FINAL SUPPLEMENTAL SITE INVESTIGATION
SITE T-9 STORAGE AREA OF CONCERN (SS025)
FORMER GRIFFISS AIR FORCE BASE
ROME, NEW YORK

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Prepared for:



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ACRONYMS AND ABBREVIATIONS

AFB	Air Force Base
AFCEC	Air Force Civil Engineer Center
AOC	Area of Concern
bgs	Below ground surface
Bhate	Bhate Environmental Associates, Inc.
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
COPC	Chemical of potential concern
DER	Division of Environmental Remediation
DPT	Direct push technology
ft	Foot or feet
HI	Hazard Index
HHRA	Human health risk assessment
HQ	Hazard Quotient
IC	Institutional Control
IRA	Interim Remedial Action
LUC	Land Use Control
mg/kg	Milligrams per kilogram
NCP	National Contingency Plan
NFA	No Further Action
NYCRR	New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
PAHs	Polycyclic Aromatic Hydrocarbons
PCBs	Polychlorinated biphenyls
PEER	PEER Consultants, P.C.
QC	Quality control
RAGS	Risk Assessment Guidance for Superfund
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
RME	Reasonable maximum exposure
ROD	Record of Decision
RSL	Regional Screening Level
SARA	Superfund Amendments and Reauthorization Act

SCO	Soil Cleanup Objectives
SIM	Selected Ion Monitoring
SVOC	Semi-volatile Organic Compound
TAL	Target Analyte List
µg/kg	Micrograms per kilogram
UCL	Upper confidence limit
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

1 INTRODUCTION

Bhate Environmental Associates, Inc. (Bhate) conducted supplemental site investigation activities at Site SS025, T-9 Storage Area of Concern (AOC) at the former Griffiss Air Force Base (AFB) in Rome, New York to support removal of the current Land Use Control (LUC)/Institutional Control (IC) restriction for industrial/commercial use. This work was performed under contract with the Air Force Civil Engineer Center (AFCEC). The objective of the supplemental site investigation activities is to demonstrate that the non-residential use deed restriction can be removed from Site SS025 and that no cleanup of soils is required.

1.1 Purpose

This Supplemental Site Investigation Report has been prepared to present additional soil sampling results from June 2017. Sampling was conducted at this site as a result of the Air Force's initiative to reduce its long-term environmental liabilities and the life cycle costs through site closures. This site is subject to a deed restriction in the form of land use restrictions for non-residential use. An evaluation of the site, including soil sampling, was conducted to determine if residual soil contamination meets the 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 Unrestricted Use Soil Cleanup Objectives (SCOs) and to obtain closure with unrestricted reuse at the site based upon a baseline human health risk assessment (HHRA) conducted under the authority of the United States Environmental Protection Agency (USEPA), pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA); the National Oil and Hazardous Substances Pollution Contingency Plan (the NCP) (USEPA, 1990); and the Superfund Amendments and Reauthorization Act of 1986 (SARA). The goal of the baseline HHRA is to evaluate the cancer risks and non-cancer hazards to the Reasonably Maximally Exposed Individual. The reasonable maximum exposure (RME) is defined as the highest exposure that is reasonably expected to occur at a site. RMEs are estimated for individual pathways (USEPA 1989 – Risk Assessment Guidance for Superfund Part A). The baseline HHRA evaluated cancer risks and non-cancer health hazards in the absence of the current LUC/IC which prevents residential use of the Site. The supplemental site investigation was conducted in accordance with the *Final Uniform Federal Policy - Quality Assurance Project Plan Supplemental Investigation at Sites SS017: Lot 69, DP022: Building 222, and SS025: T-9 Storage Area Former Griffiss Air Force Base Rome, New York* (Bhate, February 2017).

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2 RECORD OF DECISION

The Record of Decision (ROD) for SS025 (T-9 Storage Area) was signed by the USEPA on September 27, 2001. In accordance with the ROD, no further action for soils with land use restrictions within the site boundaries for industrial/commercial use were implemented. During quarterly groundwater monitoring conducted as part of the Petroleum Source Removal AOCs Monitoring Program at the former base in 2003/2004, only one exceedance for Semi-volatile Organic Compounds (SVOCs) was reported in September 2003. The consecutive groundwater sampling resulted in no groundwater exceedance of New York State Department of Environmental Conservation (NYSDEC) Groundwater Standards. Based on the groundwater results, a request to close Spill# 9702173 was accepted by the NYSDEC on September 24, 2004. Furthermore, removal of the groundwater restriction under the ROD was approved in 2013 since no contaminants of concern were detected above NYSDEC groundwater standards (USEPA, June 2013).

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3 SITE BACKGROUND

Site SS025 (T-9 Storage Area) is located at the intersection between Brooks Road and Selfridge Street near the east-central portion of Griffiss AFB (**Figure 1**). The 30,000 square foot grass and gravel site was used for heavy equipment parking and storage of herbicides and petroleum-based paving products. A 550-gallon kerosene aboveground storage tank was reported to have leaked on several occasions and stained soils. **Figure 2** presents the Site Map for Site SS025, T-9 Storage Area.

In 1991, the kerosene storage tank was replaced with an aboveground, mobile 275-gallon kerosene tank but was later moved adjacent to Building 8 and removed by the end of 1996. Additionally, asphalt carrying trucks were reportedly rinsed with kerosene which was discharged onto the ground.

Initial site investigations were conducted in 1986 and 1992, however no remedial actions were performed prior to the Remedial Investigation (RI). An RI was performed in 1994 (Law Engineering and Environmental Services, Inc., December 1996) to determine nature and extent. Soil samples were analyzed for Volatile Organic Compounds (VOCs), SVOCs, pesticides, polychlorinated biphenyls (PCBs), total cyanide, metals, and petroleum hydrocarbons. The soil sample results reported exceedances of SVOCs limited primarily to surface and shallow subsurface soils. Additionally, pesticides and PCBs exceeded New York State SCOs or proposed Resource Conservation and Recovery Act (RCRA) corrective action levels. The majority of metals reported exceedances of background screening concentrations. Groundwater samples exceeded screening standards for six metals and dieldrin. All contaminants detected in the soils and groundwater were considered chemicals of potential concern (COPC), with the exception of a few inorganics (iron, magnesium, calcium, potassium, and sodium) deemed essential human nutrients, and selected for a baseline HHRA conducted during the RI. The total carcinogenic risk to occupational workers was within the risk range of 1 x 10-6 to 1 x 10-4 (one in a million to one in ten thousand). The potential exposures at SS025 (T-9 Storage Area) represent a risk that is within the risk range. The non-carcinogenic risk to occupational workers was below the goal of protection of a Hazard Quotient (HQ) or Hazard Index (HI) = 1. Toxicity values were qualitatively assessed for several contaminants all of which were below the goal of protection of a HI or HQ = 1. An ecological risk assessment on low order species indicated a slight potential for adverse effects of aluminum to short-tailed shrews but the industrialized location of this site meant the risk was not considered to be significant.

A No further Action (NFA) Proposed Plan was issued in 1998, however, due to public comments and deed restrictions it was decided to perform contaminated soil removal activities at the site. An Interim Remedial Action (IRA) was performed in 1998 with a total of approximately 11,760 cubic yards of contaminated soils removed and all excavated areas backfilled. The contaminants were remediated along with the petroleum contaminated soils associated with NYSDEC Spill # 9702173 discovered during a site assessment conducted in 1996 by PEER Consultants, P.C.

(PEER). Additional groundwater sampling was conducted to confirm the presence/absence of petroleum contamination downgradient of SS025 (T-9 Storage Area) (PEER, April 2000).

4 SUPPLEMENTAL SITE INVESTIGATON

The supplemental site investigation conducted at T-9 Storage AOC included soil sampling to confirm the absence of residual soil contamination at the site above 6 NYCRR Part 375 Unrestricted Use SCOs. The soil sampling was also completed to evaluate the risk range for potential exposures at SS025 (T-9 Storage Area), which is discussed in Section 5 of this report.

Soil sampling, laboratory analysis, and data validation were performed in accordance with the *Final Uniform Federal Policy-Quality Assurance Project Plan Supplemental Investigation at Sites SS017: Lot 69, DP022: Building 222, and SS025: T-9 Storage Area Former Griffiss Air Force Base Rome, New York* (Bhate, February 2017), Worksheets 15, 28, and 36, respectively. Appropriate quality control (QC) samples were collected, submitted, and analyzed with the soil samples. QC samples included field duplicates, an ambient blank, and trip blanks.

4.1 Soil Sampling

In May/June 2017, 21 soil samples from 10 soil borings using direct push technology (DPT) and 10 surface soil samples were collected within the SS025 (T-9 Storage Area) site boundary (**Figure 3**). **Appendix A** contains the boring logs that present the soils encountered, the photoionization detector screening results, and the depth to groundwater. The samples were analyzed for pesticides/PCBs (by USEPA Method SW8081B/8082A), Polycyclic Aromatic Hydrocarbons (PAHs) (by USEPA Method SW8270D-Selected Ion Monitoring [SIM]), VOCs (by USEPA Method SW8260B), and Target Analyte List [TAL] metals (by USEPA Method SW6010C/7471A) and analyzed by TestAmerica Laboratory in Arvada, Colorado. Samples were collected in 2 foot (ft) intervals until groundwater was encountered. Groundwater across the site varied from 1.5 ft below ground surface (bgs) to 9.5 ft bgs. The Work Plan specified the collection of soil samples every 2 ft. However, saturated soils in sandy lithology could not be recovered. This affected sampling in each of the borings advanced and is noted in the "remarks" column of the boring logs in **Appendix A**. In addition, one sample from 0 to 2 inches below vegetation or impervious surface was collected to assess exposure to surface soil. The results of the soil sampling activities are provided in **Table 1**. **Appendix B** contains the analytical laboratory results and **Appendix C** contains the data validation reports.

4.1.1 Surface Soil Sampling Results

A total of 10 surface soil samples were collected from 0 to 2-inches bgs. None of the surface soil samples exceeded the 6 NYCRR Part 375 Unrestricted Use SCOs.

4.1.2 Subsurface Soil Sampling Results

A total of 19 primary, subsurface soil samples were collected in 2 ft intervals from 0 ft bgs to the water table. **Table 1** presents the depth to water for each sample collected. In general, depth to

water ranged from 2.0 ft to 5.5 ft with SS025-SB09 having a depth of 9.5 ft bgs and SS025-SB10 having a depth of 6.5 ft bgs. The shallowest depth to groundwater is on the western side of the site and increases in depth to the east. Only one sample collected from 0 to 2 ft bgs from SS025-SB01 had detections that exceeded the 6 NYCRR Part 375 Unrestricted Use SCOs for PAHs. However, a duplicate soil sample was collected from this same boring location that did not have any exceedances of the unrestricted use SCOs for PAHs. Both sample and duplicate required dilutions due to exceeding the calibration range of the instrument; the parent sample required a 50-fold dilution and the duplicate a 10-fold dilution. Additionally, the parent sample surrogate recoveries were outside control limits which required all PAH compounds to be qualified as estimated. Therefore, from a QC standpoint, the duplicate sample results are more representative of the site soils and did not exceed any 6 NYCRR Part 375 Unrestricted Use SCOs. Regardless, a 95 upper confidence limit (UCL) was calculated for each PAH that exceeded the Unrestricted Use SCOs using ProUCL software developed by the USEPA and is presented in the table below.

Copper was detected in one boring (SB05 [2-4 ft]) at 52 milligrams per kilogram (mg/kg) slightly exceeding the Unrestricted Use SCO of 50 mg/kg. The 95 UCL was not calculated because this value is so close to the SCO and all other results were significantly less than the SCO. Therefore, the 95 UCL would be less than 50 mg/kg.

In addition, 4,4-DDE exceeded the Unrestricted Use SCO of 3.3 micrograms per kilogram (µg/kg) with a detection of 16 µg/kg in one sample (SS025-SB01 [0-2]) but did not exceed in the duplicate sample with a detection of 1.3 J µg/kg. Also, 4,4-DDT exceeded the Unrestricted Use SCO of 3.3 µg/kg with a detection of 52 µg/kg in the primary sample and 4.6 J µg/kg in the duplicate sample at SS025-SB01 (0-2) and at SS025-SB09 (4-6) with a detection of 5.1 µg/kg. Given that the primary sample for SS025-SB01 is significantly higher than the duplicate and inconsistent with the other samples collected throughout the site, the 95 UCL calculation for 4,4-DDT excluded the primary sample result for SB01 (0-2) and used the duplicate result instead. The 95 UCL was less than the NYCRR Part 375 Unrestricted Use SCOs as presented below. The output from the ProUCL analysis is presented in **Appendix E** for the compounds listed below.

Chemical of Concern	Unrestricted SCO (µg/kg)	95 UCL (µg/kg)
Benzo[a]anthracene	1,000	331
Benzo[a]pyrene	1,000	285
Benzo[b]fluoranthene	1,000	394
Benzo[k]fluoranthene	800	232
Chrysene	1,000	748
Dibenz(a,h)anthracene	330	20
Indeno[1,2,3-cd]pyrene	500	214
4,4-DDE	3.3	0.9
4,4-DDT	3.3	1.8

This approach and rationale is allowed per the Division of Environmental Remediation (DER) Policy 10 Technical Guidance for Site Investigation and Remediation (NYSDEC, May 2010). Further, the DER-10 indicates that the "DER project manager may judge that remediation is complete for sites when:

(1) there is a large number of confirmatory samples;

(2) the vast majority of confirmation samples indicate that the soil cleanup levels for the site have been achieved; and

(3) those that do not achieve the SCO exceed it only by a small amount."

Based upon the data collected as part of this supplemental investigation, these three criteria are also met in support of unrestricted site closure.

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5 RISK ASSESSMENT

The purpose of the risk assessment is to demonstrate that exposures to the COPCs to the future resident and construction worker are within the cancer risk range of 10-6 to 10-4 and at or below the goal of protection of an HI or HQ = 1 based on organ specific effects. Site T-9 Storage Area of Concern (SS025) is currently subject to deed restrictions due to residual soil impacts. The evaluation of the risk to current and potential future human receptors due to the presence of these residual impacts is detailed in the Risk Assessment Site T-9 Storage Area of Concern (SS025) Former Griffiss Air Force Base Rome, New York (Bhate, June 2019), which is presented in **Appendix D** of this report. The risk assessment consists of the following and are generalized below:

1. Identification of COPCs
2. Development of Exposure Assessment
3. Toxicity Assessment
4. Risk Characterization
5. Uncertainty Analysis

5.1 Identification of Chemicals of Potential Concern

During the May-June 2017 supplemental site investigation, 32 soil samples including three duplicates were collected. Of the 32 samples, 22 samples including two duplicates, were collected from 0 to 2 ft bgs. The remaining 10 samples including one duplicate, were collected from depths ranging from >2 ft bgs to 8 ft bgs. From the 136 chemicals analyzed, 52 were detected in at least one soil sample. Only detected carcinogenic chemicals exceeding Regional Screening Levels (RSLs) and non-carcinogenic chemicals exceeding RSLs detected at a frequency exceeding 5% were carried forward. Additionally, benzene and trichloroethylene, known human carcinogens, were included to be consistent with Section 5.9.1 of the Risk Assessment Guidance for Superfund (RAGS) Part A.

5.2 Development of Exposure Assessment

The exposure assessment evaluates the potential ways in which the receptors (future young child and adult resident and future construction worker) may contact the soils (e.g. ingestion, contact with skin, and inhalation of soil particulates). The exposure assessment consists of identifying the complete exposure pathways and calculation of dose. As indicated previously, currently the land is vacant and there are no human receptors. The future land use is considered residential and the receptor of concern is the future resident that could be a child, adult, or construction worker. The complete exposure pathways are presented in Table 1 of the Risk Assessment (Bhate, June 2019).

5.3 Toxicity Assessment

The toxicity assessment determines the types of adverse health effects potentially associated with exposures to COPCs at the Site and the relationship between the magnitude of exposure (dose) and severity of adverse effects (response). **Appendix D** of this report provides the RAGS Part D Tables 5.1 to 5.4 and 6.1 to 6.2 that identify relevant endpoints and toxicity benchmarks. **Appendix D**, Tables 5.1 to 5.4 provide non-cancer toxicity values (i.e., reference doses, and reference concentrations [both chronic and subchronic]). Tables 6.1 to 6.2 in **Appendix D** provide cancer toxicity information (e.g., cancer slope factors and inhalation unit risks).

5.4 Risk Characterization

Risks were calculated for carcinogenic and non-carcinogenic exposures for the various receptors and pathways. A HQ/HI less than 1 implies an acceptable level of non-cancer health hazards that does not warrant any further remediation. Similarly, a cumulative carcinogenic risk within the range of 1 x 10-6 to 1 x 10-4 typically does not warrant remediation. The baseline HHRA evaluates exposures under an assumption of future residential land use. The receptors evaluated include: a future resident (adult and child) and a construction worker. The assessment assumes the future receptors may be exposed to soils at depths of 0 to 2 ft bgs and 0 ft bgs to the Water Table. The exposures include direct contact with the soil at both depths in the event the soil is brought to the surface and not managed.

The risk assessment results for each receptor are summarized in the Table below.

	Cancer Risks		**Non-cancer Hazard**	
	Soil Depth		**Soil Depth**	
Receptors	**0 to 2 ft bgs**	**0 ft bgs to Water Table**	**0 to 2 ft bgs**	**0 ft bgs to Water Table**
Future Resident				
Adult/Child (combined)*	3.5 E-05	3.5 E-05		
Young Child			1.1	1.1
Future Construction Worker (Adult)	4.3E-08	4.2E-08	0.2	0.2
* Non-cancer hazards were not calculated since the young child is the most sensitive receptor				

Exposure to soils under a future residential land use had a cancer risk within the risk range established under the NCP, and the non-cancer HI slightly exceeded the goal of protection for non-cancer of an HQ/HI = 1. Consistent with the *Supplementary Guidance for Conducting Health Risk Assessment of Chemical Mixtures* (USEPA, August 2000), evaluation of the non-cancer hazards based on target organ indicates that the HI is less than 1 for each chemical based on target organ. The highest HI for impacts was 0.4 for the nervous system from exposures to manganese. The next highest HI for impacts on the GI tract was 0.3 from exposure to iron and chromium VI. Future construction worker exposures had a cancer risk below the risk range established under the NCP and the non-cancer HI was below the goal of protection of an HI = 1.

5.5 Uncertainty Analysis

The risk assessment is based on health protective values of the parameters and models used to calculate the carcinogenic risks and non-cancer health hazards. The data was specifically collected to fill identified data gaps and was considered of sufficient quality and quantity to complete the risk evaluation. The calculated risk using the data may be over or under estimated. The exposure assessment assumes the land use will be residential. Currently the land is vacant and it is not known if residences will ever be built. The assumption of residential land use determines the choice of receptors and exposure parameters evaluated. In calculating risk, health protective exposure factors were used such as a child exposed to the surface soil for 6 years at a rate of 350 days a year. Chemical specific toxicity values used to calculate the carcinogenic risks and non-cancer health hazards are based on health protective toxicological models and may overestimate the risk, although specific levels of conservatism is difficult to quantify. Finally, certain chemicals that were detected at the site were not included in the quantitative calculations due to lack of quantitative toxicity value. However, health protective values were used in each component of the risk assessment which are designed to be health protective and may under or overestimate the cancer risks and non-cancer hazards.

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6 RECOMMENDATIONS

The analytical results from the soil sampling activities completed in May/June 2017 at Site SS025 meet the 6 NYCRR Part 375 Unrestricted Use SCOs based upon direct comparison of detections to the SCOs and/or calculation of the 95-percent UCL. The results of the risk assessment indicate that a major contributor to both the carcinogenic risks and non-cancer health hazards is naturally occurring metals. Including the effects of the metals, the carcinogenic risks are within acceptable range and the case of non-cancer hazards the HI slightly exceeded the goal of protection of an HI = 1 for the child receptor. However, the HQs based on target organ health effects are below the goal of protection of a HQ = 1. Further, excluding the effect of the naturally occurring metals, the non-cancer health hazards would be acceptable. Therefore, it is requested that the site be closed and that the New York State and USEPA grant permission to remove the remaining non-residential use deed restriction at Site SS025 and the site may be used for unrestricted land use.

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7 REFERENCES

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FIGURES

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Former Griffiss AFB Site Location Map

Figure 1

Site Closure Report
SS025: T-9 Storage Area
Former Griffiss Air Force Base, Rome, New York

DRAWN BY: MRM

DATE: 7/13/2017

SCALE: As Shown

PROJECT NO: AFCGSA3.0012.00AA.2020.0003

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Selfridge St
F6B-1
F6B-1A
Selfridge St
Brooks Rd
Brooks Rd
Brooks Rd
Griffiss International Airport
A1A
Approximate Direction of Groundwater Flow
0045
5892
SS025
F1
0008
0009
0010
Griffiss Business and Technology Pk
Olive Grove St
0043
0043
0040
F4Cb
F6B-2
0042
0047
5216

Notes:
This information is depicted to provide visual aid within the context of this document and should not be used as a sole reference in precise dimensioning of features indicated. Please verify the location of all features including underground and aboveground utilities prior to conducting any subsurface exploration or site assessment.

0 40 80 160
Feet

bing

Legend:
- Installation Restoration Program (IRP) Area
- Parcel Boundary
- 5657 Building Number
- 0781 Demolished Building Location

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SS025 - T-9 Storage Area
Site Map

Figure 2

Site Closure Report
SS025: T-9 Storage Area
Former Griffiss Air Force Base, Rome, New York

DRAWN BY: MRM

DATE: 7/13/2017

SCALE: As Shown

PROJECT NO: AFCGSA3.0012.00AA.2020.0003

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SS025 - T-9 Storage Area
Sample Locations

Figure 3

Site Closure Report
SS025: T-9 Storage Area
Former Griffiss Air Force Base, Rome, New York

DRAWN BY: MRM

DATE: 7/13/2017

SCALE: As Shown

PROJECT NO: AFCGSA3.0012.00AA.2020.0003

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SS025-SB01
SS025-SB02
SS025-SB03
SS025-SB04
SS025-SB05
SS025-SB06
SS025-SB07
SS025-SB08
SS025-SB09
SS025-SB10
SS025

Approximate Direction of Groundwater Flow

F6B-1
F6B-1A
F1
F6B-2
F4Cb
A1A

Selfridge St
Brooks Rd
Griffiss International Airport
Griffiss Business and Technology Pk
Olive Grove St

0045
5892
0043
0040
0042
0047
0008
0009
0010

Notes:
This information is depicted to provide visual aid within the context of this document and should not be used as a sole reference in precise dimensioning of features indicated. Please verify the location of all features including underground and aboveground utilities prior to conducting any subsurface exploration or site assessment.

0 40 80 160 Feet

Legend:
- Sample Locations
- Installation Restoration Program (IRP) Area
- Parcel Boundary
- 5657 Building Number
- 0781 Demolished Building Location

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TABLE

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Table

Table 1
Soil Analytical Results Compared to 6-NYCRR Part 375 Unrestricted Use SCOs
Site SS025 (T-9 Storage Area)
Former Griffiss AFB Rome, New York

Sample Identification	NYCRR Part 375 6.8(a) Unrestricted SCO	SS025-SS01		SS025-SB01(0-2)		SS025-SB01(0-2)-a		SS025-SS02		SS025-SB02(0-2)		SS025-SS03		SS025-SB03(0-2)		SS025-SS04		SS025-SB04(0-2)		SS025-SS05		SS025-SB05(0-2)	
Sample Date		5/31/2017		6/5/2017		6/5/2017		5/31/2017		5/31/2017		5/31/2017		5/31/2017		5/31/2017		5/31/2017		5/31/2017		5/31/2017	
Depth to Water		2.5'		2.5'		2.5'		3.0'		3.0'		2.0'		2.0'		2.0'		2.0'		5.5'		5.5'	
VOCs (8260B) (µg/kg)																							
1,1,1,2-Tetrachloroethane	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
1,1,1-Trichloroethane	680	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
1,1,2,2-Tetrachloroethane	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
1,1,2-Trichloroethane	NV	3.0	U	2.8	U	2.4	U	3.2	U	3.1	U	3.1	U	3.3	U	3.0	U	3.3	U	3.0	U	2.9	U
1,1-Dichloroethane	270	0.74	U	0.70	U	0.61	U	0.79	U	0.78	U	0.79	U	0.84	U	0.74	U	0.82	U	0.76	U	0.72	U
1,1-Dichloroethene	330	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
1,1-Dichloropropene	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
1,2,3-Trichlorobenzene	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ
1,2,3-Trichloropropane	NV	3.0	U	2.8	U	2.4	U	3.2	U	3.1	U	3.1	U	3.3	U	3.0	U	3.3	U	3.0	U	2.9	U
1,2,4-Trichlorobenzene	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ
1,2,4-Trimethylbenzene	3,600	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ
1,2-Dibromo-3-Chloropropane	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
1,2-Dibromoethane	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
1,2-Dichlorobenzene	1,100	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ
1,2-Dichloroethane	20	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
1,2-Dichloroethene, Total	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
1,2-Dichloropropane	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
1,3,5-Trimethylbenzene	8,400	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ
1,3-Dichlorobenzene	2,400	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ
1,3-Dichloropropane	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
1,4-Dichlorobenzene	1,800	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ
2,2-Dichloropropane	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
2-Butanone (MEK)	120	5.9	U	5.6	U	4.9	U	6.3	U	6.2	U	6.3	U	6.7	U	5.9	U	6.6	U	6.0	U	5.7	U
2-Chlorotoluene	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ
2-Hexanone	NV	12	U	11	U	9.7	U	13	U	12	U	13	U	13	U	12	U	13	U	12	U	11	U
4-Chlorotoluene	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ
4-Isopropyltoluene	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ
4-Methyl-2-pentanone (MIBK)	NV	12	U	11	U	9.7	U	13	U	12	U	13	U	13	U	12	U	13	U	12	U	11	U
Acetone	50	8.6	UB	12	UB	16	UB	12	UB	8.9	UB	16	UB	7.6	UB	12	U	13	U	12	U	11	U
Benzene	60	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ
Bromobenzene	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ
Bromochloromethane	NV	0.74	U	0.70	U	0.61	U	0.79	U	0.78	U	0.79	U	0.84	U	0.74	U	0.82	U	0.76	U	0.72	U
Bromodichloromethane	NV	0.74	U	0.70	U	0.61	U	0.79	U	0.78	U	0.79	U	0.84	U	0.74	U	0.82	U	0.76	U	0.72	U
Bromoform	NV	0.74	U	0.70	U	0.61	U	0.79	U	0.78	U	0.79	U	0.84	U	0.74	U	0.82	U	0.76	U	0.72	U
Bromomethane	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
Carbon disulfide	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
Carbon tetrachloride	760	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
Chlorobenzene	1,100	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ
Chloroethane	NV	3.0	U	2.8	U	2.4	U	3.2	U	3.1	U	3.1	U	3.3	U	3.0	U	3.3	U	3.0	U	2.9	U
Chloroform	370	0.74	U	0.70	U	0.61	U	0.79	U	0.78	U	0.79	U	0.84	U	0.74	U	0.82	U	0.76	U	0.72	U
Chloromethane	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
cis-1,2-Dichloroethene	250	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
cis-1,3-Dichloropropene	NV	3.0	U	2.8	U	2.4	U	3.2	U	3.1	U	3.1	U	3.3	U	3.0	U	3.3	U	3.0	U	2.9	U
Dibromochloromethane	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
Dibromomethane	NV	3.0	U	2.8	U	2.4	U	3.2	U	3.1	U	3.1	U	3.3	U	3.0	U	3.3	U	3.0	U	2.9	U
Dichlorodifluoromethane	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
Ethylbenzene	1,000	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ

Table 1
Soil Analytical Results Compared to 6-NYCRR Part 375 Unrestricted Use SCOs
Site SS025 (T-9 Storage Area)
Former Griffiss AFB Rome, New York

Sample Identification	NYCRR Part 375 6.8(a) Unrestricted SCO	SS025-SS01		SS025-SB01(0-2)		SS025-SB01(0-2)-a		SS025-SS02		SS025-SB02(0-2)		SS025-SS03		SS025-SB03(0-2)		SS025-SS04		SS025-SB04(0-2)		SS025-SS05		SS025-SB05(0-2)	
Sample Date		5/31/2017		6/5/2017		6/5/2017		5/31/2017		5/31/2017		5/31/2017		5/31/2017		5/31/2017		5/31/2017		5/31/2017		5/31/2017	
Depth to Water		2.5'		2.5'		2.5'		3.0'		3.0'		2.0'		2.0'		2.0'		2.0'		5.5'		5.5'	
Hexachlorobutadiene	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
Isopropyl ether	NV	7.4	U	7.0	U	6.1	U	7.9	U	7.8	U	7.9	U	8.4	U	7.4	U	8.2	U	7.6	U	7.2	U
Isopropylbenzene	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ
m&p-Xylene	NV	3.0	U	2.8	U	2.4	U	3.2	U	3.1	U	**1.7**	J	3.3	U	**1.4**	J	3.3	U	3.0	U	2.9	U
Methyl iodide	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
Methyl tert-butyl ether	930	0.74	U	0.70	U	0.61	U	0.79	U	0.78	U	0.79	U	0.84	U	0.74	U	0.82	U	0.76	U	0.72	U
Methylene Chloride	50	3.0	U	2.8	U	2.4	U	3.2	U	3.1	U	3.1	U	3.3	U	3.0	U	3.3	U	3.0	U	2.9	U
Naphthalene	12,000	1.5	U	**4.5**		1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ
n-Butylbenzene	12,000	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ
N-Propylbenzene	3,900	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ
o-Xylene	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	**2.2**	J	1.7	U	**2.1**	J	1.6	U	1.5	U	1.4	U
sec-Butylbenzene	11,000	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ
Styrene	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
tert-Butylbenzene	5,900	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ
Tetrachloroethene	1,300	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
Toluene	700	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	UJ
trans-1,2-Dichloroethene	190	0.74	U	0.70	U	0.61	U	0.79	U	0.78	U	0.79	U	0.84	U	0.74	U	0.82	U	0.76	U	0.72	U
trans-1,3-Dichloropropene	NV	1.5	U	1.4	U	1.2	U	1.6	U	1.6	U	1.6	U	1.7	U	1.5	U	1.6	U	1.5	U	1.4	U
Trichloroethene	470	0.74	U	0.70	U	0.61	U	0.79	U	0.78	U	0.79	U	0.84	U	0.74	U	0.82	U	0.76	U	0.72	U
Trichlorofluoromethane	NV	3.0	U	2.8	U	2.4	U	1.5	J	3.1	U	3.1	U	3.3	U	3.0	U	3.3	U	3.0	U	2.9	U
Vinyl acetate	NV	3.0	U	2.8	U	2.4	U	3.2	U	3.1	U	3.1	U	3.3	U	3.0	U	3.3	U	3.0	U	2.9	U
Vinyl chloride	20	3.0	U	2.8	U	2.4	U	3.2	U	3.1	U	3.1	U	3.3	U	3.0	U	3.3	U	3.0	U	2.9	U
Xylenes (total)	260	0.93	U	0.87	U	0.76	U	0.99	U	0.97	U	3.9	J	1.0	U	3.5	J	1.0	U	0.95	U	0.90	UJ
PAHs (8270D SIM) (µg/kg)																							
1-Methylnaphthalene	NV	**26**	J	**94**	J	**22**	J	**1.5**	J	0.60	U	0.66	U	0.58	U	**7.4**	J	0.61	U	**75**	J	**0.62**	J
2-Methylnaphthalene	NV	**59**		**150**	J	**34**	J	**2.1**	J	0.80	U	**2.1**	J	0.77	U	**13**		0.81	U	**93**	J	**0.81**	J
Acenaphthene	20,000	**25**	J	**600**	J	**110**		**2.4**	J	0.32	U	0.36	U	0.31	U	**18**		0.32	U	**270**		**0.98**	J
Acenaphthylene	100,000	**51**		**280**	J	**81**		**7.7**		0.80	U	**5.7**	J	0.77	U	**24**		**0.28**	J	**94**	J	**0.99**	J
Anthracene	100,000	**62**		**1,100**	J	**210**		**6.7**		3.0	U	**5.2**	J	2.9	U	**44**		3.0	U	**580**		**1.8**	J
Benzo[a]anthracene	1,000	**150**		**2,300**	J	**500**		**38**		3.0	U	**23**		2.9	U	**110**		3.0	U	**770**		**3.1**	J
Benzo[a]pyrene	1,000	**170**		**2,000**	J	**440**		**53**		3.0	U	**34**		2.9	U	**110**		3.0	U	**590**		**2.7**	J
Benzo[b]fluoranthene	1,000	**240**		**2,800**	J	**620**		**72**		3.0	U	**51**		2.9	U	**160**		3.0	U	**760**		**4.0**	J
Benzo[g,h,i]perylene	100,000	**110**		**1,100**	J	**240**		**34**		3.0	U	**28**		2.9	U	**69**		3.0	U	**320**		**2.9**	J
Benzo[k]fluoranthene	800	**79**		**1,100**	J	**220**		**23**		3.0	U	**17**		2.9	U	**57**		3.0	U	**330**		**1.9**	J
Chrysene	1,000	**200**		**2,700**	J	**580**		**51**		3.0	U	**34**		2.9	U	**140**		3.0	U	**820**		**4.2**	J
Dibenz(a,h)anthracene	330	**32.0**		**350**	J	**74**		**7.9**		3.0	U	**6.4**	J	2.9	U	**21**		3.0	U	**92**	J	2.7	U
Fluoranthene	100,000	**260**		**5,500**	J	**1,100**		**71**		3.0	U	**45**		2.9	U	**230**		3.0	U	**2,500**		**6.0**	
Fluorene	30,000	**23**	J	**590**	J	**110**		**2.6**	J	0.80	U	**1.4**	J	0.77	U	**18**		0.81	U	**600**		**0.99**	J
Indeno[1,2,3-cd]pyrene	500	**89**		**1,000**	J	**220**		**38**		3.0	U	**28**		2.9	U	**58**		3.0	U	**310**		**1.9**	J
Naphthalene	12,000	**65**		**410**	J	**82**		0.77	U	0.80	U	0.89	U	0.77	U	**26**		0.81	U	**240**		**0.66**	J
Phenanthrene	100,000	**140**		**4,400**	J	**860**		**28**		3.0	U	**17**		2.9	U	**150**		3.0	U	**3,000**		**4.6**	J
Pyrene	100,000	**270**		**4,700**	J	**1,000**		**69**		3.0	U	**45**		2.9	U	**210**		3.0	U	**1,700**		**5.9**	
Pesticides (8081B) (µg/kg)																							
4,4'-DDD	3.3	1.9	UJ	1.8	U	1.9	U	1.8	U	2.0	U	2.2	U	1.9	U	1.7	U	2.0	U	1.8	U	1.9	U
4,4'-DDE	3.3	**1.4**	J	**16**		**1.3**	J	**0.36**	J	0.79	U	0.88	U	0.75	U	0.69	U	0.80	U	0.74	U	0.76	U
4,4'-DDT	3.3	**2.1**	J	**52**		**4.6**	J	1.8	U	2.0	U	2.2	U	1.9	U	**0.68**	J	2.0	U	1.8	U	1.9	U
Aldrin	5	0.78	U	0.73	U	0.75	U	0.73	U	0.79	U	0.88	U	0.75	U	0.69	U	0.80	U	0.74	U	0.76	U
alpha-BHC	20	0.78	U	0.73	U	0.75	U	0.73	U	0.79	U	0.88	U	0.75	U	0.69	U	0.80	U	0.74	U	0.76	U

Table 1
Soil Analytical Results Compared to 6-NYCRR Part 375 Unrestricted Use SCOs
Site SS025 (T-9 Storage Area)
Former Griffiss AFB Rome, New York

Sample Identification	NYCRR Part 375 6.8(a) Unrestricted SCO	SS025-SS01		SS025-SB01(0-2)		SS025-SB01(0-2)-a		SS025-SS02		SS025-SB02(0-2)		SS025-SS03		SS025-SB03(0-2)		SS025-SS04		SS025-SB04(0-2)		SS025-SS05		SS025-SB05(0-2)	
Sample Date		5/31/2017		6/5/2017		6/5/2017		5/31/2017		5/31/2017		5/31/2017		5/31/2017		5/31/2017		5/31/2017		5/31/2017		5/31/2017	
Depth to Water		2.5'		2.5'		2.5'		3.0'		3.0'		2.0'		2.0'		2.0'		2.0'		5.5'		5.5'	
alpha-Chlordane	94	0.78	U	0.73	U	0.75	U	0.73	U	0.79	U	0.88	U	0.75	U	0.69	U	0.80	U	0.74	U	0.76	U
beta-BHC	36	1.9	U	1.8	U	1.9	U	1.8	U	2.0	U	2.2	U	1.9	U	1.7	U	2.0	U	1.8	U	1.9	U
delta-BHC	40	1.2	U	1.1	U	1.1	U	1.1	U	1.2	U	1.3	U	1.1	U	1.0	U	1.2	U	1.1	U	1.1	U
Dieldrin	5	0.78	U	0.73	U	0.75	U	0.73	U	0.79	U	0.88	U	0.75	U	0.69	U	0.80	U	0.74	U	0.76	U
Endosulfan I	2,400*	0.78	U	0.73	U	0.75	U	0.73	U	0.79	U	**0.55**	J	0.75	U	0.69	U	0.80	U	0.74	U	0.76	U
Endosulfan II	2,400*	0.78	U	**0.33**	J	0.75	U	0.73	U	0.79	U	0.88	U	0.75	U	0.69	U	0.80	U	0.74	U	0.76	U
Endosulfan sulfate	2,400*	0.78	U	0.73	U	0.75	U	0.73	U	0.79	U	0.88	U	0.75	U	0.69	U	0.80	U	0.74	U	0.76	U
Endrin	14	0.78	U	0.73	U	0.75	U	0.73	U	0.79	U	0.88	U	0.75	U	0.69	U	0.80	U	0.74	U	0.76	U
Endrin aldehyde	NV	0.78	U	0.73	U	0.75	U	0.73	U	0.79	U	0.88	U	0.75	U	0.69	U	0.80	U	0.74	U	0.76	U
gamma-BHC (Lindane)	100	1.2	U	1.1	U	1.1	U	1.1	U	1.2	U	1.3	U	1.1	U	1.0	U	1.2	U	1.1	U	1.1	U
gamma-Chlordane	NV	0.78	UJ	0.73	U	0.75	U	0.73	U	0.79	U	0.88	U	0.75	U	0.69	U	0.80	U	0.74	U	0.76	U
Heptachlor	42	0.78	U	0.73	U	0.75	U	0.73	U	0.79	U	0.88	U	0.75	U	0.69	U	0.80	U	0.74	U	0.76	U
Heptachlor epoxide	NV	1.2	U	1.1	U	1.1	U	1.1	U	1.2	U	1.3	U	1.1	U	1.0	U	1.2	U	1.1	U	1.1	U
Methoxychlor	NV	1.2	U	**1.9**	J	1.1	U	1.1	U	1.2	U	1.3	U	1.1	U	1.0	U	1.2	U	1.1	U	1.1	U
Toxaphene	NV	38	U	36	U	37	U	36	U	39	U	43	UJ	37	U	34	U	39	U	37	U	38	U
PCBs (8082A) (µg/kg)																							
Arochlor 1016	100	17	U	16	U	17	U	16	U	18	U	20	U	17	U	15	U	18	U	17	U	17	U
Arochlor 1221	100	20	U	18	U	19	U	18	U	20	U	22	U	19	U	18	U	20	U	19	U	19	U
Arochlor 1232	100	17	U	16	U	17	U	16	U	18	U	20	U	17	U	15	U	18	U	17	U	17	U
Arochlor 1242	100	38	U	36	U	37	U	36	U	39	U	43	U	37	U	34	U	39	U	37	U	38	U
Arochlor 1248	100	23	U	22	U	22	U	22	U	24	U	26	U	22	U	21	U	24	U	22	U	23	U
Arochlor 1254	100	20	U	18	U	19	U	18	U	20	U	22	U	19	U	18	U	20	U	19	U	19	U
Arochlor 1260	100	**3.8**	J	**17**	J	8.6	U	8.4	U	9.1	U	10	U	8.6	U	**6.2**	J	9.2	U	8.5	U	8.8	U
Metals (6010C/7471A) (mg/kg)																							
Aluminum	NV	**7,700**	J	**6,500**	J	**7,000**	J	**7,500**		**3,700**		**11,000**		**3,400**	J	**5,500**	J	**4,500**	J	**6,400**	J	**11,000**	J
Antimony	NV	1.7	UJ	1.2	UJ	1.3	UJ	1.7	U	1.4	U	1.7	U	1.6	U	1.4	U	1.3	U	1.5	U	1.3	U
Arsenic	13	**6.2**	J	**3.5**	J	**5.0**	J	**4.3**	J	**3.4**	J	**6.2**	J	**2.2**	J	**2.6**		**2.4**		**3.3**		**4.6**	
Barium	350	**33**		**27**		**45**		**30**		**14**		**49**		**11**		**21**		**16**		**24**		**49**	
Beryllium	7.2	**0.33**	J	**0.32**	J	**0.33**	J	**0.32**	J	**0.16**	J	**0.46**	J	**0.16**	J	**0.25**	J	**0.20**	J	**0.26**	J	**0.54**	
Cadmium	2.5	**0.20**	J	**0.13**	J	**0.11**	J	**0.14**	J	**0.083**	J	**0.20**	J	**0.078**	J	**0.13**	J	**0.069**	J	**0.11**	J	**0.26**	J
Calcium	NV	**10,000**	J	**2,600**	J	**7,000**	J	**1,600**		**11,000**		**1,800**		**5,600**		**1,100**		**1,000**		**1,400**		**3,200**	
Chromium	30	**9.4**		**7.1**		**8.5**		**7.7**		**4.5**		**11**		**3.6**	J	**6.3**		**4.6**		**6.5**		**12**	
Cobalt	NV	**5.3**		**5.3**		**5.4**		**4.4**		**3.2**		**7.0**		**2.4**		**3.7**		**2.8**		**4.2**		**9.3**	
Copper	50	**23**		**19**	J	**25**	J	**18**		**11**		**33**		**8.0**		**18**		**9.9**		**15**		**20**	
Iron	NV	**16,000**	J	**14,000**		**18,000**		**13,000**	J	**8,400**	J	**21,000**	J	**6,800**	J	**10,000**	J	**8,200**	J	**12,000**	J	**17,000**	J
Lead	63	**9.6**	J	**5.7**	J	**5.4**	J	**7.7**	J	**3.2**	J	**9.3**	J	**1.8**	J	**5.3**	J	**2.1**	J	**5.5**	J	**15**	J
Magnesium	NV	**4,800**		**2,400**		**3,700**		**2,100**		**3,700**		**3,400**		**1,800**	J	**2,000**	J	**1,700**	J	**2,100**	J	**2,900**	J
Manganese	1,600	**620**	J	**860**	J	**1,200**	J	**600**		**320**		**1,200**		**230**	J	**400**	J	**260**	J	**520**	J	**730**	J

Table 1
Soil Analytical Results Compared to 6-NYCRR Part 375 Unrestricted Use SCOs
Site SS025 (T-9 Storage Area)
Former Griffiss AFB Rome, New York

Sample Identification	NYCRR Part 375 6.8(a) Unrestricted SCO	SS025-SS01		SS025-SB01(0-2)		SS025-SB01(0-2)-a		SS025-SS02		SS025-SB02(0-2)		SS025-SS03		SS025-SB03(0-2)		SS025-SS04		SS025-SB04(0-2)		SS025-SS05		SS025-SB05(0-2)	
Sample Date		5/31/2017		6/5/2017		6/5/2017		5/31/2017		5/31/2017		5/31/2017		5/31/2017		5/31/2017		5/31/2017		5/31/2017		5/31/2017	
Depth to Water		2.5'		2.5'		2.5'		3.0'		3.0'		2.0'		2.0'		2.0'		2.0'		5.5'		5.5'	
Mercury (µg/kg)	180	**24**		**22**	J	**11**	J	**34**		**21**	J	**35**		18	U	**12**	J	18	U	**23**		**19**	J
Nickel	30	**12**		**10**		**12**		**9.2**		**6.2**		**15**		**5.2**		**8.0**		**6.5**		**8.4**		**12**	
Potassium	NV	**1,100**	J	**640**		**870**		**900**		**700**		**1,100**		**580**		**720**		**730**		**730**		**1,000**	
Selenium	3.9	3.4	U	2.3	UJ	2.7	UJ	3.4	U	2.9	U	3.3	U	3.1	U	2.8	U	2.7	U	**0.91**	J	2.6	U
Silver	2	0.68	U	0.47	U	0.54	U	0.67	U	0.58	U	0.67	U	0.63	U	0.57	U	0.53	U	0.60	U	0.52	U
Sodium	NV	68	UB	160	U	180	U	220	U	190	U	220	U	210	U	190	U	180	U	200	U	170	U
Thallium	NV	2.8	U	2.0	U	2.2	U	2.8	U	2.4	U	2.8	U	2.6	U	2.4	U	2.2	U	2.5	U	2.2	U
Vanadium	NV	**14**		**12**	J	**14**	J	**13**		**6.7**		**18**		**5.7**	J	**9.5**	J	**7.2**	J	**10**	J	**19**	J
Zinc	109	**42**	J	**36**		**41**		**38**	J	**20**	J	**59**	J	**13**	J	**29**	J	**17**	J	**31**	J	**52**	J

Notes:
VOCs = Volatile Organic Compounds; PAHs = Polycyclic Aromatic Hydrocarbons; SIM = Selected Ion Monitoring; PCBs = Polychlorinated Biphenyls; NYCRR = New York Codes, Rules, and Regulations; µg/kg = micrograms per kilogram; mg/kg = milligrams per kilogram; NV = no value
Detections are bolded.

Gray shading exceeds the Soil Cleanup Objective (SCO).
*The sum of Endosulfan I, Endosulfan II, and Endosulfan sulfate.
J - estimated value between the detection limit and limit of quantitation and/or due to quality control issues
U - not detected
UJ - estimated not detected due to quality control issues
UB - considered an artifact of blank contamination

Table 1
Soil Analytical Results Compared to 6-NYCRR Part 375 Unrestricted Use SCOs
Site SS025 (T-9 Storage Area)
Former Griffiss AFB Rome, New York

Sample Identification	NYCRR Part 375 6.8(a) Unrestricted SCO	SS025-SB05(2-4)		SS025-SS06		SS025-SS06-a		SS025-SB06(0-2)		SS025-SB06(2-4)		SS025-SS07		SS025-SB07(0-2)		SS025-SB07(2-4)		SS025-SS08		SS025-SB08(0-2)		SS025-SB08(2-4)	
Sample Date		5/31/2017		5/31/2017		5/31/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017	
Depth to Water		5.5'		5.0'		5.0'		5.0'		5.0'		4.5'		4.5'		4.5'		5.5'		5.5'		5.5'	
VOCs (8260B) (µg/kg)																							
1,1,1,2-Tetrachloroethane	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
1,1,1-Trichloroethane	680	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
1,1,2,2-Tetrachloroethane	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
1,1,2-Trichloroethane	NV	2.8	U	3.0	U	2.8	U	3.3	U	3.2	U	3.2	U	3.4	U	3.1	U	2.7	U	2.9	U	2.7	U
1,1-Dichloroethane	270	0.69	U	0.74	U	0.70	U	0.82	U	0.80	U	0.81	U	0.84	U	0.79	U	0.68	U	0.73	U	0.68	U
1,1-Dichloroethene	330	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
1,1-Dichloropropene	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
1,2,3-Trichlorobenzene	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	UJ
1,2,3-Trichloropropane	NV	2.8	U	3.0	U	2.8	U	3.3	U	3.2	U	3.2	U	3.4	U	3.1	U	2.7	U	2.9	U	2.7	U
1,2,4-Trichlorobenzene	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	UJ
1,2,4-Trimethylbenzene	3,600	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
1,2-Dibromo-3-Chloropropane	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	UJ
1,2-Dibromoethane	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
1,2-Dichlorobenzene	1,100	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	UJ
1,2-Dichloroethane	20	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
1,2-Dichloroethene, Total	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
1,2-Dichloropropane	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
1,3,5-Trimethylbenzene	8,400	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
1,3-Dichlorobenzene	2,400	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	UJ
1,3-Dichloropropane	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
1,4-Dichlorobenzene	1,800	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	UJ
2,2-Dichloropropane	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
2-Butanone (MEK)	120	5.6	U	5.9	U	5.6	U	6.5	U	6.4	U	6.5	U	6.7	U	6.3	U	5.4	U	5.8	U	5.5	U
2-Chlorotoluene	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
2-Hexanone	NV	11	U	12	U	11	U	13	U	13	U	13	U	13	U	13	U	11	U	12	U	11	U
4-Chlorotoluene	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
4-Isopropyltoluene	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.6	J	1.5	U	1.4	U
4-Methyl-2-pentanone (MIBK)	NV	11	U	12	U	11	U	13	U	13	U	13	U	13	U	13	U	11	U	12	U	11	U
Acetone	50	11	U	7.6	UB	11	U	13	U	13	U	13	UB	13	U	13	U	7.8	UB	12	U	11	U
Benzene	60	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
Bromobenzene	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
Bromochloromethane	NV	0.69	U	0.74	U	0.70	U	0.82	U	0.80	U	0.81	U	0.84	U	0.79	U	0.68	U	0.73	U	0.68	U
Bromodichloromethane	NV	0.69	U	0.74	U	0.70	U	0.82	U	0.80	U	0.81	U	0.84	U	0.79	U	0.68	U	0.73	U	0.68	U
Bromoform	NV	0.69	U	0.74	U	0.70	U	0.82	U	0.80	U	0.81	U	0.84	U	0.79	U	0.68	U	0.73	U	0.68	U
Bromomethane	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
Carbon disulfide	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
Carbon tetrachloride	760	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
Chlorobenzene	1,100	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
Chloroethane	NV	2.8	U	3.0	U	2.8	U	3.3	U	3.2	U	3.2	U	3.4	U	3.1	U	2.7	U	2.9	U	2.7	U
Chloroform	370	0.69	U	0.74	U	0.70	U	0.82	U	0.80	U	0.81	U	0.84	U	0.79	U	0.68	U	0.73	U	0.68	U
Chloromethane	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
cis-1,2-Dichloroethene	250	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
cis-1,3-Dichloropropene	NV	2.8	U	3.0	U	2.8	U	3.3	U	3.2	U	3.2	U	3.4	U	3.1	U	2.7	U	2.9	U	2.7	U
Dibromochloromethane	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
Dibromomethane	NV	2.8	U	3.0	U	2.8	U	3.3	U	3.2	U	3.2	U	3.4	U	3.1	U	2.7	U	2.9	U	2.7	U
Dichlorodifluoromethane	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
Ethylbenzene	1,000	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U

Table 1
Soil Analytical Results Compared to 6-NYCRR Part 375 Unrestricted Use SCOs
Site SS025 (T-9 Storage Area)
Former Griffiss AFB Rome, New York

Sample Identification	NYCRR Part 375 6.8(a) Unrestricted SCO	SS025-SB05(2-4)		SS025-SS06		SS025-SS06-a		SS025-SB06(0-2)		SS025-SB06(2-4)		SS025-SS07		SS025-SB07(0-2)		SS025-SB07(2-4)		SS025-SS08		SS025-SB08(0-2)		SS025-SB08(2-4)	
Sample Date		5/31/2017		5/31/2017		5/31/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017	
Depth to Water		5.5'		5.0'		5.0'		5.0'		5.0'		4.5'		4.5'		4.5'		5.5'		5.5'		5.5'	
Hexachlorobutadiene	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
Isopropyl ether	NV	6.9	U	7.4	U	7.0	U	8.2	U	8.0	U	8.1	U	8.4	U	7.9	U	6.8	U	7.3	U	6.8	U
Isopropylbenzene	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
m&p-Xylene	NV	2.8	U	3.0	U	2.8	U	3.3	U	3.2	U	3.2	U	3.4	U	3.1	U	2.7	U	2.9	U	2.7	U
Methyl iodide	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
Methyl tert-butyl ether	930	0.69	U	0.74	U	0.70	U	0.82	U	0.80	U	0.81	U	0.84	U	0.79	U	0.68	U	0.73	U	0.68	U
Methylene Chloride	50	2.8	U	3.0	U	2.8	U	3.3	U	3.2	U	3.2	U	3.4	U	3.1	U	2.7	U	2.9	U	2.7	U
Naphthalene	12,000	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
n-Butylbenzene	12,000	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
N-Propylbenzene	3,900	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
o-Xylene	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
sec-Butylbenzene	11,000	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
Styrene	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
tert-Butylbenzene	5,900	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
Tetrachloroethene	1,300	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
Toluene	700	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
trans-1,2-Dichloroethene	190	0.69	U	0.74	U	0.70	U	0.82	U	0.80	U	0.81	U	0.84	U	0.79	U	0.68	U	0.73	U	0.68	U
trans-1,3-Dichloropropene	NV	1.4	U	1.5	U	1.4	U	1.6	U	1.6	U	1.6	U	1.7	U	1.6	U	1.4	U	1.5	U	1.4	U
Trichloroethene	470	0.69	U	0.74	U	0.70	U	0.82	U	0.80	U	0.81	U	0.84	U	0.79	U	0.68	U	0.73	U	0.68	U
Trichlorofluoromethane	NV	2.8	U	3.0	U	2.8	U	3.3	U	3.2	U	3.2	U	3.4	U	3.1	U	2.7	U	2.9	U	2.7	U
Vinyl acetate	NV	2.8	U	3.0	U	2.8	U	3.3	U	3.2	U	3.2	U	3.4	U	3.1	U	2.7	U	2.9	U	2.7	U
Vinyl chloride	20	2.8	U	3.0	U	2.8	U	3.3	U	3.2	U	3.2	U	3.4	U	3.1	U	2.7	U	2.9	U	2.7	U
Xylenes (total)	260	0.87	U	0.93	U	0.87	U	1.0	U	1.0	U	1.0	U	1.1	U	0.98	U	0.85	U	0.91	U	0.85	U
PAHs (8270D SIM) (µg/kg)																							
1-Methylnaphthalene	NV	0.51	U	**1.1**	J	0.55	U	**0.71**	J	0.54	UJ	**0.38**	J	0.56	U	0.56	UJ	**11**		**0.50**	J	0.57	U
2-Methylnaphthalene	NV	0.68	U	**1.4**	J	0.73	U	**0.77**	J	0.72	UJ	**0.48**	J	0.75	U	0.75	UJ	**29**		**0.88**	J	0.76	U
Acenaphthene	20,000	0.27	U	**1.7**	J	0.29	U	**5.0**	J	0.29	UJ	**0.43**	J	0.30	U	0.30	UJ	**1.0**	J	**0.64**	J	0.31	U
Acenaphthylene	100,000	0.68	U	**4.9**	J	0.73	U	**2.0**	J	0.72	UJ	**1.7**	J	0.75	U	0.75	UJ	0.77	U	**2.9**	J	**2.3**	J
Anthracene	100,000	2.5	U	**5.3**	J	**2.7**	J	**11**		2.7	UJ	**1.7**	J	2.8	U	2.8	UJ	**0.99**	J	**1.5**	J	2.9	U
Benzo[a]anthracene	1,000	2.5	U	**26**	J	**53**	J	**42**		2.7	UJ	**6.4**		2.8	U	2.8	UJ	**3.4**	J	**3.7**	J	**1.3**	J
Benzo[a]pyrene	1,000	2.5	U	**29**	J	**81**	J	**39**		2.7	UJ	**7.6**		2.8	U	2.8	UJ	**4.2**	J	**3.8**	J	**1.3**	J
Benzo[b]fluoranthene	1,000	2.5	U	**40**	J	**100**	J	**53**		2.7	UJ	**12**		2.8	U	2.8	UJ	**7.4**		**6.6**		**2.0**	J
Benzo[g,h,i]perylene	100,000	**1.7**	J	**16**	J	**48**	J	**21**		2.7	UJ	**5.1**	J	2.8	U	2.8	UJ	**3.1**	J	**2.7**	J	2.9	U
Benzo[k]fluoranthene	800	2.5	U	**14**	J	**32**	J	**19**		2.7	UJ	**4.8**	J	2.8	U	2.8	UJ	**2.5**	J	**1.6**	J	2.9	U
Chrysene	1,000	**1.1**	J	**31**	J	**66**	J	**45**		2.7	UJ	**9.6**		2.8	U	2.8	UJ	**5.6**	J	**5.3**		**1.8**	J
Dibenz(a,h)anthracene	330	2.5	U	**5.3**	J	**14**	J	**6.1**		2.7	UJ	**1.5**	J	2.8	U	2.8	UJ	2.9	U	2.6	U	2.9	U
Fluoranthene	100,000	2.5	U	**51**		**62**		**85**		**1.4**	J	**15**		**1.3**	J	2.8	UJ	**7.6**		**7.4**		**2.3**	J
Fluorene	30,000	0.68	U	**2.1**	J	0.73	U	**4.6**	J	0.72	UJ	**0.98**	J	0.75	U	0.75	UJ	**3.3**	J	**1.1**	J	**0.82**	J
Indeno[1,2,3-cd]pyrene	500	**1.1**	J	**19**	J	**55**	J	**19**		2.7	UJ	**4.5**	J	2.8	U	2.8	UJ	**2.6**	J	2.6	U	2.9	U
Naphthalene	12,000	0.68	U	0.73	U	0.73	U	**0.70**	J	0.72	UJ	**0.58**	J	0.75	U	0.75	UJ	**50**		**0.56**	J	0.76	U
Phenanthrene	100,000	2.5	U	**22**	J	**13**	J	**52**		2.7	UJ	**6.8**		2.8	U	2.8	UJ	**4.9**	J	**4.1**	J	**1.9**	J
Pyrene	100,000	2.5	U	**46**		**61**		**69**		2.7	UJ	**13**		2.8	U	2.8	UJ	**6.7**		**7.0**		**2.0**	J
Pesticides (8081B) (µg/kg)																							
4,4'-DDD	3.3	1.8	U	1.8	U	1.9	U	1.8	UJ	1.8	U	1.8	U	1.8	U	1.9	U	1.9	U	1.8	U	1.8	U
4,4'-DDE	3.3	0.72	U	**1.2**	J	**1.0**	J	**0.43**	J	0.72	U	0.73	U	0.71	U	0.78	U	0.76	U	0.71	U	0.73	U
4,4'-DDT	3.3	1.8	U	**1.2**	J	**1.1**	J	1.8	UJ	1.8	U	1.8	U	1.8	U	1.9	U	1.9	U	1.8	U	1.8	U
Aldrin	5	0.72	U	0.72	U	0.75	U	0.71	UJ	0.72	U	0.73	U	0.71	U	0.78	U	0.76	U	0.71	U	0.73	U
alpha-BHC	20	0.72	U	0.72	U	0.75	U	0.71	UJ	0.72	U	0.73	U	0.71	U	0.78	U	0.76	U	0.71	U	0.73	U

Table 1
Soil Analytical Results Compared to 6-NYCRR Part 375 Unrestricted Use SCOs
Site SS025 (T-9 Storage Area)
Former Griffiss AFB Rome, New York

Sample Identification	NYCRR Part 375 6.8(a) Unrestricted SCO	SS025-SB05(2-4)		SS025-SS06		SS025-SS06-a		SS025-SB06(0-2)		SS025-SB06(2-4)		SS025-SS07		SS025-SB07(0-2)		SS025-SB07(2-4)		SS025-SS08		SS025-SB08(0-2)		SS025-SB08(2-4)	
Sample Date		5/31/2017		5/31/2017		5/31/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017	
Depth to Water		5.5'		5.0'		5.0'		5.0'		5.0'		4.5'		4.5'		4.5'		5.5'		5.5'		5.5'	
alpha-Chlordane	94	0.72	U	0.72	U	0.75	U	0.71	UJ	0.72	U	0.73	U	0.71	U	0.78	U	0.76	U	0.71	U	0.73	U
beta-BHC	36	1.8	U	1.8	U	1.9	U	1.8	UJ	1.8	U	1.8	U	1.8	U	1.9	U	1.9	U	1.8	U	1.8	U
delta-BHC	40	1.1	U	1.1	U	1.1	U	1.1	UJ	1.1	U	1.1	U	1.1	U	1.2	U	1.1	U	1.1	U	1.1	U
Dieldrin	5	0.72	U	0.72	U	0.75	U	0.71	UJ	0.72	U	0.73	U	0.71	U	0.78	U	0.76	U	0.71	U	0.73	U
Endosulfan I	2,400*	0.72	U	0.72	U	0.75	U	0.71	UJ	0.72	U	0.73	U	0.71	U	0.78	U	0.76	U	0.71	U	0.73	U
Endosulfan II	2,400*	0.72	U	0.72	U	0.75	U	0.71	UJ	0.72	U	0.73	U	0.71	U	0.78	U	0.76	U	0.71	U	0.73	U
Endosulfan sulfate	2,400*	0.72	U	0.72	U	0.75	U	0.71	UJ	0.72	U	0.73	U	0.71	U	0.78	U	0.76	U	0.71	U	0.73	U
Endrin	14	0.72	U	0.72	U	0.75	U	0.71	UJ	0.72	U	0.73	U	0.71	U	0.78	U	0.76	U	0.71	U	0.73	U
Endrin aldehyde	NV	0.72	U	0.72	U	0.75	U	0.71	UJ	0.72	U	0.73	U	0.71	U	0.78	U	0.76	U	0.71	U	0.73	U
gamma-BHC (Lindane)	100	1.1	U	1.1	U	1.1	U	1.1	UJ	1.1	U	1.1	U	1.1	U	1.2	U	1.1	U	1.1	U	1.1	U
gamma-Chlordane	NV	0.72	U	0.72	U	0.75	U	0.71	UJ	0.72	U	0.73	U	0.71	U	0.78	U	0.76	U	0.71	U	0.73	U
Heptachlor	42	0.72	U	0.72	U	0.75	U	0.71	UJ	0.72	U	0.73	U	0.71	U	0.78	U	0.76	U	0.71	U	0.73	U
Heptachlor epoxide	NV	1.1	U	1.1	U	1.1	U	1.1	UJ	1.1	U	1.1	U	1.1	U	1.2	U	1.1	U	1.1	U	1.1	U
Methoxychlor	NV	1.1	U	1.1	U	1.1	U	1.1	UJ	1.1	U	1.1	U	1.1	U	1.2	U	1.1	U	1.1	U	1.1	U
Toxaphene	NV	35	U	36	U	37	U	35	U	36	U	36	U	35	U	38	U	37	U	35	U	36	U
PCBs (8082A) (µg/kg)																							
Arochlor 1016	100	16	U	16	U	17	U	16	U	16	U	16	U	16	U	17	U	17	U	16	U	16	U
Arochlor 1221	100	18	U	18	U	19	U	18	U	18	U	19	U	18	U	20	U	19	U	18	U	18	U
Arochlor 1232	100	16	U	16	U	17	U	16	U	16	U	16	U	16	U	17	U	17	U	16	U	16	U
Arochlor 1242	100	35	U	36	U	37	U	35	U	36	U	36	U	35	U	38	U	37	U	35	U	36	U
Arochlor 1248	100	21	U	22	U	22	U	21	U	22	U	22	U	21	U	23	U	23	U	21	U	22	U
Arochlor 1254	100	18	U	18	U	19	U	18	U	18	U	19	U	18	U	20	U	19	U	18	U	18	U
Arochlor 1260	100	8.2	U	8.3	U	8.6	U	8.2	U	8.3	U	8.4	U	8.1	U	8.9	U	8.7	U	8.2	U	8.3	U
Metals (6010C/7471A) (mg/kg)																							
Aluminum	NV	**10,000**	J	**7,800**	J	**7,500**	J	**3,500**	J	**2,500**	J	**5,100**	J	**3,300**	J	**3,400**	J	**7,500**	J	**4,000**	J	**8,300**	J
Antimony	NV	1.6	U	1.5	U	1.6	U	1.7	U	1.6	U	1.7	UJ	1.5	UJ	1.8	UJ	1.6	U	1.2	UJ	1.2	UJ
Arsenic	13	**6.9**		**4.7**		**4.4**		2.1	UB	1.4	UB	2.3	UB	**2.5**	J	**2.7**	J	5.1	UB	**2.8**	J	**3.7**	J
Barium	350	**51**		**32**		**33**		**11**		**9.4**		**18**		**12**		**13**		**24**		**13**		**31**	
Beryllium	7.2	**0.48**	J	**0.30**	J	**0.31**	J	**0.17**	J	**0.11**	J	**0.23**	J	**0.16**	J	**0.18**	J	**0.30**	J	**0.20**	J	**0.53**	J
Cadmium	2.5	**0.13**	J	**0.17**	J	**0.18**	J	0.17	U	0.16	U	**0.080**	J	**0.058**	J	0.18	U	**0.079**	J	**0.050**	J	**0.12**	J
Calcium	NV	**1,800**		**1,300**		**1,400**		**7,500**	J	**12,000**	J	**1,500**	J	**5,700**		**2,600**		**3,600**	J	**950**		**980**	
Chromium	30	**12**		**7.4**		**7.6**		4.0	UB	2.9	UB	**5.4**		3.8	UB	3.9	UB	**7.9**		**4.2**		**9.6**	
Cobalt	NV	**7.6**		**4.4**		**4.3**		**2.5**		**2.0**		**3.4**		**2.7**		**2.9**		**5.7**		**2.9**		**4.9**	
Copper	50	**52**		**14**		**15**		**9.0**	J	**6.3**	J	**11**	J	**9.6**	J	**10**	J	**31**	J	**9.8**	J	**18**	J
Iron	NV	**27,000**	J	**13,000**	J	**13,000**	J	**8,000**	J	**5,700**	J	**9,800**	J	**7,700**		**8,200**		**17,000**	J	**8,600**		**17,000**	
Lead	63	**5.5**	J	**7.8**	J	**8.2**	J	**1.8**	J	**0.98**	J	**4.2**	J	**2.1**	J	**2.0**	J	**4.2**		**1.9**	J	**5.8**	J
Magnesium	NV	**4,000**	J	**2,000**	J	**2,000**	J	**2,800**	J	**2,700**	J	**2,000**	J	**2,500**		**2,000**		**3,700**	J	**1,700**		**2,600**	
Manganese	1,600	**570**	J	**640**	J	**620**	J	**250**		**200**		**430**	J	**310**	J	**330**	J	**950**	J	**300**	J	**340**	J

Table 1
Soil Analytical Results Compared to 6-NYCRR Part 375 Unrestricted Use SCOs
Site SS025 (T-9 Storage Area)
Former Griffiss AFB Rome, New York

Sample Identification	**NYCRR Part 375 6.8(a) Unrestricted SCO**	**SS025-SB05(2-4)**		**SS025-SS06**		**SS025-SS06-a**		**SS025-SB06(0-2)**		**SS025-SB06(2-4)**		**SS025-SS07**		**SS025-SB07(0-2)**		**SS025-SB07(2-4)**		**SS025-SS08**		**SS025-SB08(0-2)**		**SS025-SB08(2-4)**	
Sample Date		5/31/2017		5/31/2017		5/31/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017	
Depth to Water		5.5'		5.0'		5.0'		5.0'		5.0'		4.5'		4.5'		4.5'		5.5'		5.5'		5.5'	
Mercury (µg/kg)	180	**23**		**33**		**30**		16	U	18	U	18	U	17	U	19	U	**17**	J	**6.4**	J	**20**	
Nickel	30	**17**		**9.2**		**8.9**		**5.8**		**4.2**	J	**7.4**		**5.5**		**6.1**		**12**		**6.5**		**12**	
Potassium	NV	**1,000**		**710**		**720**		550	UB	480	UB	660	UB	**560**		**570**		850	UB	**600**		**970**	
Selenium	3.9	3.2	U	**0.87**	J	3.1	U	3.3	U	3.3	U	3.3	U	2.9	UJ	3.5	UJ	3.2	UJ	2.4	UJ	2.4	UJ
Silver	2	0.64	U	0.59	U	0.63	U	0.66	U	0.65	U	0.67	U	0.59	U	0.70	U	0.64	U	0.48	U	0.47	U
Sodium	NV	210	U	200	U	210	U	220	U	220	U	220	U	200	U	230	U	210	U	160	U	**71**	J
Thallium	NV	2.7	U	2.4	U	2.6	U	2.8	U	2.7	U	2.8	UJ	**0.64**	J	2.9	U	2.7	U	2.0	U	2.0	U
Vanadium	NV	**18**	J	**13**	J	**13**	J	**7.1**		5.6	UB	**9.8**		**7.1**	J	**7.3**	J	**14**		**7.6**	J	**19**	J
Zinc	109	**60**	J	**37**	J	**36**	J	**16**		**12**		**26**		**17**		**19**		**41**		**18**		**37**	

Notes:
VOCs = Volatile Organic Compounds; PAHs = Polycyclic Aromatic Hydrocarbons; SIM = Selected Ion Monitoring; PCBs = Polychlorinated Biphenyls; NYCRR = New York Codes, Rules, and Regulations; µg/kg = micrograms per kilogram; mg/kg = milligrams per kilogram; NV = no value
Detections are bolded.

Gray shading exceeds the Soil Cleanup Objective (SCO).
*The sum of Endosulfan I, Endosulfan II, and Endosulfan
J - estimated value between the detection limit and limi
U - not detected
UJ - estimated not detected due to quality control issue
UB - considered an artifact of blank contamination

Table 1
Soil Analytical Results Compared to 6-NYCRR Part 375 Unrestricted Use SCOs
Site SS025 (T-9 Storage Area)
Former Griffiss AFB Rome, New York

Sample Identification	NYCRR Part 375 6.8(a) Unrestricted SCO	SS025-SS09		SS025-SB09(0-2)		SS025-SB09(2-4)		SS025-SB09(4-6)		SS025-SB09(6-8)		SS025-SS10		SS025-SB10(0-2)		SS025-SB10(2-4)		SS025-SB10(2-4)-a		SS025-SB10(4-6)	
Sample Date		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017	
Depth to Water		9.5'		9.5'		9.5'		9.5'		9.5'		6.5'		6.5'		6.5'		6.5'		6.5'	
VOCs (8260B) (µg/kg)																					
1,1,1,2-Tetrachloroethane	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
1,1,1-Trichloroethane	680	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	40	U
1,1,2,2-Tetrachloroethane	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
1,1,2-Trichloroethane	NV	2.5	U	2.9	U	2.6	U	2.9	U	2.5	U	3.0	U	3.4	U	3.6	U	3.1	U	80	U
1,1-Dichloroethane	270	0.62	U	0.71	U	0.65	U	0.73	U	0.64	U	0.75	U	0.85	U	0.91	U	0.78	U	160	U
1,1-Dichloroethene	330	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	160	U
1,1-Dichloropropene	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	160	U
1,2,3-Trichlorobenzene	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
1,2,3-Trichloropropane	NV	2.5	U	2.9	U	2.6	U	2.9	U	2.5	U	3.0	U	3.4	U	3.6	U	3.1	U	160	U
1,2,4-Trichlorobenzene	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	160	U
1,2,4-Trimethylbenzene	3,600	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
1,2-Dibromo-3-Chloropropane	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	320	U
1,2-Dibromoethane	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
1,2-Dichlorobenzene	1,100	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	320	U
1,2-Dichloroethane	20	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
1,2-Dichloroethene, Total	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
1,2-Dichloropropane	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	160	U
1,3,5-Trimethylbenzene	8,400	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
1,3-Dichlorobenzene	2,400	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	160	U
1,3-Dichloropropane	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
1,4-Dichlorobenzene	1,800	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
2,2-Dichloropropane	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
2-Butanone (MEK)	120	5.0	U	5.7	U	5.2	U	5.8	U	5.1	U	6.0	U	6.8	U	7.3	U	6.2	U	640	U
2-Chlorotoluene	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
2-Hexanone	NV	9.9	U	11	U	10	U	12	U	10	U	12	U	14	U	15	U	12	U	640	U
4-Chlorotoluene	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
4-Isopropyltoluene	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
4-Methyl-2-pentanone (MIBK)	NV	9.9	U	11	U	10	U	12	U	10	U	12	U	14	U	15	U	12	U	640	U
Acetone	50	48	UB	20	UB	10	U	12	U	10	U	35	UB	14	U	15	U	12	U	1,300	U
Benzene	60	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	160	U
Bromobenzene	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	40	U
Bromochloromethane	NV	0.62	U	0.71	U	0.65	U	0.73	U	0.64	U	0.75	U	0.85	U	0.91	U	0.78	U	160	U
Bromodichloromethane	NV	0.62	U	0.71	U	0.65	U	0.73	U	0.64	U	0.75	U	0.85	U	0.91	U	0.78	U	80	U
Bromoform	NV	0.62	U	0.71	U	0.65	U	0.73	U	0.64	U	0.75	U	0.85	U	0.91	U	0.78	U	160	U
Bromomethane	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	160	U
Carbon disulfide	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	160	U
Carbon tetrachloride	760	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	40	U
Chlorobenzene	1,100	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
Chloroethane	NV	2.5	U	2.9	U	2.6	U	2.9	U	2.5	U	3.0	U	3.4	U	3.6	U	3.1	U	160	U
Chloroform	370	0.62	U	0.71	U	0.65	U	0.73	U	0.64	U	0.75	U	0.85	U	0.91	U	0.78	U	160	U
Chloromethane	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	160	U
cis-1,2-Dichloroethene	250	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
cis-1,3-Dichloropropene	NV	2.5	U	2.9	U	2.6	U	2.9	U	2.5	U	3.0	U	3.4	U	3.6	U	3.1	U	80	U
Dibromochloromethane	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
Dibromomethane	NV	2.5	U	2.9	U	2.6	U	2.9	U	2.5	U	3.0	U	3.4	U	3.6	U	3.1	U	80	U
Dichlorodifluoromethane	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
Ethylbenzene	1,000	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U

Table 1
Soil Analytical Results Compared to 6-NYCRR Part 375 Unrestricted Use SCOs
Site SS025 (T-9 Storage Area)
Former Griffiss AFB Rome, New York

Sample Identification	NYCRR Part 375 6.8(a) Unrestricted SCO	SS025-SS09		SS025-SB09(0-2)		SS025-SB09(2-4)		SS025-SB09(4-6)		SS025-SB09(6-8)		SS025-SS10		SS025-SB10(0-2)		SS025-SB10(2-4)		SS025-SB10(2-4)-a		SS025-SB10(4-6)	
Sample Date		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017	
Depth to Water		9.5'		9.5'		9.5'		9.5'		9.5'		6.5'		6.5'		6.5'		6.5'		6.5'	
Hexachlorobutadiene	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	160	U
Isopropyl ether	NV	6.2	U	7.1	U	6.5	U	7.3	U	6.4	U	7.5	U	8.5	U	9.1	U	7.8	U	800	U
Isopropylbenzene	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
m&p-Xylene	NV	2.5	U	2.9	U	2.6	U	2.9	U	2.5	U	3.0	U	3.4	U	3.6	U	3.1	U	160	U
Methyl iodide	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	**22**	J
Methyl tert-butyl ether	930	0.62	U	0.71	U	0.65	U	0.73	U	0.64	U	0.75	U	0.85	U	0.91	U	0.78	U	160	U
Methylene Chloride	50	2.5	U	2.9	U	2.6	U	2.9	U	2.5	U	3.0	U	3.4	U	3.6	U	3.1	U	760	UB
Naphthalene	12,000	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
n-Butylbenzene	12,000	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
N-Propylbenzene	3,900	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	160	U
o-Xylene	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
sec-Butylbenzene	11,000	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
Styrene	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
tert-Butylbenzene	5,900	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
Tetrachloroethene	1,300	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
Toluene	700	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	80	U
trans-1,2-Dichloroethene	190	0.62	U	0.71	U	0.65	U	0.73	U	0.64	U	0.75	U	0.85	U	0.91	U	0.78	U	160	U
trans-1,3-Dichloropropene	NV	1.2	U	1.4	U	1.3	U	1.5	U	1.3	U	1.5	U	1.7	U	1.8	U	1.6	U	160	U
Trichloroethene	470	0.62	U	0.71	U	0.65	U	0.73	U	0.64	U	0.75	U	0.85	U	0.91	U	0.78	U	80	U
Trichlorofluoromethane	NV	2.5	U	2.9	U	2.6	U	2.9	U	2.5	U	3.0	U	3.4	U	3.6	U	3.1	U	160	U
Vinyl acetate	NV	2.5	U	2.9	U	2.6	U	2.9	U	2.5	U	3.0	U	3.4	U	3.6	U	3.1	U	160	U
Vinyl chloride	20	2.5	U	2.9	U	2.6	U	2.9	U	2.5	U	3.0	U	3.4	U	3.6	U	3.1	U	80	U
Xylenes (total)	260	0.78	U	0.89	U	0.81	U	0.91	U	0.79	U	0.94	U	1.1	U	1.1	U	0.97	U	80	U
PAHs (8270D SIM) (µg/kg)																					
1-Methylnaphthalene	NV	**2.7**	J	**2.4**	J	**3.0**	J	**3.7**	J	0.55	U	0.53	U	0.50	U	0.51	U	0.52	U	0.50	U
2-Methylnaphthalene	NV	**4.2**	J	**3.7**	J	**3.8**	J	**5.9**	J	0.73	U	0.70	U	0.67	U	0.68	U	0.70	U	0.67	U
Acenaphthene	20,000	**1.4**	J	**2.0**	J	**1.2**	J	**3.1**	J	0.29	U	0.28	U	0.27	U	0.27	U	0.28	U	0.27	U
Acenaphthylene	100,000	**4.7**	J	**5.2**	J	**6.5**		**14**		**1.1**	J	**1.3**	**J**	**1.1**	**J**	**0.44**	J	**0.37**	J	**0.43**	J
Anthracene	100,000	**7.1**		**9.1**		**7.4**		**15**		2.7	U	**1.4**	**J**	**0.84**	**J**	2.5	U	2.6	U	2.5	U
Benzo[a]anthracene	1,000	**25**		**58**		**22**		**39**		2.7	U	**4.7**	**J**	**2.7**	**J**	2.5	U	2.6	U	2.5	U
Benzo[a]pyrene	1,000	**25**		**55**		**24**		**39**		**0.85**	J	**5.4**		**3.2**	**J**	2.5	U	2.6	U	2.5	U
Benzo[b]fluoranthene	1,000	**49**		**81**		**37**		**64**		**1.7**	J	**8.2**		**4.8**	**J**	2.5	U	2.6	U	2.5	U
Benzo[g,h,i]perylene	100,000	**19**		**29**		**18**		**34**		2.7	U	**3.7**	**J**	**2.4**	**J**	2.5	U	2.6	U	2.5	U
Benzo[k]fluoranthene	800	**16**		**28**		**15**		**22**		2.7	U	**3.0**	**J**	**1.7**	**J**	2.5	U	2.6	U	2.5	U
Chrysene	1,000	**46**		**69**		**28**		**51**		**1.4**	J	**6.3**		**3.6**	**J**	2.5	U	2.6	U	2.5	U
Dibenz(a,h)anthracene	330	**5.5**		**8.2**		**4.9**	J	**8.6**		2.7	U	2.6	U	2.5	U	2.5	U	2.6	U	2.5	U
Fluoranthene	100,000	**40**		**75**		**34**		**75**		**1.3**	J	**9.0**		**5.1**		2.5	U	2.6	U	2.5	U
Fluorene	30,000	**3.4**	J	**2.9**	J	**2.5**	J	4.9	J	0.73	U	**0.50**	J	**0.48**	J	0.68	U	0.70	U	0.67	U
Indeno[1,2,3-cd]pyrene	500	**16**		**26**		**15**		**26**		2.7	U	**3.2**	J	**2.2**	J	2.5	U	2.6	U	2.5	U
Naphthalene	12,000	**3.1**	J	**2.6**	J	**2.6**	J	**5.2**	J	0.73	U	**0.34**	J	0.67	U	0.68	U	0.70	U	0.67	U
Phenanthrene	100,000	**19**		**25**		**15**		**35**		2.7	U	**3.3**	J	**2.4**	J	2.5	U	2.6	U	2.5	U
Pyrene	100,000	**39**		**72**		**34**		**70**		**1.3**	J	**8.4**		**4.5**	J	2.5	U	2.6	U	2.5	U
Pesticides (8081B) (µg/kg)																					
4,4'-DDD	3.3	1.8	U	1.9	U	1.8	U	1.9	U	1.8	U	1.7	U	1.8	U	1.7	U	1.7	U	1.7	U
4,4'-DDE	3.3	**0.59**	J	**3.0**	J	**1.1**	J	**2.4**		0.74	U	0.70	U	0.70	U	0.70	U	0.70	U	0.68	U
4,4'-DDT	3.3	**1.3**	J	19	U	**2.2**		**5.1**		1.8	U	1.7	U	1.8	U	1.7	U	1.7	U	1.7	U
Aldrin	5	0.72	U	0.75	U	0.73	U	0.77	U	0.74	U	0.70	U	0.70	U	0.70	U	0.70	U	0.68	U
alpha-BHC	20	0.72	U	0.75	U	0.73	U	0.77	U	0.74	U	0.70	U	0.70	U	0.70	U	0.70	U	0.68	U

Table 1
Soil Analytical Results Compared to 6-NYCRR Part 375 Unrestricted Use SCOs
Site SS025 (T-9 Storage Area)
Former Griffiss AFB Rome, New York

Sample Identification	NYCRR Part 375 6.8(a) Unrestricted SCO	SS025-SS09		SS025-SB09(0-2)		SS025-SB09(2-4)		SS025-SB09(4-6)		SS025-SB09(6-8)		SS025-SS10		SS025-SB10(0-2)		SS025-SB10(2-4)		SS025-SB10(2-4)-a		SS025-SB10(4-6)	
Sample Date		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017	
Depth to Water		9.5'		9.5'		9.5'		9.5'		9.5'		6.5'		6.5'		6.5'		6.5'		6.5'	
alpha-Chlordane	94	0.72	U	**4.9**	J	0.73	U	0.77	U	0.74	U	0.70	U	0.70	U	0.70	U	0.70	U	0.68	U
beta-BHC	36	1.8	U	1.9	U	1.8	U	1.9	U	1.8	U	1.7	U	1.8	U	1.7	U	1.7	U	1.7	U
delta-BHC	40	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Dieldrin	5	**2.0**		0.75	U	**2.9**		**2.5**		0.74	U	0.70	U	0.70	U	0.70	U	0.70	U	0.68	U
Endosulfan I	2,400*	0.72	U	0.75	U	0.73	U	0.77	U	0.74	U	0.70	U	0.70	U	0.70	U	0.70	U	0.68	U
Endosulfan II	2,400*	0.72	U	0.75	U	0.73	U	0.77	U	0.74	U	0.70	U	0.70	U	0.70	U	0.70	U	0.68	U
Endosulfan sulfate	2,400*	0.72	U	0.75	U	0.73	U	0.77	U	0.74	U	0.70	U	0.70	U	0.70	U	0.70	U	0.68	U
Endrin	14	0.72	U	0.75	U	0.73	U	0.77	U	0.74	U	0.70	U	0.70	U	0.70	U	0.70	U	0.68	U
Endrin aldehyde	NV	0.72	U	0.75	U	0.73	U	0.77	U	0.74	U	0.70	U	0.70	U	0.70	U	0.70	U	0.68	U
gamma-BHC (Lindane)	100	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
gamma-Chlordane	NV	0.72	U	**3.1**	J	0.73	U	0.77	U	0.74	U	0.70	U	0.70	U	0.70	U	0.70	U	0.68	U
Heptachlor	42	0.72	U	0.75	U	0.73	U	0.77	U	0.74	U	0.70	U	0.70	U	0.70	U	0.70	U	0.68	U
Heptachlor epoxide	NV	1.1	U	11	U	1.1	U	1.1	U	1.1	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Methoxychlor	NV	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Toxaphene	NV	35	U	37	U	36	U	38	U	36	U	34	U	35	U	34	U	34	U	33	U
PCBs (8082A) (µg/kg)																					
Arochlor 1016	100	16	U	17	U	16	U	17	UJ	16	U	16	U	16	U	16	U	16	U	15	U
Arochlor 1221	100	18	U	19	U	19	U	19	UJ	19	U	18	U	18	U	18	U	18	U	17	U
Arochlor 1232	100	16	U	17	U	16	U	17	UJ	16	U	16	U	16	U	16	U	16	U	15	U
Arochlor 1242	100	35	U	37	U	36	U	38	UJ	36	U	34	U	35	U	34	U	34	U	33	U
Arochlor 1248	100	21	U	22	U	22	U	23	UJ	22	U	21	U	21	U	21	U	21	U	20	U
Arochlor 1254	100	18	U	19	U	19	U	19	UJ	19	U	18	U	18	U	18	U	18	U	17	U
Arochlor 1260	100	**95**		**81**		**69**		**14**	J	8.5	U	8.0	U	8.1	U	8.0	U	8.0	U	7.8	U
Metals (6010C/7471A) (mg/kg)																					
Aluminum	NV	**3,100**	J	**7,200**	J	**8,000**	J	**15,000**	J	**7,800**	J	**3,500**	J	**3,300**	J	**2,900**	J	**3,100**	J	**3,400**	J
Antimony	NV	6.8	UJ	1.2	UJ	1.3	UJ	1.5	UJ	1.3	U	1.4	U	1.6	U	1.3	U	1.5	U	1.3	U
Arsenic	13	**5.5**	J	**4.2**	J	**4.4**	J	**5.8**	J	3.9	UB	1.8	UB	2.2	UB	2.4	UB	2.4	UB	2.8	UB
Barium	350	**17**		**32**		**47**	J	**47**	J	**39**	J	**11**	J	**10**	J	**8.7**	J	**9.1**	J	**9.8**	J
Beryllium	7.2	**0.17**	J	**0.36**	J	**0.39**	J	**0.62**	J	**0.42**	J	**0.16**	J	**0.16**	J	**0.14**	J	**0.14**	J	**0.16**	J
Cadmium	2.5	**0.045**	J	**0.20**	J	**0.22**	J	**0.22**	J	**0.13**	J	**0.064**	J	**0.057**	J	**0.048**	J	0.15	U	0.13	U
Calcium	NV	**210,000**		**48,000**	J	**18,000**	J	**3,700**	J	**1,400**	J	**890**	J	**1,400**	J	**970**	J	**3,000**	J	**960**	J
Chromium	30	**4.9**		**8.0**		**9.5**	J	**15**	J	**9.6**	J	**3.6**	J	**3.6**	J	**3.1**	J	**3.4**	J	**3.7**	J
Cobalt	NV	**2.7**		**4.9**		**5.7**		**9.3**		**6.1**		**2.5**		**2.5**		**2.2**		**2.4**		**2.5**	
Copper	50	**11**	J	**22**	J	**31**	J	**25**	J	**19**	J	**8.5**	J	**8.2**	J	**7.8**	J	**8.1**	J	**8.4**	J
Iron	NV	**5,700**		**13,000**		**17,000**		**23,000**		**17,000**	J	**7,300**	J	**7,100**	J	**6,200**	J	**6,900**	J	**7,300**	J
Lead	63	**3.7**	J	**7.4**	J	7.5	UB	**19**	J	5.1	UB	1.9	UB	1.5	UB	1.3	UB	1.3	UB	1.5	UB
Magnesium	NV	**5,100**		**3,200**		**3,500**		**3,500**		**2,300**		**1,500**		**1,500**		**1,300**		**1,700**		**1,500**	
Manganese	1,600	**270**	J	**870**	J	**960**	J	**990**	J	**770**		**290**		**270**		**260**		**250**		**270**	

Table 1
Soil Analytical Results Compared to 6-NYCRR Part 375 Unrestricted Use SCOs
Site SS025 (T-9 Storage Area)
Former Griffiss AFB Rome, New York

Sample Identification	NYCRR Part 375 6.8(a) Unrestricted SCO	SS025-SS09		SS025-SB09(0-2)		SS025-SB09(2-4)		SS025-SB09(4-6)		SS025-SB09(6-8)		SS025-SS10		SS025-SB10(0-2)		SS025-SB10(2-4)		SS025-SB10(2-4)-a		SS025-SB10(4-6)	
Sample Date		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017		6/5/2017	
Depth to Water		9.5'		9.5'		9.5'		9.5'		9.5'		6.5'		6.5'		6.5'		6.5'		6.5'	
Mercury (µg/kg)	180	**15**	J	**45**		**79**		**38**		**17**	J	18	U	17	U	17	U	17	U	14	U
Nickel	30	**9.7**	J	**10**		**14**		**15**		**12**		**5.5**		**5.4**		**4.9**		**5.2**		**5.6**	
Potassium	NV	**620**		**880**		**1,000**		**1,400**		**900**		**560**		**590**		**480**		**570**		**580**	
Selenium	3.9	14	UJ	2.4	UJ	2.5	UJ	3.0	UJ	**0.81**	J	2.8	UJ	3.2	UJ	2.7	UJ	3.0	UJ	2.6	UJ
Silver	2	0.54	U	0.48	U	0.51	U	0.60	U	0.52	U	0.56	U	0.64	U	0.54	U	0.59	U	0.51	U
Sodium	NV	**110**	J	**59**	J	170	UJ	**85**	J	**75**	J	190	UJ	210	UJ	180	UJ	200	UJ	170	UJ
Thallium	NV	11	U	**0.92**	J	**0.76**	J	2.5	U	2.2	U	2.3	U	2.6	U	2.2	U	2.5	U	2.1	U
Vanadium	NV	**8.7**	J	**15**	J	**17**	J	**27**	J	**19**	J	**6.8**	J	**6.5**	J	**5.7**	J	**6.3**	J	**6.6**	J
Zinc	109	**26**		**39**		**52**		**67**		**36**		**15**		**14**		**13**		**14**		**14**	

Notes:
VOCs = Volatile Organic Compounds; PAHs = Polycyclic Aromatic Hydrocarbons; SIM = Selected Ion Monitoring; PCBs = Polychlorinated Biphenyls; NYCRR = New York Codes, Rules, and Regulations; µg/kg = micrograms per kilogram; mg/kg = milligrams per kilogram; NV = no value
Detections are bolded.

Gray shading exceeds the Soil Cleanup Objective (SCO).
*The sum of Endosulfan I, Endosulfan II, and Endosulfan
J - estimated value between the detection limit and limit
U - not detected
UJ - estimated not detected due to quality control issues
UB - considered an artifact of blank contamination

APPENDIX A
BORING LOGS

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BORING NUMBER SS025-SB01

CLIENT AFCEC
PROJECT NAME SS025
PROJECT NUMBER AFCGSA3.0012.00AA.2020.0003
PROJECT LOCATION Former Griffiss AFB - Rome, NY
DATE STARTED 6/5/17 **COMPLETED** 6/5/17
NORTHING: 1176491.18 **EASTING:** 1135269.81
GROUND ELEVATION 463.84 ft feet **HOLE SIZE** 3.75
DRILLING CONTRACTOR Aztech Environmental
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
▽ **AT TIME OF DRILLING** 2.5 ft / Elev 461.3 ft
LOGGED BY J. Geroux
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0		Soil Sample for offsite analysis collected from 0-2 feet below ground surface. Insufficient soil volume to collect sample from 2.0-2.5 feet below ground surface.	OH		Organic Silt, dark brown 7.5YR 3/2, plastic, soft, moist.	
					1.0 462.8	0.6
			SM		Silty Sand, brown (7.5YR 4/3), moist to saturated, loose, fine grained sand, subangular, trace gravel presence up to 1.0".	
2.5				▽		1.4
						1.7
5.0					5.0 458.8	
					Bottom of hole at 5.0 feet.	

BORING NUMBER SS025-SB02

CLIENT AFCEC
PROJECT NAME SS025
PROJECT NUMBER AFCGSA3.0012.00AA.2020.0003
PROJECT LOCATION Former Griffiss AFB - Rome, NY
DATE STARTED 5/31/17 **COMPLETED** 5/31/17
NORTHING: 1176312.69 **EASTING:** 1135273.96
GROUND ELEVATION 463.11 ft feet **HOLE SIZE** 3.75
DRILLING CONTRACTOR Aztech Environmental
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
▽ **AT TIME OF DRILLING** 3.0 ft / Elev 460.1 ft
LOGGED BY S. Liberatore
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0		Soil Sample for offsite analysis collected from 0-2 feet below ground surface. Insufficient soil volume to collect sample from 2.0-3.0 feet below ground surface.	SP		Sand, dark brown (7.5YR 3/2), moist, loose, fine grained sand, subangular, organics (roots).	
1.0						462.1
						0.8
			SM		Silty Sand, brown (7.5YR 4/3), moist to saturated, loose, fine grained sand, subangular. ▽	
2.5						
5.0						458.1
					Bottom of hole at 5.0 feet.	

BORING NUMBER SS025-SB03

CLIENT AFCEC
PROJECT NAME SS025
PROJECT NUMBER AFCGSA3.0012.00AA.2020.0003
PROJECT LOCATION Former Griffiss AFB - Rome, NY
DATE STARTED 5/31/17 **COMPLETED** 5/31/17
NORTHING: 1176262.38 **EASTING:** 1135274.79
GROUND ELEVATION 468.82 ft feet **HOLE SIZE** 3.75
DRILLING CONTRACTOR Aztech Environmental
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING 2.0 ft / Elev 466.8 ft
LOGGED BY S. Liberatore
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0		Soil Sample for offsite analysis collected from 0-2 feet below ground surface.	SM		Silty Sand, dark brown (7.5YR 3/3), moist, loose, fine grained sand, subangular, trace organics (roots). 0.5 468.3	
			SW		Sand, dark brown (7.5YR 3/2), moist to saturated, loose, fine to medium grained sand, subangular, trace organics (roots).	0.0
2.5						
5.0					5.0 463.8	
					Bottom of hole at 5.0 feet.	

BORING NUMBER SS025-SB04

CLIENT AFCEC
PROJECT NAME SS025
PROJECT NUMBER AFCGSA3.0012.00AA.2020.0003
PROJECT LOCATION Former Griffiss AFB - Rome, NY
DATE STARTED 5/31/17 **COMPLETED** 5/31/17
NORTHING: 1176231.52 **EASTING:** 1135333.66
GROUND ELEVATION 463.17 ft feet **HOLE SIZE** 3.75
DRILLING CONTRACTOR Aztech Environmental
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING 2.0 ft / Elev 461.2 ft
LOGGED BY S. Liberatore
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0		Soil Sample for offsite analysis collected from 0-2 feet below ground surface.	SP		Sand, dark brown (7.5YR 3/2), moist, loose, medium grained, subangular, trace gravel presence up to 0.5".	
1.0						462.2 1.1
			SP		Sand, brown (7.5YR 4/4), moist to saturated, loose, medium grained, subangular, trace gravel presence up to 0.75".	
2.5						
5.0						5.0 458.2
					Bottom of hole at 5.0 feet.	

BORING NUMBER SS025-SB05

CLIENT AFCEC
PROJECT NAME SS025
PROJECT NUMBER AFCGSA3.0012.00AA.2020.0003
PROJECT LOCATION Former Griffiss AFB - Rome, NY
DATE STARTED 5/31/17 **COMPLETED** 5/31/17
NORTHING: 1176264.46 **EASTING:** 1135373.9
GROUND ELEVATION 464.73 ft feet **HOLE SIZE** 3.75
DRILLING CONTRACTOR Aztec Environmental
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
▽ **AT TIME OF DRILLING** 5.5 ft / Elev 459.2 ft
LOGGED BY S. Liberatore
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0		Soil Samples for offsite analysis collected from 0-2 and 2-4 feet below ground surface. Insufficient soil volume to collect sample from 4.0-5.5 feet below ground surface.	SM		Silty Sand, dark brown (7.5YR 3/2), moist, loose, fine grained sand, subangular, trace gravel presence up to 1.0", trace organics (roots).	
1.0						463.7
			SM		Silty Sand, brown (7.5YR 4/3), moist, loose, fine grained sand, subangular, trace gravel presence up to 0.5".	3.4
2.0						462.7
2.5			SW		Sand, dark brown (7.5YR 3/2), moist to saturated, loose, medium to coarse grained sand, subangular, trace gravel inclusions up to 0.5", iron mottling.	0.4
5.0					▽	
7.5						
10.0					10.0	454.7

Bottom of hole at 10.0 feet.

BHATE ENVIRONMENTAL ASSOCIATES GAFB - SS025.GPJ GINT US LAB.GDT 7/12/17

BORING NUMBER SS025-SB06

CLIENT AFCEC
PROJECT NAME SS025
PROJECT NUMBER AFCGSA3.0012.00AA.2020.0003
PROJECT LOCATION Former Griffiss AFB - Rome, NY
DATE STARTED 6/5/17 **COMPLETED** 6/5/17
NORTHING: 1176417.96 **EASTING:** 1135373.93
GROUND ELEVATION 464.24 ft feet **HOLE SIZE** 3.75
DRILLING CONTRACTOR Aztech Environmental
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
▽ **AT TIME OF DRILLING** 5.0 ft / Elev 459.2 ft
LOGGED BY J. Geroux
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0		Soil Samples for offsite analysis collected from 0-2 and 2-4 feet below ground surface. Insufficient soil volume to collect sample from 4.0-5.0 feet below ground surface.	OH		Organic Silt, dark brown 7.5YR 3/2, plastic, soft, moist.	
					1.0 463.2	0.5
			SM		Silty Sand, brown (7.5YR 4/3), moist, loose, fine grained sand, subangular.	
2.5						1.3
5.0					▽ 5.0 459.2	4.5
			SM		Silty Sand, brown (7.5YR 4/3), saturated, loose, fine grained sand, subangular, trace gravel inclusions up to 0.25".	
7.5					7.5 456.7	0.9
			CL		Silty Clay, gray (Gley2 6/1), moist, dense, stiff, non-plastic, trace gravel inclusions up to 0.5".	
10.0					10.0 454.2	5.9

Bottom of hole at 10.0 feet.

BORING NUMBER SS025-SB07

CLIENT AFCEC
PROJECT NAME SS025
PROJECT NUMBER AFCGSA3.0012.00AA.2020.0003
PROJECT LOCATION Former Griffiss AFB - Rome, NY
DATE STARTED 6/5/17 **COMPLETED** 6/5/17
NORTHING: 1176522.2 **EASTING:** 1135366.4
GROUND ELEVATION 463.23 ft feet **HOLE SIZE** 3.75
DRILLING CONTRACTOR Aztech Environmental
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING 4.5 ft / Elev 458.7 ft
LOGGED BY J. Geroux
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0		Soil Samples for offsite analysis collected from 0-2 and 2-4 feet below ground surface. Insufficient soil volume to collect sample from 4.0-4.5 feet below ground surface.	OH		Organic Silt, brown 7.5YR 4/3, plastic, soft, moist.	
					1.0 462.2	0.2
			SM		Silty Sand, brown (7.5YR 4/3), moist to saturated, loose, fine grained sand, subangular, gravel inclusions up to 1.75".	
2.5						0.5
				▽		
5.0					5.0 458.2	1.1
			CL		Silty Clay, gray (Gley2 6/1), saturated, medium plasticity, trace gravel inclusions up to 0.5".	
7.5						1.7
					9.0 454.2	1.6
			CL		Silty Clay, gray (Gley2 6/1), saturated, medium plasticity, trace gravel inclusions up to 1.0".	
10.0					10.0 453.2	

Bottom of hole at 10.0 feet.

BORING NUMBER SS025-SB08

CLIENT AFCEC
PROJECT NAME SS025
PROJECT NUMBER AFCGSA3.0012.00AA.2020.0003
PROJECT LOCATION Former Griffiss AFB - Rome, NY
DATE STARTED 6/5/17 **COMPLETED** 6/5/17
NORTHING: 1176402.26 **EASTING:** 1135509.58
GROUND ELEVATION 463.98 ft feet **HOLE SIZE** 3.75
DRILLING CONTRACTOR Aztech Environmental
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING 5.5 ft / Elev 458.5 ft
LOGGED BY J. Geroux
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0		Soil Samples for offsite analysis collected from 0-2 and 2-4 feet below ground surface. Insufficient soil volume to collect sample from 4.0-5.5 feet below ground surface.	OH		Organic Silt, brown 7.5YR 4/3, plastic, soft, moist.	
					1.0 463.0	0.5
			SM		Silty Sand, brown (7.5YR 4/3), moist, loose, fine grained sand, subangular, gravel inclusions up to 0.25".	
2.5					3.0 461.0	1.1
			SP		Sand, dark brown (7.5YR 3/2), moist to saturated, loose, fine grained sand, subangular, gravel inclusions up to 2.0".	
5.0						0.9
					▽ 6.0 458.0	
			SP		Sand, brown (7.5YR 4/3), saturated, loose, fine grained sand, subangular, gravel inclusions up to 1.75".	1.7
7.5						
						1.3
10.0					10.0 454.0	

Bottom of hole at 10.0 feet.

BORING NUMBER SS025-SB09

CLIENT AFCEC
PROJECT NAME SS025
PROJECT NUMBER AFCGSA3.0012.00AA.2020.0003
PROJECT LOCATION Former Griffiss AFB - Rome, NY
DATE STARTED 6/5/17 **COMPLETED** 6/5/17
NORTHING: 1176350.8 **EASTING:** 1135544.54
GROUND ELEVATION 467.12 ft feet **HOLE SIZE** 3.75
DRILLING CONTRACTOR Aztech Environmental
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
▽ **AT TIME OF DRILLING** 9.5 ft / Elev 457.6 ft
LOGGED BY J. Geroux
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0		Soil Samples for offsite analysis collected from 0-2, 2-4, 4-6, and 6-8 feet below ground surface. Insufficient soil volume to collect sample from 8.0-9.5 feet below ground surface.	OH		Organic Silt, brown 7.5YR 4/3, plastic, soft, moist.	
					1.0 466.1	0.7
			SM		Silty Sand, light brown (7.5YR 3/4), moist, loose, fine grained sand, subangular, gravel inclusions up to 0.5".	
2.5						
					3.0 464.1	1.3
			SM		Silty Sand, light brown (7.5YR 3/4), moist, loose, fine grained sand, subangular, gravel inclusions up to 1.5".	
					4.5 462.6	
5.0			SM		Silty Sand, light brown (7.5YR 3/4), moist, loose, fine grained sand, subangular, gravel inclusions up to 0.75".	1.7
7.5						3.8
					8.0 459.1	
			SM		Silty Sand, light brown (7.5YR 3/4), moist to saturated, loose, fine grained sand, subangular, gravel inclusions up to 1.5".	2.3
				▽		
10.0					10.0 457.1	

(Continued Next Page)

BORING NUMBER SS025-SB09

CLIENT AFCEC **PROJECT NAME** SS025

PROJECT NUMBER AFCGSA3.0012.00AA.2020.0003 **PROJECT LOCATION** Former Griffiss AFB - Rome, NY

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
10.0						
			SP		Sand, brown (7.5YR 4/4), saturated, loose, fine grained, subangular.	1.7
					12.0 455.1	
12.5			SP		Sand, brown (7.5YR 4/4), saturated, loose, medium grained, subangular, gravel inclusions up to 2.25".	1.7
15.0					15.0 452.1	
					Bottom of hole at 15.0 feet.	

BHATE ENVIRONMENTAL ASSOCIATES GAFB - SS025.GPJ GINT US LAB.GDT 7/12/17

BORING NUMBER SS025-SB10

CLIENT AFCEC
PROJECT NAME SS025
PROJECT NUMBER AFCGSA3.0012.00AA.2020.0003
PROJECT LOCATION Former Griffiss AFB - Rome, NY
DATE STARTED 6/5/17 **COMPLETED** 6/5/17
NORTHING: 1176264.48 **EASTING:** 1135421.98
GROUND ELEVATION 464.28 ft feet **HOLE SIZE** 3.75
DRILLING CONTRACTOR Aztech Environmental
GROUND WATER LEVELS:
DRILLING METHOD Direct Push
AT TIME OF DRILLING 6.5 ft / Elev 457.8 ft
LOGGED BY J. Geroux
AT END OF DRILLING ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	SAMPLE TYPE NUMBER	REMARKS	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	PID (ppm)
0.0		Soil Samples for offsite analysis collected from 0-2, 2-4, and 4-6 feet below ground surface. Insufficient soil volume to collect sample from 6.0-6.5 feet below ground surface.	OH		Organic Silt, brown 7.5YR 4/3, plastic, soft, moist.	
					1.0 463.3	0.2
			SP		Sand, brown (7.5YR 4/3), moist to saturated, loose, fine grained, subangular.	
2.5						1.6
5.0						2.1
				▽		0.8
7.5					8.0 456.3	
			CL		Silty Clay, gray (Gley2 6/1), moist, dense, stiff, non-plastic.	1.0
10.0					10.0 454.3	

Bottom of hole at 10.0 feet.

APPENDIX B
LABORATORY RESULTS

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 280-97803-1

Job Description: Griffiss AFB, NY - SS025

For:
Bhate Environmental
445 Union Blvd Ste.129
Lakewood, CO 80226

Attention: Marcia Olive

Approved for release.
Stephanie K Rothmeyer
Project Manager I
6/27/2017 10:08 AM

Stephanie K Rothmeyer, Project Manager I
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0182
stephanie.rothmeyer@testamericainc.com
06/27/2017

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
Q	One or more quality control criteria failed.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
D	The reported value is from a dilution.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
U	Undetected at the Limit of Detection.
Q	One or more quality control criteria failed.

GC Semi VOA

Qualifier	Qualifier Description
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
Q	One or more quality control criteria failed.
M	Manual integrated compound.

Metals

Qualifier	Qualifier Description
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
D	The reported value is from a dilution.
V	Serial Dilution exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: Bhate Environmental

Project: Griffiss AFB, NY - SS025

Report Number: 280-97803-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 6/1/2017 at 8:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 0.6º C, 1.6º C and 3.4º C.

Samples were logged per the revised Chain-of-Custody received via email on 6/2/17.

VOLATILE ORGANIC COMPOUNDS (GC/MS)

Samples SS025-SS01 (280-97803-1), TB-01 (280-97803-2), SS025-SS02 (280-97803-4), SS025-SB02(0-2) (280-97803-5), SS025-SS03 (280-97803-6), SS025-SB03(0-2) (280-97803-7), SS025-SS04 (280-97803-8), SS025-SB04(0-2) (280-97803-9), SS025-SS05 (280-97803-10), SS025-SB05(0-2) (280-97803-11), SS025-SB05(2-4) (280-97803-12), SS025-SS06 (280-97803-13) and SS025-SS06-a (280-97803-14) were analyzed for volatile organic compounds (GC/MS) in accordance with 8260B. The samples were prepared on 05/31/2017 and analyzed on 06/03/2017, 06/04/2017 and 06/05/2017.

4-Bromofluorobenzene (Surr) failed the surrogate recovery criteria low for SS025-SB05(0-2) (280-97803-11) due to matrix interferences. The sample was re-analyzed showing similar results. Associated results are flagged "Q".

These samples did not contain any target analytes; therefore, re-analysis was not performed.

Dibromofluoromethane (Surr) failed the surrogate recovery criteria high for SS025-SS04 (280-97803-8). 1,2-Dichloroethane-d4 (Surr) and Dibromofluoromethane (Surr) failed the surrogate recovery criteria high for SS025-SS05 (280-97803-10). 1,2-Dichloroethane-d4 (Surr) failed the surrogate recovery criteria high for SS025-SB05(2-4) (280-97803-12), SS025-SS06 (280-97803-13), and SS025-SS06-a (280-97803-14). These samples did not contain any target analytes; therefore, re-analysis was not performed. Associated results are flagged "Q".

Isopropyl ether failed the recovery criteria high for LCS 280-376042/3-A and LCS 280-376205/3-A. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. Associated results are flagged "Q".

The following compounds were outside control limits in the continuing calibration verification (CCV) associated with batch 280-376040: Chloroethane, Isopropyl Ether. These compounds are not classified as Calibration Check Compounds (CCCs) in the reference method. This analyte was bias high in the CCV and was not detected in the associated samples. Associated results are flagged "Q".

The closing continuing calibration verification (CCVC) associated with batch 280-376040 recovered above the upper control limit for Chloroethane. The samples associated with this CCVC were non-detect for the affected analyte; therefore, the data have been reported. Associated results are flagged "Q".

The following compound was outside criteria in the initial calibration verification (ICV) associated with batch 280-376040: Bromomethane. This analyte is a known poor performer. Associated results are flagged "Q".

The following compounds were outside control limits in the continuing calibration verification (CCV) associated with batch 280-376196: Vinyl Acetate, Isopropyl Ether, Methyl tert-Butyl Ether. These compounds are not classified as Calibration Check Compounds (CCCs) in the reference method. These analytes were bias high in the CCV and was not detected in the associated samples. Associated results are flagged "Q".

The following compound was outside control limits in the continuing calibration verification (CCV) associated with batch 280-376196: Bromomethane. This compound is not classified as a Calibration Check Compound (CCC) in the reference method. This analyte is a known poor performer. Associated results are flagged "Q".

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS - SELECTED ION MODE (SIM)

Samples SS025-SS01 (280-97803-1), SS025-SS02 (280-97803-4), SS025-SB02(0-2) (280-97803-5), SS025-SS03 (280-97803-6), SS025-SB03(0-2) (280-97803-7), SS025-SS04 (280-97803-8), SS025-SB04(0-2) (280-97803-9), SS025-SS05 (280-97803-10), SS025-SB05(0-2) (280-97803-11), SS025-SB05(2-4) (280-97803-12), SS025-SS06 (280-97803-13) and SS025-SS06-a (280-97803-14) were analyzed for Semivolatile organic compounds - Selected Ion Mode (SIM) in accordance with EPA SW-846 Method 8270D SIM. The samples were prepared on 06/05/2017 and 06/14/2017 and analyzed on 06/08/2017, 06/12/2017, 06/21/2017 and 06/22/2017.

2-Fluorobiphenyl (Surr), Nitrobenzene-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for SS025-SS05 (280-97803-10) due to the required dilution. Associated results are flagged "Q".

Samples SS025-SS01 (280-97803-1)[5X], SS025-SS04 (280-97803-8)[2X] and SS025-SS05 (280-97803-10)[40X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUND (GC/MS SIM)

Sample SS025-AB-053117 (280-97803-3) was analyzed for Semivolatile Organic Compound (GC/MS SIM) in accordance with SW-846 8270D. The samples were prepared on 06/06/2017 and analyzed on 06/13/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ORGANOCHLORINE PESTICIDES

Samples SS025-SS01 (280-97803-1), SS025-SS02 (280-97803-4), SS025-SB02(0-2) (280-97803-5), SS025-SS03 (280-97803-6), SS025-SB03(0-2) (280-97803-7), SS025-SS04 (280-97803-8), SS025-SB04(0-2) (280-97803-9), SS025-SS05 (280-97803-10), SS025-SB05(0-2) (280-97803-11), SS025-SB05(2-4) (280-97803-12), SS025-SS06 (280-97803-13) and SS025-SS06-a (280-97803-14) were analyzed for organochlorine pesticides in accordance with SW 846 8081B. The samples were prepared on 06/12/2017 and 06/14/2017 and analyzed on 06/15/2017 and 06/20/2017.

4,4'-DDD, 4,4'-DDE and gamma-Chlordane failed the recovery criteria low for the MS and MSD of sample SS025-SS01 (280-97803-1) in batch 280-377328. Refer to the QC report for details.

Toxaphene exceeded the RPD limit for the MSD of sample SS025-SS03 (280-97803-6) in batch 280-377328. Refer to the QC report for details.

The following samples required a Florisil clean-up, via EPA Method 3620B, to reduce matrix interferences: SS025-SS01 (280-97803-1), SS025-SS02 (280-97803-4), SS025-SS03 (280-97803-6), SS025-SS04 (280-97803-8), SS025-SS05 (280-97803-10), SS025-SS06 (280-97803-13), (280-97803-C-1 MS), (280-97803-C-1 MSD).

The following sample required a Florisil clean-up, via EPA Method 3620C, to reduce matrix interferences: SS025-SS06-a (280-97803-14).

The DCB Decachlorobiphenyl surrogate recovery for the following samples was outside acceptance limits on the back/confirmation column due to matrix interference: (280-97803-C-1-F MS), (280-97803-C-1-G MSD). The recovery is within acceptance limits on the other column.

The Tetrachloro-m-xylene surrogate recovery for the following samples was outside acceptance limits on the back/confirmation column due to matrix interference: SS025-SS03 (280-97803-6). The recovery is within acceptance limits on the other column.

The DCB Decachlorobiphenyl (Surr) surrogate recovery for the following sample was outside acceptance limits on the front/primary column due to matrix interference: SS025-SS06-a (280-97803-14). The recovery is within acceptance limits on the other column. The sample had numerous non-target peaks and significant baseline rise that could be interfering with the identification and quantitation of target analytes. Associated results are flagged "Q".

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples SS025-SS01 (280-97803-1), SS025-SS02 (280-97803-4), SS025-SB02(0-2) (280-97803-5), SS025-SS03 (280-97803-6), SS025-SB03(0-2) (280-97803-7), SS025-SS04 (280-97803-8), SS025-SB04(0-2) (280-97803-9), SS025-SS05 (280-97803-10), SS025-SB05(0-2) (280-97803-11), SS025-SB05(2-4) (280-97803-12), SS025-SS06 (280-97803-13) and SS025-SS06-a (280-97803-14) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 06/12/2017 and 06/14/2017 and analyzed on 06/17/2017 and 06/21/2017.

The following samples underwent a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: SS025-SS06-a (280-97803-14), (LCS 280-377252/4-A), (MB 280-377252/1-A).

The following samples underwent mercury clean-up, via EPA Method 3660A, to reduce matrix interferences: SS025-SS06-a (280-97803-14), (LCS 280-377252/4-A), (MB 280-377252/1-A).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

METALS (ICP)

Samples SS025-SS01 (280-97803-1), SS025-SS02 (280-97803-4), SS025-SB02(0-2) (280-97803-5), SS025-SS03 (280-97803-6), SS025-SB03(0-2) (280-97803-7), SS025-SS04 (280-97803-8), SS025-SB04(0-2) (280-97803-9), SS025-SS05 (280-97803-10), SS025-SB05(0-2) (280-97803-11), SS025-SB05(2-4) (280-97803-12), SS025-SS06 (280-97803-13) and SS025-SS06-a (280-97803-14) were analyzed for Metals (ICP) in accordance with SW 846 6010C. The samples were prepared on 06/06/2017 and analyzed on 06/06/2017 and 06/07/2017.

Calcium, Chromium, Iron and Magnesium were detected in method blank MB 280-375991/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Antimony, Calcium, Iron and Manganese failed the recovery criteria low for the MS of sample SS025-SS01 (280-97803-1) in batch 280-376450. Potassium and Aluminum failed the recovery criteria high. Antimony and Calcium failed the recovery criteria low for the MSD of sample SS025-SS01 (280-97803-1) in batch 280-376450. Iron, Manganese, Potassium and Aluminum failed the recovery criteria high. The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY (CVAA)

Samples SS025-SS01 (280-97803-1), SS025-SS02 (280-97803-4), SS025-SB02(0-2) (280-97803-5), SS025-SS03 (280-97803-6), SS025-SB03(0-2) (280-97803-7), SS025-SS04 (280-97803-8), SS025-SB04(0-2) (280-97803-9), SS025-SS05 (280-97803-10), SS025-SB05(0-2) (280-97803-11), SS025-SB05(2-4) (280-97803-12), SS025-SS06 (280-97803-13) and SS025-SS06-a (280-97803-14) were analyzed for total mercury (CVAA) in accordance with EPA SW-846 Method 7471A. The samples were prepared and analyzed on 06/06/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS

Samples SS025-SS01 (280-97803-1), SS025-SS02 (280-97803-4), SS025-SB02(0-2) (280-97803-5), SS025-SS03 (280-97803-6), SS025-SB03(0-2) (280-97803-7), SS025-SS04 (280-97803-8), SS025-SB04(0-2) (280-97803-9), SS025-SS05 (280-97803-10), SS025-SB05(0-2) (280-97803-11), SS025-SB05(2-4) (280-97803-12), SS025-SS06 (280-97803-13) and SS025-SS06-a (280-97803-14) were analyzed for percent solids in accordance with ASTM D2216-90. The samples were analyzed on 06/02/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97803-1

Client Sample ID: SS025-SS01

Lab Sample ID: 280-97803-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.6	J	19	5.0	ug/Kg	1	☼	8260B	Total/NA
1-Methylnaphthalene	31		5.8	0.30	ug/Kg	1	☼	8270D SIM	Total/NA
2-Methylnaphthalene	69		5.8	0.36	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthene	24		5.8	0.18	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthylene	46		5.8	0.20	ug/Kg	1	☼	8270D SIM	Total/NA
Anthracene	70		5.8	0.83	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]anthracene	180		5.8	1.0	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	210	J	5.8	0.86	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene	280	J	5.8	1.4	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene	140		5.8	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene	99		5.8	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	230	J	5.8	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Dibenz(a,h)anthracene	40		5.8	1.5	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	270	J	5.8	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Fluorene	25		5.8	0.54	ug/Kg	1	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	110		5.8	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Naphthalene	75		5.8	0.38	ug/Kg	1	☼	8270D SIM	Total/NA
Phenanthrene	160		5.8	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	280	J	5.8	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
1-Methylnaphthalene - DL	26	J D	29	1.5	ug/Kg	5	☼	8270D SIM	Total/NA
2-Methylnaphthalene - DL	59	D	29	1.8	ug/Kg	5	☼	8270D SIM	Total/NA
Acenaphthene - DL	25	J D	29	0.92	ug/Kg	5	☼	8270D SIM	Total/NA
Acenaphthylene - DL	51	D	29	0.98	ug/Kg	5	☼	8270D SIM	Total/NA
Anthracene - DL	62	D	29	4.2	ug/Kg	5	☼	8270D SIM	Total/NA
Benzo[a]anthracene - DL	150	D	29	5.2	ug/Kg	5	☼	8270D SIM	Total/NA
Benzo[a]pyrene - DL	170	D	29	4.3	ug/Kg	5	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene - DL	240	D	29	6.9	ug/Kg	5	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene - DL	110	D	29	6.4	ug/Kg	5	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene - DL	79	D	29	5.8	ug/Kg	5	☼	8270D SIM	Total/NA
Chrysene - DL	200	D	29	5.8	ug/Kg	5	☼	8270D SIM	Total/NA
Dibenz(a,h)anthracene - DL	32	D	29	7.5	ug/Kg	5	☼	8270D SIM	Total/NA
Fluoranthene - DL	260	D	29	5.8	ug/Kg	5	☼	8270D SIM	Total/NA
Fluorene - DL	23	J D	29	2.7	ug/Kg	5	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene - DL	89	D	29	6.4	ug/Kg	5	☼	8270D SIM	Total/NA
Naphthalene - DL	65	D	29	1.9	ug/Kg	5	☼	8270D SIM	Total/NA
Phenanthrene - DL	140	D	29	6.4	ug/Kg	5	☼	8270D SIM	Total/NA
Pyrene - DL	270	D	29	6.4	ug/Kg	5	☼	8270D SIM	Total/NA
4,4'-DDE	1.4	J	2.0	0.28	ug/Kg	1	☼	8081B	Total/NA
4,4'-DDT	2.1	J	2.3	0.69	ug/Kg	1	☼	8081B	Total/NA
Arochlor 1260	3.8	J	38	3.1	ug/Kg	1	☼	8082A	Total/NA
Aluminum	7700	J	57	1.8	mg/Kg	1	☼	6010C	Total/NA
Arsenic	6.2		2.8	0.75	mg/Kg	1	☼	6010C	Total/NA
Barium	33		2.3	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.33	J	0.57	0.037	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.20	J	0.57	0.046	mg/Kg	1	☼	6010C	Total/NA
Calcium	10000	J	110	16	mg/Kg	1	☼	6010C	Total/NA
Chromium	9.4		4.0	0.066	mg/Kg	1	☼	6010C	Total/NA
Cobalt	5.3		1.1	0.11	mg/Kg	1	☼	6010C	Total/NA
Copper	23		5.7	0.25	mg/Kg	1	☼	6010C	Total/NA
Iron	16000	J	90	4.3	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SS01 (Continued) — Lab Sample ID: 280-97803-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Lead	9.6		1.0	0.35	mg/Kg	1	☼	6010C	Total/NA
Magnesium	4800		34	4.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	620	J	5.1	0.11	mg/Kg	1	☼	6010C	Total/NA
Nickel	12		4.5	0.15	mg/Kg	1	☼	6010C	Total/NA
Potassium	1100	J	340	46	mg/Kg	1	☼	6010C	Total/NA
Sodium	68	J	570	67	mg/Kg	1	☼	6010C	Total/NA
Vanadium	14		2.3	0.11	mg/Kg	1	☼	6010C	Total/NA
Zinc	42		9.0	0.45	mg/Kg	1	☼	6010C	Total/NA
Mercury	24		23	7.5	ug/Kg	1	☼	7471A	Total/NA

Client Sample ID: TB-01 — Lab Sample ID: 280-97803-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	10	J	20	5.4	ug/Kg	1		8260B	Total/NA
Methylene Chloride	2.6	J	5.0	1.6	ug/Kg	1		8260B	Total/NA

Client Sample ID: SS025-AB-053117 — Lab Sample ID: 280-97803-3

No Detections.

Client Sample ID: SS025-SS02 — Lab Sample ID: 280-97803-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	12	J	20	5.3	ug/Kg	1	☼	8260B	Total/NA
Trichlorofluoromethane	1.5	J	9.9	1.0	ug/Kg	1	☼	8260B	Total/NA
1-Methylnaphthalene	1.5	J	5.8	0.30	ug/Kg	1	☼	8270D SIM	Total/NA
2-Methylnaphthalene	2.1	J	5.8	0.36	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthene	2.4	J	5.8	0.19	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthylene	7.7		5.8	0.20	ug/Kg	1	☼	8270D SIM	Total/NA
Anthracene	6.7		5.8	0.83	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]anthracene	38		5.8	1.0	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	53		5.8	0.86	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene	72		5.8	1.4	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene	34		5.8	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene	23		5.8	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	51		5.8	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Dibenz(a,h)anthracene	7.9		5.8	1.5	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	71		5.8	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Fluorene	2.6	J	5.8	0.54	ug/Kg	1	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	38		5.8	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Phenanthrene	28		5.8	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	69		5.8	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
4,4'-DDE	0.36	J	1.8	0.26	ug/Kg	1	☼	8081B	Total/NA
Aluminum	7500		56	1.7	mg/Kg	1	☼	6010C	Total/NA
Arsenic	4.3		2.8	0.74	mg/Kg	1	☼	6010C	Total/NA
Barium	30		2.2	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.32	J	0.56	0.037	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.14	J	0.56	0.046	mg/Kg	1	☼	6010C	Total/NA
Calcium	1600		110	16	mg/Kg	1	☼	6010C	Total/NA
Chromium	7.7		3.9	0.065	mg/Kg	1	☼	6010C	Total/NA
Cobalt	4.4		1.1	0.11	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SS02 (Continued) — Lab Sample ID: 280-97803-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Copper	18		5.6	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	13000		89	4.2	mg/Kg	1	☼	6010C	Total/NA
Lead	7.7		1.0	0.35	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2100		34	4.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	600		5.0	0.11	mg/Kg	1	☼	6010C	Total/NA
Nickel	9.2		4.5	0.15	mg/Kg	1	☼	6010C	Total/NA
Potassium	900		340	46	mg/Kg	1	☼	6010C	Total/NA
Vanadium	13		2.2	0.11	mg/Kg	1	☼	6010C	Total/NA
Zinc	38		8.9	0.44	mg/Kg	1	☼	6010C	Total/NA
Mercury	34		24	7.8	ug/Kg	1	☼	7471A	Total/NA

Client Sample ID: SS025-SB02(0-2) — Lab Sample ID: 280-97803-5

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.9	J	19	5.2	ug/Kg	1	☼	8260B	Total/NA
Aluminum	3700		48	1.5	mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.4		2.4	0.64	mg/Kg	1	☼	6010C	Total/NA
Barium	14		1.9	0.10	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.16	J	0.48	0.032	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.083	J	0.48	0.039	mg/Kg	1	☼	6010C	Total/NA
Calcium	11000		96	14	mg/Kg	1	☼	6010C	Total/NA
Chromium	4.5		3.4	0.056	mg/Kg	1	☼	6010C	Total/NA
Cobalt	3.2		0.96	0.096	mg/Kg	1	☼	6010C	Total/NA
Copper	11		4.8	0.21	mg/Kg	1	☼	6010C	Total/NA
Iron	8400		77	3.6	mg/Kg	1	☼	6010C	Total/NA
Lead	3.2		0.86	0.30	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3700		29	3.5	mg/Kg	1	☼	6010C	Total/NA
Manganese	320		4.3	0.096	mg/Kg	1	☼	6010C	Total/NA
Nickel	6.2		3.8	0.13	mg/Kg	1	☼	6010C	Total/NA
Potassium	700		290	39	mg/Kg	1	☼	6010C	Total/NA
Vanadium	6.7		1.9	0.090	mg/Kg	1	☼	6010C	Total/NA
Zinc	20		7.7	0.38	mg/Kg	1	☼	6010C	Total/NA
Mercury	21	J	22	7.2	ug/Kg	1	☼	7471A	Total/NA

Client Sample ID: SS025-SS03 — Lab Sample ID: 280-97803-6

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	16	J	20	5.3	ug/Kg	1	☼	8260B	Total/NA
m&p-Xylene	1.7	J	3.1	1.0	ug/Kg	1	☼	8260B	Total/NA
o-Xylene	2.2	J	4.9	0.60	ug/Kg	1	☼	8260B	Total/NA
Xylenes (total)	3.9	J	9.8	0.60	ug/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	2.1	J	6.6	0.41	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthylene	5.7	J	6.6	0.23	ug/Kg	1	☼	8270D SIM	Total/NA
Anthracene	5.2	J	6.6	0.96	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]anthracene	23		6.6	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	34		6.6	0.98	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene	51		6.6	1.6	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene	28		6.6	1.5	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene	17		6.6	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	34		6.6	1.3	ug/Kg	1	☼	8270D SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SS03 (Continued) — Lab Sample ID: 280-97803-6

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Dibenz(a,h)anthracene	6.4	J	6.6	1.7	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	45		6.6	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Fluorene	1.4	J	6.6	0.62	ug/Kg	1	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	28		6.6	1.5	ug/Kg	1	☼	8270D SIM	Total/NA
Phenanthrene	17		6.6	1.5	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	45		6.6	1.5	ug/Kg	1	☼	8270D SIM	Total/NA
Endosulfan I	0.55	J	2.2	0.23	ug/Kg	1	☼	8081B	Total/NA
Aluminum	11000		56	1.7	mg/Kg	1	☼	6010C	Total/NA
Arsenic	6.2		2.8	0.74	mg/Kg	1	☼	6010C	Total/NA
Barium	49		2.2	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.46	J	0.56	0.037	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.20	J	0.56	0.046	mg/Kg	1	☼	6010C	Total/NA
Calcium	1800		110	16	mg/Kg	1	☼	6010C	Total/NA
Chromium	11		3.9	0.065	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.0		1.1	0.11	mg/Kg	1	☼	6010C	Total/NA
Copper	33		5.6	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	21000		89	4.2	mg/Kg	1	☼	6010C	Total/NA
Lead	9.3		1.0	0.35	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3400		33	4.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	1200		5.0	0.11	mg/Kg	1	☼	6010C	Total/NA
Nickel	15		4.5	0.15	mg/Kg	1	☼	6010C	Total/NA
Potassium	1100		330	46	mg/Kg	1	☼	6010C	Total/NA
Vanadium	18		2.2	0.10	mg/Kg	1	☼	6010C	Total/NA
Zinc	59		8.9	0.44	mg/Kg	1	☼	6010C	Total/NA
Mercury	35		23	7.5	ug/Kg	1	☼	7471A	Total/NA

Client Sample ID: SS025-SB03(0-2) — Lab Sample ID: 280-97803-7

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.6	J	21	5.6	ug/Kg	1	☼	8260B	Total/NA
Aluminum	3400		52	1.6	mg/Kg	1	☼	6010C	Total/NA
Arsenic	2.2	J	2.6	0.70	mg/Kg	1	☼	6010C	Total/NA
Barium	11		2.1	0.11	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.16	J	0.52	0.035	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.078	J	0.52	0.043	mg/Kg	1	☼	6010C	Total/NA
Calcium	5600		100	15	mg/Kg	1	☼	6010C	Total/NA
Chromium	3.6	J	3.7	0.061	mg/Kg	1	☼	6010C	Total/NA
Cobalt	2.4		1.0	0.10	mg/Kg	1	☼	6010C	Total/NA
Copper	8.0		5.2	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	6800		84	4.0	mg/Kg	1	☼	6010C	Total/NA
Lead	1.8		0.94	0.33	mg/Kg	1	☼	6010C	Total/NA
Magnesium	1800		31	3.9	mg/Kg	1	☼	6010C	Total/NA
Manganese	230		4.7	0.10	mg/Kg	1	☼	6010C	Total/NA
Nickel	5.2		4.2	0.14	mg/Kg	1	☼	6010C	Total/NA
Potassium	580		310	43	mg/Kg	1	☼	6010C	Total/NA
Vanadium	5.7		2.1	0.099	mg/Kg	1	☼	6010C	Total/NA
Zinc	13		8.4	0.42	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: SS025-SS04 — Lab Sample ID: 280-97803-8

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SS04 (Continued)

Lab Sample ID: 280-97803-8

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
m&p-Xylene	1.4	J	3.0	0.96	ug/Kg	1	☼	8260B	Total/NA
o-Xylene	2.1	J	4.6	0.56	ug/Kg	1	☼	8260B	Total/NA
Xylenes (total)	3.5	J	9.2	0.56	ug/Kg	1	☼	8260B	Total/NA
1-Methylnaphthalene	7.2		5.1	0.27	ug/Kg	1	☼	8270D SIM	Total/NA
2-Methylnaphthalene	14		5.1	0.32	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthene	18		5.1	0.16	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthylene	20		5.1	0.17	ug/Kg	1	☼	8270D SIM	Total/NA
Anthracene	42		5.1	0.74	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]anthracene	110		5.1	0.92	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	110		5.1	0.76	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene	150		5.1	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene	63		5.1	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene	52		5.1	1.0	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	140		5.1	1.0	ug/Kg	1	☼	8270D SIM	Total/NA
Dibenz(a,h)anthracene	18		5.1	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	220	J	5.1	1.0	ug/Kg	1	☼	8270D SIM	Total/NA
Fluorene	19		5.1	0.48	ug/Kg	1	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	55		5.1	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Naphthalene	26		5.1	0.33	ug/Kg	1	☼	8270D SIM	Total/NA
Phenanthrene	150		5.1	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	200	J	5.1	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
1-Methylnaphthalene - DL	7.4	J D	10	0.53	ug/Kg	2	☼	8270D SIM	Total/NA
2-Methylnaphthalene - DL	13	D	10	0.63	ug/Kg	2	☼	8270D SIM	Total/NA
Acenaphthene - DL	18	D	10	0.33	ug/Kg	2	☼	8270D SIM	Total/NA
Acenaphthylene - DL	24	D	10	0.35	ug/Kg	2	☼	8270D SIM	Total/NA
Anthracene - DL	44	D	10	1.5	ug/Kg	2	☼	8270D SIM	Total/NA
Benzo[a]anthracene - DL	110	D	10	1.8	ug/Kg	2	☼	8270D SIM	Total/NA
Benzo[a]pyrene - DL	110	D	10	1.5	ug/Kg	2	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene - DL	160	D	10	2.5	ug/Kg	2	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene - DL	69	D	10	2.3	ug/Kg	2	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene - DL	57	D	10	2.1	ug/Kg	2	☼	8270D SIM	Total/NA
Chrysene - DL	140	D	10	2.1	ug/Kg	2	☼	8270D SIM	Total/NA
Dibenz(a,h)anthracene - DL	21	D	10	2.7	ug/Kg	2	☼	8270D SIM	Total/NA
Fluoranthene - DL	230	D	10	2.1	ug/Kg	2	☼	8270D SIM	Total/NA
Fluorene - DL	18	D	10	0.96	ug/Kg	2	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene - DL	58	D	10	2.3	ug/Kg	2	☼	8270D SIM	Total/NA
Naphthalene - DL	26	D	10	0.67	ug/Kg	2	☼	8270D SIM	Total/NA
Phenanthrene - DL	150	D	10	2.3	ug/Kg	2	☼	8270D SIM	Total/NA
Pyrene - DL	210	D	10	2.3	ug/Kg	2	☼	8270D SIM	Total/NA
4,4'-DDT	0.68	J	2.1	0.61	ug/Kg	1	☼	8081B	Total/NA
Arochlor 1260	6.2	J	34	2.7	ug/Kg	1	☼	8082A	Total/NA
Aluminum	5500		47	1.5	mg/Kg	1	☼	6010C	Total/NA
Arsenic	2.6		2.4	0.63	mg/Kg	1	☼	6010C	Total/NA
Barium	21		1.9	0.098	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.25	J	0.47	0.031	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.13	J	0.47	0.039	mg/Kg	1	☼	6010C	Total/NA
Calcium	1100		95	13	mg/Kg	1	☼	6010C	Total/NA
Chromium	6.3		3.3	0.055	mg/Kg	1	☼	6010C	Total/NA
Cobalt	3.7		0.95	0.095	mg/Kg	1	☼	6010C	Total/NA
Copper	18		4.7	0.21	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SS04 (Continued) — Lab Sample ID: 280-97803-8

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Iron	10000		76	3.6	mg/Kg	1	☼	6010C	Total/NA
Lead	5.3		0.85	0.29	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2000		28	3.5	mg/Kg	1	☼	6010C	Total/NA
Manganese	400		4.3	0.095	mg/Kg	1	☼	6010C	Total/NA
Nickel	8.0		3.8	0.13	mg/Kg	1	☼	6010C	Total/NA
Potassium	720		280	39	mg/Kg	1	☼	6010C	Total/NA
Vanadium	9.5		1.9	0.089	mg/Kg	1	☼	6010C	Total/NA
Zinc	29		7.6	0.38	mg/Kg	1	☼	6010C	Total/NA
Mercury	12	J	19	6.2	ug/Kg	1	☼	7471A	Total/NA

Client Sample ID: SS025-SB04(0-2) — Lab Sample ID: 280-97803-9

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.28	J	6.1	0.21	ug/Kg	1	☼	8270D SIM	Total/NA
Aluminum	4500		44	1.4	mg/Kg	1	☼	6010C	Total/NA
Arsenic	2.4		2.2	0.59	mg/Kg	1	☼	6010C	Total/NA
Barium	16		1.8	0.092	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.20	J	0.44	0.029	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.069	J	0.44	0.036	mg/Kg	1	☼	6010C	Total/NA
Calcium	1000		88	12	mg/Kg	1	☼	6010C	Total/NA
Chromium	4.6		3.1	0.051	mg/Kg	1	☼	6010C	Total/NA
Cobalt	2.8		0.88	0.088	mg/Kg	1	☼	6010C	Total/NA
Copper	9.9		4.4	0.19	mg/Kg	1	☼	6010C	Total/NA
Iron	8200		71	3.4	mg/Kg	1	☼	6010C	Total/NA
Lead	2.1		0.80	0.27	mg/Kg	1	☼	6010C	Total/NA
Magnesium	1700		27	3.3	mg/Kg	1	☼	6010C	Total/NA
Manganese	260		4.0	0.088	mg/Kg	1	☼	6010C	Total/NA
Nickel	6.5		3.5	0.12	mg/Kg	1	☼	6010C	Total/NA
Potassium	730		270	36	mg/Kg	1	☼	6010C	Total/NA
Vanadium	7.2		1.8	0.083	mg/Kg	1	☼	6010C	Total/NA
Zinc	17		7.1	0.35	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: SS025-SS05 — Lab Sample ID: 280-97803-10

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	79		5.4	0.28	ug/Kg	1	☼	8270D SIM	Total/NA
2-Methylnaphthalene	97		5.4	0.33	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthene	250	J	5.4	0.17	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthylene	47		5.4	0.18	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]anthracene	860	J	5.4	0.97	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	720	J	5.4	0.80	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene	860	J	5.4	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene	330	J	5.4	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene	300	J	5.4	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	800	J	5.4	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Dibenz(a,h)anthracene	100		5.4	1.4	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	3100	J	5.4	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Fluorene	570	J	5.4	0.51	ug/Kg	1	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	420	J	5.4	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Naphthalene	250	J	5.4	0.35	ug/Kg	1	☼	8270D SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SS05 (Continued) — Lab Sample ID: 280-97803-10

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	3400	J	5.4	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	2100	J	5.4	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
1-Methylnaphthalene - DL	75	J D Q	220	11	ug/Kg	40	☼	8270D SIM	Total/NA
2-Methylnaphthalene - DL	93	J D Q	220	13	ug/Kg	40	☼	8270D SIM	Total/NA
Acenaphthene - DL	270	D Q	220	6.9	ug/Kg	40	☼	8270D SIM	Total/NA
Acenaphthylene - DL	94	J D Q	220	7.3	ug/Kg	40	☼	8270D SIM	Total/NA
Anthracene - DL	580	D Q	220	31	ug/Kg	40	☼	8270D SIM	Total/NA
Benzo[a]anthracene - DL	770	D Q	220	39	ug/Kg	40	☼	8270D SIM	Total/NA
Benzo[a]pyrene - DL	590	D Q	220	32	ug/Kg	40	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene - DL	760	D Q	220	52	ug/Kg	40	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene - DL	320	D Q	220	47	ug/Kg	40	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene - DL	330	D Q	220	43	ug/Kg	40	☼	8270D SIM	Total/NA
Chrysene - DL	820	D Q	220	43	ug/Kg	40	☼	8270D SIM	Total/NA
Dibenz(a,h)anthracene - DL	92	J D Q	220	56	ug/Kg	40	☼	8270D SIM	Total/NA
Fluoranthene - DL	2500	D Q	220	43	ug/Kg	40	☼	8270D SIM	Total/NA
Fluorene - DL	600	D Q	220	20	ug/Kg	40	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene - DL	310	D Q	220	47	ug/Kg	40	☼	8270D SIM	Total/NA
Naphthalene - DL	240	D Q	220	14	ug/Kg	40	☼	8270D SIM	Total/NA
Phenanthrene - DL	3000	D Q	220	47	ug/Kg	40	☼	8270D SIM	Total/NA
Pyrene - DL	1700	D Q	220	47	ug/Kg	40	☼	8270D SIM	Total/NA
Aluminum	6400		50	1.6	mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.3		2.5	0.67	mg/Kg	1	☼	6010C	Total/NA
Barium	24		2.0	0.10	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.26	J	0.50	0.033	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.11	J	0.50	0.041	mg/Kg	1	☼	6010C	Total/NA
Calcium	1400		100	14	mg/Kg	1	☼	6010C	Total/NA
Chromium	6.5		3.5	0.058	mg/Kg	1	☼	6010C	Total/NA
Cobalt	4.2		1.0	0.10	mg/Kg	1	☼	6010C	Total/NA
Copper	15		5.0	0.22	mg/Kg	1	☼	6010C	Total/NA
Iron	12000		80	3.8	mg/Kg	1	☼	6010C	Total/NA
Lead	5.5		0.90	0.31	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2100		30	3.7	mg/Kg	1	☼	6010C	Total/NA
Manganese	520		4.5	0.10	mg/Kg	1	☼	6010C	Total/NA
Nickel	8.4		4.0	0.13	mg/Kg	1	☼	6010C	Total/NA
Potassium	730		300	41	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.91	J	3.0	0.86	mg/Kg	1	☼	6010C	Total/NA
Vanadium	10		2.0	0.094	mg/Kg	1	☼	6010C	Total/NA
Zinc	31		8.0	0.40	mg/Kg	1	☼	6010C	Total/NA
Mercury	23		23	7.5	ug/Kg	1	☼	7471A	Total/NA

Client Sample ID: SS025-SB05(0-2) — Lab Sample ID: 280-97803-11

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	0.62	J	5.4	0.28	ug/Kg	1	☼	8270D SIM	Total/NA
2-Methylnaphthalene	0.81	J	5.4	0.33	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthene	0.98	J	5.4	0.17	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthylene	0.99	J	5.4	0.18	ug/Kg	1	☼	8270D SIM	Total/NA
Anthracene	1.8	J	5.4	0.78	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]anthracene	3.1	J	5.4	0.97	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	2.7	J	5.4	0.80	ug/Kg	1	☼	8270D SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SB05(0-2) (Continued) — Lab Sample ID: 280-97803-11

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	4.0	J	5.4	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene	2.9	J	5.4	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene	1.9	J	5.4	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	4.2	J	5.4	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	6.0		5.4	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Fluorene	0.99	J	5.4	0.51	ug/Kg	1	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	1.9	J	5.4	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Naphthalene	0.66	J	5.4	0.35	ug/Kg	1	☼	8270D SIM	Total/NA
Phenanthrene	4.6	J	5.4	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	5.9		5.4	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Aluminum	11000		43	1.3	mg/Kg	1	☼	6010C	Total/NA
Arsenic	4.6		2.2	0.58	mg/Kg	1	☼	6010C	Total/NA
Barium	49		1.7	0.090	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.54		0.43	0.029	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.26	J	0.43	0.036	mg/Kg	1	☼	6010C	Total/NA
Calcium	3200		87	12	mg/Kg	1	☼	6010C	Total/NA
Chromium	12		3.0	0.050	mg/Kg	1	☼	6010C	Total/NA
Cobalt	9.3		0.87	0.087	mg/Kg	1	☼	6010C	Total/NA
Copper	20		4.3	0.19	mg/Kg	1	☼	6010C	Total/NA
Iron	17000		69	3.3	mg/Kg	1	☼	6010C	Total/NA
Lead	15		0.78	0.27	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2900		26	3.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	730		3.9	0.087	mg/Kg	1	☼	6010C	Total/NA
Nickel	12		3.5	0.11	mg/Kg	1	☼	6010C	Total/NA
Potassium	1000		260	36	mg/Kg	1	☼	6010C	Total/NA
Vanadium	19		1.7	0.082	mg/Kg	1	☼	6010C	Total/NA
Zinc	52		6.9	0.35	mg/Kg	1	☼	6010C	Total/NA
Mercury	19	J	20	6.4	ug/Kg	1	☼	7471A	Total/NA

Client Sample ID: SS025-SB05(2-4) — Lab Sample ID: 280-97803-12

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	1.7	J	5.1	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	1.1	J	5.1	1.0	ug/Kg	1	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	1.1	J	5.1	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Aluminum	10000		53	1.7	mg/Kg	1	☼	6010C	Total/NA
Arsenic	6.9		2.7	0.71	mg/Kg	1	☼	6010C	Total/NA
Barium	51		2.1	0.11	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.48	J	0.53	0.035	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.13	J	0.53	0.044	mg/Kg	1	☼	6010C	Total/NA
Calcium	1800		110	15	mg/Kg	1	☼	6010C	Total/NA
Chromium	12		3.7	0.062	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.6		1.1	0.11	mg/Kg	1	☼	6010C	Total/NA
Copper	52		5.3	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	27000		85	4.0	mg/Kg	1	☼	6010C	Total/NA
Lead	5.5		0.96	0.33	mg/Kg	1	☼	6010C	Total/NA
Magnesium	4000		32	3.9	mg/Kg	1	☼	6010C	Total/NA
Manganese	570		4.8	0.11	mg/Kg	1	☼	6010C	Total/NA
Nickel	17		4.3	0.14	mg/Kg	1	☼	6010C	Total/NA
Potassium	1000		320	44	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SB05(2-4) (Continued) — Lab Sample ID: 280-97803-12

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	18		2.1	0.10	mg/Kg	1	☼	6010C	Total/NA
Zinc	60		8.5	0.42	mg/Kg	1	☼	6010C	Total/NA
Mercury	23		19	6.1	ug/Kg	1	☼	7471A	Total/NA

Client Sample ID: SS025-SS06 — Lab Sample ID: 280-97803-13

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.6	J	19	5.0	ug/Kg	1	☼	8260B	Total/NA
1-Methylnaphthalene	1.1	J	5.5	0.29	ug/Kg	1	☼	8270D SIM	Total/NA
2-Methylnaphthalene	1.4	J	5.5	0.34	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthene	1.7	J	5.5	0.18	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthylene	4.9	J	5.5	0.19	ug/Kg	1	☼	8270D SIM	Total/NA
Anthracene	5.3	J	5.5	0.79	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]anthracene	26		5.5	0.99	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	29		5.5	0.81	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene	40		5.5	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene	16		5.5	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene	14		5.5	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	31		5.5	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Dibenz(a,h)anthracene	5.3	J	5.5	1.4	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	51		5.5	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Fluorene	2.1	J	5.5	0.52	ug/Kg	1	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	19		5.5	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Phenanthrene	22		5.5	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	46		5.5	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
4,4'-DDE	1.2	J	1.8	0.26	ug/Kg	1	☼	8081B	Total/NA
4,4'-DDT	1.2	J	2.2	0.64	ug/Kg	1	☼	8081B	Total/NA
Aluminum	7800		49	1.5	mg/Kg	1	☼	6010C	Total/NA
Arsenic	4.7		2.4	0.65	mg/Kg	1	☼	6010C	Total/NA
Barium	32		2.0	0.10	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.30	J	0.49	0.032	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.17	J	0.49	0.040	mg/Kg	1	☼	6010C	Total/NA
Calcium	1300		98	14	mg/Kg	1	☼	6010C	Total/NA
Chromium	7.4		3.4	0.057	mg/Kg	1	☼	6010C	Total/NA
Cobalt	4.4		0.98	0.098	mg/Kg	1	☼	6010C	Total/NA
Copper	14		4.9	0.21	mg/Kg	1	☼	6010C	Total/NA
Iron	13000		78	3.7	mg/Kg	1	☼	6010C	Total/NA
Lead	7.8		0.88	0.30	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2000		29	3.6	mg/Kg	1	☼	6010C	Total/NA
Manganese	640		4.4	0.098	mg/Kg	1	☼	6010C	Total/NA
Nickel	9.2		3.9	0.13	mg/Kg	1	☼	6010C	Total/NA
Potassium	710		290	40	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.87	J	2.9	0.84	mg/Kg	1	☼	6010C	Total/NA
Vanadium	13		2.0	0.092	mg/Kg	1	☼	6010C	Total/NA
Zinc	37		7.8	0.39	mg/Kg	1	☼	6010C	Total/NA
Mercury	33		22	7.1	ug/Kg	1	☼	7471A	Total/NA

Client Sample ID: SS025-SS06-a — Lab Sample ID: 280-97803-14

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SS06-a (Continued)

Lab Sample ID: 280-97803-14

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	2.7	J	5.5	0.79	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]anthracene	53		5.5	0.99	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	81		5.5	0.81	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene	100		5.5	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene	48		5.5	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene	32		5.5	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	66		5.5	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Dibenz(a,h)anthracene	14		5.5	1.4	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	62		5.5	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	55		5.5	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Phenanthrene	13		5.5	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	61		5.5	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
4,4'-DDE	1.0	J Q	1.9	0.27	ug/Kg	1	☼	8081B	Total/NA
4,4'-DDT	1.1	J Q	2.2	0.66	ug/Kg	1	☼	8081B	Total/NA
Aluminum	7500		52	1.6	mg/Kg	1	☼	6010C	Total/NA
Arsenic	4.4		2.6	0.70	mg/Kg	1	☼	6010C	Total/NA
Barium	33		2.1	0.11	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.31	J	0.52	0.035	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.18	J	0.52	0.043	mg/Kg	1	☼	6010C	Total/NA
Calcium	1400		100	15	mg/Kg	1	☼	6010C	Total/NA
Chromium	7.6		3.7	0.061	mg/Kg	1	☼	6010C	Total/NA
Cobalt	4.3		1.0	0.10	mg/Kg	1	☼	6010C	Total/NA
Copper	15		5.2	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	13000		84	4.0	mg/Kg	1	☼	6010C	Total/NA
Lead	8.2		0.94	0.32	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2000		31	3.9	mg/Kg	1	☼	6010C	Total/NA
Manganese	620		4.7	0.10	mg/Kg	1	☼	6010C	Total/NA
Nickel	8.9		4.2	0.14	mg/Kg	1	☼	6010C	Total/NA
Potassium	720		310	43	mg/Kg	1	☼	6010C	Total/NA
Vanadium	13		2.1	0.098	mg/Kg	1	☼	6010C	Total/NA
Zinc	36		8.4	0.42	mg/Kg	1	☼	6010C	Total/NA
Mercury	30		21	7.0	ug/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SS01

Date Collected: 05/31/17 11:00
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-1

Matrix: Solid
Percent Solids: 83.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.5	U	4.6	0.52	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
1,1,1-Trichloroethane	1.5	U	4.6	0.48	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
1,1,2,2-Tetrachloroethane	1.5	U	4.6	0.57	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
1,1,2-Trichloroethane	3.0	U	4.6	0.82	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
1,1-Dichloroethane	0.74	U	4.6	0.19	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
1,1-Dichloroethene	1.5	U	4.6	0.55	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
1,1-Dichloropropene	1.5	U	4.6	0.50	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
1,2,3-Trichlorobenzene	1.5	U	4.6	0.70	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
1,2,3-Trichloropropane	3.0	U	4.6	0.75	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
1,2,4-Trichlorobenzene	1.5	U	4.6	0.68	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
1,2,4-Trimethylbenzene	1.5	U	4.6	0.54	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
1,2-Dibromo-3-Chloropropane	1.5	U	9.3	0.56	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
1,2-Dibromoethane	1.5	U	4.6	0.48	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
1,2-Dichlorobenzene	1.5	U	4.6	0.42	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
1,2-Dichloroethane	1.5	U	4.6	0.65	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
1,2-Dichloroethene, Total	1.5	U	4.6	0.36	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
1,2-Dichloropropane	1.5	U	4.6	0.51	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
1,3,5-Trimethylbenzene	1.5	U	4.6	0.53	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
1,3-Dichlorobenzene	1.5	U	4.6	0.45	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
1,3-Dichloropropane	1.5	U	4.6	0.47	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
1,4-Dichlorobenzene	1.5	U	4.6	0.72	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
2,2-Dichloropropane	1.5	U	4.6	0.41	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
2-Butanone (MEK)	5.9	U	19	1.7	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
2-Chlorotoluene	1.5	U	4.6	0.47	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
2-Hexanone	12	U	19	4.5	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
4-Chlorotoluene	1.5	U	4.6	0.72	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
4-Isopropyltoluene	1.5	U	4.6	0.45	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
4-Methyl-2-pentanone (MIBK)	12	U	19	4.0	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Acetone	**8.6**	**J**	19	5.0	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Benzene	1.5	U	4.6	0.44	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Bromobenzene	1.5	U	4.6	0.45	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Bromochloromethane	0.74	U	4.6	0.28	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Bromodichloromethane	0.74	U	4.6	0.20	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Bromoform	0.74	U	4.6	0.21	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Bromomethane	1.5	U Q	9.3	0.46	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Carbon disulfide	1.5	U	4.6	0.39	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Carbon tetrachloride	1.5	U	4.6	0.58	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Chlorobenzene	1.5	U	4.6	0.50	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Chloroethane	3.0	U	9.3	0.83	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Chloroform	0.74	U	9.3	0.27	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Chloromethane	1.5	U	9.3	0.71	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
cis-1,2-Dichloroethene	1.5	U	4.6	0.52	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
cis-1,3-Dichloropropene	3.0	U	4.6	1.2	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Dibromochloromethane	1.5	U	4.6	0.53	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Dibromomethane	3.0	U	4.6	0.78	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Dichlorodifluoromethane	1.5	U	9.3	0.48	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Ethylbenzene	1.5	U	4.6	0.62	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Hexachlorobutadiene	1.5	U	4.6	0.51	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Isopropyl ether	7.4	U Q	46	2.5	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1

Client Sample ID: SS025-SS01

Date Collected: 05/31/17 11:00
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-1

Matrix: Solid
Percent Solids: 83.2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	1.5	U	4.6	0.55	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
m&p-Xylene	3.0	U	3.0	0.96	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Methyl iodide	1.5	U	4.6	0.41	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Methyl tert-butyl ether	0.74	U Q	19	0.32	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Methylene Chloride	3.0	U	4.6	1.5	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Naphthalene	1.5	U	4.6	0.58	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
n-Butylbenzene	1.5	U	4.6	0.52	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
N-Propylbenzene	1.5	U	4.6	0.54	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
o-Xylene	1.5	U	4.6	0.57	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
sec-Butylbenzene	1.5	U	4.6	0.71	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Styrene	1.5	U	4.6	0.58	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
tert-Butylbenzene	1.5	U	4.6	0.46	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Tetrachloroethene	1.5	U	4.6	0.55	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Toluene	1.5	U	4.6	0.64	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
trans-1,2-Dichloroethene	0.74	U	4.6	0.36	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
trans-1,3-Dichloropropene	1.5	U	4.6	0.62	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Trichloroethene	0.74	U	4.6	0.21	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Trichlorofluoromethane	3.0	U	9.3	0.96	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Vinyl acetate	3.0	U Q	9.3	0.99	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Vinyl chloride	3.0	U	4.6	1.2	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1
Xylenes (total)	0.93	U	9.3	0.57	ug/Kg	☼	05/31/17 11:00	06/05/17 21:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*126*		*71 - 136*	*05/31/17 11:00*	*06/05/17 21:09*	*1*
4-Bromofluorobenzene (Surr)	*96*		*79 - 119*	*05/31/17 11:00*	*06/05/17 21:09*	*1*
Dibromofluoromethane (Surr)	*110*		*78 - 119*	*05/31/17 11:00*	*06/05/17 21:09*	*1*
Toluene-d8 (Surr)	*97*		*85 - 116*	*05/31/17 11:00*	*06/05/17 21:09*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**31**		5.8	0.30	ug/Kg	☼	06/05/17 08:51	06/12/17 19:59	1
2-Methylnaphthalene	**69**		5.8	0.36	ug/Kg	☼	06/05/17 08:51	06/12/17 19:59	1
Acenaphthene	**24**		5.8	0.18	ug/Kg	☼	06/05/17 08:51	06/12/17 19:59	1
Acenaphthylene	**46**		5.8	0.20	ug/Kg	☼	06/05/17 08:51	06/12/17 19:59	1
Anthracene	**70**		5.8	0.83	ug/Kg	☼	06/05/17 08:51	06/12/17 19:59	1
Benzo[a]anthracene	**180**		5.8	1.0	ug/Kg	☼	06/05/17 08:51	06/12/17 19:59	1
Benzo[a]pyrene	**210**	**J**	5.8	0.86	ug/Kg	☼	06/05/17 08:51	06/12/17 19:59	1
Benzo[b]fluoranthene	**280**	**J**	5.8	1.4	ug/Kg	☼	06/05/17 08:51	06/12/17 19:59	1
Benzo[g,h,i]perylene	**140**		5.8	1.3	ug/Kg	☼	06/05/17 08:51	06/12/17 19:59	1
Benzo[k]fluoranthene	**99**		5.8	1.2	ug/Kg	☼	06/05/17 08:51	06/12/17 19:59	1
Chrysene	**230**	**J**	5.8	1.2	ug/Kg	☼	06/05/17 08:51	06/12/17 19:59	1
Dibenz(a,h)anthracene	**40**		5.8	1.5	ug/Kg	☼	06/05/17 08:51	06/12/17 19:59	1
Fluoranthene	**270**	**J**	5.8	1.2	ug/Kg	☼	06/05/17 08:51	06/12/17 19:59	1
Fluorene	**25**		5.8	0.54	ug/Kg	☼	06/05/17 08:51	06/12/17 19:59	1
Indeno[1,2,3-cd]pyrene	**110**		5.8	1.3	ug/Kg	☼	06/05/17 08:51	06/12/17 19:59	1
Naphthalene	**75**		5.8	0.38	ug/Kg	☼	06/05/17 08:51	06/12/17 19:59	1
Phenanthrene	**160**		5.8	1.3	ug/Kg	☼	06/05/17 08:51	06/12/17 19:59	1
Pyrene	**280**	**J**	5.8	1.3	ug/Kg	☼	06/05/17 08:51	06/12/17 19:59	1

Client Sample ID: SS025-SS01
Lab Sample ID: 280-97803-1
Date Collected: 05/31/17 11:00
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 83.2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	72		46 - 115	06/05/17 08:51	06/12/17 19:59	1
Nitrobenzene-d5 (Surr)	84		44 - 125	06/05/17 08:51	06/12/17 19:59	1
Terphenyl-d14 (Surr)	66		58 - 133	06/05/17 08:51	06/12/17 19:59	1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**26**	**J D**	29	1.5	ug/Kg	☼	06/05/17 08:51	06/12/17 20:25	5
2-Methylnaphthalene	**59**	**D**	29	1.8	ug/Kg	☼	06/05/17 08:51	06/12/17 20:25	5
Acenaphthene	**25**	**J D**	29	0.92	ug/Kg	☼	06/05/17 08:51	06/12/17 20:25	5
Acenaphthylene	**51**	**D**	29	0.98	ug/Kg	☼	06/05/17 08:51	06/12/17 20:25	5
Anthracene	**62**	**D**	29	4.2	ug/Kg	☼	06/05/17 08:51	06/12/17 20:25	5
Benzo[a]anthracene	**150**	**D**	29	5.2	ug/Kg	☼	06/05/17 08:51	06/12/17 20:25	5
Benzo[a]pyrene	**170**	**D**	29	4.3	ug/Kg	☼	06/05/17 08:51	06/12/17 20:25	5
Benzo[b]fluoranthene	**240**	**D**	29	6.9	ug/Kg	☼	06/05/17 08:51	06/12/17 20:25	5
Benzo[g,h,i]perylene	**110**	**D**	29	6.4	ug/Kg	☼	06/05/17 08:51	06/12/17 20:25	5
Benzo[k]fluoranthene	**79**	**D**	29	5.8	ug/Kg	☼	06/05/17 08:51	06/12/17 20:25	5
Chrysene	**200**	**D**	29	5.8	ug/Kg	☼	06/05/17 08:51	06/12/17 20:25	5
Dibenz(a,h)anthracene	**32**	**D**	29	7.5	ug/Kg	☼	06/05/17 08:51	06/12/17 20:25	5
Fluoranthene	**260**	**D**	29	5.8	ug/Kg	☼	06/05/17 08:51	06/12/17 20:25	5
Fluorene	**23**	**J D**	29	2.7	ug/Kg	☼	06/05/17 08:51	06/12/17 20:25	5
Indeno[1,2,3-cd]pyrene	**89**	**D**	29	6.4	ug/Kg	☼	06/05/17 08:51	06/12/17 20:25	5
Naphthalene	**65**	**D**	29	1.9	ug/Kg	☼	06/05/17 08:51	06/12/17 20:25	5
Phenanthrene	**140**	**D**	29	6.4	ug/Kg	☼	06/05/17 08:51	06/12/17 20:25	5
Pyrene	**270**	**D**	29	6.4	ug/Kg	☼	06/05/17 08:51	06/12/17 20:25	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	63	D	46 - 115	06/05/17 08:51	06/12/17 20:25	5
Nitrobenzene-d5 (Surr)	68	D	44 - 125	06/05/17 08:51	06/12/17 20:25	5
Terphenyl-d14 (Surr)	62	D	58 - 133	06/05/17 08:51	06/12/17 20:25	5

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.9	U J	2.0	0.64	ug/Kg	☼	06/12/17 11:25	06/15/17 04:51	1
4,4'-DDE	**1.4**	**J**	2.0	0.28	ug/Kg	☼	06/12/17 11:25	06/15/17 04:51	1
4,4'-DDT	**2.1**	**J**	2.3	0.69	ug/Kg	☼	06/12/17 11:25	06/15/17 04:51	1
Aldrin	0.78	U	2.0	0.29	ug/Kg	☼	06/12/17 11:25	06/15/17 04:51	1
alpha-BHC	0.78	U	2.0	0.25	ug/Kg	☼	06/12/17 11:25	06/15/17 04:51	1
alpha-Chlordane	0.78	U	2.0	0.38	ug/Kg	☼	06/12/17 11:25	06/15/17 04:51	1
beta-BHC	1.9	U	2.0	0.77	ug/Kg	☼	06/12/17 11:25	06/15/17 04:51	1
delta-BHC	1.2	U	2.0	0.47	ug/Kg	☼	06/12/17 11:25	06/15/17 04:51	1
Dieldrin	0.78	U	2.0	0.24	ug/Kg	☼	06/12/17 11:25	06/15/17 04:51	1
Endosulfan I	0.78	U	2.0	0.20	ug/Kg	☼	06/12/17 11:25	06/15/17 04:51	1
Endosulfan II	0.78	U	2.0	0.33	ug/Kg	☼	06/12/17 11:25	06/15/17 04:51	1
Endosulfan sulfate	0.78	U	2.0	0.32	ug/Kg	☼	06/12/17 11:25	06/15/17 04:51	1
Endrin	0.78	U	2.0	0.36	ug/Kg	☼	06/12/17 11:25	06/15/17 04:51	1
Endrin aldehyde	0.78	U	2.0	0.20	ug/Kg	☼	06/12/17 11:25	06/15/17 04:51	1
gamma-BHC (Lindane)	1.2	U	2.0	0.54	ug/Kg	☼	06/12/17 11:25	06/15/17 04:51	1
gamma-Chlordane	0.78	U J	2.0	0.31	ug/Kg	☼	06/12/17 11:25	06/15/17 04:51	1
Heptachlor	0.78	U	2.0	0.25	ug/Kg	☼	06/12/17 11:25	06/15/17 04:51	1
Heptachlor epoxide	1.2	U	2.0	0.50	ug/Kg	☼	06/12/17 11:25	06/15/17 04:51	1
Methoxychlor	1.2	U	3.8	0.52	ug/Kg	☼	06/12/17 11:25	06/15/17 04:51	1

Client Sample ID: SS025-SS01

Date Collected: 05/31/17 11:00
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-1

Matrix: Solid
Percent Solids: 83.2

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Toxaphene	38	U	200	18	ug/Kg	☼	06/12/17 11:25	06/15/17 04:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*68*		*63 - 121*	*06/12/17 11:25*	*06/15/17 04:51*	*1*
Tetrachloro-m-xylene (Surr)	*67*		*42 - 129*	*06/12/17 11:25*	*06/15/17 04:51*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	17	U	38	5.9	ug/Kg	☼	06/12/17 11:25	06/17/17 13:28	1
Arochlor 1221	20	U	55	18	ug/Kg	☼	06/12/17 11:25	06/17/17 13:28	1
Arochlor 1232	17	U	38	6.0	ug/Kg	☼	06/12/17 11:25	06/17/17 13:28	1
Arochlor 1242	38	U	38	11	ug/Kg	☼	06/12/17 11:25	06/17/17 13:28	1
Arochlor 1248	23	U	38	6.5	ug/Kg	☼	06/12/17 11:25	06/17/17 13:28	1
Arochlor 1254	20	U	38	6.4	ug/Kg	☼	06/12/17 11:25	06/17/17 13:28	1
Arochlor 1260	**3.8**	**J**	38	3.1	ug/Kg	☼	06/12/17 11:25	06/17/17 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*67*		*59 - 130*	*06/12/17 11:25*	*06/17/17 13:28*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7700**	**J**	57	1.8	mg/Kg	☼	06/06/17 07:01	06/07/17 12:10	1
Antimony	1.7	U J	2.3	0.83	mg/Kg	☼	06/06/17 07:01	06/06/17 17:41	1
Arsenic	**6.2**		2.8	0.75	mg/Kg	☼	06/06/17 07:01	06/06/17 17:41	1
Barium	**33**		2.3	0.12	mg/Kg	☼	06/06/17 07:01	06/06/17 17:41	1
Beryllium	**0.33**	**J**	0.57	0.037	mg/Kg	☼	06/06/17 07:01	06/06/17 17:41	1
Cadmium	**0.20**	**J**	0.57	0.046	mg/Kg	☼	06/06/17 07:01	06/06/17 17:41	1
Calcium	**10000**	**J**	110	16	mg/Kg	☼	06/06/17 07:01	06/06/17 17:41	1
Chromium	**9.4**		4.0	0.066	mg/Kg	☼	06/06/17 07:01	06/06/17 17:41	1
Cobalt	**5.3**		1.1	0.11	mg/Kg	☼	06/06/17 07:01	06/06/17 17:41	1
Copper	**23**		5.7	0.25	mg/Kg	☼	06/06/17 07:01	06/06/17 17:41	1
Iron	**16000**	**J**	90	4.3	mg/Kg	☼	06/06/17 07:01	06/06/17 17:41	1
Lead	**9.6**		1.0	0.35	mg/Kg	☼	06/06/17 07:01	06/06/17 17:41	1
Magnesium	**4800**		34	4.2	mg/Kg	☼	06/06/17 07:01	06/06/17 17:41	1
Manganese	**620**	**J**	5.1	0.11	mg/Kg	☼	06/06/17 07:01	06/06/17 17:41	1
Nickel	**12**		4.5	0.15	mg/Kg	☼	06/06/17 07:01	06/06/17 17:41	1
Potassium	**1100**	**J**	340	46	mg/Kg	☼	06/06/17 07:01	06/06/17 17:41	1
Selenium	3.4	U	3.4	0.97	mg/Kg	☼	06/06/17 07:01	06/07/17 12:10	1
Silver	0.68	U	1.7	0.18	mg/Kg	☼	06/06/17 07:01	06/06/17 17:41	1
Sodium	**68**	**J**	570	67	mg/Kg	☼	06/06/17 07:01	06/07/17 12:10	1
Thallium	2.8	U	3.4	0.74	mg/Kg	☼	06/06/17 07:01	06/06/17 17:41	1
Vanadium	**14**		2.3	0.11	mg/Kg	☼	06/06/17 07:01	06/06/17 17:41	1
Zinc	**42**		9.0	0.45	mg/Kg	☼	06/06/17 07:01	06/06/17 17:41	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**24**		23	7.5	ug/Kg	☼	06/06/17 11:48	06/06/17 14:33	1

Client Sample ID: TB-01

Date Collected: 05/31/17 11:00
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-2

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.6	U	5.0	0.56	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
1,1,1-Trichloroethane	1.6	U	5.0	0.52	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
1,1,2,2-Tetrachloroethane	1.6	U	5.0	0.61	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
1,1,2-Trichloroethane	3.2	U	5.0	0.88	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
1,1-Dichloroethane	0.80	U	5.0	0.21	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
1,1-Dichloroethene	1.6	U	5.0	0.59	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
1,1-Dichloropropene	1.6	U	5.0	0.54	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
1,2,3-Trichlorobenzene	1.6	U	5.0	0.75	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
1,2,3-Trichloropropane	3.2	U	5.0	0.81	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
1,2,4-Trichlorobenzene	1.6	U	5.0	0.73	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
1,2,4-Trimethylbenzene	1.6	U	5.0	0.58	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
1,2-Dibromo-3-Chloropropane	1.6	U	10	0.60	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
1,2-Dibromoethane	1.6	U	5.0	0.52	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
1,2-Dichlorobenzene	1.6	U	5.0	0.45	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
1,2-Dichloroethane	1.6	U	5.0	0.70	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
1,2-Dichloroethene, Total	1.6	U	5.0	0.39	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
1,2-Dichloropropane	1.6	U	5.0	0.55	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
1,3,5-Trimethylbenzene	1.6	U	5.0	0.57	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
1,3-Dichlorobenzene	1.6	U	5.0	0.48	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
1,3-Dichloropropane	1.6	U	5.0	0.51	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
1,4-Dichlorobenzene	1.6	U	5.0	0.78	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
2,2-Dichloropropane	1.6	U	5.0	0.44	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
2-Butanone (MEK)	6.4	U	20	1.8	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
2-Chlorotoluene	1.6	U	5.0	0.51	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
2-Hexanone	13	U	20	4.9	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
4-Chlorotoluene	1.6	U	5.0	0.78	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
4-Isopropyltoluene	1.6	U	5.0	0.49	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
4-Methyl-2-pentanone (MIBK)	13	U	20	4.4	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Acetone	**10**	**J**	20	5.4	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Benzene	1.6	U	5.0	0.47	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Bromobenzene	1.6	U	5.0	0.49	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Bromochloromethane	0.80	U	5.0	0.30	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Bromodichloromethane	0.80	U	5.0	0.22	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Bromoform	0.80	U	5.0	0.23	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Bromomethane	1.6	U Q	10	0.50	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Carbon disulfide	1.6	U	5.0	0.42	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Carbon tetrachloride	1.6	U	5.0	0.63	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Chlorobenzene	1.6	U	5.0	0.54	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Chloroethane	3.2	U Q	10	0.89	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Chloroform	0.80	U	10	0.29	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Chloromethane	1.6	U	10	0.77	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
cis-1,2-Dichloroethene	1.6	U	5.0	0.56	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
cis-1,3-Dichloropropene	3.2	U	5.0	1.3	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Dibromochloromethane	1.6	U	5.0	0.57	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Dibromomethane	3.2	U	5.0	0.84	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Dichlorodifluoromethane	1.6	U	10	0.52	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Ethylbenzene	1.6	U	5.0	0.67	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Hexachlorobutadiene	1.6	U	5.0	0.55	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Isopropyl ether	8.0	U Q	50	2.7	ug/Kg		05/31/17 11:00	06/03/17 22:29	1

Client Sample ID: TB-01

Lab Sample ID: 280-97803-2

Date Collected: 05/31/17 11:00

Matrix: Solid

Date Received: 06/01/17 08:50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	1.6	U	5.0	0.59	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
m&p-Xylene	3.2	U	3.2	1.0	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Methyl iodide	1.6	U	5.0	0.44	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Methyl tert-butyl ether	0.80	U	20	0.34	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Methylene Chloride	**2.6**	**J**	5.0	1.6	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Naphthalene	1.6	U	5.0	0.63	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
n-Butylbenzene	1.6	U	5.0	0.56	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
N-Propylbenzene	1.6	U	5.0	0.58	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
o-Xylene	1.6	U	5.0	0.61	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
sec-Butylbenzene	1.6	U	5.0	0.77	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Styrene	1.6	U	5.0	0.63	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
tert-Butylbenzene	1.6	U	5.0	0.50	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Tetrachloroethene	1.6	U	5.0	0.59	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Toluene	1.6	U	5.0	0.69	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
trans-1,2-Dichloroethene	0.80	U	5.0	0.39	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
trans-1,3-Dichloropropene	1.6	U	5.0	0.67	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Trichloroethene	0.80	U	5.0	0.23	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Trichlorofluoromethane	3.2	U	10	1.0	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Vinyl acetate	3.2	U	10	1.1	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Vinyl chloride	3.2	U	5.0	1.3	ug/Kg		05/31/17 11:00	06/03/17 22:29	1
Xylenes (total)	1.0	U	10	0.61	ug/Kg		05/31/17 11:00	06/03/17 22:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*71 - 136*	*05/31/17 11:00*	*06/03/17 22:29*	*1*
4-Bromofluorobenzene (Surr)	*96*		*79 - 119*	*05/31/17 11:00*	*06/03/17 22:29*	*1*
Dibromofluoromethane (Surr)	*104*		*78 - 119*	*05/31/17 11:00*	*06/03/17 22:29*	*1*
Toluene-d8 (Surr)	*99*		*85 - 116*	*05/31/17 11:00*	*06/03/17 22:29*	*1*

Client Sample ID: SS025-AB-053117

Lab Sample ID: 280-97803-3

Date Collected: 05/31/17 12:40

Matrix: Water

Date Received: 06/01/17 08:50

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.012	U	0.10	0.0057	ug/L		06/06/17 07:45	06/13/17 11:30	1
2-Methylnaphthalene	0.012	U	0.10	0.0052	ug/L		06/06/17 07:45	06/13/17 11:30	1
Acenaphthene	0.030	U	0.10	0.011	ug/L		06/06/17 07:45	06/13/17 11:30	1
Acenaphthylene	0.012	U	0.10	0.010	ug/L		06/06/17 07:45	06/13/17 11:30	1
Anthracene	0.020	U	0.10	0.014	ug/L		06/06/17 07:45	06/13/17 11:30	1
Benzo[a]anthracene	0.012	U	0.10	0.0032	ug/L		06/06/17 07:45	06/13/17 11:30	1
Benzo[a]pyrene	0.012	U	0.10	0.0052	ug/L		06/06/17 07:45	06/13/17 11:30	1
Benzo[b]fluoranthene	0.012	U	0.10	0.0035	ug/L		06/06/17 07:45	06/13/17 11:30	1
Benzo[g,h,i]perylene	0.012	U	0.10	0.0036	ug/L		06/06/17 07:45	06/13/17 11:30	1
Benzo[k]fluoranthene	0.012	U	0.10	0.0051	ug/L		06/06/17 07:45	06/13/17 11:30	1
Chrysene	0.012	U	0.10	0.0032	ug/L		06/06/17 07:45	06/13/17 11:30	1
Dibenz(a,h)anthracene	0.012	U	0.10	0.0048	ug/L		06/06/17 07:45	06/13/17 11:30	1
Fluoranthene	0.012	U	0.10	0.0046	ug/L		06/06/17 07:45	06/13/17 11:30	1
Fluorene	0.020	U	0.10	0.019	ug/L		06/06/17 07:45	06/13/17 11:30	1
Indeno[1,2,3-cd]pyrene	0.020	U	0.10	0.015	ug/L		06/06/17 07:45	06/13/17 11:30	1
Naphthalene	0.012	U	0.10	0.0054	ug/L		06/06/17 07:45	06/13/17 11:30	1

Client Sample ID: SS025-AB-053117
Lab Sample ID: 280-97803-3

Date Collected: 05/31/17 12:40
Matrix: Water
Date Received: 06/01/17 08:50

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	0.020	U	0.10	0.0098	ug/L		06/06/17 07:45	06/13/17 11:30	1
Pyrene	0.020	U	0.10	0.0081	ug/L		06/06/17 07:45	06/13/17 11:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*73*		*53 - 106*	*06/06/17 07:45*	*06/13/17 11:30*	*1*
Nitrobenzene-d5 (Surr)	*76*		*55 - 111*	*06/06/17 07:45*	*06/13/17 11:30*	*1*
Terphenyl-d14 (Surr)	*85*		*58 - 132*	*06/06/17 07:45*	*06/13/17 11:30*	*1*

Client Sample ID: SS025-SS02
Lab Sample ID: 280-97803-4

Date Collected: 05/31/17 12:50
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 84.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.6	U	5.0	0.55	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
1,1,1-Trichloroethane	1.6	U	5.0	0.51	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
1,1,2,2-Tetrachloroethane	1.6	U	5.0	0.60	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
1,1,2-Trichloroethane	3.2	U	5.0	0.87	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
1,1-Dichloroethane	0.79	U	5.0	0.21	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
1,1-Dichloroethene	1.6	U	5.0	0.58	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
1,1-Dichloropropene	1.6	U	5.0	0.53	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
1,2,3-Trichlorobenzene	1.6	U	5.0	0.74	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
1,2,3-Trichloropropane	3.2	U	5.0	0.80	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
1,2,4-Trichlorobenzene	1.6	U	5.0	0.72	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
1,2,4-Trimethylbenzene	1.6	U	5.0	0.57	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
1,2-Dibromo-3-Chloropropane	1.6	U	9.9	0.59	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
1,2-Dibromoethane	1.6	U	5.0	0.51	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
1,2-Dichlorobenzene	1.6	U	5.0	0.45	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
1,2-Dichloroethane	1.6	U	5.0	0.69	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
1,2-Dichloroethene, Total	1.6	U	5.0	0.39	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
1,2-Dichloropropane	1.6	U	5.0	0.54	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
1,3,5-Trimethylbenzene	1.6	U	5.0	0.56	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
1,3-Dichlorobenzene	1.6	U	5.0	0.48	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
1,3-Dichloropropane	1.6	U	5.0	0.51	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
1,4-Dichlorobenzene	1.6	U	5.0	0.77	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
2,2-Dichloropropane	1.6	U	5.0	0.44	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
2-Butanone (MEK)	6.3	U	20	1.8	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
2-Chlorotoluene	1.6	U	5.0	0.51	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
2-Hexanone	13	U	20	4.8	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
4-Chlorotoluene	1.6	U	5.0	0.77	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
4-Isopropyltoluene	1.6	U	5.0	0.49	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
4-Methyl-2-pentanone (MIBK)	13	U	20	4.3	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Acetone	**12**	**J**	20	5.3	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Benzene	1.6	U	5.0	0.47	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Bromobenzene	1.6	U	5.0	0.49	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Bromochloromethane	0.79	U	5.0	0.30	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Bromodichloromethane	0.79	U	5.0	0.22	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Bromoform	0.79	U	5.0	0.23	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Bromomethane	1.6	U Q	9.9	0.50	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Carbon disulfide	1.6	U	5.0	0.42	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1

Client Sample ID: SS025-SS02
Date Collected: 05/31/17 12:50
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-4
Matrix: Solid
Percent Solids: 84.8

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	1.6	U	5.0	0.62	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Chlorobenzene	1.6	U	5.0	0.53	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Chloroethane	3.2	U Q	9.9	0.88	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Chloroform	0.79	U	9.9	0.29	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Chloromethane	1.6	U	9.9	0.76	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
cis-1,2-Dichloroethene	1.6	U	5.0	0.55	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
cis-1,3-Dichloropropene	3.2	U	5.0	1.3	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Dibromochloromethane	1.6	U	5.0	0.56	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Dibromomethane	3.2	U	5.0	0.83	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Dichlorodifluoromethane	1.6	U	9.9	0.51	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Ethylbenzene	1.6	U	5.0	0.66	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Hexachlorobutadiene	1.6	U	5.0	0.54	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Isopropyl ether	7.9	U Q	50	2.7	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Isopropylbenzene	1.6	U	5.0	0.58	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
m&p-Xylene	3.2	U	3.2	1.0	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Methyl iodide	1.6	U	5.0	0.44	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Methyl tert-butyl ether	0.79	U	20	0.34	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Methylene Chloride	3.2	U	5.0	1.6	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Naphthalene	1.6	U	5.0	0.62	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
n-Butylbenzene	1.6	U	5.0	0.55	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
N-Propylbenzene	1.6	U	5.0	0.57	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
o-Xylene	1.6	U	5.0	0.60	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
sec-Butylbenzene	1.6	U	5.0	0.76	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Styrene	1.6	U	5.0	0.62	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
tert-Butylbenzene	1.6	U	5.0	0.50	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Tetrachloroethene	1.6	U	5.0	0.58	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Toluene	1.6	U	5.0	0.68	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
trans-1,2-Dichloroethene	0.79	U	5.0	0.39	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
trans-1,3-Dichloropropene	1.6	U	5.0	0.66	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Trichloroethene	0.79	U	5.0	0.23	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Trichlorofluoromethane	**1.5**	**J**	9.9	1.0	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Vinyl acetate	3.2	U	9.9	1.1	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Vinyl chloride	3.2	U	5.0	1.3	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1
Xylenes (total)	0.99	U	9.9	0.60	ug/Kg	☼	05/31/17 12:50	06/03/17 23:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*126*		*71 - 136*	*05/31/17 12:50*	*06/03/17 23:19*	*1*
4-Bromofluorobenzene (Surr)	*102*		*79 - 119*	*05/31/17 12:50*	*06/03/17 23:19*	*1*
Dibromofluoromethane (Surr)	*110*		*78 - 119*	*05/31/17 12:50*	*06/03/17 23:19*	*1*
Toluene-d8 (Surr)	*102*		*85 - 116*	*05/31/17 12:50*	*06/03/17 23:19*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**1.5**	**J**	5.8	0.30	ug/Kg	☼	06/05/17 08:51	06/08/17 12:12	1
2-Methylnaphthalene	**2.1**	**J**	5.8	0.36	ug/Kg	☼	06/05/17 08:51	06/08/17 12:12	1
Acenaphthene	**2.4**	**J**	5.8	0.19	ug/Kg	☼	06/05/17 08:51	06/08/17 12:12	1
Acenaphthylene	**7.7**		5.8	0.20	ug/Kg	☼	06/05/17 08:51	06/08/17 12:12	1
Anthracene	**6.7**		5.8	0.83	ug/Kg	☼	06/05/17 08:51	06/08/17 12:12	1
Benzo[a]anthracene	**38**		5.8	1.0	ug/Kg	☼	06/05/17 08:51	06/08/17 12:12	1
Benzo[a]pyrene	**53**		5.8	0.86	ug/Kg	☼	06/05/17 08:51	06/08/17 12:12	1

Client Sample ID: SS025-SS02

Date Collected: 05/31/17 12:50
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-4

Matrix: Solid
Percent Solids: 84.8

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	**72**		5.8	1.4	ug/Kg	☼	06/05/17 08:51	06/08/17 12:12	1
Benzo[g,h,i]perylene	**34**		5.8	1.3	ug/Kg	☼	06/05/17 08:51	06/08/17 12:12	1
Benzo[k]fluoranthene	**23**		5.8	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 12:12	1
Chrysene	**51**		5.8	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 12:12	1
Dibenz(a,h)anthracene	**7.9**		5.8	1.5	ug/Kg	☼	06/05/17 08:51	06/08/17 12:12	1
Fluoranthene	**71**		5.8	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 12:12	1
Fluorene	**2.6**	**J**	5.8	0.54	ug/Kg	☼	06/05/17 08:51	06/08/17 12:12	1
Indeno[1,2,3-cd]pyrene	**38**		5.8	1.3	ug/Kg	☼	06/05/17 08:51	06/08/17 12:12	1
Naphthalene	0.77	U	5.8	0.38	ug/Kg	☼	06/05/17 08:51	06/08/17 12:12	1
Phenanthrene	**28**		5.8	1.3	ug/Kg	☼	06/05/17 08:51	06/08/17 12:12	1
Pyrene	**69**		5.8	1.3	ug/Kg	☼	06/05/17 08:51	06/08/17 12:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*46 - 115*	*06/05/17 08:51*	*06/08/17 12:12*	*1*
Nitrobenzene-d5 (Surr)	*72*		*44 - 125*	*06/05/17 08:51*	*06/08/17 12:12*	*1*
Terphenyl-d14 (Surr)	*81*		*58 - 133*	*06/05/17 08:51*	*06/08/17 12:12*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.8	U	1.8	0.59	ug/Kg	☼	06/12/17 11:25	06/15/17 05:41	1
4,4'-DDE	**0.36**	**J**	1.8	0.26	ug/Kg	☼	06/12/17 11:25	06/15/17 05:41	1
4,4'-DDT	1.8	U	2.2	0.64	ug/Kg	☼	06/12/17 11:25	06/15/17 05:41	1
Aldrin	0.73	U	1.8	0.27	ug/Kg	☼	06/12/17 11:25	06/15/17 05:41	1
alpha-BHC	0.73	U	1.8	0.23	ug/Kg	☼	06/12/17 11:25	06/15/17 05:41	1
alpha-Chlordane	0.73	U	1.8	0.35	ug/Kg	☼	06/12/17 11:25	06/15/17 05:41	1
beta-BHC	1.8	U	1.8	0.72	ug/Kg	☼	06/12/17 11:25	06/15/17 05:41	1
delta-BHC	1.1	U	1.8	0.44	ug/Kg	☼	06/12/17 11:25	06/15/17 05:41	1
Dieldrin	0.73	U	1.8	0.23	ug/Kg	☼	06/12/17 11:25	06/15/17 05:41	1
Endosulfan I	0.73	U	1.8	0.19	ug/Kg	☼	06/12/17 11:25	06/15/17 05:41	1
Endosulfan II	0.73	U	1.8	0.31	ug/Kg	☼	06/12/17 11:25	06/15/17 05:41	1
Endosulfan sulfate	0.73	U	1.8	0.30	ug/Kg	☼	06/12/17 11:25	06/15/17 05:41	1
Endrin	0.73	U	1.8	0.33	ug/Kg	☼	06/12/17 11:25	06/15/17 05:41	1
Endrin aldehyde	0.73	U	1.8	0.19	ug/Kg	☼	06/12/17 11:25	06/15/17 05:41	1
gamma-BHC (Lindane)	1.1	U	1.8	0.50	ug/Kg	☼	06/12/17 11:25	06/15/17 05:41	1
gamma-Chlordane	0.73	U	1.8	0.29	ug/Kg	☼	06/12/17 11:25	06/15/17 05:41	1
Heptachlor	0.73	U	1.8	0.23	ug/Kg	☼	06/12/17 11:25	06/15/17 05:41	1
Heptachlor epoxide	1.1	U	1.8	0.46	ug/Kg	☼	06/12/17 11:25	06/15/17 05:41	1
Methoxychlor	1.1	U	3.6	0.49	ug/Kg	☼	06/12/17 11:25	06/15/17 05:41	1
Toxaphene	36	U	180	17	ug/Kg	☼	06/12/17 11:25	06/15/17 05:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*108*		*63 - 121*	*06/12/17 11:25*	*06/15/17 05:41*	*1*
Tetrachloro-m-xylene (Surr)	*75*		*42 - 129*	*06/12/17 11:25*	*06/15/17 05:41*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	16	U	36	5.5	ug/Kg	☼	06/12/17 11:25	06/17/17 13:50	1
Arochlor 1221	18	U	51	17	ug/Kg	☼	06/12/17 11:25	06/17/17 13:50	1
Arochlor 1232	16	U	36	5.6	ug/Kg	☼	06/12/17 11:25	06/17/17 13:50	1
Arochlor 1242	36	U	36	9.9	ug/Kg	☼	06/12/17 11:25	06/17/17 13:50	1

Client Sample ID: SS025-SS02

Lab Sample ID: 280-97803-4
Date Collected: 05/31/17 12:50
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 84.8

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1248	22	U	36	6.1	ug/Kg	☼	06/12/17 11:25	06/17/17 13:50	1
Arochlor 1254	18	U	36	6.0	ug/Kg	☼	06/12/17 11:25	06/17/17 13:50	1
Arochlor 1260	8.4	U	36	2.9	ug/Kg	☼	06/12/17 11:25	06/17/17 13:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*80*		*59 - 130*	*06/12/17 11:25*	*06/17/17 13:50*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7500**		56	1.7	mg/Kg	☼	06/06/17 07:01	06/07/17 12:22	1
Antimony	1.7	U	2.2	0.82	mg/Kg	☼	06/06/17 07:01	06/06/17 17:53	1
Arsenic	**4.3**		2.8	0.74	mg/Kg	☼	06/06/17 07:01	06/06/17 17:53	1
Barium	**30**		2.2	0.12	mg/Kg	☼	06/06/17 07:01	06/06/17 17:53	1
Beryllium	**0.32**	**J**	0.56	0.037	mg/Kg	☼	06/06/17 07:01	06/06/17 17:53	1
Cadmium	**0.14**	**J**	0.56	0.046	mg/Kg	☼	06/06/17 07:01	06/06/17 17:53	1
Calcium	**1600**		110	16	mg/Kg	☼	06/06/17 07:01	06/06/17 17:53	1
Chromium	**7.7**		3.9	0.065	mg/Kg	☼	06/06/17 07:01	06/06/17 17:53	1
Cobalt	**4.4**		1.1	0.11	mg/Kg	☼	06/06/17 07:01	06/06/17 17:53	1
Copper	**18**		5.6	0.24	mg/Kg	☼	06/06/17 07:01	06/06/17 17:53	1
Iron	**13000**		89	4.2	mg/Kg	☼	06/06/17 07:01	06/06/17 17:53	1
Lead	**7.7**		1.0	0.35	mg/Kg	☼	06/06/17 07:01	06/06/17 17:53	1
Magnesium	**2100**		34	4.1	mg/Kg	☼	06/06/17 07:01	06/06/17 17:53	1
Manganese	**600**		5.0	0.11	mg/Kg	☼	06/06/17 07:01	06/06/17 17:53	1
Nickel	**9.2**		4.5	0.15	mg/Kg	☼	06/06/17 07:01	06/06/17 17:53	1
Potassium	**900**		340	46	mg/Kg	☼	06/06/17 07:01	06/06/17 17:53	1
Selenium	3.4	U	3.4	0.96	mg/Kg	☼	06/06/17 07:01	06/07/17 12:22	1
Silver	0.67	U	1.7	0.18	mg/Kg	☼	06/06/17 07:01	06/06/17 17:53	1
Sodium	220	U	560	66	mg/Kg	☼	06/06/17 07:01	06/07/17 12:22	1
Thallium	2.8	U	3.4	0.73	mg/Kg	☼	06/06/17 07:01	06/06/17 17:53	1
Vanadium	**13**		2.2	0.11	mg/Kg	☼	06/06/17 07:01	06/06/17 17:53	1
Zinc	**38**		8.9	0.44	mg/Kg	☼	06/06/17 07:01	06/06/17 17:53	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**34**		24	7.8	ug/Kg	☼	06/06/17 11:48	06/06/17 14:49	1

Client Sample ID: SS025-SB02(0-2)

Lab Sample ID: 280-97803-5
Date Collected: 05/31/17 13:10
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 82.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.6	U	4.9	0.54	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
1,1,1-Trichloroethane	1.6	U	4.9	0.51	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
1,1,2,2-Tetrachloroethane	1.6	U	4.9	0.59	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
1,1,2-Trichloroethane	3.1	U	4.9	0.86	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
1,1-Dichloroethane	0.78	U	4.9	0.20	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
1,1-Dichloroethene	1.6	U	4.9	0.57	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
1,1-Dichloropropene	1.6	U	4.9	0.53	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
1,2,3-Trichlorobenzene	1.6	U	4.9	0.73	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1

Client Sample ID: SS025-SB02(0-2)

Date Collected: 05/31/17 13:10
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-5

Matrix: Solid
Percent Solids: 82.4

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	3.1	U	4.9	0.79	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
1,2,4-Trichlorobenzene	1.6	U	4.9	0.71	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
1,2,4-Trimethylbenzene	1.6	U	4.9	0.56	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
1,2-Dibromo-3-Chloropropane	1.6	U	9.7	0.58	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
1,2-Dibromoethane	1.6	U	4.9	0.51	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
1,2-Dichlorobenzene	1.6	U	4.9	0.44	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
1,2-Dichloroethane	1.6	U	4.9	0.68	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
1,2-Dichloroethene, Total	1.6	U	4.9	0.38	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
1,2-Dichloropropane	1.6	U	4.9	0.54	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
1,3,5-Trimethylbenzene	1.6	U	4.9	0.55	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
1,3-Dichlorobenzene	1.6	U	4.9	0.47	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
1,3-Dichloropropane	1.6	U	4.9	0.50	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
1,4-Dichlorobenzene	1.6	U	4.9	0.76	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
2,2-Dichloropropane	1.6	U	4.9	0.43	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
2-Butanone (MEK)	6.2	U	19	1.8	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
2-Chlorotoluene	1.6	U	4.9	0.50	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
2-Hexanone	12	U	19	4.8	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
4-Chlorotoluene	1.6	U	4.9	0.76	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
4-Isopropyltoluene	1.6	U	4.9	0.48	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
4-Methyl-2-pentanone (MIBK)	12	U	19	4.2	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Acetone	**8.9**	**J**	19	5.2	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Benzene	1.6	U	4.9	0.46	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Bromobenzene	1.6	U	4.9	0.48	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Bromochloromethane	0.78	U	4.9	0.29	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Bromodichloromethane	0.78	U	4.9	0.21	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Bromoform	0.78	U	4.9	0.22	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Bromomethane	1.6	U Q	9.7	0.49	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Carbon disulfide	1.6	U	4.9	0.41	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Carbon tetrachloride	1.6	U	4.9	0.61	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Chlorobenzene	1.6	U	4.9	0.53	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Chloroethane	3.1	U Q	9.7	0.87	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Chloroform	0.78	U	9.7	0.28	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Chloromethane	1.6	U	9.7	0.75	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
cis-1,2-Dichloroethene	1.6	U	4.9	0.54	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
cis-1,3-Dichloropropene	3.1	U	4.9	1.3	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Dibromochloromethane	1.6	U	4.9	0.55	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Dibromomethane	3.1	U	4.9	0.82	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Dichlorodifluoromethane	1.6	U	9.7	0.51	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Ethylbenzene	1.6	U	4.9	0.65	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Hexachlorobutadiene	1.6	U	4.9	0.54	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Isopropyl ether	7.8	U Q	49	2.6	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Isopropylbenzene	1.6	U	4.9	0.57	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
m&p-Xylene	3.1	U	3.1	1.0	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Methyl iodide	1.6	U	4.9	0.43	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Methyl tert-butyl ether	0.78	U	19	0.33	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Methylene Chloride	3.1	U	4.9	1.6	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Naphthalene	1.6	U	4.9	0.61	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
n-Butylbenzene	1.6	U	4.9	0.54	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
N-Propylbenzene	1.6	U	4.9	0.56	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1

Client Sample ID: SS025-SB02(0-2)

Date Collected: 05/31/17 13:10
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-5

Matrix: Solid
Percent Solids: 82.4

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	1.6	U	4.9	0.59	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
sec-Butylbenzene	1.6	U	4.9	0.75	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Styrene	1.6	U	4.9	0.61	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
tert-Butylbenzene	1.6	U	4.9	0.49	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Tetrachloroethene	1.6	U	4.9	0.57	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Toluene	1.6	U	4.9	0.67	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
trans-1,2-Dichloroethene	0.78	U	4.9	0.38	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
trans-1,3-Dichloropropene	1.6	U	4.9	0.65	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Trichloroethene	0.78	U	4.9	0.22	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Trichlorofluoromethane	3.1	U	9.7	1.0	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Vinyl acetate	3.1	U	9.7	1.0	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Vinyl chloride	3.1	U	4.9	1.3	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1
Xylenes (total)	0.97	U	9.7	0.59	ug/Kg	☼	05/31/17 13:10	06/03/17 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*71 - 136*	*05/31/17 13:10*	*06/03/17 23:39*	*1*
4-Bromofluorobenzene (Surr)	*91*		*79 - 119*	*05/31/17 13:10*	*06/03/17 23:39*	*1*
Dibromofluoromethane (Surr)	*108*		*78 - 119*	*05/31/17 13:10*	*06/03/17 23:39*	*1*
Toluene-d8 (Surr)	*95*		*85 - 116*	*05/31/17 13:10*	*06/03/17 23:39*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.60	U	6.0	0.31	ug/Kg	☼	06/05/17 08:51	06/08/17 12:39	1
2-Methylnaphthalene	0.80	U	6.0	0.37	ug/Kg	☼	06/05/17 08:51	06/08/17 12:39	1
Acenaphthene	0.32	U	6.0	0.19	ug/Kg	☼	06/05/17 08:51	06/08/17 12:39	1
Acenaphthylene	0.80	U	6.0	0.20	ug/Kg	☼	06/05/17 08:51	06/08/17 12:39	1
Anthracene	3.0	U	6.0	0.86	ug/Kg	☼	06/05/17 08:51	06/08/17 12:39	1
Benzo[a]anthracene	3.0	U	6.0	1.1	ug/Kg	☼	06/05/17 08:51	06/08/17 12:39	1
Benzo[a]pyrene	3.0	U	6.0	0.89	ug/Kg	☼	06/05/17 08:51	06/08/17 12:39	1
Benzo[b]fluoranthene	3.0	U	6.0	1.4	ug/Kg	☼	06/05/17 08:51	06/08/17 12:39	1
Benzo[g,h,i]perylene	3.0	U	6.0	1.3	ug/Kg	☼	06/05/17 08:51	06/08/17 12:39	1
Benzo[k]fluoranthene	3.0	U	6.0	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 12:39	1
Chrysene	3.0	U	6.0	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 12:39	1
Dibenz(a,h)anthracene	3.0	U	6.0	1.6	ug/Kg	☼	06/05/17 08:51	06/08/17 12:39	1
Fluoranthene	3.0	U	6.0	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 12:39	1
Fluorene	0.80	U	6.0	0.56	ug/Kg	☼	06/05/17 08:51	06/08/17 12:39	1
Indeno[1,2,3-cd]pyrene	3.0	U	6.0	1.3	ug/Kg	☼	06/05/17 08:51	06/08/17 12:39	1
Naphthalene	0.80	U	6.0	0.39	ug/Kg	☼	06/05/17 08:51	06/08/17 12:39	1
Phenanthrene	3.0	U	6.0	1.3	ug/Kg	☼	06/05/17 08:51	06/08/17 12:39	1
Pyrene	3.0	U	6.0	1.3	ug/Kg	☼	06/05/17 08:51	06/08/17 12:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*65*		*46 - 115*	*06/05/17 08:51*	*06/08/17 12:39*	*1*
Nitrobenzene-d5 (Surr)	*54*		*44 - 125*	*06/05/17 08:51*	*06/08/17 12:39*	*1*
Terphenyl-d14 (Surr)	*58*		*58 - 133*	*06/05/17 08:51*	*06/08/17 12:39*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	2.0	U	2.0	0.64	ug/Kg	☼	06/12/17 11:25	06/15/17 01:11	1
4,4'-DDE	0.79	U	2.0	0.28	ug/Kg	☼	06/12/17 11:25	06/15/17 01:11	1

Client Sample ID: SS025-SB02(0-2)

Date Collected: 05/31/17 13:10
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-5

Matrix: Solid
Percent Solids: 82.4

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	2.0	U	2.4	0.70	ug/Kg	☼	06/12/17 11:25	06/15/17 01:11	1
Aldrin	0.79	U	2.0	0.30	ug/Kg	☼	06/12/17 11:25	06/15/17 01:11	1
alpha-BHC	0.79	U	2.0	0.25	ug/Kg	☼	06/12/17 11:25	06/15/17 01:11	1
alpha-Chlordane	0.79	U	2.0	0.38	ug/Kg	☼	06/12/17 11:25	06/15/17 01:11	1
beta-BHC	2.0	U	2.0	0.78	ug/Kg	☼	06/12/17 11:25	06/15/17 01:11	1
delta-BHC	1.2	U	2.0	0.47	ug/Kg	☼	06/12/17 11:25	06/15/17 01:11	1
Dieldrin	0.79	U	2.0	0.25	ug/Kg	☼	06/12/17 11:25	06/15/17 01:11	1
Endosulfan I	0.79	U	2.0	0.21	ug/Kg	☼	06/12/17 11:25	06/15/17 01:11	1
Endosulfan II	0.79	U	2.0	0.34	ug/Kg	☼	06/12/17 11:25	06/15/17 01:11	1
Endosulfan sulfate	0.79	U	2.0	0.33	ug/Kg	☼	06/12/17 11:25	06/15/17 01:11	1
Endrin	0.79	U	2.0	0.36	ug/Kg	☼	06/12/17 11:25	06/15/17 01:11	1
Endrin aldehyde	0.79	U	2.0	0.20	ug/Kg	☼	06/12/17 11:25	06/15/17 01:11	1
gamma-BHC (Lindane)	1.2	U	2.0	0.55	ug/Kg	☼	06/12/17 11:25	06/15/17 01:11	1
gamma-Chlordane	0.79	U	2.0	0.31	ug/Kg	☼	06/12/17 11:25	06/15/17 01:11	1
Heptachlor	0.79	U	2.0	0.25	ug/Kg	☼	06/12/17 11:25	06/15/17 01:11	1
Heptachlor epoxide	1.2	U	2.0	0.50	ug/Kg	☼	06/12/17 11:25	06/15/17 01:11	1
Methoxychlor	1.2	U	3.9	0.53	ug/Kg	☼	06/12/17 11:25	06/15/17 01:11	1
Toxaphene	39	U	200	19	ug/Kg	☼	06/12/17 11:25	06/15/17 01:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*69*		*63 - 121*	*06/12/17 11:25*	*06/15/17 01:11*	*1*
Tetrachloro-m-xylene (Surr)	*74*		*42 - 129*	*06/12/17 11:25*	*06/15/17 01:11*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	18	U	39	6.0	ug/Kg	☼	06/12/17 11:25	06/17/17 14:12	1
Arochlor 1221	20	U	55	18	ug/Kg	☼	06/12/17 11:25	06/17/17 14:12	1
Arochlor 1232	18	U	39	6.0	ug/Kg	☼	06/12/17 11:25	06/17/17 14:12	1
Arochlor 1242	39	U	39	11	ug/Kg	☼	06/12/17 11:25	06/17/17 14:12	1
Arochlor 1248	24	U	39	6.6	ug/Kg	☼	06/12/17 11:25	06/17/17 14:12	1
Arochlor 1254	20	U	39	6.5	ug/Kg	☼	06/12/17 11:25	06/17/17 14:12	1
Arochlor 1260	9.1	U	39	3.1	ug/Kg	☼	06/12/17 11:25	06/17/17 14:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*76*		*59 - 130*	*06/12/17 11:25*	*06/17/17 14:12*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3700**		48	1.5	mg/Kg	☼	06/06/17 07:01	06/07/17 12:25	1
Antimony	1.4	U	1.9	0.70	mg/Kg	☼	06/06/17 07:01	06/06/17 17:56	1
Arsenic	**3.4**		2.4	0.64	mg/Kg	☼	06/06/17 07:01	06/06/17 17:56	1
Barium	**14**		1.9	0.10	mg/Kg	☼	06/06/17 07:01	06/06/17 17:56	1
Beryllium	**0.16**	**J**	0.48	0.032	mg/Kg	☼	06/06/17 07:01	06/06/17 17:56	1
Cadmium	**0.083**	**J**	0.48	0.039	mg/Kg	☼	06/06/17 07:01	06/06/17 17:56	1
Calcium	**11000**		96	14	mg/Kg	☼	06/06/17 07:01	06/06/17 17:56	1
Chromium	**4.5**		3.4	0.056	mg/Kg	☼	06/06/17 07:01	06/06/17 17:56	1
Cobalt	**3.2**		0.96	0.096	mg/Kg	☼	06/06/17 07:01	06/06/17 17:56	1
Copper	**11**		4.8	0.21	mg/Kg	☼	06/06/17 07:01	06/06/17 17:56	1
Iron	**8400**		77	3.6	mg/Kg	☼	06/06/17 07:01	06/06/17 17:56	1
Lead	**3.2**		0.86	0.30	mg/Kg	☼	06/06/17 07:01	06/06/17 17:56	1

Client Sample ID: SS025-SB02(0-2)
Lab Sample ID: 280-97803-5
Date Collected: 05/31/17 13:10
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 82.4

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	**3700**		29	3.5	mg/Kg	☼	06/06/17 07:01	06/06/17 17:56	1
Manganese	**320**		4.3	0.096	mg/Kg	☼	06/06/17 07:01	06/06/17 17:56	1
Nickel	**6.2**		3.8	0.13	mg/Kg	☼	06/06/17 07:01	06/06/17 17:56	1
Potassium	**700**		290	39	mg/Kg	☼	06/06/17 07:01	06/06/17 17:56	1
Selenium	2.9	U	2.9	0.83	mg/Kg	☼	06/06/17 07:01	06/07/17 12:25	1
Silver	0.58	U	1.4	0.15	mg/Kg	☼	06/06/17 07:01	06/06/17 17:56	1
Sodium	190	U	480	57	mg/Kg	☼	06/06/17 07:01	06/07/17 12:25	1
Thallium	2.4	U	2.9	0.62	mg/Kg	☼	06/06/17 07:01	06/06/17 17:56	1
Vanadium	**6.7**		1.9	0.090	mg/Kg	☼	06/06/17 07:01	06/06/17 17:56	1
Zinc	**20**		7.7	0.38	mg/Kg	☼	06/06/17 07:01	06/06/17 17:56	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**21**	**J**	22	7.2	ug/Kg	☼	06/06/17 11:48	06/06/17 14:51	1

Client Sample ID: SS025-SS03
Lab Sample ID: 280-97803-6
Date Collected: 05/31/17 13:25
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 74.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.6	U	4.9	0.55	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
1,1,1-Trichloroethane	1.6	U	4.9	0.51	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
1,1,2,2-Tetrachloroethane	1.6	U	4.9	0.60	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
1,1,2-Trichloroethane	3.1	U	4.9	0.86	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
1,1-Dichloroethane	0.79	U	4.9	0.21	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
1,1-Dichloroethene	1.6	U	4.9	0.58	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
1,1-Dichloropropene	1.6	U	4.9	0.53	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
1,2,3-Trichlorobenzene	1.6	U	4.9	0.74	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
1,2,3-Trichloropropane	3.1	U	4.9	0.80	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
1,2,4-Trichlorobenzene	1.6	U	4.9	0.72	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
1,2,4-Trimethylbenzene	1.6	U	4.9	0.57	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
1,2-Dibromo-3-Chloropropane	1.6	U	9.8	0.59	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
1,2-Dibromoethane	1.6	U	4.9	0.51	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
1,2-Dichlorobenzene	1.6	U	4.9	0.44	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
1,2-Dichloroethane	1.6	U	4.9	0.69	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
1,2-Dichloroethene, Total	1.6	U	4.9	0.38	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
1,2-Dichloropropane	1.6	U	4.9	0.54	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
1,3,5-Trimethylbenzene	1.6	U	4.9	0.56	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
1,3-Dichlorobenzene	1.6	U	4.9	0.47	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
1,3-Dichloropropane	1.6	U	4.9	0.50	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
1,4-Dichlorobenzene	1.6	U	4.9	0.77	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
2,2-Dichloropropane	1.6	U	4.9	0.43	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
2-Butanone (MEK)	6.3	U	20	1.8	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
2-Chlorotoluene	1.6	U	4.9	0.50	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
2-Hexanone	13	U	20	4.8	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
4-Chlorotoluene	1.6	U	4.9	0.77	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
4-Isopropyltoluene	1.6	U	4.9	0.48	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
4-Methyl-2-pentanone (MIBK)	13	U	20	4.3	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Acetone	**16**	**J**	20	5.3	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1

Client Sample ID: SS025-SS03
Date Collected: 05/31/17 13:25
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-6
Matrix: Solid
Percent Solids: 74.7

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.6	U	4.9	0.46	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Bromobenzene	1.6	U	4.9	0.48	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Bromochloromethane	0.79	U	4.9	0.29	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Bromodichloromethane	0.79	U	4.9	0.22	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Bromoform	0.79	U	4.9	0.23	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Bromomethane	1.6	U Q	9.8	0.49	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Carbon disulfide	1.6	U	4.9	0.41	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Carbon tetrachloride	1.6	U	4.9	0.62	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Chlorobenzene	1.6	U	4.9	0.53	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Chloroethane	3.1	U Q	9.8	0.87	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Chloroform	0.79	U	9.8	0.29	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Chloromethane	1.6	U	9.8	0.76	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
cis-1,2-Dichloroethene	1.6	U	4.9	0.55	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
cis-1,3-Dichloropropene	3.1	U	4.9	1.3	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Dibromochloromethane	1.6	U	4.9	0.56	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Dibromomethane	3.1	U	4.9	0.83	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Dichlorodifluoromethane	1.6	U	9.8	0.51	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Ethylbenzene	1.6	U	4.9	0.66	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Hexachlorobutadiene	1.6	U	4.9	0.54	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Isopropyl ether	7.9	U Q	49	2.7	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Isopropylbenzene	1.6	U	4.9	0.58	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
m&p-Xylene	**1.7**	**J**	3.1	1.0	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Methyl iodide	1.6	U	4.9	0.43	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Methyl tert-butyl ether	0.79	U	20	0.33	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Methylene Chloride	3.1	U	4.9	1.6	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Naphthalene	1.6	U	4.9	0.62	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
n-Butylbenzene	1.6	U	4.9	0.55	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
N-Propylbenzene	1.6	U	4.9	0.57	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
o-Xylene	**2.2**	**J**	4.9	0.60	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
sec-Butylbenzene	1.6	U	4.9	0.76	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Styrene	1.6	U	4.9	0.62	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
tert-Butylbenzene	1.6	U	4.9	0.49	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Tetrachloroethene	1.6	U	4.9	0.58	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Toluene	1.6	U	4.9	0.68	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
trans-1,2-Dichloroethene	0.79	U	4.9	0.38	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
trans-1,3-Dichloropropene	1.6	U	4.9	0.66	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Trichloroethene	0.79	U	4.9	0.23	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Trichlorofluoromethane	3.1	U	9.8	1.0	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Vinyl acetate	3.1	U	9.8	1.1	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Vinyl chloride	3.1	U	4.9	1.3	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1
Xylenes (total)	**3.9**	**J**	9.8	0.60	ug/Kg	☼	05/31/17 13:25	06/03/17 23:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*134*		*71 - 136*	*05/31/17 13:25*	*06/03/17 23:59*	*1*
4-Bromofluorobenzene (Surr)	*99*		*79 - 119*	*05/31/17 13:25*	*06/03/17 23:59*	*1*
Dibromofluoromethane (Surr)	*116*		*78 - 119*	*05/31/17 13:25*	*06/03/17 23:59*	*1*
Toluene-d8 (Surr)	*99*		*85 - 116*	*05/31/17 13:25*	*06/03/17 23:59*	*1*

Client Sample ID: SS025-SS03

Date Collected: 05/31/17 13:25
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-6

Matrix: Solid
Percent Solids: 74.7

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.66	U	6.6	0.35	ug/Kg	☼	06/05/17 08:51	06/08/17 13:06	1
2-Methylnaphthalene	**2.1**	**J**	6.6	0.41	ug/Kg	☼	06/05/17 08:51	06/08/17 13:06	1
Acenaphthene	0.36	U	6.6	0.21	ug/Kg	☼	06/05/17 08:51	06/08/17 13:06	1
Acenaphthylene	**5.7**	**J**	6.6	0.23	ug/Kg	☼	06/05/17 08:51	06/08/17 13:06	1
Anthracene	**5.2**	**J**	6.6	0.96	ug/Kg	☼	06/05/17 08:51	06/08/17 13:06	1
Benzo[a]anthracene	**23**		6.6	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 13:06	1
Benzo[a]pyrene	**34**		6.6	0.98	ug/Kg	☼	06/05/17 08:51	06/08/17 13:06	1
Benzo[b]fluoranthene	**51**		6.6	1.6	ug/Kg	☼	06/05/17 08:51	06/08/17 13:06	1
Benzo[g,h,i]perylene	**28**		6.6	1.5	ug/Kg	☼	06/05/17 08:51	06/08/17 13:06	1
Benzo[k]fluoranthene	**17**		6.6	1.3	ug/Kg	☼	06/05/17 08:51	06/08/17 13:06	1
Chrysene	**34**		6.6	1.3	ug/Kg	☼	06/05/17 08:51	06/08/17 13:06	1
Dibenz(a,h)anthracene	**6.4**	**J**	6.6	1.7	ug/Kg	☼	06/05/17 08:51	06/08/17 13:06	1
Fluoranthene	**45**		6.6	1.3	ug/Kg	☼	06/05/17 08:51	06/08/17 13:06	1
Fluorene	**1.4**	**J**	6.6	0.62	ug/Kg	☼	06/05/17 08:51	06/08/17 13:06	1
Indeno[1,2,3-cd]pyrene	**28**		6.6	1.5	ug/Kg	☼	06/05/17 08:51	06/08/17 13:06	1
Naphthalene	0.89	U	6.6	0.43	ug/Kg	☼	06/05/17 08:51	06/08/17 13:06	1
Phenanthrene	**17**		6.6	1.5	ug/Kg	☼	06/05/17 08:51	06/08/17 13:06	1
Pyrene	**45**		6.6	1.5	ug/Kg	☼	06/05/17 08:51	06/08/17 13:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*66*		*46 - 115*	*06/05/17 08:51*	*06/08/17 13:06*	*1*
Nitrobenzene-d5 (Surr)	*67*		*44 - 125*	*06/05/17 08:51*	*06/08/17 13:06*	*1*
Terphenyl-d14 (Surr)	*76*		*58 - 133*	*06/05/17 08:51*	*06/08/17 13:06*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	2.2	U	2.2	0.72	ug/Kg	☼	06/12/17 11:25	06/15/17 05:58	1
4,4'-DDE	0.88	U	2.2	0.31	ug/Kg	☼	06/12/17 11:25	06/15/17 05:58	1
4,4'-DDT	2.2	U	2.6	0.78	ug/Kg	☼	06/12/17 11:25	06/15/17 05:58	1
Aldrin	0.88	U	2.2	0.33	ug/Kg	☼	06/12/17 11:25	06/15/17 05:58	1
alpha-BHC	0.88	U	2.2	0.28	ug/Kg	☼	06/12/17 11:25	06/15/17 05:58	1
alpha-Chlordane	0.88	U	2.2	0.43	ug/Kg	☼	06/12/17 11:25	06/15/17 05:58	1
beta-BHC	2.2	U	2.2	0.87	ug/Kg	☼	06/12/17 11:25	06/15/17 05:58	1
delta-BHC	1.3	U M	2.2	0.53	ug/Kg	☼	06/12/17 11:25	06/15/17 05:58	1
Dieldrin	0.88	U	2.2	0.28	ug/Kg	☼	06/12/17 11:25	06/15/17 05:58	1
Endosulfan I	**0.55**	**J**	2.2	0.23	ug/Kg	☼	06/12/17 11:25	06/15/17 05:58	1
Endosulfan II	0.88	U	2.2	0.38	ug/Kg	☼	06/12/17 11:25	06/15/17 05:58	1
Endosulfan sulfate	0.88	U	2.2	0.36	ug/Kg	☼	06/12/17 11:25	06/15/17 05:58	1
Endrin	0.88	U	2.2	0.40	ug/Kg	☼	06/12/17 11:25	06/15/17 05:58	1
Endrin aldehyde	0.88	U	2.2	0.23	ug/Kg	☼	06/12/17 11:25	06/15/17 05:58	1
gamma-BHC (Lindane)	1.3	U M	2.2	0.61	ug/Kg	☼	06/12/17 11:25	06/15/17 05:58	1
gamma-Chlordane	0.88	U	2.2	0.35	ug/Kg	☼	06/12/17 11:25	06/15/17 05:58	1
Heptachlor	0.88	U	2.2	0.28	ug/Kg	☼	06/12/17 11:25	06/15/17 05:58	1
Heptachlor epoxide	1.3	U	2.2	0.56	ug/Kg	☼	06/12/17 11:25	06/15/17 05:58	1
Methoxychlor	1.3	U	4.3	0.59	ug/Kg	☼	06/12/17 11:25	06/15/17 05:58	1
Toxaphene	43	U J	220	21	ug/Kg	☼	06/12/17 11:25	06/15/17 05:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*81*		*63 - 121*	*06/12/17 11:25*	*06/15/17 05:58*	*1*
Tetrachloro-m-xylene (Surr)	*67*		*42 - 129*	*06/12/17 11:25*	*06/15/17 05:58*	*1*

Client Sample ID: SS025-SS03
Lab Sample ID: 280-97803-6
Date Collected: 05/31/17 13:25
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 74.7

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	20	U	43	6.7	ug/Kg	☼	06/12/17 11:25	06/17/17 14:33	1
Arochlor 1221	22	U	62	21	ug/Kg	☼	06/12/17 11:25	06/17/17 14:33	1
Arochlor 1232	20	U	43	6.7	ug/Kg	☼	06/12/17 11:25	06/17/17 14:33	1
Arochlor 1242	43	U	43	12	ug/Kg	☼	06/12/17 11:25	06/17/17 14:33	1
Arochlor 1248	26	U	43	7.4	ug/Kg	☼	06/12/17 11:25	06/17/17 14:33	1
Arochlor 1254	22	U	43	7.3	ug/Kg	☼	06/12/17 11:25	06/17/17 14:33	1
Arochlor 1260	10	U	43	3.5	ug/Kg	☼	06/12/17 11:25	06/17/17 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*81*		*59 - 130*	*06/12/17 11:25*	*06/17/17 14:33*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**11000**		56	1.7	mg/Kg	☼	06/06/17 07:01	06/07/17 12:27	1
Antimony	1.7	U	2.2	0.82	mg/Kg	☼	06/06/17 07:01	06/06/17 17:58	1
Arsenic	**6.2**		2.8	0.74	mg/Kg	☼	06/06/17 07:01	06/06/17 17:58	1
Barium	**49**		2.2	0.12	mg/Kg	☼	06/06/17 07:01	06/06/17 17:58	1
Beryllium	**0.46**	**J**	0.56	0.037	mg/Kg	☼	06/06/17 07:01	06/06/17 17:58	1
Cadmium	**0.20**	**J**	0.56	0.046	mg/Kg	☼	06/06/17 07:01	06/06/17 17:58	1
Calcium	**1800**		110	16	mg/Kg	☼	06/06/17 07:01	06/06/17 17:58	1
Chromium	**11**		3.9	0.065	mg/Kg	☼	06/06/17 07:01	06/06/17 17:58	1
Cobalt	**7.0**		1.1	0.11	mg/Kg	☼	06/06/17 07:01	06/06/17 17:58	1
Copper	**33**		5.6	0.24	mg/Kg	☼	06/06/17 07:01	06/06/17 17:58	1
Iron	**21000**		89	4.2	mg/Kg	☼	06/06/17 07:01	06/06/17 17:58	1
Lead	**9.3**		1.0	0.35	mg/Kg	☼	06/06/17 07:01	06/06/17 17:58	1
Magnesium	**3400**		33	4.1	mg/Kg	☼	06/06/17 07:01	06/06/17 17:58	1
Manganese	**1200**		5.0	0.11	mg/Kg	☼	06/06/17 07:01	06/06/17 17:58	1
Nickel	**15**		4.5	0.15	mg/Kg	☼	06/06/17 07:01	06/06/17 17:58	1
Potassium	**1100**		330	46	mg/Kg	☼	06/06/17 07:01	06/06/17 17:58	1
Selenium	3.3	U	3.3	0.96	mg/Kg	☼	06/06/17 07:01	06/07/17 12:27	1
Silver	0.67	U	1.7	0.18	mg/Kg	☼	06/06/17 07:01	06/06/17 17:58	1
Sodium	220	U	560	66	mg/Kg	☼	06/06/17 07:01	06/07/17 12:27	1
Thallium	2.8	U	3.3	0.73	mg/Kg	☼	06/06/17 07:01	06/06/17 17:58	1
Vanadium	**18**		2.2	0.10	mg/Kg	☼	06/06/17 07:01	06/06/17 17:58	1
Zinc	**59**		8.9	0.44	mg/Kg	☼	06/06/17 07:01	06/06/17 17:58	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**35**		23	7.5	ug/Kg	☼	06/06/17 11:48	06/06/17 14:53	1

Client Sample ID: SS025-SB03(0-2)
Lab Sample ID: 280-97803-7
Date Collected: 05/31/17 13:40
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 86.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.7	U	5.2	0.58	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
1,1,1-Trichloroethane	1.7	U	5.2	0.54	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
1,1,2,2-Tetrachloroethane	1.7	U	5.2	0.64	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
1,1,2-Trichloroethane	3.3	U	5.2	0.92	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1

Client Sample ID: SS025-SB03(0-2)

Date Collected: 05/31/17 13:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-7

Matrix: Solid
Percent Solids: 86.2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.84	U	5.2	0.22	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
1,1-Dichloroethene	1.7	U	5.2	0.62	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
1,1-Dichloropropene	1.7	U	5.2	0.56	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
1,2,3-Trichlorobenzene	1.7	U	5.2	0.78	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
1,2,3-Trichloropropane	3.3	U	5.2	0.85	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
1,2,4-Trichlorobenzene	1.7	U	5.2	0.76	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
1,2,4-Trimethylbenzene	1.7	U	5.2	0.61	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
1,2-Dibromo-3-Chloropropane	1.7	U	10	0.63	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
1,2-Dibromoethane	1.7	U	5.2	0.54	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
1,2-Dichlorobenzene	1.7	U	5.2	0.47	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
1,2-Dichloroethane	1.7	U	5.2	0.73	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
1,2-Dichloroethene, Total	1.7	U	5.2	0.41	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
1,2-Dichloropropane	1.7	U	5.2	0.57	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
1,3,5-Trimethylbenzene	1.7	U	5.2	0.60	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
1,3-Dichlorobenzene	1.7	U	5.2	0.50	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
1,3-Dichloropropane	1.7	U	5.2	0.53	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
1,4-Dichlorobenzene	1.7	U	5.2	0.81	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
2,2-Dichloropropane	1.7	U	5.2	0.46	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
2-Butanone (MEK)	6.7	U	21	1.9	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
2-Chlorotoluene	1.7	U	5.2	0.53	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
2-Hexanone	13	U	21	5.1	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
4-Chlorotoluene	1.7	U	5.2	0.81	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
4-Isopropyltoluene	1.7	U	5.2	0.51	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
4-Methyl-2-pentanone (MIBK)	13	U	21	4.6	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Acetone	**7.6**	**J**	21	5.6	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Benzene	1.7	U	5.2	0.49	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Bromobenzene	1.7	U	5.2	0.51	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Bromochloromethane	0.84	U	5.2	0.31	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Bromodichloromethane	0.84	U	5.2	0.23	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Bromoform	0.84	U	5.2	0.24	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Bromomethane	1.7	U Q	10	0.52	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Carbon disulfide	1.7	U	5.2	0.44	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Carbon tetrachloride	1.7	U	5.2	0.66	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Chlorobenzene	1.7	U	5.2	0.56	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Chloroethane	3.3	U Q	10	0.93	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Chloroform	0.84	U	10	0.30	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Chloromethane	1.7	U	10	0.80	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
cis-1,2-Dichloroethene	1.7	U	5.2	0.58	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
cis-1,3-Dichloropropene	3.3	U	5.2	1.3	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Dibromochloromethane	1.7	U	5.2	0.60	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Dibromomethane	3.3	U	5.2	0.88	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Dichlorodifluoromethane	1.7	U	10	0.54	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Ethylbenzene	1.7	U	5.2	0.70	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Hexachlorobutadiene	1.7	U	5.2	0.57	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Isopropyl ether	8.4	U Q	52	2.8	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Isopropylbenzene	1.7	U	5.2	0.62	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
m&p-Xylene	3.3	U	3.3	1.1	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Methyl iodide	1.7	U	5.2	0.46	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Methyl tert-butyl ether	0.84	U	21	0.36	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1

Client Sample ID: SS025-SB03(0-2)

Date Collected: 05/31/17 13:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-7

Matrix: Solid
Percent Solids: 86.2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	3.3	U	5.2	1.7	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Naphthalene	1.7	U	5.2	0.66	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
n-Butylbenzene	1.7	U	5.2	0.58	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
N-Propylbenzene	1.7	U	5.2	0.61	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
o-Xylene	1.7	U	5.2	0.64	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
sec-Butylbenzene	1.7	U	5.2	0.80	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Styrene	1.7	U	5.2	0.66	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
tert-Butylbenzene	1.7	U	5.2	0.52	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Tetrachloroethene	1.7	U	5.2	0.62	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Toluene	1.7	U	5.2	0.72	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
trans-1,2-Dichloroethene	0.84	U	5.2	0.41	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
trans-1,3-Dichloropropene	1.7	U	5.2	0.70	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Trichloroethene	0.84	U	5.2	0.24	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Trichlorofluoromethane	3.3	U	10	1.1	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Vinyl acetate	3.3	U	10	1.1	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Vinyl chloride	3.3	U	5.2	1.4	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1
Xylenes (total)	1.0	U	10	0.64	ug/Kg	☼	05/31/17 13:40	06/04/17 00:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*132*		*71 - 136*	*05/31/17 13:40*	*06/04/17 00:19*	*1*
4-Bromofluorobenzene (Surr)	*89*		*79 - 119*	*05/31/17 13:40*	*06/04/17 00:19*	*1*
Dibromofluoromethane (Surr)	*115*		*78 - 119*	*05/31/17 13:40*	*06/04/17 00:19*	*1*
Toluene-d8 (Surr)	*97*		*85 - 116*	*05/31/17 13:40*	*06/04/17 00:19*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.58	U	5.8	0.30	ug/Kg	☼	06/05/17 08:51	06/08/17 13:33	1
2-Methylnaphthalene	0.77	U	5.8	0.36	ug/Kg	☼	06/05/17 08:51	06/08/17 13:33	1
Acenaphthene	0.31	U	5.8	0.19	ug/Kg	☼	06/05/17 08:51	06/08/17 13:33	1
Acenaphthylene	0.77	U	5.8	0.20	ug/Kg	☼	06/05/17 08:51	06/08/17 13:33	1
Anthracene	2.9	U	5.8	0.83	ug/Kg	☼	06/05/17 08:51	06/08/17 13:33	1
Benzo[a]anthracene	2.9	U	5.8	1.0	ug/Kg	☼	06/05/17 08:51	06/08/17 13:33	1
Benzo[a]pyrene	2.9	U	5.8	0.86	ug/Kg	☼	06/05/17 08:51	06/08/17 13:33	1
Benzo[b]fluoranthene	2.9	U	5.8	1.4	ug/Kg	☼	06/05/17 08:51	06/08/17 13:33	1
Benzo[g,h,i]perylene	2.9	U	5.8	1.3	ug/Kg	☼	06/05/17 08:51	06/08/17 13:33	1
Benzo[k]fluoranthene	2.9	U	5.8	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 13:33	1
Chrysene	2.9	U	5.8	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 13:33	1
Dibenz(a,h)anthracene	2.9	U	5.8	1.5	ug/Kg	☼	06/05/17 08:51	06/08/17 13:33	1
Fluoranthene	2.9	U	5.8	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 13:33	1
Fluorene	0.77	U	5.8	0.54	ug/Kg	☼	06/05/17 08:51	06/08/17 13:33	1
Indeno[1,2,3-cd]pyrene	2.9	U	5.8	1.3	ug/Kg	☼	06/05/17 08:51	06/08/17 13:33	1
Naphthalene	0.77	U	5.8	0.38	ug/Kg	☼	06/05/17 08:51	06/08/17 13:33	1
Phenanthrene	2.9	U	5.8	1.3	ug/Kg	☼	06/05/17 08:51	06/08/17 13:33	1
Pyrene	2.9	U	5.8	1.3	ug/Kg	☼	06/05/17 08:51	06/08/17 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*46 - 115*	*06/05/17 08:51*	*06/08/17 13:33*	*1*
Nitrobenzene-d5 (Surr)	*63*		*44 - 125*	*06/05/17 08:51*	*06/08/17 13:33*	*1*
Terphenyl-d14 (Surr)	*78*		*58 - 133*	*06/05/17 08:51*	*06/08/17 13:33*	*1*

Client Sample ID: SS025-SB03(0-2)

Date Collected: 05/31/17 13:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-7

Matrix: Solid
Percent Solids: 86.2

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.9	U	1.9	0.61	ug/Kg	☼	06/12/17 11:25	06/15/17 01:45	1
4,4'-DDE	0.75	U	1.9	0.27	ug/Kg	☼	06/12/17 11:25	06/15/17 01:45	1
4,4'-DDT	1.9	U	2.2	0.66	ug/Kg	☼	06/12/17 11:25	06/15/17 01:45	1
Aldrin	0.75	U	1.9	0.28	ug/Kg	☼	06/12/17 11:25	06/15/17 01:45	1
alpha-BHC	0.75	U	1.9	0.24	ug/Kg	☼	06/12/17 11:25	06/15/17 01:45	1
alpha-Chlordane	0.75	U	1.9	0.36	ug/Kg	☼	06/12/17 11:25	06/15/17 01:45	1
beta-BHC	1.9	U	1.9	0.74	ug/Kg	☼	06/12/17 11:25	06/15/17 01:45	1
delta-BHC	1.1	U	1.9	0.45	ug/Kg	☼	06/12/17 11:25	06/15/17 01:45	1
Dieldrin	0.75	U	1.9	0.24	ug/Kg	☼	06/12/17 11:25	06/15/17 01:45	1
Endosulfan I	0.75	U	1.9	0.20	ug/Kg	☼	06/12/17 11:25	06/15/17 01:45	1
Endosulfan II	0.75	U	1.9	0.32	ug/Kg	☼	06/12/17 11:25	06/15/17 01:45	1
Endosulfan sulfate	0.75	U	1.9	0.31	ug/Kg	☼	06/12/17 11:25	06/15/17 01:45	1
Endrin	0.75	U	1.9	0.34	ug/Kg	☼	06/12/17 11:25	06/15/17 01:45	1
Endrin aldehyde	0.75	U	1.9	0.19	ug/Kg	☼	06/12/17 11:25	06/15/17 01:45	1
gamma-BHC (Lindane)	1.1	U	1.9	0.52	ug/Kg	☼	06/12/17 11:25	06/15/17 01:45	1
gamma-Chlordane	0.75	U	1.9	0.30	ug/Kg	☼	06/12/17 11:25	06/15/17 01:45	1
Heptachlor	0.75	U	1.9	0.24	ug/Kg	☼	06/12/17 11:25	06/15/17 01:45	1
Heptachlor epoxide	1.1	U	1.9	0.48	ug/Kg	☼	06/12/17 11:25	06/15/17 01:45	1
Methoxychlor	1.1	U	3.7	0.50	ug/Kg	☼	06/12/17 11:25	06/15/17 01:45	1
Toxaphene	37	U	190	18	ug/Kg	☼	06/12/17 11:25	06/15/17 01:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*65*		*63 - 121*	*06/12/17 11:25*	*06/15/17 01:45*	*1*
Tetrachloro-m-xylene (Surr)	*74*		*42 - 129*	*06/12/17 11:25*	*06/15/17 01:45*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	17	U	37	5.7	ug/Kg	☼	06/12/17 11:25	06/17/17 14:55	1
Arochlor 1221	19	U	53	17	ug/Kg	☼	06/12/17 11:25	06/17/17 14:55	1
Arochlor 1232	17	U	37	5.7	ug/Kg	☼	06/12/17 11:25	06/17/17 14:55	1
Arochlor 1242	37	U	37	10	ug/Kg	☼	06/12/17 11:25	06/17/17 14:55	1
Arochlor 1248	22	U	37	6.3	ug/Kg	☼	06/12/17 11:25	06/17/17 14:55	1
Arochlor 1254	19	U	37	6.2	ug/Kg	☼	06/12/17 11:25	06/17/17 14:55	1
Arochlor 1260	8.6	U	37	3.0	ug/Kg	☼	06/12/17 11:25	06/17/17 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*71*		*59 - 130*	*06/12/17 11:25*	*06/17/17 14:55*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3400**		52	1.6	mg/Kg	☼	06/06/17 07:01	06/07/17 12:40	1
Antimony	1.6	U	2.1	0.77	mg/Kg	☼	06/06/17 07:01	06/06/17 18:11	1
Arsenic	**2.2**	**J**	2.6	0.70	mg/Kg	☼	06/06/17 07:01	06/06/17 18:11	1
Barium	**11**		2.1	0.11	mg/Kg	☼	06/06/17 07:01	06/06/17 18:11	1
Beryllium	**0.16**	**J**	0.52	0.035	mg/Kg	☼	06/06/17 07:01	06/06/17 18:11	1
Cadmium	**0.078**	**J**	0.52	0.043	mg/Kg	☼	06/06/17 07:01	06/06/17 18:11	1
Calcium	**5600**		100	15	mg/Kg	☼	06/06/17 07:01	06/06/17 18:11	1
Chromium	**3.6**	**J**	3.7	0.061	mg/Kg	☼	06/06/17 07:01	06/06/17 18:11	1
Cobalt	**2.4**		1.0	0.10	mg/Kg	☼	06/06/17 07:01	06/06/17 18:11	1
Copper	**8.0**		5.2	0.23	mg/Kg	☼	06/06/17 07:01	06/06/17 18:11	1

Client Sample ID: SS025-SB03(0-2)
Lab Sample ID: 280-97803-7

Date Collected: 05/31/17 13:40
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 86.2

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**6800**		84	4.0	mg/Kg	☼	06/06/17 07:01	06/06/17 18:11	1
Lead	**1.8**		0.94	0.33	mg/Kg	☼	06/06/17 07:01	06/06/17 18:11	1
Magnesium	**1800**		31	3.9	mg/Kg	☼	06/06/17 07:01	06/06/17 18:11	1
Manganese	**230**		4.7	0.10	mg/Kg	☼	06/06/17 07:01	06/06/17 18:11	1
Nickel	**5.2**		4.2	0.14	mg/Kg	☼	06/06/17 07:01	06/06/17 18:11	1
Potassium	**580**		310	43	mg/Kg	☼	06/06/17 07:01	06/06/17 18:11	1
Selenium	3.1	U	3.1	0.90	mg/Kg	☼	06/06/17 07:01	06/07/17 12:40	1
Silver	0.63	U	1.6	0.17	mg/Kg	☼	06/06/17 07:01	06/06/17 18:11	1
Sodium	210	U	520	62	mg/Kg	☼	06/06/17 07:01	06/07/17 12:40	1
Thallium	2.6	U	3.1	0.68	mg/Kg	☼	06/06/17 07:01	06/06/17 18:11	1
Vanadium	**5.7**		2.1	0.099	mg/Kg	☼	06/06/17 07:01	06/06/17 18:11	1
Zinc	**13**		8.4	0.42	mg/Kg	☼	06/06/17 07:01	06/06/17 18:11	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	18	U	23	7.4	ug/Kg	☼	06/06/17 11:48	06/06/17 14:56	1

Client Sample ID: SS025-SS04
Lab Sample ID: 280-97803-8

Date Collected: 05/31/17 14:00
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 90.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.5	U	4.6	0.52	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
1,1,1-Trichloroethane	1.5	U Q	4.6	0.48	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
1,1,2,2-Tetrachloroethane	1.5	U	4.6	0.56	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
1,1,2-Trichloroethane	3.0	U	4.6	0.81	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
1,1-Dichloroethane	0.74	U Q	4.6	0.19	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
1,1-Dichloroethene	1.5	U Q	4.6	0.54	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
1,1-Dichloropropene	1.5	U	4.6	0.50	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
1,2,3-Trichlorobenzene	1.5	U	4.6	0.69	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
1,2,3-Trichloropropane	3.0	U	4.6	0.75	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
1,2,4-Trichlorobenzene	1.5	U	4.6	0.67	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
1,2,4-Trimethylbenzene	1.5	U	4.6	0.54	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
1,2-Dibromo-3-Chloropropane	1.5	U	9.2	0.55	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
1,2-Dibromoethane	1.5	U	4.6	0.48	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
1,2-Dichlorobenzene	1.5	U	4.6	0.42	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
1,2-Dichloroethane	1.5	U	4.6	0.65	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
1,2-Dichloroethene, Total	1.5	U	4.6	0.36	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
1,2-Dichloropropane	1.5	U	4.6	0.51	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
1,3,5-Trimethylbenzene	1.5	U	4.6	0.53	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
1,3-Dichlorobenzene	1.5	U	4.6	0.44	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
1,3-Dichloropropane	1.5	U	4.6	0.47	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
1,4-Dichlorobenzene	1.5	U	4.6	0.72	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
2,2-Dichloropropane	1.5	U Q	4.6	0.41	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
2-Butanone (MEK)	5.9	U Q	18	1.7	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
2-Chlorotoluene	1.5	U	4.6	0.47	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
2-Hexanone	12	U	18	4.5	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
4-Chlorotoluene	1.5	U	4.6	0.72	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
4-Isopropyltoluene	1.5	U	4.6	0.45	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1

Client Sample ID: SS025-SS04
Date Collected: 05/31/17 14:00
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-8
Matrix: Solid
Percent Solids: 90.0

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	12	U	18	4.0	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Acetone	12	U Q	18	5.0	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Benzene	1.5	U	4.6	0.43	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Bromobenzene	1.5	U	4.6	0.45	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Bromochloromethane	0.74	U Q	4.6	0.28	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Bromodichloromethane	0.74	U	4.6	0.20	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Bromoform	0.74	U	4.6	0.21	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Bromomethane	1.5	U Q	9.2	0.46	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Carbon disulfide	1.5	U Q	4.6	0.39	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Carbon tetrachloride	1.5	U	4.6	0.58	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Chlorobenzene	1.5	U	4.6	0.50	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Chloroethane	3.0	U Q	9.2	0.82	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Chloroform	0.74	U Q	9.2	0.27	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Chloromethane	1.5	U Q	9.2	0.71	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
cis-1,2-Dichloroethene	1.5	U Q	4.6	0.52	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
cis-1,3-Dichloropropene	3.0	U	4.6	1.2	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Dibromochloromethane	1.5	U	4.6	0.53	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Dibromomethane	3.0	U	4.6	0.78	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Dichlorodifluoromethane	1.5	U Q	9.2	0.48	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Ethylbenzene	1.5	U	4.6	0.62	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Hexachlorobutadiene	1.5	U	4.6	0.51	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Isopropyl ether	7.4	U Q	46	2.5	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Isopropylbenzene	1.5	U	4.6	0.54	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
m&p-Xylene	**1.4**	**J**	3.0	0.96	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Methyl iodide	1.5	U Q	4.6	0.41	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Methyl tert-butyl ether	0.74	U Q	18	0.31	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Methylene Chloride	3.0	U Q	4.6	1.5	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Naphthalene	1.5	U	4.6	0.58	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
n-Butylbenzene	1.5	U	4.6	0.52	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
N-Propylbenzene	1.5	U	4.6	0.54	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
o-Xylene	**2.1**	**J**	4.6	0.56	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
sec-Butylbenzene	1.5	U	4.6	0.71	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Styrene	1.5	U	4.6	0.58	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
tert-Butylbenzene	1.5	U	4.6	0.46	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Tetrachloroethene	1.5	U	4.6	0.54	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Toluene	1.5	U	4.6	0.64	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
trans-1,2-Dichloroethene	0.74	U Q	4.6	0.36	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
trans-1,3-Dichloropropene	1.5	U	4.6	0.62	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Trichloroethene	0.74	U	4.6	0.21	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Trichlorofluoromethane	3.0	U Q	9.2	0.96	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Vinyl acetate	3.0	U Q	9.2	0.99	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Vinyl chloride	3.0	U Q	4.6	1.2	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1
Xylenes (total)	**3.5**	**J**	9.2	0.56	ug/Kg	☼	05/31/17 14:00	06/04/17 00:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*136*		*71 - 136*	*05/31/17 14:00*	*06/04/17 00:40*	*1*
4-Bromofluorobenzene (Surr)	*104*		*79 - 119*	*05/31/17 14:00*	*06/04/17 00:40*	*1*
Dibromofluoromethane (Surr)	*120*	*Q*	*78 - 119*	*05/31/17 14:00*	*06/04/17 00:40*	*1*
Toluene-d8 (Surr)	*102*		*85 - 116*	*05/31/17 14:00*	*06/04/17 00:40*	*1*

Client Sample ID: SS025-SS04

Date Collected: 05/31/17 14:00
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-8

Matrix: Solid
Percent Solids: 90.0

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	7.2		5.1	0.27	ug/Kg	☼	06/14/17 09:42	06/21/17 22:55	1
2-Methylnaphthalene	14		5.1	0.32	ug/Kg	☼	06/14/17 09:42	06/21/17 22:55	1
Acenaphthene	18		5.1	0.16	ug/Kg	☼	06/14/17 09:42	06/21/17 22:55	1
Acenaphthylene	20		5.1	0.17	ug/Kg	☼	06/14/17 09:42	06/21/17 22:55	1
Anthracene	42		5.1	0.74	ug/Kg	☼	06/14/17 09:42	06/21/17 22:55	1
Benzo[a]anthracene	110		5.1	0.92	ug/Kg	☼	06/14/17 09:42	06/21/17 22:55	1
Benzo[a]pyrene	110		5.1	0.76	ug/Kg	☼	06/14/17 09:42	06/21/17 22:55	1
Benzo[b]fluoranthene	150		5.1	1.2	ug/Kg	☼	06/14/17 09:42	06/21/17 22:55	1
Benzo[g,h,i]perylene	63		5.1	1.1	ug/Kg	☼	06/14/17 09:42	06/21/17 22:55	1
Benzo[k]fluoranthene	52		5.1	1.0	ug/Kg	☼	06/14/17 09:42	06/21/17 22:55	1
Chrysene	140		5.1	1.0	ug/Kg	☼	06/14/17 09:42	06/21/17 22:55	1
Dibenz(a,h)anthracene	18		5.1	1.3	ug/Kg	☼	06/14/17 09:42	06/21/17 22:55	1
Fluoranthene	220	J	5.1	1.0	ug/Kg	☼	06/14/17 09:42	06/21/17 22:55	1
Fluorene	19		5.1	0.48	ug/Kg	☼	06/14/17 09:42	06/21/17 22:55	1
Indeno[1,2,3-cd]pyrene	55		5.1	1.1	ug/Kg	☼	06/14/17 09:42	06/21/17 22:55	1
Naphthalene	26		5.1	0.33	ug/Kg	☼	06/14/17 09:42	06/21/17 22:55	1
Phenanthrene	150		5.1	1.1	ug/Kg	☼	06/14/17 09:42	06/21/17 22:55	1
Pyrene	200	J	5.1	1.1	ug/Kg	☼	06/14/17 09:42	06/21/17 22:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*66*		*46 - 115*	*06/14/17 09:42*	*06/21/17 22:55*	*1*
Nitrobenzene-d5 (Surr)	*70*		*44 - 125*	*06/14/17 09:42*	*06/21/17 22:55*	*1*
Terphenyl-d14 (Surr)	*82*		*58 - 133*	*06/14/17 09:42*	*06/21/17 22:55*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	7.4	J D	10	0.53	ug/Kg	☼	06/14/17 09:42	06/22/17 21:23	2
2-Methylnaphthalene	13	D	10	0.63	ug/Kg	☼	06/14/17 09:42	06/22/17 21:23	2
Acenaphthene	18	D	10	0.33	ug/Kg	☼	06/14/17 09:42	06/22/17 21:23	2
Acenaphthylene	24	D	10	0.35	ug/Kg	☼	06/14/17 09:42	06/22/17 21:23	2
Anthracene	44	D	10	1.5	ug/Kg	☼	06/14/17 09:42	06/22/17 21:23	2
Benzo[a]anthracene	110	D	10	1.8	ug/Kg	☼	06/14/17 09:42	06/22/17 21:23	2
Benzo[a]pyrene	110	D	10	1.5	ug/Kg	☼	06/14/17 09:42	06/22/17 21:23	2
Benzo[b]fluoranthene	160	D	10	2.5	ug/Kg	☼	06/14/17 09:42	06/22/17 21:23	2
Benzo[g,h,i]perylene	69	D	10	2.3	ug/Kg	☼	06/14/17 09:42	06/22/17 21:23	2
Benzo[k]fluoranthene	57	D	10	2.1	ug/Kg	☼	06/14/17 09:42	06/22/17 21:23	2
Chrysene	140	D	10	2.1	ug/Kg	☼	06/14/17 09:42	06/22/17 21:23	2
Dibenz(a,h)anthracene	21	D	10	2.7	ug/Kg	☼	06/14/17 09:42	06/22/17 21:23	2
Fluoranthene	230	D	10	2.1	ug/Kg	☼	06/14/17 09:42	06/22/17 21:23	2
Fluorene	18	D	10	0.96	ug/Kg	☼	06/14/17 09:42	06/22/17 21:23	2
Indeno[1,2,3-cd]pyrene	58	D	10	2.3	ug/Kg	☼	06/14/17 09:42	06/22/17 21:23	2
Naphthalene	26	D	10	0.67	ug/Kg	☼	06/14/17 09:42	06/22/17 21:23	2
Phenanthrene	150	D	10	2.3	ug/Kg	☼	06/14/17 09:42	06/22/17 21:23	2
Pyrene	210	D	10	2.3	ug/Kg	☼	06/14/17 09:42	06/22/17 21:23	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*68*	*D*	*46 - 115*	*06/14/17 09:42*	*06/22/17 21:23*	*2*
Nitrobenzene-d5 (Surr)	*70*	*D*	*44 - 125*	*06/14/17 09:42*	*06/22/17 21:23*	*2*
Terphenyl-d14 (Surr)	*87*	*D*	*58 - 133*	*06/14/17 09:42*	*06/22/17 21:23*	*2*

Client Sample ID: SS025-SS04

Date Collected: 05/31/17 14:00
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-8

Matrix: Solid
Percent Solids: 90.0

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.7	U	1.8	0.56	ug/Kg	☼	06/12/17 11:25	06/15/17 06:49	1
4,4'-DDE	0.69	U	1.8	0.25	ug/Kg	☼	06/12/17 11:25	06/15/17 06:49	1
4,4'-DDT	**0.68**	**J**	2.1	0.61	ug/Kg	☼	06/12/17 11:25	06/15/17 06:49	1
Aldrin	0.69	U	1.8	0.26	ug/Kg	☼	06/12/17 11:25	06/15/17 06:49	1
alpha-BHC	0.69	U	1.8	0.22	ug/Kg	☼	06/12/17 11:25	06/15/17 06:49	1
alpha-Chlordane	0.69	U	1.8	0.33	ug/Kg	☼	06/12/17 11:25	06/15/17 06:49	1
beta-BHC	1.7	U	1.8	0.69	ug/Kg	☼	06/12/17 11:25	06/15/17 06:49	1
delta-BHC	1.0	U	1.8	0.41	ug/Kg	☼	06/12/17 11:25	06/15/17 06:49	1
Dieldrin	0.69	U	1.8	0.22	ug/Kg	☼	06/12/17 11:25	06/15/17 06:49	1
Endosulfan I	0.69	U	1.8	0.18	ug/Kg	☼	06/12/17 11:25	06/15/17 06:49	1
Endosulfan II	0.69	U	1.8	0.30	ug/Kg	☼	06/12/17 11:25	06/15/17 06:49	1
Endosulfan sulfate	0.69	U	1.8	0.28	ug/Kg	☼	06/12/17 11:25	06/15/17 06:49	1
Endrin	0.69	U	1.8	0.32	ug/Kg	☼	06/12/17 11:25	06/15/17 06:49	1
Endrin aldehyde	0.69	U	1.8	0.18	ug/Kg	☼	06/12/17 11:25	06/15/17 06:49	1
gamma-BHC (Lindane)	1.0	U	1.8	0.48	ug/Kg	☼	06/12/17 11:25	06/15/17 06:49	1
gamma-Chlordane	0.69	U	1.8	0.27	ug/Kg	☼	06/12/17 11:25	06/15/17 06:49	1
Heptachlor	0.69	U	1.8	0.22	ug/Kg	☼	06/12/17 11:25	06/15/17 06:49	1
Heptachlor epoxide	1.0	U	1.8	0.44	ug/Kg	☼	06/12/17 11:25	06/15/17 06:49	1
Methoxychlor	1.0	U	3.4	0.46	ug/Kg	☼	06/12/17 11:25	06/15/17 06:49	1
Toxaphene	34	U	180	16	ug/Kg	☼	06/12/17 11:25	06/15/17 06:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*85*		*63 - 121*	*06/12/17 11:25*	*06/15/17 06:49*	*1*
Tetrachloro-m-xylene (Surr)	*66*		*42 - 129*	*06/12/17 11:25*	*06/15/17 06:49*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	15	U	34	5.3	ug/Kg	☼	06/12/17 11:25	06/17/17 15:39	1
Arochlor 1221	18	U	48	16	ug/Kg	☼	06/12/17 11:25	06/17/17 15:39	1
Arochlor 1232	15	U	34	5.3	ug/Kg	☼	06/12/17 11:25	06/17/17 15:39	1
Arochlor 1242	34	U	34	9.4	ug/Kg	☼	06/12/17 11:25	06/17/17 15:39	1
Arochlor 1248	21	U	34	5.8	ug/Kg	☼	06/12/17 11:25	06/17/17 15:39	1
Arochlor 1254	18	U	34	5.7	ug/Kg	☼	06/12/17 11:25	06/17/17 15:39	1
Arochlor 1260	**6.2**	**J**	34	2.7	ug/Kg	☼	06/12/17 11:25	06/17/17 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*83*		*59 - 130*	*06/12/17 11:25*	*06/17/17 15:39*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5500**		47	1.5	mg/Kg	☼	06/06/17 07:01	06/07/17 12:43	1
Antimony	1.4	U	1.9	0.69	mg/Kg	☼	06/06/17 07:01	06/06/17 18:14	1
Arsenic	**2.6**		2.4	0.63	mg/Kg	☼	06/06/17 07:01	06/06/17 18:14	1
Barium	**21**		1.9	0.098	mg/Kg	☼	06/06/17 07:01	06/06/17 18:14	1
Beryllium	**0.25**	**J**	0.47	0.031	mg/Kg	☼	06/06/17 07:01	06/06/17 18:14	1
Cadmium	**0.13**	**J**	0.47	0.039	mg/Kg	☼	06/06/17 07:01	06/06/17 18:14	1
Calcium	**1100**		95	13	mg/Kg	☼	06/06/17 07:01	06/06/17 18:14	1
Chromium	**6.3**		3.3	0.055	mg/Kg	☼	06/06/17 07:01	06/06/17 18:14	1
Cobalt	**3.7**		0.95	0.095	mg/Kg	☼	06/06/17 07:01	06/06/17 18:14	1
Copper	**18**		4.7	0.21	mg/Kg	☼	06/06/17 07:01	06/06/17 18:14	1

Client Sample ID: SS025-SS04
Lab Sample ID: 280-97803-8
Date Collected: 05/31/17 14:00
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 90.0

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**10000**		76	3.6	mg/Kg	☼	06/06/17 07:01	06/06/17 18:14	1
Lead	**5.3**		0.85	0.29	mg/Kg	☼	06/06/17 07:01	06/06/17 18:14	1
Magnesium	**2000**		28	3.5	mg/Kg	☼	06/06/17 07:01	06/06/17 18:14	1
Manganese	**400**		4.3	0.095	mg/Kg	☼	06/06/17 07:01	06/06/17 18:14	1
Nickel	**8.0**		3.8	0.13	mg/Kg	☼	06/06/17 07:01	06/06/17 18:14	1
Potassium	**720**		280	39	mg/Kg	☼	06/06/17 07:01	06/06/17 18:14	1
Selenium	2.8	U	2.8	0.81	mg/Kg	☼	06/06/17 07:01	06/07/17 12:43	1
Silver	0.57	U	1.4	0.15	mg/Kg	☼	06/06/17 07:01	06/06/17 18:14	1
Sodium	190	U	470	56	mg/Kg	☼	06/06/17 07:01	06/07/17 12:43	1
Thallium	2.4	U	2.8	0.62	mg/Kg	☼	06/06/17 07:01	06/06/17 18:14	1
Vanadium	**9.5**		1.9	0.089	mg/Kg	☼	06/06/17 07:01	06/06/17 18:14	1
Zinc	**29**		7.6	0.38	mg/Kg	☼	06/06/17 07:01	06/06/17 18:14	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**12**	**J**	19	6.2	ug/Kg	☼	06/06/17 11:48	06/06/17 14:58	1

Client Sample ID: SS025-SB04(0-2)
Lab Sample ID: 280-97803-9
Date Collected: 05/31/17 14:10
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 82.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.6	U	5.1	0.57	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
1,1,1-Trichloroethane	1.6	U	5.1	0.53	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
1,1,2,2-Tetrachloroethane	1.6	U	5.1	0.63	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
1,1,2-Trichloroethane	3.3	U	5.1	0.90	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
1,1-Dichloroethane	0.82	U	5.1	0.22	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
1,1-Dichloroethene	1.6	U	5.1	0.61	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
1,1-Dichloropropene	1.6	U	5.1	0.55	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
1,2,3-Trichlorobenzene	1.6	U	5.1	0.77	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
1,2,3-Trichloropropane	3.3	U	5.1	0.83	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
1,2,4-Trichlorobenzene	1.6	U	5.1	0.75	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
1,2,4-Trimethylbenzene	1.6	U	5.1	0.60	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
1,2-Dibromo-3-Chloropropane	1.6	U	10	0.62	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
1,2-Dibromoethane	1.6	U	5.1	0.53	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
1,2-Dichlorobenzene	1.6	U	5.1	0.46	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
1,2-Dichloroethane	1.6	U	5.1	0.72	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
1,2-Dichloroethene, Total	1.6	U	5.1	0.40	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
1,2-Dichloropropane	1.6	U	5.1	0.56	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
1,3,5-Trimethylbenzene	1.6	U	5.1	0.58	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
1,3-Dichlorobenzene	1.6	U	5.1	0.49	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
1,3-Dichloropropane	1.6	U	5.1	0.52	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
1,4-Dichlorobenzene	1.6	U	5.1	0.80	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
2,2-Dichloropropane	1.6	U	5.1	0.45	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
2-Butanone (MEK)	6.6	U	21	1.9	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
2-Chlorotoluene	1.6	U	5.1	0.52	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
2-Hexanone	13	U	21	5.0	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
4-Chlorotoluene	1.6	U	5.1	0.80	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
4-Isopropyltoluene	1.6	U	5.1	0.50	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1

Client Sample ID: SS025-SB04(0-2)

Date Collected: 05/31/17 14:10
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-9

Matrix: Solid
Percent Solids: 82.2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	13	U	21	4.5	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Acetone	13	U	21	5.5	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Benzene	1.6	U	5.1	0.48	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Bromobenzene	1.6	U	5.1	0.50	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Bromochloromethane	0.82	U	5.1	0.31	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Bromodichloromethane	0.82	U	5.1	0.23	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Bromoform	0.82	U	5.1	0.24	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Bromomethane	1.6	U Q	10	0.51	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Carbon disulfide	1.6	U	5.1	0.43	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Carbon tetrachloride	1.6	U	5.1	0.65	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Chlorobenzene	1.6	U	5.1	0.55	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Chloroethane	3.3	U Q	10	0.91	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Chloroform	0.82	U	10	0.30	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Chloromethane	1.6	U	10	0.79	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
cis-1,2-Dichloroethene	1.6	U	5.1	0.57	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
cis-1,3-Dichloropropene	3.3	U	5.1	1.3	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Dibromochloromethane	1.6	U	5.1	0.58	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Dibromomethane	3.3	U	5.1	0.86	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Dichlorodifluoromethane	1.6	U	10	0.53	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Ethylbenzene	1.6	U	5.1	0.69	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Hexachlorobutadiene	1.6	U	5.1	0.56	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Isopropyl ether	8.2	U Q	51	2.8	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Isopropylbenzene	1.6	U	5.1	0.61	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
m&p-Xylene	3.3	U	3.3	1.1	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Methyl iodide	1.6	U	5.1	0.45	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Methyl tert-butyl ether	0.82	U	21	0.35	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Methylene Chloride	3.3	U	5.1	1.6	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Naphthalene	1.6	U	5.1	0.65	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
n-Butylbenzene	1.6	U	5.1	0.57	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
N-Propylbenzene	1.6	U	5.1	0.60	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
o-Xylene	1.6	U	5.1	0.63	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
sec-Butylbenzene	1.6	U	5.1	0.79	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Styrene	1.6	U	5.1	0.65	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
tert-Butylbenzene	1.6	U	5.1	0.51	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Tetrachloroethene	1.6	U	5.1	0.61	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Toluene	1.6	U	5.1	0.71	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
trans-1,2-Dichloroethene	0.82	U	5.1	0.40	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
trans-1,3-Dichloropropene	1.6	U	5.1	0.69	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Trichloroethene	0.82	U	5.1	0.24	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Trichlorofluoromethane	3.3	U	10	1.1	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Vinyl acetate	3.3	U	10	1.1	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Vinyl chloride	3.3	U	5.1	1.4	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1
Xylenes (total)	1.0	U	10	0.63	ug/Kg	☼	05/31/17 14:10	06/04/17 01:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*136*		*71 - 136*	*05/31/17 14:10*	*06/04/17 01:00*	*1*
4-Bromofluorobenzene (Surr)	*89*		*79 - 119*	*05/31/17 14:10*	*06/04/17 01:00*	*1*
Dibromofluoromethane (Surr)	*115*		*78 - 119*	*05/31/17 14:10*	*06/04/17 01:00*	*1*
Toluene-d8 (Surr)	*97*		*85 - 116*	*05/31/17 14:10*	*06/04/17 01:00*	*1*

Client Sample ID: SS025-SB04(0-2)

Date Collected: 05/31/17 14:10
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-9

Matrix: Solid
Percent Solids: 82.2

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.61	U	6.1	0.32	ug/Kg	☼	06/14/17 09:42	06/21/17 23:21	1
2-Methylnaphthalene	0.81	U	6.1	0.38	ug/Kg	☼	06/14/17 09:42	06/21/17 23:21	1
Acenaphthene	0.32	U	6.1	0.19	ug/Kg	☼	06/14/17 09:42	06/21/17 23:21	1
Acenaphthylene	**0.28**	**J**	6.1	0.21	ug/Kg	☼	06/14/17 09:42	06/21/17 23:21	1
Anthracene	3.0	U	6.1	0.88	ug/Kg	☼	06/14/17 09:42	06/21/17 23:21	1
Benzo[a]anthracene	3.0	U	6.1	1.1	ug/Kg	☼	06/14/17 09:42	06/21/17 23:21	1
Benzo[a]pyrene	3.0	U	6.1	0.90	ug/Kg	☼	06/14/17 09:42	06/21/17 23:21	1
Benzo[b]fluoranthene	3.0	U	6.1	1.5	ug/Kg	☼	06/14/17 09:42	06/21/17 23:21	1
Benzo[g,h,i]perylene	3.0	U	6.1	1.3	ug/Kg	☼	06/14/17 09:42	06/21/17 23:21	1
Benzo[k]fluoranthene	3.0	U	6.1	1.2	ug/Kg	☼	06/14/17 09:42	06/21/17 23:21	1
Chrysene	3.0	U	6.1	1.2	ug/Kg	☼	06/14/17 09:42	06/21/17 23:21	1
Dibenz(a,h)anthracene	3.0	U	6.1	1.6	ug/Kg	☼	06/14/17 09:42	06/21/17 23:21	1
Fluoranthene	3.0	U	6.1	1.2	ug/Kg	☼	06/14/17 09:42	06/21/17 23:21	1
Fluorene	0.81	U	6.1	0.57	ug/Kg	☼	06/14/17 09:42	06/21/17 23:21	1
Indeno[1,2,3-cd]pyrene	3.0	U	6.1	1.3	ug/Kg	☼	06/14/17 09:42	06/21/17 23:21	1
Naphthalene	0.81	U	6.1	0.40	ug/Kg	☼	06/14/17 09:42	06/21/17 23:21	1
Phenanthrene	3.0	U	6.1	1.3	ug/Kg	☼	06/14/17 09:42	06/21/17 23:21	1
Pyrene	3.0	U	6.1	1.3	ug/Kg	☼	06/14/17 09:42	06/21/17 23:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*76*		*46 - 115*	*06/14/17 09:42*	*06/21/17 23:21*	*1*
Nitrobenzene-d5 (Surr)	*77*		*44 - 125*	*06/14/17 09:42*	*06/21/17 23:21*	*1*
Terphenyl-d14 (Surr)	*67*		*58 - 133*	*06/14/17 09:42*	*06/21/17 23:21*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	2.0	U	2.0	0.65	ug/Kg	☼	06/12/17 11:25	06/15/17 02:19	1
4,4'-DDE	0.80	U	2.0	0.28	ug/Kg	☼	06/12/17 11:25	06/15/17 02:19	1
4,4'-DDT	2.0	U	2.4	0.70	ug/Kg	☼	06/12/17 11:25	06/15/17 02:19	1
Aldrin	0.80	U	2.0	0.30	ug/Kg	☼	06/12/17 11:25	06/15/17 02:19	1
alpha-BHC	0.80	U	2.0	0.25	ug/Kg	☼	06/12/17 11:25	06/15/17 02:19	1
alpha-Chlordane	0.80	U	2.0	0.38	ug/Kg	☼	06/12/17 11:25	06/15/17 02:19	1
beta-BHC	2.0	U	2.0	0.79	ug/Kg	☼	06/12/17 11:25	06/15/17 02:19	1
delta-BHC	1.2	U	2.0	0.48	ug/Kg	☼	06/12/17 11:25	06/15/17 02:19	1
Dieldrin	0.80	U	2.0	0.25	ug/Kg	☼	06/12/17 11:25	06/15/17 02:19	1
Endosulfan I	0.80	U	2.0	0.21	ug/Kg	☼	06/12/17 11:25	06/15/17 02:19	1
Endosulfan II	0.80	U	2.0	0.34	ug/Kg	☼	06/12/17 11:25	06/15/17 02:19	1
Endosulfan sulfate	0.80	U	2.0	0.33	ug/Kg	☼	06/12/17 11:25	06/15/17 02:19	1
Endrin	0.80	U	2.0	0.36	ug/Kg	☼	06/12/17 11:25	06/15/17 02:19	1
Endrin aldehyde	0.80	U	2.0	0.20	ug/Kg	☼	06/12/17 11:25	06/15/17 02:19	1
gamma-BHC (Lindane)	1.2	U	2.0	0.55	ug/Kg	☼	06/12/17 11:25	06/15/17 02:19	1
gamma-Chlordane	0.80	U	2.0	0.32	ug/Kg	☼	06/12/17 11:25	06/15/17 02:19	1
Heptachlor	0.80	U	2.0	0.25	ug/Kg	☼	06/12/17 11:25	06/15/17 02:19	1
Heptachlor epoxide	1.2	U	2.0	0.51	ug/Kg	☼	06/12/17 11:25	06/15/17 02:19	1
Methoxychlor	1.2	U	3.9	0.53	ug/Kg	☼	06/12/17 11:25	06/15/17 02:19	1
Toxaphene	39	U	200	19	ug/Kg	☼	06/12/17 11:25	06/15/17 02:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*82*		*63 - 121*	*06/12/17 11:25*	*06/15/17 02:19*	*1*
Tetrachloro-m-xylene (Surr)	*85*		*42 - 129*	*06/12/17 11:25*	*06/15/17 02:19*	*1*

Client Sample ID: SS025-SB04(0-2)
Lab Sample ID: 280-97803-9

Date Collected: 05/31/17 14:10
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 82.2

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	18	U	39	6.1	ug/Kg	☼	06/12/17 11:25	06/17/17 16:44	1
Arochlor 1221	20	U	56	19	ug/Kg	☼	06/12/17 11:25	06/17/17 16:44	1
Arochlor 1232	18	U	39	6.1	ug/Kg	☼	06/12/17 11:25	06/17/17 16:44	1
Arochlor 1242	39	U	39	11	ug/Kg	☼	06/12/17 11:25	06/17/17 16:44	1
Arochlor 1248	24	U	39	6.7	ug/Kg	☼	06/12/17 11:25	06/17/17 16:44	1
Arochlor 1254	20	U	39	6.6	ug/Kg	☼	06/12/17 11:25	06/17/17 16:44	1
Arochlor 1260	9.2	U	39	3.2	ug/Kg	☼	06/12/17 11:25	06/17/17 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*88*		*59 - 130*	*06/12/17 11:25*	*06/17/17 16:44*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**4500**		44	1.4	mg/Kg	☼	06/06/17 07:01	06/07/17 12:45	1
Antimony	1.3	U	1.8	0.65	mg/Kg	☼	06/06/17 07:01	06/06/17 18:16	1
Arsenic	**2.4**		2.2	0.59	mg/Kg	☼	06/06/17 07:01	06/06/17 18:16	1
Barium	**16**		1.8	0.092	mg/Kg	☼	06/06/17 07:01	06/06/17 18:16	1
Beryllium	**0.20**	**J**	0.44	0.029	mg/Kg	☼	06/06/17 07:01	06/06/17 18:16	1
Cadmium	**0.069**	**J**	0.44	0.036	mg/Kg	☼	06/06/17 07:01	06/06/17 18:16	1
Calcium	**1000**		88	12	mg/Kg	☼	06/06/17 07:01	06/06/17 18:16	1
Chromium	**4.6**		3.1	0.051	mg/Kg	☼	06/06/17 07:01	06/06/17 18:16	1
Cobalt	**2.8**		0.88	0.088	mg/Kg	☼	06/06/17 07:01	06/06/17 18:16	1
Copper	**9.9**		4.4	0.19	mg/Kg	☼	06/06/17 07:01	06/06/17 18:16	1
Iron	**8200**		71	3.4	mg/Kg	☼	06/06/17 07:01	06/06/17 18:16	1
Lead	**2.1**		0.80	0.27	mg/Kg	☼	06/06/17 07:01	06/06/17 18:16	1
Magnesium	**1700**		27	3.3	mg/Kg	☼	06/06/17 07:01	06/06/17 18:16	1
Manganese	**260**		4.0	0.088	mg/Kg	☼	06/06/17 07:01	06/06/17 18:16	1
Nickel	**6.5**		3.5	0.12	mg/Kg	☼	06/06/17 07:01	06/06/17 18:16	1
Potassium	**730**		270	36	mg/Kg	☼	06/06/17 07:01	06/06/17 18:16	1
Selenium	2.7	U	2.7	0.76	mg/Kg	☼	06/06/17 07:01	06/07/17 12:45	1
Silver	0.53	U	1.3	0.14	mg/Kg	☼	06/06/17 07:01	06/06/17 18:16	1
Sodium	180	U	440	52	mg/Kg	☼	06/06/17 07:01	06/07/17 12:45	1
Thallium	2.2	U	2.7	0.57	mg/Kg	☼	06/06/17 07:01	06/06/17 18:16	1
Vanadium	**7.2**		1.8	0.083	mg/Kg	☼	06/06/17 07:01	06/06/17 18:16	1
Zinc	**17**		7.1	0.35	mg/Kg	☼	06/06/17 07:01	06/06/17 18:16	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	18	U	23	7.5	ug/Kg	☼	06/06/17 11:48	06/06/17 15:00	1

Client Sample ID: SS025-SS05
Lab Sample ID: 280-97803-10

Date Collected: 05/31/17 14:30
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 86.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.5	U	4.7	0.53	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
1,1,1-Trichloroethane	1.5	U Q	4.7	0.49	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
1,1,2,2-Tetrachloroethane	1.5	U	4.7	0.58	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
1,1,2-Trichloroethane	3.0	U Q	4.7	0.83	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1

Client Sample ID: SS025-SS05

Date Collected: 05/31/17 14:30
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-10

Matrix: Solid
Percent Solids: 86.8

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.76	U Q	4.7	0.20	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
1,1-Dichloroethene	1.5	U Q	4.7	0.56	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
1,1-Dichloropropene	1.5	U Q	4.7	0.51	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
1,2,3-Trichlorobenzene	1.5	U	4.7	0.71	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
1,2,3-Trichloropropane	3.0	U	4.7	0.77	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
1,2,4-Trichlorobenzene	1.5	U	4.7	0.69	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
1,2,4-Trimethylbenzene	1.5	U	4.7	0.55	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
1,2-Dibromo-3-Chloropropane	1.5	U	9.5	0.57	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
1,2-Dibromoethane	1.5	U	4.7	0.49	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
1,2-Dichlorobenzene	1.5	U	4.7	0.43	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
1,2-Dichloroethane	1.5	U Q	4.7	0.66	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
1,2-Dichloroethene, Total	1.5	U	4.7	0.37	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
1,2-Dichloropropane	1.5	U Q	4.7	0.52	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
1,3,5-Trimethylbenzene	1.5	U	4.7	0.54	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
1,3-Dichlorobenzene	1.5	U	4.7	0.45	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
1,3-Dichloropropane	1.5	U	4.7	0.48	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
1,4-Dichlorobenzene	1.5	U	4.7	0.74	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
2,2-Dichloropropane	1.5	U Q	4.7	0.42	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
2-Butanone (MEK)	6.0	U Q	19	1.7	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
2-Chlorotoluene	1.5	U	4.7	0.48	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
2-Hexanone	12	U	19	4.6	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
4-Chlorotoluene	1.5	U	4.7	0.74	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
4-Isopropyltoluene	1.5	U	4.7	0.46	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
4-Methyl-2-pentanone (MIBK)	12	U Q	19	4.1	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Acetone	12	U Q	19	5.1	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Benzene	1.5	U Q	4.7	0.44	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Bromobenzene	1.5	U	4.7	0.46	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Bromochloromethane	0.76	U Q	4.7	0.28	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Bromodichloromethane	0.76	U Q	4.7	0.21	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Bromoform	0.76	U	4.7	0.22	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Bromomethane	1.5	U Q	9.5	0.47	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Carbon disulfide	1.5	U Q	4.7	0.40	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Carbon tetrachloride	1.5	U Q	4.7	0.60	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Chlorobenzene	1.5	U	4.7	0.51	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Chloroethane	3.0	U Q	9.5	0.84	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Chloroform	0.76	U Q	9.5	0.27	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Chloromethane	1.5	U Q	9.5	0.73	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
cis-1,2-Dichloroethene	1.5	U Q	4.7	0.53	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
cis-1,3-Dichloropropene	3.0	U Q	4.7	1.2	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Dibromochloromethane	1.5	U	4.7	0.54	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Dibromomethane	3.0	U Q	4.7	0.79	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Dichlorodifluoromethane	1.5	U Q	9.5	0.49	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Ethylbenzene	1.5	U	4.7	0.63	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Hexachlorobutadiene	1.5	U	4.7	0.52	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Isopropyl ether	7.6	U Q	47	2.6	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Isopropylbenzene	1.5	U	4.7	0.56	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
m&p-Xylene	3.0	U	3.0	0.98	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Methyl iodide	1.5	U Q	4.7	0.42	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Methyl tert-butyl ether	0.76	U Q	19	0.32	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1

Client Sample ID: SS025-SS05

Date Collected: 05/31/17 14:30
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-10

Matrix: Solid
Percent Solids: 86.8

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	3.0	U Q	4.7	1.5	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Naphthalene	1.5	U	4.7	0.60	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
n-Butylbenzene	1.5	U	4.7	0.53	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
N-Propylbenzene	1.5	U	4.7	0.55	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
o-Xylene	1.5	U	4.7	0.58	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
sec-Butylbenzene	1.5	U	4.7	0.73	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Styrene	1.5	U	4.7	0.60	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
tert-Butylbenzene	1.5	U	4.7	0.47	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Tetrachloroethene	1.5	U	4.7	0.56	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Toluene	1.5	U Q	4.7	0.65	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
trans-1,2-Dichloroethene	0.76	U Q	4.7	0.37	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
trans-1,3-Dichloropropene	1.5	U Q	4.7	0.63	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Trichloroethene	0.76	U Q	4.7	0.22	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Trichlorofluoromethane	3.0	U Q	9.5	0.98	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Vinyl acetate	3.0	U Q	9.5	1.0	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Vinyl chloride	3.0	U Q	4.7	1.3	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1
Xylenes (total)	0.95	U	9.5	0.58	ug/Kg	☼	05/31/17 14:30	06/04/17 01:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*147*	*Q*	*71 - 136*	*05/31/17 14:30*	*06/04/17 01:20*	*1*
4-Bromofluorobenzene (Surr)	*96*		*79 - 119*	*05/31/17 14:30*	*06/04/17 01:20*	*1*
Dibromofluoromethane (Surr)	*123*	*Q*	*78 - 119*	*05/31/17 14:30*	*06/04/17 01:20*	*1*
Toluene-d8 (Surr)	*101*		*85 - 116*	*05/31/17 14:30*	*06/04/17 01:20*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**79**		5.4	0.28	ug/Kg	☼	06/05/17 08:51	06/08/17 14:55	1
2-Methylnaphthalene	**97**		5.4	0.33	ug/Kg	☼	06/05/17 08:51	06/08/17 14:55	1
Acenaphthene	**250**	**J**	5.4	0.17	ug/Kg	☼	06/05/17 08:51	06/08/17 14:55	1
Acenaphthylene	**47**		5.4	0.18	ug/Kg	☼	06/05/17 08:51	06/08/17 14:55	1
Anthracene	2.7	U	5.4	0.78	ug/Kg	☼	06/05/17 08:51	06/08/17 14:55	1
Benzo[a]anthracene	**860**	**J**	5.4	0.97	ug/Kg	☼	06/05/17 08:51	06/08/17 14:55	1
Benzo[a]pyrene	**720**	**J**	5.4	0.80	ug/Kg	☼	06/05/17 08:51	06/08/17 14:55	1
Benzo[b]fluoranthene	**860**	**J**	5.4	1.3	ug/Kg	☼	06/05/17 08:51	06/08/17 14:55	1
Benzo[g,h,i]perylene	**330**	**J**	5.4	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 14:55	1
Benzo[k]fluoranthene	**300**	**J**	5.4	1.1	ug/Kg	☼	06/05/17 08:51	06/08/17 14:55	1
Chrysene	**800**	**J**	5.4	1.1	ug/Kg	☼	06/05/17 08:51	06/08/17 14:55	1
Dibenz(a,h)anthracene	**100**		5.4	1.4	ug/Kg	☼	06/05/17 08:51	06/08/17 14:55	1
Fluoranthene	**3100**	**J**	5.4	1.1	ug/Kg	☼	06/05/17 08:51	06/08/17 14:55	1
Fluorene	**570**	**J**	5.4	0.51	ug/Kg	☼	06/05/17 08:51	06/08/17 14:55	1
Indeno[1,2,3-cd]pyrene	**420**	**J**	5.4	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 14:55	1
Naphthalene	**250**	**J**	5.4	0.35	ug/Kg	☼	06/05/17 08:51	06/08/17 14:55	1
Phenanthrene	**3400**	**J**	5.4	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 14:55	1
Pyrene	**2100**	**J**	5.4	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 14:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*65*		*46 - 115*	*06/05/17 08:51*	*06/08/17 14:55*	*1*
Nitrobenzene-d5 (Surr)	*60*		*44 - 125*	*06/05/17 08:51*	*06/08/17 14:55*	*1*
Terphenyl-d14 (Surr)	*85*		*58 - 133*	*06/05/17 08:51*	*06/08/17 14:55*	*1*

Client Sample ID: SS025-SS05

Date Collected: 05/31/17 14:30
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-10

Matrix: Solid
Percent Solids: 86.8

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	75	J D Q	220	11	ug/Kg	☼	06/05/17 08:51	06/12/17 20:51	40
2-Methylnaphthalene	93	J D Q	220	13	ug/Kg	☼	06/05/17 08:51	06/12/17 20:51	40
Acenaphthene	270	D Q	220	6.9	ug/Kg	☼	06/05/17 08:51	06/12/17 20:51	40
Acenaphthylene	94	J D Q	220	7.3	ug/Kg	☼	06/05/17 08:51	06/12/17 20:51	40
Anthracene	580	D Q	220	31	ug/Kg	☼	06/05/17 08:51	06/12/17 20:51	40
Benzo[a]anthracene	770	D Q	220	39	ug/Kg	☼	06/05/17 08:51	06/12/17 20:51	40
Benzo[a]pyrene	590	D Q	220	32	ug/Kg	☼	06/05/17 08:51	06/12/17 20:51	40
Benzo[b]fluoranthene	760	D Q	220	52	ug/Kg	☼	06/05/17 08:51	06/12/17 20:51	40
Benzo[g,h,i]perylene	320	D Q	220	47	ug/Kg	☼	06/05/17 08:51	06/12/17 20:51	40
Benzo[k]fluoranthene	330	D Q	220	43	ug/Kg	☼	06/05/17 08:51	06/12/17 20:51	40
Chrysene	820	D Q	220	43	ug/Kg	☼	06/05/17 08:51	06/12/17 20:51	40
Dibenz(a,h)anthracene	92	J D Q	220	56	ug/Kg	☼	06/05/17 08:51	06/12/17 20:51	40
Fluoranthene	2500	D Q	220	43	ug/Kg	☼	06/05/17 08:51	06/12/17 20:51	40
Fluorene	600	D Q	220	20	ug/Kg	☼	06/05/17 08:51	06/12/17 20:51	40
Indeno[1,2,3-cd]pyrene	310	D Q	220	47	ug/Kg	☼	06/05/17 08:51	06/12/17 20:51	40
Naphthalene	240	D Q	220	14	ug/Kg	☼	06/05/17 08:51	06/12/17 20:51	40
Phenanthrene	3000	D Q	220	47	ug/Kg	☼	06/05/17 08:51	06/12/17 20:51	40
Pyrene	1700	D Q	220	47	ug/Kg	☼	06/05/17 08:51	06/12/17 20:51	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*0*	*D Q*	*46 - 115*	*06/05/17 08:51*	*06/12/17 20:51*	*40*
Nitrobenzene-d5 (Surr)	*0*	*D Q*	*44 - 125*	*06/05/17 08:51*	*06/12/17 20:51*	*40*
Terphenyl-d14 (Surr)	*0*	*D Q*	*58 - 133*	*06/05/17 08:51*	*06/12/17 20:51*	*40*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.8	U	1.9	0.60	ug/Kg	☼	06/12/17 11:25	06/15/17 07:06	1
4,4'-DDE	0.74	U	1.9	0.26	ug/Kg	☼	06/12/17 11:25	06/15/17 07:06	1
4,4'-DDT	1.8	U	2.2	0.65	ug/Kg	☼	06/12/17 11:25	06/15/17 07:06	1
Aldrin	0.74	U	1.9	0.28	ug/Kg	☼	06/12/17 11:25	06/15/17 07:06	1
alpha-BHC	0.74	U	1.9	0.24	ug/Kg	☼	06/12/17 11:25	06/15/17 07:06	1
alpha-Chlordane	0.74	U	1.9	0.36	ug/Kg	☼	06/12/17 11:25	06/15/17 07:06	1
beta-BHC	1.8	U	1.9	0.74	ug/Kg	☼	06/12/17 11:25	06/15/17 07:06	1
delta-BHC	1.1	U	1.9	0.44	ug/Kg	☼	06/12/17 11:25	06/15/17 07:06	1
Dieldrin	0.74	U	1.9	0.23	ug/Kg	☼	06/12/17 11:25	06/15/17 07:06	1
Endosulfan I	0.74	U	1.9	0.19	ug/Kg	☼	06/12/17 11:25	06/15/17 07:06	1
Endosulfan II	0.74	U	1.9	0.32	ug/Kg	☼	06/12/17 11:25	06/15/17 07:06	1
Endosulfan sulfate	0.74	U	1.9	0.31	ug/Kg	☼	06/12/17 11:25	06/15/17 07:06	1
Endrin	0.74	U	1.9	0.34	ug/Kg	☼	06/12/17 11:25	06/15/17 07:06	1
Endrin aldehyde	0.74	U	1.9	0.19	ug/Kg	☼	06/12/17 11:25	06/15/17 07:06	1
gamma-BHC (Lindane)	1.1	U	1.9	0.51	ug/Kg	☼	06/12/17 11:25	06/15/17 07:06	1
gamma-Chlordane	0.74	U	1.9	0.29	ug/Kg	☼	06/12/17 11:25	06/15/17 07:06	1
Heptachlor	0.74	U	1.9	0.24	ug/Kg	☼	06/12/17 11:25	06/15/17 07:06	1
Heptachlor epoxide	1.1	U	1.9	0.47	ug/Kg	☼	06/12/17 11:25	06/15/17 07:06	1
Methoxychlor	1.1	U	3.7	0.50	ug/Kg	☼	06/12/17 11:25	06/15/17 07:06	1
Toxaphene	37	U	190	17	ug/Kg	☼	06/12/17 11:25	06/15/17 07:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*77*		*63 - 121*	*06/12/17 11:25*	*06/15/17 07:06*	*1*
Tetrachloro-m-xylene (Surr)	*64*		*42 - 129*	*06/12/17 11:25*	*06/15/17 07:06*	*1*

Client Sample ID: SS025-SS05

Lab Sample ID: 280-97803-10

Date Collected: 05/31/17 14:30
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 86.8

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	17	U	37	5.6	ug/Kg	☼	06/12/17 11:25	06/17/17 17:06	1
Arochlor 1221	19	U	52	17	ug/Kg	☼	06/12/17 11:25	06/17/17 17:06	1
Arochlor 1232	17	U	37	5.7	ug/Kg	☼	06/12/17 11:25	06/17/17 17:06	1
Arochlor 1242	37	U	37	10	ug/Kg	☼	06/12/17 11:25	06/17/17 17:06	1
Arochlor 1248	22	U	37	6.2	ug/Kg	☼	06/12/17 11:25	06/17/17 17:06	1
Arochlor 1254	19	U	37	6.1	ug/Kg	☼	06/12/17 11:25	06/17/17 17:06	1
Arochlor 1260	8.5	U	37	2.9	ug/Kg	☼	06/12/17 11:25	06/17/17 17:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*83*		*59 - 130*	*06/12/17 11:25*	*06/17/17 17:06*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6400**		50	1.6	mg/Kg	☼	06/06/17 07:01	06/07/17 12:48	1
Antimony	1.5	U	2.0	0.74	mg/Kg	☼	06/06/17 07:01	06/06/17 18:19	1
Arsenic	**3.3**		2.5	0.67	mg/Kg	☼	06/06/17 07:01	06/06/17 18:19	1
Barium	**24**		2.0	0.10	mg/Kg	☼	06/06/17 07:01	06/06/17 18:19	1
Beryllium	**0.26**	**J**	0.50	0.033	mg/Kg	☼	06/06/17 07:01	06/06/17 18:19	1
Cadmium	**0.11**	**J**	0.50	0.041	mg/Kg	☼	06/06/17 07:01	06/06/17 18:19	1
Calcium	**1400**		100	14	mg/Kg	☼	06/06/17 07:01	06/06/17 18:19	1
Chromium	**6.5**		3.5	0.058	mg/Kg	☼	06/06/17 07:01	06/06/17 18:19	1
Cobalt	**4.2**		1.0	0.10	mg/Kg	☼	06/06/17 07:01	06/06/17 18:19	1
Copper	**15**		5.0	0.22	mg/Kg	☼	06/06/17 07:01	06/06/17 18:19	1
Iron	**12000**		80	3.8	mg/Kg	☼	06/06/17 07:01	06/06/17 18:19	1
Lead	**5.5**		0.90	0.31	mg/Kg	☼	06/06/17 07:01	06/06/17 18:19	1
Magnesium	**2100**		30	3.7	mg/Kg	☼	06/06/17 07:01	06/06/17 18:19	1
Manganese	**520**		4.5	0.10	mg/Kg	☼	06/06/17 07:01	06/06/17 18:19	1
Nickel	**8.4**		4.0	0.13	mg/Kg	☼	06/06/17 07:01	06/06/17 18:19	1
Potassium	**730**		300	41	mg/Kg	☼	06/06/17 07:01	06/06/17 18:19	1
Selenium	**0.91**	**J**	3.0	0.86	mg/Kg	☼	06/06/17 07:01	06/07/17 12:48	1
Silver	0.60	U	1.5	0.16	mg/Kg	☼	06/06/17 07:01	06/06/17 18:19	1
Sodium	200	U	500	59	mg/Kg	☼	06/06/17 07:01	06/07/17 12:48	1
Thallium	2.5	U	3.0	0.65	mg/Kg	☼	06/06/17 07:01	06/06/17 18:19	1
Vanadium	**10**		2.0	0.094	mg/Kg	☼	06/06/17 07:01	06/06/17 18:19	1
Zinc	**31**		8.0	0.40	mg/Kg	☼	06/06/17 07:01	06/06/17 18:19	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**23**		23	7.5	ug/Kg	☼	06/06/17 11:48	06/06/17 15:02	1

Client Sample ID: SS025-SB05(0-2)

Lab Sample ID: 280-97803-11

Date Collected: 05/31/17 14:40
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 85.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.4	U	4.5	0.50	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
1,1,1-Trichloroethane	1.4	U	4.5	0.47	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
1,1,2,2-Tetrachloroethane	1.4	U Q	4.5	0.55	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
1,1,2-Trichloroethane	2.9	U	4.5	0.79	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1

Client Sample ID: SS025-SB05(0-2)
Date Collected: 05/31/17 14:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-11
Matrix: Solid
Percent Solids: 85.8

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.72	U	4.5	0.19	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
1,1-Dichloroethene	1.4	U	4.5	0.53	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
1,1-Dichloropropene	1.4	U	4.5	0.48	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
1,2,3-Trichlorobenzene	1.4	U Q	4.5	0.67	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
1,2,3-Trichloropropane	2.9	U Q	4.5	0.73	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
1,2,4-Trichlorobenzene	1.4	U Q	4.5	0.66	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
1,2,4-Trimethylbenzene	1.4	U Q	4.5	0.52	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
1,2-Dibromo-3-Chloropropane	1.4	U Q	9.0	0.54	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
1,2-Dibromoethane	1.4	U	4.5	0.47	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
1,2-Dichlorobenzene	1.4	U Q	4.5	0.40	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
1,2-Dichloroethane	1.4	U	4.5	0.63	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
1,2-Dichloroethene, Total	1.4	U	4.5	0.35	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
1,2-Dichloropropane	1.4	U	4.5	0.49	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
1,3,5-Trimethylbenzene	1.4	U Q	4.5	0.51	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
1,3-Dichlorobenzene	1.4	U Q	4.5	0.43	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
1,3-Dichloropropane	1.4	U	4.5	0.46	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
1,4-Dichlorobenzene	1.4	U Q	4.5	0.70	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
2,2-Dichloropropane	1.4	U	4.5	0.39	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
2-Butanone (MEK)	5.7	U	18	1.6	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
2-Chlorotoluene	1.4	U Q	4.5	0.46	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
2-Hexanone	11	U	18	4.4	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
4-Chlorotoluene	1.4	U Q	4.5	0.70	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
4-Isopropyltoluene	1.4	U Q	4.5	0.44	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
4-Methyl-2-pentanone (MIBK)	11	U	18	3.9	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Acetone	11	U	18	4.8	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Benzene	1.4	U	4.5	0.42	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Bromobenzene	1.4	U Q	4.5	0.44	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Bromochloromethane	0.72	U	4.5	0.27	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Bromodichloromethane	0.72	U	4.5	0.20	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Bromoform	0.72	U	4.5	0.21	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Bromomethane	1.4	U Q	9.0	0.45	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Carbon disulfide	1.4	U	4.5	0.38	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Carbon tetrachloride	1.4	U	4.5	0.57	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Chlorobenzene	1.4	U	4.5	0.48	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Chloroethane	2.9	U	9.0	0.80	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Chloroform	0.72	U	9.0	0.26	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Chloromethane	1.4	U	9.0	0.69	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
cis-1,2-Dichloroethene	1.4	U	4.5	0.50	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
cis-1,3-Dichloropropene	2.9	U	4.5	1.2	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Dibromochloromethane	1.4	U	4.5	0.51	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Dibromomethane	2.9	U	4.5	0.75	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Dichlorodifluoromethane	1.4	U	9.0	0.47	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Ethylbenzene	1.4	U	4.5	0.60	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Hexachlorobutadiene	1.4	U Q	4.5	0.49	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Isopropyl ether	7.2	U Q	45	2.4	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Isopropylbenzene	1.4	U Q	4.5	0.53	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
m&p-Xylene	2.9	U	2.9	0.93	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Methyl iodide	1.4	U	4.5	0.39	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Methyl tert-butyl ether	0.72	U Q	18	0.31	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1

Client Sample ID: SS025-SB05(0-2)

Date Collected: 05/31/17 14:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-11

Matrix: Solid
Percent Solids: 85.8

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	2.9	U	4.5	1.4	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Naphthalene	1.4	U Q	4.5	0.57	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
n-Butylbenzene	1.4	U Q	4.5	0.50	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
N-Propylbenzene	1.4	U Q	4.5	0.52	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
o-Xylene	1.4	U	4.5	0.55	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
sec-Butylbenzene	1.4	U Q	4.5	0.69	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Styrene	1.4	U	4.5	0.57	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
tert-Butylbenzene	1.4	U Q	4.5	0.45	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Tetrachloroethene	1.4	U	4.5	0.53	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Toluene	1.4	U	4.5	0.62	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
trans-1,2-Dichloroethene	0.72	U	4.5	0.35	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
trans-1,3-Dichloropropene	1.4	U	4.5	0.60	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Trichloroethene	0.72	U	4.5	0.21	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Trichlorofluoromethane	2.9	U	9.0	0.93	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Vinyl acetate	2.9	U Q	9.0	0.96	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Vinyl chloride	2.9	U	4.5	1.2	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1
Xylenes (total)	0.90	U	9.0	0.55	ug/Kg	☼	05/31/17 14:40	06/05/17 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*71 - 136*	*05/31/17 14:40*	*06/05/17 21:29*	*1*
4-Bromofluorobenzene (Surr)	*78*	*Q*	*79 - 119*	*05/31/17 14:40*	*06/05/17 21:29*	*1*
Dibromofluoromethane (Surr)	*108*		*78 - 119*	*05/31/17 14:40*	*06/05/17 21:29*	*1*
Toluene-d8 (Surr)	*86*		*85 - 116*	*05/31/17 14:40*	*06/05/17 21:29*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**0.62**	**J**	5.4	0.28	ug/Kg	☼	06/14/17 09:42	06/22/17 00:39	1
2-Methylnaphthalene	**0.81**	**J**	5.4	0.33	ug/Kg	☼	06/14/17 09:42	06/22/17 00:39	1
Acenaphthene	**0.98**	**J**	5.4	0.17	ug/Kg	☼	06/14/17 09:42	06/22/17 00:39	1
Acenaphthylene	**0.99**	**J**	5.4	0.18	ug/Kg	☼	06/14/17 09:42	06/22/17 00:39	1
Anthracene	**1.8**	**J**	5.4	0.78	ug/Kg	☼	06/14/17 09:42	06/22/17 00:39	1
Benzo[a]anthracene	**3.1**	**J**	5.4	0.97	ug/Kg	☼	06/14/17 09:42	06/22/17 00:39	1
Benzo[a]pyrene	**2.7**	**J**	5.4	0.80	ug/Kg	☼	06/14/17 09:42	06/22/17 00:39	1
Benzo[b]fluoranthene	**4.0**	**J**	5.4	1.3	ug/Kg	☼	06/14/17 09:42	06/22/17 00:39	1
Benzo[g,h,i]perylene	**2.9**	**J**	5.4	1.2	ug/Kg	☼	06/14/17 09:42	06/22/17 00:39	1
Benzo[k]fluoranthene	**1.9**	**J**	5.4	1.1	ug/Kg	☼	06/14/17 09:42	06/22/17 00:39	1
Chrysene	**4.2**	**J**	5.4	1.1	ug/Kg	☼	06/14/17 09:42	06/22/17 00:39	1
Dibenz(a,h)anthracene	2.7	U	5.4	1.4	ug/Kg	☼	06/14/17 09:42	06/22/17 00:39	1
Fluoranthene	**6.0**		5.4	1.1	ug/Kg	☼	06/14/17 09:42	06/22/17 00:39	1
Fluorene	**0.99**	**J**	5.4	0.51	ug/Kg	☼	06/14/17 09:42	06/22/17 00:39	1
Indeno[1,2,3-cd]pyrene	**1.9**	**J**	5.4	1.2	ug/Kg	☼	06/14/17 09:42	06/22/17 00:39	1
Naphthalene	**0.66**	**J**	5.4	0.35	ug/Kg	☼	06/14/17 09:42	06/22/17 00:39	1
Phenanthrene	**4.6**	**J**	5.4	1.2	ug/Kg	☼	06/14/17 09:42	06/22/17 00:39	1
Pyrene	**5.9**		5.4	1.2	ug/Kg	☼	06/14/17 09:42	06/22/17 00:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*46 - 115*	*06/14/17 09:42*	*06/22/17 00:39*	*1*
Nitrobenzene-d5 (Surr)	*69*		*44 - 125*	*06/14/17 09:42*	*06/22/17 00:39*	*1*
Terphenyl-d14 (Surr)	*72*		*58 - 133*	*06/14/17 09:42*	*06/22/17 00:39*	*1*

Client Sample ID: SS025-SB05(0-2)
Date Collected: 05/31/17 14:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-11
Matrix: Solid
Percent Solids: 85.8

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.9	U	1.9	0.62	ug/Kg	☼	06/12/17 11:25	06/15/17 07:22	1
4,4'-DDE	0.76	U	1.9	0.27	ug/Kg	☼	06/12/17 11:25	06/15/17 07:22	1
4,4'-DDT	1.9	U	2.3	0.67	ug/Kg	☼	06/12/17 11:25	06/15/17 07:22	1
Aldrin	0.76	U	1.9	0.29	ug/Kg	☼	06/12/17 11:25	06/15/17 07:22	1
alpha-BHC	0.76	U	1.9	0.24	ug/Kg	☼	06/12/17 11:25	06/15/17 07:22	1
alpha-Chlordane	0.76	U	1.9	0.37	ug/Kg	☼	06/12/17 11:25	06/15/17 07:22	1
beta-BHC	1.9	U	1.9	0.76	ug/Kg	☼	06/12/17 11:25	06/15/17 07:22	1
delta-BHC	1.1	U	1.9	0.46	ug/Kg	☼	06/12/17 11:25	06/15/17 07:22	1
Dieldrin	0.76	U	1.9	0.24	ug/Kg	☼	06/12/17 11:25	06/15/17 07:22	1
Endosulfan I	0.76	U	1.9	0.20	ug/Kg	☼	06/12/17 11:25	06/15/17 07:22	1
Endosulfan II	0.76	U	1.9	0.33	ug/Kg	☼	06/12/17 11:25	06/15/17 07:22	1
Endosulfan sulfate	0.76	U	1.9	0.31	ug/Kg	☼	06/12/17 11:25	06/15/17 07:22	1
Endrin	0.76	U	1.9	0.35	ug/Kg	☼	06/12/17 11:25	06/15/17 07:22	1
Endrin aldehyde	0.76	U	1.9	0.19	ug/Kg	☼	06/12/17 11:25	06/15/17 07:22	1
gamma-BHC (Lindane)	1.1	U	1.9	0.53	ug/Kg	☼	06/12/17 11:25	06/15/17 07:22	1
gamma-Chlordane	0.76	U	1.9	0.30	ug/Kg	☼	06/12/17 11:25	06/15/17 07:22	1
Heptachlor	0.76	U	1.9	0.24	ug/Kg	☼	06/12/17 11:25	06/15/17 07:22	1
Heptachlor epoxide	1.1	U	1.9	0.49	ug/Kg	☼	06/12/17 11:25	06/15/17 07:22	1
Methoxychlor	1.1	U	3.8	0.51	ug/Kg	☼	06/12/17 11:25	06/15/17 07:22	1
Toxaphene	38	U	190	18	ug/Kg	☼	06/12/17 11:25	06/15/17 07:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*82*		*63 - 121*	*06/12/17 11:25*	*06/15/17 07:22*	*1*
Tetrachloro-m-xylene (Surr)	*78*		*42 - 129*	*06/12/17 11:25*	*06/15/17 07:22*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	17	U	38	5.8	ug/Kg	☼	06/12/17 11:25	06/17/17 17:27	1
Arochlor 1221	19	U	54	18	ug/Kg	☼	06/12/17 11:25	06/17/17 17:27	1
Arochlor 1232	17	U	38	5.8	ug/Kg	☼	06/12/17 11:25	06/17/17 17:27	1
Arochlor 1242	38	U	38	10	ug/Kg	☼	06/12/17 11:25	06/17/17 17:27	1
Arochlor 1248	23	U	38	6.4	ug/Kg	☼	06/12/17 11:25	06/17/17 17:27	1
Arochlor 1254	19	U	38	6.3	ug/Kg	☼	06/12/17 11:25	06/17/17 17:27	1
Arochlor 1260	8.8	U	38	3.0	ug/Kg	☼	06/12/17 11:25	06/17/17 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*87*		*59 - 130*	*06/12/17 11:25*	*06/17/17 17:27*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**11000**		43	1.3	mg/Kg	☼	06/06/17 07:01	06/07/17 12:50	1
Antimony	1.3	U	1.7	0.64	mg/Kg	☼	06/06/17 07:01	06/06/17 18:21	1
Arsenic	**4.6**		2.2	0.58	mg/Kg	☼	06/06/17 07:01	06/06/17 18:21	1
Barium	**49**		1.7	0.090	mg/Kg	☼	06/06/17 07:01	06/06/17 18:21	1
Beryllium	**0.54**		0.43	0.029	mg/Kg	☼	06/06/17 07:01	06/06/17 18:21	1
Cadmium	**0.26**	**J**	0.43	0.036	mg/Kg	☼	06/06/17 07:01	06/06/17 18:21	1
Calcium	**3200**		87	12	mg/Kg	☼	06/06/17 07:01	06/06/17 18:21	1
Chromium	**12**		3.0	0.050	mg/Kg	☼	06/06/17 07:01	06/06/17 18:21	1
Cobalt	**9.3**		0.87	0.087	mg/Kg	☼	06/06/17 07:01	06/06/17 18:21	1
Copper	**20**		4.3	0.19	mg/Kg	☼	06/06/17 07:01	06/06/17 18:21	1

Client Sample ID: SS025-SB05(0-2)
Lab Sample ID: 280-97803-11

Date Collected: 05/31/17 14:40
Matrix: Solid

Date Received: 06/01/17 08:50
Percent Solids: 85.8

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**17000**		69	3.3	mg/Kg	☼	06/06/17 07:01	06/06/17 18:21	1
Lead	**15**		0.78	0.27	mg/Kg	☼	06/06/17 07:01	06/06/17 18:21	1
Magnesium	**2900**		26	3.2	mg/Kg	☼	06/06/17 07:01	06/06/17 18:21	1
Manganese	**730**		3.9	0.087	mg/Kg	☼	06/06/17 07:01	06/06/17 18:21	1
Nickel	**12**		3.5	0.11	mg/Kg	☼	06/06/17 07:01	06/06/17 18:21	1
Potassium	**1000**		260	36	mg/Kg	☼	06/06/17 07:01	06/06/17 18:21	1
Selenium	2.6	U	2.6	0.75	mg/Kg	☼	06/06/17 07:01	06/07/17 12:50	1
Silver	0.52	U	1.3	0.14	mg/Kg	☼	06/06/17 07:01	06/06/17 18:21	1
Sodium	170	U	430	51	mg/Kg	☼	06/06/17 07:01	06/07/17 12:50	1
Thallium	2.2	U	2.6	0.56	mg/Kg	☼	06/06/17 07:01	06/06/17 18:21	1
Vanadium	**19**		1.7	0.082	mg/Kg	☼	06/06/17 07:01	06/06/17 18:21	1
Zinc	**52**		6.9	0.35	mg/Kg	☼	06/06/17 07:01	06/06/17 18:21	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**19**	**J**	20	6.4	ug/Kg	☼	06/06/17 11:48	06/06/17 15:09	1

Client Sample ID: SS025-SB05(2-4)
Lab Sample ID: 280-97803-12

Date Collected: 05/31/17 15:00
Matrix: Solid

Date Received: 06/01/17 08:50
Percent Solids: 90.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.4	U	4.3	0.49	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
1,1,1-Trichloroethane	1.4	U	4.3	0.45	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
1,1,2,2-Tetrachloroethane	1.4	U	4.3	0.53	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
1,1,2-Trichloroethane	2.8	U Q	4.3	0.76	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
1,1-Dichloroethane	0.69	U	4.3	0.18	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
1,1-Dichloroethene	1.4	U	4.3	0.51	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
1,1-Dichloropropene	1.4	U Q	4.3	0.47	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
1,2,3-Trichlorobenzene	1.4	U	4.3	0.65	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
1,2,3-Trichloropropane	2.8	U	4.3	0.70	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
1,2,4-Trichlorobenzene	1.4	U	4.3	0.63	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
1,2,4-Trimethylbenzene	1.4	U	4.3	0.50	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
1,2-Dibromo-3-Chloropropane	1.4	U	8.7	0.52	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
1,2-Dibromoethane	1.4	U	4.3	0.45	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
1,2-Dichlorobenzene	1.4	U	4.3	0.39	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
1,2-Dichloroethane	1.4	U Q	4.3	0.61	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
1,2-Dichloroethene, Total	1.4	U	4.3	0.34	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
1,2-Dichloropropane	1.4	U Q	4.3	0.48	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
1,3,5-Trimethylbenzene	1.4	U	4.3	0.49	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
1,3-Dichlorobenzene	1.4	U	4.3	0.42	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
1,3-Dichloropropane	1.4	U	4.3	0.44	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
1,4-Dichlorobenzene	1.4	U	4.3	0.68	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
2,2-Dichloropropane	1.4	U	4.3	0.38	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
2-Butanone (MEK)	5.6	U	17	1.6	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
2-Chlorotoluene	1.4	U	4.3	0.44	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
2-Hexanone	11	U	17	4.2	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
4-Chlorotoluene	1.4	U	4.3	0.68	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
4-Isopropyltoluene	1.4	U	4.3	0.43	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1

Client Sample ID: SS025-SB05(2-4)

Date Collected: 05/31/17 15:00
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-12

Matrix: Solid
Percent Solids: 90.2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	11	U Q	17	3.8	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Acetone	11	U	17	4.7	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Benzene	1.4	U Q	4.3	0.41	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Bromobenzene	1.4	U	4.3	0.43	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Bromochloromethane	0.69	U	4.3	0.26	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Bromodichloromethane	0.69	U Q	4.3	0.19	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Bromoform	0.69	U	4.3	0.20	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Bromomethane	1.4	U Q	8.7	0.43	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Carbon disulfide	1.4	U	4.3	0.36	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Carbon tetrachloride	1.4	U Q	4.3	0.55	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Chlorobenzene	1.4	U	4.3	0.47	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Chloroethane	2.8	U Q	8.7	0.77	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Chloroform	0.69	U	8.7	0.25	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Chloromethane	1.4	U	8.7	0.67	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
cis-1,2-Dichloroethene	1.4	U	4.3	0.49	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
cis-1,3-Dichloropropene	2.8	U Q	4.3	1.1	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Dibromochloromethane	1.4	U	4.3	0.49	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Dibromomethane	2.8	U Q	4.3	0.73	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Dichlorodifluoromethane	1.4	U	8.7	0.45	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Ethylbenzene	1.4	U	4.3	0.58	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Hexachlorobutadiene	1.4	U	4.3	0.48	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Isopropyl ether	6.9	U Q	43	2.4	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Isopropylbenzene	1.4	U	4.3	0.51	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
m&p-Xylene	2.8	U	2.8	0.90	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Methyl iodide	1.4	U	4.3	0.38	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Methyl tert-butyl ether	0.69	U	17	0.29	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Methylene Chloride	2.8	U	4.3	1.4	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Naphthalene	1.4	U	4.3	0.55	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
n-Butylbenzene	1.4	U	4.3	0.49	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
N-Propylbenzene	1.4	U	4.3	0.50	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
o-Xylene	1.4	U	4.3	0.53	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
sec-Butylbenzene	1.4	U	4.3	0.67	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Styrene	1.4	U	4.3	0.55	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
tert-Butylbenzene	1.4	U	4.3	0.43	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Tetrachloroethene	1.4	U	4.3	0.51	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Toluene	1.4	U Q	4.3	0.60	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
trans-1,2-Dichloroethene	0.69	U	4.3	0.34	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
trans-1,3-Dichloropropene	1.4	U Q	4.3	0.58	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Trichloroethene	0.69	U Q	4.3	0.20	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Trichlorofluoromethane	2.8	U	8.7	0.90	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Vinyl acetate	2.8	U	8.7	0.93	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Vinyl chloride	2.8	U	4.3	1.2	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1
Xylenes (total)	0.87	U	8.7	0.53	ug/Kg	☼	05/31/17 15:00	06/04/17 02:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*140*	*Q*	*71 - 136*	*05/31/17 15:00*	*06/04/17 02:00*	*1*
4-Bromofluorobenzene (Surr)	*89*		*79 - 119*	*05/31/17 15:00*	*06/04/17 02:00*	*1*
Dibromofluoromethane (Surr)	*119*		*78 - 119*	*05/31/17 15:00*	*06/04/17 02:00*	*1*
Toluene-d8 (Surr)	*96*		*85 - 116*	*05/31/17 15:00*	*06/04/17 02:00*	*1*

Client Sample ID: SS025-SB05(2-4)

Date Collected: 05/31/17 15:00
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-12

Matrix: Solid
Percent Solids: 90.2

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.51	U	5.1	0.26	ug/Kg	☼	06/05/17 08:51	06/08/17 15:50	1
2-Methylnaphthalene	0.68	U	5.1	0.31	ug/Kg	☼	06/05/17 08:51	06/08/17 15:50	1
Acenaphthene	0.27	U	5.1	0.16	ug/Kg	☼	06/05/17 08:51	06/08/17 15:50	1
Acenaphthylene	0.68	U	5.1	0.17	ug/Kg	☼	06/05/17 08:51	06/08/17 15:50	1
Anthracene	2.5	U	5.1	0.73	ug/Kg	☼	06/05/17 08:51	06/08/17 15:50	1
Benzo[a]anthracene	2.5	U	5.1	0.92	ug/Kg	☼	06/05/17 08:51	06/08/17 15:50	1
Benzo[a]pyrene	2.5	U	5.1	0.75	ug/Kg	☼	06/05/17 08:51	06/08/17 15:50	1
Benzo[b]fluoranthene	2.5	U	5.1	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 15:50	1
Benzo[g,h,i]perylene	**1.7**	**J**	5.1	1.1	ug/Kg	☼	06/05/17 08:51	06/08/17 15:50	1
Benzo[k]fluoranthene	2.5	U	5.1	1.0	ug/Kg	☼	06/05/17 08:51	06/08/17 15:50	1
Chrysene	**1.1**	**J**	5.1	1.0	ug/Kg	☼	06/05/17 08:51	06/08/17 15:50	1
Dibenz(a,h)anthracene	2.5	U	5.1	1.3	ug/Kg	☼	06/05/17 08:51	06/08/17 15:50	1
Fluoranthene	2.5	U	5.1	1.0	ug/Kg	☼	06/05/17 08:51	06/08/17 15:50	1
Fluorene	0.68	U	5.1	0.48	ug/Kg	☼	06/05/17 08:51	06/08/17 15:50	1
Indeno[1,2,3-cd]pyrene	**1.1**	**J**	5.1	1.1	ug/Kg	☼	06/05/17 08:51	06/08/17 15:50	1
Naphthalene	0.68	U	5.1	0.33	ug/Kg	☼	06/05/17 08:51	06/08/17 15:50	1
Phenanthrene	2.5	U	5.1	1.1	ug/Kg	☼	06/05/17 08:51	06/08/17 15:50	1
Pyrene	2.5	U	5.1	1.1	ug/Kg	☼	06/05/17 08:51	06/08/17 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*68*		*46 - 115*	*06/05/17 08:51*	*06/08/17 15:50*	*1*
Nitrobenzene-d5 (Surr)	*60*		*44 - 125*	*06/05/17 08:51*	*06/08/17 15:50*	*1*
Terphenyl-d14 (Surr)	*75*		*58 - 133*	*06/05/17 08:51*	*06/08/17 15:50*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.8	U	1.8	0.58	ug/Kg	☼	06/12/17 11:25	06/15/17 03:09	1
4,4'-DDE	0.72	U	1.8	0.25	ug/Kg	☼	06/12/17 11:25	06/15/17 03:09	1
4,4'-DDT	1.8	U	2.1	0.63	ug/Kg	☼	06/12/17 11:25	06/15/17 03:09	1
Aldrin	0.72	U	1.8	0.27	ug/Kg	☼	06/12/17 11:25	06/15/17 03:09	1
alpha-BHC	0.72	U	1.8	0.23	ug/Kg	☼	06/12/17 11:25	06/15/17 03:09	1
alpha-Chlordane	0.72	U	1.8	0.35	ug/Kg	☼	06/12/17 11:25	06/15/17 03:09	1
beta-BHC	1.8	U	1.8	0.71	ug/Kg	☼	06/12/17 11:25	06/15/17 03:09	1
delta-BHC	1.1	U	1.8	0.43	ug/Kg	☼	06/12/17 11:25	06/15/17 03:09	1
Dieldrin	0.72	U	1.8	0.22	ug/Kg	☼	06/12/17 11:25	06/15/17 03:09	1
Endosulfan I	0.72	U	1.8	0.19	ug/Kg	☼	06/12/17 11:25	06/15/17 03:09	1
Endosulfan II	0.72	U	1.8	0.31	ug/Kg	☼	06/12/17 11:25	06/15/17 03:09	1
Endosulfan sulfate	0.72	U	1.8	0.30	ug/Kg	☼	06/12/17 11:25	06/15/17 03:09	1
Endrin	0.72	U	1.8	0.33	ug/Kg	☼	06/12/17 11:25	06/15/17 03:09	1
Endrin aldehyde	0.72	U	1.8	0.18	ug/Kg	☼	06/12/17 11:25	06/15/17 03:09	1
gamma-BHC (Lindane)	1.1	U	1.8	0.50	ug/Kg	☼	06/12/17 11:25	06/15/17 03:09	1
gamma-Chlordane	0.72	U	1.8	0.28	ug/Kg	☼	06/12/17 11:25	06/15/17 03:09	1
Heptachlor	0.72	U	1.8	0.23	ug/Kg	☼	06/12/17 11:25	06/15/17 03:09	1
Heptachlor epoxide	1.1	U	1.8	0.46	ug/Kg	☼	06/12/17 11:25	06/15/17 03:09	1
Methoxychlor	1.1	U	3.5	0.48	ug/Kg	☼	06/12/17 11:25	06/15/17 03:09	1
Toxaphene	35	U	180	17	ug/Kg	☼	06/12/17 11:25	06/15/17 03:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*80*		*63 - 121*	*06/12/17 11:25*	*06/15/17 03:09*	*1*
Tetrachloro-m-xylene (Surr)	*81*		*42 - 129*	*06/12/17 11:25*	*06/15/17 03:09*	*1*

Client Sample ID: SS025-SB05(2-4)
Lab Sample ID: 280-97803-12

Date Collected: 05/31/17 15:00
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 90.2

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	16	U	35	5.4	ug/Kg	☼	06/12/17 11:25	06/17/17 17:49	1
Arochlor 1221	18	U	50	17	ug/Kg	☼	06/12/17 11:25	06/17/17 17:49	1
Arochlor 1232	16	U	35	5.5	ug/Kg	☼	06/12/17 11:25	06/17/17 17:49	1
Arochlor 1242	35	U	35	9.8	ug/Kg	☼	06/12/17 11:25	06/17/17 17:49	1
Arochlor 1248	21	U	35	6.0	ug/Kg	☼	06/12/17 11:25	06/17/17 17:49	1
Arochlor 1254	18	U	35	5.9	ug/Kg	☼	06/12/17 11:25	06/17/17 17:49	1
Arochlor 1260	8.2	U	35	2.8	ug/Kg	☼	06/12/17 11:25	06/17/17 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*89*		*59 - 130*	*06/12/17 11:25*	*06/17/17 17:49*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**10000**		53	1.7	mg/Kg	☼	06/06/17 07:01	06/07/17 12:53	1
Antimony	1.6	U	2.1	0.78	mg/Kg	☼	06/06/17 07:01	06/06/17 18:24	1
Arsenic	**6.9**		2.7	0.71	mg/Kg	☼	06/06/17 07:01	06/06/17 18:24	1
Barium	**51**		2.1	0.11	mg/Kg	☼	06/06/17 07:01	06/06/17 18:24	1
Beryllium	**0.48**	**J**	0.53	0.035	mg/Kg	☼	06/06/17 07:01	06/06/17 18:24	1
Cadmium	**0.13**	**J**	0.53	0.044	mg/Kg	☼	06/06/17 07:01	06/06/17 18:24	1
Calcium	**1800**		110	15	mg/Kg	☼	06/06/17 07:01	06/06/17 18:24	1
Chromium	**12**		3.7	0.062	mg/Kg	☼	06/06/17 07:01	06/06/17 18:24	1
Cobalt	**7.6**		1.1	0.11	mg/Kg	☼	06/06/17 07:01	06/06/17 18:24	1
Copper	**52**		5.3	0.23	mg/Kg	☼	06/06/17 07:01	06/06/17 18:24	1
Iron	**27000**		85	4.0	mg/Kg	☼	06/06/17 07:01	06/06/17 18:24	1
Lead	**5.5**		0.96	0.33	mg/Kg	☼	06/06/17 07:01	06/06/17 18:24	1
Magnesium	**4000**		32	3.9	mg/Kg	☼	06/06/17 07:01	06/06/17 18:24	1
Manganese	**570**		4.8	0.11	mg/Kg	☼	06/06/17 07:01	06/06/17 18:24	1
Nickel	**17**		4.3	0.14	mg/Kg	☼	06/06/17 07:01	06/06/17 18:24	1
Potassium	**1000**		320	44	mg/Kg	☼	06/06/17 07:01	06/06/17 18:24	1
Selenium	3.2	U	3.2	0.92	mg/Kg	☼	06/06/17 07:01	06/07/17 12:53	1
Silver	0.64	U	1.6	0.17	mg/Kg	☼	06/06/17 07:01	06/06/17 18:24	1
Sodium	210	U	530	63	mg/Kg	☼	06/06/17 07:01	06/07/17 12:53	1
Thallium	2.7	U	3.2	0.69	mg/Kg	☼	06/06/17 07:01	06/06/17 18:24	1
Vanadium	**18**		2.1	0.10	mg/Kg	☼	06/06/17 07:01	06/06/17 18:24	1
Zinc	**60**		8.5	0.42	mg/Kg	☼	06/06/17 07:01	06/06/17 18:24	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**23**		19	6.1	ug/Kg	☼	06/06/17 11:48	06/06/17 15:11	1

Client Sample ID: SS025-SS06
Lab Sample ID: 280-97803-13

Date Collected: 05/31/17 15:40
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 87.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.5	U	4.6	0.52	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
1,1,1-Trichloroethane	1.5	U	4.6	0.48	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
1,1,2,2-Tetrachloroethane	1.5	U	4.6	0.57	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
1,1,2-Trichloroethane	3.0	U Q	4.6	0.82	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1

Client Sample ID: SS025-SS06

Date Collected: 05/31/17 15:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-13

Matrix: Solid
Percent Solids: 87.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.74	U	4.6	0.20	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
1,1-Dichloroethene	1.5	U	4.6	0.55	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
1,1-Dichloropropene	1.5	U Q	4.6	0.50	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
1,2,3-Trichlorobenzene	1.5	U	4.6	0.70	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
1,2,3-Trichloropropane	3.0	U	4.6	0.75	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
1,2,4-Trichlorobenzene	1.5	U	4.6	0.68	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
1,2,4-Trimethylbenzene	1.5	U	4.6	0.54	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
1,2-Dibromo-3-Chloropropane	1.5	U	9.3	0.56	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
1,2-Dibromoethane	1.5	U	4.6	0.48	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
1,2-Dichlorobenzene	1.5	U	4.6	0.42	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
1,2-Dichloroethane	1.5	U Q	4.6	0.65	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
1,2-Dichloroethene, Total	1.5	U	4.6	0.36	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
1,2-Dichloropropane	1.5	U Q	4.6	0.51	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
1,3,5-Trimethylbenzene	1.5	U	4.6	0.53	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
1,3-Dichlorobenzene	1.5	U	4.6	0.45	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
1,3-Dichloropropane	1.5	U	4.6	0.47	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
1,4-Dichlorobenzene	1.5	U	4.6	0.72	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
2,2-Dichloropropane	1.5	U	4.6	0.41	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
2-Butanone (MEK)	5.9	U	19	1.7	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
2-Chlorotoluene	1.5	U	4.6	0.47	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
2-Hexanone	12	U	19	4.5	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
4-Chlorotoluene	1.5	U	4.6	0.72	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
4-Isopropyltoluene	1.5	U	4.6	0.46	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
4-Methyl-2-pentanone (MIBK)	12	U Q	19	4.1	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Acetone	**7.6**	**J**	19	5.0	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Benzene	1.5	U Q	4.6	0.44	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Bromobenzene	1.5	U	4.6	0.46	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Bromochloromethane	0.74	U	4.6	0.28	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Bromodichloromethane	0.74	U Q	4.6	0.20	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Bromoform	0.74	U	4.6	0.21	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Bromomethane	1.5	U Q	9.3	0.46	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Carbon disulfide	1.5	U	4.6	0.39	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Carbon tetrachloride	1.5	U Q	4.6	0.59	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Chlorobenzene	1.5	U	4.6	0.50	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Chloroethane	3.0	U	9.3	0.83	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Chloroform	0.74	U	9.3	0.27	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Chloromethane	1.5	U	9.3	0.72	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
cis-1,2-Dichloroethene	1.5	U	4.6	0.52	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
cis-1,3-Dichloropropene	3.0	U Q	4.6	1.2	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Dibromochloromethane	1.5	U	4.6	0.53	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Dibromomethane	3.0	U Q	4.6	0.78	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Dichlorodifluoromethane	1.5	U	9.3	0.48	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Ethylbenzene	1.5	U	4.6	0.62	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Hexachlorobutadiene	1.5	U	4.6	0.51	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Isopropyl ether	7.4	U Q	46	2.5	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Isopropylbenzene	1.5	U	4.6	0.55	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
m&p-Xylene	3.0	U	3.0	0.97	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Methyl iodide	1.5	U	4.6	0.41	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Methyl tert-butyl ether	0.74	U Q	19	0.32	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1

Client Sample ID: SS025-SS06

Date Collected: 05/31/17 15:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-13

Matrix: Solid
Percent Solids: 87.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	3.0	U	4.6	1.5	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Naphthalene	1.5	U	4.6	0.59	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
n-Butylbenzene	1.5	U	4.6	0.52	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
N-Propylbenzene	1.5	U	4.6	0.54	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
o-Xylene	1.5	U	4.6	0.57	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
sec-Butylbenzene	1.5	U	4.6	0.72	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Styrene	1.5	U	4.6	0.59	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
tert-Butylbenzene	1.5	U	4.6	0.46	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Tetrachloroethene	1.5	U	4.6	0.55	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Toluene	1.5	U Q	4.6	0.64	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
trans-1,2-Dichloroethene	0.74	U	4.6	0.36	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
trans-1,3-Dichloropropene	1.5	U Q	4.6	0.62	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Trichloroethene	0.74	U Q	4.6	0.21	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Trichlorofluoromethane	3.0	U	9.3	0.97	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Vinyl acetate	3.0	U Q	9.3	0.99	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Vinyl chloride	3.0	U	4.6	1.2	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1
Xylenes (total)	0.93	U	9.3	0.57	ug/Kg	☼	05/31/17 15:40	06/05/17 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*138*	*Q*	*71 - 136*	*05/31/17 15:40*	*06/05/17 21:50*	*1*
4-Bromofluorobenzene (Surr)	*80*		*79 - 119*	*05/31/17 15:40*	*06/05/17 21:50*	*1*
Dibromofluoromethane (Surr)	*114*		*78 - 119*	*05/31/17 15:40*	*06/05/17 21:50*	*1*
Toluene-d8 (Surr)	*87*		*85 - 116*	*05/31/17 15:40*	*06/05/17 21:50*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**1.1**	**J**	5.5	0.29	ug/Kg	☼	06/05/17 08:51	06/08/17 16:18	1
2-Methylnaphthalene	**1.4**	**J**	5.5	0.34	ug/Kg	☼	06/05/17 08:51	06/08/17 16:18	1
Acenaphthene	**1.7**	**J**	5.5	0.18	ug/Kg	☼	06/05/17 08:51	06/08/17 16:18	1
Acenaphthylene	**4.9**	**J**	5.5	0.19	ug/Kg	☼	06/05/17 08:51	06/08/17 16:18	1
Anthracene	**5.3**	**J**	5.5	0.79	ug/Kg	☼	06/05/17 08:51	06/08/17 16:18	1
Benzo[a]anthracene	**26**		5.5	0.99	ug/Kg	☼	06/05/17 08:51	06/08/17 16:18	1
Benzo[a]pyrene	**29**		5.5	0.81	ug/Kg	☼	06/05/17 08:51	06/08/17 16:18	1
Benzo[b]fluoranthene	**40**		5.5	1.3	ug/Kg	☼	06/05/17 08:51	06/08/17 16:18	1
Benzo[g,h,i]perylene	**16**		5.5	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 16:18	1
Benzo[k]fluoranthene	**14**		5.5	1.1	ug/Kg	☼	06/05/17 08:51	06/08/17 16:18	1
Chrysene	**31**		5.5	1.1	ug/Kg	☼	06/05/17 08:51	06/08/17 16:18	1
Dibenz(a,h)anthracene	**5.3**	**J**	5.5	1.4	ug/Kg	☼	06/05/17 08:51	06/08/17 16:18	1
Fluoranthene	**51**		5.5	1.1	ug/Kg	☼	06/05/17 08:51	06/08/17 16:18	1
Fluorene	**2.1**	**J**	5.5	0.52	ug/Kg	☼	06/05/17 08:51	06/08/17 16:18	1
Indeno[1,2,3-cd]pyrene	**19**		5.5	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 16:18	1
Naphthalene	0.73	U	5.5	0.36	ug/Kg	☼	06/05/17 08:51	06/08/17 16:18	1
Phenanthrene	**22**		5.5	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 16:18	1
Pyrene	**46**		5.5	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*64*		*46 - 115*	*06/05/17 08:51*	*06/08/17 16:18*	*1*
Nitrobenzene-d5 (Surr)	*58*		*44 - 125*	*06/05/17 08:51*	*06/08/17 16:18*	*1*
Terphenyl-d14 (Surr)	*72*		*58 - 133*	*06/05/17 08:51*	*06/08/17 16:18*	*1*

Client Sample ID: SS025-SS06

Date Collected: 05/31/17 15:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-13

Matrix: Solid
Percent Solids: 87.1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.8	U	1.8	0.59	ug/Kg	☼	06/12/17 11:25	06/15/17 07:56	1
4,4'-DDE	**1.2**	**J**	1.8	0.26	ug/Kg	☼	06/12/17 11:25	06/15/17 07:56	1
4,4'-DDT	**1.2**	**J**	2.2	0.64	ug/Kg	☼	06/12/17 11:25	06/15/17 07:56	1
Aldrin	0.72	U	1.8	0.27	ug/Kg	☼	06/12/17 11:25	06/15/17 07:56	1
alpha-BHC	0.72	U	1.8	0.23	ug/Kg	☼	06/12/17 11:25	06/15/17 07:56	1
alpha-Chlordane	0.72	U	1.8	0.35	ug/Kg	☼	06/12/17 11:25	06/15/17 07:56	1
beta-BHC	1.8	U	1.8	0.71	ug/Kg	☼	06/12/17 11:25	06/15/17 07:56	1
delta-BHC	1.1	U	1.8	0.43	ug/Kg	☼	06/12/17 11:25	06/15/17 07:56	1
Dieldrin	0.72	U	1.8	0.23	ug/Kg	☼	06/12/17 11:25	06/15/17 07:56	1
Endosulfan I	0.72	U	1.8	0.19	ug/Kg	☼	06/12/17 11:25	06/15/17 07:56	1
Endosulfan II	0.72	U	1.8	0.31	ug/Kg	☼	06/12/17 11:25	06/15/17 07:56	1
Endosulfan sulfate	0.72	U	1.8	0.30	ug/Kg	☼	06/12/17 11:25	06/15/17 07:56	1
Endrin	0.72	U	1.8	0.33	ug/Kg	☼	06/12/17 11:25	06/15/17 07:56	1
Endrin aldehyde	0.72	U	1.8	0.18	ug/Kg	☼	06/12/17 11:25	06/15/17 07:56	1
gamma-BHC (Lindane)	1.1	U	1.8	0.50	ug/Kg	☼	06/12/17 11:25	06/15/17 07:56	1
gamma-Chlordane	0.72	U	1.8	0.29	ug/Kg	☼	06/12/17 11:25	06/15/17 07:56	1
Heptachlor	0.72	U	1.8	0.23	ug/Kg	☼	06/12/17 11:25	06/15/17 07:56	1
Heptachlor epoxide	1.1	U	1.8	0.46	ug/Kg	☼	06/12/17 11:25	06/15/17 07:56	1
Methoxychlor	1.1	U	3.6	0.48	ug/Kg	☼	06/12/17 11:25	06/15/17 07:56	1
Toxaphene	36	U	180	17	ug/Kg	☼	06/12/17 11:25	06/15/17 07:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*72*		*63 - 121*	*06/12/17 11:25*	*06/15/17 07:56*	*1*
Tetrachloro-m-xylene (Surr)	*69*		*42 - 129*	*06/12/17 11:25*	*06/15/17 07:56*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	16	U	36	5.5	ug/Kg	☼	06/12/17 11:25	06/17/17 18:11	1
Arochlor 1221	18	U	51	17	ug/Kg	☼	06/12/17 11:25	06/17/17 18:11	1
Arochlor 1232	16	U	36	5.5	ug/Kg	☼	06/12/17 11:25	06/17/17 18:11	1
Arochlor 1242	36	U	36	9.8	ug/Kg	☼	06/12/17 11:25	06/17/17 18:11	1
Arochlor 1248	22	U	36	6.0	ug/Kg	☼	06/12/17 11:25	06/17/17 18:11	1
Arochlor 1254	18	U	36	5.9	ug/Kg	☼	06/12/17 11:25	06/17/17 18:11	1
Arochlor 1260	8.3	U	36	2.9	ug/Kg	☼	06/12/17 11:25	06/17/17 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*81*		*59 - 130*	*06/12/17 11:25*	*06/17/17 18:11*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7800**		49	1.5	mg/Kg	☼	06/06/17 07:01	06/07/17 12:56	1
Antimony	1.5	U	2.0	0.72	mg/Kg	☼	06/06/17 07:01	06/06/17 18:26	1
Arsenic	**4.7**		2.4	0.65	mg/Kg	☼	06/06/17 07:01	06/06/17 18:26	1
Barium	**32**		2.0	0.10	mg/Kg	☼	06/06/17 07:01	06/06/17 18:26	1
Beryllium	**0.30**	**J**	0.49	0.032	mg/Kg	☼	06/06/17 07:01	06/06/17 18:26	1
Cadmium	**0.17**	**J**	0.49	0.040	mg/Kg	☼	06/06/17 07:01	06/06/17 18:26	1
Calcium	**1300**		98	14	mg/Kg	☼	06/06/17 07:01	06/06/17 18:26	1
Chromium	**7.4**		3.4	0.057	mg/Kg	☼	06/06/17 07:01	06/06/17 18:26	1
Cobalt	**4.4**		0.98	0.098	mg/Kg	☼	06/06/17 07:01	06/06/17 18:26	1
Copper	**14**		4.9	0.21	mg/Kg	☼	06/06/17 07:01	06/06/17 18:26	1

Client Sample ID: SS025-SS06

Date Collected: 05/31/17 15:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-13

Matrix: Solid
Percent Solids: 87.1

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**13000**		78	3.7	mg/Kg	☼	06/06/17 07:01	06/06/17 18:26	1
Lead	**7.8**		0.88	0.30	mg/Kg	☼	06/06/17 07:01	06/06/17 18:26	1
Magnesium	**2000**		29	3.6	mg/Kg	☼	06/06/17 07:01	06/06/17 18:26	1
Manganese	**640**		4.4	0.098	mg/Kg	☼	06/06/17 07:01	06/06/17 18:26	1
Nickel	**9.2**		3.9	0.13	mg/Kg	☼	06/06/17 07:01	06/06/17 18:26	1
Potassium	**710**		290	40	mg/Kg	☼	06/06/17 07:01	06/06/17 18:26	1
Selenium	**0.87**	**J**	2.9	0.84	mg/Kg	☼	06/06/17 07:01	06/07/17 12:56	1
Silver	0.59	U	1.5	0.16	mg/Kg	☼	06/06/17 07:01	06/06/17 18:26	1
Sodium	200	U	490	58	mg/Kg	☼	06/06/17 07:01	06/07/17 12:56	1
Thallium	2.4	U	2.9	0.64	mg/Kg	☼	06/06/17 07:01	06/06/17 18:26	1
Vanadium	**13**		2.0	0.092	mg/Kg	☼	06/06/17 07:01	06/06/17 18:26	1
Zinc	**37**		7.8	0.39	mg/Kg	☼	06/06/17 07:01	06/06/17 18:26	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**33**		22	7.1	ug/Kg	☼	06/06/17 11:48	06/06/17 15:13	1

Client Sample ID: SS025-SS06-a

Date Collected: 05/31/17 15:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-14

Matrix: Solid
Percent Solids: 86.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.4	U	4.4	0.49	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
1,1,1-Trichloroethane	1.4	U	4.4	0.45	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
1,1,2,2-Tetrachloroethane	1.4	U	4.4	0.53	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
1,1,2-Trichloroethane	2.8	U Q	4.4	0.77	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
1,1-Dichloroethane	0.70	U	4.4	0.18	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
1,1-Dichloroethene	1.4	U	4.4	0.51	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
1,1-Dichloropropene	1.4	U Q	4.4	0.47	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
1,2,3-Trichlorobenzene	1.4	U	4.4	0.65	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
1,2,3-Trichloropropane	2.8	U	4.4	0.71	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
1,2,4-Trichlorobenzene	1.4	U	4.4	0.64	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
1,2,4-Trimethylbenzene	1.4	U	4.4	0.51	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
1,2-Dibromo-3-Chloropropane	1.4	U	8.7	0.52	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
1,2-Dibromoethane	1.4	U	4.4	0.45	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
1,2-Dichlorobenzene	1.4	U	4.4	0.39	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
1,2-Dichloroethane	1.4	U Q	4.4	0.61	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
1,2-Dichloroethene, Total	1.4	U	4.4	0.34	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
1,2-Dichloropropane	1.4	U Q	4.4	0.48	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
1,3,5-Trimethylbenzene	1.4	U	4.4	0.50	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
1,3-Dichlorobenzene	1.4	U	4.4	0.42	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
1,3-Dichloropropane	1.4	U	4.4	0.44	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
1,4-Dichlorobenzene	1.4	U	4.4	0.68	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
2,2-Dichloropropane	1.4	U	4.4	0.38	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
2-Butanone (MEK)	5.6	U	17	1.6	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
2-Chlorotoluene	1.4	U	4.4	0.44	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
2-Hexanone	11	U	17	4.3	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
4-Chlorotoluene	1.4	U	4.4	0.68	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
4-Isopropyltoluene	1.4	U	4.4	0.43	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1

Client Sample ID: SS025-SS06-a

Date Collected: 05/31/17 15:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-14

Matrix: Solid
Percent Solids: 86.8

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	11	U Q	17	3.8	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Acetone	11	U	17	4.7	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Benzene	1.4	U Q	4.4	0.41	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Bromobenzene	1.4	U	4.4	0.43	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Bromochloromethane	0.70	U	4.4	0.26	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Bromodichloromethane	0.70	U Q	4.4	0.19	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Bromoform	0.70	U	4.4	0.20	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Bromomethane	1.4	U Q	8.7	0.44	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Carbon disulfide	1.4	U	4.4	0.37	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Carbon tetrachloride	1.4	U Q	4.4	0.55	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Chlorobenzene	1.4	U	4.4	0.47	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Chloroethane	2.8	U	8.7	0.78	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Chloroform	0.70	U	8.7	0.25	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Chloromethane	1.4	U	8.7	0.67	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
cis-1,2-Dichloroethene	1.4	U	4.4	0.49	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
cis-1,3-Dichloropropene	2.8	U Q	4.4	1.1	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Dibromochloromethane	1.4	U	4.4	0.50	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Dibromomethane	2.8	U Q	4.4	0.73	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Dichlorodifluoromethane	1.4	U	8.7	0.45	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Ethylbenzene	1.4	U	4.4	0.58	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Hexachlorobutadiene	1.4	U	4.4	0.48	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Isopropyl ether	7.0	U Q	44	2.4	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Isopropylbenzene	1.4	U	4.4	0.51	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
m&p-Xylene	2.8	U	2.8	0.91	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Methyl iodide	1.4	U	4.4	0.38	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Methyl tert-butyl ether	0.70	U Q	17	0.30	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Methylene Chloride	2.8	U	4.4	1.4	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Naphthalene	1.4	U	4.4	0.55	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
n-Butylbenzene	1.4	U	4.4	0.49	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
N-Propylbenzene	1.4	U	4.4	0.51	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
o-Xylene	1.4	U	4.4	0.53	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
sec-Butylbenzene	1.4	U	4.4	0.67	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Styrene	1.4	U	4.4	0.55	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
tert-Butylbenzene	1.4	U	4.4	0.44	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Tetrachloroethene	1.4	U	4.4	0.51	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Toluene	1.4	U Q	4.4	0.60	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
trans-1,2-Dichloroethene	0.70	U	4.4	0.34	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
trans-1,3-Dichloropropene	1.4	U Q	4.4	0.58	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Trichloroethene	0.70	U Q	4.4	0.20	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Trichlorofluoromethane	2.8	U	8.7	0.91	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Vinyl acetate	2.8	U Q	8.7	0.93	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Vinyl chloride	2.8	U	4.4	1.2	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1
Xylenes (total)	0.87	U	8.7	0.53	ug/Kg	☼	05/31/17 15:40	06/05/17 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*145*	*Q*	*71 - 136*	*05/31/17 15:40*	*06/05/17 22:10*	*1*
4-Bromofluorobenzene (Surr)	*81*		*79 - 119*	*05/31/17 15:40*	*06/05/17 22:10*	*1*
Dibromofluoromethane (Surr)	*119*		*78 - 119*	*05/31/17 15:40*	*06/05/17 22:10*	*1*
Toluene-d8 (Surr)	*92*		*85 - 116*	*05/31/17 15:40*	*06/05/17 22:10*	*1*

Client Sample ID: SS025-SS06-a

Date Collected: 05/31/17 15:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-14

Matrix: Solid
Percent Solids: 86.8

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.55	U	5.5	0.29	ug/Kg	☼	06/05/17 08:51	06/08/17 16:45	1
2-Methylnaphthalene	0.73	U	5.5	0.34	ug/Kg	☼	06/05/17 08:51	06/08/17 16:45	1
Acenaphthene	0.29	U	5.5	0.18	ug/Kg	☼	06/05/17 08:51	06/08/17 16:45	1
Acenaphthylene	0.73	U	5.5	0.19	ug/Kg	☼	06/05/17 08:51	06/08/17 16:45	1
Anthracene	**2.7**	**J**	5.5	0.79	ug/Kg	☼	06/05/17 08:51	06/08/17 16:45	1
Benzo[a]anthracene	**53**		5.5	0.99	ug/Kg	☼	06/05/17 08:51	06/08/17 16:45	1
Benzo[a]pyrene	**81**		5.5	0.81	ug/Kg	☼	06/05/17 08:51	06/08/17 16:45	1
Benzo[b]fluoranthene	**100**		5.5	1.3	ug/Kg	☼	06/05/17 08:51	06/08/17 16:45	1
Benzo[g,h,i]perylene	**48**		5.5	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 16:45	1
Benzo[k]fluoranthene	**32**		5.5	1.1	ug/Kg	☼	06/05/17 08:51	06/08/17 16:45	1
Chrysene	**66**		5.5	1.1	ug/Kg	☼	06/05/17 08:51	06/08/17 16:45	1
Dibenz(a,h)anthracene	**14**		5.5	1.4	ug/Kg	☼	06/05/17 08:51	06/08/17 16:45	1
Fluoranthene	**62**		5.5	1.1	ug/Kg	☼	06/05/17 08:51	06/08/17 16:45	1
Fluorene	0.73	U	5.5	0.52	ug/Kg	☼	06/05/17 08:51	06/08/17 16:45	1
Indeno[1,2,3-cd]pyrene	**55**		5.5	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 16:45	1
Naphthalene	0.73	U	5.5	0.36	ug/Kg	☼	06/05/17 08:51	06/08/17 16:45	1
Phenanthrene	**13**		5.5	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 16:45	1
Pyrene	**61**		5.5	1.2	ug/Kg	☼	06/05/17 08:51	06/08/17 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*46 - 115*	*06/05/17 08:51*	*06/08/17 16:45*	*1*
Nitrobenzene-d5 (Surr)	*57*		*44 - 125*	*06/05/17 08:51*	*06/08/17 16:45*	*1*
Terphenyl-d14 (Surr)	*72*		*58 - 133*	*06/05/17 08:51*	*06/08/17 16:45*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.9	U Q	1.9	0.61	ug/Kg	☼	06/14/17 09:49	06/20/17 16:06	1
4,4'-DDE	**1.0**	**J Q**	1.9	0.27	ug/Kg	☼	06/14/17 09:49	06/20/17 16:06	1
4,4'-DDT	**1.1**	**J Q**	2.2	0.66	ug/Kg	☼	06/14/17 09:49	06/20/17 16:06	1
Aldrin	0.75	U Q	1.9	0.28	ug/Kg	☼	06/14/17 09:49	06/20/17 16:06	1
alpha-BHC	0.75	U Q	1.9	0.24	ug/Kg	☼	06/14/17 09:49	06/20/17 16:06	1
alpha-Chlordane	0.75	U Q	1.9	0.36	ug/Kg	☼	06/14/17 09:49	06/20/17 16:06	1
beta-BHC	1.9	U Q	1.9	0.75	ug/Kg	☼	06/14/17 09:49	06/20/17 16:06	1
delta-BHC	1.1	U Q	1.9	0.45	ug/Kg	☼	06/14/17 09:49	06/20/17 16:06	1
Dieldrin	0.75	U Q	1.9	0.24	ug/Kg	☼	06/14/17 09:49	06/20/17 16:06	1
Endosulfan I	0.75	U Q	1.9	0.20	ug/Kg	☼	06/14/17 09:49	06/20/17 16:06	1
Endosulfan II	0.75	U Q	1.9	0.32	ug/Kg	☼	06/14/17 09:49	06/20/17 16:06	1
Endosulfan sulfate	0.75	U Q	1.9	0.31	ug/Kg	☼	06/14/17 09:49	06/20/17 16:06	1
Endrin	0.75	U Q	1.9	0.34	ug/Kg	☼	06/14/17 09:49	06/20/17 16:06	1
Endrin aldehyde	0.75	U Q	1.9	0.19	ug/Kg	☼	06/14/17 09:49	06/20/17 16:06	1
gamma-BHC (Lindane)	1.1	U Q	1.9	0.52	ug/Kg	☼	06/14/17 09:49	06/20/17 16:06	1
gamma-Chlordane	0.75	U Q	1.9	0.30	ug/Kg	☼	06/14/17 09:49	06/20/17 16:06	1
Heptachlor	0.75	U Q	1.9	0.24	ug/Kg	☼	06/14/17 09:49	06/20/17 16:06	1
Heptachlor epoxide	1.1	U Q	1.9	0.48	ug/Kg	☼	06/14/17 09:49	06/20/17 16:06	1
Methoxychlor	1.1	U Q	3.7	0.51	ug/Kg	☼	06/14/17 09:49	06/20/17 16:06	1
Toxaphene	37	U Q	190	18	ug/Kg	☼	06/14/17 09:49	06/20/17 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*83*		*63 - 121*	*06/14/17 09:49*	*06/20/17 16:06*	*1*
Tetrachloro-m-xylene (Surr)	*58*		*42 - 129*	*06/14/17 09:49*	*06/20/17 16:06*	*1*

Client Sample ID: SS025-SS06-a

Date Collected: 05/31/17 15:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-14

Matrix: Solid
Percent Solids: 86.8

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	17	U	37	5.7	ug/Kg	☼	06/14/17 09:49	06/21/17 15:41	1
Arochlor 1221	19	U	53	18	ug/Kg	☼	06/14/17 09:49	06/21/17 15:41	1
Arochlor 1232	17	U	37	5.7	ug/Kg	☼	06/14/17 09:49	06/21/17 15:41	1
Arochlor 1242	37	U	37	10	ug/Kg	☼	06/14/17 09:49	06/21/17 15:41	1
Arochlor 1248	22	U	37	6.3	ug/Kg	☼	06/14/17 09:49	06/21/17 15:41	1
Arochlor 1254	19	U	37	6.2	ug/Kg	☼	06/14/17 09:49	06/21/17 15:41	1
Arochlor 1260	8.6	U	37	3.0	ug/Kg	☼	06/14/17 09:49	06/21/17 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*67*		*59 - 130*	*06/14/17 09:49*	*06/21/17 15:41*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7500**		52	1.6	mg/Kg	☼	06/06/17 07:01	06/07/17 12:58	1
Antimony	1.6	U	2.1	0.77	mg/Kg	☼	06/06/17 07:01	06/06/17 18:29	1
Arsenic	**4.4**		2.6	0.70	mg/Kg	☼	06/06/17 07:01	06/06/17 18:29	1
Barium	**33**		2.1	0.11	mg/Kg	☼	06/06/17 07:01	06/06/17 18:29	1
Beryllium	**0.31**	**J**	0.52	0.035	mg/Kg	☼	06/06/17 07:01	06/06/17 18:29	1
Cadmium	**0.18**	**J**	0.52	0.043	mg/Kg	☼	06/06/17 07:01	06/06/17 18:29	1
Calcium	**1400**		100	15	mg/Kg	☼	06/06/17 07:01	06/06/17 18:29	1
Chromium	**7.6**		3.7	0.061	mg/Kg	☼	06/06/17 07:01	06/06/17 18:29	1
Cobalt	**4.3**		1.0	0.10	mg/Kg	☼	06/06/17 07:01	06/06/17 18:29	1
Copper	**15**		5.2	0.23	mg/Kg	☼	06/06/17 07:01	06/06/17 18:29	1
Iron	**13000**		84	4.0	mg/Kg	☼	06/06/17 07:01	06/06/17 18:29	1
Lead	**8.2**		0.94	0.32	mg/Kg	☼	06/06/17 07:01	06/06/17 18:29	1
Magnesium	**2000**		31	3.9	mg/Kg	☼	06/06/17 07:01	06/06/17 18:29	1
Manganese	**620**		4.7	0.10	mg/Kg	☼	06/06/17 07:01	06/06/17 18:29	1
Nickel	**8.9**		4.2	0.14	mg/Kg	☼	06/06/17 07:01	06/06/17 18:29	1
Potassium	**720**		310	43	mg/Kg	☼	06/06/17 07:01	06/06/17 18:29	1
Selenium	3.1	U	3.1	0.90	mg/Kg	☼	06/06/17 07:01	06/07/17 12:58	1
Silver	0.63	U	1.6	0.17	mg/Kg	☼	06/06/17 07:01	06/06/17 18:29	1
Sodium	210	U	520	62	mg/Kg	☼	06/06/17 07:01	06/07/17 12:58	1
Thallium	2.6	U	3.1	0.68	mg/Kg	☼	06/06/17 07:01	06/06/17 18:29	1
Vanadium	**13**		2.1	0.098	mg/Kg	☼	06/06/17 07:01	06/06/17 18:29	1
Zinc	**36**		8.4	0.42	mg/Kg	☼	06/06/17 07:01	06/06/17 18:29	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**30**		21	7.0	ug/Kg	☼	06/06/17 11:48	06/06/17 15:16	1

Default Detection Limits

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97803-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Prep: 5035

Analyte	LOQ	DL	Units	Method
1,1,1,2-Tetrachloroethane	5.0	0.56	ug/Kg	8260B
1,1,1-Trichloroethane	5.0	0.52	ug/Kg	8260B
1,1,2,2-Tetrachloroethane	5.0	0.61	ug/Kg	8260B
1,1,2-Trichloroethane	5.0	0.88	ug/Kg	8260B
1,1-Dichloroethane	5.0	0.21	ug/Kg	8260B
1,1-Dichloroethene	5.0	0.59	ug/Kg	8260B
1,1-Dichloropropene	5.0	0.54	ug/Kg	8260B
1,2,3-Trichlorobenzene	5.0	0.75	ug/Kg	8260B
1,2,3-Trichloropropane	5.0	0.81	ug/Kg	8260B
1,2,4-Trichlorobenzene	5.0	0.73	ug/Kg	8260B
1,2,4-Trimethylbenzene	5.0	0.58	ug/Kg	8260B
1,2-Dibromo-3-Chloropropane	10	0.60	ug/Kg	8260B
1,2-Dibromoethane	5.0	0.52	ug/Kg	8260B
1,2-Dichlorobenzene	5.0	0.45	ug/Kg	8260B
1,2-Dichloroethane	5.0	0.70	ug/Kg	8260B
1,2-Dichloroethene, Total	5.0	0.39	ug/Kg	8260B
1,2-Dichloropropane	5.0	0.55	ug/Kg	8260B
1,3,5-Trimethylbenzene	5.0	0.57	ug/Kg	8260B
1,3-Dichlorobenzene	5.0	0.48	ug/Kg	8260B
1,3-Dichloropropane	5.0	0.51	ug/Kg	8260B
1,4-Dichlorobenzene	5.0	0.78	ug/Kg	8260B
2,2-Dichloropropane	5.0	0.44	ug/Kg	8260B
2-Butanone (MEK)	20	1.8	ug/Kg	8260B
2-Chlorotoluene	5.0	0.51	ug/Kg	8260B
2-Hexanone	20	4.9	ug/Kg	8260B
4-Chlorotoluene	5.0	0.78	ug/Kg	8260B
4-Isopropyltoluene	5.0	0.49	ug/Kg	8260B
4-Methyl-2-pentanone (MIBK)	20	4.4	ug/Kg	8260B
Acetone	20	5.4	ug/Kg	8260B
Benzene	5.0	0.47	ug/Kg	8260B
Bromobenzene	5.0	0.49	ug/Kg	8260B
Bromochloromethane	5.0	0.30	ug/Kg	8260B
Bromodichloromethane	5.0	0.22	ug/Kg	8260B
Bromoform	5.0	0.23	ug/Kg	8260B
Bromomethane	10	0.50	ug/Kg	8260B
Carbon disulfide	5.0	0.42	ug/Kg	8260B
Carbon tetrachloride	5.0	0.63	ug/Kg	8260B
Chlorobenzene	5.0	0.54	ug/Kg	8260B
Chloroethane	10	0.89	ug/Kg	8260B
Chloroform	10	0.29	ug/Kg	8260B
Chloromethane	10	0.77	ug/Kg	8260B
cis-1,2-Dichloroethene	5.0	0.56	ug/Kg	8260B
cis-1,3-Dichloropropene	5.0	1.3	ug/Kg	8260B
Dibromochloromethane	5.0	0.57	ug/Kg	8260B
Dibromomethane	5.0	0.84	ug/Kg	8260B
Dichlorodifluoromethane	10	0.52	ug/Kg	8260B
Ethylbenzene	5.0	0.67	ug/Kg	8260B
Hexachlorobutadiene	5.0	0.55	ug/Kg	8260B
Isopropyl ether	50	2.7	ug/Kg	8260B
Isopropylbenzene	5.0	0.59	ug/Kg	8260B
m&p-Xylene	3.2	1.0	ug/Kg	8260B

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Prep: 5035

Analyte	LOQ	DL	Units	Method
Methyl iodide	5.0	0.44	ug/Kg	8260B
Methyl tert-butyl ether	20	0.34	ug/Kg	8260B
Methylene Chloride	5.0	1.6	ug/Kg	8260B
Naphthalene	5.0	0.63	ug/Kg	8260B
n-Butylbenzene	5.0	0.56	ug/Kg	8260B
N-Propylbenzene	5.0	0.58	ug/Kg	8260B
o-Xylene	5.0	0.61	ug/Kg	8260B
sec-Butylbenzene	5.0	0.77	ug/Kg	8260B
Styrene	5.0	0.63	ug/Kg	8260B
tert-Butylbenzene	5.0	0.50	ug/Kg	8260B
Tetrachloroethene	5.0	0.59	ug/Kg	8260B
Toluene	5.0	0.69	ug/Kg	8260B
trans-1,2-Dichloroethene	5.0	0.39	ug/Kg	8260B
trans-1,3-Dichloropropene	5.0	0.67	ug/Kg	8260B
Trichloroethene	5.0	0.23	ug/Kg	8260B
Trichlorofluoromethane	10	1.0	ug/Kg	8260B
Vinyl acetate	10	1.1	ug/Kg	8260B
Vinyl chloride	5.0	1.3	ug/Kg	8260B
Xylenes (total)	10	0.61	ug/Kg	8260B

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Prep: 3510C

Analyte	LOQ	DL	Units	Method
1-Methylnaphthalene	0.10	0.0057	ug/L	8270D SIM
2-Methylnaphthalene	0.10	0.0052	ug/L	8270D SIM
Acenaphthene	0.10	0.011	ug/L	8270D SIM
Acenaphthylene	0.10	0.010	ug/L	8270D SIM
Anthracene	0.10	0.014	ug/L	8270D SIM
Benzo[a]anthracene	0.10	0.0032	ug/L	8270D SIM
Benzo[a]pyrene	0.10	0.0051	ug/L	8270D SIM
Benzo[b]fluoranthene	0.10	0.0034	ug/L	8270D SIM
Benzo[g,h,i]perylene	0.10	0.0036	ug/L	8270D SIM
Benzo[k]fluoranthene	0.10	0.0051	ug/L	8270D SIM
Chrysene	0.10	0.0032	ug/L	8270D SIM
Dibenz(a,h)anthracene	0.10	0.0048	ug/L	8270D SIM
Fluoranthene	0.10	0.0045	ug/L	8270D SIM
Fluorene	0.10	0.019	ug/L	8270D SIM
Indeno[1,2,3-cd]pyrene	0.10	0.015	ug/L	8270D SIM
Naphthalene	0.10	0.0053	ug/L	8270D SIM
Phenanthrene	0.10	0.0098	ug/L	8270D SIM
Pyrene	0.10	0.0081	ug/L	8270D SIM

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Prep: 3546

Analyte	LOQ	DL	Units	Method
1-Methylnaphthalene	5.0	0.26	ug/Kg	8270D SIM
2-Methylnaphthalene	5.0	0.31	ug/Kg	8270D SIM
Acenaphthene	5.0	0.16	ug/Kg	8270D SIM
Acenaphthylene	5.0	0.17	ug/Kg	8270D SIM
Anthracene	5.0	0.72	ug/Kg	8270D SIM

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Prep: 3546

Analyte	LOQ	DL	Units	Method
Benzo[a]anthracene	5.0	0.90	ug/Kg	8270D SIM
Benzo[a]pyrene	5.0	0.74	ug/Kg	8270D SIM
Benzo[b]fluoranthene	5.0	1.2	ug/Kg	8270D SIM
Benzo[g,h,i]perylene	5.0	1.1	ug/Kg	8270D SIM
Benzo[k]fluoranthene	5.0	1.0	ug/Kg	8270D SIM
Chrysene	5.0	1.0	ug/Kg	8270D SIM
Dibenz(a,h)anthracene	5.0	1.3	ug/Kg	8270D SIM
Fluoranthene	5.0	1.0	ug/Kg	8270D SIM
Fluorene	5.0	0.47	ug/Kg	8270D SIM
Indeno[1,2,3-cd]pyrene	5.0	1.1	ug/Kg	8270D SIM
Naphthalene	5.0	0.33	ug/Kg	8270D SIM
Phenanthrene	5.0	1.1	ug/Kg	8270D SIM
Pyrene	5.0	1.1	ug/Kg	8270D SIM

Method: 8081B - Organochlorine Pesticides (GC)

Prep: 3546

Analyte	LOQ	DL	Units	Method
4,4'-DDD	1.7	0.55	ug/Kg	8081B
4,4'-DDE	1.7	0.24	ug/Kg	8081B
4,4'-DDT	2.0	0.59	ug/Kg	8081B
Aldrin	1.7	0.25	ug/Kg	8081B
alpha-BHC	1.7	0.21	ug/Kg	8081B
alpha-Chlordane	1.7	0.32	ug/Kg	8081B
beta-BHC	1.7	0.66	ug/Kg	8081B
delta-BHC	1.7	0.40	ug/Kg	8081B
Dieldrin	1.7	0.21	ug/Kg	8081B
Endosulfan I	1.7	0.18	ug/Kg	8081B
Endosulfan II	1.7	0.29	ug/Kg	8081B
Endosulfan sulfate	1.7	0.28	ug/Kg	8081B
Endrin	1.7	0.31	ug/Kg	8081B
Endrin aldehyde	1.7	0.17	ug/Kg	8081B
gamma-BHC (Lindane)	1.7	0.46	ug/Kg	8081B
gamma-Chlordane	1.7	0.27	ug/Kg	8081B
Heptachlor	1.7	0.21	ug/Kg	8081B
Heptachlor epoxide	1.7	0.43	ug/Kg	8081B
Methoxychlor	3.3	0.45	ug/Kg	8081B
Toxaphene	170	16	ug/Kg	8081B

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Prep: 3546

Analyte	LOQ	DL	Units	Method
Arochlor 1016	33	5.1	ug/Kg	8082A
Arochlor 1221	47	16	ug/Kg	8082A
Arochlor 1232	33	5.1	ug/Kg	8082A
Arochlor 1242	33	9.1	ug/Kg	8082A
Arochlor 1248	33	5.6	ug/Kg	8082A
Arochlor 1254	33	5.5	ug/Kg	8082A
Arochlor 1260	33	2.7	ug/Kg	8082A

Default Detection Limits

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97803-1

Method: 6010C - Metals (ICP)

Prep: 3050B

Analyte	LOQ	DL	Units	Method
Aluminum	50	1.6	mg/Kg	6010C
Antimony	2.0	0.73	mg/Kg	6010C
Arsenic	2.5	0.67	mg/Kg	6010C
Barium	2.0	0.10	mg/Kg	6010C
Beryllium	0.50	0.033	mg/Kg	6010C
Cadmium	0.50	0.041	mg/Kg	6010C
Calcium	100	14	mg/Kg	6010C
Chromium	3.5	0.058	mg/Kg	6010C
Cobalt	1.0	0.10	mg/Kg	6010C
Copper	5.0	0.22	mg/Kg	6010C
Iron	80	3.8	mg/Kg	6010C
Lead	0.90	0.31	mg/Kg	6010C
Magnesium	30	3.7	mg/Kg	6010C
Manganese	4.5	0.10	mg/Kg	6010C
Nickel	4.0	0.13	mg/Kg	6010C
Potassium	300	41	mg/Kg	6010C
Selenium	3.0	0.86	mg/Kg	6010C
Silver	1.5	0.16	mg/Kg	6010C
Sodium	500	59	mg/Kg	6010C
Thallium	3.0	0.65	mg/Kg	6010C
Vanadium	2.0	0.094	mg/Kg	6010C
Zinc	8.0	0.40	mg/Kg	6010C

Method: 7471A - Mercury (CVAA)

Prep: 7471A

Analyte	LOQ	DL	Units	Method
Mercury	17	5.5	ug/Kg	7471A

Surrogate Summary

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97803-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	12DCE (71-136)	BFB (79-119)	DBFM (78-119)	TOL (85-116)
280-97803-1	SS025-SS01	126	96	110	97
280-97803-2	TB-01	116	96	104	99
280-97803-4	SS025-SS02	126	102	110	102
280-97803-5	SS025-SB02(0-2)	121	91	108	95
280-97803-6	SS025-SS03	134	99	116	99
280-97803-7	SS025-SB03(0-2)	132	89	115	97
280-97803-8	SS025-SS04	136	104	120 Q	102
280-97803-9	SS025-SB04(0-2)	136	89	115	97
280-97803-10	SS025-SS05	147 Q	96	123 Q	101
280-97803-11	SS025-SB05(0-2)	123	78 Q	108	86
280-97803-12	SS025-SB05(2-4)	140 Q	89	119	96
280-97803-13	SS025-SS06	138 Q	80	114	87
280-97803-14	SS025-SS06-a	145 Q	81	119	92
LCS 280-376042/2-A	Lab Control Sample	97	98	90	98
LCS 280-376042/3-A	Lab Control Sample	96	114	91	99
LCS 280-376205/2-A	Lab Control Sample	98	88	88	90
LCS 280-376205/3-A	Lab Control Sample	103	98	91	90
MB 280-376042/1-A	Method Blank	105	95	100	91
MB 280-376205/1-A	Method Blank	109	84	98	85

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	FBP (46-115)	NBZ (44-125)	TPH (58-133)
280-97803-1	SS025-SS01	72	84	66
280-97803-1 - DL	SS025-SS01	63 D	68 D	62 D
280-97803-4	SS025-SS02	74	72	81
280-97803-5	SS025-SB02(0-2)	65	54	58
280-97803-6	SS025-SS03	66	67	76
280-97803-7	SS025-SB03(0-2)	74	63	78
280-97803-8	SS025-SS04	66	70	82
280-97803-8 - DL	SS025-SS04	68 D	70 D	87 D
280-97803-9	SS025-SB04(0-2)	76	77	67
280-97803-9 MS	SS025-SB04(0-2)	81	82	70
280-97803-9 MSD	SS025-SB04(0-2)	86	87	76
280-97803-10	SS025-SS05	65	60	85
280-97803-10 - DL	SS025-SS05	0 D Q	0 D Q	0 D Q
280-97803-11	SS025-SB05(0-2)	74	69	72
280-97803-12	SS025-SB05(2-4)	68	60	75
280-97803-13	SS025-SS06	64	58	72
280-97803-14	SS025-SS06-a	67	57	72

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPH
Lab Sample ID	Client Sample ID	(46-115)	(44-125)	(58-133)
LCS 280-376088/2-A	Lab Control Sample	85	82	83
LCS 280-377246/2-A	Lab Control Sample	84	92	84
MB 280-376088/1-A	Method Blank	85	80	85
MB 280-377246/1-A	Method Blank	92	92	89

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPH
Lab Sample ID	Client Sample ID	(53-106)	(55-111)	(58-132)
280-97803-3	SS025-AB-053117	73	76	85
LCS 280-376215/2-A	Lab Control Sample	83	90	83
MB 280-376215/1-A	Method Blank	71	79	86

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		DCB1	TCX1
Lab Sample ID	Client Sample ID	(63-121)	(42-129)
280-97803-1	SS025-SS01	68	67
280-97803-1 MS	SS025-SS01	92	61
280-97803-1 MSD	SS025-SS01	106	60
280-97803-4	SS025-SS02	108	75
280-97803-5	SS025-SB02(0-2)	69	74
280-97803-6	SS025-SS03	81	67
280-97803-6 MS	SS025-SS03	90	78
280-97803-6 MSD	SS025-SS03	77	73
280-97803-7	SS025-SB03(0-2)	65	74
280-97803-8	SS025-SS04	85	66
280-97803-9	SS025-SB04(0-2)	82	85
280-97803-10	SS025-SS05	77	64
280-97803-11	SS025-SB05(0-2)	82	78
280-97803-12	SS025-SB05(2-4)	80	81
280-97803-13	SS025-SS06	72	69
LCS 280-376892/2-A	Lab Control Sample	66	64
LCS 280-376892/3-A	Lab Control Sample	79	82
LCS 280-377252/2-A	Lab Control Sample	94	82
LCS 280-377252/3-A	Lab Control Sample	81 M	80

Surrogate Summary

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97803-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCB1 (63-121)	TCX1 (42-129)
MB 280-376892/1-A	Method Blank	70	71
MB 280-377252/1-A	Method Blank	86	74 M

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCB2 (63-121)	TCX1 (42-129)
280-97803-14	SS025-SS06-a	83	58

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DCB2 (59-130)
280-97803-1	SS025-SS01	67
280-97803-4	SS025-SS02	80
280-97803-5	SS025-SB02(0-2)	76
280-97803-6	SS025-SS03	81
280-97803-7	SS025-SB03(0-2)	71
280-97803-8	SS025-SS04	83
280-97803-8 MS	SS025-SS04	80
280-97803-8 MSD	SS025-SS04	82
280-97803-9	SS025-SB04(0-2)	88
280-97803-10	SS025-SS05	83
280-97803-11	SS025-SB05(0-2)	87
280-97803-12	SS025-SB05(2-4)	89
280-97803-13	SS025-SS06	81
280-97803-14	SS025-SS06-a	67
LCS 280-376892/4-A	Lab Control Sample	91
LCS 280-377252/4-A	Lab Control Sample	96
MB 280-376892/1-A	Method Blank	92
MB 280-377252/1-A	Method Blank	98

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-376042/1-A
Matrix: Solid
Analysis Batch: 376040

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376042

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.6	U	5.0	0.56	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
1,1,1-Trichloroethane	1.6	U	5.0	0.52	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
1,1,2,2-Tetrachloroethane	1.6	U	5.0	0.61	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
1,1,2-Trichloroethane	3.2	U	5.0	0.88	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
1,1-Dichloroethane	0.80	U	5.0	0.21	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
1,1-Dichloroethene	1.6	U	5.0	0.59	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
1,1-Dichloropropene	1.6	U	5.0	0.54	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
1,2,3-Trichlorobenzene	1.6	U	5.0	0.75	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
1,2,3-Trichloropropane	3.2	U	5.0	0.81	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
1,2,4-Trichlorobenzene	1.6	U	5.0	0.73	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
1,2,4-Trimethylbenzene	1.6	U	5.0	0.58	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
1,2-Dibromo-3-Chloropropane	1.6	U	10	0.60	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
1,2-Dibromoethane	1.6	U	5.0	0.52	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
1,2-Dichlorobenzene	1.6	U	5.0	0.45	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
1,2-Dichloroethane	1.6	U	5.0	0.70	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
1,2-Dichloroethene, Total	1.6	U	5.0	0.39	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
1,2-Dichloropropane	1.6	U	5.0	0.55	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
1,3,5-Trimethylbenzene	1.6	U	5.0	0.57	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
1,3-Dichlorobenzene	1.6	U	5.0	0.48	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
1,3-Dichloropropane	1.6	U	5.0	0.51	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
1,4-Dichlorobenzene	1.6	U	5.0	0.78	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
2,2-Dichloropropane	1.6	U	5.0	0.44	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
2-Butanone (MEK)	6.4	U	20	1.8	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
2-Chlorotoluene	1.6	U	5.0	0.51	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
2-Hexanone	13	U	20	4.9	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
4-Chlorotoluene	1.6	U	5.0	0.78	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
4-Isopropyltoluene	1.6	U	5.0	0.49	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
4-Methyl-2-pentanone (MIBK)	13	U	20	4.4	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Acetone	13	U	20	5.4	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Benzene	1.6	U	5.0	0.47	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Bromobenzene	1.6	U	5.0	0.49	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Bromochloromethane	0.80	U	5.0	0.30	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Bromodichloromethane	0.80	U	5.0	0.22	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Bromoform	0.80	U	5.0	0.23	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Bromomethane	1.6	U	10	0.50	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Carbon disulfide	1.6	U	5.0	0.42	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Carbon tetrachloride	1.6	U	5.0	0.63	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Chlorobenzene	1.6	U	5.0	0.54	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Chloroethane	3.2	U	10	0.89	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Chloroform	0.80	U	10	0.29	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Chloromethane	1.6	U	10	0.77	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
cis-1,2-Dichloroethene	1.6	U	5.0	0.56	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
cis-1,3-Dichloropropene	3.2	U	5.0	1.3	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Dibromochloromethane	1.6	U	5.0	0.57	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Dibromomethane	3.2	U	5.0	0.84	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Dichlorodifluoromethane	1.6	U	10	0.52	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Ethylbenzene	1.6	U	5.0	0.67	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Hexachlorobutadiene	1.6	U	5.0	0.55	ug/Kg		06/03/17 15:00	06/03/17 20:42	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-376042/1-A
Matrix: Solid
Analysis Batch: 376040

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376042

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	8.0	U	50	2.7	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Isopropylbenzene	1.6	U	5.0	0.59	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
m&p-Xylene	3.2	U	3.2	1.0	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Methyl iodide	1.6	U	5.0	0.44	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Methyl tert-butyl ether	0.80	U	20	0.34	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Methylene Chloride	3.2	U	5.0	1.6	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Naphthalene	1.6	U	5.0	0.63	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
n-Butylbenzene	1.6	U	5.0	0.56	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
N-Propylbenzene	1.6	U	5.0	0.58	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
o-Xylene	1.6	U	5.0	0.61	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
sec-Butylbenzene	1.6	U	5.0	0.77	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Styrene	1.6	U	5.0	0.63	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
tert-Butylbenzene	1.6	U	5.0	0.50	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Tetrachloroethene	1.6	U	5.0	0.59	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Toluene	1.6	U	5.0	0.69	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
trans-1,2-Dichloroethene	0.80	U	5.0	0.39	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
trans-1,3-Dichloropropene	1.6	U	5.0	0.67	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Trichloroethene	0.80	U	5.0	0.23	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Trichlorofluoromethane	3.2	U	10	1.0	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Vinyl acetate	3.2	U	10	1.1	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Vinyl chloride	3.2	U	5.0	1.3	ug/Kg		06/03/17 15:00	06/03/17 20:42	1
Xylenes (total)	1.0	U	10	0.61	ug/Kg		06/03/17 15:00	06/03/17 20:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*71 - 136*	*06/03/17 15:00*	*06/03/17 20:42*	*1*
4-Bromofluorobenzene (Surr)	*95*		*79 - 119*	*06/03/17 15:00*	*06/03/17 20:42*	*1*
Dibromofluoromethane (Surr)	*100*		*78 - 119*	*06/03/17 15:00*	*06/03/17 20:42*	*1*
Toluene-d8 (Surr)	*91*		*85 - 116*	*06/03/17 15:00*	*06/03/17 20:42*	*1*

Lab Sample ID: LCS 280-376042/2-A
Matrix: Solid
Analysis Batch: 376040

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376042

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	45.3		ug/Kg		91	78 - 125
1,1,1-Trichloroethane	50.0	43.6		ug/Kg		87	73 - 130
1,1,2,2-Tetrachloroethane	50.0	48.7		ug/Kg		97	70 - 124
1,1,2-Trichloroethane	50.0	48.1		ug/Kg		96	78 - 121
1,1-Dichloroethane	50.0	48.1		ug/Kg		96	76 - 125
1,1-Dichloroethene	50.0	46.2		ug/Kg		92	70 - 131
1,1-Dichloropropene	50.0	50.5		ug/Kg		101	76 - 125
1,2,3-Trichlorobenzene	50.0	49.4		ug/Kg		99	66 - 130
1,2,3-Trichloropropane	50.0	47.4		ug/Kg		95	73 - 125
1,2,4-Trichlorobenzene	50.0	47.6		ug/Kg		95	67 - 129
1,2,4-Trimethylbenzene	50.0	45.6		ug/Kg		91	75 - 123
1,2-Dibromo-3-Chloropropane	50.0	51.1		ug/Kg		102	61 - 132
1,2-Dibromoethane	50.0	47.7		ug/Kg		95	78 - 122
1,2-Dichlorobenzene	50.0	46.9		ug/Kg		94	78 - 121

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-376042/2-A
Matrix: Solid
Analysis Batch: 376040

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376042

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	50.0	43.9		ug/Kg		88	73 - 128
1,2-Dichloroethene, Total	100	99.0		ug/Kg		99	78 - 122
1,2-Dichloropropane	50.0	51.1		ug/Kg		102	76 - 123
1,3,5-Trimethylbenzene	50.0	45.6		ug/Kg		91	73 - 124
1,3-Dichlorobenzene	50.0	48.2		ug/Kg		96	77 - 121
1,3-Dichloropropane	50.0	49.3		ug/Kg		99	77 - 121
1,4-Dichlorobenzene	50.0	44.9		ug/Kg		90	75 - 120
2,2-Dichloropropane	50.0	44.4		ug/Kg		89	67 - 133
2-Butanone (MEK)	200	188		ug/Kg		94	51 - 148
2-Chlorotoluene	50.0	45.6		ug/Kg		91	75 - 122
2-Hexanone	200	188		ug/Kg		94	53 - 145
4-Chlorotoluene	50.0	45.9		ug/Kg		92	72 - 124
4-Isopropyltoluene	50.0	45.8		ug/Kg		92	73 - 127
4-Methyl-2-pentanone (MIBK)	200	193		ug/Kg		97	65 - 135
Acetone	200	192		ug/Kg		96	36 - 164
Benzene	50.0	51.6		ug/Kg		103	77 - 121
Bromobenzene	50.0	48.8		ug/Kg		98	78 - 121
Bromochloromethane	50.0	48.0		ug/Kg		96	78 - 125
Bromodichloromethane	50.0	47.1		ug/Kg		94	75 - 127
Bromoform	50.0	45.3		ug/Kg		91	67 - 132
Bromomethane	50.0	43.9		ug/Kg		88	53 - 143
Carbon disulfide	50.0	49.2		ug/Kg		98	63 - 132
Carbon tetrachloride	50.0	43.6		ug/Kg		87	70 - 135
Chlorobenzene	50.0	45.9		ug/Kg		92	79 - 120
Chloroethane	50.0	61.0		ug/Kg		122	59 - 139
Chloroform	50.0	44.1		ug/Kg		88	78 - 123
Chloromethane	50.0	51.2		ug/Kg		102	50 - 136
cis-1,2-Dichloroethene	50.0	48.6		ug/Kg		97	77 - 123
cis-1,3-Dichloropropene	50.0	46.2		ug/Kg		92	74 - 126
Dibromochloromethane	50.0	46.7		ug/Kg		93	74 - 126
Dibromomethane	50.0	45.2		ug/Kg		90	78 - 125
Dichlorodifluoromethane	50.0	49.4		ug/Kg		99	29 - 149
Ethylbenzene	50.0	49.9		ug/Kg		100	76 - 122
Hexachlorobutadiene	50.0	45.5		ug/Kg		91	61 - 135
Isopropylbenzene	50.0	47.3		ug/Kg		95	68 - 134
m&p-Xylene	50.0	46.1		ug/Kg		92	77 - 124
Methyl iodide	50.0	45.9		ug/Kg		92	71 - 131
Methyl tert-butyl ether	50.0	52.0		ug/Kg		104	73 - 125
Methylene Chloride	50.0	50.0		ug/Kg		100	70 - 128
Naphthalene	50.0	49.5		ug/Kg		99	62 - 129
n-Butylbenzene	50.0	47.6		ug/Kg		95	70 - 128
N-Propylbenzene	50.0	46.5		ug/Kg		93	73 - 125
o-Xylene	50.0	47.6		ug/Kg		95	77 - 123
sec-Butylbenzene	50.0	45.0		ug/Kg		90	73 - 126
Styrene	50.0	46.1		ug/Kg		92	76 - 124
tert-Butylbenzene	50.0	46.3		ug/Kg		93	73 - 125
Tetrachloroethene	50.0	44.5		ug/Kg		89	73 - 128
Toluene	50.0	52.5		ug/Kg		105	77 - 121

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-376042/2-A
Matrix: Solid
Analysis Batch: 376040

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376042

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	50.0	50.4		ug/Kg		101	74 - 125
trans-1,3-Dichloropropene	50.0	47.7		ug/Kg		95	71 - 130
Trichloroethene	50.0	48.4		ug/Kg		97	77 - 123
Trichlorofluoromethane	50.0	46.5		ug/Kg		93	62 - 140
Vinyl acetate	100	79.9		ug/Kg		80	50 - 151
Vinyl chloride	50.0	46.4		ug/Kg		93	56 - 135
Xylenes (total)	100	93.7		ug/Kg		94	78 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*71 - 136*
4-Bromofluorobenzene (Surr)	*98*		*79 - 119*
Dibromofluoromethane (Surr)	*90*		*78 - 119*
Toluene-d8 (Surr)	*98*		*85 - 116*

Lab Sample ID: LCS 280-376042/3-A
Matrix: Solid
Analysis Batch: 376040

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376042

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropyl ether	50.0	87.4	Q	ug/Kg		175	69 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*71 - 136*
4-Bromofluorobenzene (Surr)	*114*		*79 - 119*
Dibromofluoromethane (Surr)	*91*		*78 - 119*
Toluene-d8 (Surr)	*99*		*85 - 116*

Lab Sample ID: MB 280-376205/1-A
Matrix: Solid
Analysis Batch: 376196

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376205

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.6	U	5.0	0.56	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
1,1,1-Trichloroethane	1.6	U	5.0	0.52	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
1,1,2,2-Tetrachloroethane	1.6	U	5.0	0.61	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
1,1,2-Trichloroethane	3.2	U	5.0	0.88	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
1,1-Dichloroethane	0.80	U	5.0	0.21	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
1,1-Dichloroethene	1.6	U	5.0	0.59	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
1,1-Dichloropropene	1.6	U	5.0	0.54	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
1,2,3-Trichlorobenzene	1.6	U	5.0	0.75	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
1,2,3-Trichloropropane	3.2	U	5.0	0.81	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
1,2,4-Trichlorobenzene	1.6	U	5.0	0.73	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
1,2,4-Trimethylbenzene	1.6	U	5.0	0.58	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
1,2-Dibromo-3-Chloropropane	1.6	U	10	0.60	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
1,2-Dibromoethane	1.6	U	5.0	0.52	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
1,2-Dichlorobenzene	1.6	U	5.0	0.45	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
1,2-Dichloroethane	1.6	U	5.0	0.70	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
1,2-Dichloroethene, Total	1.6	U	5.0	0.39	ug/Kg		06/05/17 15:00	06/05/17 20:04	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-376205/1-A
Matrix: Solid
Analysis Batch: 376196

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376205

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	1.6	U	5.0	0.55	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
1,3,5-Trimethylbenzene	1.6	U	5.0	0.57	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
1,3-Dichlorobenzene	1.6	U	5.0	0.48	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
1,3-Dichloropropane	1.6	U	5.0	0.51	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
1,4-Dichlorobenzene	1.6	U	5.0	0.78	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
2,2-Dichloropropane	1.6	U	5.0	0.44	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
2-Butanone (MEK)	6.4	U	20	1.8	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
2-Chlorotoluene	1.6	U	5.0	0.51	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
2-Hexanone	13	U	20	4.9	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
4-Chlorotoluene	1.6	U	5.0	0.78	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
4-Isopropyltoluene	1.6	U	5.0	0.49	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
4-Methyl-2-pentanone (MIBK)	13	U	20	4.4	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Acetone	13	U	20	5.4	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Benzene	1.6	U	5.0	0.47	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Bromobenzene	1.6	U	5.0	0.49	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Bromochloromethane	0.80	U	5.0	0.30	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Bromodichloromethane	0.80	U	5.0	0.22	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Bromoform	0.80	U	5.0	0.23	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Bromomethane	1.6	U	10	0.50	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Carbon disulfide	1.6	U	5.0	0.42	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Carbon tetrachloride	1.6	U	5.0	0.63	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Chlorobenzene	1.6	U	5.0	0.54	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Chloroethane	3.2	U	10	0.89	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Chloroform	0.80	U	10	0.29	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Chloromethane	1.6	U	10	0.77	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
cis-1,2-Dichloroethene	1.6	U	5.0	0.56	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
cis-1,3-Dichloropropene	3.2	U	5.0	1.3	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Dibromochloromethane	1.6	U	5.0	0.57	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Dibromomethane	3.2	U	5.0	0.84	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Dichlorodifluoromethane	1.6	U	10	0.52	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Ethylbenzene	1.6	U	5.0	0.67	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Hexachlorobutadiene	1.6	U	5.0	0.55	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Isopropyl ether	8.0	U	50	2.7	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Isopropylbenzene	1.6	U	5.0	0.59	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
m&p-Xylene	3.2	U	3.2	1.0	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Methyl iodide	1.6	U	5.0	0.44	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Methyl tert-butyl ether	0.80	U	20	0.34	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Methylene Chloride	3.2	U	5.0	1.6	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Naphthalene	1.6	U	5.0	0.63	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
n-Butylbenzene	1.6	U	5.0	0.56	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
N-Propylbenzene	1.6	U	5.0	0.58	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
o-Xylene	1.6	U	5.0	0.61	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
sec-Butylbenzene	1.6	U	5.0	0.77	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Styrene	1.6	U	5.0	0.63	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
tert-Butylbenzene	1.6	U	5.0	0.50	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Tetrachloroethene	1.6	U	5.0	0.59	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Toluene	1.6	U	5.0	0.69	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
trans-1,2-Dichloroethene	0.80	U	5.0	0.39	ug/Kg		06/05/17 15:00	06/05/17 20:04	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-376205/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 376196 — **Prep Batch: 376205**

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	1.6	U	5.0	0.67	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Trichloroethene	0.80	U	5.0	0.23	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Trichlorofluoromethane	3.2	U	10	1.0	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Vinyl acetate	3.2	U	10	1.1	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Vinyl chloride	3.2	U	5.0	1.3	ug/Kg		06/05/17 15:00	06/05/17 20:04	1
Xylenes (total)	1.0	U	10	0.61	ug/Kg		06/05/17 15:00	06/05/17 20:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*71 - 136*	*06/05/17 15:00*	*06/05/17 20:04*	*1*
4-Bromofluorobenzene (Surr)	*84*		*79 - 119*	*06/05/17 15:00*	*06/05/17 20:04*	*1*
Dibromofluoromethane (Surr)	*98*		*78 - 119*	*06/05/17 15:00*	*06/05/17 20:04*	*1*
Toluene-d8 (Surr)	*85*		*85 - 116*	*06/05/17 15:00*	*06/05/17 20:04*	*1*

Lab Sample ID: LCS 280-376205/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 376196 — **Prep Batch: 376205**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	44.4		ug/Kg		89	78 - 125
1,1,1-Trichloroethane	50.0	45.7		ug/Kg		91	73 - 130
1,1,2,2-Tetrachloroethane	50.0	46.8		ug/Kg		94	70 - 124
1,1,2-Trichloroethane	50.0	46.8		ug/Kg		94	78 - 121
1,1-Dichloroethane	50.0	48.6		ug/Kg		97	76 - 125
1,1-Dichloroethene	50.0	47.1		ug/Kg		94	70 - 131
1,1-Dichloropropene	50.0	50.5		ug/Kg		101	76 - 125
1,2,3-Trichlorobenzene	50.0	54.5		ug/Kg		109	66 - 130
1,2,3-Trichloropropane	50.0	44.9		ug/Kg		90	73 - 125
1,2,4-Trichlorobenzene	50.0	52.2		ug/Kg		104	67 - 129
1,2,4-Trimethylbenzene	50.0	44.1		ug/Kg		88	75 - 123
1,2-Dibromo-3-Chloropropane	50.0	53.7		ug/Kg		107	61 - 132
1,2-Dibromoethane	50.0	46.0		ug/Kg		92	78 - 122
1,2-Dichlorobenzene	50.0	45.2		ug/Kg		90	78 - 121
1,2-Dichloroethane	50.0	45.1		ug/Kg		90	73 - 128
1,2-Dichloroethene, Total	100	98.3		ug/Kg		98	78 - 122
1,2-Dichloropropane	50.0	50.4		ug/Kg		101	76 - 123
1,3,5-Trimethylbenzene	50.0	43.9		ug/Kg		88	73 - 124
1,3-Dichlorobenzene	50.0	44.7		ug/Kg		89	77 - 121
1,3-Dichloropropane	50.0	47.7		ug/Kg		95	77 - 121
1,4-Dichlorobenzene	50.0	42.0		ug/Kg		84	75 - 120
2,2-Dichloropropane	50.0	52.6		ug/Kg		105	67 - 133
2-Butanone (MEK)	200	201		ug/Kg		100	51 - 148
2-Chlorotoluene	50.0	43.8		ug/Kg		88	75 - 122
2-Hexanone	200	194		ug/Kg		97	53 - 145
4-Chlorotoluene	50.0	42.7		ug/Kg		85	72 - 124
4-Isopropyltoluene	50.0	45.0		ug/Kg		90	73 - 127
4-Methyl-2-pentanone (MIBK)	200	210		ug/Kg		105	65 - 135
Acetone	200	201		ug/Kg		100	36 - 164
Benzene	50.0	50.3		ug/Kg		101	77 - 121

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-376205/2-A
Matrix: Solid
Analysis Batch: 376196

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376205

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromobenzene	50.0	45.2		ug/Kg		90	78 - 121
Bromochloromethane	50.0	46.7		ug/Kg		93	78 - 125
Bromodichloromethane	50.0	46.6		ug/Kg		93	75 - 127
Bromoform	50.0	43.3		ug/Kg		87	67 - 132
Bromomethane	50.0	47.4		ug/Kg		95	53 - 143
Carbon disulfide	50.0	49.1		ug/Kg		98	63 - 132
Carbon tetrachloride	50.0	44.0		ug/Kg		88	70 - 135
Chlorobenzene	50.0	43.2		ug/Kg		86	79 - 120
Chloroethane	50.0	68.1		ug/Kg		136	59 - 139
Chloroform	50.0	44.9		ug/Kg		90	78 - 123
Chloromethane	50.0	64.2		ug/Kg		128	50 - 136
cis-1,2-Dichloroethene	50.0	48.7		ug/Kg		97	77 - 123
cis-1,3-Dichloropropene	50.0	45.9		ug/Kg		92	74 - 126
Dibromochloromethane	50.0	44.0		ug/Kg		88	74 - 126
Dibromomethane	50.0	46.2		ug/Kg		92	78 - 125
Dichlorodifluoromethane	50.0	55.3		ug/Kg		111	29 - 149
Ethylbenzene	50.0	46.2		ug/Kg		92	76 - 122
Hexachlorobutadiene	50.0	49.2		ug/Kg		98	61 - 135
Isopropylbenzene	50.0	45.6		ug/Kg		91	68 - 134
m&p-Xylene	50.0	43.3		ug/Kg		87	77 - 124
Methyl iodide	50.0	45.7		ug/Kg		91	71 - 131
Methyl tert-butyl ether	50.0	58.1		ug/Kg		116	73 - 125
Methylene Chloride	50.0	50.9		ug/Kg		102	70 - 128
Naphthalene	50.0	56.0		ug/Kg		112	62 - 129
n-Butylbenzene	50.0	47.8		ug/Kg		96	70 - 128
N-Propylbenzene	50.0	43.6		ug/Kg		87	73 - 125
o-Xylene	50.0	45.1		ug/Kg		90	77 - 123
sec-Butylbenzene	50.0	44.1		ug/Kg		88	73 - 126
Styrene	50.0	45.0		ug/Kg		90	76 - 124
tert-Butylbenzene	50.0	44.9		ug/Kg		90	73 - 125
Tetrachloroethene	50.0	41.4		ug/Kg		83	73 - 128
Toluene	50.0	50.8		ug/Kg		102	77 - 121
trans-1,2-Dichloroethene	50.0	49.6		ug/Kg		99	74 - 125
trans-1,3-Dichloropropene	50.0	47.6		ug/Kg		95	71 - 130
Trichloroethene	50.0	47.5		ug/Kg		95	77 - 123
Trichlorofluoromethane	50.0	52.9		ug/Kg		106	62 - 140
Vinyl acetate	100	91.8		ug/Kg		92	50 - 151
Vinyl chloride	50.0	51.7		ug/Kg		103	56 - 135
Xylenes (total)	100	88.4		ug/Kg		88	78 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*71 - 136*
4-Bromofluorobenzene (Surr)	*88*		*79 - 119*
Dibromofluoromethane (Surr)	*88*		*78 - 119*
Toluene-d8 (Surr)	*90*		*85 - 116*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-376205/3-A
Matrix: Solid
Analysis Batch: 376196

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376205

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropyl ether	50.0	88.1	Q	ug/Kg		176	69 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*71 - 136*
4-Bromofluorobenzene (Surr)	*98*		*79 - 119*
Dibromofluoromethane (Surr)	*91*		*78 - 119*
Toluene-d8 (Surr)	*90*		*85 - 116*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 280-376088/1-A
Matrix: Solid
Analysis Batch: 376394

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376088

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.48	U	4.8	0.25	ug/Kg		06/05/17 08:51	06/07/17 09:24	1
2-Methylnaphthalene	0.64	U	4.8	0.30	ug/Kg		06/05/17 08:51	06/07/17 09:24	1
Acenaphthene	0.26	U	4.8	0.15	ug/Kg		06/05/17 08:51	06/07/17 09:24	1
Acenaphthylene	0.64	U	4.8	0.16	ug/Kg		06/05/17 08:51	06/07/17 09:24	1
Anthracene	2.4	U	4.8	0.69	ug/Kg		06/05/17 08:51	06/07/17 09:24	1
Benzo[a]anthracene	2.4	U	4.8	0.87	ug/Kg		06/05/17 08:51	06/07/17 09:24	1
Benzo[a]pyrene	2.4	U	4.8	0.71	ug/Kg		06/05/17 08:51	06/07/17 09:24	1
Benzo[b]fluoranthene	2.4	U	4.8	1.2	ug/Kg		06/05/17 08:51	06/07/17 09:24	1
Benzo[g,h,i]perylene	2.4	U	4.8	1.1	ug/Kg		06/05/17 08:51	06/07/17 09:24	1
Benzo[k]fluoranthene	2.4	U	4.8	0.96	ug/Kg		06/05/17 08:51	06/07/17 09:24	1
Chrysene	2.4	U	4.8	0.96	ug/Kg		06/05/17 08:51	06/07/17 09:24	1
Dibenz(a,h)anthracene	2.4	U	4.8	1.3	ug/Kg		06/05/17 08:51	06/07/17 09:24	1
Fluoranthene	2.4	U	4.8	0.96	ug/Kg		06/05/17 08:51	06/07/17 09:24	1
Fluorene	0.64	U	4.8	0.45	ug/Kg		06/05/17 08:51	06/07/17 09:24	1
Indeno[1,2,3-cd]pyrene	2.4	U	4.8	1.1	ug/Kg		06/05/17 08:51	06/07/17 09:24	1
Naphthalene	0.64	U	4.8	0.31	ug/Kg		06/05/17 08:51	06/07/17 09:24	1
Phenanthrene	2.4	U	4.8	1.1	ug/Kg		06/05/17 08:51	06/07/17 09:24	1
Pyrene	2.4	U	4.8	1.1	ug/Kg		06/05/17 08:51	06/07/17 09:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*85*		*46 - 115*	*06/05/17 08:51*	*06/07/17 09:24*	*1*
Nitrobenzene-d5 (Surr)	*80*		*44 - 125*	*06/05/17 08:51*	*06/07/17 09:24*	*1*
Terphenyl-d14 (Surr)	*85*		*58 - 133*	*06/05/17 08:51*	*06/07/17 09:24*	*1*

Lab Sample ID: LCS 280-376088/2-A
Matrix: Solid
Analysis Batch: 376394

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376088

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	27.3	20.2		ug/Kg		74	43 - 111
2-Methylnaphthalene	27.3	22.3		ug/Kg		82	39 - 114
Acenaphthene	27.3	21.2		ug/Kg		78	44 - 111

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 280-376088/2-A
Matrix: Solid
Analysis Batch: 376394

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376088

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	27.3	18.7		ug/Kg		69	39 - 116
Anthracene	27.3	19.9		ug/Kg		73	50 - 114
Benzo[a]anthracene	27.3	21.2		ug/Kg		78	54 - 122
Benzo[a]pyrene	27.3	18.2		ug/Kg		67	50 - 125
Benzo[b]fluoranthene	27.3	21.2		ug/Kg		78	53 - 128
Benzo[g,h,i]perylene	27.3	21.5		ug/Kg		79	49 - 127
Benzo[k]fluoranthene	27.3	21.2		ug/Kg		78	56 - 123
Chrysene	27.3	24.7		ug/Kg		91	57 - 118
Dibenz(a,h)anthracene	27.3	20.9		ug/Kg		77	50 - 129
Fluoranthene	27.3	21.7		ug/Kg		79	55 - 119
Fluorene	27.3	21.9		ug/Kg		80	47 - 114
Indeno[1,2,3-cd]pyrene	27.3	20.7		ug/Kg		76	49 - 130
Naphthalene	27.3	21.4		ug/Kg		78	38 - 111
Phenanthrene	27.3	21.5		ug/Kg		79	49 - 113
Pyrene	27.3	21.6		ug/Kg		79	55 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*85*		*46 - 115*
Nitrobenzene-d5 (Surr)	*82*		*44 - 125*
Terphenyl-d14 (Surr)	*83*		*58 - 133*

Lab Sample ID: MB 280-376215/1-A
Matrix: Water
Analysis Batch: 377034

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376215

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.012	U	0.10	0.0057	ug/L		06/06/17 07:45	06/13/17 06:49	1
2-Methylnaphthalene	0.012	U	0.10	0.0052	ug/L		06/06/17 07:45	06/13/17 06:49	1
Acenaphthene	0.030	U	0.10	0.011	ug/L		06/06/17 07:45	06/13/17 06:49	1
Acenaphthylene	0.012	U	0.10	0.010	ug/L		06/06/17 07:45	06/13/17 06:49	1
Anthracene	0.020	U	0.10	0.014	ug/L		06/06/17 07:45	06/13/17 06:49	1
Benzo[a]anthracene	0.012	U	0.10	0.0032	ug/L		06/06/17 07:45	06/13/17 06:49	1
Benzo[a]pyrene	0.012	U	0.10	0.0051	ug/L		06/06/17 07:45	06/13/17 06:49	1
Benzo[b]fluoranthene	0.012	U	0.10	0.0034	ug/L		06/06/17 07:45	06/13/17 06:49	1
Benzo[g,h,i]perylene	0.012	U	0.10	0.0036	ug/L		06/06/17 07:45	06/13/17 06:49	1
Benzo[k]fluoranthene	0.012	U	0.10	0.0051	ug/L		06/06/17 07:45	06/13/17 06:49	1
Chrysene	0.012	U	0.10	0.0032	ug/L		06/06/17 07:45	06/13/17 06:49	1
Dibenz(a,h)anthracene	0.012	U	0.10	0.0048	ug/L		06/06/17 07:45	06/13/17 06:49	1
Fluoranthene	0.012	U	0.10	0.0045	ug/L		06/06/17 07:45	06/13/17 06:49	1
Fluorene	0.020	U	0.10	0.019	ug/L		06/06/17 07:45	06/13/17 06:49	1
Indeno[1,2,3-cd]pyrene	0.020	U	0.10	0.015	ug/L		06/06/17 07:45	06/13/17 06:49	1
Naphthalene	0.012	U	0.10	0.0053	ug/L		06/06/17 07:45	06/13/17 06:49	1
Phenanthrene	0.020	U	0.10	0.0098	ug/L		06/06/17 07:45	06/13/17 06:49	1
Pyrene	0.020	U	0.10	0.0081	ug/L		06/06/17 07:45	06/13/17 06:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*71*		*53 - 106*	*06/06/17 07:45*	*06/13/17 06:49*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 280-376215/1-A
Matrix: Water
Analysis Batch: 377034

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376215

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	79		55 - 111	06/06/17 07:45	06/13/17 06:49	1
Terphenyl-d14 (Surr)	86		58 - 132	06/06/17 07:45	06/13/17 06:49	1

Lab Sample ID: LCS 280-376215/2-A
Matrix: Water
Analysis Batch: 377034

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376215

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	0.900	0.615		ug/L		68	41 - 115
2-Methylnaphthalene	0.900	0.654		ug/L		73	39 - 114
Acenaphthene	0.900	0.685		ug/L		76	48 - 114
Acenaphthylene	0.900	0.638		ug/L		71	35 - 121
Anthracene	0.900	0.715		ug/L		79	53 - 119
Benzo[a]anthracene	0.900	0.762		ug/L		85	59 - 120
Benzo[a]pyrene	0.900	0.715		ug/L		79	53 - 120
Benzo[b]fluoranthene	0.900	0.735		ug/L		82	53 - 126
Benzo[g,h,i]perylene	0.900	0.667		ug/L		74	44 - 128
Benzo[k]fluoranthene	0.900	0.765		ug/L		85	54 - 125
Chrysene	0.900	0.841		ug/L		93	57 - 120
Dibenz(a,h)anthracene	0.900	0.689		ug/L		77	44 - 131
Fluoranthene	0.900	0.743		ug/L		83	58 - 120
Fluorene	0.900	0.716		ug/L		80	50 - 118
Indeno[1,2,3-cd]pyrene	0.900	0.690		ug/L		77	48 - 130
Naphthalene	0.900	0.611		ug/L		68	43 - 114
Phenanthrene	0.900	0.696		ug/L		77	53 - 115
Pyrene	0.900	0.754		ug/L		84	53 - 121

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	83		53 - 106
Nitrobenzene-d5 (Surr)	90		55 - 111
Terphenyl-d14 (Surr)	83		58 - 132

Lab Sample ID: MB 280-377246/1-A
Matrix: Solid
Analysis Batch: 378253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377246

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.50	U	5.0	0.26	ug/Kg		06/14/17 09:42	06/21/17 19:51	1
2-Methylnaphthalene	0.66	U	5.0	0.31	ug/Kg		06/14/17 09:42	06/21/17 19:51	1
Acenaphthene	0.27	U	5.0	0.16	ug/Kg		06/14/17 09:42	06/21/17 19:51	1
Acenaphthylene	0.66	U	5.0	0.17	ug/Kg		06/14/17 09:42	06/21/17 19:51	1
Anthracene	2.5	U	5.0	0.72	ug/Kg		06/14/17 09:42	06/21/17 19:51	1
Benzo[a]anthracene	2.5	U	5.0	0.90	ug/Kg		06/14/17 09:42	06/21/17 19:51	1
Benzo[a]pyrene	2.5	U	5.0	0.74	ug/Kg		06/14/17 09:42	06/21/17 19:51	1
Benzo[b]fluoranthene	2.5	U	5.0	1.2	ug/Kg		06/14/17 09:42	06/21/17 19:51	1
Benzo[g,h,i]perylene	2.5	U	5.0	1.1	ug/Kg		06/14/17 09:42	06/21/17 19:51	1
Benzo[k]fluoranthene	2.5	U	5.0	1.0	ug/Kg		06/14/17 09:42	06/21/17 19:51	1
Chrysene	2.5	U	5.0	1.0	ug/Kg		06/14/17 09:42	06/21/17 19:51	1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 280-377246/1-A
Matrix: Solid
Analysis Batch: 378253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377246

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	2.5	U	5.0	1.3	ug/Kg		06/14/17 09:42	06/21/17 19:51	1
Fluoranthene	2.5	U	5.0	1.0	ug/Kg		06/14/17 09:42	06/21/17 19:51	1
Fluorene	0.66	U	5.0	0.47	ug/Kg		06/14/17 09:42	06/21/17 19:51	1
Indeno[1,2,3-cd]pyrene	2.5	U	5.0	1.1	ug/Kg		06/14/17 09:42	06/21/17 19:51	1
Naphthalene	0.66	U	5.0	0.32	ug/Kg		06/14/17 09:42	06/21/17 19:51	1
Phenanthrene	2.5	U	5.0	1.1	ug/Kg		06/14/17 09:42	06/21/17 19:51	1
Pyrene	2.5	U	5.0	1.1	ug/Kg		06/14/17 09:42	06/21/17 19:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*92*		*46 - 115*	*06/14/17 09:42*	*06/21/17 19:51*	*1*
Nitrobenzene-d5 (Surr)	*92*		*44 - 125*	*06/14/17 09:42*	*06/21/17 19:51*	*1*
Terphenyl-d14 (Surr)	*89*		*58 - 133*	*06/14/17 09:42*	*06/21/17 19:51*	*1*

Lab Sample ID: LCS 280-377246/2-A
Matrix: Solid
Analysis Batch: 378253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377246

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	28.8	20.7		ug/Kg		72	43 - 111
2-Methylnaphthalene	28.8	22.3		ug/Kg		77	39 - 114
Acenaphthene	28.8	21.7		ug/Kg		75	44 - 111
Acenaphthylene	28.8	20.8		ug/Kg		72	39 - 116
Anthracene	28.8	22.7		ug/Kg		79	50 - 114
Benzo[a]anthracene	28.8	24.4		ug/Kg		85	54 - 122
Benzo[a]pyrene	28.8	21.8		ug/Kg		75	50 - 125
Benzo[b]fluoranthene	28.8	22.7		ug/Kg		79	53 - 128
Benzo[g,h,i]perylene	28.8	18.3		ug/Kg		63	49 - 127
Benzo[k]fluoranthene	28.8	23.6		ug/Kg		82	56 - 123
Chrysene	28.8	26.5		ug/Kg		92	57 - 118
Dibenz(a,h)anthracene	28.8	18.4		ug/Kg		64	50 - 129
Fluoranthene	28.8	24.6		ug/Kg		85	55 - 119
Fluorene	28.8	22.4		ug/Kg		78	47 - 114
Indeno[1,2,3-cd]pyrene	28.8	18.9		ug/Kg		65	49 - 130
Naphthalene	28.8	21.1		ug/Kg		73	38 - 111
Phenanthrene	28.8	22.1		ug/Kg		77	49 - 113
Pyrene	28.8	25.0		ug/Kg		87	55 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*84*		*46 - 115*
Nitrobenzene-d5 (Surr)	*92*		*44 - 125*
Terphenyl-d14 (Surr)	*84*		*58 - 133*

Lab Sample ID: 280-97803-9 MS
Matrix: Solid
Analysis Batch: 378253

Client Sample ID: SS025-SB04(0-2)
Prep Type: Total/NA
Prep Batch: 377246

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	0.61	U	35.9	25.3		ug/Kg	☼	71	43 - 111

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 280-97803-9 MS
Matrix: Solid
Analysis Batch: 378253

Client Sample ID: SS025-SB04(0-2)
Prep Type: Total/NA
Prep Batch: 377246

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	0.81	U	35.9	27.1		ug/Kg	☼	76	39 - 114
Acenaphthene	0.32	U	35.9	29.0		ug/Kg	☼	81	44 - 111
Acenaphthylene	0.28	J	35.9	25.5		ug/Kg	☼	70	39 - 116
Anthracene	3.0	U	35.9	26.3		ug/Kg	☼	73	50 - 114
Benzo[a]anthracene	3.0	U	35.9	27.4		ug/Kg	☼	76	54 - 122
Benzo[a]pyrene	3.0	U	35.9	24.8		ug/Kg	☼	69	50 - 125
Benzo[b]fluoranthene	3.0	U	35.9	25.7		ug/Kg	☼	72	53 - 128
Benzo[g,h,i]perylene	3.0	U	35.9	21.4		ug/Kg	☼	60	49 - 127
Benzo[k]fluoranthene	3.0	U	35.9	26.5		ug/Kg	☼	74	56 - 123
Chrysene	3.0	U	35.9	30.0		ug/Kg	☼	83	57 - 118
Dibenz(a,h)anthracene	3.0	U	35.9	21.5		ug/Kg	☼	60	50 - 129
Fluoranthene	3.0	U	35.9	26.2		ug/Kg	☼	73	55 - 119
Fluorene	0.81	U	35.9	28.1		ug/Kg	☼	78	47 - 114
Indeno[1,2,3-cd]pyrene	3.0	U	35.9	21.9		ug/Kg	☼	61	49 - 130
Naphthalene	0.81	U	35.9	25.2		ug/Kg	☼	70	38 - 111
Phenanthrene	3.0	U	35.9	25.9		ug/Kg	☼	72	49 - 113
Pyrene	3.0	U	35.9	26.2		ug/Kg	☼	73	55 - 117

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*81*		*46 - 115*
Nitrobenzene-d5 (Surr)	*82*		*44 - 125*
Terphenyl-d14 (Surr)	*70*		*58 - 133*

Lab Sample ID: 280-97803-9 MSD
Matrix: Solid
Analysis Batch: 378253

Client Sample ID: SS025-SB04(0-2)
Prep Type: Total/NA
Prep Batch: 377246

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1-Methylnaphthalene	0.61	U	34.9	25.4		ug/Kg	☼	73	43 - 111	0	20
2-Methylnaphthalene	0.81	U	34.9	27.3		ug/Kg	☼	78	39 - 114	1	20
Acenaphthene	0.32	U	34.9	27.5		ug/Kg	☼	79	44 - 111	5	20
Acenaphthylene	0.28	J	34.9	25.4		ug/Kg	☼	72	39 - 116	0	20
Anthracene	3.0	U	34.9	26.2		ug/Kg	☼	75	50 - 114	0	20
Benzo[a]anthracene	3.0	U	34.9	27.4		ug/Kg	☼	79	54 - 122	0	20
Benzo[a]pyrene	3.0	U	34.9	25.1		ug/Kg	☼	72	50 - 125	1	20
Benzo[b]fluoranthene	3.0	U	34.9	26.8		ug/Kg	☼	77	53 - 128	4	20
Benzo[g,h,i]perylene	3.0	U	34.9	22.2		ug/Kg	☼	64	49 - 127	4	20
Benzo[k]fluoranthene	3.0	U	34.9	27.3		ug/Kg	☼	78	56 - 123	3	20
Chrysene	3.0	U	34.9	30.1		ug/Kg	☼	86	57 - 118	0	20
Dibenz(a,h)anthracene	3.0	U	34.9	22.5		ug/Kg	☼	65	50 - 129	5	20
Fluoranthene	3.0	U	34.9	27.2		ug/Kg	☼	78	55 - 119	4	20
Fluorene	0.81	U	34.9	28.1		ug/Kg	☼	81	47 - 114	0	20
Indeno[1,2,3-cd]pyrene	3.0	U	34.9	22.3		ug/Kg	☼	64	49 - 130	2	20
Naphthalene	0.81	U	34.9	25.4		ug/Kg	☼	73	38 - 111	1	20
Phenanthrene	3.0	U	34.9	25.9		ug/Kg	☼	74	49 - 113	0	20
Pyrene	3.0	U	34.9	27.3		ug/Kg	☼	78	55 - 117	4	20

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 280-97803-9 MSD
Matrix: Solid
Analysis Batch: 378253

Client Sample ID: SS025-SB04(0-2)
Prep Type: Total/NA
Prep Batch: 377246

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl (Surr)	86		46 - 115
Nitrobenzene-d5 (Surr)	87		44 - 125
Terphenyl-d14 (Surr)	76		58 - 133

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 280-376892/1-A
Matrix: Solid
Analysis Batch: 377328

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376892

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.5	U	1.5	0.50	ug/Kg		06/12/17 11:25	06/14/17 19:49	1
4,4'-DDE	0.61	U	1.5	0.22	ug/Kg		06/12/17 11:25	06/14/17 19:49	1
4,4'-DDT	1.5	U	1.8	0.54	ug/Kg		06/12/17 11:25	06/14/17 19:49	1
Aldrin	0.61	U	1.5	0.23	ug/Kg		06/12/17 11:25	06/14/17 19:49	1
alpha-BHC	0.61	U	1.5	0.19	ug/Kg		06/12/17 11:25	06/14/17 19:49	1
alpha-Chlordane	0.61	U	1.5	0.29	ug/Kg		06/12/17 11:25	06/14/17 19:49	1
beta-BHC	1.5	U	1.5	0.60	ug/Kg		06/12/17 11:25	06/14/17 19:49	1
delta-BHC	0.91	U	1.5	0.36	ug/Kg		06/12/17 11:25	06/14/17 19:49	1
Dieldrin	0.61	U	1.5	0.19	ug/Kg		06/12/17 11:25	06/14/17 19:49	1
Endosulfan I	0.61	U	1.5	0.16	ug/Kg		06/12/17 11:25	06/14/17 19:49	1
Endosulfan II	0.61	U	1.5	0.26	ug/Kg		06/12/17 11:25	06/14/17 19:49	1
Endosulfan sulfate	0.61	U	1.5	0.25	ug/Kg		06/12/17 11:25	06/14/17 19:49	1
Endrin	0.61	U	1.5	0.28	ug/Kg		06/12/17 11:25	06/14/17 19:49	1
Endrin aldehyde	0.61	U	1.5	0.16	ug/Kg		06/12/17 11:25	06/14/17 19:49	1
gamma-BHC (Lindane)	0.91	U	1.5	0.42	ug/Kg		06/12/17 11:25	06/14/17 19:49	1
gamma-Chlordane	0.61	U	1.5	0.24	ug/Kg		06/12/17 11:25	06/14/17 19:49	1
Heptachlor	0.61	U	1.5	0.19	ug/Kg		06/12/17 11:25	06/14/17 19:49	1
Heptachlor epoxide	0.91	U	1.5	0.39	ug/Kg		06/12/17 11:25	06/14/17 19:49	1
Methoxychlor	0.91	U	3.0	0.41	ug/Kg		06/12/17 11:25	06/14/17 19:49	1
Toxaphene	30	U	150	14	ug/Kg		06/12/17 11:25	06/14/17 19:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	70		63 - 121	06/12/17 11:25	06/14/17 19:49	1
Tetrachloro-m-xylene (Surr)	71		42 - 129	06/12/17 11:25	06/14/17 19:49	1

Lab Sample ID: LCS 280-376892/2-A
Matrix: Solid
Analysis Batch: 377328

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376892

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	15.9	10.8		ug/Kg		68	56 - 139
4,4'-DDE	15.9	10.8		ug/Kg		68	56 - 134
4,4'-DDT	15.9	11.5		ug/Kg		72	50 - 141
Aldrin	15.9	9.73		ug/Kg		61	45 - 136
alpha-BHC	15.9	10.1		ug/Kg		64	45 - 137
alpha-Chlordane	15.9	10.2		ug/Kg		64	54 - 133

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 280-376892/2-A
Matrix: Solid
Analysis Batch: 377328

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376892

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
beta-BHC	15.9	10.3		ug/Kg		65	50 - 136
delta-BHC	15.9	10.4		ug/Kg		65	47 - 139
Dieldrin	15.9	11.2		ug/Kg		71	56 - 136
Endosulfan I	15.9	11.1		ug/Kg		69	53 - 132
Endosulfan II	15.9	10.8		ug/Kg		68	53 - 134
Endosulfan sulfate	15.9	10.7		ug/Kg		67	55 - 136
Endrin	15.9	12.6		ug/Kg		79	57 - 140
Endrin aldehyde	15.9	9.64		ug/Kg		61	35 - 137
gamma-BHC (Lindane)	15.9	10.3		ug/Kg		64	49 - 135
gamma-Chlordane	15.9	10.4		ug/Kg		65	53 - 135
Heptachlor	15.9	11.4		ug/Kg		71	47 - 136
Heptachlor epoxide	15.9	10.9		ug/Kg		68	52 - 136
Methoxychlor	15.9	11.4		ug/Kg		72	52 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*66*		*63 - 121*
Tetrachloro-m-xylene (Surr)	*64*		*42 - 129*

Lab Sample ID: LCS 280-376892/3-A
Matrix: Solid
Analysis Batch: 377328

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376892

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toxaphene	62.7	52.4	J	ug/Kg		84	33 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*79*		*63 - 121*
Tetrachloro-m-xylene (Surr)	*82*		*42 - 129*

Lab Sample ID: 280-97803-1 MS
Matrix: Solid
Analysis Batch: 377328

Client Sample ID: SS025-SS01
Prep Type: Total/NA
Prep Batch: 376892

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	1.9	U	19.7	10.4	J	ug/Kg	☼	53	56 - 139
4,4'-DDE	1.9	J	19.7	11.3	J	ug/Kg	☼	48	56 - 134
4,4'-DDT	3.3		19.7	15.2		ug/Kg	☼	61	50 - 141
Aldrin	0.78	U M	19.7	11.3		ug/Kg	☼	57	45 - 136
alpha-BHC	0.78	U	19.7	12.9		ug/Kg	☼	65	45 - 137
alpha-Chlordane	0.78	U M	19.7	10.6		ug/Kg	☼	54	54 - 133
beta-BHC	1.9	U	19.7	11.2		ug/Kg	☼	57	50 - 136
delta-BHC	1.2	U	19.7	12.8		ug/Kg	☼	65	47 - 139
Dieldrin	0.78	U	19.7	12.9		ug/Kg	☼	65	56 - 136
Endosulfan I	0.78	U	19.7	12.2		ug/Kg	☼	62	53 - 132
Endosulfan II	0.78	U	19.7	11.8		ug/Kg	☼	60	53 - 134
Endosulfan sulfate	0.67	J	19.7	11.5		ug/Kg	☼	55	55 - 136
Endrin	0.78	U	19.7	14.0		ug/Kg	☼	71	57 - 140
Endrin aldehyde	0.78	U	19.7	9.74		ug/Kg	☼	49	35 - 137

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 280-97803-1 MS
Matrix: Solid
Analysis Batch: 377328

Client Sample ID: SS025-SS01
Prep Type: Total/NA
Prep Batch: 376892

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
gamma-BHC (Lindane)	1.2	U M	19.7	12.8		ug/Kg	☼	65	49 - 135
gamma-Chlordane	0.78	U	19.7	8.89	J	ug/Kg	☼	45	53 - 135
Heptachlor	0.78	U	19.7	13.3		ug/Kg	☼	67	47 - 136
Heptachlor epoxide	1.2	U	19.7	12.3		ug/Kg	☼	62	52 - 136
Methoxychlor	1.2	U	19.7	13.0		ug/Kg	☼	66	52 - 143

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*92*		*63 - 121*
Tetrachloro-m-xylene (Surr)	*61*		*42 - 129*

Lab Sample ID: 280-97803-1 MSD
Matrix: Solid
Analysis Batch: 377328

Client Sample ID: SS025-SS01
Prep Type: Total/NA
Prep Batch: 376892

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	1.9	U	18.6	9.70	J	ug/Kg	☼	52	56 - 139	7	30
4,4'-DDE	1.9	J	18.6	11.2	J	ug/Kg	☼	50	56 - 134	0	30
4,4'-DDT	3.3		18.6	14.2		ug/Kg	☼	59	50 - 141	7	30
Aldrin	0.78	U M	18.6	10.7		ug/Kg	☼	58	45 - 136	5	30
alpha-BHC	0.78	U	18.6	12.6		ug/Kg	☼	67	45 - 137	2	30
alpha-Chlordane	0.78	U M	18.6	10.1		ug/Kg	☼	54	54 - 133	4	30
beta-BHC	1.9	U	18.6	10.8		ug/Kg	☼	58	50 - 136	4	30
delta-BHC	1.2	U	18.6	12.5		ug/Kg	☼	67	47 - 139	3	30
Dieldrin	0.78	U	18.6	12.4		ug/Kg	☼	66	56 - 136	4	30
Endosulfan I	0.78	U	18.6	11.7		ug/Kg	☼	63	53 - 132	4	30
Endosulfan II	0.78	U	18.6	11.2		ug/Kg	☼	60	53 - 134	5	30
Endosulfan sulfate	0.67	J	18.6	11.0		ug/Kg	☼	56	55 - 136	5	30
Endrin	0.78	U	18.6	13.1		ug/Kg	☼	71	57 - 140	6	30
Endrin aldehyde	0.78	U	18.6	9.33		ug/Kg	☼	50	35 - 137	4	30
gamma-BHC (Lindane)	1.2	U M	18.6	12.2		ug/Kg	☼	65	49 - 135	5	30
gamma-Chlordane	0.78	U	18.6	8.93	J	ug/Kg	☼	48	53 - 135	1	30
Heptachlor	0.78	U	18.6	12.6		ug/Kg	☼	68	47 - 136	5	30
Heptachlor epoxide	1.2	U	18.6	11.7		ug/Kg	☼	63	52 - 136	5	30
Methoxychlor	1.2	U	18.6	12.1		ug/Kg	☼	65	52 - 143	7	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*106*		*63 - 121*
Tetrachloro-m-xylene (Surr)	*60*		*42 - 129*

Lab Sample ID: 280-97803-6 MS
Matrix: Solid
Analysis Batch: 377328

Client Sample ID: SS025-SS03
Prep Type: Total/NA
Prep Batch: 376892

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toxaphene	43	U J Q	87.2	116	J	ug/Kg	☼	133	33 - 141

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 280-97803-6 MS
Matrix: Solid
Analysis Batch: 377328

Client Sample ID: SS025-SS03
Prep Type: Total/NA
Prep Batch: 376892

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	90		63 - 121
Tetrachloro-m-xylene (Surr)	78		42 - 129

Lab Sample ID: 280-97803-6 MSD
Matrix: Solid
Analysis Batch: 377328

Client Sample ID: SS025-SS03
Prep Type: Total/NA
Prep Batch: 376892

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toxaphene	43	U J Q	88.6	76.9	J	ug/Kg	☼	87	33 - 141	41	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	77		63 - 121
Tetrachloro-m-xylene (Surr)	73		42 - 129

Lab Sample ID: MB 280-377252/1-A
Matrix: Solid
Analysis Batch: 377996

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377252

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.6	U	1.6	0.52	ug/Kg		06/14/17 09:49	06/20/17 14:36	1
4,4'-DDE	0.64	U	1.6	0.23	ug/Kg		06/14/17 09:49	06/20/17 14:36	1
4,4'-DDT	1.6	U	1.9	0.56	ug/Kg		06/14/17 09:49	06/20/17 14:36	1
Aldrin	0.64	U	1.6	0.24	ug/Kg		06/14/17 09:49	06/20/17 14:36	1
alpha-BHC	0.64	U	1.6	0.20	ug/Kg		06/14/17 09:49	06/20/17 14:36	1
alpha-Chlordane	0.64	U	1.6	0.31	ug/Kg		06/14/17 09:49	06/20/17 14:36	1
beta-BHC	1.6	U M	1.6	0.63	ug/Kg		06/14/17 09:49	06/20/17 14:36	1
delta-BHC	0.95	U M	1.6	0.38	ug/Kg		06/14/17 09:49	06/20/17 14:36	1
Dieldrin	0.64	U	1.6	0.20	ug/Kg		06/14/17 09:49	06/20/17 14:36	1
Endosulfan I	0.64	U	1.6	0.17	ug/Kg		06/14/17 09:49	06/20/17 14:36	1
Endosulfan II	0.64	U	1.6	0.27	ug/Kg		06/14/17 09:49	06/20/17 14:36	1
Endosulfan sulfate	0.64	U	1.6	0.26	ug/Kg		06/14/17 09:49	06/20/17 14:36	1
Endrin	0.64	U	1.6	0.29	ug/Kg		06/14/17 09:49	06/20/17 14:36	1
Endrin aldehyde	0.64	U	1.6	0.16	ug/Kg		06/14/17 09:49	06/20/17 14:36	1
gamma-BHC (Lindane)	0.95	U	1.6	0.44	ug/Kg		06/14/17 09:49	06/20/17 14:36	1
gamma-Chlordane	0.64	U	1.6	0.25	ug/Kg		06/14/17 09:49	06/20/17 14:36	1
Heptachlor	0.64	U	1.6	0.20	ug/Kg		06/14/17 09:49	06/20/17 14:36	1
Heptachlor epoxide	0.95	U	1.6	0.41	ug/Kg		06/14/17 09:49	06/20/17 14:36	1
Methoxychlor	0.95	U	3.1	0.43	ug/Kg		06/14/17 09:49	06/20/17 14:36	1
Toxaphene	31	U	160	15	ug/Kg		06/14/17 09:49	06/20/17 14:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	86		63 - 121	06/14/17 09:49	06/20/17 14:36	1
Tetrachloro-m-xylene (Surr)	74	M	42 - 129	06/14/17 09:49	06/20/17 14:36	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 280-377252/2-A
Matrix: Solid
Analysis Batch: 377996

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377252

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.3	13.9		ug/Kg		85	56 - 139
4,4'-DDE	16.3	13.9		ug/Kg		85	56 - 134
4,4'-DDT	16.3	15.0		ug/Kg		92	50 - 141
Aldrin	16.3	13.7		ug/Kg		84	45 - 136
alpha-BHC	16.3	13.8		ug/Kg		85	45 - 137
alpha-Chlordane	16.3	13.9		ug/Kg		85	54 - 133
beta-BHC	16.3	13.5		ug/Kg		83	50 - 136
delta-BHC	16.3	13.7		ug/Kg		84	47 - 139
Dieldrin	16.3	14.4		ug/Kg		89	56 - 136
Endosulfan I	16.3	14.4		ug/Kg		88	53 - 132
Endosulfan II	16.3	14.1	M	ug/Kg		86	53 - 134
Endosulfan sulfate	16.3	14.6		ug/Kg		90	55 - 136
Endrin	16.3	15.8		ug/Kg		97	57 - 140
Endrin aldehyde	16.3	13.1		ug/Kg		80	35 - 137
gamma-BHC (Lindane)	16.3	13.9		ug/Kg		85	49 - 135
gamma-Chlordane	16.3	13.9		ug/Kg		86	53 - 135
Heptachlor	16.3	15.0		ug/Kg		92	47 - 136
Heptachlor epoxide	16.3	14.0		ug/Kg		86	52 - 136
Methoxychlor	16.3	14.9		ug/Kg		91	52 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*94*		*63 - 121*
Tetrachloro-m-xylene (Surr)	*82*		*42 - 129*

Lab Sample ID: LCS 280-377252/3-A
Matrix: Solid
Analysis Batch: 377996

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377252

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toxaphene	64.9	60.6	J	ug/Kg		93	33 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*81*	*M*	*63 - 121*
Tetrachloro-m-xylene (Surr)	*80*		*42 - 129*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 280-376892/1-A
Matrix: Solid
Analysis Batch: 377714

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376892

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	14	U	30	4.6	ug/Kg		06/12/17 11:25	06/17/17 12:45	1
Arochlor 1221	15	U	43	14	ug/Kg		06/12/17 11:25	06/17/17 12:45	1
Arochlor 1232	14	U	30	4.7	ug/Kg		06/12/17 11:25	06/17/17 12:45	1
Arochlor 1242	30	U	30	8.3	ug/Kg		06/12/17 11:25	06/17/17 12:45	1
Arochlor 1248	18	U	30	5.1	ug/Kg		06/12/17 11:25	06/17/17 12:45	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 280-376892/1-A
Matrix: Solid
Analysis Batch: 377714

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376892

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1254	15	U	30	5.0	ug/Kg		06/12/17 11:25	06/17/17 12:45	1
Arochlor 1260	7.0	U	30	2.4	ug/Kg		06/12/17 11:25	06/17/17 12:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*92*		*59 - 130*	*06/12/17 11:25*	*06/17/17 12:45*	*1*

Lab Sample ID: LCS 280-376892/4-A
Matrix: Solid
Analysis Batch: 377714

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376892

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arochlor 1016			63.3	62.2		ug/Kg		98	47 - 134		
Arochlor 1260			63.3	62.4		ug/Kg		99	53 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*91*		*59 - 130*

Lab Sample ID: 280-97803-8 MS
Matrix: Solid
Analysis Batch: 377714

Client Sample ID: SS025-SS04
Prep Type: Total/NA
Prep Batch: 376892

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arochlor 1016	15	U	68.4	69.6		ug/Kg	☼	102	47 - 134		
Arochlor 1260	6.2	J	68.4	76.1		ug/Kg	☼	102	53 - 140		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*80*		*59 - 130*

Lab Sample ID: 280-97803-8 MSD
Matrix: Solid
Analysis Batch: 377714

Client Sample ID: SS025-SS04
Prep Type: Total/NA
Prep Batch: 376892

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arochlor 1016	15	U	67.9	66.4		ug/Kg	☼	98	47 - 134	5	30
Arochlor 1260	6.2	J	67.9	64.3		ug/Kg	☼	85	53 - 140	17	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*82*		*59 - 130*

Lab Sample ID: MB 280-377252/1-A
Matrix: Solid
Analysis Batch: 378200

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377252

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	14	U	31	4.8	ug/Kg		06/14/17 09:49	06/21/17 14:35	1
Arochlor 1221	16	U	45	15	ug/Kg		06/14/17 09:49	06/21/17 14:35	1
Arochlor 1232	14	U	31	4.9	ug/Kg		06/14/17 09:49	06/21/17 14:35	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 280-377252/1-A
Matrix: Solid
Analysis Batch: 378200

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377252

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1242	31	U	31	8.7	ug/Kg		06/14/17 09:49	06/21/17 14:35	1
Arochlor 1248	19	U	31	5.3	ug/Kg		06/14/17 09:49	06/21/17 14:35	1
Arochlor 1254	16	U	31	5.3	ug/Kg		06/14/17 09:49	06/21/17 14:35	1
Arochlor 1260	7.3	U	31	2.5	ug/Kg		06/14/17 09:49	06/21/17 14:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*98*		*59 - 130*	*06/14/17 09:49*	*06/21/17 14:35*	*1*

Lab Sample ID: LCS 280-377252/4-A
Matrix: Solid
Analysis Batch: 378200

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377252

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arochlor 1016			62.1	59.6		ug/Kg		96	47 - 134		
Arochlor 1260			62.1	60.4		ug/Kg		97	53 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*96*		*59 - 130*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 280-375991/1-A
Matrix: Solid
Analysis Batch: 376356

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 375991

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.5	U	2.0	0.73	mg/Kg		06/06/17 07:01	06/06/17 17:36	1
Arsenic	2.5	U	2.5	0.67	mg/Kg		06/06/17 07:01	06/06/17 17:36	1
Barium	0.30	U	2.0	0.10	mg/Kg		06/06/17 07:01	06/06/17 17:36	1
Beryllium	0.12	U	0.50	0.033	mg/Kg		06/06/17 07:01	06/06/17 17:36	1
Cadmium	0.15	U	0.50	0.041	mg/Kg		06/06/17 07:01	06/06/17 17:36	1
Calcium	15.3	J	100	14	mg/Kg		06/06/17 07:01	06/06/17 17:36	1
Chromium	0.0900	J	3.5	0.058	mg/Kg		06/06/17 07:01	06/06/17 17:36	1
Cobalt	0.40	U	1.0	0.10	mg/Kg		06/06/17 07:01	06/06/17 17:36	1
Copper	0.80	U	5.0	0.22	mg/Kg		06/06/17 07:01	06/06/17 17:36	1
Iron	3.85	J	80	3.8	mg/Kg		06/06/17 07:01	06/06/17 17:36	1
Lead	0.80	U	0.90	0.31	mg/Kg		06/06/17 07:01	06/06/17 17:36	1
Magnesium	3.89	J	30	3.7	mg/Kg		06/06/17 07:01	06/06/17 17:36	1
Manganese	0.40	U	4.5	0.10	mg/Kg		06/06/17 07:01	06/06/17 17:36	1
Nickel	0.45	U	4.0	0.13	mg/Kg		06/06/17 07:01	06/06/17 17:36	1
Potassium	160	U	300	41	mg/Kg		06/06/17 07:01	06/06/17 17:36	1
Silver	0.60	U	1.5	0.16	mg/Kg		06/06/17 07:01	06/06/17 17:36	1
Thallium	2.5	U	3.0	0.65	mg/Kg		06/06/17 07:01	06/06/17 17:36	1
Vanadium	0.35	U	2.0	0.094	mg/Kg		06/06/17 07:01	06/06/17 17:36	1
Zinc	1.5	U	8.0	0.40	mg/Kg		06/06/17 07:01	06/06/17 17:36	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 280-375991/1-A
Matrix: Solid
Analysis Batch: 376450

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 375991

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6.0	U	50	1.6	mg/Kg		06/06/17 07:01	06/07/17 12:05	1
Selenium	3.0	U	3.0	0.86	mg/Kg		06/06/17 07:01	06/07/17 12:05	1
Sodium	200	U	500	59	mg/Kg		06/06/17 07:01	06/07/17 12:05	1

Lab Sample ID: LCS 280-375991/2-A
Matrix: Solid
Analysis Batch: 376356

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 375991

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	46.9		mg/Kg		94	79 - 114
Arsenic	100	96.0		mg/Kg		96	82 - 111
Barium	200	191		mg/Kg		95	83 - 113
Beryllium	5.00	4.72		mg/Kg		94	83 - 113
Cadmium	10.0	9.77		mg/Kg		98	82 - 113
Calcium	5000	4610		mg/Kg		92	81 - 116
Chromium	20.0	18.7		mg/Kg		93	85 - 113
Cobalt	50.0	46.3		mg/Kg		93	85 - 112
Copper	25.0	25.1		mg/Kg		100	81 - 117
Iron	100	102		mg/Kg		102	81 - 118
Lead	50.0	46.4		mg/Kg		93	81 - 112
Magnesium	5000	4620		mg/Kg		92	78 - 115
Manganese	50.0	46.8		mg/Kg		94	84 - 114
Nickel	50.0	45.7		mg/Kg		91	83 - 113
Potassium	5000	4840		mg/Kg		97	81 - 116
Silver	5.00	4.73		mg/Kg		95	82 - 112
Thallium	200	185		mg/Kg		93	83 - 111
Vanadium	50.0	47.4		mg/Kg		95	82 - 114
Zinc	50.0	46.4		mg/Kg		93	82 - 113

Lab Sample ID: LCS 280-375991/2-A
Matrix: Solid
Analysis Batch: 376450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 375991

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	200	190		mg/Kg		95	74 - 119
Selenium	200	189		mg/Kg		95	78 - 111
Sodium	5000	5020		mg/Kg		100	83 - 118

Lab Sample ID: 280-97803-1 MS
Matrix: Solid
Analysis Batch: 376356

Client Sample ID: SS025-SS01
Prep Type: Total/NA
Prep Batch: 375991

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.7	U J	50.2	26.7	J	mg/Kg	☼	53	79 - 114
Arsenic	6.2		100	95.7		mg/Kg	☼	89	82 - 111
Barium	33		201	226		mg/Kg	☼	96	83 - 113
Beryllium	0.33	J	5.02	4.88		mg/Kg	☼	91	83 - 113
Cadmium	0.20	J	10.0	9.47		mg/Kg	☼	92	82 - 113
Calcium	10000	J	5020	12400	J	mg/Kg	☼	47	81 - 116

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 280-97803-1 MS
Matrix: Solid
Analysis Batch: 376356

Client Sample ID: SS025-SS01
Prep Type: Total/NA
Prep Batch: 375991

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	9.4		20.1	29.7		mg/Kg	☼	101	85 - 113
Cobalt	5.3		50.2	48.1		mg/Kg	☼	85	85 - 112
Copper	23		25.1	45.7		mg/Kg	☼	91	81 - 117
Iron	16000	J	100	15400	4	mg/Kg	☼	-426	81 - 118
Lead	9.6		50.2	52.2		mg/Kg	☼	85	81 - 112
Magnesium	4800		5020	8860		mg/Kg	☼	82	78 - 115
Manganese	620	J	50.2	653	4	mg/Kg	☼	56	84 - 114
Nickel	12		50.2	53.6		mg/Kg	☼	84	83 - 113
Potassium	1100	J	5020	7080	J	mg/Kg	☼	120	81 - 116
Silver	0.68	U	5.02	4.47		mg/Kg	☼	89	82 - 112
Thallium	2.8	U	201	169		mg/Kg	☼	84	83 - 111
Vanadium	14		50.2	66.9		mg/Kg	☼	106	82 - 114
Zinc	42		50.2	87.4		mg/Kg	☼	90	82 - 113

Lab Sample ID: 280-97803-1 MS
Matrix: Solid
Analysis Batch: 376450

Client Sample ID: SS025-SS01
Prep Type: Total/NA
Prep Batch: 375991

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7700	J	201	11200	4	mg/Kg	☼	1717	74 - 119
Selenium	3.4	U	201	180		mg/Kg	☼	90	78 - 111
Sodium	68	J	5020	4880		mg/Kg	☼	96	83 - 118

Lab Sample ID: 280-97803-1 MSD
Matrix: Solid
Analysis Batch: 376356

Client Sample ID: SS025-SS01
Prep Type: Total/NA
Prep Batch: 375991

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.7	U J	56.6	28.3	J	mg/Kg	☼	50	79 - 114	6	20
Arsenic	6.2		113	109		mg/Kg	☼	91	82 - 111	13	20
Barium	33		226	255		mg/Kg	☼	98	83 - 113	12	20
Beryllium	0.33	J	5.66	5.57		mg/Kg	☼	93	83 - 113	13	20
Cadmium	0.20	J	11.3	10.8		mg/Kg	☼	94	82 - 113	13	20
Calcium	10000	J	5660	13600	J	mg/Kg	☼	64	81 - 116	9	20
Chromium	9.4		22.6	34.0		mg/Kg	☼	109	85 - 113	14	20
Cobalt	5.3		56.6	55.3		mg/Kg	☼	88	85 - 112	14	20
Copper	23		28.3	52.3		mg/Kg	☼	104	81 - 117	14	20
Iron	16000	J	113	17600	4	mg/Kg	☼	1579	81 - 118	13	20
Lead	9.6		56.6	58.5		mg/Kg	☼	87	81 - 112	11	20
Magnesium	4800		5660	10400		mg/Kg	☼	99	78 - 115	16	20
Manganese	620	J	56.6	715	4	mg/Kg	☼	159	84 - 114	9	20
Nickel	12		56.6	62.2		mg/Kg	☼	89	83 - 113	15	20
Potassium	1100	J	5660	7890	J	mg/Kg	☼	121	81 - 116	11	20
Silver	0.68	U	5.66	5.14		mg/Kg	☼	91	82 - 112	14	20
Thallium	2.8	U	226	192		mg/Kg	☼	85	83 - 111	13	20
Vanadium	14		56.6	74.4		mg/Kg	☼	107	82 - 114	11	20
Zinc	42		56.6	100		mg/Kg	☼	103	82 - 113	14	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 280-97803-1 MSD — **Client Sample ID: SS025-SS01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 376450 — **Prep Batch: 375991**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	7700	J	226	12600	4	mg/Kg	☼	2164	74 - 119	12	20
Selenium	3.4	U	226	205		mg/Kg	☼	91	78 - 111	13	20
Sodium	68	J	5660	5520		mg/Kg	☼	96	83 - 118	12	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 280-376183/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 376375 — **Prep Batch: 376183**

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	13	U	17	5.5	ug/Kg		06/06/17 11:48	06/06/17 14:24	1

Lab Sample ID: LCS 280-376183/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 376375 — **Prep Batch: 376183**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			333	307		ug/Kg		92	80 - 124		

Lab Sample ID: 280-97803-1 MS — **Client Sample ID: SS025-SS01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 376375 — **Prep Batch: 376183**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	24		462	525		ug/Kg	☼	108	80 - 124		

Lab Sample ID: 280-97803-1 MSD — **Client Sample ID: SS025-SS01**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 376375 — **Prep Batch: 376183**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	24		445	503		ug/Kg	☼	108	80 - 124	4	20

GC/MS VOA

Analysis Batch: 376040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-2	TB-01	Total/NA	Solid	8260B	376042
280-97803-4	SS025-SS02	Total/NA	Solid	8260B	376042
280-97803-5	SS025-SB02(0-2)	Total/NA	Solid	8260B	376042
280-97803-6	SS025-SS03	Total/NA	Solid	8260B	376042
280-97803-7	SS025-SB03(0-2)	Total/NA	Solid	8260B	376042
280-97803-8	SS025-SS04	Total/NA	Solid	8260B	376042
280-97803-9	SS025-SB04(0-2)	Total/NA	Solid	8260B	376042
280-97803-10	SS025-SS05	Total/NA	Solid	8260B	376042
280-97803-12	SS025-SB05(2-4)	Total/NA	Solid	8260B	376042
MB 280-376042/1-A	Method Blank	Total/NA	Solid	8260B	376042
LCS 280-376042/2-A	Lab Control Sample	Total/NA	Solid	8260B	376042
LCS 280-376042/3-A	Lab Control Sample	Total/NA	Solid	8260B	376042

Prep Batch: 376042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-2	TB-01	Total/NA	Solid	5035	
280-97803-4	SS025-SS02	Total/NA	Solid	5035	
280-97803-5	SS025-SB02(0-2)	Total/NA	Solid	5035	
280-97803-6	SS025-SS03	Total/NA	Solid	5035	
280-97803-7	SS025-SB03(0-2)	Total/NA	Solid	5035	
280-97803-8	SS025-SS04	Total/NA	Solid	5035	
280-97803-9	SS025-SB04(0-2)	Total/NA	Solid	5035	
280-97803-10	SS025-SS05	Total/NA	Solid	5035	
280-97803-12	SS025-SB05(2-4)	Total/NA	Solid	5035	
MB 280-376042/1-A	Method Blank	Total/NA	Solid	5035	
LCS 280-376042/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 280-376042/3-A	Lab Control Sample	Total/NA	Solid	5035	

Analysis Batch: 376196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-1	SS025-SS01	Total/NA	Solid	8260B	376205
280-97803-11	SS025-SB05(0-2)	Total/NA	Solid	8260B	376205
280-97803-13	SS025-SS06	Total/NA	Solid	8260B	376205
280-97803-14	SS025-SS06-a	Total/NA	Solid	8260B	376205
MB 280-376205/1-A	Method Blank	Total/NA	Solid	8260B	376205
LCS 280-376205/2-A	Lab Control Sample	Total/NA	Solid	8260B	376205
LCS 280-376205/3-A	Lab Control Sample	Total/NA	Solid	8260B	376205

Prep Batch: 376205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-1	SS025-SS01	Total/NA	Solid	5035	
280-97803-11	SS025-SB05(0-2)	Total/NA	Solid	5035	
280-97803-13	SS025-SS06	Total/NA	Solid	5035	
280-97803-14	SS025-SS06-a	Total/NA	Solid	5035	
MB 280-376205/1-A	Method Blank	Total/NA	Solid	5035	
LCS 280-376205/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 280-376205/3-A	Lab Control Sample	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 376088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-1 - DL	SS025-SS01	Total/NA	Solid	3546	
280-97803-1	SS025-SS01	Total/NA	Solid	3546	
280-97803-4	SS025-SS02	Total/NA	Solid	3546	
280-97803-5	SS025-SB02(0-2)	Total/NA	Solid	3546	
280-97803-6	SS025-SS03	Total/NA	Solid	3546	
280-97803-7	SS025-SB03(0-2)	Total/NA	Solid	3546	
280-97803-10 - DL	SS025-SS05	Total/NA	Solid	3546	
280-97803-10	SS025-SS05	Total/NA	Solid	3546	
280-97803-12	SS025-SB05(2-4)	Total/NA	Solid	3546	
280-97803-13	SS025-SS06	Total/NA	Solid	3546	
280-97803-14	SS025-SS06-a	Total/NA	Solid	3546	
MB 280-376088/1-A	Method Blank	Total/NA	Solid	3546	
LCS 280-376088/2-A	Lab Control Sample	Total/NA	Solid	3546	

Prep Batch: 376215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-3	SS025-AB-053117	Total/NA	Water	3510C	
MB 280-376215/1-A	Method Blank	Total/NA	Water	3510C	
LCS 280-376215/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 376394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-376088/1-A	Method Blank	Total/NA	Solid	8270D SIM	376088
LCS 280-376088/2-A	Lab Control Sample	Total/NA	Solid	8270D SIM	376088

Analysis Batch: 376547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-4	SS025-SS02	Total/NA	Solid	8270D SIM	376088
280-97803-5	SS025-SB02(0-2)	Total/NA	Solid	8270D SIM	376088
280-97803-6	SS025-SS03	Total/NA	Solid	8270D SIM	376088
280-97803-7	SS025-SB03(0-2)	Total/NA	Solid	8270D SIM	376088
280-97803-10	SS025-SS05	Total/NA	Solid	8270D SIM	376088
280-97803-12	SS025-SB05(2-4)	Total/NA	Solid	8270D SIM	376088
280-97803-13	SS025-SS06	Total/NA	Solid	8270D SIM	376088
280-97803-14	SS025-SS06-a	Total/NA	Solid	8270D SIM	376088

Analysis Batch: 376943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-1	SS025-SS01	Total/NA	Solid	8270D SIM	376088
280-97803-1 - DL	SS025-SS01	Total/NA	Solid	8270D SIM	376088
280-97803-10 - DL	SS025-SS05	Total/NA	Solid	8270D SIM	376088

Analysis Batch: 377034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-3	SS025-AB-053117	Total/NA	Water	8270D SIM	376215
MB 280-376215/1-A	Method Blank	Total/NA	Water	8270D SIM	376215
LCS 280-376215/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	376215

Prep Batch: 377246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-8 - DL	SS025-SS04	Total/NA	Solid	3546	

GC/MS Semi VOA (Continued)

Prep Batch: 377246 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-8	SS025-SS04	Total/NA	Solid	3546	
280-97803-9	SS025-SB04(0-2)	Total/NA	Solid	3546	
280-97803-11	SS025-SB05(0-2)	Total/NA	Solid	3546	
MB 280-377246/1-A	Method Blank	Total/NA	Solid	3546	
LCS 280-377246/2-A	Lab Control Sample	Total/NA	Solid	3546	
280-97803-9 MS	SS025-SB04(0-2)	Total/NA	Solid	3546	
280-97803-9 MSD	SS025-SB04(0-2)	Total/NA	Solid	3546	

Analysis Batch: 378253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-8	SS025-SS04	Total/NA	Solid	8270D SIM	377246
280-97803-9	SS025-SB04(0-2)	Total/NA	Solid	8270D SIM	377246
280-97803-11	SS025-SB05(0-2)	Total/NA	Solid	8270D SIM	377246
MB 280-377246/1-A	Method Blank	Total/NA	Solid	8270D SIM	377246
LCS 280-377246/2-A	Lab Control Sample	Total/NA	Solid	8270D SIM	377246
280-97803-9 MS	SS025-SB04(0-2)	Total/NA	Solid	8270D SIM	377246
280-97803-9 MSD	SS025-SB04(0-2)	Total/NA	Solid	8270D SIM	377246

Analysis Batch: 378412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-8 - DL	SS025-SS04	Total/NA	Solid	8270D SIM	377246

GC Semi VOA

Prep Batch: 376892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-1	SS025-SS01	Total/NA	Solid	3546	
280-97803-4	SS025-SS02	Total/NA	Solid	3546	
280-97803-5	SS025-SB02(0-2)	Total/NA	Solid	3546	
280-97803-6	SS025-SS03	Total/NA	Solid	3546	
280-97803-7	SS025-SB03(0-2)	Total/NA	Solid	3546	
280-97803-8	SS025-SS04	Total/NA	Solid	3546	
280-97803-9	SS025-SB04(0-2)	Total/NA	Solid	3546	
280-97803-10	SS025-SS05	Total/NA	Solid	3546	
280-97803-11	SS025-SB05(0-2)	Total/NA	Solid	3546	
280-97803-12	SS025-SB05(2-4)	Total/NA	Solid	3546	
280-97803-13	SS025-SS06	Total/NA	Solid	3546	
MB 280-376892/1-A	Method Blank	Total/NA	Solid	3546	
LCS 280-376892/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCS 280-376892/3-A	Lab Control Sample	Total/NA	Solid	3546	
LCS 280-376892/4-A	Lab Control Sample	Total/NA	Solid	3546	
280-97803-1 MS	SS025-SS01	Total/NA	Solid	3546	
280-97803-1 MSD	SS025-SS01	Total/NA	Solid	3546	
280-97803-6 MS	SS025-SS03	Total/NA	Solid	3546	
280-97803-6 MSD	SS025-SS03	Total/NA	Solid	3546	
280-97803-8 MS	SS025-SS04	Total/NA	Solid	3546	
280-97803-8 MSD	SS025-SS04	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 377252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-14	SS025-SS06-a	Total/NA	Solid	3546	
MB 280-377252/1-A	Method Blank	Total/NA	Solid	3546	
LCS 280-377252/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCS 280-377252/3-A	Lab Control Sample	Total/NA	Solid	3546	
LCS 280-377252/4-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 377328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-1	SS025-SS01	Total/NA	Solid	8081B	376892
280-97803-4	SS025-SS02	Total/NA	Solid	8081B	376892
280-97803-5	SS025-SB02(0-2)	Total/NA	Solid	8081B	376892
280-97803-6	SS025-SS03	Total/NA	Solid	8081B	376892
280-97803-7	SS025-SB03(0-2)	Total/NA	Solid	8081B	376892
280-97803-8	SS025-SS04	Total/NA	Solid	8081B	376892
280-97803-9	SS025-SB04(0-2)	Total/NA	Solid	8081B	376892
280-97803-10	SS025-SS05	Total/NA	Solid	8081B	376892
280-97803-11	SS025-SB05(0-2)	Total/NA	Solid	8081B	376892
280-97803-12	SS025-SB05(2-4)	Total/NA	Solid	8081B	376892
280-97803-13	SS025-SS06	Total/NA	Solid	8081B	376892
MB 280-376892/1-A	Method Blank	Total/NA	Solid	8081B	376892
LCS 280-376892/2-A	Lab Control Sample	Total/NA	Solid	8081B	376892
LCS 280-376892/3-A	Lab Control Sample	Total/NA	Solid	8081B	376892
280-97803-1 MS	SS025-SS01	Total/NA	Solid	8081B	376892
280-97803-1 MSD	SS025-SS01	Total/NA	Solid	8081B	376892
280-97803-6 MS	SS025-SS03	Total/NA	Solid	8081B	376892
280-97803-6 MSD	SS025-SS03	Total/NA	Solid	8081B	376892

Analysis Batch: 377714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-1	SS025-SS01	Total/NA	Solid	8082A	376892
280-97803-4	SS025-SS02	Total/NA	Solid	8082A	376892
280-97803-5	SS025-SB02(0-2)	Total/NA	Solid	8082A	376892
280-97803-6	SS025-SS03	Total/NA	Solid	8082A	376892
280-97803-7	SS025-SB03(0-2)	Total/NA	Solid	8082A	376892
280-97803-8	SS025-SS04	Total/NA	Solid	8082A	376892
280-97803-9	SS025-SB04(0-2)	Total/NA	Solid	8082A	376892
280-97803-10	SS025-SS05	Total/NA	Solid	8082A	376892
280-97803-11	SS025-SB05(0-2)	Total/NA	Solid	8082A	376892
280-97803-12	SS025-SB05(2-4)	Total/NA	Solid	8082A	376892
280-97803-13	SS025-SS06	Total/NA	Solid	8082A	376892
MB 280-376892/1-A	Method Blank	Total/NA	Solid	8082A	376892
LCS 280-376892/4-A	Lab Control Sample	Total/NA	Solid	8082A	376892
280-97803-8 MS	SS025-SS04	Total/NA	Solid	8082A	376892
280-97803-8 MSD	SS025-SS04	Total/NA	Solid	8082A	376892

Analysis Batch: 377996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-14	SS025-SS06-a	Total/NA	Solid	8081B	377252
MB 280-377252/1-A	Method Blank	Total/NA	Solid	8081B	377252
LCS 280-377252/2-A	Lab Control Sample	Total/NA	Solid	8081B	377252
LCS 280-377252/3-A	Lab Control Sample	Total/NA	Solid	8081B	377252

Analysis Batch: 378200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-14	SS025-SS06-a	Total/NA	Solid	8082A	377252
MB 280-377252/1-A	Method Blank	Total/NA	Solid	8082A	377252
LCS 280-377252/4-A	Lab Control Sample	Total/NA	Solid	8082A	377252

Metals

Prep Batch: 375991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-1	SS025-SS01	Total/NA	Solid	3050B	
280-97803-4	SS025-SS02	Total/NA	Solid	3050B	
280-97803-5	SS025-SB02(0-2)	Total/NA	Solid	3050B	
280-97803-6	SS025-SS03	Total/NA	Solid	3050B	
280-97803-7	SS025-SB03(0-2)	Total/NA	Solid	3050B	
280-97803-8	SS025-SS04	Total/NA	Solid	3050B	
280-97803-9	SS025-SB04(0-2)	Total/NA	Solid	3050B	
280-97803-10	SS025-SS05	Total/NA	Solid	3050B	
280-97803-11	SS025-SB05(0-2)	Total/NA	Solid	3050B	
280-97803-12	SS025-SB05(2-4)	Total/NA	Solid	3050B	
280-97803-13	SS025-SS06	Total/NA	Solid	3050B	
280-97803-14	SS025-SS06-a	Total/NA	Solid	3050B	
MB 280-375991/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 280-375991/2-A	Lab Control Sample	Total/NA	Solid	3050B	
280-97803-1 MS	SS025-SS01	Total/NA	Solid	3050B	
280-97803-1 MSD	SS025-SS01	Total/NA	Solid	3050B	

Prep Batch: 376183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-1	SS025-SS01	Total/NA	Solid	7471A	
280-97803-4	SS025-SS02	Total/NA	Solid	7471A	
280-97803-5	SS025-SB02(0-2)	Total/NA	Solid	7471A	
280-97803-6	SS025-SS03	Total/NA	Solid	7471A	
280-97803-7	SS025-SB03(0-2)	Total/NA	Solid	7471A	
280-97803-8	SS025-SS04	Total/NA	Solid	7471A	
280-97803-9	SS025-SB04(0-2)	Total/NA	Solid	7471A	
280-97803-10	SS025-SS05	Total/NA	Solid	7471A	
280-97803-11	SS025-SB05(0-2)	Total/NA	Solid	7471A	
280-97803-12	SS025-SB05(2-4)	Total/NA	Solid	7471A	
280-97803-13	SS025-SS06	Total/NA	Solid	7471A	
280-97803-14	SS025-SS06-a	Total/NA	Solid	7471A	
MB 280-376183/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 280-376183/2-A	Lab Control Sample	Total/NA	Solid	7471A	
280-97803-1 MS	SS025-SS01	Total/NA	Solid	7471A	
280-97803-1 MSD	SS025-SS01	Total/NA	Solid	7471A	

Analysis Batch: 376356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-1	SS025-SS01	Total/NA	Solid	6010C	375991
280-97803-4	SS025-SS02	Total/NA	Solid	6010C	375991
280-97803-5	SS025-SB02(0-2)	Total/NA	Solid	6010C	375991
280-97803-6	SS025-SS03	Total/NA	Solid	6010C	375991
280-97803-7	SS025-SB03(0-2)	Total/NA	Solid	6010C	375991
280-97803-8	SS025-SS04	Total/NA	Solid	6010C	375991
280-97803-9	SS025-SB04(0-2)	Total/NA	Solid	6010C	375991

Metals (Continued)

Analysis Batch: 376356 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-10	SS025-SS05	Total/NA	Solid	6010C	375991
280-97803-11	SS025-SB05(0-2)	Total/NA	Solid	6010C	375991
280-97803-12	SS025-SB05(2-4)	Total/NA	Solid	6010C	375991
280-97803-13	SS025-SS06	Total/NA	Solid	6010C	375991
280-97803-14	SS025-SS06-a	Total/NA	Solid	6010C	375991
MB 280-375991/1-A	Method Blank	Total/NA	Solid	6010C	375991
LCS 280-375991/2-A	Lab Control Sample	Total/NA	Solid	6010C	375991
280-97803-1 MS	SS025-SS01	Total/NA	Solid	6010C	375991
280-97803-1 MSD	SS025-SS01	Total/NA	Solid	6010C	375991

Analysis Batch: 376375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-1	SS025-SS01	Total/NA	Solid	7471A	376183
280-97803-4	SS025-SS02	Total/NA	Solid	7471A	376183
280-97803-5	SS025-SB02(0-2)	Total/NA	Solid	7471A	376183
280-97803-6	SS025-SS03	Total/NA	Solid	7471A	376183
280-97803-7	SS025-SB03(0-2)	Total/NA	Solid	7471A	376183
280-97803-8	SS025-SS04	Total/NA	Solid	7471A	376183
280-97803-9	SS025-SB04(0-2)	Total/NA	Solid	7471A	376183
280-97803-10	SS025-SS05	Total/NA	Solid	7471A	376183
280-97803-11	SS025-SB05(0-2)	Total/NA	Solid	7471A	376183
280-97803-12	SS025-SB05(2-4)	Total/NA	Solid	7471A	376183
280-97803-13	SS025-SS06	Total/NA	Solid	7471A	376183
280-97803-14	SS025-SS06-a	Total/NA	Solid	7471A	376183
MB 280-376183/1-A	Method Blank	Total/NA	Solid	7471A	376183
LCS 280-376183/2-A	Lab Control Sample	Total/NA	Solid	7471A	376183
280-97803-1 MS	SS025-SS01	Total/NA	Solid	7471A	376183
280-97803-1 MSD	SS025-SS01	Total/NA	Solid	7471A	376183

Analysis Batch: 376450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-1	SS025-SS01	Total/NA	Solid	6010C	375991
280-97803-4	SS025-SS02	Total/NA	Solid	6010C	375991
280-97803-5	SS025-SB02(0-2)	Total/NA	Solid	6010C	375991
280-97803-6	SS025-SS03	Total/NA	Solid	6010C	375991
280-97803-7	SS025-SB03(0-2)	Total/NA	Solid	6010C	375991
280-97803-8	SS025-SS04	Total/NA	Solid	6010C	375991
280-97803-9	SS025-SB04(0-2)	Total/NA	Solid	6010C	375991
280-97803-10	SS025-SS05	Total/NA	Solid	6010C	375991
280-97803-11	SS025-SB05(0-2)	Total/NA	Solid	6010C	375991
280-97803-12	SS025-SB05(2-4)	Total/NA	Solid	6010C	375991
280-97803-13	SS025-SS06	Total/NA	Solid	6010C	375991
280-97803-14	SS025-SS06-a	Total/NA	Solid	6010C	375991
MB 280-375991/1-A	Method Blank	Total/NA	Solid	6010C	375991
LCS 280-375991/2-A	Lab Control Sample	Total/NA	Solid	6010C	375991
280-97803-1 MS	SS025-SS01	Total/NA	Solid	6010C	375991
280-97803-1 MSD	SS025-SS01	Total/NA	Solid	6010C	375991

General Chemistry

Analysis Batch: 376001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97803-1	SS025-SS01	Total/NA	Solid	Moisture	
280-97803-4	SS025-SS02	Total/NA	Solid	Moisture	
280-97803-5	SS025-SB02(0-2)	Total/NA	Solid	Moisture	
280-97803-6	SS025-SS03	Total/NA	Solid	Moisture	
280-97803-7	SS025-SB03(0-2)	Total/NA	Solid	Moisture	
280-97803-8	SS025-SS04	Total/NA	Solid	Moisture	
280-97803-9	SS025-SB04(0-2)	Total/NA	Solid	Moisture	
280-97803-10	SS025-SS05	Total/NA	Solid	Moisture	
280-97803-11	SS025-SB05(0-2)	Total/NA	Solid	Moisture	
280-97803-12	SS025-SB05(2-4)	Total/NA	Solid	Moisture	
280-97803-13	SS025-SS06	Total/NA	Solid	Moisture	
280-97803-14	SS025-SS06-a	Total/NA	Solid	Moisture	
280-97803-10 DU	SS025-SS05	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97803-1

Client Sample ID: SS025-SS01
Date Collected: 05/31/17 11:00
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376001	06/02/17 16:26	JBM	TAL DEN

Client Sample ID: SS025-SS01
Date Collected: 05/31/17 11:00
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-1
Matrix: Solid
Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.481 g	5 mL	376205	05/31/17 11:00	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	376196	06/05/17 21:09	ADD	TAL DEN
Total/NA	Prep	3546			31.2 g	1 mL	376088	06/05/17 08:51	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			376943	06/12/17 19:59	KGV	TAL DEN
Total/NA	Prep	3546	DL		31.2 g	1 mL	376088	06/05/17 08:51	JDW	TAL DEN
Total/NA	Analysis	8270D SIM	DL	5			376943	06/12/17 20:25	KGV	TAL DEN
Total/NA	Prep	3546			31.0 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8081B		1			377328	06/15/17 04:51	DAW	TAL DEN
Total/NA	Prep	3546			31.0 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8082A		1			377714	06/17/17 13:28	TDJ	TAL DEN
Total/NA	Prep	3050B			1.063 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376356	06/06/17 17:41	SJS	TAL DEN
Total/NA	Prep	3050B			1.063 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376450	06/07/17 12:10	CRR	TAL DEN
Total/NA	Prep	7471A			0.53 g	50 mL	376183	06/06/17 11:48	CDH	TAL DEN
Total/NA	Analysis	7471A		1			376375	06/06/17 14:33	CDH	TAL DEN

Client Sample ID: TB-01
Date Collected: 05/31/17 11:00
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5 g	5 mL	376042	05/31/17 11:00	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	376040	06/03/17 22:29	ADD	TAL DEN

Client Sample ID: SS025-AB-053117
Date Collected: 05/31/17 12:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			995.6 mL	1 mL	376215	06/06/17 07:45	KI	TAL DEN
Total/NA	Analysis	8270D SIM		1			377034	06/13/17 11:30	KGV	TAL DEN

Client Sample ID: SS025-SS02
Date Collected: 05/31/17 12:50
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376001	06/02/17 16:26	JBM	TAL DEN

Client Sample ID: SS025-SS02
Date Collected: 05/31/17 12:50
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-4
Matrix: Solid
Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.955 g	5 mL	376042	05/31/17 12:50	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	376040	06/03/17 23:19	ADD	TAL DEN
Total/NA	Prep	3546			30.6 g	1 mL	376088	06/05/17 08:51	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			376547	06/08/17 12:12	KGV	TAL DEN
Total/NA	Prep	3546			32.6 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8081B		1			377328	06/15/17 05:41	DAW	TAL DEN
Total/NA	Prep	3546			32.6 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8082A		1			377714	06/17/17 13:50	TDJ	TAL DEN
Total/NA	Prep	3050B			1.055 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376356	06/06/17 17:53	SJS	TAL DEN
Total/NA	Prep	3050B			1.055 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376450	06/07/17 12:22	CRR	TAL DEN
Total/NA	Prep	7471A			0.50 g	50 mL	376183	06/06/17 11:48	CDH	TAL DEN
Total/NA	Analysis	7471A		1			376375	06/06/17 14:49	CDH	TAL DEN

Client Sample ID: SS025-SB02(0-2)
Date Collected: 05/31/17 13:10
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376001	06/02/17 16:26	JBM	TAL DEN

Client Sample ID: SS025-SB02(0-2)
Date Collected: 05/31/17 13:10
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-5
Matrix: Solid
Percent Solids: 82.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.238 g	5 mL	376042	05/31/17 13:10	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	376040	06/03/17 23:39	ADD	TAL DEN
Total/NA	Prep	3546			30.4 g	1 mL	376088	06/05/17 08:51	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			376547	06/08/17 12:39	KGV	TAL DEN
Total/NA	Prep	3546			30.9 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8081B		1			377328	06/15/17 01:11	DAW	TAL DEN
Total/NA	Prep	3546			30.9 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8082A		1			377714	06/17/17 14:12	TDJ	TAL DEN
Total/NA	Prep	3050B			1.265 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN

Client Sample ID: SS025-SB02(0-2)

Lab Sample ID: 280-97803-5
Date Collected: 05/31/17 13:10
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 82.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010C		1			376356	06/06/17 17:56	SJS	TAL DEN
Total/NA	Prep	3050B			1.265 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376450	06/07/17 12:25	CRR	TAL DEN
Total/NA	Prep	7471A			0.56 g	50 mL	376183	06/06/17 11:48	CDH	TAL DEN
Total/NA	Analysis	7471A		1			376375	06/06/17 14:51	CDH	TAL DEN

Client Sample ID: SS025-SS03

Lab Sample ID: 280-97803-6
Date Collected: 05/31/17 13:25
Matrix: Solid
Date Received: 06/01/17 08:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376001	06/02/17 16:26	JBM	TAL DEN

Client Sample ID: SS025-SS03

Lab Sample ID: 280-97803-6
Date Collected: 05/31/17 13:25
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 74.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.81 g	5 mL	376042	05/31/17 13:25	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	376040	06/03/17 23:59	ADD	TAL DEN
Total/NA	Prep	3546			30.2 g	1 mL	376088	06/05/17 08:51	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			376547	06/08/17 13:06	KGV	TAL DEN
Total/NA	Prep	3546			30.5 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8081B		1			377328	06/15/17 05:58	DAW	TAL DEN
Total/NA	Prep	3546			30.5 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8082A		1			377714	06/17/17 14:33	TDJ	TAL DEN
Total/NA	Prep	3050B			1.199 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376356	06/06/17 17:58	SJS	TAL DEN
Total/NA	Prep	3050B			1.199 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376450	06/07/17 12:27	CRR	TAL DEN
Total/NA	Prep	7471A			0.59 g	50 mL	376183	06/06/17 11:48	CDH	TAL DEN
Total/NA	Analysis	7471A		1			376375	06/06/17 14:53	CDH	TAL DEN

Client Sample ID: SS025-SB03(0-2)

Lab Sample ID: 280-97803-7
Date Collected: 05/31/17 13:40
Matrix: Solid
Date Received: 06/01/17 08:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376001	06/02/17 16:26	JBM	TAL DEN

Client Sample ID: SS025-SB03(0-2)

Lab Sample ID: 280-97803-7

Date Collected: 05/31/17 13:40

Matrix: Solid

Date Received: 06/01/17 08:50

Percent Solids: 86.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.558 g	5 mL	376042	05/31/17 13:40	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	376040	06/04/17 00:19	ADD	TAL DEN
Total/NA	Prep	3546			30.1 g	1 mL	376088	06/05/17 08:51	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			376547	06/08/17 13:33	KGV	TAL DEN
Total/NA	Prep	3546			31.1 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8081B		1			377328	06/15/17 01:45	DAW	TAL DEN
Total/NA	Prep	3546			31.1 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8082A		1			377714	06/17/17 14:55	TDJ	TAL DEN
Total/NA	Prep	3050B			1.107 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376356	06/06/17 18:11	SJS	TAL DEN
Total/NA	Prep	3050B			1.107 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376450	06/07/17 12:40	CRR	TAL DEN
Total/NA	Prep	7471A			0.52 g	50 mL	376183	06/06/17 11:48	CDH	TAL DEN
Total/NA	Analysis	7471A		1			376375	06/06/17 14:56	CDH	TAL DEN

Client Sample ID: SS025-SS04

Lab Sample ID: 280-97803-8

Date Collected: 05/31/17 14:00

Matrix: Solid

Date Received: 06/01/17 08:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376001	06/02/17 16:26	JBM	TAL DEN

Client Sample ID: SS025-SS04

Lab Sample ID: 280-97803-8

Date Collected: 05/31/17 14:00

Matrix: Solid

Date Received: 06/01/17 08:50

Percent Solids: 90.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.016 g	5 mL	376042	05/31/17 14:00	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	376040	06/04/17 00:40	ADD	TAL DEN
Total/NA	Prep	3546			32.5 g	1 mL	377246	06/14/17 09:42	KI	TAL DEN
Total/NA	Analysis	8270D SIM		1			378253	06/21/17 22:55	MKW	TAL DEN
Total/NA	Prep	3546	DL		32.5 g	1 mL	377246	06/14/17 09:42	KI	TAL DEN
Total/NA	Analysis	8270D SIM	DL	2			378412	06/22/17 21:23	MKW	TAL DEN
Total/NA	Prep	3546			32.3 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8081B		1			377328	06/15/17 06:49	DAW	TAL DEN
Total/NA	Prep	3546			32.3 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8082A		1			377714	06/17/17 15:39	TDJ	TAL DEN
Total/NA	Prep	3050B			1.173 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376356	06/06/17 18:14	SJS	TAL DEN
Total/NA	Prep	3050B			1.173 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376450	06/07/17 12:43	CRR	TAL DEN
Total/NA	Prep	7471A			0.59 g	50 mL	376183	06/06/17 11:48	CDH	TAL DEN
Total/NA	Analysis	7471A		1			376375	06/06/17 14:58	CDH	TAL DEN

Client Sample ID: SS025-SB04(0-2)

Lab Sample ID: 280-97803-9
Date Collected: 05/31/17 14:10
Matrix: Solid
Date Received: 06/01/17 08:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376001	06/02/17 16:26	JBM	TAL DEN

Client Sample ID: SS025-SB04(0-2)

Lab Sample ID: 280-97803-9
Date Collected: 05/31/17 14:10
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 82.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.927 g	5 mL	376042	05/31/17 14:10	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	376040	06/04/17 01:00	ADD	TAL DEN
Total/NA	Prep	3546			30.0 g	1 mL	377246	06/14/17 09:42	KI	TAL DEN
Total/NA	Analysis	8270D SIM		1			378253	06/21/17 23:21	MKW	TAL DEN
Total/NA	Prep	3546			30.7 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8081B		1			377328	06/15/17 02:19	DAW	TAL DEN
Total/NA	Prep	3546			30.7 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8082A		1			377714	06/17/17 16:44	TDJ	TAL DEN
Total/NA	Prep	3050B			1.376 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376356	06/06/17 18:16	SJS	TAL DEN
Total/NA	Prep	3050B			1.376 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376450	06/07/17 12:45	CRR	TAL DEN
Total/NA	Prep	7471A			0.54 g	50 mL	376183	06/06/17 11:48	CDH	TAL DEN
Total/NA	Analysis	7471A		1			376375	06/06/17 15:00	CDH	TAL DEN

Client Sample ID: SS025-SS05

Lab Sample ID: 280-97803-10
Date Collected: 05/31/17 14:30
Matrix: Solid
Date Received: 06/01/17 08:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376001	06/02/17 16:26	JBM	TAL DEN

Client Sample ID: SS025-SS05

Lab Sample ID: 280-97803-10
Date Collected: 05/31/17 14:30
Matrix: Solid
Date Received: 06/01/17 08:50
Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.094 g	5 mL	376042	05/31/17 14:30	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	376040	06/04/17 01:20	ADD	TAL DEN
Total/NA	Prep	3546	DL		32.1 g	1 mL	376088	06/05/17 08:51	JDW	TAL DEN
Total/NA	Analysis	8270D SIM	DL	40			376943	06/12/17 20:51	KGV	TAL DEN
Total/NA	Prep	3546			32.1 g	1 mL	376088	06/05/17 08:51	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			376547	06/08/17 14:55	KGV	TAL DEN
Total/NA	Prep	3546			31.2 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8081B		1			377328	06/15/17 07:06	DAW	TAL DEN
Total/NA	Prep	3546			31.2 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN

Client Sample ID: SS025-SS05
Date Collected: 05/31/17 14:30
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-10
Matrix: Solid
Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082A		1			377714	06/17/17 17:06	TDJ	TAL DEN
Total/NA	Prep	3050B			1.147 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376356	06/06/17 18:19	SJS	TAL DEN
Total/NA	Prep	3050B			1.147 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376450	06/07/17 12:48	CRR	TAL DEN
Total/NA	Prep	7471A			0.51 g	50 mL	376183	06/06/17 11:48	CDH	TAL DEN
Total/NA	Analysis	7471A		1			376375	06/06/17 15:02	CDH	TAL DEN

Client Sample ID: SS025-SB05(0-2)
Date Collected: 05/31/17 14:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376001	06/02/17 16:26	JBM	TAL DEN

Client Sample ID: SS025-SB05(0-2)
Date Collected: 05/31/17 14:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-11
Matrix: Solid
Percent Solids: 85.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.493 g	5 mL	376205	05/31/17 14:40	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	376196	06/05/17 21:29	ADD	TAL DEN
Total/NA	Prep	3546			32.3 g	1 mL	377246	06/14/17 09:42	KI	TAL DEN
Total/NA	Analysis	8270D SIM		1			378253	06/22/17 00:39	MKW	TAL DEN
Total/NA	Prep	3546			30.7 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8081B		1			377328	06/15/17 07:22	DAW	TAL DEN
Total/NA	Prep	3546			30.7 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8082A		1			377714	06/17/17 17:27	TDJ	TAL DEN
Total/NA	Prep	3050B			1.344 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376356	06/06/17 18:21	SJS	TAL DEN
Total/NA	Prep	3050B			1.344 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376450	06/07/17 12:50	CRR	TAL DEN
Total/NA	Prep	7471A			0.60 g	50 mL	376183	06/06/17 11:48	CDH	TAL DEN
Total/NA	Analysis	7471A		1			376375	06/06/17 15:09	CDH	TAL DEN

Client Sample ID: SS025-SB05(2-4)
Date Collected: 05/31/17 15:00
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376001	06/02/17 16:26	JBM	TAL DEN

Lab Chronicle

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97803-1

Client Sample ID: SS025-SB05(2-4)

Date Collected: 05/31/17 15:00
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-12

Matrix: Solid
Percent Solids: 90.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.393 g	5 mL	376042	05/31/17 15:00	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	376040	06/04/17 02:00	ADD	TAL DEN
Total/NA	Prep	3546			32.7 g	1 mL	376088	06/05/17 08:51	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			376547	06/08/17 15:50	KGV	TAL DEN
Total/NA	Prep	3546			31.1 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8081B		1			377328	06/15/17 03:09	DAW	TAL DEN
Total/NA	Prep	3546			31.1 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8082A		1			377714	06/17/17 17:49	TDJ	TAL DEN
Total/NA	Prep	3050B			1.041 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376356	06/06/17 18:24	SJS	TAL DEN
Total/NA	Prep	3050B			1.041 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376450	06/07/17 12:53	CRR	TAL DEN
Total/NA	Prep	7471A			0.60 g	50 mL	376183	06/06/17 11:48	CDH	TAL DEN
Total/NA	Analysis	7471A		1			376375	06/06/17 15:11	CDH	TAL DEN

Client Sample ID: SS025-SS06

Date Collected: 05/31/17 15:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376001	06/02/17 16:26	JBM	TAL DEN

Client Sample ID: SS025-SS06

Date Collected: 05/31/17 15:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-13

Matrix: Solid
Percent Solids: 87.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.182 g	5 mL	376205	05/31/17 15:40	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	376196	06/05/17 21:50	ADD	TAL DEN
Total/NA	Prep	3546			31.3 g	1 mL	376088	06/05/17 08:51	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			376547	06/08/17 16:18	KGV	TAL DEN
Total/NA	Prep	3546			32.0 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8081B		1			377328	06/15/17 07:56	DAW	TAL DEN
Total/NA	Prep	3546			32.0 g	10 mL	376892	06/12/17 11:25	KI	TAL DEN
Total/NA	Analysis	8082A		1			377714	06/17/17 18:11	TDJ	TAL DEN
Total/NA	Prep	3050B			1.172 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376356	06/06/17 18:26	SJS	TAL DEN
Total/NA	Prep	3050B			1.172 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376450	06/07/17 12:56	CRR	TAL DEN
Total/NA	Prep	7471A			0.54 g	50 mL	376183	06/06/17 11:48	CDH	TAL DEN
Total/NA	Analysis	7471A		1			376375	06/06/17 15:13	CDH	TAL DEN

Lab Chronicle

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97803-1

Client Sample ID: SS025-SS06-a
Date Collected: 05/31/17 15:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376001	06/02/17 16:26	JBM	TAL DEN

Client Sample ID: SS025-SS06-a
Date Collected: 05/31/17 15:40
Date Received: 06/01/17 08:50

Lab Sample ID: 280-97803-14
Matrix: Solid
Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.615 g	5 mL	376205	05/31/17 15:40	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	376196	06/05/17 22:10	ADD	TAL DEN
Total/NA	Prep	3546			31.4 g	1 mL	376088	06/05/17 08:51	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			376547	06/08/17 16:45	KGV	TAL DEN
Total/NA	Prep	3546			30.8 g	10 mL	377252	06/14/17 09:49	KI	TAL DEN
Total/NA	Analysis	8081B		1			377996	06/20/17 16:06	DAW	TAL DEN
Total/NA	Prep	3546			30.8 g	10 mL	377252	06/14/17 09:49	KI	TAL DEN
Total/NA	Analysis	8082A		1			378200	06/21/17 15:41	TDJ	TAL DEN
Total/NA	Prep	3050B			1.102 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376356	06/06/17 18:29	SJS	TAL DEN
Total/NA	Prep	3050B			1.102 g	100 mL	375991	06/06/17 07:01	TEB	TAL DEN
Total/NA	Analysis	6010C		1			376450	06/07/17 12:58	CRR	TAL DEN
Total/NA	Prep	7471A			0.55 g	50 mL	376183	06/06/17 11:48	CDH	TAL DEN
Total/NA	Analysis	7471A		1			376375	06/06/17 15:16	CDH	TAL DEN

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Accreditation/Certification Summary

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97803-1

Laboratory: TestAmerica Denver

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-17

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte		
Moisture		Solid	Percent Moisture		
New York	NELAP	2	11964	04-01-18	

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010C	3050B	Solid	Aluminum
6010C	3050B	Solid	Antimony
6010C	3050B	Solid	Arsenic
6010C	3050B	Solid	Barium
6010C	3050B	Solid	Beryllium
6010C	3050B	Solid	Cadmium
6010C	3050B	Solid	Calcium
6010C	3050B	Solid	Chromium
6010C	3050B	Solid	Cobalt
6010C	3050B	Solid	Copper
6010C	3050B	Solid	Iron
6010C	3050B	Solid	Lead
6010C	3050B	Solid	Magnesium
6010C	3050B	Solid	Manganese
6010C	3050B	Solid	Nickel
6010C	3050B	Solid	Potassium
6010C	3050B	Solid	Selenium
6010C	3050B	Solid	Silver
6010C	3050B	Solid	Sodium
6010C	3050B	Solid	Thallium
6010C	3050B	Solid	Vanadium
6010C	3050B	Solid	Zinc
7471A	7471A	Solid	Mercury
8081B	3546	Solid	4,4'-DDD
8081B	3546	Solid	4,4'-DDE
8081B	3546	Solid	4,4'-DDT
8081B	3546	Solid	Aldrin
8081B	3546	Solid	alpha-BHC
8081B	3546	Solid	alpha-Chlordane
8081B	3546	Solid	beta-BHC
8081B	3546	Solid	delta-BHC
8081B	3546	Solid	Dieldrin
8081B	3546	Solid	Endosulfan I
8081B	3546	Solid	Endosulfan II
8081B	3546	Solid	Endosulfan sulfate
8081B	3546	Solid	Endrin
8081B	3546	Solid	Endrin aldehyde
8081B	3546	Solid	gamma-BHC (Lindane)
8081B	3546	Solid	gamma-Chlordane
8081B	3546	Solid	Heptachlor
8081B	3546	Solid	Heptachlor epoxide
8081B	3546	Solid	Methoxychlor

Laboratory: TestAmerica Denver (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11964	04-01-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8081B	3546	Solid	Toxaphene
8082A	3546	Solid	Arochlor 1016
8082A	3546	Solid	Arochlor 1221
8082A	3546	Solid	Arochlor 1232
8082A	3546	Solid	Arochlor 1242
8082A	3546	Solid	Arochlor 1248
8082A	3546	Solid	Arochlor 1254
8082A	3546	Solid	Arochlor 1260
8260B	5035	Solid	1,1,1,2-Tetrachloroethane
8260B	5035	Solid	1,1,1-Trichloroethane
8260B	5035	Solid	1,1,2,2-Tetrachloroethane
8260B	5035	Solid	1,1,2-Trichloroethane
8260B	5035	Solid	1,1-Dichloroethane
8260B	5035	Solid	1,1-Dichloroethene
8260B	5035	Solid	1,1-Dichloropropene
8260B	5035	Solid	1,2,3-Trichlorobenzene
8260B	5035	Solid	1,2,3-Trichloropropane
8260B	5035	Solid	1,2,4-Trichlorobenzene
8260B	5035	Solid	1,2,4-Trimethylbenzene
8260B	5035	Solid	1,2-Dibromo-3-Chloropropane
8260B	5035	Solid	1,2-Dibromoethane
8260B	5035	Solid	1,2-Dichlorobenzene
8260B	5035	Solid	1,2-Dichloroethane
8260B	5035	Solid	1,2-Dichloroethene, Total
8260B	5035	Solid	1,2-Dichloropropane
8260B	5035	Solid	1,3,5-Trimethylbenzene
8260B	5035	Solid	1,3-Dichlorobenzene
8260B	5035	Solid	1,3-Dichloropropane
8260B	5035	Solid	1,4-Dichlorobenzene
8260B	5035	Solid	2,2-Dichloropropane
8260B	5035	Solid	2-Butanone (MEK)
8260B	5035	Solid	2-Chlorotoluene
8260B	5035	Solid	2-Hexanone
8260B	5035	Solid	4-Chlorotoluene
8260B	5035	Solid	4-Isopropyltoluene
8260B	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260B	5035	Solid	Acetone
8260B	5035	Solid	Benzene
8260B	5035	Solid	Bromobenzene
8260B	5035	Solid	Bromochloromethane
8260B	5035	Solid	Bromodichloromethane
8260B	5035	Solid	Bromoform
8260B	5035	Solid	Bromomethane
8260B	5035	Solid	Carbon disulfide
8260B	5035	Solid	Carbon tetrachloride
8260B	5035	Solid	Chlorobenzene

Laboratory: TestAmerica Denver (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11964	04-01-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260B	5035	Solid	Chloroethane
8260B	5035	Solid	Chloroform
8260B	5035	Solid	Chloromethane
8260B	5035	Solid	cis-1,2-Dichloroethene
8260B	5035	Solid	cis-1,3-Dichloropropene
8260B	5035	Solid	Dibromochloromethane
8260B	5035	Solid	Dibromomethane
8260B	5035	Solid	Dichlorodifluoromethane
8260B	5035	Solid	Ethylbenzene
8260B	5035	Solid	Hexachlorobutadiene
8260B	5035	Solid	Isopropyl ether
8260B	5035	Solid	Isopropylbenzene
8260B	5035	Solid	m&p-Xylene
8260B	5035	Solid	Methyl iodide
8260B	5035	Solid	Methyl tert-butyl ether
8260B	5035	Solid	Methylene Chloride
8260B	5035	Solid	Naphthalene
8260B	5035	Solid	n-Butylbenzene
8260B	5035	Solid	N-Propylbenzene
8260B	5035	Solid	o-Xylene
8260B	5035	Solid	sec-Butylbenzene
8260B	5035	Solid	Styrene
8260B	5035	Solid	tert-Butylbenzene
8260B	5035	Solid	Tetrachloroethene
8260B	5035	Solid	Toluene
8260B	5035	Solid	trans-1,2-Dichloroethene
8260B	5035	Solid	trans-1,3-Dichloropropene
8260B	5035	Solid	Trichloroethene
8260B	5035	Solid	Trichlorofluoromethane
8260B	5035	Solid	Vinyl acetate
8260B	5035	Solid	Vinyl chloride
8260B	5035	Solid	Xylenes (total)
8270D SIM	3510C	Water	1-Methylnaphthalene
8270D SIM	3510C	Water	2-Methylnaphthalene
8270D SIM	3510C	Water	Acenaphthene
8270D SIM	3510C	Water	Acenaphthylene
8270D SIM	3510C	Water	Anthracene
8270D SIM	3510C	Water	Benzo[a]anthracene
8270D SIM	3510C	Water	Benzo[a]pyrene
8270D SIM	3510C	Water	Benzo[b]fluoranthene
8270D SIM	3510C	Water	Benzo[g,h,i]perylene
8270D SIM	3510C	Water	Benzo[k]fluoranthene
8270D SIM	3510C	Water	Chrysene
8270D SIM	3510C	Water	Dibenz(a,h)anthracene
8270D SIM	3510C	Water	Fluoranthene
8270D SIM	3510C	Water	Fluorene

Laboratory: TestAmerica Denver (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11964	04-01-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8270D SIM	3510C	Water	Indeno[1,2,3-cd]pyrene
8270D SIM	3510C	Water	Naphthalene
8270D SIM	3510C	Water	Phenanthrene
8270D SIM	3510C	Water	Pyrene
8270D SIM	3546	Solid	1-Methylnaphthalene
8270D SIM	3546	Solid	2-Methylnaphthalene
8270D SIM	3546	Solid	Acenaphthene
8270D SIM	3546	Solid	Acenaphthylene
8270D SIM	3546	Solid	Anthracene
8270D SIM	3546	Solid	Benzo[a]anthracene
8270D SIM	3546	Solid	Benzo[a]pyrene
8270D SIM	3546	Solid	Benzo[b]fluoranthene
8270D SIM	3546	Solid	Benzo[g,h,i]perylene
8270D SIM	3546	Solid	Benzo[k]fluoranthene
8270D SIM	3546	Solid	Chrysene
8270D SIM	3546	Solid	Dibenz(a,h)anthracene
8270D SIM	3546	Solid	Fluoranthene
8270D SIM	3546	Solid	Fluorene
8270D SIM	3546	Solid	Indeno[1,2,3-cd]pyrene
8270D SIM	3546	Solid	Naphthalene
8270D SIM	3546	Solid	Phenanthrene
8270D SIM	3546	Solid	Pyrene
Moisture		Solid	Percent Moisture

Method Summary

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97803-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL DEN
8081B	Organochlorine Pesticides (GC)	SW846	TAL DEN
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL DEN
6010C	Metals (ICP)	SW846	TAL DEN
7471A	Mercury (CVAA)	SW846	TAL DEN
Moisture	Percent Moisture	EPA	TAL DEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97803-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-97803-1	SS025-SS01	Solid	05/31/17 11:00	06/01/17 08:50
280-97803-2	TB-01	Solid	05/31/17 11:00	06/01/17 08:50
280-97803-3	SS025-AB-053117	Water	05/31/17 12:40	06/01/17 08:50
280-97803-4	SS025-SS02	Solid	05/31/17 12:50	06/01/17 08:50
280-97803-5	SS025-SB02(0-2)	Solid	05/31/17 13:10	06/01/17 08:50
280-97803-6	SS025-SS03	Solid	05/31/17 13:25	06/01/17 08:50
280-97803-7	SS025-SB03(0-2)	Solid	05/31/17 13:40	06/01/17 08:50
280-97803-8	SS025-SS04	Solid	05/31/17 14:00	06/01/17 08:50
280-97803-9	SS025-SB04(0-2)	Solid	05/31/17 14:10	06/01/17 08:50
280-97803-10	SS025-SS05	Solid	05/31/17 14:30	06/01/17 08:50
280-97803-11	SS025-SB05(0-2)	Solid	05/31/17 14:40	06/01/17 08:50
280-97803-12	SS025-SB05(2-4)	Solid	05/31/17 15:00	06/01/17 08:50
280-97803-13	SS025-SS06	Solid	05/31/17 15:40	06/01/17 08:50
280-97803-14	SS025-SS06-a	Solid	05/31/17 15:40	06/01/17 08:50

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: VMS_G2 Analysis Batch Number: 375537

Lab Sample ID: STD002 280-375537/5 IC Client Sample ID:

Date Analyzed: 05/30/17 19:11 Lab File ID: G2_0477.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane	7.34	assign peak		
1,4-Dioxane	8.42	Assign Peak	dukesa	05/30/17 21:29

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SMS_F Analysis Batch Number: 373158

Lab Sample ID: ICIS 280-373158/2 Client Sample ID:

Date Analyzed: 05/11/17 12:58 Lab File ID: F6544.D GC Column: Rxi-5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	18.65	Split Peak	vasquezk	05/11/17 15:25

Lab Sample ID: STD0020 280-373158/3 IC Client Sample ID:

Date Analyzed: 05/11/17 13:34 Lab File ID: F6545.D GC Column: Rxi-5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	18.65	Split Peak	vasquezk	05/11/17 15:26

Lab Sample ID: STD2500 280-373158/7 IC Client Sample ID:

Date Analyzed: 05/11/17 15:16 Lab File ID: F6549.D GC Column: Rxi-5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	18.64	Split Peak	vasquezk	05/12/17 05:49

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SMS_G5 Analysis Batch Number: 375238

Lab Sample ID: STD0020 280-375238/3 IC Client Sample ID:

Date Analyzed: 06/01/17 11:09 Lab File ID: G5_1344.D GC Column: Rxi-5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	14.28	Split Peak	vasquezk	06/01/17 14:46
Benzo[a]pyrene	15.34	Split Peak	vasquezk	06/01/17 14:46

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SMS_G5 Analysis Batch Number: 376547

Lab Sample ID: CCV 280-376547/2 Client Sample ID:

Date Analyzed: 06/08/17 09:13 Lab File ID: G5_1428.D GC Column: Rxi-5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	18.50	Split Peak	vasquezk	06/08/17 09:41

Lab Sample ID: CCVC 280-376547/19 Client Sample ID:

Date Analyzed: 06/08/17 17:12 Lab File ID: G5_1445.D GC Column: Rxi-5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[a]pyrene	15.33	Split Peak	vasquezk	06/11/17 22:35

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 368670

Lab Sample ID: STD6 280-368670/13 IC Client Sample ID:

Date Analyzed: 04/10/17 14:16 Lab File ID: 04100013.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.23	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	7.28	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.42	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.71	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.23	Baseline Smoothing	wellsd	04/17/17 13:21

Lab Sample ID: STD5 280-368670/14 IC Client Sample ID:

Date Analyzed: 04/10/17 14:33 Lab File ID: 04100014.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.65	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	6.98	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.24	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.74	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.18	Baseline Smoothing	wellsd	04/17/17 13:21

Lab Sample ID: STD5 280-368670/14 IC Client Sample ID:

Date Analyzed: 04/10/17 14:33 Lab File ID: 04100014.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.23	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	7.27	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.42	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.70	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.23	Baseline Smoothing	wellsd	04/17/17 13:21

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 368670

Lab Sample ID: STD4 280-368670/15 IC Client Sample ID:

Date Analyzed: 04/10/17 14:50 Lab File ID: 04100015.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.65	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	6.97	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.24	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.74	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.18	Baseline Smoothing	wellsd	04/17/17 13:21

Lab Sample ID: STD4 280-368670/15 IC Client Sample ID:

Date Analyzed: 04/10/17 14:50 Lab File ID: 04100015.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.23	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	7.28	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.42	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.70	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.23	Baseline Smoothing	wellsd	04/17/17 13:21

Lab Sample ID: STD3 280-368670/16 IC Client Sample ID:

Date Analyzed: 04/10/17 15:06 Lab File ID: 04100016.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.65	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	6.98	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.24	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.74	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.18	Baseline Smoothing	wellsd	04/17/17 13:21

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 368670

Lab Sample ID: STD3 280-368670/16 IC Client Sample ID:

Date Analyzed: 04/10/17 15:06 Lab File ID: 04100016.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.23	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	7.28	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.42	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.70	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.23	Baseline Smoothing	wellsd	04/17/17 13:21

Lab Sample ID: STD2 280-368670/17 IC Client Sample ID:

Date Analyzed: 04/10/17 15:23 Lab File ID: 04100017.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.65	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	6.98	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.24	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.74	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.18	Baseline Smoothing	wellsd	04/17/17 13:21

Lab Sample ID: STD2 280-368670/17 IC Client Sample ID:

Date Analyzed: 04/10/17 15:23 Lab File ID: 04100017.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.23	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	7.28	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.42	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.71	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.23	Baseline Smoothing	wellsd	04/17/17 13:21

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 368670

Lab Sample ID: STD1 280-368670/18 IC Client Sample ID:

Date Analyzed: 04/10/17 15:40 Lab File ID: 04100018.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.65	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	6.97	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.24	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.74	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.18	Baseline Smoothing	wellsd	04/17/17 13:21

Lab Sample ID: STD1 280-368670/18 IC Client Sample ID:

Date Analyzed: 04/10/17 15:40 Lab File ID: 04100018.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.23	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	7.28	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.42	Incomplete Integration	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.71	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.23	Baseline Smoothing	wellsd	04/17/17 13:21

Lab Sample ID: STD4 280-368670/26 ICIS Client Sample ID:

Date Analyzed: 04/10/17 17:56 Lab File ID: 04100026.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Heptachlor	5.18	Incomplete Integration	wellsd	04/17/17 13:22

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 368670

Lab Sample ID: STD2 280-368670/28 IC Client Sample ID:

Date Analyzed: 04/10/17 18:29 Lab File ID: 04100028.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
gamma-Chlordane	6.14	Incomplete Integration	wellsd	04/17/17 13:22
Endrin aldehyde	7.70	Incomplete Integration	wellsd	04/17/17 13:22

Lab Sample ID: STD1 280-368670/29 IC Client Sample ID:

Date Analyzed: 04/10/17 18:46 Lab File ID: 04100029.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Aldrin	5.47	Incomplete Integration	wellsd	04/17/17 13:22

Lab Sample ID: ICV 280-368670/31 Client Sample ID:

Date Analyzed: 04/10/17 19:20 Lab File ID: 04100031.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.65	Baseline Smoothing	wellsd	04/17/17 13:22
Toxaphene Peak 2	6.97	Baseline Smoothing	wellsd	04/17/17 13:22
Toxaphene Peak 3	7.23	Baseline Smoothing	wellsd	04/17/17 13:22
Toxaphene Peak 4	7.74	Baseline Smoothing	wellsd	04/17/17 13:22
Toxaphene Peak 5	8.18	Baseline Smoothing	wellsd	04/17/17 13:22

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 368670

Lab Sample ID: ICV 280-368670/31 Client Sample ID:

Date Analyzed: 04/10/17 19:20 Lab File ID: 04100031.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.23	Baseline Smoothing	wellsd	04/17/17 13:22
Toxaphene Peak 2	7.27	Baseline Smoothing	wellsd	04/17/17 13:22
Toxaphene Peak 3	7.42	Baseline Smoothing	wellsd	04/17/17 13:22
Toxaphene Peak 4	7.70	Baseline Smoothing	wellsd	04/17/17 13:22
Toxaphene Peak 5	8.23	Baseline Smoothing	wellsd	04/17/17 13:22

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 377328

Lab Sample ID: CCV 280-377328/11 Client Sample ID:

Date Analyzed: 06/14/17 18:58 Lab File ID: 06140011.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.61	Baseline Smoothing	wellsd	06/15/17 13:41
Toxaphene Peak 2	6.93	Baseline Smoothing	wellsd	06/15/17 13:41
Toxaphene Peak 3	7.19	Baseline Smoothing	wellsd	06/15/17 13:41
Toxaphene Peak 4	7.70	Baseline Smoothing	wellsd	06/15/17 13:41
Toxaphene Peak 5	8.14	Baseline Smoothing	wellsd	06/15/17 13:41

Lab Sample ID: CCV 280-377328/11 Client Sample ID:

Date Analyzed: 06/14/17 18:58 Lab File ID: 06140011.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.12	Baseline Smoothing	wellsd	06/15/17 13:42
Toxaphene Peak 2	7.17	Baseline Smoothing	wellsd	06/15/17 13:42
Toxaphene Peak 3	7.31	Baseline Smoothing	wellsd	06/15/17 13:42
Toxaphene Peak 4	7.60	Baseline Smoothing	wellsd	06/15/17 13:42
Toxaphene Peak 5	8.12	Baseline Smoothing	wellsd	06/15/17 13:42

Lab Sample ID: MB 280-376892/1-A Client Sample ID:

Date Analyzed: 06/14/17 19:49 Lab File ID: 06140014.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
DCB Decachlorobiphenyl (Surr)	9.61	Incomplete Integration	wellsd	06/15/17 13:42

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 377328

Lab Sample ID: LCS 280-376892/3-A Client Sample ID:

Date Analyzed: 06/14/17 20:23 Lab File ID: 06140016.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.61	Baseline Smoothing	wellsd	06/15/17 13:42
Toxaphene Peak 2	6.93	Baseline Smoothing	wellsd	06/15/17 13:42
Toxaphene Peak 3	7.19	Baseline Smoothing	wellsd	06/15/17 13:42
Toxaphene Peak 4	7.70	Baseline Smoothing	wellsd	06/15/17 13:42
Toxaphene Peak 5	8.14	Baseline Smoothing	wellsd	06/15/17 13:42

Lab Sample ID: LCS 280-376892/3-A Client Sample ID:

Date Analyzed: 06/14/17 20:23 Lab File ID: 06140016.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.12	Baseline Smoothing	wellsd	06/15/17 13:42
Toxaphene Peak 2	7.16	Baseline Smoothing	wellsd	06/15/17 13:42
Toxaphene Peak 3	7.31	Baseline Smoothing	wellsd	06/15/17 13:42
Toxaphene Peak 4	7.60	Baseline Smoothing	wellsd	06/15/17 13:42
Toxaphene Peak 5	8.12	Baseline Smoothing	wellsd	06/15/17 13:42

Lab Sample ID: CCV 280-377328/28 Client Sample ID:

Date Analyzed: 06/14/17 23:47 Lab File ID: 06140028.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.61	Baseline Smoothing	wellsd	06/15/17 13:47
Toxaphene Peak 2	6.93	Baseline Smoothing	wellsd	06/15/17 13:47
Toxaphene Peak 3	7.19	Baseline Smoothing	wellsd	06/15/17 13:47
Toxaphene Peak 4	7.70	Baseline Smoothing	wellsd	06/15/17 13:47
Toxaphene Peak 5	8.14	Baseline Smoothing	wellsd	06/15/17 13:47

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 377328

Lab Sample ID: CCV 280-377328/28 Client Sample ID:

Date Analyzed: 06/14/17 23:47 Lab File ID: 06140028.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.12	Baseline Smoothing	wellsd	06/15/17 13:47
Toxaphene Peak 2	7.17	Baseline Smoothing	wellsd	06/15/17 13:47
Toxaphene Peak 3	7.31	Baseline Smoothing	wellsd	06/15/17 13:47
Toxaphene Peak 4	7.60	Baseline Smoothing	wellsd	06/15/17 13:47
Toxaphene Peak 5	8.12	Baseline Smoothing	wellsd	06/15/17 13:47

Lab Sample ID: PEM 280-377328/31 Client Sample ID:

Date Analyzed: 06/15/17 00:37 Lab File ID: 06140031.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4,4'-DDT	7.47	Incomplete Integration	wellsd	06/15/17 13:47

Lab Sample ID: CCV 280-377328/43 Client Sample ID:

Date Analyzed: 06/15/17 04:00 Lab File ID: 06140043.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.61	Baseline Smoothing	wellsd	06/15/17 13:53
Toxaphene Peak 2	6.93	Baseline Smoothing	wellsd	06/15/17 13:53
Toxaphene Peak 3	7.19	Baseline Smoothing	wellsd	06/15/17 13:53
Toxaphene Peak 4	7.70	Baseline Smoothing	wellsd	06/15/17 13:53
Toxaphene Peak 5	8.14	Baseline Smoothing	wellsd	06/15/17 13:53

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 377328

Lab Sample ID: CCV 280-377328/43 Client Sample ID:

Date Analyzed: 06/15/17 04:00 Lab File ID: 06140043.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.12	Baseline Smoothing	wellsd	06/15/17 13:53
Toxaphene Peak 2	7.17	Baseline Smoothing	wellsd	06/15/17 13:53
Toxaphene Peak 3	7.31	Baseline Smoothing	wellsd	06/15/17 13:53
Toxaphene Peak 4	7.60	Baseline Smoothing	wellsd	06/15/17 13:53
Toxaphene Peak 5	8.12	Baseline Smoothing	wellsd	06/15/17 13:53

Lab Sample ID: 280-97803-1 Client Sample ID: SS025-SS01

Date Analyzed: 06/15/17 04:51 Lab File ID: 06140046.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
gamma-BHC (Lindane)	4.57	Baseline Smoothing	wellsd	06/15/17 09:26
Aldrin	5.29	Baseline Smoothing	wellsd	06/15/17 09:26
alpha-Chlordane	6.20	Baseline Smoothing	wellsd	06/15/17 09:26

Lab Sample ID: 280-97803-6 Client Sample ID: SS025-SS03

Date Analyzed: 06/15/17 05:58 Lab File ID: 06140050.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
gamma-BHC (Lindane)	4.68	Baseline Smoothing	wellsd	06/15/17 13:54
delta-BHC	4.95	Baseline Smoothing	wellsd	06/15/17 13:54

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 377328

Lab Sample ID: 280-97803-6 Client Sample ID: SS025-SS03

Date Analyzed: 06/15/17 05:58 Lab File ID: 06140050.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrachloro-m-xylene (Surr)	3.69	Baseline Smoothing	wellsd	06/15/17 13:54
gamma-BHC (Lindane)	4.57	Baseline Smoothing	wellsd	06/15/17 13:54
delta-BHC	4.93	Baseline Smoothing	wellsd	06/15/17 13:54

Lab Sample ID: 280-97803-6 MS Client Sample ID: SS025-SS03 MS

Date Analyzed: 06/15/17 06:15 Lab File ID: 06140051.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.63	Baseline Smoothing	wellsd	06/15/17 13:55
Toxaphene Peak 2	6.92	Baseline Smoothing	wellsd	06/15/17 13:55
Toxaphene Peak 3	7.19	Baseline Smoothing	wellsd	06/15/17 13:55
Toxaphene Peak 4	7.70	Baseline Smoothing	wellsd	06/15/17 13:55

Lab Sample ID: 280-97803-6 MS Client Sample ID: SS025-SS03 MS

Date Analyzed: 06/15/17 06:15 Lab File ID: 06140051.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 2	7.17	Baseline Smoothing	wellsd	06/15/17 13:55
Toxaphene Peak 3	7.31	Baseline Smoothing	wellsd	06/15/17 13:55
Toxaphene Peak 4	7.61	Baseline Smoothing	wellsd	06/15/17 13:55
Toxaphene Peak 5	8.13	Baseline Smoothing	wellsd	06/15/17 13:55

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 377328

Lab Sample ID: 280-97803-6 MSD Client Sample ID: SS025-SS03 MSD

Date Analyzed: 06/15/17 06:32 Lab File ID: 06140052.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 2	6.93	Baseline Smoothing	wellsd	06/15/17 13:55
Toxaphene Peak 3	7.20	Baseline Smoothing	wellsd	06/15/17 13:55
Toxaphene Peak 4	7.70	Baseline Smoothing	wellsd	06/15/17 13:55
Toxaphene Peak 5	8.14	Baseline Smoothing	wellsd	06/15/17 13:55

Lab Sample ID: 280-97803-6 MSD Client Sample ID: SS025-SS03 MSD

Date Analyzed: 06/15/17 06:32 Lab File ID: 06140052.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 2	7.17	Baseline Smoothing	wellsd	06/15/17 13:55
Toxaphene Peak 3	7.31	Baseline Smoothing	wellsd	06/15/17 13:55
Toxaphene Peak 4	7.60	Baseline Smoothing	wellsd	06/15/17 13:55
Toxaphene Peak 5	8.13	Baseline Smoothing	wellsd	06/15/17 13:55

Lab Sample ID: CCV 280-377328/59 Client Sample ID:

Date Analyzed: 06/15/17 08:30 Lab File ID: 06140059.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.61	Baseline Smoothing	wellsd	06/15/17 13:56
Toxaphene Peak 2	6.93	Baseline Smoothing	wellsd	06/15/17 13:56
Toxaphene Peak 3	7.19	Baseline Smoothing	wellsd	06/15/17 13:56
Toxaphene Peak 4	7.70	Baseline Smoothing	wellsd	06/15/17 13:56
Toxaphene Peak 5	8.14	Baseline Smoothing	wellsd	06/15/17 13:56

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 377328

Lab Sample ID: CCV 280-377328/59 Client Sample ID:

Date Analyzed: 06/15/17 08:30 Lab File ID: 06140059.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.12	Baseline Smoothing	wellsd	06/15/17 13:57
Toxaphene Peak 2	7.17	Baseline Smoothing	wellsd	06/15/17 13:57
Toxaphene Peak 3	7.31	Baseline Smoothing	wellsd	06/15/17 13:57
Toxaphene Peak 4	7.60	Baseline Smoothing	wellsd	06/15/17 13:57
Toxaphene Peak 5	8.12	Baseline Smoothing	wellsd	06/15/17 13:57

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 377996

Lab Sample ID: PEM 280-377996/7 Client Sample ID:

Date Analyzed: 06/20/17 12:18 Lab File ID: 06200007.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4,4'-DDT	7.47	Incomplete Integration	wellsd	06/21/17 10:58
Endrin ketone	8.41	Incomplete Integration	wellsd	06/21/17 10:58

Lab Sample ID: CCV 280-377996/11 Client Sample ID:

Date Analyzed: 06/20/17 13:45 Lab File ID: 06200011.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.61	Baseline Smoothing	wellsd	06/20/17 15:27
Toxaphene Peak 2	6.93	Baseline Smoothing	wellsd	06/20/17 15:27
Toxaphene Peak 3	7.19	Baseline Smoothing	wellsd	06/20/17 15:27
Toxaphene Peak 4	7.69	Baseline Smoothing	wellsd	06/20/17 15:27
Toxaphene Peak 5	8.14	Baseline Smoothing	wellsd	06/20/17 15:27

Lab Sample ID: CCV 280-377996/11 Client Sample ID:

Date Analyzed: 06/20/17 13:45 Lab File ID: 06200011.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.12	Baseline Smoothing	wellsd	06/20/17 15:27
Toxaphene Peak 2	7.16	Baseline Smoothing	wellsd	06/20/17 15:27
Toxaphene Peak 3	7.31	Baseline Smoothing	wellsd	06/20/17 15:27
Toxaphene Peak 4	7.60	Baseline Smoothing	wellsd	06/20/17 15:27
Toxaphene Peak 5	8.12	Baseline Smoothing	wellsd	06/20/17 15:27

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 377996

Lab Sample ID: MB 280-377252/1-A Client Sample ID:

Date Analyzed: 06/20/17 14:36 Lab File ID: 06200014.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrachloro-m-xylene (Surr)	3.82	Baseline Smoothing	wellsd	06/20/17 15:28
beta-BHC	4.75	Baseline Smoothing	wellsd	06/20/17 15:28
delta-BHC	4.93	Baseline Smoothing	wellsd	06/20/17 15:28

Lab Sample ID: LCS 280-377252/2-A Client Sample ID:

Date Analyzed: 06/20/17 14:53 Lab File ID: 06200015.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Endosulfan II	7.33	Incomplete Integration	wellsd	06/20/17 15:28

Lab Sample ID: LCS 280-377252/3-A Client Sample ID:

Date Analyzed: 06/20/17 15:32 Lab File ID: 06200016.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.61	Baseline Smoothing	wellsd	06/20/17 16:06
Toxaphene Peak 2	6.93	Baseline Smoothing	wellsd	06/20/17 16:06
Toxaphene Peak 3	7.19	Baseline Smoothing	wellsd	06/20/17 16:06
Toxaphene Peak 4	7.69	Baseline Smoothing	wellsd	06/20/17 16:06
Toxaphene Peak 5	8.13	Baseline Smoothing	wellsd	06/20/17 16:06
DCB Decachlorobiphenyl (Surr)	9.49	Baseline Smoothing	wellsd	06/20/17 16:06

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 377996

Lab Sample ID: LCS 280-377252/3-A Client Sample ID:

Date Analyzed: 06/20/17 15:32 Lab File ID: 06200016.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.11	Baseline Smoothing	wellsd	06/20/17 16:06
Toxaphene Peak 2	7.16	Baseline Smoothing	wellsd	06/20/17 16:06
Toxaphene Peak 3	7.31	Baseline Smoothing	wellsd	06/20/17 16:06
Toxaphene Peak 4	7.60	Baseline Smoothing	wellsd	06/20/17 16:06
Toxaphene Peak 5	8.12	Baseline Smoothing	wellsd	06/20/17 16:06

Lab Sample ID: CCV 280-377996/29 Client Sample ID:

Date Analyzed: 06/20/17 19:13 Lab File ID: 06200029.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.61	Baseline Smoothing	wellsd	06/21/17 10:54
Toxaphene Peak 2	6.92	Baseline Smoothing	wellsd	06/21/17 10:54
Toxaphene Peak 3	7.19	Baseline Smoothing	wellsd	06/21/17 10:54
Toxaphene Peak 4	7.69	Baseline Smoothing	wellsd	06/21/17 10:54
Toxaphene Peak 5	8.13	Baseline Smoothing	wellsd	06/21/17 10:54

Lab Sample ID: CCV 280-377996/29 Client Sample ID:

Date Analyzed: 06/20/17 19:13 Lab File ID: 06200029.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.11	Baseline Smoothing	wellsd	06/21/17 10:54
Toxaphene Peak 2	7.16	Baseline Smoothing	wellsd	06/21/17 10:54
Toxaphene Peak 3	7.31	Baseline Smoothing	wellsd	06/21/17 10:54
Toxaphene Peak 4	7.60	Baseline Smoothing	wellsd	06/21/17 10:54
Toxaphene Peak 5	8.12	Baseline Smoothing	wellsd	06/21/17 10:54

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P3 Analysis Batch Number: 376236

Lab Sample ID: STDL71248 280-376236/1 Client Sample ID:

Date Analyzed: 06/06/17 13:49 Lab File ID: 06061701.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1248 Peak 1	3.95	Baseline Smoothing	jacksonto	06/06/17 14:59
PCB-1248 Peak 2	4.59	Baseline Smoothing	jacksonto	06/06/17 14:59
PCB-1248 Peak 3	4.72	Baseline Smoothing	jacksonto	06/06/17 14:59
PCB-1248 Peak 4	5.03	Baseline Smoothing	jacksonto	06/06/17 14:59
PCB-1248 Peak 5	5.07	Baseline Smoothing	jacksonto	06/06/17 14:59

Lab Sample ID: STDL61248 280-376236/2 Client Sample ID:

Date Analyzed: 06/06/17 14:10 Lab File ID: 06061702.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1248 Peak 1	3.95	Baseline Smoothing	jacksonto	06/06/17 14:58
PCB-1248 Peak 2	4.59	Baseline Smoothing	jacksonto	06/06/17 14:58
PCB-1248 Peak 3	4.72	Baseline Smoothing	jacksonto	06/06/17 14:58
PCB-1248 Peak 4	5.03	Baseline Smoothing	jacksonto	06/06/17 14:58
PCB-1248 Peak 5	5.07	Baseline Smoothing	jacksonto	06/06/17 14:58

Lab Sample ID: STDL51248 280-376236/3 Client Sample ID:

Date Analyzed: 06/06/17 14:32 Lab File ID: 06061703.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1248 Peak 1	3.95	Baseline Smoothing	jacksonto	06/06/17 14:59
PCB-1248 Peak 2	4.59	Baseline Smoothing	jacksonto	06/06/17 14:59
PCB-1248 Peak 3	4.72	Baseline Smoothing	jacksonto	06/06/17 14:59
PCB-1248 Peak 4	5.03	Baseline Smoothing	jacksonto	06/06/17 14:59
PCB-1248 Peak 5	5.07	Baseline Smoothing	jacksonto	06/06/17 14:59

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P3 Analysis Batch Number: 376236

Lab Sample ID: STDL51660 280-376236/17 Client Sample ID:

Date Analyzed: 06/06/17 19:36 Lab File ID: 06061717.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1260 Peak 1	6.01	Baseline Smoothing	jacksonto	06/07/17 06:44
PCB-1260 Peak 2	6.74	Baseline Smoothing	jacksonto	06/07/17 06:44
PCB-1260 Peak 3	7.23	Baseline Smoothing	jacksonto	06/07/17 06:44
PCB-1260 Peak 4	7.67	Baseline Smoothing	jacksonto	06/07/17 06:44
PCB-1260 Peak 5	8.05	Baseline Smoothing	jacksonto	06/07/17 06:44

Lab Sample ID: STDL41660 280-376236/18 Client Sample ID:

Date Analyzed: 06/06/17 19:58 Lab File ID: 06061718.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1260 Peak 1	6.01	Baseline Smoothing	jacksonto	06/07/17 06:44
PCB-1260 Peak 2	6.74	Baseline Smoothing	jacksonto	06/07/17 06:44
PCB-1260 Peak 3	7.23	Baseline Smoothing	jacksonto	06/07/17 06:44
PCB-1260 Peak 4	7.67	Baseline Smoothing	jacksonto	06/07/17 06:44
PCB-1260 Peak 5	8.05	Baseline Smoothing	jacksonto	06/07/17 06:44

Lab Sample ID: STDL31660 280-376236/19 Client Sample ID:

Date Analyzed: 06/06/17 20:19 Lab File ID: 06061719.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1260 Peak 1	6.01	Baseline Smoothing	jacksonto	06/07/17 06:45
PCB-1260 Peak 2	6.74	Baseline Smoothing	jacksonto	06/07/17 06:45
PCB-1260 Peak 3	7.23	Baseline Smoothing	jacksonto	06/07/17 06:45
PCB-1260 Peak 4	7.67	Baseline Smoothing	jacksonto	06/07/17 06:45
PCB-1260 Peak 5	8.05	Baseline Smoothing	jacksonto	06/07/17 06:45

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P3 Analysis Batch Number: 376236

Lab Sample ID: STDL21660 280-376236/20 Client Sample ID:

Date Analyzed: 06/06/17 20:41 Lab File ID: 06061720.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1016 Peak 1	3.49	Baseline Smoothing	jacksonto	06/07/17 06:45
PCB-1016 Peak 2	3.95	Baseline Smoothing	jacksonto	06/07/17 06:45
PCB-1016 Peak 3	4.09	Baseline Smoothing	jacksonto	06/07/17 06:45
PCB-1016 Peak 4	4.15	Baseline Smoothing	jacksonto	06/07/17 06:45
PCB-1016 Peak 5	4.54	Baseline Smoothing	jacksonto	06/07/17 06:45

Lab Sample ID: STDL73262 280-376236/22 Client Sample ID:

Date Analyzed: 06/06/17 21:25 Lab File ID: 06061722.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1232 Peak 1	3.14	Baseline Smoothing	jacksonto	06/07/17 06:41
PCB-1232 Peak 2	3.51	Baseline Smoothing	jacksonto	06/07/17 06:41
PCB-1232 Peak 3	3.95	Baseline Smoothing	jacksonto	06/07/17 06:41
PCB-1232 Peak 4	4.09	Baseline Smoothing	jacksonto	06/07/17 06:41
PCB-1232 Peak 5	4.72	Baseline Smoothing	jacksonto	06/07/17 06:41

Lab Sample ID: STDL63262 280-376236/23 Client Sample ID:

Date Analyzed: 06/06/17 21:46 Lab File ID: 06061723.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1232 Peak 1	3.14	Baseline Smoothing	jacksonto	06/07/17 06:42
PCB-1232 Peak 2	3.51	Baseline Smoothing	jacksonto	06/07/17 06:42
PCB-1232 Peak 3	3.95	Baseline Smoothing	jacksonto	06/07/17 06:42
PCB-1232 Peak 4	4.09	Baseline Smoothing	jacksonto	06/07/17 06:42
PCB-1232 Peak 5	4.72	Baseline Smoothing	jacksonto	06/07/17 06:42

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P3 Analysis Batch Number: 376236

Lab Sample ID: STDL53262 280-376236/24 Client Sample ID:

Date Analyzed: 06/06/17 22:08 Lab File ID: 06061724.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1232 Peak 1	3.14	Baseline Smoothing	jacksonto	06/07/17 06:43
PCB-1232 Peak 2	3.51	Baseline Smoothing	jacksonto	06/07/17 06:43
PCB-1232 Peak 3	3.95	Baseline Smoothing	jacksonto	06/07/17 06:43
PCB-1232 Peak 4	4.09	Baseline Smoothing	jacksonto	06/07/17 06:43
PCB-1232 Peak 5	4.72	Baseline Smoothing	jacksonto	06/07/17 06:43

Lab Sample ID: STDL54268 280-376236/31 Client Sample ID:

Date Analyzed: 06/07/17 00:39 Lab File ID: 06061731.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1242 Peak 1	3.51	Baseline Smoothing	jacksonto	06/07/17 06:40
PCB-1242 Peak 2	3.95	Baseline Smoothing	jacksonto	06/07/17 06:40
PCB-1242 Peak 3	4.09	Baseline Smoothing	jacksonto	06/07/17 06:40
PCB-1242 Peak 4	5.03	Baseline Smoothing	jacksonto	06/07/17 06:40
PCB-1242 Peak 5	5.07	Baseline Smoothing	jacksonto	06/07/17 06:40

Lab Sample ID: ICV 280-376236/38 Client Sample ID:

Date Analyzed: 06/07/17 03:11 Lab File ID: 06061738.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1260 Peak 1	6.01	Baseline Smoothing	jacksonto	06/07/17 06:48
PCB-1260 Peak 2	6.74	Baseline Smoothing	jacksonto	06/07/17 06:48
PCB-1260 Peak 3	7.23	Baseline Smoothing	jacksonto	06/07/17 06:48
PCB-1260 Peak 4	7.67	Baseline Smoothing	jacksonto	06/07/17 06:48
PCB-1260 Peak 5	8.05	Baseline Smoothing	jacksonto	06/07/17 06:48

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P3 Analysis Batch Number: 376236

Lab Sample ID: ICV 280-376236/40 Client Sample ID:

Date Analyzed: 06/07/17 03:54 Lab File ID: 06061740.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1242 Peak 1	3.51	Baseline Smoothing	jacksonto	06/07/17 06:49
PCB-1242 Peak 2	3.95	Baseline Smoothing	jacksonto	06/07/17 06:49
PCB-1242 Peak 3	4.09	Baseline Smoothing	jacksonto	06/07/17 06:49
PCB-1242 Peak 4	5.03	Baseline Smoothing	jacksonto	06/07/17 06:49
PCB-1242 Peak 5	5.08	Baseline Smoothing	jacksonto	06/07/17 06:49

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8081 LCS_00378	06/14/17	06/08/17	P&T Methanol, Lot MethanolP&T_00172	50 mL	8081LCSPrim_00036	0.5 mL	4,4'-DDD	0.5 ug/mL
							4,4'-DDE	0.5 ug/mL
							4,4'-DDT	0.5 ug/mL
							Aldrin	0.5 ug/mL
							alpha-BHC	0.5 ug/mL
							alpha-Chlordane	0.5 ug/mL
							beta-BHC	0.5 ug/mL
							delta-BHC	0.5 ug/mL
							Dieldrin	0.5 ug/mL
							Endosulfan I	0.5 ug/mL
							Endosulfan II	0.5 ug/mL
							Endosulfan sulfate	0.5 ug/mL
							Endrin	0.5 ug/mL
							Endrin aldehyde	0.5 ug/mL
							Endrin ketone	0.5 ug/mL
							gamma-BHC (Lindane)	0.5 ug/mL
							gamma-Chlordane	0.5 ug/mL
							Heptachlor	0.5 ug/mL
							Heptachlor epoxide	0.5 ug/mL
							Methoxychlor	0.5 ug/mL
.8081LCSPrim_00036	11/15/17	07/20/16	Hexane, Lot Hexane_Cycl_00044	10 mL	8081ABResPS_00016	0.25 mL	4,4'-DDD	50 ug/mL
							4,4'-DDE	50 ug/mL
							4,4'-DDT	50 ug/mL
							Aldrin	50 ug/mL
							alpha-BHC	50 ug/mL
							alpha-Chlordane	50 ug/mL
							beta-BHC	50 ug/mL
							delta-BHC	50 ug/mL
							Dieldrin	50 ug/mL
							Endosulfan I	50 ug/mL
							Endosulfan II	50 ug/mL
							Endosulfan sulfate	50 ug/mL
							Endrin	50 ug/mL
							Endrin aldehyde	50 ug/mL
							Endrin ketone	50 ug/mL
							gamma-BHC (Lindane)	50 ug/mL
							gamma-Chlordane	50 ug/mL
							Heptachlor	50 ug/mL
							Heptachlor epoxide	50 ug/mL
							Methoxychlor	50 ug/mL
..8081ABResPS_00016	03/15/18		Restek, Lot A0108399		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
8081/82 Surr_00093	10/19/17	04/17/17	ACETONE, Lot Acetone_00176	1000 mL	AR_SURR_RES_00060	1 mL	DCB Decachlorobiphenyl (Surr)	0.2 ug/mL
							Tetrachloro-m-xylene (Surr)	0.2 ug/mL
.AR_SURR_RES_00060	06/30/22		RESTEK, Lot A0118280		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
8081_EvalBPEM_00008	09/08/17	02/27/17	Hexane, Lot 135581	100 mL	8081EvalBStk2_00015	20 uL	4,4'-DDT	0.04 ug/mL
							Endrin	0.04 ug/mL
.8081EvalBStk2_00015	09/08/17		AccuStandard, Inc, Lot 214101838-03		(Purchased Reagent)		4,4'-DDT	200 ug/mL
							Endrin	200 ug/mL
8081_IS_00005	05/29/17	11/29/16	Hexane, Lot 135581	500 mL	BNB stock_00008	1 mL	1-Bromo-2-nitrobenzene	2 ug/mL
.BNB stock_00008	07/31/19		Restek, Lot A0118613		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
8081_IS_00006	11/30/17	05/30/17	Hexane, Lot 160062	500 mL	BNB stock_00010	1 mL	1-Bromo-2-nitrobenzene	2 ug/mL
.BNB stock_00010	07/31/19		Restek, Lot A0118613		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
8081ABICVL3_00028	09/30/17	04/04/17	Hexane, Lot 130362	100 mL	8081ABICVStk_00025	2.5 mL	4,4'-DDD	25 ng/mL
							4,4'-DDE	25 ng/mL
							4,4'-DDT	25 ng/mL
							Aldrin	25 ng/mL
							alpha-BHC	25 ng/mL
							alpha-Chlordane	25 ng/mL
							beta-BHC	25 ng/mL
							delta-BHC	25 ng/mL
							Dieldrin	25 ng/mL
							Endosulfan I	25 ng/mL
							Endosulfan II	25 ng/mL
							Endosulfan sulfate	25 ng/mL
							Endrin	25 ng/mL
							Endrin aldehyde	25 ng/mL
							gamma-BHC (Lindane)	25 ng/mL
							gamma-Chlordane	25 ng/mL
							Heptachlor	25 ng/mL
							Heptachlor epoxide	25 ng/mL
							Methoxychlor	25 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							DCB Decachlorobiphenyl (Surr)	25 ng/mL
							Tetrachloro-m-xylene (Surr)	25 ng/mL
.8081ABICVStk_00025	09/30/17	04/04/17	Hexane, Lot 130362	50 mL	8081ABResSS_00010	0.025 mL	4,4'-DDD	1000 ng/mL
							4,4'-DDE	1000 ng/mL
							4,4'-DDT	1000 ng/mL
							Aldrin	1000 ng/mL
							alpha-BHC	1000 ng/mL
							alpha-Chlordane	1000 ng/mL
							beta-BHC	1000 ng/mL
							delta-BHC	1000 ng/mL
							Dieldrin	1000 ng/mL
							Endosulfan I	1000 ng/mL
							Endosulfan II	1000 ng/mL
							Endosulfan sulfate	1000 ng/mL
							Endrin	1000 ng/mL
							Endrin aldehyde	1000 ng/mL
							gamma-BHC (Lindane)	1000 ng/mL
							gamma-Chlordane	1000 ng/mL
							Heptachlor	1000 ng/mL
							Heptachlor epoxide	1000 ng/mL
							Methoxychlor	1000 ng/mL
					AR_SURR_RES_00067	0.25 mL	DCB Decachlorobiphenyl (Surr)	1000 ng/mL
							Tetrachloro-m-xylene (Surr)	1000 ng/mL
..8081ABResSS_00010	02/28/19		Restek, Lot A0108854		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..AR_SURR_RES_00067	12/30/22		RESTEK, Lot A0121594		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
8081IcalL1_00021	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABCalStk_00028	0.4 mL	4,4'-DDD	4 ng/mL
							4,4'-DDE	4 ng/mL
							4,4'-DDT	4 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Aldrin	4 ng/mL
							alpha-BHC	4 ng/mL
							alpha-Chlordane	4 ng/mL
							beta-BHC	4 ng/mL
							delta-BHC	4 ng/mL
							Dieldrin	4 ng/mL
							Endosulfan I	4 ng/mL
							Endosulfan II	4 ng/mL
							Endosulfan sulfate	4 ng/mL
							Endrin	4 ng/mL
							Endrin aldehyde	4 ng/mL
							Endrin ketone	4 ng/mL
							gamma-BHC (Lindane)	4 ng/mL
							gamma-Chlordane	4 ng/mL
							Heptachlor	4 ng/mL
							Heptachlor epoxide	4 ng/mL
							Methoxychlor	4 ng/mL
							Hexachlorobenzene	4 ng/mL
							DCB Decachlorobiphenyl (Surr)	4 ng/mL
							Tetrachloro-m-xylene (Surr)	4 ng/mL
.8081ABCalStk_00028	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABResPS_00020	0.05 mL	4,4'-DDD	1000 ng/mL
							4,4'-DDE	1000 ng/mL
							4,4'-DDT	1000 ng/mL
							Aldrin	1000 ng/mL
							alpha-BHC	1000 ng/mL
							alpha-Chlordane	1000 ng/mL
							beta-BHC	1000 ng/mL
							delta-BHC	1000 ng/mL
							Dieldrin	1000 ng/mL
							Endosulfan I	1000 ng/mL
							Endosulfan II	1000 ng/mL
							Endosulfan sulfate	1000 ng/mL
							Endrin	1000 ng/mL
							Endrin aldehyde	1000 ng/mL
							Endrin ketone	1000 ng/mL
							gamma-BHC (Lindane)	1000 ng/mL
							gamma-Chlordane	1000 ng/mL
							Heptachlor	1000 ng/mL
							Heptachlor epoxide	1000 ng/mL
							Methoxychlor	1000 ng/mL
					8081HCBStkPS_00017	1 mL	Hexachlorobenzene	1000 ng/mL
					AR_SURR_RES_00050	0.5 mL	DCB Decachlorobiphenyl (Surr)	1000 ng/mL
							Tetrachloro-m-xylene (Surr)	1000 ng/mL
..8081ABResPS_00020	10/31/19		Restek, Lot A0114872		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..8081HCBStkPS_00017	06/16/25		Accustandard, Inc., Lot 215061299		(Purchased Reagent)		Hexachlorobenzene	100 ug/mL
..AR_SURR_RES_00050	06/30/22		RESTEK, Lot A0117947		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
8081IcalL2_00021	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABCalStk_00028	1 mL	4,4'-DDD	10 ng/mL
							4,4'-DDE	10 ng/mL
							4,4'-DDT	10 ng/mL
							Aldrin	10 ng/mL
							alpha-BHC	10 ng/mL
							alpha-Chlordane	10 ng/mL
							beta-BHC	10 ng/mL
							delta-BHC	10 ng/mL
							Dieldrin	10 ng/mL
							Endosulfan I	10 ng/mL
							Endosulfan II	10 ng/mL
							Endosulfan sulfate	10 ng/mL
							Endrin	10 ng/mL
							Endrin aldehyde	10 ng/mL
							Endrin ketone	10 ng/mL
							gamma-BHC (Lindane)	10 ng/mL
							gamma-Chlordane	10 ng/mL
							Heptachlor	10 ng/mL
							Heptachlor epoxide	10 ng/mL
							Methoxychlor	10 ng/mL
							Hexachlorobenzene	10 ng/mL
							DCB Decachlorobiphenyl (Surr)	10 ng/mL
							Tetrachloro-m-xylene (Surr)	10 ng/mL
.8081ABCalStk_00028	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABResPS_00020	0.05 mL	4,4'-DDD	1000 ng/mL
							4,4'-DDE	1000 ng/mL
							4,4'-DDT	1000 ng/mL
							Aldrin	1000 ng/mL
							alpha-BHC	1000 ng/mL
							alpha-Chlordane	1000 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent: Reagent ID	Parent Reagent: Volume Added	Analyte	Concentration
							beta-BHC	1000 ng/mL
							delta-BHC	1000 ng/mL
							Dieldrin	1000 ng/mL
							Endosulfan I	1000 ng/mL
							Endosulfan II	1000 ng/mL
							Endosulfan sulfate	1000 ng/mL
							Endrin	1000 ng/mL
							Endrin aldehyde	1000 ng/mL
							Endrin ketone	1000 ng/mL
							gamma-BHC (Lindane)	1000 ng/mL
							gamma-Chlordane	1000 ng/mL
							Heptachlor	1000 ng/mL
							Heptachlor epoxide	1000 ng/mL
							Methoxychlor	1000 ng/mL
					8081HCBStkPS_00017	1 mL	Hexachlorobenzene	1000 ng/mL
					AR_SURR_RES_00050	0.5 mL	DCB Decachlorobiphenyl (Surr)	1000 ng/mL
							Tetrachloro-m-xylene (Surr)	1000 ng/mL
..8081ABResPS_00020	10/31/19		Restek, Lot A0114872		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..8081HCBStkPS_00017	06/16/25		Accustandard, Inc., Lot 215061299		(Purchased Reagent)		Hexachlorobenzene	100 ug/mL
..AR_SURR_RES_00050	06/30/22		RESTEK, Lot A0117947		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
8081IcalL3_00022	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABCalStk_00028	2.5 mL	4,4'-DDD	25 ng/mL
							4,4'-DDE	25 ng/mL
							4,4'-DDT	25 ng/mL
							Aldrin	25 ng/mL
							alpha-BHC	25 ng/mL
							alpha-Chlordane	25 ng/mL
							beta-BHC	25 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Parent Reagent Volume Added	Analyte	Concentration
							delta-BHC	25 ng/mL
							Dieldrin	25 ng/mL
							Endosulfan I	25 ng/mL
							Endosulfan II	25 ng/mL
							Endosulfan sulfate	25 ng/mL
							Endrin	25 ng/mL
							Endrin aldehyde	25 ng/mL
							Endrin ketone	25 ng/mL
							gamma-BHC (Lindane)	25 ng/mL
							gamma-Chlordane	25 ng/mL
							Heptachlor	25 ng/mL
							Heptachlor epoxide	25 ng/mL
							Methoxychlor	25 ng/mL
							Hexachlorobenzene	25 ng/mL
							DCB Decachlorobiphenyl (Surr)	25 ng/mL
							Tetrachloro-m-xylene (Surr)	25 ng/mL
.8081ABCalStk_00028	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABResPS_00020	0.05 mL	4,4'-DDD	1000 ng/mL
							4,4'-DDE	1000 ng/mL
							4,4'-DDT	1000 ng/mL
							Aldrin	1000 ng/mL
							alpha-BHC	1000 ng/mL
							alpha-Chlordane	1000 ng/mL
							beta-BHC	1000 ng/mL
							delta-BHC	1000 ng/mL
							Dieldrin	1000 ng/mL
							Endosulfan I	1000 ng/mL
							Endosulfan II	1000 ng/mL
							Endosulfan sulfate	1000 ng/mL
							Endrin	1000 ng/mL
							Endrin aldehyde	1000 ng/mL
							Endrin ketone	1000 ng/mL
							gamma-BHC (Lindane)	1000 ng/mL
							gamma-Chlordane	1000 ng/mL
							Heptachlor	1000 ng/mL
							Heptachlor epoxide	1000 ng/mL
							Methoxychlor	1000 ng/mL
					8081HCBStkPS_00017	1 mL	Hexachlorobenzene	1000 ng/mL
					AR_SURR_RES_00050	0.5 mL	DCB Decachlorobiphenyl (Surr)	1000 ng/mL
							Tetrachloro-m-xylene (Surr)	1000 ng/mL
..8081ABResPS_00020	10/31/19		Restek, Lot A0114872		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..8081HCBStkPS_00017	06/16/25		Accustandard, Inc., Lot 215061299		(Purchased Reagent)		Hexachlorobenzene	100 ug/mL
..AR_SURR_RES_00050	06/30/22		RESTEK, Lot A0117947		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
8081IcalL4_00024	05/22/17	03/23/17	Hexane, Lot 130362	250 mL	8081ABCalStk_00028	12.5 mL	4,4'-DDD	50 ng/mL
							4,4'-DDE	50 ng/mL
							4,4'-DDT	50 ng/mL
							Aldrin	50 ng/mL
							alpha-BHC	50 ng/mL
							alpha-Chlordane	50 ng/mL
							beta-BHC	50 ng/mL
							delta-BHC	50 ng/mL
							Dieldrin	50 ng/mL
							Endosulfan I	50 ng/mL
							Endosulfan II	50 ng/mL
							Endosulfan sulfate	50 ng/mL
							Endrin	50 ng/mL
							Endrin aldehyde	50 ng/mL
							Endrin ketone	50 ng/mL
							gamma-BHC (Lindane)	50 ng/mL
							gamma-Chlordane	50 ng/mL
							Heptachlor	50 ng/mL
							Heptachlor epoxide	50 ng/mL
							Methoxychlor	50 ng/mL
							Hexachlorobenzene	50 ng/mL
							DCB Decachlorobiphenyl (Surr)	50 ng/mL
							Tetrachloro-m-xylene (Surr)	50 ng/mL
.8081ABCalStk_00028	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABResPS_00020	0.05 mL	4,4'-DDD	1000 ng/mL
							4,4'-DDE	1000 ng/mL
							4,4'-DDT	1000 ng/mL
							Aldrin	1000 ng/mL
							alpha-BHC	1000 ng/mL
							alpha-Chlordane	1000 ng/mL
							beta-BHC	1000 ng/mL
							delta-BHC	1000 ng/mL
							Dieldrin	1000 ng/mL
							Endosulfan I	1000 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent: Reagent ID	Parent Reagent: Volume Added	Analyte	Concentration
							Endosulfan II	1000 ng/mL
							Endosulfan sulfate	1000 ng/mL
							Endrin	1000 ng/mL
							Endrin aldehyde	1000 ng/mL
							Endrin ketone	1000 ng/mL
							gamma-BHC (Lindane)	1000 ng/mL
							gamma-Chlordane	1000 ng/mL
							Heptachlor	1000 ng/mL
							Heptachlor epoxide	1000 ng/mL
							Methoxychlor	1000 ng/mL
					8081HCBStkPS_00017	1 mL	Hexachlorobenzene	1000 ng/mL
					AR_SURR_RES_00050	0.5 mL	DCB Decachlorobiphenyl (Surr)	1000 ng/mL
							Tetrachloro-m-xylene (Surr)	1000 ng/mL
..8081ABResPS_00020	10/31/19		Restek, Lot A0114872		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..8081HCBStkPS_00017	06/16/25		Accustandard, Inc., Lot 215061299		(Purchased Reagent)		Hexachlorobenzene	100 ug/mL
..AR_SURR_RES_00050	06/30/22		RESTEK, Lot A0117947		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
8081IcalL4_00026	12/07/17	06/07/17	Hexane, Lot 160062	250 mL	8081ABCalStk_00030	12.5 mL	4,4'-DDD	50 ng/mL
							4,4'-DDE	50 ng/mL
							4,4'-DDT	50 ng/mL
							Aldrin	50 ng/mL
							alpha-BHC	50 ng/mL
							alpha-Chlordane	50 ng/mL
							beta-BHC	50 ng/mL
							delta-BHC	50 ng/mL
							Dieldrin	50 ng/mL
							Endosulfan I	50 ng/mL
							Endosulfan II	50 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							Endosulfan sulfate	50 ng/mL
							Endrin	50 ng/mL
							Endrin aldehyde	50 ng/mL
							gamma-BHC (Lindane)	50 ng/mL
							gamma-Chlordane	50 ng/mL
							Heptachlor	50 ng/mL
							Heptachlor epoxide	50 ng/mL
							Methoxychlor	50 ng/mL
							DCB Decachlorobiphenyl (Surr)	50 ng/mL
							Tetrachloro-m-xylene (Surr)	50 ng/mL
.8081ABCalStk_00030	12/07/17	06/07/17	Hexane, Lot 160062	100 mL	8081ABResPS_00022	0.05 mL	4,4'-DDD	1000 ng/mL
							4,4'-DDE	1000 ng/mL
							4,4'-DDT	1000 ng/mL
							Aldrin	1000 ng/mL
							alpha-BHC	1000 ng/mL
							alpha-Chlordane	1000 ng/mL
							beta-BHC	1000 ng/mL
							delta-BHC	1000 ng/mL
							Dieldrin	1000 ng/mL
							Endosulfan I	1000 ng/mL
							Endosulfan II	1000 ng/mL
							Endosulfan sulfate	1000 ng/mL
							Endrin	1000 ng/mL
							Endrin aldehyde	1000 ng/mL
							gamma-BHC (Lindane)	1000 ng/mL
							gamma-Chlordane	1000 ng/mL
							Heptachlor	1000 ng/mL
							Heptachlor epoxide	1000 ng/mL
							Methoxychlor	1000 ng/mL
					AR_SURR_RES_00058	0.5 mL	DCB Decachlorobiphenyl (Surr)	1000 ng/mL
							Tetrachloro-m-xylene (Surr)	1000 ng/mL
..8081ABResPS_00022	09/30/20		Restek, Lot A0121765		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent: Reagent ID	Parent Reagent: Volume Added	Analyte	Concentration
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..AR_SURR_RES_00058	06/30/22		RESTEK, Lot A0118280		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
8081IcalL5_00022	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABCalStk_00028	7.5 mL	4,4'-DDD	75 ng/mL
							4,4'-DDE	75 ng/mL
							4,4'-DDT	75 ng/mL
							Aldrin	75 ng/mL
							alpha-BHC	75 ng/mL
							alpha-Chlordane	75 ng/mL
							beta-BHC	75 ng/mL
							delta-BHC	75 ng/mL
							Dieldrin	75 ng/mL
							Endosulfan I	75 ng/mL
							Endosulfan II	75 ng/mL
							Endosulfan sulfate	75 ng/mL
							Endrin	75 ng/mL
							Endrin aldehyde	75 ng/mL
							Endrin ketone	75 ng/mL
							gamma-BHC (Lindane)	75 ng/mL
							gamma-Chlordane	75 ng/mL
							Heptachlor	75 ng/mL
							Heptachlor epoxide	75 ng/mL
							Methoxychlor	75 ng/mL
							Hexachlorobenzene	75 ng/mL
							DCB Decachlorobiphenyl (Surr)	75 ng/mL
							Tetrachloro-m-xylene (Surr)	75 ng/mL
.8081ABCalStk_00028	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABResPS_00020	0.05 mL	4,4'-DDD	1000 ng/mL
							4,4'-DDE	1000 ng/mL
							4,4'-DDT	1000 ng/mL
							Aldrin	1000 ng/mL
							alpha-BHC	1000 ng/mL
							alpha-Chlordane	1000 ng/mL
							beta-BHC	1000 ng/mL
							delta-BHC	1000 ng/mL
							Dieldrin	1000 ng/mL
							Endosulfan I	1000 ng/mL
							Endosulfan II	1000 ng/mL
							Endosulfan sulfate	1000 ng/mL
							Endrin	1000 ng/mL
							Endrin aldehyde	1000 ng/mL
							Endrin ketone	1000 ng/mL
							gamma-BHC (Lindane)	1000 ng/mL
							gamma-Chlordane	1000 ng/mL
							Heptachlor	1000 ng/mL
							Heptachlor epoxide	1000 ng/mL
							Methoxychlor	1000 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent	Volume Added	Analyte	Concentration
					8081HCBStkPS_00017	1 mL	Hexachlorobenzene	1000 ng/mL
					AR_SURR_RES_00050	0.5 mL	DCB Decachlorobiphenyl (Surr)	1000 ng/mL
							Tetrachloro-m-xylene (Surr)	1000 ng/mL
..8081ABResPS_00020	10/31/19		Restek, Lot A0114872		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..8081HCBStkPS_00017	06/16/25		Accustandard, Inc., Lot 215061299		(Purchased Reagent)		Hexachlorobenzene	100 ug/mL
..AR_SURR_RES_00050	06/30/22		RESTEK, Lot A0117947		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
8081IcalL6_00021	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABCalStk_00028	10 mL	4,4'-DDD	100 ng/mL
							4,4'-DDE	100 ng/mL
							4,4'-DDT	100 ng/mL
							Aldrin	100 ng/mL
							alpha-BHC	100 ng/mL
							alpha-Chlordane	100 ng/mL
							beta-BHC	100 ng/mL
							delta-BHC	100 ng/mL
							Dieldrin	100 ng/mL
							Endosulfan I	100 ng/mL
							Endosulfan II	100 ng/mL
							Endosulfan sulfate	100 ng/mL
							Endrin	100 ng/mL
							Endrin aldehyde	100 ng/mL
							Endrin ketone	100 ng/mL
							gamma-BHC (Lindane)	100 ng/mL
							gamma-Chlordane	100 ng/mL
							Heptachlor	100 ng/mL
							Heptachlor epoxide	100 ng/mL
							Methoxychlor	100 ng/mL
							Hexachlorobenzene	100 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							DCB Decachlorobiphenyl (Surr)	100 ng/mL
							Tetrachloro-m-xylene (Surr)	100 ng/mL
.8081ABCalStk_00028	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABResPS_00020	0.05 mL	4,4'-DDD	1000 ng/mL
							4,4'-DDE	1000 ng/mL
							4,4'-DDT	1000 ng/mL
							Aldrin	1000 ng/mL
							alpha-BHC	1000 ng/mL
							alpha-Chlordane	1000 ng/mL
							beta-BHC	1000 ng/mL
							delta-BHC	1000 ng/mL
							Dieldrin	1000 ng/mL
							Endosulfan I	1000 ng/mL
							Endosulfan II	1000 ng/mL
							Endosulfan sulfate	1000 ng/mL
							Endrin	1000 ng/mL
							Endrin aldehyde	1000 ng/mL
							Endrin ketone	1000 ng/mL
							gamma-BHC (Lindane)	1000 ng/mL
							gamma-Chlordane	1000 ng/mL
							Heptachlor	1000 ng/mL
							Heptachlor epoxide	1000 ng/mL
							Methoxychlor	1000 ng/mL
					8081HCBStkPS_00017	1 mL	Hexachlorobenzene	1000 ng/mL
					AR_SURR_RES_00050	0.5 mL	DCB Decachlorobiphenyl (Surr)	1000 ng/mL
							Tetrachloro-m-xylene (Surr)	1000 ng/mL
..8081ABResPS_00020	10/31/19		Restek, Lot A0114872		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..8081HCBStkPS_00017	06/16/25		Accustandard, Inc., Lot 215061299		(Purchased Reagent)		Hexachlorobenzene	100 ug/mL
..AR_SURR_RES_00050	06/30/22		RESTEK, Lot A0117947		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
8081Toxaphene_00027	11/03/17	05/03/17	ACETONE, Lot Acetone_00177	250 mL	8081 ToxStock_00014	0.5 mL	Toxaphene	2 ug/mL
.8081 ToxStock_00014	01/19/22		AccuStandard, Lot 212011251		(Purchased Reagent)		Toxaphene	1000 ug/mL
8081TOXCCVL4_00011	05/11/17	11/11/16	Hexane, Lot 135581	250 mL	8081ToxPS_00031	0.1 mL	Toxaphene Peak 1	2000 ng/mL
							Toxaphene Peak 2	2000 ng/mL
							Toxaphene Peak 3	2000 ng/mL
							Toxaphene Peak 4	2000 ng/mL
							Toxaphene Peak 5	2000 ng/mL
.8081ToxPS_00031	12/31/19		Restek, Lot A0113750		(Purchased Reagent)		Toxaphene Peak 1	5000 ug/mL
							Toxaphene Peak 2	5000 ug/mL
							Toxaphene Peak 3	5000 ug/mL
							Toxaphene Peak 4	5000 ug/mL
							Toxaphene Peak 5	5000 ug/mL
8081TOXCCVL4_00012	11/13/17	05/13/17	Hexane, Lot 162297	250 mL	8081ToxPS_00032	0.1 mL	Toxaphene	2000 ng/mL
.8081ToxPS_00032	12/31/19		Restek, Lot A0113750		(Purchased Reagent)		Toxaphene	5000 ug/mL
8081ToxICVL3_00010	08/22/17	02/22/17	Hexane, Lot 135581	100 mL	8081ToxSS_00016	0.1 mL	Toxaphene	1000 ng/mL
.8081ToxSS_00016	01/30/25		Accustandard, Inc., Lot 215011420		(Purchased Reagent)		Toxaphene	1000 ug/mL
8081ToxL1_00017	05/11/17	11/11/16	Hexane, Lot 135581	100 mL	8081ToxPS_00031	0.004 mL	Toxaphene Peak 1	200 ng/mL
							Toxaphene Peak 2	200 ng/mL
							Toxaphene Peak 3	200 ng/mL
							Toxaphene Peak 4	200 ng/mL
							Toxaphene Peak 5	200 ng/mL
.8081ToxPS_00031	12/31/19		Restek, Lot A0113750		(Purchased Reagent)		Toxaphene Peak 1	5000 ug/mL
							Toxaphene Peak 2	5000 ug/mL
							Toxaphene Peak 3	5000 ug/mL
							Toxaphene Peak 4	5000 ug/mL
							Toxaphene Peak 5	5000 ug/mL
8081ToxL2_00018	05/11/17	11/11/16	Hexane, Lot 135581	100 mL	8081ToxPS_00031	0.01 mL	Toxaphene Peak 1	500 ng/mL
							Toxaphene Peak 2	500 ng/mL
							Toxaphene Peak 3	500 ng/mL
							Toxaphene Peak 4	500 ng/mL
							Toxaphene Peak 5	500 ng/mL
.8081ToxPS_00031	12/31/19		Restek, Lot A0113750		(Purchased Reagent)		Toxaphene Peak 1	5000 ug/mL
							Toxaphene Peak 2	5000 ug/mL
							Toxaphene Peak 3	5000 ug/mL
							Toxaphene Peak 4	5000 ug/mL
							Toxaphene Peak 5	5000 ug/mL
8081ToxL3_00017	05/11/17	11/11/16	Hexane, Lot 135581	100 mL	8081ToxPS_00031	0.02 mL	Toxaphene Peak 1	1000 ng/mL
							Toxaphene Peak 2	1000 ng/mL
							Toxaphene Peak 3	1000 ng/mL
							Toxaphene Peak 4	1000 ng/mL
							Toxaphene Peak 5	1000 ng/mL
.8081ToxPS_00031	12/31/19		Restek, Lot A0113750		(Purchased Reagent)		Toxaphene Peak 1	5000 ug/mL
							Toxaphene Peak 2	5000 ug/mL
							Toxaphene Peak 3	5000 ug/mL
							Toxaphene Peak 4	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							Toxaphene Peak 5	5000 ug/mL
8081ToxL5_00018	05/11/17	11/11/16	Hexane, Lot 135581	100 mL	8081ToxPS_00031	0.1 mL	Toxaphene Peak 1	5000 ng/mL
							Toxaphene Peak 2	5000 ng/mL
							Toxaphene Peak 3	5000 ng/mL
							Toxaphene Peak 4	5000 ng/mL
							Toxaphene Peak 5	5000 ng/mL
.8081ToxPS_00031	12/31/19		Restek, Lot A0113750		(Purchased Reagent)		Toxaphene Peak 1	5000 ug/mL
							Toxaphene Peak 2	5000 ug/mL
							Toxaphene Peak 3	5000 ug/mL
							Toxaphene Peak 4	5000 ug/mL
							Toxaphene Peak 5	5000 ug/mL
8081ToxL6_00020	05/11/17	11/11/16	Hexane, Lot 135581	100 mL	8081ToxPS_00031	0.2 mL	Toxaphene Peak 1	10000 ng/mL
							Toxaphene Peak 2	10000 ng/mL
							Toxaphene Peak 3	10000 ng/mL
							Toxaphene Peak 4	10000 ng/mL
							Toxaphene Peak 5	10000 ng/mL
.8081ToxPS_00031	12/31/19		Restek, Lot A0113750		(Purchased Reagent)		Toxaphene Peak 1	5000 ug/mL
							Toxaphene Peak 2	5000 ug/mL
							Toxaphene Peak 3	5000 ug/mL
							Toxaphene Peak 4	5000 ug/mL
							Toxaphene Peak 5	5000 ug/mL
8082 LCS_00046	10/28/17	04/28/17	ACETONE, Lot Acetone_000177	500 mL	8082LCSSTOCK_00033	1 mL	Arochlor 1016	2 ug/mL
							Arochlor 1260	2 ug/mL
.8082LCSSTOCK_00033	04/25/18		RESTEK, Lot A0109664		(Purchased Reagent)		Arochlor 1016	1000 ug/mL
							Arochlor 1260	1000 ug/mL
8270 SIM Surr_00070	05/15/18	05/15/17	ACETONE, Lot Acetone_00180	1000 mL	8270SurStkHL_00228	100 uL	2,4,6 - Tribromophenol	0.5 ug/mL
							2,4,6-Tribromophenol	0.5 ug/mL
							2-Fluorobiphenyl (Surr)	0.5 ug/mL
							2-Fluorophenol	0.5 ug/mL
							Nitrobenzene-d5 (Surr)	0.5 ug/mL
							Phenol-d5	0.5 ug/mL
							Phenol-d6	0.5 ug/mL
							Terphenyl-d14 (Surr)	0.5 ug/mL
.8270SurStkHL_00228	12/31/21		Restek, Lot A0123269		(Purchased Reagent)		2,4,6 - Tribromophenol	5000 ug/mL
							2,4,6-Tribromophenol	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5	5000 ug/mL
							Phenol-d6	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
8270BO-SIMLCS_00022	03/14/18	03/14/17	P&T Methanol, Lot MethanolP&T_00164	250 mL	570666_00052	225 uL	1,1'-Biphenyl	0.9 ug/mL
							1,2,4,5-Tetrachlorobenzene	0.9 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							1,2,4-Trichlorobenzene	0.9 ug/mL
							1,2-Dichlorobenzene	0.9 ug/mL
							1,2-Diphenylhydrazine	0.909877 ug/mL
							1,3-Dichlorobenzene	0.9 ug/mL
							1,3-Dinitrobenzene	0.9 ug/mL
							1,4-Dichlorobenzene	0.9 ug/mL
							1,4-Dioxane	0.9 ug/mL
							1-Methylnaphthalene	0.9 ug/mL
							2,2'-oxybis[1-chloropropane]	0.9 ug/mL
							2,3,4,6-Tetrachlorophenol	0.9 ug/mL
							2,4,5-Trichlorophenol	0.9 ug/mL
							2,4,6-Trichlorophenol	0.9 ug/mL
							2,4-Dichlorophenol	0.9 ug/mL
							2,4-Dimethylphenol	0.9 ug/mL
							2,4-Dinitrophenol	1.8 ug/mL
							2,4-Dinitrotoluene	0.9 ug/mL
							2,6-Dichlorophenol	0.9 ug/mL
							2,6-Dinitrotoluene	0.9 ug/mL
							2-Chloronaphthalene	0.9 ug/mL
							2-Chlorophenol	0.9 ug/mL
							2-Methylnaphthalene	0.9 ug/mL
							2-Methylphenol	0.9 ug/mL
							2-Nitroaniline	0.9 ug/mL
							2-Nitrophenol	0.9 ug/mL
							3 & 4 Methylphenol	0.9 ug/mL
							3-Methylphenol	0.9 ug/mL
							3-Nitroaniline	0.9 ug/mL
							4,6-Dinitro-2-methylphenol	1.8 ug/mL
							4-Bromophenyl phenyl ether	0.9 ug/mL
							4-Chloro-3-methylphenol	0.9 ug/mL
							4-Chloroaniline	0.9 ug/mL
							4-Chlorophenyl phenyl ether	0.9 ug/mL
							4-Methylphenol	0.9 ug/mL
							4-Nitroaniline	0.9 ug/mL
							4-Nitrophenol	1.8 ug/mL
							Acenaphthene	0.9 ug/mL
							Acenaphthylene	0.9 ug/mL
							Acetophenone	0.9 ug/mL
							Aniline	0.9 ug/mL
							Anthracene	0.9 ug/mL
							Azobenzene	0.9 ug/mL
							Benzo[a]anthracene	0.9 ug/mL
							Benzo[a]pyrene	0.9 ug/mL
							Benzo[b]fluoranthene	0.9 ug/mL
							Benzo[g,h,i]perylene	0.9 ug/mL
							Benzo[k]fluoranthene	0.9 ug/mL
							Benzyl alcohol	0.9 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Parent Reagent Volume Added	Analyte	Concentration
							Bis(2-chloroethoxy)methane	0.9 ug/mL
							Bis(2-chloroethyl)ether	0.9 ug/mL
							Bis(2-ethylhexyl) phthalate	0.9 ug/mL
							Butyl benzyl phthalate	0.9 ug/mL
							Carbazole	0.9 ug/mL
							Chrysene	0.9 ug/mL
							Di-n-butyl phthalate	0.9 ug/mL
							Di-n-octyl phthalate	0.9 ug/mL
							Dibenz(a,h)anthracene	0.9 ug/mL
							Dibenzofuran	0.9 ug/mL
							Diethyl phthalate	0.9 ug/mL
							Dimethyl phthalate	0.9 ug/mL
							Diphenylamine	0.765 ug/mL
							Fluoranthene	0.9 ug/mL
							Fluorene	0.9 ug/mL
							Hexachlorobenzene	0.9 ug/mL
							Hexachlorobutadiene	0.9 ug/mL
							Hexachlorocyclopentadiene	0.9 ug/mL
							Hexachloroethane	0.9 ug/mL
							Hexadecane	0.9 ug/mL
							Indeno[1,2,3-cd]pyrene	0.9 ug/mL
							Isophorone	0.9 ug/mL
							n-Decane	0.9 ug/mL
							N-Nitrosodi-n-propylamine	0.9 ug/mL
							N-Nitrosodimethylamine	0.9 ug/mL
							N-Nitrosodiphenylamine	0.9 ug/mL
							n-Octadecane	0.9 ug/mL
							Naphthalene	0.9 ug/mL
							Nitrobenzene	0.9 ug/mL
							Pentachlorophenol	1.8 ug/mL
							Phenanthrene	0.9 ug/mL
							Phenol	0.9 ug/mL
							Pyrene	0.9 ug/mL
							Pyridine	0.9 ug/mL
.570666_00052	03/14/18		Restek, Lot A0121722		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1010.97 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Diphenylamine	850 ug/mL

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
Alt AsPbSbSe*_00001	07/19/17	06/07/17	5%5%HNO3HCL, Lot See Reagent Log	100 mL	10 ppm As_00012	0.15 mL	Arsenic	0.015 ppm
					10 ppm Pb_00009	0.09 mL	Lead	0.009 ppm
					10 ppm Sb_00009	0.2 mL	Antimony	0.02 ppm
					10 ppm Se_00009	0.2 mL	Selenium	0.02 ppm
.10 ppm As_00012	11/07/17	11/18/16	5%HNO3/5% HCl, Lot See logbook	100 mL	1000 As_00018	1 mL	Arsenic	10 mg/L
..1000 As_00018	11/07/17		Inorganic Venture, Lot J2-AS02122		(Purchased Reagent)		Arsenic	1000 mg/L
.10 ppm Pb_00009	07/19/17	08/15/16	5%HNO3/5% HCl, Lot see log book	100 mL	1000 Pb_00019	1 mL	Lead	10 mg/L
..1000 Pb_00019	07/19/17		Inorganic Ventures, Lot K2-PB03074		(Purchased Reagent)		Lead	1000 mg/L
.10 ppm Sb_00009	07/19/17	12/09/16	5%HNO3/5% HCl, Lot see log book	100 mL	1000 Sb_00015	1 mL	Antimony	10 mg/L
..1000 Sb_00015	07/19/17		Inorganic Ventures, Lot J2-SB03037		(Purchased Reagent)		Antimony	1000 mg/L
.10 ppm Se_00009	08/31/17	09/06/16	2%HNO3/0.5% HCl, Lot see log books	100 mL	1000 Se_00016	1 mL	Selenium	10 mg/L
..1000 Se_00016	08/31/17		Inorganic Ventures, Lot K2-SE02067		(Purchased Reagent)		Selenium	1000 mg/L
Alt Fe Se_00009	06/07/17	06/06/17	5%5%HNO3HCL, Lot See Reagent Log	100 mL	10 ppm Se_00009	0.2 mL	Selenium	0.02 ppm
.10 ppm Se_00009	08/31/17	09/06/16	2%HNO3/0.5% HCl, Lot see log books	100 mL	1000 Se_00016	1 mL	Selenium	10 mg/L
..1000 Se_00016	08/31/17		Inorganic Ventures, Lot K2-SE02067		(Purchased Reagent)		Selenium	1000 mg/L
Alt Fe Se_00010	06/07/17	06/06/17	5%5%HNO3HCL, Lot See Reagent Log	100 mL	10 ppm Tl_00007	0.15 mL	Thallium	0.015 ppm
.10 ppm Tl_00007	08/17/17	09/06/16	5%HNO3/5% HCl, Lot See Reagent log	100 mL	1000 Tl_00015	1 mL	Thallium	10 ppm
..1000 Tl_00015	08/17/17		Inorganic Ventures, Lot J2-TL02025		(Purchased Reagent)		Thallium	1000 mg/L

REAGENT TRACEABILITY SUMMARY

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Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent	Volume Added	Analyte	Concentration
Alt Fe Se_00011	06/07/17	06/06/17	5%5%HNO3HCL, Lot See Reagent Log	100 mL	10 ppm Fe_00009	1 mL	Iron	0.1 ppm
.10 ppm Fe_00009	02/13/18	04/05/17	5%HNO3/5% HCl, Lot see log book	100 mL	10000 Fe_00018	0.1 mL	Iron	10 mg/L
..10000 Fe_00018	02/13/18	Inorganic Ventures, Lot K2-FE04047			(Purchased Reagent)		Iron	10000 mg/L
AR_1248_ICV_00011	11/20/17	05/20/17	Hexane, Lot 135581	100 mL	AR_1248_RESss_00008	25 uL	Arochlor 1248	250 ng/mL
.AR_1248_RESss_00008	05/20/18	RESTEK, Lot A0116431			(Purchased Reagent)		Arochlor 1248	1000 ug/mL
AR_1248_L1_00019	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_1248_L7_00014	0.25 mL	PCB-1248 Peak 1	0.025 ug/mL
							PCB-1248 Peak 2	0.025 ug/mL
							PCB-1248 Peak 3	0.025 ug/mL
							PCB-1248 Peak 4	0.025 ug/mL
							PCB-1248 Peak 5	0.025 ug/mL
.AR_1248_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1248_RES_00009	100 uL	PCB-1248 Peak 1	1 ug/mL
							PCB-1248 Peak 2	1 ug/mL
							PCB-1248 Peak 3	1 ug/mL
							PCB-1248 Peak 4	1 ug/mL
							PCB-1248 Peak 5	1 ug/mL
..AR_1248_RES_00009	04/30/18	RESTEK, Lot A0118166			(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
AR_1248_L2_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_1248_L7_00014	0.5 mL	PCB-1248 Peak 1	0.05 ug/mL
							PCB-1248 Peak 2	0.05 ug/mL
							PCB-1248 Peak 3	0.05 ug/mL
							PCB-1248 Peak 4	0.05 ug/mL
							PCB-1248 Peak 5	0.05 ug/mL
.AR_1248_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1248_RES_00009	100 uL	PCB-1248 Peak 1	1 ug/mL
							PCB-1248 Peak 2	1 ug/mL
							PCB-1248 Peak 3	1 ug/mL
							PCB-1248 Peak 4	1 ug/mL
							PCB-1248 Peak 5	1 ug/mL
..AR_1248_RES_00009	04/30/18	RESTEK, Lot A0118166			(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
AR_1248_L3_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_1248_L7_00014	1 mL	PCB-1248 Peak 1	0.1 ug/mL
							PCB-1248 Peak 2	0.1 ug/mL
							PCB-1248 Peak 3	0.1 ug/mL
							PCB-1248 Peak 4	0.1 ug/mL
							PCB-1248 Peak 5	0.1 ug/mL
.AR_1248_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1248_RES_00009	100 uL	PCB-1248 Peak 1	1 ug/mL
							PCB-1248 Peak 2	1 ug/mL
							PCB-1248 Peak 3	1 ug/mL
							PCB-1248 Peak 4	1 ug/mL
							PCB-1248 Peak 5	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
..AR_1248_RES_00009	04/30/18		RESTEK, Lot A0118166		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
AR_1248_L4_00019	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_1248_L7_00014	2.5 mL	PCB-1248 Peak 1	0.25 ug/mL
							PCB-1248 Peak 2	0.25 ug/mL
							PCB-1248 Peak 3	0.25 ug/mL
							PCB-1248 Peak 4	0.25 ug/mL
							PCB-1248 Peak 5	0.25 ug/mL
.AR_1248_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1248_RES_00009	100 uL	PCB-1248 Peak 1	1 ug/mL
							PCB-1248 Peak 2	1 ug/mL
							PCB-1248 Peak 3	1 ug/mL
							PCB-1248 Peak 4	1 ug/mL
							PCB-1248 Peak 5	1 ug/mL
..AR_1248_RES_00009	04/30/18		RESTEK, Lot A0118166		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
AR_1248_L5_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_1248_L7_00014	5 mL	PCB-1248 Peak 1	0.5 ug/mL
							PCB-1248 Peak 2	0.5 ug/mL
							PCB-1248 Peak 3	0.5 ug/mL
							PCB-1248 Peak 4	0.5 ug/mL
							PCB-1248 Peak 5	0.5 ug/mL
.AR_1248_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1248_RES_00009	100 uL	PCB-1248 Peak 1	1 ug/mL
							PCB-1248 Peak 2	1 ug/mL
							PCB-1248 Peak 3	1 ug/mL
							PCB-1248 Peak 4	1 ug/mL
							PCB-1248 Peak 5	1 ug/mL
..AR_1248_RES_00009	04/30/18		RESTEK, Lot A0118166		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
AR_1248_L6_00016	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_1248_L7_00014	7.5 mL	PCB-1248 Peak 1	0.75 ug/mL
							PCB-1248 Peak 2	0.75 ug/mL
							PCB-1248 Peak 3	0.75 ug/mL
							PCB-1248 Peak 4	0.75 ug/mL
							PCB-1248 Peak 5	0.75 ug/mL
.AR_1248_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1248_RES_00009	100 uL	PCB-1248 Peak 1	1 ug/mL
							PCB-1248 Peak 2	1 ug/mL
							PCB-1248 Peak 3	1 ug/mL
							PCB-1248 Peak 4	1 ug/mL
							PCB-1248 Peak 5	1 ug/mL
..AR_1248_RES_00009	04/30/18		RESTEK, Lot A0118166		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
AR_1248_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1248_RES_00009	100 uL	PCB-1248 Peak 1	1 ug/mL
							PCB-1248 Peak 2	1 ug/mL
							PCB-1248 Peak 3	1 ug/mL
							PCB-1248 Peak 4	1 ug/mL
							PCB-1248 Peak 5	1 ug/mL
.AR_1248_RES_00009	04/30/18		RESTEK, Lot A0118166		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
AR_1660_ICV_00011	11/20/17	05/20/17	Hexane, Lot 135581	100 mL	AR_1660_RESss_00008	25 uL	Arochlor 1016	250 ng/mL
							Arochlor 1260	250 ng/mL
					AR_SURR_RES_00056	6.25 uL	DCB Decachlorobiphenyl (Surr)	12.5 ng/mL
.AR_1660_RESss_00008	05/20/18		RESTEK, Lot A0114674		(Purchased Reagent)		Arochlor 1016	1000 ug/mL
							Arochlor 1260	1000 ug/mL
.AR_SURR_RES_00056	04/30/18		RESTEK, Lot A0117949		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
AR_1660_L1_00028	11/01/17	05/01/17	hexane, Lot 135581	10 mL	AR_1660_L7_00022	0.25 mL	PCB-1016 Peak 1	0.025 ug/mL
							PCB-1016 Peak 2	0.025 ug/mL
							PCB-1016 Peak 3	0.025 ug/mL
							PCB-1016 Peak 4	0.025 ug/mL
							PCB-1016 Peak 5	0.025 ug/mL
							PCB-1260 Peak 1	0.025 ug/mL
							PCB-1260 Peak 2	0.025 ug/mL
							PCB-1260 Peak 3	0.025 ug/mL
							PCB-1260 Peak 4	0.025 ug/mL
							PCB-1260 Peak 5	0.025 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.00125 ug/mL
							Tetrachloro-m-xylene (Surr)	0.00125 ug/mL
.AR_1660_L7_00022	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1016_RES_00010	100 uL	PCB-1016 Peak 1	1 ug/mL
							PCB-1016 Peak 2	1 ug/mL
							PCB-1016 Peak 3	1 ug/mL
							PCB-1016 Peak 4	1 ug/mL
							PCB-1016 Peak 5	1 ug/mL
					AR_1260_RES_00012	100 uL	PCB-1260 Peak 1	1 ug/mL
							PCB-1260 Peak 2	1 ug/mL
							PCB-1260 Peak 3	1 ug/mL
							PCB-1260 Peak 4	1 ug/mL
							PCB-1260 Peak 5	1 ug/mL
					AR_SURR_RES_00056	25 uL	DCB Decachlorobiphenyl (Surr)	0.05 ug/mL
							Tetrachloro-m-xylene (Surr)	0.05 ug/mL
..AR_1016_RES_00010	04/30/18		RESTEK, Lot A0117379		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent: Reagent ID	Parent Reagent: Volume Added	Analyte	Concentration
							PCB-1016 Peak 5	1000 ug/mL
..AR_1260_RES_00012	04/30/18		RESTEK, Lot A0116299		(Purchased Reagent)		PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..AR_SURR_RES_00056	04/30/18		RESTEK, Lot A0117949		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
AR_1660_L2_00027	11/01/17	05/01/17	hexane, Lot 135581	10 mL	AR_1660_L7_00022	0.5 mL	PCB-1016 Peak 1	0.05 ug/mL
							PCB-1016 Peak 2	0.05 ug/mL
							PCB-1016 Peak 3	0.05 ug/mL
							PCB-1016 Peak 4	0.05 ug/mL
							PCB-1016 Peak 5	0.05 ug/mL
							PCB-1260 Peak 1	0.05 ug/mL
							PCB-1260 Peak 2	0.05 ug/mL
							PCB-1260 Peak 3	0.05 ug/mL
							PCB-1260 Peak 4	0.05 ug/mL
							PCB-1260 Peak 5	0.05 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.0025 ug/mL
							Tetrachloro-m-xylene (Surr)	0.0025 ug/mL
.AR_1660_L7_00022	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1016_RES_00010	100 uL	PCB-1016 Peak 1	1 ug/mL
							PCB-1016 Peak 2	1 ug/mL
							PCB-1016 Peak 3	1 ug/mL
							PCB-1016 Peak 4	1 ug/mL
							PCB-1016 Peak 5	1 ug/mL
					AR_1260_RES_00012	100 uL	PCB-1260 Peak 1	1 ug/mL
							PCB-1260 Peak 2	1 ug/mL
							PCB-1260 Peak 3	1 ug/mL
							PCB-1260 Peak 4	1 ug/mL
							PCB-1260 Peak 5	1 ug/mL
					AR_SURR_RES_00056	25 uL	DCB Decachlorobiphenyl (Surr)	0.05 ug/mL
							Tetrachloro-m-xylene (Surr)	0.05 ug/mL
..AR_1016_RES_00010	04/30/18		RESTEK, Lot A0117379		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
..AR_1260_RES_00012	04/30/18		RESTEK, Lot A0116299		(Purchased Reagent)		PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..AR_SURR_RES_00056	04/30/18		RESTEK, Lot A0117949		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
AR_1660_L3_00028	11/01/17	05/01/17	hexane, Lot 135581	10 mL	AR_1660_L7_00022	1 mL	PCB-1016 Peak 1	0.1 ug/mL
							PCB-1016 Peak 2	0.1 ug/mL
							PCB-1016 Peak 3	0.1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							PCB-1016 Peak 4	0.1 ug/mL
							PCB-1016 Peak 5	0.1 ug/mL
							PCB-1260 Peak 1	0.1 ug/mL
							PCB-1260 Peak 2	0.1 ug/mL
							PCB-1260 Peak 3	0.1 ug/mL
							PCB-1260 Peak 4	0.1 ug/mL
							PCB-1260 Peak 5	0.1 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.005 ug/mL
							Tetrachloro-m-xylene (Surr)	0.005 ug/mL
.AR_1660_L7_00022	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1016_RES_00010	100 uL	PCB-1016 Peak 1	1 ug/mL
							PCB-1016 Peak 2	1 ug/mL
							PCB-1016 Peak 3	1 ug/mL
							PCB-1016 Peak 4	1 ug/mL
							PCB-1016 Peak 5	1 ug/mL
					AR_1260_RES_00012	100 uL	PCB-1260 Peak 1	1 ug/mL
							PCB-1260 Peak 2	1 ug/mL
							PCB-1260 Peak 3	1 ug/mL
							PCB-1260 Peak 4	1 ug/mL
							PCB-1260 Peak 5	1 ug/mL
					AR_SURR_RES_00056	25 uL	DCB Decachlorobiphenyl (Surr)	0.05 ug/mL
							Tetrachloro-m-xylene (Surr)	0.05 ug/mL
..AR_1016_RES_00010	04/30/18		RESTEK, Lot A0117379		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
..AR_1260_RES_00012	04/30/18		RESTEK, Lot A0116299		(Purchased Reagent)		PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..AR_SURR_RES_00056	04/30/18		RESTEK, Lot A0117949		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
AR_1660_L4_00065	11/01/17	05/01/17	hexane, Lot 135581	10 mL	AR_1660_L7_00022	2.5 mL	PCB-1016 Peak 1	0.25 ug/mL
							PCB-1016 Peak 2	0.25 ug/mL
							PCB-1016 Peak 3	0.25 ug/mL
							PCB-1016 Peak 4	0.25 ug/mL
							PCB-1016 Peak 5	0.25 ug/mL
							PCB-1260 Peak 1	0.25 ug/mL
							PCB-1260 Peak 2	0.25 ug/mL
							PCB-1260 Peak 3	0.25 ug/mL
							PCB-1260 Peak 4	0.25 ug/mL
							PCB-1260 Peak 5	0.25 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.0125 ug/mL
							Tetrachloro-m-xylene (Surr)	0.0125 ug/mL
.AR_1660_L7_00022	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1016_RES_00010	100 uL	PCB-1016 Peak 1	1 ug/mL
							PCB-1016 Peak 2	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							PCB-1016 Peak 3	1 ug/mL
							PCB-1016 Peak 4	1 ug/mL
							PCB-1016 Peak 5	1 ug/mL
					AR_1260_RES_00012	100 uL	PCB-1260 Peak 1	1 ug/mL
							PCB-1260 Peak 2	1 ug/mL
							PCB-1260 Peak 3	1 ug/mL
							PCB-1260 Peak 4	1 ug/mL
							PCB-1260 Peak 5	1 ug/mL
					AR_SURR_RES_00056	25 uL	DCB Decachlorobiphenyl (Surr)	0.05 ug/mL
							Tetrachloro-m-xylene (Surr)	0.05 ug/mL
..AR_1016_RES_00010	04/30/18		RESTEK, Lot A0117379		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
..AR_1260_RES_00012	04/30/18		RESTEK, Lot A0116299		(Purchased Reagent)		PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..AR_SURR_RES_00056	04/30/18		RESTEK, Lot A0117949		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
AR_1660_L5_00062	11/01/17	05/01/17	hexane, Lot 135581	25 mL	AR_1660_L7_00022	12.5 mL	PCB-1016 Peak 1	0.5 ug/mL
							PCB-1016 Peak 2	0.5 ug/mL
							PCB-1016 Peak 3	0.5 ug/mL
							PCB-1016 Peak 4	0.5 ug/mL
							PCB-1016 Peak 5	0.5 ug/mL
							PCB-1260 Peak 1	0.5 ug/mL
							PCB-1260 Peak 2	0.5 ug/mL
							PCB-1260 Peak 3	0.5 ug/mL
							PCB-1260 Peak 4	0.5 ug/mL
							PCB-1260 Peak 5	0.5 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.025 ug/mL
							Tetrachloro-m-xylene (Surr)	0.025 ug/mL
.AR_1660_L7_00022	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1016_RES_00010	100 uL	PCB-1016 Peak 1	1 ug/mL
							PCB-1016 Peak 2	1 ug/mL
							PCB-1016 Peak 3	1 ug/mL
							PCB-1016 Peak 4	1 ug/mL
							PCB-1016 Peak 5	1 ug/mL
					AR_1260_RES_00012	100 uL	PCB-1260 Peak 1	1 ug/mL
							PCB-1260 Peak 2	1 ug/mL
							PCB-1260 Peak 3	1 ug/mL
							PCB-1260 Peak 4	1 ug/mL
							PCB-1260 Peak 5	1 ug/mL
					AR_SURR_RES_00056	25 uL	DCB Decachlorobiphenyl (Surr)	0.05 ug/mL
							Tetrachloro-m-xylene (Surr)	0.05 ug/mL
..AR_1016_RES_00010	04/30/18		RESTEK, Lot A0117379		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Parent Reagent Volume Added	Analyte	Concentration
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
..AR_1260_RES_00012	04/30/18		RESTEK, Lot A0116299		(Purchased Reagent)		PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..AR_SURR_RES_00056	04/30/18		RESTEK, Lot A0117949		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
AR_1660_L5_00062	11/01/17	05/01/17	hexane, Lot 135581	25 mL	AR_1660_L7_00022	12.5 mL	Arochlor 1016	0.5 ug/mL
							Arochlor 1260	0.5 ug/mL
.AR_1660_L7_00022	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1016_RES_00010	100 uL	Arochlor 1016	1 ug/mL
					AR_1260_RES_00012	100 uL	Arochlor 1260	1 ug/mL
..AR_1016_RES_00010	04/30/18		RESTEK, Lot A0117379		(Purchased Reagent)		Arochlor 1016	1000 ug/mL
..AR_1260_RES_00012	04/30/18		RESTEK, Lot A0116299		(Purchased Reagent)		Arochlor 1260	1000 ug/mL
AR_1660_L6_00029	11/01/17	05/01/17	hexane, Lot 135581	10 mL	AR_1660_L7_00022	7.5 mL	PCB-1016 Peak 1	0.75 ug/mL
							PCB-1016 Peak 2	0.75 ug/mL
							PCB-1016 Peak 3	0.75 ug/mL
							PCB-1016 Peak 4	0.75 ug/mL
							PCB-1016 Peak 5	0.75 ug/mL
							PCB-1260 Peak 1	0.75 ug/mL
							PCB-1260 Peak 2	0.75 ug/mL
							PCB-1260 Peak 3	0.75 ug/mL
							PCB-1260 Peak 4	0.75 ug/mL
							PCB-1260 Peak 5	0.75 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.0375 ug/mL
							Tetrachloro-m-xylene (Surr)	0.0375 ug/mL
.AR_1660_L7_00022	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1016_RES_00010	100 uL	PCB-1016 Peak 1	1 ug/mL
							PCB-1016 Peak 2	1 ug/mL
							PCB-1016 Peak 3	1 ug/mL
							PCB-1016 Peak 4	1 ug/mL
							PCB-1016 Peak 5	1 ug/mL
					AR_1260_RES_00012	100 uL	PCB-1260 Peak 1	1 ug/mL
							PCB-1260 Peak 2	1 ug/mL
							PCB-1260 Peak 3	1 ug/mL
							PCB-1260 Peak 4	1 ug/mL
							PCB-1260 Peak 5	1 ug/mL
					AR_SURR_RES_00056	25 uL	DCB Decachlorobiphenyl (Surr)	0.05 ug/mL
							Tetrachloro-m-xylene (Surr)	0.05 ug/mL
..AR_1016_RES_00010	04/30/18		RESTEK, Lot A0117379		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
..AR_1260_RES_00012	04/30/18		RESTEK, Lot A0116299		(Purchased Reagent)		PCB-1260 Peak 1	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..AR_SURR_RES_00056	04/30/18		RESTEK, Lot A0117949		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
AR_1660_L7_00022	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1016_RES_00010	100 uL	PCB-1016 Peak 1	1 ug/mL
							PCB-1016 Peak 2	1 ug/mL
							PCB-1016 Peak 3	1 ug/mL
							PCB-1016 Peak 4	1 ug/mL
							PCB-1016 Peak 5	1 ug/mL
					AR_1260_RES_00012	100 uL	PCB-1260 Peak 1	1 ug/mL
							PCB-1260 Peak 2	1 ug/mL
							PCB-1260 Peak 3	1 ug/mL
							PCB-1260 Peak 4	1 ug/mL
							PCB-1260 Peak 5	1 ug/mL
					AR_SURR_RES_00056	25 uL	DCB Decachlorobiphenyl (Surr)	0.05 ug/mL
							Tetrachloro-m-xylene (Surr)	0.05 ug/mL
.AR_1016_RES_00010	04/30/18		RESTEK, Lot A0117379		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
.AR_1260_RES_00012	04/30/18		RESTEK, Lot A0116299		(Purchased Reagent)		PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
.AR_SURR_RES_00056	04/30/18		RESTEK, Lot A0117949		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
AR_2154_ICV_00011	11/20/17	05/20/17	Hexane, Lot 135581	100 mL	AR_1221_RESss_00008	25 uL	Arochlor 1221	250 ng/mL
					AR_1254_RESss_00008	25 uL	Arochlor 1254	250 ng/mL
.AR_1221_RESss_00008	05/20/18		RESTEK, Lot A0117382		(Purchased Reagent)		Arochlor 1221	1000 ug/mL
.AR_1254_RESss_00008	05/20/18		RESTEK, Lot A0105373		(Purchased Reagent)		Arochlor 1254	1000 ug/mL
AR_2154_L1_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_2154_L7_00014	0.25 mL	PCB-1221 Peak 1	0.025 ug/mL
							PCB-1221 Peak 2	0.025 ug/mL
							PCB-1221 Peak 3	0.025 ug/mL
							PCB-1254 Peak 1	0.025 ug/mL
							PCB-1254 Peak 2	0.025 ug/mL
							PCB-1254 Peak 3	0.025 ug/mL
							PCB-1254 Peak 4	0.025 ug/mL
							PCB-1254 Peak 5	0.025 ug/mL
.AR_2154_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1221_RES_00009	100 uL	PCB-1221 Peak 1	1 ug/mL
							PCB-1221 Peak 2	1 ug/mL
							PCB-1221 Peak 3	1 ug/mL
					AR_1254_RES_00009	100 uL	PCB-1254 Peak 1	1 ug/mL
							PCB-1254 Peak 2	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Parent Reagent Volume Added	Analyte	Concentration
							PCB-1254 Peak 3	1 ug/mL
							PCB-1254 Peak 4	1 ug/mL
							PCB-1254 Peak 5	1 ug/mL
..AR_1221_RES_00009	04/30/18		RESTEK, Lot A0118480		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
..AR_1254_RES_00009	04/30/18		RESTEK, Lot A0118645		(Purchased Reagent)		PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
AR_2154_L2_00019	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_2154_L7_00014	0.5 mL	PCB-1221 Peak 1	0.05 ug/mL
							PCB-1221 Peak 2	0.05 ug/mL
							PCB-1221 Peak 3	0.05 ug/mL
							PCB-1254 Peak 1	0.05 ug/mL
							PCB-1254 Peak 2	0.05 ug/mL
							PCB-1254 Peak 3	0.05 ug/mL
							PCB-1254 Peak 4	0.05 ug/mL
							PCB-1254 Peak 5	0.05 ug/mL
.AR_2154_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1221_RES_00009	100 uL	PCB-1221 Peak 1	1 ug/mL
							PCB-1221 Peak 2	1 ug/mL
							PCB-1221 Peak 3	1 ug/mL
					AR_1254_RES_00009	100 uL	PCB-1254 Peak 1	1 ug/mL
							PCB-1254 Peak 2	1 ug/mL
							PCB-1254 Peak 3	1 ug/mL
							PCB-1254 Peak 4	1 ug/mL
							PCB-1254 Peak 5	1 ug/mL
..AR_1221_RES_00009	04/30/18		RESTEK, Lot A0118480		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
..AR_1254_RES_00009	04/30/18		RESTEK, Lot A0118645		(Purchased Reagent)		PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
AR_2154_L3_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_2154_L7_00014	1 mL	PCB-1221 Peak 1	0.1 ug/mL
							PCB-1221 Peak 2	0.1 ug/mL
							PCB-1221 Peak 3	0.1 ug/mL
							PCB-1254 Peak 1	0.1 ug/mL
							PCB-1254 Peak 2	0.1 ug/mL
							PCB-1254 Peak 3	0.1 ug/mL
							PCB-1254 Peak 4	0.1 ug/mL
							PCB-1254 Peak 5	0.1 ug/mL
.AR_2154_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1221_RES_00009	100 uL	PCB-1221 Peak 1	1 ug/mL
							PCB-1221 Peak 2	1 ug/mL
							PCB-1221 Peak 3	1 ug/mL
					AR_1254_RES_00009	100 uL	PCB-1254 Peak 1	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							PCB-1254 Peak 2	1 ug/mL
							PCB-1254 Peak 3	1 ug/mL
							PCB-1254 Peak 4	1 ug/mL
							PCB-1254 Peak 5	1 ug/mL
..AR_1221_RES_00009	04/30/18		RESTEK, Lot A0118480		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
..AR_1254_RES_00009	04/30/18		RESTEK, Lot A0118645		(Purchased Reagent)		PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
AR_2154_L4_00019	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_2154_L7_00014	2.5 mL	PCB-1221 Peak 1	0.25 ug/mL
							PCB-1221 Peak 2	0.25 ug/mL
							PCB-1221 Peak 3	0.25 ug/mL
							PCB-1254 Peak 1	0.25 ug/mL
							PCB-1254 Peak 2	0.25 ug/mL
							PCB-1254 Peak 3	0.25 ug/mL
							PCB-1254 Peak 4	0.25 ug/mL
							PCB-1254 Peak 5	0.25 ug/mL
.AR_2154_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1221_RES_00009	100 uL	PCB-1221 Peak 1	1 ug/mL
							PCB-1221 Peak 2	1 ug/mL
							PCB-1221 Peak 3	1 ug/mL
					AR_1254_RES_00009	100 uL	PCB-1254 Peak 1	1 ug/mL
							PCB-1254 Peak 2	1 ug/mL
							PCB-1254 Peak 3	1 ug/mL
							PCB-1254 Peak 4	1 ug/mL
							PCB-1254 Peak 5	1 ug/mL
..AR_1221_RES_00009	04/30/18		RESTEK, Lot A0118480		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
..AR_1254_RES_00009	04/30/18		RESTEK, Lot A0118645		(Purchased Reagent)		PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
AR_2154_L5_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_2154_L7_00014	5 mL	PCB-1221 Peak 1	0.5 ug/mL
							PCB-1221 Peak 2	0.5 ug/mL
							PCB-1221 Peak 3	0.5 ug/mL
							PCB-1254 Peak 1	0.5 ug/mL
							PCB-1254 Peak 2	0.5 ug/mL
							PCB-1254 Peak 3	0.5 ug/mL
							PCB-1254 Peak 4	0.5 ug/mL
							PCB-1254 Peak 5	0.5 ug/mL
.AR_2154_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1221_RES_00009	100 uL	PCB-1221 Peak 1	1 ug/mL
							PCB-1221 Peak 2	1 ug/mL
							PCB-1221 Peak 3	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent: Reagent ID	Parent Reagent: Volume Added	Analyte	Concentration
					AR_1254_RES_00009	100 uL	PCB-1254 Peak 1	1 ug/mL
							PCB-1254 Peak 2	1 ug/mL
							PCB-1254 Peak 3	1 ug/mL
							PCB-1254 Peak 4	1 ug/mL
							PCB-1254 Peak 5	1 ug/mL
..AR_1221_RES_00009	04/30/18		RESTEK, Lot A0118480		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
..AR_1254_RES_00009	04/30/18		RESTEK, Lot A0118645		(Purchased Reagent)		PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
AR_2154_L5_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_2154_L7_00014	5 mL	Arochlor 1221	0.5 ug/mL
							Arochlor 1254	0.5 ug/mL
.AR_2154_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1221_RES_00009	100 uL	Arochlor 1221	1 ug/mL
					AR_1254_RES_00009	100 uL	Arochlor 1254	1 ug/mL
..AR_1221_RES_00009	04/30/18		RESTEK, Lot A0118480		(Purchased Reagent)		Arochlor 1221	1000 ug/mL
..AR_1254_RES_00009	04/30/18		RESTEK, Lot A0118645		(Purchased Reagent)		Arochlor 1254	1000 ug/mL
AR_2154_L6_00016	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_2154_L7_00014	7.5 mL	PCB-1221 Peak 1	0.75 ug/mL
							PCB-1221 Peak 2	0.75 ug/mL
							PCB-1221 Peak 3	0.75 ug/mL
							PCB-1254 Peak 1	0.75 ug/mL
							PCB-1254 Peak 2	0.75 ug/mL
							PCB-1254 Peak 3	0.75 ug/mL
							PCB-1254 Peak 4	0.75 ug/mL
							PCB-1254 Peak 5	0.75 ug/mL
.AR_2154_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1221_RES_00009	100 uL	PCB-1221 Peak 1	1 ug/mL
							PCB-1221 Peak 2	1 ug/mL
							PCB-1221 Peak 3	1 ug/mL
					AR_1254_RES_00009	100 uL	PCB-1254 Peak 1	1 ug/mL
							PCB-1254 Peak 2	1 ug/mL
							PCB-1254 Peak 3	1 ug/mL
							PCB-1254 Peak 4	1 ug/mL
							PCB-1254 Peak 5	1 ug/mL
..AR_1221_RES_00009	04/30/18		RESTEK, Lot A0118480		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
..AR_1254_RES_00009	04/30/18		RESTEK, Lot A0118645		(Purchased Reagent)		PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
AR_2154_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1221_RES_00009	100 uL	PCB-1221 Peak 1	1 ug/mL
							PCB-1221 Peak 2	1 ug/mL
							PCB-1221 Peak 3	1 ug/mL
					AR_1254_RES_00009	100 uL	PCB-1254 Peak 1	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
							PCB-1254 Peak 2	1 ug/mL
							PCB-1254 Peak 3	1 ug/mL
							PCB-1254 Peak 4	1 ug/mL
							PCB-1254 Peak 5	1 ug/mL
.AR_1221_RES_00009	04/30/18		RESTEK, Lot A0118480		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
.AR_1254_RES_00009	04/30/18		RESTEK, Lot A0118645		(Purchased Reagent)		PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
AR_3262_ICV_00011	11/20/17	05/20/17	Hexane, Lot 135581	100 mL	AR_1232_RESss_00008	25 uL	Arochlor 1232	250 ng/mL
.AR_1232_RESss_00008	05/20/18		RESTEK, Lot A095877		(Purchased Reagent)		Arochlor 1232	1000 ug/mL
AR_3262_L1_00019	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_3262_L7_00014	0.25 mL	PCB-1232 Peak 1	0.025 ug/mL
							PCB-1232 Peak 2	0.025 ug/mL
							PCB-1232 Peak 3	0.025 ug/mL
							PCB-1232 Peak 4	0.025 ug/mL
							PCB-1232 Peak 5	0.025 ug/mL
							PCB-1262 Peak 1	0.025 ug/mL
							PCB-1262 Peak 2	0.025 ug/mL
							PCB-1262 Peak 3	0.025 ug/mL
							PCB-1262 Peak 4	0.025 ug/mL
							PCB-1262 Peak 5	0.025 ug/mL
.AR_3262_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1232_RES_00010	100 uL	PCB-1232 Peak 1	1 ug/mL
							PCB-1232 Peak 2	1 ug/mL
							PCB-1232 Peak 3	1 ug/mL
							PCB-1232 Peak 4	1 ug/mL
							PCB-1232 Peak 5	1 ug/mL
					AR_1262_RES_00010	100 uL	PCB-1262 Peak 1	1 ug/mL
							PCB-1262 Peak 2	1 ug/mL
							PCB-1262 Peak 3	1 ug/mL
							PCB-1262 Peak 4	1 ug/mL
							PCB-1262 Peak 5	1 ug/mL
..AR_1232_RES_00010	04/30/18		RESTEK, Lot A0117033		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
..AR_1262_RES_00010	04/30/18		RESTEK, Lot A0117769		(Purchased Reagent)		PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
AR_3262_L2_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_3262_L7_00014	0.5 mL	PCB-1232 Peak 1	0.05 ug/mL
							PCB-1232 Peak 2	0.05 ug/mL
							PCB-1232 Peak 3	0.05 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							PCB-1232 Peak 4	0.05 ug/mL
							PCB-1232 Peak 5	0.05 ug/mL
							PCB-1262 Peak 1	0.05 ug/mL
							PCB-1262 Peak 2	0.05 ug/mL
							PCB-1262 Peak 3	0.05 ug/mL
							PCB-1262 Peak 4	0.05 ug/mL
							PCB-1262 Peak 5	0.05 ug/mL
.AR_3262_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1232_RES_00010	100 uL	PCB-1232 Peak 1	1 ug/mL
							PCB-1232 Peak 2	1 ug/mL
							PCB-1232 Peak 3	1 ug/mL
							PCB-1232 Peak 4	1 ug/mL
							PCB-1232 Peak 5	1 ug/mL
					AR_1262_RES_00010	100 uL	PCB-1262 Peak 1	1 ug/mL
							PCB-1262 Peak 2	1 ug/mL
							PCB-1262 Peak 3	1 ug/mL
							PCB-1262 Peak 4	1 ug/mL
							PCB-1262 Peak 5	1 ug/mL
..AR_1232_RES_00010	04/30/18		RESTEK, Lot A0117033		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
..AR_1262_RES_00010	04/30/18		RESTEK, Lot A0117769		(Purchased Reagent)		PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
AR_3262_L3_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_3262_L7_00014	1 mL	PCB-1232 Peak 1	0.1 ug/mL
							PCB-1232 Peak 2	0.1 ug/mL
							PCB-1232 Peak 3	0.1 ug/mL
							PCB-1232 Peak 4	0.1 ug/mL
							PCB-1232 Peak 5	0.1 ug/mL
							PCB-1262 Peak 1	0.1 ug/mL
							PCB-1262 Peak 2	0.1 ug/mL
							PCB-1262 Peak 3	0.1 ug/mL
							PCB-1262 Peak 4	0.1 ug/mL
							PCB-1262 Peak 5	0.1 ug/mL
.AR_3262_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1232_RES_00010	100 uL	PCB-1232 Peak 1	1 ug/mL
							PCB-1232 Peak 2	1 ug/mL
							PCB-1232 Peak 3	1 ug/mL
							PCB-1232 Peak 4	1 ug/mL
							PCB-1232 Peak 5	1 ug/mL
					AR_1262_RES_00010	100 uL	PCB-1262 Peak 1	1 ug/mL
							PCB-1262 Peak 2	1 ug/mL
							PCB-1262 Peak 3	1 ug/mL
							PCB-1262 Peak 4	1 ug/mL
							PCB-1262 Peak 5	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Parent Reagent Volume Added	Analyte	Concentration
..AR_1232_RES_00010	04/30/18		RESTEK, Lot A0117033		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
..AR_1262_RES_00010	04/30/18		RESTEK, Lot A0117769		(Purchased Reagent)		PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
AR_3262_L4_00019	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_3262_L7_00014	2.5 mL	PCB-1232 Peak 1	0.25 ug/mL
							PCB-1232 Peak 2	0.25 ug/mL
							PCB-1232 Peak 3	0.25 ug/mL
							PCB-1232 Peak 4	0.25 ug/mL
							PCB-1232 Peak 5	0.25 ug/mL
							PCB-1262 Peak 1	0.25 ug/mL
							PCB-1262 Peak 2	0.25 ug/mL
							PCB-1262 Peak 3	0.25 ug/mL
							PCB-1262 Peak 4	0.25 ug/mL
							PCB-1262 Peak 5	0.25 ug/mL
.AR_3262_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1232_RES_00010	100 uL	PCB-1232 Peak 1	1 ug/mL
							PCB-1232 Peak 2	1 ug/mL
							PCB-1232 Peak 3	1 ug/mL
							PCB-1232 Peak 4	1 ug/mL
							PCB-1232 Peak 5	1 ug/mL
					AR_1262_RES_00010	100 uL	PCB-1262 Peak 1	1 ug/mL
							PCB-1262 Peak 2	1 ug/mL
							PCB-1262 Peak 3	1 ug/mL
							PCB-1262 Peak 4	1 ug/mL
							PCB-1262 Peak 5	1 ug/mL
..AR_1232_RES_00010	04/30/18		RESTEK, Lot A0117033		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
..AR_1262_RES_00010	04/30/18		RESTEK, Lot A0117769		(Purchased Reagent)		PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
AR_3262_L5_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_3262_L7_00014	5 mL	PCB-1232 Peak 1	0.5 ug/mL
							PCB-1232 Peak 2	0.5 ug/mL
							PCB-1232 Peak 3	0.5 ug/mL
							PCB-1232 Peak 4	0.5 ug/mL
							PCB-1232 Peak 5	0.5 ug/mL
							PCB-1262 Peak 1	0.5 ug/mL
							PCB-1262 Peak 2	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Parent Reagent Volume Added	Analyte	Concentration
							PCB-1262 Peak 3	0.5 ug/mL
							PCB-1262 Peak 4	0.5 ug/mL
							PCB-1262 Peak 5	0.5 ug/mL
.AR_3262_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1232_RES_00010	100 uL	PCB-1232 Peak 1	1 ug/mL
							PCB-1232 Peak 2	1 ug/mL
							PCB-1232 Peak 3	1 ug/mL
							PCB-1232 Peak 4	1 ug/mL
							PCB-1232 Peak 5	1 ug/mL
					AR_1262_RES_00010	100 uL	PCB-1262 Peak 1	1 ug/mL
							PCB-1262 Peak 2	1 ug/mL
							PCB-1262 Peak 3	1 ug/mL
							PCB-1262 Peak 4	1 ug/mL
							PCB-1262 Peak 5	1 ug/mL
..AR_1232_RES_00010	04/30/18		RESTEK, Lot A0117033		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
..AR_1262_RES_00010	04/30/18		RESTEK, Lot A0117769		(Purchased Reagent)		PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
AR_3262_L6_00016	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_3262_L7_00014	7.5 mL	PCB-1232 Peak 1	0.75 ug/mL
							PCB-1232 Peak 2	0.75 ug/mL
							PCB-1232 Peak 3	0.75 ug/mL
							PCB-1232 Peak 4	0.75 ug/mL
							PCB-1232 Peak 5	0.75 ug/mL
							PCB-1262 Peak 1	0.75 ug/mL
							PCB-1262 Peak 2	0.75 ug/mL
							PCB-1262 Peak 3	0.75 ug/mL
							PCB-1262 Peak 4	0.75 ug/mL
							PCB-1262 Peak 5	0.75 ug/mL
.AR_3262_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1232_RES_00010	100 uL	PCB-1232 Peak 1	1 ug/mL
							PCB-1232 Peak 2	1 ug/mL
							PCB-1232 Peak 3	1 ug/mL
							PCB-1232 Peak 4	1 ug/mL
							PCB-1232 Peak 5	1 ug/mL
					AR_1262_RES_00010	100 uL	PCB-1262 Peak 1	1 ug/mL
							PCB-1262 Peak 2	1 ug/mL
							PCB-1262 Peak 3	1 ug/mL
							PCB-1262 Peak 4	1 ug/mL
							PCB-1262 Peak 5	1 ug/mL
..AR_1232_RES_00010	04/30/18		RESTEK, Lot A0117033		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							PCB-1232 Peak 5	1000 ug/mL
..AR_1262_RES_00010	04/30/18		RESTEK, Lot A0117769		(Purchased Reagent)		PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
AR_3262_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1232_RES_00010	100 uL	PCB-1232 Peak 1	1 ug/mL
							PCB-1232 Peak 2	1 ug/mL
							PCB-1232 Peak 3	1 ug/mL
							PCB-1232 Peak 4	1 ug/mL
							PCB-1232 Peak 5	1 ug/mL
					AR_1262_RES_00010	100 uL	PCB-1262 Peak 1	1 ug/mL
							PCB-1262 Peak 2	1 ug/mL
							PCB-1262 Peak 3	1 ug/mL
							PCB-1262 Peak 4	1 ug/mL
							PCB-1262 Peak 5	1 ug/mL
.AR_1232_RES_00010	04/30/18		RESTEK, Lot A0117033		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
.AR_1262_RES_00010	04/30/18		RESTEK, Lot A0117769		(Purchased Reagent)		PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
AR_4268_ICV_00011	11/20/17	05/20/17	Hexane, Lot 135581	100 mL	AR_1242_RESss_00008	25 uL	Arochlor 1242	250 ng/mL
.AR_1242_RESss_00008	05/20/18		RESTEK, Lot A0105175		(Purchased Reagent)		Arochlor 1242	1000 ug/mL
AR_4268_L1_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_4268_L7_00013	0.25 mL	PCB-1242 Peak 1	0.025 ug/mL
							PCB-1242 Peak 2	0.025 ug/mL
							PCB-1242 Peak 3	0.025 ug/mL
							PCB-1242 Peak 4	0.025 ug/mL
							PCB-1242 Peak 5	0.025 ug/mL
							PCB-1268 Peak 1	0.025 ug/mL
							PCB-1268 Peak 2	0.025 ug/mL
							PCB-1268 Peak 3	0.025 ug/mL
							PCB-1268 Peak 4	0.025 ug/mL
							PCB-1268 Peak 5	0.025 ug/mL
.AR_4268_L7_00013	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1242_RES_00009	100 uL	PCB-1242 Peak 1	1 ug/mL
							PCB-1242 Peak 2	1 ug/mL
							PCB-1242 Peak 3	1 ug/mL
							PCB-1242 Peak 4	1 ug/mL
							PCB-1242 Peak 5	1 ug/mL
					AR_1268_RES_00009	100 uL	PCB-1268 Peak 1	1 ug/mL
							PCB-1268 Peak 2	1 ug/mL
							PCB-1268 Peak 3	1 ug/mL
							PCB-1268 Peak 4	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent: Reagent ID	Parent Reagent: Volume Added	Analyte	Concentration
							PCB-1268 Peak 5	1 ug/mL
..AR_1242_RES_00009	04/30/18		RESTEK, Lot A0117779		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
..AR_1268_RES_00009	04/30/18		RESTEK, Lot A0114508		(Purchased Reagent)		PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
AR_4268_L2_00017	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_4268_L7_00013	0.5 mL	PCB-1242 Peak 1	0.05 ug/mL
							PCB-1242 Peak 2	0.05 ug/mL
							PCB-1242 Peak 3	0.05 ug/mL
							PCB-1242 Peak 4	0.05 ug/mL
							PCB-1242 Peak 5	0.05 ug/mL
							PCB-1268 Peak 1	0.05 ug/mL
							PCB-1268 Peak 2	0.05 ug/mL
							PCB-1268 Peak 3	0.05 ug/mL
							PCB-1268 Peak 4	0.05 ug/mL
							PCB-1268 Peak 5	0.05 ug/mL
.AR_4268_L7_00013	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1242_RES_00009	100 uL	PCB-1242 Peak 1	1 ug/mL
							PCB-1242 Peak 2	1 ug/mL
							PCB-1242 Peak 3	1 ug/mL
							PCB-1242 Peak 4	1 ug/mL
							PCB-1242 Peak 5	1 ug/mL
					AR_1268_RES_00009	100 uL	PCB-1268 Peak 1	1 ug/mL
							PCB-1268 Peak 2	1 ug/mL
							PCB-1268 Peak 3	1 ug/mL
							PCB-1268 Peak 4	1 ug/mL
							PCB-1268 Peak 5	1 ug/mL
..AR_1242_RES_00009	04/30/18		RESTEK, Lot A0117779		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
..AR_1268_RES_00009	04/30/18		RESTEK, Lot A0114508		(Purchased Reagent)		PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
AR_4268_L3_00017	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_4268_L7_00013	1 mL	PCB-1242 Peak 1	0.1 ug/mL
							PCB-1242 Peak 2	0.1 ug/mL
							PCB-1242 Peak 3	0.1 ug/mL
							PCB-1242 Peak 4	0.1 ug/mL
							PCB-1242 Peak 5	0.1 ug/mL
							PCB-1268 Peak 1	0.1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent	Volume Added	Analyte	Concentration
							PCB-1268 Peak 2	0.1 ug/mL
							PCB-1268 Peak 3	0.1 ug/mL
							PCB-1268 Peak 4	0.1 ug/mL
							PCB-1268 Peak 5	0.1 ug/mL
.AR_4268_L7_00013	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1242_RES_00009	100 uL	PCB-1242 Peak 1	1 ug/mL
							PCB-1242 Peak 2	1 ug/mL
							PCB-1242 Peak 3	1 ug/mL
							PCB-1242 Peak 4	1 ug/mL
							PCB-1242 Peak 5	1 ug/mL
					AR_1268_RES_00009	100 uL	PCB-1268 Peak 1	1 ug/mL
							PCB-1268 Peak 2	1 ug/mL
							PCB-1268 Peak 3	1 ug/mL
							PCB-1268 Peak 4	1 ug/mL
							PCB-1268 Peak 5	1 ug/mL
..AR_1242_RES_00009	04/30/18		RESTEK, Lot A0117779		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
..AR_1268_RES_00009	04/30/18		RESTEK, Lot A0114508		(Purchased Reagent)		PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
AR_4268_L4_00020	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_4268_L7_00013	2.5 mL	PCB-1242 Peak 1	0.25 ug/mL
							PCB-1242 Peak 2	0.25 ug/mL
							PCB-1242 Peak 3	0.25 ug/mL
							PCB-1242 Peak 4	0.25 ug/mL
							PCB-1242 Peak 5	0.25 ug/mL
							PCB-1268 Peak 1	0.25 ug/mL
							PCB-1268 Peak 2	0.25 ug/mL
							PCB-1268 Peak 3	0.25 ug/mL
							PCB-1268 Peak 4	0.25 ug/mL
							PCB-1268 Peak 5	0.25 ug/mL
.AR_4268_L7_00013	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1242_RES_00009	100 uL	PCB-1242 Peak 1	1 ug/mL
							PCB-1242 Peak 2	1 ug/mL
							PCB-1242 Peak 3	1 ug/mL
							PCB-1242 Peak 4	1 ug/mL
							PCB-1242 Peak 5	1 ug/mL
					AR_1268_RES_00009	100 uL	PCB-1268 Peak 1	1 ug/mL
							PCB-1268 Peak 2	1 ug/mL
							PCB-1268 Peak 3	1 ug/mL
							PCB-1268 Peak 4	1 ug/mL
							PCB-1268 Peak 5	1 ug/mL
..AR_1242_RES_00009	04/30/18		RESTEK, Lot A0117779		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent: Reagent ID	Parent Reagent: Volume Added	Analyte	Concentration
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
..AR_1268_RES_00009	04/30/18		RESTEK, Lot A0114508		(Purchased Reagent)		PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
AR_4268_L5_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_4268_L7_00013	5 mL	PCB-1242 Peak 1	0.5 ug/mL
							PCB-1242 Peak 2	0.5 ug/mL
							PCB-1242 Peak 3	0.5 ug/mL
							PCB-1242 Peak 4	0.5 ug/mL
							PCB-1242 Peak 5	0.5 ug/mL
							PCB-1268 Peak 1	0.5 ug/mL
							PCB-1268 Peak 2	0.5 ug/mL
							PCB-1268 Peak 3	0.5 ug/mL
							PCB-1268 Peak 4	0.5 ug/mL
							PCB-1268 Peak 5	0.5 ug/mL
.AR_4268_L7_00013	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1242_RES_00009	100 uL	PCB-1242 Peak 1	1 ug/mL
							PCB-1242 Peak 2	1 ug/mL
							PCB-1242 Peak 3	1 ug/mL
							PCB-1242 Peak 4	1 ug/mL
							PCB-1242 Peak 5	1 ug/mL
					AR_1268_RES_00009	100 uL	PCB-1268 Peak 1	1 ug/mL
							PCB-1268 Peak 2	1 ug/mL
							PCB-1268 Peak 3	1 ug/mL
							PCB-1268 Peak 4	1 ug/mL
							PCB-1268 Peak 5	1 ug/mL
..AR_1242_RES_00009	04/30/18		RESTEK, Lot A0117779		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
..AR_1268_RES_00009	04/30/18		RESTEK, Lot A0114508		(Purchased Reagent)		PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
AR_4268_L6_00015	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_4268_L7_00013	7.5 mL	PCB-1242 Peak 1	0.75 ug/mL
							PCB-1242 Peak 2	0.75 ug/mL
							PCB-1242 Peak 3	0.75 ug/mL
							PCB-1242 Peak 4	0.75 ug/mL
							PCB-1242 Peak 5	0.75 ug/mL
							PCB-1268 Peak 1	0.75 ug/mL
							PCB-1268 Peak 2	0.75 ug/mL
							PCB-1268 Peak 3	0.75 ug/mL
							PCB-1268 Peak 4	0.75 ug/mL
							PCB-1268 Peak 5	0.75 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
.AR_4268_L7_00013	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1242_RES_00009	100 uL	PCB-1242 Peak 1	1 ug/mL
							PCB-1242 Peak 2	1 ug/mL
							PCB-1242 Peak 3	1 ug/mL
							PCB-1242 Peak 4	1 ug/mL
							PCB-1242 Peak 5	1 ug/mL
					AR_1268_RES_00009	100 uL	PCB-1268 Peak 1	1 ug/mL
							PCB-1268 Peak 2	1 ug/mL
							PCB-1268 Peak 3	1 ug/mL
							PCB-1268 Peak 4	1 ug/mL
							PCB-1268 Peak 5	1 ug/mL
..AR_1242_RES_00009	04/30/18		RESTEK, Lot A0117779		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
..AR_1268_RES_00009	04/30/18		RESTEK, Lot A0114508		(Purchased Reagent)		PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
AR_4268_L7_00013	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1242_RES_00009	100 uL	PCB-1242 Peak 1	1 ug/mL
							PCB-1242 Peak 2	1 ug/mL
							PCB-1242 Peak 3	1 ug/mL
							PCB-1242 Peak 4	1 ug/mL
							PCB-1242 Peak 5	1 ug/mL
					AR_1268_RES_00009	100 uL	PCB-1268 Peak 1	1 ug/mL
							PCB-1268 Peak 2	1 ug/mL
							PCB-1268 Peak 3	1 ug/mL
							PCB-1268 Peak 4	1 ug/mL
							PCB-1268 Peak 5	1 ug/mL
.AR_1242_RES_00009	04/30/18		RESTEK, Lot A0117779		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
.AR_1268_RES_00009	04/30/18		RESTEK, Lot A0114508		(Purchased Reagent)		PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
BNB IS_00009	08/20/17	02/20/17	Hexane, Lot 135581	100 mL	BNB 10000ppb_00005	10 mL	1-Bromo-2-nitrobenzene	1000 ng/mL
.BNB 10000ppb_00005	08/20/17	02/20/17	Hexane, Lot 135581	100 mL	BNB stock_00009	1 mL	1-Bromo-2-nitrobenzene	10000 ng/mL
..BNB stock_00009	02/20/18		Restek, Lot A0118613		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
Hg Daily Spk_01936	06/07/17	06/06/17	1% HNO3, Lot K23022	100 mL	Hg Mnth Spike_00115	1 mL	Mercury	0.1 mg/L
.Hg Mnth Spike_00115	06/08/17	05/08/17	1% HNO3, Lot K23022	100 mL	Hg Ultra Prim_00011	1 mL	Mercury	10 mg/L
..Hg Ultra Prim_00011	03/08/18		Ultra Scientific, Lot T00602		(Purchased Reagent)		Mercury	1000 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
Hg Soil CCV_00913	06/07/17	06/06/17	1% HNO3, Lot K14036	50 mL	Hg Daily Spk_01936	2.5 mL	Mercury	0.005 mg/L
.Hg Daily Spk_01936	06/07/17	06/06/17	1% HNO3, Lot K23022	100 mL	Hg Mnth Spike_00115	1 mL	Mercury	0.1 mg/L
..Hg Mnth Spike_00115	06/08/17	05/08/17	1% HNO3, Lot K23022	100 mL	Hg Ultra Prim_00011	1 mL	Mercury	10 mg/L
...Hg Ultra Prim_00011	03/08/18		Ultra Scientific, Lot T00602		(Purchased Reagent)		Mercury	1000 mg/L
Hg Soil ICV_00516	06/07/17	06/06/17	1% HNO3, Lot K23022	50 mL	Hg Biwk ICV_00222	0.5 mL	Mercury	0.004 mg/L
.Hg Biwk ICV_00222	06/09/17	05/26/17	1% HNO3, Lot K23022	100 mL	Hg ICV Stock_00009	0.4 mL	Mercury	0.4 mg/L
..Hg ICV Stock_00009	06/24/20		Inorganic Ventures, Lot H2-HG02113R		(Purchased Reagent)		Mercury	100 mg/L
ICP CCV_00270	12/12/17	05/31/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	ICP ICAL1A_00734	250 mL	Arsenic	1 mg/L
							Lead	1 mg/L
							Antimony	1 mg/L
							Selenium	1 mg/L
							Thallium	1 mg/L
							Aluminum	0.5 mg/L
							Barium	0.5 mg/L
							Beryllium	0.5 mg/L
							Cadmium	0.5 mg/L
							Calcium	5 mg/L
							Chromium	0.5 mg/L
							Cobalt	0.5 mg/L
							Copper	0.5 mg/L
							Iron	2.5 mg/L
							Magnesium	20 mg/L
							Manganese	0.5 mg/L
							Nickel	0.5 mg/L
							Potassium	50 mg/L
							Silver	0.5 mg/L
							Sodium	5 mg/L
							Vanadium	0.5 mg/L
							Zinc	0.5 mg/L
.ICP ICAL1A_00734	12/12/17	05/30/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	1000 mL	1000 As_00017	2 mL	Arsenic	2 mg/L
					1000 Pb_00020	2 mL	Lead	2 mg/L
					1000 Sb_00016	2 mL	Antimony	2 mg/L
					1000 Se_00015	2 mL	Selenium	2 mg/L
					1000 Tl_00016	2 mL	Thallium	2 mg/L
					Icp cal std 3_00016	10 mL	Aluminum	1 mg/L
							Barium	1 mg/L
							Beryllium	1 mg/L
							Cadmium	1 mg/L
							Calcium	10 mg/L
							Chromium	1 mg/L
							Cobalt	1 mg/L
							Copper	1 mg/L
							Iron	5 mg/L
							Magnesium	40 mg/L
							Manganese	1 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Nickel	1 mg/L
							Potassium	100 mg/L
							Silver	1 mg/L
							Sodium	10 mg/L
							Vanadium	1 mg/L
							Zinc	1 mg/L
..1000 As_00017	03/21/18		Inorganic Venture, Lot J2-AS02122		(Purchased Reagent)		Arsenic	1000 mg/L
..1000 Pb_00020	12/12/17		Inorganic Ventures, Lot K2-PB03074		(Purchased Reagent)		Lead	1000 mg/L
..1000 Sb_00016	02/27/18		Inorganic Ventures, Lot J2-SB03037		(Purchased Reagent)		Antimony	1000 mg/L
..1000 Se_00015	02/16/18		Inorganic Ventures, Lot J2-SE02058		(Purchased Reagent)		Selenium	1000 mg/L
..1000 Tl_00016	02/13/18		Inorganic Ventures, Lot J2-TL02025		(Purchased Reagent)		Thallium	1000 mg/L
..Icp cal std 3_00016	02/22/18		Inorganic Ventures, Lot K2-MEB652538		(Purchased Reagent)		Aluminum	100 mg/L
							Barium	100 mg/L
							Beryllium	100 mg/L
							Cadmium	100 mg/L
							Calcium	1000 mg/L
							Chromium	100 mg/L
							Cobalt	100 mg/L
							Copper	100 mg/L
							Iron	500 mg/L
							Magnesium	4000 mg/L
							Manganese	100 mg/L
							Nickel	100 mg/L
							Potassium	10000 mg/L
							Silver	100 mg/L
							Sodium	1000 mg/L
							Vanadium	100 mg/L
							Zinc	100 mg/L
ICP CCVH_00539	06/06/17	05/31/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	ICP ICAL2A_00438	250 mL	Aluminum	50 mg/L
							Iron	50 mg/L
							Sodium	250 mg/L
.ICP ICAL2A_00438	06/06/17	05/31/17	5%HCl/5% HNO3, Lot see reagent log	1000 mL	10000 Al_00016	10 mL	Aluminum	100 mg/L
					10000 Fe_00018	10 mL	Iron	100 mg/L
					10000 Na_00057	50 mL	Sodium	500 mg/L
..10000 Al_00016	01/13/18		Inorganic Ventures, Lot J2-AL05009		(Purchased Reagent)		Aluminum	10000 mg/L
..10000 Fe_00018	02/13/18		Inorganic Ventures, Lot K2-FE04047		(Purchased Reagent)		Iron	10000 mg/L
..10000 Na_00057	04/19/18		Inorganic Ventures, Lot K2-NA651997		(Purchased Reagent)		Sodium	10000 mg/L
ICP CCVH_00540	01/02/18	06/07/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	ICP ICAL2A_00439	250 mL	Aluminum	50 mg/L
							Iron	50 mg/L
							Sodium	250 mg/L
.ICP ICAL2A_00439	01/02/18	06/07/17	5%HCl/5% HNO3, Lot see reagent log	1000 mL	10000 Al_00016	10 mL	Aluminum	100 mg/L
					10000 Fe_00018	10 mL	Iron	100 mg/L
					10000 Na_00057	50 mL	Sodium	500 mg/L
..10000 Al_00016	01/13/18		Inorganic Ventures, Lot J2-AL05009		(Purchased Reagent)		Aluminum	10000 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
..10000 Fe_00018	02/13/18	Inorganic Ventures, Lot K2-FE04047			(Purchased Reagent)		Iron	10000 mg/L
..10000 Na_00057	04/19/18	Inorganic Ventures, Lot K2-NA651997			(Purchased Reagent)		Sodium	10000 mg/L
ICP CRI_00712	06/07/17	06/06/17	5:HNO3/5%HCl, Lot see reagent log	100 mL	ICP RL STD3A_00011	0.1 mL	Aluminum	0.1 mg/L
							Barium	0.005 mg/L
							Beryllium	0.001 mg/L
							Cadmium	0.005 mg/L
							Calcium	0.2 mg/L
							Chromium	0.01 mg/L
							Cobalt	0.005 mg/L
							Copper	0.01 mg/L
							Magnesium	0.2 mg/L
							Manganese	0.003 mg/L
							Nickel	0.01 mg/L
							Potassium	1 mg/L
							Silver	0.01 mg/L
							Sodium	1 mg/L
							Vanadium	0.01 mg/L
							Zinc	0.01 mg/L
					ICP RLSTD 1A_00012	0.1 mL	Antimony	0.01 mg/L
							Arsenic	0.01 mg/L
							Lead	0.003 mg/L
.ICP RL STD3A_00011	08/31/17	Inorganic Ventures, Lot k2-MEB651193			(Purchased Reagent)		Aluminum	100 mg/L
							Barium	5 mg/L
							Beryllium	1 mg/L
							Cadmium	5 mg/L
							Calcium	200 mg/L
							Chromium	10 mg/L
							Cobalt	5 mg/L
							Copper	10 mg/L
							Magnesium	200 mg/L
							Manganese	3 mg/L
							Nickel	10 mg/L
							Potassium	1000 mg/L
							Silver	10 mg/L
							Sodium	1000 mg/L
							Vanadium	10 mg/L
							Zinc	10 mg/L
.ICP RLSTD 1A_00012	03/01/18	Inorganic Ventures, Lot K2-MEB651561			(Purchased Reagent)		Antimony	10 mg/L
							Arsenic	10 mg/L
							Lead	3 mg/L
ICP CRI_00713	06/08/17	06/07/17	5:HNO3/5%HCl, Lot see reagent log	100 mL	ICP RL STD3A_00011	0.1 mL	Aluminum	0.1 mg/L
							Barium	0.005 mg/L
							Cadmium	0.005 mg/L
							Calcium	0.2 mg/L
							Chromium	0.01 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							Cobalt	0.005 mg/L
							Copper	0.01 mg/L
							Iron	0.03 mg/L
							Magnesium	0.2 mg/L
							Manganese	0.003 mg/L
							Nickel	0.01 mg/L
							Potassium	1 mg/L
							Silver	0.01 mg/L
							Sodium	1 mg/L
							Vanadium	0.01 mg/L
							Zinc	0.01 mg/L
					ICP RLSTD 1A_00012	0.1 mL	Thallium	0.01 mg/L
.ICP RL STD3A_00011	08/31/17		Inorganic Ventures, Lot k2-MEB651193		(Purchased Reagent)		Aluminum	100 mg/L
							Barium	5 mg/L
							Cadmium	5 mg/L
							Calcium	200 mg/L
							Chromium	10 mg/L
							Cobalt	5 mg/L
							Copper	10 mg/L
							Iron	30 mg/L
							Magnesium	200 mg/L
							Manganese	3 mg/L
							Nickel	10 mg/L
							Potassium	1000 mg/L
							Silver	10 mg/L
							Sodium	1000 mg/L
							Vanadium	10 mg/L
							Zinc	10 mg/L
.ICP RLSTD 1A_00012	03/01/18		Inorganic Ventures, Lot K2-MEB651561		(Purchased Reagent)		Thallium	10 mg/L
ICP ICSA_00146	08/12/17	05/17/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	250 mL	Icp stk ICSA_00020	25 mL	Aluminum	500 mg/L
							Calcium	500 mg/L
							Iron	200 mg/L
							Magnesium	500 mg/L
.Icp stk ICSA_00020	08/12/17		Inorganic Ventures, Lot K2-MEB643109		(Purchased Reagent)		Aluminum	5000 mg/L
							Calcium	5000 mg/L
							Iron	2000 mg/L
							Magnesium	5000 mg/L
ICP ICSA_00147	08/12/17	06/06/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	250 mL	Icp stk ICSA_00020	25 mL	Aluminum	500 mg/L
							Calcium	500 mg/L
							Iron	200 mg/L
							Magnesium	500 mg/L
.Icp stk ICSA_00020	08/12/17		Inorganic Ventures, Lot K2-MEB643109		(Purchased Reagent)		Aluminum	5000 mg/L
							Calcium	5000 mg/L
							Iron	2000 mg/L
							Magnesium	5000 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent	Volume Added	Analyte	Concentration
ICP ICSAB_00162	06/06/17	05/26/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	250 mL	10000 Si_00013	0.25 mL	Si	10 mg/L
							SiO2	21.4 mg/L
					ANALYTES B_00012	2.5 mL	Barium	0.5 mg/L
							Beryllium	0.5 mg/L
							Cadmium	1 mg/L
							Chromium	0.5 mg/L
							Cobalt	0.5 mg/L
							Copper	0.5 mg/L
							Lead	1 mg/L
							Manganese	0.5 mg/L
							Nickel	1 mg/L
							Silver	1 mg/L
							Vanadium	0.5 mg/L
							Zinc	1 mg/L
					ICP ISAB 1B_00010	2.5 mL	Thallium	10 mg/L
					ICP ISAB STD1_00009	2.5 mL	Antimony	1 mg/L
							Arsenic	2 mg/L
							B	2 mg/L
							Li	1 mg/L
							Mo	1 mg/L
							P	2 mg/L
							Potassium	50 mg/L
							Selenium	5 mg/L
							Sodium	50 mg/L
							Sr	1 mg/L
					ICP ISAB STD2_00009	2.5 mL	Sn	10 mg/L
							Ti	1 mg/L
					Icp stk ICSA_00020	25 mL	Aluminum	500 mg/L
							Calcium	500 mg/L
							Iron	200 mg/L
							Magnesium	500 mg/L
.10000 Si_00013	12/05/17		Inorganic ventures, Lot J2-SI03056		(Purchased Reagent)		Si	10000 mg/L
							SiO2	21400 mg/L
.ANALYTES B_00012	04/30/18		SPEX, Lot 3-98MKBY		(Purchased Reagent)		Barium	50 mg/L
							Beryllium	50 mg/L
							Cadmium	100 mg/L
							Chromium	50 mg/L
							Cobalt	50 mg/L
							Copper	50 mg/L
							Lead	100 mg/L
							Manganese	50 mg/L
							Nickel	100 mg/L
							Silver	100 mg/L
							Vanadium	50 mg/L
							Zinc	100 mg/L
.ICP ISAB 1B_00010	01/11/18		High Purity, Lot 1700955		(Purchased Reagent)		Thallium	1000 mg/L
.ICP ISAB STD1_00009	01/11/18		High Purity, Lot 1700954		(Purchased Reagent)		Antimony	100 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Arsenic	200 mg/L
							B	200 mg/L
							Li	100 mg/L
							Mo	100 mg/L
							P	200 mg/L
							Potassium	5000 mg/L
							Selenium	500 mg/L
							Sodium	5000 mg/L
							Sr	100 mg/L
.ICP ISAB STD2_00009	07/27/17		High Purity, Lot 1620836		(Purchased Reagent)		Sn	1000 mg/L
							Ti	100 mg/L
.Icp stk ICSA_00020	08/12/17		Inorganic Ventures, Lot K2-MEB643109		(Purchased Reagent)		Aluminum	5000 mg/L
							Calcium	5000 mg/L
							Iron	2000 mg/L
							Magnesium	5000 mg/L
ICP ICSAB_00163	07/27/17	06/07/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	250 mL	10000 Si_00013	0.25 mL	Si	10 mg/L
							SiO2	21.4 mg/L
					ANALYTES B_00012	2.5 mL	Barium	0.5 mg/L
							Beryllium	0.5 mg/L
							Cadmium	1 mg/L
							Chromium	0.5 mg/L
							Cobalt	0.5 mg/L
							Copper	0.5 mg/L
							Lead	1 mg/L
							Manganese	0.5 mg/L
							Nickel	1 mg/L
							Silver	1 mg/L
							Vanadium	0.5 mg/L
							Zinc	1 mg/L
					ICP ISAB 1B_00010	2.5 mL	Thallium	10 mg/L
					ICP ISAB STD1_00009	2.5 mL	Antimony	1 mg/L
							Arsenic	2 mg/L
							B	2 mg/L
							Li	1 mg/L
							Mo	1 mg/L
							P	2 mg/L
							Potassium	50 mg/L
							Selenium	5 mg/L
							Sodium	50 mg/L
							Sr	1 mg/L
					ICP ISAB STD2_00009	2.5 mL	Sn	10 mg/L
							Ti	1 mg/L
					Icp stk ICSA_00020	25 mL	Aluminum	500 mg/L
							Calcium	500 mg/L
							Iron	200 mg/L
							Magnesium	500 mg/L
.10000 Si_00013	12/05/17		Inorganic ventures, Lot J2-SI03056		(Purchased Reagent)		Si	10000 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent: Reagent ID	Parent Reagent: Volume Added	Analyte	Concentration
							SiO2	21400 mg/L
.ANALYTES B_00012	04/30/18		SPEX, Lot 3-98MKBY		(Purchased Reagent)		Barium	50 mg/L
							Beryllium	50 mg/L
							Cadmium	100 mg/L
							Chromium	50 mg/L
							Cobalt	50 mg/L
							Copper	50 mg/L
							Lead	100 mg/L
							Manganese	50 mg/L
							Nickel	100 mg/L
							Silver	100 mg/L
							Vanadium	50 mg/L
							Zinc	100 mg/L
.ICP ISAB 1B_00010	01/11/18		High Purity, Lot 1700955		(Purchased Reagent)		Thallium	1000 mg/L
.ICP ISAB STD1_00009	01/11/18		High Purity, Lot 1700954		(Purchased Reagent)		Antimony	100 mg/L
							Arsenic	200 mg/L
							B	200 mg/L
							Li	100 mg/L
							Mo	100 mg/L
							P	200 mg/L
							Potassium	5000 mg/L
							Selenium	500 mg/L
							Sodium	5000 mg/L
							Sr	100 mg/L
.ICP ISAB STD2_00009	07/27/17		High Purity, Lot 1620836		(Purchased Reagent)		Sn	1000 mg/L
							Ti	100 mg/L
.Icp stk ICSA_00020	08/12/17		Inorganic Ventures, Lot K2-MEB643109		(Purchased Reagent)		Aluminum	5000 mg/L
							Calcium	5000 mg/L
							Iron	2000 mg/L
							Magnesium	5000 mg/L
ICP ICV_00298	11/16/17	06/06/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	Icp ICVL A_00011	1 mL	Aluminum	0.25 mg/L
							Arsenic	0.25 mg/L
							Barium	0.25 mg/L
							Beryllium	0.25 mg/L
							Cadmium	0.25 mg/L
							Calcium	2 mg/L
							Chromium	0.25 mg/L
							Cobalt	0.25 mg/L
							Copper	0.25 mg/L
							Iron	0.25 mg/L
							Lead	0.25 mg/L
							Magnesium	10 mg/L
							Manganese	0.25 mg/L
							Nickel	0.25 mg/L
							Potassium	20 mg/L
							Selenium	0.5 mg/L
							Sodium	2 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							Thallium	0.5 mg/L
							Vanadium	0.25 mg/L
							Zinc	0.25 mg/L
					Icp ICVL B_00011	1 mL	Antimony	0.25 mg/L
							Silver	0.25 mg/L
.Icp ICVL A_00011	11/16/17		High Purity, Lot 1631905		(Purchased Reagent)		Aluminum	25 mg/L
							Arsenic	25 mg/L
							Barium	25 mg/L
							Beryllium	25 mg/L
							Cadmium	25 mg/L
							Calcium	200 mg/L
							Chromium	25 mg/L
							Cobalt	25 mg/L
							Copper	25 mg/L
							Iron	25 mg/L
							Lead	25 mg/L
							Magnesium	1000 mg/L
							Manganese	25 mg/L
							Nickel	25 mg/L
							Potassium	2000 mg/L
							Selenium	50 mg/L
							Sodium	200 mg/L
							Thallium	50 mg/L
							Vanadium	25 mg/L
							Zinc	25 mg/L
.Icp ICVL B_00011	11/16/17		HIGH PURITY, Lot 1631906		(Purchased Reagent)		Antimony	25 mg/L
							Silver	25 mg/L
ICP ICVH_00414	06/14/17	06/01/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	Icp ICVH_00372	1 mL	Aluminum	40 mg/L
							Iron	80 mg/L
							Sodium	40 mg/L
.Icp ICVH_00372	12/15/17		High Purity, Lot 1634736		(Purchased Reagent)		Aluminum	4000 mg/L
							Iron	8000 mg/L
							Sodium	4000 mg/L
ICP LLCCV_01980	06/07/17	06/06/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	10 ppm Se_00009	0.05 mL	Selenium	0.02 mg/L
					ICP LLCCV-2a_00002	1 mL	Antimony	0.02 mg/L
					ICP LLCCV-3_00006	1 mL	Aluminum	0.1 mg/L
							Arsenic	0.015 mg/L
							Barium	0.01 mg/L
							Beryllium	0.001 mg/L
							Cadmium	0.005 mg/L
							Calcium	0.2 mg/L
							Chromium	0.01 mg/L
							Cobalt	0.01 mg/L
							Copper	0.015 mg/L
							Iron	0.1 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Lead	0.009 mg/L
							Magnesium	0.2 mg/L
							Manganese	0.01 mg/L
							Nickel	0.04 mg/L
							Potassium	3 mg/L
							Selenium	0.02 mg/L
							Silver	0.01 mg/L
							Sodium	1 mg/L
							Thallium	0.015 mg/L
							Vanadium	0.01 mg/L
							Zinc	0.02 mg/L
.10 ppm Se_00009	08/31/17	09/06/16	2%HNO3/0.5% HCl, Lot see log books	100 mL	1000 Se_00016	1 mL	Selenium	10 mg/L
..1000 Se_00016	08/31/17		Inorganic Ventures, Lot K2-SE02067		(Purchased Reagent)		Selenium	1000 mg/L
.ICP LLCCV-2a_00002	08/22/17		Inorganic Ventures, Lot K2-MEB638041		(Purchased Reagent)		Antimony	2 mg/L
.ICP LLCCV-3_00006	05/12/18		Inorganic Ventures, Lot K2-MEB653967		(Purchased Reagent)		Aluminum	10 mg/L
							Arsenic	1.5 mg/L
							Barium	1 mg/L
							Beryllium	0.1 mg/L
							Cadmium	0.5 mg/L
							Calcium	20 mg/L
							Chromium	1 mg/L
							Cobalt	1 mg/L
							Copper	1.5 mg/L
							Iron	10 mg/L
							Lead	0.9 mg/L
							Magnesium	20 mg/L
							Manganese	1 mg/L
							Nickel	4 mg/L
							Potassium	300 mg/L
							Selenium	1.5 mg/L
							Silver	1 mg/L
							Sodium	100 mg/L
							Thallium	1.5 mg/L
							Vanadium	1 mg/L
							Zinc	2 mg/L
ICP LLCCV_01981	06/08/17	06/07/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	10 ppm Se_00009	0.05 mL	Selenium	0.02 mg/L
					ICP LLCCV-2a_00002	1 mL	Antimony	0.02 mg/L
					ICP LLCCV-3_00006	1 mL	Aluminum	0.1 mg/L
							Arsenic	0.015 mg/L
							Barium	0.01 mg/L
							Beryllium	0.001 mg/L
							Cadmium	0.005 mg/L
							Calcium	0.2 mg/L
							Chromium	0.01 mg/L
							Cobalt	0.01 mg/L
							Copper	0.015 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent: Reagent ID	Parent Reagent: Volume Added	Analyte	Concentration
							Iron	0.1 mg/L
							Lead	0.009 mg/L
							Magnesium	0.2 mg/L
							Manganese	0.01 mg/L
							Nickel	0.04 mg/L
							Potassium	3 mg/L
							Selenium	0.02 mg/L
							Silver	0.01 mg/L
							Sodium	1 mg/L
							Thallium	0.015 mg/L
							Vanadium	0.01 mg/L
							Zinc	0.02 mg/L
.10 ppm Se_00009	08/31/17	09/06/16	2%HNO3/0.5% HCl, Lot see log books	100 mL	1000 Se_00016	1 mL	Selenium	10 mg/L
..1000 Se_00016	08/31/17		Inorganic Ventures, Lot K2-SE02067		(Purchased Reagent)		Selenium	1000 mg/L
.ICP LLCCV-2a_00002	08/22/17		Inorganic Ventures, Lot K2-MEB638041		(Purchased Reagent)		Antimony	2 mg/L
.ICP LLCCV-3_00006	05/12/18		Inorganic Ventures, Lot K2-MEB653967		(Purchased Reagent)		Aluminum	10 mg/L
							Arsenic	1.5 mg/L
							Barium	1 mg/L
							Beryllium	0.1 mg/L
							Cadmium	0.5 mg/L
							Calcium	20 mg/L
							Chromium	1 mg/L
							Cobalt	1 mg/L
							Copper	1.5 mg/L
							Iron	10 mg/L
							Lead	0.9 mg/L
							Magnesium	20 mg/L
							Manganese	1 mg/L
							Nickel	4 mg/L
							Potassium	300 mg/L
							Selenium	1.5 mg/L
							Silver	1 mg/L
							Sodium	100 mg/L
							Thallium	1.5 mg/L
							Vanadium	1 mg/L
							Zinc	2 mg/L
ICP PDS 1_00020	04/07/18		Inorganic Ventures, Lot M2-MEB655824		(Purchased Reagent)		Aluminum	100 mg/L
							Arsenic	20 mg/L
							Barium	10 mg/L
							Beryllium	5 mg/L
							Cadmium	5 mg/L
							Calcium	2000 mg/L
							Chromium	5 mg/L
							Cobalt	5 mg/L
							Copper	5 mg/L
							Iron	100 mg/L
							Lead	10 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							Magnesium	2000 mg/L
							Manganese	5 mg/L
							Nickel	5 mg/L
							Potassium	2000 mg/L
							Selenium	20 mg/L
							Silver	5 mg/L
							Sodium	2000 mg/L
							Thallium	20 mg/L
							Vanadium	5 mg/L
							Zinc	20 mg/L
ICP PDS 2_00014	12/01/17		Inorganic Ventures, Lot H2-MEB546063		(Purchased Reagent)		Antimony	10 mg/L
ICP SPK 2B_00062	05/17/18		Inorganic Ventures, Lot K2-MEB654055		(Purchased Reagent)		Antimony	50 mg/L
							B	100 mg/L
							Mo	100 mg/L
							Si	1000 mg/L
							SiO2	2140 mg/L
							Sn	200 mg/L
							Sulfur	200 mg/L
							Ti	100 mg/L
							Zr	50 mg/L
ICP SPK 3A_00133	05/17/18		Inorganic Ventures, Lot M2-MEB656518		(Purchased Reagent)		Aluminum	200 mg/L
							Arsenic	100 mg/L
							Barium	200 mg/L
							Beryllium	5 mg/L
							Bi	200 mg/L
							Cadmium	10 mg/L
							Calcium	5000 mg/L
							Chromium	20 mg/L
							Cobalt	50 mg/L
							Copper	25 mg/L
							Iron	100 mg/L
							Lead	50 mg/L
							Li	100 mg/L
							Magnesium	5000 mg/L
							Manganese	50 mg/L
							Nickel	50 mg/L
							P	1000 mg/L
							Potassium	5000 mg/L
							Selenium	200 mg/L
							Silver	5 mg/L
							Sodium	5000 mg/L
							Sr	100 mg/L
							Th	100 mg/L
							Thallium	200 mg/L
							U	200 mg/L
							Vanadium	50 mg/L
							Zinc	50 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent	Volume Added	Analyte	Concentration
MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL
.MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
MS-SIM SSV_00116	06/30/17	03/29/17	Methylene Chloride, Lot 138764	500 uL	MS-SIM IS_00029	50 uL	Acenaphthene-d10	0.6 ug/mL
							Chrysene-d12	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
.MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
...MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
MS-SIM SSV_00116	06/30/17	03/29/17	Methylene Chloride, Lot 138764	500 uL	MS-SIM SSV_00113	30 uL	1-Methylnaphthalene	1.2 ug/mL
							2-Methylnaphthalene	1.2 ug/mL
							Acenaphthene	1.2 ug/mL
							Acenaphthylene	1.2 ug/mL
							Anthracene	1.2 ug/mL
							Benzo[a]anthracene	1.2 ug/mL
							Benzo[a]pyrene	1.2 ug/mL
							Benzo[b]fluoranthene	1.2 ug/mL
							Benzo[g,h,i]perylene	1.2 ug/mL
							Benzo[k]fluoranthene	1.2 ug/mL
							Chrysene	1.2 ug/mL
							Dibenz(a,h)anthracene	1.2 ug/mL
							Fluoranthene	1.2 ug/mL
							Fluorene	1.2 ug/mL
							Indeno[1,2,3-cd]pyrene	1.2 ug/mL
							Naphthalene	1.2 ug/mL
							Phenanthrene	1.2 ug/mL
							Pyrene	1.2 ug/mL
.MS-SIM SSV_00113	06/30/17	09/13/16	Methylene Chloride, Lot 131181	10 mL	MS-HSLB1_STK_00008	1 mL	1-Methylnaphthalene	20 ug/mL
							2-Methylnaphthalene	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Chrysene	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL
							Pyrene	20 ug/mL
..MS-HSLB1_STK_00008	06/30/17	06/30/16	Methylene Chloride, Lot 123631	10 mL	MS-570666.SEC_00001	2 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
...MS-570666.SEC_00001	06/30/17		Restek, Lot A0115803		(Purchased Reagent)		1-Methylnaphthalene	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Chrysene	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Fluoranthene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							Fluorene	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Naphthalene	1000 ug/mL
							Phenanthrene	1000 ug/mL
							Pyrene	1000 ug/mL
MS-SIMSL 0.02_00067	08/31/17	03/29/17	Methylene Chloride, Lot 138764	500 uL	MS-SIM IS_00029	50 uL	Acenaphthene-d10	0.6 ug/mL
							Chrysene-d12	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-SIMSL Int._00020	5 uL	2-Fluorobiphenyl (Surr)	0.02 ug/mL
							Nitrobenzene-d5 (Surr)	0.02002 ug/mL
							Terphenyl-d14 (Surr)	0.02002 ug/mL
							2-Methylnaphthalene	0.04 ug/mL
							1-Methylnaphthalene	0.02 ug/mL
							Acenaphthene	0.02 ug/mL
							Acenaphthylene	0.02 ug/mL
							Anthracene	0.02 ug/mL
							Benzo[a]anthracene	0.02 ug/mL
							Benzo[a]pyrene	0.02 ug/mL
							Benzo[b]fluoranthene	0.02 ug/mL
							Benzo[g,h,i]perylene	0.02 ug/mL
							Benzo[k]fluoranthene	0.02 ug/mL
							Chrysene	0.02 ug/mL
							Dibenz(a,h)anthracene	0.02 ug/mL
							Fluoranthene	0.02 ug/mL
							Fluorene	0.02 ug/mL
							Indeno[1,2,3-cd]pyrene	0.02 ug/mL
							Naphthalene	0.02 ug/mL
							Phenanthrene	0.02 ug/mL
							Pyrene	0.02 ug/mL
.MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
...MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.MS-SIMSL Int._00020	08/31/17	03/29/17	Methylene Chloride, Lot 138764	10 mL	MS-SIMSL_00020	1 mL	2-Fluorobiphenyl (Surr)	2 ug/mL
							Nitrobenzene-d5 (Surr)	2.002 ug/mL
							Terphenyl-d14 (Surr)	2.002 ug/mL
							2-Methylnaphthalene	4 ug/mL
							1-Methylnaphthalene	2 ug/mL
							Acenaphthene	2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Acenaphthylene	2 ug/mL
							Anthracene	2 ug/mL
							Benzo[a]anthracene	2 ug/mL
							Benzo[a]pyrene	2 ug/mL
							Benzo[b]fluoranthene	2 ug/mL
							Benzo[g,h,i]perylene	2 ug/mL
							Benzo[k]fluoranthene	2 ug/mL
							Chrysene	2 ug/mL
							Dibenz(a,h)anthracene	2 ug/mL
							Fluoranthene	2 ug/mL
							Fluorene	2 ug/mL
							Indeno[1,2,3-cd]pyrene	2 ug/mL
							Naphthalene	2 ug/mL
							Phenanthrene	2 ug/mL
							Pyrene	2 ug/mL
..MS-SIMSL_00020	08/31/17	03/24/17	Methylene Chloride, Lot 138764	10 mL	MS-48925_00014	0.2 mL	2-Fluorobiphenyl (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20.02 ug/mL
							Terphenyl-d14 (Surr)	20.02 ug/mL
					MS-SIM SL_Stk_00017	1 mL	2-Methylnaphthalene	40 ug/mL
							1-Methylnaphthalene	20 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Chrysene	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL
							Pyrene	20 ug/mL
...MS-48925_00014	08/31/17		Supelco, Lot LC08783V		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ug/mL
							Nitrobenzene-d5 (Surr)	1001 ug/mL
							Terphenyl-d14 (Surr)	1001 ug/mL
...MS-SIM SL_Stk_00017	11/15/17	11/15/16	Methylene Chloride, Lot 138764	5 mL	MS-31010_00011	0.5 mL	2-Methylnaphthalene	400 ug/mL
					MS-31995_00004	0.5 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
....MS-31010_00011	03/31/19		Restek, Lot A0116027		(Purchased Reagent)		2-Methylnaphthalene	2000 ug/mL
....MS-31995_00004	10/31/18		Restek, Lot A092153		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
MS-SIMSL 0.1_00063	08/31/17	03/29/17	Methylene Chloride, Lot 138764	500 uL	MS-SIM IS_00029	50 uL	Acenaphthene-d10	0.6 ug/mL
							Chrysene-d12	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-SIMSL Int._00020	25 uL	2-Fluorobiphenyl (Surr)	0.1 ug/mL
							Nitrobenzene-d5 (Surr)	0.1001 ug/mL
							Terphenyl-d14 (Surr)	0.1001 ug/mL
							2-Methylnaphthalene	0.2 ug/mL
							1-Methylnaphthalene	0.1 ug/mL
							Acenaphthene	0.1 ug/mL
							Acenaphthylene	0.1 ug/mL
							Anthracene	0.1 ug/mL
							Benzo[a]anthracene	0.1 ug/mL
							Benzo[a]pyrene	0.1 ug/mL
							Benzo[b]fluoranthene	0.1 ug/mL
							Benzo[g,h,i]perylene	0.1 ug/mL
							Benzo[k]fluoranthene	0.1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
							Chrysene	0.1 ug/mL
							Dibenz(a,h)anthracene	0.1 ug/mL
							Fluoranthene	0.1 ug/mL
							Fluorene	0.1 ug/mL
							Indeno[1,2,3-cd]pyrene	0.1 ug/mL
							Naphthalene	0.1 ug/mL
							Phenanthrene	0.1 ug/mL
							Pyrene	0.1 ug/mL
.MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
...MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.MS-SIMSL Int._00020	08/31/17	03/29/17	Methylene Chloride, Lot 138764	10 mL	MS-SIMSL_00020	1 mL	2-Fluorobiphenyl (Surr)	2 ug/mL
							Nitrobenzene-d5 (Surr)	2.002 ug/mL
							Terphenyl-d14 (Surr)	2.002 ug/mL
							2-Methylnaphthalene	4 ug/mL
							1-Methylnaphthalene	2 ug/mL
							Acenaphthene	2 ug/mL
							Acenaphthylene	2 ug/mL
							Anthracene	2 ug/mL
							Benzo[a]anthracene	2 ug/mL
							Benzo[a]pyrene	2 ug/mL
							Benzo[b]fluoranthene	2 ug/mL
							Benzo[g,h,i]perylene	2 ug/mL
							Benzo[k]fluoranthene	2 ug/mL
							Chrysene	2 ug/mL
							Dibenz(a,h)anthracene	2 ug/mL
							Fluoranthene	2 ug/mL
							Fluorene	2 ug/mL
							Indeno[1,2,3-cd]pyrene	2 ug/mL
							Naphthalene	2 ug/mL
							Phenanthrene	2 ug/mL
							Pyrene	2 ug/mL
..MS-SIMSL_00020	08/31/17	03/24/17	Methylene Chloride, Lot 138764	10 mL	MS-48925_00014	0.2 mL	2-Fluorobiphenyl (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20.02 ug/mL
							Terphenyl-d14 (Surr)	20.02 ug/mL
					MS-SIM SL_Stk_00017	1 mL	2-Methylnaphthalene	40 ug/mL
							1-Methylnaphthalene	20 ug/mL
							Acenaphthene	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Acenaphthylene	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Chrysene	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL
							Pyrene	20 ug/mL
...MS-48925_00014	08/31/17		Supelco, Lot LC08783V		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ug/mL
							Nitrobenzene-d5 (Surr)	1001 ug/mL
							Terphenyl-d14 (Surr)	1001 ug/mL
...MS-SIM SL_Stk_00017	11/15/17	11/15/16	Methylene Chloride, Lot 138764	5 mL	MS-31010_00011	0.5 mL	2-Methylnaphthalene	400 ug/mL
					MS-31995_00004	0.5 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
....MS-31010_00011	03/31/19		Restek, Lot A0116027		(Purchased Reagent)		2-Methylnaphthalene	2000 ug/mL
....MS-31995_00004	10/31/18		Restek, Lot A092153		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
MS-SIMSL 0.3_00061	08/31/17	03/29/17	Methylene Chloride, Lot 138764	500 uL	MS-SIM IS_00029	50 uL	Acenaphthene-d10	0.6 ug/mL
							Chrysene-d12	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-SIMSL Int._00020	75 uL	2-Fluorobiphenyl (Surr)	0.3 ug/mL
							Nitrobenzene-d5 (Surr)	0.3003 ug/mL
							Terphenyl-d14 (Surr)	0.3003 ug/mL
							2-Methylnaphthalene	0.6 ug/mL
							1-Methylnaphthalene	0.3 ug/mL
							Acenaphthene	0.3 ug/mL
							Acenaphthylene	0.3 ug/mL
							Anthracene	0.3 ug/mL
							Benzo[a]anthracene	0.3 ug/mL
							Benzo[a]pyrene	0.3 ug/mL
							Benzo[b]fluoranthene	0.3 ug/mL
							Benzo[g,h,i]perylene	0.3 ug/mL
							Benzo[k]fluoranthene	0.3 ug/mL
							Chrysene	0.3 ug/mL
							Dibenz(a,h)anthracene	0.3 ug/mL
							Fluoranthene	0.3 ug/mL
							Fluorene	0.3 ug/mL
							Indeno[1,2,3-cd]pyrene	0.3 ug/mL
							Naphthalene	0.3 ug/mL
							Phenanthrene	0.3 ug/mL
							Pyrene	0.3 ug/mL
.MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
...MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.MS-SIMSL Int._00020	08/31/17	03/29/17	Methylene Chloride, Lot 138764	10 mL	MS-SIMSL_00020	1 mL	2-Fluorobiphenyl (Surr)	2 ug/mL
							Nitrobenzene-d5 (Surr)	2.002 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Terphenyl-d14 (Surr)	2.002 ug/mL
							2-Methylnaphthalene	4 ug/mL
							1-Methylnaphthalene	2 ug/mL
							Acenaphthene	2 ug/mL
							Acenaphthylene	2 ug/mL
							Anthracene	2 ug/mL
							Benzo[a]anthracene	2 ug/mL
							Benzo[a]pyrene	2 ug/mL
							Benzo[b]fluoranthene	2 ug/mL
							Benzo[g,h,i]perylene	2 ug/mL
							Benzo[k]fluoranthene	2 ug/mL
							Chrysene	2 ug/mL
							Dibenz(a,h)anthracene	2 ug/mL
							Fluoranthene	2 ug/mL
							Fluorene	2 ug/mL
							Indeno[1,2,3-cd]pyrene	2 ug/mL
							Naphthalene	2 ug/mL
							Phenanthrene	2 ug/mL
							Pyrene	2 ug/mL
..MS-SIMSL_00020	08/31/17	03/24/17	Methylene Chloride, Lot 138764	10 mL	MS-48925_00014	0.2 mL	2-Fluorobiphenyl (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20.02 ug/mL
							Terphenyl-d14 (Surr)	20.02 ug/mL
					MS-SIM SL_Stk_00017	1 mL	2-Methylnaphthalene	40 ug/mL
							1-Methylnaphthalene	20 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Chrysene	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL
							Pyrene	20 ug/mL
...MS-48925_00014	08/31/17		Supelco, Lot LC08783V		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ug/mL
							Nitrobenzene-d5 (Surr)	1001 ug/mL
							Terphenyl-d14 (Surr)	1001 ug/mL
...MS-SIM SL_Stk_00017	11/15/17	11/15/16	Methylene Chloride, Lot 138764	5 mL	MS-31010_00011	0.5 mL	2-Methylnaphthalene	400 ug/mL
					MS-31995_00004	0.5 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	400 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
....MS-31010_00011	03/31/19		Restek, Lot A0116027		(Purchased Reagent)		2-Methylnaphthalene	2000 ug/mL
....MS-31995_00004	10/31/18		Restek, Lot A092153		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
MS-SIMSL 0.6_00122	08/31/17	03/24/17	Methylene Chloride, Lot 138764	500 uL	MS-SIM IS_00029	50 uL	Acenaphthene-d10	0.6 ug/mL
							Chrysene-d12	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-SIMSL_00020	15 uL	2-Fluorobiphenyl (Surr)	0.6 ug/mL
							Nitrobenzene-d5 (Surr)	0.6006 ug/mL
							Terphenyl-d14 (Surr)	0.6006 ug/mL
							2-Methylnaphthalene	1.2 ug/mL
							1-Methylnaphthalene	0.6 ug/mL
							Acenaphthene	0.6 ug/mL
							Acenaphthylene	0.6 ug/mL
							Anthracene	0.6 ug/mL
							Benzo[a]anthracene	0.6 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							Benzo[a]pyrene	0.6 ug/mL
							Benzo[b]fluoranthene	0.6 ug/mL
							Benzo[g,h,i]perylene	0.6 ug/mL
							Benzo[k]fluoranthene	0.6 ug/mL
							Chrysene	0.6 ug/mL
							Dibenz(a,h)anthracene	0.6 ug/mL
							Fluoranthene	0.6 ug/mL
							Fluorene	0.6 ug/mL
							Indeno[1,2,3-cd]pyrene	0.6 ug/mL
							Naphthalene	0.6 ug/mL
							Phenanthrene	0.6 ug/mL
							Pyrene	0.6 ug/mL
.MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
...MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.MS-SIMSL_00020	08/31/17	03/24/17	Methylene Chloride, Lot 138764	10 mL	MS-48925_00014	0.2 mL	2-Fluorobiphenyl (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20.02 ug/mL
							Terphenyl-d14 (Surr)	20.02 ug/mL
					MS-SIM SL_Stk_00017	1 mL	2-Methylnaphthalene	40 ug/mL
							1-Methylnaphthalene	20 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Chrysene	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL
							Pyrene	20 ug/mL
..MS-48925_00014	08/31/17		Supelco, Lot LC08783V		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ug/mL
							Nitrobenzene-d5 (Surr)	1001 ug/mL
							Terphenyl-d14 (Surr)	1001 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
..MS-SIM SL_Stk_00017	11/15/17	11/15/16	Methylene Chloride, Lot 138764	5 mL	MS-31010_00011	0.5 mL	2-Methylnaphthalene	400 ug/mL
					MS-31995_00004	0.5 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
...MS-31010_00011	03/31/19		Restek, Lot A0116027		(Purchased Reagent)		2-Methylnaphthalene	2000 ug/mL
...MS-31995_00004	10/31/18		Restek, Lot A092153		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
MS-SIMSL 0.6_00125	08/31/17	05/22/17	Methylene Chloride, Lot 157164	500 uL	MS-SIM IS_00029	50 uL	Acenaphthene-d10	0.6 ug/mL
							Chrysene-d12	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-SIMSL_00020	15 uL	2-Fluorobiphenyl (Surr)	0.6 ug/mL
							Nitrobenzene-d5 (Surr)	0.6006 ug/mL
							Terphenyl-d14 (Surr)	0.6006 ug/mL
							2-Methylnaphthalene	1.2 ug/mL
							1-Methylnaphthalene	0.6 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Acenaphthene	0.6 ug/mL
							Acenaphthylene	0.6 ug/mL
							Anthracene	0.6 ug/mL
							Benzo[a]anthracene	0.6 ug/mL
							Benzo[a]pyrene	0.6 ug/mL
							Benzo[b]fluoranthene	0.6 ug/mL
							Benzo[g,h,i]perylene	0.6 ug/mL
							Benzo[k]fluoranthene	0.6 ug/mL
							Chrysene	0.6 ug/mL
							Dibenz(a,h)anthracene	0.6 ug/mL
							Fluoranthene	0.6 ug/mL
							Fluorene	0.6 ug/mL
							Indeno[1,2,3-cd]pyrene	0.6 ug/mL
							Naphthalene	0.6 ug/mL
							Phenanthrene	0.6 ug/mL
							Pyrene	0.6 ug/mL
.MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
...MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.MS-SIMSL_00020	08/31/17	03/24/17	Methylene Chloride, Lot 138764	10 mL	MS-48925_00014	0.2 mL	2-Fluorobiphenyl (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20.02 ug/mL
							Terphenyl-d14 (Surr)	20.02 ug/mL
					MS-SIM SL_Stk_00017	1 mL	2-Methylnaphthalene	40 ug/mL
							1-Methylnaphthalene	20 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Chrysene	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Pyrene	20 ug/mL
..MS-48925_00014	08/31/17		Supelco, Lot LC08783V		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ug/mL
							Nitrobenzene-d5 (Surr)	1001 ug/mL
							Terphenyl-d14 (Surr)	1001 ug/mL
..MS-SIM SL_Stk_00017	11/15/17	11/15/16	Methylene Chloride, Lot 138764	5 mL	MS-31010_00011	0.5 mL	2-Methylnaphthalene	400 ug/mL
					MS-31995_00004	0.5 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
...MS-31010_00011	03/31/19		Restek, Lot A0116027		(Purchased Reagent)		2-Methylnaphthalene	2000 ug/mL
...MS-31995_00004	10/31/18		Restek, Lot A092153		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
MS-SIMSL 1.2_00064	08/31/17	05/03/17	Methylene Chloride, Lot 138764	500 uL	MS-SIM IS_00029	50 uL	Acenaphthene-d10	0.6 ug/mL
							Chrysene-d12	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-SIMSL_00020	30 uL	2-Fluorobiphenyl (Surr)	1.2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							Nitrobenzene-d5 (Surr)	1.2012 ug/mL
							Terphenyl-d14 (Surr)	1.2012 ug/mL
							2-Methylnaphthalene	2.4 ug/mL
							1-Methylnaphthalene	1.2 ug/mL
							Acenaphthene	1.2 ug/mL
							Acenaphthylene	1.2 ug/mL
							Anthracene	1.2 ug/mL
							Benzo[a]anthracene	1.2 ug/mL
							Benzo[a]pyrene	1.2 ug/mL
							Benzo[b]fluoranthene	1.2 ug/mL
							Benzo[g,h,i]perylene	1.2 ug/mL
							Benzo[k]fluoranthene	1.2 ug/mL
							Chrysene	1.2 ug/mL
							Dibenz(a,h)anthracene	1.2 ug/mL
							Fluoranthene	1.2 ug/mL
							Fluorene	1.2 ug/mL
							Indeno[1,2,3-cd]pyrene	1.2 ug/mL
							Naphthalene	1.2 ug/mL
							Phenanthrene	1.2 ug/mL
							Pyrene	1.2 ug/mL
.MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
...MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.MS-SIMSL_00020	08/31/17	03/24/17	Methylene Chloride, Lot 138764	10 mL	MS-48925_00014	0.2 mL	2-Fluorobiphenyl (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20.02 ug/mL
							Terphenyl-d14 (Surr)	20.02 ug/mL
					MS-SIM SL_Stk_00017	1 mL	2-Methylnaphthalene	40 ug/mL
							1-Methylnaphthalene	20 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Chrysene	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Parent Reagent Volume Added	Analyte	Concentration
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL
							Pyrene	20 ug/mL
..MS-48925_00014	08/31/17		Supelco, Lot LC08783V		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ug/mL
							Nitrobenzene-d5 (Surr)	1001 ug/mL
							Terphenyl-d14 (Surr)	1001 ug/mL
..MS-SIM SL_Stk_00017	11/15/17	11/15/16	Methylene Chloride, Lot 138764	5 mL	MS-31010_00011	0.5 mL	2-Methylnaphthalene	400 ug/mL
					MS-31995_00004	0.5 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
...MS-31010_00011	03/31/19		Restek, Lot A0116027		(Purchased Reagent)		2-Methylnaphthalene	2000 ug/mL
...MS-31995_00004	10/31/18		Restek, Lot A092153		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
MS-SIMSL 2.5_00062	08/31/17	03/29/17	Methylene Chloride, Lot 138764	500 uL	MS-SIM IS_00029	50 uL	Acenaphthene-d10	0.6 ug/mL
							Chrysene-d12	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-SIMSL_00020	62.5 uL	2-Fluorobiphenyl (Surr)	2.5 ug/mL
							Nitrobenzene-d5 (Surr)	2.5025 ug/mL
							Terphenyl-d14 (Surr)	2.5025 ug/mL
							2-Methylnaphthalene	5 ug/mL
							1-Methylnaphthalene	2.5 ug/mL
							Acenaphthene	2.5 ug/mL
							Acenaphthylene	2.5 ug/mL
							Anthracene	2.5 ug/mL
							Benzo[a]anthracene	2.5 ug/mL
							Benzo[a]pyrene	2.5 ug/mL
							Benzo[b]fluoranthene	2.5 ug/mL
							Benzo[g,h,i]perylene	2.5 ug/mL
							Benzo[k]fluoranthene	2.5 ug/mL
							Chrysene	2.5 ug/mL
							Dibenz(a,h)anthracene	2.5 ug/mL
							Fluoranthene	2.5 ug/mL
							Fluorene	2.5 ug/mL
							Indeno[1,2,3-cd]pyrene	2.5 ug/mL
							Naphthalene	2.5 ug/mL
							Phenanthrene	2.5 ug/mL
							Pyrene	2.5 ug/mL
.MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
...MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.MS-SIMSL_00020	08/31/17	03/24/17	Methylene Chloride, Lot 138764	10 mL	MS-48925_00014	0.2 mL	2-Fluorobiphenyl (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20.02 ug/mL
							Terphenyl-d14 (Surr)	20.02 ug/mL
					MS-SIM SL_Stk_00017	1 mL	2-Methylnaphthalene	40 ug/mL
							1-Methylnaphthalene	20 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Chrysene	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL
							Pyrene	20 ug/mL
..MS-48925_00014	08/31/17		Supelco, Lot LC08783V		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ug/mL
							Nitrobenzene-d5 (Surr)	1001 ug/mL
							Terphenyl-d14 (Surr)	1001 ug/mL
..MS-SIM SL_Stk_00017	11/15/17	11/15/16	Methylene Chloride, Lot 138764	5 mL	MS-31010_00011	0.5 mL	2-Methylnaphthalene	400 ug/mL
					MS-31995_00004	0.5 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
...MS-31010_00011	03/31/19		Restek, Lot A0116027		(Purchased Reagent)		2-Methylnaphthalene	2000 ug/mL
...MS-31995_00004	10/31/18		Restek, Lot A092153		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
MS-SIMSL 5_00063	08/31/17	03/29/17	Methylene Chloride, Lot 138764	500 uL	MS-SIM IS_00029	50 uL	Acenaphthene-d10	0.6 ug/mL
							Chrysene-d12	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-SIMSL_00020	125 uL	2-Fluorobiphenyl (Surr)	5 ug/mL
							Nitrobenzene-d5 (Surr)	5.005 ug/mL
							Terphenyl-d14 (Surr)	5.005 ug/mL
							2-Methylnaphthalene	10 ug/mL
							1-Methylnaphthalene	5 ug/mL
							Acenaphthene	5 ug/mL
							Acenaphthylene	5 ug/mL
							Anthracene	5 ug/mL
							Benzo[a]anthracene	5 ug/mL
							Benzo[a]pyrene	5 ug/mL
							Benzo[b]fluoranthene	5 ug/mL
							Benzo[g,h,i]perylene	5 ug/mL
							Benzo[k]fluoranthene	5 ug/mL
							Chrysene	5 ug/mL
							Dibenz(a,h)anthracene	5 ug/mL
							Fluoranthene	5 ug/mL
							Fluorene	5 ug/mL
							Indeno[1,2,3-cd]pyrene	5 ug/mL
							Naphthalene	5 ug/mL
							Phenanthrene	5 ug/mL
							Pyrene	5 ug/mL
.MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
...MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.MS-SIMSL_00020	08/31/17	03/24/17	Methylene Chloride, Lot 138764	10 mL	MS-48925_00014	0.2 mL	2-Fluorobiphenyl (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20.02 ug/mL
							Terphenyl-d14 (Surr)	20.02 ug/mL
					MS-SIM SL_Stk_00017	1 mL	2-Methylnaphthalene	40 ug/mL
							1-Methylnaphthalene	20 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Chrysene	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL
							Pyrene	20 ug/mL
..MS-48925_00014	08/31/17		Supelco, Lot LC08783V		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ug/mL
							Nitrobenzene-d5 (Surr)	1001 ug/mL
							Terphenyl-d14 (Surr)	1001 ug/mL
..MS-SIM SL_Stk_00017	11/15/17	11/15/16	Methylene Chloride, Lot 138764	5 mL	MS-31010_00011	0.5 mL	2-Methylnaphthalene	400 ug/mL
					MS-31995_00004	0.5 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
...MS-31010_00011	03/31/19		Restek, Lot A0116027		(Purchased Reagent)		2-Methylnaphthalene	2000 ug/mL
...MS-31995_00004	10/31/18		Restek, Lot A092153		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
MS-SIMX 10_00055	08/31/17	03/29/17	Methylene Chloride, Lot 138764	500 uL	MS-SIM IS_00029	50 uL	Acenaphthene-d10	0.6 ug/mL
							Chrysene-d12	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-SIMSL_00020	250 uL	2-Fluorobiphenyl (Surr)	10 ug/mL
							Nitrobenzene-d5 (Surr)	10.01 ug/mL
							Terphenyl-d14 (Surr)	10.01 ug/mL
							2-Methylnaphthalene	20 ug/mL
							1-Methylnaphthalene	10 ug/mL
							Acenaphthene	10 ug/mL
							Acenaphthylene	10 ug/mL
							Anthracene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	10 ug/mL
							Benzo[g,h,i]perylene	10 ug/mL
							Benzo[k]fluoranthene	10 ug/mL
							Chrysene	10 ug/mL
							Dibenz(a,h)anthracene	10 ug/mL
							Fluoranthene	10 ug/mL
							Fluorene	10 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Naphthalene	10 ug/mL
							Phenanthrene	10 ug/mL
							Pyrene	10 ug/mL
.MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
...MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.MS-SIMSL_00020	08/31/17	03/24/17	Methylene Chloride, Lot 138764	10 mL	MS-48925_00014	0.2 mL	2-Fluorobiphenyl (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20.02 ug/mL
							Terphenyl-d14 (Surr)	20.02 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent: Reagent ID	Parent Reagent: Volume Added	Analyte	Concentration
					MS-SIM SL_Stk_00017	1 mL	2-Methylnaphthalene	40 ug/mL
							1-Methylnaphthalene	20 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Chrysene	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL
							Pyrene	20 ug/mL
..MS-48925_00014	08/31/17		Supelco, Lot LC08783V		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ug/mL
							Nitrobenzene-d5 (Surr)	1001 ug/mL
							Terphenyl-d14 (Surr)	1001 ug/mL
..MS-SIM SL_Stk_00017	11/15/17	11/15/16	Methylene Chloride, Lot 138764	5 mL	MS-31010_00011	0.5 mL	2-Methylnaphthalene	400 ug/mL
					MS-31995_00004	0.5 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
...MS-31010_00011	03/31/19		Restek, Lot A0116027		(Purchased Reagent)		2-Methylnaphthalene	2000 ug/mL
...MS-31995_00004	10/31/18		Restek, Lot A092153		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Parent Reagent Volume Added	Analyte	Concentration
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
MV-2cleve+AVA_00025	07/31/17	05/02/17	P&T Methanol, Lot 127999	10 mL	MV-568720_00016	202.5 uL	Acrolein	399.938 ug/mL
					MV-569723_00002	160 uL	2-Chloroethyl vinyl ether	40 ug/mL
					MV-569724_00008	160 uL	Vinyl acetate	80 ug/mL
.MV-568720_00016	09/30/17		RESTEK, Lot A0125560		(Purchased Reagent)		Acrolein	19750 ug/mL
.MV-569723_00002	11/30/18		RESTEK, Lot A0115628		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
.MV-569724_00008	07/31/17		RESTEK, Lot A0124520		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
MV-568718-D_00003	01/31/19		RESTEK, Lot A0100746		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
MV-ARCH SS A_00081	10/24/17	04/25/17	P&T Methanol, Lot 127999	50 mL	MV-567650_00025	5 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
.MV-567650_00025	07/31/21		Restek, Lot A0120212		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
MV-Gas/Ket A_00060	10/25/17	04/25/17	P&T Methanol, Lot 127999	10 mL	MV-569721_00003	128 uL	2-Butanone (MEK)	160 ug/mL
							2-Hexanone	160 ug/mL
							4-Methyl-2-pentanone (MIBK)	160 ug/mL
							Acetone	160 ug/mL
					MV-569722_00005	160 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Dichlorodifluoromethane	40 ug/mL
							Dichlorofluoromethane	40 ug/mL
							Trichlorofluoromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
					MV-569727_00006	640 uL	Cyclohexanone	1600 ug/mL
.MV-569721_00003	11/30/18		RESTEK, Lot A0115554		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent: Reagent ID	Parent Reagent: Volume Added	Analyte	Concentration
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MV-569722_00005	11/30/19		RESTEK, Lot A0122964		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.MV-569727_00006	03/31/19		RESTEK, Lot A0118487		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
MV-Gas/Ket B_00034	10/25/17	04/25/17	P&T Methanol, Lot 127999	10 mL	MV-569721.sec_00004	128 uL	2-Butanone (MEK)	160 ug/mL
							2-Hexanone	160 ug/mL
							4-Methyl-2-pentanone (MIBK)	160 ug/mL
							Acetone	160 ug/mL
					MV-569722.sec_00003	160 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Dichlorodifluoromethane	40 ug/mL
							Trichlorofluoromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MV-569721.sec_00004	03/31/19		RESTEK, Lot A0118013		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MV-569722.sec_00003	11/30/18		RESTEK, Lot A0115484		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
MV-Main A_00030	10/02/17	04/02/17	P&T Methanol, Lot 147462	20 mL	MV-569720_00003	320 uL	1,1,1,2-Tetrachloroethane	40 ug/mL
							1,1,1-Trichloroethane	40 ug/mL
							1,1,2,2-Tetrachloroethane	40 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	40 ug/mL
							1,1,2-Trichloroethane	40 ug/mL
							1,1-Dichloroethane	40 ug/mL
							1,1-Dichloroethene	40 ug/mL
							1,1-Dichloropropene	40 ug/mL
							1,2,3-Trichlorobenzene	40 ug/mL
							1,2,3-Trichloropropane	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2,4-Trimethylbenzene	40 ug/mL
							1,2-Dibromo-3-Chloropropane	40 ug/mL
							1,2-Dibromoethane	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							1,2-Dichloroethane	40 ug/mL
							1,2-Dichloropropane	40 ug/mL
							1,3,5-Trimethylbenzene	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dichloropropane	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							1,4-Dioxane	800 ug/mL
							2,2-Dichloropropane	40 ug/mL
							2-Chlorotoluene	40 ug/mL
							2-Methyl-2-propanol	400 ug/mL
							3-Chloro-1-propene	40 ug/mL
							4-Chlorotoluene	40 ug/mL
							4-Isopropyltoluene	40 ug/mL
							Acrylonitrile	400 ug/mL
							Benzene	40 ug/mL
							Bromobenzene	40 ug/mL
							Bromochloromethane	40 ug/mL
							Bromodichloromethane	40 ug/mL
							Bromoform	40 ug/mL
							Carbon disulfide	40 ug/mL
							Carbon tetrachloride	40 ug/mL
							Chlorobenzene	40 ug/mL
							Chloroform	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL
							cis-1,3-Dichloropropene	40 ug/mL
							Cyclohexane	40 ug/mL
							Dibromochloromethane	40 ug/mL
							Dibromomethane	40 ug/mL
							Ethyl ether	40 ug/mL
							Ethyl methacrylate	40 ug/mL
							Ethylbenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexane	40 ug/mL
							Isobutyl alcohol	1000 ug/mL
							Isopropylbenzene	40 ug/mL
							m&p-Xylene	40 ug/mL
							Methyl acetate	200 ug/mL
							Methyl iodide	40 ug/mL
							Methyl tert-butyl ether	40 ug/mL
							Methylcyclohexane	40 ug/mL
							Methylene Chloride	40 ug/mL
							n-Butylbenzene	40 ug/mL
							N-Propylbenzene	40 ug/mL
							Naphthalene	40 ug/mL
							o-Xylene	40 ug/mL
							sec-Butylbenzene	40 ug/mL
							Styrene	40 ug/mL
							tert-Butylbenzene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Parent Reagent Volume Added	Analyte	Concentration
							Tetrachloroethene	40 ug/mL
							Tetrahydrofuran	80 ug/mL
							Toluene	40 ug/mL
							trans-1,2-Dichloroethene	40 ug/mL
							trans-1,3-Dichloropropene	40 ug/mL
							trans-1,4-Dichloro-2-butene	40 ug/mL
							Trichloroethene	40 ug/mL
					MV-CUS22195_00001	400 uL	1-Chlorohexane	20 ug/mL
							2-Pentanone	80 ug/mL
							sec-Butyl Alcohol	600 ug/mL
.MV-569720_00003	03/31/18		RESTEK, Lot A0118177		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m&p-Xylene	2500 ug/mL
							Methyl acetate	12500 ug/mL
							Methyl iodide	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.MV-CUS22195_00001	09/30/18		Ultra, Lot CP-4302		(Purchased Reagent)		1-Chlorohexane	1000 ug/mL
							2-Pentanone	4000 ug/mL
							sec-Butyl Alcohol	30000 ug/mL
MV-Main A_00030	10/02/17	04/02/17	P&T Methanol, Lot 147462	20 mL	MV-569720_00003	320 uL	1,2-Dichloroethene, Total	80 ug/mL
							Xylenes (total)	80 ug/mL
.MV-569720_00003	03/31/18		RESTEK, Lot A0118177		(Purchased Reagent)		1,2-Dichloroethene, Total	5000 ug/mL
							Xylenes (total)	5000 ug/mL
MV-Main B_00017	07/23/17	01/23/17	P&T Methanol, Lot 127999	20 mL	MV-569720.sec_00002	320 uL	1,1,1,2-Tetrachloroethane	40 ug/mL
							1,1,1-Trichloroethane	40 ug/mL
							1,1,2,2-Tetrachloroethane	40 ug/mL
							1,1,2-Trichloroethane	40 ug/mL
							1,1-Dichloroethane	40 ug/mL
							1,1-Dichloroethene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							1,1-Dichloropropene	40 ug/mL
							1,2,3-Trichlorobenzene	40 ug/mL
							1,2,3-Trichloropropane	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2,4-Trimethylbenzene	40 ug/mL
							1,2-Dibromo-3-Chloropropane	40 ug/mL
							1,2-Dibromoethane	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Dichloroethane	40 ug/mL
							1,2-Dichloroethene, Total	40 ug/mL
							1,2-Dichloropropane	40 ug/mL
							1,3,5-Trimethylbenzene	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dichloropropane	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							2,2-Dichloropropane	40 ug/mL
							2-Chlorotoluene	40 ug/mL
							4-Chlorotoluene	40 ug/mL
							4-Isopropyltoluene	40 ug/mL
							Benzene	40 ug/mL
							Bromobenzene	40 ug/mL
							Bromochloromethane	40 ug/mL
							Bromodichloromethane	40 ug/mL
							Bromoform	40 ug/mL
							Carbon disulfide	40 ug/mL
							Carbon tetrachloride	40 ug/mL
							Chlorobenzene	40 ug/mL
							Chloroform	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL
							cis-1,3-Dichloropropene	40 ug/mL
							Dibromochloromethane	40 ug/mL
							Dibromomethane	40 ug/mL
							Ethylbenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Isopropylbenzene	40 ug/mL
							m&p-Xylene	40 ug/mL
							Methyl iodide	40 ug/mL
							Methyl tert-butyl ether	40 ug/mL
							Methylene Chloride	40 ug/mL
							n-Butylbenzene	40 ug/mL
							N-Propylbenzene	40 ug/mL
							Naphthalene	40 ug/mL
							o-Xylene	40 ug/mL
							sec-Butylbenzene	40 ug/mL
							Styrene	40 ug/mL
							tert-Butylbenzene	40 ug/mL
							Tetrachloroethene	40 ug/mL
							Toluene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							trans-1,2-Dichloroethene	40 ug/mL
							trans-1,3-Dichloropropene	40 ug/mL
							Trichloroethene	40 ug/mL
							Xylenes (total)	80 ug/mL
.MV-569720.sec_00002	07/31/18		RESTEK, Lot A0120604		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloroethene, Total	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m&p-Xylene	2500 ug/mL
							Methyl iodide	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes (total)	5000 ug/mL
MV-SS 2-Cleve_00035	07/31/17	05/02/17	P&T Methanol, Lot 127999	10 mL	MV-569724.sec_00011	160 uL	Vinyl acetate	80 ug/mL
.MV-569724.sec_00011	07/31/17		RESTEK, Lot A0122475		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
MV-Supp A_00023	05/31/17	01/26/17	P&T Methanol, Lot 12799	10 mL	mv-569728_00002	160 uL	Acetonitrile	400 ug/mL
							Ethanol	1600 ug/mL
							Isopropyl ether	40 ug/mL
							Propionitrile	400 ug/mL
							Tert-amyl methyl ether	40 ug/mL
							Tert-butyl ethyl ether	40 ug/mL
					mv-570808_00001	160 uL	1,2,3-Trimethylbenzene	40 ug/mL
							2-Chloro-1,3-butadiene	40 ug/mL
							2-Nitropropane	80 ug/mL
							Isopropyl alcohol	400 ug/mL
							Methacrylonitrile	400 ug/mL
							n-Butanol	1000 ug/mL
					mv-570809_00001	160 uL	Ethyl acetate	80 ug/mL
							Methyl methacrylate	80 ug/mL
					mv-VO-TAOH-5_00001	800 uL	cis-1,4-Dichloro-2-butene	80 ug/mL
.mv-569728_00002	10/31/17		RESTEK, Lot A0114666		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Ethanol	100000 ug/mL
							Isopropyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
							Tert-butyl ethyl ether	2500 ug/mL
.mv-570808_00001	06/30/17		Restek, Lot A0116135		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							2-Chloro-1,3-butadiene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Isopropyl alcohol	25000 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
.mv-570809_00001	06/30/17		Restek, Lot A0116080		(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
.mv-VO-TAOH-5_00001	05/31/17		SPEX, Lot BW160504027		(Purchased Reagent)		cis-1,4-Dichloro-2-butene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MV-Supp A_00024	08/15/17	05/26/17	P&T Methanol, Lot 12799	10 mL	mv-569728_00002	240 uL	Isopropyl ether	60 ug/mL
.mv-569728_00002	10/31/17	RESTEK, Lot A0114666			(Purchased Reagent)		Isopropyl ether	2500 ug/mL
MV-Supp B_00015	05/31/17	01/31/17	P&T Methanol, Lot 127999	10 mL	mv-569728.sec_00002	160 uL	Isopropyl ether	40 ug/mL
.mv-569728.sec_00002	05/31/17	RESTEK, Lot A0108248			(Purchased Reagent)		Isopropyl ether	2500 ug/mL
MV-Supp B_00016	06/30/17	05/31/17	P&T Methanol, Lot 127999	10 mL	mv-571993.sec_00001	160 uL	Isopropyl ether	40 ug/mL
.mv-571993.sec_00001	12/31/18	RESTEK, Lot A0123771			(Purchased Reagent)		Isopropyl ether	2500 ug/mL

Reagent

1000 As_00017

INORGANIC VENTURES
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CERTIFICATE OF ANALYSIS

Tel: 540.382.4097
http://www.inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories".

Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Designation Certificate 863.01

ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAS1
Lot Number:	K2-AS0530402
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Arsenic
Starting Material:	As Pieces
Starting Material Lot#:	1851
Starting Material Purity:	99.9992%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value:	1000 ± 6 µg/mL
Certified Density:	1.010 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1	1000 ± 4 µg/mL ICP Assay NIST SRM 3103a Lot Number: 100818

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods **Characterization of CRM by one method**

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.004098	M	Eu	<	0.000512	O	Na		0.001457	O	Se	<	0.032610	O	Zn		0.000102
O	Al		0.000296	O	Fe		0.000227	O	Nb	<	0.007609	O	Si		0.003552	M	Zr	<	0.002049
s	As	<		M	Ga	<	0.000512	M	Nd	<	0.000512	M	Sm	<	0.000512				
M	Au	<	0.000509	M	Gd	<	0.000512	O	Ni	<	0.003261	O	Sn	<	0.004348				
O	B	<	0.003261	M	Ge	<	0.003073	M	Os	<	0.000509	O	Sr	<	0.000326				
M	Ba	<	0.001024	M	Hf	<	0.000512	O	P	<	0.020653	M	Ta	<	0.000512				
O	Be	<	0.000086	M	Hg	<	0.000509	M	Pb	<	0.000512	M	Tb	<	0.000512				
M	Bi	<	0.000512	M	Ho	<	0.000512	M	Pd	<	0.002049	M	Te	<	0.004098				
O	Ca		0.001981	M	In	<	0.009220	M	Pr	<	0.000512	M	Th	<	0.000512				
M	Cd	<	0.000512	M	Ir	<	0.000509	M	Pt	<	0.000512	O	Ti		0.000045				
M	Ce	<	0.001024	O	K		0.000273	M	Rb	<	0.000512	M	Tl	<	0.000512				
M	Co	<	0.001024	M	La	<	0.000512	M	Re	<	0.001024	M	Tm	<	0.000512				
M	Cr		0.000042	O	Li		0.000004	M	Rh	<	0.000512	M	U	<	0.000512				
M	Cs	<	0.001024	M	Lu	<	0.000512	M	Ru	<	0.000509	M	V	<	0.001024				
M	Cu	<	0.001024	O	Mg		0.000227	O	S	<	0.217400	M	W	<	0.002049				
M	Dy	<	0.000512	O	Mn		0.000036	M	Sb	<	0.001024	M	Y	<	0.000512				
M	Er	<	0.000512	O	Mo	<	0.003261	O	Sc	<	0.000434	M	Yb	<	0.000512				

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.8799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 12, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 12, 2020**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Brenda Francis
Product Documentation Technician

Certificate Approved By:

Michael Booth
Supervisor, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 74.92 ; mix of +3 and +5 ; 6 ; H3AsO4 and HAsO2
Chemical Compatibility - Arsenic has no cationic chemistry. It is soluble in HCl, HNO3,H3PO4, H2SO4 and HF aqueous matrices water and NH4OH . It is stable with most inorganic anions (forms arsenate when boiled with chromate) but many cationic metals form the insoluble arsenates under pH neutral conditions. When fluorinated and / or under acidic conditions arsenate formation is typically not a problem at moderate to low concentrations.
Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO3 / LDPE container.
As Containing Samples (Preparation and Solution) - Metal (soluble in 1:1 H2O / HNO3); Oxides (the oxide exists in crystalline and amorphous forms where the amorphic form is more water soluble. The oxides typically dissolve in dilute acidic solutions when boiled); Minerals (one gram of powered sample is fused in a Ni crucible with 10 grams of a 1:1 mix of K2CO3 and KNO3 and the melt extracted with hot water); Organic Matrices (0.2 to 0.5 grams of sample are fused with 15 grams of a 1:1 Na2CO3 / Na2O2 mix in a Ni crucible. The fuseate is extracted with water and acidified with HNO3).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 75 amu	20 ppt	N/A	40Ar35Cl, 59Co16O, 36Ar38Ar1H,8Ar37Cl,Ar39K, 150Nd2+,150Sm2+
ICP-OES 189.042 nm	0.05/0.005 µg/mL	1	Cr
ICP-OES 193.696 nm	0.1/0.01 µg/mL	1	V, Ge
ICP-QES 228.812 nm	0.1/0.01 µg/mL	1	Cd, Pt, Ir, Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

Reagent

1000 Pb_00019

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg,Va 24073, USA,Telephone: 800.669.6799, 540.585.3030, Fax: 540.585.3012: inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 19, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- April 19, 2020

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Donna Senn

Certificate Approved By:

Michael Booth
QC Supervisor

Michael J Booth

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

300 Technology Drive
Christiansburg, VA 24073-USA
Inorganic Ventures.com

Tel: 540.585.3030
Fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

ACCREDITED Testing Laboratory Certificate 883.01 — ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution	
Catalog Number:	CGPB1	
Lot Number:	K2-PB03074	
Matrix:	0.5% (v/v) HNO3	4005150
Value / Analyte(s):	1 000 µg/mL ea: Lead	ID: 1000 Pb_00019 Exp:07/19/17 Prpd:SJS Opn:07/19/16 1000 Pb IV
Starting Material:	Lead nitrate	
Starting Material Lot#:	1840 and 1908	
Starting Material Purity:	99.9994%	

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1003 ± 4 µg/mL

Certified Density: 1.002 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1 — **1003 ± 3 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #2 — **1003 ± 4 µg/mL**
ICP Assay NIST SRM 3128 Lot Number: 101026

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods | **Characterization of CRM by one method**

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\,a}$
X_b = mean of Assay Method B with standard uncertainty $u_{char\,b}$
w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\,a}^2) / ((1/u_{char\,a}^2) + (1/u_{char\,b}^2))$
$w_b = (1/u_{char\,b}^2) / ((1/u_{char\,a}^2) + (1/u_{char\,b}^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\,a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\,a\&b} = [(w_a)^2\,(u_{char\,a})^2 + (w_b)^2\,(u_{char\,b})^2]^{1/2}$ where $u_{char\,a}$ and $u_{char\,b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty
u_{lts} = long term stability standard uncertainty (storage)
u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\,a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\,a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\,a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty
u_{lts} = long term stability standard uncertainty (storage)
u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9995% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000304	M	Eu	<	0.000304	O	Na		0.000155	M	Se	<	0.006074	O	Zn		0.000324
O	Al		0.003825	O	Fe		0.000360	M	Nb	<	0.000304	O	Si		0.001008	M	Zr	<	0.000911
M	As	<	0.000607	M	Ga	<	0.000304	M	Nd	<	0.000304	M	Sm	<	0.000304				
M	Au	<	0.000611	M	Gd	<	0.000304	M	Ni	<	0.000607	M	Sn	<	0.000304				
O	B	<	0.000624	M	Ge	<	0.000304	M	Os	<	0.000306	O	Sr		0.000012				
O	Ba		0.000648	M	Hf	<	0.000304	O	P	<	0.020800	M	Ta	<	0.000304				
O	Be	<	0.000031	O	Hg	<	0.002080	s	Pb	<		M	Tb	<	0.000304				
O	Bi		0.002593	M	Ho	<	0.000304	M	Pd	<	0.000304	M	Te	<	0.003037				
O	Ca		0.000360	M	In	<	0.000304	M	Pr	<	0.000304	M	Th	<	0.004555				
O	Cd	<	0.000208	M	Ir	<	0.000306	M	Pt	<	0.000304	O	Ti		0.000115				
M	Ce	<	0.000304	O	K		0.000576	M	Rb	<	0.000304	M	Tl	<	0.003037				
M	Co	<	0.000304	M	La	<	0.000304	M	Re	<	0.000304	M	Tm	<	0.000304				
O	Cr	<	0.000520	O	Li	<	0.000416	O	Rh	<	0.010400	M	U	<	0.000304				
M	Cs		0.000168	M	Lu	<	0.000304	M	Ru	<	0.000306	M	V	<	0.000304				
M	Cu	<	0.000304	O	Mg		0.000043	O	S	<	0.010400	M	W	<	0.000304				
M	Dy	<	0.000304	M	Mn	<	0.000607	M	Sb	<	0.000304	M	Y	<	0.000304				
M	Er	<	0.000304	M	Mo	<	0.000304	M	Sc	<	0.000304	M	Yb	<	0.000304				

M = Checked by ICP-MS O = Checked by ICP-OES i = Spectral Interference
n = Not Checked For s = Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.20 +2 6 $Pb(H_2O)_6^{+2}$
Chemical Compatibility - Soluble in HCl, HF and HNO_3. Avoid H_2SO_4. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, sulfide, phosphate, oxalate, chromate, tannate, iodate, and cyanide in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO_3 / LDPE container.
Pb Containing Samples (Preparation and Solution) -Metal (Best dissolved in 1:1 H_2O / HNO_3); Oxides (The many different Pb oxides are soluble in HNO_3 with the exception of PbO_2 which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H_2O / HNO_3); Organic Matrices (Dry ash and dissolve in dilute HCl).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 208 amu	5 ppt	n/a	$^{192}Pt^{16}O$, $^{192}Os^{16}O$
ICP-OES 168.215 nm	0.03 / 0.003 µg/mL	1	Ce
ICP-OES 217.000 nm	0.09 / 0.03 µg/mL	1	W, Ir, Hf, Sb, Th
ICP-OES 220.353 nm	0.04 / 0.006 µg/mL	1	Bi, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

Reagent

1000 Pb_00020

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"
10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02
- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY
11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date
11.1 Certification Issue Date

April 19, 2016
April 19, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.
- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date
11.2 Lot Expiration Date

- April 19, 2020
- April 19, 2020

- The date after which this CRM/RM should not be used.
- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.
- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity
11.3 Period of Validity

- Sealed TCT Bag Open Date: _____
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.
- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS
12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:
Certificate Prepared By:

Donna Senn
Donna Senn
Product Documentation Technician
Product Documentation Technician

Donna Senn

Certificate Approved By:
Certificate Approved By:

Michael Booth
Michael Booth
QC Supervisor
QC Supervisor

Michael J Booth

Certifying Officer:
Certifying Officer:

Paul Gaines
Paul Gaines
PhD., Senior Technical Director
PhD., Senior Technical Director

Paul R Gaines

INORGANIC VENTURES CERTIFICATE OF ANALYSIS

300 Technology Drive
Christiansburg, VA 24073 USA
Phone: 540.585.3030

1.0 ACCREDITATION / REGISTRATION
1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories".
INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories".
Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 0101025).
Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 0101025).

ACCREDITED Testing Laboratory Certificate 583.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION
2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGPB1
Lot Number:	K2-PB93074
Matrix:	0.5% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Lead
Starting Material:	Lead nitrate
Starting Material Lot#:	1840 and 1908
Starting Material Purity:	99.9994 %

4153242
4153242
ID: 1000 Pb 00020
Ex: 1000 Pb 00020
Exc: 04/19/20 Proc: SJS
Exp: 04/19/20 Proc: SJS
1000 Pb IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES
3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value:	1003 ± 4 µg/mL
Certified Density:	1.002 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1	1003 ± 3 µg/mL EDTA NIST SRM 928 Lot Number: 928
Assay Method #2	1003 ± 4 µg/mL ICP Assay NIST SRM 3128 Lot Number: 101026

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.
- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.
The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of $k = 2$.

Characterization of CRM by two independent methods **Characterization of CRM by one method**

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000304	M	Eu	<	0.000304	O	Na		0.000155	M	Se	<	0.006074	O	Zn		0.000324
O	Al		0.003025	O	Fe		0.000360	M	Nb	<	0.000304	O	Si		0.001008	M	Zr	<	0.000911
M	As	<	0.000607	M	Ga	<	0.000304	M	Nd	<	0.000304	M	Sm	<	0.000304				
M	Au	<	0.000611	M	Gd	<	0.000304	M	Ni	<	0.000607	M	Sn	<	0.000304				
O	B	<	0.000624	M	Ge	<	0.000304	M	Os	<	0.000306	O	Sr		0.000012				
O	Ba		0.000648	M	Hf	<	0.000304	O	P	<	0.020800	M	Ta	<	0.000304				
O	Be	<	0.000031	O	Hg	<	0.002080	s	Pb	<		M	Tb	<	0.000304				
O	Bi		0.002593	M	Ho	<	0.000304	M	Pd	<	0.000304	M	Te	<	0.003037				
O	Ca		0.000360	M	In	<	0.000304	M	Pr	<	0.000304	M	Th	<	0.004555				
O	Cd	<	0.000208	M	Ir	<	0.000306	M	Pt	<	0.000304	O	Ti		0.000115				
M	Ce	<	0.000304	O	K		0.000576	M	Rb	<	0.000304	M	Tl	<	0.003037				
M	Co	<	0.000304	M	La	<	0.000304	M	Re	<	0.000304	M	Tm	<	0.000304				
O	Cr	<	0.000520	O	Li	<	0.000416	O	Rh	<	0.010400	M	U	<	0.000304				
M	Cs		0.000168	M	Lu	<	0.000304	M	Ru	<	0.000306	M	V	<	0.000304				
M	Cu	<	0.000304	O	Mg		0.000043	O	S	<	0.010400	M	W	<	0.000304				
M	Dy	<	0.000304	M	Mn	<	0.000607	M	Sb	<	0.000304	M	Y	<	0.000304				
M	Er	<	0.000304	M	Mo	<	0.000304	M	Sc	<	0.000304	M	Yb	<	0.000304				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.20 +2 6 $Pb(H_2O)_6^{+2}$
Chemical Compatibility - Soluble in HCl, HF and HNO_3. Avoid H_2SO_4. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, sulfide, phosphate, oxalate, chromate, tannate, iodate, and cyanide in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO_3 / LDPE container.
Pb Containing Samples (Preparation and Solution) -Metal (Best dissolved in 1:1 H_2O / HNO_3); Oxides (The many different Pb oxides are soluble in HNO_3 with the exception of PbO_2 which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H_2O / HNO_3); Organic Matrices (Dry ash and dissolve in dilute HCl).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 208 amu	5 ppt	n/a	192Pt16O, 192Os16O
ICP-OES 168.215 nm	0.03 / 0.003 µg/mL	1	Co
ICP-OES 217.000 nm	0.09 / 0.03 µg/mL	1	W, Ir, Hf, Sb, Th
ICP-OES 220.353 nm	0.04 / 0.006 µg/mL	1	Bi, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

Reagent

1000 Sb_00015

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 21, 2015

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- July 21, 2018

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

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CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

ACCREDITED Testing Laboratory Certificate 883.01 — ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSB1
Lot Number:	J2-SB03037
Matrix:	1% (v/v) HNO3 3% Tartaric Acid
Value / Analyte(s):	1 000 µg/mL ea: Sb
Starting Material:	Sb Metal
Starting Material Lot#:	1857
Starting Material Purity:	99.9898%

4005196
ID: 1000 Sb_00015
Exp:07/19/17 Prpd:SJS Opn:07/19/16
1000 Sb IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 7 µg/mL

Certified Density: 1.022 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1 — **996 ± 5 µg/mL**
ICP Assay NIST SRM 3102A Lot Number: 061229

Assay Method #2 — **1002 ± 5 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods | **Characterization of CRM by one method**

Characterization of CRM/RM by Two Methods

Certified Value, X_{CRMRM}, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRMRM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\,a}$
X_b = mean of Assay Method B with standard uncertainty $u_{char\,b}$
w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\,a})^2 / ((1/u_{char\,a})^2 + (1/u_{char\,b})^2))$
$w_b = (1/u_{char\,b})^2 / ((1/u_{char\,a})^2 + (1/u_{char\,b})^2))$

CRM/RM Expanded Uncertainty ($\pm$) = $U_{CRMRM} = k\,(u^2_{char\,a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\,a\&b} = [(w_a)^2 (u_{char\,a})^2 + (w_b)^2 (u_{char\,b})^2]^{1/2}$ where $u_{char\,a}$ and $u_{char\,b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty
u_{lts} = long term stability standard uncertainty (storage)
u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, X_{CRMRM}, where one method of characterization is used is the mean of individual results:

X_{CRMRM} = mean of Assay Method A with standard uncertainty $u_{char\,a}$

CRM/RM Expanded Uncertainty ($\pm$) = $U_{CRMRM} = k\,(u^2_{char\,a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\,a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty
u_{lts} = long term stability standard uncertainty (storage)
u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9995% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000101	M	Eu	<	0.000101	O	Na		0.007416	M	Se	<	0.003733	M	Zn		0.000243
O	Al		0.000971	O	Fe		0.002142	O	Nb	<	0.001814	O	Si		0.019082	M	Zr	<	0.001211
M	As	<	0.003228	M	Ga	<	0.000101	M	Nd	<	0.000101	M	Sm	<	0.000101				
M	Au	<	0.001994	M	Gd	<	0.000101	O	Ni		0.000525	M	Sn	<	0.001816				
O	B		0.003127	M	Ge	<	0.000807	M	Os	<	0.000100	O	Sr	<	0.000085				
O	Ba	<	0.001057	M	Hf	<	0.000101	O	P		0.006812	O	Ta	<	0.001014				
O	Be	<	0.000028	M	Hg	<	0.000299	M	Pb	<	0.000605	M	Tb	<	0.000101				
M	Bi	<	0.000101	M	Ho	<	0.000101	M	Pd	<	0.000202	M	Te	<	0.001110				
O	Ca		0.001111	M	In	<	0.000101	M	Pr	<	0.001009	M	Th	<	0.000101				
M	Cd	<	0.000101	M	Ir	<	0.000389	M	Pt	<	0.000101	O	Ti		0.001104				
O	Ce	<	0.007469	O	K		0.052182	M	Rb	<	0.002825	M	Tl	<	0.000101				
M	Co	<	0.000101	O	La	<	0.000760	M	Re	<	0.000101	M	Tm	<	0.000101				
O	Cr		0.010294	O	Li	<	0.000053	M	Rh	<	0.000101	M	U	<	0.000101				
M	Cs	<	0.002018	M	Lu	<	0.000101	M	Ru	<	0.000100	M	V	<	0.000101				
O	Cu	<	0.000598	O	Mg		0.000436	n	S	<		M	W	<	0.001009				
M	Dy	<	0.000404	O	Mn		0.000172	s	Sb	<		M	Y	<	0.000101				
M	Er	<	0.000101	M	Mo		0.000317	O	Se	<	0.000049	O	Yb	<	0.000064				

M = Checked by ICP-MS O = Checked by ICP-OES i = Spectral Interference
n = Not Checked For s = Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 121.75 +3 6 Sb(C)C4H4O6-1
Chemical Compatibility -Stable in conc. HCl, dilute or conc. HF. Stable in dilute HNO_3 as the fluoride or tartrate complex. Avoid basic media. Stable with most metals and inorganic anions in acidic media as the tartrate provided the acidity is not too high or the acid is oxidizing causing loss of the stabilizing tartrate ion. The fluoride complex of antimony is stable in strong acid but you should only mix with other metals that are fluorinated.
Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-2% HNO_3 / LDPE container.
Sb Containing Samples (Preparation and Solution) -Metal and alloys (Soluble in H_2O / HF / HNO_3 mixture); Oxides (Soluble in HCl and tartaric acid or H_2O / HF / HNO_3 mixtures); Ores (fusion with Na_2CO_3 in Pt⊖ followed by dissolving the fuseate in a H_2O / HF / HNO_3 mixture); Organic based (sulfuric acid / hydrogen peroxide digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 121 amu	5 ppt	N/A	105Pd16O; 89Y16O2
ICP-OES 206.833 nm	0.03/0.003 µg/mL	1	Ta, Cr, Ge, Hf
ICP-OES 217.581 nm	0.05/0.005 µg/mL	1	Nb, W, Re, Fe
ICP-OES 231.147 nm	0.06/0.006 µg/mL	1	Ni, Ce, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

Reagent

1000 Sb_00016

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures 300 Technology Drive, Christiansburg Va 24073, USA. Telephone: 800.669.6799, 540.585.3030, Fax: 540.585.3012, inorganicventures.com, info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 01, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 01, 2020**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Joseph Burns
TSG Technician

Certificate Approved By:

Michael Booth
QC Supervisor

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

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tel: 540.585.3030
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CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR 1034).

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSB1
Lot Number:	K2-SB03048
Matrix:	1% (v/v) HNO3 3% Tartaric Acid
Value / Analyte(s):	1 000 µg/mL ea: Antimony
Starting Material:	Sb Pieces
Starting Material Lot#:	1857/1647
Starting Material Purity:	99.9835%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1000 ± 8 µg/mL

Certified Density: 1.020 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1 **1000 ± 5 µg/mL**
ICP Assay NIST SRM 3102a Lot Number: 081229 Sb

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods **Characterization of CRM by one method**

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2)^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = longterm stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	< 0.000303	M	Eu	< 0.000404	O	Na	0.007895	M	Se	< 0.002022	O	Zn	0.000398
O	Al	0.001425	O	Fe	0.002492	M	Nb	< 0.001011	O	Si	0.035346	O	Zr	< 0.003088
M	As	< 0.003842	M	Ga	< 0.000101	M	Nd	< 0.000101	M	Sm	< 0.000202			
M	Au	< 0.001961	M	Gd	< 0.000101	O	Ni	< 0.011715	M	Sn	< 0.002629			
M	B	0.005849	M	Ge	< 0.000303	M	Os	< 0.000103	O	Sr	< 0.000198			
O	Ba	< 0.001065	M	Hf	< 0.000202	O	P	0.061438	M	Ta	< 0.002224			
M	Be	< 0.000404	M	Hg	< 0.000103	M	Pb	< 0.001618	M	Tb	< 0.000101			
M	Bi	0.000704	M	Ho	< 0.000101	M	Pd	< 0.000202	M	Te	< 0.001213			
O	Ca	0.001146	M	In	< 0.000101	M	Pr	< 0.001415	M	Th	< 0.000101			
M	Cd	< 0.000101	M	Ir	< 0.000103	M	Pt	< 0.000101	M	Ti	0.000652			
O	Ce	< 0.010490	O	K	0.047431	M	Rb	< 0.002831	M	Tl	< 0.000404			
O	Co	< 0.001160	O	La	< 0.002587	M	Re	< 0.000101	M	Tm	< 0.000101			
O	Cr	0.008875	O	Li	0.000016	M	Rh	< 0.000101	M	U	< 0.000101			
M	Cs	< 0.001011	M	Lu	< 0.000404	M	Ru	< 0.000103	M	V	< 0.000404			
M	Cu	0.000441	O	Mg	0.000330	n	S	<	M	W	< 0.000202			
M	Dy	< 0.003438	O	Mn	0.000152	s	Sb	<	M	Y	< 0.000101			
M	Er	< 0.000101	M	Mo	< 0.006269	O	Sc	< 0.000711	M	Yb	< 0.000101			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 121.75 +3 6 Sb(O)C4H4O6-1

Chemical Compatibility -Stable in conc. HCl, dilute or conc. HF. Stable in dilute HNO_3 as the fluoride or tartrate complex. Avoid basic media. Stable with most metals and inorganic anions in acidic media as the tartrate provided the acidity is not too high or the acid is oxidizing causing loss of the stabilizing tartrate ion. The fluoride complex of antimony is stable in strong acid but you should only mix with other metals that are fluorinated.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-2% HNO_3 / LDPE container.

Sb Containing Samples (Preparation and Solution) -Metal and alloys (Soluble in H_2O / HF / HNO_3 mixture); Oxides (Soluble in HCl and tartaric acid or H_2O / HF / HNO_3 mixtures); Ores (fusion with Na_2CO_3 in Pt0 followed by dissolving the fuseate in a H_2O / HF / HNO_3 mixture); Organic based (sulfuric acid / hydrogen peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 121 amu	5 ppt	N/A	105Pd16O, 89Y16O2
ICP-OES 206.833 nm	0.03/0.003 µg/mL	1	Ta, Cr, Ge, Hf
ICP-OES 217.581 nm	0.05/0.005 µg/mL	1	Nb, W, Re, Fe
ICP-OES 231.147 nm	0.06/0.006 µg/mL	1	Ni, Co, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

Reagent

1000 Se_00015

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 09, 2015

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 09, 2018

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Zach Saunders
Product Documentation Technician

Zachary Saunders

Certificate Approved By:

Michael Booth
QC Supervisor

Michael J Booth

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

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CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSE(4)1
Lot Number:	J2-SE02058
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Se
Starting Material:	Se Shot
Starting Material Lot#:	1616
Starting Material Purity:	99.9995%

3895977
ID: 1000 Se_00015
Exp: 06/09/15 Prpd: SJS
1000 Se IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 4 µg/mL - weighted mean

Certified Density: 1.011 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1	**1004 ± 4 µg/mL** ICP Assay NIST SRM 3149 Lot Number: 100901
Assay Method #2	**1000 ± 5 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty ($\pm$) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

SRM/RM Expanded Uncertainty ($\pm$) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag		0.000353	M	Eu	<	0.000370	O	Na		0.002152	s	Se	<		O	Zn		0.000073
O	Al	<	0.005555	O	Fe		0.000209	O	Nb	<	0.001667	O	Si		0.000530	O	Zr	<	0.001111
O	As	<	0.005555	M	Ga	<	0.000370	M	Nd	<	0.000370	M	Sm	<	0.000370				
M	Au	<	0.000370	M	Gd	<	0.000370	O	Ni	<	0.003333	O	Sn	<	0.003333				
M	B	<	0.007405	M	Ge	<	0.001851	n	Os	<		O	Sr	<	0.000078				
O	Ba	<	0.000333	M	Hf	<	0.001851	O	P	<	0.002222	M	Ta	<	0.001851				
O	Be	<	0.000100	O	Hg	<	0.002222	M	Pb	<	0.007405	M	Tb	<	0.000370				
O	Bi	<	0.005666	M	Ho	<	0.000370	M	Pd	<	0.003703	M	Te	<	0.037027				
O	Ca		0.000497	M	In	<	0.003703	M	Pr	<	0.000370	M	Th	<	0.003703				
O	Cd	<	0.000444	M	Ir	<	0.003703	M	Pt	<	0.007405	O	Ti	<	0.000444				
M	Ce	<	0.000370	O	K		0.000397	M	Rb	<	0.001111	M	Tl	<	0.000370				
O	Co	<	0.000889	M	La	<	0.000370	M	Re	<	0.000370	M	Tm	<	0.000370				
O	Cr	<	0.001667	O	Li	<	0.000067	M	Rh	<	0.000370	M	U	<	0.000370				
M	Cs	<	0.000370	M	Lu	<	0.000370	M	Ru	<	0.001851	M	V	<	0.000370				
O	Cu		0.000927	O	Mg		0.000073	O	S	<	0.007777	O	W	<	0.003333				
M	Dy	<	0.000370	O	Mn	<	0.000222	M	Sb	<	0.011108	M	Y	<	0.000370				
M	Er	<	0.000370	O	Mo	<	0.000556	O	Sc	<	0.000333	M	Yb	<	0.000370				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 78.96 +4 6 H_2SeO_3

Chemical Compatibility -Soluble in HCl, HNO_3,H_3PO_4, H_2SO_4 and HF aqueous matrices and water. It is stable with most inorganic anions but many cationic metals form the insoluble selenites under pH neutral conditions. When fluorinated and/or under acidic conditions precipitation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Se Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (readily soluble in water); Minerals and alloys (acid digestion with HNO_3or HNO_3 / HF); Organic Matrices (acid digestion with hot concentrated H_2SO_4 accompanied by the careful dropwise addition of H_2O_2 until clear).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 82 amu	200 ppt	N/A	12C35Cl2
ICP-OES 196.026 nm	0.08/0.006 µg/mL	1	Fe
ICP-OES 203.985 nm	0.2/0.05 µg/mL	1	Sb, Ir, Cr, Ta
ICP-OES 206.279 nm	0.3/0.16 µg/mL	1	Cr, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

Reagent

1000 Se_00016

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 01, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 01, 2020

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Brenda Francis
Product Documentation Technician

Certificate Approved By:

Michael Booth
QC Supervisor

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

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CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01 — ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSE(4)1
Lot Number:	K2-SE02067
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Selenium
Starting Material:	Se shot
Starting Material Lot#:	1616
Starting Material Purity:	99.9996%

4060891
ID: 1000 Se_00016
Exp: 06/01/20 Prpd: SJS
1000 Se IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1006 ± 6 µg/mL

Certified Density: 1.011 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1 **1006 ± 5 µg/mL**
ICP Assay NIST SRM 3149 Lot Number: 100901

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods | **Characterization of CRM by one method**

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.007579	M	Eu	<	0.011369	O	Na		0.002654	s	Se	<		O	Zn	<	0.000200
O	Al		0.000169	O	Fe		0.000199	O	Nb	<	0.004000	O	Si	<	0.003000	O	Zr	<	0.000400
O	As	<	0.005000	M	Ga	<	0.003789	M	Nd	<	0.007579	M	Sm	<	0.003789				
M	Au	<	0.011369	M	Gd	<	0.003789	O	Ni	<	0.000900	M	Sn	<	0.018949				
O	B		0.000690	M	Ge	<	0.022739	n	Os	<		M	Sr	<	0.001894				
M	Ba	<	0.037899	M	Hf	<	0.007579	O	P	<	0.003000	M	Ta	<	0.026529				
O	Be	<	0.000090	O	Hg	<	0.014000	M	Pb	<	0.011369	M	Tb	<	0.001136				
M	Bi	<	0.001515	M	Ho	<	0.001894	M	Pd	<	0.018949	M	Te	<	0.113699				
O	Ca		0.000437	M	In	<	0.037899	M	Pr	<	0.001136	M	Th	<	0.003789				
M	Cd	<	0.011369	M	Ir	<	0.018949	M	Pt	<	0.007579	M	Ti	<	0.189499				
M	Ce	<	0.018949	O	K		0.000212	M	Rb	<	0.003789	M	Tl	<	0.003789				
M	Co	<	0.011369	M	La	<	0.001894	O	Re	<	0.009000	M	Tm	<	0.001515				
M	Cr	<	0.018949	O	Li	<	0.000030	M	Rh	<	0.003789	M	U	<	0.007579				
M	Cs	<	0.001136	M	Lu	<	0.001515	O	Ru	<	0.007000	M	V	<	0.007579				
M	Cu	<	0.022739	O	Mg		0.000066	O	S	<	0.040000	M	W	<	0.037899				
M	Dy	<	0.022739	M	Mn	<	0.015159	M	Sb	<	0.001894	M	Y	<	0.151599				
M	Er	<	0.018949	O	Mo	<	0.004000	M	Sc	<	0.037899	M	Yb	<	0.003789				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 78.96 +4 6 H2SeO3

Chemical Compatibility -Soluble in HCl, HNO3,H3PO4, H2SO4 and HF aqueous matrices and water. It is stable with most inorganic anions but many cationic metals form the insoluble selenites under pH neutral conditions. When fluorinated and/or under acidic conditions precipitation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Se Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (readily soluble in water); Minerals and alloys (acid digestion with HNO3or HNO3 / HF); Organic Matrices (acid digestion with hot concentrated H2SO4 accompanied by the careful dropwise addition of H2O2 until clear).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 82 amu	200 ppt	N/A	12C35Cl2
ICP-OES 196.026 nm	0.08/0.006 µg/mL	1	Fe
ICP-OES 203.985 nm	0.2/0.05 µg/mL	1	Sb, Ir, Cr, Ta
ICP-OES 206.279 nm	0.3/0.16 µg/mL	1	Cr, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

Reagent

1000 T1_00015

10.8 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 24, 2015

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 24, 2018

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Zach Saunders
Product Documentation Technician

Zachary Saunders

Certificate Approved By:

Michael Booth
QC Supervisor

Michael J Booth

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 - USA
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CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTL1
Lot Number:	J2-TL02025
Matrix:	0.7% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Tl
Starting Material:	TlNO3
Starting Material Lot#:	1741 and 1793
Starting Material Purity:	99.9988%

3895978
ID: 1000 Tl_00015
Exp: 06/24/16 Prpd: SJS
1000 Tl

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 998 ± 6 µg/mL

Certified Density: 1.003 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1 **998 ± 5 µg/mL**
ICP Assay NIST SRM 3158 Lot Number: 993012

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag		0.000267	M	Eu	<	0.001195	O	Na		0.000939	M	Se	<	0.002988	O	Zn		0.000917
M	Al	<	0.007170	O	Fe		0.000345	M	Nb	<	0.000199	O	Si		0.000755	M	Zr	<	0.000199
M	As	<	0.002390	M	Ga	<	0.000199	M	Nd	<	0.000199	M	Sm	<	0.000199				
M	Au	<	0.001395	M	Gd	<	0.000199	O	Ni	<	0.000628	M	Sn	<	0.000398				
O	B	<	0.000647	M	Ge	<	0.000996	M	Os	<	0.000797	O	Sr		0.000016				
O	Ba	<	0.002092	M	Hf	<	0.000199	O	P	<	0.031380	M	Ta	<	0.000199				
O	Be	<	0.000084	O	Hg	<	0.003138	M	Pb		0.003339	M	Tb	<	0.000199				
M	Bi		0.000134	M	Ho	<	0.000199	M	Pd	<	0.001195	M	Te	<	0.001593				
O	Ca		0.001873	M	In	<	0.000199	M	Pr	<	0.000199	M	Th	<	0.000199				
M	Cd		0.000709	M	Ir	<	0.003188	M	Pt	<	0.000398	O	Ti	<	0.000209				
M	Ce	<	0.004780	O	K		0.002374	M	Rb	<	0.011950	s	Tl	<					
M	Co	<	0.000797	M	La	<	0.000797	M	Re	.	0.003843	M	Tm	<	0.000199				
M	Cr	<	0.000598	O	Li	<	0.000066	M	Rh	<	0.000199	M	U	<	0.000199				
M	Cs	<	0.005975	M	Lu	<	0.000199	M	Ru	<	0.000199	M	V	<	0.000199				
M	Cu		0.000370	O	Mg		0.000305	O	S	<	0.047818	M	W		0.000092				
M	Dy	<	0.000199	M	Mn	<	0.000199	M	Sb	<	0.000199	M	Y	<	0.000199				
M	Er	<	0.000199	M	Mo		0.000277	O	Sc	<	0.000146	M	Yb	<	0.000199				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 204.38 +1 6 Tl(H2O)61+
Chemical Compatibility - Soluble in HCl, HNO3, and H2SO4. Stable with most metals and inorganic anions. The sulfite, thiocyanate and oxalate are moderately soluble; the phosphate and arsenite are slightly soluble and the sulfide is insoluble.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Tl Containing Samples (Preparation and Solution) -Metal (Best dissolved in HNO3 which forms chiefly the Tl1+ ion.); Oxide (The thallous oxide is readily soluble in water. The thallic oxide requires high levels of acid); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in HCl).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 205 amu	2 ppt	N/A	189Os16O
ICP-OES 190.864 nm	0.04 / 0.004 µg/mL	1	V, Ti
ICP-OES 276.787 nm	0.1 / 0.01 µg/mL	1	Ta, V, Fe, Cr
ICP-OES 351.924 nm	0.2 / 0.02 µg/mL	1	Th, Ce, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

Reagent

1000 Tl_00016

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 20, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 20, 2020**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Brenda Francis
Product Documentation Technician

Certificate Approved By:

Michael Booth
Supervisor, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 888.01 — ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTL1
Lot Number:	K2-TL650335
Matrix:	1% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Thallium
Starting Material:	TlNO3
Starting Material Lot#:	1741 and 1793
Starting Material Purity:	99.9988%

4158240
ID: 1000 Tl_00016
Exp: 07/20/20 Prpd: SJS
1000 Tl

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value:	**1003 ± 6 µg/mL**
Certified Density:	1.004 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1	**1006 ± 6 µg/mL** ICP Assay NIST SRM 3158 Lot Number: 993012
Assay Method #2	**999 ± 7 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty ($\pm$) = $U_{CRM/RM} = k\ (u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\ (u_{char\ a})^2 + (w_b)^2\ (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty ($\pm$) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag		0.000268	M	Eu	<	0.001195	O	Na		0.000943	M	Se	<	0.002987	O	Zn		0.000920
M	Al	<	0.007170	O	Fe		0.000346	M	Nb	<	0.000199	O	Si		0.000758	M	Zr	<	0.000199
M	As	<	0.002390	M	Ga	<	0.000199	M	Nd	<	0.000199	M	Sm	<	0.000199				
M	Au	<	0.001394	M	Gd	<	0.000199	O	Ni	<	0.000627	M	Sn	<	0.000398				
O	B	<	0.000647	M	Ge	<	0.000995	M	Os	<	0.000797	O	Sr		0.000016				
O	Ba	<	0.002092	M	Hf	<	0.000199	O	P	<	0.031380	M	Ta	<	0.000199				
O	Be	<	0.000083	O	Hg	<	0.003138	M	Pb		0.003352	M	Tb	<	0.000199				
M	Bi		0.000134	M	Ho	<	0.000199	M	Pd	<	0.001195	M	Te	<	0.001593				
O	Ca		0.001880	M	In	<	0.000199	M	Pr	<	0.000199	M	Th	<	0.000199				
M	Cd		0.000711	M	Ir	<	0.003188	M	Pt	<	0.000398	O	Ti	<	0.000209				
M	Ce	<	0.004780	O	K		0.002383	M	Rb	<	0.011950	s	Tl	<					
M	Co	<	0.000796	M	La	<	0.000796	M	Re		0.003857	M	Tm	<	0.000199				
M	Cr	<	0.000597	O	Li	<	0.000066	M	Rh	<	0.000199	M	U	<	0.000199				
M	Cs	<	0.005975	M	Lu	<	0.000199	M	Ru	<	0.000199	M	V	<	0.000199				
M	Cu		0.000371	O	Mg		0.000306	O	S	<	0.047817	M	W		0.000092				
M	Dy	<	0.000199	M	Mn	<	0.000199	M	Sb	<	0.000199	M	Y	<	0.000199				
M	Er	<	0.000199	M	Mo		0.000278	O	Sc	<	0.000146	M	Yb	<	0.000199				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n = Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 204.38 +1 6 Tl(H2O)61+

Chemical Compatibility - Soluble in HCl, HNO3, and H2SO4. Stable with most metals and inorganic anions. The sulfite, thiocyanate and oxalate are moderately soluble; the phosphate and arsenite are slightly soluble and the sulfide is insoluble.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

Tl Containing Samples (Preparation and Solution) -Metal (Best dissolved in HNO3 which forms chiefly the Tl1+ ion.); Oxide (The thallous oxide is readily soluble in water. The thallic oxide requires high levels of acid); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 205 amu	2 ppt	N/A	189Os16O
ICP-OES 190.864 nm	0.04 / 0.004 µg/mL	1	V, Ti
ICP-OES 276.787 nm	0.1 / 0.01 µg/mL	1	Ta, V, Fe, Cr
ICP-OES 351.924 nm	0.2 / 0.02 µg/mL	1	Th, Ce, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

Reagent

10000 Al_00016

INORGANIC VENTURES
CERTIFICATE OF ANALYSIS
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

ACCREDITED
Testing Laboratory
Certificate 863.01

ACCREDITED
Reference Material Producer
Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAL10
Lot Number:	J2-AL05009
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Al
Starting Material:	Al Shot
Starting Material Lot#:	1834
Starting Material Purity:	99.9950%

40110053
ID: 10000/AL_000156
Exp. 07/19/19 Prod: LLB
10000 Al IN

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value:	**9960 ± 34 µg/mL** - weighted mean
Certified Density:	**1.082 g/mL** (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1	**9964 ± 25 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #2	**9939 ± 56 µg/mL** ICP Assay NIST SRM 3101a Lot Number: 060502

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2.

280-40110053

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty ($\pm$) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty ($\pm$) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9995% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000541	M	Eu	<	0.000541	O	Na		0.085913	M	Se	<	0.008117	M	Zn	0.084547
s	Al	<		O	Fe		0.029418	M	Nb	<	0.000541	O	Si		0.255986	O	Zr	0.000495
M	As	<	0.007576	M	Ga		0.003548	M	Nd		0.004527	M	Sm	<	0.001082			
M	Au	<	0.001083	M	Gd	<	0.003247	O	Ni	<	0.002062	M	Sn	<	0.000541			
O	B		0.016996	M	Ge	<	0.001623	M	Os	<	0.000541	O	Sr		0.000180			
O	Ba	<	0.001934	M	Hf	<	0.000541	n	P	<		M	Ta	<	0.000541			
O	Be	<	0.000103	M	Hg	<	0.001083	O	Pb			M	Tb	<	0.000541			
M	Bi	<	0.000541	M	Ho	<	0.000541	M	Pd	<	0.000541	M	Te	<	0.003788			
O	Ca		0.028541	M	In	<	0.000541	M	Pr	<	0.008658	M	Th	<	0.006493			
M	Cd	<	0.006493	M	Ir	<	0.000541	M	Pt	<	0.000541	O	Ti		0.001519			
O	Ce		0.007287	O	K		0.033683	M	Rb	<	0.000541	M	Tl		0.003548			
M	Co	<	0.000541	O	La		0.005699	M	Re	<	0.000541	M	Tm	<	0.000541			
O	Cr	<	0.007734	O	Li	<	0.000258	M	Rh	<	0.000541	M	U	<	0.005411			
M	Cs	<	0.000541	M	Lu	<	0.000541	M	Ru	<	0.000541	M	V		0.001468			
O	Cu		0.032061	O	Mg		0.016763	n	S	<		M	W	<	0.003247			
M	Dy	<	0.005411	O	Mn		0.000570	M	Sb	<	0.004329	M	Y	<	0.005411			
M	Er	<	0.002164	O	Mo	<	0.001289	O	Sc		0.000330	O	Yb	<	0.000047			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference

n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 26.98 +3 6 Al(H2O)6+3
Chemical Compatibility -Soluble in HCl, HNO3, HF and H2SO4. Avoid neutral media. Soluble in strongly basic NaOH forming the Al(OH)4(H2O)21- species. Stable with most metals and inorganic anions. The phosphate is insoluble in water and only slightly soluble in acid.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Al Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); a- Al2O3 (Na2CO3 fusion in Pt0);
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 27 amu	30 ppt	N/A	12C15N, 13C14N, 1H12C14N, 11B16O, 54Cr2+, 54Fe2+
ICP-OES 167.078 nm	0.1/0.009 µg/mL	1	Fe
ICP-OES 394.401 nm	0.05/0.006 µg/mL	1	U, Ce
ICP-OES 396.152 nm	0.03/0.006 µg/mL	1	Mo, Zr, Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited - A2LA Certificate Number 3833.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 13, 2015

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- July 13, 2018

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Zach Saunders
Product Documentation Technician

Zachary Saunders

Certificate Approved By:

Michael Booth
QC Supervisor

Michael J Booth

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

Reagent

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neral Requirements for the Competence of Testing and Calibration Laboratories"

edited / A2LA Certificate Number 883.01

equirements for the Competence of Reference Material Producers"

ucer - Accredited / A2LA Certificate Number 883.02

ansburg, Va. 24073, USA; Telephone: 800.669.6799, 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

IRATION AND PERIOD OF VALIDITY

within the measurement uncertainty specified provided the CRM/RM is stored and
h instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1
:RM/RM is damaged, contaminated, or otherwise modified.

; CRM/RM should not be used.

eflects the period of time that the stability of a CRM/RM can be supported by long term
l on properly stored and handled CRM/RMs. Lot expiration is limited primarily by
r from the solution) and infrequently by chemical stability.

Date: _____

it be used longer than one year from the date of removal from the aluminized bag or
c. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled
with the instructions given in Sec 7.1.

S OF CERTIFYING OFFICERS

visor

Michael Z Rodd

Paul R Heinen

ir

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CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGFE10
Lot Number:	K2-FE04057
Matrix:	5% (v/v) HNO_3
Value / Analyte(s):	10 000 µg/mL ea: Iron
Starting Material:	Iron Metal
Starting Material Lot#:	2031
Starting Material Purity:	99.9970%

4204670
ID: 10000 Fe_00018
Exp: 02/27/20 Prpd: SJS
10000 Fe IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10 003 ± 26 µg/mL

Certified Density: 1.041 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1	**9998 ± 26 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #2	**10038 ± 66 µg/mL** ICP Assay NIST SRM 3126a Lot Number: 140812

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty ($\pm$) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty ($\pm$) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001204	M	Eu	<	0.000602	O	Na		0.014010	M	Se	<	0.003000	M	Zn	<	0.021079
O	Al		0.005094	s	Fe	<		M	Nb	<	0.001204	O	Si		0.056296	M	Zr	<	0.002409
M	As	<	0.063841	M	Ga	<	0.018068	M	Nd	<	0.000602	M	Sm	<	0.000602				
M	Au	<	0.000600	M	Gd	<	0.000602	M	Ni		0.029566	M	Sn	<	0.006022				
O	B	<	0.037050	i	Ge	<		M	Os	<	0.000600	M	Sr	<	0.000602				
O	Ba	<	0.001852	M	Hf	<	0.000602	i	P	<		M	Ta	<	0.000602				
O	Be	<	0.000617	M	Hg	<	0.003000	M	Pb	<	0.004818	M	Tb	<	0.000602				
M	Bi	<	0.000602	M	Ho	<	0.000602	M	Pd	<	0.001204	M	Te	<	0.008431				
O	Ca		0.011717	M	In	<	0.000602	M	Pr	<	0.000602	M	Th	<	0.000602				
M	Cd	<	0.000602	M	Ir	<	0.000600	M	Pt	<	0.000602	M	Ti	<	0.001806				
M	Ce	<	0.000602	O	K		0.005604	M	Rb	<	0.001204	M	Tl	<	0.000602				
M	Co		0.038013	M	La	<	0.000602	M	Re	<	0.000602	M	Tm	<	0.000602				
O	Cr		0.030058	O	Li	<	0.000123	M	Rh	<	0.000602	M	U	<	0.000602				
M	Cs	<	0.000602	M	Lu	<	0.000602	M	Ru	<	0.000600	M	V	<	0.004818				
M	Cu		0.023230	O	Mg		0.001783	O	S		0.020124	M	W	<	0.001204				
M	Dy	<	0.000602	O	Mn		0.076420	M	Sb		0.035404	M	Y	<	0.000602				
M	Er	<	0.000602	M	Mo		0.005838	M	Sc	<	0.001204	M	Yb	<	0.000602				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 55.85 +3 6 $Fe(H_2O)_6^{3+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF and H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Fe Containing Samples (Preparation and Solution) - Metal (Soluble in HCl); Oxides (If the oxide has been at a high temperature then Na_2CO_3 fusion in Pt0 followed by HCl dissolution otherwise dissolve in dilute HCl); Ores (See Oxides above using only the fusion approach).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 56 amu	970 ppt	N/A	40Ar15N1H, 40Ar16O, 36Ar17O1H , 38Ar18O, 37Cl18O1H, 40Ca16O
ICP-OES 238.204 nm	0.005/0.001 µg/mL	1	Ru, Co
ICP-OES 239.562 nm	0.005/0.001 µg/mL	1	Co, W, Cr
ICP-OES 259.940 nm	0.006/0.001 µg/mL	1	Hf, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

Reagent

10000 Na_00057

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive Christiansburg, Va. 24073, USA; Telephone: 800.669.6788; 540.585.3030; Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 28, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **October 28, 2020**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Donna Senn

Certificate Approved By:

Michael Booth
Supervisor, Quality Control

Michael Z Booth

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

Paul R Gaines

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

300 Technology Drive
Christiansburg, VA 24073 - USA
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fax: 540.585.3012
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-11034).

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

4447794
IC: 10000 Na_60857
Exp: 10/28/20 Prod: SJS
10000 Na IV

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNA10
Lot Number:	K2-NA651997
Matrix:	2% (w/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Sodium
Starting Material:	Na2CO3
Starting Material Lot#:	1870
Starting Material Purity:	99.9989%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10036 ± 19 µg/mL

Certified Density: 1.034 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1	**10013 ± 76 µg/mL** ICP Assay NIST SRM 3152a Lot Number: 120715
Assay Method #2	**10037 ± 18 µg/mL** Gravimetric NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\ (u_{char\ a})^2 + (w_b)^2\ (u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000911	M	Eu	<	0.000911	s	Na	<		M	Se	<	0.008202	O	Zn	0.001574
O	Al	<	0.000497	O	Fe		0.000230	M	Nb	<	0.000911	O	Si		0.001566	O	Zr	< 0.000686
M	As	<	0.002734	M	Ga	<	0.000911	M	Nd	<	0.000911	M	Sm	<	0.000911			
O	Au	<	0.004172	M	Gd	<	0.000911	O	Ni	<	0.002364	M	Sn	<	0.000911			
O	B	<	0.006380	M	Ge	<	0.000911	M	Os	<	0.000876	O	Sr		0.000363			
O	Ba		0.000264	M	Hf	<	0.000911	O	P	<	0.010344	M	Ta	<	0.000911			
O	Be	<	0.000393	M	Hg	<	0.001753	M	Pb	<	0.000911	M	Tb	<	0.000911			
M	Bi	<	0.000911	M	Ho	<	0.000911	M	Pd	<	0.000911	M	Te	<	0.018227			
O	Ca		0.018140	M	In	<	0.000911	M	Pr	<	0.000911	M	Th	<	0.000911			
M	Cd	<	0.000911	M	Ir	<	0.000876	M	Pt	<	0.000911	O	Ti	<	0.000729			
M	Ce	<	0.000911	O	K		0.269850	M	Rb	<	0.000911	M	Tl	<	0.000911			
O	Co	<	0.000469	M	La	<	0.000911	M	Re	<	0.000911	M	Tm	<	0.000911			
O	Cr	<	0.000881	O	Li	<	0.000098	M	Rh	<	0.000911	M	U	<	0.000911			
M	Cs	<	0.001823	M	Lu	<	0.000911	M	Ru	<	0.000876	M	V	<	0.000911			
O	Cu	<	0.001595	O	Mg		0.000365	O	S	<	0.024540	M	W	<	0.002734			
M	Dy	<	0.000911	M	Mn	<	0.000911	M	Sb	<	0.000911	M	Y	<	0.001823			
M	Er	<	0.000911	M	Mo	<	0.000911	O	Sc	<	0.000279	M	Yb	<	0.000911			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 22.99 +1 (6) Na+(aq) largely ionic in nature

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Na Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Lithium carbonate fusion in graphite crucible followed by HCl dissolution - blank levels of Na in lithium carbonate critical); Organic Matrices (Sulfuric / peroxide digestion or nitric/sulfuric/perchloric acid decomposition).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 23 amu	310 ppt	n/a	46Ti+2 , 46Ca+2
ICP-OES 330.237 nm	2.0 / 0.09 µg/mL	1	Pd, Zn
ICP-OES 588.995 nm	0.03 / 0.006 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 589.595 nm	0.07 / 0.00009 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

Reagent

10000 Si_00013

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

[illegible]
Christiansburg, VA 24073 - USA
[illegible]

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSI10
Lot Number:	J2-SI03056
Matrix:	1% (v/v) HNO3 1.4% (v/v) HF
Value / Analyte(s):	10 000 µg/mL ea: Silicon
Starting Material:	Fumed Silica
Starting Material Lot#:	1771
Starting Material Purity:	99.9931%

3781817
ID: 10000 Si_00013
Exp: 06/26/18 Prpd: SJS
10000 Si IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 53 µg/mL

Certified Density: 1.046 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1	**9990 ± 60 µg/mL** ICP Assay NIST SRM 3150 Lot Number: 071204
Assay Method #2	**9994 ± 66 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

SRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000504	M	Eu	<	0.000252	O	Na		0.009659	M	Se	<	0.025180	O	Zn	<	0.022280
O	Al		0.067136	i	Fe	<		M	Nb	<	0.001007	s	Si	<		O	Zr	<	0.001114
O	As	<	0.222800	M	Ga	<	0.000252	M	Nd	<	0.002014	M	Sm	<	0.000252				
M	Au	<	0.000252	M	Gd	<	0.000252	O	Ni	<	0.005570	M	Sn	<	0.003777				
O	B		0.123710	O	Ge	<		n	Os	<		O	Sr	<	0.000334				
O	Ba		0.000719	M	Hf	<	0.001259	O	P	<	0.111400	M	Ta	<	0.005036				
O	Be	<	0.000045	i	Hg	<		M	Pb	<	0.000252	M	Tb	<	0.000252				
M	Bi	<	0.000252	M	Ho	<	0.000252	M	Pd	<	0.000252	M	Te	<	0.003777				
O	Ca		0.017416	M	In	<	0.000252	M	Pr	<	0.000252	M	Th	<	0.002518				
M	Cd	<	0.000252	M	Ir	<	0.000252	M	Pt	<	0.000252	O	Ti		0.002199				
M	Ce	<	0.001259	O	K		0.045202	M	Rb	<	0.050360	M	Tl	<	0.000252				
M	Co	<	0.000756	M	La	<	0.000252	M	Re	<	0.000252	M	Tm	<	0.000252				
M	Cr	<	0.003777	O	Li	<	0.000111	M	Rh	<	0.000252	M	U	<	0.000252				
M	Cs	<	0.002014	M	Lu	<	0.000252	M	Ru	<	0.000252	O	V	<	0.001114				
O	Cu	<	0.001114	O	Mg		0.001727	O	S		1.317984	M	W	<	0.000252				
M	Dy	<	0.000252	M	Mn	<	0.007554	M	Sb	<	0.000252	M	Y	<	0.000252				
M	Er	<	0.000252	M	Mo	<	0.001259	O	Sc	<	0.000111	M	Yb	<	0.000252				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 28.09 +4 6 Si(OH)x(F)y2-
Chemical Compatibility -Soluble in HCl, HF, H3PO4 H2SO4 and HNO3 as the Si(OH)x(F)y2-. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths, or high levels of transition elements unless they are fluorinated. Stable with most inorganic anions with a tendency to hydrolyze forming silicic acid (silicic acid is soluble up to ∼100 ppm in water) in all dilute acids except HF.
Stability - 2-100 ppb levels - stability unknown - (alone or mixed with all other metals) as the Si(OH)x(F)y2-. 1-10,000 ppm single element solutions as the Si(OH)x(F)y2- chemically stable for years in 2-5 % HNO3 / trace HF in a LDPE container.
Si Containing Samples (Preparation and Solution) -Metal (Soluble in 1:1:1 H2O / HF / HNO3); Oxide - SiO2, amorphic (dissolve by heating in 1:1:1 H2O / HF / HNO3); Oxide - quartz (fuse in Pt0 with Na2CO3); Geological Samples(fuse in Pt0with Na2CO3 followed by HCl solution of the fuseate); Organic Matrices containing silicates and non volatile silicon compounds (dry ash at 4500C in Pt0 and dissolve by gently warming with 1:1:1 H2O / HF / H2SO4 or fuse / ash with Na2CO3 and dissolve fuseate with HCl / H2O); Silicone Oils - dimethyl silicones depolymerize to form volatile monomer units when heated (Measure directly in alcoholic KOH / xylene mixture where sample is treated first with the KOH at 60-1000C to "unzip" the Si-O-Si polymeric structure or digest with conc. H2SO4 / H2O2 followed by cooling and dissolution of the dehydrated silica with HF.) Note that the direct analysis of silicone oils in an organic solvent will result in false high results due to high vapor pressure of volatile monomer units like hexamethylcyclotrisiloxane. The KOH forms the K2+Si(CH3)2O= salt which is not volatile at room temperature.
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 28 amu	4000 - 8000 ppt	N/A	N2, 12C16O
ICP-OES 212.412 nm	0.02/0.01 µg/mL	1	Hf, Os, Mo, Ta
ICP-OES 251.611 nm	0.012/0.003 µg/mL	1	Ta, U, Zn, Th
ICP-OES 288.158 nm	0.03/0.004 µg/mL	1	Ta, Ce, Cr, Cd, Th

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799, 540.585.3699, Fax: 540.585.3612; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 26, 2015

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 26, 2018

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Brenda Francis
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Reagent

570666_00052

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309
www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 570666 **Lot No.:** A0114832

Description: 8270 List 1 / Std #1 MegaMix (2016)

8270 List 1 / Std #1 MegaMix (2016) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size: 10 mL **Pkg Amt:** > 5 mL

Expiration Date: April 30, 2017 **Storage:** 10°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate.

CERTIFIED VALUES

Entry	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane CAS # 123-91-1 (Lot SHBG1461V) Purity 99%	1,000.9 µg/mL	+/- 5.8193 +/- 11.9648 +/- 19.0418	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Pyridine CAS # 110-86-1 (Lot SHBC7174V) Purity 99%	1,004.7 µg/mL	+/- 5.8416 +/- 12.0106 +/- 19.1148	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	N-Nitrosodimethylamine CAS # 62-75-9 (Lot 4370100) Purity 99%	1,002.6 µg/mL	+/- 5.8294 +/- 11.9855 +/- 19.0748	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	Aniline CAS # 62-53-3 (Lot K22Z462) Purity 99%	1,001.8 µg/mL	+/- 5.8246 +/- 11.9756 +/- 19.0590	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bis(2-chloroethyl)ether CAS # 111-44-4 (Lot SHBD4430V) Purity 99%	1,000.2 µg/mL	+/- 5.8152 +/- 11.9565 +/- 19.0285	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	2-Chlorophenol CAS # 95-57-8 (Lot STBF2690V) Purity 99%	1,000.6 µg/mL	+/- 5.8236 +/- 11.9736 +/- 19.0558	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Phenol CAS # 108-95-2 (Lot SHBF1351V) Purity 99%	1,000.6 µg/mL	+/- 5.8176 +/- 11.9612 +/- 19.0361	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Bis(2-chloroethoxy)methane **CAS #** 111-91-1 **Purity** 99%	(Lot 3299900)	1,000.2	µg/mL	+/- 5.8151 +/- 11.9561 +/- 19.0279	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	2,4-Dichlorophenol **CAS #** 120-83-2 **Purity** 99%	(Lot BCBH1617V)	1,002.2	µg/mL	+/- 5.8271 +/- 11.9808 +/- 19.0672	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 98%	(Lot SHBC5541V)	1,000.1	µg/mL	+/- 5.8144 +/- 11.9547 +/- 19.0258	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBH4351V)	1,000.4	µg/mL	+/- 5.8164 +/- 11.9588 +/- 19.0323	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	2,6-Dichlorophenol **CAS #** 87-65-0 **Purity** 99%	(Lot MKBN2776V)	1,001.1	µg/mL	+/- 5.8205 +/- 11.9672 +/- 19.0456	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	4-Chloroaniline **CAS #** 106-47-8 **Purity** 99%	(Lot 12528PH)	1,000.7	µg/mL	+/- 5.8182 +/- 11.9624 +/- 19.0380	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 98%	(Lot J31X013)	1,000.7	µg/mL	+/- 5.8182 +/- 11.9626 +/- 19.0382	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	2-Methylnaphthalene **CAS #** 91-57-6 **Purity** 99%	(Lot 19399MJV)	1,001.3	µg/mL	+/- 5.8216 +/- 11.9696 +/- 19.0494	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	4-Chloro-3-methylphenol **CAS #** 59-50-7 **Purity** 99%	(Lot STBC0769V)	1,000.2	µg/mL	+/- 5.8151 +/- 11.9561 +/- 19.0279	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	1-Methylnaphthalene **CAS #** 90-12-0 **Purity** 99%	(Lot 525000-10)	1,001.1	µg/mL	+/- 5.8203 +/- 11.9668 +/- 19.0450	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	1,2,4,5-Tetrachlorobenzene **CAS #** 95-94-3 **Purity** 99%	(Lot 06024AIV)	1,000.1	µg/mL	+/- 5.8145 +/- 11.9549 +/- 19.0260	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Hexachlorocyclopentadiene **CAS #** 77-47-4 **Purity** 97%	(Lot 150909)	999.7	µg/mL	+/- 5.8126 +/- 11.9510 +/- 19.0199	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	2,4,6-Trichlorophenol **CAS #** 88-06-2 **Purity** 99%	(Lot MKBH7393V)	1,001.4	µg/mL	+/- 5.8220 +/- 11.9704 +/- 19.0507	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	2,4,5-Trichlorophenol **CAS #** 95-95-4 **Purity** 99%	(Lot 150806JLM)	1,000.1	µg/mL	+/- 5.8145 +/- 11.9549 +/- 19.0260	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	2-Chloronaphthalene **CAS #** 91-58-7 **Purity** 99%	(Lot AJ2UI-TE)	1,000.9	µg/mL	+/- 5.8193 +/- 11.9648 +/- 19.0418	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Biphenyl **CAS #** 92-52-4 **Purity** 99%	(Lot 1277976)	1,000.6	µg/mL	+/- 5.8178 +/- 11.9616 +/- 19.0368	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Azobenzene **CAS #** 103-33-3 **Purity** 99%	(Lot MKBS2559V)	1,001.2	µg/mL	+/- 5.8213 +/- 11.9688 +/- 19.0482	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	Diphenylamine **CAS #** 122-39-4 **Purity** 99%	(Lot MKBN8295V)	850.7	µg/mL	+/- 4.9460 +/- 10.1693 +/- 16.1843	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Nitroaniline **CAS #** 88-74-4 **Purity** 99%	(Lot MKBK7597V)	1,000.2	µg/mL	+/- 5.8151 +/- 11.9561 +/- 19.0279	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol) **CAS #** 534-52-1 **Purity** 99%	(Lot LC12394V)	2,000.9	µg/mL	+/- 11.6336 +/- 23.9193 +/- 38.0672	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	4-Bromophenyl phenyl ether **CAS #** 101-55-3 **Purity** 98%	(Lot STBB9729V)	999.8	µg/mL	+/- 5.8131 +/- 11.9520 +/- 19.0215	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	Hexachlorobenzene **CAS #** 118-74-1 **Purity** 99%	(Lot LC10604V)	1,001.6	µg/mL	+/- 5.8234 +/- 11.9732 +/- 19.0551	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	Pentachlorophenol **CAS #** 87-86-5 **Purity** 98%	(Lot 150902JLM)	2,000.5	µg/mL	+/- 11.6311 +/- 23.9142 +/- 38.0591	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	Phenanthrene **CAS #** 85-01-8 **Purity** 99%	(Lot MKBT8628V)	1,001.9	µg/mL	+/- 5.8249 +/- 11.9764 +/- 19.0602	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	n-Octadecane (C18) **CAS #** 593-45-3 **Purity** 99%	(Lot 27SOF)	1,000.8	µg/mL	+/- 5.8187 +/- 11.9636 +/- 19.0399	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	Anthracene **CAS #** 120-12-7 **Purity** 99%	(Lot MKBK5208V)	1,001.4	µg/mL	+/- 5.8224 +/- 11.9712 +/- 19.0520	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	Carbazole **CAS #** 86-74-8 **Purity** 98%	(Lot 4017900)	1,000.4	µg/mL	+/- 5.8161 +/- 11.9583 +/- 19.0314	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	Di-n-butylphthalate **CAS #** 84-74-2 **Purity** 99%	(Lot MKBL8501V)	1,003.6	µg/mL	+/- 5.8348 +/- 11.9967 +/- 19.0926	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	Fluoranthene **CAS #** 206-44-0 **Purity** 98%	(Lot MKBQ6360V)	1,000.7	µg/mL	+/- 5.8184 +/- 11.9629 +/- 19.0389	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	Pyrene **CAS #** 129-00-0 **Purity** 99%	(Lot BCBL6786V)	1,000.2	µg/mL	+/- 5.8151 +/- 11.9561 +/- 19.0279	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Benzyl butyl phthalate **CAS #** 85-68-7 **Purity** 99%	(Lot 03027HV)	1,000.3	µg/mL	+/- 5.8158 +/- 11.9576 +/- 19.0304	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Benz(a)anthracene **CAS #** 56-55-3 **Purity** 99%	(Lot ER031412-01)	1,000.1	µg/mL	+/- 5.8147 +/- 11.9553 +/- 19.0266	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	n-Decane (C10) **CAS #** 124-18-5 **Purity** 99%	(Lot SHBG1119V)	1,001.4	µg/mL	+/- 5.8224 +/- 11.9712 +/- 19.0520	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBS1350V)	1,000.5	µg/mL	+/- 5.8170 +/- 11.9600 +/- 19.0342	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBM5751V)	1,000.1	µg/mL	+/- 5.8145 +/- 11.9549 +/- 19.0260	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot SHBD7331V)	1,000.6	µg/mL	+/- 5.8178 +/- 11.9616 +/- 19.0368	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Benzyl alcohol **CAS #** 100-51-6 **Purity** 99%	(Lot SHBC1850V)	1,000.5	µg/mL	+/- 5.8170 +/- 11.9600 +/- 19.0342	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	2,2'-oxybis(1-chloropropane) **CAS #** 108-60-1 **Purity** 99%	(Lot 2-KMW-57-8)	1,001.3	µg/mL	+/- 5.8215 +/- 11.9692 +/- 19.0488	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	2-Methylphenol (o-cresol) **CAS #** 95-48-7 **Purity** 99%	(Lot SHBC1479V)	1,001.2	µg/mL	+/- 5.8211 +/- 11.9684 +/- 19.0475	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Hexachloroethane **CAS #** 67-72-1 **Purity** 99%	(Lot 4H3SF)	1,001.7	µg/mL	+/- 5.8238 +/- 11.9740 +/- 19.0564	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Acetophenone **CAS #** 98-86-2 **Purity** 99%	(Lot MKBR7156V)	1,000.1	µg/mL	+/- 5.8149 +/- 11.9557 +/- 19.0272	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	N-Nitroso-di-n-propylamine **CAS #** 621-64-7 **Purity** 99%	(Lot OPAGF)	1,001.5	µg/mL	+/- 5.8226 +/- 11.9716 +/- 19.0526	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	4-Methylphenol (p-cresol) **CAS #** 106-44-5 **Purity** 99%	(Lot 49396APV)	500.4	µg/mL	+/- 2.9096 +/- 5.9822 +/- 9.5206	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	3-Methylphenol (m-cresol) **CAS #** 108-39-4 **Purity** 99%	(Lot SHBD0627V)	501.7	µg/mL	+/- 2.9167 +/- 5.9970 +/- 9.5441	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot SHBF2348V)	1,002.1	µg/mL	+/- 5.8265 +/- 11.9796 +/- 19.0653	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	Isophorone **CAS #** 78-59-1 **Purity** 99%	(Lot MKBG2442V)	1,002.2	µg/mL	+/- 5.8271 +/- 11.9808 +/- 19.0672	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	2-Nitrophenol **CAS #** 88-75-5 **Purity** 99%	(Lot BCBH7602V)	1,000.1	µg/mL	+/- 5.8149 +/- 11.9557 +/- 19.0272	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	2,4-Dimethylphenol **CAS #** 105-67-9 **Purity** 99%	(Lot 10165155)	1,000.3	µg/mL	+/- 5.8160 +/- 11.9580 +/- 19.0311	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	4-Nitroaniline		1,000.5	µg/mL	+/-	5.8172	µg/mL	Gravimetric
	CAS # 100-01-6	(Lot BCBG4702V)			+/-	11.9604	µg/mL	Unstressed
	Purity 99%				+/-	19.0349	µg/mL	Stressed
41	Acenaphthylene		999.8	µg/mL	+/-	5.8127	µg/mL	Gravimetric
	CAS # 208-96-8	(Lot W01O)			+/-	11.9512	µg/mL	Unstressed
	Purity 98%				+/-	19.0202	µg/mL	Stressed
42	1,3-Dinitrobenzene		1,000.5	µg/mL	+/-	5.8168	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBB1436V)			+/-	11.9596	µg/mL	Unstressed
	Purity 99%				+/-	19.0336	µg/mL	Stressed
43	Dimethylphthalate		1,001.5	µg/mL	+/-	5.8228	µg/mL	Gravimetric
	CAS # 131-11-3	(Lot 10117699)			+/-	11.9720	µg/mL	Unstressed
	Purity 99%				+/-	19.0532	µg/mL	Stressed
44	2,6-Dinitrotoluene		1,000.2	µg/mL	+/-	5.8152	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot 1437483V)			+/-	11.9565	µg/mL	Unstressed
	Purity 99%				+/-	19.0285	µg/mL	Stressed
45	Acenaphthene		1,001.8	µg/mL	+/-	5.8246	µg/mL	Gravimetric
	CAS # 83-32-9	(Lot MKBP0384V)			+/-	11.9756	µg/mL	Unstressed
	Purity 99%				+/-	19.0590	µg/mL	Stressed
46	2,4-Dinitrophenol		1,999.8	µg/mL	+/-	11.6272	µg/mL	Gravimetric
	CAS # 51-28-5	(Lot STBF1268V)			+/-	23.9061	µg/mL	Unstressed
	Purity 99%				+/-	38.0462	µg/mL	Stressed
47	Dibenzofuran		1,000.7	µg/mL	+/-	5.8180	µg/mL	Gravimetric
	CAS # 132-64-9	(Lot MKBH8392V)			+/-	11.9620	µg/mL	Unstressed
	Purity 99%				+/-	19.0374	µg/mL	Stressed
48	3-Nitroaniline		1,000.8	µg/mL	+/-	5.8185	µg/mL	Gravimetric
	CAS # 99-09-2	(Lot MKBQ6338V)			+/-	11.9632	µg/mL	Unstressed
	Purity 99%				+/-	19.0393	µg/mL	Stressed
49	2,4-Dinitrotoluene		1,001.5	µg/mL	+/-	5.8230	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)			+/-	11.9724	µg/mL	Unstressed
	Purity 99%				+/-	19.0539	µg/mL	Stressed
50	4-Nitrophenol		2,000.3	µg/mL	+/-	11.6297	µg/mL	Gravimetric
	CAS # 100-02-7	(Lot MKBP6945V)			+/-	23.9113	µg/mL	Unstressed
	Purity 99%				+/-	38.0545	µg/mL	Stressed
51	2,3,4,6-Tetrachlorophenol		1,000.0	µg/mL	+/-	5.8141	µg/mL	Gravimetric
	CAS # 58-90-2	(Lot B15W0912)			+/-	11.9541	µg/mL	Unstressed
	Purity 99%				+/-	19.0247	µg/mL	Stressed
52	Fluorene		1,000.4	µg/mL	+/-	5.8163	µg/mL	Gravimetric
	CAS # 86-73-7	(Lot 10174662)			+/-	11.9587	µg/mL	Unstressed
	Purity 98%				+/-	19.0320	µg/mL	Stressed
53	4-Chlorophenyl phenyl ether		1,001.0	µg/mL	+/-	5.8201	µg/mL	Gravimetric
	CAS # 7005-72-3	(Lot MKBS2248V)			+/-	11.9664	µg/mL	Unstressed
	Purity 99%				+/-	19.0444	µg/mL	Stressed
54	n-Hexadecane (C16)		1,000.7	µg/mL	+/-	5.8180	µg/mL	Gravimetric
	CAS # 544-76-3	(Lot SHBF6942V)			+/-	11.9620	µg/mL	Unstressed
	Purity 99%				+/-	19.0374	µg/mL	Stressed
55	Diethylphthalate		1,000.9	µg/mL	+/-	5.8193	µg/mL	Gravimetric
	CAS # 84-66-2	(Lot MKBJ3578V)			+/-	11.9648	µg/mL	Unstressed
	Purity 99%				+/-	19.0418	µg/mL	Stressed

72	Chrysene		1,000.0 µg/mL	+/- 5.8143	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot PR121912-01)		+/- 11.9545	µg/mL	Unstressed
	Purity 99%			+/- 19.0253	µg/mL	Stressed
73	Bis(2-ethylhexyl)phthalate		1,000.4 µg/mL	+/- 5.8164	µg/mL	Gravimetric
	CAS # 117-81-7	(Lot MKBK2695V)		+/- 11.9588	µg/mL	Unstressed
	Purity 99%			+/- 19.0323	µg/mL	Stressed
74	Di-n-octyl phthalate		1,004.1 µg/mL	+/- 5.8379	µg/mL	Gravimetric
	CAS # 117-84-0	(Lot 3998900)		+/- 12.0031	µg/mL	Unstressed
	Purity 99%			+/- 19.1027	µg/mL	Stressed
75	Benzo(b)fluoranthene		1,002.0 µg/mL	+/- 5.8257	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot ER03101401)		+/- 11.9780	µg/mL	Unstressed
	Purity 99%			+/- 19.0628	µg/mL	Stressed
76	Benzo(k)fluoranthene		1,000.1 µg/mL	+/- 5.8149	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot 012012K)		+/- 11.9557	µg/mL	Unstressed
	Purity 99%			+/- 19.0272	µg/mL	Stressed
77	Benzo(a)pyrene		1,000.3 µg/mL	+/- 5.8160	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot ER071309-02)		+/- 11.9580	µg/mL	Unstressed
	Purity 99%			+/- 19.0311	µg/mL	Stressed
78	Indeno(1,2,3-cd)pyrene		1,000.8 µg/mL	+/- 5.8189	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot ER082107-02)		+/- 11.9640	µg/mL	Unstressed
	Purity 99%			+/- 19.0406	µg/mL	Stressed
79	Dibenz(a,h)anthracene		1,001.9 µg/mL	+/- 5.8251	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)		+/- 11.9768	µg/mL	Unstressed
	Purity 99%			+/- 19.0609	µg/mL	Stressed
80	Benzo(g,h,i)perylene		1,000.8 µg/mL	+/- 5.8185	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot ER05121401)		+/- 11.9632	µg/mL	Unstressed
	Purity 99%			+/- 19.0393	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Specific Reference Material Notes:
N-nitrosodiphenylamine 1000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 855 ug/mL.
N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine.
N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.

Reagent

8081 ToxStock_00014

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: P-093S-H-10X
Description: Toxaphene

Lot: 212011251
Solvent: Hexane

8-28

Date Certified: Jan 19, 2012
Expiration: Jan 19, 2022
Sample Size: 1 mL
Storage Condition: Ambient
Hazards: HIGHLY FLAMMABLE

[X] Included on ISO/IEC 17025 Scope of Accreditation
[X] Included on ISO Guide 34 Scope of Accreditation

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
Toxaphene	8001-35-2	Tech Mix	1000	1000

AccuStandard follows U.S. conventions in reporting numerical values on both certificates and labels:

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

1. All weights are traceable through NIST, Test No.822-275872-11
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.
3. A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot# has had its expiration date extended and is identical to the same lot# without the suffix.

For use in routine laboratory analysis.

See reverse side for additional information
Refer to the MSDS for additional safety information

Certified by: R. Cooper
Russ Cooper, QC Manager

Reagent

8081/82 Surr_00093

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

8081/82 Surr_00093

Reagent ID: 8081/82 Surr_00093

Description:	0.2ug/mL 8081/82 Surrogate	Expiration Date:	10/19/2017
No. of Bottles:	4	Laboratory:	TestAmerica Denver
Storage Location:	North Prep	Prepared By:	Anderson, Brittney J
Reagent Volume:	1000.000 mL	Solvent:	ACETONE
Creation Date:	04/17/2017	Solvent Lot:	Acetone_00176
Open Date:			
Container(s):	4474806, 4474807, 4474808, 4474809		
Comment:	Take 1 mL of AR_SURR_RES (Restek Cat# 32000) or 8081 SurStock and dilute to 1000 mL in Acetone. Expires after 6 months.		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
DCB Decachlorobiphenyl	AR_SURR_RES_00060	06/30/2022	200.00000	ug/mL	0.20000	ug/mL
Tetrachloro-m-xylene	AR_SURR_RES_00060	06/30/2022	200.00000	ug/mL	0.20000	ug/mL

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot#	Volume Used	Volume Units
AR_SURR_RES_00060	Pesticide Surrogate Mix 200ppm	ASTD	06/30/22	RESTEK	A0118280	32000	1.00000	mL

4/19/17

Preliminary Report

TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\SGC_P2\20170419-57707.b\04190014.D
Lims ID: 8081/82 Surr_00093
Client ID:
Sample Type: Client
Inject. Date: 19-Apr-2017 14:28:15 ALS Bottle#: 8 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 8081/82 Surr_000
Misc. Info.: 280-0057707-014
Operator ID: DAW Instrument ID: SGC_P2

Method: \\ChromNA\Denver\ChromData\SGC_P2\20170419-57707.b\P2 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 19-Apr-2017 14:53:24 Calib Date: 15-Apr-2017 22:42:47
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P2\20170415-57591.b\04150033.D

Column 1 : CLP1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	50.0	48.1	96.24
$ 41 DCB Decachlorobiphenyl	50.0	47.2	94.35

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	50.0	46.4	92.78
$ 41 DCB Decachlorobiphenyl	50.0	46.1	92.22

Reagent

8081ABResPS_00016

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32415 **Lot No.:** A0108399

Description : Organochlorine Pesticide Mix AB #3

Organochlorine Pesticide Mix AB #3 2,000 µg/mL, Hexane/Toluene (50:50), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2019 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	alpha-BHC **CAS #** 319-84-6 (Lot 0911942) **Purity** 99%	2,000.0 µg/mL	+/- 11.7371 µg/mL +/- 78.2355 µg/mL +/- 124.1521 µg/mL	Gravimetric Unstressed Stressed
2	gamma-BHC (Lindane) **CAS #** 58-89-9 (Lot 2951000) **Purity** 99%	2,000.5 µg/mL	+/- 11.7401 µg/mL +/- 78.2551 µg/mL +/- 124.1832 µg/mL	Gravimetric Unstressed Stressed
3	beta-BHC **CAS #** 319-85-7 (Lot SZBD116XV) **Purity** 98%	2,001.2 µg/mL	+/- 11.7439 µg/mL +/- 78.2809 µg/mL +/- 124.2241 µg/mL	Gravimetric Unstressed Stressed
4	delta-BHC **CAS #** 319-86-8 (Lot ER02101401) **Purity** 98%	2,000.7 µg/mL	+/- 11.7411 µg/mL +/- 78.2617 µg/mL +/- 124.1937 µg/mL	Gravimetric Unstressed Stressed
5	Heptachlor **CAS #** 76-44-8 (Lot RM03111) **Purity** 98%	2,001.2 µg/mL	+/- 11.7439 µg/mL +/- 78.2809 µg/mL +/- 124.2241 µg/mL	Gravimetric Unstressed Stressed
6	Aldrin **CAS #** 309-00-2 (Lot 3094500) **Purity** 99%	2,001.5 µg/mL	+/- 11.7459 µg/mL +/- 78.2942 µg/mL +/- 124.2453 µg/mL	Gravimetric Unstressed Stressed
7	Heptachlor epoxide (isomer B) **CAS #** 1024-57-3 (Lot ER121511-01) **Purity** 99%	2,000.0 µg/mL	+/- 11.7371 µg/mL +/- 78.2355 µg/mL +/- 124.1521 µg/mL	Gravimetric Unstressed Stressed

8	trans-Chlordane		2,000.5	µg/mL	+/- 111.7401	µg/mL	Gravimetric
	CAS # 5103-74-2	(Lot ER061906-04)			+/- 78.2551	µg/mL	Unstressed
	Purity 99%				+/- 124.1832	µg/mL	Stressed
9	cis-Chlordane		2,000.0	µg/mL	+/- 111.7371	µg/mL	Gravimetric
	CAS # 5103-71-9	(Lot ER062410-01)			+/- 78.2355	µg/mL	Unstressed
	Purity 99%				+/- 124.1521	µg/mL	Stressed
10	Endosulfan I		2,000.7	µg/mL	+/- 111.7411	µg/mL	Gravimetric
	CAS # 959-98-8	(Lot ER012105-02)			+/- 78.2617	µg/mL	Unstressed
	Purity 98%				+/- 124.1937	µg/mL	Stressed
11	4,4'-DDE		2,000.5	µg/mL	+/- 111.7401	µg/mL	Gravimetric
	CAS # 72-55-9	(Lot ER011106-01)			+/- 78.2551	µg/mL	Unstressed
	Purity 99%				+/- 124.1832	µg/mL	Stressed
12	Dieldrin		2,000.7	µg/mL	+/- 111.7411	µg/mL	Gravimetric
	CAS # 60-57-1	(Lot ER030105-03)			+/- 78.2617	µg/mL	Unstressed
	Purity 98%				+/- 124.1937	µg/mL	Stressed
13	Endrin		2,001.0	µg/mL	+/- 111.7430	µg/mL	Gravimetric
	CAS # 72-20-8	(Lot LC06045V)			+/- 78.2746	µg/mL	Unstressed
	Purity 99%				+/- 124.2142	µg/mL	Stressed
14	4,4'-DDD		2,000.1	µg/mL	+/- 111.7379	µg/mL	Gravimetric
	CAS # 72-54-8	(Lot ER061207-01)			+/- 78.2410	µg/mL	Unstressed
	Purity 97%				+/- 124.1608	µg/mL	Stressed
15	Endosulfan II		2,000.5	µg/mL	+/- 111.7401	µg/mL	Gravimetric
	CAS # 33213-65-9	(Lot ER102407-02)			+/- 78.2551	µg/mL	Unstressed
	Purity 99%				+/- 124.1832	µg/mL	Stressed
16	4,4'-DDT		2,000.5	µg/mL	+/- 111.7401	µg/mL	Gravimetric
	CAS # 50-29-3	(Lot S37912V)			+/- 78.2551	µg/mL	Unstressed
	Purity 99%				+/- 124.1832	µg/mL	Stressed
17	Endrin aldehyde		2,000.1	µg/mL	+/- 111.7376	µg/mL	Gravimetric
	CAS # 7421-93-4	(Lot ER082306-01)			+/- 78.2387	µg/mL	Unstressed
	Purity 98%				+/- 124.1572	µg/mL	Stressed
18	Endosulfan sulfate		2,000.5	µg/mL	+/- 111.7401	µg/mL	Gravimetric
	CAS # 1031-07-8	(Lot 30918)			+/- 78.2551	µg/mL	Unstressed
	Purity 99%				+/- 124.1832	µg/mL	Stressed
19	Methoxychlor		2,000.0	µg/mL	+/- 111.7371	µg/mL	Gravimetric
	CAS # 72-43-5	(Lot 3296700)			+/- 78.2355	µg/mL	Unstressed
	Purity 99%				+/- 124.1521	µg/mL	Stressed
20	Endrin ketone		2,000.5	µg/mL	+/- 111.7401	µg/mL	Gravimetric
	CAS # 53494-70-5	(Lot 3169200)			+/- 78.2551	µg/mL	Unstressed
	Purity 99%				+/- 124.1832	µg/mL	Stressed
Solvent:	Hexane/Toluene (50:50)						
	CAS # 110-54-3/108-88-3						
	Purity 99%						

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

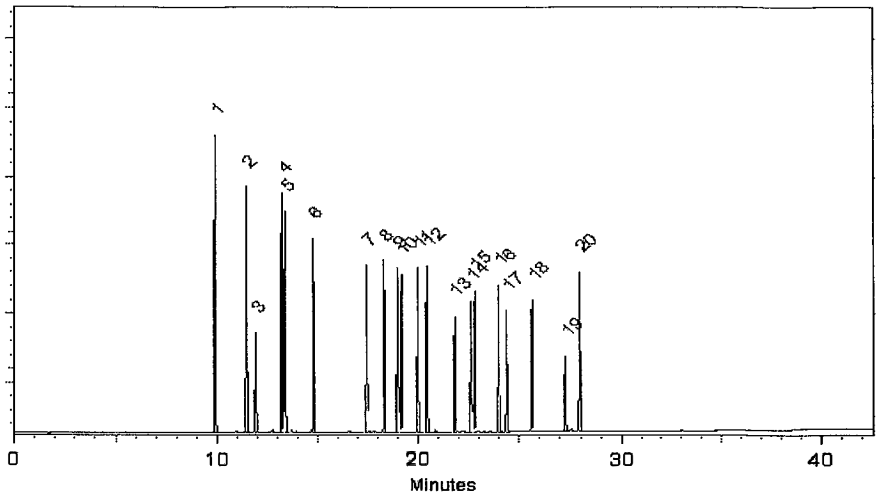
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Connor Flannery - Mix Technician

Date Mixed: 19-Jan-2015 **Balance:** 1128360905

Jennifer L. Pollino - QC Analyst

Date Passed: 21-Jan-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, IR, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8081ABResPS_00020

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309
www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY. READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 32415 **Lot No.:** A0114872

Description: Organochlorine Pesticide Mix A/B #3

Organochlorine Pesticide Mix A/B #3 2,000 µg/mL, Hexane/Toluene (50:50), 1 mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: October 31, 2019 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Position	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	alpha-BHC CAS # 319-84-6 Purity 99% (Lot 0911942)	2,001.5 µg/mL	+/- 11.7459 µg/mL +/- 91.1668 µg/mL +/- 131.6325 µg/mL		Gravimetric Unstressed Stressed
2	gamma-BHC (Lindane) CAS # 58-89-9 Purity 99% (Lot 3895100)	2,002.5 µg/mL	+/- 11.7518 µg/mL +/- 91.2123 µg/mL +/- 131.6982 µg/mL		Gravimetric Unstressed Stressed
3	beta-BHC CAS # 319-85-7 Purity 98% (Lot SZBD116XV)	2,011.0 µg/mL	+/- 11.8014 µg/mL +/- 91.5977 µg/mL +/- 132.2546 µg/mL		Gravimetric Unstressed Stressed
4	delta-BHC CAS # 319-86-8 Purity 98% (Lot ER021014001)	2,011.9 µg/mL	+/- 11.8072 µg/mL +/- 91.6423 µg/mL +/- 132.3191 µg/mL		Gravimetric Unstressed Stressed
5	Heptachlor CAS # 76-44-8 Purity 99% (Lot NT0512444)	2,007.5 µg/mL	+/- 11.7811 µg/mL +/- 91.4401 µg/mL +/- 132.0271 µg/mL		Gravimetric Unstressed Stressed
6	Aldrin CAS # 309-00-2 Purity 99% (Lot 42401100)	2,006.5 µg/mL	+/- 11.7753 µg/mL +/- 91.3945 µg/mL +/- 131.9613 µg/mL		Gravimetric Unstressed Stressed
7	Heptachlor epoxide (isomer B) CAS # 1024-57-3 Purity 99% (Lot ER121511101)	2,006.5 µg/mL	+/- 11.7694 µg/mL +/- 91.3490 µg/mL +/- 131.8955 µg/mL		Gravimetric Unstressed Stressed

8	trans-Chlordane		2,011.5	µg/mL	+/-	11.8046	µg/mL	Gravimetric
	CAS # 5103-74-2	(Lot ER061906-04)			+/-	91.6223	µg/mL	Unstressed
	Purity 99%				+/-	132.2901	µg/mL	Stressed
9	cis-Chlordane		2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS # 5103-71-9	(Lot ER062410-01)			+/-	91.5539	µg/mL	Unstressed
	Purity 99%				+/-	132.1915	µg/mL	Stressed
10	Endosulfan I		2,012.4	µg/mL	+/-	11.8101	µg/mL	Gravimetric
	CAS # 959-98-8	(Lot ER012105-02)			+/-	91.6646	µg/mL	Unstressed
	Purity 98%				+/-	132.3513	µg/mL	Stressed
11	4,4'-DDE		2,004.5	µg/mL	+/-	11.7635	µg/mL	Gravimetric
	CAS # 72-55-9	(Lot ER011106-01)			+/-	91.3034	µg/mL	Unstressed
	Purity 99%				+/-	131.8298	µg/mL	Stressed
12	Dieldrin		2,002.6	µg/mL	+/-	11.7526	µg/mL	Gravimetric
	CAS # 60-57-1	(Lot ER030105-03)			+/-	91.2182	µg/mL	Unstressed
	Purity 98%				+/-	131.7068	µg/mL	Stressed
13	Endrin		2,012.0	µg/mL	+/-	11.8075	µg/mL	Gravimetric
	CAS # 72-20-8	(Lot LC06045V)			+/-	91.6450	µg/mL	Unstressed
	Purity 99%				+/-	132.3230	µg/mL	Stressed
14	4,4'-DDD		2,003.1	µg/mL	+/-	11.7550	µg/mL	Gravimetric
	CAS # 72-54-8	(Lot ER061207-01)			+/-	91.2374	µg/mL	Unstressed
	Purity 97%				+/-	131.7344	µg/mL	Stressed
15	Endosulfan II		2,005.5	µg/mL	+/-	11.7694	µg/mL	Gravimetric
	CAS # 33213-65-9	(Lot ER102407-02)			+/-	91.3490	µg/mL	Unstressed
	Purity 99%				+/-	131.8955	µg/mL	Stressed
16	4,4'-DDT		2,003.5	µg/mL	+/-	11.7577	µg/mL	Gravimetric
	CAS # 50-29-3	(Lot S37912V)			+/-	91.2579	µg/mL	Unstressed
	Purity 99%				+/-	131.7640	µg/mL	Stressed
17	Endrin aldehyde		2,008.5	µg/mL	+/-	11.7871	µg/mL	Gravimetric
	CAS # 7421-93-4	(Lot ER082306-01)			+/-	91.4861	µg/mL	Unstressed
	Purity 98%				+/-	132.0935	µg/mL	Stressed
18	Methoxychlor		2,002.5	µg/mL	+/-	11.7518	µg/mL	Gravimetric
	CAS # 72-43-5	(Lot 3296700)			+/-	91.2123	µg/mL	Unstressed
	Purity 99%				+/-	131.6982	µg/mL	Stressed
19	Endosulfan sulfate		2,005.0	µg/mL	+/-	11.7662	µg/mL	Gravimetric
	CAS # 1031-07-8	(Lot SZBC213XV)			+/-	91.3244	µg/mL	Unstressed
	Purity 96%				+/-	131.8600	µg/mL	Stressed
20	Endrin ketone		2,001.0	µg/mL	+/-	11.7430	µg/mL	Gravimetric
	CAS # 53494-70-5	(Lot 4405100)			+/-	91.1440	µg/mL	Unstressed
	Purity 99%				+/-	131.5996	µg/mL	Stressed

Solvent: Hexane/Toluene (50:50)
CAS # 110-54-3/108-88-3
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

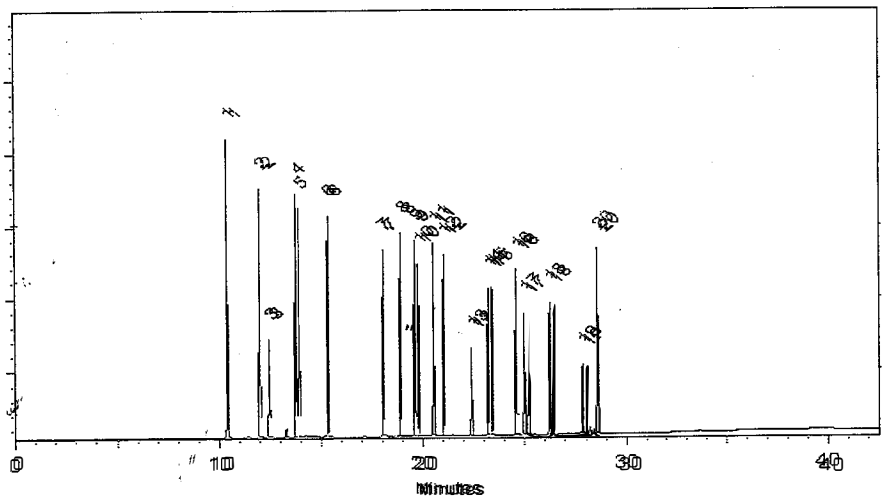
Carrier Gas:
helium constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Connor Flannery - Mix Technician

Date Mixed: 21-Oct-2015 **Balance:** B442140311

Jennifer L. Polling - QC Analyst

Date Passed: 23-Oct-2015

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8081ABResPS_00022

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309
www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY. READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 32415 **Lot No.:** A0114872

Description: Organochlorine Pesticide Mix AB #3

Organochlorine Pesticide Mix AB #3 2,000 µg/mL, Hexane/Toluene (50:50), 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: October 31, 2019 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Position Number	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	alpha-BHC CAS # 319-84-6 Purity 99% (Lot 0911942)	2,001.5 µg/mL	+/- 11.7459 µg/mL +/- 91.1668 µg/mL +/- 131.6325 µg/mL		Gravimetric Unstressed Stressed
2	gamma-BHC (Lindane) CAS # 58-89-9 Purity 99% (Lot 3895100)	2,002.5 µg/mL	+/- 11.7518 µg/mL +/- 91.2123 µg/mL +/- 131.6982 µg/mL		Gravimetric Unstressed Stressed
3	beta-BHC CAS # 319-85-7 Purity 98% (Lot SZBD116XV)	2,011.0 µg/mL	+/- 11.8014 µg/mL +/- 91.5977 µg/mL +/- 132.2546 µg/mL		Gravimetric Unstressed Stressed
4	delta-BHC CAS # 319-86-8 Purity 98% (Lot ER0210014001)	2,011.9 µg/mL	+/- 11.8072 µg/mL +/- 91.6423 µg/mL +/- 132.3191 µg/mL		Gravimetric Unstressed Stressed
5	Heptachlor CAS # 76-44-8 Purity 99% (Lot NT0512244)	2,007.5 µg/mL	+/- 11.7811 µg/mL +/- 91.4401 µg/mL +/- 132.0271 µg/mL		Gravimetric Unstressed Stressed
6	Aldrin CAS # 309-00-2 Purity 99% (Lot 42401100)	2,006.5 µg/mL	+/- 11.7753 µg/mL +/- 91.3945 µg/mL +/- 131.9613 µg/mL		Gravimetric Unstressed Stressed
7	Heptachlor epoxide (isomer B) CAS # 1024-57-3 Purity 99% (Lot ER1215111001)	2,006.55 µg/mL	+/- 11.7694 µg/mL +/- 91.3490 µg/mL +/- 131.8955 µg/mL		Gravimetric Unstressed Stressed

8	trans-Chlordane		2,011.5	µg/mL	+/-	11.8046	µg/mL	Gravimetric
	CAS # 5103-74-2	(Lot ER061906-04)			+/-	91.6223	µg/mL	Unstressed
	Purity 99%				+/-	132.2901	µg/mL	Stressed
9	cis-Chlordane		2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS # 5103-71-9	(Lot ER062410-01)			+/-	91.5539	µg/mL	Unstressed
	Purity 99%				+/-	132.1915	µg/mL	Stressed
10	Endosulfan I		2,012.4	µg/mL	+/-	11.8101	µg/mL	Gravimetric
	CAS # 959-98-8	(Lot ER012105-02)			+/-	91.6646	µg/mL	Unstressed
	Purity 98%				+/-	132.3513	µg/mL	Stressed
11	4,4'-DDE		2,004.5	µg/mL	+/-	11.7635	µg/mL	Gravimetric
	CAS # 72-55-9	(Lot ER011106-01)			+/-	91.3034	µg/mL	Unstressed
	Purity 99%				+/-	131.8298	µg/mL	Stressed
12	Dieldrin		2,002.6	µg/mL	+/-	11.7526	µg/mL	Gravimetric
	CAS # 60-57-1	(Lot ER030105-03)			+/-	91.2182	µg/mL	Unstressed
	Purity 98%				+/-	131.7068	µg/mL	Stressed
13	Endrin		2,012.0	µg/mL	+/-	11.8075	µg/mL	Gravimetric
	CAS # 72-20-8	(Lot LC06045V)			+/-	91.6450	µg/mL	Unstressed
	Purity 99%				+/-	132.3230	µg/mL	Stressed
14	4,4'-DDD		2,003.1	µg/mL	+/-	11.7550	µg/mL	Gravimetric
	CAS # 72-54-8	(Lot ER061207-01)			+/-	91.2374	µg/mL	Unstressed
	Purity 97%				+/-	131.7344	µg/mL	Stressed
15	Endosulfan II		2,005.5	µg/mL	+/-	11.7694	µg/mL	Gravimetric
	CAS # 33213-65-9	(Lot ER102407-02)			+/-	91.3490	µg/mL	Unstressed
	Purity 99%				+/-	131.8955	µg/mL	Stressed
16	4,4'-DDT		2,003.5	µg/mL	+/-	11.7577	µg/mL	Gravimetric
	CAS # 50-29-3	(Lot S37912V)			+/-	91.2579	µg/mL	Unstressed
	Purity 99%				+/-	131.7640	µg/mL	Stressed
17	Endrin aldehyde		2,008.5	µg/mL	+/-	11.7871	µg/mL	Gravimetric
	CAS # 7421-93-4	(Lot ER082306-01)			+/-	91.4861	µg/mL	Unstressed
	Purity 98%				+/-	132.0935	µg/mL	Stressed
18	Methoxychlor		2,002.5	µg/mL	+/-	11.7518	µg/mL	Gravimetric
	CAS # 72-43-5	(Lot 3296700)			+/-	91.2123	µg/mL	Unstressed
	Purity 99%				+/-	131.6982	µg/mL	Stressed
19	Endosulfan sulfate		2,005.0	µg/mL	+/-	11.7662	µg/mL	Gravimetric
	CAS # 1031-07-8	(Lot SZBC213XV)			+/-	91.3244	µg/mL	Unstressed
	Purity 96%				+/-	131.8600	µg/mL	Stressed
20	Endrin ketone		2,001.0	µg/mL	+/-	11.7430	µg/mL	Gravimetric
	CAS # 53494-70-5	(Lot 4405100)			+/-	91.1440	µg/mL	Unstressed
	Purity 99%				+/-	131.5996	µg/mL	Stressed

Solvent: Hexane/Toluene (50:50)
CAS # 110-54-3/108-88-3
Purity 99%

Column:
30m x 25mm x 2um
Rtx-CLPesticides II (cat.# 11923)

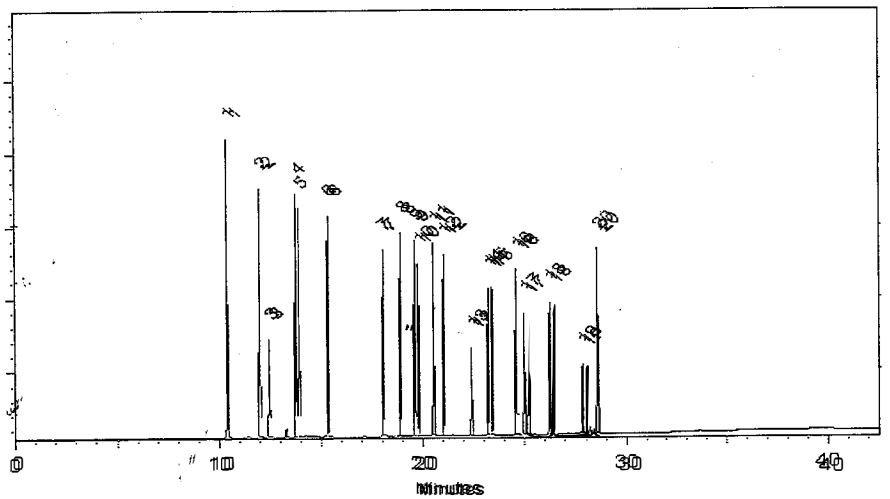
Carrier Gas:
helium constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Connor Flannery - Mix Technician

Date Mixed: 21-Oct-2015 **Balance:** B442140311

Jennifer L. Polling - QC Analyst

Date Passed: 23-Oct-2015

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8081ABResSS_00010

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited Reference Material Producer Certificate #3332.01

ACCREDITED
ISO/IEC 17025 Accredited Testing Laboratory Certificate #3332.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32415.sec **Lot No.:** A0108854

Description : Organochlorine Pesticide Mix AB #3

Organochlorine Pesticide Mix AB #3 2,000 µg/mL, Hexane/Toluene (50:50), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2019 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	alpha-BHC		2,009.5 µg/mL	+/-	11.7929	µg/mL	Gravimetric
	CAS # 319-84-6.SEC	(Lot 1623900)		+/-	78.6071	µg/mL	Unstressed
	Purity 99%			+/-	124.7419	µg/mL	Stressed
2	gamma-BHC (Lindane)		2,010.0 µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS # 58-89-9.SEC	(Lot LC00563V)		+/-	78.6267	µg/mL	Unstressed
	Purity 99%			+/-	124.7729	µg/mL	Stressed
3	beta-BHC		2,003.1 µg/mL	+/-	11.7554	µg/mL	Gravimetric
	CAS # 319-85-7.SEC	(Lot 1808700)		+/-	78.3575	µg/mL	Unstressed
	Purity 98%			+/-	124.3458	µg/mL	Stressed
4	delta-BHC		2,003.5 µg/mL	+/-	11.7577	µg/mL	Gravimetric
	CAS # 319-86-8.SEC	(Lot 1912200)		+/-	78.3724	µg/mL	Unstressed
	Purity 99%			+/-	124.3694	µg/mL	Stressed
5	Heptachlor		2,000.5 µg/mL	+/-	11.7401	µg/mL	Gravimetric
	CAS # 76-44-8.SEC	(Lot 1745400)		+/-	78.2551	µg/mL	Unstressed
	Purity 99%			+/-	124.1832	µg/mL	Stressed
6	Aldrin		2,004.1 µg/mL	+/-	11.7612	µg/mL	Gravimetric
	CAS # 309-00-2.SEC	(Lot ER062311-01)		+/-	78.3959	µg/mL	Unstressed
	Purity 98%			+/-	124.4067	µg/mL	Stressed
7	Heptachlor epoxide (isomer B)		2,006.0 µg/mL	+/-	11.77723	µg/mL	Gravimetric
	CAS # 1024-57-3.SEC	(Lot 33525000)		+/-	78.47702	µg/mL	Unstressed
	Purity 99%			+/-	124.52446	µg/mL	Stressed

8	trans-Chlordane			2,006.0	µg/mL	+/-	11.7723	µg/mL	Gravimetric
	CAS #	5103-74-2.SEC	(Lot LC06193V)			+/-	78.4702	µg/mL	Unstressed
	Purity	99%				+/-	124.5246	µg/mL	Stressed
9	cis-Chlordane			2,009.0	µg/mL	+/-	11.7899	µg/mL	Gravimetric
	CAS #	5103-71-9.SEC	(Lot 24407)			+/-	78.5876	µg/mL	Unstressed
	Purity	99%				+/-	124.7108	µg/mL	Stressed
10	4,4'-DDE			2,001.5	µg/mL	+/-	11.7459	µg/mL	Gravimetric
	CAS #	72-55-9.SEC	(Lot 1833500)			+/-	78.2942	µg/mL	Unstressed
	Purity	99%				+/-	124.2453	µg/mL	Stressed
11	Endosulfan I			2,002.1	µg/mL	+/-	11.7497	µg/mL	Gravimetric
	CAS #	959-98-8.SEC	(Lot 1710200)			+/-	78.3192	µg/mL	Unstressed
	Purity	98%				+/-	124.2850	µg/mL	Stressed
12	Dieldrin			1,995.3	µg/mL	+/-	11.7094	µg/mL	Gravimetric
	CAS #	60-57-1.SEC	(Lot 1274700)			+/-	78.0509	µg/mL	Unstressed
	Purity	98%				+/-	123.8591	µg/mL	Stressed
13	Endrin			2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS #	72-20-8 *	(Lot LC06045V)			+/-	78.2355	µg/mL	Unstressed
	Purity	99%				+/-	124.1521	µg/mL	Stressed
14	4,4'-DDD			2,009.0	µg/mL	+/-	11.7899	µg/mL	Gravimetric
	CAS #	72-54-8.SEC	(Lot 1141700)			+/-	78.5876	µg/mL	Unstressed
	Purity	98%				+/-	124.7108	µg/mL	Stressed
15	Endosulfan II			2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS #	33213-65-9.SEC	(Lot 3437500)			+/-	78.6267	µg/mL	Unstressed
	Purity	99%				+/-	124.7729	µg/mL	Stressed
16	4,4'-DDT			2,016.5	µg/mL	+/-	11.8340	µg/mL	Gravimetric
	CAS #	50-29-3.SEC	(Lot 3478000)			+/-	78.8809	µg/mL	Unstressed
	Purity	99%				+/-	125.1764	µg/mL	Stressed
17	Endrin aldehyde			2,016.4	µg/mL	+/-	11.8331	µg/mL	Gravimetric
	CAS #	7421-93-4.SEC	(Lot 21752)			+/-	78.8751	µg/mL	Unstressed
	Purity	98%				+/-	125.1671	µg/mL	Stressed
18	Methoxychlor			2,007.0	µg/mL	+/-	11.7782	µg/mL	Gravimetric
	CAS #	72-43-5.SEC	(Lot LC09014V)			+/-	78.5093	µg/mL	Unstressed
	Purity	99%				+/-	124.5867	µg/mL	Stressed
19	Endosulfan sulfate			2,007.5	µg/mL	+/-	11.7813	µg/mL	Gravimetric
	CAS #	1031-07-8.SEC	(Lot 1888900)			+/-	78.5301	µg/mL	Unstressed
	Purity	98%				+/-	124.6196	µg/mL	Stressed
20	Endrin ketone			2,007.5	µg/mL	+/-	11.7813	µg/mL	Gravimetric
	CAS #	53494-70-5.SEC	(Lot 091307RD)			+/-	78.5301	µg/mL	Unstressed
	Purity	98%				+/-	124.6196	µg/mL	Stressed

Solvent: Hexane/Toluene (50:50)
CAS # 110-54-3/108-88-3
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

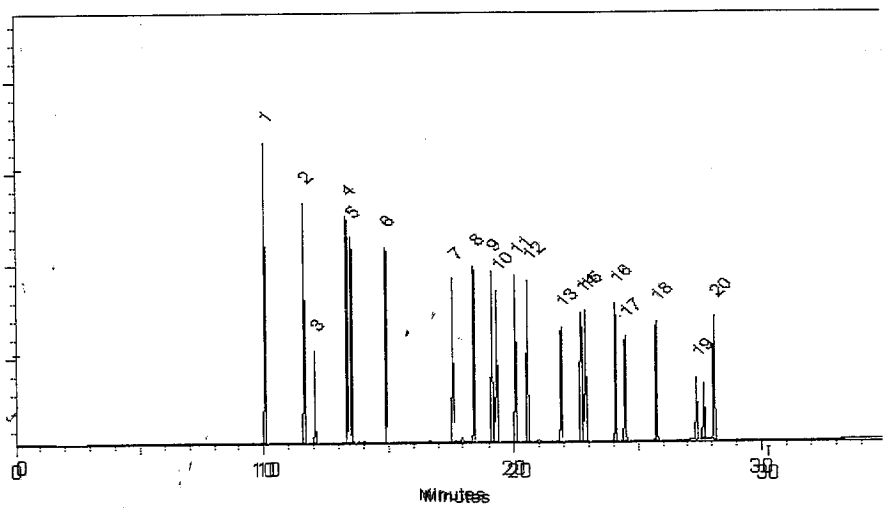
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Lane Kibe - Mix Technician

Date Mixed: 04-Feb-2015 **Balance:** B345965662

Diane Shaffer - QA Analyst

Date Passed: 12-Feb-2015

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #EM 88387

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8081EvalBStk2_00015

125 Market Street
New Haven, CT 06513
USA

AccuStandard,® Inc.

Tel: (203)786-5290
Fax: (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8081-DS
Description: 4,4'-DDT & Endrin
Lot: 214101383-03
Solvent: Hexane
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Sep 8, 2016
Expiration: Sep 8., 2017
Sample Size: 1 mL
Components: 2
Storage Condition: Ambient (>5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: Yes

Included on ISO Guide 34 Scope of Accreditation: Yes

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
4,4'-DDT	50-29-3	99.7	202.5	201.9
Endrin	72-20-8	99.0	202.4	200.4

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] All weights are traceable through NIST, Test No. 822-275872-11

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

See reverse side for additional information

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001

Reagent

8081HCBStkPS_00017

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: APP-9-112
Description: Hexachlorobenzene Standard
Lot: 215061299
Solvent: Methanol
Hazards: HIGHLY FLAMMABLE - *Refer to SDS for safety info*



Danger 2

Date Certified: Jun 16, 2015
Expiration: Jun 16, 2025
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)
Included on ISO/IEC 17025 Scope of Accreditation: Yes
Included on ISO Guide 34 Scope of Accreditation: Yes

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
Hexachlorobenzene	118-74-1	100.0	100.3	100.3

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] All weights are traceable through NIST, Test No. 822-275872-11

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values:
A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

See reverse side for additional information

Certified By:
Larry Decker, Organic QC Manager

Page 1 of 1

For use in routine laboratory analysis.

Reagent

8081LCSPrim_00036

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

8081LCSPrim_00036

Reagent ID: 8081LCSPrim_00036

Description:	8081 Pesticides Prime 50ug/mL	Expiration Date:	11/15/2017
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	North Prep	Prepared By:	Isberg, Kyle
Reagent Volume:	10.000 mL	Solvent:	Hexane
Creation Date:	07/20/2016	Solvent Lot:	Hexane_Cycl_00044
Open Date:			
Container(s):	4539365		
Comment:	0.25mL 8081ABResPS (Restek Cat# 32415) diluted to 10mL hexane. 6 month Exp. Stock has 1 yr expiration date from date opened. STOCK IS VERY HIGH LEVEL. AFTER MAKING STANDARD RINSE SYRINGE 3X WITH MECL2. TAKE SYRINGE APART & RINSE OUTSIDE OF BARREL & PLUNGER. REASSEMBLE & RINSE 3x WITH MECL2 AGAIN.		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
4,4'-DDD	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
4,4'-DDE	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
4,4'-DDT	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
Aldrin	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
alpha-BHC	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
alpha-Chlordane	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
beta-BHC	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
delta-BHC	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
Dieldrin	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
Endosulfan I	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
Endosulfan II	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
Endosulfan sulfate	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
Endrin	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
Endrin aldehyde	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
Endrin ketone	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
gamma-BHC (Lindane)	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
gamma-Chlordane	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL

Preliminary Report

TestAmerica Denver

LCS, Lab Control Sample Report

Sample Path: \\ChromNA\Denver\ChromData\SGC_P1\20170516-87762.b\016D0010.D
Lims ID: 8081LCSPrim_00086 Inj Date: 16-May-2017 14:16:20
Worklist ID: 280-0058762-010 Instrument: SGC_P1
Method: P1_8081_IS

Detector 1: GC ECD1A

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 608_Prep	Limits 2 35100C
8 alpha-BHC	50.0	45.8	91.6	66-115	73-133
9 gamma-BHC (Lindane)	50.0	45.8	91.6	68-142	71-132
10 beta-BHC	50.0	45.0	90.0	69-119	67-133
12 delta-BHC	50.0	45.5	90.9	75-124	72-135
15 Heptachlor	50.0	48.5	97.0	59-143	52-129
16 Aldrin	50.0	45.6	91.2	42-118	44-127
21 Heptachlor epoxide	50.0	46.0	92.1	37-142	77-132
22 gamma-Chlordane	50.0	45.7	91.5	64-120	73-131
23 alpha-Chlordane	50.0	45.7	91.5	66-120	75-128
24 4,4'-DDE	50.0	45.4	90.8	61-119	74-124
25 Endosulfan I	50.0	45.8	91.7	61-116	73-128
27 Dieldrin	50.0	46.4	92.9	68-119	78-132
30 Endrin	50.0	49.8	99.6	66-143	74-171
32 4,4'-DDD	50.0	45.2	90.4	63-127	78-138
34 Endosulfan II	50.0	44.6	89.3	63-117	75-132
35 4,4'-DDT	50.0	46.6	93.2	53-128	72-139
36 Endrin aldehyde	50.0	43.5	87.0	55-119	59-136
37 Methoxychlor	50.0	44.4	88.8	30-150	67-150
39 Endosulfan sulfate	50.0	44.0	88.0	70-119	77-135
40 Endrin ketone	50.0	40.8	81.6		75-137

Detector 2: GC ECD2B

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 608_Prep	Limits 2 35100C
8 alpha-BHC	50.0	46.1	92.2	66-115	73-133
9 gamma-BHC (Lindane)	50.0	45.8	91.6	68-142	71-132
10 beta-BHC	50.0	45.4	90.8	69-119	67-133
12 delta-BHC	50.0	45.0	90.0	75-124	72-135
15 Heptachlor	50.0	46.3	92.6	59-143	52-129
16 Aldrin	50.0	45.1	90.2	42-118	44-127
21 Heptachlor epoxide	50.0	45.1	90.1	37-142	77-132
22 gamma-Chlordane	50.0	44.4	88.8	64-120	73-131
23 alpha-Chlordane	50.0	44.3	88.7	66-120	75-128
24 4,4'-DDE	50.0	44.7	89.4	61-119	74-124
25 Endosulfan I	50.0	44.2	88.5	61-116	73-128
27 Dieldrin	50.0	45.1	90.2	68-119	78-132
30 Endrin	50.0	48.3	96.5	66-143	74-171
32 4,4'-DDD	50.0	44.0	87.9	63-127	78-138
34 Endosulfan II	50.0	43.6	87.2	63-117	75-132
35 4,4'-DDT	50.0	41.1	82.3	53-128	72-139
36 Endrin aldehyde	50.0	42.4	84.8	55-119	59-136

Report Date: 17-May-2017 11:22:05 Chrom Revision: 2.2 25-Apr-2017 13:27:22

Preliminary Report

Sample Path: \\ChromNA\Denver\ChromData\SSC_P1\20170516\58762b055660010.D

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 608_Prep	Limits 2 3510C
37 Methoxychlor	50.0	40.3	80.5	30-150	67-150
39 Endosulfan sulfate	50.0	42.8	85.7	70-199	77-135
40 Endrin ketone	50.0	40.0	79.9		75-137

Samples for Limit Group: 1, Limits Prep Method: 608_Prep

280-96455-D-1-K

Samples for Limit Group: 2, Limits Prep Method: 3510C

280-96568-M-1-A
280-96606-K-1-A
280-96606-L-4-A
280-96572-H-2-A
280-96606-F-2-A
280-96606-K-5-A
280-96572-A-3-A
280-96606-D-3-A

Reagent

8081Toxaphene_00027

Preliminary Report

TestAmerica Denver

LCS, Lab Control Sample Report

Sample Path: \\ChromNA\Denver\ChromData\SGC_P1\20170531-59302.b\05310016.D

Lims ID: LCS 280-374659/3-A Inj. Date: 31-May-2017 15:37:48

Worklist ID: 280-0059302-016 Instrument: SGC_P1

Method: P1 8081 IS

Detector 1: GC ECD1A

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3546
$ 4 Tetrachloro-m-xylene	20.0	19.6	97.9	0-0
28 Toxaphene	200.0	207.0	103.5	33-141
28 Toxaphene-1	200.0	158.5	79.3	33-141
28 Toxaphene-2	200.0	268.1	134.0	33-141
28 Toxaphene-3	200.0	220.8	110.4	33-141
28 Toxaphene-4	200.0	171.7	85.9	33-141
28 Toxaphene-5	200.0	215.8	107.9	33-141
$ 41 DCB Decachlorobiphenyl	20.0	21.4	106.9	63-121

Detector 2: GC ECD2B

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3546
$ 4 Tetrachloro-m-xylene	20.0	21.0	105.0	0-0
28 Toxaphene	200.0	147.7	73.9	33-141
28 Toxaphene-1	200.0	108.8	54.4	33-141
28 Toxaphene-2	200.0	107.1	53.6	33-141
28 Toxaphene-3	200.0	139.3	69.6	33-141
28 Toxaphene-4	200.0	176.7	88.4	33-141
28 Toxaphene-5	200.0	206.7	103.3	33-141
$ 41 DCB Decachlorobiphenyl	20.0	22.7	113.7	63-121

Samples for Limit Group: 1, Lims Prep Method: 3546

280-97393-B-1-B 280-97393-B-2-B 280-97393-B-3-B

280-97393-A-4-D 280-97393-A-5-D 280-97393-C-6-H

Reagent

8081ToxPS_00031

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY–READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 32071 **Lot No.:** A0113750

Description: Toxaphene Standard

Toxaphene Standard 5,000 µg/mL, Isooctane, 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: December 31, 2019 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Toxaphene	5,018.0 µg/mL	+/- 29.4484	µg/mL	Gravimetric
	CAS # 8001-35-2 (Lot NT052041)		+/- 156.1719	µg/mL	Unstressed
	Purity ----%		+/- 207.7410	µg/mL	Stressed

Solvent: Isooctane
CAS # 540-84-1
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

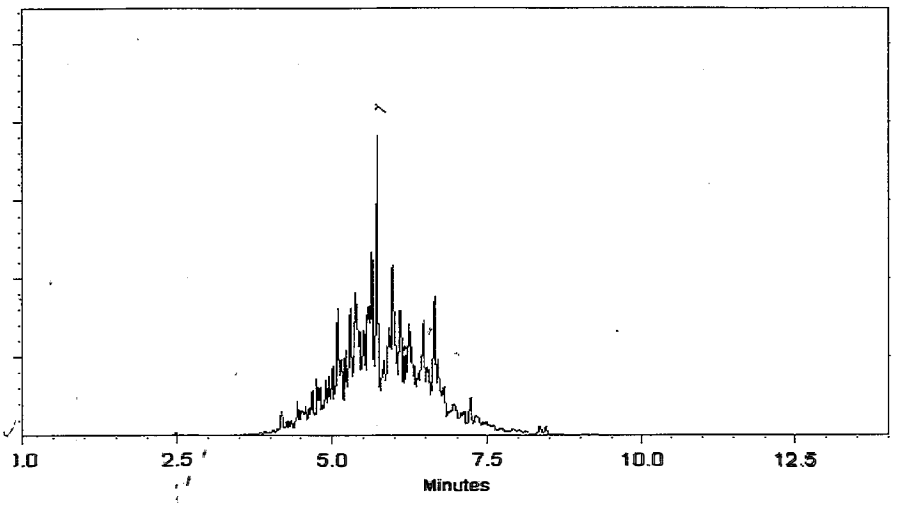
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Rebecca Sawyer

Date Mixed: 03-Sep-2015 **Balance:** 1125113331

Jennifer L Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 09-Sep-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

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Handling Notes:

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8081ToxPS_00032

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY–READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 32071 **Lot No.:** A0113750

Description: Toxaphene Standard

Toxaphene Standard 5,000 µg/mL, Isooctane, 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: December 31, 2019 **Storage:** 10°C or colder

CERTIFIED VALUES

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Solvent: Isooctane
CAS # 540-84-1
Purity 99%

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30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

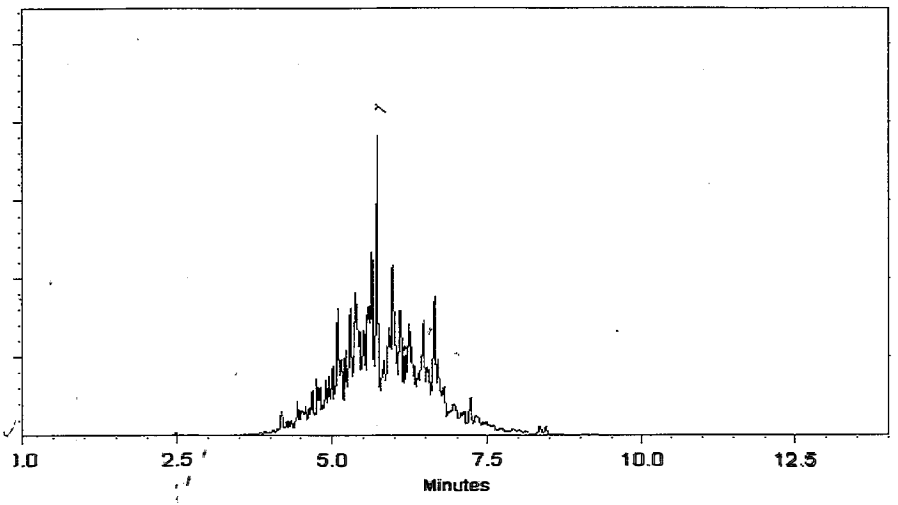
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Det. Temp:
300°C

Det. Type:
ECD



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Rebecca Sawyer

Date Mixed: 03-Sep-2015 **Balance:** 1125113331

Jennifer L Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 09-Sep-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8081ToxSS_00016

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: P-093S-H-10X
Description: Toxaphene Standard
Lot: 215011420
Solvent: Hexane
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*



Danger 2

Date Certified: Jan 30, 2015
Expiration: Jan 30, 2025
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: Yes

Included on ISO Guide 34 Scope of Accreditation: Yes

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
Toxaphene	8001-35-2	Tech Mix	1001	1001

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] All weights are traceable through NIST, Test No. 822-275872-11

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values:
A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

See reverse side for additional information

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001

OR-ORG/INO-001
Rev. 5/16

Reagent

8082 LCS_00046

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING



Reagent ID: 8082 LCS_00046

Description:	2 ug/mL	Expiration Date:	10/28/2017
No. of Bottles:	2	Laboratory:	TestAmerica Denver
Storage Location:	North Prep	Prepared By:	Bourgery, David F
Reagent Volume:	500.000 mL	Solvent:	ACETONE
Creation Date:	04/28/2017	Solvent Lot:	Acetone_000177
Open Date:			
Container(s):	4504519, 4504520		
Comment:	Take 1mL 8082LCSStock and dilute to 500mL in Acetone. 6 Month epxiration date. Divide into 2 bottles.		

Reagent Analyte Information

Analyte	%R	%D	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
PCB-1016	95.9	-4.2	8082LCSSTOCK_00033	04/25/2018	1000.00000	ug/mL	2.00000	ug/mL
PCB-1260	103.2	+3.2	8082LCSSTOCK_00033	04/25/2018	1000.00000	ug/mL	2.00000	ug/mL

GAV 02 MAY 2017

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
8082LCSSTOCK_00033	Aroclor 1016/1260 1000UG/ML	ASTD	04/25/18	RESTEK	A0109664	32039	1.00000	mL

Preliminary Report

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170501-58156.b\050117004.D
Lims ID: 8082-LCS_00046
Client ID:
Sample Type: Client
Inject. Date: 01-May-2017 14:17:05 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.00000
Sample Info: 8082-LCS_00046
Misc. Info.: 280-0058156-004
Operator ID: jax Instrument ID: SGC_P3
Method: \\ChromNA\Denver\ChromData\SGC_P3\20170501-58156.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 01-May-2017 21:07:49 Calib Date: 27-Apr-2017 01:30:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last Cal File: \\ChromNA\Denver\ChromData\SGC_P3\20170426-57988.b\042617035.D
Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK032

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
# 17 1-Bromo-2-nitrobenzene						
1	1.840	1.839	0.001	387609084	1000.0	
2	1.662	1.660	0.002	244245650	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						c
1		2.789			ND	
2		2.717				
3 PCB-1221						U
1		3.005			ND	
1		3.149				
1		3.189				
2		3.037				
2		3.167				
2		3.217				
7 PCB-1232						U
1		3.187			ND	
1		3.540				
1		4.013				
1		4.157				
1		4.613				
2		3.218				
2		3.601				
2		4.051				
2		4.191				
2		4.845				

Preliminary Report

Data File: \\ChromNA\Denver\ChromData\SGC_F3\20170501-58166\0501F3004.D

Col	RT (min)	Exp RT (min)	Dlt RT (min)	Response	Conc Amt ng/ml	Flags
10 PCB-1242						U
1		3.539			ND	
1		4.012				
1		4.156				
1		5.109				
1		5.182				
2		3.600				
2		4.050				
2		4.194				
2		5.157				
2		5.204				
4 PCB-1248						U
1		3.540			ND	
1		4.010				
1		4.370				
1		4.613				
1		5.373				
2		4.048				
2		4.708				
2		4.845				
2		5.155				
2		5.201				
1 PCB-1016						C
1	3.540	3.542	-0.002	31712546	196.7	
1	4.014	4.016	-0.002	69246134	194.4	
1	4.157	4.156	0.001	30845852	192.0	
1	4.224	4.222	0.002	19684887	194.0	
1	4.614	4.612	0.002	31292920	190.8	
		Average of Peak Amounts =			193.6	
2	3.602	3.600	0.002	23662904	193.7	
2	4.052	4.050	0.002	50858818	200.2	
2	4.192	4.194	-0.002	21250137	191.4	
2	4.422	4.420	0.002	11425576	179.8	
2	4.708	4.707	0.001	16832040	193.2	
		Average of Peak Amounts =			191.7	
					RPD = 0.99	

Preliminary Report

Data File: \\ChromNA\Denver\ChromData\SSC_P3\20170501\58156.D\0501F04.D

Col	Cpd	RT (min.)	ExpRT (min.)	DltRT (min.)	Response	Conc ng/ml	Flags
1	9 PCB-1254						U
1	9 PCB-1254	5.375				ND	
1		5.709					
1		5.862					
1		6.469					
1		6.839					
2		5.443					
2		5.857					
2		6.007					
2		6.310					
2		7.017					
1	12 PCB-1260						dM
1	12 PCB-1260	6.104	6.102	0.002	45616151	192.1	M
1		6.837	6.836	0.001	81059617	178.5	M
1		7.330	7.332	-0.002	44203167	206.8	M
1		7.767	7.766	0.001	96454426	205.8	M
1		8.154	8.152	0.002	50461976	194.6	M
			Average of Peak Amounts =			195.6	
2		6.552	6.550	0.002	40270602	196.9	M
2		7.015	7.014	0.001	57116909	184.0	M
2		7.538	7.537	0.001	31475569	218.7	M
2		7.905	7.907	-0.002	69861172	218.5	M
2		8.405	8.407	-0.002	50192528	213.7	
			Average of Peak Amounts =			206.4	
						RPD = 5.37	
1	5 PCB-1262						U
1	5 PCB-1262	6.470				ND	
1		7.000					
1		7.330					
1		7.767					
1		8.153					
2		6.551					
2		7.145					
2		7.538					
2		7.908					
2		8.405					

Reagent

8082LCSSTOCK_00033

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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Catalog No. : 32039 **Lot No.:** A0109664

Description : Aroclor® 1016/1260 Mix

Aroclor® 1016/1260 Mix 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 25°C nominal

Handling: This product contains PCB's

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Aroclor 1016	1,007.4 µg/mL	+/- 5.8705 µg/mL	Gravimetric
	CAS # 12674-11-2 (Lot W-125-01)		+/- 31.3443 µg/mL	Unstressed
	Purity ----%		+/- 41.6988 µg/mL	Stressed
2	Aroclor 1260	1,009.8 µg/mL	+/- 5.8846 µg/mL	Gravimetric
	CAS # 11096-82-5 (Lot W-129-06)		+/- 31.4196 µg/mL	Unstressed
	Purity ----%		+/- 41.7990 µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

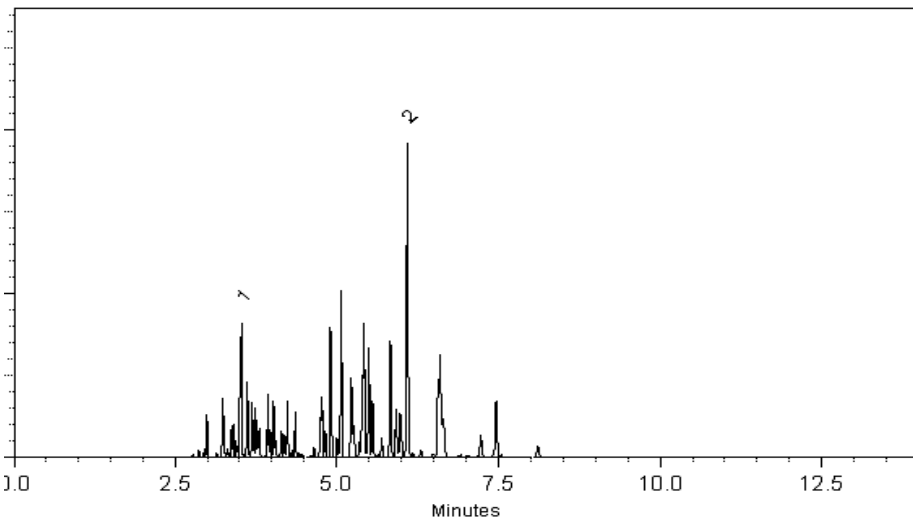
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



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Cheryl Graham - Mix Technician

Date Mixed: 14-Mar-2015 **Balance:** B442140311

Diane Shaffer - QAAnalyst

Date Passed: 16-Mar-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

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Reagent

8270 SIM Surr_00070

Preliminary Report

TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170524-59091.b\F6794.D
Lims ID: 8270SIM Surr_00070
Client ID:
Sample Type: Client
Inject. Date: 24-May-2017 16:09:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 8270 SIM Surr_00070
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170524-59091.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 25-May-2017 09:13:31 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK023

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	488.2	97.64
$ 5 2-Fluorobiphenyl	500.0	480.7	96.14
$ 6 Terphenyl-d14	500.0	430.9	86.17

Reagent

8270BO-SIMLCS_00022

Preliminary Report

TestAmerica Denver

LCS, Lab Control Sample Report

Sample Path: \\ChromNA\Denver\ChromData\SMS_F\20170524-59091.b\F6793.D

Lims ID: 8270BO-SIMLCS_00022 Inj. Date: 24-May-2017 15:43:30

Worklist ID: 280-0059091-007 Instrument: SMS_F

Method: SMSF_8270SIMX

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3546
9 1,4-Dioxane	900.0	842.5	93.6	
10 N-Nitrosodimethylamine	900.0	838.4	93.2	
14 Naphthalene	900.0	855.2	95.0	38-111
16 2-Methylnaphthalene	900.0	880.0	97.8	39-114
17 1-Methylnaphthalene	900.0	821.2	91.2	43-111
20 Dimethyl phthalate	900.0	887.1	98.6	
22 Acenaphthylene	900.0	795.7	88.4	39-116
23 Acenaphthene	900.0	848.4	94.3	44-111
32 Dibenzofuran	900.0	870.8	96.8	
24 Diethyl phthalate	900.0	888.5	98.7	
25 Fluorene	900.0	865.6	96.2	47-114
26 N-Nitrosodiphenylamine	900.0	857.6	95.3	
27 Phenanthrene	900.0	806.2	89.6	49-113
28 Anthracene	900.0	853.4	94.8	50-114
29 Di-n-butyl phthalate	900.0	818.1	90.9	
30 Fluoranthene	900.0	846.9	94.1	55-119
31 Pyrene	900.0	852.3	94.7	55-117
33 Butyl benzyl phthalate	900.0	801.2	89.0	
34 Bis(2-ethylhexyl) phtha	900.0	777.0	86.3	
35 Benzo[a]anthracene	900.0	849.5	94.4	54-122
36 Chrysene	900.0	895.2	99.5	57-118
37 Di-n-octyl phthalate	900.0	760.5	84.5	
38 Benzo[b]fluoranthene	900.0	859.3	95.5	53-128
39 Benzo[k]fluoranthene	900.0	869.0	96.6	56-123
40 Benzo[a]pyrene	900.0	847.0	94.1	50-125
41 Indeno[1,2,3-cd]pyrene	900.0	836.7	93.0	49-130
42 Dibenz(a,h)anthracene	900.0	838.3	93.1	50-129
43 Benzo[g,h,i]perylene	900.0	835.2	92.8	49-127

Samples for Limit Group: 1, Lims Prep Method: 3546

280-96516-B-6-H
280-96828-B-1-D
280-96828-B-2-B
280-96828-C-3-B
280-96828-B-4-B
280-96828-C-5-B
280-96828-B-6-B
280-96828-B-7-B
280-96828-B-8-B
280-96828-B-9-B
280-96828-B-10-B
280-96828-C-11-B
280-96828-B-12-B
280-96828-C-13-B

Reagent

8270SurStkHL_00228

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FOR LABORATORY USE ONLY. READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 567685 **Lot No.:** A0012352869

Description: 8270 Surrogate Standard

8270 Surrogate Standard 5,000 µg/mL, Methylene Chloride, 5 mL/ampul

Container Size: 5 mL **Pkg Amt:** ≥5 mL

Expiration Date: December 31, 2021 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

	Compound		Gravimetric (weight/volume)	Expanded Uncertainty (95% C.L.; k=2)		
1	2-Fluorophenol CAS # 367-12-4 Purity 99%	(Lot STBD7945V)	5,017.0 µg/mL	+/- 29.1677 µg/mL +/- 146.4126 µg/mL +/- 177.6661 µg/mL		Gravimetric Unstressed Stressed
2	Phenol-d5 CAS # 4165-62-2 Purity 99%	(Lot X-479)	4,965.4 µg/mL	+/- 28.8690 µg/mL +/- 144.9056 µg/mL +/- 175.8373 µg/mL		Gravimetric Unstressed Stressed
3	Nitrobenzene-d5 CAS # 4165-60-0 Purity 99%	(Lot PR-25462)	5,019.4 µg/mL	+/- 29.1814 µg/mL +/- 146.4812 µg/mL +/- 177.7494 µg/mL		Gravimetric Unstressed Stressed
4	2-Fluorobiphenyl CAS # 321-60-8 Purity 99%	(Lot 101948342)	5,031.5 µg/mL	+/- 29.2518 µg/mL +/- 146.8343 µg/mL +/- 178.1779 µg/mL		Gravimetric Unstressed Stressed
5	2,4,6-Tribromophenol CAS # 118-79-6 Purity 99%	(Lot 29689MJW)	5,022.7 µg/mL	+/- 29.2238 µg/mL +/- 146.6942 µg/mL +/- 178.0079 µg/mL		Gravimetric Unstressed Stressed
6	p-Terphenyl-d14 CAS # 1718-51-0 Purity 99%	(Lot PR-21037)	5,022.2 µg/mL	+/- 29.2387 µg/mL +/- 146.7686 µg/mL +/- 178.0982 µg/mL		Gravimetric Unstressed Stressed

Reagent

ANALYTES B_00012

4470428
4470428
ID: ANALYTES B 09012
ID: ANALYTES B 09012
Exp: 04/14/18 Prod: SPEX
Exp: 04/14/18 Prod: SPEX
ICP ANALYTES B SPEX
ICP ANALYTES B SPEX

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SPEXCertiPrep®

Certificate of Reference Material

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Chemical Testing
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Catalog Number: INNTBB1 **Lot No.** 3-98MKBY

Description: Analytes BB

Matrix: 5% HNO_3

This **ASSURANCE**® Certified Reference Material (CRM) is intended primarily for use as a calibration standard or quality control standard for inorganic spectroscopic instrumentation such as ICP-OES, DCP, AA, ICP-MS, and XRF. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

The CRM is prepared from high purity single element concentrates of individual elements using Class A laboratory ware to give precise concentrations. See side 2 for details of certification.

Instrumental Analysis by ICP Spectrometer:

Analyte	Labeled	Certified	Uncertainty	SRM	Analyte	Labeled	Certified	Uncertainty	SRM
Ag	100 µg/mL	99.1 µg/mL	±0.5 µg/mL	3151*	Be	50 µg/mL	49.6 µg/mL	±0.3 µg/mL	3105a*
Cd	100 µg/mL	98.9 µg/mL	±0.5 µg/mL	3108*	Co	50 µg/mL	49.4 µg/mL	±0.3 µg/mL	3113*
Ni	100 µg/mL	98.9 µg/mL	±0.5 µg/mL	3136*	Cr	50 µg/mL	49.6 µg/mL	±0.3 µg/mL	3112a*
Pb	100 µg/mL	99.1 µg/mL	±0.5 µg/mL	3128*	Cu	50 µg/mL	49.8 µg/mL	±0.3 µg/mL	3114*
Zn	100 µg/mL	98.9 µg/mL	±0.5 µg/mL	3168a*	Mn	50 µg/mL	49.3 µg/mL	±0.3 µg/mL	3132*
Ba	50 µg/mL	49.3 µg/mL	±0.3 µg/mL	3104a*	V	50 µg/mL	49.8 µg/mL	±0.3 µg/mL	3165*

*- indicates NIST SRM
†- indicates SPEX CertiPrep CRM (when NIST SRM is not available)

SPEX CertiPrep Reference Multi: Lot# 9-164YP, 12-03YP

Balances are calibrated regularly with weight sets traceable to NIST#s 2356, 2837 and others. This CRM is guaranteed stable and accurate to ±0.5% of the certified (measured) value. This includes uncertainty components due to preparation, measurement, homogeneity, and short-term and long-term stability. No measured concentration of any individual component exceeds ±2% of the labeled value. This guarantee is valid for a period of one year from the date of certification only when the material is unopened and stored under ambient laboratory conditions.

Date of Certification: APR - 2017 Certifying Officer:

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Reagent

AR_1016_RES_00010

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 32006 **Lot No.:** A0117379

Description: Aroclor® 1016 Standard

Aroclor 1016 1000µg/mL, Hexane, 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: May 31, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1016	1,003.0 µg/mL	+/- 5.8862	µg/mL	Gravimetric
	CAS # 12674-11-2 (Lot W-125-01)		+/- 31.7890	µg/mL	Unstressed
	Purity 99%		+/- 41.5271	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1221_RES_00009

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Catalog No.: 32007 **Lot No.:** A0113480

Description: Aroclor® 1221 Standard

Aroclor® 1221 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: June 30, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Peak	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1221	1,002.7 µg/mL	+/- 5.9555	µg/mL	Gravimetric
	CAS # 11104-28-2 (Lot 2781200)		+/- 31.7918	µg/mL	Unstressed
	Purity ----%		+/- 41.5234	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1221_RESss_00008

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32007.sec **Lot No.:** A0117382

Description : Aroclor® 1221 Standard

Aroclor® 1221 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1221	1,000.0 µg/mL	+/- 10.0737	µg/mL	Gravimetric
	CAS # 11104-28-2.SEC (Lot W-126-07)		+/- 32.7345	µg/mL	Unstressed
	Purity ----%		+/- 42.2047	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1232_RES_00010

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32008 **Lot No.:** A0117033

Description : Aroclor® 1232 Standard

Aroclor® 1232 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	Aroclor 1232	1,003.0 µg/mL	+/- 5.8862	µg/mL	Gravimetric
	CAS # 11141-16-5 (Lot W-107-05)		+/- 31.7890	µg/mL	Unstressed
	Purity ----%		+/- 41.5271	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1232_RESss_00008

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Catalog No. : 32008.sec **Lot No.:** A095877

Description : Aroclor® 1232 Standard

Aroclor® 1232 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2019 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Aroclor 1232	1,000.0 µg/mL	+/- 5.9397 µg/mL	Gravimetric
	CAS # 11141-16-5.SEC (Lot 130604JLM)		+/- 20.8959 µg/mL	Unstressed
	Purity ----%		+/- 34.3792 µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1242_RES_00009

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Catalog No. : 32009 **Lot No.:** A0117779

Description : Aroclor® 1242 Standard

Aroclor® 1242 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1242	1,000.0 µg/mL	+/- 5.8686	µg/mL	Gravimetric
	CAS # 53469-21-9 (Lot 01141-A)		+/- 31.6940	µg/mL	Unstressed
	Purity ----%		+/- 41.4029	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1242_RESss_00008

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Catalog No. : 32009.SEC **Lot No.:** A0105175

Description : Aroclor® 1242 Standard

Aroclor® 1242 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2020 **Storage:** 25°C nominal

Handling: This product contains PCB's

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc (weight/volume)	Expanded Uncertainty (95% C.L ; K=2)		
1	Aroclor 1242	1,000.0 µg/mL	+/- 10.0737	µg/mL	Gravimetric
	CAS # 53469-21-9.SEC (Lot NTO1020)		+/- 32.1814	µg/mL	Unstressed
	Purity ----%		+/- 42.2011	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1248_RES_00009

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32010 **Lot No.:** A0118166

Description : Aroclor® 1248 Standard

Aroclor® 1248 Standard 1,000µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C L.; K=2)		
1	Aroclor 1248		1,000.3 µg/mL	+/- 5.8704	µg/mL	Gravimetric
	CAS # 12672-29-6	(Lot W-108-07)		+/- 31.7041	µg/mL	Unstressed
	Purity ----%			+/- 41.4161	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1248_RESss_00008

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Catalog No. : 32010.sec **Lot No.:** A0116431

Description : Aroclor® 1248 Standard

Aroclor® 1248 Standard 1,000µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Aroclor 1248	1,002.0 µg/mL	+/- 5.9516 µg/mL	Gravimetric
	CAS # 12672-29-6.SEC (Lot 106-248)		+/- 31.7706 µg/mL	Unstressed
	Purity ----%		+/- 41.4958 µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1254_RES_00009

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Catalog No. : 32011 **Lot No.:** A0118645

Description : Aroclor® 1254 Standard

Aroclor® 1254 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1254	1,004.8 µg/mL	+/- 5.8967	µg/mL	Gravimetric
	CAS # 11097-69-1 (Lot 124-191-B)		+/- 31.8461	µg/mL	Unstressed
	Purity ----%		+/- 41.6016	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1254_RESss_00008

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Catalog No. : 32011.SEC **Lot No.:** A0105373

Description : Aroclor® 1254 Standard

Aroclor® 1254 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2020 **Storage:** 25°C nominal

Handling: This product contains PCB's

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1254	1,004.0 µg/mL	+/- 10.1140	µg/mL	Gravimetric
	CAS # 11097-69-1.SEC (Lot RM00922)		+/- 32.3101	µg/mL	Unstressed
	Purity ----%		+/- 42.3699	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1260_RES_00012

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32012 **Lot No.:** A0116299

Description : Aroclor® 1260 Standard

Aroclor 1260 1000µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1260	1,006.5 µg/mL	+/- 5.9067	µg/mL	Gravimetric
	CAS # 11096-82-5 (Lot W-129-06)		+/- 31.9000	µg/mL	Unstressed
	Purity ----%		+/- 41.6720	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1262_RES_00010

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Catalog No. : 32409 **Lot No.:** A0117769

Description : Aroclor® 1262 Standard

Aroclor® 1262 Standard 1,000 µg/mL, 1mL/ampul, Hexane

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav Conc. (weight/volume)	Expanded Uncertainty (95% C.L ; K=2)		
1	Aroclor 1262	1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 37324-23-5 (Lot 3067100)		+/- 31.8658	µg/mL	Unstressed
	Purity ----%		+/- 41.6201	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1268_RES_00009

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO Guide 34 Accredited Reference Material Producer Certificate #3222.01

ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32410 **Lot No.:** A0114508

Description : Aroclor® 1268 Standard

Aroclor® 1268 Standard 1,000 µg/mL, 1mL/ampul, Hexane

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2022 **Storage:** 25°C nominal

Handling: This product contains PCB's

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L ; K=2)		
1	Aroclor 1268	1,006.0 µg/mL	+/- 5.9753	µg/mL	Gravimetric
	CAS # 11100-14-4 (Lot 2743900)		+/- 31.8975	µg/mL	Unstressed
	Purity ----%		+/- 41.6615	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1660_RESss_00008

RESTEK
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Tel: (800)356-1688
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO Guide 34 Accredited Reference Material Producer Certificate #3222.09

ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32039.SEC **Lot No.:** A0114674

Description : Aroclor® 1016/1260 Mix

Aroclor® 1016/1260 Mix 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2022 **Storage:** 25°C nominal

Handling: This product contains PCB's

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1016	1,000.7 µg/mL	+/- 5.9437	µg/mL	Gravimetric
	CAS # 12674-11-2.SEC (Lot 129)		+/- 31.7284	µg/mL	Unstressed
	Purity ----%		+/- 41.4406	µg/mL	Stressed
2	Aroclor 1260	1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 11096-82-5.SEC (Lot NTO1023)		+/- 31.7072	µg/mL	Unstressed
	Purity ----%		+/- 41.4130	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_SURR_RES_00050

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Certificate #32.2202

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32000 **Lot No.:** A0117947

Description : Pesticide Surrogate Mix

Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2022 **Storage:** 10°C or colder

Handling: Contains PCBs - sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)			
1	2,4,5,6-Tetrachloro-m-xylene		200.4	µg/mL	+/- 1.1679	µg/mL	Gravimetric
	CAS # 877-09-8	(Lot 0052481)			+/- 6.3503	µg/mL	Unstressed
	Purity 98%				+/- 8.2964	µg/mL	Stressed
2	Decachlorobiphenyl (BZ# 209)		200.4	µg/mL	+/- 1.1678	µg/mL	Gravimetric
	CAS # 2051-24-3	(Lot ER071509-01)			+/- 6.3500	µg/mL	Unstressed
	Purity 99%				+/- 8.2960	µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Reagent

AR_SURR_RES_00056

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CERTIFIED REFERENCE MATERIAL

ISO Guide 34 Accredited Reference Material Producer Certificate #3222.01

Certificate of Analysis

ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32000 **Lot No.:** A0117947

Description : Pesticide Surrogate Mix

Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2022 **Storage:** 10°C or colder

Handling: Contains PCBs - sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2,4,5,6-Tetrachloro-m-xylene	200.4 µg/mL	+/- 1.1679 µg/mL	Gravimetric
	CAS # 877-09-8 (Lot 0052481)		+/- 6.3503 µg/mL	Unstressed
	Purity 98%		+/- 8.2964 µg/mL	Stressed
2	Decachlorobiphenyl (BZ# 209)	200.4 µg/mL	+/- 1.1678 µg/mL	Gravimetric
	CAS # 2051-24-3 (Lot ER071509-01)		+/- 6.3500 µg/mL	Unstressed
	Purity 99%		+/- 8.2960 µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Reagent

AR_SURR_RES_00058

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32000 **Lot No.:** A0118280

Description : Pesticide Surrogate Mix

Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2022 **Storage:** 10°C or colder

Handling: Contains PCBs - sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4,5,6-Tetrachloro-m-xylene		199.9 µg/mL	+/- 1.4176	µg/mL	Gravimetric
	CAS # 877-09-8	(Lot 0052481)		+/- 6.3860	µg/mL	Unstressed
	Purity 98%			+/- 8.3154	µg/mL	Stressed
2	Decachlorobiphenyl (BZ# 209)		200.0 µg/mL	+/- 1.4182	µg/mL	Gravimetric
	CAS # 2051-24-3	(Lot ER071509-01)		+/- 6.3886	µg/mL	Unstressed
	Purity 99%			+/- 8.3187	µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Reagent

AR_SURR_RES_00060

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32000 **Lot No.:** A0118280

Description : Pesticide Surrogate Mix

Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2022 **Storage:** 10°C or colder

Handling: Contains PCBs - sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4,5,6-Tetrachloro-m-xylene		199.9 µg/mL	+/- 1.4176	µg/mL	Gravimetric
	CAS # 877-09-8	(Lot 0052481)		+/- 6.3860	µg/mL	Unstressed
	Purity 98%			+/- 8.3154	µg/mL	Stressed
2	Decachlorobiphenyl (BZ# 209)		200.0 µg/mL	+/- 1.4182	µg/mL	Gravimetric
	CAS # 2051-24-3	(Lot ER071509-01)		+/- 6.3886	µg/mL	Unstressed
	Purity 99%			+/- 8.3187	µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Reagent

AR_SURR_RES_00067

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32000 **Lot No.:** A0121594

Description : Pesticide Surrogate Mix

Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2022 **Storage:** 10°C or colder

Handling: Contains PCBs - sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4,5,6-Tetrachloro-m-xylene		200.0 µg/mL	+/- 1.1656	µg/mL	Gravimetric
	CAS # 877-09-8	(Lot 0052481)		+/- 6.3378	µg/mL	Unstressed
	Purity 98%			+/- 8.2802	µg/mL	Stressed
2	Decachlorobiphenyl (BZ# 209)		201.2 µg/mL	+/- 1.1725	µg/mL	Gravimetric
	CAS # 2051-24-3	(Lot ER071509-01)		+/- 6.3753	µg/mL	Unstressed
	Purity 99%			+/- 8.3291	µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Reagent

BNB stock_00008

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32279 **Lot No.:** A0118613

Description : 1-Bromo-2-nitrobenzene Standard

1-Bromo-2-nitrobenzene Standard 1000 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2019 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-2-nitrobenzene		1,002.0 µg/mL		+/- 5.9516	µg/mL	Gravimetric
	CAS # 577-19-5	(Lot 643872/1)			+/- 56.1943	µg/mL	Unstressed
	Purity 99%				+/- 57.5086	µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

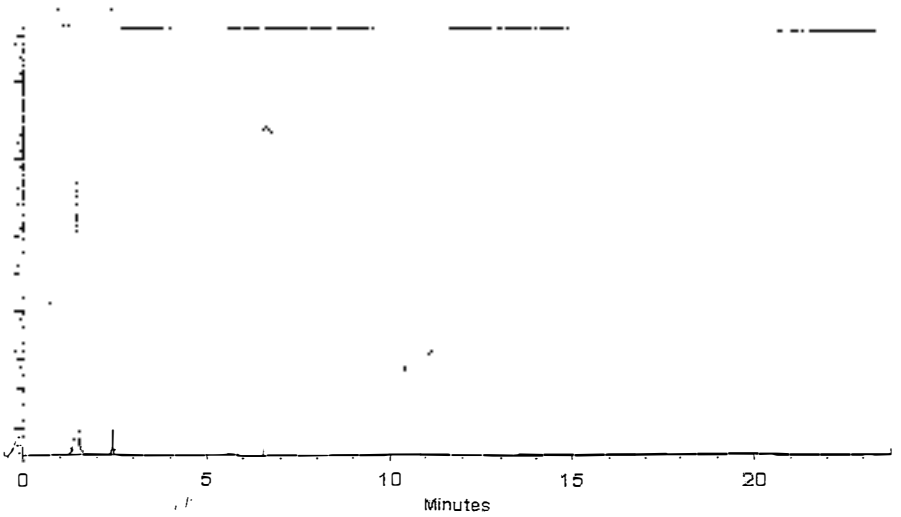
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Cook - Mix Technician

Date Mixed: 06-Apr-2016 **Balance:** 1127510105

Jodi E. Breon - QA Analyst

Date Passed: 08-Apr-2016

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

BNB stock_00009

RESTEK
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Bellefonte, PA 16823-8812
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CERTIFIED REFERENCE MATERIAL

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Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32279 **Lot No.:** A0118613

Description : 1-Bromo-2-nitrobenzene Standard

1-Bromo-2-nitrobenzene Standard 1000 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2019 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1-Bromo-2-nitrobenzene	1,002.0 µg/mL	+/- 5.9516 µg/mL	Gravimetric
	CAS # 577-19-5 (Lot 643872/1)		+/- 56.1943 µg/mL	Unstressed
	Purity 99%		+/- 57.5086 µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

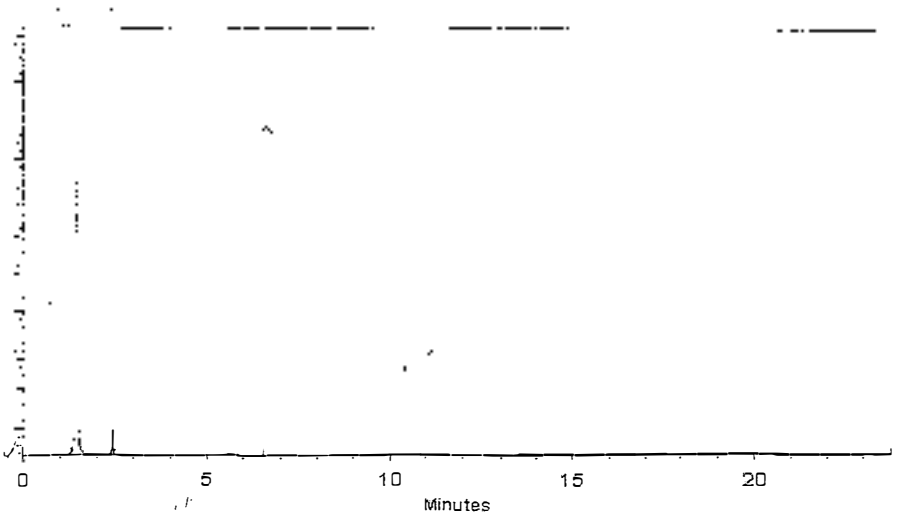
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Cook - Mix Technician

Date Mixed: 06-Apr-2016 **Balance:** 1127510105

Jodi E. Breon - QA Analyst

Date Passed: 08-Apr-2016

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

BNB stock_00010

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Certificate of Analysis

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32279 **Lot No.:** A0118613

Description : 1-Bromo-2-nitrobenzene Standard

1-Bromo-2-nitrobenzene Standard 1000 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2019 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-2-nitrobenzene		1,002.0 µg/mL		+/- 5.9516	µg/mL	Gravimetric
	CAS # 577-19-5	(Lot 643872/1)			+/- 56.1943	µg/mL	Unstressed
	Purity 99%				+/- 57.5086	µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

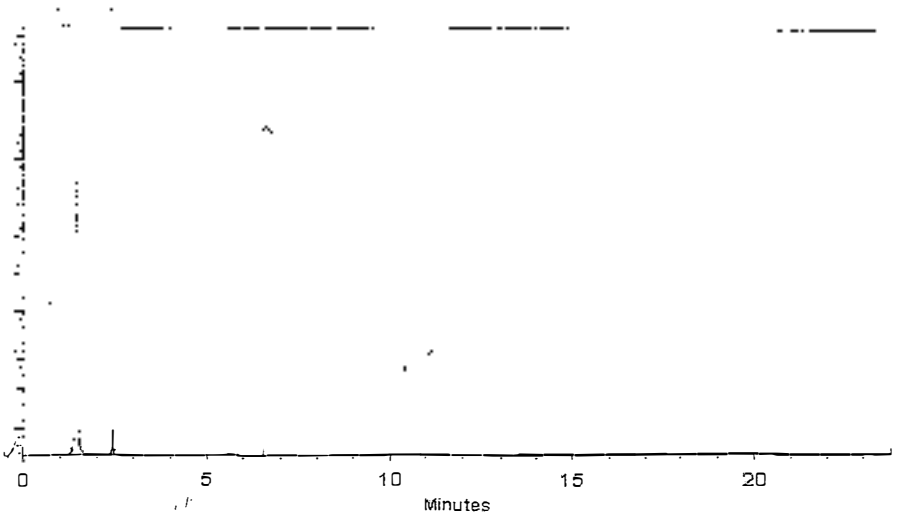
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Cook - Mix Technician

Date Mixed: 06-Apr-2016 **Balance:** 1127510105

Jodi E. Breon - QA Analyst

Date Passed: 08-Apr-2016

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

Hg ICV Stock_00009

4389839
ID: Hg ICV Stock_00009
Exp: 06/24/20 Prpd: CDH
Hg ICV Stock Inorganic Ve

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Mass Spec Solution
Catalog Number:	MSHG-100PPM
Lot Number:	K2-HG02145
Matrix:	10% (v/v) HCl
Value / Analyte(s):	100 µg/mL ea: Mercury
Starting Material:	Hg Metal
Starting Material Lot#:	R307HGA1, 1780
Starting Material Purity:	99.9987%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value:	99.94 ± 0.43 µg/mL
Certified Density:	1.020 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	061204
Hg	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods **Characterization of CRM by one method**

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	0.000024	M	Eu	< 0.000100	O	Na	0.000118	M	Se	< 0.002204	O	Zn	< 0.001349					
O	Al	0.000042	O	Fe	0.000031	M	Nb	< 0.000100	O	Si	< 0.010380	M	Zr	< 0.000200					
M	As	< 0.000801	M	Ga	< 0.000100	M	Nd	< 0.000100	M	Sm	< 0.000100								
O	Au	< 0.001038	M	Gd	< 0.000100	M	Ni	< 0.000701	M	Sn	< 0.000100								
M	B	< 0.004810	M	Ge	< 0.000300	M	Os	< 0.000100	O	Sr	< 0.000046								
M	Ba	< 0.000300	M	Hf	< 0.000100	O	P	< 0.010380	M	Ta	< 0.000100								
O	Be	< 0.000103	s	Hg	<	M	Pb	< 0.000100	M	Tb	< 0.000100								
M	Bi	< 0.001002	M	Ho	< 0.000100	M	Pd	< 0.000400	M	Te	< 0.000801								
O	Ca	0.000435	M	In	< 0.000100	M	Pr	< 0.000100	M	Th	< 0.000100								
M	Cd	< 0.000100	M	Ir	< 0.000100	M	Pt	< 0.000100	O	Ti	< 0.000207								
M	Ce	< 0.000100	O	K	0.000063	M	Rb	< 0.000400	O	Tl	< 0.005013								
M	Co	0.000015	M	La	< 0.000100	M	Re	< 0.000100	M	Tm	< 0.000100								
O	Cr	< 0.000603	O	Li	< 0.000038	M	Rh	< 0.000100	M	U	< 0.000100								
M	Cs	< 0.000100	O	Lu	< 0.000063	M	Ru	< 0.000100	M	V	< 0.000300								
O	Cu	< 0.000666	O	Mg	0.000142	O	S	0.000384	M	W	< 0.000100								
M	Dy	< 0.000100	O	Mn	0.000019	M	Sb	< 0.000400	M	Y	< 0.000100								
M	Er	< 0.000100	O	Mo	0.000074	O	Sc	< 0.000124	M	Yb	< 0.000100								

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+
Chemical Compatibility - Stable in HNO3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.
Stability - 2-100 ppb levels not stable in 1% HNO3 / LDPE container, stable in 10% HNO3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO3 / LDPE container.
Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO3); Oxide (Soluble in HNO3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 24, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 24, 2020**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

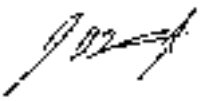
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

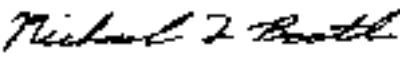
Certificate Prepared By:

James King Jr
Product Documentation Supervisor



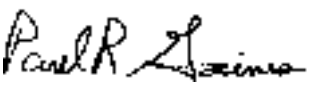
Certificate Approved By:

Michael Booth
QC Supervisor



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

Hg Ultra Prim_00011

Certificate of Analysis

ULTRA SCIENTIFIC
Analytical Solutions

ISO Guide 34 Reference Material

Product Number: ICP-080
Lot Number: CP-5666

Lot Issue Date: 16-Nov 2016
Expiration Date: 31-Dec 2023

Product Name: Mercury ICP Standard

Description:
This Reference Material (RM) was gravimetrically prepared in accordance with ISO Guide 34 and under ULTRA Scientific's ISO 9001 registered quality system. The neat materials used for this product have been verified by ULTRA's ISO 17025 laboratory and under ULTRA's ISO Guide 34 accreditation. The analyte concentrations were verified by ULTRA's ISO 17025 accredited laboratory. For each analyte, the true value, with its uncertainty value calculated at the 95% confidence level, is reported below.

Analyte	Starting Material	Lot Number	Purity (%)	Calculated Value	Traceability & Method
mercury	mercuric nitrate	RM11214	99.999%	1002 ± 2 µg/mL	NIST SRM 3133; ICP-OES

Solvent: 2% nitric acid in low TOC water (< 50 ppb)

4397620
ID: Hg Ultra Prim_00011
Exp: 12/31/23 Prpd: CDH
Ultra 1000 ppm Hg primar

Non-Certified Values:

Density: 1.0099 g/mL @ 20.00 ± 0.05°C

Trace Metallic Impurities in Solution Standard in µg/mL

*	Al	<0.005 ND	*	Ga	<0.005 ND	n	Nb		n	S	
*	Sb	<0.005 ND	n	Ge		n	Os		n	Ta	
*	As	<0.005 ND	n	Au		*	Pd	<0.005 ND	n	Te	
*	Ba	<0.005 ND	n	Hf		*	P	<0.005 ND	n	Tb	
*	Be	<0.005 ND	n	Ho		*	Pt	<0.005 ND	n	Tl	
*	Bi	<0.005 ND	*	In	<0.005 ND	*	K	<0.005 ND	*	Th	<0.005 ND
*	B	<0.005 ND	n	Ir		n	Pr		n	Tm	
*	Cd	<0.005 ND	*	Fe	<0.005 ND	n	Re		*	Sn	<0.005 ND
*	Cs	<0.005 ND	*	La	<0.005 ND	n	Rh		*	Ti	<0.005 ND
*	Ca	<0.005 ND	*	Pb	<0.005 ND	n	Rb		n	W	
n	Ce		*	Li	<0.005 ND	n	Ru		n	U	
*	Cr	<0.005 ND	n	Lu		n	Sm		*	V	<0.005 ND
*	Co	<0.005 ND	*	Mg	<0.005 ND	n	Sc		n	Yb	
*	Cu	<0.005 ND	*	Mn	<0.005 ND	*	Se	<0.005 ND	n	Y	
n	Dy		s	Hg		*	Si	<0.005 ND	*	Zn	<0.005 ND
*	Er	<0.005 ND	*	Mo	<0.005 ND	*	Ag	<0.005 ND	n	Zr	
*	Eu	<0.005 ND	n	Nd		*	Na	<0.005 ND			
*	Gd	<0.005 ND	*	Ni	<0.005 ND	*	Sr	<0.005 ND			

* - element checked; i - spectral interference; n – element not checked; D – element detected; ND – element not detected; s - standard element

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER
ANAB ACCREDITED ISO 17025 TESTING LABORATORY

Certificate of Analysis

ISO Guide 34 Reference Material

Product Number: ICP-080
Lot Number: CP-5666

Lot Issue Date: 16-Nov 2016
Expiration Date: 31-Dec 2023

Storage: Store at Room Temperature (15° to 30°C).

Traceability:
Traceability has been established through an unbroken chain of comparisons, each having stated uncertainties. Comparisons are based on appropriate physical or chemical measurements, including gravimetric or volumetric dilution, where the mass or volume of a solution before and after dilution is measured. The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1, ISO 9001, ISO 17025, and ISO Guide 34. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 819.

Estimation of Uncertainties:
The true value is reported, with its uncertainty value calculated at the 95% confidence level.

Homogeneity:
This RM was formulated and unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening and should be processed without delay for the true value to be valid within the stated uncertainties. Do not pipet from the bottle. Do not return any material removed for pipetting to the bottle. Tightly cap the bottle after removing any material and store according to the instructions noted above.

Hazards:
Refer to the Safety Data Sheet for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid, within the measurement uncertainty specified, until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
The real-time, long term stability of the RM may be monitored over the lifetime of the certification. If substantive changes occur that affect the certification before the expiration of this certificate, ULTRA Scientific will notify the purchaser.

John Russo
President

Monica Bourgeois
Director of QA/RA

Reagent

Icp cal std 3_00016

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	STLDEN-STD-3B
Lot Number:	K2-MEB652538
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Potassium, 4 000 µg/mL ea: Magnesium, 1 000 µg/mL ea: Calcium, Sodium, 500 µg/mL ea: Iron, 200 µg/mL ea: Lithium, Phosphorus, 100 µg/mL ea: Silver, Aluminum, Boron, Barium, Beryllium, Cadmium, Cobalt, Chromium+3, Copper, Manganese, Nickel, Strontium, Vanadium, Zinc

4179774
ID: icp cal std 3_00016
Exp: 10/12/19 Prpd: SJS
ICP CAL STD 3B IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	100.0± 0.6 µg/mL	Barium, Ba	100.0 ± 0.5 µg/mL
Beryllium, Be	100.0 ± 0.6 µg/mL	Boron, B	100.0 ± 0.6 µg/mL
Cadmium, Cd	100.0 ± 0.5 µg/mL	Calcium, Ca	1 000 ± 4 µg/mL
Chromium+3, Cr3	100.0 ± 0.6 µg/mL	Cobalt, Co	100.0 ± 0.5 µg/mL
Copper, Cu	100.0 ± 0.4 µg/mL	Iron, Fe	499.9 ± 2.0 µg/mL
Lithium, Li	200.0± 0.7µg/mL	Magnesium, Mg	4 000 ± 16 µg/mL
Manganese, Mn	100.0± 0.4µg/mL	Nickel, Ni	100.0 ± 0.4 µg/mL
Phosphorus, P	200.0 ± 0.9 µg/mL	Potassium, K	10 000.0 ± 40.0 µg/mL
Silver, Ag	100.0 ± 0.4 µg/mL	Sodium, Na	1 000 ± 4 µg/mL
Strontium, Sr	100.0± 0.4µg/mL	Vanadium, V	100.0 ± 0.4µg/mL
Zinc, Zn	100.0 ± 0.4 µg/mL		

Certified Density: 1.076 g/mL (measured at 20 ± 1 °C)

Assay Information:

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty(±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 12, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- October 12, 2019

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Certificate Approved By:

Michael Booth
Supervisor, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
B	ICP Assay	3107	110830
Ba	ICP Assay	3104a	070222
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr3	ICP Assay	3112a	030730Cr3
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec 4.2
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Sr	EDTA	928	928
Sr	ICP Assay	3153a	990906
V	EDTA	928	928
V	ICP Assay	3165	992706
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Reagent

Icp ICVH_00372

HIGH PURITY STANDARDS
www.highpuritystandards.com

4318899
ID: Icp ICVH_00372
Exp 12/15/17 Prpd SJS
ICP ICVH HP

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

ISO/IEC 17025:2005 Accreditation
Certificate Number AT 1529

Product Description:

Name:	ICVH
Part Number:	**SM-606-125**
Lot Number:	**1634736**
Matrix:	5% HNO_3
Purity:	99.98% - 99.999%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
Al	4000 ± 20	3101a	140903	Th	300.0 ± 1.8	*	
Fe	8000 ± 40	3126a	140812	U	500.0 ± 2.5	3164	080521
Na	4000 ± 20	3152a	120715				

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2.

* Refer to Traceability Information, Section d

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	December 12, 2016
Shipped Date:	**December 15, 2016**
Expiration Date:	**December 15, 2017**
Certificate Issue Date:	December 14, 2016

Moven Mututuvari

Moven Mututuvari PhD., Laboratory Manager

Reagent

Icp ICVL A_00011

HIGH PURITY STANDARDS
www.highpuritystandards.com

P.O.Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Product Description:

Name:	Intrepid ICVL
Part Number:	**SM-606-062**
	Solution A
Lot Number:	**1631905**
Matrix:	5% HNO_3
Purity:	99.98% - 99.9999%

4269090
ID: Icp ICVL A_00011
Exp: 11/16/17 Prpd: SJS
ICP ICVL SOLUTION A H

ANAB ACCREDITED
ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Certified Values:

Element	(mg/L)	SRM ID	SRM Lot#	Element	(mg/L)	SRM ID	SRM Lot#
Al	25.0 ± 0.1	3101a	140903	Li	25.0 ± 0.2	3129a	100714
As	25.0 ± 0.3	3103a	100818	Mg	1000 ± 5	3131a	140110
Ba	25.0 ± 0.2	3104a	140909	Mn	25.0 ± 0.3	3132	050429
Be	25.0 ± 0.3	3105a	090514	Ni	25.0 ± 0.1	3136	120619
B	25.0 ± 0.1	3107	110830	K	2000 ± 10	3141a	140813
Cd	25.0 ± 0.1	3108	130116	Se	50.0 ± 0.5	3149	100901
Ca	200 ± 1	3109a	130213	Na	200 ± 1	3152a	120715
Cr	25.0 ± 0.1	3112a	030730	Sr	25.0 ± 0.1	3153a	990906
Co	25.0 ± 0.1	3113	000630	Tl	25.0 ± 0.3	3158	993012
Cu	25.0 ± 0.1	3114	121207	V	25.0 ± 0.2	*	
Fe	25.0 ± 0.1	3126a	140812	Zn	25.0 ± 0.1	3168a	120629
Pb	25.0 ± 0.2	3128	101026				

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2.
* Refer to Traceability Information, Section d

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	November 14, 2016
Shipped Date:	**November 16, 2016**
Expiration Date:	**November 16, 2017**
Certificate Issue Date:	November 14, 2016

Moven Mututuvari

Moven Mututuvari PhD., Laboratory Manager

Reagent

Icp ICVL B_00011

HIGH-PURITY STANDARDS
www.highpuritystandards.com
P.O. Box 41727
Charleston, SC 29423
Phone: (843) 767-7000
Fax: (843) 767-7005

Certificate of Analysis

Product Description:

Name:	Intrepid ICVL
Part Number:	**SM-606-062 Solution B**
Lot Number:	**1631906**
Matrix:	2% HNO_3 + Tr HF
Purity:	99.92% - 99.9999%

4269091
ID: Icp ICVL B_00011
Exp: 11/16/17Prpd: SJS
ICP ICVL SOLUTION B HP

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Certified Values:

Element	(mg/L)	SRM ID	SRM Lot#	Element	(mg/L)	SRM ID	SRM Lot#
Sb	25.0 ± 0.2	3102a	140911	Ag	25.0 ± 0.2	3151	992212
Mo	25.0 ± 0.2	3134	130418	Sn	50.0 ± 0.3	3161a	140917
P	200 ± 1	3139a	060717	Ti	25.0 ± 0.2	3162a	130925
Si	200 ± 2	3150	130912	Zr	25.0 ± 0.2	3169	130920

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2.

* Refer to Traceability Information, Section d

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	November 14, 2016
Shipped Date:	**November 16, 2016**
Expiration Date:	**November 16, 2017**
Certificate Issue Date:	November 14, 2016

Moven Mutuvari

Moven Mutuvari PhD., Laboratory Manager

Reagent

ICP ISAB 1B_00010

HIGH PURITY STANDARDS
www.highpuritystandards.com
PO Box 41320
Charleston, SC 29423
Phone: (843) 767-7300
Fax: (843) 767-1336

Certificate of Analysis

Product Description:

Name:	ICS-AB STD #1
Part Number:	**SM-606-037**
	Solution B
Lot Number:	**1700955**
Matrix:	2% HNO_3
Purity:	99.99%

4336979
ID: ICP ISAB 1B_00010
Exp:01/11/16Prpd:SJS
ICP ICSAB STD 1 SOL B H

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Certified Values:

Element	(mg/L)	SRM ID	SRM Lot#
Tl	1000 ± 5	3158	993012

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.
* Refer to Traceability Information, Section d

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	January 9, 2017
Shipped Date:	**January 11, 2017**
Expiration Date:	**January 11, 2018**
Certificate Issue Date:	January 10, 2017

Moven Mutuvari

Moven Mutuvari PhD., Laboratory Manager

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Intended Use:

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not available, a second source standard or independent lot is used.

Refer to Safety Datasheet (SDS) for hazardous information.

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

ICP ISAB STD1_00009

HIGH PURITY STANDARDS
www.highpuritystandards.com
PO Box 41727
Charleston SC 29423
Phone (843) 767-7800
Fax (843) 767-7801

Certificate of Analysis

Product Description:

Name:	ICS-AB STD#1
Part Number:	**SM-606-037**
	Solution A
Lot Number:	**1700954**
Matrix:	20% HCl
Purity:	99.999% - 99.9999%

4336964
ID: ICP ISAB STD1_00009
Exp: 01/11/18 Prpd: SJS
ICAP ICSAB STD 1 SOL A

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Certified Values:

Element	(mg/L)	SRM ID	SRM Lot#	Element	(mg/L)	SRM ID	SRM Lot#
Sb	100.0 ± 0.6	3102a	140911	P	200.0 ± 1.2	3139a	060717
As	200 ± 2	3103a	100818	K	5000 ± 25	3141a	140813
B	200.0 ± 1.2	3107	110830	Se	500 ± 5	3149	100901
Li	100.0 ± 0.6	3129a	100714	Na	5000 ± 25	3152a	120715
Mo	100.0 ± 0.6	3134	891307	Sr	100.0 ± 0.5	3153a	990906

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2.
* Refer to Traceability Information, Section d

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	January 9, 2017
Shipped Date:	**January 11, 2017**
Expiration Date:	**January 11, 2018**
Certificate Issue Date:	January 10, 2017

Moven Mututuvari

Moven Mututuvari PhD., Laboratory Manager

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Intended Use:

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not available, a second source standard or independent lot is used.

Refer to Safety Datasheet (SDS) for hazardous information.

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

ICP ISAB STD2_00009

HIGH-PURITY STANDARDS
www.highpuritystandards.com
P.O. Box 41[illegible]
Charleston SC [illegible]
Phone (843) [illegible]
Fax (843) [illegible]

4026784
ID: ICP ISAB STD2_00009
Exp:07/27/17 Prpd:SJS Opn:07/29/16
ICP ICSAB STD 2 HP

Certificate of Analysis

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Product Description:

Name:	ICS-AB STD #2
Part Number:	**SM-606-038**
Lot Number:	**1620836**
Matrix:	20% HCl
Purity:	99.98% - 99.999%

Certified Values:

Element	(mg/L)	SRM ID	SRM Lot#	Element	(mg/L)	SRM ID	SRM Lot#
Sn	1000 ± 6	3161a	140917	Ti	100.0 ± 0.6	3162a	130925

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.
* Refer to Traceability Information, Section d

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	July 26, 2016
Shipped Date:	**July 27, 2016**
Expiration Date:	**July 27, 2017**
Certificate Issue Date:	July 26, 2016

Moven Mututuvari

Moven Mututuvari PhD., Laboratory Manager

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Intended Use:

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not availabe, a second source standard or independent lot is used.

Refer to Safety Datasheet (SDS) for hazardous information.

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

ICP LLCCV-3_00006

4470428
ID: ANALYTES B_00012
Exp: 04/14/18 Prpd: SJS
ICP ANALYTES B SPEX

Reference Materials Producer
Cert #2485.01

SPEXertificate®

Certificate of Reference Material

Catalog Number: INT-B1 **Lot No.** 3-98MKBY

Description: Analytes B

Matrix: 5% HNO_3

This **ASSURANCE®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for inorganic spectroscopic instrumentation such as ICP-OES, DCP, AA, ICP-MS, and XRF. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

The CRM is prepared from high purity single element concentrates of individual elements using Class A laboratory ware to give precise concentrations. See side 2 for details of certification.

Instrumental Analysis by ICP Spectrometer:

Analyte	Labeled	Certified	Uncertainty	SRM	Analyte	Labeled	Certified	Uncertainty	SRM
Ag	100 µg/mL	99.1 µg/mL	±0.5 µg/mL	3151*	Be	50 µg/mL	49.6 µg/mL	±0.3 µg/mL	3105a*
Cd	100 µg/mL	98.9 µg/mL	±0.5 µg/mL	3108*	Co	50 µg/mL	49.4 µg/mL	±0.3 µg/mL	3113*
Ni	100 µg/mL	98.9 µg/mL	±0.5 µg/mL	3136*	Cr	50 µg/mL	49.6 µg/mL	±0.3 µg/mL	3112a*
Pb	100 µg/mL	99.1 µg/mL	±0.5 µg/mL	3128*	Cu	50 µg/mL	49.8 µg/mL	±0.3 µg/mL	3114*
Zn	100 µg/mL	98.9 µg/mL	±0.5 µg/mL	3168a*	Mn	50 µg/mL	49.3 µg/mL	±0.3 µg/mL	3132*
Ba	50 µg/mL	49.3 µg/mL	±0.3 µg/mL	3104a*	V	50 µg/mL	49.8 µg/mL	±0.3 µg/mL	3165*

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available)

SPEX CertiPrep Reference Multi: Lot# 9-164YP, 12-03YP

Balances are calibrated regularly with weight sets traceable to NIST#s 32856, 32867 and others. This CRM is guaranteed stable and accurate to ±0.5% of the certified (measured) value. This includes uncertainty components due to preparation, measurement, homogeneity, and short-term and long-term stability. No measured concentration of any individual component exceeds ±2% of the labeled value. This guarantee is valid for a period of one year from the date of certification only when the material is unopened and stored under ambient laboratory conditions.

Date of Certification: APR - - 2017

Certifying Officer:

©2016 SPEX CertPrep, LLC

Reagent

ICP PDS 1_00020

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate #80.01

ACCREDITED Reference Material Producer Certificate #80.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	STLDEN-PDS-1
Lot Number:	M2-MEB655824
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	2 000 µg/mL ea:

Calcium,	Potassium,	Magnesium,
Sodium,		
200 µg/mL ea:		
Phosphorus,		
100 µg/mL ea:		
Iron,	Aluminum,	
50 µg/mL ea:		
Uranium,		
20 µg/mL ea:		
Thorium,	Thallium,	Selenium,
Zinc,	Arsenic,	
10 µg/mL ea:		
Barium,	Lithium,	Lead,
5 µg/mL ea:		
Strontium,	Vanadium,	Silver,
Nickel,	Manganese,	Beryllium,
Cadmium,	Cobalt,	Chromium,
Copper		

4337005
ID: ICP PDS 1_00019
Exp: 02/16/20 Prpd: SJS
ICP PDS 1 IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	100.0 ± 0.5 µg/mL	Arsenic, As	20.00 ± 0.14 µg/mL
Barium, Ba	10.00 ± 0.05 µg/mL	Beryllium, Be	5.000 ± 0.029 µg/mL
Cadmium, Cd	5.000 ± 0.030 µg/mL	Calcium, Ca	2 000 ± 8 µg/mL
Chromium, Cr	5.000 ± 0.025 µg/mL	Cobalt, Co	5.000 ± 0.022 µg/mL
Copper, Cu	5.000 ± 0.030 µg/mL	Iron, Fe	100.0 ± 0.4 µg/mL
Lead, Pb	10.00 ± 0.05 µg/mL	Lithium, Li	10.00 ± 0.04 µg/mL
Magnesium, Mg	2 000 ± 8 µg/mL	Manganese, Mn	5.001 ± 0.026 µg/mL
Nickel, Ni	5.000 ± 0.030 µg/mL	Phosphorus, P	200.0 ± 0.9 µg/mL
Potassium, K	2 000 ± 7 µg/mL	Selenium, Se	20.00 ± 0.10 µg/mL
Silver, Ag	5.000 ± 0.034 µg/mL	Sodium, Na	2 000 ± 7 µg/mL
Strontium, Sr	5.000 ± 0.029 µg/mL	Thallium, Tl	20.00 ± 0.14 µg/mL
Thorium, Th	20.00 ± 0.10 µg/mL	Uranium, U	50.00 ± 0.25 µg/mL
Vanadium, V	5.001 ± 0.030 µg/mL	Zinc, Zn	20.00 ± 0.12 µg/mL

Certified Density: 1.042 g/mL (measured at 20 ± 1 °C)

Assay Information:

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM by one method

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance	
Isotope	**Atom %**
Uranium 238U	99.6 ± 0.1
Uranium 235U	0.37 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 16, 2017

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- February 16, 2020

-The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Donna Senn

Certificate Approved By:

Michael Booth
Supervisor, Quality Control

Michael J Booth

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

Paul R Gaines

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr	ICP Assay	3112a	030730Cr3
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Sr	EDTA	928	928
Sr	ICP Assay	3153a	990906
Th	EDTA	928	928
Tl	ICP Assay	3158	993012
Tl	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2
V	EDTA	928	928
V	ICP Assay	3165	992706
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

Reagent

ICP PDS 2_00014

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Zach Saunders
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR 1034).

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	STLDEN-PDS-2A
Lot Number:	H2-MEB546063
Matrix:	3% (v/v) HNO3 tr. HF
Value / Analyte(s):	500 µg/mL ea: Silicon, 10 µg/mL ea: Boron, Antimony, Tin, 5 µg/mL ea: Molybdenum, Titanium, Zirconium

4269162
ID: ICP PDS 2_00014
Exp: 12/01/17 Prpd: S/S
ICP PDS 2A IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	10.00 ± 0.07 µg/mL	Boron, B	10.00 ± 0.06 µg/mL
Molybdenum, Mo	5.000 ± 0.032 µg/mL	Silicon, Si	500.0 ± 3.8 µg/mL
Tin, Sn	10.00 ± 0.06 µg/mL	Titanium, Ti	5.000 ± 0.028 µg/mL
Zirconium, Zr	5.001 ± 0.032 µg/mL		

Certified Density: 1.017 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	070514
B	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Sb	Calculated		See Sec. 4.2
Si	ICP Assay	3150	071204
Si	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Sn	Calculated		See Sec. 4.2
Ti	ICP Assay	3162a	060808
Ti	Calculated		See Sec. 4.2
Zr	ICP Assay	3169	071226
Zr	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ ($\bar{x}$) = mean

x_i = individual results

n = number of measurements

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$ 2 = the coverage factor

$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep cap tightly sealed when not in use. Store and use at 20 ± 4° C. Do not pipette from the container. Do not return removed aliquots to container.

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 22, 2014

11.2 Expiration Date

EXPIRES:
01 DEC 2017

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

Reagent

ICP RL STD3A_00011

INORGANIC VENTURES
Christiansburg, VA 24073 - USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	STLDEN-RL-3A
Lot Number:	K2-MEB651193
Matrix:	1.4% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea:

Potassium,	Sodium,	Phosphorus,
200 µg/mL ea:		
Calcium,	Magnesium,	
100 µg/mL ea:		
Aluminum,	Boron,	
60 µg/mL ea:		
Uranium,		
30 µg/mL ea:		
Iron,		
10 µg/mL ea:		
Silver,	Chromium+3,	Copper,
Lithium,	Nickel,	Thorium,
Vanadium,	Zinc,	
5 µg/mL ea:		
Barium,	Cadmium,	Cobalt,
Strontium,		
3 µg/mL ea:		
Manganese,		
1 µg/mL ea:		
Beryllium		

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	100.0 ± 0.5 µg/mL	Barium, Ba	4.999 ± 0.030 µg/mL
Beryllium, Be	1.000 ± 0.006 µg/mL	Boron, B	100.0 ± 0.6 µg/mL
Cadmium, Cd	5.000 ± 0.030 µg/mL	Calcium, Ca	200.0 ± 0.8 µg/mL
Chromium+3, Cr3	10.00 ± 0.05 µg/mL	Cobalt, Co	5.000 ± 0.022 µg/mL
Copper, Cu	10.00 ± 0.06 µg/mL	Iron, Fe	30.00 ± 0.13 µg/mL
Lithium, Li	10.00 ± 0.04 µg/mL	Magnesium, Mg	200.0 ± 0.8 µg/mL
Manganese, Mn	3.000 ± 0.015 µg/mL	Nickel, Ni	10.00 ± 0.06 µg/mL
Phosphorus, P	1 000 ± 4 µg/mL	Potassium, K	1 000 ± 4 µg/mL
Silver, Ag	10.00 ± 0.07 µg/mL	Sodium, Na	1 000 ± 4 µg/mL
Strontium, Sr	5.000 ± 0.030 µg/mL	Thorium, Th	10.00 ± 0.05 µg/mL
Uranium, U	60.00 ± 0.39 µg/mL	Vanadium, V	10.00 ± 0.06 µg/mL
Zinc, Zn	10.00 ± 0.06 µg/mL		

Certified Density: 1.017 g/mL (measured at 20 ± 1 °C)

Assay Information:

11.1 Certification Issue Date

August 17, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- August 17, 2019

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Maurice Harris
Product Documentation Technician

Certificate Approved By:

Michael Booth
Supervisor, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
B	ICP Assay	3107	110830
Ba	ICP Assay	3104a	070222
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr3	ICP Assay	3112a	030730Cr3
Cr3	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Sr	EDTA	928	928
Sr	ICP Assay	3153a	990906
Th	EDTA	928	928
U	ICP Assay	3164	080521
V	EDTA	928	928
V	ICP Assay	3165	992706
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.7 ± 0.1
Uranium 235U	0.28 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

Reagent

ICP RLSTD 1A_00012

OF CERTIFYING OFFICERS

ian

Donna Senn

Michael J Bottle

Paul R Laine

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01

ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

4097744

ID: ICP RLSTD 1A_00012

Exp: 09/02/15 Prod: SJS

ICP RLSTD 1A

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	STLDEN-RL-1A
Lot Number:	K2-MEB651561
Matrix:	2% (v/v) HNO_3 tr. HF
Value / Analyte(s):	10 mg/L ea: Arsenic, Antimony, Selenium, Thallium, 3 mg/L ea: Lead

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	10.00 ± 0.07 mg/L	Arsenic, As	10.00 ± 0.06 mg/L
Lead, Pb	3.000 ± 0.015 mg/L	Selenium, Se	10.00 ± 0.05 mg/L
Thallium, Tl	10.00 ± 0.07 mg/L		

Certified Density: 1.007 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	ICP Assay	3103a	100818
As	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Sb	ICP Assay	3102a	061229 Sb
Sb	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±)= $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density NIST SRM uncertainty weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.8799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 02, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **September 02, 2019**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

Reagent

ICP SPK 2B_00062

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 - USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-ICP-SPK-2B
Lot Number:	K2-MEB654055
Matrix:	5% (v/v) HNO3 0.5% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Silicon, 200 µg/mL ea: Sulfur, Tin, 100 µg/mL ea: Boron, Molybdenum, Titanium, 50 µg/mL ea: Antimony, Zirconium

4545906
ID: ICP SPK 2B_00062
Exp:05/17/18 Prpd:LMT Opn:05/17/17
ICP PREP SPIKE 2B

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	50.00 ± 0.35 µg/mL	Boron, B	100.0 ± 0.6 µg/mL
Molybdenum, Mo	100.0 ± 0.5 µg/mL	Silicon, Si	1 000 ± 6 µg/mL
Sulfur, S	200.0 ± 1.0 µg/mL	Tin, Sn	200.0 ± 0.7 µg/mL
Titanium, Ti	100.0 ± 0.6 µg/mL	Zirconium, Zr	50.00 ± 0.34 µg/mL

Certified Density: 1.029 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	110830
Mo	ICP Assay	3134	130418
S	Acidimetric	84L	84L
S	ICP Assay	3154	892205
Sb	ICP Assay	3102A	061229
Si	ICP Assay	3150	130912
Sn	ICP Assay	3161a	070330
Sn	Calculated		See Sec. 4.2
Ti	ICP Assay	3162a	130925
Zr	ICP Assay	3169	130920

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods | **Characterization of CRM by one method**

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\,a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\,b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\,a})^2 / ((1/u_{char\,a})^2 + (1/u_{char\,b})^2))$

$w_b = (1/u_{char\,b})^2 / ((1/u_{char\,a})^2 + (1/u_{char\,b})^2))$

CRM/RM Expanded Uncertainty (u_c) = $U_{CRM/RM} = k(u^2_{char\,a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\,a\&b} = [(w_a)^2 (u_{char\,a})^2 + (w_b)^2 (u_{char\,b})^2]^{1/2}$ where $u_{char\,a}$ and $u_{char\,b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\,a}$

CRM/RM Expanded Uncertainty (u_c) = $U_{CRM/RM} = k(u^2_{char\,a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\,a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

Store between approximately 4° - 30° C while in sealed TCT bag.

While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pipette from the container. Do not return removed aliquots to container.

For more information, visit www.inorganicventures.com/TCT

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

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- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 09, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- December 09, 2019

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: 5/2/17

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Maurice Harris
Product Documentation Technician

Certificate Approved By:

Michael Booth
Supervisor, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

Reagent

ICP SPK 3A_00133

INORGANIC VENTURES
300 Technology Drive
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CERTIFICATE OF ANALYSIS

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ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	STLDEN-SPK-3A
Lot Number:	M2-MEB656518
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	5 000 µg/mL ea:
	Calcium, Potassium, Magnesium,
	Sodium,
	1 000 µg/mL ea:
	Phosphorus,
	200 µg/mL ea:
	Thallium, Uranium, Selenium,
	Bismuth, Aluminum, Barium,
	100 µg/mL ea:
	Arsenic, Lithium, Iron,
	Strontium, Thorium,
	50 µg/mL ea:
	Vanadium, Zinc, Lead,
	Nickel, Cobalt, Manganese,
	25 µg/mL ea:
	Copper,
	20 µg/mL ea:
	Chromium,
	10 µg/mL ea:
	Cadmium,
	5 µg/mL ea:
	Silver, Beryllium

4545907
ID: ICP SPK 3A_00133
Exp:05/17/18 Prpd:MT Opn:05/17/17
ICP PREP SPIKE 3A IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	200.0 ± 0.9 µg/mL	Arsenic, As	100.0 ± 0.8 µg/mL
Barium, Ba	200.1 ± 0.8 µg/mL	Beryllium, Be	5.001 ± 0.029 µg/mL
Bismuth, Bi	200.0 ± 1.1 µg/mL	Cadmium, Cd	10.00 ± 0.06 µg/mL
Calcium, Ca	5 000 ± 19 µg/mL	Chromium, Cr	20.01 ± 0.12 µg/mL
Cobalt, Co	50.01 ± 0.23 µg/mL	Copper, Cu	25.01 ± 0.09 µg/mL
Iron, Fe	100.1 ± 0.4 µg/mL	Lead, Pb	50.02 ± 0.22 µg/mL
Lithium, Li	100.0 ± 0.3 µg/mL	Magnesium, Mg	5 000 ± 20 µg/mL
Manganese, Mn	50.02 ± 0.19 µg/mL	Nickel, Ni	50.02 ± 0.21 µg/mL
Phosphorus, P	1 000 ± 4 µg/mL	Potassium, K	5 000 ± 18 µg/mL
Selenium, Se	200.0 ± 1.2 µg/mL	Silver, Ag	5.001 ± 0.034 µg/mL
Sodium, Na	5 000 ± 18 µg/mL	Strontium, Sr	100.0 ± 0.4 µg/mL
Thallium, Tl	200.0 ± 1.3 µg/mL	Thorium, Th	100.0 ± 0.5 µg/mL
Uranium, U	200.0 ± 1.1 µg/mL	Vanadium, V	50.00 ± 0.21 µg/mL
Zinc, Zn	50.02 ± 0.21 µg/mL		

Certified Density: 1.091 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	070222
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Bi	ICP Assay	3106	991212
Bi	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr	ICP Assay	3112a	030730Cr3
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric		traceable to 84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	3153a	990906
Th	EDTA	928	928
Th	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2
V	EDTA	928	928
V	ICP Assay	3165	992706
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.7 ± 0.1
Uranium 235U	0.28 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.5799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 13, 2017

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.11. This certification is nullified if instructions in Sec 7.11 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- March 13, 2020

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: 5/10/17

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.11.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Maurice Harris
Product Documentation Technician

Certificate Approved By:

Michael Booth
Supervisor, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

Reagent

Icp stk ICSA_00020

INORGANIC VENTURES
[illegible]
Christiansburg, VA 24073 - USA
[illegible]
tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CLPP-ICS-A
Lot Number:	K2-MEB643109
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	5 000 µg/mL ea: Aluminum, Calcium, Magnesium, 2 000 µg/mL ea: Iron

4004440
ID: MS ICSA_STOCK_00024
Exp: 07/01/20 Rpd: LMT
ICP-MS ICS-0A STOCK SOLUT

ICSA-00020

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	5 000 ± 22 µg/mL	Calcium, Ca	5 000 ± 20 µg/mL
Iron, Fe	2 000 ± 8 µg/mL	Magnesium, Mg	5 000 ± 20 µg/mL

Certified Density: 1.085 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 01, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- July 01, 2020

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

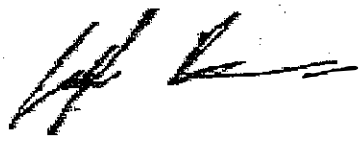
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

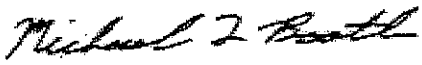
Certificate Prepared By:

Joseph Burns
TSG Technician



Certificate Approved By:

Michael Booth
QC Supervisor



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MS-31010_00011

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31010 **Lot No.:** A0116027

Description : SV Calibration Mix #4

SV Calibration Mix #4 2000 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2019 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	Hexachloroethane		2,002.0	µg/mL	+/- 11.8913	µg/mL	Gravimetric
	CAS # 67-72-1	(Lot 4H3SF)			+/- 60.6057	µg/mL	Unstressed
	Purity 99%				+/- 60.6057	µg/mL	Stressed
2	Nitrobenzene		2,014.0	µg/mL	+/- 11.9625	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot 65096APV)			+/- 60.9690	µg/mL	Unstressed
	Purity 99%				+/- 60.9690	µg/mL	Stressed
3	Isophorone		2,002.0	µg/mL	+/- 11.8913	µg/mL	Gravimetric
	CAS # 78-59-1	(Lot MKBG2442V)			+/- 60.6057	µg/mL	Unstressed
	Purity 99%				+/- 60.6057	µg/mL	Stressed
4	1,2,4-Trichlorobenzene		2,014.0	µg/mL	+/- 11.9625	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot 26896BM)			+/- 60.9690	µg/mL	Unstressed
	Purity 99%				+/- 60.9690	µg/mL	Stressed
5	Hexachlorobutadiene		2,007.0	µg/mL	+/- 11.9212	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/- 60.7583	µg/mL	Unstressed
	Purity 98%				+/- 60.7583	µg/mL	Stressed
6	2-Methylnaphthalene		2,000.0	µg/mL	+/- 11.8794	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot 19399MJV)			+/- 60.5452	µg/mL	Unstressed
	Purity 99%				+/- 60.5452	µg/mL	Stressed
7	Hexachlorocyclopentadiene		2,007.9	µg/mL	+/- 11.9263	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 150909)			+/- 60.7843	µg/mL	Unstressed
	Purity 97%				+/- 60.7843	µg/mL	Stressed

8	2,6-Dinitrotoluene		2,010.0	µg/mL	+/-	11.9388	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot 1437483V)			+/-	60.8479	µg/mL	Unstressed
	Purity 99%				+/-	60.8479	µg/mL	Stressed
9	Dibenzofuran		2,002.0	µg/mL	+/-	11.8913	µg/mL	Gravimetric
	CAS # 132-64-9	(Lot MKBH8392V)			+/-	60.6057	µg/mL	Unstressed
	Purity 99%				+/-	60.6057	µg/mL	Stressed
10	2,4-Dinitrotoluene		2,000.0	µg/mL	+/-	11.8794	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)			+/-	60.5452	µg/mL	Unstressed
	Purity 99%				+/-	60.5452	µg/mL	Stressed
11	Diethylphthalate		2,016.0	µg/mL	+/-	11.9744	µg/mL	Gravimetric
	CAS # 84-66-2	(Lot MKBJ3578V)			+/-	61.0295	µg/mL	Unstressed
	Purity 99%				+/-	61.0295	µg/mL	Stressed
12	Hexachlorobenzene		2,018.0	µg/mL	+/-	11.9863	µg/mL	Gravimetric
	CAS # 118-74-1	(Lot LB98981V)			+/-	61.0901	µg/mL	Unstressed
	Purity 99%				+/-	61.0901	µg/mL	Stressed
13	Carbazole		1,999.2	µg/mL	+/-	11.8746	µg/mL	Gravimetric
	CAS # 86-74-8	(Lot 3715800)			+/-	60.5210	µg/mL	Unstressed
	Purity 98%				+/-	60.5210	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

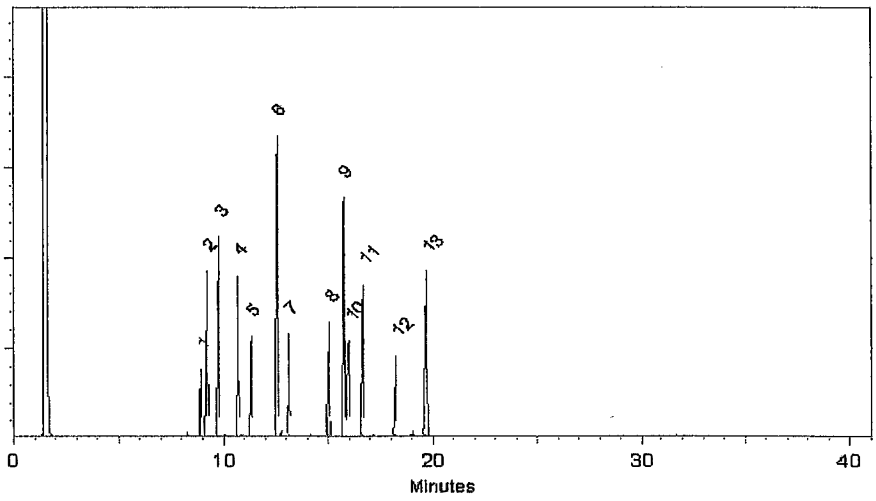
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 17-Dec-2015 **Balance:** B345965662

Jennifer L. Pollino - QC Analyst

Date Passed: 21-Dec-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MS-31995_00004

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CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31995 **Lot No.:** A092153

Description : 8270 Calibration Mix #5, Revised

8270 Calibration Mix #5, Revised 2,000µg/ml, Methylene Chloride, 1ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2018 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Naphthalene **CAS #** 91-20-3 (Lot MKBF8633V) **Purity** 99%	2,000.0 µg/mL	+/- 11.7371 µg/mL +/- 92.7295 µg/mL +/- 101.3892 µg/mL	Gravimetric Unstressed Stressed
2	2-Methylnaphthalene **CAS #** 91-57-6 (Lot 19399MJV) **Purity** 96%	1,999.7 µg/mL	+/- 11.7352 µg/mL +/- 92.7147 µg/mL +/- 101.3729 µg/mL	Gravimetric Unstressed Stressed
3	1-Methylnaphthalene **CAS #** 90-12-0 (Lot 5250.00-10) **Purity** 99%	2,000.0 µg/mL	+/- 11.7371 µg/mL +/- 92.7295 µg/mL +/- 101.3892 µg/mL	Gravimetric Unstressed Stressed
4	Acenaphthylene **CAS #** 208-96-8 (Lot ER030707-01) **Purity** 99%	2,000.0 µg/mL	+/- 11.7371 µg/mL +/- 92.7295 µg/mL +/- 101.3892 µg/mL	Gravimetric Unstressed Stressed
5	Acenaphthene **CAS #** 83-32-9 (Lot MKBH3748V) **Purity** 99%	2,000.5 µg/mL	+/- 11.7401 µg/mL +/- 92.7527 µg/mL +/- 101.4145 µg/mL	Gravimetric Unstressed Stressed
6	Fluorene **CAS #** 86-73-7 (Lot 1326187) **Purity** 99%	2,000.0 µg/mL	+/- 11.7371 µg/mL +/- 92.7295 µg/mL +/- 101.3892 µg/mL	Gravimetric Unstressed Stressed
7	Phenanthrene **CAS #** 85-01-8 (Lot MKBJ4205V) **Purity** 99%	2,001.0 µg/mL	+/- 11.7430 µg/mL +/- 92.7759 µg/mL +/- 101.4398 µg/mL	Gravimetric Unstressed Stressed
8	Anthracene **CAS #** 120-12-7 (Lot MKBK5208V) **Purity** 99%	2,000.5 µg/mL	+/- 11.7401 µg/mL +/- 92.7527 µg/mL +/- 101.4145 µg/mL	Gravimetric Unstressed Stressed

9	Fluoranthene		2,000.2	µg/mL	+/-	11.7382	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot 00828AJ)			+/-	92.7378	µg/mL	Unstressed
	Purity 98%				+/-	101.3983	µg/mL	Stressed
10	Pyrene		2,001.5	µg/mL	+/-	11.7459	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot S22012V)			+/-	92.7990	µg/mL	Unstressed
	Purity 99%				+/-	101.4652	µg/mL	Stressed
11	Benz(a)anthracene		2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot ER121707-01)			+/-	92.7295	µg/mL	Unstressed
	Purity 99%				+/-	101.3892	µg/mL	Stressed
12	Chrysene		2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot ER120810-02)			+/-	92.7295	µg/mL	Unstressed
	Purity 99%				+/-	101.3892	µg/mL	Stressed
13	Benzo(b)fluoranthene		2,000.5	µg/mL	+/-	11.7401	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot ER022008-02)			+/-	92.7527	µg/mL	Unstressed
	Purity 99%				+/-	101.4145	µg/mL	Stressed
14	Benzo(k)fluoranthene		2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot ER061608-02)			+/-	92.7295	µg/mL	Unstressed
	Purity 99%				+/-	101.3892	µg/mL	Stressed
15	Benzo(a)pyrene		2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot ER071309-02)			+/-	92.7295	µg/mL	Unstressed
	Purity 99%				+/-	101.3892	µg/mL	Stressed
16	Indeno(1,2,3-cd)pyrene		2,000.5	µg/mL	+/-	11.7401	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot ER082107-02)			+/-	92.7527	µg/mL	Unstressed
	Purity 99%				+/-	101.4145	µg/mL	Stressed
17	Dibenz(a,h)anthracene		2,000.5	µg/mL	+/-	11.7401	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	92.7527	µg/mL	Unstressed
	Purity 99%				+/-	101.4145	µg/mL	Stressed
18	Benzo(g,h,i)perylene		2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot ER020708-08)			+/-	92.7295	µg/mL	Unstressed
	Purity 99%				+/-	101.3892	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25um
Rtx-5 (cat.#10223)

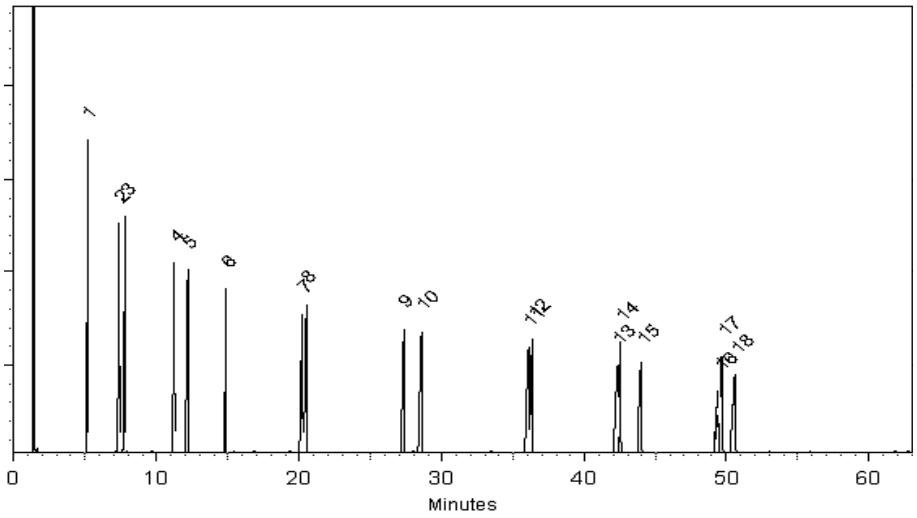
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen to guarantee product quality. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Rebecca Sawyer

Date Mixed: 28-Nov-2012 **Balance:** 1128360905

Jodi E. Breon

Jodi E. Breon - QA Analyst

Date Passed: 03-Dec-2012

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MS-48925_00014

Certificate of Analysis

DESCRIPTION: Base-Neutral Surrogate Spike Mix

CATALOG NO.: 48925_00014 MFG DATE: Aug-2014

LOT NO.: LC08783V EXPIRATION DATE: Aug-2017

SOLVENT: METHYLENE CHLORIDE

3308099
ID: MS-48925_00014
Exp: 08/31/17 Prpd: NRC
SUP Base-Neutral Surrogat

ANALYTE (1)	CAS NUMBER	PERCENT PURITY(2)	WEIGHT(3) CONCENTRATION	ANALYTICAL(4) CONCENTRATION		STD DEV	SUPELCO LOT NO
NITROBENZENE-D5	4165-60-0	99.9	1000	1014	+/-	45.1	LB83753
P-TERPHENYL-D14	1718-51-0	99.9	1000	1001	+/-	23.2	LC01817
2-FLUOROBIPHENYL	321-60-8	99.9	1001	1001	+/-	7.2	LB99948

(1) Listed in alphabetical order.
(2) Determined by capillary GC-FID, unless otherwise noted.
(3) NIST traceable weights are used to verify balance calibration with the preparation of each lot. Concentration of analyte in solution is ug/ml +/- 0.5%, based upon balance and Class A volumetric glassware tolerances. Weights are corrected for analytes less than 98% pure.
(4) Determined by chromatographic analysis against an independently prepared reference lot. Mean of replicate injections.

Duane Funk

Duane Funk
Quality Manager

Supelco warrants that its products conform to the information contained in this publication. Purchaser must determine the suitability of the product for its particular use. Please see the latest catalog or order invoice and packing slip for additional terms and conditions of sale.
Supelco is a Sigma-Aldrich Company.

SUPELCO
Solutions within.™
595 North Harrison Road
Bellefonte, PA 16823-0048 USA
Phone (814) 359-3441

Certificate of Analysis

DESCRIPTION: Base-Neutral Surrogate Spike Mix

CATALOG NO.: 48925_00014 MFG DATE: Aug-2014

LOT NO.: LC08783V EXPIRATION DATE: Aug-2017

SOLVENT: METHYLENE CHLORIDE

3308100
ID: MS-48925_00014
Exp: 08/31/17 Prpd: NRC
SUP Base-Neutral Surrogat

ANALYTE (1)	CAS NUMBER	PERCENT PURITY(2)	WEIGHT(3) CONCENTRATION	ANALYTICAL(4) CONCENTRATION		STD DEV	SUPELCO LOT NO
NITROBENZENE-D5	4165-60-0	99.9	1000	1014	+/-	45.1	LB83753
P-TERPHENYL-D14	1718-51-0	99.9	1000	1001	+/-	23.2	LC01817
2-FLUOROBIPHENYL	321-60-8	99.9	1001	1001	+/-	7.2	LB99948

(1) Listed in alphabetical order.

(2) Determined by capillary GC-FID, unless otherwise noted.

(3) NIST traceable weights are used to verify balance calibration with the preparation of each lot. Concentration of analyte in solution is ug/ml +/- 0.5%, based upon balance and Class A volumetric glassware tolerances. Weights are corrected for analytes less than 98% pure.

(4) Determined by chromatographic analysis against an independently prepared reference lot. Mean of replicate injections.

Duane Funk

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Bellefonte, PA 16823-0048 USA
Phone (814) 359-3441

Reagent

MS-567684_00019

RESTEK®
110 Bonner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

41011728
ID: MS-567684_00019
Exp: 07/31/20 Pack: 25K
RES 8270 Internal Std Mix

Catalog No. : 567684 **Lot No.:** A0112833

Description : 8270 Internal Standard

8270 Internal Standard 2,000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2020 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dichlorobenzene-d4		2,014.8 µg/mL	+/- 11.7142 µg/mL		Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)		+/- 89.5186 µg/mL		Unstressed
	Purity 99%			+/- 98.3528 µg/mL		Stressed
2	Naphthalene-d8		2,015.8 µg/mL	+/- 11.7202 µg/mL		Gravimetric
	CAS # 1146-65-2	(Lot M-1452)		+/- 89.5645 µg/mL		Unstressed
	Purity 99%			+/- 98.4032 µg/mL		Stressed
3	Acenaphthene-d10		2,002.0 µg/mL	+/- 11.6397 µg/mL		Gravimetric
	CAS # 15067-26-2	(Lot PR-21070)		+/- 88.9491 µg/mL		Unstressed
	Purity 97%			+/- 97.7271 µg/mL		Stressed
4	Phenanthrene-d10		2,007.1 µg/mL	+/- 11.6693 µg/mL		Gravimetric
	CAS # 1517-22-2	(Lot PR-23065)		+/- 89.1750 µg/mL		Unstressed
	Purity 99%			+/- 97.9753 µg/mL		Stressed
5	Chrysene-d12		2,013.2 µg/mL	+/- 11.7047 µg/mL		Gravimetric
	CAS # 1719-03-5	(Lot PR-25081)		+/- 89.4460 µg/mL		Unstressed
	Purity 99%			+/- 98.2730 µg/mL		Stressed
6	Perylene-d12		2,005.4 µg/mL	+/- 11.6598 µg/mL		Gravimetric
	CAS # 1520-96-3	(Lot PR-241113)		+/- 89.1024 µg/mL		Unstressed
	Purity 99%			+/- 97.8955 µg/mL		Stressed

Reagent

MS-570666.SEC_00001

RESTEK
110 Bonner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 570666.sec **Lot No.:** A0115803

3708708
ID: MS-570666.SEC_00001
Exp: 06/30/17 Pqd: DCK
RES HSLB Mega Mix (2016)

Description: 8270 List 1 / Std #1 MegaMix (2016)

8270 List 1 / Std #1 MegaMix (2016) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size: 10 mL **Pkg Amt:** > 5 mL

Expiration Date: June 30, 2017 **Storage:** 10°C or colder

Handling: Carcinogen/reproductive toxin, Photosensitive, Sonicate.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane		1,001.0 µg/mL	+/- 5.8333	µg/mL	Gravimetric
	CAS # 123-91-1,SEC	(Lot CHA4A)		+/- 11.9726	µg/mL	Unstressed
	Purity 99%			+/- 19.0478	µg/mL	Stressed
2	Pyridine		1,000.3 µg/mL	+/- 5.8290	µg/mL	Gravimetric
	CAS # 110-86-1,SEC	(Lot QN8DK)		+/- 11.9636	µg/mL	Unstressed
	Purity 99%			+/- 19.0336	µg/mL	Stressed
3	N-Nitrosodimethylamine		1,001.4 µg/mL	+/- 5.8359	µg/mL	Gravimetric
	CAS # 62-75-9,SEC	(Lot 41B67)		+/- 11.9778	µg/mL	Unstressed
	Purity 98%			+/- 19.0562	µg/mL	Stressed
4	Aniline		1,000.3 µg/mL	+/- 5.8290	µg/mL	Gravimetric
	CAS # 62-53-3,SEC	(Lot ZCD3N)		+/- 11.9636	µg/mL	Unstressed
	Purity 99%			+/- 19.0336	µg/mL	Stressed
5	Bis(2-chloroethyl)ether		1,000.3 µg/mL	+/- 5.8290	µg/mL	Gravimetric
	CAS # 111-44-4,SEC	(Lot FA010143)		+/- 11.9636	µg/mL	Unstressed
	Purity 99%			+/- 19.0336	µg/mL	Stressed
6	2-Chlorophenol		1,000.6 µg/mL	+/- 5.8312	µg/mL	Gravimetric
	CAS # 95-57-8,SEC	(Lot GJ01)		+/- 11.9681	µg/mL	Unstressed
	Purity 99%			+/- 19.0407	µg/mL	Stressed
7	Phenol		1,000.1 µg/mL	+/- 5.8282	µg/mL	Gravimetric
	CAS # 108-95-2,SEC	(Lot EDPYN)		+/- 11.9621	µg/mL	Unstressed
	Purity 99%			+/- 19.0312	µg/mL	Stressed

8	n-Decane (C10)		1,000.1	µg/mL	+/-	5.8282	µg/mL	Gravimetric
	CAS # 124-18-5.SEC	(Lot UCWNN)			+/-	11.9621	µg/mL	Unstressed
	Purity 99%				+/-	19.0312	µg/mL	Stressed
9	1,4-Dichlorobenzene		1,000.3	µg/mL	+/-	5.8290	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot YWKDC-MK)			+/-	11.9636	µg/mL	Unstressed
	Purity 99%				+/-	19.0336	µg/mL	Stressed
10	1,3-Dichlorobenzene		1,000.0	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD-KA)			+/-	11.9606	µg/mL	Unstressed
	Purity 99%				+/-	19.0288	µg/mL	Stressed
11	1,2-Dichlorobenzene		1,000.0	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot 4NRGF-OI)			+/-	11.9606	µg/mL	Unstressed
	Purity 99%				+/-	19.0288	µg/mL	Stressed
12	Benzyl alcohol		1,000.4	µg/mL	+/-	5.8297	µg/mL	Gravimetric
	CAS # 100-51-6.SEC	(Lot QZBUO)			+/-	11.9651	µg/mL	Unstressed
	Purity 99%				+/-	19.0360	µg/mL	Stressed
13	2,2'-oxybis(1-chloropropane)		1,000.4	µg/mL	+/-	5.8297	µg/mL	Gravimetric
	CAS # 108-60-1 *	(Lot 2-KMW-57-8)			+/-	11.9651	µg/mL	Unstressed
	Purity 99%				+/-	19.0360	µg/mL	Stressed
14	2-Methylphenol (o-cresol)		1,000.3	µg/mL	+/-	5.8295	µg/mL	Gravimetric
	CAS # 95-48-7.SEC	(Lot NC7HL)			+/-	11.9646	µg/mL	Unstressed
	Purity 98%				+/-	19.0352	µg/mL	Stressed
15	Hexachloroethane		1,000.6	µg/mL	+/-	5.8309	µg/mL	Gravimetric
	CAS # 67-72-1.SEC	(Lot 10173016)			+/-	11.9675	µg/mL	Unstressed
	Purity 98%				+/-	19.0399	µg/mL	Stressed
16	Acetophenone		1,000.3	µg/mL	+/-	5.8290	µg/mL	Gravimetric
	CAS # 98-86-2.SEC	(Lot NSGTI)			+/-	11.9636	µg/mL	Unstressed
	Purity 99%				+/-	19.0336	µg/mL	Stressed
17	N-Nitroso-di-n-propylamine		1,000.6	µg/mL	+/-	5.8312	µg/mL	Gravimetric
	CAS # 621-64-7.SEC	(Lot 1528900)			+/-	11.9681	µg/mL	Unstressed
	Purity 99%				+/-	19.0407	µg/mL	Stressed
18	4-Methylphenol (p-cresol)		500.1	µg/mL	+/-	2.9145	µg/mL	Gravimetric
	CAS # 106-44-5.SEC	(Lot 65S2E)			+/-	5.9818	µg/mL	Unstressed
	Purity 99%				+/-	9.5168	µg/mL	Stressed
19	3-Methylphenol (m-cresol)		500.1	µg/mL	+/-	2.9145	µg/mL	Gravimetric
	CAS # 108-39-4.SEC	(Lot 6LHTM)			+/-	5.9818	µg/mL	Unstressed
	Purity 99%				+/-	9.5168	µg/mL	Stressed
20	Nitrobenzene		1,000.4	µg/mL	+/-	5.8297	µg/mL	Gravimetric
	CAS # 98-95-3.SEC	(Lot FLYIG)			+/-	11.9651	µg/mL	Unstressed
	Purity 99%				+/-	19.0360	µg/mL	Stressed
21	Isophorone		1,000.4	µg/mL	+/-	5.8297	µg/mL	Gravimetric
	CAS # 78-59-1.SEC	(Lot XHGJI)			+/-	11.9651	µg/mL	Unstressed
	Purity 99%				+/-	19.0360	µg/mL	Stressed
22	2-Nitrophenol		1,000.3	µg/mL	+/-	5.8290	µg/mL	Gravimetric
	CAS # 88-75-5.SEC	(Lot GXJ7J)			+/-	11.9636	µg/mL	Unstressed
	Purity 99%				+/-	19.0336	µg/mL	Stressed
23	2,4-Dimethylphenol		1,000.4	µg/mL	+/-	5.8297	µg/mL	Gravimetric
	CAS # 105-67-9.SEC	(Lot MKBL3650V)			+/-	11.9651	µg/mL	Unstressed
	Purity 99%				+/-	19.0360	µg/mL	Stressed

24	Bis(2-chloroethoxy)methane		1,000.6	µg/mL	+/- 5.8312	µg/mL	Gravimetric
	CAS # 111-91-1 *	(Lot 3299900)			+/- 11.9681	µg/mL	Unstressed
	Purity 99%				+/- 19.0407	µg/mL	Stressed
25	2,4-Dichlorophenol		1,000.8	µg/mL	+/- 5.8319	µg/mL	Gravimetric
	CAS # 120-83-2.SEC	(Lot FHM01)			+/- 11.9696	µg/mL	Unstressed
	Purity 99%				+/- 19.0431	µg/mL	Stressed
26	1,2,4-Trichlorobenzene		1,000.0	µg/mL	+/- 5.8275	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/- 11.9606	µg/mL	Unstressed
	Purity 99%				+/- 19.0288	µg/mL	Stressed
27	Naphthalene		1,001.1	µg/mL	+/- 5.8341	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot 4KW3H-OO)			+/- 11.9741	µg/mL	Unstressed
	Purity 99%				+/- 19.0502	µg/mL	Stressed
28	2,6-Dichlorophenol		1,000.6	µg/mL	+/- 5.8312	µg/mL	Gravimetric
	CAS # 87-65-0.SEC	(Lot SIDBB)			+/- 11.9681	µg/mL	Unstressed
	Purity 99%				+/- 19.0407	µg/mL	Stressed
29	4-Chloroaniline		1,000.8	µg/mL	+/- 5.8319	µg/mL	Gravimetric
	CAS # 106-47-8.SEC	(Lot 10171860)			+/- 11.9696	µg/mL	Unstressed
	Purity 99%				+/- 19.0431	µg/mL	Stressed
30	Hexachlorobutadiene		1,000.8	µg/mL	+/- 5.8323	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 3265500)			+/- 11.9705	µg/mL	Unstressed
	Purity 98%				+/- 19.0445	µg/mL	Stressed
31	2-Methylnaphthalene		1,000.8	µg/mL	+/- 5.8319	µg/mL	Gravimetric
	CAS # 91-57-6.SEC	(Lot 76023-1)			+/- 11.9696	µg/mL	Unstressed
	Purity 99%				+/- 19.0431	µg/mL	Stressed
32	4-Chloro-3-methylphenol		1,000.1	µg/mL	+/- 5.8282	µg/mL	Gravimetric
	CAS # 59-50-7.SEC	(Lot FDO02)			+/- 11.9621	µg/mL	Unstressed
	Purity 99%				+/- 19.0312	µg/mL	Stressed
33	1-Methylnaphthalene		1,000.9	µg/mL	+/- 5.8326	µg/mL	Gravimetric
	CAS # 90-12-0.SEC	(Lot UATSA)			+/- 11.9711	µg/mL	Unstressed
	Purity 99%				+/- 19.0455	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,000.8	µg/mL	+/- 5.8319	µg/mL	Gravimetric
	CAS # 95-94-3.SEC	(Lot AF02)			+/- 11.9696	µg/mL	Unstressed
	Purity 99%				+/- 19.0431	µg/mL	Stressed
35	Hexachlorocyclopentadiene		1,001.1	µg/mL	+/- 5.8341	µg/mL	Gravimetric
	CAS # 77-47-4.SEC	(Lot 0012013)			+/- 11.9741	µg/mL	Unstressed
	Purity 99%				+/- 19.0502	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,000.9	µg/mL	+/- 5.8330	µg/mL	Gravimetric
	CAS # 88-06-2.SEC	(Lot UUMYM)			+/- 11.9719	µg/mL	Unstressed
	Purity 98%				+/- 19.0469	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,000.9	µg/mL	+/- 5.8329	µg/mL	Gravimetric
	CAS # 95-95-4.SEC	(Lot MKBQ9937V)			+/- 11.9716	µg/mL	Unstressed
	Purity 97%				+/- 19.0463	µg/mL	Stressed
38	2-Chloronaphthalene		1,000.3	µg/mL	+/- 5.8290	µg/mL	Gravimetric
	CAS # 91-58-7.SEC	(Lot LC03928V)			+/- 11.9636	µg/mL	Unstressed
	Purity 99%				+/- 19.0336	µg/mL	Stressed
39	Biphenyl		1,000.1	µg/mL	+/- 5.8282	µg/mL	Gravimetric
	CAS # 92-52-4.SEC	(Lot 330QE)			+/- 11.9621	µg/mL	Unstressed
	Purity 99%				+/- 19.0312	µg/mL	Stressed

40	4-Nitroaniline CAS# 100-01-6,SEC Purity 99%	(Lot 5TTRC)	1,000.44	µg/mL	+/- 5.82297 +/- 11.96651 +/- 19.03360	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	Acenaphthylene CAS# 208-96-8,SEC Purity 98%	(Lot 0620133)	1,000.11	µg/mL	+/- 5.82280 +/- 11.96617 +/- 19.03305	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	1,3-Dinitrobenzene CAS # 99-65-0,SEC Purity 99%	(Lot 3XXLB)	1,000.44	µg/mL	+/- 5.82297 +/- 11.96651 +/- 19.03360	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	Dimethylphthalate CAS # 131-11-3,SEC Purity 99%	(Lot 4833WC)	1,000.13	µg/mL	+/- 5.82290 +/- 11.96636 +/- 19.03336	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	2,6-Dinitrotoluene CAS # 606-20-2,SEC Purity 99%	(Lot GE01)	1,000.11	µg/mL	+/- 5.82282 +/- 11.96621 +/- 19.03312	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Acenaphthene CAS # 83-32-9,SEC Purity 99%	(Lot BWZJE)	1,000.6	µg/mL	+/- 5.8312 +/- 11.9681 +/- 19.0407	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	2,4-Dinitrophenol CAS # 51-28-5,SEC Purity 99%	(Lot 2TXXH)	2,000.4	µg/mL	+/- 11.6304 +/- 23.9126 +/- 38.0566	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	Dibenzofuran CAS # 132-64-9,SEC Purity 99%	(Lot 27ZGC)	1,000.5	µg/mL	+/- 5.8304 +/- 11.9666 +/- 19.0383	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	3-Nitroaniline CAS # 99-09-2,SEC Purity 99%	(Lot FGN03)	1,000.1	µg/mL	+/- 5.8282 +/- 11.9621 +/- 19.0312	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	2,4-Dinitrotoluene CAS # 121-14-2,SEC Purity 99%	(Lot SHRSA)	1,000.5	µg/mL	+/- 5.8304 +/- 11.9666 +/- 19.0383	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	4-Nitrophenol CAS # 100-02-7,SEC Purity 99%	(Lot 2J5LB)	2,000.3	µg/mL	+/- 11.6296 +/- 23.9111 +/- 38.0542	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	2,3,4,6-Tetrachlorophenol CAS # 58-90-2,SEC Purity 98%	(Lot LC10202V)	1,001.1	µg/mL	+/- 5.8338 +/- 11.9734 +/- 19.0492	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Fluorene CAS # 86-73-7,SEC Purity 99%	(Lot 1561600)	1,000.4	µg/mL	+/- 5.82297 +/- 11.96651 +/- 19.03360	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	4-Chlorophenyl-phenyl ether CAS # 7005-72-3,SEC Purity 99%	(Lot P31G)	1,000.6	µg/mL	+/- 5.83312 +/- 11.96681 +/- 19.04007	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	n-Hexadecane (C16) CAS # 544-76-3,SEC Purity 99%	(Lot A0328141)	1,000.8	µg/mL	+/- 5.83319 +/- 11.96696 +/- 19.04031	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	Diethylphthalate CAS # 84-66-2,SEC Purity 99%	(Lot UWBIC)	1,000.00	µg/mL	+/- 5.83333 +/- 11.97726 +/- 19.04778	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Azobenzene		1,000.8	µg/mL	+/- 5.8319	µg/mL	Gravimetric
	CAS # 103-33-3.SEC	(Lot JUWAG)			+/- 11.9696	µg/mL	Unstressed
	Purity 99%				+/- 19.0431	µg/mL	Stressed
57	Diphenylamine		850.5	µg/mL	+/- 4.9563	µg/mL	Gravimetric
	CAS # 122-39-4.SEC	(Lot 10164691)			+/- 10.1725	µg/mL	Unstressed
	Purity 99%				+/- 16.1840	µg/mL	Stressed
58	2-Nitroaniline		1,000.5	µg/mL	+/- 5.8304	µg/mL	Gravimetric
	CAS # 88-74-4.SEC	(Lot T6E7B)			+/- 11.9666	µg/mL	Unstressed
	Purity 99%				+/- 19.0383	µg/mL	Stressed
59	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		2,000.8	µg/mL	+/- 11.6325	µg/mL	Gravimetric
	CAS # 534-52-1.SEC	(Lot 3256700)			+/- 23.9171	µg/mL	Unstressed
	Purity 99%				+/- 38.0637	µg/mL	Stressed
60	4-Bromophenyl phenyl ether		1,000.9	µg/mL	+/- 5.8326	µg/mL	Gravimetric
	CAS # 101-55-3.SEC	(Lot 84C6D)			+/- 11.9711	µg/mL	Unstressed
	Purity 99%				+/- 19.0455	µg/mL	Stressed
61	Hexachlorobenzene		1,000.4	µg/mL	+/- 5.8297	µg/mL	Gravimetric
	CAS # 118-74-1.SEC	(Lot 20622)			+/- 11.9651	µg/mL	Unstressed
	Purity 99%				+/- 19.0360	µg/mL	Stressed
62	Pentachlorophenol		2,001.1	µg/mL	+/- 11.6347	µg/mL	Gravimetric
	CAS # 87-86-5.SEC	(Lot 2357600)			+/- 23.9216	µg/mL	Unstressed
	Purity 99%				+/- 38.0708	µg/mL	Stressed
63	Phenanthrene		1,000.2	µg/mL	+/- 5.8288	µg/mL	Gravimetric
	CAS # 85-01-8.SEC	(Lot 1777100)			+/- 11.9631	µg/mL	Unstressed
	Purity 98%				+/- 19.0329	µg/mL	Stressed
64	n-Octadecane (C18)		1,000.9	µg/mL	+/- 5.8326	µg/mL	Gravimetric
	CAS # 593-45-3.SEC	(Lot G14U045)			+/- 11.9711	µg/mL	Unstressed
	Purity 99%				+/- 19.0455	µg/mL	Stressed
65	Anthracene		1,000.8	µg/mL	+/- 5.8319	µg/mL	Gravimetric
	CAS # 120-12-7.SEC	(Lot WDFNJ)			+/- 11.9696	µg/mL	Unstressed
	Purity 99%				+/- 19.0431	µg/mL	Stressed
66	Carbazole		1,000.4	µg/mL	+/- 5.8297	µg/mL	Gravimetric
	CAS # 86-74-8.SEC	(Lot LMIZB)			+/- 11.9651	µg/mL	Unstressed
	Purity 99%				+/- 19.0360	µg/mL	Stressed
67	Di-n-butylphthalate		1,000.1	µg/mL	+/- 5.8282	µg/mL	Gravimetric
	CAS # 84-74-2.SEC	(Lot 42FSG)			+/- 11.9621	µg/mL	Unstressed
	Purity 99%				+/- 19.0312	µg/mL	Stressed
68	Fluoranthene		1,000.6	µg/mL	+/- 5.8312	µg/mL	Gravimetric
	CAS # 206-44-0.SEC	(Lot FREGF)			+/- 11.9681	µg/mL	Unstressed
	Purity 99%				+/- 19.0407	µg/mL	Stressed
69	Pyrene		1,000.9	µg/mL	+/- 5.8326	µg/mL	Gravimetric
	CAS # 129-00-0.SEC	(Lot ROVJC)			+/- 11.9711	µg/mL	Unstressed
	Purity 99%				+/- 19.0455	µg/mL	Stressed
70	Benzyl butyl phthalate		1,001.6	µg/mL	+/- 5.8366	µg/mL	Gravimetric
	CAS # 85-68-7.SEC	(Lot GX3GL)			+/- 11.9793	µg/mL	Unstressed
	Purity 98%				+/- 19.0585	µg/mL	Stressed
71	Benz(a)anthracene		1,000.2	µg/mL	+/- 5.8286	µg/mL	Gravimetric
	CAS # 56-55-3.SEC	(Lot MTENF)			+/- 11.9629	µg/mL	Unstressed
	Purity 97%				+/- 19.0325	µg/mL	Stressed

72	chrysene		1,000.4	µg/mL	+/- 5.82977	µg/mL	Gravimetric
	CAS # 218-01-9.SEC	(Lot KQ4SE)			+/- 11.96551	µg/mL	Unstressed
	Purity 99%				+/- 19.03360	µg/mL	Stressed
73	Bis(2-ethylhexyl)phthalate		1,000.8	µg/mL	+/- 5.83119	µg/mL	Gravimetric
	CAS # 117-81-7.SEC	(Lot MI18AG)			+/- 11.96996	µg/mL	Unstressed
	Purity 99%				+/- 19.04131	µg/mL	Stressed
74	Di-n-octyl phthalate		1,000.9	µg/mL	+/- 5.83330	µg/mL	Gravimetric
	CAS # 117-84-0.SEC	(Lot O8DLD)			+/- 11.97119	µg/mL	Unstressed
	Purity 98%				+/- 19.04469	µg/mL	Stressed
75	Benzo(b)fluoranthene		1,000.4	µg/mL	+/- 5.82297	µg/mL	Gravimetric
	CAS # 205-99-2.SEC	(Lot 022011)			+/- 11.96551	µg/mL	Unstressed
	Purity 99%				+/- 19.03360	µg/mL	Stressed
76	Benzo(k)fluoranthene		1,000.9	µg/mL	+/- 5.8326	µg/mL	Gravimetric
	CAS # 207-08-9.SEC	(Lot ER061608-02)			+/- 11.9711	µg/mL	Unstressed
	Purity 99%				+/- 19.0455	µg/mL	Stressed
77	Benzo(a)pyrene		1,000.0	µg/mL	+/- 5.8275	µg/mL	Gravimetric
	CAS # 50-32-8.SEC	(Lot NPEZF)			+/- 11.9606	µg/mL	Unstressed
	Purity 99%				+/- 19.0288	µg/mL	Stressed
78	Indeno(1,2,3-cd)pyrene		1,000.1	µg/mL	+/- 5.8282	µg/mL	Gravimetric
	CAS # 193-39-5.SEC	(Lot 022013)			+/- 11.9621	µg/mL	Unstressed
	Purity 99%				+/- 19.0312	µg/mL	Stressed
79	Dibenz(a,h)anthracene		1,000.8	µg/mL	+/- 5.8319	µg/mL	Gravimetric
	CAS # 53-70-3.SEC	(Lot 0012012)			+/- 11.9696	µg/mL	Unstressed
	Purity 99%				+/- 19.0431	µg/mL	Stressed
80	Benzo(g,h,i)perylene		1,000.6	µg/mL	+/- 5.8308	µg/mL	Gravimetric
	CAS # 191-24-2.SEC	(Lot 0022012)			+/- 11.9673	µg/mL	Unstressed
	Purity 96%				+/- 19.0395	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Reagent

MV-567650_00025

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0120212

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane	2,521.3 µg/mL	+/- 14.6591 µg/mL	Gravimetric
	CAS # 1868-53-7 (Lot 032015)		+/- 141.3668 µg/mL	Unstressed
	Purity 99%		+/- 144.6746 µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,523.7 µg/mL	+/- 14.6730 µg/mL	Gravimetric
	CAS # 17060-07-0 (Lot 14C-191)		+/- 141.5014 µg/mL	Unstressed
	Purity 99%		+/- 144.8123 µg/mL	Stressed
3	Toluene-d8	2,523.6 µg/mL	+/- 14.6724 µg/mL	Gravimetric
	CAS # 2037-26-5 (Lot PR-26623)		+/- 141.4957 µg/mL	Unstressed
	Purity 99%		+/- 144.8066 µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,510.9 µg/mL	+/- 14.5986 µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KOV)		+/- 140.7837 µg/mL	Unstressed
	Purity 99%		+/- 144.0778 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

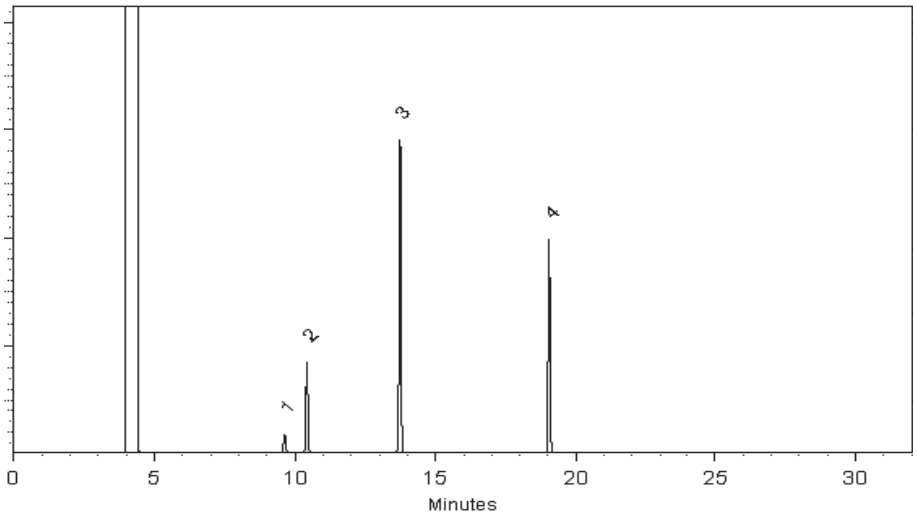
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dawn Brownson - Mix Technician

Date Mixed: 06-Jul-2016 **Balance:** 1125113331

Jennifer L. Pollino - QC Analyst

Date Passed: 11-Jul-2016

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MV-568718-D_00003

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 – 00003 **Lot No.:** A0100746

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol		5,001.8 µg/mL	+/- 29.0809	µg/mL	Gravimetric
	CAS # 25725-11-5	(Lot C158P15)		+/- 106.0751	µg/mL	Unstressed
	Purity 99%			+/- 106.5458	µg/mL	Stressed
2	2-Butanone-d5		1,250.8 µg/mL	+/- 7.2891	µg/mL	Gravimetric
	CAS # 24313-50-6	(Lot M276P11)		+/- 26.5308	µg/mL	Unstressed
	Purity 99%			+/- 26.6485	µg/mL	Stressed
3	Fluorobenzene		250.4 µg/mL	+/- 1.4771	µg/mL	Gravimetric
	CAS # 462-06-6	(Lot 1380033)		+/- 5.3162	µg/mL	Unstressed
	Purity 99%			+/- 5.3397	µg/mL	Stressed
4	1,4-Dioxane-d8		5,002.4 µg/mL	+/- 29.0844	µg/mL	Gravimetric
	CAS # 17647-74-4	(Lot 11C-596)		+/- 106.0878	µg/mL	Unstressed
	Purity 99%			+/- 106.5585	µg/mL	Stressed
5	Chlorobenzene-d5		251.2 µg/mL	+/- 1.4819	µg/mL	Gravimetric
	CAS # 3114-55-4	(Lot PR-22736)		+/- 5.3332	µg/mL	Unstressed
	Purity 99%			+/- 5.3568	µg/mL	Stressed
6	1,4-Dichlorobenzene-d4		250.2 µg/mL	+/- 1.4760	µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)		+/- 5.3120	µg/mL	Unstressed
	Purity 99%			+/- 5.3355	µg/mL	Stressed

Reagent

MV-569720.sec_00002

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569720.sec **Lot No.:** A0120604

Description : 8260 List 1 / Std #1 MegaMix (2015)

8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,501.1 µg/mL	+/- 14.5415 µg/mL +/- 150.9014 µg/mL +/- 151.2597 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,501.1 µg/mL	+/- 14.5418 µg/mL +/- 150.9040 µg/mL +/- 151.2622 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 2767000) **Purity** 99%	2,500.8 µg/mL	+/- 14.5396 µg/mL +/- 150.8813 µg/mL +/- 151.2395 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,004.1 µg/mL	+/- 145.3683 µg/mL +/- 1,508.6067 µg/mL +/- 1,512.1884 µg/mL	Gravimetric Unstressed Stressed
5	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,501.0 µg/mL	+/- 14.5410 µg/mL +/- 150.8964 µg/mL +/- 151.2547 µg/mL	Gravimetric Unstressed Stressed
6	Methyl acetate **CAS #** 79-20-9.SEC (Lot 6WOXM) **Purity** 99%	12,501.6 µg/mL	+/- 72.6817 µg/mL +/- 754.2781 µg/mL +/- 756.0689 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot VEBOC) **Purity** 98%	2,501.0 µg/mL	+/- 14.5408 µg/mL +/- 150.8940 µg/mL +/- 151.2522 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane)		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-09-2.SEC	(Lot FGM02)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
9	Carbon disulfide		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
10	Acrylonitrile		25,020.0	µg/mL	+/-	145.4608	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot UERIL-DA)			+/-	1,509.5667	µg/mL	Unstressed
	Purity 99%				+/-	1,513.1507	µg/mL	Stressed
11	cis-1,2-Dichloroethene		2,500.8	µg/mL	+/-	14.5401	µg/mL	Gravimetric
	CAS # 156-59-2.SEC	(Lot HGC01-BLKT)			+/-	150.8866	µg/mL	Unstressed
	Purity 98%				+/-	151.2448	µg/mL	Stressed
12	n-Hexane (C6)		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot 10188491)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
13	1,1-Dichloroethane		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-34-3.SEC	(Lot 5035700)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
14	2,2-Dichloropropane		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 594-20-7.SEC	(Lot GI01)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed
15	trans-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5426	µg/mL	Gravimetric
	CAS # 156-60-5.SEC	(Lot TS5UB)			+/-	150.9125	µg/mL	Unstressed
	Purity 97%				+/-	151.2708	µg/mL	Stressed
16	Isobutanol (2-Methyl-1-propanol)		62,503.0	µg/mL	+/-	363.3788	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot 83NHH)			+/-	3,771.0811	µg/mL	Unstressed
	Purity 99%				+/-	3,780.0343	µg/mL	Stressed
17	Methyl-tert-butyl ether (MTBE)		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZAQTA-MS)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
18	Bromochloromethane		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 1775400)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
19	Tetrahydrofuran		5,000.3	µg/mL	+/-	29.0719	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot K3V7J-SJ)			+/-	301.6872	µg/mL	Unstressed
	Purity 99%				+/-	302.4035	µg/mL	Stressed
20	1,1,1-Trichloroethane		2,501.3	µg/mL	+/-	14.5429	µg/mL	Gravimetric
	CAS # 71-55-6.SEC	(Lot CS160712)			+/-	150.9162	µg/mL	Unstressed
	Purity 98%				+/-	151.2745	µg/mL	Stressed
21	Cyclohexane		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
22	1,1-Dichloropropene		2,500.4	µg/mL	+/-	14.5378	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 4672600)			+/-	150.8626	µg/mL	Unstressed
	Purity 96%				+/-	151.2208	µg/mL	Stressed
23	Carbon tetrachloride		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed

24	n-Heptane (C7)		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 142-82-5.SEC	(Lot OGM01)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
25	1,2-Dichloroethane		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot FO6PK)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
26	Benzene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed
27	Trichloroethene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
28	Methylcyclohexane		2,501.9	µg/mL	+/-	14.5461	µg/mL	Gravimetric
	CAS # 108-87-2.SEC	(Lot 24MSD-CD)			+/-	150.9492	µg/mL	Unstressed
	Purity 99%				+/-	151.3076	µg/mL	Stressed
29	1,2-Dichloropropane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot OGG01)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
30	Bromodichloromethane		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 10171168)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
31	1,4-Dioxane		50,014.8	µg/mL	+/-	290.7749	µg/mL	Gravimetric
	CAS # 123-91-1.SEC	(Lot CHA4A)			+/-	3,017.6100	µg/mL	Unstressed
	Purity 99%				+/-	3,024.7743	µg/mL	Stressed
32	Dibromomethane		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot FGI01-OICH)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 7ZLXJ-TJ)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
34	Toluene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
35	Ethyl methacrylate		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 97-63-2.SEC	(Lot MLWYK-LS)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot 2ECIC)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,500.5	µg/mL	+/-	14.5379	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 3440900)			+/-	150.8644	µg/mL	Unstressed
	Purity 98%				+/-	151.2226	µg/mL	Stressed
38	1,3-Dichloropropane		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot AGN01-EFPC)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
39	Tetrachloroethene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed

40	Dibromochloromethane		2,501.9	µg/mL	+/-	14.5461	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10181507)			+/-	150.9491	µg/mL	Unstressed
	Purity 97%				+/-	151.3074	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 3505900)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
42	Chlorobenzene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
43	1,1,1,2-Tetrachloroethane		2,501.0	µg/mL	+/-	14.5408	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot GC01)			+/-	150.8940	µg/mL	Unstressed
	Purity 98%				+/-	151.2522	µg/mL	Stressed
44	Ethylbenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
45	m-Xylene		1,250.9	µg/mL	+/-	7.2727	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot OUKMG-GB)			+/-	75.4708	µg/mL	Unstressed
	Purity 99%				+/-	75.6500	µg/mL	Stressed
46	p-Xylene		1,250.8	µg/mL	+/-	7.2720	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot GM01)			+/-	75.4633	µg/mL	Unstressed
	Purity 99%				+/-	75.6425	µg/mL	Stressed
47	o-Xylene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01-KTPK)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
48	Styrene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot OFIOL-IA)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot 2PHXG-IH)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
50	Bromoform		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 5139000)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
51	1,1,2,2-Tetrachloroethane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot CFA4D-AQ)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
52	Chloroform		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 67-66-3.SEC	(Lot 1297547)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,501.5	µg/mL	+/-	14.5436	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot OGI01)			+/-	150.9236	µg/mL	Unstressed
	Purity 98%				+/-	151.2819	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene		2,500.5	µg/mL	+/-	14.5379	µg/mL	Gravimetric
	CAS # 110-57-6.SEC	(Lot 100700-3)			+/-	150.8644	µg/mL	Unstressed
	Purity 98%				+/-	151.2226	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC-IT)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed

56	Bromobenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
57	1,2,4-Trimethylbenzene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot SC7LO-QA)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed
58	2-Chlorotoluene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed
59	4-Chlorotoluene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
60	tert-Butylbenzene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot OGN01-CAI)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
61	1,3,5-Trimethylbenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot FGH02-CMLN)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
62	sec-Butylbenzene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,501.5	µg/mL	+/-	14.5441	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 1195000)			+/-	150.9278	µg/mL	Unstressed
	Purity 96%				+/-	151.2861	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
66	n-Butylbenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot OGN01-PNP)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot 4NRGF-OT)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,500.3	µg/mL	+/-	14.5369	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	150.8539	µg/mL	Unstressed
	Purity 97%				+/-	151.2121	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
70	Hexachlorobutadiene		2,500.7	µg/mL	+/-	14.5394	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 497470099			+/-	150.8792	µg/mL	Unstressed
	Purity 98%				+/-	151.2374	µg/mL	Stressed
71	Naphthalene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot SKZ5N)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,501.6 µg/mL	+/-	14.5444	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	150.9310	µg/mL	Unstressed
	Purity 98%			+/-	151.2893	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

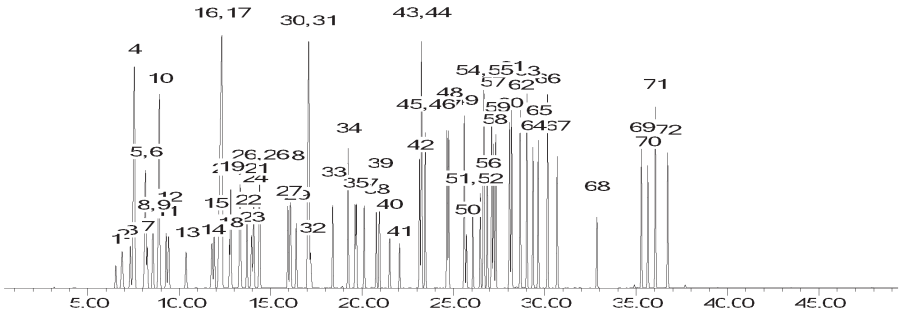
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Maye

Jennifer L. Pollino - QC Analyst

Date Mixed: 25-Jul-2016 **Balance:** 1127510105

Date Passed: 28-Jul-2016

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721.sec **Lot No.:** A0118013

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone	12,550.0 µg/mL	+/- 73.4830 µg/mL	Gravimetric
	CAS # 67-64-1.SEC (Lot P14A572)		+/- 757.2470 µg/mL	Unstressed
	Purity 99%		+/- 759.0446 µg/mL	Stressed
2	2-Butanone (MEK)	12,603.0 µg/mL	+/- 73.7933 µg/mL	Gravimetric
	CAS # 78-93-3.SEC (Lot RA58J)		+/- 760.4450 µg/mL	Unstressed
	Purity 99%		+/- 762.2502 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,591.5 µg/mL	+/- 73.7260 µg/mL	Gravimetric
	CAS # 108-10-1.SEC (Lot E29T040)		+/- 759.7511 µg/mL	Unstressed
	Purity 99%		+/- 761.5546 µg/mL	Stressed
4	2-Hexanone	12,588.0 µg/mL	+/- 73.7055 µg/mL	Gravimetric
	CAS # 591-78-6.SEC (Lot V3NRA)		+/- 759.5399 µg/mL	Unstressed
	Purity 99%		+/- 761.3429 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

MV-569721_00003

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Catalog No. : 569721 **Lot No.:** A0115554

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone	12,501.8 µg/mL	+/- 72.6865 µg/mL	Gravimetric
	CAS # 67-64-1 (Lot 07196AK)		+/- 754.2890 µg/mL	Unstressed
	Purity 99%		+/- 756.0798 µg/mL	Stressed
2	2-Butanone (MEK)	12,499.7 µg/mL	+/- 72.6744 µg/mL	Gravimetric
	CAS # 78-93-3 (Lot SHBG0444V)		+/- 754.1625 µg/mL	Unstressed
	Purity 98%		+/- 755.9530 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,500.6 µg/mL	+/- 72.6796 µg/mL	Gravimetric
	CAS # 108-10-1 (Lot SHBF9556V)		+/- 754.2166 µg/mL	Unstressed
	Purity 99%		+/- 756.0072 µg/mL	Stressed
4	2-Hexanone	12,502.4 µg/mL	+/- 72.6900 µg/mL	Gravimetric
	CAS # 591-78-6 (Lot MKBT3158V)		+/- 754.3252 µg/mL	Unstressed
	Purity 99%		+/- 756.1161 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

MV-569722.sec_00003

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Catalog No.: 569722.sec **Lot No.:** A0115484

Description: 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) CAS # 75-71-8.SEC (Lot 22274) Purity 99%	2,505.6 µg/mL	+/- 16.6251 µg/mL +/- 140.7169 µg/mL +/- 143.9990 µg/mL		Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) CAS # 74-87-3.SEC (Lot 18343) Purity 99%	2,517.3 µg/mL	+/- 17.3796 µg/mL +/- 141.4522 µg/mL +/- 144.7477 µg/mL		Gravimetric Unstressed Stressed
3	Vinyl chloride CAS # 75-01-4.SEC (Lot MKBK6872V) Purity 99%	2,510.2 µg/mL	+/- 16.6342 µg/mL +/- 140.9727 µg/mL +/- 144.2609 µg/mL		Gravimetric Unstressed Stressed
4	1,3-Butadiene CAS # 106-99-0.SEC (Lot 22331) Purity 99%	2,516.5 µg/mL	+/- 17.4874 µg/mL +/- 141.4240 µg/mL +/- 144.7182 µg/mL		Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) CAS # 74-83-9.SEC (Lot Q119-46) Purity 99%	2,511.5 µg/mL	+/- 16.8310 µg/mL +/- 141.0664 µg/mL +/- 144.3557 µg/mL		Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) CAS # 75-00-3.SEC (Lot 000042202) Purity 99%	2,504.8 µg/mL	+/- 16.4341 µg/mL +/- 140.6469 µg/mL +/- 143.9283 µg/mL		Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) CAS # 75-43-4.SEC (Lot SHBC0858W) Purity 99%	2,500.5 µg/mL	+/- 16.1659 µg/mL +/- 140.3776 µg/mL +/- 143.6540 µg/mL		Gravimetric Unstressed Stressed

Reagent

MV-569722_00005

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Catalog No. : 569722 **Lot No.:** A0122964

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2019 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,491.5 µg/mL	+/- 31.7005 µg/mL	Gravimetric
	CAS # 75-71-8 (Lot Q167-08)		+/- 142.5149 µg/mL	Unstressed
	Purity 99%		+/- 145.7205 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,515.8 µg/mL	+/- 34.3475 µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBG7976V)		+/- 144.4391 µg/mL	Unstressed
	Purity 99%		+/- 147.6640 µg/mL	Stressed
3	Vinyl chloride	2,486.4 µg/mL	+/- 25.8864 µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 1026101231B1)		+/- 141.0541 µg/mL	Unstressed
	Purity 99%		+/- 144.2790 µg/mL	Stressed
4	1,3-Butadiene	2,492.0 µg/mL	+/- 23.1233 µg/mL	Gravimetric
	CAS # 106-99-0 (Lot SHBF3387V)		+/- 140.8813 µg/mL	Unstressed
	Purity 99%		+/- 144.1245 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,515.4 µg/mL	+/- 22.6959 µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/- 142.0993 µg/mL	Unstressed
	Purity 99%		+/- 145.3752 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,494.8 µg/mL	+/- 25.9739 µg/mL	Gravimetric
	CAS # 75-00-3 (Lot SHBD1717V)		+/- 141.5307 µg/mL	Unstressed
	Purity 99%		+/- 144.7664 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/- 81.3528 µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 4938100)		+/- 161.4167 µg/mL	Unstressed
	Purity 99%		+/- 164.2729 µg/mL	Stressed

Reagent

MV-569723_00002

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569723 **Lot No.:** A0115628

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Chloroethyl vinyl ether	2,509.2 µg/mL	+/- 14.5887 µg/mL	Gravimetric
	CAS # 110-75-8 (Lot MKBK2735V)		+/- 53.7223 µg/mL	Unstressed
	Purity 99%		+/- 55.2841 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

mv-569728.sec_00002

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569728.sec **Lot No.:** A0108248

Description : 8260 List 3/ Std#1 Polar Additions (2015)

8260 List 3/ Std#1 Polar Additions (2015) 2500-100,000 µg/ml, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Ethanol	100,040.0 µg/mL	+/- 585.7260 µg/mL	Gravimetric
	CAS # 64-17-5 * (Lot PG0219)		+/- 3,486.0604 µg/mL	Unstressed
	Purity 99%		+/- 3,605.5089 µg/mL	Stressed
2	Acetonitrile	25,022.0 µg/mL	+/- 146.5093 µg/mL	Gravimetric
	CAS # 75-05-8.SEC (Lot 7KGDA)		+/- 871.9345 µg/mL	Unstressed
	Purity 99%		+/- 901.8109 µg/mL	Stressed
3	Diisopropyl ether (DIPE)	2,512.7 µg/mL	+/- 14.7460 µg/mL	Gravimetric
	CAS # 108-20-3.SEC (Lot LL7TN-SH)		+/- 87.5657 µg/mL	Unstressed
	Purity 98%		+/- 90.5657 µg/mL	Stressed
4	Ethyl-tert-butyl ether (ETBE)	2,512.7 µg/mL	+/- 14.7457 µg/mL	Gravimetric
	CAS # 637-92-3.SEC (Lot MHBJG-QK)		+/- 87.5638 µg/mL	Unstressed
	Purity 99%		+/- 90.5638 µg/mL	Stressed
5	Propionitrile	25,034.7 µg/mL	+/- 146.5835 µg/mL	Gravimetric
	CAS # 107-12-0.SEC (Lot RTXQL)		+/- 872.3759 µg/mL	Unstressed
	Purity 99%		+/- 902.2674 µg/mL	Stressed
6	tert-Amyl alcohol	25,010.0 µg/mL	+/- 146.4390 µg/mL	Gravimetric
	CAS # 75-85-4.SEC (Lot REJPI)		+/- 871.5164 µg/mL	Unstressed
	Purity 99%		+/- 901.3784 µg/mL	Stressed
7	tert-Amyl methyl ether (TAME)	2,514.0 µg/mL	+/- 14.7536 µg/mL	Gravimetric
	CAS # 994-05-8.SEC (Lot 1195200)		+/- 87.6103 µg/mL	Unstressed
	Purity 99%		+/- 90.6118 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

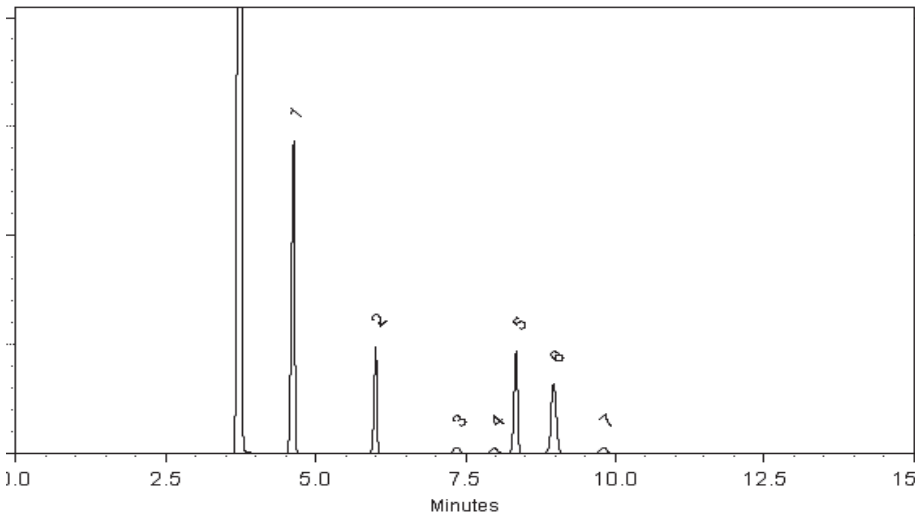
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Lane Kibe - Mix Technician

Date Mixed: 12-Jan-2015 **Balance:** 1127510105

Jennifer L. Pollino - QC Analyst

Date Passed: 14-Jan-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

mv-569728_00002

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569728 **Lot No.:** A0114666

Description : 8260 List 3/ Std#1 Polar Additions (2015)

8260 List 3/ Std#1 Polar Additions (2015) 2500-100,000 µg/ml, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Ethanol	100,005.8 µg/mL	+/- 581.4117 µg/mL	Gravimetric
	CAS # 64-17-5 (Lot PG0219)		+/- 4,947.0657 µg/mL	Unstressed
	Purity 99%		+/- 5,070.0789 µg/mL	Stressed
2	Acetonitrile	25,001.0 µg/mL	+/- 145.3505 µg/mL	Gravimetric
	CAS # 75-05-8 (Lot SHBB3177V)		+/- 1,236.7460 µg/mL	Unstressed
	Purity 98%		+/- 1,267.4988 µg/mL	Stressed
3	Diisopropyl ether (DIPE)	2,500.8 µg/mL	+/- 14.5396 µg/mL	Gravimetric
	CAS # 108-20-3 (Lot SHBB6268V)		+/- 123.7067 µg/mL	Unstressed
	Purity 99%		+/- 126.7828 µg/mL	Stressed
4	Ethyl-tert-butyl ether (ETBE)	2,505.0 µg/mL	+/- 14.5643 µg/mL	Gravimetric
	CAS # 637-92-3 (Lot MKBR1623V)		+/- 123.9170 µg/mL	Unstressed
	Purity 99%		+/- 126.9983 µg/mL	Stressed
5	Propionitrile	25,001.5 µg/mL	+/- 145.3533 µg/mL	Gravimetric
	CAS # 107-12-0 (Lot BCBM6569V)		+/- 1,236.7695 µg/mL	Unstressed
	Purity 99%		+/- 1,267.5229 µg/mL	Stressed
6	tert-Amyl alcohol	25,012.3 µg/mL	+/- 145.4158 µg/mL	Gravimetric
	CAS # 75-85-4 (Lot STBB1898V)		+/- 1,237.3013 µg/mL	Unstressed
	Purity 99%		+/- 1,268.0679 µg/mL	Stressed
7	tert-Amyl methyl ether (TAME)	2,503.5 µg/mL	+/- 14.5556 µg/mL	Gravimetric
	CAS # 994-05-8 (Lot HMBC8037V)		+/- 123.8428 µg/mL	Unstressed
	Purity 99%		+/- 126.9222 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

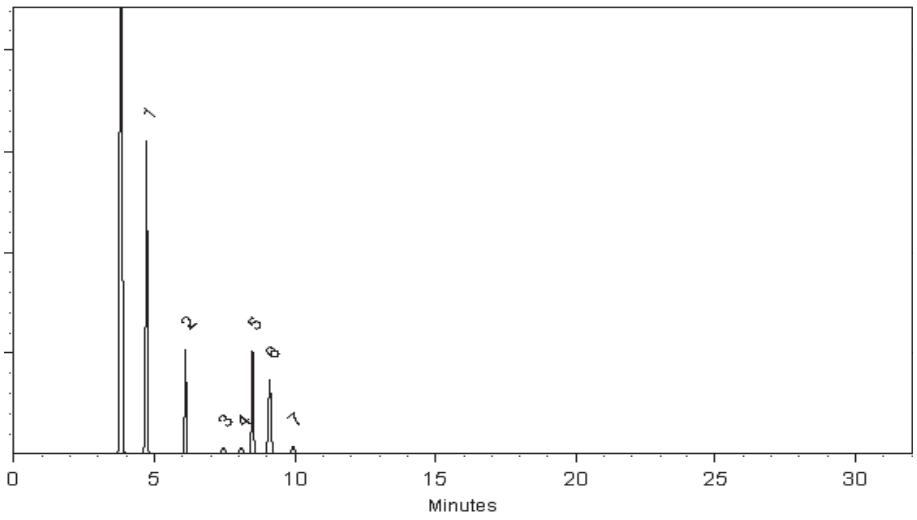
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Fallon - Mix Technician

Date Mixed: 12-Oct-2015 **Balance:** B251644995

Jennifer L. Pollino - QC Analyst

Date Passed: 14-Oct-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

mv-570808_00001

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570808.sec **Lot No.:** A0116135

Description : 8260 List 2 / Std #6

8260 List 2 / Std #6 2500-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Propanol (isopropanol) **CAS #** 67-63-0.SEC (Lot NWVYK) **Purity** 98%	25,004.1 µg/mL	+/- 146.4046 µg/mL +/- 1,237.0209 µg/mL +/- 1,267.7746 µg/mL	Gravimetric Unstressed Stressed
2	Chloroprene **CAS #** 126-99-8.A * (Lot 151210JLM) **Purity** 99%	2,502.4 µg/mL	+/- 14.6855 µg/mL +/- 123.8044 µg/mL +/- 126.8822 µg/mL	Gravimetric Unstressed Stressed
3	Methacrylonitrile **CAS #** 126-98-7 * (Lot 1012014) **Purity** 99%	25,001.6 µg/mL	+/- 146.3899 µg/mL +/- 1,236.8966 µg/mL +/- 1,267.6472 µg/mL	Gravimetric Unstressed Stressed
4	2,2,4-Trimethylpentane (Isooctane) **CAS #** 540-84-1.SEC (Lot 1894700) **Purity** 99%	2,500.8 µg/mL	+/- 14.6761 µg/mL +/- 123.7253 µg/mL +/- 126.8010 µg/mL	Gravimetric Unstressed Stressed
5	1-Butanol **CAS #** 71-36-3.SEC (Lot QBO2D) **Purity** 99%	62,500.0 µg/mL	+/- 365.9324 µg/mL +/- 3,092.0415 µg/mL +/- 3,168.9130 µg/mL	Gravimetric Unstressed Stressed
6	2-Nitropropane **CAS #** 79-46-9.SEC (Lot KW38H-RN) **Purity** 98%	5,000.4 µg/mL	+/- 29.2782 µg/mL +/- 247.3809 µg/mL +/- 253.5311 µg/mL	Gravimetric Unstressed Stressed
7	1-Chlorohexane **CAS #** 544-10-5.SEC (Lot 3890000) **Purity** 98%	2,500.2 µg/mL	+/- 14.6724 µg/mL +/- 123.6944 µg/mL +/- 126.7694 µg/mL	Gravimetric Unstressed Stressed

Reagent

mv-570809_00001

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570809.sec **Lot No.:** A0116080

Description : 8260 List 2 / Std #7

8260 List 2 / Std #7 2500-5000 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	Ethyl acetate		5,000.4	µg/mL	+/- 29.2784	µg/mL	Gravimetric
	CAS # 141-78-6.SEC	(Lot C386A-GG)			+/- 301.7162	µg/mL	Unstressed
	Purity 99%				+/- 302.4324	µg/mL	Stressed
2	Ethyl acrylate		2,501.2	µg/mL	+/- 14.6784	µg/mL	Gravimetric
	CAS # 140-88-5.SEC	(Lot YIFAM-TG)			+/- 150.9217	µg/mL	Unstressed
	Purity 99%				+/- 151.2799	µg/mL	Stressed
3	Methyl methacrylate		5,002.0	µg/mL	+/- 29.2878	µg/mL	Gravimetric
	CAS # 80-62-6.SEC	(Lot G01X021)			+/- 301.8127	µg/mL	Unstressed
	Purity 99%				+/- 302.5292	µg/mL	Stressed
4	Butyl acetate		2,501.6	µg/mL	+/- 14.6808	µg/mL	Gravimetric
	CAS # 123-86-4.SEC	(Lot V2L2G-GT)			+/- 150.9458	µg/mL	Unstressed
	Purity 99%				+/- 151.3041	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

MV-CUS22195_00001

Certificate of Analysis

Custom Standard

Product Number: CUS-22195 **Page:** 1 of 1

Lot Number: CP-4302 **Lot Issue Date:** 22-Aug-2016 **Expiration Date:** 30-Sep-2018

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA Scientific's ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1-chlorohexane	000544-10-5	RM11012	1004 ± 5 µg/mL
2-pentanone	000107-87-9	RM03775	4016 ± 20 µg/mL
sec-butanol	000078-92-2	RM01299	30062 ± 150 µg/mL

Matrix: methanol (purge & trap grade)

Storage: Store Frozen (-25° to -10°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

John Russo
President

Vincent Wang, Ph.D.
Director of QA/RA

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

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Reagent

mv-VO-TAOH-5_00001

Reference Materials Producer
Cert #2495.01

SPEXertificate®
Certificate of Reference Material

Chemical Testing
Cert #2495.02

Catalog Number: VO-TAOH-5 **Lot No.** BW160504027

Description: Custom Organic Standard

Matrix: Methanol (Purge & Trap Grade)

Manufactured Date: 5-4-2016
Expiration Date: 5-4-2017

This **SPEXOrganics®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
Propylene oxide	75-56-9	50000 µg/mL	99%	49963 µg/mL	± 1749 µg/mL
Ethylene oxide	75-21-8	50000 µg/mL	99.8%	50892 µg/mL	± 1781 µg/mL
cis-1,4-Dichloro-2-butene	1476-11-5	1000 µg/mL	95%	999 µg/mL	± 35 µg/mL
Tetrahydrothiophene	110-01-0	1000 µg/mL	99%	994 µg/mL	± 35 µg/mL

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 5-4-2016 Certifying Officer: Julian Burton

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Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): DB-624 (60. ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM	#	DCA	#	TOL	#	BFB	#
SS025-SS01	280-97803-1	110		126		97		96	
TB-01	280-97803-2	104		116		99		96	
SS025-SS02	280-97803-4	110		126		102		102	
SS025-SB02(0-2)	280-97803-5	108		121		95		91	
SS025-SS03	280-97803-6	116		134		99		99	
SS025-SB03(0-2)	280-97803-7	115		132		97		89	
SS025-SS04	280-97803-8	120	Q	136		102		104	
SS025-SB04(0-2)	280-97803-9	115		136		97		89	
SS025-SS05	280-97803-10	123	Q	147	Q	101		96	
SS025-SB05(0-2)	280-97803-11	108		123		86		78	Q
SS025-SB05(2-4)	280-97803-12	119		140	Q	96		89	
SS025-SS06	280-97803-13	114		138	Q	87		80	
SS025-SS06-a	280-97803-14	119		145	Q	92		81	
	MB 280-376042/1-A	100		105		91		95	
	MB 280-376205/1-A	98		109		85		84	
	LCS 280-376042/2-A	90		97		98		98	
	LCS 280-376042/3-A	91		96		99		114	
	LCS 280-376205/2-A	88		98		90		88	
	LCS 280-376205/3-A	91		103		90		98	

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	78-119
DCA = 1,2-Dichloroethane-d4 (Surr)	71-136
TOL = Toluene-d8 (Surr)	85-116
BFB = 4-Bromofluorobenzene (Surr)	79-119

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: G2_0633.D

Lab ID: LCS 280-376042/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	50.0	45.3	91	78-125	
1,1,1-Trichloroethane	50.0	43.6	87	73-130	
1,1,2,2-Tetrachloroethane	50.0	48.7	97	70-124	
1,1,2-Trichloroethane	50.0	48.1	96	78-121	
1,1-Dichloroethane	50.0	48.1	96	76-125	
1,1-Dichloroethene	50.0	46.2	92	70-131	
1,1-Dichloropropene	50.0	50.5	101	76-125	
1,2,3-Trichlorobenzene	50.0	49.4	99	66-130	
1,2,3-Trichloropropane	50.0	47.4	95	73-125	
1,2,4-Trichlorobenzene	50.0	47.6	95	67-129	
1,2,4-Trimethylbenzene	50.0	45.6	91	75-123	
1,2-Dibromo-3-Chloropropane	50.0	51.1	102	61-132	
1,2-Dibromoethane	50.0	47.7	95	78-122	
1,2-Dichlorobenzene	50.0	46.9	94	78-121	
1,2-Dichloroethane	50.0	43.9	88	73-128	
1,2-Dichloroethene, Total	100	99.0	99	78-122	
1,2-Dichloropropane	50.0	51.1	102	76-123	
1,3,5-Trimethylbenzene	50.0	45.6	91	73-124	
1,3-Dichlorobenzene	50.0	48.2	96	77-121	
1,3-Dichloropropane	50.0	49.3	99	77-121	
1,4-Dichlorobenzene	50.0	44.9	90	75-120	
2,2-Dichloropropane	50.0	44.4	89	67-133	
2-Butanone (MEK)	200	188	94	51-148	
2-Chlorotoluene	50.0	45.6	91	75-122	
2-Hexanone	200	188	94	53-145	
4-Chlorotoluene	50.0	45.9	92	72-124	
4-Isopropyltoluene	50.0	45.8	92	73-127	
4-Methyl-2-pentanone (MIBK)	200	193	97	65-135	
Acetone	200	192	96	36-164	
Benzene	50.0	51.6	103	77-121	
Bromobenzene	50.0	48.8	98	78-121	
Bromochloromethane	50.0	48.0	96	78-125	
Bromodichloromethane	50.0	47.1	94	75-127	
Bromoform	50.0	45.3	91	67-132	
Bromomethane	50.0	43.9	88	53-143	
Carbon disulfide	50.0	49.2	98	63-132	
Carbon tetrachloride	50.0	43.6	87	70-135	
Chlorobenzene	50.0	45.9	92	79-120	
Chloroethane	50.0	61.0	122	59-139	
Chloroform	50.0	44.1	88	78-123	
Chloromethane	50.0	51.2	102	50-136	
cis-1,2-Dichloroethene	50.0	48.6	97	77-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: G2_0633.D

Lab ID: LCS 280-376042/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
cis-1,3-Dichloropropene	50.0	46.2	92	74-126	
Dibromochloromethane	50.0	46.7	93	74-126	
Dibromomethane	50.0	45.2	90	78-125	
Dichlorodifluoromethane	50.0	49.4	99	29-149	
Ethylbenzene	50.0	49.9	100	76-122	
Hexachlorobutadiene	50.0	45.5	91	61-135	
Isopropylbenzene	50.0	47.3	95	68-134	
m&p-Xylene	50.0	46.1	92	77-124	
Methyl iodide	50.0	45.9	92	71-131	
Methyl tert-butyl ether	50.0	52.0	104	73-125	
Methylene Chloride	50.0	50.0	100	70-128	
Naphthalene	50.0	49.5	99	62-129	
n-Butylbenzene	50.0	47.6	95	70-128	
N-Propylbenzene	50.0	46.5	93	73-125	
o-Xylene	50.0	47.6	95	77-123	
sec-Butylbenzene	50.0	45.0	90	73-126	
Styrene	50.0	46.1	92	76-124	
tert-Butylbenzene	50.0	46.3	93	73-125	
Tetrachloroethene	50.0	44.5	89	73-128	
Toluene	50.0	52.5	105	77-121	
trans-1,2-Dichloroethene	50.0	50.4	101	74-125	
trans-1,3-Dichloropropene	50.0	47.7	95	71-130	
Trichloroethene	50.0	48.4	97	77-123	
Trichlorofluoromethane	50.0	46.5	93	62-140	
Vinyl acetate	100	79.9	80	50-151	
Vinyl chloride	50.0	46.4	93	56-135	
Xylenes (total)	100	93.7	94	78-124	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: G2_0635.D

Lab ID: LCS 280-376042/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Isopropyl ether	50.0	87.4	175	69-127	Q

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: G2_0696.D

Lab ID: LCS 280-376205/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	50.0	44.4	89	78-125	
1,1,1-Trichloroethane	50.0	45.7	91	73-130	
1,1,2,2-Tetrachloroethane	50.0	46.8	94	70-124	
1,1,2-Trichloroethane	50.0	46.8	94	78-121	
1,1-Dichloroethane	50.0	48.6	97	76-125	
1,1-Dichloroethene	50.0	47.1	94	70-131	
1,1-Dichloropropene	50.0	50.5	101	76-125	
1,2,3-Trichlorobenzene	50.0	54.5	109	66-130	
1,2,3-Trichloropropane	50.0	44.9	90	73-125	
1,2,4-Trichlorobenzene	50.0	52.2	104	67-129	
1,2,4-Trimethylbenzene	50.0	44.1	88	75-123	
1,2-Dibromo-3-Chloropropane	50.0	53.7	107	61-132	
1,2-Dibromoethane	50.0	46.0	92	78-122	
1,2-Dichlorobenzene	50.0	45.2	90	78-121	
1,2-Dichloroethane	50.0	45.1	90	73-128	
1,2-Dichloroethene, Total	100	98.3	98	78-122	
1,2-Dichloropropane	50.0	50.4	101	76-123	
1,3,5-Trimethylbenzene	50.0	43.9	88	73-124	
1,3-Dichlorobenzene	50.0	44.7	89	77-121	
1,3-Dichloropropane	50.0	47.7	95	77-121	
1,4-Dichlorobenzene	50.0	42.0	84	75-120	
2,2-Dichloropropane	50.0	52.6	105	67-133	
2-Butanone (MEK)	200	201	100	51-148	
2-Chlorotoluene	50.0	43.8	88	75-122	
2-Hexanone	200	194	97	53-145	
4-Chlorotoluene	50.0	42.7	85	72-124	
4-Isopropyltoluene	50.0	45.0	90	73-127	
4-Methyl-2-pentanone (MIBK)	200	210	105	65-135	
Acetone	200	201	100	36-164	
Benzene	50.0	50.3	101	77-121	
Bromobenzene	50.0	45.2	90	78-121	
Bromochloromethane	50.0	46.7	93	78-125	
Bromodichloromethane	50.0	46.6	93	75-127	
Bromoform	50.0	43.3	87	67-132	
Bromomethane	50.0	47.4	95	53-143	
Carbon disulfide	50.0	49.1	98	63-132	
Carbon tetrachloride	50.0	44.0	88	70-135	
Chlorobenzene	50.0	43.2	86	79-120	
Chloroethane	50.0	68.1	136	59-139	
Chloroform	50.0	44.9	90	78-123	
Chloromethane	50.0	64.2	128	50-136	
cis-1,2-Dichloroethene	50.0	48.7	97	77-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: G2_0696.D

Lab ID: LCS 280-376205/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
cis-1,3-Dichloropropene	50.0	45.9	92	74-126	
Dibromochloromethane	50.0	44.0	88	74-126	
Dibromomethane	50.0	46.2	92	78-125	
Dichlorodifluoromethane	50.0	55.3	111	29-149	
Ethylbenzene	50.0	46.2	92	76-122	
Hexachlorobutadiene	50.0	49.2	98	61-135	
Isopropylbenzene	50.0	45.6	91	68-134	
m&p-Xylene	50.0	43.3	87	77-124	
Methyl iodide	50.0	45.7	91	71-131	
Methyl tert-butyl ether	50.0	58.1	116	73-125	
Methylene Chloride	50.0	50.9	102	70-128	
Naphthalene	50.0	56.0	112	62-129	
n-Butylbenzene	50.0	47.8	96	70-128	
N-Propylbenzene	50.0	43.6	87	73-125	
o-Xylene	50.0	45.1	90	77-123	
sec-Butylbenzene	50.0	44.1	88	73-126	
Styrene	50.0	45.0	90	76-124	
tert-Butylbenzene	50.0	44.9	90	73-125	
Tetrachloroethene	50.0	41.4	83	73-128	
Toluene	50.0	50.8	102	77-121	
trans-1,2-Dichloroethene	50.0	49.6	99	74-125	
trans-1,3-Dichloropropene	50.0	47.6	95	71-130	
Trichloroethene	50.0	47.5	95	77-123	
Trichlorofluoromethane	50.0	52.9	106	62-140	
Vinyl acetate	100	91.8	92	50-151	
Vinyl chloride	50.0	51.7	103	56-135	
Xylenes (total)	100	88.4	88	78-124	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: G2_0694.D

Lab ID: LCS 280-376205/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Isopropyl ether	50.0	88.1	176	69-127	Q

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab File ID: G2_0632.D Lab Sample ID: MB 280-376042/1-A

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: VMS_G2 Date Analyzed: 06/03/2017 20:42

GC Column: DB-624 (60.25) ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-376042/2-A	G2_0633.D	06/03/2017 21:03
	LCS 280-376042/3-A	G2_0635.D	06/03/2017 21:43
TB-01	280-97803-2	G2_0637.D	06/03/2017 22:29
SS025-SS02	280-97803-4	G2_0639.D	06/03/2017 23:19
SS025-SB02(0-2)	280-97803-5	G2_0640.D	06/03/2017 23:39
SS025-SS03	280-97803-6	G2_0641.D	06/03/2017 23:59
SS025-SB03(0-2)	280-97803-7	G2_0642.D	06/04/2017 00:19
SS025-SS04	280-97803-8	G2_0643.D	06/04/2017 00:40
SS025-SB04(0-2)	280-97803-9	G2_0644.D	06/04/2017 01:00
SS025-SS05	280-97803-10	G2_0645.D	06/04/2017 01:20
SS025-SB05(2-4)	280-97803-12	G2_0647.D	06/04/2017 02:00

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab File ID: G2_0695.D Lab Sample ID: MB 280-376205/1-A

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: VMS_G2 Date Analyzed: 06/05/2017 20:04

GC Column: DB-624 (60.25) ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-376205/3-A	G2_0694.D	06/05/2017 19:44
	LCS 280-376205/2-A	G2_0696.D	06/05/2017 20:25
SS025-SS01	280-97803-1	G2_0698.D	06/05/2017 21:09
SS025-SB05(0-2)	280-97803-11	G2_0699.D	06/05/2017 21:29
SS025-SS06	280-97803-13	G2_0700.D	06/05/2017 21:50
SS025-SS06-a	280-97803-14	G2_0701.D	06/05/2017 22:10

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab File ID: G2_9102.D BFB Injection Date: 04/26/2017

Instrument ID: VMS_G2 BFB Injection Time: 20:42

Analysis Batch No.: 371118

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.1	
75	30.0 - 60.0 % of mass 95	49.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.7	
173	Less than 2.0 % of mass 174	0.7	(0.7) 1
174	50.0 - 120.00 % of mass 95	101.7	
175	5.0 - 9.0 % of mass 174	7.5	(7.4) 1
176	95.0 - 101.0 % of mass 174	100.7	(99.0) 1
177	5.0 - 9.0 % of mass 176	6.1	(6.1) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD001 280-371118/20	G2_9103.D	04/26/2017	21:24
	STD002 280-371118/21	G2_9104.D	04/26/2017	21:44
	STD005 280-371118/22	G2_9105.D	04/26/2017	22:05
	STD010 280-371118/23	G2_9106.D	04/26/2017	22:25
	STD020 280-371118/24	G2_9107.D	04/26/2017	22:45
	ICIS 280-371118/25	G2_9108.D	04/26/2017	23:06
	STD100 280-371118/26	G2_9109.D	04/26/2017	23:27
	STD200 280-371118/27	G2_9110.D	04/26/2017	23:47
	ICV 280-371118/28	G2_9111.D	04/27/2017	00:08

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab File ID: G2_0473.D BFB Injection Date: 05/30/2017

Instrument ID: VMS_G2 BFB Injection Time: 17:19

Analysis Batch No.: 375537

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	23.0	
75	30.0 - 60.0 % of mass 95	54.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.9	
173	Less than 2.0 % of mass 174	0.3	(0.3) 1
174	50.0 - 120.00 % of mass 95	96.6	
175	5.0 - 9.0 % of mass 174	7.6	(7.9) 1
176	95.0 - 101.0 % of mass 174	92.8	(96.1) 1
177	5.0 - 9.0 % of mass 176	6.4	(6.9) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD001 280-375537/4	G2_0476.D	05/30/2017	18:51
	STD002 280-375537/5	G2_0477.D	05/30/2017	19:11
	STD005 280-375537/6	G2_0478.D	05/30/2017	19:32
	STD010 280-375537/7	G2_0479.D	05/30/2017	19:52
	STD020 280-375537/8	G2_0480.D	05/30/2017	20:13
	ICIS 280-375537/9	G2_0481.D	05/30/2017	20:33
	STD100 280-375537/10	G2_0482.D	05/30/2017	20:54
	STD200 280-375537/11	G2_0483.D	05/30/2017	21:14
	ICV 280-375537/12	G2_0487.D	05/30/2017	22:43

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab File ID: G2_0628.D BFB Injection Date: 06/03/2017

Instrument ID: VMS_G2 BFB Injection Time: 19:00

Analysis Batch No.: 376040

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.4	
75	30.0 - 60.0 % of mass 95	52.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.7	
173	Less than 2.0 % of mass 174	0.6	(0.7) 1
174	50.0 - 120.00 % of mass 95	91.8	
175	5.0 - 9.0 % of mass 174	6.5	(7.1) 1
176	95.0 - 101.0 % of mass 174	88.1	(96.0) 1
177	5.0 - 9.0 % of mass 176	6.2	(7.1) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-376040/2	G2_0630.D	06/03/2017	20:01
	CCV 280-376040/3	G2_0631.D	06/03/2017	20:21
	MB 280-376042/1-A	G2_0632.D	06/03/2017	20:42
	LCS 280-376042/2-A	G2_0633.D	06/03/2017	21:03
	LCS 280-376042/3-A	G2_0635.D	06/03/2017	21:43
TB-01	280-97803-2	G2_0637.D	06/03/2017	22:29
SS025-SS02	280-97803-4	G2_0639.D	06/03/2017	23:19
SS025-SB02(0-2)	280-97803-5	G2_0640.D	06/03/2017	23:39
SS025-SS03	280-97803-6	G2_0641.D	06/03/2017	23:59
SS025-SB03(0-2)	280-97803-7	G2_0642.D	06/04/2017	00:19
SS025-SS04	280-97803-8	G2_0643.D	06/04/2017	00:40
SS025-SB04(0-2)	280-97803-9	G2_0644.D	06/04/2017	01:00
SS025-SS05	280-97803-10	G2_0645.D	06/04/2017	01:20
SS025-SB05(2-4)	280-97803-12	G2_0647.D	06/04/2017	02:00
	CCVC 280-376040/37	G2_0660.D	06/04/2017	06:20
	CCVC 280-376040/38	G2_0661.D	06/04/2017	06:40

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab File ID: G2_0688.D BFB Injection Date: 06/05/2017

Instrument ID: VMS_G2 BFB Injection Time: 17:20

Analysis Batch No.: 376196

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.4	
75	30.0 - 60.0 % of mass 95	51.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.1	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	87.6	
175	5.0 - 9.0 % of mass 174	6.1	(7.0) 1
176	95.0 - 101.0 % of mass 174	87.0	(99.3) 1
177	5.0 - 9.0 % of mass 176	5.4	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-376196/2	G2_0690.D	06/05/2017	18:06
	CCV 280-376196/3	G2_0691.D	06/05/2017	18:26
	CCV 280-376196/4	G2_0692.D	06/05/2017	18:47
	LCS 280-376205/3-A	G2_0694.D	06/05/2017	19:44
	MB 280-376205/1-A	G2_0695.D	06/05/2017	20:04
	LCS 280-376205/2-A	G2_0696.D	06/05/2017	20:25
SS025-SS01	280-97803-1	G2_0698.D	06/05/2017	21:09
SS025-SB05(0-2)	280-97803-11	G2_0699.D	06/05/2017	21:29
SS025-SS06	280-97803-13	G2_0700.D	06/05/2017	21:50
SS025-SS06-a	280-97803-14	G2_0701.D	06/05/2017	22:10
	CCVC 280-376196/33	G2_0717.D	06/06/2017	03:38
	CCVC 280-376196/34	G2_0718.D	06/06/2017	03:58

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Sample No.: ICIS 280-371118/25 Date Analyzed: 04/26/2017 23:06

Instrument ID: VMS_G2 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): G2_9108.D Heated Purge: (Y/N) Y

Calibration ID: 28915

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		464934	4.07	921971	7.64	237497	10.78
UPPER LIMIT		929868	4.57	1843942	8.14	474994	11.28
LOWER LIMIT		232467	3.57	460986	7.14	118749	10.28
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-371118/28		543420	4.08	1010405	7.64	259337	10.78

TBAd9 = TBA-d9 (IS)
FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Sample No.: ICIS 280-371118/25 Date Analyzed: 04/26/2017 23:06

Instrument ID: VMS_G2 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): G2_9108.D Heated Purge: (Y/N) Y

Calibration ID: 28915

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		386534	12.84				
UPPER LIMIT		773068	13.34				
LOWER LIMIT		193267	12.34				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-371118/28		422767	12.84				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Sample No.: ICIS 280-375537/9 Date Analyzed: 05/30/2017 20:33

Instrument ID: VMS_G2 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): G2_0481.D Heated Purge: (Y/N) Y

Calibration ID: 29340

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		347104	4.07	377382	7.63	155057	10.76
UPPER LIMIT		694208	4.57	754764	8.13	310114	11.26
LOWER LIMIT		173552	3.57	188691	7.13	77529	10.26
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-375537/12		419122	4.05	449806	7.62	179966	10.76
CCV 280-376040/2		503230	4.07	465228	7.64	191336	10.76
CCV 280-376040/3		448517	4.08	439610	7.64	172089	10.76
MB 280-376042/1-A		424217	4.08	397719	7.63	177038	10.76
LCS 280-376042/2-A		464441	4.07	461888	7.63	193809	10.76
LCS 280-376042/3-A		548940	4.07	478301	7.63	195185	10.76
280-97803-2	TB-01	617587	4.08	399458	7.63	169761	10.76
280-97803-4	SS025-SS02	429679	4.08	353904	7.63	144437	10.76
280-97803-5	SS025-SB02(0-2)	406124	4.08	349257	7.64	151512	10.76
280-97803-6	SS025-SS03	314763	4.08	325515	7.64	141662	10.76
280-97803-7	SS025-SB03(0-2)	394202	4.08	321681	7.63	142220	10.76
280-97803-8	SS025-SS04	208165	4.08	295758	7.64	124025	10.76
280-97803-9	SS025-SB04(0-2)	374965	4.08	303405	7.64	134253	10.76
280-97803-10	SS025-SS05	327694	4.08	279179	7.63	123855	10.76
280-97803-12	SS025-SB05(2-4)	334388	4.08	270925	7.64	122566	10.76
CCVC 280-376040/37		287821	4.08	312202	7.64	140082	10.76
CCVC 280-376040/38		310200	4.08	315636	7.64	128806	10.76
CCV 280-376196/2		509401	4.07	375908	7.63	153670	10.76
CCV 280-376196/3		481993	4.07	422229	7.63	171058	10.76
CCV 280-376196/4		474668	4.07	406101	7.63	167787	10.76
LCS 280-376205/3-A		566611	4.07	405110	7.63	167170	10.76
MB 280-376205/1-A		529426	4.07	357938	7.63	158070	10.76
LCS 280-376205/2-A		514469	4.07	415533	7.63	178361	10.76
280-97803-1	SS025-SS01	357281	4.07	320246	7.63	126358	10.76
280-97803-11	SS025-SB05(0-2)	356158	4.07	287367	7.63	126275	10.76
280-97803-13	SS025-SS06	345350	4.07	280335	7.63	125408	10.76
280-97803-14	SS025-SS06-a	320188	4.07	258248	7.63	112011	10.76
CCVC 280-376196/33		315909	4.05	279575	7.63	122529	10.76

TBAd9 = TBA-d9 (IS)
FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Sample No.: ICIS 280-375537/9 Date Analyzed: 05/30/2017 20:33

Instrument ID: VMS_G2 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): G2_0481.D Heated Purge: (Y/N) Y

Calibration ID: 29340

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		347104	4.07	377382	7.63	155057	10.76
UPPER LIMIT		694208	4.57	754764	8.13	310114	11.26
LOWER LIMIT		173552	3.57	188691	7.13	77529	10.26
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVC 280-376196/34		366674	4.07	308205	7.63	126372	10.76

TBAd9 = TBA-d9 (IS)
FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Sample No.: ICIS 280-375537/9 Date Analyzed: 05/30/2017 20:33

Instrument ID: VMS_G2 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): G2_0481.D Heated Purge: (Y/N) Y

Calibration ID: 29340

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		347457	12.82				
UPPER LIMIT		694914	13.32				
LOWER LIMIT		173729	12.32				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-375537/12		380726	12.82				
CCV 280-376040/2		407550	12.82				
CCV 280-376040/3		306198	12.82				
MB 280-376042/1-A		360213	12.82				
LCS 280-376042/2-A		418187	12.82				
LCS 280-376042/3-A		376298	12.82				
280-97803-2	TB-01	326230	12.82				
280-97803-4	SS025-SS02	232016	12.82				
280-97803-5	SS025-SB02(0-2)	284551	12.82				
280-97803-6	SS025-SS03	259859	12.82				
280-97803-7	SS025-SB03(0-2)	295882	12.82				
280-97803-8	SS025-SS04	204290	12.82				
280-97803-9	SS025-SB04(0-2)	264233	12.82				
280-97803-10	SS025-SS05	238387	12.82				
280-97803-12	SS025-SB05(2-4)	219588	12.82				
CCVC 280-376040/37		326330	12.82				
CCVC 280-376040/38		219350	12.82				
CCV 280-376196/2		351861	12.82				
CCV 280-376196/3		333472	12.82				
CCV 280-376196/4		376579	12.82				
LCS 280-376205/3-A		349357	12.82				
MB 280-376205/1-A		350402	12.82				
LCS 280-376205/2-A		393516	12.82				
280-97803-1	SS025-SS01	205154	12.82				
280-97803-11	SS025-SB05(0-2)	258422	12.82				
280-97803-13	SS025-SS06	255191	12.82				
280-97803-14	SS025-SS06-a	238408	12.82				
CCVC 280-376196/33		309921	12.82				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Sample No.: ICIS 280-375537/9 Date Analyzed: 05/30/2017 20:33

Instrument ID: VMS_G2 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): G2_0481.D Heated Purge: (Y/N) Y

Calibration ID: 29340

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		347457	12.82				
UPPER LIMIT		694914	13.32				
LOWER LIMIT		173729	12.32				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVC 280-376196/34		225101	12.82				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS01 | Lab Sample ID: 280-97803-1

Matrix: Solid | Lab File ID: G2_0698.D

Analysis Method: 8260B | Date Collected: 05/31/2017 11:00

Sample wt/vol: 6.481(g) | Date Analyzed: 06/05/2017 21:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 16.8 | Level: (low/med) Low

Analysis Batch No.: 376196 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.5	U	4.6	1.5	0.52
71-55-6	1,1,1-Trichloroethane	1.5	U	4.6	1.5	0.48
79-34-5	1,1,2,2-Tetrachloroethane	1.5	U	4.6	1.5	0.57
79-00-5	1,1,2-Trichloroethane	3.0	U	4.6	3.0	0.82
75-34-3	1,1-Dichloroethane	0.74	U	4.6	0.74	0.19
75-35-4	1,1-Dichloroethene	1.5	U	4.6	1.5	0.55
563-58-6	1,1-Dichloropropene	1.5	U	4.6	1.5	0.50
87-61-6	1,2,3-Trichlorobenzene	1.5	U	4.6	1.5	0.70
96-18-4	1,2,3-Trichloropropane	3.0	U	4.6	3.0	0.75
120-82-1	1,2,4-Trichlorobenzene	1.5	U	4.6	1.5	0.68
95-63-6	1,2,4-Trimethylbenzene	1.5	U	4.6	1.5	0.54
96-12-8	1,2-Dibromo-3-Chloropropane	1.5	U	9.3	1.5	0.56
106-93-4	1,2-Dibromoethane	1.5	U	4.6	1.5	0.48
95-50-1	1,2-Dichlorobenzene	1.5	U	4.6	1.5	0.42
107-06-2	1,2-Dichloroethane	1.5	U	4.6	1.5	0.65
540-59-0	1,2-Dichloroethene, Total	1.5	U	4.6	1.5	0.36
78-87-5	1,2-Dichloropropane	1.5	U	4.6	1.5	0.51
108-67-8	1,3,5-Trimethylbenzene	1.5	U	4.6	1.5	0.53
541-73-1	1,3-Dichlorobenzene	1.5	U	4.6	1.5	0.45
142-28-9	1,3-Dichloropropane	1.5	U	4.6	1.5	0.47
106-46-7	1,4-Dichlorobenzene	1.5	U	4.6	1.5	0.72
594-20-7	2,2-Dichloropropane	1.5	U	4.6	1.5	0.41
78-93-3	2-Butanone (MEK)	5.9	U	19	5.9	1.7
95-49-8	2-Chlorotoluene	1.5	U	4.6	1.5	0.47
591-78-6	2-Hexanone	12	U	19	12	4.5
106-43-4	4-Chlorotoluene	1.5	U	4.6	1.5	0.72
99-87-6	4-Isopropyltoluene	1.5	U	4.6	1.5	0.45
108-10-1	4-Methyl-2-pentanone (MIBK)	12	U	19	12	4.0
67-64-1	Acetone	8.6	J	19	12	5.0
71-43-2	Benzene	1.5	U	4.6	1.5	0.44
108-86-1	Bromobenzene	1.5	U	4.6	1.5	0.45
74-97-5	Bromochloromethane	0.74	U	4.6	0.74	0.28
75-27-4	Bromodichloromethane	0.74	U	4.6	0.74	0.20
75-25-2	Bromoform	0.74	U	4.6	0.74	0.21
74-83-9	Bromomethane	1.5	U Q	9.3	1.5	0.46
75-15-0	Carbon disulfide	1.5	U	4.6	1.5	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS01 | Lab Sample ID: 280-97803-1

Matrix: Solid | Lab File ID: G2_0698.D

Analysis Method: 8260B | Date Collected: 05/31/2017 11:00

Sample wt/vol: 6.481(g) | Date Analyzed: 06/05/2017 21:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 16.8 | Level: (low/med) Low

Analysis Batch No.: 376196 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.5	U	4.6	1.5	0.58
108-90-7	Chlorobenzene	1.5	U	4.6	1.5	0.50
75-00-3	Chloroethane	3.0	U	9.3	3.0	0.83
67-66-3	Chloroform	0.74	U	9.3	0.74	0.27
74-87-3	Chloromethane	1.5	U	9.3	1.5	0.71
156-59-2	cis-1,2-Dichloroethene	1.5	U	4.6	1.5	0.52
10061-01-5	cis-1,3-Dichloropropene	3.0	U	4.6	3.0	1.2
124-48-1	Dibromochloromethane	1.5	U	4.6	1.5	0.53
74-95-3	Dibromomethane	3.0	U	4.6	3.0	0.78
75-71-8	Dichlorodifluoromethane	1.5	U	9.3	1.5	0.48
100-41-4	Ethylbenzene	1.5	U	4.6	1.5	0.62
87-68-3	Hexachlorobutadiene	1.5	U	4.6	1.5	0.51
108-20-3	Isopropyl ether	7.4	U Q	46	7.4	2.5
98-82-8	Isopropylbenzene	1.5	U	4.6	1.5	0.55
179601-23-1	m&p-Xylene	3.0	U	3.0	3.0	0.96
74-88-4	Methyl iodide	1.5	U	4.6	1.5	0.41
1634-04-4	Methyl tert-butyl ether	0.74	U Q	19	0.74	0.32
75-09-2	Methylene Chloride	3.0	U	4.6	3.0	1.5
91-20-3	Naphthalene	1.5	U	4.6	1.5	0.58
104-51-8	n-Butylbenzene	1.5	U	4.6	1.5	0.52
103-65-1	N-Propylbenzene	1.5	U	4.6	1.5	0.54
95-47-6	o-Xylene	1.5	U	4.6	1.5	0.57
135-98-8	sec-Butylbenzene	1.5	U	4.6	1.5	0.71
100-42-5	Styrene	1.5	U	4.6	1.5	0.58
98-06-6	tert-Butylbenzene	1.5	U	4.6	1.5	0.46
127-18-4	Tetrachloroethene	1.5	U	4.6	1.5	0.55
108-88-3	Toluene	1.5	U	4.6	1.5	0.64
156-60-5	trans-1,2-Dichloroethene	0.74	U	4.6	0.74	0.36
10061-02-6	trans-1,3-Dichloropropene	1.5	U	4.6	1.5	0.62
79-01-6	Trichloroethene	0.74	U	4.6	0.74	0.21
75-69-4	Trichlorofluoromethane	3.0	U	9.3	3.0	0.96
108-05-4	Vinyl acetate	3.0	U Q	9.3	3.0	0.99
75-01-4	Vinyl chloride	3.0	U	4.6	3.0	1.2
1330-20-7	Xylenes (total)	0.93	U	9.3	0.93	0.57

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS01 Lab Sample ID: 280-97803-1

Matrix: Solid Lab File ID: G2_0698.D

Analysis Method: 8260B Date Collected: 05/31/2017 11:00

Sample wt/vol: 6.481(g) Date Analyzed: 06/05/2017 21:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 16.8 Level: (low/med) Low

Analysis Batch No.: 376196 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	126		71-136
460-00-4	4-Bromofluorobenzene (Surr)	96		79-119
1868-53-7	Dibromofluoromethane (Surr)	110		78-119
2037-26-5	Toluene-d8 (Surr)	97		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0698.D
Lims ID: 280-97803-E-1-A
Client ID: SS025-SS01
Sample Type: Client
Inject. Date: 05-Jun-2017 21:09:30 ALS Bottle#: 19 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-e-1-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Jun-2017 20:22:30 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: dukesa Date: 05-Jun-2017 22:40:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.051	0.014	93	357281	1000.0	
* 3 Fluorobenzene	96	7.629	7.622	0.007	98	320246	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	126358	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	205154	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.828	0.000	93	180490	49.5	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	239913	56.7	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	528848	43.8	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	144991	43.1	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.276				ND	
32 Dichlorodifluoromethane	85		1.691				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.984				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.654				ND	
43 Trichlorofluoromethane	101		2.696				ND	
42 Ethanol	45		2.892				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.297				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.339				ND	
50 Acetone	43	3.353	3.353	0.000	97	10974	9.23	
55 Iodomethane	142		3.478				ND	
51 Isopropyl alcohol	45		3.562				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.744				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.786				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
60 Methylene Chloride	84		3.995				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
59 2-Methyl-2-propanol	59		4.191				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.358				ND	
63 trans-1,2-Dichloroethene	96		4.414				ND	
62 Methyl tert-butyl ether	73		4.414				ND	
64 Hexane	57		4.903				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.196				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.895				ND	
74 cis-1,2-Dichloroethene	96		6.121				ND	
71 2-Butanone (MEK)	43		6.121				ND	
75 2,2-Dichloropropane	77		6.121				ND	
70 Ethyl acetate	43		6.214				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.442				ND	
77 Chlorobromomethane	128		6.450				ND	
79 Tetrahydrofuran	42		6.457				ND	
78 Chloroform	83		6.614				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.879				ND	
84 Carbon tetrachloride	117		6.993				ND	
83 1,1-Dichloropropene	75		7.007				ND	
87 Benzene	78		7.250				ND	
85 1,2-Dichloroethane	62		7.329				ND	
86 Tert-amyl methyl ether	73		7.451				ND	
80 Isobutyl alcohol	41		7.644				ND	
35 n-Heptane	43		7.644				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.037				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.251				ND	
93 Methylcyclohexane	55		8.287				ND	
92 1,2-Dichloropropane	63		8.323				ND	
94 1,4-Dioxane	88		8.409				ND	
95 Dibromomethane	93		8.416				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.074				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.231				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.653				ND	
102 Ethyl methacrylate	69		9.710				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.910				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.768				ND	
112 Chlorobenzene	112		10.783				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.876				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.835				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.064				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.578				ND	
140 1,3,5-Trichlorobenzene	180		13.693				ND	
141 1,2,4-Trichlorobenzene	180		14.115				ND	
142 Hexachlorobutadiene	225		14.200				ND	
143 Naphthalene	128		14.301				ND	
144 1,2,3-Trichlorobenzene	180		14.458				ND	
28 Dimethyl disulfide	1		0.000				ND	
26 3-Methylhexane	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
20 2,2-Dimethylpentane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
12 2-Methylhexane	1		0.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent

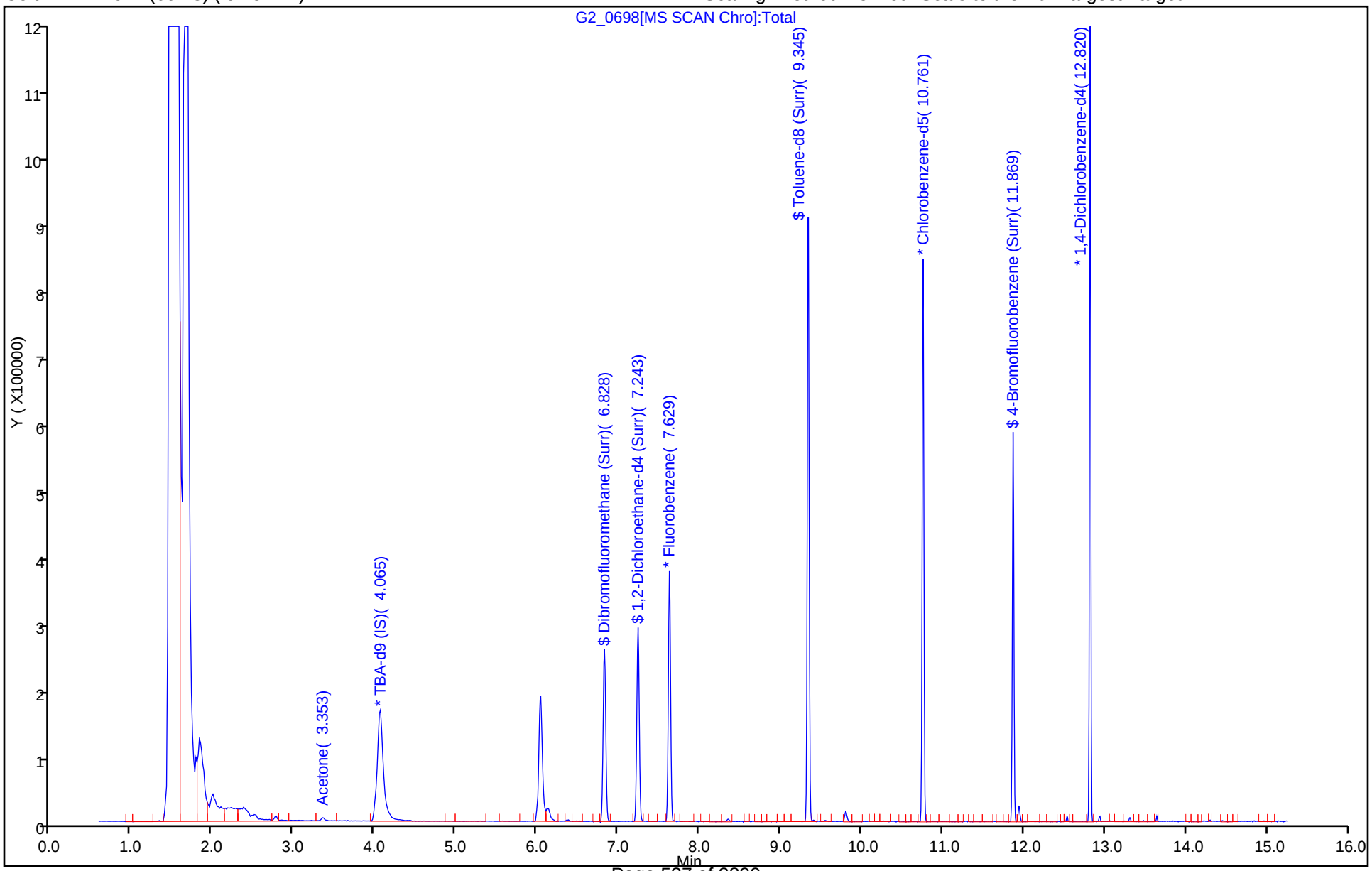
Report Date: 06-Jun-2017 20:22:45 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0698.D

Injection Date:	05-Jun-2017 21:09:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97803-E-1-A	Lab Sample ID:	280-97803-1	Worklist Smp#:	14
Client ID:	SS025-SS01				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0698.D
Lims ID: 280-97803-E-1-A
Client ID: SS025-SS01
Sample Type: Client
Inject. Date: 05-Jun-2017 21:09:30 ALS Bottle#: 19 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-e-1-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Jun-2017 20:22:30 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: dukesa Date: 05-Jun-2017 22:40:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	45.0	49.5	109.93
$ 9 1,2-Dichloroethane-d4 (Surr)	45.0	56.7	125.93
$ 10 Toluene-d8 (Surr)	45.0	43.8	97.33
$ 11 4-Bromofluorobenzene (Surr)	45.0	43.1	95.81

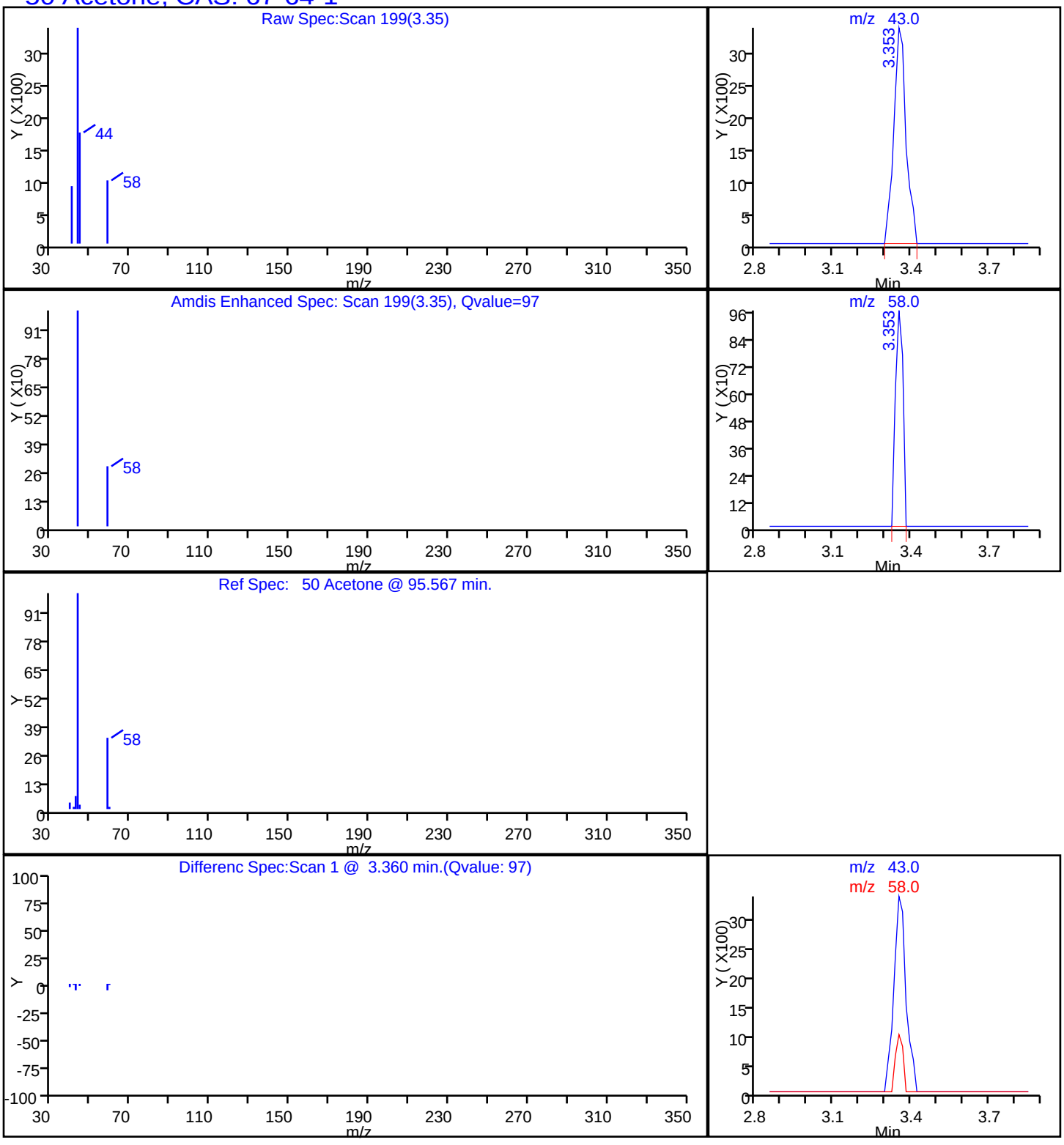
Report Date: 06-Jun-2017 20:22:45 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0698.D

Injection Date:	05-Jun-2017 21:09:30	Instrument ID:	VMS_G2		
Lims ID:	280-97803-E-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	DUKESA	ALS Bottle#:	19	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

50 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: TB-01 | Lab Sample ID: 280-97803-2

Matrix: Solid | Lab File ID: G2_0637.D

Analysis Method: 8260B | Date Collected: 05/31/2017 11:00

Sample wt/vol: 5(g) | Date Analyzed: 06/03/2017 22:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.6	U	5.0	1.6	0.56
71-55-6	1,1,1-Trichloroethane	1.6	U	5.0	1.6	0.52
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U	5.0	1.6	0.61
79-00-5	1,1,2-Trichloroethane	3.2	U	5.0	3.2	0.88
75-34-3	1,1-Dichloroethane	0.80	U	5.0	0.80	0.21
75-35-4	1,1-Dichloroethene	1.6	U	5.0	1.6	0.59
563-58-6	1,1-Dichloropropene	1.6	U	5.0	1.6	0.54
87-61-6	1,2,3-Trichlorobenzene	1.6	U	5.0	1.6	0.75
96-18-4	1,2,3-Trichloropropane	3.2	U	5.0	3.2	0.81
120-82-1	1,2,4-Trichlorobenzene	1.6	U	5.0	1.6	0.73
95-63-6	1,2,4-Trimethylbenzene	1.6	U	5.0	1.6	0.58
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	10	1.6	0.60
106-93-4	1,2-Dibromoethane	1.6	U	5.0	1.6	0.52
95-50-1	1,2-Dichlorobenzene	1.6	U	5.0	1.6	0.45
107-06-2	1,2-Dichloroethane	1.6	U	5.0	1.6	0.70
540-59-0	1,2-Dichloroethene, Total	1.6	U	5.0	1.6	0.39
78-87-5	1,2-Dichloropropane	1.6	U	5.0	1.6	0.55
108-67-8	1,3,5-Trimethylbenzene	1.6	U	5.0	1.6	0.57
541-73-1	1,3-Dichlorobenzene	1.6	U	5.0	1.6	0.48
142-28-9	1,3-Dichloropropane	1.6	U	5.0	1.6	0.51
106-46-7	1,4-Dichlorobenzene	1.6	U	5.0	1.6	0.78
594-20-7	2,2-Dichloropropane	1.6	U	5.0	1.6	0.44
78-93-3	2-Butanone (MEK)	6.4	U	20	6.4	1.8
95-49-8	2-Chlorotoluene	1.6	U	5.0	1.6	0.51
591-78-6	2-Hexanone	13	U	20	13	4.9
106-43-4	4-Chlorotoluene	1.6	U	5.0	1.6	0.78
99-87-6	4-Isopropyltoluene	1.6	U	5.0	1.6	0.49
108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	20	13	4.4
67-64-1	Acetone	10	J	20	13	5.4
71-43-2	Benzene	1.6	U	5.0	1.6	0.47
108-86-1	Bromobenzene	1.6	U	5.0	1.6	0.49
74-97-5	Bromochloromethane	0.80	U	5.0	0.80	0.30
75-27-4	Bromodichloromethane	0.80	U	5.0	0.80	0.22
75-25-2	Bromoform	0.80	U	5.0	0.80	0.23
74-83-9	Bromomethane	1.6	U Q	10	1.6	0.50
75-15-0	Carbon disulfide	1.6	U	5.0	1.6	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: TB-01 | Lab Sample ID: 280-97803-2

Matrix: Solid | Lab File ID: G2_0637.D

Analysis Method: 8260B | Date Collected: 05/31/2017 11:00

Sample wt/vol: 5(g) | Date Analyzed: 06/03/2017 22:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.6	U	5.0	1.6	0.63
108-90-7	Chlorobenzene	1.6	U	5.0	1.6	0.54
75-00-3	Chloroethane	3.2	U Q	10	3.2	0.89
67-66-3	Chloroform	0.80	U	10	0.80	0.29
74-87-3	Chloromethane	1.6	U	10	1.6	0.77
156-59-2	cis-1,2-Dichloroethene	1.6	U	5.0	1.6	0.56
10061-01-5	cis-1,3-Dichloropropene	3.2	U	5.0	3.2	1.3
124-48-1	Dibromochloromethane	1.6	U	5.0	1.6	0.57
74-95-3	Dibromomethane	3.2	U	5.0	3.2	0.84
75-71-8	Dichlorodifluoromethane	1.6	U	10	1.6	0.52
100-41-4	Ethylbenzene	1.6	U	5.0	1.6	0.67
87-68-3	Hexachlorobutadiene	1.6	U	5.0	1.6	0.55
108-20-3	Isopropyl ether	8.0	U Q	50	8.0	2.7
98-82-8	Isopropylbenzene	1.6	U	5.0	1.6	0.59
179601-23-1	m&p-Xylene	3.2	U	3.2	3.2	1.0
74-88-4	Methyl iodide	1.6	U	5.0	1.6	0.44
1634-04-4	Methyl tert-butyl ether	0.80	U	20	0.80	0.34
75-09-2	Methylene Chloride	2.6	J	5.0	3.2	1.6
91-20-3	Naphthalene	1.6	U	5.0	1.6	0.63
104-51-8	n-Butylbenzene	1.6	U	5.0	1.6	0.56
103-65-1	N-Propylbenzene	1.6	U	5.0	1.6	0.58
95-47-6	o-Xylene	1.6	U	5.0	1.6	0.61
135-98-8	sec-Butylbenzene	1.6	U	5.0	1.6	0.77
100-42-5	Styrene	1.6	U	5.0	1.6	0.63
98-06-6	tert-Butylbenzene	1.6	U	5.0	1.6	0.50
127-18-4	Tetrachloroethene	1.6	U	5.0	1.6	0.59
108-88-3	Toluene	1.6	U	5.0	1.6	0.69
156-60-5	trans-1,2-Dichloroethene	0.80	U	5.0	0.80	0.39
10061-02-6	trans-1,3-Dichloropropene	1.6	U	5.0	1.6	0.67
79-01-6	Trichloroethene	0.80	U	5.0	0.80	0.23
75-69-4	Trichlorofluoromethane	3.2	U	10	3.2	1.0
108-05-4	Vinyl acetate	3.2	U	10	3.2	1.1
75-01-4	Vinyl chloride	3.2	U	5.0	3.2	1.3
1330-20-7	Xylenes (total)	1.0	U	10	1.0	0.61

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: TB-01 | Lab Sample ID: 280-97803-2

Matrix: Solid | Lab File ID: G2_0637.D

Analysis Method: 8260B | Date Collected: 05/31/2017 11:00

Sample wt/vol: 5(g) | Date Analyzed: 06/03/2017 22:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	116		71-136
460-00-4	4-Bromofluorobenzene (Surr)	96		79-119
1868-53-7	Dibromofluoromethane (Surr)	104		78-119
2037-26-5	Toluene-d8 (Surr)	99		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0637.D
Lims ID: 280-97803-A-2-A
Client ID: TB-01
Sample Type: Client
Inject. Date: 03-Jun-2017 22:29:30 ALS Bottle#: 18 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-a-2-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 03-Jun-2017 22:48:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	95	617587	1000.0	
* 3 Fluorobenzene	96	7.629	7.637	-0.008	98	399458	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	169761	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	326230	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	93	212708	46.7	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	276906	52.2	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	722265	44.5	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	231776	43.3	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.691				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.956				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.654				ND	
43 Trichlorofluoromethane	101		2.682				ND	
42 Ethanol	45		2.892				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.339				ND	
50 Acetone	43	3.353	3.353	0.000	99	15316	10.3	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.814				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84	3.995	4.009	-0.014	96	24206	2.62	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.322				ND	
68 2-Chloro-1,3-butadiene	53		5.336				ND	
69 Tert-butyl ethyl ether	59		5.909				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.221				ND	
73 Propionitrile	54		6.228				ND	
76 Methacrylonitrile	41		6.435				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
72 sec-Butyl Alcohol	45		6.464				ND	
78 Chloroform	83		6.628				ND	
81 1,1,1-Trichloroethane	97		6.814				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.022				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.451				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.008				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.180				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
91 Methyl methacrylate	100		8.423				ND	
95 Dibromomethane	93		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.866				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91	9.410	9.410	0.000	95	8717	0.5336	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.798				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.177				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.835				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.064				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.586				ND	
140 1,3,5-Trichlorobenzene	180		13.693				ND	
141 1,2,4-Trichlorobenzene	180		14.115				ND	
142 Hexachlorobutadiene	225		14.208				ND	
143 Naphthalene	128		14.301				ND	
144 1,2,3-Trichlorobenzene	180		14.458				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
12 2-Methylhexane	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 2,2,3-Trimethylbutane	1		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
26 3-Methylhexane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 147 Total BTEX	1				0		0.5336	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent

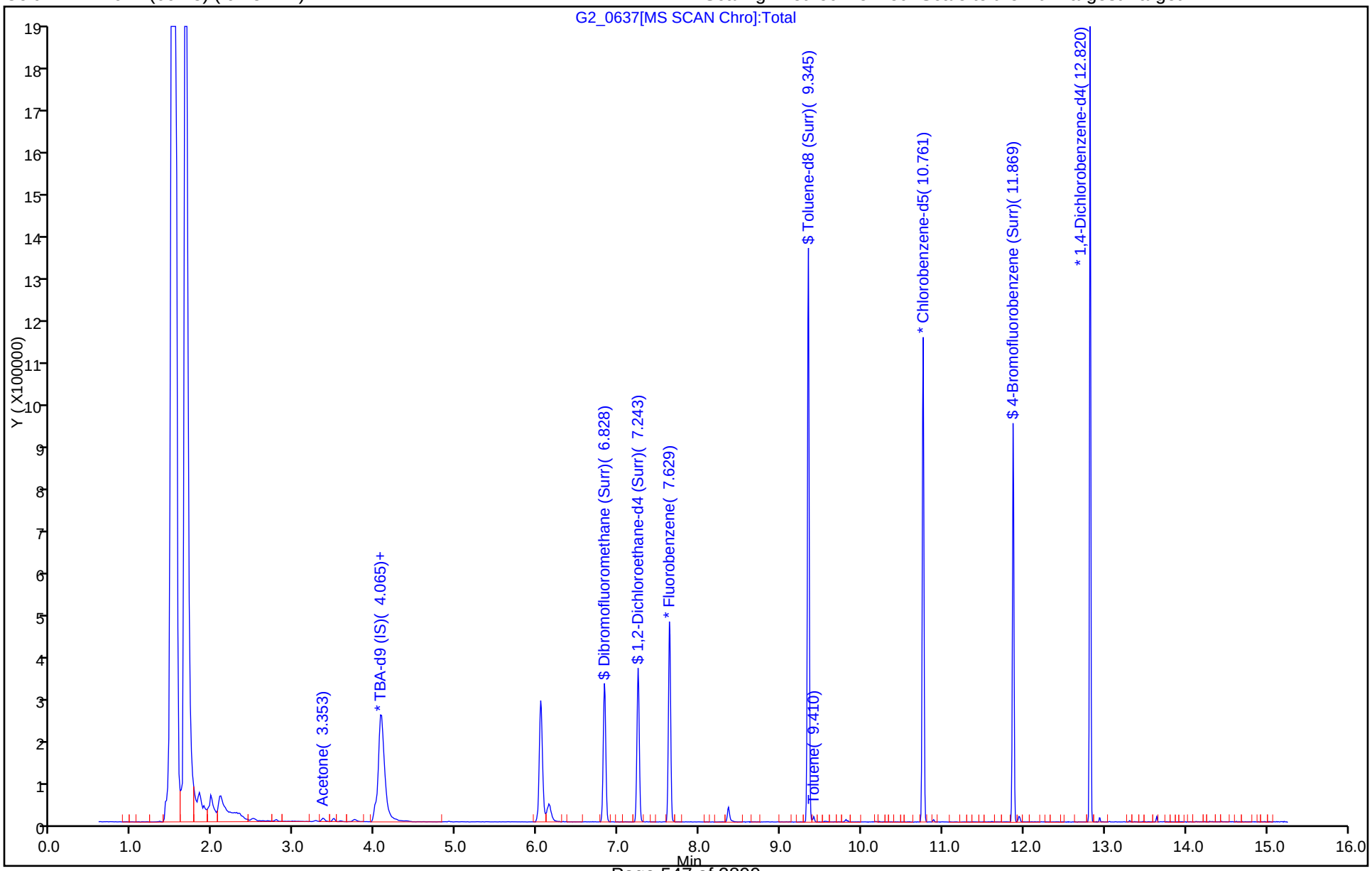
Report Date: 05-Jun-2017 17:13:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0637.D

Injection Date:	03-Jun-2017 22:29:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97803-A-2-A	Lab Sample ID:	280-97803-2	Worklist Smp#:	13
Client ID:	TB-01				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0637.D
Lims ID: 280-97803-A-2-A
Client ID: TB-01
Sample Type: Client
Inject. Date: 03-Jun-2017 22:29:30 ALS Bottle#: 18 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-a-2-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 03-Jun-2017 22:48:45

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	45.0	46.7	103.87
$ 9 1,2-Dichloroethane-d4 (Surr)	45.0	52.2	115.95
$ 10 Toluene-d8 (Surr)	45.0	44.5	98.94
$ 11 4-Bromofluorobenzene (Surr)	45.0	43.3	96.31

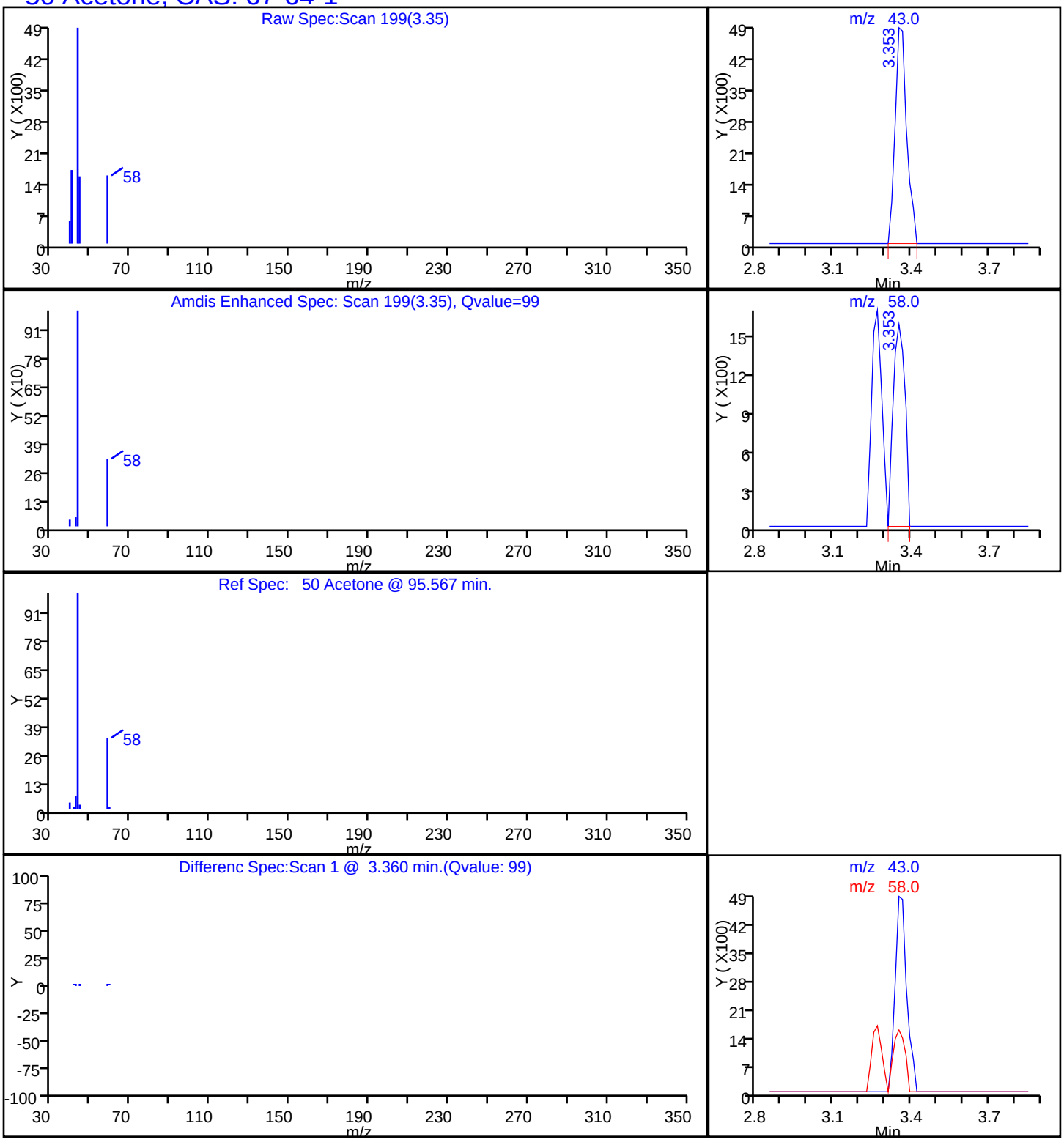
Report Date: 05-Jun-2017 17:13:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0637.D

Injection Date:	03-Jun-2017 22:29:30	Instrument ID:	VMS_G2		
Lims ID:	280-97803-A-2-A	Lab Sample ID:	280-97803-2		
Client ID:	TB-01				
Operator ID:	DUKESA	ALS Bottle#:	18	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

50 Acetone, CAS: 67-64-1



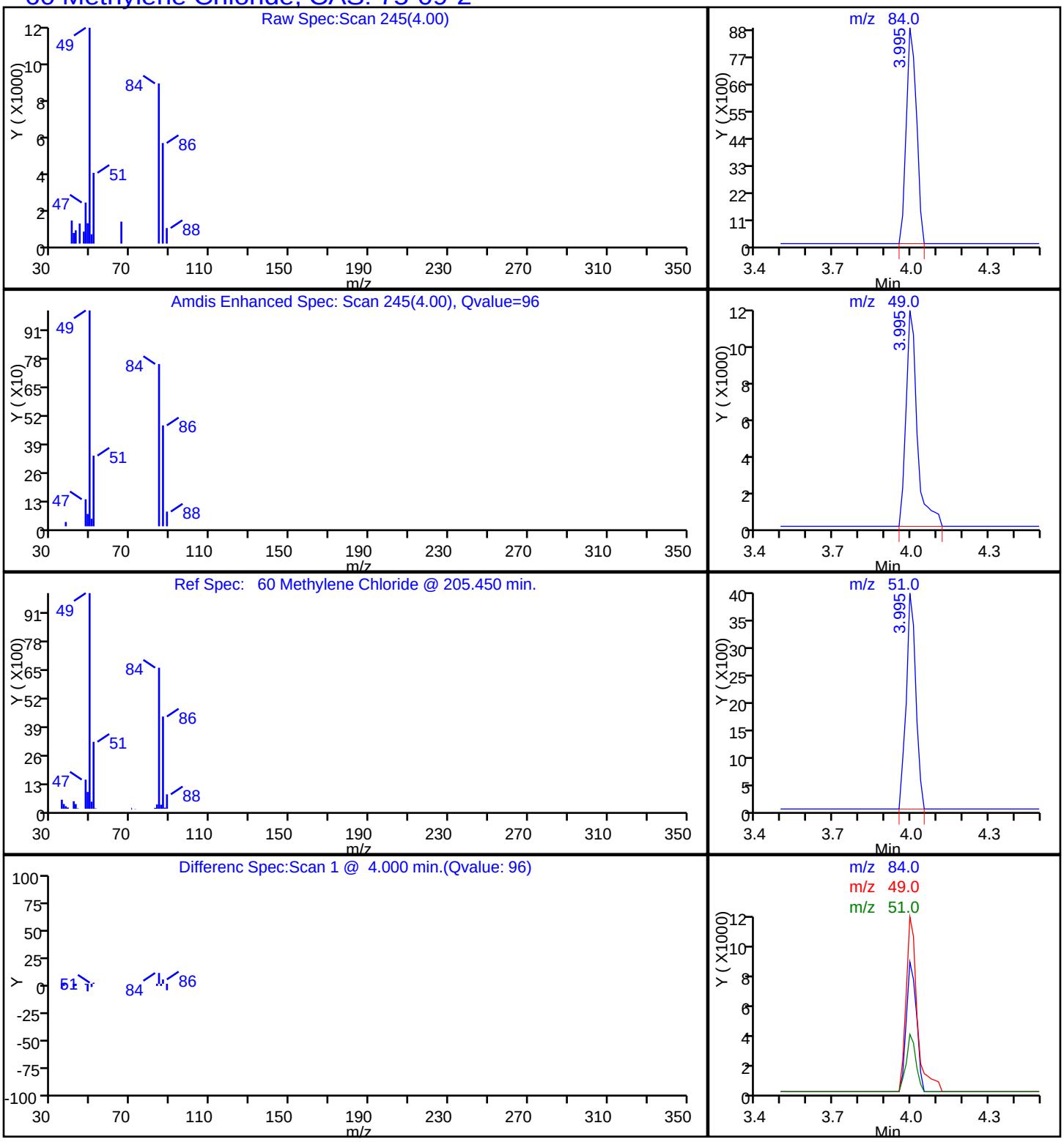
Report Date: 05-Jun-2017 17:13:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0637.D

Injection Date:	03-Jun-2017 22:29:30	Instrument ID:	VMS_G2		
Lims ID:	280-97803-A-2-A	Lab Sample ID:	280-97803-2		
Client ID:	TB-01				
Operator ID:	DUKESA	ALS Bottle#:	18	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

60 Methylene Chloride, CAS: 75-09-2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS02 | Lab Sample ID: 280-97803-4

Matrix: Solid | Lab File ID: G2_0639.D

Analysis Method: 8260B | Date Collected: 05/31/2017 12:50

Sample wt/vol: 5.955(g) | Date Analyzed: 06/03/2017 23:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 15.2 | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.6	U	5.0	1.6	0.55
71-55-6	1,1,1-Trichloroethane	1.6	U	5.0	1.6	0.51
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U	5.0	1.6	0.60
79-00-5	1,1,2-Trichloroethane	3.2	U	5.0	3.2	0.87
75-34-3	1,1-Dichloroethane	0.79	U	5.0	0.79	0.21
75-35-4	1,1-Dichloroethene	1.6	U	5.0	1.6	0.58
563-58-6	1,1-Dichloropropene	1.6	U	5.0	1.6	0.53
87-61-6	1,2,3-Trichlorobenzene	1.6	U	5.0	1.6	0.74
96-18-4	1,2,3-Trichloropropane	3.2	U	5.0	3.2	0.80
120-82-1	1,2,4-Trichlorobenzene	1.6	U	5.0	1.6	0.72
95-63-6	1,2,4-Trimethylbenzene	1.6	U	5.0	1.6	0.57
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	9.9	1.6	0.59
106-93-4	1,2-Dibromoethane	1.6	U	5.0	1.6	0.51
95-50-1	1,2-Dichlorobenzene	1.6	U	5.0	1.6	0.45
107-06-2	1,2-Dichloroethane	1.6	U	5.0	1.6	0.69
540-59-0	1,2-Dichloroethene, Total	1.6	U	5.0	1.6	0.39
78-87-5	1,2-Dichloropropane	1.6	U	5.0	1.6	0.54
108-67-8	1,3,5-Trimethylbenzene	1.6	U	5.0	1.6	0.56
541-73-1	1,3-Dichlorobenzene	1.6	U	5.0	1.6	0.48
142-28-9	1,3-Dichloropropane	1.6	U	5.0	1.6	0.51
106-46-7	1,4-Dichlorobenzene	1.6	U	5.0	1.6	0.77
594-20-7	2,2-Dichloropropane	1.6	U	5.0	1.6	0.44
78-93-3	2-Butanone (MEK)	6.3	U	20	6.3	1.8
95-49-8	2-Chlorotoluene	1.6	U	5.0	1.6	0.51
591-78-6	2-Hexanone	13	U	20	13	4.8
106-43-4	4-Chlorotoluene	1.6	U	5.0	1.6	0.77
99-87-6	4-Isopropyltoluene	1.6	U	5.0	1.6	0.49
108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	20	13	4.3
67-64-1	Acetone	12	J	20	13	5.3
71-43-2	Benzene	1.6	U	5.0	1.6	0.47
108-86-1	Bromobenzene	1.6	U	5.0	1.6	0.49
74-97-5	Bromochloromethane	0.79	U	5.0	0.79	0.30
75-27-4	Bromodichloromethane	0.79	U	5.0	0.79	0.22
75-25-2	Bromoform	0.79	U	5.0	0.79	0.23
74-83-9	Bromomethane	1.6	U Q	9.9	1.6	0.50
75-15-0	Carbon disulfide	1.6	U	5.0	1.6	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS02 | Lab Sample ID: 280-97803-4

Matrix: Solid | Lab File ID: G2_0639.D

Analysis Method: 8260B | Date Collected: 05/31/2017 12:50

Sample wt/vol: 5.955(g) | Date Analyzed: 06/03/2017 23:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 15.2 | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.6	U	5.0	1.6	0.62
108-90-7	Chlorobenzene	1.6	U	5.0	1.6	0.53
75-00-3	Chloroethane	3.2	U Q	9.9	3.2	0.88
67-66-3	Chloroform	0.79	U	9.9	0.79	0.29
74-87-3	Chloromethane	1.6	U	9.9	1.6	0.76
156-59-2	cis-1,2-Dichloroethene	1.6	U	5.0	1.6	0.55
10061-01-5	cis-1,3-Dichloropropene	3.2	U	5.0	3.2	1.3
124-48-1	Dibromochloromethane	1.6	U	5.0	1.6	0.56
74-95-3	Dibromomethane	3.2	U	5.0	3.2	0.83
75-71-8	Dichlorodifluoromethane	1.6	U	9.9	1.6	0.51
100-41-4	Ethylbenzene	1.6	U	5.0	1.6	0.66
87-68-3	Hexachlorobutadiene	1.6	U	5.0	1.6	0.54
108-20-3	Isopropyl ether	7.9	U Q	50	7.9	2.7
98-82-8	Isopropylbenzene	1.6	U	5.0	1.6	0.58
179601-23-1	m&p-Xylene	3.2	U	3.2	3.2	1.0
74-88-4	Methyl iodide	1.6	U	5.0	1.6	0.44
1634-04-4	Methyl tert-butyl ether	0.79	U	20	0.79	0.34
75-09-2	Methylene Chloride	3.2	U	5.0	3.2	1.6
91-20-3	Naphthalene	1.6	U	5.0	1.6	0.62
104-51-8	n-Butylbenzene	1.6	U	5.0	1.6	0.55
103-65-1	N-Propylbenzene	1.6	U	5.0	1.6	0.57
95-47-6	o-Xylene	1.6	U	5.0	1.6	0.60
135-98-8	sec-Butylbenzene	1.6	U	5.0	1.6	0.76
100-42-5	Styrene	1.6	U	5.0	1.6	0.62
98-06-6	tert-Butylbenzene	1.6	U	5.0	1.6	0.50
127-18-4	Tetrachloroethene	1.6	U	5.0	1.6	0.58
108-88-3	Toluene	1.6	U	5.0	1.6	0.68
156-60-5	trans-1,2-Dichloroethene	0.79	U	5.0	0.79	0.39
10061-02-6	trans-1,3-Dichloropropene	1.6	U	5.0	1.6	0.66
79-01-6	Trichloroethene	0.79	U	5.0	0.79	0.23
75-69-4	Trichlorofluoromethane	1.5	J	9.9	3.2	1.0
108-05-4	Vinyl acetate	3.2	U	9.9	3.2	1.1
75-01-4	Vinyl chloride	3.2	U	5.0	3.2	1.3
1330-20-7	Xylenes (total)	0.99	U	9.9	0.99	0.60

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS02 Lab Sample ID: 280-97803-4

Matrix: Solid Lab File ID: G2_0639.D

Analysis Method: 8260B Date Collected: 05/31/2017 12:50

Sample wt/vol: 5.955(g) Date Analyzed: 06/03/2017 23:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 15.2 Level: (low/med) Low

Analysis Batch No.: 376040 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	126		71-136
460-00-4	4-Bromofluorobenzene (Surr)	102		79-119
1868-53-7	Dibromofluoromethane (Surr)	110		78-119
2037-26-5	Toluene-d8 (Surr)	102		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0639.D
Lims ID: 280-97803-D-4-A
Client ID: SS025-SS02
Sample Type: Client
Inject. Date: 03-Jun-2017 23:19:30 ALS Bottle#: 20 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-D-4-A
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 03-Jun-2017 23:38:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	94	429679	1000.0	
* 3 Fluorobenzene	96	7.629	7.637	-0.008	98	353904	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	144437	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	232016	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	93	200457	49.7	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	264453	56.5	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	631495	45.8	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	174173	45.8	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.691				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.956				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.654				ND	
43 Trichlorofluoromethane	101	2.682	2.682	0.000	94	9264	1.49	
42 Ethanol	45		2.892				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.339				ND	
50 Acetone	43	3.353	3.353	0.000	99	15591	11.9	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.814				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.322				ND	
68 2-Chloro-1,3-butadiene	53		5.336				ND	
69 Tert-butyl ethyl ether	59		5.909				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.221				ND	
73 Propionitrile	54		6.228				ND	
76 Methacrylonitrile	41		6.435				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
72 sec-Butyl Alcohol	45		6.464				ND	
78 Chloroform	83		6.628				ND	
81 1,1,1-Trichloroethane	97		6.814				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.022				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.451				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.008				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.180				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
91 Methyl methacrylate	100		8.423				ND	
95 Dibromomethane	93		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.866				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.798				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.177				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.835				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.064				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.586				ND	
140 1,3,5-Trichlorobenzene	180		13.693				ND	
141 1,2,4-Trichlorobenzene	180		14.115				ND	
142 Hexachlorobutadiene	225		14.208				ND	
143 Naphthalene	128		14.301				ND	
144 1,2,3-Trichlorobenzene	180		14.458				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
12 2-Methylhexane	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 2,2,3-Trimethylbutane	1		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
26 3-Methylhexane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent

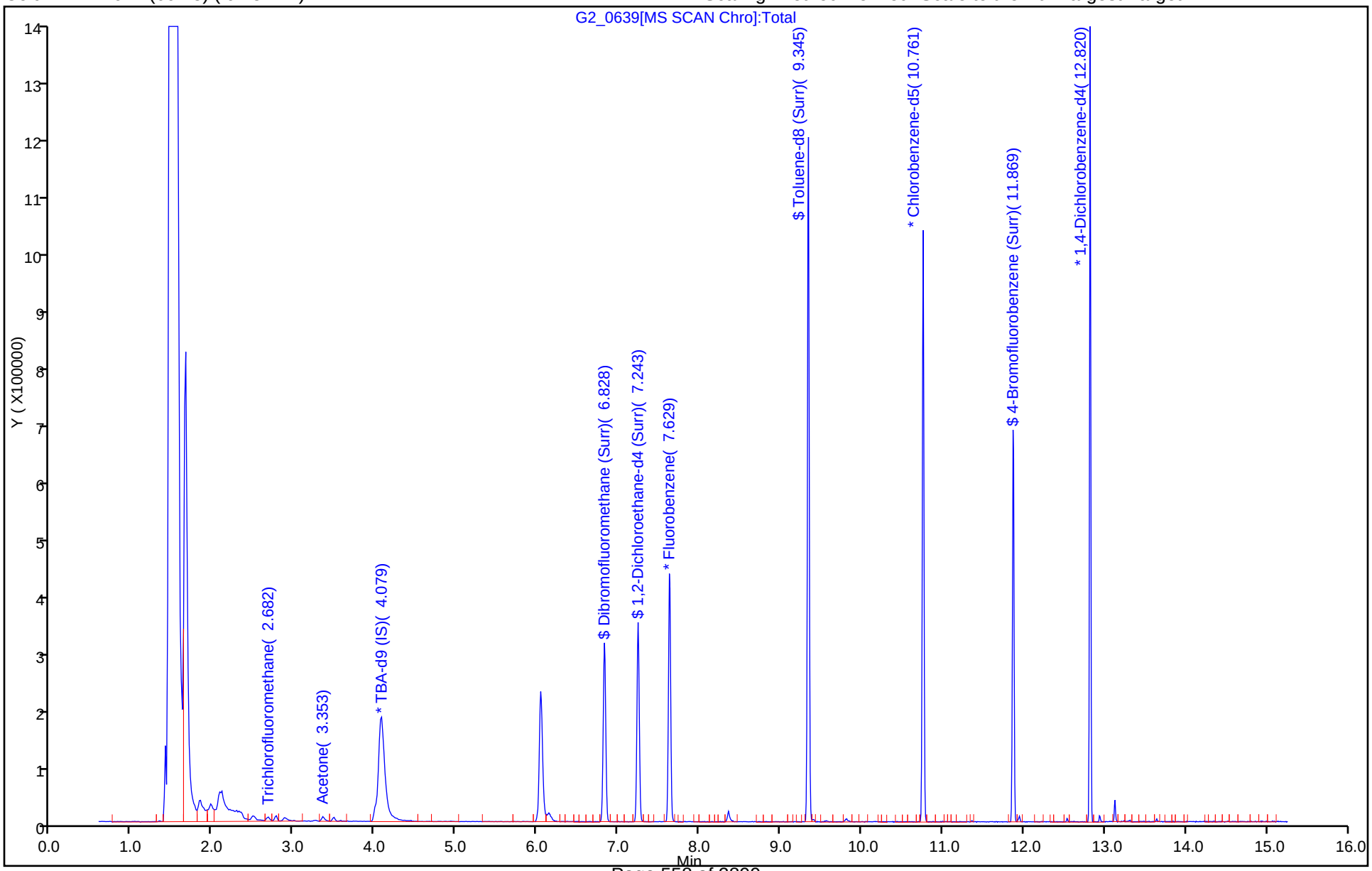
Report Date: 05-Jun-2017 17:13:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0639.D

Injection Date:	03-Jun-2017 23:19:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97803-D-4-A	Lab Sample ID:	280-97803-4	Worklist Smp#:	14
Client ID:	SS025-SS02				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0639.D
Lims ID: 280-97803-D-4-A
Client ID: SS025-SS02
Sample Type: Client
Inject. Date: 03-Jun-2017 23:19:30 ALS Bottle#: 20 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-D-4-A
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 03-Jun-2017 23:38:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	45.0	49.7	110.48
$ 9 1,2-Dichloroethane-d4 (Surr)	45.0	56.5	125.59
$ 10 Toluene-d8 (Surr)	45.0	45.8	101.68
$ 11 4-Bromofluorobenzene (Surr)	45.0	45.8	101.76

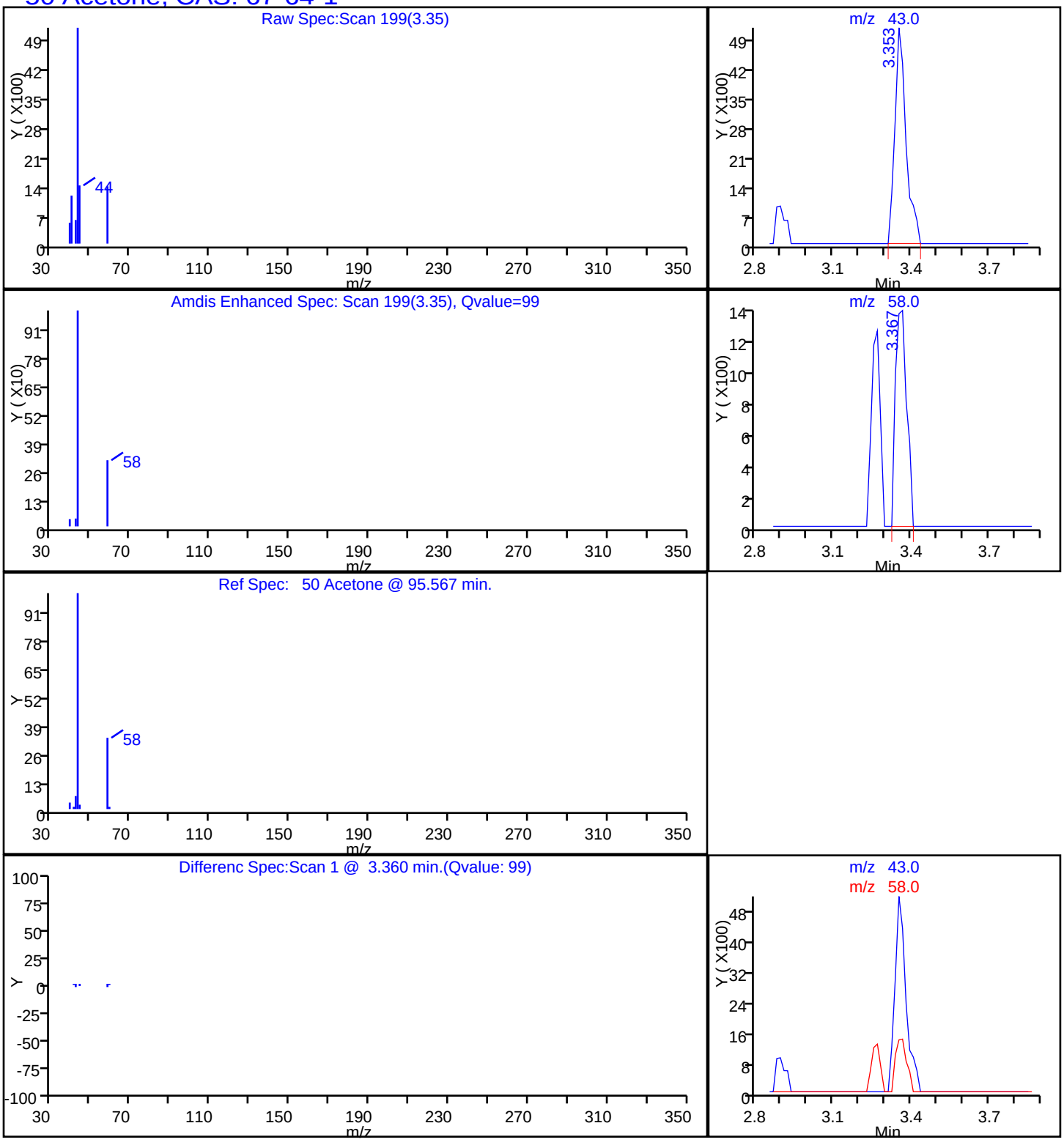
Report Date: 05-Jun-2017 17:13:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0639.D

Injection Date:	03-Jun-2017 23:19:30	Instrument ID:	VMS_G2		
Lims ID:	280-97803-D-4-A	Lab Sample ID:	280-97803-4		
Client ID:	SS025-SS02				
Operator ID:	DUKESA	ALS Bottle#:	20	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

50 Acetone, CAS: 67-64-1



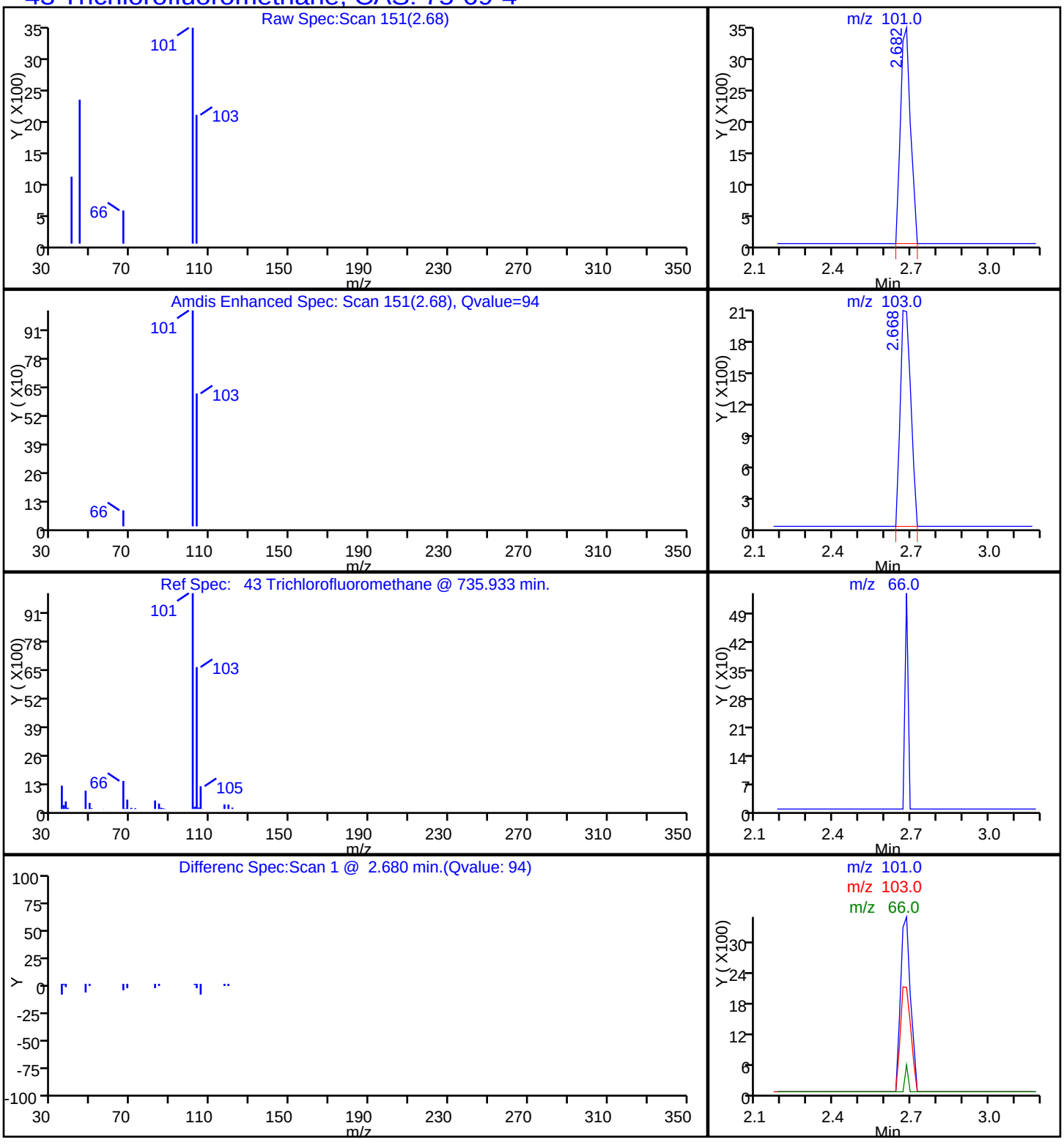
Report Date: 05-Jun-2017 17:13:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0639.D

Injection Date:	03-Jun-2017 23:19:30	Instrument ID:	VMS_G2		
Lims ID:	280-97803-D-4-A	Lab Sample ID:	280-97803-4		
Client ID:	SS025-SS02				
Operator ID:	DUKESA	ALS Bottle#:	20	Worklist Smp#:	14
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

43 Trichlorofluoromethane, CAS: 75-69-4



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB02(0-2) | Lab Sample ID: 280-97803-5

Matrix: Solid | Lab File ID: G2_0640.D

Analysis Method: 8260B | Date Collected: 05/31/2017 13:10

Sample wt/vol: 6.238(g) | Date Analyzed: 06/03/2017 23:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 17.6 | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.6	U	4.9	1.6	0.54
71-55-6	1,1,1-Trichloroethane	1.6	U	4.9	1.6	0.51
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U	4.9	1.6	0.59
79-00-5	1,1,2-Trichloroethane	3.1	U	4.9	3.1	0.86
75-34-3	1,1-Dichloroethane	0.78	U	4.9	0.78	0.20
75-35-4	1,1-Dichloroethene	1.6	U	4.9	1.6	0.57
563-58-6	1,1-Dichloropropene	1.6	U	4.9	1.6	0.53
87-61-6	1,2,3-Trichlorobenzene	1.6	U	4.9	1.6	0.73
96-18-4	1,2,3-Trichloropropane	3.1	U	4.9	3.1	0.79
120-82-1	1,2,4-Trichlorobenzene	1.6	U	4.9	1.6	0.71
95-63-6	1,2,4-Trimethylbenzene	1.6	U	4.9	1.6	0.56
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	9.7	1.6	0.58
106-93-4	1,2-Dibromoethane	1.6	U	4.9	1.6	0.51
95-50-1	1,2-Dichlorobenzene	1.6	U	4.9	1.6	0.44
107-06-2	1,2-Dichloroethane	1.6	U	4.9	1.6	0.68
540-59-0	1,2-Dichloroethene, Total	1.6	U	4.9	1.6	0.38
78-87-5	1,2-Dichloropropane	1.6	U	4.9	1.6	0.54
108-67-8	1,3,5-Trimethylbenzene	1.6	U	4.9	1.6	0.55
541-73-1	1,3-Dichlorobenzene	1.6	U	4.9	1.6	0.47
142-28-9	1,3-Dichloropropane	1.6	U	4.9	1.6	0.50
106-46-7	1,4-Dichlorobenzene	1.6	U	4.9	1.6	0.76
594-20-7	2,2-Dichloropropane	1.6	U	4.9	1.6	0.43
78-93-3	2-Butanone (MEK)	6.2	U	19	6.2	1.8
95-49-8	2-Chlorotoluene	1.6	U	4.9	1.6	0.50
591-78-6	2-Hexanone	12	U	19	12	4.8
106-43-4	4-Chlorotoluene	1.6	U	4.9	1.6	0.76
99-87-6	4-Isopropyltoluene	1.6	U	4.9	1.6	0.48
108-10-1	4-Methyl-2-pentanone (MIBK)	12	U	19	12	4.2
67-64-1	Acetone	8.9	J	19	12	5.2
71-43-2	Benzene	1.6	U	4.9	1.6	0.46
108-86-1	Bromobenzene	1.6	U	4.9	1.6	0.48
74-97-5	Bromochloromethane	0.78	U	4.9	0.78	0.29
75-27-4	Bromodichloromethane	0.78	U	4.9	0.78	0.21
75-25-2	Bromoform	0.78	U	4.9	0.78	0.22
74-83-9	Bromomethane	1.6	U Q	9.7	1.6	0.49
75-15-0	Carbon disulfide	1.6	U	4.9	1.6	0.41

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB02(0-2) | Lab Sample ID: 280-97803-5

Matrix: Solid | Lab File ID: G2_0640.D

Analysis Method: 8260B | Date Collected: 05/31/2017 13:10

Sample wt/vol: 6.238(g) | Date Analyzed: 06/03/2017 23:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 17.6 | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.6	U	4.9	1.6	0.61
108-90-7	Chlorobenzene	1.6	U	4.9	1.6	0.53
75-00-3	Chloroethane	3.1	U Q	9.7	3.1	0.87
67-66-3	Chloroform	0.78	U	9.7	0.78	0.28
74-87-3	Chloromethane	1.6	U	9.7	1.6	0.75
156-59-2	cis-1,2-Dichloroethene	1.6	U	4.9	1.6	0.54
10061-01-5	cis-1,3-Dichloropropene	3.1	U	4.9	3.1	1.3
124-48-1	Dibromochloromethane	1.6	U	4.9	1.6	0.55
74-95-3	Dibromomethane	3.1	U	4.9	3.1	0.82
75-71-8	Dichlorodifluoromethane	1.6	U	9.7	1.6	0.51
100-41-4	Ethylbenzene	1.6	U	4.9	1.6	0.65
87-68-3	Hexachlorobutadiene	1.6	U	4.9	1.6	0.54
108-20-3	Isopropyl ether	7.8	U Q	49	7.8	2.6
98-82-8	Isopropylbenzene	1.6	U	4.9	1.6	0.57
179601-23-1	m&p-Xylene	3.1	U	3.1	3.1	1.0
74-88-4	Methyl iodide	1.6	U	4.9	1.6	0.43
1634-04-4	Methyl tert-butyl ether	0.78	U	19	0.78	0.33
75-09-2	Methylene Chloride	3.1	U	4.9	3.1	1.6
91-20-3	Naphthalene	1.6	U	4.9	1.6	0.61
104-51-8	n-Butylbenzene	1.6	U	4.9	1.6	0.54
103-65-1	N-Propylbenzene	1.6	U	4.9	1.6	0.56
95-47-6	o-Xylene	1.6	U	4.9	1.6	0.59
135-98-8	sec-Butylbenzene	1.6	U	4.9	1.6	0.75
100-42-5	Styrene	1.6	U	4.9	1.6	0.61
98-06-6	tert-Butylbenzene	1.6	U	4.9	1.6	0.49
127-18-4	Tetrachloroethene	1.6	U	4.9	1.6	0.57
108-88-3	Toluene	1.6	U	4.9	1.6	0.67
156-60-5	trans-1,2-Dichloroethene	0.78	U	4.9	0.78	0.38
10061-02-6	trans-1,3-Dichloropropene	1.6	U	4.9	1.6	0.65
79-01-6	Trichloroethene	0.78	U	4.9	0.78	0.22
75-69-4	Trichlorofluoromethane	3.1	U	9.7	3.1	1.0
108-05-4	Vinyl acetate	3.1	U	9.7	3.1	1.0
75-01-4	Vinyl chloride	3.1	U	4.9	3.1	1.3
1330-20-7	Xylenes (total)	0.97	U	9.7	0.97	0.59

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB02(0-2) Lab Sample ID: 280-97803-5

Matrix: Solid Lab File ID: G2_0640.D

Analysis Method: 8260B Date Collected: 05/31/2017 13:10

Sample wt/vol: 6.238(g) Date Analyzed: 06/03/2017 23:39

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 17.6 Level: (low/med) Low

Analysis Batch No.: 376040 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	121		71-136
460-00-4	4-Bromofluorobenzene (Surr)	91		79-119
1868-53-7	Dibromofluoromethane (Surr)	108		78-119
2037-26-5	Toluene-d8 (Surr)	95		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0640.D
Lims ID: 280-97803-D-5-A
Client ID: SS025-SB02(0-2)
Sample Type: Client
Inject. Date: 03-Jun-2017 23:39:30 ALS Bottle#: 21 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-D-5-A
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 04-Jun-2017 00:03:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	93	406124	1000.0	
* 3 Fluorobenzene	96	7.636	7.637	-0.001	98	349257	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	151512	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	284551	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	93	194255	48.8	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.250	7.243	0.007	97	252101	54.5	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	620019	42.8	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	90	190260	40.8	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.691				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.956				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.654				ND	
43 Trichlorofluoromethane	101		2.682				ND	
42 Ethanol	45		2.892				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.339				ND	
50 Acetone	43	3.367	3.353	0.014	98	11884	9.17	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.814				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.322				ND	
68 2-Chloro-1,3-butadiene	53		5.336				ND	
69 Tert-butyl ethyl ether	59		5.909				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.221				ND	
73 Propionitrile	54		6.228				ND	
76 Methacrylonitrile	41		6.435				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
72 sec-Butyl Alcohol	45		6.464				ND	
78 Chloroform	83		6.628				ND	
81 1,1,1-Trichloroethane	97		6.814				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.022				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.451				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.008				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.180				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
91 Methyl methacrylate	100		8.423				ND	
95 Dibromomethane	93		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.866				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.798				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.177				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.835				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.064				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.586				ND	
140 1,3,5-Trichlorobenzene	180		13.693				ND	
141 1,2,4-Trichlorobenzene	180		14.115				ND	
142 Hexachlorobutadiene	225		14.208				ND	
143 Naphthalene	128		14.301				ND	
144 1,2,3-Trichlorobenzene	180		14.458				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
12 2-Methylhexane	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 2,2,3-Trimethylbutane	1		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
26 3-Methylhexane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent

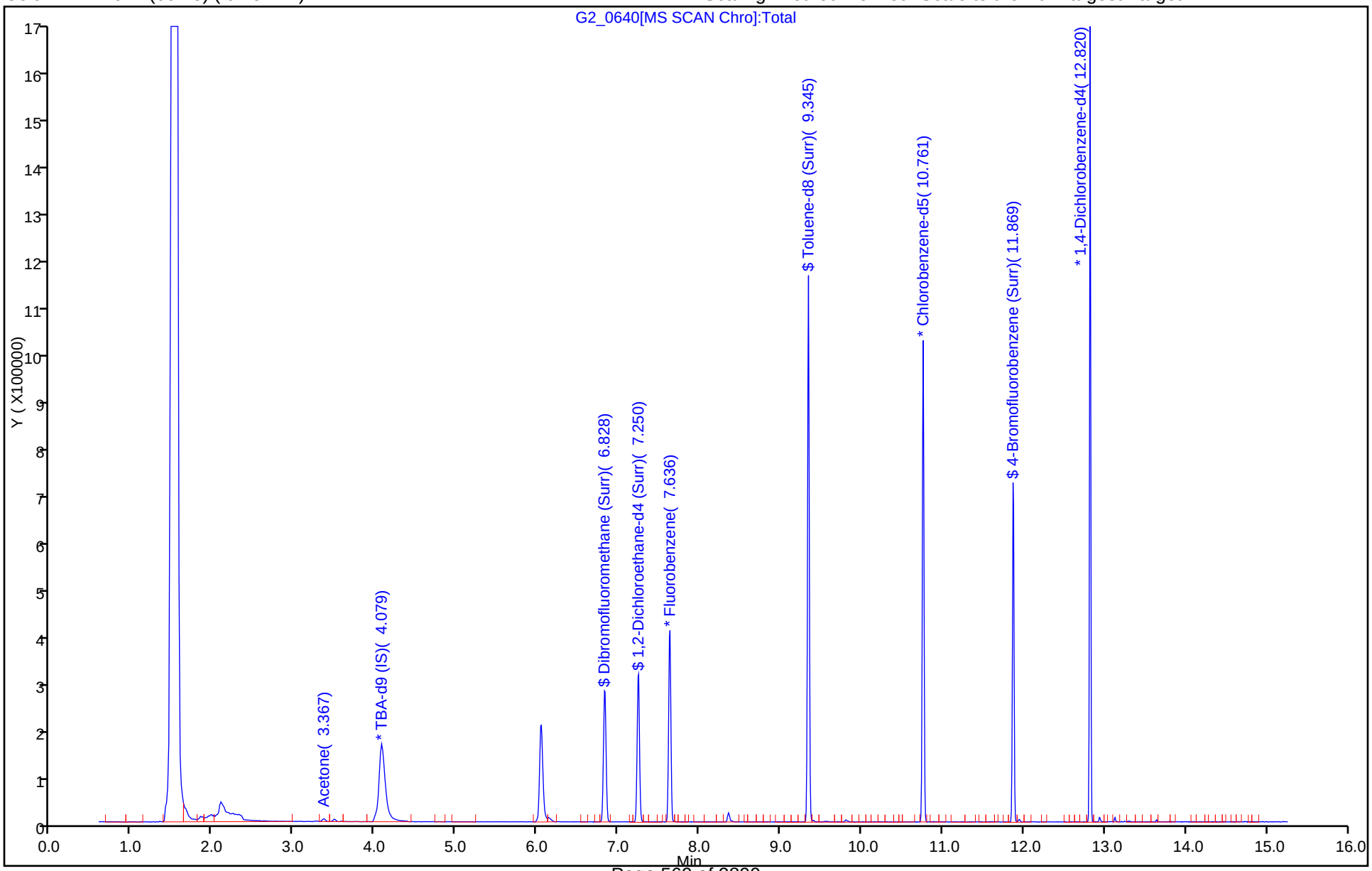
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0640.D

Injection Date:	03-Jun-2017 23:39:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97803-D-5-A	Lab Sample ID:	280-97803-5	Worklist Smp#:	15
Client ID:	SS025-SB02(0-2)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0640.D
Lims ID: 280-97803-D-5-A
Client ID: SS025-SB02(0-2)
Sample Type: Client
Inject. Date: 03-Jun-2017 23:39:30 ALS Bottle#: 21 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-D-5-A
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 04-Jun-2017 00:03:51

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	45.0	48.8	108.49
$ 9 1,2-Dichloroethane-d4 (Surr)	45.0	54.5	121.05
$ 10 Toluene-d8 (Surr)	45.0	42.8	95.17
$ 11 4-Bromofluorobenzene (Surr)	45.0	40.8	90.64

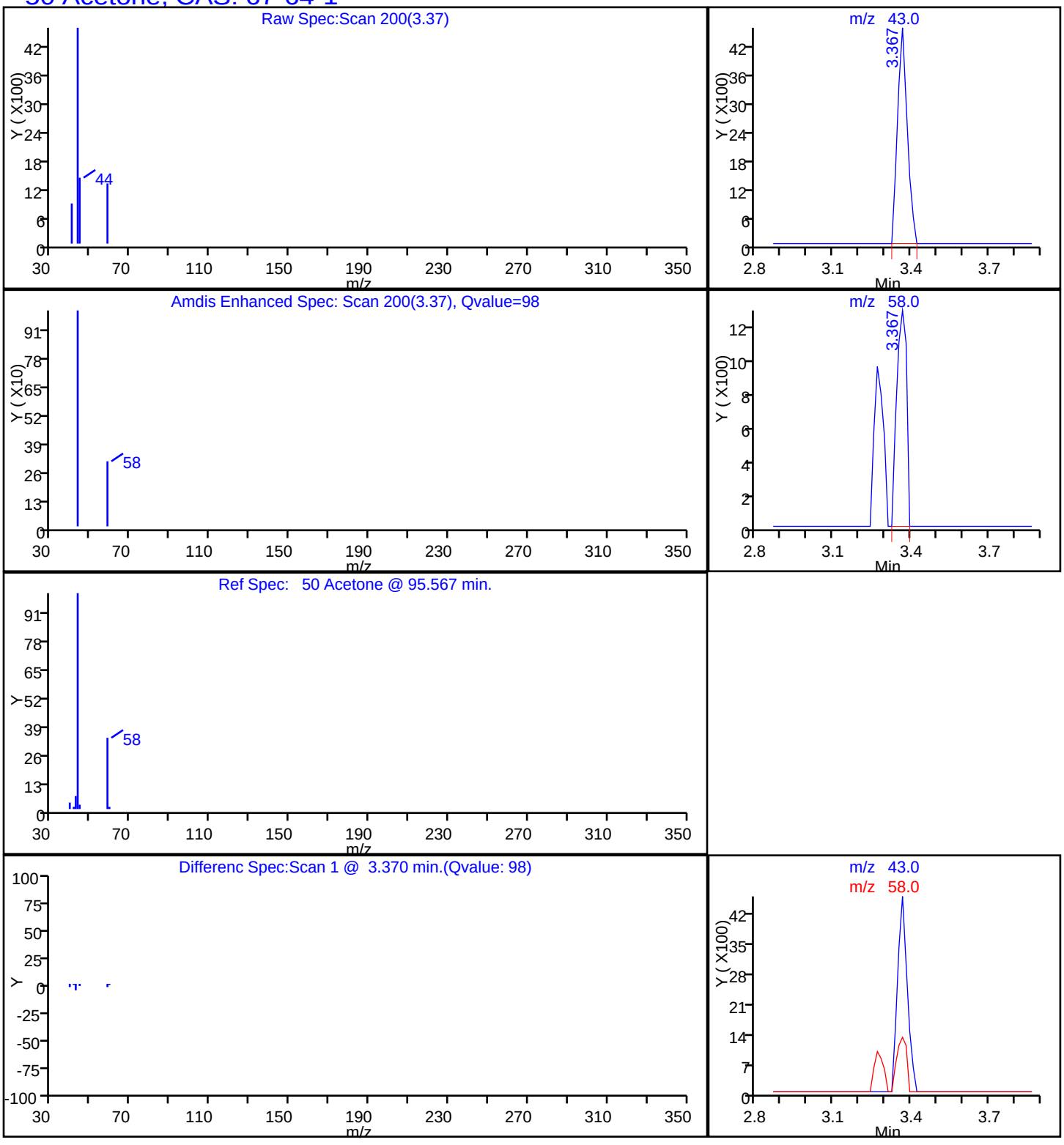
Report Date: 05-Jun-2017 17:13:22 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0640.D

Injection Date:	03-Jun-2017 23:39:30	Instrument ID:	VMS_G2		
Lims ID:	280-97803-D-5-A	Lab Sample ID:	280-97803-5		
Client ID:	SS025-SB02(0-2)				
Operator ID:	DUKESA	ALS Bottle#:	21	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

50 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS03 | Lab Sample ID: 280-97803-6

Matrix: Solid | Lab File ID: G2_0641.D

Analysis Method: 8260B | Date Collected: 05/31/2017 13:25

Sample wt/vol: 6.81(g) | Date Analyzed: 06/03/2017 23:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 25.3 | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.6	U	4.9	1.6	0.55
71-55-6	1,1,1-Trichloroethane	1.6	U	4.9	1.6	0.51
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U	4.9	1.6	0.60
79-00-5	1,1,2-Trichloroethane	3.1	U	4.9	3.1	0.86
75-34-3	1,1-Dichloroethane	0.79	U	4.9	0.79	0.21
75-35-4	1,1-Dichloroethene	1.6	U	4.9	1.6	0.58
563-58-6	1,1-Dichloropropene	1.6	U	4.9	1.6	0.53
87-61-6	1,2,3-Trichlorobenzene	1.6	U	4.9	1.6	0.74
96-18-4	1,2,3-Trichloropropane	3.1	U	4.9	3.1	0.80
120-82-1	1,2,4-Trichlorobenzene	1.6	U	4.9	1.6	0.72
95-63-6	1,2,4-Trimethylbenzene	1.6	U	4.9	1.6	0.57
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	9.8	1.6	0.59
106-93-4	1,2-Dibromoethane	1.6	U	4.9	1.6	0.51
95-50-1	1,2-Dichlorobenzene	1.6	U	4.9	1.6	0.44
107-06-2	1,2-Dichloroethane	1.6	U	4.9	1.6	0.69
540-59-0	1,2-Dichloroethene, Total	1.6	U	4.9	1.6	0.38
78-87-5	1,2-Dichloropropane	1.6	U	4.9	1.6	0.54
108-67-8	1,3,5-Trimethylbenzene	1.6	U	4.9	1.6	0.56
541-73-1	1,3-Dichlorobenzene	1.6	U	4.9	1.6	0.47
142-28-9	1,3-Dichloropropane	1.6	U	4.9	1.6	0.50
106-46-7	1,4-Dichlorobenzene	1.6	U	4.9	1.6	0.77
594-20-7	2,2-Dichloropropane	1.6	U	4.9	1.6	0.43
78-93-3	2-Butanone (MEK)	6.3	U	20	6.3	1.8
95-49-8	2-Chlorotoluene	1.6	U	4.9	1.6	0.50
591-78-6	2-Hexanone	13	U	20	13	4.8
106-43-4	4-Chlorotoluene	1.6	U	4.9	1.6	0.77
99-87-6	4-Isopropyltoluene	1.6	U	4.9	1.6	0.48
108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	20	13	4.3
67-64-1	Acetone	16	J	20	13	5.3
71-43-2	Benzene	1.6	U	4.9	1.6	0.46
108-86-1	Bromobenzene	1.6	U	4.9	1.6	0.48
74-97-5	Bromochloromethane	0.79	U	4.9	0.79	0.29
75-27-4	Bromodichloromethane	0.79	U	4.9	0.79	0.22
75-25-2	Bromoform	0.79	U	4.9	0.79	0.23
74-83-9	Bromomethane	1.6	U Q	9.8	1.6	0.49
75-15-0	Carbon disulfide	1.6	U	4.9	1.6	0.41

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS03 | Lab Sample ID: 280-97803-6

Matrix: Solid | Lab File ID: G2_0641.D

Analysis Method: 8260B | Date Collected: 05/31/2017 13:25

Sample wt/vol: 6.81(g) | Date Analyzed: 06/03/2017 23:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 25.3 | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.6	U	4.9	1.6	0.62
108-90-7	Chlorobenzene	1.6	U	4.9	1.6	0.53
75-00-3	Chloroethane	3.1	U Q	9.8	3.1	0.87
67-66-3	Chloroform	0.79	U	9.8	0.79	0.29
74-87-3	Chloromethane	1.6	U	9.8	1.6	0.76
156-59-2	cis-1,2-Dichloroethene	1.6	U	4.9	1.6	0.55
10061-01-5	cis-1,3-Dichloropropene	3.1	U	4.9	3.1	1.3
124-48-1	Dibromochloromethane	1.6	U	4.9	1.6	0.56
74-95-3	Dibromomethane	3.1	U	4.9	3.1	0.83
75-71-8	Dichlorodifluoromethane	1.6	U	9.8	1.6	0.51
100-41-4	Ethylbenzene	1.6	U	4.9	1.6	0.66
87-68-3	Hexachlorobutadiene	1.6	U	4.9	1.6	0.54
108-20-3	Isopropyl ether	7.9	U Q	49	7.9	2.7
98-82-8	Isopropylbenzene	1.6	U	4.9	1.6	0.58
179601-23-1	m&p-Xylene	1.7	J	3.1	3.1	1.0
74-88-4	Methyl iodide	1.6	U	4.9	1.6	0.43
1634-04-4	Methyl tert-butyl ether	0.79	U	20	0.79	0.33
75-09-2	Methylene Chloride	3.1	U	4.9	3.1	1.6
91-20-3	Naphthalene	1.6	U	4.9	1.6	0.62
104-51-8	n-Butylbenzene	1.6	U	4.9	1.6	0.55
103-65-1	N-Propylbenzene	1.6	U	4.9	1.6	0.57
95-47-6	o-Xylene	2.2	J	4.9	1.6	0.60
135-98-8	sec-Butylbenzene	1.6	U	4.9	1.6	0.76
100-42-5	Styrene	1.6	U	4.9	1.6	0.62
98-06-6	tert-Butylbenzene	1.6	U	4.9	1.6	0.49
127-18-4	Tetrachloroethene	1.6	U	4.9	1.6	0.58
108-88-3	Toluene	1.6	U	4.9	1.6	0.68
156-60-5	trans-1,2-Dichloroethene	0.79	U	4.9	0.79	0.38
10061-02-6	trans-1,3-Dichloropropene	1.6	U	4.9	1.6	0.66
79-01-6	Trichloroethene	0.79	U	4.9	0.79	0.23
75-69-4	Trichlorofluoromethane	3.1	U	9.8	3.1	1.0
108-05-4	Vinyl acetate	3.1	U	9.8	3.1	1.1
75-01-4	Vinyl chloride	3.1	U	4.9	3.1	1.3
1330-20-7	Xylenes (total)	3.9	J	9.8	0.98	0.60

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS03 | Lab Sample ID: 280-97803-6

Matrix: Solid | Lab File ID: G2_0641.D

Analysis Method: 8260B | Date Collected: 05/31/2017 13:25

Sample wt/vol: 6.81(g) | Date Analyzed: 06/03/2017 23:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 25.3 | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	134		71-136
460-00-4	4-Bromofluorobenzene (Surr)	99		79-119
1868-53-7	Dibromofluoromethane (Surr)	116		78-119
2037-26-5	Toluene-d8 (Surr)	99		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0641.D
Lims ID: 280-97803-D-6-A
Client ID: SS025-SS03
Sample Type: Client
Inject. Date: 03-Jun-2017 23:59:30 ALS Bottle#: 22 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-D-6-A
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 05-Jun-2017 17:07:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	92	314763	1000.0	
* 3 Fluorobenzene	96	7.636	7.637	-0.001	98	325515	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	141662	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	259859	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	92	193745	52.2	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	258636	60.3	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	604879	44.7	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	90	189363	44.5	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.691				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.956				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.654				ND	
43 Trichlorofluoromethane	101		2.682				ND	
42 Ethanol	45		2.892				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.339				ND	
50 Acetone	43	3.353	3.353	0.000	98	19885	16.5	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.814				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.322				ND	
68 2-Chloro-1,3-butadiene	53		5.336				ND	
69 Tert-butyl ethyl ether	59		5.909				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.221				ND	
73 Propionitrile	54		6.228				ND	
76 Methacrylonitrile	41		6.435				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
72 sec-Butyl Alcohol	45		6.464				ND	
78 Chloroform	83		6.628				ND	
81 1,1,1-Trichloroethane	97		6.814				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.022				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.451				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.008				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.180				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
91 Methyl methacrylate	100		8.423				ND	
95 Dibromomethane	93		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.866				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106	10.997	11.004	-0.007	94	2113	1.71	
117 o-Xylene	106	11.362	11.362	0.000	96	3221	2.20	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.798				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.177				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.835				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.064				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.586				ND	
140 1,3,5-Trichlorobenzene	180		13.693				ND	
141 1,2,4-Trichlorobenzene	180		14.115				ND	
142 Hexachlorobutadiene	225		14.208				ND	
143 Naphthalene	128		14.301				ND	
144 1,2,3-Trichlorobenzene	180		14.458				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
12 2-Methylhexane	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 2,2,3-Trimethylbutane	1		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
26 3-Methylhexane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 147 Total BTEX	1				0		3.91	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1				0		3.91	
S 150 Xylenes, Total	106				0		3.91	
S 145 Trihalomethanes, Total	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent

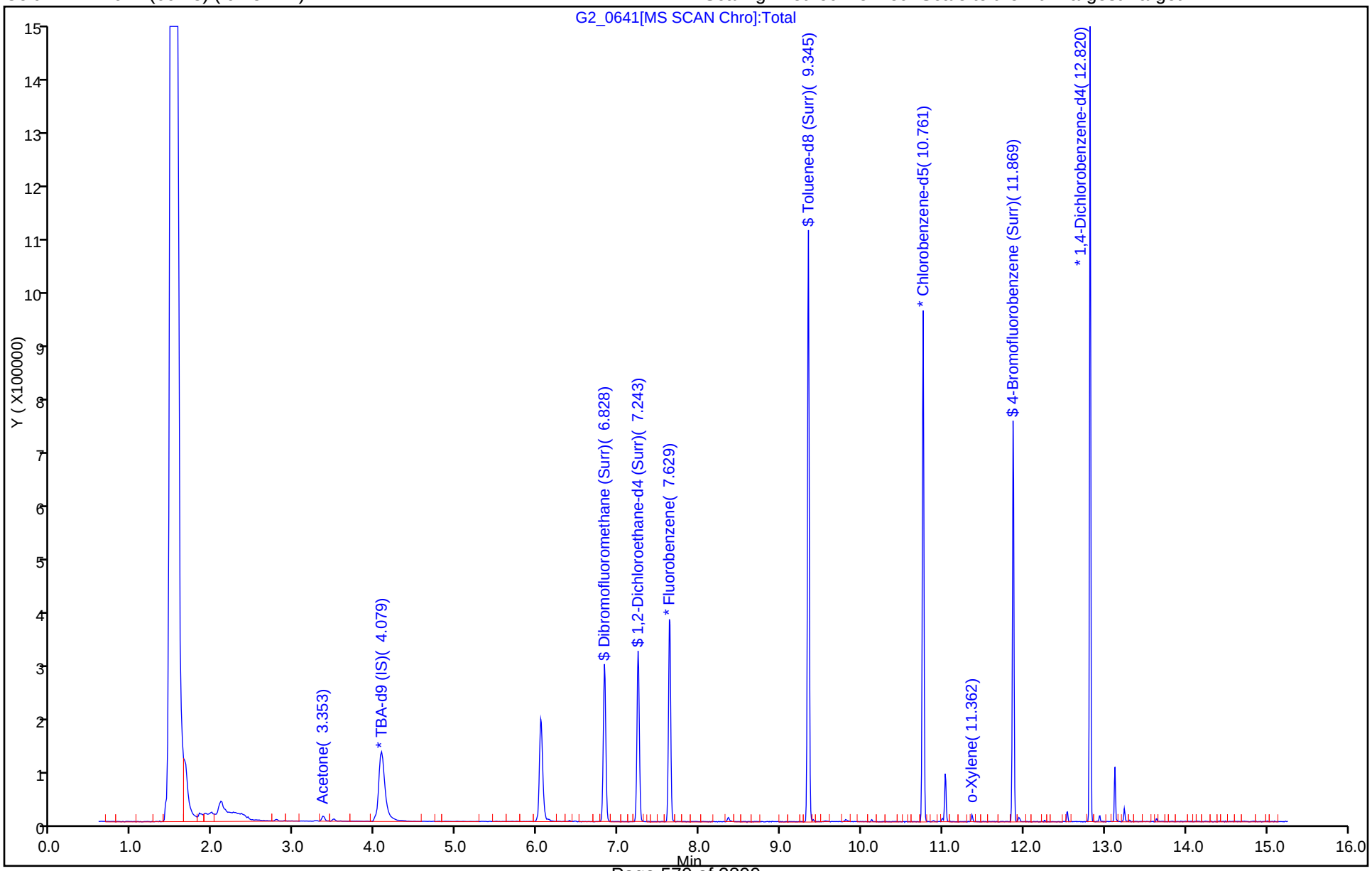
Report Date: 05-Jun-2017 17:13:23 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0641.D

Injection Date:	03-Jun-2017 23:59:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97803-D-6-A	Lab Sample ID:	280-97803-6	Worklist Smp#:	16
Client ID:	SS025-SS03				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0641.D
Lims ID: 280-97803-D-6-A
Client ID: SS025-SS03
Sample Type: Client
Inject. Date: 03-Jun-2017 23:59:30 ALS Bottle#: 22 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-D-6-A
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 05-Jun-2017 17:07:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	45.0	52.2	116.10
$ 9 1,2-Dichloroethane-d4 (Surr)	45.0	60.3	134.04
$ 10 Toluene-d8 (Surr)	45.0	44.7	99.30
$ 11 4-Bromofluorobenzene (Surr)	45.0	44.5	98.79

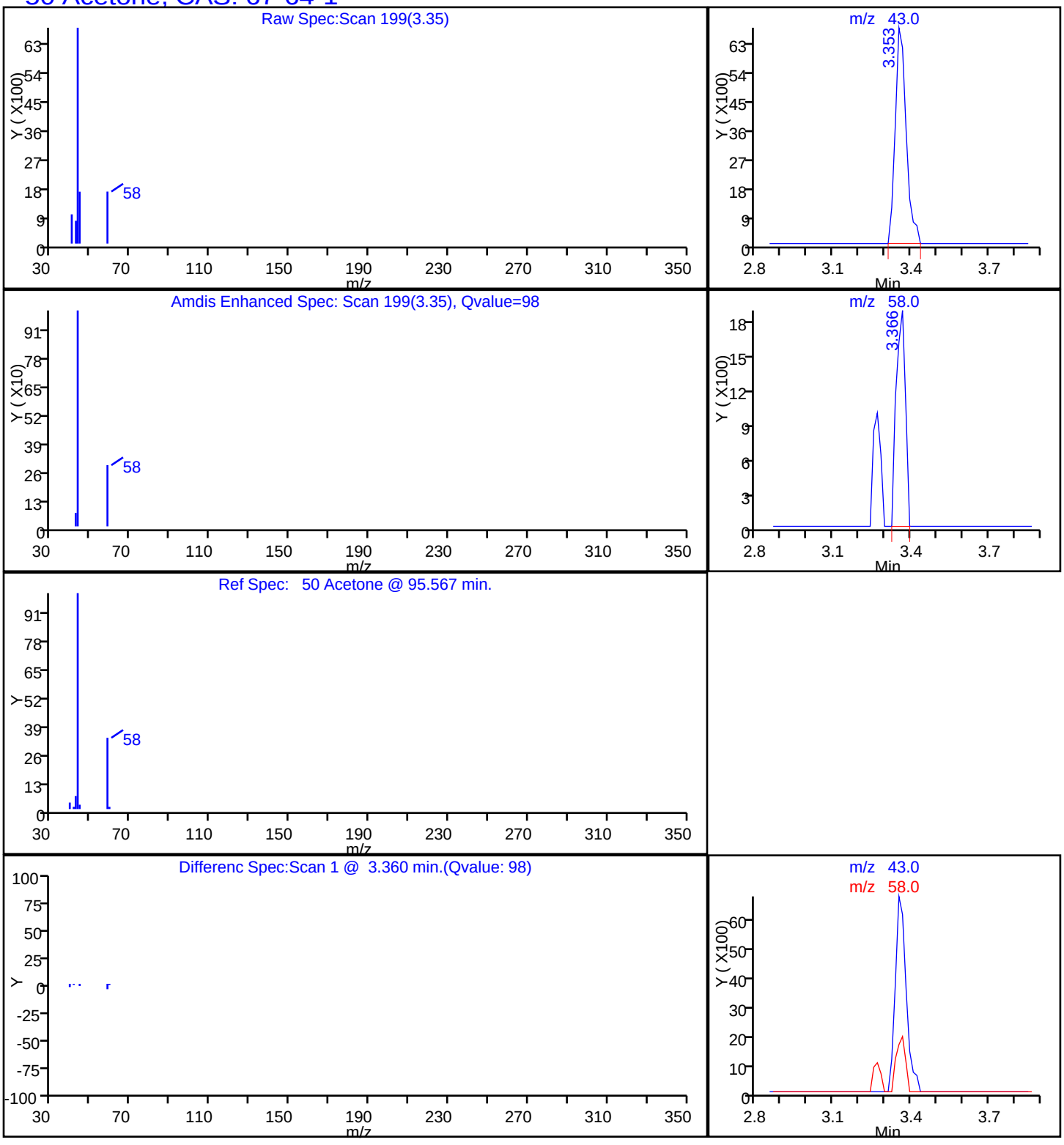
Report Date: 05-Jun-2017 17:13:23 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0641.D

Injection Date:	03-Jun-2017 23:59:30	Instrument ID:	VMS_G2		
Lims ID:	280-97803-D-6-A	Lab Sample ID:	280-97803-6		
Client ID:	SS025-SS03				
Operator ID:	DUKESA	ALS Bottle#:	22	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

50 Acetone, CAS: 67-64-1



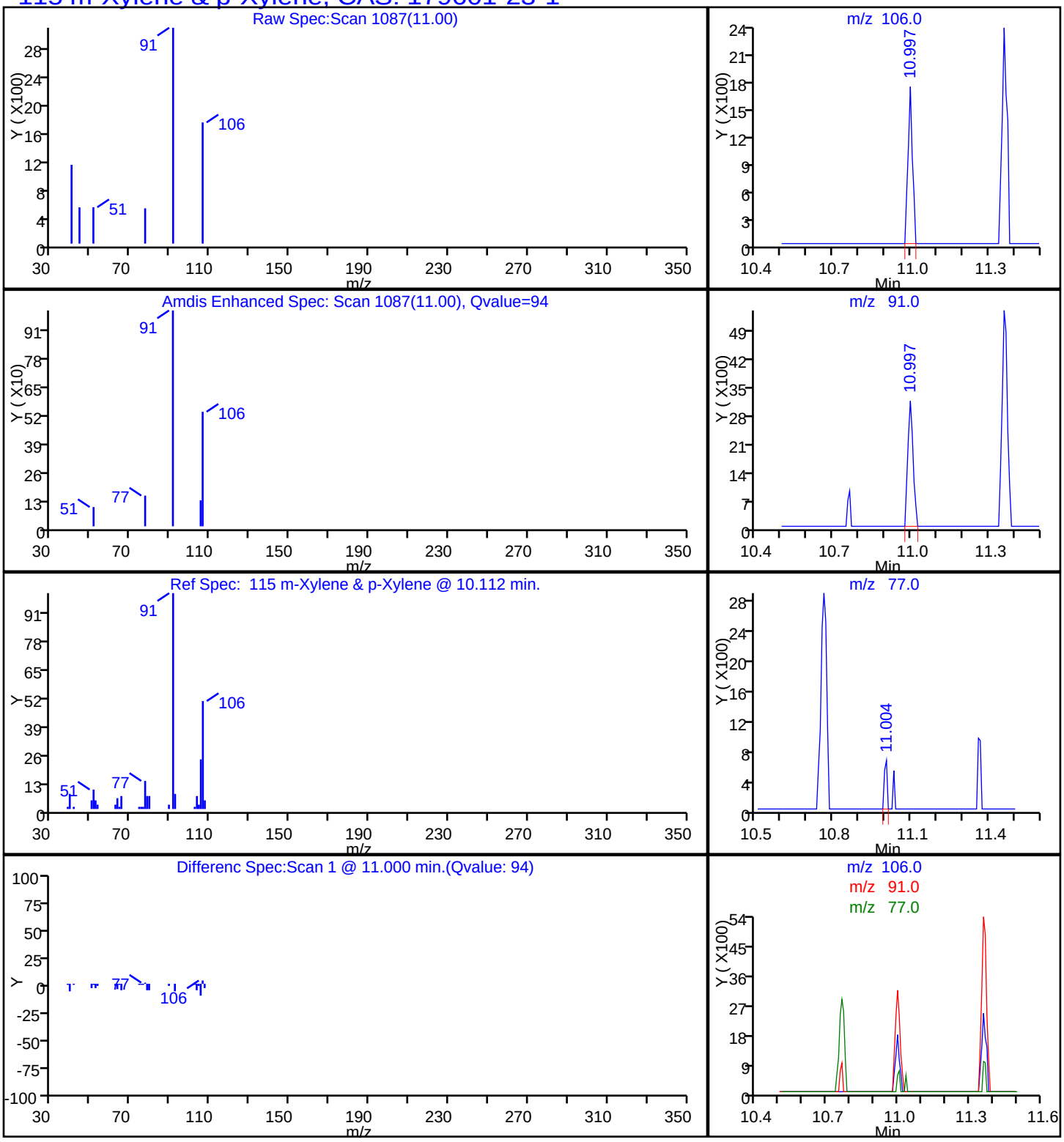
Report Date: 05-Jun-2017 17:13:23 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0641.D

Injection Date:	03-Jun-2017 23:59:30	Instrument ID:	VMS_G2		
Lims ID:	280-97803-D-6-A	Lab Sample ID:	280-97803-6		
Client ID:	SS025-SS03				
Operator ID:	DUKESA	ALS Bottle#:	22	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

115 m-Xylene & p-Xylene, CAS: 179601-23-1



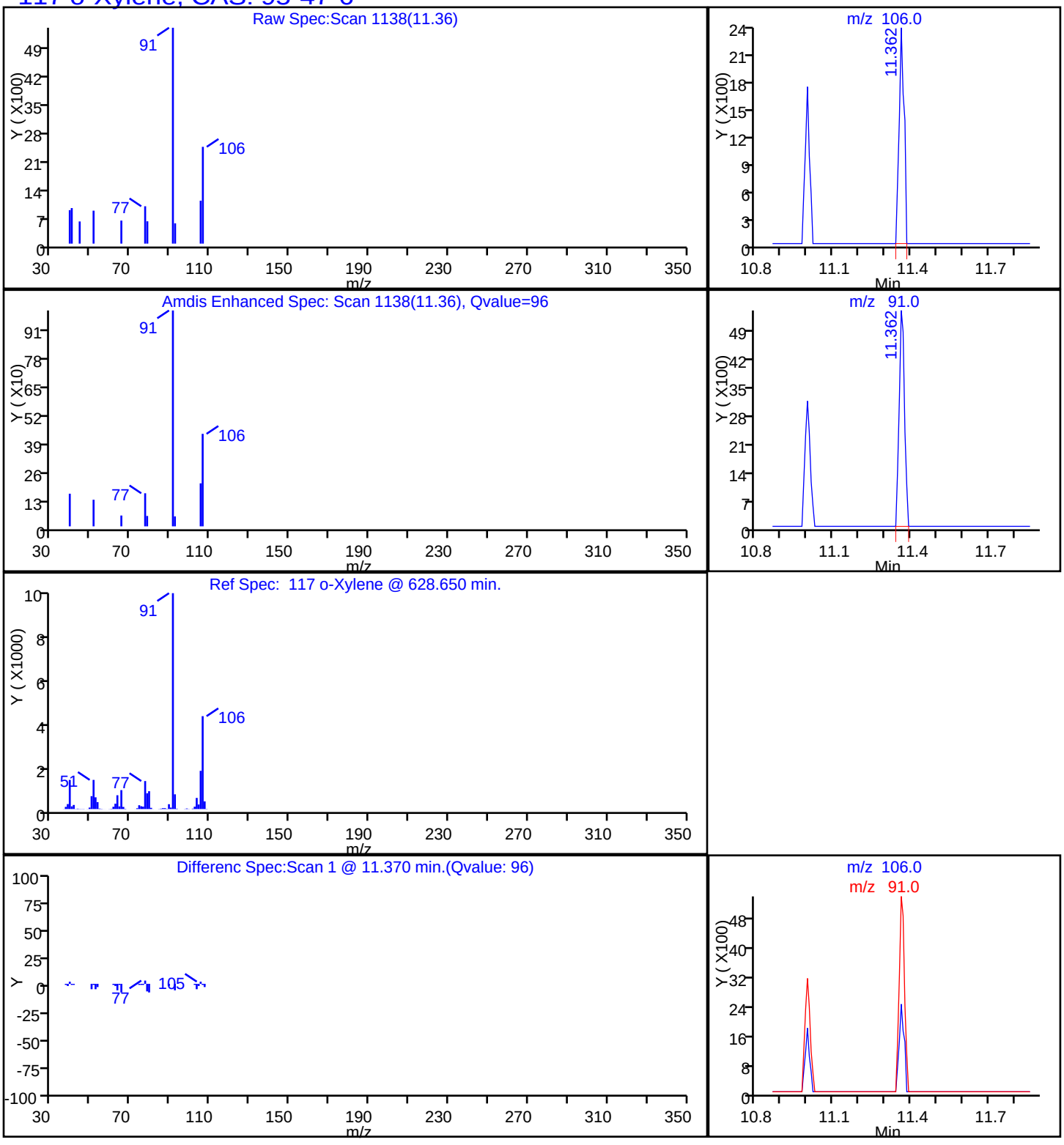
Report Date: 05-Jun-2017 17:13:23 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0641.D

Injection Date:	03-Jun-2017 23:59:30	Instrument ID:	VMS_G2		
Lims ID:	280-97803-D-6-A	Lab Sample ID:	280-97803-6		
Client ID:	SS025-SS03				
Operator ID:	DUKESA	ALS Bottle#:	22	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

117 o-Xylene, CAS: 95-47-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB03(0-2) | Lab Sample ID: 280-97803-7

Matrix: Solid | Lab File ID: G2_0642.D

Analysis Method: 8260B | Date Collected: 05/31/2017 13:40

Sample wt/vol: 5.558(g) | Date Analyzed: 06/04/2017 00:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.8 | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.7	U	5.2	1.7	0.58
71-55-6	1,1,1-Trichloroethane	1.7	U	5.2	1.7	0.54
79-34-5	1,1,2,2-Tetrachloroethane	1.7	U	5.2	1.7	0.64
79-00-5	1,1,2-Trichloroethane	3.3	U	5.2	3.3	0.92
75-34-3	1,1-Dichloroethane	0.84	U	5.2	0.84	0.22
75-35-4	1,1-Dichloroethene	1.7	U	5.2	1.7	0.62
563-58-6	1,1-Dichloropropene	1.7	U	5.2	1.7	0.56
87-61-6	1,2,3-Trichlorobenzene	1.7	U	5.2	1.7	0.78
96-18-4	1,2,3-Trichloropropane	3.3	U	5.2	3.3	0.85
120-82-1	1,2,4-Trichlorobenzene	1.7	U	5.2	1.7	0.76
95-63-6	1,2,4-Trimethylbenzene	1.7	U	5.2	1.7	0.61
96-12-8	1,2-Dibromo-3-Chloropropane	1.7	U	10	1.7	0.63
106-93-4	1,2-Dibromoethane	1.7	U	5.2	1.7	0.54
95-50-1	1,2-Dichlorobenzene	1.7	U	5.2	1.7	0.47
107-06-2	1,2-Dichloroethane	1.7	U	5.2	1.7	0.73
540-59-0	1,2-Dichloroethene, Total	1.7	U	5.2	1.7	0.41
78-87-5	1,2-Dichloropropane	1.7	U	5.2	1.7	0.57
108-67-8	1,3,5-Trimethylbenzene	1.7	U	5.2	1.7	0.60
541-73-1	1,3-Dichlorobenzene	1.7	U	5.2	1.7	0.50
142-28-9	1,3-Dichloropropane	1.7	U	5.2	1.7	0.53
106-46-7	1,4-Dichlorobenzene	1.7	U	5.2	1.7	0.81
594-20-7	2,2-Dichloropropane	1.7	U	5.2	1.7	0.46
78-93-3	2-Butanone (MEK)	6.7	U	21	6.7	1.9
95-49-8	2-Chlorotoluene	1.7	U	5.2	1.7	0.53
591-78-6	2-Hexanone	13	U	21	13	5.1
106-43-4	4-Chlorotoluene	1.7	U	5.2	1.7	0.81
99-87-6	4-Isopropyltoluene	1.7	U	5.2	1.7	0.51
108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	21	13	4.6
67-64-1	Acetone	7.6	J	21	13	5.6
71-43-2	Benzene	1.7	U	5.2	1.7	0.49
108-86-1	Bromobenzene	1.7	U	5.2	1.7	0.51
74-97-5	Bromochloromethane	0.84	U	5.2	0.84	0.31
75-27-4	Bromodichloromethane	0.84	U	5.2	0.84	0.23
75-25-2	Bromoform	0.84	U	5.2	0.84	0.24
74-83-9	Bromomethane	1.7	U Q	10	1.7	0.52
75-15-0	Carbon disulfide	1.7	U	5.2	1.7	0.44

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB03(0-2) | Lab Sample ID: 280-97803-7

Matrix: Solid | Lab File ID: G2_0642.D

Analysis Method: 8260B | Date Collected: 05/31/2017 13:40

Sample wt/vol: 5.558(g) | Date Analyzed: 06/04/2017 00:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.8 | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.7	U	5.2	1.7	0.66
108-90-7	Chlorobenzene	1.7	U	5.2	1.7	0.56
75-00-3	Chloroethane	3.3	U Q	10	3.3	0.93
67-66-3	Chloroform	0.84	U	10	0.84	0.30
74-87-3	Chloromethane	1.7	U	10	1.7	0.80
156-59-2	cis-1,2-Dichloroethene	1.7	U	5.2	1.7	0.58
10061-01-5	cis-1,3-Dichloropropene	3.3	U	5.2	3.3	1.3
124-48-1	Dibromochloromethane	1.7	U	5.2	1.7	0.60
74-95-3	Dibromomethane	3.3	U	5.2	3.3	0.88
75-71-8	Dichlorodifluoromethane	1.7	U	10	1.7	0.54
100-41-4	Ethylbenzene	1.7	U	5.2	1.7	0.70
87-68-3	Hexachlorobutadiene	1.7	U	5.2	1.7	0.57
108-20-3	Isopropyl ether	8.4	U Q	52	8.4	2.8
98-82-8	Isopropylbenzene	1.7	U	5.2	1.7	0.62
179601-23-1	m&p-Xylene	3.3	U	3.3	3.3	1.1
74-88-4	Methyl iodide	1.7	U	5.2	1.7	0.46
1634-04-4	Methyl tert-butyl ether	0.84	U	21	0.84	0.36
75-09-2	Methylene Chloride	3.3	U	5.2	3.3	1.7
91-20-3	Naphthalene	1.7	U	5.2	1.7	0.66
104-51-8	n-Butylbenzene	1.7	U	5.2	1.7	0.58
103-65-1	N-Propylbenzene	1.7	U	5.2	1.7	0.61
95-47-6	o-Xylene	1.7	U	5.2	1.7	0.64
135-98-8	sec-Butylbenzene	1.7	U	5.2	1.7	0.80
100-42-5	Styrene	1.7	U	5.2	1.7	0.66
98-06-6	tert-Butylbenzene	1.7	U	5.2	1.7	0.52
127-18-4	Tetrachloroethene	1.7	U	5.2	1.7	0.62
108-88-3	Toluene	1.7	U	5.2	1.7	0.72
156-60-5	trans-1,2-Dichloroethene	0.84	U	5.2	0.84	0.41
10061-02-6	trans-1,3-Dichloropropene	1.7	U	5.2	1.7	0.70
79-01-6	Trichloroethene	0.84	U	5.2	0.84	0.24
75-69-4	Trichlorofluoromethane	3.3	U	10	3.3	1.1
108-05-4	Vinyl acetate	3.3	U	10	3.3	1.1
75-01-4	Vinyl chloride	3.3	U	5.2	3.3	1.4
1330-20-7	Xylenes (total)	1.0	U	10	1.0	0.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB03(0-2) Lab Sample ID: 280-97803-7

Matrix: Solid Lab File ID: G2_0642.D

Analysis Method: 8260B Date Collected: 05/31/2017 13:40

Sample wt/vol: 5.558(g) Date Analyzed: 06/04/2017 00:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.8 Level: (low/med) Low

Analysis Batch No.: 376040 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	132		71-136
460-00-4	4-Bromofluorobenzene (Surr)	89		79-119
1868-53-7	Dibromofluoromethane (Surr)	115		78-119
2037-26-5	Toluene-d8 (Surr)	97		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0642.D
Lims ID: 280-97803-D-7-A
Client ID: SS025-SB03(0-2)
Sample Type: Client
Inject. Date: 04-Jun-2017 00:19:30 ALS Bottle#: 23 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-D-7-A
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 05-Jun-2017 17:08:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	92	394202	1000.0	
* 3 Fluorobenzene	96	7.629	7.637	-0.008	98	321681	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	142220	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	295882	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	93	188898	51.5	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	251942	59.4	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	591415	43.5	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	90	194067	40.0	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.691				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.956				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.654				ND	
43 Trichlorofluoromethane	101		2.682				ND	
42 Ethanol	45		2.892				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.339				ND	
50 Acetone	43	3.366	3.353	0.013	98	8724	7.31	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.814				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.322				ND	
68 2-Chloro-1,3-butadiene	53		5.336				ND	
69 Tert-butyl ethyl ether	59		5.909				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.221				ND	
73 Propionitrile	54		6.228				ND	
76 Methacrylonitrile	41		6.435				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
72 sec-Butyl Alcohol	45		6.464				ND	
78 Chloroform	83		6.628				ND	
81 1,1,1-Trichloroethane	97		6.814				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.022				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.451				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.008				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.180				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
91 Methyl methacrylate	100		8.423				ND	
95 Dibromomethane	93		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.866				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.798				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.177				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.835				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.064				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.586				ND	
140 1,3,5-Trichlorobenzene	180		13.693				ND	
141 1,2,4-Trichlorobenzene	180		14.115				ND	
142 Hexachlorobutadiene	225		14.208				ND	
143 Naphthalene	128		14.301				ND	
144 1,2,3-Trichlorobenzene	180		14.458				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
12 2-Methylhexane	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 2,2,3-Trimethylbutane	1		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
26 3-Methylhexane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent

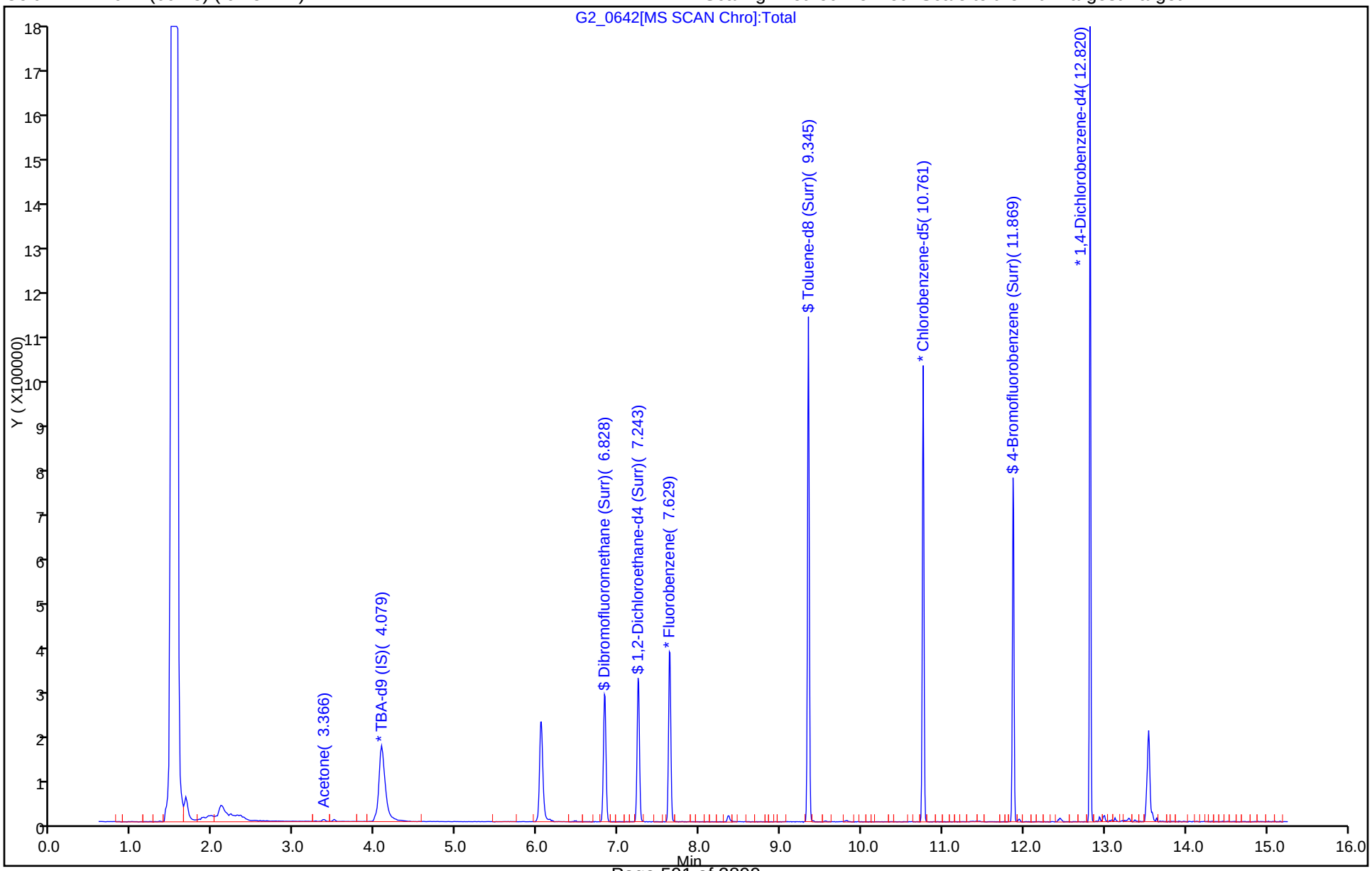
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0642.D

Injection Date:	04-Jun-2017 00:19:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97803-D-7-A	Lab Sample ID:	280-97803-7	Worklist Smp#:	17
Client ID:	SS025-SB03(0-2)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0642.D
Lims ID: 280-97803-D-7-A
Client ID: SS025-SB03(0-2)
Sample Type: Client
Inject. Date: 04-Jun-2017 00:19:30 ALS Bottle#: 23 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-D-7-A
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 05-Jun-2017 17:08:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	45.0	51.5	114.54
$ 9 1,2-Dichloroethane-d4 (Surr)	45.0	59.4	132.01
$ 10 Toluene-d8 (Surr)	45.0	43.5	96.71
$ 11 4-Bromofluorobenzene (Surr)	45.0	40.0	88.91

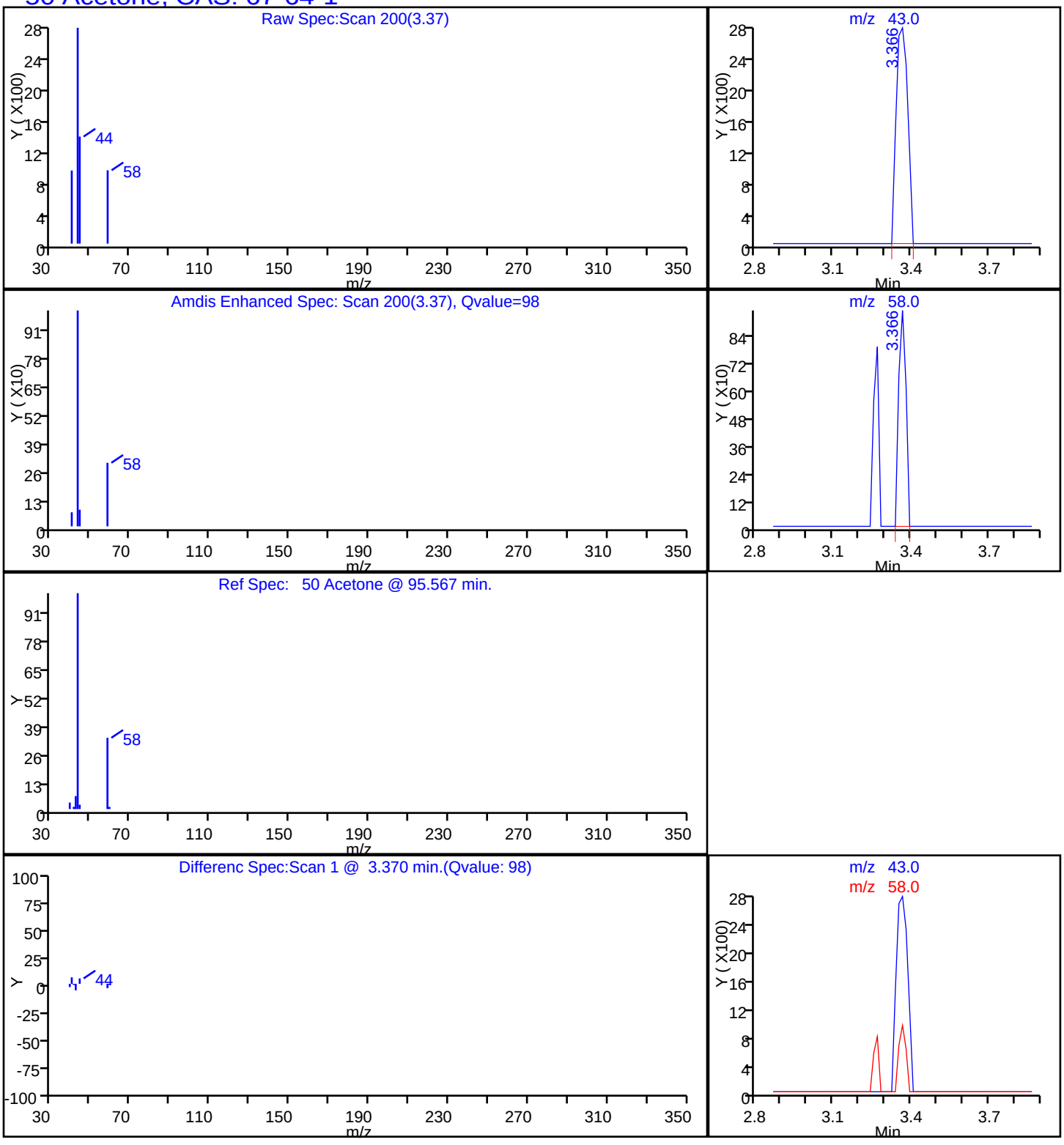
Report Date: 05-Jun-2017 17:13:24 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0642.D

Injection Date:	04-Jun-2017 00:19:30	Instrument ID:	VMS_G2		
Lims ID:	280-97803-D-7-A	Lab Sample ID:	280-97803-7		
Client ID:	SS025-SB03(0-2)				
Operator ID:	DUKESA	ALS Bottle#:	23	Worklist Smp#:	17
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

50 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS04 | Lab Sample ID: 280-97803-8

Matrix: Solid | Lab File ID: G2_0643.D

Analysis Method: 8260B | Date Collected: 05/31/2017 14:00

Sample wt/vol: 6.016(g) | Date Analyzed: 06/04/2017 00:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 10.0 | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.5	U	4.6	1.5	0.52
71-55-6	1,1,1-Trichloroethane	1.5	U Q	4.6	1.5	0.48
79-34-5	1,1,2,2-Tetrachloroethane	1.5	U	4.6	1.5	0.56
79-00-5	1,1,2-Trichloroethane	3.0	U	4.6	3.0	0.81
75-34-3	1,1-Dichloroethane	0.74	U Q	4.6	0.74	0.19
75-35-4	1,1-Dichloroethene	1.5	U Q	4.6	1.5	0.54
563-58-6	1,1-Dichloropropene	1.5	U	4.6	1.5	0.50
87-61-6	1,2,3-Trichlorobenzene	1.5	U	4.6	1.5	0.69
96-18-4	1,2,3-Trichloropropane	3.0	U	4.6	3.0	0.75
120-82-1	1,2,4-Trichlorobenzene	1.5	U	4.6	1.5	0.67
95-63-6	1,2,4-Trimethylbenzene	1.5	U	4.6	1.5	0.54
96-12-8	1,2-Dibromo-3-Chloropropane	1.5	U	9.2	1.5	0.55
106-93-4	1,2-Dibromoethane	1.5	U	4.6	1.5	0.48
95-50-1	1,2-Dichlorobenzene	1.5	U	4.6	1.5	0.42
107-06-2	1,2-Dichloroethane	1.5	U	4.6	1.5	0.65
540-59-0	1,2-Dichloroethene, Total	1.5	U	4.6	1.5	0.36
78-87-5	1,2-Dichloropropane	1.5	U	4.6	1.5	0.51
108-67-8	1,3,5-Trimethylbenzene	1.5	U	4.6	1.5	0.53
541-73-1	1,3-Dichlorobenzene	1.5	U	4.6	1.5	0.44
142-28-9	1,3-Dichloropropane	1.5	U	4.6	1.5	0.47
106-46-7	1,4-Dichlorobenzene	1.5	U	4.6	1.5	0.72
594-20-7	2,2-Dichloropropane	1.5	U Q	4.6	1.5	0.41
78-93-3	2-Butanone (MEK)	5.9	U Q	18	5.9	1.7
95-49-8	2-Chlorotoluene	1.5	U	4.6	1.5	0.47
591-78-6	2-Hexanone	12	U	18	12	4.5
106-43-4	4-Chlorotoluene	1.5	U	4.6	1.5	0.72
99-87-6	4-Isopropyltoluene	1.5	U	4.6	1.5	0.45
108-10-1	4-Methyl-2-pentanone (MIBK)	12	U	18	12	4.0
67-64-1	Acetone	12	U Q	18	12	5.0
71-43-2	Benzene	1.5	U	4.6	1.5	0.43
108-86-1	Bromobenzene	1.5	U	4.6	1.5	0.45
74-97-5	Bromochloromethane	0.74	U Q	4.6	0.74	0.28
75-27-4	Bromodichloromethane	0.74	U	4.6	0.74	0.20
75-25-2	Bromoform	0.74	U	4.6	0.74	0.21
74-83-9	Bromomethane	1.5	U Q	9.2	1.5	0.46
75-15-0	Carbon disulfide	1.5	U Q	4.6	1.5	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS04 | Lab Sample ID: 280-97803-8

Matrix: Solid | Lab File ID: G2_0643.D

Analysis Method: 8260B | Date Collected: 05/31/2017 14:00

Sample wt/vol: 6.016(g) | Date Analyzed: 06/04/2017 00:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 10.0 | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.5	U	4.6	1.5	0.58
108-90-7	Chlorobenzene	1.5	U	4.6	1.5	0.50
75-00-3	Chloroethane	3.0	U Q	9.2	3.0	0.82
67-66-3	Chloroform	0.74	U Q	9.2	0.74	0.27
74-87-3	Chloromethane	1.5	U Q	9.2	1.5	0.71
156-59-2	cis-1,2-Dichloroethene	1.5	U Q	4.6	1.5	0.52
10061-01-5	cis-1,3-Dichloropropene	3.0	U	4.6	3.0	1.2
124-48-1	Dibromochloromethane	1.5	U	4.6	1.5	0.53
74-95-3	Dibromomethane	3.0	U	4.6	3.0	0.78
75-71-8	Dichlorodifluoromethane	1.5	U Q	9.2	1.5	0.48
100-41-4	Ethylbenzene	1.5	U	4.6	1.5	0.62
87-68-3	Hexachlorobutadiene	1.5	U	4.6	1.5	0.51
108-20-3	Isopropyl ether	7.4	U Q	46	7.4	2.5
98-82-8	Isopropylbenzene	1.5	U	4.6	1.5	0.54
179601-23-1	m&p-Xylene	1.4	J	3.0	3.0	0.96
74-88-4	Methyl iodide	1.5	U Q	4.6	1.5	0.41
1634-04-4	Methyl tert-butyl ether	0.74	U Q	18	0.74	0.31
75-09-2	Methylene Chloride	3.0	U Q	4.6	3.0	1.5
91-20-3	Naphthalene	1.5	U	4.6	1.5	0.58
104-51-8	n-Butylbenzene	1.5	U	4.6	1.5	0.52
103-65-1	N-Propylbenzene	1.5	U	4.6	1.5	0.54
95-47-6	o-Xylene	2.1	J	4.6	1.5	0.56
135-98-8	sec-Butylbenzene	1.5	U	4.6	1.5	0.71
100-42-5	Styrene	1.5	U	4.6	1.5	0.58
98-06-6	tert-Butylbenzene	1.5	U	4.6	1.5	0.46
127-18-4	Tetrachloroethene	1.5	U	4.6	1.5	0.54
108-88-3	Toluene	1.5	U	4.6	1.5	0.64
156-60-5	trans-1,2-Dichloroethene	0.74	U Q	4.6	0.74	0.36
10061-02-6	trans-1,3-Dichloropropene	1.5	U	4.6	1.5	0.62
79-01-6	Trichloroethene	0.74	U	4.6	0.74	0.21
75-69-4	Trichlorofluoromethane	3.0	U Q	9.2	3.0	0.96
108-05-4	Vinyl acetate	3.0	U Q	9.2	3.0	0.99
75-01-4	Vinyl chloride	3.0	U Q	4.6	3.0	1.2
1330-20-7	Xylenes (total)	3.5	J	9.2	0.92	0.56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS04 Lab Sample ID: 280-97803-8

Matrix: Solid Lab File ID: G2_0643.D

Analysis Method: 8260B Date Collected: 05/31/2017 14:00

Sample wt/vol: 6.016(g) Date Analyzed: 06/04/2017 00:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 10.0 Level: (low/med) Low

Analysis Batch No.: 376040 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	136		71-136
460-00-4	4-Bromofluorobenzene (Surr)	104		79-119
1868-53-7	Dibromofluoromethane (Surr)	120	Q	78-119
2037-26-5	Toluene-d8 (Surr)	102		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0643.D
Lims ID: 280-97803-D-8-A
Client ID: SS025-SS04
Sample Type: Client
Inject. Date: 04-Jun-2017 00:40:30 ALS Bottle#: 24 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-D-8-A
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 05-Jun-2017 17:08:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	92	208165	1000.0	
* 3 Fluorobenzene	96	7.636	7.637	-0.001	98	295758	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	124025	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	204290	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	93	181816	54.0	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	238171	61.2	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	543517	45.9	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	90	156665	46.8	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.691				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.956				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.654				ND	
43 Trichlorofluoromethane	101		2.682				ND	
42 Ethanol	45		2.892				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.339				ND	
50 Acetone	43		3.353				ND	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.814				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.322				ND	
68 2-Chloro-1,3-butadiene	53		5.336				ND	
69 Tert-butyl ethyl ether	59		5.909				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43	6.135	6.221	-0.086	91	9725	7.50	
73 Propionitrile	54		6.228				ND	
76 Methacrylonitrile	41		6.435				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
72 sec-Butyl Alcohol	45		6.464				ND	
78 Chloroform	83		6.628				ND	
81 1,1,1-Trichloroethane	97		6.814				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.022				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.451				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.008				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.180				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
91 Methyl methacrylate	100		8.423				ND	
95 Dibromomethane	93		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.866				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91	10.754	10.775	-0.021	33	803	0.7250	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106	10.997	11.004	-0.007	87	459	1.48	
117 o-Xylene	106	11.362	11.362	0.000	93	2951	2.22	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.798				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.177				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.835				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.064				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.586				ND	
140 1,3,5-Trichlorobenzene	180		13.693				ND	
141 1,2,4-Trichlorobenzene	180		14.115				ND	
142 Hexachlorobutadiene	225		14.208				ND	
143 Naphthalene	128		14.301				ND	
144 1,2,3-Trichlorobenzene	180		14.458				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
12 2-Methylhexane	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 2,2,3-Trimethylbutane	1		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
26 3-Methylhexane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 147 Total BTEX	1				0		3.71	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1				0		3.71	
S 150 Xylenes, Total	106				0		3.71	
S 145 Trihalomethanes, Total	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent

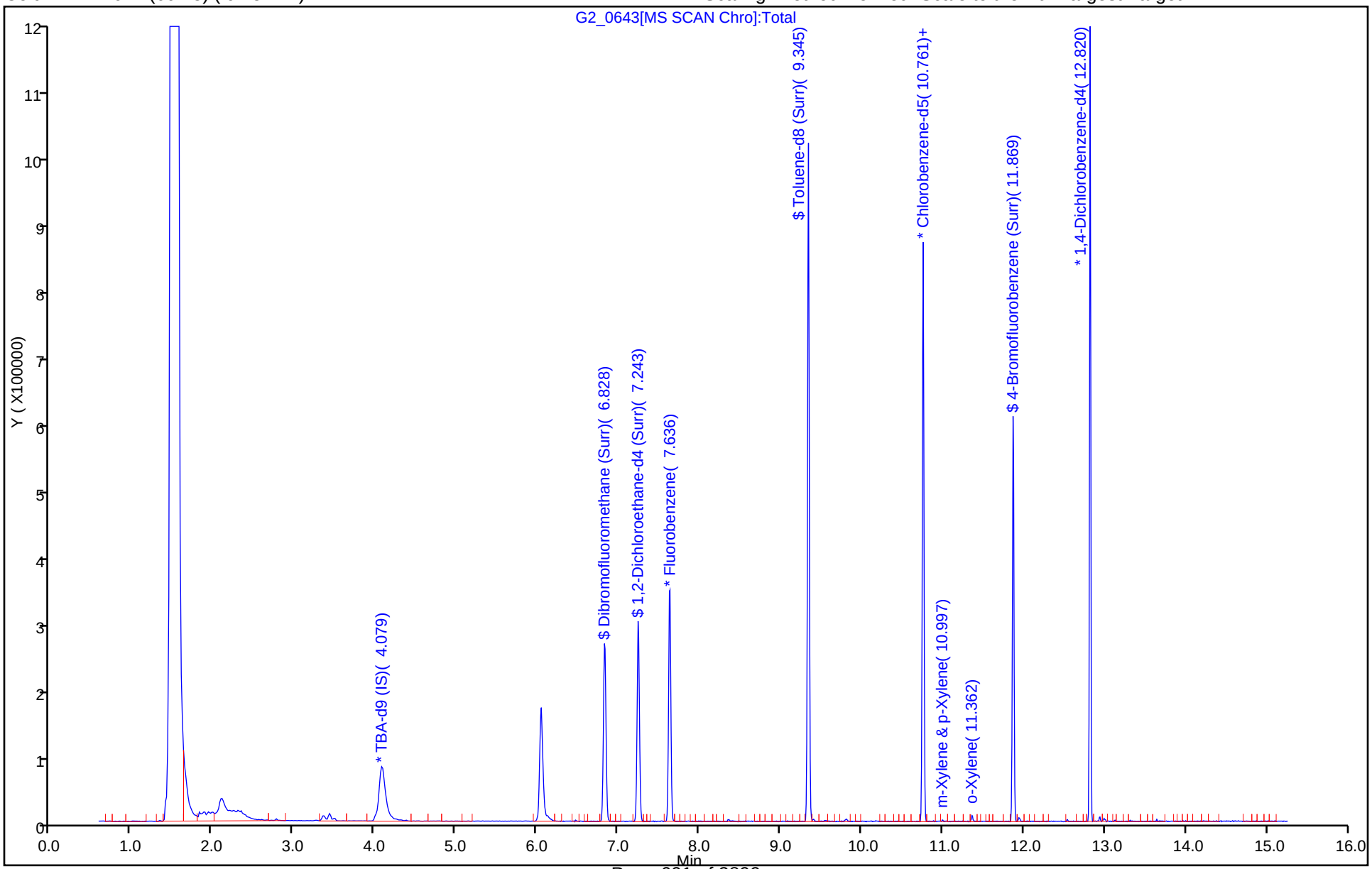
Report Date: 05-Jun-2017 17:13:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0643.D

Injection Date:	04-Jun-2017 00:40:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97803-D-8-A	Lab Sample ID:	280-97803-8	Worklist Smp#:	18
Client ID:	SS025-SS04				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0643.D
Lims ID: 280-97803-D-8-A
Client ID: SS025-SS04
Sample Type: Client
Inject. Date: 04-Jun-2017 00:40:30 ALS Bottle#: 24 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-D-8-A
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 05-Jun-2017 17:08:59

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	45.0	54.0	119.91
$ 9 1,2-Dichloroethane-d4 (Surr)	45.0	61.2	135.96
$ 10 Toluene-d8 (Surr)	45.0	45.9	101.92
$ 11 4-Bromofluorobenzene (Surr)	45.0	46.8	103.96

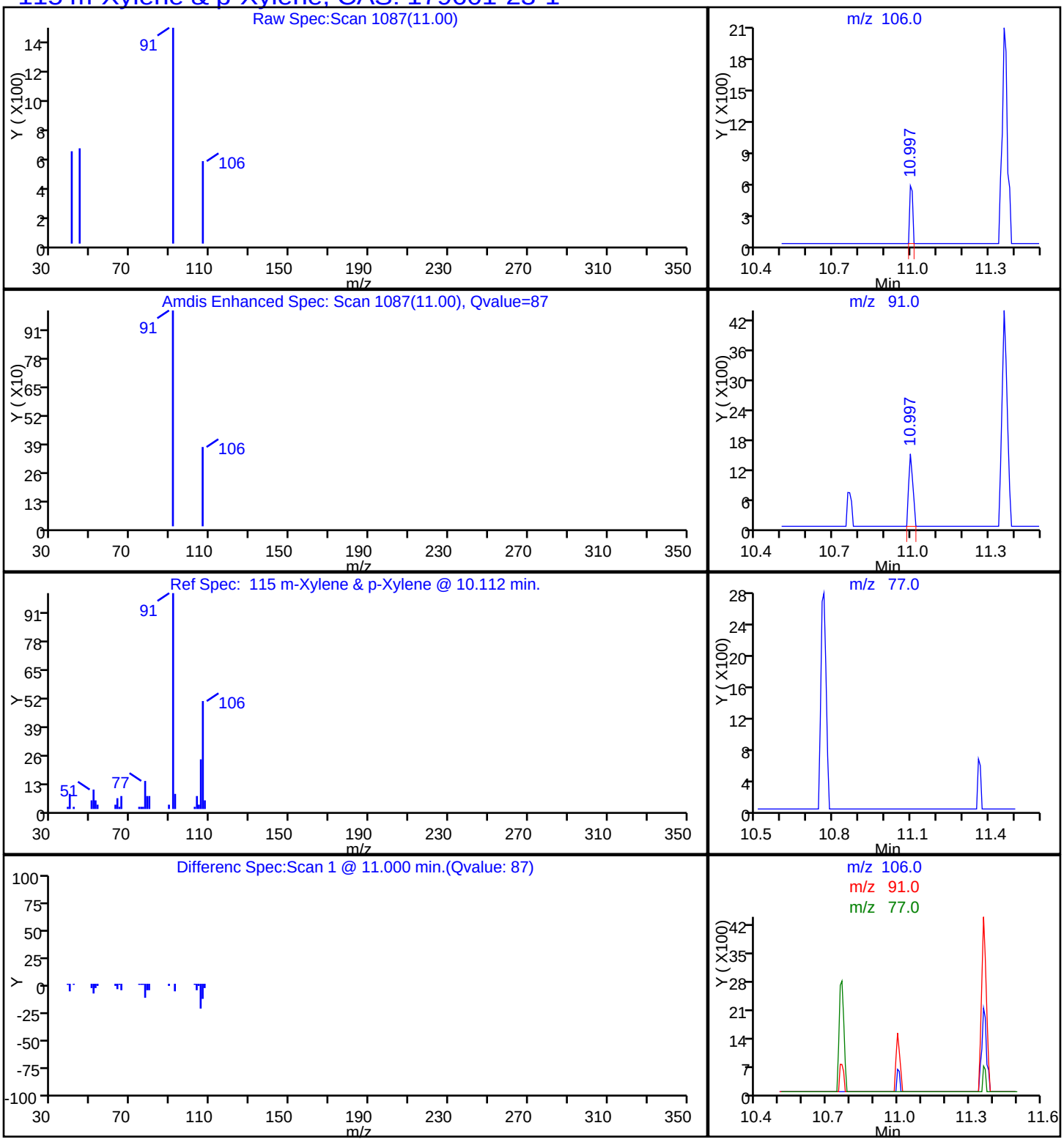
Report Date: 05-Jun-2017 17:13:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0643.D

Injection Date:	04-Jun-2017 00:40:30	Instrument ID:	VMS_G2		
Lims ID:	280-97803-D-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	DUKESA	ALS Bottle#:	24	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

115 m-Xylene & p-Xylene, CAS: 179601-23-1



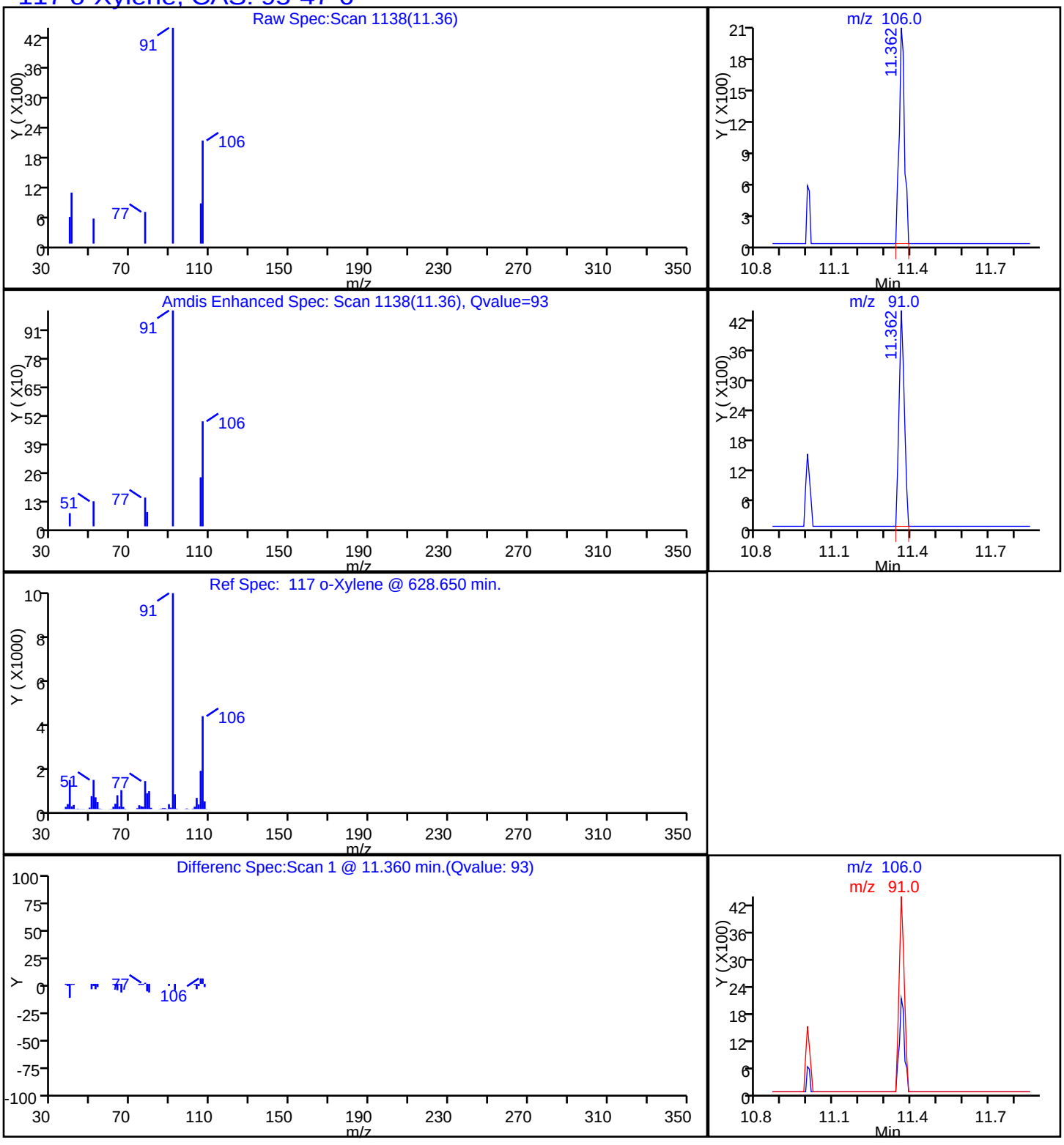
Report Date: 05-Jun-2017 17:13:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0643.D

Injection Date:	04-Jun-2017 00:40:30	Instrument ID:	VMS_G2		
Lims ID:	280-97803-D-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	DUKESA	ALS Bottle#:	24	Worklist Smp#:	18
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

117 o-Xylene, CAS: 95-47-6



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB04(0-2) | Lab Sample ID: 280-97803-9

Matrix: Solid | Lab File ID: G2_0644.D

Analysis Method: 8260B | Date Collected: 05/31/2017 14:10

Sample wt/vol: 5.927(g) | Date Analyzed: 06/04/2017 01:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 17.8 | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.6	U	5.1	1.6	0.57
71-55-6	1,1,1-Trichloroethane	1.6	U	5.1	1.6	0.53
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U	5.1	1.6	0.63
79-00-5	1,1,2-Trichloroethane	3.3	U	5.1	3.3	0.90
75-34-3	1,1-Dichloroethane	0.82	U	5.1	0.82	0.22
75-35-4	1,1-Dichloroethene	1.6	U	5.1	1.6	0.61
563-58-6	1,1-Dichloropropene	1.6	U	5.1	1.6	0.55
87-61-6	1,2,3-Trichlorobenzene	1.6	U	5.1	1.6	0.77
96-18-4	1,2,3-Trichloropropane	3.3	U	5.1	3.3	0.83
120-82-1	1,2,4-Trichlorobenzene	1.6	U	5.1	1.6	0.75
95-63-6	1,2,4-Trimethylbenzene	1.6	U	5.1	1.6	0.60
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	10	1.6	0.62
106-93-4	1,2-Dibromoethane	1.6	U	5.1	1.6	0.53
95-50-1	1,2-Dichlorobenzene	1.6	U	5.1	1.6	0.46
107-06-2	1,2-Dichloroethane	1.6	U	5.1	1.6	0.72
540-59-0	1,2-Dichloroethene, Total	1.6	U	5.1	1.6	0.40
78-87-5	1,2-Dichloropropane	1.6	U	5.1	1.6	0.56
108-67-8	1,3,5-Trimethylbenzene	1.6	U	5.1	1.6	0.58
541-73-1	1,3-Dichlorobenzene	1.6	U	5.1	1.6	0.49
142-28-9	1,3-Dichloropropane	1.6	U	5.1	1.6	0.52
106-46-7	1,4-Dichlorobenzene	1.6	U	5.1	1.6	0.80
594-20-7	2,2-Dichloropropane	1.6	U	5.1	1.6	0.45
78-93-3	2-Butanone (MEK)	6.6	U	21	6.6	1.9
95-49-8	2-Chlorotoluene	1.6	U	5.1	1.6	0.52
591-78-6	2-Hexanone	13	U	21	13	5.0
106-43-4	4-Chlorotoluene	1.6	U	5.1	1.6	0.80
99-87-6	4-Isopropyltoluene	1.6	U	5.1	1.6	0.50
108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	21	13	4.5
67-64-1	Acetone	13	U	21	13	5.5
71-43-2	Benzene	1.6	U	5.1	1.6	0.48
108-86-1	Bromobenzene	1.6	U	5.1	1.6	0.50
74-97-5	Bromochloromethane	0.82	U	5.1	0.82	0.31
75-27-4	Bromodichloromethane	0.82	U	5.1	0.82	0.23
75-25-2	Bromoform	0.82	U	5.1	0.82	0.24
74-83-9	Bromomethane	1.6	U Q	10	1.6	0.51
75-15-0	Carbon disulfide	1.6	U	5.1	1.6	0.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB04(0-2) | Lab Sample ID: 280-97803-9

Matrix: Solid | Lab File ID: G2_0644.D

Analysis Method: 8260B | Date Collected: 05/31/2017 14:10

Sample wt/vol: 5.927(g) | Date Analyzed: 06/04/2017 01:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 17.8 | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.6	U	5.1	1.6	0.65
108-90-7	Chlorobenzene	1.6	U	5.1	1.6	0.55
75-00-3	Chloroethane	3.3	U Q	10	3.3	0.91
67-66-3	Chloroform	0.82	U	10	0.82	0.30
74-87-3	Chloromethane	1.6	U	10	1.6	0.79
156-59-2	cis-1,2-Dichloroethene	1.6	U	5.1	1.6	0.57
10061-01-5	cis-1,3-Dichloropropene	3.3	U	5.1	3.3	1.3
124-48-1	Dibromochloromethane	1.6	U	5.1	1.6	0.58
74-95-3	Dibromomethane	3.3	U	5.1	3.3	0.86
75-71-8	Dichlorodifluoromethane	1.6	U	10	1.6	0.53
100-41-4	Ethylbenzene	1.6	U	5.1	1.6	0.69
87-68-3	Hexachlorobutadiene	1.6	U	5.1	1.6	0.56
108-20-3	Isopropyl ether	8.2	U Q	51	8.2	2.8
98-82-8	Isopropylbenzene	1.6	U	5.1	1.6	0.61
179601-23-1	m&p-Xylene	3.3	U	3.3	3.3	1.1
74-88-4	Methyl iodide	1.6	U	5.1	1.6	0.45
1634-04-4	Methyl tert-butyl ether	0.82	U	21	0.82	0.35
75-09-2	Methylene Chloride	3.3	U	5.1	3.3	1.6
91-20-3	Naphthalene	1.6	U	5.1	1.6	0.65
104-51-8	n-Butylbenzene	1.6	U	5.1	1.6	0.57
103-65-1	N-Propylbenzene	1.6	U	5.1	1.6	0.60
95-47-6	o-Xylene	1.6	U	5.1	1.6	0.63
135-98-8	sec-Butylbenzene	1.6	U	5.1	1.6	0.79
100-42-5	Styrene	1.6	U	5.1	1.6	0.65
98-06-6	tert-Butylbenzene	1.6	U	5.1	1.6	0.51
127-18-4	Tetrachloroethene	1.6	U	5.1	1.6	0.61
108-88-3	Toluene	1.6	U	5.1	1.6	0.71
156-60-5	trans-1,2-Dichloroethene	0.82	U	5.1	0.82	0.40
10061-02-6	trans-1,3-Dichloropropene	1.6	U	5.1	1.6	0.69
79-01-6	Trichloroethene	0.82	U	5.1	0.82	0.24
75-69-4	Trichlorofluoromethane	3.3	U	10	3.3	1.1
108-05-4	Vinyl acetate	3.3	U	10	3.3	1.1
75-01-4	Vinyl chloride	3.3	U	5.1	3.3	1.4
1330-20-7	Xylenes (total)	1.0	U	10	1.0	0.63

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB04(0-2) Lab Sample ID: 280-97803-9

Matrix: Solid Lab File ID: G2_0644.D

Analysis Method: 8260B Date Collected: 05/31/2017 14:10

Sample wt/vol: 5.927(g) Date Analyzed: 06/04/2017 01:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 17.8 Level: (low/med) Low

Analysis Batch No.: 376040 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	136		71-136
460-00-4	4-Bromofluorobenzene (Surr)	89		79-119
1868-53-7	Dibromofluoromethane (Surr)	115		78-119
2037-26-5	Toluene-d8 (Surr)	97		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0644.D
Lims ID: 280-97803-D-9-A
Client ID: SS025-SB04(0-2)
Sample Type: Client
Inject. Date: 04-Jun-2017 01:00:30 ALS Bottle#: 25 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-D-9-A
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 05-Jun-2017 17:09:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	92	374965	1000.0	
* 3 Fluorobenzene	96	7.636	7.637	-0.001	98	303405	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	134253	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	264233	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.836	6.829	0.007	93	178425	51.6	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	245239	61.4	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	558858	43.6	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	172590	39.8	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.691				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.956				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.654				ND	
43 Trichlorofluoromethane	101		2.682				ND	
42 Ethanol	45		2.892				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.339				ND	
50 Acetone	43		3.353				ND	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.814				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.322				ND	
68 2-Chloro-1,3-butadiene	53		5.336				ND	
69 Tert-butyl ethyl ether	59		5.909				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.221				ND	
73 Propionitrile	54		6.228				ND	
76 Methacrylonitrile	41		6.435				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
72 sec-Butyl Alcohol	45		6.464				ND	
78 Chloroform	83		6.628				ND	
81 1,1,1-Trichloroethane	97		6.814				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.022				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.451				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.008				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.180				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
91 Methyl methacrylate	100		8.423				ND	
95 Dibromomethane	93		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.866				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.798				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.177				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.835				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.064				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.586				ND	
140 1,3,5-Trichlorobenzene	180		13.693				ND	
141 1,2,4-Trichlorobenzene	180		14.115				ND	
142 Hexachlorobutadiene	225		14.208				ND	
143 Naphthalene	128		14.301				ND	
144 1,2,3-Trichlorobenzene	180		14.458				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
12 2-Methylhexane	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 2,2,3-Trimethylbutane	1		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
26 3-Methylhexane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent

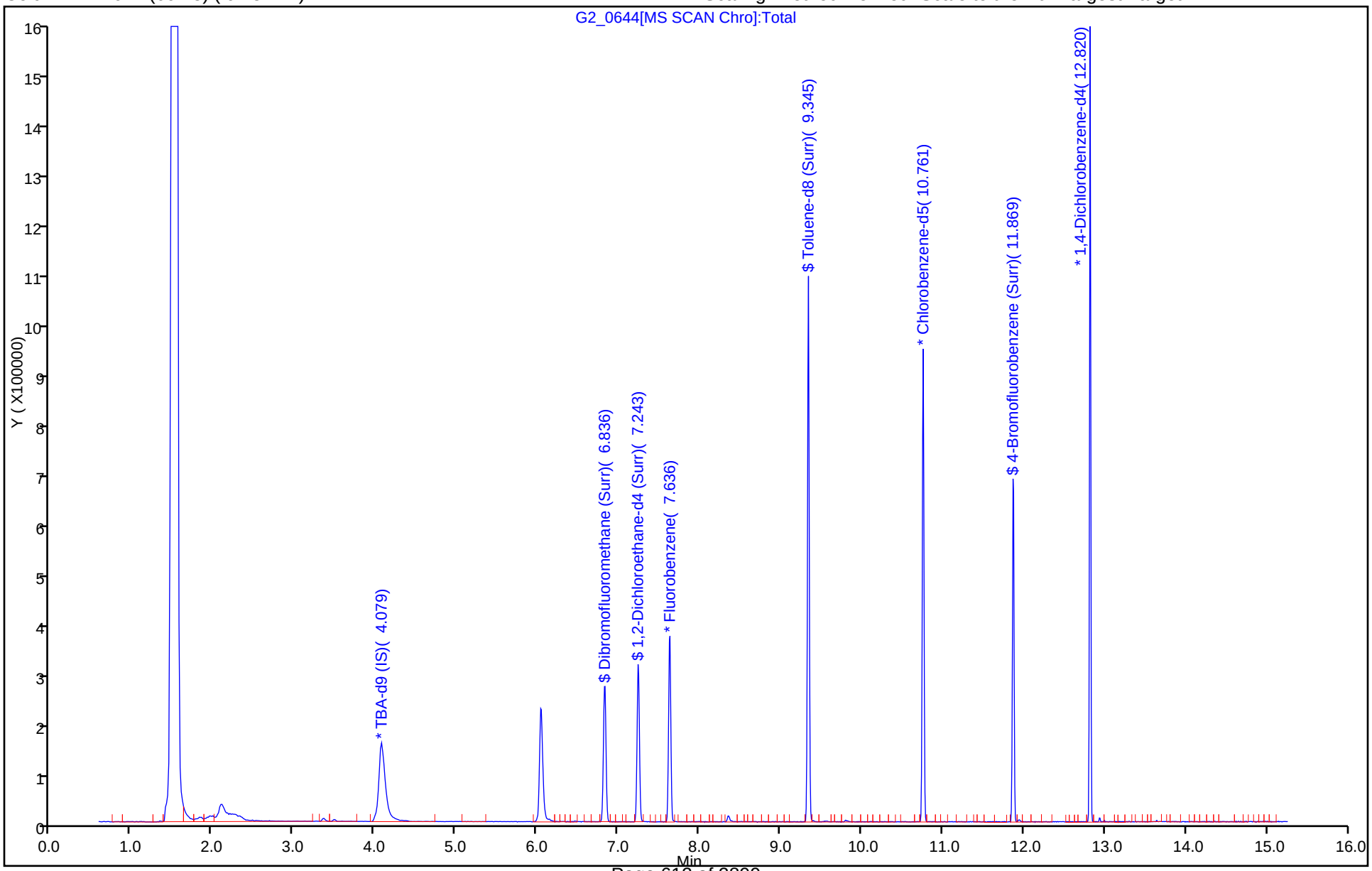
Report Date: 05-Jun-2017 17:13:27 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0644.D

Injection Date:	04-Jun-2017 01:00:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97803-D-9-A	Lab Sample ID:	280-97803-9	Worklist Smp#:	19
Client ID:	SS025-SB04(0-2)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0644.D
Lims ID: 280-97803-D-9-A
Client ID: SS025-SB04(0-2)
Sample Type: Client
Inject. Date: 04-Jun-2017 01:00:30 ALS Bottle#: 25 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-D-9-A
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 05-Jun-2017 17:09:24

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	45.0	51.6	114.71
$ 9 1,2-Dichloroethane-d4 (Surr)	45.0	61.4	136.49
$ 10 Toluene-d8 (Surr)	45.0	43.6	96.81
$ 11 4-Bromofluorobenzene (Surr)	45.0	39.8	88.54

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS05 | Lab Sample ID: 280-97803-10

Matrix: Solid | Lab File ID: G2_0645.D

Analysis Method: 8260B | Date Collected: 05/31/2017 14:30

Sample wt/vol: 6.094(g) | Date Analyzed: 06/04/2017 01:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.2 | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.5	U	4.7	1.5	0.53
71-55-6	1,1,1-Trichloroethane	1.5	U Q	4.7	1.5	0.49
79-34-5	1,1,2,2-Tetrachloroethane	1.5	U	4.7	1.5	0.58
79-00-5	1,1,2-Trichloroethane	3.0	U Q	4.7	3.0	0.83
75-34-3	1,1-Dichloroethane	0.76	U Q	4.7	0.76	0.20
75-35-4	1,1-Dichloroethene	1.5	U Q	4.7	1.5	0.56
563-58-6	1,1-Dichloropropene	1.5	U Q	4.7	1.5	0.51
87-61-6	1,2,3-Trichlorobenzene	1.5	U	4.7	1.5	0.71
96-18-4	1,2,3-Trichloropropane	3.0	U	4.7	3.0	0.77
120-82-1	1,2,4-Trichlorobenzene	1.5	U	4.7	1.5	0.69
95-63-6	1,2,4-Trimethylbenzene	1.5	U	4.7	1.5	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	1.5	U	9.5	1.5	0.57
106-93-4	1,2-Dibromoethane	1.5	U	4.7	1.5	0.49
95-50-1	1,2-Dichlorobenzene	1.5	U	4.7	1.5	0.43
107-06-2	1,2-Dichloroethane	1.5	U Q	4.7	1.5	0.66
540-59-0	1,2-Dichloroethene, Total	1.5	U	4.7	1.5	0.37
78-87-5	1,2-Dichloropropane	1.5	U Q	4.7	1.5	0.52
108-67-8	1,3,5-Trimethylbenzene	1.5	U	4.7	1.5	0.54
541-73-1	1,3-Dichlorobenzene	1.5	U	4.7	1.5	0.45
142-28-9	1,3-Dichloropropane	1.5	U	4.7	1.5	0.48
106-46-7	1,4-Dichlorobenzene	1.5	U	4.7	1.5	0.74
594-20-7	2,2-Dichloropropane	1.5	U Q	4.7	1.5	0.42
78-93-3	2-Butanone (MEK)	6.0	U Q	19	6.0	1.7
95-49-8	2-Chlorotoluene	1.5	U	4.7	1.5	0.48
591-78-6	2-Hexanone	12	U	19	12	4.6
106-43-4	4-Chlorotoluene	1.5	U	4.7	1.5	0.74
99-87-6	4-Isopropyltoluene	1.5	U	4.7	1.5	0.46
108-10-1	4-Methyl-2-pentanone (MIBK)	12	U Q	19	12	4.1
67-64-1	Acetone	12	U Q	19	12	5.1
71-43-2	Benzene	1.5	U Q	4.7	1.5	0.44
108-86-1	Bromobenzene	1.5	U	4.7	1.5	0.46
74-97-5	Bromochloromethane	0.76	U Q	4.7	0.76	0.28
75-27-4	Bromodichloromethane	0.76	U Q	4.7	0.76	0.21
75-25-2	Bromoform	0.76	U	4.7	0.76	0.22
74-83-9	Bromomethane	1.5	U Q	9.5	1.5	0.47
75-15-0	Carbon disulfide	1.5	U Q	4.7	1.5	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS05 | Lab Sample ID: 280-97803-10

Matrix: Solid | Lab File ID: G2_0645.D

Analysis Method: 8260B | Date Collected: 05/31/2017 14:30

Sample wt/vol: 6.094(g) | Date Analyzed: 06/04/2017 01:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.2 | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.5	U Q	4.7	1.5	0.60
108-90-7	Chlorobenzene	1.5	U	4.7	1.5	0.51
75-00-3	Chloroethane	3.0	U Q	9.5	3.0	0.84
67-66-3	Chloroform	0.76	U Q	9.5	0.76	0.27
74-87-3	Chloromethane	1.5	U Q	9.5	1.5	0.73
156-59-2	cis-1,2-Dichloroethene	1.5	U Q	4.7	1.5	0.53
10061-01-5	cis-1,3-Dichloropropene	3.0	U Q	4.7	3.0	1.2
124-48-1	Dibromochloromethane	1.5	U	4.7	1.5	0.54
74-95-3	Dibromomethane	3.0	U Q	4.7	3.0	0.79
75-71-8	Dichlorodifluoromethane	1.5	U Q	9.5	1.5	0.49
100-41-4	Ethylbenzene	1.5	U	4.7	1.5	0.63
87-68-3	Hexachlorobutadiene	1.5	U	4.7	1.5	0.52
108-20-3	Isopropyl ether	7.6	U Q	47	7.6	2.6
98-82-8	Isopropylbenzene	1.5	U	4.7	1.5	0.56
179601-23-1	m&p-Xylene	3.0	U	3.0	3.0	0.98
74-88-4	Methyl iodide	1.5	U Q	4.7	1.5	0.42
1634-04-4	Methyl tert-butyl ether	0.76	U Q	19	0.76	0.32
75-09-2	Methylene Chloride	3.0	U Q	4.7	3.0	1.5
91-20-3	Naphthalene	1.5	U	4.7	1.5	0.60
104-51-8	n-Butylbenzene	1.5	U	4.7	1.5	0.53
103-65-1	N-Propylbenzene	1.5	U	4.7	1.5	0.55
95-47-6	o-Xylene	1.5	U	4.7	1.5	0.58
135-98-8	sec-Butylbenzene	1.5	U	4.7	1.5	0.73
100-42-5	Styrene	1.5	U	4.7	1.5	0.60
98-06-6	tert-Butylbenzene	1.5	U	4.7	1.5	0.47
127-18-4	Tetrachloroethene	1.5	U	4.7	1.5	0.56
108-88-3	Toluene	1.5	U Q	4.7	1.5	0.65
156-60-5	trans-1,2-Dichloroethene	0.76	U Q	4.7	0.76	0.37
10061-02-6	trans-1,3-Dichloropropene	1.5	U Q	4.7	1.5	0.63
79-01-6	Trichloroethene	0.76	U Q	4.7	0.76	0.22
75-69-4	Trichlorofluoromethane	3.0	U Q	9.5	3.0	0.98
108-05-4	Vinyl acetate	3.0	U Q	9.5	3.0	1.0
75-01-4	Vinyl chloride	3.0	U Q	4.7	3.0	1.3
1330-20-7	Xylenes (total)	0.95	U	9.5	0.95	0.58

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS05 | Lab Sample ID: 280-97803-10

Matrix: Solid | Lab File ID: G2_0645.D

Analysis Method: 8260B | Date Collected: 05/31/2017 14:30

Sample wt/vol: 6.094(g) | Date Analyzed: 06/04/2017 01:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.2 | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	147	Q	71-136
460-00-4	4-Bromofluorobenzene (Surr)	96		79-119
1868-53-7	Dibromofluoromethane (Surr)	123	Q	78-119
2037-26-5	Toluene-d8 (Surr)	101		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0645.D
Lims ID: 280-97803-D-10-A
Client ID: SS025-SS05
Sample Type: Client
Inject. Date: 04-Jun-2017 01:20:30 ALS Bottle#: 26 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-D-10-A
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 05-Jun-2017 17:09:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	92	327694	1000.0	
* 3 Fluorobenzene	96	7.629	7.637	-0.008	98	279179	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	123855	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	238387	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	93	175802	55.3	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	242333	66.2	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	538458	45.5	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	90	169594	43.4	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.691				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.956				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.654				ND	
43 Trichlorofluoromethane	101		2.682				ND	
42 Ethanol	45		2.892				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.339				ND	
50 Acetone	43		3.353				ND	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.814				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.322				ND	
68 2-Chloro-1,3-butadiene	53		5.336				ND	
69 Tert-butyl ethyl ether	59		5.909				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.221				ND	
73 Propionitrile	54		6.228				ND	
76 Methacrylonitrile	41		6.435				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
72 sec-Butyl Alcohol	45		6.464				ND	
78 Chloroform	83		6.628				ND	
81 1,1,1-Trichloroethane	97		6.814				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.022				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.451				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.008				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.180				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
91 Methyl methacrylate	100		8.423				ND	
95 Dibromomethane	93		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.866				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.798				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.177				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.835				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.064				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.586				ND	
140 1,3,5-Trichlorobenzene	180		13.693				ND	
141 1,2,4-Trichlorobenzene	180		14.115				ND	
142 Hexachlorobutadiene	225		14.208				ND	
143 Naphthalene	128		14.301				ND	
144 1,2,3-Trichlorobenzene	180		14.458				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
12 2-Methylhexane	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 2,2,3-Trimethylbutane	1		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
26 3-Methylhexane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent

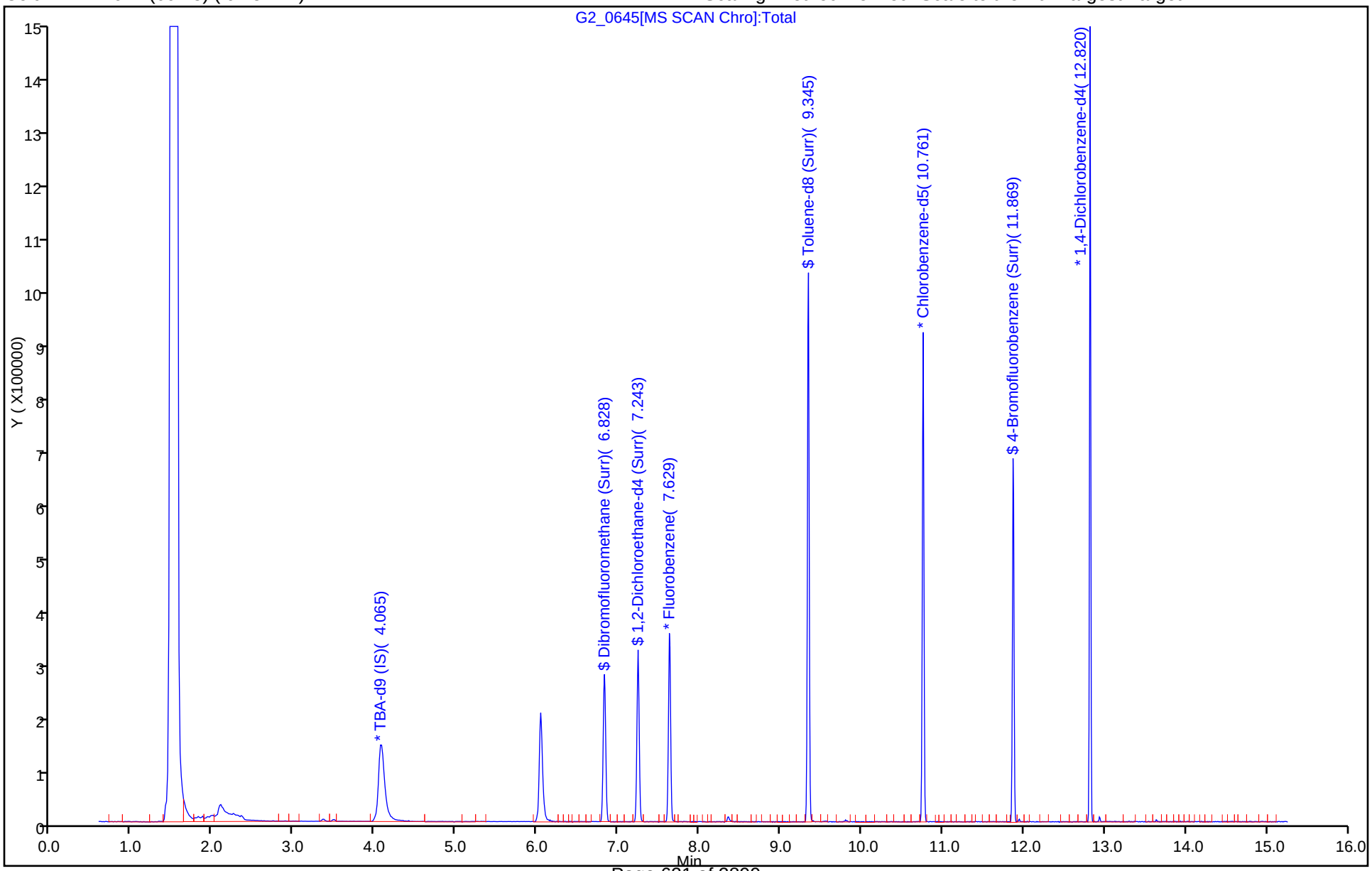
Report Date: 05-Jun-2017 17:13:28 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0645.D

Injection Date:	04-Jun-2017 01:20:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97803-D-10-A	Lab Sample ID:	280-97803-10	Worklist Smp#:	20
Client ID:	SS025-SS05				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0645.D
Lims ID: 280-97803-D-10-A
Client ID: SS025-SS05
Sample Type: Client
Inject. Date: 04-Jun-2017 01:20:30 ALS Bottle#: 26 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-D-10-A
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 05-Jun-2017 17:09:40

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	45.0	55.3	122.83
$ 9 1,2-Dichloroethane-d4 (Surr)	45.0	66.2	147.16
$ 10 Toluene-d8 (Surr)	45.0	45.5	101.11
$ 11 4-Bromofluorobenzene (Surr)	45.0	43.4	96.44

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB05(0-2) | Lab Sample ID: 280-97803-11

Matrix: Solid | Lab File ID: G2_0699.D

Analysis Method: 8260B | Date Collected: 05/31/2017 14:40

Sample wt/vol: 6.493(g) | Date Analyzed: 06/05/2017 21:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 14.2 | Level: (low/med) Low

Analysis Batch No.: 376196 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.4	U	4.5	1.4	0.50
71-55-6	1,1,1-Trichloroethane	1.4	U	4.5	1.4	0.47
79-34-5	1,1,2,2-Tetrachloroethane	1.4	U Q	4.5	1.4	0.55
79-00-5	1,1,2-Trichloroethane	2.9	U	4.5	2.9	0.79
75-34-3	1,1-Dichloroethane	0.72	U	4.5	0.72	0.19
75-35-4	1,1-Dichloroethene	1.4	U	4.5	1.4	0.53
563-58-6	1,1-Dichloropropene	1.4	U	4.5	1.4	0.48
87-61-6	1,2,3-Trichlorobenzene	1.4	U Q	4.5	1.4	0.67
96-18-4	1,2,3-Trichloropropane	2.9	U Q	4.5	2.9	0.73
120-82-1	1,2,4-Trichlorobenzene	1.4	U Q	4.5	1.4	0.66
95-63-6	1,2,4-Trimethylbenzene	1.4	U Q	4.5	1.4	0.52
96-12-8	1,2-Dibromo-3-Chloropropane	1.4	U Q	9.0	1.4	0.54
106-93-4	1,2-Dibromoethane	1.4	U	4.5	1.4	0.47
95-50-1	1,2-Dichlorobenzene	1.4	U Q	4.5	1.4	0.40
107-06-2	1,2-Dichloroethane	1.4	U	4.5	1.4	0.63
540-59-0	1,2-Dichloroethene, Total	1.4	U	4.5	1.4	0.35
78-87-5	1,2-Dichloropropane	1.4	U	4.5	1.4	0.49
108-67-8	1,3,5-Trimethylbenzene	1.4	U Q	4.5	1.4	0.51
541-73-1	1,3-Dichlorobenzene	1.4	U Q	4.5	1.4	0.43
142-28-9	1,3-Dichloropropane	1.4	U	4.5	1.4	0.46
106-46-7	1,4-Dichlorobenzene	1.4	U Q	4.5	1.4	0.70
594-20-7	2,2-Dichloropropane	1.4	U	4.5	1.4	0.39
78-93-3	2-Butanone (MEK)	5.7	U	18	5.7	1.6
95-49-8	2-Chlorotoluene	1.4	U Q	4.5	1.4	0.46
591-78-6	2-Hexanone	11	U	18	11	4.4
106-43-4	4-Chlorotoluene	1.4	U Q	4.5	1.4	0.70
99-87-6	4-Isopropyltoluene	1.4	U Q	4.5	1.4	0.44
108-10-1	4-Methyl-2-pentanone (MIBK)	11	U	18	11	3.9
67-64-1	Acetone	11	U	18	11	4.8
71-43-2	Benzene	1.4	U	4.5	1.4	0.42
108-86-1	Bromobenzene	1.4	U Q	4.5	1.4	0.44
74-97-5	Bromochloromethane	0.72	U	4.5	0.72	0.27
75-27-4	Bromodichloromethane	0.72	U	4.5	0.72	0.20
75-25-2	Bromoform	0.72	U	4.5	0.72	0.21
74-83-9	Bromomethane	1.4	U Q	9.0	1.4	0.45
75-15-0	Carbon disulfide	1.4	U	4.5	1.4	0.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB05(0-2) | Lab Sample ID: 280-97803-11

Matrix: Solid | Lab File ID: G2_0699.D

Analysis Method: 8260B | Date Collected: 05/31/2017 14:40

Sample wt/vol: 6.493(g) | Date Analyzed: 06/05/2017 21:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 14.2 | Level: (low/med) Low

Analysis Batch No.: 376196 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.4	U	4.5	1.4	0.57
108-90-7	Chlorobenzene	1.4	U	4.5	1.4	0.48
75-00-3	Chloroethane	2.9	U	9.0	2.9	0.80
67-66-3	Chloroform	0.72	U	9.0	0.72	0.26
74-87-3	Chloromethane	1.4	U	9.0	1.4	0.69
156-59-2	cis-1,2-Dichloroethene	1.4	U	4.5	1.4	0.50
10061-01-5	cis-1,3-Dichloropropene	2.9	U	4.5	2.9	1.2
124-48-1	Dibromochloromethane	1.4	U	4.5	1.4	0.51
74-95-3	Dibromomethane	2.9	U	4.5	2.9	0.75
75-71-8	Dichlorodifluoromethane	1.4	U	9.0	1.4	0.47
100-41-4	Ethylbenzene	1.4	U	4.5	1.4	0.60
87-68-3	Hexachlorobutadiene	1.4	U Q	4.5	1.4	0.49
108-20-3	Isopropyl ether	7.2	U Q	45	7.2	2.4
98-82-8	Isopropylbenzene	1.4	U Q	4.5	1.4	0.53
179601-23-1	m&p-Xylene	2.9	U	2.9	2.9	0.93
74-88-4	Methyl iodide	1.4	U	4.5	1.4	0.39
1634-04-4	Methyl tert-butyl ether	0.72	U Q	18	0.72	0.31
75-09-2	Methylene Chloride	2.9	U	4.5	2.9	1.4
91-20-3	Naphthalene	1.4	U Q	4.5	1.4	0.57
104-51-8	n-Butylbenzene	1.4	U Q	4.5	1.4	0.50
103-65-1	N-Propylbenzene	1.4	U Q	4.5	1.4	0.52
95-47-6	o-Xylene	1.4	U	4.5	1.4	0.55
135-98-8	sec-Butylbenzene	1.4	U Q	4.5	1.4	0.69
100-42-5	Styrene	1.4	U	4.5	1.4	0.57
98-06-6	tert-Butylbenzene	1.4	U Q	4.5	1.4	0.45
127-18-4	Tetrachloroethene	1.4	U	4.5	1.4	0.53
108-88-3	Toluene	1.4	U	4.5	1.4	0.62
156-60-5	trans-1,2-Dichloroethene	0.72	U	4.5	0.72	0.35
10061-02-6	trans-1,3-Dichloropropene	1.4	U	4.5	1.4	0.60
79-01-6	Trichloroethene	0.72	U	4.5	0.72	0.21
75-69-4	Trichlorofluoromethane	2.9	U	9.0	2.9	0.93
108-05-4	Vinyl acetate	2.9	U Q	9.0	2.9	0.96
75-01-4	Vinyl chloride	2.9	U	4.5	2.9	1.2
1330-20-7	Xylenes (total)	0.90	U	9.0	0.90	0.55

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB05(0-2) | Lab Sample ID: 280-97803-11

Matrix: Solid | Lab File ID: G2_0699.D

Analysis Method: 8260B | Date Collected: 05/31/2017 14:40

Sample wt/vol: 6.493(g) | Date Analyzed: 06/05/2017 21:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 14.2 | Level: (low/med) Low

Analysis Batch No.: 376196 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	123		71-136
460-00-4	4-Bromofluorobenzene (Surr)	78	Q	79-119
1868-53-7	Dibromofluoromethane (Surr)	108		78-119
2037-26-5	Toluene-d8 (Surr)	86		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0699.D
Lims ID: 280-97803-E-11-A
Client ID: SS025-SB05(0-2)
Sample Type: Client
Inject. Date: 05-Jun-2017 21:29:30 ALS Bottle#: 20 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-e-11-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Jun-2017 20:22:30 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: dukesa Date: 05-Jun-2017 22:41:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.051	0.014	94	356158	1000.0	
* 3 Fluorobenzene	96	7.629	7.622	0.007	98	287367	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	126275	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	97	258422	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.828	0.000	92	159027	48.6	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	211062	55.5	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	467846	38.8	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	90	148196	35.0	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.276				ND	
32 Dichlorodifluoromethane	85		1.691				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.984				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.654				ND	
43 Trichlorofluoromethane	101		2.696				ND	
42 Ethanol	45		2.892				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.297				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.339				ND	
50 Acetone	43		3.353				ND	
55 Iodomethane	142		3.478				ND	
51 Isopropyl alcohol	45		3.562				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.744				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.786				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
60 Methylene Chloride	84		3.995				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
59 2-Methyl-2-propanol	59		4.191				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.358				ND	
63 trans-1,2-Dichloroethene	96		4.414				ND	
62 Methyl tert-butyl ether	73		4.414				ND	
64 Hexane	57		4.903				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.196				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.895				ND	
74 cis-1,2-Dichloroethene	96		6.121				ND	
71 2-Butanone (MEK)	43		6.121				ND	
75 2,2-Dichloropropane	77		6.121				ND	
70 Ethyl acetate	43		6.214				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.442				ND	
77 Chlorobromomethane	128		6.450				ND	
79 Tetrahydrofuran	42		6.457				ND	
78 Chloroform	83		6.614				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.879				ND	
84 Carbon tetrachloride	117		6.993				ND	
83 1,1-Dichloropropene	75		7.007				ND	
87 Benzene	78		7.250				ND	
85 1,2-Dichloroethane	62		7.329				ND	
86 Tert-amyl methyl ether	73		7.451				ND	
80 Isobutyl alcohol	41		7.644				ND	
35 n-Heptane	43		7.644				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.037				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.251				ND	
93 Methylcyclohexane	55		8.287				ND	
92 1,2-Dichloropropane	63		8.323				ND	
94 1,4-Dioxane	88		8.409				ND	
95 Dibromomethane	93		8.416				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.074				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.231				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.653				ND	
102 Ethyl methacrylate	69		9.710				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.910				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.768				ND	
112 Chlorobenzene	112		10.783				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.876				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.835				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.064				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.578				ND	
140 1,3,5-Trichlorobenzene	180		13.693				ND	
141 1,2,4-Trichlorobenzene	180		14.115				ND	
142 Hexachlorobutadiene	225		14.200				ND	
143 Naphthalene	128		14.301				ND	
144 1,2,3-Trichlorobenzene	180		14.458				ND	
28 Dimethyl disulfide	1		0.000				ND	
26 3-Methylhexane	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
20 2,2-Dimethylpentane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
12 2-Methylhexane	1		0.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent

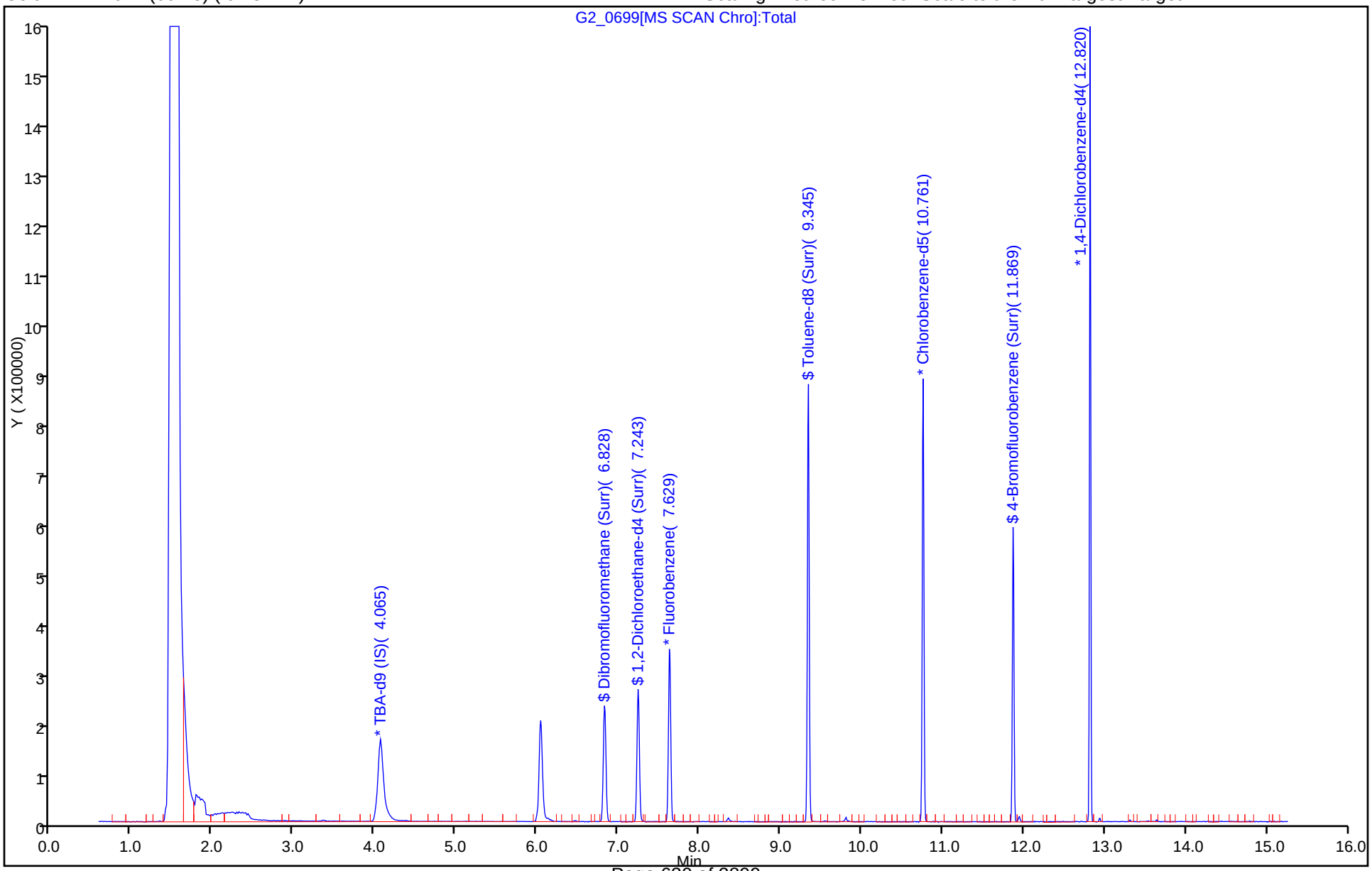
Report Date: 06-Jun-2017 20:22:48 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0699.D

Injection Date:	05-Jun-2017 21:29:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97803-E-11-A	Lab Sample ID:	280-97803-11	Worklist Smp#:	15
Client ID:	SS025-SB05(0-2)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0699.D
Lims ID: 280-97803-E-11-A
Client ID: SS025-SB05(0-2)
Sample Type: Client
Inject. Date: 05-Jun-2017 21:29:30 ALS Bottle#: 20 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-e-11-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Jun-2017 20:22:30 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: dukesa Date: 05-Jun-2017 22:41:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	45.0	48.6	107.94
$ 9 1,2-Dichloroethane-d4 (Surr)	45.0	55.5	123.31
$ 10 Toluene-d8 (Surr)	45.0	38.8	86.16
$ 11 4-Bromofluorobenzene (Surr)	45.0	35.0	77.74

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB05(2-4) | Lab Sample ID: 280-97803-12

Matrix: Solid | Lab File ID: G2_0647.D

Analysis Method: 8260B | Date Collected: 05/31/2017 15:00

Sample wt/vol: 6.393(g) | Date Analyzed: 06/04/2017 02:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 9.8 | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.4	U	4.3	1.4	0.49
71-55-6	1,1,1-Trichloroethane	1.4	U	4.3	1.4	0.45
79-34-5	1,1,2,2-Tetrachloroethane	1.4	U	4.3	1.4	0.53
79-00-5	1,1,2-Trichloroethane	2.8	U Q	4.3	2.8	0.76
75-34-3	1,1-Dichloroethane	0.69	U	4.3	0.69	0.18
75-35-4	1,1-Dichloroethene	1.4	U	4.3	1.4	0.51
563-58-6	1,1-Dichloropropene	1.4	U Q	4.3	1.4	0.47
87-61-6	1,2,3-Trichlorobenzene	1.4	U	4.3	1.4	0.65
96-18-4	1,2,3-Trichloropropane	2.8	U	4.3	2.8	0.70
120-82-1	1,2,4-Trichlorobenzene	1.4	U	4.3	1.4	0.63
95-63-6	1,2,4-Trimethylbenzene	1.4	U	4.3	1.4	0.50
96-12-8	1,2-Dibromo-3-Chloropropane	1.4	U	8.7	1.4	0.52
106-93-4	1,2-Dibromoethane	1.4	U	4.3	1.4	0.45
95-50-1	1,2-Dichlorobenzene	1.4	U	4.3	1.4	0.39
107-06-2	1,2-Dichloroethane	1.4	U Q	4.3	1.4	0.61
540-59-0	1,2-Dichloroethene, Total	1.4	U	4.3	1.4	0.34
78-87-5	1,2-Dichloropropane	1.4	U Q	4.3	1.4	0.48
108-67-8	1,3,5-Trimethylbenzene	1.4	U	4.3	1.4	0.49
541-73-1	1,3-Dichlorobenzene	1.4	U	4.3	1.4	0.42
142-28-9	1,3-Dichloropropane	1.4	U	4.3	1.4	0.44
106-46-7	1,4-Dichlorobenzene	1.4	U	4.3	1.4	0.68
594-20-7	2,2-Dichloropropane	1.4	U	4.3	1.4	0.38
78-93-3	2-Butanone (MEK)	5.6	U	17	5.6	1.6
95-49-8	2-Chlorotoluene	1.4	U	4.3	1.4	0.44
591-78-6	2-Hexanone	11	U	17	11	4.2
106-43-4	4-Chlorotoluene	1.4	U	4.3	1.4	0.68
99-87-6	4-Isopropyltoluene	1.4	U	4.3	1.4	0.43
108-10-1	4-Methyl-2-pentanone (MIBK)	11	U Q	17	11	3.8
67-64-1	Acetone	11	U	17	11	4.7
71-43-2	Benzene	1.4	U Q	4.3	1.4	0.41
108-86-1	Bromobenzene	1.4	U	4.3	1.4	0.43
74-97-5	Bromochloromethane	0.69	U	4.3	0.69	0.26
75-27-4	Bromodichloromethane	0.69	U Q	4.3	0.69	0.19
75-25-2	Bromoform	0.69	U	4.3	0.69	0.20
74-83-9	Bromomethane	1.4	U Q	8.7	1.4	0.43
75-15-0	Carbon disulfide	1.4	U	4.3	1.4	0.36

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB05(2-4) | Lab Sample ID: 280-97803-12

Matrix: Solid | Lab File ID: G2_0647.D

Analysis Method: 8260B | Date Collected: 05/31/2017 15:00

Sample wt/vol: 6.393(g) | Date Analyzed: 06/04/2017 02:00

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 9.8 | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.4	U Q	4.3	1.4	0.55
108-90-7	Chlorobenzene	1.4	U	4.3	1.4	0.47
75-00-3	Chloroethane	2.8	U Q	8.7	2.8	0.77
67-66-3	Chloroform	0.69	U	8.7	0.69	0.25
74-87-3	Chloromethane	1.4	U	8.7	1.4	0.67
156-59-2	cis-1,2-Dichloroethene	1.4	U	4.3	1.4	0.49
10061-01-5	cis-1,3-Dichloropropene	2.8	U Q	4.3	2.8	1.1
124-48-1	Dibromochloromethane	1.4	U	4.3	1.4	0.49
74-95-3	Dibromomethane	2.8	U Q	4.3	2.8	0.73
75-71-8	Dichlorodifluoromethane	1.4	U	8.7	1.4	0.45
100-41-4	Ethylbenzene	1.4	U	4.3	1.4	0.58
87-68-3	Hexachlorobutadiene	1.4	U	4.3	1.4	0.48
108-20-3	Isopropyl ether	6.9	U Q	43	6.9	2.4
98-82-8	Isopropylbenzene	1.4	U	4.3	1.4	0.51
179601-23-1	m&p-Xylene	2.8	U	2.8	2.8	0.90
74-88-4	Methyl iodide	1.4	U	4.3	1.4	0.38
1634-04-4	Methyl tert-butyl ether	0.69	U	17	0.69	0.29
75-09-2	Methylene Chloride	2.8	U	4.3	2.8	1.4
91-20-3	Naphthalene	1.4	U	4.3	1.4	0.55
104-51-8	n-Butylbenzene	1.4	U	4.3	1.4	0.49
103-65-1	N-Propylbenzene	1.4	U	4.3	1.4	0.50
95-47-6	o-Xylene	1.4	U	4.3	1.4	0.53
135-98-8	sec-Butylbenzene	1.4	U	4.3	1.4	0.67
100-42-5	Styrene	1.4	U	4.3	1.4	0.55
98-06-6	tert-Butylbenzene	1.4	U	4.3	1.4	0.43
127-18-4	Tetrachloroethene	1.4	U	4.3	1.4	0.51
108-88-3	Toluene	1.4	U Q	4.3	1.4	0.60
156-60-5	trans-1,2-Dichloroethene	0.69	U	4.3	0.69	0.34
10061-02-6	trans-1,3-Dichloropropene	1.4	U Q	4.3	1.4	0.58
79-01-6	Trichloroethene	0.69	U Q	4.3	0.69	0.20
75-69-4	Trichlorofluoromethane	2.8	U	8.7	2.8	0.90
108-05-4	Vinyl acetate	2.8	U	8.7	2.8	0.93
75-01-4	Vinyl chloride	2.8	U	4.3	2.8	1.2
1330-20-7	Xylenes (total)	0.87	U	8.7	0.87	0.53

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB05(2-4) Lab Sample ID: 280-97803-12

Matrix: Solid Lab File ID: G2_0647.D

Analysis Method: 8260B Date Collected: 05/31/2017 15:00

Sample wt/vol: 6.393(g) Date Analyzed: 06/04/2017 02:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 9.8 Level: (low/med) Low

Analysis Batch No.: 376040 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	140	Q	71-136
460-00-4	4-Bromofluorobenzene (Surr)	89		79-119
1868-53-7	Dibromofluoromethane (Surr)	119		78-119
2037-26-5	Toluene-d8 (Surr)	96		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0647.D
Lims ID: 280-97803-D-12-A
Client ID: SS025-SB05(2-4)
Sample Type: Client
Inject. Date: 04-Jun-2017 02:00:30 ALS Bottle#: 28 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-D-12-A
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 05-Jun-2017 17:10:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	90	334388	1000.0	
* 3 Fluorobenzene	96	7.636	7.637	-0.001	98	270925	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	122566	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	97	219588	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	93	165196	53.5	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	224456	63.0	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	504361	43.1	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	144546	40.2	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.691				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.956				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.654				ND	
43 Trichlorofluoromethane	101		2.682				ND	
42 Ethanol	45		2.892				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.339				ND	
50 Acetone	43		3.353				ND	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.814				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.322				ND	
68 2-Chloro-1,3-butadiene	53		5.336				ND	
69 Tert-butyl ethyl ether	59		5.909				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.221				ND	
73 Propionitrile	54		6.228				ND	
76 Methacrylonitrile	41		6.435				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
72 sec-Butyl Alcohol	45		6.464				ND	
78 Chloroform	83		6.628				ND	
81 1,1,1-Trichloroethane	97		6.814				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.022				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.451				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.008				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.180				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
91 Methyl methacrylate	100		8.423				ND	
95 Dibromomethane	93		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.866				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.798				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.177				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.835				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.064				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.586				ND	
140 1,3,5-Trichlorobenzene	180		13.693				ND	
141 1,2,4-Trichlorobenzene	180		14.115				ND	
142 Hexachlorobutadiene	225		14.208				ND	
143 Naphthalene	128		14.301				ND	
144 1,2,3-Trichlorobenzene	180		14.458				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
12 2-Methylhexane	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
18 2,2,3-Trimethylbutane	1		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
26 3-Methylhexane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent

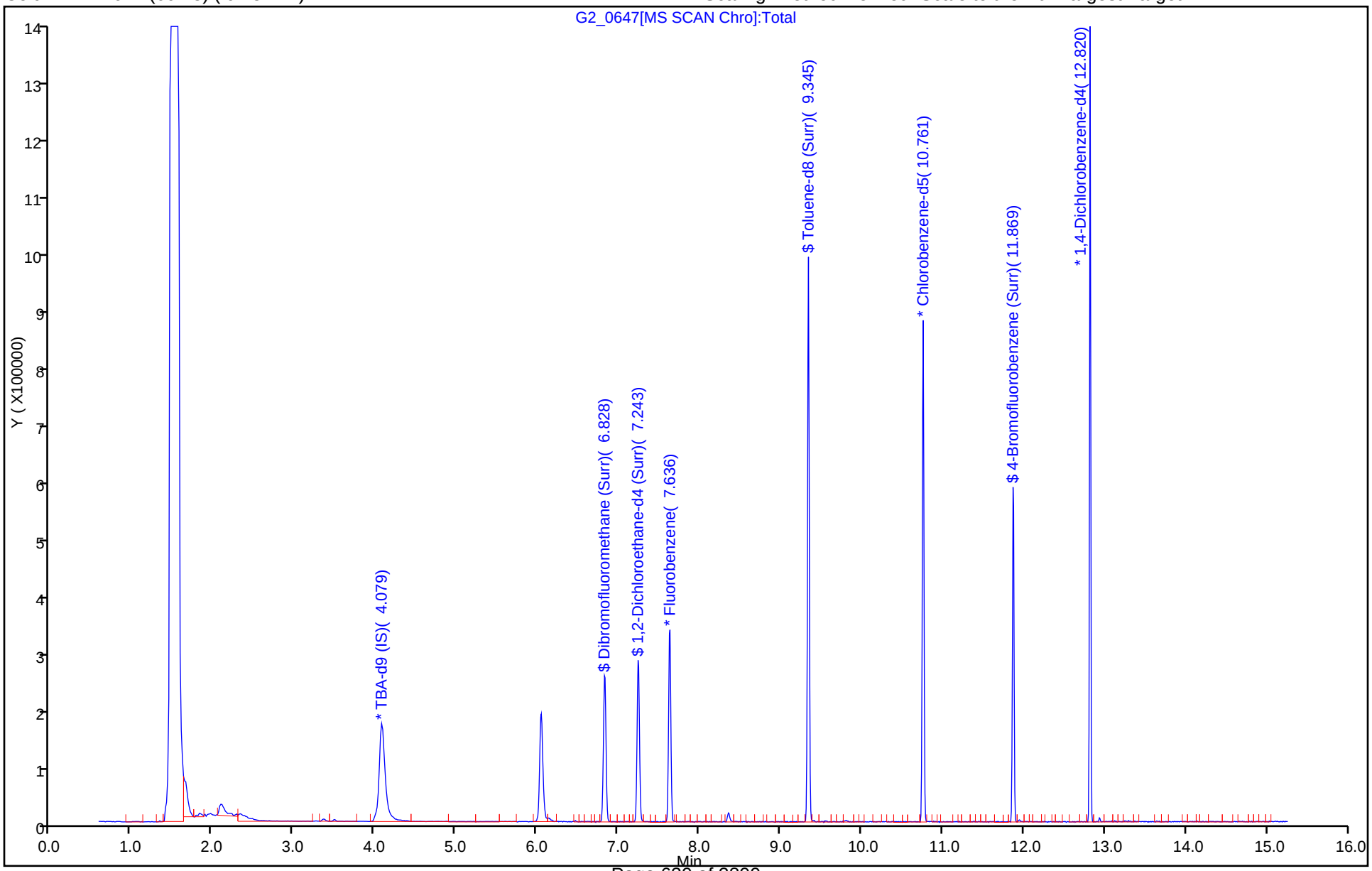
Report Date: 05-Jun-2017 17:13:30 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0647.D

Injection Date:	04-Jun-2017 02:00:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97803-D-12-A	Lab Sample ID:	280-97803-12	Worklist Smp#:	22
Client ID:	SS025-SB05(2-4)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0647.D
Lims ID: 280-97803-D-12-A
Client ID: SS025-SB05(2-4)
Sample Type: Client
Inject. Date: 04-Jun-2017 02:00:30 ALS Bottle#: 28 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-D-12-A
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 05-Jun-2017 17:10:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	45.0	53.5	118.94
$ 9 1,2-Dichloroethane-d4 (Surr)	45.0	63.0	140.10
$ 10 Toluene-d8 (Surr)	45.0	43.1	95.70
$ 11 4-Bromofluorobenzene (Surr)	45.0	40.2	89.23

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS06 | Lab Sample ID: 280-97803-13

Matrix: Solid | Lab File ID: G2_0700.D

Analysis Method: 8260B | Date Collected: 05/31/2017 15:40

Sample wt/vol: 6.182(g) | Date Analyzed: 06/05/2017 21:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 12.9 | Level: (low/med) Low

Analysis Batch No.: 376196 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.5	U	4.6	1.5	0.52
71-55-6	1,1,1-Trichloroethane	1.5	U	4.6	1.5	0.48
79-34-5	1,1,2,2-Tetrachloroethane	1.5	U	4.6	1.5	0.57
79-00-5	1,1,2-Trichloroethane	3.0	U Q	4.6	3.0	0.82
75-34-3	1,1-Dichloroethane	0.74	U	4.6	0.74	0.20
75-35-4	1,1-Dichloroethene	1.5	U	4.6	1.5	0.55
563-58-6	1,1-Dichloropropene	1.5	U Q	4.6	1.5	0.50
87-61-6	1,2,3-Trichlorobenzene	1.5	U	4.6	1.5	0.70
96-18-4	1,2,3-Trichloropropane	3.0	U	4.6	3.0	0.75
120-82-1	1,2,4-Trichlorobenzene	1.5	U	4.6	1.5	0.68
95-63-6	1,2,4-Trimethylbenzene	1.5	U	4.6	1.5	0.54
96-12-8	1,2-Dibromo-3-Chloropropane	1.5	U	9.3	1.5	0.56
106-93-4	1,2-Dibromoethane	1.5	U	4.6	1.5	0.48
95-50-1	1,2-Dichlorobenzene	1.5	U	4.6	1.5	0.42
107-06-2	1,2-Dichloroethane	1.5	U Q	4.6	1.5	0.65
540-59-0	1,2-Dichloroethene, Total	1.5	U	4.6	1.5	0.36
78-87-5	1,2-Dichloropropane	1.5	U Q	4.6	1.5	0.51
108-67-8	1,3,5-Trimethylbenzene	1.5	U	4.6	1.5	0.53
541-73-1	1,3-Dichlorobenzene	1.5	U	4.6	1.5	0.45
142-28-9	1,3-Dichloropropane	1.5	U	4.6	1.5	0.47
106-46-7	1,4-Dichlorobenzene	1.5	U	4.6	1.5	0.72
594-20-7	2,2-Dichloropropane	1.5	U	4.6	1.5	0.41
78-93-3	2-Butanone (MEK)	5.9	U	19	5.9	1.7
95-49-8	2-Chlorotoluene	1.5	U	4.6	1.5	0.47
591-78-6	2-Hexanone	12	U	19	12	4.5
106-43-4	4-Chlorotoluene	1.5	U	4.6	1.5	0.72
99-87-6	4-Isopropyltoluene	1.5	U	4.6	1.5	0.46
108-10-1	4-Methyl-2-pentanone (MIBK)	12	U Q	19	12	4.1
67-64-1	Acetone	7.6	J	19	12	5.0
71-43-2	Benzene	1.5	U Q	4.6	1.5	0.44
108-86-1	Bromobenzene	1.5	U	4.6	1.5	0.46
74-97-5	Bromochloromethane	0.74	U	4.6	0.74	0.28
75-27-4	Bromodichloromethane	0.74	U Q	4.6	0.74	0.20
75-25-2	Bromoform	0.74	U	4.6	0.74	0.21
74-83-9	Bromomethane	1.5	U Q	9.3	1.5	0.46
75-15-0	Carbon disulfide	1.5	U	4.6	1.5	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS06 | Lab Sample ID: 280-97803-13

Matrix: Solid | Lab File ID: G2_0700.D

Analysis Method: 8260B | Date Collected: 05/31/2017 15:40

Sample wt/vol: 6.182(g) | Date Analyzed: 06/05/2017 21:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 12.9 | Level: (low/med) Low

Analysis Batch No.: 376196 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.5	U Q	4.6	1.5	0.59
108-90-7	Chlorobenzene	1.5	U	4.6	1.5	0.50
75-00-3	Chloroethane	3.0	U	9.3	3.0	0.83
67-66-3	Chloroform	0.74	U	9.3	0.74	0.27
74-87-3	Chloromethane	1.5	U	9.3	1.5	0.72
156-59-2	cis-1,2-Dichloroethene	1.5	U	4.6	1.5	0.52
10061-01-5	cis-1,3-Dichloropropene	3.0	U Q	4.6	3.0	1.2
124-48-1	Dibromochloromethane	1.5	U	4.6	1.5	0.53
74-95-3	Dibromomethane	3.0	U Q	4.6	3.0	0.78
75-71-8	Dichlorodifluoromethane	1.5	U	9.3	1.5	0.48
100-41-4	Ethylbenzene	1.5	U	4.6	1.5	0.62
87-68-3	Hexachlorobutadiene	1.5	U	4.6	1.5	0.51
108-20-3	Isopropyl ether	7.4	U Q	46	7.4	2.5
98-82-8	Isopropylbenzene	1.5	U	4.6	1.5	0.55
179601-23-1	m&p-Xylene	3.0	U	3.0	3.0	0.97
74-88-4	Methyl iodide	1.5	U	4.6	1.5	0.41
1634-04-4	Methyl tert-butyl ether	0.74	U Q	19	0.74	0.32
75-09-2	Methylene Chloride	3.0	U	4.6	3.0	1.5
91-20-3	Naphthalene	1.5	U	4.6	1.5	0.59
104-51-8	n-Butylbenzene	1.5	U	4.6	1.5	0.52
103-65-1	N-Propylbenzene	1.5	U	4.6	1.5	0.54
95-47-6	o-Xylene	1.5	U	4.6	1.5	0.57
135-98-8	sec-Butylbenzene	1.5	U	4.6	1.5	0.72
100-42-5	Styrene	1.5	U	4.6	1.5	0.59
98-06-6	tert-Butylbenzene	1.5	U	4.6	1.5	0.46
127-18-4	Tetrachloroethene	1.5	U	4.6	1.5	0.55
108-88-3	Toluene	1.5	U Q	4.6	1.5	0.64
156-60-5	trans-1,2-Dichloroethene	0.74	U	4.6	0.74	0.36
10061-02-6	trans-1,3-Dichloropropene	1.5	U Q	4.6	1.5	0.62
79-01-6	Trichloroethene	0.74	U Q	4.6	0.74	0.21
75-69-4	Trichlorofluoromethane	3.0	U	9.3	3.0	0.97
108-05-4	Vinyl acetate	3.0	U Q	9.3	3.0	0.99
75-01-4	Vinyl chloride	3.0	U	4.6	3.0	1.2
1330-20-7	Xylenes (total)	0.93	U	9.3	0.93	0.57

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS06 Lab Sample ID: 280-97803-13

Matrix: Solid Lab File ID: G2_0700.D

Analysis Method: 8260B Date Collected: 05/31/2017 15:40

Sample wt/vol: 6.182(g) Date Analyzed: 06/05/2017 21:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 12.9 Level: (low/med) Low

Analysis Batch No.: 376196 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	138	Q	71-136
460-00-4	4-Bromofluorobenzene (Surr)	80		79-119
1868-53-7	Dibromofluoromethane (Surr)	114		78-119
2037-26-5	Toluene-d8 (Surr)	87		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0700.D
Lims ID: 280-97803-E-13-A
Client ID: SS025-SS06
Sample Type: Client
Inject. Date: 05-Jun-2017 21:50:30 ALS Bottle#: 21 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-e-13-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Jun-2017 20:22:30 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: dukesa Date: 05-Jun-2017 22:41:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.051	0.014	92	345350	1000.0	
* 3 Fluorobenzene	96	7.629	7.622	0.007	98	280335	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	89	125408	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	255191	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.828	0.000	92	163431	51.2	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	228524	62.0	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	470574	39.3	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	90	150183	35.9	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.276				ND	
32 Dichlorodifluoromethane	85		1.691				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.984				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.654				ND	
43 Trichlorofluoromethane	101		2.696				ND	
42 Ethanol	45		2.892				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.297				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.339				ND	
50 Acetone	43	3.366	3.353	0.013	98	8484	8.15	
55 Iodomethane	142		3.478				ND	
51 Isopropyl alcohol	45		3.562				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.744				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.786				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
60 Methylene Chloride	84		3.995				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
59 2-Methyl-2-propanol	59		4.191				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.358				ND	
63 trans-1,2-Dichloroethene	96		4.414				ND	
62 Methyl tert-butyl ether	73		4.414				ND	
64 Hexane	57		4.903				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.196				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.895				ND	
74 cis-1,2-Dichloroethene	96		6.121				ND	
71 2-Butanone (MEK)	43		6.121				ND	
75 2,2-Dichloropropane	77		6.121				ND	
70 Ethyl acetate	43		6.214				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.442				ND	
77 Chlorobromomethane	128		6.450				ND	
79 Tetrahydrofuran	42		6.457				ND	
78 Chloroform	83		6.614				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.879				ND	
84 Carbon tetrachloride	117		6.993				ND	
83 1,1-Dichloropropene	75		7.007				ND	
87 Benzene	78		7.250				ND	
85 1,2-Dichloroethane	62		7.329				ND	
86 Tert-amyl methyl ether	73		7.451				ND	
80 Isobutyl alcohol	41		7.644				ND	
35 n-Heptane	43		7.644				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.037				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.251				ND	
93 Methylcyclohexane	55		8.287				ND	
92 1,2-Dichloropropane	63		8.323				ND	
94 1,4-Dioxane	88		8.409				ND	
95 Dibromomethane	93		8.416				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.074				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.231				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.653				ND	
102 Ethyl methacrylate	69		9.710				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.910				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.768				ND	
112 Chlorobenzene	112		10.783				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.876				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.835				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.064				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.578				ND	
140 1,3,5-Trichlorobenzene	180		13.693				ND	
141 1,2,4-Trichlorobenzene	180		14.115				ND	
142 Hexachlorobutadiene	225		14.200				ND	
143 Naphthalene	128		14.301				ND	
144 1,2,3-Trichlorobenzene	180		14.458				ND	
28 Dimethyl disulfide	1		0.000				ND	
26 3-Methylhexane	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
20 2,2-Dimethylpentane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
12 2-Methylhexane	1		0.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent

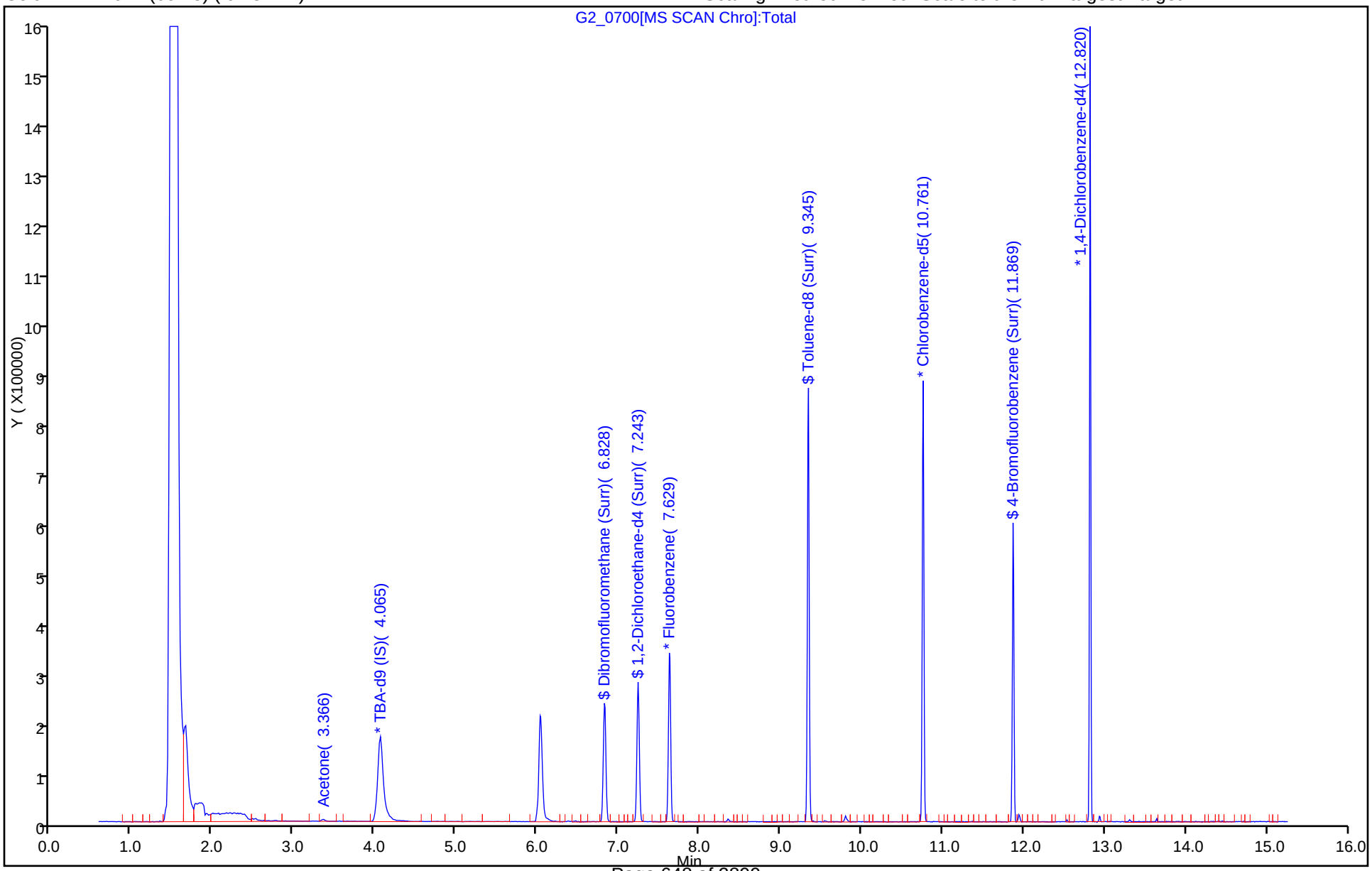
Report Date: 06-Jun-2017 20:22:50 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0700.D

Injection Date:	05-Jun-2017 21:50:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97803-E-13-A	Lab Sample ID:	280-97803-13	Worklist Smp#:	16
Client ID:	SS025-SS06				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0700.D
Lims ID: 280-97803-E-13-A
Client ID: SS025-SS06
Sample Type: Client
Inject. Date: 05-Jun-2017 21:50:30 ALS Bottle#: 21 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-e-13-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Jun-2017 20:22:30 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: dukesa Date: 05-Jun-2017 22:41:31

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	45.0	51.2	113.71
$ 9 1,2-Dichloroethane-d4 (Surr)	45.0	62.0	137.72
$ 10 Toluene-d8 (Surr)	45.0	39.3	87.26
$ 11 4-Bromofluorobenzene (Surr)	45.0	35.9	79.78

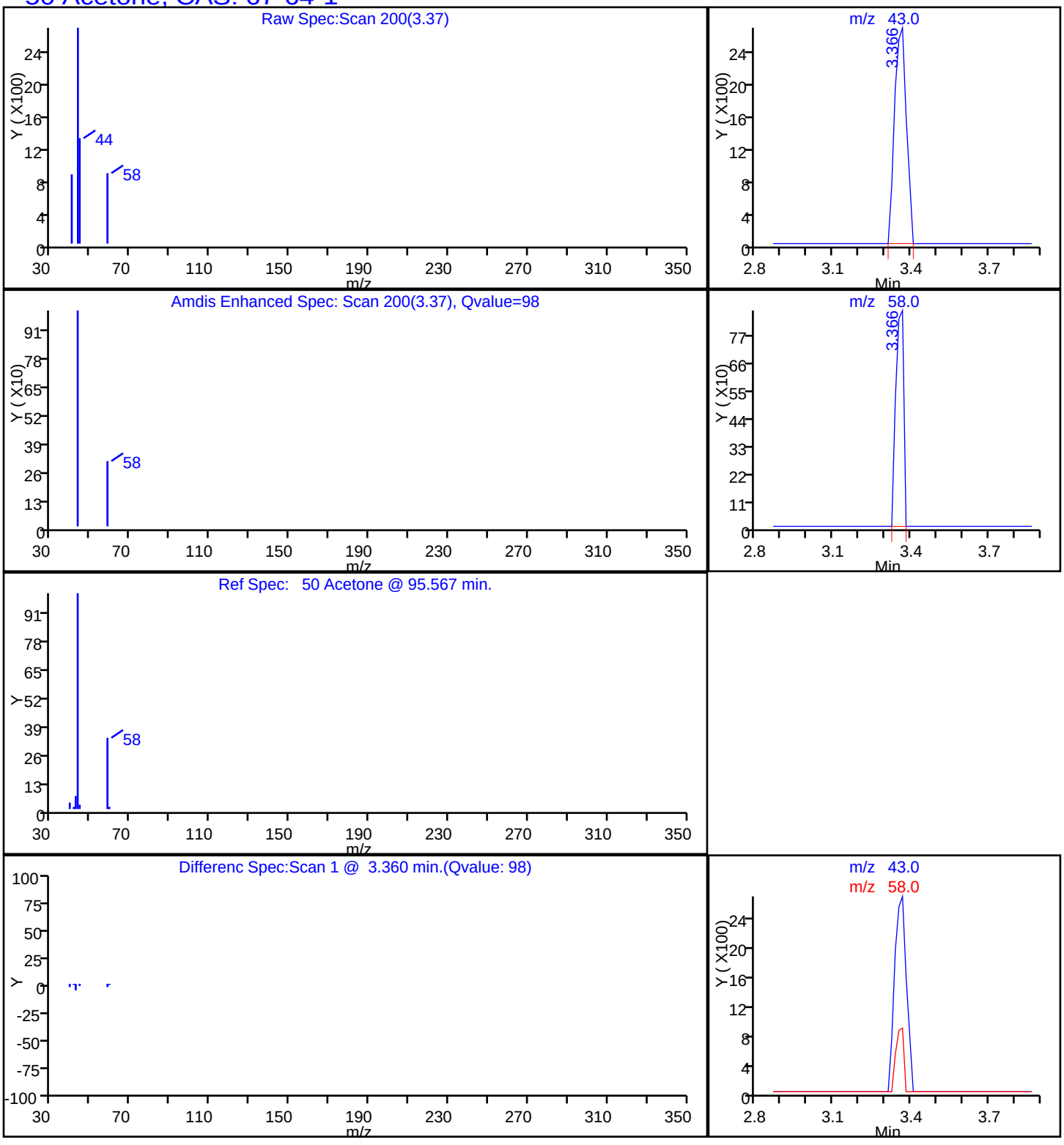
Report Date: 06-Jun-2017 20:22:50 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0700.D

Injection Date:	05-Jun-2017 21:50:30	Instrument ID:	VMS_G2		
Lims ID:	280-97803-E-13-A	Lab Sample ID:	280-97803-13		
Client ID:	SS025-SS06				
Operator ID:	DUKESA	ALS Bottle#:	21	Worklist Smp#:	16
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

50 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS06-a | Lab Sample ID: 280-97803-14

Matrix: Solid | Lab File ID: G2_0701.D

Analysis Method: 8260B | Date Collected: 05/31/2017 15:40

Sample wt/vol: 6.615(g) | Date Analyzed: 06/05/2017 22:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.2 | Level: (low/med) Low

Analysis Batch No.: 376196 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.4	U	4.4	1.4	0.49
71-55-6	1,1,1-Trichloroethane	1.4	U	4.4	1.4	0.45
79-34-5	1,1,2,2-Tetrachloroethane	1.4	U	4.4	1.4	0.53
79-00-5	1,1,2-Trichloroethane	2.8	U Q	4.4	2.8	0.77
75-34-3	1,1-Dichloroethane	0.70	U	4.4	0.70	0.18
75-35-4	1,1-Dichloroethene	1.4	U	4.4	1.4	0.51
563-58-6	1,1-Dichloropropene	1.4	U Q	4.4	1.4	0.47
87-61-6	1,2,3-Trichlorobenzene	1.4	U	4.4	1.4	0.65
96-18-4	1,2,3-Trichloropropane	2.8	U	4.4	2.8	0.71
120-82-1	1,2,4-Trichlorobenzene	1.4	U	4.4	1.4	0.64
95-63-6	1,2,4-Trimethylbenzene	1.4	U	4.4	1.4	0.51
96-12-8	1,2-Dibromo-3-Chloropropane	1.4	U	8.7	1.4	0.52
106-93-4	1,2-Dibromoethane	1.4	U	4.4	1.4	0.45
95-50-1	1,2-Dichlorobenzene	1.4	U	4.4	1.4	0.39
107-06-2	1,2-Dichloroethane	1.4	U Q	4.4	1.4	0.61
540-59-0	1,2-Dichloroethene, Total	1.4	U	4.4	1.4	0.34
78-87-5	1,2-Dichloropropane	1.4	U Q	4.4	1.4	0.48
108-67-8	1,3,5-Trimethylbenzene	1.4	U	4.4	1.4	0.50
541-73-1	1,3-Dichlorobenzene	1.4	U	4.4	1.4	0.42
142-28-9	1,3-Dichloropropane	1.4	U	4.4	1.4	0.44
106-46-7	1,4-Dichlorobenzene	1.4	U	4.4	1.4	0.68
594-20-7	2,2-Dichloropropane	1.4	U	4.4	1.4	0.38
78-93-3	2-Butanone (MEK)	5.6	U	17	5.6	1.6
95-49-8	2-Chlorotoluene	1.4	U	4.4	1.4	0.44
591-78-6	2-Hexanone	11	U	17	11	4.3
106-43-4	4-Chlorotoluene	1.4	U	4.4	1.4	0.68
99-87-6	4-Isopropyltoluene	1.4	U	4.4	1.4	0.43
108-10-1	4-Methyl-2-pentanone (MIBK)	11	U Q	17	11	3.8
67-64-1	Acetone	11	U	17	11	4.7
71-43-2	Benzene	1.4	U Q	4.4	1.4	0.41
108-86-1	Bromobenzene	1.4	U	4.4	1.4	0.43
74-97-5	Bromochloromethane	0.70	U	4.4	0.70	0.26
75-27-4	Bromodichloromethane	0.70	U Q	4.4	0.70	0.19
75-25-2	Bromoform	0.70	U	4.4	0.70	0.20
74-83-9	Bromomethane	1.4	U Q	8.7	1.4	0.44
75-15-0	Carbon disulfide	1.4	U	4.4	1.4	0.37

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS06-a | Lab Sample ID: 280-97803-14

Matrix: Solid | Lab File ID: G2_0701.D

Analysis Method: 8260B | Date Collected: 05/31/2017 15:40

Sample wt/vol: 6.615(g) | Date Analyzed: 06/05/2017 22:10

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.2 | Level: (low/med) Low

Analysis Batch No.: 376196 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.4	U Q	4.4	1.4	0.55
108-90-7	Chlorobenzene	1.4	U	4.4	1.4	0.47
75-00-3	Chloroethane	2.8	U	8.7	2.8	0.78
67-66-3	Chloroform	0.70	U	8.7	0.70	0.25
74-87-3	Chloromethane	1.4	U	8.7	1.4	0.67
156-59-2	cis-1,2-Dichloroethene	1.4	U	4.4	1.4	0.49
10061-01-5	cis-1,3-Dichloropropene	2.8	U Q	4.4	2.8	1.1
124-48-1	Dibromochloromethane	1.4	U	4.4	1.4	0.50
74-95-3	Dibromomethane	2.8	U Q	4.4	2.8	0.73
75-71-8	Dichlorodifluoromethane	1.4	U	8.7	1.4	0.45
100-41-4	Ethylbenzene	1.4	U	4.4	1.4	0.58
87-68-3	Hexachlorobutadiene	1.4	U	4.4	1.4	0.48
108-20-3	Isopropyl ether	7.0	U Q	44	7.0	2.4
98-82-8	Isopropylbenzene	1.4	U	4.4	1.4	0.51
179601-23-1	m&p-Xylene	2.8	U	2.8	2.8	0.91
74-88-4	Methyl iodide	1.4	U	4.4	1.4	0.38
1634-04-4	Methyl tert-butyl ether	0.70	U Q	17	0.70	0.30
75-09-2	Methylene Chloride	2.8	U	4.4	2.8	1.4
91-20-3	Naphthalene	1.4	U	4.4	1.4	0.55
104-51-8	n-Butylbenzene	1.4	U	4.4	1.4	0.49
103-65-1	N-Propylbenzene	1.4	U	4.4	1.4	0.51
95-47-6	o-Xylene	1.4	U	4.4	1.4	0.53
135-98-8	sec-Butylbenzene	1.4	U	4.4	1.4	0.67
100-42-5	Styrene	1.4	U	4.4	1.4	0.55
98-06-6	tert-Butylbenzene	1.4	U	4.4	1.4	0.44
127-18-4	Tetrachloroethene	1.4	U	4.4	1.4	0.51
108-88-3	Toluene	1.4	U Q	4.4	1.4	0.60
156-60-5	trans-1,2-Dichloroethene	0.70	U	4.4	0.70	0.34
10061-02-6	trans-1,3-Dichloropropene	1.4	U Q	4.4	1.4	0.58
79-01-6	Trichloroethene	0.70	U Q	4.4	0.70	0.20
75-69-4	Trichlorofluoromethane	2.8	U	8.7	2.8	0.91
108-05-4	Vinyl acetate	2.8	U Q	8.7	2.8	0.93
75-01-4	Vinyl chloride	2.8	U	4.4	2.8	1.2
1330-20-7	Xylenes (total)	0.87	U	8.7	0.87	0.53

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS06-a Lab Sample ID: 280-97803-14

Matrix: Solid Lab File ID: G2_0701.D

Analysis Method: 8260B Date Collected: 05/31/2017 15:40

Sample wt/vol: 6.615(g) Date Analyzed: 06/05/2017 22:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.2 Level: (low/med) Low

Analysis Batch No.: 376196 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	145	Q	71-136
460-00-4	4-Bromofluorobenzene (Surr)	81		79-119
1868-53-7	Dibromofluoromethane (Surr)	119		78-119
2037-26-5	Toluene-d8 (Surr)	92		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0701.D
Lims ID: 280-97803-E-14-A
Client ID: SS025-SS06-a
Sample Type: Client
Inject. Date: 05-Jun-2017 22:10:30 ALS Bottle#: 22 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-e-14-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Jun-2017 20:22:30 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: dukesa Date: 05-Jun-2017 22:41:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.051	0.014	92	320188	1000.0	
* 3 Fluorobenzene	96	7.629	7.622	0.007	98	258248	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	112011	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	97	238408	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.829	6.828	0.000	92	157716	53.6	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	220738	65.2	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	442894	41.4	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	89	141724	36.3	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.276				ND	
32 Dichlorodifluoromethane	85		1.691				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.984				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.654				ND	
43 Trichlorofluoromethane	101		2.696				ND	
42 Ethanol	45		2.892				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.297				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.339				ND	
50 Acetone	43		3.353				ND	
55 Iodomethane	142		3.478				ND	
51 Isopropyl alcohol	45		3.562				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.744				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.786				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
60 Methylene Chloride	84		3.995				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
59 2-Methyl-2-propanol	59		4.191				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.358				ND	
63 trans-1,2-Dichloroethene	96		4.414				ND	
62 Methyl tert-butyl ether	73		4.414				ND	
64 Hexane	57		4.903				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.196				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.895				ND	
74 cis-1,2-Dichloroethene	96		6.121				ND	
71 2-Butanone (MEK)	43		6.121				ND	
75 2,2-Dichloropropane	77		6.121				ND	
70 Ethyl acetate	43		6.214				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.442				ND	
77 Chlorobromomethane	128		6.450				ND	
79 Tetrahydrofuran	42		6.457				ND	
78 Chloroform	83		6.614				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.879				ND	
84 Carbon tetrachloride	117		6.993				ND	
83 1,1-Dichloropropene	75		7.007				ND	
87 Benzene	78		7.250				ND	
85 1,2-Dichloroethane	62		7.329				ND	
86 Tert-amyl methyl ether	73		7.451				ND	
80 Isobutyl alcohol	41		7.644				ND	
35 n-Heptane	43		7.644				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.037				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.251				ND	
93 Methylcyclohexane	55		8.287				ND	
92 1,2-Dichloropropane	63		8.323				ND	
94 1,4-Dioxane	88		8.409				ND	
95 Dibromomethane	93		8.416				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.074				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.231				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.653				ND	
102 Ethyl methacrylate	69		9.710				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.910				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.768				ND	
112 Chlorobenzene	112		10.783				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.876				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.835				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.064				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.578				ND	
140 1,3,5-Trichlorobenzene	180		13.693				ND	
141 1,2,4-Trichlorobenzene	180		14.115				ND	
142 Hexachlorobutadiene	225		14.200				ND	
143 Naphthalene	128		14.301				ND	
144 1,2,3-Trichlorobenzene	180		14.458				ND	
28 Dimethyl disulfide	1		0.000				ND	
26 3-Methylhexane	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
20 2,2-Dimethylpentane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
12 2-Methylhexane	1		0.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent

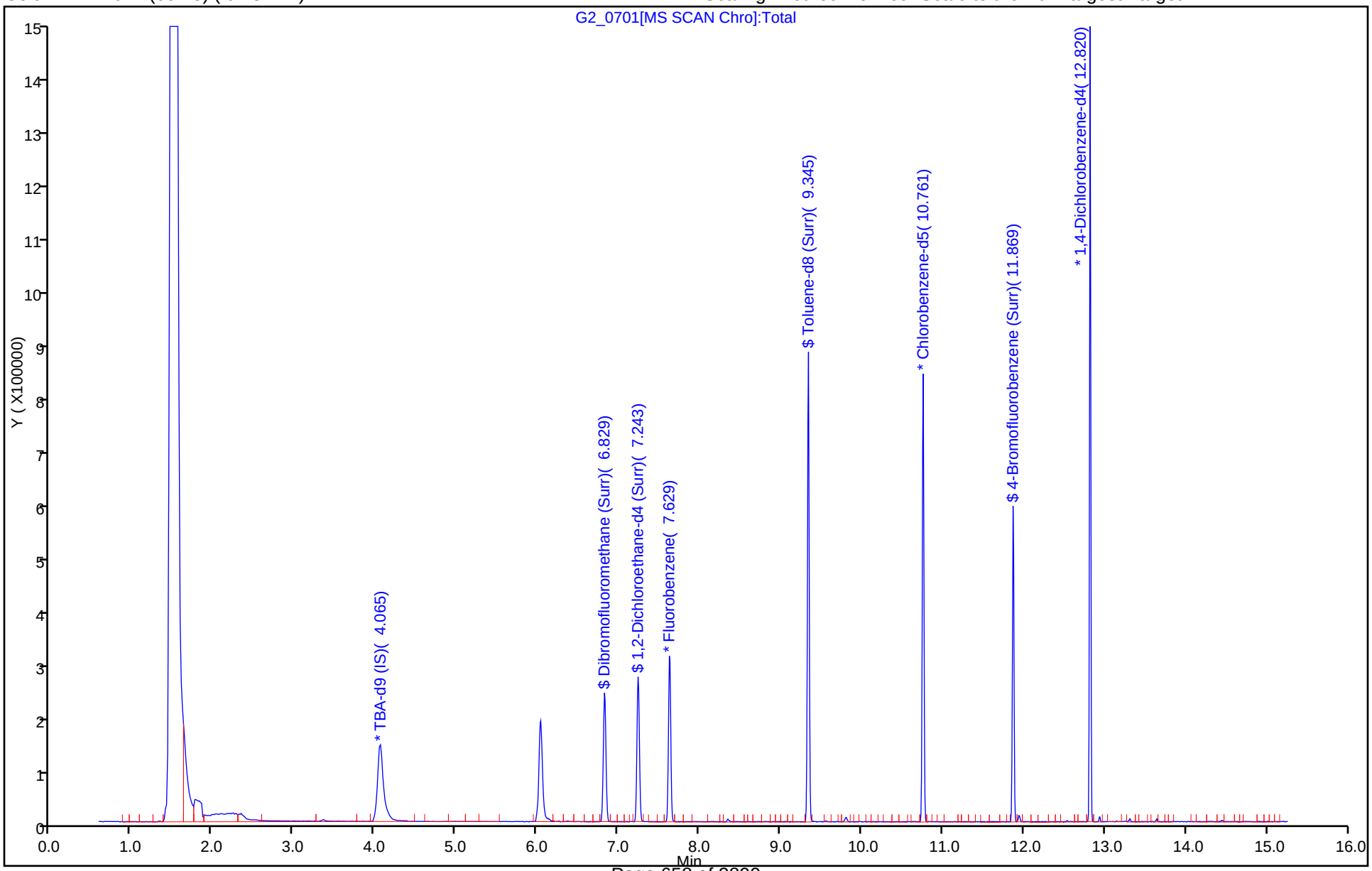
Report Date: 06-Jun-2017 20:22:52 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0701.D

Injection Date:	05-Jun-2017 22:10:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97803-E-14-A	Lab Sample ID:	280-97803-14	Worklist Smp#:	17
Client ID:	SS025-SS06-a				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0701.D
Lims ID: 280-97803-E-14-A
Client ID: SS025-SS06-a
Sample Type: Client
Inject. Date: 05-Jun-2017 22:10:30 ALS Bottle#: 22 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97803-e-14-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Jun-2017 20:22:30 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: dukesa Date: 05-Jun-2017 22:41:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	45.0	53.6	119.12
$ 9 1,2-Dichloroethane-d4 (Surr)	45.0	65.2	144.79
$ 10 Toluene-d8 (Surr)	45.0	41.4	91.95
$ 11 4-Bromofluorobenzene (Surr)	45.0	36.3	80.59

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 371118

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/26/2017 21:24 Calibration End Date: 04/26/2017 23:47 Calibration ID: 28915

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-371118/20	G2_9103.D
Level 2	STD002 280-371118/21	G2_9104.D
Level 3	STD005 280-371118/22	G2_9105.D
Level 4	STD010 280-371118/23	G2_9106.D
Level 5	STD020 280-371118/24	G2_9107.D
Level 6	ICIS 280-371118/25	G2_9108.D
Level 7	STD100 280-371118/26	G2_9109.D
Level 8	STD200 280-371118/27	G2_9110.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.1320	+++++ 0.1303	0.0763 0.1272	0.1035	0.1052	Lin2	-11.06	0.1302							0.9960		0.9900
Isopropyl alcohol	+++++ 0.7426	+++++ 0.7473	0.5107 0.7532	0.5464	0.5813	Lin2	-13.11	0.7310							0.9910		0.9900
Acetonitrile	+++++ 0.0357	+++++ 0.0377	0.0292 0.0364	0.0323	0.0326	Ave		0.0340				9.3		15.0			
Isopropyl ether	+++++ 0.2658	+++++ 0.2787	0.1461 0.2876	0.1589	0.1884	Lin1	-1.054	0.2885							0.9970		0.9900
2-Chloro-1,3-butadiene	+++++ 0.5608	+++++ 0.5571	0.2938 0.5499	0.3298	0.3945	Lin1	-1.820	0.5644							0.9970		0.9900
Tert-butyl ethyl ether	+++++ 0.8027	0.5287 0.8449	0.4578 0.8737	0.4775	0.5655	Lin1	-1.603	0.8528							0.9920		0.9900
Ethyl acetate	+++++ 0.2436	0.2206 0.2590	0.1743 0.2460	0.1859	0.2047	Ave		0.2191				14.7		15.0			
Propionitrile	0.0393 0.0399	0.0359 0.0410	0.0300 0.0392	0.0320	0.0352	Ave		0.0366				10.9		15.0			
Methacrylonitrile	0.1366 0.1656	0.1260 0.1655	0.1120 0.1531	0.1250	0.1405	Ave		0.1405				14.0		15.0			
Tert-amyl methyl ether	+++++ 0.7992	0.4837 0.7994	0.4364 0.8185	0.5098	0.6054	Lin1	-1.378	0.8103							0.9950		0.9900
n-Butanol	+++++ 0.3438	+++++ 0.3682	0.1737 0.3652	0.1913	0.2081	Lin1	-37.56	0.3715							0.9940		0.9900
Methyl methacrylate	+++++ 0.0795	+++++ 0.0865	0.0463 0.0856	0.0510	0.0595	Lin1	-0.586	0.0868							0.9970		0.9900
2-Nitropropane	+++++ 0.0762	+++++ 0.0819	0.0526 0.0801	0.0537	0.0598	Lin1	-0.436	0.0814							0.9980		0.9900
cis-1,4-Dichloro-2-butene	+++++ 0.2585	+++++ 0.2749	0.1576 0.2612	0.1559	0.1874	Lin1	-1.671	0.2696							0.9960		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 371118

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/26/2017 21:24 Calibration End Date: 04/26/2017 23:47 Calibration ID: 28915

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,3-Trimethylbenzene	+++++ 3.4519	+++++ 3.3230	2.3329 3.0319	2.4512	2.8086	Lin2	-5.187	3.2328							0.9920		0.9900
Dibromofluoromethane (Surr)	+++++ 0.3095	+++++ 0.3033	0.2903 0.2967	0.2880	0.2922	Ave		0.2967				2.8		15.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.3625	+++++ 0.3587	0.3597 0.3440	0.3280	0.3416	Ave		0.3491				3.9		15.0			
Toluene-d8 (Surr)	+++++ 4.5111	4.1228 4.5648	3.2663 4.3866	3.5867	3.9451	Ave		4.0548				12.1		15.0			
4-Bromofluorobenzene (Surr)	+++++ 1.0204	+++++ 1.0257	0.6803 0.9628	0.7151	0.8832	Lin2	-1.839	0.9992							0.9940		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 371118

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/26/2017 21:24 Calibration End Date: 04/26/2017 23:47 Calibration ID: 28915

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-371118/20	G2_9103.D
Level 2	STD002 280-371118/21	G2_9104.D
Level 3	STD005 280-371118/22	G2_9105.D
Level 4	STD010 280-371118/23	G2_9106.D
Level 5	STD020 280-371118/24	G2_9107.D
Level 6	ICIS 280-371118/25	G2_9108.D
Level 7	STD100 280-371118/26	G2_9109.D
Level 8	STD200 280-371118/27	G2_9110.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethanol	TBAd 9	Lin2	+++++ 122781	+++++ 283622	7276 573614	20171	41345	+++++ 2000	+++++ 4000	200 8000	400	800
Isopropyl alcohol	TBAd 9	Lin2	+++++ 172630	+++++ 406709	12177 849140	26611	57099	+++++ 500	+++++ 1000	50.0 2000	100	200
Acetonitrile	FB	Ave	+++++ 329217	+++++ 734663	26441 1481604	57118	112546	+++++ 500	+++++ 1000	50.0 2000	100	200
Isopropyl ether	FB	Lin1	+++++ 245024	+++++ 543678	13234 1170578	28081	65060	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
2-Chloro-1,3-butadiene	FB	Lin1	+++++ 516999	+++++ 1086636	26621 2238320	58295	136212	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Tert-butyl ethyl ether	FB	Lin1	+++++ 740026	19370 1648041	41478 3556496	84392	195271	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Ethyl acetate	FB	Ave	+++++ 449116	16162 1010347	31579 2002470	65714	141346	+++++ 100	4.00 200	10.0 400	20.0	40.0
Propionitrile	FB	Ave	8076 368245	13153 799862	27173 1595234	56592	121445	10.0 500	20.0 1000	50.0 2000	100	200
Methacrylonitrile	FB	Ave	28072 1526789	46147 3228599	101430 6231562	220951	485255	10.0 500	20.0 1000	50.0 2000	100	200
Tert-amyl methyl ether	FB	Lin1	+++++ 736869	17719 1559265	39541 3331592	90109	209044	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
n-Butanol	TBAd 9	Lin1	+++++ 199829	+++++ 500903	10355 1029447	23296	51108	+++++ 1250	+++++ 2500	125 5000	250	500
Methyl methacrylate	FB	Lin1	+++++ 146545	+++++ 337342	8391 697047	18014	41080	+++++ 100	+++++ 200	10.0 400	20.0	40.0
2-Nitropropane	FB	Lin1	+++++ 140567	+++++ 319469	9526 652312	18997	41285	+++++ 100	+++++ 200	10.0 400	20.0	40.0
cis-1,4-Dichloro-2-butene	DCBd 4	Lin1	+++++ 199872	+++++ 475453	11849 979420	21713	52773	+++++ 100	+++++ 200	10.0 400	20.0	40.0
1,2,3-Trimethylbenzene	DCBd 4	Lin2	+++++ 1334271	+++++ 2873226	87682 5683286	170709	395414	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 371118

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/26/2017 21:24 Calibration End Date: 04/26/2017 23:47 Calibration ID: 28915

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dibromofluoromethane (Surr)	FB	Ave	+++++ 285345	+++++ 591609	26300 1207841	50907	100882	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 334208	+++++ 699623	32586 1400342	57978	117949	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	+++++ 1071370	37867 2375251	73621 4806099	152095	348590	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
4-Bromofluorobenzene (Surr)	DCBd 4	Lin2	+++++ 394437	+++++ 886909	25571 1804706	49798	124341	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9103.D
Lims ID: STD001
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 26-Apr-2017 21:24:30 ALS Bottle#: 10 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD001
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub102

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2017 16:49:59 Calib Date: 26-Apr-2017 23:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	96	635071	1000.0	1000.0	
* 3 Fluorobenzene	96	7.636	7.644	-0.008	99	1027637	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.775	10.775	0.000	85	266935	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	94	445571	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.836	6.836	0.000	89	8471	1.00	1.39	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.250	7.258	-0.008	97	9452	1.00	1.32	
$ 10 Toluene-d8 (Surr)	98	9.352	9.353	-0.001	92	24716	1.00	1.14	
$ 11 4-Bromofluorobenzene (Surr	95	11.884	11.884	0.000	93	7592	1.00	2.69	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.263	2.263	0.000	100	33554	100.0	135.9	
42 Ethanol	45		2.892				ND	ND	
47 Propene oxide	58	3.059	3.073	-0.014	96	155067	100.0	123.4	
51 Isopropyl alcohol	45	3.562	3.576	-0.014	92	4611	10.0	27.9	
54 Acetonitrile	41	3.744	3.814	-0.070	97	9685	10.0	13.9	
68 2-Chloro-1,3-butadiene	53	5.322	5.322	0.000	63	6605	1.00	3.79	
66 Isopropyl ether	87		5.322				ND	ND	
69 Tert-butyl ethyl ether	59	5.894	5.908	-0.014	90	12458	1.00	2.59	
70 Ethyl acetate	43	6.221	6.142	0.079	95	10568	2.00	2.35	
73 Propionitrile	54	6.228	6.228	0.000	59	8076	10.0	10.7	
76 Methacrylonitrile	41	6.442	6.471	-0.029	89	28072	10.0	9.72	
86 Tert-amyl methyl ether	73	7.443	7.458	-0.015	65	10466	1.00	2.33	
88 n-Butanol	56	8.015	8.015	0.000	82	3030	25.0	113.9	
16 Ethyl acrylate	55		8.187				ND	ND	
91 Methyl methacrylate	100	8.437	8.437	0.000	88	2460	2.00	8.12	
97 2-Nitropropane	41	8.866	8.873	-0.007	76	2421	2.00	6.80	
120 cis-1,4-Dichloro-2-butene	53	11.776	11.784	-0.008	89	3473	2.00	7.64	
135 1,2,3-Trimethylbenzene	105	12.863	12.863	0.000	96	23708	1.00	2.43	
140 1,3,5-Trichlorobenzene	180	13.707	13.707	0.000	94	13373	1.00	1.04	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00023	Amount Added:	0.13	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.02	Units: uL

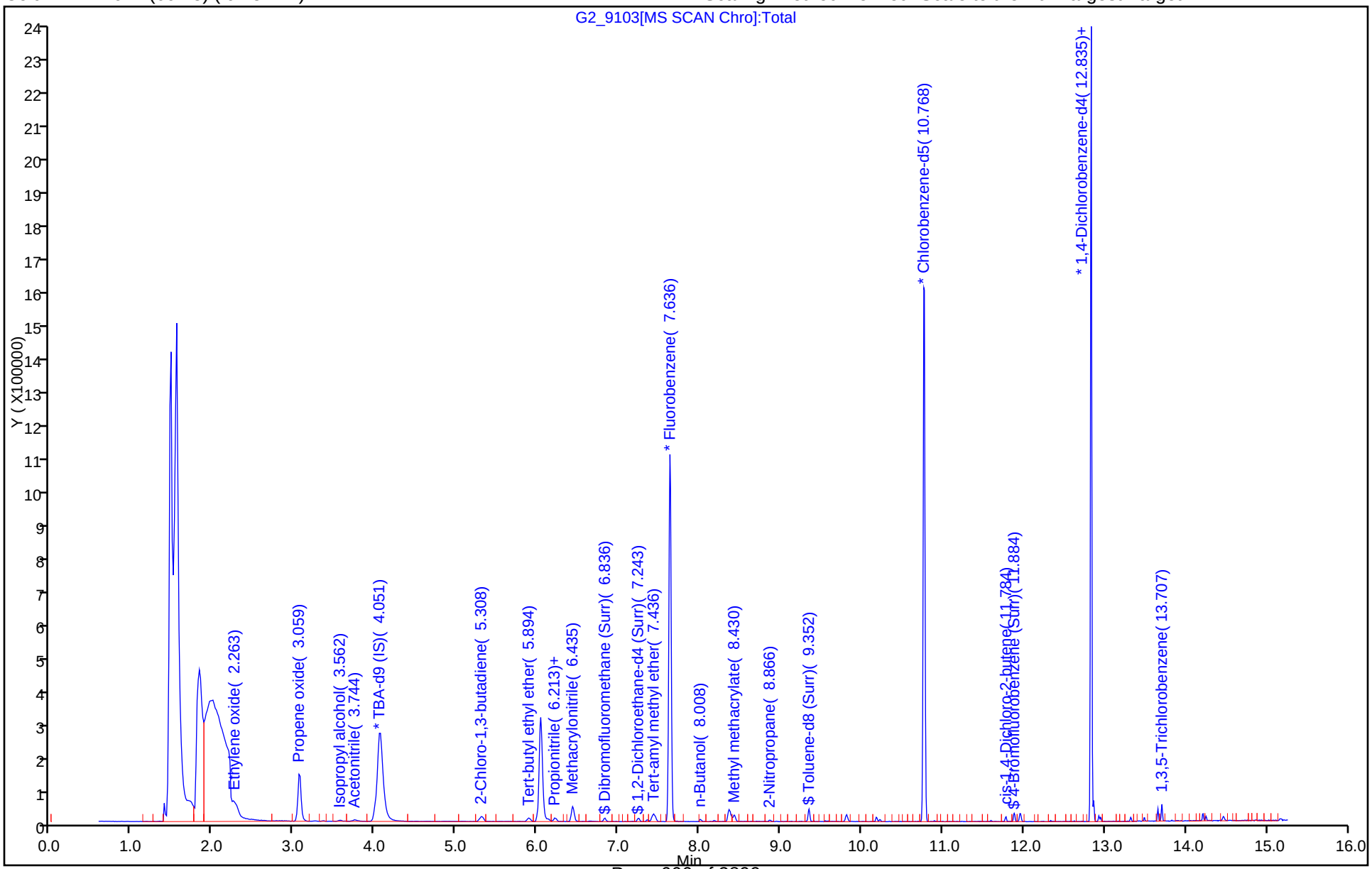
Report Date: 27-Apr-2017 16:50:00 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9103.D

Injection Date:	26-Apr-2017 21:24:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD001			Worklist Smp#:	20
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9104.D
Lims ID: STD002
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 26-Apr-2017 21:44:30 ALS Bottle#: 11 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD002
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub102

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2017 16:50:01 Calib Date: 26-Apr-2017 23:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: dukesa Date: 27-Apr-2017 00:13:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.065	0.014	95	492497	1000.0	1000.0	
* 3 Fluorobenzene	96	7.644	7.644	0.000	99	915851	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.776	10.775	0.001	85	229619	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	94	385898	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.843	6.836	0.007	92	13850	2.00	2.55	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.258	7.258	0.000	98	16019	2.00	2.51	
$ 10 Toluene-d8 (Surr)	98	9.353	9.353	0.000	94	37867	2.00	2.03	
$ 11 4-Bromofluorobenzene (Surr	95	11.884	11.884	0.000	94	13227	2.00	3.56	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.263	2.263	0.000	100	51599	200.0	234.6	
42 Ethanol	45		2.892				ND	ND	
47 Propene oxide	58	3.073	3.073	0.000	96	249535	200.0	222.9	
51 Isopropyl alcohol	45	3.562	3.576	-0.014	93	7351	20.0	38.3	
54 Acetonitrile	41	3.758	3.814	-0.056	99	14574	20.0	23.4	
66 Isopropyl ether	87	5.336	5.322	0.014	84	6072	2.00	4.80	
68 2-Chloro-1,3-butadiene	53	5.336	5.322	0.014	76	12171	2.00	4.40	
69 Tert-butyl ethyl ether	59	5.909	5.908	0.001	89	19370	2.00	3.12	
70 Ethyl acetate	43	6.221	6.142	0.079	98	16162	4.00	4.03	
73 Propionitrile	54	6.228	6.228	0.000	88	13153	20.0	19.6	
76 Methacrylonitrile	41	6.442	6.471	-0.029	88	46147	20.0	17.9	
86 Tert-amyl methyl ether	73	7.465	7.458	0.007	89	17719	2.00	2.89	
88 n-Butanol	56	8.008	8.015	-0.007	91	5551	50.0	131.4	
16 Ethyl acrylate	55	8.187	8.187	0.000	96	7182	2.00	4.82	
91 Methyl methacrylate	100	8.430	8.437	-0.007	88	4473	4.00	9.55	
97 2-Nitropropane	41	8.874	8.873	0.001	91	4912	4.00	8.65	
120 cis-1,4-Dichloro-2-butene	53	11.777	11.784	-0.007	89	5389	4.00	8.79	
135 1,2,3-Trimethylbenzene	105	12.863	12.863	0.000	98	41309	2.00	3.26	
140 1,3,5-Trichlorobenzene	180	13.707	13.707	0.000	96	22103	2.00	1.98	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00023	Amount Added:	0.25	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.04	Units: uL

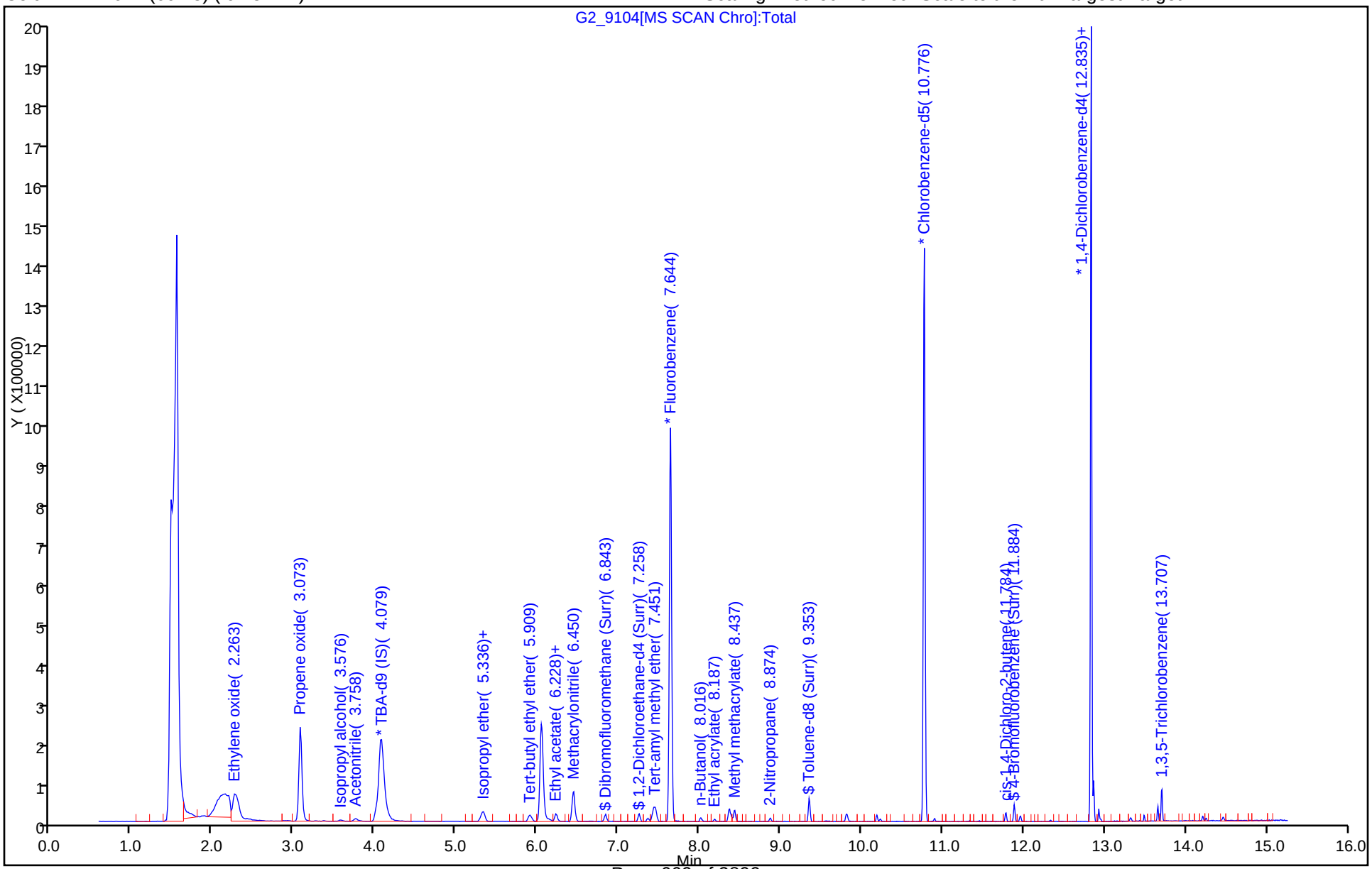
Report Date: 27-Apr-2017 16:50:01 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9104.D

Injection Date:	26-Apr-2017 21:44:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD002			Worklist Smp#:	21
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9105.D
Lims ID: STD005
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 26-Apr-2017 22:05:30 ALS Bottle#: 12 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD005
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub102

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2017 16:50:03 Calib Date: 26-Apr-2017 23:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: dukesa Date: 26-Apr-2017 22:51:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.065	0.014	94	476839	1000.0	1000.0	
* 3 Fluorobenzene	96	7.644	7.644	0.000	99	905969	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.775	10.775	0.000	86	225399	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	95	375851	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.836	6.836	0.000	93	26300	5.00	4.89	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.257	7.258	-0.001	97	32586	5.00	5.15	
$ 10 Toluene-d8 (Surr)	98	9.352	9.353	-0.001	94	73621	5.00	4.03	
$ 11 4-Bromofluorobenzene (Surr	95	11.884	11.884	0.000	94	25571	5.00	5.24	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.263	2.263	0.000	100	100037	500.0	459.7	
42 Ethanol	45	2.906	2.892	0.014	93	7276	200.0	202.2	
47 Propene oxide	58	3.073	3.073	0.000	96	512360	500.0	462.6	
51 Isopropyl alcohol	45	3.562	3.576	-0.014	92	12177	50.0	52.9	
54 Acetonitrile	41	3.758	3.814	-0.056	97	26441	50.0	42.9	
68 2-Chloro-1,3-butadiene	53	5.336	5.322	0.014	91	26621	5.00	5.83	
66 Isopropyl ether	87	5.322	5.322	0.000	85	13234	5.00	6.18	
69 Tert-butyl ethyl ether	59	5.908	5.908	0.000	91	41478	5.00	4.56	
70 Ethyl acetate	43	6.228	6.142	0.086	98	31579	10.0	7.95	
73 Propionitrile	54	6.242	6.228	0.014	98	27173	50.0	41.0	
76 Methacrylonitrile	41	6.442	6.471	-0.029	91	101430	50.0	39.8	
86 Tert-amyl methyl ether	73	7.465	7.458	0.007	92	39541	5.00	4.39	
88 n-Butanol	56	8.015	8.015	0.000	93	10355	125.0	159.6	
16 Ethyl acrylate	55	8.187	8.187	0.000	99	16019	5.00	6.22	
91 Methyl methacrylate	100	8.430	8.437	-0.007	90	8391	10.0	12.1	
97 2-Nitropropane	41	8.873	8.873	0.000	93	9526	10.0	11.8	
120 cis-1,4-Dichloro-2-butene	53	11.776	11.784	-0.008	91	11849	10.0	12.0	
135 1,2,3-Trimethylbenzene	105	12.863	12.863	0.000	98	87682	5.00	5.21	
140 1,3,5-Trichlorobenzene	180	13.707	13.707	0.000	97	53473	5.00	4.92	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00023	Amount Added:	0.63	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.10	Units: uL

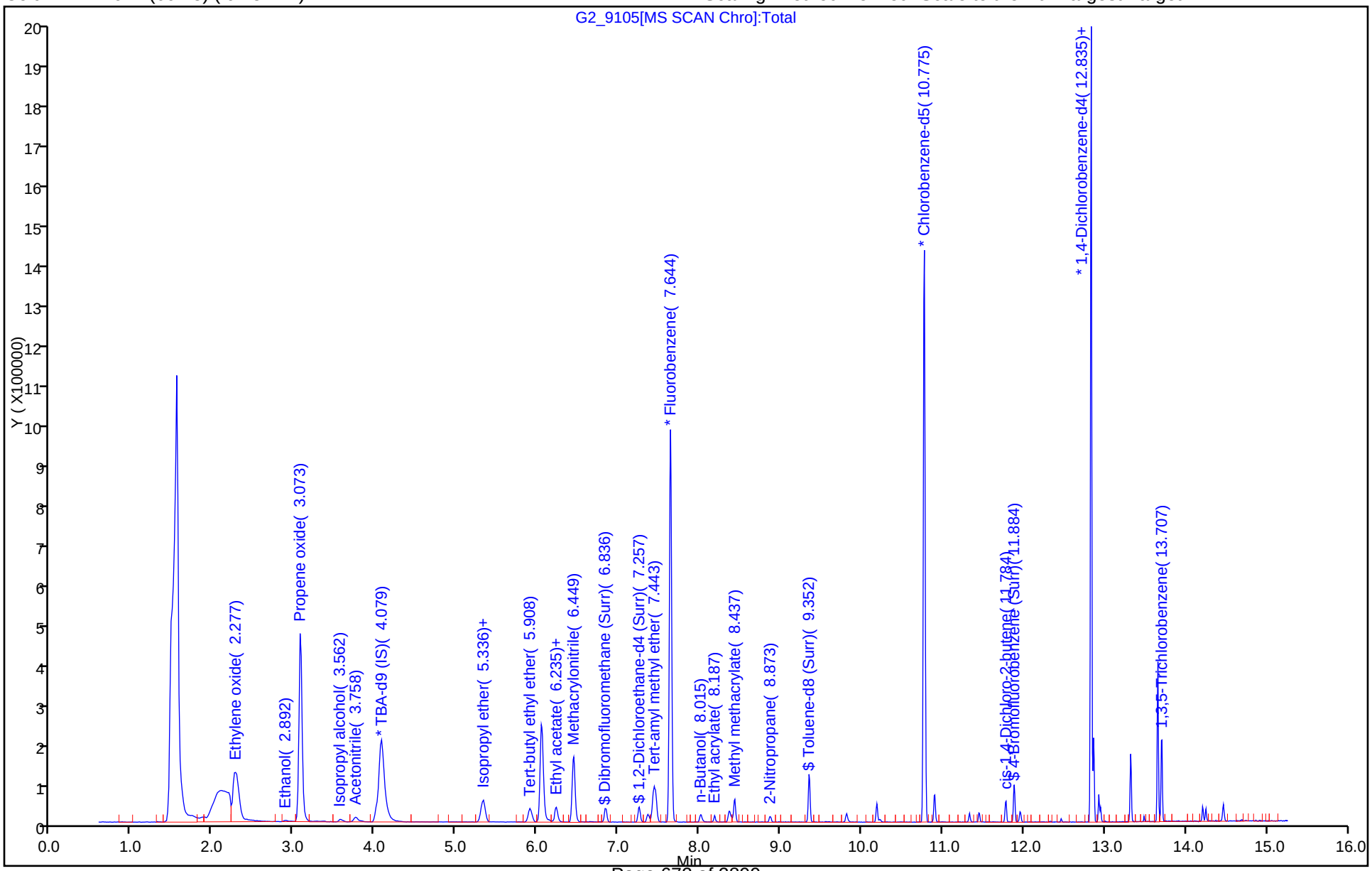
Report Date: 27-Apr-2017 16:50:03 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9105.D

Injection Date:	26-Apr-2017 22:05:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD005			Worklist Smp#:	22
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9106.D
Lims ID: STD010
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 26-Apr-2017 22:25:30 ALS Bottle#: 13 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD010
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub102

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2017 16:50:04 Calib Date: 26-Apr-2017 23:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.065	0.014	94	487039	1000.0	1000.0	
* 3 Fluorobenzene	96	7.644	7.644	0.000	99	883731	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.775	10.775	0.000	86	212024	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	94	348210	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.843	6.836	0.007	93	50907	10.0	9.71	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.258	7.258	0.000	99	57978	10.0	9.40	
$ 10 Toluene-d8 (Surr)	98	9.353	9.353	0.000	94	152095	10.0	8.85	
$ 11 4-Bromofluorobenzene (Surr	95	11.884	11.884	0.000	96	49798	10.0	9.00	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.277	2.263	0.014	100	195328	1000.0	920.2	
42 Ethanol	45	2.892	2.892	0.000	96	20171	400.0	403.1	
47 Propene oxide	58	3.073	3.073	0.000	96	1041088	1000.0	963.6	
51 Isopropyl alcohol	45	3.562	3.576	-0.014	92	26611	100.0	92.7	
54 Acetonitrile	41	3.758	3.814	-0.056	98	57118	100.0	95.1	
66 Isopropyl ether	87	5.322	5.322	0.000	86	28081	10.0	9.16	
68 2-Chloro-1,3-butadiene	53	5.336	5.322	0.014	93	58295	10.0	9.07	
69 Tert-butyl ethyl ether	59	5.909	5.908	0.000	93	84392	10.0	7.48	
70 Ethyl acetate	43	6.228	6.142	0.086	99	65714	20.0	17.0	
73 Propionitrile	54	6.235	6.228	0.007	98	56592	100.0	87.6	
76 Methacrylonitrile	41	6.442	6.471	-0.029	91	220951	100.0	89.0	
86 Tert-amyl methyl ether	73	7.458	7.458	0.000	95	90109	10.0	7.99	
88 n-Butanol	56	8.015	8.015	0.000	93	23296	250.0	229.9	
16 Ethyl acrylate	55	8.187	8.187	0.000	99	34920	10.0	9.31	
91 Methyl methacrylate	100	8.437	8.437	0.000	91	18014	20.0	18.5	
97 2-Nitropropane	41	8.874	8.873	0.001	94	18997	20.0	18.6	
120 cis-1,4-Dichloro-2-butene	53	11.784	11.784	0.000	90	21713	20.0	17.8	
135 1,2,3-Trimethylbenzene	105	12.863	12.863	0.000	98	170709	10.0	9.19	
140 1,3,5-Trichlorobenzene	180	13.707	13.707	0.000	98	83115	10.0	8.25	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00023	Amount Added:	1.25	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.20	Units: uL

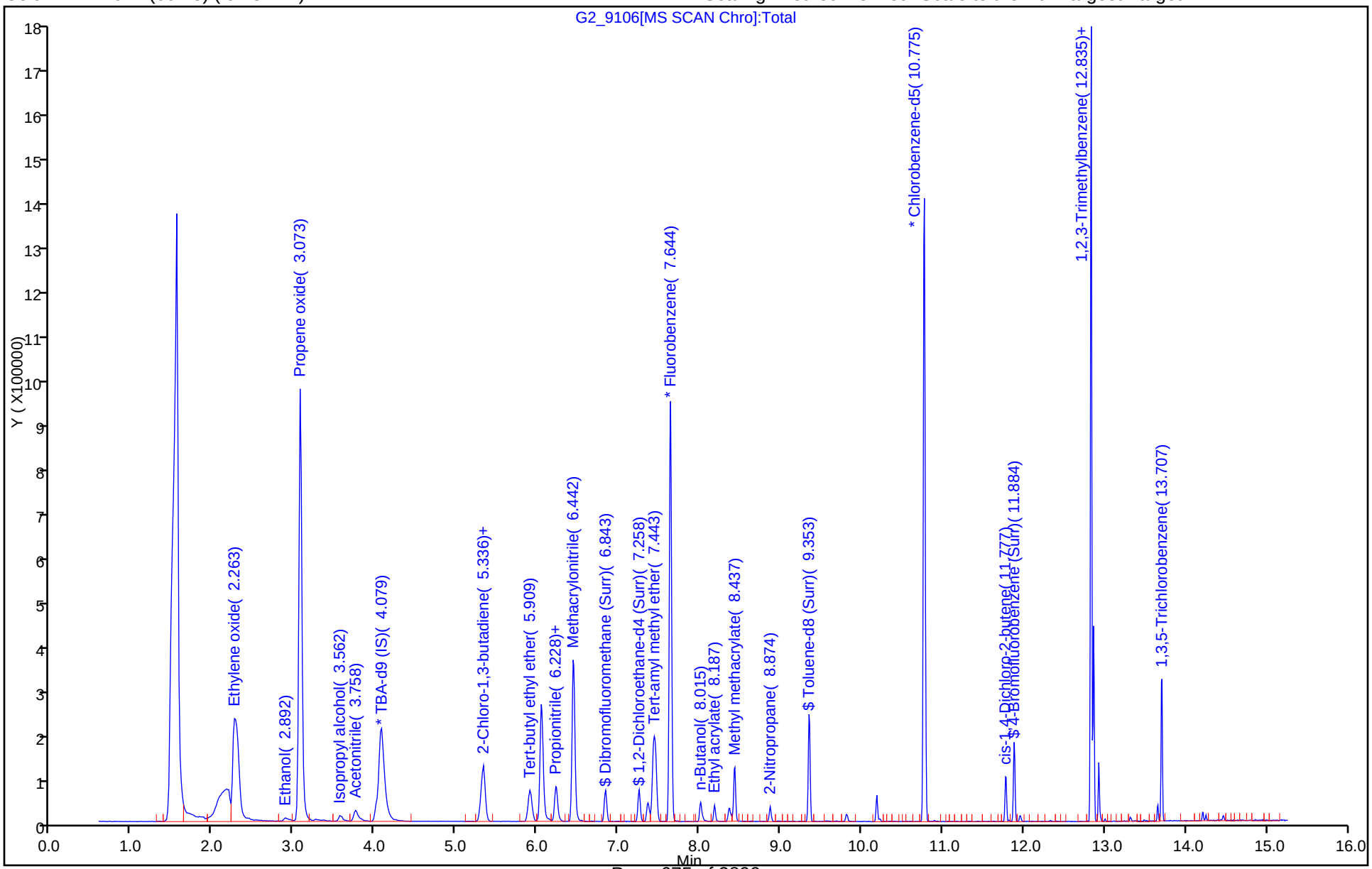
Report Date: 27-Apr-2017 16:50:05 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9106.D

Injection Date:	26-Apr-2017 22:25:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD010			Worklist Smp#:	23
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9107.D
Lims ID: STD020
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 26-Apr-2017 22:45:30 ALS Bottle#: 14 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD020
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub102

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2017 16:50:06 Calib Date: 26-Apr-2017 23:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: dukesa Date: 26-Apr-2017 23:50:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	94	491112	1000.0	1000.0	
* 3 Fluorobenzene	96	7.644	7.644	0.000	99	863229	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.775	10.775	0.000	87	220901	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	94	351972	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.836	6.836	0.000	93	100882	20.0	19.7	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.250	7.258	-0.008	98	117949	20.0	19.6	
$ 10 Toluene-d8 (Surr)	98	9.353	9.353	0.000	93	348590	20.0	19.5	
$ 11 4-Bromofluorobenzene (Surr	95	11.884	11.884	0.000	94	124341	20.0	19.5	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.249	2.263	-0.014	100	384826	2000.0	1856.0	
42 Ethanol	45	2.892	2.892	0.000	97	41345	800.0	731.7	
47 Propene oxide	58	3.073	3.073	0.000	96	2114174	2000.0	2003.3	
51 Isopropyl alcohol	45	3.562	3.576	-0.014	93	57099	200.0	177.0	
54 Acetonitrile	41	3.744	3.814	-0.070	97	112546	200.0	191.9	
68 2-Chloro-1,3-butadiene	53	5.336	5.322	0.014	92	136212	20.0	17.2	
66 Isopropyl ether	87	5.322	5.322	0.000	87	65060	20.0	16.7	
69 Tert-butyl ethyl ether	59	5.908	5.908	0.000	94	195271	20.0	15.1	
70 Ethyl acetate	43	6.228	6.142	0.086	99	141346	40.0	37.4	
73 Propionitrile	54	6.235	6.228	0.007	98	121445	200.0	192.4	
76 Methacrylonitrile	41	6.442	6.471	-0.029	91	485255	200.0	200.0	
86 Tert-amyl methyl ether	73	7.458	7.458	0.000	96	209044	20.0	16.6	
88 n-Butanol	56	8.015	8.015	0.000	93	51108	500.0	381.3	
16 Ethyl acrylate	55	8.187	8.187	0.000	99	77634	20.0	16.4	
91 Methyl methacrylate	100	8.430	8.437	-0.007	91	41080	40.0	34.1	
97 2-Nitropropane	41	8.873	8.873	0.000	99	41285	40.0	34.7	
120 cis-1,4-Dichloro-2-butene	53	11.784	11.784	0.000	91	52773	40.0	34.0	
135 1,2,3-Trimethylbenzene	105	12.863	12.863	0.000	98	395414	20.0	19.0	
140 1,3,5-Trichlorobenzene	180	13.707	13.707	0.000	98	181305	20.0	17.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00023	Amount Added:	2.50	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.40	Units: uL

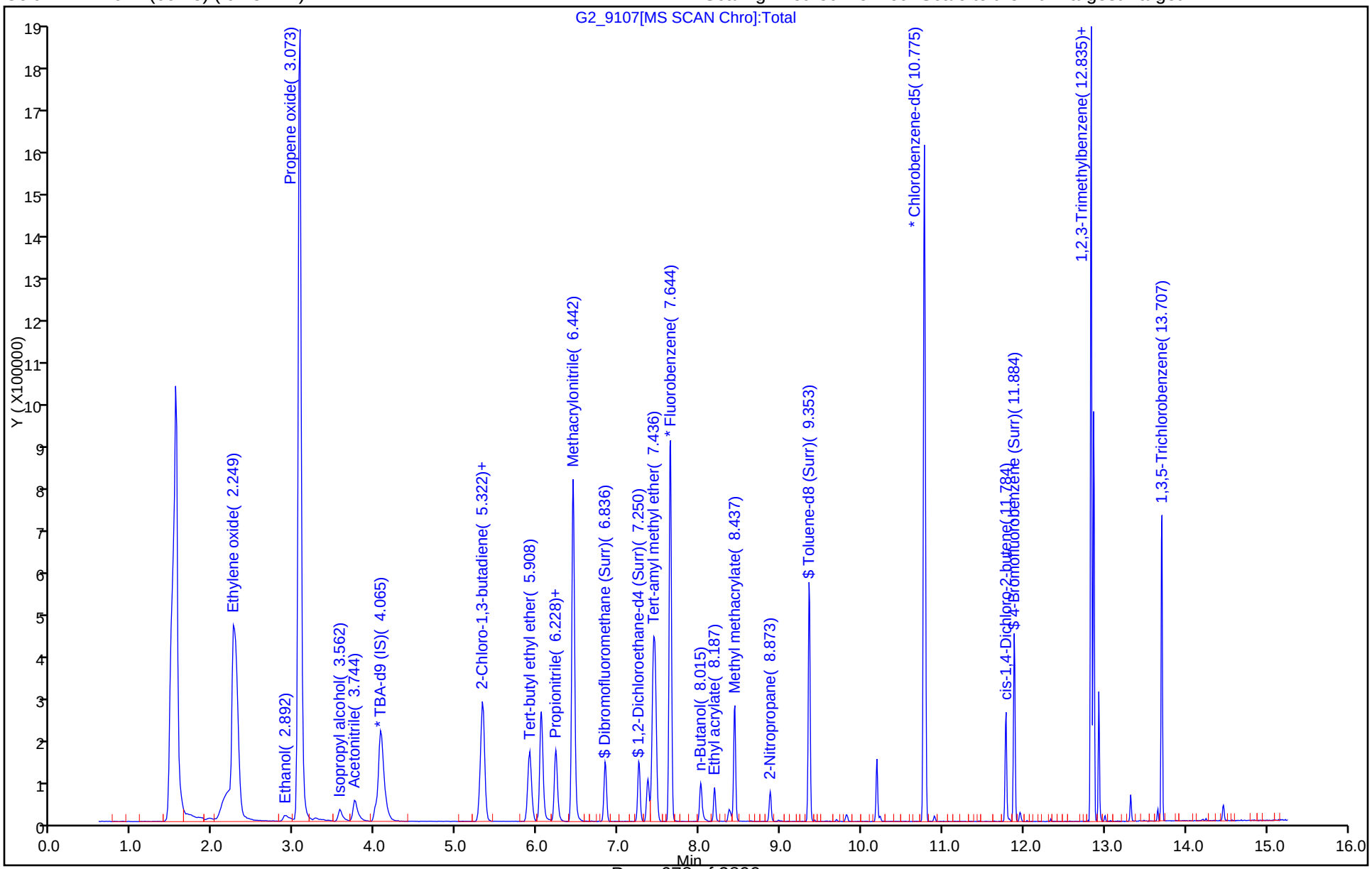
Report Date: 27-Apr-2017 16:50:06 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9107.D

Injection Date:	26-Apr-2017 22:45:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD020			Worklist Smp#:	24
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9108.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 26-Apr-2017 23:06:30 ALS Bottle#: 15 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub102

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2017 16:50:07 Calib Date: 26-Apr-2017 23:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: dukesa Date: 26-Apr-2017 23:57:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	94	464934	1000.0	1000.0	
* 3 Fluorobenzene	96	7.644	7.644	0.000	99	921971	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.775	10.775	0.000	88	237497	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	94	386534	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.836	6.836	0.000	94	285345	50.0	52.2	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.250	7.250	0.000	98	334208	50.0	51.9	
$ 10 Toluene-d8 (Surr)	98	9.352	9.352	0.000	93	1071370	50.0	55.6	
$ 11 4-Bromofluorobenzene (Surr	95	11.884	11.884	0.000	94	394437	50.0	52.9	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.263	2.263	0.000	100	1173254	5000.0	5298.1	
42 Ethanol	45	2.892	2.892	0.000	97	122781	2000.0	2113.6	
47 Propene oxide	58	3.073	3.073	0.000	96	6157641	5000.0	5463.0	
51 Isopropyl alcohol	45	3.562	3.562	0.000	95	172630	500.0	525.8	
54 Acetonitrile	41	3.744	3.744	0.000	100	329217	500.0	525.5	
66 Isopropyl ether	87	5.322	5.322	0.000	90	245024	50.0	49.7	
68 2-Chloro-1,3-butadiene	53	5.322	5.322	0.000	93	516999	50.0	52.9	
69 Tert-butyl ethyl ether	59	5.908	5.908	0.000	95	740026	50.0	48.9	
70 Ethyl acetate	43	6.221	6.221	0.000	99	449116	100.0	111.1	
73 Propionitrile	54	6.228	6.228	0.000	98	368245	500.0	546.2	
76 Methacrylonitrile	41	6.442	6.442	0.000	91	1526789	500.0	589.2	
86 Tert-amyl methyl ether	73	7.458	7.458	0.000	97	736869	50.0	51.0	
88 n-Butanol	56	8.015	8.015	0.000	89	199829	1250.0	1258.1	
16 Ethyl acrylate	55	8.187	8.187	0.000	100	288953	50.0	48.1	
91 Methyl methacrylate	100	8.430	8.430	0.000	91	146545	100.0	98.3	
97 2-Nitropropane	41	8.873	8.873	0.000	99	140567	100.0	99.0	
120 cis-1,4-Dichloro-2-butene	53	11.784	11.784	0.000	91	199872	100.0	102.1	
135 1,2,3-Trimethylbenzene	105	12.863	12.863	0.000	98	1334271	50.0	55.0	
140 1,3,5-Trichlorobenzene	180	13.707	13.707	0.000	98	656131	50.0	58.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00023	Amount Added:	6.25	Units: uL
MV-ARCH SS A_00081	Amount Added:	1.00	Units: uL

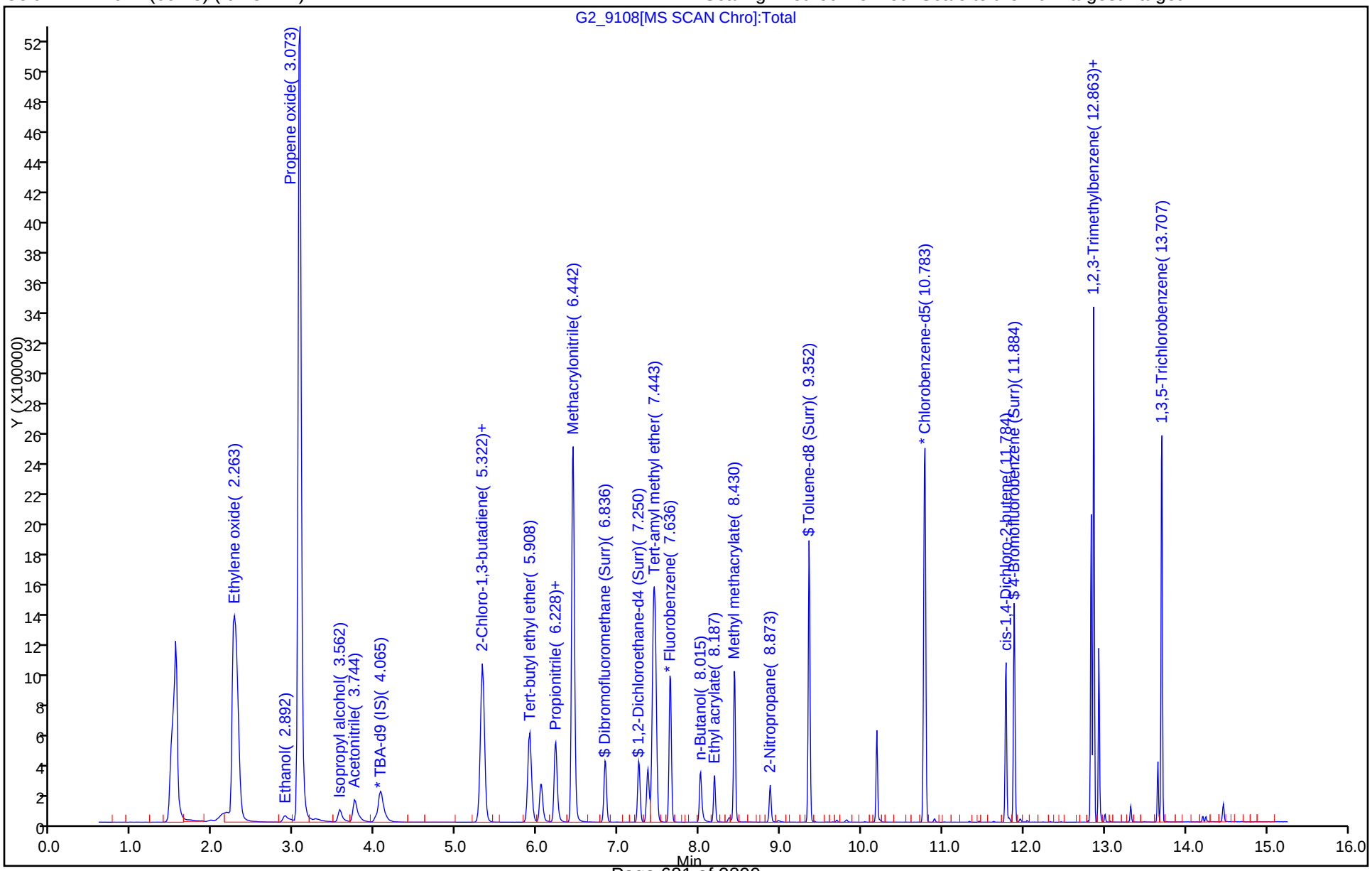
Report Date: 27-Apr-2017 16:50:08 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9108.D

Injection Date:	26-Apr-2017 23:06:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	ICIS			Worklist Smp#:	25
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9109.D
Lims ID: STD100
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 26-Apr-2017 23:27:30 ALS Bottle#: 16 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD100
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub102

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2017 16:50:09 Calib Date: 26-Apr-2017 23:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: dukesa Date: 26-Apr-2017 23:57:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.065	0.014	95	544220	1000.0	1000.0	
* 3 Fluorobenzene	96	7.644	7.644	0.000	99	975268	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.775	10.775	0.000	87	260168	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	93	432323	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.843	6.836	0.007	94	591609	100.0	102.2	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.258	7.250	0.008	98	699623	100.0	102.7	
$ 10 Toluene-d8 (Surr)	98	9.353	9.352	0.001	93	2375251	100.0	112.6	
$ 11 4-Bromofluorobenzene (Surr	95	11.884	11.884	0.000	94	886909	100.0	104.5	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.277	2.263	0.014	100	2393394	10000	10217	
42 Ethanol	45	2.892	2.892	0.000	99	283622	4000.0	4088.4	
47 Propene oxide	58	3.073	3.073	0.000	96	12248551	10000	10273	
51 Isopropyl alcohol	45	3.576	3.562	0.014	96	406709	1000.0	1040.2	
54 Acetonitrile	41	3.758	3.744	0.014	99	734663	1000.0	1108.5	
68 2-Chloro-1,3-butadiene	53	5.336	5.322	0.014	92	1086636	100.0	101.9	
66 Isopropyl ether	87	5.322	5.322	0.000	92	543678	100.0	100.3	
69 Tert-butyl ethyl ether	59	5.908	5.908	0.000	96	1648041	100.0	101.0	
70 Ethyl acetate	43	6.228	6.221	0.007	99	1010347	200.0	236.4	
73 Propionitrile	54	6.235	6.228	0.007	99	799862	1000.0	1121.5	
76 Methacrylonitrile	41	6.442	6.442	0.000	90	3228599	1000.0	1177.8	
86 Tert-amyl methyl ether	73	7.458	7.458	0.000	97	1559265	100.0	100.4	
88 n-Butanol	56	8.015	8.015	0.000	88	500903	2500.0	2578.9	
16 Ethyl acrylate	55	8.187	8.187	0.000	100	686227	100.0	103.4	
91 Methyl methacrylate	100	8.437	8.430	0.007	91	337342	200.0	205.9	
97 2-Nitropropane	41	8.873	8.873	0.000	98	319469	200.0	206.6	
120 cis-1,4-Dichloro-2-butene	53	11.784	11.784	0.000	91	475453	200.0	210.2	
135 1,2,3-Trimethylbenzene	105	12.863	12.863	0.000	98	2873226	100.0	104.4	
140 1,3,5-Trichlorobenzene	180	13.707	13.707	0.000	98	1374676	100.0	109.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00023	Amount Added:	12.50	Units: uL
MV-ARCH SS A_00081	Amount Added:	2.00	Units: uL

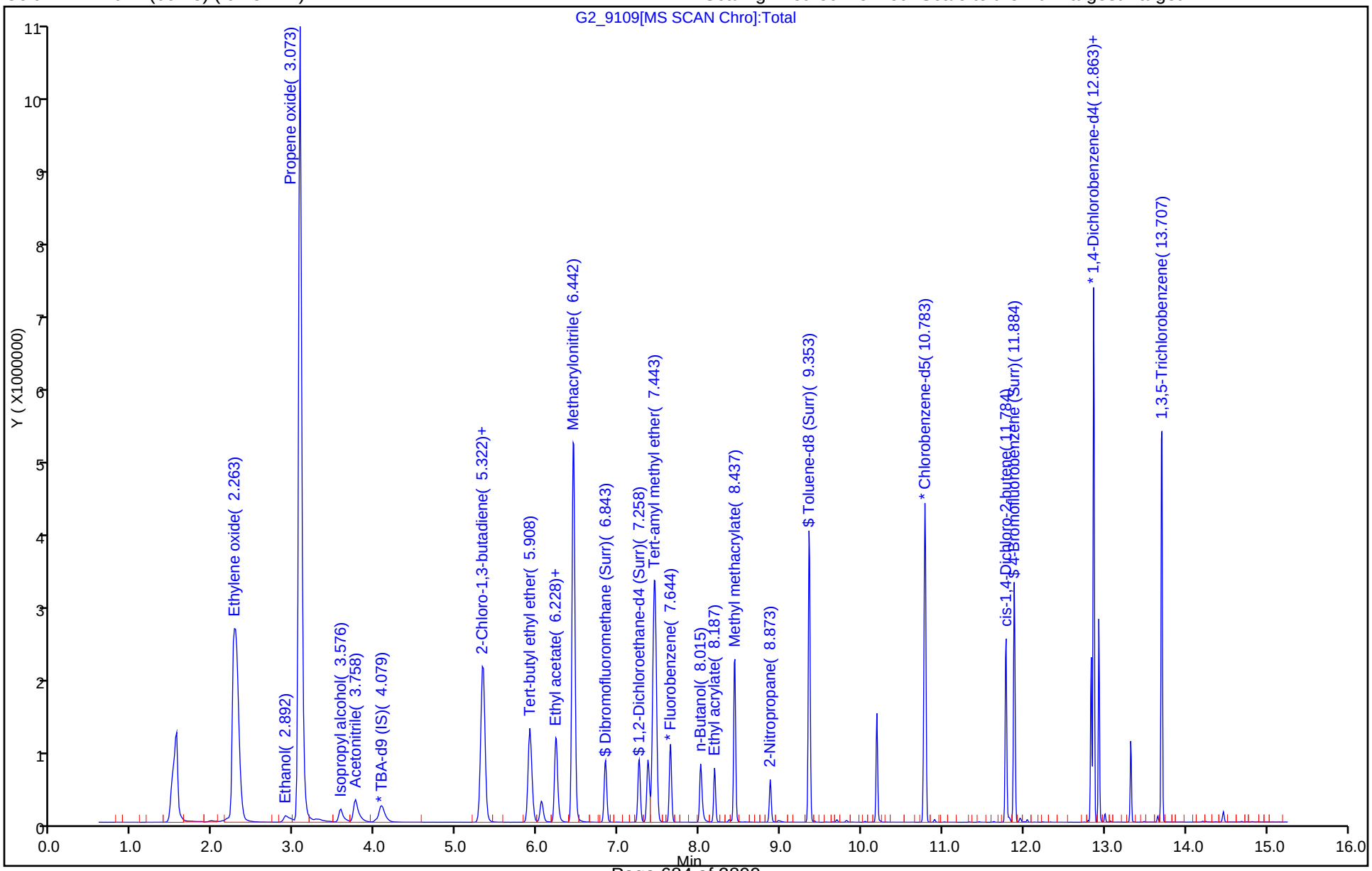
Report Date: 27-Apr-2017 16:50:09 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9109.D

Injection Date:	26-Apr-2017 23:27:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD100			Worklist Smp#:	26
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 26-Apr-2017 23:47:30 ALS Bottle#: 17 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub102

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2017 16:50:10 Calib Date: 26-Apr-2017 23:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: dukesa Date: 27-Apr-2017 00:12:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.065	0.014	96	563706	1000.0	1000.0	
* 3 Fluorobenzene	96	7.643	7.644	-0.001	99	1017607	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.775	10.775	0.000	87	273911	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	94	468623	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.843	6.836	0.007	94	1207841	200.0	200.0	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.257	7.250	0.007	98	1400342	200.0	197.1	
$ 10 Toluene-d8 (Surr)	98	9.352	9.352	0.000	93	4806099	200.0	216.4	
$ 11 4-Bromofluorobenzene (Surr	95	11.884	11.884	0.000	95	1804706	200.0	194.5	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.277	2.263	0.014	100	4781717	20000	19564	
42 Ethanol	45	2.906	2.892	0.014	99	573614	8000.0	7901.8	
47 Propene oxide	58	3.073	3.073	0.000	96	21779352	20000	17507	
51 Isopropyl alcohol	45	3.576	3.562	0.014	97	849140	2000.0	2078.5	
54 Acetonitrile	41	3.758	3.744	0.014	99	1481604	2000.0	2142.5	
66 Isopropyl ether	87	5.322	5.322	0.000	92	1170578	200.0	203.0	
68 2-Chloro-1,3-butadiene	53	5.336	5.322	0.014	92	2238320	200.0	198.1	
69 Tert-butyl ethyl ether	59	5.908	5.908	0.000	97	3556496	200.0	206.8	
70 Ethyl acetate	43	6.228	6.221	0.007	99	2002470	400.0	449.0	
73 Propionitrile	54	6.235	6.228	0.007	99	1595234	2000.0	2143.6	
76 Methacrylonitrile	41	6.449	6.442	0.007	90	6231562	2000.0	2178.7	
86 Tert-amyl methyl ether	73	7.465	7.458	0.007	95	3331592	200.0	203.7	
88 n-Butanol	56	8.015	8.015	0.000	88	1029447	5000.0	5017.3	
16 Ethyl acrylate	55	8.187	8.187	0.000	100	1421457	200.0	201.6	
91 Methyl methacrylate	100	8.437	8.430	0.007	90	697047	400.0	401.1	
97 2-Nitropropane	41	8.873	8.873	0.000	98	652312	400.0	399.2	
120 cis-1,4-Dichloro-2-butene	53	11.783	11.784	-0.001	90	979420	400.0	393.9	
135 1,2,3-Trimethylbenzene	105	12.863	12.863	0.000	98	5683286	200.0	189.2	
140 1,3,5-Trichlorobenzene	180	13.707	13.707	0.000	97	2792982	200.0	206.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00023	Amount Added:	25.00	Units: uL
MV-ARCH SS A_00081	Amount Added:	4.00	Units: uL

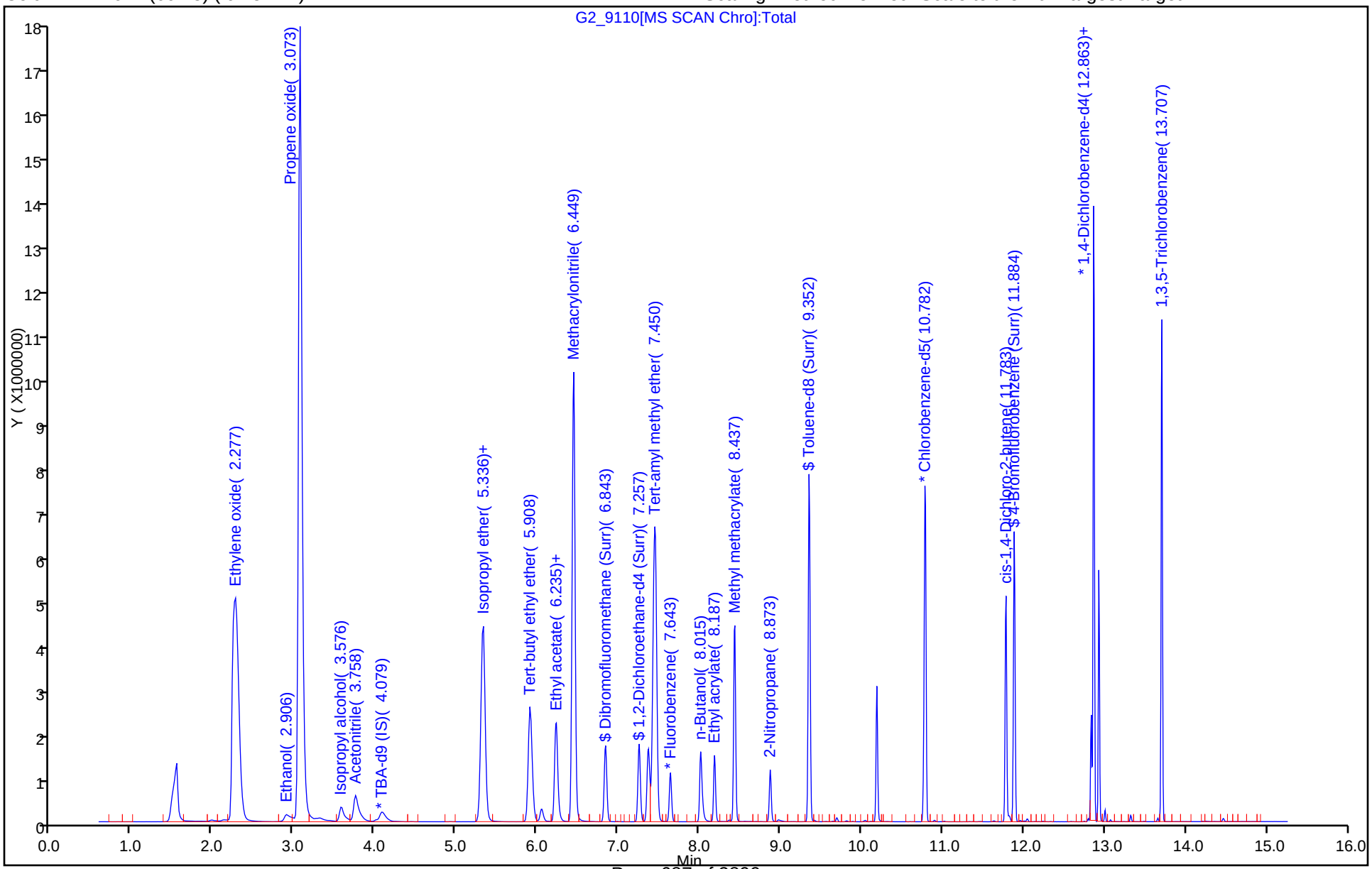
Report Date: 27-Apr-2017 16:50:10 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Injection Date:	26-Apr-2017 23:47:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD200			Worklist Smp#:	27
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 375537

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/30/2017 18:51 Calibration End Date: 05/30/2017 21:14 Calibration ID: 29340

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-375537/4	G2_0476.D
Level 2	STD002 280-375537/5	G2_0477.D
Level 3	STD005 280-375537/6	G2_0478.D
Level 4	STD010 280-375537/7	G2_0479.D
Level 5	STD020 280-375537/8	G2_0480.D
Level 6	ICIS 280-375537/9	G2_0481.D
Level 7	STD100 280-375537/10	G2_0482.D
Level 8	STD200 280-375537/11	G2_0483.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	+++++ 0.6568	+++++ 0.6243	0.4583 0.5627	0.4318	0.4752	Lin1	-0.962	0.5966							0.9920		0.9900
Chloromethane	+++++ 0.8812	0.8763 0.7730	0.8359 0.7444	0.7146	0.6794	Ave		0.7864			0.1000	10.1		15.0			
Vinyl chloride	0.9460 1.1074	1.0663 1.0615	0.9219 0.9484	0.8857	0.8726	Ave		0.9762				9.2		30.0			
Bromomethane	+++++ 0.9038	+++++ 0.7440	0.7682 +++++	0.7195	0.7397	Ave		0.7750				9.6		15.0			
Chloroethane	+++++ 0.4804	+++++ 0.4433	0.3798 0.4534	0.3656	0.3765	Lin1	-0.629	0.4568							0.9980		0.9900
Dichlorofluoromethane	+++++ 1.1481	+++++ 1.0605	0.8499 0.9963	0.9008	0.9480	Qua	-2.447	1.1884	-0.000904						1.0000		0.9900
Trichlorofluoromethane	+++++ 1.0193	0.8991 0.9346	0.7897 0.8776	0.7934	0.8238	Ave		0.8768				9.5		15.0			
Ethyl ether	+++++ 0.4617	0.4408 0.4484	0.3530 0.4284	0.3659	0.4171	Ave		0.4165				10.0		15.0			
Acrolein	0.0655 0.0841	0.0849 0.0834	0.0624 0.0792	0.0661	0.0746	Ave		0.0750				12.3		15.0			
1,1-Dichloroethene	+++++ 0.5211	0.5783 0.4991	0.4551 0.4849	0.4744	0.5093	Qua	-0.152	0.5225	-0.000186						1.0000		0.9900
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 0.5067	0.6513 0.4847	0.5208 0.4474	0.5176	0.4983	Ave		0.5181				12.3		15.0			
Acetone	+++++ 0.1866	+++++ 0.1724	0.2309 0.1564	0.1873	0.1798	Ave		0.1856				13.5		15.0			
Methyl iodide	2.1818 0.9644	1.6928 0.9249	1.0129 0.8830	0.9408	0.9517	Lin1	1.2815	0.8921							0.9990		0.9900
Carbon disulfide	2.8152 1.8829	2.9981 1.7882	1.9089 +++++	1.8559	1.8698	Qua	0.5942	1.9173	-0.001331						1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 375537

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/30/2017 18:51 Calibration End Date: 05/30/2017 21:14 Calibration ID: 29340

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Methyl acetate	+++++ 0.3823	+++++ 0.3687	0.3628 0.3466	0.3565	0.3816	Ave		0.3664				3.8		15.0			
3-Chloro-1-propene	+++++ 0.9022	0.9443 0.8728	0.6889 0.8339	0.7042	0.8332	Ave		0.8257				11.7		15.0			
Methylene Chloride	+++++ 0.5961	1.3555 0.5558	0.8399 0.5165	0.6952	0.6414	Lin2	1.6213	0.5379							0.9980		0.9900
t-Butyl alcohol	+++++ 0.0556	0.0542 0.0584	0.0516 0.0551	0.0533	0.0544	Ave		0.0547				3.9		15.0			
Acrylonitrile	0.1598 0.1831	0.1845 0.1763	0.1671 0.1682	0.1651	0.1767	Ave		0.1726				5.2		15.0			
trans-1,2-Dichloroethene	0.5161 0.5716	0.5717 0.5384	0.5059 0.5170	0.5378	0.5687	Ave		0.5409				5.0		15.0			
Methyl tert-butyl ether	+++++ 1.4975	1.1605 1.4725	1.1694 1.4150	1.2500	1.4127	Ave		1.3397				10.7		15.0			
Hexane	+++++ 2.0228	+++++ 2.1090	1.2032 2.0840	1.4750	1.7422	Lin2	-4.777	2.0792							0.9970		0.9900
1,1-Dichloroethane	+++++ 1.0703	1.1995 1.0052	1.0332 0.9400	1.0128	1.0408	Ave		1.0431			0.1000	7.7		15.0			
Vinyl acetate	+++++ 0.9929	+++++ 1.0012	0.5445 0.9580	0.6180	0.7596	Lin2	-4.903	0.9697							0.9900		0.9900
cis-1,2-Dichloroethene	0.5323 0.6020	0.6092 0.5825	0.5370 0.5565	0.5561	0.5891	Ave		0.5706				5.1		15.0			
2,2-Dichloropropane	+++++ 0.8726	0.9067 0.8453	0.8008 0.8082	0.8261	0.8450	Ave		0.8435				4.4		15.0			
2-Butanone (MEK)	+++++ 0.2510	0.2603 0.2350	0.2321 0.2231	0.2237	0.2218	Ave		0.2353				6.4		15.0			
Bromochloromethane	+++++ 0.2879	0.2895 0.2750	0.2752 0.2632	0.2793	0.2758	Ave		0.2780				3.2		15.0			
sec-Butyl Alcohol	+++++ 0.0370	+++++ 0.0411	0.0261 0.0415	0.0273	0.0309	Lin1	-1.766	0.0415							0.9980		0.9900
Tetrahydrofuran	+++++ 0.1545	+++++ 0.1553	0.1075 0.1488	0.1192	0.1348	Ave		0.1367				14.5		15.0			
Chloroform	1.1432 1.0907	1.2803 0.9935	1.0994 0.9280	1.0503	1.1001	Ave		1.0857				9.6		30.0			
1,1,1-Trichloroethane	0.9607 0.9658	1.0997 0.9161	0.9428 0.8344	0.9471	0.9783	Ave		0.9556				7.7		15.0			
Cyclohexane	+++++ 0.9162	+++++ 0.9246	0.5347 0.8905	0.6326	0.8107	Lin2	-2.098	0.9196							0.9960		0.9900
Carbon tetrachloride	+++++ 0.9098	1.0726 0.8566	0.9045 0.7884	0.8847	0.9164	Ave		0.9047				9.5		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 375537

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/30/2017 18:51 Calibration End Date: 05/30/2017 21:14 Calibration ID: 29340

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	+++++ 0.7744	0.5730 0.7609	0.5547 0.7339	0.6253	0.7168	Lin1	-0.575	0.7497							0.9990		0.9900
Benzene	1.8987 2.2114	2.0954 2.0695	1.9585 1.9868	2.0523	2.1627	Ave		2.0544				5.1		15.0			
1,2-Dichloroethane	+++++ 0.8883	1.0101 0.8103	0.9241 0.7361	0.8487	0.8950	Ave		0.8732				10.0		15.0			
Isobutyl alcohol	+++++ 0.0249	0.0263 0.0239	0.0232 0.0219	0.0241	0.0252	Ave		0.0242				6.0		15.0			
Trichloroethene	0.5225 0.5350	0.5034 0.5299	0.4624 0.5151	0.4767	0.5051	Ave		0.5063				5.0		15.0			
2-Pentanone	+++++ 0.4121	+++++ 0.4485	0.3438 0.4043	0.3439	0.3987	Ave		0.3919				10.5		15.0			
Methylcyclohexane	0.3947 0.8164	0.5254 0.7916	0.5836 0.7452	0.6418	0.7747	Lin2	-0.393	0.7518							0.9920		0.9900
1,2-Dichloropropane	+++++ 0.5630	0.5734 0.5377	0.5385 0.5135	0.5379	0.5602	Ave		0.5463				3.7		30.0			
1,4-Dioxane	+++++ 0.0049	+++++ 0.0050	0.0037 0.0051	0.0040	0.0043	Lin1	-0.185	0.0051							0.9990		0.9900
Dibromomethane	0.3011 0.3557	0.3933 0.3313	0.3659 0.3065	0.3440	0.3462	Ave		0.3430				8.9		15.0			
Bromodichloromethane	0.7024 0.7750	0.8856 0.7319	0.7357 0.6835	0.7250	0.7528	Ave		0.7490				8.3		15.0			
2-Chloroethyl vinyl ether	+++++ 0.1183	+++++ 0.1423	0.0573 0.1539	0.0593	0.0797	Lin1	-0.759	0.1505							0.9900		0.9900
cis-1,3-Dichloropropene	+++++ 2.0568	1.4969 2.1203	1.2921 2.0743	1.4419	1.6971	Lin1	-2.723	2.0842							0.9970		0.9900
4-Methyl-2-pentanone (MIBK)	+++++ 0.5279	+++++ 0.5011	0.2865 0.4703	0.3468	0.4138	Lin2	-4.634	0.4987							0.9930		0.9900
Toluene	+++++ 2.3075	1.7317 2.2174	1.7166 2.1111	2.0230	2.2059	Ave		2.0447				11.6		30.0			
trans-1,3-Dichloropropene	+++++ 0.8287	0.5507 0.8019	0.5483 0.7786	0.6018	0.6910	Lin1	-0.849	0.7932							0.9980		0.9900
Ethyl methacrylate	+++++ 1.4553	+++++ 1.5444	0.6294 1.5656	0.8162	1.1442	Lin1	-6.170	1.5884							0.9990		0.9900
1,1,2-Trichloroethane	0.4569 0.4621	0.4678 0.4332	0.4504 0.4092	0.4086	0.4409	Ave		0.4411				5.2		15.0			
Tetrachloroethene	+++++ 1.2637	1.2658 1.2330	1.1026 1.2090	1.2133	1.2567	Ave		1.2206				4.7		15.0			
1,3-Dichloropropane	1.6348 2.0585	1.7500 1.9709	1.6096 1.8937	1.7985	1.8598	Ave		1.8220				8.6		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 375537

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/30/2017 18:51 Calibration End Date: 05/30/2017 21:14 Calibration ID: 29340

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	+++++ 0.9326	+++++ 0.9097	0.4973 0.8653	0.6247	0.7619	Lin2	-8.831	0.9069							0.9950		0.9900
Dibromochloromethane	1.2430 1.4121	1.3518 1.3783	1.1561 1.3391	1.2783	1.3291	Ave		1.3110				6.3		15.0			
1,2-Dibromoethane	+++++ 1.1294	1.0118 1.1129	0.9358 1.0861	1.0053	1.0649	Ave		1.0495				6.5		15.0			
1-Chlorohexane	+++++ 1.7805	1.4243 1.8668	1.2926 1.9044	1.4535	1.5850	Lin1	-1.038	1.8777							0.9980		0.9900
Chlorobenzene	3.9537 3.9271	3.9639 3.7966	3.4361 3.6918	3.7185	3.8502	Ave		3.7923			0.3000	4.7		15.0			
1,1,1,2-Tetrachloroethane	1.4707 1.5151	1.6346 1.4775	1.3097 1.4271	1.4446	1.4346	Ave		1.4642				6.2		15.0			
Ethylbenzene	+++++ 2.0498	+++++ 2.0736	1.3933 2.0551	1.6713	1.8916	Ave		1.8558				14.7		30.0			
m&p-Xylene	+++++ 2.4463	1.2449 2.4682	1.4471 2.4259	1.9015	2.2192	Lin1	-3.458	2.4590							0.9990		0.9900
o-Xylene	+++++ 2.3635	1.2061 2.4004	1.1908 2.3854	1.5888	1.9853	Lin1	-4.147	2.3987							0.9970		0.9900
Styrene	+++++ 4.0711	1.8093 4.0745	1.9018 4.0050	2.9191	3.6450	Lin1	-6.854	4.0703							0.9980		0.9900
Bromoform	+++++ 0.9063	0.8768 0.9077	0.7483 0.9053	0.8238	0.8492	Ave		0.8596			0.1000	6.8		15.0			
Isopropylbenzene	+++++ 2.8799	+++++ 2.9379	1.3505 2.9888	1.8554	2.3188	Lin2	-8.689	2.9461							0.9950		0.9900
Cyclohexanone	+++++ 0.0437	0.0189 0.0431	0.0208 0.0422	0.0292	0.0344	Lin1	-3.076	0.0429							0.9970		0.9900
1,1,2,2-Tetrachloroethane	+++++ 0.6834	0.7014 0.6752	0.6256 0.6742	0.6247	0.6379	Ave		0.6603			0.3000	4.6		15.0			
Bromobenzene	+++++ 0.7952	0.6041 0.7938	0.5904 0.8086	0.6445	0.7084	Ave		0.7064				13.4		15.0			
trans-1,4-Dichloro-2-butene	+++++ 0.2190	+++++ 0.2190	0.1484 0.2143	0.1555	0.1853	Lin2	-0.392	0.2154							0.9940		0.9900
1,2,3-Trichloropropane	+++++ 0.2241	+++++ 0.2143	0.2002 0.2144	0.1963	0.2150	Ave		0.2107				4.9		15.0			
N-Propylbenzene	+++++ 0.8287	+++++ 0.8500	0.4743 0.8670	0.6164	0.7260	Lin2	-2.038	0.8578							0.9980		0.9900
2-Chlorotoluene	+++++ 0.7176	+++++ 0.7298	0.4408 0.7396	0.5721	0.6506	Lin2	-1.547	0.7410							1.0000		0.9900
1,3,5-Trimethylbenzene	+++++ 2.4902	+++++ 2.5118	1.3360 2.5243	1.9131	2.2182	Lin2	-6.243	2.5662							1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 375537

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/30/2017 18:51 Calibration End Date: 05/30/2017 21:14 Calibration ID: 29340

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Chlorotoluene	+++++ 0.7690	+++++ 0.7512	0.5148 0.7750	0.6624	0.7159	Lin1	-1.247	0.7781							1.0000		0.9900
tert-Butylbenzene	+++++ 2.1651	+++++ 2.2666	1.0940 2.3077	1.4334	1.8038	Lin2	-6.374	2.2541							0.9950		0.9900
1,2,4-Trimethylbenzene	+++++ 2.5907	+++++ 2.5878	1.3591 2.6108	1.9963	2.3576	Lin2	-6.579	2.6725							1.0000		0.9900
sec-Butylbenzene	+++++ 0.6945	+++++ 0.7116	0.3616 0.7402	0.5045	0.6017	Lin2	-1.919	0.7255							0.9980		0.9900
1,3-Dichlorobenzene	+++++ 1.5385	1.3082 1.5086	1.2210 1.5441	1.3374	1.4212	Ave		1.4113				8.9		15.0			
4-Isopropyltoluene	+++++ 2.9310	+++++ 2.9474	1.4838 2.9912	2.1210	2.5749	Lin2	-7.945	3.0180							0.9990		0.9900
1,4-Dichlorobenzene	1.6636 1.5655	1.6941 1.5278	1.4287 1.5333	1.4671	1.4848	Ave		1.5456				6.0		15.0			
n-Butylbenzene	+++++ 2.5458	+++++ 2.5989	1.3100 2.6202	1.7376	2.1886	Lin2	-7.028	2.6178							0.9970		0.9900
1,2-Dichlorobenzene	+++++ 1.4765	1.3729 1.4246	1.2400 1.4480	1.3479	1.3900	Ave		1.3857				5.6		15.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1310	0.1226 0.1381	0.1042 0.1459	0.1086	0.1157	Ave		0.1237				12.5		15.0			
1,2,4-Trichlorobenzene	+++++ 0.9441	+++++ 0.9544	0.5179 1.0055	0.5607	0.7331	Lin1	-3.423	1.0056							0.9980		0.9900
Hexachlorobutadiene	+++++ 0.6136	+++++ 0.6252	0.4215 0.6338	0.4552	0.5612	Lin2	-1.160	0.6262							0.9970		0.9900
Naphthalene	+++++ 1.9571	+++++ 1.9887	0.7290 1.9833	0.9008	1.4768	Lin1	-8.329	2.0404							0.9980		0.9900
1,2,3-Trichlorobenzene	+++++ 0.9109	+++++ 0.8672	0.4987 0.8595	0.5938	0.7845	Lin2	-2.124	0.8887							0.9950		0.9900
Dibromofluoromethane (Surr)	+++++ 0.5400	+++++ 0.5104	0.6292 0.4805	0.6256	0.6321	Ave		0.5696				11.9		15.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.7277	+++++ 0.6585	0.8870 0.6027	0.8482	0.8522	Lin1	2.1872	0.6224							0.9930		0.9900
Toluene-d8 (Surr)	+++++ 4.7496	+++++ 4.6644	4.2851 4.5295	5.0057	5.4322	Ave		4.7777				8.4		15.0			
4-Bromofluorobenzene (Surr)	+++++ 0.8265	+++++ 0.8108	0.7231 0.8205	0.8333	0.9037	Ave		0.8196				7.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 375537

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/30/2017 18:51 Calibration End Date: 05/30/2017 21:14 Calibration ID: 29340

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-375537/4	G2_0476.D
Level 2	STD002 280-375537/5	G2_0477.D
Level 3	STD005 280-375537/6	G2_0478.D
Level 4	STD010 280-375537/7	G2_0479.D
Level 5	STD020 280-375537/8	G2_0480.D
Level 6	ICIS 280-375537/9	G2_0481.D
Level 7	STD100 280-375537/10	G2_0482.D
Level 8	STD200 280-375537/11	G2_0483.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Lin1	+++++ 247859	+++++ 520269	13853 1047483	28770	62181	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Chloromethane	FB	Ave	+++++ 332554	9629 644220	25268 1385720	47609	88898	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Vinyl chloride	FB	Ave	5417 417916	11717 884703	27867 1765516	59007	114179	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromomethane	FB	Ave	+++++ 341068	+++++ 620059	23221 +++++	47936	96786	+++++ 50.0	+++++ 100	5.00 +++++	10.0	20.0
Chloroethane	FB	Lin1	+++++ 181289	+++++ 369426	11480 844022	24356	49261	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Dichlorofluoromethane	FB	Qua	+++++ 433283	+++++ 883808	25692 1854675	60012	124044	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Trichlorofluoromethane	FB	Ave	+++++ 384655	9880 778909	23871 1633792	52859	107789	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Ethyl ether	FB	Ave	+++++ 174240	4844 373708	10671 797459	24375	54583	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Acrolein	FB	Ave	3748 317263	9332 695062	18853 1473507	44017	97615	10.00 500	20.0 1000	50.0 2000	100.0	200
1,1-Dichloroethene	FB	Qua	+++++ 196661	6355 416002	13756 902621	31607	66642	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	+++++ 191212	7157 403969	15744 832940	34481	65200	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Acetone	FB	Ave	+++++ 281606	+++++ 574686	27918 1164563	49923	94116	+++++ 200	+++++ 400	20.0 800	40.0	80.0
Methyl iodide	FB	Lin1	12493 363935	18602 770824	30620 1643795	62679	124535	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Carbon disulfide	FB	Qua	16120 710586	32945 1490295	57706 +++++	123640	244671	1.00 50.0	2.00 100	5.00 +++++	10.0	20.0
Methyl acetate	FB	Ave	+++++ 721359	+++++ 1536263	54832 3225767	118745	249673	+++++ 250	+++++ 500	25.0 1000	50.0	100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 375537

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/30/2017 18:51 Calibration End Date: 05/30/2017 21:14 Calibration ID: 29340

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
3-Chloro-1-propene	FB	Ave	+++++ 340479	10377 727448	20824 1552449	46914	109022	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Methylene Chloride	FB	Lin2	+++++ 224946	14895 463204	25391 961573	46315	83931	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
t-Butyl alcohol	FB	Ave	+++++ 209803	5961 486879	15591 1026599	35497	71136	+++++ 500	20.0 1000	50.0 2000	100	200
Acrylonitrile	FB	Ave	9148 690953	20275 1469435	50505 3131041	109990	231213	10.0 500	20.0 1000	50.0 2000	100	200
trans-1,2-Dichloroethene	FB	Ave	2955 215693	6282 448737	15293 962391	35828	74411	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methyl tert-butyl ether	FB	Ave	+++++ 565138	12753 1227205	35350 2634131	83279	184849	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Hexane	CBNZ d5	Lin2	+++++ 313647	+++++ 706837	15314 1537776	39315	92452	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,1-Dichloroethane	FB	Ave	+++++ 403898	13181 837729	31234 1749977	67472	136196	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Vinyl acetate	FB	Lin2	+++++ 749436	+++++ 1668845	32920 3566826	82337	198778	+++++ 100	+++++ 200	10.0 400	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	3048 227195	6694 485470	16232 1035945	37048	77078	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2,2-Dichloropropane	FB	Ave	+++++ 329303	9964 704462	24207 1504495	55038	110573	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
2-Butanone (MEK)	FB	Ave	+++++ 378910	11443 783541	28068 1661435	59617	116110	+++++ 200	8.00 400	20.0 800	40.0	80.0
Bromochloromethane	FB	Ave	+++++ 108637	3181 229204	8318 490049	18607	36091	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
sec-Butyl Alcohol	FB	Lin1	+++++ 209168	+++++ 513993	11830 1159040	27235	60690	+++++ 750	+++++ 1500	75.0 3000	150	300
Tetrahydrofuran	FB	Ave	+++++ 116620	+++++ 258889	6498 554168	15882	35281	+++++ 100	+++++ 200	10.0 400	20.0	40.0
Chloroform	FB	Ave	6546 411614	14069 827981	33234 1727587	69973	143955	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	5501 364488	12084 763540	28501 1553334	63099	128017	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Cyclohexane	FB	Lin2	+++++ 345769	+++++ 770601	16163 1657824	42144	106086	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Carbon tetrachloride	FB	Ave	+++++ 343336	11786 713901	27344 1467773	58939	119913	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,1-Dichloropropene	FB	Lin1	+++++ 292258	6297 634130	16767 1366279	41661	93788	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Benzene	FB	Ave	10872 834524	23026 1724788	59203 3698654	136726	282996	1.00 50.0	2.00 100	5.00 200	10.0	20.0

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Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/30/2017 18:51 Calibration End Date: 05/30/2017 21:14 Calibration ID: 29340

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2-Dichloroethane	FB	Ave	+++++ 335216	11100 675366	27936 1370304	56543	117117	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Isobutyl alcohol	FB	Ave	+++++ 234727	7222 497438	17535 1017357	40099	82552	+++++ 1250	50.0 2500	125 5000	250	500
Trichloroethene	FB	Ave	2992 201906	5532 441592	13978 958894	31756	66098	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Pentanone	FB	Ave	+++++ 311071	+++++ 747585	20786 1505387	45827	104335	+++++ 100	+++++ 200	10.0 400	20.0	40.0
Methylcyclohexane	FB	Lin2	2260 308087	5774 659725	17643 1387282	42757	101371	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloropropane	FB	Ave	+++++ 212483	6301 448148	16278 956014	35836	73309	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,4-Dioxane	FB	Lin1	+++++ 36926	+++++ 83776	2264 188325	5288	11177	+++++ 1000	+++++ 2000	100 4000	200	400
Dibromomethane	FB	Ave	1724 134230	4322 276152	11060 570498	22918	45296	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromodichloromethane	FB	Ave	4022 292475	9732 610011	22241 1272445	48302	98504	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Chloroethyl vinyl ether	FB	Lin1	+++++ 44645	+++++ 118573	1731 286445	3953	10423	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
cis-1,3-Dichloropropene	CBNZ d5	Lin1	+++++ 318921	6819 710607	16446 1530570	38433	90061	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Lin2	+++++ 796807	+++++ 1670558	34640 3502395	92418	216609	+++++ 200	+++++ 400	20.0 800	40.0	80.0
Toluene	FB	Ave	+++++ 870811	19029 1848027	51891 3929984	134772	288644	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,3-Dichloropropene	FB	Lin1	+++++ 312724	6051 668356	16576 1449358	40091	90424	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Ethyl methacrylate	CBNZ d5	Lin1	+++++ 225660	+++++ 517601	8011 1155252	21755	60719	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,1,2-Trichloroethane	FB	Ave	2616 174377	5140 361022	13614 761750	27221	57687	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Tetrachloroethene	CBNZ d5	Ave	+++++ 195947	5766 413250	14034 892119	32340	66688	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,3-Dichloropropane	CBNZ d5	Ave	3814 319182	7972 660549	20486 1397342	47936	98693	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Hexanone	CBNZ d5	Lin2	+++++ 578438	+++++ 1219582	25319 2554073	66605	161736	+++++ 200	+++++ 400	20.0 800	40.0	80.0
Dibromochloromethane	CBNZ d5	Ave	2900 218959	6158 461923	14715 988108	34072	70533	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dibromoethane	CBNZ d5	Ave	+++++ 175127	4609 372999	11911 801427	26796	56510	+++++ 50.0	2.00 100	5.00 200	10.0	20.0

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Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 05/30/2017 18:51 Calibration End Date: 05/30/2017 21:14 Calibration ID: 29340

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1-Chlorohexane	CBNZ d5	Lin1	+++++ 138039	3244 312824	8226 702616	19370	42056	+++++ 25.0	1.00 50.0	2.50 100	5.00	10.0
Chlorobenzene	CBNZ d5	Ave	9224 608931	18057 1272417	43734 2724118	99111	204318	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	3431 234925	7446 495169	16670 1053006	38503	76129	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	+++++ 317830	+++++ 694956	17734 1516450	44546	100380	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
m&p-Xylene	CBNZ d5	Lin1	+++++ 379313	5671 827224	18418 1790046	50682	117767	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
o-Xylene	CBNZ d5	Lin1	+++++ 366480	5494 804473	15156 1760130	42348	105355	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Styrene	CBNZ d5	Lin1	+++++ 631255	8242 1365561	24206 2955192	77804	193427	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Bromoform	CBNZ d5	Ave	+++++ 140521	3994 304217	9524 667994	21956	45065	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Isopropylbenzene	DCBd 4	Lin2	+++++ 1000655	+++++ 2179638	38119 4680695	115105	288955	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Cyclohexanone	CBNZ d5	Lin1	+++++ 271187	3441 578434	10580 1246674	31148	72918	+++++ 2000	80.0 4000	200 8000	400	800
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	+++++ 237446	6909 500929	17657 1055880	38757	79491	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Bromobenzene	DCBd 4	Ave	+++++ 276289	5951 588927	16663 1266402	39984	88279	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Lin2	+++++ 76080	+++++ 162516	4188 335582	9647	23093	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	+++++ 77853	+++++ 159020	5651 335706	12175	26791	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
N-Propylbenzene	DCBd 4	Lin2	+++++ 287944	+++++ 630658	13387 1357782	38239	90474	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
2-Chlorotoluene	DCBd 4	Lin2	+++++ 249321	+++++ 541464	12442 1158251	35490	81075	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,3,5-Trimethylbenzene	DCBd 4	Lin2	+++++ 865235	+++++ 1863543	37708 3953237	118682	276419	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
4-Chlorotoluene	DCBd 4	Lin1	+++++ 267200	+++++ 557358	14531 1213635	41097	89215	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
tert-Butylbenzene	DCBd 4	Lin2	+++++ 752262	+++++ 1681638	30878 3614056	88923	224780	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2,4-Trimethylbenzene	DCBd 4	Lin2	+++++ 900167	+++++ 1919905	38361 4088663	123845	293789	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
sec-Butylbenzene	DCBd 4	Lin2	+++++ 241310	+++++ 527936	10205 1159199	31297	74983	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0

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			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,3-Dichlorobenzene	DCBd 4	Ave	+++++ 534550	12887 1119219	34462 2418121	82968	177096	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
4-Isopropyltoluene	DCBd 4	Lin2	+++++ 1018381	+++++ 2186733	41881 4684394	131581	320866	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	7962 543955	16688 1133493	40325 2401312	91014	185030	1.00 50.0	2.00 100	5.00 200	10.0	20.0
n-Butylbenzene	DCBd 4	Lin2	+++++ 884539	+++++ 1928184	36974 4103408	107797	272729	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	+++++ 513031	13524 1056953	35000 2267636	83621	173216	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	+++++ 45511	1208 102438	2940 228447	6737	14418	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Lin1	+++++ 328022	+++++ 708113	14618 1574732	34785	91348	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Hexachlorobutadiene	DCBd 4	Lin2	+++++ 213204	+++++ 463858	11898 992525	28237	69935	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Naphthalene	DCBd 4	Lin1	+++++ 680003	+++++ 1475469	20577 3106055	55882	184033	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2,3-Trichlorobenzene	DCBd 4	Lin2	+++++ 316498	+++++ 643407	14077 1346073	36838	97761	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	+++++ 203776	+++++ 425414	19019 894575	41678	82712	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Lin1	+++++ 274617	+++++ 548819	26812 1121998	56511	111517	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	+++++ 736458	+++++ 1563255	54539 3342225	133421	288270	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	+++++ 287180	+++++ 601542	20409 1284902	51694	112613	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua = Quadratic ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0476.D
Lims ID: STD001
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 30-May-2017 18:51:30 ALS Bottle#: 12 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD001
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 31-May-2017 19:56:57 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: dukesa Date: 30-May-2017 19:49:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	93	301807	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	286306	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	116649	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	239298	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111		6.828				ND	ND	
$ 9 1,2-Dichloroethane-d4 (Sur	65		7.243				ND	ND	
$ 10 Toluene-d8 (Surr)	98		9.345				ND	ND	
$ 11 4-Bromofluorobenzene (Surr	95		11.869				ND	ND	
32 Dichlorodifluoromethane	85		1.705				ND	ND	
34 Chloromethane	50	1.830	1.830	0.000	98	7498	1.00	1.67	
37 Vinyl chloride	62	1.942	1.956	-0.014	91	5417	1.00	0.9691	
22 Butadiene	54		1.998				ND	ND	
39 Bromomethane	94	2.291	2.291	0.000	91	5417	1.00	1.22	
40 Chloroethane	64		2.403				ND	ND	
41 Dichlorofluoromethane	67	2.654	2.654	0.000	93	3249	1.00	2.54	
43 Trichlorofluoromethane	101	2.682	2.682	0.000	93	4221	1.00	0.8407	
45 Ethyl ether	59	3.003	3.003	0.000	95	1721	1.00	0.7217	
48 Acrolein	56	3.185	3.185	0.000	97	3748	10.0	8.73	
53 1,1-Dichloroethene	96	3.297	3.311	-0.014	89	2546	1.00	1.14	
52 1,1,2-Trichloro-1,2,2-trif	151	3.338	3.339	-0.001	82	2377	1.00	0.8012	
50 Acetone	43	3.352	3.353	-0.001	99	12467	4.00	11.7	
55 Iodomethane	142	3.492	3.492	0.000	98	12493	1.00	1.01	
58 Carbon disulfide	76	3.576	3.576	0.000	98	16120	1.00	1.16	
56 Methyl acetate	43	3.785	3.799	-0.014	97	11856	5.00	5.65	
57 3-Chloro-1-propene	41	3.799	3.799	0.000	56	5742	1.00	1.21	
60 Methylene Chloride	84	3.995	4.009	-0.014	94	11370	1.00	0.6772	
59 2-Methyl-2-propanol	59	4.218	4.204	0.014	91	1541	10.0	4.92	
61 Acrylonitrile	53	4.372	4.372	0.000	98	9148	10.0	9.26	
62 Methyl tert-butyl ether	73	4.414	4.428	-0.014	54	5395	1.00	0.7033	
63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	83	2955	1.00	0.9541	
64 Hexane	57	4.889	4.917	-0.028	1	1275	1.00	2.56	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 1,1-Dichloroethane	63		5.210				ND	ND	
65 Vinyl acetate	43	5.238	5.252	-0.014	91	6048	2.00	6.15	
74 cis-1,2-Dichloroethene	96	6.120	6.128	-0.008	78	3048	1.00	0.9329	
71 2-Butanone (MEK)	43		6.128				ND	ND	
75 2,2-Dichloropropane	77		6.135				ND	ND	
77 Chlorobromomethane	128	6.449	6.457	-0.008	84	1222	1.00	0.7677	
72 sec-Butyl Alcohol	45		6.457				ND	ND	
79 Tetrahydrofuran	42		6.464				ND	ND	
78 Chloroform	83	6.621	6.628	-0.007	89	6546	1.00	1.05	
81 1,1,1-Trichloroethane	97	6.800	6.814	-0.014	92	5501	1.00	1.01	
82 Cyclohexane	56		6.886				ND	ND	
84 Carbon tetrachloride	117	7.000	7.000	0.000	94	4609	1.00	0.8897	
83 1,1-Dichloropropene	75		7.014				ND	ND	
87 Benzene	78	7.250	7.257	-0.007	43	10872	1.00	0.9242	
85 1,2-Dichloroethane	62		7.343				ND	ND	
80 Isobutyl alcohol	41	7.651	7.651	0.000	30	3108	25.0	22.4	
35 n-Heptane	43		7.651				ND	ND	
89 Trichloroethene	95	8.037	8.044	-0.007	89	2992	1.00	1.03	
90 2-Pentanone	43		8.258				ND	ND	
93 Methylcyclohexane	55	8.294	8.294	0.000	80	2260	1.00	1.05	
92 1,2-Dichloropropane	63		8.330				ND	ND	
94 1,4-Dioxane	88		8.416				ND	ND	
95 Dibromomethane	93	8.423	8.423	0.000	95	1724	1.00	0.8778	
96 Dichlorobromomethane	83	8.616	8.623	-0.007	88	4022	1.00	0.9378	
98 2-Chloroethyl vinyl ether	63		8.938				ND	ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	ND	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	96	5358	4.00	11.2	
101 Toluene	91	9.410	9.410	0.000	94	13286	1.00	1.13	
103 trans-1,3-Dichloropropene	75		9.660				ND	ND	
102 Ethyl methacrylate	69	9.717	9.717	0.000	86	1099	1.00	4.18	
104 1,1,2-Trichloroethane	97	9.846	9.853	-0.007	83	2616	1.00	1.04	
107 Tetrachloroethene	164	9.910	9.917	-0.007	91	2187	1.00	0.7680	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	95	3814	1.00	0.8973	
105 2-Hexanone	43	10.067	10.060	0.007	93	3806	4.00	11.5	
108 Chlorodibromomethane	129	10.210	10.210	0.000	80	2900	1.00	0.9482	
110 Ethylene Dibromide	107	10.318	10.318	0.000	93	1926	1.00	0.7866	
111 1-Chlorohexane	91	10.768	10.775	-0.007	33	2200	0.5000	1.05	
112 Chlorobenzene	112	10.782	10.790	-0.008	96	9224	1.00	1.04	
113 1,1,1,2-Tetrachloroethane	131	10.868	10.875	-0.007	69	3431	1.00	1.00	
114 Ethylbenzene	106	10.882	10.883	-0.001	88	3112	1.00	0.7188	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	95	2718	1.00	1.88	
117 o-Xylene	106	11.362	11.362	0.000	92	2123	1.00	2.11	
116 Styrene	104	11.383	11.383	0.000	83	3283	1.00	2.03	
118 Bromoform	173		11.555				ND	ND	
119 Isopropylbenzene	105	11.705	11.705	0.000	91	6183	1.00	3.39	
121 Cyclohexanone	55	11.791	11.798	-0.007	67	1632	40.0	88.0	
125 Bromobenzene	156	12.005	11.998	0.007	88	3927	1.00	1.16	
122 1,1,2,2-Tetrachloroethane	83	11.991	11.998	-0.007	76	3717	1.00	1.18	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	ND	
124 1,2,3-Trichloropropane	110		12.048				ND	ND	
126 N-Propylbenzene	120		12.091				ND	ND	
128 2-Chlorotoluene	126	12.177	12.177	0.000	92	2227	1.00	2.72	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	90	5399	1.00	2.87	
129 4-Chlorotoluene	126	12.277	12.277	0.000	95	1952	1.00	2.13	
130 tert-Butylbenzene	119	12.506	12.506	0.000	91	4617	1.00	3.26	
131 1,2,4-Trimethylbenzene	105	12.548	12.549	-0.001	92	5202	1.00	2.87	
132 sec-Butylbenzene	134	12.677	12.677	0.000	91	1040	1.00	2.94	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	94	5787	1.00	0.8568	
133 4-Isopropyltoluene	119	12.784	12.785	-0.001	94	5270	1.00	3.00	
136 1,4-Dichlorobenzene	146	12.834	12.835	-0.001	94	7962	1.00	1.08	
137 n-Butylbenzene	91	13.063	13.063	0.000	95	6770	1.00	3.23	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	93	5689	1.00	0.8578	
139 1,2-Dibromo-3-Chloropropan	157		13.578				ND	ND	
141 1,2,4-Trichlorobenzene	180	14.107	14.107	0.000	87	2820	1.00	3.99	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	86	2231	1.00	2.60	
143 Naphthalene	128		14.300				ND	ND	
144 1,2,3-Trichlorobenzene	180	14.458	14.451	0.007	87	3025	1.00	3.10	
S 151 1,2-Dichloroethene, Total	96				0		2.00	1.89	
S 146 Xylenes, Total (URS)	1				0		2.00	3.99	
S 150 Xylenes, Total	106				0		2.00	3.99	
S 145 Trihalomethanes, Total	1				0		4.00	2.94	
S 149 1,2-Dichloroethene, Total	1				0		2.00	1.89	
S 147 Total BTEX	1				0			6.77	
S 148 1,3-Dichloropropene, Total	1				0		2.00	0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Main A_00030	Amount Added:	0.13	Units: uL
MV-Gas/Ket A_00060	Amount Added:	0.13	Units: uL
MV-2cleve+AVA_00025	Amount Added:	0.13	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.02	Units: uL

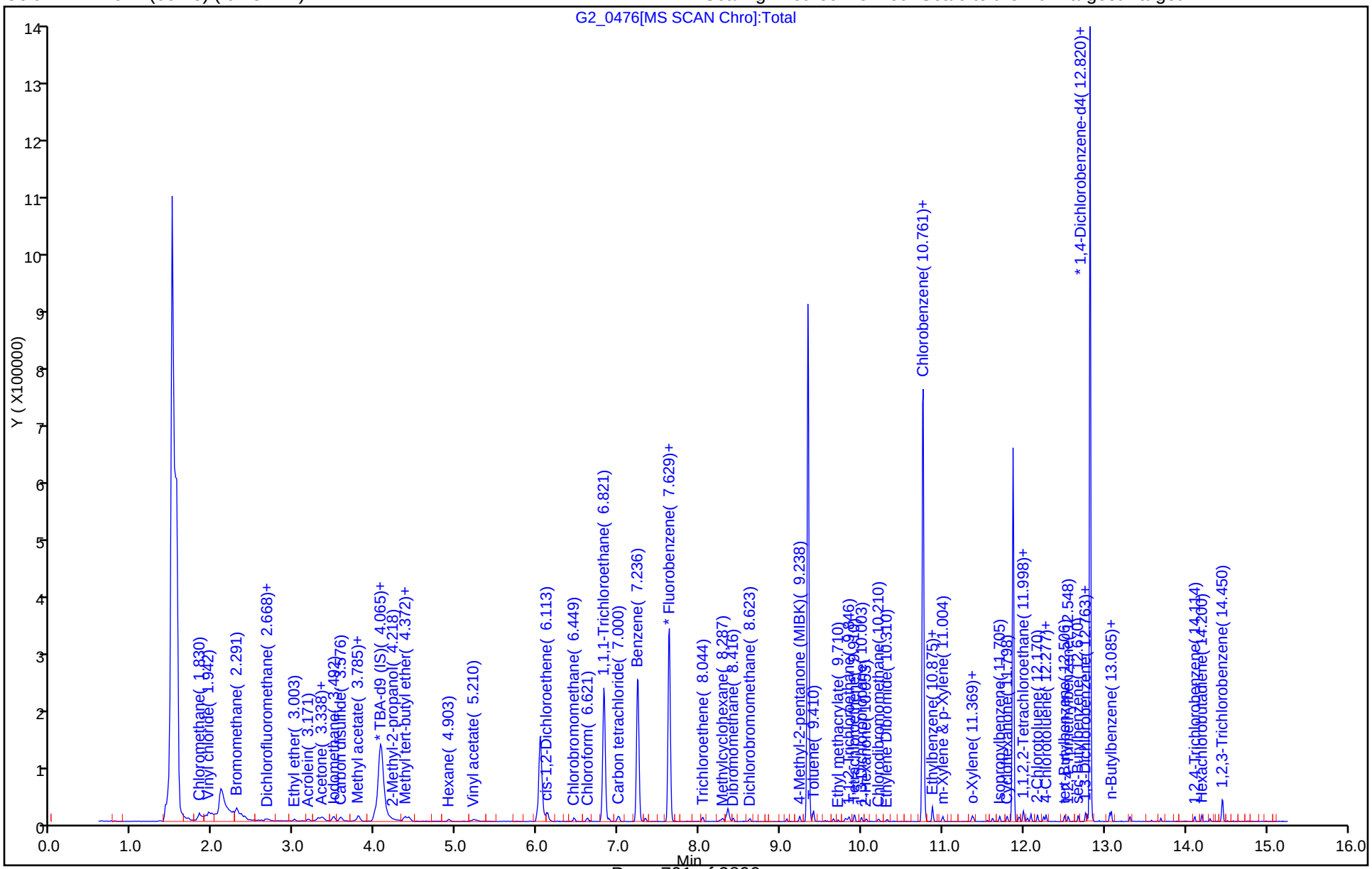
Report Date: 31-May-2017 19:57:00 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0476.D

Injection Date:	30-May-2017 18:51:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD001			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0477.D
Lims ID: STD002
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 30-May-2017 19:11:30 ALS Bottle#: 13 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD002
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 31-May-2017 19:57:16 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: dukesa Date: 30-May-2017 21:28:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.065	0.014	93	295031	1000.0	1000.0	
* 3 Fluorobenzene	96	7.636	7.629	0.007	98	274719	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	113883	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	246266	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.836	6.828	0.008	90	8348	2.00	2.67	
$ 9 1,2-Dichloroethane-d4 (Sur	65		7.243				ND	ND	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	20740	2.00	1.91	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	88	7517	2.00	1.86	
32 Dichlorodifluoromethane	85	1.705	1.705	0.000	93	5232	2.00	3.21	
34 Chloromethane	50	1.830	1.830	0.000	98	9629	2.00	2.23	
37 Vinyl chloride	62	1.956	1.956	0.000	96	11717	2.00	2.18	
22 Butadiene	54	1.998	1.998	0.000	38	1677	2.00	5.25	
39 Bromomethane	94	2.291	2.291	0.000	93	9738	2.00	2.29	
40 Chloroethane	64	2.417	2.403	0.014	96	6487	2.00	3.96	
41 Dichlorofluoromethane	67	2.654	2.654	0.000	96	12587	2.00	4.00	
43 Trichlorofluoromethane	101	2.682	2.682	0.000	94	9880	2.00	2.05	
45 Ethyl ether	59	3.017	3.003	0.014	89	4844	2.00	2.12	
48 Acrolein	56	3.185	3.185	0.000	96	9332	20.0	22.6	
53 1,1-Dichloroethene	96	3.311	3.311	0.000	93	6355	2.00	2.51	
52 1,1,2-Trichloro-1,2,2-trif	151	3.339	3.339	0.000	86	7157	2.00	2.51	
50 Acetone	43	3.367	3.353	0.014	99	16976	8.00	16.7	
55 Iodomethane	142	3.492	3.492	0.000	96	18602	2.00	2.36	
58 Carbon disulfide	76	3.590	3.576	0.014	100	32945	2.00	2.82	
57 3-Chloro-1-propene	41	3.814	3.799	0.015	85	10377	2.00	2.29	
56 Methyl acetate	43	3.800	3.799	0.001	97	28777	10.0	14.3	
60 Methylene Chloride	84	4.009	4.009	0.000	96	14895	2.00	2.03	
59 2-Methyl-2-propanol	59	4.205	4.204	0.001	91	5961	20.0	19.8	
61 Acrylonitrile	53	4.386	4.372	0.014	96	20275	20.0	21.4	
63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	93	6282	2.00	2.11	
62 Methyl tert-butyl ether	73	4.428	4.428	0.000	93	12753	2.00	1.73	
64 Hexane	57	4.931	4.917	0.014	85	5980	2.00	3.56	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 1,1-Dichloroethane	63	5.210	5.210	0.000	92	13181	2.00	2.30	
65 Vinyl acetate	43	5.252	5.252	0.000	91	12136	4.00	7.33	
71 2-Butanone (MEK)	43	6.135	6.128	0.007	94	11443	8.00	8.85	
74 cis-1,2-Dichloroethene	96	6.128	6.128	0.000	83	6694	2.00	2.14	
75 2,2-Dichloropropane	77	6.135	6.135	0.000	58	9964	2.00	2.15	
72 sec-Butyl Alcohol	45		6.457				ND	ND	
77 Chlorobromomethane	128	6.471	6.457	0.014	92	3181	2.00	2.08	
79 Tetrahydrofuran	42		6.464				ND	ND	
78 Chloroform	83	6.628	6.628	0.000	92	14069	2.00	2.36	
81 1,1,1-Trichloroethane	97	6.814	6.814	0.000	95	12084	2.00	2.30	
82 Cyclohexane	56	6.893	6.886	0.007	81	4943	2.00	3.26	
84 Carbon tetrachloride	117	7.007	7.000	0.007	94	11786	2.00	2.37	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	68	6297	2.00	2.30	
87 Benzene	78	7.258	7.257	0.001	96	23026	2.00	2.04	
85 1,2-Dichloroethane	62	7.336	7.343	-0.007	35	11100	2.00	2.31	a
35 n-Heptane	43	7.651	7.651	0.000	85	8360	2.00	1.86	
80 Isobutyl alcohol	41	7.651	7.651	0.000	80	7222	50.0	54.3	
89 Trichloroethene	95	8.044	8.044	0.000	93	5532	2.00	1.99	
90 2-Pentanone	43		8.258				ND	ND	
93 Methylcyclohexane	55	8.294	8.294	0.000	90	5774	2.00	1.92	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	86	6301	2.00	2.10	
94 1,4-Dioxane	88	8.423	8.416	0.007	1	698	40.0	61.3	M
95 Dibromomethane	93	8.423	8.423	0.000	93	4322	2.00	2.29	
96 Dichlorobromomethane	83	8.623	8.623	0.000	95	9732	2.00	2.36	
98 2-Chloroethyl vinyl ether	63		8.938				ND	ND	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	92	6819	2.00	2.74	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	96	11749	8.00	13.6	
101 Toluene	91	9.410	9.410	0.000	97	19029	2.00	1.69	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	93	6051	2.00	2.46	
102 Ethyl methacrylate	69	9.717	9.717	0.000	85	2736	2.00	4.64	
104 1,1,2-Trichloroethane	97	9.853	9.853	0.000	91	5140	2.00	2.12	
107 Tetrachloroethene	164	9.917	9.917	0.000	92	5766	2.00	2.07	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	92	7972	2.00	1.92	
105 2-Hexanone	43	10.060	10.060	0.000	97	8943	8.00	14.1	
108 Chlorodibromomethane	129	10.203	10.210	-0.007	87	6158	2.00	2.06	
110 Ethylene Dibromide	107	10.318	10.318	0.000	95	4609	2.00	1.93	
111 1-Chlorohexane	91	10.775	10.775	0.000	81	3244	1.00	1.31	
112 Chlorobenzene	112	10.783	10.790	-0.007	91	18057	2.00	2.09	
113 1,1,1,2-Tetrachloroethane	131	10.876	10.875	0.001	88	7446	2.00	2.23	
114 Ethylbenzene	106	10.876	10.883	-0.007	94	5670	2.00	1.34	
115 m-Xylene & p-Xylene	106	11.011	11.004	0.007	97	5671	2.00	2.42	
117 o-Xylene	106	11.362	11.362	0.000	94	5494	2.00	2.73	
116 Styrene	104	11.383	11.383	0.000	93	8242	2.00	2.57	
118 Bromoform	173	11.555	11.555	0.000	91	3994	2.00	2.04	
119 Isopropylbenzene	105	11.705	11.705	0.000	96	13445	2.00	3.88	
121 Cyclohexanone	55	11.798	11.798	0.000	87	3441	80.0	106.9	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	80	6909	2.00	2.12	
125 Bromobenzene	156	11.998	11.998	0.000	90	5951	2.00	1.71	
123 trans-1,4-Dichloro-2-buten	53	12.034	12.027	0.007	1	1144	2.00	2.90	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	85	2549	2.00	2.46	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	3662	2.00	3.24	
128 2-Chlorotoluene	126	12.170	12.177	-0.007	94	4163	2.00	3.23	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	90	11598	2.00	3.35	
129 4-Chlorotoluene	126	12.277	12.277	0.000	97	4630	2.00	2.81	
130 tert-Butylbenzene	119	12.506	12.506	0.000	93	9278	2.00	3.66	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	96	11728	2.00	3.35	
132 sec-Butylbenzene	134	12.677	12.677	0.000	94	2605	2.00	3.37	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	96	12887	2.00	1.85	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	95	12528	2.00	3.48	
136 1,4-Dichlorobenzene	146	12.835	12.835	0.000	92	16688	2.00	2.19	
137 n-Butylbenzene	91	13.063	13.063	0.000	97	13228	2.00	3.71	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	94	13524	2.00	1.98	
139 1,2-Dibromo-3-Chloropropan	157	13.578	13.578	0.000	79	1208	2.00	1.98	
141 1,2,4-Trichlorobenzene	180	14.107	14.107	0.000	90	6079	2.00	4.63	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	91	5471	2.00	3.63	
143 Naphthalene	128		14.300				ND	ND	
144 1,2,3-Trichlorobenzene	180	14.451	14.451	0.000	89	5627	2.00	3.68	
S 151 1,2-Dichloroethene, Total	96				0		4.00	4.25	
S 149 1,2-Dichloroethene, Total	1				0		4.00	4.25	
S 147 Total BTEX	1				0			10.2	
S 148 1,3-Dichloropropene, Total	1				0		4.00	5.20	
S 146 Xylenes, Total (URS)	1				0		4.00	5.15	
S 150 Xylenes, Total	106				0		4.00	5.15	
S 145 Trihalomethanes, Total	1				0		8.00	8.83	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Main A_00030	Amount Added:	0.25	Units: uL
MV-Gas/Ket A_00060	Amount Added:	0.25	Units: uL
MV-2cleve+AVA_00025	Amount Added:	0.25	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.04	Units: uL

Report Date: 31-May-2017 19:57:18 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0477.D

Injection Date: 30-May-2017 19:11:30 Instrument ID: VMS_G2 Operator ID: DUKESA

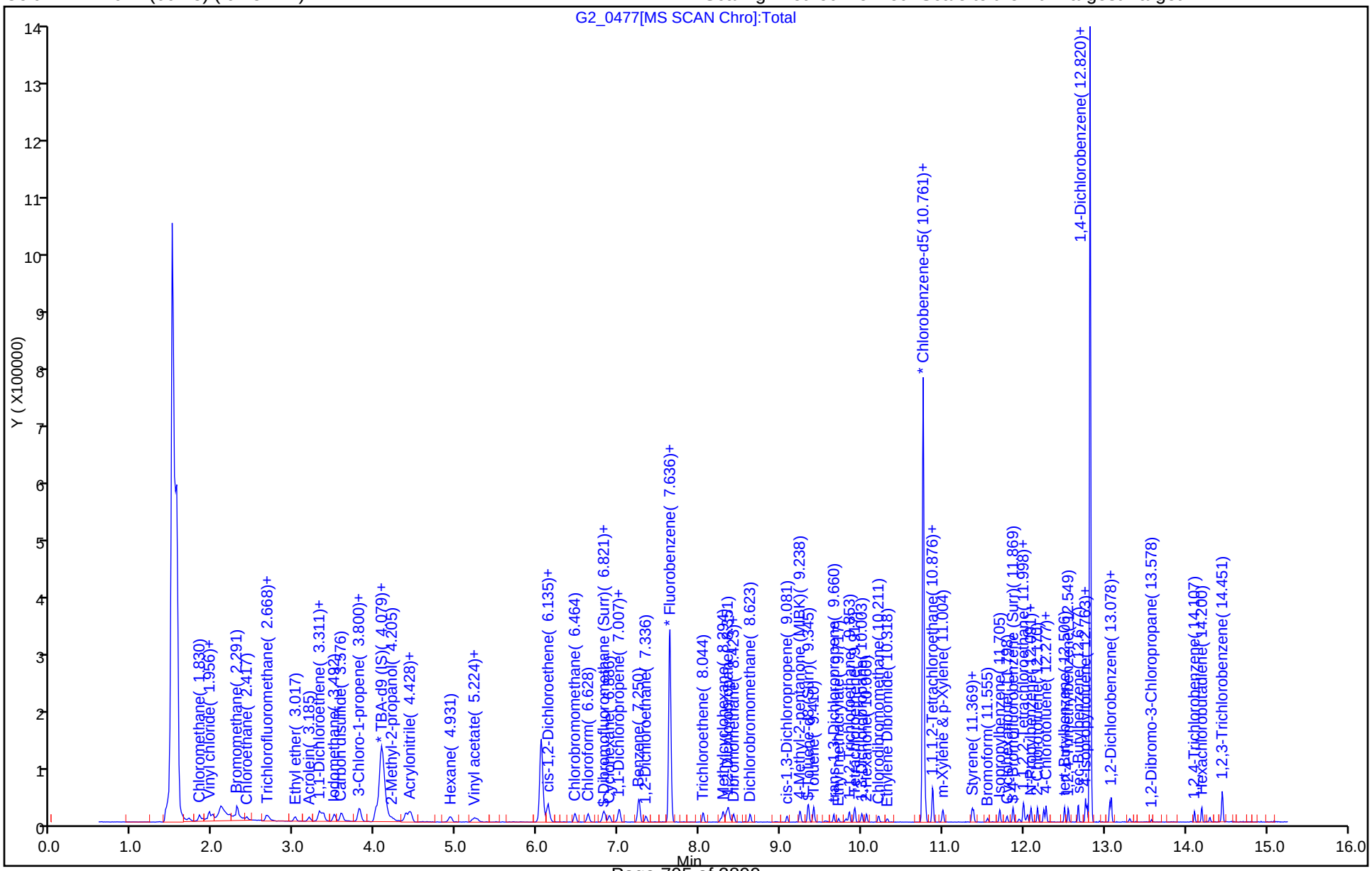
Lims ID: STD002 Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 13

Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Denver

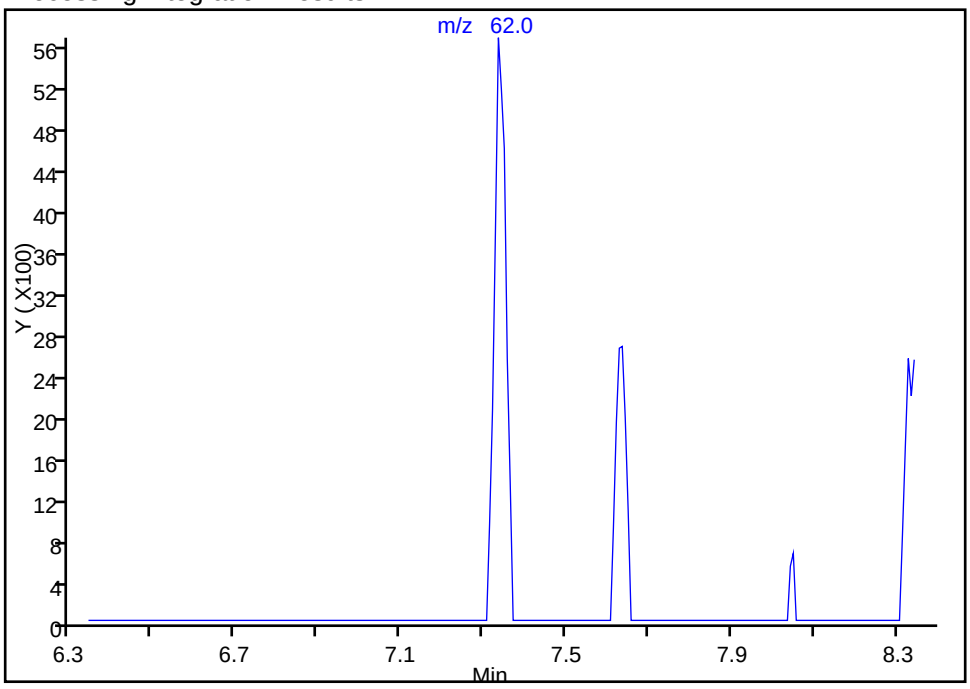
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Injection Date: 30-May-2017 19:11:30 Instrument ID: VMS_G2
Lims ID: STD002
Client ID:
Operator ID: DUKESA ALS Bottle#: 13 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

85 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

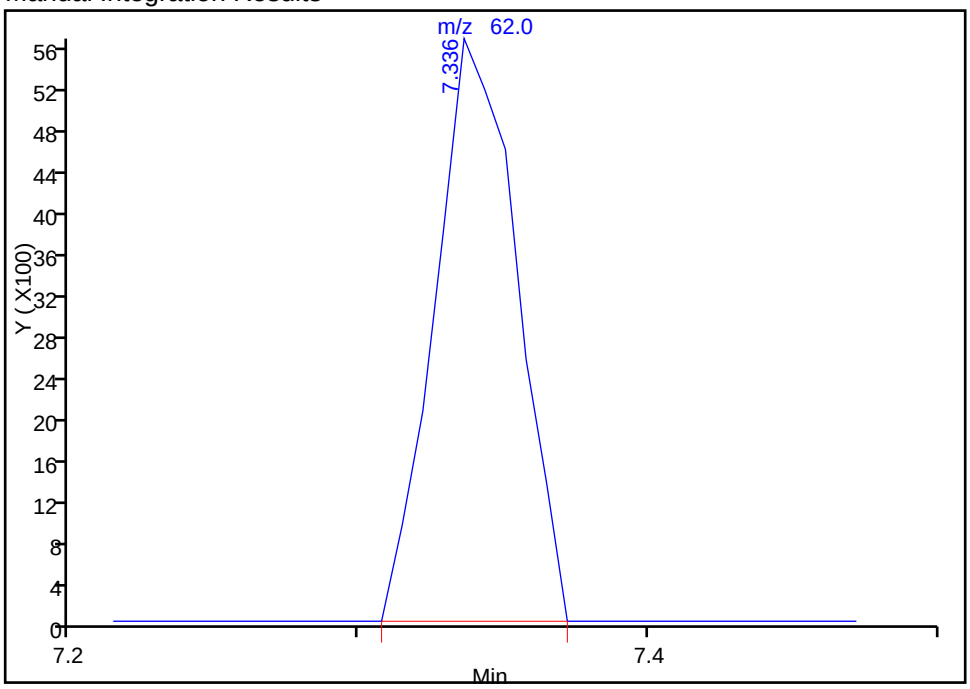
Not Detected
Expected RT: 7.34

Processing Integration Results



Manual Integration Results

RT: 7.34
Area: 11100
Amount: 2.313487
Amount Units: ug/l



Reviewer: dukesa, 30-May-2017 21:28:36
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

Manual Integration/User Assign Peak Report

TestAmerica Denver

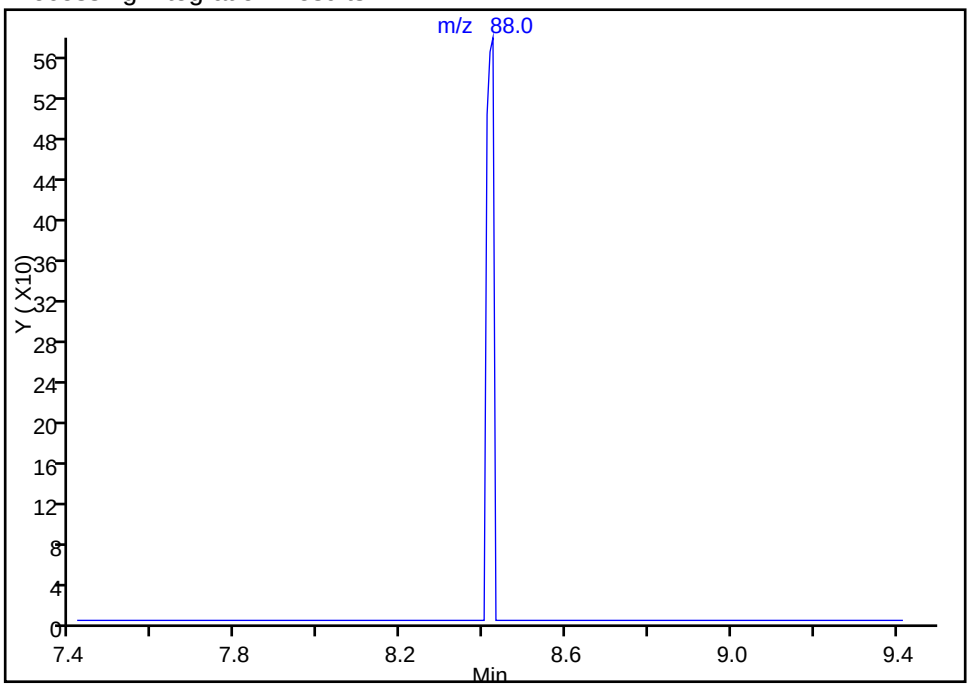
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Injection Date: 30-May-2017 19:11:30 Instrument ID: VMS_G2
Lims ID: STD002
Client ID:
Operator ID: DUKESA ALS Bottle#: 13 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

94 1,4-Dioxane, CAS: 123-91-1

Signal: 1

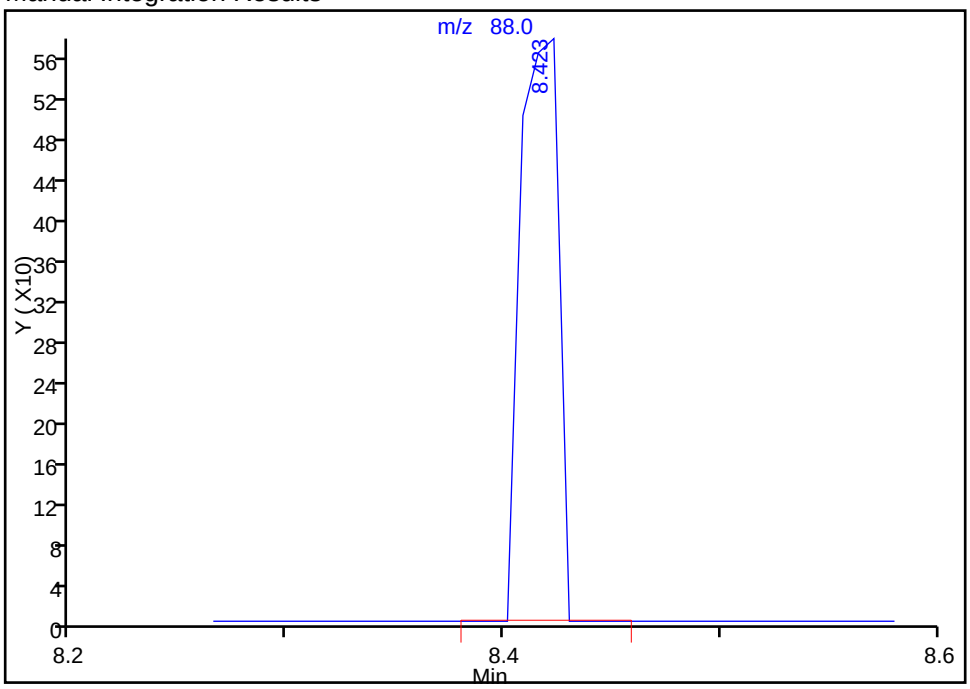
Not Detected
Expected RT: 8.42

Processing Integration Results



Manual Integration Results

RT: 8.42
Area: 698
Amount: 61.285957
Amount Units: ug/l



Reviewer: dukesa, 30-May-2017 21:29:17
Audit Action: Manually Integrated Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0478.D
Lims ID: STD005
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 30-May-2017 19:32:30 ALS Bottle#: 14 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD005
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 31-May-2017 19:57:28 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: dukesa Date: 30-May-2017 19:53:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.065	0.014	93	327934	1000.0	1000.0	
* 3 Fluorobenzene	96	7.636	7.629	0.007	98	302294	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	127277	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	282249	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.828	0.000	93	19019	5.00	5.52	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	95	26812	5.00	3.61	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	54539	5.00	4.48	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	89	20409	5.00	4.41	
32 Dichlorodifluoromethane	85	1.704	1.705	-0.001	97	13853	5.00	5.45	
34 Chloromethane	50	1.830	1.830	0.000	99	25268	5.00	5.31	
37 Vinyl chloride	62	1.956	1.956	0.000	98	27867	5.00	4.72	
22 Butadiene	54	1.998	1.998	0.000	79	5468	5.00	6.53	
39 Bromomethane	94	2.291	2.291	0.000	93	23221	5.00	4.96	
40 Chloroethane	64	2.417	2.403	0.014	97	11480	5.00	5.53	
41 Dichlorofluoromethane	67	2.654	2.654	0.000	96	25692	5.00	5.66	
43 Trichlorofluoromethane	101	2.682	2.682	0.000	96	23871	5.00	4.50	
45 Ethyl ether	59	3.017	3.003	0.014	87	10671	5.00	4.24	
48 Acrolein	56	3.185	3.185	0.000	98	18853	50.0	41.6	
53 1,1-Dichloroethene	96	3.311	3.311	0.000	93	13756	5.00	4.65	
52 1,1,2-Trichloro-1,2,2-trif	151	3.339	3.339	0.000	93	15744	5.00	5.03	
50 Acetone	43	3.366	3.353	0.013	99	27918	20.0	24.9	
55 Iodomethane	142	3.492	3.492	0.000	96	30620	5.00	4.24	
58 Carbon disulfide	76	3.590	3.576	0.014	100	57706	5.00	4.68	
56 Methyl acetate	43	3.799	3.799	0.000	97	54832	25.0	24.8	
57 3-Chloro-1-propene	41	3.813	3.799	0.014	77	20824	5.00	4.17	
60 Methylene Chloride	84	4.009	4.009	0.000	95	25391	5.00	4.79	
59 2-Methyl-2-propanol	59	4.204	4.204	0.000	91	15591	50.0	47.2	
61 Acrylonitrile	53	4.386	4.372	0.014	98	50505	50.0	48.4	
62 Methyl tert-butyl ether	73	4.442	4.428	0.014	95	35350	5.00	4.36	
63 trans-1,2-Dichloroethene	96	4.442	4.428	0.014	94	15293	5.00	4.68	
64 Hexane	57	4.917	4.917	0.000	83	15314	5.00	5.19	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 1,1-Dichloroethane	63	5.210	5.210	0.000	97	31234	5.00	4.95	
65 Vinyl acetate	43	5.252	5.252	0.000	96	32920	10.0	10.7	
74 cis-1,2-Dichloroethene	96	6.128	6.128	0.000	85	16232	5.00	4.71	
71 2-Butanone (MEK)	43	6.135	6.128	0.007	90	28068	20.0	19.7	
75 2,2-Dichloropropane	77	6.128	6.135	-0.007	60	24207	5.00	4.75	
77 Chlorobromomethane	128	6.464	6.457	0.007	92	8318	5.00	4.95	
72 sec-Butyl Alcohol	45	6.464	6.457	0.007	66	11830	75.0	89.6	
79 Tetrahydrofuran	42	6.471	6.464	0.007	65	6498	10.0	7.86	
78 Chloroform	83	6.628	6.628	0.000	95	33234	5.00	5.06	
81 1,1,1-Trichloroethane	97	6.814	6.814	0.000	97	28501	5.00	4.93	
82 Cyclohexane	56	6.893	6.886	0.007	89	16163	5.00	5.19	
84 Carbon tetrachloride	117	7.000	7.000	0.000	97	27344	5.00	5.00	
83 1,1-Dichloropropene	75	7.021	7.014	0.007	88	16767	5.00	4.47	
87 Benzene	78	7.257	7.257	0.000	98	59203	5.00	4.77	
85 1,2-Dichloroethane	62	7.343	7.343	0.000	98	27936	5.00	5.29	
80 Isobutyl alcohol	41	7.651	7.651	0.000	81	17535	125.0	119.8	
35 n-Heptane	43	7.651	7.651	0.000	89	21848	5.00	4.42	
89 Trichloroethene	95	8.044	8.044	0.000	95	13978	5.00	4.57	
90 2-Pentanone	43	8.258	8.258	0.000	97	20786	10.0	8.77	
93 Methylcyclohexane	55	8.294	8.294	0.000	90	17643	5.00	4.40	
92 1,2-Dichloropropane	63	8.337	8.330	0.007	86	16278	5.00	4.93	
94 1,4-Dioxane	88	8.423	8.416	0.007	35	2264	100.0	109.9	
95 Dibromomethane	93	8.423	8.423	0.000	96	11060	5.00	5.33	
96 Dichlorobromomethane	83	8.630	8.623	0.007	97	22241	5.00	4.91	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	80	1731	5.00	6.95	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	92	16446	5.00	4.41	
100 4-Methyl-2-pentanone (MIBK	43	9.245	9.238	0.007	97	34640	20.0	20.8	
101 Toluene	91	9.410	9.410	0.000	97	51891	5.00	4.20	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	97	16576	5.00	4.53	
102 Ethyl methacrylate	69	9.717	9.717	0.000	90	8011	5.00	5.87	
104 1,1,2-Trichloroethane	97	9.846	9.853	-0.007	95	13614	5.00	5.10	
107 Tetrachloroethene	164	9.917	9.917	0.000	94	14034	5.00	4.52	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	94	20486	5.00	4.42	
105 2-Hexanone	43	10.067	10.060	0.007	96	25319	20.0	20.7	
108 Chlorodibromomethane	129	10.210	10.210	0.000	88	14715	5.00	4.41	
110 Ethylene Dibromide	107	10.318	10.318	0.000	97	11911	5.00	4.46	
111 1-Chlorohexane	91	10.775	10.775	0.000	85	8226	2.50	2.27	
112 Chlorobenzene	112	10.790	10.790	0.000	91	43734	5.00	4.53	
113 1,1,1,2-Tetrachloroethane	131	10.875	10.875	0.000	88	16670	5.00	4.47	
114 Ethylbenzene	106	10.883	10.883	0.000	94	17734	5.00	3.75	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	98	18418	5.00	4.35	
117 o-Xylene	106	11.369	11.362	0.007	97	15156	5.00	4.21	
116 Styrene	104	11.383	11.383	0.000	97	24206	5.00	4.02	
118 Bromoform	173	11.555	11.555	0.000	93	9524	5.00	4.35	
119 Isopropylbenzene	105	11.705	11.705	0.000	97	38119	5.00	5.24	
121 Cyclohexanone	55	11.798	11.798	0.000	92	10580	200.0	168.5	
125 Bromobenzene	156	12.005	11.998	0.007	93	16663	5.00	4.18	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	83	17657	5.00	4.74	
123 trans-1,4-Dichloro-2-buten	53	12.027	12.027	0.000	67	4188	5.00	5.27	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	87	5651	5.00	4.75	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	13387	5.00	5.14	
128 2-Chlorotoluene	126	12.177	12.177	0.000	95	12442	5.00	5.06	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	93	37708	5.00	5.04	
129 4-Chlorotoluene	126	12.277	12.277	0.000	98	14531	5.00	4.91	
130 tert-Butylbenzene	119	12.506	12.506	0.000	93	30878	5.00	5.25	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	97	38361	5.00	5.00	
132 sec-Butylbenzene	134	12.677	12.677	0.000	96	10205	5.00	5.14	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	97	34462	5.00	4.33	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	41881	5.00	5.09	
136 1,4-Dichlorobenzene	146	12.835	12.835	0.000	94	40325	5.00	4.62	
137 n-Butylbenzene	91	13.063	13.063	0.000	96	36974	5.00	5.19	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	96	35000	5.00	4.47	
139 1,2-Dibromo-3-Chloropropan	157	13.578	13.578	0.000	79	2940	5.00	4.21	
141 1,2,4-Trichlorobenzene	180	14.107	14.107	0.000	92	14618	5.00	5.98	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	95	11898	5.00	5.22	
143 Naphthalene	128	14.300	14.300	0.000	96	20577	5.00	5.87	
144 1,2,3-Trichlorobenzene	180	14.451	14.451	0.000	93	14077	5.00	5.20	
S 151 1,2-Dichloroethene, Total	96				0		10.0	9.38	
S 146 Xylenes, Total (URS)	1				0		10.0	8.56	
S 150 Xylenes, Total	106				0		10.0	8.56	
S 145 Trihalomethanes, Total	1				0		20.0	18.7	
S 149 1,2-Dichloroethene, Total	1				0		10.0	9.38	
S 147 Total BTEX	1				0			21.3	
S 148 1,3-Dichloropropene, Total	1				0		10.0	8.93	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Main A_00030	Amount Added:	0.63	Units: uL
MV-Gas/Ket A_00060	Amount Added:	0.63	Units: uL
MV-2cleve+AVA_00025	Amount Added:	0.63	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.10	Units: uL

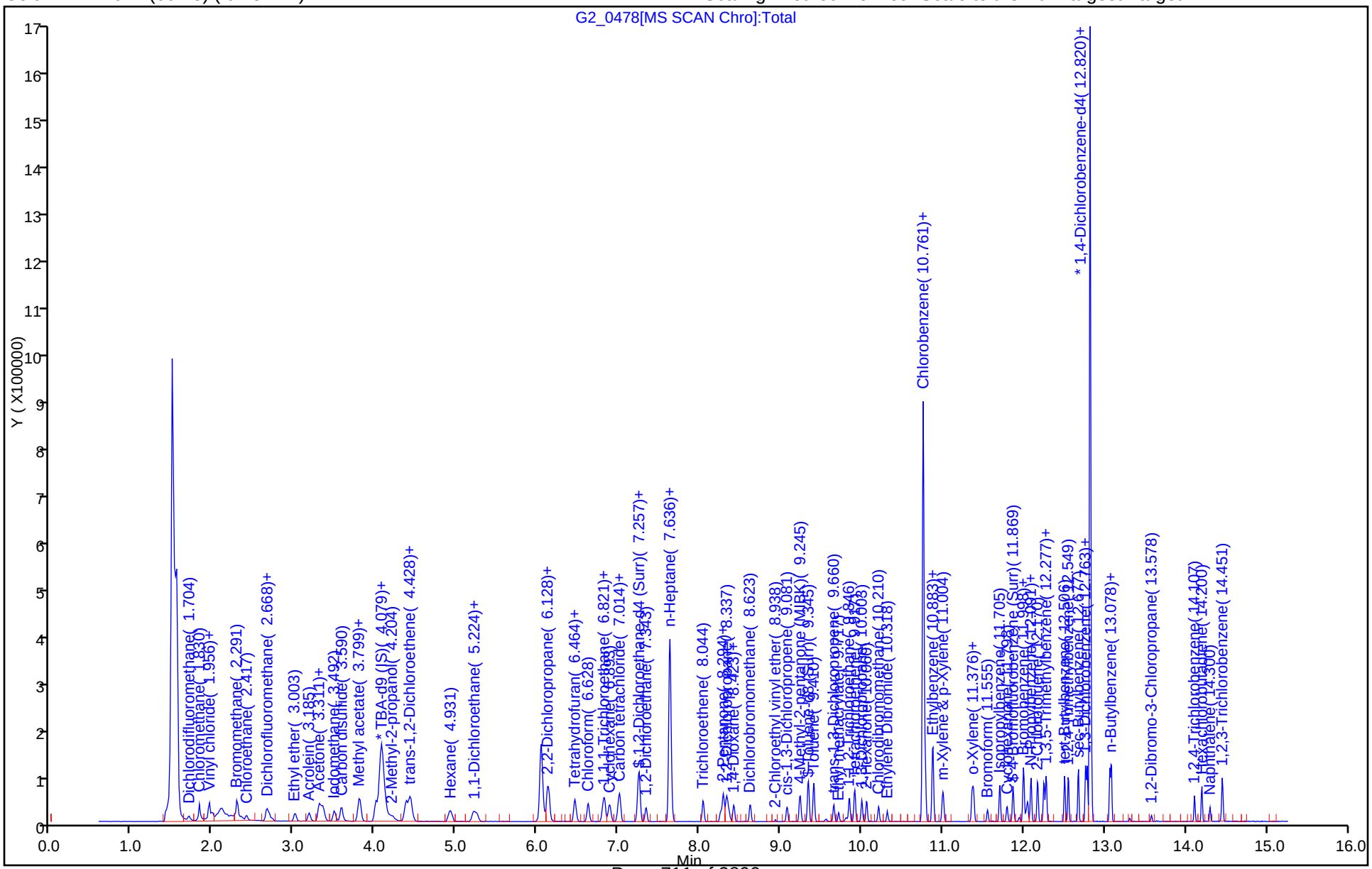
Report Date: 31-May-2017 19:57:30 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0478.D

Injection Date:	30-May-2017 19:32:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD005			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0479.D
Lims ID: STD010
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 30-May-2017 19:52:30 ALS Bottle#: 15 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD010
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 31-May-2017 19:57:43 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK010

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.065	0.014	93	348255	1000.0	1000.0	
* 3 Fluorobenzene	96	7.636	7.629	0.007	98	333105	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	133268	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	310190	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.829	6.828	0.001	93	41678	10.0	11.0	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	56511	10.0	10.1	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	133421	10.0	10.5	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	90	51694	10.0	10.2	
32 Dichlorodifluoromethane	85	1.705	1.705	0.000	98	28770	10.0	8.85	
34 Chloromethane	50	1.830	1.830	0.000	99	47609	10.0	9.09	
37 Vinyl chloride	62	1.956	1.956	0.000	98	59007	10.0	9.07	
22 Butadiene	54	1.998	1.998	0.000	86	12967	10.0	8.75	
39 Bromomethane	94	2.291	2.291	0.000	91	47936	10.0	9.28	
40 Chloroethane	64	2.417	2.403	0.014	97	24356	10.0	9.38	
41 Dichlorofluoromethane	67	2.654	2.654	0.000	97	60012	10.0	9.71	
43 Trichlorofluoromethane	101	2.682	2.682	0.000	97	52859	10.0	9.05	
45 Ethyl ether	59	3.017	3.003	0.014	90	24375	10.0	8.79	
48 Acrolein	56	3.185	3.185	0.000	96	44017	100.0	88.1	
53 1,1-Dichloroethene	96	3.311	3.311	0.000	94	31607	10.0	9.40	
52 1,1,2-Trichloro-1,2,2-trif	151	3.339	3.339	0.000	93	34481	10.0	9.99	
50 Acetone	43	3.367	3.353	0.014	98	49923	40.0	40.4	
55 Iodomethane	142	3.492	3.492	0.000	98	62679	10.0	9.11	
58 Carbon disulfide	76	3.576	3.576	0.000	100	123640	10.0	9.43	
57 3-Chloro-1-propene	41	3.814	3.799	0.015	87	46914	10.0	8.53	
56 Methyl acetate	43	3.800	3.799	0.001	98	118745	50.0	48.6	
60 Methylene Chloride	84	4.009	4.009	0.000	95	46315	10.0	9.91	
59 2-Methyl-2-propanol	59	4.219	4.204	0.015	92	35497	100.0	97.5	
61 Acrylonitrile	53	4.386	4.372	0.014	96	109990	100.0	95.7	
63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	94	35828	10.0	9.94	
62 Methyl tert-butyl ether	73	4.428	4.428	0.000	94	83279	10.0	9.33	
64 Hexane	57	4.931	4.917	0.014	90	39315	10.0	9.39	
67 1,1-Dichloroethane	63	5.210	5.210	0.000	97	67472	10.0	9.71	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
65 Vinyl acetate	43	5.252	5.252	0.000	98	82337	20.0	17.8	
71 2-Butanone (MEK)	43	6.135	6.128	0.007	99	59617	40.0	38.0	
74 cis-1,2-Dichloroethene	96	6.135	6.128	0.007	86	37048	10.0	9.75	
75 2,2-Dichloropropane	77	6.135	6.135	0.000	70	55038	10.0	9.79	
72 sec-Butyl Alcohol	45	6.464	6.457	0.007	68	27235	150.0	141.0	
77 Chlorobromomethane	128	6.457	6.457	0.000	97	18607	10.0	10.0	
79 Tetrahydrofuran	42	6.464	6.464	0.000	66	15882	20.0	17.4	
78 Chloroform	83	6.628	6.628	0.000	94	69973	10.0	9.67	
81 1,1,1-Trichloroethane	97	6.814	6.814	0.000	98	63099	10.0	9.91	
82 Cyclohexane	56	6.886	6.886	0.000	90	42144	10.0	9.16	
84 Carbon tetrachloride	117	7.007	7.000	0.007	98	58939	10.0	9.78	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	92	41661	10.0	9.11	
87 Benzene	78	7.258	7.257	0.001	97	136726	10.0	9.99	
85 1,2-Dichloroethane	62	7.343	7.343	0.000	99	56543	10.0	9.72	
35 n-Heptane	43	7.651	7.651	0.000	85	51341	10.0	9.42	
80 Isobutyl alcohol	41	7.651	7.651	0.000	80	40099	250.0	248.7	
89 Trichloroethene	95	8.044	8.044	0.000	94	31756	10.0	9.42	
90 2-Pentanone	43	8.259	8.258	0.001	98	45827	20.0	17.6	
93 Methylcyclohexane	55	8.294	8.294	0.000	91	42757	10.0	9.06	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	91	35836	10.0	9.85	
94 1,4-Dioxane	88	8.416	8.416	0.000	38	5288	200.0	192.4	
95 Dibromomethane	93	8.423	8.423	0.000	95	22918	10.0	10.0	
96 Dichlorobromomethane	83	8.623	8.623	0.000	98	48302	10.0	9.68	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	88	3953	10.0	8.99	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	93	38433	10.0	8.22	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	98	92418	40.0	37.1	
101 Toluene	91	9.410	9.410	0.000	97	134772	10.0	9.89	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	96	40091	10.0	8.66	
102 Ethyl methacrylate	69	9.717	9.717	0.000	88	21755	10.0	9.02	
104 1,1,2-Trichloroethane	97	9.853	9.853	0.000	96	27221	10.0	9.26	
107 Tetrachloroethene	164	9.917	9.917	0.000	94	32340	10.0	9.94	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	94	47936	10.0	9.87	
105 2-Hexanone	43	10.060	10.060	0.000	97	66605	40.0	37.3	
108 Chlorodibromomethane	129	10.211	10.210	0.001	89	34072	10.0	9.75	
110 Ethylene Dibromide	107	10.318	10.318	0.000	99	26796	10.0	9.58	
111 1-Chlorohexane	91	10.775	10.775	0.000	90	19370	5.00	4.42	
112 Chlorobenzene	112	10.790	10.790	0.000	94	99111	10.0	9.81	
113 1,1,1,2-Tetrachloroethane	131	10.876	10.875	0.001	91	38503	10.0	9.87	
114 Ethylbenzene	106	10.883	10.883	0.000	97	44546	10.0	9.01	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	50682	10.0	9.14	
117 o-Xylene	106	11.369	11.362	0.007	97	42348	10.0	8.35	
116 Styrene	104	11.383	11.383	0.000	97	77804	10.0	8.86	
118 Bromoform	173	11.555	11.555	0.000	95	21956	10.0	9.58	
119 Isopropylbenzene	105	11.705	11.705	0.000	97	115105	10.0	9.25	
121 Cyclohexanone	55	11.798	11.798	0.000	94	31148	400.0	344.0	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	96	38757	10.0	9.46	
125 Bromobenzene	156	11.998	11.998	0.000	93	39984	10.0	9.12	
123 trans-1,4-Dichloro-2-buten	53	12.027	12.027	0.000	80	9647	10.0	9.04	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	86	12175	10.0	9.31	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	38239	10.0	9.56	
128 2-Chlorotoluene	126	12.177	12.177	0.000	95	35490	10.0	9.81	
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	93	118682	10.0	9.89	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
129 4-Chlorotoluene	126	12.277	12.277	0.000	98	41097	10.0	10.1	
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	88923	10.0	9.19	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	123845	10.0	9.93	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	31297	10.0	9.60	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	97	82968	10.0	9.48	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	131581	10.0	9.66	
136 1,4-Dichlorobenzene	146	12.835	12.835	0.000	94	91014	10.0	9.49	
137 n-Butylbenzene	91	13.064	13.063	0.001	97	107797	10.0	9.32	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	97	83621	10.0	9.73	
139 1,2-Dibromo-3-Chloropropan	157	13.578	13.578	0.000	78	6737	10.0	8.78	
141 1,2,4-Trichlorobenzene	180	14.107	14.107	0.000	93	34785	10.0	8.98	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	97	28237	10.0	9.12	
143 Naphthalene	128	14.301	14.300	0.001	97	55882	10.0	8.50	
144 1,2,3-Trichlorobenzene	180	14.458	14.451	0.007	94	36838	10.0	9.07	
S 151 1,2-Dichloroethene, Total	96				0		20.0	19.7	
S 149 1,2-Dichloroethene, Total	1				0		20.0	19.7	
S 147 Total BTEX	1				0			46.4	
S 148 1,3-Dichloropropene, Total	1				0		20.0	16.9	
S 146 Xylenes, Total (URS)	1				0		20.0	17.5	
S 150 Xylenes, Total	106				0		20.0	17.5	
S 145 Trihalomethanes, Total	1				0		40.0	38.7	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Main A_00030	Amount Added:	1.25	Units: uL
MV-Gas/Ket A_00060	Amount Added:	1.25	Units: uL
MV-2cleve+AVA_00025	Amount Added:	1.25	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.20	Units: uL

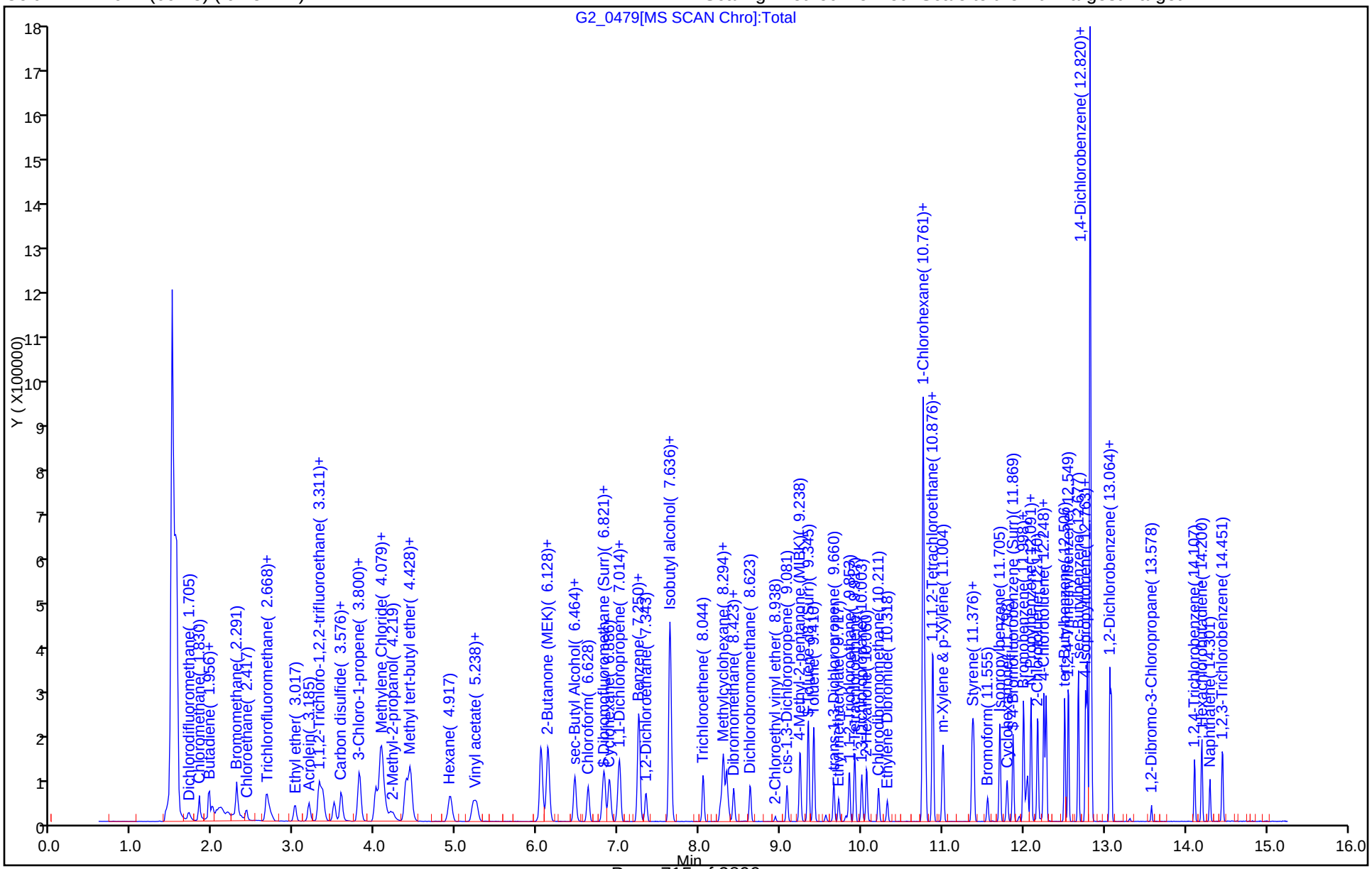
Report Date: 31-May-2017 19:57:45 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0479.D

Injection Date:	30-May-2017 19:52:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD010			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0480.D
Lims ID: STD020
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 30-May-2017 20:13:30 ALS Bottle#: 16 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD020
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 31-May-2017 19:57:59 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK010

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	94	318357	1000.0	1000.0	
* 3 Fluorobenzene	96	7.636	7.629	0.007	98	327128	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	132667	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	311530	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.836	6.828	0.008	93	82712	20.0	22.2	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	111517	20.0	23.9	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	288270	20.0	22.7	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	89	112613	20.0	22.1	
32 Dichlorodifluoromethane	85	1.704	1.705	-0.001	99	62181	20.0	17.5	
34 Chloromethane	50	1.830	1.830	0.000	98	88898	20.0	17.3	
37 Vinyl chloride	62	1.956	1.956	0.000	98	114179	20.0	17.9	
22 Butadiene	54	1.998	1.998	0.000	89	36106	20.0	16.4	
39 Bromomethane	94	2.291	2.291	0.000	90	96786	20.0	19.1	
40 Chloroethane	64	2.403	2.403	0.000	99	49261	20.0	17.9	
41 Dichlorofluoromethane	67	2.654	2.654	0.000	97	124044	20.0	18.3	
43 Trichlorofluoromethane	101	2.682	2.682	0.000	98	107789	20.0	18.8	
45 Ethyl ether	59	3.003	3.003	0.000	90	54583	20.0	20.0	
48 Acrolein	56	3.185	3.185	0.000	99	97615	200.0	198.9	
53 1,1-Dichloroethene	96	3.311	3.311	0.000	95	66642	20.0	19.9	
52 1,1,2-Trichloro-1,2,2-trif	151	3.339	3.339	0.000	94	65200	20.0	19.2	
50 Acetone	43	3.366	3.353	0.013	98	94116	80.0	77.5	
55 Iodomethane	142	3.492	3.492	0.000	98	124535	20.0	19.9	
58 Carbon disulfide	76	3.576	3.576	0.000	100	244671	20.0	19.5	
56 Methyl acetate	43	3.799	3.799	0.000	98	249673	100.0	104.2	
57 3-Chloro-1-propene	41	3.813	3.799	0.014	85	109022	20.0	20.2	
60 Methylene Chloride	84	4.009	4.009	0.000	96	83931	20.0	20.8	
59 2-Methyl-2-propanol	59	4.204	4.204	0.000	94	71136	200.0	198.9	
61 Acrylonitrile	53	4.372	4.372	0.000	98	231213	200.0	204.8	
62 Methyl tert-butyl ether	73	4.442	4.428	0.014	95	184849	20.0	21.1	
63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	96	74411	20.0	21.0	
64 Hexane	57	4.931	4.917	0.014	90	92452	20.0	19.1	
67 1,1-Dichloroethane	63	5.210	5.210	0.000	97	136196	20.0	20.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
65 Vinyl acetate	43	5.252	5.252	0.000	98	198778	40.0	36.4	
74 cis-1,2-Dichloroethene	96	6.128	6.128	0.000	85	77078	20.0	20.6	
71 2-Butanone (MEK)	43	6.135	6.128	0.007	98	116110	80.0	75.4	
75 2,2-Dichloropropane	77	6.128	6.135	-0.007	75	110573	20.0	20.0	
77 Chlorobromomethane	128	6.464	6.457	0.007	96	36091	20.0	19.8	
72 sec-Butyl Alcohol	45	6.464	6.457	0.007	76	60690	300.0	265.9	
79 Tetrahydrofuran	42	6.464	6.464	0.000	70	35281	40.0	39.4	
78 Chloroform	83	6.628	6.628	0.000	95	143955	20.0	20.3	
81 1,1,1-Trichloroethane	97	6.814	6.814	0.000	98	128017	20.0	20.5	
82 Cyclohexane	56	6.893	6.886	0.007	94	106086	20.0	19.9	
84 Carbon tetrachloride	117	7.007	7.000	0.007	97	119913	20.0	20.3	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	92	93788	20.0	19.9	
87 Benzene	78	7.257	7.257	0.000	98	282996	20.0	21.1	
85 1,2-Dichloroethane	62	7.343	7.343	0.000	98	117117	20.0	20.5	
80 Isobutyl alcohol	41	7.651	7.651	0.000	83	82552	500.0	521.3	
35 n-Heptane	43	7.651	7.651	0.000	90	110804	20.0	20.7	
89 Trichloroethene	95	8.044	8.044	0.000	96	66098	20.0	20.0	
90 2-Pentanone	43	8.258	8.258	0.000	98	104335	40.0	40.7	
93 Methylcyclohexane	55	8.294	8.294	0.000	92	101371	20.0	21.1	
92 1,2-Dichloropropane	63	8.337	8.330	0.007	92	73309	20.0	20.5	
94 1,4-Dioxane	88	8.416	8.416	0.000	36	11177	400.0	372.2	
95 Dibromomethane	93	8.423	8.423	0.000	94	45296	20.0	20.2	
96 Dichlorobromomethane	83	8.623	8.623	0.000	99	98504	20.0	20.1	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	92	10423	20.0	15.6	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	92	90061	20.0	17.6	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	97	216609	80.0	75.7	
101 Toluene	91	9.410	9.410	0.000	97	288644	20.0	21.6	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	97	90424	20.0	18.5	
102 Ethyl methacrylate	69	9.717	9.717	0.000	90	60719	20.0	18.3	
104 1,1,2-Trichloroethane	97	9.853	9.853	0.000	95	57687	20.0	20.0	
107 Tetrachloroethene	164	9.917	9.917	0.000	97	66688	20.0	20.6	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	95	98693	20.0	20.4	
105 2-Hexanone	43	10.060	10.060	0.000	98	161736	80.0	76.9	
108 Chlorodibromomethane	129	10.210	10.210	0.000	90	70533	20.0	20.3	
110 Ethylene Dibromide	107	10.318	10.318	0.000	96	56510	20.0	20.3	
111 1-Chlorohexane	91	10.775	10.775	0.000	88	42056	10.0	8.99	
112 Chlorobenzene	112	10.790	10.790	0.000	93	204318	20.0	20.3	
113 1,1,1,2-Tetrachloroethane	131	10.875	10.875	0.000	92	76129	20.0	19.6	
114 Ethylbenzene	106	10.883	10.883	0.000	98	100380	20.0	20.4	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	117767	20.0	19.5	
117 o-Xylene	106	11.369	11.362	0.007	97	105355	20.0	18.3	
116 Styrene	104	11.383	11.383	0.000	98	193427	20.0	19.6	
118 Bromoform	173	11.555	11.555	0.000	96	45065	20.0	19.8	
119 Isopropylbenzene	105	11.705	11.705	0.000	97	288955	20.0	18.7	
121 Cyclohexanone	55	11.798	11.798	0.000	95	72918	800.0	712.1	
125 Bromobenzene	156	12.005	11.998	0.007	93	88279	20.0	20.1	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	97	79491	20.0	19.3	
123 trans-1,4-Dichloro-2-buten	53	12.034	12.027	0.007	81	23093	20.0	19.0	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	85	26791	20.0	20.4	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	90474	20.0	19.3	
128 2-Chlorotoluene	126	12.177	12.177	0.000	96	81075	20.0	19.6	
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	94	276419	20.0	19.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
129 4-Chlorotoluene	126	12.277	12.277	0.000	97	89215	20.0	20.0	
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	224780	20.0	18.8	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	293789	20.0	20.1	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	74983	20.0	19.2	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	98	177096	20.0	20.1	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	320866	20.0	19.7	
136 1,4-Dichlorobenzene	146	12.835	12.835	0.000	94	185030	20.0	19.2	
137 n-Butylbenzene	91	13.063	13.063	0.000	98	272729	20.0	19.4	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	97	173216	20.0	20.1	
139 1,2-Dibromo-3-Chloropropan	157	13.578	13.578	0.000	80	14418	20.0	18.7	
141 1,2,4-Trichlorobenzene	180	14.107	14.107	0.000	94	91348	20.0	18.0	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	97	69935	20.0	19.8	
143 Naphthalene	128	14.300	14.300	0.000	97	184033	20.0	18.6	
144 1,2,3-Trichlorobenzene	180	14.451	14.451	0.000	95	97761	20.0	20.0	
S 151 1,2-Dichloroethene, Total	96				0		40.0	41.7	
S 146 Xylenes, Total (URS)	1				0		40.0	37.7	
S 150 Xylenes, Total	106				0		40.0	37.7	
S 145 Trihalomethanes, Total	1				0		80.0	80.4	
S 149 1,2-Dichloroethene, Total	1				0		40.0	41.7	
S 147 Total BTEX	1				0			100.8	
S 148 1,3-Dichloropropene, Total	1				0		40.0	36.1	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Main A_00030	Amount Added:	2.50	Units: uL
MV-2cleve+AVA_00025	Amount Added:	2.50	Units: uL
MV-Gas/Ket A_00060	Amount Added:	2.50	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.40	Units: uL

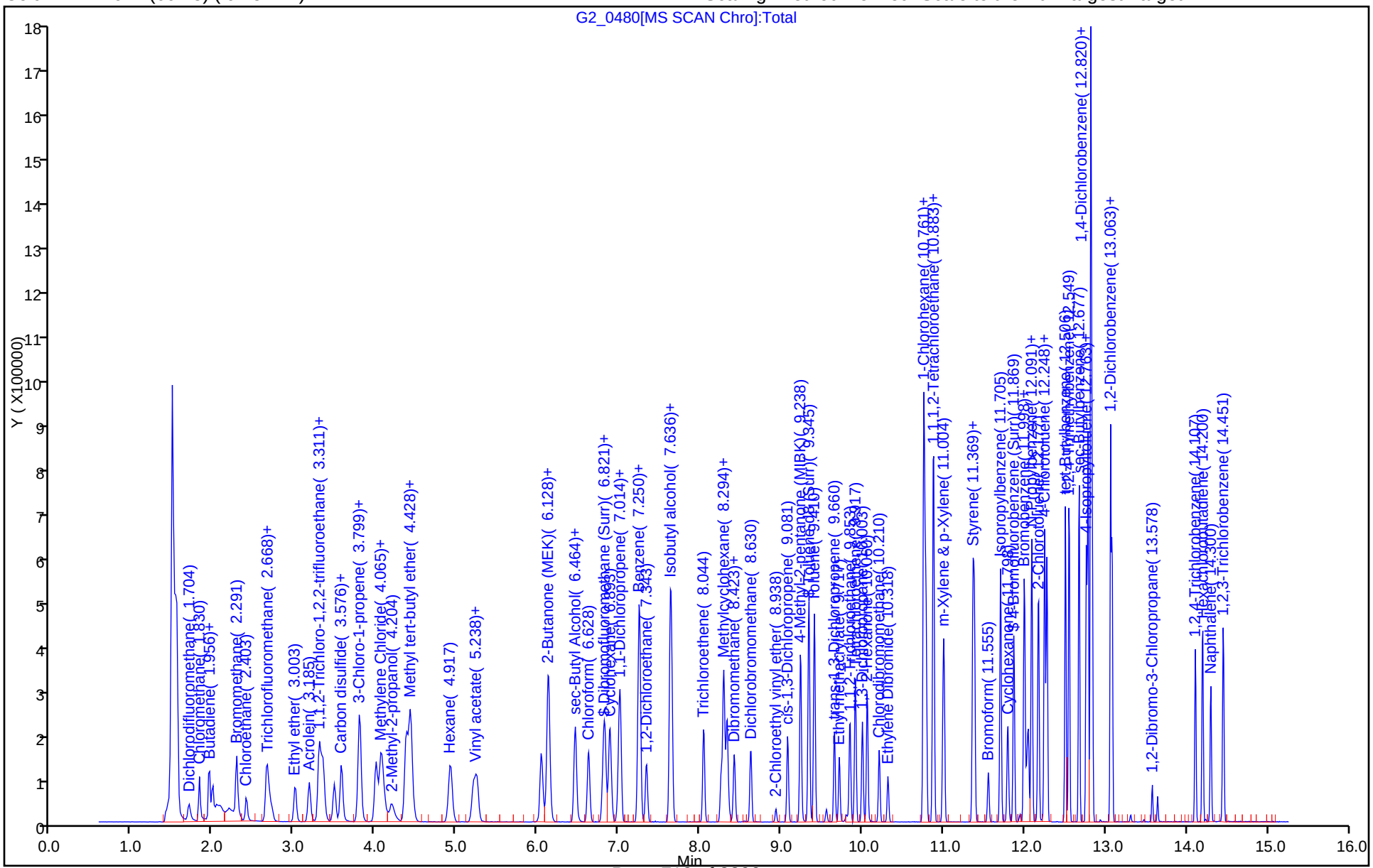
Report Date: 31-May-2017 19:58:00 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0480.D

Injection Date:	30-May-2017 20:13:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD020			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0481.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 30-May-2017 20:33:30 ALS Bottle#: 17 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 31-May-2017 19:58:08 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: dukesa Date: 30-May-2017 21:28:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	94	347104	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	377382	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	155057	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	347457	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.828	0.000	93	203776	50.0	47.4	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	274617	50.0	54.9	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	736458	50.0	49.7	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	287180	50.0	50.4	
32 Dichlorodifluoromethane	85	1.705	1.705	0.000	99	247859	50.0	56.7	
34 Chloromethane	50	1.830	1.830	0.000	99	332554	50.0	56.0	
37 Vinyl chloride	62	1.956	1.956	0.000	98	417916	50.0	56.7	
22 Butadiene	54	1.998	1.998	0.000	90	160978	50.0	50.1	
39 Bromomethane	94	2.291	2.291	0.000	90	341068	50.0	58.3	
40 Chloroethane	64	2.403	2.403	0.000	100	181289	50.0	54.0	
41 Dichlorofluoromethane	67	2.654	2.654	0.000	98	433283	50.0	52.5	
43 Trichlorofluoromethane	101	2.682	2.682	0.000	98	384655	50.0	58.1	
45 Ethyl ether	59	3.003	3.003	0.000	93	174240	50.0	55.4	
48 Acrolein	56	3.185	3.185	0.000	99	317263	499.9	560.3	
53 1,1-Dichloroethene	96	3.311	3.311	0.000	95	196661	50.0	51.1	
52 1,1,2-Trichloro-1,2,2-trif	151	3.339	3.339	0.000	92	191212	50.0	48.9	
50 Acetone	43	3.353	3.353	0.000	98	281606	200.0	201.1	
55 Iodomethane	142	3.492	3.492	0.000	98	363935	50.0	52.6	
58 Carbon disulfide	76	3.576	3.576	0.000	100	710586	50.0	50.6	
57 3-Chloro-1-propene	41	3.799	3.799	0.000	88	340479	50.0	54.6	
56 Methyl acetate	43	3.799	3.799	0.000	98	721359	250.0	260.8	
60 Methylene Chloride	84	4.009	4.009	0.000	96	224946	50.0	52.4	
59 2-Methyl-2-propanol	59	4.204	4.204	0.000	94	209803	500.0	508.5	
61 Acrylonitrile	53	4.372	4.372	0.000	97	690953	500.0	530.4	
63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	95	215693	50.0	52.8	
62 Methyl tert-butyl ether	73	4.428	4.428	0.000	97	565138	50.0	55.9	
64 Hexane	57	4.917	4.917	0.000	95	313647	50.0	50.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 1,1-Dichloroethane	63	5.210	5.210	0.000	97	403898	50.0	51.3	
65 Vinyl acetate	43	5.252	5.252	0.000	98	749436	100.0	107.5	
71 2-Butanone (MEK)	43	6.128	6.128	0.000	99	378910	200.0	213.3	
74 cis-1,2-Dichloroethene	96	6.128	6.128	0.000	84	227195	50.0	52.8	
75 2,2-Dichloropropane	77	6.135	6.135	0.000	69	329303	50.0	51.7	
72 sec-Butyl Alcohol	45	6.457	6.457	0.000	90	209168	750.0	709.9	
77 Chlorobromomethane	128	6.457	6.457	0.000	97	108637	50.0	51.8	
79 Tetrahydrofuran	42	6.464	6.464	0.000	88	116620	100.0	113.0	
78 Chloroform	83	6.628	6.628	0.000	95	411614	50.0	50.2	
81 1,1,1-Trichloroethane	97	6.814	6.814	0.000	98	364488	50.0	50.5	
82 Cyclohexane	56	6.886	6.886	0.000	92	345769	50.0	52.1	
84 Carbon tetrachloride	117	7.000	7.000	0.000	96	343336	50.0	50.3	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	93	292258	50.0	52.4	
87 Benzene	78	7.257	7.257	0.000	97	834524	50.0	53.8	
85 1,2-Dichloroethane	62	7.343	7.343	0.000	99	335216	50.0	50.9	
35 n-Heptane	43	7.651	7.651	0.000	91	339674	50.0	55.0	
80 Isobutyl alcohol	41	7.651	7.651	0.000	84	234727	1250.0	1285.0	
89 Trichloroethene	95	8.044	8.044	0.000	97	201906	50.0	52.8	
90 2-Pentanone	43	8.258	8.258	0.000	98	311071	100.0	105.2	
93 Methylcyclohexane	55	8.294	8.294	0.000	91	308087	50.0	54.8	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	94	212483	50.0	51.5	
94 1,4-Dioxane	88	8.416	8.416	0.000	95	36926	1000.0	998.3	
95 Dibromomethane	93	8.423	8.423	0.000	94	134230	50.0	51.9	
96 Dichlorobromomethane	83	8.623	8.623	0.000	99	292475	50.0	51.7	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	93	44645	50.0	44.3	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	93	318921	50.0	50.6	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	97	796807	200.0	221.0	
101 Toluene	91	9.410	9.410	0.000	98	870811	50.0	56.4	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	96	312724	50.0	53.3	
102 Ethyl methacrylate	69	9.717	9.717	0.000	90	225660	50.0	49.7	
104 1,1,2-Trichloroethane	97	9.853	9.853	0.000	95	174377	50.0	52.4	
107 Tetrachloroethene	164	9.917	9.917	0.000	98	195947	50.0	51.8	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	94	319182	50.0	56.5	
105 2-Hexanone	43	10.060	10.060	0.000	98	578438	200.0	215.4	
108 Chlorodibromomethane	129	10.210	10.210	0.000	91	218959	50.0	53.9	
110 Ethylene Dibromide	107	10.318	10.318	0.000	99	175127	50.0	53.8	
111 1-Chlorohexane	91	10.775	10.775	0.000	94	138039	25.0	24.3	
112 Chlorobenzene	112	10.790	10.790	0.000	93	608931	50.0	51.8	
113 1,1,1,2-Tetrachloroethane	131	10.875	10.875	0.000	92	234925	50.0	51.7	
114 Ethylbenzene	106	10.883	10.883	0.000	97	317830	50.0	55.2	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	379313	50.0	51.1	
117 o-Xylene	106	11.362	11.362	0.000	97	366480	50.0	51.0	
116 Styrene	104	11.383	11.383	0.000	99	631255	50.0	51.7	
118 Bromoform	173	11.555	11.555	0.000	96	140521	50.0	52.7	
119 Isopropylbenzene	105	11.705	11.705	0.000	97	1000655	50.0	51.8	
121 Cyclohexanone	55	11.798	11.798	0.000	95	271187	2000.0	2109.4	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	96	237446	50.0	51.7	
125 Bromobenzene	156	11.998	11.998	0.000	94	276289	50.0	56.3	
123 trans-1,4-Dichloro-2-buten	53	12.027	12.027	0.000	88	76080	50.0	52.6	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	86	77853	50.0	53.2	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	287944	50.0	50.7	
128 2-Chlorotoluene	126	12.177	12.177	0.000	96	249321	50.0	50.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	94	865235	50.0	51.0	
129 4-Chlorotoluene	126	12.277	12.277	0.000	97	267200	50.0	51.0	
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	752262	50.0	50.9	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	900167	50.0	50.9	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	241310	50.0	50.5	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	97	534550	50.0	54.5	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	1018381	50.0	51.2	
136 1,4-Dichlorobenzene	146	12.835	12.835	0.000	97	543955	50.0	50.6	
137 n-Butylbenzene	91	13.063	13.063	0.000	98	884539	50.0	51.3	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	98	513031	50.0	53.3	
139 1,2-Dibromo-3-Chloropropan	157	13.578	13.578	0.000	80	45511	50.0	52.9	
141 1,2,4-Trichlorobenzene	180	14.107	14.107	0.000	93	328022	50.0	50.3	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	96	213204	50.0	50.8	
143 Naphthalene	128	14.300	14.300	0.000	97	680003	50.0	52.0	
144 1,2,3-Trichlorobenzene	180	14.451	14.451	0.000	95	316498	50.0	53.6	
S 151 1,2-Dichloroethene, Total	96				0		100.0	105.6	
S 149 1,2-Dichloroethene, Total	1				0		100.0	105.6	
S 148 1,3-Dichloropropene, Total	1				0		100.0	104.0	
S 146 Xylenes, Total (URS)	1				0		100.0	102.1	
S 150 Xylenes, Total	106				0		100.0	102.1	
S 145 Trihalomethanes, Total	1				0		200.0	208.5	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Main A_00030	Amount Added:	6.25	Units: uL
MV-2cleve+AVA_00025	Amount Added:	6.25	Units: uL
MV-Gas/Ket A_00060	Amount Added:	6.25	Units: uL
MV-ARCH SS A_00081	Amount Added:	1.00	Units: uL

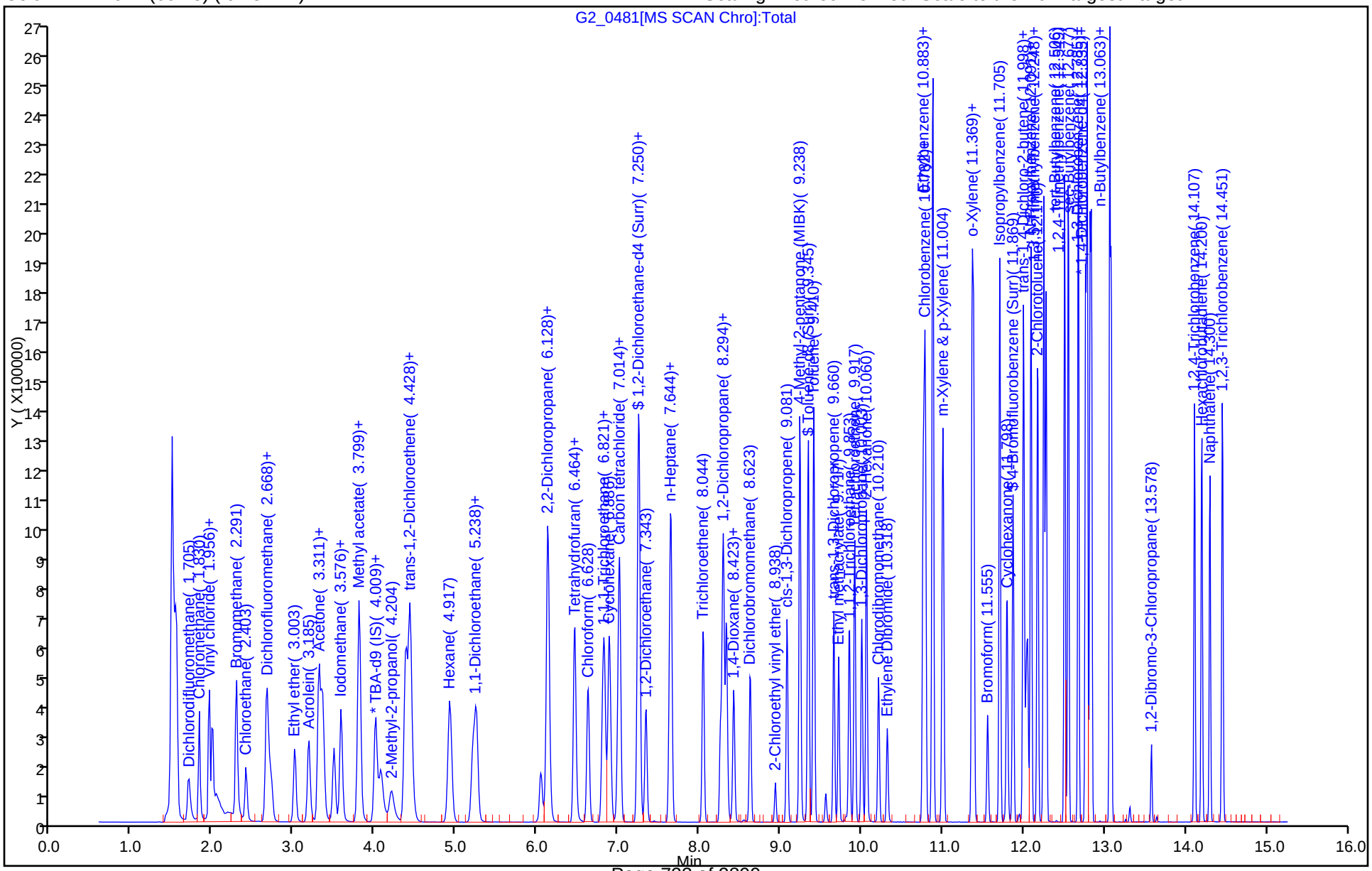
Report Date: 31-May-2017 19:58:11 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0481.D

Injection Date:	30-May-2017 20:33:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	ICIS			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0482.D
Lims ID: STD100
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 30-May-2017 20:54:30 ALS Bottle#: 18 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD100
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 31-May-2017 19:58:29 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK010

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	96	403867	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	416713	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	85	167573	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	94	370958	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.828	0.000	93	425414	100.0	89.6	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	548819	100.0	102.3	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	93	1563255	100.0	97.6	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	92	601542	100.0	98.9	
32 Dichlorodifluoromethane	85	1.691	1.705	-0.014	99	520269	100.0	106.2	
34 Chloromethane	50	1.816	1.830	-0.014	99	644220	100.0	98.3	
37 Vinyl chloride	62	1.942	1.956	-0.014	98	884703	100.0	108.7	
22 Butadiene	54	1.984	1.998	-0.014	89	358738	100.0	96.5	
39 Bromomethane	94	2.277	2.291	-0.014	90	620059	100.0	96.0	
40 Chloroethane	64	2.389	2.403	-0.014	100	369426	100.0	98.4	
41 Dichlorofluoromethane	67	2.654	2.654	0.000	98	883808	100.0	98.7	
43 Trichlorofluoromethane	101	2.682	2.682	0.000	98	778909	100.0	106.6	
45 Ethyl ether	59	3.003	3.003	0.000	93	373708	100.0	107.7	
48 Acrolein	56	3.171	3.185	-0.014	98	695062	999.8	1111.7	
53 1,1-Dichloroethene	96	3.297	3.311	-0.014	94	416002	100.0	99.3	
52 1,1,2-Trichloro-1,2,2-trif	151	3.339	3.339	0.000	93	403969	100.0	93.6	
50 Acetone	43	3.353	3.353	-0.001	98	574686	400.0	371.6	
55 Iodomethane	142	3.478	3.492	-0.014	99	770824	100.0	102.2	
58 Carbon disulfide	76	3.576	3.576	0.000	100	1490295	100.0	99.9	
56 Methyl acetate	43	3.785	3.799	-0.014	98	1536263	500.0	503.1	
57 3-Chloro-1-propene	41	3.799	3.799	0.000	88	727448	100.0	105.7	
60 Methylene Chloride	84	3.995	4.009	-0.014	95	463204	100.0	100.3	
59 2-Methyl-2-propanol	59	4.190	4.204	-0.014	96	486879	1000.0	1068.7	
61 Acrylonitrile	53	4.372	4.372	0.000	97	1469435	1000.0	1021.6	
62 Methyl tert-butyl ether	73	4.428	4.428	0.000	97	1227205	100.0	109.9	
63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	95	448737	100.0	99.5	
64 Hexane	57	4.917	4.917	0.000	95	706837	100.0	103.7	
67 1,1-Dichloroethane	63	5.196	5.210	-0.014	97	837729	100.0	96.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
65 Vinyl acetate	43	5.238	5.252	-0.014	98	1668845	200.0	211.6	
74 cis-1,2-Dichloroethene	96	6.128	6.128	0.000	84	485470	100.0	102.1	
71 2-Butanone (MEK)	43	6.128	6.128	0.000	98	783541	400.0	399.5	
75 2,2-Dichloropropane	77	6.128	6.135	-0.007	89	704462	100.0	100.2	
77 Chlorobromomethane	128	6.457	6.457	0.000	96	229204	100.0	98.9	
72 sec-Butyl Alcohol	45	6.457	6.457	0.000	87	513993	1500.0	1527.6	
79 Tetrahydrofuran	42	6.457	6.464	-0.007	75	258889	200.0	227.2	
78 Chloroform	83	6.621	6.628	-0.007	94	827981	100.0	91.5	
81 1,1,1-Trichloroethane	97	6.807	6.814	-0.007	99	763540	100.0	95.9	
82 Cyclohexane	56	6.886	6.886	0.000	92	770601	100.0	102.8	
84 Carbon tetrachloride	117	7.000	7.000	0.000	97	713901	100.0	94.7	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	94	634130	100.0	102.3	
87 Benzene	78	7.257	7.257	0.000	98	1724788	100.0	100.7	
85 1,2-Dichloroethane	62	7.336	7.343	-0.007	99	675366	100.0	92.8	
80 Isobutyl alcohol	41	7.651	7.651	0.000	84	497438	2500.0	2466.1	
35 n-Heptane	43	7.651	7.651	0.000	91	734920	100.0	107.8	
89 Trichloroethene	95	8.044	8.044	0.000	96	441592	100.0	104.7	
90 2-Pentanone	43	8.258	8.258	0.000	98	747585	200.0	228.9	
93 Methylcyclohexane	55	8.294	8.294	0.000	92	659725	100.0	105.8	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	95	448148	100.0	98.4	
94 1,4-Dioxane	88	8.416	8.416	0.000	97	83776	2000.0	2012.7	
95 Dibromomethane	93	8.423	8.423	0.000	95	276152	100.0	96.6	
96 Dichlorobromomethane	83	8.623	8.623	0.000	99	610011	100.0	97.7	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	93	118573	100.0	99.6	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	93	710607	100.0	103.0	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	97	1670558	400.0	411.2	
101 Toluene	91	9.410	9.410	0.000	98	1848027	100.0	108.4	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	96	668356	100.0	102.2	
102 Ethyl methacrylate	69	9.717	9.717	0.000	90	517601	100.0	101.1	
104 1,1,2-Trichloroethane	97	9.846	9.853	-0.007	94	361022	100.0	98.2	
107 Tetrachloroethene	164	9.917	9.917	0.000	97	413250	100.0	101.0	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	94	660549	100.0	108.2	
105 2-Hexanone	43	10.060	10.060	0.000	96	1219582	400.0	411.0	
108 Chlorodibromomethane	129	10.210	10.210	0.000	90	461923	100.0	105.1	
110 Ethylene Dibromide	107	10.318	10.318	0.000	98	372999	100.0	106.0	
111 1-Chlorohexane	91	10.775	10.775	0.000	97	312824	50.0	50.3	
112 Chlorobenzene	112	10.790	10.790	0.000	94	1272417	100.0	100.1	
113 1,1,1,2-Tetrachloroethane	131	10.875	10.875	0.000	93	495169	100.0	100.9	
114 Ethylbenzene	106	10.883	10.883	0.000	98	694956	100.0	111.7	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	827224	100.0	101.8	
117 o-Xylene	106	11.362	11.362	0.000	97	804473	100.0	101.8	
116 Styrene	104	11.383	11.383	0.000	99	1365561	100.0	101.8	
118 Bromoform	173	11.555	11.555	0.000	96	304217	100.0	105.6	
119 Isopropylbenzene	105	11.705	11.705	0.000	96	2179638	100.0	102.7	
121 Cyclohexanone	55	11.791	11.798	-0.007	95	578434	4000.0	4093.5	
125 Bromobenzene	156	11.998	11.998	0.000	92	588927	100.0	112.4	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	96	500929	100.0	102.2	
123 trans-1,4-Dichloro-2-buten	53	12.027	12.027	0.000	88	162516	100.0	103.5	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	87	159020	100.0	101.7	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	630658	100.0	101.5	
128 2-Chlorotoluene	126	12.170	12.177	-0.007	96	541464	100.0	100.6	
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	96	1863543	100.0	100.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
129 4-Chlorotoluene	126	12.277	12.277	0.000	98	557358	100.0	98.2	
130 tert-Butylbenzene	119	12.506	12.506	0.000	93	1681638	100.0	103.4	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	97	1919905	100.0	99.3	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	527936	100.0	100.7	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	98	1119219	100.0	106.9	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	2186733	100.0	100.3	
136 1,4-Dichlorobenzene	146	12.835	12.835	0.000	94	1133493	100.0	98.8	
137 n-Butylbenzene	91	13.063	13.063	0.000	97	1928184	100.0	102.0	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	97	1056953	100.0	102.8	
139 1,2-Dibromo-3-Chloropropan	157	13.578	13.578	0.000	83	102438	100.0	111.6	
141 1,2,4-Trichlorobenzene	180	14.107	14.107	0.000	94	708113	100.0	98.3	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	96	463858	100.0	101.7	
143 Naphthalene	128	14.300	14.300	0.000	97	1475469	100.0	101.5	
144 1,2,3-Trichlorobenzene	180	14.451	14.451	0.000	95	643407	100.0	100.0	
S 151 1,2-Dichloroethene, Total	96				0		200.0	201.6	
S 146 Xylenes, Total (URS)	1				0		200.0	203.6	
S 150 Xylenes, Total	106				0		200.0	203.6	
S 145 Trihalomethanes, Total	1				0		400.0	400.0	
S 149 1,2-Dichloroethene, Total	1				0		200.0	201.6	
S 147 Total BTEX	1				0			524.5	
S 148 1,3-Dichloropropene, Total	1				0		200.0	205.2	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Main A_00030	Amount Added:	12.50	Units: uL
MV-2cleve+AVA_00025	Amount Added:	12.50	Units: uL
MV-Gas/Ket A_00060	Amount Added:	12.50	Units: uL
MV-ARCH SS A_00081	Amount Added:	2.00	Units: uL

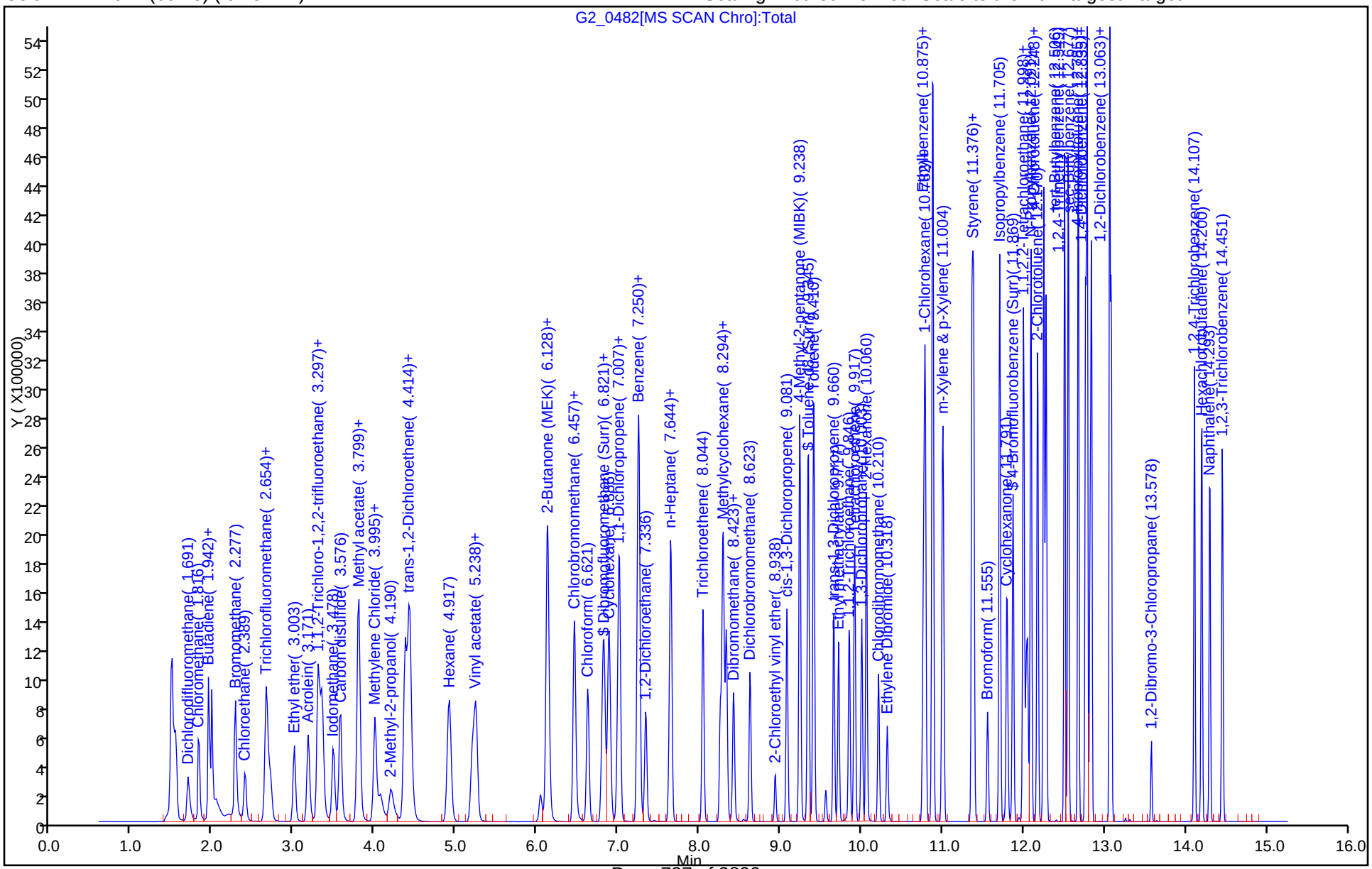
Report Date: 31-May-2017 19:58:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0482.D

Injection Date:	30-May-2017 20:54:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD100			Worklist Smp#:	10
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 30-May-2017 21:14:30 ALS Bottle#: 19 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 31-May-2017 19:58:50 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK010

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 TBA-d9 (IS)	65	4.079	4.065	0.014	96	442331	1000.0	1000.0	
*	3 Fluorobenzene	96	7.629	7.629	0.000	98	465399	50.0	50.0	
*	4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	184471	50.0	50.0	
*	5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	93	391519	50.0	50.0	
$	8 Dibromofluoromethane (Surr	111	6.828	6.828	0.000	93	894575	200.0	168.7	
$	9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	1121998	200.0	190.2	
$	10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	93	3342225	200.0	189.6	
$	11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	93	1284902	200.0	200.2	
	32 Dichlorodifluoromethane	85	1.691	1.705	-0.014	99	1047483	200.0	190.2	
	34 Chloromethane	50	1.830	1.830	0.000	99	1385720	200.0	189.3	
	37 Vinyl chloride	62	1.956	1.956	0.000	98	1765516	200.0	194.3	
	22 Butadiene	54	1.984	1.998	-0.014	89	881365	200.0	206.7	
	39 Bromomethane	94	2.263	2.291	-0.028	90	691059	200.0	95.8	
	40 Chloroethane	64	2.389	2.403	-0.014	99	844022	200.0	199.9	
	41 Dichlorofluoromethane	67	2.654	2.654	0.000	98	1854675	200.0	200.2	
	43 Trichlorofluoromethane	101	2.682	2.682	0.000	97	1633792	200.0	200.2	
	45 Ethyl ether	59	3.003	3.003	0.000	93	797459	200.0	205.7	
	48 Acrolein	56	3.185	3.185	0.000	99	1473507	1999.7	2110.3	
	53 1,1-Dichloroethene	96	3.297	3.311	-0.014	95	902621	200.0	200.1	
	52 1,1,2-Trichloro-1,2,2-trif	151	3.339	3.339	0.000	93	832940	200.0	172.7	
	50 Acetone	43	3.353	3.353	0.000	98	1164563	800.0	674.2	
	55 Iodomethane	142	3.478	3.492	-0.014	100	1643795	200.0	196.5	
	58 Carbon disulfide	76	3.576	3.576	0.000	100	3154818	200.0	205.9	
	57 3-Chloro-1-propene	41	3.800	3.799	0.001	89	1552449	200.0	202.0	
	56 Methyl acetate	43	3.800	3.799	0.001	98	3225767	1000.0	945.9	
	60 Methylene Chloride	84	3.995	4.009	-0.014	95	961573	200.0	189.0	
	59 2-Methyl-2-propanol	59	4.205	4.204	0.001	97	1026599	2000.0	2017.7	
	61 Acrylonitrile	53	4.372	4.372	0.000	98	3131041	2000.0	1949.0	
	63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	96	962391	200.0	191.2	
	62 Methyl tert-butyl ether	73	4.428	4.428	0.000	96	2634131	200.0	211.2	
	64 Hexane	57	4.917	4.917	0.000	94	1537776	200.0	202.8	
	67 1,1-Dichloroethane	63	5.210	5.210	0.000	96	1749977	200.0	180.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
65 Vinyl acetate	43	5.252	5.252	0.000	97	3566826	400.0	400.3	
71 2-Butanone (MEK)	43	6.128	6.128	0.000	99	1661435	800.0	758.6	
74 cis-1,2-Dichloroethene	96	6.128	6.128	0.000	83	1035945	200.0	195.1	
75 2,2-Dichloropropane	77	6.128	6.135	-0.007	74	1504495	200.0	191.6	
72 sec-Butyl Alcohol	45	6.464	6.457	0.007	97	1159040	3000.0	3041.0	
77 Chlorobromomethane	128	6.457	6.457	0.000	97	490049	200.0	189.4	
79 Tetrahydrofuran	42	6.464	6.464	0.000	78	554168	400.0	435.6	
78 Chloroform	83	6.621	6.628	-0.007	94	1727587	200.0	171.0	
81 1,1,1-Trichloroethane	97	6.814	6.814	0.000	98	1553334	200.0	174.6	
82 Cyclohexane	56	6.886	6.886	0.000	92	1657824	200.0	196.0	
84 Carbon tetrachloride	117	7.000	7.000	0.000	97	1467773	200.0	174.3	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	95	1366279	200.0	196.6	
87 Benzene	78	7.257	7.257	0.000	98	3698654	200.0	193.4	
85 1,2-Dichloroethane	62	7.343	7.343	0.000	98	1370304	200.0	168.6	
35 n-Heptane	43	7.651	7.651	0.000	92	1573749	200.0	206.6	
80 Isobutyl alcohol	41	7.651	7.651	0.000	85	1017357	5000.0	4516.1	
89 Trichloroethene	95	8.044	8.044	0.000	97	958894	200.0	203.5	
90 2-Pentanone	43	8.259	8.258	0.001	98	1505387	400.0	412.7	
93 Methylcyclohexane	55	8.294	8.294	0.000	90	1387282	200.0	198.8	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	95	956014	200.0	188.0	
94 1,4-Dioxane	88	8.416	8.416	0.000	96	188325	4000.0	4014.5	
95 Dibromomethane	93	8.423	8.423	0.000	95	570498	200.0	178.7	
96 Dichlorobromomethane	83	8.623	8.623	0.000	99	1272445	200.0	182.5	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	93	286445	200.0	209.5	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	94	1530570	200.0	200.3	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	97	3502395	800.0	763.7	
101 Toluene	91	9.410	9.410	0.000	98	3929984	200.0	206.5	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	95	1449358	200.0	197.4	
102 Ethyl methacrylate	69	9.717	9.717	0.000	90	1155252	200.0	201.0	
104 1,1,2-Trichloroethane	97	9.853	9.853	0.000	94	761750	200.0	185.5	
107 Tetrachloroethene	164	9.917	9.917	0.000	98	892119	200.0	198.1	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	93	1397342	200.0	207.9	
105 2-Hexanone	43	10.060	10.060	0.000	96	2554073	800.0	773.0	
108 Chlorodibromomethane	129	10.211	10.210	0.001	90	988108	200.0	204.3	
110 Ethylene Dibromide	107	10.318	10.318	0.000	99	801427	200.0	207.0	
111 1-Chlorohexane	91	10.775	10.775	0.000	98	702616	100.0	102.0	
112 Chlorobenzene	112	10.790	10.790	0.000	96	2724118	200.0	194.7	
113 1,1,1,2-Tetrachloroethane	131	10.876	10.875	0.001	94	1053006	200.0	194.9	
114 Ethylbenzene	106	10.883	10.883	0.000	97	1516450	200.0	221.5	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	1790046	200.0	198.7	
117 o-Xylene	106	11.362	11.362	0.000	97	1760130	200.0	200.6	
116 Styrene	104	11.383	11.383	0.000	99	2955192	200.0	198.5	
118 Bromoform	173	11.555	11.555	0.000	97	667994	200.0	210.6	
119 Isopropylbenzene	105	11.705	11.705	0.000	96	4680695	200.0	205.8	
121 Cyclohexanone	55	11.798	11.798	0.000	94	1246674	8000.0	7945.7	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	96	1055880	200.0	204.2	
125 Bromobenzene	156	12.005	11.998	0.007	90	1266402	200.0	228.9	
123 trans-1,4-Dichloro-2-buten	53	12.027	12.027	0.000	86	335582	200.0	200.8	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	85	335706	200.0	203.5	
126 N-Propylbenzene	120	12.091	12.091	0.000	98	1357782	200.0	204.5	
128 2-Chlorotoluene	126	12.177	12.177	0.000	97	1158251	200.0	201.7	
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	95	3953237	200.0	199.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
129 4-Chlorotoluene	126	12.277	12.277	0.000	98	1213635	200.0	200.8	
130 tert-Butylbenzene	119	12.506	12.506	0.000	93	3614056	200.0	207.6	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	97	4088663	200.0	197.8	
132 sec-Butylbenzene	134	12.677	12.677	0.000	94	1159199	200.0	206.7	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	98	2418121	200.0	218.8	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	4684394	200.0	200.9	
136 1,4-Dichlorobenzene	146	12.835	12.835	0.000	97	2401312	200.0	198.4	
137 n-Butylbenzene	91	13.063	13.063	0.000	97	4103408	200.0	202.9	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	98	2267636	200.0	209.0	
139 1,2-Dibromo-3-Chloropropan	157	13.578	13.578	0.000	86	228447	200.0	235.8	
141 1,2,4-Trichlorobenzene	180	14.107	14.107	0.000	94	1574732	200.0	203.4	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	96	992525	200.0	204.3	
143 Naphthalene	128	14.293	14.300	-0.007	97	3106055	200.0	198.5	
144 1,2,3-Trichlorobenzene	180	14.451	14.451	0.000	95	1346073	200.0	195.8	
S 151 1,2-Dichloroethene, Total	96				0		400.0	386.2	
S 149 1,2-Dichloroethene, Total	1				0		400.0	386.2	
S 147 Total BTEX	1				0			1020.7	
S 148 1,3-Dichloropropene, Total	1				0		400.0	397.7	
S 146 Xylenes, Total (URS)	1				0		400.0	399.3	
S 150 Xylenes, Total	106				0		400.0	399.3	
S 145 Trihalomethanes, Total	1				0		800.0	768.4	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Main A_00030	Amount Added:	25.00	Units: uL
MV-Gas/Ket A_00060	Amount Added:	25.00	Units: uL
MV-2cleve+AVA_00025	Amount Added:	25.00	Units: uL
MV-ARCH SS A_00081	Amount Added:	4.00	Units: uL

Report Date: 31-May-2017 19:58:52 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Injection Date: 30-May-2017 21:14:30 Instrument ID: VMS_G2 Operator ID: DUKESA

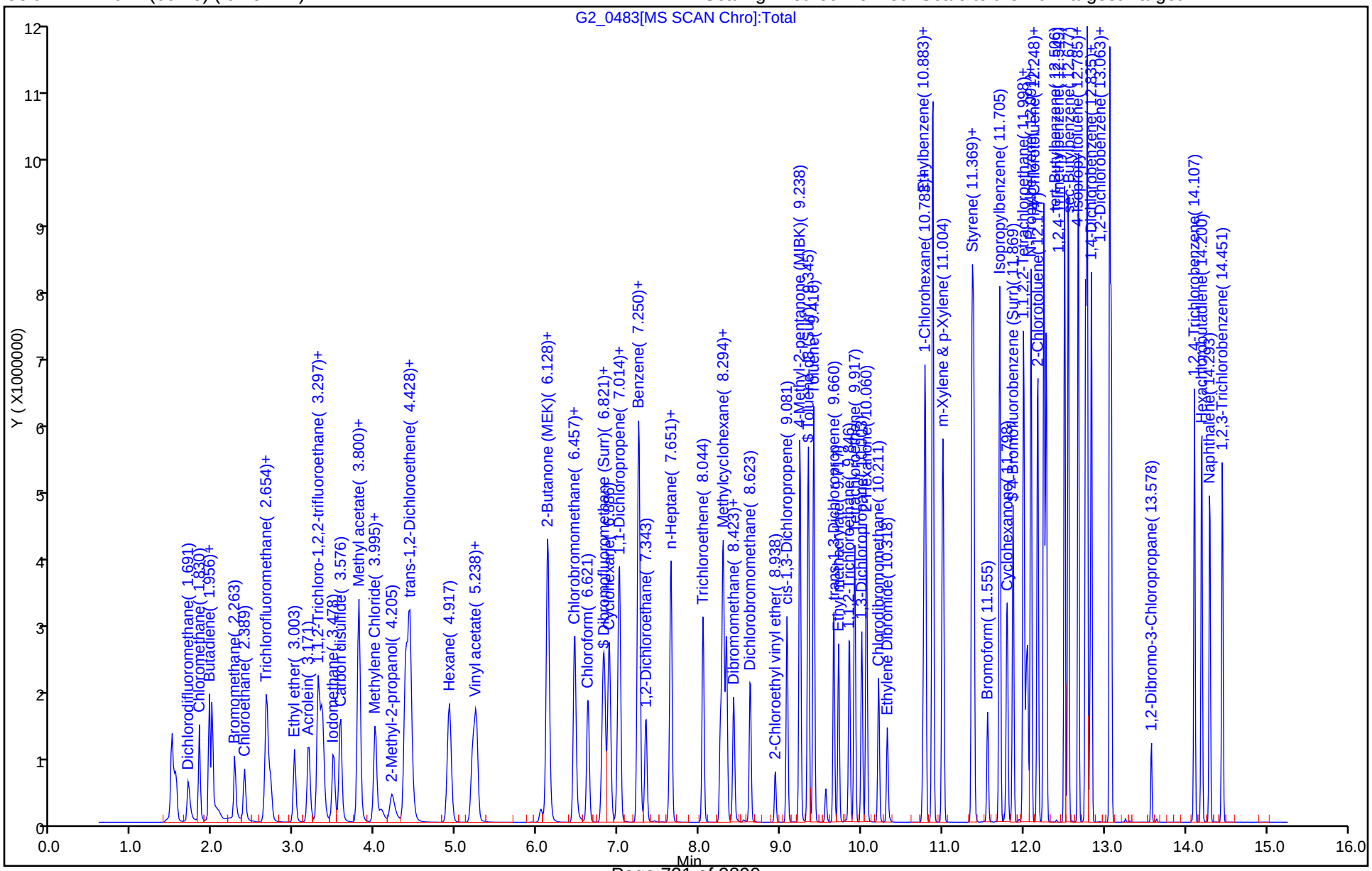
Lims ID: STD200 Worklist Smp#: 11

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 19

Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-371118/28 Calibration Date: 04/27/2017 00:08

Instrument ID: VMS_G2 Calib Start Date: 04/26/2017 21:24

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/26/2017 23:47

Lab File ID: G2_9111.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.1246		2000	2000	-0.0	20.0
Isopropyl alcohol	Lin2		0.7207		511	500	2.2	20.0
Acetonitrile	Ave	0.0340	0.0344		507	500	1.3	20.0
Isopropyl ether	Lin1		0.2681		50.1	50.0	0.2	20.0
2-Chloro-1,3-butadiene	Lin1		0.5292		50.1	50.0	0.2	20.0
Tert-butyl ethyl ether	Lin1		0.7848		47.9	50.0	-4.2	20.0
Ethyl acetate	Ave	0.2191	0.2352		107	100	7.3	20.0
Propionitrile	Ave	0.0366	0.0384		525	500	4.9	20.0
Methacrylonitrile	Ave	0.1405	0.1553		552	500	10.5	20.0
Tert-amyl methyl ether	Lin1		0.7573		48.4	50.0	-3.1	20.0
n-Butanol	Lin1		0.3130		1150	1250	-7.6	20.0
Methyl methacrylate	Lin1		0.0788		97.5	100	-2.5	20.0
2-Nitropropane	Lin1		0.0692		90.4	100	-9.6	20.0
cis-1,4-Dichloro-2-butene	Lin1		0.2540		100	100	0.4	20.0
1,2,3-Trimethylbenzene	Lin2		3.271		52.2	50.0	4.4	20.0
Dibromofluoromethane (Surr)	Ave	0.2967	0.3091		52.1	50.0	4.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3491	0.3574		51.2	50.0	2.4	20.0
Toluene-d8 (Surr)	Ave	4.055	4.576		56.4	50.0	12.9	20.0
4-Bromofluorobenzene (Surr)	Lin2		1.043		54.1	50.0	8.1	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9111.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 27-Apr-2017 00:08:30 ALS Bottle#: 18 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist:

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2017 16:50:10 Calib Date: 26-Apr-2017 23:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.065	0.014	96	543420	1000.0	1000.0	
* 3 Fluorobenzene	96	7.644	7.644	0.000	99	1010405	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.775	10.775	0.000	86	259337	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	94	422767	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.843	6.836	0.007	94	312317	50.0	52.1	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.257	7.250	0.007	98	361076	50.0	51.2	
$ 10 Toluene-d8 (Surr)	98	9.352	9.352	0.000	93	1186761	50.0	56.4	
$ 11 4-Bromofluorobenzene (Surr	95	11.884	11.884	0.000	94	441142	50.0	54.1	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.277	2.263	0.014	100	1111944	5000.0	4581.8	
42 Ethanol	45	2.892	2.892	0.000	99	135452	2000.0	1999.7	
47 Propene oxide	58	3.073	3.073	0.000	96	6399890	5000.0	5181.0	
51 Isopropyl alcohol	45	3.576	3.562	0.014	96	195831	500.0	510.9	
54 Acetonitrile	41	3.758	3.744	0.014	99	347796	500.0	506.5	
68 2-Chloro-1,3-butadiene	53	5.336	5.322	0.014	91	534750	50.0	50.1	
66 Isopropyl ether	87	5.322	5.322	0.000	91	270860	50.0	50.1	
69 Tert-butyl ethyl ether	59	5.908	5.908	0.000	97	792920	50.0	47.9	
70 Ethyl acetate	43	6.228	6.221	0.007	99	475209	100.0	107.3	
73 Propionitrile	54	6.235	6.228	0.007	99	387598	500.0	524.6	
76 Methacrylonitrile	41	6.442	6.442	0.000	91	1568874	500.0	552.4	
86 Tert-amyl methyl ether	73	7.465	7.458	0.007	97	765220	50.0	48.4	
88 n-Butanol	56	8.015	8.015	0.000	90	212642	1250.0	1154.5	
16 Ethyl acrylate	55	8.187	8.187	0.000	100	306857	50.0	46.7	
91 Methyl methacrylate	100	8.437	8.430	0.007	91	159298	100.0	97.5	
97 2-Nitropropane	41	8.873	8.873	0.000	99	139813	100.0	90.4	
120 cis-1,4-Dichloro-2-butene	53	11.783	11.784	-0.001	91	214794	100.0	100.4	
135 1,2,3-Trimethylbenzene	105	12.863	12.863	0.000	98	1382988	50.0	52.2	
140 1,3,5-Trichlorobenzene	180	13.707	13.707	0.000	98	677662	50.0	55.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp B_00015	Amount Added:	6.25	Units: uL
MV-ARCH SS A_00081	Amount Added:	1.00	Units: uL

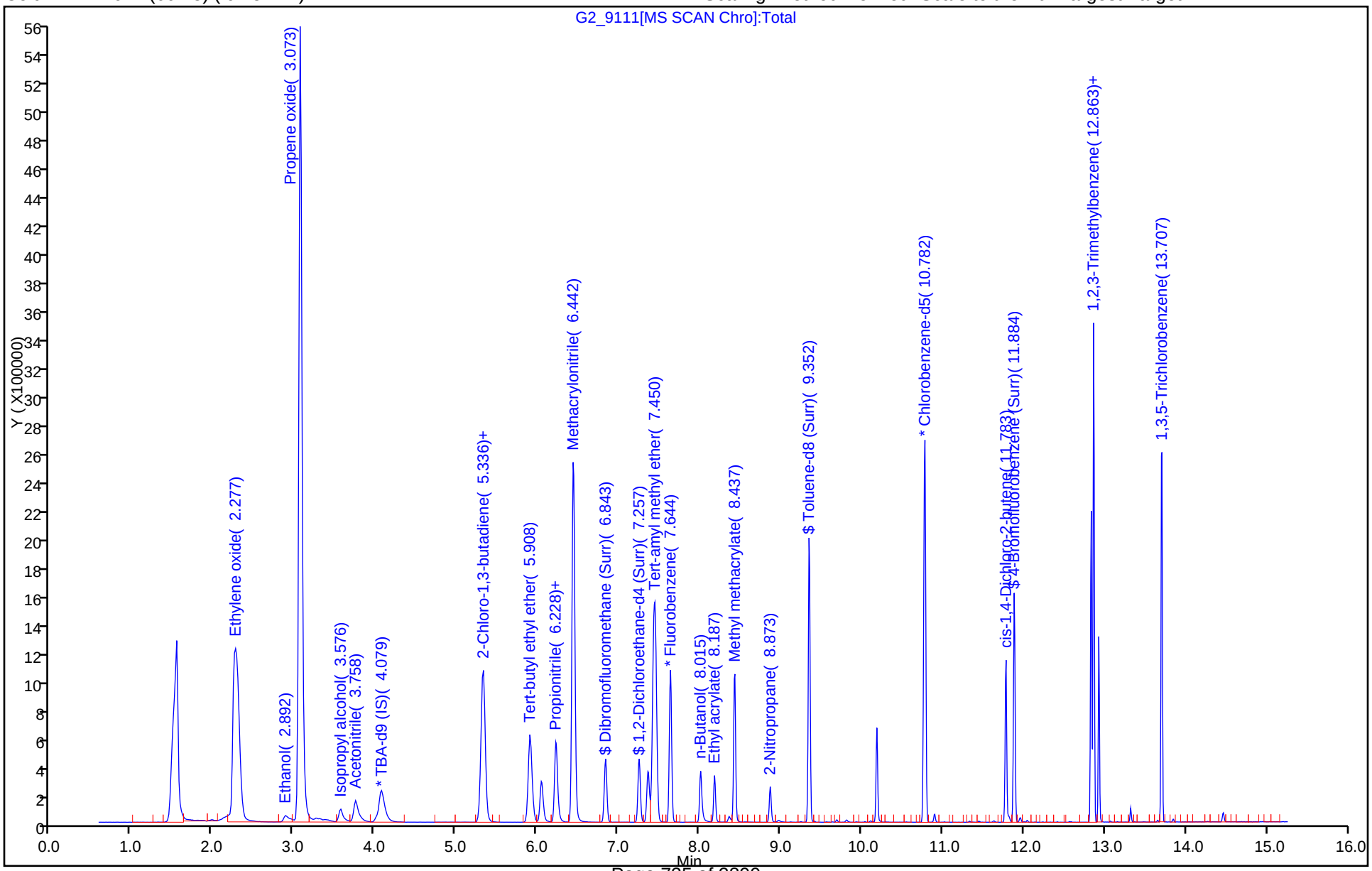
Report Date: 27-Apr-2017 16:50:11 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9111.D

Injection Date:	27-Apr-2017 00:08:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	ICV			Worklist Smp#:	28
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-375537/12 Calibration Date: 05/30/2017 22:43

Instrument ID: VMS_G2 Calib Start Date: 05/30/2017 18:51

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/30/2017 21:14

Lab File ID: G2_0487.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin1		0.5855		50.7	50.0	1.4	20.0
Chloromethane	Ave	0.7864	0.7337	0.1000	46.7	50.0	-6.7	20.0
Vinyl chloride	Ave	0.9762	0.8609		44.1	50.0	-11.8	20.0
Bromomethane	Ave	0.7750	0.5977		38.6	50.0	-22.9*	20.0
Chloroethane	Lin1		0.5078		57.0	50.0	13.9	20.0
Dichlorofluoromethane	Qua		0.9692		44.3	50.0	-11.3	20.0
Trichlorofluoromethane	Ave	0.8768	0.7882		44.9	50.0	-10.1	20.0
Ethyl ether	Ave	0.4165	0.4511		54.2	50.0	8.3	20.0
Acrolein	Ave	0.0750	0.0806		537	500	7.5	20.0
1,1-Dichloroethene	Qua		0.4986		48.8	50.0	-2.3	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.5181	0.4643		44.8	50.0	-10.4	20.0
Acetone	Ave	0.1856	0.1668		180	200	-10.1	20.0
Methyl iodide	Lin1		0.9208		50.2	50.0	0.3	20.0
Carbon disulfide	Qua		1.826		49.0	50.0	-2.1	20.0
Methyl acetate	Ave	0.3664	0.3646		249	250	-0.5	20.0
3-Chloro-1-propene	Ave	0.8257	0.8738		52.9	50.0	5.8	20.0
Methylene Chloride	Lin2		0.5582		48.9	50.0	-2.3	20.0
t-Butyl alcohol	Ave	0.0547	0.0534		489	500	-2.3	20.0
Acrylonitrile	Ave	0.1726	0.1674		485	500	-3.0	20.0
Methyl tert-butyl ether	Ave	1.340	1.406		52.5	50.0	5.0	20.0
trans-1,2-Dichloroethene	Ave	0.5409	0.5605		51.8	50.0	3.6	20.0
Hexane	Lin2		2.093		52.6	50.0	5.3	20.0
1,1-Dichloroethane	Ave	1.043	0.9843	0.1000	47.2	50.0	-5.6	20.0
Vinyl acetate	Lin2		0.7824		85.7	100	-14.3	20.0
2,2-Dichloropropane	Ave	0.8435	0.7972		47.3	50.0	-5.5	20.0
2-Butanone (MEK)	Ave	0.2353	0.2008		171	200	-14.7	20.0
cis-1,2-Dichloroethene	Ave	0.5706	0.5600		49.1	50.0	-1.9	20.0
Bromochloromethane	Ave	0.2780	0.2653		47.7	50.0	-4.6	20.0
sec-Butyl Alcohol	Lin1		0.0368		1370	1500	-8.7	20.0
Tetrahydrofuran	Ave	0.1367	0.1548		113	100	13.2	20.0
Chloroform	Ave	1.086	0.9605		44.2	50.0	-11.5	20.0
1,1,1-Trichloroethane	Ave	0.9556	0.8741		45.7	50.0	-8.5	20.0
Cyclohexane	Lin2		0.8982		51.1	50.0	2.2	20.0
Carbon tetrachloride	Ave	0.9047	0.8074		44.6	50.0	-10.8	20.0
1,1-Dichloropropene	Lin1		0.7720		52.3	50.0	4.5	20.0
Benzene	Ave	2.054	2.071		50.4	50.0	0.8	20.0
1,2-Dichloroethane	Ave	0.8732	0.7555		43.3	50.0	-13.5	20.0
Isobutyl alcohol	Ave	0.0242	0.0227		1170	1250	-6.4	20.0
Trichloroethene	Ave	0.5063	0.5029		49.7	50.0	-0.7	20.0
2-Pentanone	Ave	0.3919	0.4320		220	200	10.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-375537/12 Calibration Date: 05/30/2017 22:43

Instrument ID: VMS_G2 Calib Start Date: 05/30/2017 18:51

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/30/2017 21:14

Lab File ID: G2_0487.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Lin2		0.7865		52.8	50.0	5.7	20.0
1,2-Dichloropropane	Ave	0.5463	0.5303		48.5	50.0	-2.9	20.0
1,4-Dioxane	Lin1		0.0048		988	1000	-1.2	20.0
Dibromomethane	Ave	0.3430	0.3132		45.7	50.0	-8.7	20.0
Bromodichloromethane	Ave	0.7490	0.7034		47.0	50.0	-6.1	20.0
2-Chloroethyl vinyl ether	Lin1		0.1167		43.8	50.0	-12.4	20.0
cis-1,3-Dichloropropene	Lin1		1.978		48.8	50.0	-2.5	20.0
4-Methyl-2-pentanone (MIBK)	Lin2		0.4322		183	200	-8.7	20.0
Toluene	Ave	2.045	2.162		52.9	50.0	5.7	20.0
trans-1,3-Dichloropropene	Lin1		0.7329		47.3	50.0	-5.5	20.0
Ethyl methacrylate	Lin1		1.414		48.4	50.0	-3.2	20.0
1,1,2-Trichloroethane	Ave	0.4411	0.4254		48.2	50.0	-3.6	20.0
Tetrachloroethene	Ave	1.221	1.198		49.1	50.0	-1.9	20.0
1,3-Dichloropropane	Ave	1.822	1.865		51.2	50.0	2.4	20.0
2-Hexanone	Lin2		0.7858		183	200	-8.5	20.0
Dibromochloromethane	Ave	1.311	1.296		49.4	50.0	-1.2	20.0
1,2-Dibromoethane	Ave	1.049	1.067		50.8	50.0	1.7	20.0
1-Chlorohexane	Lin1		1.826		49.2	50.0	-1.6	20.0
Chlorobenzene	Ave	3.792	3.704	0.3000	48.8	50.0	-2.3	20.0
1,1,1,2-Tetrachloroethane	Ave	1.464	1.421		48.5	50.0	-2.9	20.0
Ethylbenzene	Ave	1.856	1.955		52.7	50.0	5.4	20.0
m&p-Xylene	Lin1		2.367		49.5	50.0	-0.9	20.0
o-Xylene	Lin1		2.369		51.1	50.0	2.2	20.0
Styrene	Lin1		3.904		49.6	50.0	-0.7	20.0
Bromoform	Ave	0.8596	0.8190	0.1000	47.6	50.0	-4.7	20.0
Isopropylbenzene	Lin2		2.900		52.2	50.0	4.3	20.0
Cyclohexanone	Lin1		0.0367		1780	2000	-11.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6603	0.6678	0.3000	50.6	50.0	1.1	20.0
Bromobenzene	Ave	0.7064	0.7764		55.0	50.0	9.9	20.0
trans-1,4-Dichloro-2-butene	Lin2		0.2152		51.8	50.0	3.5	20.0
1,2,3-Trichloropropane	Ave	0.2107	0.2120		50.3	50.0	0.6	20.0
N-Propylbenzene	Lin2		0.8525		52.1	50.0	4.1	20.0
2-Chlorotoluene	Lin2		0.7204		50.7	50.0	1.4	20.0
1,3,5-Trimethylbenzene	Lin2		2.461		50.4	50.0	0.8	20.0
4-Chlorotoluene	Lin1		0.7705		51.1	50.0	2.2	20.0
tert-Butylbenzene	Lin2		2.228		52.3	50.0	4.5	20.0
1,2,4-Trimethylbenzene	Lin2		2.525		49.7	50.0	-0.6	20.0
sec-Butylbenzene	Lin2		0.6936		50.4	50.0	0.9	20.0
1,3-Dichlorobenzene	Ave	1.411	1.516		53.7	50.0	7.4	20.0
4-Isopropyltoluene	Lin2		2.928		51.1	50.0	2.3	20.0
1,4-Dichlorobenzene	Ave	1.546	1.540		49.8	50.0	-0.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-375537/12 Calibration Date: 05/30/2017 22:43

Instrument ID: VMS_G2 Calib Start Date: 05/30/2017 18:51

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/30/2017 21:14

Lab File ID: G2_0487.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Lin2		2.616		52.7	50.0	5.3	20.0
1,2-Dichlorobenzene	Ave	1.386	1.446		52.2	50.0	4.4	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1237	0.1446		58.4	50.0	16.9	20.0
1,2,4-Trichlorobenzene	Lin1		1.028		54.5	50.0	9.1	20.0
Hexachlorobutadiene	Lin2		0.6387		52.9	50.0	5.7	20.0
Naphthalene	Lin1		2.038		54.0	50.0	8.1	20.0
1,2,3-Trichlorobenzene	Lin2		0.9402		55.3	50.0	10.6	20.0
Dibromofluoromethane (Surr)	Ave	0.5696	0.5396		37.9	45.0	-5.3	20.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.6817		40.3	45.0	-10.5	20.0
Toluene-d8 (Surr)	Ave	4.778	5.160		43.2	45.0	8.0	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8196	0.8729		42.6	45.0	6.5	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0487.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 30-May-2017 22:43:30 ALS Bottle#: 23 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist:

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 31-May-2017 20:00:43 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: dukesa Date: 30-May-2017 23:05:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.051	4.065	-0.014	96	419122	1000.0	1000.0	
* 3 Fluorobenzene	96	7.622	7.629	-0.007	98	449806	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	86	179966	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	380726	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.821	6.828	-0.007	94	194187	40.0	37.9	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.236	7.243	-0.007	97	245299	40.0	40.3	
$ 10 Toluene-d8 (Surr)	98	9.338	9.345	-0.007	94	742889	40.0	43.2	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	265881	40.0	42.6	
32 Dichlorodifluoromethane	85	1.690	1.705	-0.015	99	263363	50.0	50.7	
34 Chloromethane	50	1.816	1.830	-0.014	99	330039	50.0	46.7	
37 Vinyl chloride	62	1.942	1.956	-0.014	98	387258	50.0	44.1	
22 Butadiene	54	1.984	1.998	-0.014	90	147998	50.0	39.7	
39 Bromomethane	94	2.277	2.291	-0.014	90	268861	50.0	38.6	
40 Chloroethane	64	2.403	2.403	0.000	100	228400	50.0	57.0	
41 Dichlorofluoromethane	67	2.654	2.654	0.000	97	435928	50.0	44.3	
43 Trichlorofluoromethane	101	2.682	2.682	0.000	98	354543	50.0	44.9	
45 Ethyl ether	59	2.989	3.003	-0.014	94	202892	50.0	54.2	
48 Acrolein	56	3.171	3.185	-0.014	99	362653	499.9	537.4	
53 1,1-Dichloroethene	96	3.297	3.311	-0.014	95	224249	50.0	48.8	
52 1,1,2-Trichloro-1,2,2-trif	151	3.325	3.339	-0.014	94	208847	50.0	44.8	
50 Acetone	43	3.352	3.353	-0.001	98	300020	200.0	179.7	
55 Iodomethane	142	3.478	3.492	-0.014	100	414176	50.0	50.2	
58 Carbon disulfide	76	3.562	3.576	-0.014	100	821259	50.0	49.0	
56 Methyl acetate	43	3.785	3.799	-0.014	98	819894	250.0	248.7	
57 3-Chloro-1-propene	41	3.799	3.799	0.000	89	393018	50.0	52.9	
60 Methylene Chloride	84	3.995	4.009	-0.014	95	251093	50.0	48.9	
59 2-Methyl-2-propanol	59	4.190	4.204	-0.014	96	240276	500.0	488.6	
61 Acrylonitrile	53	4.358	4.372	-0.014	98	752821	500.0	484.9	
62 Methyl tert-butyl ether	73	4.414	4.428	-0.014	97	632445	50.0	52.5	
63 trans-1,2-Dichloroethene	96	4.414	4.428	-0.014	96	252096	50.0	51.8	
64 Hexane	57	4.903	4.917	-0.014	94	376684	50.0	52.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 1,1-Dichloroethane	63	5.196	5.210	-0.014	97	442725	50.0	47.2	
65 Vinyl acetate	43	5.238	5.252	-0.014	98	703872	100.0	85.7	
74 cis-1,2-Dichloroethene	96	6.120	6.128	-0.008	84	251869	50.0	49.1	
71 2-Butanone (MEK)	43	6.120	6.128	-0.008	92	361205	200.0	170.6	
75 2,2-Dichloropropane	77	6.120	6.135	-0.015	63	358589	50.0	47.3	
77 Chlorobromomethane	128	6.449	6.457	-0.008	68	119310	50.0	47.7	
72 sec-Butyl Alcohol	45	6.449	6.457	-0.008	96	495995	1500.0	1370.2	
79 Tetrahydrofuran	42	6.457	6.464	-0.007	79	139255	100.0	113.2	
78 Chloroform	83	6.621	6.628	-0.007	95	432048	50.0	44.2	
81 1,1,1-Trichloroethane	97	6.807	6.814	-0.007	98	393157	50.0	45.7	
82 Cyclohexane	56	6.878	6.886	-0.008	92	404028	50.0	51.1	
84 Carbon tetrachloride	117	6.993	7.000	-0.007	96	363159	50.0	44.6	
83 1,1-Dichloropropene	75	7.007	7.014	-0.007	94	347239	50.0	52.3	
87 Benzene	78	7.250	7.257	-0.007	98	931770	50.0	50.4	
85 1,2-Dichloroethane	62	7.336	7.343	-0.007	98	339814	50.0	43.3	
80 Isobutyl alcohol	41	7.643	7.651	-0.008	84	254778	1250.0	1170.2	
35 n-Heptane	43	7.643	7.651	-0.008	93	379734	50.0	51.6	
89 Trichloroethene	95	8.037	8.044	-0.007	97	226216	50.0	49.7	
90 2-Pentanone	43	8.251	8.258	-0.007	99	777218	200.0	220.5	
93 Methylcyclohexane	55	8.287	8.294	-0.007	91	353780	50.0	52.8	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	94	238538	50.0	48.5	
94 1,4-Dioxane	88	8.409	8.416	-0.007	94	43545	1000.0	988.0	
95 Dibromomethane	93	8.416	8.423	-0.007	96	140865	50.0	45.7	
96 Dichlorobromomethane	83	8.623	8.623	0.000	99	316400	50.0	47.0	
98 2-Chloroethyl vinyl ether	63	8.931	8.938	-0.008	93	52506	50.0	43.8	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	94	356052	50.0	48.8	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	98	777592	200.0	182.6	
101 Toluene	91	9.410	9.410	0.000	98	972365	50.0	52.9	
103 trans-1,3-Dichloropropene	75	9.653	9.660	-0.007	95	329674	50.0	47.3	
102 Ethyl methacrylate	69	9.717	9.717	0.000	90	254515	50.0	48.4	
104 1,1,2-Trichloroethane	97	9.846	9.853	-0.007	93	191367	50.0	48.2	
107 Tetrachloroethene	164	9.910	9.917	-0.007	98	215554	50.0	49.1	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	93	335671	50.0	51.2	
105 2-Hexanone	43	10.060	10.060	0.000	97	565677	200.0	183.0	
108 Chlorodibromomethane	129	10.210	10.210	0.000	90	233211	50.0	49.4	
110 Ethylene Dibromide	107	10.318	10.318	0.000	98	192065	50.0	50.8	
111 1-Chlorohexane	91	10.775	10.775	0.000	96	328695	50.0	49.2	
112 Chlorobenzene	112	10.782	10.790	-0.008	95	666664	50.0	48.8	
113 1,1,1,2-Tetrachloroethane	131	10.875	10.875	0.000	93	255797	50.0	48.5	
114 Ethylbenzene	106	10.883	10.883	0.000	98	351868	50.0	52.7	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	425897	50.0	49.5	
117 o-Xylene	106	11.362	11.362	0.000	97	426328	50.0	51.1	
116 Styrene	104	11.383	11.383	0.000	99	702562	50.0	49.6	
118 Bromoform	173	11.555	11.555	0.000	96	147387	50.0	47.6	
119 Isopropylbenzene	105	11.705	11.705	0.000	96	1104139	50.0	52.2	
121 Cyclohexanone	55	11.791	11.798	-0.007	94	264013	2000.0	1780.9	
125 Bromobenzene	156	11.998	11.998	0.000	92	295612	50.0	55.0	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	96	254257	50.0	50.6	
123 trans-1,4-Dichloro-2-buten	53	12.027	12.027	0.000	77	81919	50.0	51.8	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	85	80731	50.0	50.3	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	324569	50.0	52.1	
128 2-Chlorotoluene	126	12.170	12.177	-0.007	96	274276	50.0	50.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	95	937085	50.0	50.4	
129 4-Chlorotoluene	126	12.277	12.277	0.000	98	293348	50.0	51.1	
130 tert-Butylbenzene	119	12.506	12.506	0.000	93	848374	50.0	52.3	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	961298	50.0	49.7	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	264074	50.0	50.4	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	98	577146	50.0	53.7	
133 4-Isopropyltoluene	119	12.784	12.785	-0.001	97	1114728	50.0	51.1	
136 1,4-Dichlorobenzene	146	12.835	12.835	0.000	95	586414	50.0	49.8	
137 n-Butylbenzene	91	13.063	13.063	0.000	98	995987	50.0	52.7	
138 1,2-Dichlorobenzene	146	13.078	13.085	-0.007	98	550585	50.0	52.2	
139 1,2-Dibromo-3-Chloropropan	157	13.578	13.578	0.000	84	55058	50.0	58.4	
141 1,2,4-Trichlorobenzene	180	14.107	14.107	0.000	93	391478	50.0	54.5	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	96	243169	50.0	52.9	
143 Naphthalene	128	14.293	14.300	-0.007	97	776013	50.0	54.0	
144 1,2,3-Trichlorobenzene	180	14.450	14.451	-0.001	95	357963	50.0	55.3	
S 151 1,2-Dichloroethene, Total	96				0		100.0	100.9	
S 146 Xylenes, Total (URS)	1				0		100.0	100.6	
S 150 Xylenes, Total	106				0		100.0	100.6	
S 145 Trihalomethanes, Total	1				0		200.0	188.3	
S 149 1,2-Dichloroethene, Total	1				0		50.0	100.9	
S 148 1,3-Dichloropropene, Total	1				0		100.0	96.0	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Gas/Ket B_00034	Amount Added:	6.25	Units: uL
MV-Main B_00017	Amount Added:	6.25	Units: uL
MV-SS 2-Cleve_00035	Amount Added:	6.25	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.80	Units: uL

Report Date: 31-May-2017 20:01:09 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0487.D

Injection Date: 30-May-2017 22:43:30 Instrument ID: VMS_G2 Operator ID: DUKESA

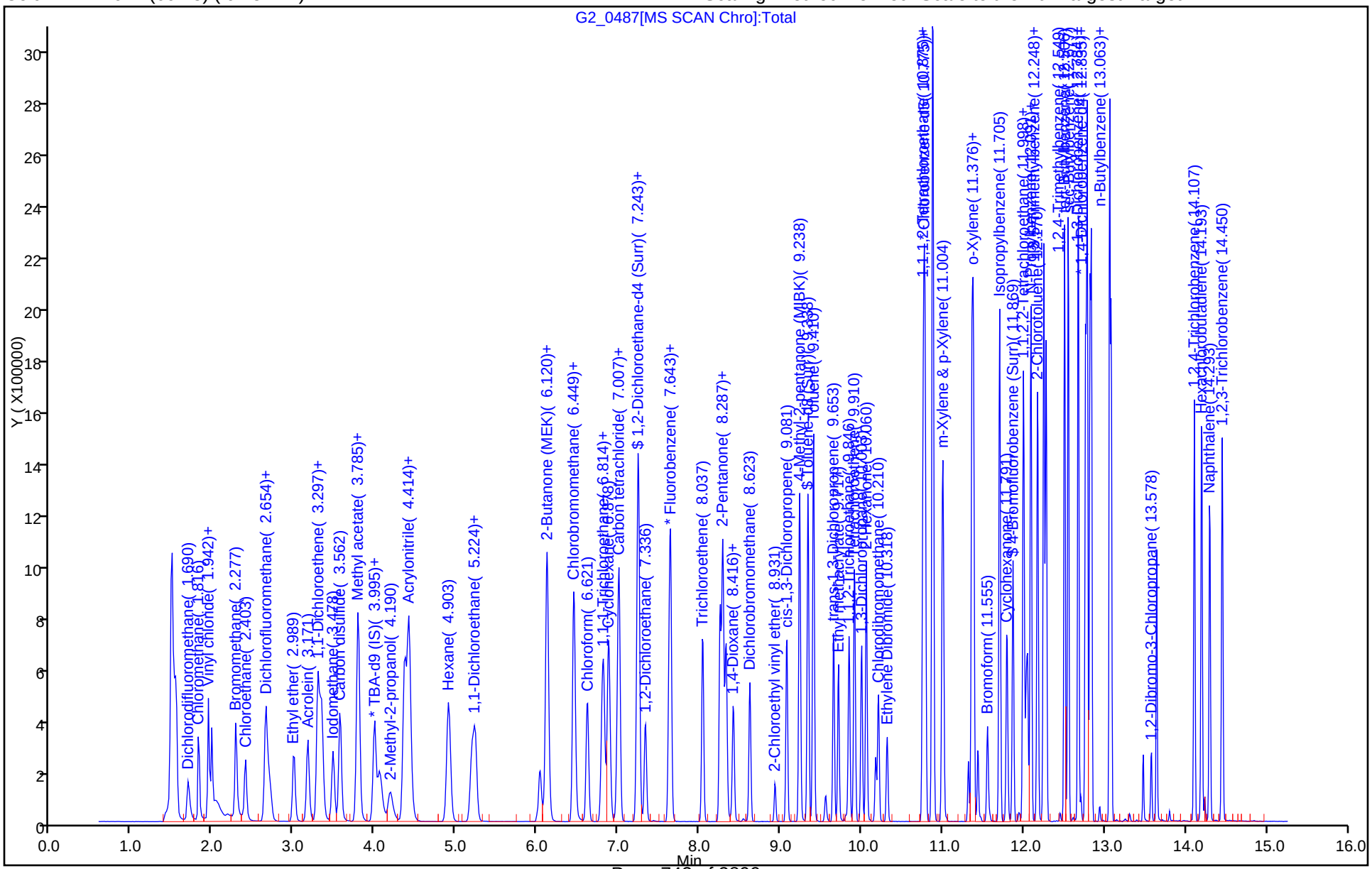
Lims ID: ICV Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 23

Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-376040/2 Calibration Date: 06/03/2017 20:01

Instrument ID: VMS_G2 Calib Start Date: 05/30/2017 18:51

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/30/2017 21:14

Lab File ID: G2_0630.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin1		0.5719		49.5	50.0	-0.9	20.0
Chloromethane	Ave	0.7864	0.8903	0.1000	56.6	50.0	13.2	20.0
Vinyl chloride	Ave	0.9762	0.998		51.1	50.0	2.2	20.0
Bromomethane	Ave	0.7750	0.7439		48.0	50.0	-4.0	20.0
Chloroethane	Lin1		0.5500		61.6	50.0	23.1*	20.0
Dichlorofluoromethane	Qua		1.005		46.0	50.0	-8.1	20.0
Trichlorofluoromethane	Ave	0.8768	0.8414		48.0	50.0	-4.0	20.0
Ethyl ether	Ave	0.4165	0.4935		59.2	50.0	18.5	20.0
Acrolein	Ave	0.0750	0.0863		575	500	15.0	20.0
1,1-Dichloroethene	Qua		0.5382		52.8	50.0	5.6	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.5181	0.4953		47.8	50.0	-4.4	20.0
Acetone	Ave	0.1856	0.1861		201	200	0.3	20.0
Methyl iodide	Lin1		0.9591		52.3	50.0	4.6	20.0
Carbon disulfide	Qua		1.946		52.3	50.0	4.7	20.0
Methyl acetate	Ave	0.3664	0.4244		290	250	15.8	20.0
3-Chloro-1-propene	Ave	0.8257	0.9922		60.1	50.0	20.2*	20.0
Methylene Chloride	Lin2		0.6275		55.3	50.0	10.6	20.0
t-Butyl alcohol	Ave	0.0547	0.0628		574	500	14.8	20.0
Acrylonitrile	Ave	0.1726	0.2051		594	500	18.8	20.0
Methyl tert-butyl ether	Ave	1.340	1.538		57.4	50.0	14.8	20.0
trans-1,2-Dichloroethene	Ave	0.5409	0.5926		54.8	50.0	9.6	20.0
Hexane	Lin2		2.242		56.2	50.0	12.4	20.0
1,1-Dichloroethane	Ave	1.043	1.120	0.1000	53.7	50.0	7.4	20.0
Vinyl acetate	Lin2		0.9763		106	100	5.7	20.0
2,2-Dichloropropane	Ave	0.8435	0.8508		50.4	50.0	0.9	20.0
2-Butanone (MEK)	Ave	0.2353	0.2546		216	200	8.2	20.0
cis-1,2-Dichloroethene	Ave	0.5706	0.6293		55.1	50.0	10.3	20.0
Bromochloromethane	Ave	0.2780	0.2954		53.1	50.0	6.3	20.0
sec-Butyl Alcohol	Lin1		0.0437		832	750	10.9	20.0
Tetrahydrofuran	Ave	0.1367	0.1738		127	100	27.2*	20.0
Chloroform	Ave	1.086	1.063		49.0	50.0	-2.1	20.0
1,1,1-Trichloroethane	Ave	0.9556	0.9261		48.5	50.0	-3.1	20.0
Cyclohexane	Lin2		1.016		57.5	50.0	15.1	20.0
Carbon tetrachloride	Ave	0.9047	0.8555		47.3	50.0	-5.4	20.0
1,1-Dichloropropene	Lin1		0.8052		54.5	50.0	8.9	20.0
Benzene	Ave	2.054	2.348		57.1	50.0	14.3	20.0
1,2-Dichloroethane	Ave	0.8732	0.8390		48.0	50.0	-3.9	20.0
Isobutyl alcohol	Ave	0.0242	0.0259		1340	1250	7.0	20.0
Trichloroethene	Ave	0.5063	0.5483		54.1	50.0	8.3	20.0
2-Pentanone	Ave	0.3919	0.5850		149	100	49.3*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-376040/2 Calibration Date: 06/03/2017 20:01

Instrument ID: VMS_G2 Calib Start Date: 05/30/2017 18:51

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/30/2017 21:14

Lab File ID: G2_0630.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Lin2		0.8744		58.7	50.0	17.4	20.0
1,2-Dichloropropane	Ave	0.5463	0.6138		56.2	50.0	12.3	20.0
1,4-Dioxane	Lin1		0.0055		1120	1000	11.7	20.0
Dibromomethane	Ave	0.3430	0.3554		51.8	50.0	3.6	20.0
Bromodichloromethane	Ave	0.7490	0.7614		50.8	50.0	1.6	20.0
2-Chloroethyl vinyl ether	Lin1		0.1146		43.1	50.0	-13.7	20.0
cis-1,3-Dichloropropene	Lin1		2.157		53.0	50.0	6.1	20.0
4-Methyl-2-pentanone (MIBK)	Lin2		0.5187		217	200	8.7	20.0
Toluene	Ave	2.045	2.405		58.8	50.0	17.6	20.0
trans-1,3-Dichloropropene	Lin1		0.8398		54.0	50.0	8.0	20.0
Ethyl methacrylate	Lin1		1.586		53.8	50.0	7.6	20.0
1,1,2-Trichloroethane	Ave	0.4411	0.4675		53.0	50.0	6.0	20.0
Tetrachloroethene	Ave	1.221	1.235		50.6	50.0	1.2	20.0
1,3-Dichloropropane	Ave	1.822	2.080		57.1	50.0	14.2	20.0
2-Hexanone	Lin2		0.9145		211	200	5.7	20.0
Dibromochloromethane	Ave	1.311	1.349		51.4	50.0	2.9	20.0
1,2-Dibromoethane	Ave	1.049	1.125		53.6	50.0	7.2	20.0
1-Chlorohexane	Lin1		1.866		25.4	25.0	1.6	20.0
Chlorobenzene	Ave	3.792	3.946	0.3000	52.0	50.0	4.0	20.0
1,1,1,2-Tetrachloroethane	Ave	1.464	1.470		50.2	50.0	0.4	20.0
Ethylbenzene	Ave	1.856	2.097		56.5	50.0	13.0	20.0
m&p-Xylene	Lin1		2.482		51.9	50.0	3.8	20.0
o-Xylene	Lin1		2.363		51.0	50.0	2.0	20.0
Styrene	Lin1		4.114		52.2	50.0	4.4	20.0
Bromoform	Ave	0.8596	0.8751	0.1000	50.9	50.0	1.8	20.0
Isopropylbenzene	Lin2		2.966		53.3	50.0	6.6	20.0
Cyclohexanone	Lin1		0.0412		1990	2000	-0.5	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6603	0.7408	0.3000	56.1	50.0	12.2	20.0
Bromobenzene	Ave	0.7064	0.7988		56.5	50.0	13.1	20.0
trans-1,4-Dichloro-2-butene	Lin2		0.2323		55.7	50.0	11.5	20.0
1,2,3-Trichloropropane	Ave	0.2107	0.2241		53.2	50.0	6.3	20.0
N-Propylbenzene	Lin2		0.8765		53.5	50.0	6.9	20.0
2-Chlorotoluene	Lin2		0.7331		51.5	50.0	3.1	20.0
1,3,5-Trimethylbenzene	Lin2		2.531		51.7	50.0	3.5	20.0
4-Chlorotoluene	Lin1		0.7793		51.7	50.0	3.4	20.0
tert-Butylbenzene	Lin2		2.228		52.2	50.0	4.5	20.0
1,2,4-Trimethylbenzene	Lin2		2.619		51.5	50.0	2.9	20.0
sec-Butylbenzene	Lin2		0.7025		51.1	50.0	2.1	20.0
1,3-Dichlorobenzene	Ave	1.411	1.528		54.1	50.0	8.2	20.0
4-Isopropyltoluene	Lin2		2.949		51.5	50.0	3.0	20.0
1,4-Dichlorobenzene	Ave	1.546	1.566		50.7	50.0	1.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-376040/2 Calibration Date: 06/03/2017 20:01

Instrument ID: VMS_G2 Calib Start Date: 05/30/2017 18:51

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/30/2017 21:14

Lab File ID: G2_0630.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Lin2		2.607		52.5	50.0	5.0	20.0
1,2-Dichlorobenzene	Ave	1.386	1.466		52.9	50.0	5.8	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1237	0.1396		56.4	50.0	12.8	20.0
1,2,4-Trichlorobenzene	Lin1		0.9079		48.5	50.0	-2.9	20.0
Hexachlorobutadiene	Lin2		0.5743		47.7	50.0	-4.6	20.0
Naphthalene	Lin1		1.939		51.6	50.0	3.2	20.0
1,2,3-Trichlorobenzene	Lin2		0.8453		49.9	50.0	-0.1	20.0
Dibromofluoromethane (Surr)	Ave	0.5696	0.5124		40.5	45.0	-10.1	20.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.6349		42.4	45.0	-5.8	20.0
Toluene-d8 (Surr)	Ave	4.778	4.817		45.4	45.0	0.8	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8196	0.8005		43.9	45.0	-2.3	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0630.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 03-Jun-2017 20:01:30 ALS Bottle#: 11 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:10 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 03-Jun-2017 20:22:53

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 TBA-d9 (IS)	65	4.065	4.065	0.000	95	503230	1000.0	1000.0	
*	3 Fluorobenzene	96	7.637	7.637	0.000	98	465228	50.0	50.0	
*	4 Chlorobenzene-d5	119	10.761	10.761	0.000	86	191336	50.0	50.0	
*	5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	94	407550	50.0	50.0	
$	8 Dibromofluoromethane (Surr	111	6.829	6.829	0.000	93	214523	45.0	40.5	
$	9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	98	265830	45.0	42.4	
$	10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	829462	45.0	45.4	
$	11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	92	293612	45.0	43.9	
	32 Dichlorodifluoromethane	85	1.691	1.691	0.000	99	266058	50.0	49.5	
	34 Chloromethane	50	1.830	1.830	0.000	99	414187	50.0	56.6	
	37 Vinyl chloride	62	1.956	1.956	0.000	98	464091	50.0	51.1	
	22 Butadiene	54	1.998	1.998	0.000	90	219610	50.0	55.0	
	39 Bromomethane	94	2.291	2.291	0.000	91	346104	50.0	48.0	
	40 Chloroethane	64	2.403	2.403	0.000	100	255867	50.0	61.6	
	41 Dichlorofluoromethane	67	2.654	2.654	0.000	97	467778	50.0	46.0	
	43 Trichlorofluoromethane	101	2.682	2.682	0.000	97	391457	50.0	48.0	
	45 Ethyl ether	59	3.004	3.004	0.000	94	229584	50.0	59.2	
	48 Acrolein	56	3.185	3.185	0.000	99	401267	499.9	574.9	
	53 1,1-Dichloroethene	96	3.311	3.311	0.000	95	250377	50.0	52.8	
	52 1,1,2-Trichloro-1,2,2-trif	151	3.339	3.339	0.000	94	230417	50.0	47.8	
	50 Acetone	43	3.353	3.353	0.000	98	346251	200.0	200.5	
	55 Iodomethane	142	3.492	3.492	0.000	99	446176	50.0	52.3	
	58 Carbon disulfide	76	3.576	3.576	0.000	100	905386	50.0	52.3	
	56 Methyl acetate	43	3.800	3.800	0.000	98	987086	250.0	289.5	
	57 3-Chloro-1-propene	41	3.814	3.814	0.000	90	461607	50.0	60.1	
	60 Methylene Chloride	84	4.009	4.009	0.000	96	291940	50.0	55.3	
	59 2-Methyl-2-propanol	59	4.205	4.205	0.000	96	292052	500.0	574.2	
	61 Acrylonitrile	53	4.372	4.372	0.000	98	954229	500.0	594.2	
	62 Methyl tert-butyl ether	73	4.428	4.428	0.000	97	715743	50.0	57.4	
	63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	95	275705	50.0	54.8	
	64 Hexane	57	4.917	4.917	0.000	94	429047	50.0	56.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 1,1-Dichloroethane	63	5.210	5.210	0.000	97	521179	50.0	53.7	
65 Vinyl acetate	43	5.252	5.252	0.000	98	908370	100.0	105.7	
74 cis-1,2-Dichloroethene	96	6.128	6.128	0.000	86	292755	50.0	55.1	
71 2-Butanone (MEK)	43	6.128	6.128	0.000	99	473722	200.0	216.4	
75 2,2-Dichloropropane	77	6.128	6.128	0.000	87	395828	50.0	50.4	
77 Chlorobromomethane	128	6.457	6.457	0.000	98	137437	50.0	53.1	
79 Tetrahydrofuran	42	6.464	6.464	0.000	90	161725	100.0	127.2	
72 sec-Butyl Alcohol	45	6.464	6.464	0.000	86	305017	750.0	831.9	
78 Chloroform	83	6.628	6.628	0.000	94	494513	50.0	49.0	
81 1,1,1-Trichloroethane	97	6.814	6.814	0.000	98	430863	50.0	48.5	
82 Cyclohexane	56	6.893	6.893	0.000	92	472802	50.0	57.5	
84 Carbon tetrachloride	117	7.000	7.000	0.000	95	397999	50.0	47.3	
83 1,1-Dichloropropene	75	7.022	7.022	0.000	95	374618	50.0	54.5	
87 Benzene	78	7.258	7.258	0.000	98	1092169	50.0	57.1	
85 1,2-Dichloroethane	62	7.336	7.336	0.000	98	390327	50.0	48.0	
80 Isobutyl alcohol	41	7.651	7.651	0.000	85	301095	1250.0	1337.1	
35 n-Heptane	43	7.651	7.651	0.000	93	463754	50.0	60.9	
89 Trichloroethene	95	8.044	8.044	0.000	97	255070	50.0	54.1	
90 2-Pentanone	43	8.259	8.259	0.000	97	544268	100.0	149.3	
93 Methylcyclohexane	55	8.294	8.294	0.000	92	406790	50.0	58.7	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	94	285558	50.0	56.2	
94 1,4-Dioxane	88	8.416	8.416	0.000	94	51136	1000.0	1116.9	
95 Dibromomethane	93	8.423	8.423	0.000	97	165320	50.0	51.8	
96 Dichlorobromomethane	83	8.623	8.623	0.000	99	354207	50.0	50.8	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	94	53328	50.0	43.1	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	93	412633	50.0	53.0	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	98	965286	200.0	217.3	
101 Toluene	91	9.410	9.410	0.000	98	1118769	50.0	58.8	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	95	390710	50.0	54.0	
102 Ethyl methacrylate	69	9.717	9.717	0.000	91	303424	50.0	53.8	
104 1,1,2-Trichloroethane	97	9.846	9.846	0.000	94	217491	50.0	53.0	
107 Tetrachloroethene	164	9.917	9.917	0.000	98	236265	50.0	50.6	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	94	398073	50.0	57.1	
105 2-Hexanone	43	10.060	10.060	0.000	97	699900	200.0	211.4	
108 Chlorodibromomethane	129	10.211	10.211	0.000	90	258050	50.0	51.4	
110 Ethylene Dibromide	107	10.318	10.318	0.000	99	215328	50.0	53.6	
111 1-Chlorohexane	91	10.775	10.775	0.000	94	178472	25.0	25.4	
112 Chlorobenzene	112	10.790	10.790	0.000	94	754967	50.0	52.0	
113 1,1,1,2-Tetrachloroethane	131	10.876	10.876	0.000	93	281258	50.0	50.2	
114 Ethylbenzene	106	10.883	10.883	0.000	98	401203	50.0	56.5	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	474960	50.0	51.9	
117 o-Xylene	106	11.362	11.362	0.000	97	452066	50.0	51.0	
116 Styrene	104	11.383	11.383	0.000	99	787070	50.0	52.2	
118 Bromoform	173	11.555	11.555	0.000	96	167433	50.0	50.9	
119 Isopropylbenzene	105	11.705	11.705	0.000	96	1208901	50.0	53.3	
121 Cyclohexanone	55	11.798	11.798	0.000	94	315169	2000.0	1990.9	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	96	301923	50.0	56.1	
125 Bromobenzene	156	11.998	11.998	0.000	93	325535	50.0	56.5	
123 trans-1,4-Dichloro-2-buten	53	12.027	12.027	0.000	82	94664	50.0	55.7	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	87	91317	50.0	53.2	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	357203	50.0	53.5	
128 2-Chlorotoluene	126	12.177	12.177	0.000	96	298757	50.0	51.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	94	1031313	50.0	51.7	
129 4-Chlorotoluene	126	12.277	12.277	0.000	98	317612	50.0	51.7	
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	907882	50.0	52.2	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	97	1067302	50.0	51.5	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	286319	50.0	51.1	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	98	622590	50.0	54.1	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	1202013	50.0	51.5	
136 1,4-Dichlorobenzene	146	12.835	12.835	0.000	94	638313	50.0	50.7	
137 n-Butylbenzene	91	13.064	13.064	0.000	97	1062453	50.0	52.5	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	97	597668	50.0	52.9	
139 1,2-Dibromo-3-Chloropropan	157	13.586	13.586	0.000	93	56882	50.0	56.4	
141 1,2,4-Trichlorobenzene	180	14.115	14.115	0.000	94	370012	50.0	48.5	
142 Hexachlorobutadiene	225	14.208	14.208	0.000	97	234041	50.0	47.7	
143 Naphthalene	128	14.301	14.301	0.000	98	790378	50.0	51.6	
144 1,2,3-Trichlorobenzene	180	14.458	14.458	0.000	95	344511	50.0	49.9	
S 151 1,2-Dichloroethene, Total	96				0		100.0	109.9	
S 149 1,2-Dichloroethene, Total	1				0		100.0	109.9	
S 148 1,3-Dichloropropene, Total	1				0		100.0	107.1	
S 146 Xylenes, Total (URS)	1				0		100.0	102.9	
S 150 Xylenes, Total	106				0		100.0	102.9	
S 145 Trihalomethanes, Total	1				0		200.0	202.1	

Reagents:

MV-2cleve+AVA_00025	Amount Added:	6.25	Units: uL		
MV-568718-D_00003	Amount Added:	1.00	Units: uL		
MV-Gas/Ket A_00060	Amount Added:	6.25	Units: uL		
MV-Main A_00030	Amount Added:	6.25	Units: uL		
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent	

Report Date: 05-Jun-2017 17:13:11 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0630.D

Injection Date: 03-Jun-2017 20:01:30 Instrument ID: VMS_G2 Operator ID: DUKESA

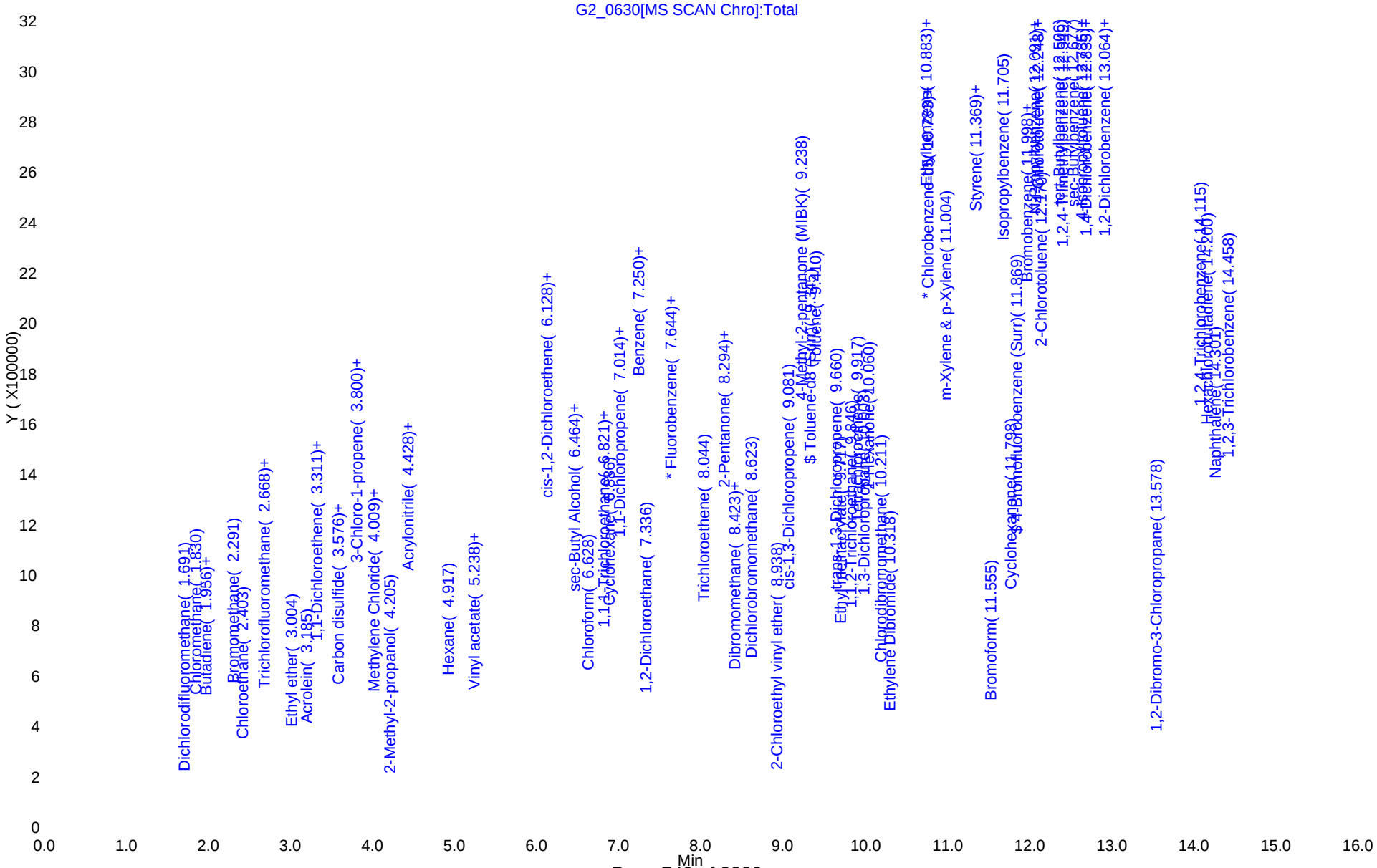
Lims ID: CCV Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 11

Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-376040/3 Calibration Date: 06/03/2017 20:21

Instrument ID: VMS_G2 Calib Start Date: 04/26/2017 21:24

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/26/2017 23:47

Lab File ID: G2_0631.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.1202		2850	3000	-4.9	20.0
Isopropyl alcohol	Lin2		0.6852		487	500	-2.7	20.0
Acetonitrile	Ave	0.0340	0.0694		1530	750	104.3*	20.0
Isopropyl ether	Lin1		0.4248		114	75.0	52.1*	20.0
2-Chloro-1,3-butadiene	Lin1		0.9591		88.2	50.0	76.4*	20.0
Tert-butyl ethyl ether	Lin1		1.451		129	75.0	72.6*	20.0
Ethyl acetate	Ave	0.2191	0.4694		214	100	114.2*	20.0
Propionitrile	Ave	0.0366	0.0711		1460	750	94.5*	20.0
Methacrylonitrile	Ave	0.1405	0.3142		1120	500	123.6*	20.0
Tert-amyl methyl ether	Lin1		1.362		128	75.0	70.4*	20.0
n-Butanol	Lin1		0.2525		951	1250	-23.9*	20.0
Methyl methacrylate	Lin1		0.1342		161	100	61.2*	20.0
2-Nitropropane	Lin1		0.1343		170	100	70.4*	20.0
cis-1,4-Dichloro-2-butene	Lin1		0.2486		98.4	100	-1.6	20.0
1,2,3-Trimethylbenzene	Lin2		2.731		43.8	50.0	-12.3	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0631.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 03-Jun-2017 20:21:30 ALS Bottle#: 12 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub99

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 03-Jun-2017 20:45:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	95	448517	1000.0	1000.0	
* 3 Fluorobenzene	96	7.637	7.637	0.000	98	439610	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	172089	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	306198	50.0	50.0	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.277	2.277	0.000	100	1429028	5000.0	13534	
42 Ethanol	45	2.892	2.892	0.000	99	161697	3000.0	2854.4	
47 Propene oxide	58	3.073	3.073	0.000	96	4533919	5000.0	8436.1	
51 Isopropyl alcohol	45	3.576	3.576	0.000	96	153669	500.0	486.6	
54 Acetonitrile	41	3.758	3.758	0.000	99	457824	750.0	1532.5	
66 Isopropyl ether	87	5.322	5.322	0.000	94	280131	75.0	114.1	
68 2-Chloro-1,3-butadiene	53	5.336	5.336	0.000	93	421647	50.0	88.2	
69 Tert-butyl ethyl ether	59	5.909	5.909	0.000	97	956640	75.0	129.5	
70 Ethyl acetate	43	6.221	6.221	0.000	99	412699	100.0	214.2	
73 Propionitrile	54	6.228	6.228	0.000	99	468938	750.0	1458.7	
76 Methacrylonitrile	41	6.435	6.435	0.000	93	1381411	500.0	1118.0	
86 Tert-amyl methyl ether	73	7.451	7.451	0.000	96	898367	75.0	127.8	
88 n-Butanol	56	8.008	8.008	0.000	94	141587	1250.0	950.9	
16 Ethyl acrylate	55	8.180	8.180	0.000	100	257546	50.0	86.7	
91 Methyl methacrylate	100	8.423	8.423	0.000	92	117946	100.0	161.2	
97 2-Nitropropane	41	8.866	8.866	0.000	98	118081	100.0	170.4	
120 cis-1,4-Dichloro-2-butene	53	11.769	11.769	0.000	90	152240	100.0	98.4	
135 1,2,3-Trimethylbenzene	105	12.856	12.856	0.000	98	836306	50.0	43.8	
140 1,3,5-Trichlorobenzene	180	13.693	13.693	0.000	97	348409	50.0	39.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00024	Amount Added:	6.25	Units: uL

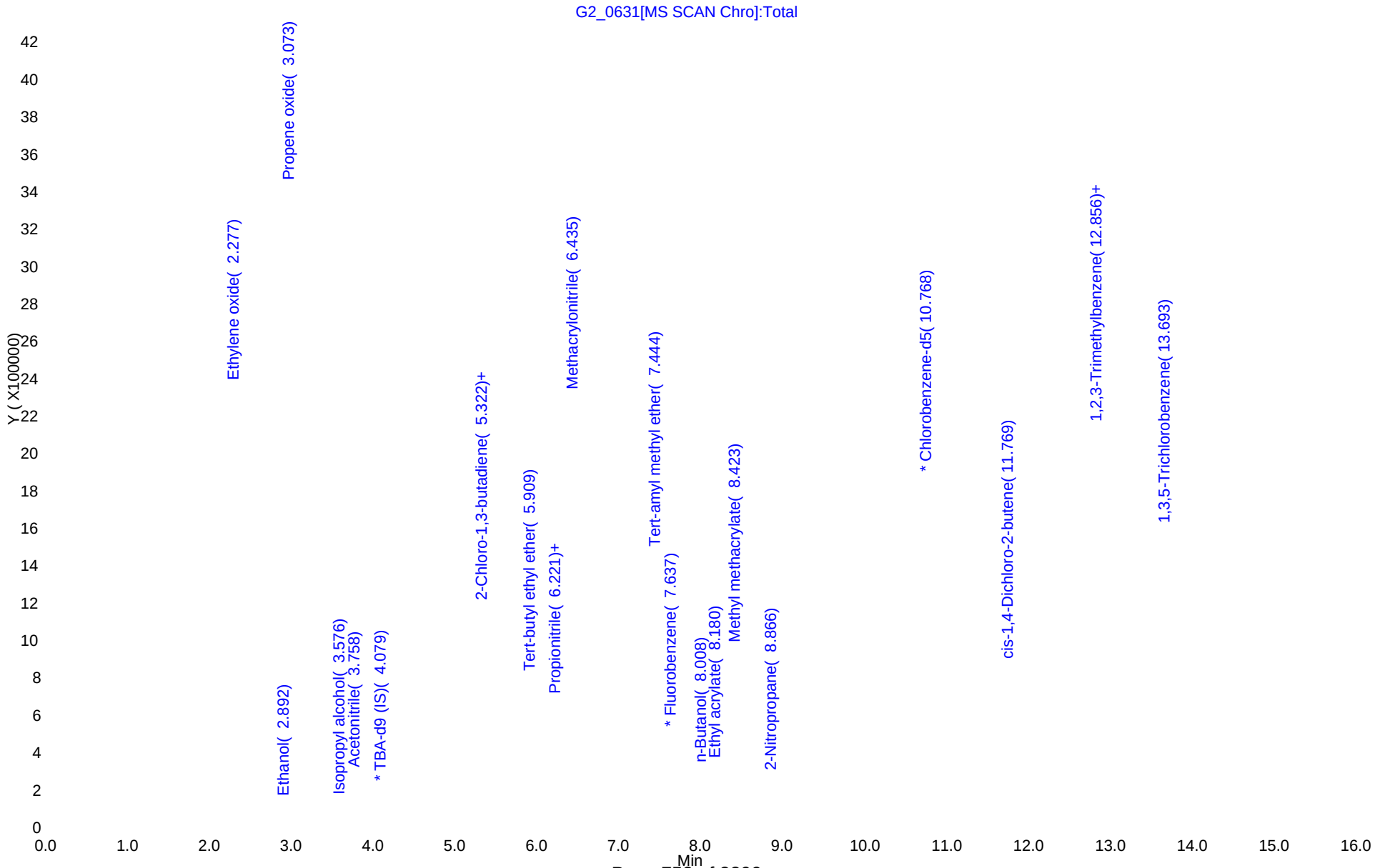
Report Date: 05-Jun-2017 17:13:13 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0631.D

Injection Date:	03-Jun-2017 20:21:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	CCV			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVC 280-376040/37 Calibration Date: 06/04/2017 06:20

Instrument ID: VMS_G2 Calib Start Date: 05/30/2017 18:51

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/30/2017 21:14

Lab File ID: G2_0660.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin1		0.5788		50.1	50.0	0.2	50.0
Chloromethane	Ave	0.7864	0.8726	0.1000	55.5	50.0	11.0	50.0
Vinyl chloride	Ave	0.9762	1.090		55.8	50.0	11.7	50.0
Bromomethane	Ave	0.7750	0.9104		58.7	50.0	17.5	50.0
Chloroethane	Lin1		0.7127		79.4	50.0	58.8*	50.0
Dichlorofluoromethane	Qua		1.132		51.7	50.0	3.5	50.0
Trichlorofluoromethane	Ave	0.8768	0.9390		53.5	50.0	7.1	50.0
Ethyl ether	Ave	0.4165	0.4275		51.3	50.0	2.6	50.0
Acrolein	Ave	0.0750	0.0770		513	500	2.7	50.0
1,1-Dichloroethene	Qua		0.4831		47.3	50.0	-5.4	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.5181	0.4972		48.0	50.0	-4.0	50.0
Acetone	Ave	0.1856	0.1791		193	200	-3.5	50.0
Methyl iodide	Lin1		0.8555		46.5	50.0	-7.0	50.0
Carbon disulfide	Qua		1.860		49.9	50.0	-0.1	50.0
Methyl acetate	Ave	0.3664	0.3812		260	250	4.0	50.0
3-Chloro-1-propene	Ave	0.8257	0.9057		54.8	50.0	9.7	50.0
Methylene Chloride	Lin2		0.5971		52.5	50.0	5.0	50.0
t-Butyl alcohol	Ave	0.0547	0.0477		436	500	-12.8	50.0
Acrylonitrile	Ave	0.1726	0.1848		535	500	7.1	50.0
Methyl tert-butyl ether	Ave	1.340	1.400		52.3	50.0	4.5	50.0
trans-1,2-Dichloroethene	Ave	0.5409	0.5733		53.0	50.0	6.0	50.0
Hexane	Lin2		1.712		43.5	50.0	-13.1	50.0
1,1-Dichloroethane	Ave	1.043	1.101	0.1000	52.8	50.0	5.5	50.0
Vinyl acetate	Lin2		0.8810		95.9	100	-4.1	50.0
cis-1,2-Dichloroethene	Ave	0.5706	0.5950		52.1	50.0	4.3	50.0
2,2-Dichloropropane	Ave	0.8435	0.8029		47.6	50.0	-4.8	50.0
2-Butanone (MEK)	Ave	0.2353	0.2356		200	200	0.1	50.0
Bromochloromethane	Ave	0.2780	0.2874		51.7	50.0	3.4	50.0
sec-Butyl Alcohol	Lin1		0.0323		626	750	-16.6	50.0
Tetrahydrofuran	Ave	0.1367	0.1476		108	100	8.0	50.0
Chloroform	Ave	1.086	1.130		52.0	50.0	4.1	50.0
1,1,1-Trichloroethane	Ave	0.9556	0.9866		51.6	50.0	3.2	50.0
Cyclohexane	Lin2		0.9060		51.5	50.0	3.1	50.0
Carbon tetrachloride	Ave	0.9047	0.9231		51.0	50.0	2.0	50.0
1,1-Dichloropropene	Lin1		0.7531		51.0	50.0	2.0	50.0
Benzene	Ave	2.054	2.286		55.6	50.0	11.3	50.0
1,2-Dichloroethane	Ave	0.8732	0.9236		52.9	50.0	5.8	50.0
Isobutyl alcohol	Ave	0.0242	0.0270		1400	1250	11.6	50.0
Trichloroethene	Ave	0.5063	0.4980		49.2	50.0	-1.6	50.0
2-Pentanone	Ave	0.3919	0.3459		88.3	100	-11.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVC 280-376040/37 Calibration Date: 06/04/2017 06:20

Instrument ID: VMS_G2 Calib Start Date: 05/30/2017 18:51

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/30/2017 21:14

Lab File ID: G2_0660.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Lin2		0.8482		56.9	50.0	13.9	50.0
1,2-Dichloropropane	Ave	0.5463	0.5962		54.6	50.0	9.1	50.0
1,4-Dioxane	Lin1		0.0044		904	1000	-9.6	50.0
Dibromomethane	Ave	0.3430	0.3585		52.3	50.0	4.5	50.0
Bromodichloromethane	Ave	0.7490	0.7950		53.1	50.0	6.1	50.0
2-Chloroethyl vinyl ether	Lin1		0.0823		32.4	50.0	-35.2	50.0
cis-1,3-Dichloropropene	Lin1		1.769		43.7	50.0	-12.5	50.0
4-Methyl-2-pentanone (MIBK)	Lin2		0.4973		209	200	4.4	50.0
Toluene	Ave	2.045	2.357		57.6	50.0	15.3	50.0
trans-1,3-Dichloropropene	Lin1		0.7780		50.1	50.0	0.2	50.0
Ethyl methacrylate	Lin1		1.229		42.6	50.0	-14.8	50.0
1,1,2-Trichloroethane	Ave	0.4411	0.4613		52.3	50.0	4.6	50.0
Tetrachloroethene	Ave	1.221	1.105		45.3	50.0	-9.5	50.0
1,3-Dichloropropane	Ave	1.822	1.853		50.8	50.0	1.7	50.0
2-Hexanone	Lin2		0.7964		185	200	-7.3	50.0
Dibromochloromethane	Ave	1.311	1.244		47.4	50.0	-5.1	50.0
1,2-Dibromoethane	Ave	1.049	0.9536		45.4	50.0	-9.1	50.0
1-Chlorohexane	Lin1		1.503		20.6	25.0	-17.7	50.0
Chlorobenzene	Ave	3.792	3.607	0.3000	47.6	50.0	-4.9	50.0
1,1,1,2-Tetrachloroethane	Ave	1.464	1.386		47.3	50.0	-5.4	50.0
Ethylbenzene	Ave	1.856	1.826		49.2	50.0	-1.6	50.0
m&p-Xylene	Lin1		2.167		45.5	50.0	-9.1	50.0
o-Xylene	Lin1		2.062		44.7	50.0	-10.6	50.0
Styrene	Lin1		3.721		47.4	50.0	-5.2	50.0
Bromoform	Ave	0.8596	0.7732	0.1000	45.0	50.0	-10.1	50.0
Isopropylbenzene	Lin2		2.409		43.8	50.0	-12.3	50.0
Cyclohexanone	Lin1		0.0365		1770	2000	-11.4	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6603	0.6077	0.3000	46.0	50.0	-8.0	50.0
Bromobenzene	Ave	0.7064	0.6755		47.8	50.0	-4.4	50.0
trans-1,4-Dichloro-2-butene	Lin2		0.1930		46.6	50.0	-6.7	50.0
1,2,3-Trichloropropane	Ave	0.2107	0.1913		45.4	50.0	-9.2	50.0
N-Propylbenzene	Lin2		0.7090		43.7	50.0	-12.6	50.0
2-Chlorotoluene	Lin2		0.6232		44.1	50.0	-11.7	50.0
1,3,5-Trimethylbenzene	Lin2		2.179		44.9	50.0	-10.2	50.0
4-Chlorotoluene	Lin1		0.6712		44.7	50.0	-10.5	50.0
tert-Butylbenzene	Lin2		1.822		43.2	50.0	-13.5	50.0
1,2,4-Trimethylbenzene	Lin2		2.266		44.8	50.0	-10.3	50.0
sec-Butylbenzene	Lin2		0.5832		42.8	50.0	-14.3	50.0
1,3-Dichlorobenzene	Ave	1.411	1.285		45.5	50.0	-9.0	50.0
4-Isopropyltoluene	Lin2		2.485		43.8	50.0	-12.4	50.0
1,4-Dichlorobenzene	Ave	1.546	1.328		42.9	50.0	-14.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVC 280-376040/37 Calibration Date: 06/04/2017 06:20

Instrument ID: VMS_G2 Calib Start Date: 05/30/2017 18:51

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/30/2017 21:14

Lab File ID: G2_0660.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Lin2		2.156		43.9	50.0	-12.3	50.0
1,2-Dichlorobenzene	Ave	1.386	1.269		45.8	50.0	-8.4	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1237	0.0995		40.2	50.0	-19.5	50.0
1,2,4-Trichlorobenzene	Lin1		0.6455		35.5	50.0	-29.0	50.0
Hexachlorobutadiene	Lin2		0.4730		39.6	50.0	-20.8	50.0
Naphthalene	Lin1		1.451		39.6	50.0	-20.7	50.0
1,2,3-Trichlorobenzene	Lin2		0.6552		39.2	50.0	-21.5	50.0
Dibromofluoromethane (Surr)	Ave	0.5696	0.5745		45.4	45.0	0.9	50.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.8047		54.7	45.0	21.5	50.0
Toluene-d8 (Surr)	Ave	4.778	4.827		45.5	45.0	1.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.8196	0.7864		43.2	45.0	-4.1	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0660.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 04-Jun-2017 06:20:30 ALS Bottle#: 41 Worklist Smp#: 37
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVC
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:49 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 TBA-d9 (IS)	65	4.079	4.079	0.000	92	287821	1000.0	1000.0	
*	3 Fluorobenzene	96	7.636	7.636	0.000	98	312202	50.0	50.0	
*	4 Chlorobenzene-d5	119	10.761	10.761	0.000	89	140082	50.0	50.0	
*	5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	326330	50.0	50.0	
$	8 Dibromofluoromethane (Surr	111	6.828	6.828	0.000	93	161436	45.0	45.4	
$	9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	226102	45.0	54.7	
$	10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	608581	45.0	45.5	
$	11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	90	230966	45.0	43.2	
	32 Dichlorodifluoromethane	85	1.705	1.705	0.000	99	180704	50.0	50.1	
	34 Chloromethane	50	1.830	1.830	0.000	99	272438	50.0	55.5	
	37 Vinyl chloride	62	1.956	1.956	0.000	98	340289	50.0	55.8	
	22 Butadiene	54	1.998	1.998	0.000	90	217884	50.0	79.1	
	39 Bromomethane	94	2.291	2.291	0.000	91	284236	50.0	58.7	
	40 Chloroethane	64	2.417	2.417	0.000	99	222499	50.0	79.4	
	41 Dichlorofluoromethane	67	2.654	2.654	0.000	98	353522	50.0	51.7	
	43 Trichlorofluoromethane	101	2.682	2.682	0.000	97	293147	50.0	53.5	
	45 Ethyl ether	59	3.003	3.003	0.000	93	133467	50.0	51.3	
	48 Acrolein	56	3.185	3.185	0.000	99	240436	499.9	513.3	
	53 1,1-Dichloroethene	96	3.311	3.311	0.000	93	150824	50.0	47.3	
	52 1,1,2-Trichloro-1,2,2-trif	151	3.339	3.339	0.000	94	155237	50.0	48.0	
	50 Acetone	43	3.353	3.353	0.000	97	223658	200.0	193.0	
	55 Iodomethane	142	3.492	3.492	0.000	97	267076	50.0	46.5	
	58 Carbon disulfide	76	3.576	3.576	0.000	100	580803	50.0	49.9	
	56 Methyl acetate	43	3.799	3.799	0.000	98	595113	250.0	260.1	
	57 3-Chloro-1-propene	41	3.813	3.813	0.000	86	282773	50.0	54.8	
	60 Methylene Chloride	84	4.009	4.009	0.000	98	186417	50.0	52.5	
	59 2-Methyl-2-propanol	59	4.204	4.204	0.000	92	148755	500.0	435.8	
	61 Acrylonitrile	53	4.372	4.372	0.000	97	576993	500.0	535.4	
	62 Methyl tert-butyl ether	73	4.428	4.428	0.000	97	437196	50.0	52.3	
	63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	94	178990	50.0	53.0	
	64 Hexane	57	4.917	4.917	0.000	93	239867	50.0	43.5	
	67 1,1-Dichloroethane	63	5.210	5.210	0.000	97	343627	50.0	52.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
65 Vinyl acetate	43	5.252	5.252	0.000	98	550118	100.0	95.9	
74 cis-1,2-Dichloroethene	96	6.128	6.128	0.000	86	185751	50.0	52.1	
71 2-Butanone (MEK)	43	6.135	6.135	0.000	95	294206	200.0	200.2	
75 2,2-Dichloropropane	77	6.135	6.135	0.000	63	250675	50.0	47.6	
77 Chlorobromomethane	128	6.464	6.464	0.000	97	89733	50.0	51.7	
79 Tetrahydrofuran	42	6.464	6.464	0.000	72	92160	100.0	108.0	
72 sec-Butyl Alcohol	45	6.464	6.464	0.000	77	151233	750.0	625.8	
78 Chloroform	83	6.628	6.628	0.000	95	352807	50.0	52.0	
81 1,1,1-Trichloroethane	97	6.814	6.814	0.000	98	308028	50.0	51.6	
82 Cyclohexane	56	6.893	6.893	0.000	94	282843	50.0	51.5	
84 Carbon tetrachloride	117	7.000	7.000	0.000	96	288204	50.0	51.0	
83 1,1-Dichloropropene	75	7.021	7.021	0.000	93	235124	50.0	51.0	
87 Benzene	78	7.257	7.257	0.000	98	713709	50.0	55.6	
85 1,2-Dichloroethane	62	7.343	7.343	0.000	98	288337	50.0	52.9	
80 Isobutyl alcohol	41	7.651	7.651	0.000	83	210825	1250.0	1395.1	
35 n-Heptane	43	7.651	7.651	0.000	92	290548	50.0	56.9	
89 Trichloroethene	95	8.044	8.044	0.000	96	155481	50.0	49.2	
90 2-Pentanone	43	8.258	8.258	0.000	99	215992	100.0	88.3	
93 Methylcyclohexane	55	8.294	8.294	0.000	93	264811	50.0	56.9	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	93	186135	50.0	54.6	
94 1,4-Dioxane	88	8.416	8.416	0.000	96	27563	1000.0	904.3	
95 Dibromomethane	93	8.423	8.423	0.000	95	111938	50.0	52.3	
96 Dichlorobromomethane	83	8.623	8.623	0.000	98	248195	50.0	53.1	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	93	25692	50.0	32.4	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	92	247767	50.0	43.7	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	98	621030	200.0	208.7	
101 Toluene	91	9.410	9.410	0.000	97	735919	50.0	57.6	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	97	242886	50.0	50.1	
102 Ethyl methacrylate	69	9.717	9.717	0.000	91	172227	50.0	42.6	
104 1,1,2-Trichloroethane	97	9.846	9.846	0.000	96	144031	50.0	52.3	
107 Tetrachloroethene	164	9.917	9.917	0.000	96	154742	50.0	45.3	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	95	259536	50.0	50.8	
105 2-Hexanone	43	10.060	10.060	0.000	98	446251	200.0	185.4	
108 Chlorodibromomethane	129	10.210	10.210	0.000	90	174281	50.0	47.4	
110 Ethylene Dibromide	107	10.318	10.318	0.000	99	133587	50.0	45.4	
111 1-Chlorohexane	91	10.775	10.775	0.000	88	105282	25.0	20.6	
112 Chlorobenzene	112	10.790	10.790	0.000	92	505308	50.0	47.6	
113 1,1,1,2-Tetrachloroethane	131	10.875	10.875	0.000	91	194099	50.0	47.3	
114 Ethylbenzene	106	10.883	10.883	0.000	98	255752	50.0	49.2	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	303555	50.0	45.5	
117 o-Xylene	106	11.369	11.369	0.000	97	288896	50.0	44.7	
116 Styrene	104	11.383	11.383	0.000	97	521182	50.0	47.4	
118 Bromoform	173	11.555	11.555	0.000	95	108314	50.0	45.0	
119 Isopropylbenzene	105	11.705	11.705	0.000	97	786275	50.0	43.8	
121 Cyclohexanone	55	11.798	11.798	0.000	95	204526	2000.0	1772.8	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	97	198322	50.0	46.0	
125 Bromobenzene	156	12.005	12.005	0.000	97	220445	50.0	47.8	
123 trans-1,4-Dichloro-2-buten	53	12.027	12.027	0.000	85	62996	50.0	46.6	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	86	62437	50.0	45.4	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	231351	50.0	43.7	
128 2-Chlorotoluene	126	12.177	12.177	0.000	95	203357	50.0	44.1	
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	94	710922	50.0	44.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
129 4-Chlorotoluene	126	12.277	12.277	0.000	98	219018	50.0	44.7	
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	594567	50.0	43.2	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	739341	50.0	44.8	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	190303	50.0	42.8	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	97	419260	50.0	45.5	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	811023	50.0	43.8	
136 1,4-Dichlorobenzene	146	12.835	12.835	0.000	96	433210	50.0	42.9	
137 n-Butylbenzene	91	13.063	13.063	0.000	98	703595	50.0	43.9	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	97	414260	50.0	45.8	
139 1,2-Dibromo-3-Chloropropan	157	13.578	13.578	0.000	77	32480	50.0	40.2	
141 1,2,4-Trichlorobenzene	180	14.107	14.107	0.000	94	210654	50.0	35.5	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	97	154346	50.0	39.6	
143 Naphthalene	128	14.300	14.300	0.000	97	473573	50.0	39.6	
144 1,2,3-Trichlorobenzene	180	14.451	14.451	0.000	95	213794	50.0	39.2	
S 151 1,2-Dichloroethene, Total	96				0		100.0	105.1	
S 149 1,2-Dichloroethene, Total	1				0		100.0	105.1	
S 148 1,3-Dichloropropene, Total	1				0		100.0	93.8	
S 146 Xylenes, Total (URS)	1				0		100.0	90.2	
S 150 Xylenes, Total	106				0		100.0	90.2	
S 145 Trihalomethanes, Total	1				0		200.0	197.5	

Reagents:

MV-2cleve+AVA_00025	Amount Added:	6.25	Units: uL		
MV-Gas/Ket A_00060	Amount Added:	6.25	Units: uL		
MV-Main A_00030	Amount Added:	6.25	Units: uL		
MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent	
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent	

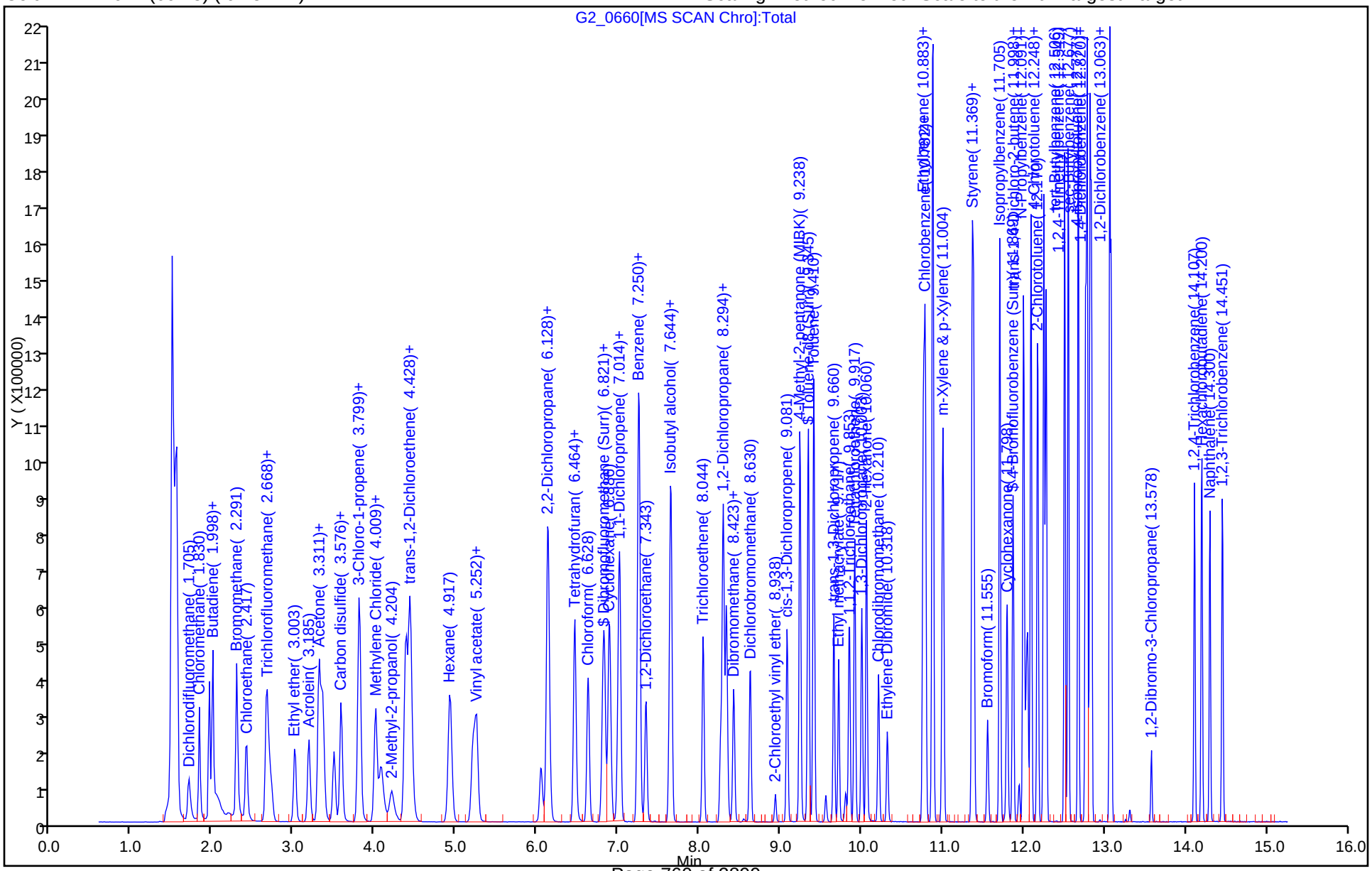
Report Date: 05-Jun-2017 17:13:50 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0660.D

Injection Date:	04-Jun-2017 06:20:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	CCVC			Worklist Smp#:	37
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVC 280-376040/38 Calibration Date: 06/04/2017 06:40

Instrument ID: VMS_G2 Calib Start Date: 04/26/2017 21:24

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/26/2017 23:47

Lab File ID: G2_0661.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.1142		2720	3000	-9.4	50.0
Isopropyl alcohol	Lin2		0.6061		433	500	-13.5	50.0
Acetonitrile	Ave	0.0340	0.0653		1440	750	92.0*	50.0
Isopropyl ether	Lin1		0.3582		96.8	75.0	29.0	50.0
2-Chloro-1,3-butadiene	Lin1		0.8576		79.2	50.0	58.4*	50.0
Tert-butyl ethyl ether	Lin1		1.275		114	75.0	52.0*	50.0
Ethyl acetate	Ave	0.2191	0.4322		197	100	97.2*	50.0
Propionitrile	Ave	0.0366	0.0648		1330	750	77.2*	50.0
Methacrylonitrile	Ave	0.1405	0.3055		1090	500	117.4*	50.0
Tert-amyl methyl ether	Lin1		1.228		115	75.0	53.8*	50.0
n-Butanol	Lin1		0.2114		812	1250	-35.0	50.0
Methyl methacrylate	Lin1		0.1091		132	100	32.4	50.0
2-Nitropropane	Lin1		0.1228		156	100	56.3*	50.0
cis-1,4-Dichloro-2-butene	Lin1		0.2037		81.8	100	-18.2	50.0
1,2,3-Trimethylbenzene	Lin2		2.422		39.1	50.0	-21.9	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0661.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 04-Jun-2017 06:40:30 ALS Bottle#: 42 Worklist Smp#: 38
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVC
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub99

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:51 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 05-Jun-2017 17:06:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	92	310200	1000.0	1000.0	
* 3 Fluorobenzene	96	7.636	7.636	0.000	98	315636	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	89	128806	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	97	219350	50.0	50.0	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.263	2.263	0.000	100	1294098	5000.0	17070	
42 Ethanol	45	2.892	2.892	0.000	98	106275	3000.0	2716.8	
47 Propene oxide	58	3.073	3.073	0.000	96	3055052	5000.0	7917.1	
51 Isopropyl alcohol	45	3.576	3.576	0.000	94	94012	500.0	432.5	
54 Acetonitrile	41	3.744	3.744	0.000	99	308941	750.0	1440.3	
66 Isopropyl ether	87	5.308	5.308	0.000	93	169590	75.0	96.8	
68 2-Chloro-1,3-butadiene	53	5.322	5.322	0.000	95	270695	50.0	79.2	
69 Tert-butyl ethyl ether	59	5.894	5.894	0.000	96	603619	75.0	114.0	
70 Ethyl acetate	43	6.213	6.213	0.000	100	272841	100.0	197.2	
73 Propionitrile	54	6.221	6.221	0.000	98	306687	750.0	1328.7	
76 Methacrylonitrile	41	6.435	6.435	0.000	95	964177	500.0	1086.8	
86 Tert-amyl methyl ether	73	7.450	7.450	0.000	95	581378	75.0	115.4	
88 n-Butanol	56	8.008	8.008	0.000	96	81963	1250.0	812.4	
16 Ethyl acrylate	55	8.173	8.173	0.000	100	147547	50.0	69.9	
91 Methyl methacrylate	100	8.423	8.423	0.000	93	68900	100.0	132.4	
97 2-Nitropropane	41	8.859	8.859	0.000	97	77522	100.0	156.3	
120 cis-1,4-Dichloro-2-butene	53	11.769	11.769	0.000	89	89363	100.0	81.8	
135 1,2,3-Trimethylbenzene	105	12.856	12.856	0.000	99	531265	50.0	39.1	
140 1,3,5-Trichlorobenzene	180	13.700	13.700	0.000	97	186905	50.0	29.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00024	Amount Added:	6.25	Units: uL
MV-568718-D_00003	Amount Added:	1.00	Units: uL

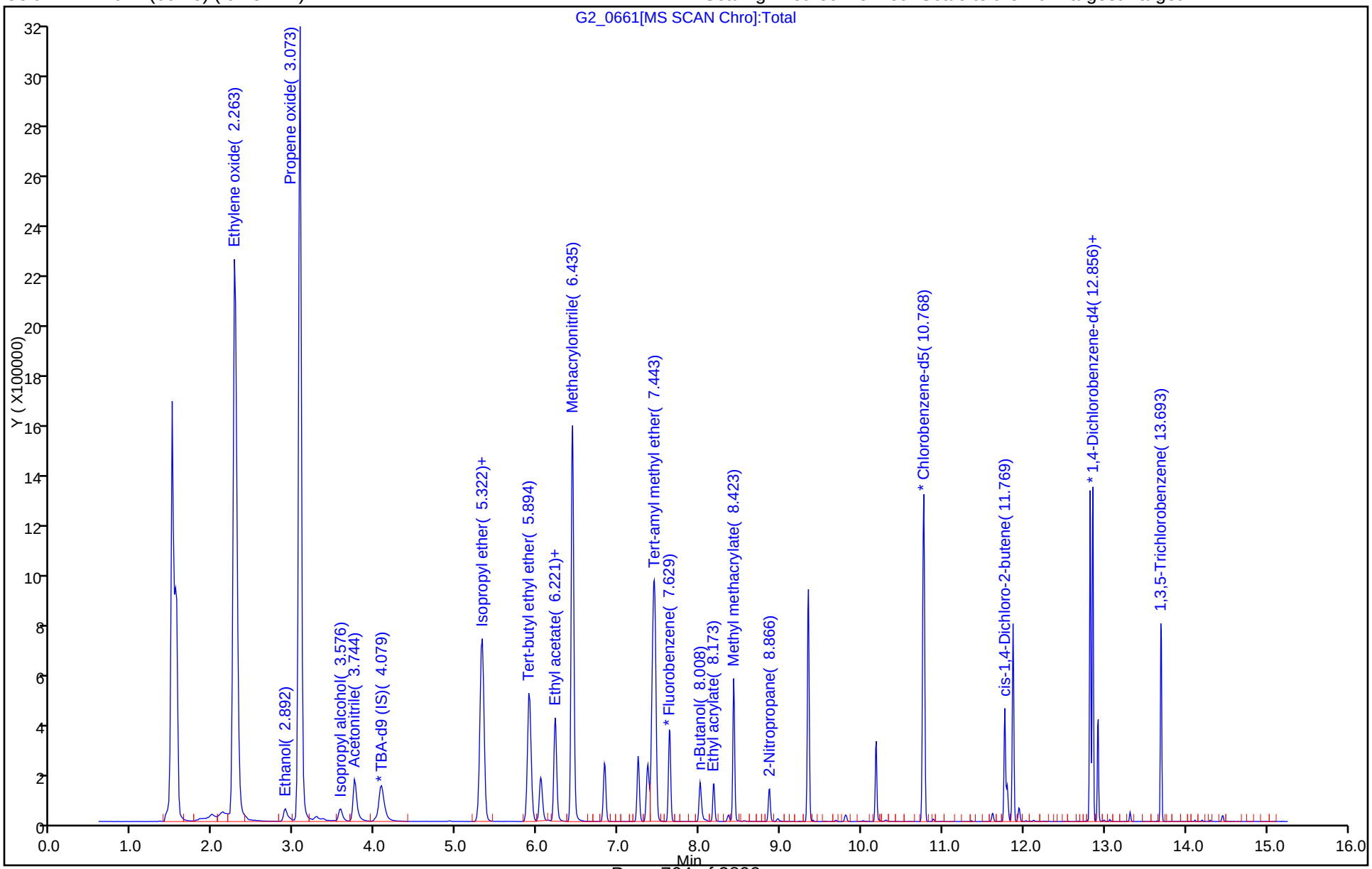
Report Date: 05-Jun-2017 17:13:52 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0661.D

Injection Date:	04-Jun-2017 06:40:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	CCVC			Worklist Smp#:	38
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-376196/2 Calibration Date: 06/05/2017 18:06

Instrument ID: VMS_G2 Calib Start Date: 05/30/2017 18:51

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/30/2017 21:14

Lab File ID: G2_0690.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acrolein	Ave	0.0750	0.1244		829	500	65.9*	20.0
Vinyl acetate	Lin2		1.340		143	100	43.3*	20.0
2-Chloroethyl vinyl ether	Lin1		0.2367		83.7	50.0	67.4*	20.0
Dibromofluoromethane (Surr)	Ave	0.5696	0.5467		43.2	45.0	-4.0	20.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.7228		48.7	45.0	8.3	20.0
Toluene-d8 (Surr)	Ave	4.778	4.753		44.8	45.0	-0.5	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8196	0.7781		42.7	45.0	-5.1	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0690.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-Jun-2017 18:06:30 ALS Bottle#: 11 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub113

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Jun-2017 20:22:19 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: dukesa Date: 05-Jun-2017 19:44:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	96	509401	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	375908	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	153670	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	351861	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.828	0.000	93	184953	45.0	43.2	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	94	244519	45.0	48.7	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	657410	45.0	44.8	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	90	246415	45.0	42.7	
48 Acrolein	56	3.185	3.185	0.000	99	467661	499.9	829.2	
65 Vinyl acetate	43	5.252	5.252	0.000	98	1007747	100.0	143.3	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	93	88982	50.0	83.7	

Reagents:

MV-2cleve+AVA_00025 Amount Added: 6.25 Units: uL
MV-568718-D_00003 Amount Added: 1.00 Units: uL
MV-ARCH SS A_00081 Amount Added: 0.90 Units: uL Run Reagent

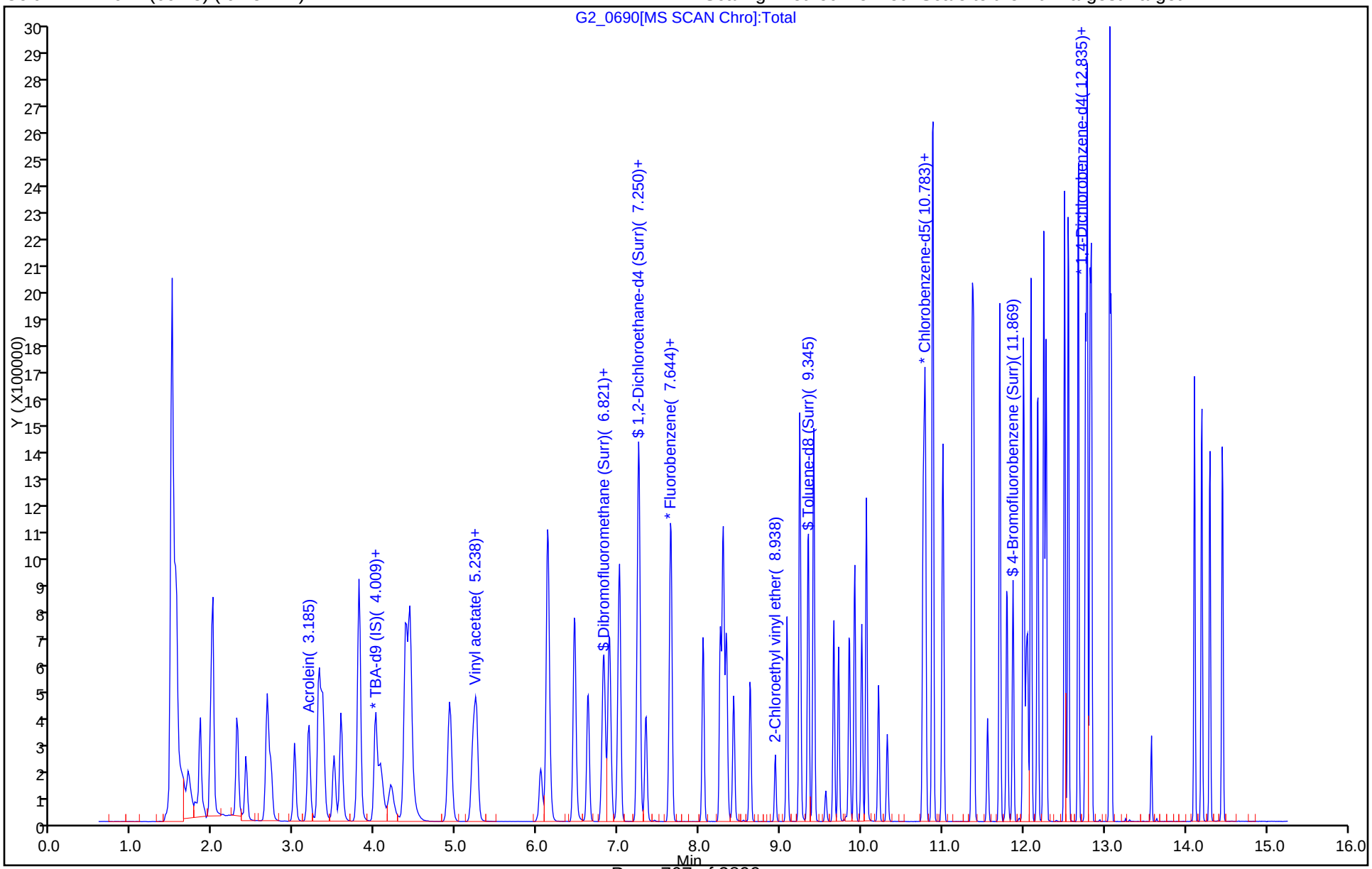
Report Date: 06-Jun-2017 20:22:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0690.D

Injection Date:	05-Jun-2017 18:06:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-376196/3 Calibration Date: 06/05/2017 18:26

Instrument ID: VMS_G2 Calib Start Date: 04/26/2017 21:24

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/26/2017 23:47

Lab File ID: G2_0691.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.0937		2240	3000	-25.2*	20.0
Isopropyl alcohol	Lin2		0.5831		417	500	-16.6	20.0
Acetonitrile	Ave	0.0340	0.0649		1430	750	91.1*	20.0
Isopropyl ether	Lin1		0.4012		108	75.0	43.9*	20.0
2-Chloro-1,3-butadiene	Lin1		0.8931		82.3	50.0	64.7*	20.0
Tert-butyl ethyl ether	Lin1		1.486		133	75.0	76.7*	20.0
Ethyl acetate	Ave	0.2191	0.4336		198	100	97.9*	20.0
Propionitrile	Ave	0.0366	0.0649		1330	750	77.5*	20.0
Methacrylonitrile	Ave	0.1405	0.2978		1060	500	111.9*	20.0
Tert-amyl methyl ether	Lin1		1.358		127	75.0	69.9*	20.0
n-Butanol	Lin1		0.2256		860	1250	-31.2*	20.0
Methyl methacrylate	Lin1		0.1142		138	100	38.3*	20.0
2-Nitropropane	Lin1		0.1213		154	100	54.4*	20.0
cis-1,4-Dichloro-2-butene	Lin1		0.2118		84.8	100	-15.2	20.0
1,2,3-Trimethylbenzene	Lin2		2.467		39.8	50.0	-20.5*	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0691.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-Jun-2017 18:26:30 ALS Bottle#: 12 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub99

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Jun-2017 20:22:23 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: dukesa Date: 05-Jun-2017 19:06:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	96	481993	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	422229	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	171058	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	333472	50.0	50.0	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.277	2.277	0.000	100	1873547	5000.0	18474	
42 Ethanol	45	2.892	2.892	0.000	98	135413	3000.0	2243.1	
47 Propene oxide	58	3.073	3.073	0.000	96	4413541	5000.0	8550.2	
51 Isopropyl alcohol	45	3.562	3.562	0.000	96	140531	500.0	416.8	
54 Acetonitrile	41	3.744	3.744	0.000	99	411278	750.0	1433.4	
66 Isopropyl ether	87	5.308	5.308	0.000	94	254098	75.0	107.9	
68 2-Chloro-1,3-butadiene	53	5.322	5.322	0.000	94	377111	50.0	82.3	
69 Tert-butyl ethyl ether	59	5.895	5.895	0.000	97	941023	75.0	132.6	
70 Ethyl acetate	43	6.214	6.214	0.000	100	366180	100.0	197.9	
73 Propionitrile	54	6.221	6.221	0.000	99	410962	750.0	1330.9	
76 Methacrylonitrile	41	6.435	6.435	0.000	94	1257511	500.0	1059.6	
86 Tert-amyl methyl ether	73	7.451	7.451	0.000	96	860183	75.0	127.4	
88 n-Butanol	56	8.001	8.001	0.000	95	135889	1250.0	860.1	
16 Ethyl acrylate	55	8.173	8.173	0.000	100	217439	NC	NC	
91 Methyl methacrylate	100	8.423	8.423	0.000	92	96468	100.0	138.3	
97 2-Nitropropane	41	8.859	8.859	0.000	99	102430	100.0	154.4	
120 cis-1,4-Dichloro-2-butene	53	11.769	11.769	0.000	90	141233	100.0	84.8	
135 1,2,3-Trimethylbenzene	105	12.856	12.856	0.000	98	822632	50.0	39.8	
140 1,3,5-Trichlorobenzene	180	13.693	13.693	0.000	96	376384	50.0	39.0	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00024	Amount Added:	6.25	Units: uL

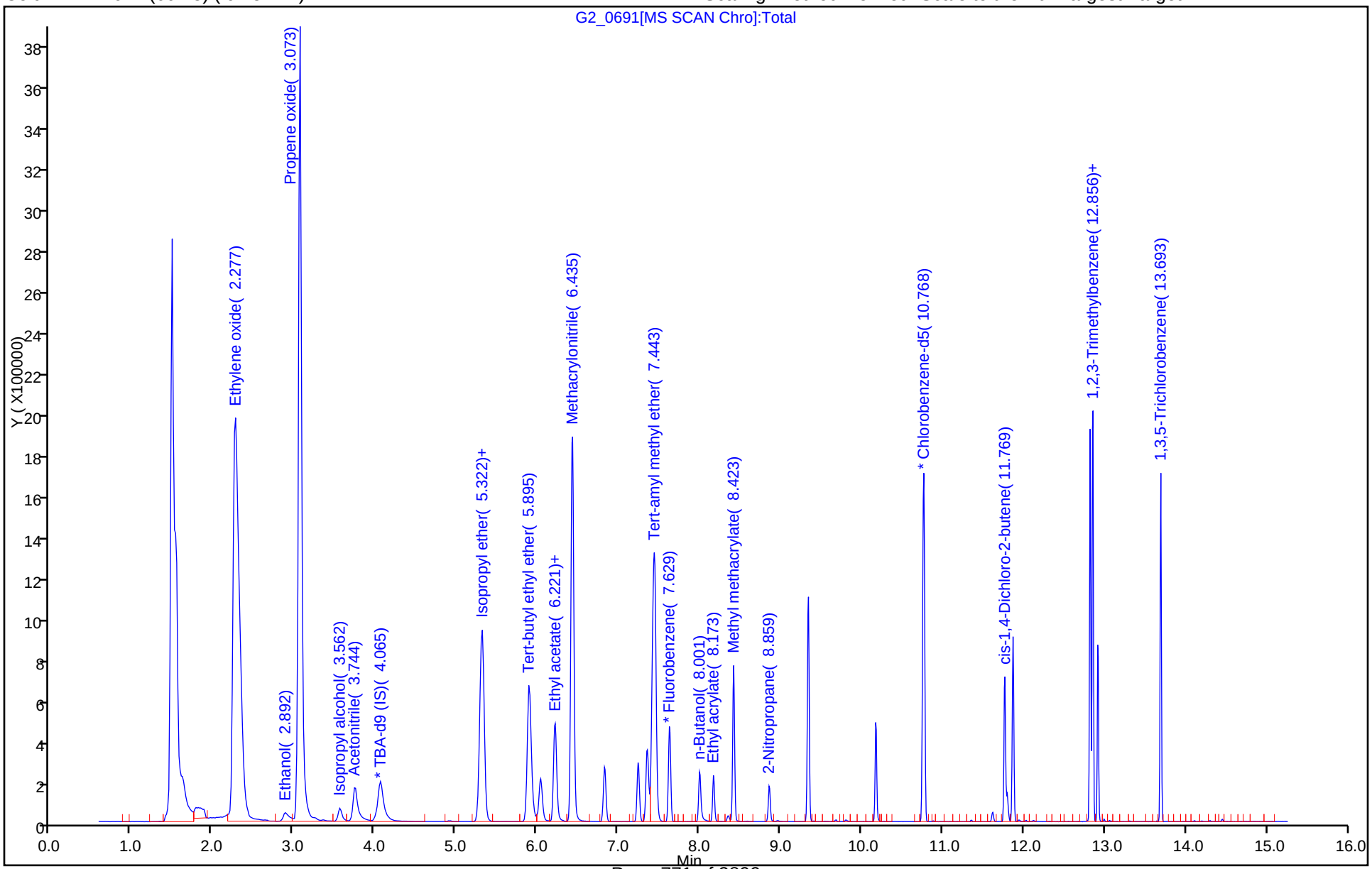
Report Date: 06-Jun-2017 20:22:24 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0691.D

Injection Date:	05-Jun-2017 18:26:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	CCV			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-376196/4 Calibration Date: 06/05/2017 18:47

Instrument ID: VMS_G2 Calib Start Date: 05/30/2017 18:51

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/30/2017 21:14

Lab File ID: G2_0692.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin1		0.4831		42.1	50.0	-15.8	20.0
Chloromethane	Ave	0.7864	0.7135	0.1000	45.4	50.0	-9.3	20.0
Vinyl chloride	Ave	0.9762	0.7940		40.7	50.0	-18.7	20.0
Bromomethane	Ave	0.7750	0.6187		39.9	50.0	-20.2*	20.0
Chloroethane	Lin1		0.5158		57.8	50.0	15.7	20.0
Dichlorofluoromethane	Qua		1.077		49.2	50.0	-1.6	20.0
Trichlorofluoromethane	Ave	0.8768	0.8458		48.2	50.0	-3.5	20.0
Ethyl ether	Ave	0.4165	0.4964		59.6	50.0	19.2	20.0
1,1-Dichloroethene	Qua		0.5265		51.6	50.0	3.2	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.5181	0.5066		48.9	50.0	-2.2	20.0
Acetone	Ave	0.1856	0.1834		198	200	-1.2	20.0
Methyl iodide	Lin1		0.9478		51.7	50.0	3.4	20.0
Carbon disulfide	Qua		1.988		53.5	50.0	7.1	20.0
Methyl acetate	Ave	0.3664	0.4113		281	250	12.2	20.0
3-Chloro-1-propene	Ave	0.8257	1.044		63.2	50.0	26.5*	20.0
Methylene Chloride	Lin2		0.6367		56.2	50.0	12.3	20.0
t-Butyl alcohol	Ave	0.0547	0.0611		559	500	11.7	20.0
Acrylonitrile	Ave	0.1726	0.1990		577	500	15.3	20.0
Methyl tert-butyl ether	Ave	1.340	1.658		61.9	50.0	23.8*	20.0
trans-1,2-Dichloroethene	Ave	0.5409	0.5921		54.7	50.0	9.5	20.0
Hexane	Lin2		2.190		55.0	50.0	9.9	20.0
1,1-Dichloroethane	Ave	1.043	1.127	0.1000	54.0	50.0	8.0	20.0
2,2-Dichloropropane	Ave	0.8435	1.001		59.3	50.0	18.6	20.0
2-Butanone (MEK)	Ave	0.2353	0.2347		199	200	-0.3	20.0
cis-1,2-Dichloroethene	Ave	0.5706	0.6166		54.0	50.0	8.1	20.0
sec-Butyl Alcohol	Lin1		0.0402		768	750	2.4	20.0
Bromochloromethane	Ave	0.2780	0.2874		51.7	50.0	3.4	20.0
Tetrahydrofuran	Ave	0.1367	0.1639		120	100	19.9	20.0
Chloroform	Ave	1.086	1.084		49.9	50.0	-0.2	20.0
1,1,1-Trichloroethane	Ave	0.9556	0.9851		51.5	50.0	3.1	20.0
Cyclohexane	Lin2		1.024		58.0	50.0	15.9	20.0
Carbon tetrachloride	Ave	0.9047	0.9006		49.8	50.0	-0.5	20.0
1,1-Dichloropropene	Lin1		0.8127		55.0	50.0	9.9	20.0
Benzene	Ave	2.054	2.273		55.3	50.0	10.7	20.0
1,2-Dichloroethane	Ave	0.8732	0.8800		50.4	50.0	0.8	20.0
Isobutyl alcohol	Ave	0.0242	0.0265		1370	1250	9.6	20.0
Trichloroethene	Ave	0.5063	0.5467		54.0	50.0	8.0	20.0
2-Pentanone	Ave	0.3919	0.5799		148	100	48.0*	20.0
Methylcyclohexane	Lin2		0.8981		60.3	50.0	20.5*	20.0
1,2-Dichloropropane	Ave	0.5463	0.5939		54.4	50.0	8.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-376196/4 Calibration Date: 06/05/2017 18:47

Instrument ID: VMS_G2 Calib Start Date: 05/30/2017 18:51

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/30/2017 21:14

Lab File ID: G2_0692.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin1		0.0049		998	1000	-0.2	20.0
Dibromomethane	Ave	0.3430	0.3425		49.9	50.0	-0.2	20.0
Bromodichloromethane	Ave	0.7490	0.7623		50.9	50.0	1.8	20.0
cis-1,3-Dichloropropene	Lin1		1.983		48.9	50.0	-2.3	20.0
4-Methyl-2-pentanone (MIBK)	Lin2		0.5004		210	200	5.0	20.0
Toluene	Ave	2.045	2.305		56.4	50.0	12.7	20.0
trans-1,3-Dichloropropene	Lin1		0.8333		53.6	50.0	7.2	20.0
Ethyl methacrylate	Lin1		1.512		51.5	50.0	2.9	20.0
1,1,2-Trichloroethane	Ave	0.4411	0.4466		50.6	50.0	1.2	20.0
Tetrachloroethene	Ave	1.221	1.184		48.5	50.0	-3.0	20.0
1,3-Dichloropropane	Ave	1.822	1.991		54.6	50.0	9.3	20.0
2-Hexanone	Lin2		0.8593		199	200	-0.4	20.0
Dibromochloromethane	Ave	1.311	1.310		50.0	50.0	-0.0	20.0
1,2-Dibromoethane	Ave	1.049	1.074		51.2	50.0	2.3	20.0
1-Chlorohexane	Lin1		1.800		24.5	25.0	-1.9	20.0
Chlorobenzene	Ave	3.792	3.795	0.3000	50.0	50.0	0.0	20.0
1,1,1,2-Tetrachloroethane	Ave	1.464	1.430		48.8	50.0	-2.3	20.0
Ethylbenzene	Ave	1.856	1.967		53.0	50.0	6.0	20.0
m&p-Xylene	Lin1		2.417		50.5	50.0	1.1	20.0
o-Xylene	Lin1		2.289		49.4	50.0	-1.1	20.0
Styrene	Lin1		4.012		51.0	50.0	1.9	20.0
Bromoform	Ave	0.8596	0.8229	0.1000	47.9	50.0	-4.3	20.0
Isopropylbenzene	Lin2		2.827		50.9	50.0	1.9	20.0
Cyclohexanone	Lin1		0.0424		2050	2000	2.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6603	0.6708	0.3000	50.8	50.0	1.6	20.0
Bromobenzene	Ave	0.7064	0.7455		52.8	50.0	5.5	20.0
trans-1,4-Dichloro-2-butene	Lin2		0.2223		53.4	50.0	6.8	20.0
1,2,3-Trichloropropane	Ave	0.2107	0.2075		49.2	50.0	-1.5	20.0
N-Propylbenzene	Lin2		0.8178		50.0	50.0	0.0	20.0
2-Chlorotoluene	Lin2		0.6946		49.0	50.0	-2.1	20.0
1,3,5-Trimethylbenzene	Lin2		2.464		50.4	50.0	0.9	20.0
4-Chlorotoluene	Lin1		0.7372		49.0	50.0	-2.1	20.0
tert-Butylbenzene	Lin2		2.191		51.4	50.0	2.8	20.0
1,2,4-Trimethylbenzene	Lin2		2.550		50.2	50.0	0.3	20.0
sec-Butylbenzene	Lin2		0.6955		50.6	50.0	1.2	20.0
1,3-Dichlorobenzene	Ave	1.411	1.460		51.7	50.0	3.5	20.0
4-Isopropyltoluene	Lin2		2.950		51.5	50.0	3.0	20.0
1,4-Dichlorobenzene	Ave	1.546	1.486		48.1	50.0	-3.8	20.0
n-Butylbenzene	Lin2		2.735		54.9	50.0	9.8	20.0
1,2-Dichlorobenzene	Ave	1.386	1.427		51.5	50.0	3.0	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.1237	0.1292		52.2	50.0	4.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-376196/4 Calibration Date: 06/05/2017 18:47

Instrument ID: VMS_G2 Calib Start Date: 05/30/2017 18:51

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/30/2017 21:14

Lab File ID: G2_0692.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,4-Trichlorobenzene	Lin1		1.025		54.4	50.0	8.8	20.0
Hexachlorobutadiene	Lin2		0.6636		54.8	50.0	9.7	20.0
Naphthalene	Lin1		2.126		56.2	50.0	12.4	20.0
1,2,3-Trichlorobenzene	Lin2		0.9852		57.8	50.0	15.6	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0692.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 05-Jun-2017 18:47:30 ALS Bottle#: 13 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub105

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Jun-2017 20:22:26 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: dukesa Date: 05-Jun-2017 19:06:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	96	474668	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	406101	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	167787	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	376579	50.0	50.0	
32 Dichlorodifluoromethane	85	1.691	1.691	0.000	99	196172	50.0	42.1	
34 Chloromethane	50	1.830	1.830	0.000	99	289749	50.0	45.4	
37 Vinyl chloride	62	1.956	1.956	0.000	98	322447	50.0	40.7	
22 Butadiene	54	1.984	1.984	0.000	94	294165	NC	NC	
39 Bromomethane	94	2.291	2.291	0.000	90	251242	50.0	39.9	
40 Chloroethane	64	2.403	2.403	0.000	100	209481	50.0	57.8	
41 Dichlorofluoromethane	67	2.654	2.654	0.000	97	437175	50.0	49.2	
43 Trichlorofluoromethane	101	2.696	2.696	0.000	97	343496	50.0	48.2	
45 Ethyl ether	59	3.003	3.003	0.000	94	201596	50.0	59.6	
53 1,1-Dichloroethene	96	3.297	3.297	0.000	94	213797	50.0	51.6	
52 1,1,2-Trichloro-1,2,2-trif	151	3.339	3.339	0.000	95	205742	50.0	48.9	
50 Acetone	43	3.353	3.353	0.000	98	297938	200.0	197.7	
55 Iodomethane	142	3.492	3.492	0.000	99	384920	50.0	51.7	
58 Carbon disulfide	76	3.576	3.576	0.000	100	807428	50.0	53.5	
56 Methyl acetate	43	3.786	3.786	0.000	98	835099	250.0	280.6	
57 3-Chloro-1-propene	41	3.800	3.800	0.000	88	424126	50.0	63.2	
60 Methylene Chloride	84	3.995	3.995	0.000	97	258544	50.0	56.2	
59 2-Methyl-2-propanol	59	4.191	4.191	0.000	96	248019	500.0	558.7	
61 Acrylonitrile	53	4.372	4.372	0.000	98	808191	500.0	576.5	
63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	95	240447	50.0	54.7	
62 Methyl tert-butyl ether	73	4.428	4.428	0.000	92	673280	50.0	61.9	
64 Hexane	57	4.917	4.917	0.000	95	367435	50.0	55.0	
67 1,1-Dichloroethane	63	5.196	5.196	0.000	97	457672	50.0	54.0	
74 cis-1,2-Dichloroethene	96	6.128	6.128	0.000	85	250410	50.0	54.0	
71 2-Butanone (MEK)	43	6.128	6.128	0.000	88	381258	200.0	199.5	
75 2,2-Dichloropropane	77	6.128	6.128	0.000	65	406437	50.0	59.3	
72 sec-Butyl Alcohol	45	6.450	6.450	0.000	96	244711	750.0	768.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
77 Chlorobromomethane	128	6.457	6.457	0.000	97	116729	50.0	51.7	
79 Tetrahydrofuran	42	6.457	6.457	0.000	91	133077	100.0	119.9	
78 Chloroform	83	6.621	6.621	0.000	95	440051	50.0	49.9	
81 1,1,1-Trichloroethane	97	6.807	6.807	0.000	98	400037	50.0	51.5	
82 Cyclohexane	56	6.886	6.886	0.000	93	415786	50.0	58.0	
84 Carbon tetrachloride	117	7.000	7.000	0.000	96	365724	50.0	49.8	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	93	330020	50.0	55.0	
87 Benzene	78	7.257	7.257	0.000	98	923256	50.0	55.3	
85 1,2-Dichloroethane	62	7.336	7.336	0.000	98	357354	50.0	50.4	
80 Isobutyl alcohol	41	7.651	7.651	0.000	84	269217	1250.0	1369.6	
35 n-Heptane	43	7.651	7.651	0.000	93	404280	50.0	60.8	
89 Trichloroethene	95	8.044	8.044	0.000	97	222015	50.0	54.0	
90 2-Pentanone	43	8.259	8.259	0.000	97	470982	100.0	148.0	
93 Methylcyclohexane	55	8.294	8.294	0.000	93	364718	50.0	60.3	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	93	241174	50.0	54.4	
94 1,4-Dioxane	88	8.416	8.416	0.000	96	39708	1000.0	997.6	
95 Dibromomethane	93	8.423	8.423	0.000	96	139069	50.0	49.9	
96 Dichlorobromomethane	83	8.623	8.623	0.000	99	309589	50.0	50.9	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	93	332666	50.0	48.9	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	98	812915	200.0	210.0	
101 Toluene	91	9.410	9.410	0.000	98	935876	50.0	56.4	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	96	338415	50.0	53.6	
102 Ethyl methacrylate	69	9.717	9.717	0.000	91	253620	50.0	51.5	
104 1,1,2-Trichloroethane	97	9.846	9.846	0.000	95	181359	50.0	50.6	
107 Tetrachloroethene	164	9.917	9.917	0.000	97	198664	50.0	48.5	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	95	334110	50.0	54.6	
105 2-Hexanone	43	10.060	10.060	0.000	98	576713	200.0	199.2	
108 Chlorodibromomethane	129	10.211	10.211	0.000	90	219795	50.0	50.0	
110 Ethylene Dibromide	107	10.318	10.318	0.000	98	180216	50.0	51.2	
111 1-Chlorohexane	91	10.775	10.775	0.000	91	151025	25.0	24.5	
112 Chlorobenzene	112	10.790	10.790	0.000	93	636678	50.0	50.0	
113 1,1,1,2-Tetrachloroethane	131	10.876	10.876	0.000	92	239988	50.0	48.8	
114 Ethylbenzene	106	10.883	10.883	0.000	98	330069	50.0	53.0	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	405516	50.0	50.5	
117 o-Xylene	106	11.362	11.362	0.000	98	384017	50.0	49.4	
116 Styrene	104	11.383	11.383	0.000	99	673234	50.0	51.0	
118 Bromoform	173	11.555	11.555	0.000	96	138065	50.0	47.9	
119 Isopropylbenzene	105	11.705	11.705	0.000	97	1064653	50.0	50.9	
121 Cyclohexanone	55	11.791	11.791	0.000	95	284392	2000.0	2046.5	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	96	252607	50.0	50.8	
125 Bromobenzene	156	11.998	11.998	0.000	94	280746	50.0	52.8	
123 trans-1,4-Dichloro-2-buten	53	12.027	12.027	0.000	89	83725	50.0	53.4	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	87	78123	50.0	49.2	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	307961	50.0	50.0	
128 2-Chlorotoluene	126	12.177	12.177	0.000	96	261563	50.0	49.0	
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	94	927797	50.0	50.4	
129 4-Chlorotoluene	126	12.277	12.277	0.000	97	277604	50.0	49.0	
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	824943	50.0	51.4	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	960091	50.0	50.2	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	261925	50.0	50.6	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	98	549987	50.0	51.7	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	1111009	50.0	51.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
136 1,4-Dichlorobenzene	146	12.835	12.835	0.000	93	559746	50.0	48.1	
137 n-Butylbenzene	91	13.063	13.063	0.000	98	1029978	50.0	54.9	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	97	537299	50.0	51.5	
139 1,2-Dibromo-3-Chloropropan	157	13.578	13.578	0.000	79	48637	50.0	52.2	
141 1,2,4-Trichlorobenzene	180	14.115	14.115	0.000	94	386136	50.0	54.4	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	97	249890	50.0	54.8	
143 Naphthalene	128	14.300	14.300	0.000	98	800545	50.0	56.2	
144 1,2,3-Trichlorobenzene	180	14.458	14.458	0.000	95	371020	50.0	57.8	
S 151 1,2-Dichloroethene, Total	96				0		100.0	108.8	
S 146 Xylenes, Total (URS)	1				0		100.0	100.0	
S 150 Xylenes, Total	106				0		100.0	100.0	
S 145 Trihalomethanes, Total	1				0		200.0	198.6	
S 149 1,2-Dichloroethene, Total	1				0		100.0	108.8	
S 148 1,3-Dichloropropene, Total	1				0		100.0	102.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Gas/Ket A_00060	Amount Added:	6.25	Units: uL
MV-Main A_00030	Amount Added:	6.25	Units: uL

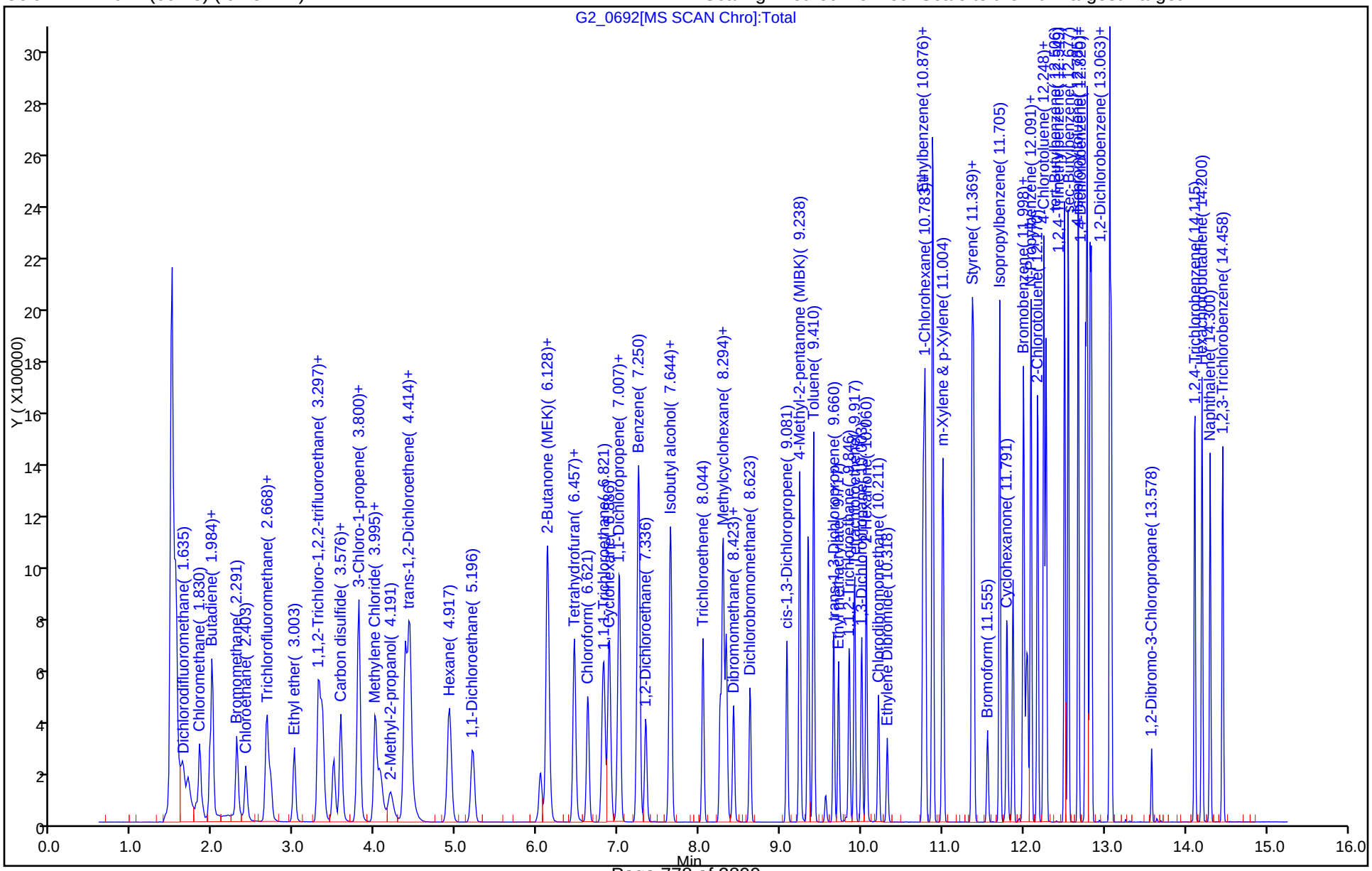
Report Date: 06-Jun-2017 20:22:27 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0692.D

Injection Date:	05-Jun-2017 18:47:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	CCV			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVC 280-376196/33 Calibration Date: 06/06/2017 03:38

Instrument ID: VMS_G2 Calib Start Date: 05/30/2017 18:51

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/30/2017 21:14

Lab File ID: G2_0717.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin1		0.5863		50.8	50.0	1.5	50.0
Chloromethane	Ave	0.7864	0.7638	0.1000	48.6	50.0	-2.9	50.0
Vinyl chloride	Ave	0.9762	0.8748		44.8	50.0	-10.4	50.0
Bromomethane	Ave	0.7750	0.7905		51.0	50.0	2.0	50.0
Chloroethane	Lin1		0.6411		71.5	50.0	43.1	50.0
Dichlorofluoromethane	Qua		1.255		57.4	50.0	14.7	50.0
Trichlorofluoromethane	Ave	0.8768	1.005		57.3	50.0	14.7	50.0
Ethyl ether	Ave	0.4165	0.4432		53.2	50.0	6.4	50.0
Acrolein	Ave	0.0750	0.0933		622	500	24.3	50.0
1,1-Dichloroethene	Qua		0.4956		48.6	50.0	-2.9	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.5181	0.5122		49.4	50.0	-1.1	50.0
Acetone	Ave	0.1856	0.2050		221	200	10.5	50.0
Methyl iodide	Lin1		0.8583		46.7	50.0	-6.7	50.0
Carbon disulfide	Qua		1.933		52.0	50.0	3.9	50.0
Methyl acetate	Ave	0.3664	0.4257		290	250	16.2	50.0
3-Chloro-1-propene	Ave	0.8257	0.9318		56.4	50.0	12.9	50.0
Methylene Chloride	Lin2		0.6328		55.8	50.0	11.6	50.0
t-Butyl alcohol	Ave	0.0547	0.0540		494	500	-1.2	50.0
Acrylonitrile	Ave	0.1726	0.2017		584	500	16.9	50.0
Methyl tert-butyl ether	Ave	1.340	1.561		58.3	50.0	16.5	50.0
trans-1,2-Dichloroethene	Ave	0.5409	0.5755		53.2	50.0	6.4	50.0
Hexane	Lin2		1.772		44.9	50.0	-10.2	50.0
1,1-Dichloroethane	Ave	1.043	1.127	0.1000	54.0	50.0	8.0	50.0
Vinyl acetate	Lin2		0.997		108	100	7.9	50.0
2,2-Dichloropropane	Ave	0.8435	0.9658		57.2	50.0	14.5	50.0
2-Butanone (MEK)	Ave	0.2353	0.2652		225	200	12.7	50.0
cis-1,2-Dichloroethene	Ave	0.5706	0.6022		52.8	50.0	5.5	50.0
sec-Butyl Alcohol	Lin1		0.0348		672	750	-10.5	50.0
Bromochloromethane	Ave	0.2780	0.2940		52.9	50.0	5.8	50.0
Tetrahydrofuran	Ave	0.1367	0.1624		119	100	18.8	50.0
Chloroform	Ave	1.086	1.145		52.8	50.0	5.5	50.0
1,1,1-Trichloroethane	Ave	0.9556	1.014		53.1	50.0	6.1	50.0
Cyclohexane	Lin2		0.9243		52.5	50.0	5.1	50.0
Carbon tetrachloride	Ave	0.9047	0.9441		52.2	50.0	4.3	50.0
1,1-Dichloropropene	Lin1		0.7439		50.4	50.0	0.8	50.0
Benzene	Ave	2.054	2.331		56.7	50.0	13.5	50.0
1,2-Dichloroethane	Ave	0.8732	0.9664		55.3	50.0	10.7	50.0
Isobutyl alcohol	Ave	0.0242	0.0277		1430	1250	14.5	50.0
Trichloroethene	Ave	0.5063	0.4963		49.0	50.0	-2.0	50.0
2-Pentanone	Ave	0.3919	0.3738		95.4	100	-4.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVC 280-376196/33 Calibration Date: 06/06/2017 03:38

Instrument ID: VMS_G2 Calib Start Date: 05/30/2017 18:51

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/30/2017 21:14

Lab File ID: G2_0717.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Lin2		0.8823		59.2	50.0	18.4	50.0
1,2-Dichloropropane	Ave	0.5463	0.6024		55.1	50.0	10.3	50.0
1,4-Dioxane	Lin1		0.0043		874	1000	-12.6	50.0
Dibromomethane	Ave	0.3430	0.3726		54.3	50.0	8.6	50.0
Bromodichloromethane	Ave	0.7490	0.8074		53.9	50.0	7.8	50.0
2-Chloroethyl vinyl ether	Lin1		0.1334		49.4	50.0	-1.3	50.0
cis-1,3-Dichloropropene	Lin1		1.829		45.2	50.0	-9.6	50.0
4-Methyl-2-pentanone (MIBK)	Lin2		0.5717		239	200	19.3	50.0
Toluene	Ave	2.045	2.347		57.4	50.0	14.8	50.0
trans-1,3-Dichloropropene	Lin1		0.7836		50.5	50.0	0.9	50.0
Ethyl methacrylate	Lin1		1.279		44.2	50.0	-11.7	50.0
1,1,2-Trichloroethane	Ave	0.4411	0.4738		53.7	50.0	7.4	50.0
Tetrachloroethene	Ave	1.221	1.107		45.3	50.0	-9.3	50.0
1,3-Dichloropropane	Ave	1.822	1.913		52.5	50.0	5.0	50.0
2-Hexanone	Lin2		0.9247		214	200	6.8	50.0
Dibromochloromethane	Ave	1.311	1.299		49.5	50.0	-0.9	50.0
1,2-Dibromoethane	Ave	1.049	1.000		47.7	50.0	-4.7	50.0
1-Chlorohexane	Lin1		1.487		20.4	25.0	-18.6	50.0
Chlorobenzene	Ave	3.792	3.633	0.3000	47.9	50.0	-4.2	50.0
1,1,1,2-Tetrachloroethane	Ave	1.464	1.435		49.0	50.0	-2.0	50.0
Ethylbenzene	Ave	1.856	1.830		49.3	50.0	-1.4	50.0
m&p-Xylene	Lin1		2.145		45.0	50.0	-9.9	50.0
o-Xylene	Lin1		2.082		45.1	50.0	-9.7	50.0
Styrene	Lin1		3.858		49.1	50.0	-1.9	50.0
Bromoform	Ave	0.8596	0.8163	0.1000	47.5	50.0	-5.0	50.0
Isopropylbenzene	Lin2		2.274		41.5	50.0	-16.9	50.0
Cyclohexanone	Lin1		0.0462		2230	2000	11.3	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6603	0.6043	0.3000	45.8	50.0	-8.5	50.0
Bromobenzene	Ave	0.7064	0.6244		44.2	50.0	-11.6	50.0
trans-1,4-Dichloro-2-butene	Lin2		0.1912		46.2	50.0	-7.6	50.0
1,2,3-Trichloropropane	Ave	0.2107	0.1978		46.9	50.0	-6.1	50.0
N-Propylbenzene	Lin2		0.6779		41.9	50.0	-16.2	50.0
2-Chlorotoluene	Lin2		0.5902		41.9	50.0	-16.2	50.0
1,3,5-Trimethylbenzene	Lin2		2.094		43.2	50.0	-13.5	50.0
4-Chlorotoluene	Lin1		0.6239		41.7	50.0	-16.6	50.0
tert-Butylbenzene	Lin2		1.765		42.0	50.0	-16.1	50.0
1,2,4-Trimethylbenzene	Lin2		2.228		44.1	50.0	-11.7	50.0
sec-Butylbenzene	Lin2		0.5617		41.4	50.0	-17.3	50.0
1,3-Dichlorobenzene	Ave	1.411	1.241		44.0	50.0	-12.0	50.0
4-Isopropyltoluene	Lin2		2.446		43.2	50.0	-13.7	50.0
1,4-Dichlorobenzene	Ave	1.546	1.286		41.6	50.0	-16.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVC 280-376196/33 Calibration Date: 06/06/2017 03:38

Instrument ID: VMS_G2 Calib Start Date: 05/30/2017 18:51

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 05/30/2017 21:14

Lab File ID: G2_0717.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Lin2		2.222		45.1	50.0	-9.8	50.0
1,2-Dichlorobenzene	Ave	1.386	1.253		45.2	50.0	-9.6	50.0
1,2-Dibromo-3-Chloropropane	Ave	0.1237	0.1039		42.0	50.0	-16.0	50.0
1,2,4-Trichlorobenzene	Lin1		0.7094		38.7	50.0	-22.6	50.0
Hexachlorobutadiene	Lin2		0.5436		45.3	50.0	-9.5	50.0
Naphthalene	Lin1		1.660		44.7	50.0	-10.5	50.0
1,2,3-Trichlorobenzene	Lin2		0.7775		46.1	50.0	-7.7	50.0
Dibromofluoromethane (Surr)	Ave	0.5696	0.5889		46.5	45.0	3.4	50.0
1,2-Dichloroethane-d4 (Surr)	Lin1		0.8309		56.6	45.0	25.7	50.0
Toluene-d8 (Surr)	Ave	4.778	4.858		45.8	45.0	1.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.8196	0.7329		40.2	45.0	-10.6	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0717.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 06-Jun-2017 03:38:30 ALS Bottle#: 38 Worklist Smp#: 33
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVC
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Jun-2017 20:23:23 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
*	1 TBA-d9 (IS)	65	4.051	4.051	0.000	91	315909	1000.0	1000.0	
*	3 Fluorobenzene	96	7.629	7.629	0.000	98	279575	50.0	50.0	
*	4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	122529	50.0	50.0	
*	5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	309921	50.0	50.0	
$	8 Dibromofluoromethane (Surr	111	6.829	6.829	0.000	92	148188	45.0	46.5	
$	9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	209077	45.0	56.6	
$	10 Toluene-d8 (Surr)	98	9.338	9.338	0.000	95	535770	45.0	45.8	
$	11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	88	204426	45.0	40.2	
	32 Dichlorodifluoromethane	85	1.691	1.691	0.000	99	163918	50.0	50.8	
	34 Chloromethane	50	1.830	1.830	0.000	99	213530	50.0	48.6	
	37 Vinyl chloride	62	1.956	1.956	0.000	98	244570	50.0	44.8	
	22 Butadiene	54	1.984	1.984	0.000	90	215483	NC	NC	
	39 Bromomethane	94	2.277	2.277	0.000	91	221013	50.0	51.0	
	40 Chloroethane	64	2.403	2.403	0.000	99	179235	50.0	71.5	
	41 Dichlorofluoromethane	67	2.654	2.654	0.000	98	350901	50.0	57.4	
	43 Trichlorofluoromethane	101	2.696	2.696	0.000	98	281085	50.0	57.3	
	45 Ethyl ether	59	3.004	3.004	0.000	93	123904	50.0	53.2	
	48 Acrolein	56	3.171	3.171	0.000	99	260742	499.9	621.6	
	53 1,1-Dichloroethene	96	3.297	3.297	0.000	93	138557	50.0	48.6	
	52 1,1,2-Trichloro-1,2,2-trif	151	3.325	3.325	0.000	94	143204	50.0	49.4	
	50 Acetone	43	3.353	3.353	0.000	97	229266	200.0	221.0	
	55 Iodomethane	142	3.478	3.478	0.000	97	239954	50.0	46.7	
	58 Carbon disulfide	76	3.562	3.562	0.000	100	540357	50.0	52.0	
	56 Methyl acetate	43	3.786	3.786	0.000	98	595024	250.0	290.4	
	57 3-Chloro-1-propene	41	3.800	3.800	0.000	87	260502	50.0	56.4	
	60 Methylene Chloride	84	3.995	3.995	0.000	98	176908	50.0	55.8	
	59 2-Methyl-2-propanol	59	4.191	4.191	0.000	92	150968	500.0	493.9	
	61 Acrylonitrile	53	4.372	4.372	0.000	96	563862	500.0	584.3	
	63 trans-1,2-Dichloroethene	96	4.414	4.414	0.000	93	160887	50.0	53.2	
	62 Methyl tert-butyl ether	73	4.414	4.414	0.000	97	436489	50.0	58.3	
	64 Hexane	57	4.917	4.917	0.000	93	217171	50.0	44.9	
	67 1,1-Dichloroethane	63	5.196	5.196	0.000	97	314997	50.0	54.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
65 Vinyl acetate	43	5.238	5.238	0.000	98	557740	100.0	107.9	
74 cis-1,2-Dichloroethene	96	6.121	6.121	0.000	86	168357	50.0	52.8	
71 2-Butanone (MEK)	43	6.121	6.121	0.000	96	296542	200.0	225.4	
75 2,2-Dichloropropane	77	6.121	6.121	0.000	64	270015	50.0	57.2	
72 sec-Butyl Alcohol	45	6.450	6.450	0.000	93	146059	750.0	671.5	
77 Chlorobromomethane	128	6.457	6.457	0.000	97	82198	50.0	52.9	
79 Tetrahydrofuran	42	6.457	6.457	0.000	87	90818	100.0	118.8	
78 Chloroform	83	6.621	6.621	0.000	95	320241	50.0	52.8	
81 1,1,1-Trichloroethane	97	6.807	6.807	0.000	98	283588	50.0	53.1	
82 Cyclohexane	56	6.886	6.886	0.000	95	258415	50.0	52.5	
84 Carbon tetrachloride	117	7.000	7.000	0.000	96	263937	50.0	52.2	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	92	207971	50.0	50.4	
87 Benzene	78	7.250	7.250	0.000	98	651675	50.0	56.7	
85 1,2-Dichloroethane	62	7.336	7.336	0.000	98	270193	50.0	55.3	
80 Isobutyl alcohol	41	7.644	7.644	0.000	83	193706	1250.0	1431.4	
35 n-Heptane	43	7.644	7.644	0.000	92	268401	50.0	58.7	
89 Trichloroethene	95	8.044	8.044	0.000	96	138748	50.0	49.0	
90 2-Pentanone	43	8.259	8.259	0.000	98	209023	100.0	95.4	
93 Methylcyclohexane	55	8.287	8.287	0.000	95	246664	50.0	59.2	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	93	168422	50.0	55.1	
94 1,4-Dioxane	88	8.416	8.416	0.000	98	23834	1000.0	874.4	
95 Dibromomethane	93	8.423	8.423	0.000	95	104165	50.0	54.3	
96 Dichlorobromomethane	83	8.623	8.623	0.000	98	225728	50.0	53.9	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	93	37290	50.0	49.4	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	92	224077	50.0	45.2	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	99	639319	200.0	238.5	
101 Toluene	91	9.410	9.410	0.000	97	656144	50.0	57.4	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	97	219081	50.0	50.5	
102 Ethyl methacrylate	69	9.717	9.717	0.000	91	156757	50.0	44.2	
104 1,1,2-Trichloroethane	97	9.846	9.846	0.000	96	132471	50.0	53.7	
107 Tetrachloroethene	164	9.917	9.917	0.000	96	135649	50.0	45.3	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	95	234395	50.0	52.5	
105 2-Hexanone	43	10.060	10.060	0.000	99	453218	200.0	213.7	
108 Chlorodibromomethane	129	10.211	10.211	0.000	90	159132	50.0	49.5	
110 Ethylene Dibromide	107	10.318	10.318	0.000	98	122560	50.0	47.7	
111 1-Chlorohexane	91	10.775	10.775	0.000	90	91120	25.0	20.4	
112 Chlorobenzene	112	10.790	10.790	0.000	92	445175	50.0	47.9	
113 1,1,1,2-Tetrachloroethane	131	10.876	10.876	0.000	91	175811	50.0	49.0	
114 Ethylbenzene	106	10.883	10.883	0.000	98	224168	50.0	49.3	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	98	262867	50.0	45.0	
117 o-Xylene	106	11.362	11.362	0.000	98	255111	50.0	45.1	
116 Styrene	104	11.383	11.383	0.000	98	472701	50.0	49.1	
118 Bromoform	173	11.555	11.555	0.000	95	100014	50.0	47.5	
119 Isopropylbenzene	105	11.705	11.705	0.000	97	704805	50.0	41.5	
121 Cyclohexanone	55	11.791	11.791	0.000	95	226586	2000.0	2226.3	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	96	187269	50.0	45.8	
125 Bromobenzene	156	11.998	11.998	0.000	96	193522	50.0	44.2	
123 trans-1,4-Dichloro-2-buten	53	12.027	12.027	0.000	88	59242	50.0	46.2	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	88	61306	50.0	46.9	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	210079	50.0	41.9	
128 2-Chlorotoluene	126	12.177	12.177	0.000	96	182927	50.0	41.9	
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	94	649099	50.0	43.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
129 4-Chlorotoluene	126	12.277	12.277	0.000	98	193352	50.0	41.7	
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	546878	50.0	42.0	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	690364	50.0	44.1	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	174076	50.0	41.4	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	97	384687	50.0	44.0	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	758063	50.0	43.2	
136 1,4-Dichlorobenzene	146	12.835	12.835	0.000	93	398533	50.0	41.6	
137 n-Butylbenzene	91	13.064	13.064	0.000	98	688600	50.0	45.1	
138 1,2-Dichlorobenzene	146	13.078	13.078	0.000	96	388334	50.0	45.2	
139 1,2-Dibromo-3-Chloropropan	157	13.578	13.578	0.000	77	32193	50.0	42.0	
141 1,2,4-Trichlorobenzene	180	14.107	14.107	0.000	94	219860	50.0	38.7	
142 Hexachlorobutadiene	225	14.193	14.193	0.000	97	168477	50.0	45.3	
143 Naphthalene	128	14.293	14.293	0.000	98	514314	50.0	44.7	
144 1,2,3-Trichlorobenzene	180	14.451	14.451	0.000	94	240976	50.0	46.1	
S 151 1,2-Dichloroethene, Total	96				0		100.0	106.0	
S 146 Xylenes, Total (URS)	1				0		100.0	90.2	
S 150 Xylenes, Total	106				0		100.0	90.2	
S 145 Trihalomethanes, Total	1				0		200.0	203.7	
S 149 1,2-Dichloroethene, Total	1				0		100.0	106.0	
S 148 1,3-Dichloropropene, Total	1				0		100.0	95.6	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MV-2cleve+AVA_00025	Amount Added:	6.25	Units: uL	
MV-Main A_00030	Amount Added:	6.25	Units: uL	
MV-Gas/Ket A_00060	Amount Added:	6.25	Units: uL	
MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent

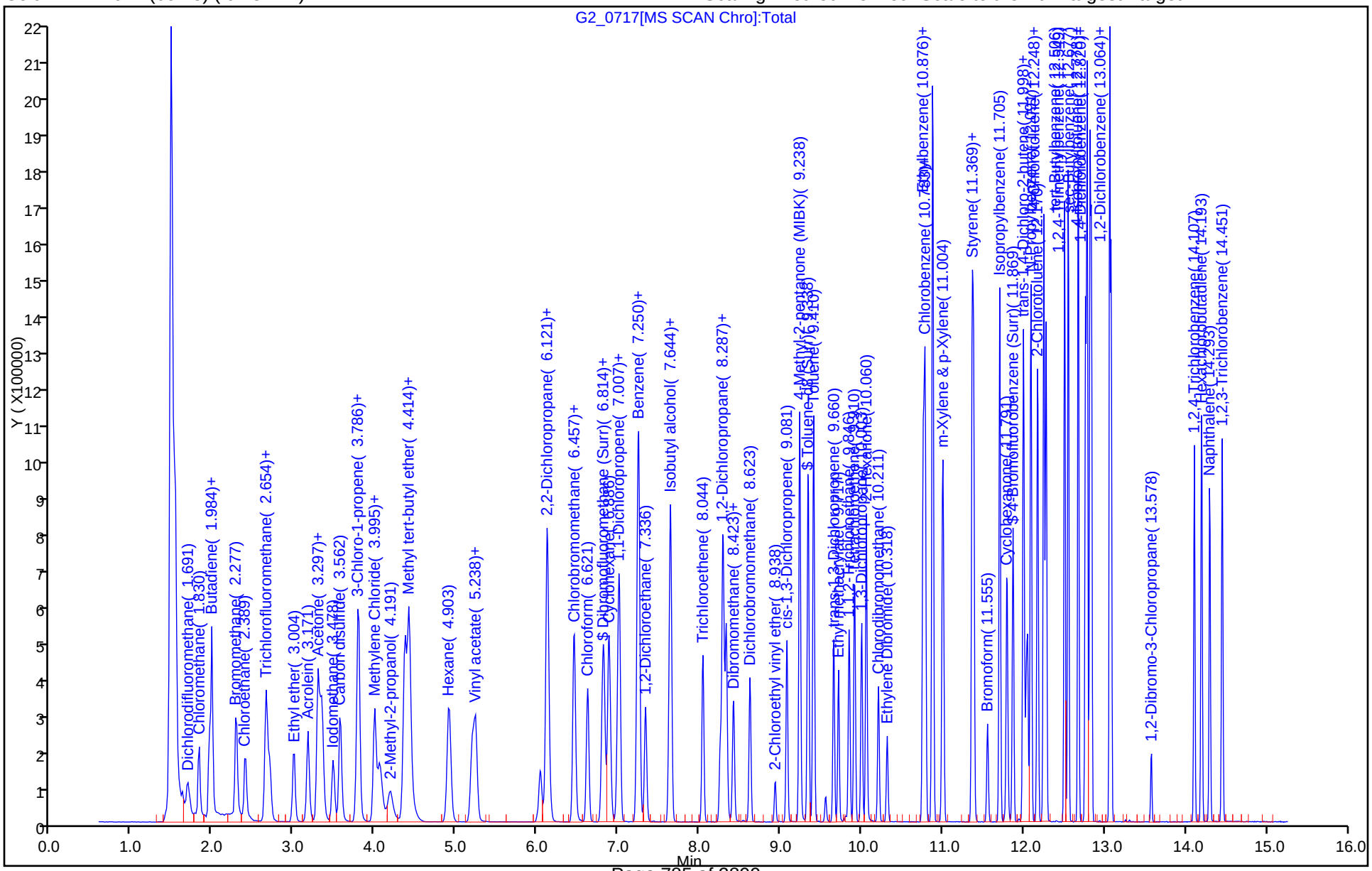
Report Date: 06-Jun-2017 20:23:24 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0717.D

Injection Date:	06-Jun-2017 03:38:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	CCVC			Worklist Smp#:	33
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVC 280-376196/34 Calibration Date: 06/06/2017 03:58

Instrument ID: VMS_G2 Calib Start Date: 04/26/2017 21:24

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/26/2017 23:47

Lab File ID: G2_0718.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.0921		2210	3000	-26.5	50.0
Isopropyl alcohol	Lin2		0.5232		376	500	-24.8	50.0
Acetonitrile	Ave	0.0340	0.0700		1550	750	106.0*	50.0
Isopropyl ether	Lin1		0.3521		95.2	75.0	26.9	50.0
2-Chloro-1,3-butadiene	Lin1		0.8738		80.6	50.0	61.3*	50.0
Tert-butyl ethyl ether	Lin1		1.314		117	75.0	56.6*	50.0
Ethyl acetate	Ave	0.2191	0.4378		200	100	99.8*	50.0
Propionitrile	Ave	0.0366	0.0677		1390	750	85.3*	50.0
Methacrylonitrile	Ave	0.1405	0.3188		1130	500	126.9*	50.0
Tert-amyl methyl ether	Lin1		1.280		120	75.0	60.2*	50.0
n-Butanol	Lin1		0.1919		747	1250	-40.3	50.0
Methyl methacrylate	Lin1		0.1033		126	100	25.7	50.0
2-Nitropropane	Lin1		0.1224		156	100	55.8*	50.0
cis-1,4-Dichloro-2-butene	Lin1		0.1986		79.9	100	-20.1	50.0
1,2,3-Trimethylbenzene	Lin2		2.412		38.9	50.0	-22.2	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0718.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 06-Jun-2017 03:58:30 ALS Bottle#: 39 Worklist Smp#: 34
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVC
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub99

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Jun-2017 20:23:25 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	93	366674	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	308205	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	89	126372	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	97	225101	50.0	50.0	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.263	2.263	0.000	100	1708068	5000.0	23073	E
42 Ethanol	45	2.892	2.892	0.000	98	101260	3000.0	2206.4	
47 Propene oxide	58	3.073	3.073	0.000	96	3375160	5000.0	8957.6	
51 Isopropyl alcohol	45	3.562	3.562	0.000	93	95923	500.0	375.8	
54 Acetonitrile	41	3.744	3.744	0.000	99	323654	750.0	1545.3	
66 Isopropyl ether	87	5.308	5.308	0.000	94	162776	75.0	95.2	
68 2-Chloro-1,3-butadiene	53	5.322	5.322	0.000	95	269296	50.0	80.6	
69 Tert-butyl ethyl ether	59	5.894	5.894	0.000	96	607463	75.0	117.4	
70 Ethyl acetate	43	6.214	6.214	0.000	100	269833	100.0	199.8	
73 Propionitrile	54	6.221	6.221	0.000	99	313160	750.0	1389.4	
76 Methacrylonitrile	41	6.428	6.428	0.000	95	982691	500.0	1134.4	
86 Tert-amyl methyl ether	73	7.451	7.451	0.000	95	591764	75.0	120.2	
88 n-Butanol	56	8.001	8.001	0.000	95	87940	1250.0	746.7	
16 Ethyl acrylate	55	8.173	8.173	0.000	100	140739	NC	NC	
91 Methyl methacrylate	100	8.423	8.423	0.000	92	63680	100.0	125.7	
97 2-Nitropropane	41	8.859	8.859	0.000	98	75465	100.0	155.8	
120 cis-1,4-Dichloro-2-butene	53	11.769	11.769	0.000	89	89387	100.0	79.9	
135 1,2,3-Trimethylbenzene	105	12.856	12.856	0.000	99	542972	50.0	38.9	
140 1,3,5-Trichlorobenzene	180	13.693	13.693	0.000	96	209102	50.0	32.1	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

E - Exceeded Maximum Amount

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00024	Amount Added:	6.25	Units: uL

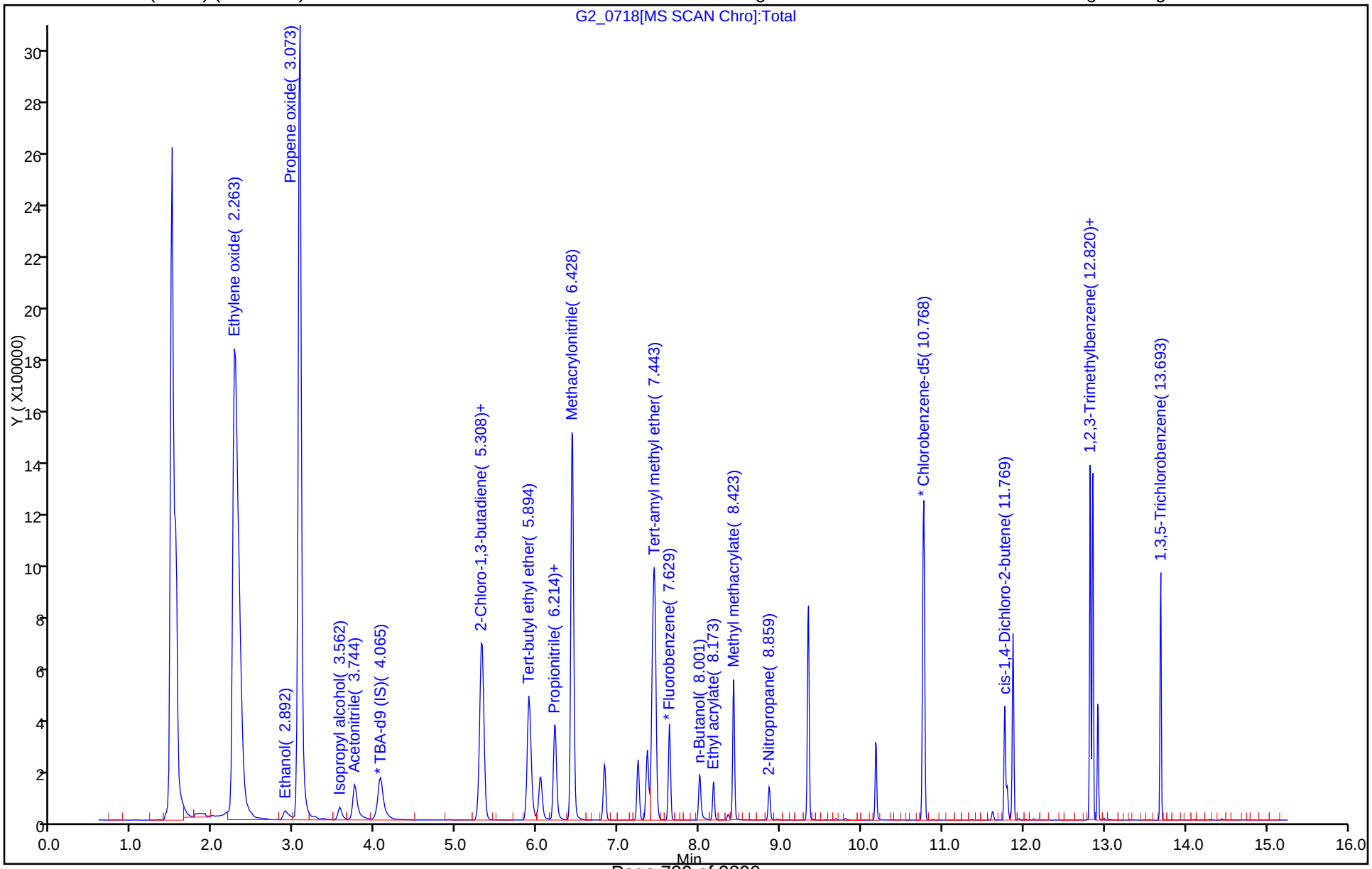
Report Date: 06-Jun-2017 20:23:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0718.D

Injection Date:	06-Jun-2017 03:58:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	CCVC			Worklist Smp#:	34
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9102.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 26-Apr-2017 20:42:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2017 16:49:58 Calib Date: 26-Apr-2017 23:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 7 BFB	95	2.282	2.282	0.000	88	44239	NR	NR	7

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
7 - Failed Limit of Detection

Reagents:

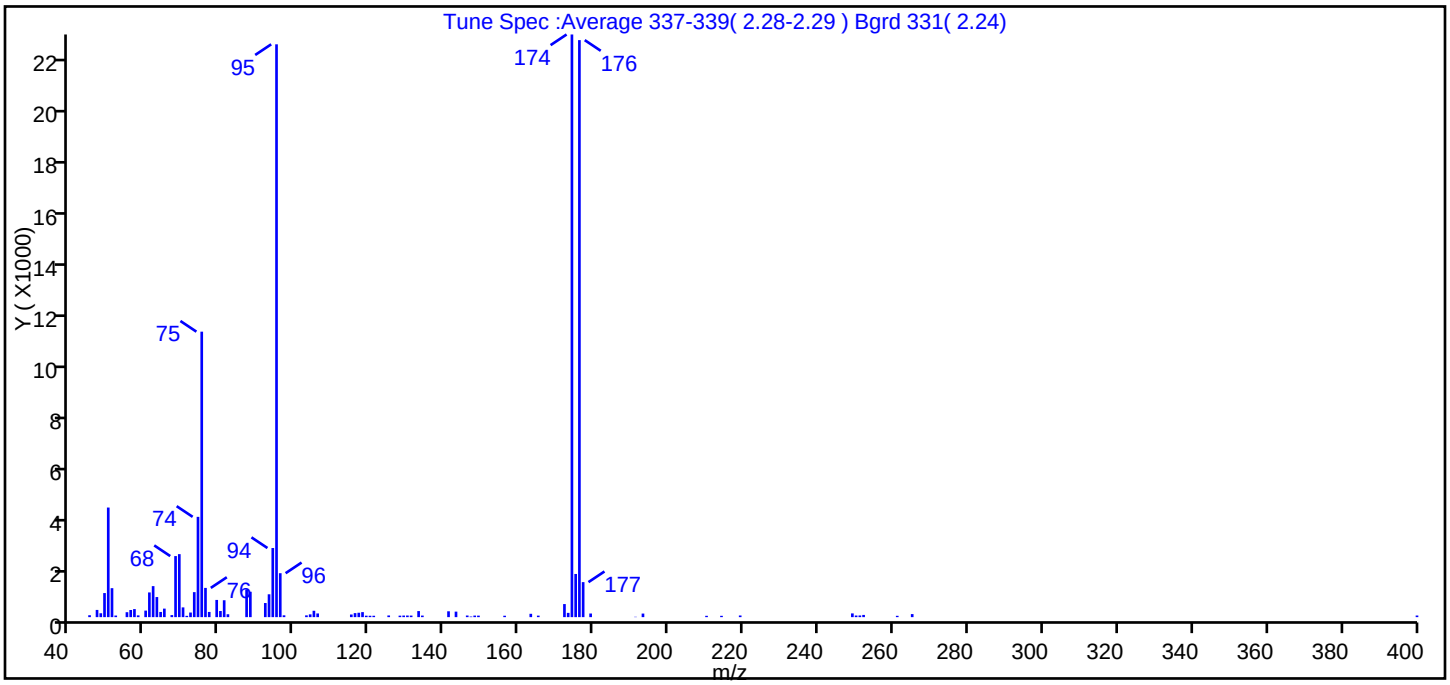
MV-BFB_00022 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9102.D
Injection Date: 26-Apr-2017 20:42:30 Instrument ID: VMS_G2
Lims ID: BFB
Client ID:
Operator ID: DUKESA ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 7 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.1
75	30 to 60% of m/z 95	49.8
96	5 to 9% of m/z 95	7.7
173	Less than 2% of m/z 174	0.7 (0.7)
174	50 to 120% of m/z 95	101.7
175	5 to 9% of m/z 174	7.5 (7.4)
176	Greater than 95% but less than 101% of m/z 174	100.7 (99.0)
177	5 to 9% of m/z 176	6.1 (6.1)

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9102.D\SO_VMSG2_8260.rslt\spectra.d
Injection Date: 26-Apr-2017 20:42:30
Spectrum: Tune Spec :Average 337-339(2.28-2.29) Bgrd 331(2.24)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 86

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	73	72.00	176	115.00	101	165.00	58
47.00	276	73.00	956	116.00	154	172.00	500
48.00	149	74.00	3835	117.00	168	173.00	163
49.00	921	75.00	10916	118.00	192	174.00	22280
50.00	4191	76.00	1118	119.00	56	175.00	1651
51.00	1108	77.00	199	120.00	53	176.00	22064
52.00	61	79.00	658	121.00	53	177.00	1339
55.00	189	80.00	234	125.00	64	179.00	139
56.00	273	81.00	646	128.00	57	191.00	13
57.00	308	82.00	111	129.00	61	193.00	137
58.00	68	87.00	1048	130.00	62	210.00	51
60.00	250	88.00	971	131.00	60	214.00	51
61.00	945	92.00	540	133.00	232	219.00	63
62.00	1186	93.00	874	134.00	60	249.00	143
63.00	768	94.00	2643	141.00	224	250.00	62
64.00	198	95.00	21904	143.00	211	251.00	64
65.00	326	96.00	1680	146.00	62	252.00	85
67.00	78	97.00	70	147.00	23	261.00	51
68.00	2335	103.00	68	148.00	60	265.00	117
69.00	2409	104.00	106	149.00	58	400.00	62
70.00	373	105.00	244	156.00	54		
71.00	50	106.00	141	163.00	128		

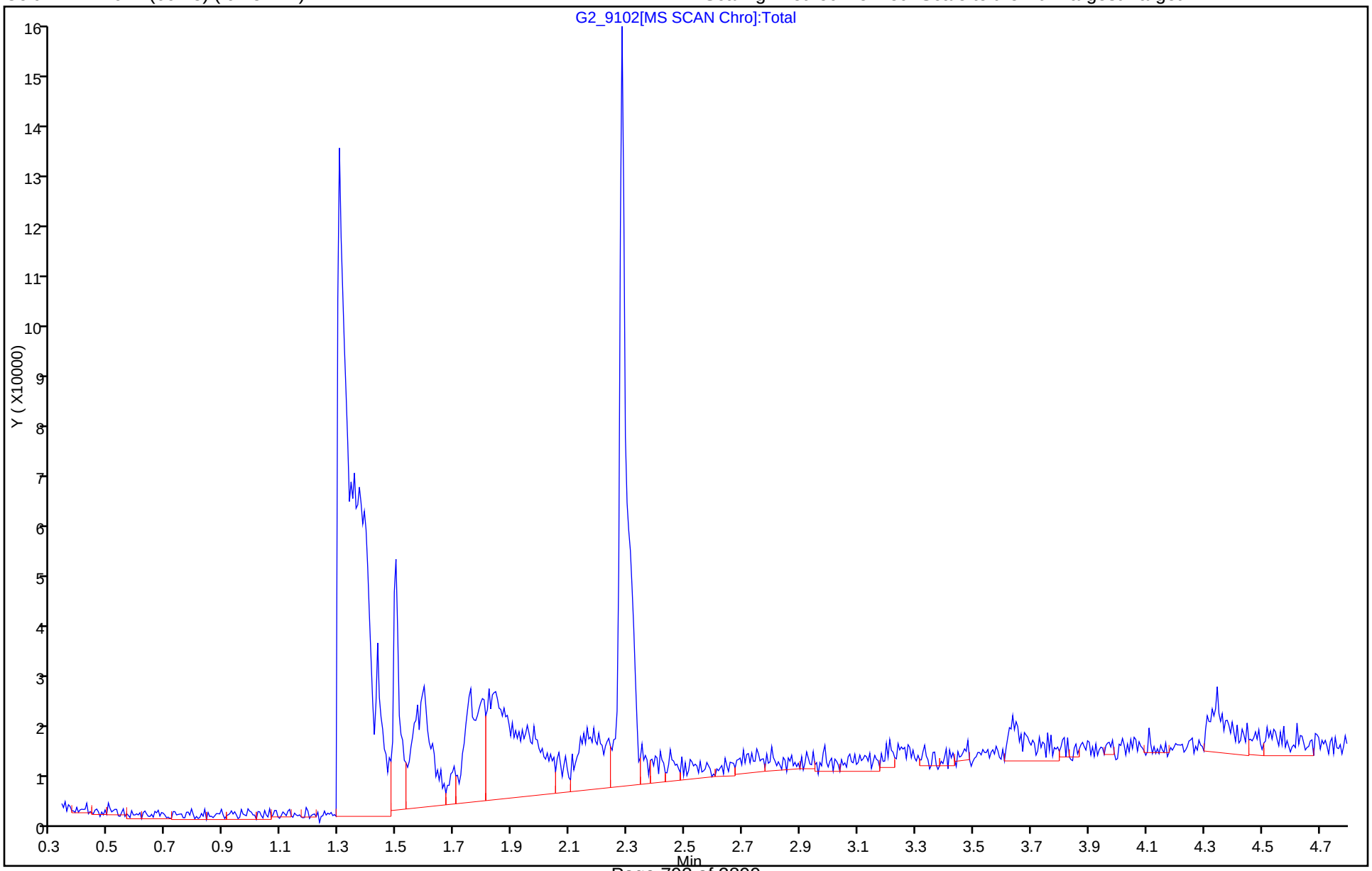
Report Date: 27-Apr-2017 16:49:58 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9102.D

Injection Date:	26-Apr-2017 20:42:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0473.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 30-May-2017 17:19:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 31-May-2017 19:59:02 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK010

First Level Reviewer: newcomer Date: 31-May-2017 16:32:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 7 BFB	95	2.270	2.270	0.000	87	54622	NR	NR	7

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
7 - Failed Limit of Detection

Reagents:

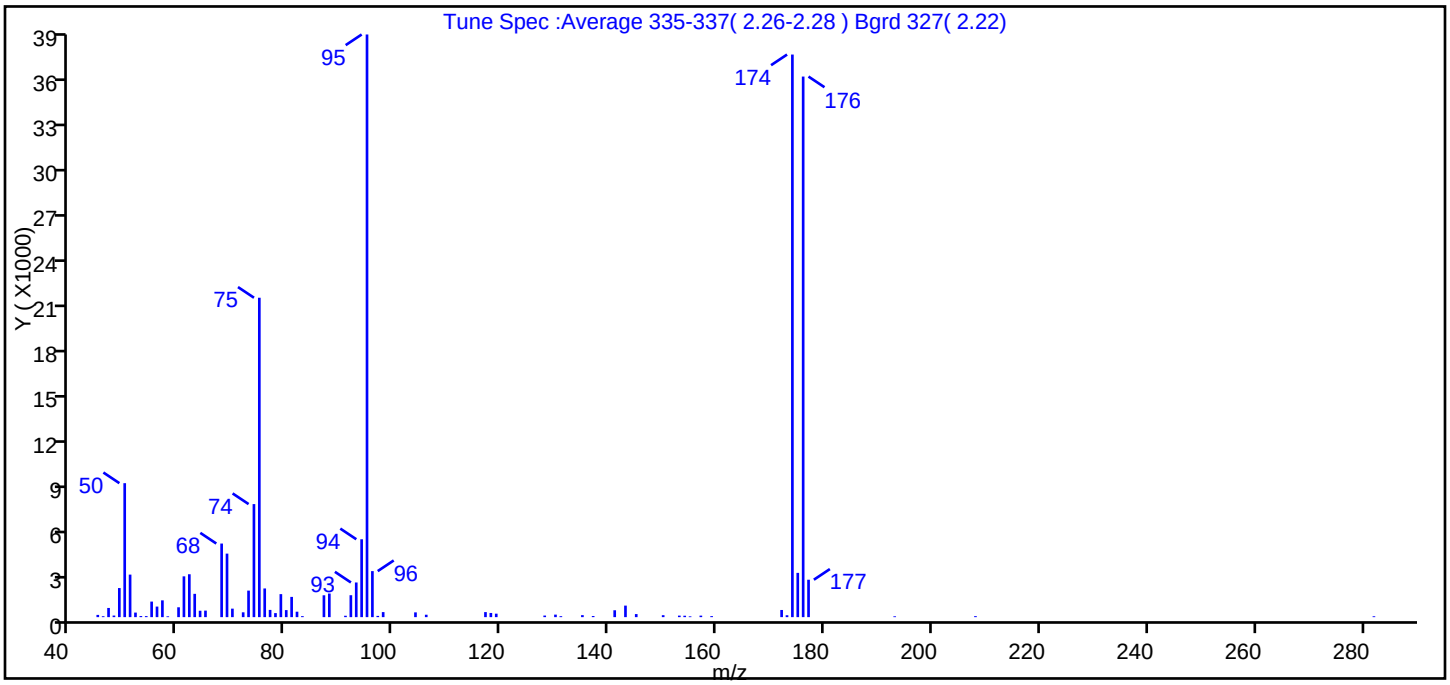
MV-BFB_00023 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0473.D
Injection Date: 30-May-2017 17:19:30 Instrument ID: VMS_G2
Lims ID: BFB
Client ID:
Operator ID: DUKESA ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 7 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	23.0
75	30 to 60% of m/z 95	54.8
96	5 to 9% of m/z 95	7.9
173	Less than 2% of m/z 174	0.3 (0.3)
174	50 to 120% of m/z 95	96.6
175	5 to 9% of m/z 174	7.6 (7.9)
176	Greater than 95% but less than 101% of m/z 174	92.8 (96.1)
177	5 to 9% of m/z 176	6.4 (6.9)

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0473.D\SO_VMSG2_8260.rslt\spectra.d
Injection Date: 30-May-2017 17:19:30
Spectrum: Tune Spec :Average 335-337(2.26-2.28) Bgrd 327(2.22)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 73

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	147	65.00	427	92.00	1434	145.00	201
46.00	59	68.00	4813	93.00	2267	150.00	128
47.00	601	69.00	4154	94.00	5093	153.00	100
48.00	104	70.00	556	95.00	38104	154.00	93
49.00	1902	72.00	316	96.00	3010	155.00	51
50.00	8761	73.00	1735	97.00	82	157.00	99
51.00	2782	74.00	7393	98.00	330	159.00	66
52.00	298	75.00	20888	104.00	312	172.00	469
53.00	72	76.00	1876	106.00	158	173.00	124
54.00	68	77.00	473	117.00	330	174.00	36792
55.00	1017	78.00	264	118.00	273	175.00	2895
56.00	691	79.00	1505	119.00	227	176.00	35352
57.00	1098	80.00	461	128.00	104	177.00	2447
58.00	53	81.00	1324	130.00	165	193.00	54
60.00	645	82.00	356	131.00	62	208.00	65
61.00	2668	83.00	65	135.00	131	282.00	56
62.00	2805	87.00	1430	137.00	73		
63.00	1524	88.00	1545	141.00	450		
64.00	419	91.00	91	143.00	754		

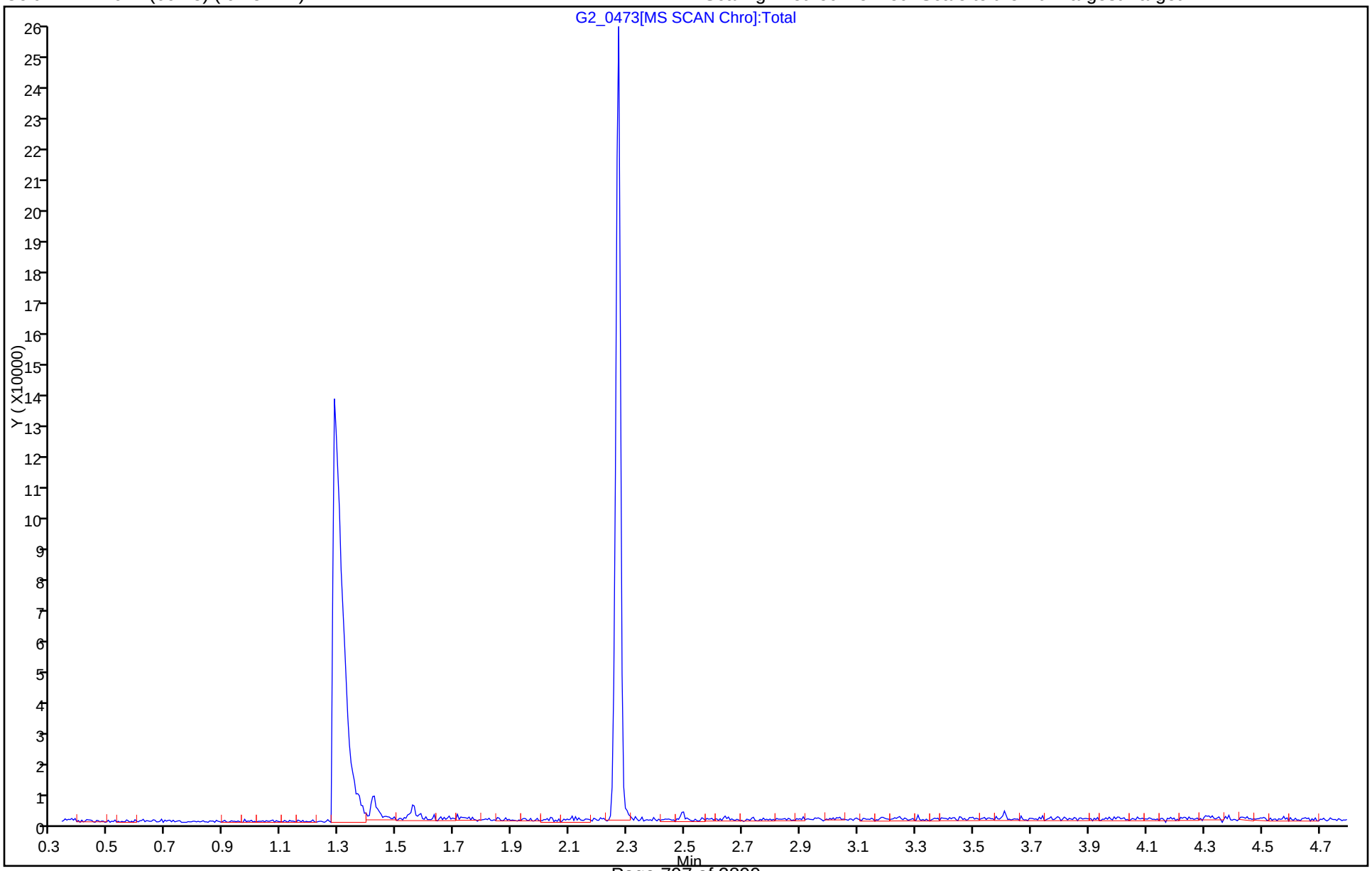
Report Date: 31-May-2017 19:59:03 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0473.D

Injection Date:	30-May-2017 17:19:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0628.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 03-Jun-2017 19:00:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:08 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 03-Jun-2017 19:10:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 7 BFB	95	2.270	2.270	0.000	85	122067	NR	NR	7

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
7 - Failed Limit of Detection

Reagents:

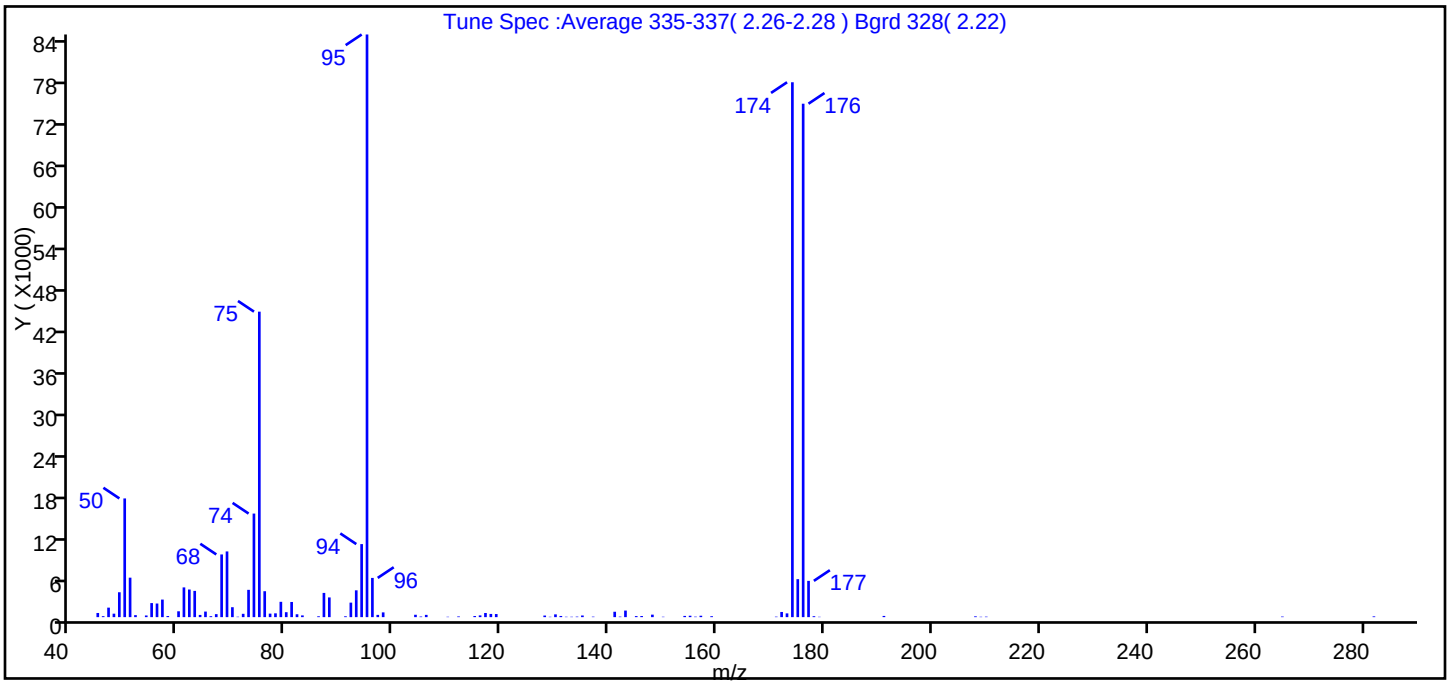
MV-BFB_00023 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0628.D
Injection Date: 03-Jun-2017 19:00:30 Instrument ID: VMS_G2
Lims ID: BFB
Client ID:
Operator ID: DUKESA ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 7 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.4
75	30 to 60% of m/z 95	52.4
96	5 to 9% of m/z 95	6.7
173	Less than 2% of m/z 174	0.6 (0.7)
174	50 to 120% of m/z 95	91.8
175	5 to 9% of m/z 174	6.5 (7.1)
176	Greater than 95% but less than 101% of m/z 174	88.1 (96.0)
177	5 to 9% of m/z 176	6.2 (7.1)

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0628.D\SO_VMSG2_8260.rslt\spectra.d
Injection Date: 03-Jun-2017 19:00:30
Spectrum: Tune Spec :Average 335-337(2.26-2.28) Bgrd 328(2.22)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 94

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	605	71.00	62	104.00	346	148.00	365
46.00	141	72.00	485	105.00	87	150.00	57
47.00	1383	73.00	3974	106.00	330	154.00	179
48.00	505	74.00	15070	110.00	54	155.00	204
49.00	3621	75.00	44448	112.00	101	156.00	71
50.00	17272	76.00	3772	115.00	162	157.00	204
51.00	5744	77.00	513	116.00	254	159.00	134
52.00	291	78.00	554	117.00	604	171.00	72
54.00	243	79.00	2230	118.00	467	172.00	753
55.00	2046	80.00	721	119.00	451	173.00	547
56.00	1982	81.00	2207	128.00	232	174.00	77824
57.00	2557	82.00	420	129.00	53	175.00	5525
58.00	159	83.00	253	130.00	405	176.00	74704
60.00	852	86.00	123	131.00	171	177.00	5279
61.00	4327	87.00	3525	132.00	57	178.00	134
62.00	4021	88.00	2868	133.00	57	179.00	51
63.00	3820	91.00	125	134.00	77	191.00	176
64.00	322	92.00	2111	135.00	240	208.00	116
65.00	811	93.00	3902	137.00	72	209.00	54
66.00	138	94.00	10629	141.00	784	210.00	72
67.00	437	95.00	84776	142.00	76	265.00	84
68.00	9123	96.00	5708	143.00	955	282.00	110
69.00	9560	97.00	329	145.00	154		
70.00	1445	98.00	693	146.00	160		

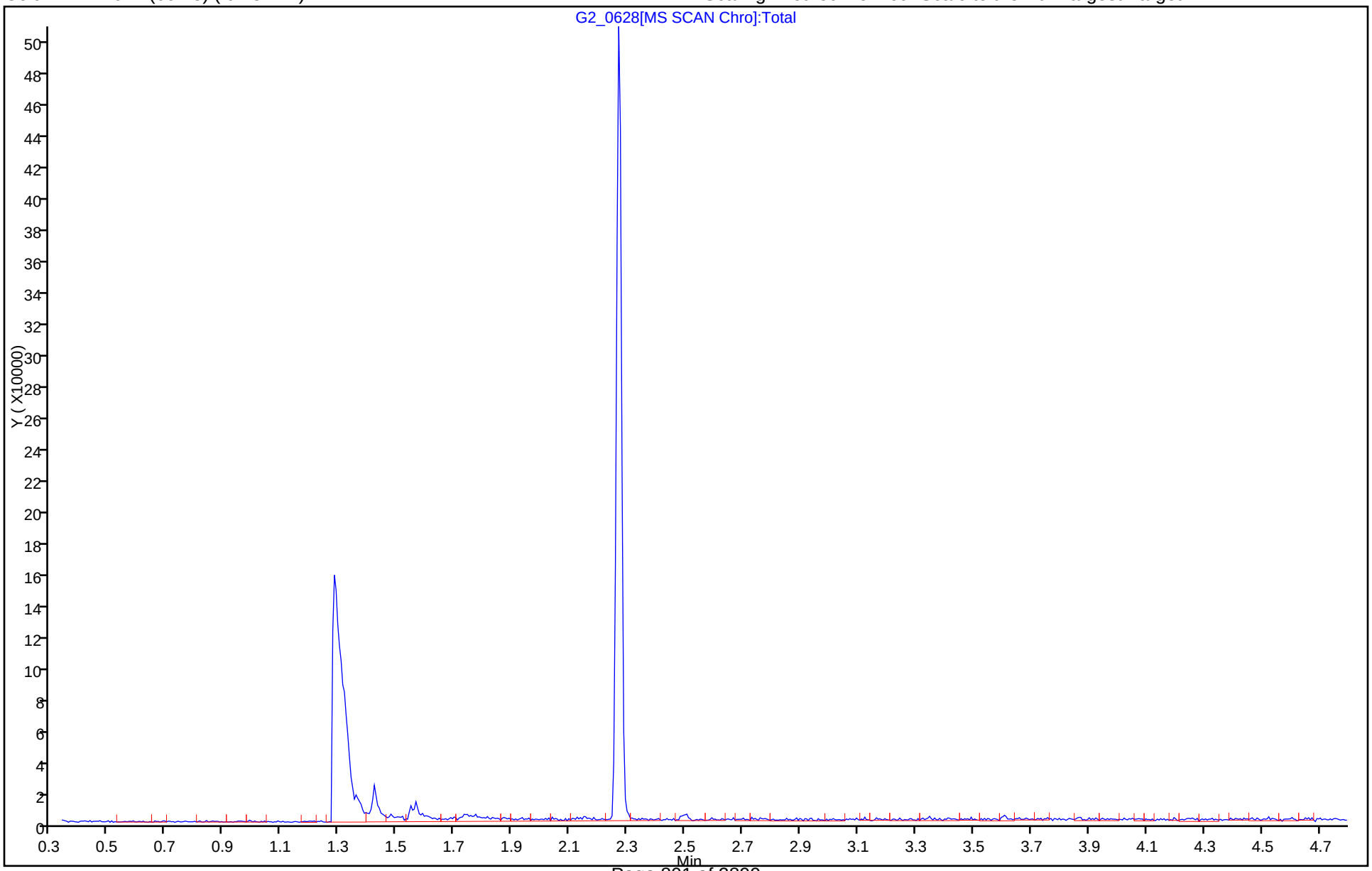
Report Date: 05-Jun-2017 17:13:09 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0628.D

Injection Date:	03-Jun-2017 19:00:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0688.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	05-Jun-2017 17:20:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Operator ID:	DUKESA	Instrument ID:	VMS_G2		
Method:	\\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\SO_VMSG2_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	06-Jun-2017 20:22:14	Calib Date:	30-May-2017 21:14:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK032				
First Level Reviewer: dukesa		Date:	05-Jun-2017 23:00:02		

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 7 BFB	95	2.276	2.276	0.000	83	167033	NR	NR	7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

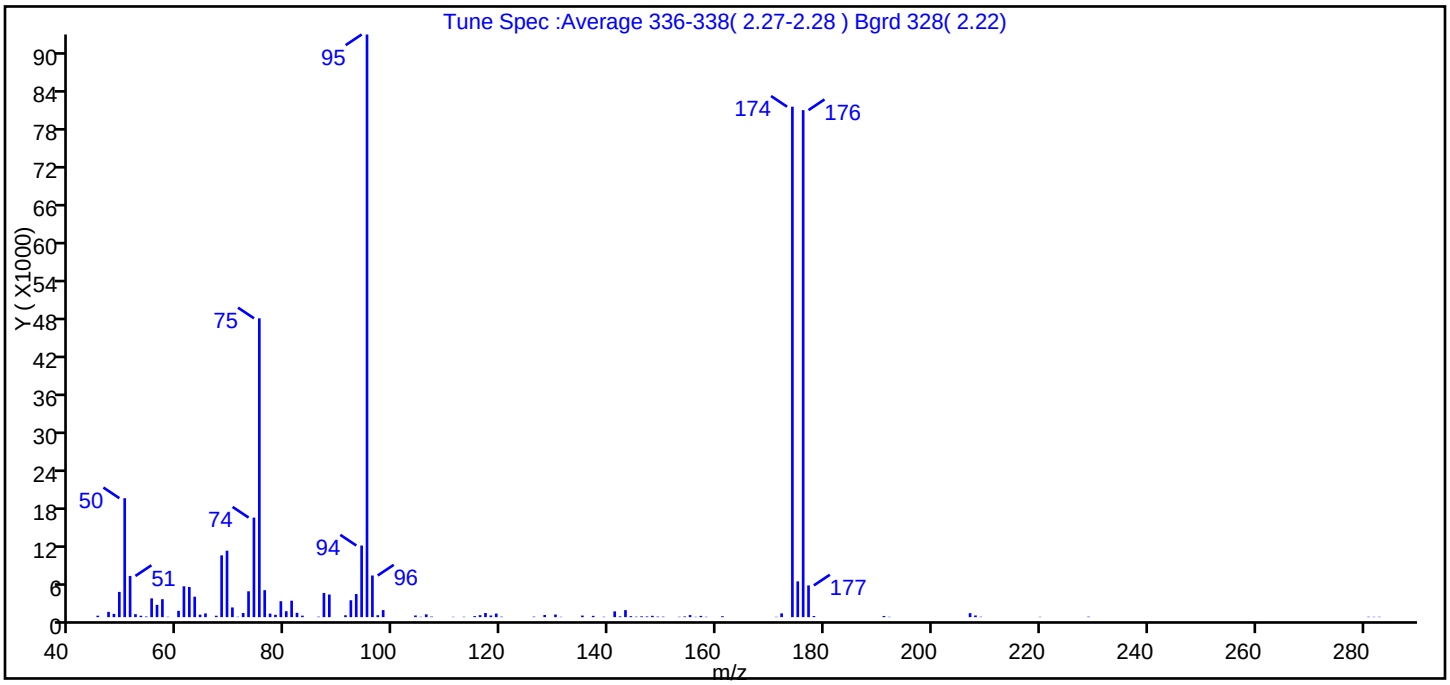
MV-BFB_00023 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0688.D
Injection Date: 05-Jun-2017 17:20:30 Instrument ID: VMS_G2
Lims ID: BFB
Client ID:
Operator ID: DUKESA ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 7 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.4
75	30 to 60% of m/z 95	51.3
96	5 to 9% of m/z 95	7.1
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	87.6
175	5 to 9% of m/z 174	6.1 (7.0)
176	Greater than 95% but less than 101% of m/z 174	87.0 (99.3)
177	5 to 9% of m/z 176	5.4 (6.3)

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0688.D\SO_VMSG2_8260.rslt\spectra.d
Injection Date: 05-Jun-2017 17:20:30
Spectrum: Tune Spec :Average 336-338(2.27-2.28) Bgrd 328(2.22)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 100

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	230	73.00	4106	107.00	90	150.00	78
47.00	838	74.00	15823	111.00	51	153.00	59
48.00	521	75.00	47496	113.00	58	154.00	110
49.00	4013	76.00	4289	115.00	166	155.00	326
50.00	18904	77.00	562	116.00	320	156.00	51
51.00	6547	78.00	376	117.00	657	157.00	201
52.00	470	79.00	2533	118.00	262	158.00	57
53.00	220	80.00	946	119.00	569	161.00	147
54.00	99	81.00	2614	120.00	75	171.00	51
55.00	2984	82.00	689	126.00	81	172.00	597
56.00	1954	83.00	238	128.00	338	174.00	81128
57.00	2852	86.00	75	130.00	411	175.00	5685
58.00	60	87.00	3843	131.00	51	176.00	80584
60.00	1003	88.00	3593	135.00	249	177.00	5046
61.00	4900	91.00	299	137.00	208	178.00	171
62.00	4790	92.00	2684	139.00	61	191.00	184
63.00	3251	93.00	3673	141.00	917	192.00	53
64.00	397	94.00	11385	142.00	122	207.00	629
65.00	595	95.00	92608	143.00	1120	208.00	266
67.00	225	96.00	6619	144.00	157	209.00	64
68.00	9818	97.00	306	145.00	75	220.00	50
69.00	10562	98.00	1127	146.00	130	229.00	76
70.00	1541	104.00	265	147.00	110	281.00	62
71.00	60	105.00	56	148.00	212	282.00	53
72.00	659	106.00	440	149.00	87	283.00	56

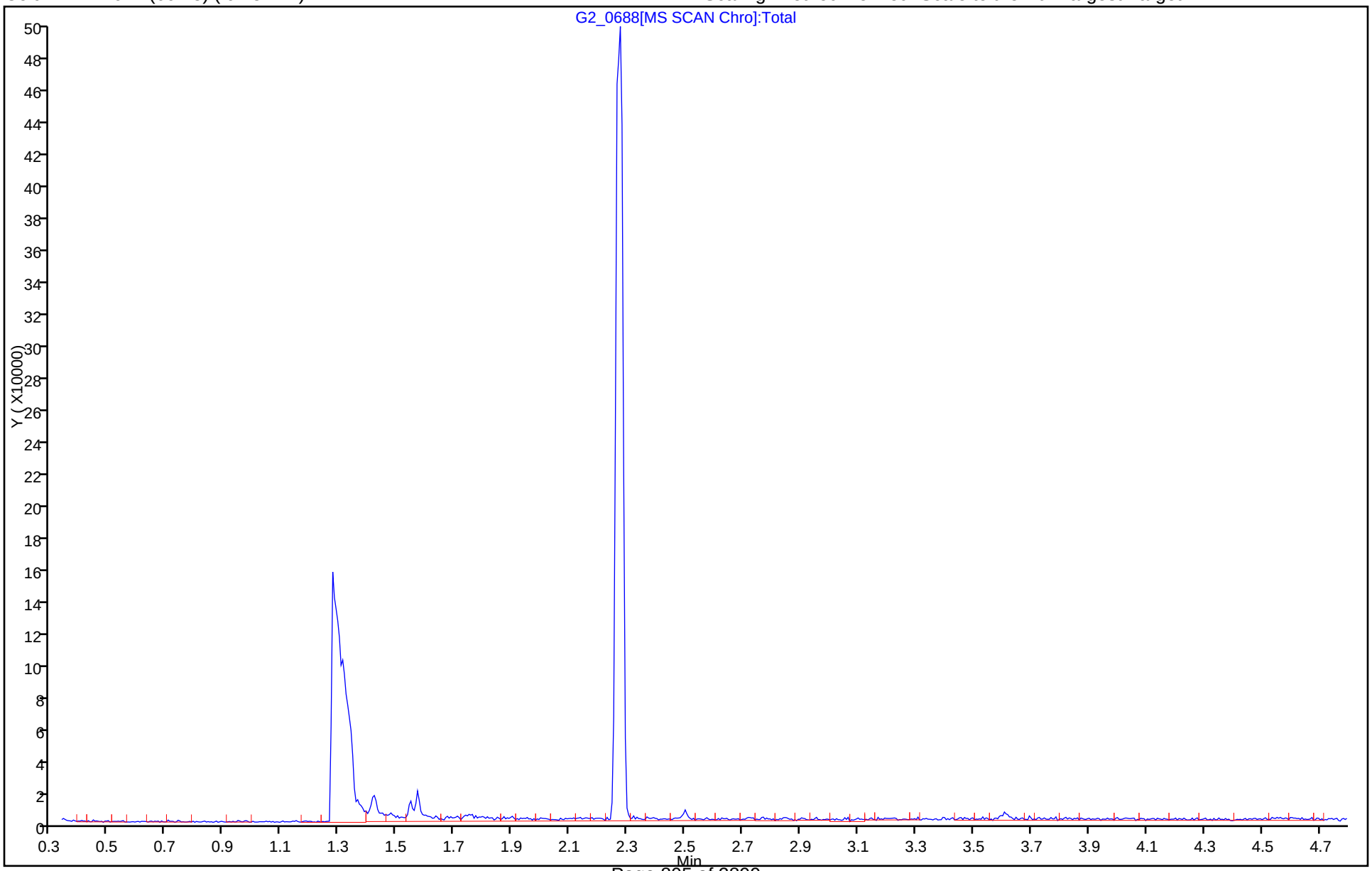
Report Date: 06-Jun-2017 20:22:15 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0688.D

Injection Date:	05-Jun-2017 17:20:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-376042/1-A

Matrix: Solid | Lab File ID: G2_0632.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/03/2017 20:42

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.6	U	5.0	1.6	0.56
71-55-6	1,1,1-Trichloroethane	1.6	U	5.0	1.6	0.52
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U	5.0	1.6	0.61
79-00-5	1,1,2-Trichloroethane	3.2	U	5.0	3.2	0.88
75-34-3	1,1-Dichloroethane	0.80	U	5.0	0.80	0.21
75-35-4	1,1-Dichloroethene	1.6	U	5.0	1.6	0.59
563-58-6	1,1-Dichloropropene	1.6	U	5.0	1.6	0.54
87-61-6	1,2,3-Trichlorobenzene	1.6	U	5.0	1.6	0.75
96-18-4	1,2,3-Trichloropropane	3.2	U	5.0	3.2	0.81
120-82-1	1,2,4-Trichlorobenzene	1.6	U	5.0	1.6	0.73
95-63-6	1,2,4-Trimethylbenzene	1.6	U	5.0	1.6	0.58
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	10	1.6	0.60
106-93-4	1,2-Dibromoethane	1.6	U	5.0	1.6	0.52
95-50-1	1,2-Dichlorobenzene	1.6	U	5.0	1.6	0.45
107-06-2	1,2-Dichloroethane	1.6	U	5.0	1.6	0.70
540-59-0	1,2-Dichloroethene, Total	1.6	U	5.0	1.6	0.39
78-87-5	1,2-Dichloropropane	1.6	U	5.0	1.6	0.55
108-67-8	1,3,5-Trimethylbenzene	1.6	U	5.0	1.6	0.57
541-73-1	1,3-Dichlorobenzene	1.6	U	5.0	1.6	0.48
142-28-9	1,3-Dichloropropane	1.6	U	5.0	1.6	0.51
106-46-7	1,4-Dichlorobenzene	1.6	U	5.0	1.6	0.78
594-20-7	2,2-Dichloropropane	1.6	U	5.0	1.6	0.44
78-93-3	2-Butanone (MEK)	6.4	U	20	6.4	1.8
95-49-8	2-Chlorotoluene	1.6	U	5.0	1.6	0.51
591-78-6	2-Hexanone	13	U	20	13	4.9
106-43-4	4-Chlorotoluene	1.6	U	5.0	1.6	0.78
99-87-6	4-Isopropyltoluene	1.6	U	5.0	1.6	0.49
108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	20	13	4.4
67-64-1	Acetone	13	U	20	13	5.4
71-43-2	Benzene	1.6	U	5.0	1.6	0.47
108-86-1	Bromobenzene	1.6	U	5.0	1.6	0.49
74-97-5	Bromochloromethane	0.80	U	5.0	0.80	0.30
75-27-4	Bromodichloromethane	0.80	U	5.0	0.80	0.22
75-25-2	Bromoform	0.80	U	5.0	0.80	0.23
74-83-9	Bromomethane	1.6	U	10	1.6	0.50
75-15-0	Carbon disulfide	1.6	U	5.0	1.6	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-376042/1-A

Matrix: Solid | Lab File ID: G2_0632.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/03/2017 20:42

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.6	U	5.0	1.6	0.63
108-90-7	Chlorobenzene	1.6	U	5.0	1.6	0.54
75-00-3	Chloroethane	3.2	U	10	3.2	0.89
67-66-3	Chloroform	0.80	U	10	0.80	0.29
74-87-3	Chloromethane	1.6	U	10	1.6	0.77
156-59-2	cis-1,2-Dichloroethene	1.6	U	5.0	1.6	0.56
10061-01-5	cis-1,3-Dichloropropene	3.2	U	5.0	3.2	1.3
124-48-1	Dibromochloromethane	1.6	U	5.0	1.6	0.57
74-95-3	Dibromomethane	3.2	U	5.0	3.2	0.84
75-71-8	Dichlorodifluoromethane	1.6	U	10	1.6	0.52
100-41-4	Ethylbenzene	1.6	U	5.0	1.6	0.67
87-68-3	Hexachlorobutadiene	1.6	U	5.0	1.6	0.55
108-20-3	Isopropyl ether	8.0	U	50	8.0	2.7
98-82-8	Isopropylbenzene	1.6	U	5.0	1.6	0.59
179601-23-1	m&p-Xylene	3.2	U	3.2	3.2	1.0
74-88-4	Methyl iodide	1.6	U	5.0	1.6	0.44
1634-04-4	Methyl tert-butyl ether	0.80	U	20	0.80	0.34
75-09-2	Methylene Chloride	3.2	U	5.0	3.2	1.6
91-20-3	Naphthalene	1.6	U	5.0	1.6	0.63
104-51-8	n-Butylbenzene	1.6	U	5.0	1.6	0.56
103-65-1	N-Propylbenzene	1.6	U	5.0	1.6	0.58
95-47-6	o-Xylene	1.6	U	5.0	1.6	0.61
135-98-8	sec-Butylbenzene	1.6	U	5.0	1.6	0.77
100-42-5	Styrene	1.6	U	5.0	1.6	0.63
98-06-6	tert-Butylbenzene	1.6	U	5.0	1.6	0.50
127-18-4	Tetrachloroethene	1.6	U	5.0	1.6	0.59
108-88-3	Toluene	1.6	U	5.0	1.6	0.69
156-60-5	trans-1,2-Dichloroethene	0.80	U	5.0	0.80	0.39
10061-02-6	trans-1,3-Dichloropropene	1.6	U	5.0	1.6	0.67
79-01-6	Trichloroethene	0.80	U	5.0	0.80	0.23
75-69-4	Trichlorofluoromethane	3.2	U	10	3.2	1.0
108-05-4	Vinyl acetate	3.2	U	10	3.2	1.1
75-01-4	Vinyl chloride	3.2	U	5.0	3.2	1.3
1330-20-7	Xylenes (total)	1.0	U	10	1.0	0.61

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-376042/1-A

Matrix: Solid Lab File ID: G2_0632.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 06/03/2017 20:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 376040 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		71-136
460-00-4	4-Bromofluorobenzene (Surr)	95		79-119
1868-53-7	Dibromofluoromethane (Surr)	100		78-119
2037-26-5	Toluene-d8 (Surr)	91		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0632.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 03-Jun-2017 20:42:30 ALS Bottle#: 13 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 03-Jun-2017 21:17:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	94	424217	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.637	-0.008	98	397719	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	177038	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	360213	50.0	50.0	
* 2 1,4-Dioxane-d8	96		0.000					ND	
$ 8 Dibromofluoromethane (Surr	111	6.829	6.829	0.000	93	204013	45.0	45.0	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	252380	45.0	47.5	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	689734	45.0	40.8	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	90	252010	45.0	42.7	
$ 6 Trifluorotoluene (Surr)	1		0.000					ND	
$ 7 BFB	95		2.270					ND	
32 Dichlorodifluoromethane	85		1.691					ND	
109 Tetrahydrothiophene	60		1.718					ND	
34 Chloromethane	50		1.830					ND	
37 Vinyl chloride	62		1.956					ND	
22 Butadiene	54		1.998					ND	
38 Ethylene oxide	43		2.277					ND	
39 Bromomethane	94		2.291					ND	
40 Chloroethane	64		2.403					ND	
41 Dichlorofluoromethane	67		2.654					ND	
43 Trichlorofluoromethane	101		2.682					ND	
42 Ethanol	45		2.892					ND	
45 Ethyl ether	59		3.004					ND	
47 Propene oxide	58		3.073					ND	
48 Acrolein	56		3.185					ND	
53 1,1-Dichloroethene	96		3.311					ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.339					ND	
50 Acetone	43		3.353					ND	
55 Iodomethane	142		3.492					ND	
51 Isopropyl alcohol	45		3.576					ND	
58 Carbon disulfide	76		3.576					ND	
54 Acetonitrile	41		3.758					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800					ND	
57 3-Chloro-1-propene	41		3.814					ND	
31 Chlorotrifluoroethene	116		3.825					ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009					ND	
60 Methylene Chloride	84		4.009					ND	
59 2-Methyl-2-propanol	59		4.205					ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286					ND	
61 Acrylonitrile	53		4.372					ND	
62 Methyl tert-butyl ether	73		4.428					ND	
63 trans-1,2-Dichloroethene	96		4.428					ND	
64 Hexane	57		4.917					ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040					ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068					ND	
67 1,1-Dichloroethane	63		5.210					ND	
65 Vinyl acetate	43		5.252					ND	
66 Isopropyl ether	87		5.322					ND	
68 2-Chloro-1,3-butadiene	53		5.336					ND	
69 Tert-butyl ethyl ether	59		5.909					ND	
74 cis-1,2-Dichloroethene	96		6.128					ND	
71 2-Butanone (MEK)	43		6.128					ND	
75 2,2-Dichloropropane	77		6.128					ND	
70 Ethyl acetate	43		6.221					ND	
73 Propionitrile	54		6.228					ND	
76 Methacrylonitrile	41		6.435					ND	
77 Chlorobromomethane	128		6.457					ND	
79 Tetrahydrofuran	42		6.464					ND	
72 sec-Butyl Alcohol	45		6.464					ND	
78 Chloroform	83		6.628					ND	
81 1,1,1-Trichloroethane	97		6.814					ND	
82 Cyclohexane	56		6.893					ND	
84 Carbon tetrachloride	117		7.000					ND	
83 1,1-Dichloropropene	75		7.022					ND	
87 Benzene	78		7.258					ND	
85 1,2-Dichloroethane	62		7.336					ND	
86 Tert-amyl methyl ether	73		7.451					ND	
80 Isobutyl alcohol	41		7.651					ND	
35 n-Heptane	43		7.651					ND	
88 n-Butanol	56		8.008					ND	
89 Trichloroethene	95		8.044					ND	
16 Ethyl acrylate	55		8.180					ND	
90 2-Pentanone	43		8.259					ND	
93 Methylcyclohexane	55		8.294					ND	
92 1,2-Dichloropropane	63		8.330					ND	
94 1,4-Dioxane	88		8.416					ND	
91 Methyl methacrylate	100		8.423					ND	
95 Dibromomethane	93		8.423					ND	
96 Dichlorobromomethane	83		8.623					ND	
97 2-Nitropropane	41		8.866					ND	
98 2-Chloroethyl vinyl ether	63		8.938					ND	
99 cis-1,3-Dichloropropene	75		9.081					ND	
24 n-Butyl acetate	43		9.214					ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 Toluene	91		9.410					ND	
103 trans-1,3-Dichloropropene	75		9.660					ND	
102 Ethyl methacrylate	69		9.717					ND	
104 1,1,2-Trichloroethane	97		9.846					ND	
107 Tetrachloroethene	164		9.917					ND	
106 1,3-Dichloropropane	76		10.003					ND	
105 2-Hexanone	43		10.060					ND	
108 Chlorodibromomethane	129		10.211					ND	
110 Ethylene Dibromide	107		10.318					ND	
111 1-Chlorohexane	91		10.775					ND	
112 Chlorobenzene	112		10.790					ND	
113 1,1,1,2-Tetrachloroethane	131		10.876					ND	
114 Ethylbenzene	106		10.883					ND	
115 m-Xylene & p-Xylene	106		11.004					ND	
117 o-Xylene	106		11.362					ND	
116 Styrene	104		11.383					ND	
118 Bromoform	173		11.555					ND	
119 Isopropylbenzene	105		11.705					ND	
23 Benzyl chloride	126		11.759					ND	
120 cis-1,4-Dichloro-2-butene	53		11.769					ND	
121 Cyclohexanone	55		11.798					ND	
122 1,1,2,2-Tetrachloroethane	83		11.998					ND	
125 Bromobenzene	156		11.998					ND	
123 trans-1,4-Dichloro-2-buten	53		12.027					ND	
124 1,2,3-Trichloropropane	110		12.048					ND	
126 N-Propylbenzene	120		12.091					ND	
128 2-Chlorotoluene	126		12.177					ND	
127 1,3,5-Trimethylbenzene	105		12.248					ND	
129 4-Chlorotoluene	126		12.277					ND	
130 tert-Butylbenzene	119		12.506					ND	
131 1,2,4-Trimethylbenzene	105		12.549					ND	
132 sec-Butylbenzene	134		12.677					ND	
134 1,3-Dichlorobenzene	146		12.763					ND	
133 4-Isopropyltoluene	119		12.785					ND	
136 1,4-Dichlorobenzene	146		12.835					ND	
135 1,2,3-Trimethylbenzene	105	12.856	12.856	0.000	93	4015		1.78	
137 n-Butylbenzene	91		13.064					ND	
138 1,2-Dichlorobenzene	146		13.085					ND	
139 1,2-Dibromo-3-Chloropropan	157		13.586					ND	
140 1,3,5-Trichlorobenzene	180		13.693					ND	
141 1,2,4-Trichlorobenzene	180		14.115					ND	
142 Hexachlorobutadiene	225		14.208					ND	
143 Naphthalene	128		14.301					ND	
144 1,2,3-Trichlorobenzene	180		14.458					ND	
19 2,3-Dimethylpentane	1		0.000					ND	
17 2-Methylnaphthalene	142		0.000					ND	
25 n-Nonyl Aldehyde	1		0.000					ND	
12 2-Methylhexane	1		0.000					ND	
20 2,2-Dimethylpentane	1		0.000					ND	
14 2,4-Dimethylpentane	1		0.000					ND	
21 Pentachloroethane	167		0.000					ND	
13 2-Butoxyethanol TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
18 2,2,3-Trimethylbutane	1		0.000					ND	
15 3,3-Dimethylpentane	1		0.000					ND	
27 3-Ethylpentane	1		0.000					ND	
28 Dimethyl disulfide	1		0.000					ND	
26 3-Methylhexane	1		0.000					ND	
29 Dichloroacetonitrile TIC	74		1.000					ND	
30 2,3-dichloro-1-propene TIC	75		1.000					ND	
49 Propene oxide TIC	58		5.292					ND	
S 151 1,2-Dichloroethene, Total	96		2.000					ND	
S 149 1,2-Dichloroethene, Total	1		0.000					ND	
S 147 Total BTEX	1		0.000					ND	
S 148 1,3-Dichloropropene, Total	1		0.000					ND	
S 146 Xylenes, Total (URS)	1		0.000					ND	
S 150 Xylenes, Total	106		0.000					ND	
S 145 Trihalomethanes, Total	1		0.000					ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent

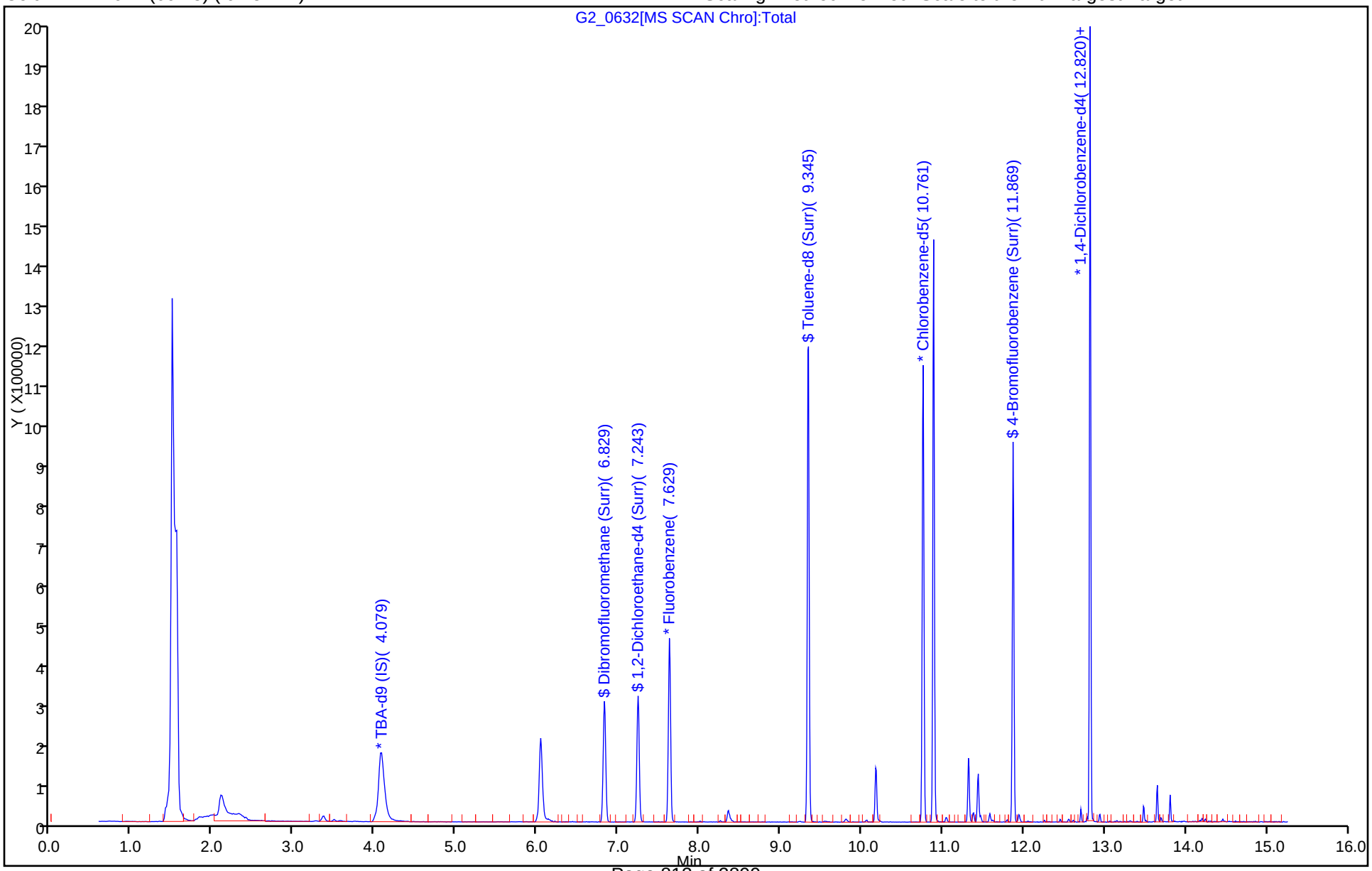
Report Date: 05-Jun-2017 17:13:17 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0632.D

Injection Date:	03-Jun-2017 20:42:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	MB			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0632.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 03-Jun-2017 20:42:30 ALS Bottle#: 13 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 03-Jun-2017 21:17:31

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	45.0	45.0	100.06
$ 9 1,2-Dichloroethane-d4 (Surr)	45.0	47.5	105.48
$ 10 Toluene-d8 (Surr)	45.0	40.8	90.60
$ 11 4-Bromofluorobenzene (Surr)	45.0	42.7	94.84

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-376205/1-A

Matrix: Solid | Lab File ID: G2_0695.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/05/2017 20:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 376196 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.6	U	5.0	1.6	0.56
71-55-6	1,1,1-Trichloroethane	1.6	U	5.0	1.6	0.52
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U	5.0	1.6	0.61
79-00-5	1,1,2-Trichloroethane	3.2	U	5.0	3.2	0.88
75-34-3	1,1-Dichloroethane	0.80	U	5.0	0.80	0.21
75-35-4	1,1-Dichloroethene	1.6	U	5.0	1.6	0.59
563-58-6	1,1-Dichloropropene	1.6	U	5.0	1.6	0.54
87-61-6	1,2,3-Trichlorobenzene	1.6	U	5.0	1.6	0.75
96-18-4	1,2,3-Trichloropropane	3.2	U	5.0	3.2	0.81
120-82-1	1,2,4-Trichlorobenzene	1.6	U	5.0	1.6	0.73
95-63-6	1,2,4-Trimethylbenzene	1.6	U	5.0	1.6	0.58
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	10	1.6	0.60
106-93-4	1,2-Dibromoethane	1.6	U	5.0	1.6	0.52
95-50-1	1,2-Dichlorobenzene	1.6	U	5.0	1.6	0.45
107-06-2	1,2-Dichloroethane	1.6	U	5.0	1.6	0.70
540-59-0	1,2-Dichloroethene, Total	1.6	U	5.0	1.6	0.39
78-87-5	1,2-Dichloropropane	1.6	U	5.0	1.6	0.55
108-67-8	1,3,5-Trimethylbenzene	1.6	U	5.0	1.6	0.57
541-73-1	1,3-Dichlorobenzene	1.6	U	5.0	1.6	0.48
142-28-9	1,3-Dichloropropane	1.6	U	5.0	1.6	0.51
106-46-7	1,4-Dichlorobenzene	1.6	U	5.0	1.6	0.78
594-20-7	2,2-Dichloropropane	1.6	U	5.0	1.6	0.44
78-93-3	2-Butanone (MEK)	6.4	U	20	6.4	1.8
95-49-8	2-Chlorotoluene	1.6	U	5.0	1.6	0.51
591-78-6	2-Hexanone	13	U	20	13	4.9
106-43-4	4-Chlorotoluene	1.6	U	5.0	1.6	0.78
99-87-6	4-Isopropyltoluene	1.6	U	5.0	1.6	0.49
108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	20	13	4.4
67-64-1	Acetone	13	U	20	13	5.4
71-43-2	Benzene	1.6	U	5.0	1.6	0.47
108-86-1	Bromobenzene	1.6	U	5.0	1.6	0.49
74-97-5	Bromochloromethane	0.80	U	5.0	0.80	0.30
75-27-4	Bromodichloromethane	0.80	U	5.0	0.80	0.22
75-25-2	Bromoform	0.80	U	5.0	0.80	0.23
74-83-9	Bromomethane	1.6	U	10	1.6	0.50
75-15-0	Carbon disulfide	1.6	U	5.0	1.6	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-376205/1-A

Matrix: Solid | Lab File ID: G2_0695.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/05/2017 20:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 376196 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.6	U	5.0	1.6	0.63
108-90-7	Chlorobenzene	1.6	U	5.0	1.6	0.54
75-00-3	Chloroethane	3.2	U	10	3.2	0.89
67-66-3	Chloroform	0.80	U	10	0.80	0.29
74-87-3	Chloromethane	1.6	U	10	1.6	0.77
156-59-2	cis-1,2-Dichloroethene	1.6	U	5.0	1.6	0.56
10061-01-5	cis-1,3-Dichloropropene	3.2	U	5.0	3.2	1.3
124-48-1	Dibromochloromethane	1.6	U	5.0	1.6	0.57
74-95-3	Dibromomethane	3.2	U	5.0	3.2	0.84
75-71-8	Dichlorodifluoromethane	1.6	U	10	1.6	0.52
100-41-4	Ethylbenzene	1.6	U	5.0	1.6	0.67
87-68-3	Hexachlorobutadiene	1.6	U	5.0	1.6	0.55
108-20-3	Isopropyl ether	8.0	U	50	8.0	2.7
98-82-8	Isopropylbenzene	1.6	U	5.0	1.6	0.59
179601-23-1	m&p-Xylene	3.2	U	3.2	3.2	1.0
74-88-4	Methyl iodide	1.6	U	5.0	1.6	0.44
1634-04-4	Methyl tert-butyl ether	0.80	U	20	0.80	0.34
75-09-2	Methylene Chloride	3.2	U	5.0	3.2	1.6
91-20-3	Naphthalene	1.6	U	5.0	1.6	0.63
104-51-8	n-Butylbenzene	1.6	U	5.0	1.6	0.56
103-65-1	N-Propylbenzene	1.6	U	5.0	1.6	0.58
95-47-6	o-Xylene	1.6	U	5.0	1.6	0.61
135-98-8	sec-Butylbenzene	1.6	U	5.0	1.6	0.77
100-42-5	Styrene	1.6	U	5.0	1.6	0.63
98-06-6	tert-Butylbenzene	1.6	U	5.0	1.6	0.50
127-18-4	Tetrachloroethene	1.6	U	5.0	1.6	0.59
108-88-3	Toluene	1.6	U	5.0	1.6	0.69
156-60-5	trans-1,2-Dichloroethene	0.80	U	5.0	0.80	0.39
10061-02-6	trans-1,3-Dichloropropene	1.6	U	5.0	1.6	0.67
79-01-6	Trichloroethene	0.80	U	5.0	0.80	0.23
75-69-4	Trichlorofluoromethane	3.2	U	10	3.2	1.0
108-05-4	Vinyl acetate	3.2	U	10	3.2	1.1
75-01-4	Vinyl chloride	3.2	U	5.0	3.2	1.3
1330-20-7	Xylenes (total)	1.0	U	10	1.0	0.61

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-376205/1-A

Matrix: Solid Lab File ID: G2_0695.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 06/05/2017 20:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 376196 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		71-136
460-00-4	4-Bromofluorobenzene (Surr)	84		79-119
1868-53-7	Dibromofluoromethane (Surr)	98		78-119
2037-26-5	Toluene-d8 (Surr)	85		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0695.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 05-Jun-2017 20:04:30 ALS Bottle#: 16 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Jun-2017 20:22:30 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: dukesa Date: 05-Jun-2017 20:27:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.051	0.014	95	529426	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.622	0.007	98	357938	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	158070	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	350402	50.0	50.0	
* 2 1,4-Dioxane-d8	96		0.000					ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.828	0.000	93	180386	45.0	44.2	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	234452	45.0	49.1	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	579927	45.0	38.4	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	90	216848	45.0	37.8	
$ 6 Trifluorotoluene (Surr)	1		0.000					ND	
$ 7 BFB	95		2.276					ND	
32 Dichlorodifluoromethane	85		1.691					ND	
109 Tetrahydrothiophene	60		1.718					ND	
34 Chloromethane	50		1.830					ND	
37 Vinyl chloride	62		1.970					ND	
22 Butadiene	54		1.984					ND	
38 Ethylene oxide	43		2.277					ND	
39 Bromomethane	94		2.291					ND	
40 Chloroethane	64		2.403					ND	
41 Dichlorofluoromethane	67		2.654					ND	
43 Trichlorofluoromethane	101		2.696					ND	
42 Ethanol	45		2.892					ND	
45 Ethyl ether	59		3.004					ND	
47 Propene oxide	58		3.073					ND	
48 Acrolein	56		3.185					ND	
53 1,1-Dichloroethene	96		3.297					ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.339					ND	
50 Acetone	43		3.353					ND	
55 Iodomethane	142		3.478					ND	
51 Isopropyl alcohol	45		3.562					ND	
58 Carbon disulfide	76		3.576					ND	
54 Acetonitrile	41		3.744					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.786					ND	
57 3-Chloro-1-propene	41		3.800					ND	
31 Chlorotrifluoroethene	116		3.825					ND	
60 Methylene Chloride	84		3.995					ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009					ND	
59 2-Methyl-2-propanol	59		4.191					ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286					ND	
61 Acrylonitrile	53		4.358					ND	
63 trans-1,2-Dichloroethene	96		4.414					ND	
62 Methyl tert-butyl ether	73		4.414					ND	
64 Hexane	57		4.903					ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040					ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068					ND	
67 1,1-Dichloroethane	63		5.196					ND	
65 Vinyl acetate	43		5.252					ND	
66 Isopropyl ether	87		5.308					ND	
68 2-Chloro-1,3-butadiene	53		5.322					ND	
69 Tert-butyl ethyl ether	59		5.895					ND	
74 cis-1,2-Dichloroethene	96		6.121					ND	
71 2-Butanone (MEK)	43		6.121					ND	
75 2,2-Dichloropropane	77		6.121					ND	
70 Ethyl acetate	43		6.214					ND	
73 Propionitrile	54		6.221					ND	
76 Methacrylonitrile	41		6.435					ND	
72 sec-Butyl Alcohol	45		6.442					ND	
77 Chlorobromomethane	128		6.450					ND	
79 Tetrahydrofuran	42		6.457					ND	
78 Chloroform	83		6.614					ND	
81 1,1,1-Trichloroethane	97		6.807					ND	
82 Cyclohexane	56		6.879					ND	
84 Carbon tetrachloride	117		6.993					ND	
83 1,1-Dichloropropene	75		7.007					ND	
87 Benzene	78		7.250					ND	
85 1,2-Dichloroethane	62		7.329					ND	
86 Tert-amyl methyl ether	73		7.451					ND	
80 Isobutyl alcohol	41		7.644					ND	
35 n-Heptane	43		7.644					ND	
88 n-Butanol	56		8.001					ND	
89 Trichloroethene	95		8.037					ND	
16 Ethyl acrylate	55		8.173					ND	
90 2-Pentanone	43		8.251					ND	
93 Methylcyclohexane	55		8.287					ND	
92 1,2-Dichloropropane	63		8.323					ND	
94 1,4-Dioxane	88		8.409					ND	
95 Dibromomethane	93		8.416					ND	
91 Methyl methacrylate	100		8.423					ND	
96 Dichlorobromomethane	83		8.623					ND	
97 2-Nitropropane	41		8.859					ND	
98 2-Chloroethyl vinyl ether	63		8.938					ND	
99 cis-1,3-Dichloropropene	75		9.074					ND	
24 n-Butyl acetate	43		9.214					ND	
100 4-Methyl-2-pentanone (MIBK	43		9.231					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 Toluene	91		9.410					ND	
103 trans-1,3-Dichloropropene	75		9.653					ND	
102 Ethyl methacrylate	69		9.710					ND	
104 1,1,2-Trichloroethane	97		9.846					ND	
107 Tetrachloroethene	164		9.910					ND	
106 1,3-Dichloropropane	76		10.003					ND	
105 2-Hexanone	43		10.060					ND	
108 Chlorodibromomethane	129		10.211					ND	
110 Ethylene Dibromide	107		10.318					ND	
111 1-Chlorohexane	91		10.768					ND	
112 Chlorobenzene	112		10.783					ND	
113 1,1,1,2-Tetrachloroethane	131		10.876					ND	
114 Ethylbenzene	106		10.876					ND	
115 m-Xylene & p-Xylene	106		11.004					ND	
117 o-Xylene	106		11.362					ND	
116 Styrene	104		11.383					ND	
118 Bromoform	173		11.555					ND	
119 Isopropylbenzene	105		11.705					ND	
23 Benzyl chloride	126		11.759					ND	
120 cis-1,4-Dichloro-2-butene	53		11.769					ND	
121 Cyclohexanone	55		11.791					ND	
122 1,1,2,2-Tetrachloroethane	83		11.998					ND	
125 Bromobenzene	156		11.998					ND	
123 trans-1,4-Dichloro-2-buten	53		12.027					ND	
124 1,2,3-Trichloropropane	110		12.048					ND	
126 N-Propylbenzene	120		12.091					ND	
128 2-Chlorotoluene	126		12.170					ND	
127 1,3,5-Trimethylbenzene	105		12.248					ND	
129 4-Chlorotoluene	126		12.277					ND	
130 tert-Butylbenzene	119		12.506					ND	
131 1,2,4-Trimethylbenzene	105		12.549					ND	
132 sec-Butylbenzene	134		12.677					ND	
134 1,3-Dichlorobenzene	146		12.763					ND	
133 4-Isopropyltoluene	119		12.785					ND	
136 1,4-Dichlorobenzene	146		12.835					ND	
135 1,2,3-Trimethylbenzene	105		12.856					ND	
137 n-Butylbenzene	91		13.064					ND	
138 1,2-Dichlorobenzene	146		13.085					ND	
139 1,2-Dibromo-3-Chloropropan	157		13.578					ND	
140 1,3,5-Trichlorobenzene	180		13.693					ND	
141 1,2,4-Trichlorobenzene	180		14.115					ND	
142 Hexachlorobutadiene	225		14.200					ND	
143 Naphthalene	128		14.301					ND	
144 1,2,3-Trichlorobenzene	180		14.458					ND	
28 Dimethyl disulfide	1		0.000					ND	
26 3-Methylhexane	1		0.000					ND	
27 3-Ethylpentane	1		0.000					ND	
18 2,2,3-Trimethylbutane	1		0.000					ND	
15 3,3-Dimethylpentane	1		0.000					ND	
25 n-Nonyl Aldehyde	1		0.000					ND	
17 2-Methylnaphthalene	142		0.000					ND	
19 2,3-Dimethylpentane	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
20 2,2-Dimethylpentane	1		0.000					ND	
13 2-Butoxyethanol TIC	1		0.000					ND	
21 Pentachloroethane	167		0.000					ND	
14 2,4-Dimethylpentane	1		0.000					ND	
12 2-Methylhexane	1		0.000					ND	
30 2,3-dichloro-1-propene TIC	75		1.000					ND	
29 Dichloroacetonitrile TIC	74		1.000					ND	
49 Propene oxide TIC	58		5.292					ND	
S 151 1,2-Dichloroethene, Total	96		2.000					ND	
S 146 Xylenes, Total (URS)	1		0.000					ND	
S 150 Xylenes, Total	106		0.000					ND	
S 145 Trihalomethanes, Total	1		0.000					ND	
S 149 1,2-Dichloroethene, Total	1		0.000					ND	
S 147 Total BTEX	1		0.000					ND	
S 148 1,3-Dichloropropene, Total	1		0.000					ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent

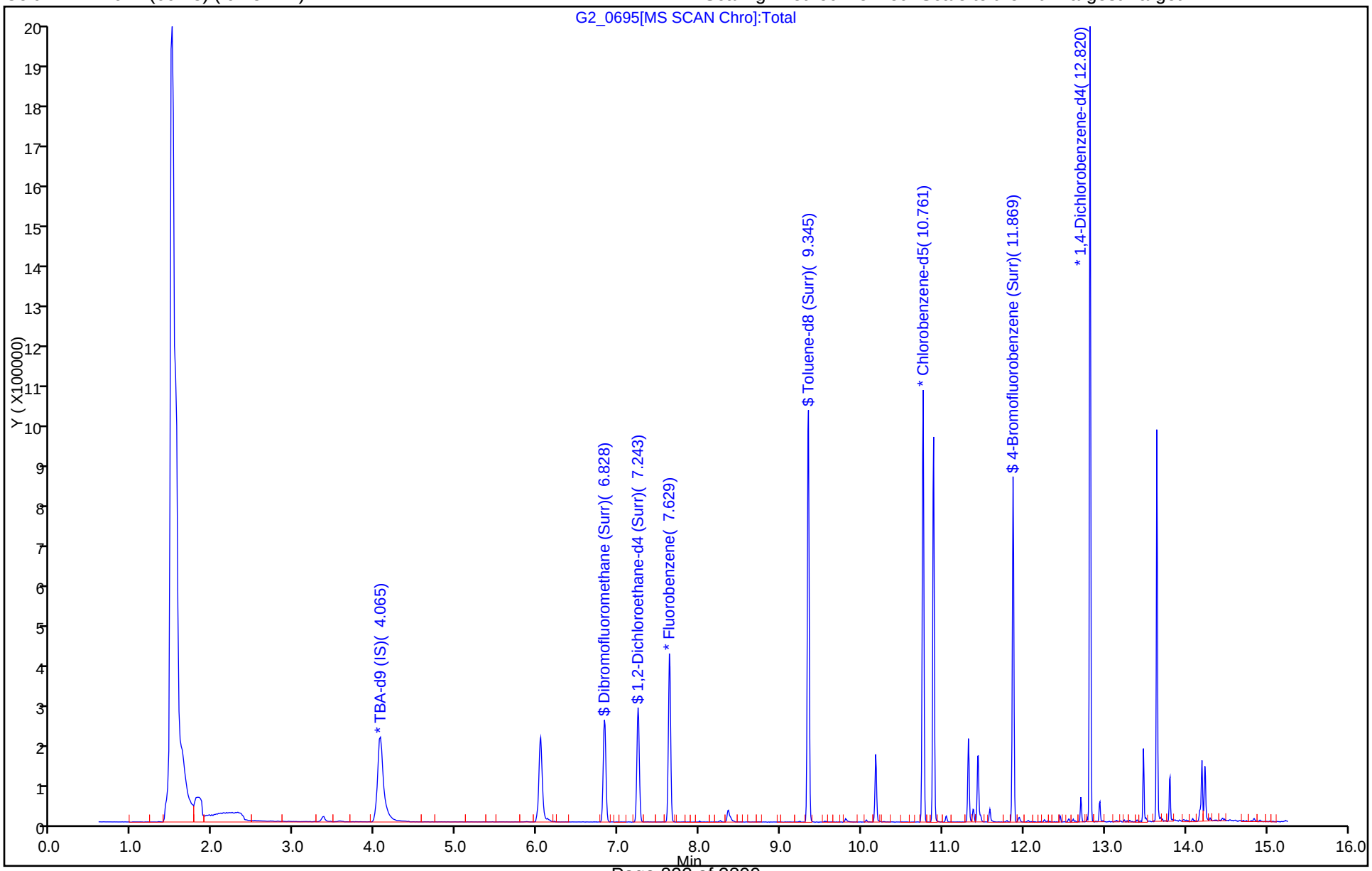
Report Date: 06-Jun-2017 20:22:39 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0695.D

Injection Date:	05-Jun-2017 20:04:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	MB			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0695.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 05-Jun-2017 20:04:30 ALS Bottle#: 16 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Jun-2017 20:22:30 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

First Level Reviewer: dukesa Date: 05-Jun-2017 20:27:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	45.0	44.2	98.30
$ 9 1,2-Dichloroethane-d4 (Surr)	45.0	49.1	109.13
$ 10 Toluene-d8 (Surr)	45.0	38.4	85.32
$ 11 4-Bromofluorobenzene (Surr)	45.0	37.8	83.89

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-376042/2-A

Matrix: Solid | Lab File ID: G2_0633.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/03/2017 21:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	45.3		5.0	1.6	0.56
71-55-6	1,1,1-Trichloroethane	43.6		5.0	1.6	0.52
79-34-5	1,1,2,2-Tetrachloroethane	48.7		5.0	1.6	0.61
79-00-5	1,1,2-Trichloroethane	48.1		5.0	3.2	0.88
75-34-3	1,1-Dichloroethane	48.1		5.0	0.80	0.21
75-35-4	1,1-Dichloroethene	46.2		5.0	1.6	0.59
563-58-6	1,1-Dichloropropene	50.5		5.0	1.6	0.54
87-61-6	1,2,3-Trichlorobenzene	49.4		5.0	1.6	0.75
96-18-4	1,2,3-Trichloropropane	47.4		5.0	3.2	0.81
120-82-1	1,2,4-Trichlorobenzene	47.6		5.0	1.6	0.73
95-63-6	1,2,4-Trimethylbenzene	45.6		5.0	1.6	0.58
96-12-8	1,2-Dibromo-3-Chloropropane	51.1		10	1.6	0.60
106-93-4	1,2-Dibromoethane	47.7		5.0	1.6	0.52
95-50-1	1,2-Dichlorobenzene	46.9		5.0	1.6	0.45
107-06-2	1,2-Dichloroethane	43.9		5.0	1.6	0.70
540-59-0	1,2-Dichloroethene, Total	99.0		5.0	1.6	0.39
78-87-5	1,2-Dichloropropane	51.1		5.0	1.6	0.55
108-67-8	1,3,5-Trimethylbenzene	45.6		5.0	1.6	0.57
541-73-1	1,3-Dichlorobenzene	48.2		5.0	1.6	0.48
142-28-9	1,3-Dichloropropane	49.3		5.0	1.6	0.51
106-46-7	1,4-Dichlorobenzene	44.9		5.0	1.6	0.78
594-20-7	2,2-Dichloropropane	44.4		5.0	1.6	0.44
78-93-3	2-Butanone (MEK)	188		20	6.4	1.8
95-49-8	2-Chlorotoluene	45.6		5.0	1.6	0.51
591-78-6	2-Hexanone	188		20	13	4.9
106-43-4	4-Chlorotoluene	45.9		5.0	1.6	0.78
99-87-6	4-Isopropyltoluene	45.8		5.0	1.6	0.49
108-10-1	4-Methyl-2-pentanone (MIBK)	193		20	13	4.4
67-64-1	Acetone	192		20	13	5.4
71-43-2	Benzene	51.6		5.0	1.6	0.47
108-86-1	Bromobenzene	48.8		5.0	1.6	0.49
74-97-5	Bromochloromethane	48.0		5.0	0.80	0.30
75-27-4	Bromodichloromethane	47.1		5.0	0.80	0.22
75-25-2	Bromoform	45.3		5.0	0.80	0.23
74-83-9	Bromomethane	43.9		10	1.6	0.50
75-15-0	Carbon disulfide	49.2		5.0	1.6	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-376042/2-A

Matrix: Solid | Lab File ID: G2_0633.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/03/2017 21:03

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	43.6		5.0	1.6	0.63
108-90-7	Chlorobenzene	45.9		5.0	1.6	0.54
75-00-3	Chloroethane	61.0		10	3.2	0.89
67-66-3	Chloroform	44.1		10	0.80	0.29
74-87-3	Chloromethane	51.2		10	1.6	0.77
156-59-2	cis-1,2-Dichloroethene	48.6		5.0	1.6	0.56
10061-01-5	cis-1,3-Dichloropropene	46.2		5.0	3.2	1.3
124-48-1	Dibromochloromethane	46.7		5.0	1.6	0.57
74-95-3	Dibromomethane	45.2		5.0	3.2	0.84
75-71-8	Dichlorodifluoromethane	49.4		10	1.6	0.52
100-41-4	Ethylbenzene	49.9		5.0	1.6	0.67
87-68-3	Hexachlorobutadiene	45.5		5.0	1.6	0.55
98-82-8	Isopropylbenzene	47.3		5.0	1.6	0.59
179601-23-1	m&p-Xylene	46.1		3.2	3.2	1.0
74-88-4	Methyl iodide	45.9		5.0	1.6	0.44
1634-04-4	Methyl tert-butyl ether	52.0		20	0.80	0.34
75-09-2	Methylene Chloride	50.0		5.0	3.2	1.6
91-20-3	Naphthalene	49.5		5.0	1.6	0.63
104-51-8	n-Butylbenzene	47.6		5.0	1.6	0.56
103-65-1	N-Propylbenzene	46.5		5.0	1.6	0.58
95-47-6	o-Xylene	47.6		5.0	1.6	0.61
135-98-8	sec-Butylbenzene	45.0		5.0	1.6	0.77
100-42-5	Styrene	46.1		5.0	1.6	0.63
98-06-6	tert-Butylbenzene	46.3		5.0	1.6	0.50
127-18-4	Tetrachloroethene	44.5		5.0	1.6	0.59
108-88-3	Toluene	52.5		5.0	1.6	0.69
156-60-5	trans-1,2-Dichloroethene	50.4		5.0	0.80	0.39
10061-02-6	trans-1,3-Dichloropropene	47.7		5.0	1.6	0.67
79-01-6	Trichloroethene	48.4		5.0	0.80	0.23
75-69-4	Trichlorofluoromethane	46.5		10	3.2	1.0
108-05-4	Vinyl acetate	79.9		10	3.2	1.1
75-01-4	Vinyl chloride	46.4		5.0	3.2	1.3
1330-20-7	Xylenes (total)	93.7		10	1.0	0.61

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-376042/2-A

Matrix: Solid Lab File ID: G2_0633.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 06/03/2017 21:03

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 376040 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		71-136
460-00-4	4-Bromofluorobenzene (Surr)	98		79-119
1868-53-7	Dibromofluoromethane (Surr)	90		78-119
2037-26-5	Toluene-d8 (Surr)	98		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0633.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 03-Jun-2017 21:03:30 ALS Bottle#: 14 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	95	464441	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.637	-0.008	98	461888	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	86	193809	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	418187	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	93	214049	45.0	40.7	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	269914	45.0	43.4	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	815565	45.0	44.0	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	90	301709	45.0	44.0	
32 Dichlorodifluoromethane	85	1.691	1.691	0.000	99	263599	50.0	49.4	
34 Chloromethane	50	1.830	1.830	0.000	99	371897	50.0	51.2	
37 Vinyl chloride	62	1.956	1.956	0.000	98	418846	50.0	46.4	
22 Butadiene	54	1.998	1.998	0.000	89	169888	50.0	43.9	
39 Bromomethane	94	2.291	2.291	0.000	90	314103	50.0	43.9	
40 Chloroethane	64	2.403	2.403	0.000	100	251533	50.0	61.0	
41 Dichlorofluoromethane	67	2.654	2.654	0.000	97	471697	50.0	46.7	
43 Trichlorofluoromethane	101	2.682	2.682	0.000	98	376274	50.0	46.5	
45 Ethyl ether	59	3.003	3.004	-0.001	94	215321	50.0	56.0	
48 Acrolein	56	3.185	3.185	0.000	99	352262	499.9	508.3	
53 1,1-Dichloroethene	96	3.297	3.311	-0.014	94	218008	50.0	46.2	
52 1,1,2-Trichloro-1,2,2-trif	151	3.339	3.339	0.000	94	204339	50.0	42.7	
50 Acetone	43	3.353	3.353	-0.001	98	328927	200.0	191.9	
55 Iodomethane	142	3.492	3.492	0.000	99	390453	50.0	45.9	
58 Carbon disulfide	76	3.576	3.576	0.000	100	847463	50.0	49.2	
56 Methyl acetate	43	3.799	3.800	-0.001	99	879467	250.0	259.8	
57 3-Chloro-1-propene	41	3.799	3.814	-0.015	91	409940	50.0	53.7	
60 Methylene Chloride	84	4.009	4.009	0.000	96	263232	50.0	50.0	
59 2-Methyl-2-propanol	59	4.204	4.205	-0.001	95	244540	500.0	484.3	
61 Acrylonitrile	53	4.372	4.372	0.000	98	812859	500.0	509.8	
62 Methyl tert-butyl ether	73	4.428	4.428	0.000	98	643360	50.0	52.0	
63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	96	251915	50.0	50.4	
64 Hexane	57	4.917	4.917	0.000	95	382958	50.0	49.8	
67 1,1-Dichloroethane	63	5.210	5.210	0.000	97	463017	50.0	48.1	
65 Vinyl acetate	43	5.252	5.252	0.000	98	670025	100.0	79.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
74 cis-1,2-Dichloroethene	96	6.128	6.128	0.000	84	256324	50.0	48.6	
71 2-Butanone (MEK)	43	6.128	6.128	0.000	98	409414	200.0	188.3	
75 2,2-Dichloropropane	77	6.135	6.128	0.007	88	346254	50.0	44.4	
77 Chlorobromomethane	128	6.464	6.457	0.007	89	123178	50.0	48.0	
79 Tetrahydrofuran	42	6.464	6.464	0.000	90	154376	100.0	122.3	
72 sec-Butyl Alcohol	45	6.457	6.464	-0.007	95	533952	1500.0	1434.4	
78 Chloroform	83	6.628	6.628	0.000	94	442339	50.0	44.1	
81 1,1,1-Trichloroethane	97	6.814	6.814	0.000	98	384798	50.0	43.6	
82 Cyclohexane	56	6.893	6.893	0.000	93	423920	50.0	52.2	
84 Carbon tetrachloride	117	7.000	7.000	0.000	97	364355	50.0	43.6	
83 1,1-Dichloropropene	75	7.021	7.022	-0.001	94	344654	50.0	50.5	
87 Benzene	78	7.257	7.258	-0.001	98	978712	50.0	51.6	
85 1,2-Dichloroethane	62	7.343	7.336	0.007	98	354270	50.0	43.9	
80 Isobutyl alcohol	41	7.651	7.651	0.000	85	262451	1250.0	1173.9	
35 n-Heptane	43	7.651	7.651	0.000	93	403172	50.0	53.3	
89 Trichloroethene	95	8.044	8.044	0.000	97	226275	50.0	48.4	
90 2-Pentanone	43	8.258	8.259	-0.001	98	837223	200.0	231.3	
93 Methylcyclohexane	55	8.294	8.294	0.000	91	369486	50.0	53.7	
92 1,2-Dichloropropane	63	8.337	8.330	0.007	94	258090	50.0	51.1	
94 1,4-Dioxane	88	8.416	8.416	0.000	98	42917	1000.0	949.8	
95 Dibromomethane	93	8.423	8.423	0.000	97	143081	50.0	45.2	
96 Dichlorobromomethane	83	8.623	8.623	0.000	99	326230	50.0	47.1	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	93	48423	50.0	39.9	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	94	363041	50.0	46.2	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	97	846498	200.0	193.0	
101 Toluene	91	9.410	9.410	0.000	98	992285	50.0	52.5	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	96	341900	50.0	47.7	
102 Ethyl methacrylate	69	9.717	9.717	0.000	91	263865	50.0	46.7	
104 1,1,2-Trichloroethane	97	9.853	9.846	0.007	94	196144	50.0	48.1	
107 Tetrachloroethene	164	9.917	9.917	0.000	97	210459	50.0	44.5	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	94	348249	50.0	49.3	
105 2-Hexanone	43	10.060	10.060	0.000	97	626418	200.0	187.9	
108 Chlorodibromomethane	129	10.210	10.211	-0.001	90	237451	50.0	46.7	
110 Ethylene Dibromide	107	10.318	10.318	0.000	98	193913	50.0	47.7	
111 1-Chlorohexane	91	10.775	10.775	0.000	95	329715	50.0	45.9	
112 Chlorobenzene	112	10.790	10.790	0.000	93	674062	50.0	45.9	
113 1,1,1,2-Tetrachloroethane	131	10.875	10.876	-0.001	93	257069	50.0	45.3	
114 Ethylbenzene	106	10.883	10.883	0.000	98	358760	50.0	49.9	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	426141	50.0	46.1	
117 o-Xylene	106	11.362	11.362	0.000	97	426828	50.0	47.6	
116 Styrene	104	11.383	11.383	0.000	98	700799	50.0	46.1	
118 Bromoform	173	11.555	11.555	0.000	96	150899	50.0	45.3	
119 Isopropylbenzene	105	11.705	11.705	0.000	97	1091986	50.0	47.3	
121 Cyclohexanone	55	11.798	11.798	0.000	95	297617	2000.0	1860.9	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	96	268754	50.0	48.7	
125 Bromobenzene	156	11.998	11.998	0.000	94	288385	50.0	48.8	
123 trans-1,4-Dichloro-2-buten	53	12.034	12.027	0.007	85	88805	50.0	51.1	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	85	83544	50.0	47.4	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	316766	50.0	46.5	
128 2-Chlorotoluene	126	12.177	12.177	0.000	96	269948	50.0	45.6	
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	94	926951	50.0	45.6	
129 4-Chlorotoluene	126	12.277	12.277	0.000	97	288521	50.0	45.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	818823	50.0	46.3	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	963380	50.0	45.6	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	256835	50.0	45.0	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	98	569179	50.0	48.2	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	1089147	50.0	45.8	
136 1,4-Dichlorobenzene	146	12.842	12.835	0.007	95	580584	50.0	44.9	
137 n-Butylbenzene	91	13.063	13.064	-0.001	98	983612	50.0	47.6	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	97	543452	50.0	46.9	
139 1,2-Dibromo-3-Chloropropan	157	13.585	13.586	-0.001	81	52884	50.0	51.1	
141 1,2,4-Trichlorobenzene	180	14.114	14.115	-0.001	94	371843	50.0	47.6	
142 Hexachlorobutadiene	225	14.200	14.208	-0.008	97	228532	50.0	45.5	
143 Naphthalene	128	14.300	14.301	-0.001	97	775332	50.0	49.5	
144 1,2,3-Trichlorobenzene	180	14.458	14.458	0.000	95	349751	50.0	49.4	
S 151 1,2-Dichloroethene, Total	96				0		100.0	99.0	
S 149 1,2-Dichloroethene, Total	1				0		50.0	99.0	
S 148 1,3-Dichloropropene, Total	1				0		100.0	94.0	
S 146 Xylenes, Total (URS)	1				0		100.0	93.8	
S 150 Xylenes, Total	106				0		100.0	93.8	
S 145 Trihalomethanes, Total	1				0		200.0	183.3	

Reagents:

MV-Gas/Ket B_00034	Amount Added:	6.25	Units: uL	
MV-Main B_00017	Amount Added:	6.25	Units: uL	
MV-SS 2-Cleve_00035	Amount Added:	6.25	Units: uL	
MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent

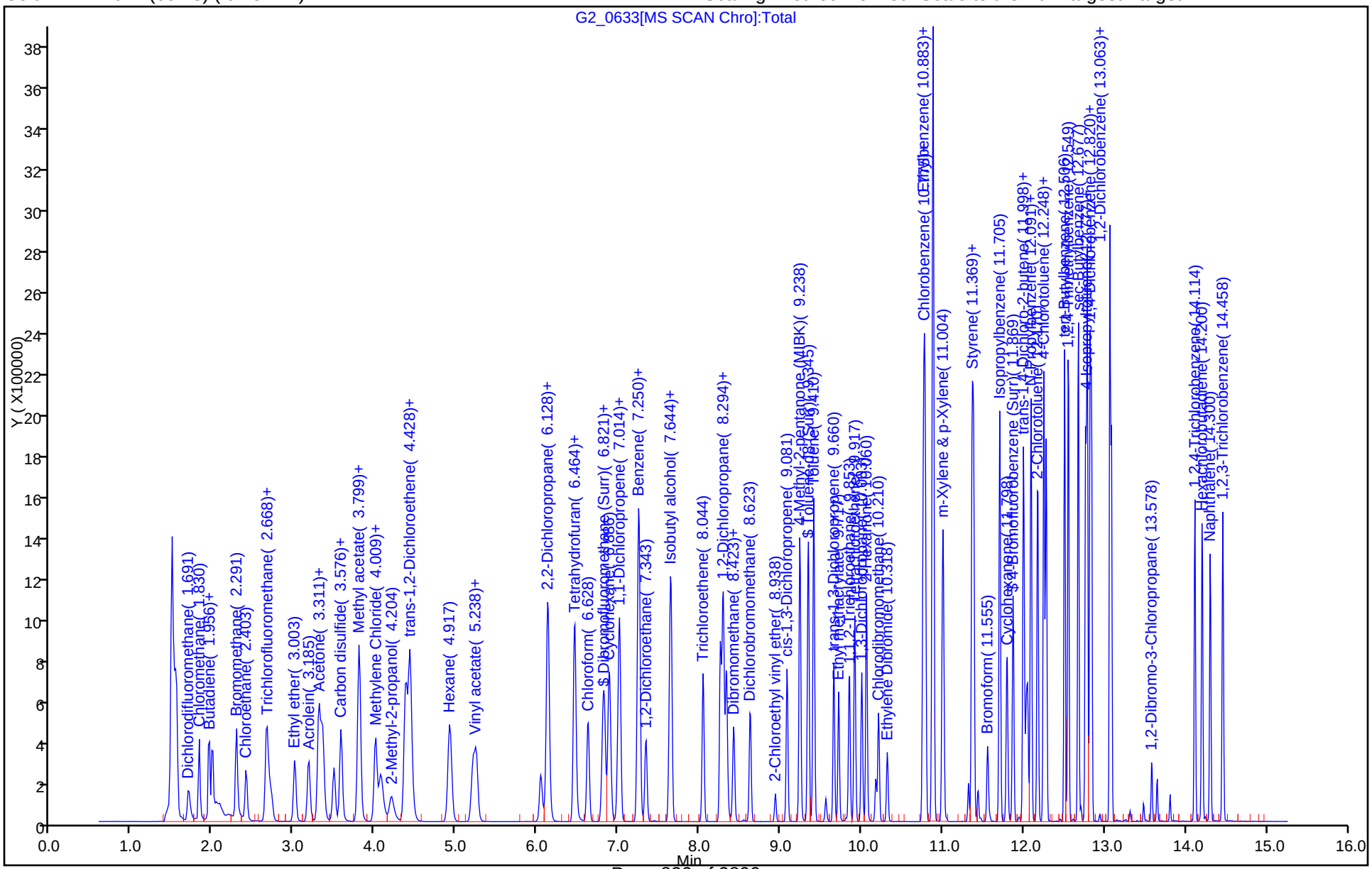
Report Date: 05-Jun-2017 17:13:15 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0633.D

Injection Date:	03-Jun-2017 21:03:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	LCS			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0633.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 03-Jun-2017 21:03:30 ALS Bottle#: 14 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	45.0	40.7	90.39
$ 9 1,2-Dichloroethane-d4 (Surr)	45.0	43.4	96.52
$ 10 Toluene-d8 (Surr)	45.0	44.0	97.86
$ 11 4-Bromofluorobenzene (Surr)	45.0	44.0	97.80

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-376042/3-A

Matrix: Solid | Lab File ID: G2_0635.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/03/2017 21:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 376040 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
108-20-3	Isopropyl ether	87.4	Q	50	8.0	2.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		71-136
460-00-4	4-Bromofluorobenzene (Surr)	114		79-119
1868-53-7	Dibromofluoromethane (Surr)	91		78-119
2037-26-5	Toluene-d8 (Surr)	99		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0635.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 03-Jun-2017 21:43:30 ALS Bottle#: 16 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS S
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 03-Jun-2017 22:37:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	96	548940	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.637	-0.008	98	478301	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	195185	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	376298	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	93	223473	45.0	41.0	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	279212	45.0	43.4	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	834566	45.0	44.7	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	315635	45.0	51.2	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.263	2.277	-0.014	100	1669248	5000.0	14530	
42 Ethanol	45	2.878	2.892	-0.014	99	221172	3000.0	3180.0	
47 Propene oxide	58	3.059	3.073	-0.014	96	6030582	5000.0	10313	
51 Isopropyl alcohol	45	3.562	3.576	-0.014	97	218300	500.0	561.9	
54 Acetonitrile	41	3.744	3.758	-0.014	99	385351	500.0	1185.6	
66 Isopropyl ether	87	5.308	5.322	-0.014	93	231252	50.0	87.4	
68 2-Chloro-1,3-butadiene	53	5.322	5.336	-0.014	94	476400	50.0	91.5	
69 Tert-butyl ethyl ether	59	5.894	5.909	-0.015	97	771309	50.0	96.4	
70 Ethyl acetate	43	6.213	6.221	-0.008	99	525046	100.0	250.5	
73 Propionitrile	54	6.221	6.228	-0.007	99	411095	500.0	1175.3	
76 Methacrylonitrile	41	6.428	6.435	-0.007	93	1763412	500.0	1311.7	
86 Tert-amyl methyl ether	73	7.450	7.451	-0.001	97	748724	50.0	98.3	
88 n-Butanol	56	8.008	8.008	0.000	93	205677	1250.0	1109.8	
16 Ethyl acrylate	55	8.173	8.180	-0.007	100	324215	50.0	99.7	
91 Methyl methacrylate	100	8.423	8.423	0.000	92	149464	100.0	186.7	
97 2-Nitropropane	41	8.859	8.866	-0.007	99	116645	100.0	155.2	
120 cis-1,4-Dichloro-2-butene	53	11.762	11.769	-0.007	92	225546	100.0	117.4	
135 1,2,3-Trimethylbenzene	105	12.856	12.856	0.000	98	1093622	50.0	46.6	
140 1,3,5-Trichlorobenzene	180	13.693	13.693	0.000	97	495234	50.0	45.5	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp B_00016	Amount Added:	6.25	Units: uL	
MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent

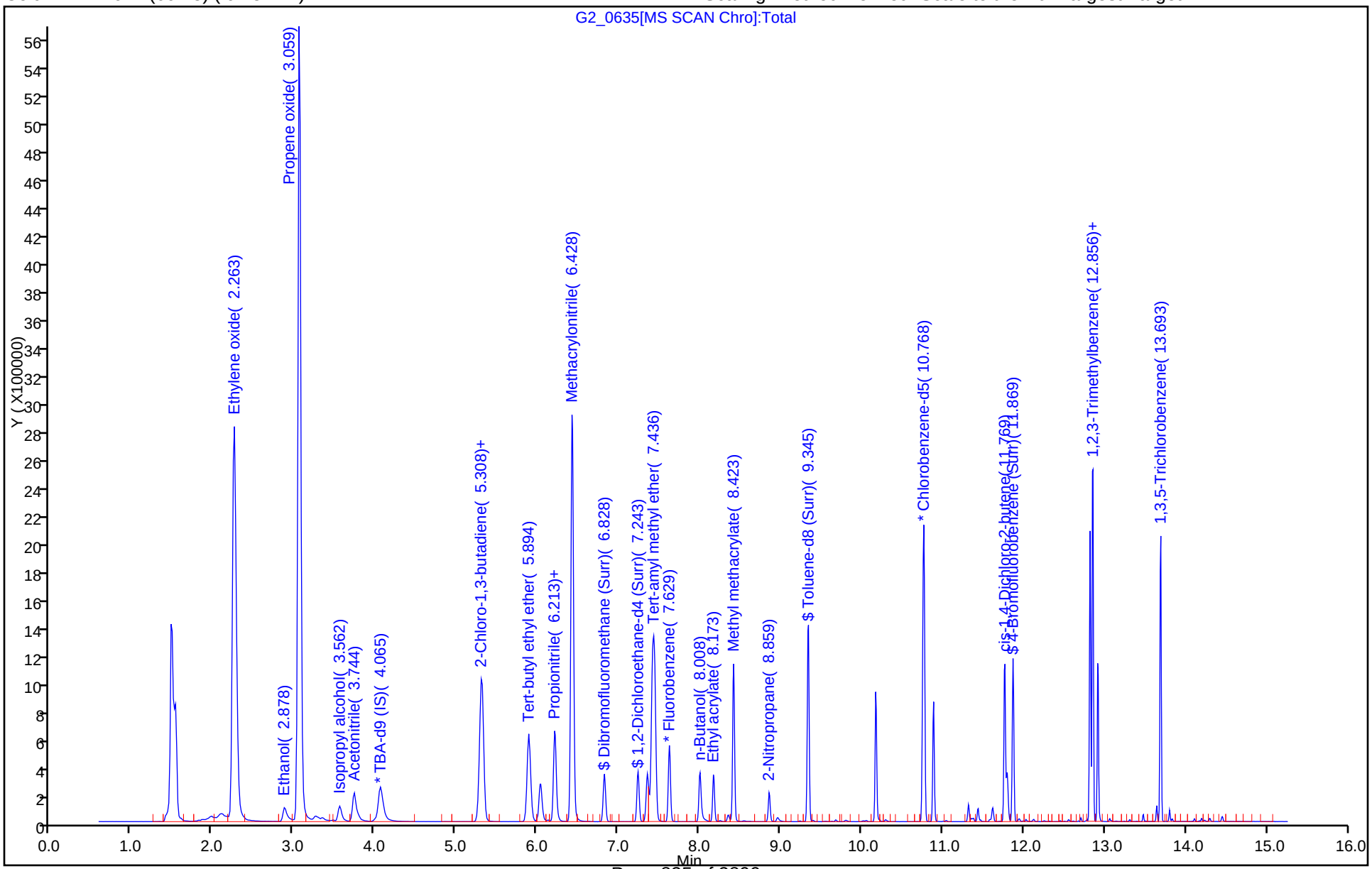
Report Date: 05-Jun-2017 17:13:16 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0635.D

Injection Date:	03-Jun-2017 21:43:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	LCS			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\G2_0635.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 03-Jun-2017 21:43:30 ALS Bottle#: 16 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS S
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 05-Jun-2017 17:13:12 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: dukesa Date: 03-Jun-2017 22:37:28

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	45.0	41.0	91.13
$ 9 1,2-Dichloroethane-d4 (Surr)	45.0	43.4	96.41
$ 10 Toluene-d8 (Surr)	45.0	44.7	99.44
$ 11 4-Bromofluorobenzene (Surr)	45.0	51.2	113.71

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-376205/2-A

Matrix: Solid | Lab File ID: G2_0696.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/05/2017 20:25

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 376196 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	44.4		5.0	1.6	0.56
71-55-6	1,1,1-Trichloroethane	45.7		5.0	1.6	0.52
79-34-5	1,1,2,2-Tetrachloroethane	46.8		5.0	1.6	0.61
79-00-5	1,1,2-Trichloroethane	46.8		5.0	3.2	0.88
75-34-3	1,1-Dichloroethane	48.6		5.0	0.80	0.21
75-35-4	1,1-Dichloroethene	47.1		5.0	1.6	0.59
563-58-6	1,1-Dichloropropene	50.5		5.0	1.6	0.54
87-61-6	1,2,3-Trichlorobenzene	54.5		5.0	1.6	0.75
96-18-4	1,2,3-Trichloropropane	44.9		5.0	3.2	0.81
120-82-1	1,2,4-Trichlorobenzene	52.2		5.0	1.6	0.73
95-63-6	1,2,4-Trimethylbenzene	44.1		5.0	1.6	0.58
96-12-8	1,2-Dibromo-3-Chloropropane	53.7		10	1.6	0.60
106-93-4	1,2-Dibromoethane	46.0		5.0	1.6	0.52
95-50-1	1,2-Dichlorobenzene	45.2		5.0	1.6	0.45
107-06-2	1,2-Dichloroethane	45.1		5.0	1.6	0.70
540-59-0	1,2-Dichloroethene, Total	98.3		5.0	1.6	0.39
78-87-5	1,2-Dichloropropane	50.4		5.0	1.6	0.55
108-67-8	1,3,5-Trimethylbenzene	43.9		5.0	1.6	0.57
541-73-1	1,3-Dichlorobenzene	44.7		5.0	1.6	0.48
142-28-9	1,3-Dichloropropane	47.7		5.0	1.6	0.51
106-46-7	1,4-Dichlorobenzene	42.0		5.0	1.6	0.78
594-20-7	2,2-Dichloropropane	52.6		5.0	1.6	0.44
78-93-3	2-Butanone (MEK)	201		20	6.4	1.8
95-49-8	2-Chlorotoluene	43.8		5.0	1.6	0.51
591-78-6	2-Hexanone	194		20	13	4.9
106-43-4	4-Chlorotoluene	42.7		5.0	1.6	0.78
99-87-6	4-Isopropyltoluene	45.0		5.0	1.6	0.49
108-10-1	4-Methyl-2-pentanone (MIBK)	210		20	13	4.4
67-64-1	Acetone	201		20	13	5.4
71-43-2	Benzene	50.3		5.0	1.6	0.47
108-86-1	Bromobenzene	45.2		5.0	1.6	0.49
74-97-5	Bromochloromethane	46.7		5.0	0.80	0.30
75-27-4	Bromodichloromethane	46.6		5.0	0.80	0.22
75-25-2	Bromoform	43.3		5.0	0.80	0.23
74-83-9	Bromomethane	47.4		10	1.6	0.50
75-15-0	Carbon disulfide	49.1		5.0	1.6	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-376205/2-A

Matrix: Solid | Lab File ID: G2_0696.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/05/2017 20:25

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 376196 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	44.0		5.0	1.6	0.63
108-90-7	Chlorobenzene	43.2		5.0	1.6	0.54
75-00-3	Chloroethane	68.1		10	3.2	0.89
67-66-3	Chloroform	44.9		10	0.80	0.29
74-87-3	Chloromethane	64.2		10	1.6	0.77
156-59-2	cis-1,2-Dichloroethene	48.7		5.0	1.6	0.56
10061-01-5	cis-1,3-Dichloropropene	45.9		5.0	3.2	1.3
124-48-1	Dibromochloromethane	44.0		5.0	1.6	0.57
74-95-3	Dibromomethane	46.2		5.0	3.2	0.84
75-71-8	Dichlorodifluoromethane	55.3		10	1.6	0.52
100-41-4	Ethylbenzene	46.2		5.0	1.6	0.67
87-68-3	Hexachlorobutadiene	49.2		5.0	1.6	0.55
98-82-8	Isopropylbenzene	45.6		5.0	1.6	0.59
179601-23-1	m&p-Xylene	43.3		3.2	3.2	1.0
74-88-4	Methyl iodide	45.7		5.0	1.6	0.44
1634-04-4	Methyl tert-butyl ether	58.1		20	0.80	0.34
75-09-2	Methylene Chloride	50.9		5.0	3.2	1.6
91-20-3	Naphthalene	56.0		5.0	1.6	0.63
104-51-8	n-Butylbenzene	47.8		5.0	1.6	0.56
103-65-1	N-Propylbenzene	43.6		5.0	1.6	0.58
95-47-6	o-Xylene	45.1		5.0	1.6	0.61
135-98-8	sec-Butylbenzene	44.1		5.0	1.6	0.77
100-42-5	Styrene	45.0		5.0	1.6	0.63
98-06-6	tert-Butylbenzene	44.9		5.0	1.6	0.50
127-18-4	Tetrachloroethene	41.4		5.0	1.6	0.59
108-88-3	Toluene	50.8		5.0	1.6	0.69
156-60-5	trans-1,2-Dichloroethene	49.6		5.0	0.80	0.39
10061-02-6	trans-1,3-Dichloropropene	47.6		5.0	1.6	0.67
79-01-6	Trichloroethene	47.5		5.0	0.80	0.23
75-69-4	Trichlorofluoromethane	52.9		10	3.2	1.0
108-05-4	Vinyl acetate	91.8		10	3.2	1.1
75-01-4	Vinyl chloride	51.7		5.0	3.2	1.3
1330-20-7	Xylenes (total)	88.4		10	1.0	0.61

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-376205/2-A

Matrix: Solid Lab File ID: G2_0696.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 06/05/2017 20:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 376196 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		71-136
460-00-4	4-Bromofluorobenzene (Surr)	88		79-119
1868-53-7	Dibromofluoromethane (Surr)	88		78-119
2037-26-5	Toluene-d8 (Surr)	90		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0696.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 05-Jun-2017 20:25:30 ALS Bottle#: 17 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Jun-2017 20:22:30 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.051	0.014	96	514469	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.622	0.007	98	415533	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	178361	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	393516	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.829	6.828	0.001	93	187144	45.0	39.5	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	246236	45.0	44.1	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	688449	45.0	40.4	
$ 11 4-Bromofluorobenzene (Surr	95	11.870	11.869	0.001	90	256300	45.0	39.7	
32 Dichlorodifluoromethane	85	1.691	1.691	0.000	99	266059	50.0	55.3	
34 Chloromethane	50	1.830	1.830	0.000	99	419414	50.0	64.2	
37 Vinyl chloride	62	1.970	1.970	0.000	98	419404	50.0	51.7	
22 Butadiene	54	1.984	1.984	0.000	96	346097	NC	NC	
39 Bromomethane	94	2.291	2.291	0.000	90	305526	50.0	47.4	
40 Chloroethane	64	2.403	2.403	0.000	100	253148	50.0	68.1	
41 Dichlorofluoromethane	67	2.654	2.654	0.000	98	474396	50.0	52.2	
43 Trichlorofluoromethane	101	2.710	2.696	0.014	99	385547	50.0	52.9	
45 Ethyl ether	59	3.004	3.004	0.000	94	193956	50.0	56.0	
48 Acrolein	56	3.171	3.185	-0.014	99	370034	499.9	593.5	
53 1,1-Dichloroethene	96	3.297	3.297	0.000	94	199832	50.0	47.1	
52 1,1,2-Trichloro-1,2,2-trif	151	3.339	3.339	0.000	95	187783	50.0	43.6	
50 Acetone	43	3.353	3.353	0.000	98	309764	200.0	200.9	
55 Iodomethane	142	3.492	3.478	0.014	99	349247	50.0	45.7	
58 Carbon disulfide	76	3.576	3.576	0.000	100	760034	50.0	49.1	
56 Methyl acetate	43	3.786	3.786	0.000	99	846097	250.0	277.9	
57 3-Chloro-1-propene	41	3.800	3.800	0.000	89	390920	50.0	57.0	
60 Methylene Chloride	84	3.995	3.995	0.000	98	241165	50.0	50.9	
59 2-Methyl-2-propanol	59	4.191	4.191	0.000	96	243592	500.0	536.2	
61 Acrylonitrile	53	4.372	4.358	0.014	98	778152	500.0	542.5	
63 trans-1,2-Dichloroethene	96	4.428	4.414	0.014	95	222734	50.0	49.6	
62 Methyl tert-butyl ether	73	4.428	4.414	0.014	92	646463	50.0	58.1	
64 Hexane	57	4.917	4.903	0.014	95	346509	50.0	49.0	
67 1,1-Dichloroethane	63	5.196	5.196	0.000	97	421239	50.0	48.6	
65 Vinyl acetate	43	5.238	5.252	-0.014	97	698757	100.0	91.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
74 cis-1,2-Dichloroethene	96	6.121	6.121	0.000	85	230728	50.0	48.7	
71 2-Butanone (MEK)	43	6.128	6.121	0.007	95	392227	200.0	200.6	
75 2,2-Dichloropropane	77	6.128	6.121	0.007	64	368647	50.0	52.6	
72 sec-Butyl Alcohol	45	6.450	6.442	0.008	98	514086	1500.0	1532.1	
77 Chlorobromomethane	128	6.457	6.450	0.007	97	107935	50.0	46.7	
79 Tetrahydrofuran	42	6.457	6.457	0.000	93	146714	100.0	129.1	
78 Chloroform	83	6.621	6.614	0.007	95	405568	50.0	44.9	
81 1,1,1-Trichloroethane	97	6.807	6.807	0.000	98	362771	50.0	45.7	
82 Cyclohexane	56	6.886	6.879	0.007	94	388619	50.0	53.1	
84 Carbon tetrachloride	117	7.000	6.993	0.007	95	330572	50.0	44.0	
83 1,1-Dichloropropene	75	7.015	7.007	0.007	93	309825	50.0	50.5	
87 Benzene	78	7.258	7.250	0.008	98	858686	50.0	50.3	
85 1,2-Dichloroethane	62	7.336	7.329	0.007	98	327541	50.0	45.1	
80 Isobutyl alcohol	41	7.651	7.644	0.007	85	240095	1250.0	1193.7	
35 n-Heptane	43	7.651	7.644	0.007	94	366616	50.0	53.9	
89 Trichloroethene	95	8.044	8.037	0.007	97	199817	50.0	47.5	
90 2-Pentanone	43	8.251	8.251	0.000	98	665338	200.0	204.3	
93 Methylcyclohexane	55	8.294	8.287	0.007	92	336891	50.0	54.4	
92 1,2-Dichloropropane	63	8.330	8.323	0.007	93	228986	50.0	50.4	
94 1,4-Dioxane	88	8.409	8.409	0.000	97	38310	1000.0	942.7	
95 Dibromomethane	93	8.423	8.416	0.007	96	131568	50.0	46.2	
96 Dichlorobromomethane	83	8.623	8.623	0.000	98	290197	50.0	46.6	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	93	74298	50.0	64.4	
99 cis-1,3-Dichloropropene	75	9.081	9.074	0.007	93	331912	50.0	45.9	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.231	0.007	98	832955	200.0	210.3	
101 Toluene	91	9.410	9.410	0.000	98	863874	50.0	50.8	
103 trans-1,3-Dichloropropene	75	9.660	9.653	0.007	96	306587	50.0	47.6	
102 Ethyl methacrylate	69	9.717	9.710	0.007	91	243709	50.0	46.9	
104 1,1,2-Trichloroethane	97	9.846	9.846	0.000	95	171416	50.0	46.8	
107 Tetrachloroethene	164	9.917	9.910	0.007	96	180321	50.0	41.4	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	94	309903	50.0	47.7	
105 2-Hexanone	43	10.061	10.060	0.000	98	595059	200.0	193.7	
108 Chlorodibromomethane	129	10.211	10.211	0.000	91	205799	50.0	44.0	
110 Ethylene Dibromide	107	10.318	10.318	0.000	98	172344	50.0	46.0	
111 1-Chlorohexane	91	10.776	10.768	0.008	94	284321	50.0	43.0	
112 Chlorobenzene	112	10.790	10.783	0.007	92	584770	50.0	43.2	
113 1,1,1,2-Tetrachloroethane	131	10.876	10.876	0.000	93	231849	50.0	44.4	
114 Ethylbenzene	106	10.883	10.876	0.007	98	306137	50.0	46.2	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	367796	50.0	43.3	
117 o-Xylene	106	11.362	11.362	0.000	97	371278	50.0	45.1	
116 Styrene	104	11.383	11.383	0.000	98	628305	50.0	45.0	
118 Bromoform	173	11.555	11.555	0.000	96	132810	50.0	43.3	
119 Isopropylbenzene	105	11.705	11.705	0.000	97	990008	50.0	45.6	
121 Cyclohexanone	55	11.791	11.791	0.000	96	293747	2000.0	1990.5	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	96	243317	50.0	46.8	
125 Bromobenzene	156	11.998	11.998	0.000	95	251422	50.0	45.2	
123 trans-1,4-Dichloro-2-buten	53	12.027	12.027	0.000	90	83300	50.0	51.0	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	87	74397	50.0	44.9	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	278063	50.0	43.6	
128 2-Chlorotoluene	126	12.170	12.170	0.000	96	243367	50.0	43.8	
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	94	838263	50.0	43.9	
129 4-Chlorotoluene	126	12.277	12.277	0.000	97	251600	50.0	42.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	745827	50.0	44.9	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	875417	50.0	44.1	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	236485	50.0	44.1	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	98	496758	50.0	44.7	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	1006496	50.0	45.0	
136 1,4-Dichlorobenzene	146	12.835	12.835	0.000	93	510414	50.0	42.0	
137 n-Butylbenzene	91	13.064	13.064	0.000	98	929438	50.0	47.8	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	97	493399	50.0	45.2	
139 1,2-Dibromo-3-Chloropropan	157	13.578	13.578	0.000	81	52308	50.0	53.7	
141 1,2,4-Trichlorobenzene	180	14.108	14.115	-0.007	94	386134	50.0	52.2	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	97	233521	50.0	49.2	
143 Naphthalene	128	14.301	14.301	0.000	97	833449	50.0	56.0	
144 1,2,3-Trichlorobenzene	180	14.458	14.458	0.000	94	364688	50.0	54.5	
S 151 1,2-Dichloroethene, Total	96				0		100.0	98.2	
S 146 Xylenes, Total (URS)	1				0		100.0	88.5	
S 150 Xylenes, Total	106				0		100.0	88.5	
S 145 Trihalomethanes, Total	1				0		200.0	178.9	
S 149 1,2-Dichloroethene, Total	1				0		50.0	98.2	
S 148 1,3-Dichloropropene, Total	1				0		100.0	93.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MV-Gas/Ket B_00034	Amount Added:	6.25	Units: uL		
MV-Main B_00017	Amount Added:	6.25	Units: uL		
MV-SS 2-Cleve_00035	Amount Added:	6.25	Units: uL		
MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent	
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent	

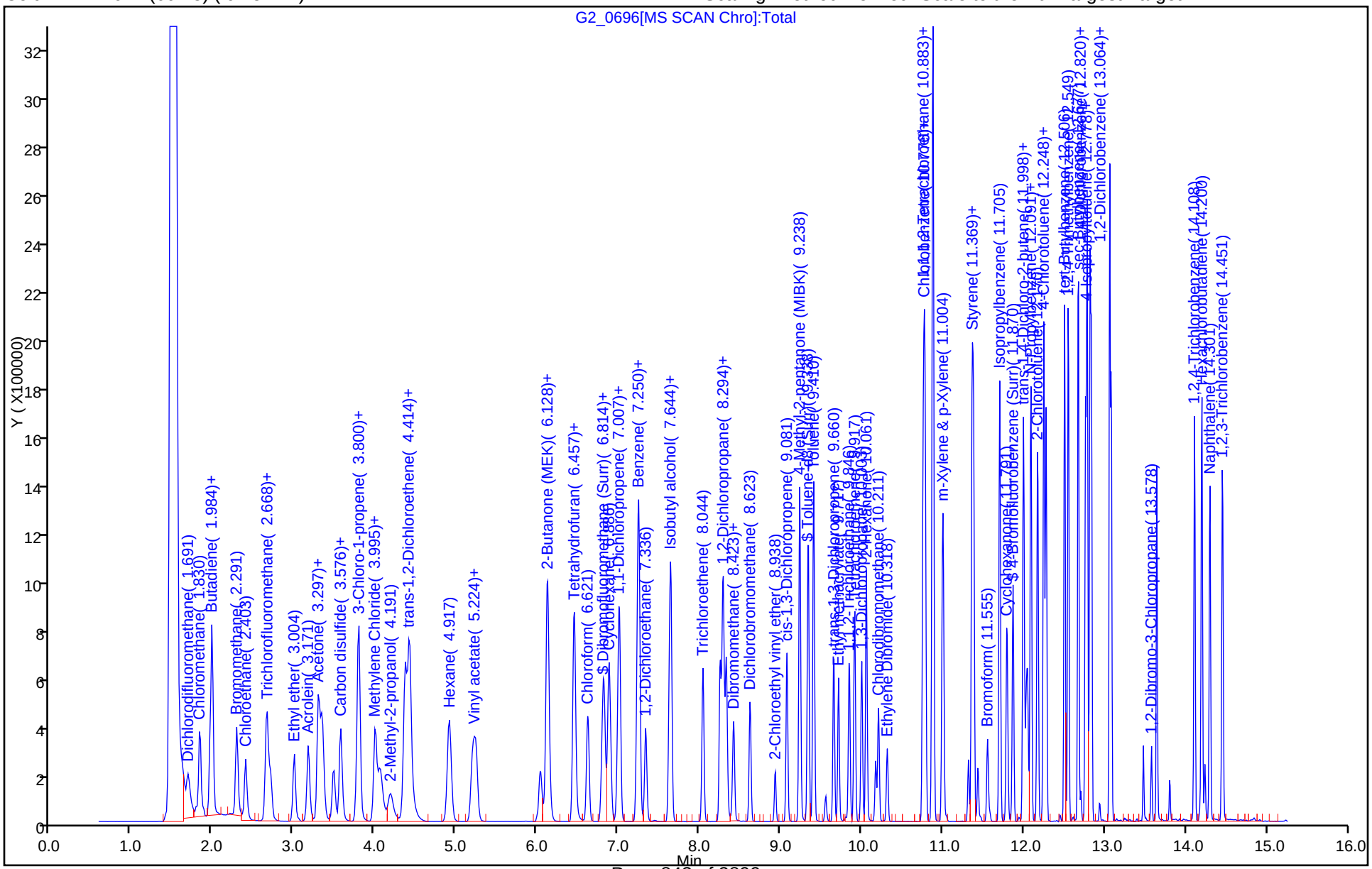
Report Date: 06-Jun-2017 20:22:34 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0696.D

Injection Date:	05-Jun-2017 20:25:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	LCS			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0696.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 05-Jun-2017 20:25:30 ALS Bottle#: 17 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Jun-2017 20:22:30 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	45.0	39.5	87.85
$ 9 1,2-Dichloroethane-d4 (Surr)	45.0	44.1	97.98
$ 10 Toluene-d8 (Surr)	45.0	40.4	89.76
$ 11 4-Bromofluorobenzene (Surr)	45.0	39.7	88.29

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-376205/3-A

Matrix: Solid | Lab File ID: G2_0694.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/05/2017 19:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 376196 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
108-20-3	Isopropyl ether	88.1	Q	50	8.0	2.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		71-136
460-00-4	4-Bromofluorobenzene (Surr)	98		79-119
1868-53-7	Dibromofluoromethane (Surr)	91		78-119
2037-26-5	Toluene-d8 (Surr)	90		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0694.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 05-Jun-2017 19:44:30 ALS Bottle#: 15 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS S
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Jun-2017 20:22:30 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.051	0.014	96	566611	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.622	0.007	98	405110	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	167170	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	349357	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.828	0.000	93	189899	45.0	41.1	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	250518	45.0	46.2	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	648582	45.0	40.6	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	90	252956	45.0	44.2	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.277	2.277	0.000	100	2124916	5000.0	21838	E
42 Ethanol	45	2.892	2.892	0.000	99	178332	3000.0	2502.7	
47 Propene oxide	58	3.073	3.073	0.000	96	5846829	5000.0	11805	
51 Isopropyl alcohol	45	3.562	3.562	0.000	96	194651	500.0	487.9	
54 Acetonitrile	41	3.744	3.744	0.000	99	341346	500.0	1239.9	
66 Isopropyl ether	87	5.308	5.308	0.000	93	197406	50.0	88.1	
68 2-Chloro-1,3-butadiene	53	5.322	5.322	0.000	94	432351	50.0	97.8	
69 Tert-butyl ethyl ether	59	5.894	5.895	0.000	97	712326	50.0	105.0	
70 Ethyl acetate	43	6.206	6.214	-0.008	99	456920	100.0	257.3	
73 Propionitrile	54	6.221	6.221	0.000	98	352835	500.0	1191.0	
76 Methacrylonitrile	41	6.428	6.435	-0.007	94	1583715	500.0	1390.9	
86 Tert-amyl methyl ether	73	7.450	7.451	-0.001	96	678393	50.0	105.0	
88 n-Butanol	56	8.001	8.001	0.000	93	184280	1250.0	976.6	
16 Ethyl acrylate	55	8.173	8.173	0.000	100	270652	NC	NC	
91 Methyl methacrylate	100	8.423	8.423	0.000	93	128369	100.0	189.2	
97 2-Nitropropane	41	8.859	8.859	0.000	99	105623	100.0	165.6	
120 cis-1,4-Dichloro-2-butene	53	11.762	11.769	-0.007	90	203636	100.0	114.3	
135 1,2,3-Trimethylbenzene	105	12.856	12.856	0.000	98	985685	50.0	45.2	
140 1,3,5-Trichlorobenzene	180	13.693	13.693	0.000	96	484224	50.0	47.9	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

E - Exceeded Maximum Amount

Reagents:

MV-Supp B_00016	Amount Added:	6.25	Units: uL	
MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.90	Units: uL	Run Reagent

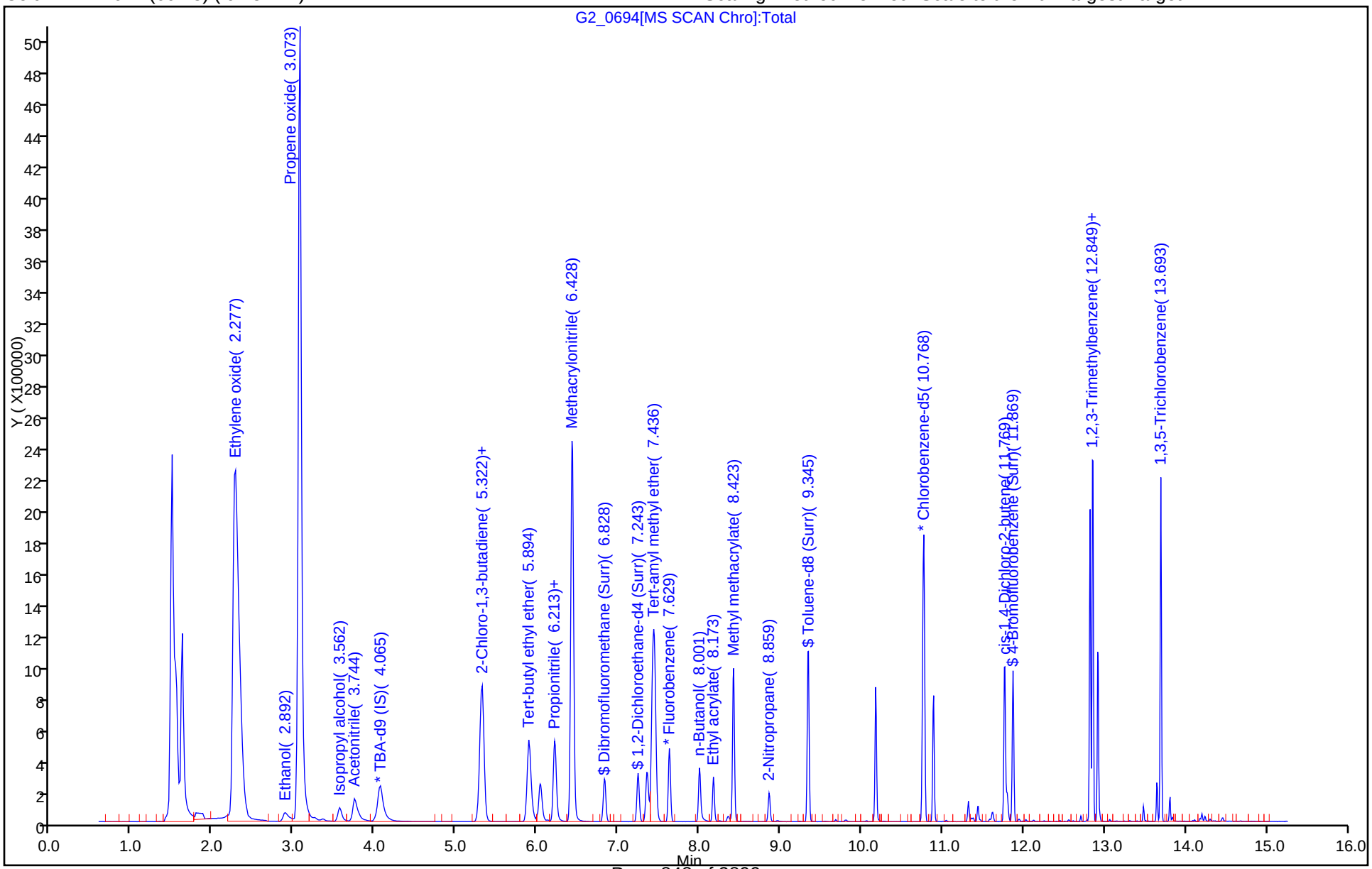
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0694.D

Injection Date:	05-Jun-2017 19:44:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	LCS			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\G2_0694.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 05-Jun-2017 19:44:30 ALS Bottle#: 15 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS S
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170605-59441.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 06-Jun-2017 20:22:30 Calib Date: 30-May-2017 21:14:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b\G2_0483.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK032

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	45.0	41.1	91.43
$ 9 1,2-Dichloroethane-d4 (Surr)	45.0	46.2	102.59
$ 10 Toluene-d8 (Surr)	45.0	40.6	90.23
$ 11 4-Bromofluorobenzene (Surr)	45.0	44.2	98.15

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: VMS_G2 Start Date: 04/26/2017 20:42

Analysis Batch Number: 371118 End Date: 04/27/2017 05:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-371118/1		04/26/2017 20:42	1	G2_9102.D	DB-624 (60.25) 0.25(mm)
STD001 280-371118/20 IC		04/26/2017 21:24	1	G2_9103.D	DB-624 (60.25) 0.25(mm)
STD002 280-371118/21 IC		04/26/2017 21:44	1	G2_9104.D	DB-624 (60.25) 0.25(mm)
STD005 280-371118/22 IC		04/26/2017 22:05	1	G2_9105.D	DB-624 (60.25) 0.25(mm)
STD010 280-371118/23 IC		04/26/2017 22:25	1	G2_9106.D	DB-624 (60.25) 0.25(mm)
STD020 280-371118/24 IC		04/26/2017 22:45	1	G2_9107.D	DB-624 (60.25) 0.25(mm)
ICIS 280-371118/25		04/26/2017 23:06	1	G2_9108.D	DB-624 (60.25) 0.25(mm)
STD100 280-371118/26 IC		04/26/2017 23:27	1	G2_9109.D	DB-624 (60.25) 0.25(mm)
STD200 280-371118/27 IC		04/26/2017 23:47	1	G2_9110.D	DB-624 (60.25) 0.25(mm)
ICV 280-371118/28		04/27/2017 00:08	1	G2_9111.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		04/27/2017 01:02	1		DB-624 (60.25) 0.25(mm)
280-94107-A-7-B MDLV		04/27/2017 01:22	1		DB-624 (60.25) 0.25(mm)
280-94107-A-8-B MDLV		04/27/2017 01:43	1		DB-624 (60.25) 0.25(mm)
280-94107-A-9-B MDLV		04/27/2017 02:03	1		DB-624 (60.25) 0.25(mm)
280-94107-A-10-B MDLV		04/27/2017 02:24	1		DB-624 (60.25) 0.25(mm)
280-94107-A-11-C MDLV		04/27/2017 02:44	1		DB-624 (60.25) 0.25(mm)
280-94107-A-11-D MDLV		04/27/2017 03:05	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/27/2017 03:25	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/27/2017 03:46	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/27/2017 04:06	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/27/2017 04:27	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/27/2017 04:48	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/27/2017 05:08	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/27/2017 05:29	1		DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: VMS_G2 Start Date: 05/30/2017 17:19

Analysis Batch Number: 375537 End Date: 05/31/2017 04:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-375537/1		05/30/2017 17:19	1	G2_0473.D	DB-624 (60.25) 0.25(mm)
CCV 280-375537/3		05/30/2017 18:16	1		DB-624 (60.25) 0.25(mm)
STD001 280-375537/4 IC		05/30/2017 18:51	1	G2_0476.D	DB-624 (60.25) 0.25(mm)
STD002 280-375537/5 IC		05/30/2017 19:11	1	G2_0477.D	DB-624 (60.25) 0.25(mm)
STD005 280-375537/6 IC		05/30/2017 19:32	1	G2_0478.D	DB-624 (60.25) 0.25(mm)
STD010 280-375537/7 IC		05/30/2017 19:52	1	G2_0479.D	DB-624 (60.25) 0.25(mm)
STD020 280-375537/8 IC		05/30/2017 20:13	1	G2_0480.D	DB-624 (60.25) 0.25(mm)
ICIS 280-375537/9		05/30/2017 20:33	1	G2_0481.D	DB-624 (60.25) 0.25(mm)
STD100 280-375537/10 IC		05/30/2017 20:54	1	G2_0482.D	DB-624 (60.25) 0.25(mm)
STD200 280-375537/11 IC		05/30/2017 21:14	1	G2_0483.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		05/30/2017 21:58	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/30/2017 22:20	1		DB-624 (60.25) 0.25(mm)
ICV 280-375537/12		05/30/2017 22:43	1	G2_0487.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		05/30/2017 23:23	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/30/2017 23:43	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/31/2017 00:04	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/31/2017 00:24	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/31/2017 00:44	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/31/2017 01:04	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/31/2017 01:25	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		05/31/2017 01:45	1		DB-624 (60.25) 0.25(mm)
CCVC 280-375537/35		05/31/2017 04:46	1		DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: VMS_G2 Start Date: 06/03/2017 19:00

Analysis Batch Number: 376040 End Date: 06/04/2017 06:40

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-376040/1		06/03/2017 19:00	1	G2_0628.D	DB-624 (60.25) 0.25(mm)
CCV 280-376040/2		06/03/2017 20:01	1	G2_0630.D	DB-624 (60.25) 0.25(mm)
CCV 280-376040/3		06/03/2017 20:21	1	G2_0631.D	DB-624 (60.25) 0.25(mm)
MB 280-376042/1-A		06/03/2017 20:42	1	G2_0632.D	DB-624 (60.25) 0.25(mm)
LCS 280-376042/2-A		06/03/2017 21:03	1	G2_0633.D	DB-624 (60.25) 0.25(mm)
LCS 280-376042/3-A		06/03/2017 21:43	1	G2_0635.D	DB-624 (60.25) 0.25(mm)
280-97803-2		06/03/2017 22:29	1	G2_0637.D	DB-624 (60.25) 0.25(mm)
280-97803-4		06/03/2017 23:19	1	G2_0639.D	DB-624 (60.25) 0.25(mm)
280-97803-5		06/03/2017 23:39	1	G2_0640.D	DB-624 (60.25) 0.25(mm)
280-97803-6		06/03/2017 23:59	1	G2_0641.D	DB-624 (60.25) 0.25(mm)
280-97803-7		06/04/2017 00:19	1	G2_0642.D	DB-624 (60.25) 0.25(mm)
280-97803-8		06/04/2017 00:40	1	G2_0643.D	DB-624 (60.25) 0.25(mm)
280-97803-9		06/04/2017 01:00	1	G2_0644.D	DB-624 (60.25) 0.25(mm)
280-97803-10		06/04/2017 01:20	1	G2_0645.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/04/2017 01:40	1		DB-624 (60.25) 0.25(mm)
280-97803-12		06/04/2017 02:00	1	G2_0647.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/04/2017 02:20	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/04/2017 02:40	1		DB-624 (60.25) 0.25(mm)
CCVC 280-376040/37		06/04/2017 06:20	1	G2_0660.D	DB-624 (60.25) 0.25(mm)
CCVC 280-376040/38		06/04/2017 06:40	1	G2_0661.D	DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: VMS_G2 Start Date: 06/05/2017 17:20

Analysis Batch Number: 376196 End Date: 06/06/2017 03:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-376196/1		06/05/2017 17:20	1	G2_0688.D	DB-624 (60.25) 0.25(mm)
CCV 280-376196/2		06/05/2017 18:06	1	G2_0690.D	DB-624 (60.25) 0.25(mm)
CCV 280-376196/3		06/05/2017 18:26	1	G2_0691.D	DB-624 (60.25) 0.25(mm)
CCV 280-376196/4		06/05/2017 18:47	1	G2_0692.D	DB-624 (60.25) 0.25(mm)
CCV 280-376196/5		06/05/2017 19:24	1		DB-624 (60.25) 0.25(mm)
LCS 280-376205/3-A		06/05/2017 19:44	1	G2_0694.D	DB-624 (60.25) 0.25(mm)
MB 280-376205/1-A		06/05/2017 20:04	1	G2_0695.D	DB-624 (60.25) 0.25(mm)
LCS 280-376205/2-A		06/05/2017 20:25	1	G2_0696.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2017 20:49	1		DB-624 (60.25) 0.25(mm)
280-97803-1		06/05/2017 21:09	1	G2_0698.D	DB-624 (60.25) 0.25(mm)
280-97803-11		06/05/2017 21:29	1	G2_0699.D	DB-624 (60.25) 0.25(mm)
280-97803-13		06/05/2017 21:50	1	G2_0700.D	DB-624 (60.25) 0.25(mm)
280-97803-14		06/05/2017 22:10	1	G2_0701.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2017 22:34	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2017 22:55	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2017 23:15	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2017 23:35	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/05/2017 23:55	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/06/2017 00:16	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/06/2017 00:36	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/06/2017 00:56	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/06/2017 01:16	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/06/2017 01:37	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/06/2017 01:57	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/06/2017 02:17	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/06/2017 02:37	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/06/2017 02:58	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/06/2017 03:18	1		DB-624 (60.25) 0.25(mm)
CCVC 280-376196/33		06/06/2017 03:38	1	G2_0717.D	DB-624 (60.25) 0.25(mm)
CCVC 280-376196/34		06/06/2017 03:58	1	G2_0718.D	DB-624 (60.25) 0.25(mm)

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GCMS Volatile CCV & Batch Data Review Checklist

LIMS Batch Number:	Worklist #: 59400	Instrument ID: GC2
Analyst/1st Reviewer: AOD Date: 6/3/17		Analytical Method (circle): 624 (8260B) 8260 SIM Other____
QC Type (circle): Standard DOD Q4 DoD Q5 QAPP_____ Other_____		
Matrix (circle one): Water (Solid)		Circle: 5-mL 20-mL Meth Ext (5 g)

Review Items	NA	Yes	No	2nd Rev	Comments (List NCM #)
A. Tune & Continuing Calibration					
1. Did BFB meet tune criteria? If CFCs, did autotune meet SOP criteria?		✓		✓	Time of injection: 1900
2. Was the correct ICAL used for quantitation? Date and instrument ID of ICAL verified? (Check in both Chrom/Target and TALS)		✓		✓	
3. Is ICAL locked in TALS and Chrom?		✓		✓	
4. Do RFs meet minimum criteria? (624 – not method defined) (8260B-SPCCs = Chloromethane, 1,1-Dichloroethane, Bromoform ≥0.1; Chlorobenzene, 1,1,2,2-Tetrachloroethane ≥0.3)		✓		✓	
5. Does %Difference/%Drift meet criteria? (624: cmpd specific-Table 5 Q value) (8260B: ≤20% for CCCs; ≤20% for all cmpds/surrogates if CCCs not on list); (DOD ± 20%)		✓		✓	(8260B: %D high, samples ND? List NCM) NCM: STD VAR Chloroethane +23.1 %D Isopropyl Ether +52.1 %D
6. Are the Internal Standard area responses within method limits? (624 – not method defined) (8260B -- 50% - 200% of ICAL mid pt)		✓		✓	
7. Are the Internal standard retention times within method limits? (624, ±30 sec of ICAL mid pt) (8260B, ±30 sec of ICAL mid pt)		✓		✓	
8. Isomeric pairs checked for elution order and correct peak assignment? • Vinyl Acetate / Isopropyl Ether • 1,2- & 1,3-& 1,4-Dichlorobenzene • Ethylbenzene / m- & p-Xylenes • o-Xylene / Styrene • 1,3,5- & 1,2,4-Trimethylbenzene / Isopropylbenzene / sec-butylbenzene • 2- & 4-Chlorotoluene / n-Propylbenzene • MIBK / 2-Hexanone • Methyl Methacrylate / Ethyl Methacrylate • 1,1-Dichloroethene / cis-1,2- & trans-1,2-Dichloroethene • 1,2,3- & 1,2,4-Trichlorobenzene • 1,1-Dichloropropene / cis-1,3- & trans-1,3-Dichloropropene // 1,2,3-Trichloropropane • Chlorobenzene-d5 // 1,1,1,2-Tetrachloroethane • Trichlorofluoromethane // Freon 113 • Hexane // Vinyl Acetate (Chrom: View//Documents//Methods//Isomers)				✓	
Were manual integrations performed correctly and properly documented? (dated, initialed and reason given) 2nd review of all MIs required		✓		✓	

Comments:_____

2nd Reviewer: _____ Review Date: 6/5/17

Sequence Name: C:\msdchem\1\sequence\060317LL.s
Comment:
Operator: DUKESA
Data Path: C:\msdchem\1\DATA\060317LL\
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Test America Denver
Instrument: G2
DV-MS-0010 (8260B/624) (Circle)
Purge Volume: (20mL/5mL(5g)) (Circle)
Tune Time: 1900-0640
Lims Batch: 376040
376044

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

Sequence Barcode Options
(X) On Mismatch, Inject Anyway
( ) On Mismatch, Don't Inject
( ) Barcode Disabled

Line			Sample Name/Misc Info		
1)	Sample	100	G2_0628	BFBS	BFB
2)	Sample	10	G2_0629	8260S	BLK
3)	Sample	11	G2_0630	8260S	CCV
4)	Sample	12	G2_0631	8260S	CCV
5)	Sample	13	G2_0632	8260S	MB
6)	Sample	14	G2_0633	8260S	LCS
7)	Sample	15	G2_0634	8260S	LCS (2)
8)	Sample	16	G2_0635	8260S	LCS S
9)	Sample	17	G2_0636	8260S	MB (2)
10)	Sample	18	G2_0637	8260S	280-97803-A-2-A
11)	Sample	19	G2_0638	8260S	280-97803-D-1-A
12)	Sample	20	G2_0639	8260S	280-97803-D-4-A
13)	Sample	21	G2_0640	8260S	280-97803-D-5-A
14)	Sample	22	G2_0641	8260S	280-97803-D-6-A
15)	Sample	23	G2_0642	8260S	280-97803-D-7-A
16)	Sample	24	G2_0643	8260S	280-97803-D-8-A
17)	Sample	25	G2_0644	8260S	280-97803-D-9-A
18)	Sample	26	G2_0645	8260S	280-97803-D-10-A
19)	Sample	27	G2_0646	8260S	280-97803-D-11-A
20)	Sample	28	G2_0647	8260S	280-97803-D-12-A
21)	Sample	29	G2_0648	8260S	280-97803-D-13-A ISt
22)	Sample	30	G2_0649	8260S	280-97803-D-14-A ISt
23)	Sample	31	G2_0650	8260S	280-97861-I-3-A
24)	Sample	32	G2_0651	8260S	280-97876-D-1-A
25)	Sample	33	G2_0652	8260S	280-97876-D-2-A
26)	Sample	34	G2_0653	8260S	280-97876-D-3-A
27)	Sample	35	G2_0654	8260S	280-97876-D-4-A
28)	Sample	36	G2_0655	8260S	280-97876-D-5-A
29)	Sample	37	G2_0656	8260S	280-97876-D-6-A SSM
30)	Sample	38	G2_0657	8260S	280-97876-D-7-A
31)	Sample	39	G2_0658	8260S	280-97876-D-8-A
32)	Sample	40	G2_0659	8260S	280-97876-D-9-A ISttt, RR
33)	Sample	41	G2_0660	8260S	CCVC
34)	Sample	42	G2_0661	8260S	CCVC

AP 6/5/17

TestAmerica Laboratories
Worklist Report

Worklist Name: 060317LL Worklist Number: 59400
Instrument Name: VMS_G2 Chrom Method: SO_VMSG2_8260
Purge Volume: 5.000 Units: mL
Analysis Type: VOA
Batch Directory: \\ChromNA\Denver\ChromData\VMS_G2\20170603-59400.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_G2
Run Reagent: MV-568718-D_00003 Amount Added: 1.000, Units: uL
Run Reagent: MV-ARCH SS A_00081 Amount Added: 0.900, Units: uL

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059400-001	# 1 BFB	MV-BFB_00023	BFB	voaSoilLL	1.000	uL	1.000
280-0059400-002	# 2 CCV	MV-2cleve+AVA_00025 MV-568718-D_00003 MV-Gas/Ket A_00060 MV-Main A_00030	CCV	voaSoilLL	5.000	g	1.000
280-0059400-003	# 3 CCV	MV-568718-D_00003 MV-Supp A_00024	CCV	voaSoilLL	5.000	g	1.000
280-0059400-004	# 4 LCS	MV-Gas/Ket B_00034 MV-Main B_00017 MV-SS 2-Cleve_00035	LCS	voaSoilLL	5.000	g	1.000
280-0059400-005	# 5 LCSD	MV-Gas/Ket B_00034 MV-Main B_00017 MV-SS 2-Cleve_00035	LCSD	voaSoilLL	5.000	g	1.000
280-0059400-006	# 6 LCS	MV-Supp B_00016	LCS	voaSoilLL	5.000	g	1.000
280-0059400-008	# 8 MB		MB	voaSoilLL	5.000	g	1.000
280-0059400-009	# 9 280-62974-A-4		Client	voaSoilLL	5.000	g	1.000
280-0059400-010	#10 280-62935-A-1-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-011	#11 280-62974-A-6		Client	voaSoilLL	5.000	g	1.000
280-0059400-012	#12 280-97803-D-1-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-013	#13 280-97803-A-2-A		Client	voaSoilLL	5.000	g	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059400-014	#14 280-97803-D-4-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-015	#15 280-97803-D-5-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-016	#16 280-97803-D-6-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-017	#17 280-97803-D-7-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-018	#18 280-97803-D-8-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-019	#19 280-97803-D-9-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-020	#20 280-97803-D-10-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-021	#21 280-97803-D-11-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-022	#22 280-97803-D-12-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-023	#23 280-97803-D-13-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-024	#24 280-97803-D-14-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-025	#25 LCS 280-376043/2-A	MV-Gas/Ket B_00034 MV-Main B_00017 MV-SS 2-Cleve_00035	LCS	voaSoilLL	5.000	g	1.000
280-0059400-026	#26 MB 280-376043/1-A		MB	voaSoilLL	5.000	g	1.000
280-0059400-027	#27 280-97861-I-3-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-028	#28 280-97876-D-1-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-029	#29 280-97876-D-2-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-030	#30 280-97876-D-3-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-031	#31 280-97876-D-4-A		Client	voaSoilLL	5.000	g	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059400-032	#32 280-97876-D-5-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-033	#33 280-97876-D-6-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-034	#34 280-97876-D-7-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-035	#35 280-97876-D-8-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-036	#36 280-97876-D-9-A		Client	voaSoilLL	5.000	g	1.000
280-0059400-037	#37 CCVC	MV-2cleve+AVA_00025 MV-Gas/Ket A_00060 MV-Main A_00030	CCVC	voaSoilLL	5.000	g	1.000
280-0059400-038	#38 CCVC	MV-Supp A_00024 MV-568718-D_00003	CCVC	voaSoilLL	5.000	g	1.000

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GCMS Volatile ICAL Data Review Checklist

Supp / surr

LIMS Batch Number:	Worklist #:	ICAL Event #:	ICIS/ICV Line #s:	2nd Day ICV Line#	Instrument ID:
371118	58011	28915	25/28		GC2
2nd Day Batch/ICV Lines:					
Analyst/1st Reviewer: PDD	Prep Method (circle): 5030 5035-L 5035-H		Analytical Method (circle): 624 8260B SIM Other		
Date: 5/2/17					
QC Type (circle): Standard DQD Q4 DQD Q5 QAPP			Other		
Matrix (circle one): Water Solid			Circle: 5-mL 20-mL Meth Ext (5 g)		

Review Items	NA	Yes	No	2nd Rev	Comments
A. Tune / Calibration					
1. Did BFB meet tune criteria? If CFCs, did autotune meet SOP criteria?		/		+	
2. Were all standards injected within 12 hours of the BFB? (or 24 hours for 624?)		/		+	
3. Were ≥ 5 levels of each compound and surrogate analyzed? (624 has minimum of four standards)		/		+	
4. Was low level standard at or below RL?		/		+	
5. If calibration points removed, were reasons for removal documented? Did sufficient calibration points remain? (removal from middle of curve not allowed)		/		+	(Other than those stated in SOP)
6. Do the average RFs meet minimum RF requirements? (624 – not method defined) (8260B-SPCCs = Chloromethane, 1,1-Dichloroethane, Bromoform ≥0.1; Chlorobenzene, 1,1,2,2-Tetrachloroethane ≥0.3)		/		+	
7. Did the calibration %RSD meet method requirements? (624: ≤35% all cmpds) (8260B: ≤30% for CCCs & ≤15% for all other cmpds/surrogates)		/		+	NOT CAL FOR: TETRAHYDROTHIOPHENE
8. Was a linear or quadratic regression fit used for analytes that exceeded the %RSD requirements?		/		+	
9. If regression fit used, is r^2 ≥0.990?		/		+	
10. At least 6 consecutive points used for quadratic curves?		/		+	
11. For quadratic – examine plot: Is a tangent's slope to the curve entirely positive or negative and continuous? (does not flatten or recurve within the range of calibration)		/		+	
12. For quadratic – evaluate curve fitting errors: Does each point fall within criteria when 'read-back' against the curve? (TA requirement – CA-QS-005); (recommended limits ±30% low point & ±20% all other points) (Chrom Report = Details of Calibration per Analyte)		/		+	
13. Is the concentration intercept <|RL| for each cmpd? ("X" intercept in Chrom)		/		+	
Were manual integrations performed correctly and properly documented?(dated, initialed and reason given) 2nd review of all MIs required		/		+	
14. Was the high point checked for detector saturation?		/		+	

Review Items	NA	Yes	No	2nd Rev	Comments
15. Isomeric pairs(checked for elution order/correct peak assignment? • Vinyl Acetate / Isopropyl Ether • 1,2- & 1,3-& 1,4-Dichlorobenzene • Ethylbenzene / m- & p-Xylenes • o-Xylene / Styrene • 1,3,5- & 1,2,4-Trimethylbenzene / Isopropylbenzene / sec-butylbenzene • 2-nitropropane between bromodichloromethane & MIBK • 2- & 4-Chlorotoluene / n-Propylbenzene • MIBK / 2-Hexanone • Methyl Methacrylate / Ethyl Methacrylate • 1,1-Dichloroethene / cis-1,2- & trans-1,2-Dichloroethene • 1,2,3- & 1,2,4-Trichlorobenzene • 1,1-Dichloropropene / cis-1,3- & trans-1,3-Dichloropropene / 1,2,3-Trichloropropane • Chlorobenzene-d5 / 1,1,1,2-Tetrachloroethane • Trichlorofluoromethane / Freon 113 • Hexane / Vinyl Acetate (Chrom: View/Documents/Methods/Isomers)				+	
16. Was the 2nd source initial calibration verification standard (ICV) within required criteria? (624 = QCS method defined/Table5) (8260B = SOP defined) (DoD = ±20%) QAPP specific_____				+	
17. Was the ICV Target report printed and elution order of all analytes verified? (attach at L1 Review)				+	If No, immediate corrective action required
18. If any criteria from items 1-17 were not met, was a NCM generated and supervisor copied?				+	
19. Are all files and QC linked and processed correctly?				+	□ Files linked properly to calibration levels? □ All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed] □ Runs linked to BFB? [QC links] □ Checklist & run log scanned, attached & assigned properly?
20. Is the ICAL locked in TALS and Chrom?				+	
21. ICAL Date and Instrument ID verified?				+	

Comments: _____

MDD 5/2/17

2nd Reviewer: _____ Review Date: 5-3-17

Sequence Name: C:\msdchem\1\sequence\042617LL.s
Comment:
Operator: DUKESA
Data Path: C:\msdchem\1\DATA\042617LL\
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

Sequence Barcode Options
(X) On Mismatch, Inject Anyway
( ) On Mismatch, Don't Inject
( ) Barcode Disabled

Line			Sample Name/Misc Info		
1)	Sample	100	G2_9094	BFBS	BFB
2)	Sample	100	G2_9096	BFBS	BFB
3)	Sample	100	G2_9097	BFBS	BFB-WORK
4)	Sample	100	G2_9098	BFBS	BFB
5)	Sample	100	G2_9099	BFBS	BFB-WORK
6)	Sample	100	G2_9100	BFBS	BFB
7)	Sample	100	G2_9101	BFBS	BFB-WORK
8)	Sample	100	G2_9102	BFBS	BFB -WORK
9)	Sample	10	G2_9103	8260S	STD001
10)	Sample	11	G2_9104	8260S	STD002
11)	Sample	12	G2_9105	8260S	STD005
12)	Sample	13	G2_9106	8260S	STD010
13)	Sample	14	G2_9107	8260S	STD020
14)	Sample	15	G2_9108	8260S	ICIS
15)	Sample	16	G2_9109	8260S	STD100
16)	Sample	17	G2_9110	8260S	STD200
17)	Sample	18	G2_9111	8260S	ICV
18)	Sample	19	G2_9112	8260S	BLK
19)	Sample	20	G2_9113	8260S	mb 280-371155/1-a
20)	Sample	21	G2_9114	8260S	280-94107-a-7-b mdlv
21)	Sample	22	G2_9115	8260S	280-94107-a-8-b mdlv
22)	Sample	23	G2_9116	8260S	280-94107-a-9-b mdlv
23)	Sample	24	G2_9117	8260S	280-94107-a-10-b mdlv
24)	Sample	25	G2_9118	8260S	280-94107-a-11-c mdlv
25)	Sample	26	G2_9119	8260S	280-94107-a-11-d mdlv
26)	Sample	27	G2_9120	8260S	280-94107-a-12-h loqv
27)	Sample	28	G2_9121	8260S	280-94107-a-12-i loqv
28)	Sample	29	G2_9122	8260S	280-94107-a-12-j loqv
29)	Sample	30	G2_9123	8260S	280-94107-a-12-k loqv
30)	Sample	31	G2_9124	8260S	280-94107-a-12-l loqv
31)	Sample	32	G2_9125	8260S	280-94107-a-12-m loqv
32)	Sample	33	G2_9126	8260S	280-94107-a-12-n loqv
33)	Sample	34	G2_9127	8260S	RT TEST MAIN
34)	Sample	35	G2_9128	8260S	bl

Test America Denver
Instrument: 2042 GC2
DV-MS-0010 (8260B/624) (Circle)
Purge Volume: (20mL/5mL/5g) (Circle)
Tune Time: 2042 - 0529
Lims Batch: 371118

CE 28915
AMD 4/27/17

Q2 MDLV/LOQV

TestAmerica Laboratories
Worklist Report

Worklist Name: 042617LL
Worklist Number: 580111
Instrument Name: VMS_G2
Chrom Method: SO_VMSG2_8260
Purge Volume: 5.000
Units: mL
Analysis Type: VOA
Batch Directory: \\ChromNA\Denver\ChromData\VMS_G2\20170426-580111b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_G2
Run Reagent: MV-568718-D_00003 Amount Added: 1.000, Units: uL
Run Reagent: MV-ARCH SS A_00081 Amount Added: 0.850, Units: uL

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0058011-001	# 1 BFB	MV-BFB_00022	BFB		voaSoilLL	1.000	uL	1.000
280-0058011-007	# 7 MB		MB		voaSoilLL	5.000	g	1.000
280-0058011-020	#20 STD001	MV-568718-D_00003 MV-Supp A_00023 MV-ARCH SS A_00081	IC	1	voaSoilLL	5.000	g	1.000
280-0058011-021	#21 STD002	MV-568718-D_00003 MV-Supp A_00023 MV-ARCH SS A_00081	IC	2	voaSoilLL	5.000	g	1.000
280-0058011-022	#22 STD005	MV-568718-D_00003 MV-Supp A_00023 MV-ARCH SS A_00081	IC	3	voaSoilLL	5.000	g	1.000
280-0058011-023	#23 STD010	MV-568718-D_00003 MV-Supp A_00023 MV-ARCH SS A_00081	IC	4	voaSoilLL	5.000	g	1.000
280-0058011-024	#24 STD020	MV-568718-D_00003 MV-Supp A_00023 MV-ARCH SS A_00081	IC	5	voaSoilLL	5.000	g	1.000
280-0058011-025	#25 ICIS	MV-568718-D_00003 MV-Supp A_00023 MV-ARCH SS A_00081	ICIS	6	voaSoilLL	5.000	g	1.000
280-0058011-026	#26 STD100	MV-568718-D_00003 MV-Supp A_00023 MV-ARCH SS A_00081	IC	7	voaSoilLL	5.000	g	1.000
280-0058011-027	#27 STD200	MV-568718-D_00003 MV-Supp A_00023 MV-ARCH SS A_00081	IC	8	voaSoilLL	5.000	g	1.000
280-0058011-028	#28 ICV	MV-568718-D_00003 MV-Supp B_00015 MV-ARCH SS A_00081	ICV		voaSoilLL	5.000	g	1.000
280-0058011-029	#29 MB 280-371155/1-A		MB		voaSoilLL	5.000	g	1.000
280-0058011-030	#30 280-94107-A-7-B MDLV	MV-Supp A_00023	MDLV		voaSoilLL	5.000	g	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0058011-031	#31 280-94107-A-8-B MDLV	MV-Supp A_00023	MDLV		voaSoilLL	5.000	g	1.000
280-0058011-032	#32 280-94107-A-9-B MDLV	MV-Supp A_00023	MDLV		voaSoilLL	5.000	g	1.000
280-0058011-033	#33 280-94107-A-10-B MDLV	MV-Supp A_00023	MDLV		voaSoilLL	5.000	g	1.000
280-0058011-034	#34 280-94107-A-11-C MDLV	MV-Supp A_00023	MDLV		voaSoilLL	5.000	g	1.000
280-0058011-035	#35 280-94107-A-11-D MDLV	MV-Supp A_00023	MDLV		voaSoilLL	5.000	g	1.000
280-0058011-036	#36 280-94107-A-12-H LOQV	MV-Supp A_00023	LOQV		voaSoilLL	5.000	g	1.000
280-0058011-037	#37 280-94107-A-12-I LOQV	MV-Supp A_00023	LOQV		voaSoilLL	5.000	g	1.000
280-0058011-038	#38 280-94107-A-12-J LOQV	MV-Supp A_00023	LOQV		voaSoilLL	5.000	g	1.000
280-0058011-039	#39 280-94107-A-12-K LOQV	MV-Supp A_00023	LOQV		voaSoilLL	5.000	g	1.000
280-0058011-040	#40 280-94107-A-12-L LOQV	MV-Supp A_00023	LOQV		voaSoilLL	5.000	g	1.000
280-0058011-041	#41 280-94107-A-12-M LOQV	MV-Supp A_00023	LOQV		voaSoilLL	5.000	g	1.000
280-0058011-042	#42 280-94107-A-12-N LOQV	MV-Supp A_00023	LOQV		voaSoilLL	5.000	g	1.000
280-0058011-043	#43 TEST	MV-Main A_00030	Client		voaSoilLL	5.000	g	1.000

TestAmerica-Denver

MAIN/GAS/SURROGATE

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GCMS Volatile ICAL Data Review Checklist

LIMS Batch Number: 375537	Worklist #: 592760	ICAL Event #: 29340	ICIS/ICV Line #s: 9/12	2nd Day ICV Line# NA	Instrument ID: GT2
2nd Day Batch/ICV Lines:					
Analyst/1st Reviewer: AOD Date: 5/30/17	Prep Method (circle): 5030 5035-L 5035-H		Analytical Method (circle): 624 8260B SIM Other_____		
QC Type (circle): Standard DOD Q4 DOD Q5		QAPP_____		Other_____	
Matrix (circle one): Water Solid			Circle: 5-mL 20-mL Meth Ext (5)		

Review Items	NA	Yes	No	2nd Rev	Comments
A. Tune / Calibration					
1. Did BFB meet tune criteria? If CFCs, did autotune meet SOP criteria?		✓		✓	
2. Were all standards injected within 12 hours of the BFB? (or 24 hours for 624?)		✓		✓	
3. Were ≥ 5 levels of each compound and surrogate analyzed? (624 has minimum of four standards)		✓		✓	
4. Was low level standard at or below RL?		✓			
5. If calibration points removed, were reasons for removal documented? Did sufficient calibration points remain? (removal from middle of curve not allowed)		✓		✓	(Other than those stated in SOP)
6. Do the average RFs meet minimum RF requirements? (624 – not method defined) (8260B-SPCCs = Chloromethane, 1,1-Dichloroethane, Bromoform ≥0.1; Chlorobenzene, 1,1,2,2-Tetrachloroethane ≥0.3)		✓		✓	
7. Did the calibration %RSD meet method requirements? (624: ≤35% all cmpds) (8260B: ≤30% for CCCs & ≤15% for all other cmpds/surrogates)		✓		✓	
8. Was a linear or quadratic regression fit used for analytes that exceeded the %RSD requirements?		✓		✓	
9. If regression fit used, is r^2 ≥0.990?		✓		✓	
10. At least 6 consecutive points used for quadratic curves?		✓		✓	
11. For quadratic – examine plot: Is a tangent's slope to the curve entirely positive or negative and continuous? (does not flatten or recurve within the range of calibration)		✓		✓	
12. For quadratic – evaluate curve fitting errors: Does each point fall within criteria when 'read-back' against the curve? (TA requirement – CA-Q-S-005); (recommended limits ±30% low point & ±20% all other points) (Chrom Report = Details of Calibration per Analyte)		✓		✓	
13. Is the concentration intercept <|RL| for each cmpd? ("X" intercept in Chrom)		✓		✓	
Were manual integrations performed correctly and properly documented?(dated, initialed and reason given) 2nd review of all MIs required	✓			✓	
14. Was the high point checked for detector saturation?		✓		✓	

Review Items	NA	Yes	No	2nd Rev	Comments
15.Isomeric pairs(checked for elution order/correct peak assignment? • Vinyl Acetate / Isopropyl Ether • 1,2- & 1,3-& 1,4-Dichlorobenzene • Ethylbenzene / m- & p-Xylenes • o-Xylene / Styrene • 1,3,5- & 1,2,4-Trimethylbenzene / Isopropylbenzene / sec-butylbenzene • 2-nitropropane between bromodichloromethane & MIBK • 2- & 4-Chlorotoluene / n-Propylbenzene • MIBK / 2-Hexanone • Methyl Methacrylate / Ethyl Methacrylate • 1,1-Dichloroethene / cis-1,2- & trans-1,2-Dichloroethene • 1,2,3- & 1,2,4-Trichlorobenzene • 1,1-Dichloropropene / cis-1,3- & trans-1,3-Dichloropropene / 1,2,3-Trichloropropane • Chlorobenzene-d5 / 1,1,1,2-Tetrachloroethane • Trichlorofluoromethane / Freon 113 • Hexane / Vinyl Acetate (Chrom: View/Documents/Methods/Isomers)					
16. Was the 2nd source initial calibration verification standard (ICV) within required criteria? (624 = QCS method defined/Table5) (8260B = SOP defined) (DoD = ±20%) QAPP specific_____					BROMOMETHANE - 22.9 %D
17. Was the ICV Target report printed and elution order of all analytes verified? (attach at L1 Review)					**If No, immediate corrective action required**
18. If any criteria from items 1-17 were not met, was a NCM generated and supervisor copied?					
19. Are all files and QC linked and processed correctly?					☐ Files linked properly to calibration levels? ☐ All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed] ☐ Runs linked to BFB? [QC links] ☐ Checklist & run log scanned, attached & assigned properly?
20. Is the ICAL locked in TALS and Chrom?					
21. ICAL Date and Instrument ID verified?					

Comments: ____

Also 5/31/17

2nd Reviewer: _____ **Review Date:** 6/1/17

Sequence Name:: C:\msdchem\1\sequence\053017LL.s
Comment::
Operator:: DUKESA
Data Path:: C:\msdchem\1\DATA\053017LL\
Instrument Control Pre-Seq Cmd::
Data Analysis Pre-Seq Cmd::

Instrument Control Post-Seq Cmd::
Data Analysis Post-Seq Cmd::

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

Sequence Barcode Options
(X) On Mismatch, Inject Anyway
( ) On Mismatch, Don't Inject
( ) Barcode Disabled

Line			Sample Name/Misc Info		
1)	Sample	100	G2_0473	BFBS	BFB
2)	Sample	10	G2_0474	8260S	CCV
3)	Sample	11	G2_0475	8260S	CCV
4)	Sample	12	G2_0476	8260S	STD001
5)	Sample	13	G2_0477	8260S	STD002
6)	Sample	14	G2_0478	8260S	STD005
7)	Sample	15	G2_0479	8260S	STD010
8)	Sample	16	G2_0480	8260S	STD020
9)	Sample	17	G2_0481	8260S	ICIS
10)	Sample	18	G2_0482	8260S	STD100
11)	Sample	19	G2_0483	8260S	STD200
12)	Sample	20	G2_0484	8260S	BLK
13)	Sample	21	G2_0485	8260S	ICV
14)	Sample	22	G2_0486	8260S	MB
15)	Sample	23	G2_0487	8260S	~~LCS~~ICV
16)	Sample	24	G2_0488	8260S	~~ICV~~LCS
17)	Sample	25	G2_0489	8260S	280-97622-f-1-a
18)	Sample	26	G2_0490	8260S	280-97622-f-2-a
19)	Sample	27	G2_0491	8260S	280-97622-f-3-a
20)	Sample	28	G2_0492	8260S	280-97622-f-4-a
21)	Sample	29	G2_0493	8260S	280-97622-f-5-a ss↑
22)	Sample	30	G2_0494	8260S	280-97622-f-6-a
23)	Sample	31	G2_0495	8260S	280-97622-e-7-a
24)	Sample	32	G2_0496	8260S	280-97622-c-8-a
25)	Sample	33	G2_0497	8260S	280-97434-e-1-a
26)	Sample	34	G2_0498	8260S	280-97434-a-2-a
27)	Sample	35	G2_0499	8260S	280-97393-d-1-a
28)	Sample	36	G2_0500	8260S	280-97393-d-2-a
29)	Sample	37	G2_0501	8260S	280-97393-d-3-a
30)	Sample	38	G2_0502	8260S	280-97393-d-4-a
31)	Sample	39	G2_0503	8260S	280-97393-d-5-a
32)	Sample	40	G2_0504	8260S	280-97393-d-6-a
33)	Sample	41	G2_0505	8260S	CCVC
34)	Sample	42	G2_0506	8260S	blk

E 29340

Test America Denver
Instrument: 1719-0446
DV-MS-0010 (8260B/624) (Circle)
Purge Volume: (20mL/5mL/5g) (Circle)
Tune Time: G2
Lims Batch: 375537
375580
AM 5/31/17

Last Modified: Wed May 31 006::45::40 20017 Page:: 1

TestAmerica Laboratories
Worklist Report

Worklist Name: 053017LL
Worklist Number: 59276
Instrument Name: VMS_G2
Chrom Method: SO_VMSG2_8260
Purge Volume: 5.000
Units: mL
Analysis Type: VOA
Batch Directory: \\ChromNA\Denver\ChromData\VMS_G2\20170530-59276.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_G2
Run Reagent: MV-568718-D_00003 Amount Added: 1.000, Units: uL
Run Reagent: MV-ARCH SS A_00081 Amount Added: 0.800, Units: uL

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059276-001	# 1 BFB	MV-BFB_00023	BFB		voaSoilLL	1.000	uL	1.000
280-0059276-002	# 2 CCV	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	CCV		voaSoilLL	5.000	g	1.000
280-0059276-003	# 3 CCV	MV-568718-D_00003 MV-Supp A_00023	CCV		voaSoilLL	5.000	g	1.000
280-0059276-004	# 4 STD001	MV-568718-D_00003 MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025 MV-ARCH SS A_00081	IC	1	voaSoilLL	5.000	g	1.000
280-0059276-005	# 5 STD002	MV-568718-D_00003 MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025 MV-ARCH SS A_00081	IC	2	voaSoilLL	5.000	g	1.000
280-0059276-006	# 6 STD005	MV-568718-D_00003 MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025 MV-ARCH SS A_00081	IC	3	voaSoilLL	5.000	g	1.000
280-0059276-007	# 7 STD010	MV-568718-D_00003 MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025 MV-ARCH SS A_00081	IC	4	voaSoilLL	5.000	g	1.000
280-0059276-008	# 8 STD020	MV-568718-D_00003 MV-Main A_00030 MV-2cleve+AVA_00025 MV-Gas/Ket A_00060 MV-ARCH SS A_00081	IC	5	voaSoilLL	5.000	g	1.000
280-0059276-009	# 9 ICIS	MV-568718-D_00003 MV-Main A_00030 MV-2cleve+AVA_00025 MV-Gas/Ket A_00060 MV-ARCH SS A_00081	ICIS	6	voaSoilLL	5.000	g	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059276-010	#10 STD100	MV-568718-D_00003 MV-Main A_00030 MV-2cleve+AVA_00025 MV-Gas/Ket A_00060 MV-ARCH SS A_00081	IC	7	voaSoilLL	5.000	g	1.000
280-0059276-011	#11 STD200	MV-568718-D_00003 MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025 MV-ARCH SS A_00081	IC	8	voaSoilLL	5.000	g	1.000
280-0059276-012	#12 ICV	MV-Gas/Ket B_00034 MV-Main B_00017 MV-SS 2-Cleve_00035	ICV		voaSoilLL	5.000	g	1.000
280-0059276-013	#13 LCS	MV-Gas/Ket B_00034 MV-Main B_00017 MV-SS 2-Cleve_00035 MV-ARCH SS A_00081 MV-568718-D_00003	LCS		voaSoilLL	5.000	g	1.000
280-0059276-014	#14 LCSD	MV-Gas/Ket B_00034 MV-Main B_00017 MV-SS 2-Cleve_00035	LCSD		voaSoilLL	5.000	g	1.000
280-0059276-015	#15 MB		MB		voaSoilLL	5.000	g	1.000
280-0059276-016	#16 280-62974-A-4		Client		voaSoilLL	5.000	g	1.000
280-0059276-017	#17 280-62935-A-1-A		Client		voaSoilLL	5.000	g	1.000
280-0059276-018	#18 280-62974-A-6		Client		voaSoilLL	5.000	g	1.000
280-0059276-019	#19 280-97622-F-1-A		Client		voaSoilLL	5.000	g	1.000
280-0059276-020	#20 280-97622-F-2-A		Client		voaSoilLL	5.000	g	1.000
280-0059276-021	#21 280-97622-F-3-A		Client		voaSoilLL	5.000	g	1.000
280-0059276-022	#22 280-97622-F-4-A		Client		voaSoilLL	5.000	g	1.000
280-0059276-023	#23 280-97622-F-5-A		Client		voaSoilLL	5.000	g	1.000
280-0059276-024	#24 280-97622-F-6-A		Client		voaSoilLL	5.000	g	1.000
280-0059276-025	#25 280-97622-E-7-A		Client		voaSoilLL	5.000	g	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059276-026	#26 280-97622-C-8-A		Client		voaSoilLL	5.000	g	1.000
280-0059276-027	#27 280-97434-E-1-A		Client		voaSoilLL	5.000	g	1.000
280-0059276-028	#28 280-97434-A-2-A		Client		voaSoilLL	5.000	g	1.000
280-0059276-029	#29 280-97393-D-1-A		Client		voaSoilLL	5.000	g	1.000
280-0059276-030	#30 280-97393-D-2-A		Client		voaSoilLL	5.000	g	1.000
280-0059276-031	#31 280-97393-D-3-A		Client		voaSoilLL	5.000	g	1.000
280-0059276-032	#32 280-97393-D-4-A		Client		voaSoilLL	5.000	g	1.000
280-0059276-033	#33 280-97393-D-5-A		Client		voaSoilLL	5.000	g	1.000
280-0059276-034	#34 280-97393-D-6-A		Client		voaSoilLL	5.000	g	1.000
280-0059276-035	#35 CCVC	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	CCVC		voaSoilLL	5.000	g	1.000

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 376042 Batch Start Date: 06/03/17 15:00 Batch Analyst: Dukes, Aaron D

Batch Method: 5035 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount	AnalysisComment	
MB 280-376042/1		5035, 8260B		30 g	35 g	5 g	5 mL		
LCS 280-376042/2		5035, 8260B		30 g	35 g	5 g	5 mL		
LCS 280-376042/3		5035, 8260B		30 g	35 g	5 g	5 mL	SUPP	
280-97803-A-2	TB-01	5035, 8260B	T	+030.480 g	35.480 g	5 g	5 mL	TRIP BLANK	
280-97803-D-4	SS025-SS02	5035, 8260B	T	+030.768 g	36.723 g	5.955 g	5 mL		
280-97803-D-5	SS025-SB02(0-2)	5035, 8260B	T	+030.825 g	37.063 g	6.238 g	5 mL		
280-97803-D-6	SS025-SS03	5035, 8260B	T	+030.422 g	37.232 g	6.81 g	5 mL		
280-97803-D-7	SS025-SB03(0-2)	5035, 8260B	T	+030.592 g	36.150 g	5.558 g	5 mL		
280-97803-D-8	SS025-SS04	5035, 8260B	T	+030.709 g	36.725 g	6.016 g	5 mL		
280-97803-D-9	SS025-SB04(0-2)	5035, 8260B	T	+030.492 g	36.419 g	5.927 g	5 mL		
280-97803-D-10	SS025-SS05	5035, 8260B	T	+030.749 g	36.843 g	6.094 g	5 mL		
280-97803-D-12	SS025-SB05(2-4)	5035, 8260B	T	+030.632 g	37.025 g	6.393 g	5 mL		

Batch Notes	
Balance ID	24850252
Blank Sand Lot #	156690

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 376205 Batch Start Date: 06/05/17 15:00 Batch Analyst: Dukes, Aaron D

Batch Method: 5035 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
MB 280-376205/1		5035, 8260B		30 g	35 g	5 g	5 mL		
LCS 280-376205/2		5035, 8260B		30 g	35 g	5 g	5 mL		
LCS 280-376205/3		5035, 8260B		30 g	35 g	5 g	5 mL		
280-97803-E-1	SS025-SS01	5035, 8260B	T	+030.803 g	37.284 g	6.481 g	5 mL		
280-97803-E-11	SS025-SB05(0-2)	5035, 8260B	T	+030.689 g	37.182 g	6.493 g	5 mL		
280-97803-E-13	SS025-SS06	5035, 8260B	T	+030.520 g	36.702 g	6.182 g	5 mL		
280-97803-E-14	SS025-SS06-a	5035, 8260B	T	+030.305 g	36.920 g	6.615 g	5 mL		

Batch Notes	
Balance ID	24850252
Blank Soil Lot Number	170485

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8270D_SIM_DOD5

Semivolatile Organic Compounds (GC/MS SIM)

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Rxi-5Sil MS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	NBZ	#	FBP	#	TPHL	#
SS025-SS01	280-97803-1	84		72		66	
SS025-SS01 DL	280-97803-1 DL	68	D	63	D	62	D
SS025-SS02	280-97803-4	72		74		81	
SS025-SB02(0-2)	280-97803-5	54		65		58	
SS025-SS03	280-97803-6	67		66		76	
SS025-SB03(0-2)	280-97803-7	63		74		78	
SS025-SS04	280-97803-8	70		66		82	
SS025-SS04 DL	280-97803-8 DL	70	D	68	D	87	D
SS025-SB04(0-2)	280-97803-9	77		76		67	
SS025-SS05	280-97803-10	60		65		85	
SS025-SS05 DL	280-97803-10 DL	0	D Q	0	D Q	0	D Q
SS025-SB05(0-2)	280-97803-11	69		74		72	
SS025-SB05(2-4)	280-97803-12	60		68		75	
SS025-SS06	280-97803-13	58		64		72	
SS025-SS06-a	280-97803-14	57		67		72	
	MB 280-376088/1-A	80		85		85	
	MB 280-377246/1-A	92		92		89	
	LCS 280-376088/2-A	82		85		83	
	LCS 280-377246/2-A	92		84		84	
SS025-SB04(0-2) MS	280-97803-9 MS	82		81		70	
SS025-SB04(0-2) MSD	280-97803-9 MSD	87		86		76	

	QC LIMITS
NBZ = Nitrobenzene-d5 (Surr)	44-125
FBP = 2-Fluorobiphenyl (Surr)	46-115
TPHL = Terphenyl-d14 (Surr)	58-133

Column to be used to flag recovery values

FORM II 8270D SIM

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rxi-5Sil MS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	NBZ #	FBP #	TPHL #
SS025-AB-053117	280-97803-3	76	73	85
	MB 280-376215/1-A	79	71	86
	LCS 280-376215/2-A	90	83	83

	QC LIMITS
NBZ = Nitrobenzene-d5 (Surr)	55-111
FBP = 2-Fluorobiphenyl (Surr)	53-106
TPHL = Terphenyl-d14 (Surr)	58-132

Column to be used to flag recovery values

FORM II 8270D SIM

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F7046.D

Lab ID: LCS 280-376088/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1-Methylnaphthalene	27.3	20.2	74	43-111	
2-Methylnaphthalene	27.3	22.3	82	39-114	
Acenaphthene	27.3	21.2	78	44-111	
Acenaphthylene	27.3	18.7	69	39-116	
Anthracene	27.3	19.9	73	50-114	
Benzo[a]anthracene	27.3	21.2	78	54-122	
Benzo[a]pyrene	27.3	18.2	67	50-125	
Benzo[b]fluoranthene	27.3	21.2	78	53-128	
Benzo[g,h,i]perylene	27.3	21.5	79	49-127	
Benzo[k]fluoranthene	27.3	21.2	78	56-123	
Chrysene	27.3	24.7	91	57-118	
Dibenz(a,h)anthracene	27.3	20.9	77	50-129	
Fluoranthene	27.3	21.7	79	55-119	
Fluorene	27.3	21.9	80	47-114	
Indeno[1,2,3-cd]pyrene	27.3	20.7	76	49-130	
Naphthalene	27.3	21.4	78	38-111	
Phenanthrene	27.3	21.5	79	49-113	
Pyrene	27.3	21.6	79	55-117	

Column to be used to flag recovery and RPD values

FORM III 8270D SIM

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Water Level: Low Lab File ID: F7152.D

Lab ID: LCS 280-376215/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1-Methylnaphthalene	0.900	0.615	68	41-115	
2-Methylnaphthalene	0.900	0.654	73	39-114	
Acenaphthene	0.900	0.685	76	48-114	
Acenaphthylene	0.900	0.638	71	35-121	
Anthracene	0.900	0.715	79	53-119	
Benzo[a]anthracene	0.900	0.762	85	59-120	
Benzo[a]pyrene	0.900	0.715	79	53-120	
Benzo[b]fluoranthene	0.900	0.735	82	53-126	
Benzo[g,h,i]perylene	0.900	0.667	74	44-128	
Benzo[k]fluoranthene	0.900	0.765	85	54-125	
Chrysene	0.900	0.841	93	57-120	
Dibenz(a,h)anthracene	0.900	0.689	77	44-131	
Fluoranthene	0.900	0.743	83	58-120	
Fluorene	0.900	0.716	80	50-118	
Indeno[1,2,3-cd]pyrene	0.900	0.690	77	48-130	
Naphthalene	0.900	0.611	68	43-114	
Phenanthrene	0.900	0.696	77	53-115	
Pyrene	0.900	0.754	84	53-121	

Column to be used to flag recovery and RPD values

FORM III 8270D SIM

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F7339.D

Lab ID: LCS 280-377246/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1-Methylnaphthalene	28.8	20.7	72	43-111	
2-Methylnaphthalene	28.8	22.3	77	39-114	
Acenaphthene	28.8	21.7	75	44-111	
Acenaphthylene	28.8	20.8	72	39-116	
Anthracene	28.8	22.7	79	50-114	
Benzo[a]anthracene	28.8	24.4	85	54-122	
Benzo[a]pyrene	28.8	21.8	75	50-125	
Benzo[b]fluoranthene	28.8	22.7	79	53-128	
Benzo[g,h,i]perylene	28.8	18.3	63	49-127	
Benzo[k]fluoranthene	28.8	23.6	82	56-123	
Chrysene	28.8	26.5	92	57-118	
Dibenz(a,h)anthracene	28.8	18.4	64	50-129	
Fluoranthene	28.8	24.6	85	55-119	
Fluorene	28.8	22.4	78	47-114	
Indeno[1,2,3-cd]pyrene	28.8	18.9	65	49-130	
Naphthalene	28.8	21.1	73	38-111	
Phenanthrene	28.8	22.1	77	49-113	
Pyrene	28.8	25.0	87	55-117	

Column to be used to flag recovery and RPD values

FORM III 8270D SIM

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F7347.D

Lab ID: 280-97803-9 MS Client ID: SS025-SB04(0-2) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1-Methylnaphthalene	35.9	0.61 U	25.3	71	43-111	
2-Methylnaphthalene	35.9	0.81 U	27.1	76	39-114	
Acenaphthene	35.9	0.32 U	29.0	81	44-111	
Acenaphthylene	35.9	0.28 J	25.5	70	39-116	
Anthracene	35.9	3.0 U	26.3	73	50-114	
Benzo[a]anthracene	35.9	3.0 U	27.4	76	54-122	
Benzo[a]pyrene	35.9	3.0 U	24.8	69	50-125	
Benzo[b]fluoranthene	35.9	3.0 U	25.7	72	53-128	
Benzo[g,h,i]perylene	35.9	3.0 U	21.4	60	49-127	
Benzo[k]fluoranthene	35.9	3.0 U	26.5	74	56-123	
Chrysene	35.9	3.0 U	30.0	83	57-118	
Dibenz(a,h)anthracene	35.9	3.0 U	21.5	60	50-129	
Fluoranthene	35.9	3.0 U	26.2	73	55-119	
Fluorene	35.9	0.81 U	28.1	78	47-114	
Indeno[1,2,3-cd]pyrene	35.9	3.0 U	21.9	61	49-130	
Naphthalene	35.9	0.81 U	25.2	70	38-111	
Phenanthrene	35.9	3.0 U	25.9	72	49-113	
Pyrene	35.9	3.0 U	26.2	73	55-117	

Column to be used to flag recovery and RPD values

FORM III 8270D SIM

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F7348.D

Lab ID: 280-97803-9 MSD Client ID: SS025-SB04(0-2) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1-Methylnaphthalene	34.9	25.4	73	0	20	43-111	
2-Methylnaphthalene	34.9	27.3	78	1	20	39-114	
Acenaphthene	34.9	27.5	79	5	20	44-111	
Acenaphthylene	34.9	25.4	72	0	20	39-116	
Anthracene	34.9	26.2	75	0	20	50-114	
Benzo[a]anthracene	34.9	27.4	79	0	20	54-122	
Benzo[a]pyrene	34.9	25.1	72	1	20	50-125	
Benzo[b]fluoranthene	34.9	26.8	77	4	20	53-128	
Benzo[g,h,i]perylene	34.9	22.2	64	4	20	49-127	
Benzo[k]fluoranthene	34.9	27.3	78	3	20	56-123	
Chrysene	34.9	30.1	86	0	20	57-118	
Dibenz(a,h)anthracene	34.9	22.5	65	5	20	50-129	
Fluoranthene	34.9	27.2	78	4	20	55-119	
Fluorene	34.9	28.1	81	0	20	47-114	
Indeno[1,2,3-cd]pyrene	34.9	22.3	64	2	20	49-130	
Naphthalene	34.9	25.4	73	1	20	38-111	
Phenanthrene	34.9	25.9	74	0	20	49-113	
Pyrene	34.9	27.3	78	4	20	55-117	

Column to be used to flag recovery and RPD values

FORM III 8270D SIM

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab File ID: F7045.D Lab Sample ID: MB 280-376088/1-A

Matrix: Solid Date Extracted: 06/05/2017 08:51

Instrument ID: SMS_F Date Analyzed: 06/07/2017 09:24

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-376088/2-A	F7046.D	06/07/2017 09:50
SS025-SS02	280-97803-4	G5_1434.D	06/08/2017 12:12
SS025-SB02(0-2)	280-97803-5	G5_1435.D	06/08/2017 12:39
SS025-SS03	280-97803-6	G5_1436.D	06/08/2017 13:06
SS025-SB03(0-2)	280-97803-7	G5_1437.D	06/08/2017 13:33
SS025-SS05	280-97803-10	G5_1440.D	06/08/2017 14:55
SS025-SB05(2-4)	280-97803-12	G5_1442.D	06/08/2017 15:50
SS025-SS06	280-97803-13	G5_1443.D	06/08/2017 16:18
SS025-SS06-a	280-97803-14	G5_1444.D	06/08/2017 16:45
SS025-SS01	280-97803-1	F7136.D	06/12/2017 19:59
SS025-SS01 DL	280-97803-1 DL	F7137.D	06/12/2017 20:25
SS025-SS05 DL	280-97803-10 DL	F7138.D	06/12/2017 20:51

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab File ID: F7151.D Lab Sample ID: MB 280-376215/1-A

Matrix: Water Date Extracted: 06/06/2017 07:45

Instrument ID: SMS_F Date Analyzed: 06/13/2017 06:49

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-376215/2-A	F7152.D	06/13/2017 07:14
SS025-AB-053117	280-97803-3	F7162.D	06/13/2017 11:30

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab File ID: F7338.D Lab Sample ID: MB 280-377246/1-A

Matrix: Solid Date Extracted: 06/14/2017 09:42

Instrument ID: SMS_F Date Analyzed: 06/21/2017 19:51

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-377246/2-A	F7339.D	06/21/2017 20:17
SS025-SS04	280-97803-8	F7345.D	06/21/2017 22:55
SS025-SB04(0-2)	280-97803-9	F7346.D	06/21/2017 23:21
SS025-SB04(0-2) MS	280-97803-9 MS	F7347.D	06/21/2017 23:47
SS025-SB04(0-2) MSD	280-97803-9 MSD	F7348.D	06/22/2017 00:13
SS025-SB05(0-2)	280-97803-11	F7349.D	06/22/2017 00:39
SS025-SS04 DL	280-97803-8 DL	F7371.D	06/22/2017 21:23

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab File ID: F6543.D DFTPP Injection Date: 05/11/2017

Instrument ID: SMS_F DFTPP Injection Time: 12:39

Analysis Batch No.: 373158

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	53.8	
68	Less than 2.0 % of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	60.2	
70	Less than 2.0 % of mass 69	0.2	(0.4) 1
127	40.0 - 60.0 % of mass 198	53.5	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.7	
275	10.0 - 30.0 % of mass 198	25.6	
365	Greater than 1.0 % of mass 198	4.0	
441	Present but less than mass 443	12.4	(78.3) 3
442	Greater than 40.0 % of mass 198	80.0	
443	17.0 - 23.0 % of mass 442	15.8	(19.7) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICIS 280-373158/2	F6544.D	05/11/2017	12:58
	STD0020 280-373158/3	F6545.D	05/11/2017	13:34
	STD0100 280-373158/4	F6546.D	05/11/2017	13:59
	STD0300 280-373158/5	F6547.D	05/11/2017	14:25
	STD1200 280-373158/6	F6548.D	05/11/2017	14:50
	STD2500 280-373158/7	F6549.D	05/11/2017	15:16
	STD5000 280-373158/8	F6550.D	05/11/2017	15:42
	STD10000 280-373158/9	F6551.D	05/11/2017	16:07
	ICV 280-373158/10	F6552.D	05/11/2017	16:33

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab File ID: F7043.D DFTPP Injection Date: 06/07/2017

Instrument ID: SMS_F DFTPP Injection Time: 08:29

Analysis Batch No.: 376394

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	48.9	
68	Less than 2.0 % of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	58.6	
70	Less than 2.0 % of mass 69	0.3	(0.5) 1
127	40.0 - 60.0 % of mass 198	52.7	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	7.4	
275	10.0 - 30.0 % of mass 198	26.4	
365	Greater than 1.0 % of mass 198	4.4	
441	Present but less than mass 443	13.8	(82.7) 3
442	Greater than 40.0 % of mass 198	83.7	
443	17.0 - 23.0 % of mass 442	16.7	(19.9) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-376394/2	F7044.D	06/07/2017	08:53
	MB 280-376088/1-A	F7045.D	06/07/2017	09:24
	LCS 280-376088/2-A	F7046.D	06/07/2017	09:50
	CCVC 280-376394/15	F7057.D	06/07/2017	15:22

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab File ID: F7122.D DFTPP Injection Date: 06/12/2017

Instrument ID: SMS_F DFTPP Injection Time: 13:22

Analysis Batch No.: 376943

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	47.9	
68	Less than 2.0 % of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	59.8	
70	Less than 2.0 % of mass 69	0.3	(0.4) 1
127	40.0 - 60.0 % of mass 198	52.6	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.9	
275	10.0 - 30.0 % of mass 198	27.2	
365	Greater than 1.0 % of mass 198	5.3	
441	Present but less than mass 443	12.5	(81.3) 3
442	Greater than 40.0 % of mass 198	75.0	
443	17.0 - 23.0 % of mass 442	15.3	(20.4) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-376943/2	F7123.D	06/12/2017	13:49
SS025-SS01	280-97803-1	F7136.D	06/12/2017	19:59
SS025-SS01 DL	280-97803-1 DL	F7137.D	06/12/2017	20:25
SS025-SS05 DL	280-97803-10 DL	F7138.D	06/12/2017	20:51
	CCVC 280-376943/27	F7148.D	06/13/2017	01:09

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab File ID: F7149.D DFTPP Injection Date: 06/13/2017

Instrument ID: SMS_F DFTPP Injection Time: 06:08

Analysis Batch No.: 377034

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	51.0	
68	Less than 2.0 % of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	61.4	
70	Less than 2.0 % of mass 69	0.3	(0.6) 1
127	40.0 - 60.0 % of mass 198	53.0	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	7.6	
275	10.0 - 30.0 % of mass 198	27.4	
365	Greater than 1.0 % of mass 198	4.5	
441	Present but less than mass 443	13.7	(89.8) 3
442	Greater than 40.0 % of mass 198	80.6	
443	17.0 - 23.0 % of mass 442	15.2	(18.9) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-377034/2	F7150.D	06/13/2017	06:21
	MB 280-376215/1-A	F7151.D	06/13/2017	06:49
	LCS 280-376215/2-A	F7152.D	06/13/2017	07:14
SS025-AB-053117	280-97803-3	F7162.D	06/13/2017	11:30
	CCVC 280-377034/18	F7166.D	06/13/2017	13:14

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab File ID: F7336.D DFTPP Injection Date: 06/21/2017

Instrument ID: SMS_F DFTPP Injection Time: 19:11

Analysis Batch No.: 378253

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	51.5	
68	Less than 2.0 % of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	60.9	
70	Less than 2.0 % of mass 69	0.4	(0.6) 1
127	40.0 - 60.0 % of mass 198	54.1	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.9	
275	10.0 - 30.0 % of mass 198	25.2	
365	Greater than 1.0 % of mass 198	3.8	
441	Present but less than mass 443	8.9	(79.2) 3
442	Greater than 40.0 % of mass 198	57.6	
443	17.0 - 23.0 % of mass 442	11.2	(19.5) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-378253/2	F7337.D	06/21/2017	19:23
	MB 280-377246/1-A	F7338.D	06/21/2017	19:51
	LCS 280-377246/2-A	F7339.D	06/21/2017	20:17
SS025-SS04	280-97803-8	F7345.D	06/21/2017	22:55
SS025-SB04(0-2)	280-97803-9	F7346.D	06/21/2017	23:21
SS025-SB04(0-2) MS	280-97803-9 MS	F7347.D	06/21/2017	23:47
SS025-SB04(0-2) MSD	280-97803-9 MSD	F7348.D	06/22/2017	00:13
SS025-SB05(0-2)	280-97803-11	F7349.D	06/22/2017	00:39
	CCVC 280-378253/24	F7359.D	06/22/2017	04:59

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab File ID: F7361.D DFTPP Injection Date: 06/22/2017

Instrument ID: SMS_F DFTPP Injection Time: 17:13

Analysis Batch No.: 378412

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	57.3	
68	Less than 2.0 % of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	69.2	
70	Less than 2.0 % of mass 69	0.4	(0.6) 1
127	40.0 - 60.0 % of mass 198	54.1	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.8	
275	10.0 - 30.0 % of mass 198	23.6	
365	Greater than 1.0 % of mass 198	3.5	
441	Present but less than mass 443	7.8	(88.9) 3
442	Greater than 40.0 % of mass 198	43.8	
443	17.0 - 23.0 % of mass 442	8.8	(20.0) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-378412/2	F7362.D	06/22/2017	17:25
SS025-SS04 DL	280-97803-8 DL	F7371.D	06/22/2017	21:23
	CCVC 280-378412/27	F7387.D	06/23/2017	04:14

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab File ID: G5_1342.D DFTPP Injection Date: 06/01/2017

Instrument ID: SMS_G5 DFTPP Injection Time: 10:22

Analysis Batch No.: 375238

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	43.2	
68	Less than 2.0 % of mass 69	0.9	(1.7) 1
69	Mass 69 relative abundance	52.0	
70	Less than 2.0 % of mass 69	0.2	(0.5) 1
127	40.0 - 60.0 % of mass 198	49.4	
197	Less than 1.0 % of mass 198	0.7	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.6	
275	10.0 - 30.0 % of mass 198	23.0	
365	Greater than 1.0 % of mass 198	3.2	
441	Present but less than mass 443	10.2	(83.0) 3
442	Greater than 40.0 % of mass 198	65.9	
443	17.0 - 23.0 % of mass 442	12.3	(18.7) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICIS 280-375238/2	G5_1343.D	06/01/2017	10:39
	STD0020 280-375238/3	G5_1344.D	06/01/2017	11:09
	STD0100 280-375238/4	G5_1345.D	06/01/2017	11:37
	STD0300 280-375238/5	G5_1346.D	06/01/2017	12:04
	STD1200 280-375238/6	G5_1347.D	06/01/2017	12:31
	STD2500 280-375238/7	G5_1348.D	06/01/2017	12:58
	STD5000 280-375238/8	G5_1349.D	06/01/2017	13:26
	STD10000 280-375238/9	G5_1350.D	06/01/2017	13:53
	ICV 280-375238/10	G5_1351.D	06/01/2017	14:20

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab File ID: G5_1427.D DFTPP Injection Date: 06/08/2017

Instrument ID: SMS_G5 DFTPP Injection Time: 08:58

Analysis Batch No.: 376547

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	44.5	
68	Less than 2.0 % of mass 69	0.8	(1.9) 1
69	Mass 69 relative abundance	39.8	
70	Less than 2.0 % of mass 69	0.2	(0.6) 1
127	40.0 - 60.0 % of mass 198	46.4	
197	Less than 1.0 % of mass 198	0.7	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	7.0	
275	10.0 - 30.0 % of mass 198	23.6	
365	Greater than 1.0 % of mass 198	4.1	
441	Present but less than mass 443	11.4	(79.1) 3
442	Greater than 40.0 % of mass 198	68.6	
443	17.0 - 23.0 % of mass 442	14.4	(20.9) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-376547/2	G5_1428.D	06/08/2017	09:13
SS025-SS02	280-97803-4	G5_1434.D	06/08/2017	12:12
SS025-SB02(0-2)	280-97803-5	G5_1435.D	06/08/2017	12:39
SS025-SS03	280-97803-6	G5_1436.D	06/08/2017	13:06
SS025-SB03(0-2)	280-97803-7	G5_1437.D	06/08/2017	13:33
SS025-SS05	280-97803-10	G5_1440.D	06/08/2017	14:55
SS025-SB05(2-4)	280-97803-12	G5_1442.D	06/08/2017	15:50
SS025-SS06	280-97803-13	G5_1443.D	06/08/2017	16:18
SS025-SS06-a	280-97803-14	G5_1444.D	06/08/2017	16:45
	CCVC 280-376547/19	G5_1445.D	06/08/2017	17:12

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Sample No.: ICIS 280-373158/2 Date Analyzed: 05/11/2017 12:58

Instrument ID: SMS_F GC Column: Rxi-5Sil MS ID: 0.25(mm)

Lab File ID (Standard): F6544.D Heated Purge: (Y/N) N

Calibration ID: 29139

		ANT		PHN		CRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		26826	6.04	49006	7.31	41978	11.38
UPPER LIMIT		53652	6.54	98012	7.81	83956	11.88
LOWER LIMIT		13413	5.54	24503	6.81	20989	10.88
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-373158/10		28386	6.03	52370	7.30	47349	11.36
CCV 280-376394/2		23106	6.03	45103	7.30	41920	11.38
MB 280-376088/1-A		17315	6.04	33184	7.31	28720	11.38
LCS 280-376088/2-A		14993	6.03	29386	7.30	24448	11.37
CCVC 280-376394/15		32321	6.03	63298	7.30	57804	11.36
CCV 280-376943/2		21849	6.04	41871	7.31	38037	11.39
280-97803-1	SS025-SS01	26167	6.03	43560	7.29	36978	11.36
280-97803-1 DL	SS025-SS01 DL	24060	6.03	46011	7.30	42183	11.36
280-97803-10 DL	SS025-SS05 DL	26396	6.03	51795	7.30	45693	11.37
CCVC 280-376943/27		24039	6.03	47594	7.30	40435	11.37
CCV 280-377034/2		21526	6.03	42378	7.30	38800	11.38
MB 280-376215/1-A		17848	6.04	35326	7.31	32970	11.39
LCS 280-376215/2-A		19217	6.03	37083	7.30	31549	11.37
280-97803-3	SS025-AB-053117	18310	6.04	36613	7.31	32653	11.39
CCVC 280-377034/18		22638	6.03	42917	7.30	37179	11.37
CCV 280-378253/2		20426	6.03	40605	7.30	37316	11.38
MB 280-377246/1-A		18967	6.04	37388	7.31	33948	11.39
LCS 280-377246/2-A		22889	6.03	44884	7.30	39664	11.38
280-97803-8	SS025-SS04	25601	6.03	45530	7.30	36069	11.36
280-97803-9	SS025-SB04(0-2)	23632	6.03	47452	7.30	36038	11.38
280-97803-9 MS	SS025-SB04(0-2) MS	24095	6.03	49563	7.30	37149	11.37
280-97803-9 MSD	SS025-SB04(0-2) MSD	21805	6.03	44248	7.30	36049	11.38
280-97803-11	SS025-SB05(0-2)	25226	6.03	47262	7.30	36077	11.37
CCVC 280-378253/24		21639	6.03	42719	7.30	38923	11.38
CCV 280-378412/2		19703	6.03	39811	7.30	35319	11.38
280-97803-8 DL	SS025-SS04 DL	19503	6.03	36161	7.30	30741	11.35
CCVC 280-378412/27		21307	6.03	44359	7.30	39740	11.38

ANT = Acenaphthene-d10
PHN = Phenanthrene-d10
CRY = Chrysene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D SIM

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Sample No.: ICIS 280-375238/2 Date Analyzed: 06/01/2017 10:39

Instrument ID: SMS_G5 GC Column: Rxi-5Sil MS ID: 0.25(mm)

Lab File ID (Standard): G5_1343.D Heated Purge: (Y/N) N

Calibration ID: 29369

		ANT		PHN		CRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		14593	5.99	29898	7.26	30473	11.23
UPPER LIMIT		29186	6.49	59796	7.76	60946	11.73
LOWER LIMIT		7297	5.49	14949	6.76	15237	10.73
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-375238/10		22207	5.99	44089	7.25	50499	11.22
CCV 280-376547/2		21585	5.99	43419	7.25	47968	11.22
280-97803-4	SS025-SS02	16708	5.99	32774	7.25	37236	11.22
280-97803-5	SS025-SB02(0-2)	12508	5.99	25924	7.25	27992	11.22
280-97803-6	SS025-SS03	9801	5.99	18220	7.25	19748	11.22
280-97803-7	SS025-SB03(0-2)	14319	5.99	30269	7.25	33410	11.22
280-97803-10	SS025-SS05	20687	5.99	39800	7.25	46289	11.23
280-97803-12	SS025-SB05(2-4)	20980	5.99	43728	7.25	48306	11.23
280-97803-13	SS025-SS06	22660	5.99	44909	7.25	49040	11.23
280-97803-14	SS025-SS06-a	9799	5.99	20422	7.25	20646	11.22
CCVC 280-376547/19		19727	5.99	41155	7.25	40198	11.23

ANT = Acenaphthene-d10
PHN = Phenanthrene-d10
CRY = Chrysene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D SIM

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS01 | Lab Sample ID: 280-97803-1

Matrix: Solid | Lab File ID: F7136.D

Analysis Method: 8270D SIM | Date Collected: 05/31/2017 11:00

Extract. Method: 3546 | Date Extracted: 06/05/2017 08:51

Sample wt/vol: 31.2(g) | Date Analyzed: 06/12/2017 19:59

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 376943 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	31		5.8	0.58	0.30
91-57-6	2-Methylnaphthalene	69		5.8	0.77	0.36
83-32-9	Acenaphthene	24		5.8	0.31	0.18
208-96-8	Acenaphthylene	46		5.8	0.77	0.20
120-12-7	Anthracene	70		5.8	2.9	0.83
56-55-3	Benzo[a]anthracene	180		5.8	2.9	1.0
50-32-8	*Benzo[a]pyrene*	*210*	*J*	*5.8*	2.9	*0.86*
205-99-2	*Benzo[b]fluoranthene*	*280*	*J*	*5.8*	2.9	*1.4*
191-24-2	Benzo[g,h,i]perylene	140		5.8	2.9	1.3
207-08-9	Benzo[k]fluoranthene	99		5.8	2.9	1.2
218-01-9	*Chrysene*	*230*	*J*	*5.8*	2.9	*1.2*
53-70-3	Dibenz(a,h)anthracene	40		5.8	2.9	1.5
206-44-0	*Fluoranthene*	*270*	*J*	*5.8*	2.9	*1.2*
86-73-7	Fluorene	25		5.8	0.77	0.54
193-39-5	Indeno[1,2,3-cd]pyrene	110		5.8	2.9	1.3
91-20-3	Naphthalene	75		5.8	0.77	0.38
85-01-8	Phenanthrene	160		5.8	2.9	1.3
129-00-0	*Pyrene*	*280*	*J*	*5.8*	2.9	*1.3*

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	72		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	84		44-125
1718-51-0	Terphenyl-d14 (Surr)	66		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7136.D
Lims ID: 280-97803-C-1-A
Client ID: SS025-SS01
Sample Type: Client
Inject. Date: 12-Jun-2017 19:59:30 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-c-1-a
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 13-Jun-2017 07:13:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: vasquezk Date: 13-Jun-2017 07:02:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.038	-0.009	100	26167	600.0	
* 2 Phenanthrene-d10	188	7.294	7.307	-0.013	100	43560	600.0	
* 3 Chrysene-d12	240	11.358	11.385	-0.027	36	36978	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	100	17115	417.5	
$ 5 2-Fluorobiphenyl	172	5.431	5.436	-0.005	99	24278	357.8	
$ 6 Terphenyl-d14	244	9.123	9.136	-0.013	94	14642	331.1	
14 Naphthalene	128	4.589	4.589	0.000	100	164634	1940.8	
16 2-Methylnaphthalene	142	5.143	5.147	-0.004	98	97181	1781.9	
17 1-Methylnaphthalene	142	5.230	5.234	-0.004	99	44234	809.9	
22 Acenaphthylene	152	5.908	5.917	-0.009	98	107658	1192.7	
23 Acenaphthene	153	6.055	6.055	0.000	99	33986	616.0	
25 Fluorene	166	6.487	6.494	-0.007	99	44460	656.6	
27 Phenanthrene	178	7.313	7.326	-0.013	100	388834	4208.8	
28 Anthracene	178	7.359	7.372	-0.013	100	169815	1820.3	
30 Fluoranthene	202	8.622	8.634	-0.012	100	749628	7064.7	E
31 Pyrene	202	8.960	8.973	-0.013	100	807986	7342.4	E
35 Benzo[a]anthracene	228	11.331	11.349	-0.018	96	461828	4696.2	
36 Chrysene	228	11.422	11.448	-0.026	99	540929	5945.8	E
38 Benzo[b]fluoranthene	252	14.482	14.508	-0.026	100	647096	7247.8	E
39 Benzo[k]fluoranthene	252	14.560	14.591	-0.031	100	231052	2573.0	
40 Benzo[a]pyrene	252	15.557	15.592	-0.035	100	476288	5405.7	E
41 Indeno[1,2,3-cd]pyrene	276	18.654	18.672	-0.018	79	292464	2926.3	
42 Dibenz(a,h)anthracene	278	18.676	18.707	-0.031	84	80720	1034.9	
43 Benzo[g,h,i]perylene	276	19.088	19.109	-0.021	98	298463	3520.1	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

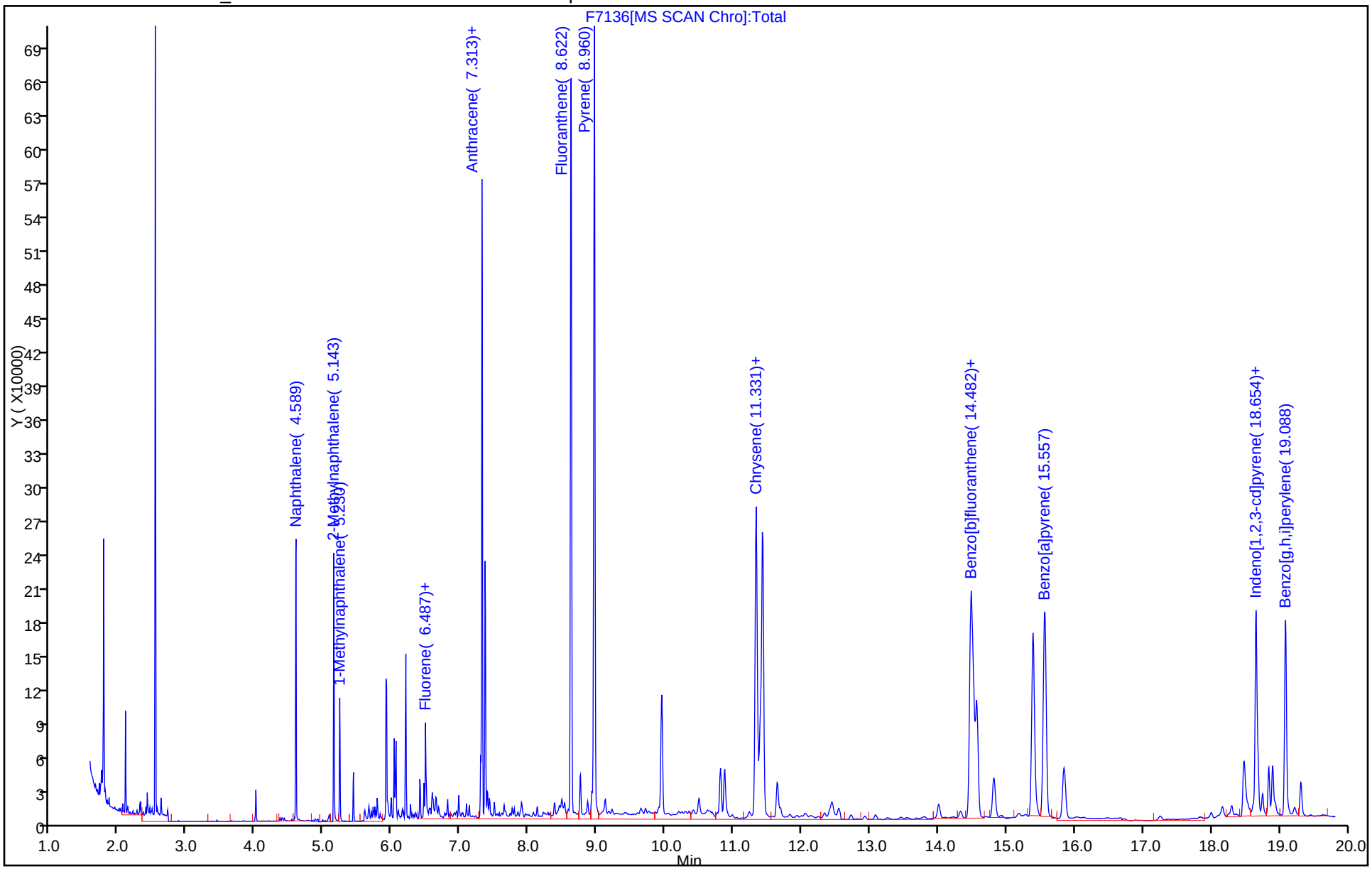
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 13-Jun-2017 07:13:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7136.D

Injection Date:	12-Jun-2017 19:59:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1	Worklist Smp#:	15
Client ID:	SS025-SS01				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7136.D				
Lims ID:	280-97803-C-1-A				
Client ID:	SS025-SS01				
Sample Type:	Client				
Inject. Date:	12-Jun-2017 19:59:30	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-c-1-a				
Operator ID:	VASQUEZK	Instrument ID:	SMS_F		
Method:	\\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\SMSF_8270SIMX.m				
Limit Group:	MSSV - 8270C-SIM				
Last Update:	13-Jun-2017 07:13:04	Calib Date:	11-May-2017 16:07:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK012				

First Level Reviewer: vasquezk Date: 13-Jun-2017 07:02:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	417.5	83.51
$ 5 2-Fluorobiphenyl	500.0	357.8	71.57
$ 6 Terphenyl-d14	500.0	331.1	66.21

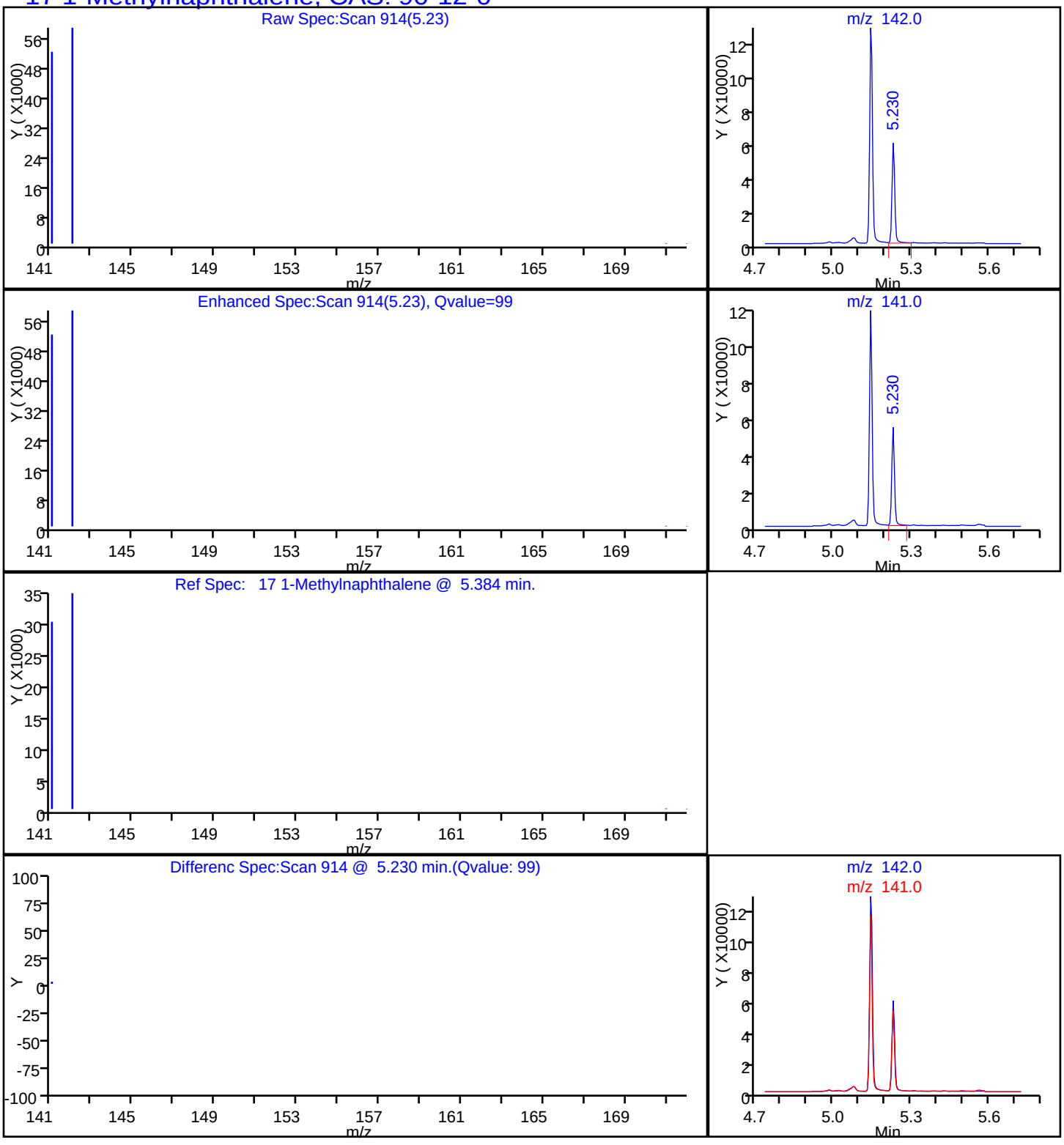
Report Date: 13-Jun-2017 07:13:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7136.D

Injection Date:	12-Jun-2017 19:59:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0



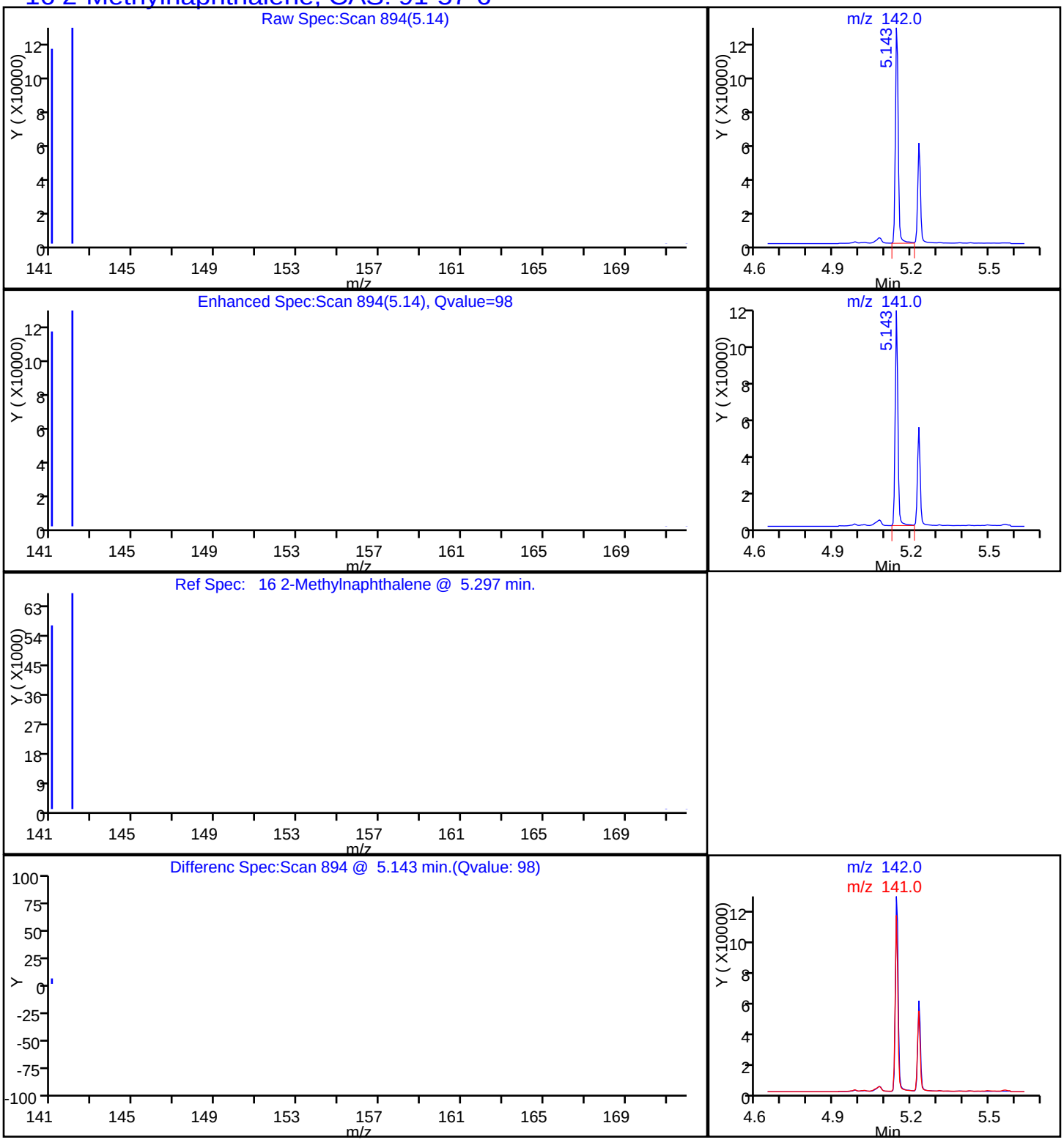
Report Date: 13-Jun-2017 07:13:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7136.D

Injection Date:	12-Jun-2017 19:59:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



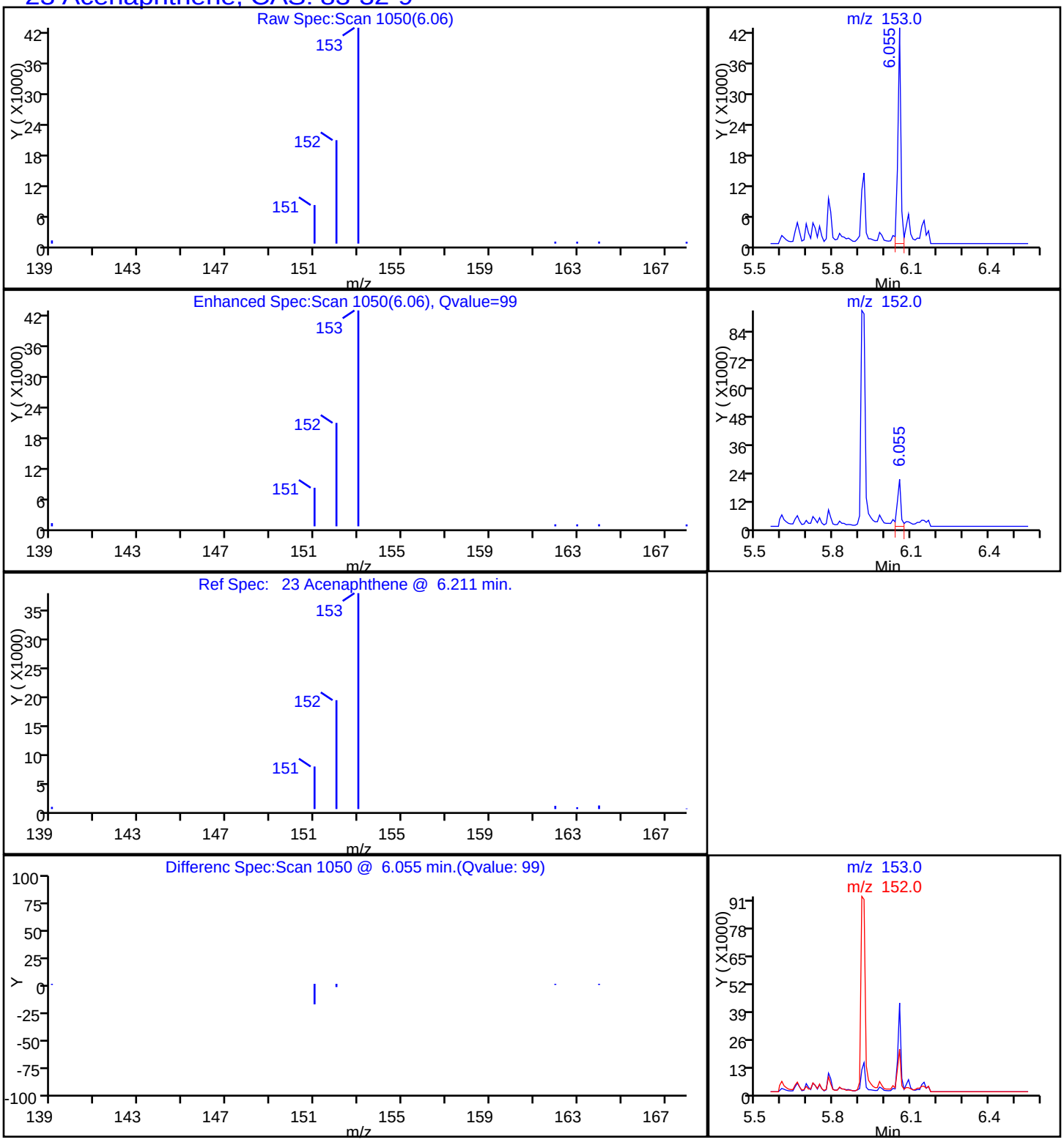
Report Date: 13-Jun-2017 07:13:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7136.D

Injection Date:	12-Jun-2017 19:59:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9



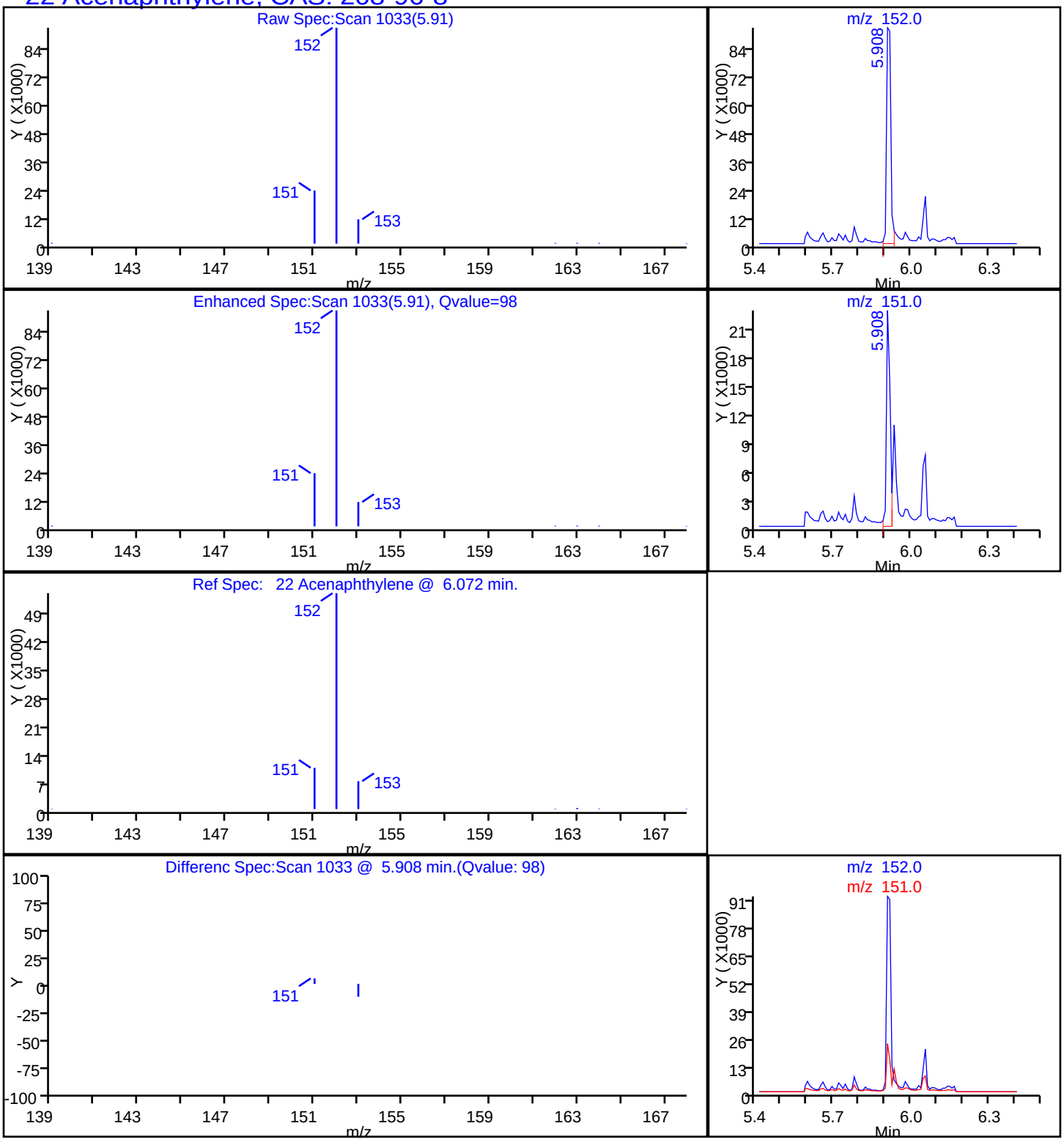
Report Date: 13-Jun-2017 07:13:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7136.D

Injection Date:	12-Jun-2017 19:59:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Acenaphthylene, CAS: 208-96-8



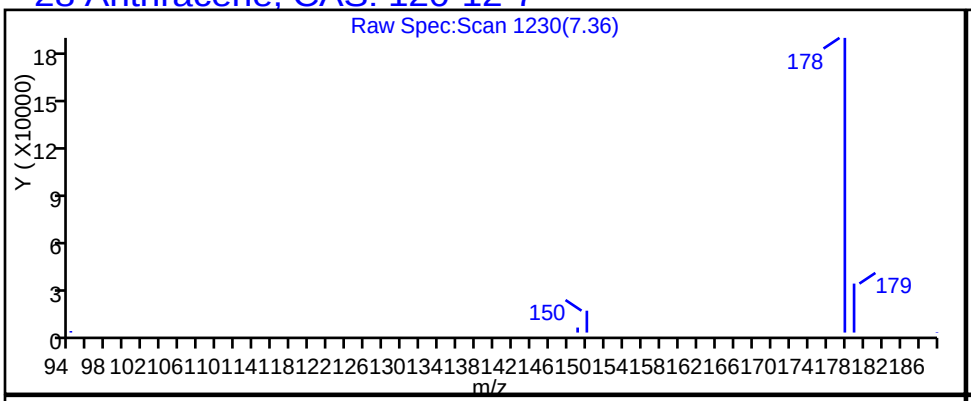
Report Date: 13-Jun-2017 07:13:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

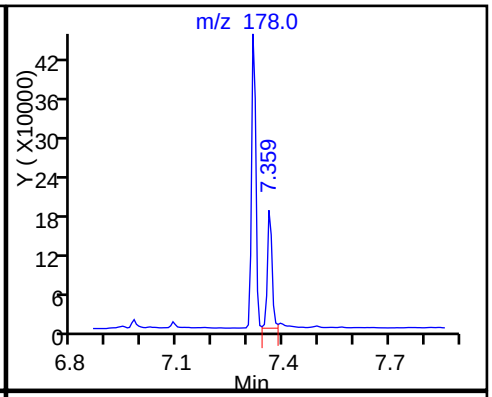
TestAmerica Denver

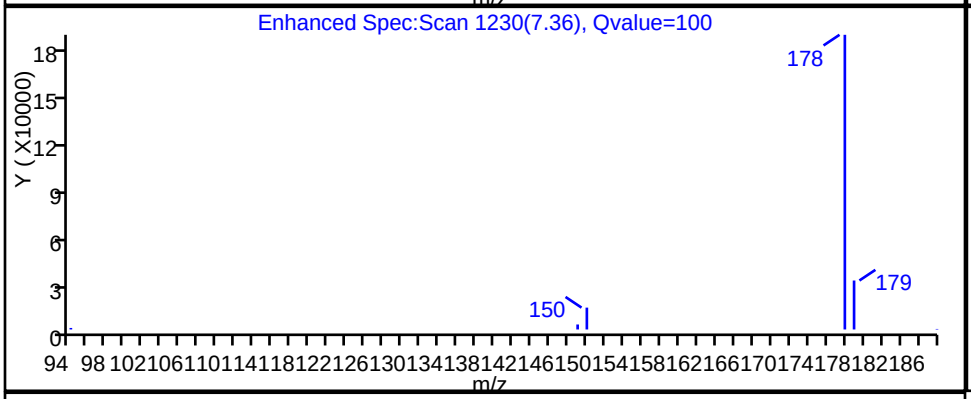
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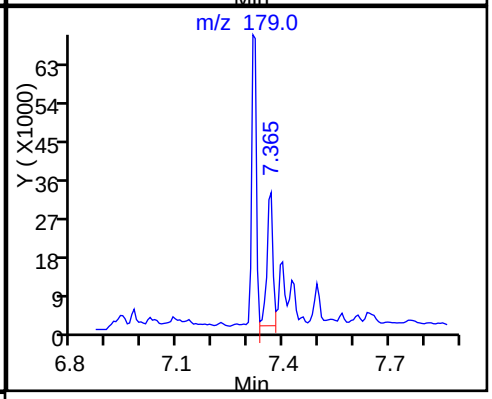
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Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
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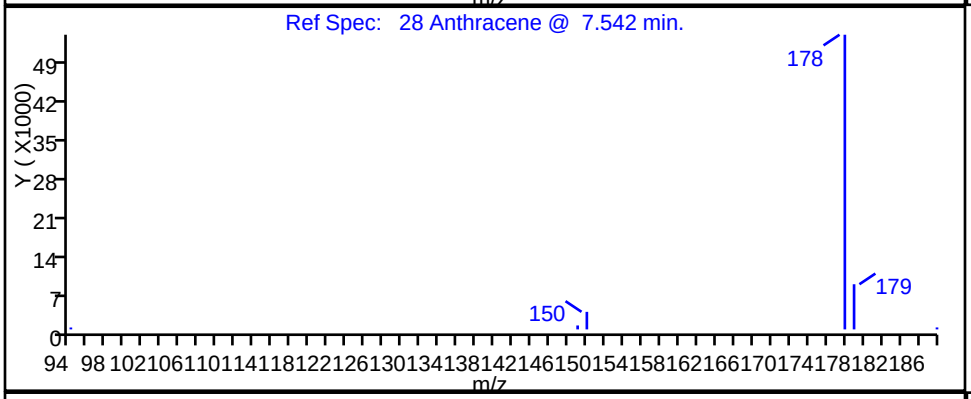
28 Anthracene, CAS: 120-12-7

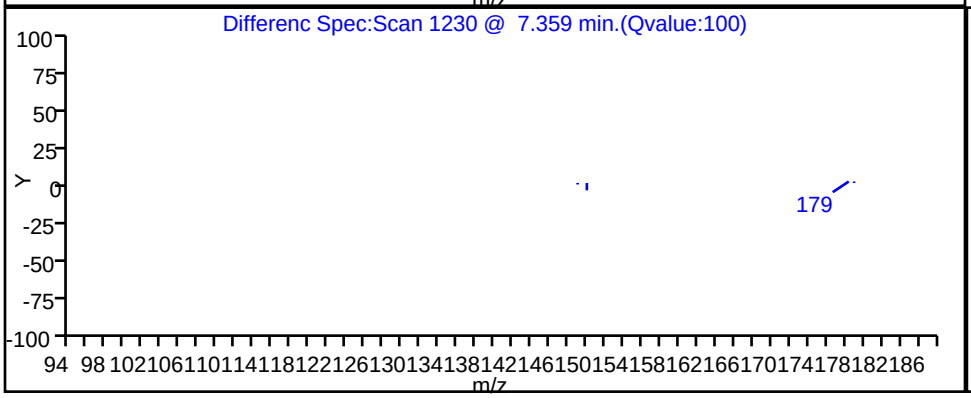


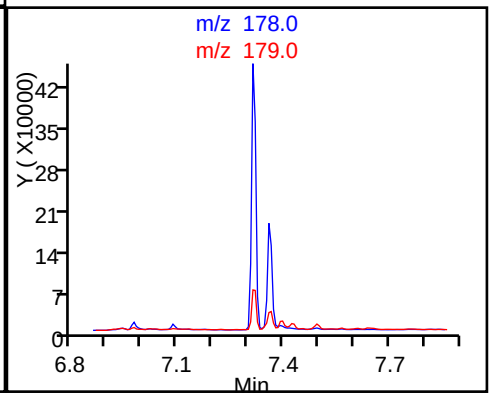












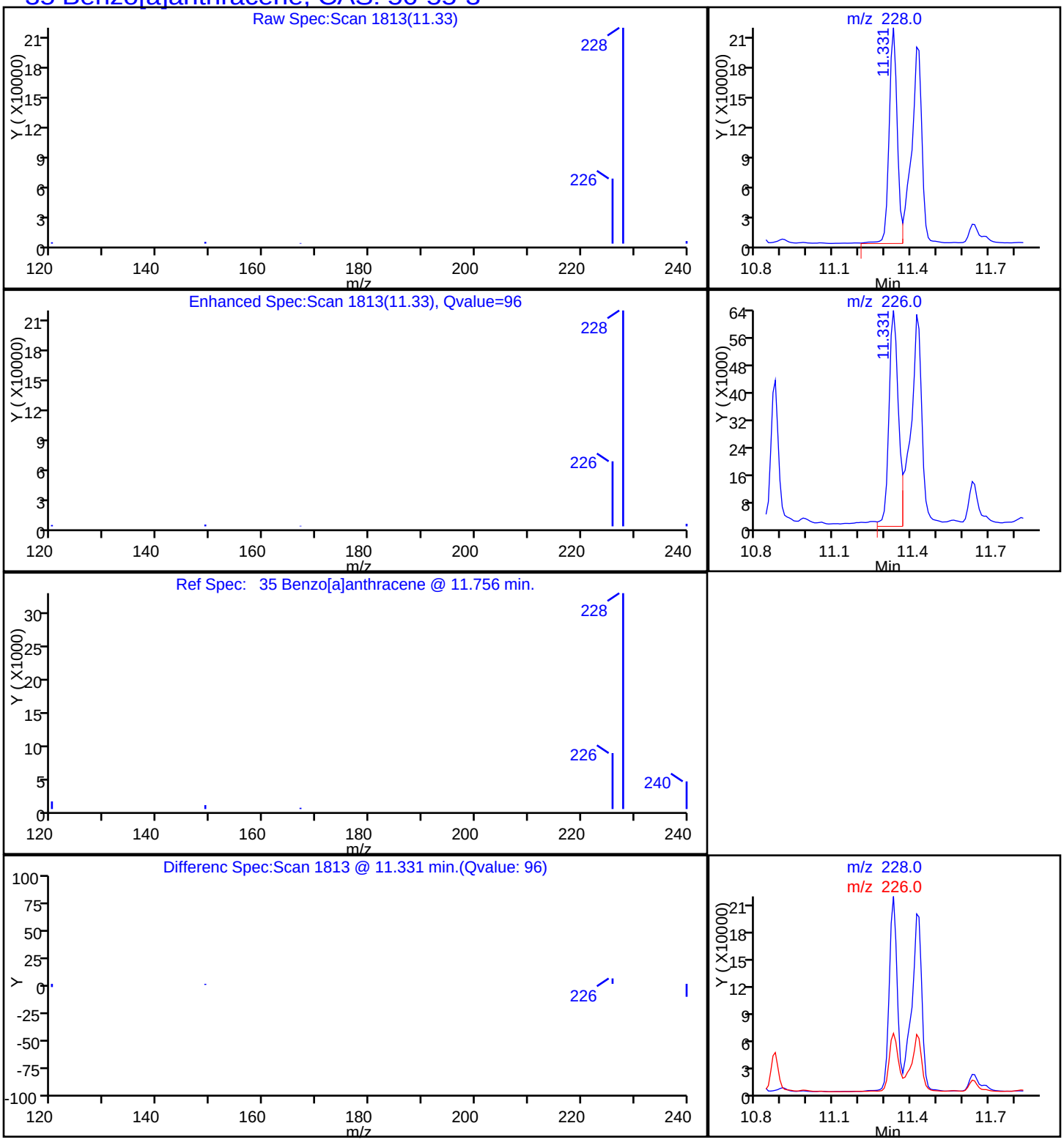
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TestAmerica Denver

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Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

35 Benzo[a]anthracene, CAS: 56-55-3

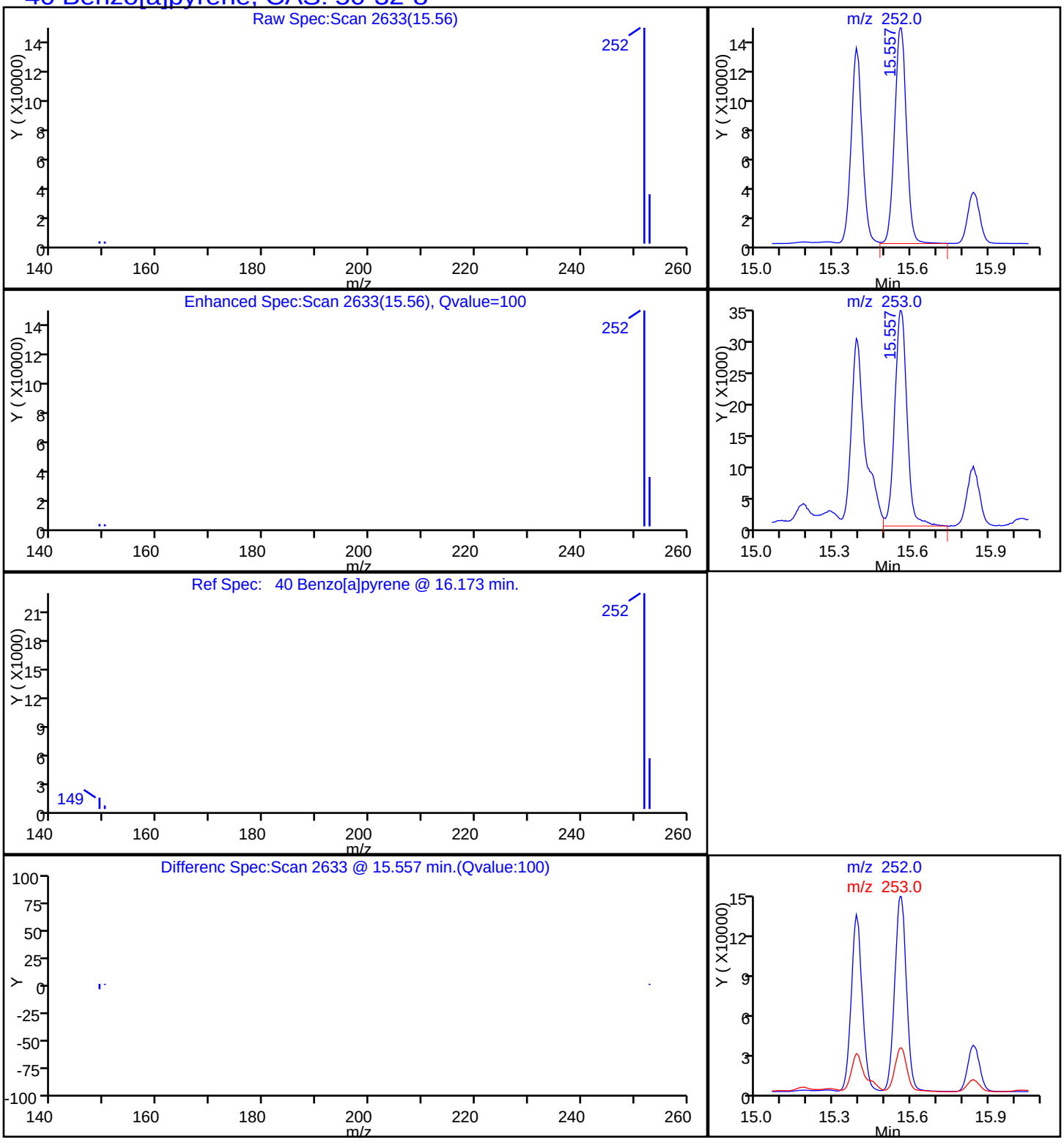


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TestAmerica Denver

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Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

40 Benzo[a]pyrene, CAS: 50-32-8



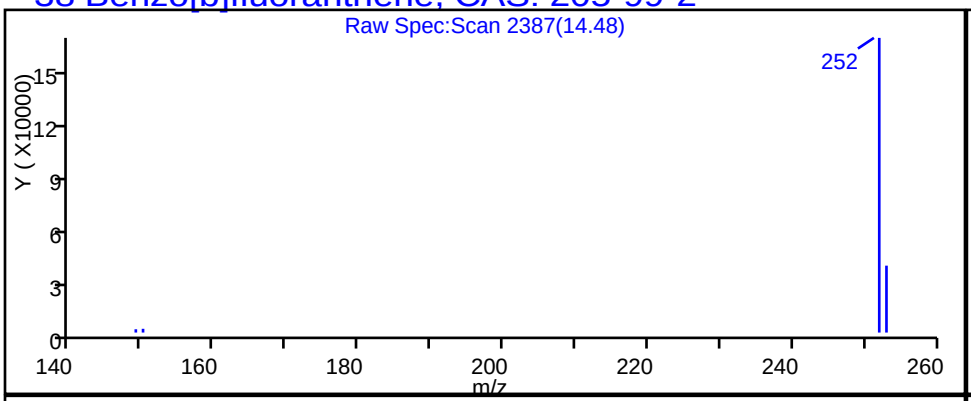
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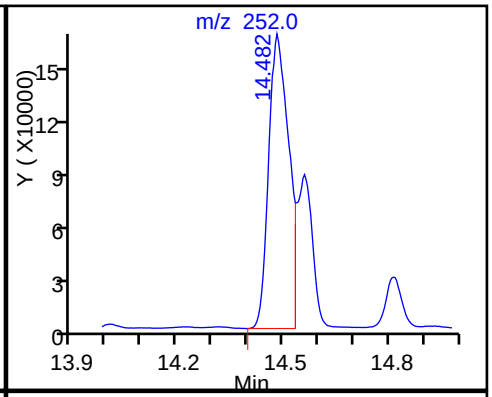
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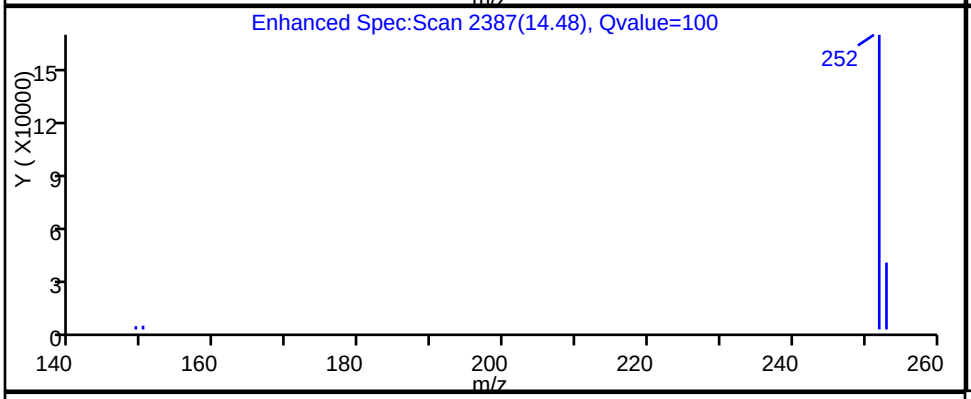
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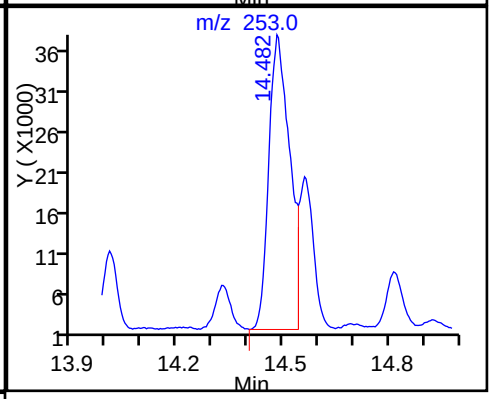
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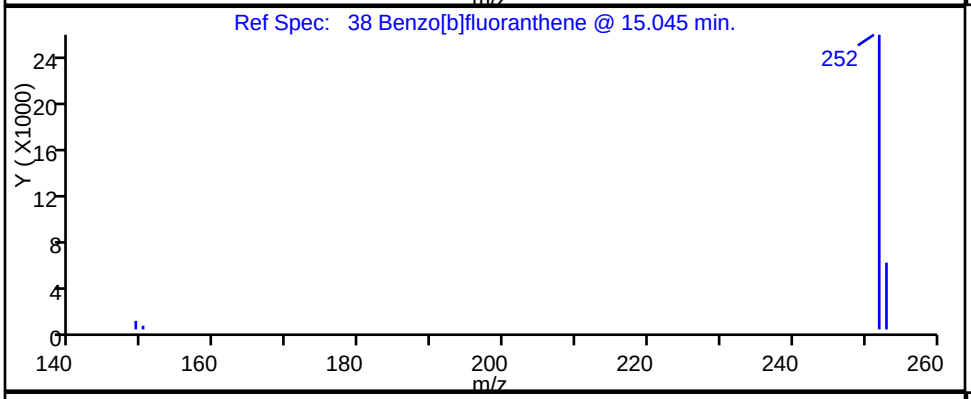
38 Benzo[b]fluoranthene, CAS: 205-99-2

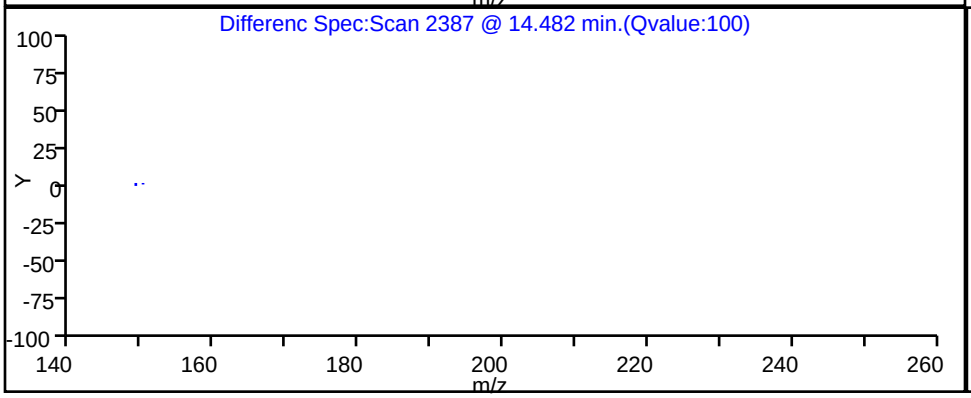


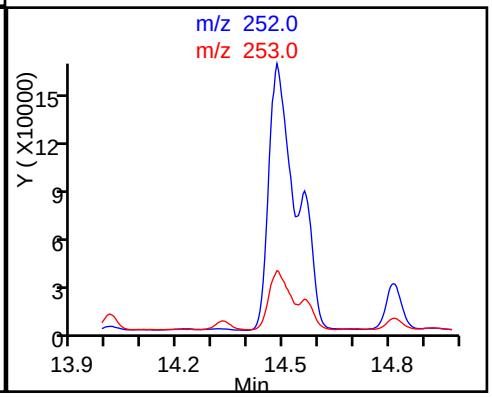










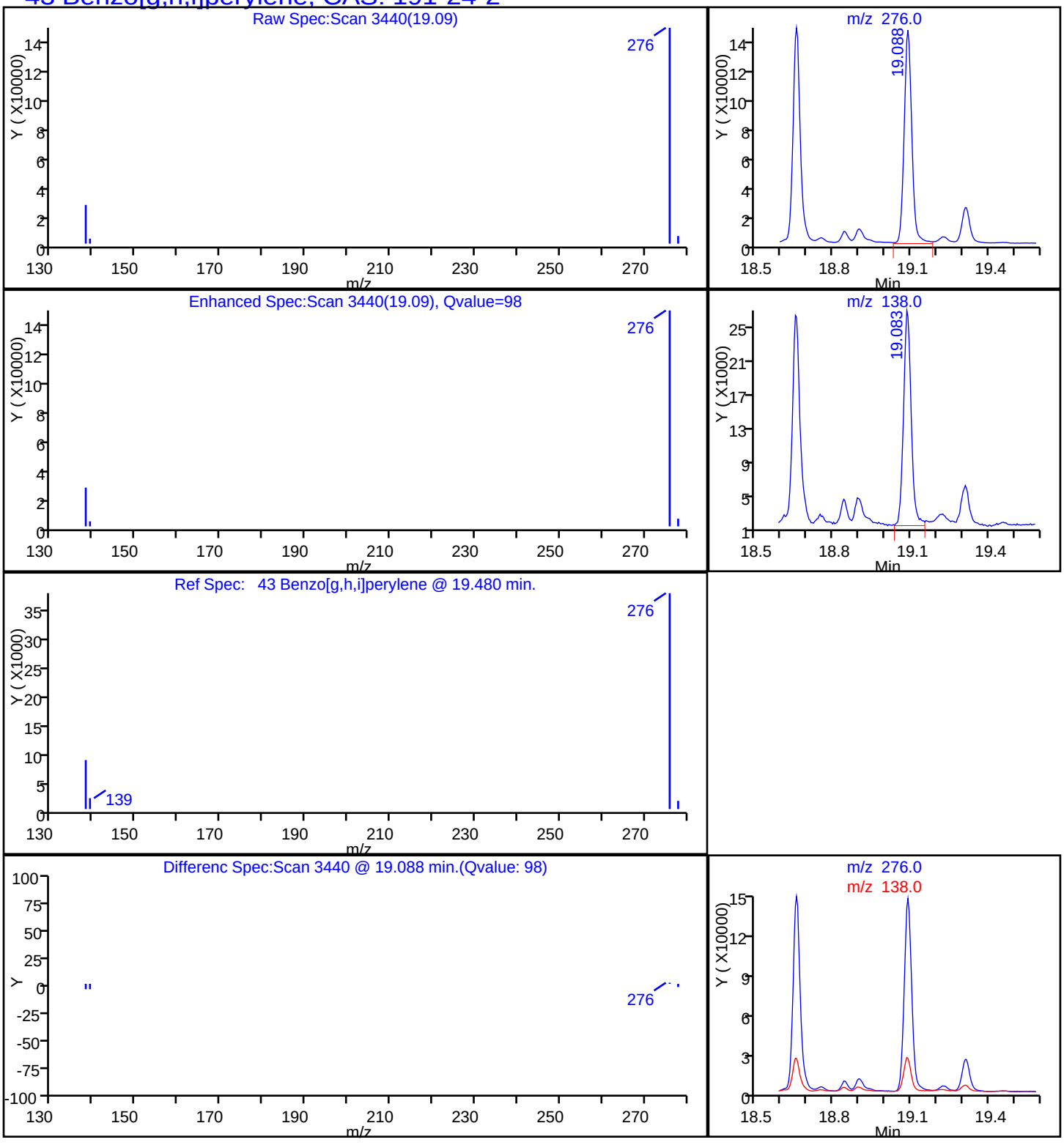


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TestAmerica Denver

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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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Column:		Detector	MS SCAN		

43 Benzo[g,h,i]perylene, CAS: 191-24-2



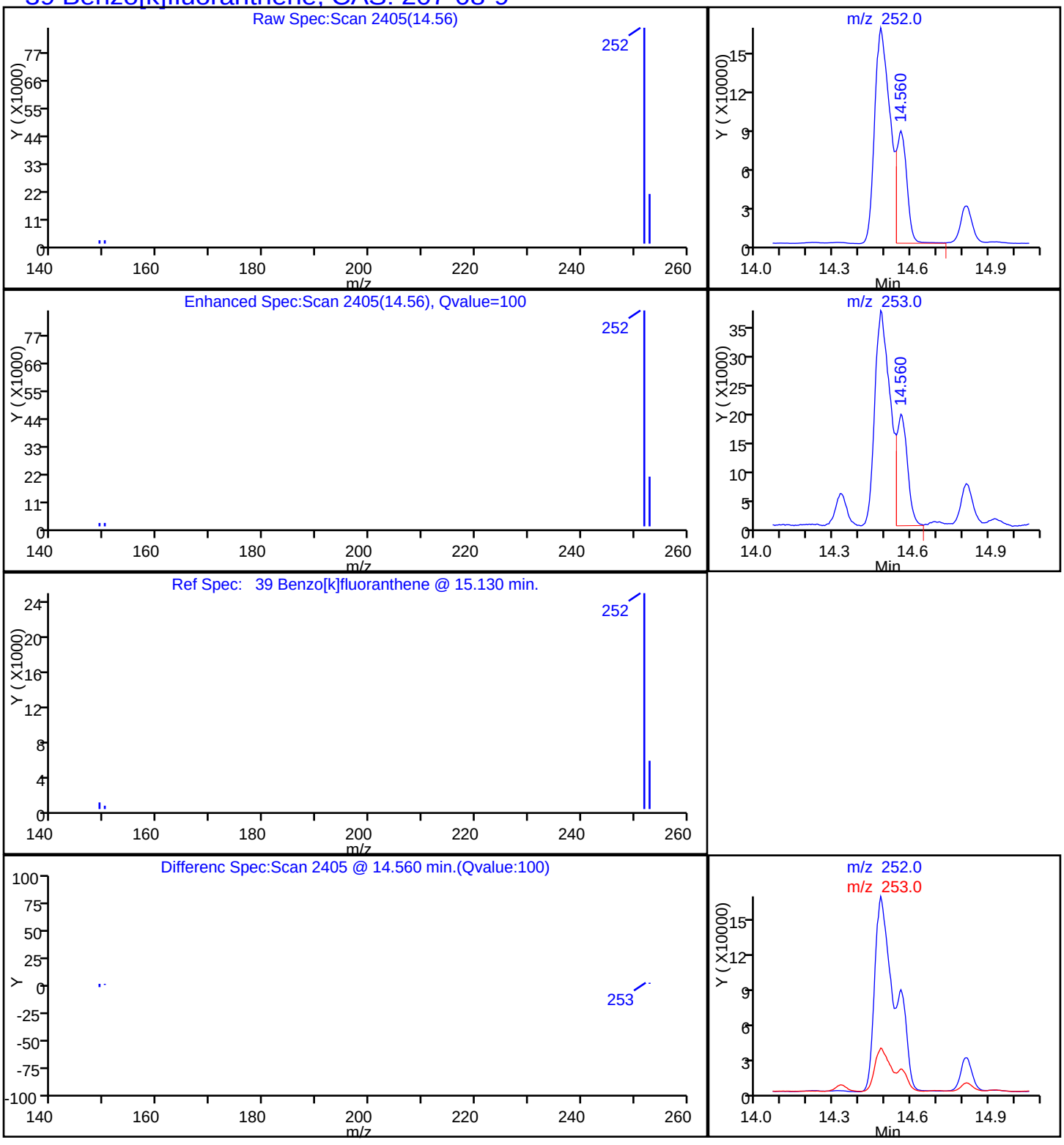
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TestAmerica Denver

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Column:		Detector	MS SCAN		

39 Benzo[k]fluoranthene, CAS: 207-08-9



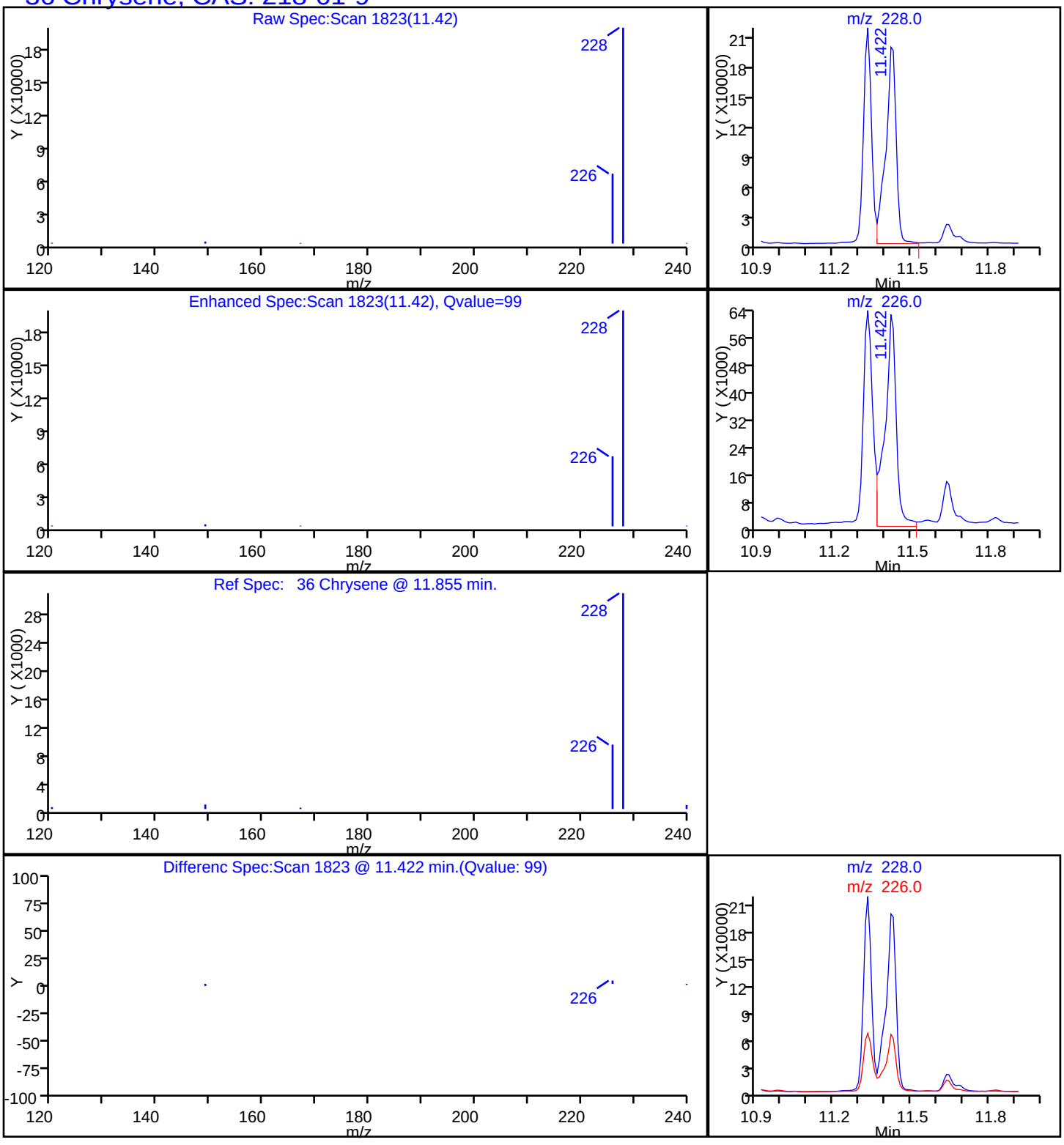
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TestAmerica Denver

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Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	15	Worklist Smp#:	15
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Column:		Detector	MS SCAN		

36 Chrysene, CAS: 218-01-9



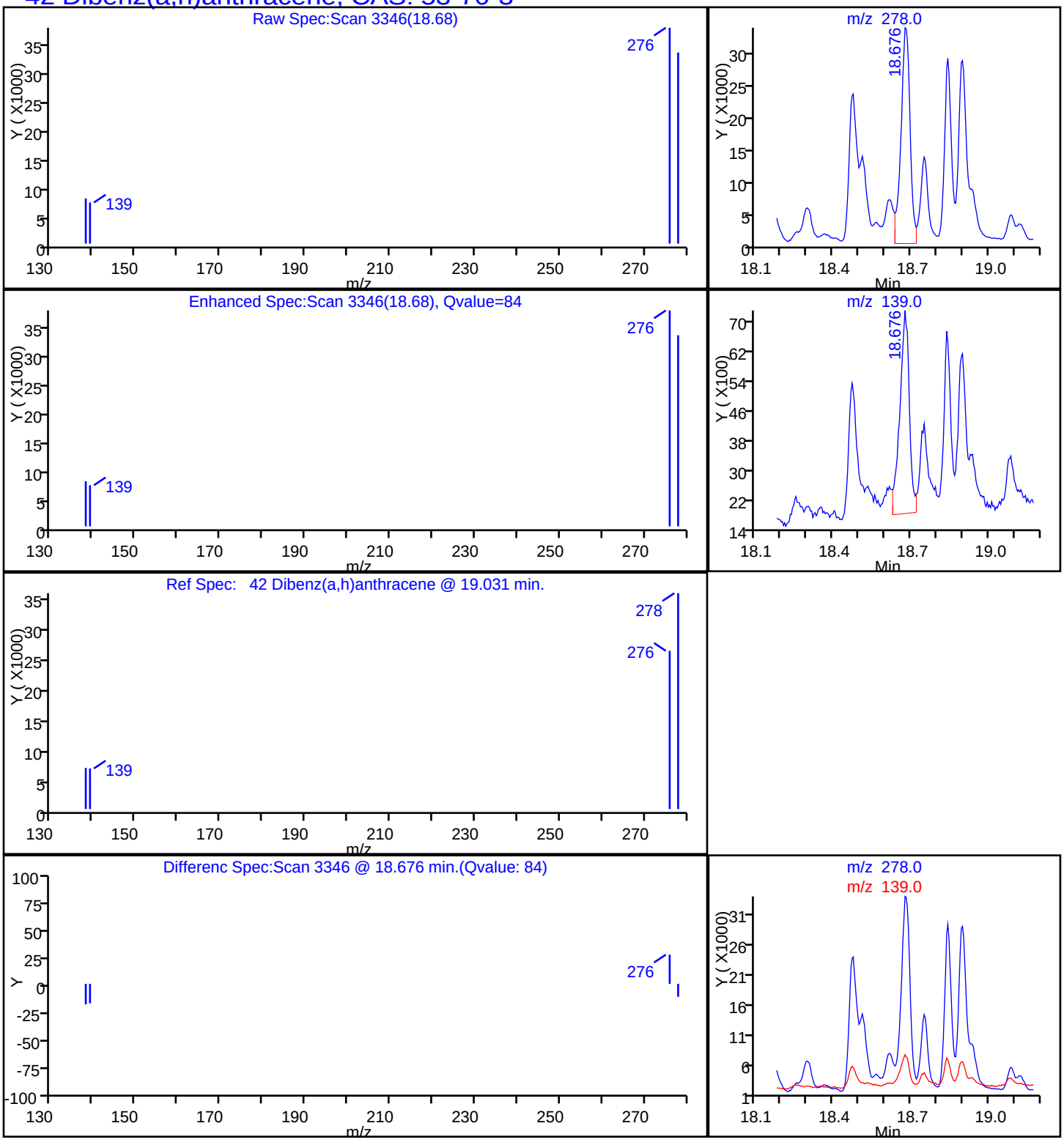
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TestAmerica Denver

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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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42 Dibenz(a,h)anthracene, CAS: 53-70-3

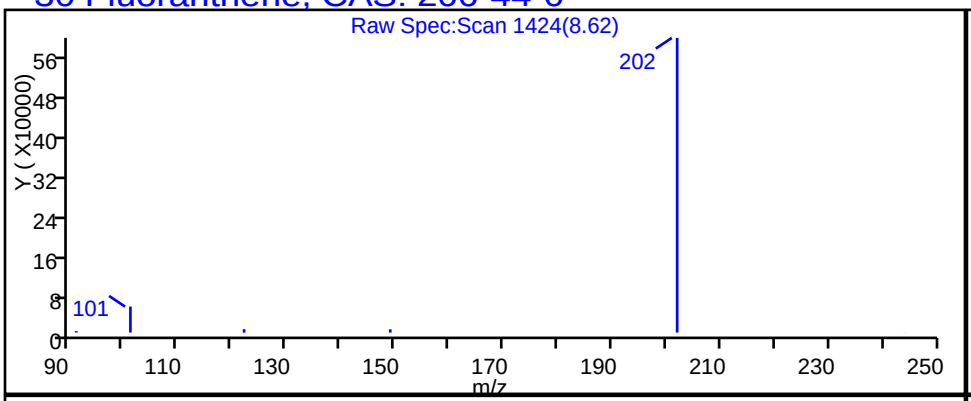


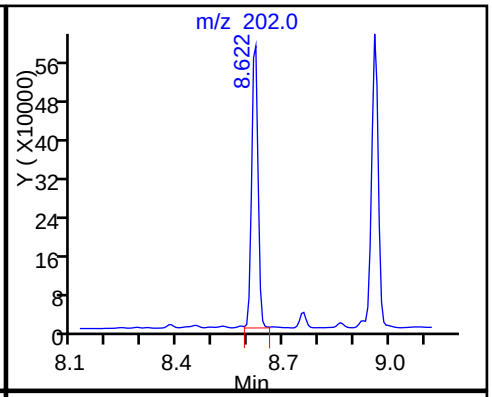
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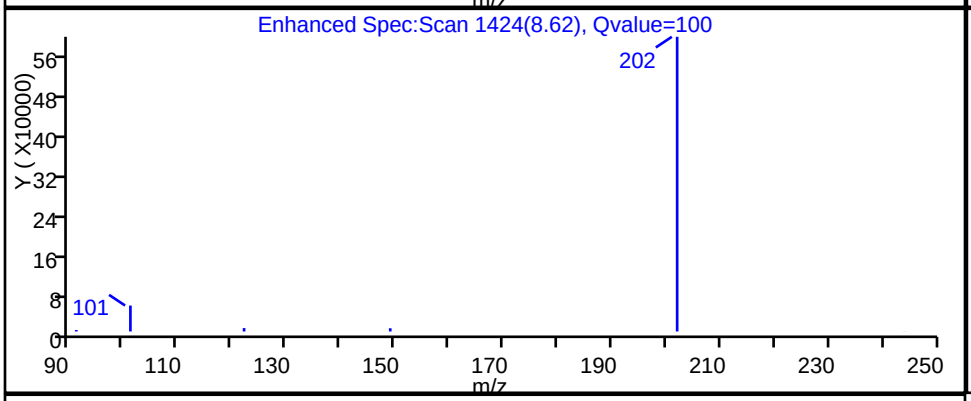
TestAmerica Denver

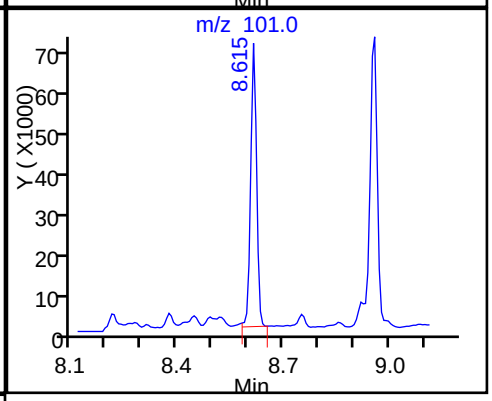
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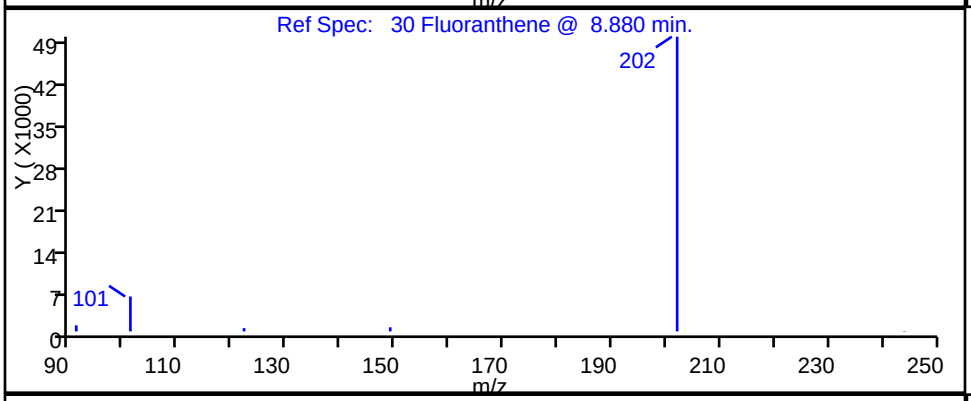
30 Fluoranthene, CAS: 206-44-0

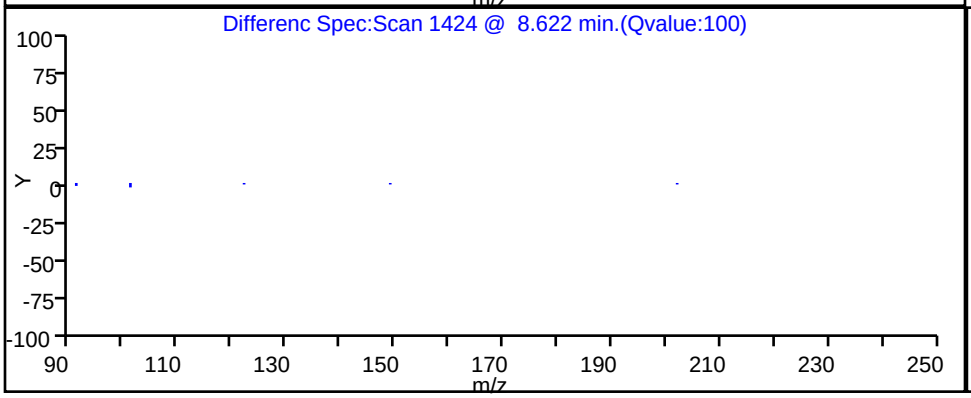


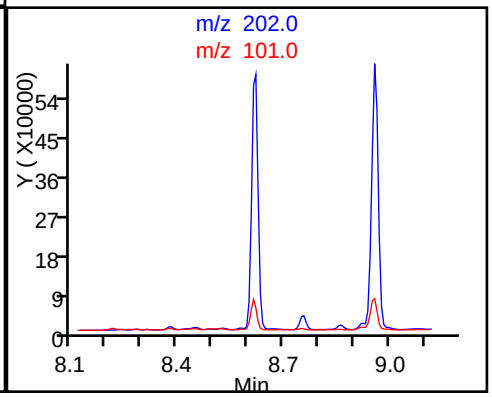












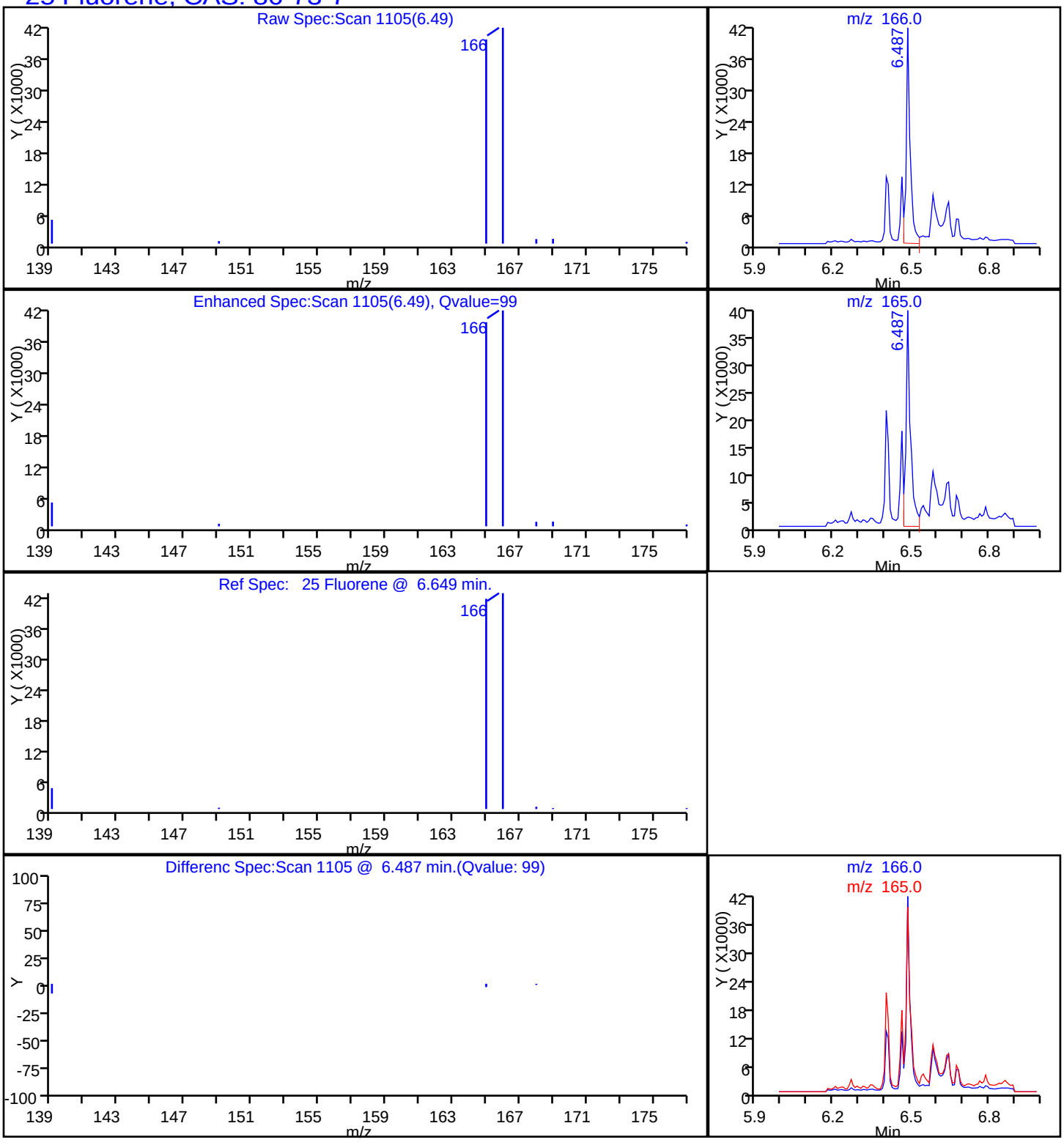
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TestAmerica Denver

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Column:		Detector	MS SCAN		

25 Fluorene, CAS: 86-73-7



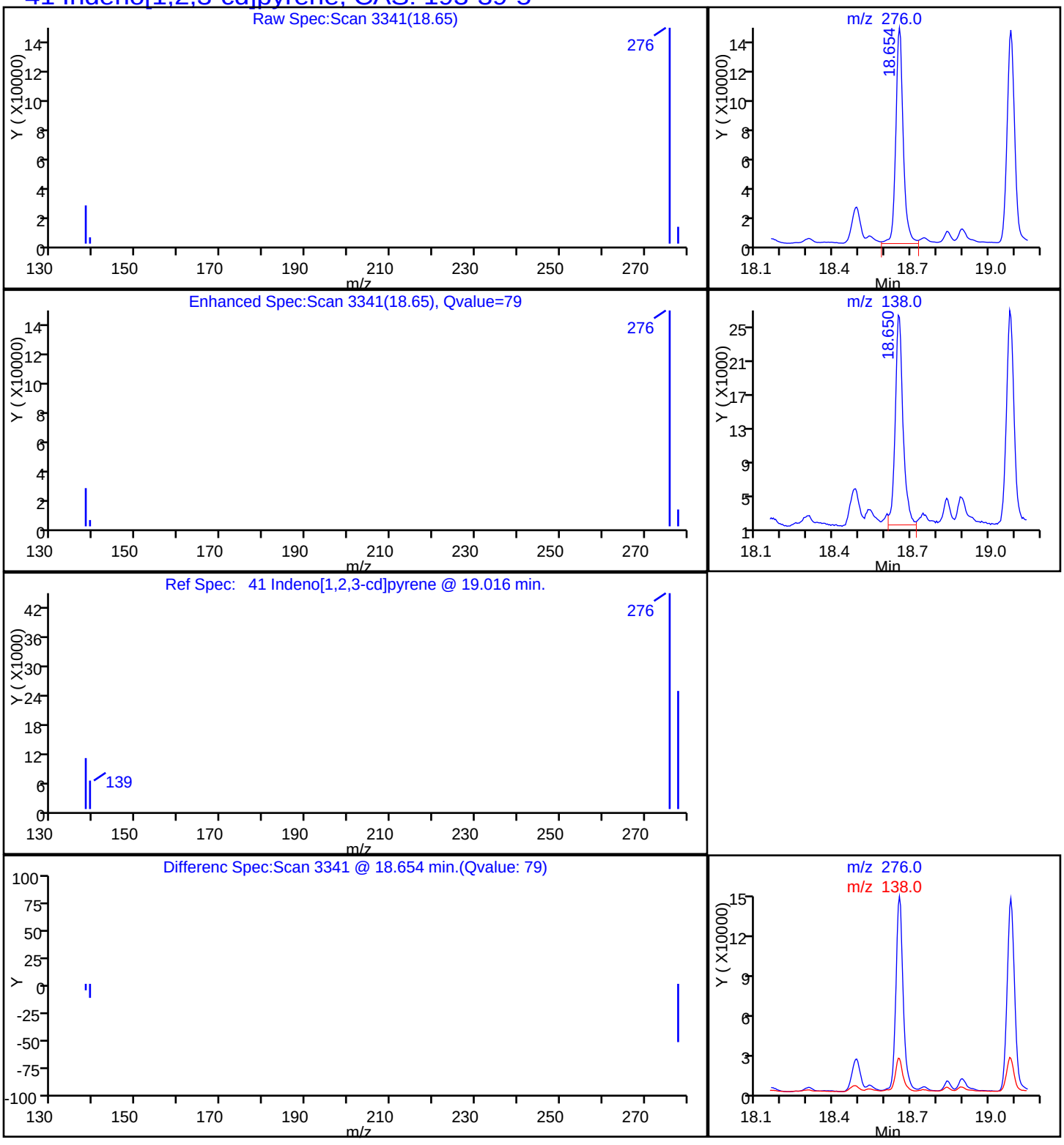
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TestAmerica Denver

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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

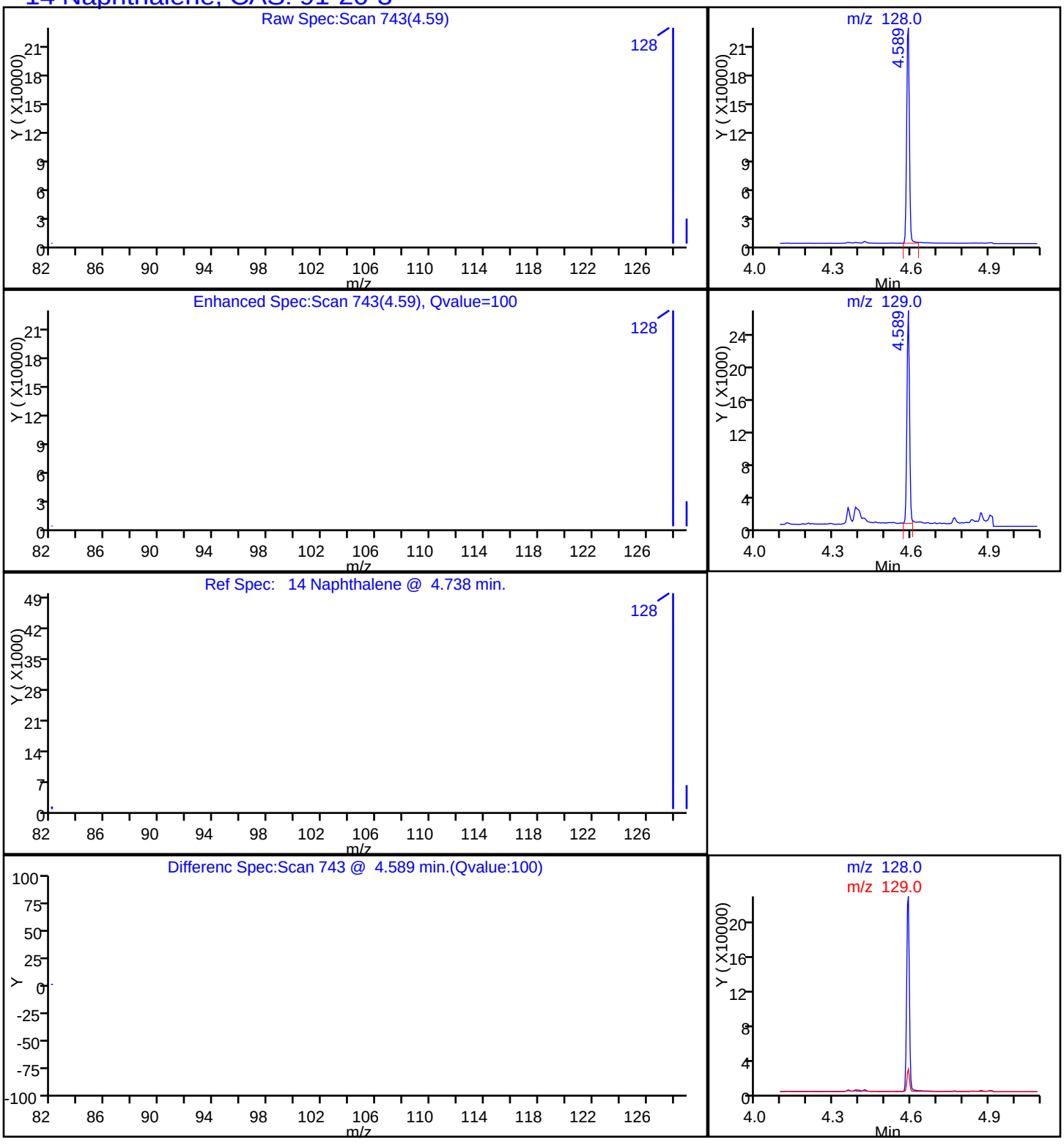


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14 Naphthalene, CAS: 91-20-3

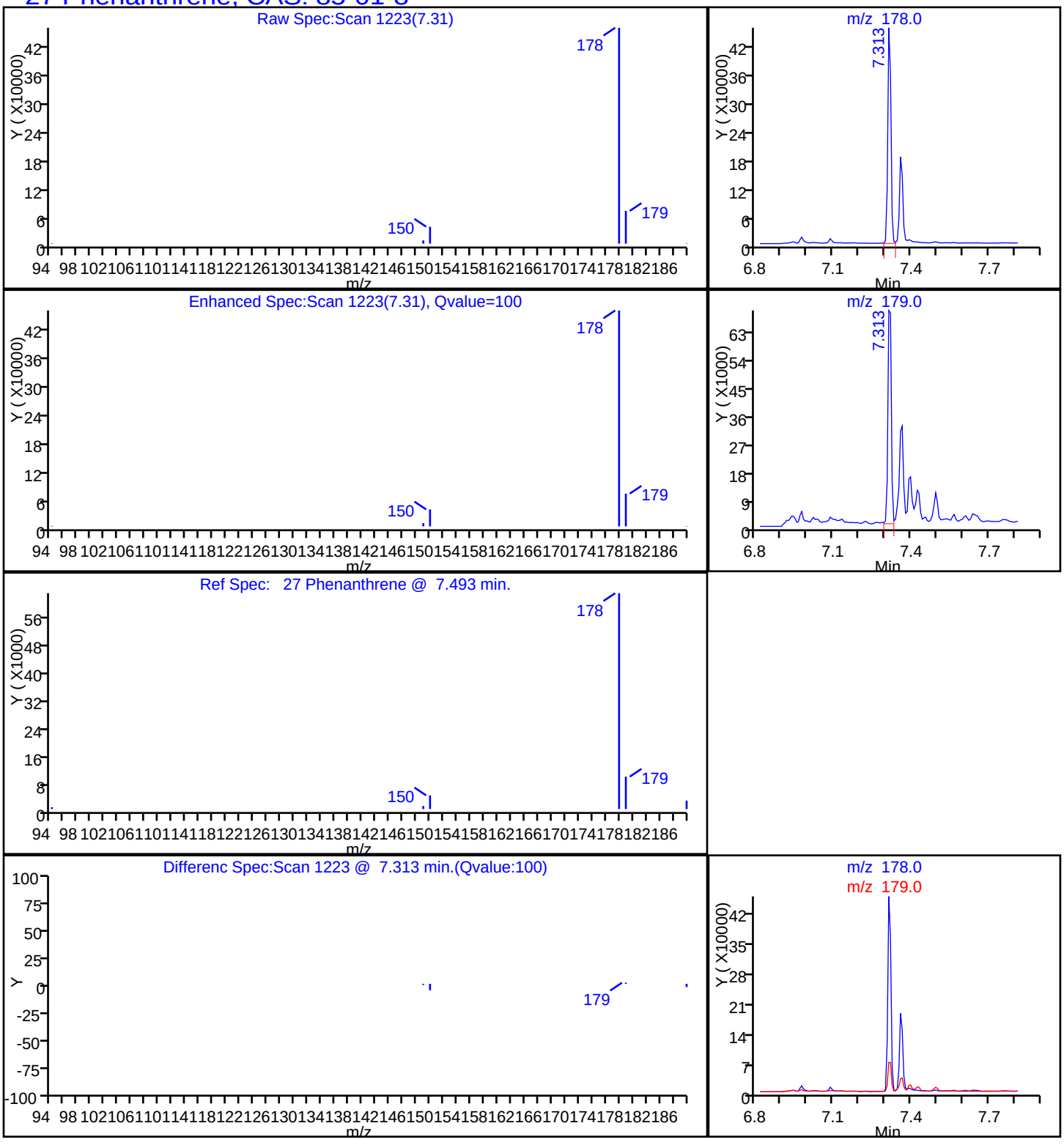


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Column:		Detector	MS SCAN		

27 Phenanthrene, CAS: 85-01-8



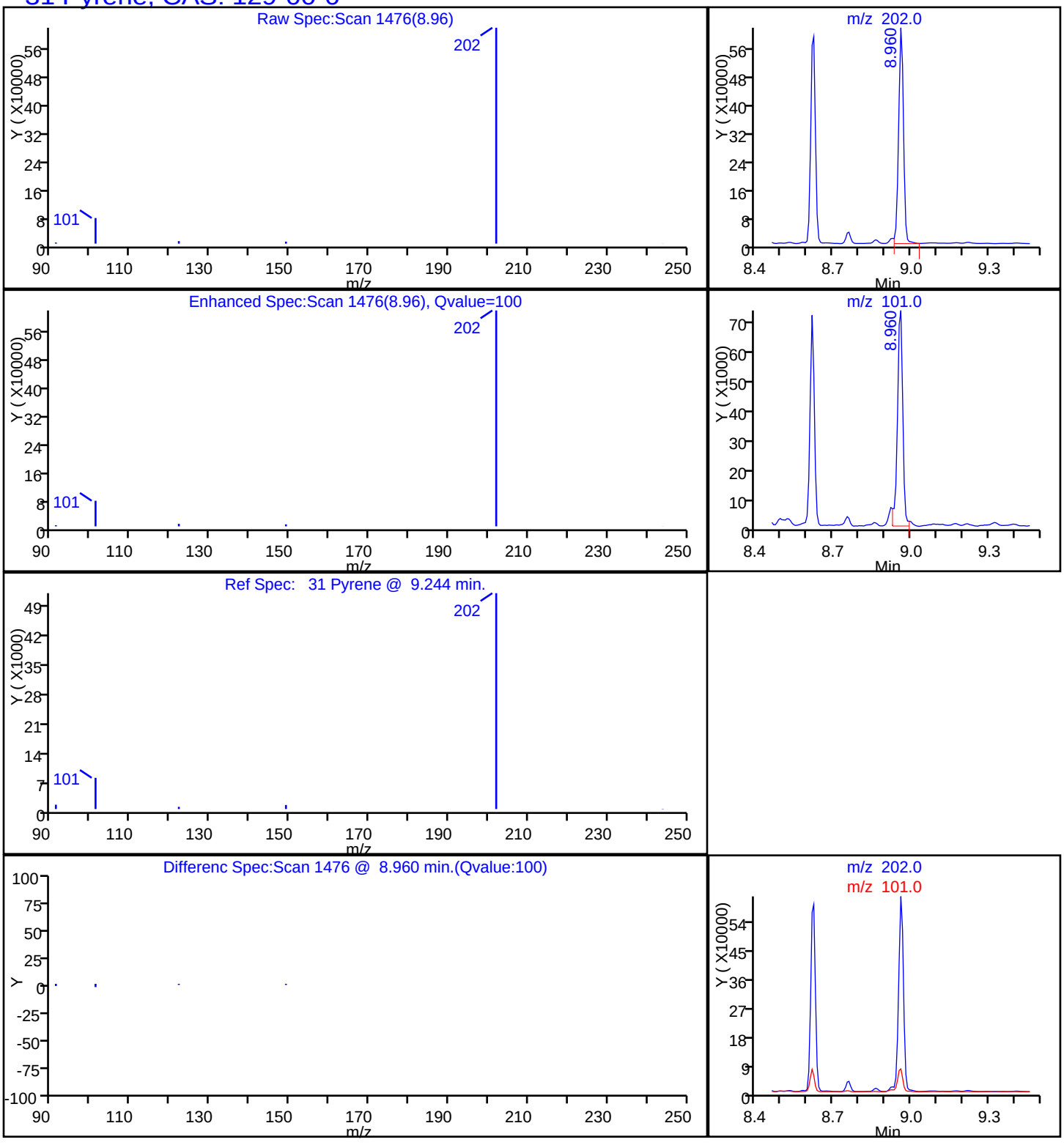
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TestAmerica Denver

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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Pyrene, CAS: 129-00-0



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS01 DL | Lab Sample ID: 280-97803-1 DL

Matrix: Solid | Lab File ID: F7137.D

Analysis Method: 8270D SIM | Date Collected: 05/31/2017 11:00

Extract. Method: 3546 | Date Extracted: 06/05/2017 08:51

Sample wt/vol: 31.2(g) | Date Analyzed: 06/12/2017 20:25

Con. Extract Vol.: 1(mL) | Dilution Factor: 5

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 376943 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	*1-Methylnaphthalene*	*26*	*J D*	*29*	2.9	*1.5*
91-57-6	*2-Methylnaphthalene*	*59*	*D*	*29*	3.9	*1.8*
83-32-9	*Acenaphthene*	*25*	*J D*	*29*	1.5	*0.92*
208-96-8	*Acenaphthylene*	*51*	*D*	*29*	3.9	*0.98*
120-12-7	*Anthracene*	*62*	*D*	*29*	14	*4.2*
56-55-3	*Benzo[a]anthracene*	*150*	*D*	*29*	14	*5.2*
50-32-8	Benzo[a]pyrene	170	D	29	14	4.3
205-99-2	Benzo[b]fluoranthene	240	D	29	14	6.9
191-24-2	*Benzo[g,h,i]perylene*	*110*	*D*	*29*	14	*6.4*
207-08-9	*Benzo[k]fluoranthene*	*79*	*D*	*29*	14	*5.8*
218-01-9	Chrysene	200	D	29	14	5.8
53-70-3	*Dibenz(a,h)anthracene*	*32*	*D*	*29*	14	*7.5*
206-44-0	Fluoranthene	260	D	29	14	5.8
86-73-7	*Fluorene*	*23*	*J D*	*29*	3.9	*2.7*
193-39-5	*Indeno[1,2,3-cd]pyrene*	*89*	*D*	*29*	14	*6.4*
91-20-3	*Naphthalene*	*65*	*D*	*29*	3.9	*1.9*
85-01-8	*Phenanthrene*	*140*	*D*	*29*	14	*6.4*
129-00-0	Pyrene	270	D	29	14	6.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	63	D	46-115
4165-60-0	Nitrobenzene-d5 (Surr)	68	D	44-125
1718-51-0	Terphenyl-d14 (Surr)	62	D	58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7137.D
Lims ID: 280-97803-C-1-A
Client ID: SS025-SS01
Sample Type: Client
Inject. Date: 12-Jun-2017 20:25:30 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 5.0000
Sample Info: 280-97803-c-1-a
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 13-Jun-2017 07:13:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: vasquezk Date: 13-Jun-2017 07:02:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.038	-0.009	95	24060	600.0	
* 2 Phenanthrene-d10	188	7.300	7.307	-0.007	99	46011	600.0	
* 3 Chrysene-d12	240	11.359	11.385	-0.026	89	42183	600.0	
$ 4 Nitrobenzene-d5	82	4.005	4.001	0.004	100	2562	68.0	
$ 5 2-Fluorobiphenyl	172	5.431	5.436	-0.005	100	3957	63.4	
$ 6 Terphenyl-d14	244	9.123	9.136	-0.013	85	2903	62.1	
14 Naphthalene	128	4.590	4.589	0.001	100	26504	339.8	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	98	15283	304.8	
17 1-Methylnaphthalene	142	5.235	5.234	0.001	96	6872	136.8	
22 Acenaphthylene	152	5.917	5.917	0.000	100	21781	262.4	
23 Acenaphthene	153	6.055	6.055	0.000	98	6465	127.4	
25 Fluorene	166	6.487	6.494	-0.007	96	7545	121.2	
27 Phenanthrene	178	7.320	7.326	-0.006	99	71737	735.1	
28 Anthracene	178	7.365	7.372	-0.007	99	31593	320.6	
30 Fluoranthene	202	8.622	8.634	-0.012	100	153657	1371.0	
31 Pyrene	202	8.960	8.973	-0.013	100	162146	1395.0	
35 Benzo[a]anthracene	228	11.332	11.349	-0.017	97	88186	786.1	
36 Chrysene	228	11.431	11.448	-0.017	100	107113	1032.1	
38 Benzo[b]fluoranthene	252	14.486	14.508	-0.022	100	127898	1255.8	
39 Benzo[k]fluoranthene	252	14.569	14.591	-0.022	100	42119	411.2	
40 Benzo[a]pyrene	252	15.562	15.592	-0.030	100	88340	878.9	
41 Indeno[1,2,3-cd]pyrene	276	18.659	18.672	-0.013	80	52733	462.5	
42 Dibenz(a,h)anthracene	278	18.685	18.707	-0.022	94	14786	166.2	
43 Benzo[g,h,i]perylene	276	19.092	19.109	-0.017	99	52774	545.6	

Reagents:

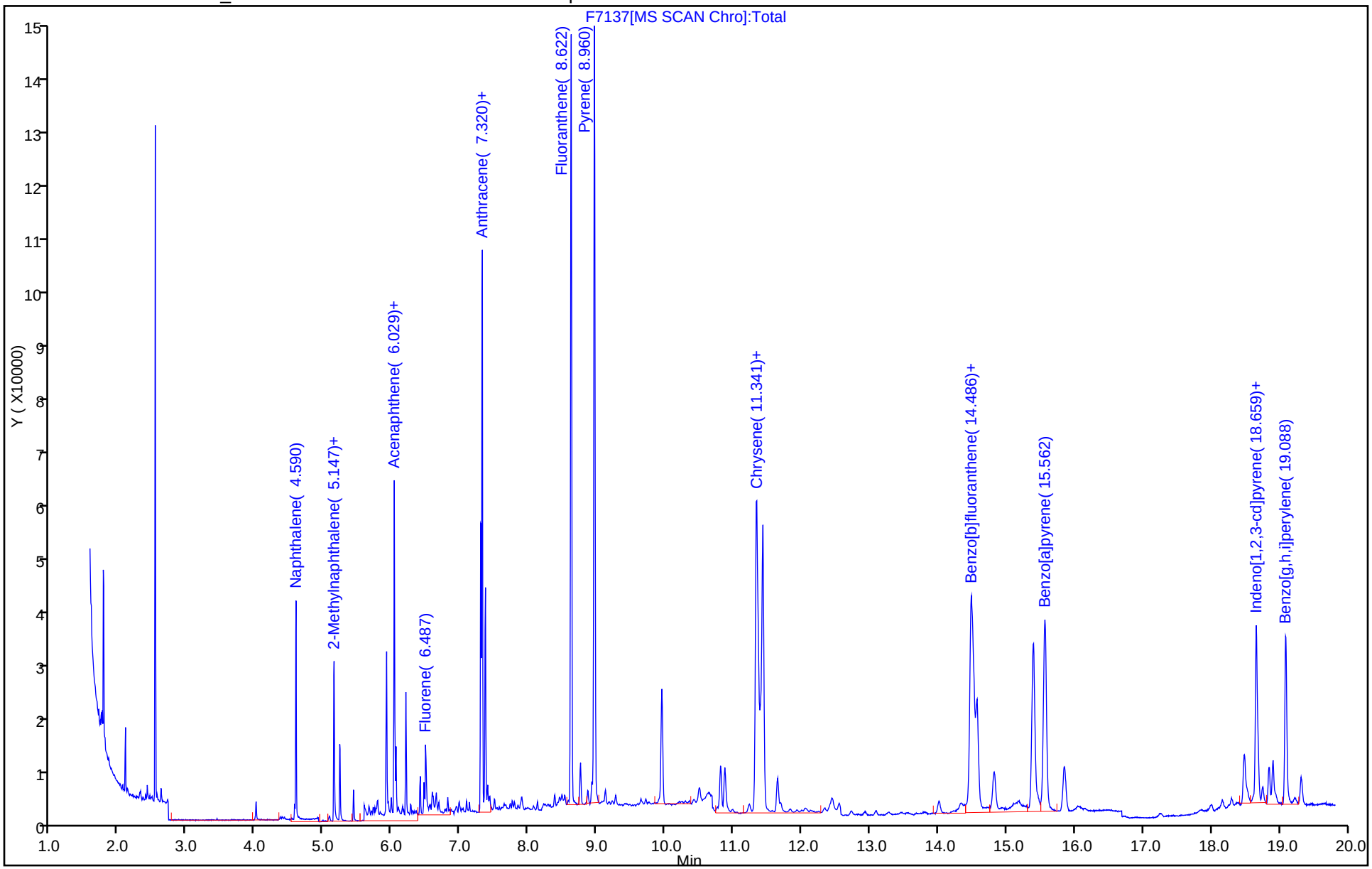
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 13-Jun-2017 07:13:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7137.D

Injection Date:	12-Jun-2017 20:25:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1	Worklist Smp#:	16
Client ID:	SS025-SS01				
Injection Vol:	1.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	16
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7137.D				
Lims ID:	280-97803-C-1-A				
Client ID:	SS025-SS01				
Sample Type:	Client				
Inject. Date:	12-Jun-2017 20:25:30	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Sample Info:	280-97803-c-1-a				
Operator ID:	VASQUEZK	Instrument ID:	SMS_F		
Method:	\\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\SMSF_8270SIMX.m				
Limit Group:	MSSV - 8270C-SIM				
Last Update:	13-Jun-2017 07:13:04	Calib Date:	11-May-2017 16:07:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK012				

First Level Reviewer: vasquezk Date: 13-Jun-2017 07:02:58

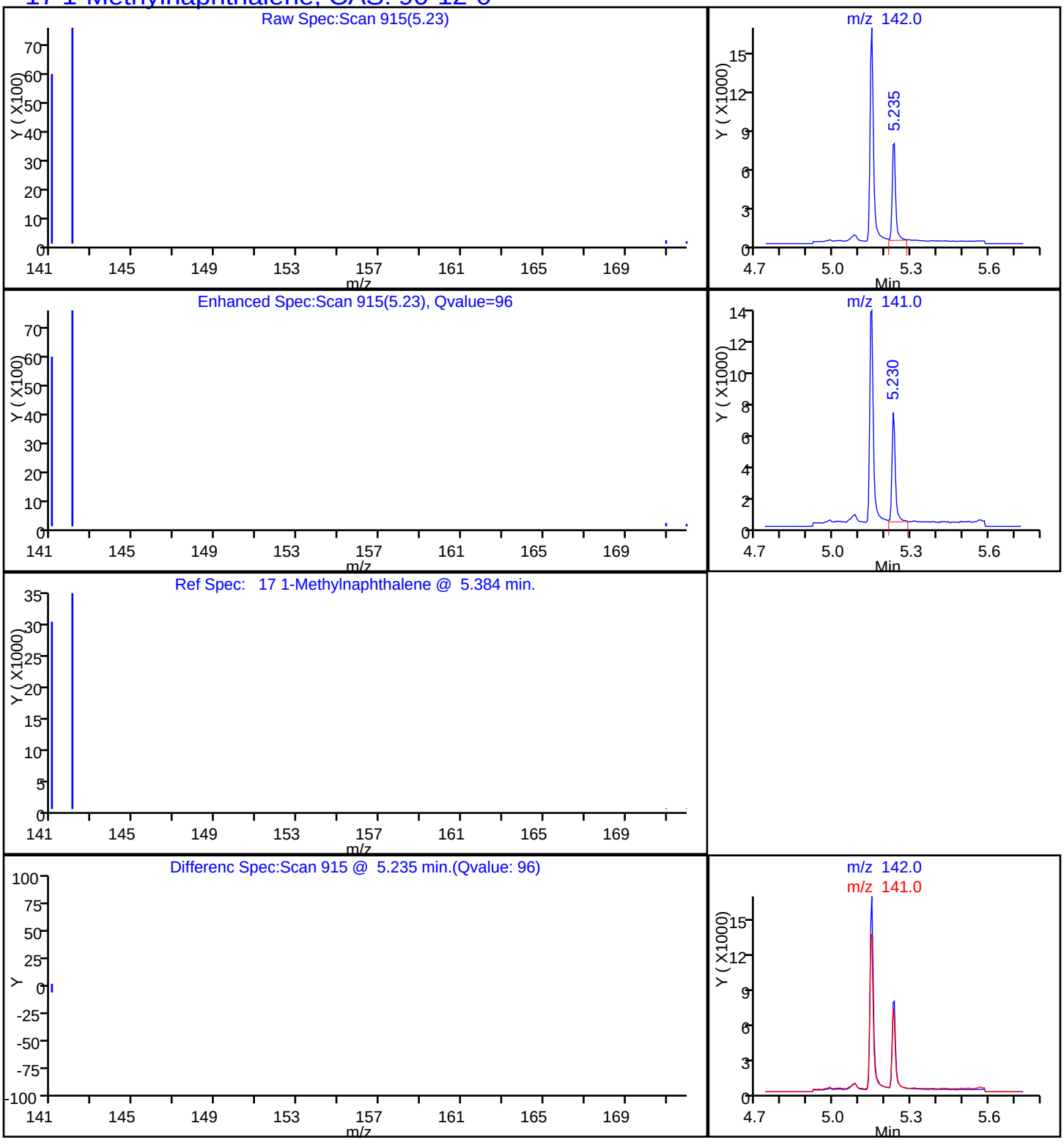
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	68.0	67.98
$ 5 2-Fluorobiphenyl	500.0	63.4	63.43
$ 6 Terphenyl-d14	500.0	62.1	62.14

Report Date: 13-Jun-2017 07:13:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7137.D				
Injection Date:	12-Jun-2017 20:25:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0

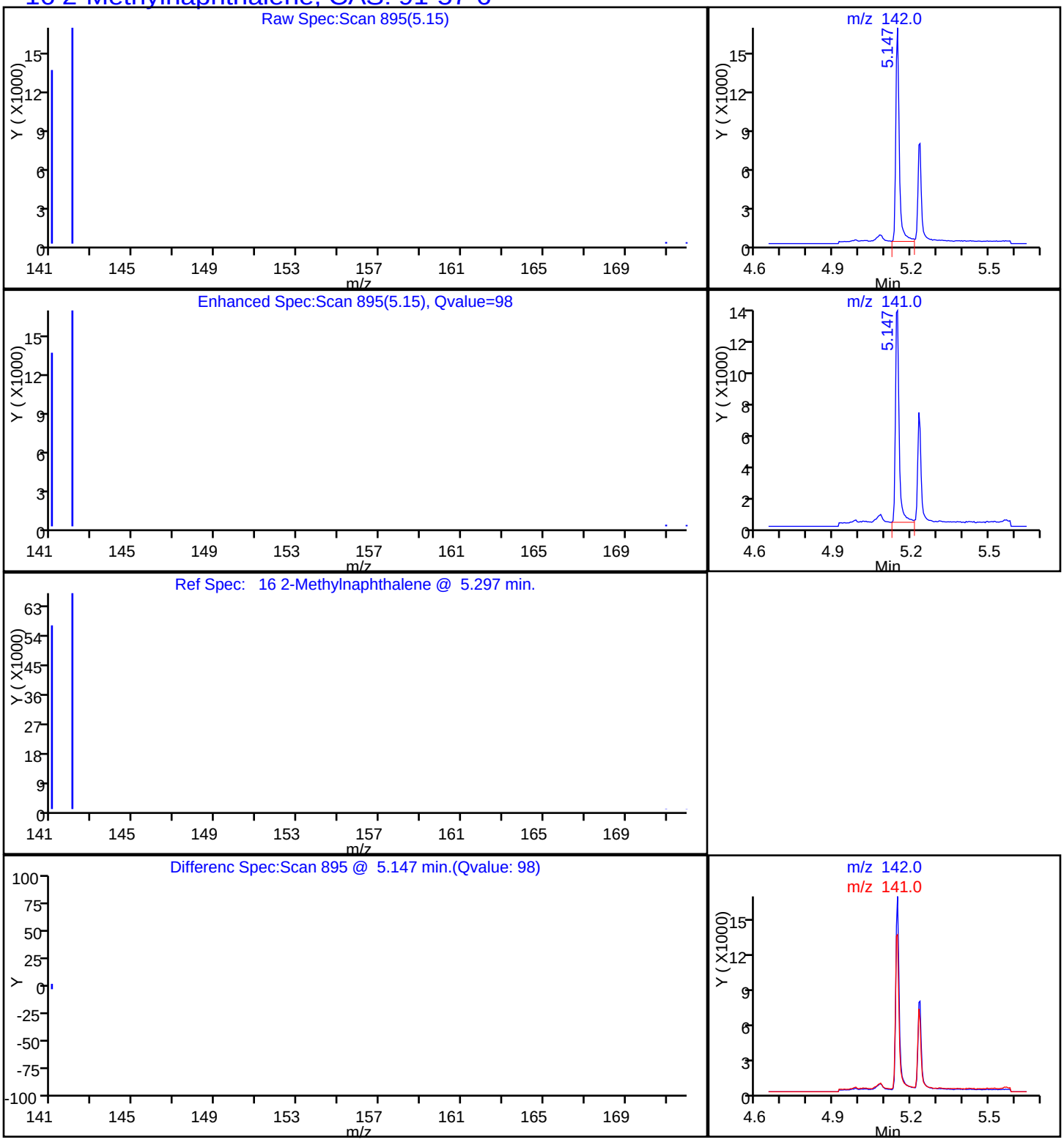


Report Date: 13-Jun-2017 07:13:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7137.D				
Injection Date:	12-Jun-2017 20:25:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



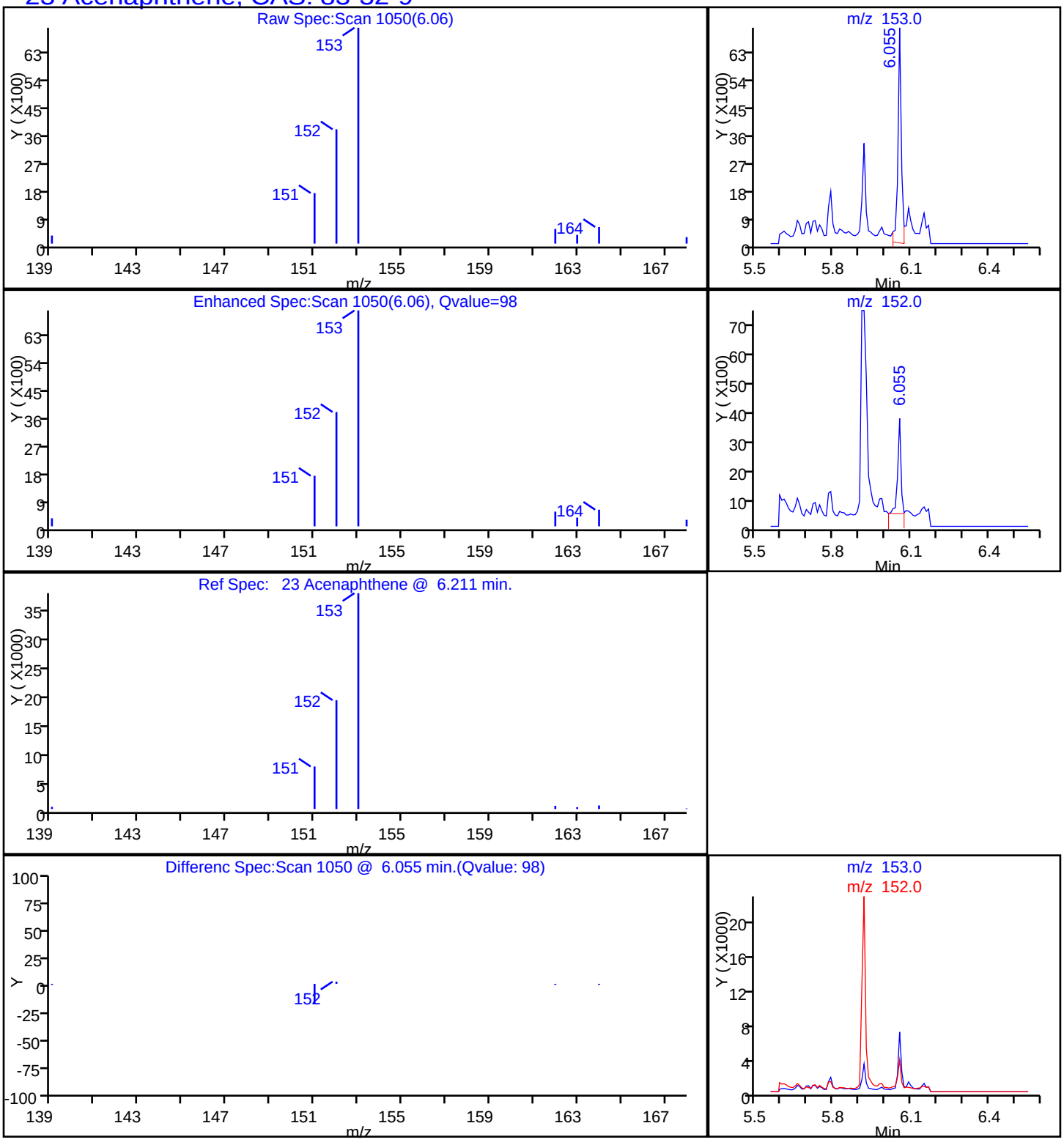
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7137.D

Injection Date:	12-Jun-2017 20:25:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9



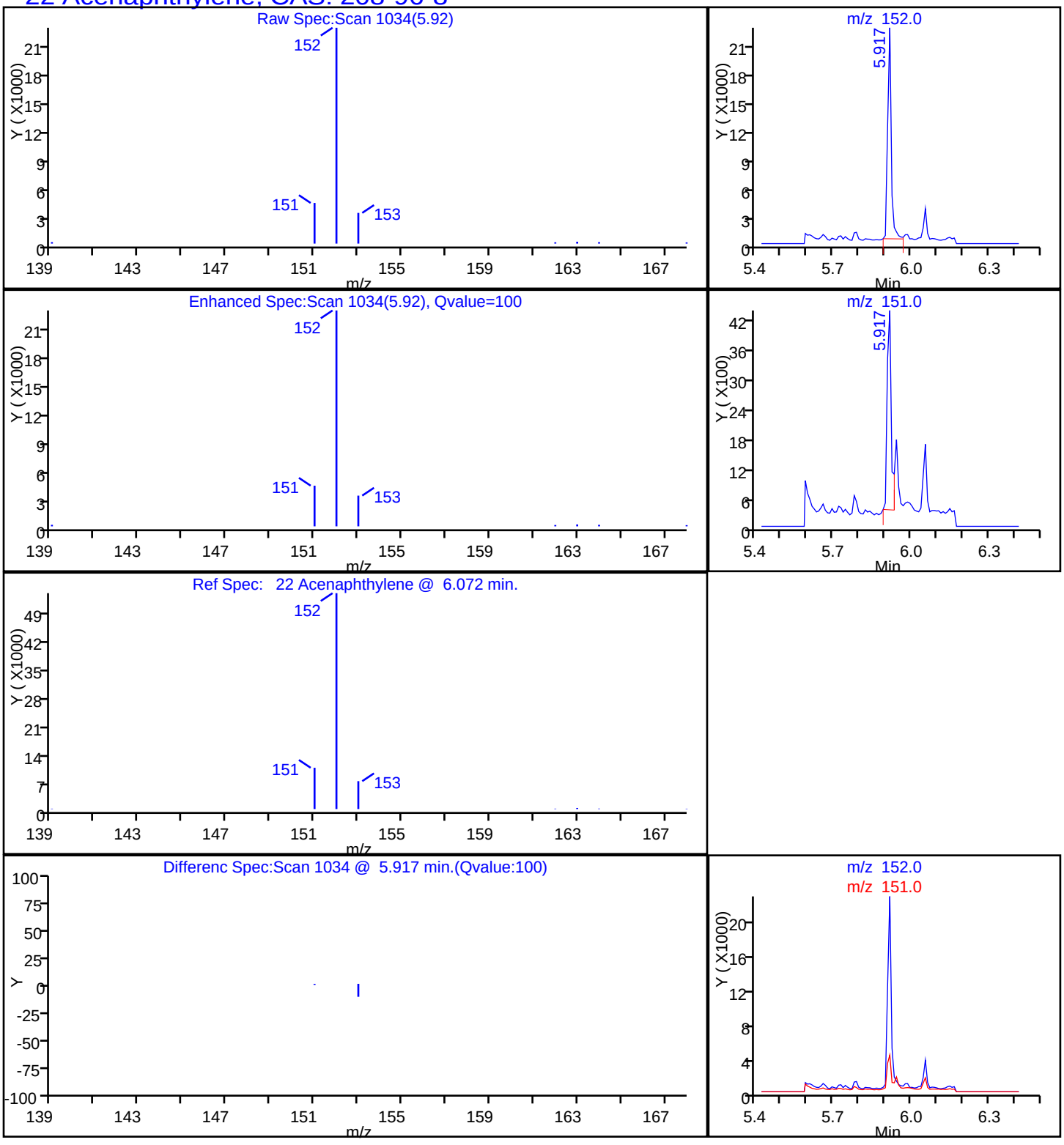
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7137.D

Injection Date:	12-Jun-2017 20:25:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Acenaphthylene, CAS: 208-96-8



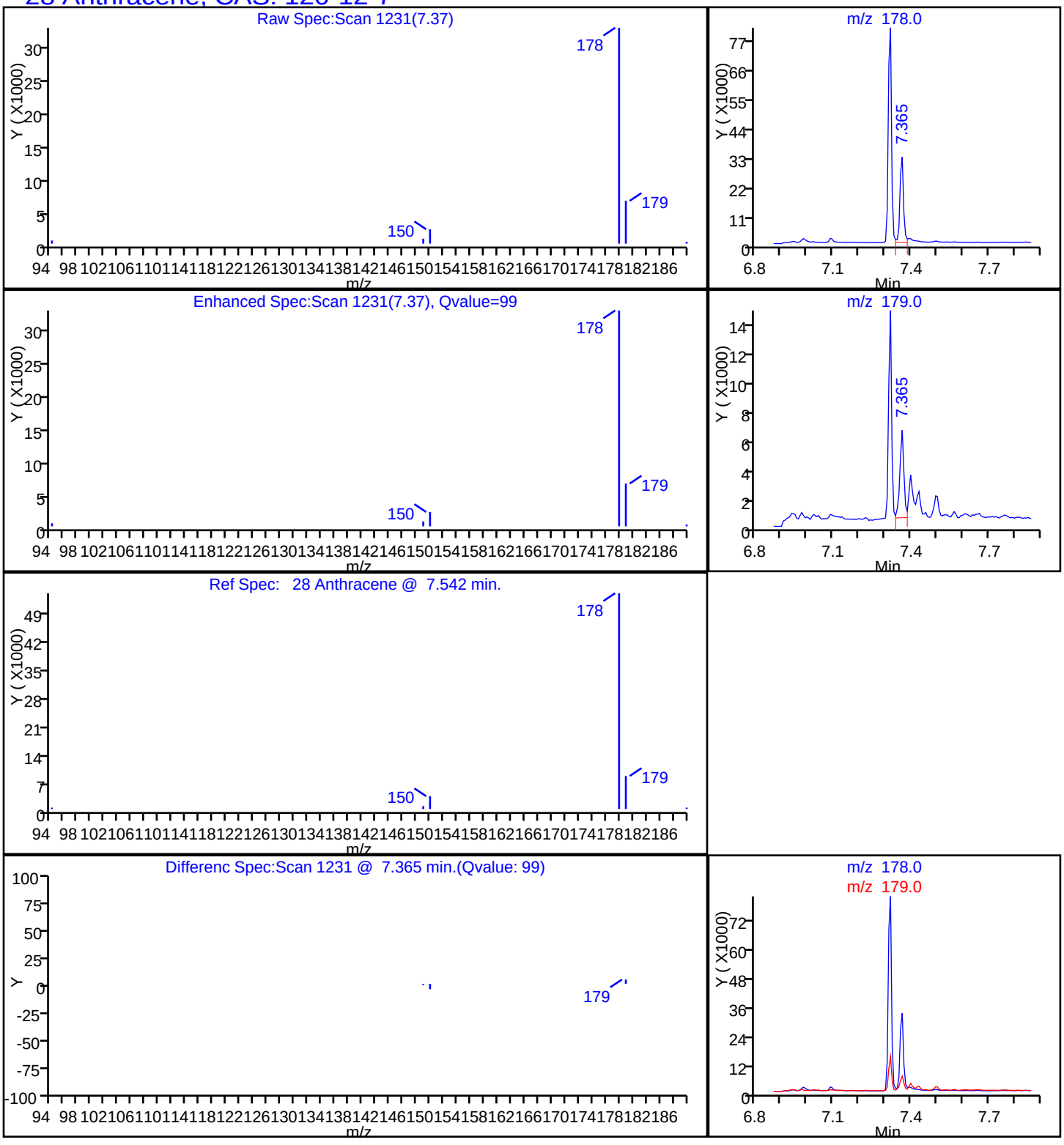
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7137.D

Injection Date:	12-Jun-2017 20:25:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

28 Anthracene, CAS: 120-12-7



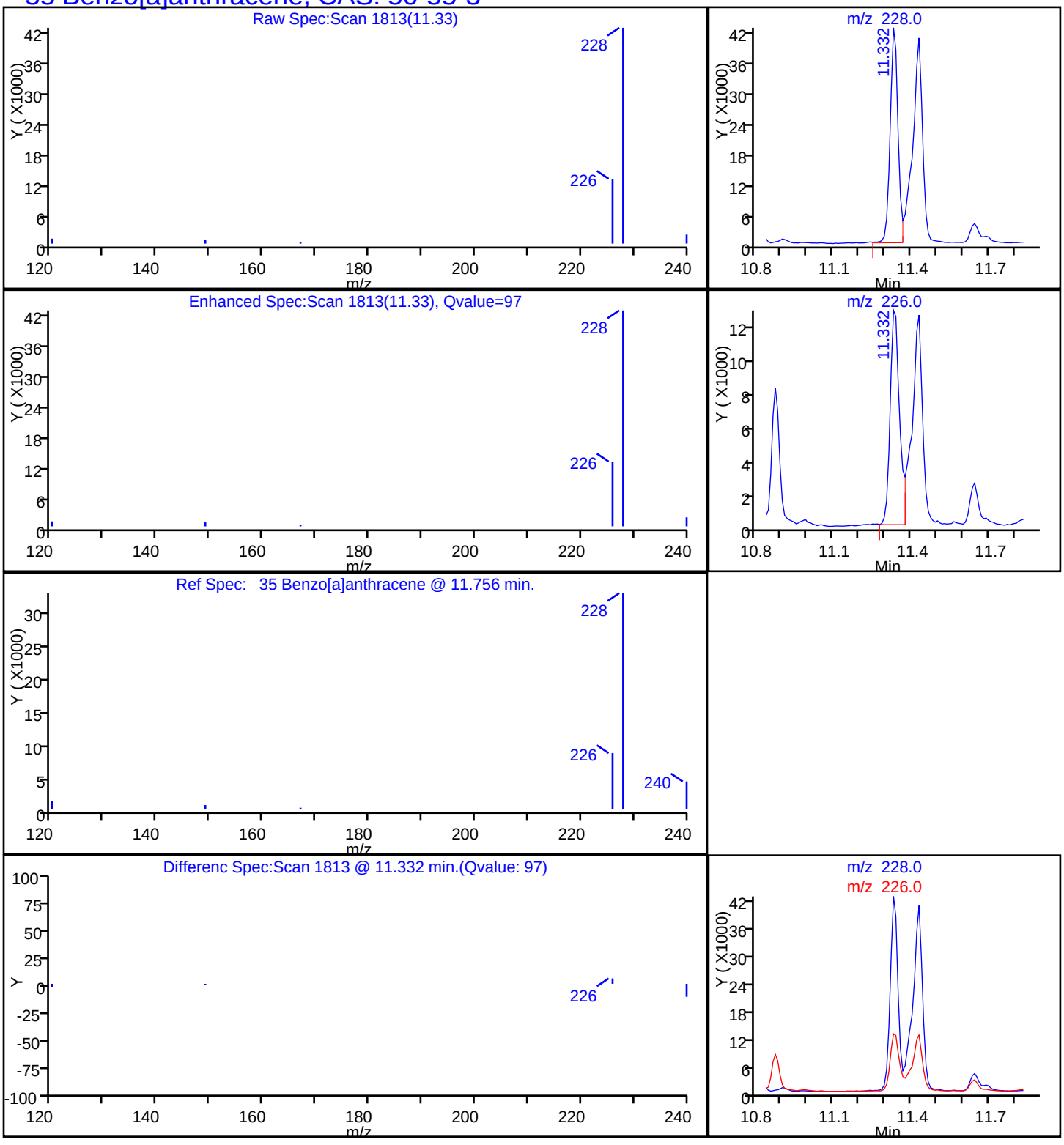
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7137.D

Injection Date:	12-Jun-2017 20:25:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

35 Benzo[a]anthracene, CAS: 56-55-3



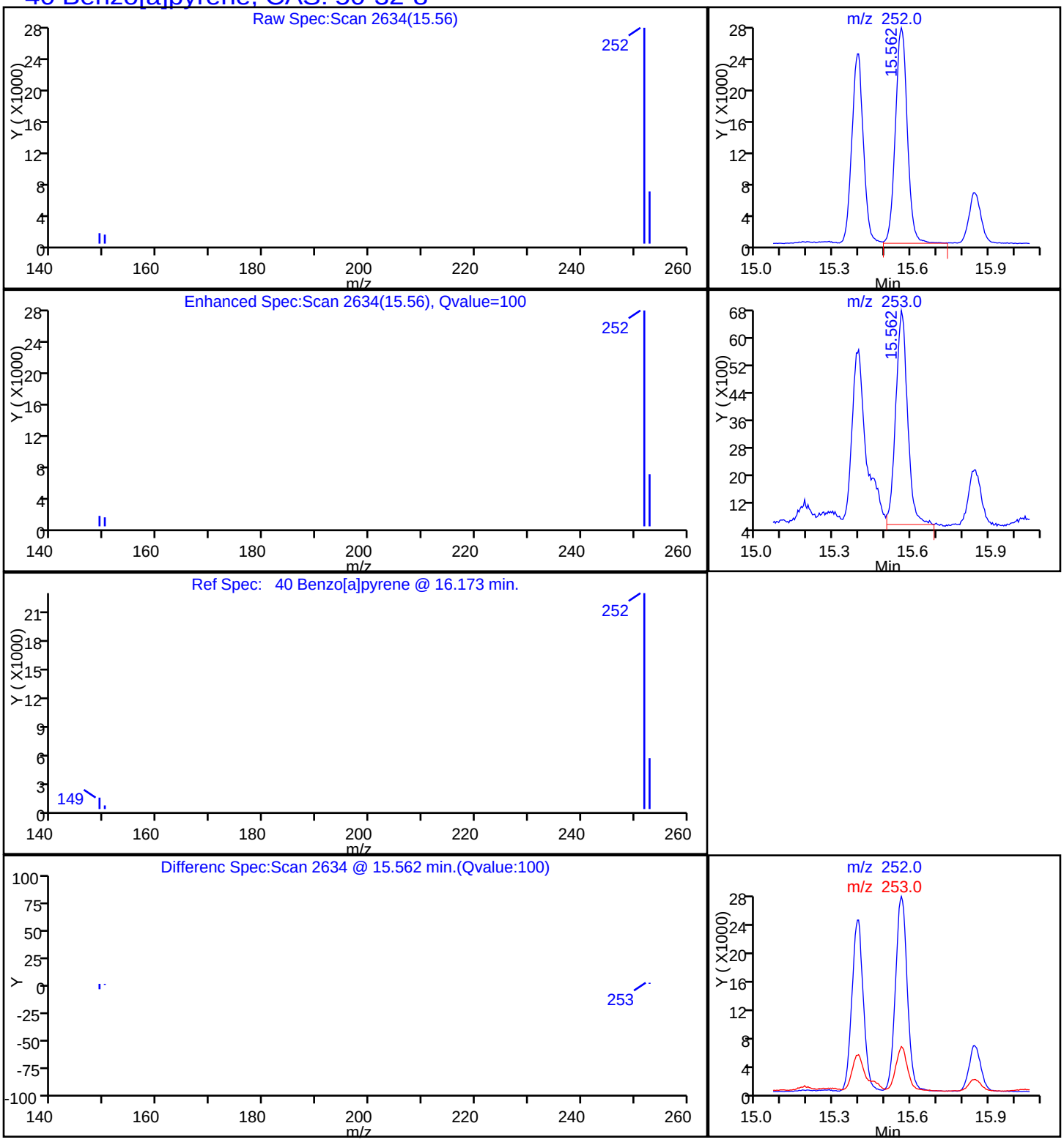
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7137.D

Injection Date:	12-Jun-2017 20:25:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

40 Benzo[a]pyrene, CAS: 50-32-8



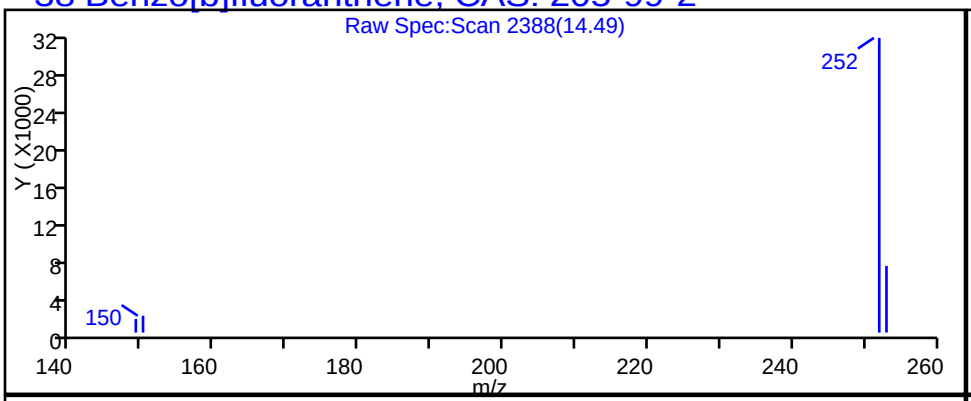
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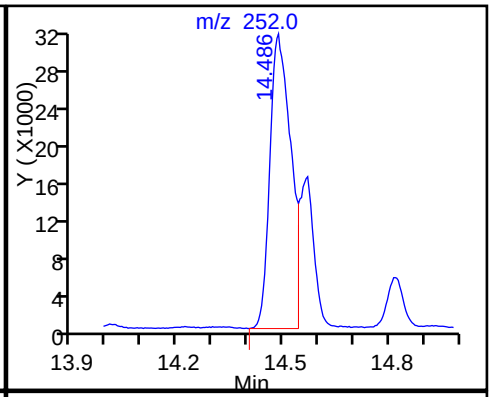
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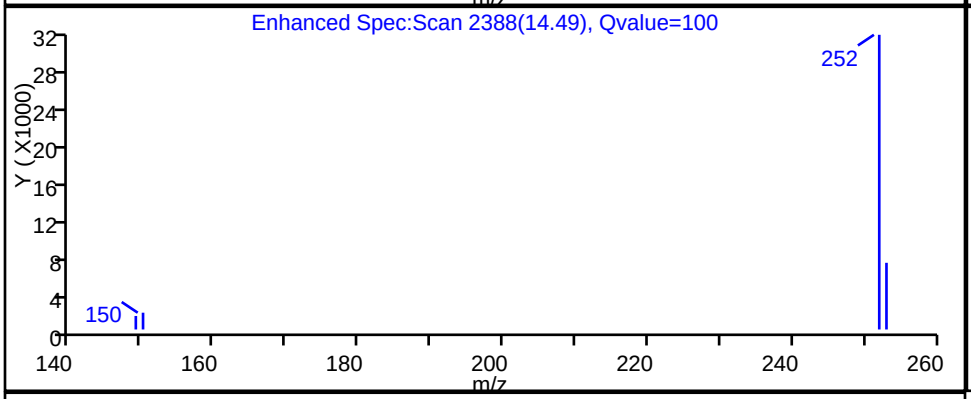
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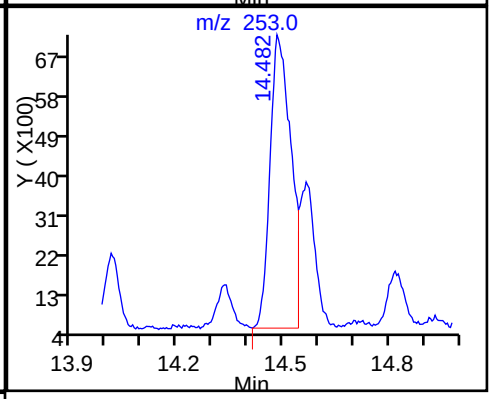
Injection Date:	12-Jun-2017 20:25:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
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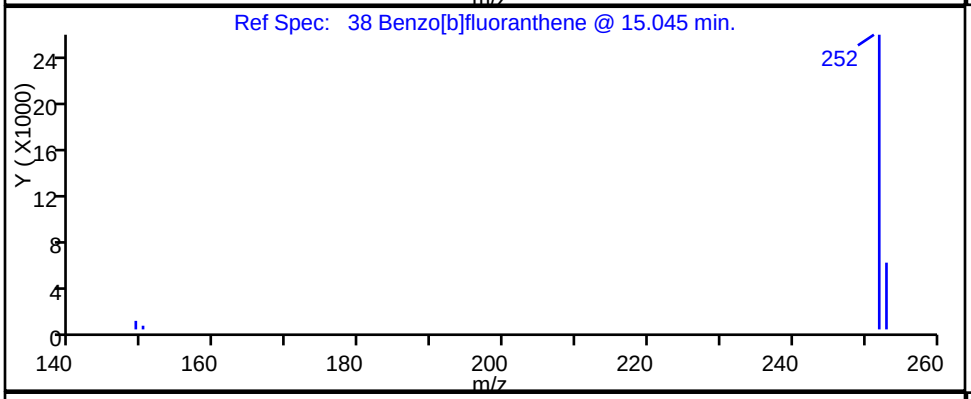
38 Benzo[b]fluoranthene, CAS: 205-99-2

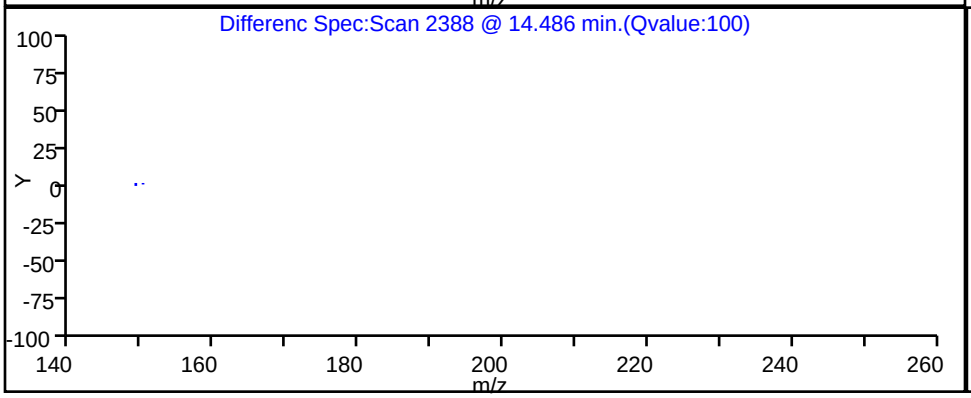


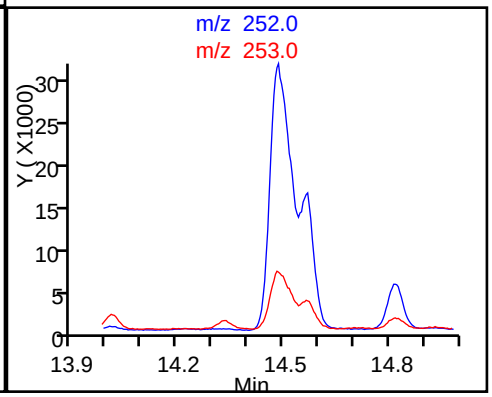










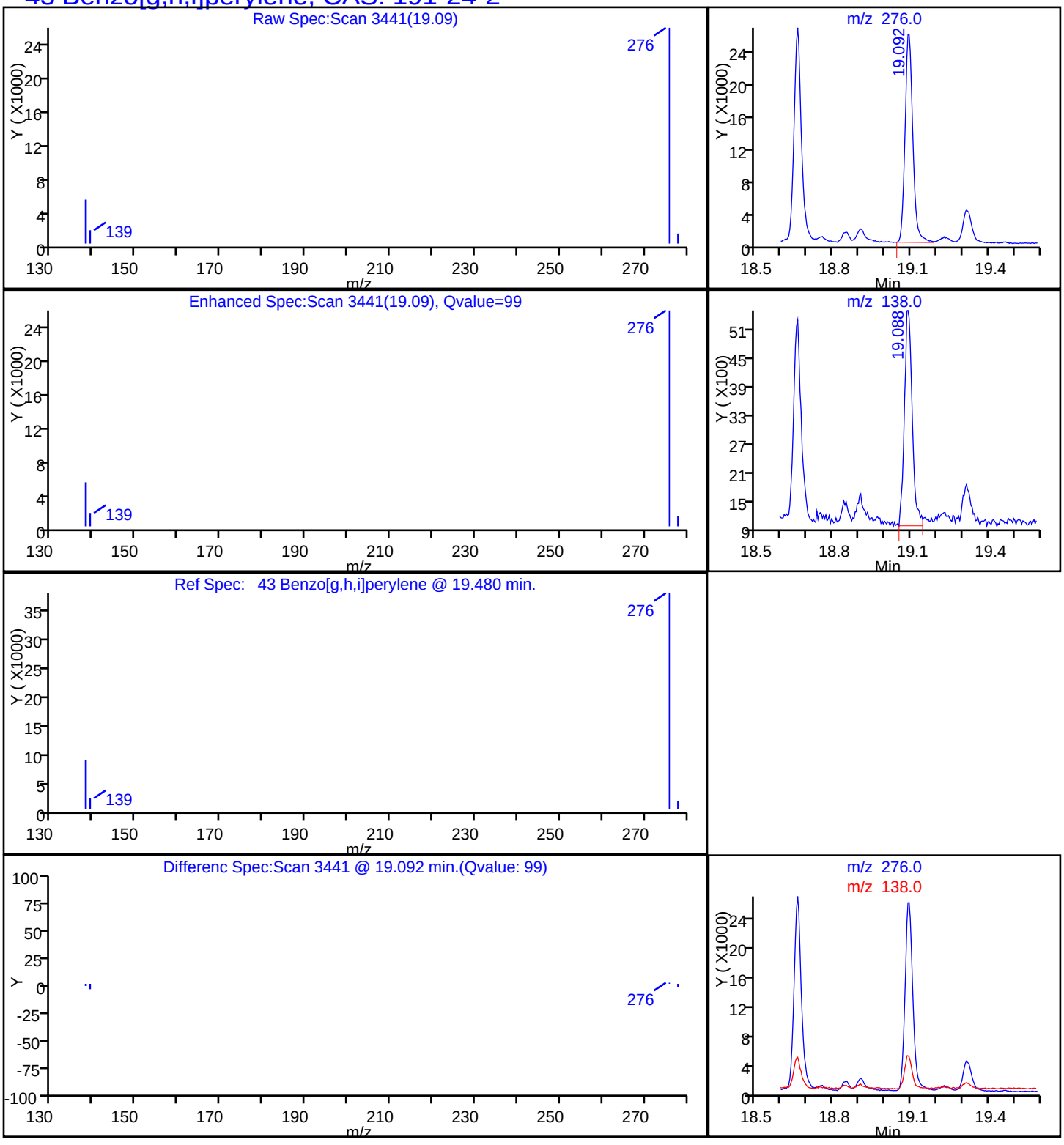


Report Date: 13-Jun-2017 07:13:21 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7137.D				
Injection Date:	12-Jun-2017 20:25:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

43 Benzo[g,h,i]perylene, CAS: 191-24-2

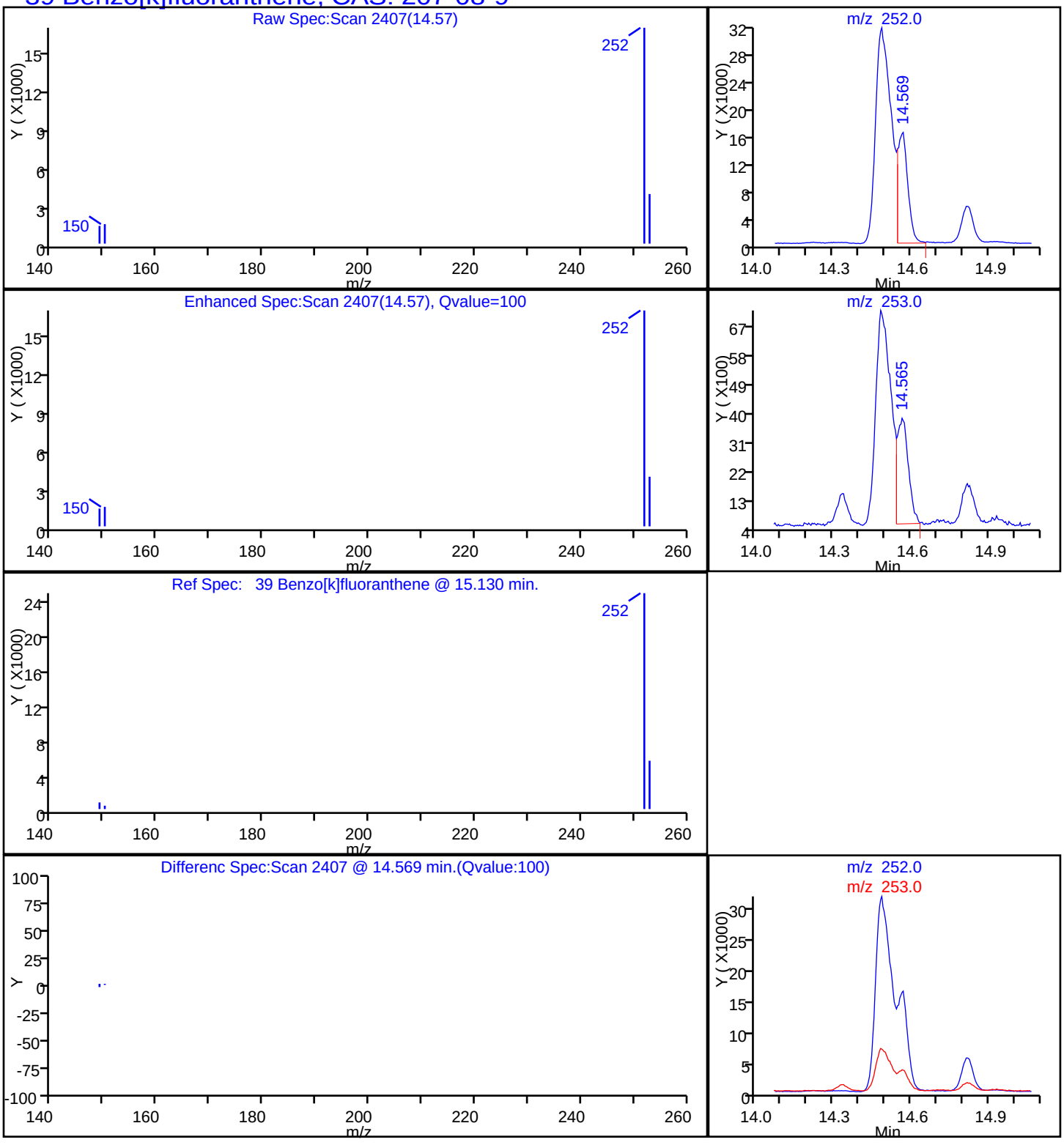


Report Date: 13-Jun-2017 07:13:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7137.D				
Injection Date:	12-Jun-2017 20:25:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Benzo[k]fluoranthene, CAS: 207-08-9

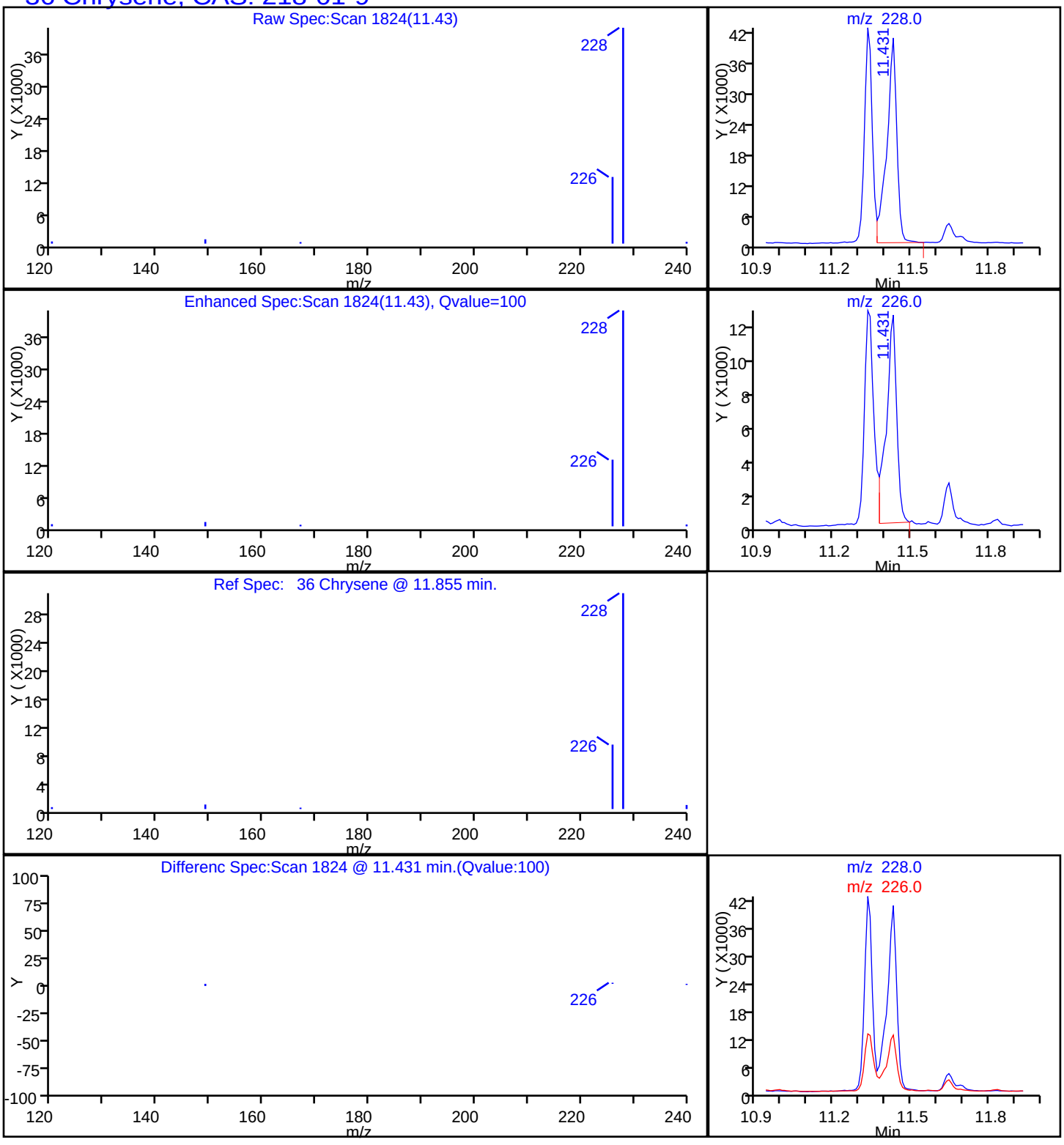


Report Date: 13-Jun-2017 07:13:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7137.D				
Injection Date:	12-Jun-2017 20:25:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Chrysene, CAS: 218-01-9

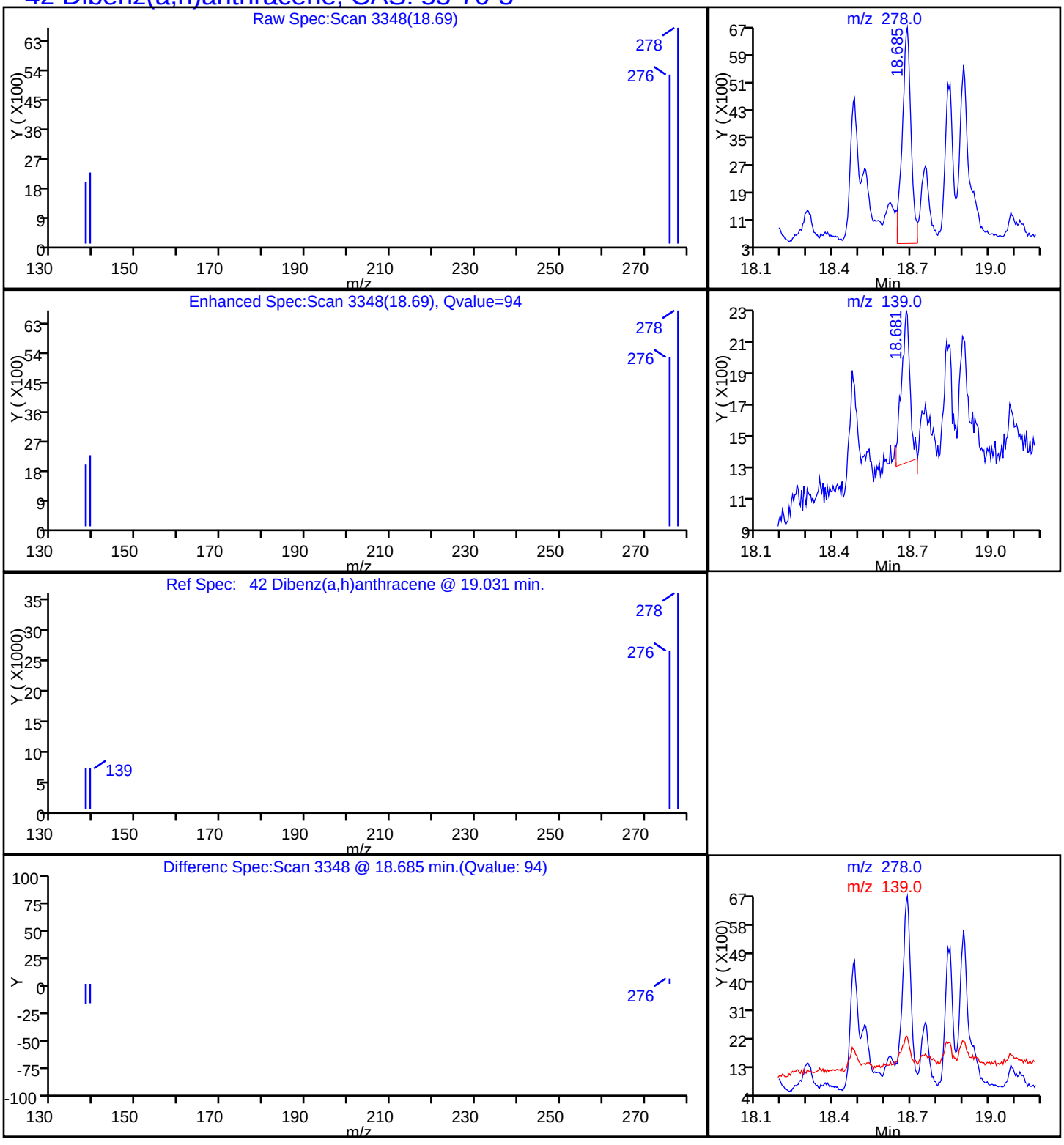


Report Date: 13-Jun-2017 07:13:21 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7137.D				
Injection Date:	12-Jun-2017 20:25:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

42 Dibenz(a,h)anthracene, CAS: 53-70-3



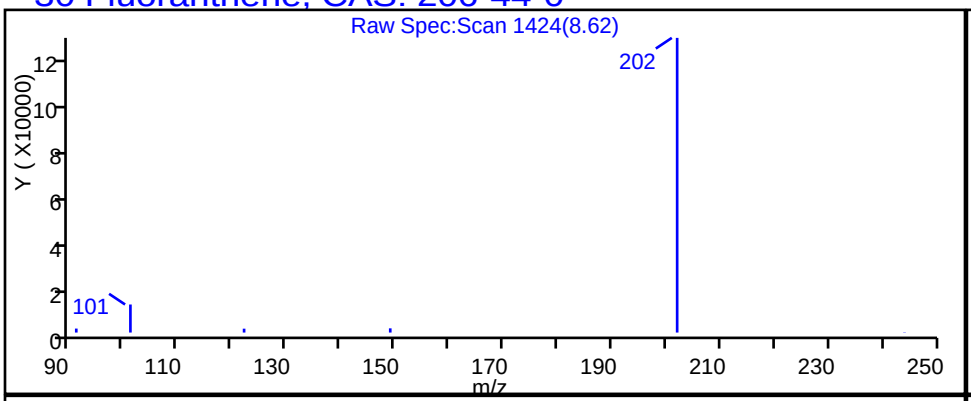
Report Date: 13-Jun-2017 07:13:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

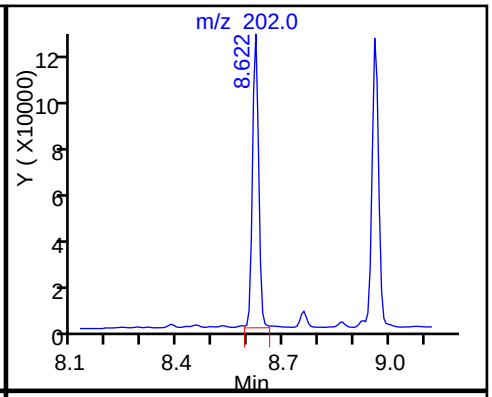
TestAmerica Denver

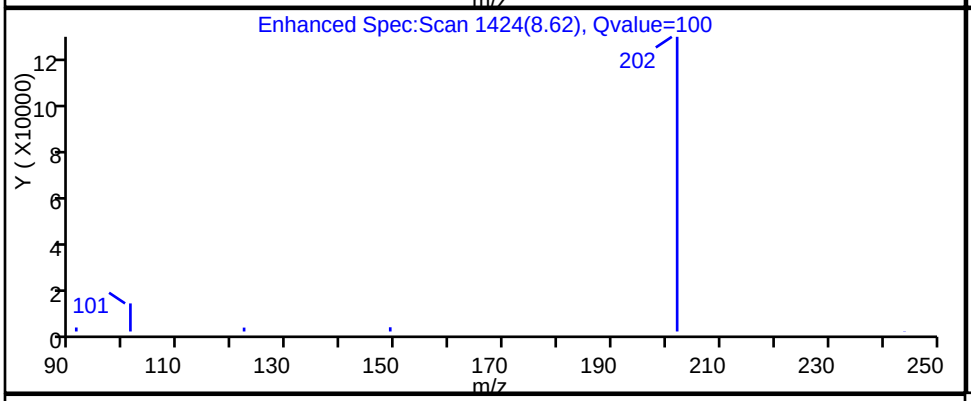
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7137.D

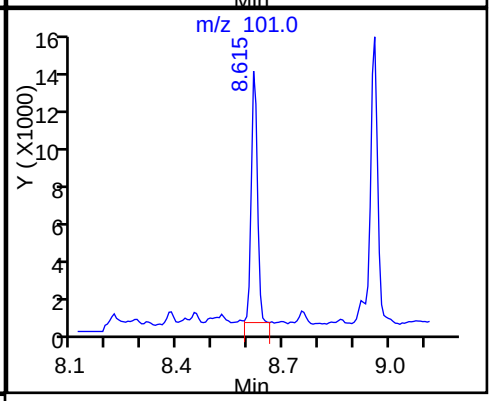
Injection Date:	12-Jun-2017 20:25:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

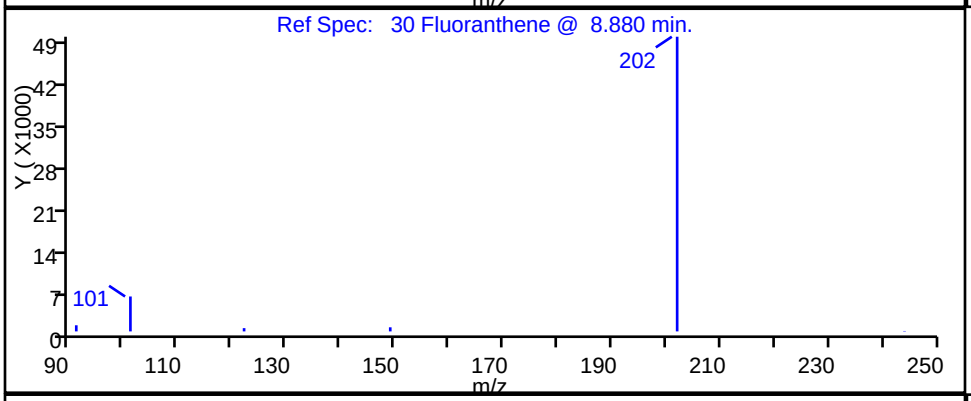
30 Fluoranthene, CAS: 206-44-0

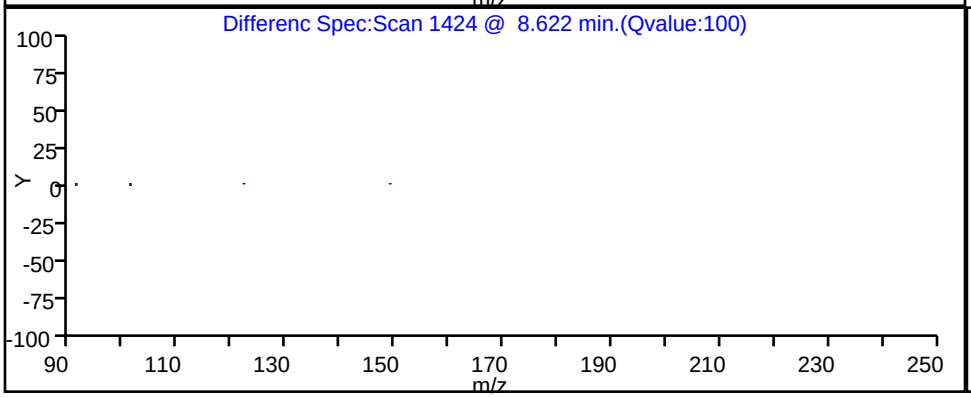


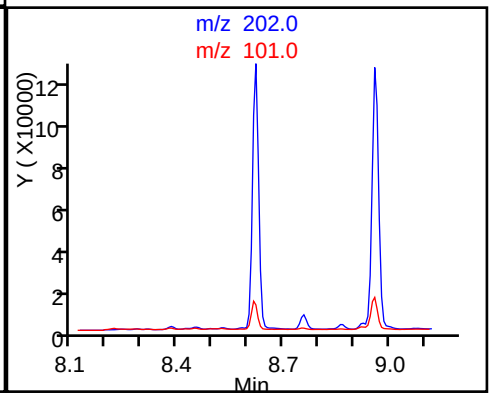










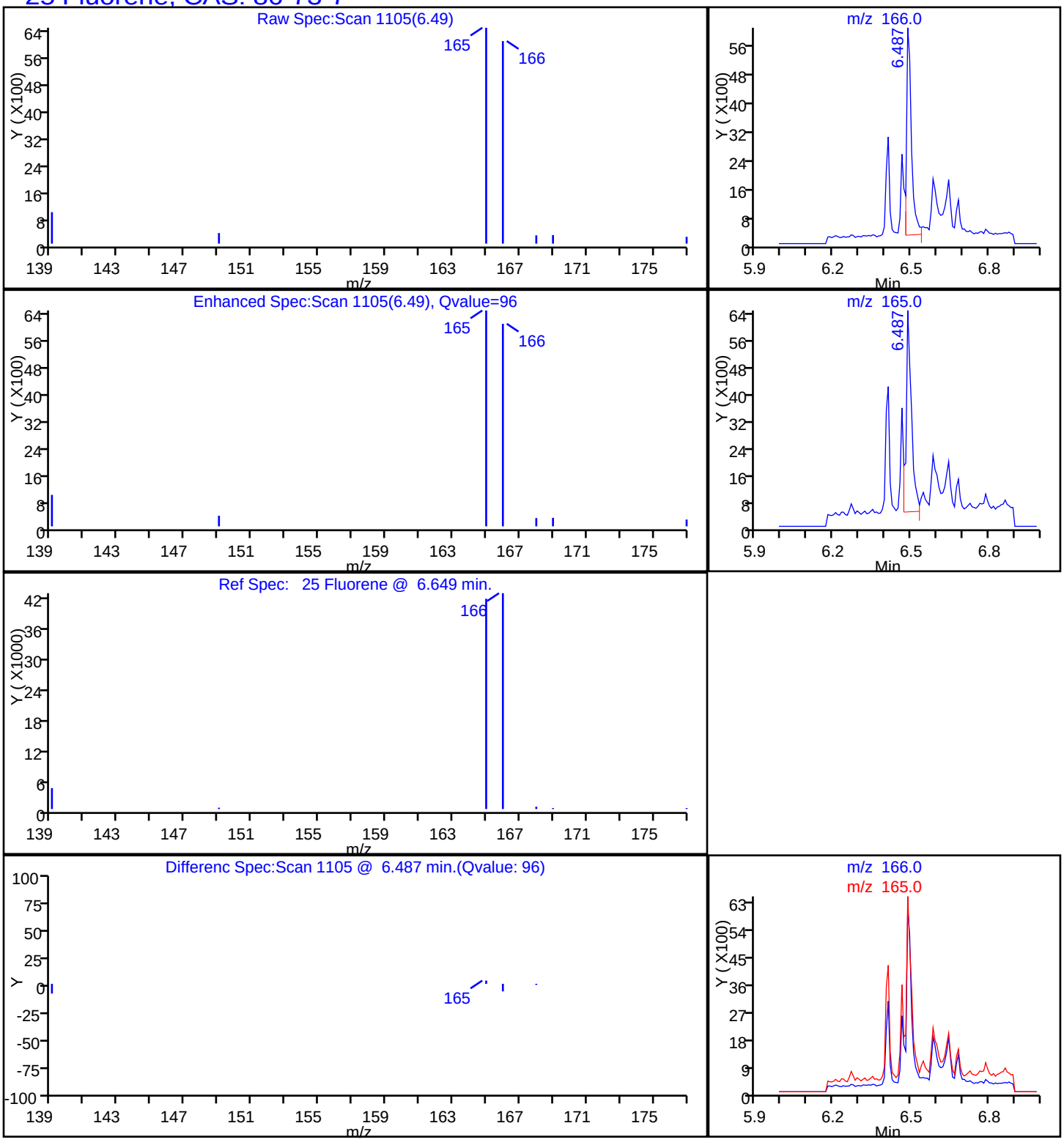


Report Date: 13-Jun-2017 07:13:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7137.D				
Injection Date:	12-Jun-2017 20:25:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Fluorene, CAS: 86-73-7

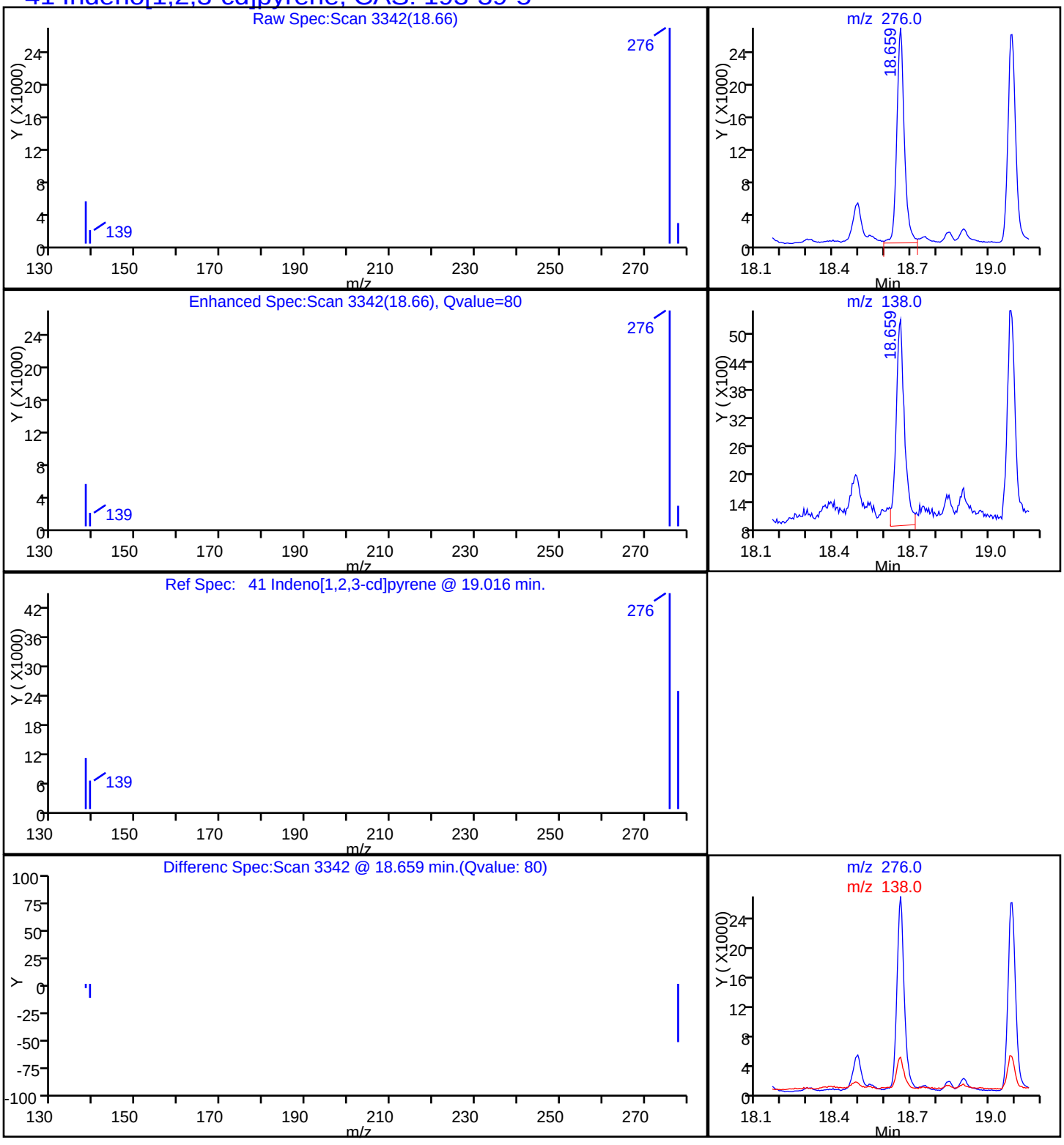


Report Date: 13-Jun-2017 07:13:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7137.D				
Injection Date:	12-Jun-2017 20:25:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



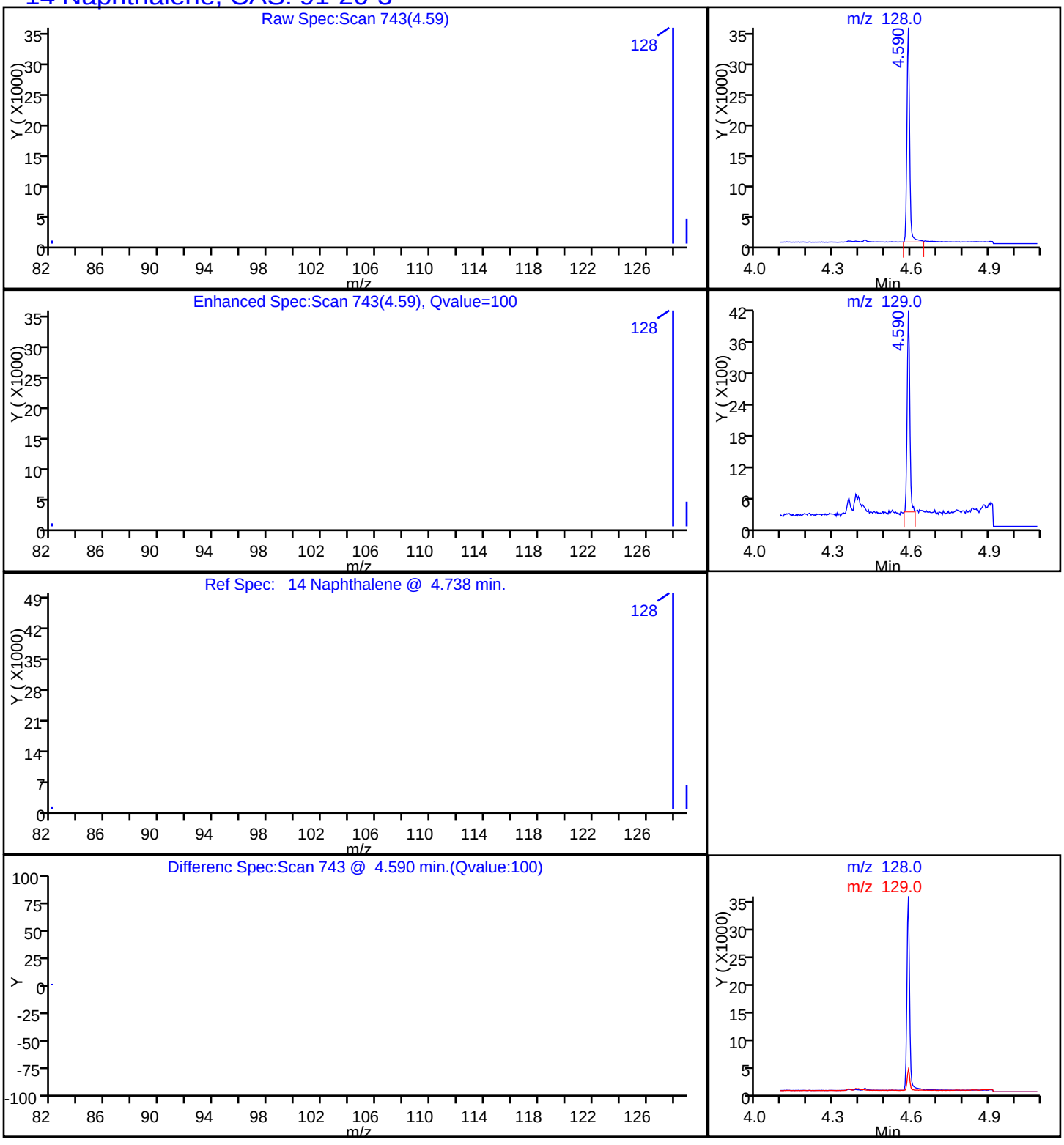
Report Date: 13-Jun-2017 07:13:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7137.D

Injection Date:	12-Jun-2017 20:25:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3



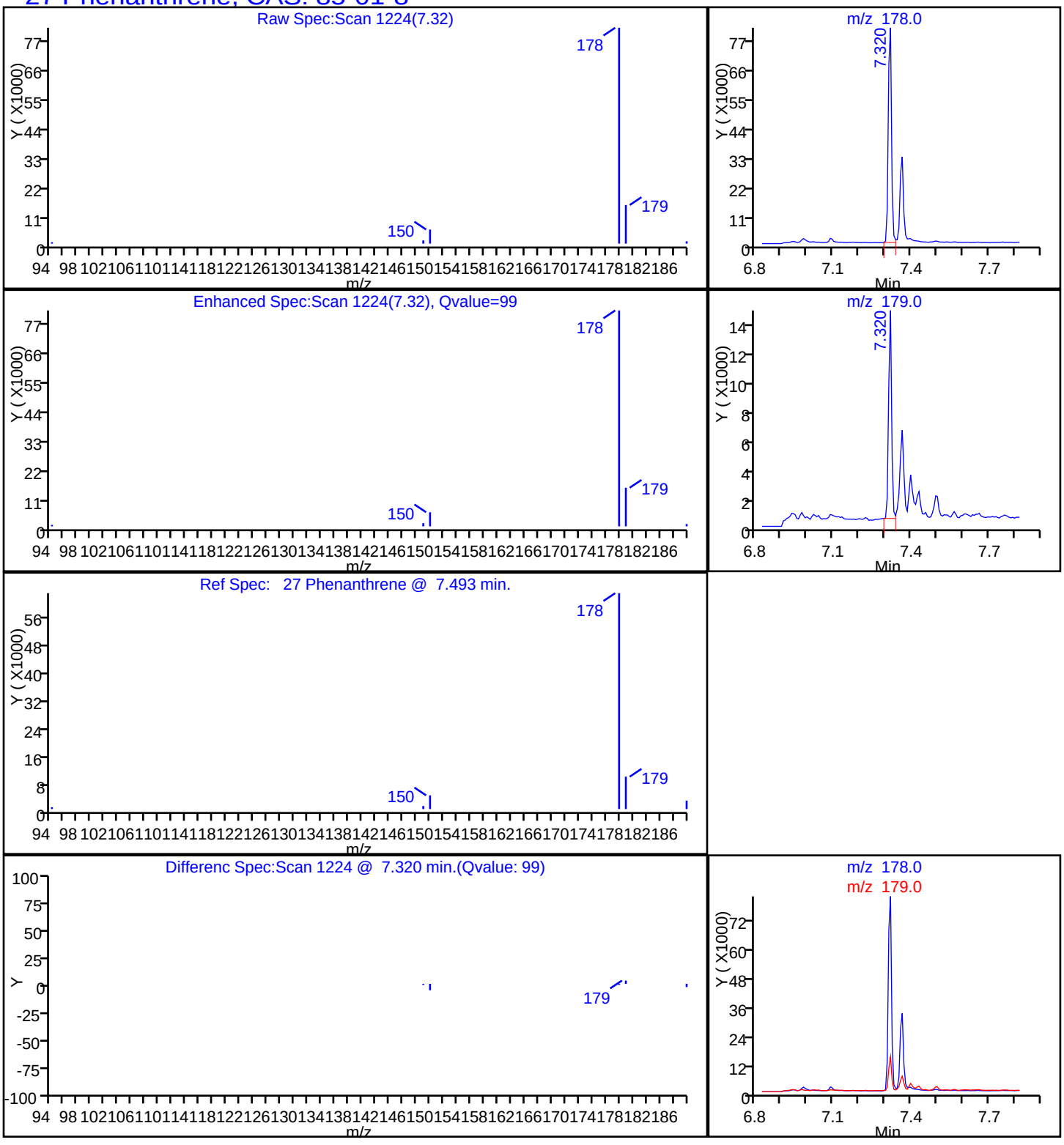
Report Date: 13-Jun-2017 07:13:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7137.D

Injection Date:	12-Jun-2017 20:25:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

27 Phenanthrene, CAS: 85-01-8



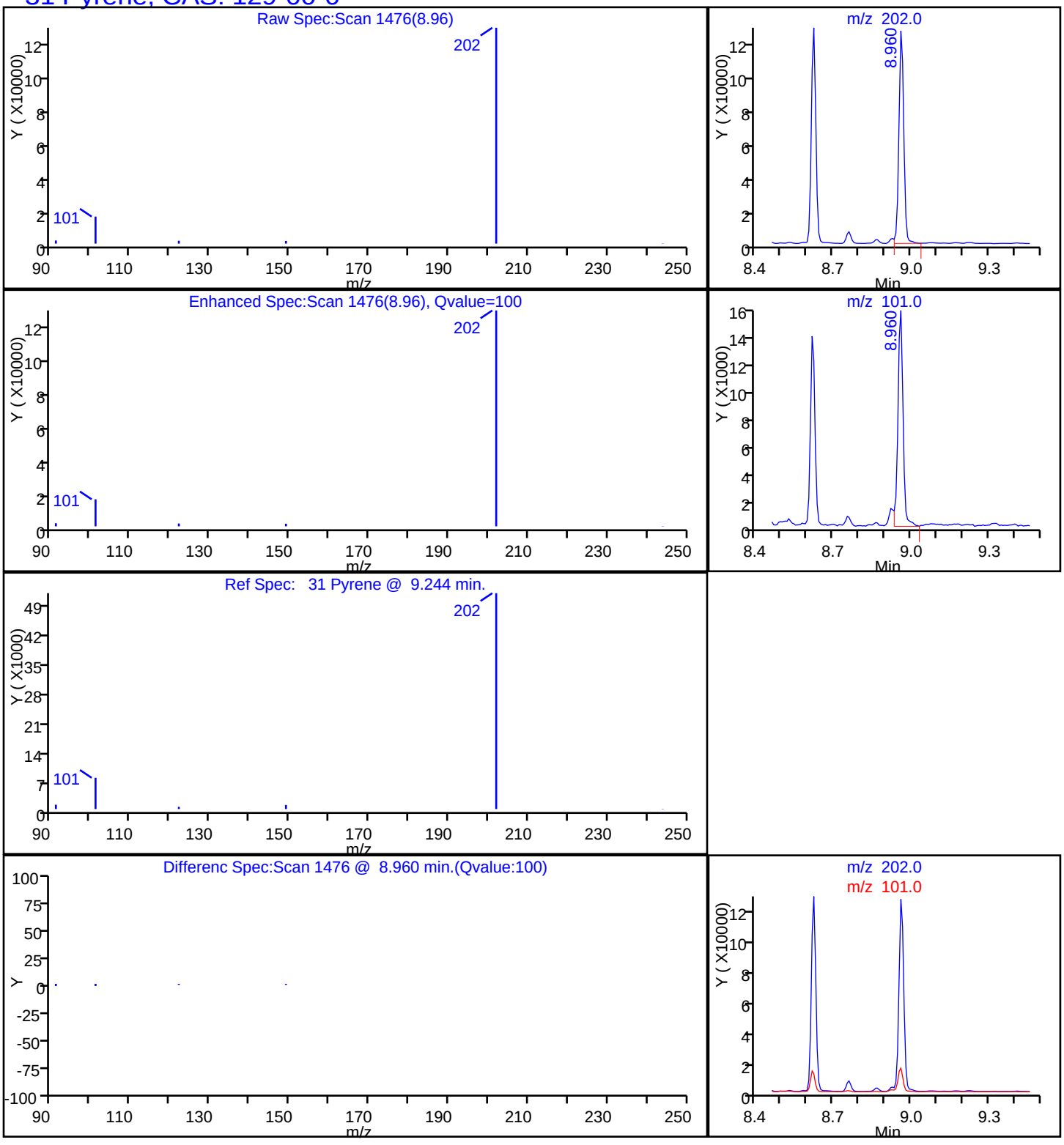
Report Date: 13-Jun-2017 07:13:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7137.D

Injection Date:	12-Jun-2017 20:25:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-1-A	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	5.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Pyrene, CAS: 129-00-0



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-AB-053117 | Lab Sample ID: 280-97803-3

Matrix: Water | Lab File ID: F7162.D

Analysis Method: 8270D SIM | Date Collected: 05/31/2017 12:40

Extract. Method: 3510C | Date Extracted: 06/06/2017 07:45

Sample wt/vol: 995.6(mL) | Date Analyzed: 06/13/2017 11:30

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377034 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.012	U	0.10	0.012	0.0057
91-57-6	2-Methylnaphthalene	0.012	U	0.10	0.012	0.0052
83-32-9	Acenaphthene	0.030	U	0.10	0.030	0.011
208-96-8	Acenaphthylene	0.012	U	0.10	0.012	0.010
120-12-7	Anthracene	0.020	U	0.10	0.020	0.014
56-55-3	Benzo[a]anthracene	0.012	U	0.10	0.012	0.0032
50-32-8	Benzo[a]pyrene	0.012	U	0.10	0.012	0.0052
205-99-2	Benzo[b]fluoranthene	0.012	U	0.10	0.012	0.0035
191-24-2	Benzo[g,h,i]perylene	0.012	U	0.10	0.012	0.0036
207-08-9	Benzo[k]fluoranthene	0.012	U	0.10	0.012	0.0051
218-01-9	Chrysene	0.012	U	0.10	0.012	0.0032
53-70-3	Dibenz(a,h)anthracene	0.012	U	0.10	0.012	0.0048
206-44-0	Fluoranthene	0.012	U	0.10	0.012	0.0046
86-73-7	Fluorene	0.020	U	0.10	0.020	0.019
193-39-5	Indeno[1,2,3-cd]pyrene	0.020	U	0.10	0.020	0.015
91-20-3	Naphthalene	0.012	U	0.10	0.012	0.0054
85-01-8	Phenanthrene	0.020	U	0.10	0.020	0.0098
129-00-0	Pyrene	0.020	U	0.10	0.020	0.0081

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	73		53-106
4165-60-0	Nitrobenzene-d5 (Surr)	76		55-111
1718-51-0	Terphenyl-d14 (Surr)	85		58-132

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7162.D
Lims ID: 280-97803-B-3-A
Client ID: SS025-AB-053117
Sample Type: Client
Inject. Date: 13-Jun-2017 11:30:30 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-b-3-a
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 13-Jun-2017 13:37:48 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: vasquezk Date: 13-Jun-2017 11:54:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.038	6.029	0.009	99	18310	600.0	
* 2 Phenanthrene-d10	188	7.307	7.301	0.006	100	36613	600.0	
* 3 Chrysene-d12	240	11.386	11.380	0.006	93	32653	600.0	
$ 4 Nitrobenzene-d5	82	4.005	4.001	0.004	100	10890	379.7	
$ 5 2-Fluorobiphenyl	172	5.440	5.436	0.004	100	17395	366.4	
$ 6 Terphenyl-d14	244	9.130	9.130	0.000	98	15858	426.6	
14 Naphthalene	128		4.589				ND	
16 2-Methylnaphthalene	142		5.147				ND	
17 1-Methylnaphthalene	142		5.235				ND	
22 Acenaphthylene	152		5.917				ND	
23 Acenaphthene	153		6.055				ND	
25 Fluorene	166		6.494				ND	
27 Phenanthrene	178		7.321				ND	
28 Anthracene	178		7.366				ND	
30 Fluoranthene	202		8.629				ND	
31 Pyrene	202		8.974				ND	
35 Benzo[a]anthracene	228		11.344				ND	
36 Chrysene	228		11.443				ND	
38 Benzo[b]fluoranthene	252		14.503				ND	
39 Benzo[k]fluoranthene	252		14.586				ND	
40 Benzo[a]pyrene	252		15.587				ND	
41 Indeno[1,2,3-cd]pyrene	276		18.671				ND	
42 Dibenz(a,h)anthracene	278		18.697				ND	
43 Benzo[g,h,i]perylene	276		19.104				ND	

Reagents:

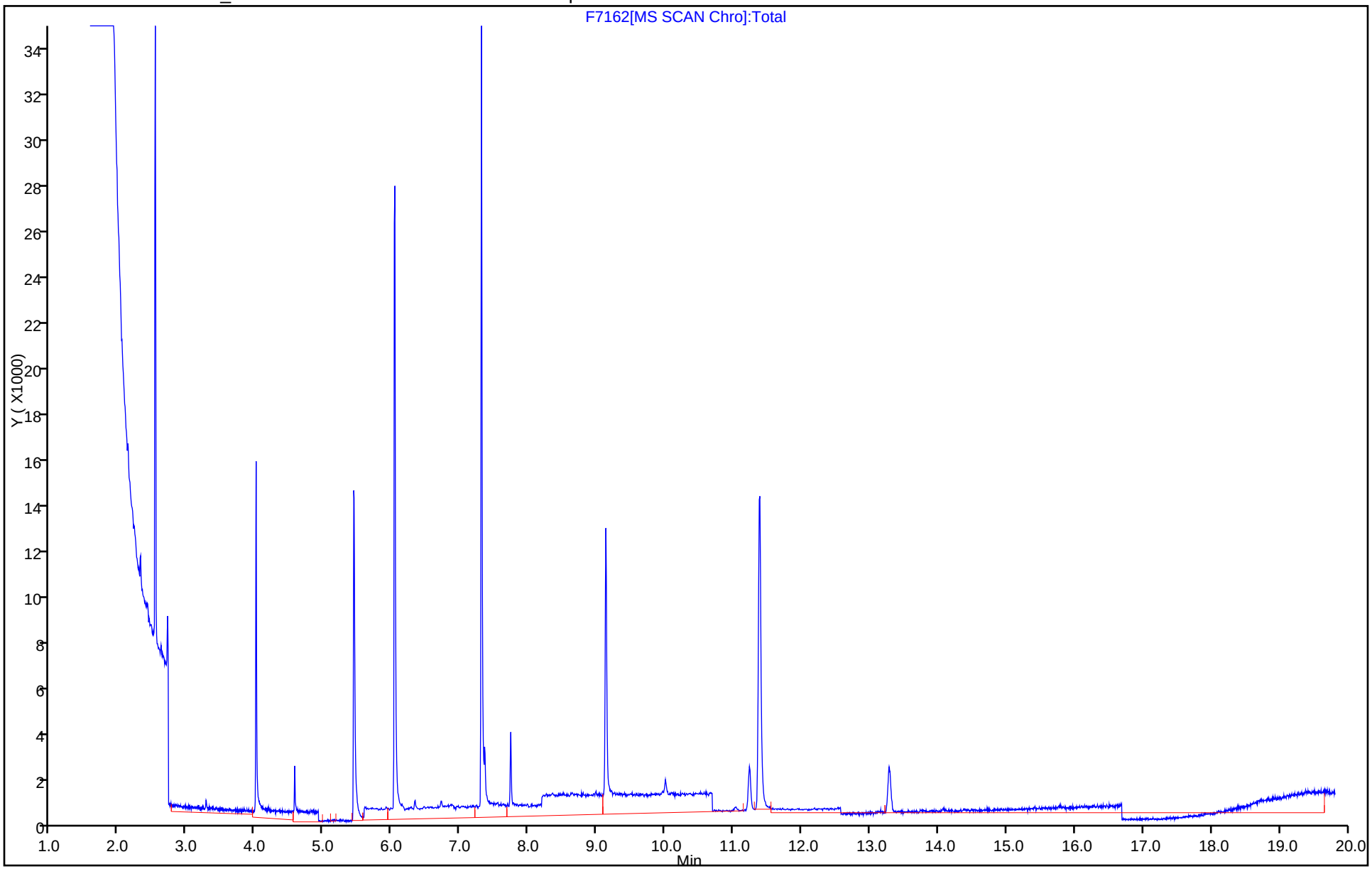
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 13-Jun-2017 13:37:59 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7162.D

Injection Date:	13-Jun-2017 11:30:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	280-97803-B-3-A	Lab Sample ID:	280-97803-3	Worklist Smp#:	14
Client ID:	SS025-AB-053117				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7162.D
Lims ID: 280-97803-B-3-A
Client ID: SS025-AB-053117
Sample Type: Client
Inject. Date: 13-Jun-2017 11:30:30 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-b-3-a
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 13-Jun-2017 13:37:48 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: vasquezk Date: 13-Jun-2017 11:54:53

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	379.7	75.94
$ 5 2-Fluorobiphenyl	500.0	366.4	73.28
$ 6 Terphenyl-d14	500.0	426.6	85.32

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS02 | Lab Sample ID: 280-97803-4

Matrix: Solid | Lab File ID: G5_1434.D

Analysis Method: 8270D SIM | Date Collected: 05/31/2017 12:50

Extract. Method: 3546 | Date Extracted: 06/05/2017 08:51

Sample wt/vol: 30.6(g) | Date Analyzed: 06/08/2017 12:12

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 376547 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	1.5	J	5.8	0.58	0.30
91-57-6	2-Methylnaphthalene	2.1	J	5.8	0.77	0.36
83-32-9	Acenaphthene	2.4	J	5.8	0.31	0.19
208-96-8	Acenaphthylene	7.7		5.8	0.77	0.20
120-12-7	Anthracene	6.7		5.8	2.9	0.83
56-55-3	Benzo[a]anthracene	38		5.8	2.9	1.0
50-32-8	Benzo[a]pyrene	53		5.8	2.9	0.86
205-99-2	Benzo[b]fluoranthene	72		5.8	2.9	1.4
191-24-2	Benzo[g,h,i]perylene	34		5.8	2.9	1.3
207-08-9	Benzo[k]fluoranthene	23		5.8	2.9	1.2
218-01-9	Chrysene	51		5.8	2.9	1.2
53-70-3	Dibenz(a,h)anthracene	7.9		5.8	2.9	1.5
206-44-0	Fluoranthene	71		5.8	2.9	1.2
86-73-7	Fluorene	2.6	J	5.8	0.77	0.54
193-39-5	Indeno[1,2,3-cd]pyrene	38		5.8	2.9	1.3
91-20-3	Naphthalene	0.77	U	5.8	0.77	0.38
85-01-8	Phenanthrene	28		5.8	2.9	1.3
129-00-0	Pyrene	69		5.8	2.9	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	74		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	72		44-125
1718-51-0	Terphenyl-d14 (Surr)	81		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1434.D
Lims ID: 280-97803-C-4-A
Client ID: SS025-SS02
Sample Type: Client
Inject. Date: 08-Jun-2017 12:12:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-c-4-a
Operator ID: VASQUEZK Instrument ID: SMS_G5

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 11-Jun-2017 22:45:01 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 11-Jun-2017 22:26:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	5.987	5.987	0.000	90	16708	600.0	
* 3 Phenanthrene-d10	188	7.249	7.249	0.000	100	32774	600.0	
* 1 Chrysene-d12	240	11.224	11.224	0.000	98	37236	600.0	
$ 4 Nitrobenzene-d5	82	3.958	3.959	-0.001	100	5704	357.6	
$ 5 2-Fluorobiphenyl	172	5.391	5.391	0.000	100	14869	368.6	
$ 6 Terphenyl-d14	244	9.038	9.044	-0.006	100	17404	404.8	
43 1,4-Dioxane	88		1.879				ND	
7 N-Nitrosodimethylamine	42		2.004				ND	
15 Naphthalene	128		4.550				ND	
16 2-Methylnaphthalene	142	5.105	5.105	0.000	99	1627	54.7	
17 1-Methylnaphthalene	142	5.190	5.190	0.000	96	1124	37.6	
18 Dimethyl phthalate	163		5.710				ND	
20 Acenaphthylene	152	5.873	5.873	0.000	100	9337	199.4	
21 Acenaphthene	153	6.015	6.015	0.000	95	1980	62.1	
19 Dibenzofuran	168	6.153	6.159	-0.006	91	1834	36.0	
22 Diethyl phthalate	149		6.284				ND	
23 Fluorene	166	6.447	6.447	0.000	99	2548	66.4	
24 N-Nitrosodiphenylamine	169		6.522				ND	
25 Phenanthrene	178	7.271	7.271	0.000	100	45385	731.0	
26 Anthracene	178	7.314	7.314	0.000	98	10039	173.1	
27 Di-n-butyl phthalate	149	7.682	7.683	0.000	99	4139	67.7	
28 Fluoranthene	202	8.544	8.545	-0.001	100	142977	1845.5	
29 Pyrene	202	8.875	8.881	-0.006	100	144930	1799.8	
30 Butyl benzyl phthalate	149	9.863	9.863	0.000	96	24067	962.1	
31 Bis(2-ethylhexyl) phthalat	149	11.127	11.127	0.000	97	7237	200.9	
32 Benzo[a]anthracene	228	11.192	11.197	-0.005	98	76381	996.1	
33 Chrysene	228	11.284	11.290	-0.006	100	103777	1314.4	
34 Di-n-octyl phthalate	149		13.028				ND	
35 Benzo[b]fluoranthene	252	14.276	14.276	0.000	100	133402	1868.2	
36 Benzo[k]fluoranthene	252	14.350	14.361	-0.011	100	43269	595.9	
37 Benzo[a]pyrene	252	15.326	15.333	-0.007	99	87347	1377.6	
39 Indeno[1,2,3-cd]pyrene	276	18.498	18.502	-0.004	100	61137	992.0	

Report Date: 11-Jun-2017 22:45:12 Chrom Revision: 2.2 25-Apr-2017 13:27:22
Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1434.D

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
	38 Dibenz(a,h)anthracene	278	18.539	18.543	-0.004	88	12997	204.2	
	40 Benzo[g,h,i]perylene	276	18.924	18.924	0.000	100	62564	889.6	
	8 Morpholine	1		0.000				ND	
	44 Benzidine	184		0.000				ND	
	42 Pentachlorophenol	266		0.000				ND	
	9 Pentachlorophenol_T	266		4.285				ND	
	10 DFTPP								
	11 Benzidine_T	184		5.387				ND	
	13 4,4'-DDD	235		5.777				ND	
	12 4,4'-DDE	246		5.932				ND	
	14 4,4'-DDT	235		5.970				ND	
S	41 TPAH	1		0.000				ND	

Reagents:

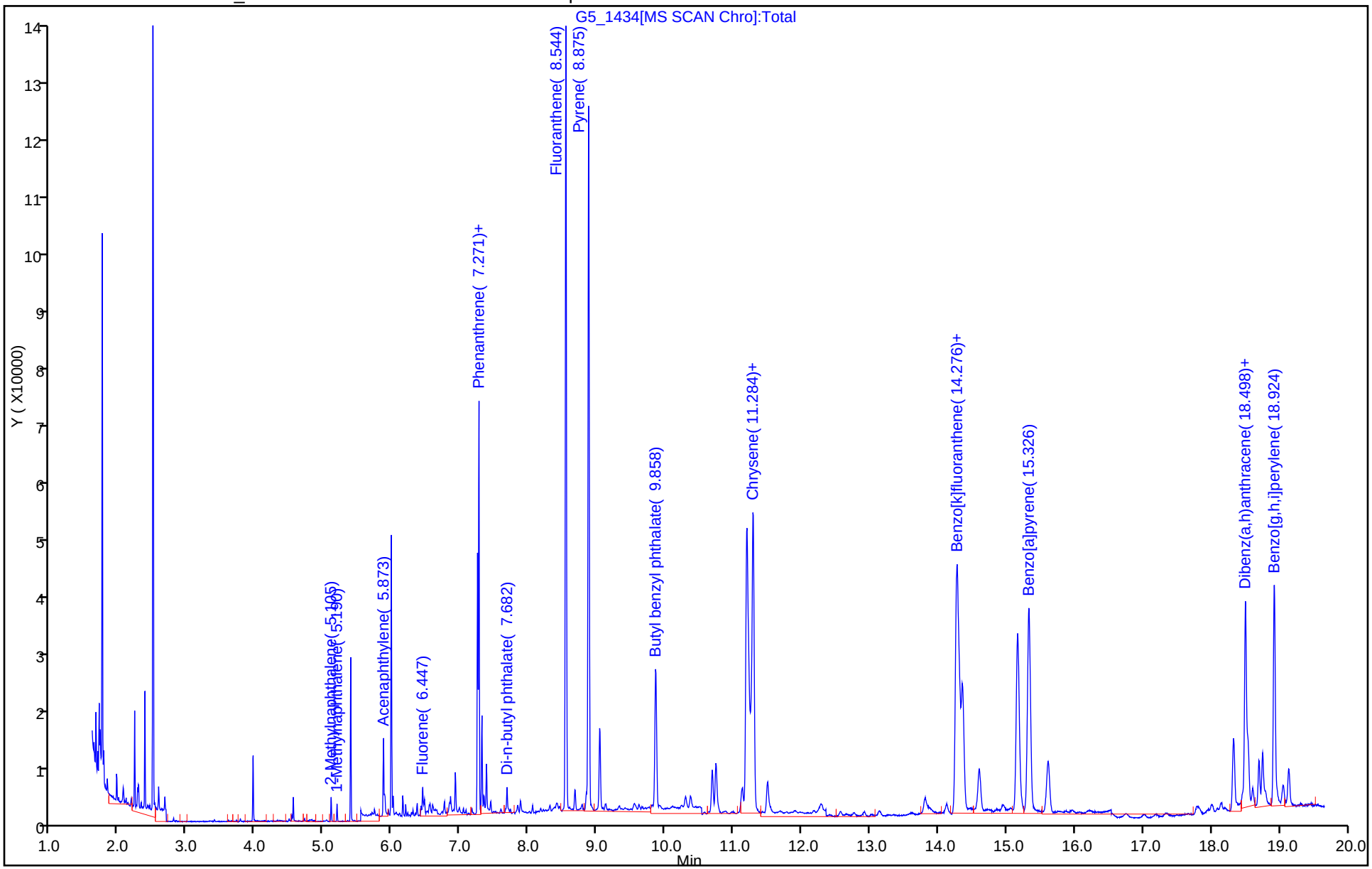
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 11-Jun-2017 22:45:12 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1434.D

Injection Date:	08-Jun-2017 12:12:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	280-97803-C-4-A	Lab Sample ID:	280-97803-4	Worklist Smp#:	8
Client ID:	SS025-SS02				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1434.D
Lims ID: 280-97803-C-4-A
Client ID: SS025-SS02
Sample Type: Client
Inject. Date: 08-Jun-2017 12:12:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-c-4-a
Operator ID: VASQUEZK Instrument ID: SMS_G5

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 11-Jun-2017 22:45:01 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 11-Jun-2017 22:26:50

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	357.6	71.51
$ 5 2-Fluorobiphenyl	500.0	368.6	73.73
$ 6 Terphenyl-d14	500.0	404.8	80.97

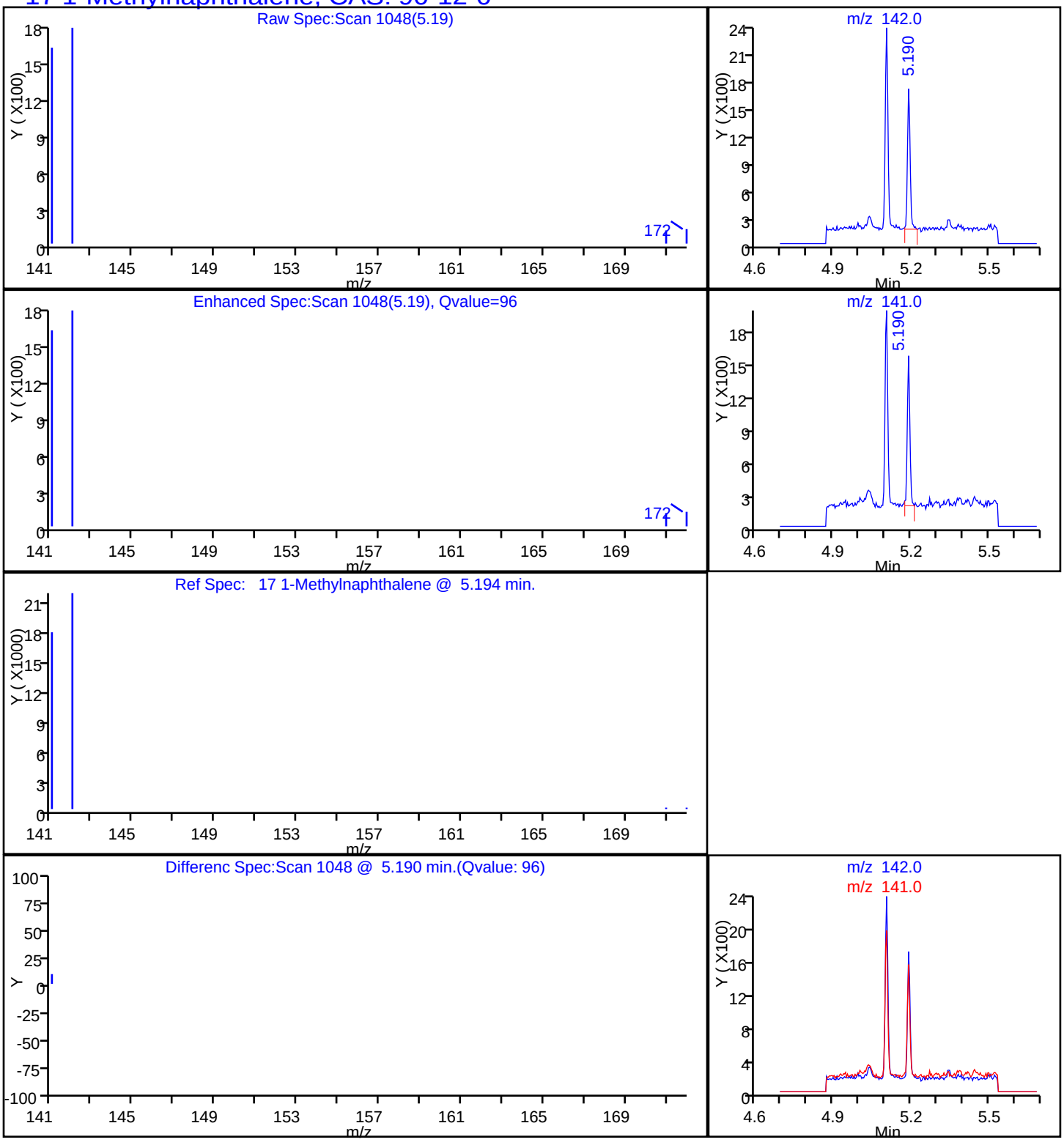
Report Date: 11-Jun-2017 22:45:12 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1434.D

Injection Date:	08-Jun-2017 12:12:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-C-4-A	Lab Sample ID:	280-97803-4		
Client ID:	SS025-SS02				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0



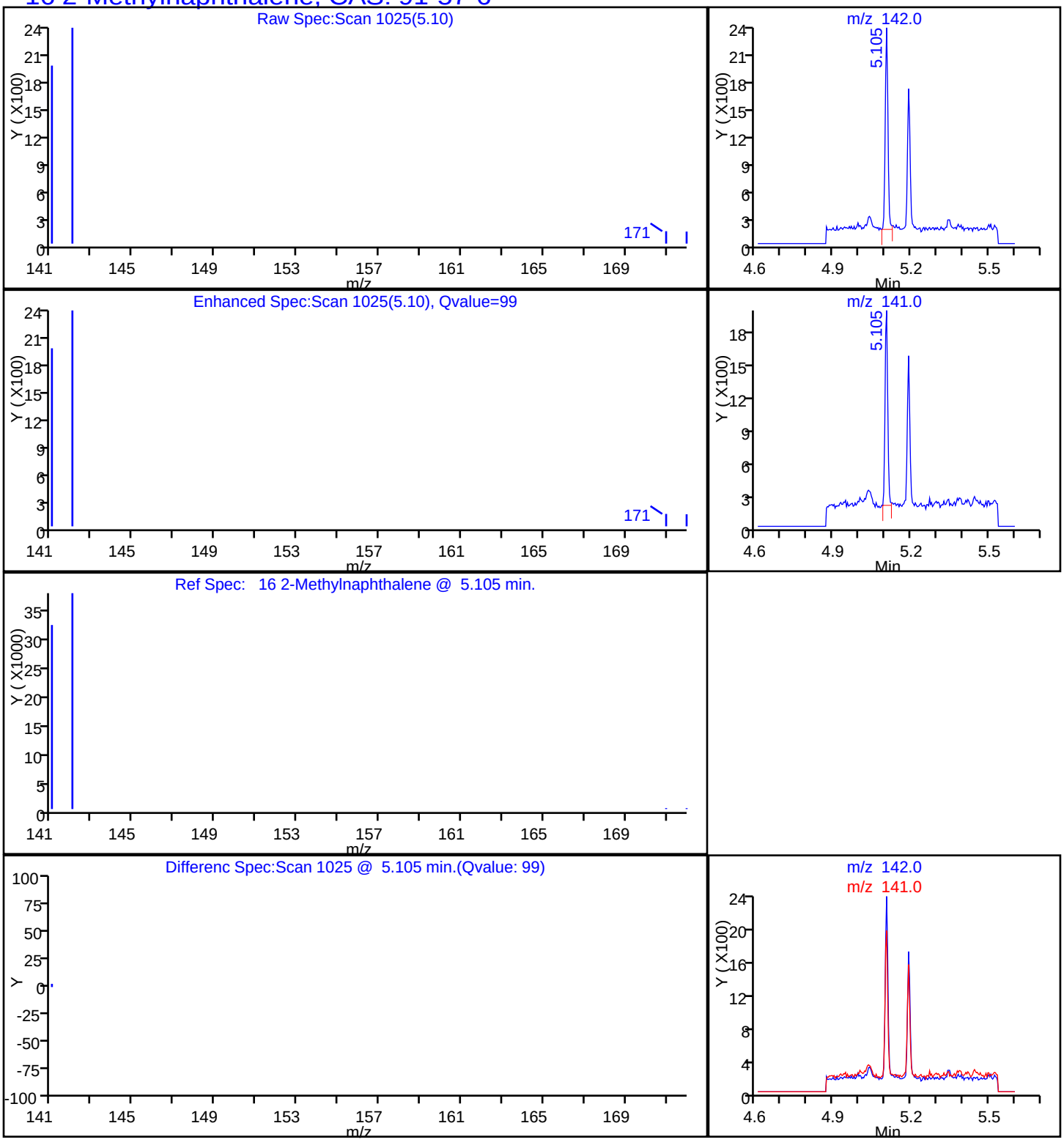
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1434.D

Injection Date:	08-Jun-2017 12:12:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-C-4-A	Lab Sample ID:	280-97803-4		
Client ID:	SS025-SS02				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



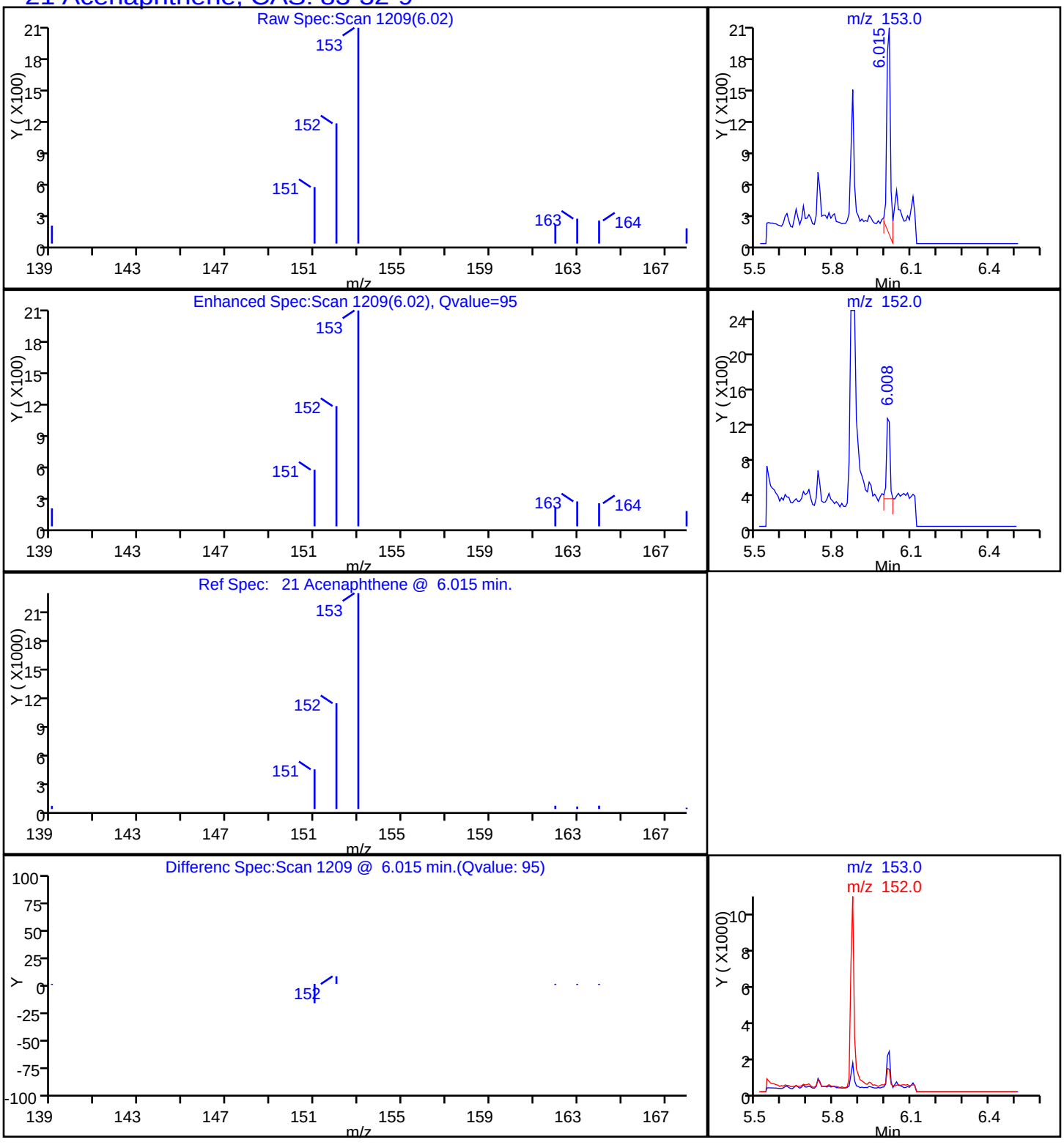
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1434.D

Injection Date:	08-Jun-2017 12:12:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-C-4-A	Lab Sample ID:	280-97803-4		
Client ID:	SS025-SS02				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

21 Acenaphthene, CAS: 83-32-9



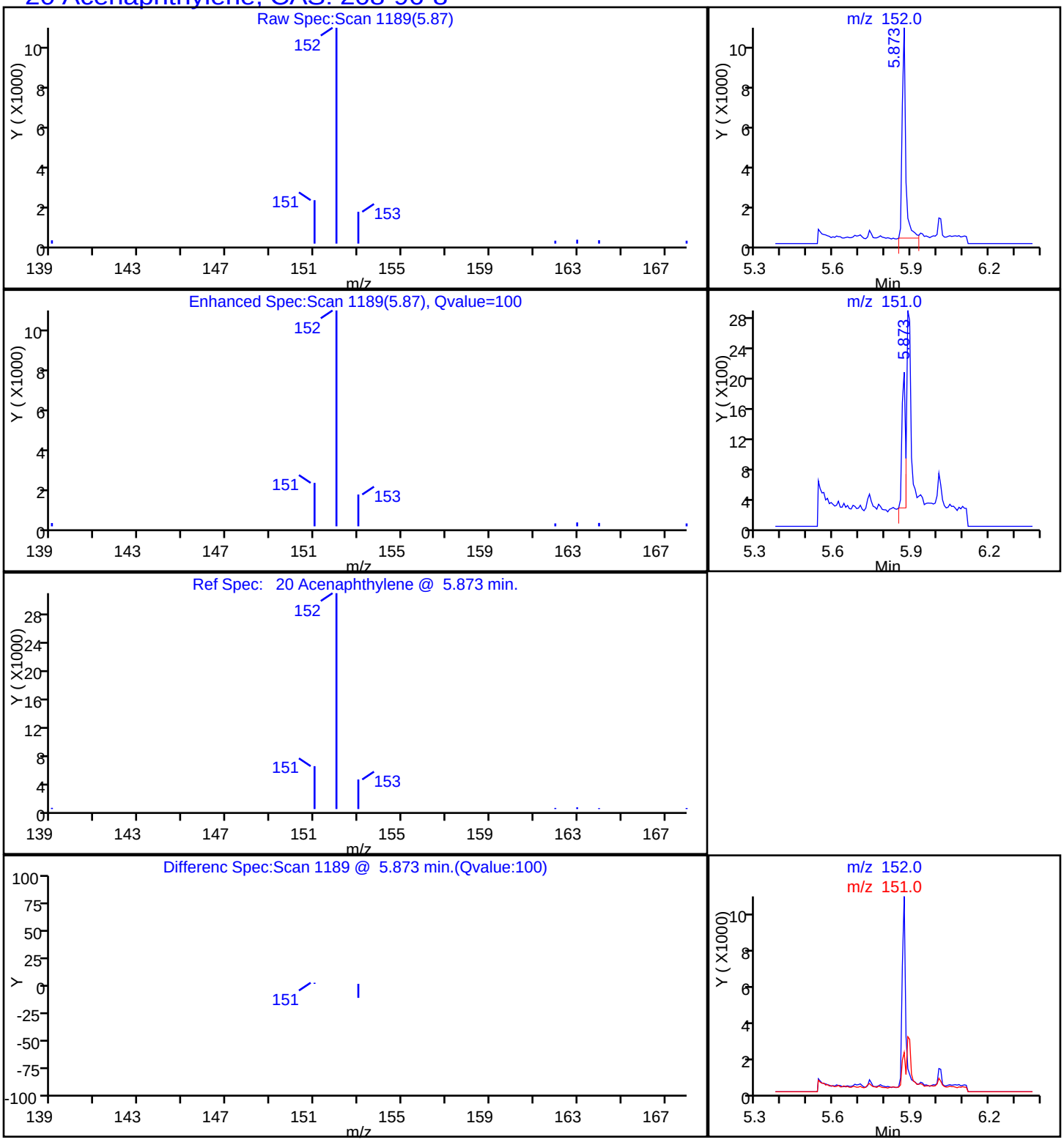
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1434.D

Injection Date:	08-Jun-2017 12:12:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-C-4-A	Lab Sample ID:	280-97803-4		
Client ID:	SS025-SS02				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

20 Acenaphthylene, CAS: 208-96-8



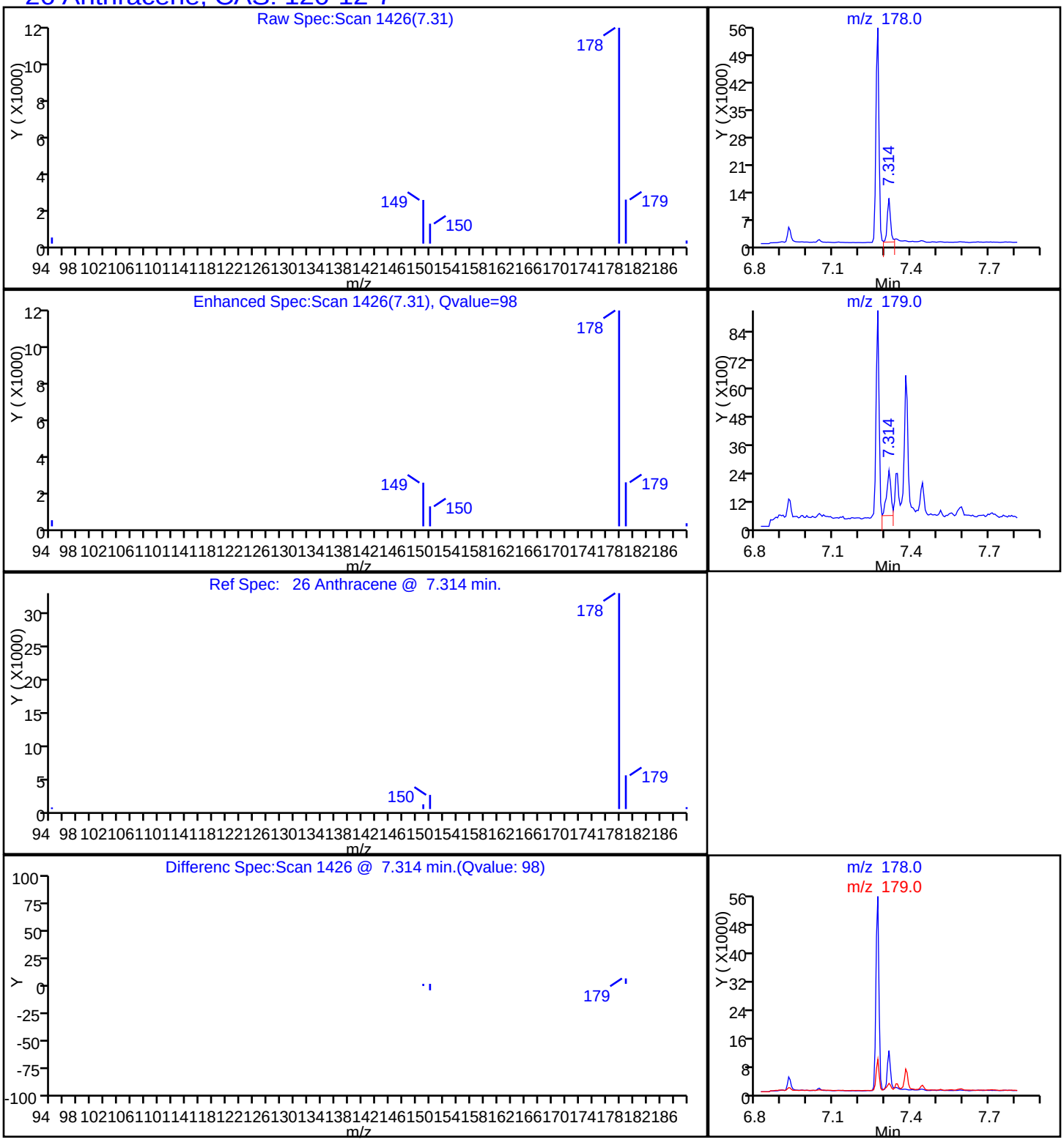
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1434.D

Injection Date:	08-Jun-2017 12:12:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-C-4-A	Lab Sample ID:	280-97803-4		
Client ID:	SS025-SS02				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

26 Anthracene, CAS: 120-12-7



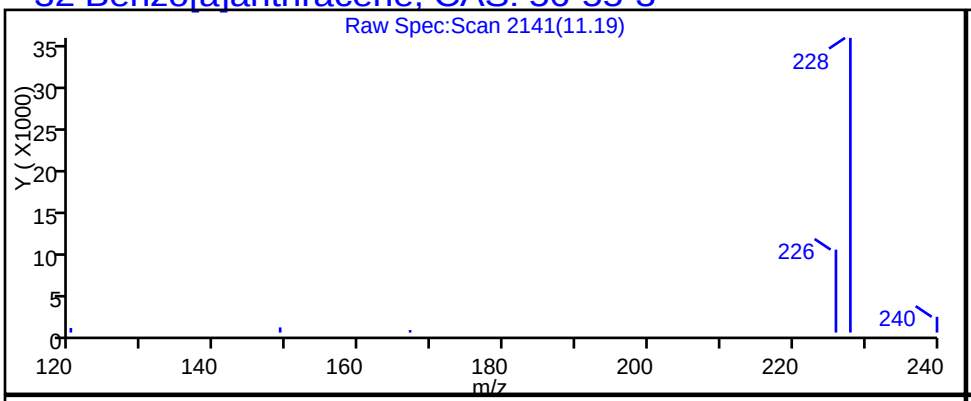
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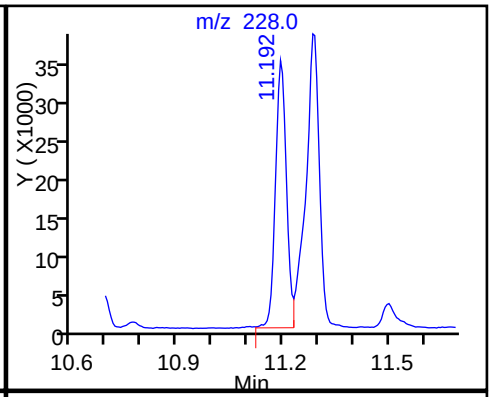
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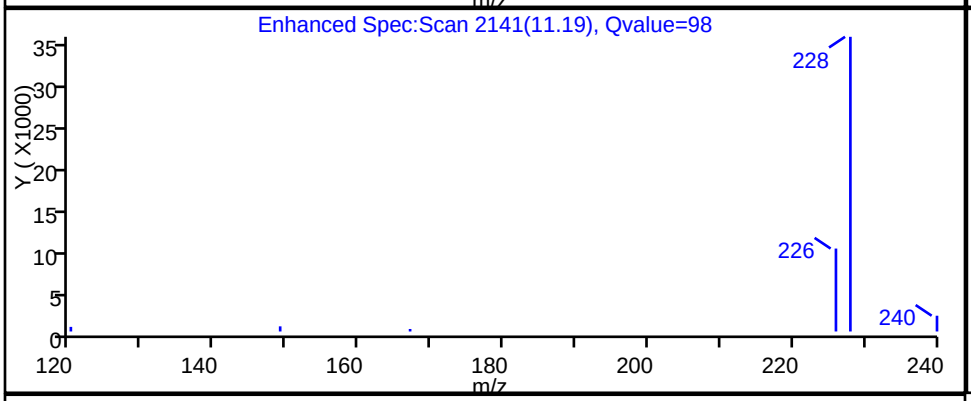
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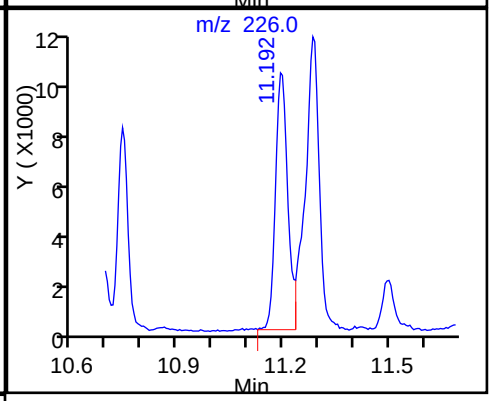
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Lims ID:	280-97803-C-4-A	Lab Sample ID:	280-97803-4		
Client ID:	SS025-SS02				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

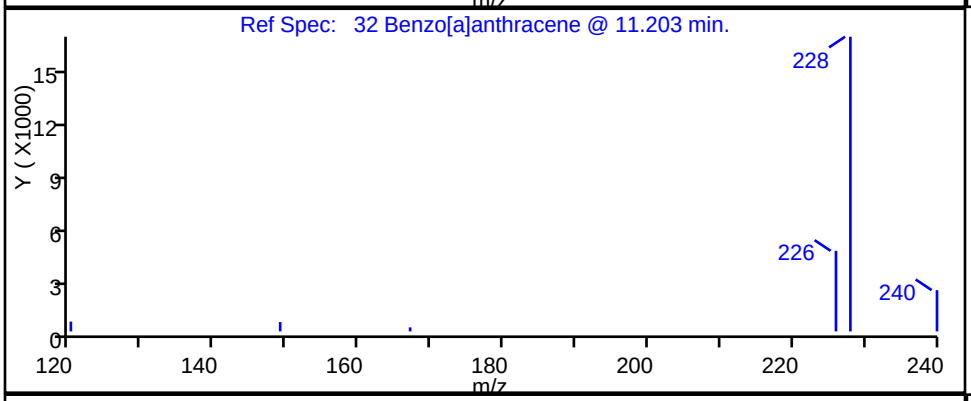
32 Benzo[a]anthracene, CAS: 56-55-3

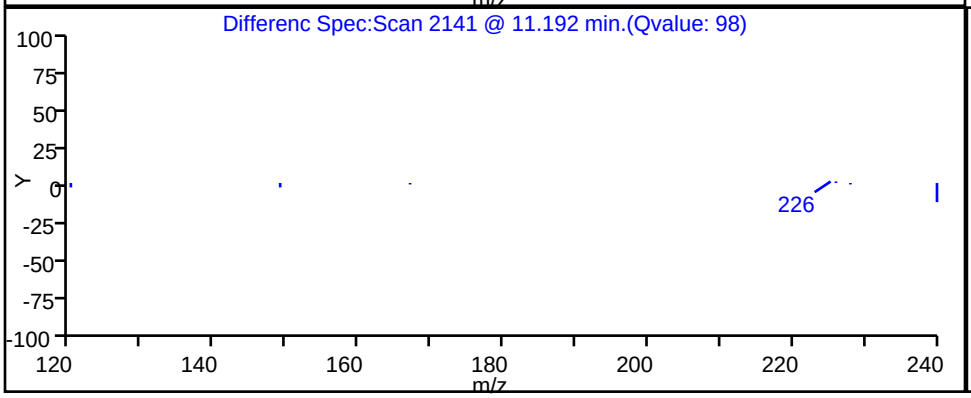


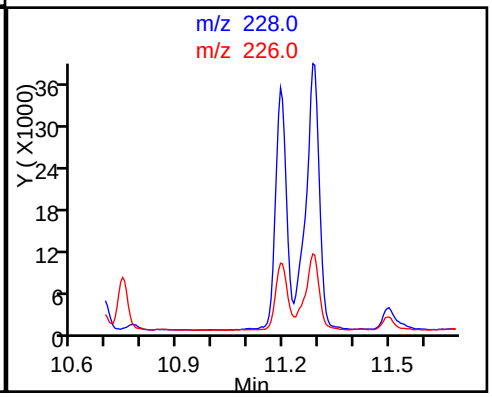












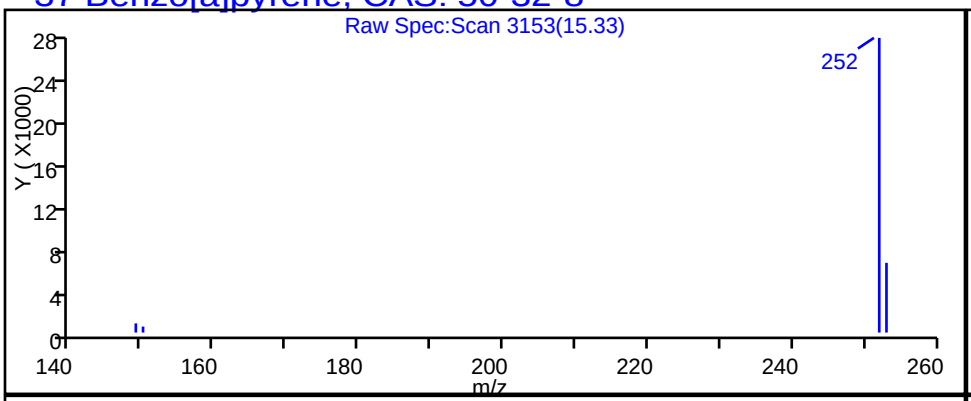
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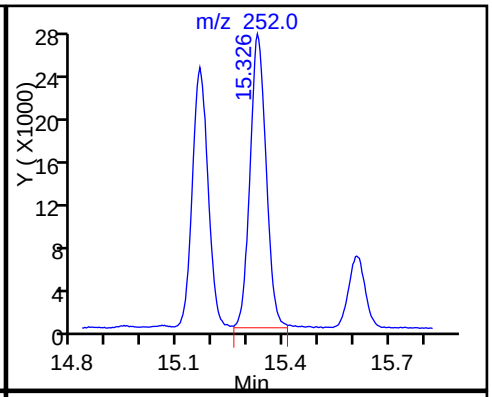
TestAmerica Denver

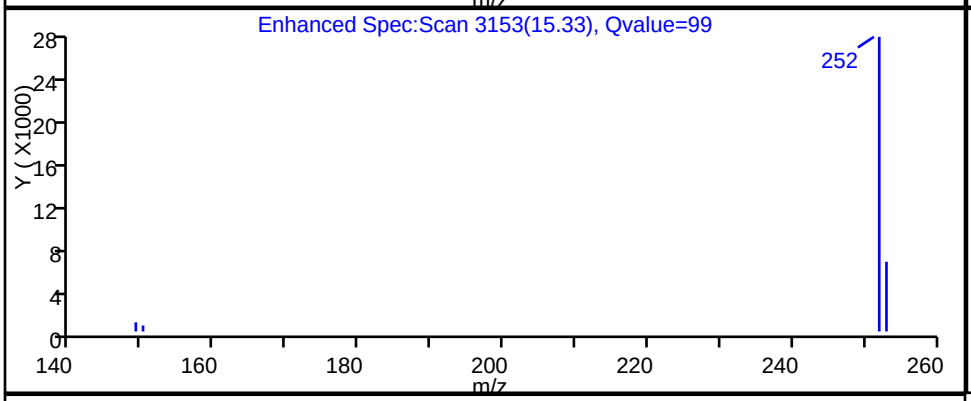
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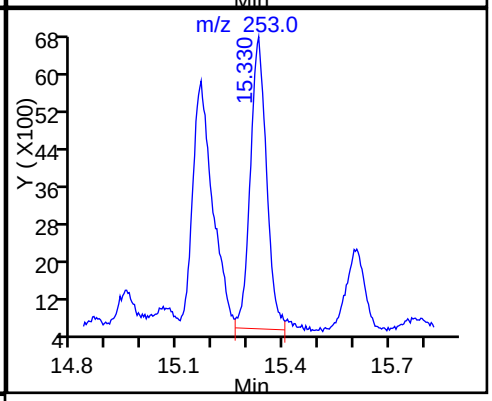
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Lims ID:	280-97803-C-4-A	Lab Sample ID:	280-97803-4		
Client ID:	SS025-SS02				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

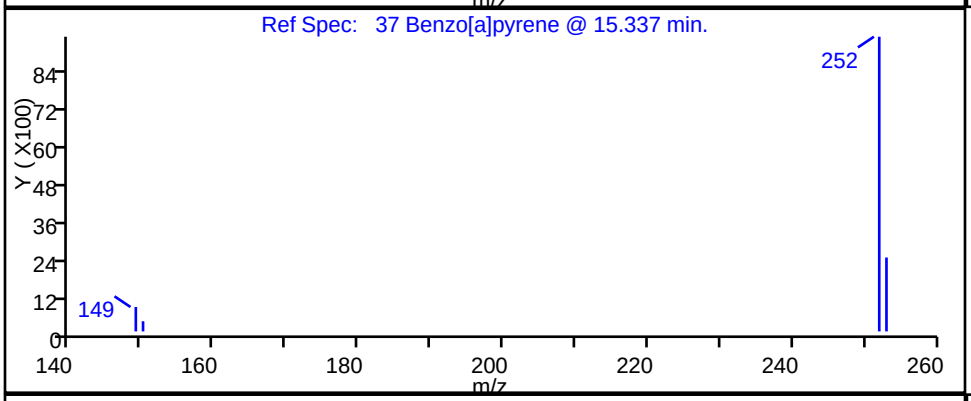
37 Benzo[a]pyrene, CAS: 50-32-8

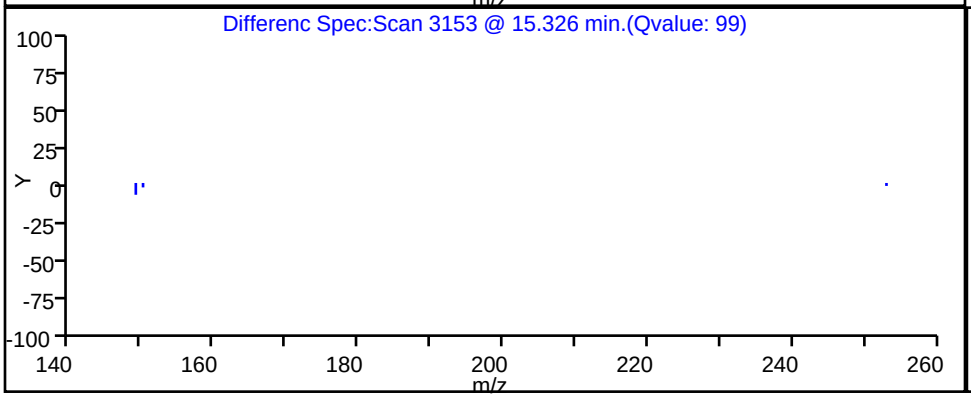


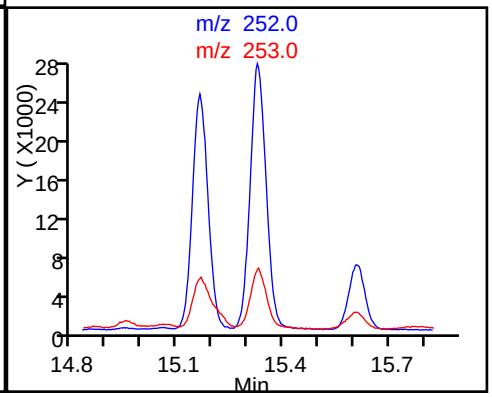












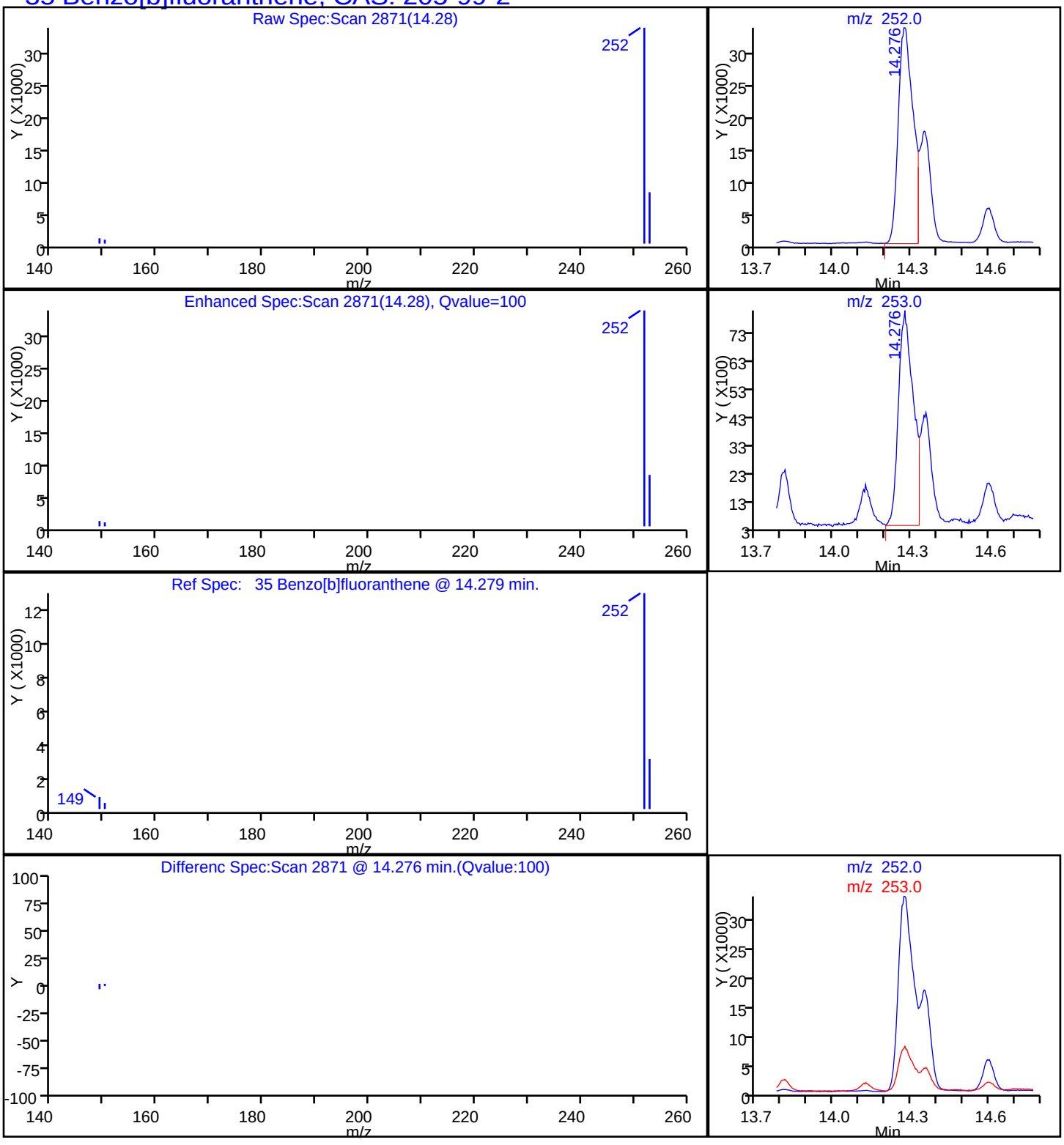
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1434.D

Injection Date:	08-Jun-2017 12:12:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-C-4-A	Lab Sample ID:	280-97803-4		
Client ID:	SS025-SS02				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

35 Benzo[b]fluoranthene, CAS: 205-99-2

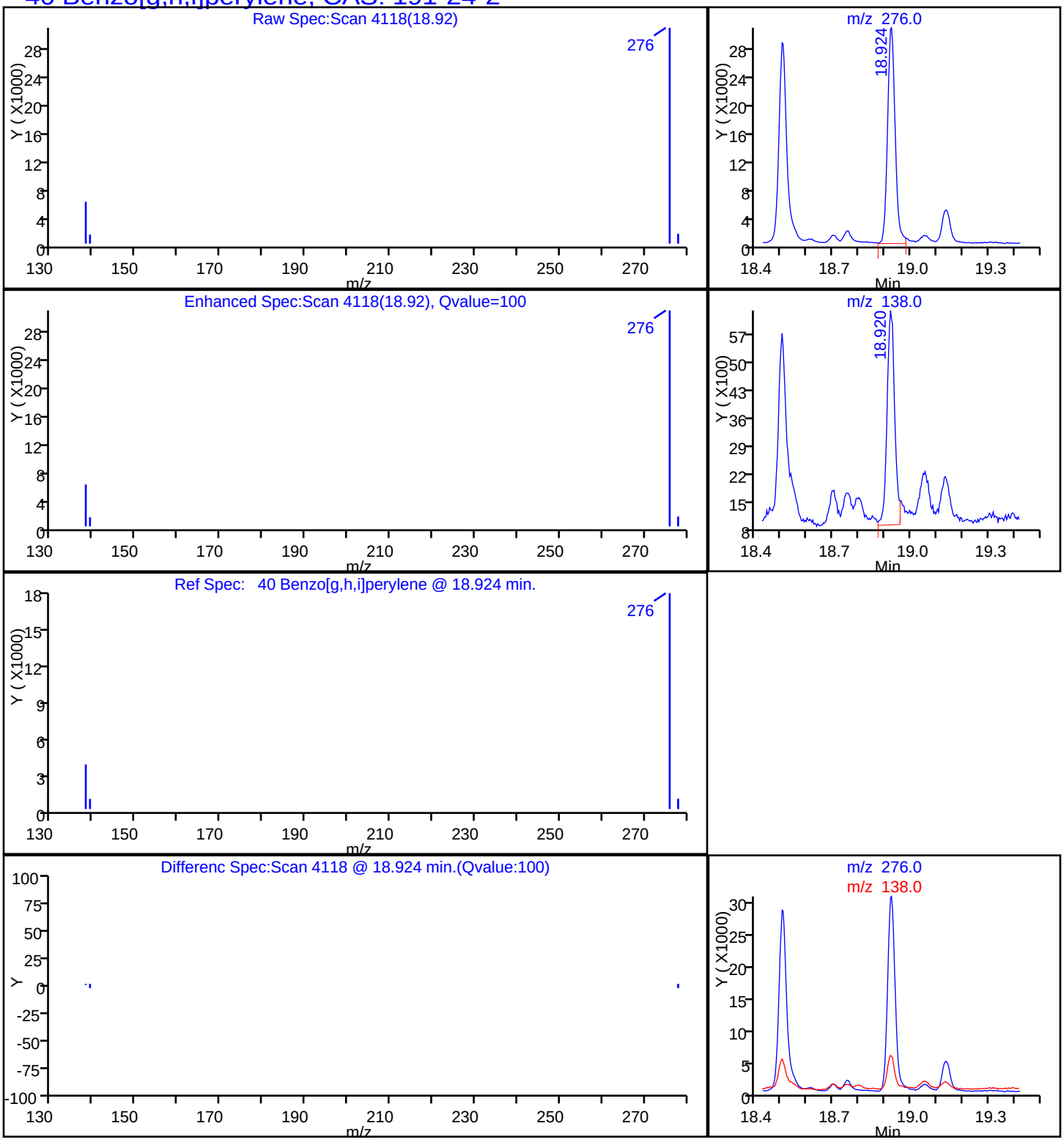


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TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1434.D				
Injection Date:	08-Jun-2017 12:12:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-C-4-A	Lab Sample ID:	280-97803-4		
Client ID:	SS025-SS02				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

40 Benzo[g,h,i]perylene, CAS: 191-24-2



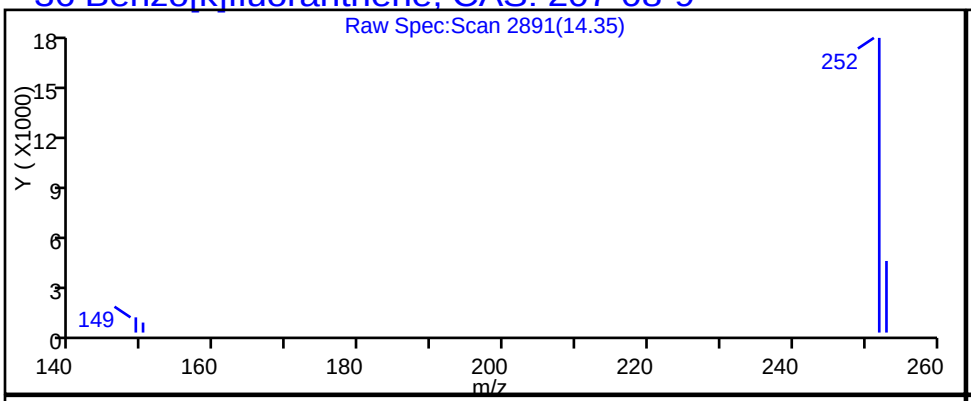
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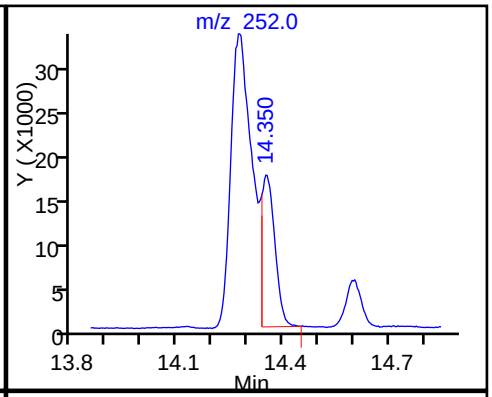
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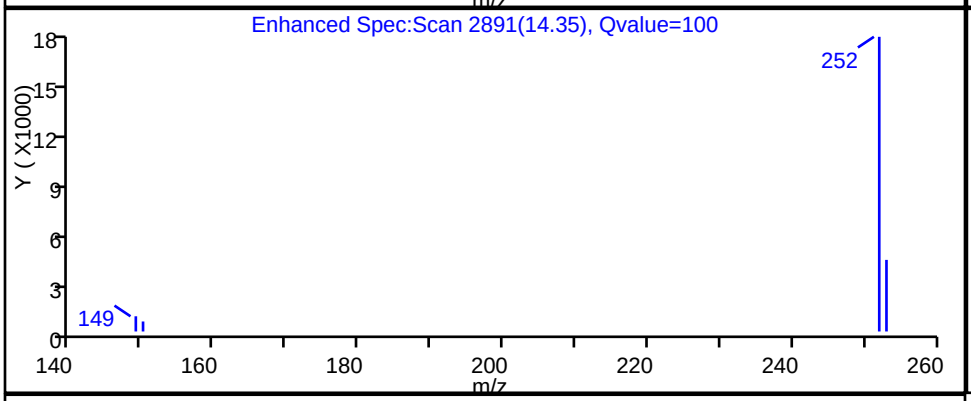
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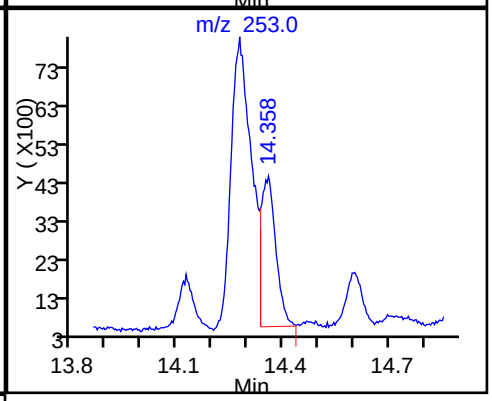
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Lims ID:	280-97803-C-4-A	Lab Sample ID:	280-97803-4		
Client ID:	SS025-SS02				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
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Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

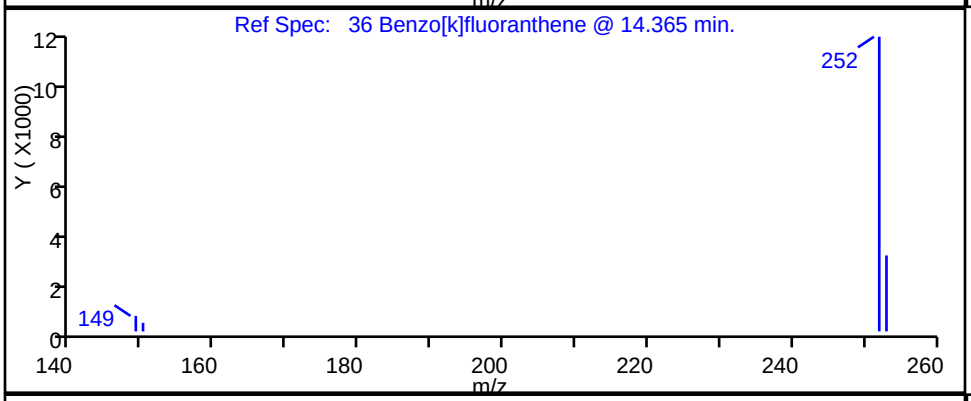
36 Benzo[k]fluoranthene, CAS: 207-08-9

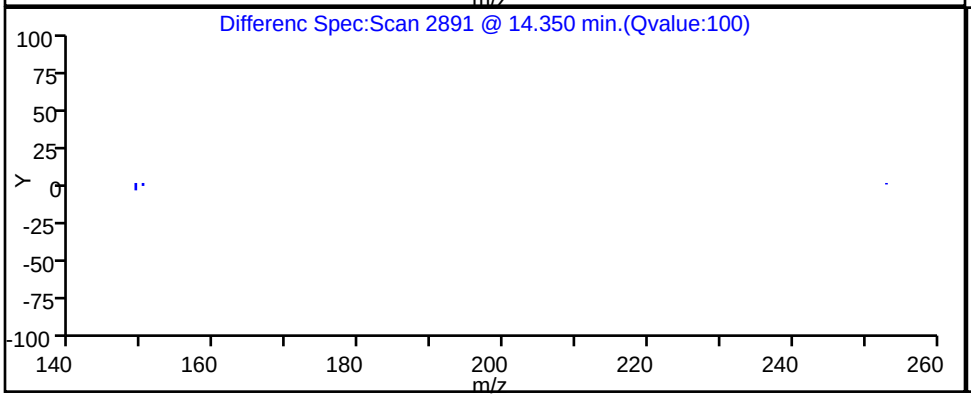


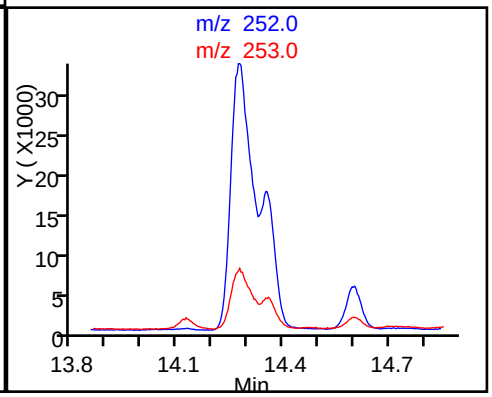












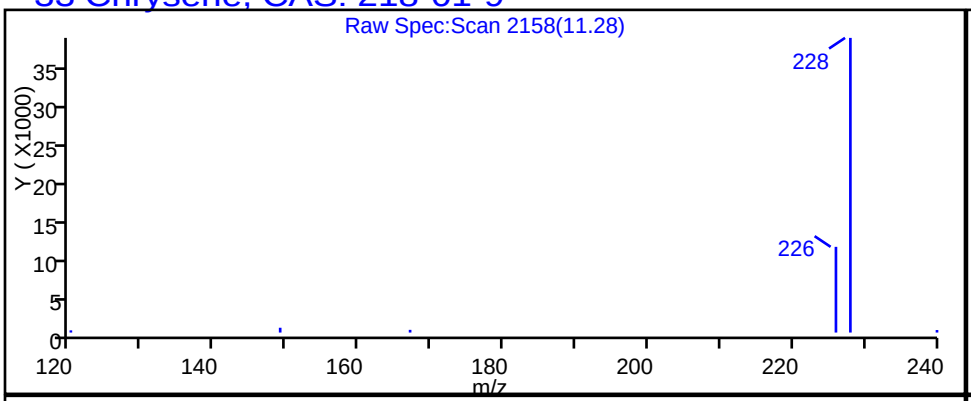
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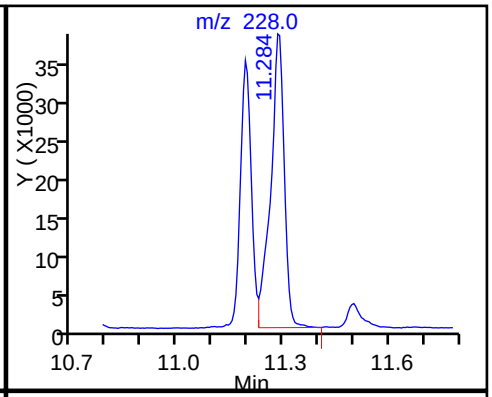
TestAmerica Denver

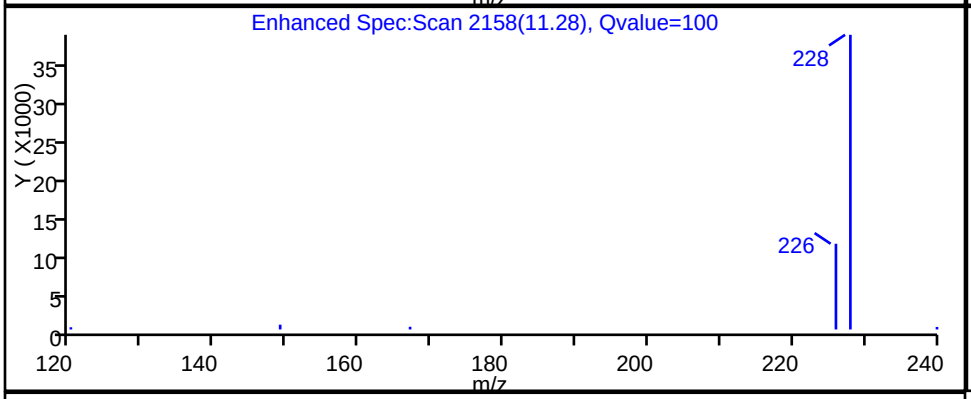
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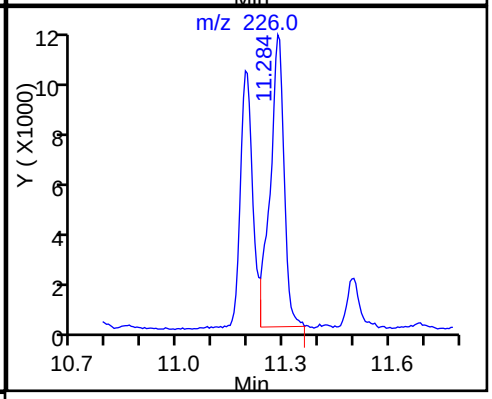
Injection Date:	08-Jun-2017 12:12:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-C-4-A	Lab Sample ID:	280-97803-4		
Client ID:	SS025-SS02				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

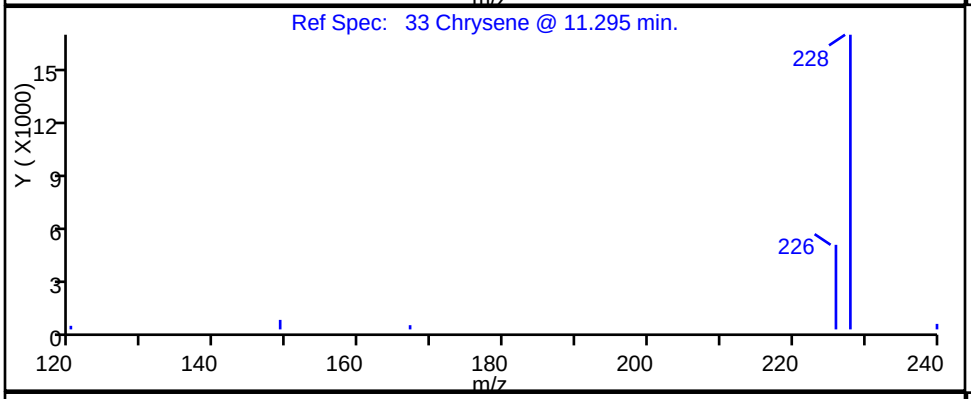
33 Chrysene, CAS: 218-01-9

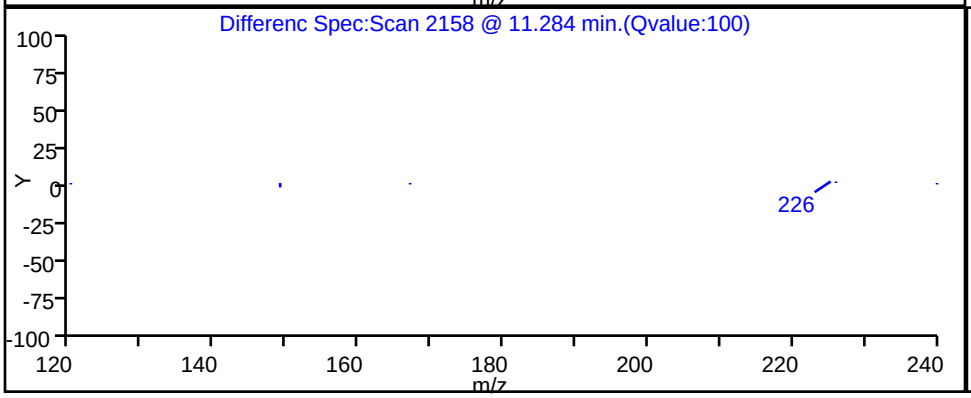


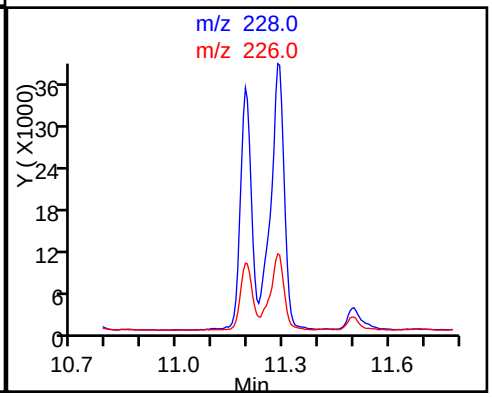












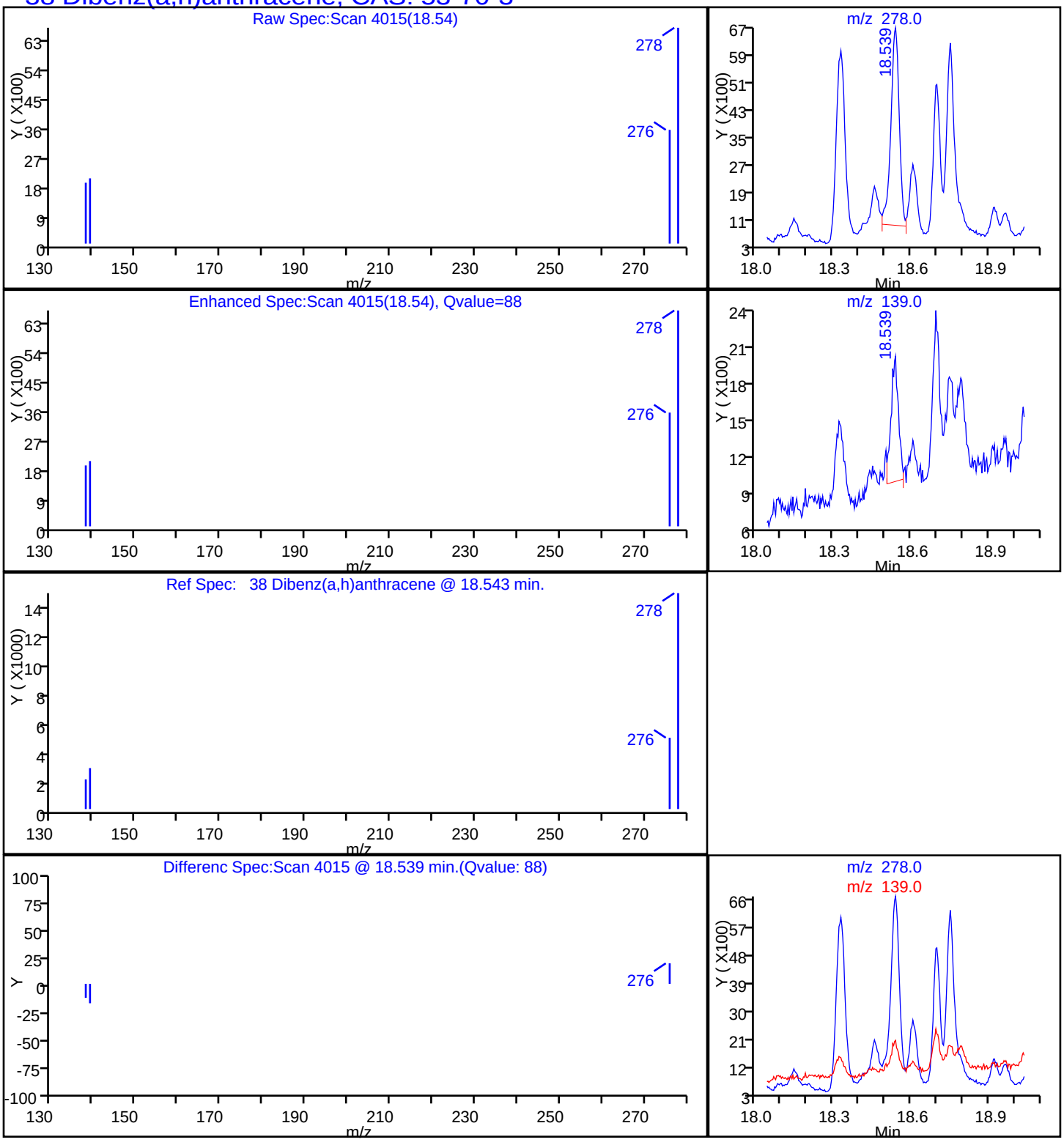
Report Date: 11-Jun-2017 22:45:13 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1434.D

Injection Date:	08-Jun-2017 12:12:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-C-4-A	Lab Sample ID:	280-97803-4		
Client ID:	SS025-SS02				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Dibenz(a,h)anthracene, CAS: 53-70-3



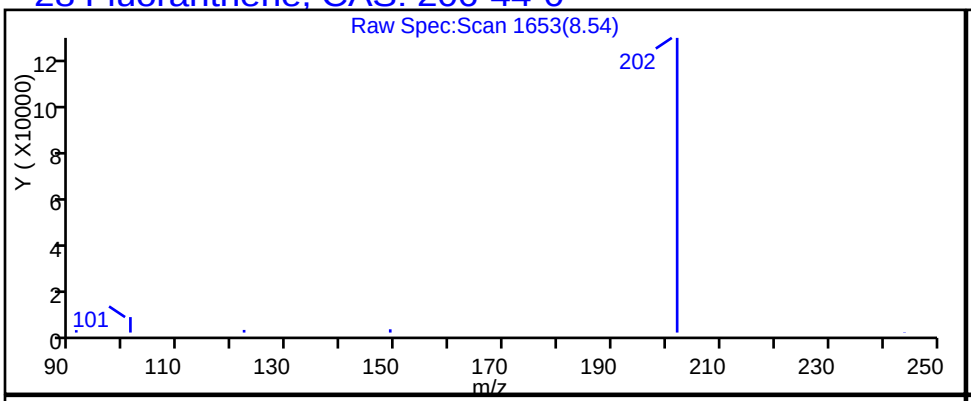
Report Date: 11-Jun-2017 22:45:12 Chrom Revision: 2.2 25-Apr-2017 13:27:22

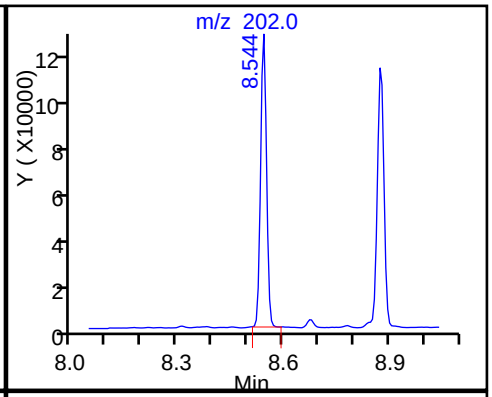
TestAmerica Denver

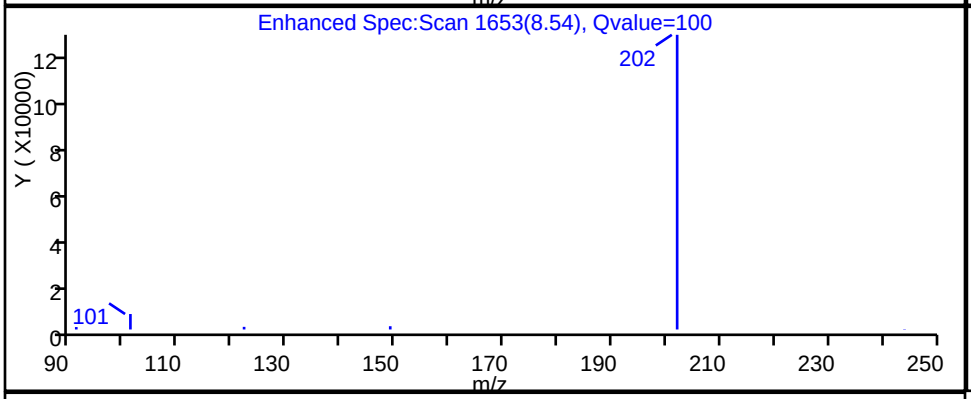
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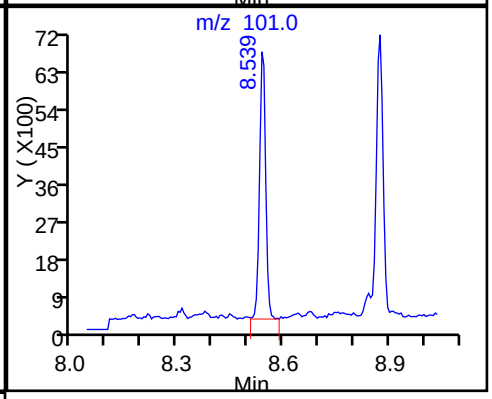
Injection Date:	08-Jun-2017 12:12:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-C-4-A	Lab Sample ID:	280-97803-4		
Client ID:	SS025-SS02				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

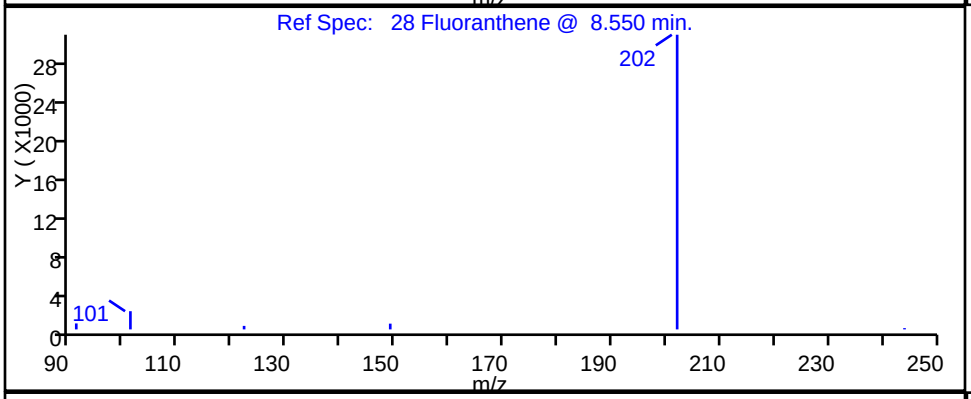
28 Fluoranthene, CAS: 206-44-0

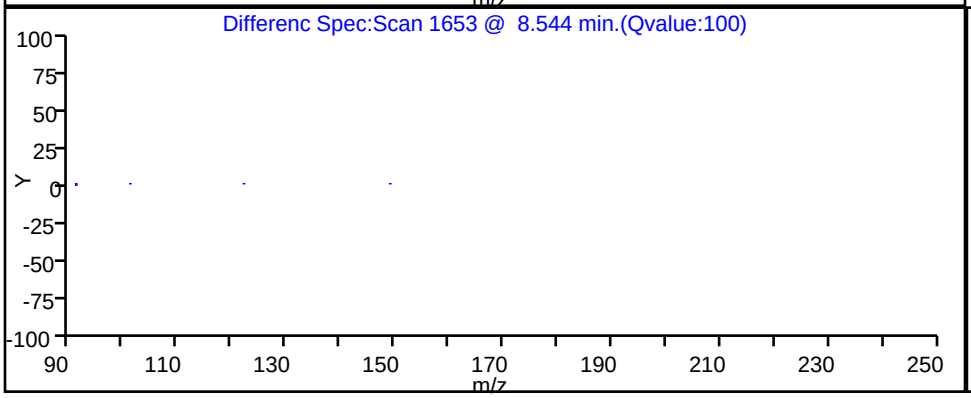


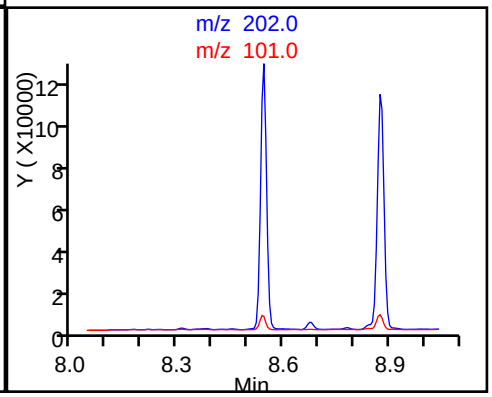












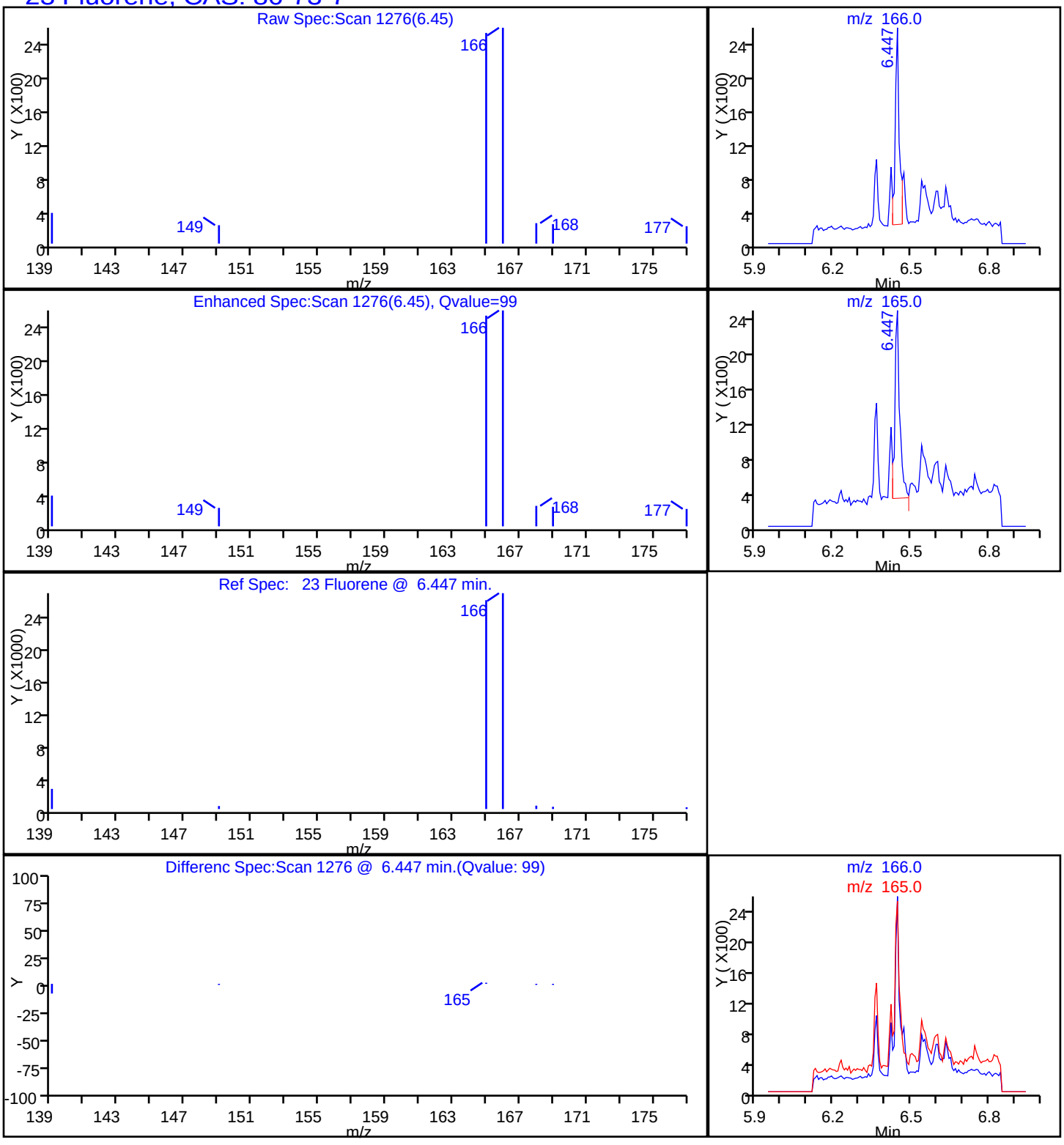
Report Date: 11-Jun-2017 22:45:12 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1434.D

Injection Date:	08-Jun-2017 12:12:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-C-4-A	Lab Sample ID:	280-97803-4		
Client ID:	SS025-SS02				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Fluorene, CAS: 86-73-7



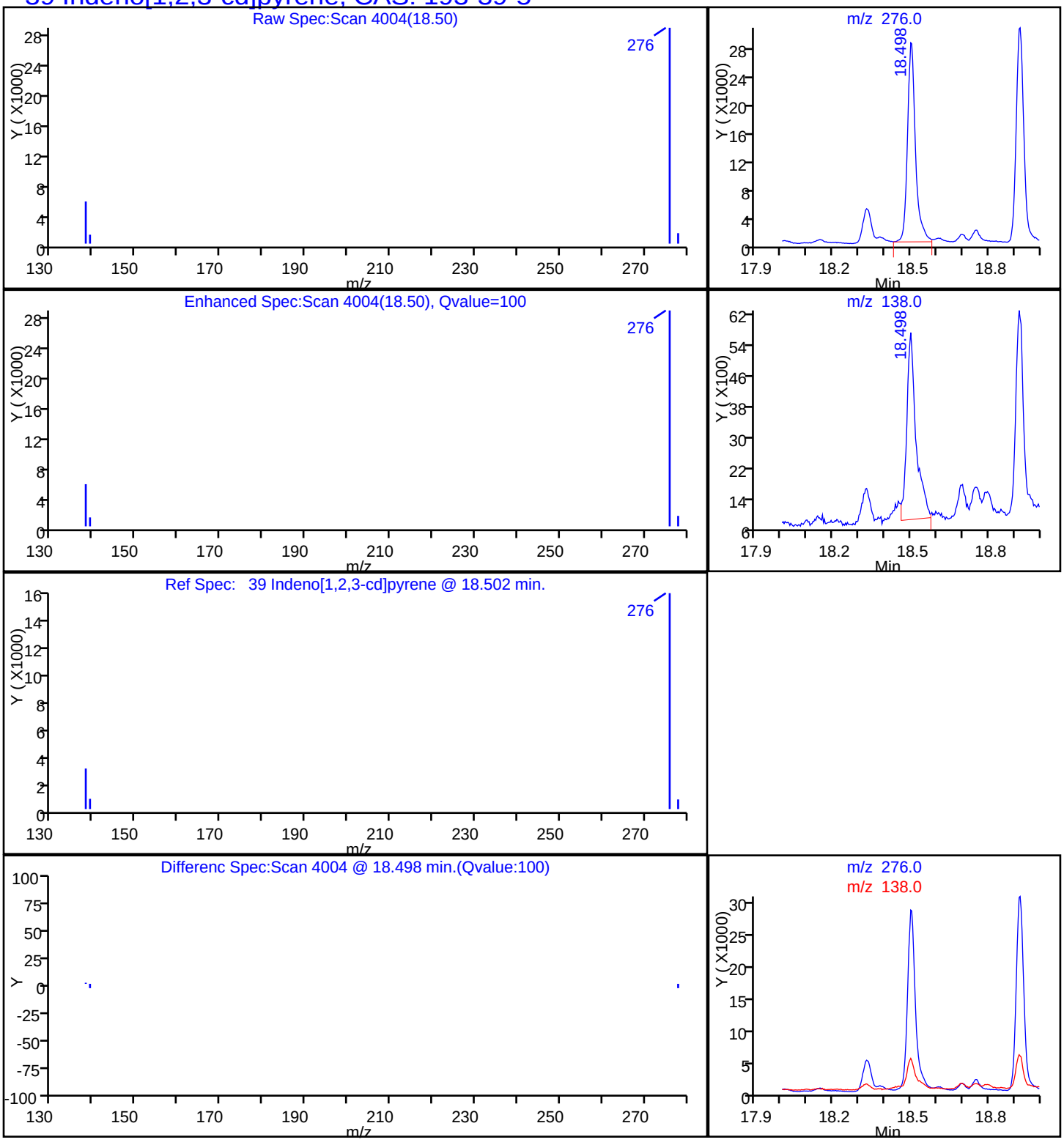
Report Date: 11-Jun-2017 22:45:13 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1434.D

Injection Date:	08-Jun-2017 12:12:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-C-4-A	Lab Sample ID:	280-97803-4		
Client ID:	SS025-SS02				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



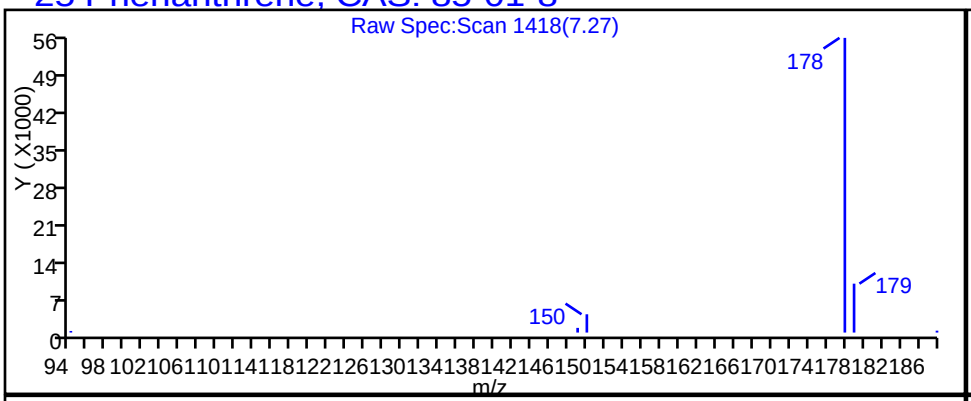
Report Date: 11-Jun-2017 22:45:12 Chrom Revision: 2.2 25-Apr-2017 13:27:22

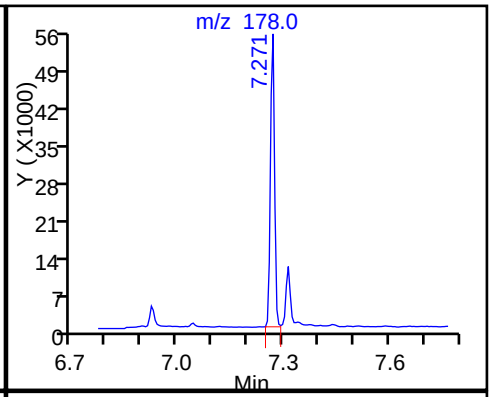
TestAmerica Denver

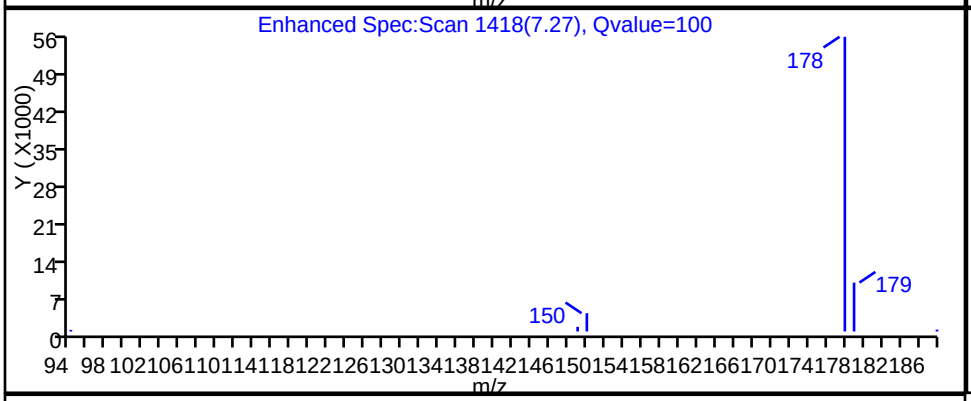
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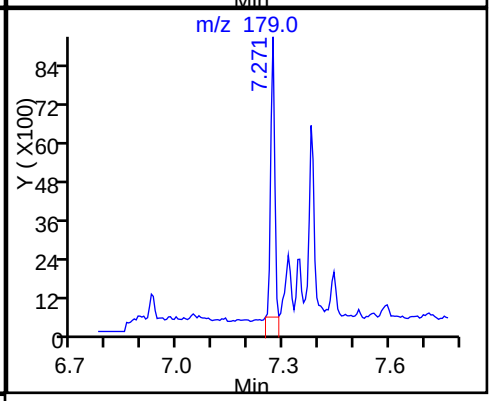
Injection Date:	08-Jun-2017 12:12:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-C-4-A	Lab Sample ID:	280-97803-4		
Client ID:	SS025-SS02				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

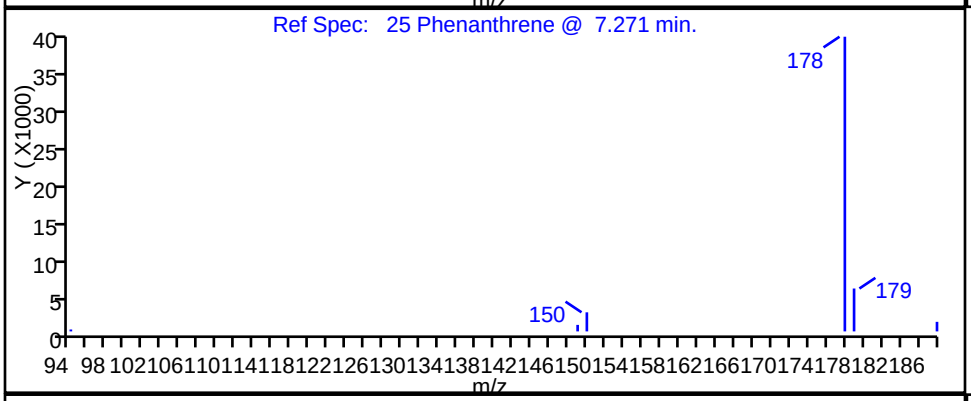
25 Phenanthrene, CAS: 85-01-8

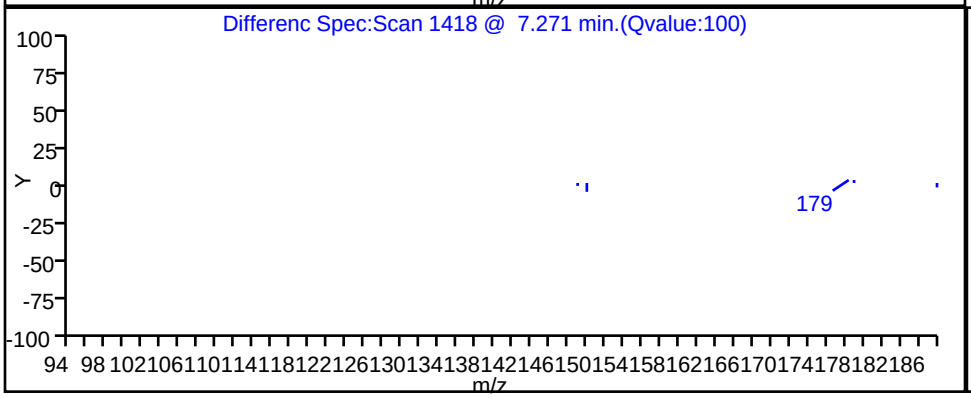


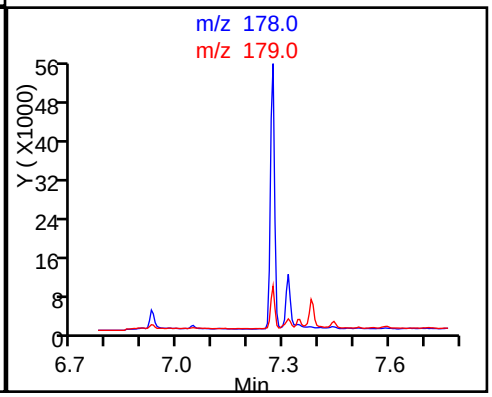












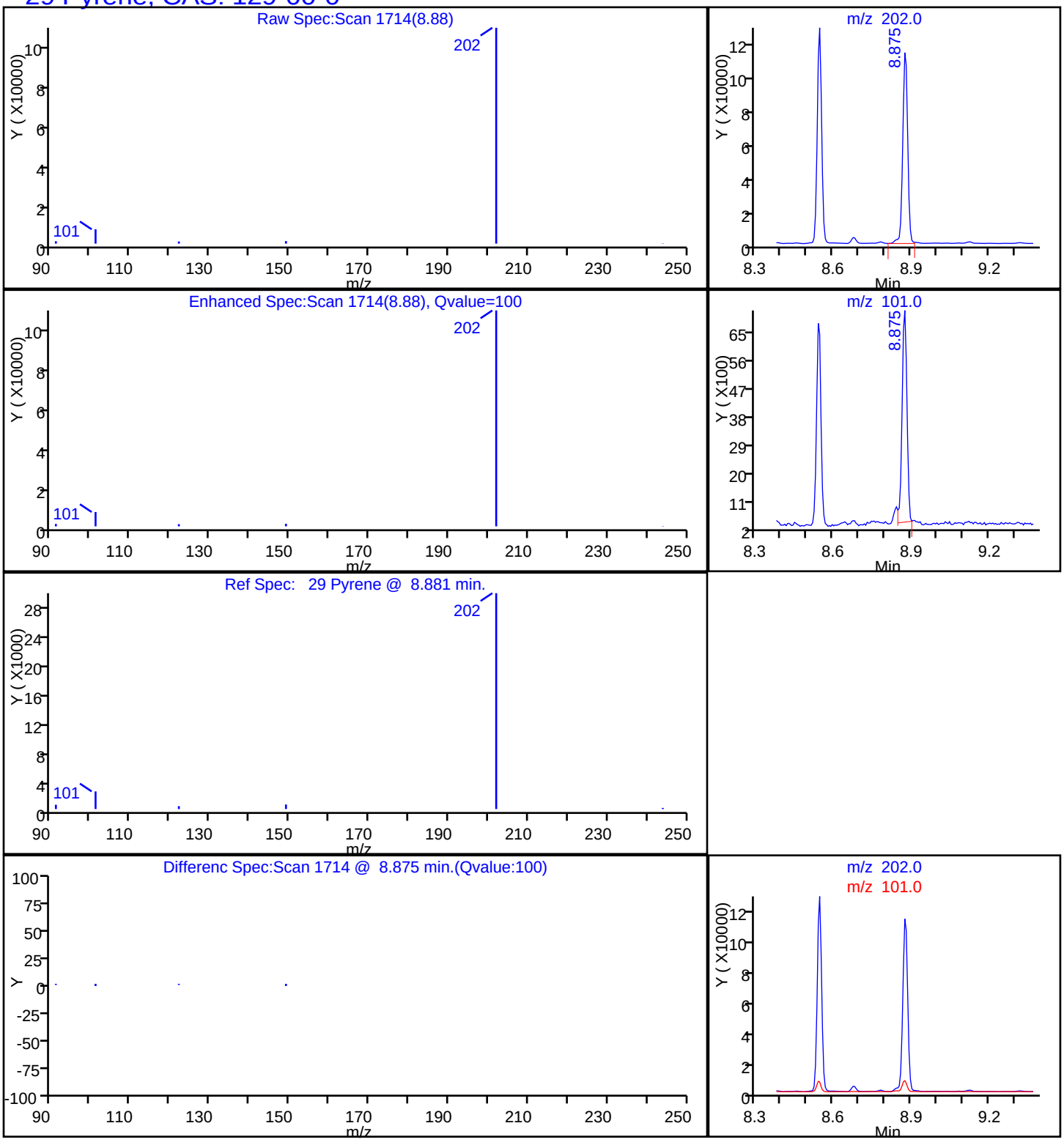
Report Date: 11-Jun-2017 22:45:12 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1434.D

Injection Date:	08-Jun-2017 12:12:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-C-4-A	Lab Sample ID:	280-97803-4		
Client ID:	SS025-SS02				
Operator ID:	VASQUEZK	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

29 Pyrene, CAS: 129-00-0



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB02(0-2) | Lab Sample ID: 280-97803-5

Matrix: Solid | Lab File ID: G5_1435.D

Analysis Method: 8270D SIM | Date Collected: 05/31/2017 13:10

Extract. Method: 3546 | Date Extracted: 06/05/2017 08:51

Sample wt/vol: 30.4(g) | Date Analyzed: 06/08/2017 12:39

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 17.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 376547 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.60	U	6.0	0.60	0.31
91-57-6	2-Methylnaphthalene	0.80	U	6.0	0.80	0.37
83-32-9	Acenaphthene	0.32	U	6.0	0.32	0.19
208-96-8	Acenaphthylene	0.80	U	6.0	0.80	0.20
120-12-7	Anthracene	3.0	U	6.0	3.0	0.86
56-55-3	Benzo[a]anthracene	3.0	U	6.0	3.0	1.1
50-32-8	Benzo[a]pyrene	3.0	U	6.0	3.0	0.89
205-99-2	Benzo[b]fluoranthene	3.0	U	6.0	3.0	1.4
191-24-2	Benzo[g,h,i]perylene	3.0	U	6.0	3.0	1.3
207-08-9	Benzo[k]fluoranthene	3.0	U	6.0	3.0	1.2
218-01-9	Chrysene	3.0	U	6.0	3.0	1.2
53-70-3	Dibenz(a,h)anthracene	3.0	U	6.0	3.0	1.6
206-44-0	Fluoranthene	3.0	U	6.0	3.0	1.2
86-73-7	Fluorene	0.80	U	6.0	0.80	0.56
193-39-5	Indeno[1,2,3-cd]pyrene	3.0	U	6.0	3.0	1.3
91-20-3	Naphthalene	0.80	U	6.0	0.80	0.39
85-01-8	Phenanthrene	3.0	U	6.0	3.0	1.3
129-00-0	Pyrene	3.0	U	6.0	3.0	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	65		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	54		44-125
1718-51-0	Terphenyl-d14 (Surr)	58		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1435.D
Lims ID: 280-97803-A-5-B
Client ID: SS025-SB02(0-2)
Sample Type: Client
Inject. Date: 08-Jun-2017 12:39:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-a-5-b
Operator ID: VASQUEZK Instrument ID: SMS_G5

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 11-Jun-2017 22:45:01 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 11-Jun-2017 22:27:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	5.987	5.987	0.000	92	12508	600.0	
* 3 Phenanthrene-d10	188	7.249	7.249	0.000	100	25924	600.0	
* 1 Chrysene-d12	240	11.224	11.224	0.000	93	27992	600.0	
$ 4 Nitrobenzene-d5	82	3.959	3.959	0.000	99	3241	271.4	
$ 5 2-Fluorobiphenyl	172	5.391	5.391	0.000	99	9764	323.4	
$ 6 Terphenyl-d14	244	9.044	9.044	0.000	100	9943	292.4	
43 1,4-Dioxane	88		1.879				ND	
7 N-Nitrosodimethylamine	42		2.004				ND	
15 Naphthalene	128		4.550				ND	
16 2-Methylnaphthalene	142		5.105				ND	
17 1-Methylnaphthalene	142		5.190				ND	
18 Dimethyl phthalate	163		5.710				ND	
20 Acenaphthylene	152		5.873				ND	
21 Acenaphthene	153		6.015				ND	
19 Dibenzofuran	168		6.159				ND	
22 Diethyl phthalate	149		6.284				ND	
23 Fluorene	166		6.447				ND	
24 N-Nitrosodiphenylamine	169		6.522				ND	
25 Phenanthrene	178		7.271				ND	
26 Anthracene	178		7.314				ND	
27 Di-n-butyl phthalate	149		7.683				ND	
28 Fluoranthene	202		8.545				ND	
29 Pyrene	202		8.881				ND	
30 Butyl benzyl phthalate	149		9.863				ND	
31 Bis(2-ethylhexyl) phthalat	149	11.127	11.127	0.000	96	2515	88.3	
32 Benzo[a]anthracene	228		11.197				ND	
33 Chrysene	228		11.290				ND	
34 Di-n-octyl phthalate	149		13.028				ND	
35 Benzo[b]fluoranthene	252		14.276				ND	
36 Benzo[k]fluoranthene	252		14.361				ND	
37 Benzo[a]pyrene	252		15.333				ND	
39 Indeno[1,2,3-cd]pyrene	276		18.502				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
38 Dibenz(a,h)anthracene	278		18.543				ND	
40 Benzo[g,h,i]perylene	276		18.924				ND	
8 Morpholine	1		0.000				ND	
44 Benzidine	184		0.000				ND	
42 Pentachlorophenol	266		0.000				ND	
9 Pentachlorophenol_T	266		4.285				ND	
10 DFTPP								
11 Benzidine_T	184		5.387				ND	
13 4,4'-DDD	235		5.777				ND	
12 4,4'-DDE	246		5.932				ND	
14 4,4'-DDT	235		5.970				ND	
S 41 TPAH	1		0.000				ND	

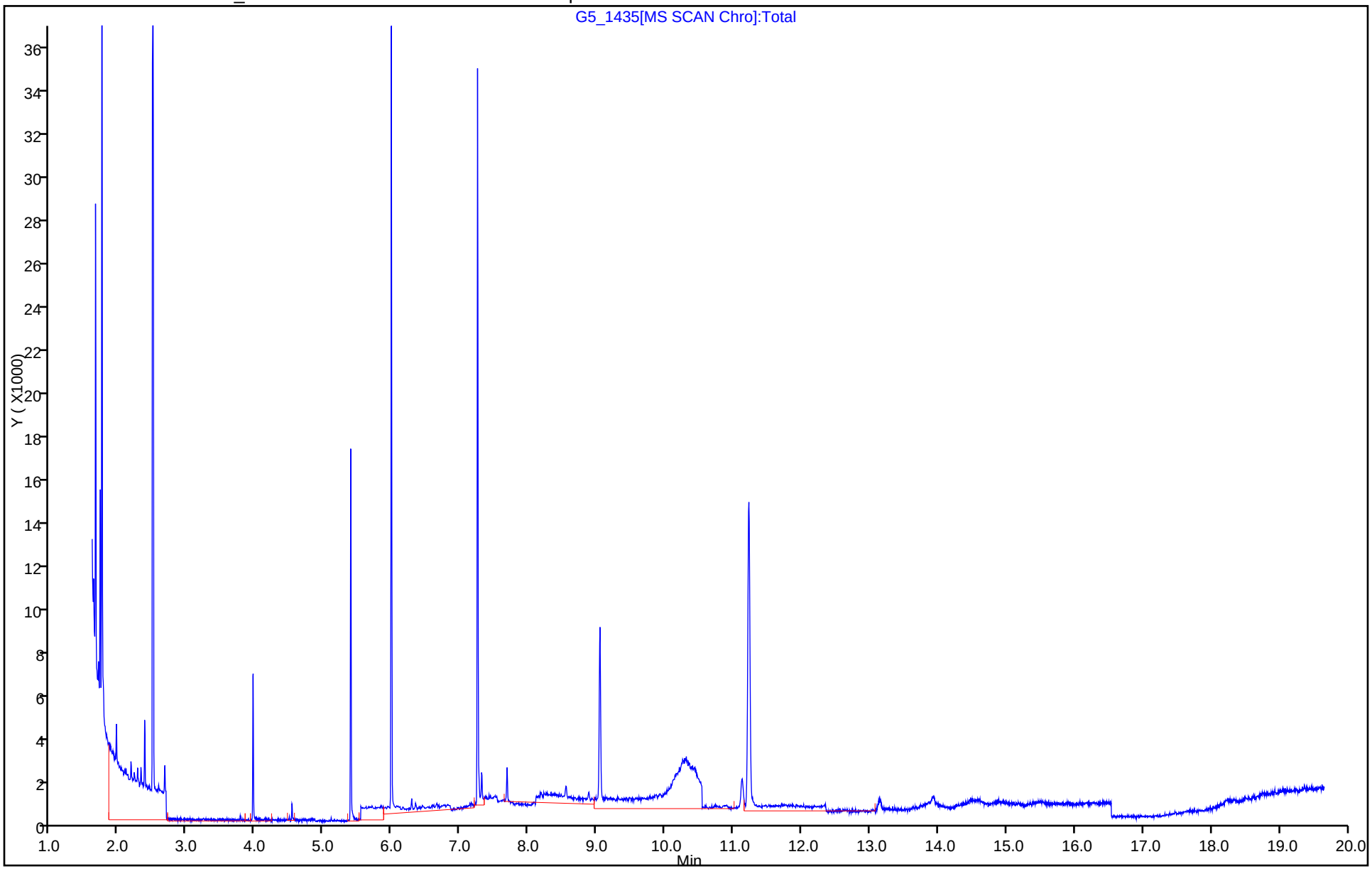
Reagents:

MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 11-Jun-2017 22:45:14 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1435.D				
Injection Date:	08-Jun-2017 12:39:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	280-97803-A-5-B	Lab Sample ID:	280-97803-5	Worklist Smp#:	9
Client ID:	SS025-SB02(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1435.D
Lims ID: 280-97803-A-5-B
Client ID: SS025-SB02(0-2)
Sample Type: Client
Inject. Date: 08-Jun-2017 12:39:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-a-5-b
Operator ID: VASQUEZK Instrument ID: SMS_G5

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 11-Jun-2017 22:45:01 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 11-Jun-2017 22:27:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	271.4	54.28
$ 5 2-Fluorobiphenyl	500.0	323.4	64.67
$ 6 Terphenyl-d14	500.0	292.4	58.48

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS03 | Lab Sample ID: 280-97803-6

Matrix: Solid | Lab File ID: G5_1436.D

Analysis Method: 8270D SIM | Date Collected: 05/31/2017 13:25

Extract. Method: 3546 | Date Extracted: 06/05/2017 08:51

Sample wt/vol: 30.2(g) | Date Analyzed: 06/08/2017 13:06

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 25.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 376547 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.66	U	6.6	0.66	0.35
91-57-6	2-Methylnaphthalene	2.1	J	6.6	0.89	0.41
83-32-9	Acenaphthene	0.36	U	6.6	0.36	0.21
208-96-8	Acenaphthylene	5.7	J	6.6	0.89	0.23
120-12-7	Anthracene	5.2	J	6.6	3.3	0.96
56-55-3	Benzo[a]anthracene	23		6.6	3.3	1.2
50-32-8	Benzo[a]pyrene	34		6.6	3.3	0.98
205-99-2	Benzo[b]fluoranthene	51		6.6	3.3	1.6
191-24-2	Benzo[g,h,i]perylene	28		6.6	3.3	1.5
207-08-9	Benzo[k]fluoranthene	17		6.6	3.3	1.3
218-01-9	Chrysene	34		6.6	3.3	1.3
53-70-3	Dibenz(a,h)anthracene	6.4	J	6.6	3.3	1.7
206-44-0	Fluoranthene	45		6.6	3.3	1.3
86-73-7	Fluorene	1.4	J	6.6	0.89	0.62
193-39-5	Indeno[1,2,3-cd]pyrene	28		6.6	3.3	1.5
91-20-3	Naphthalene	0.89	U	6.6	0.89	0.43
85-01-8	Phenanthrene	17		6.6	3.3	1.5
129-00-0	Pyrene	45		6.6	3.3	1.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	66		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	67		44-125
1718-51-0	Terphenyl-d14 (Surr)	76		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1436.D
Lims ID: 280-97803-A-6-B
Client ID: SS025-SS03
Sample Type: Client
Inject. Date: 08-Jun-2017 13:06:30 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-a-6-b
Operator ID: VASQUEZK Instrument ID: SMS_G5

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 11-Jun-2017 22:45:01 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 11-Jun-2017 22:28:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	5.987	5.987	0.000	83	9801	600.0	
* 3 Phenanthrene-d10	188	7.249	7.249	0.000	100	18220	600.0	
* 1 Chrysene-d12	240	11.224	11.224	0.000	98	19748	600.0	
$ 4 Nitrobenzene-d5	82	3.958	3.959	-0.001	100	3158	337.5	
$ 5 2-Fluorobiphenyl	172	5.391	5.391	0.000	100	7780	328.8	
$ 6 Terphenyl-d14	244	9.038	9.044	-0.006	99	9110	381.2	
43 1,4-Dioxane	88		1.879				ND	
7 N-Nitrosodimethylamine	42		2.004				ND	
15 Naphthalene	128		4.550				ND	
16 2-Methylnaphthalene	142	5.105	5.105	0.000	100	823	47.2	
17 1-Methylnaphthalene	142		5.190				ND	
18 Dimethyl phthalate	163	5.710	5.710	0.000	93	607	26.6	
20 Acenaphthylene	152	5.873	5.873	0.000	98	3532	128.6	
21 Acenaphthene	153		6.015				ND	
19 Dibenzofuran	168		6.159				ND	
22 Diethyl phthalate	149		6.284				ND	
23 Fluorene	166	6.447	6.447	0.000	92	718	31.9	
24 N-Nitrosodiphenylamine	169		6.522				ND	
25 Phenanthrene	178	7.271	7.271	0.000	99	13157	381.2	
26 Anthracene	178	7.314	7.314	0.000	95	3815	118.3	
27 Di-n-butyl phthalate	149		7.683				ND	
28 Fluoranthene	202	8.544	8.545	-0.001	100	44144	1024.9	
29 Pyrene	202	8.875	8.881	-0.006	100	45932	1026.0	
30 Butyl benzyl phthalate	149	9.858	9.863	-0.005	100	10997	790.8	
31 Bis(2-ethylhexyl) phthalat	149	11.127	11.127	0.000	97	3756	187.5	
32 Benzo[a]anthracene	228	11.192	11.197	-0.005	99	21068	518.1	
33 Chrysene	228	11.289	11.290	-0.001	100	32419	774.2	
34 Di-n-octyl phthalate	149		13.028				ND	
35 Benzo[b]fluoranthene	252	14.272	14.276	-0.004	99	43171	1140.0	
36 Benzo[k]fluoranthene	252	14.350	14.361	-0.011	97	14711	382.0	
37 Benzo[a]pyrene	252	15.330	15.333	-0.003	100	25737	765.4	
39 Indeno[1,2,3-cd]pyrene	276	18.502	18.502	0.000	99	20922	640.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
38 Dibenz(a,h)anthracene	278	18.536	18.543	-0.007	70	4897	145.1	
40 Benzo[g,h,i]perylene	276	18.924	18.924	0.000	99	23632	633.6	
8 Morpholine	1		0.000				ND	
44 Benzidine	184		0.000				ND	
42 Pentachlorophenol	266		0.000				ND	
9 Pentachlorophenol_T	266		4.285				ND	
10 DFTPP								
11 Benzidine_T	184		5.387				ND	
13 4,4'-DDD	235		5.777				ND	
12 4,4'-DDE	246		5.932				ND	
14 4,4'-DDT	235		5.970				ND	
S 41 TPAH	1		0.000				ND	

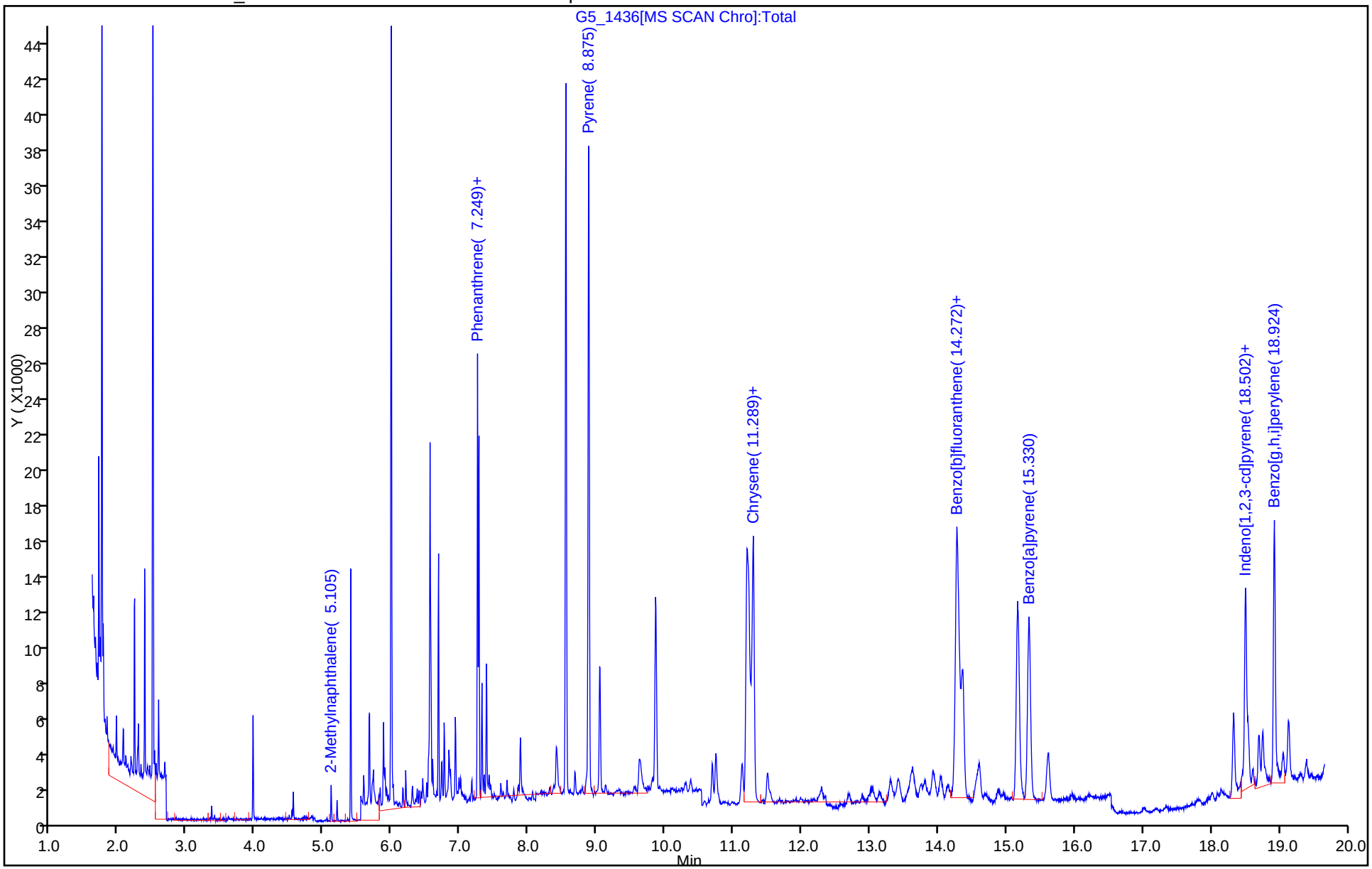
Reagents:

MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 11-Jun-2017 22:45:16 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1436.D				
Injection Date:	08-Jun-2017 13:06:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	280-97803-A-6-B	Lab Sample ID:	280-97803-6	Worklist Smp#:	10
Client ID:	SS025-SS03				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1436.D
Lims ID: 280-97803-A-6-B
Client ID: SS025-SS03
Sample Type: Client
Inject. Date: 08-Jun-2017 13:06:30 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-a-6-b
Operator ID: VASQUEZK Instrument ID: SMS_G5

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 11-Jun-2017 22:45:01 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 11-Jun-2017 22:28:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	337.5	67.50
$ 5 2-Fluorobiphenyl	500.0	328.8	65.76
$ 6 Terphenyl-d14	500.0	381.2	76.24

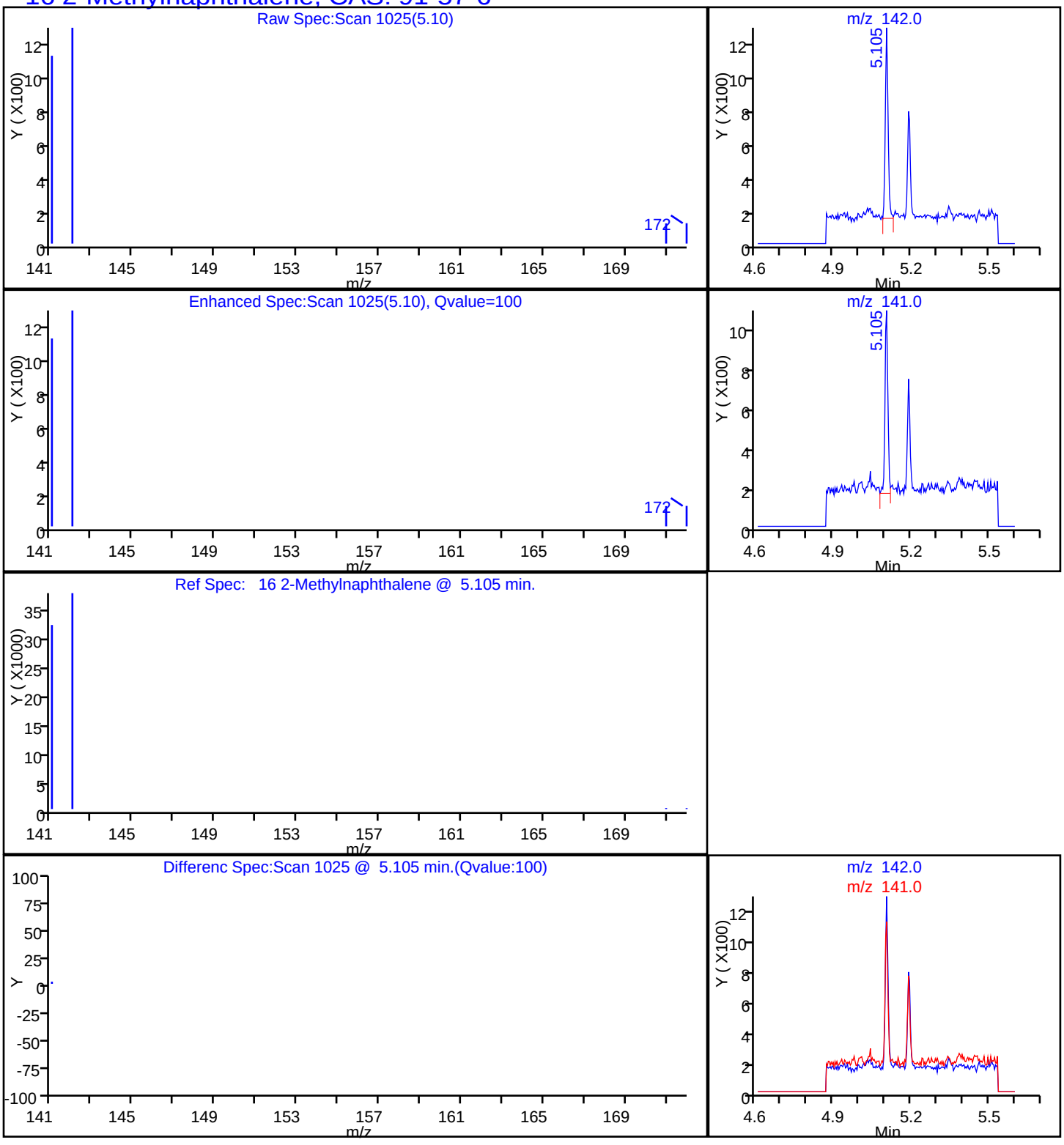
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1436.D

Injection Date:	08-Jun-2017 13:06:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-6-B	Lab Sample ID:	280-97803-6		
Client ID:	SS025-SS03				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



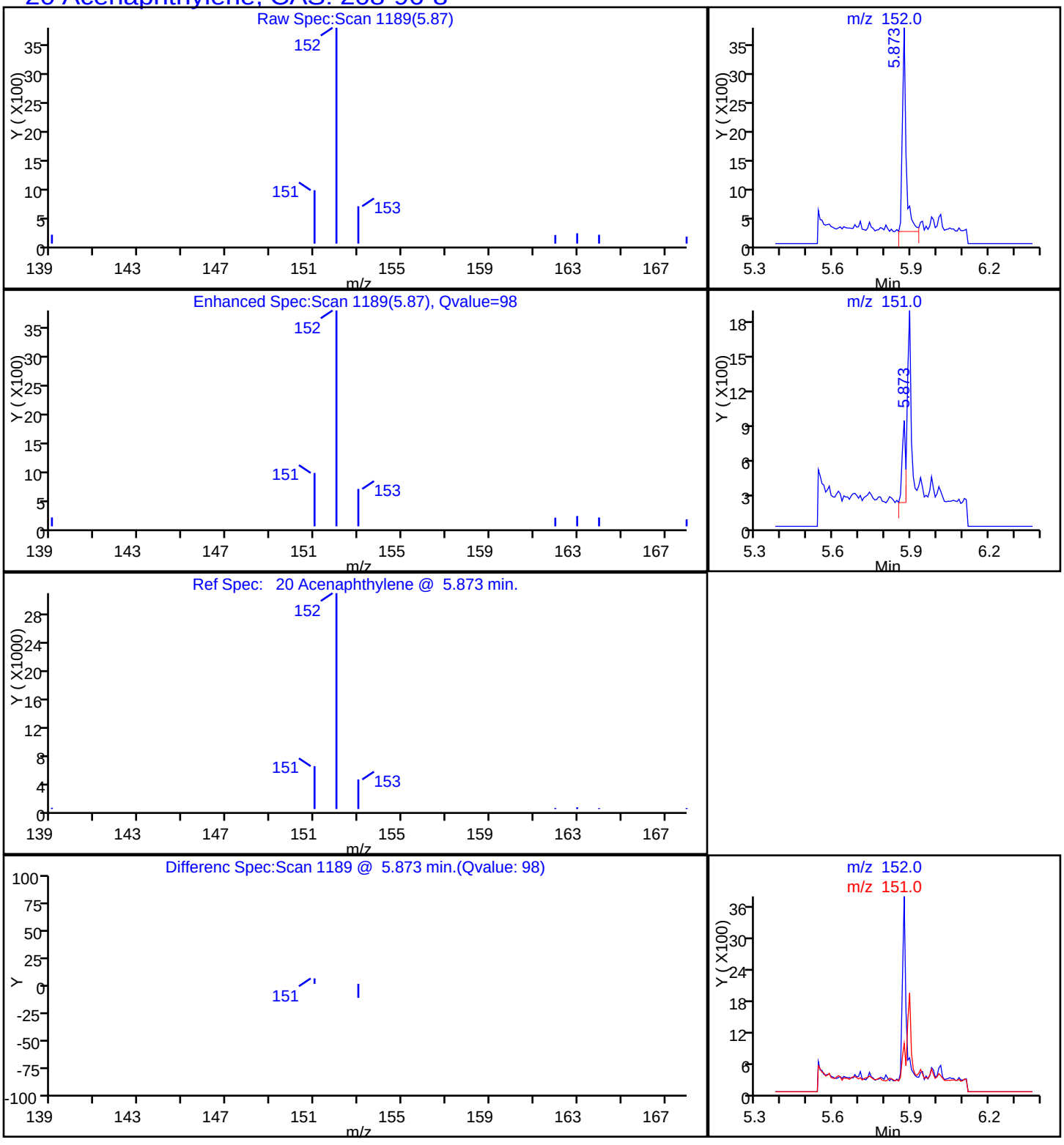
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1436.D

Injection Date:	08-Jun-2017 13:06:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-6-B	Lab Sample ID:	280-97803-6		
Client ID:	SS025-SS03				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

20 Acenaphthylene, CAS: 208-96-8



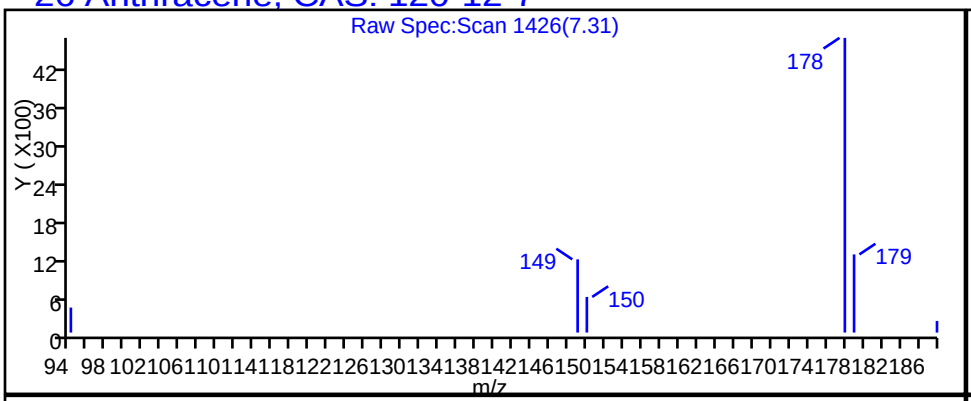
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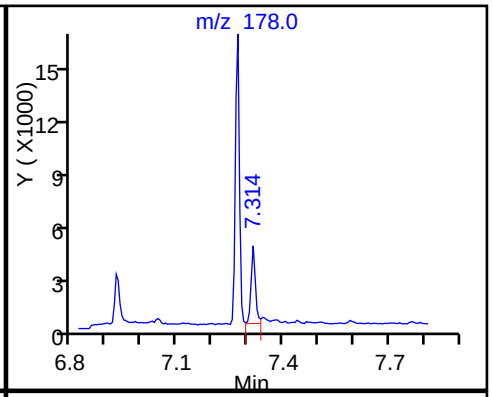
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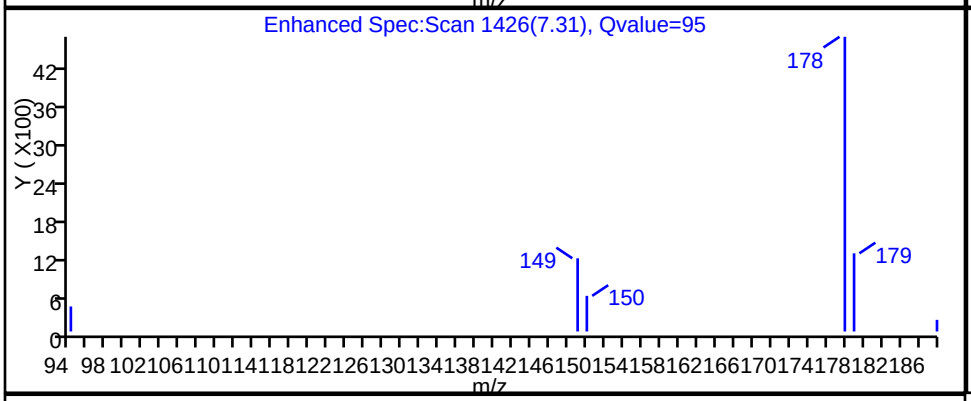
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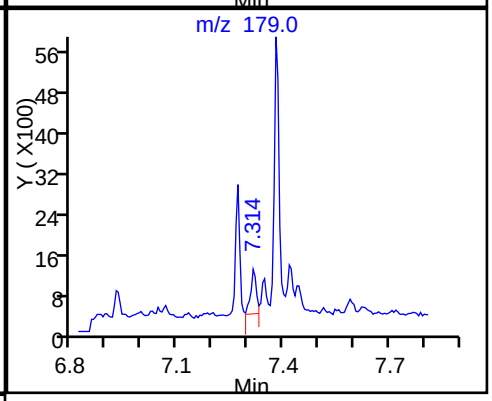
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Lims ID:	280-97803-A-6-B	Lab Sample ID:	280-97803-6		
Client ID:	SS025-SS03				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

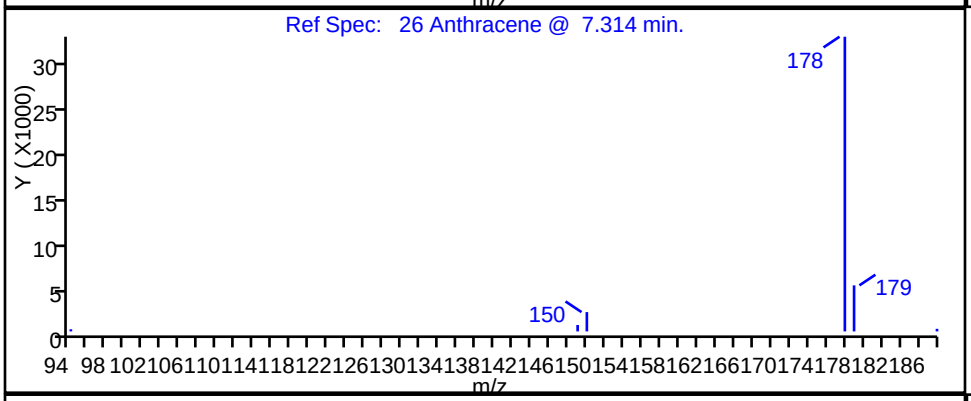
26 Anthracene, CAS: 120-12-7

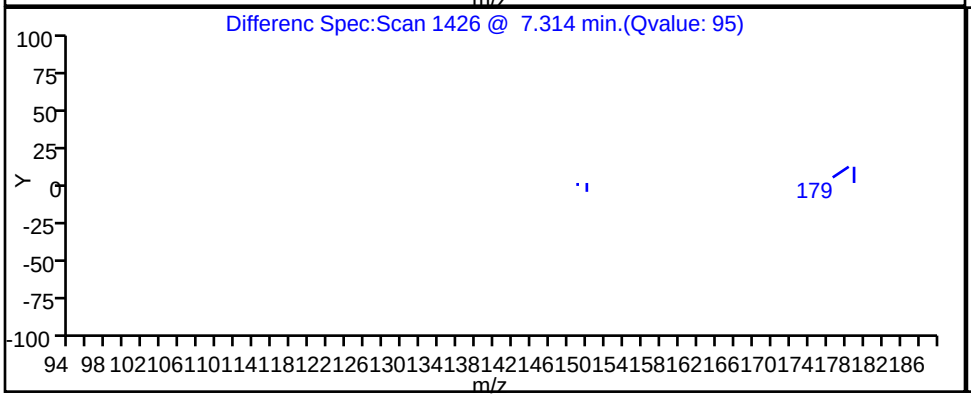


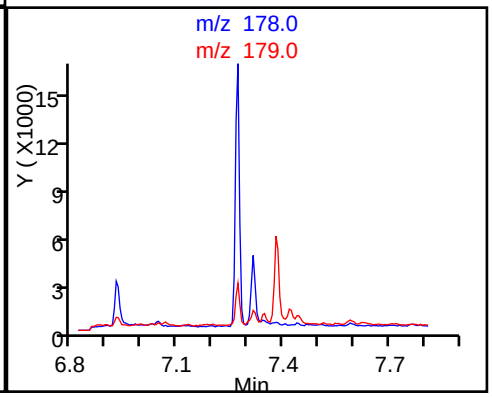












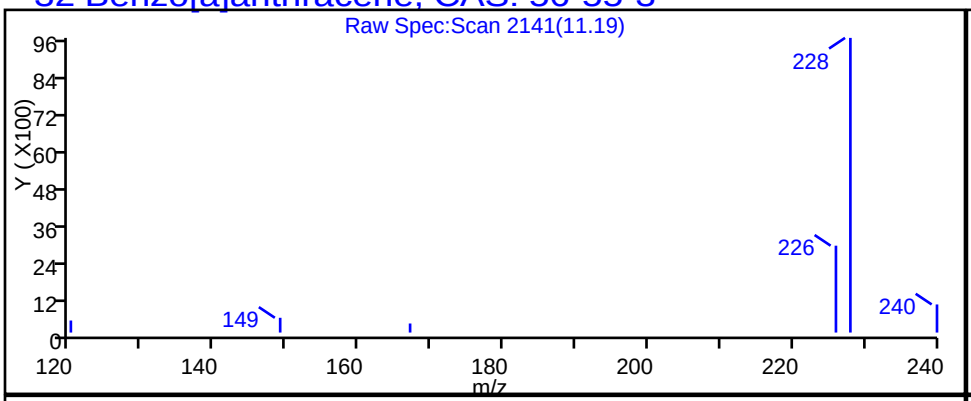
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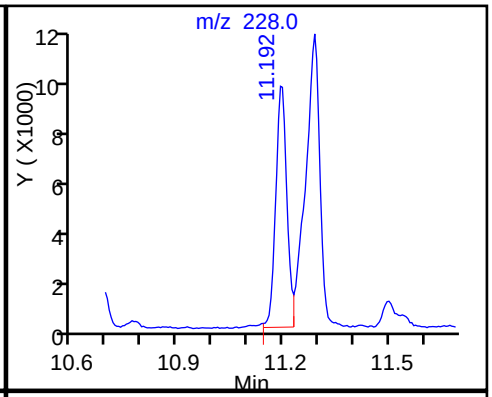
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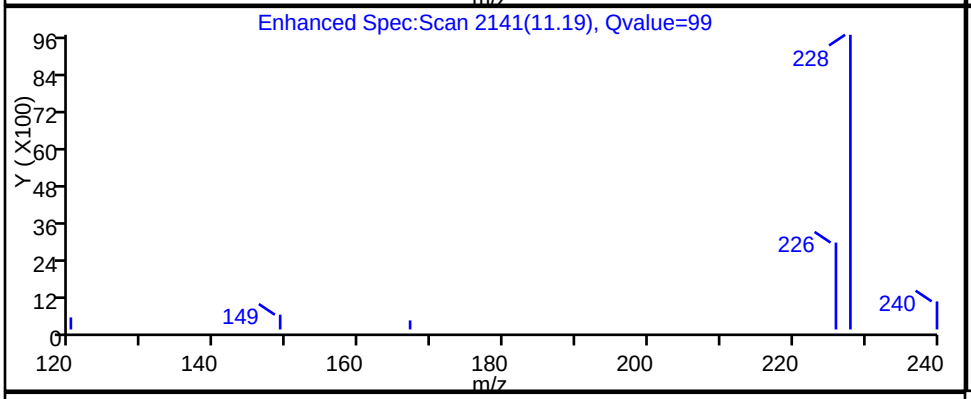
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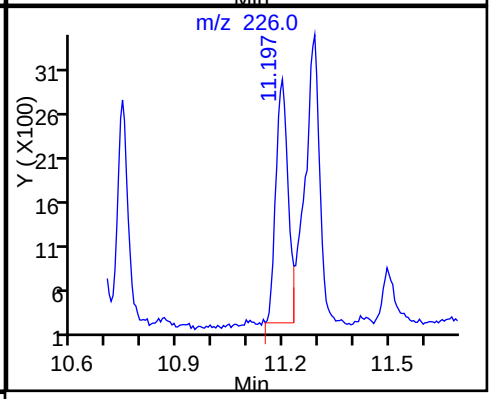
Injection Date:	08-Jun-2017 13:06:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-6-B	Lab Sample ID:	280-97803-6		
Client ID:	SS025-SS03				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

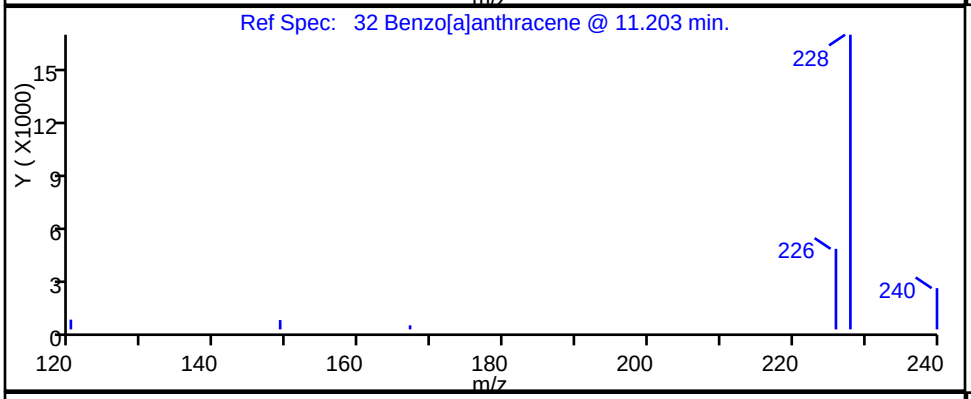
32 Benzo[a]anthracene, CAS: 56-55-3

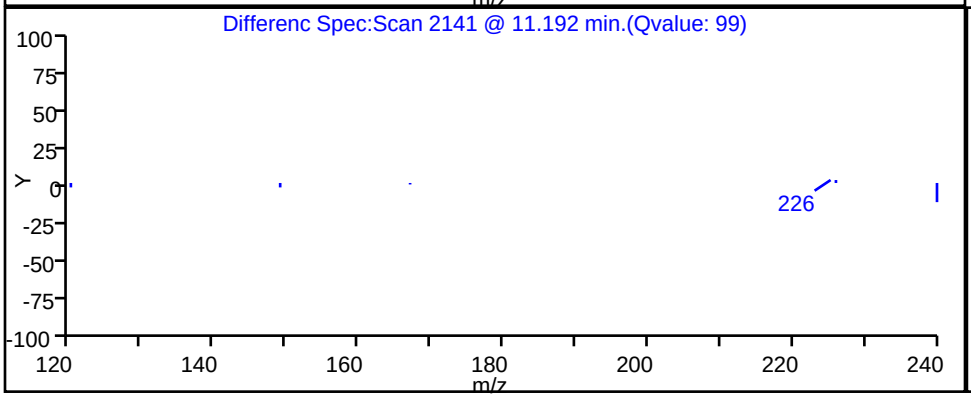


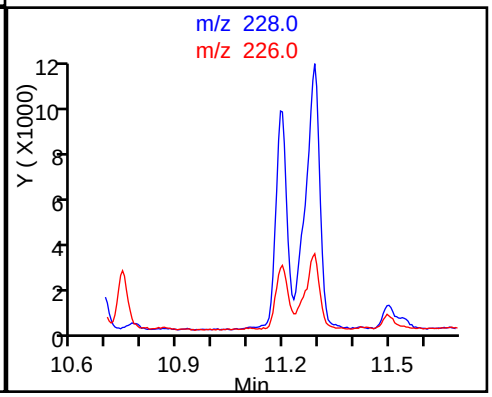












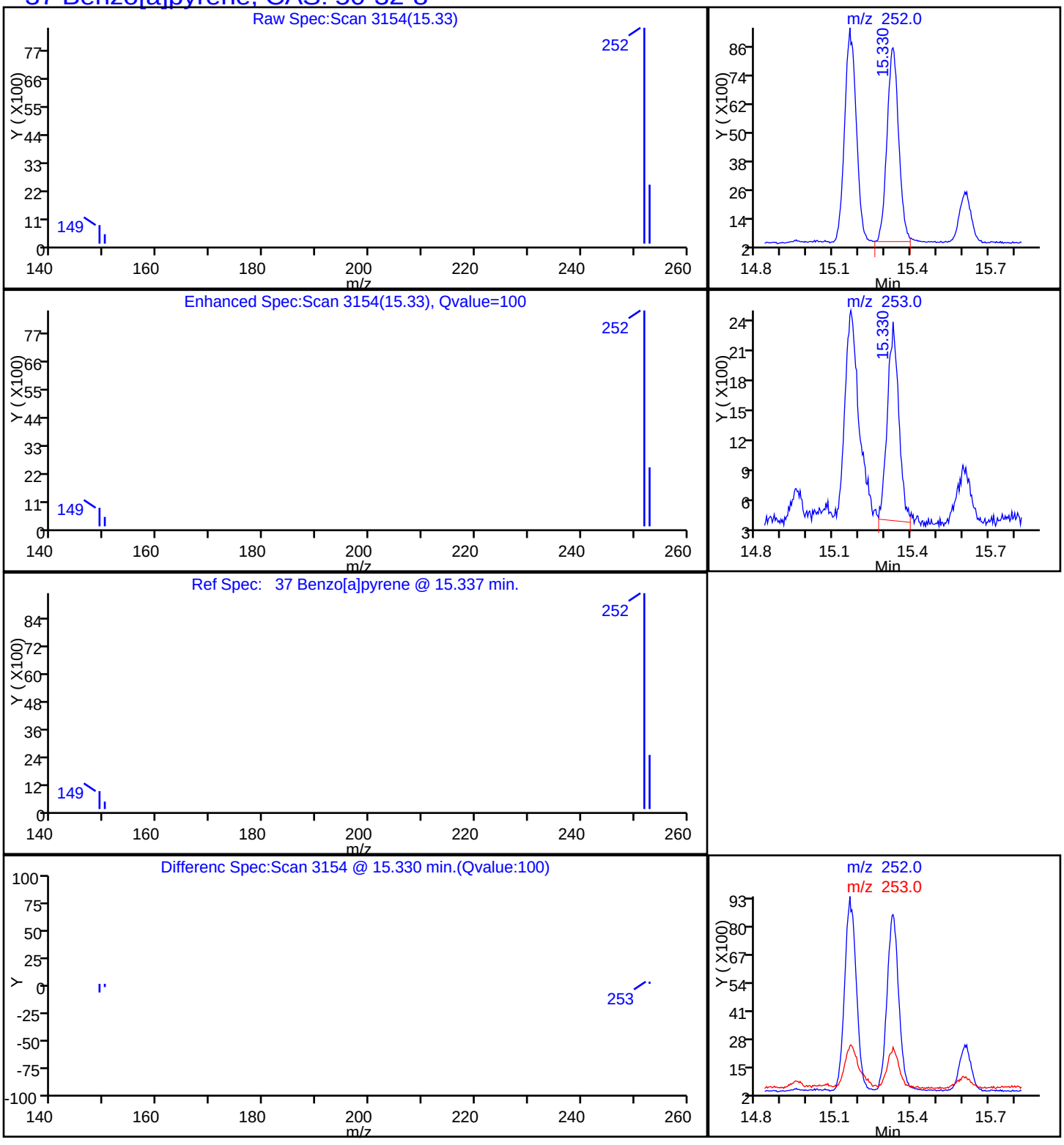
Report Date: 11-Jun-2017 22:45:17 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1436.D

Injection Date:	08-Jun-2017 13:06:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-6-B	Lab Sample ID:	280-97803-6		
Client ID:	SS025-SS03				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

37 Benzo[a]pyrene, CAS: 50-32-8

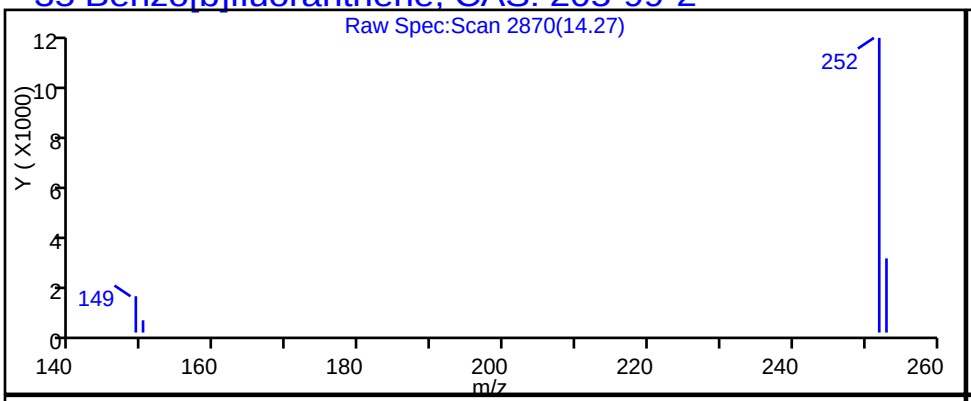


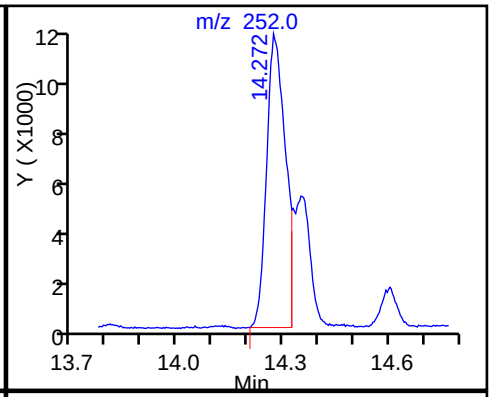
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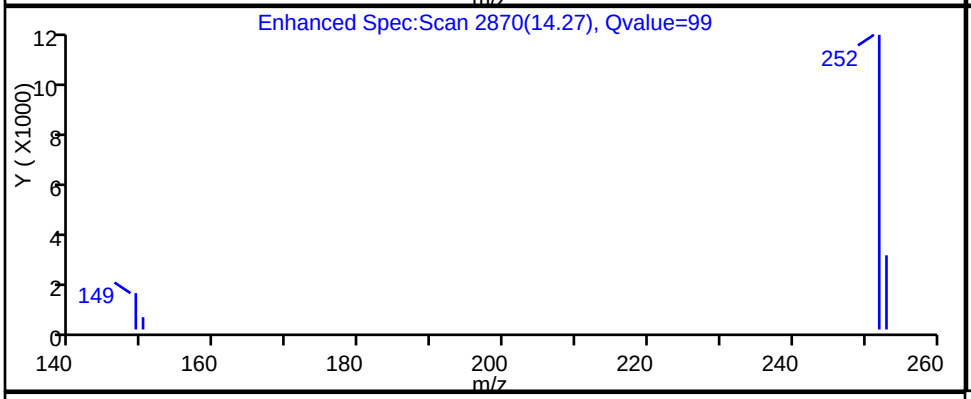
TestAmerica Denver

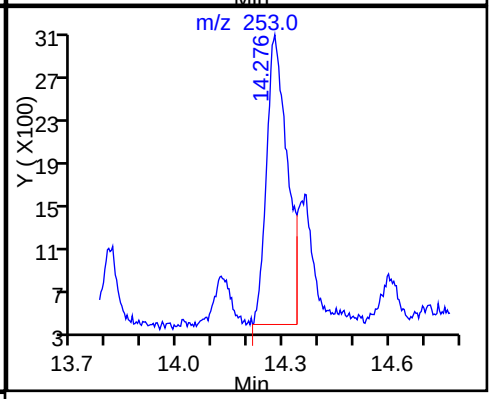
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Injection Date:	08-Jun-2017 13:06:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-6-B	Lab Sample ID:	280-97803-6		
Client ID:	SS025-SS03				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

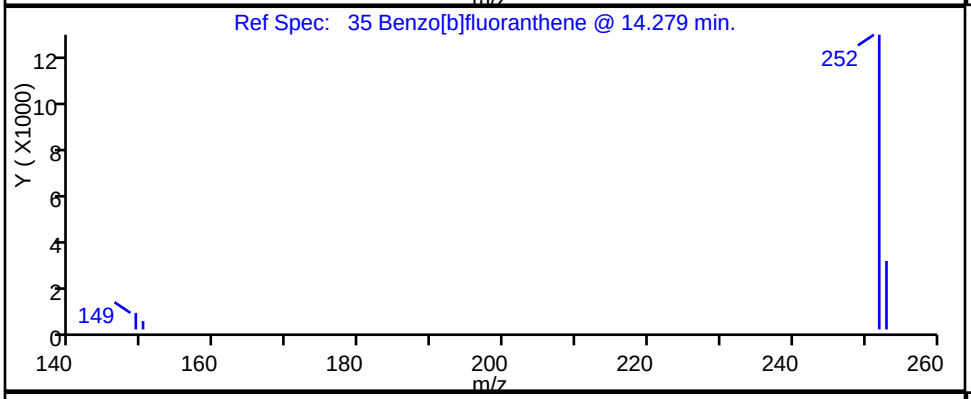
35 Benzo[b]fluoranthene, CAS: 205-99-2

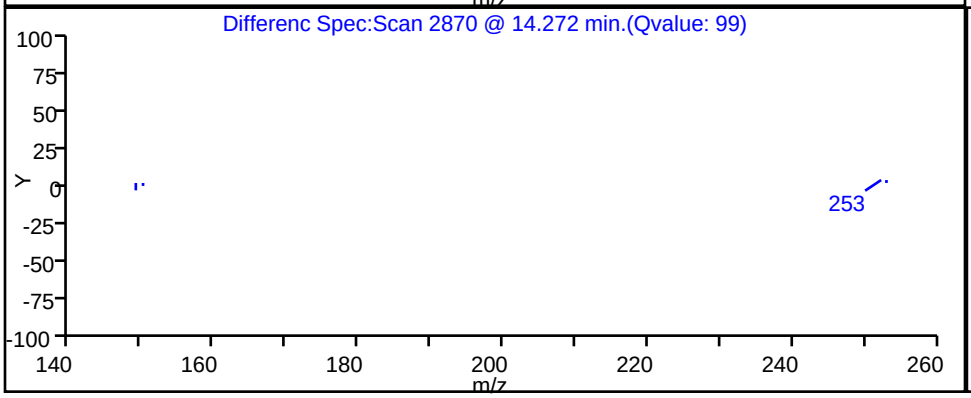


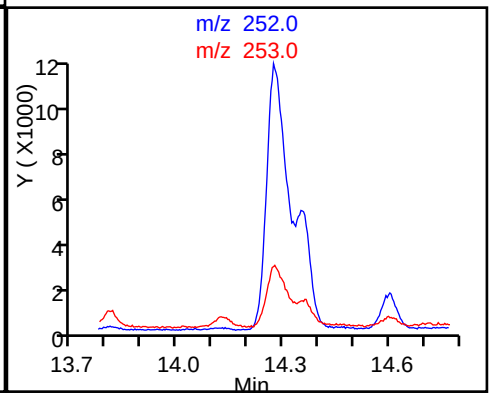










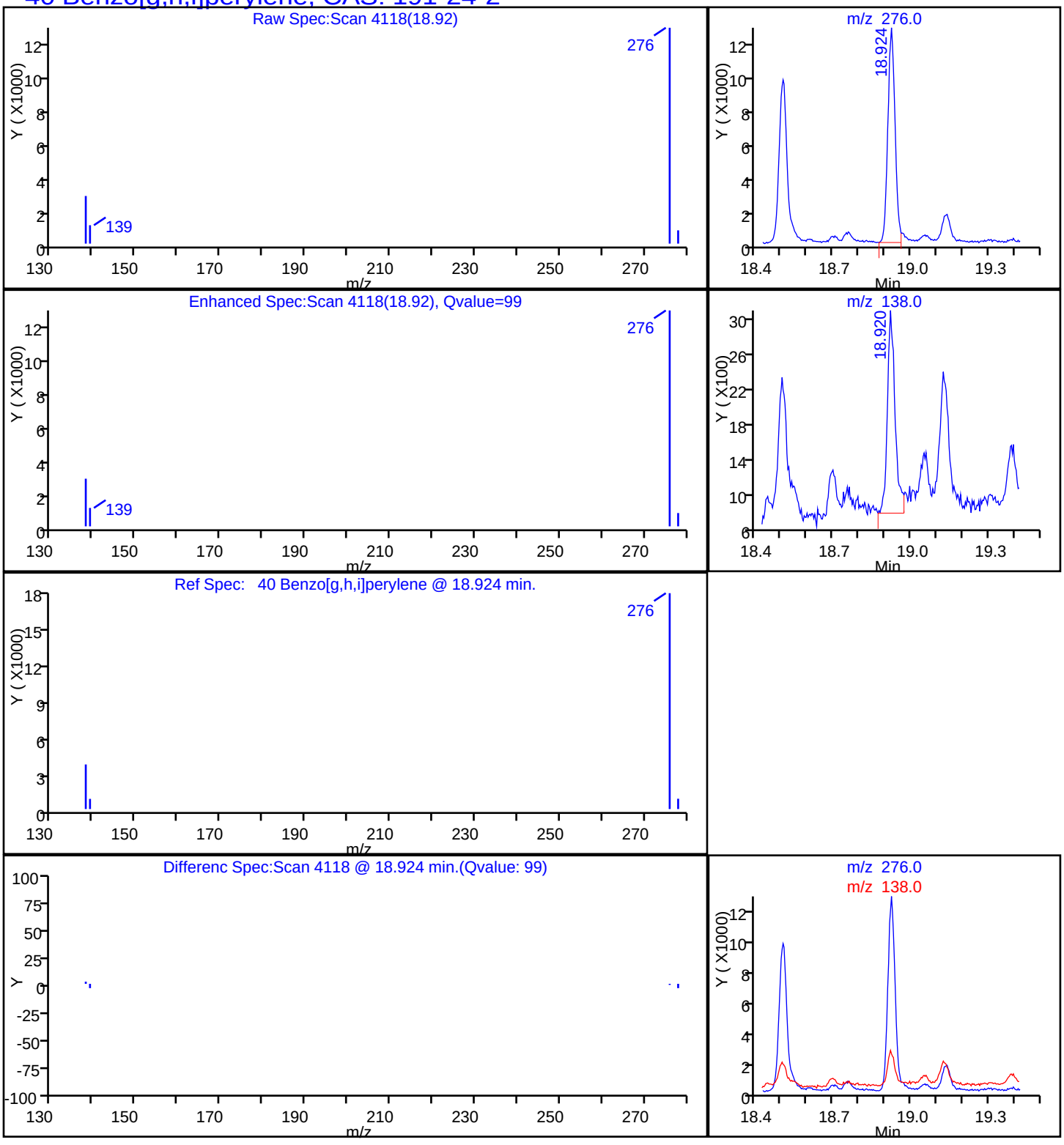


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TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1436.D				
Injection Date:	08-Jun-2017 13:06:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-6-B	Lab Sample ID:	280-97803-6		
Client ID:	SS025-SS03				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

40 Benzo[g,h,i]perylene, CAS: 191-24-2



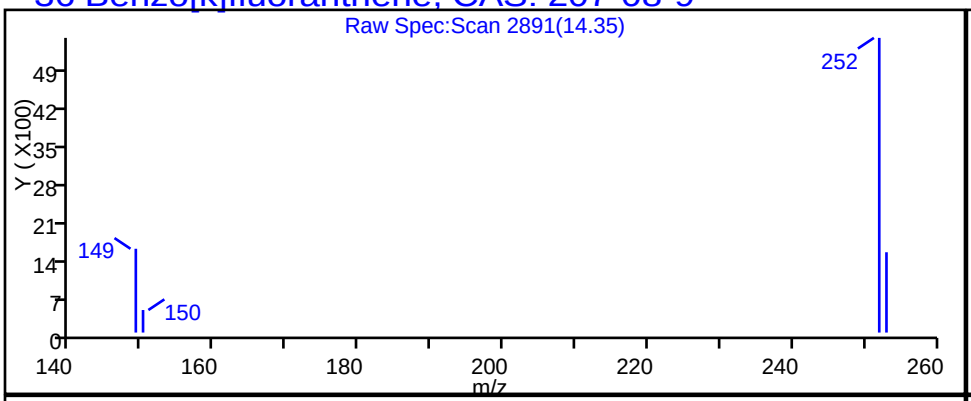
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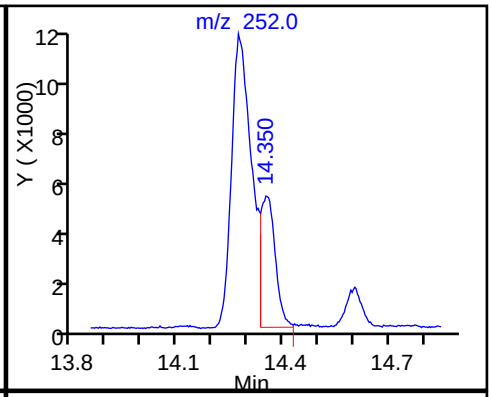
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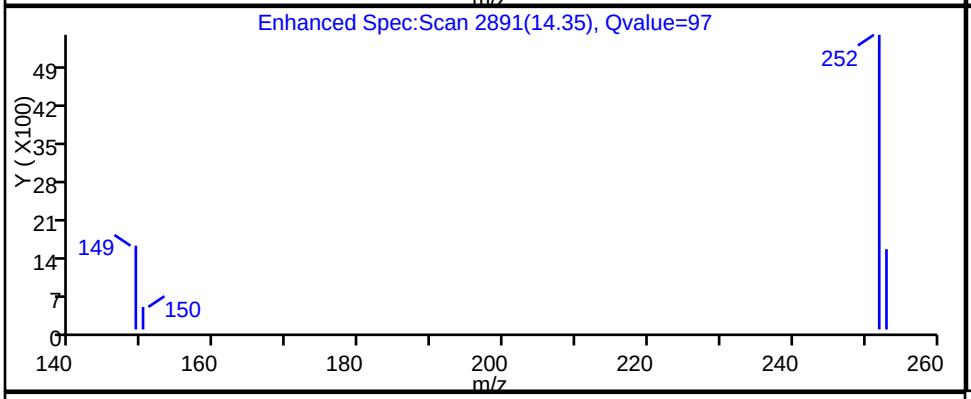
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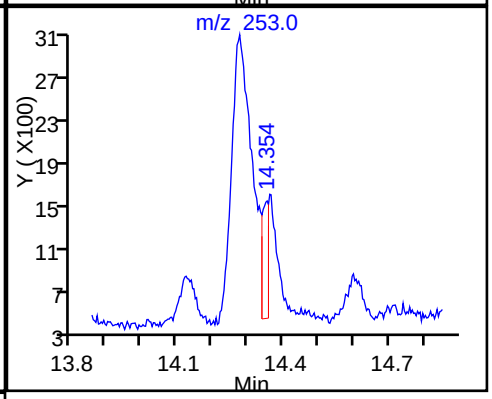
Injection Date:	08-Jun-2017 13:06:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-6-B	Lab Sample ID:	280-97803-6		
Client ID:	SS025-SS03				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

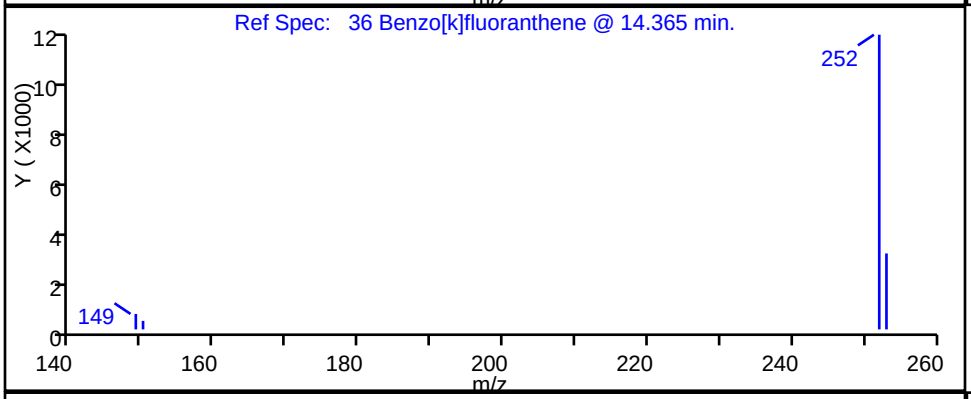
36 Benzo[k]fluoranthene, CAS: 207-08-9

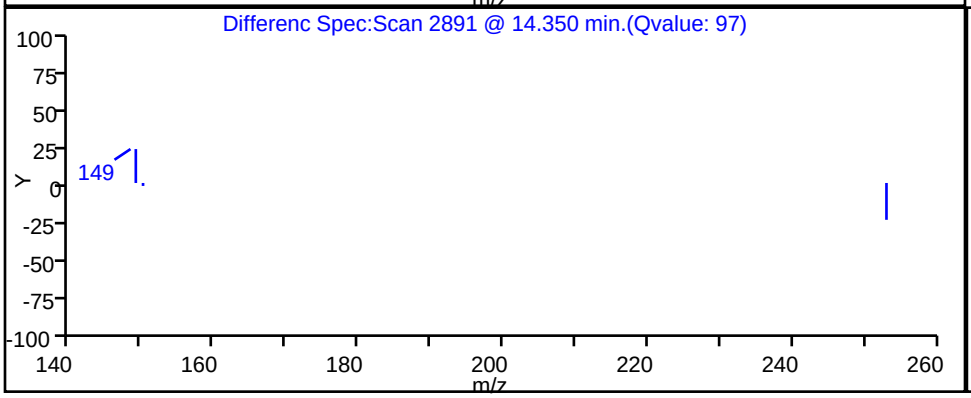


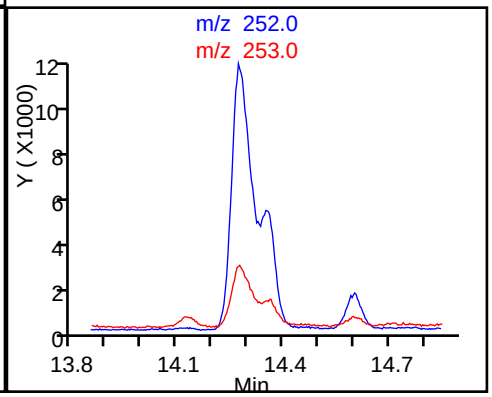










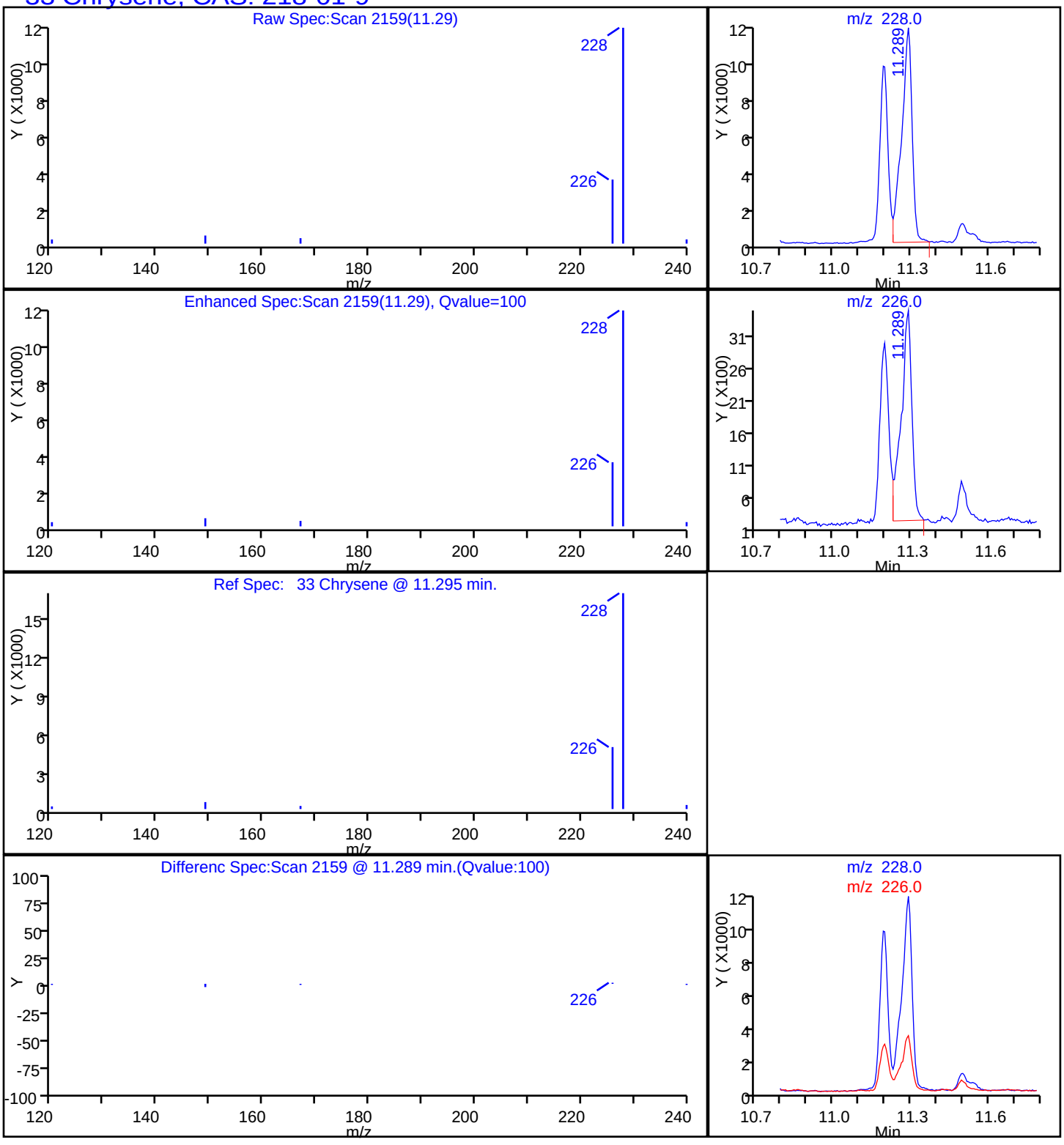


Report Date: 11-Jun-2017 22:45:17 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1436.D				
Injection Date:	08-Jun-2017 13:06:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-6-B	Lab Sample ID:	280-97803-6		
Client ID:	SS025-SS03				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

33 Chrysene, CAS: 218-01-9



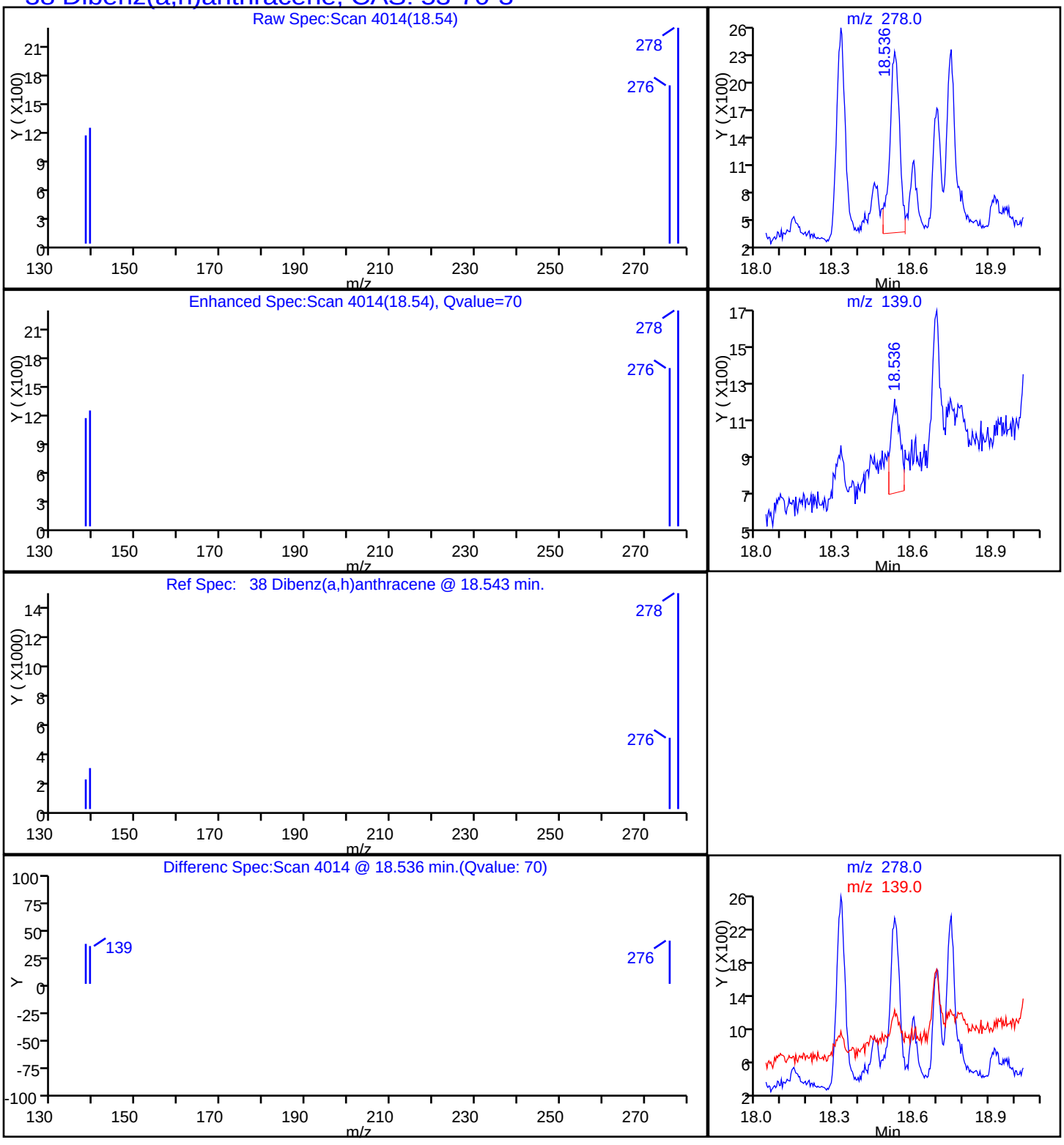
Report Date: 11-Jun-2017 22:45:17 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1436.D

Injection Date:	08-Jun-2017 13:06:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-6-B	Lab Sample ID:	280-97803-6		
Client ID:	SS025-SS03				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Dibenz(a,h)anthracene, CAS: 53-70-3



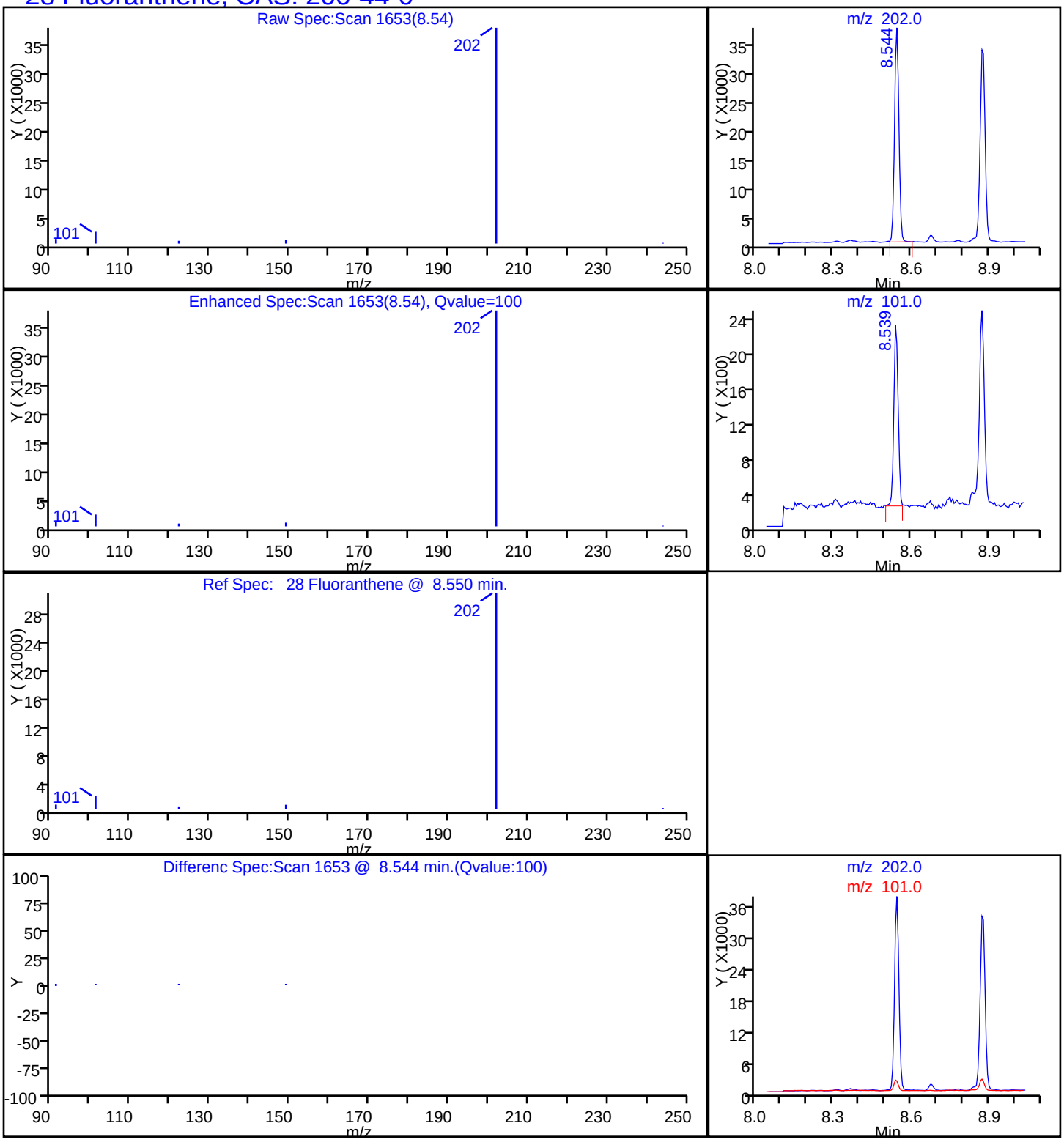
Report Date: 11-Jun-2017 22:45:17 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1436.D

Injection Date:	08-Jun-2017 13:06:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-6-B	Lab Sample ID:	280-97803-6		
Client ID:	SS025-SS03				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

28 Fluoranthene, CAS: 206-44-0



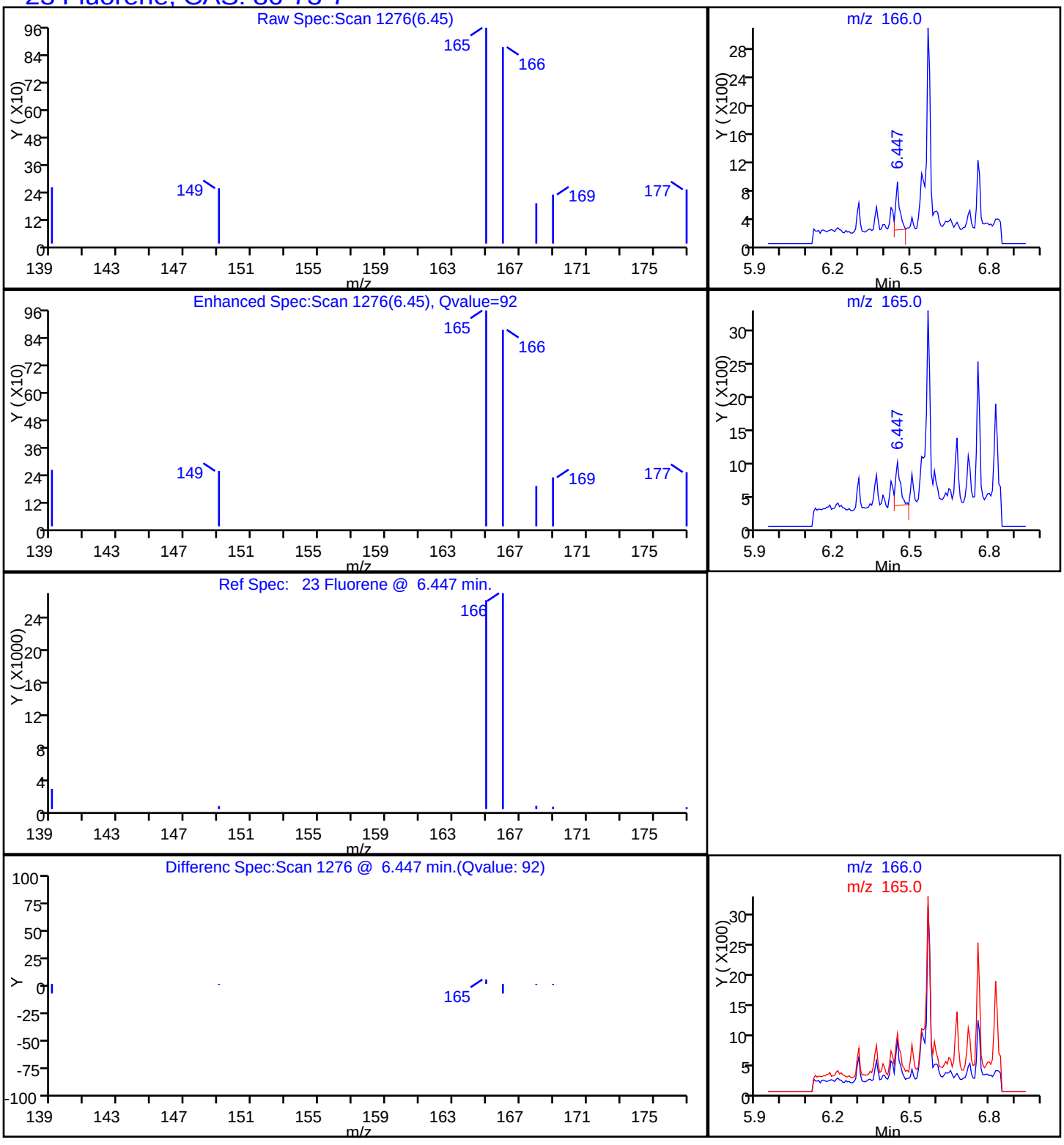
Report Date: 11-Jun-2017 22:45:17 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1436.D

Injection Date:	08-Jun-2017 13:06:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-6-B	Lab Sample ID:	280-97803-6		
Client ID:	SS025-SS03				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Fluorene, CAS: 86-73-7



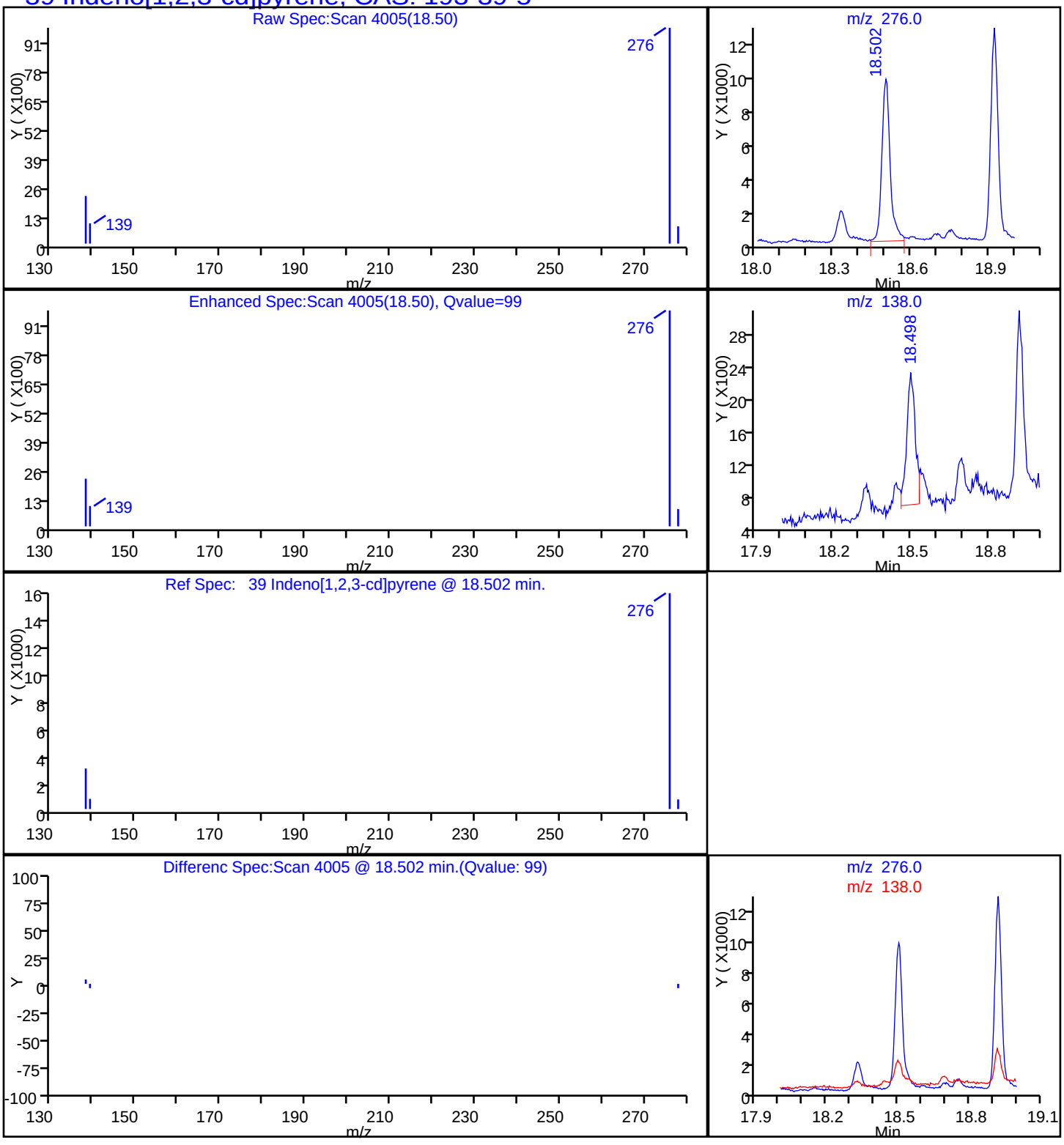
Report Date: 11-Jun-2017 22:45:17 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1436.D

Injection Date:	08-Jun-2017 13:06:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-6-B	Lab Sample ID:	280-97803-6		
Client ID:	SS025-SS03				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



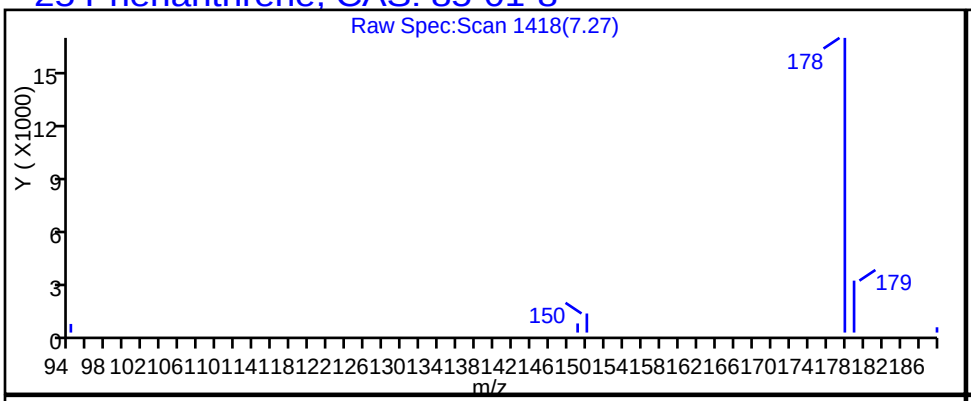
Report Date: 11-Jun-2017 22:45:17 Chrom Revision: 2.2 25-Apr-2017 13:27:22

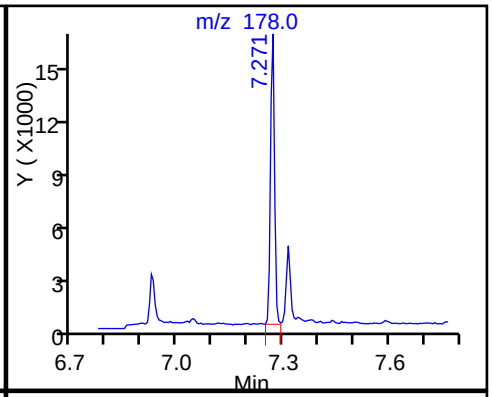
TestAmerica Denver

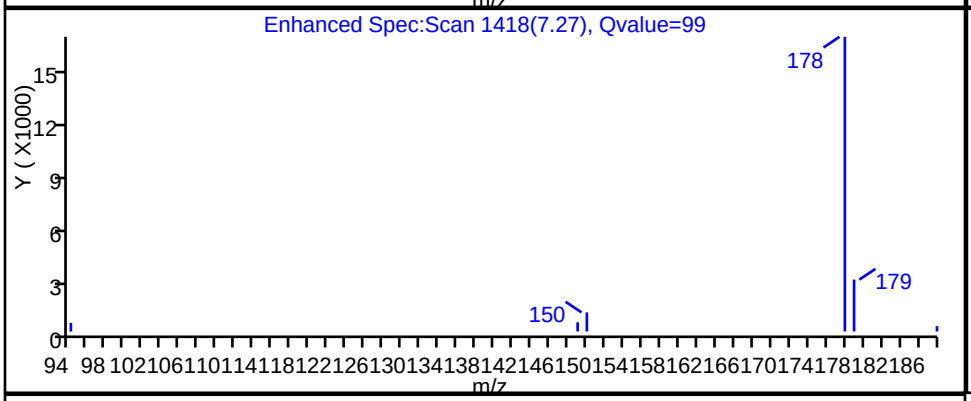
Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1436.D

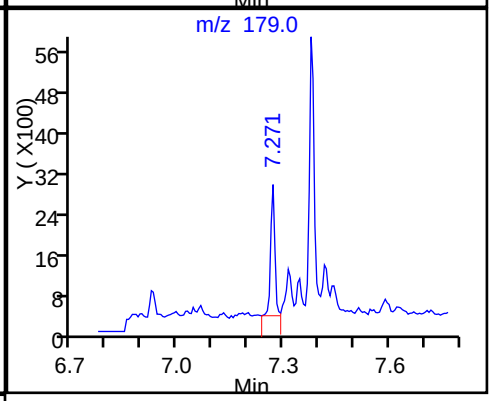
Injection Date:	08-Jun-2017 13:06:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-6-B	Lab Sample ID:	280-97803-6		
Client ID:	SS025-SS03				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

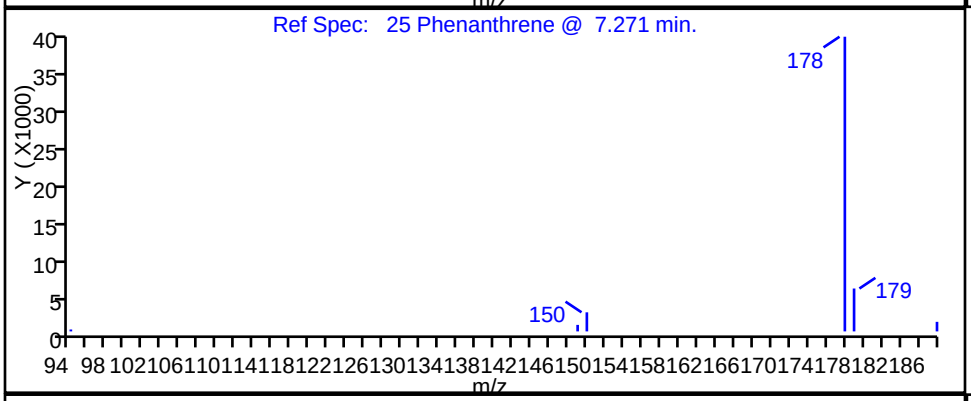
25 Phenanthrene, CAS: 85-01-8

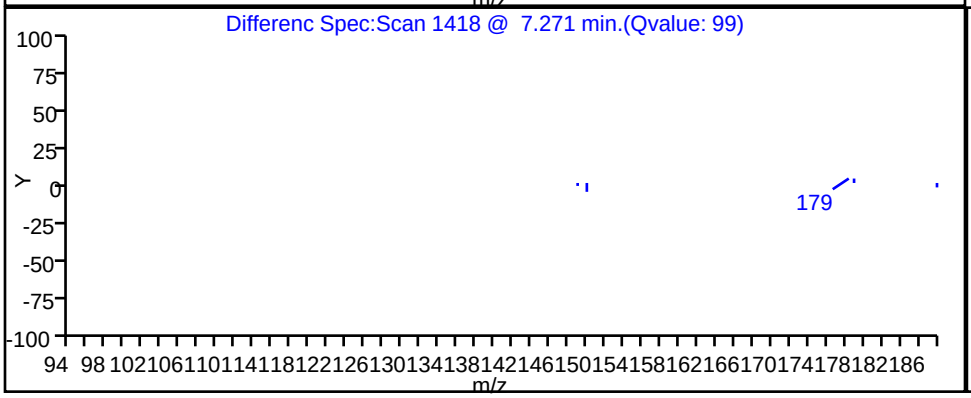


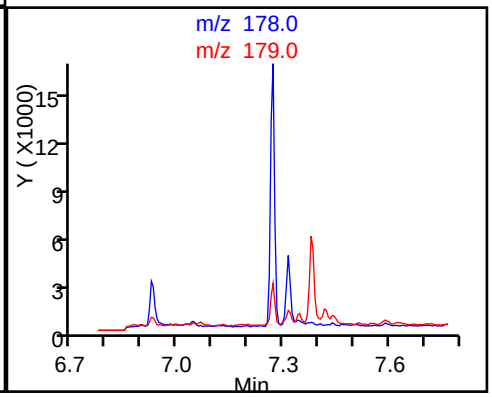












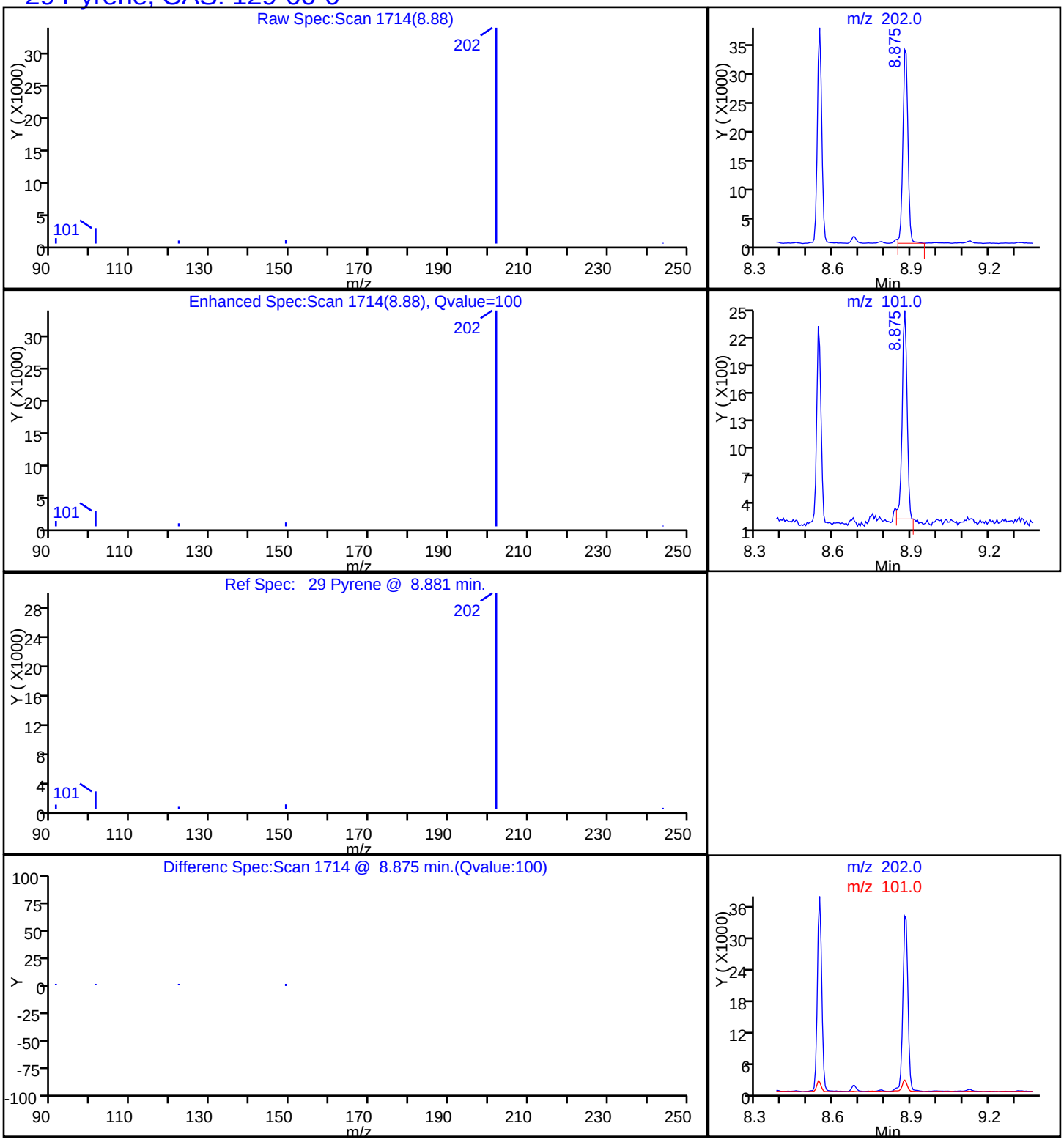
Report Date: 11-Jun-2017 22:45:17 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1436.D

Injection Date:	08-Jun-2017 13:06:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-6-B	Lab Sample ID:	280-97803-6		
Client ID:	SS025-SS03				
Operator ID:	VASQUEZK	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

29 Pyrene, CAS: 129-00-0



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB03(0-2) | Lab Sample ID: 280-97803-7

Matrix: Solid | Lab File ID: G5_1437.D

Analysis Method: 8270D SIM | Date Collected: 05/31/2017 13:40

Extract. Method: 3546 | Date Extracted: 06/05/2017 08:51

Sample wt/vol: 30.1(g) | Date Analyzed: 06/08/2017 13:33

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 13.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 376547 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.58	U	5.8	0.58	0.30
91-57-6	2-Methylnaphthalene	0.77	U	5.8	0.77	0.36
83-32-9	Acenaphthene	0.31	U	5.8	0.31	0.19
208-96-8	Acenaphthylene	0.77	U	5.8	0.77	0.20
120-12-7	Anthracene	2.9	U	5.8	2.9	0.83
56-55-3	Benzo[a]anthracene	2.9	U	5.8	2.9	1.0
50-32-8	Benzo[a]pyrene	2.9	U	5.8	2.9	0.86
205-99-2	Benzo[b]fluoranthene	2.9	U	5.8	2.9	1.4
191-24-2	Benzo[g,h,i]perylene	2.9	U	5.8	2.9	1.3
207-08-9	Benzo[k]fluoranthene	2.9	U	5.8	2.9	1.2
218-01-9	Chrysene	2.9	U	5.8	2.9	1.2
53-70-3	Dibenz(a,h)anthracene	2.9	U	5.8	2.9	1.5
206-44-0	Fluoranthene	2.9	U	5.8	2.9	1.2
86-73-7	Fluorene	0.77	U	5.8	0.77	0.54
193-39-5	Indeno[1,2,3-cd]pyrene	2.9	U	5.8	2.9	1.3
91-20-3	Naphthalene	0.77	U	5.8	0.77	0.38
85-01-8	Phenanthrene	2.9	U	5.8	2.9	1.3
129-00-0	Pyrene	2.9	U	5.8	2.9	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	74		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	63		44-125
1718-51-0	Terphenyl-d14 (Surr)	78		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1437.D
Lims ID: 280-97803-A-7-B
Client ID: SS025-SB03(0-2)
Sample Type: Client
Inject. Date: 08-Jun-2017 13:33:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-a-7-b
Operator ID: VASQUEZK Instrument ID: SMS_G5

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 11-Jun-2017 22:45:01 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 11-Jun-2017 22:30:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	5.987	5.987	0.000	95	14319	600.0	
* 3 Phenanthrene-d10	188	7.249	7.249	0.000	100	30269	600.0	
* 1 Chrysene-d12	240	11.224	11.224	0.000	92	33410	600.0	
$ 4 Nitrobenzene-d5	82	3.961	3.959	0.002	97	4297	314.3	
$ 5 2-Fluorobiphenyl	172	5.391	5.391	0.000	100	12728	368.2	
$ 6 Terphenyl-d14	244	9.044	9.044	0.000	100	15497	390.3	
43 1,4-Dioxane	88		1.879				ND	
7 N-Nitrosodimethylamine	42		2.004				ND	
15 Naphthalene	128		4.550				ND	
16 2-Methylnaphthalene	142		5.105				ND	
17 1-Methylnaphthalene	142		5.190				ND	
18 Dimethyl phthalate	163		5.710				ND	
20 Acenaphthylene	152		5.873				ND	
21 Acenaphthene	153		6.015				ND	
19 Dibenzofuran	168		6.159				ND	
22 Diethyl phthalate	149		6.284				ND	
23 Fluorene	166		6.447				ND	
24 N-Nitrosodiphenylamine	169		6.522				ND	
25 Phenanthrene	178		7.271				ND	
26 Anthracene	178		7.314				ND	
27 Di-n-butyl phthalate	149		7.683				ND	
28 Fluoranthene	202		8.545				ND	
29 Pyrene	202		8.881				ND	
30 Butyl benzyl phthalate	149		9.863				ND	
31 Bis(2-ethylhexyl) phthalat	149	11.121	11.127	-0.006	98	3096	93.1	
32 Benzo[a]anthracene	228		11.197				ND	
33 Chrysene	228		11.290				ND	
34 Di-n-octyl phthalate	149		13.028				ND	
35 Benzo[b]fluoranthene	252		14.276				ND	
36 Benzo[k]fluoranthene	252		14.361				ND	
37 Benzo[a]pyrene	252		15.333				ND	
39 Indeno[1,2,3-cd]pyrene	276		18.502				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
38 Dibenz(a,h)anthracene	278		18.543				ND	
40 Benzo[g,h,i]perylene	276		18.924				ND	
8 Morpholine	1		0.000				ND	
44 Benzidine	184		0.000				ND	
42 Pentachlorophenol	266		0.000				ND	
9 Pentachlorophenol_T	266		4.285				ND	
10 DFTPP								
11 Benzidine_T	184		5.387				ND	
13 4,4'-DDD	235		5.777				ND	
12 4,4'-DDE	246		5.932				ND	
14 4,4'-DDT	235		5.970				ND	
S 41 TPAH	1		0.000				ND	

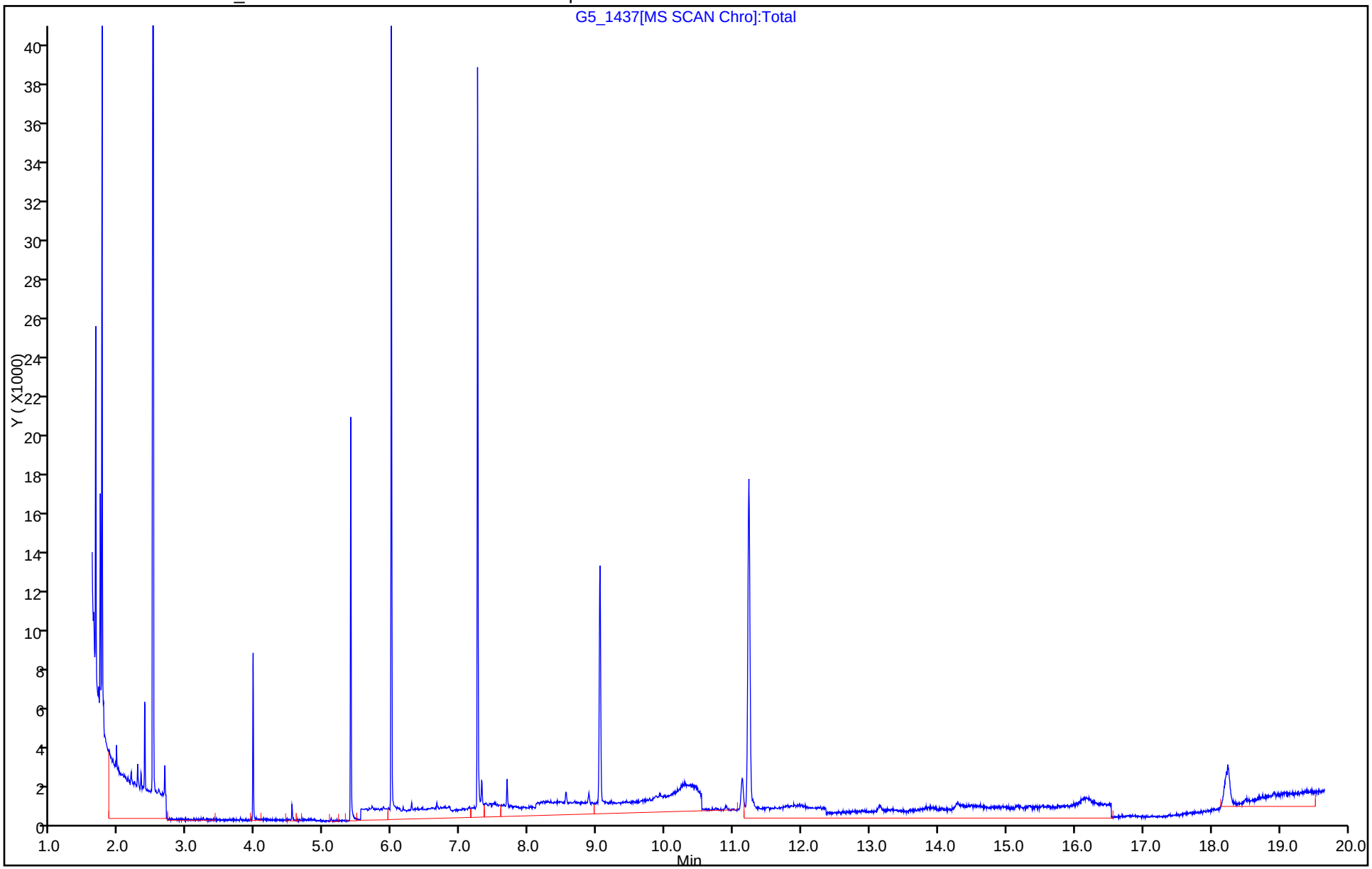
Reagents:

MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 11-Jun-2017 22:45:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1437.D				
Injection Date:	08-Jun-2017 13:33:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	280-97803-A-7-B	Lab Sample ID:	280-97803-7	Worklist Smp#:	11
Client ID:	SS025-SB03(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1437.D
Lims ID: 280-97803-A-7-B
Client ID: SS025-SB03(0-2)
Sample Type: Client
Inject. Date: 08-Jun-2017 13:33:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-a-7-b
Operator ID: VASQUEZK Instrument ID: SMS_G5

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 11-Jun-2017 22:45:01 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 11-Jun-2017 22:30:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	314.3	62.86
$ 5 2-Fluorobiphenyl	500.0	368.2	73.64
$ 6 Terphenyl-d14	500.0	390.3	78.06

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS04 | Lab Sample ID: 280-97803-8

Matrix: Solid | Lab File ID: F7345.D

Analysis Method: 8270D SIM | Date Collected: 05/31/2017 14:00

Extract. Method: 3546 | Date Extracted: 06/14/2017 09:42

Sample wt/vol: 32.5(g) | Date Analyzed: 06/21/2017 22:55

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 10.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378253 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	7.2		5.1	0.51	0.27
91-57-6	2-Methylnaphthalene	14		5.1	0.68	0.32
83-32-9	Acenaphthene	18		5.1	0.27	0.16
208-96-8	Acenaphthylene	20		5.1	0.68	0.17
120-12-7	Anthracene	42		5.1	2.6	0.74
56-55-3	Benzo[a]anthracene	110		5.1	2.6	0.92
50-32-8	Benzo[a]pyrene	110		5.1	2.6	0.76
205-99-2	Benzo[b]fluoranthene	150		5.1	2.6	1.2
191-24-2	Benzo[g,h,i]perylene	63		5.1	2.6	1.1
207-08-9	Benzo[k]fluoranthene	52		5.1	2.6	1.0
218-01-9	Chrysene	140		5.1	2.6	1.0
53-70-3	Dibenz(a,h)anthracene	18		5.1	2.6	1.3
206-44-0	*Fluoranthene*	*220*	*J*	*5.1*	2.6	*1.0*
86-73-7	Fluorene	19		5.1	0.68	0.48
193-39-5	Indeno[1,2,3-cd]pyrene	55		5.1	2.6	1.1
91-20-3	Naphthalene	26		5.1	0.68	0.33
85-01-8	Phenanthrene	150		5.1	2.6	1.1
129-00-0	*Pyrene*	*200*	*J*	*5.1*	2.6	*1.1*

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	66		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	70		44-125
1718-51-0	Terphenyl-d14 (Surr)	82		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7345.D
Lims ID: 280-97803-C-8-A
Client ID: SS025-SS04
Sample Type: Client
Inject. Date: 21-Jun-2017 22:55:30 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-c-8-a
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 22-Jun-2017 16:05:39 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: wickhamm Date: 22-Jun-2017 15:58:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	97	25601	600.0	
* 2 Phenanthrene-d10	188	7.295	7.302	-0.007	100	45530	600.0	
* 3 Chrysene-d12	240	11.360	11.380	-0.020	66	36069	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	14027	349.8	
$ 5 2-Fluorobiphenyl	172	5.431	5.436	-0.005	99	21778	328.1	
$ 6 Terphenyl-d14	244	9.117	9.131	-0.014	97	18950	409.9	
14 Naphthalene	128	4.586	4.586	0.000	100	63718	767.8	
16 2-Methylnaphthalene	142	5.143	5.147	-0.004	98	21782	408.2	
17 1-Methylnaphthalene	142	5.230	5.230	0.000	100	11305	211.6	
22 Acenaphthylene	152	5.908	5.917	-0.009	99	52406	593.4	
23 Acenaphthene	153	6.055	6.055	0.000	98	28700	531.7	
25 Fluorene	166	6.487	6.494	-0.007	98	36126	545.3	
27 Phenanthrene	178	7.314	7.328	-0.014	100	415804	4306.0	
28 Anthracene	178	7.360	7.373	-0.013	99	120579	1236.6	
30 Fluoranthene	202	8.616	8.629	-0.013	100	707877	6382.6	E
31 Pyrene	202	8.961	8.974	-0.013	99	665778	5788.4	E
35 Benzo[a]anthracene	228	11.333	11.353	-0.020	97	305418	3184.0	
36 Chrysene	228	11.432	11.452	-0.020	100	353774	3986.6	
38 Benzo[b]fluoranthene	252	14.487	14.512	-0.025	100	388825	4464.8	
39 Benzo[k]fluoranthene	252	14.566	14.595	-0.029	100	133453	1523.6	
40 Benzo[a]pyrene	252	15.563	15.596	-0.033	100	268267	3121.4	
41 Indeno[1,2,3-cd]pyrene	276	18.660	18.680	-0.020	79	156761	1608.0	
42 Dibenz(a,h)anthracene	278	18.686	18.706	-0.020	91	40990	538.8	
43 Benzo[g,h,i]perylene	276	19.093	19.113	-0.020	99	152394	1842.6	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

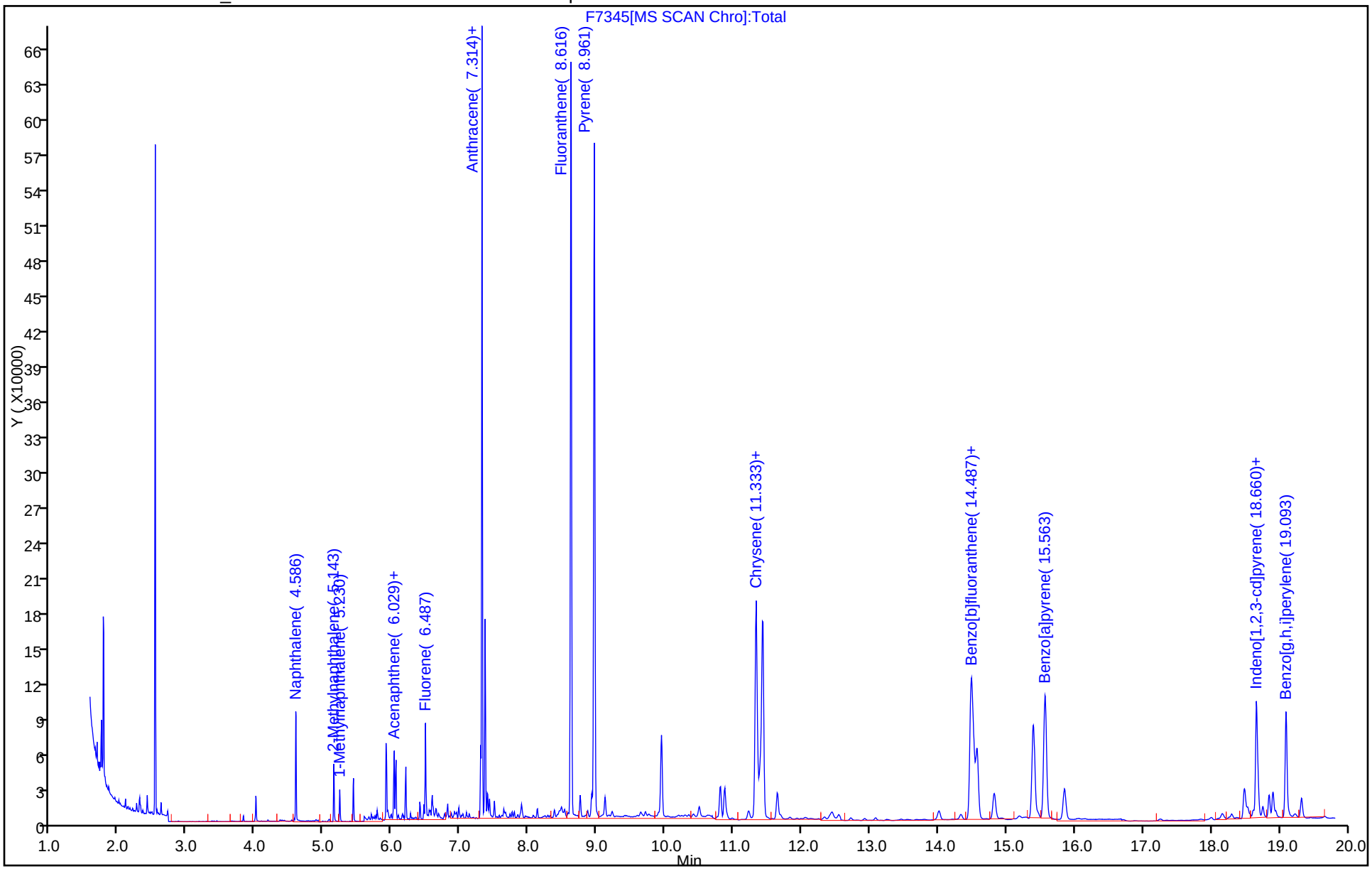
Reagents:

MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 22-Jun-2017 16:05:48 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7345.D				
Injection Date:	21-Jun-2017 22:55:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8	Worklist Smp#:	10
Client ID:	SS025-SS04				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7345.D				
Lims ID:	280-97803-C-8-A				
Client ID:	SS025-SS04				
Sample Type:	Client				
Inject. Date:	21-Jun-2017 22:55:30	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-c-8-a				
Operator ID:	WICKHAMM	Instrument ID:	SMS_F		
Method:	\\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\SMSF_8270SIMX.m				
Limit Group:	MSSV - 8270C-SIM				
Last Update:	22-Jun-2017 16:05:39	Calib Date:	11-May-2017 16:07:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK015				

First Level Reviewer: wickhamm Date: 22-Jun-2017 15:58:36

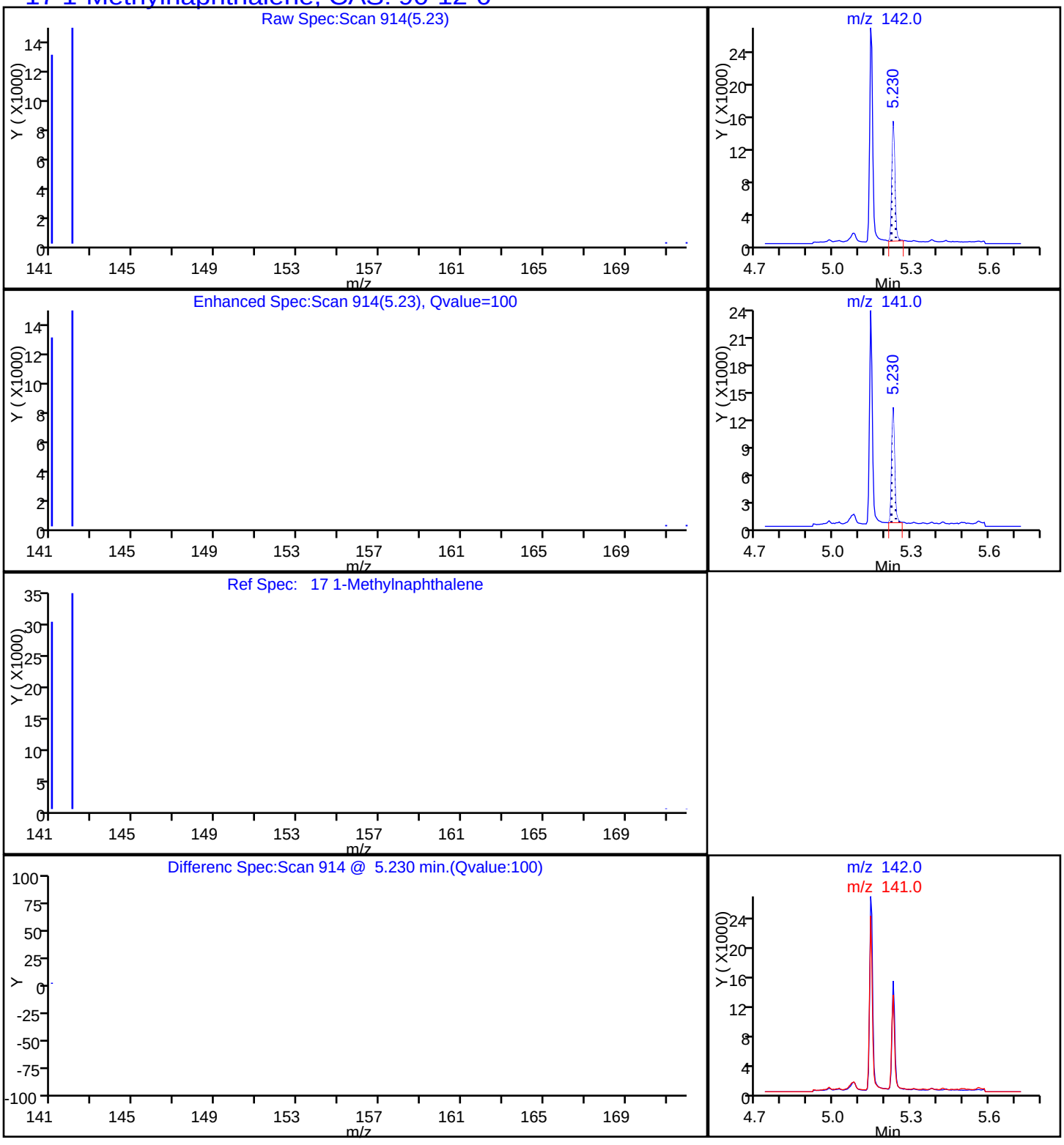
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	349.8	69.96
$ 5 2-Fluorobiphenyl	500.0	328.1	65.62
$ 6 Terphenyl-d14	500.0	409.9	81.98

Report Date: 22-Jun-2017 16:05:48 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7345.D				
Injection Date:	21-Jun-2017 22:55:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0

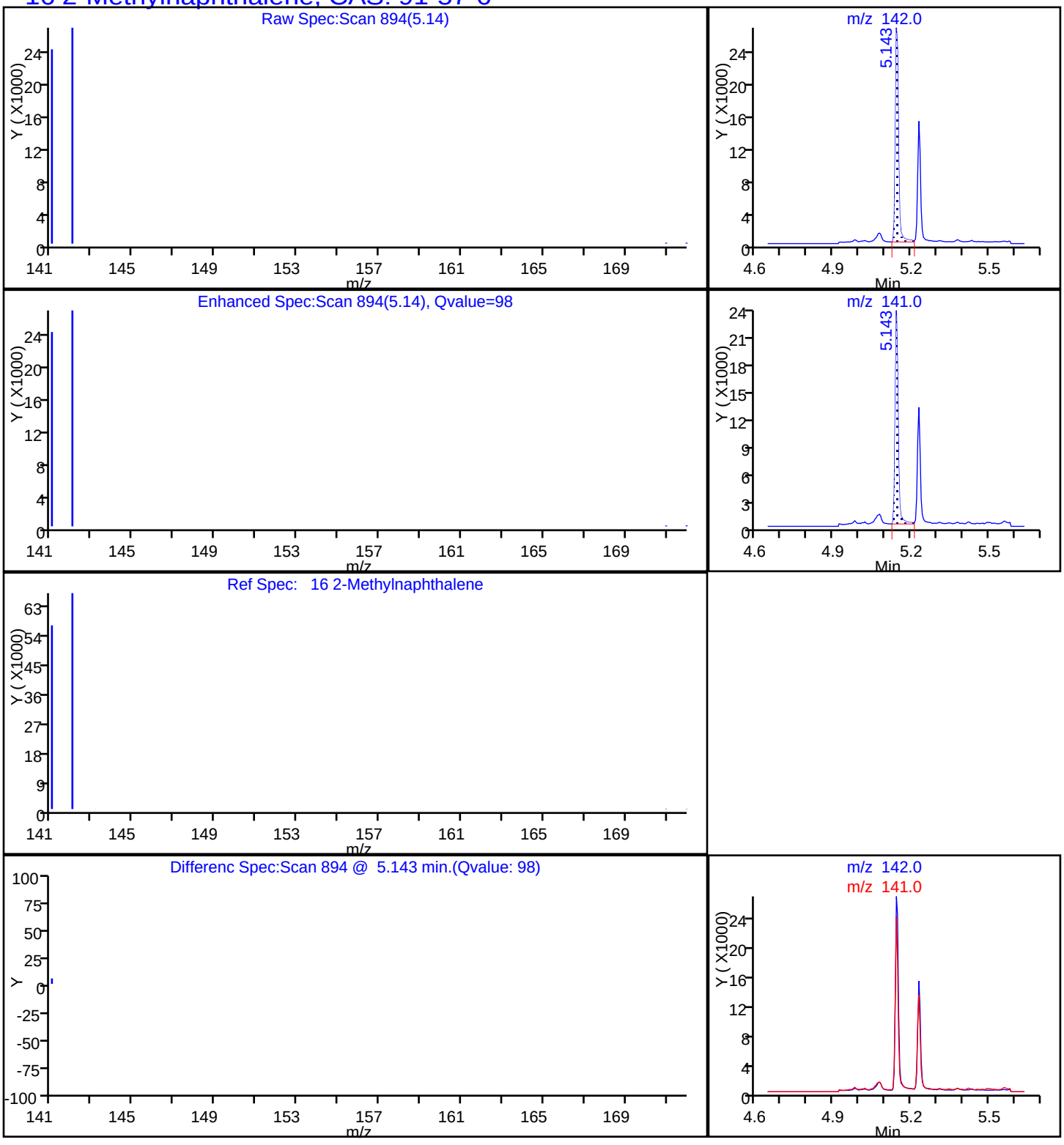


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TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7345.D				
Injection Date:	21-Jun-2017 22:55:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



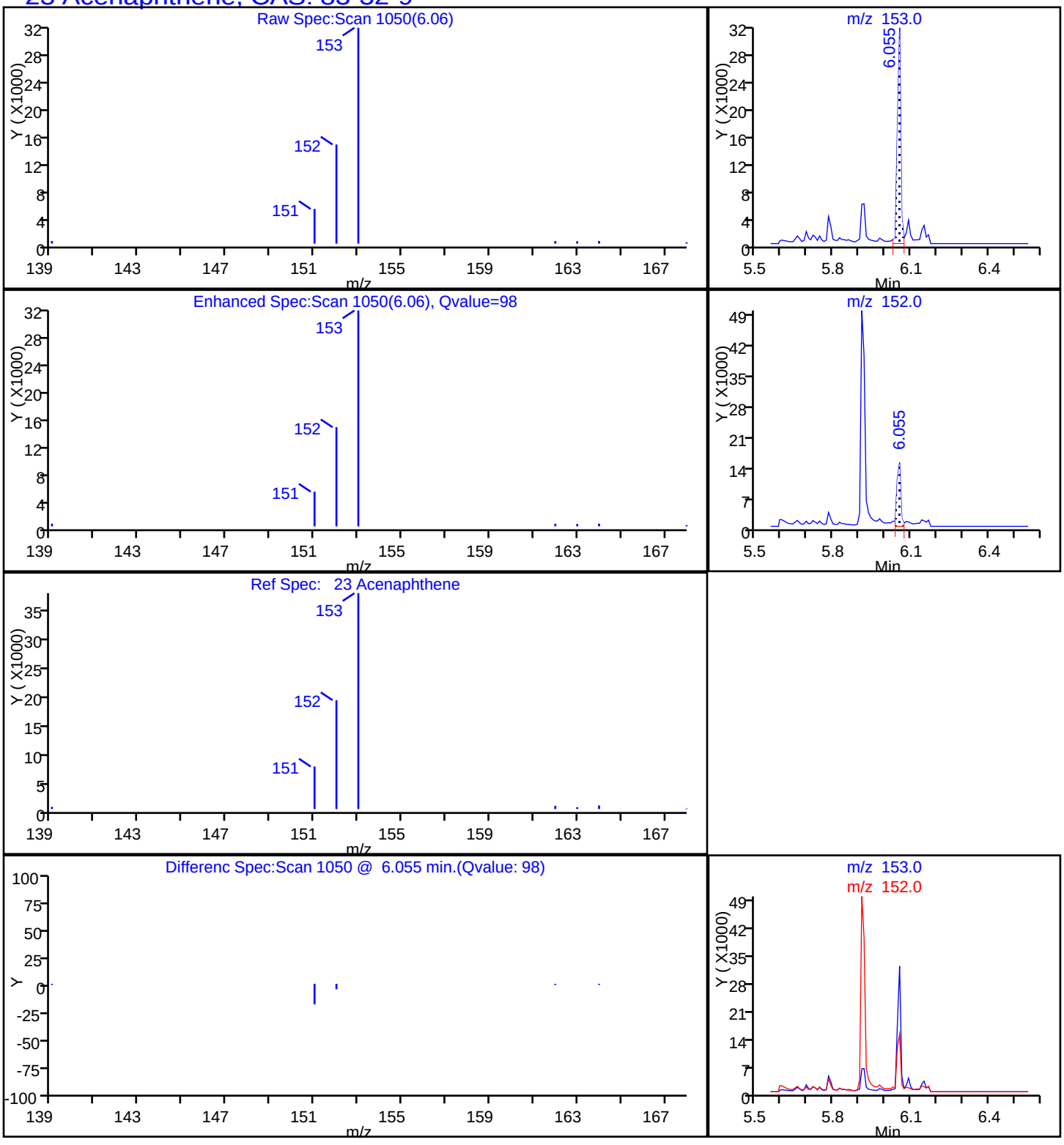
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7345.D

Injection Date:	21-Jun-2017 22:55:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9



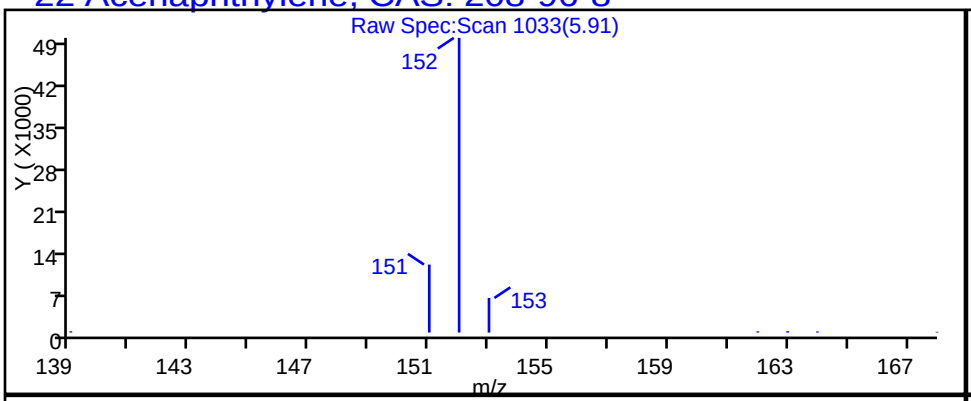
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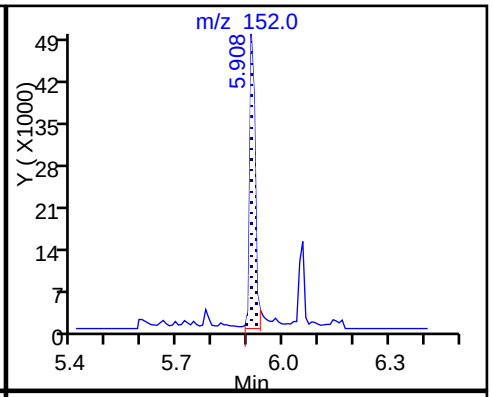
TestAmerica Denver

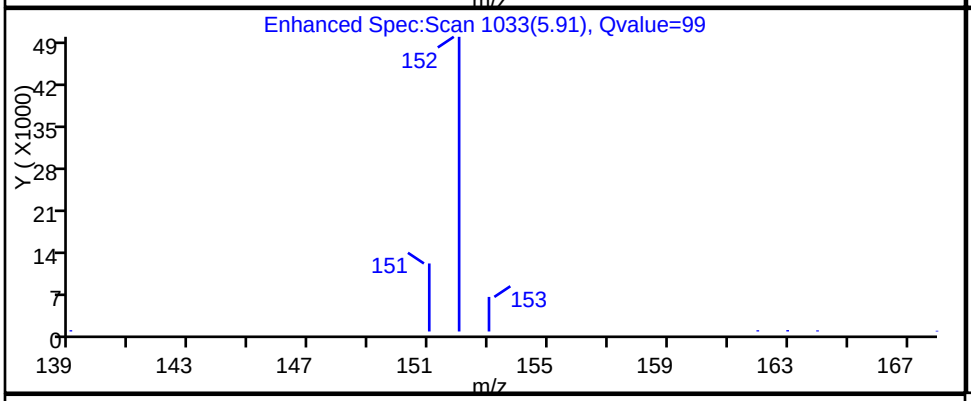
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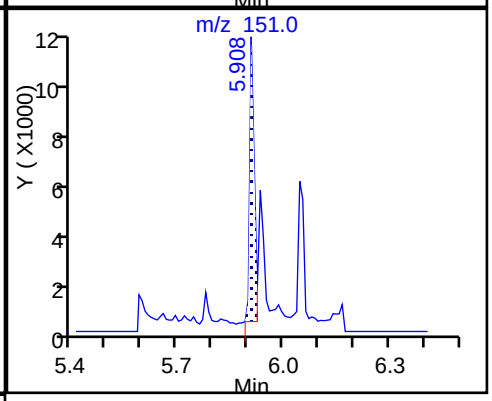
Injection Date:	21-Jun-2017 22:55:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

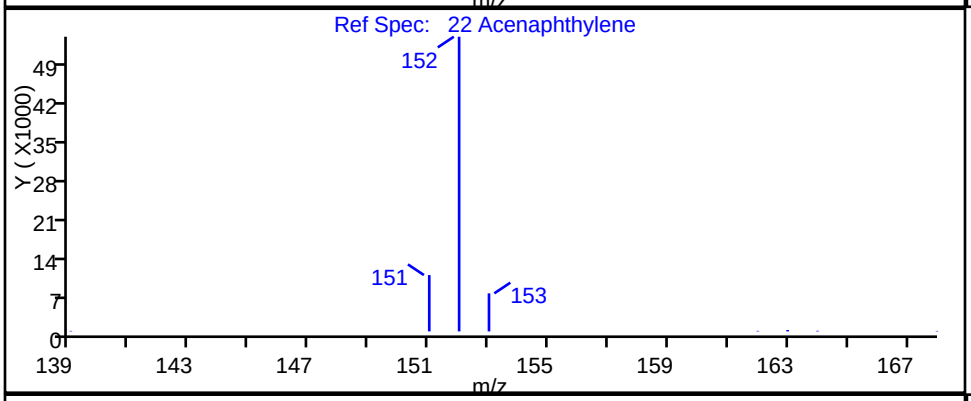
22 Acenaphthylene, CAS: 208-96-8

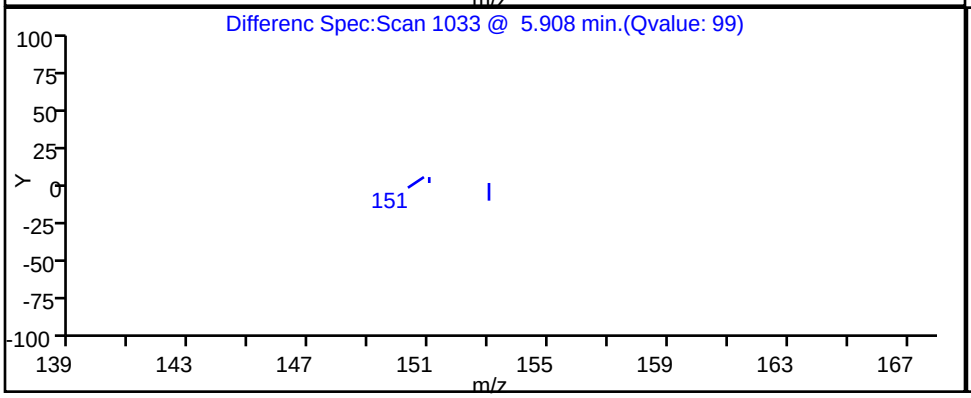


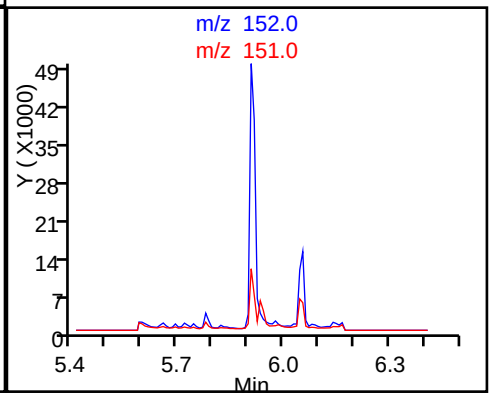












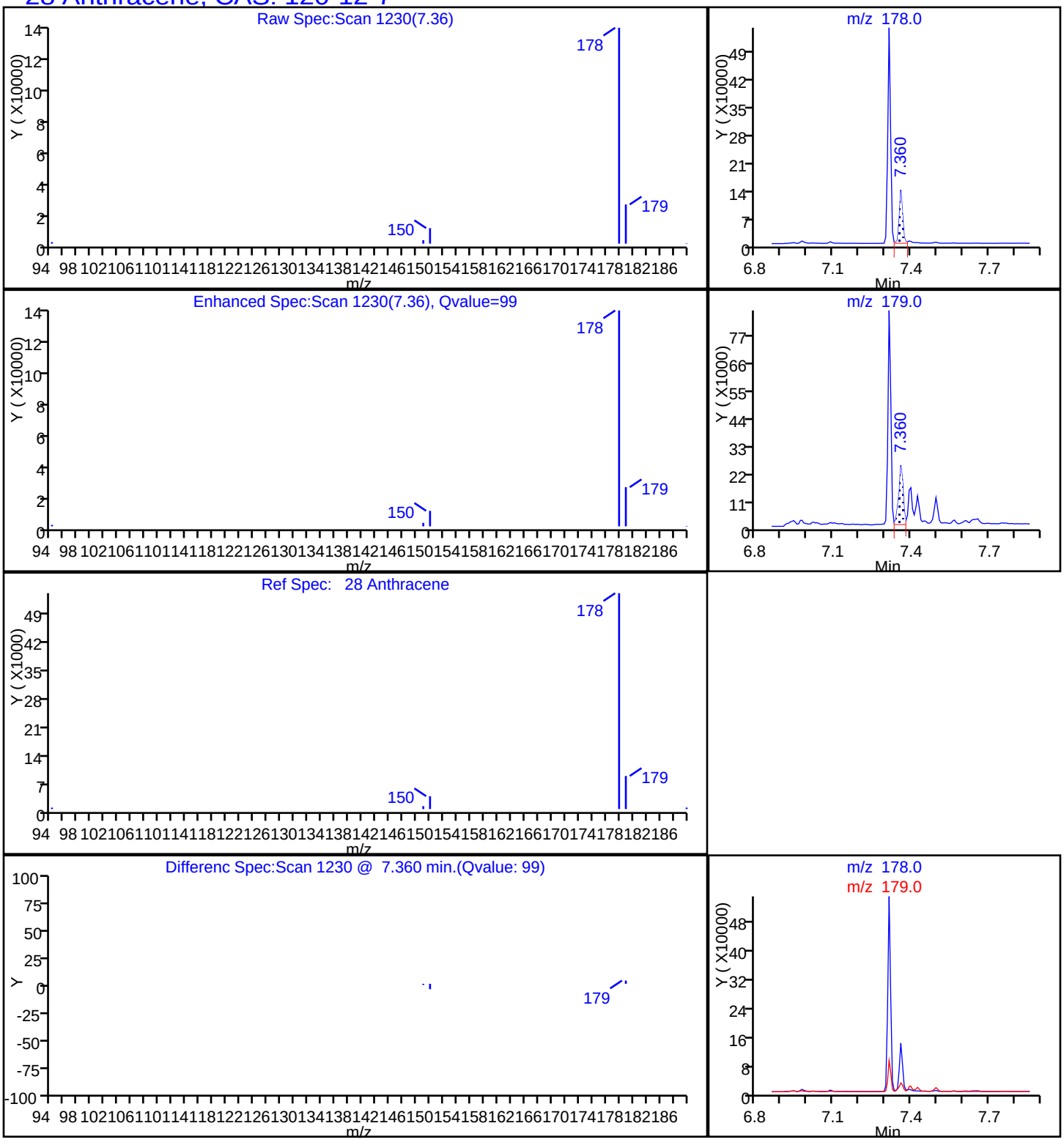
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7345.D

Injection Date:	21-Jun-2017 22:55:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

28 Anthracene, CAS: 120-12-7



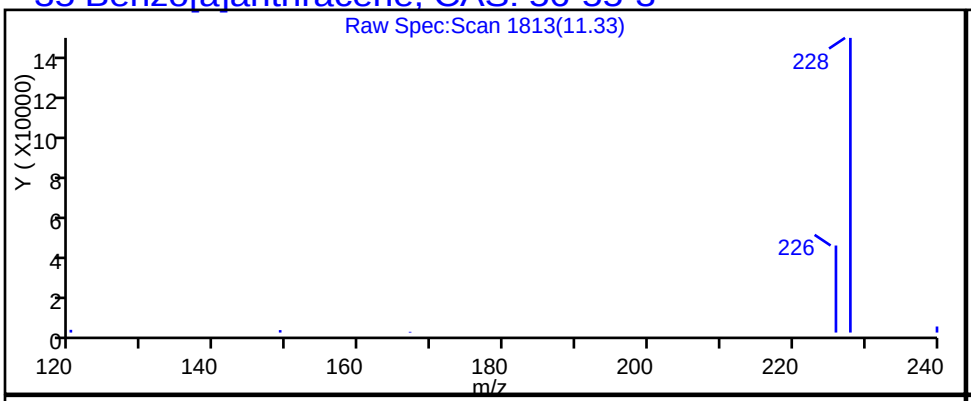
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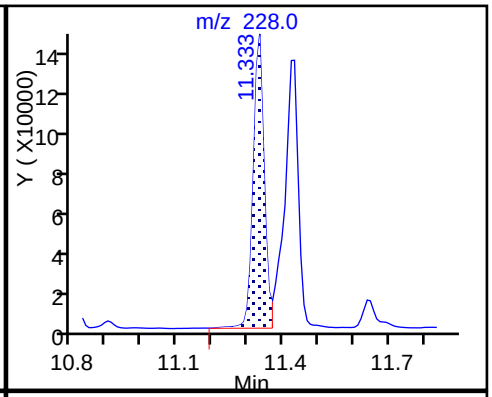
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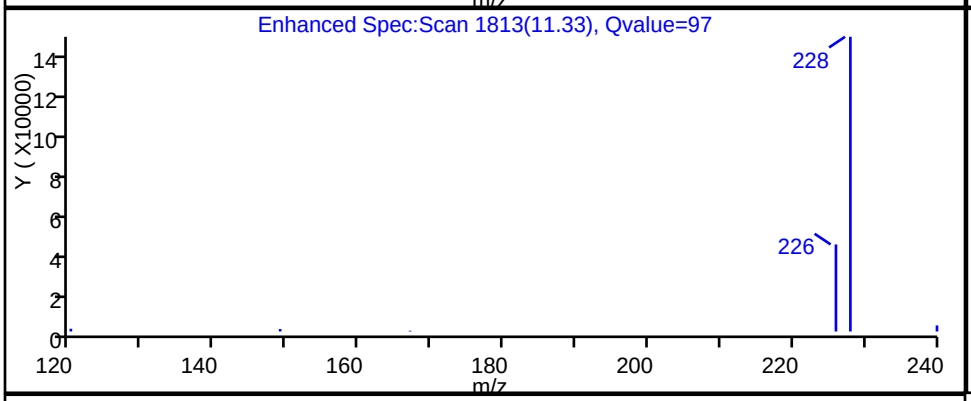
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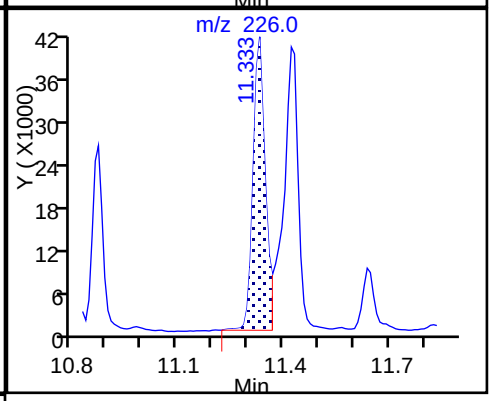
Injection Date:	21-Jun-2017 22:55:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

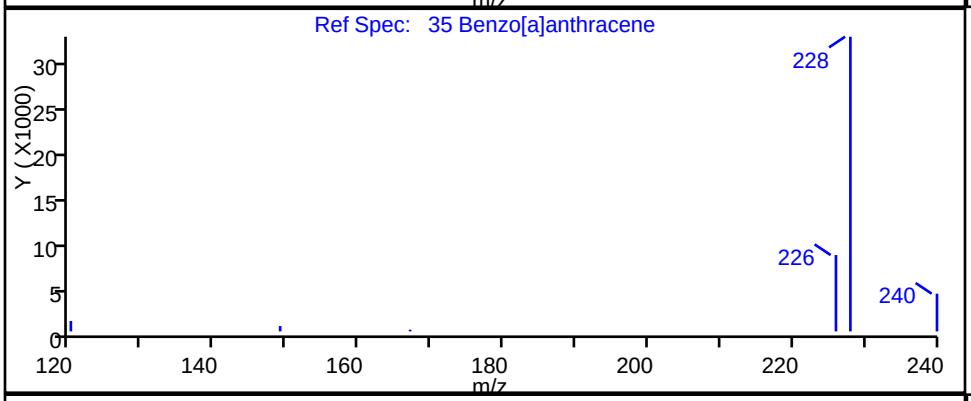
35 Benzo[a]anthracene, CAS: 56-55-3

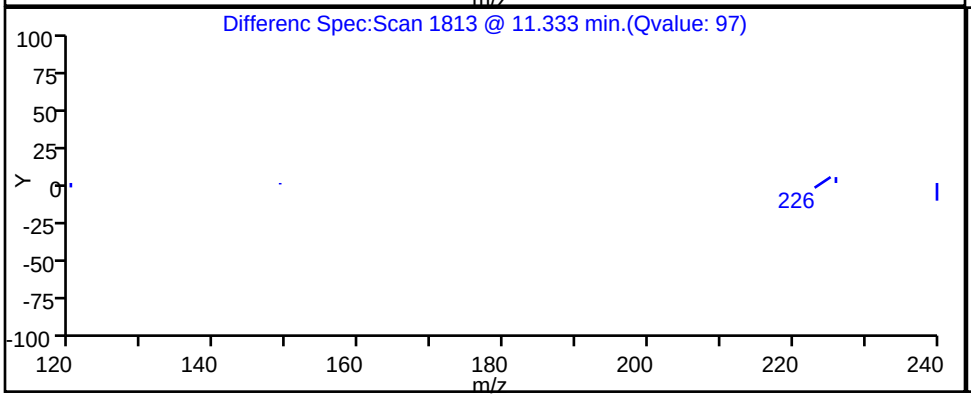


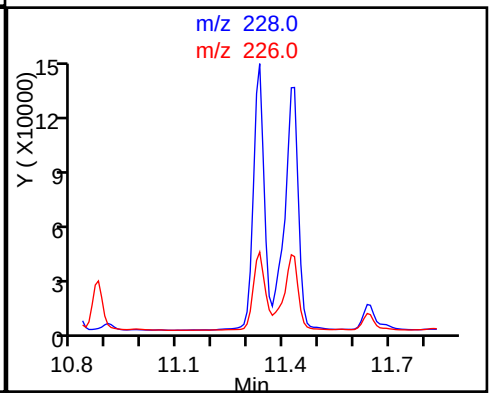












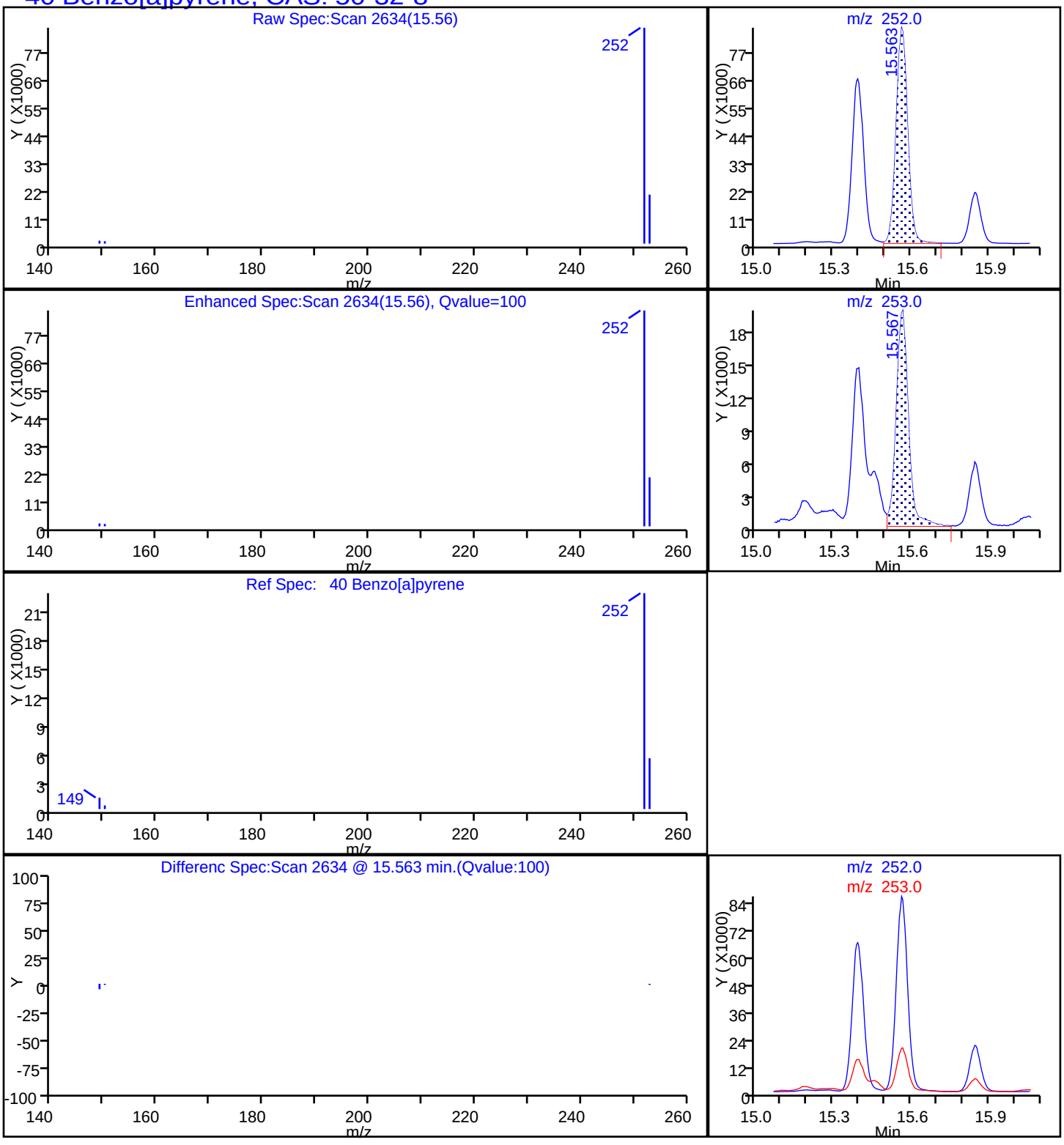
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7345.D

Injection Date:	21-Jun-2017 22:55:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

40 Benzo[a]pyrene, CAS: 50-32-8



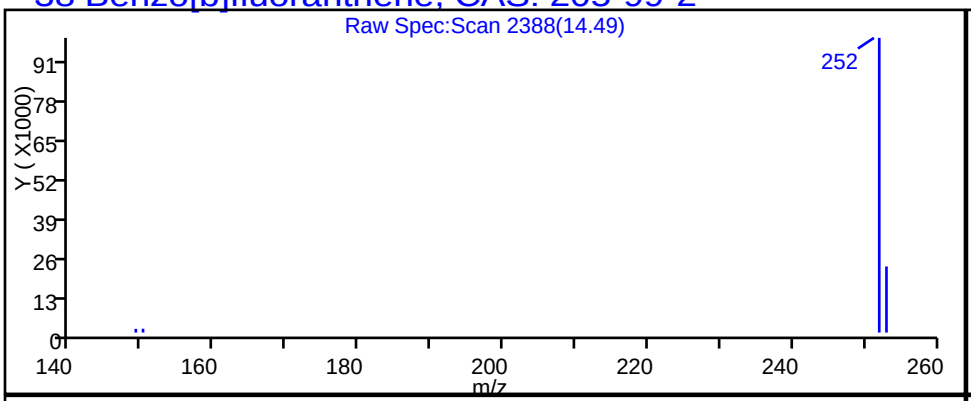
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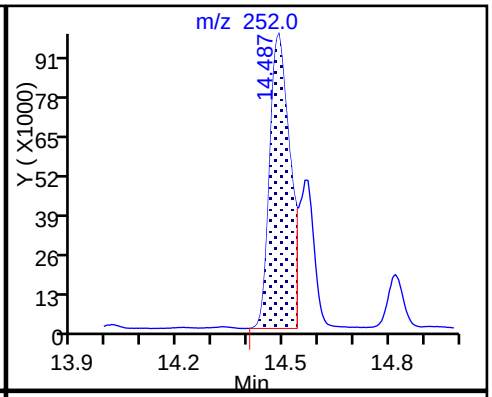
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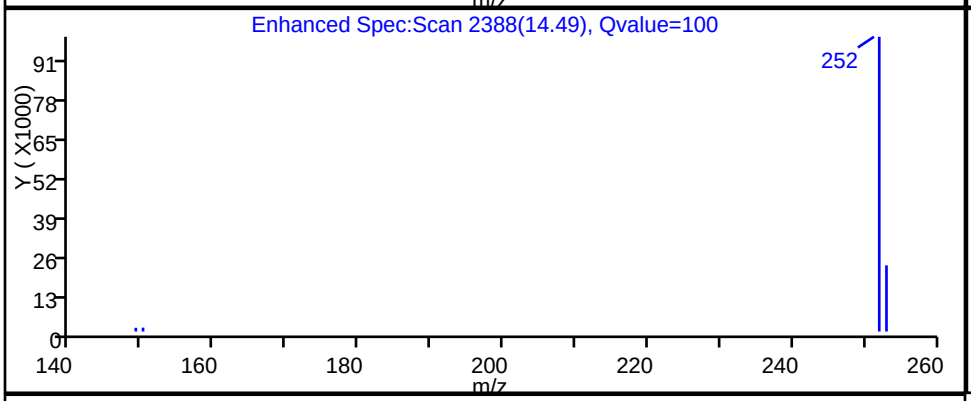
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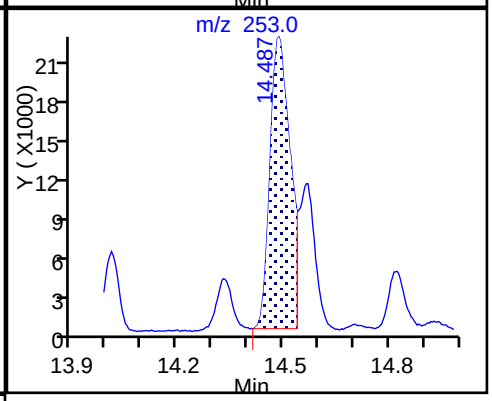
Injection Date:	21-Jun-2017 22:55:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

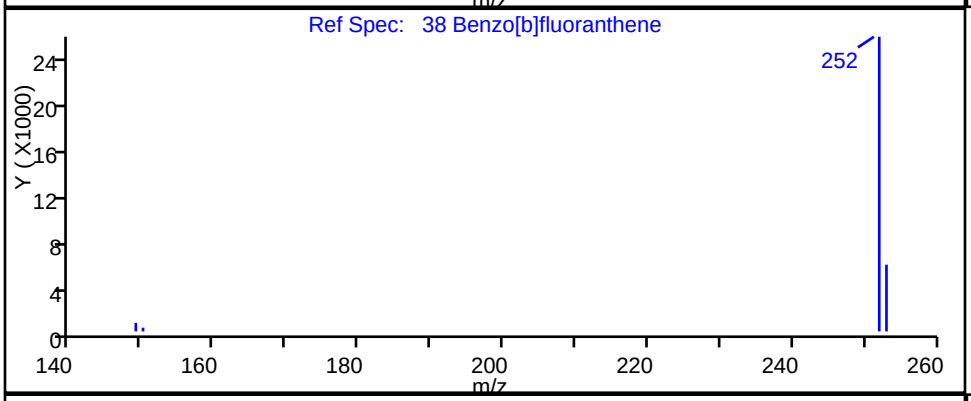
38 Benzo[b]fluoranthene, CAS: 205-99-2

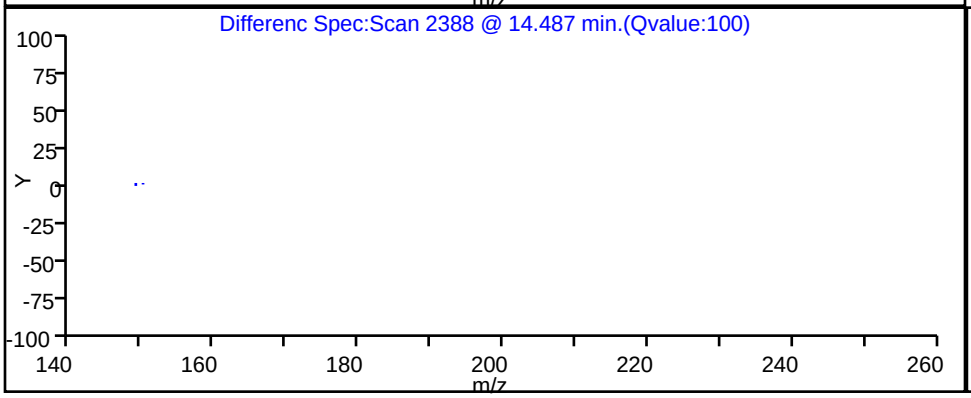


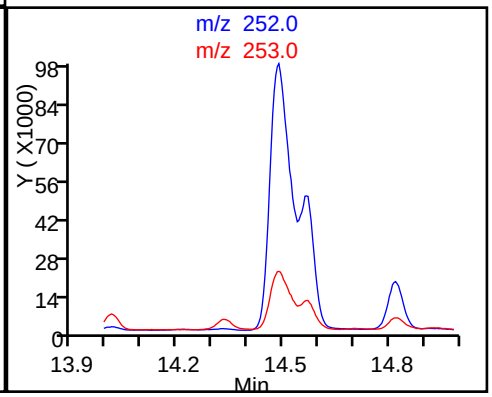










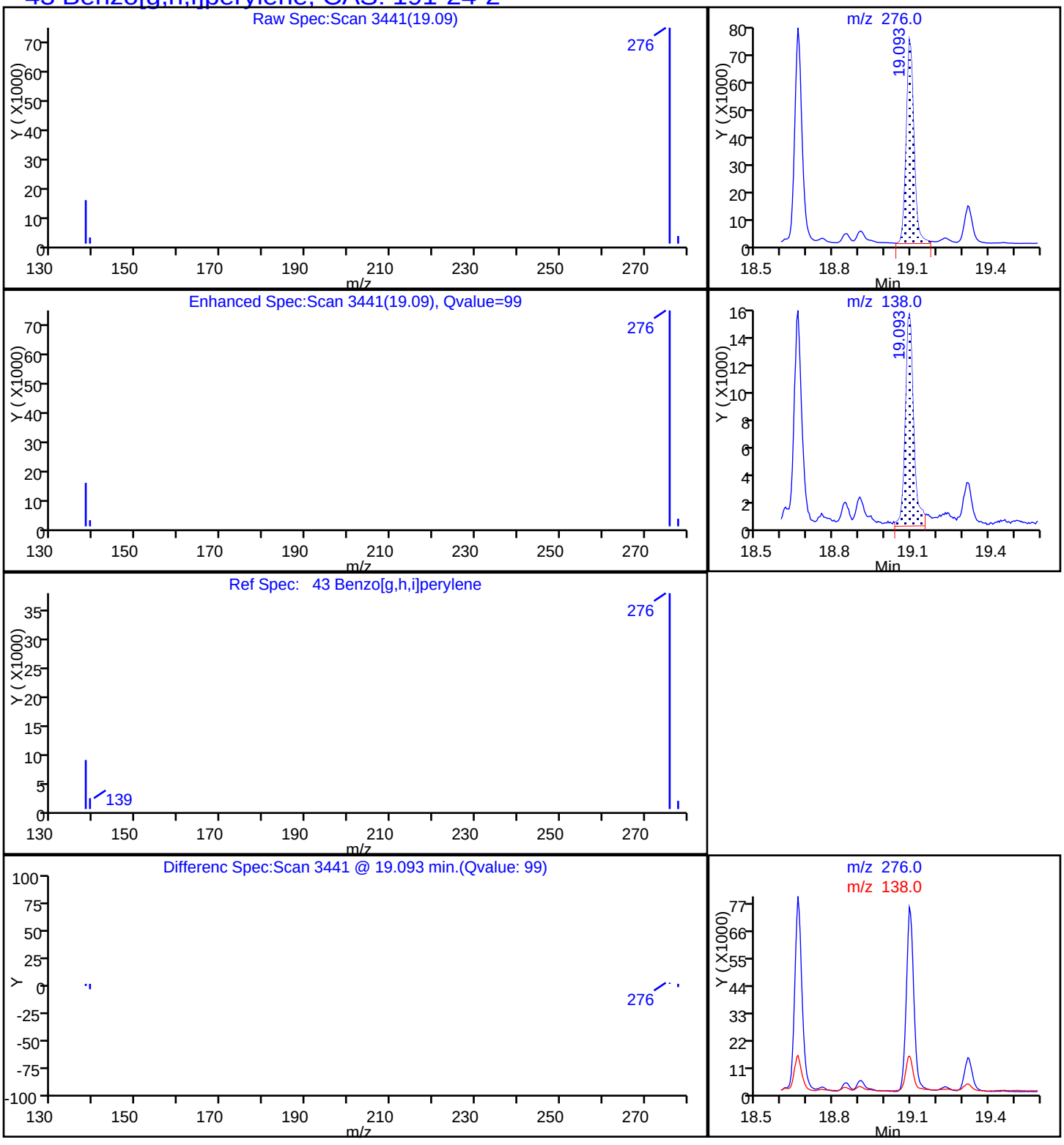


Report Date: 22-Jun-2017 16:05:48 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7345.D				
Injection Date:	21-Jun-2017 22:55:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

43 Benzo[g,h,i]perylene, CAS: 191-24-2

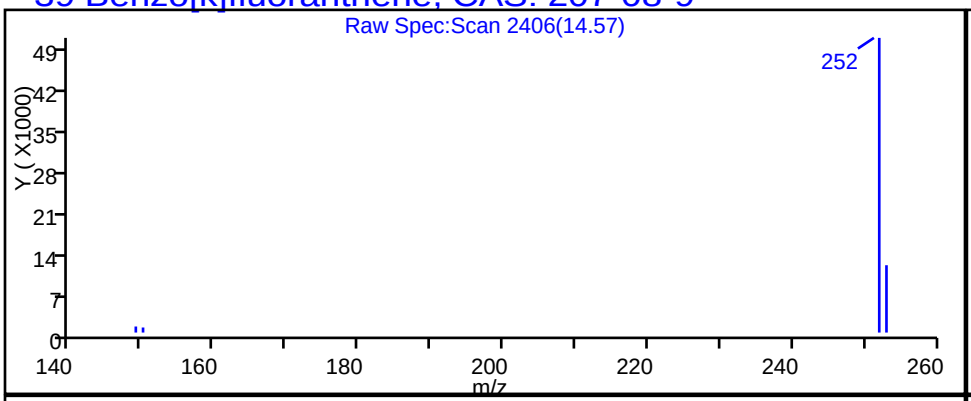


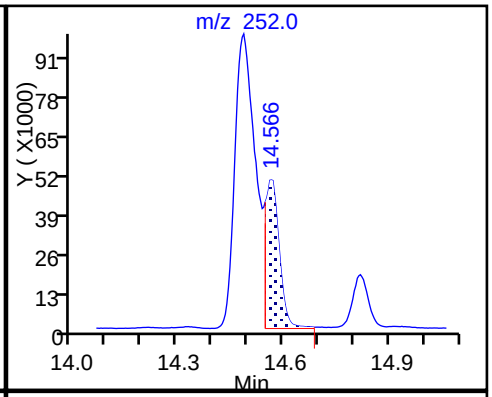
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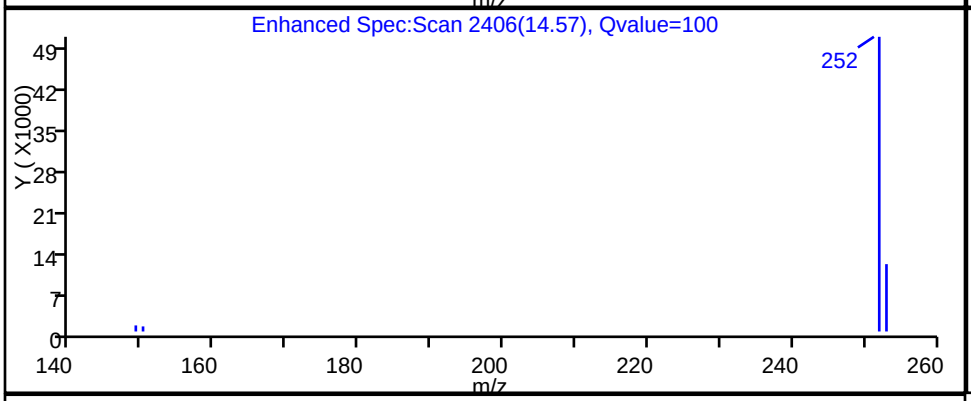
TestAmerica Denver

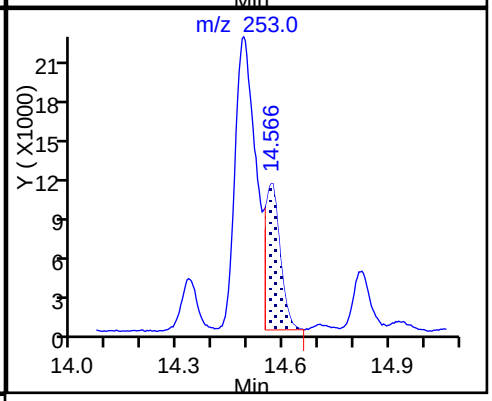
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Injection Date:	21-Jun-2017 22:55:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

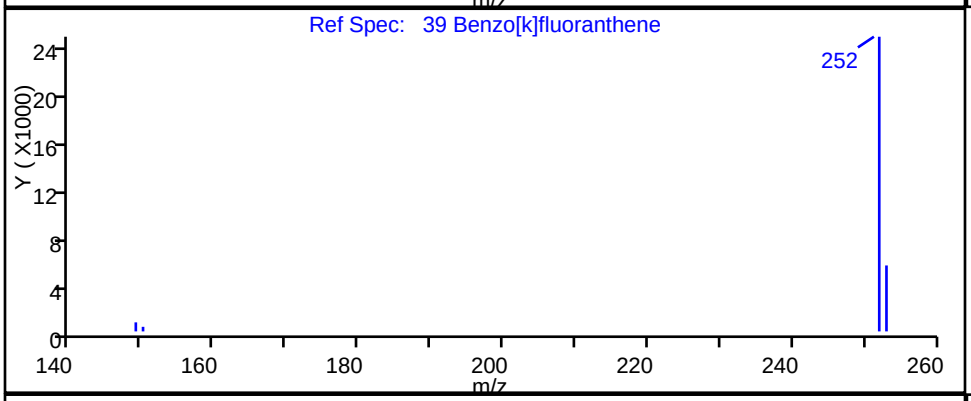
39 Benzo[k]fluoranthene, CAS: 207-08-9

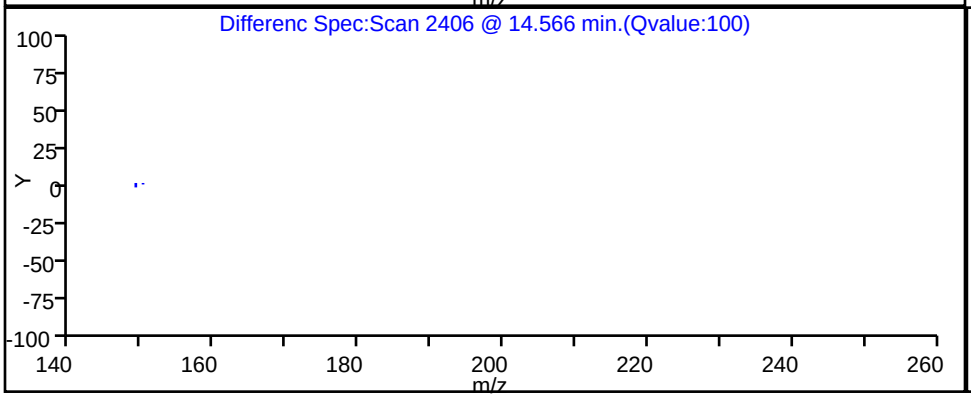


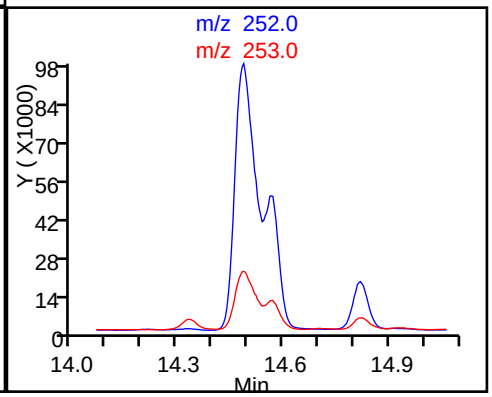












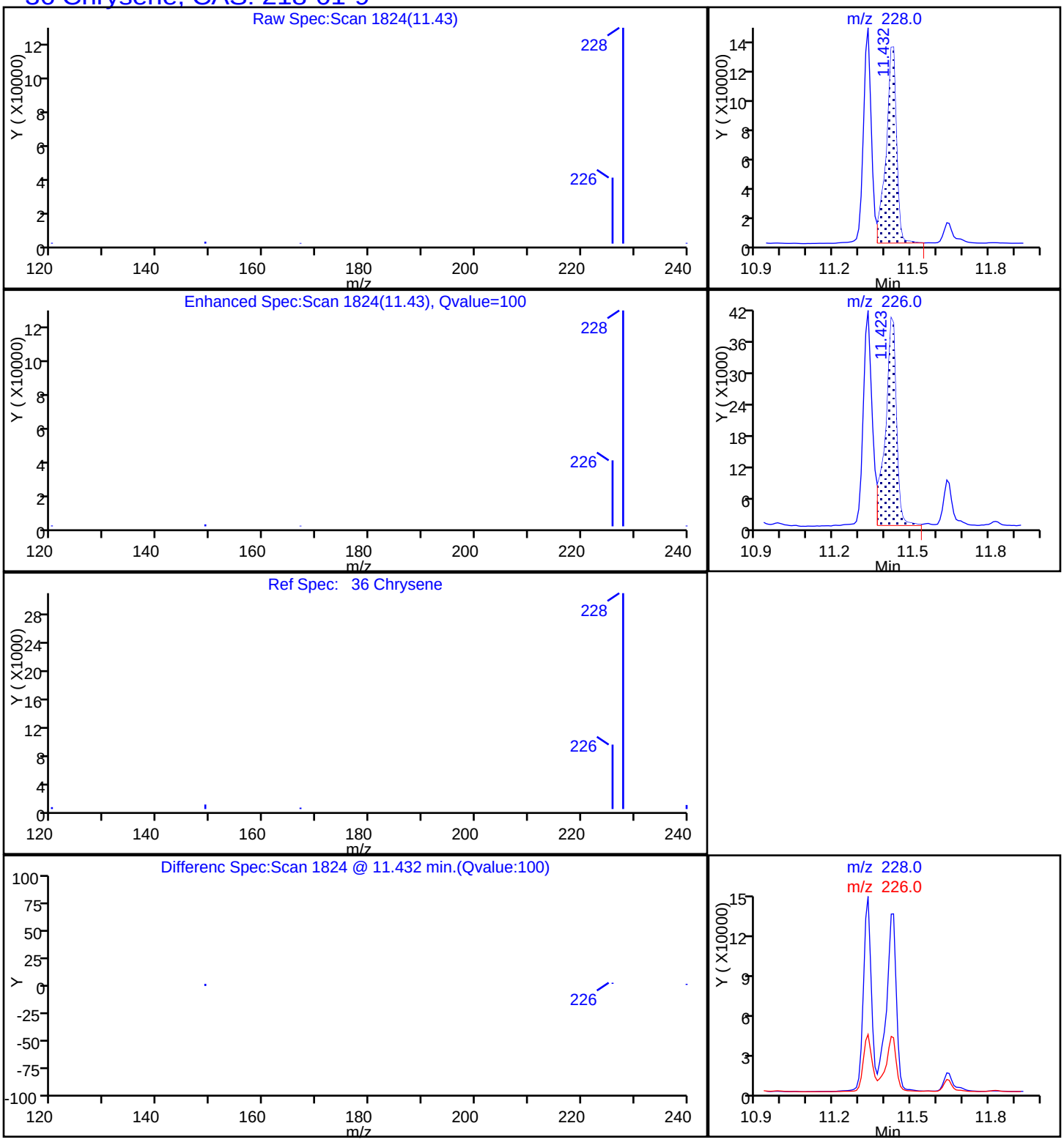
Report Date: 22-Jun-2017 16:05:48 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7345.D

Injection Date:	21-Jun-2017 22:55:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Chrysene, CAS: 218-01-9

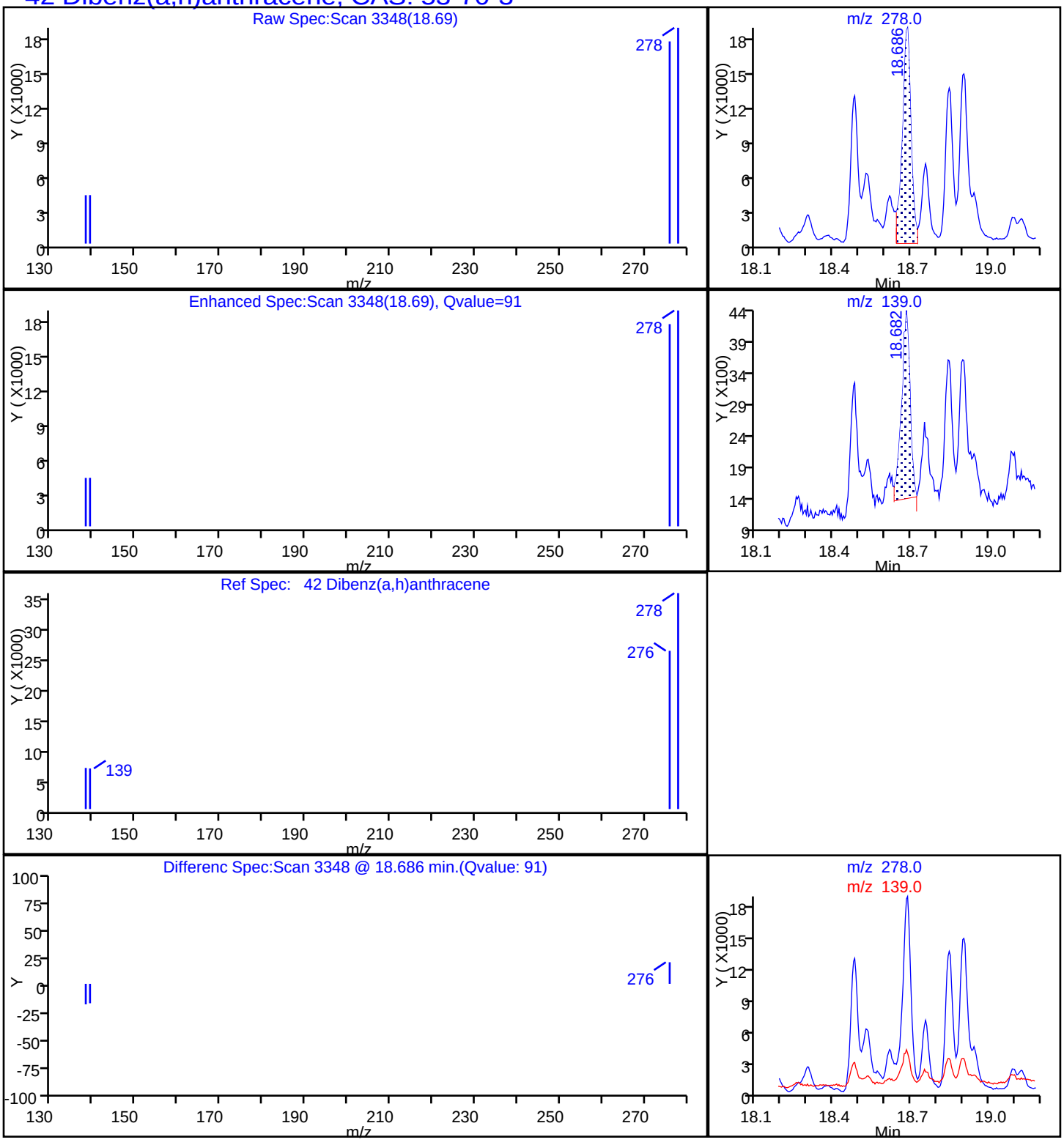


Report Date: 22-Jun-2017 16:05:48 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7345.D				
Injection Date:	21-Jun-2017 22:55:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

42 Dibenz(a,h)anthracene, CAS: 53-70-3

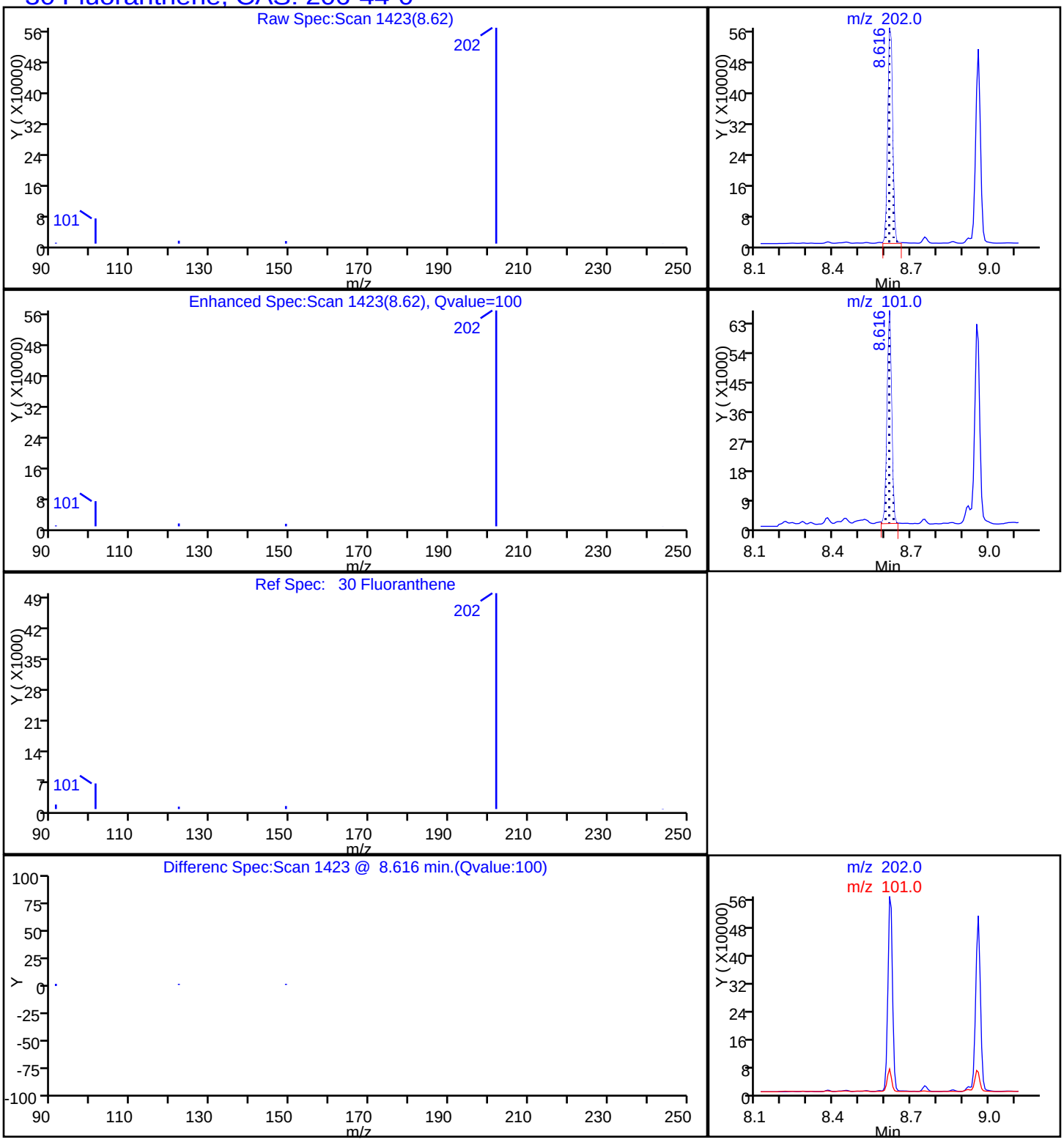


Report Date: 22-Jun-2017 16:05:48 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7345.D				
Injection Date:	21-Jun-2017 22:55:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

30 Fluoranthene, CAS: 206-44-0



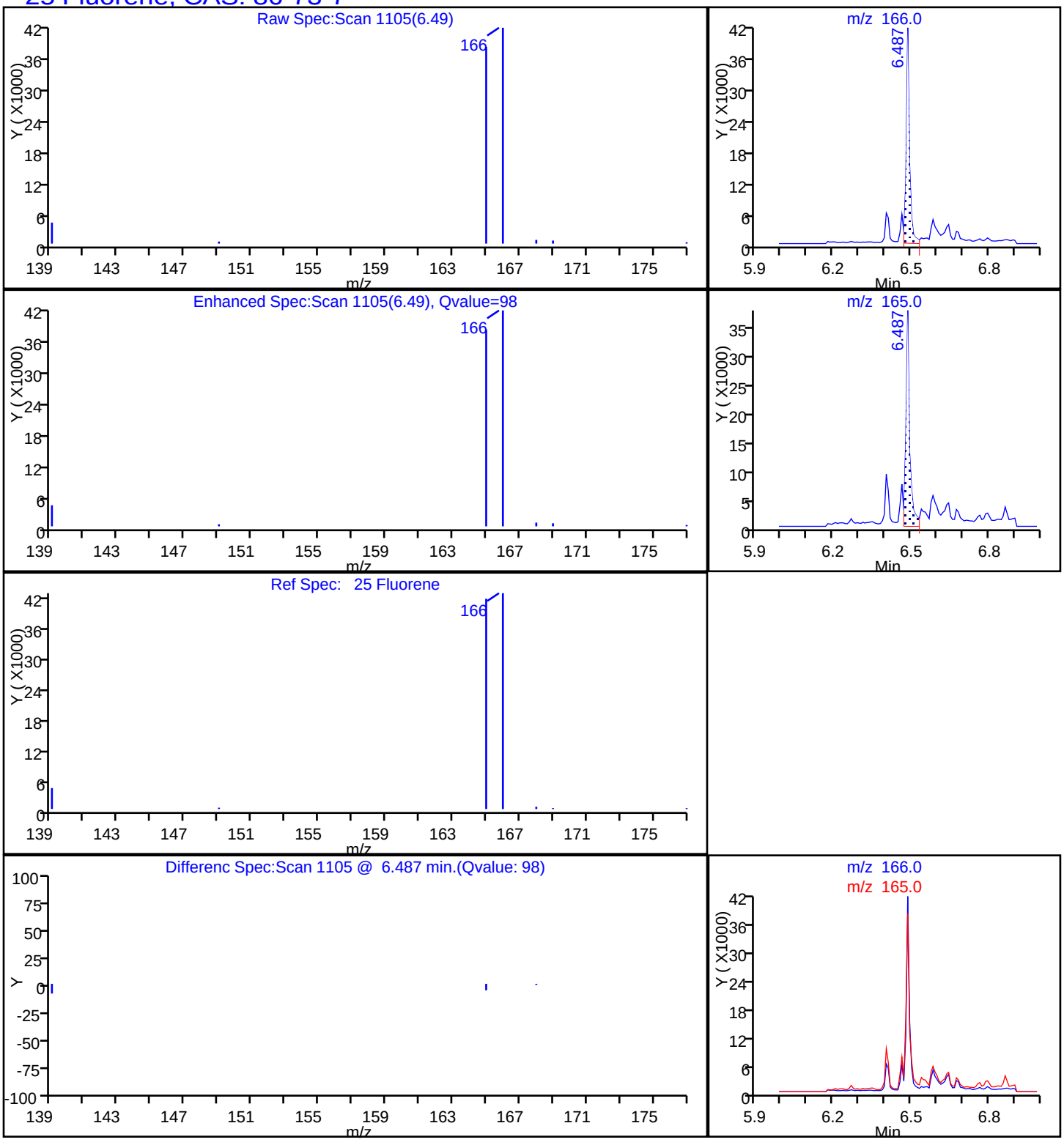
Report Date: 22-Jun-2017 16:05:48 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7345.D

Injection Date:	21-Jun-2017 22:55:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Fluorene, CAS: 86-73-7



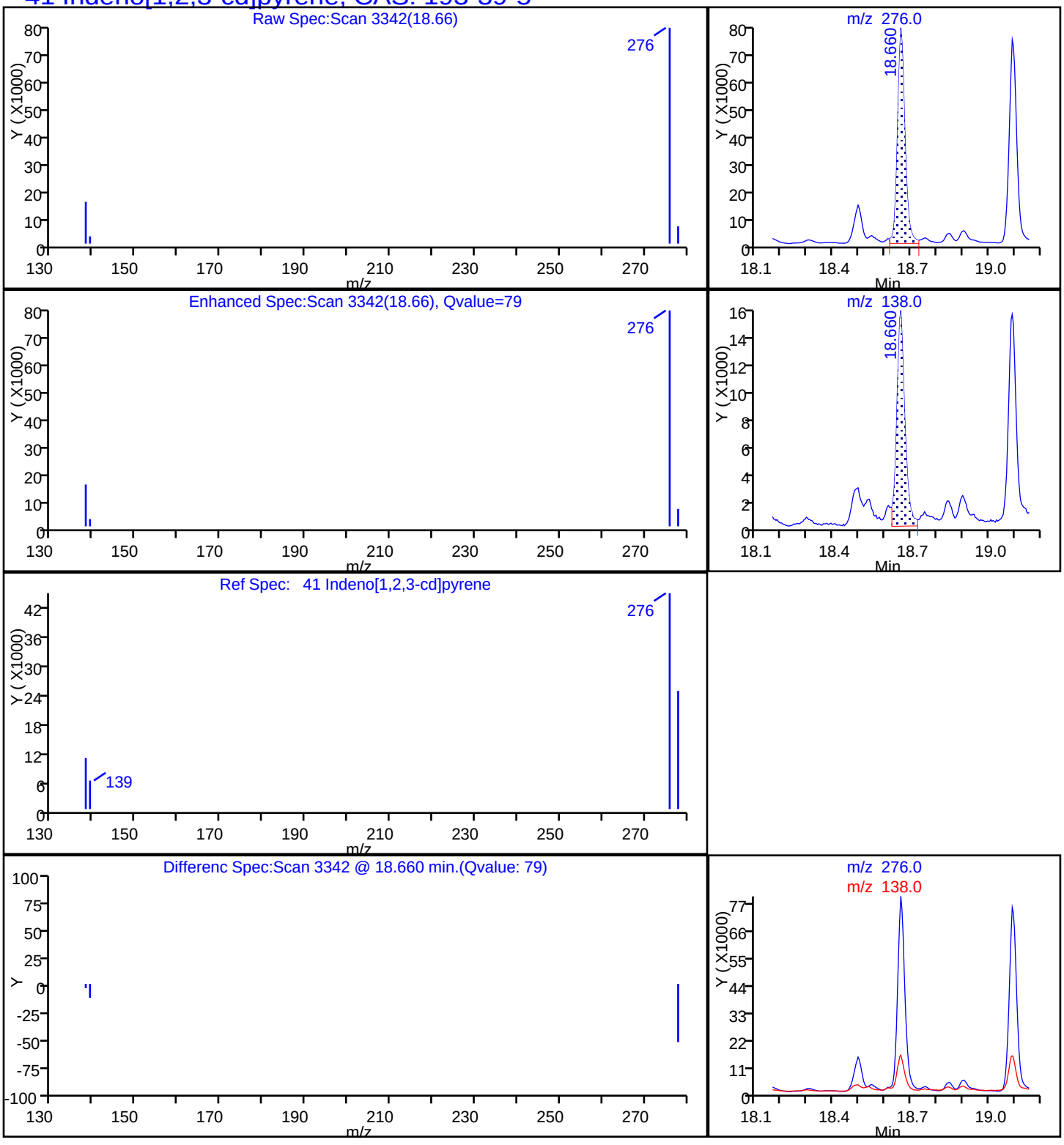
Report Date: 22-Jun-2017 16:05:48 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7345.D

Injection Date:	21-Jun-2017 22:55:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

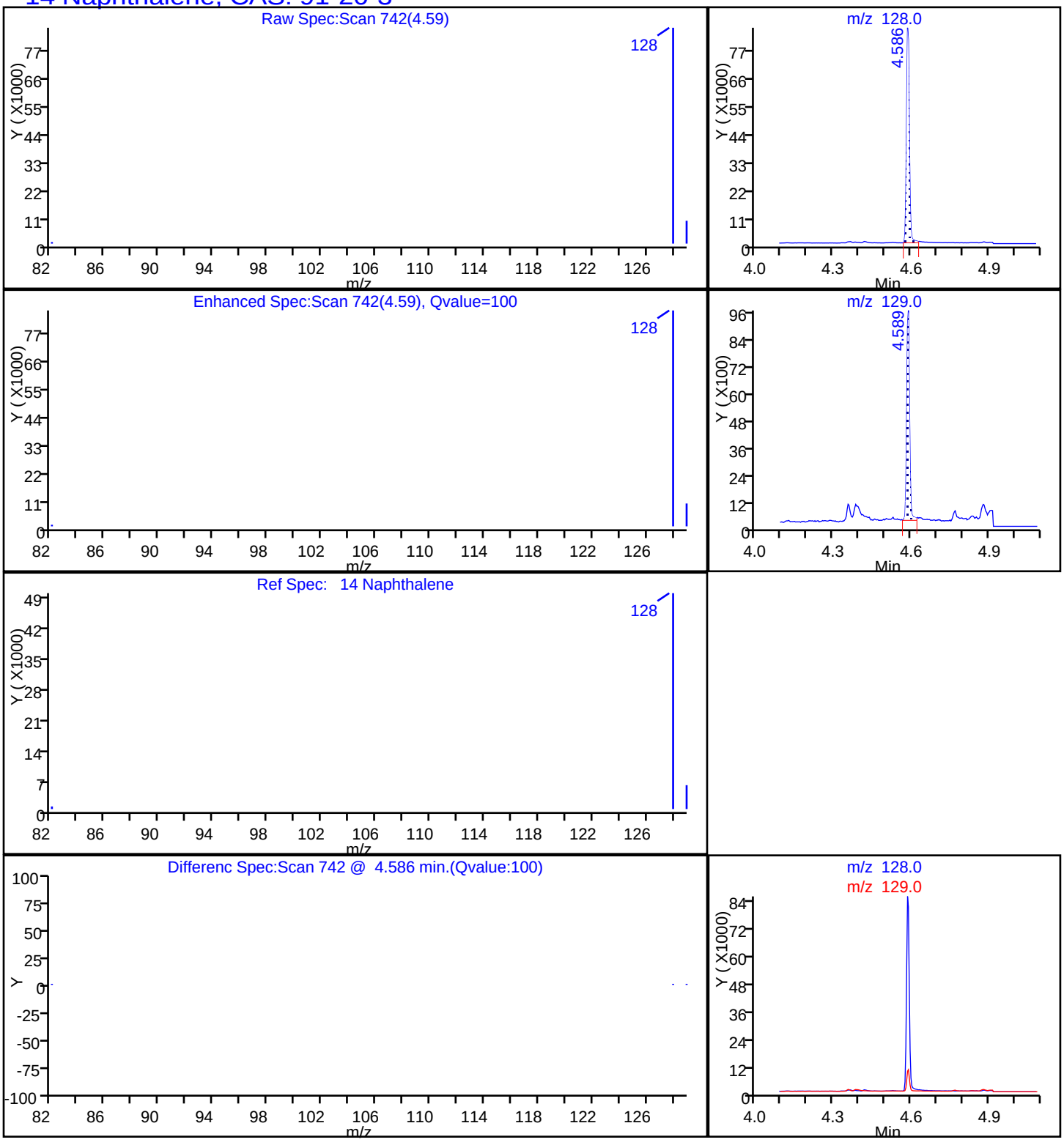


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TestAmerica Denver

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Injection Date:	21-Jun-2017 22:55:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3

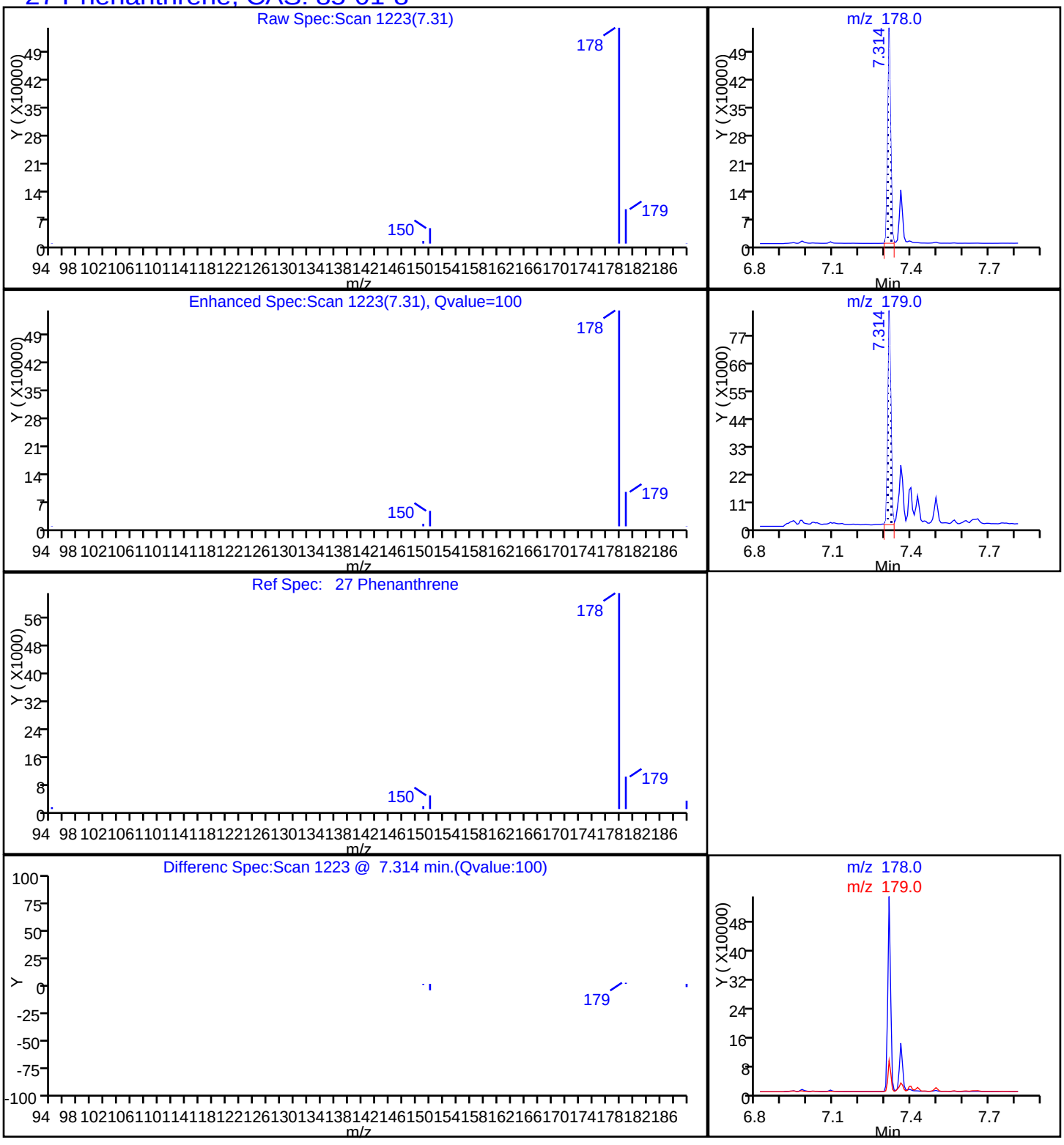


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TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7345.D				
Injection Date:	21-Jun-2017 22:55:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

27 Phenanthrene, CAS: 85-01-8

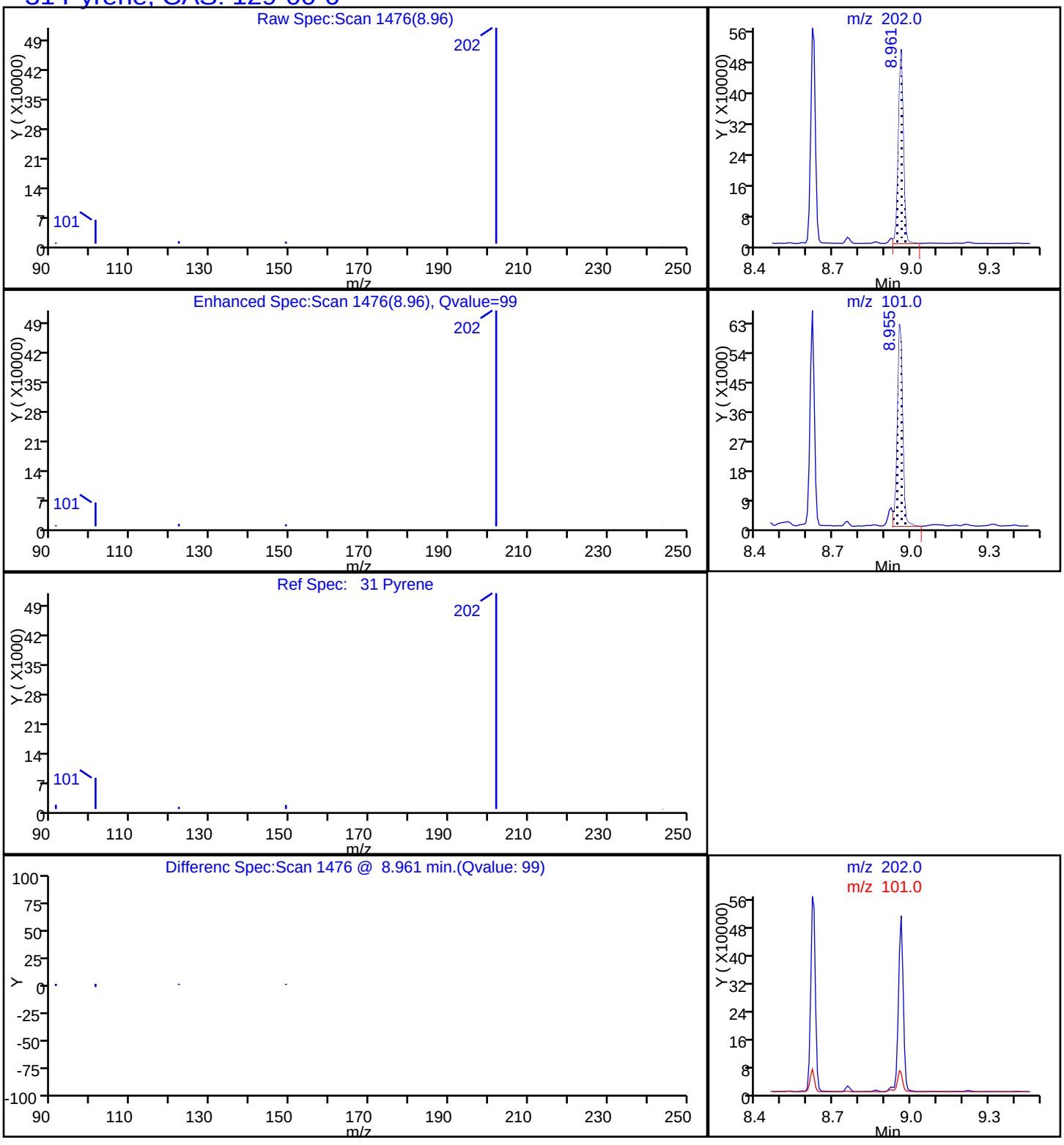


Report Date: 22-Jun-2017 16:05:48 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7345.D				
Injection Date:	21-Jun-2017 22:55:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Pyrene, CAS: 129-00-0



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS04 DL | Lab Sample ID: 280-97803-8 DL

Matrix: Solid | Lab File ID: F7371.D

Analysis Method: 8270D SIM | Date Collected: 05/31/2017 14:00

Extract. Method: 3546 | Date Extracted: 06/14/2017 09:42

Sample wt/vol: 32.5(g) | Date Analyzed: 06/22/2017 21:23

Con. Extract Vol.: 1(mL) | Dilution Factor: 2

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 10.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378412 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	*1-Methylnaphthalene*	*7.4*	*J D*	*10*	1.0	*0.53*
91-57-6	*2-Methylnaphthalene*	*13*	*D*	*10*	1.4	*0.63*
83-32-9	*Acenaphthene*	*18*	*D*	*10*	0.55	*0.33*
208-96-8	*Acenaphthylene*	*24*	*D*	*10*	1.4	*0.35*
120-12-7	*Anthracene*	*44*	*D*	*10*	5.1	*1.5*
56-55-3	*Benzo[a]anthracene*	*110*	*D*	*10*	5.1	*1.8*
50-32-8	*Benzo[a]pyrene*	*110*	*D*	*10*	5.1	*1.5*
205-99-2	*Benzo[b]fluoranthene*	*160*	*D*	*10*	5.1	*2.5*
191-24-2	*Benzo[g,h,i]perylene*	*69*	*D*	*10*	5.1	*2.3*
207-08-9	*Benzo[k]fluoranthene*	*57*	*D*	*10*	5.1	*2.1*
218-01-9	*Chrysene*	*140*	*D*	*10*	5.1	*2.1*
53-70-3	*Dibenz(a,h)anthracene*	*21*	*D*	*10*	5.1	*2.7*
206-44-0	Fluoranthene	230	D	10	5.1	2.1
86-73-7	*Fluorene*	*18*	*D*	*10*	1.4	*0.96*
193-39-5	*Indeno[1,2,3-cd]pyrene*	*58*	*D*	*10*	5.1	*2.3*
91-20-3	*Naphthalene*	*26*	*D*	*10*	1.4	*0.67*
85-01-8	*Phenanthrene*	*150*	*D*	*10*	5.1	*2.3*
129-00-0	Pyrene	210	D	10	5.1	2.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	68	D	46-115
4165-60-0	Nitrobenzene-d5 (Surr)	70	D	44-125
1718-51-0	Terphenyl-d14 (Surr)	87	D	58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7371.D
Lims ID: 280-97803-C-8-A
Client ID: SS025-SS04
Sample Type: Client
Inject. Date: 22-Jun-2017 21:23:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 2.0000
Sample Info: 280-97803-c-8-a
Misc. Info.: 2X
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 23-Jun-2017 21:52:47 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: wickhamm Date: 23-Jun-2017 20:49:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	100	19503	600.0	
* 2 Phenanthrene-d10	188	7.295	7.301	-0.006	100	36161	600.0	
* 3 Chrysene-d12	240	11.353	11.377	-0.024	75	30741	600.0	
$ 4 Nitrobenzene-d5	82	4.005	4.001	0.004	100	5378	176.0	
$ 5 2-Fluorobiphenyl	172	5.431	5.435	-0.004	100	8637	170.8	
$ 6 Terphenyl-d14	244	9.117	9.130	-0.013	96	8017	218.4	
14 Naphthalene	128	4.586	4.586	0.000	100	24307	384.5	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	99	7779	191.4	
17 1-Methylnaphthalene	142	5.235	5.230	0.005	96	4431	108.8	
22 Acenaphthylene	152	5.917	5.917	0.000	100	23633	351.3	
23 Acenaphthene	153	6.055	6.055	0.000	98	11012	267.8	
25 Fluorene	166	6.487	6.494	-0.007	99	13183	261.2	
27 Phenanthrene	178	7.314	7.321	-0.007	100	166559	2171.8	
28 Anthracene	178	7.360	7.366	-0.006	100	49282	636.4	
30 Fluoranthene	202	8.616	8.629	-0.013	100	296833	3369.8	
31 Pyrene	202	8.961	8.967	-0.006	99	278766	3051.6	
35 Benzo[a]anthracene	228	11.326	11.341	-0.015	97	126886	1552.0	
36 Chrysene	228	11.425	11.440	-0.015	100	156157	2064.7	
38 Benzo[b]fluoranthene	252	14.485	14.500	-0.015	100	172930	2329.9	
39 Benzo[k]fluoranthene	252	14.560	14.587	-0.027	100	61892	829.1	
40 Benzo[a]pyrene	252	15.557	15.589	-0.032	100	117309	1601.5	
41 Indeno[1,2,3-cd]pyrene	276	18.663	18.673	-0.010	81	70869	852.9	
42 Dibenz(a,h)anthracene	278	18.684	18.704	-0.020	82	19484	300.5	
43 Benzo[g,h,i]perylene	276	19.096	19.110	-0.014	100	70734	1003.5	

Reagents:

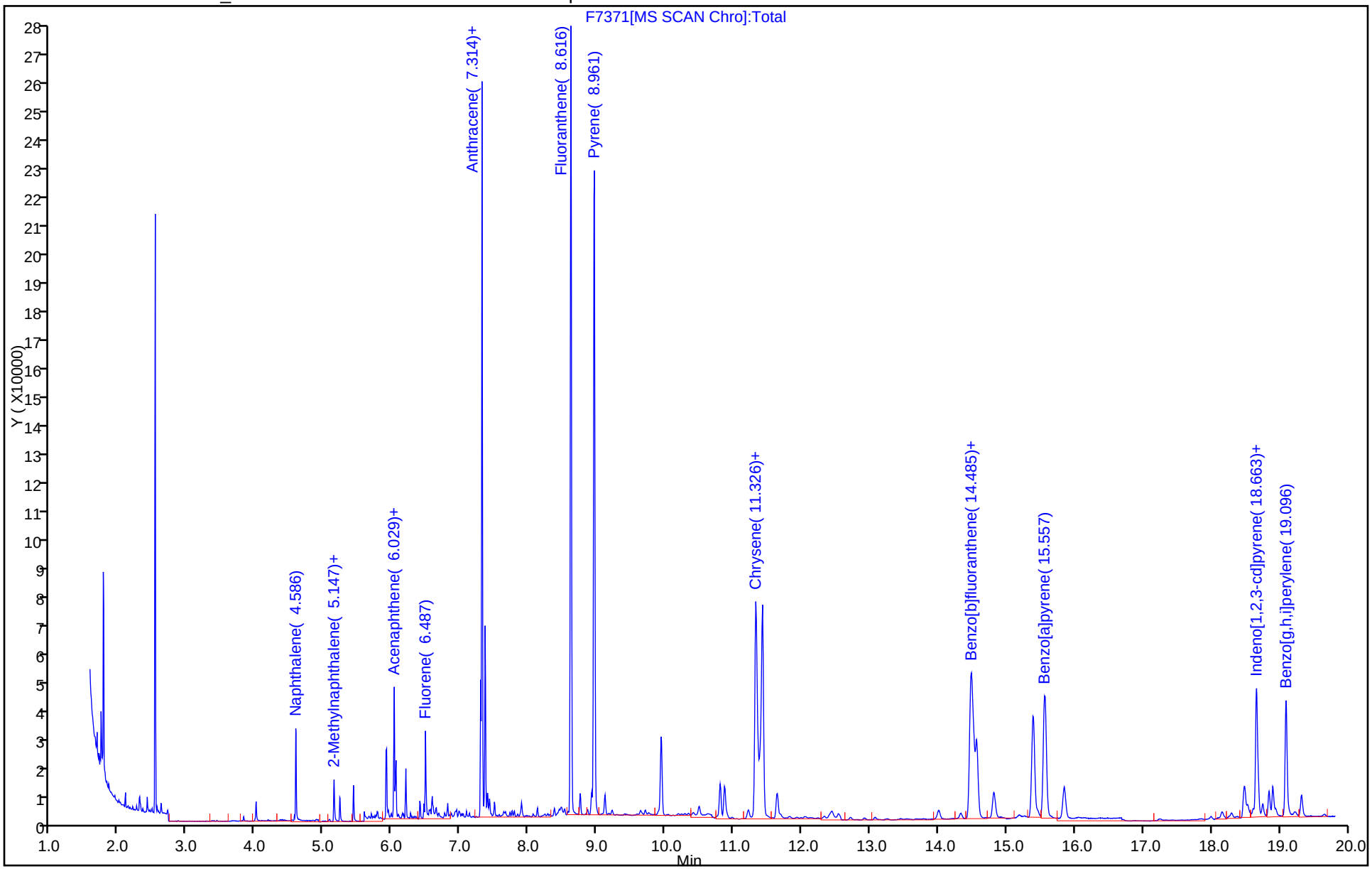
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 23-Jun-2017 21:53:09 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7371.D

Injection Date:	22-Jun-2017 21:23:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8	Worklist Smp#:	11
Client ID:	SS025-SS04				
Injection Vol:	1.0 ul	Dil. Factor:	2.0000	ALS Bottle#:	11
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7371.D
Lims ID: 280-97803-C-8-A
Client ID: SS025-SS04
Sample Type: Client
Inject. Date: 22-Jun-2017 21:23:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 2.0000
Sample Info: 280-97803-c-8-a
Misc. Info.: 2X
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 23-Jun-2017 21:52:47 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: wickhamm Date: 23-Jun-2017 20:49:51

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	176.0	70.41
$ 5 2-Fluorobiphenyl	500.0	170.8	68.32
$ 6 Terphenyl-d14	500.0	218.4	87.34

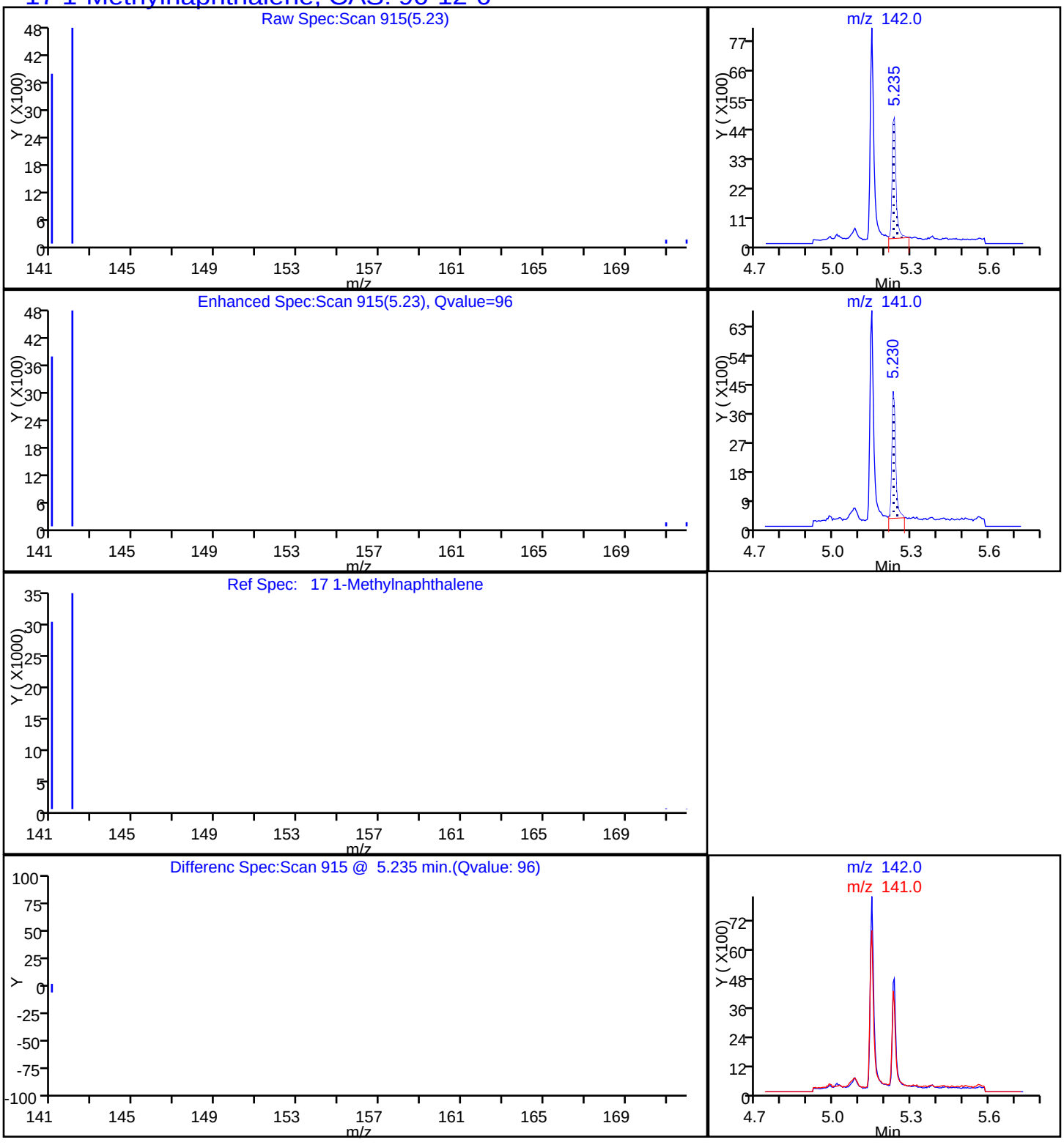
Report Date: 23-Jun-2017 21:53:09 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7371.D

Injection Date:	22-Jun-2017 21:23:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0



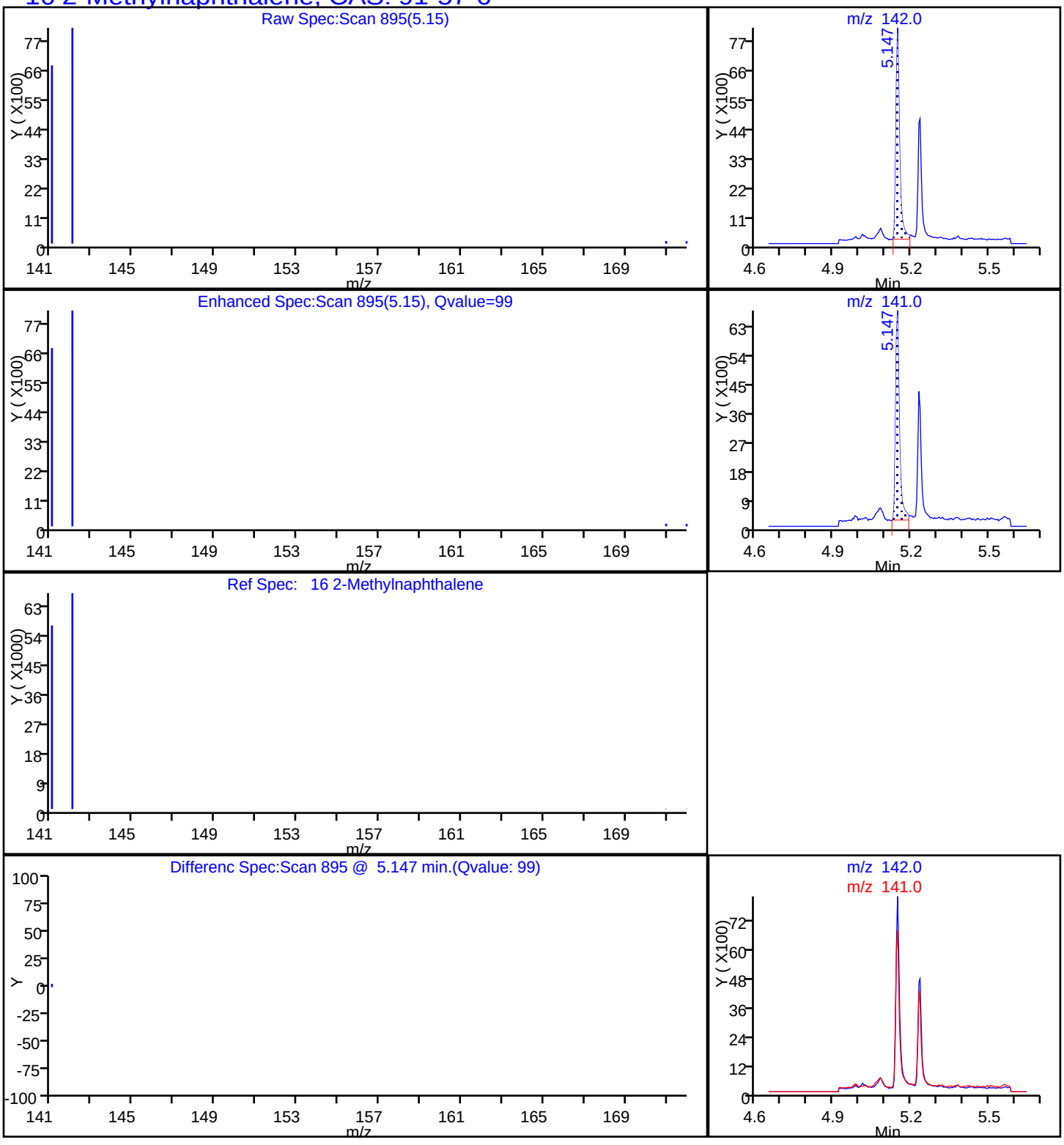
Report Date: 23-Jun-2017 21:53:09 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7371.D

Injection Date:	22-Jun-2017 21:23:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



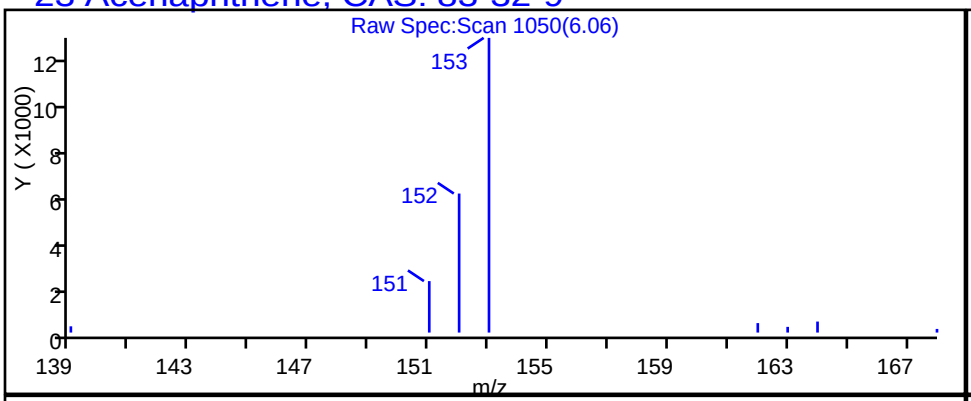
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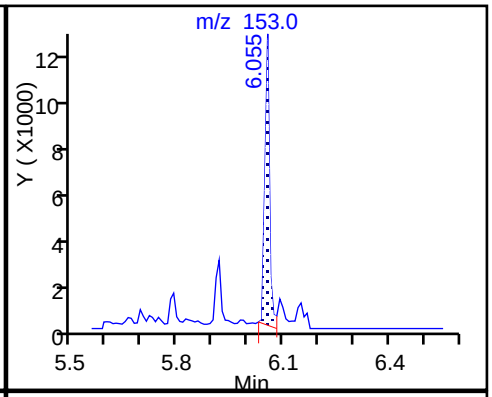
TestAmerica Denver

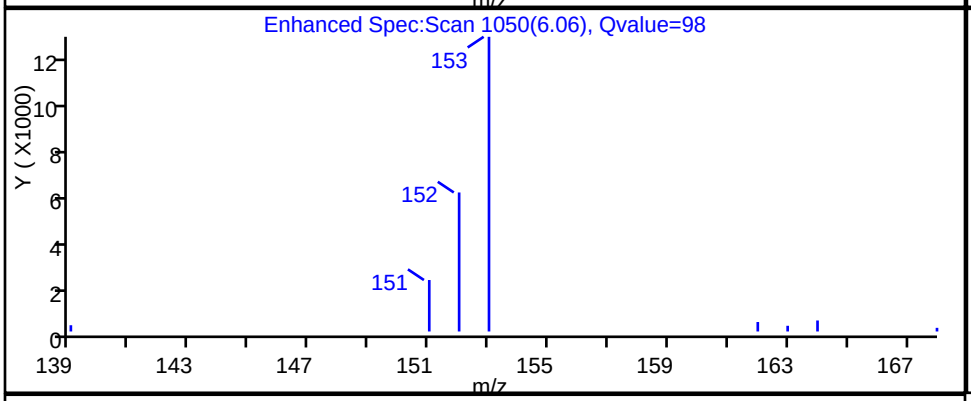
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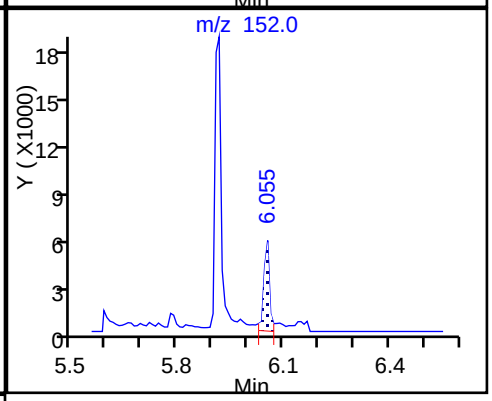
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Operator ID:	WICKHAMM	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
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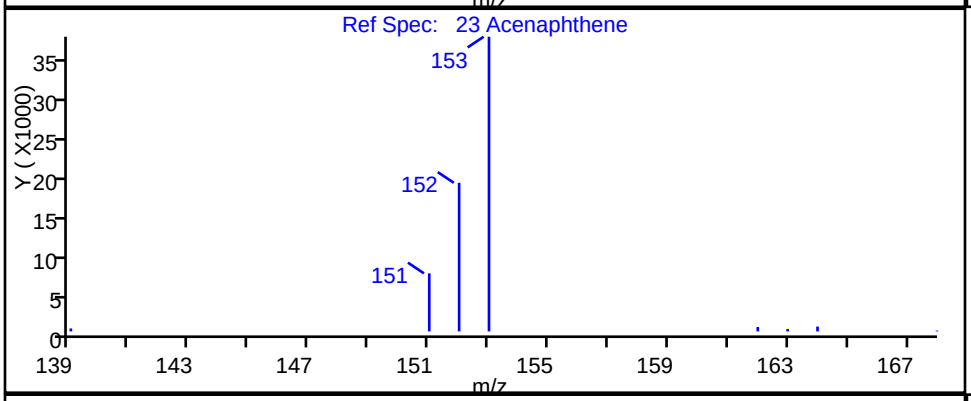
23 Acenaphthene, CAS: 83-32-9

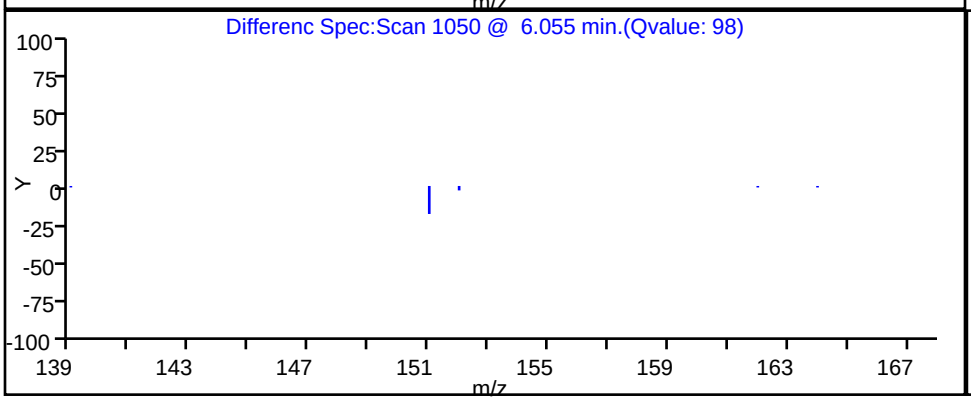


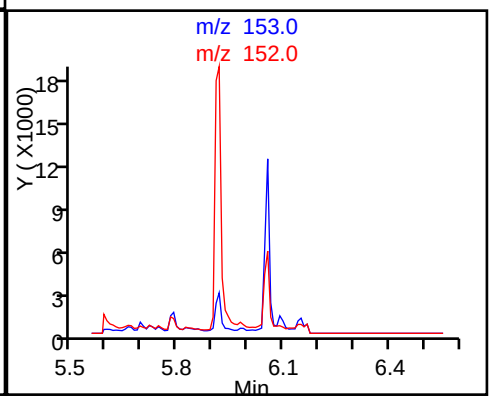












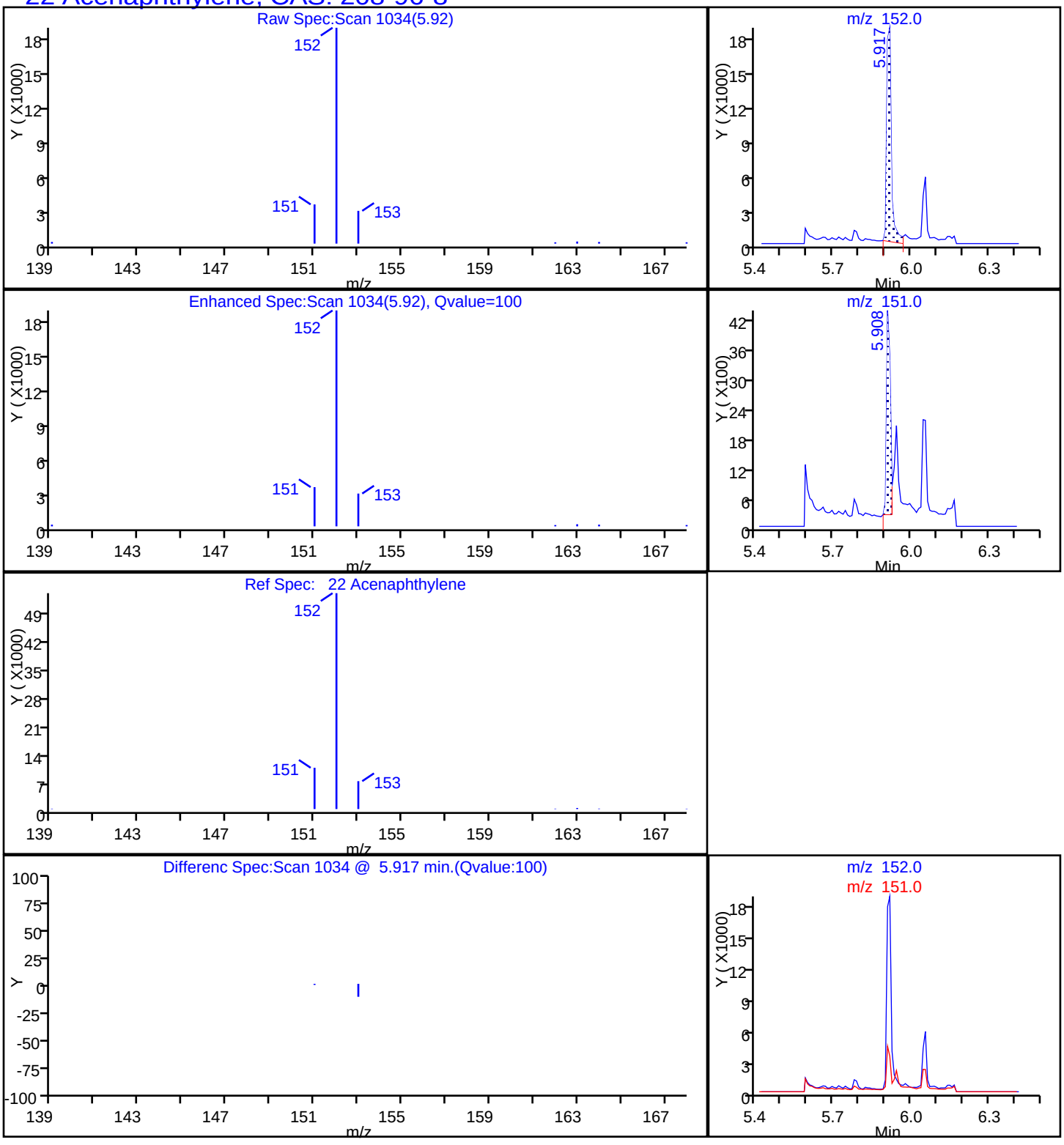
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TestAmerica Denver

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Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Acenaphthylene, CAS: 208-96-8



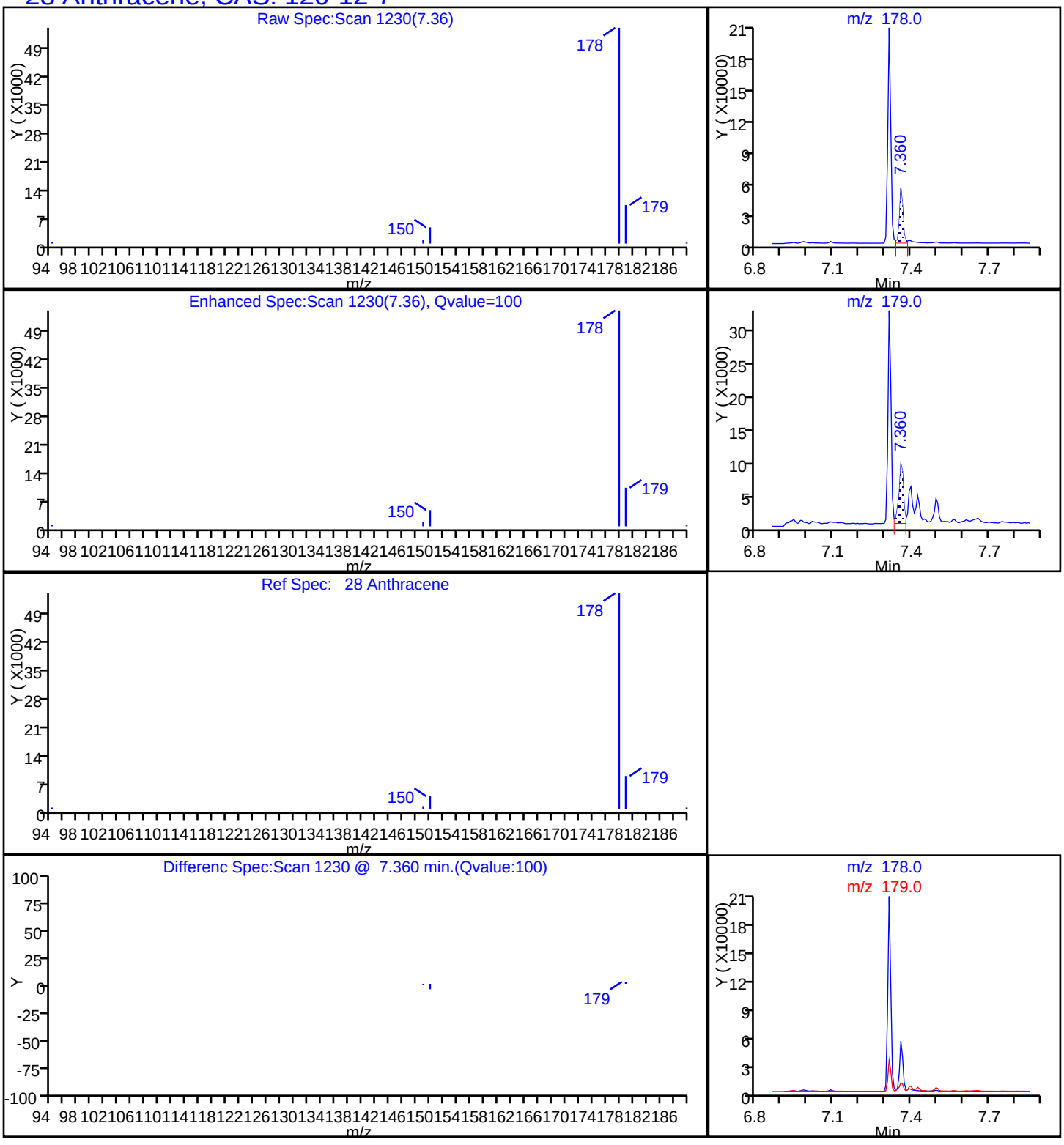
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Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

28 Anthracene, CAS: 120-12-7



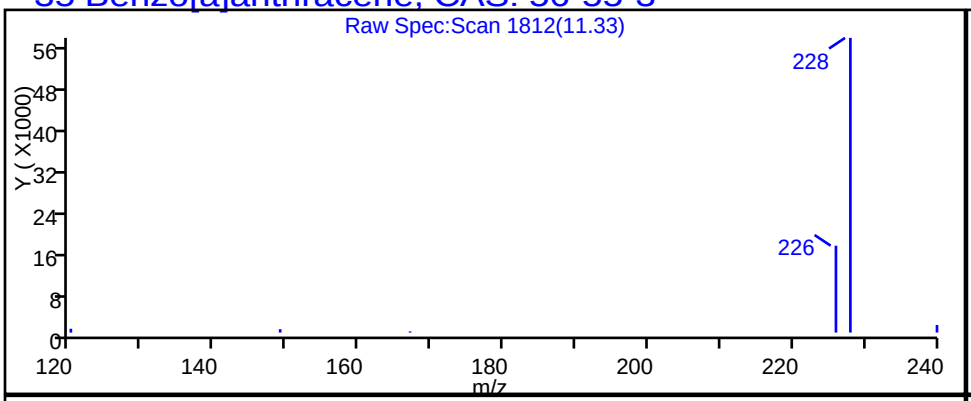
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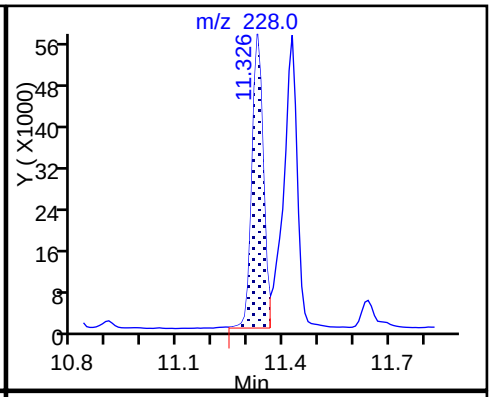
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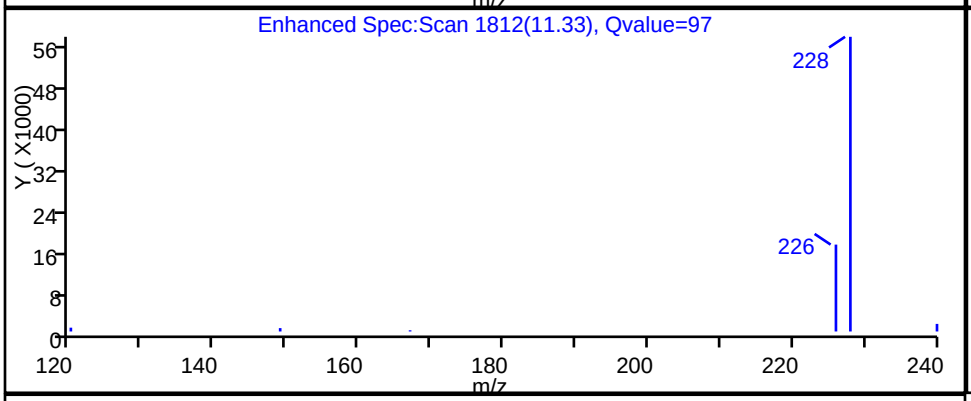
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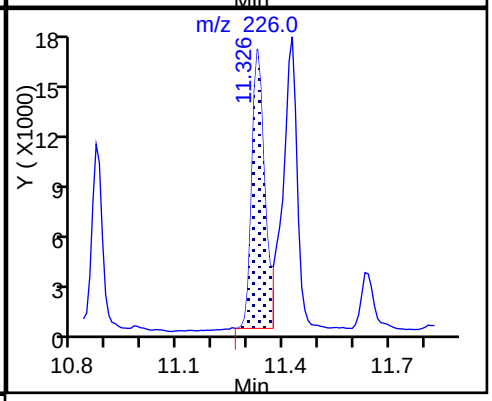
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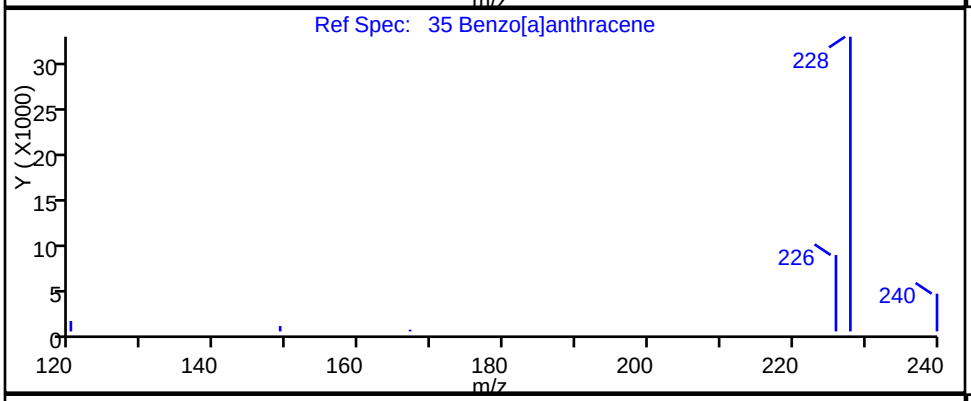
35 Benzo[a]anthracene, CAS: 56-55-3

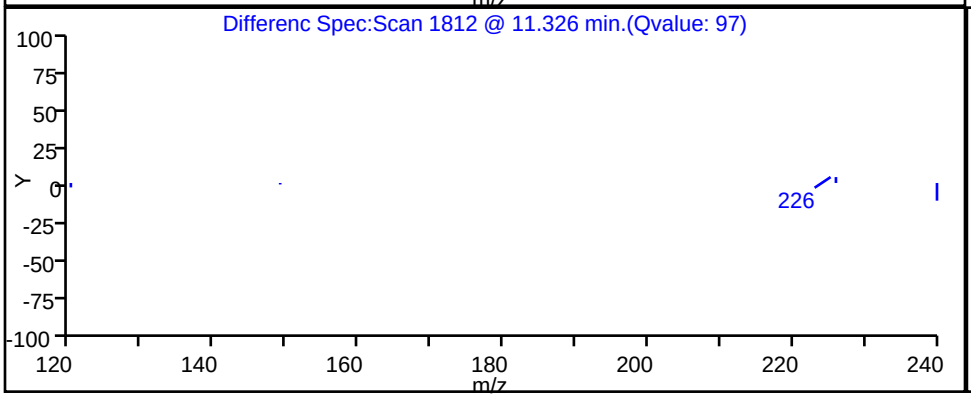


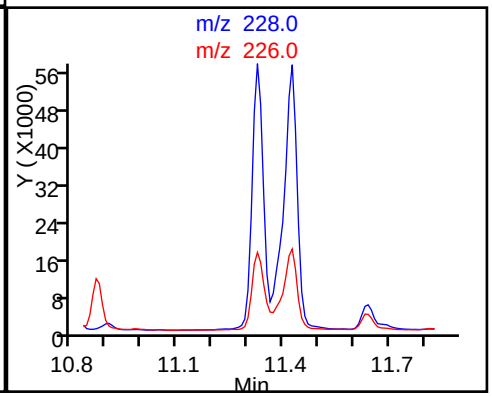












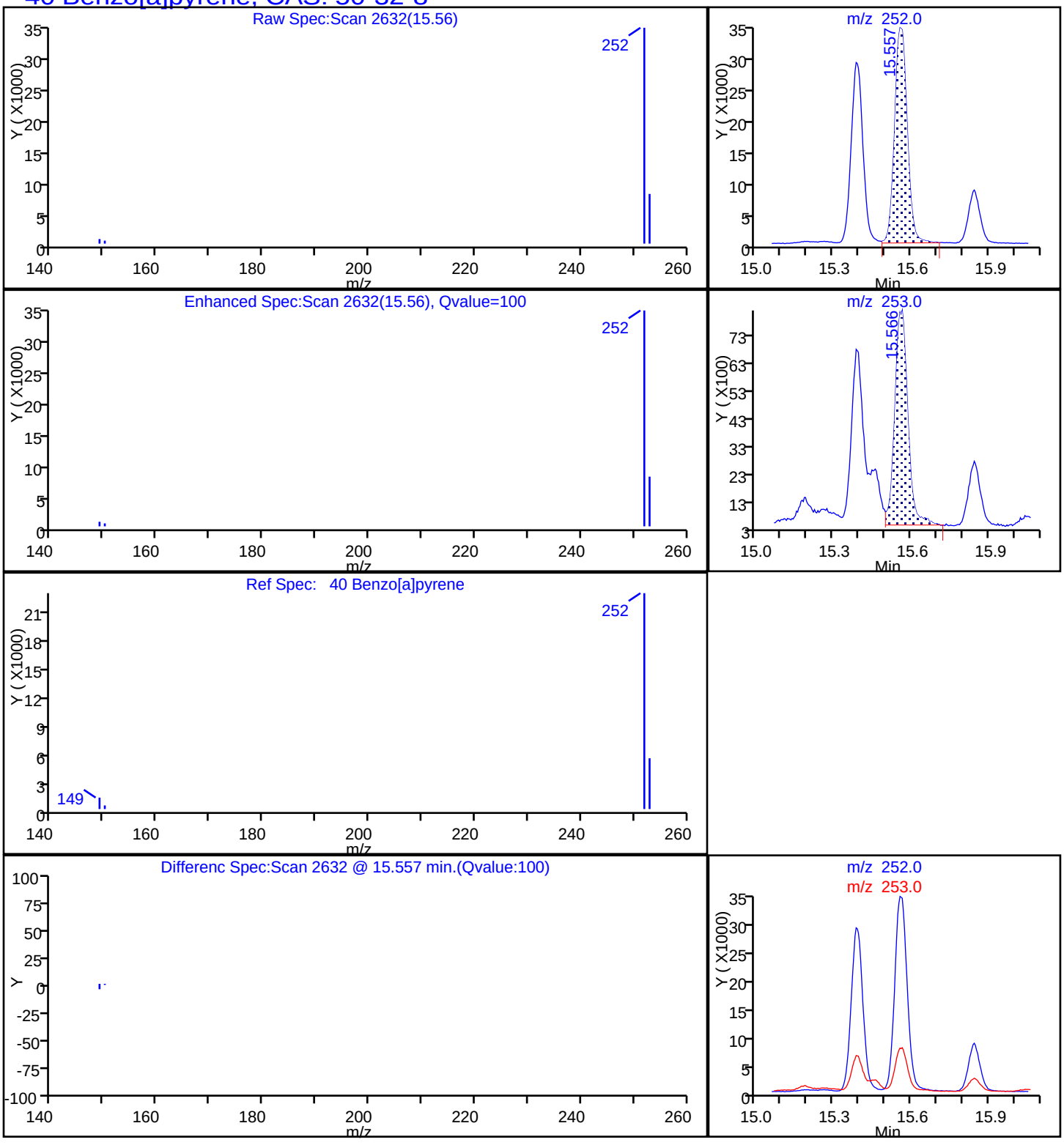
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Injection Date:	22-Jun-2017 21:23:30	Instrument ID:	SMS_F		
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40 Benzo[a]pyrene, CAS: 50-32-8



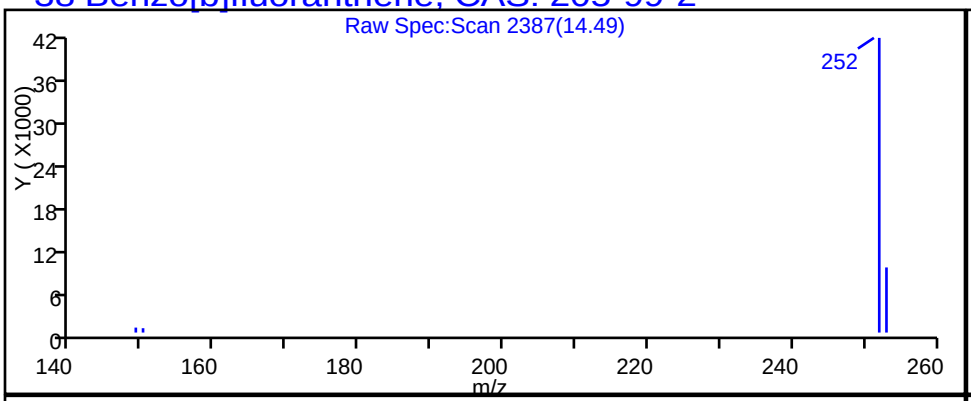
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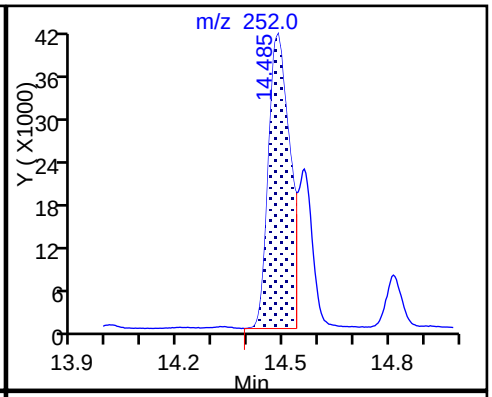
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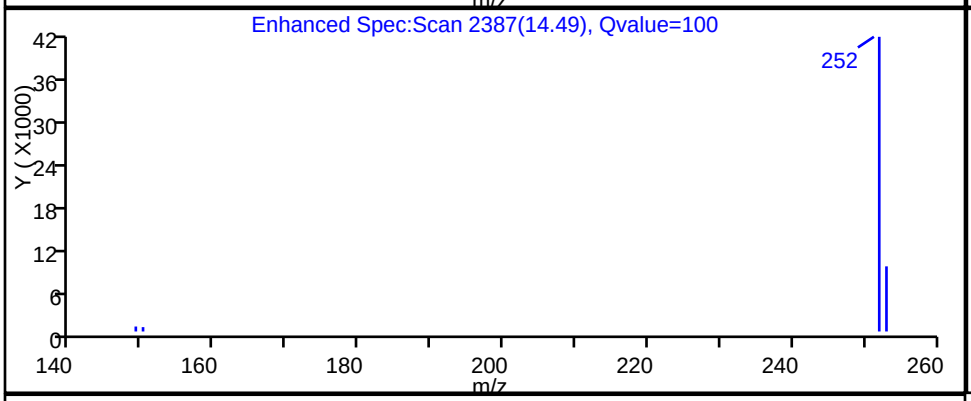
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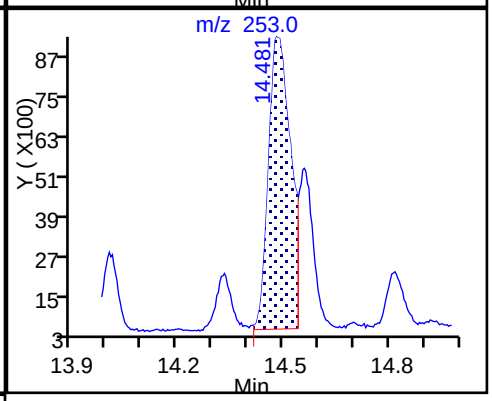
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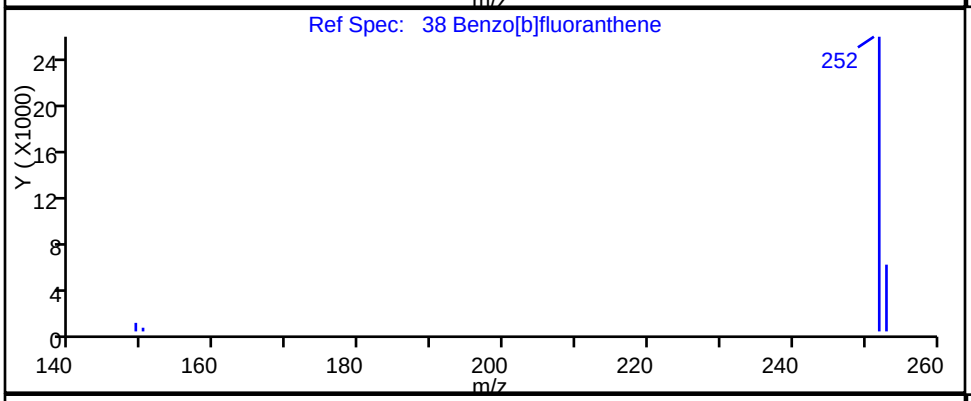
38 Benzo[b]fluoranthene, CAS: 205-99-2

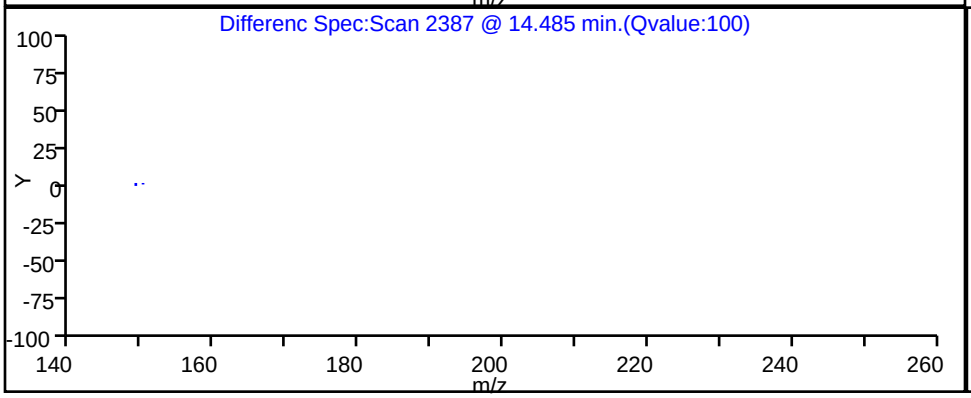


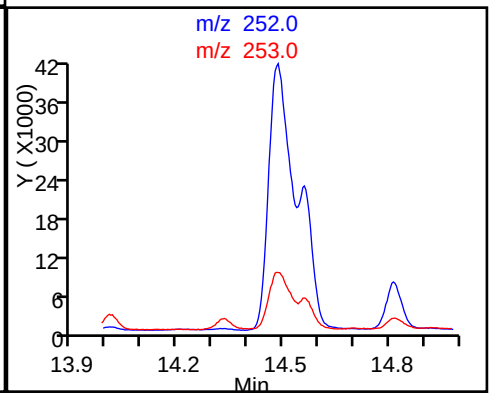












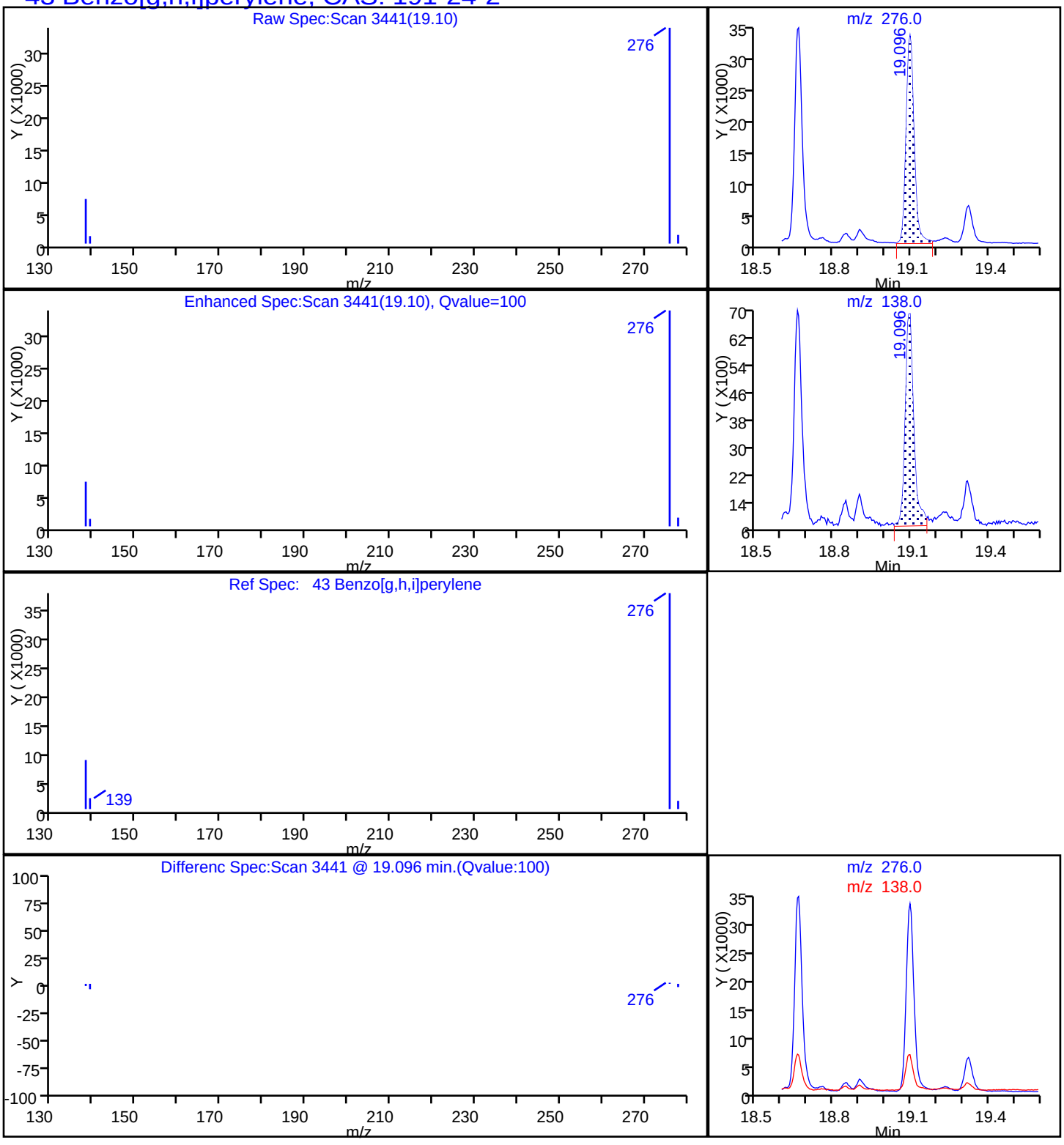
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Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
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43 Benzo[g,h,i]perylene, CAS: 191-24-2



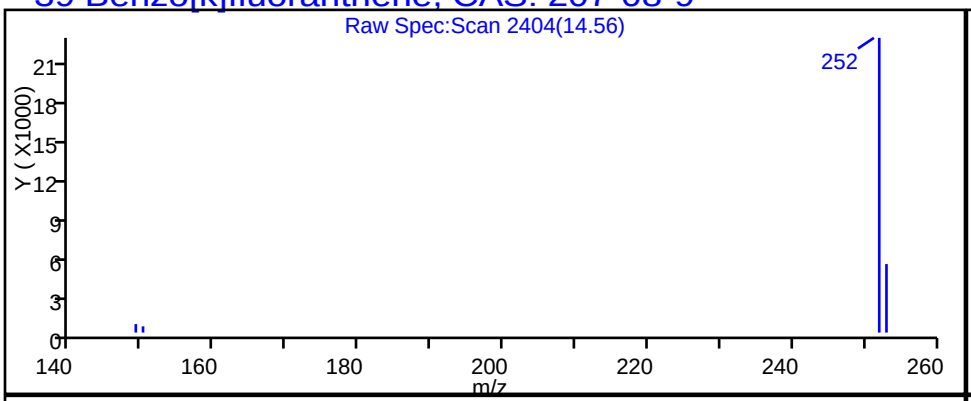
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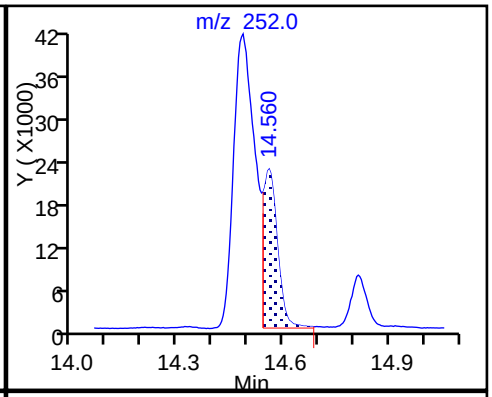
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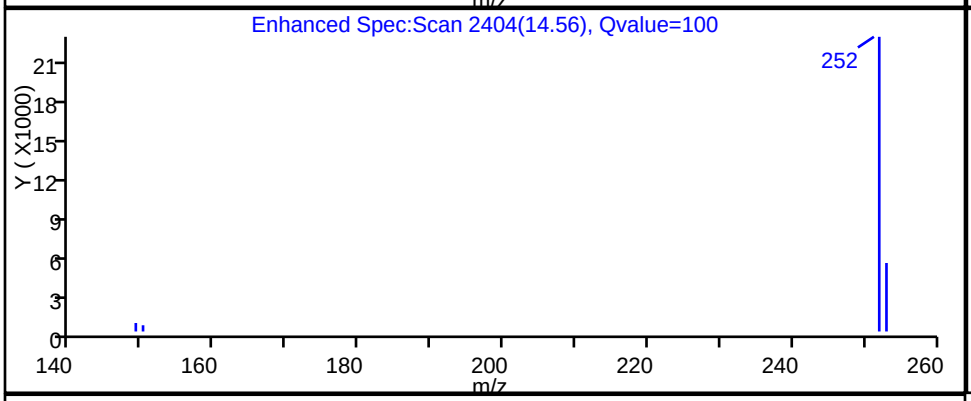
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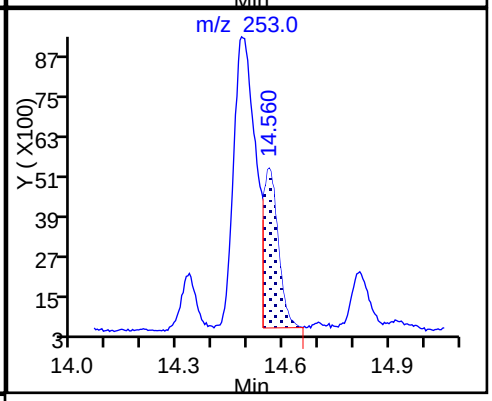
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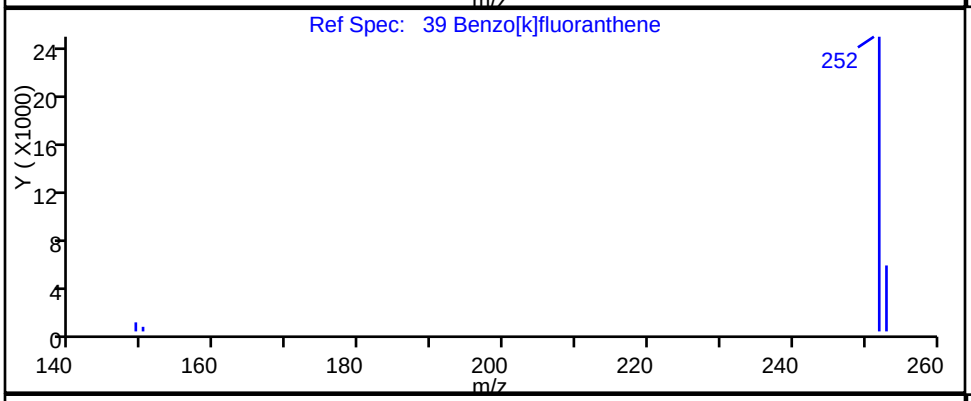
39 Benzo[k]fluoranthene, CAS: 207-08-9

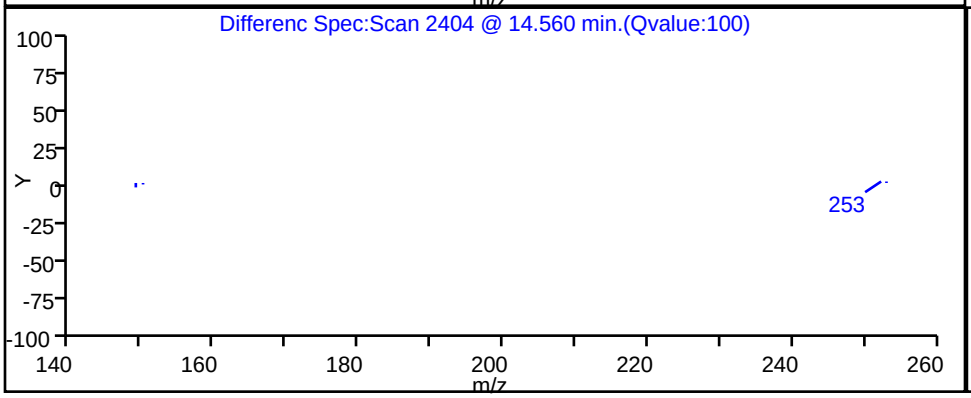


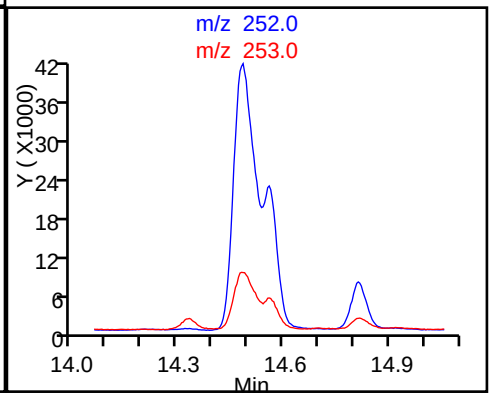












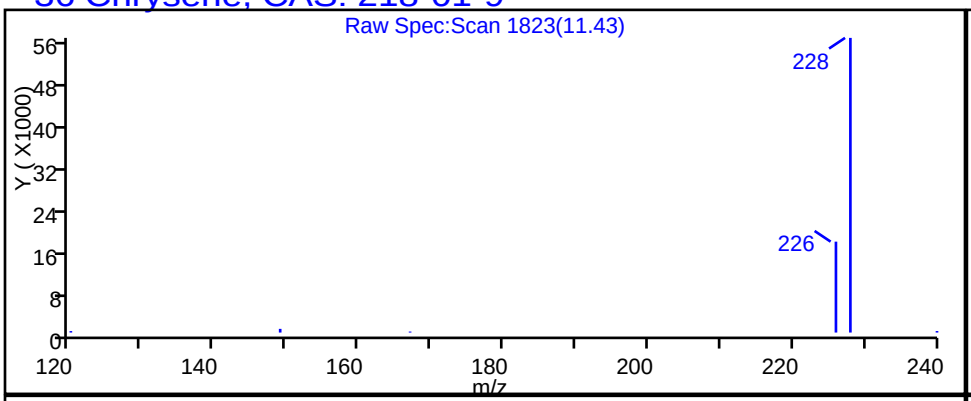
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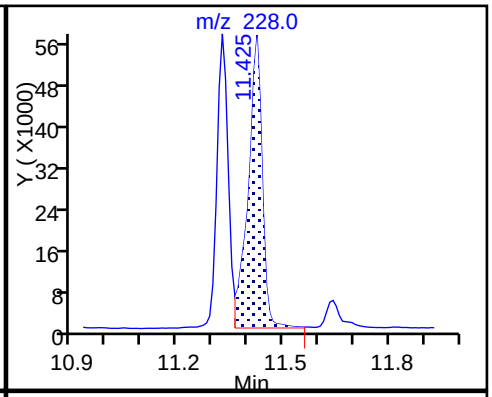
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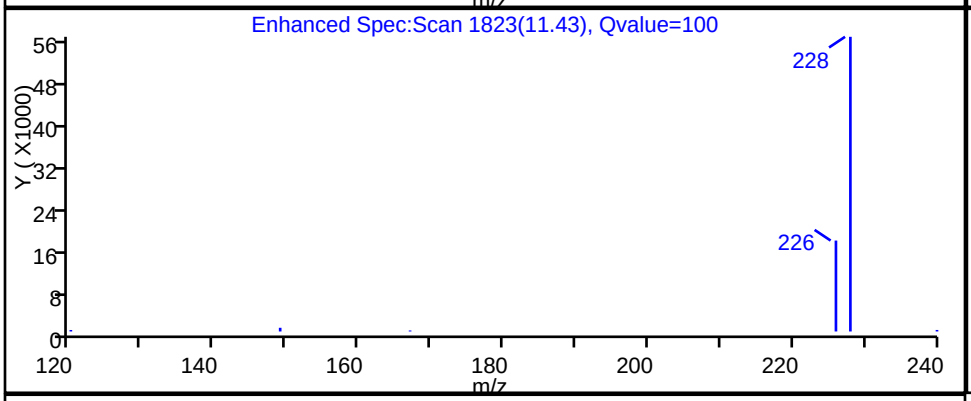
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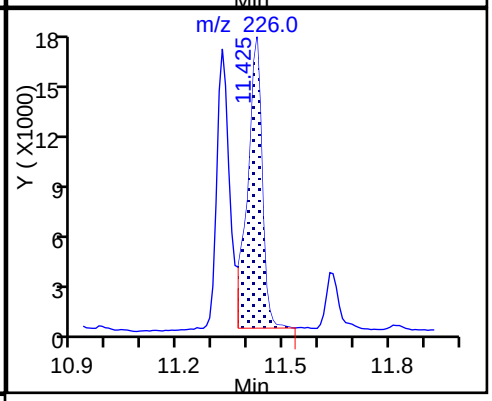
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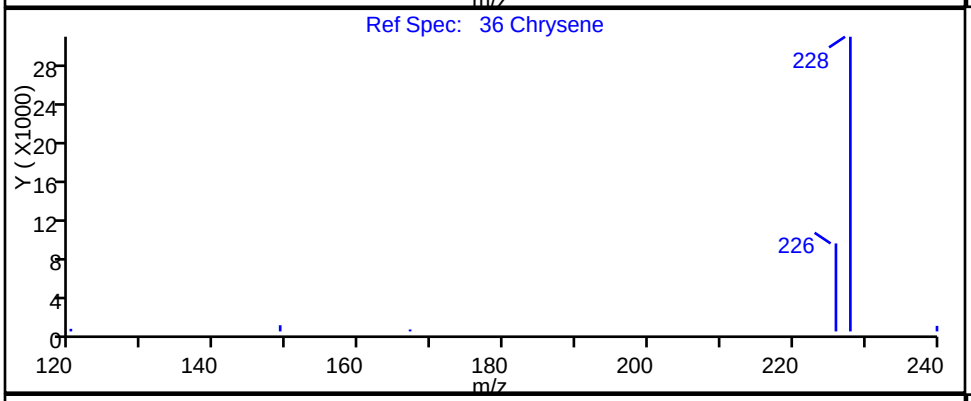
36 Chrysene, CAS: 218-01-9

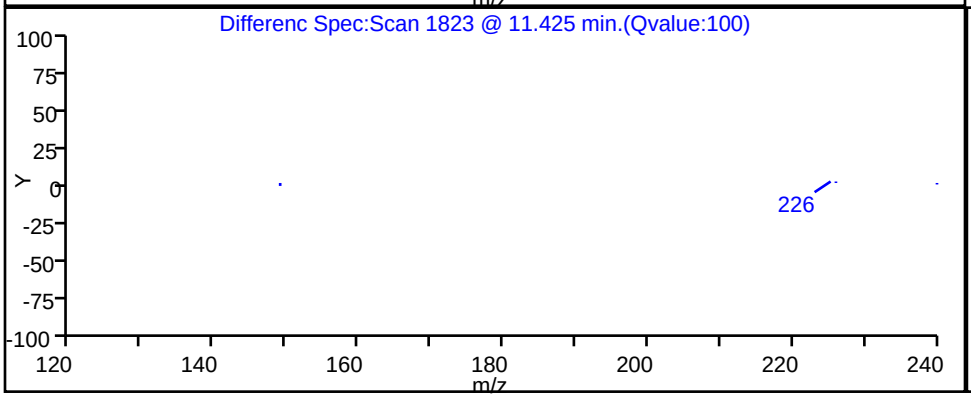


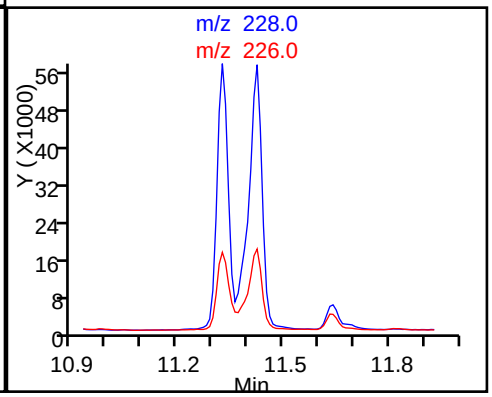










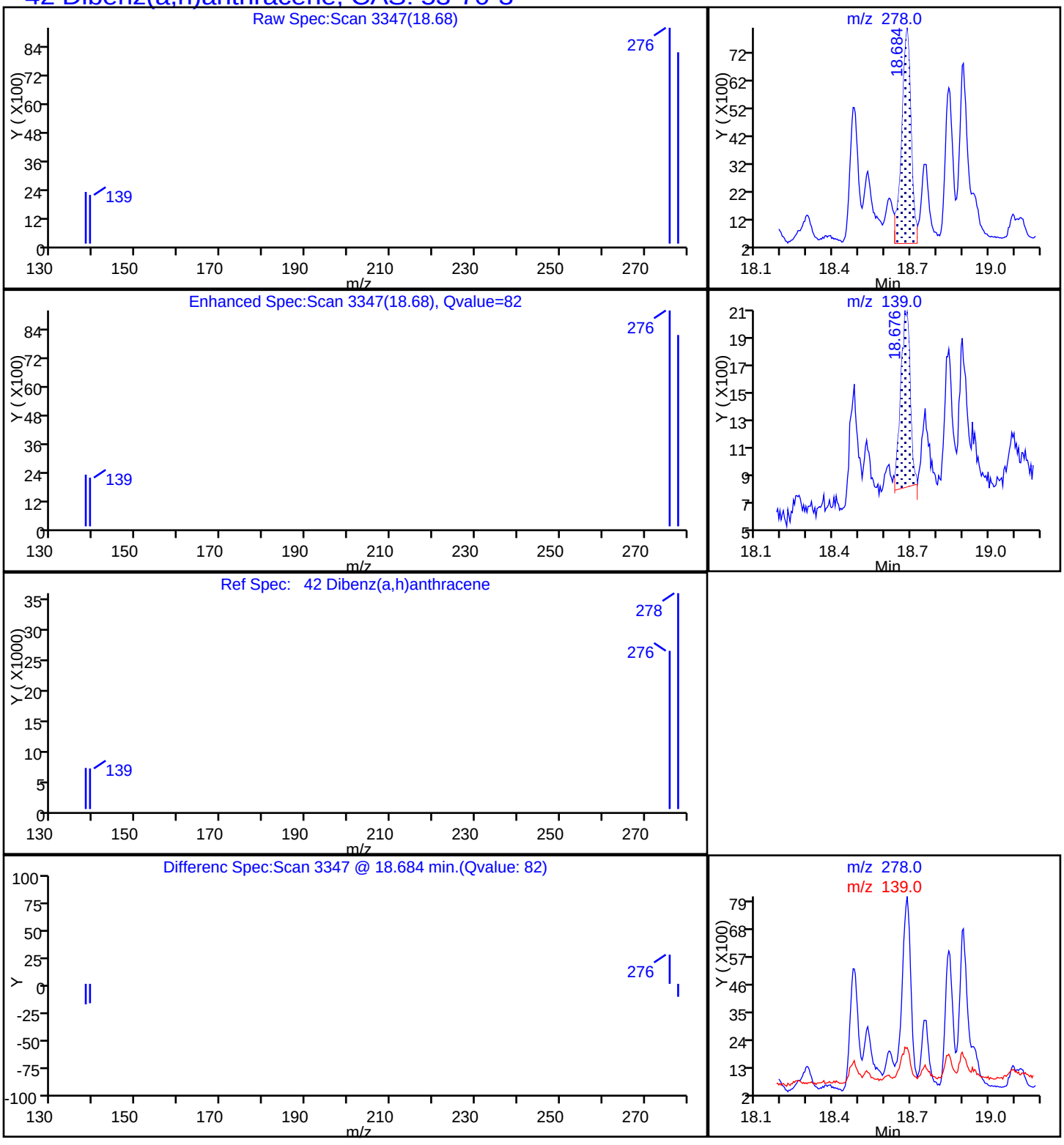


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TestAmerica Denver

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Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
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Column:		Detector	MS SCAN		

42 Dibenz(a,h)anthracene, CAS: 53-70-3



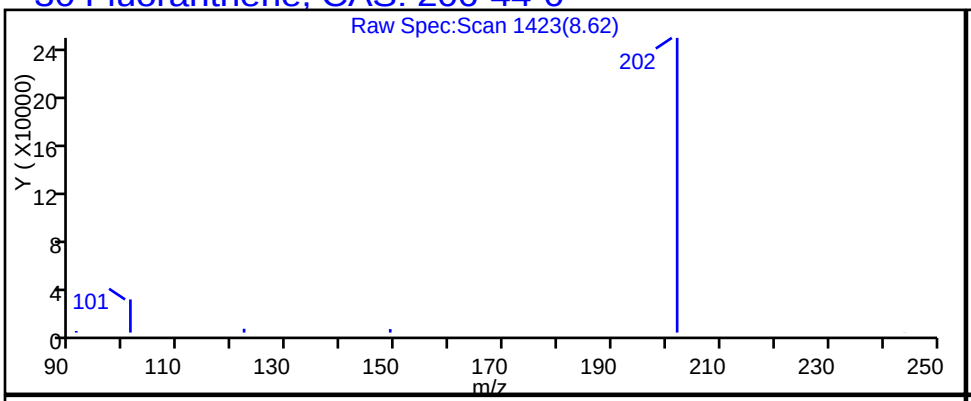
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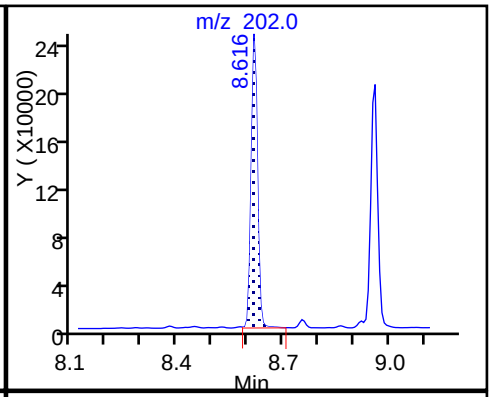
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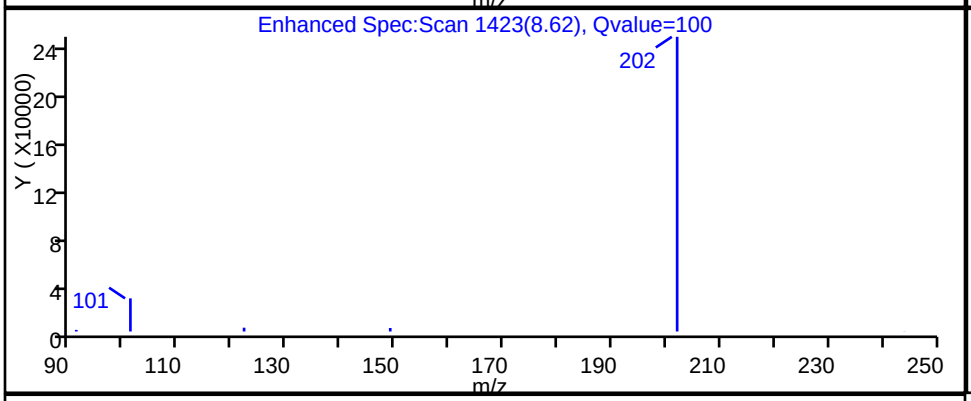
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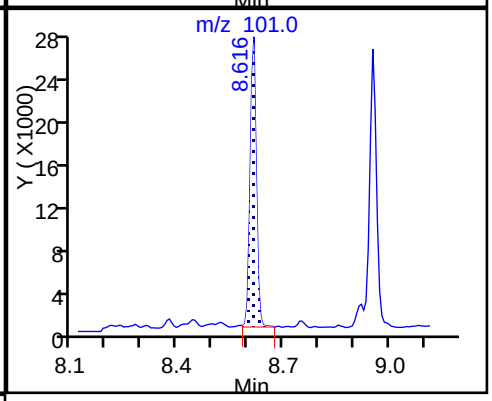
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Column:		Detector	MS SCAN		

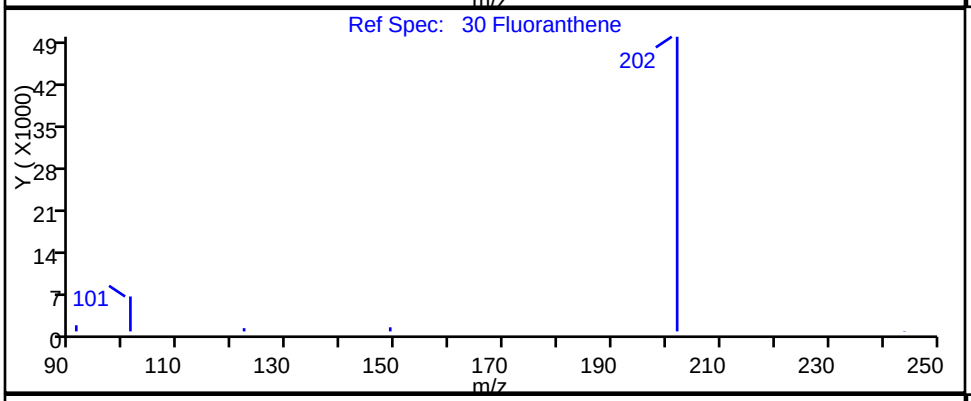
30 Fluoranthene, CAS: 206-44-0

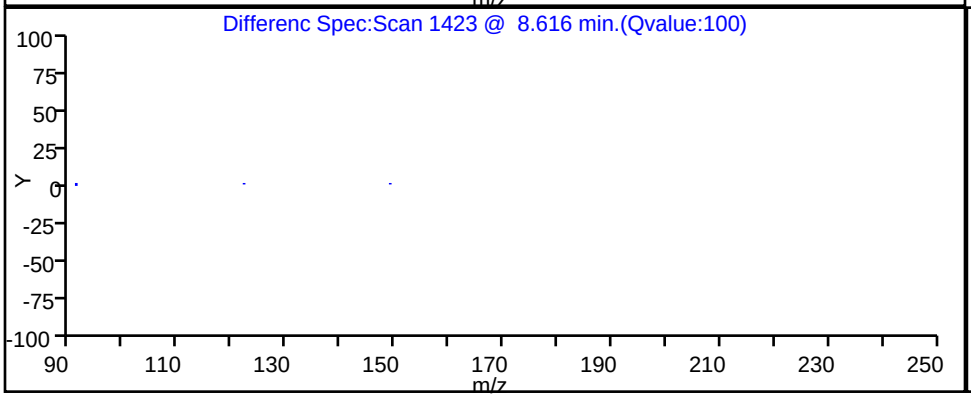


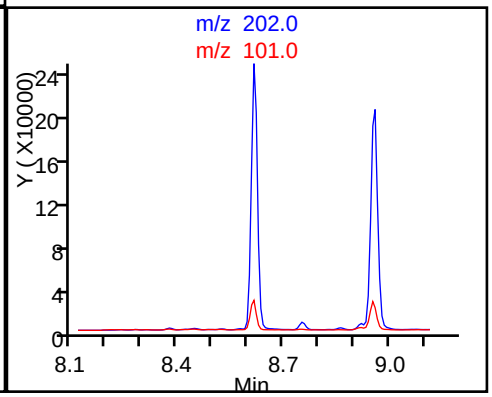












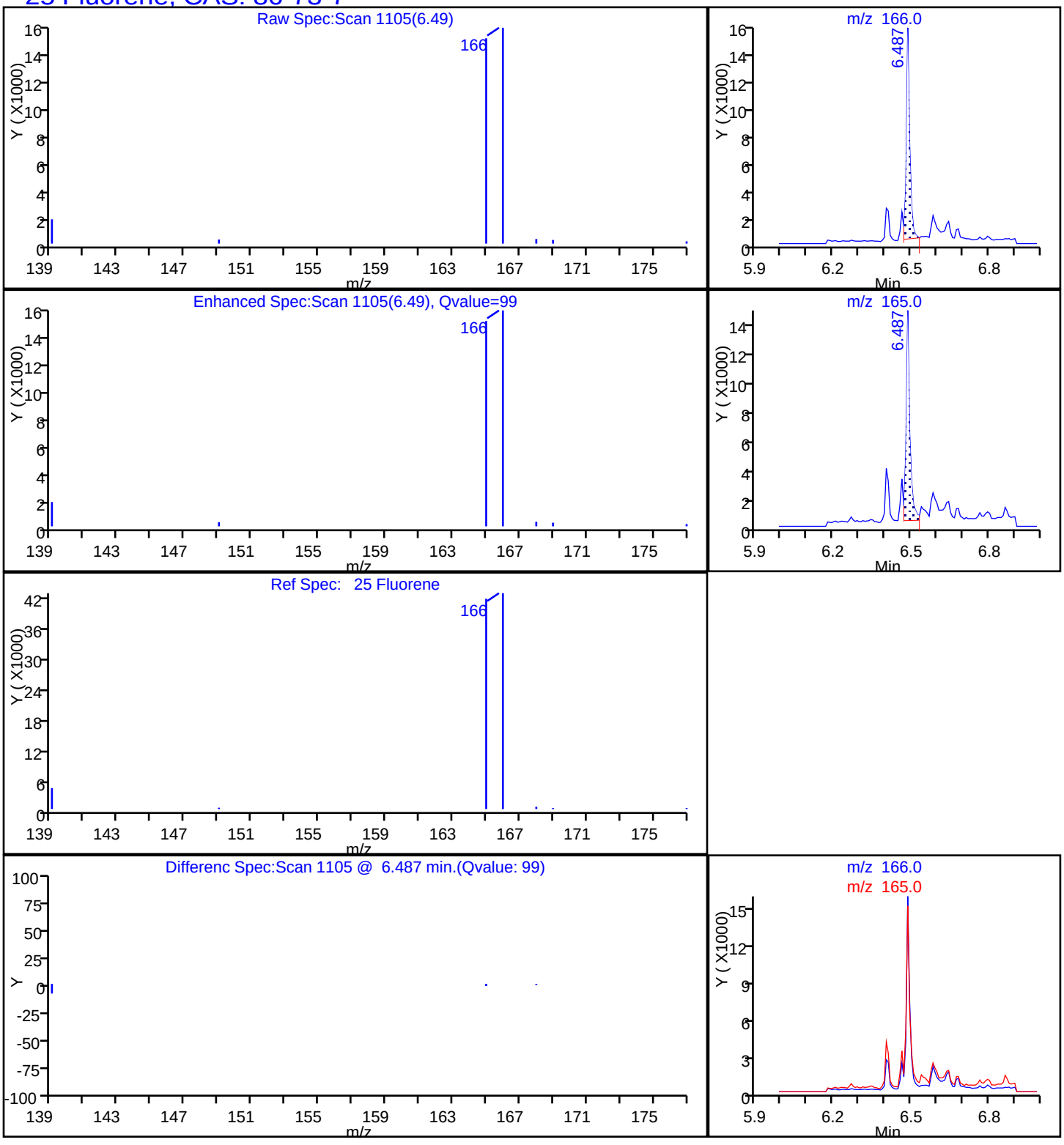
Report Date: 23-Jun-2017 21:53:09 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7371.D

Injection Date:	22-Jun-2017 21:23:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Fluorene, CAS: 86-73-7



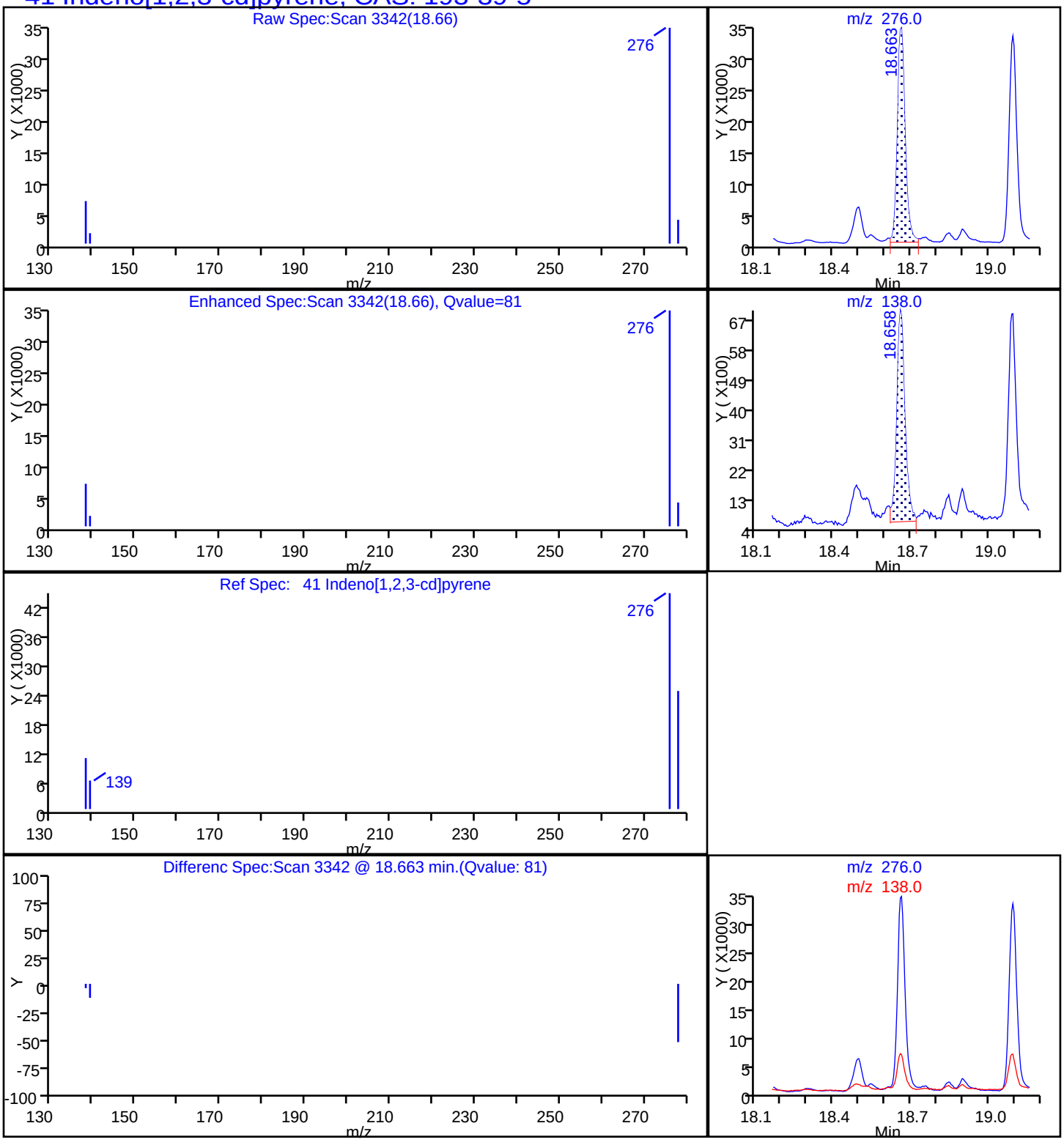
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7371.D

Injection Date:	22-Jun-2017 21:23:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



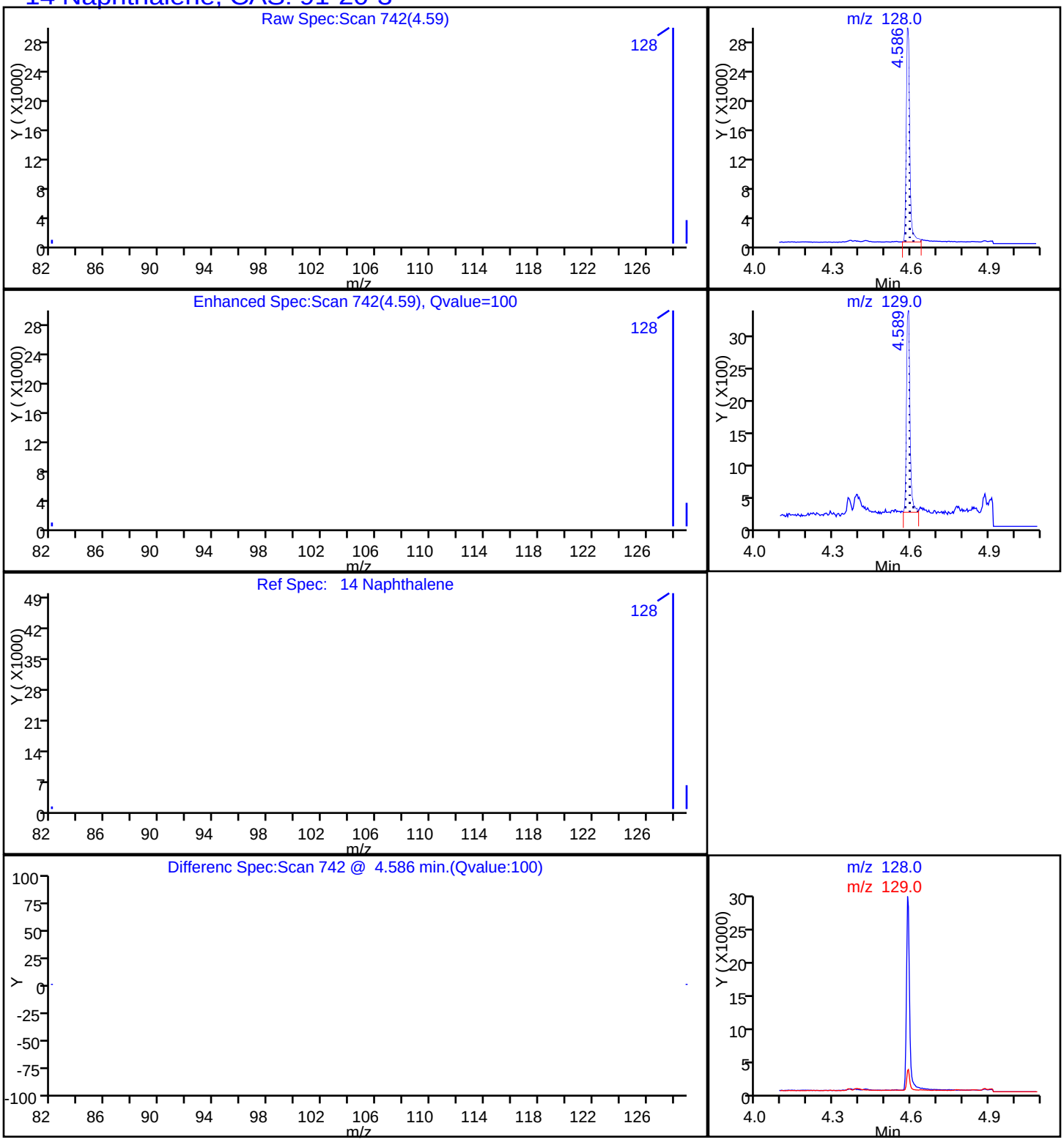
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7371.D

Injection Date:	22-Jun-2017 21:23:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3



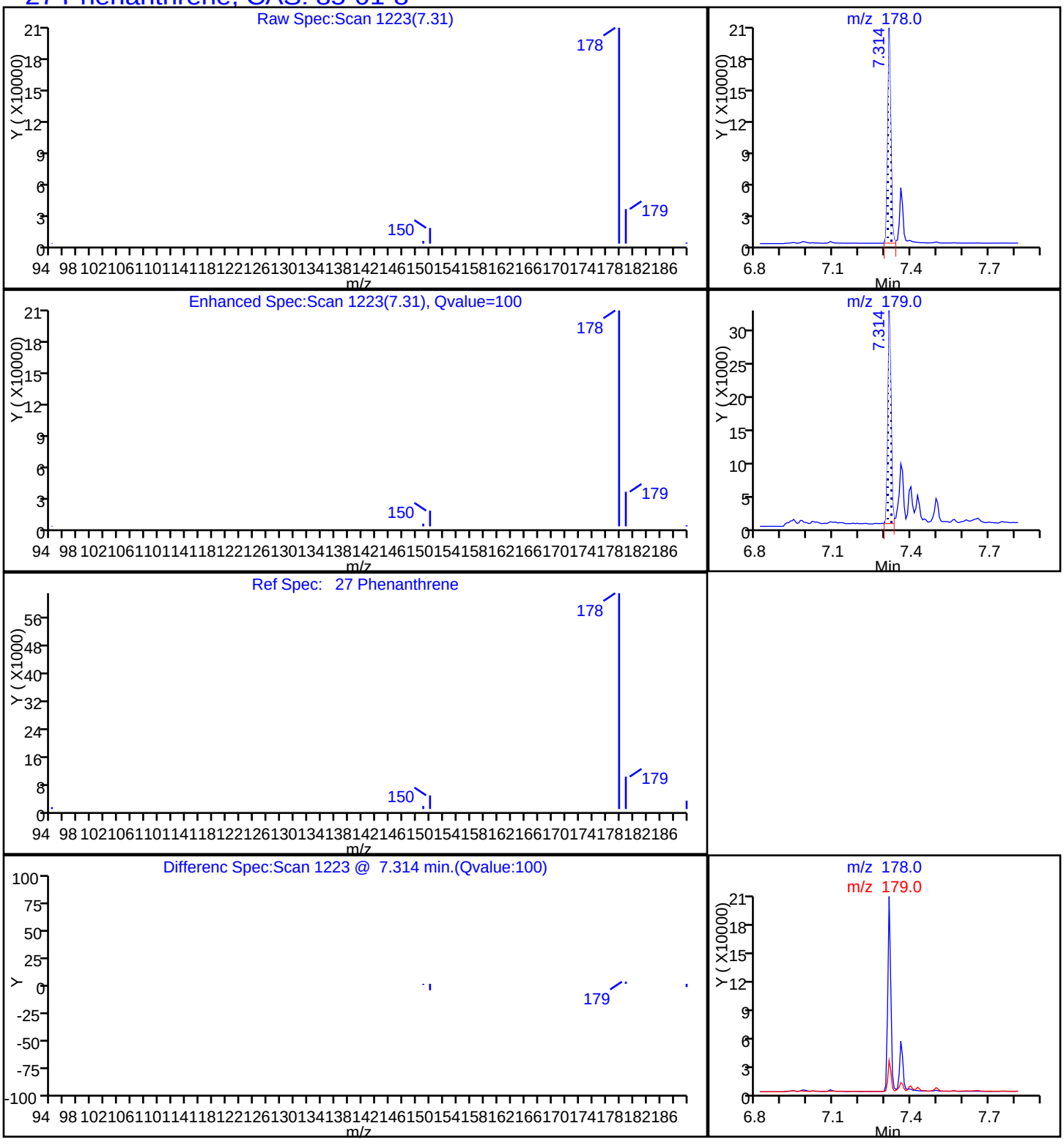
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7371.D

Injection Date:	22-Jun-2017 21:23:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

27 Phenanthrene, CAS: 85-01-8



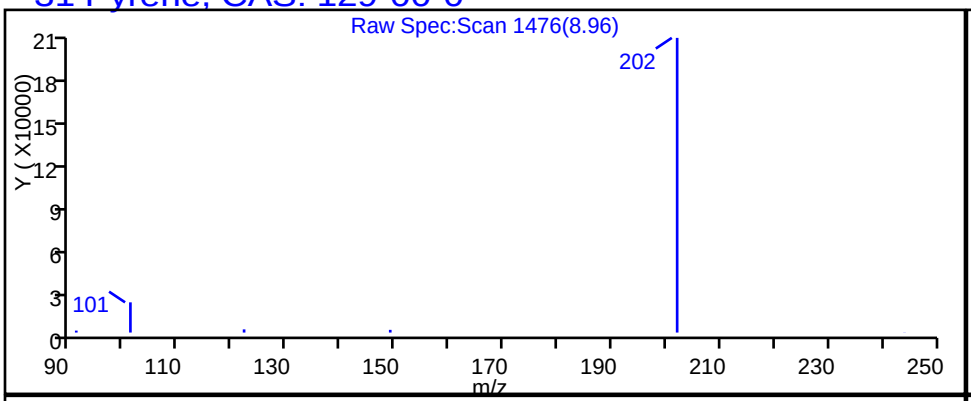
Report Date: 23-Jun-2017 21:53:09 Chrom Revision: 2.2 20-Jun-2017 07:42:38

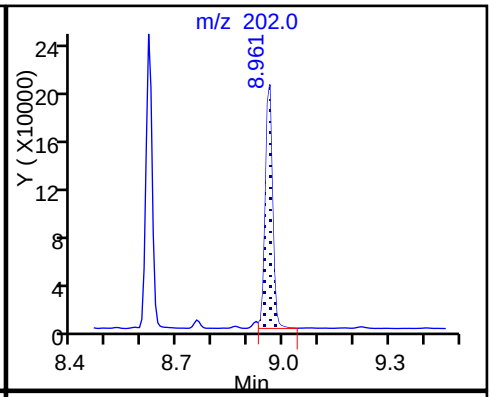
TestAmerica Denver

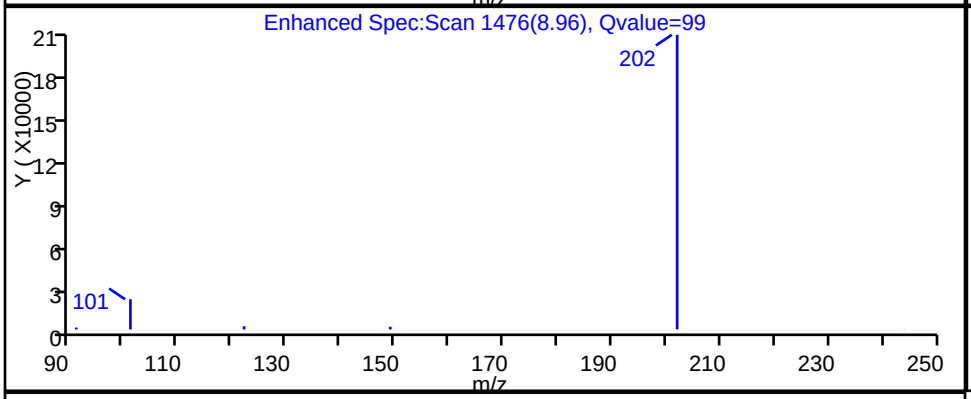
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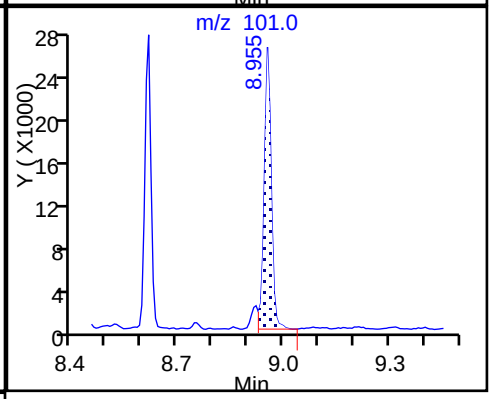
Injection Date:	22-Jun-2017 21:23:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	WICKHAMM	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	2.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

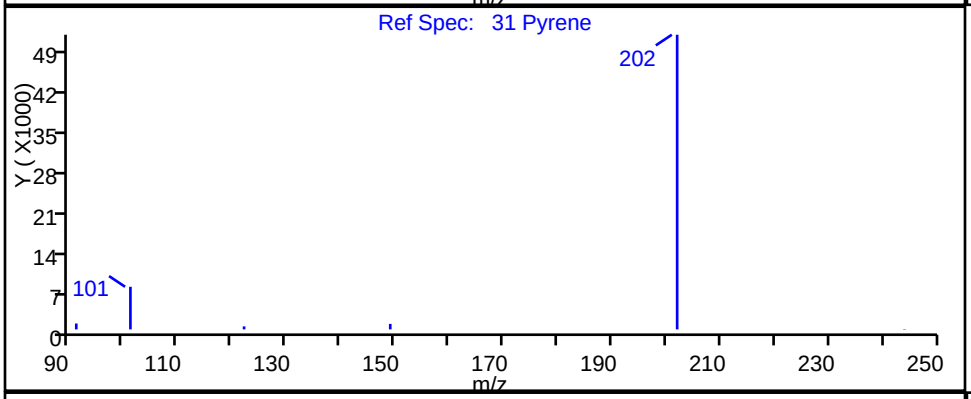
31 Pyrene, CAS: 129-00-0

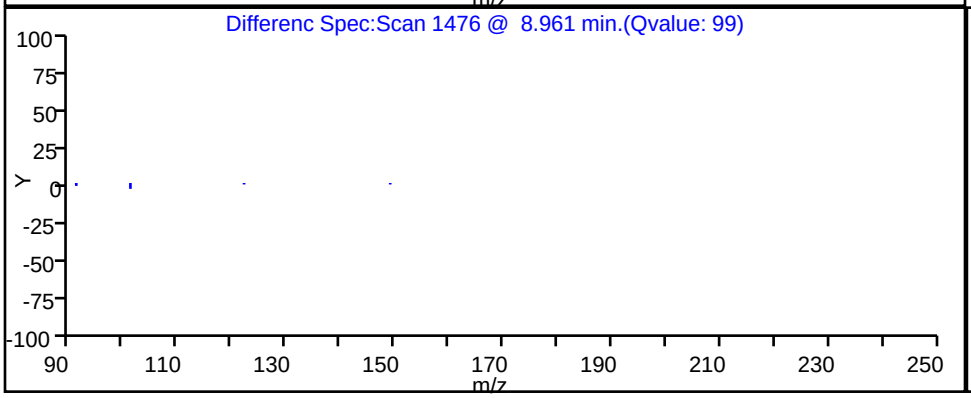


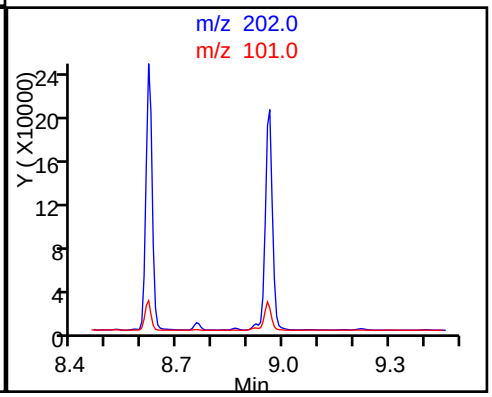












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB04(0-2) | Lab Sample ID: 280-97803-9

Matrix: Solid | Lab File ID: F7346.D

Analysis Method: 8270D SIM | Date Collected: 05/31/2017 14:10

Extract. Method: 3546 | Date Extracted: 06/14/2017 09:42

Sample wt/vol: 30.0(g) | Date Analyzed: 06/21/2017 23:21

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 17.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378253 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.61	U	6.1	0.61	0.32
91-57-6	2-Methylnaphthalene	0.81	U	6.1	0.81	0.38
83-32-9	Acenaphthene	0.32	U	6.1	0.32	0.19
208-96-8	Acenaphthylene	0.28	J	6.1	0.81	0.21
120-12-7	Anthracene	3.0	U	6.1	3.0	0.88
56-55-3	Benzo[a]anthracene	3.0	U	6.1	3.0	1.1
50-32-8	Benzo[a]pyrene	3.0	U	6.1	3.0	0.90
205-99-2	Benzo[b]fluoranthene	3.0	U	6.1	3.0	1.5
191-24-2	Benzo[g,h,i]perylene	3.0	U	6.1	3.0	1.3
207-08-9	Benzo[k]fluoranthene	3.0	U	6.1	3.0	1.2
218-01-9	Chrysene	3.0	U	6.1	3.0	1.2
53-70-3	Dibenz(a,h)anthracene	3.0	U	6.1	3.0	1.6
206-44-0	Fluoranthene	3.0	U	6.1	3.0	1.2
86-73-7	Fluorene	0.81	U	6.1	0.81	0.57
193-39-5	Indeno[1,2,3-cd]pyrene	3.0	U	6.1	3.0	1.3
91-20-3	Naphthalene	0.81	U	6.1	0.81	0.40
85-01-8	Phenanthrene	3.0	U	6.1	3.0	1.3
129-00-0	Pyrene	3.0	U	6.1	3.0	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	76		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	77		44-125
1718-51-0	Terphenyl-d14 (Surr)	67		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7346.D
Lims ID: 280-97803-B-9-B
Client ID: SS025-SB04(0-2)
Sample Type: Client
Inject. Date: 21-Jun-2017 23:21:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-b-9-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 22-Jun-2017 16:05:39 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: wickhamm Date: 22-Jun-2017 15:59:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	91	23632	600.0	
* 2 Phenanthrene-d10	188	7.301	7.302	-0.001	100	47452	600.0	
* 3 Chrysene-d12	240	11.380	11.380	0.000	93	36038	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	14199	383.6	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	23340	380.9	
$ 6 Terphenyl-d14	244	9.124	9.131	-0.007	97	16155	335.3	
9 1,4-Dioxane	88		1.903				ND	
11 Morpholine	87	1.929	1.916	0.013	1	104	NC	
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	51	209	9.62	
14 Naphthalene	128		4.586				ND	
16 2-Methylnaphthalene	142		5.147				ND	
17 1-Methylnaphthalene	142		5.230				ND	
20 Dimethyl phthalate	163		5.753				ND	
22 Acenaphthylene	152	5.917	5.917	0.000	88	560	6.87	
23 Acenaphthene	153		6.055				ND	
32 Dibenzofuran	168		6.207				ND	
24 Diethyl phthalate	149		6.328				ND	
25 Fluorene	166		6.494				ND	
26 N-Nitrosodiphenylamine	169		6.570				ND	
27 Phenanthrene	178	7.321	7.328	-0.007	33	1312	13.0	
28 Anthracene	178		7.373				ND	
29 Di-n-butyl phthalate	149	7.731	7.738	-0.007	98	1397	10.8	
30 Fluoranthene	202	8.636	8.629	0.007	93	1845	16.0	
31 Pyrene	202	8.974	8.974	0.000	91	1497	12.5	
33 Butyl benzyl phthalate	149		9.957				ND	
34 Bis(2-ethylhexyl) phthalat	149	11.227	11.236	-0.009	99	2737	31.2	
35 Benzo[a]anthracene	228	11.344	11.353	-0.009	30	710	7.41	
36 Chrysene	228	11.452	11.452	0.000	81	1184	13.4	
37 Di-n-octyl phthalate	149		13.165				ND	
38 Benzo[b]fluoranthene	252		14.512				ND	
39 Benzo[k]fluoranthene	252		14.595				ND	
40 Benzo[a]pyrene	252		15.596				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276		18.680				ND	
42 Dibenz(a,h)anthracene	278		18.706				ND	
43 Benzo[g,h,i]perylene	276		19.113				ND	
7 Pentachlorophenol	266		0.000				ND	
8 Benzidine	184		0.000				ND	
12 Pentachlorophenol_T	266		4.251				ND	
15 Benzidine_T	184		5.382				ND	
19 4,4'-DDE	246		5.495				ND	
18 4,4'-DDD	235		5.851				ND	
21 4,4'-DDT	235		6.135				ND	
S 52 TPAH	1		0.000				ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

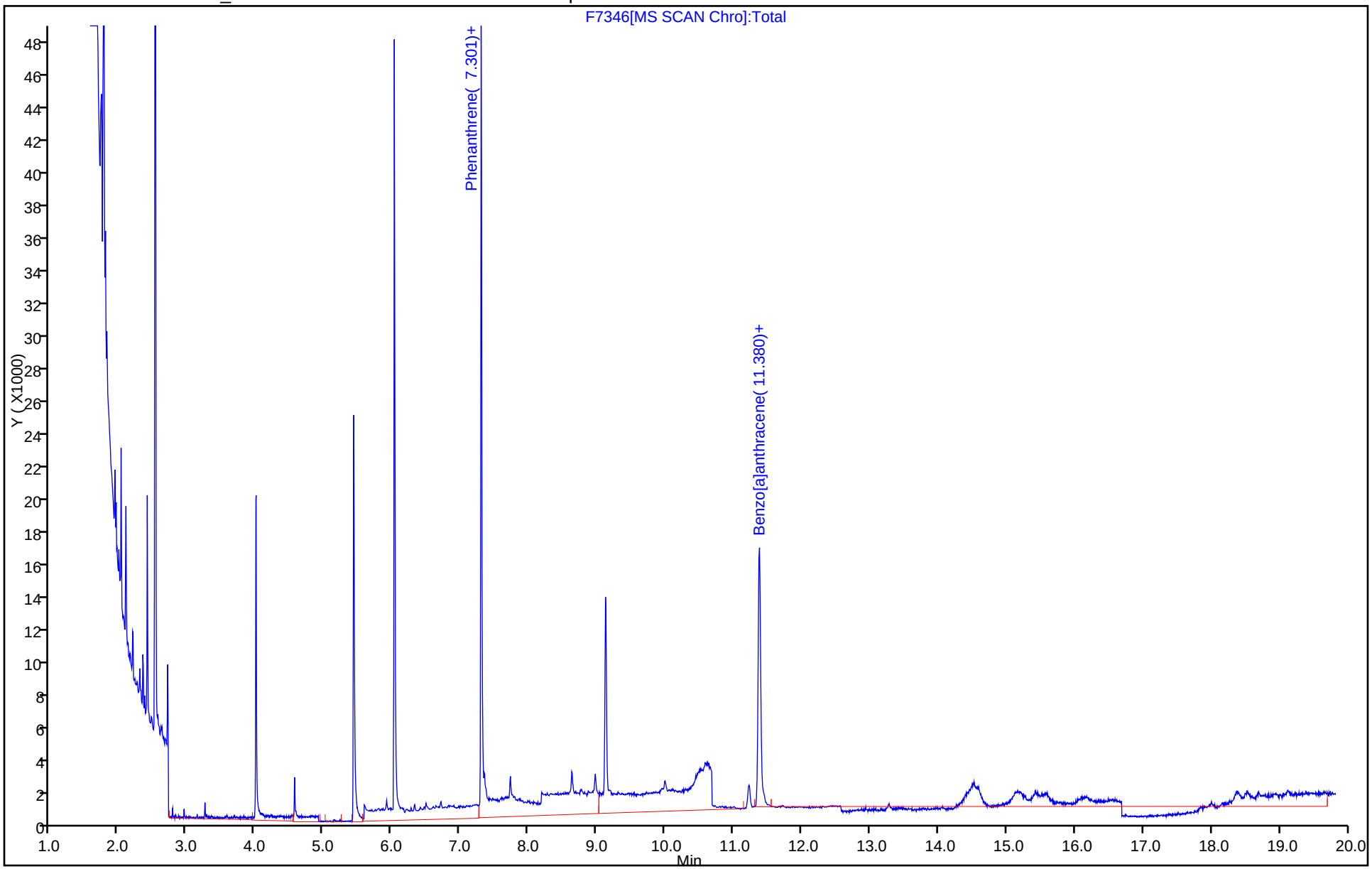
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 22-Jun-2017 16:05:49 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7346.D

Injection Date:	21-Jun-2017 23:21:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97803-B-9-B	Lab Sample ID:	280-97803-9	Worklist Smp#:	11
Client ID:	SS025-SB04(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7346.D
Lims ID: 280-97803-B-9-B
Client ID: SS025-SB04(0-2)
Sample Type: Client
Inject. Date: 21-Jun-2017 23:21:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-b-9-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 22-Jun-2017 16:05:39 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: wickhamm Date: 22-Jun-2017 15:59:31

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	383.6	76.71
$ 5 2-Fluorobiphenyl	500.0	380.9	76.18
$ 6 Terphenyl-d14	500.0	335.3	67.06

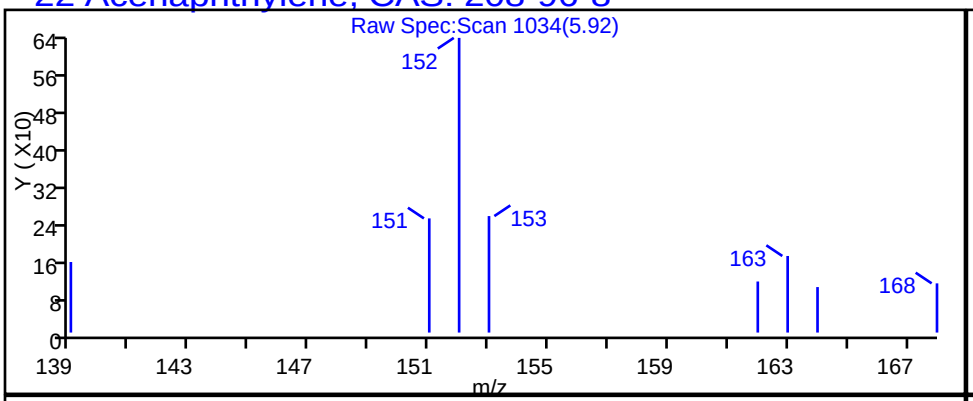
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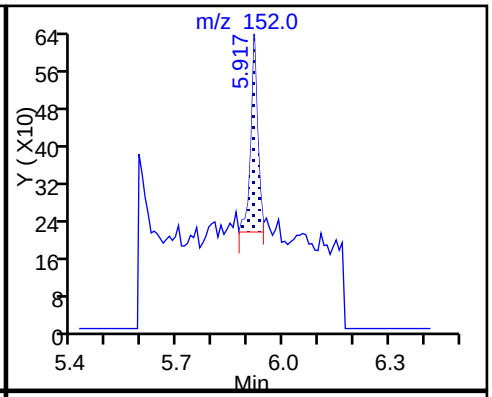
TestAmerica Denver

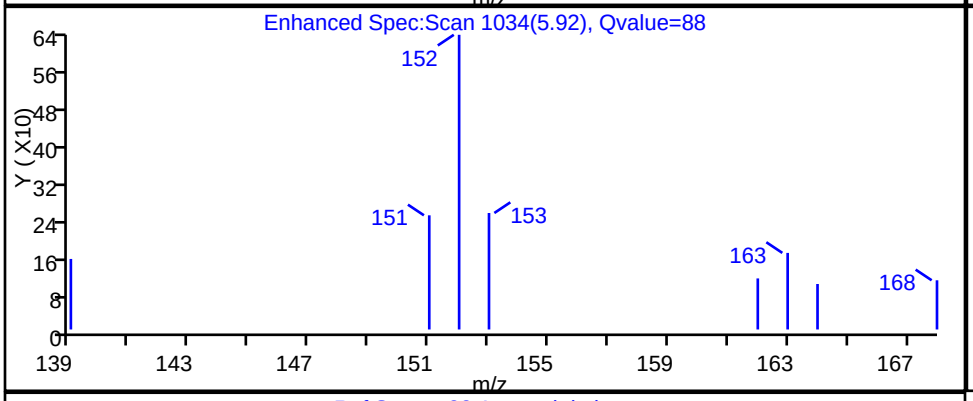
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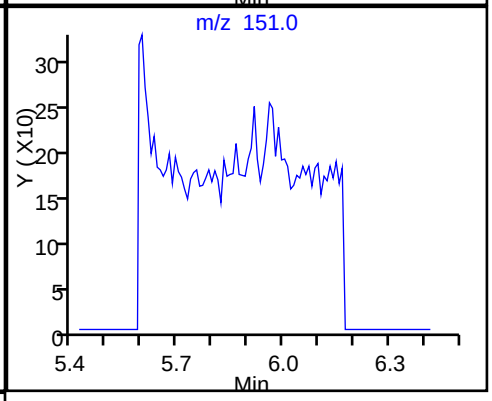
Injection Date:	21-Jun-2017 23:21:30	Instrument ID:	SMS_F
Lims ID:	280-97803-B-9-B	Lab Sample ID:	280-97803-9
Client ID:	SS025-SB04(0-2)		
Operator ID:	WICKHAMM	ALS Bottle#:	11 Worklist Smp#: 11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM
Column:		Detector	MS SCAN

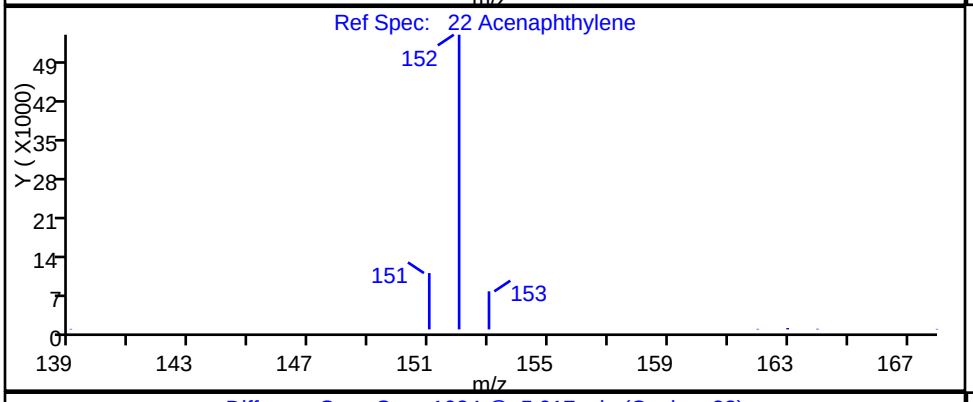
22 Acenaphthylene, CAS: 208-96-8

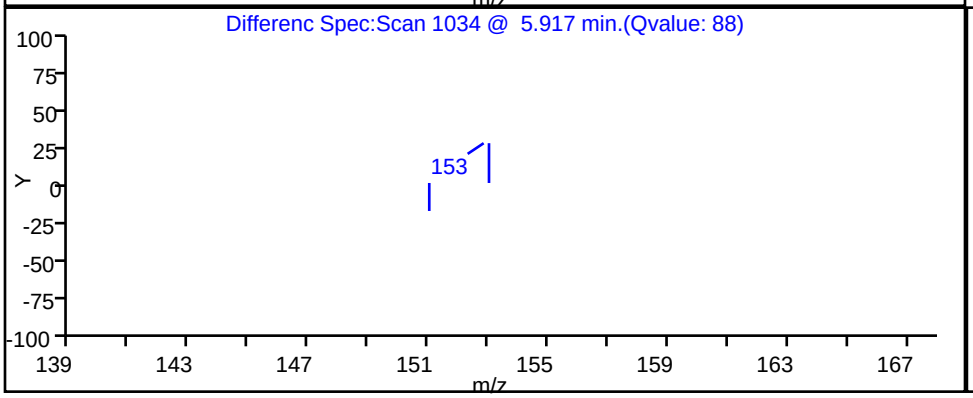


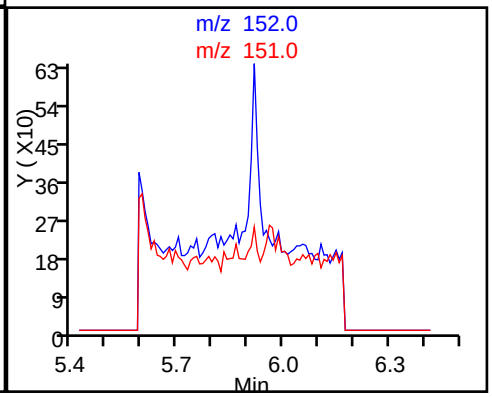












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS05 | Lab Sample ID: 280-97803-10

Matrix: Solid | Lab File ID: G5_1440.D

Analysis Method: 8270D SIM | Date Collected: 05/31/2017 14:30

Extract. Method: 3546 | Date Extracted: 06/05/2017 08:51

Sample wt/vol: 32.1(g) | Date Analyzed: 06/08/2017 14:55

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 13.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 376547 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	79		5.4	0.54	0.28
91-57-6	2-Methylnaphthalene	97		5.4	0.72	0.33
83-32-9	*Acenaphthene*	*250*	*J*	*5.4*	0.29	*0.17*
208-96-8	Acenaphthylene	47		5.4	0.72	0.18
120-12-7	Anthracene	2.7	U	5.4	2.7	0.78
56-55-3	*Benzo[a]anthracene*	*860*	*J*	*5.4*	2.7	*0.97*
50-32-8	*Benzo[a]pyrene*	*720*	*J*	*5.4*	2.7	*0.80*
205-99-2	*Benzo[b]fluoranthene*	*860*	*J*	*5.4*	2.7	*1.3*
191-24-2	*Benzo[g,h,i]perylene*	*330*	*J*	*5.4*	2.7	*1.2*
207-08-9	*Benzo[k]fluoranthene*	*300*	*J*	*5.4*	2.7	*1.1*
218-01-9	*Chrysene*	*800*	*J*	*5.4*	2.7	*1.1*
53-70-3	Dibenz(a,h)anthracene	100		5.4	2.7	1.4
206-44-0	*Fluoranthene*	*3100*	*J*	*5.4*	2.7	*1.1*
86-73-7	*Fluorene*	*570*	*J*	*5.4*	0.72	*0.51*
193-39-5	*Indeno[1,2,3-cd]pyrene*	*420*	*J*	*5.4*	2.7	*1.2*
91-20-3	*Naphthalene*	*250*	*J*	*5.4*	0.72	*0.35*
85-01-8	*Phenanthrene*	*3400*	*J*	*5.4*	2.7	*1.2*
129-00-0	*Pyrene*	*2100*	*J*	*5.4*	2.7	*1.2*

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	65		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	60		44-125
1718-51-0	Terphenyl-d14 (Surr)	85		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1440.D
Lims ID: 280-97803-A-10-B
Client ID: SS025-SS05
Sample Type: Client
Inject. Date: 08-Jun-2017 14:55:30 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-a-10-b
Operator ID: VASQUEZK Instrument ID: SMS_G5

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 11-Jun-2017 22:45:01 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 11-Jun-2017 22:31:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	5.987	5.987	0.000	92	20687	600.0	
* 3 Phenanthrene-d10	188	7.249	7.249	0.000	100	39800	600.0	
* 1 Chrysene-d12	240	11.230	11.224	0.006	13	46289	600.0	
$ 4 Nitrobenzene-d5	82	3.962	3.959	0.003	97	5935	300.5	
$ 5 2-Fluorobiphenyl	172	5.391	5.391	0.000	100	16266	325.7	
$ 6 Terphenyl-d14	244	9.044	9.044	0.000	98	22128	423.9	
43 1,4-Dioxane	88		1.879				ND	
7 N-Nitrosodimethylamine	42		2.004				ND	
15 Naphthalene	128	4.550	4.550	0.000	100	361050	6862.9	E
16 2-Methylnaphthalene	142	5.105	5.105	0.000	99	99834	2711.7	
17 1-Methylnaphthalene	142	5.190	5.190	0.000	97	81733	2210.8	
18 Dimethyl phthalate	163		5.710				ND	
20 Acenaphthylene	152	5.873	5.873	0.000	100	76392	1317.4	
21 Acenaphthene	153	6.015	6.015	0.000	98	274753	6957.7	E
19 Dibenzofuran	168	6.153	6.159	-0.006	95	466651	7397.5	E
22 Diethyl phthalate	149		6.284				ND	
23 Fluorene	166	6.447	6.447	0.000	96	752865	15845	E
24 N-Nitrosodiphenylamine	169		6.522				ND	
25 Phenanthrene	178	7.271	7.271	0.000	98	7226080	95838	Ee
26 Anthracene	178		7.314				ND	
27 Di-n-butyl phthalate	149	7.683	7.683	0.001	93	4893	65.9	
28 Fluoranthene	202	8.550	8.545	0.005	100	8206304	87225	E
29 Pyrene	202	8.881	8.881	0.000	100	5809690	59411	E
30 Butyl benzyl phthalate	149	9.863	9.863	0.000	98	12676	417.3	
31 Bis(2-ethylhexyl) phthalat	149	11.127	11.127	0.000	79	7288	166.6	
32 Benzo[a]anthracene	228	11.203	11.197	0.006	97	2280352	23923	E
33 Chrysene	228	11.295	11.290	0.005	100	2176098	22171	E
34 Di-n-octyl phthalate	149		13.028				ND	
35 Benzo[b]fluoranthene	252	14.287	14.276	0.011	99	2129860	23994	E
36 Benzo[k]fluoranthene	252	14.365	14.361	0.004	99	762028	8442.7	E
37 Benzo[a]pyrene	252	15.345	15.333	0.012	98	1579716	20042	E
39 Indeno[1,2,3-cd]pyrene	276	18.506	18.502	0.004	99	893892	11668	E

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
	38 Dibenz(a,h)anthracene	278	18.543	18.543	0.000	96	219485	2774.3	
	40 Benzo[g,h,i]perylene	276	18.931	18.924	0.007	99	810931	9276.0	E
	8 Morpholine	1		0.000				ND	
	44 Benzidine	184		0.000				ND	
	42 Pentachlorophenol	266		0.000				ND	
	9 Pentachlorophenol_T	266		4.285				ND	
	10 DFTPP								
	11 Benzidine_T	184		5.387				ND	
	13 4,4'-DDD	235		5.777				ND	
	12 4,4'-DDE	246		5.932				ND	
	14 4,4'-DDT	235		5.970				ND	
S	41 TPAH	1		0.000				ND	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

e - Potential Peak Saturated

Reagents:

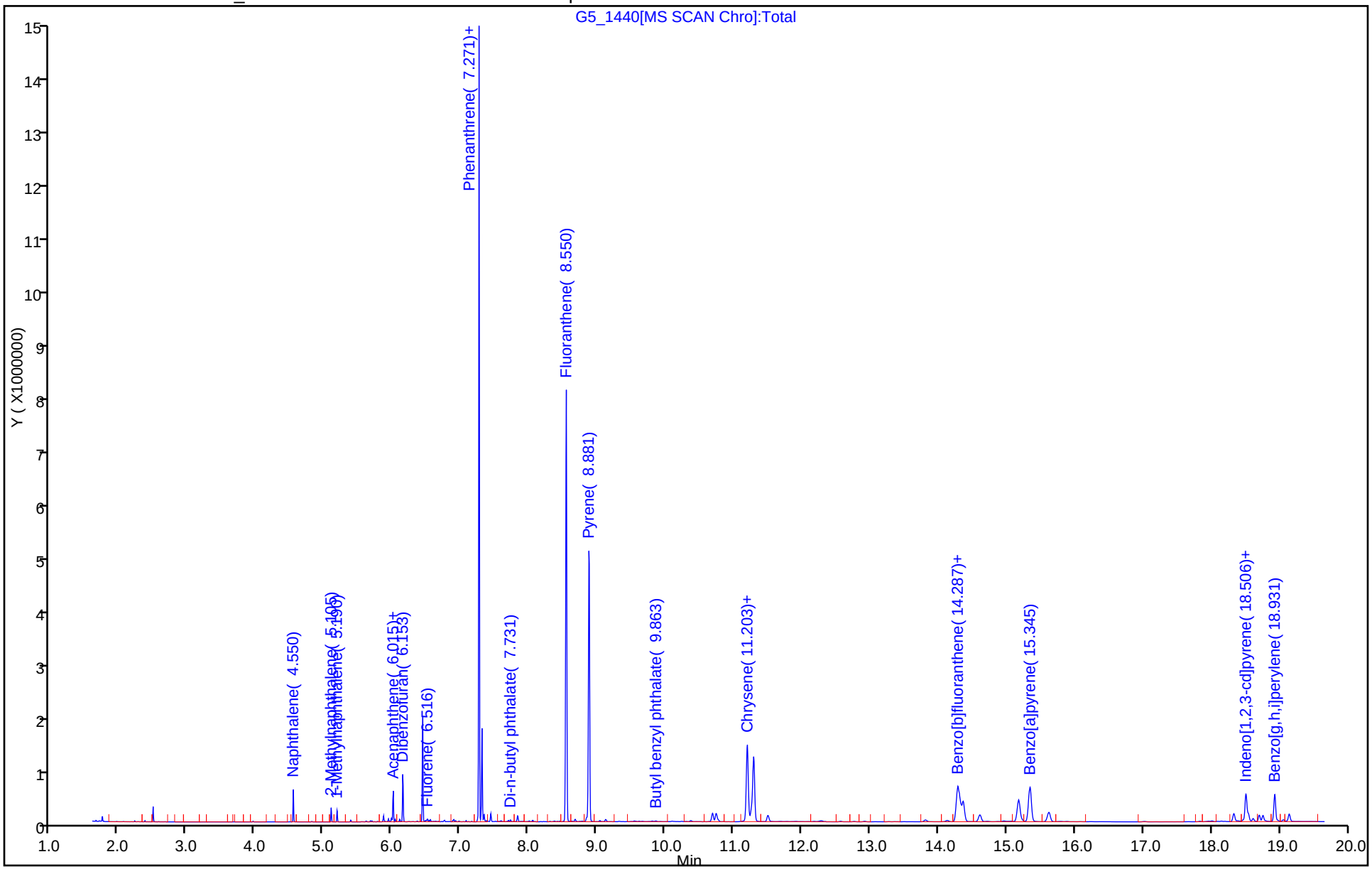
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 11-Jun-2017 22:45:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1440.D

Injection Date:	08-Jun-2017 14:55:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10	Worklist Smp#:	14
Client ID:	SS025-SS05				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1440.D
Lims ID: 280-97803-A-10-B
Client ID: SS025-SS05
Sample Type: Client
Inject. Date: 08-Jun-2017 14:55:30 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-a-10-b
Operator ID: VASQUEZK Instrument ID: SMS_G5

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 11-Jun-2017 22:45:01 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 11-Jun-2017 22:31:54

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	300.5	60.10
$ 5 2-Fluorobiphenyl	500.0	325.7	65.14
$ 6 Terphenyl-d14	500.0	423.9	84.77

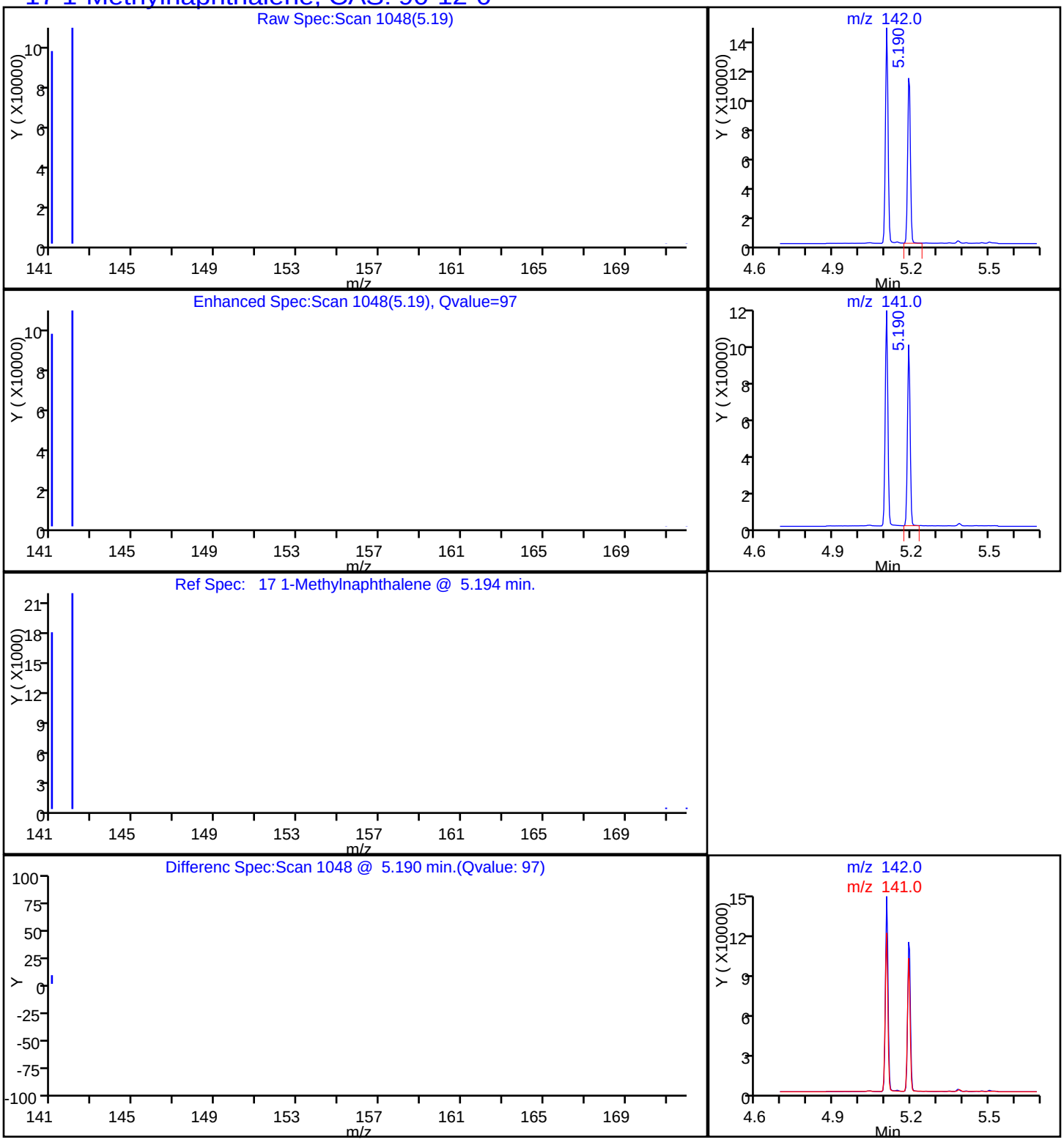
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1440.D

Injection Date:	08-Jun-2017 14:55:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0



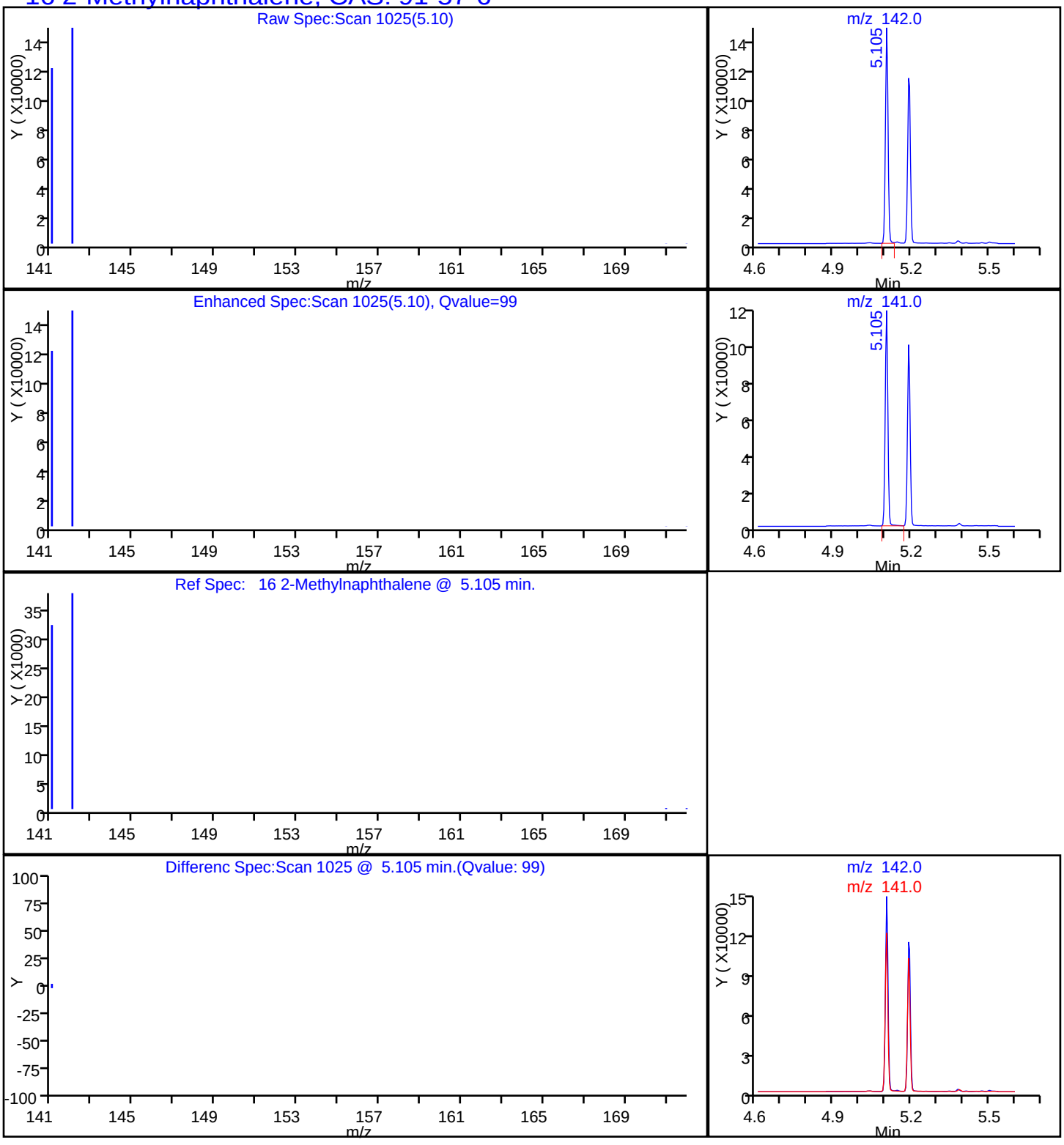
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1440.D

Injection Date:	08-Jun-2017 14:55:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



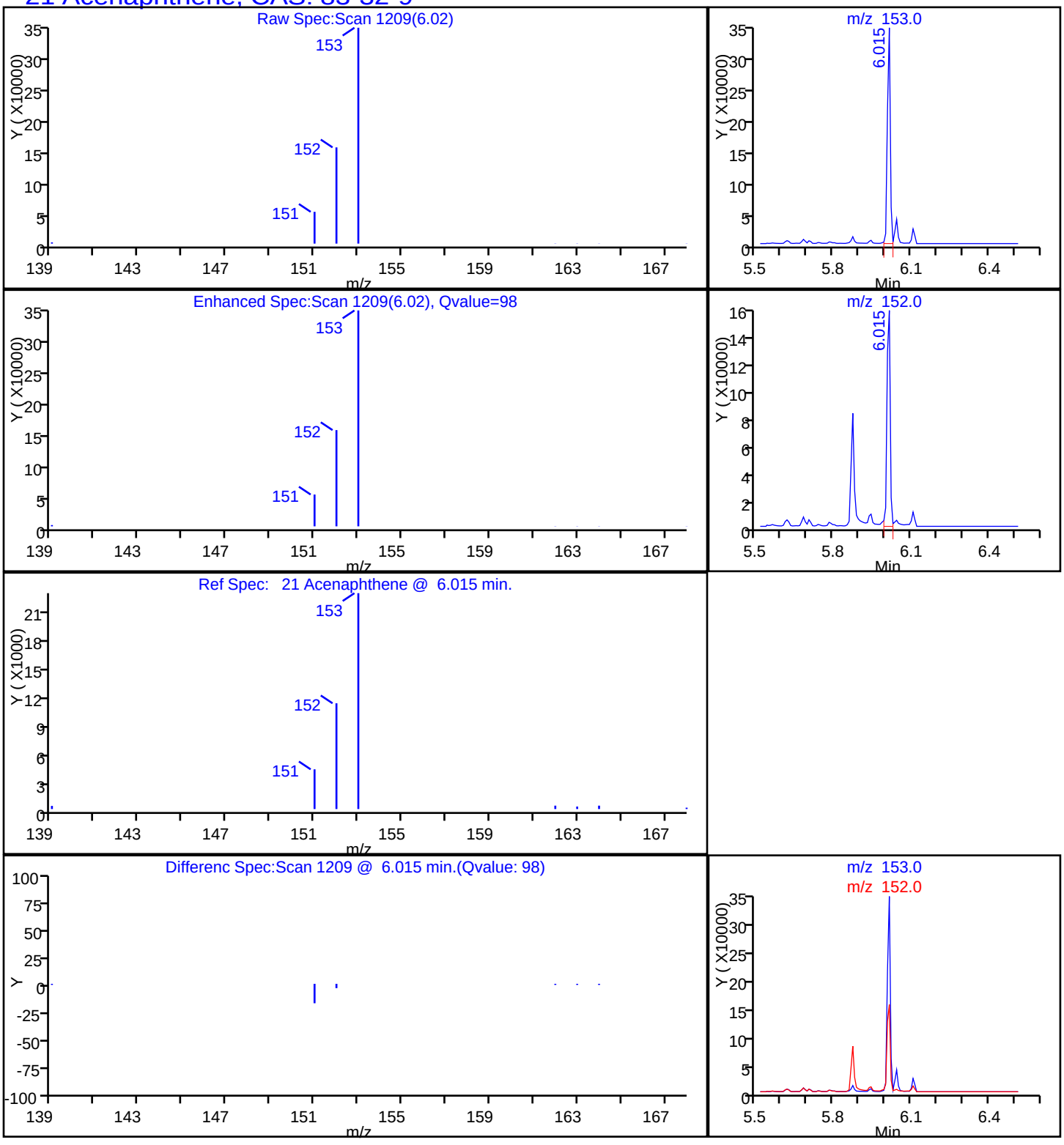
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1440.D

Injection Date:	08-Jun-2017 14:55:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

21 Acenaphthene, CAS: 83-32-9



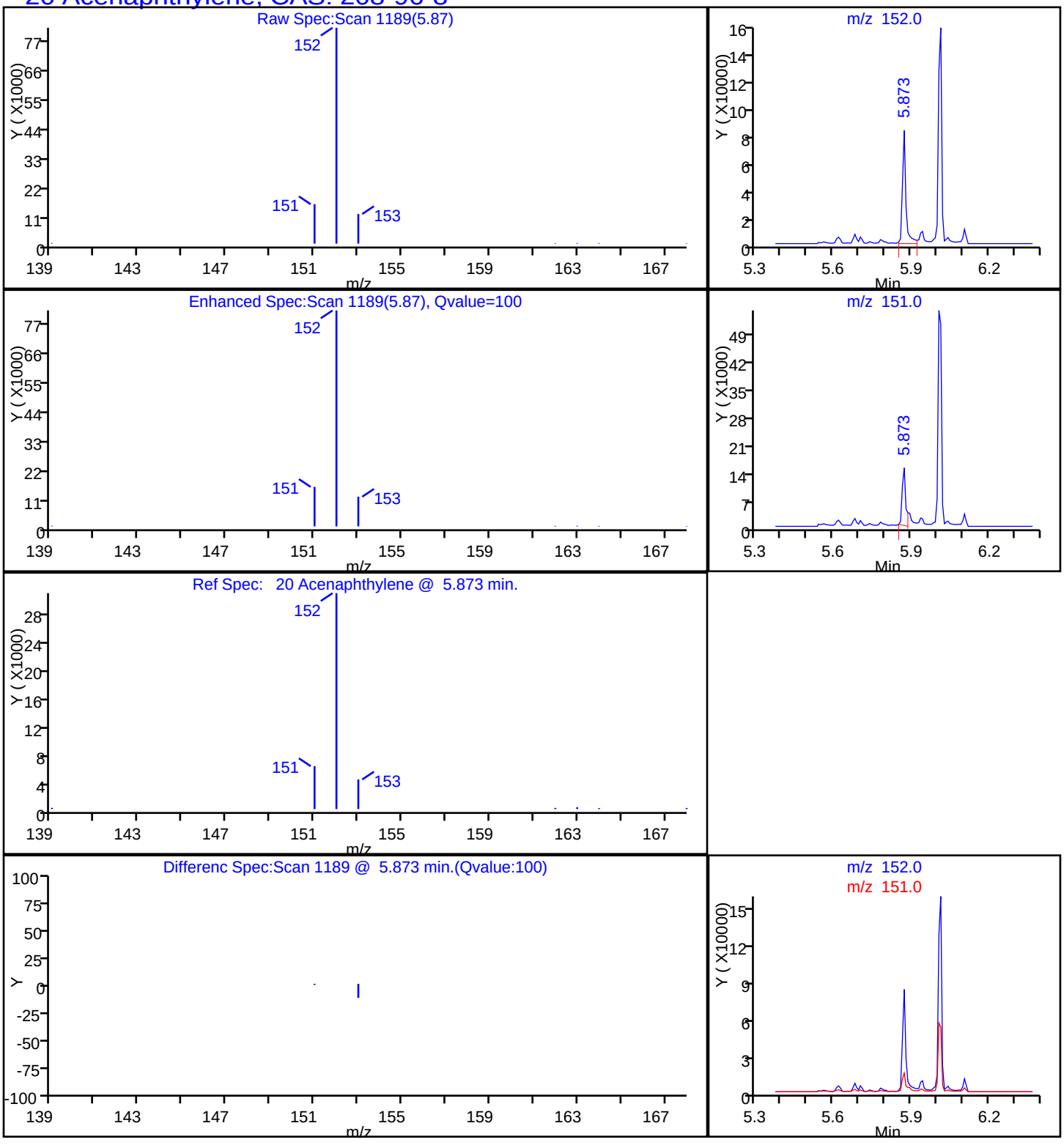
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1440.D

Injection Date:	08-Jun-2017 14:55:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

20 Acenaphthylene, CAS: 208-96-8



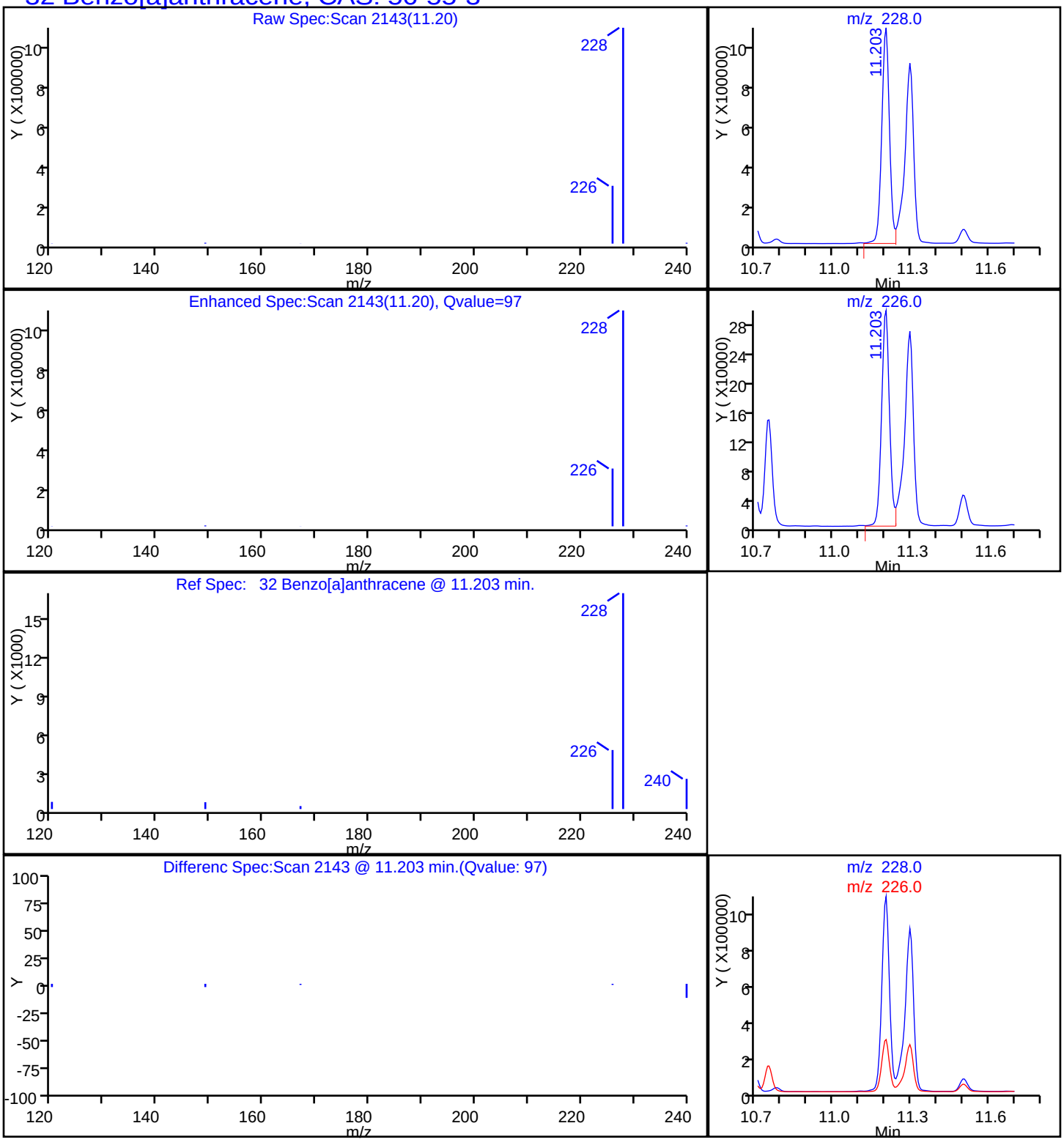
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1440.D

Injection Date:	08-Jun-2017 14:55:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Benzo[a]anthracene, CAS: 56-55-3



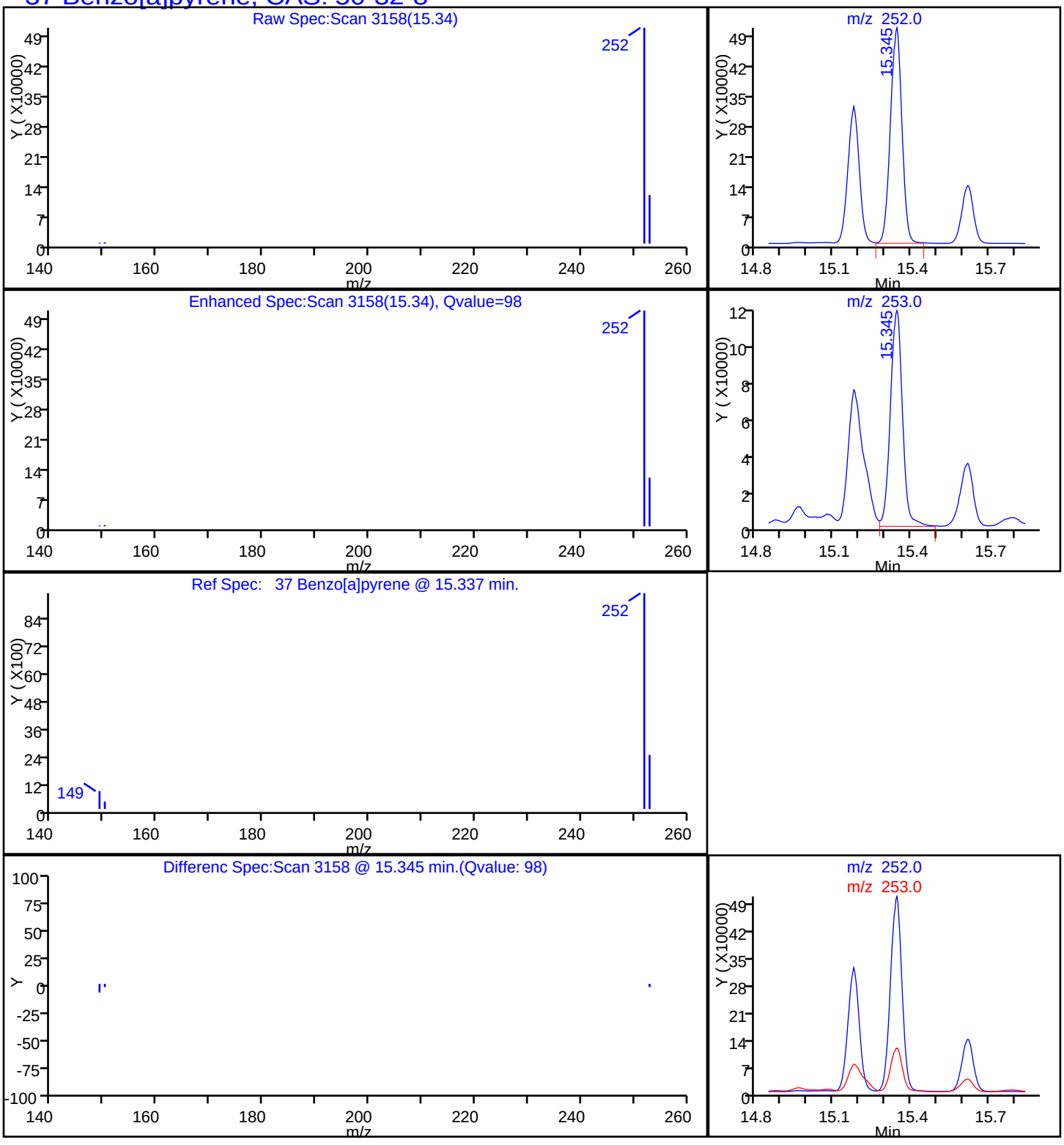
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1440.D

Injection Date:	08-Jun-2017 14:55:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

37 Benzo[a]pyrene, CAS: 50-32-8



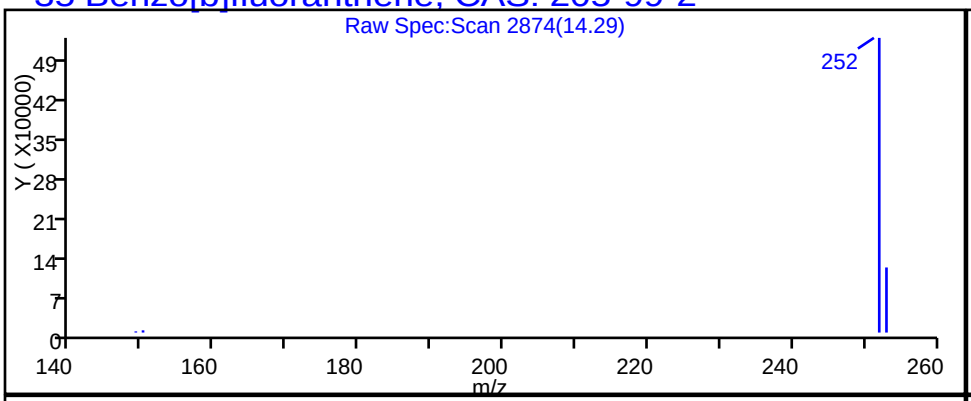
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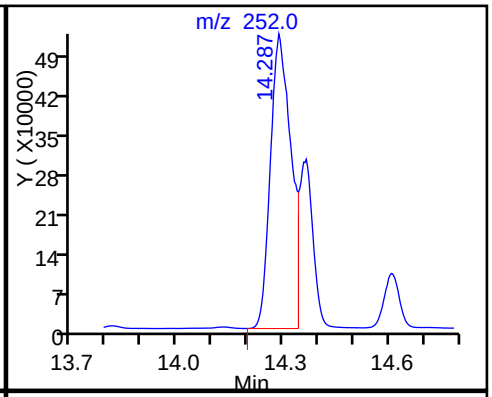
TestAmerica Denver

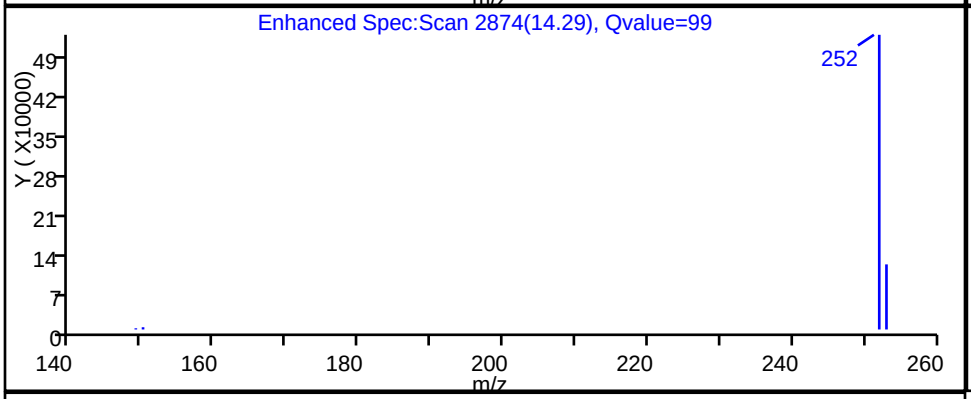
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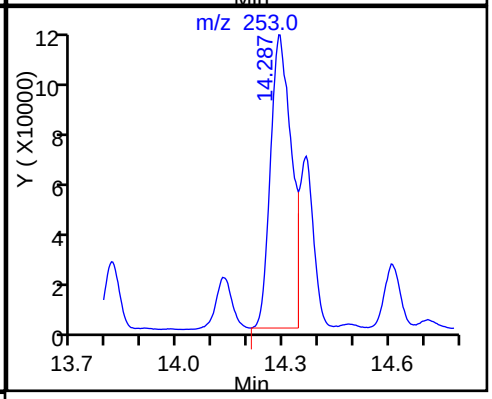
Injection Date:	08-Jun-2017 14:55:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

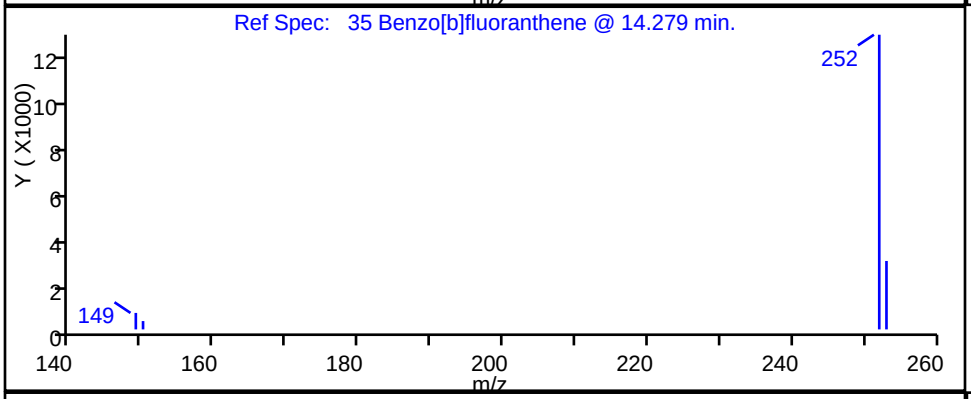
35 Benzo[b]fluoranthene, CAS: 205-99-2

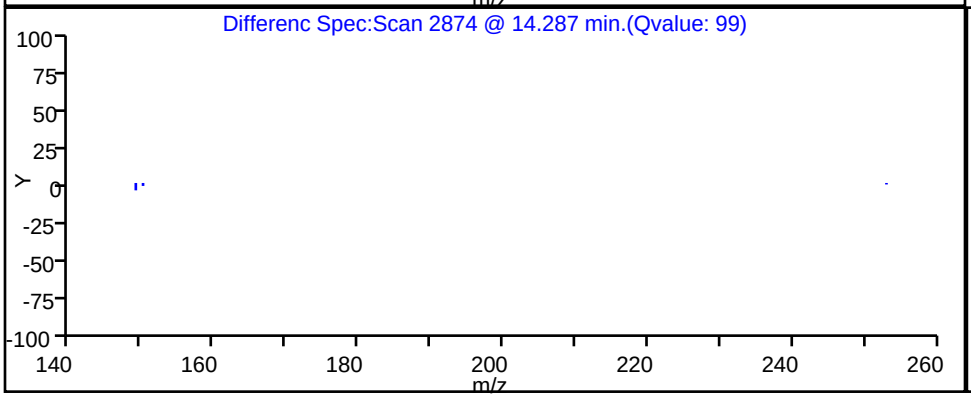


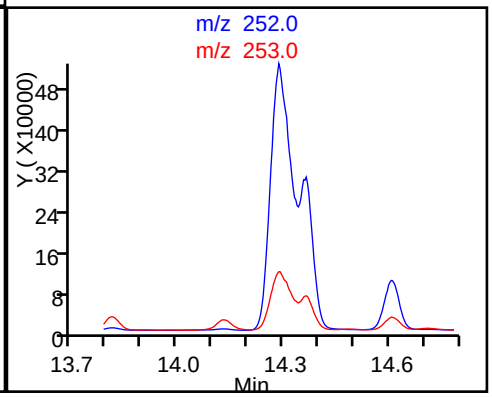










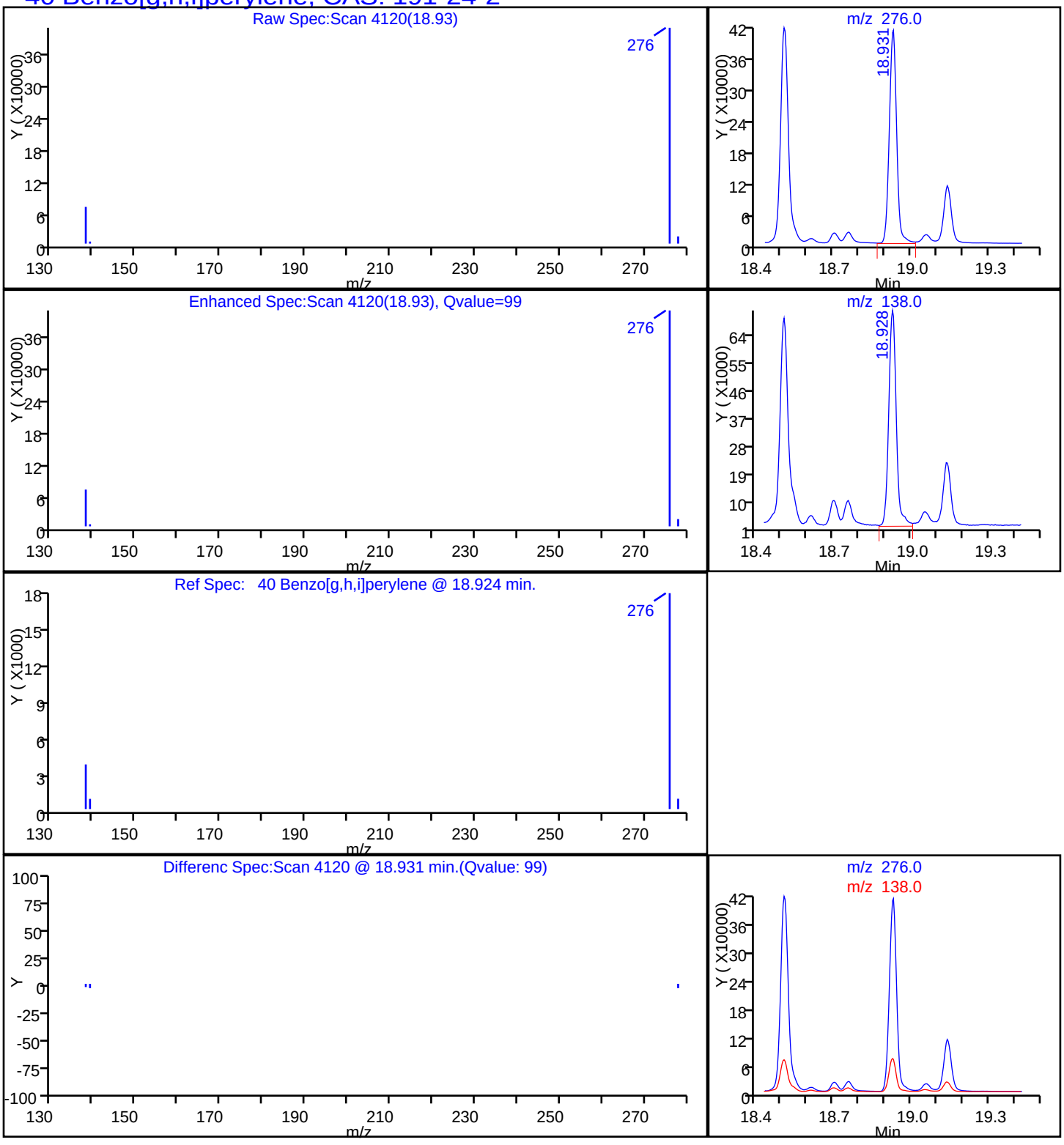


Report Date: 11-Jun-2017 22:45:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1440.D				
Injection Date:	08-Jun-2017 14:55:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

40 Benzo[g,h,i]perylene, CAS: 191-24-2



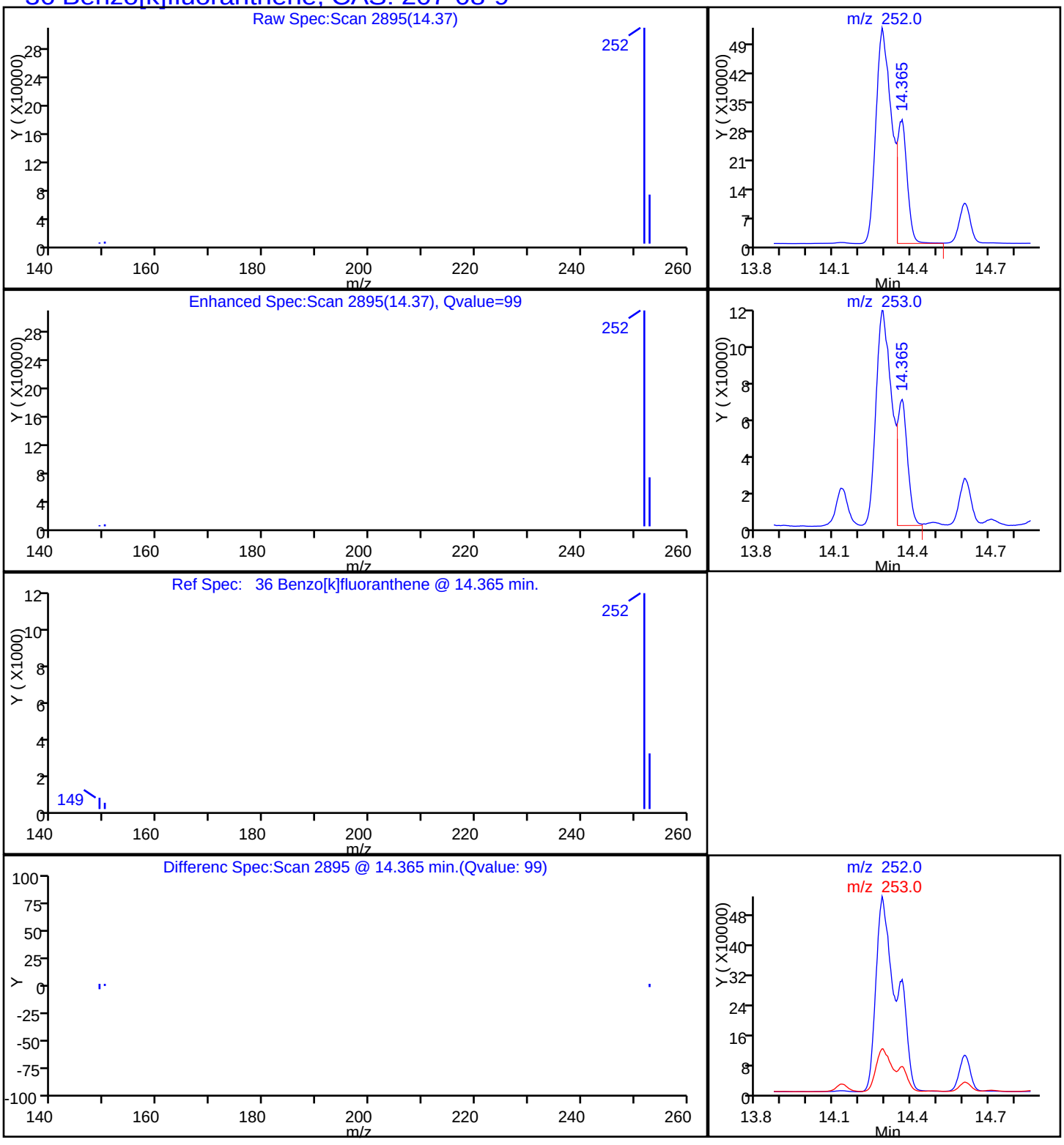
Report Date: 11-Jun-2017 22:45:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1440.D

Injection Date:	08-Jun-2017 14:55:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Benzo[k]fluoranthene, CAS: 207-08-9



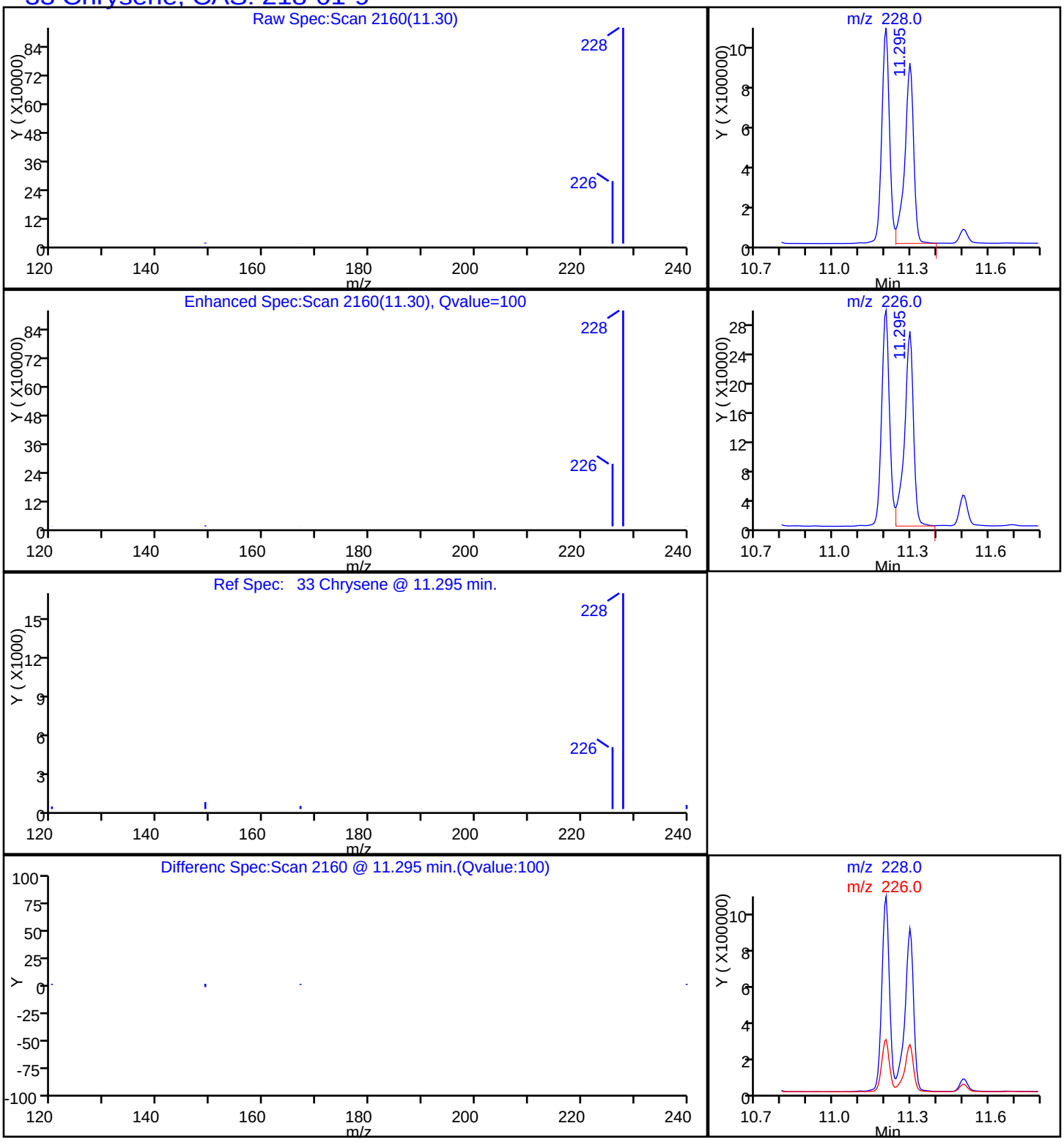
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1440.D

Injection Date:	08-Jun-2017 14:55:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

33 Chrysene, CAS: 218-01-9



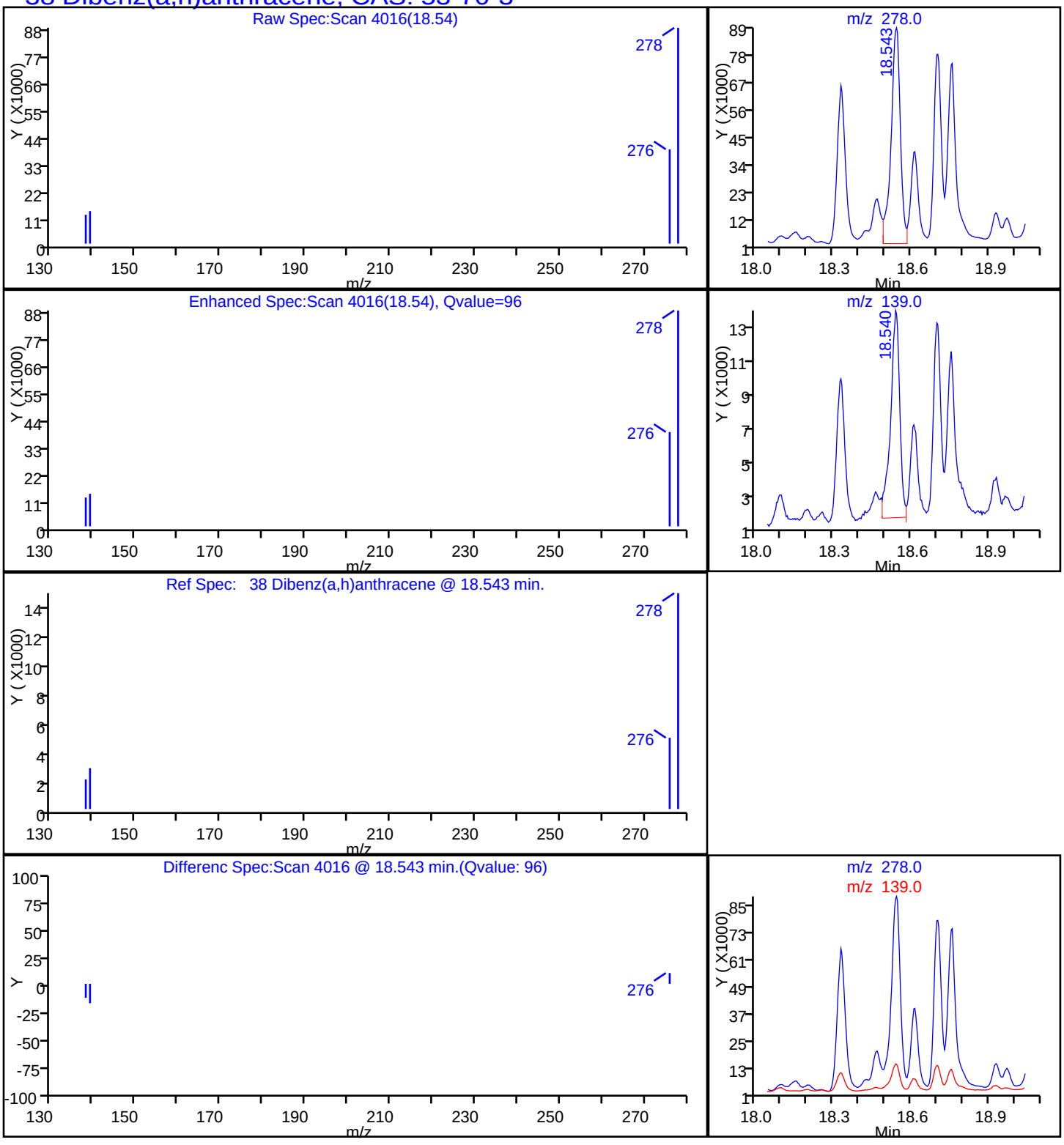
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1440.D

Injection Date:	08-Jun-2017 14:55:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Dibenz(a,h)anthracene, CAS: 53-70-3



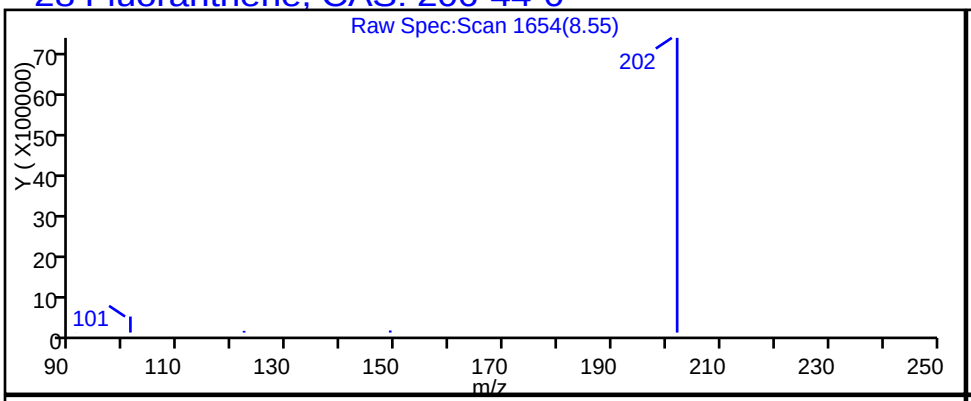
Report Date: 11-Jun-2017 22:45:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

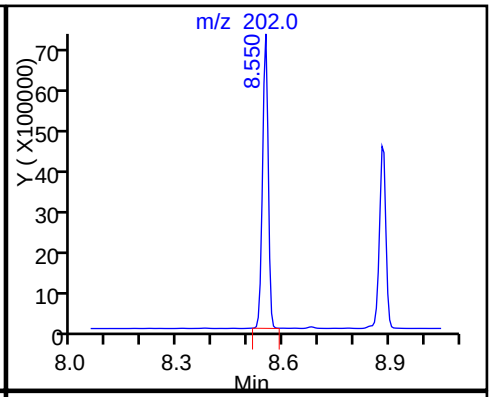
TestAmerica Denver

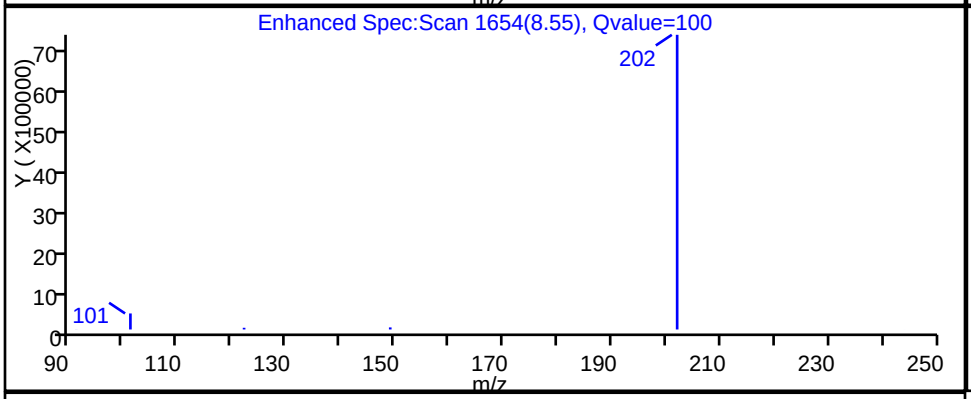
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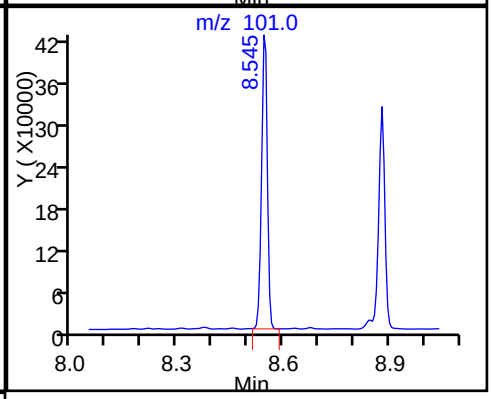
Injection Date:	08-Jun-2017 14:55:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

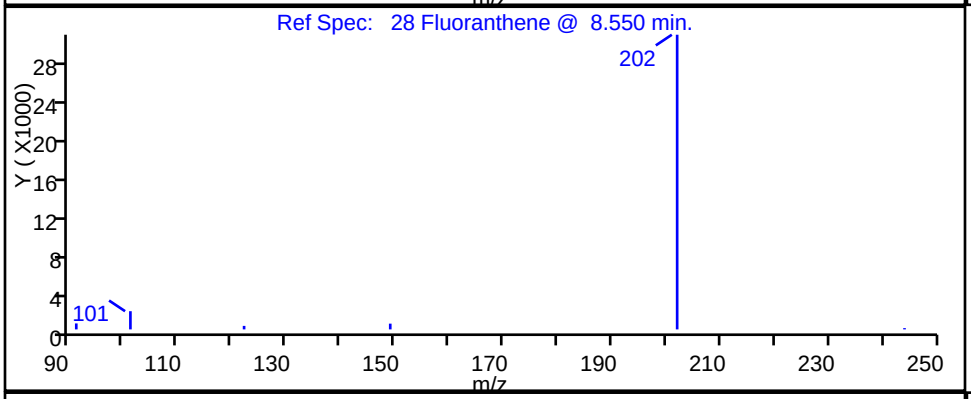
28 Fluoranthene, CAS: 206-44-0

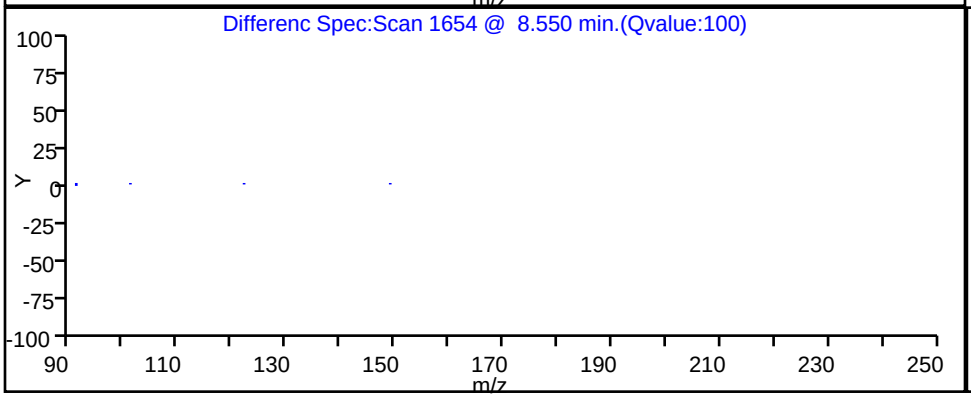


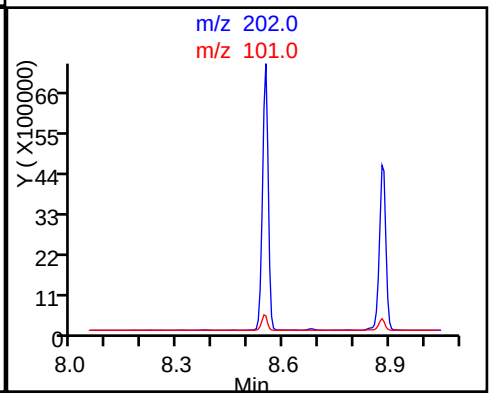












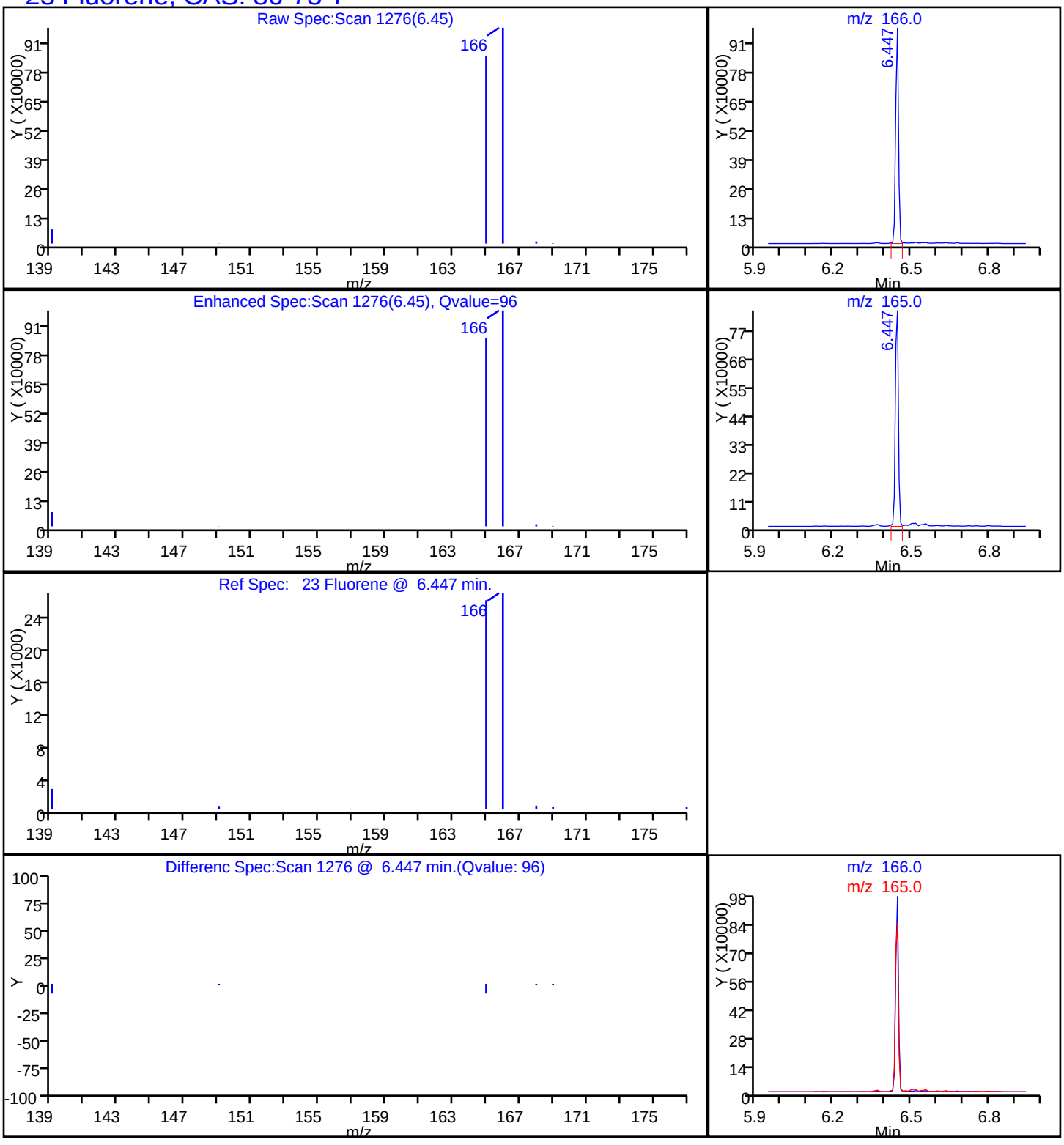
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1440.D

Injection Date:	08-Jun-2017 14:55:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Fluorene, CAS: 86-73-7



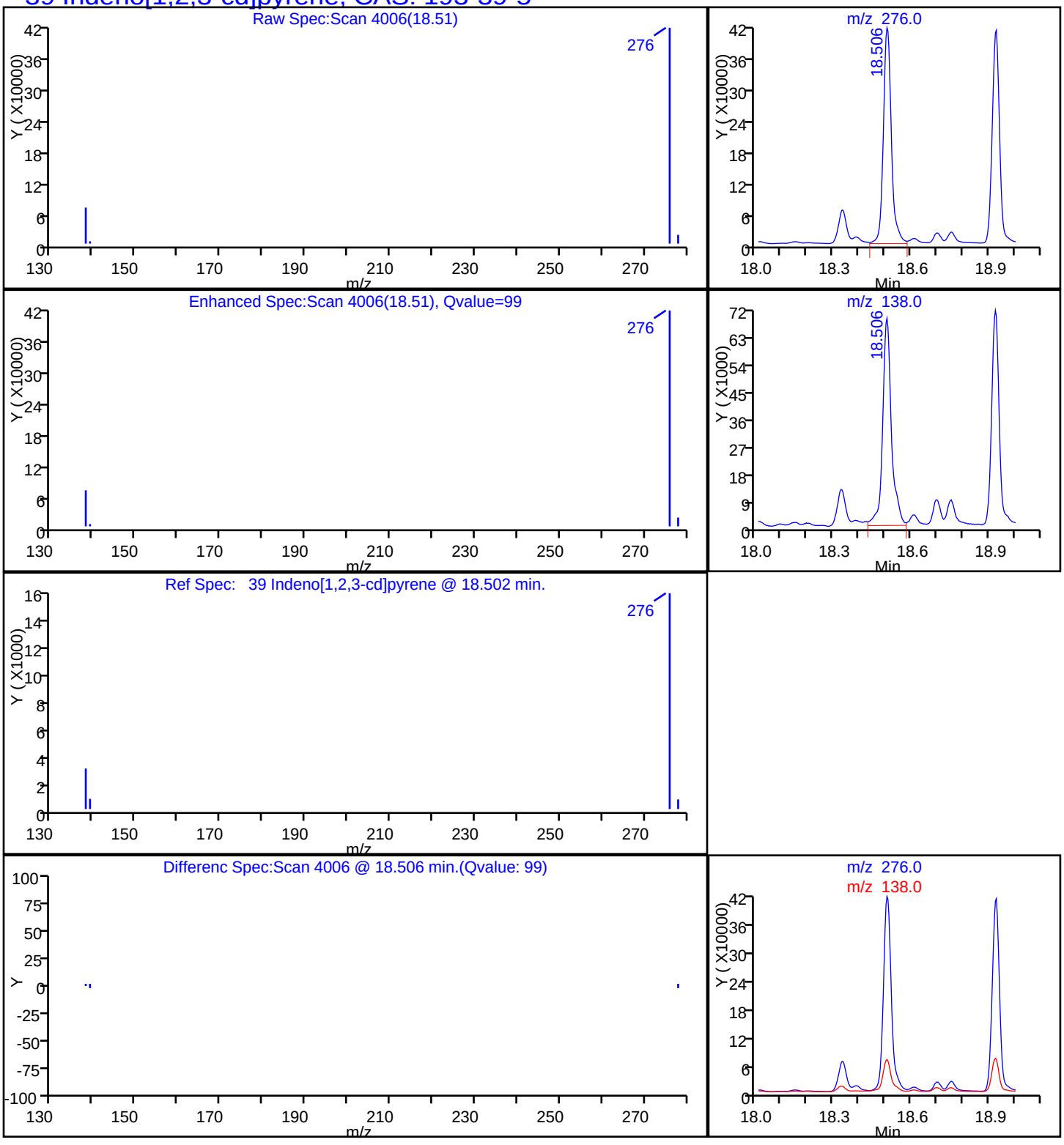
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1440.D

Injection Date:	08-Jun-2017 14:55:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



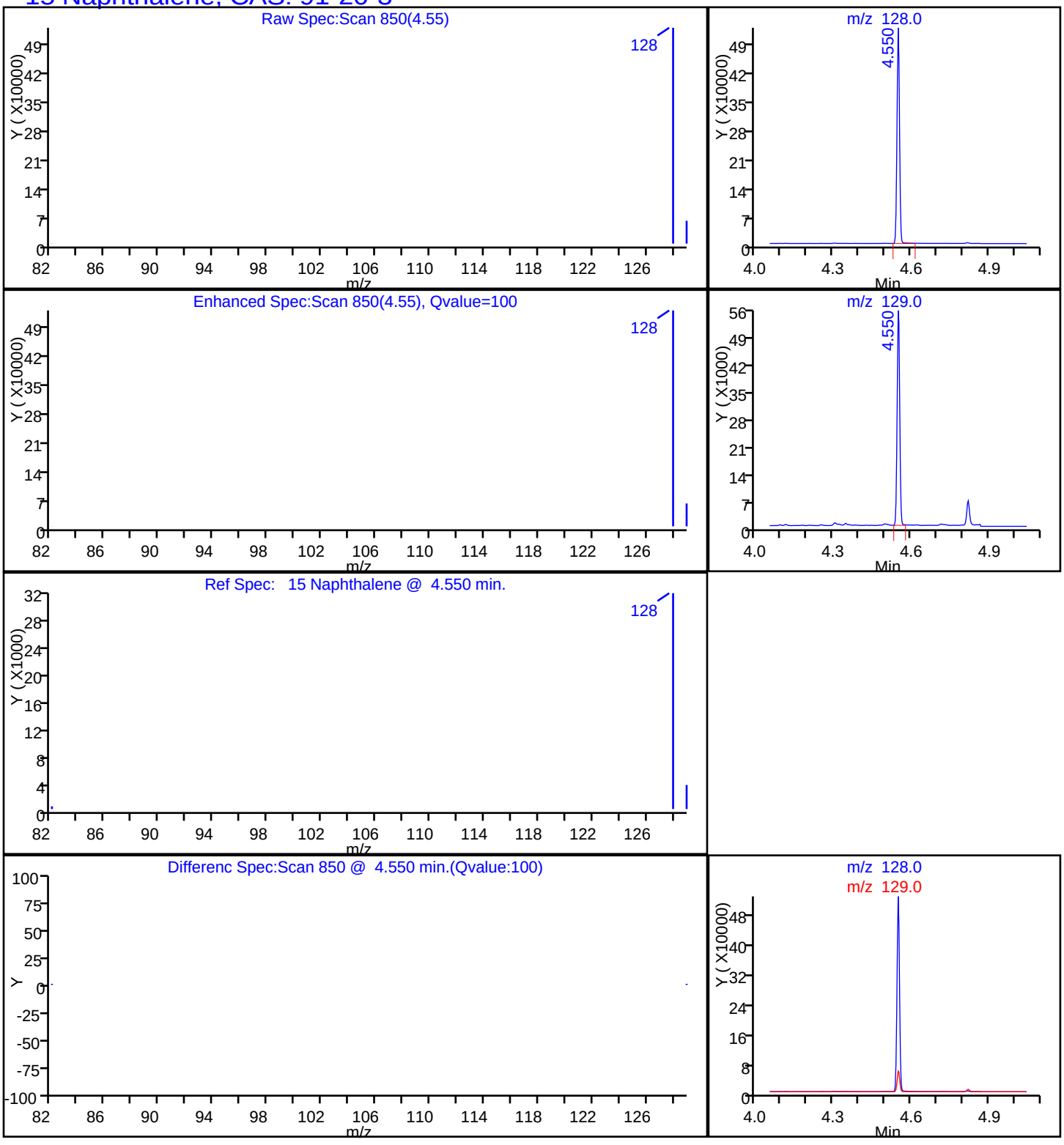
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TestAmerica Denver

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Injection Date:	08-Jun-2017 14:55:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

15 Naphthalene, CAS: 91-20-3



Report Date: 11-Jun-2017 22:45:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

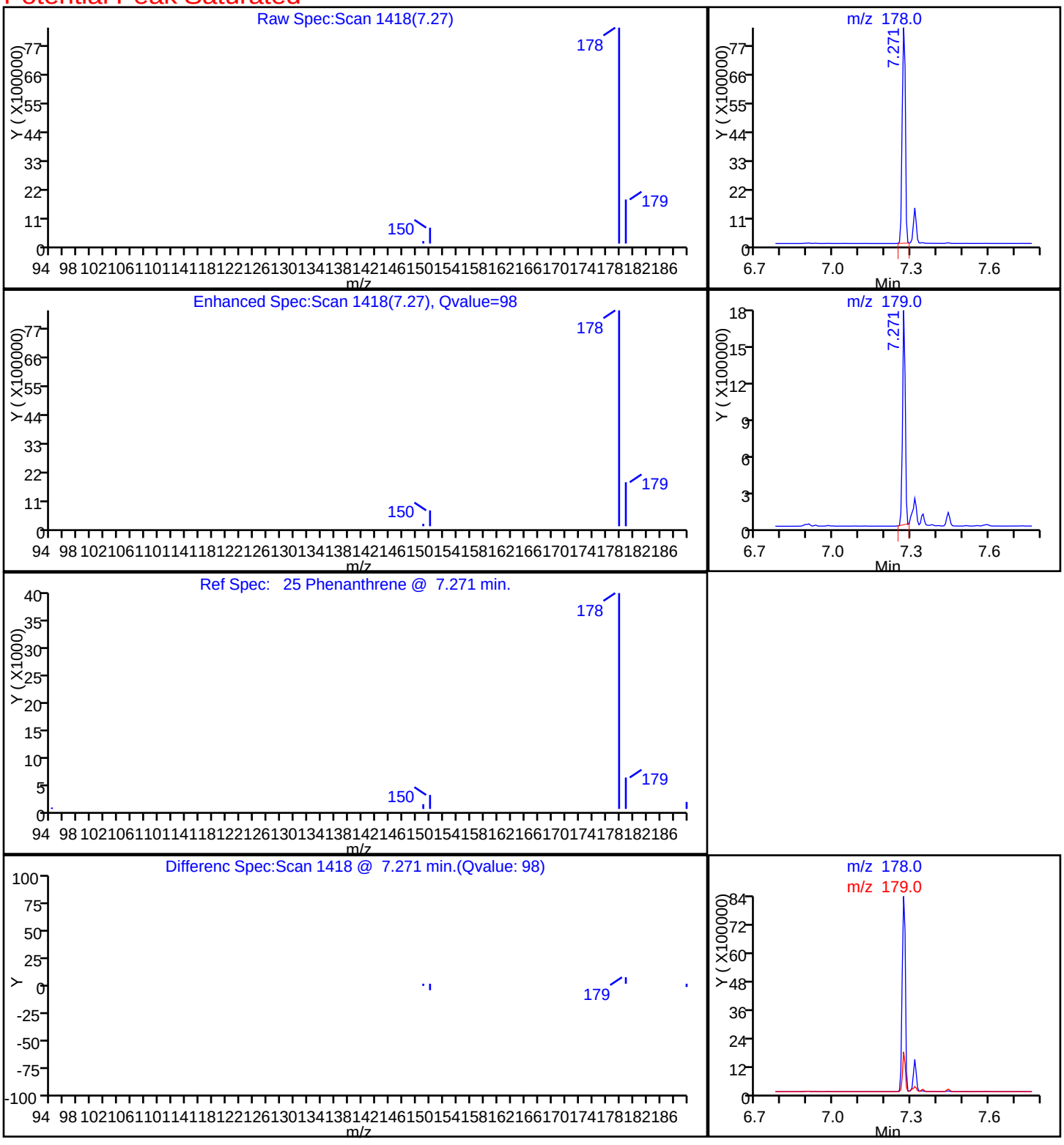
TestAmerica Denver

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Injection Date:	08-Jun-2017 14:55:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Phenanthrene, CAS: 85-01-8

Potential Peak Saturated



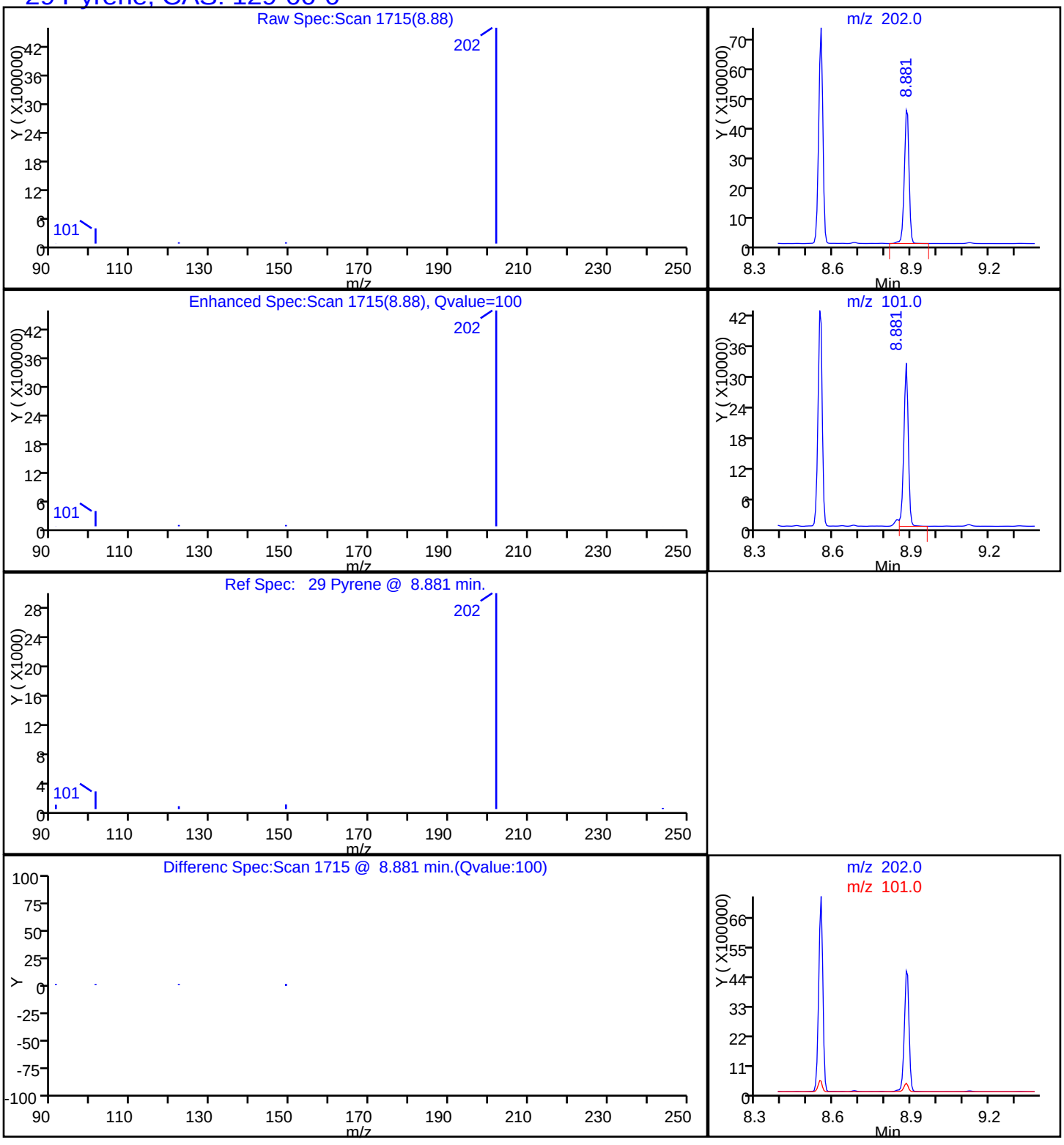
Report Date: 11-Jun-2017 22:45:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1440.D

Injection Date:	08-Jun-2017 14:55:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

29 Pyrene, CAS: 129-00-0



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS05 DL | Lab Sample ID: 280-97803-10 DL

Matrix: Solid | Lab File ID: F7138.D

Analysis Method: 8270D SIM | Date Collected: 05/31/2017 14:30

Extract. Method: 3546 | Date Extracted: 06/05/2017 08:51

Sample wt/vol: 32.1(g) | Date Analyzed: 06/12/2017 20:51

Con. Extract Vol.: 1(mL) | Dilution Factor: 40

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 13.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 376943 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	*1-Methylnaphthalene*	*75*	*J D Q*	*220*	22	*11*
91-57-6	*2-Methylnaphthalene*	*93*	*J D Q*	*220*	29	*13*
83-32-9	Acenaphthene	270	D Q	220	11	6.9
208-96-8	*Acenaphthylene*	*94*	*J D Q*	*220*	29	*7.3*
120-12-7	*Anthracene*	*580*	*D Q*	*220*	110	*31*
56-55-3	Benzo[a]anthracene	770	D Q	220	110	39
50-32-8	Benzo[a]pyrene	590	D Q	220	110	32
205-99-2	Benzo[b]fluoranthene	760	D Q	220	110	52
191-24-2	Benzo[g,h,i]perylene	320	D Q	220	110	47
207-08-9	Benzo[k]fluoranthene	330	D Q	220	110	43
218-01-9	Chrysene	820	D Q	220	110	43
53-70-3	*Dibenz(a,h)anthracene*	*92*	*J D Q*	*220*	110	*56*
206-44-0	Fluoranthene	2500	D Q	220	110	43
86-73-7	Fluorene	600	D Q	220	29	20
193-39-5	Indeno[1,2,3-cd]pyrene	310	D Q	220	110	47
91-20-3	Naphthalene	240	D Q	220	29	14
85-01-8	Phenanthrene	3000	D Q	220	110	47
129-00-0	Pyrene	1700	D Q	220	110	47

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	0	D Q	46-115
4165-60-0	Nitrobenzene-d5 (Surr)	0	D Q	44-125
1718-51-0	Terphenyl-d14 (Surr)	0	D Q	58-133

Report Date: 13-Jun-2017 07:13:21 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7138.D
Lims ID: 280-97803-A-10-B
Client ID: SS025-SS05
Sample Type: Client
Inject. Date: 12-Jun-2017 20:51:30 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 40.0000
Sample Info: 280-97803-a-10-b
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 13-Jun-2017 07:13:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: vasquezk Date: 13-Jun-2017 07:03:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.038	-0.009	91	26396	600.0	
* 2 Phenanthrene-d10	188	7.301	7.307	-0.006	99	51795	600.0	
* 3 Chrysene-d12	240	11.371	11.385	-0.014	99	45693	600.0	
$ 4 Nitrobenzene-d5	82		4.001				ND	
$ 5 2-Fluorobiphenyl	172		5.436				ND	
$ 6 Terphenyl-d14	244		9.136				ND	
14 Naphthalene	128	4.589	4.589	0.000	100	14352	167.7	
16 2-Methylnaphthalene	142	5.151	5.147	0.004	99	3556	64.6	
17 1-Methylnaphthalene	142	5.234	5.234	0.000	99	2895	52.5	
22 Acenaphthylene	152	5.917	5.917	0.000	99	5971	65.6	
23 Acenaphthene	153	6.055	6.055	0.000	99	10358	186.1	
25 Fluorene	166	6.494	6.494	0.000	92	28394	415.7	
27 Phenanthrene	178	7.321	7.326	-0.005	100	229983	2093.6	
28 Anthracene	178	7.366	7.372	-0.006	99	44511	401.3	
30 Fluoranthene	202	8.623	8.634	-0.011	100	217377	1722.9	
31 Pyrene	202	8.968	8.973	-0.005	99	158258	1209.5	
35 Benzo[a]anthracene	228	11.335	11.349	-0.014	98	65025	535.1	
36 Chrysene	228	11.434	11.448	-0.014	100	64105	570.2	
38 Benzo[b]fluoranthene	252	14.494	14.508	-0.014	100	58609	531.2	
39 Benzo[k]fluoranthene	252	14.573	14.591	-0.018	100	25679	231.4	
40 Benzo[a]pyrene	252	15.570	15.592	-0.022	100	44502	408.7	
41 Indeno[1,2,3-cd]pyrene	276	18.667	18.672	-0.005	81	26779	216.8	
42 Dibenz(a,h)anthracene	278	18.693	18.707	-0.014	83	6200	64.3	
43 Benzo[g,h,i]perylene	276	19.100	19.109	-0.009	100	23711	226.3	

Reagents:

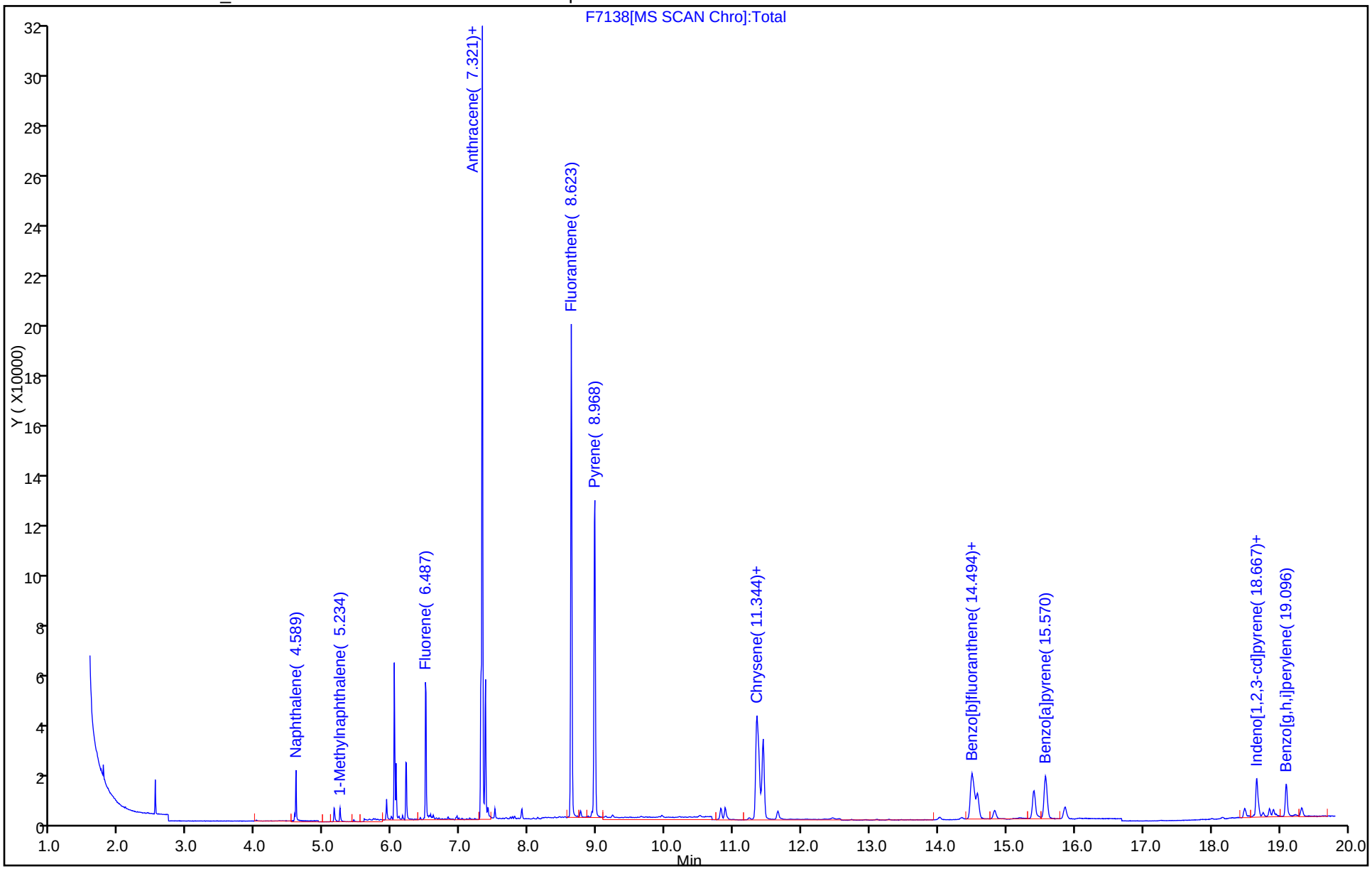
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 13-Jun-2017 07:13:21 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7138.D

Injection Date:	12-Jun-2017 20:51:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10	Worklist Smp#:	17
Client ID:	SS025-SS05				
Injection Vol:	1.0 ul	Dil. Factor:	40.0000	ALS Bottle#:	17
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		

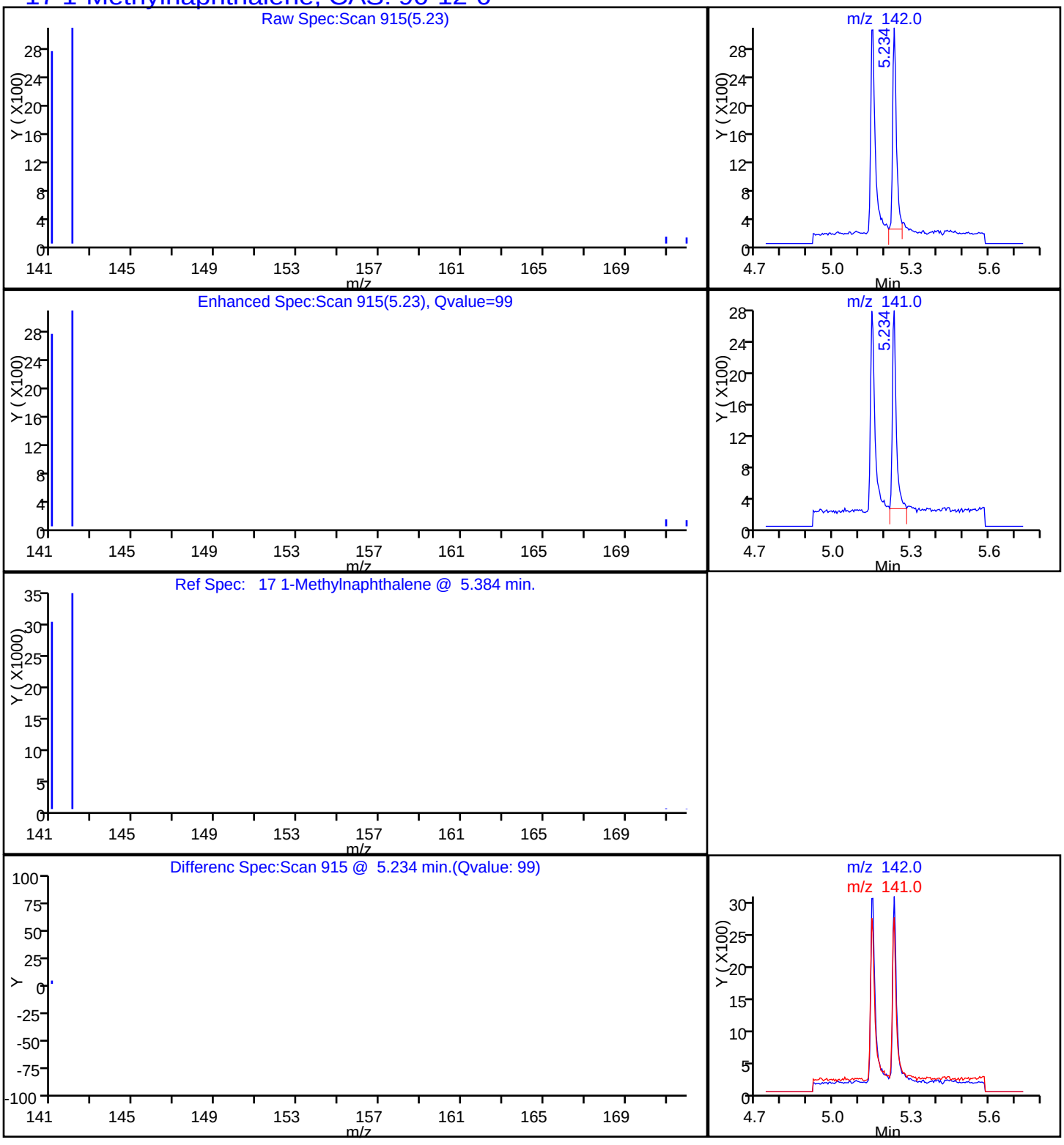


Report Date: 13-Jun-2017 07:13:21 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7138.D				
Injection Date:	12-Jun-2017 20:51:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	40.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0



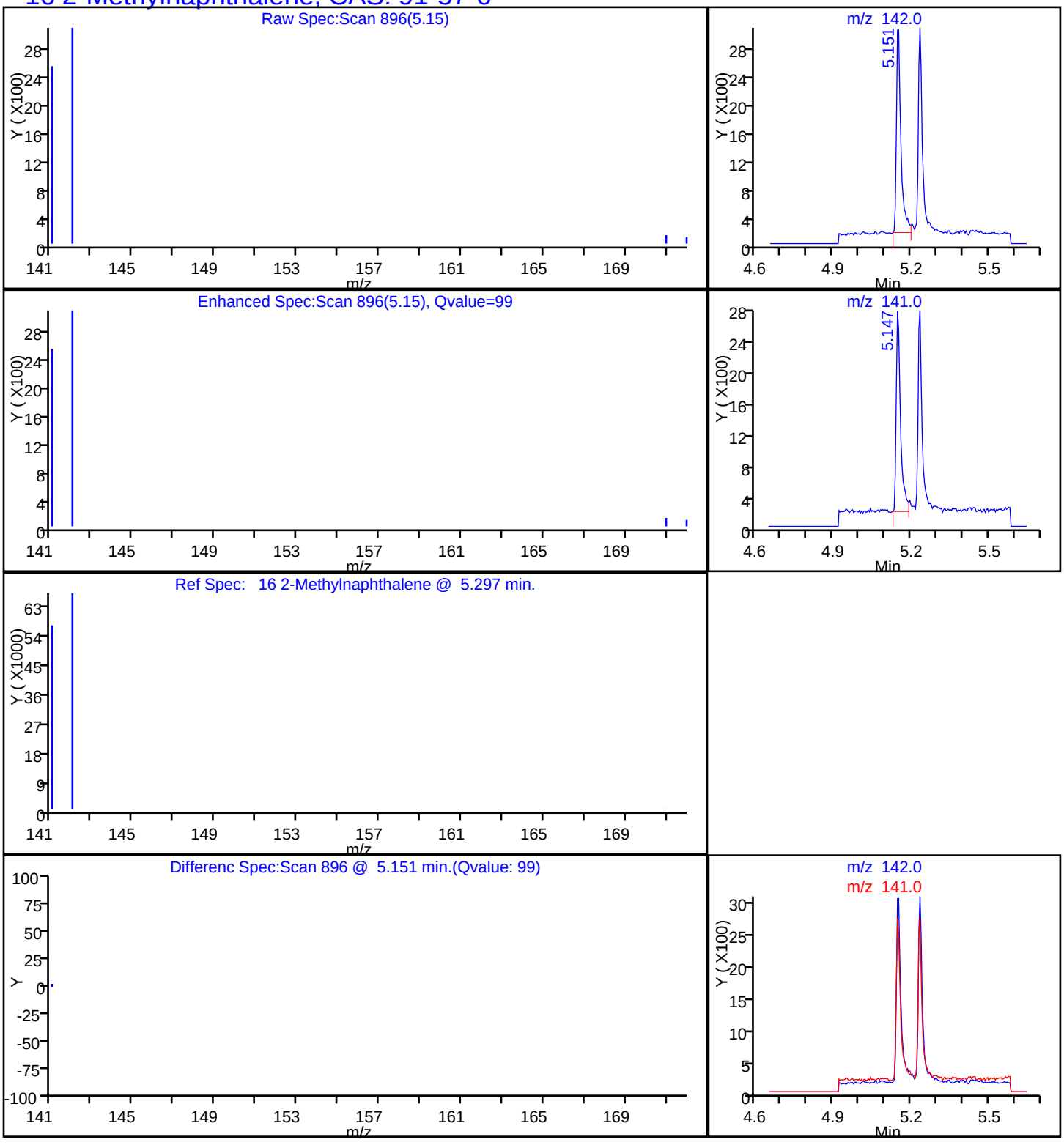
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7138.D

Injection Date:	12-Jun-2017 20:51:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	40.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



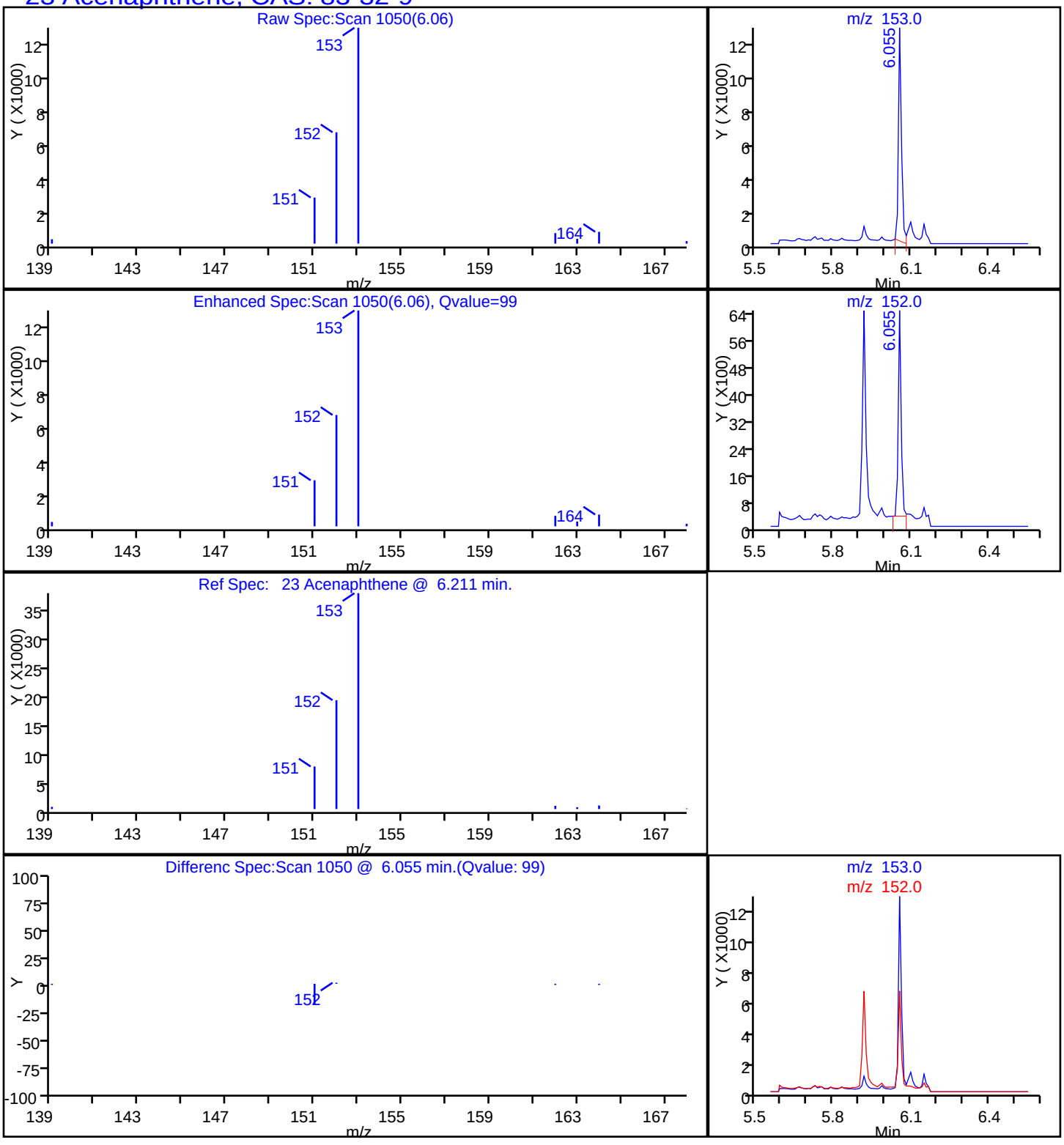
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7138.D

Injection Date:	12-Jun-2017 20:51:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	40.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9



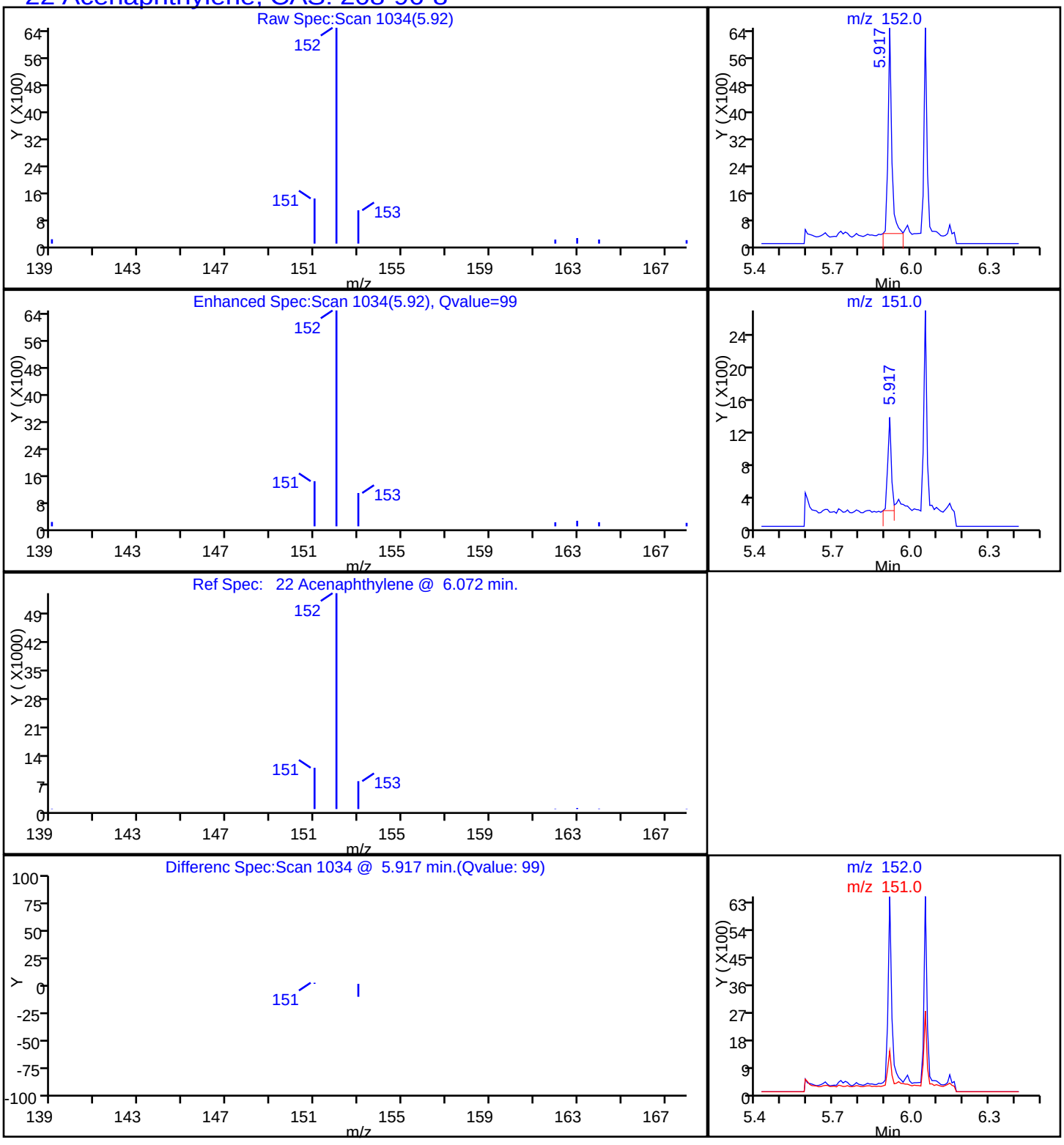
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7138.D

Injection Date:	12-Jun-2017 20:51:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	40.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Acenaphthylene, CAS: 208-96-8

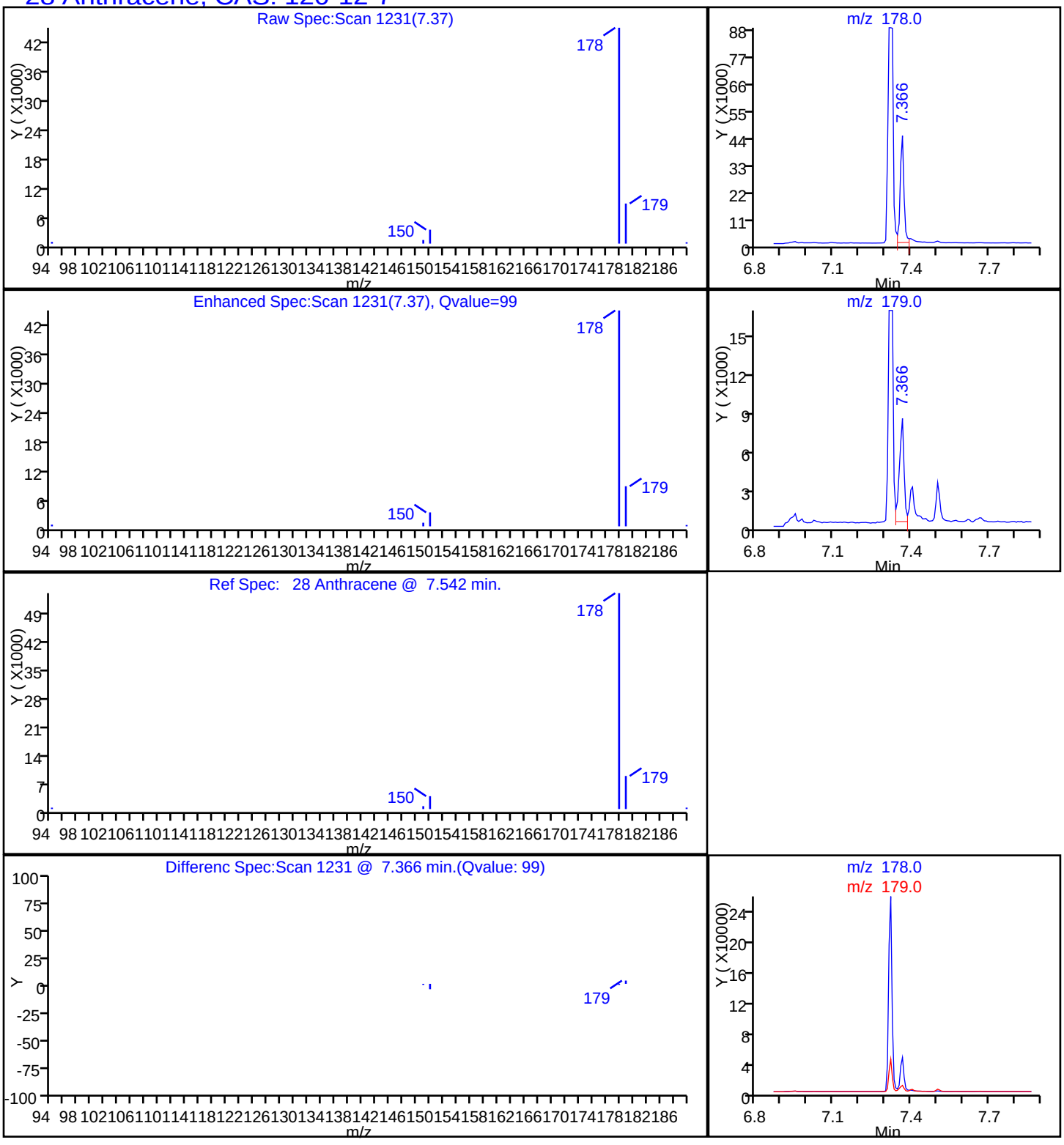


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TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7138.D				
Injection Date:	12-Jun-2017 20:51:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	40.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

28 Anthracene, CAS: 120-12-7

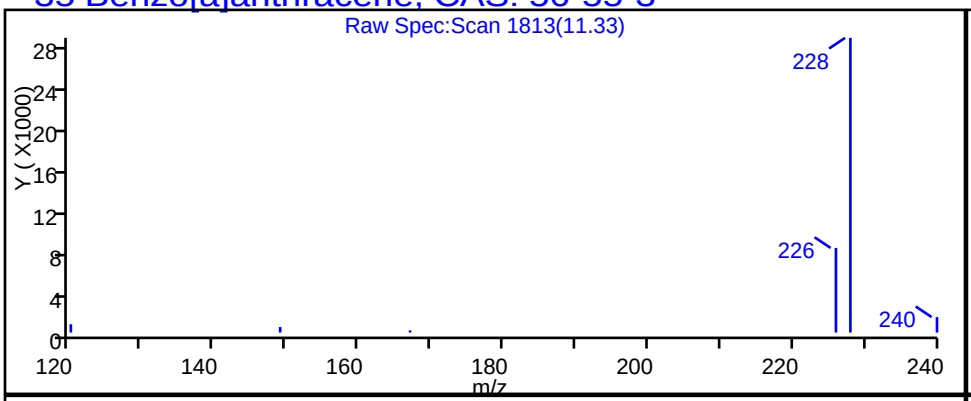


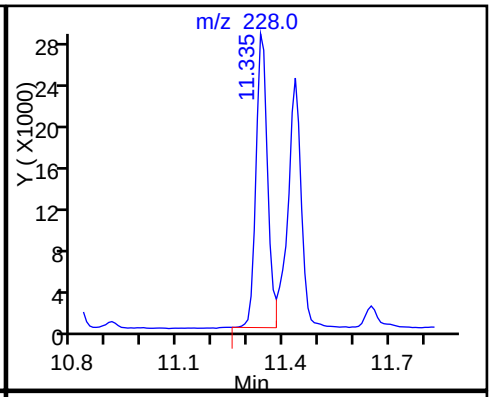
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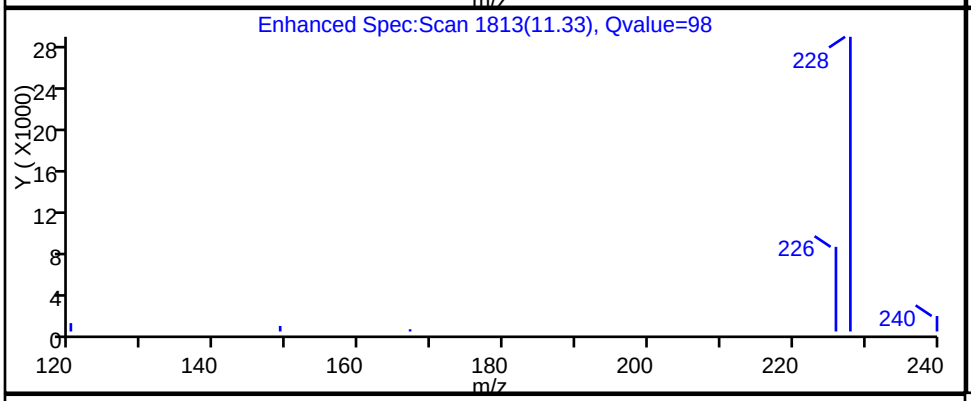
TestAmerica Denver

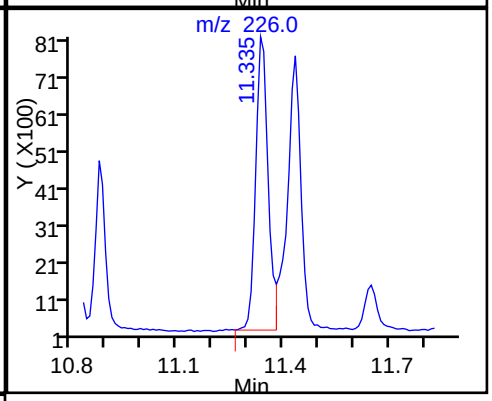
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Injection Date:	12-Jun-2017 20:51:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	40.0000		
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Column:		Detector	MS SCAN		

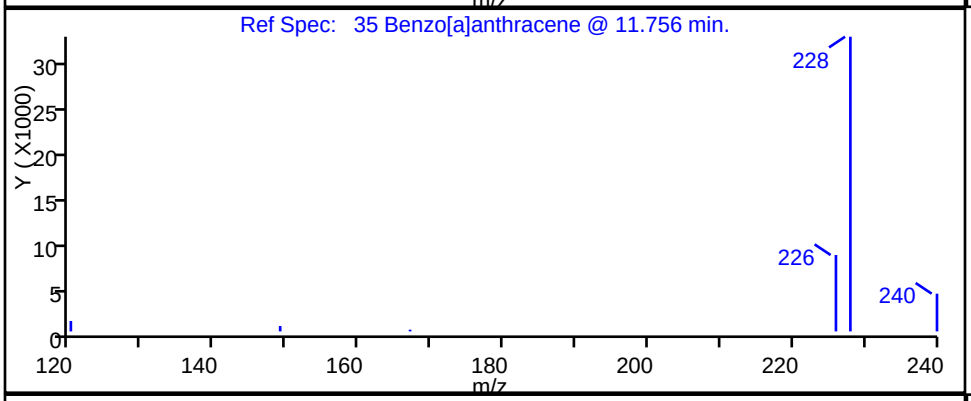
35 Benzo[a]anthracene, CAS: 56-55-3

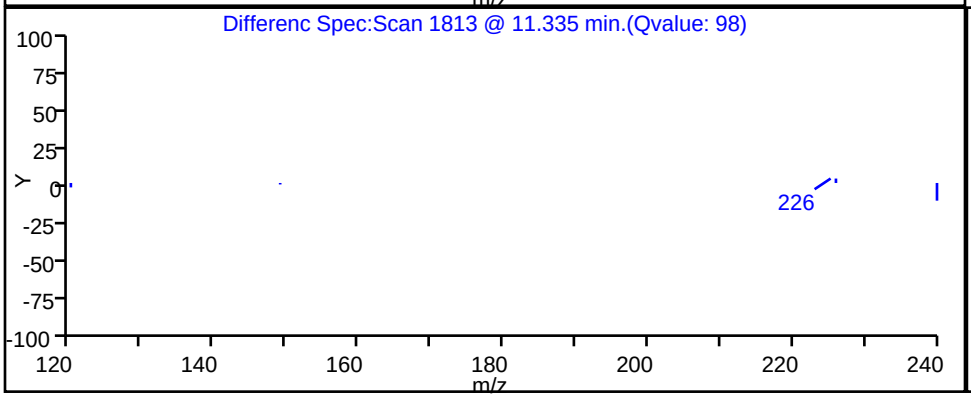


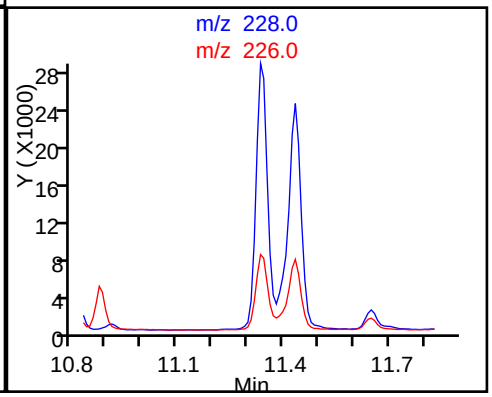










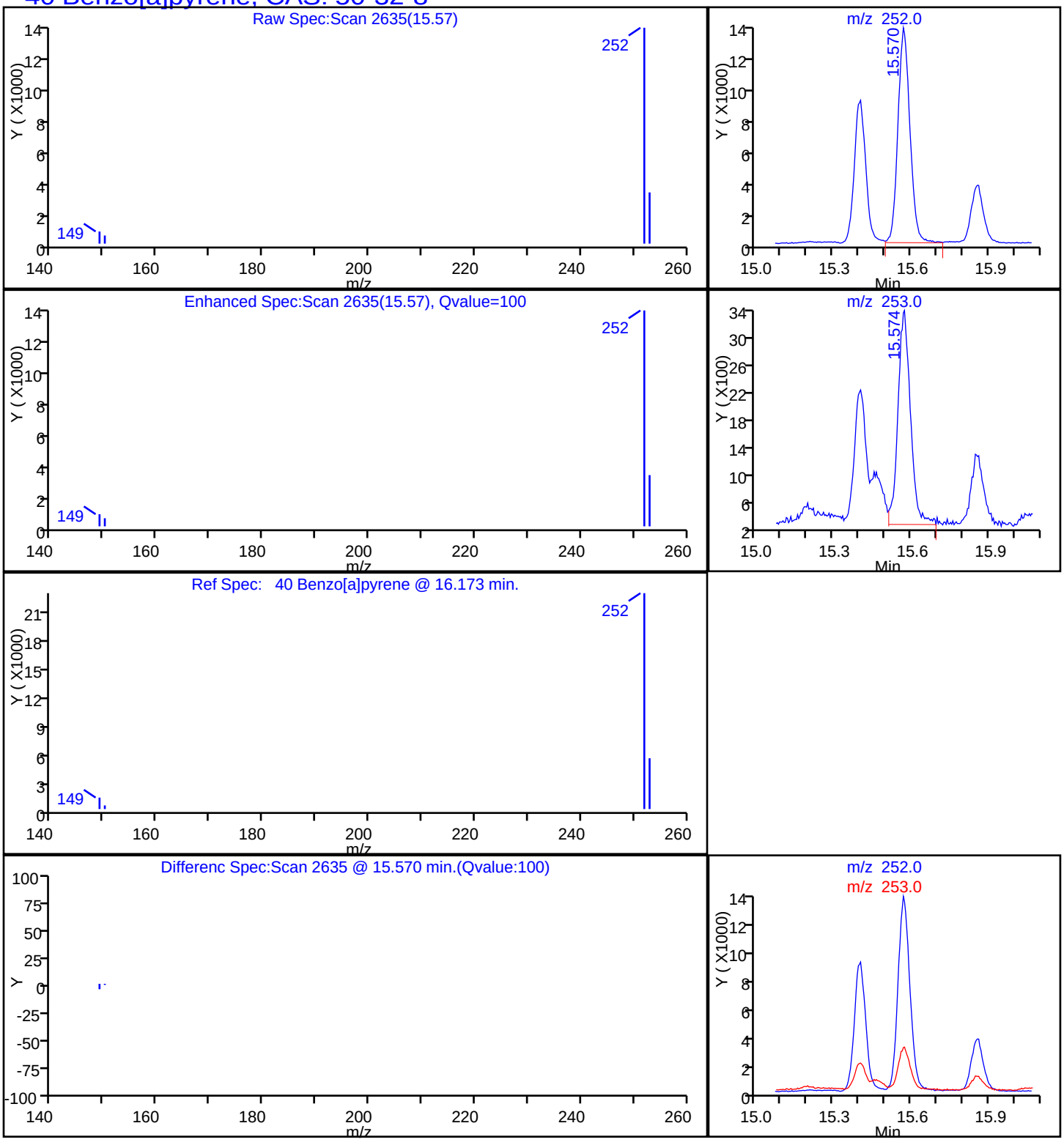


Report Date: 13-Jun-2017 07:13:22 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7138.D				
Injection Date:	12-Jun-2017 20:51:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	40.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

40 Benzo[a]pyrene, CAS: 50-32-8



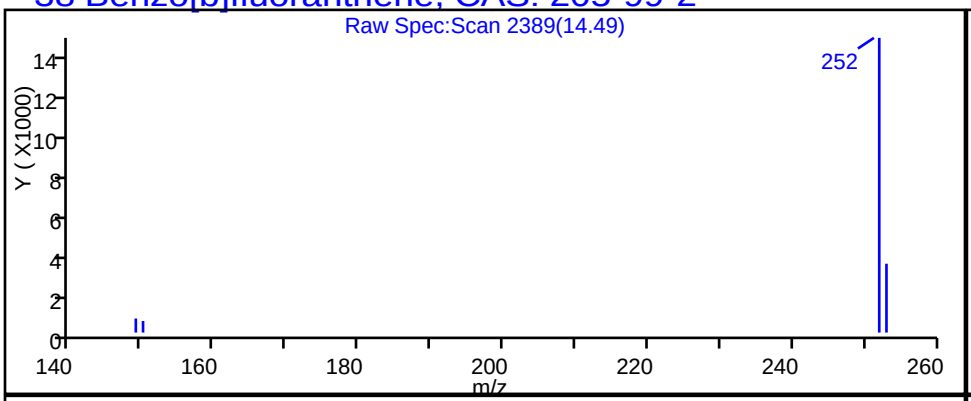
Report Date: 13-Jun-2017 07:13:22 Chrom Revision: 2.2 25-Apr-2017 13:27:22

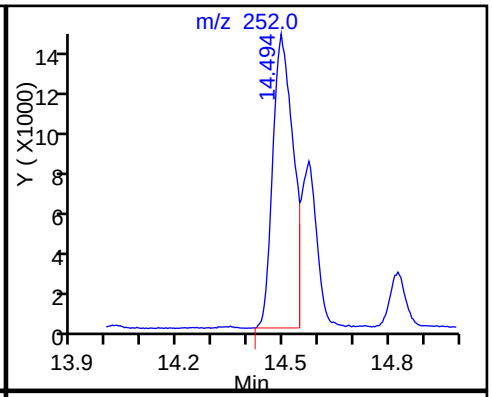
TestAmerica Denver

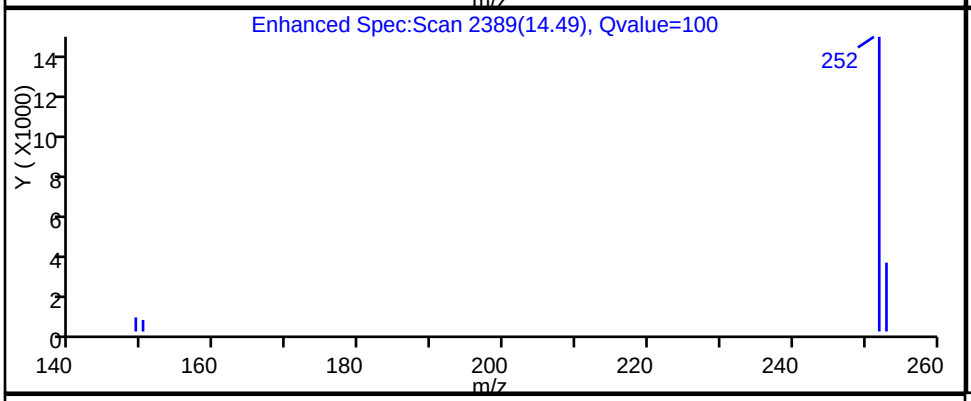
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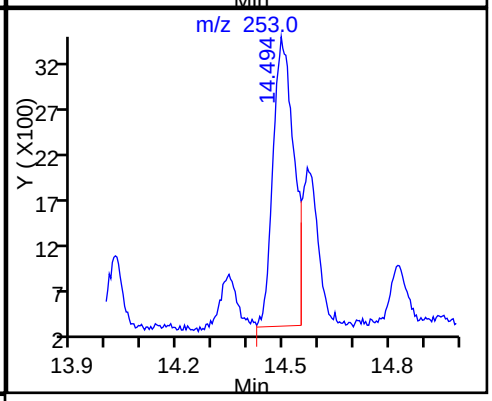
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Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	40.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

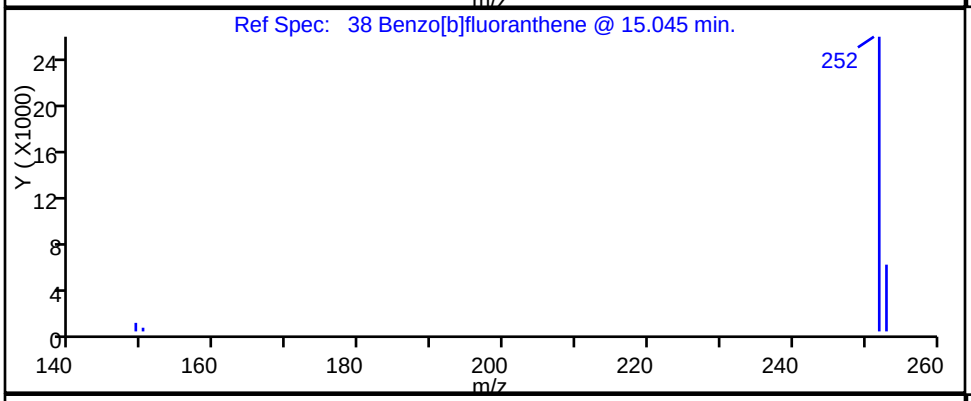
38 Benzo[b]fluoranthene, CAS: 205-99-2

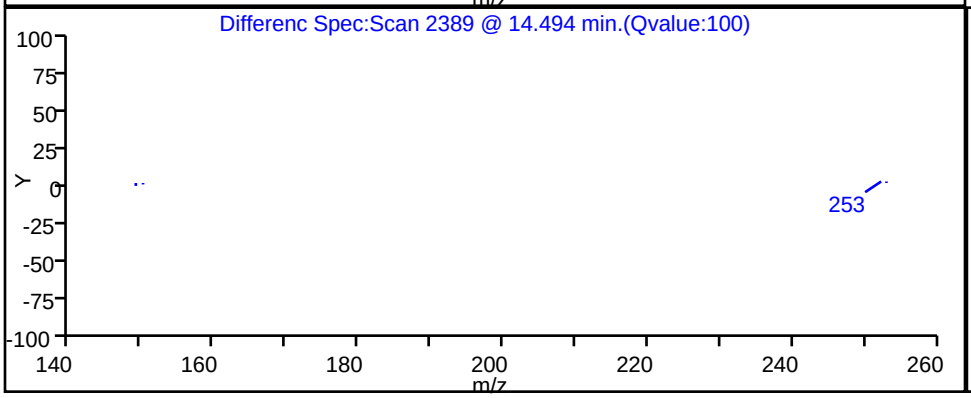


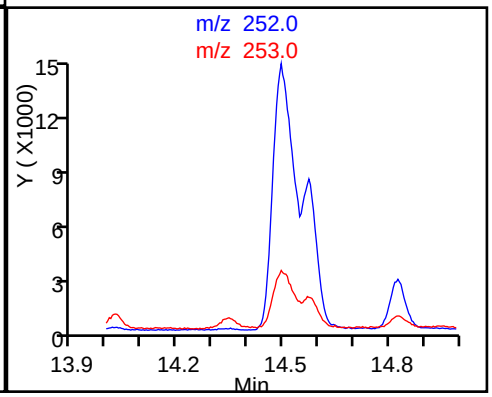










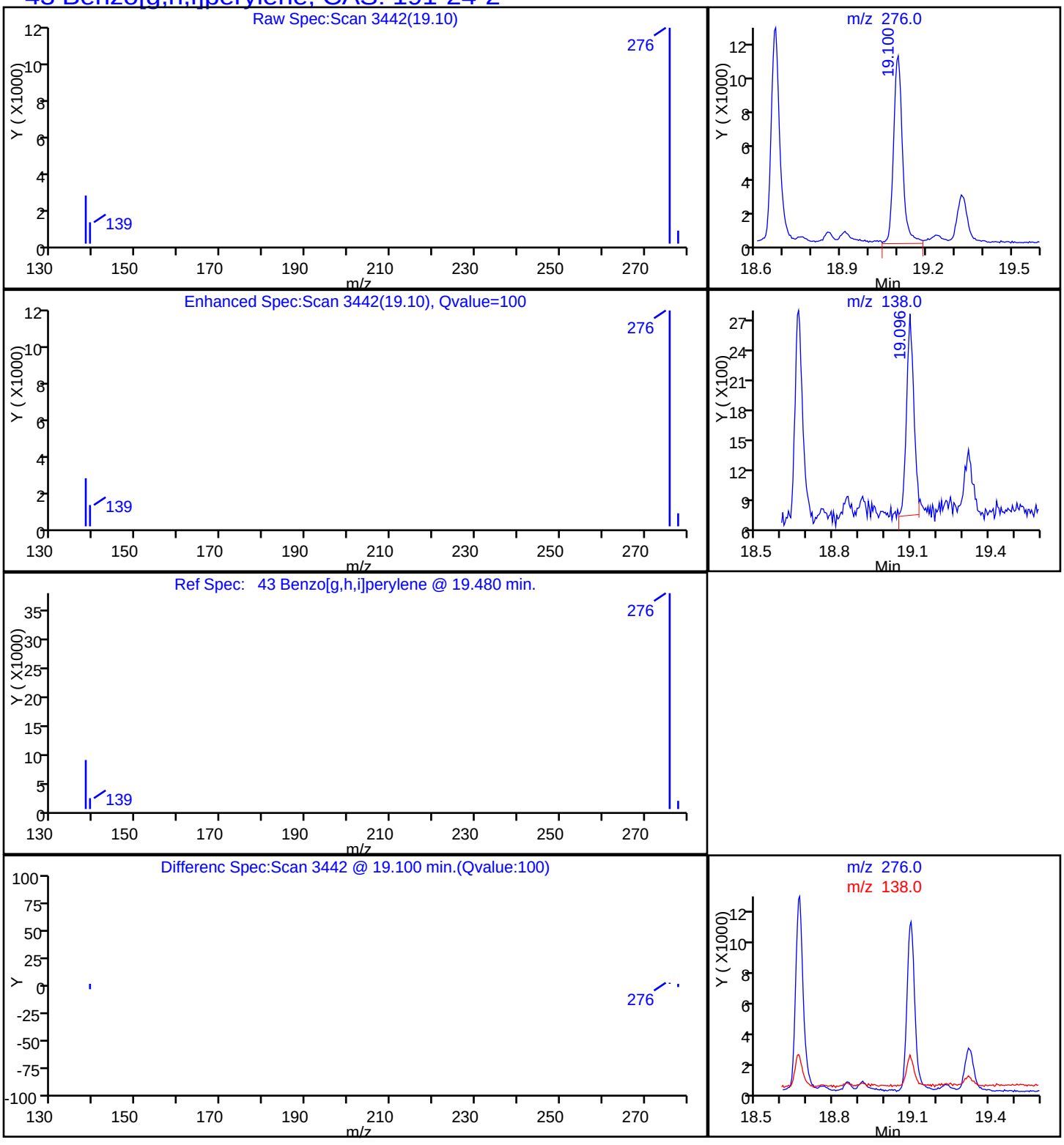


Report Date: 13-Jun-2017 07:13:22 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7138.D				
Injection Date:	12-Jun-2017 20:51:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	40.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

43 Benzo[g,h,i]perylene, CAS: 191-24-2

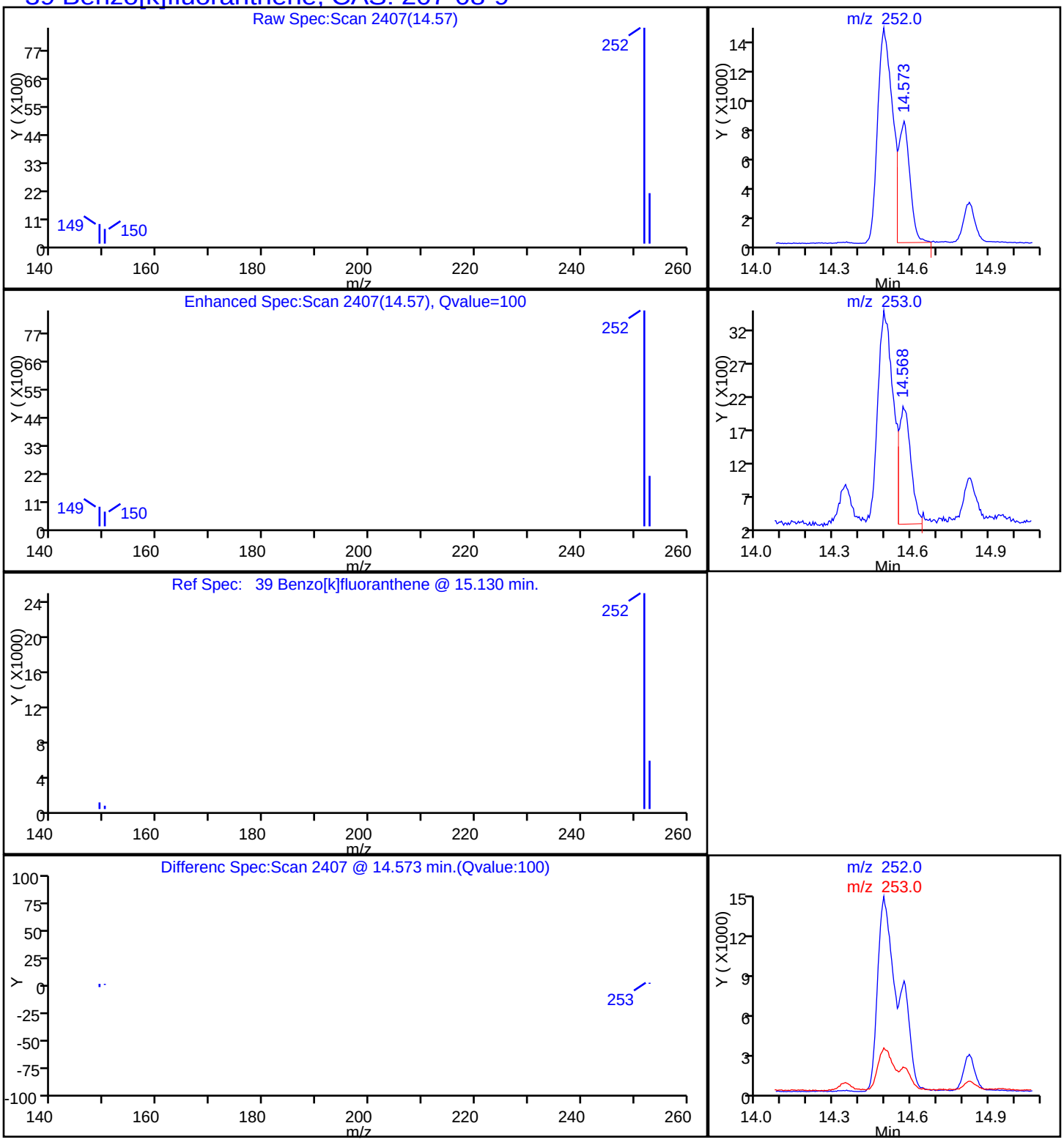


Report Date: 13-Jun-2017 07:13:22 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7138.D				
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Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	40.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Benzo[k]fluoranthene, CAS: 207-08-9



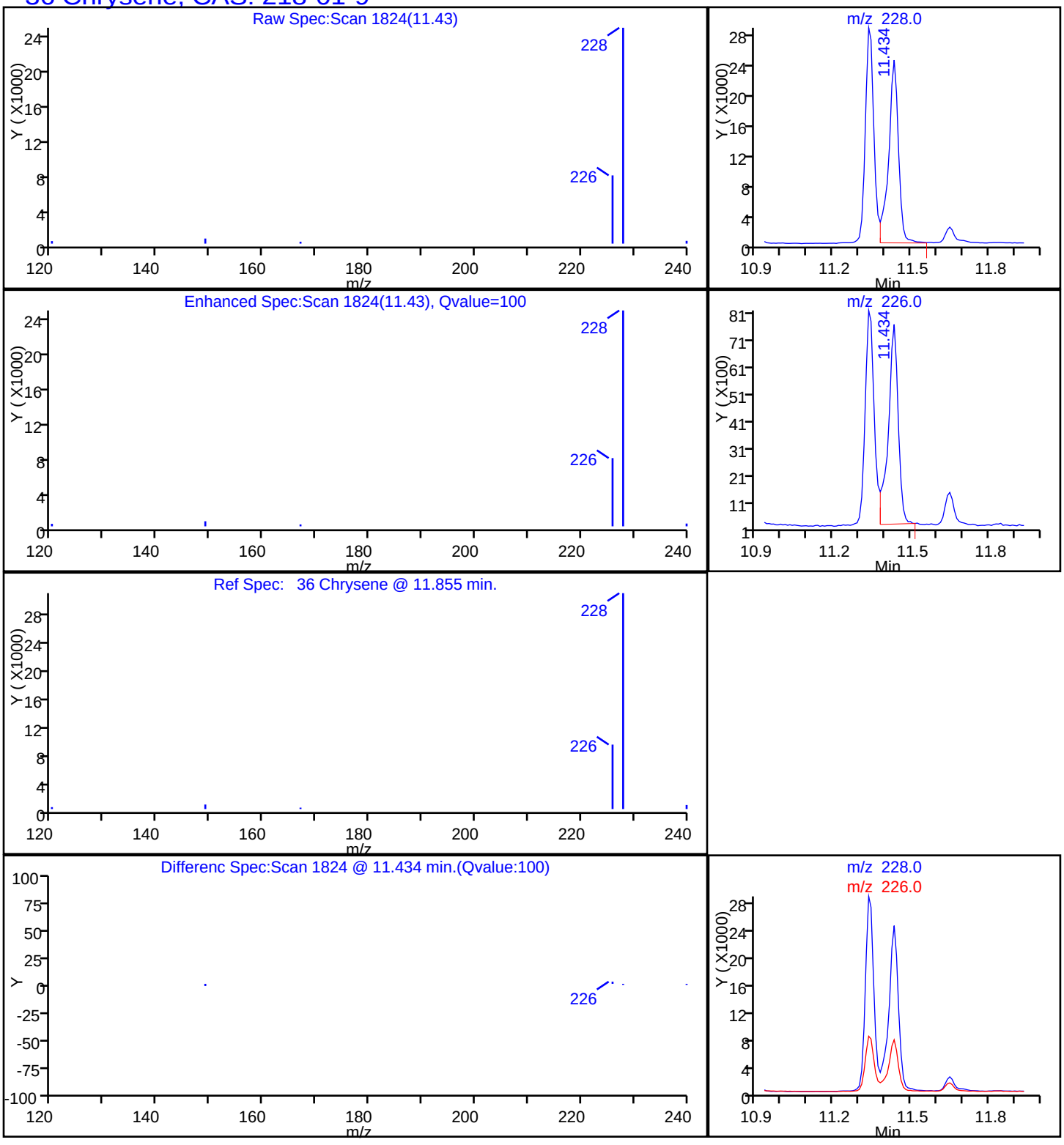
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7138.D

Injection Date:	12-Jun-2017 20:51:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	40.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Chrysene, CAS: 218-01-9



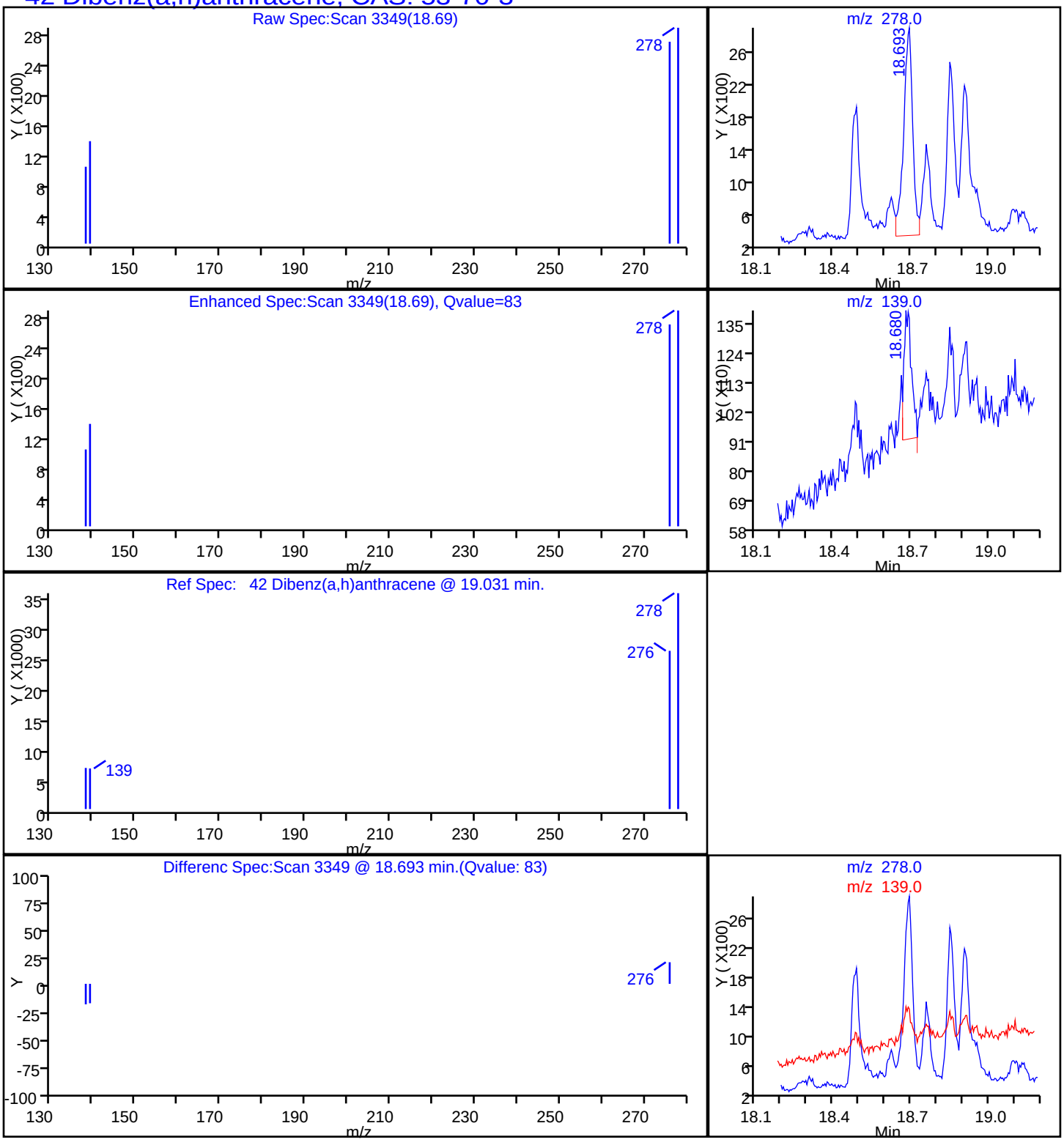
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7138.D

Injection Date:	12-Jun-2017 20:51:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	40.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

42 Dibenz(a,h)anthracene, CAS: 53-70-3



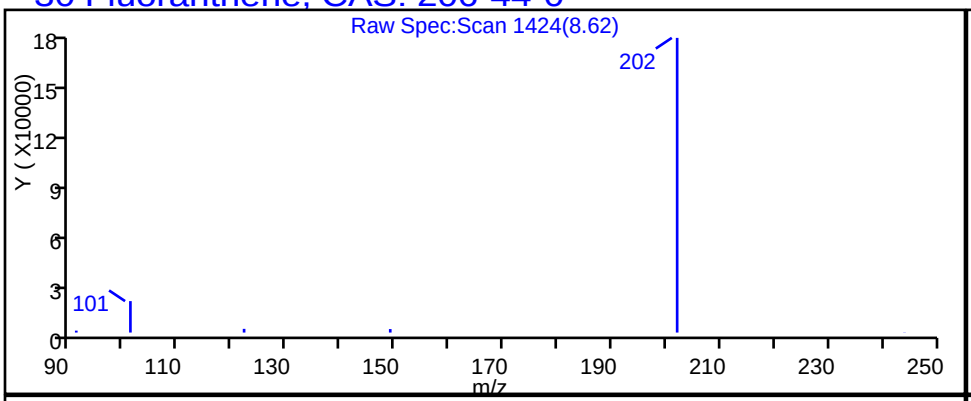
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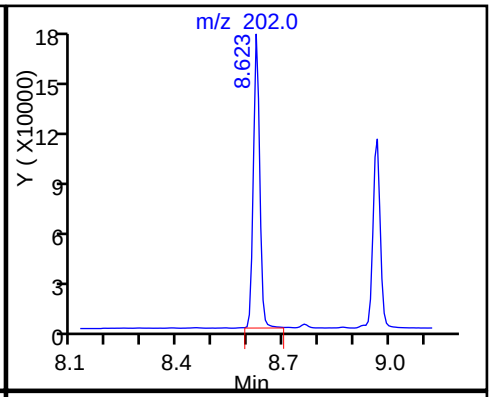
TestAmerica Denver

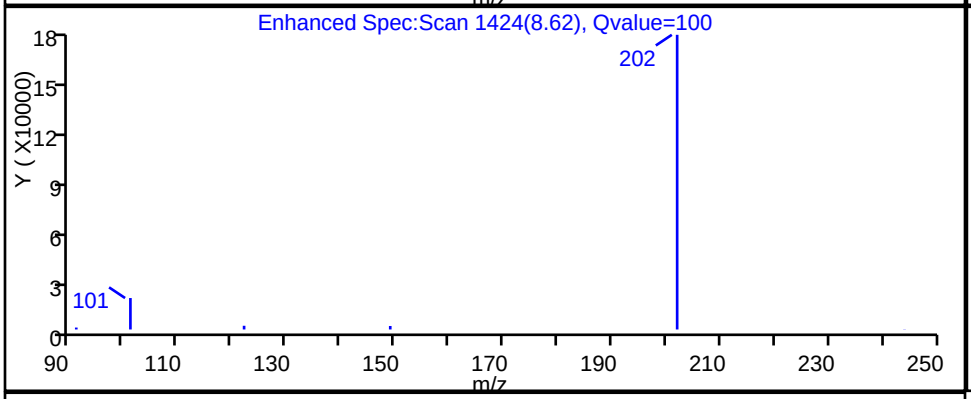
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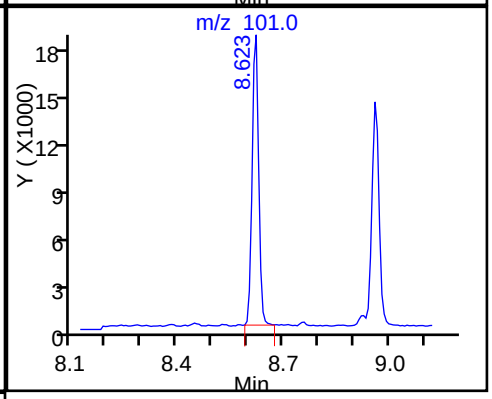
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Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	40.0000		
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Column:		Detector	MS SCAN		

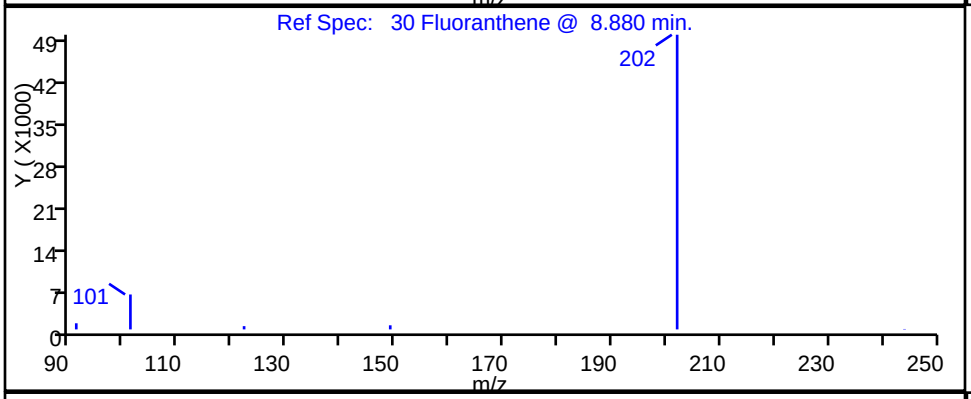
30 Fluoranthene, CAS: 206-44-0

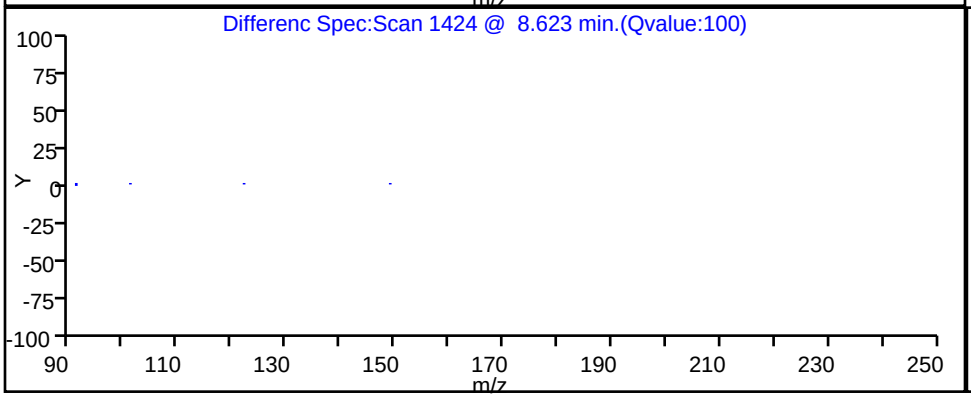


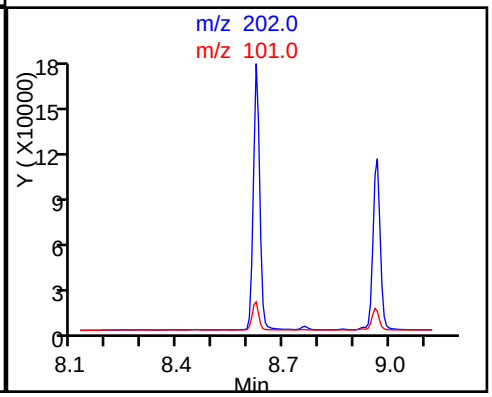












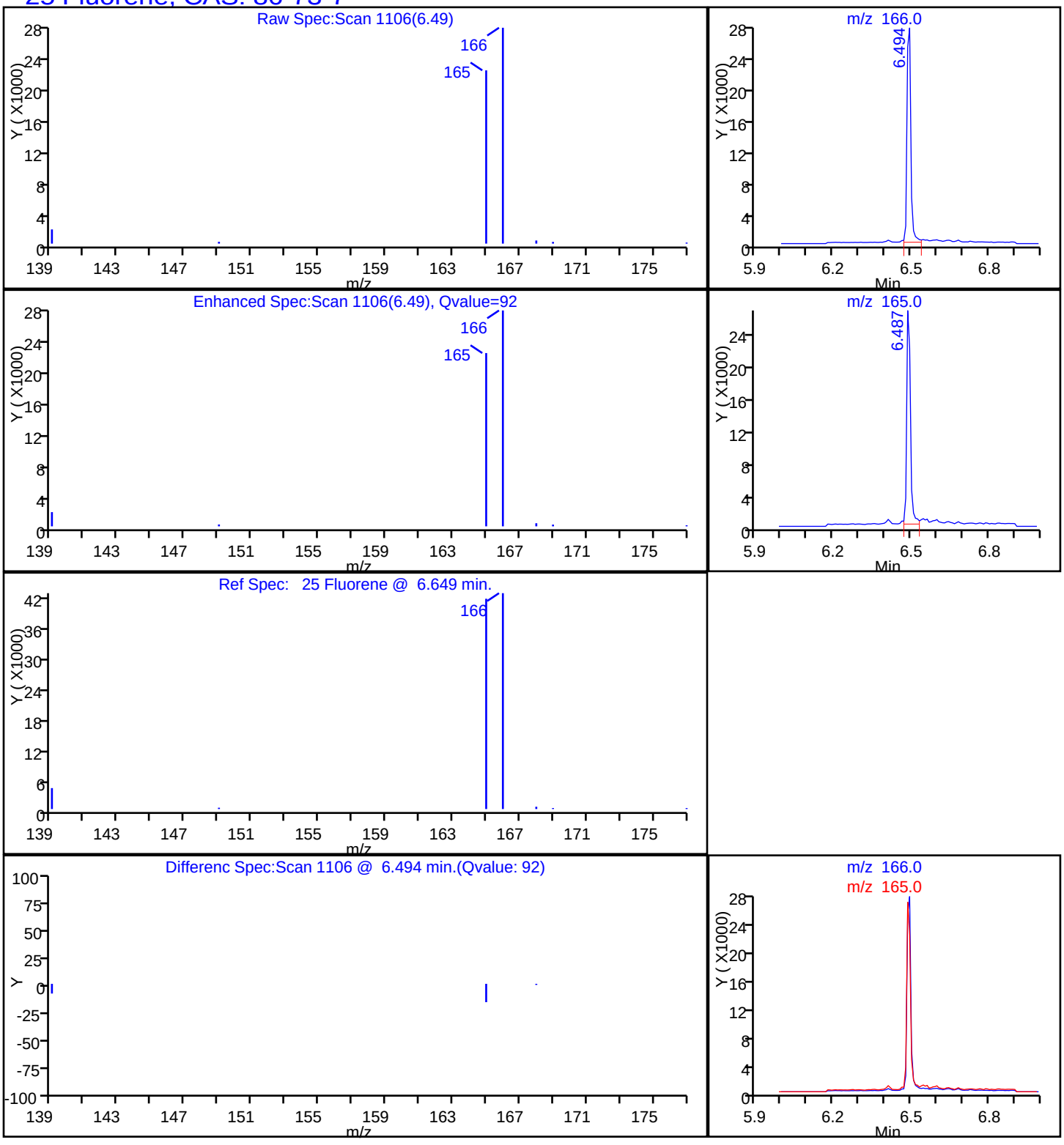
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7138.D

Injection Date:	12-Jun-2017 20:51:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	40.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Fluorene, CAS: 86-73-7



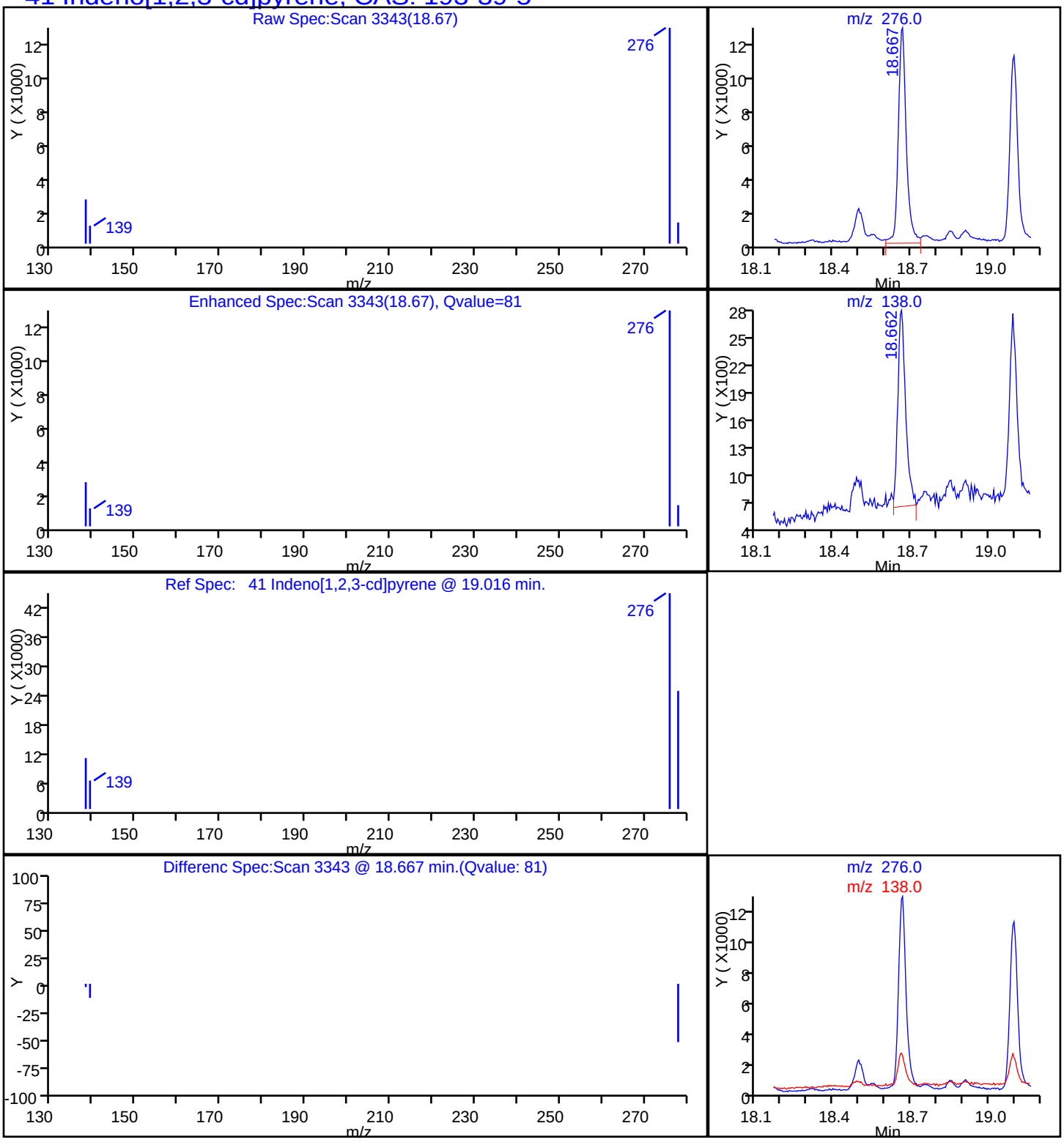
Report Date: 13-Jun-2017 07:13:22 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7138.D

Injection Date:	12-Jun-2017 20:51:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	40.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

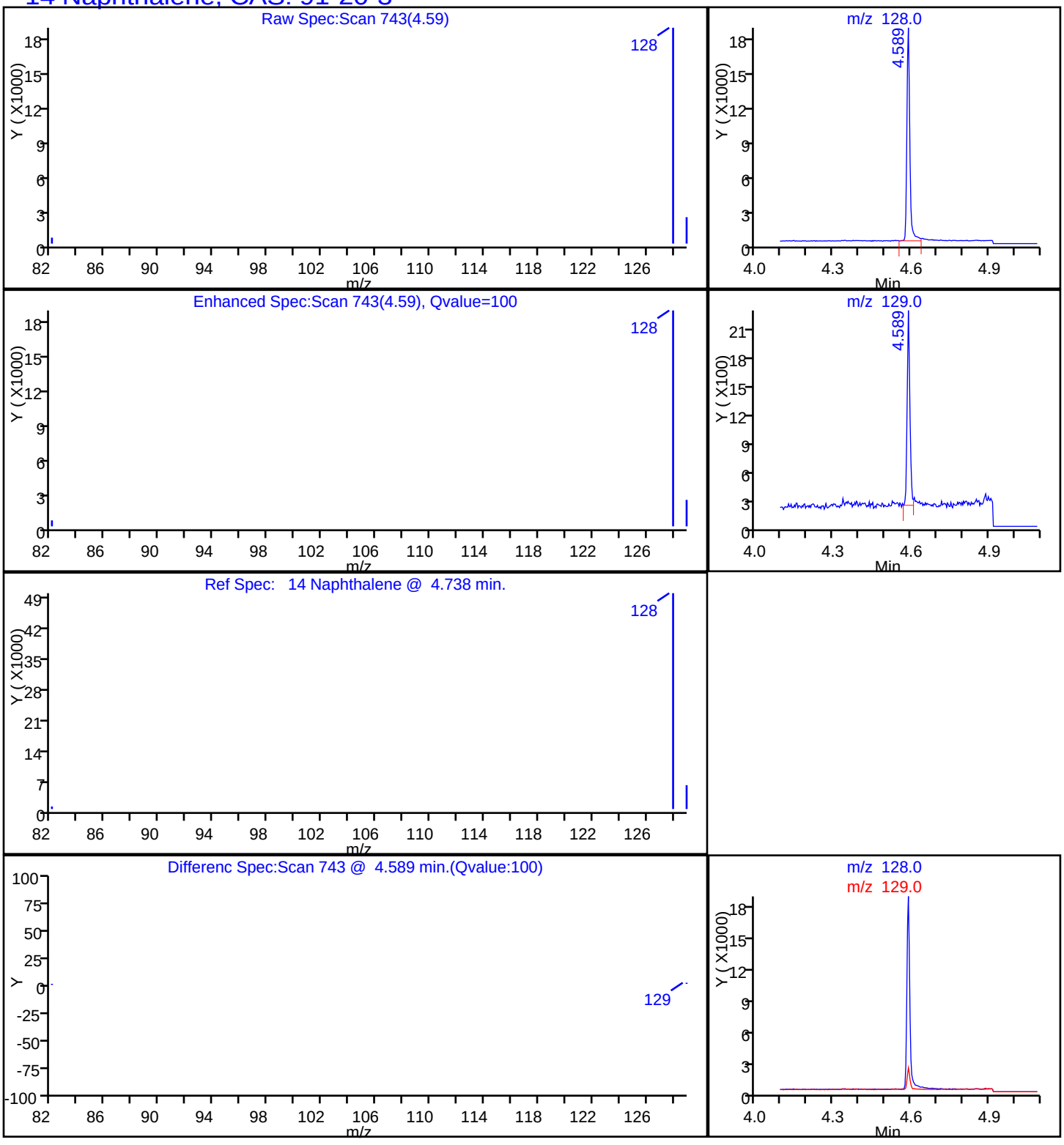


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TestAmerica Denver

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Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	40.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3

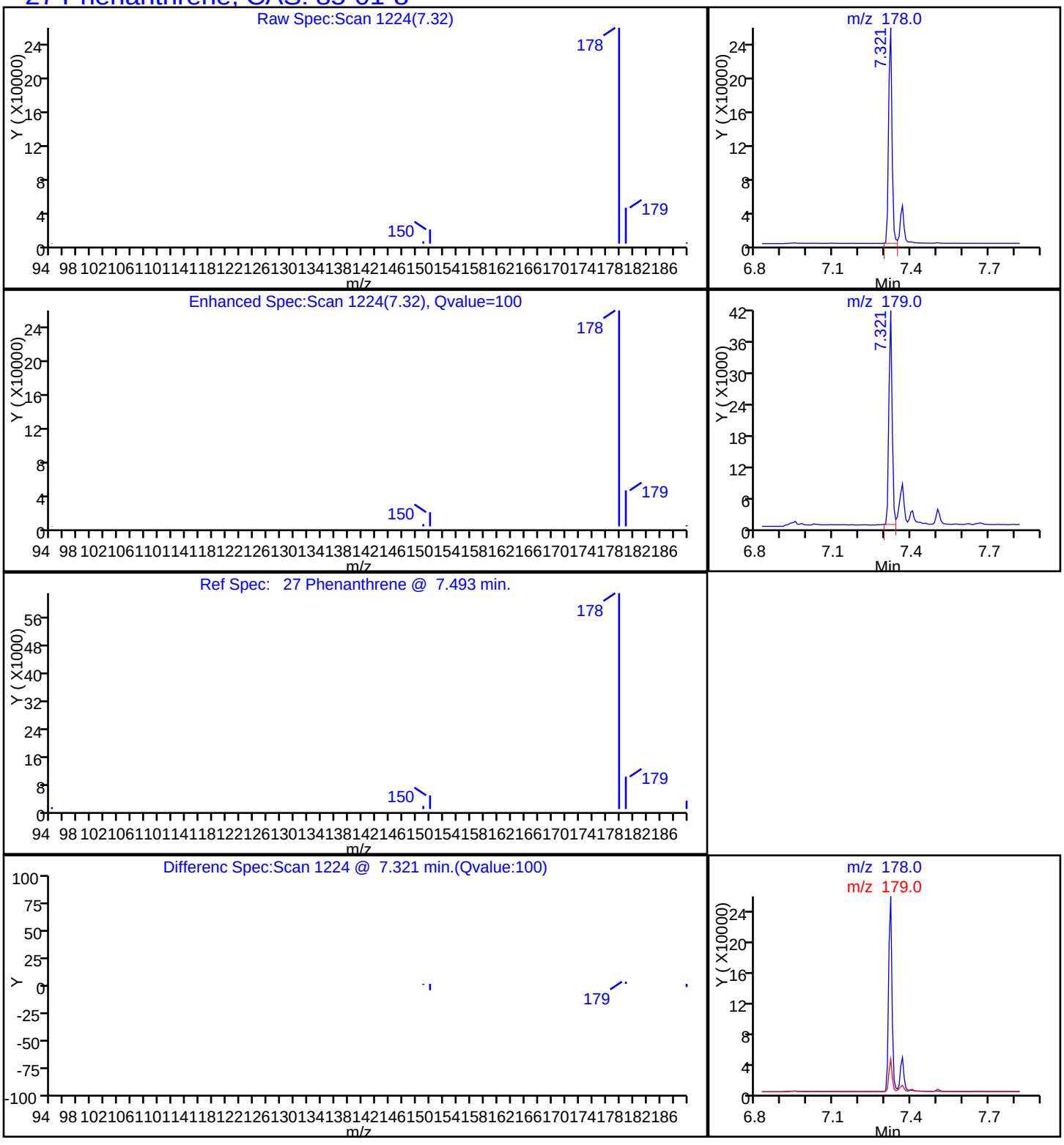


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TestAmerica Denver

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Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	40.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

27 Phenanthrene, CAS: 85-01-8

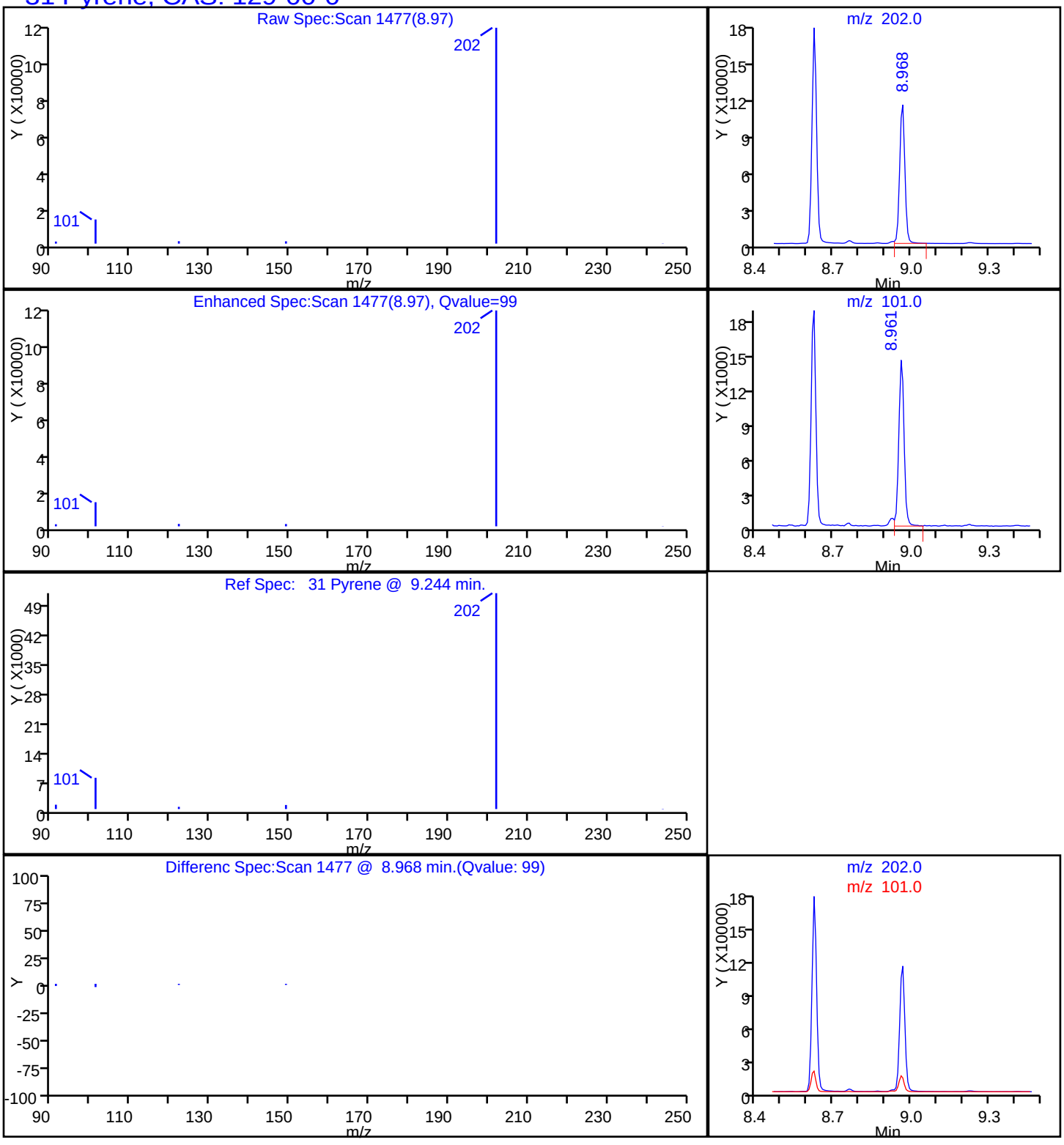


Report Date: 13-Jun-2017 07:13:22 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7138.D				
Injection Date:	12-Jun-2017 20:51:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-A-10-B	Lab Sample ID:	280-97803-10		
Client ID:	SS025-SS05				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	40.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Pyrene, CAS: 129-00-0



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB05(0-2) | Lab Sample ID: 280-97803-11

Matrix: Solid | Lab File ID: F7349.D

Analysis Method: 8270D SIM | Date Collected: 05/31/2017 14:40

Extract. Method: 3546 | Date Extracted: 06/14/2017 09:42

Sample wt/vol: 32.3(g) | Date Analyzed: 06/22/2017 00:39

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378253 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.62	J	5.4	0.54	0.28
91-57-6	2-Methylnaphthalene	0.81	J	5.4	0.72	0.33
83-32-9	Acenaphthene	0.98	J	5.4	0.29	0.17
208-96-8	Acenaphthylene	0.99	J	5.4	0.72	0.18
120-12-7	Anthracene	1.8	J	5.4	2.7	0.78
56-55-3	Benzo[a]anthracene	3.1	J	5.4	2.7	0.97
50-32-8	Benzo[a]pyrene	2.7	J	5.4	2.7	0.80
205-99-2	Benzo[b]fluoranthene	4.0	J	5.4	2.7	1.3
191-24-2	Benzo[g,h,i]perylene	2.9	J	5.4	2.7	1.2
207-08-9	Benzo[k]fluoranthene	1.9	J	5.4	2.7	1.1
218-01-9	Chrysene	4.2	J	5.4	2.7	1.1
53-70-3	Dibenz(a,h)anthracene	2.7	U	5.4	2.7	1.4
206-44-0	Fluoranthene	6.0		5.4	2.7	1.1
86-73-7	Fluorene	0.99	J	5.4	0.72	0.51
193-39-5	Indeno[1,2,3-cd]pyrene	1.9	J	5.4	2.7	1.2
91-20-3	Naphthalene	0.66	J	5.4	0.72	0.35
85-01-8	Phenanthrene	4.6	J	5.4	2.7	1.2
129-00-0	Pyrene	5.9		5.4	2.7	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	74		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	69		44-125
1718-51-0	Terphenyl-d14 (Surr)	72		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7349.D
Lims ID: 280-97803-C-11-B
Client ID: SS025-SB05(0-2)
Sample Type: Client
Inject. Date: 22-Jun-2017 00:39:30 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-c-11-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 22-Jun-2017 16:05:39 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: wickhamm Date: 22-Jun-2017 16:01:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	93	25226	600.0	
* 2 Phenanthrene-d10	188	7.301	7.302	-0.001	99	47262	600.0	
* 3 Chrysene-d12	240	11.368	11.380	-0.012	95	36077	600.0	
$ 4 Nitrobenzene-d5	82	4.004	4.001	0.003	100	13613	344.5	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	24069	368.0	
$ 6 Terphenyl-d14	244	9.124	9.131	-0.007	98	17260	359.7	
14 Naphthalene	128	4.589	4.586	0.003	98	1490	18.2	
16 2-Methylnaphthalene	142	5.151	5.147	0.004	100	1179	22.4	
17 1-Methylnaphthalene	142	5.234	5.230	0.004	95	907	17.2	
22 Acenaphthylene	152	5.917	5.917	0.000	98	2393	27.5	
23 Acenaphthene	153	6.055	6.055	0.000	92	1446	27.2	
25 Fluorene	166	6.494	6.494	0.000	95	1798	27.5	
27 Phenanthrene	178	7.321	7.328	-0.007	98	12718	126.9	
28 Anthracene	178	7.366	7.373	-0.007	96	5008	49.5	
30 Fluoranthene	202	8.623	8.629	-0.006	100	19082	165.7	
31 Pyrene	202	8.968	8.974	-0.006	99	19621	164.3	
35 Benzo[a]anthracene	228	11.341	11.353	-0.012	87	8219	85.7	
36 Chrysene	228	11.441	11.452	-0.011	98	10374	116.9	
38 Benzo[b]fluoranthene	252	14.500	14.512	-0.012	97	9758	112.0	
39 Benzo[k]fluoranthene	252	14.579	14.595	-0.016	93	4516	51.5	
40 Benzo[a]pyrene	252	15.576	15.596	-0.020	95	6476	75.3	
41 Indeno[1,2,3-cd]pyrene	276	18.673	18.680	-0.007	82	5256	53.9	
42 Dibenz(a,h)anthracene	278	18.695	18.706	-0.011	67	1767	23.2	
43 Benzo[g,h,i]perylene	276	19.110	19.113	-0.003	96	6710	81.1	

Reagents:

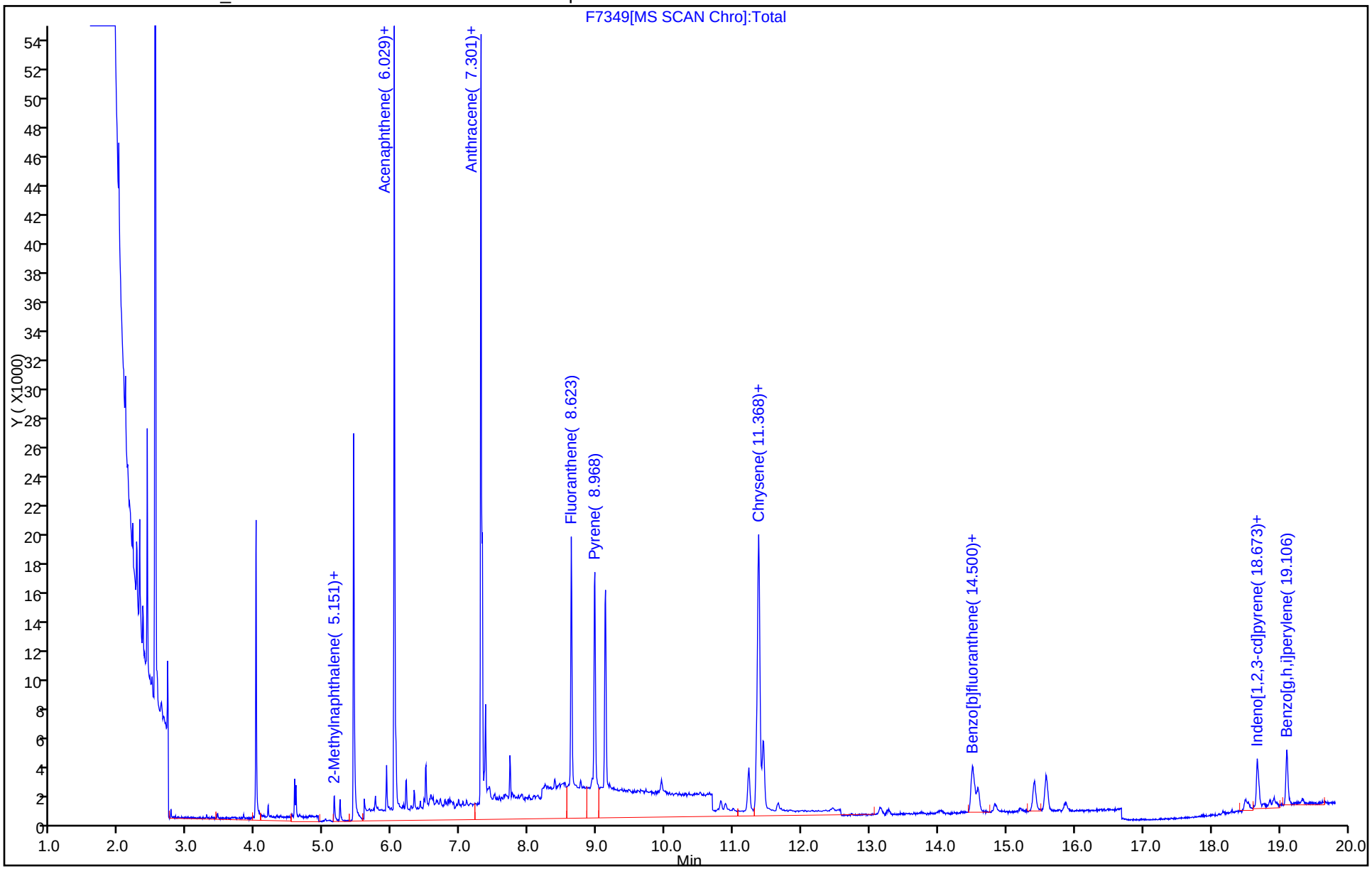
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 22-Jun-2017 16:05:51 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7349.D

Injection Date:	22-Jun-2017 00:39:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97803-C-11-B	Lab Sample ID:	280-97803-11	Worklist Smp#:	14
Client ID:	SS025-SB05(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7349.D				
Lims ID:	280-97803-C-11-B				
Client ID:	SS025-SB05(0-2)				
Sample Type:	Client				
Inject. Date:	22-Jun-2017 00:39:30	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-c-11-b				
Operator ID:	WICKHAMM	Instrument ID:	SMS_F		
Method:	\\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\SMSF_8270SIMX.m				
Limit Group:	MSSV - 8270C-SIM				
Last Update:	22-Jun-2017 16:05:39	Calib Date:	11-May-2017 16:07:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK015				

First Level Reviewer: wickhamm Date: 22-Jun-2017 16:01:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	344.5	68.90
$ 5 2-Fluorobiphenyl	500.0	368.0	73.60
$ 6 Terphenyl-d14	500.0	359.7	71.94

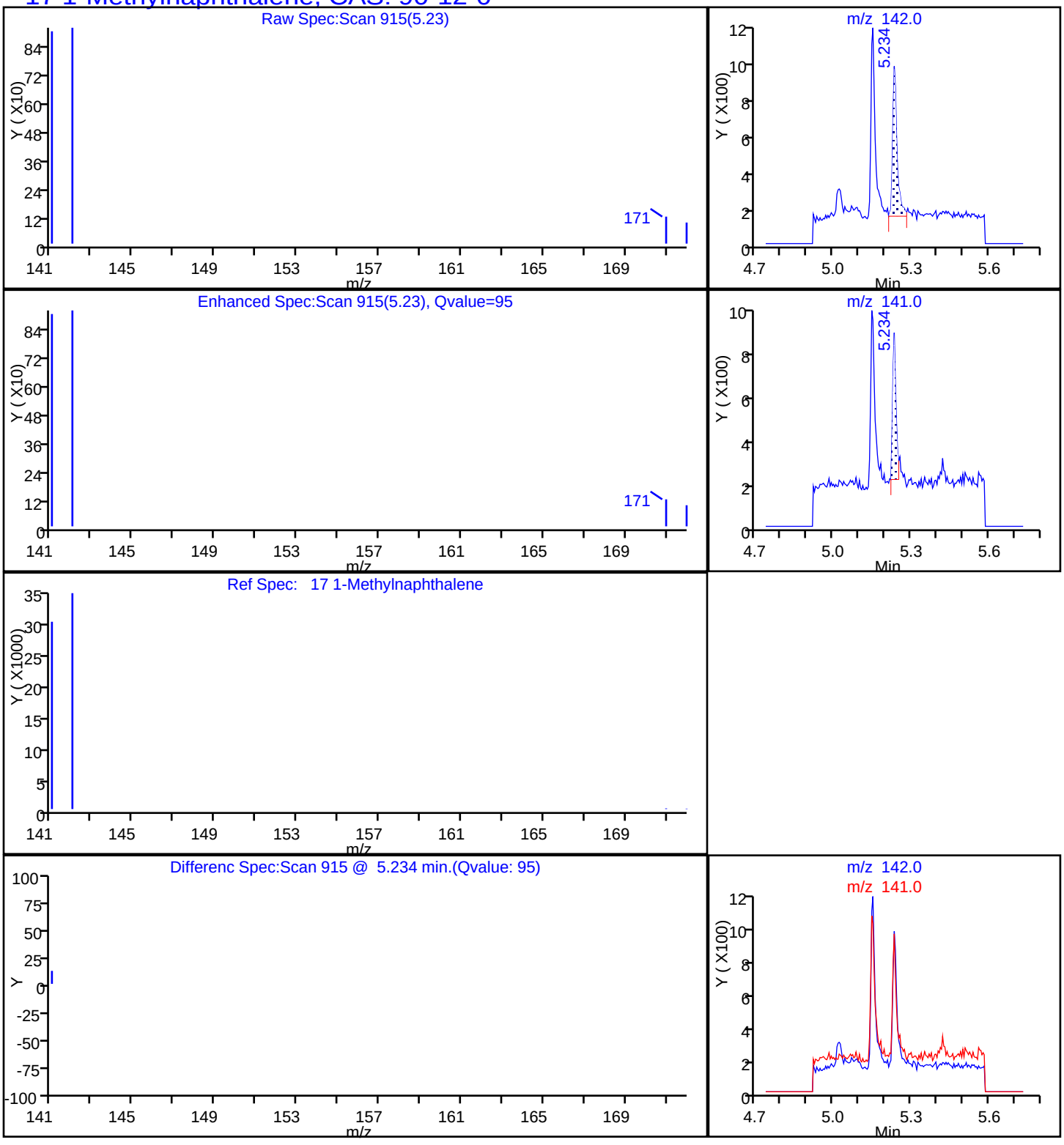
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7349.D

Injection Date:	22-Jun-2017 00:39:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-11-B	Lab Sample ID:	280-97803-11		
Client ID:	SS025-SB05(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0



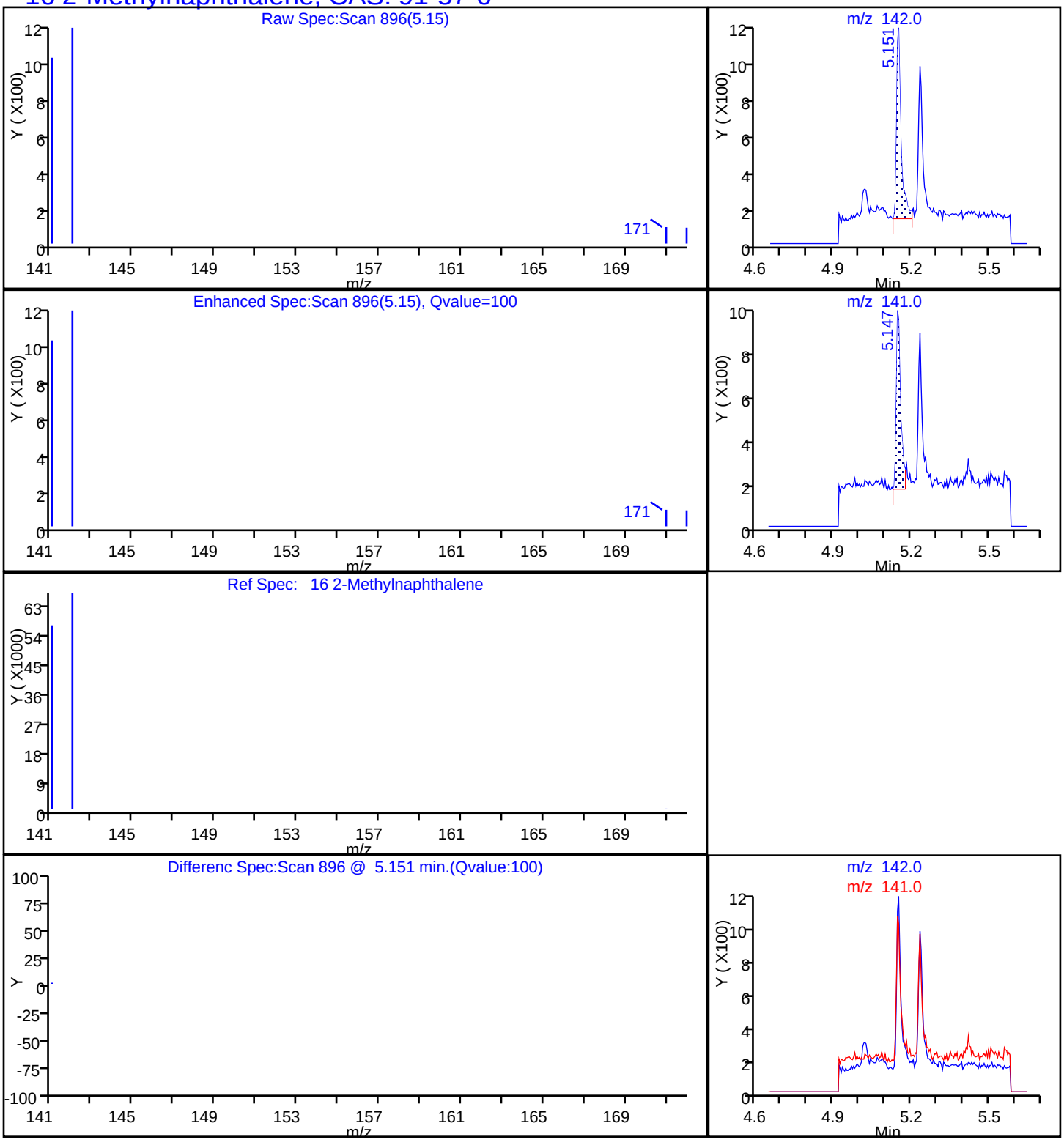
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7349.D

Injection Date:	22-Jun-2017 00:39:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-11-B	Lab Sample ID:	280-97803-11		
Client ID:	SS025-SB05(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



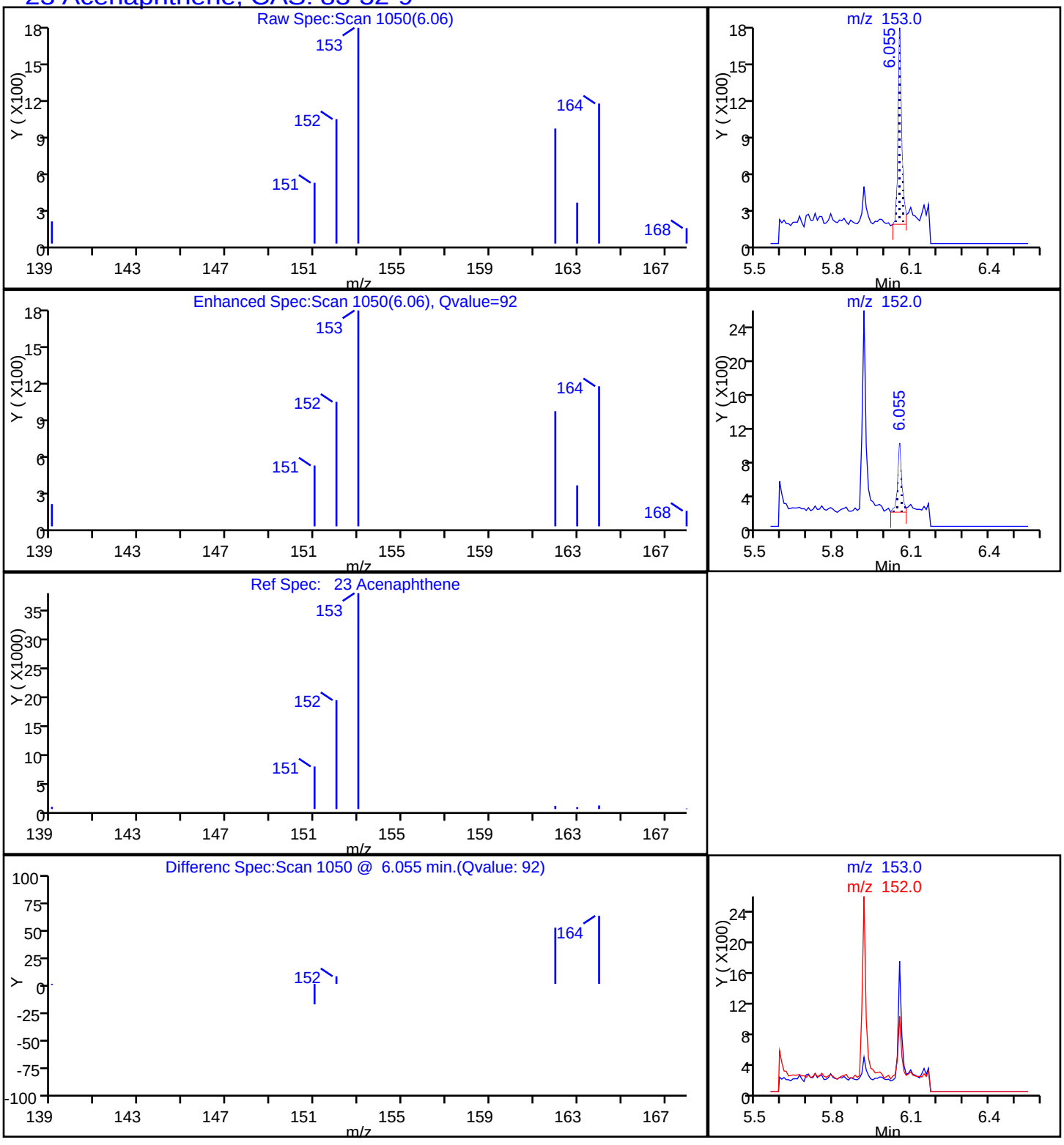
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7349.D

Injection Date:	22-Jun-2017 00:39:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-11-B	Lab Sample ID:	280-97803-11		
Client ID:	SS025-SB05(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9



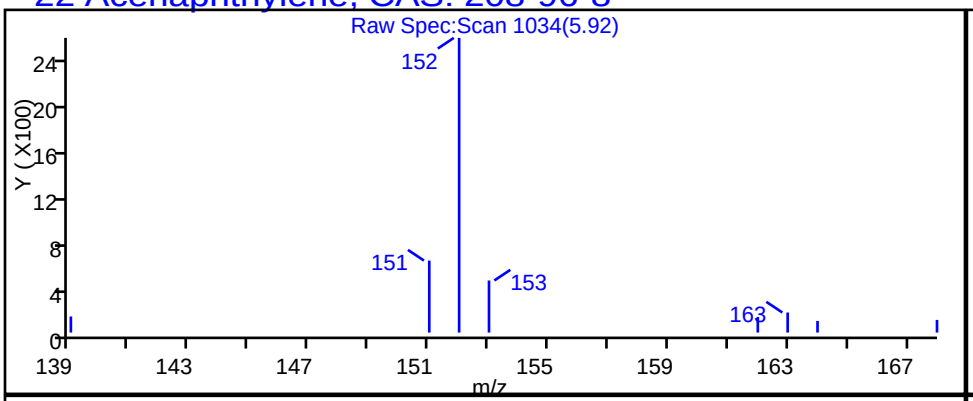
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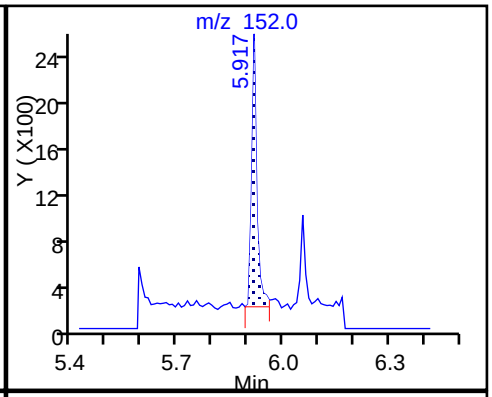
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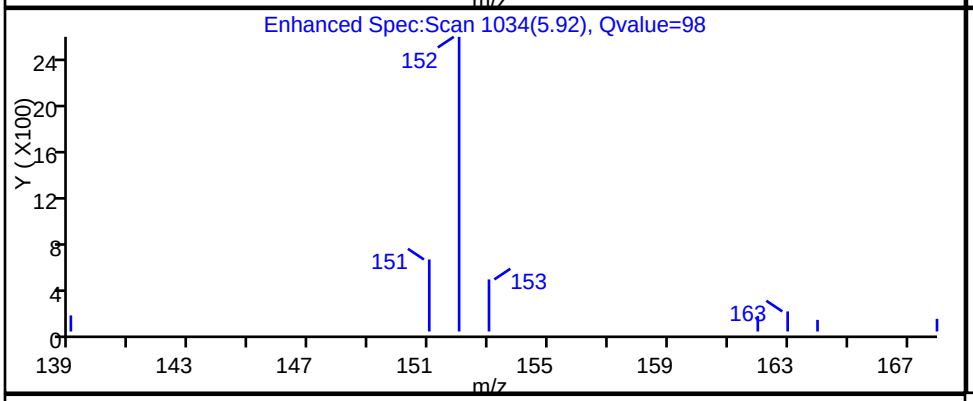
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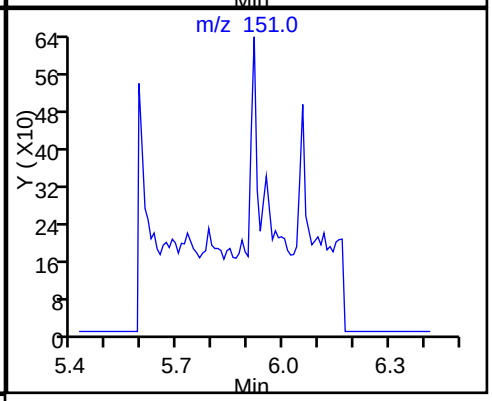
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Lims ID:	280-97803-C-11-B	Lab Sample ID:	280-97803-11		
Client ID:	SS025-SB05(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

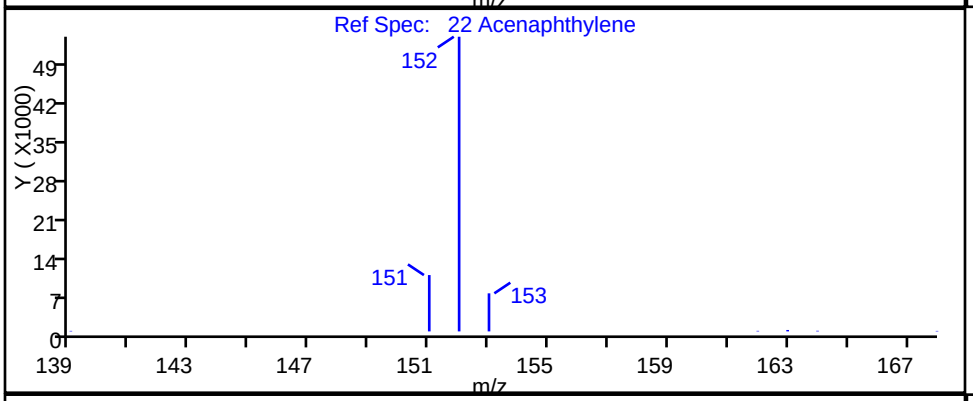
22 Acenaphthylene, CAS: 208-96-8

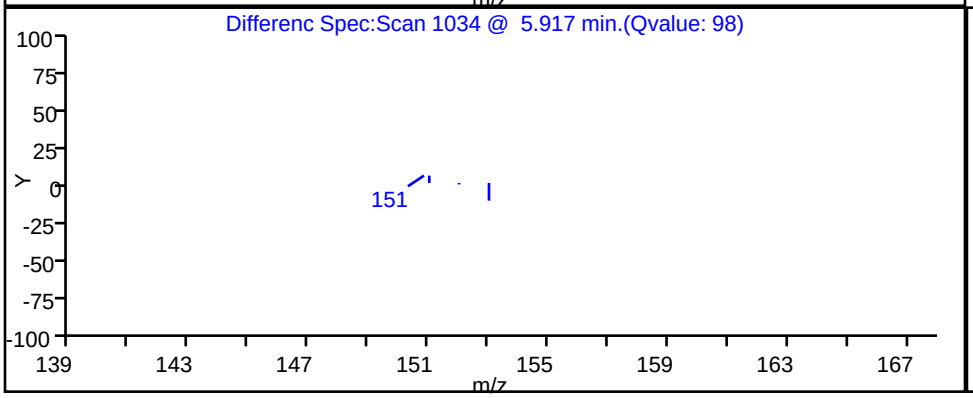


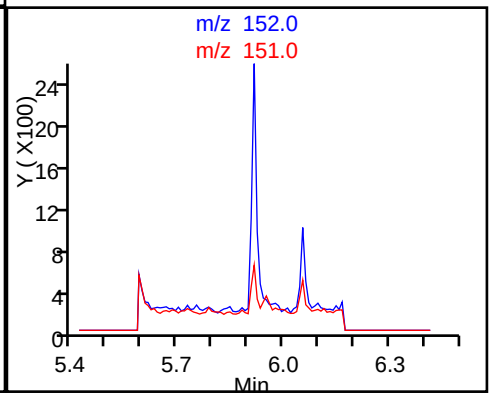












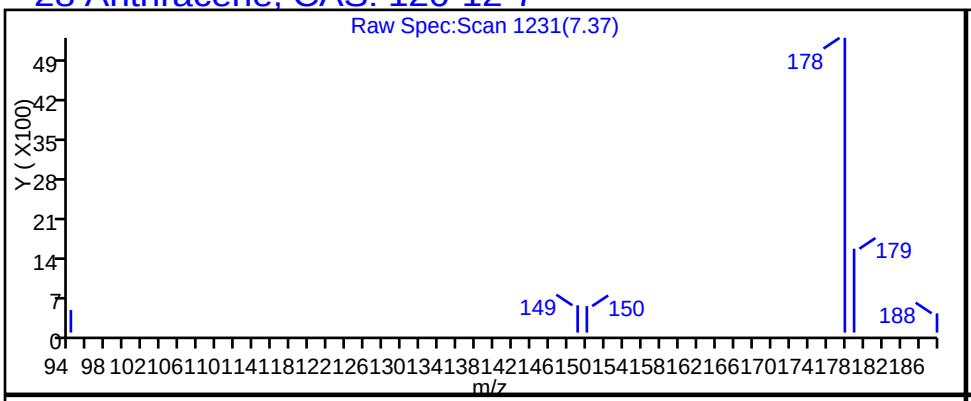
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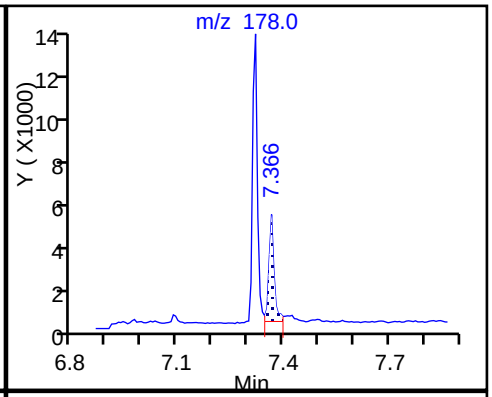
TestAmerica Denver

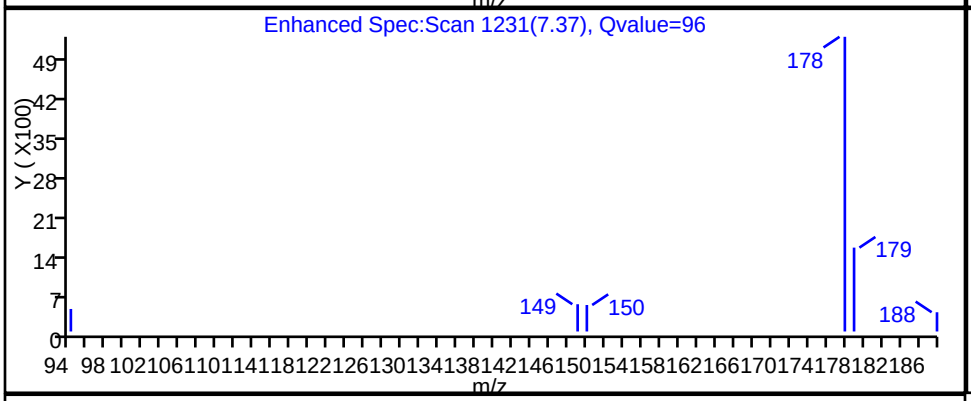
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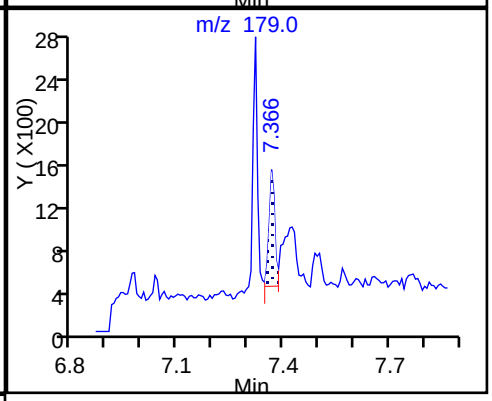
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Lims ID:	280-97803-C-11-B	Lab Sample ID:	280-97803-11		
Client ID:	SS025-SB05(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	14
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Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
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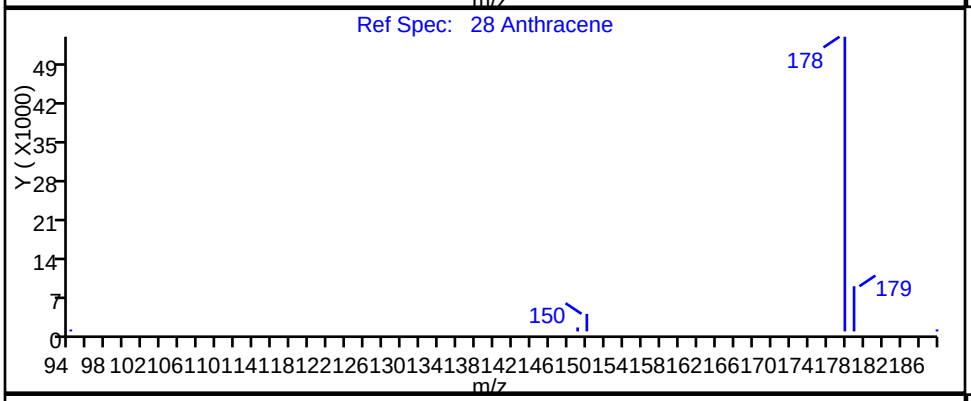
28 Anthracene, CAS: 120-12-7

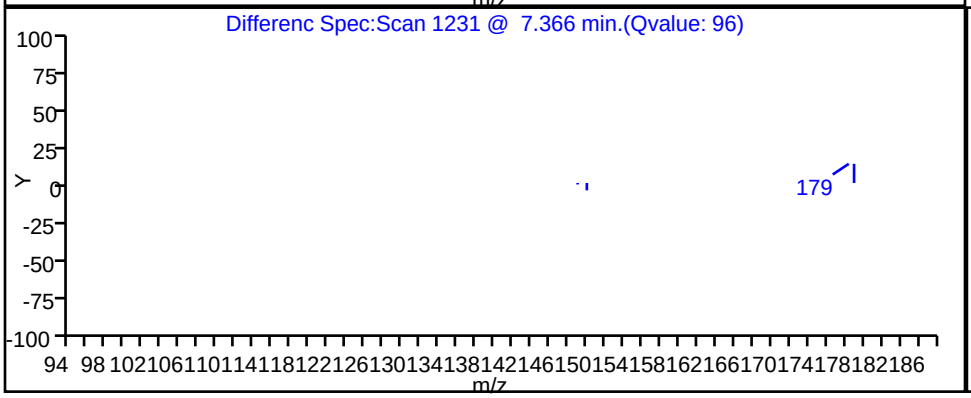


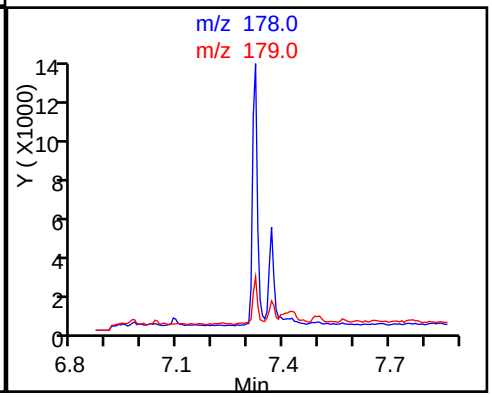












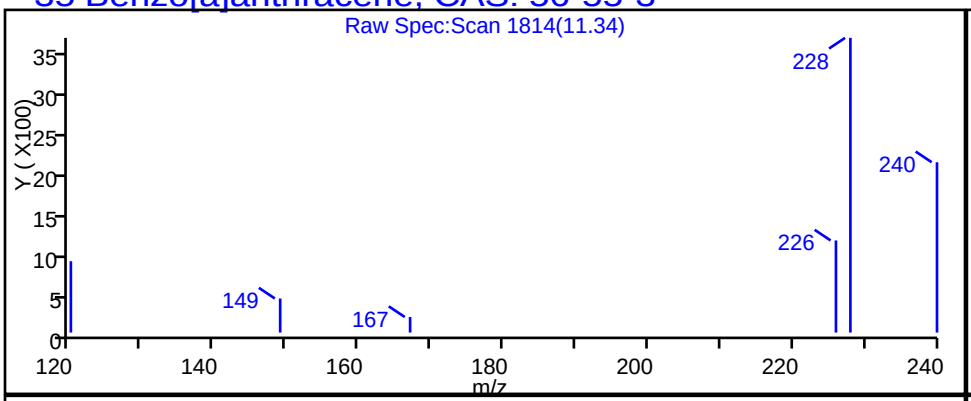
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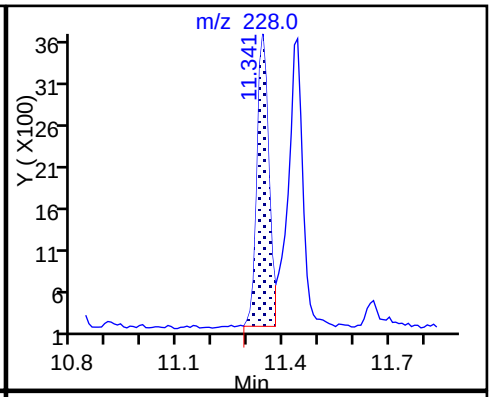
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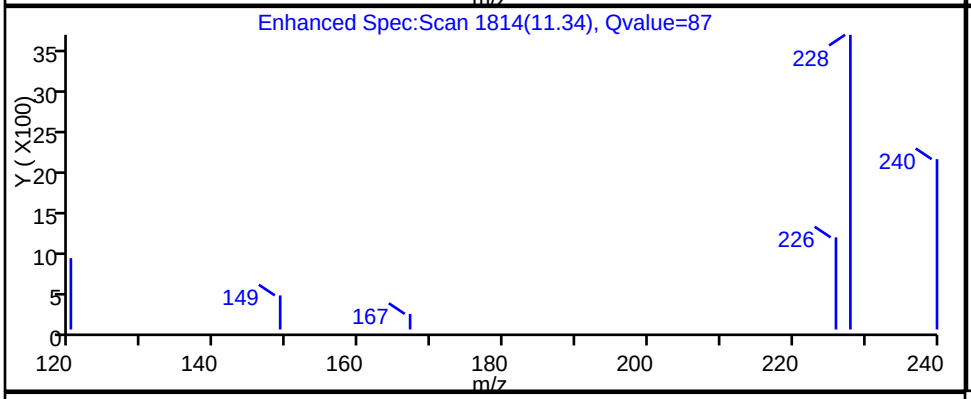
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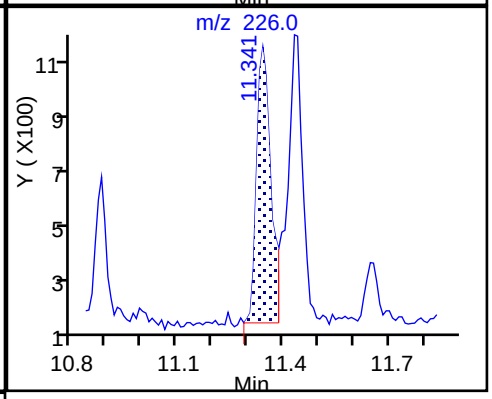
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Lims ID:	280-97803-C-11-B	Lab Sample ID:	280-97803-11		
Client ID:	SS025-SB05(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

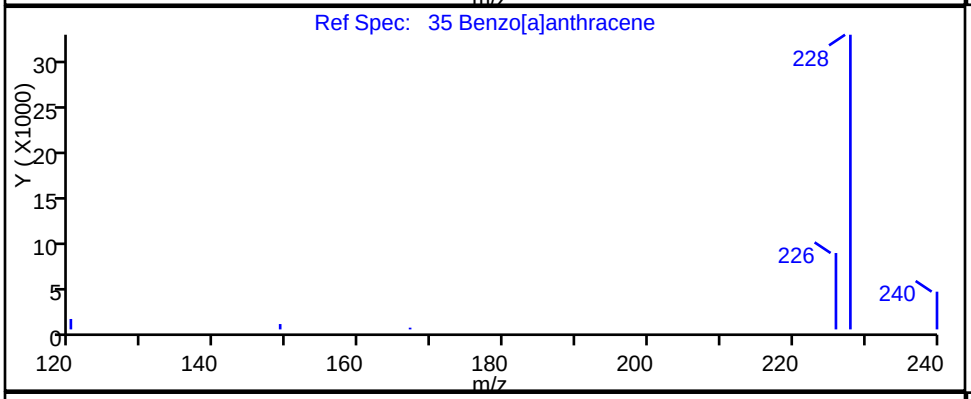
35 Benzo[a]anthracene, CAS: 56-55-3

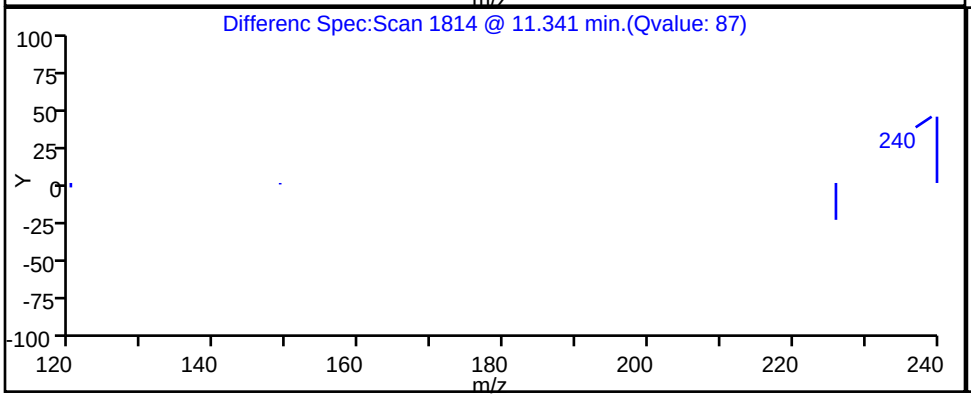


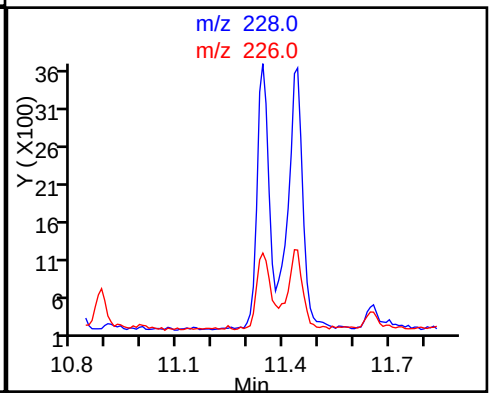












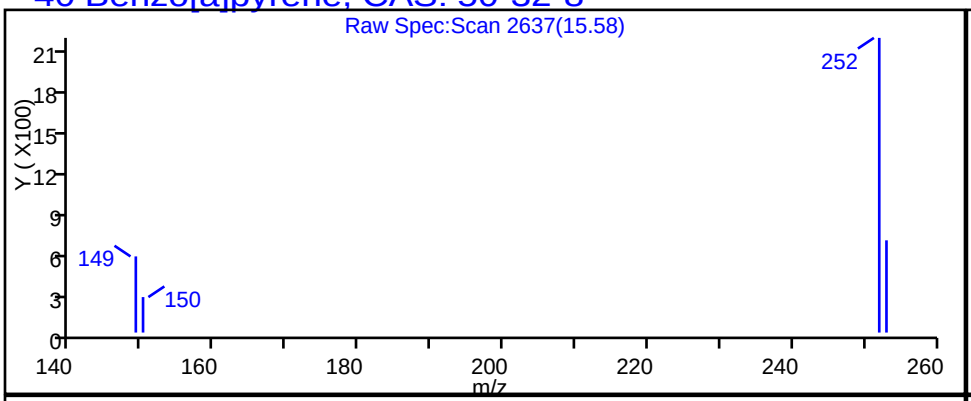
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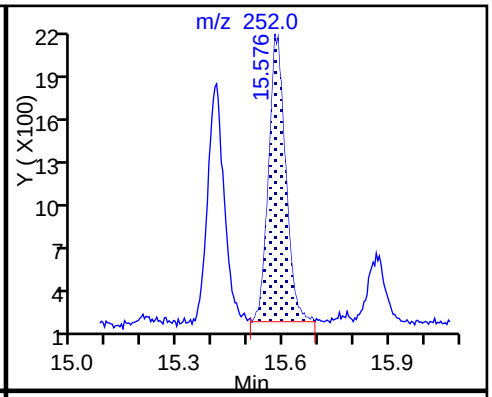
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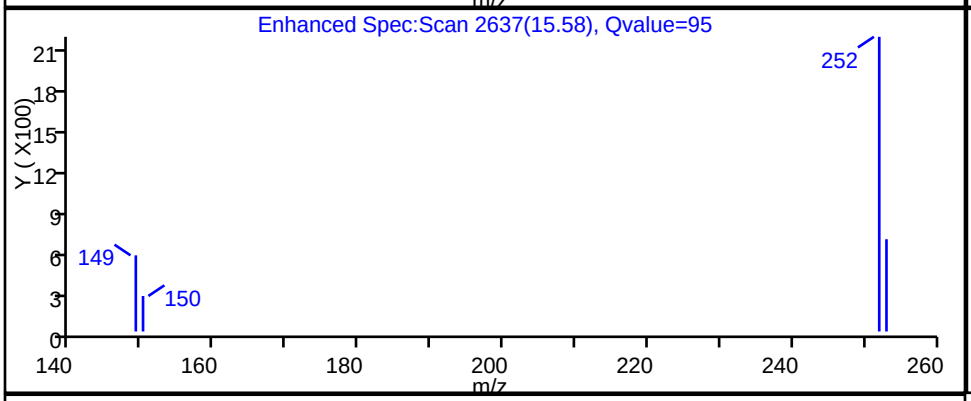
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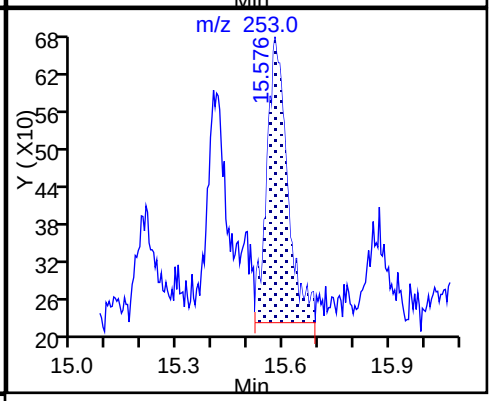
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Lims ID:	280-97803-C-11-B	Lab Sample ID:	280-97803-11		
Client ID:	SS025-SB05(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
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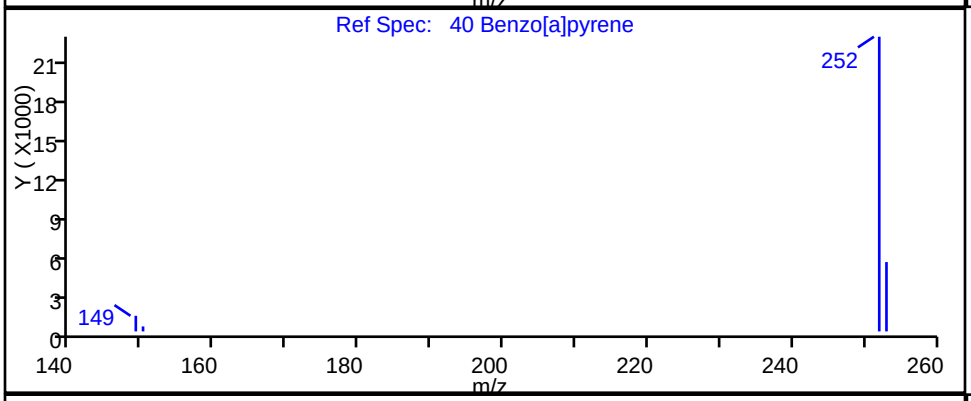
40 Benzo[a]pyrene, CAS: 50-32-8

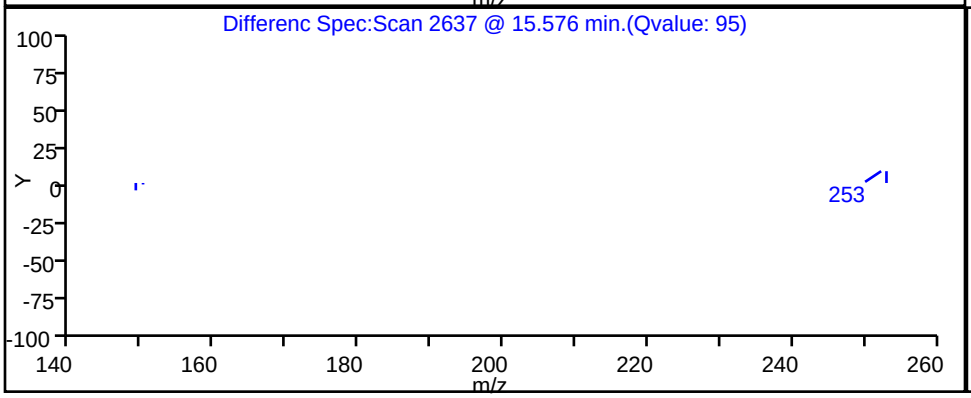


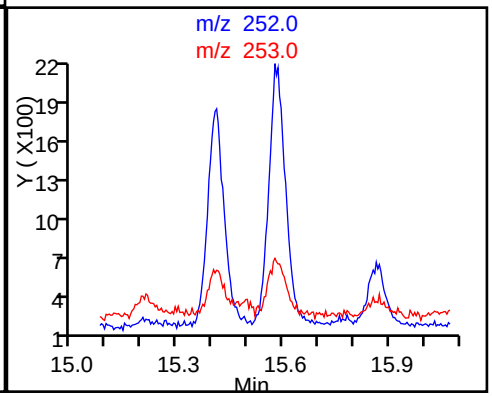










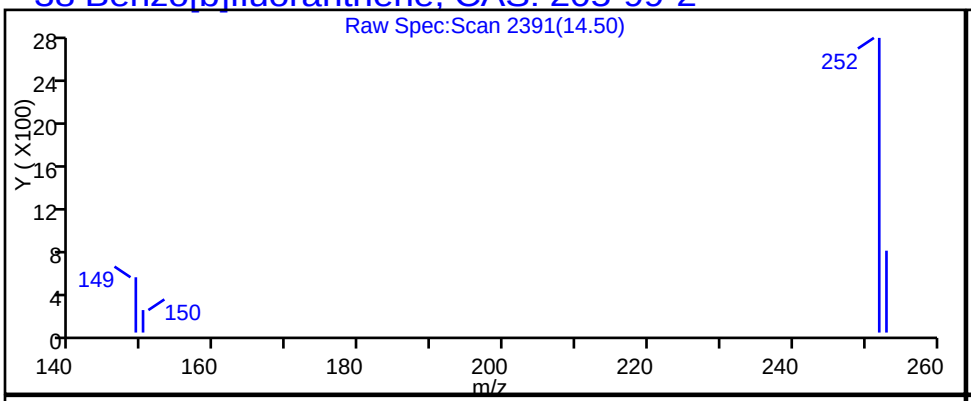


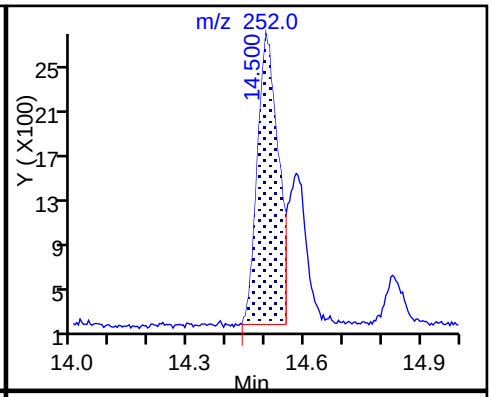
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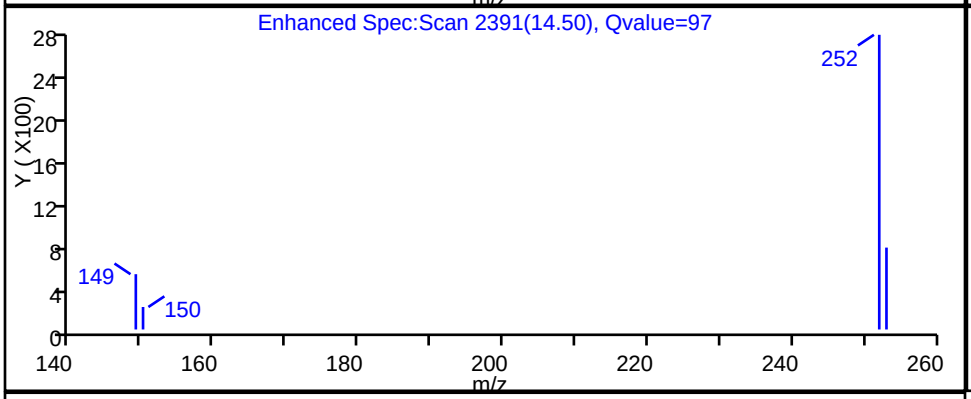
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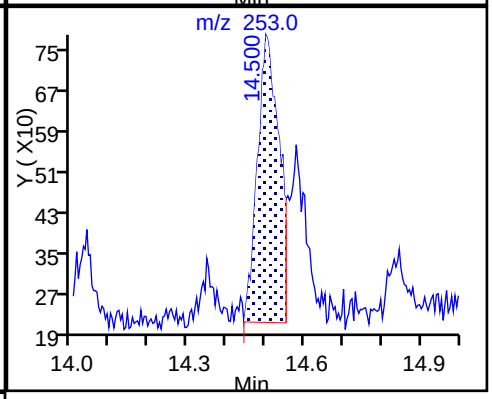
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Lims ID:	280-97803-C-11-B	Lab Sample ID:	280-97803-11		
Client ID:	SS025-SB05(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

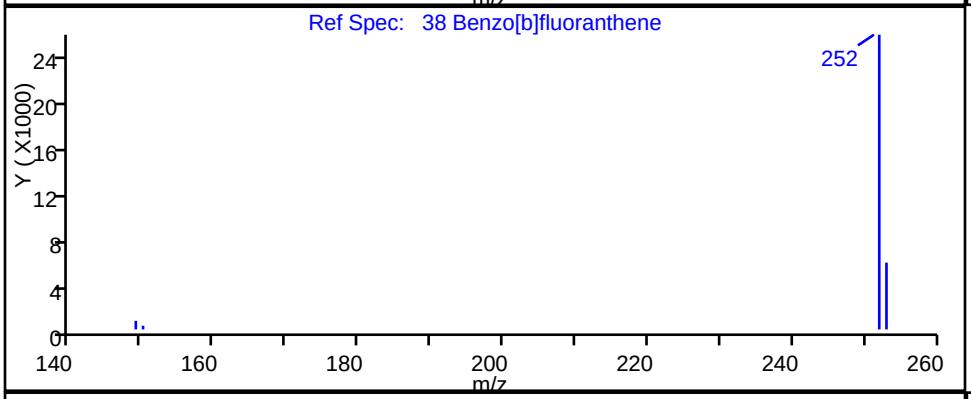
38 Benzo[b]fluoranthene, CAS: 205-99-2

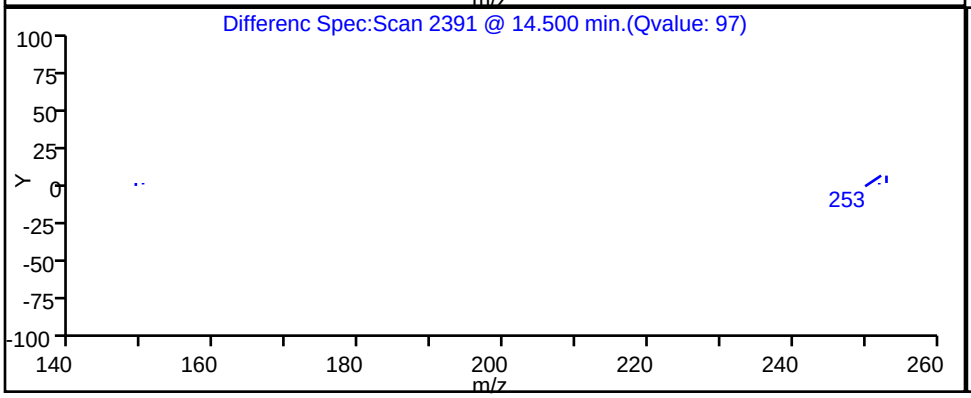


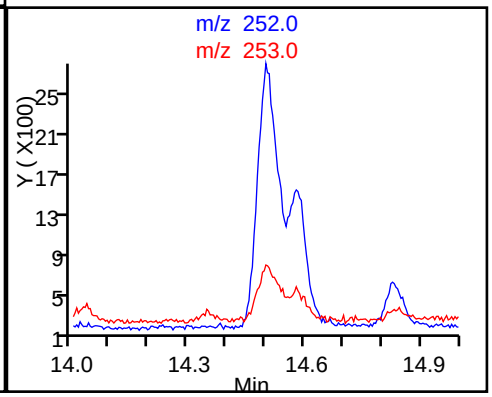












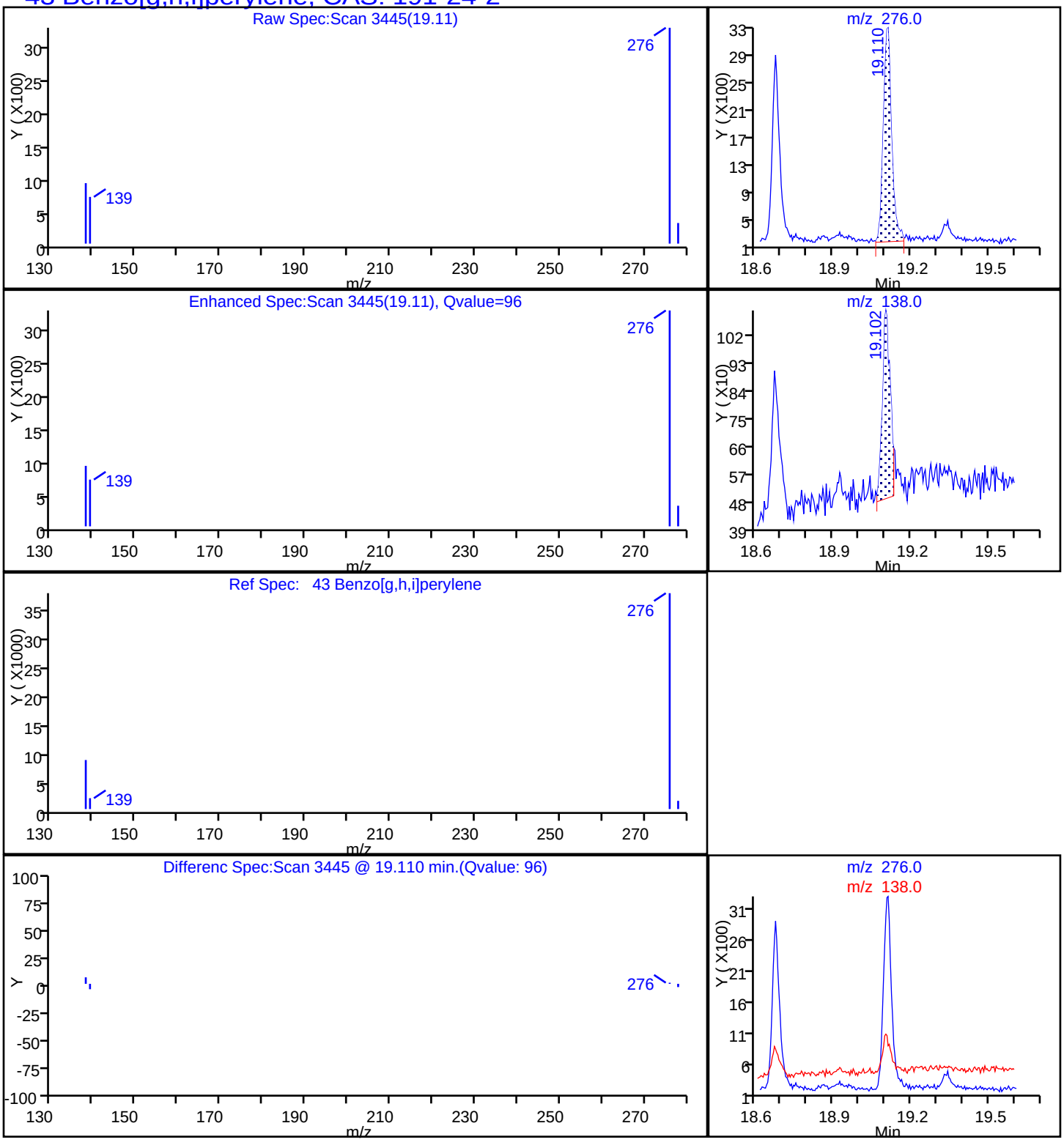
Report Date: 22-Jun-2017 16:05:52 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7349.D

Injection Date:	22-Jun-2017 00:39:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-11-B	Lab Sample ID:	280-97803-11		
Client ID:	SS025-SB05(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

43 Benzo[g,h,i]perylene, CAS: 191-24-2

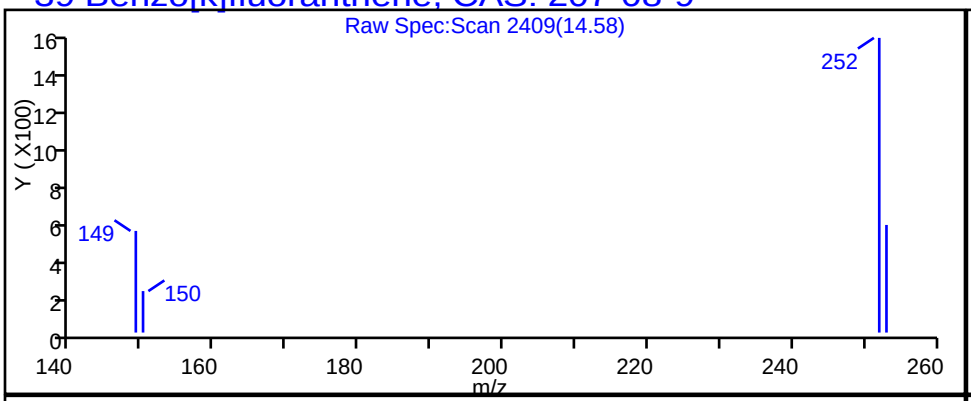


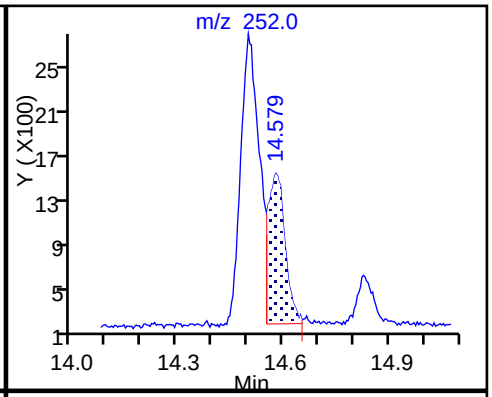
Report Date: 22-Jun-2017 16:05:52 Chrom Revision: 2.2 20-Jun-2017 07:42:38

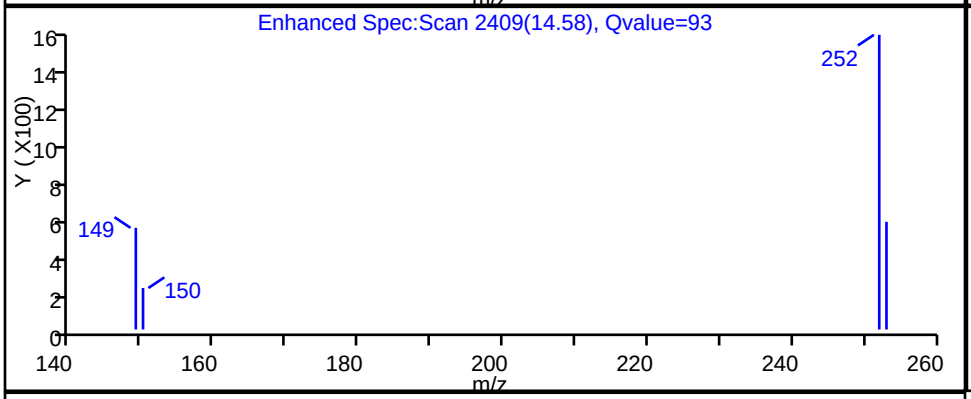
TestAmerica Denver

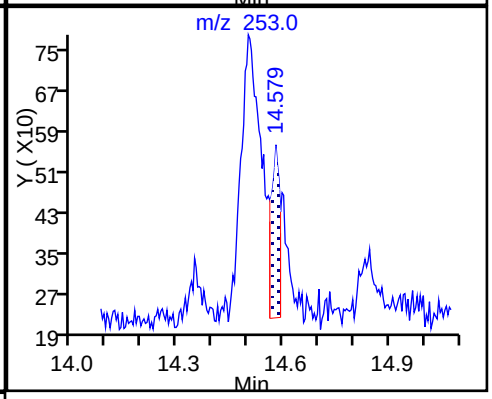
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Lims ID:	280-97803-C-11-B	Lab Sample ID:	280-97803-11		
Client ID:	SS025-SB05(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

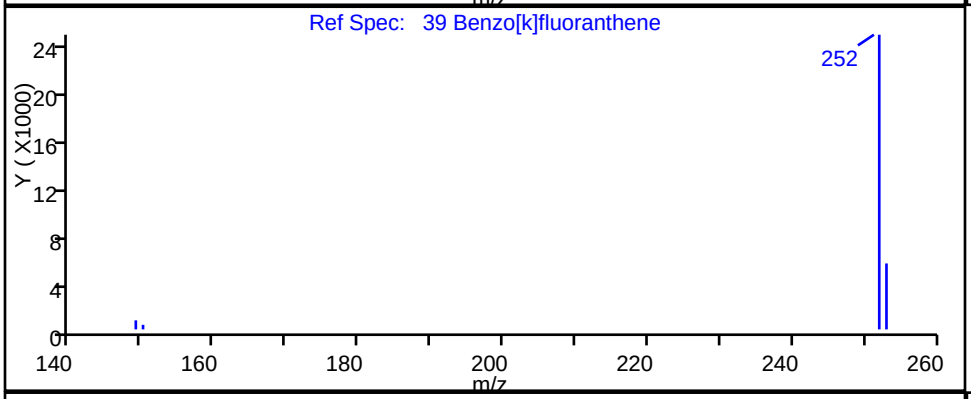
39 Benzo[k]fluoranthene, CAS: 207-08-9

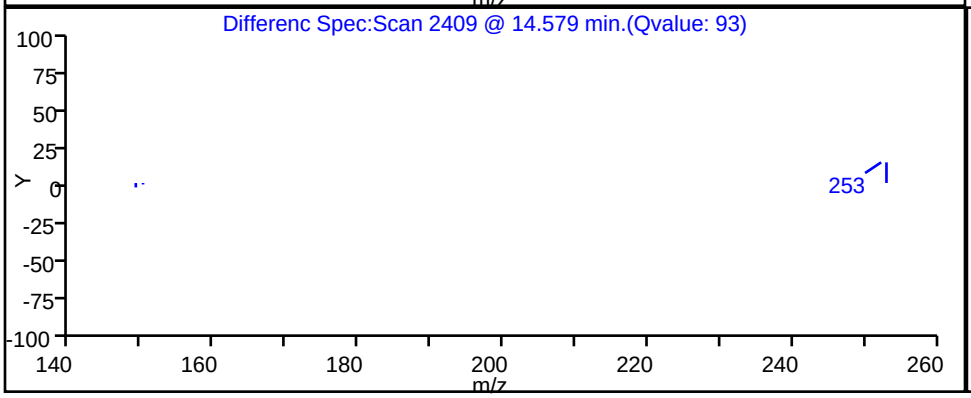


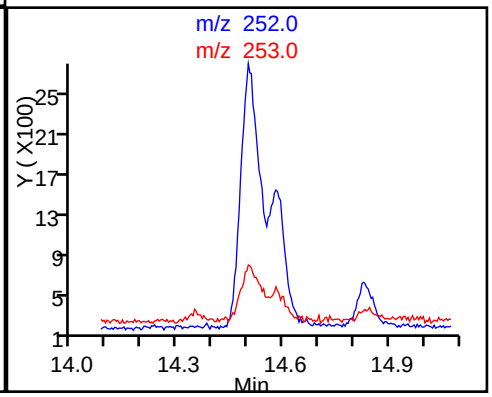












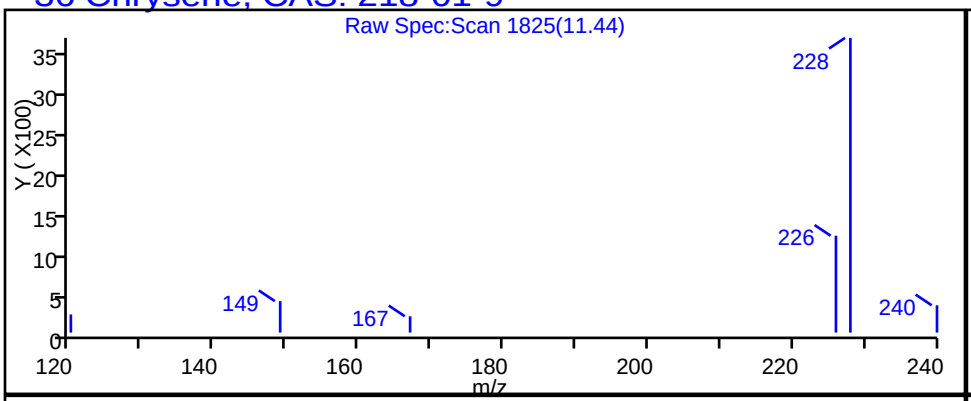
Report Date: 22-Jun-2017 16:05:52 Chrom Revision: 2.2 20-Jun-2017 07:42:38

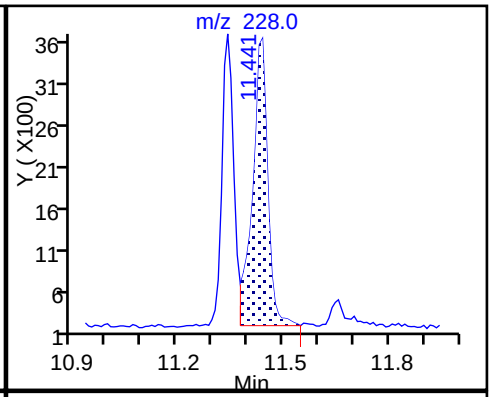
TestAmerica Denver

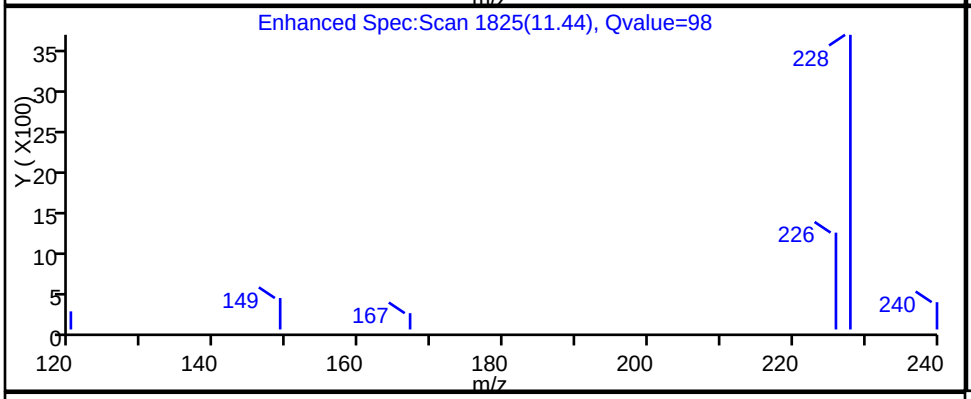
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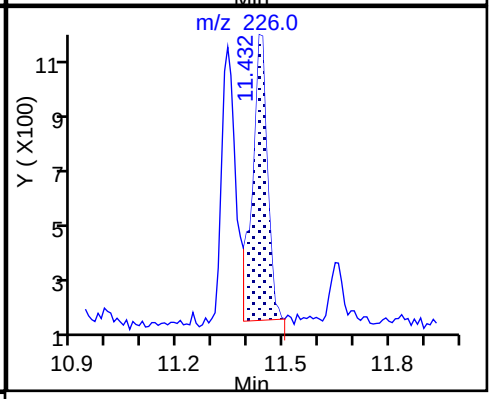
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Lims ID:	280-97803-C-11-B	Lab Sample ID:	280-97803-11
Client ID:	SS025-SB05(0-2)		
Operator ID:	WICKHAMM	ALS Bottle#:	14 Worklist Smp#: 14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM
Column:		Detector	MS SCAN

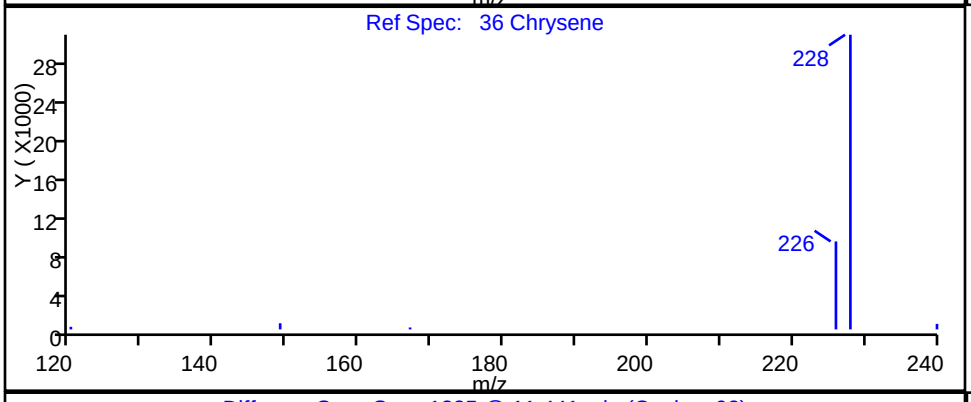
36 Chrysene, CAS: 218-01-9

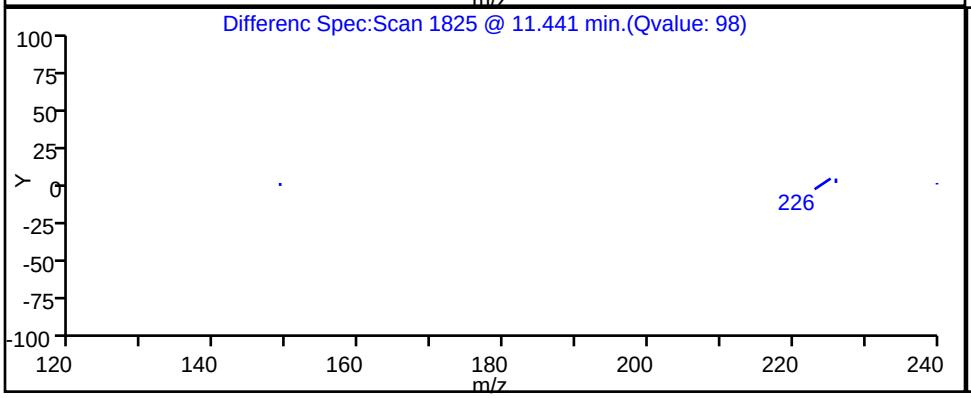


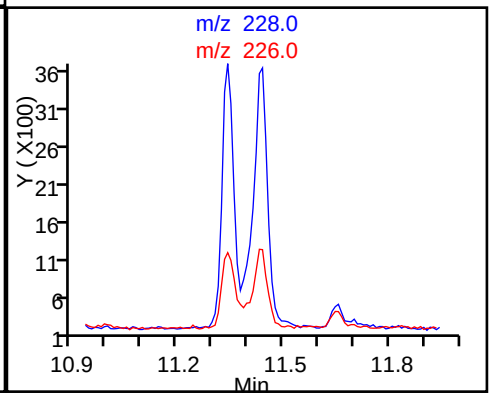










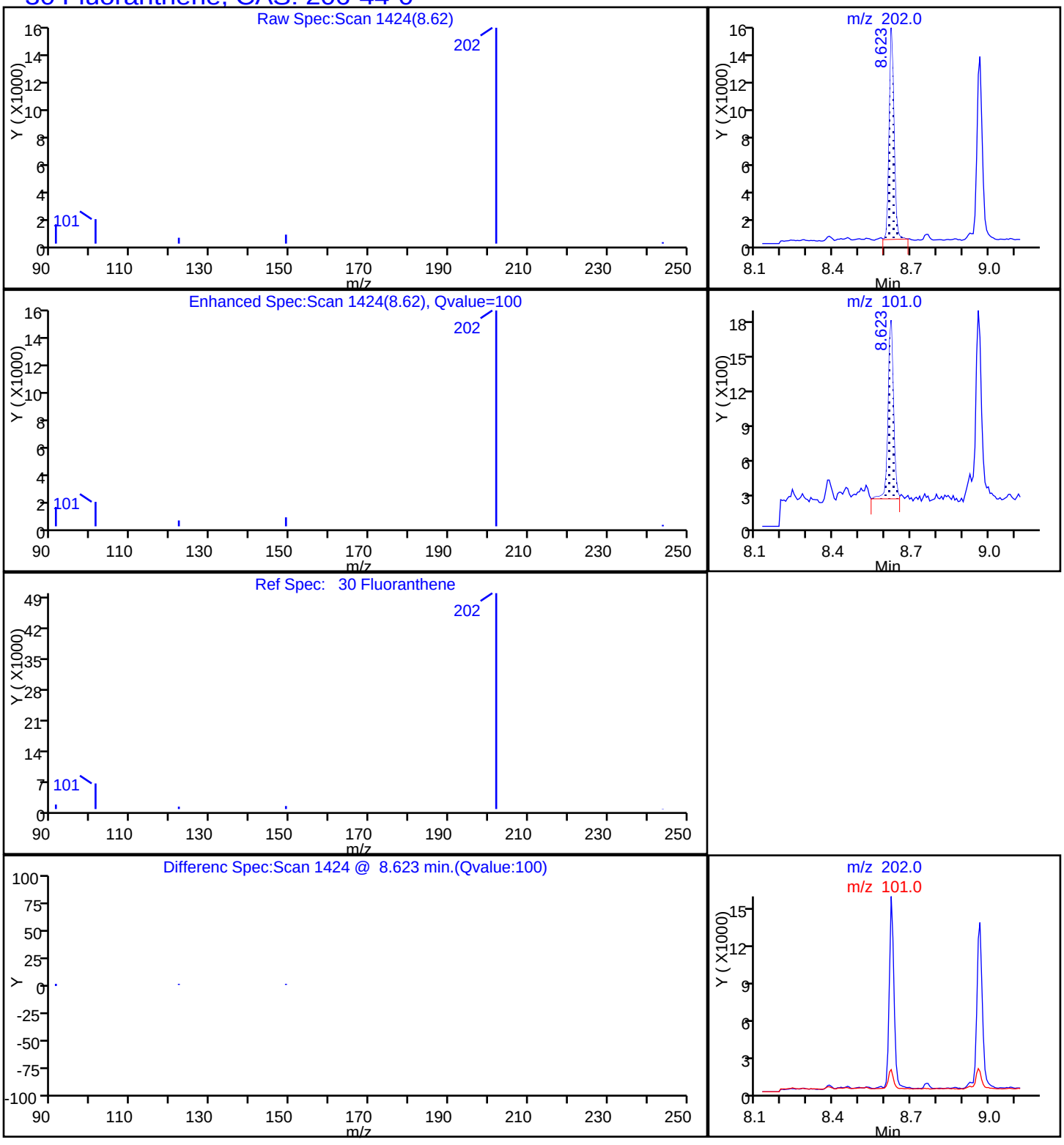


Report Date: 22-Jun-2017 16:05:52 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7349.D				
Injection Date:	22-Jun-2017 00:39:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-11-B	Lab Sample ID:	280-97803-11		
Client ID:	SS025-SB05(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

30 Fluoranthene, CAS: 206-44-0



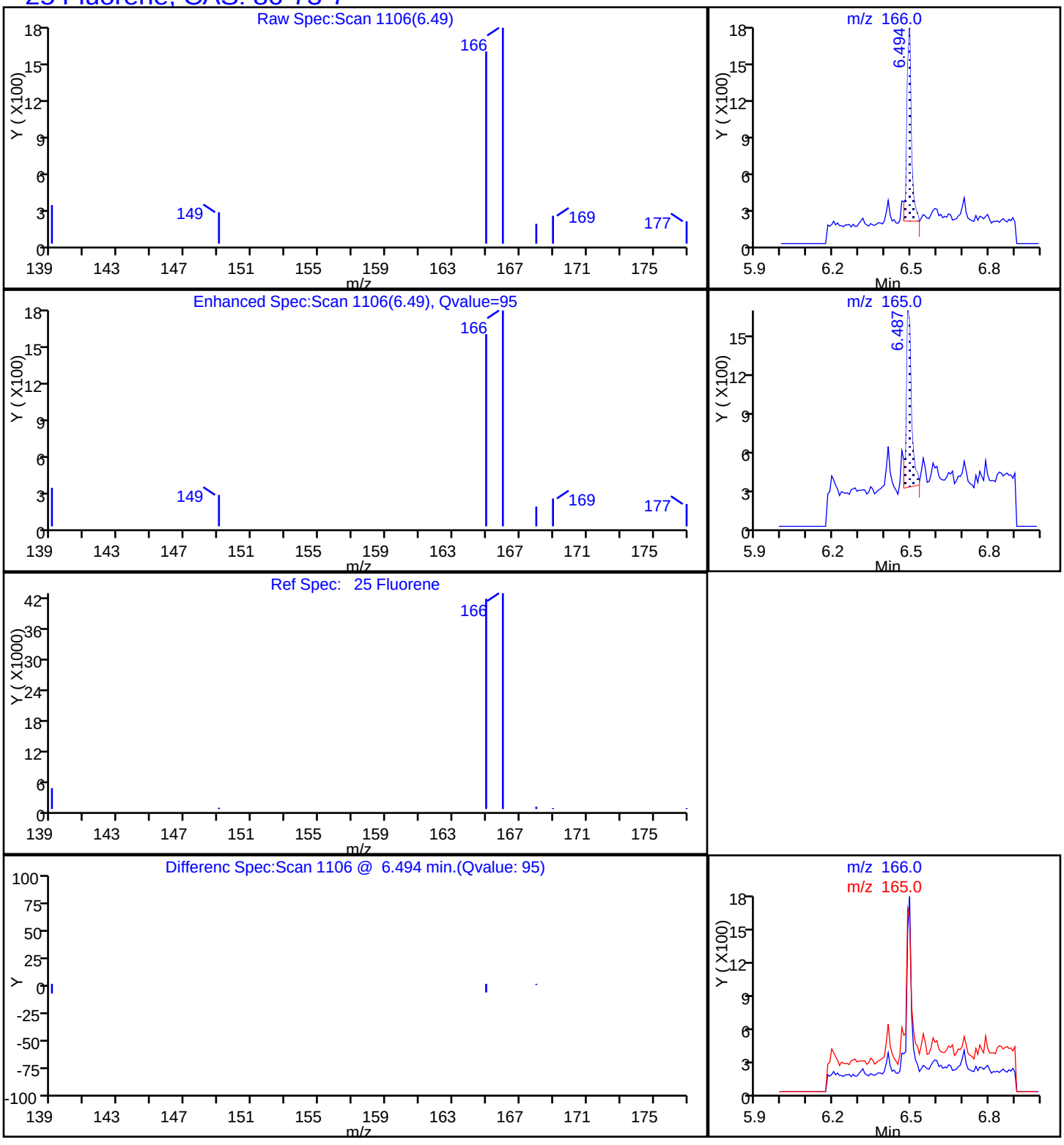
Report Date: 22-Jun-2017 16:05:52 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7349.D

Injection Date:	22-Jun-2017 00:39:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-11-B	Lab Sample ID:	280-97803-11		
Client ID:	SS025-SB05(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Fluorene, CAS: 86-73-7

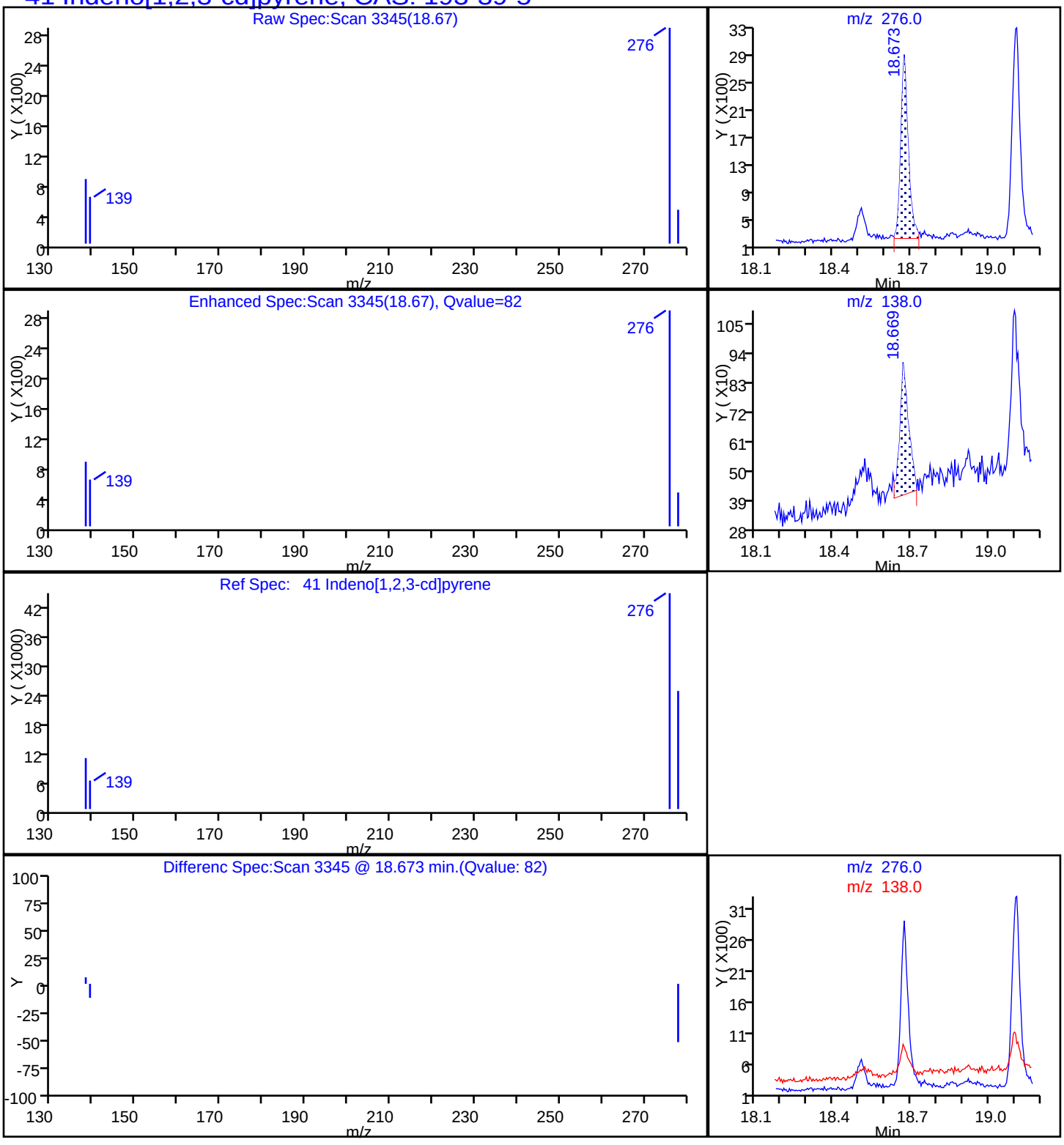


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TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7349.D				
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Lims ID:	280-97803-C-11-B	Lab Sample ID:	280-97803-11		
Client ID:	SS025-SB05(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



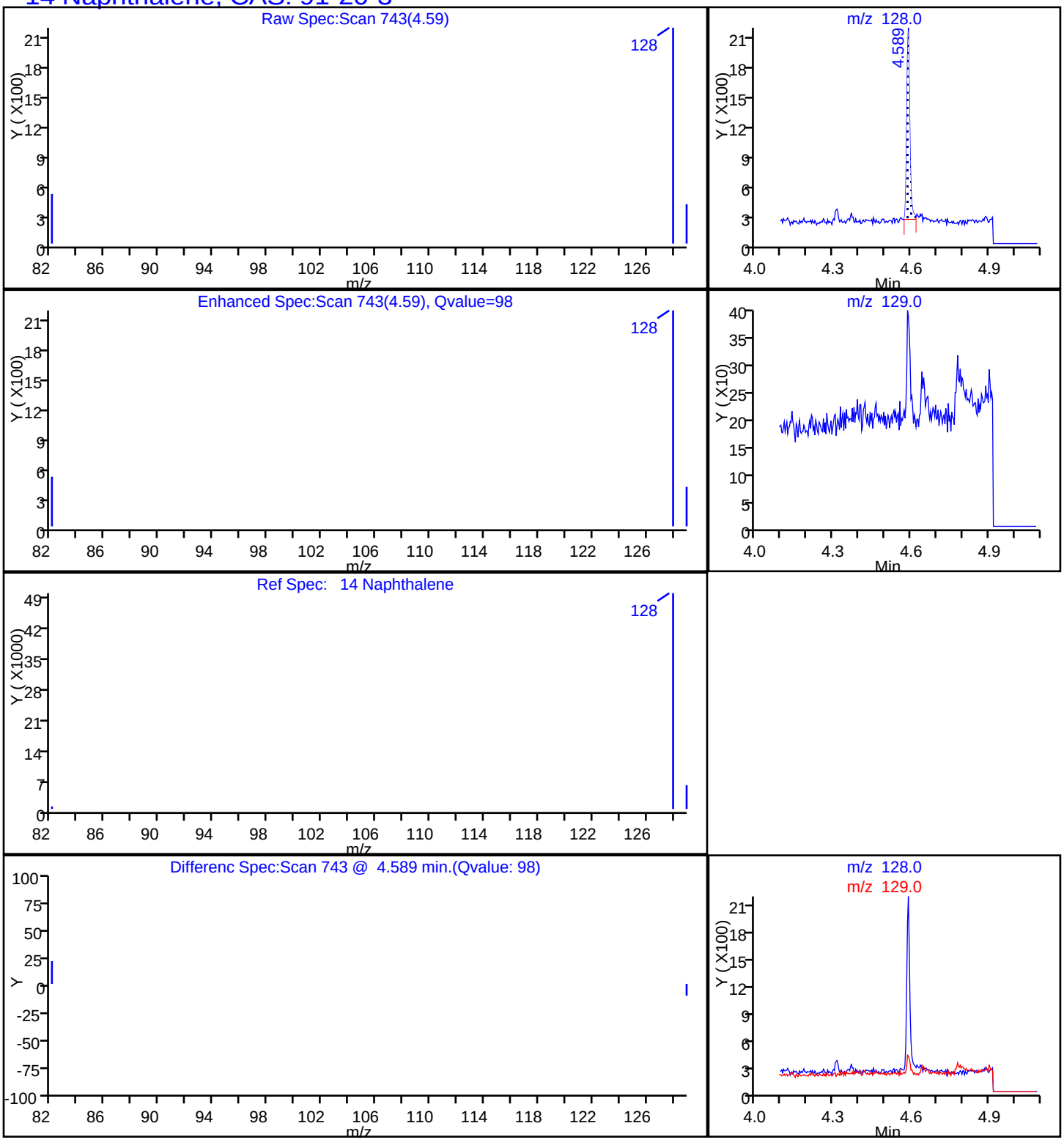
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7349.D

Injection Date:	22-Jun-2017 00:39:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-11-B	Lab Sample ID:	280-97803-11		
Client ID:	SS025-SB05(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3

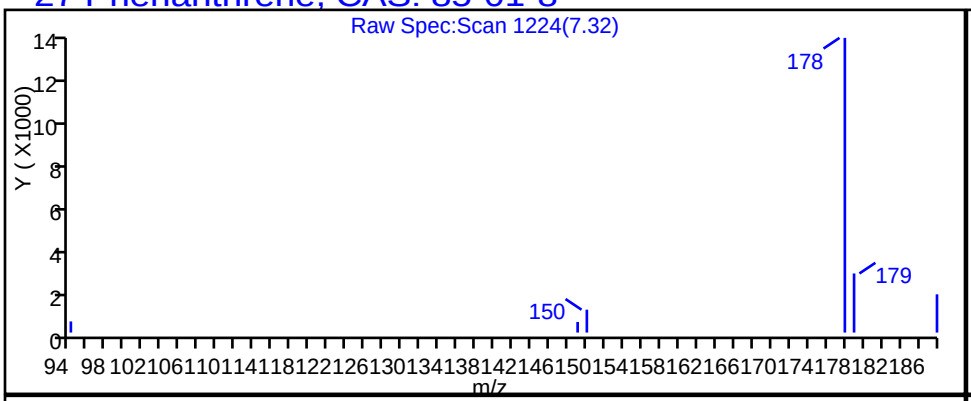


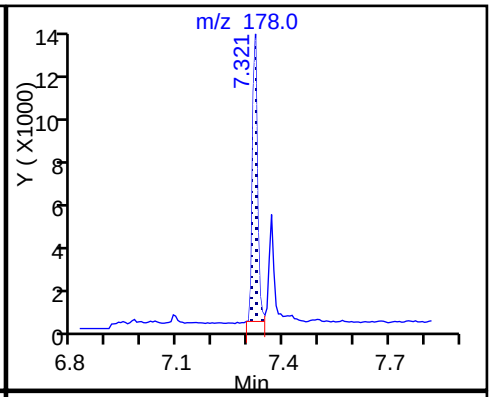
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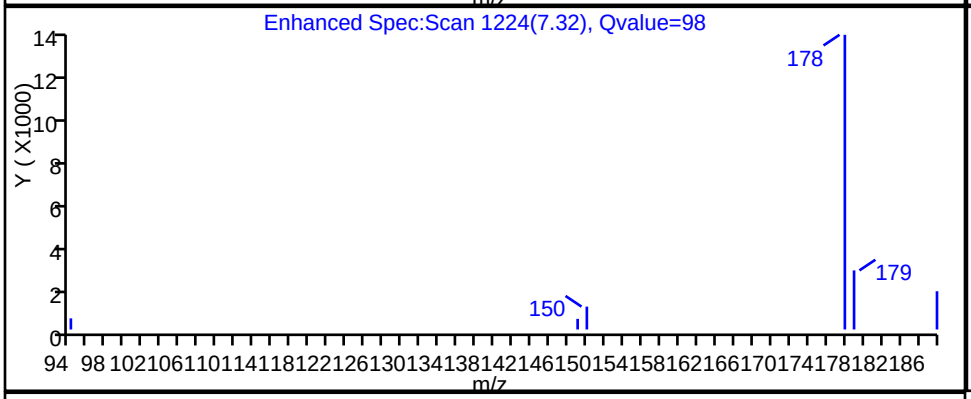
TestAmerica Denver

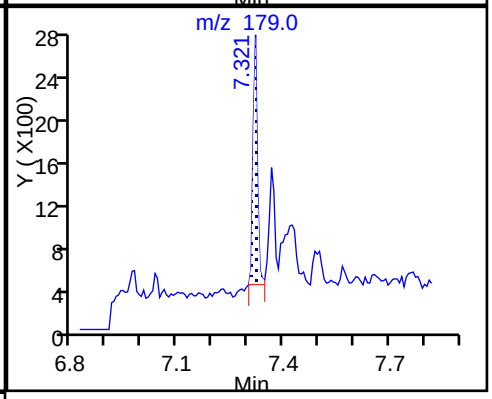
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Lims ID:	280-97803-C-11-B	Lab Sample ID:	280-97803-11		
Client ID:	SS025-SB05(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

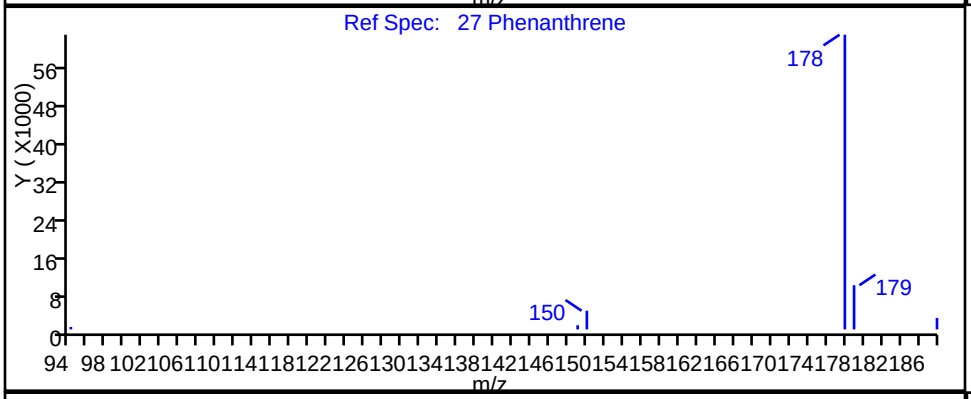
27 Phenanthrene, CAS: 85-01-8

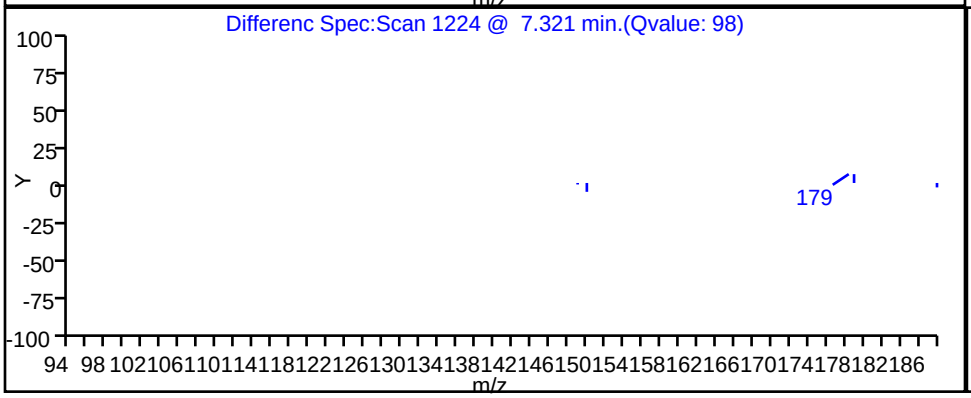


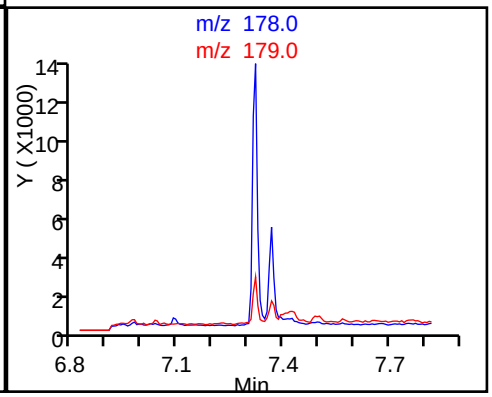












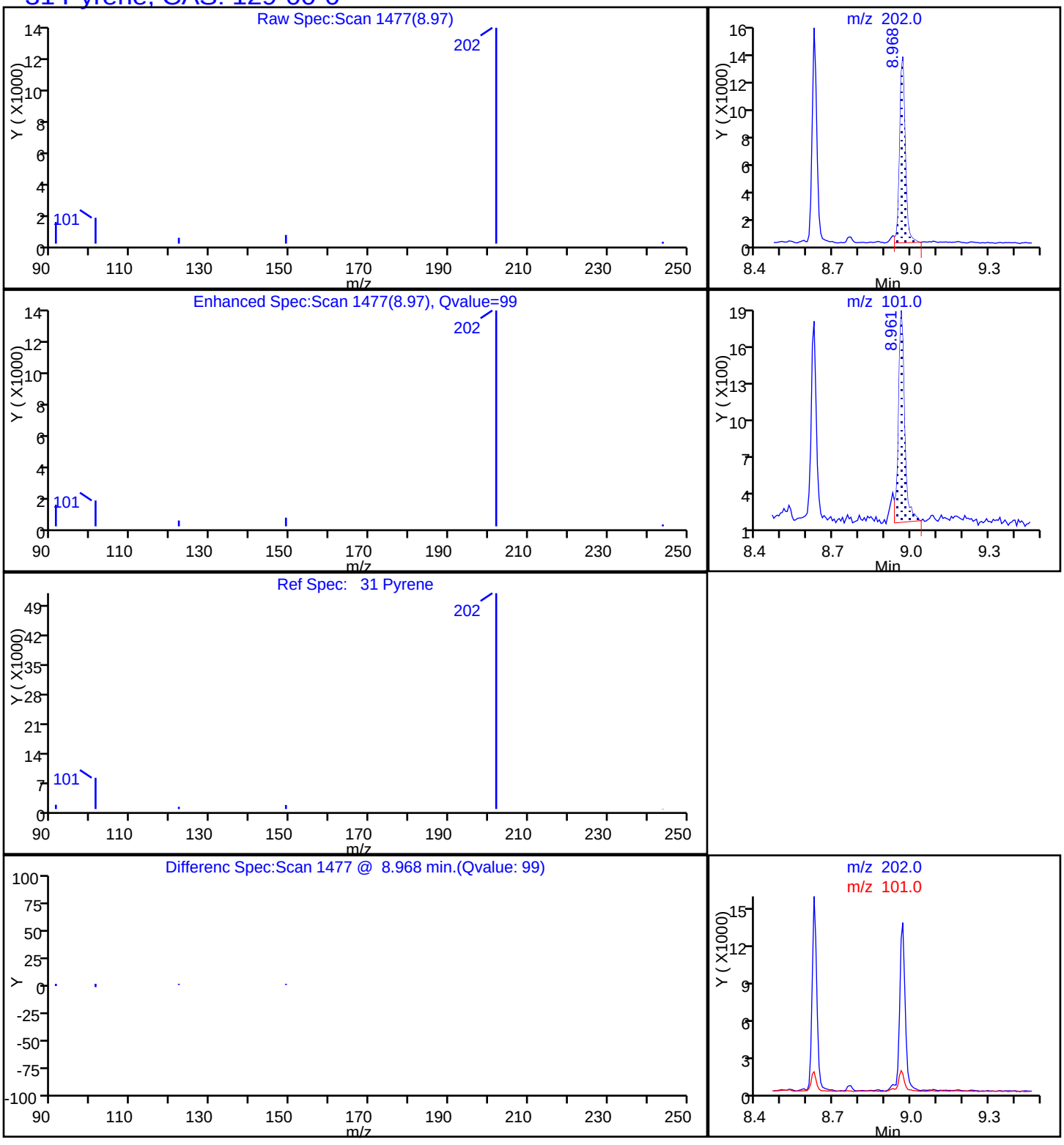
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7349.D

Injection Date:	22-Jun-2017 00:39:30	Instrument ID:	SMS_F		
Lims ID:	280-97803-C-11-B	Lab Sample ID:	280-97803-11		
Client ID:	SS025-SB05(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Pyrene, CAS: 129-00-0



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB05(2-4) | Lab Sample ID: 280-97803-12

Matrix: Solid | Lab File ID: G5_1442.D

Analysis Method: 8270D SIM | Date Collected: 05/31/2017 15:00

Extract. Method: 3546 | Date Extracted: 06/05/2017 08:51

Sample wt/vol: 32.7(g) | Date Analyzed: 06/08/2017 15:50

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 9.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 376547 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.51	U	5.1	0.51	0.26
91-57-6	2-Methylnaphthalene	0.68	U	5.1	0.68	0.31
83-32-9	Acenaphthene	0.27	U	5.1	0.27	0.16
208-96-8	Acenaphthylene	0.68	U	5.1	0.68	0.17
120-12-7	Anthracene	2.5	U	5.1	2.5	0.73
56-55-3	Benzo[a]anthracene	2.5	U	5.1	2.5	0.92
50-32-8	Benzo[a]pyrene	2.5	U	5.1	2.5	0.75
205-99-2	Benzo[b]fluoranthene	2.5	U	5.1	2.5	1.2
191-24-2	Benzo[g,h,i]perylene	1.7	J	5.1	2.5	1.1
207-08-9	Benzo[k]fluoranthene	2.5	U	5.1	2.5	1.0
218-01-9	Chrysene	1.1	J	5.1	2.5	1.0
53-70-3	Dibenz(a,h)anthracene	2.5	U	5.1	2.5	1.3
206-44-0	Fluoranthene	2.5	U	5.1	2.5	1.0
86-73-7	Fluorene	0.68	U	5.1	0.68	0.48
193-39-5	Indeno[1,2,3-cd]pyrene	1.1	J	5.1	2.5	1.1
91-20-3	Naphthalene	0.68	U	5.1	0.68	0.33
85-01-8	Phenanthrene	2.5	U	5.1	2.5	1.1
129-00-0	Pyrene	2.5	U	5.1	2.5	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	68		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	60		44-125
1718-51-0	Terphenyl-d14 (Surr)	75		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1442.D
Lims ID: 280-97803-A-12-B
Client ID: SS025-SB05(2-4)
Sample Type: Client
Inject. Date: 08-Jun-2017 15:50:30 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-a-12-b
Operator ID: VASQUEZK Instrument ID: SMS_G5

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 11-Jun-2017 22:45:01 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 11-Jun-2017 22:33:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	5.987	5.987	0.000	93	20980	600.0	
* 3 Phenanthrene-d10	188	7.249	7.249	0.000	100	43728	600.0	
* 1 Chrysene-d12	240	11.230	11.224	0.006	93	48306	600.0	
$ 4 Nitrobenzene-d5	82	3.961	3.959	0.002	96	6006	299.8	
$ 5 2-Fluorobiphenyl	172	5.391	5.391	0.000	100	17231	340.2	
$ 6 Terphenyl-d14	244	9.044	9.044	0.000	100	21556	375.8	
43 1,4-Dioxane	88		1.879				ND	
7 N-Nitrosodimethylamine	42		2.004				ND	
15 Naphthalene	128		4.550				ND	
16 2-Methylnaphthalene	142		5.105				ND	
17 1-Methylnaphthalene	142		5.190				ND	
18 Dimethyl phthalate	163		5.710				ND	
20 Acenaphthylene	152		5.873				ND	
21 Acenaphthene	153		6.015				ND	
19 Dibenzofuran	168		6.159				ND	
22 Diethyl phthalate	149		6.284				ND	
23 Fluorene	166		6.447				ND	
24 N-Nitrosodiphenylamine	169		6.522				ND	
25 Phenanthrene	178		7.271				ND	
26 Anthracene	178		7.314				ND	
27 Di-n-butyl phthalate	149		7.683				ND	
28 Fluoranthene	202		8.545				ND	
29 Pyrene	202		8.881				ND	
30 Butyl benzyl phthalate	149		9.863				ND	
31 Bis(2-ethylhexyl) phthalat	149	11.132	11.127	0.005	100	21465	446.6	
32 Benzo[a]anthracene	228	11.203	11.197	0.006	21	2240	22.5	
33 Chrysene	228	11.295	11.290	0.005	93	3339	32.6	
34 Di-n-octyl phthalate	149		13.028				ND	
35 Benzo[b]fluoranthene	252		14.276				ND	
36 Benzo[k]fluoranthene	252		14.361				ND	
37 Benzo[a]pyrene	252		15.333				ND	
39 Indeno[1,2,3-cd]pyrene	276	18.506	18.502	0.004	84	2648	33.1	

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
	38 Dibenz(a,h)anthracene	278		18.543				ND	
	40 Benzo[g,h,i]perylene	276	18.924	18.924	0.000	88	4594	50.4	
	8 Morpholine	1		0.000				ND	
	44 Benzidine	184		0.000				ND	
	42 Pentachlorophenol	266		0.000				ND	
	9 Pentachlorophenol_T	266		4.285				ND	
	10 DFTPP								
	11 Benzidine_T	184		5.387				ND	
	13 4,4'-DDD	235		5.777				ND	
	12 4,4'-DDE	246		5.932				ND	
	14 4,4'-DDT	235		5.970				ND	
S	41 TPAH	1		0.000				ND	

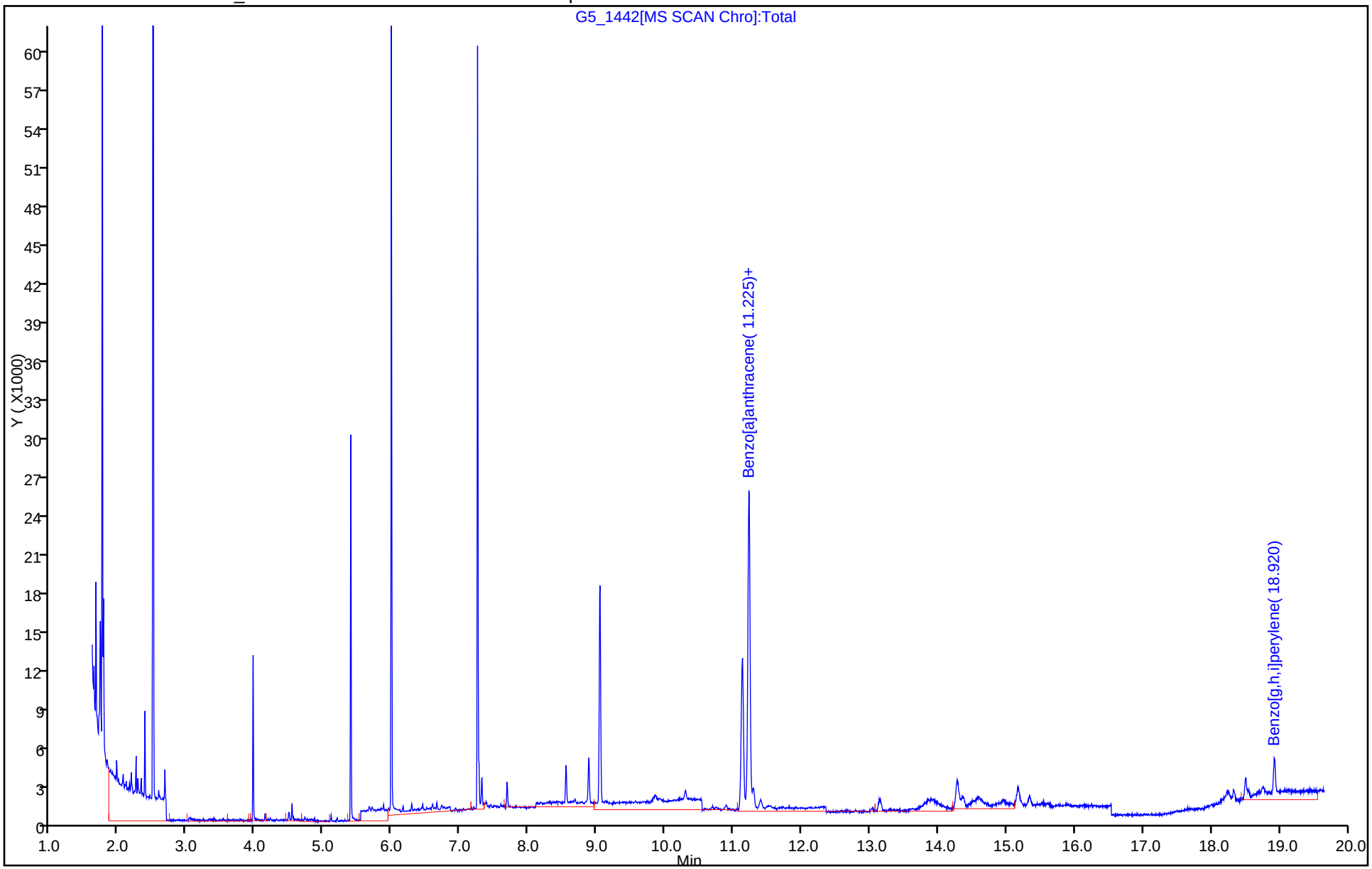
Reagents:

MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 11-Jun-2017 22:45:30 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1442.D				
Injection Date:	08-Jun-2017 15:50:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	280-97803-A-12-B	Lab Sample ID:	280-97803-12	Worklist Smp#:	16
Client ID:	SS025-SB05(2-4)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1442.D
Lims ID: 280-97803-A-12-B
Client ID: SS025-SB05(2-4)
Sample Type: Client
Inject. Date: 08-Jun-2017 15:50:30 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-a-12-b
Operator ID: VASQUEZK Instrument ID: SMS_G5

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 11-Jun-2017 22:45:01 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 11-Jun-2017 22:33:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	299.8	59.97
$ 5 2-Fluorobiphenyl	500.0	340.2	68.04
$ 6 Terphenyl-d14	500.0	375.8	75.16

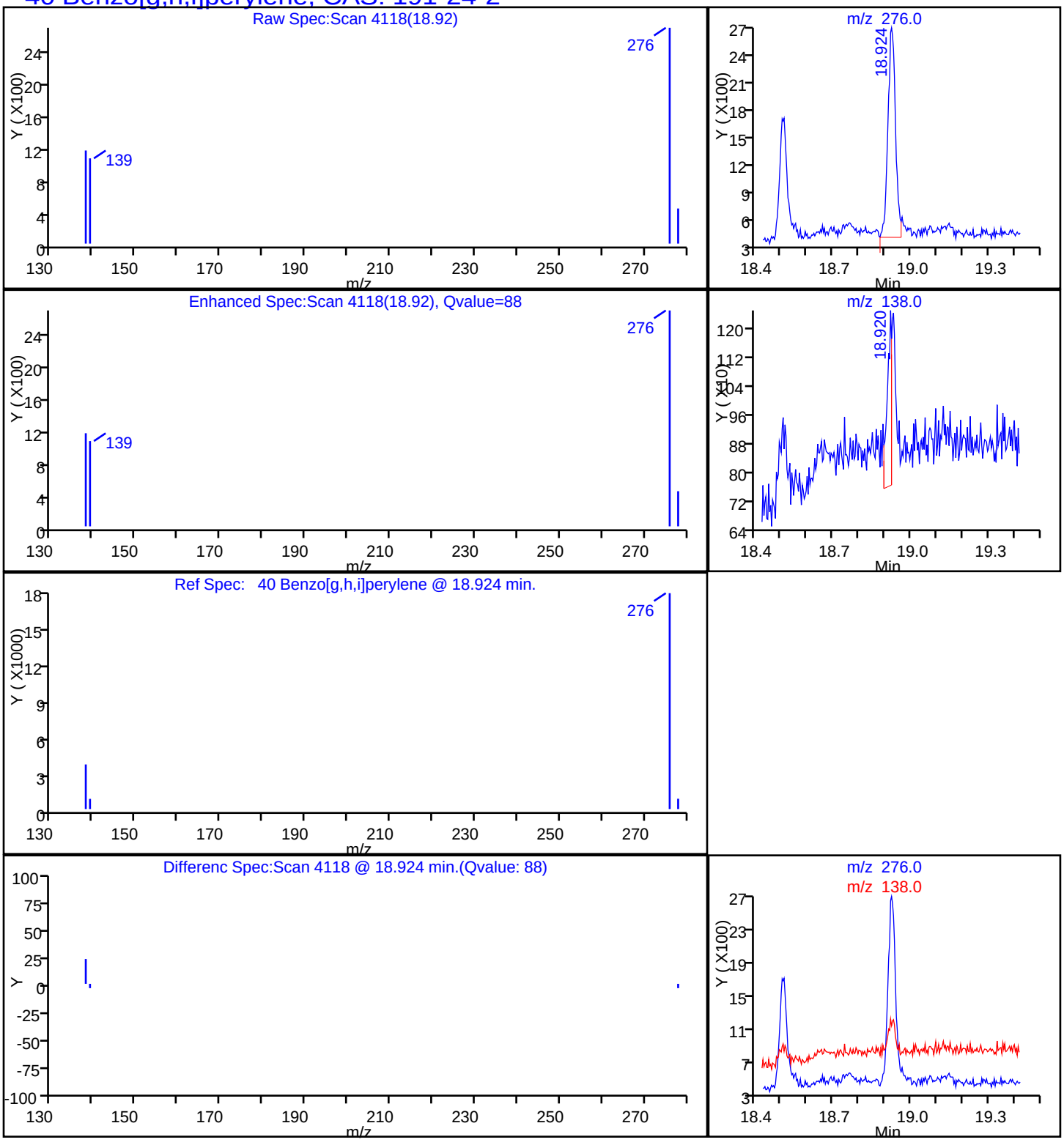
Report Date: 11-Jun-2017 22:45:30 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1442.D

Injection Date:	08-Jun-2017 15:50:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-12-B	Lab Sample ID:	280-97803-12		
Client ID:	SS025-SB05(2-4)				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

40 Benzo[g,h,i]perylene, CAS: 191-24-2



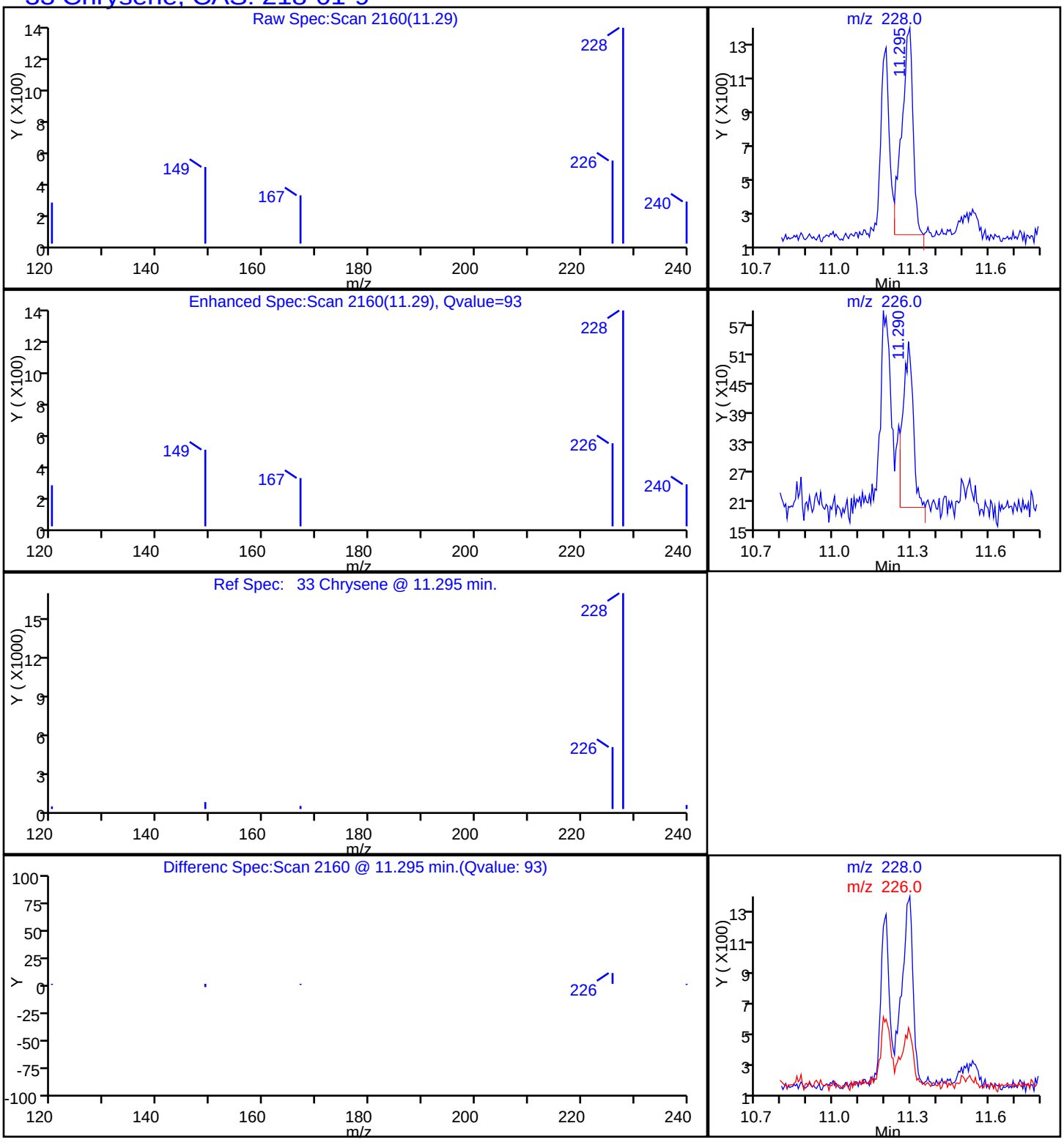
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1442.D

Injection Date:	08-Jun-2017 15:50:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-12-B	Lab Sample ID:	280-97803-12		
Client ID:	SS025-SB05(2-4)				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

33 Chrysene, CAS: 218-01-9



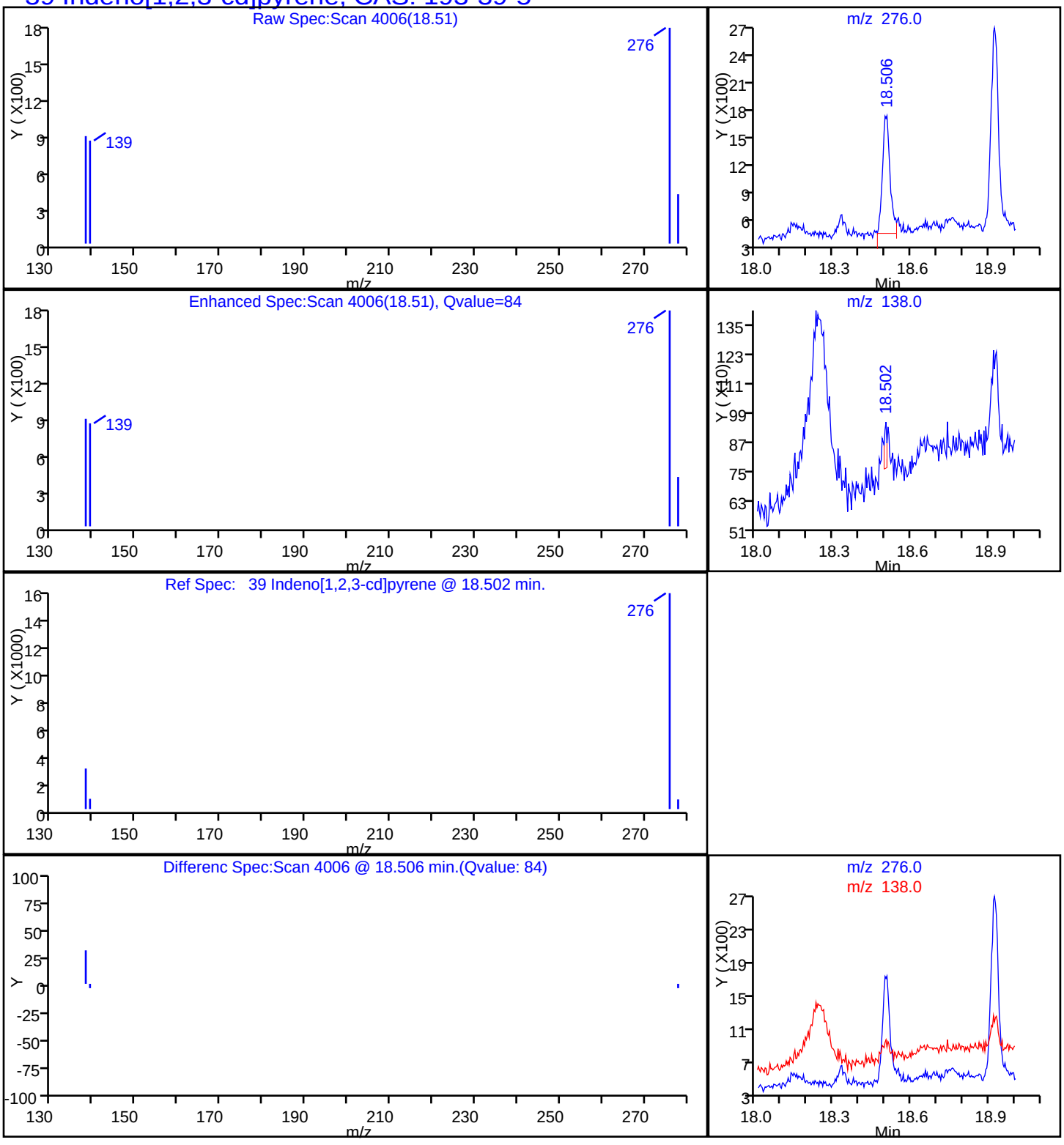
Report Date: 11-Jun-2017 22:45:30 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1442.D

Injection Date:	08-Jun-2017 15:50:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-12-B	Lab Sample ID:	280-97803-12		
Client ID:	SS025-SB05(2-4)				
Operator ID:	VASQUEZK	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS06 | Lab Sample ID: 280-97803-13

Matrix: Solid | Lab File ID: G5_1443.D

Analysis Method: 8270D SIM | Date Collected: 05/31/2017 15:40

Extract. Method: 3546 | Date Extracted: 06/05/2017 08:51

Sample wt/vol: 31.3(g) | Date Analyzed: 06/08/2017 16:18

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 12.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 376547 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	1.1	J	5.5	0.55	0.29
91-57-6	2-Methylnaphthalene	1.4	J	5.5	0.73	0.34
83-32-9	Acenaphthene	1.7	J	5.5	0.29	0.18
208-96-8	Acenaphthylene	4.9	J	5.5	0.73	0.19
120-12-7	Anthracene	5.3	J	5.5	2.8	0.79
56-55-3	Benzo[a]anthracene	26		5.5	2.8	0.99
50-32-8	Benzo[a]pyrene	29		5.5	2.8	0.81
205-99-2	Benzo[b]fluoranthene	40		5.5	2.8	1.3
191-24-2	Benzo[g,h,i]perylene	16		5.5	2.8	1.2
207-08-9	Benzo[k]fluoranthene	14		5.5	2.8	1.1
218-01-9	Chrysene	31		5.5	2.8	1.1
53-70-3	Dibenz(a,h)anthracene	5.3	J	5.5	2.8	1.4
206-44-0	Fluoranthene	51		5.5	2.8	1.1
86-73-7	Fluorene	2.1	J	5.5	0.73	0.52
193-39-5	Indeno[1,2,3-cd]pyrene	19		5.5	2.8	1.2
91-20-3	Naphthalene	0.73	U	5.5	0.73	0.36
85-01-8	Phenanthrene	22		5.5	2.8	1.2
129-00-0	Pyrene	46		5.5	2.8	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	64		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	58		44-125
1718-51-0	Terphenyl-d14 (Surr)	72		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1443.D
Lims ID: 280-97803-A-13-B
Client ID: SS025-SS06
Sample Type: Client
Inject. Date: 08-Jun-2017 16:18:30 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-a-13-b
Operator ID: VASQUEZK Instrument ID: SMS_G5

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 11-Jun-2017 22:45:01 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 11-Jun-2017 22:33:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	5.987	5.987	0.000	95	22660	600.0	
* 3 Phenanthrene-d10	188	7.249	7.249	0.000	100	44909	600.0	
* 1 Chrysene-d12	240	11.225	11.224	0.001	99	49040	600.0	
$ 4 Nitrobenzene-d5	82	3.962	3.959	0.003	96	6231	288.0	
$ 5 2-Fluorobiphenyl	172	5.391	5.391	0.000	100	17630	322.3	
$ 6 Terphenyl-d14	244	9.044	9.044	0.000	100	21275	361.2	
43 1,4-Dioxane	88		1.879				ND	
7 N-Nitrosodimethylamine	42		2.004				ND	
15 Naphthalene	128		4.550				ND	
16 2-Methylnaphthalene	142	5.105	5.105	0.000	99	1513	37.5	
17 1-Methylnaphthalene	142	5.190	5.190	0.000	93	1168	28.8	
18 Dimethyl phthalate	163		5.710				ND	
20 Acenaphthylene	152	5.873	5.873	0.000	100	8562	134.8	
21 Acenaphthene	153	6.015	6.015	0.000	98	2031	47.0	
19 Dibenzofuran	168	6.159	6.159	0.000	97	2032	29.4	
22 Diethyl phthalate	149		6.284				ND	
23 Fluorene	166	6.447	6.447	0.000	96	2912	56.0	
24 N-Nitrosodiphenylamine	169	6.522	6.522	0.000	86	940	28.3	
25 Phenanthrene	178	7.271	7.271	0.000	100	50005	587.8	
26 Anthracene	178	7.314	7.314	0.000	99	11568	145.5	
27 Di-n-butyl phthalate	149		7.683				ND	
28 Fluoranthene	202	8.545	8.545	0.000	100	148691	1400.7	
29 Pyrene	202	8.881	8.881	0.000	100	139140	1261.0	
30 Butyl benzyl phthalate	149	9.863	9.863	0.000	97	6903	201.4	
31 Bis(2-ethylhexyl) phthalat	149	11.127	11.127	0.000	98	8542	173.0	
32 Benzo[a]anthracene	228	11.197	11.197	0.000	98	71310	706.1	
33 Chrysene	228	11.290	11.290	0.000	100	89123	857.1	
34 Di-n-octyl phthalate	149		13.028				ND	
35 Benzo[b]fluoranthene	252	14.283	14.276	0.007	100	103710	1102.8	
36 Benzo[k]fluoranthene	252	14.358	14.361	-0.003	100	36954	386.5	
37 Benzo[a]pyrene	252	15.337	15.333	0.004	100	65860	788.7	
39 Indeno[1,2,3-cd]pyrene	276	18.506	18.502	0.004	99	42672	525.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
38 Dibenz(a,h)anthracene	278	18.540	18.543	-0.003	85	12039	143.6	
40 Benzo[g,h,i]perylene	276	18.928	18.924	0.004	100	41230	445.2	
8 Morpholine	1		0.000				ND	
44 Benzidine	184		0.000				ND	
42 Pentachlorophenol	266		0.000				ND	
9 Pentachlorophenol_T	266		4.285				ND	
10 DFTPP								
11 Benzidine_T	184		5.387				ND	
13 4,4'-DDD	235		5.777				ND	
12 4,4'-DDE	246		5.932				ND	
14 4,4'-DDT	235		5.970				ND	
S 41 TPAH	1		0.000				ND	

Reagents:

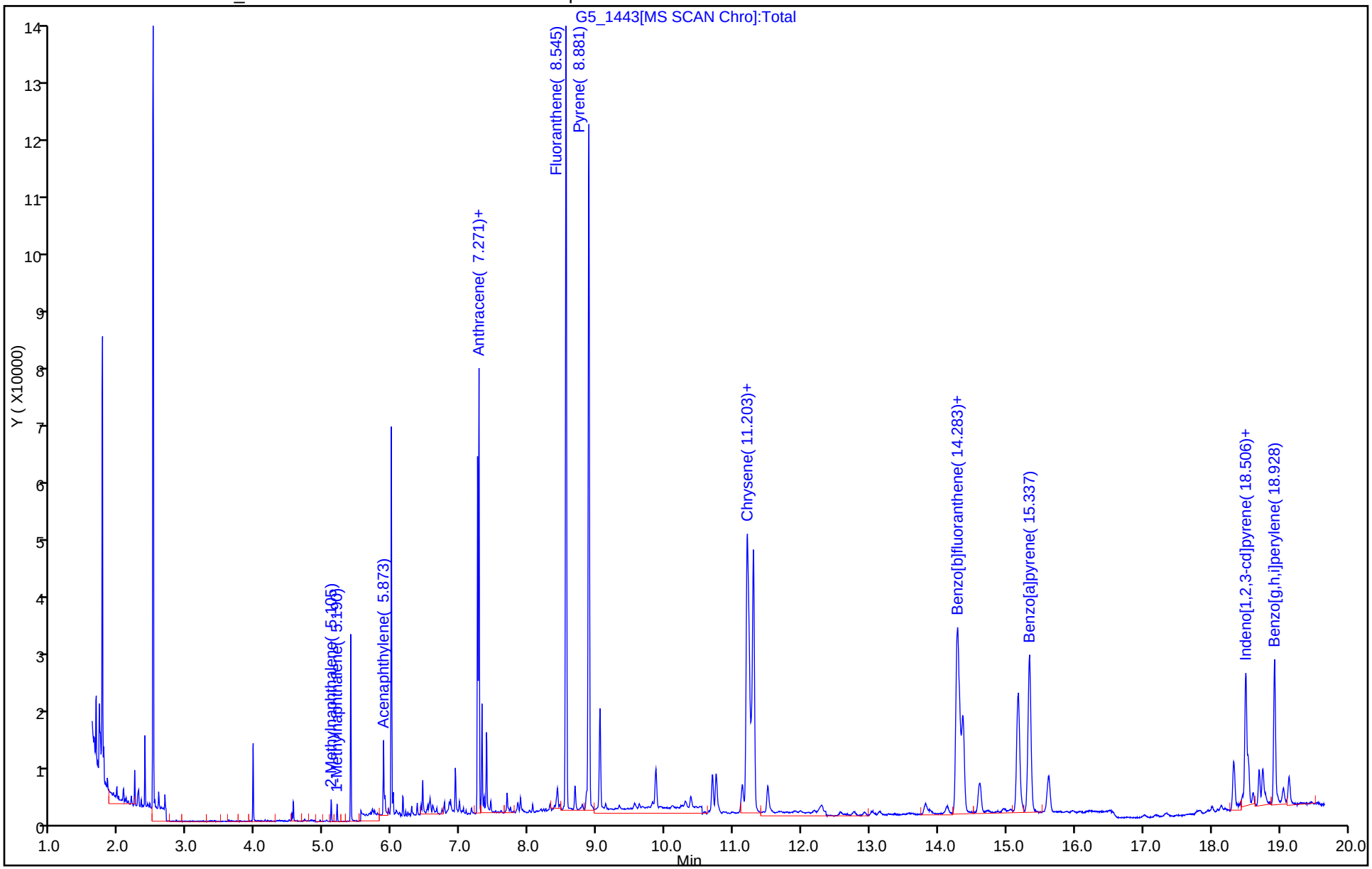
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 11-Jun-2017 22:45:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1443.D

Injection Date:	08-Jun-2017 16:18:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	280-97803-A-13-B	Lab Sample ID:	280-97803-13	Worklist Smp#:	17
Client ID:	SS025-SS06				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1443.D
Lims ID: 280-97803-A-13-B
Client ID: SS025-SS06
Sample Type: Client
Inject. Date: 08-Jun-2017 16:18:30 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-a-13-b
Operator ID: VASQUEZK Instrument ID: SMS_G5

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 11-Jun-2017 22:45:01 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 11-Jun-2017 22:33:48

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	288.0	57.60
$ 5 2-Fluorobiphenyl	500.0	322.3	64.46
$ 6 Terphenyl-d14	500.0	361.2	72.23

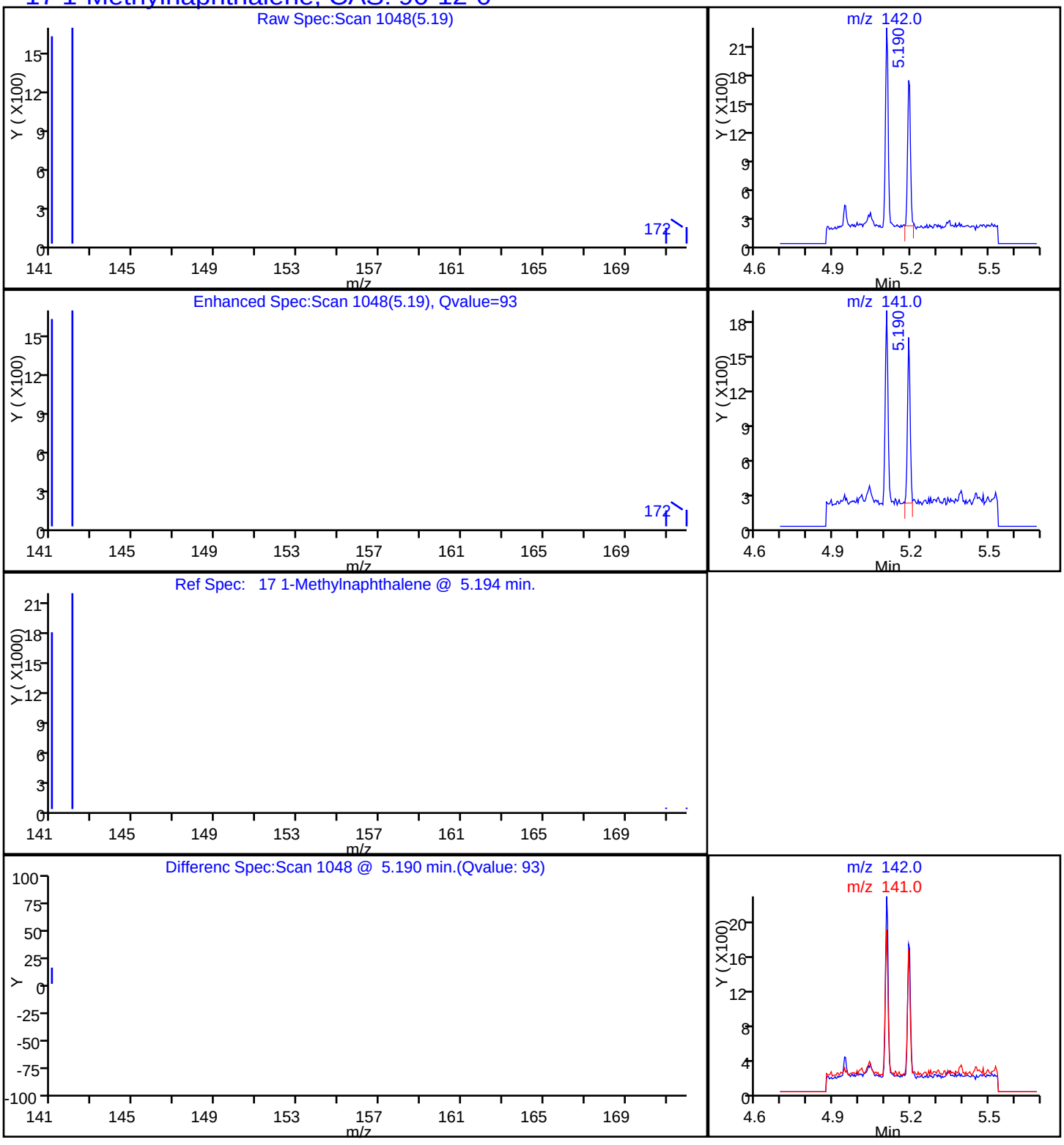
Report Date: 11-Jun-2017 22:45:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1443.D

Injection Date:	08-Jun-2017 16:18:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-13-B	Lab Sample ID:	280-97803-13		
Client ID:	SS025-SS06				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0



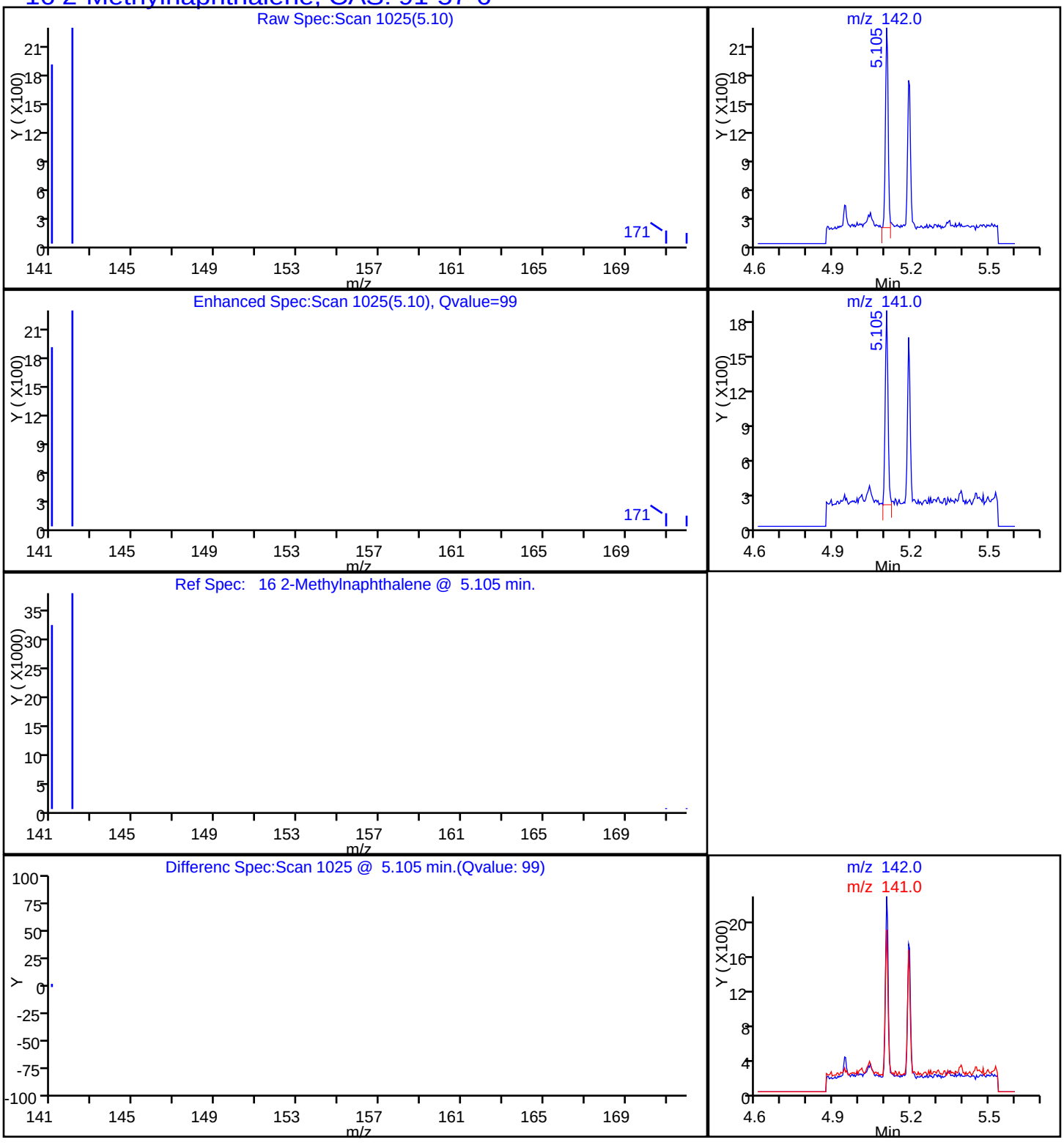
Report Date: 11-Jun-2017 22:45:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1443.D

Injection Date:	08-Jun-2017 16:18:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-13-B	Lab Sample ID:	280-97803-13		
Client ID:	SS025-SS06				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



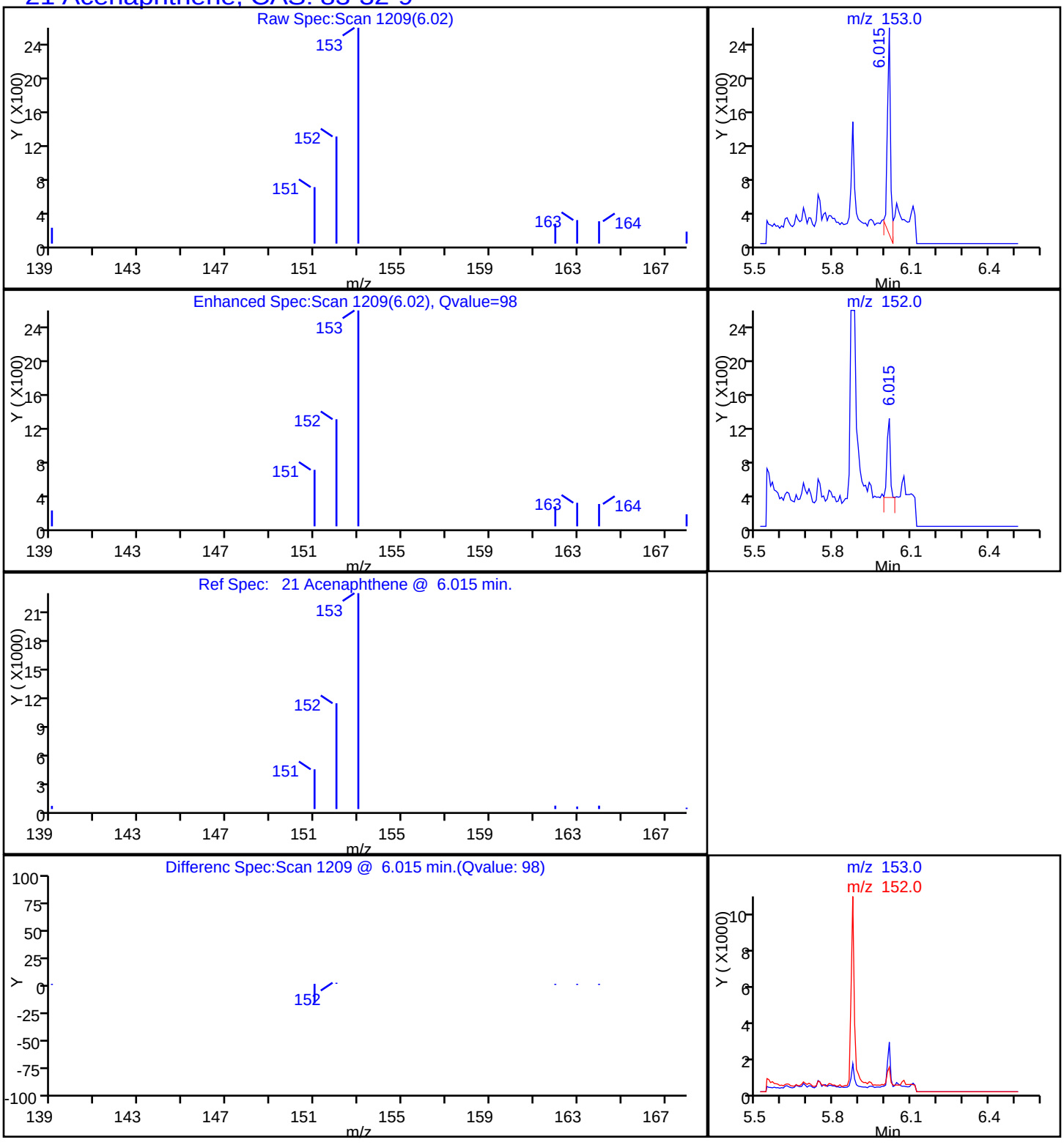
Report Date: 11-Jun-2017 22:45:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1443.D

Injection Date:	08-Jun-2017 16:18:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-13-B	Lab Sample ID:	280-97803-13		
Client ID:	SS025-SS06				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

21 Acenaphthene, CAS: 83-32-9



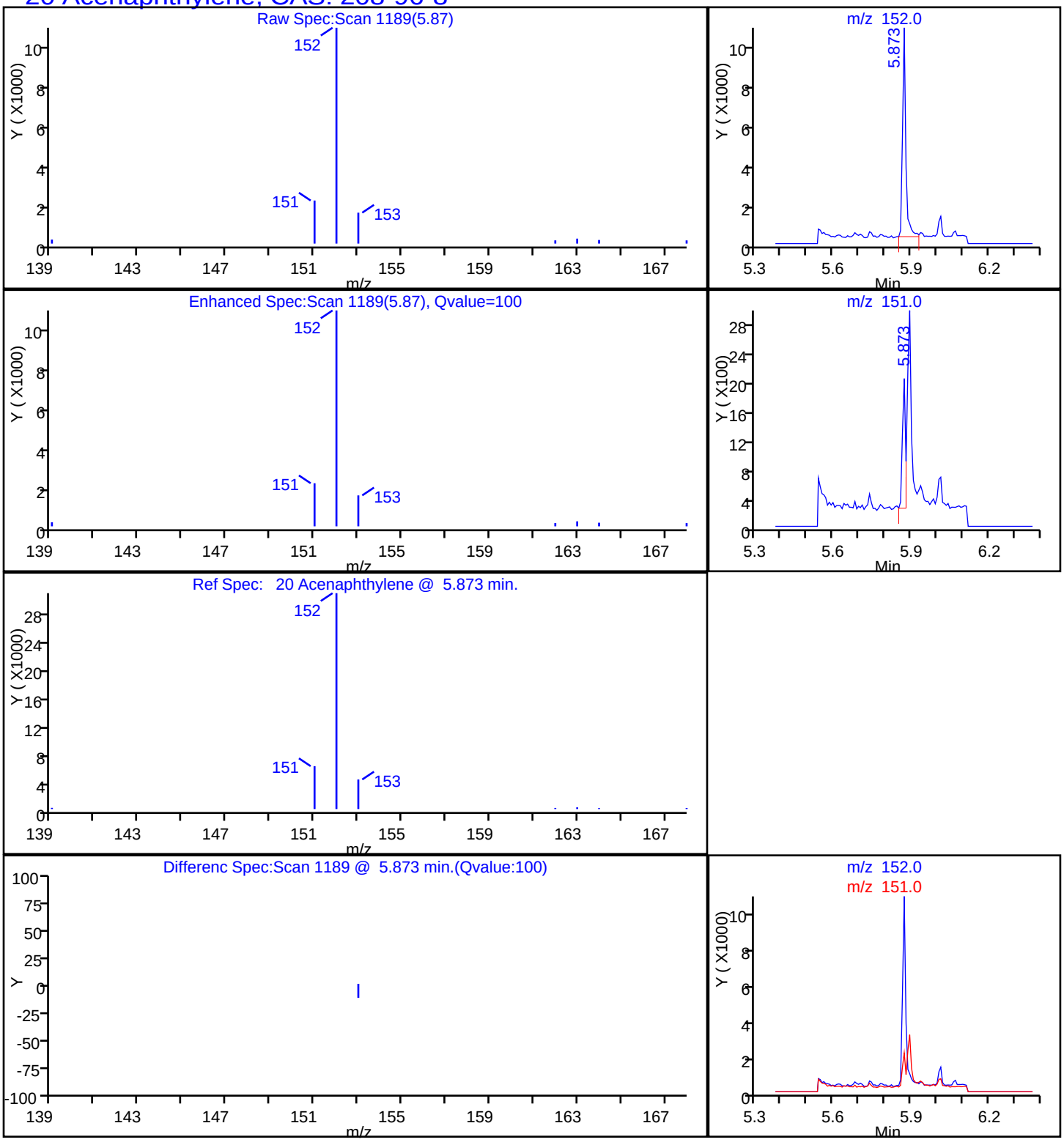
Report Date: 11-Jun-2017 22:45:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1443.D

Injection Date:	08-Jun-2017 16:18:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-13-B	Lab Sample ID:	280-97803-13		
Client ID:	SS025-SS06				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

20 Acenaphthylene, CAS: 208-96-8



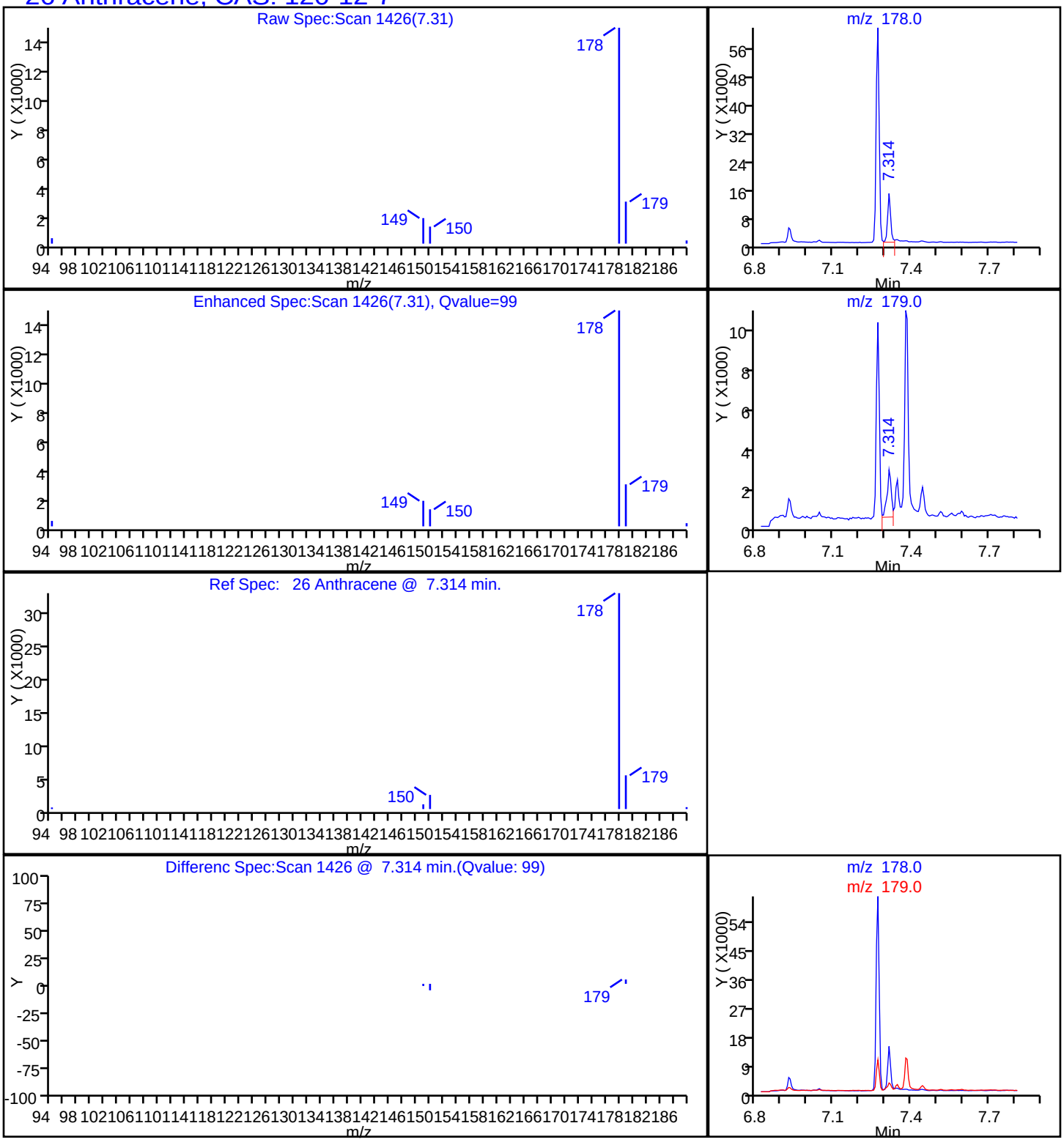
Report Date: 11-Jun-2017 22:45:32 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1443.D

Injection Date:	08-Jun-2017 16:18:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-13-B	Lab Sample ID:	280-97803-13		
Client ID:	SS025-SS06				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

26 Anthracene, CAS: 120-12-7



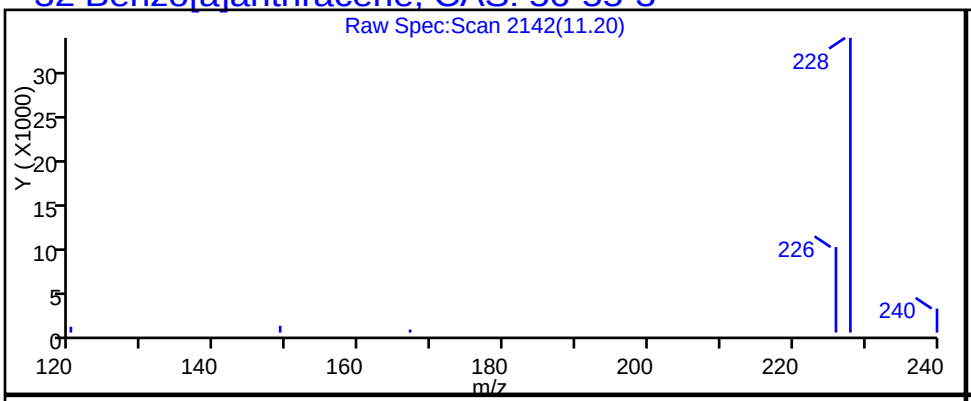
Report Date: 11-Jun-2017 22:45:32 Chrom Revision: 2.2 25-Apr-2017 13:27:22

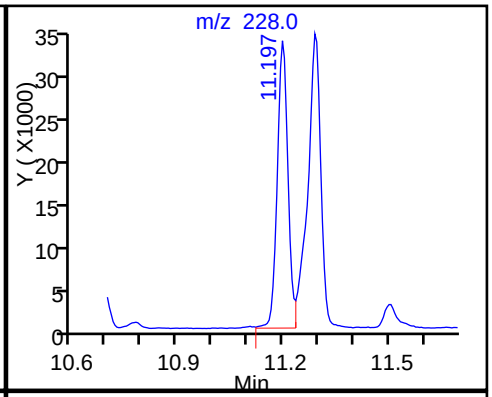
TestAmerica Denver

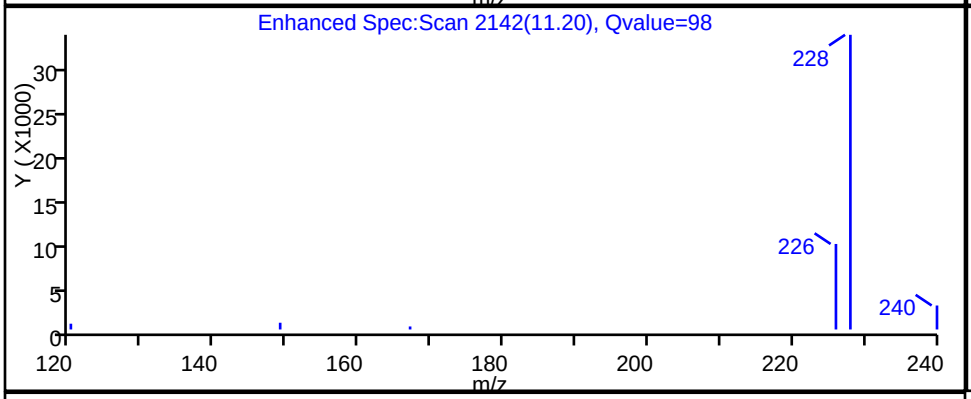
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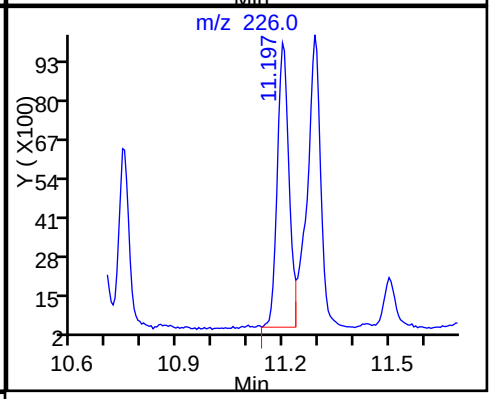
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Lims ID:	280-97803-A-13-B	Lab Sample ID:	280-97803-13		
Client ID:	SS025-SS06				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
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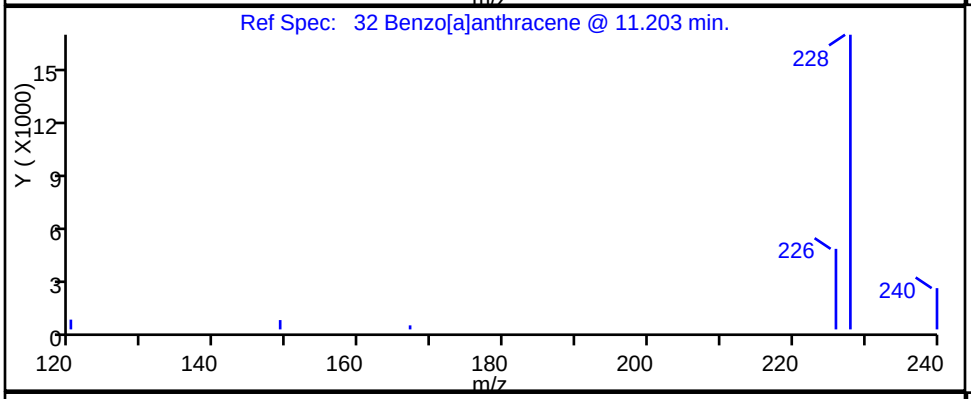
32 Benzo[a]anthracene, CAS: 56-55-3

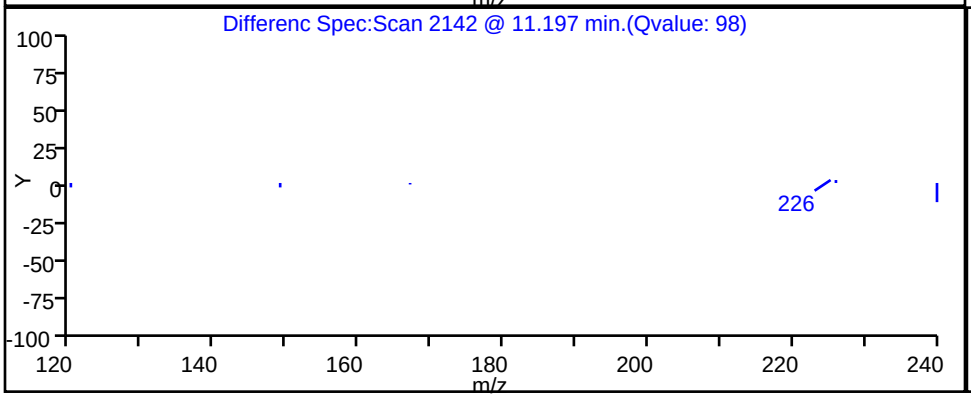


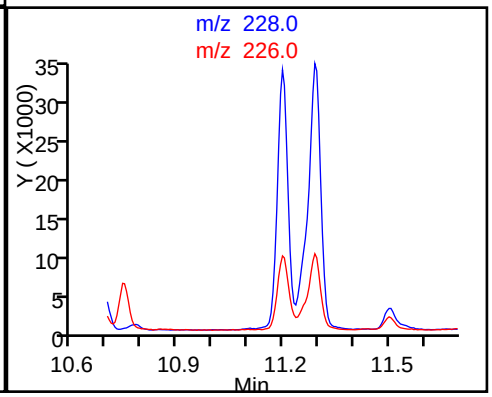












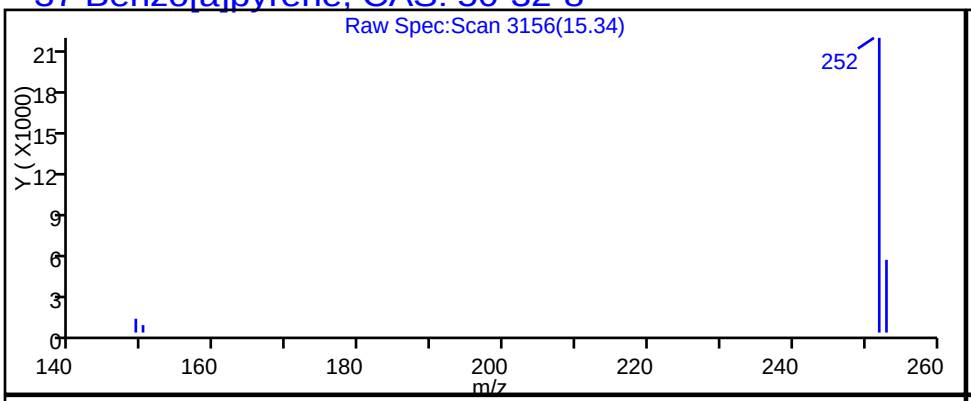
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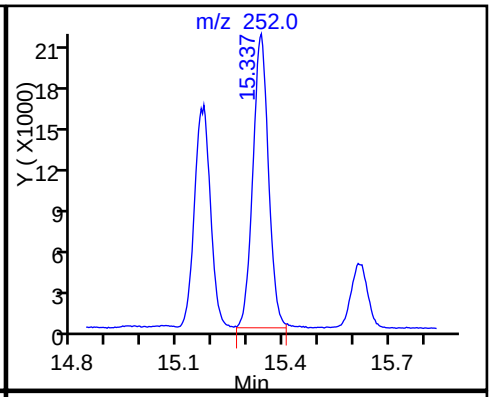
TestAmerica Denver

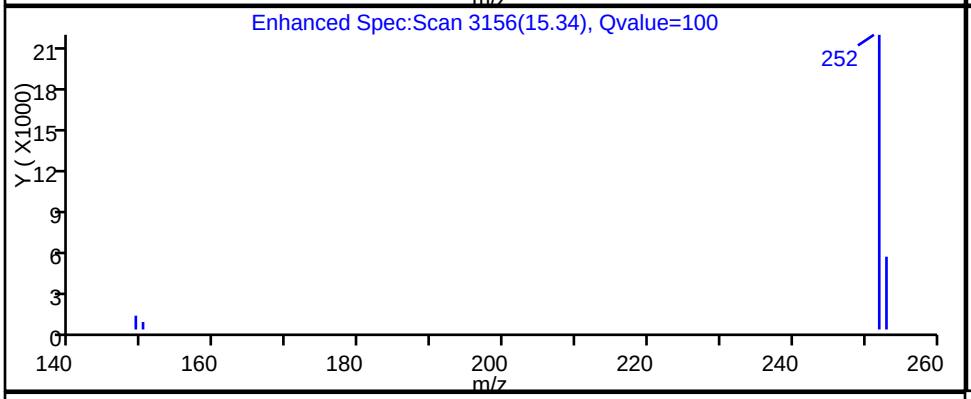
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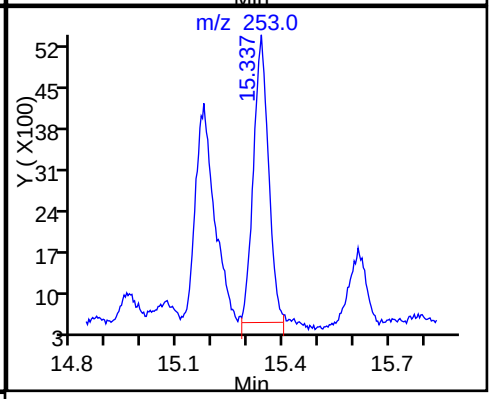
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Client ID:	SS025-SS06				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
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Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
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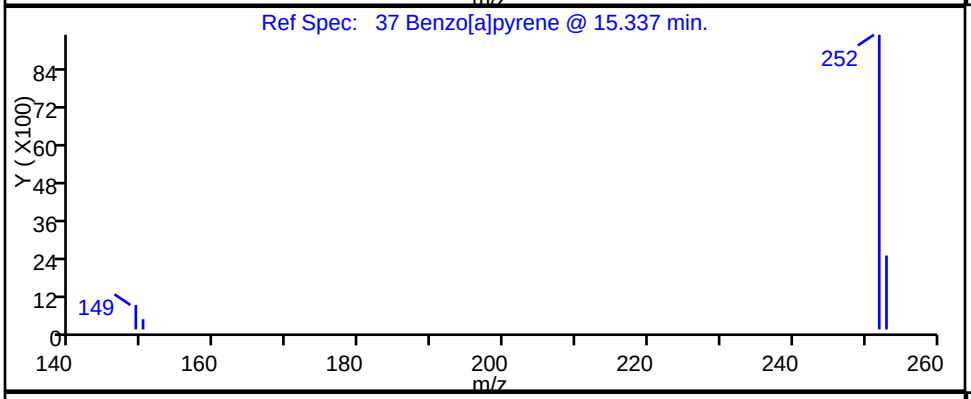
37 Benzo[a]pyrene, CAS: 50-32-8

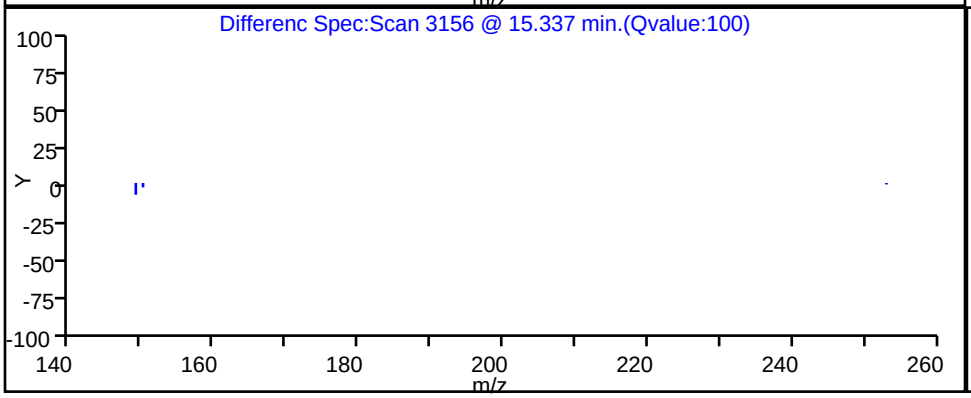


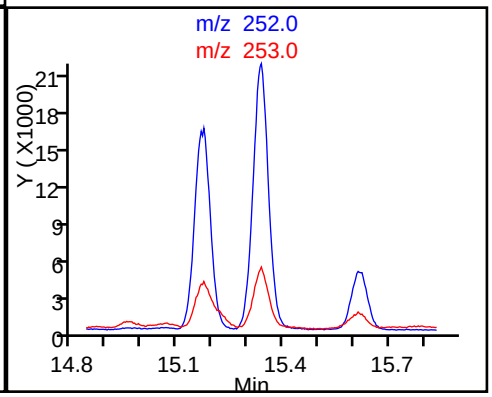












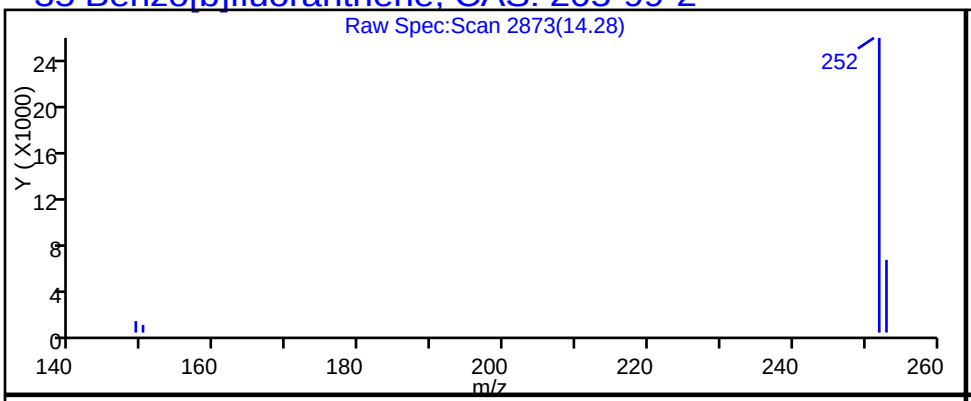
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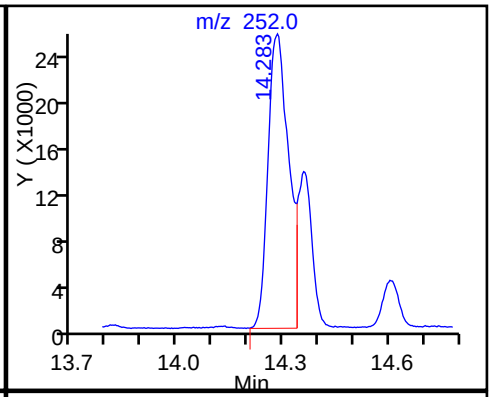
TestAmerica Denver

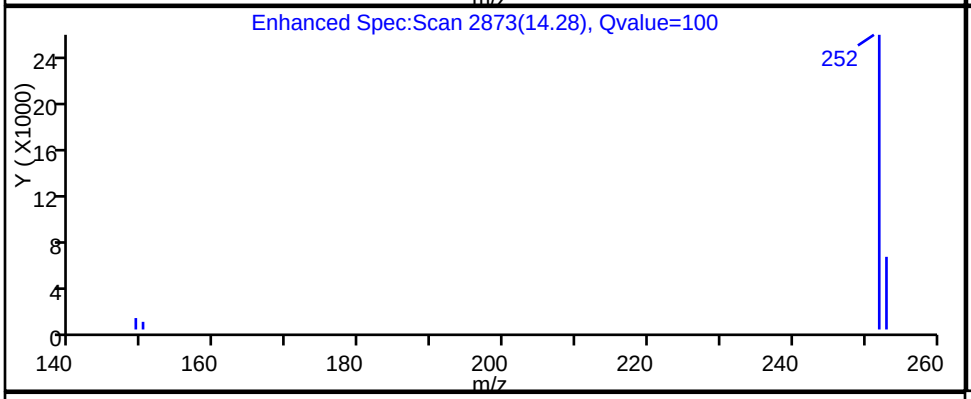
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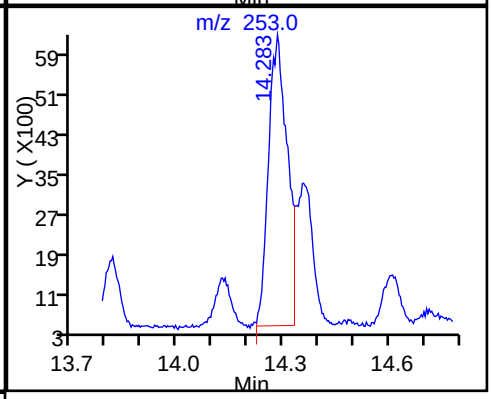
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Lims ID:	280-97803-A-13-B	Lab Sample ID:	280-97803-13		
Client ID:	SS025-SS06				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

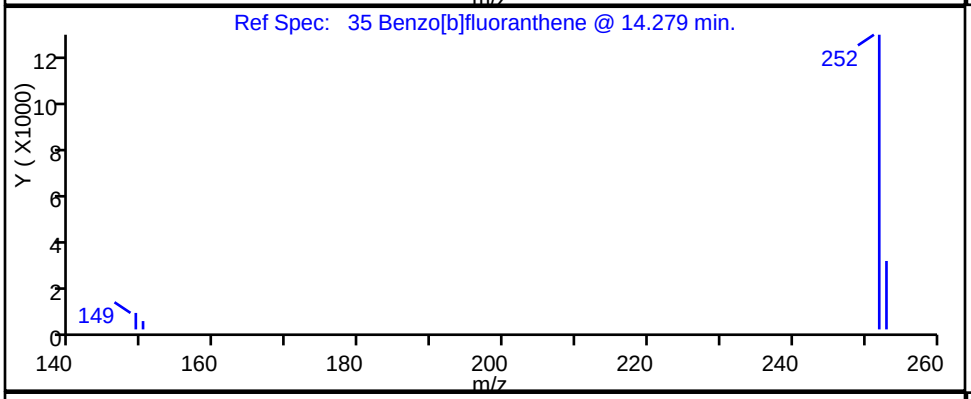
35 Benzo[b]fluoranthene, CAS: 205-99-2

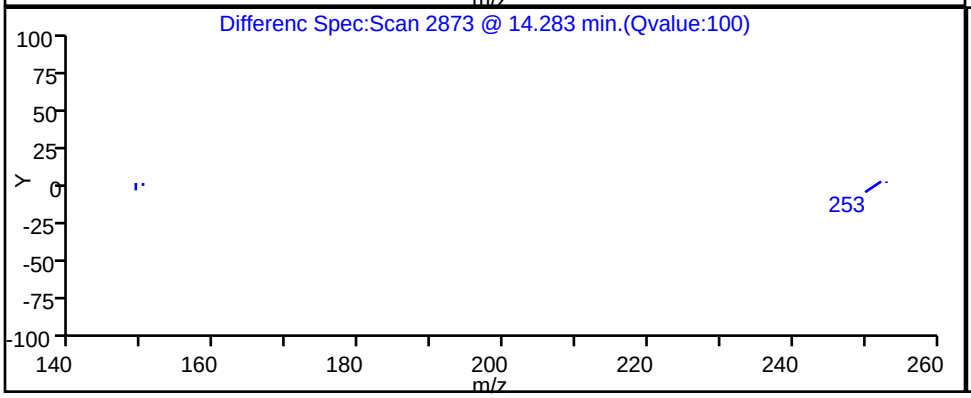


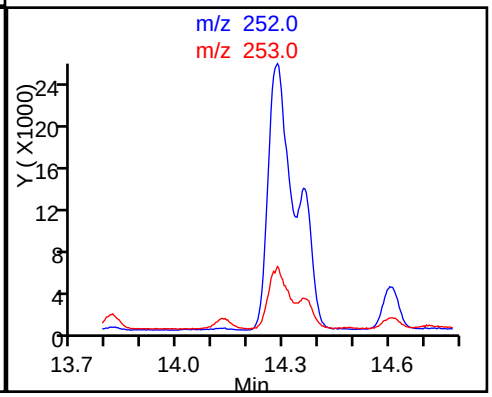












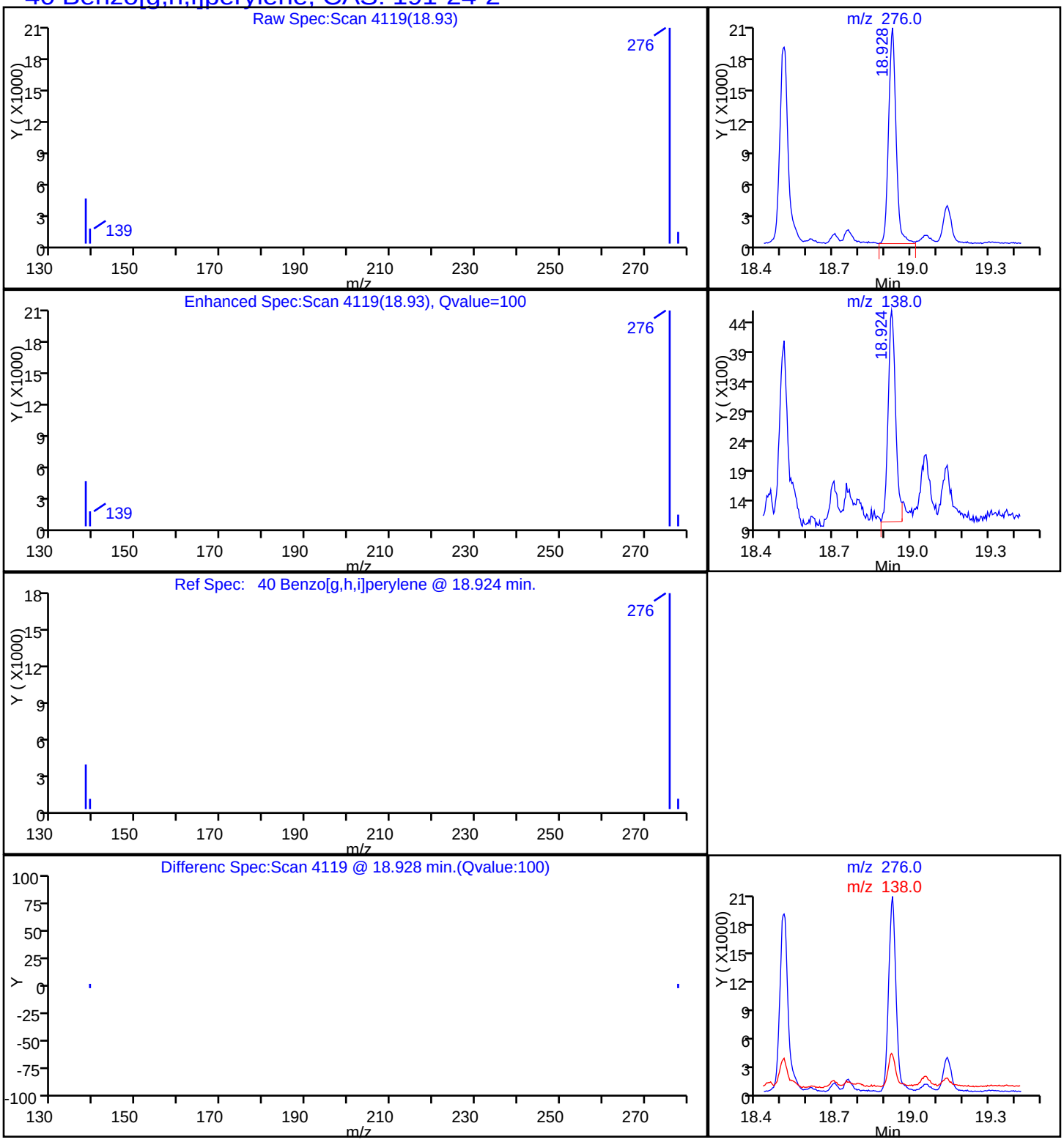
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TestAmerica Denver

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Injection Date:	08-Jun-2017 16:18:30	Instrument ID:	SMS_G5		
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Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

40 Benzo[g,h,i]perylene, CAS: 191-24-2



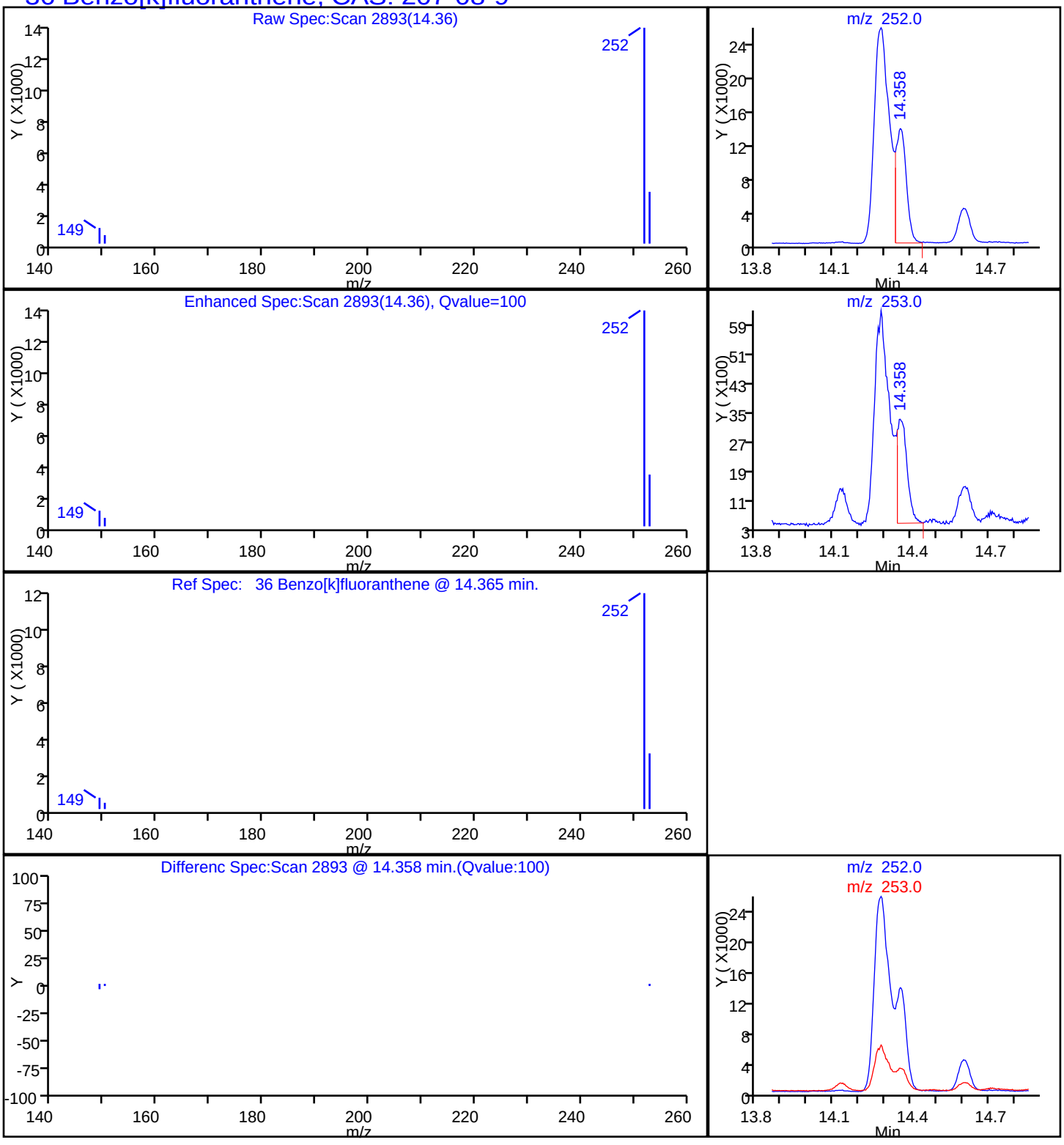
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TestAmerica Denver

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Client ID:	SS025-SS06				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Benzo[k]fluoranthene, CAS: 207-08-9



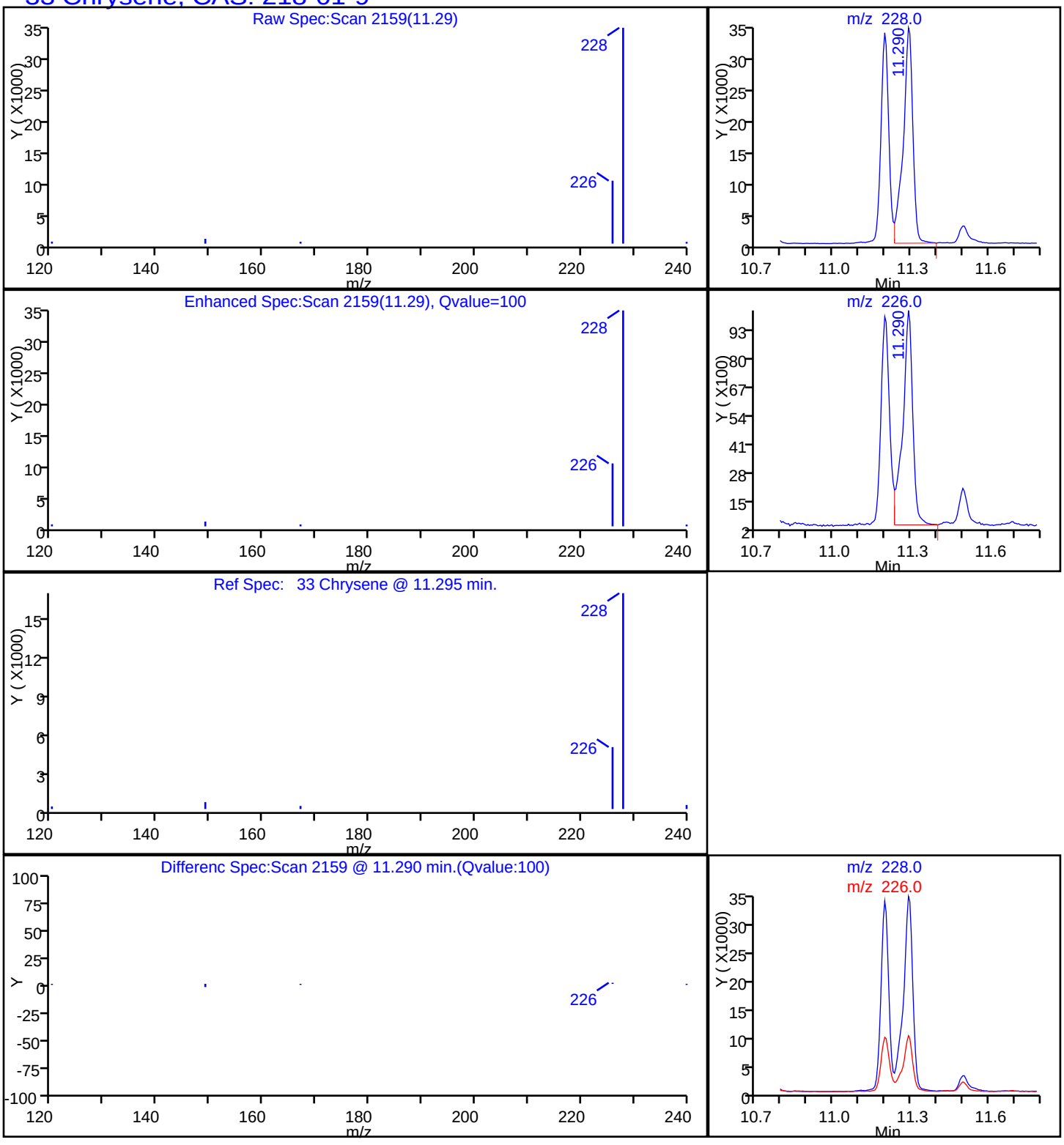
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TestAmerica Denver

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Client ID:	SS025-SS06				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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Column:		Detector	MS SCAN		

33 Chrysene, CAS: 218-01-9



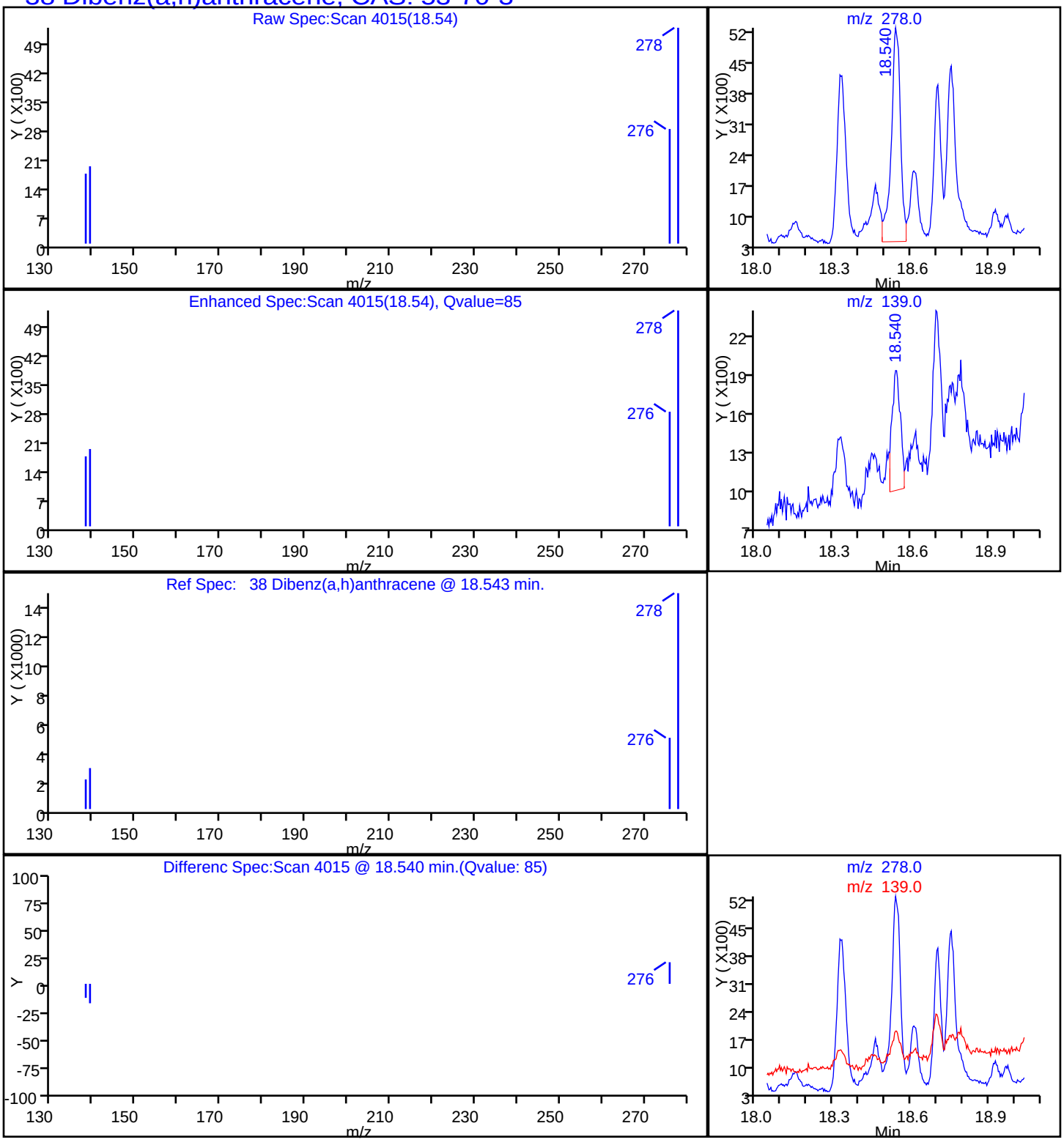
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TestAmerica Denver

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Client ID:	SS025-SS06				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Dibenz(a,h)anthracene, CAS: 53-70-3



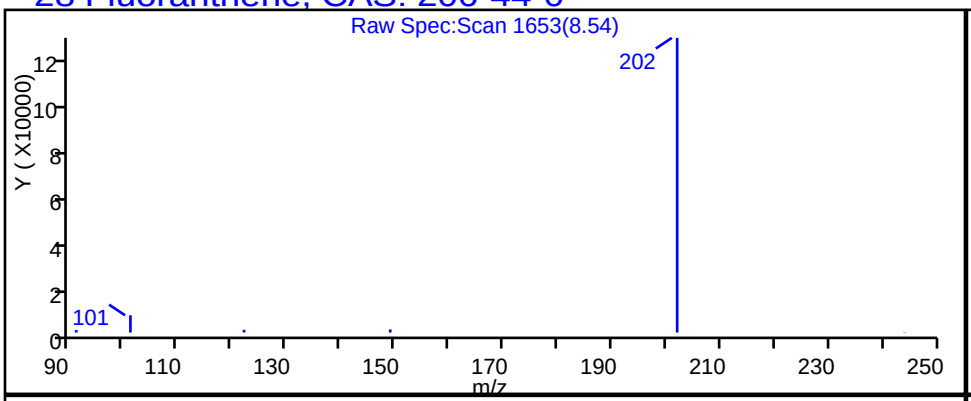
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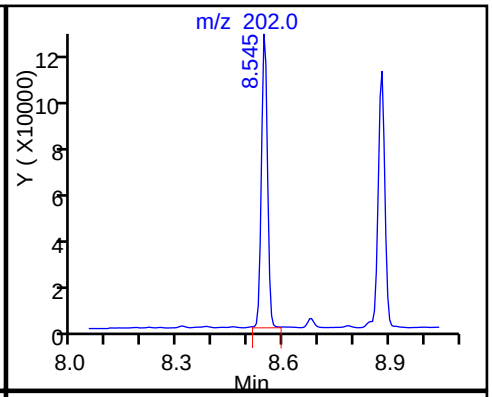
TestAmerica Denver

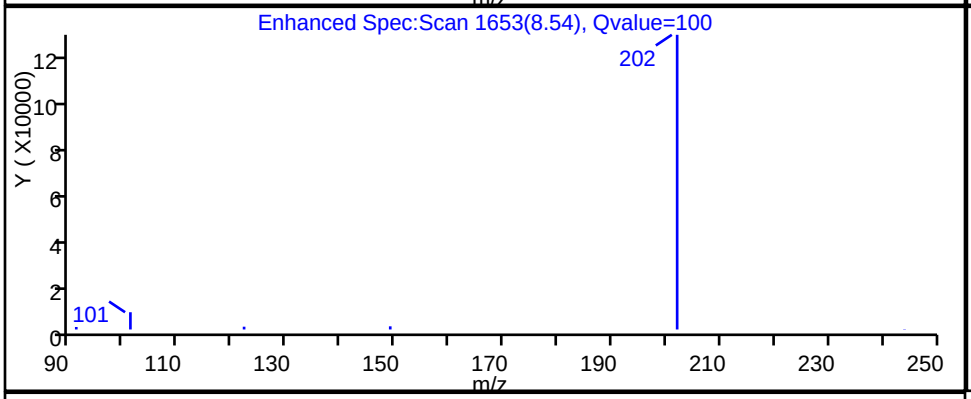
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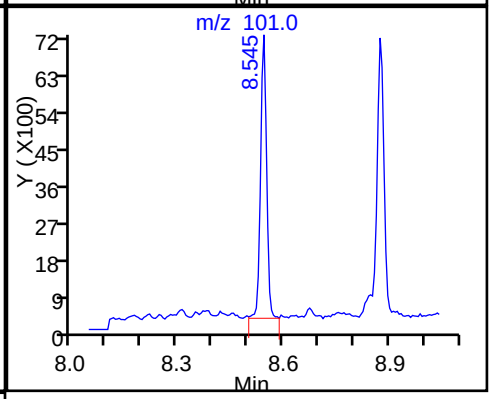
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Client ID:	SS025-SS06				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
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Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
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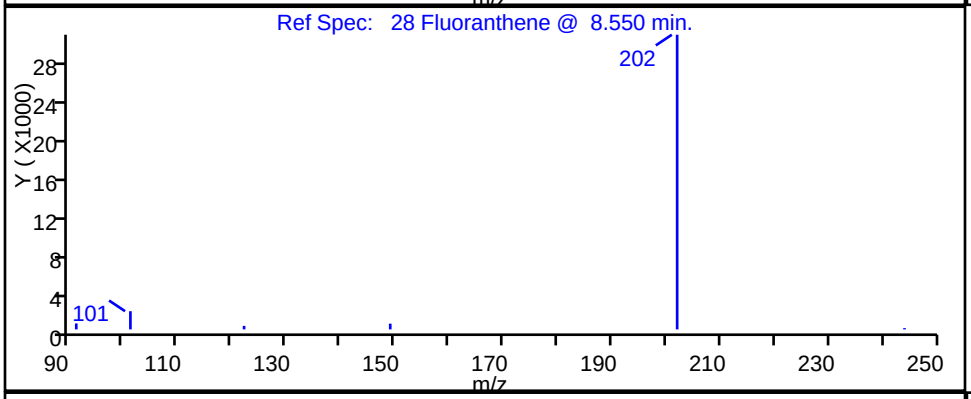
28 Fluoranthene, CAS: 206-44-0

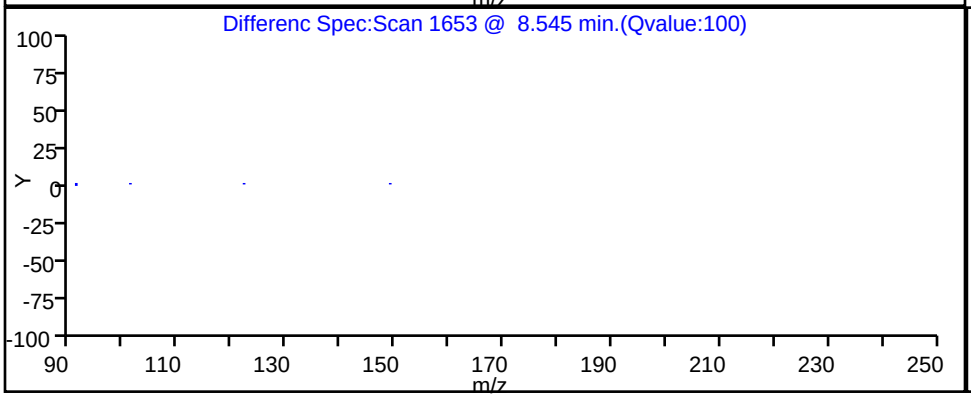


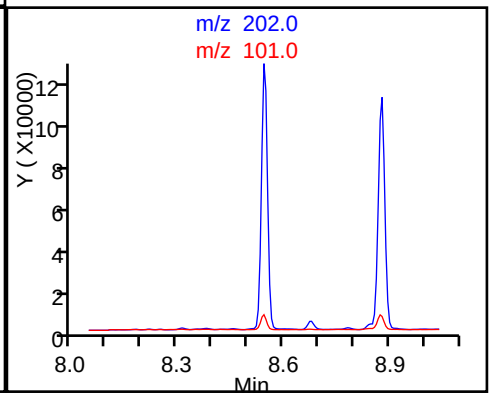












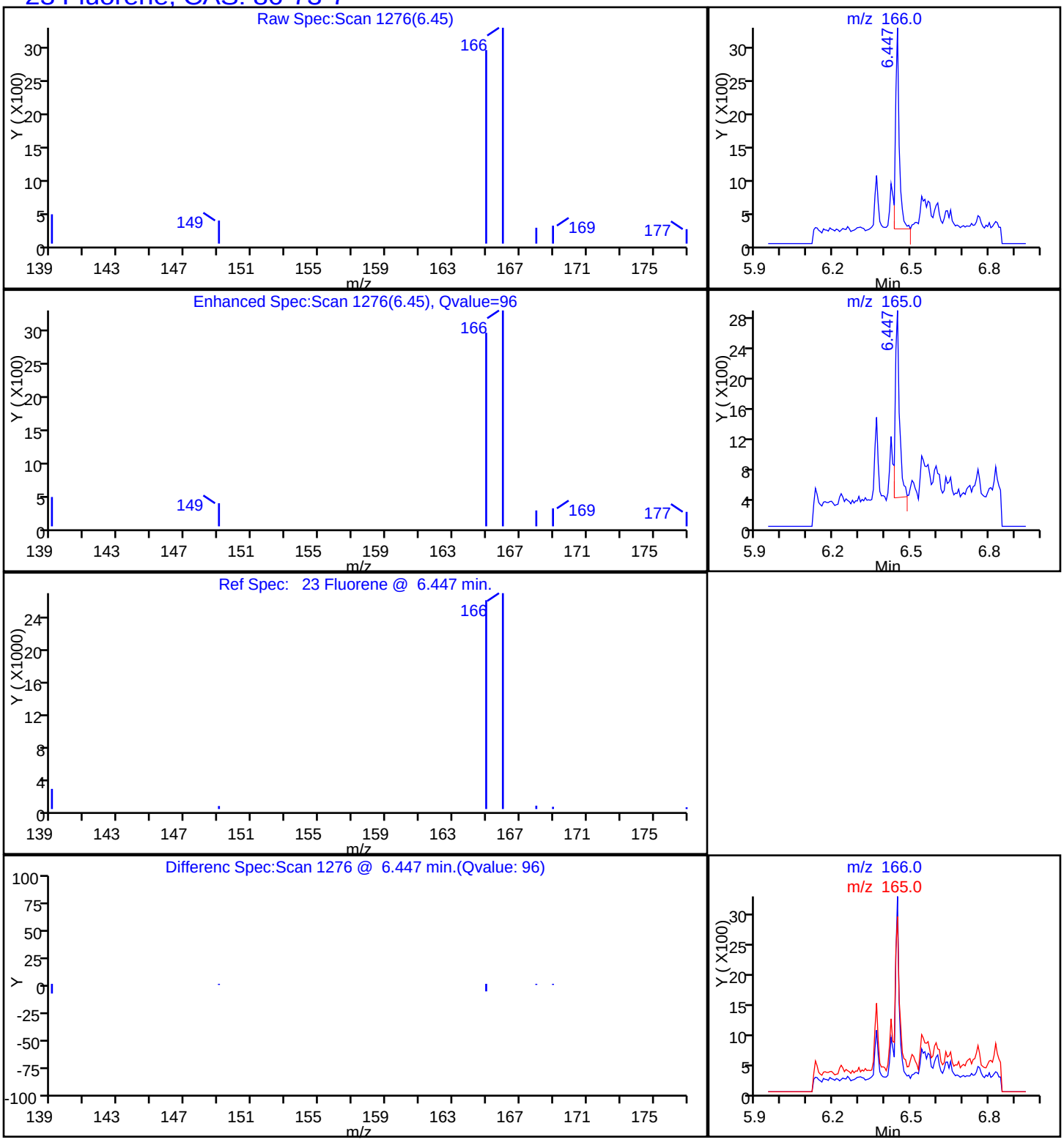
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TestAmerica Denver

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Client ID:	SS025-SS06				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Fluorene, CAS: 86-73-7



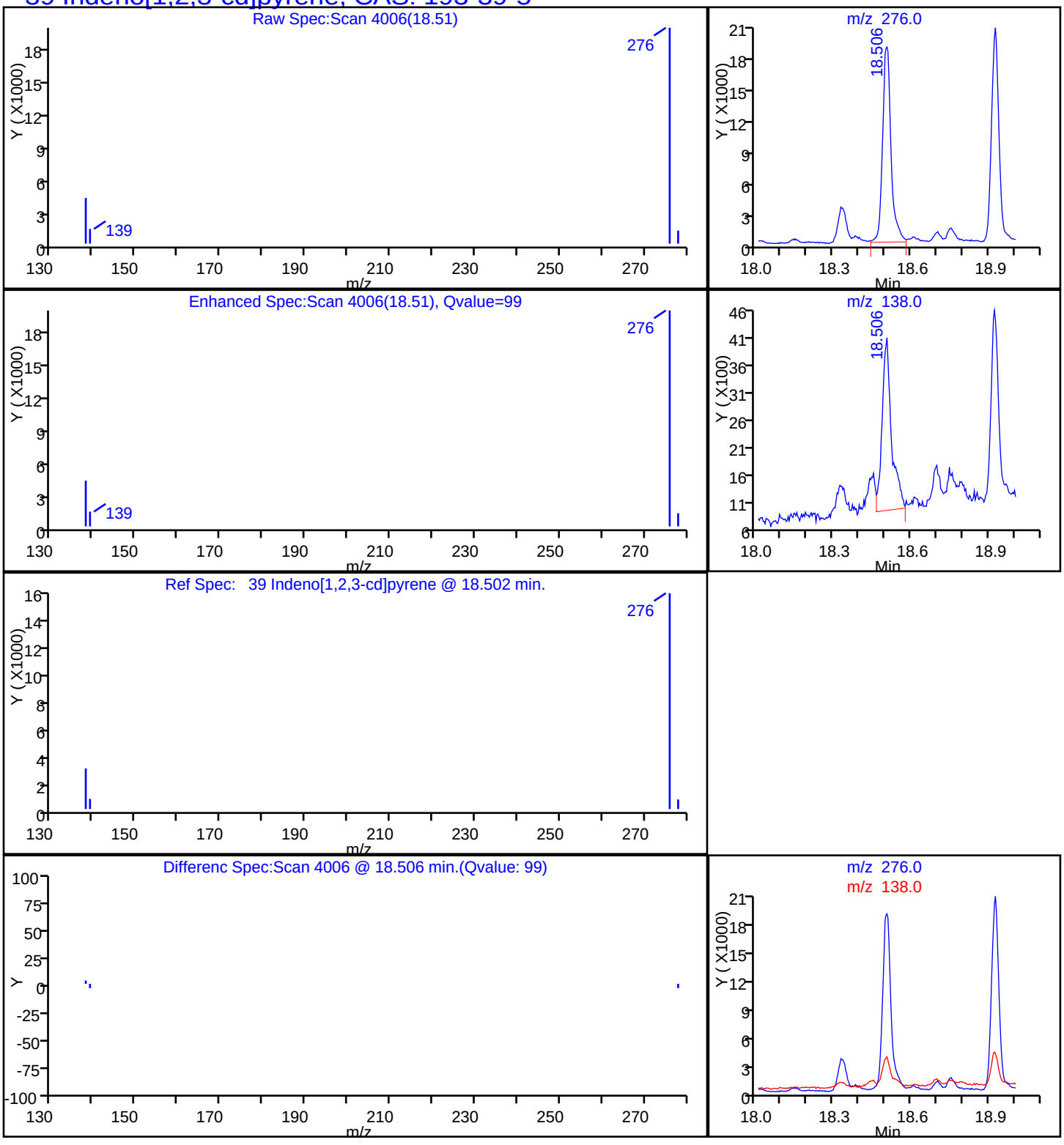
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Client ID:	SS025-SS06				
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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



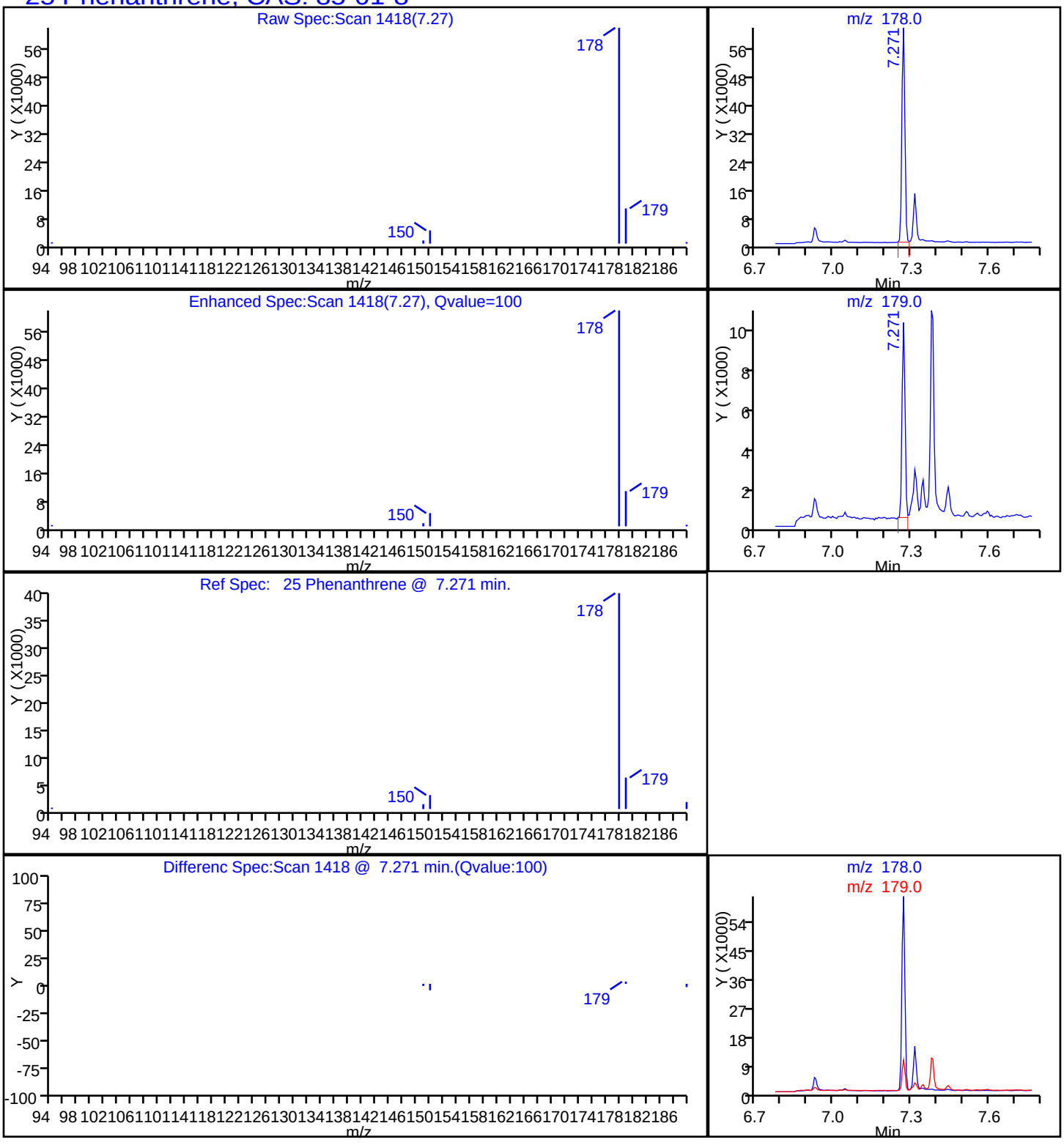
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Client ID:	SS025-SS06				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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Column:		Detector	MS SCAN		

25 Phenanthrene, CAS: 85-01-8

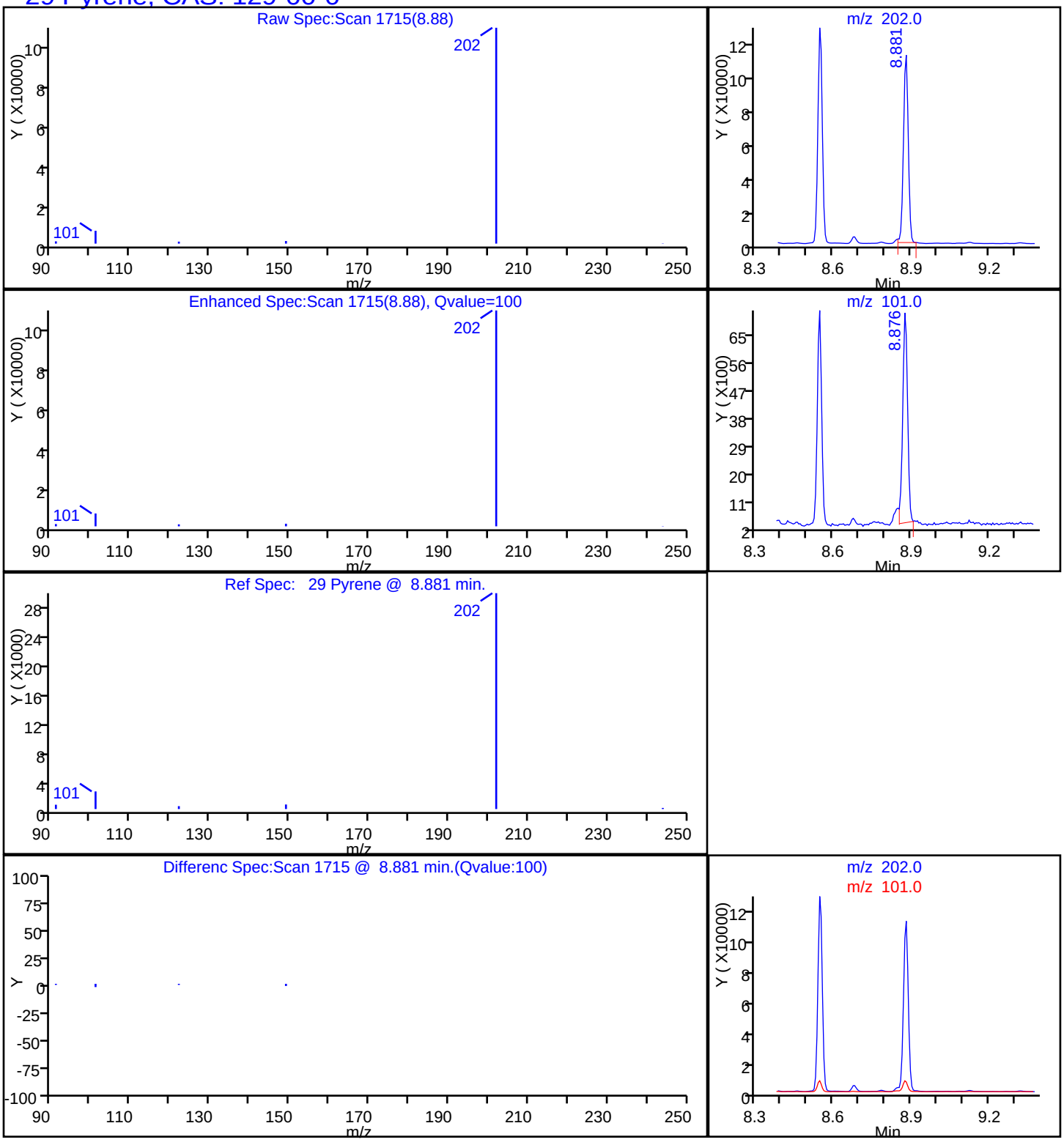


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TestAmerica Denver

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Client ID:	SS025-SS06				
Operator ID:	VASQUEZK	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

29 Pyrene, CAS: 129-00-0



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS06-a | Lab Sample ID: 280-97803-14

Matrix: Solid | Lab File ID: G5_1444.D

Analysis Method: 8270D SIM | Date Collected: 05/31/2017 15:40

Extract. Method: 3546 | Date Extracted: 06/05/2017 08:51

Sample wt/vol: 31.4(g) | Date Analyzed: 06/08/2017 16:45

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 13.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 376547 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.55	U	5.5	0.55	0.29
91-57-6	2-Methylnaphthalene	0.73	U	5.5	0.73	0.34
83-32-9	Acenaphthene	0.29	U	5.5	0.29	0.18
208-96-8	Acenaphthylene	0.73	U	5.5	0.73	0.19
120-12-7	Anthracene	2.7	J	5.5	2.8	0.79
56-55-3	Benzo[a]anthracene	53		5.5	2.8	0.99
50-32-8	Benzo[a]pyrene	81		5.5	2.8	0.81
205-99-2	Benzo[b]fluoranthene	100		5.5	2.8	1.3
191-24-2	Benzo[g,h,i]perylene	48		5.5	2.8	1.2
207-08-9	Benzo[k]fluoranthene	32		5.5	2.8	1.1
218-01-9	Chrysene	66		5.5	2.8	1.1
53-70-3	Dibenz(a,h)anthracene	14		5.5	2.8	1.4
206-44-0	Fluoranthene	62		5.5	2.8	1.1
86-73-7	Fluorene	0.73	U	5.5	0.73	0.52
193-39-5	Indeno[1,2,3-cd]pyrene	55		5.5	2.8	1.2
91-20-3	Naphthalene	0.73	U	5.5	0.73	0.36
85-01-8	Phenanthrene	13		5.5	2.8	1.2
129-00-0	Pyrene	61		5.5	2.8	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	67		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	57		44-125
1718-51-0	Terphenyl-d14 (Surr)	72		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1444.D
Lims ID: 280-97803-A-14-B
Client ID: SS025-SS06-a
Sample Type: Client
Inject. Date: 08-Jun-2017 16:45:30 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-a-14-b
Operator ID: VASQUEZK Instrument ID: SMS_G5

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 11-Jun-2017 22:45:01 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 11-Jun-2017 22:34:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	5.987	5.987	0.000	93	9799	600.0	
* 3 Phenanthrene-d10	188	7.249	7.249	0.000	100	20422	600.0	
* 1 Chrysene-d12	240	11.224	11.224	0.000	90	20646	600.0	
$ 4 Nitrobenzene-d5	82	3.961	3.959	0.002	96	2653	283.6	
$ 5 2-Fluorobiphenyl	172	5.391	5.391	0.000	99	7930	335.2	
$ 6 Terphenyl-d14	244	9.044	9.044	0.000	99	9687	361.6	
43 1,4-Dioxane	88		1.879				ND	
7 N-Nitrosodimethylamine	42		2.004				ND	
15 Naphthalene	128		4.550				ND	
16 2-Methylnaphthalene	142		5.105				ND	
17 1-Methylnaphthalene	142		5.190				ND	
18 Dimethyl phthalate	163		5.710				ND	
20 Acenaphthylene	152		5.873				ND	
21 Acenaphthene	153		6.015				ND	
19 Dibenzofuran	168		6.159				ND	
22 Diethyl phthalate	149		6.284				ND	
23 Fluorene	166		6.447				ND	
24 N-Nitrosodiphenylamine	169		6.522				ND	
25 Phenanthrene	178	7.271	7.271	0.000	100	13334	344.7	
26 Anthracene	178	7.314	7.314	0.000	95	2703	74.8	
27 Di-n-butyl phthalate	149		7.683				ND	
28 Fluoranthene	202	8.544	8.545	-0.001	100	81219	1682.4	
29 Pyrene	202	8.881	8.881	0.000	100	83841	1670.9	
30 Butyl benzyl phthalate	149		9.863				ND	
31 Bis(2-ethylhexyl) phthalat	149	11.127	11.127	0.000	97	3280	146.1	
32 Benzo[a]anthracene	228	11.197	11.197	0.000	98	61984	1457.9	
33 Chrysene	228	11.289	11.290	-0.001	100	79239	1810.1	
34 Di-n-octyl phthalate	149		13.028				ND	
35 Benzo[b]fluoranthene	252	14.276	14.276	0.000	100	108525	2741.1	
36 Benzo[k]fluoranthene	252	14.358	14.361	-0.003	99	35030	870.1	
37 Benzo[a]pyrene	252	15.337	15.333	0.004	99	77513	2204.8	
39 Indeno[1,2,3-cd]pyrene	276	18.502	18.502	0.000	100	51361	1503.1	

Report Date: 11-Jun-2017 22:45:33 Chrom Revision: 2.2 25-Apr-2017 13:27:22
Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1444.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
38 Dibenz(a,h)anthracene	278	18.539	18.543	-0.004	88	13032	369.3	
40 Benzo[g,h,i]perylene	276	18.924	18.924	0.000	100	51425	1318.8	
8 Morpholine	1		0.000				ND	
44 Benzidine	184		0.000				ND	
42 Pentachlorophenol	266		0.000				ND	
9 Pentachlorophenol_T	266		4.285				ND	
10 DFTPP								
11 Benzidine_T	184		5.387				ND	
13 4,4'-DDD	235		5.777				ND	
12 4,4'-DDE	246		5.932				ND	
14 4,4'-DDT	235		5.970				ND	
S 41 TPAH	1		0.000				ND	

Reagents:

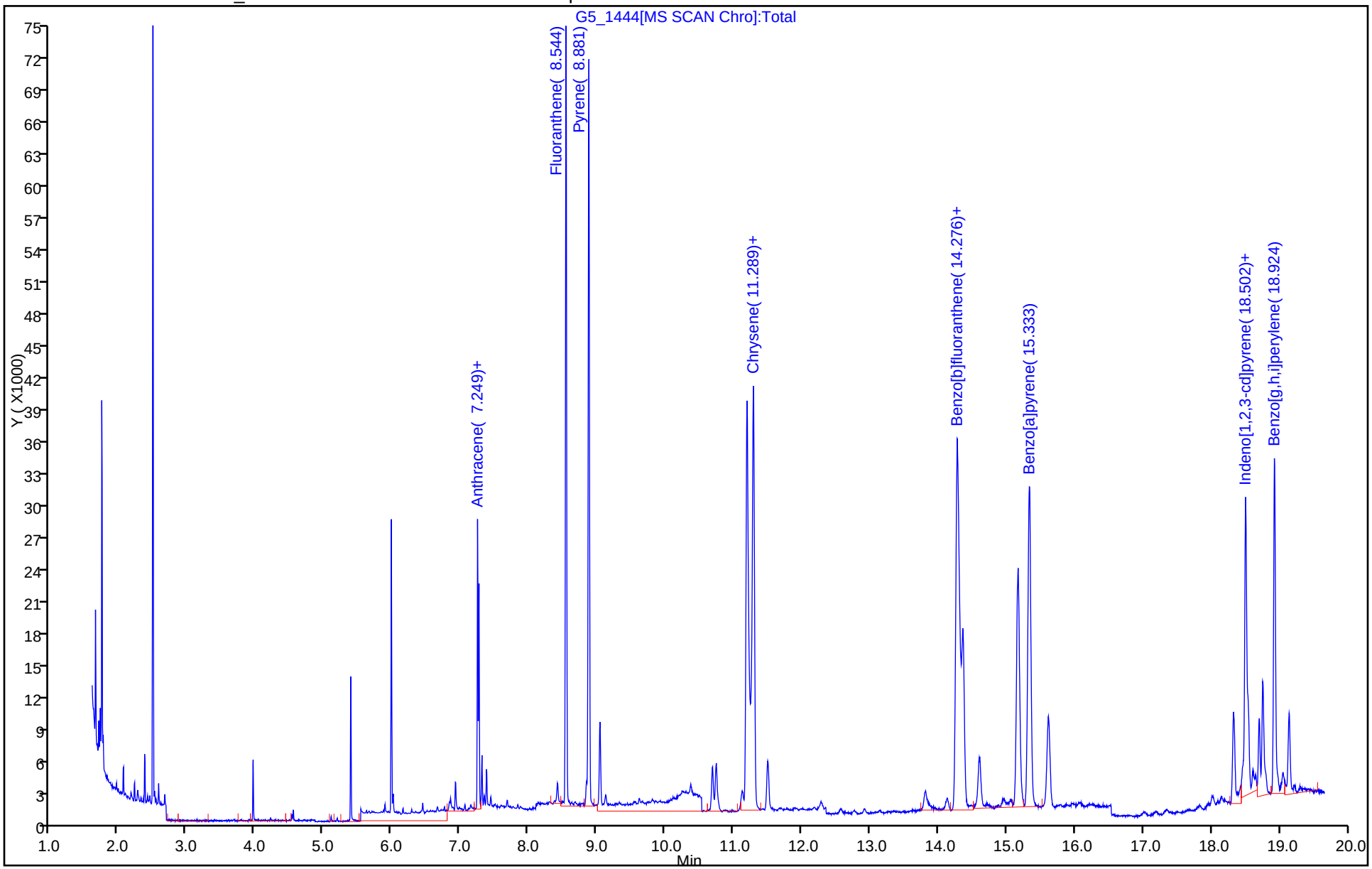
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 11-Jun-2017 22:45:33 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1444.D

Injection Date:	08-Jun-2017 16:45:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	280-97803-A-14-B	Lab Sample ID:	280-97803-14	Worklist Smp#:	18
Client ID:	SS025-SS06-a				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1444.D
Lims ID: 280-97803-A-14-B
Client ID: SS025-SS06-a
Sample Type: Client
Inject. Date: 08-Jun-2017 16:45:30 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-a-14-b
Operator ID: VASQUEZK Instrument ID: SMS_G5

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 11-Jun-2017 22:45:01 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 11-Jun-2017 22:34:45

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	283.6	56.71
$ 5 2-Fluorobiphenyl	500.0	335.2	67.05
$ 6 Terphenyl-d14	500.0	361.6	72.32

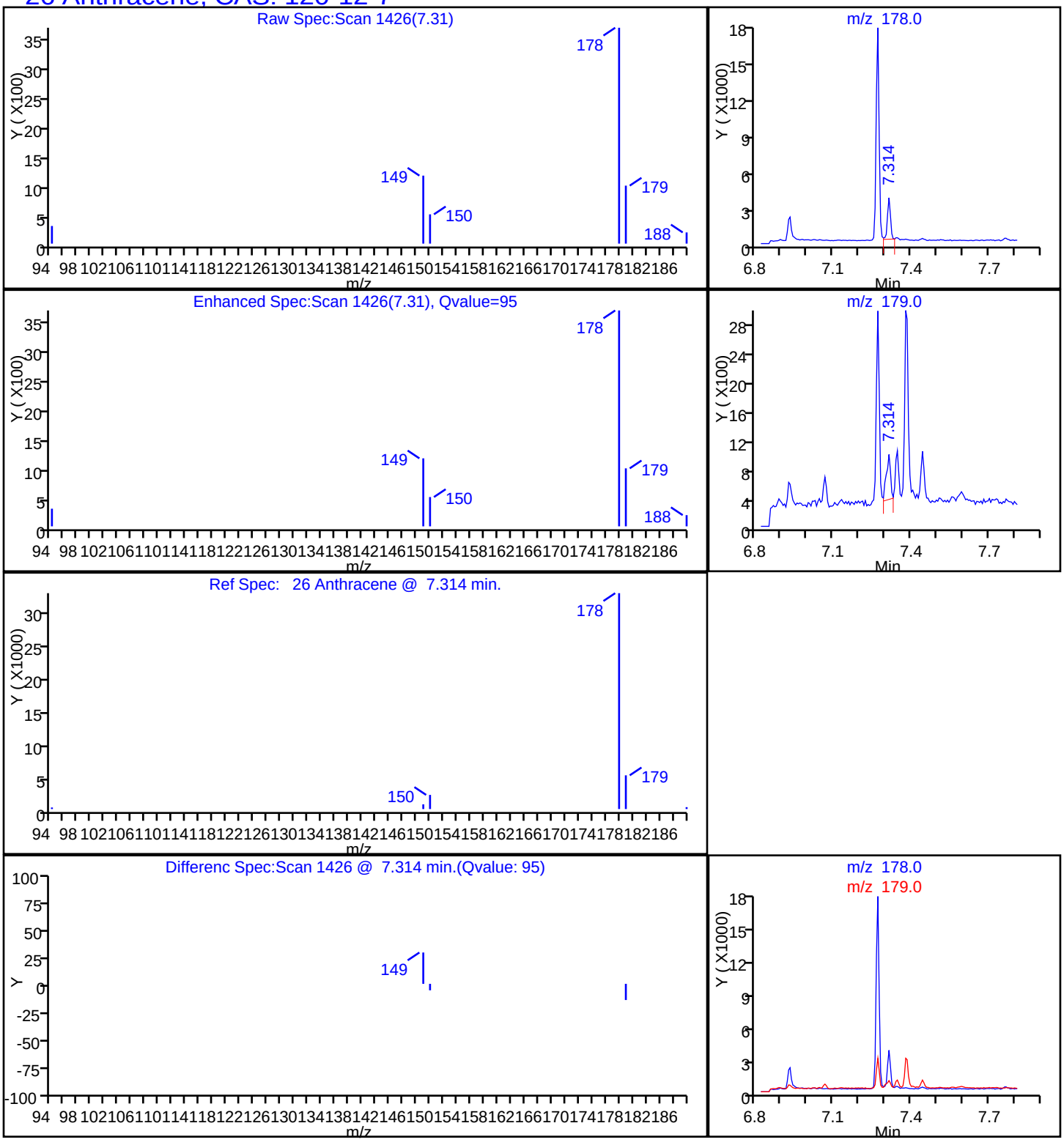
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1444.D

Injection Date:	08-Jun-2017 16:45:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-14-B	Lab Sample ID:	280-97803-14		
Client ID:	SS025-SS06-a				
Operator ID:	VASQUEZK	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

26 Anthracene, CAS: 120-12-7



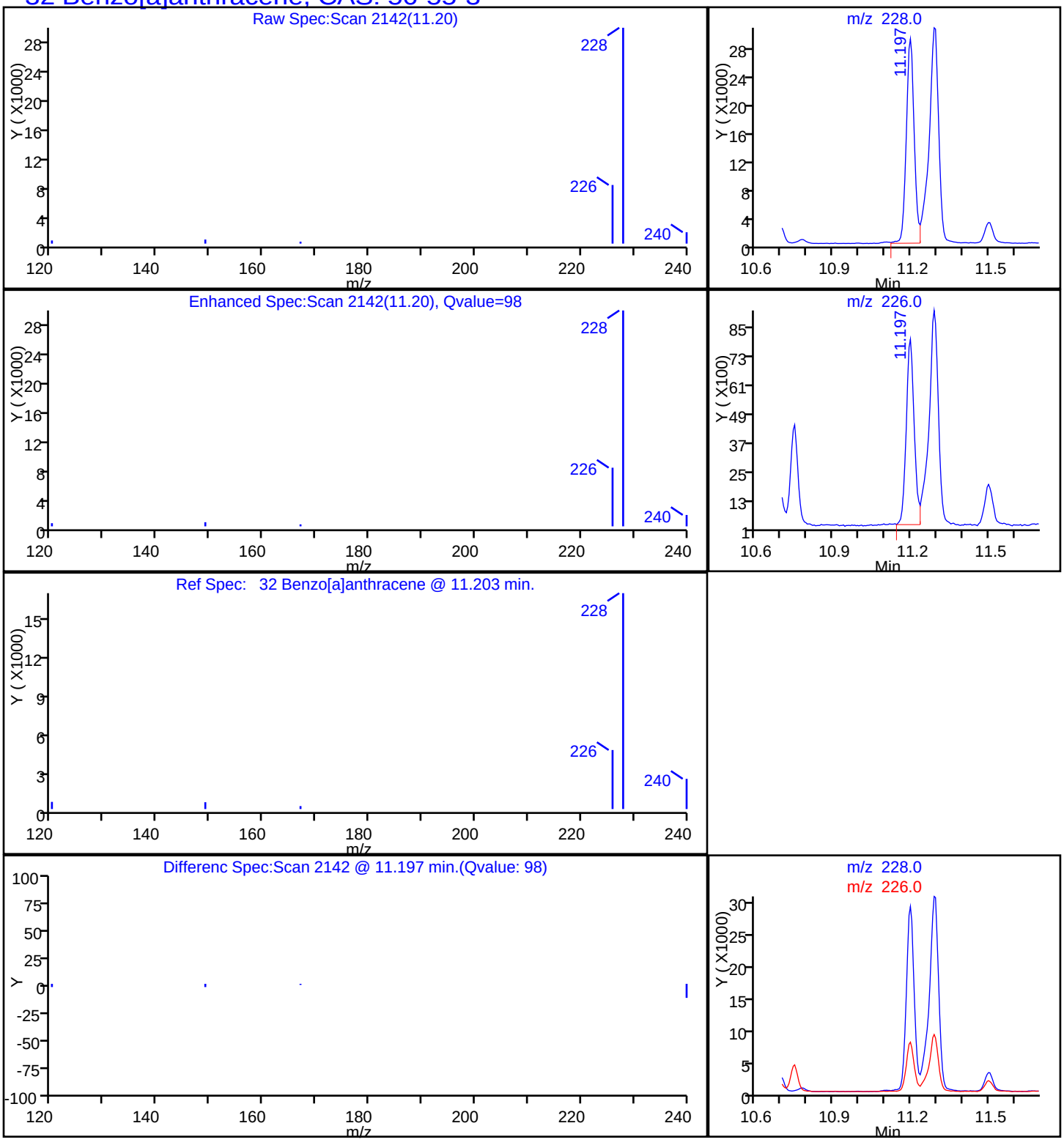
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1444.D

Injection Date:	08-Jun-2017 16:45:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-14-B	Lab Sample ID:	280-97803-14		
Client ID:	SS025-SS06-a				
Operator ID:	VASQUEZK	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

32 Benzo[a]anthracene, CAS: 56-55-3



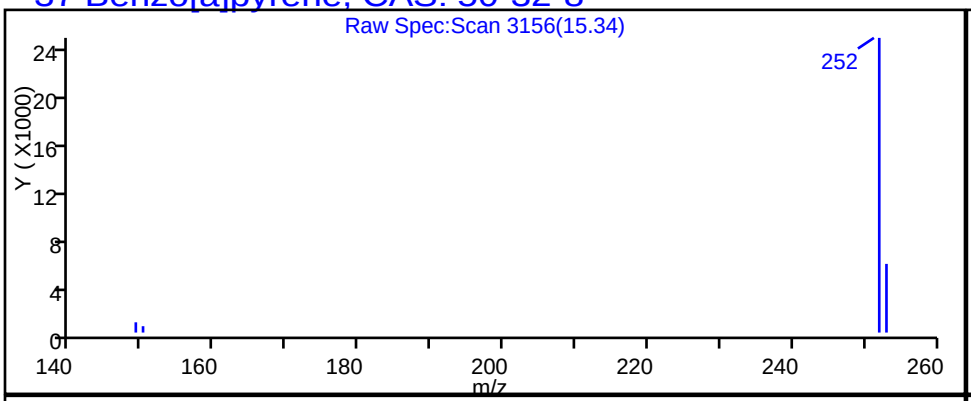
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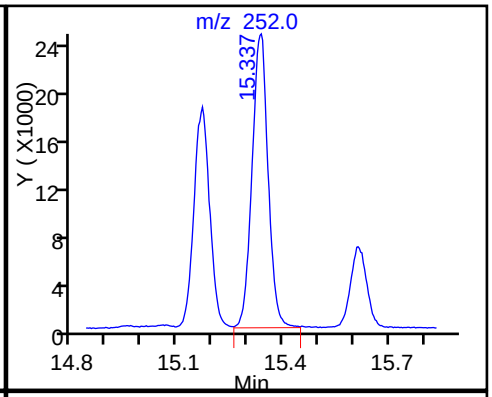
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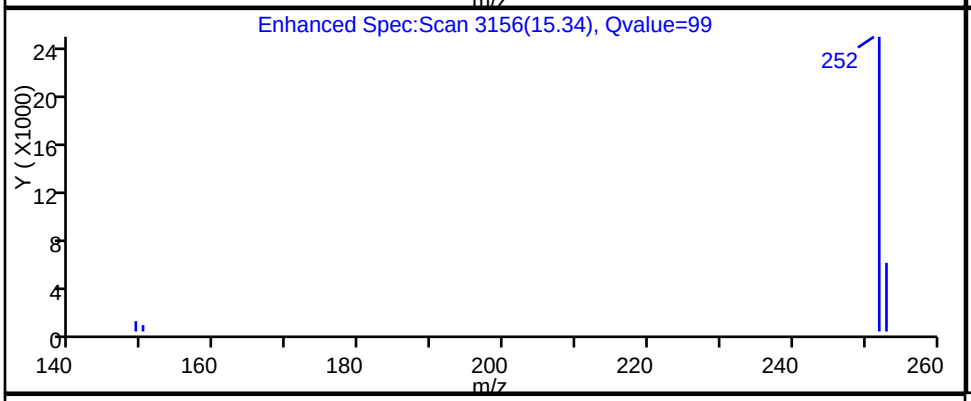
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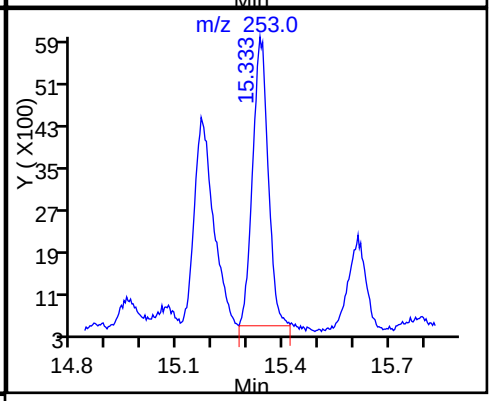
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Lims ID:	280-97803-A-14-B	Lab Sample ID:	280-97803-14		
Client ID:	SS025-SS06-a				
Operator ID:	VASQUEZK	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

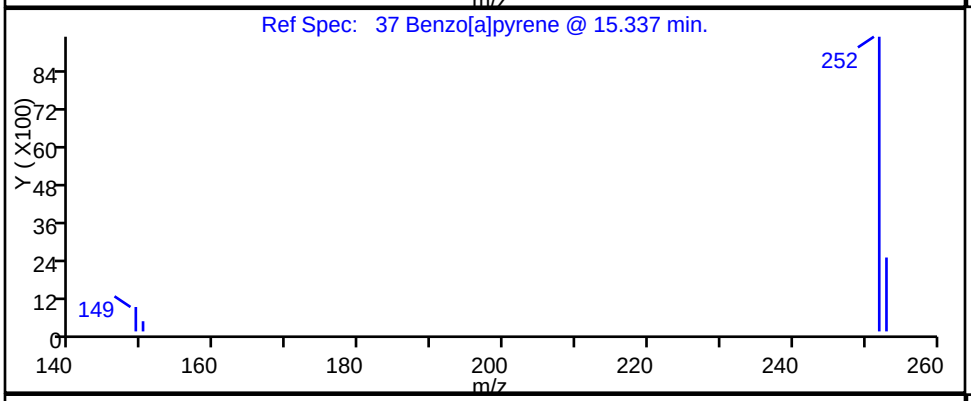
37 Benzo[a]pyrene, CAS: 50-32-8

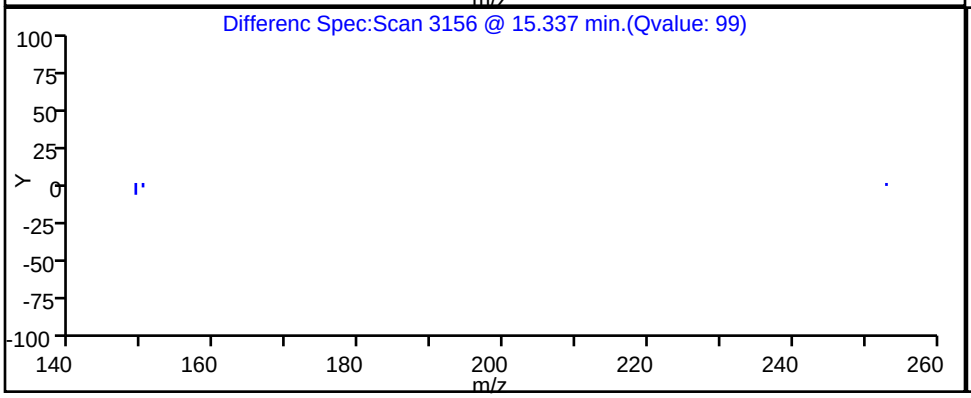


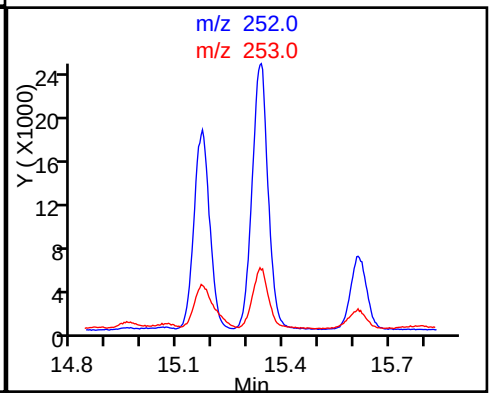












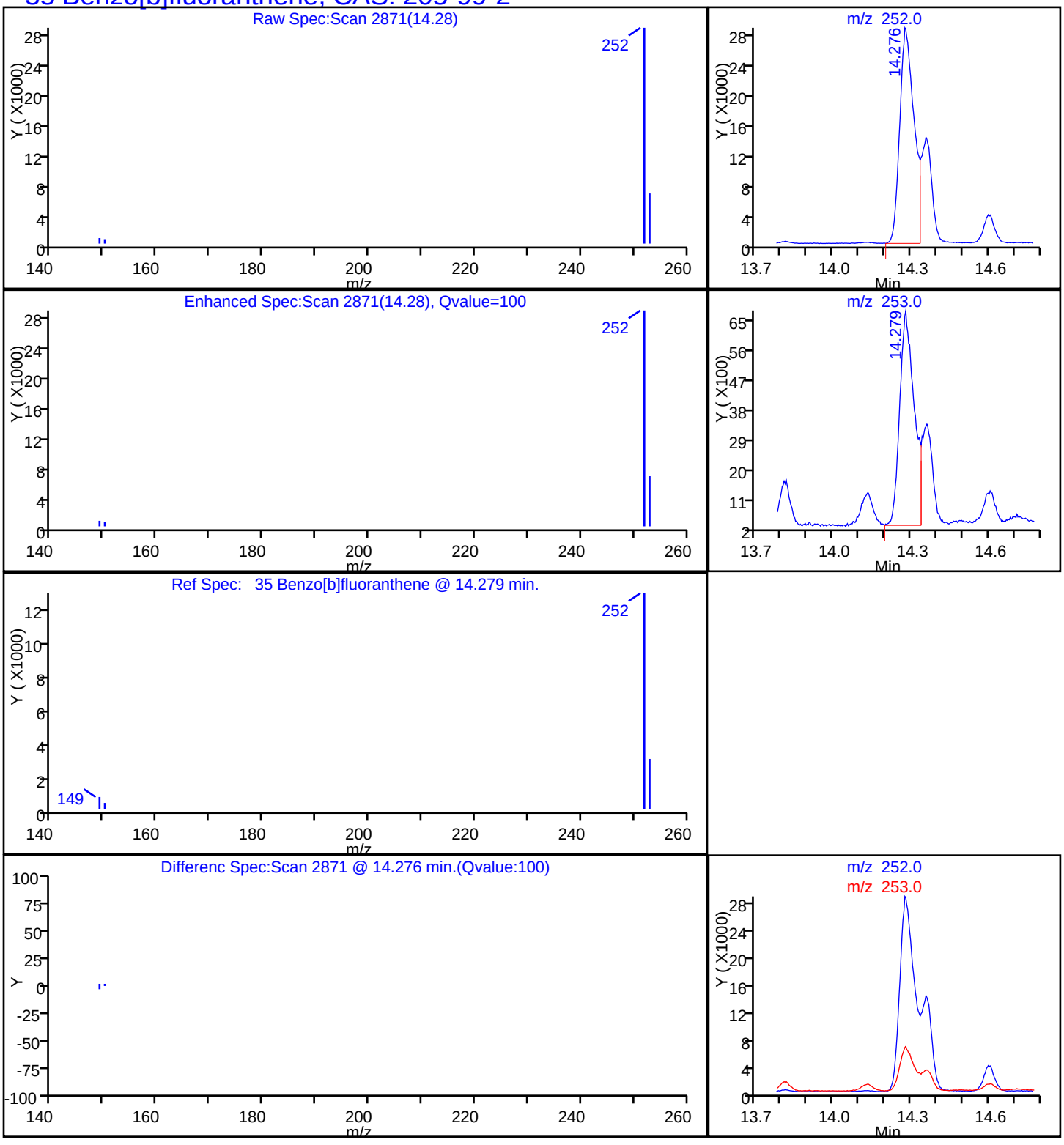
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1444.D

Injection Date:	08-Jun-2017 16:45:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-14-B	Lab Sample ID:	280-97803-14		
Client ID:	SS025-SS06-a				
Operator ID:	VASQUEZK	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

35 Benzo[b]fluoranthene, CAS: 205-99-2



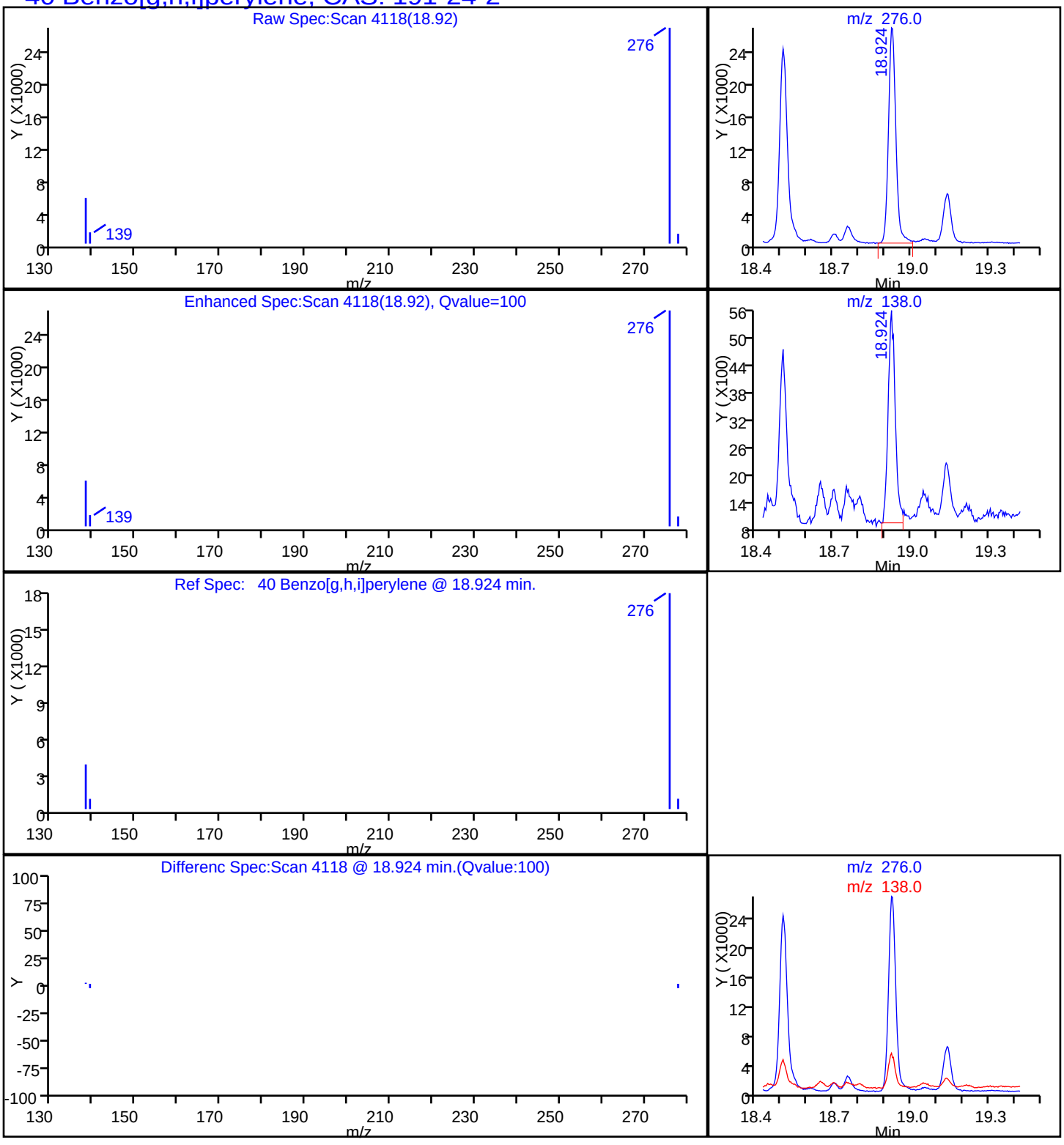
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1444.D

Injection Date:	08-Jun-2017 16:45:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-14-B	Lab Sample ID:	280-97803-14		
Client ID:	SS025-SS06-a				
Operator ID:	VASQUEZK	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

40 Benzo[g,h,i]perylene, CAS: 191-24-2



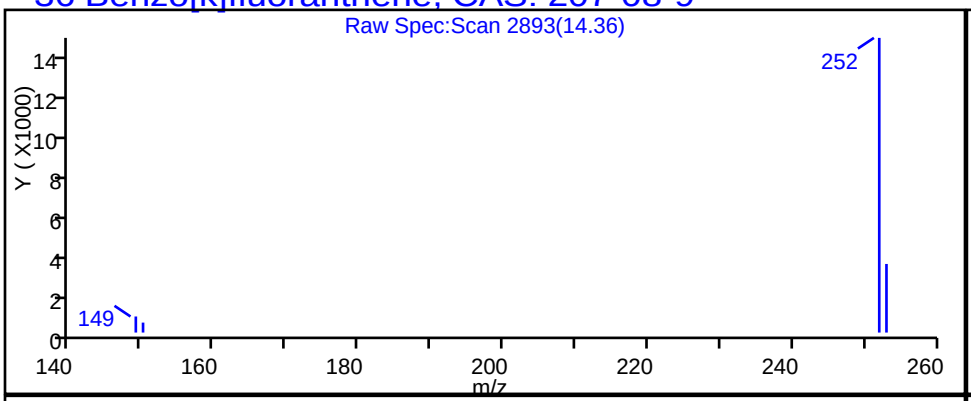
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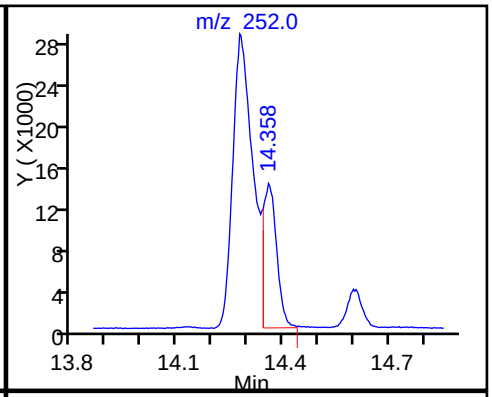
TestAmerica Denver

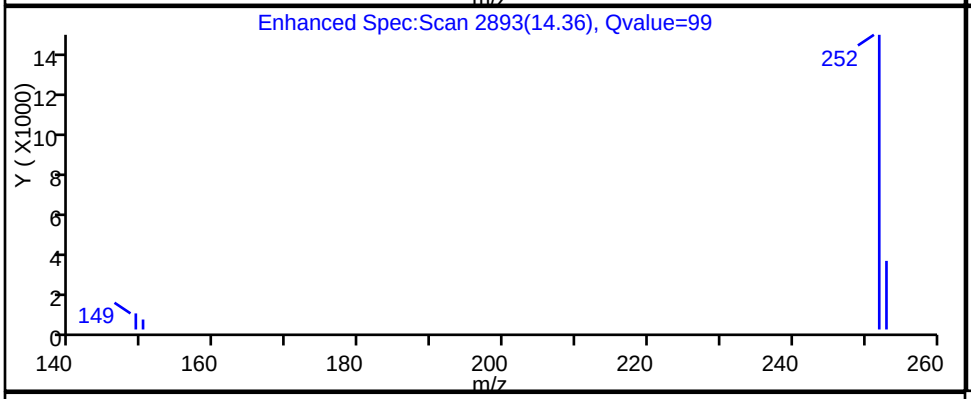
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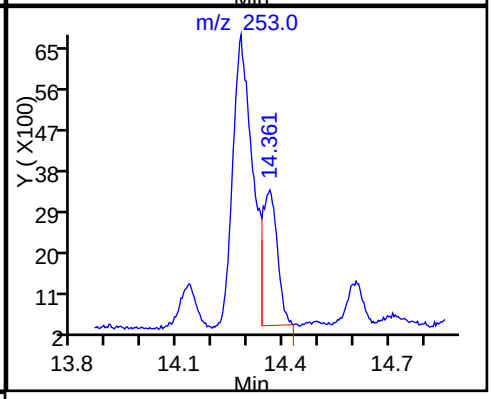
Injection Date:	08-Jun-2017 16:45:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-14-B	Lab Sample ID:	280-97803-14		
Client ID:	SS025-SS06-a				
Operator ID:	VASQUEZK	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

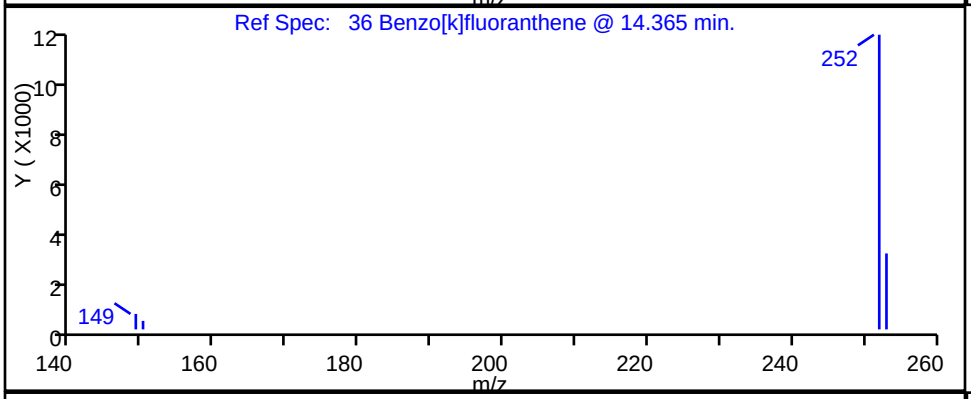
36 Benzo[k]fluoranthene, CAS: 207-08-9

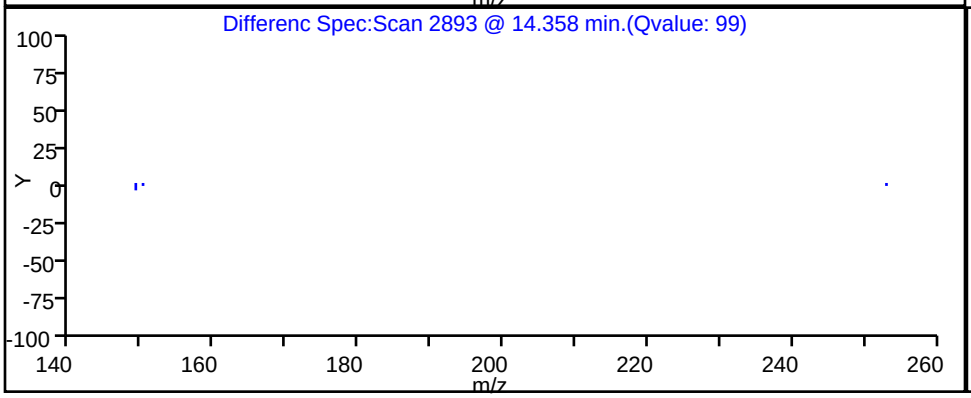


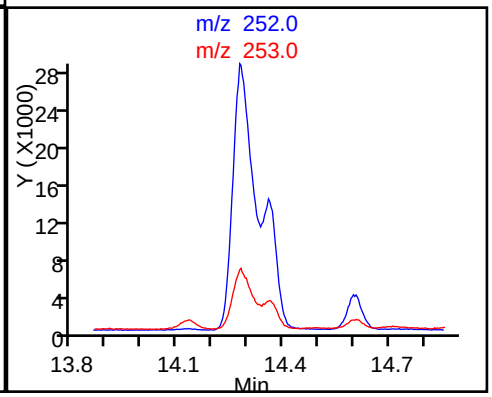












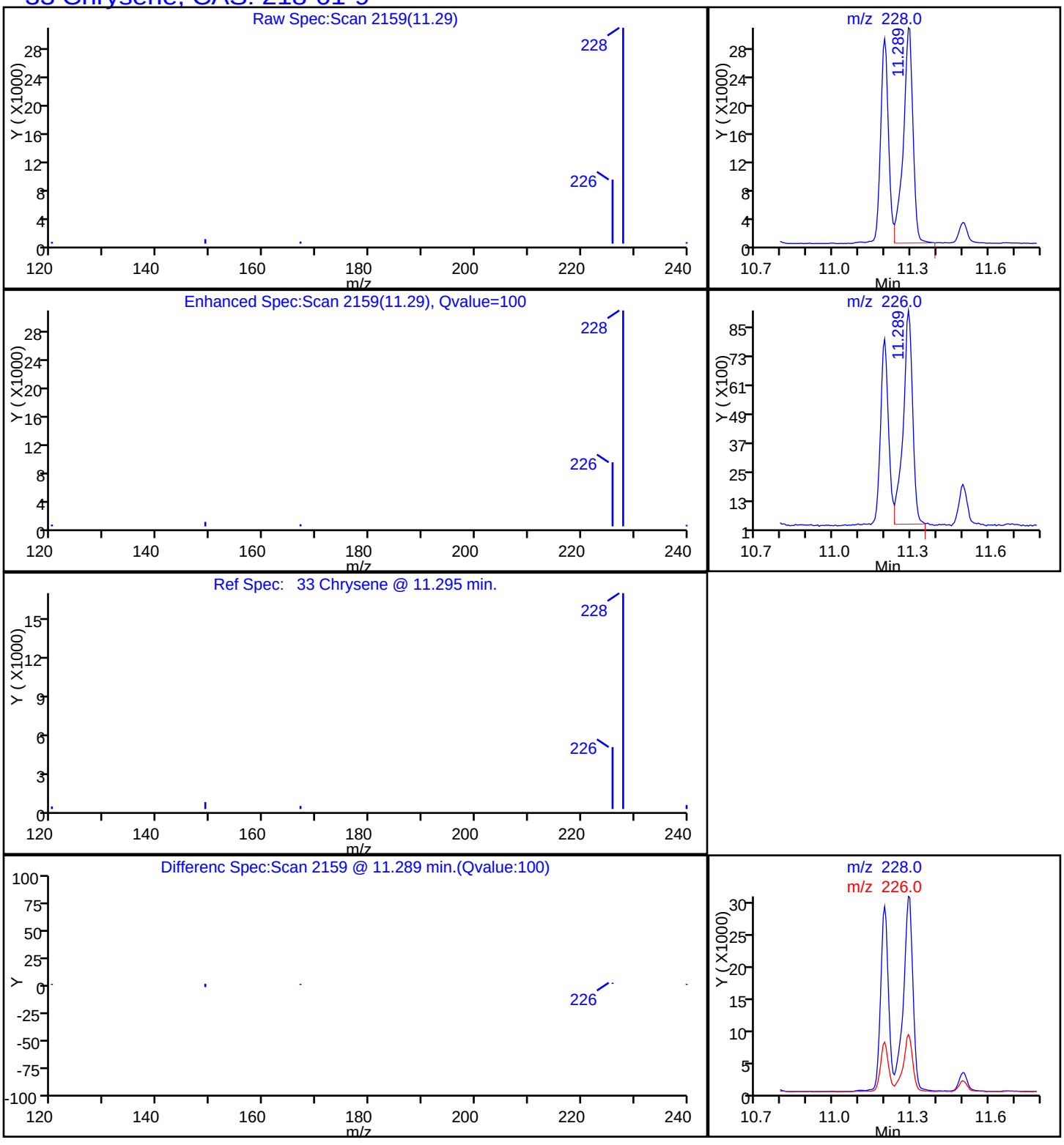
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1444.D

Injection Date:	08-Jun-2017 16:45:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-14-B	Lab Sample ID:	280-97803-14		
Client ID:	SS025-SS06-a				
Operator ID:	VASQUEZK	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

33 Chrysene, CAS: 218-01-9



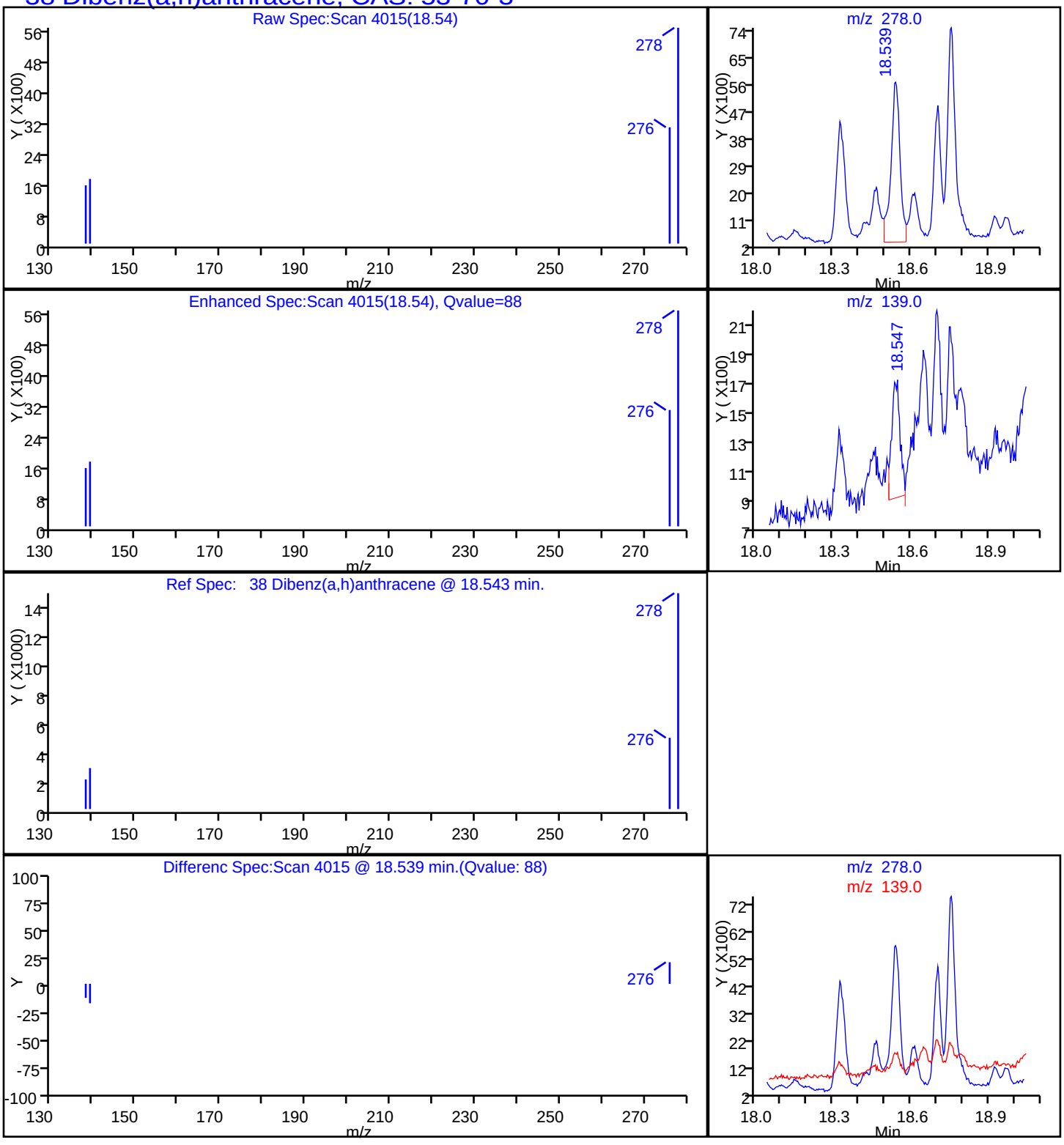
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1444.D

Injection Date:	08-Jun-2017 16:45:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-14-B	Lab Sample ID:	280-97803-14		
Client ID:	SS025-SS06-a				
Operator ID:	VASQUEZK	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Dibenz(a,h)anthracene, CAS: 53-70-3



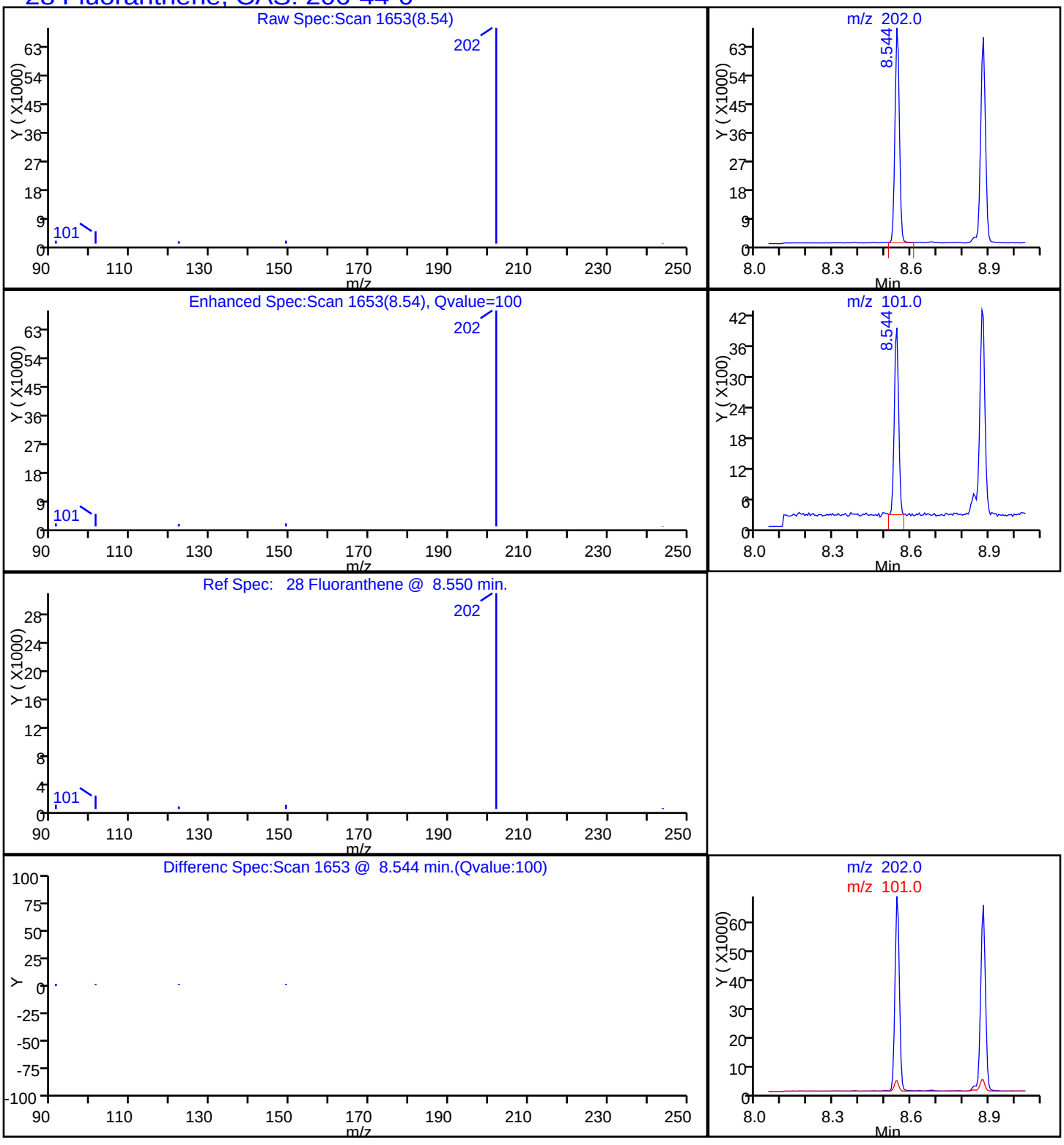
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1444.D

Injection Date:	08-Jun-2017 16:45:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-14-B	Lab Sample ID:	280-97803-14		
Client ID:	SS025-SS06-a				
Operator ID:	VASQUEZK	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

28 Fluoranthene, CAS: 206-44-0



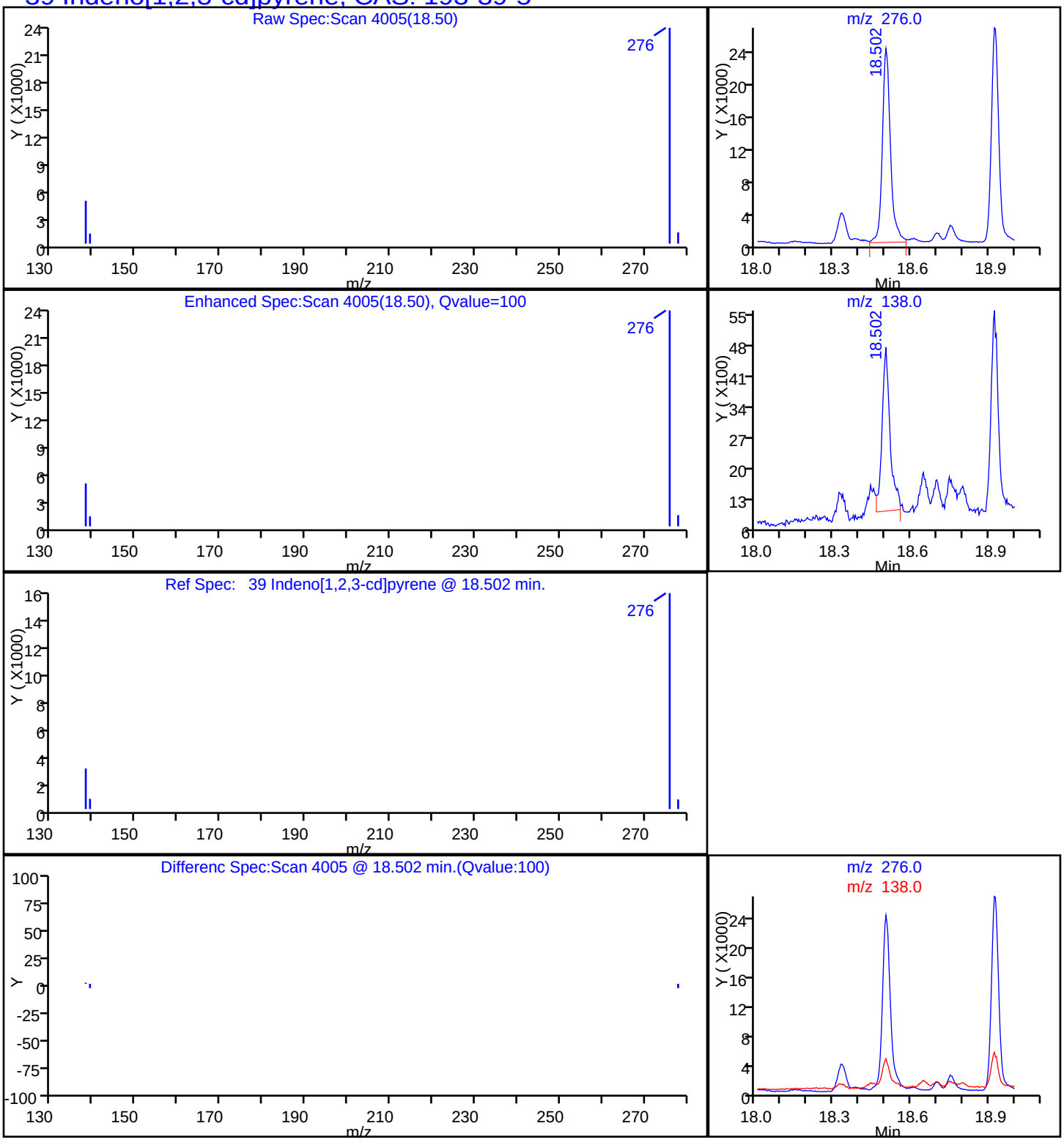
Report Date: 11-Jun-2017 22:45:34 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1444.D

Injection Date:	08-Jun-2017 16:45:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-14-B	Lab Sample ID:	280-97803-14		
Client ID:	SS025-SS06-a				
Operator ID:	VASQUEZK	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



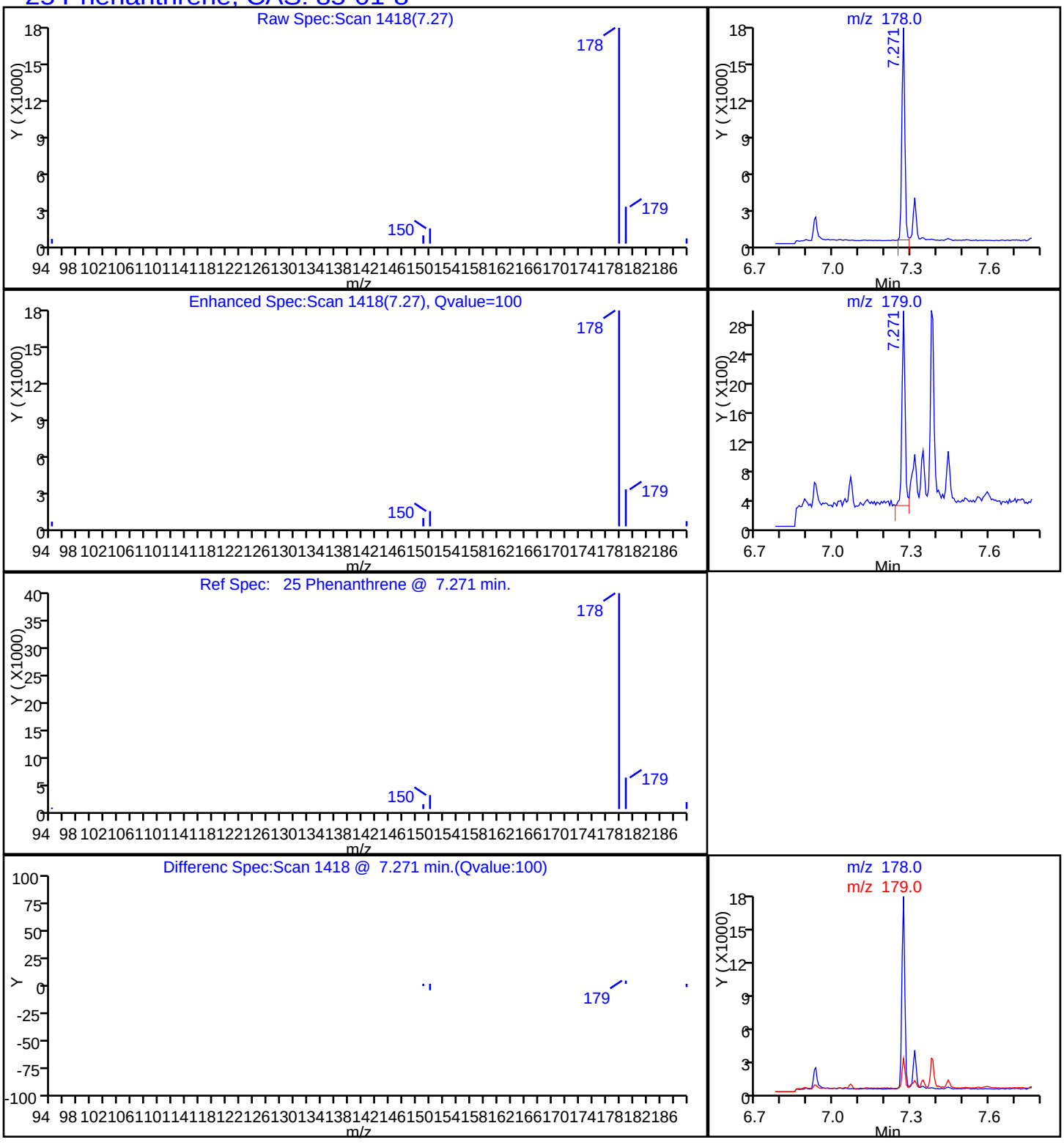
Report Date: 11-Jun-2017 22:45:33 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1444.D

Injection Date:	08-Jun-2017 16:45:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-14-B	Lab Sample ID:	280-97803-14		
Client ID:	SS025-SS06-a				
Operator ID:	VASQUEZK	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Phenanthrene, CAS: 85-01-8



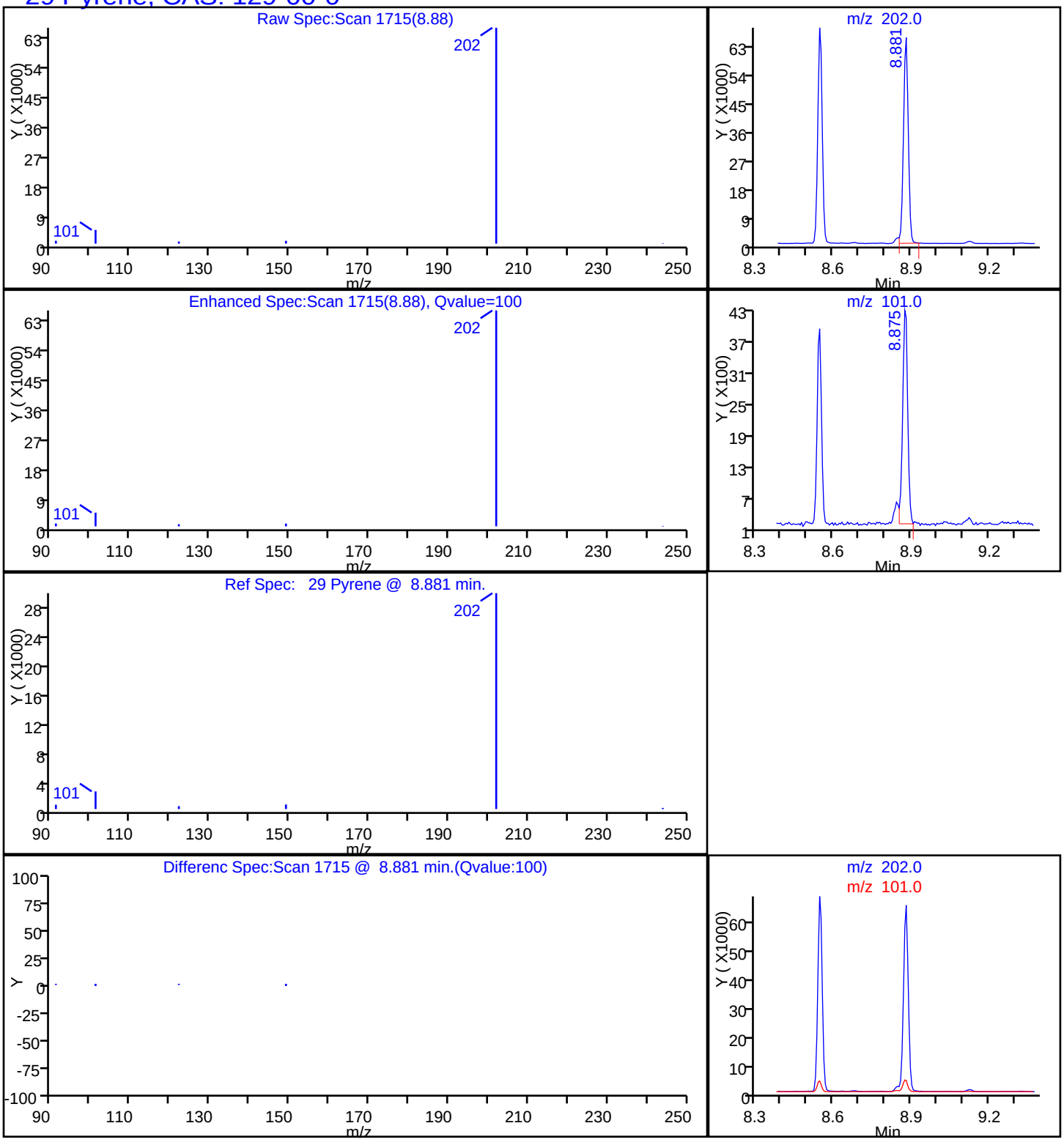
Report Date: 11-Jun-2017 22:45:33 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1444.D

Injection Date:	08-Jun-2017 16:45:30	Instrument ID:	SMS_G5		
Lims ID:	280-97803-A-14-B	Lab Sample ID:	280-97803-14		
Client ID:	SS025-SS06-a				
Operator ID:	VASQUEZK	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

29 Pyrene, CAS: 129-00-0



FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 373158

SDG No.:

Instrument ID: SMS_F GC Column: Rxi-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2017 12:58 Calibration End Date: 05/11/2017 16:07 Calibration ID: 29139

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD10000 280-373158/9	F6551.D
Level 2	STD0020 280-373158/3	F6545.D
Level 3	STD0100 280-373158/4	F6546.D
Level 4	STD0300 280-373158/5	F6547.D
Level 5	ICIS 280-373158/2	F6544.D
Level 6	STD1200 280-373158/6	F6548.D
Level 7	STD2500 280-373158/7	F6549.D
Level 8	STD5000 280-373158/8	F6550.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Naphthalene	+++++ 1.9596	2.1767 1.8539	1.9904 1.7532	1.9102	1.9711	Ave		1.9450			0.7000	6.7		15.0			
2-Methylnaphthalene	+++++ 1.2855	1.3137 1.2160	1.2852 1.1560	1.2243	1.2730	Ave		1.2505			0.4000	4.3		15.0			
1-Methylnaphthalene	+++++ 1.2706	1.3968 1.2067	1.2684 1.1420	1.2211	1.2612	Ave		1.2524			0.0500	6.3		15.0			
Acenaphthylene	+++++ 2.1371	2.1703 2.0566	2.1007 1.9402	2.0435	2.0397	Ave		2.0697			0.9000	3.6		15.0			
Acenaphthene	+++++ 1.2832	1.3798 1.2320	1.3020 1.1637	1.2504	1.2450	Ave		1.2652			0.9000	5.3		15.0			
Fluorene	+++++ 1.5973	1.7069 1.5400	1.5757 1.4289	1.5102	1.5089	Ave		1.5525			0.9000	5.6		15.0			
Phenanthrene	+++++ 1.2571	1.6152 1.1921	1.2432 1.1400	1.2272	1.2328	Ave		1.2725			0.7000	12.3		15.0			
Anthracene	+++++ 1.2951	1.5510 1.2175	1.2546 1.1733	1.2531	1.2502	Ave		1.2850			0.7000	9.6		15.0			
Fluoranthene	+++++ 1.4665	1.7251 1.4100	1.4761 1.3395	1.4148	1.3990	Ave		1.4616			0.6000	8.5		15.0			
Pyrene	+++++ 1.5022	1.8991 1.4485	1.4817 1.3733	1.4581	1.4472	Ave		1.5157			0.6000	11.5		15.0			
Benzo[a]anthracene	+++++ 1.5634	1.9782 1.4868	1.6042 1.4440	1.5367	1.5565	Ave		1.5957			0.8000	11.1		15.0			
Chrysene	+++++ 1.4573	1.7826 1.3944	1.4617 1.3431	1.4367	1.4574	Ave		1.4762			0.7000	9.6		15.0			
Benzo[b]fluoranthene	+++++ 1.4235	1.7190 1.3689	1.4586 1.3295	1.4045	1.4366	Ave		1.4487			0.7000	8.8		15.0			
Benzo[k]fluoranthene	+++++ 1.4764	1.6913 1.3784	1.4289 1.3443	1.4198	1.4605	Ave		1.4571			0.7000	7.7		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 373158

SDG No.:

Instrument ID: SMS_F GC Column: Rxi-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2017 12:58 Calibration End Date: 05/11/2017 16:07 Calibration ID: 29139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Benzo[a]pyrene	+++++ 1.3964	1.8009 1.3185	1.4292 1.2868	1.3728	1.4029	Ave		1.4296			0.7000	12.0		15.0			
Indeno[1,2,3-cd]pyrene	+++++ 1.5768	2.0472 1.4661	1.6475 1.4452	1.5693	1.5996	Ave		1.6217			0.5000	12.4		15.0			
Dibenz(a,h)anthracene	+++++ 1.2529	1.6026 1.1675	1.1776 1.1432	1.2526	1.2630	Ave		1.2656			0.4000	12.3		15.0			
Benzo[g,h,i]perylene	1.2869 1.3328	1.8679 1.2444	1.3887 1.2138	1.3184	1.3534	Ave		1.3758			0.5000	15.0		15.0			
Nitrobenzene-d5 (Surr)	0.9312 0.9605	1.0452 0.9237	0.9188 0.8757	0.9018	0.9620	Ave		0.9399				5.4		15.0			
2-Fluorobiphenyl (Surr)	1.5125 1.5847	1.7388 1.5221	1.5704 1.4346	1.5352	1.5476	Ave		1.5557				5.6		15.0			
Terphenyl-d14 (Surr)	0.5983 0.6146	0.7154 0.5921	0.6246 0.5620	0.6014	0.5653	Ave		0.6092				7.9		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 373158

SDG No.:

Instrument ID: SMS_F GC Column: Rxi-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2017 12:58 Calibration End Date: 05/11/2017 16:07 Calibration ID: 29139

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD10000 280-373158/9	F6551.D
Level 2	STD0020 280-373158/3	F6545.D
Level 3	STD0100 280-373158/4	F6546.D
Level 4	STD0300 280-373158/5	F6547.D
Level 5	ICIS 280-373158/2	F6544.D
Level 6	STD1200 280-373158/6	F6548.D
Level 7	STD2500 280-373158/7	F6549.D
Level 8	STD5000 280-373158/8	F6550.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Naphthalene	ANT	Ave	+++++ 94281	2043 228112	8602 404564	25553	52878	+++++ 1200	20.0 2500	100 5000	300	600
2-Methylnaphthalene	ANT	Ave	+++++ 123693	2466 299233	11109 533515	32756	68299	+++++ 2400	40.0 5000	200 10000	600	1200
1-Methylnaphthalene	ANT	Ave	+++++ 61133	1311 148473	5482 263521	16335	33832	+++++ 1200	20.0 2500	100 5000	300	600
Acenaphthylene	ANT	Ave	+++++ 102818	2037 253042	9079 447724	27336	54716	+++++ 1200	20.0 2500	100 5000	300	600
Acenaphthene	ANT	Ave	+++++ 61738	1295 151592	5627 268543	16726	33398	+++++ 1200	20.0 2500	100 5000	300	600
Fluorene	ANT	Ave	+++++ 76847	1602 189482	6810 329727	20202	40477	+++++ 1200	20.0 2500	100 5000	300	600
Phenanthrene	PHN	Ave	+++++ 111683	2691 277752	10149 484562	30194	60417	+++++ 1200	20.0 2500	100 5000	300	600
Anthracene	PHN	Ave	+++++ 115053	2584 283675	10242 498719	30832	61266	+++++ 1200	20.0 2500	100 5000	300	600
Fluoranthene	PHN	Ave	+++++ 130280	2874 328525	12050 569375	34809	68559	+++++ 1200	20.0 2500	100 5000	300	600
Pyrene	PHN	Ave	+++++ 133458	3164 337491	12096 583741	35875	70923	+++++ 1200	20.0 2500	100 5000	300	600
Benzo[a]anthracene	CRY	Ave	+++++ 124103	2923 315528	11770 547347	33773	65338	+++++ 1200	20.0 2500	100 5000	300	600
Chrysene	CRY	Ave	+++++ 115675	2634 295905	10725 509125	31576	61177	+++++ 1200	20.0 2500	100 5000	300	600
Benzo[b]fluoranthene	CRY	Ave	+++++ 112998	2540 290503	10702 503976	30868	60307	+++++ 1200	20.0 2500	100 5000	300	600
Benzo[k]fluoranthene	CRY	Ave	+++++ 117190	2499 292518	10484 509563	31204	61309	+++++ 1200	20.0 2500	100 5000	300	600
Benzo[a]pyrene	CRY	Ave	+++++ 110841	2661 279807	10486 487782	30172	58893	+++++ 1200	20.0 2500	100 5000	300	600

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 373158

SDG No.:

Instrument ID: SMS_F GC Column: Rxi-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2017 12:58 Calibration End Date: 05/11/2017 16:07 Calibration ID: 29139

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Indeno[1,2,3-cd]pyrene	CRY	Ave	+++++ 125164	3025 311134	12088 547816	34491	67148	+++++ 1200	20.0 2500	100 5000	300	600
Dibenz(a,h)anthracene	CRY	Ave	+++++ 99456	2368 247769	8640 433357	27529	53017	+++++ 1200	20.0 2500	100 5000	300	600
Benzo[g,h,i]perylene	CRY	Ave	968251 105797	2760 264085	10189 460086	28975	56811	10000 1200	20.0 2500	100 5000	300	600
Nitrobenzene-d5 (Surr)	ANT	Ave	425770 46257	982 113769	3975 202281	12076	25832	10010 1201	20.0 2503	100 5005	300	601
2-Fluorobiphenyl (Surr)	ANT	Ave	690907 76243	1632 187277	6787 331041	20536	41517	10000 1200	20.0 2500	100 5000	300	600
Terphenyl-d14 (Surr)	PHN	Ave	500874 54655	1193 138095	5104 239138	14812	27729	10010 1201	20.0 2503	100 5005	300	601

Curve Type Legend:
Ave = Average ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6544.D
Lims ID: ICIS STD0600
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 11-May-2017 12:58:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 12-May-2017 08:51:13 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: vasquezk Date: 11-May-2017 15:25:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.038	6.038	0.000	95	26826	600.0	600.0	
* 2 Phenanthrene-d10	188	7.307	7.307	0.000	99	49006	600.0	600.0	
* 3 Chrysene-d12	240	11.377	11.377	0.000	97	41978	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.005	4.005	0.000	100	25832	600.6	614.7	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	41517	600.0	596.9	
$ 6 Terphenyl-d14	244	9.136	9.136	0.000	96	27729	600.6	557.3	
9 1,4-Dioxane	88	1.909	1.909	0.000	0	9280	604.8	640.7	M
10 N-Nitrosodimethylamine	74	2.039	2.039	0.000	93	15543	600.0	630.3	
14 Naphthalene	128	4.596	4.596	0.000	100	52878	600.0	608.1	
16 2-Methylnaphthalene	142	5.152	5.152	0.000	98	68299	1200.0	1221.6	
17 1-Methylnaphthalene	142	5.239	5.239	0.000	99	33832	600.0	604.2	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	94798	1201.2	1246.5	
22 Acenaphthylene	152	5.917	5.917	0.000	99	54716	600.0	591.3	
23 Acenaphthene	153	6.064	6.064	0.000	95	33398	600.0	590.4	
32 Dibenzofuran	168	6.207	6.207	0.000	96	52446	600.6	593.6	
24 Diethyl phthalate	149	6.328	6.328	0.000	97	96103	1204.8	1223.0	
25 Fluorene	166	6.494	6.494	0.000	99	40477	600.0	583.1	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	98	27998	599.2	610.3	
27 Phenanthrene	178	7.326	7.326	0.000	99	60417	600.0	581.3	
28 Anthracene	178	7.372	7.372	0.000	100	61266	600.0	583.8	
29 Di-n-butyl phthalate	149	7.736	7.736	0.000	100	161793	1201.5	1215.7	
30 Fluoranthene	202	8.628	8.628	0.000	99	68559	600.0	574.3	
31 Pyrene	202	8.973	8.973	0.000	100	70923	600.0	572.9	
33 Butyl benzyl phthalate	149	9.969	9.969	0.000	98	73966	1201.5	1202.5	
34 Bis(2-ethylhexyl) phthalat	149	11.260	11.260	0.000	100	113874	1201.8	1256.6	
35 Benzo[a]anthracene	228	11.350	11.350	0.000	99	65338	600.0	585.3	
36 Chrysene	228	11.440	11.440	0.000	100	61177	600.0	592.4	
37 Di-n-octyl phthalate	149	13.192	13.192	0.000	100	180516	1203.3	1272.0	
38 Benzo[b]fluoranthene	252	14.495	14.495	0.000	99	60307	600.0	595.0	
39 Benzo[k]fluoranthene	252	14.582	14.582	0.000	99	61309	600.0	601.4	
40 Benzo[a]pyrene	252	15.571	15.571	0.000	98	58893	600.0	588.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.650	18.650	0.000	80	67148	600.0	591.8	M
42 Dibenz(a,h)anthracene	278	18.685	18.685	0.000	82	53017	600.0	598.7	
43 Benzo[g,h,i]perylene	276	19.079	19.079	0.000	97	56811	600.0	590.2	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

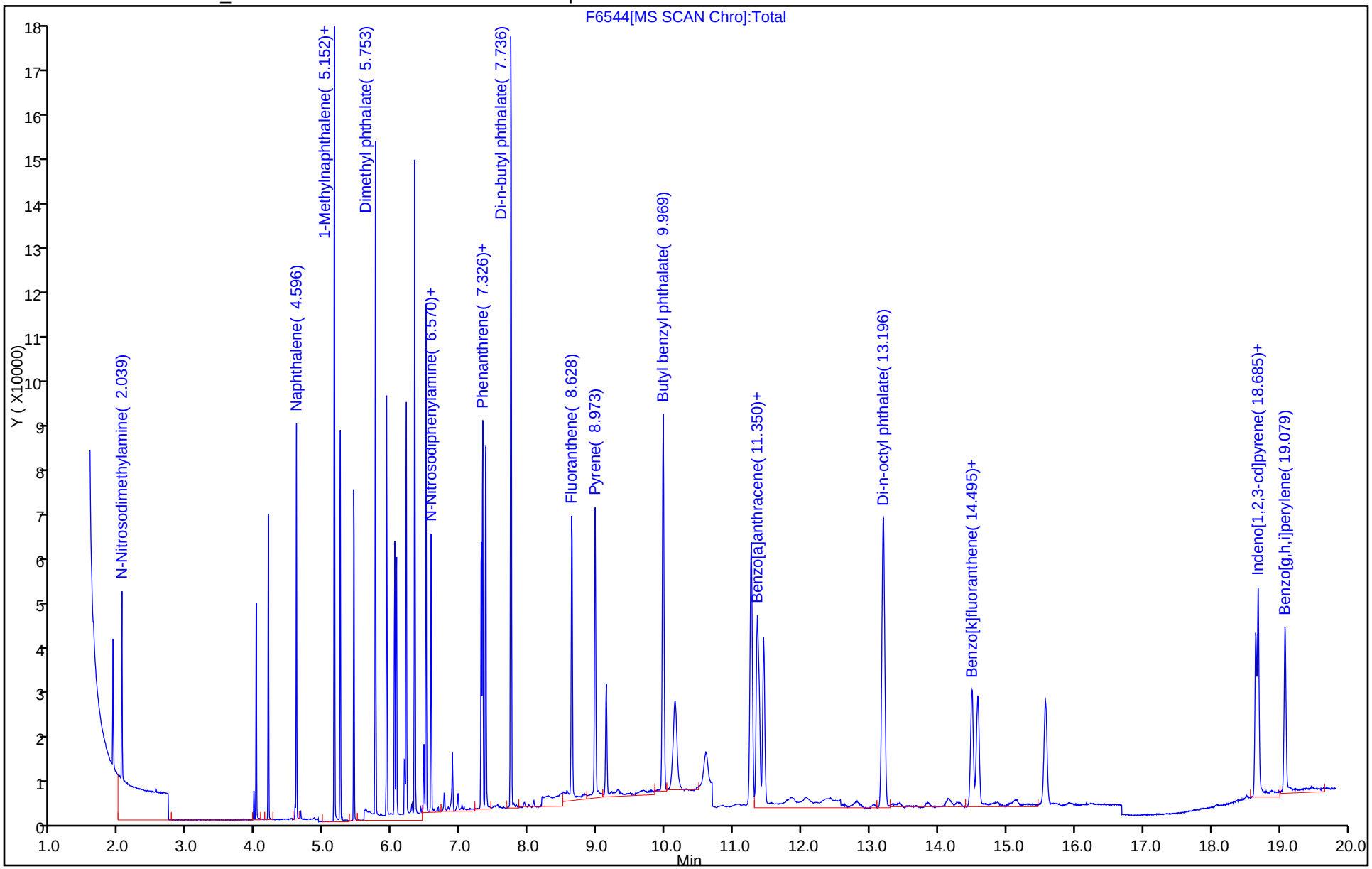
MS-SIMSL 0.6_00122 Amount Added: 1.00 Units: uL

Report Date: 12-May-2017 08:51:14 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6544.D

Injection Date:	11-May-2017 12:58:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	ICIS STD0600			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

TestAmerica Denver

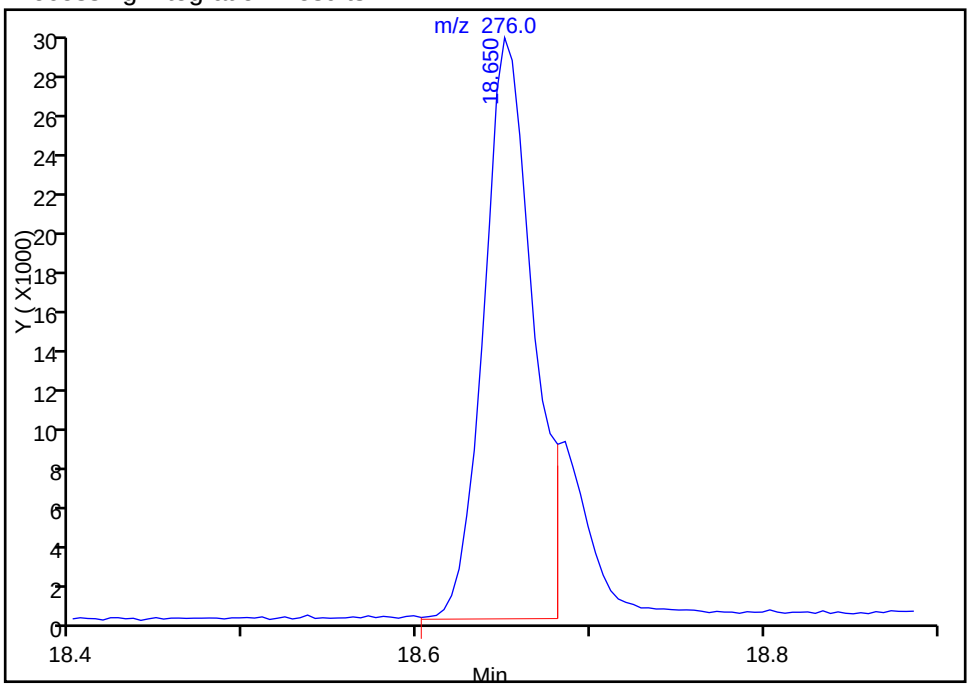
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6544.D
Injection Date: 11-May-2017 12:58:30 Instrument ID: SMS_F
Lims ID: ICIS STD0600
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM
Column: Detector MS SCAN

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

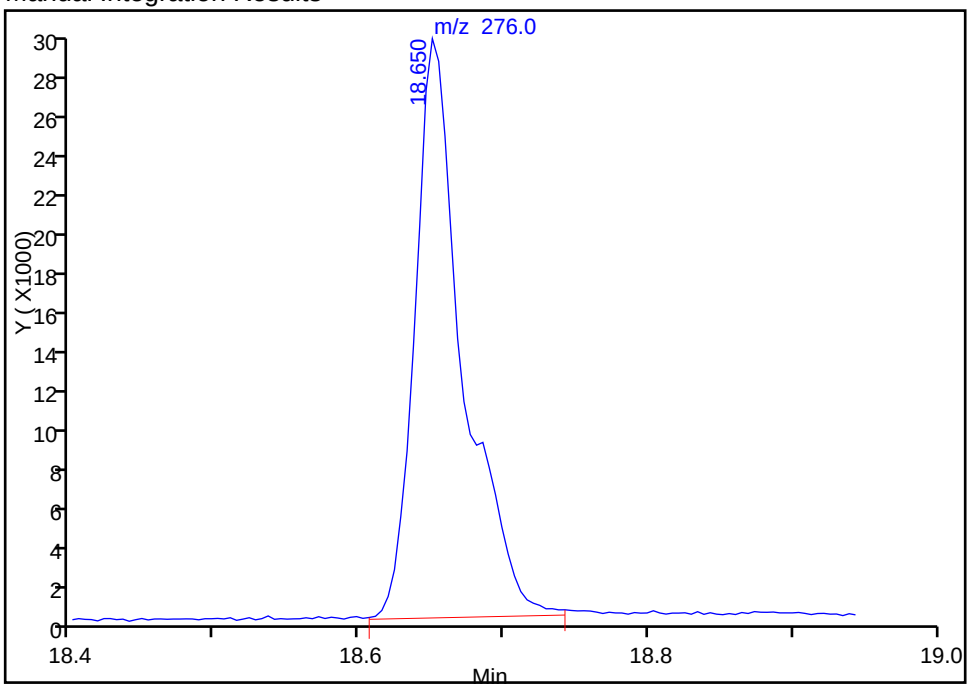
Processing Integration Results

RT: 18.65
Area: 58045
Amount: 600.0000
Amount Units: ng/ml



Manual Integration Results

RT: 18.65
Area: 67148
Amount: 591.8280
Amount Units: ng/ml



Reviewer: vasquezk, 11-May-2017 15:25:33
Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6545.D
Lims ID: STD0020
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 11-May-2017 13:34:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD0020
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 12-May-2017 08:51:16 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: vasquezk Date: 11-May-2017 15:26:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.038	6.038	0.000	100	28157	600.0	600.0	
* 2 Phenanthrene-d10	188	7.307	7.307	0.000	99	49981	600.0	600.0	
* 3 Chrysene-d12	240	11.377	11.377	0.000	93	44328	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.008	4.005	0.003	96	982	20.0	22.3	
$ 5 2-Fluorobiphenyl	172	5.440	5.436	0.004	99	1632	20.0	22.4	
$ 6 Terphenyl-d14	244	9.136	9.136	0.000	43	1193	20.0	23.5	
9 1,4-Dioxane	88		1.909				ND	ND	
10 N-Nitrosodimethylamine	74	2.039	2.039	0.000	52	609	20.0	23.5	
14 Naphthalene	128	4.596	4.596	0.000	98	2043	20.0	22.4	
16 2-Methylnaphthalene	142	5.152	5.152	0.000	94	2466	40.0	42.0	
17 1-Methylnaphthalene	142	5.239	5.239	0.000	98	1311	20.0	22.3	
20 Dimethyl phthalate	163		5.753				ND	ND	
22 Acenaphthylene	152	5.917	5.917	0.000	95	2037	20.0	21.0	
23 Acenaphthene	153	6.064	6.064	0.000	98	1295	20.0	21.8	
32 Dibenzofuran	168	6.207	6.207	0.000	91	2048	20.0	22.1	
24 Diethyl phthalate	149		6.328				ND	ND	
25 Fluorene	166	6.494	6.494	0.000	95	1602	20.0	22.0	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	97	1173	20.0	25.1	
27 Phenanthrene	178	7.326	7.326	0.000	91	2691	20.0	25.4	
28 Anthracene	178	7.372	7.372	0.000	94	2584	20.0	24.1	
29 Di-n-butyl phthalate	149		7.736				ND	ND	
30 Fluoranthene	202	8.635	8.628	0.007	93	2874	20.0	23.6	
31 Pyrene	202	8.973	8.973	0.000	93	3164	20.0	25.1	
33 Butyl benzyl phthalate	149		9.969				ND	ND	
34 Bis(2-ethylhexyl) phthalat	149		11.260				ND	ND	
35 Benzo[a]anthracene	228	11.350	11.350	0.000	33	2923	20.0	24.8	
36 Chrysene	228	11.449	11.440	0.009	91	2634	20.0	24.2	
37 Di-n-octyl phthalate	149		13.192				ND	ND	
38 Benzo[b]fluoranthene	252	14.495	14.495	0.000	76	2540	20.0	23.7	
39 Benzo[k]fluoranthene	252	14.582	14.582	0.000	70	2499	20.0	23.2	
40 Benzo[a]pyrene	252	15.575	15.571	0.004	60	2661	20.0	25.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.650	18.650	0.000	60	3025	20.0	25.2	M
42 Dibenz(a,h)anthracene	278	18.685	18.685	0.000	52	2368	20.0	25.3	
43 Benzo[g,h,i]perylene	276	19.079	19.079	0.000	51	2760	20.0	27.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

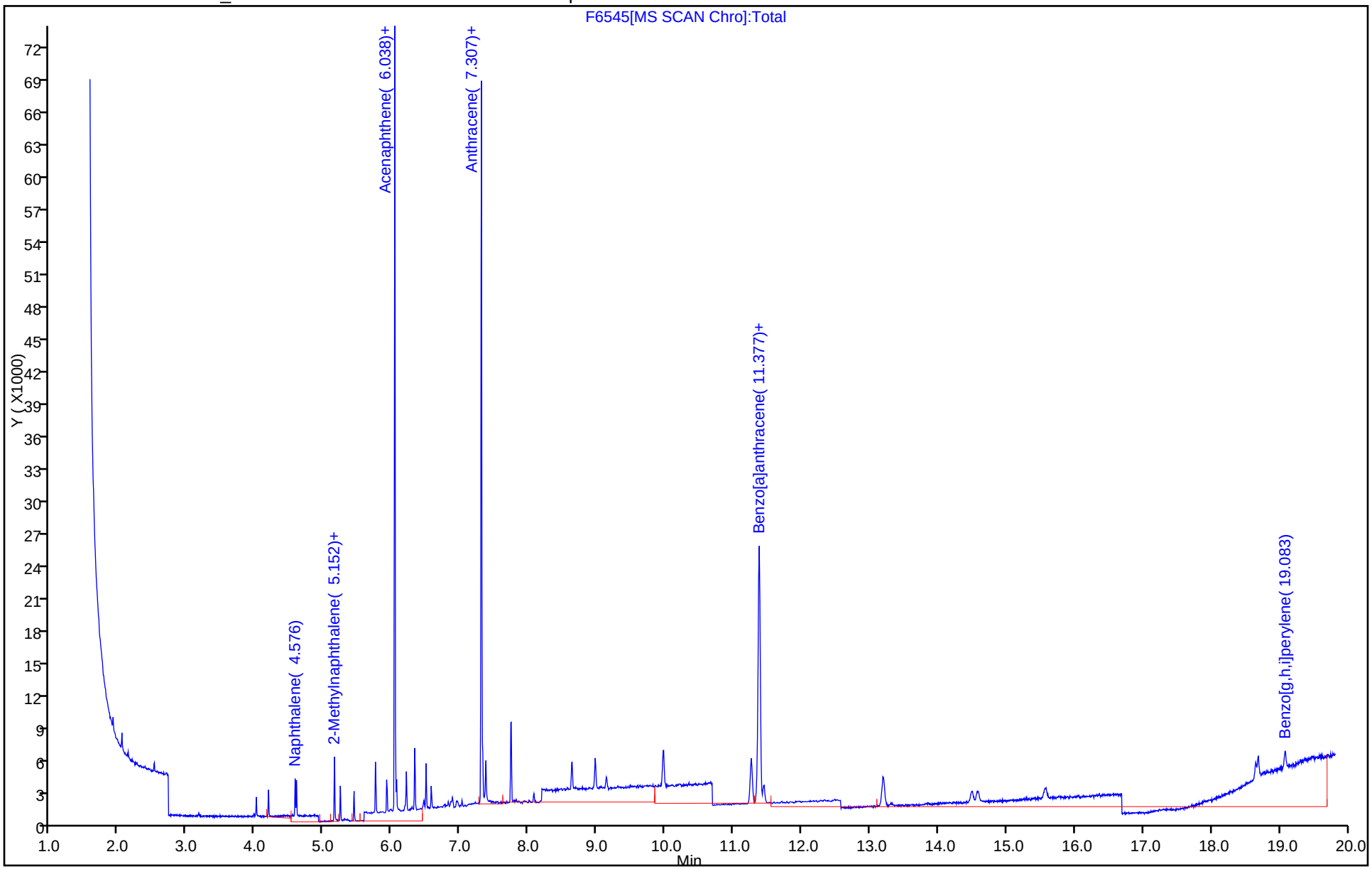
MS-SIMSL 0.02_00067 Amount Added: 1.00 Units: uL

Report Date: 12-May-2017 08:51:17 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6545.D

Injection Date:	11-May-2017 13:34:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	STD0020			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

TestAmerica Denver

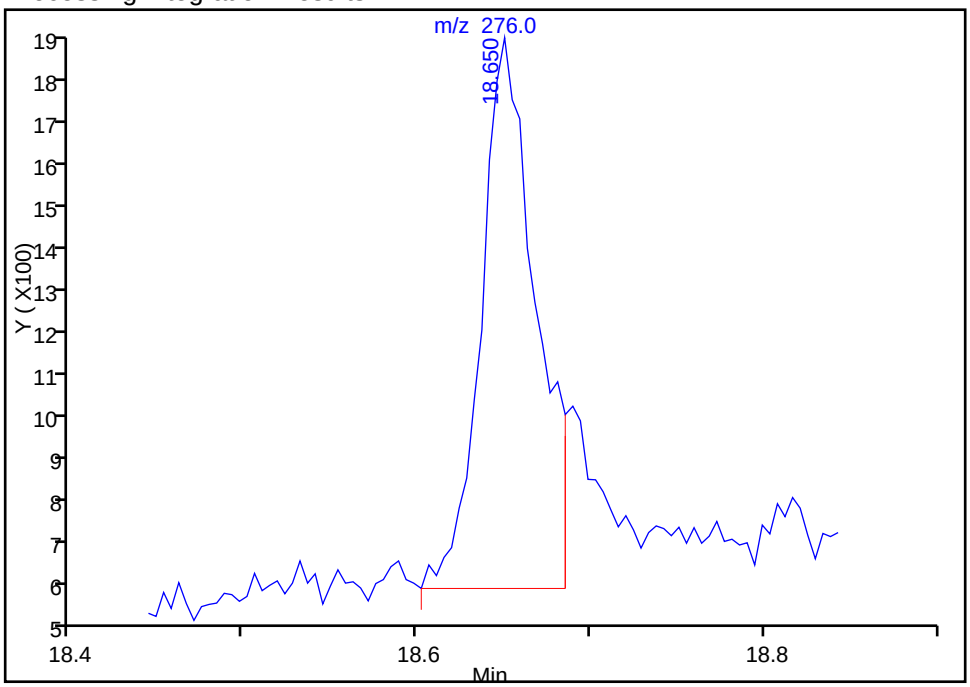
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6545.D
Injection Date: 11-May-2017 13:34:30 Instrument ID: SMS_F
Lims ID: STD0020
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM
Column: Detector MS SCAN

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

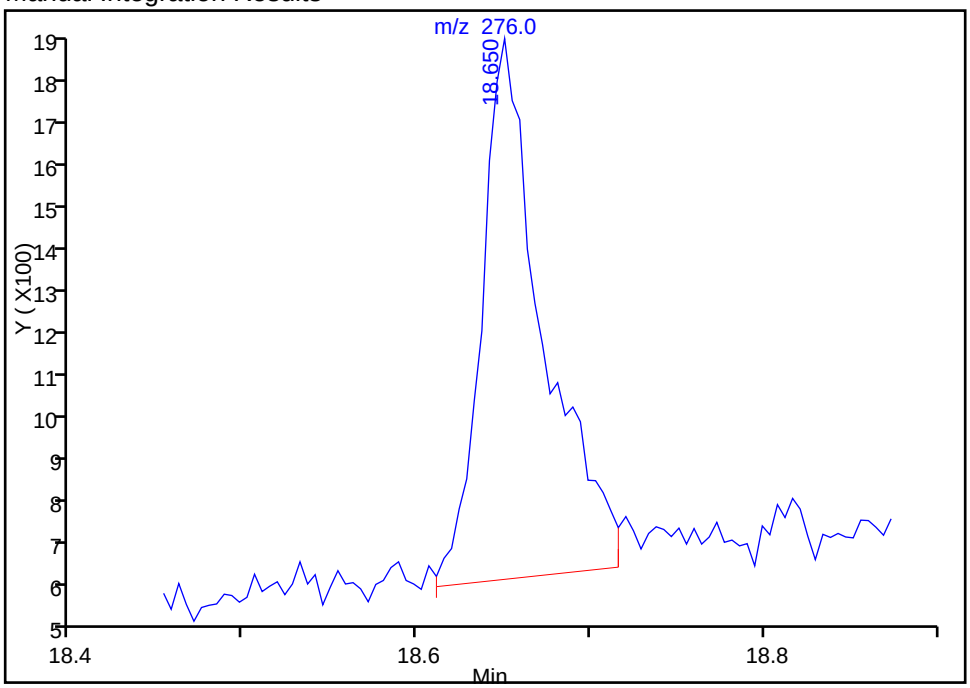
Processing Integration Results

RT: 18.65
Area: 2745
Amount: 22.515369
Amount Units: ng/ml



Manual Integration Results

RT: 18.65
Area: 3025
Amount: 25.248258
Amount Units: ng/ml



Reviewer: vasquezk, 11-May-2017 15:26:34
Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6546.D
Lims ID: STD0100
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 11-May-2017 13:59:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD0100
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 12-May-2017 08:51:20 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: vasquezk Date: 11-May-2017 15:26:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.038	6.038	0.000	93	25931	600.0	600.0	
* 2 Phenanthrene-d10	188	7.300	7.307	-0.007	100	48980	600.0	600.0	
* 3 Chrysene-d12	240	11.367	11.377	-0.010	93	44023	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.008	4.005	0.003	98	3975	100.1	97.9	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	99	6787	100.0	100.9	
$ 6 Terphenyl-d14	244	9.129	9.136	-0.007	90	5104	100.1	102.6	
9 1,4-Dioxane	88	1.909	1.909	0.000	0	1685	100.8	120.3	M
10 N-Nitrosodimethylamine	74	2.039	2.039	0.000	69	2373	100.0	99.5	
14 Naphthalene	128	4.596	4.596	0.000	100	8602	100.0	102.3	
16 2-Methylnaphthalene	142	5.151	5.152	-0.001	100	11109	200.0	205.5	
17 1-Methylnaphthalene	142	5.239	5.239	0.000	98	5482	100.0	101.3	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	15411	200.2	209.6	
22 Acenaphthylene	152	5.917	5.917	0.000	99	9079	100.0	101.5	
23 Acenaphthene	153	6.055	6.064	-0.009	94	5627	100.0	102.9	
32 Dibenzofuran	168	6.206	6.207	-0.001	96	8861	100.1	103.7	
24 Diethyl phthalate	149	6.328	6.328	0.000	98	15815	200.8	208.2	
25 Fluorene	166	6.494	6.494	0.000	96	6810	100.0	101.5	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	98	4758	99.9	103.8	
27 Phenanthrene	178	7.320	7.326	-0.006	99	10149	100.0	97.7	
28 Anthracene	178	7.365	7.372	-0.007	100	10242	100.0	97.6	
29 Di-n-butyl phthalate	149	7.736	7.736	0.000	100	28181	200.3	211.9	
30 Fluoranthene	202	8.628	8.628	0.000	99	12050	100.0	101.0	
31 Pyrene	202	8.967	8.973	-0.006	99	12096	100.0	97.8	
33 Butyl benzyl phthalate	149	9.963	9.969	-0.006	97	12858	200.3	209.2	
34 Bis(2-ethylhexyl) phthalat	149	11.250	11.260	-0.010	100	21988	200.3	242.8	
35 Benzo[a]anthracene	228	11.340	11.350	-0.010	86	11770	100.0	100.5	
36 Chrysene	228	11.431	11.440	-0.010	98	10725	100.0	99.0	
37 Di-n-octyl phthalate	149	13.178	13.192	-0.014	100	30987	200.6	208.2	
38 Benzo[b]fluoranthene	252	14.477	14.495	-0.018	95	10702	100.0	100.7	
39 Benzo[k]fluoranthene	252	14.569	14.582	-0.013	95	10484	100.0	98.1	
40 Benzo[a]pyrene	252	15.557	15.571	-0.014	93	10486	100.0	100.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.646	18.650	-0.004	76	12088	100.0	101.6	
42 Dibenz(a,h)anthracene	278	18.685	18.685	0.000	76	8640	100.0	93.0	
43 Benzo[g,h,i]perylene	276	19.074	19.079	-0.005	87	10189	100.0	100.9	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

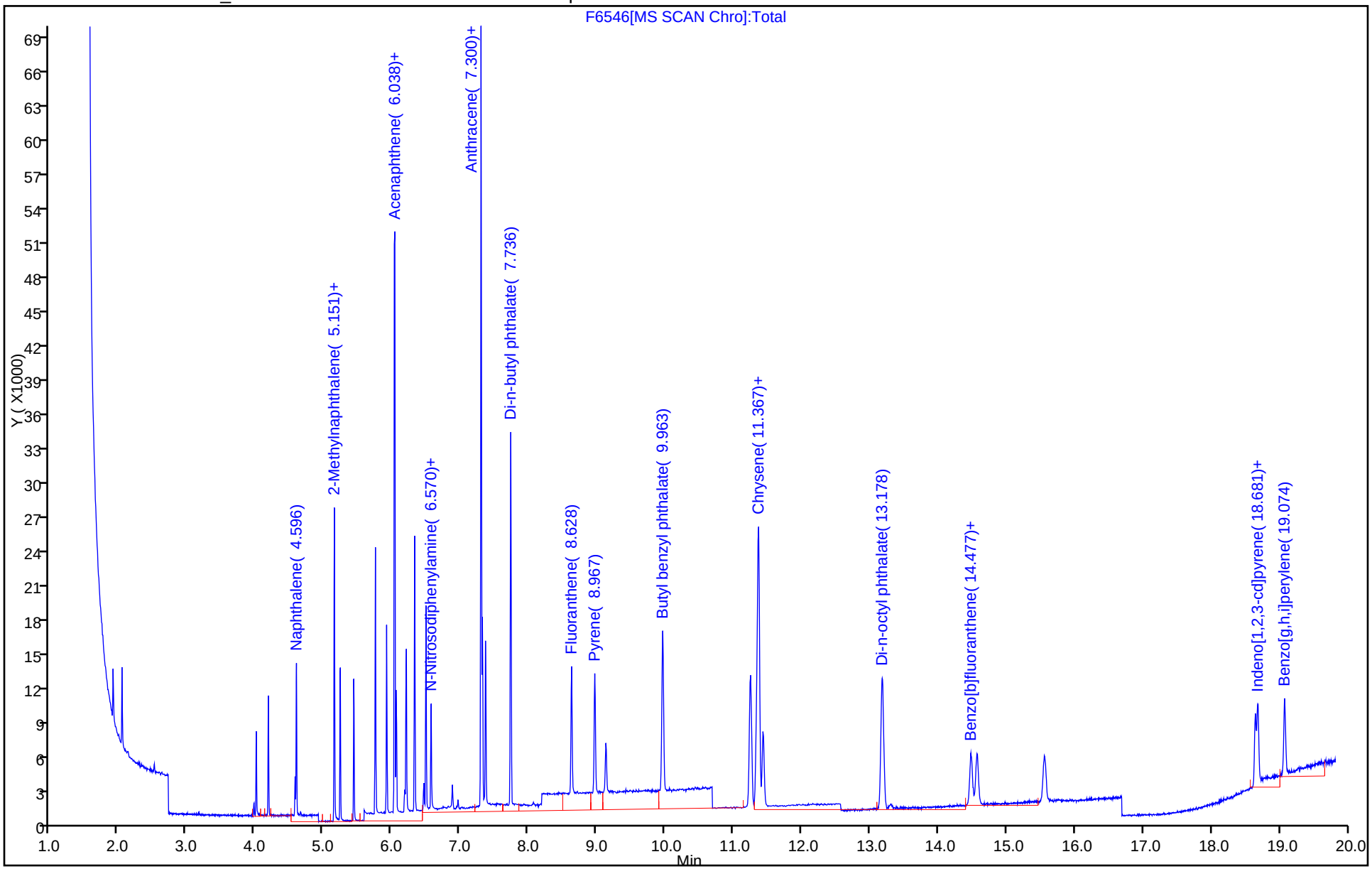
MS-SIMSL 0.1_00063 Amount Added: 1.00 Units: uL

Report Date: 12-May-2017 08:51:20 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6546.D

Injection Date:	11-May-2017 13:59:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	STD0100			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6547.D
Lims ID: STD0300
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 11-May-2017 14:25:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD0300
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 12-May-2017 08:51:22 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: vasquezk Date: 11-May-2017 15:27:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.038	6.038	0.000	92	26754	600.0	600.0	
* 2 Phenanthrene-d10	188	7.302	7.307	-0.005	100	49208	600.0	600.0	
* 3 Chrysene-d12	240	11.362	11.377	-0.015	96	43956	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.005	4.005	0.000	100	12076	300.3	288.1	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	20536	300.0	296.0	
$ 6 Terphenyl-d14	244	9.131	9.136	-0.005	97	14812	300.3	296.5	
9 1,4-Dioxane	88	1.909	1.909	0.000	0	4094	302.4	283.4	M
10 N-Nitrosodimethylamine	74	2.039	2.039	0.000	97	7181	300.0	292.0	
14 Naphthalene	128	4.596	4.596	0.000	100	25553	300.0	294.6	
16 2-Methylnaphthalene	142	5.152	5.152	0.000	98	32756	600.0	587.4	
17 1-Methylnaphthalene	142	5.239	5.239	0.000	97	16335	300.0	292.5	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	45810	600.6	604.0	
22 Acenaphthylene	152	5.917	5.917	0.000	100	27336	300.0	296.2	
23 Acenaphthene	153	6.055	6.064	-0.009	96	16726	300.0	296.5	
32 Dibenzofuran	168	6.207	6.207	0.000	97	25668	300.3	291.3	
24 Diethyl phthalate	149	6.328	6.328	0.000	99	47195	602.4	602.2	
25 Fluorene	166	6.494	6.494	0.000	95	20202	300.0	291.8	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	96	13920	299.6	302.2	
27 Phenanthrene	178	7.321	7.326	-0.005	100	30194	300.0	289.3	
28 Anthracene	178	7.367	7.372	-0.005	100	30832	300.0	292.6	
29 Di-n-butyl phthalate	149	7.738	7.736	0.002	100	81453	600.8	609.5	
30 Fluoranthene	202	8.623	8.628	-0.005	99	34809	300.0	290.4	
31 Pyrene	202	8.968	8.973	-0.005	100	35875	300.0	288.6	
33 Butyl benzyl phthalate	149	9.964	9.969	-0.005	94	37158	600.8	601.6	
34 Bis(2-ethylhexyl) phthalat	149	11.245	11.260	-0.015	100	54292	600.9	596.7	
35 Benzo[a]anthracene	228	11.335	11.350	-0.015	99	33773	300.0	288.9	
36 Chrysene	228	11.434	11.440	-0.006	100	31576	300.0	292.0	
37 Di-n-octyl phthalate	149	13.178	13.192	-0.014	100	89250	601.7	600.6	
38 Benzo[b]fluoranthene	252	14.477	14.495	-0.018	99	30868	300.0	290.9	
39 Benzo[k]fluoranthene	252	14.564	14.582	-0.018	100	31204	300.0	292.3	
40 Benzo[a]pyrene	252	15.557	15.571	-0.014	99	30172	300.0	288.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.641	18.650	-0.009	80	34491	300.0	290.3	
42 Dibenz(a,h)anthracene	278	18.680	18.685	-0.005	80	27529	300.0	296.9	
43 Benzo[g,h,i]perylene	276	19.070	19.079	-0.009	96	28975	300.0	287.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

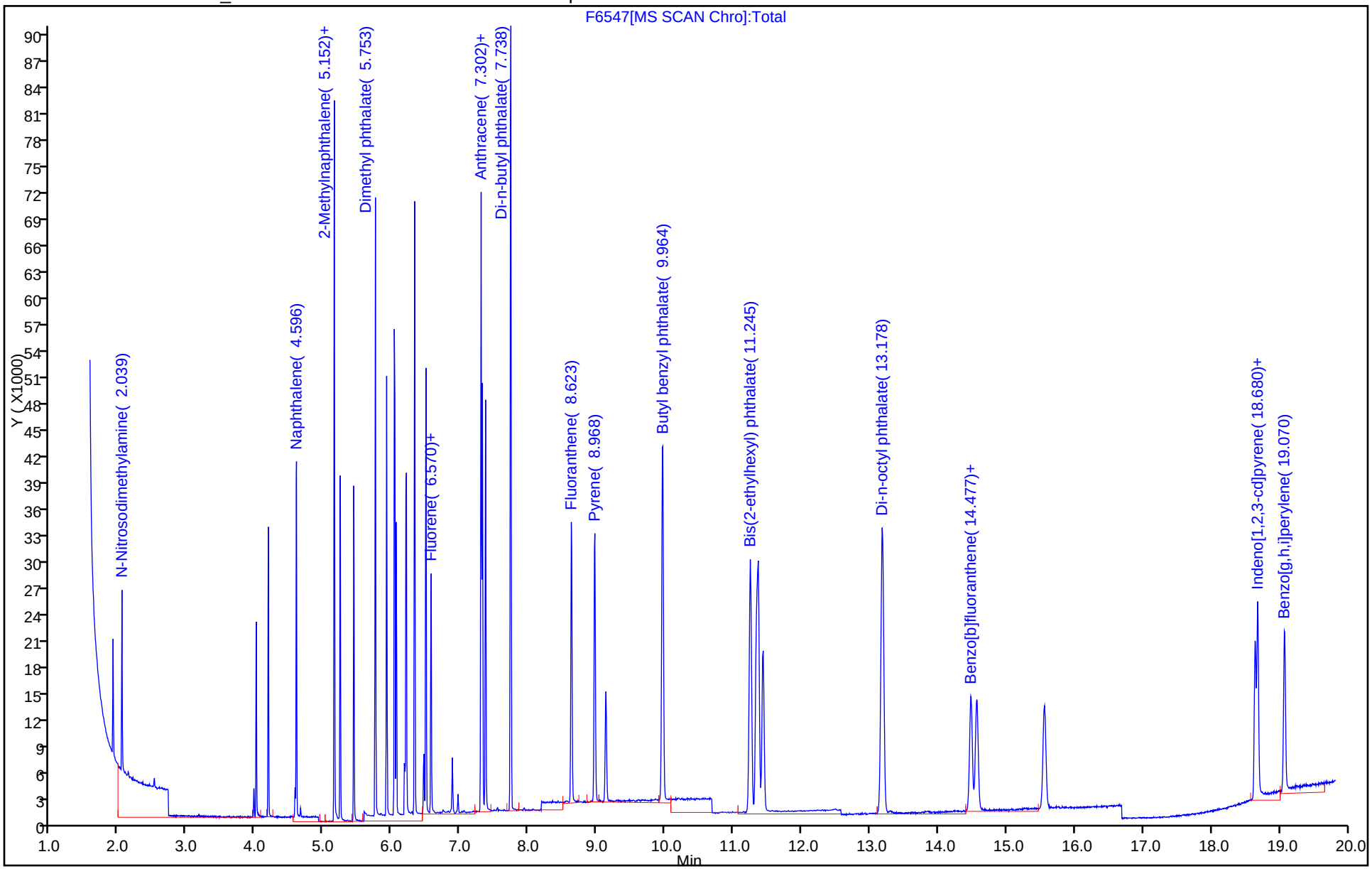
MS-SIMSL 0.3_00061 Amount Added: 1.00 Units: uL

Report Date: 12-May-2017 08:51:22 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6547.D

Injection Date:	11-May-2017 14:25:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	STD0300			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6548.D
Lims ID: STD1200
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 11-May-2017 14:50:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD1200
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 12-May-2017 08:51:24 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: vasquezk Date: 11-May-2017 15:27:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.038	6.038	0.000	91	24056	600.0	600.0	
* 2 Phenanthrene-d10	188	7.301	7.307	-0.006	100	44420	600.0	600.0	
* 3 Chrysene-d12	240	11.362	11.377	-0.015	85	39689	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.005	4.005	0.000	100	46257	1201.2	1227.5	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	76243	1200.0	1222.3	
$ 6 Terphenyl-d14	244	9.130	9.136	-0.006	99	54655	1201.2	1211.8	
9 1,4-Dioxane	88	1.909	1.909	0.000	0	15792	1209.6	1215.8	M
10 N-Nitrosodimethylamine	74	2.039	2.039	0.000	86	26136	1200.0	1181.8	
14 Naphthalene	128	4.596	4.596	0.000	100	94281	1200.0	1209.0	
16 2-Methylnaphthalene	142	5.152	5.152	0.000	96	123693	2400.0	2467.1	
17 1-Methylnaphthalene	142	5.235	5.239	-0.004	97	61133	1200.0	1217.5	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	171258	2402.4	2511.1	
22 Acenaphthylene	152	5.917	5.917	0.000	100	102818	1200.0	1239.0	
23 Acenaphthene	153	6.055	6.064	-0.009	96	61738	1200.0	1217.1	
32 Dibenzofuran	168	6.207	6.207	0.000	98	96559	1201.2	1218.6	
24 Diethyl phthalate	149	6.328	6.328	0.000	99	175004	2409.6	2483.5	
25 Fluorene	166	6.494	6.494	0.000	95	76847	1200.0	1234.6	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	95	49365	1198.3	1187.2	
27 Phenanthrene	178	7.321	7.326	-0.005	100	111683	1200.0	1185.5	
28 Anthracene	178	7.366	7.372	-0.006	100	115053	1200.0	1209.4	
29 Di-n-butyl phthalate	149	7.737	7.736	0.001	100	299391	2403.0	2481.8	
30 Fluoranthene	202	8.623	8.628	-0.005	100	130280	1200.0	1204.0	
31 Pyrene	202	8.968	8.973	-0.005	100	133458	1200.0	1189.3	
33 Butyl benzyl phthalate	149	9.964	9.969	-0.005	92	136554	2403.0	2449.3	
34 Bis(2-ethylhexyl) phthalat	149	11.245	11.260	-0.015	100	192708	2403.6	2346.2	
35 Benzo[a]anthracene	228	11.335	11.350	-0.015	98	124103	1200.0	1175.8	
36 Chrysene	228	11.434	11.440	-0.006	100	115675	1200.0	1184.6	
37 Di-n-octyl phthalate	149	13.178	13.192	-0.014	100	327232	2406.6	2438.9	
38 Benzo[b]fluoranthene	252	14.472	14.495	-0.023	100	112998	1200.0	1179.2	
39 Benzo[k]fluoranthene	252	14.560	14.582	-0.022	100	117190	1200.0	1215.9	
40 Benzo[a]pyrene	252	15.552	15.571	-0.019	100	110841	1200.0	1172.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.641	18.650	-0.009	78	125164	1200.0	1166.8	
42 Dibenz(a,h)anthracene	278	18.680	18.685	-0.005	80	99456	1200.0	1188.0	
43 Benzo[g,h,i]perylene	276	19.074	19.079	-0.005	100	105797	1200.0	1162.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

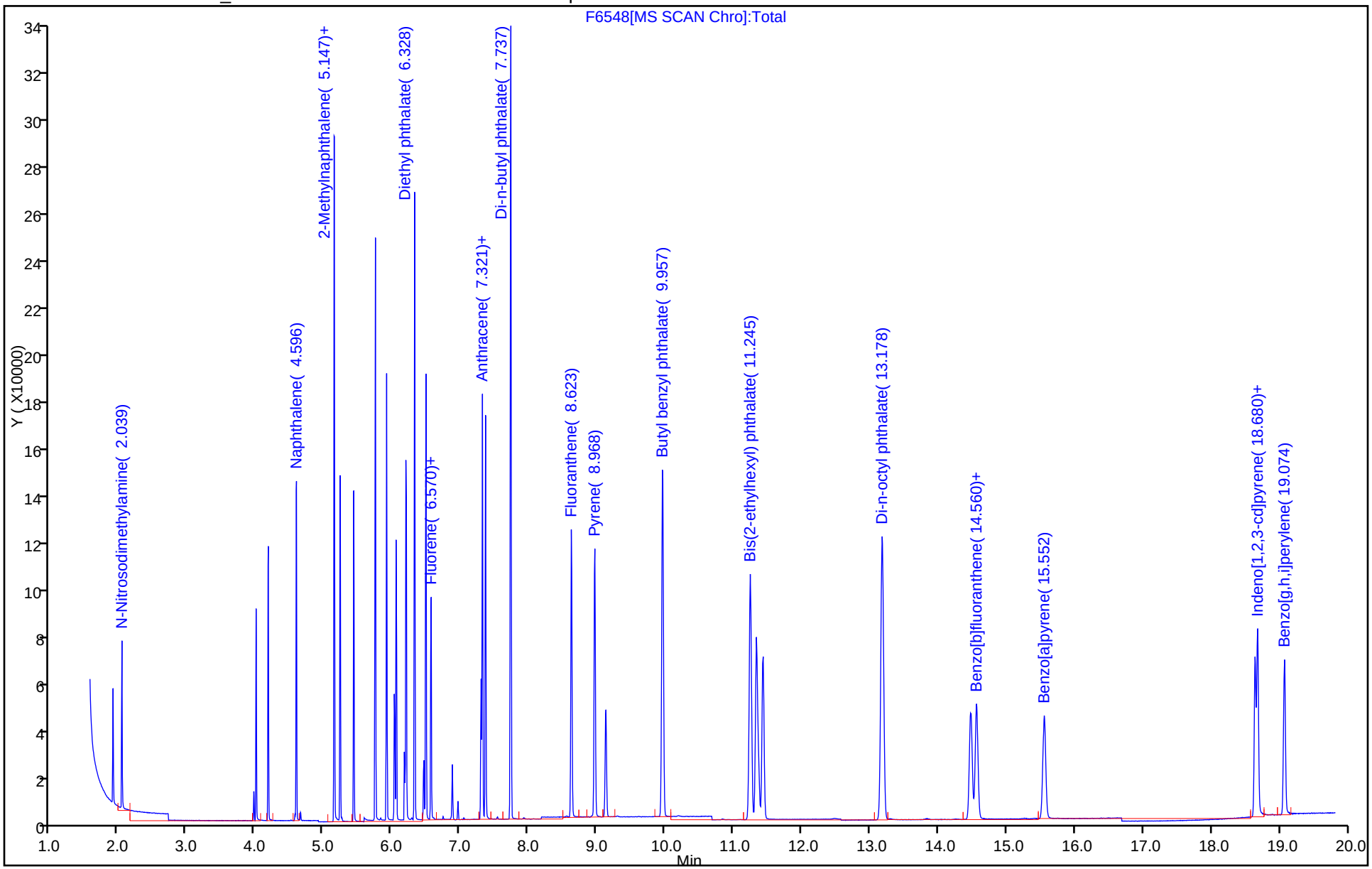
MS-SIMSL 1.2_00064 Amount Added: 1.00 Units: uL

Report Date: 12-May-2017 08:51:24 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6548.D

Injection Date:	11-May-2017 14:50:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	STD1200			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6549.D
Lims ID: STD2500
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 11-May-2017 15:16:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD2500
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 12-May-2017 08:51:26 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: vasquezk Date: 12-May-2017 05:49:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.038	-0.009	82	29530	600.0	600.0	
* 2 Phenanthrene-d10	188	7.300	7.307	-0.007	100	55918	600.0	600.0	
* 3 Chrysene-d12	240	11.367	11.377	-0.010	92	50932	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.004	4.005	-0.001	100	113769	2502.5	2459.5	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	187277	2500.0	2445.9	
$ 6 Terphenyl-d14	244	9.129	9.136	-0.007	99	138095	2502.5	2432.3	
9 1,4-Dioxane	88	1.909	1.909	0.000	0	38102	2520.0	2389.6	
10 N-Nitrosodimethylamine	74	2.039	2.039	0.000	90	63880	2500.0	2353.1	
14 Naphthalene	128	4.593	4.596	-0.003	100	228112	2500.0	2382.9	
16 2-Methylnaphthalene	142	5.151	5.152	-0.001	95	299233	5000.0	4861.9	
17 1-Methylnaphthalene	142	5.234	5.239	-0.005	97	148473	2500.0	2408.7	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	415418	5005.0	4962.0	
22 Acenaphthylene	152	5.917	5.917	0.000	100	253042	2500.0	2484.1	
23 Acenaphthene	153	6.055	6.064	-0.009	96	151592	2500.0	2434.6	
32 Dibenzofuran	168	6.206	6.207	-0.001	97	235581	2502.5	2422.1	
24 Diethyl phthalate	149	6.328	6.328	0.000	100	440297	5020.0	5090.1	
25 Fluorene	166	6.494	6.494	0.000	93	189482	2500.0	2479.8	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	95	114205	2496.5	2181.8	
27 Phenanthrene	178	7.320	7.326	-0.006	100	277752	2500.0	2342.0	
28 Anthracene	178	7.365	7.372	-0.007	100	283675	2500.0	2368.8	
29 Di-n-butyl phthalate	149	7.736	7.736	0.000	100	748330	5006.3	4927.7	
30 Fluoranthene	202	8.621	8.628	-0.007	100	328525	2500.0	2411.9	
31 Pyrene	202	8.967	8.973	-0.007	100	337491	2500.0	2389.1	
33 Butyl benzyl phthalate	149	9.963	9.969	-0.006	92	347502	5006.3	4951.2	
34 Bis(2-ethylhexyl) phthalat	149	11.250	11.260	-0.010	100	484331	5007.5	4684.1	
35 Benzo[a]anthracene	228	11.331	11.350	-0.019	97	315528	2500.0	2329.4	
36 Chrysene	228	11.430	11.440	-0.010	100	295905	2500.0	2361.4	
37 Di-n-octyl phthalate	149	13.178	13.192	-0.014	100	827297	5013.8	4804.8	
38 Benzo[b]fluoranthene	252	14.473	14.495	-0.022	100	290503	2500.0	2362.3	
39 Benzo[k]fluoranthene	252	14.560	14.582	-0.022	100	292518	2500.0	2365.0	
40 Benzo[a]pyrene	252	15.553	15.571	-0.018	99	279807	2500.0	2305.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.641	18.650	-0.009	78	311134	2500.0	2260.2	M
42 Dibenz(a,h)anthracene	278	18.676	18.685	-0.009	81	247769	2500.0	2306.2	
43 Benzo[g,h,i]perylene	276	19.070	19.079	-0.009	100	264085	2500.0	2261.3	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

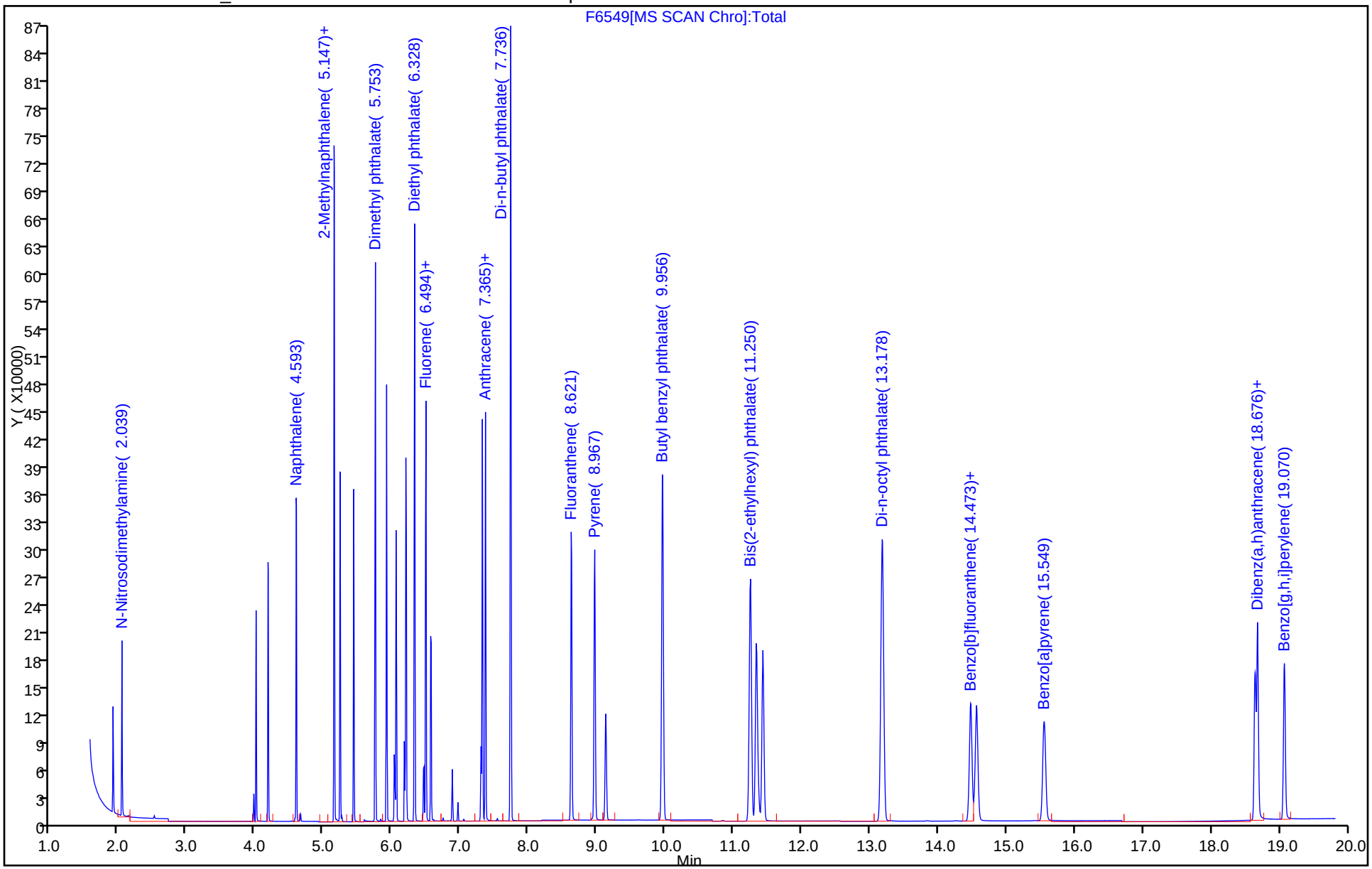
MS-SIMSL 2.5_00062 Amount Added: 1.00 Units: uL

Report Date: 12-May-2017 08:51:26 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6549.D

Injection Date:	11-May-2017 15:16:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	STD2500			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

TestAmerica Denver

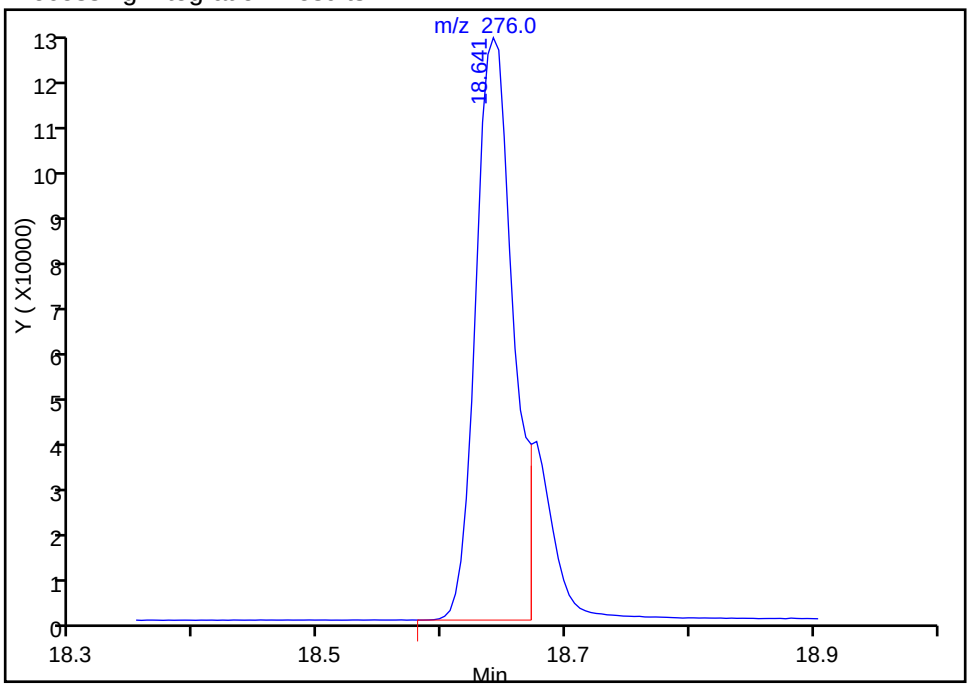
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6549.D
Injection Date: 11-May-2017 15:16:30 Instrument ID: SMS_F
Lims ID: STD2500
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM
Column: Detector MS SCAN

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

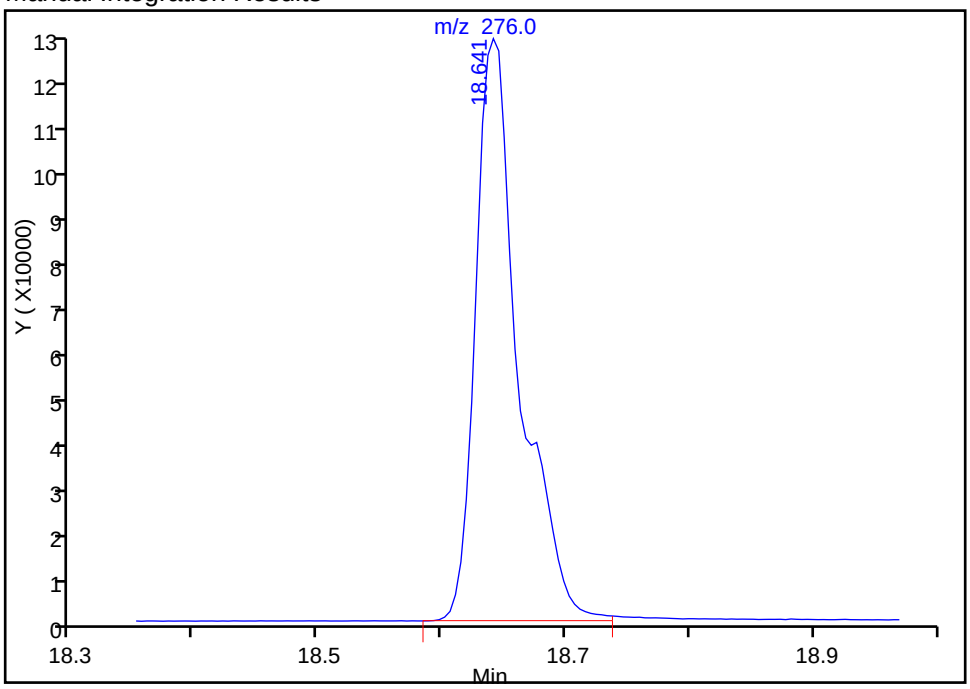
Processing Integration Results

RT: 18.64
Area: 269334
Amount: 2000.9233
Amount Units: ng/ml



Manual Integration Results

RT: 18.64
Area: 311134
Amount: 2260.1690
Amount Units: ng/ml



Reviewer: vasquezk, 12-May-2017 05:49:52
Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6550.D
Lims ID: STD5000
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 11-May-2017 15:42:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD5000
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 12-May-2017 08:51:28 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: vasquezk Date: 12-May-2017 05:50:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.038	-0.009	85	27691	600.0	600.0	
* 2 Phenanthrene-d10	188	7.300	7.307	-0.007	100	51008	600.0	600.0	
* 3 Chrysene-d12	240	11.368	11.377	-0.009	84	45487	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.005	4.005	0.000	99	202281	5005.0	4663.4	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	331041	5000.0	4610.6	
$ 6 Terphenyl-d14	244	9.130	9.136	-0.006	99	239138	5005.0	4617.4	
9 1,4-Dioxane	88	1.909	1.909	0.000	0	64535	5040.0	4316.1	
10 N-Nitrosodimethylamine	74	2.039	2.039	0.000	80	111805	5000.0	4392.0	
14 Naphthalene	128	4.593	4.596	-0.003	100	404564	5000.0	4506.9	
16 2-Methylnaphthalene	142	5.147	5.152	-0.005	98	533515	10000	9244.1	
17 1-Methylnaphthalene	142	5.235	5.239	-0.004	99	263521	5000.0	4559.1	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	721130	10010	9185.7	
22 Acenaphthylene	152	5.917	5.917	0.000	100	447724	5000.0	4687.2	
23 Acenaphthene	153	6.055	6.064	-0.009	98	268543	5000.0	4599.2	
32 Dibenzofuran	168	6.199	6.207	-0.008	88	419941	5005.0	4604.2	
24 Diethyl phthalate	149	6.328	6.328	0.000	100	763924	10040	9418.0	
25 Fluorene	166	6.494	6.494	0.000	92	329727	5000.0	4601.8	
26 N-Nitrosodiphenylamine	169	6.563	6.570	-0.007	97	193947	4993.0	4061.9	
27 Phenanthrene	178	7.320	7.326	-0.006	100	484562	5000.0	4479.1	
28 Anthracene	178	7.366	7.372	-0.006	100	498719	5000.0	4565.4	
29 Di-n-butyl phthalate	149	7.736	7.736	0.000	100	1289329	10013	9307.5	
30 Fluoranthene	202	8.622	8.628	-0.006	100	569375	5000.0	4582.4	
31 Pyrene	202	8.967	8.973	-0.006	100	583741	5000.0	4530.1	
33 Butyl benzyl phthalate	149	9.963	9.969	-0.006	91	603604	10013	9428.0	
34 Bis(2-ethylhexyl) phthalat	149	11.251	11.260	-0.009	100	840919	10015	8915.6	
35 Benzo[a]anthracene	228	11.332	11.350	-0.018	97	547347	5000.0	4524.6	
36 Chrysene	228	11.431	11.440	-0.009	100	509125	5000.0	4549.4	
37 Di-n-octyl phthalate	149	13.178	13.192	-0.014	100	1447092	10028	9410.5	
38 Benzo[b]fluoranthene	252	14.473	14.495	-0.022	100	503976	5000.0	4588.8	
39 Benzo[k]fluoranthene	252	14.565	14.582	-0.017	100	509563	5000.0	4613.0	
40 Benzo[a]pyrene	252	15.549	15.571	-0.022	99	487782	5000.0	4500.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.642	18.650	-0.008	78	547816	5000.0	4455.9	
42 Dibenz(a,h)anthracene	278	18.677	18.685	-0.008	80	433357	5000.0	4516.5	
43 Benzo[g,h,i]perylene	276	19.070	19.079	-0.009	100	460086	5000.0	4411.2	

Reagents:

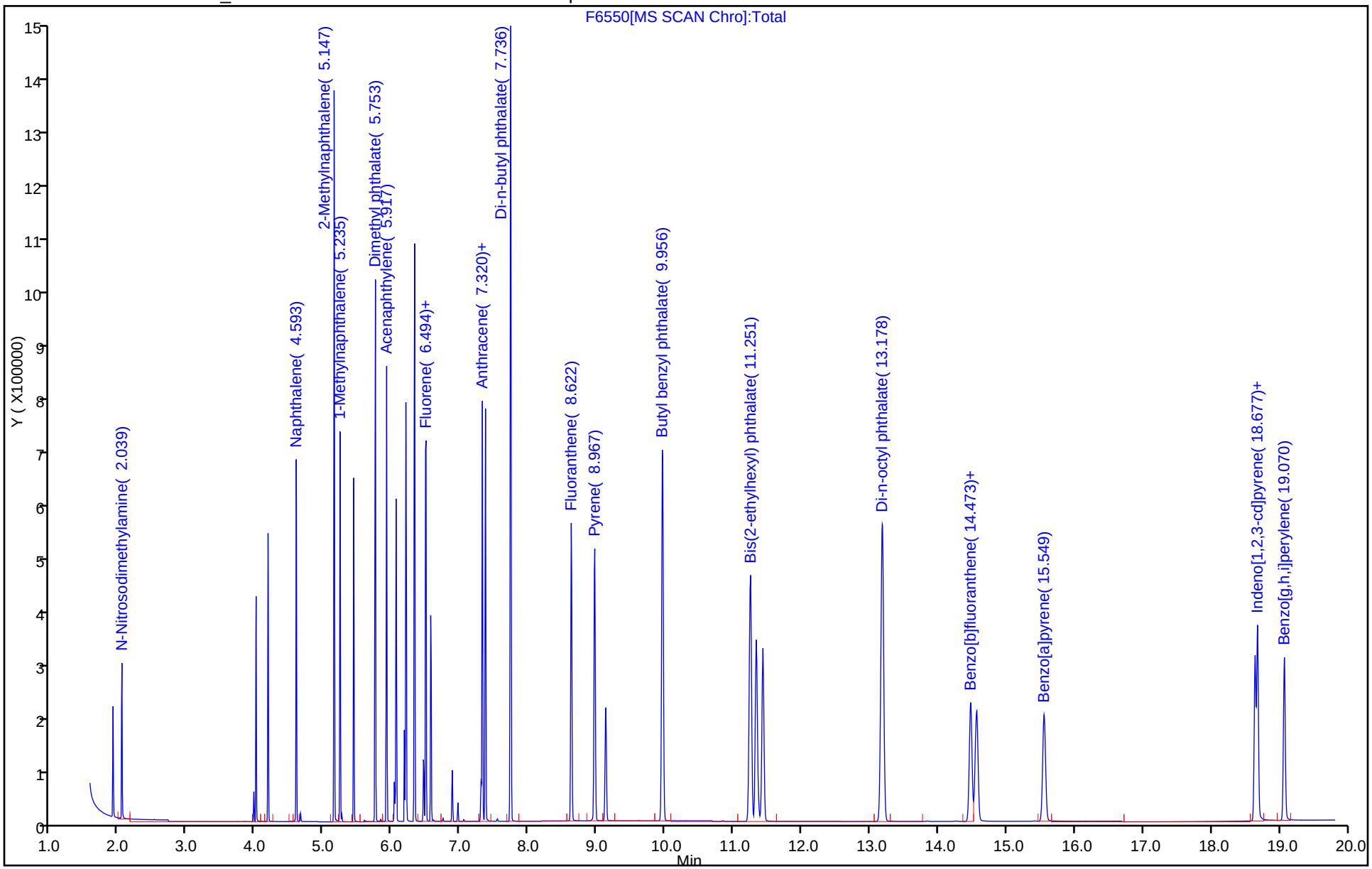
MS-SIMSL 5_00063 Amount Added: 1.00 Units: uL

Report Date: 12-May-2017 08:51:29 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6550.D

Injection Date:	11-May-2017 15:42:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	STD5000			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D
Lims ID: STD10000
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 11-May-2017 16:07:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD10000
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 12-May-2017 08:51:30 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: vasquezk Date: 12-May-2017 05:50:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.038	-0.009	85	27407	600.0	600.0	
* 2 Phenanthrene-d10	188	7.301	7.307	-0.006	99	50182	600.0	600.0	
* 3 Chrysene-d12	240	11.362	11.377	-0.015	21	45142	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.005	4.005	0.000	98	425770	10010	9917.4	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	690907	10000	9722.4	
$ 6 Terphenyl-d14	244	9.131	9.136	-0.005	99	500874	10010	9830.3	
9 1,4-Dioxane	88		1.909				ND	ND	
10 N-Nitrosodimethylamine	74		2.039				ND	ND	
14 Naphthalene	128		4.596				ND	ND	
16 2-Methylnaphthalene	142		5.152				ND	ND	
17 1-Methylnaphthalene	142		5.239				ND	ND	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	1486048	20020	19125	
22 Acenaphthylene	152		5.917				ND	ND	
23 Acenaphthene	153		6.064				ND	ND	
32 Dibenzofuran	168		6.207				ND	ND	
24 Diethyl phthalate	149	6.328	6.328	0.000	100	1556605	20080	19389	
25 Fluorene	166		6.494				ND	ND	
26 N-Nitrosodiphenylamine	169		6.570				ND	ND	
27 Phenanthrene	178		7.326				ND	ND	
28 Anthracene	178		7.372				ND	ND	
29 Di-n-butyl phthalate	149	7.738	7.736	0.002	100	2644395	20025	19404	
30 Fluoranthene	202		8.628				ND	ND	
31 Pyrene	202		8.973				ND	ND	
33 Butyl benzyl phthalate	149	9.964	9.969	-0.005	91	1265522	20025	20092	
34 Bis(2-ethylhexyl) phthalat	149	11.245	11.260	-0.015	100	1761247	20030	18981	
35 Benzo[a]anthracene	228		11.350				ND	ND	
36 Chrysene	228		11.440				ND	ND	
37 Di-n-octyl phthalate	149	13.182	13.192	-0.010	100	3048854	20055	19978	
38 Benzo[b]fluoranthene	252		14.495				ND	ND	
39 Benzo[k]fluoranthene	252		14.582				ND	ND	
40 Benzo[a]pyrene	252		15.571				ND	ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276		18.650				ND	ND	
42 Dibenz(a,h)anthracene	278		18.685				ND	ND	
43 Benzo[g,h,i]perylene	276	19.069	19.079	-0.010	100	968251	10000	9354.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

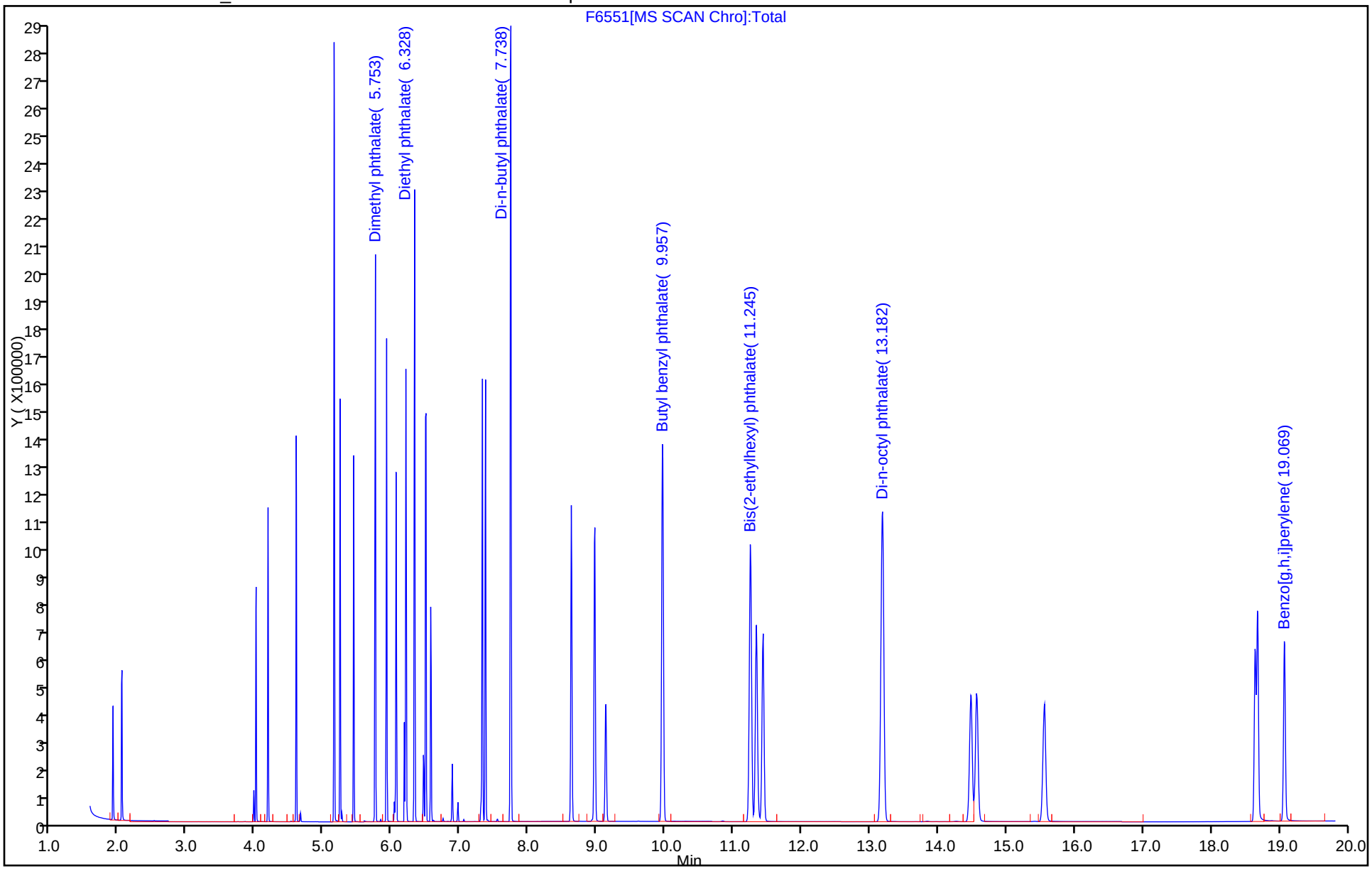
MS-SIMX 10_00055 Amount Added: 1.00 Units: uL

Report Date: 12-May-2017 08:51:30 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Injection Date:	11-May-2017 16:07:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	STD10000			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 375238

SDG No.:

Instrument ID: SMS_G5 GC Column: Rxi-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2017 10:39 Calibration End Date: 06/01/2017 13:53 Calibration ID: 29369

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD10000 280-375238/9	G5_1350.D
Level 2	STD0020 280-375238/3	G5_1344.D
Level 3	STD0100 280-375238/4	G5_1345.D
Level 4	STD0300 280-375238/5	G5_1346.D
Level 5	ICIS 280-375238/2	G5_1343.D
Level 6	STD1200 280-375238/6	G5_1347.D
Level 7	STD2500 280-375238/7	G5_1348.D
Level 8	STD5000 280-375238/8	G5_1349.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Naphthalene	+++++ 1.5540	1.6328 1.4942	1.5170 1.4296	1.5002	1.5531	Ave		1.5258			0.7000	4.1		15.0			
2-Methylnaphthalene	+++++ 1.1126	1.0166 1.0923	1.0185 1.0624	1.0615	1.1108	Ave		1.0678			0.4000	3.7		15.0			
1-Methylnaphthalene	+++++ 1.1112	1.1846 1.0794	0.9723 1.0406	1.0237	1.0942	Ave		1.0723			0.0500	6.4		15.0			
Acenaphthylene	+++++ 1.7025	1.7598 1.7514	1.5402 1.7576	1.6491	1.6119	Ave		1.6818			0.9000	5.0		15.0			
Acenaphthene	+++++ 1.1813	1.2300 1.1436	1.0988 1.1276	1.1057	1.1302	Ave		1.1453			0.9000	4.0		15.0			
Fluorene	+++++ 1.4220	1.4194 1.4149	1.2631 1.3952	1.3499	1.3819	Ave		1.3781			0.9000	4.1		15.0			
Phenanthrene	+++++ 1.1540	1.3362 1.1227	1.0500 1.0840	1.1041	1.1057	Ave		1.1367			0.7000	8.2		15.0			
Anthracene	+++++ 1.1200	1.1325 1.1035	0.9535 1.0786	1.0022	1.0432	Ave		1.0619			0.7000	6.2		15.0			
Fluoranthene	+++++ 1.4750	1.6040 1.4485	1.3549 1.4148	1.3342	1.2968	Ave		1.4183			0.6000	7.3		15.0			
Pyrene	+++++ 1.5160	1.7301 1.5031	1.3604 1.4687	1.3844	1.3566	Ave		1.4742			0.6000	8.9		15.0			
Benzo[a]anthracene	+++++ 1.2662	1.4329 1.2770	1.1083 1.2493	1.1324	1.1827	Ave		1.2356			0.8000	8.8		15.0			
Chrysene	+++++ 1.2701	1.5365 1.2392	1.1956 1.1974	1.2100	1.2567	Ave		1.2722			0.7000	9.4		15.0			
Benzo[b]fluoranthene	+++++ 1.1452	1.2842 1.1692	1.0863 1.1450	1.0436	1.1807	Ave		1.1506			0.7000	6.6		15.0			
Benzo[k]fluoranthene	+++++ 1.2119	1.2664 1.2127	1.0650 1.2005	1.0621	1.1710	Ave		1.1699			0.7000	6.7		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 375238

SDG No.:

Instrument ID: SMS_G5 GC Column: Rxi-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2017 10:39 Calibration End Date: 06/01/2017 13:53 Calibration ID: 29369

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Benzo[a]pyrene	+++++ 1.0024	1.1392 1.0628	0.9248 1.0716	0.9129	1.0381	Ave		1.0217			0.7000	8.0		15.0			
Indeno[1,2,3-cd]pyrene	+++++ 0.9506	1.2732 0.9411	0.9476 0.9177	0.8887	1.0325	Ave		0.9931			0.5000	13.2		15.0			
Dibenz(a,h)anthracene	+++++ 1.0279	1.2402 1.0147	0.9474 0.9927	0.9027	1.0526	Ave		1.0255			0.4000	10.5		15.0			
Benzo[g,h,i]perylene	+++++ 1.1172	1.3423 1.0711	1.1106 1.0198	1.0791	1.1922	Ave		1.1332			0.5000	9.4		15.0			
Nitrobenzene-d5 (Surr)	0.6246 0.5710	0.6268 0.5774	0.5281 0.5729	0.5401	0.5418	Ave		0.5729				6.5		15.0			
2-Fluorobiphenyl (Surr)	1.4991 1.4898	1.5000 1.4730	1.3198 1.4269	1.4124	1.4667	Ave		1.4485				4.2		15.0			
Terphenyl-d14 (Surr)	0.8657 0.8086	0.8416 0.8179	0.7301 0.7882	0.7267	0.7173	Ave		0.7870				7.2		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 375238

SDG No.:

Instrument ID: SMS_G5 GC Column: Rxi-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2017 10:39 Calibration End Date: 06/01/2017 13:53 Calibration ID: 29369

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD10000 280-375238/9	G5_1350.D
Level 2	STD0020 280-375238/3	G5_1344.D
Level 3	STD0100 280-375238/4	G5_1345.D
Level 4	STD0300 280-375238/5	G5_1346.D
Level 5	ICIS 280-375238/2	G5_1343.D
Level 6	STD1200 280-375238/6	G5_1347.D
Level 7	STD2500 280-375238/7	G5_1348.D
Level 8	STD5000 280-375238/8	G5_1349.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Naphthalene	ANT	Ave	+++++ 58556	1439 160344	5108 296316	17912	22665	+++++ 1200	20.0 2500	100 5000	300	600
2-Methylnaphthalene	ANT	Ave	+++++ 83844	1792 234436	6859 440402	25347	32419	+++++ 2400	40.0 5000	200 10000	600	1200
1-Methylnaphthalene	ANT	Ave	+++++ 41871	1044 115834	3274 215698	12222	15967	+++++ 1200	20.0 2500	100 5000	300	600
Acenaphthylene	ANT	Ave	+++++ 64151	1551 187949	5186 364308	19690	23522	+++++ 1200	20.0 2500	100 5000	300	600
Acenaphthene	ANT	Ave	+++++ 44510	1084 122727	3700 233731	13202	16493	+++++ 1200	20.0 2500	100 5000	300	600
Fluorene	ANT	Ave	+++++ 53580	1251 151838	4253 289186	16117	20166	+++++ 1200	20.0 2500	100 5000	300	600
Phenanthrene	PHN	Ave	+++++ 86445	2395 243814	7061 461884	26787	33058	+++++ 1200	20.0 2500	100 5000	300	600
Anthracene	PHN	Ave	+++++ 83896	2030 239652	6412 459591	24315	31190	+++++ 1200	20.0 2500	100 5000	300	600
Fluoranthene	PHN	Ave	+++++ 110485	2875 314583	9112 602854	32369	38771	+++++ 1200	20.0 2500	100 5000	300	600
Pyrene	PHN	Ave	+++++ 113556	3101 326435	9149 625814	33587	40560	+++++ 1200	20.0 2500	100 5000	300	600
Benzo[a]anthracene	CRY	Ave	+++++ 112088	2737 339600	7798 647531	30376	36041	+++++ 1200	20.0 2500	100 5000	300	600
Chrysene	CRY	Ave	+++++ 112428	2935 329550	8412 620611	32458	38294	+++++ 1200	20.0 2500	100 5000	300	600
Benzo[b]fluoranthene	CRY	Ave	+++++ 101375	2453 310923	7643 593483	27994	35978	+++++ 1200	20.0 2500	100 5000	300	600
Benzo[k]fluoranthene	CRY	Ave	+++++ 107279	2419 322509	7493 622221	28489	35685	+++++ 1200	20.0 2500	100 5000	300	600
Benzo[a]pyrene	CRY	Ave	+++++ 88736	2176 282630	6507 555437	24487	31633	+++++ 1200	20.0 2500	100 5000	300	600

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 375238

SDG No.:

Instrument ID: SMS_G5 GC Column: Rxi-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/01/2017 10:39 Calibration End Date: 06/01/2017 13:53 Calibration ID: 29369

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Indeno[1,2,3-cd]pyrene	CRY	Ave	+++++ 84148	2432 250272	6667 475656	23840	31462	+++++ 1200	20.0 2500	100 5000	300	600
Dibenz(a,h)anthracene	CRY	Ave	+++++ 90991	2369 269836	6666 514519	24215	32076	+++++ 1200	20.0 2500	100 5000	300	600
Benzo[g,h,i]perylene	CRY	Ave	+++++ 98896	2564 284846	7814 528559	28946	36329	+++++ 1200	20.0 2500	100 5000	300	600
Nitrobenzene-d5 (Surr)	ANT	Ave	263274 21536	553 62025	1780 118874	6455	7915	10010 1201	20.0 2503	100 5005	300	601
2-Fluorobiphenyl (Surr)	ANT	Ave	631219 56134	1322 158075	4444 295751	16863	21404	10000 1200	20.0 2500	100 5000	300	600
Terphenyl-d14 (Surr)	PHN	Ave	726121 60633	1510 177810	4915 336172	17649	21468	10010 1201	20.0 2503	100 5005	300	601

Curve Type Legend:
Ave = Average ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1343.D
Lims ID: ICIS STD0600
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 01-Jun-2017 10:39:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: VASQUEZK Instrument ID: SMS_G5
Sublist: chrom-SMSG5_SIMX*sub2

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jun-2017 12:06:13 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: vasquezk Date: 01-Jun-2017 13:46:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	5.987	5.987	0.000	94	14593	600.0	600.0	
* 3 Phenanthrene-d10	188	7.255	7.255	0.000	100	29898	600.0	600.0	
* 1 Chrysene-d12	240	11.230	11.230	0.000	99	30473	600.0	600.0	
$ 4 Nitrobenzene-d5	82	3.961	3.961	0.000	97	7915	600.6	568.1	
$ 5 2-Fluorobiphenyl	172	5.394	5.394	0.000	100	21404	600.0	607.6	
$ 6 Terphenyl-d14	244	9.049	9.049	0.000	100	21468	600.6	547.4	
43 1,4-Dioxane	88	1.879	1.879	0.000	96	2876	604.8	607.4	
7 N-Nitrosodimethylamine	42	2.004	2.004	0.000	89	5352	600.0	636.8	
15 Naphthalene	128	4.550	4.550	0.000	100	22665	600.0	610.7	
16 2-Methylnaphthalene	142	5.105	5.105	0.000	100	32419	1200.0	1248.3	
17 1-Methylnaphthalene	142	5.194	5.194	0.000	99	15967	600.0	612.2	
18 Dimethyl phthalate	163	5.710	5.710	0.000	100	39381	1201.2	1157.1	
20 Acenaphthylene	152	5.873	5.873	0.000	100	23522	600.0	575.1	
21 Acenaphthene	153	6.015	6.015	0.000	99	16493	600.0	592.1	
19 Dibenzofuran	168	6.159	6.159	0.000	99	26977	600.6	606.2	
22 Diethyl phthalate	149	6.284	6.284	0.000	100	37565	1204.8	1133.5	
23 Fluorene	166	6.447	6.447	0.000	98	20166	600.0	601.7	
24 N-Nitrosodiphenylamine	169	6.522	6.522	0.000	99	13349	599.2	603.4	
25 Phenanthrene	178	7.271	7.271	0.000	100	33058	600.0	583.7	
26 Anthracene	178	7.314	7.314	0.000	100	31190	600.0	589.4	
27 Di-n-butyl phthalate	149	7.688	7.688	0.000	100	58944	1201.5	1057.3	
28 Fluoranthene	202	8.550	8.550	0.000	100	38771	600.0	548.6	
29 Pyrene	202	8.881	8.881	0.000	100	40560	600.0	552.1	
30 Butyl benzyl phthalate	149	9.869	9.869	0.000	94	24314	1201.5	1065.5	
31 Bis(2-ethylhexyl) phthalat	149	11.132	11.132	0.000	100	33387	1201.8	1016.0	
32 Benzo[a]anthracene	228	11.203	11.203	0.000	100	36041	600.0	574.3	
33 Chrysene	228	11.295	11.295	0.000	100	38294	600.0	592.7	
34 Di-n-octyl phthalate	149	13.035	13.035	0.000	100	59886	1203.3	1203.3	
35 Benzo[b]fluoranthene	252	14.279	14.279	0.000	100	35978	600.0	615.7	
36 Benzo[k]fluoranthene	252	14.365	14.365	0.000	99	35685	600.0	600.6	
37 Benzo[a]pyrene	252	15.337	15.337	0.000	100	31633	600.0	609.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
39 Indeno[1,2,3-cd]pyrene	276	18.502	18.502	0.000	100	31462	600.0	623.8	
38 Dibenz(a,h)anthracene	278	18.543	18.543	0.000	99	32076	600.0	615.9	
40 Benzo[g,h,i]perylene	276	18.924	18.924	0.000	100	36329	600.0	631.2	

Reagents:

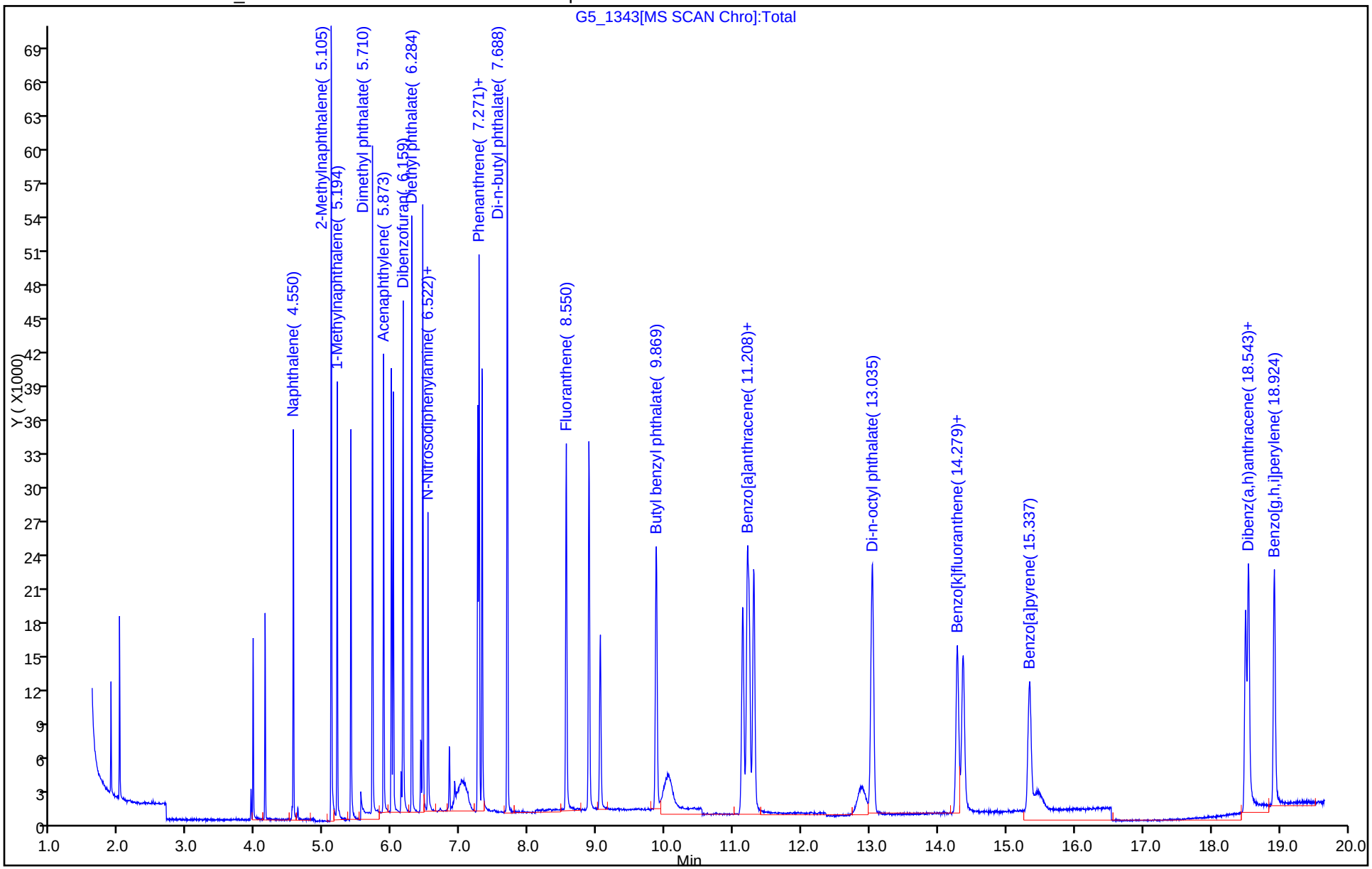
MS-SIMSL 0.6_00125 Amount Added: 1.00 Units: uL

Report Date: 02-Jun-2017 12:06:13 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1343.D

Injection Date:	01-Jun-2017 10:39:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	ICIS STD0600			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1344.D
Lims ID: STD0020
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 01-Jun-2017 11:09:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD0020
Operator ID: VASQUEZK Instrument ID: SMS_G5
Sublist: chrom-SMSG5_SIMX*sub2

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jun-2017 12:06:14 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: vasquezk Date: 01-Jun-2017 14:36:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	5.987	5.987	0.000	100	26440	600.0	600.0	
* 3 Phenanthrene-d10	188	7.254	7.255	-0.001	100	53773	600.0	600.0	
* 1 Chrysene-d12	240	11.230	11.230	0.000	93	57304	600.0	600.0	
$ 4 Nitrobenzene-d5	82	3.961	3.961	0.000	95	553	20.0	21.9	
$ 5 2-Fluorobiphenyl	172	5.398	5.394	0.004	98	1322	20.0	20.7	
$ 6 Terphenyl-d14	244	9.049	9.049	0.000	89	1510	20.0	21.4	
43 1,4-Dioxane	88		1.879				ND	ND	
7 N-Nitrosodimethylamine	42	2.003	2.004	-0.001	77	340	20.0	22.3	
15 Naphthalene	128	4.549	4.550	-0.001	98	1439	20.0	21.4	
16 2-Methylnaphthalene	142	5.108	5.105	0.003	99	1792	40.0	38.1	
17 1-Methylnaphthalene	142	5.194	5.194	0.000	95	1044	20.0	22.1	
18 Dimethyl phthalate	163		5.710				ND	ND	
20 Acenaphthylene	152	5.873	5.873	0.000	97	1551	20.0	20.9	
21 Acenaphthene	153	6.015	6.015	0.000	94	1084	20.0	21.5	
19 Dibenzofuran	168	6.159	6.159	0.000	93	1719	20.0	21.3	
22 Diethyl phthalate	149		6.284				ND	ND	
23 Fluorene	166	6.447	6.447	0.000	93	1251	20.0	20.6	
24 N-Nitrosodiphenylamine	169	6.528	6.522	0.006	96	908	20.0	22.8	
25 Phenanthrene	178	7.271	7.271	0.000	57	2395	20.0	23.5	
26 Anthracene	178	7.319	7.314	0.005	95	2030	20.0	21.3	
27 Di-n-butyl phthalate	149		7.688				ND	ND	
28 Fluoranthene	202	8.550	8.550	0.000	97	2875	20.0	22.6	
29 Pyrene	202	8.881	8.881	0.000	97	3101	20.0	23.5	
30 Butyl benzyl phthalate	149		9.869				ND	ND	
31 Bis(2-ethylhexyl) phthalat	149		11.132				ND	ND	
32 Benzo[a]anthracene	228	11.203	11.203	0.000	31	2737	20.0	23.2	
33 Chrysene	228	11.295	11.295	0.000	95	2935	20.0	24.2	
34 Di-n-octyl phthalate	149		13.035				ND	ND	
35 Benzo[b]fluoranthene	252	14.279	14.279	0.000	83	2453	20.0	22.3	M
36 Benzo[k]fluoranthene	252	14.358	14.365	-0.007	82	2419	20.0	21.6	
37 Benzo[a]pyrene	252	15.341	15.337	0.004	75	2176	20.0	22.3	M

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
39 Indeno[1,2,3-cd]pyrene	276	18.510	18.502	0.008	86	2432	20.0	25.6	
38 Dibenz(a,h)anthracene	278	18.551	18.543	0.008	81	2369	20.0	24.2	
40 Benzo[g,h,i]perylene	276	18.924	18.924	0.000	86	2564	20.0	23.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

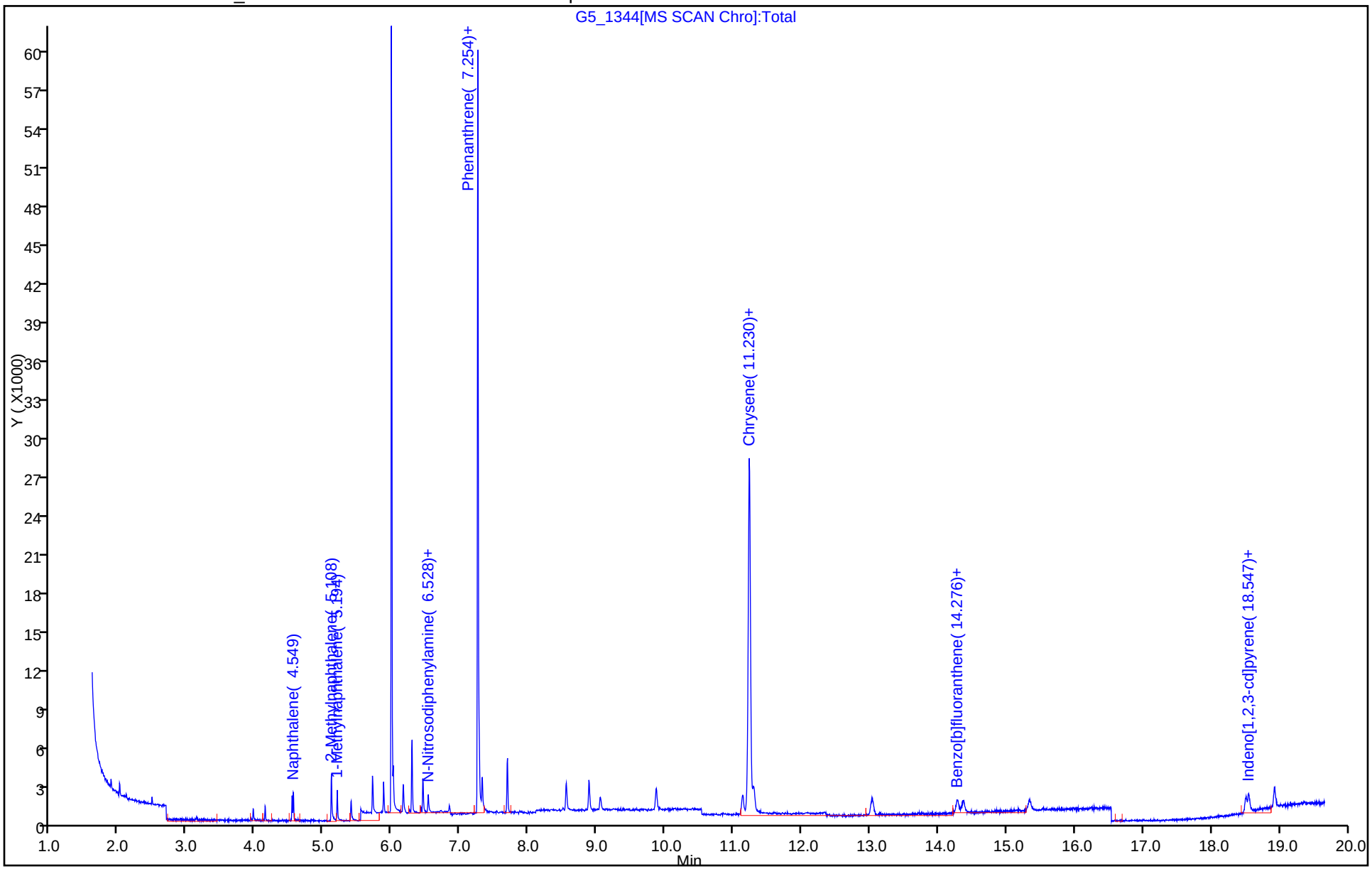
MS-SIMSL 0.02_00067 Amount Added: 1.00 Units: uL

Report Date: 02-Jun-2017 12:06:14 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1344.D

Injection Date:	01-Jun-2017 11:09:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	STD0020			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

TestAmerica Denver

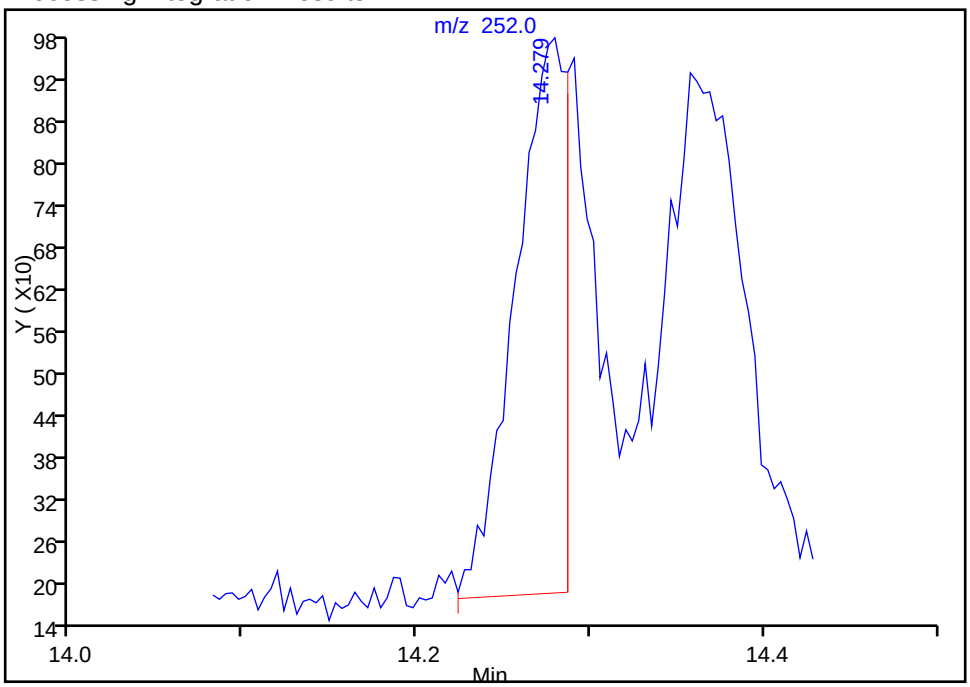
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Injection Date: 01-Jun-2017 11:09:30 Instrument ID: SMS_G5
Lims ID: STD0020
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSG5_SIMX Limit Group: MSSV - 8270C-SIM
Column: Detector MS SCAN

35 Benzo[b]fluoranthene, CAS: 205-99-2

Signal: 1

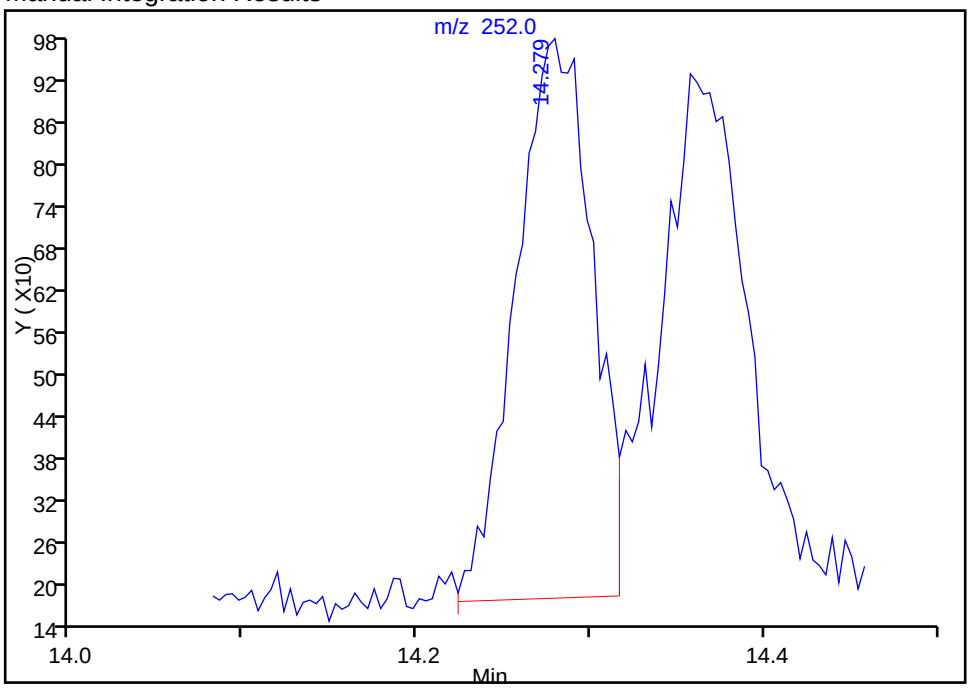
Processing Integration Results

RT: 14.28
Area: 1642
Amount: 15.464450
Amount Units: ng/ml



Manual Integration Results

RT: 14.28
Area: 2453
Amount: 22.322438
Amount Units: ng/ml



Reviewer: vasquezk, 01-Jun-2017 14:46:36
Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Denver

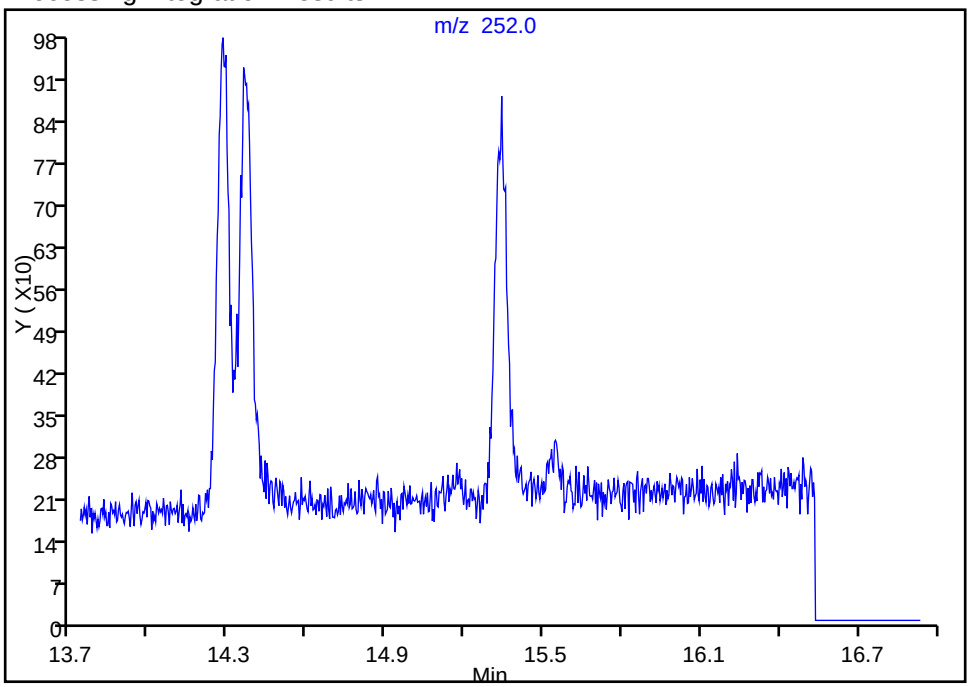
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Injection Date:	01-Jun-2017 11:09:30	Instrument ID:	SMS_G5		
Lims ID:	STD0020				
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

37 Benzo[a]pyrene, CAS: 50-32-8

Signal: 1

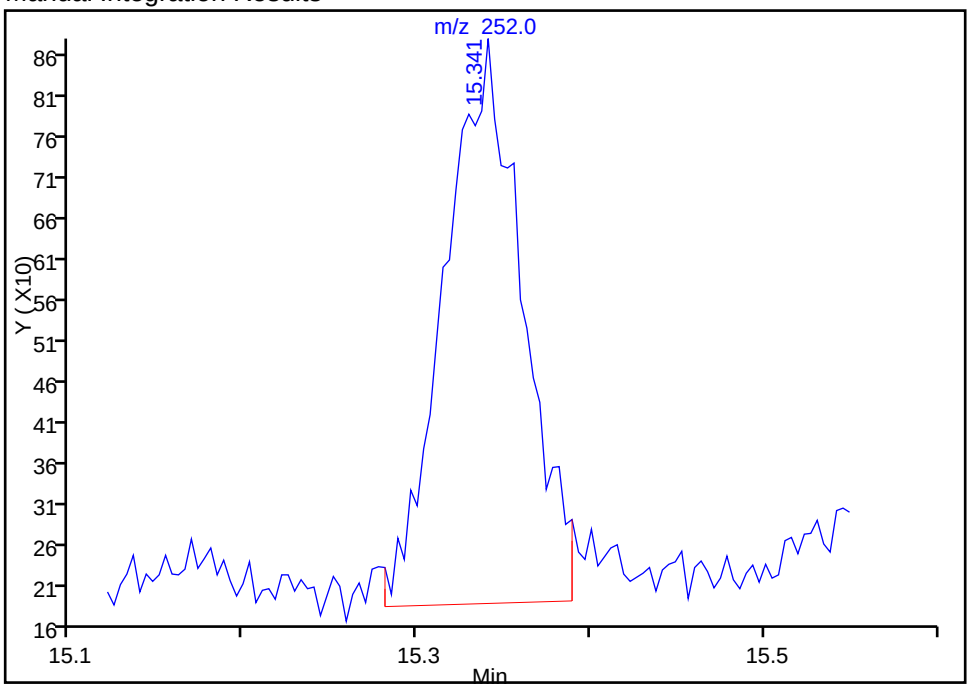
Not Detected
Expected RT: 15.34

Processing Integration Results



Manual Integration Results

RT: 15.34
Area: 2176
Amount: 22.300191
Amount Units: ng/ml



Reviewer: vasquezk, 01-Jun-2017 14:46:39
Audit Action: Assigned Compound ID Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Denver

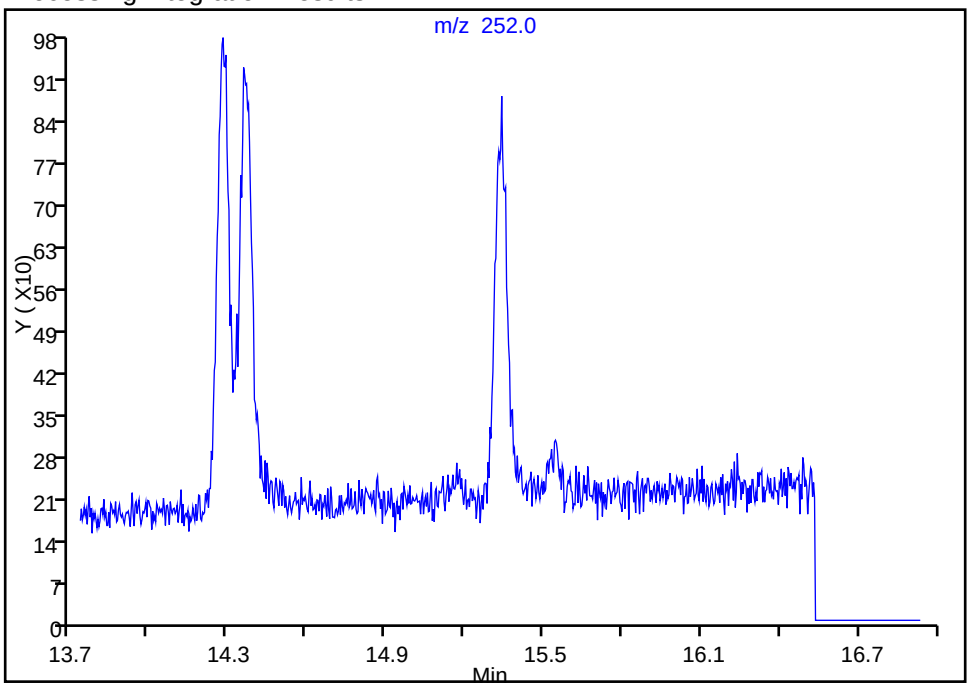
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Injection Date: 01-Jun-2017 11:09:30 Instrument ID: SMS_G5
Lims ID: STD0020
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSG5_SIMX Limit Group: MSSV - 8270C-SIM
Column: Detector MS SCAN

37 Benzo[a]pyrene, CAS: 50-32-8

Signal: 1

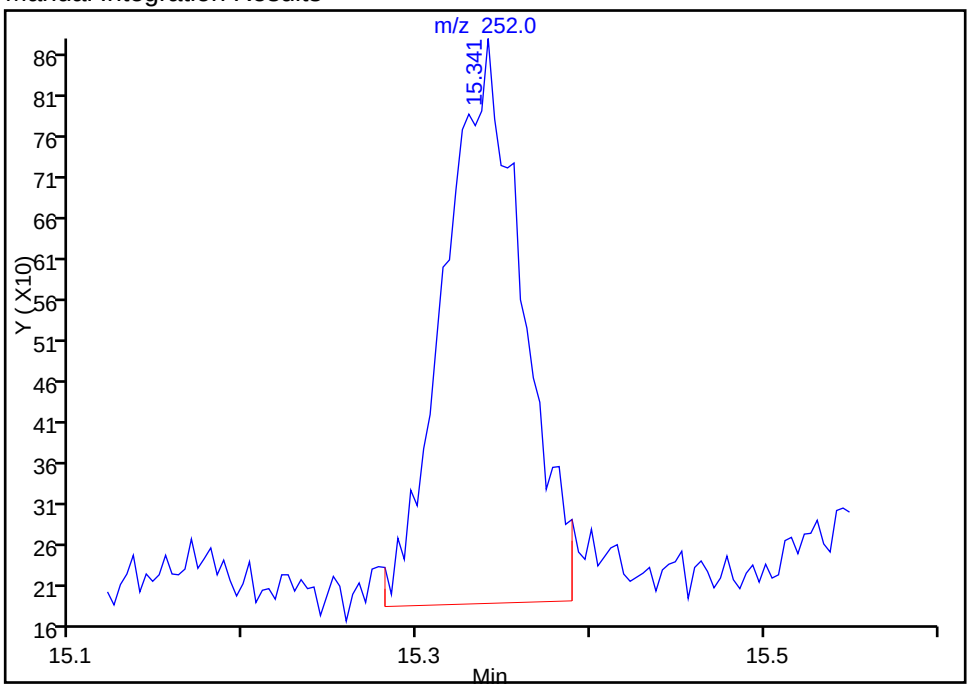
Not Detected
Expected RT: 15.34

Processing Integration Results



Manual Integration Results

RT: 15.34
Area: 2176
Amount: 22.300191
Amount Units: ng/ml



Reviewer: vasquezk, 01-Jun-2017 14:46:41
Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1345.D
Lims ID: STD0100
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 01-Jun-2017 11:37:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD0100
Operator ID: VASQUEZK Instrument ID: SMS_G5
Sublist: chrom-SMSG5_SIMX*sub2

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jun-2017 12:06:15 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: vasquezk Date: 01-Jun-2017 14:46:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	5.987	5.987	0.000	95	20203	600.0	600.0	
* 3 Phenanthrene-d10	188	7.249	7.255	-0.006	100	40350	600.0	600.0	
* 1 Chrysene-d12	240	11.224	11.230	-0.006	94	42216	600.0	600.0	
$ 4 Nitrobenzene-d5	82	3.961	3.961	0.000	100	1780	100.1	92.3	
$ 5 2-Fluorobiphenyl	172	5.394	5.394	0.000	99	4444	100.0	91.1	
$ 6 Terphenyl-d14	244	9.049	9.049	0.000	98	4915	100.1	92.9	
43 1,4-Dioxane	88	1.879	1.879	0.000	91	771	100.8	117.6	M
7 N-Nitrosodimethylamine	42	2.004	2.004	-0.001	92	1128	100.0	96.9	
15 Naphthalene	128	4.550	4.550	0.000	100	5108	100.0	99.4	
16 2-Methylnaphthalene	142	5.105	5.105	0.000	100	6859	200.0	190.8	
17 1-Methylnaphthalene	142	5.194	5.194	0.000	98	3274	100.0	90.7	
18 Dimethyl phthalate	163	5.710	5.710	0.000	100	8715	200.2	185.0	
20 Acenaphthylene	152	5.873	5.873	0.000	100	5186	100.0	91.6	
21 Acenaphthene	153	6.015	6.015	0.000	99	3700	100.0	95.9	
19 Dibenzofuran	168	6.159	6.159	0.000	98	5738	100.1	93.1	
22 Diethyl phthalate	149	6.284	6.284	0.000	99	8199	200.8	178.7	
23 Fluorene	166	6.447	6.447	0.000	99	4253	100.0	91.7	
24 N-Nitrosodiphenylamine	169	6.522	6.522	0.000	97	2896	99.9	97.0	
25 Phenanthrene	178	7.271	7.271	0.000	97	7061	100.0	92.4	
26 Anthracene	178	7.314	7.314	0.000	99	6412	100.0	89.8	
27 Di-n-butyl phthalate	149	7.682	7.688	-0.006	100	12695	200.3	168.7	
28 Fluoranthene	202	8.545	8.550	-0.005	99	9112	100.0	95.5	
29 Pyrene	202	8.881	8.881	0.000	99	9149	100.0	92.3	
30 Butyl benzyl phthalate	149	9.863	9.869	-0.006	95	4818	200.3	156.4	
31 Bis(2-ethylhexyl) phthalat	149	11.127	11.132	-0.005	99	8466	200.3	190.9	
32 Benzo[a]anthracene	228	11.197	11.203	-0.006	86	7798	100.0	89.7	
33 Chrysene	228	11.290	11.295	-0.005	99	8412	100.0	94.0	
34 Di-n-octyl phthalate	149	13.024	13.035	-0.011	99	11041	200.6	160.1	
35 Benzo[b]fluoranthene	252	14.276	14.279	-0.003	96	7643	100.0	94.4	
36 Benzo[k]fluoranthene	252	14.361	14.365	-0.004	96	7493	100.0	91.0	
37 Benzo[a]pyrene	252	15.333	15.337	-0.004	91	6507	100.0	90.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
39 Indeno[1,2,3-cd]pyrene	276	18.502	18.502	0.000	97	6667	100.0	95.4	
38 Dibenz(a,h)anthracene	278	18.547	18.543	0.004	97	6666	100.0	92.4	
40 Benzo[g,h,i]perylene	276	18.924	18.924	0.000	96	7814	100.0	98.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

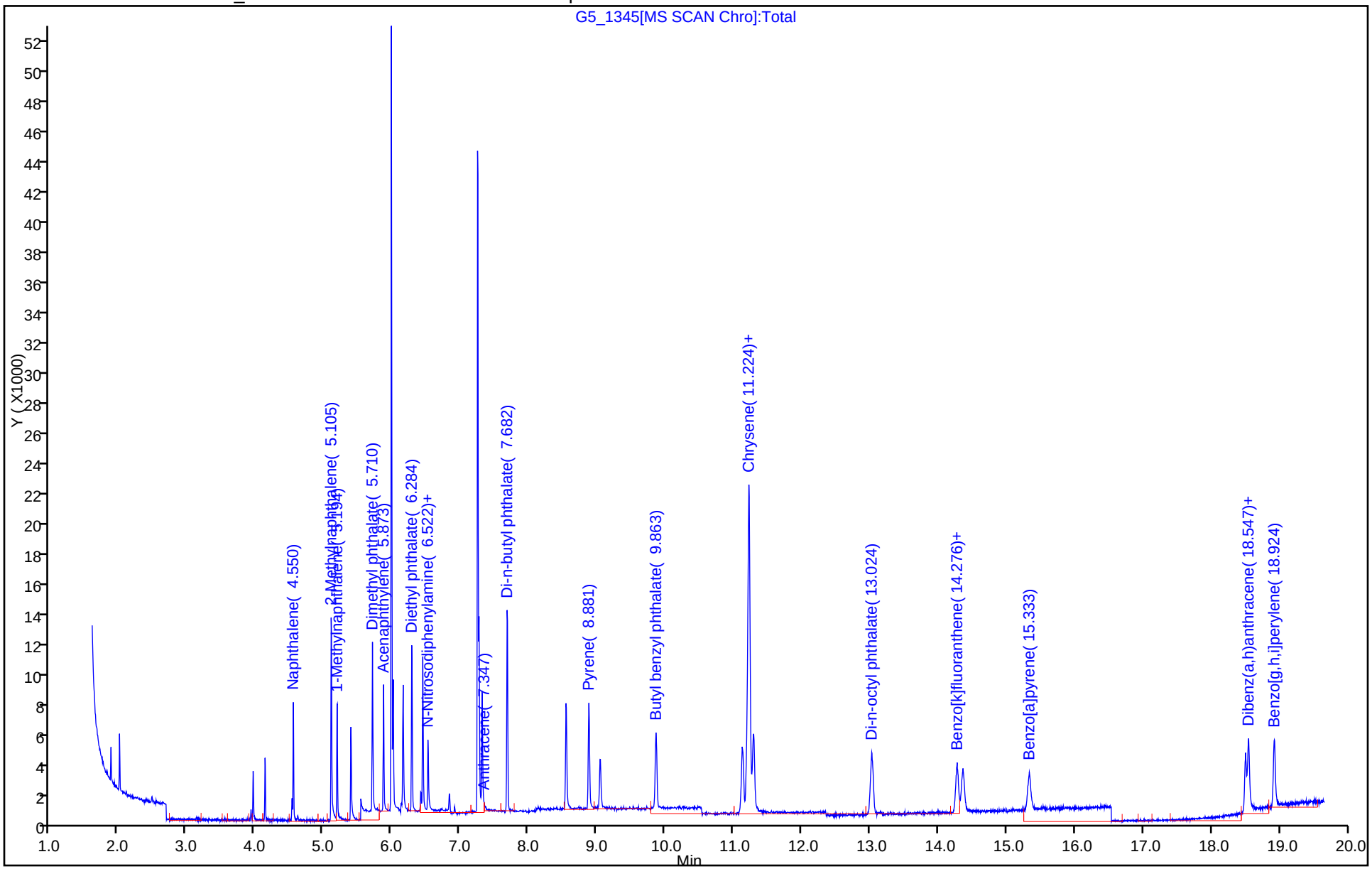
MS-SIMSL 0.1_00063 Amount Added: 1.00 Units: uL

Report Date: 02-Jun-2017 12:06:16 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1345.D

Injection Date:	01-Jun-2017 11:37:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	STD0100			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1346.D
Lims ID: STD0300
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 01-Jun-2017 12:04:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD0300
Operator ID: VASQUEZK Instrument ID: SMS_G5
Sublist: chrom-SMSG5_SIMX*sub2

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jun-2017 12:06:17 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: vasquezk Date: 01-Jun-2017 14:47:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	5.987	5.987	0.000	95	23879	600.0	600.0	
* 3 Phenanthrene-d10	188	7.249	7.255	-0.006	100	48523	600.0	600.0	
* 1 Chrysene-d12	240	11.224	11.230	-0.006	96	53649	600.0	600.0	
$ 4 Nitrobenzene-d5	82	3.961	3.961	0.000	100	6455	300.3	283.1	
$ 5 2-Fluorobiphenyl	172	5.394	5.394	0.000	100	16863	300.0	292.5	
$ 6 Terphenyl-d14	244	9.044	9.049	-0.005	100	17649	300.3	277.3	
43 1,4-Dioxane	88	1.879	1.879	0.000	99	2443	302.4	315.3	M
7 N-Nitrosodimethylamine	42	2.003	2.004	-0.001	97	3985	300.0	289.7	
15 Naphthalene	128	4.549	4.550	-0.001	100	17912	300.0	295.0	
16 2-Methylnaphthalene	142	5.105	5.105	0.000	100	25347	600.0	596.4	
17 1-Methylnaphthalene	142	5.194	5.194	0.000	100	12222	300.0	286.4	
18 Dimethyl phthalate	163	5.710	5.710	0.000	100	31893	600.6	572.7	
20 Acenaphthylene	152	5.873	5.873	0.000	100	19690	300.0	294.2	
21 Acenaphthene	153	6.015	6.015	0.000	99	13202	300.0	289.6	
19 Dibenzofuran	168	6.159	6.159	0.000	99	21281	300.3	292.3	
22 Diethyl phthalate	149	6.284	6.284	0.000	100	31519	602.4	581.2	
23 Fluorene	166	6.447	6.447	0.000	99	16117	300.0	293.9	
24 N-Nitrosodiphenylamine	169	6.522	6.522	0.000	100	10818	299.6	301.3	
25 Phenanthrene	178	7.271	7.271	0.000	100	26787	300.0	291.4	
26 Anthracene	178	7.314	7.314	0.000	100	24315	300.0	283.1	
27 Di-n-butyl phthalate	149	7.682	7.688	-0.006	100	48666	600.8	537.9	
28 Fluoranthene	202	8.544	8.550	-0.006	100	32369	300.0	282.2	
29 Pyrene	202	8.881	8.881	0.000	100	33587	300.0	281.7	
30 Butyl benzyl phthalate	149	9.868	9.869	-0.001	99	19397	600.8	523.8	
31 Bis(2-ethylhexyl) phthalat	149	11.127	11.132	-0.005	100	26895	600.9	504.3	
32 Benzo[a]anthracene	228	11.197	11.203	-0.006	97	30376	300.0	275.0	
33 Chrysene	228	11.289	11.295	-0.006	100	32458	300.0	285.3	
34 Di-n-octyl phthalate	149	13.024	13.035	-0.011	100	42079	601.7	480.3	
35 Benzo[b]fluoranthene	252	14.272	14.279	-0.007	100	27994	300.0	272.1	
36 Benzo[k]fluoranthene	252	14.361	14.365	-0.004	100	28489	300.0	272.3	
37 Benzo[a]pyrene	252	15.326	15.337	-0.011	100	24487	300.0	268.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
39 Indeno[1,2,3-cd]pyrene	276	18.498	18.502	-0.004	100	23840	300.0	268.5	
38 Dibenz(a,h)anthracene	278	18.543	18.543	0.000	100	24215	300.0	264.1	
40 Benzo[g,h,i]perylene	276	18.920	18.924	-0.004	100	28946	300.0	285.7	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

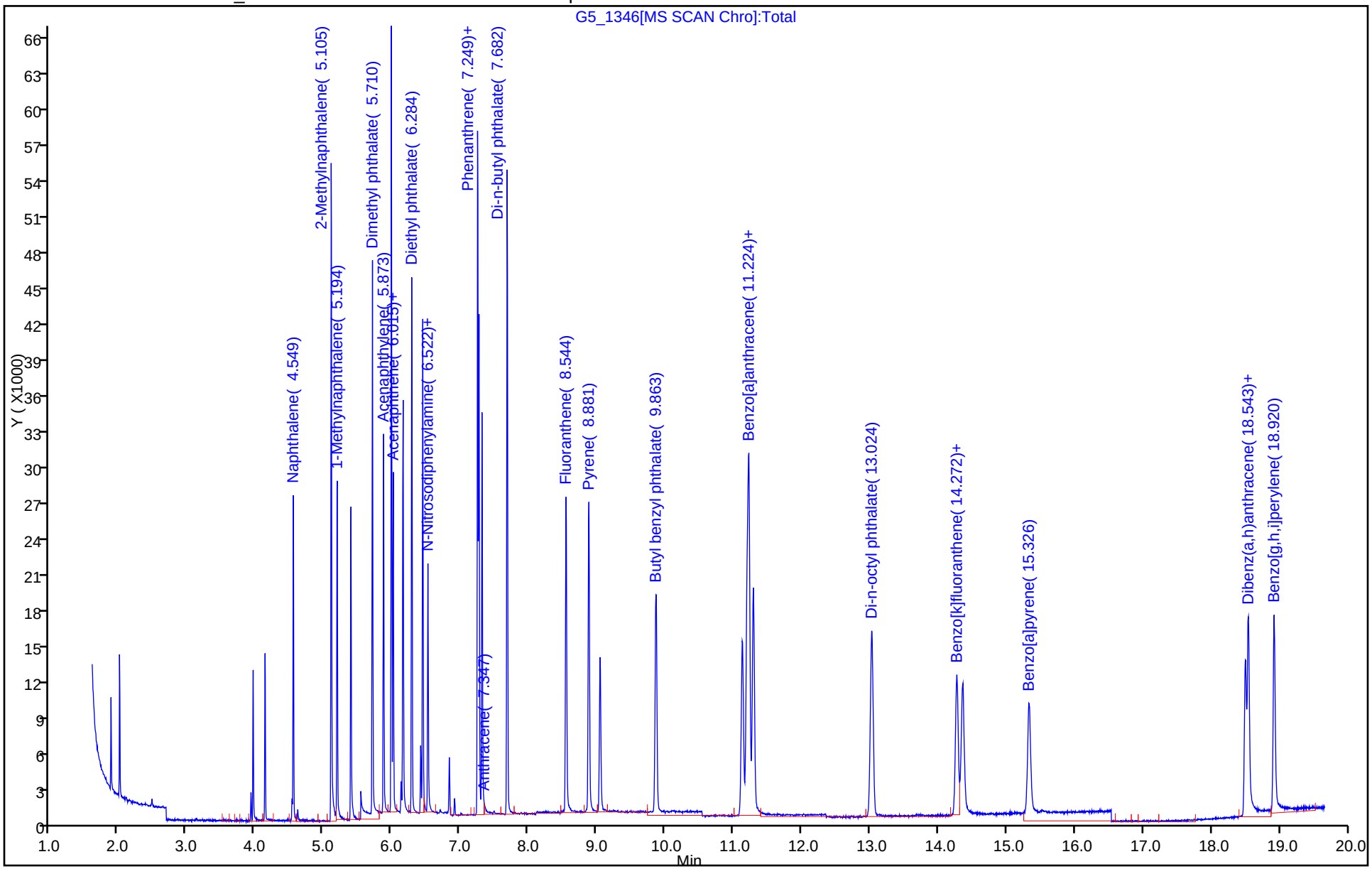
MS-SIMSL 0.3_00061 Amount Added: 1.00 Units: uL

Report Date: 02-Jun-2017 12:06:17 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1346.D

Injection Date:	01-Jun-2017 12:04:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	STD0300			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1347.D
Lims ID: STD1200
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 01-Jun-2017 12:31:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD1200
Operator ID: VASQUEZK Instrument ID: SMS_G5
Sublist: chrom-SMSG5_SIMX*sub2

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jun-2017 12:06:18 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: vasquezk Date: 01-Jun-2017 14:47:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	5.987	5.987	0.000	97	18840	600.0	600.0	
* 3 Phenanthrene-d10	188	7.249	7.255	-0.006	100	37453	600.0	600.0	
* 1 Chrysene-d12	240	11.224	11.230	-0.006	93	44260	600.0	600.0	
$ 4 Nitrobenzene-d5	82	3.961	3.961	0.000	100	21536	1201.2	1197.3	
$ 5 2-Fluorobiphenyl	172	5.394	5.394	0.000	100	56134	1200.0	1234.2	
$ 6 Terphenyl-d14	244	9.044	9.049	-0.005	100	60633	1201.2	1234.2	
43 1,4-Dioxane	88	1.879	1.879	0.000	96	7387	1209.6	1208.4	
7 N-Nitrosodimethylamine	42	2.003	2.004	-0.001	92	13356	1200.0	1230.8	
15 Naphthalene	128	4.549	4.550	-0.001	100	58556	1200.0	1222.2	
16 2-Methylnaphthalene	142	5.105	5.105	0.000	100	83844	2400.0	2500.6	
17 1-Methylnaphthalene	142	5.194	5.194	0.000	99	41871	1200.0	1243.6	
18 Dimethyl phthalate	163	5.710	5.710	0.000	100	108280	2402.4	2464.3	
20 Acenaphthylene	152	5.873	5.873	0.000	100	64151	1200.0	1214.8	
21 Acenaphthene	153	6.015	6.015	0.000	99	44510	1200.0	1237.7	
19 Dibenzofuran	168	6.159	6.159	0.000	98	71525	1201.2	1245.0	
22 Diethyl phthalate	149	6.284	6.284	0.000	100	104732	2409.6	2447.9	
23 Fluorene	166	6.447	6.447	0.000	98	53580	1200.0	1238.2	
24 N-Nitrosodiphenylamine	169	6.522	6.522	0.000	98	34144	1198.3	1232.0	
25 Phenanthrene	178	7.271	7.271	0.000	100	86445	1200.0	1218.4	
26 Anthracene	178	7.314	7.314	0.000	100	83896	1200.0	1265.6	
27 Di-n-butyl phthalate	149	7.682	7.688	-0.006	100	170515	2403.0	2441.6	
28 Fluoranthene	202	8.544	8.550	-0.006	100	110485	1200.0	1247.9	
29 Pyrene	202	8.881	8.881	0.000	100	113556	1200.0	1234.0	
30 Butyl benzyl phthalate	149	9.863	9.869	-0.006	100	73050	2403.0	2555.5	
31 Bis(2-ethylhexyl) phthalat	149	11.132	11.132	0.000	100	99591	2403.6	2419.2	
32 Benzo[a]anthracene	228	11.197	11.203	-0.006	98	112088	1200.0	1229.8	
33 Chrysene	228	11.289	11.295	-0.006	100	112428	1200.0	1198.0	
34 Di-n-octyl phthalate	149	13.032	13.035	-0.003	100	159775	2406.6	2210.4	
35 Benzo[b]fluoranthene	252	14.272	14.279	-0.007	99	101375	1200.0	1194.4	
36 Benzo[k]fluoranthene	252	14.358	14.365	-0.007	98	107279	1200.0	1243.1	
37 Benzo[a]pyrene	252	15.333	15.337	-0.004	98	88736	1200.0	1177.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
39 Indeno[1,2,3-cd]pyrene	276	18.498	18.502	-0.004	100	84148	1200.0	1148.7	
38 Dibenz(a,h)anthracene	278	18.539	18.543	-0.004	99	90991	1200.0	1202.9	
40 Benzo[g,h,i]perylene	276	18.920	18.924	-0.004	99	98896	1200.0	1183.1	

Reagents:

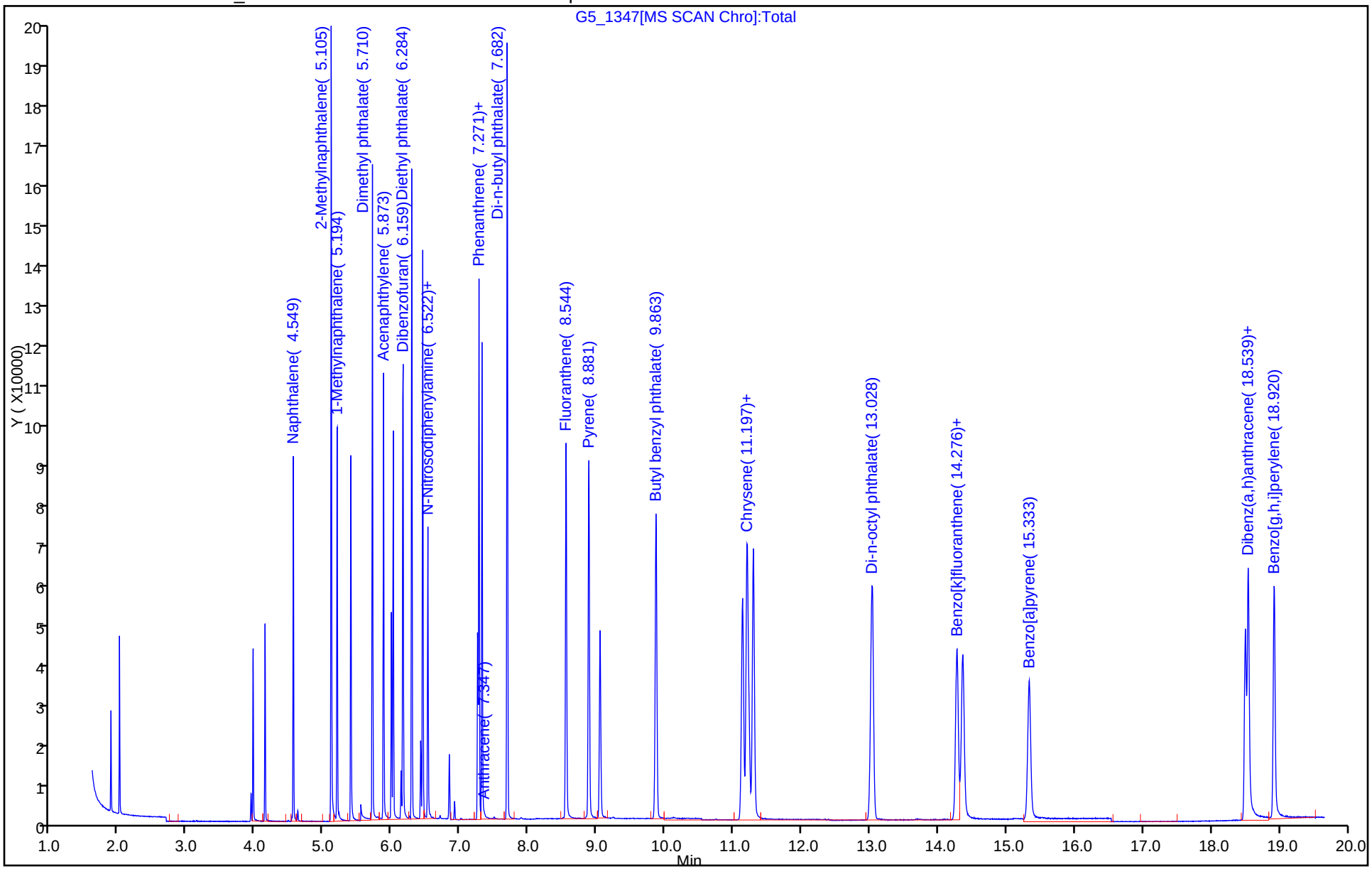
MS-SIMSL 1.2_00064 Amount Added: 1.00 Units: uL

Report Date: 02-Jun-2017 12:06:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1347.D

Injection Date:	01-Jun-2017 12:31:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	STD1200			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1348.D
Lims ID: STD2500
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 01-Jun-2017 12:58:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD2500
Operator ID: VASQUEZK Instrument ID: SMS_G5
Sublist: chrom-SMSG5_SIMX*sub2

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jun-2017 12:06:19 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: vasquezk Date: 01-Jun-2017 14:47:50

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	5.987	5.987	0.000	96	25755	600.0	600.0	
* 3 Phenanthrene-d10	188	7.249	7.255	-0.006	100	52122	600.0	600.0	
* 1 Chrysene-d12	240	11.224	11.230	-0.006	80	63824	600.0	600.0	
$ 4 Nitrobenzene-d5	82	3.961	3.961	0.000	100	62025	2502.5	2522.4	
$ 5 2-Fluorobiphenyl	172	5.394	5.394	0.000	99	158075	2500.0	2542.4	
$ 6 Terphenyl-d14	244	9.044	9.049	-0.005	100	177810	2502.5	2600.7	
43 1,4-Dioxane	88	1.879	1.879	0.000	97	19301	2520.0	2309.7	
7 N-Nitrosodimethylamine	42	2.003	2.004	-0.001	94	35642	2500.0	2402.7	
15 Naphthalene	128	4.549	4.550	-0.001	100	160344	2500.0	2448.1	
16 2-Methylnaphthalene	142	5.105	5.105	0.000	100	234436	5000.0	5114.7	
17 1-Methylnaphthalene	142	5.190	5.194	-0.004	97	115834	2500.0	2516.6	
18 Dimethyl phthalate	163	5.710	5.710	0.000	100	311187	5005.0	5180.7	
20 Acenaphthylene	152	5.873	5.873	0.000	100	187949	2500.0	2603.5	
21 Acenaphthene	153	6.015	6.015	0.000	98	122727	2500.0	2496.3	
19 Dibenzofuran	168	6.159	6.159	0.000	98	198152	2502.5	2523.0	
22 Diethyl phthalate	149	6.284	6.284	0.000	99	306742	5020.0	5244.5	
23 Fluorene	166	6.447	6.447	0.000	98	151838	2500.0	2566.9	
24 N-Nitrosodiphenylamine	169	6.522	6.522	0.000	97	91643	2496.5	2376.2	
25 Phenanthrene	178	7.271	7.271	0.000	100	243814	2500.0	2469.2	
26 Anthracene	178	7.314	7.314	0.000	100	239652	2500.0	2597.8	
27 Di-n-butyl phthalate	149	7.682	7.688	-0.006	100	525063	5006.3	5402.4	
28 Fluoranthene	202	8.544	8.550	-0.006	100	314583	2500.0	2553.2	
29 Pyrene	202	8.881	8.881	0.000	100	326435	2500.0	2549.0	
30 Butyl benzyl phthalate	149	9.863	9.869	-0.006	99	236357	5006.3	5941.4	
31 Bis(2-ethylhexyl) phthalat	149	11.132	11.132	0.000	100	332419	5007.5	5802.4	
32 Benzo[a]anthracene	228	11.197	11.203	-0.006	97	339600	2500.0	2583.9	
33 Chrysene	228	11.289	11.295	-0.006	100	329550	2500.0	2435.2	
34 Di-n-octyl phthalate	149	13.032	13.035	-0.003	100	543670	5013.8	5215.8	
35 Benzo[b]fluoranthene	252	14.272	14.279	-0.007	99	310923	2500.0	2540.4	
36 Benzo[k]fluoranthene	252	14.358	14.365	-0.007	98	322509	2500.0	2591.5	
37 Benzo[a]pyrene	252	15.326	15.337	-0.011	98	282630	2500.0	2600.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
39 Indeno[1,2,3-cd]pyrene	276	18.498	18.502	-0.004	99	250272	2500.0	2369.2	
38 Dibenz(a,h)anthracene	278	18.539	18.543	-0.004	98	269836	2500.0	2473.7	
40 Benzo[g,h,i]perylene	276	18.920	18.924	-0.004	99	284846	2500.0	2363.1	

Reagents:

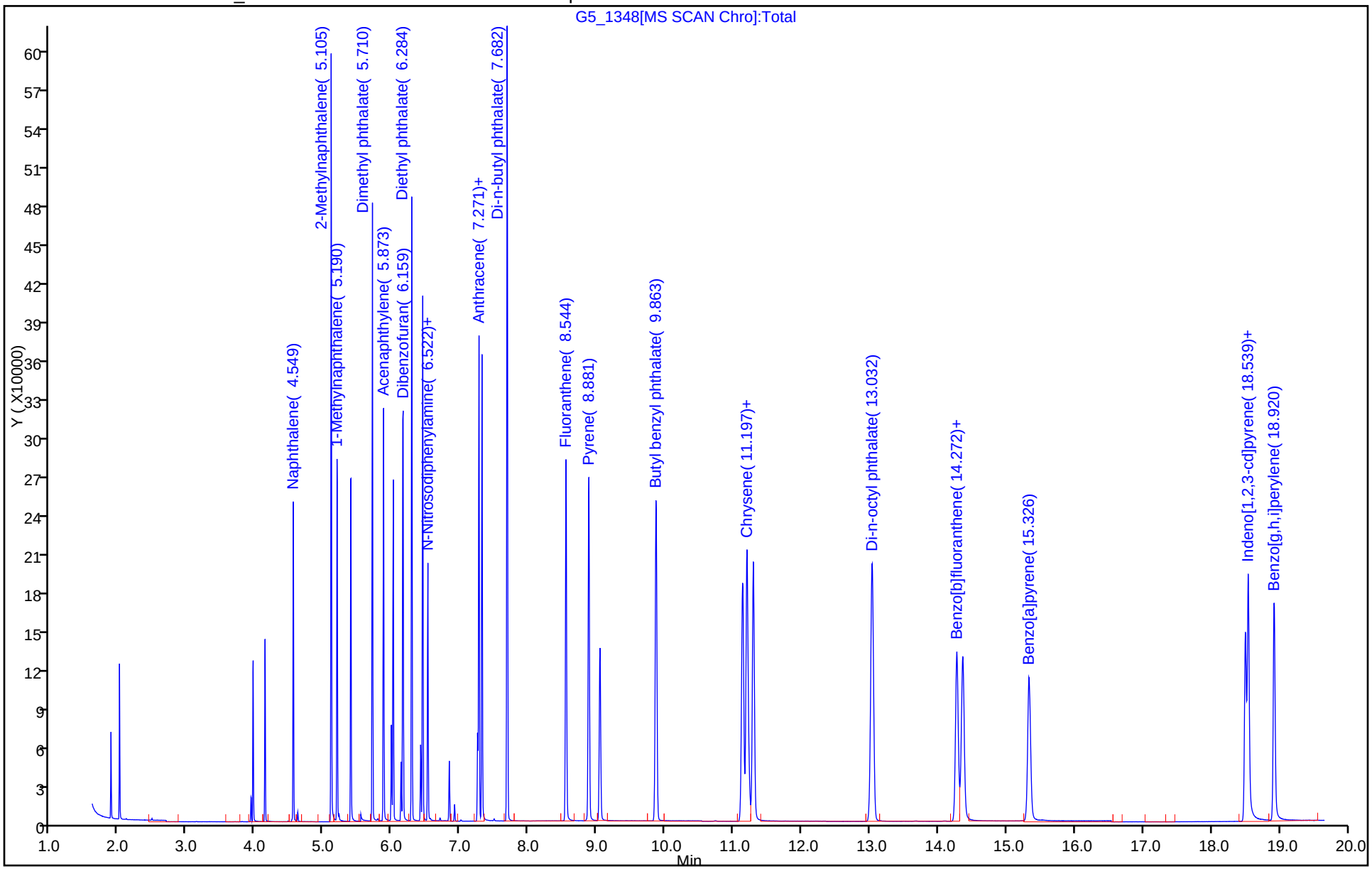
MS-SIMSL 2.5_00062 Amount Added: 1.00 Units: uL

Report Date: 02-Jun-2017 12:06:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1348.D

Injection Date:	01-Jun-2017 12:58:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	STD2500			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1349.D
Lims ID: STD5000
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 01-Jun-2017 13:26:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD5000
Operator ID: VASQUEZK Instrument ID: SMS_G5
Sublist: chrom-SMSG5_SIMX*sub2

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jun-2017 12:06:20 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: vasquezk Date: 01-Jun-2017 14:48:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	5.987	5.987	0.000	92	24873	600.0	600.0	
* 3 Phenanthrene-d10	188	7.249	7.255	-0.006	100	51131	600.0	600.0	
* 1 Chrysene-d12	240	11.224	11.230	-0.006	50	62197	600.0	600.0	
$ 4 Nitrobenzene-d5	82	3.959	3.961	-0.002	99	118874	5005.0	5005.7	
$ 5 2-Fluorobiphenyl	172	5.391	5.394	-0.003	100	295751	5000.0	4925.4	
$ 6 Terphenyl-d14	244	9.044	9.049	-0.005	100	336172	5005.0	5012.3	
43 1,4-Dioxane	88	1.879	1.879	0.000	96	35408	5040.0	4387.4	
7 N-Nitrosodimethylamine	42	2.004	2.004	-0.001	95	64501	5000.0	4502.3	
15 Naphthalene	128	4.550	4.550	0.000	100	296316	5000.0	4684.5	
16 2-Methylnaphthalene	142	5.105	5.105	0.000	99	440402	10000	9949.0	
17 1-Methylnaphthalene	142	5.190	5.194	-0.004	97	215698	5000.0	4852.4	
18 Dimethyl phthalate	163	5.710	5.710	0.000	100	589432	10010	10161	
20 Acenaphthylene	152	5.873	5.873	0.000	100	364308	5000.0	5225.4	
21 Acenaphthene	153	6.015	6.015	0.000	98	233731	5000.0	4922.8	
19 Dibenzofuran	168	6.159	6.159	0.000	97	371001	5005.0	4891.4	
22 Diethyl phthalate	149	6.284	6.284	0.000	99	588186	10040	10413	
23 Fluorene	166	6.447	6.447	0.000	96	289186	5000.0	5062.1	
24 N-Nitrosodiphenylamine	169	6.522	6.522	0.000	96	168751	4993.0	4460.3	
25 Phenanthrene	178	7.271	7.271	0.000	100	461884	5000.0	4768.4	
26 Anthracene	178	7.314	7.314	0.000	100	459591	5000.0	5078.6	
27 Di-n-butyl phthalate	149	7.683	7.688	-0.006	100	1026115	10013	10762	
28 Fluoranthene	202	8.545	8.550	-0.005	100	602854	5000.0	4987.8	
29 Pyrene	202	8.881	8.881	0.000	100	625814	5000.0	4981.5	
30 Butyl benzyl phthalate	149	9.869	9.869	0.000	97	472743	10013	12114	
31 Bis(2-ethylhexyl) phthalat	149	11.132	11.132	0.000	100	673861	10015	11990	
32 Benzo[a]anthracene	228	11.197	11.203	-0.006	97	647531	5000.0	5055.7	
33 Chrysene	228	11.290	11.295	-0.005	100	620611	5000.0	4705.9	
34 Di-n-octyl phthalate	149	13.028	13.035	-0.007	100	1133284	10028	11157	
35 Benzo[b]fluoranthene	252	14.272	14.279	-0.007	99	593483	5000.0	4975.9	
36 Benzo[k]fluoranthene	252	14.358	14.365	-0.007	98	622221	5000.0	5130.5	
37 Benzo[a]pyrene	252	15.330	15.337	-0.007	98	555437	5000.0	5244.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
39 Indeno[1,2,3-cd]pyrene	276	18.502	18.502	0.000	99	475656	5000.0	4620.6	
38 Dibenz(a,h)anthracene	278	18.543	18.543	0.000	97	514519	5000.0	4840.2	
40 Benzo[g,h,i]perylene	276	18.924	18.924	0.000	99	528559	5000.0	4499.6	

Reagents:

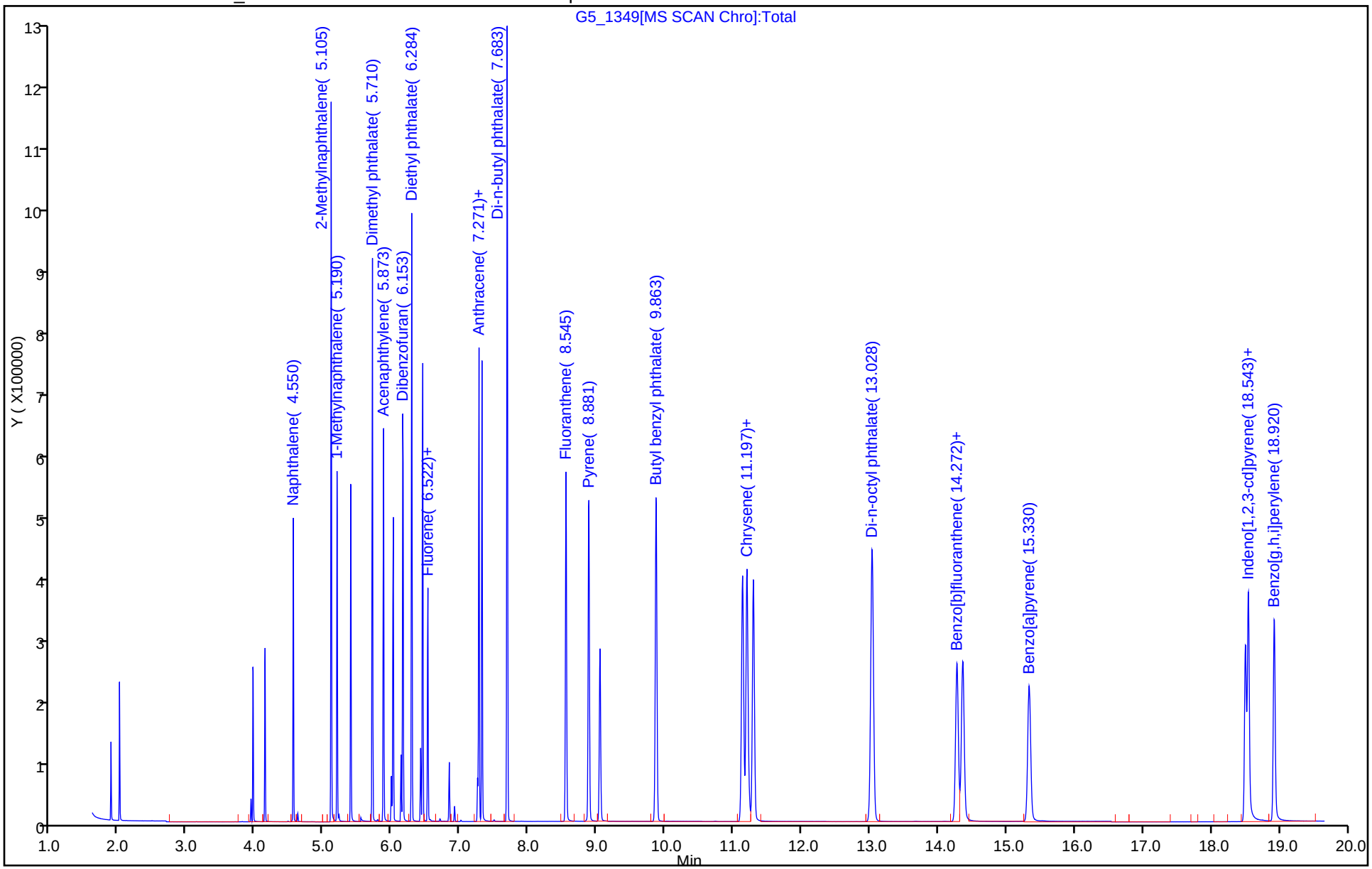
MS-SIMSL 5_00063 Amount Added: 1.00 Units: uL

Report Date: 02-Jun-2017 12:06:21 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1349.D

Injection Date:	01-Jun-2017 13:26:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	STD5000			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D
Lims ID: STD10000
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 01-Jun-2017 13:53:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD10000
Operator ID: VASQUEZK Instrument ID: SMS_G5
Sublist: chrom-SMSG5_SIMX*sub2

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jun-2017 12:06:21 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: vasquezk Date: 01-Jun-2017 14:48:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	5.987	5.987	0.000	94	25264	600.0	600.0	
* 3 Phenanthrene-d10	188	7.249	7.255	-0.006	100	50275	600.0	600.0	
* 1 Chrysene-d12	240	11.224	11.230	-0.006	25	63029	600.0	600.0	
$ 4 Nitrobenzene-d5	82	3.959	3.961	-0.002	99	263274	10010	10915	
$ 5 2-Fluorobiphenyl	172	5.394	5.394	0.000	99	631219	10000	10350	
$ 6 Terphenyl-d14	244	9.044	9.049	-0.005	100	726121	10010	11011	
43 1,4-Dioxane	88		1.879				ND	ND	
7 N-Nitrosodimethylamine	42		2.004				ND	ND	
15 Naphthalene	128		4.550				ND	ND	
16 2-Methylnaphthalene	142		5.105				ND	ND	
17 1-Methylnaphthalene	142		5.194				ND	ND	
18 Dimethyl phthalate	163	5.710	5.710	0.000	100	1277891	20020	21688	
20 Acenaphthylene	152		5.873				ND	ND	
21 Acenaphthene	153		6.015				ND	ND	
19 Dibenzofuran	168		6.159				ND	ND	
22 Diethyl phthalate	149	6.284	6.284	0.000	100	1274753	20080	22219	
23 Fluorene	166		6.447				ND	ND	
24 N-Nitrosodiphenylamine	169		6.522				ND	ND	
25 Phenanthrene	178		7.271				ND	ND	
26 Anthracene	178		7.314				ND	ND	
27 Di-n-butyl phthalate	149	7.683	7.688	-0.006	100	2275335	20025	24271	
28 Fluoranthene	202		8.550				ND	ND	
29 Pyrene	202		8.881				ND	ND	
30 Butyl benzyl phthalate	149	9.863	9.869	-0.006	100	1091342	20025	28441	
31 Bis(2-ethylhexyl) phthalat	149	11.132	11.132	0.000	100	1586406	20030	28708	
32 Benzo[a]anthracene	228		11.203				ND	ND	
33 Chrysene	228		11.295				ND	ND	
34 Di-n-octyl phthalate	149	13.028	13.035	-0.007	100	2749442	20055	26710	
35 Benzo[b]fluoranthene	252		14.279				ND	ND	
36 Benzo[k]fluoranthene	252		14.365				ND	ND	
37 Benzo[a]pyrene	252		15.337				ND	ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
39 Indeno[1,2,3-cd]pyrene	276		18.502				ND	ND	
38 Dibenz(a,h)anthracene	278		18.543				ND	ND	
40 Benzo[g,h,i]perylene	276		18.924				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

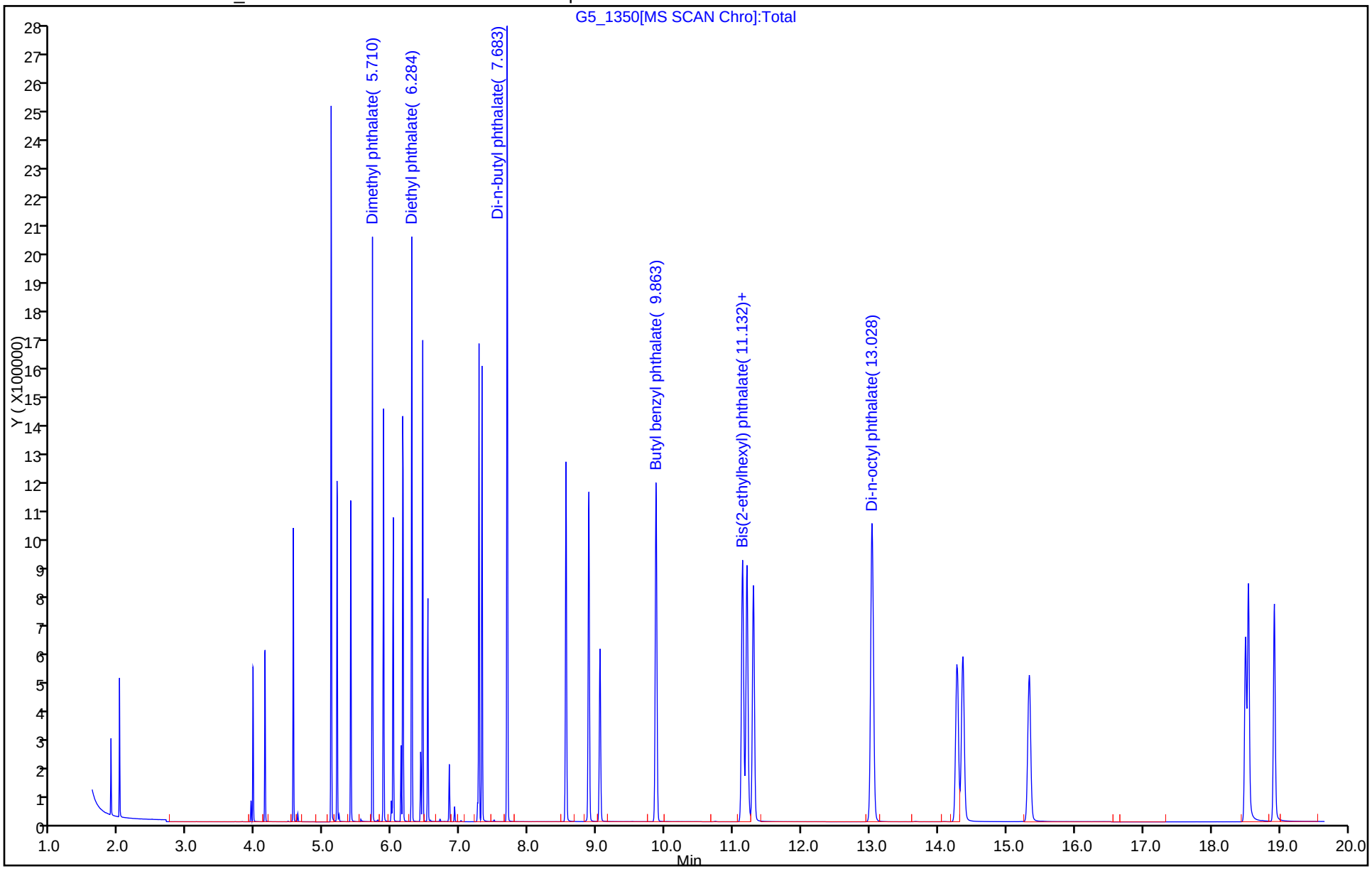
MS-SIMX 10_00055 Amount Added: 1.00 Units: uL

Report Date: 02-Jun-2017 12:06:21 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Injection Date:	01-Jun-2017 13:53:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	STD10000			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-373158/10 Calibration Date: 05/11/2017 16:33

Instrument ID: SMS_F Calib Start Date: 05/11/2017 12:58

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/11/2017 16:07

Lab File ID: F6552.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.945	1.964	0.7000	1210000	1200000	1.0	20.0
2-Methylnaphthalene	Ave	1.251	1.289	0.4000	1240000	1200000	3.1	20.0
1-Methylnaphthalene	Ave	1.252	1.218	0.0500	1170000	1200000	-2.8	20.0
Acenaphthylene	Ave	2.070	2.149	0.9000	1250000	1200000	3.8	20.0
Acenaphthene	Ave	1.265	1.330	0.9000	1260000	1200000	5.1	20.0
Fluorene	Ave	1.553	1.578	0.9000	1220000	1200000	1.6	20.0
Phenanthrene	Ave	1.273	1.290	0.7000	1220000	1200000	1.4	20.0
Anthracene	Ave	1.285	1.309	0.7000	1220000	1200000	1.9	20.0
Fluoranthene	Ave	1.462	1.498	0.6000	1230000	1200000	2.5	20.0
Pyrene	Ave	1.516	1.551	0.6000	1230000	1200000	2.3	20.0
Benzo[a]anthracene	Ave	1.596	1.636	0.8000	1230000	1200000	2.5	20.0
Chrysene	Ave	1.476	1.563	0.7000	1270000	1200000	5.9	20.0
Benzo[b]fluoranthene	Ave	1.449	1.452	0.7000	1200000	1200000	0.2	20.0
Benzo[k]fluoranthene	Ave	1.457	1.459	0.7000	1200000	1200000	0.2	20.0
Benzo[a]pyrene	Ave	1.430	1.358	0.7000	1140000	1200000	-5.0	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.622	1.557	0.5000	1150000	1200000	-4.0	20.0
Dibenz(a,h)anthracene	Ave	1.266	1.256	0.4000	1190000	1200000	-0.8	20.0
Benzo[g,h,i]perylene	Ave	1.376	1.405	0.5000	1230000	1200000	2.1	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6552.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 11-May-2017 16:33:30 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist:

Method: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 12-May-2017 08:54:08 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: vasquezk Date: 12-May-2017 08:54:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	85	28386	600.0	600.0	
* 2 Phenanthrene-d10	188	7.300	7.300	0.000	100	52370	600.0	600.0	
* 3 Chrysene-d12	240	11.359	11.359	0.000	85	47349	600.0	600.0	
9 1,4-Dioxane	88	1.909	1.909	0.000	0	17582	1200.0	1147.1	M
10 N-Nitrosodimethylamine	74	2.039	2.039	0.000	94	26592	1200.0	1019.0	
14 Naphthalene	128	4.593	4.593	0.000	100	111498	1200.0	1211.7	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	98	73180	1200.0	1236.9	
17 1-Methylnaphthalene	142	5.235	5.235	0.000	98	69134	1200.0	1166.8	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	99966	1200.0	1242.2	
22 Acenaphthylene	152	5.917	5.917	0.000	100	122017	1200.0	1246.1	
23 Acenaphthene	153	6.055	6.055	0.000	98	75516	1200.0	1261.7	
32 Dibenzofuran	168	6.199	6.199	0.000	87	112742	1200.0	1205.8	
24 Diethyl phthalate	149	6.328	6.328	0.000	100	101987	1200.0	1226.6	
25 Fluorene	166	6.494	6.487	0.007	91	89569	1200.0	1219.4	
26 N-Nitrosodiphenylamine	169	6.563	6.563	0.000	97	63912	1200.0	1303.7	
27 Phenanthrene	178	7.320	7.320	0.000	100	135094	1200.0	1216.3	
28 Anthracene	178	7.365	7.366	-0.001	100	137083	1200.0	1222.2	
29 Di-n-butyl phthalate	149	7.736	7.736	0.000	100	176047	1200.0	1237.8	
30 Fluoranthene	202	8.622	8.622	0.000	100	156879	1200.0	1229.8	
31 Pyrene	202	8.967	8.960	0.007	100	162452	1200.0	1227.9	
33 Butyl benzyl phthalate	149	9.956	9.956	0.000	97	81064	1200.0	1233.3	
34 Bis(2-ethylhexyl) phthalat	149	11.242	11.242	0.000	99	123000	1200.0	1270.2	
35 Benzo[a]anthracene	228	11.332	11.332	0.000	97	154929	1200.0	1230.3	
36 Chrysene	228	11.431	11.431	0.000	100	147988	1200.0	1270.4	
37 Di-n-octyl phthalate	149	13.174	13.170	0.004	100	185139	1200.0	1156.6	
38 Benzo[b]fluoranthene	252	14.473	14.464	0.009	100	137458	1200.0	1202.4	
39 Benzo[k]fluoranthene	252	14.560	14.552	0.008	100	138211	1200.0	1202.0	
40 Benzo[a]pyrene	252	15.553	15.545	0.008	100	128566	1200.0	1139.6	
41 Indeno[1,2,3-cd]pyrene	276	18.642	18.637	0.005	78	147436	1200.0	1152.1	
42 Dibenz(a,h)anthracene	278	18.677	18.677	0.000	81	118946	1200.0	1190.9	
43 Benzo[g,h,i]perylene	276	19.070	19.066	0.004	100	133014	1200.0	1225.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
7 Pentachlorophenol	266		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

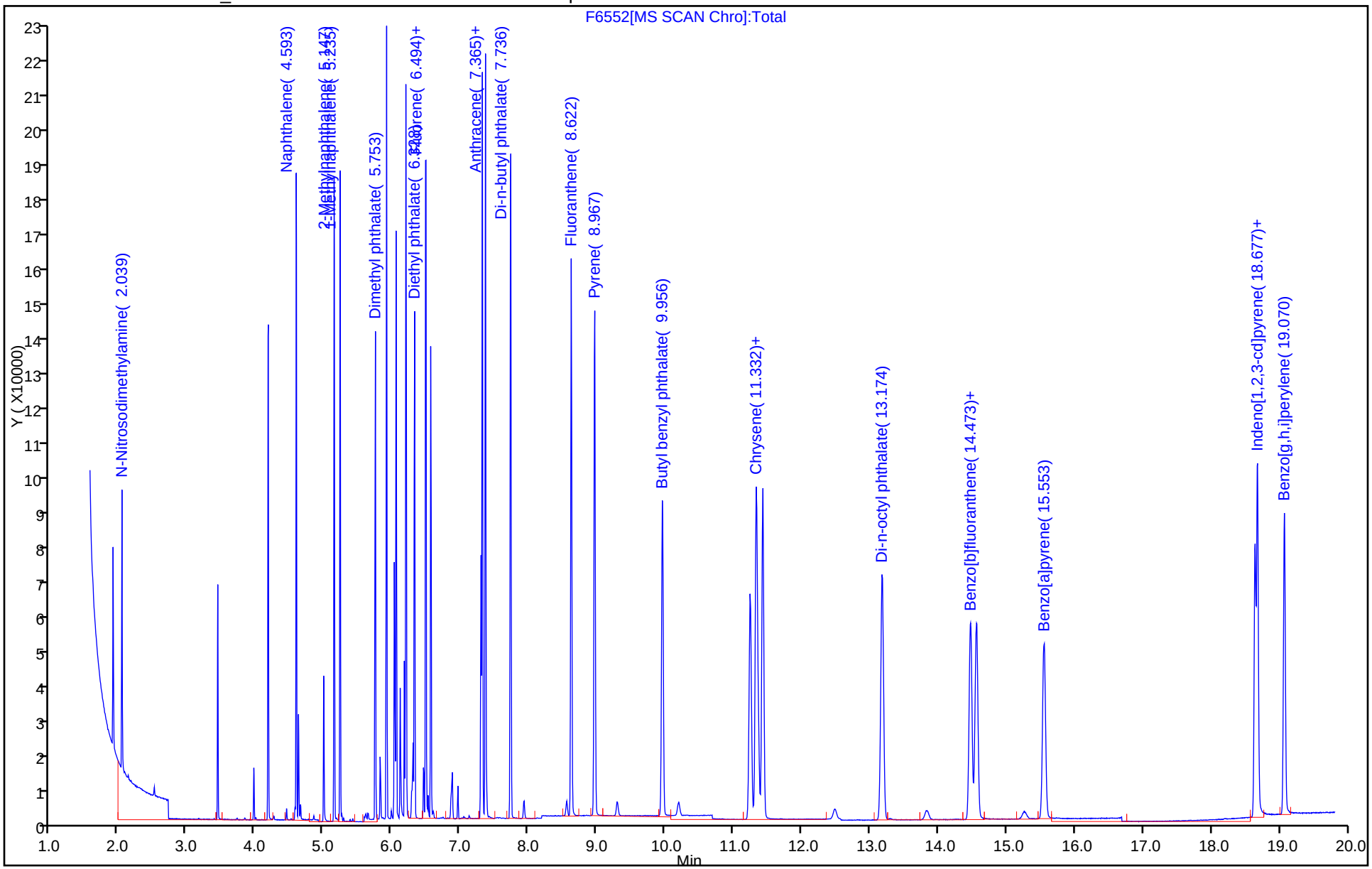
MS-SIM SSV_00116 Amount Added: 1.00 Units: uL

Report Date: 12-May-2017 08:54:36 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6552.D

Injection Date:	11-May-2017 16:33:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	ICV			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-376394/2 Calibration Date: 06/07/2017 08:53

Instrument ID: SMS_F Calib Start Date: 05/11/2017 12:58

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/11/2017 16:07

Lab File ID: F7044.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.945	1.882	0.7000	581000	600000	-3.2	20.0
2-Methylnaphthalene	Ave	1.251	1.218	0.4000	1170000	1200000	-2.6	20.0
1-Methylnaphthalene	Ave	1.252	1.244	0.0500	596000	600000	-0.7	20.0
Acenaphthylene	Ave	2.070	1.893	0.9000	549000	600000	-8.6	20.0
Acenaphthene	Ave	1.265	1.246	0.9000	591000	600000	-1.6	20.0
Fluorene	Ave	1.553	1.567	0.9000	606000	600000	1.0	20.0
Phenanthrene	Ave	1.273	1.169	0.7000	551000	600000	-8.1	20.0
Anthracene	Ave	1.285	1.177	0.7000	550000	600000	-8.4	20.0
Fluoranthene	Ave	1.462	1.408	0.6000	578000	600000	-3.7	20.0
Pyrene	Ave	1.516	1.444	0.6000	572000	600000	-4.7	20.0
Benzo[a]anthracene	Ave	1.596	1.450	0.8000	545000	600000	-9.1	20.0
Chrysene	Ave	1.476	1.516	0.7000	616000	600000	2.7	20.0
Benzo[b]fluoranthene	Ave	1.449	1.325	0.7000	549000	600000	-8.5	20.0
Benzo[k]fluoranthene	Ave	1.457	1.351	0.7000	557000	600000	-7.2	20.0
Benzo[a]pyrene	Ave	1.430	1.153	0.7000	484000	600000	-19.4	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.622	1.593	0.5000	589000	600000	-1.8	20.0
Dibenz(a,h)anthracene	Ave	1.266	1.242	0.4000	589000	600000	-1.9	20.0
Benzo[g,h,i]perylene	Ave	1.376	1.362	0.5000	594000	600000	-1.0	20.0
Nitrobenzene-d5 (Surr)	Ave	0.9399	0.9411		601000	601000	0.1	20.0
2-Fluorobiphenyl (Surr)	Ave	1.556	1.652		637000	600000	6.2	20.0
Terphenyl-d14 (Surr)	Ave	0.6092	0.5740		566000	601000	-5.8	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\F7044.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 07-Jun-2017 08:53:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 07-Jun-2017 15:34:07 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: vasquezk Date: 07-Jun-2017 09:49:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	84	23106	600.0	600.0	
* 2 Phenanthrene-d10	188	7.300	7.300	0.000	100	45103	600.0	600.0	
* 3 Chrysene-d12	240	11.377	11.377	0.000	98	41920	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	21767	600.6	601.4	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	99	38166	600.0	637.0	
$ 6 Terphenyl-d14	244	9.130	9.130	0.000	98	25917	600.6	565.9	
9 1,4-Dioxane	88	1.903	1.903	0.000	0	7805	604.8	625.6	
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	93	12789	600.0	602.1	
14 Naphthalene	128	4.590	4.590	0.000	100	43482	600.0	580.5	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	100	56300	1200.0	1169.1	
17 1-Methylnaphthalene	142	5.235	5.235	0.000	100	28748	600.0	596.1	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	79557	1201.2	1214.5	
22 Acenaphthylene	152	5.917	5.917	0.000	100	43732	600.0	548.7	
23 Acenaphthene	153	6.055	6.055	0.000	99	28779	600.0	590.7	
32 Dibenzofuran	168	6.207	6.207	0.000	96	46677	600.6	613.3	
24 Diethyl phthalate	149	6.328	6.328	0.000	100	79600	1204.8	1176.1	
25 Fluorene	166	6.494	6.494	0.000	94	36214	600.0	605.7	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	97	23335	599.2	552.7	
27 Phenanthrene	178	7.320	7.320	0.000	100	52738	600.0	551.3	
28 Anthracene	178	7.365	7.365	0.000	100	53101	600.0	549.7	
29 Di-n-butyl phthalate	149	7.736	7.736	0.000	100	124989	1201.5	1020.4	
30 Fluoranthene	202	8.628	8.628	0.000	100	63514	600.0	578.1	
31 Pyrene	202	8.973	8.973	0.000	99	65133	600.0	571.6	
33 Butyl benzyl phthalate	149	9.963	9.963	0.000	94	53181	1201.5	939.4	
34 Bis(2-ethylhexyl) phthalat	149	11.242	11.242	0.000	99	84360	1201.8	1011.5	
35 Benzo[a]anthracene	228	11.350	11.350	0.000	99	60797	600.0	545.3	
36 Chrysene	228	11.440	11.440	0.000	99	63557	600.0	616.3	
37 Di-n-octyl phthalate	149	13.170	13.170	0.000	100	113962	1203.3	804.2	
38 Benzo[b]fluoranthene	252	14.495	14.495	0.000	100	55542	600.0	548.8	
39 Benzo[k]fluoranthene	252	14.582	14.582	0.000	100	56653	600.0	556.5	
40 Benzo[a]pyrene	252	15.580	15.580	0.000	100	48331	600.0	483.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.663	18.663	0.000	79	66763	600.0	589.2	
42 Dibenz(a,h)anthracene	278	18.694	18.694	0.000	86	52065	600.0	588.8	
43 Benzo[g,h,i]perylene	276	19.097	19.097	0.000	99	57111	600.0	594.2	

Reagents:

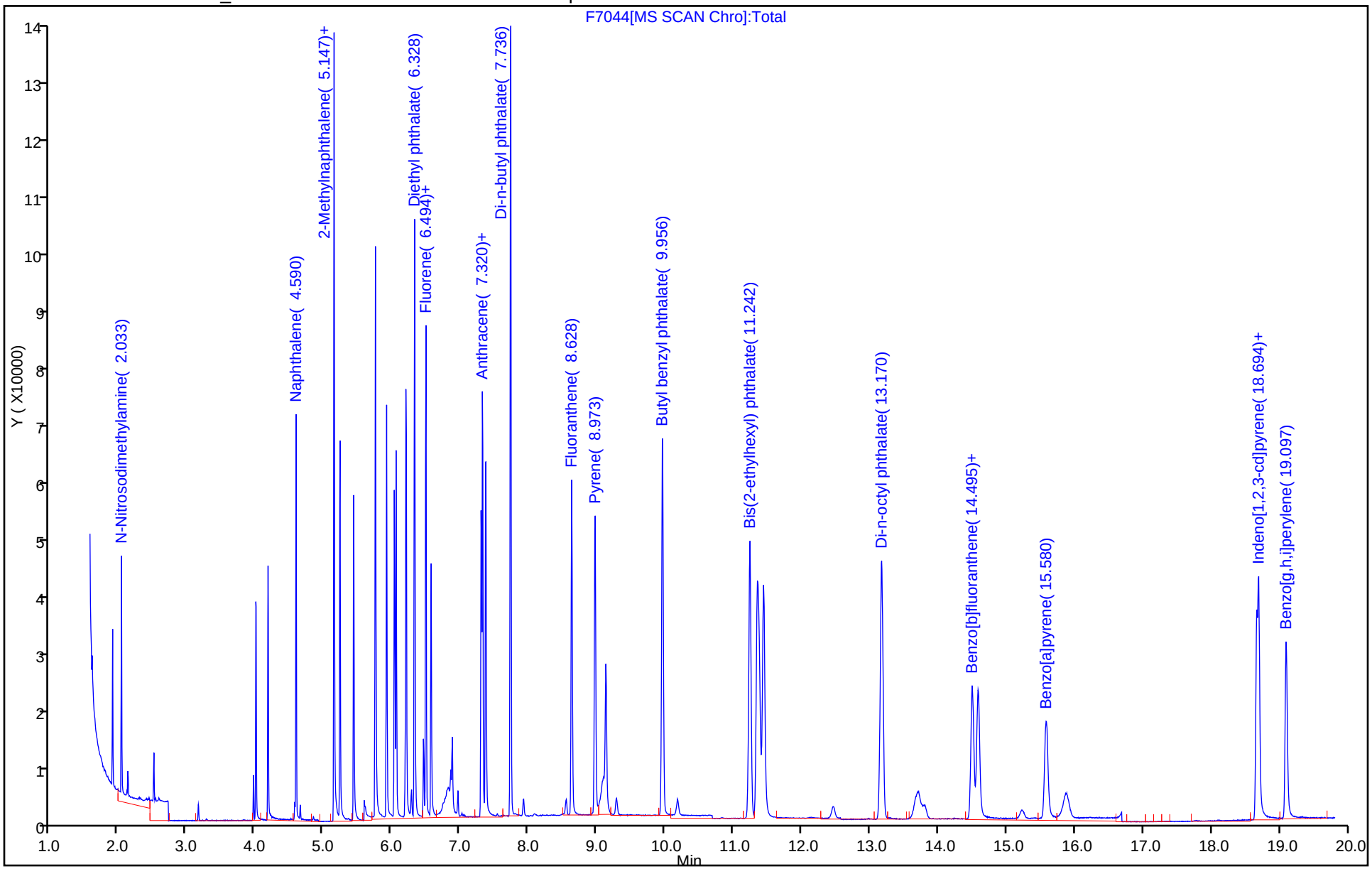
MS-SIMSL 0.6_00125 Amount Added: 1.00 Units: uL

Report Date: 07-Jun-2017 15:34:08 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\F7044.D

Injection Date:	07-Jun-2017 08:53:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVC 280-376394/15 Calibration Date: 06/07/2017 15:22

Instrument ID: SMS_F Calib Start Date: 05/11/2017 12:58

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/11/2017 16:07

Lab File ID: F7057.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.945	1.689	0.7000	521000	600000	-13.2	50.0
2-Methylnaphthalene	Ave	1.251	1.158	0.4000	1110000	1200000	-7.4	50.0
1-Methylnaphthalene	Ave	1.252	1.172	0.0500	562000	600000	-6.4	50.0
Acenaphthylene	Ave	2.070	1.961	0.9000	568000	600000	-5.3	50.0
Acenaphthene	Ave	1.265	1.237	0.9000	587000	600000	-2.2	50.0
Fluorene	Ave	1.553	1.537	0.9000	594000	600000	-1.0	50.0
Phenanthrene	Ave	1.273	1.194	0.7000	563000	600000	-6.2	50.0
Anthracene	Ave	1.285	1.248	0.7000	583000	600000	-2.9	50.0
Fluoranthene	Ave	1.462	1.465	0.6000	602000	600000	0.3	50.0
Pyrene	Ave	1.516	1.523	0.6000	603000	600000	0.5	50.0
Benzo[a]anthracene	Ave	1.596	1.563	0.8000	588000	600000	-2.0	50.0
Chrysene	Ave	1.476	1.502	0.7000	610000	600000	1.7	50.0
Benzo[b]fluoranthene	Ave	1.449	1.415	0.7000	586000	600000	-2.3	50.0
Benzo[k]fluoranthene	Ave	1.457	1.427	0.7000	588000	600000	-2.1	50.0
Benzo[a]pyrene	Ave	1.430	1.339	0.7000	562000	600000	-6.4	50.0
Indeno[1,2,3-cd]pyrene	Ave	1.622	1.421	0.5000	526000	600000	-12.4	50.0
Dibenz(a,h)anthracene	Ave	1.266	1.098	0.4000	520000	600000	-13.3	50.0
Benzo[g,h,i]perylene	Ave	1.376	1.170	0.5000	510000	600000	-14.9	50.0
Nitrobenzene-d5 (Surr)	Ave	0.9399	0.8723		557000	601000	-7.2	50.0
2-Fluorobiphenyl (Surr)	Ave	1.556	1.561		602000	600000	0.3	50.0
Terphenyl-d14 (Surr)	Ave	0.6092	0.5958		587000	601000	-2.2	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\F7057.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 07-Jun-2017 15:22:30 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVC
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 07-Jun-2017 15:50:40 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: vasquezk Date: 07-Jun-2017 15:50:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	95	32321	600.0	600.0	
* 2 Phenanthrene-d10	188	7.301	7.301	0.000	99	63298	600.0	600.0	
* 3 Chrysene-d12	240	11.362	11.362	0.000	99	57804	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	100	28223	600.6	557.4	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	100	50441	600.0	601.9	
$ 6 Terphenyl-d14	244	9.124	9.124	0.000	99	37749	600.6	587.4	
9 1,4-Dioxane	88	1.903	1.903	0.000	0	9864	604.8	565.2	M
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	96	13159	600.0	442.9	
14 Naphthalene	128	4.589	4.589	0.000	100	54576	600.0	520.9	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	97	74887	1200.0	1111.7	
17 1-Methylnaphthalene	142	5.234	5.234	0.000	96	37895	600.0	561.7	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	105914	1201.2	1155.9	
22 Acenaphthylene	152	5.917	5.917	0.000	100	63369	600.0	568.4	
23 Acenaphthene	153	6.055	6.055	0.000	99	39972	600.0	586.5	
32 Dibenzofuran	168	6.199	6.199	0.000	91	62684	600.6	588.8	
24 Diethyl phthalate	149	6.320	6.320	0.000	96	109085	1204.8	1152.2	
25 Fluorene	166	6.487	6.487	0.000	98	49665	600.0	593.8	
26 N-Nitrosodiphenylamine	169	6.562	6.562	0.000	100	34606	599.2	584.0	
27 Phenanthrene	178	7.321	7.321	0.000	99	75582	600.0	563.0	
28 Anthracene	178	7.366	7.366	0.000	100	78990	600.0	582.7	
29 Di-n-butyl phthalate	149	7.731	7.731	0.000	100	188379	1201.5	1095.8	
30 Fluoranthene	202	8.623	8.623	0.000	100	92756	600.0	601.6	
31 Pyrene	202	8.961	8.961	0.000	100	96431	600.0	603.0	
33 Butyl benzyl phthalate	149	9.951	9.951	0.000	95	88829	1201.5	1118.1	
34 Bis(2-ethylhexyl) phthalat	149	11.227	11.227	0.000	99	136198	1201.8	1163.6	
35 Benzo[a]anthracene	228	11.335	11.335	0.000	99	90362	600.0	587.8	
36 Chrysene	228	11.434	11.434	0.000	100	86818	600.0	610.5	
37 Di-n-octyl phthalate	149	13.156	13.156	0.000	100	208759	1203.3	1068.3	
38 Benzo[b]fluoranthene	252	14.481	14.481	0.000	100	81819	600.0	586.2	
39 Benzo[k]fluoranthene	252	14.564	14.564	0.000	100	82479	600.0	587.6	
40 Benzo[a]pyrene	252	15.561	15.561	0.000	100	77379	600.0	561.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.654	18.654	0.000	79	82163	600.0	525.9	
42 Dibenz(a,h)anthracene	278	18.689	18.689	0.000	83	63449	600.0	520.4	
43 Benzo[g,h,i]perylene	276	19.087	19.087	0.000	99	67659	600.0	510.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

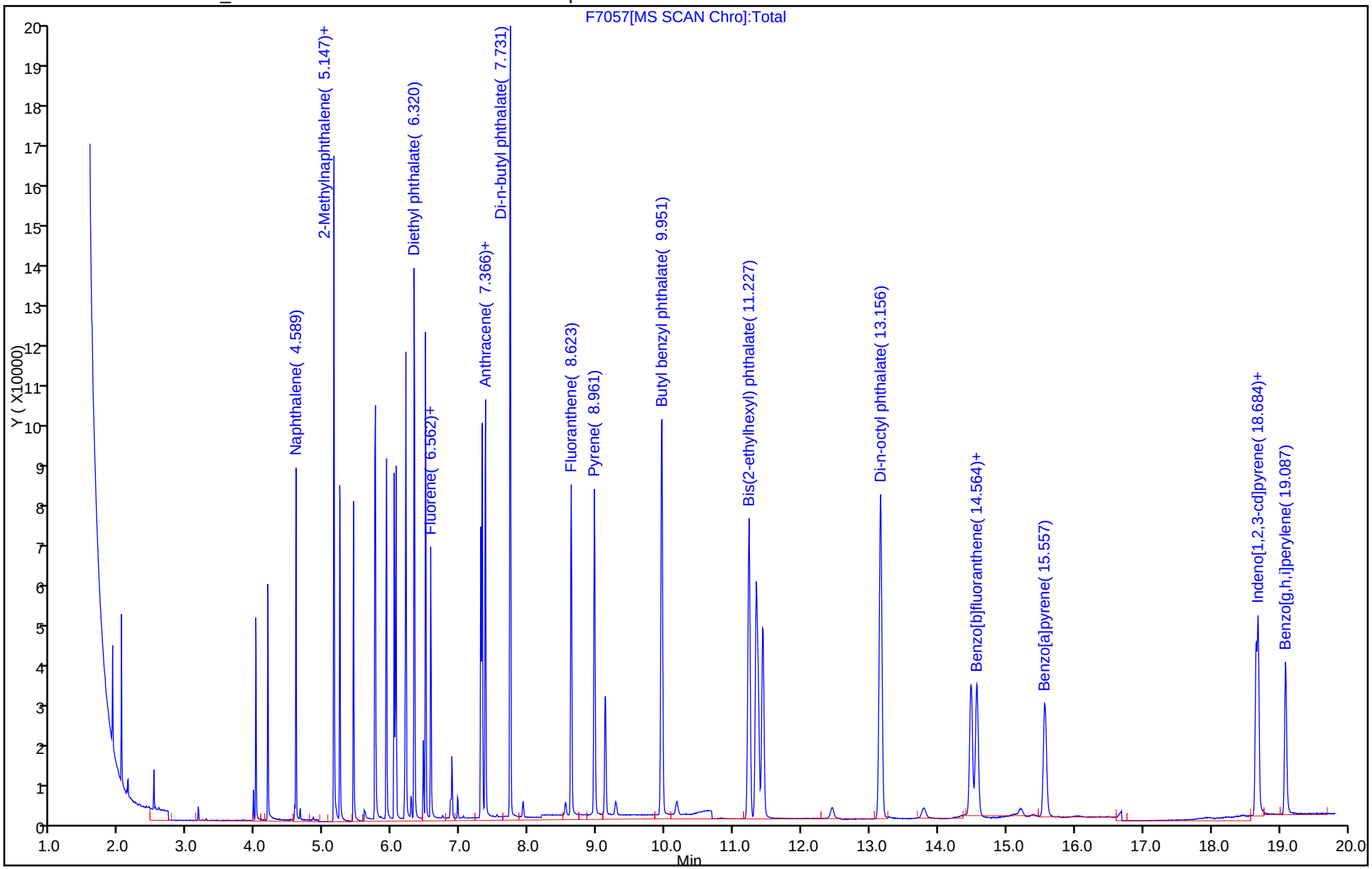
MS-SIMSL 0.6_00125 Amount Added: 1.00 Units: uL

Report Date: 07-Jun-2017 15:50:41 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\F7057.D

Injection Date:	07-Jun-2017 15:22:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	CCVC			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-376943/2 Calibration Date: 06/12/2017 13:49

Instrument ID: SMS_F Calib Start Date: 05/11/2017 12:58

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/11/2017 16:07

Lab File ID: F7123.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.945	1.677	0.7000	517000	600000	-13.8	20.0
2-Methylnaphthalene	Ave	1.251	1.130	0.4000	1080000	1200000	-9.7	20.0
1-Methylnaphthalene	Ave	1.252	1.137	0.0500	545000	600000	-9.2	20.0
Acenaphthylene	Ave	2.070	1.876	0.9000	544000	600000	-9.4	20.0
Acenaphthene	Ave	1.265	1.164	0.9000	552000	600000	-8.0	20.0
Fluorene	Ave	1.553	1.473	0.9000	569000	600000	-5.1	20.0
Phenanthrene	Ave	1.273	1.160	0.7000	547000	600000	-8.8	20.0
Anthracene	Ave	1.285	1.180	0.7000	551000	600000	-8.2	20.0
Fluoranthene	Ave	1.462	1.409	0.6000	578000	600000	-3.6	20.0
Pyrene	Ave	1.516	1.449	0.6000	574000	600000	-4.4	20.0
Benzo[a]anthracene	Ave	1.596	1.462	0.8000	550000	600000	-8.4	20.0
Chrysene	Ave	1.476	1.459	0.7000	593000	600000	-1.2	20.0
Benzo[b]fluoranthene	Ave	1.449	1.321	0.7000	547000	600000	-8.8	20.0
Benzo[k]fluoranthene	Ave	1.457	1.400	0.7000	576000	600000	-3.9	20.0
Benzo[a]pyrene	Ave	1.430	1.280	0.7000	537000	600000	-10.4	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.622	1.388	0.5000	514000	600000	-14.4	20.0
Dibenz(a,h)anthracene	Ave	1.266	1.077	0.4000	511000	600000	-14.9	20.0
Benzo[g,h,i]perylene	Ave	1.376	1.143	0.5000	498000	600000	-17.0	20.0
Nitrobenzene-d5 (Surr)	Ave	0.9399	0.8463		541000	601000	-10.0	20.0
2-Fluorobiphenyl (Surr)	Ave	1.556	1.503		580000	600000	-3.4	20.0
Terphenyl-d14 (Surr)	Ave	0.6092	0.5775		569000	601000	-5.2	20.0

Report Date: 13-Jun-2017 07:13:05 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7123.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 12-Jun-2017 13:49:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 13-Jun-2017 07:13:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: vasquezk Date: 12-Jun-2017 14:23:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.038	6.038	0.000	93	21849	600.0	600.0	
* 2 Phenanthrene-d10	188	7.307	7.307	0.000	99	41871	600.0	600.0	
* 3 Chrysene-d12	240	11.385	11.385	0.000	99	38037	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	18510	600.6	540.8	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	32837	600.0	579.6	
$ 6 Terphenyl-d14	244	9.136	9.136	0.000	99	24203	600.6	569.3	
9 1,4-Dioxane	88	1.903	1.903	0.000	0	5735	604.8	486.1	M
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	95	10112	600.0	503.4	
14 Naphthalene	128	4.589	4.589	0.000	100	36643	600.0	517.4	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	100	49369	1200.0	1084.1	
17 1-Methylnaphthalene	142	5.234	5.234	0.000	100	24847	600.0	544.8	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	72081	1201.2	1163.7	
22 Acenaphthylene	152	5.917	5.917	0.000	100	40981	600.0	543.7	
23 Acenaphthene	153	6.055	6.055	0.000	96	25440	600.0	552.2	
32 Dibenzofuran	168	6.206	6.206	0.000	94	41613	600.6	578.2	
24 Diethyl phthalate	149	6.328	6.328	0.000	99	73061	1204.8	1141.6	
25 Fluorene	166	6.494	6.494	0.000	98	32189	600.0	569.4	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	100	22062	599.2	562.9	
27 Phenanthrene	178	7.326	7.326	0.000	100	48584	600.0	547.1	
28 Anthracene	178	7.372	7.372	0.000	100	49406	600.0	551.0	
29 Di-n-butyl phthalate	149	7.736	7.736	0.000	100	118221	1201.5	1039.7	
30 Fluoranthene	202	8.634	8.634	0.000	100	58983	600.0	578.3	
31 Pyrene	202	8.973	8.973	0.000	100	60664	600.0	573.5	
33 Butyl benzyl phthalate	149	9.963	9.963	0.000	97	52400	1201.5	997.1	
34 Bis(2-ethylhexyl) phthalat	149	11.241	11.241	0.000	99	72087	1201.8	931.1	
35 Benzo[a]anthracene	228	11.349	11.349	0.000	98	55617	600.0	549.8	
36 Chrysene	228	11.448	11.448	0.000	100	55480	600.0	592.9	
37 Di-n-octyl phthalate	149	13.174	13.174	0.000	100	114727	1203.3	892.2	
38 Benzo[b]fluoranthene	252	14.508	14.508	0.000	100	50250	600.0	547.2	
39 Benzo[k]fluoranthene	252	14.591	14.591	0.000	100	53235	600.0	576.3	
40 Benzo[a]pyrene	252	15.592	15.592	0.000	100	48702	600.0	537.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.672	18.672	0.000	79	52802	600.0	513.6	
42 Dibenz(a,h)anthracene	278	18.707	18.707	0.000	85	40967	600.0	510.6	
43 Benzo[g,h,i]perylene	276	19.109	19.109	0.000	99	43460	600.0	498.3	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

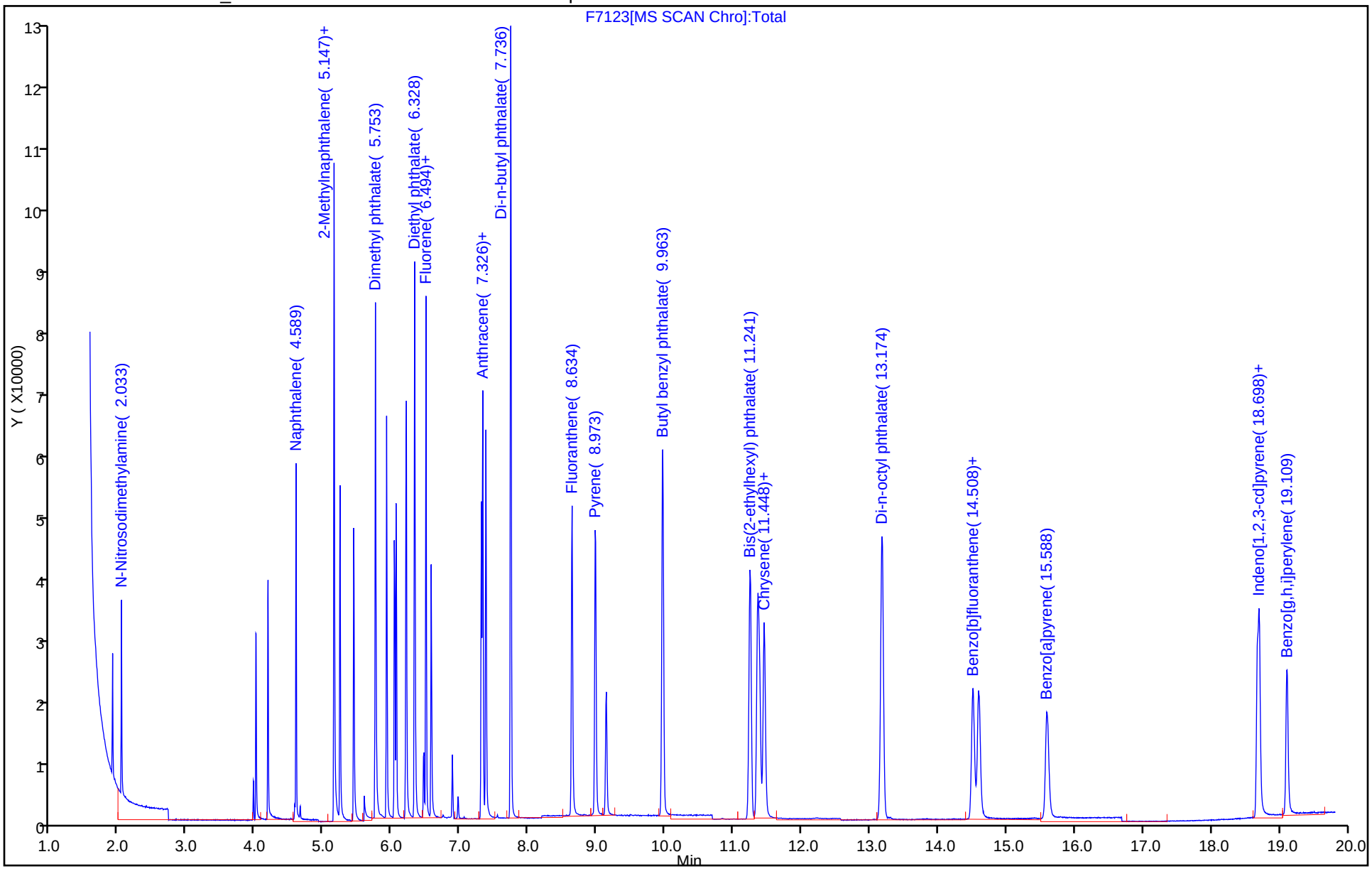
MS-SIMSL 0.6_00125 Amount Added: 1.00 Units: uL

Report Date: 13-Jun-2017 07:13:05 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7123.D

Injection Date:	12-Jun-2017 13:49:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVC 280-376943/27 Calibration Date: 06/13/2017 01:09

Instrument ID: SMS_F Calib Start Date: 05/11/2017 12:58

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/11/2017 16:07

Lab File ID: F7148.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.945	1.721	0.7000	531000	600000	-11.5	50.0
2-Methylnaphthalene	Ave	1.251	1.169	0.4000	1120000	1200000	-6.5	50.0
1-Methylnaphthalene	Ave	1.252	1.181	0.0500	566000	600000	-5.7	50.0
Acenaphthylene	Ave	2.070	2.028	0.9000	588000	600000	-2.0	50.0
Acenaphthene	Ave	1.265	1.230	0.9000	584000	600000	-2.7	50.0
Fluorene	Ave	1.553	1.539	0.9000	595000	600000	-0.8	50.0
Phenanthrene	Ave	1.273	1.153	0.7000	544000	600000	-9.4	50.0
Anthracene	Ave	1.285	1.216	0.7000	568000	600000	-5.4	50.0
Fluoranthene	Ave	1.462	1.381	0.6000	567000	600000	-5.5	50.0
Pyrene	Ave	1.516	1.403	0.6000	556000	600000	-7.4	50.0
Benzo[a]anthracene	Ave	1.596	1.505	0.8000	566000	600000	-5.7	50.0
Chrysene	Ave	1.476	1.450	0.7000	589000	600000	-1.8	50.0
Benzo[b]fluoranthene	Ave	1.449	1.299	0.7000	538000	600000	-10.4	50.0
Benzo[k]fluoranthene	Ave	1.457	1.379	0.7000	568000	600000	-5.3	50.0
Benzo[a]pyrene	Ave	1.430	1.264	0.7000	531000	600000	-11.6	50.0
Indeno[1,2,3-cd]pyrene	Ave	1.622	1.276	0.5000	472000	600000	-21.3	50.0
Dibenz(a,h)anthracene	Ave	1.266	0.9831	0.4000	466000	600000	-22.3	50.0
Benzo[g,h,i]perylene	Ave	1.376	1.043	0.5000	455000	600000	-24.2	50.0
Nitrobenzene-d5 (Surr)	Ave	0.9399	0.8613		550000	601000	-8.4	50.0
2-Fluorobiphenyl (Surr)	Ave	1.556	1.561		602000	600000	0.4	50.0
Terphenyl-d14 (Surr)	Ave	0.6092	0.5562		548000	601000	-8.7	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7148.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 13-Jun-2017 01:09:30 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVC
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 13-Jun-2017 07:13:31 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: vasquezk Date: 13-Jun-2017 07:12:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	93	24039	600.0	600.0	
* 2 Phenanthrene-d10	188	7.301	7.301	0.000	100	47594	600.0	600.0	
* 3 Chrysene-d12	240	11.371	11.371	0.000	97	40435	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	20726	600.6	550.4	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	37536	600.0	602.2	
$ 6 Terphenyl-d14	244	9.131	9.131	0.000	99	26498	600.6	548.3	
9 1,4-Dioxane	88	1.903	1.903	0.000	0	5478	604.8	422.0	M
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	94	9667	600.0	437.4	
14 Naphthalene	128	4.589	4.589	0.000	100	41379	600.0	531.0	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	97	56206	1200.0	1121.8	
17 1-Methylnaphthalene	142	5.235	5.235	0.000	97	28388	600.0	565.7	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	79950	1201.2	1173.1	
22 Acenaphthylene	152	5.917	5.917	0.000	100	48758	600.0	588.0	
23 Acenaphthene	153	6.055	6.055	0.000	100	29577	600.0	583.5	
32 Dibenzofuran	168	6.199	6.199	0.000	87	46660	600.6	589.3	
24 Diethyl phthalate	149	6.320	6.320	0.000	96	81207	1204.8	1153.2	
25 Fluorene	166	6.494	6.494	0.000	93	37007	600.0	594.9	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	97	25102	599.2	563.4	
27 Phenanthrene	178	7.321	7.321	0.000	100	54866	600.0	543.5	
28 Anthracene	178	7.366	7.366	0.000	100	57878	600.0	567.8	
29 Di-n-butyl phthalate	149	7.731	7.731	0.000	100	137435	1201.5	1063.3	
30 Fluoranthene	202	8.629	8.629	0.000	100	65729	600.0	566.9	
31 Pyrene	202	8.968	8.968	0.000	100	66791	600.0	555.5	
33 Butyl benzyl phthalate	149	9.957	9.957	0.000	95	60936	1201.5	1020.1	
34 Bis(2-ethylhexyl) phthalat	149	11.227	11.227	0.000	99	88883	1201.8	1010.0	
35 Benzo[a]anthracene	228	11.344	11.344	0.000	100	60867	600.0	566.0	
36 Chrysene	228	11.443	11.443	0.000	100	58631	600.0	589.4	
37 Di-n-octyl phthalate	149	13.160	13.160	0.000	100	138756	1203.3	1015.1	
38 Benzo[b]fluoranthene	252	14.498	14.498	0.000	100	52508	600.0	537.8	
39 Benzo[k]fluoranthene	252	14.581	14.581	0.000	100	55778	600.0	568.0	
40 Benzo[a]pyrene	252	15.583	15.583	0.000	100	51127	600.0	530.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.671	18.671	0.000	82	51577	600.0	471.9	
42 Dibenz(a,h)anthracene	278	18.698	18.698	0.000	85	39750	600.0	466.0	
43 Benzo[g,h,i]perylene	276	19.104	19.104	0.000	99	42193	600.0	455.1	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

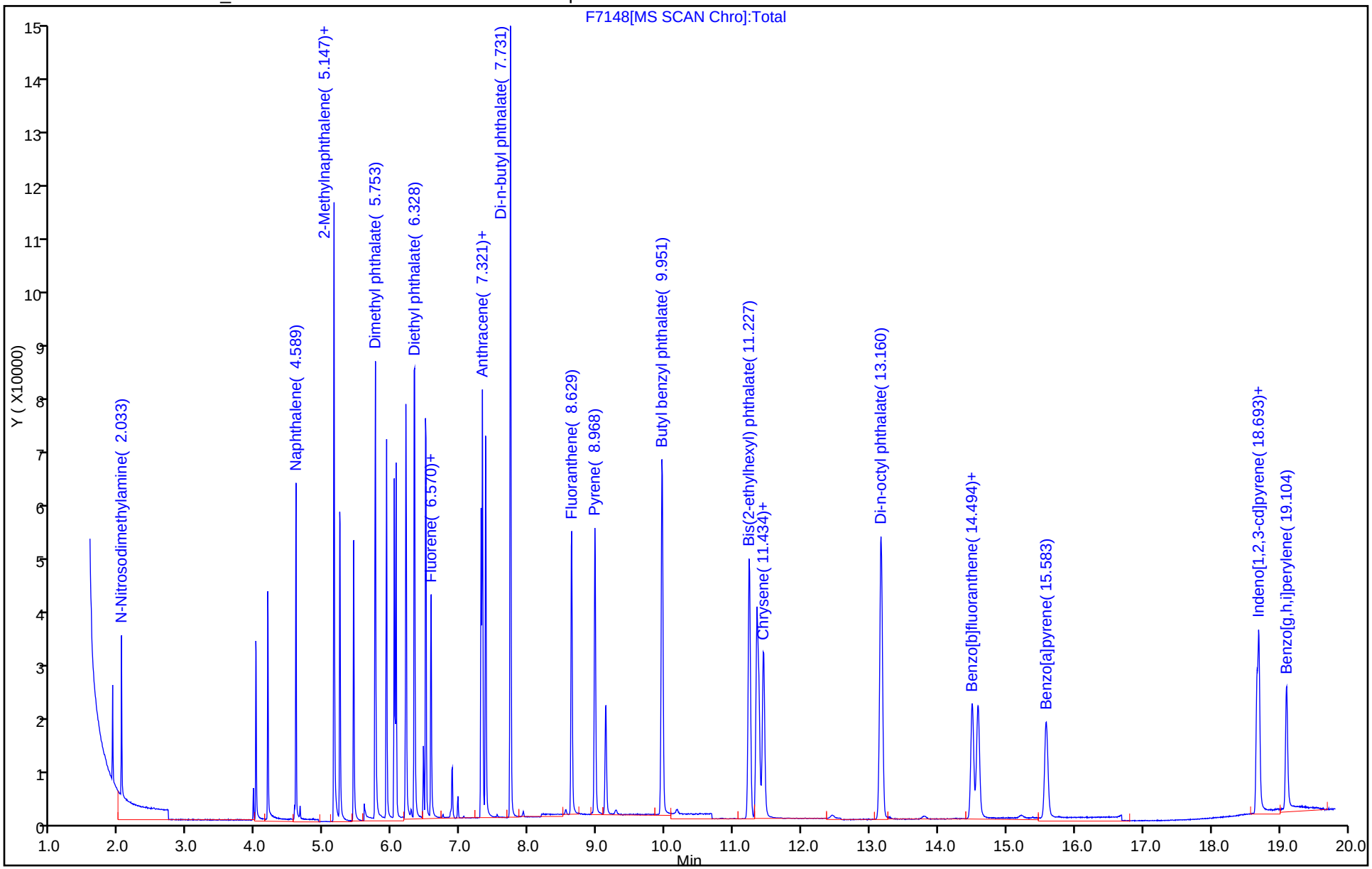
MS-SIMSL 0.6_00125 Amount Added: 1.00 Units: uL

Report Date: 13-Jun-2017 07:13:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7148.D

Injection Date:	13-Jun-2017 01:09:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	CCVC			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377034/2 Calibration Date: 06/13/2017 06:21

Instrument ID: SMS_F Calib Start Date: 05/11/2017 12:58

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/11/2017 16:07

Lab File ID: F7150.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.945	1.771	0.7000	546000	600000	-9.0	20.0
2-Methylnaphthalene	Ave	1.251	1.183	0.4000	1140000	1200000	-5.4	20.0
1-Methylnaphthalene	Ave	1.252	1.199	0.0500	574000	600000	-4.3	20.0
Acenaphthylene	Ave	2.070	1.959	0.9000	568000	600000	-5.3	20.0
Acenaphthene	Ave	1.265	1.223	0.9000	580000	600000	-3.3	20.0
Fluorene	Ave	1.553	1.514	0.9000	585000	600000	-2.5	20.0
Phenanthrene	Ave	1.273	1.163	0.7000	548000	600000	-8.6	20.0
Anthracene	Ave	1.285	1.215	0.7000	567000	600000	-5.4	20.0
Fluoranthene	Ave	1.462	1.415	0.6000	581000	600000	-3.2	20.0
Pyrene	Ave	1.516	1.446	0.6000	572000	600000	-4.6	20.0
Benzo[a]anthracene	Ave	1.596	1.508	0.8000	567000	600000	-5.5	20.0
Chrysene	Ave	1.476	1.458	0.7000	593000	600000	-1.2	20.0
Benzo[b]fluoranthene	Ave	1.449	1.380	0.7000	572000	600000	-4.7	20.0
Benzo[k]fluoranthene	Ave	1.457	1.407	0.7000	579000	600000	-3.4	20.0
Benzo[a]pyrene	Ave	1.430	1.323	0.7000	555000	600000	-7.5	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.622	1.377	0.5000	509000	600000	-15.1	20.0
Dibenz(a,h)anthracene	Ave	1.266	1.080	0.4000	512000	600000	-14.7	20.0
Benzo[g,h,i]perylene	Ave	1.376	1.159	0.5000	505000	600000	-15.8	20.0
Nitrobenzene-d5 (Surr)	Ave	0.9399	0.9187		587000	601000	-2.3	20.0
2-Fluorobiphenyl (Surr)	Ave	1.556	1.592		614000	600000	2.3	20.0
Terphenyl-d14 (Surr)	Ave	0.6092	0.5905		582000	601000	-3.1	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7150.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 13-Jun-2017 06:21:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 13-Jun-2017 13:37:48 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: vasquezk Date: 13-Jun-2017 10:32:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	87	21526	600.0	600.0	
* 2 Phenanthrene-d10	188	7.301	7.301	0.000	100	42378	600.0	600.0	
* 3 Chrysene-d12	240	11.380	11.380	0.000	99	38800	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	19796	600.6	587.1	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	99	34273	600.0	614.0	
$ 6 Terphenyl-d14	244	9.130	9.130	0.000	99	25050	600.6	582.2	
9 1,4-Dioxane	88	1.903	1.903	0.000	0	6324	604.8	544.1	M
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	89	10911	600.0	551.4	
14 Naphthalene	128	4.589	4.589	0.000	100	38120	600.0	546.3	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	98	50924	1200.0	1135.1	
17 1-Methylnaphthalene	142	5.235	5.235	0.000	98	25810	600.0	574.4	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	76310	1201.2	1250.4	
22 Acenaphthylene	152	5.917	5.917	0.000	100	42172	600.0	567.9	
23 Acenaphthene	153	6.055	6.055	0.000	98	26336	600.0	580.2	
32 Dibenzofuran	168	6.206	6.206	0.000	96	41584	600.6	586.5	
24 Diethyl phthalate	149	6.328	6.328	0.000	100	80314	1204.8	1273.7	
25 Fluorene	166	6.494	6.494	0.000	96	32580	600.0	584.9	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	99	21886	599.2	551.7	
27 Phenanthrene	178	7.321	7.321	0.000	100	49273	600.0	548.2	
28 Anthracene	178	7.366	7.366	0.000	100	51489	600.0	567.3	
29 Di-n-butyl phthalate	149	7.731	7.731	0.000	100	135619	1201.5	1178.4	
30 Fluoranthene	202	8.629	8.629	0.000	100	59948	600.0	580.7	
31 Pyrene	202	8.974	8.974	0.000	100	61264	600.0	572.3	
33 Butyl benzyl phthalate	149	9.957	9.957	0.000	100	60791	1201.5	1142.9	
34 Bis(2-ethylhexyl) phthalat	149	11.236	11.236	0.000	99	96566	1201.8	1232.3	
35 Benzo[a]anthracene	228	11.344	11.344	0.000	98	58500	600.0	566.9	
36 Chrysene	228	11.443	11.443	0.000	100	56571	600.0	592.6	
37 Di-n-octyl phthalate	149	13.164	13.164	0.000	100	138452	1203.3	1055.5	
38 Benzo[b]fluoranthene	252	14.503	14.503	0.000	100	53545	600.0	571.6	
39 Benzo[k]fluoranthene	252	14.586	14.586	0.000	100	54599	600.0	579.5	
40 Benzo[a]pyrene	252	15.587	15.587	0.000	100	51314	600.0	555.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.671	18.671	0.000	81	53428	600.0	509.5	
42 Dibenz(a,h)anthracene	278	18.697	18.697	0.000	86	41906	600.0	512.0	
43 Benzo[g,h,i]perylene	276	19.104	19.104	0.000	99	44961	600.0	505.4	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

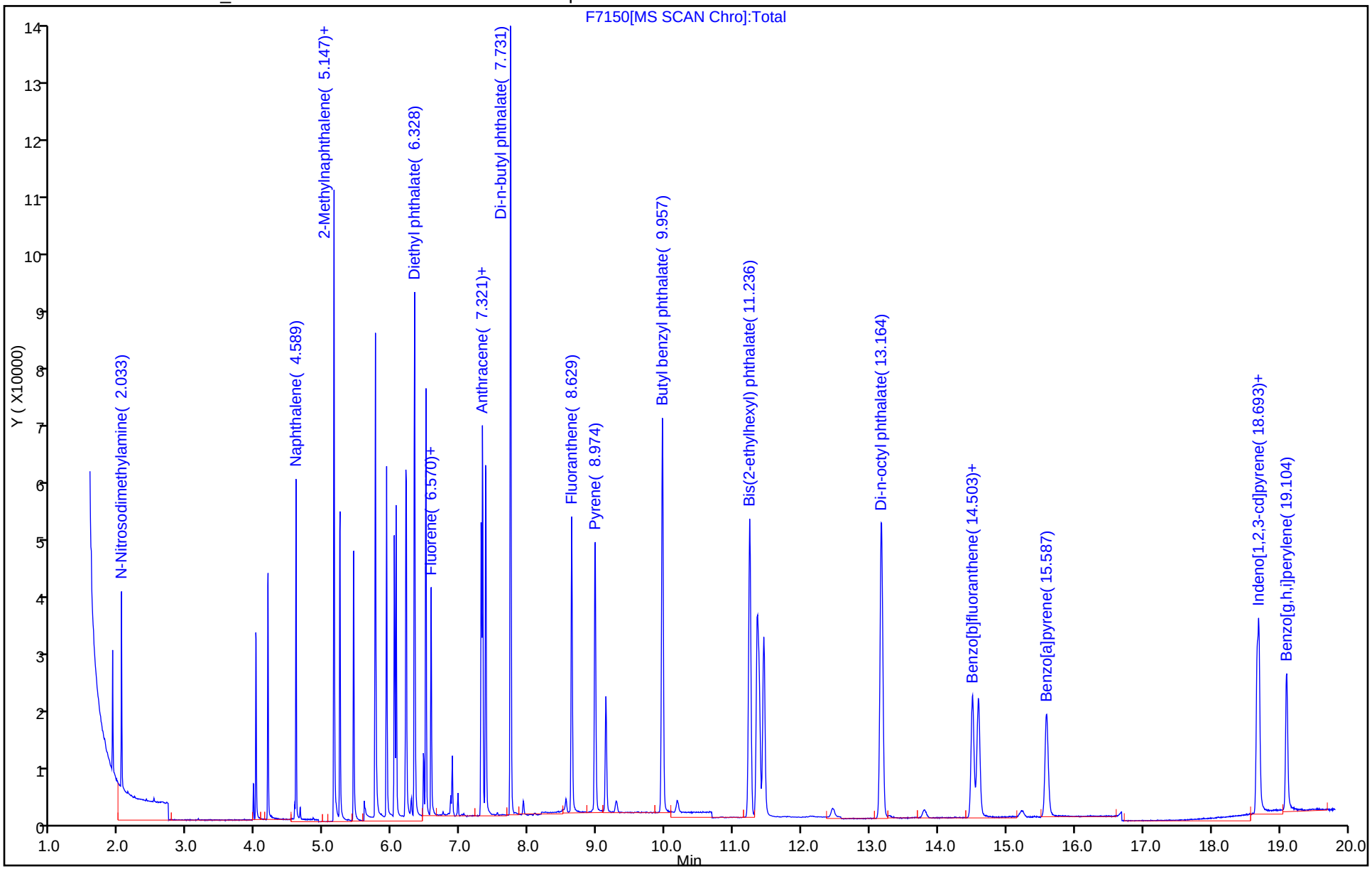
MS-SIMSL 0.6_00125 Amount Added: 1.00 Units: uL

Report Date: 13-Jun-2017 13:37:49 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7150.D

Injection Date:	13-Jun-2017 06:21:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVC 280-377034/18 Calibration Date: 06/13/2017 13:14

Instrument ID: SMS_F Calib Start Date: 05/11/2017 12:58

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/11/2017 16:07

Lab File ID: F7166.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.945	1.700	0.7000	525000	600000	-12.6	50.0
2-Methylnaphthalene	Ave	1.251	1.133	0.4000	1090000	1200000	-9.4	50.0
1-Methylnaphthalene	Ave	1.252	1.179	0.0500	565000	600000	-5.9	50.0
Acenaphthylene	Ave	2.070	1.929	0.9000	559000	600000	-6.8	50.0
Acenaphthene	Ave	1.265	1.211	0.9000	574000	600000	-4.3	50.0
Fluorene	Ave	1.553	1.490	0.9000	576000	600000	-4.0	50.0
Phenanthrene	Ave	1.273	1.152	0.7000	543000	600000	-9.5	50.0
Anthracene	Ave	1.285	1.223	0.7000	571000	600000	-4.8	50.0
Fluoranthene	Ave	1.462	1.371	0.6000	563000	600000	-6.2	50.0
Pyrene	Ave	1.516	1.387	0.6000	549000	600000	-8.5	50.0
Benzo[a]anthracene	Ave	1.596	1.448	0.8000	545000	600000	-9.2	50.0
Chrysene	Ave	1.476	1.465	0.7000	596000	600000	-0.7	50.0
Benzo[b]fluoranthene	Ave	1.449	1.289	0.7000	534000	600000	-11.0	50.0
Benzo[k]fluoranthene	Ave	1.457	1.417	0.7000	583000	600000	-2.8	50.0
Benzo[a]pyrene	Ave	1.430	1.229	0.7000	516000	600000	-14.0	50.0
Indeno[1,2,3-cd]pyrene	Ave	1.622	1.452	0.5000	537000	600000	-10.5	50.0
Dibenz(a,h)anthracene	Ave	1.266	1.137	0.4000	539000	600000	-10.1	50.0
Benzo[g,h,i]perylene	Ave	1.376	1.228	0.5000	536000	600000	-10.7	50.0
Nitrobenzene-d5 (Surr)	Ave	0.9399	0.8332		532000	601000	-11.4	50.0
2-Fluorobiphenyl (Surr)	Ave	1.556	1.558		601000	600000	0.2	50.0
Terphenyl-d14 (Surr)	Ave	0.6092	0.5595		552000	601000	-8.2	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7166.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 13-Jun-2017 13:14:30 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVC
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 13-Jun-2017 13:38:02 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: vasquezk Date: 13-Jun-2017 13:36:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	95	22638	600.0	600.0	
* 2 Phenanthrene-d10	188	7.300	7.300	0.000	100	42917	600.0	600.0	
* 3 Chrysene-d12	240	11.368	11.368	0.000	89	37179	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	100	18880	600.6	532.4	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	99	35279	600.0	601.0	
$ 6 Terphenyl-d14	244	9.130	9.130	0.000	99	24036	600.6	551.6	
9 1,4-Dioxane	88	1.903	1.903	0.000	0	5782	604.8	473.0	M
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	97	9758	600.0	468.9	
14 Naphthalene	128	4.590	4.590	0.000	100	38494	600.0	524.5	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	98	51300	1200.0	1087.3	
17 1-Methylnaphthalene	142	5.230	5.230	0.000	98	26681	600.0	564.6	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	74602	1201.2	1162.4	
22 Acenaphthylene	152	5.917	5.917	0.000	100	43667	600.0	559.2	
23 Acenaphthene	153	6.055	6.055	0.000	100	27419	600.0	574.4	
32 Dibenzofuran	168	6.199	6.199	0.000	86	43544	600.6	584.0	
24 Diethyl phthalate	149	6.320	6.320	0.000	96	75247	1204.8	1134.7	
25 Fluorene	166	6.494	6.494	0.000	94	33733	600.0	575.9	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	97	22449	599.2	558.8	
27 Phenanthrene	178	7.320	7.320	0.000	100	49440	600.0	543.2	
28 Anthracene	178	7.366	7.366	0.000	100	52473	600.0	570.9	
29 Di-n-butyl phthalate	149	7.730	7.730	0.000	100	118988	1201.5	1020.9	
30 Fluoranthene	202	8.628	8.628	0.000	100	58850	600.0	562.9	
31 Pyrene	202	8.973	8.973	0.000	99	59505	600.0	548.8	
33 Butyl benzyl phthalate	149	9.956	9.956	0.000	98	49170	1201.5	912.8	
34 Bis(2-ethylhexyl) phthalat	149	11.233	11.233	0.000	99	76418	1201.8	962.9	
35 Benzo[a]anthracene	228	11.341	11.341	0.000	98	53851	600.0	544.6	
36 Chrysene	228	11.440	11.440	0.000	100	54475	600.0	595.5	
37 Di-n-octyl phthalate	149	13.161	13.161	0.000	100	104541	1203.3	831.8	
38 Benzo[b]fluoranthene	252	14.495	14.495	0.000	100	47942	600.0	534.1	
39 Benzo[k]fluoranthene	252	14.582	14.582	0.000	100	52666	600.0	583.3	
40 Benzo[a]pyrene	252	15.584	15.584	0.000	99	45702	600.0	515.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.668	18.668	0.000	79	53970	600.0	537.1	
42 Dibenz(a,h)anthracene	278	18.698	18.698	0.000	88	42289	600.0	539.2	
43 Benzo[g,h,i]perylene	276	19.101	19.101	0.000	99	45658	600.0	535.6	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

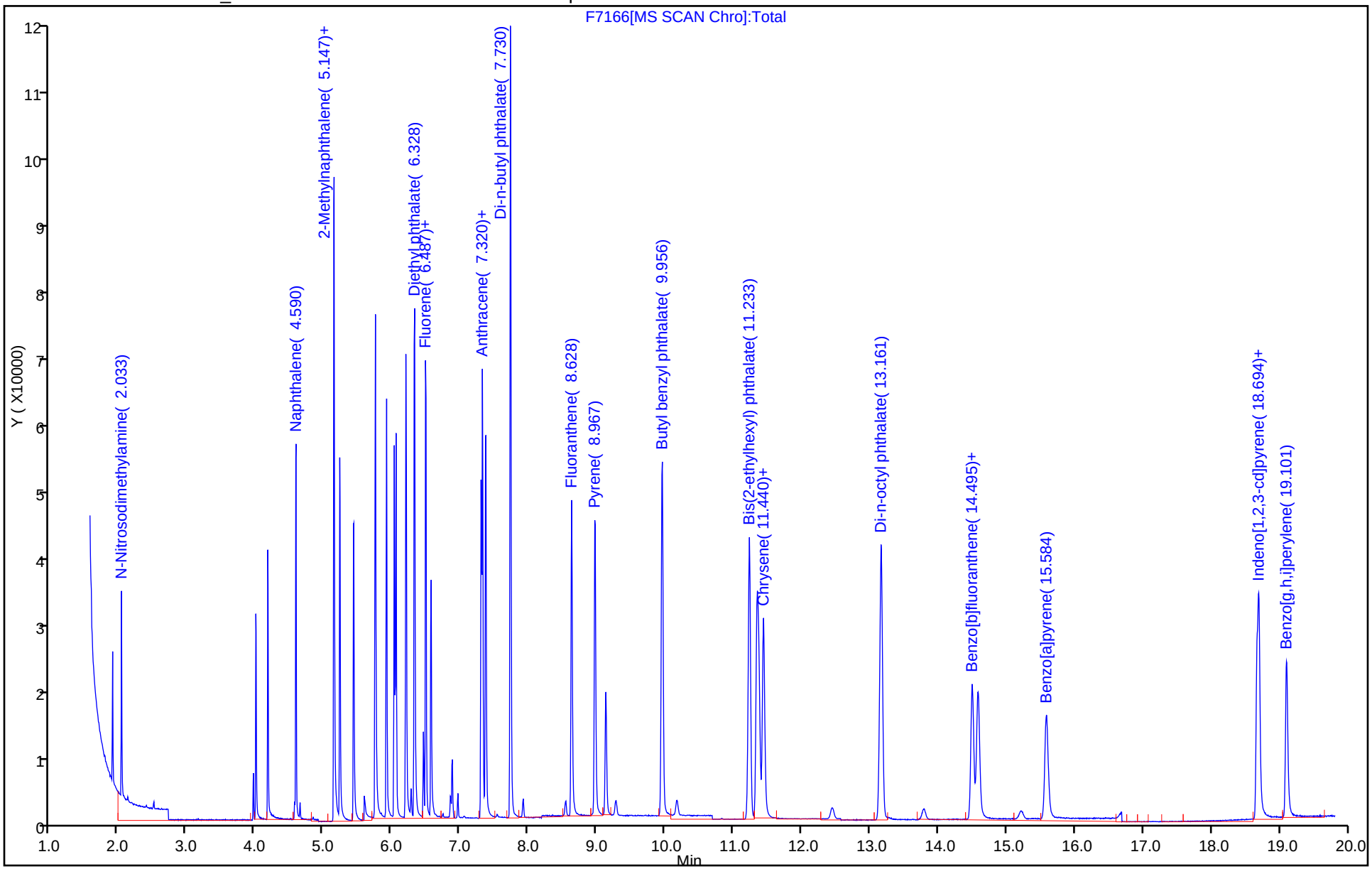
MS-SIMSL 0.6_00125 Amount Added: 1.00 Units: uL

Report Date: 13-Jun-2017 13:38:02 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7166.D

Injection Date:	13-Jun-2017 13:14:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	CCVC			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-378253/2 Calibration Date: 06/21/2017 19:23

Instrument ID: SMS_F Calib Start Date: 05/11/2017 12:58

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/11/2017 16:07

Lab File ID: F7337.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.945	1.661	0.7000	512000	600000	-14.6	20.0
2-Methylnaphthalene	Ave	1.251	1.118	0.4000	1070000	1200000	-10.6	20.0
1-Methylnaphthalene	Ave	1.252	1.195	0.0500	573000	600000	-4.5	20.0
Acenaphthylene	Ave	2.070	1.897	0.9000	550000	600000	-8.4	20.0
Acenaphthene	Ave	1.265	1.205	0.9000	571000	600000	-4.8	20.0
Fluorene	Ave	1.553	1.502	0.9000	580000	600000	-3.3	20.0
Phenanthrene	Ave	1.273	1.173	0.7000	553000	600000	-7.8	20.0
Anthracene	Ave	1.285	1.225	0.7000	572000	600000	-4.7	20.0
Fluoranthene	Ave	1.462	1.432	0.6000	588000	600000	-2.0	20.0
Pyrene	Ave	1.516	1.492	0.6000	590000	600000	-1.6	20.0
Benzo[a]anthracene	Ave	1.596	1.567	0.8000	589000	600000	-1.8	20.0
Chrysene	Ave	1.476	1.478	0.7000	601000	600000	0.1	20.0
Benzo[b]fluoranthene	Ave	1.449	1.420	0.7000	588000	600000	-2.0	20.0
Benzo[k]fluoranthene	Ave	1.457	1.549	0.7000	638000	600000	6.3	20.0
Benzo[a]pyrene	Ave	1.430	1.419	0.7000	595000	600000	-0.8	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.622	1.487	0.5000	550000	600000	-8.3	20.0
Dibenz(a,h)anthracene	Ave	1.266	1.068	0.4000	507000	600000	-15.6	20.0
Benzo[g,h,i]perylene	Ave	1.376	1.181	0.5000	515000	600000	-14.2	20.0
Nitrobenzene-d5 (Surr)	Ave	0.9399	0.8856		566000	601000	-5.8	20.0
2-Fluorobiphenyl (Surr)	Ave	1.556	1.501		579000	600000	-3.5	20.0
Terphenyl-d14 (Surr)	Ave	0.6092	0.5613		553000	601000	-7.9	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7337.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 21-Jun-2017 19:23:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: WICKHAMM Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 22-Jun-2017 16:05:39 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: wickhamm Date: 21-Jun-2017 19:56:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	89	20426	600.0	600.0	
* 2 Phenanthrene-d10	188	7.302	7.302	0.000	100	40605	600.0	600.0	
* 3 Chrysene-d12	240	11.380	11.380	0.000	94	37316	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	18108	600.6	565.9	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	30667	600.0	579.0	
$ 6 Terphenyl-d14	244	9.131	9.131	0.000	98	22813	600.6	553.3	
9 1,4-Dioxane	88	1.903	1.903	0.000	0	5486	604.8	497.4	M
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	94	9723	600.0	517.8	
14 Naphthalene	128	4.586	4.586	0.000	100	33919	600.0	512.3	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	99	45672	1200.0	1072.8	
17 1-Methylnaphthalene	142	5.230	5.230	0.000	98	24418	600.0	572.7	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	71269	1201.2	1230.7	
22 Acenaphthylene	152	5.917	5.917	0.000	100	38744	600.0	549.9	
23 Acenaphthene	153	6.055	6.055	0.000	99	24605	600.0	571.3	
32 Dibenzofuran	168	6.207	6.207	0.000	94	38978	600.6	579.4	
24 Diethyl phthalate	149	6.328	6.328	0.000	100	73713	1204.8	1232.0	
25 Fluorene	166	6.494	6.494	0.000	97	30673	600.0	580.3	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	100	20605	599.2	542.1	
27 Phenanthrene	178	7.328	7.328	0.000	99	47631	600.0	553.1	
28 Anthracene	178	7.373	7.373	0.000	100	49736	600.0	571.9	
29 Di-n-butyl phthalate	149	7.738	7.738	0.000	100	123719	1201.5	1121.9	
30 Fluoranthene	202	8.629	8.629	0.000	100	58140	600.0	587.8	
31 Pyrene	202	8.974	8.974	0.000	100	60564	600.0	590.4	
33 Butyl benzyl phthalate	149	9.957	9.957	0.000	95	56336	1201.5	1105.4	M
34 Bis(2-ethylhexyl) phthalat	149	11.236	11.236	0.000	99	78336	1201.8	1043.3	M
35 Benzo[a]anthracene	228	11.353	11.353	0.000	98	58492	600.0	589.4	
36 Chrysene	228	11.452	11.452	0.000	98	55150	600.0	600.7	
37 Di-n-octyl phthalate	149	13.165	13.165	0.000	99	136165	1203.3	1079.4	
38 Benzo[b]fluoranthene	252	14.512	14.512	0.000	98	52980	600.0	588.0	
39 Benzo[k]fluoranthene	252	14.595	14.595	0.000	97	57785	600.0	637.7	
40 Benzo[a]pyrene	252	15.596	15.596	0.000	74	52937	600.0	595.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.680	18.680	0.000	84	55507	600.0	550.3	
42 Dibenz(a,h)anthracene	278	18.706	18.706	0.000	88	39869	600.0	506.5	
43 Benzo[g,h,i]perylene	276	19.113	19.113	0.000	99	44058	600.0	514.9	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

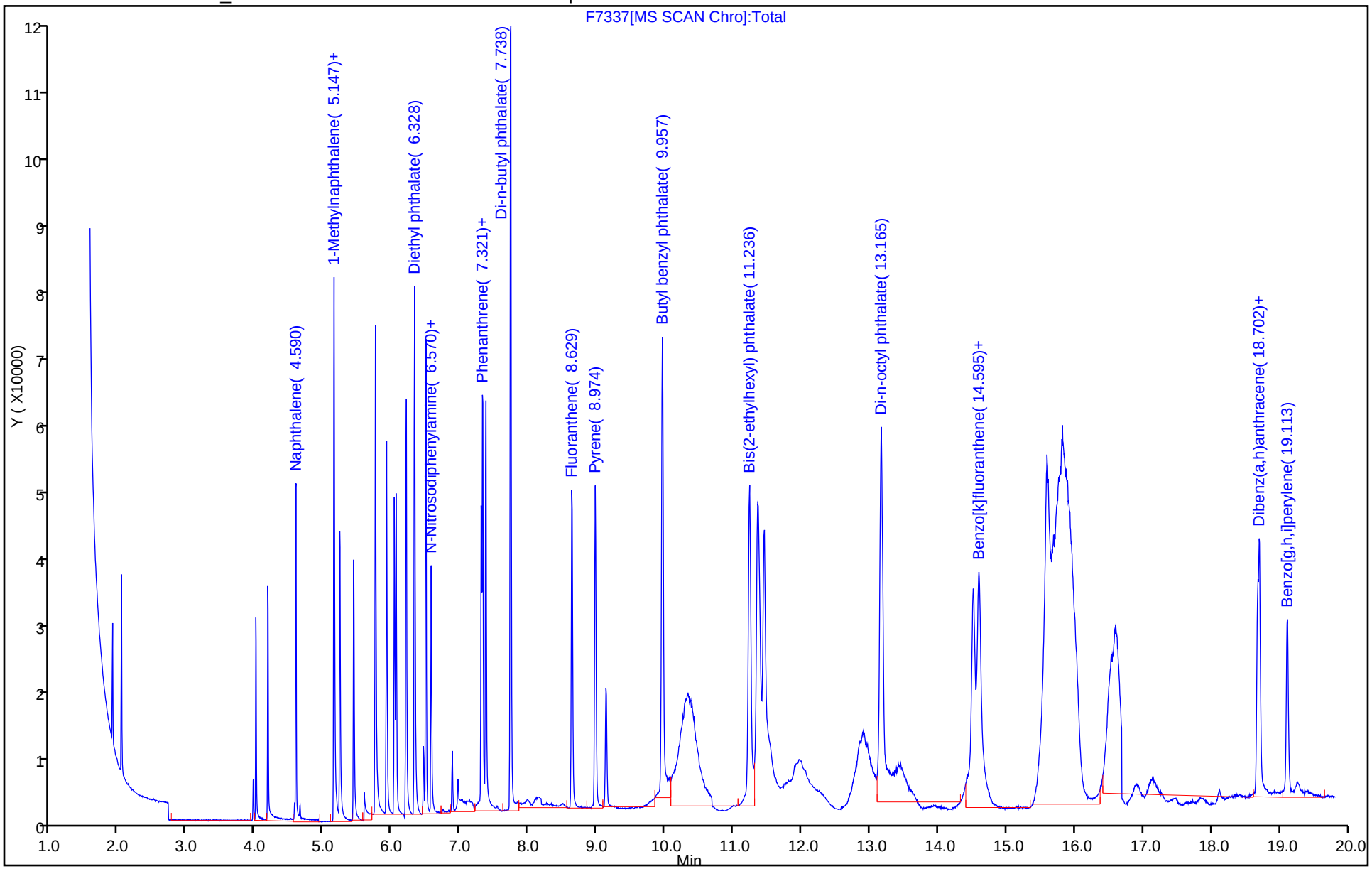
MS-SIMSL 0.6_00125 Amount Added: 1.00 Units: uL

Report Date: 22-Jun-2017 16:05:39 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7337.D

Injection Date:	21-Jun-2017 19:23:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVC 280-378253/24 Calibration Date: 06/22/2017 04:59

Instrument ID: SMS_F Calib Start Date: 05/11/2017 12:58

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/11/2017 16:07

Lab File ID: F7359.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.945	1.608	0.7000	496000	600000	-17.3	50.0
2-Methylnaphthalene	Ave	1.251	1.080	0.4000	1040000	1200000	-13.6	50.0
1-Methylnaphthalene	Ave	1.252	1.145	0.0500	548000	600000	-8.6	50.0
Acenaphthylene	Ave	2.070	1.905	0.9000	552000	600000	-8.0	50.0
Acenaphthene	Ave	1.265	1.195	0.9000	567000	600000	-5.5	50.0
Fluorene	Ave	1.553	1.480	0.9000	572000	600000	-4.7	50.0
Phenanthrene	Ave	1.273	1.148	0.7000	541000	600000	-9.8	50.0
Anthracene	Ave	1.285	1.209	0.7000	564000	600000	-5.9	50.0
Fluoranthene	Ave	1.462	1.419	0.6000	582000	600000	-2.9	50.0
Pyrene	Ave	1.516	1.472	0.6000	583000	600000	-2.9	50.0
Benzo[a]anthracene	Ave	1.596	1.434	0.8000	539000	600000	-10.1	50.0
Chrysene	Ave	1.476	1.514	0.7000	615000	600000	2.6	50.0
Benzo[b]fluoranthene	Ave	1.449	1.246	0.7000	516000	600000	-14.0	50.0
Benzo[k]fluoranthene	Ave	1.457	1.394	0.7000	574000	600000	-4.3	50.0
Benzo[a]pyrene	Ave	1.430	1.241	0.7000	521000	600000	-13.2	50.0
Indeno[1,2,3-cd]pyrene	Ave	1.622	1.256	0.5000	465000	600000	-22.5	50.0
Dibenz(a,h)anthracene	Ave	1.266	0.9801	0.4000	465000	600000	-22.6	50.0
Benzo[g,h,i]perylene	Ave	1.376	1.042	0.5000	454000	600000	-24.3	50.0
Nitrobenzene-d5 (Surr)	Ave	0.9399	0.8123		519000	601000	-13.6	50.0
2-Fluorobiphenyl (Surr)	Ave	1.556	1.492		576000	600000	-4.1	50.0
Terphenyl-d14 (Surr)	Ave	0.6092	0.5449		537000	601000	-10.6	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7359.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 22-Jun-2017 04:59:30 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVC
Operator ID: WICKHAMM Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 22-Jun-2017 16:06:00 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: wickhamm Date: 22-Jun-2017 16:05:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	92	21639	600.0	600.0	
* 2 Phenanthrene-d10	188	7.301	7.301	0.000	100	42719	600.0	600.0	
* 3 Chrysene-d12	240	11.380	11.380	0.000	95	38923	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	17594	600.6	519.1	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	32291	600.0	575.5	
$ 6 Terphenyl-d14	244	9.131	9.131	0.000	98	23302	600.6	537.2	
9 1,4-Dioxane	88	1.903	1.903	0.000	0	8013	604.8	685.8	
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	96	9015	600.0	453.2	
14 Naphthalene	128	4.586	4.586	0.000	100	34794	600.0	496.0	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	100	46744	1200.0	1036.4	
17 1-Methylnaphthalene	142	5.235	5.235	0.000	100	24772	600.0	548.4	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	70818	1201.2	1154.4	
22 Acenaphthylene	152	5.917	5.917	0.000	100	41221	600.0	552.2	
23 Acenaphthene	153	6.055	6.055	0.000	100	25858	600.0	566.7	
32 Dibenzofuran	168	6.207	6.207	0.000	94	41311	600.6	579.6	
24 Diethyl phthalate	149	6.328	6.328	0.000	99	71740	1204.8	1131.8	
25 Fluorene	166	6.494	6.494	0.000	96	32021	600.0	571.9	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	99	22021	599.2	550.7	
27 Phenanthrene	178	7.321	7.321	0.000	100	49021	600.0	541.1	
28 Anthracene	178	7.373	7.373	0.000	100	51635	600.0	564.4	
29 Di-n-butyl phthalate	149	7.731	7.731	0.000	100	116023	1201.5	1000.1	
30 Fluoranthene	202	8.629	8.629	0.000	100	60599	600.0	582.3	
31 Pyrene	202	8.974	8.974	0.000	100	62897	600.0	582.8	
33 Butyl benzyl phthalate	149	9.951	9.951	0.000	100	52134	1201.5	972.3	
34 Bis(2-ethylhexyl) phthalat	149	11.227	11.227	0.000	100	69984	1201.8	886.0	
35 Benzo[a]anthracene	228	11.353	11.353	0.000	98	55821	600.0	539.3	
36 Chrysene	228	11.443	11.443	0.000	100	58935	600.0	615.4	
37 Di-n-octyl phthalate	149	13.156	13.156	0.000	100	112186	1203.3	852.6	
38 Benzo[b]fluoranthene	252	14.512	14.512	0.000	100	48500	600.0	516.1	
39 Benzo[k]fluoranthene	252	14.595	14.595	0.000	100	54250	600.0	573.9	
40 Benzo[a]pyrene	252	15.601	15.601	0.000	100	48298	600.0	520.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.680	18.680	0.000	81	48897	600.0	464.8	
42 Dibenz(a,h)anthracene	278	18.706	18.706	0.000	95	38150	600.0	464.7	
43 Benzo[g,h,i]perylene	276	19.118	19.118	0.000	100	40556	600.0	454.4	

Reagents:

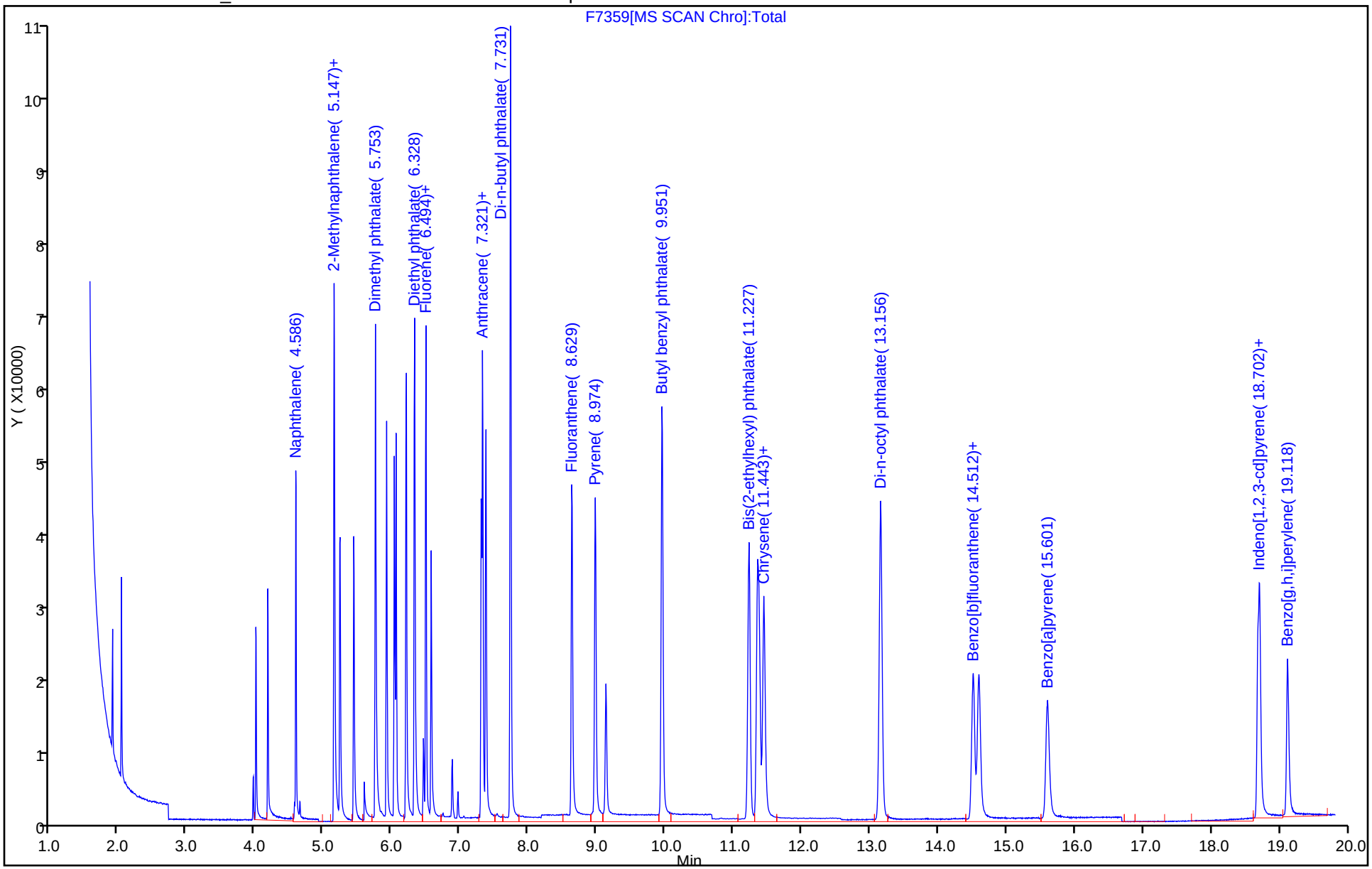
MS-SIMSL 0.6_00125 Amount Added: 1.00 Units: uL

Report Date: 22-Jun-2017 16:06:00 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7359.D

Injection Date:	22-Jun-2017 04:59:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	CCVC			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-378412/2 Calibration Date: 06/22/2017 17:25

Instrument ID: SMS_F Calib Start Date: 05/11/2017 12:58

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/11/2017 16:07

Lab File ID: F7362.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.945	1.658	0.7000	512000	600000	-14.7	20.0
2-Methylnaphthalene	Ave	1.251	1.094	0.4000	1050000	1200000	-12.5	20.0
1-Methylnaphthalene	Ave	1.252	1.125	0.0500	539000	600000	-10.2	20.0
Acenaphthylene	Ave	2.070	1.892	0.9000	549000	600000	-8.6	20.0
Acenaphthene	Ave	1.265	1.254	0.9000	595000	600000	-0.9	20.0
Fluorene	Ave	1.553	1.500	0.9000	580000	600000	-3.4	20.0
Phenanthrene	Ave	1.273	1.207	0.7000	569000	600000	-5.1	20.0
Anthracene	Ave	1.285	1.244	0.7000	581000	600000	-3.2	20.0
Fluoranthene	Ave	1.462	1.405	0.6000	577000	600000	-3.9	20.0
Pyrene	Ave	1.516	1.452	0.6000	575000	600000	-4.2	20.0
Benzo[a]anthracene	Ave	1.596	1.571	0.8000	591000	600000	-1.5	20.0
Chrysene	Ave	1.476	1.530	0.7000	622000	600000	3.7	20.0
Benzo[b]fluoranthene	Ave	1.449	1.458	0.7000	604000	600000	0.7	20.0
Benzo[k]fluoranthene	Ave	1.457	1.569	0.7000	646000	600000	7.7	20.0
Benzo[a]pyrene	Ave	1.430	1.489	0.7000	625000	600000	4.2	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.622	1.588	0.5000	587000	600000	-2.1	20.0
Dibenz(a,h)anthracene	Ave	1.266	1.118	0.4000	530000	600000	-11.7	20.0
Benzo[g,h,i]perylene	Ave	1.376	1.231	0.5000	537000	600000	-10.5	20.0
Nitrobenzene-d5 (Surr)	Ave	0.9399	0.8502		543000	601000	-9.5	20.0
2-Fluorobiphenyl (Surr)	Ave	1.556	1.493		576000	600000	-4.1	20.0
Terphenyl-d14 (Surr)	Ave	0.6092	0.5590		551000	601000	-8.2	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7362.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 22-Jun-2017 17:25:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: WICKHAMM Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 23-Jun-2017 21:52:47 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK016

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	92	19703	600.0	600.0	
* 2 Phenanthrene-d10	188	7.301	7.301	0.000	100	39811	600.0	600.0	
* 3 Chrysene-d12	240	11.377	11.377	0.000	96	35319	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	100	16769	600.6	543.3	
$ 5 2-Fluorobiphenyl	172	5.435	5.435	0.000	100	29408	600.0	575.6	
$ 6 Terphenyl-d14	244	9.130	9.130	0.000	99	22276	600.6	551.1	
9 1,4-Dioxane	88	1.902	1.902	0.000	0	30674	604.8	2883.2	
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	98	9082	600.0	501.4	
14 Naphthalene	128	4.586	4.586	0.000	100	32671	600.0	511.5	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	97	43116	1200.0	1049.9	
17 1-Methylnaphthalene	142	5.230	5.230	0.000	99	22171	600.0	539.1	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	69946	1201.2	1252.2	
22 Acenaphthylene	152	5.917	5.917	0.000	100	37282	600.0	548.5	
23 Acenaphthene	153	6.055	6.055	0.000	100	24704	600.0	594.6	
32 Dibenzofuran	168	6.206	6.206	0.000	95	37691	600.6	580.8	
24 Diethyl phthalate	149	6.320	6.320	0.000	96	73794	1204.8	1278.6	
25 Fluorene	166	6.494	6.494	0.000	95	29547	600.0	579.5	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	98	20424	599.2	548.0	
27 Phenanthrene	178	7.321	7.321	0.000	99	48059	600.0	569.2	
28 Anthracene	178	7.366	7.366	0.000	100	49513	600.0	580.7	
29 Di-n-butyl phthalate	149	7.731	7.731	0.000	100	120912	1201.5	1118.3	
30 Fluoranthene	202	8.629	8.629	0.000	100	55937	600.0	576.8	
31 Pyrene	202	8.967	8.967	0.000	100	57797	600.0	574.7	
33 Butyl benzyl phthalate	149	9.951	9.951	0.000	98	67920	1201.5	1359.3	
34 Bis(2-ethylhexyl) phthalat	149	11.224	11.224	0.000	98	108433	1201.8	1473.0	
35 Benzo[a]anthracene	228	11.341	11.341	0.000	96	55500	600.0	590.9	
36 Chrysene	228	11.440	11.440	0.000	98	54045	600.0	622.0	
37 Di-n-octyl phthalate	149	13.157	13.157	0.000	99	152078	1203.3	1273.7	
38 Benzo[b]fluoranthene	252	14.500	14.500	0.000	98	51503	600.0	604.0	
39 Benzo[k]fluoranthene	252	14.587	14.587	0.000	97	55400	600.0	645.9	
40 Benzo[a]pyrene	252	15.589	15.589	0.000	81	52597	600.0	625.0	
41 Indeno[1,2,3-cd]pyrene	276	18.673	18.673	0.000	82	56083	600.0	587.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
42 Dibenz(a,h)anthracene	278	18.704	18.704	0.000	88	39477	600.0	529.9	
43 Benzo[g,h,i]perylene	276	19.110	19.110	0.000	99	43487	600.0	537.0	

Reagents:

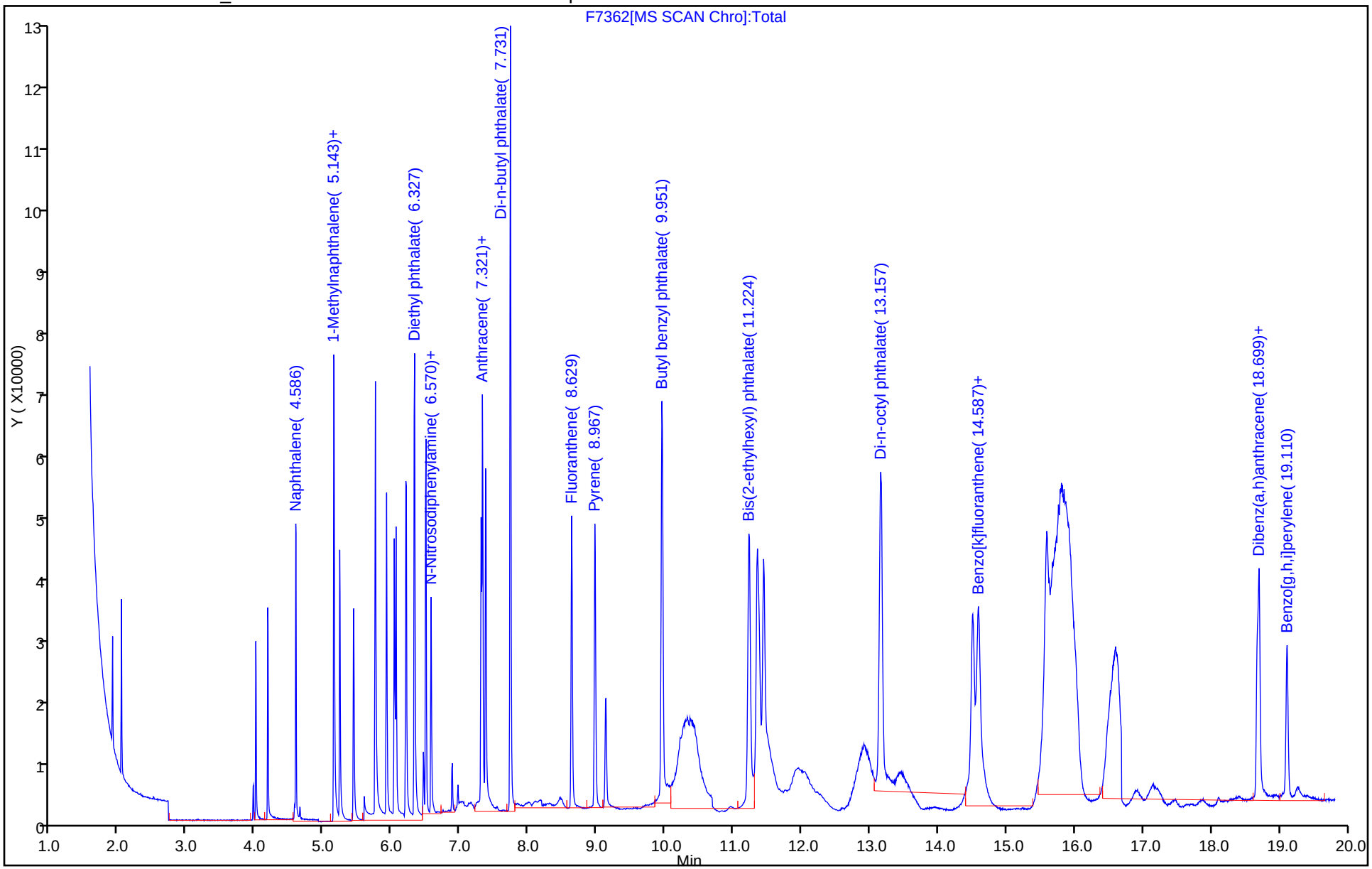
MS-SIMSL 0.6_00125 Amount Added: 1.00 Units: uL

Report Date: 23-Jun-2017 21:52:48 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7362.D

Injection Date:	22-Jun-2017 17:25:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVC 280-378412/27 Calibration Date: 06/23/2017 04:14

Instrument ID: SMS_F Calib Start Date: 05/11/2017 12:58

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/11/2017 16:07

Lab File ID: F7387.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.945	1.571	0.7000	485000	600000	-19.2	50.0
2-Methylnaphthalene	Ave	1.251	1.068	0.4000	1020000	1200000	-14.6	50.0
1-Methylnaphthalene	Ave	1.252	1.108	0.0500	531000	600000	-11.5	50.0
Acenaphthylene	Ave	2.070	1.912	0.9000	554000	600000	-7.6	50.0
Acenaphthene	Ave	1.265	1.250	0.9000	593000	600000	-1.2	50.0
Fluorene	Ave	1.553	1.536	0.9000	594000	600000	-1.1	50.0
Phenanthrene	Ave	1.273	1.143	0.7000	539000	600000	-10.1	50.0
Anthracene	Ave	1.285	1.197	0.7000	559000	600000	-6.9	50.0
Fluoranthene	Ave	1.462	1.399	0.6000	574000	600000	-4.3	50.0
Pyrene	Ave	1.516	1.431	0.6000	566000	600000	-5.6	50.0
Benzo[a]anthracene	Ave	1.596	1.410	0.8000	530000	600000	-11.6	50.0
Chrysene	Ave	1.476	1.512	0.7000	615000	600000	2.5	50.0
Benzo[b]fluoranthene	Ave	1.449	1.245	0.7000	516000	600000	-14.0	50.0
Benzo[k]fluoranthene	Ave	1.457	1.390	0.7000	572000	600000	-4.6	50.0
Benzo[a]pyrene	Ave	1.430	1.181	0.7000	496000	600000	-17.4	50.0
Indeno[1,2,3-cd]pyrene	Ave	1.622	1.271	0.5000	470000	600000	-21.6	50.0
Dibenz(a,h)anthracene	Ave	1.266	0.9883	0.4000	469000	600000	-21.9	50.0
Benzo[g,h,i]perylene	Ave	1.376	1.055	0.5000	460000	600000	-23.3	50.0
Nitrobenzene-d5 (Surr)	Ave	0.9399	0.7740		495000	601000	-17.6	50.0
2-Fluorobiphenyl (Surr)	Ave	1.556	1.474		569000	600000	-5.2	50.0
Terphenyl-d14 (Surr)	Ave	0.6092	0.5505		543000	601000	-9.6	50.0

Report Date: 23-Jun-2017 21:53:37 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7387.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 23-Jun-2017 04:14:30 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVC
Operator ID: WICKHAMM Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 23-Jun-2017 21:53:37 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: wickhamm Date: 23-Jun-2017 21:51:28

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	92	21307	600.0	600.0	
* 2 Phenanthrene-d10	188	7.301	7.301	0.000	100	44359	600.0	600.0	
* 3 Chrysene-d12	240	11.380	11.380	0.000	95	39740	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	16509	600.6	494.6	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	31411	600.0	568.6	
$ 6 Terphenyl-d14	244	9.131	9.131	0.000	99	24442	600.6	542.7	
9 1,4-Dioxane	88	1.903	1.903	0.000	0	5013	604.8	435.7	M
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	90	9209	600.0	470.1	
14 Naphthalene	128	4.586	4.586	0.000	100	33466	600.0	484.5	
16 2-Methylnaphthalene	142	5.152	5.152	0.000	99	45502	1200.0	1024.6	
17 1-Methylnaphthalene	142	5.235	5.235	0.000	100	23617	600.0	531.0	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	72465	1201.2	1199.6	
22 Acenaphthylene	152	5.917	5.917	0.000	100	40741	600.0	554.3	
23 Acenaphthene	153	6.055	6.055	0.000	100	26643	600.0	593.0	
32 Dibenzofuran	168	6.207	6.207	0.000	94	41529	600.6	591.7	
24 Diethyl phthalate	149	6.328	6.328	0.000	100	75334	1204.8	1207.0	
25 Fluorene	166	6.494	6.494	0.000	97	32722	600.0	593.5	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	100	22506	599.2	542.0	
27 Phenanthrene	178	7.321	7.321	0.000	99	50719	600.0	539.1	
28 Anthracene	178	7.373	7.373	0.000	100	53092	600.0	558.9	
29 Di-n-butyl phthalate	149	7.731	7.731	0.000	100	123240	1201.5	1023.0	
30 Fluoranthene	202	8.629	8.629	0.000	100	62066	600.0	574.4	
31 Pyrene	202	8.974	8.974	0.000	100	63460	600.0	566.3	
33 Butyl benzyl phthalate	149	9.951	9.951	0.000	100	53872	1201.5	967.6	
34 Bis(2-ethylhexyl) phthalat	149	11.218	11.218	0.000	99	70894	1201.8	864.3	
35 Benzo[a]anthracene	228	11.344	11.344	0.000	98	56051	600.0	530.3	
36 Chrysene	228	11.443	11.443	0.000	100	60105	600.0	614.7	
37 Di-n-octyl phthalate	149	13.151	13.151	0.000	100	114079	1203.3	849.1	
38 Benzo[b]fluoranthene	252	14.507	14.507	0.000	100	49495	600.0	515.8	
39 Benzo[k]fluoranthene	252	14.590	14.590	0.000	100	55240	600.0	572.4	
40 Benzo[a]pyrene	252	15.596	15.596	0.000	100	46927	600.0	495.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.684	18.684	0.000	88	50515	600.0	470.3	
42 Dibenz(a,h)anthracene	278	18.706	18.706	0.000	93	39275	600.0	468.5	
43 Benzo[g,h,i]perylene	276	19.118	19.118	0.000	100	41922	600.0	460.1	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

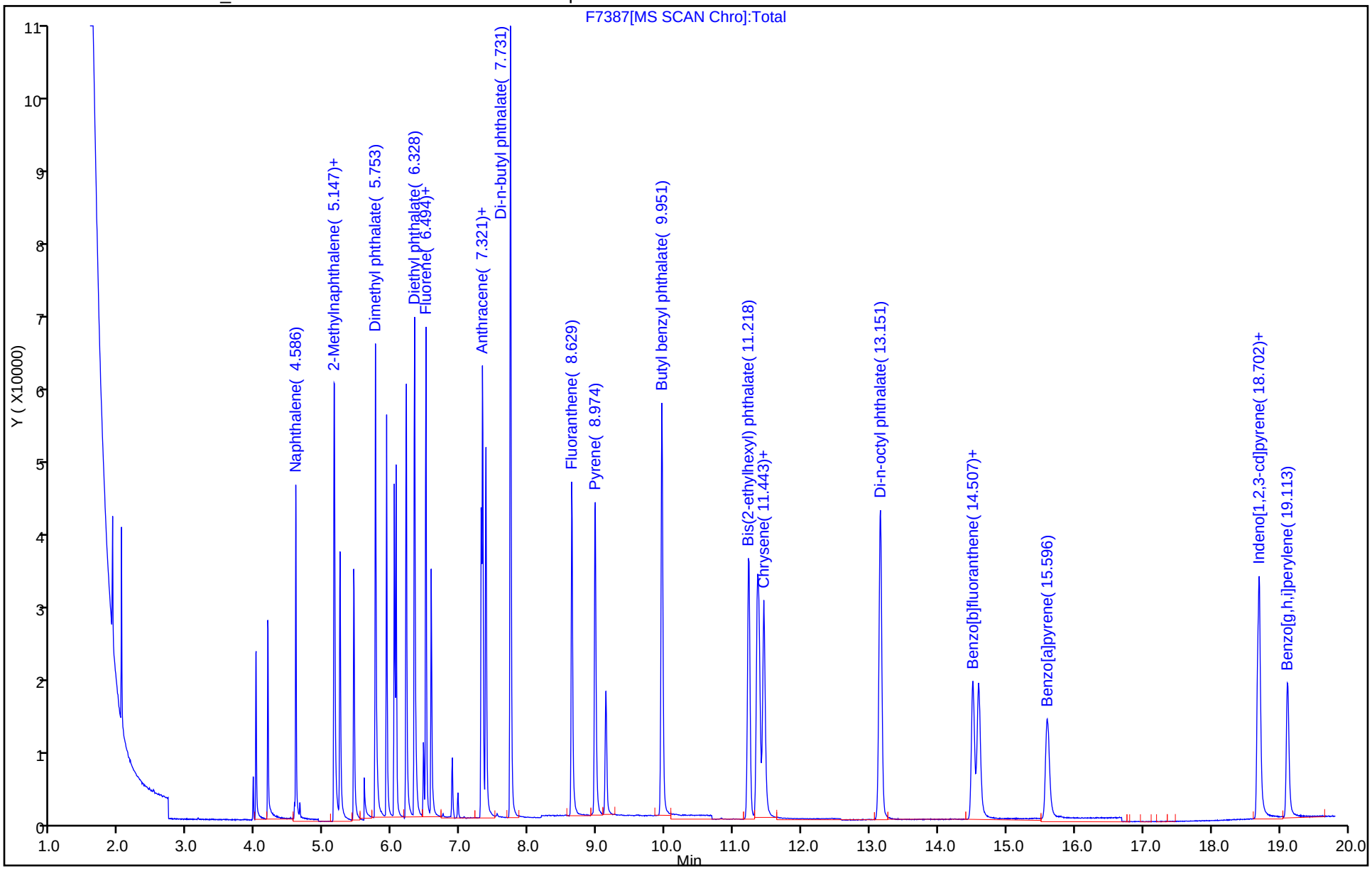
MS-SIMSL 0.6_00125 Amount Added: 1.00 Units: uL

Report Date: 23-Jun-2017 21:53:37 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7387.D

Injection Date:	23-Jun-2017 04:14:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	CCVC			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-375238/10 Calibration Date: 06/01/2017 14:20

Instrument ID: SMS_G5 Calib Start Date: 06/01/2017 10:39

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 06/01/2017 13:53

Lab File ID: G5_1351.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.526	1.560	0.7000	1230000	1200000	2.2	20.0
2-Methylnaphthalene	Ave	1.068	1.128	0.4000	1270000	1200000	5.6	20.0
1-Methylnaphthalene	Ave	1.072	1.082	0.0500	1210000	1200000	0.9	20.0
Acenaphthylene	Ave	1.682	1.822	0.9000	1300000	1200000	8.4	20.0
Acenaphthene	Ave	1.145	1.230	0.9000	1290000	1200000	7.4	20.0
Fluorene	Ave	1.378	1.452	0.9000	1260000	1200000	5.4	20.0
Phenanthrene	Ave	1.137	1.182	0.7000	1250000	1200000	4.0	20.0
Anthracene	Ave	1.062	1.135	0.7000	1280000	1200000	6.9	20.0
Fluoranthene	Ave	1.418	1.503	0.6000	1270000	1200000	6.0	20.0
Pyrene	Ave	1.474	1.515	0.6000	1230000	1200000	2.8	20.0
Benzo[a]anthracene	Ave	1.236	1.314	0.8000	1280000	1200000	6.3	20.0
Chrysene	Ave	1.272	1.362	0.7000	1280000	1200000	7.1	20.0
Benzo[b]fluoranthene	Ave	1.151	1.115	0.7000	1160000	1200000	-3.1	20.0
Benzo[k]fluoranthene	Ave	1.170	1.168	0.7000	1200000	1200000	-0.2	20.0
Benzo[a]pyrene	Ave	1.022	0.9316	0.7000	1090000	1200000	-8.8	20.0
Indeno[1,2,3-cd]pyrene	Ave	0.9931	0.8970	0.5000	1080000	1200000	-9.7	20.0
Dibenz(a,h)anthracene	Ave	1.025	0.9850	0.4000	1150000	1200000	-3.9	20.0
Benzo[g,h,i]perylene	Ave	1.133	1.125	0.5000	1190000	1200000	-0.7	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1351.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 01-Jun-2017 14:20:30 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: VASQUEZK Instrument ID: SMS_G5
Sublist:

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jun-2017 12:06:21 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: vasquezk Date: 01-Jun-2017 14:51:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	5.987	5.987	0.000	95	22207	600.0	600.0	
* 3 Phenanthrene-d10	188	7.249	7.255	-0.006	100	44089	600.0	600.0	
* 1 Chrysene-d12	240	11.224	11.230	-0.006	91	50499	600.0	600.0	
43 1,4-Dioxane	88	1.879	1.879	0.000	97	8355	1200.0	1159.6	
7 N-Nitrosodimethylamine	42	2.003	2.004	-0.001	93	13205	1200.0	1032.4	
15 Naphthalene	128	4.549	4.550	-0.001	100	69284	1200.0	1226.8	
16 2-Methylnaphthalene	142	5.105	5.105	0.000	100	50092	1200.0	1267.5	
17 1-Methylnaphthalene	142	5.194	5.194	0.000	99	48045	1200.0	1210.6	
18 Dimethyl phthalate	163	5.710	5.710	0.000	100	64844	1200.0	1252.0	
20 Acenaphthylene	152	5.873	5.873	0.000	100	80936	1200.0	1300.3	
21 Acenaphthene	153	6.015	6.015	0.000	98	54649	1200.0	1289.2	
19 Dibenzofuran	168	6.159	6.159	0.000	97	84770	1200.0	1251.8	
22 Diethyl phthalate	149	6.284	6.284	0.000	99	62538	1200.0	1240.1	
23 Fluorene	166	6.447	6.447	0.000	98	64482	1200.0	1264.3	
24 N-Nitrosodiphenylamine	169	6.522	6.522	0.000	96	46741	1200.0	1432.7	
25 Phenanthrene	178	7.271	7.271	0.000	100	104244	1200.0	1248.1	
26 Anthracene	178	7.314	7.314	0.000	100	100103	1200.0	1282.8	
27 Di-n-butyl phthalate	149	7.682	7.688	-0.006	100	94258	1200.0	1146.5	
28 Fluoranthene	202	8.545	8.550	-0.005	100	132556	1200.0	1271.9	
29 Pyrene	202	8.881	8.881	0.000	100	133608	1200.0	1233.4	
30 Butyl benzyl phthalate	149	9.868	9.869	-0.001	99	37209	1200.0	1105.7	
31 Bis(2-ethylhexyl) phthalat	149	11.132	11.132	0.000	100	56739	1200.0	1170.8	
32 Benzo[a]anthracene	228	11.197	11.203	-0.006	98	132667	1200.0	1275.8	
33 Chrysene	228	11.289	11.295	-0.006	100	137587	1200.0	1285.0	
34 Di-n-octyl phthalate	149	13.032	13.035	-0.003	100	78648	1200.0	953.6	
35 Benzo[b]fluoranthene	252	14.272	14.279	-0.007	99	112644	1200.0	1163.2	
36 Benzo[k]fluoranthene	252	14.358	14.365	-0.007	98	117935	1200.0	1197.7	
37 Benzo[a]pyrene	252	15.330	15.337	-0.007	98	94085	1200.0	1094.1	
39 Indeno[1,2,3-cd]pyrene	276	18.502	18.502	0.000	100	90599	1200.0	1084.0	
38 Dibenz(a,h)anthracene	278	18.543	18.543	0.000	98	99486	1200.0	1152.7	
40 Benzo[g,h,i]perylene	276	18.920	18.924	-0.004	99	113660	1200.0	1191.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
42 Pentachlorophenol	266		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

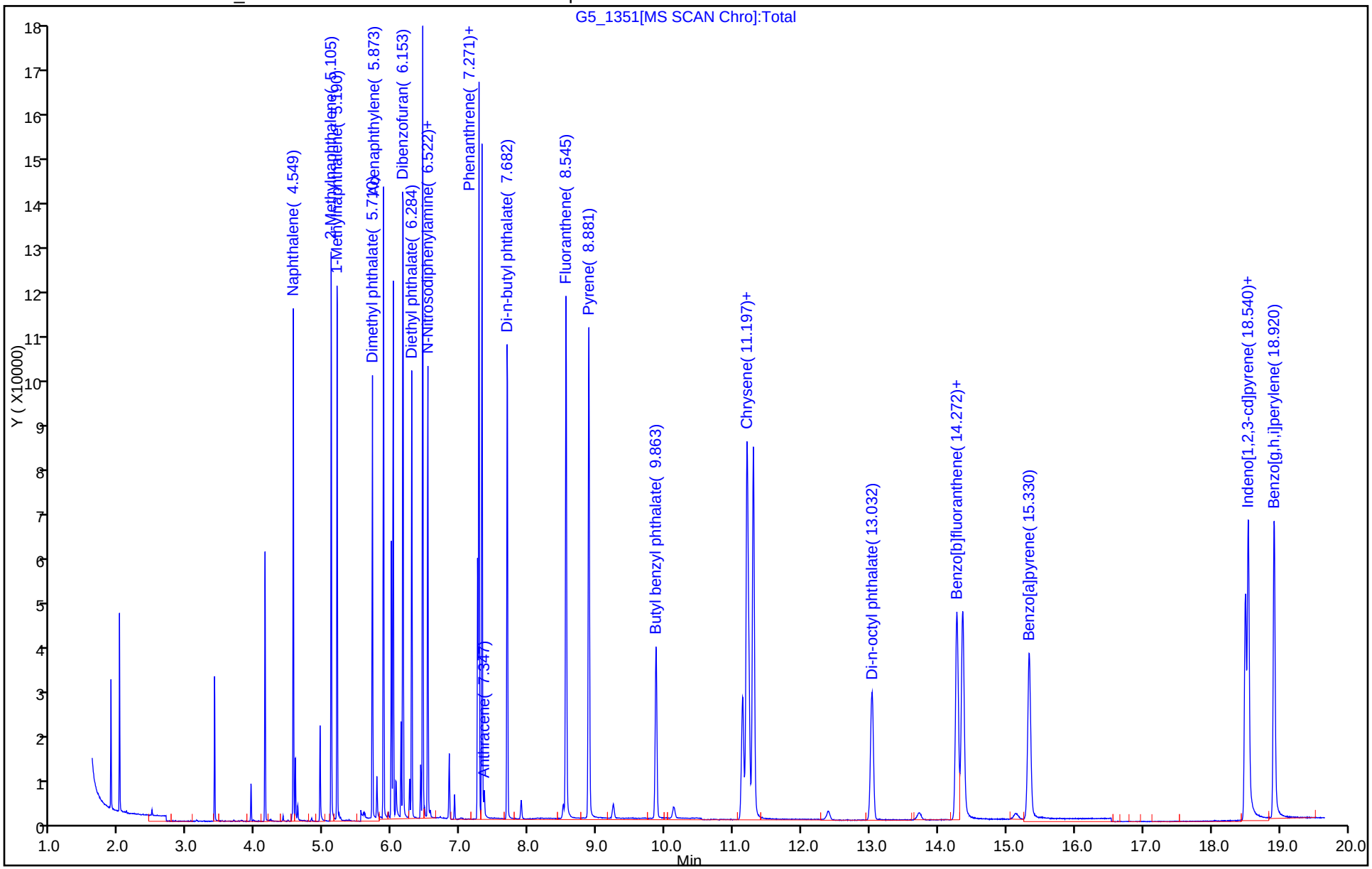
MS-SIM SSV_00116 Amount Added: 1.00 Units: uL

Report Date: 02-Jun-2017 12:06:23 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1351.D

Injection Date:	01-Jun-2017 14:20:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	ICV			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-376547/2 Calibration Date: 06/08/2017 09:13

Instrument ID: SMS_G5 Calib Start Date: 06/01/2017 10:39

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 06/01/2017 13:53

Lab File ID: G5_1428.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.526	1.386	0.7000	545000	600000	-9.2	20.0
2-Methylnaphthalene	Ave	1.068	1.025	0.4000	1150000	1200000	-4.0	20.0
1-Methylnaphthalene	Ave	1.072	1.002	0.0500	560000	600000	-6.6	20.0
Acenaphthylene	Ave	1.682	1.661	0.9000	593000	600000	-1.2	20.0
Acenaphthene	Ave	1.145	1.082	0.9000	567000	600000	-5.6	20.0
Fluorene	Ave	1.378	1.359	0.9000	592000	600000	-1.4	20.0
Phenanthrene	Ave	1.137	1.062	0.7000	561000	600000	-6.6	20.0
Anthracene	Ave	1.062	1.090	0.7000	616000	600000	2.6	20.0
Fluoranthene	Ave	1.418	1.366	0.6000	578000	600000	-3.7	20.0
Pyrene	Ave	1.474	1.420	0.6000	578000	600000	-3.7	20.0
Benzo[a]anthracene	Ave	1.236	1.276	0.8000	620000	600000	3.3	20.0
Chrysene	Ave	1.272	1.246	0.7000	587000	600000	-2.1	20.0
Benzo[b]fluoranthene	Ave	1.151	1.221	0.7000	637000	600000	6.1	20.0
Benzo[k]fluoranthene	Ave	1.170	1.263	0.7000	648000	600000	7.9	20.0
Benzo[a]pyrene	Ave	1.022	1.190	0.7000	699000	600000	16.5	20.0
Indeno[1,2,3-cd]pyrene	Ave	0.9931	1.036	0.5000	626000	600000	4.3	20.0
Dibenz(a,h)anthracene	Ave	1.025	1.112	0.4000	651000	600000	8.5	20.0
Benzo[g,h,i]perylene	Ave	1.133	1.155	0.5000	612000	600000	1.9	20.0
Nitrobenzene-d5 (Surr)	Ave	0.5729	0.4618		484000	601000	-19.4	20.0
2-Fluorobiphenyl (Surr)	Ave	1.448	1.375		569000	600000	-5.1	20.0
Terphenyl-d14 (Surr)	Ave	0.7870	0.7452		569000	601000	-5.3	20.0

Report Date: 11-Jun-2017 22:45:02 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1428.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 08-Jun-2017 09:13:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: VASQUEZK Instrument ID: SMS_G5
Sublist: chrom-SMSG5_SIMX*sub2

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 11-Jun-2017 22:45:01 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 08-Jun-2017 09:56:25

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	5.987	5.987	0.000	93	21585	600.0	600.0	
* 3 Phenanthrene-d10	188	7.249	7.249	0.000	100	43419	600.0	600.0	
* 1 Chrysene-d12	240	11.224	11.224	0.000	98	47968	600.0	600.0	
$ 4 Nitrobenzene-d5	82	3.959	3.959	0.000	99	9977	600.6	484.1	
$ 5 2-Fluorobiphenyl	172	5.391	5.391	0.000	100	29672	600.0	569.4	
$ 6 Terphenyl-d14	244	9.044	9.044	0.000	100	32387	600.6	568.7	
43 1,4-Dioxane	88	1.879	1.879	0.000	87	3523	604.8	503.0	M
7 N-Nitrosodimethylamine	42	2.004	2.004	0.000	91	6513	600.0	523.9	
15 Naphthalene	128	4.550	4.550	0.000	100	29914	600.0	545.0	
16 2-Methylnaphthalene	142	5.105	5.105	0.000	99	44255	1200.0	1152.0	
17 1-Methylnaphthalene	142	5.190	5.190	0.000	98	21620	600.0	560.5	
18 Dimethyl phthalate	163	5.710	5.710	0.000	100	59380	1201.2	1179.6	
20 Acenaphthylene	152	5.873	5.873	0.000	100	35848	600.0	592.5	
21 Acenaphthene	153	6.015	6.015	0.000	98	23349	600.0	566.7	
19 Dibenzofuran	168	6.159	6.159	0.000	98	36437	600.6	553.6	
22 Diethyl phthalate	149	6.284	6.284	0.000	99	58902	1204.8	1201.6	
23 Fluorene	166	6.447	6.447	0.000	97	29334	600.0	591.7	
24 N-Nitrosodiphenylamine	169	6.522	6.522	0.000	98	19775	599.2	615.5	
25 Phenanthrene	178	7.271	7.271	0.000	100	46119	600.0	560.7	
26 Anthracene	178	7.314	7.314	0.000	100	47318	600.0	615.7	
27 Di-n-butyl phthalate	149	7.683	7.683	0.000	100	102137	1201.5	1261.5	
28 Fluoranthene	202	8.545	8.545	0.000	100	59301	600.0	577.8	
29 Pyrene	202	8.881	8.881	0.000	100	61667	600.0	578.1	
30 Butyl benzyl phthalate	149	9.863	9.863	0.000	97	45286	1201.5	1366.5	
31 Bis(2-ethylhexyl) phthalat	149	11.127	11.127	0.000	100	65056	1201.8	1363.2	
32 Benzo[a]anthracene	228	11.197	11.197	0.000	99	61212	600.0	619.7	
33 Chrysene	228	11.290	11.290	0.000	100	59748	600.0	587.4	
34 Di-n-octyl phthalate	149	13.028	13.028	0.000	100	109475	1203.3	1397.4	
35 Benzo[b]fluoranthene	252	14.276	14.276	0.000	100	58554	600.0	636.6	
36 Benzo[k]fluoranthene	252	14.361	14.361	0.000	99	60581	600.0	647.7	
37 Benzo[a]pyrene	252	15.333	15.333	0.000	99	57102	600.0	699.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
39 Indeno[1,2,3-cd]pyrene	276	18.502	18.502	0.000	100	49695	600.0	625.9	M
38 Dibenz(a,h)anthracene	278	18.543	18.543	0.000	97	53354	600.0	650.8	
40 Benzo[g,h,i]perylene	276	18.924	18.924	0.000	100	55403	600.0	611.6	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

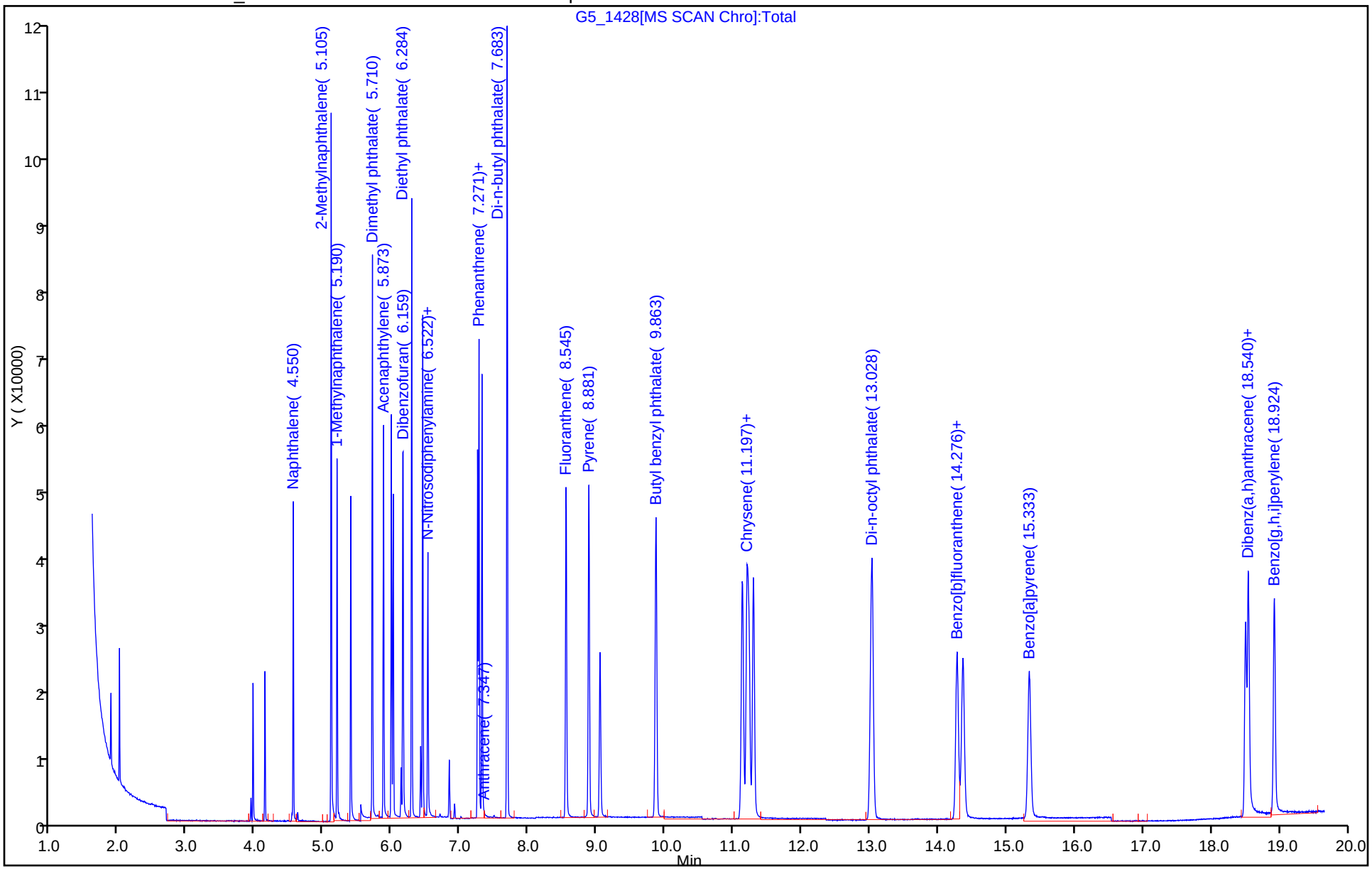
MS-SIMSL 0.6_00125 Amount Added: 1.00 Units: uL

Report Date: 11-Jun-2017 22:45:02 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1428.D

Injection Date:	08-Jun-2017 09:13:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

TestAmerica Denver

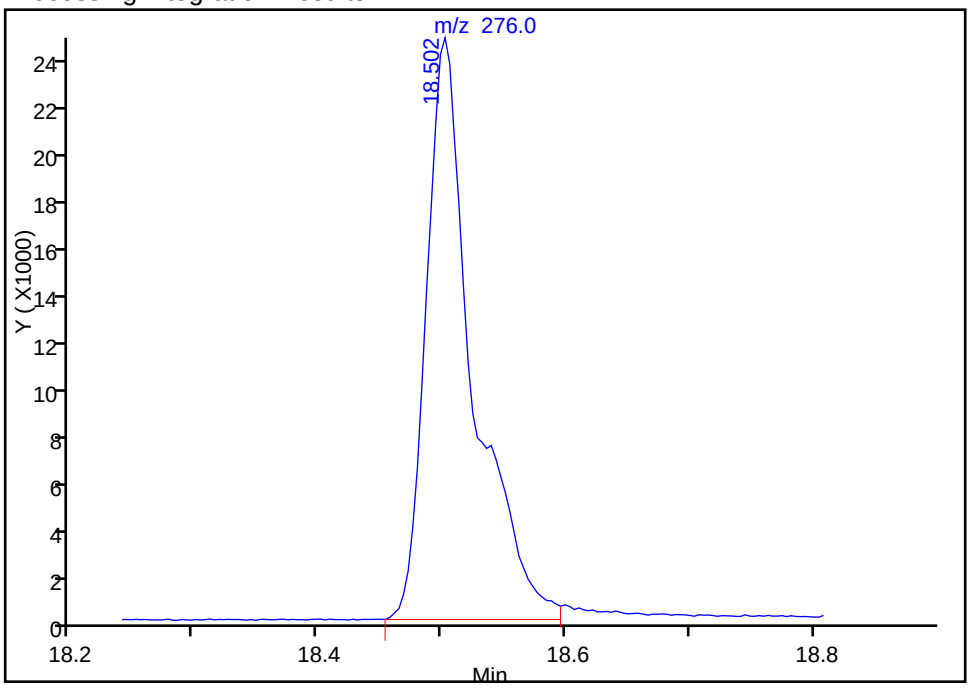
Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1428.D
Injection Date: 08-Jun-2017 09:13:30 Instrument ID: SMS_G5
Lims ID: CCV
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSG5_SIMX Limit Group: MSSV - 8270C-SIM
Column: Detector MS SCAN

39 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

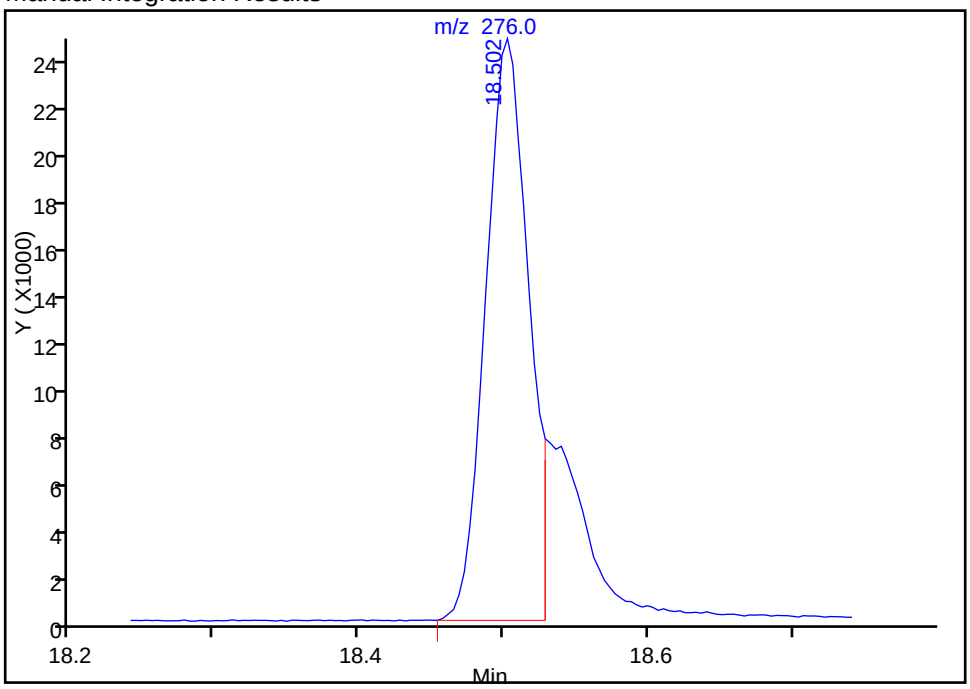
Processing Integration Results

RT: 18.50
Area: 63081
Amount: 794.5566
Amount Units: ng/ml



Manual Integration Results

RT: 18.50
Area: 49695
Amount: 625.9490
Amount Units: ng/ml



Reviewer: vasquezk, 08-Jun-2017 09:41:35
Audit Action: Split an Integrated Peak Audit Reason: Split Peak

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVC 280-376547/19 Calibration Date: 06/08/2017 17:12

Instrument ID: SMS_G5 Calib Start Date: 06/01/2017 10:39

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 06/01/2017 13:53

Lab File ID: G5_1445.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.526	1.244	0.7000	489000	600000	-18.5	50.0
2-Methylnaphthalene	Ave	1.068	0.9695	0.4000	1090000	1200000	-9.2	50.0
1-Methylnaphthalene	Ave	1.072	0.9726	0.0500	544000	600000	-9.3	50.0
Acenaphthylene	Ave	1.682	1.676	0.9000	598000	600000	-0.4	50.0
Acenaphthene	Ave	1.145	1.067	0.9000	559000	600000	-6.8	50.0
Fluorene	Ave	1.378	1.337	0.9000	582000	600000	-3.0	50.0
Phenanthrene	Ave	1.137	1.056	0.7000	557000	600000	-7.1	50.0
Anthracene	Ave	1.062	1.088	0.7000	615000	600000	2.5	50.0
Fluoranthene	Ave	1.418	1.364	0.6000	577000	600000	-3.8	50.0
Pyrene	Ave	1.474	1.398	0.6000	569000	600000	-5.1	50.0
Benzo[a]anthracene	Ave	1.236	1.286	0.8000	624000	600000	4.1	50.0
Chrysene	Ave	1.272	1.205	0.7000	568000	600000	-5.3	50.0
Benzo[b]fluoranthene	Ave	1.151	1.126	0.7000	587000	600000	-2.1	50.0
Benzo[k]fluoranthene	Ave	1.170	1.117	0.7000	573000	600000	-4.5	50.0
Benzo[a]pyrene	Ave	1.022	1.055	0.7000	620000	600000	3.3	50.0
Indeno[1,2,3-cd]pyrene	Ave	0.9931	0.8946	0.5000	540000	600000	-9.9	50.0
Dibenz(a,h)anthracene	Ave	1.025	0.9113	0.4000	533000	600000	-11.1	50.0
Benzo[g,h,i]perylene	Ave	1.133	0.9201	0.5000	487000	600000	-18.8	50.0
Nitrobenzene-d5 (Surr)	Ave	0.5729	0.4139		434000	601000	-27.7	50.0
2-Fluorobiphenyl (Surr)	Ave	1.448	1.287		533000	600000	-11.2	50.0
Terphenyl-d14 (Surr)	Ave	0.7870	0.7281		556000	601000	-7.5	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1445.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 08-Jun-2017 17:12:30 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVC
Operator ID: VASQUEZK Instrument ID: SMS_G5
Sublist: chrom-SMSG5_SIMX*sub2

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 11-Jun-2017 22:45:35 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 11-Jun-2017 22:35:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 2 Acenaphthene-d10	164	5.987	5.987	0.000	93	19727	600.0	600.0	
* 3 Phenanthrene-d10	188	7.249	7.249	0.000	100	41155	600.0	600.0	
* 1 Chrysene-d12	240	11.225	11.225	0.000	100	40198	600.0	600.0	
$ 4 Nitrobenzene-d5	82	3.959	3.959	0.000	98	8174	600.6	434.0	
$ 5 2-Fluorobiphenyl	172	5.391	5.391	0.000	100	25386	600.0	533.1	
$ 6 Terphenyl-d14	244	9.044	9.044	0.000	100	29995	600.6	555.6	
43 1,4-Dioxane	88	1.879	1.879	0.000	95	2142	604.8	334.7	
7 N-Nitrosodimethylamine	42	2.004	2.004	0.000	99	4767	600.0	419.6	
15 Naphthalene	128	4.550	4.550	0.000	100	24537	600.0	489.1	
16 2-Methylnaphthalene	142	5.105	5.105	0.000	99	38252	1200.0	1089.6	
17 1-Methylnaphthalene	142	5.190	5.190	0.000	97	19187	600.0	544.2	
18 Dimethyl phthalate	163	5.710	5.710	0.000	100	50585	1201.2	1099.5	
20 Acenaphthylene	152	5.873	5.873	0.000	100	33059	600.0	597.9	
21 Acenaphthene	153	6.015	6.015	0.000	98	21057	600.0	559.2	
19 Dibenzofuran	168	6.159	6.159	0.000	97	32363	600.6	538.0	
22 Diethyl phthalate	149	6.284	6.284	0.000	98	50565	1204.8	1128.7	
23 Fluorene	166	6.447	6.447	0.000	97	26381	600.0	582.3	
24 N-Nitrosodiphenylamine	169	6.522	6.522	0.000	97	19870	599.2	652.5	
25 Phenanthrene	178	7.271	7.271	0.000	100	43464	600.0	557.5	
26 Anthracene	178	7.314	7.314	0.000	100	44790	600.0	614.9	
27 Di-n-butyl phthalate	149	7.683	7.683	0.000	100	90922	1201.5	1184.8	
28 Fluoranthene	202	8.545	8.545	0.000	100	56150	600.0	577.2	
29 Pyrene	202	8.881	8.881	0.000	100	57554	600.0	569.2	
30 Butyl benzyl phthalate	149	9.863	9.863	0.000	97	40807	1201.5	1299.1	
31 Bis(2-ethylhexyl) phthalat	149	11.127	11.127	0.000	100	55093	1201.8	1217.9	
32 Benzo[a]anthracene	228	11.197	11.197	0.000	99	51688	600.0	624.4	
33 Chrysene	228	11.295	11.295	0.000	100	48426	600.0	568.2	
34 Di-n-octyl phthalate	149	13.028	13.028	0.000	100	90145	1203.3	1373.1	
35 Benzo[b]fluoranthene	252	14.276	14.276	0.000	100	45263	600.0	587.2	
36 Benzo[k]fluoranthene	252	14.365	14.365	0.000	99	44893	600.0	572.7	
37 Benzo[a]pyrene	252	15.330	15.330	0.000	99	42425	600.0	619.8	M

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
39 Indeno[1,2,3-cd]pyrene	276	18.502	18.502	0.000	100	35960	600.0	540.5	
38 Dibenz(a,h)anthracene	278	18.547	18.547	0.000	98	36632	600.0	533.2	
40 Benzo[g,h,i]perylene	276	18.924	18.924	0.000	100	36986	600.0	487.2	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

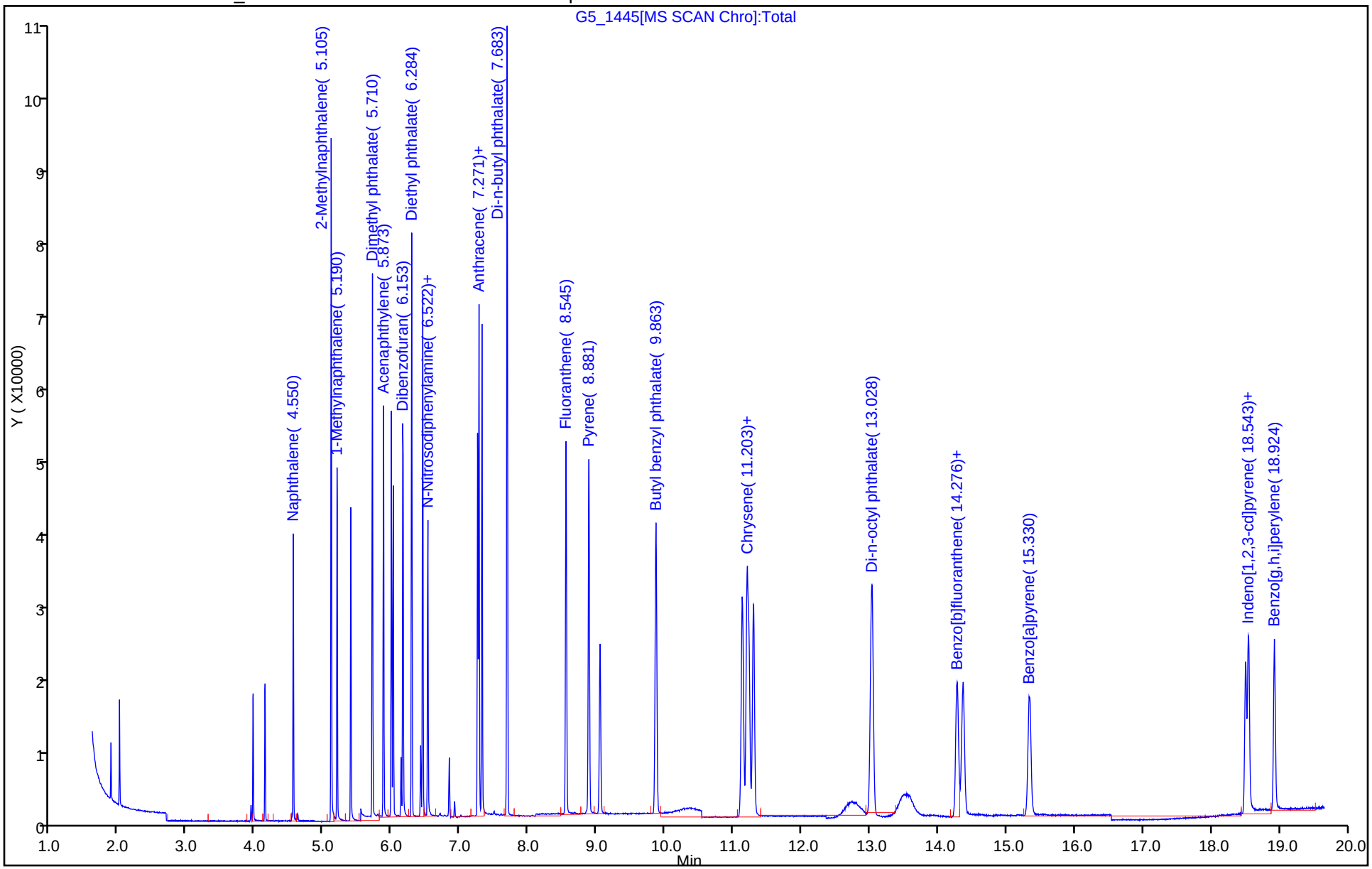
MS-SIMSL 0.6_00125 Amount Added: 1.00 Units: uL

Report Date: 11-Jun-2017 22:45:35 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1445.D

Injection Date:	08-Jun-2017 17:12:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	CCVC			Worklist Smp#:	19
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

TestAmerica Denver

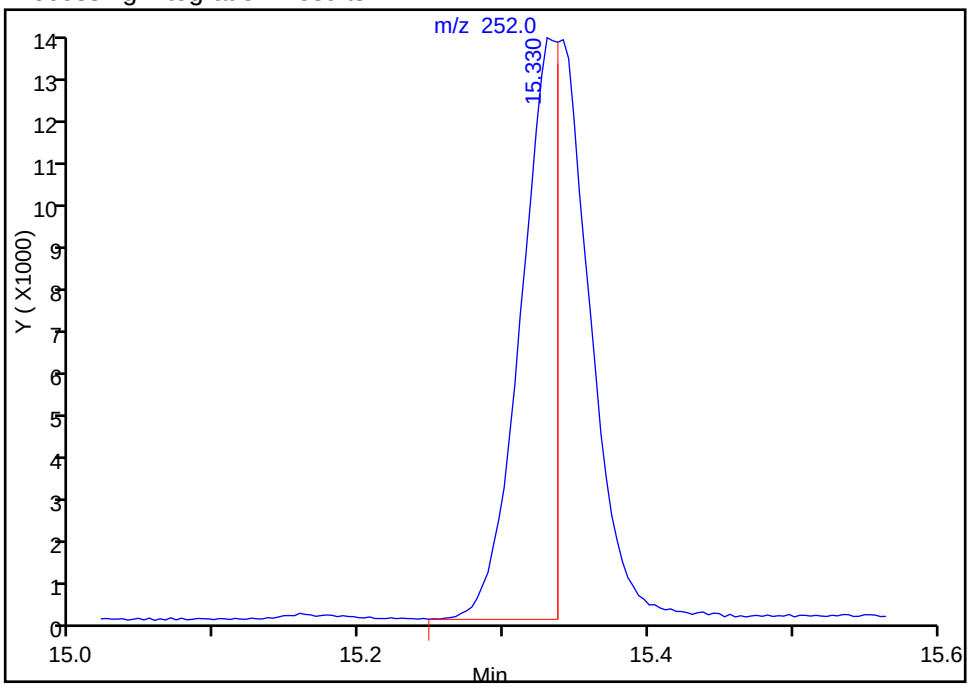
Data File:	\\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1445.D				
Injection Date:	08-Jun-2017 17:12:30	Instrument ID:	SMS_G5		
Lims ID:	CCVC				
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

37 Benzo[a]pyrene, CAS: 50-32-8

Signal: 1

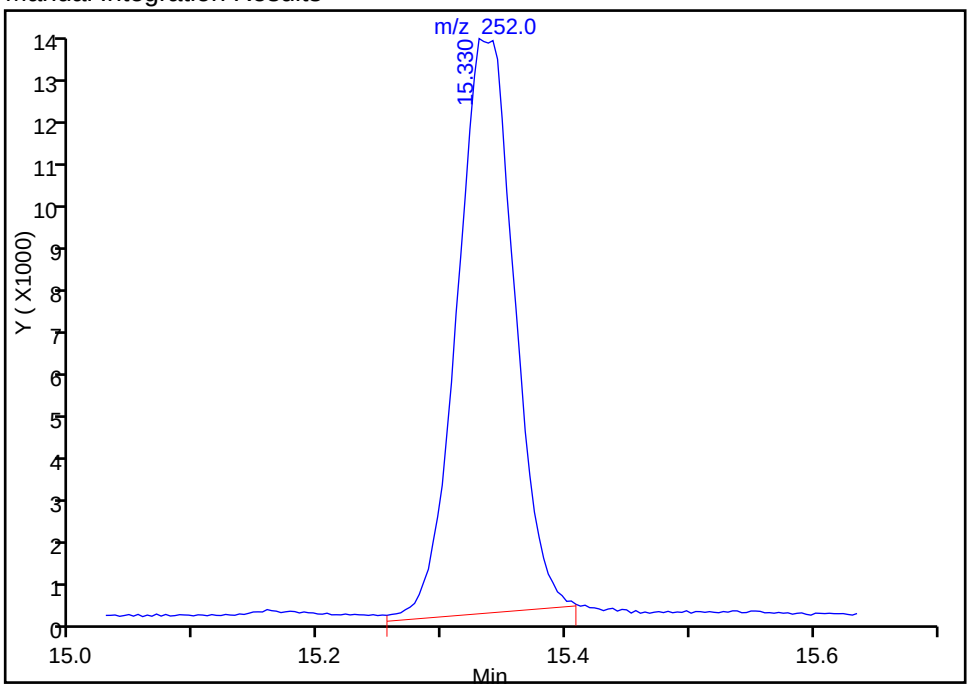
Processing Integration Results

RT: 15.33
Area: 23955
Amount: 349.9664
Amount Units: ng/ml



Manual Integration Results

RT: 15.33
Area: 42425
Amount: 619.8007
Amount Units: ng/ml



Reviewer: vasquezk, 11-Jun-2017 22:35:05

Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6543.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 11-May-2017 12:39:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 12-May-2017 08:51:10 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: vasquezk Date: 11-May-2017 12:55:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 Pentachlorophenol_T	266	4.254	4.254	0.000	72	303726	NR	NR	
13 DFTPP									
15 Benzidine_T	184	5.388	5.388	0.000	95	1714681	NR	NR	
18 4,4'-DDD	235	5.857	5.857	0.000	79	9535	NR	NR	
19 4,4'-DDE	246	5.906	5.906	0.000	35	779	NR	NR	
21 4,4'-DDT	235	6.146	6.146	0.000	91	796091	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

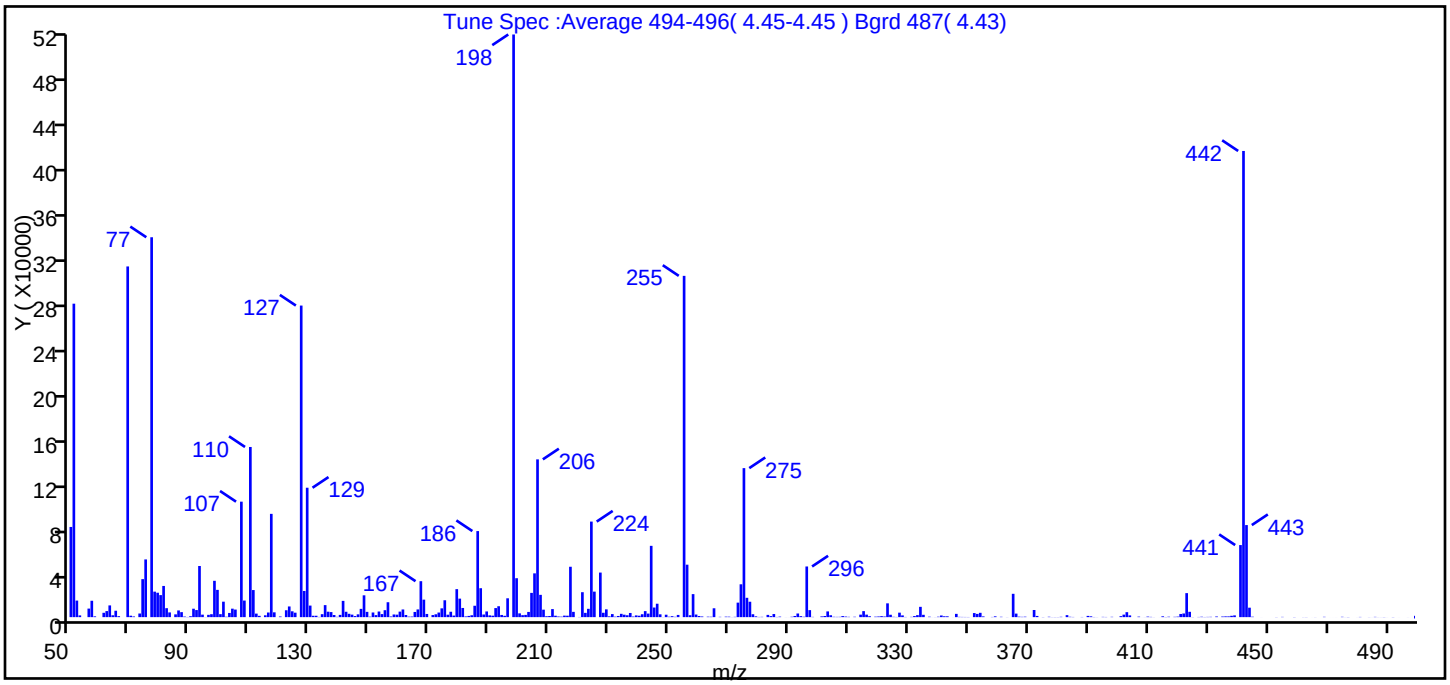
MS-DFTPP_00044 Amount Added: 0.50 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6543.D
Injection Date: 11-May-2017 12:39:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM
Tune Method: DFTPP Method 8270

13 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	53.8
68	<2% of mass 69	0.0 (0.0)
69	Present	60.2
70	<2% of mass 69	0.2 (0.4)
127	40-60% of mass 198	53.5
197	<1% of mass 198	0.0
199	5-9% of mass 198	6.7
275	10-30% of mass 198	25.6
365	>1% of mass 198	4.0
441	Present but less than mass 443	12.4 (78.3)
442	>40% of mass 198	80.0
443	17-23% of mass 442	15.8 (19.7)

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6543.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 11-May-2017 12:39:30
Spectrum: Tune Spec :Average 494-496(4.45-4.45) Bgrd 487(4.43)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 372

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	79672	158.00	2356	255.00	301504	366.00	3124
51.00	276928	159.00	2191	256.00	46344	367.00	425
52.00	14631	160.00	4877	257.00	1695	368.00	274
53.00	1541	161.00	6775	258.00	20344	369.00	403
56.00	7554	162.00	1899	259.00	2307	372.00	6316
57.00	14475	163.00	447	260.00	993	373.00	1063
58.00	692	164.00	513	261.00	574	375.00	118
61.00	3840	165.00	4585	263.00	414	376.00	2
62.00	5351	166.00	6813	264.00	355	377.00	341
63.00	10369	167.00	31760	265.00	7835	378.00	87
64.00	1641	168.00	15456	267.00	272	379.00	112
65.00	5660	169.00	2820	269.00	430	380.00	113
66.00	858	171.00	1845	270.00	406	381.00	294
69.00	309824	172.00	2524	271.00	71	383.00	1763
70.00	1265	173.00	4059	272.00	264	384.00	312
71.00	594	174.00	7776	273.00	12817	385.00	172
73.00	3206	175.00	14915	274.00	29024	388.00	150
74.00	33576	176.00	2147	275.00	131648	390.00	1103
75.00	50992	177.00	4768	276.00	17080	391.00	709
77.00	335616	178.00	1386	277.00	13608	392.00	141
78.00	22528	179.00	24736	278.00	2568	393.00	63
79.00	21568	180.00	16347	279.00	702	395.00	236
80.00	19464	181.00	8107	280.00	189	396.00	166
81.00	27560	182.00	616	281.00	260	398.00	286
82.00	7917	183.00	1086	283.00	1991	399.00	2
83.00	4172	184.00	1656	284.00	911	401.00	873
85.00	2458	185.00	10052	285.00	2750	402.00	2216
86.00	5917	186.00	76032	286.00	175	403.00	4389
87.00	4418	187.00	25560	287.00	450	404.00	1537
88.00	512	188.00	2333	289.00	34	407.00	456
89.00	154	189.00	5038	290.00	21	408.00	15
90.00	808	190.00	1568	291.00	346	409.00	46
91.00	7442	191.00	1290	292.00	1027	410.00	469

Report Date: 12-May-2017 08:51:11 Chrom Revision: 2.2 18-Apr-2017 07:43:58
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6543.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 11-May-2017 12:39:30
Spectrum: Tune Spec :Average 494-496(4.45-4.45) Bgrd 487(4.43)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 372

m/z	Y	m/z	Y	m/z	Y	m/z	Y
92.00	6250	192.00	8005	293.00	3222	411.00	225
93.00	45184	193.00	9640	294.00	882	412.00	56
94.00	2206	194.00	1933	295.00	342	414.00	20
95.00	84	195.00	1186	296.00	44760	415.00	719
96.00	2048	196.00	16656	297.00	6193	416.00	132
97.00	2593	198.00	514752	298.00	220	417.00	370
98.00	32104	199.00	34392	301.00	662	419.00	283
99.00	24096	200.00	3343	302.00	1003	420.00	447
100.00	2639	201.00	1751	303.00	5063	421.00	2800
101.00	13665	202.00	1989	304.00	1683	422.00	3225
102.00	356	203.00	4601	305.00	308	423.00	21216
103.00	3704	204.00	21432	306.00	242	424.00	4707
104.00	7486	205.00	38680	307.00	274	425.00	107
105.00	6695	206.00	139392	308.00	922	427.00	176
107.00	102024	207.00	19696	309.00	523	428.00	349
108.00	14651	208.00	6607	310.00	282	429.00	147
110.00	150336	209.00	804	312.00	336	430.00	217
111.00	23928	210.00	1018	314.00	2203	431.00	278
112.00	3120	211.00	7113	315.00	5314	433.00	575
113.00	1153	212.00	1251	316.00	2218	435.00	542
115.00	1616	213.00	579	317.00	831	436.00	671
116.00	4090	214.00	442	319.00	418	437.00	659
117.00	91248	215.00	1349	320.00	581	438.00	1189
118.00	4257	216.00	1275	321.00	878	439.00	1551
120.00	557	217.00	44512	322.00	567	441.00	63672
122.00	6086	218.00	4669	323.00	12191	442.00	411840
123.00	9444	219.00	12	324.00	2106	443.00	81336
124.00	5163	220.00	151	325.00	294	444.00	8352
125.00	3942	221.00	22032	326.00	167	445.00	385
127.00	275264	222.00	3783	327.00	3964	448.00	20
128.00	23128	223.00	7352	328.00	1538	453.00	97
129.00	114328	224.00	84424	329.00	171	455.00	227
130.00	10208	225.00	22544	331.00	253	457.00	5
131.00	1213	227.00	39376	332.00	954	459.00	128

Report Date: 12-May-2017 08:51:11 Chrom Revision: 2.2 18-Apr-2017 07:43:58
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6543.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 11-May-2017 12:39:30
Spectrum: Tune Spec :Average 494-496(4.45-4.45) Bgrd 487(4.43)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 372

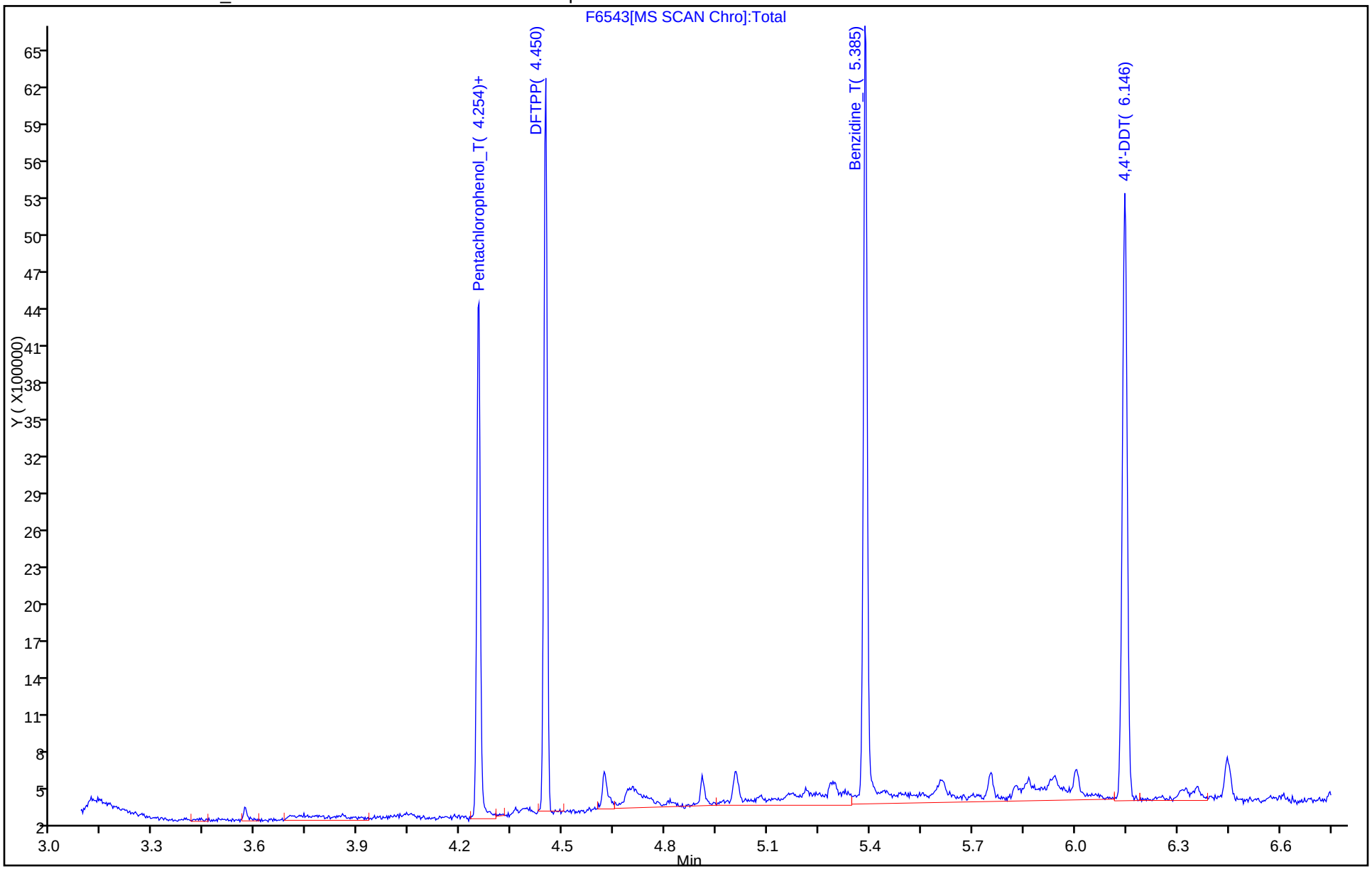
m/z	Y	m/z	Y	m/z	Y	m/z	Y
132.00	1229	228.00	3865	333.00	1764	462.00	67
133.00	194	229.00	6892	334.00	9102	463.00	87
134.00	2615	230.00	700	335.00	2066	465.00	13
135.00	10619	231.00	2699	336.00	17	466.00	56
136.00	4804	232.00	417	337.00	399	469.00	273
137.00	4467	233.00	1034	338.00	30	470.00	3
138.00	1875	234.00	2929	339.00	69	471.00	11
139.00	265	235.00	2157	340.00	384	472.00	8
140.00	1988	236.00	1655	341.00	1460	473.00	17
141.00	14372	237.00	3686	342.00	758	475.00	289
142.00	4751	238.00	526	343.00	728	476.00	44
143.00	2947	239.00	1542	345.00	33	477.00	118
144.00	2211	240.00	1244	346.00	2896	478.00	2
145.00	963	241.00	2564	347.00	253	480.00	25
146.00	2462	242.00	5318	348.00	191	481.00	186
147.00	7316	243.00	3123	349.00	166	484.00	67
148.00	19280	244.00	62992	350.00	142	485.00	23
149.00	4667	245.00	8496	352.00	3607	486.00	237
150.00	408	246.00	11857	353.00	2862	487.00	54
151.00	4116	247.00	2490	354.00	3823	488.00	38
152.00	1782	248.00	87	355.00	634	489.00	110
153.00	4973	249.00	2150	358.00	172	490.00	21
154.00	2691	250.00	383	359.00	706	492.00	112
155.00	6133	251.00	839	361.00	311	494.00	14
156.00	13180	252.00	284	363.00	68	497.00	29
157.00	574	253.00	1956	365.00	20616	499.00	1

Report Date: 12-May-2017 08:51:11 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6543.D

Injection Date:	11-May-2017 12:39:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	DFTPP			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		

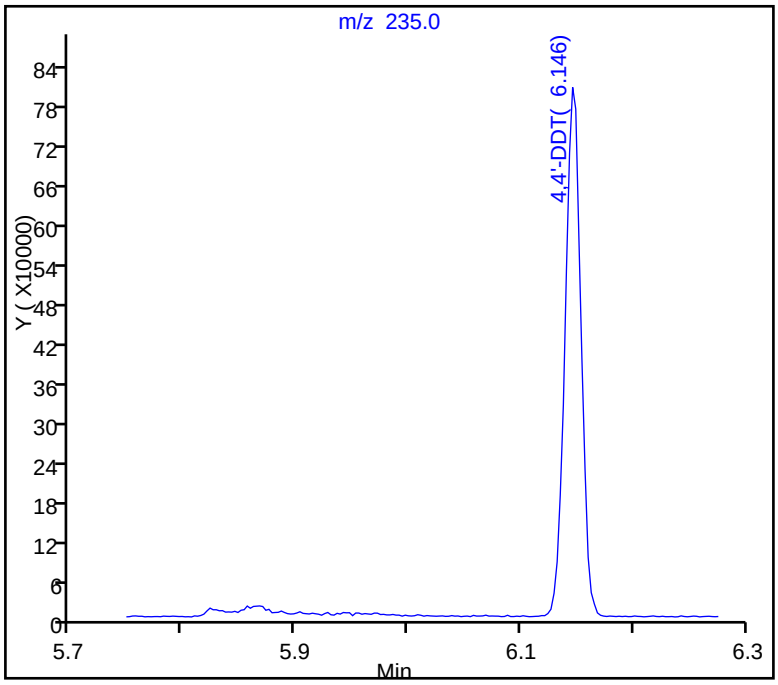


Breakdown Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6543.D
Injection Date: 11-May-2017 12:39:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

21 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

21 4,4'-DDT, Area = 796091
19 4,4'-DDE, Area = 779
18 4,4'-DDD, Area = 9535

%Breakdown: 1.28%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Denver

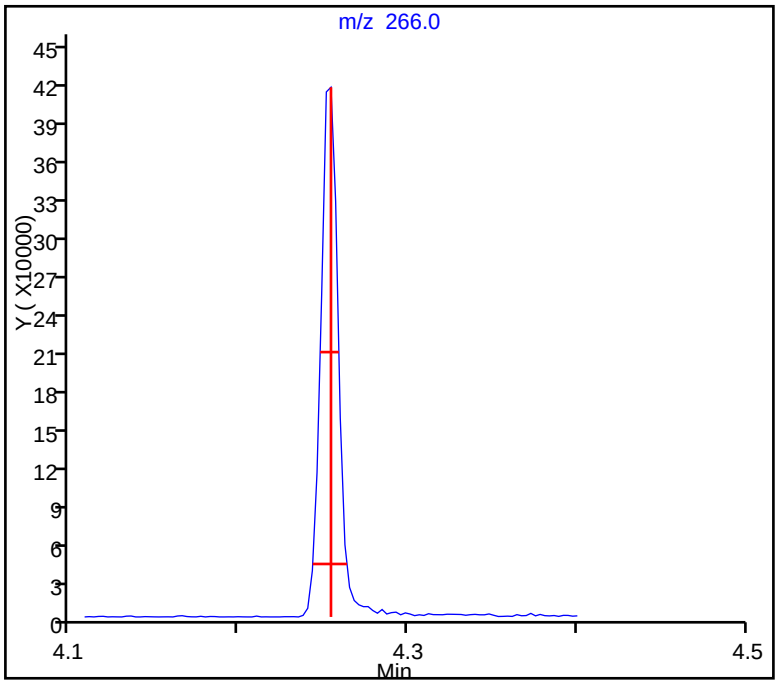
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6543.D
Injection Date: 11-May-2017 12:39:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

12 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.010 (min.)
Front Width = 0.011 (min.)

Tailing Factor = 0.9, Max. Tailing < 2.00
Passed



Report Date: 12-May-2017 08:51:11 Chrom Revision: 2.2 18-Apr-2017 07:43:58

Peak Tailing Report

TestAmerica Denver

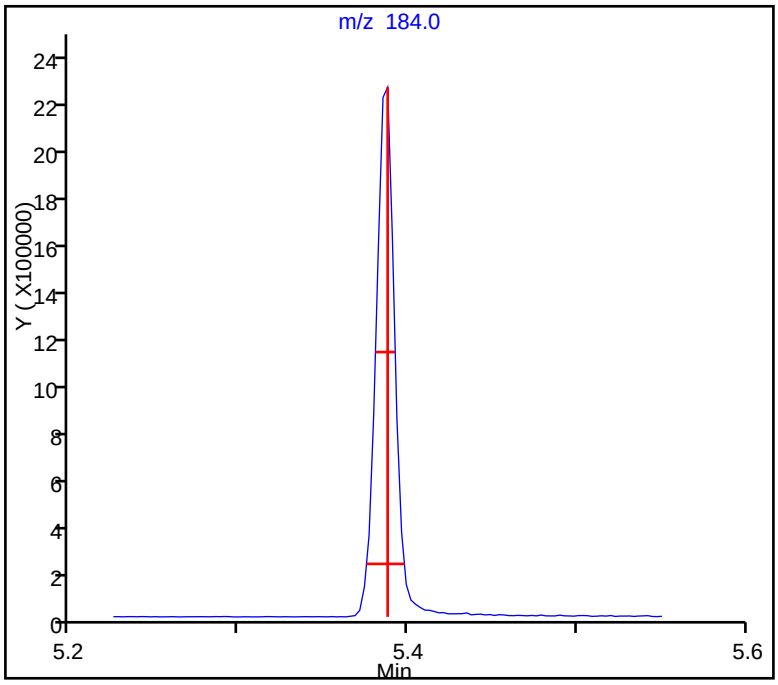
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6543.D
Injection Date: 11-May-2017 12:39:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

15 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.010 (min.)
Front Width = 0.013 (min.)

Tailing Factor = 0.8, Max. Tailing < 2.00
Passed



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\F7043.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 07-Jun-2017 08:29:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 07-Jun-2017 15:34:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: vasquezk Date: 07-Jun-2017 09:18:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 Pentachlorophenol_T	266	4.249	4.249	0.000	73	680264	NR	NR	
13 DFTPP									
15 Benzidine_T	184	5.377	5.377	0.000	94	4128136	NR	NR	
18 4,4'-DDD	235	5.813	5.813	0.000	71	10772	NR	NR	
21 4,4'-DDT	235	6.130	6.130	0.000	91	2168074	NR	NR	
19 4,4'-DDE	246		6.133				ND	ND	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
ND - Not Detected or Marked ND

Reagents:

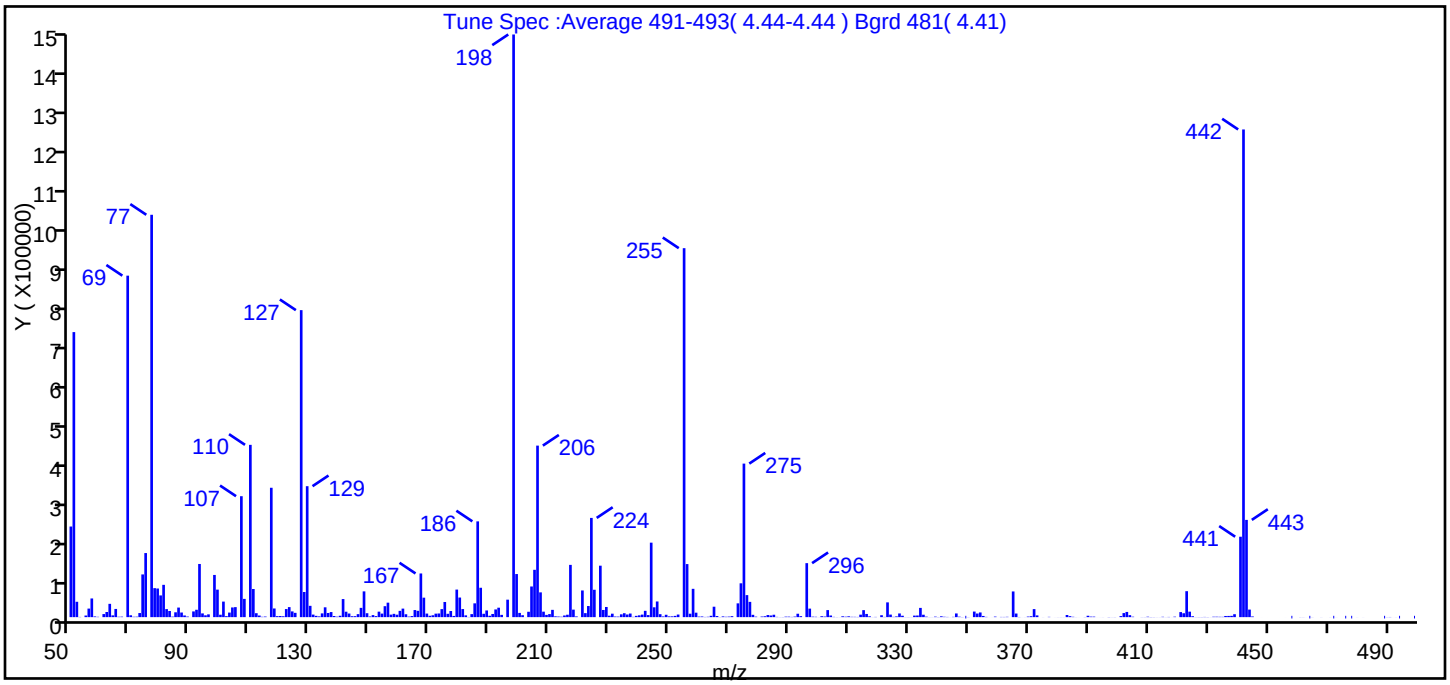
MS-DFTPP_00044 Amount Added: 0.50 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\F7043.D
Injection Date: 07-Jun-2017 08:29:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM
Tune Method: DFTPP Method 8270

13 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	48.9
68	<2% of mass 69	0.0 (0.0)
69	Present	58.6
70	<2% of mass 69	0.3 (0.5)
127	40-60% of mass 198	52.7
197	<1% of mass 198	0.0
199	5-9% of mass 198	7.4
275	10-30% of mass 198	26.4
365	>1% of mass 198	4.4
441	Present but less than mass 443	13.8 (82.7)
442	>40% of mass 198	83.7
443	17-23% of mass 442	16.7 (19.9)

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\F7043.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 07-Jun-2017 08:29:30
Spectrum: Tune Spec :Average 491-493(4.44-4.44) Bgrd 481(4.41)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 401

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	224704	161.00	21152	267.00	290	373.00	4298
51.00	706816	162.00	7160	268.00	1810	375.00	109
52.00	38088	163.00	1345	269.00	912	377.00	696
53.00	498	164.00	2680	270.00	1337	378.00	17
55.00	3990	165.00	17608	271.00	2402	379.00	75
56.00	21208	166.00	15689	273.00	34200	380.00	145
57.00	46336	167.00	108312	274.00	83920	381.00	176
58.00	1766	168.00	48280	275.00	380736	382.00	141
59.00	817	169.00	8840	276.00	54632	383.00	5312
61.00	7637	170.00	3409	277.00	37864	384.00	2398
62.00	12743	171.00	4634	278.00	5783	385.00	866
63.00	32992	172.00	8656	279.00	1208	386.00	150
64.00	4371	173.00	9074	280.00	34	387.00	69
65.00	20336	174.00	19896	281.00	1488	389.00	270
66.00	954	175.00	37584	282.00	2204	390.00	3429
67.00	1233	176.00	8319	283.00	5226	391.00	1283
69.00	846784	177.00	15197	284.00	4086	392.00	1254
70.00	4591	178.00	3013	285.00	5943	393.00	54
71.00	924	179.00	68360	286.00	646	394.00	63
72.00	1140	180.00	48608	287.00	237	395.00	119
73.00	10180	181.00	20056	288.00	331	397.00	357
74.00	105928	182.00	4425	289.00	1217	398.00	144
75.00	158912	183.00	435	290.00	1219	399.00	234
77.00	997760	184.00	7505	291.00	567	400.00	7
78.00	71912	185.00	34216	292.00	1389	401.00	2557
79.00	70992	186.00	237504	293.00	8458	402.00	10094
80.00	53856	187.00	72848	294.00	2448	403.00	12890
81.00	80120	188.00	8325	296.00	133888	404.00	4941
82.00	19936	189.00	16560	297.00	21136	405.00	1095
83.00	15236	190.00	3450	298.00	1199	408.00	220
84.00	1250	191.00	7877	299.00	899	409.00	241
85.00	12006	192.00	19104	300.00	152	410.00	1035
86.00	23736	193.00	23432	301.00	2262	411.00	350

Report Date: 07-Jun-2017 15:34:05 Chrom Revision: 2.2 25-Apr-2017 13:27:22
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\F7043.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 07-Jun-2017 08:29:30
Spectrum: Tune Spec :Average 491-493(4.44-4.44) Bgrd 481(4.41)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 401

m/z	Y	m/z	Y	m/z	Y	m/z	Y
87.00	11462	194.00	5633	302.00	1441	412.00	275
88.00	4142	196.00	43344	303.00	17480	413.00	145
89.00	1469	198.00	1444864	304.00	4045	414.00	140
91.00	14193	199.00	106872	305.00	640	415.00	838
92.00	18296	200.00	10502	306.00	244	416.00	145
93.00	131840	201.00	4814	307.00	147	417.00	505
94.00	9301	202.00	94	308.00	2070	418.00	63
95.00	4561	203.00	13318	309.00	1097	419.00	1147
96.00	6871	204.00	76032	310.00	2051	421.00	12532
98.00	104632	205.00	117400	311.00	793	422.00	9674
99.00	68232	206.00	425344	312.00	758	423.00	64384
100.00	5997	207.00	61440	313.00	515	424.00	13602
101.00	38568	208.00	13605	314.00	6143	425.00	2299
102.00	2445	209.00	5580	315.00	17368	426.00	229
103.00	11302	210.00	7575	316.00	7916	427.00	314
104.00	24024	211.00	18080	317.00	2069	428.00	344
105.00	24824	212.00	1984	318.00	165	429.00	520
107.00	299904	213.00	1488	319.00	557	430.00	346
108.00	45272	214.00	1029	321.00	4737	431.00	127
110.00	427264	215.00	4129	322.00	548	432.00	1029
111.00	69776	216.00	5978	323.00	36616	433.00	1075
112.00	9768	217.00	129608	324.00	6312	434.00	869
113.00	4008	218.00	18632	325.00	695	435.00	772
114.00	862	219.00	1748	326.00	1799	436.00	2881
115.00	1436	221.00	66160	327.00	9144	437.00	2998
117.00	320832	222.00	9969	328.00	3476	438.00	3225
118.00	21480	223.00	27576	329.00	241	439.00	7277
119.00	2491	224.00	246080	330.00	289	441.00	199424
120.00	2756	225.00	67928	331.00	196	442.00	1209344
121.00	2148	227.00	127592	332.00	3828	443.00	241152
122.00	20024	228.00	17792	333.00	4073	444.00	18736
123.00	24864	229.00	25200	334.00	22936	445.00	1680
124.00	14240	230.00	3570	335.00	5983	448.00	20
125.00	10667	231.00	8581	336.00	1228	450.00	14

Report Date: 07-Jun-2017 15:34:05 Chrom Revision: 2.2 25-Apr-2017 13:27:22
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\F7043.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 07-Jun-2017 08:29:30
Spectrum: Tune Spec :Average 491-493(4.44-4.44) Bgrd 481(4.41)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 401

m/z	Y	m/z	Y	m/z	Y	m/z	Y
127.00	761280	232.00	1472	337.00	208	451.00	7
128.00	62336	233.00	1325	338.00	161	453.00	7
129.00	324736	234.00	6971	339.00	1261	454.00	13
130.00	28056	235.00	9743	340.00	378	456.00	31
131.00	6328	236.00	6584	341.00	2091	458.00	5
132.00	3207	237.00	8942	342.00	925	460.00	15
133.00	1864	238.00	679	343.00	521	461.00	215
134.00	9312	239.00	3187	344.00	120	462.00	171
135.00	24368	240.00	4443	345.00	716	463.00	40
136.00	10317	241.00	6280	346.00	9154	464.00	4
137.00	12605	242.00	15670	347.00	1146	465.00	177
138.00	2833	243.00	5156	348.00	323	466.00	9
139.00	1168	244.00	184704	349.00	1	468.00	124
140.00	3429	245.00	24400	350.00	268	470.00	13
141.00	44840	246.00	38856	352.00	13865	471.00	123
142.00	13474	247.00	7346	353.00	8964	472.00	2
143.00	8965	248.00	1696	354.00	11631	473.00	82
144.00	2304	249.00	5899	355.00	2940	476.00	2
145.00	2448	250.00	1907	356.00	633	478.00	1
146.00	7414	251.00	1974	357.00	54	479.00	11
147.00	23000	252.00	3130	358.00	69	480.00	84
148.00	63904	253.00	6427	359.00	1334	482.00	72
149.00	9723	255.00	914944	360.00	13	489.00	2
150.00	1717	256.00	131584	361.00	524	490.00	232
151.00	5052	257.00	8495	362.00	505	491.00	402
152.00	2546	258.00	70224	363.00	796	492.00	38
153.00	13601	259.00	11055	365.00	63728	493.00	116
154.00	8783	260.00	1349	366.00	8943	494.00	3
155.00	27168	261.00	1620	367.00	413	495.00	7
156.00	35896	262.00	503	368.00	57	497.00	10
157.00	6259	263.00	892	369.00	134	499.00	1
158.00	8167	264.00	3307	370.00	1375		
159.00	6085	265.00	25864	371.00	2243		
160.00	15583	266.00	2733	372.00	19952		

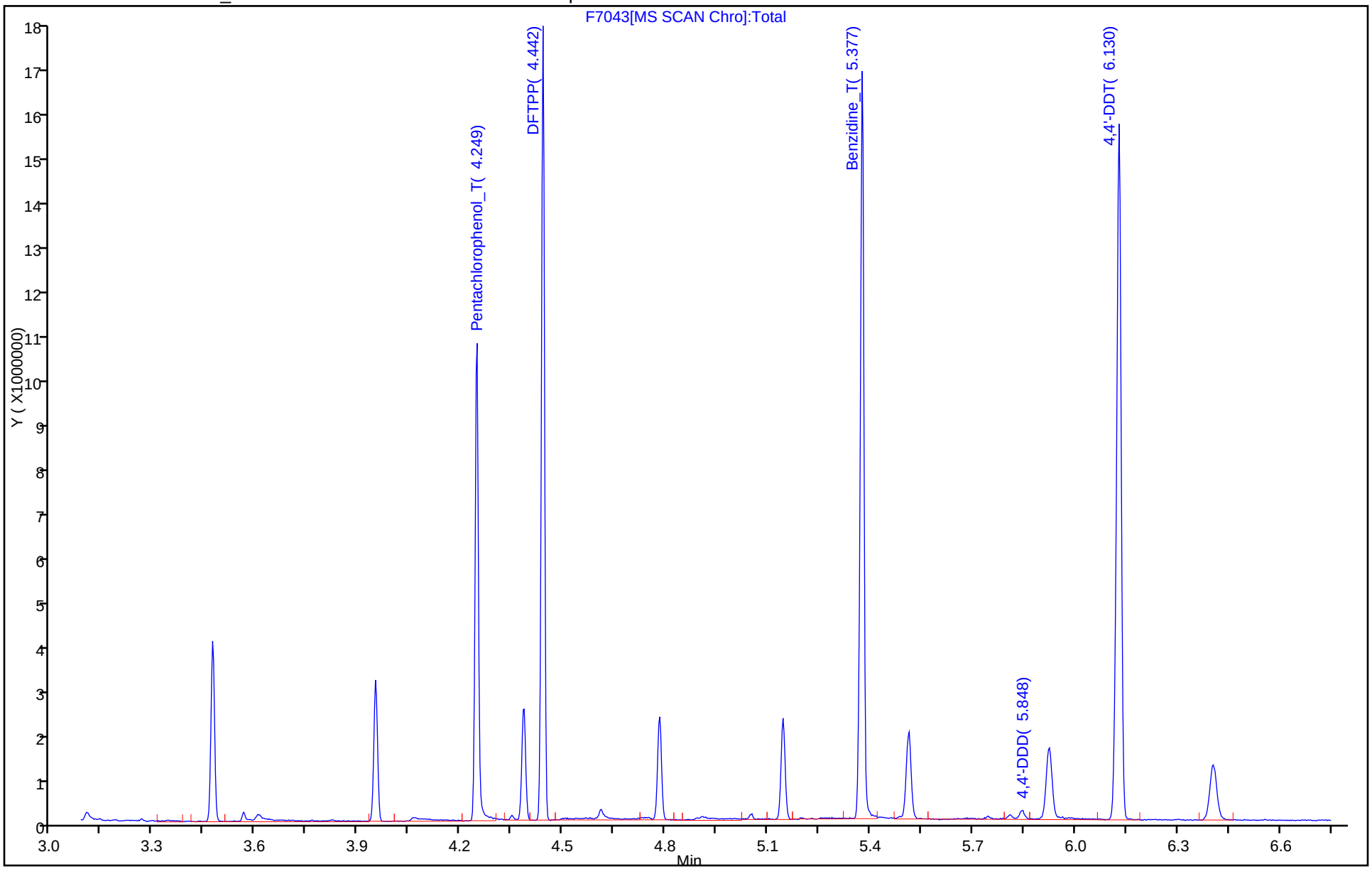
m/z	Y	m/z	Y	m/z	Y	m/z	Y
127.00	761280	232.00	1472	337.00	208	451.00	7
128.00	62336	233.00	1325	338.00	161	453.00	7
129.00	324736	234.00	6971	339.00	1261	454.00	13
130.00	28056	235.00	9743	340.00	378	456.00	31
131.00	6328	236.00	6584	341.00	2091	458.00	5
132.00	3207	237.00	8942	342.00	925	460.00	15
133.00	1864	238.00	679	343.00	521	461.00	215
134.00	9312	239.00	3187	344.00	120	462.00	171
135.00	24368	240.00	4443	345.00	716	463.00	40
136.00	10317	241.00	6280	346.00	9154	464.00	4
137.00	12605	242.00	15670	347.00	1146	465.00	177
138.00	2833	243.00	5156	348.00	323	466.00	9
139.00	1168	244.00	184704	349.00	1	468.00	124
140.00	3429	245.00	24400	350.00	268	470.00	13
141.00	44840	246.00	38856	352.00	13865	471.00	123
142.00	13474	247.00	7346	353.00	8964	472.00	2
143.00	8965	248.00	1696	354.00	11631	473.00	82
144.00	2304	249.00	5899	355.00	2940	476.00	2
145.00	2448	250.00	1907	356.00	633	478.00	1
146.00	7414	251.00	1974	357.00	54	479.00	11
147.00	23000	252.00	3130	358.00	69	480.00	84
148.00	63904	253.00	6427	359.00	1334	482.00	72
149.00	9723	255.00	914944	360.00	13	489.00	2
150.00	1717	256.00	131584	361.00	524	490.00	232
151.00	5052	257.00	8495	362.00	505	491.00	402
152.00	2546	258.00	70224	363.00	796	492.00	38
153.00	13601	259.00	11055	365.00	63728	493.00	116
154.00	8783	260.00	1349	366.00	8943	494.00	3
155.00	27168	261.00	1620	367.00	413	495.00	7
156.00	35896	262.00	503	368.00	57	497.00	10
157.00	6259	263.00	892	369.00	134	499.00	1
158.00	8167	264.00	3307	370.00	1375		
159.00	6085	265.00	25864	371.00	2243		
160.00	15583	266.00	2733	372.00	19952		

Report Date: 07-Jun-2017 15:34:05 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\F7043.D

Injection Date:	07-Jun-2017 08:29:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	DFTPP			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		

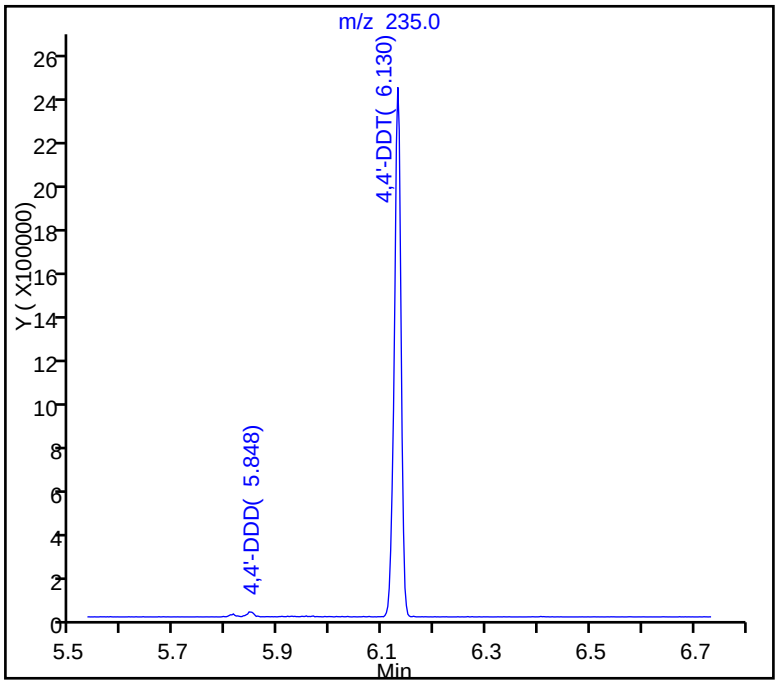


Breakdown Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\F7043.D
Injection Date: 07-Jun-2017 08:29:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

21 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

21 4,4'-DDT, Area = 2168074
19 4,4'-DDE, Area = 0
18 4,4'-DDD, Area = 10772

%Breakdown: 0.49%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Denver

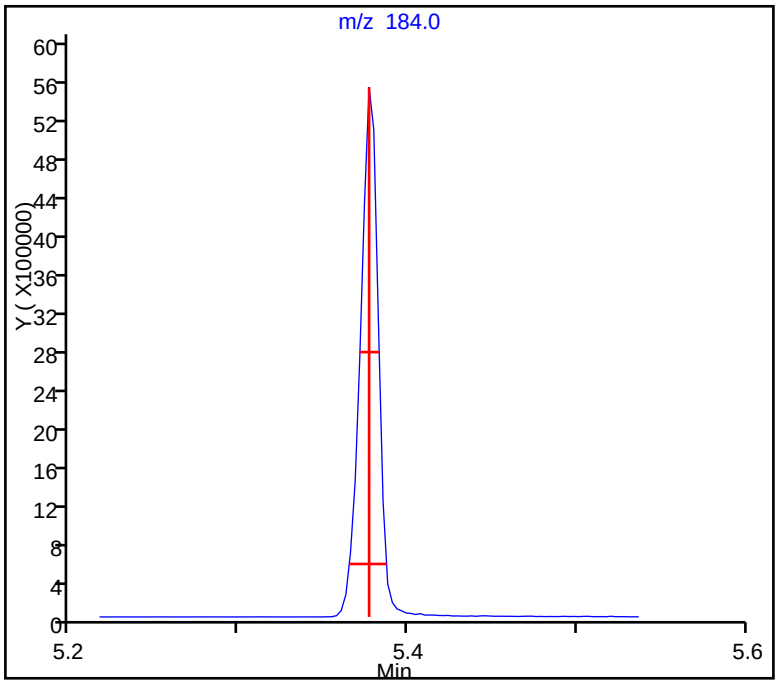
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\F7043.D
Injection Date: 07-Jun-2017 08:29:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

15 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.010 (min.)
Front Width = 0.012 (min.)

Tailing Factor = 0.9, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Denver

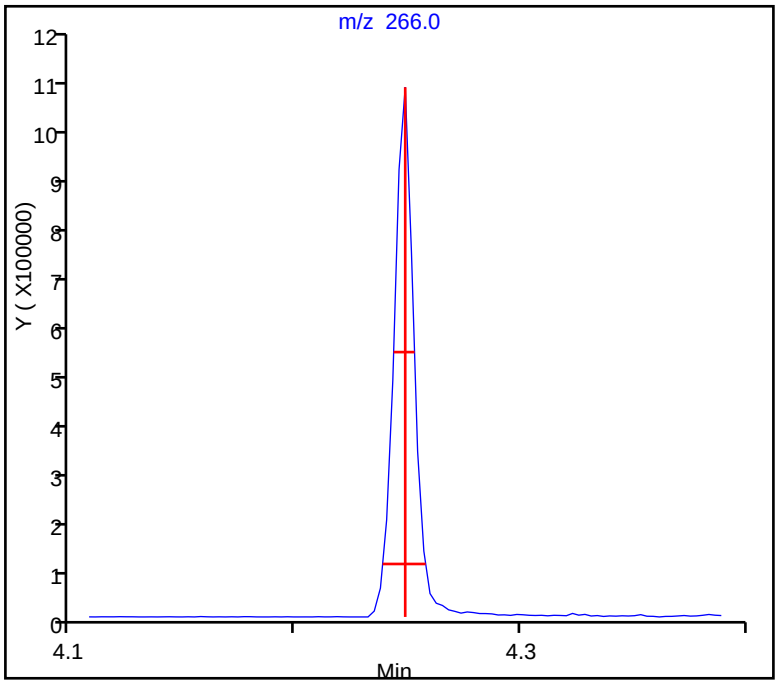
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\F7043.D
Injection Date: 07-Jun-2017 08:29:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

12 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.009 (min.)
Front Width = 0.010 (min.)

Tailing Factor = 0.9, Max. Tailing < 2.00
Passed



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7122.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 12-Jun-2017 13:22:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 13-Jun-2017 07:13:03 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: vasquezk Date: 12-Jun-2017 13:41:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 Pentachlorophenol_T	266	4.251	4.251	0.000	69	334104	NR	NR	
13 DFTPP									
15 Benzidine_T	184	5.399	5.399	0.000	94	2235266	NR	NR	
18 4,4'-DDD	235	5.840	5.840	0.000	76	20528	NR	NR	
19 4,4'-DDE	246	6.157	6.157	0.000	51	84405	NR	NR	
21 4,4'-DDT	235	6.157	6.157	0.000	90	1070123	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

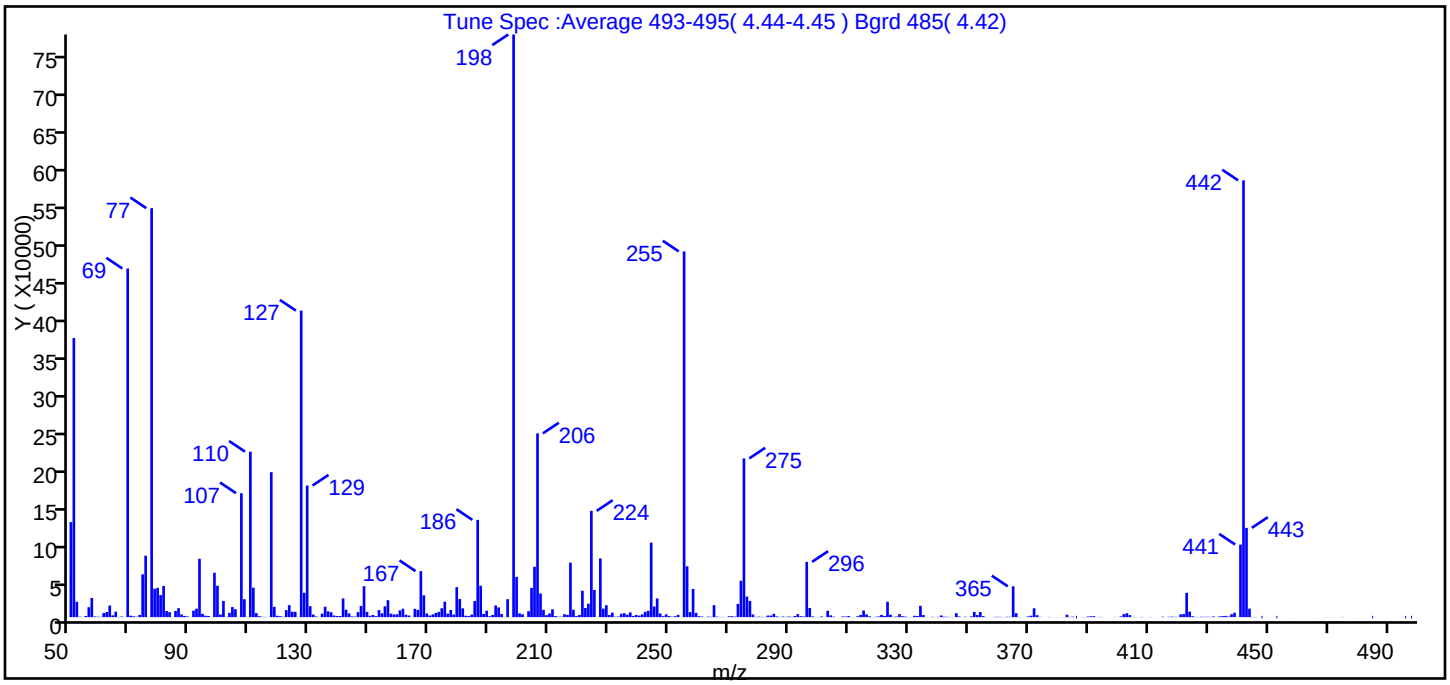
MS-DFTPP_00044 Amount Added: 0.50 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7122.D
Injection Date: 12-Jun-2017 13:22:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM
Tune Method: DFTPP Method 8270

13 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	47.9
68	<2% of mass 69	0.0 (0.0)
69	Present	59.8
70	<2% of mass 69	0.3 (0.4)
127	40-60% of mass 198	52.6
197	<1% of mass 198	0.0
199	5-9% of mass 198	6.9
275	10-30% of mass 198	27.2
365	>1% of mass 198	5.3
441	Present but less than mass 443	12.5 (81.3)
442	>40% of mass 198	75.0
443	17-23% of mass 442	15.3 (20.4)

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7122.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 12-Jun-2017 13:22:30
Spectrum: Tune Spec :Average 493-495(4.44-4.45) Bgrd 485(4.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 396

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	126288	159.00	3729	263.00	699	371.00	1914
51.00	370752	160.00	8921	264.00	482	372.00	11752
52.00	20384	161.00	11180	265.00	15956	373.00	2613
53.00	587	162.00	3179	266.00	680	374.00	441
55.00	1488	163.00	2120	267.00	253	375.00	25
56.00	13172	165.00	11034	268.00	301	377.00	291
57.00	25376	166.00	9640	270.00	1136	379.00	13
58.00	887	167.00	61168	271.00	1242	380.00	111
59.00	564	168.00	29064	272.00	678	382.00	210
60.00	399	169.00	4898	273.00	17584	383.00	3232
61.00	5460	170.00	2139	274.00	48408	384.00	372
62.00	6757	171.00	3562	275.00	210816	385.00	627
63.00	15392	172.00	5615	276.00	27312	386.00	2
64.00	2375	173.00	6982	277.00	21608	388.00	115
65.00	7242	174.00	11839	278.00	3590	389.00	182
66.00	289	175.00	20520	279.00	319	390.00	792
67.00	810	176.00	4720	280.00	667	391.00	1182
69.00	463104	177.00	9500	281.00	380	392.00	1314
70.00	1945	178.00	3384	282.00	237	394.00	333
71.00	1161	179.00	39872	283.00	2065	395.00	190
72.00	515	180.00	24000	284.00	2069	396.00	58
73.00	2988	181.00	11734	285.00	4432	399.00	242
74.00	56896	182.00	1887	286.00	966	401.00	964
75.00	81744	183.00	1462	287.00	317	402.00	3983
77.00	543296	184.00	3409	288.00	774	403.00	5187
78.00	37720	185.00	21368	289.00	409	404.00	2700
79.00	38904	186.00	129224	290.00	803	405.00	268
80.00	29304	187.00	41688	291.00	398	406.00	94
81.00	41448	188.00	4294	292.00	1488	408.00	336
82.00	8150	189.00	8485	293.00	4036	410.00	102
83.00	6627	190.00	1163	294.00	1224	411.00	250
84.00	77	191.00	2956	295.00	823	413.00	13
85.00	8249	192.00	15531	296.00	73432	414.00	63

Report Date: 13-Jun-2017 07:13:04 Chrom Revision: 2.2 25-Apr-2017 13:27:22
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7122.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 12-Jun-2017 13:22:30
Spectrum: Tune Spec :Average 493-495(4.44-4.45) Bgrd 485(4.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 396

m/z	Y	m/z	Y	m/z	Y	m/z	Y
86.00	11908	193.00	12933	297.00	12194	415.00	575
87.00	3533	194.00	4149	298.00	962	417.00	440
88.00	1633	195.00	204	299.00	180	418.00	679
89.00	955	196.00	23896	300.00	240	419.00	388
91.00	8616	198.00	774016	301.00	948	420.00	349
92.00	11268	199.00	53464	303.00	8397	421.00	3701
93.00	77480	200.00	4943	304.00	2386	422.00	4135
94.00	4473	201.00	3716	305.00	674	423.00	32312
95.00	1907	203.00	7898	308.00	896	424.00	7328
96.00	1607	204.00	38856	309.00	779	425.00	1198
98.00	58992	205.00	66880	310.00	1464	426.00	343
99.00	41776	206.00	244096	311.00	204	427.00	230
100.00	3542	207.00	31272	312.00	107	428.00	564
101.00	21528	208.00	9754	313.00	1168	429.00	402
102.00	406	209.00	2607	314.00	2998	430.00	509
103.00	5664	210.00	4896	315.00	8770	431.00	353
104.00	13393	211.00	10369	316.00	3610	432.00	941
105.00	10572	212.00	1448	317.00	1159	433.00	37
107.00	164672	213.00	541	318.00	80	434.00	986
108.00	23768	214.00	594	319.00	416	435.00	1413
110.00	219840	215.00	3920	320.00	932	436.00	1638
111.00	39168	216.00	3005	321.00	2947	437.00	832
112.00	5397	217.00	72424	322.00	1594	438.00	3879
113.00	1310	218.00	9767	323.00	20416	439.00	5904
114.00	483	219.00	1414	324.00	3241	441.00	96448
115.00	317	220.00	3002	325.00	383	442.00	580224
117.00	192576	221.00	35144	326.00	815	443.00	118592
118.00	13664	222.00	12165	327.00	4032	444.00	11329
119.00	1795	223.00	17880	328.00	1286	445.00	226
120.00	1194	224.00	141184	329.00	760	446.00	236
121.00	469	225.00	36104	330.00	207	447.00	4
122.00	9336	227.00	77920	331.00	212	448.00	1
123.00	15964	228.00	11291	332.00	1816	449.00	10
124.00	7220	229.00	15871	333.00	1488	450.00	15

Report Date: 13-Jun-2017 07:13:04 Chrom Revision: 2.2 25-Apr-2017 13:27:22
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7122.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 12-Jun-2017 13:22:30
Spectrum: Tune Spec :Average 493-495(4.44-4.45) Bgrd 485(4.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 396

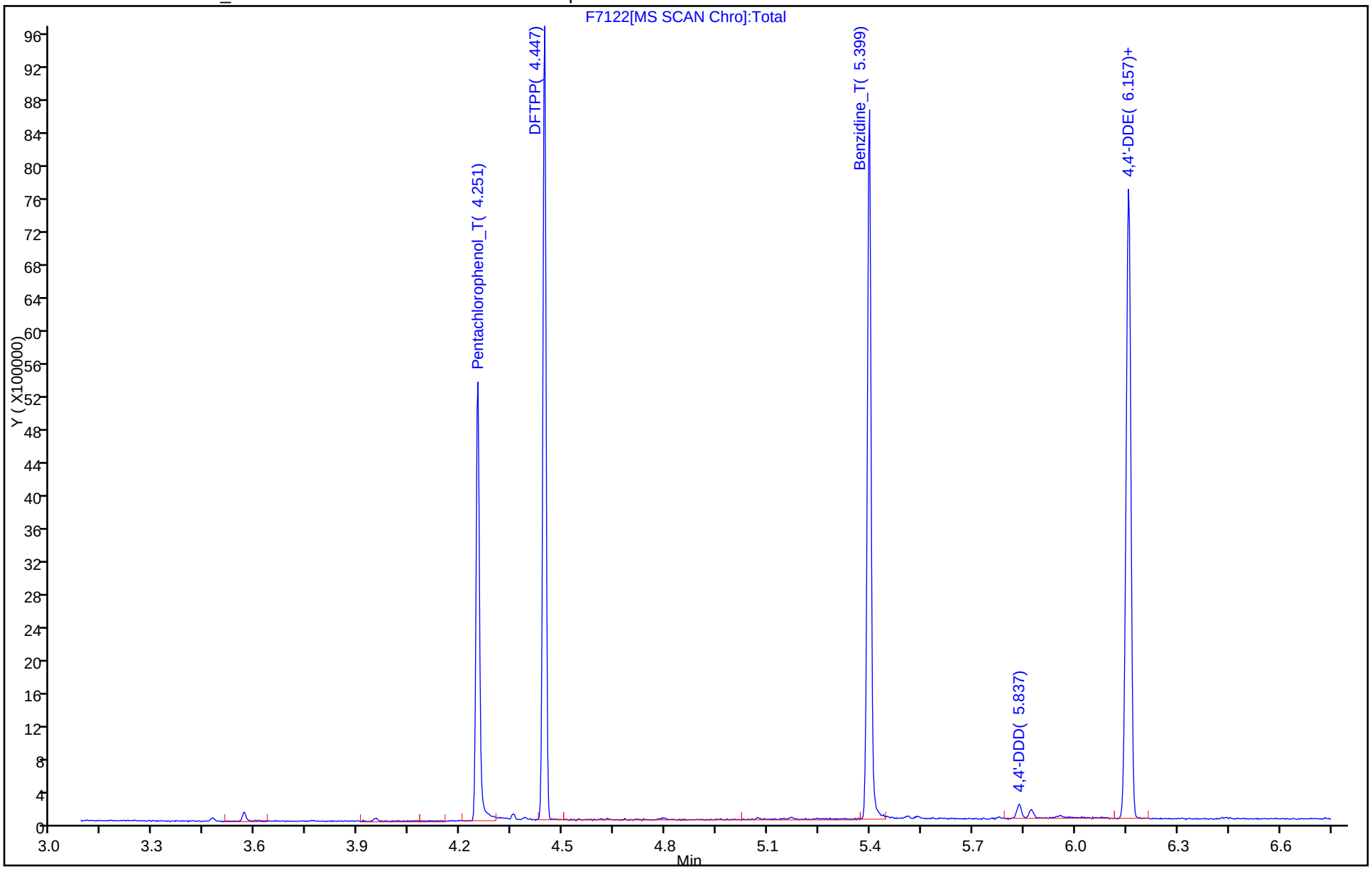
m/z	Y	m/z	Y	m/z	Y	m/z	Y
125.00	7040	230.00	2765	334.00	15050	451.00	31
127.00	407232	231.00	5973	335.00	2761	452.00	10
128.00	32392	232.00	522	336.00	199	453.00	1
129.00	174784	233.00	803	338.00	448	455.00	4
130.00	14516	234.00	4462	339.00	118	457.00	51
131.00	3547	235.00	5274	340.00	452	458.00	5
132.00	909	236.00	3293	341.00	2220	459.00	7
134.00	4688	237.00	6335	342.00	614	460.00	35
135.00	13797	238.00	1677	343.00	437	461.00	6
136.00	7657	239.00	2782	344.00	271	464.00	10
137.00	6505	240.00	2057	345.00	274	466.00	36
138.00	2155	241.00	3614	346.00	5214	467.00	7
139.00	1603	242.00	7066	347.00	860	469.00	129
140.00	1556	243.00	8381	349.00	564	470.00	66
141.00	24888	244.00	99016	351.00	1030	471.00	52
142.00	9854	245.00	14076	352.00	6810	472.00	58
143.00	4934	246.00	24864	353.00	2802	474.00	7
144.00	882	247.00	4842	354.00	6825	475.00	303
145.00	736	248.00	1252	355.00	1373	477.00	33
146.00	6643	249.00	3757	356.00	193	479.00	64
147.00	14922	250.00	1415	358.00	79	480.00	6
148.00	41104	251.00	596	359.00	433	482.00	11
149.00	6965	252.00	1240	360.00	467	483.00	72
150.00	1797	253.00	3056	361.00	321	485.00	1
151.00	2905	255.00	485824	362.00	202	486.00	9
152.00	1409	256.00	67552	363.00	532	488.00	22
153.00	9364	257.00	6750	364.00	374	492.00	3
154.00	5003	258.00	37472	365.00	40920	494.00	29
155.00	14375	259.00	5666	366.00	5223	495.00	98
156.00	22560	260.00	1269	367.00	232	496.00	2
157.00	4651	261.00	777	368.00	29	498.00	2
158.00	3586	262.00	124	370.00	987	500.00	53

Report Date: 13-Jun-2017 07:13:04 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7122.D

Injection Date:	12-Jun-2017 13:22:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	DFTPP			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		

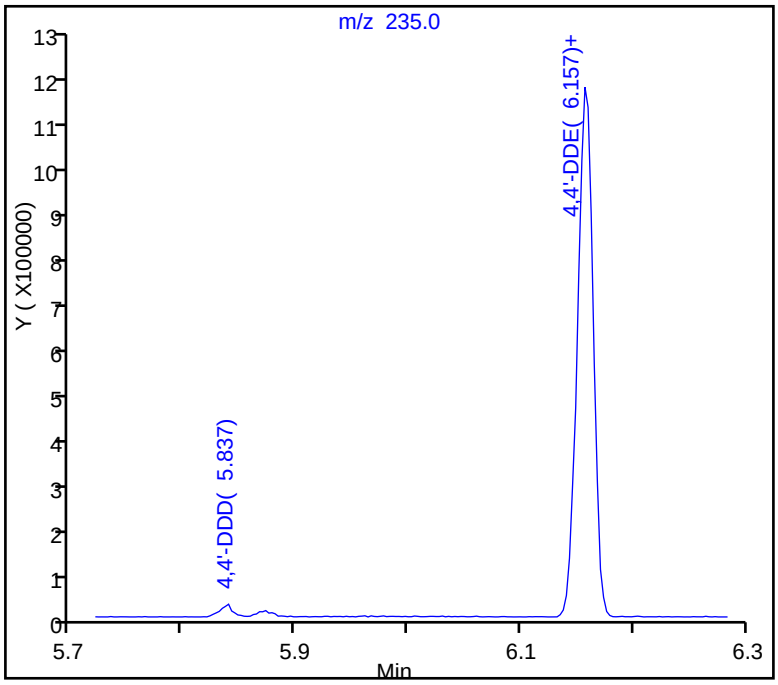


Breakdown Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7122.D
Injection Date: 12-Jun-2017 13:22:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

21 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

21 4,4'-DDT, Area = 1070123
19 4,4'-DDE, Area = 84405
18 4,4'-DDD, Area = 20528

%Breakdown: 8.93%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Denver

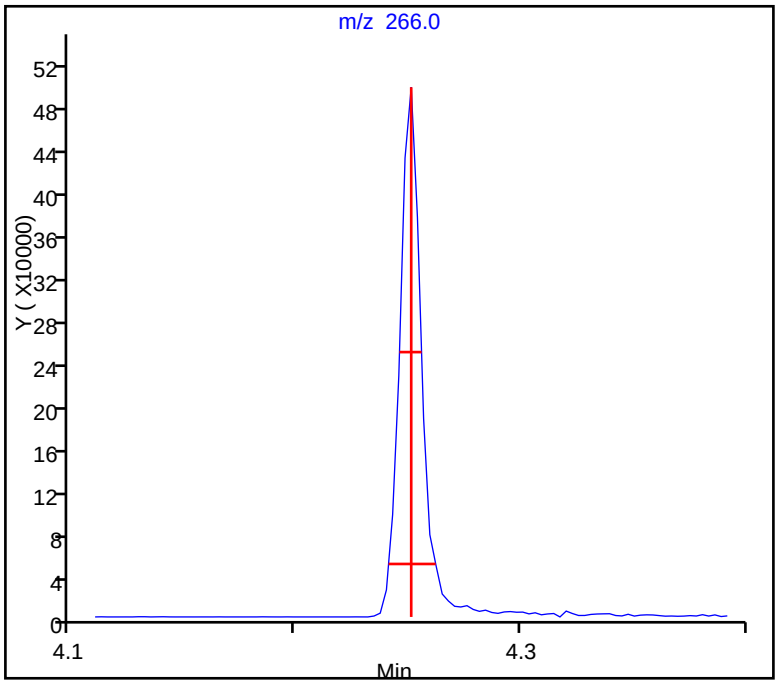
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b\F7122.D
Injection Date: 12-Jun-2017 13:22:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

12 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.011 (min.)
Front Width = 0.010 (min.)

Tailing Factor = 1.1, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Denver

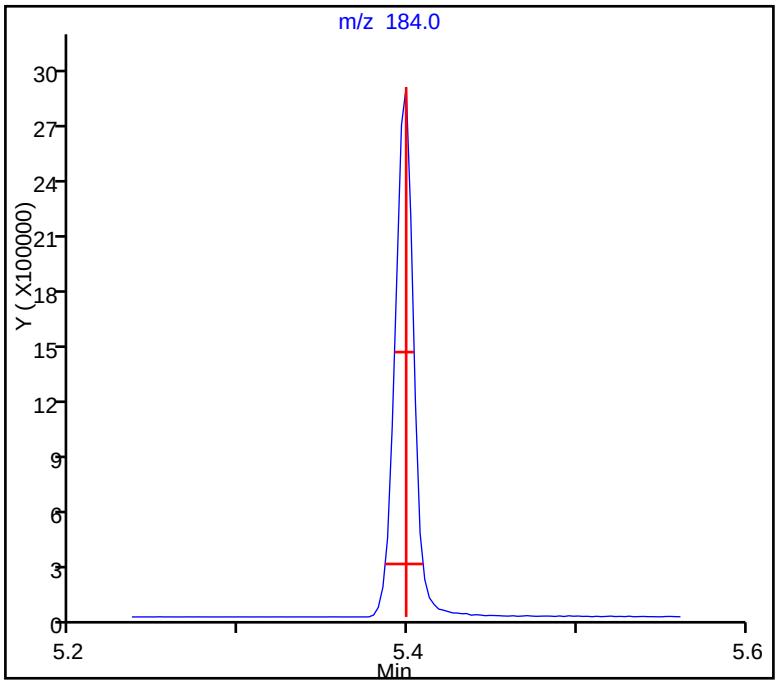
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Injection Date: 12-Jun-2017 13:22:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

15 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.010 (min.)
Front Width = 0.012 (min.)

Tailing Factor = 0.8, Max. Tailing < 2.00
Passed



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7149.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 13-Jun-2017 06:08:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 13-Jun-2017 13:37:47 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: vasquezk Date: 13-Jun-2017 06:17:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 Pentachlorophenol_T	266	4.251	4.251	0.000	73	659977	NR	NR	
13 DFTPP									
15 Benzidine_T	184	5.374	5.374	0.000	94	3959003	NR	NR	
18 4,4'-DDD	235	5.846	5.846	0.000	71	21146	NR	NR	
19 4,4'-DDE	246		6.127				ND	ND	
21 4,4'-DDT	235	6.127	6.127	0.000	93	2133956	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
ND - Not Detected or Marked ND

Reagents:

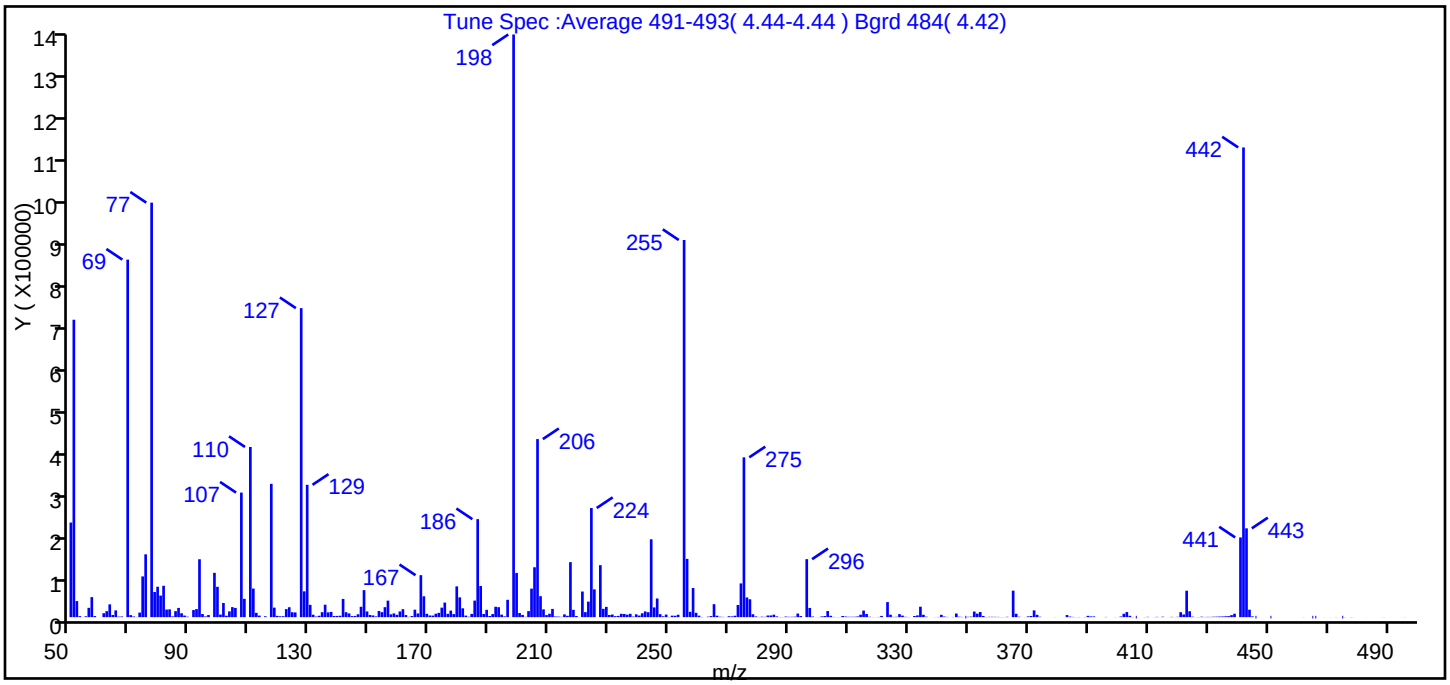
MS-DFTPP_00044 Amount Added: 0.50 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7149.D
Injection Date: 13-Jun-2017 06:08:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM
Tune Method: DFTPP Method 8270

13 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	51.0
68	<2% of mass 69	0.0 (0.0)
69	Present	61.4
70	<2% of mass 69	0.3 (0.6)
127	40-60% of mass 198	53.0
197	<1% of mass 198	0.0
199	5-9% of mass 198	7.6
275	10-30% of mass 198	27.4
365	>1% of mass 198	4.5
441	Present but less than mass 443	13.7 (89.8)
442	>40% of mass 198	80.6
443	17-23% of mass 442	15.2 (18.9)

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7149.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 13-Jun-2017 06:08:30
Spectrum: Tune Spec :Average 491-493(4.44-4.44) Bgrd 484(4.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 404

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	221696	160.00	13326	264.00	2488	373.00	5433
51.00	697024	161.00	18592	265.00	30360	374.00	909
52.00	37672	162.00	4893	266.00	3325	376.00	106
53.00	2348	163.00	681	267.00	985	377.00	60
54.00	142	164.00	2584	268.00	600	378.00	45
55.00	1955	165.00	17456	269.00	151	379.00	188
56.00	21800	166.00	8595	270.00	2124	380.00	51
57.00	46936	167.00	98328	271.00	1819	383.00	4870
58.00	2499	168.00	48824	272.00	3299	384.00	1383
59.00	34	169.00	7866	273.00	28488	385.00	588
60.00	89	170.00	3914	274.00	79048	386.00	221
61.00	9193	171.00	3689	275.00	374528	387.00	364
62.00	13969	172.00	8002	276.00	46120	389.00	387
63.00	29928	173.00	9999	277.00	41904	390.00	3077
64.00	5018	174.00	22264	278.00	6830	391.00	1683
65.00	15834	175.00	34160	279.00	1743	392.00	1643
66.00	1204	176.00	7745	280.00	475	395.00	64
67.00	1593	177.00	15301	281.00	1055	396.00	507
69.00	837824	178.00	7240	282.00	684	399.00	208
70.00	4734	179.00	72112	283.00	3833	400.00	131
71.00	1593	180.00	46360	284.00	3938	401.00	1456
72.00	487	181.00	20688	285.00	5812	402.00	7952
73.00	10695	182.00	3621	286.00	1748	403.00	11910
74.00	95448	183.00	994	287.00	359	404.00	3137
75.00	147200	184.00	7566	288.00	328	405.00	422
77.00	971392	185.00	38824	289.00	1360	406.00	1
78.00	58864	186.00	229632	290.00	821	407.00	52
79.00	71280	187.00	72968	291.00	865	408.00	6
80.00	50520	188.00	7445	292.00	1187	409.00	311
81.00	73456	189.00	17168	293.00	8417	410.00	701
82.00	17840	190.00	2701	294.00	2583	412.00	160
83.00	18296	191.00	7161	296.00	135872	413.00	651
84.00	1731	192.00	24336	297.00	21544	414.00	121

Report Date: 13-Jun-2017 13:37:48 Chrom Revision: 2.2 25-Apr-2017 13:27:22
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7149.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 13-Jun-2017 06:08:30
Spectrum: Tune Spec :Average 491-493(4.44-4.44) Bgrd 484(4.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 404

m/z	Y	m/z	Y	m/z	Y	m/z	Y
85.00	14068	193.00	23368	298.00	1463	415.00	1036
86.00	21616	194.00	5866	299.00	96	416.00	70
87.00	9168	195.00	1802	300.00	303	417.00	143
88.00	3681	196.00	40608	301.00	1679	418.00	632
89.00	1095	198.00	1365504	302.00	2538	419.00	148
91.00	16600	199.00	103632	303.00	14330	420.00	757
92.00	18880	200.00	9647	304.00	3163	421.00	11555
93.00	135680	201.00	5188	305.00	581	422.00	6260
94.00	7278	202.00	725	306.00	268	423.00	61920
95.00	1743	203.00	14150	307.00	272	424.00	13786
96.00	4948	204.00	66888	308.00	2706	425.00	1119
98.00	103824	205.00	116920	309.00	1455	426.00	152
99.00	71072	206.00	417280	310.00	888	427.00	347
100.00	6010	207.00	49152	311.00	911	428.00	1009
101.00	33208	208.00	18216	312.00	997	429.00	458
102.00	3302	209.00	4808	313.00	1662	430.00	701
103.00	13532	210.00	7947	314.00	5741	431.00	630
104.00	23488	211.00	19240	315.00	15415	432.00	996
105.00	21640	212.00	1622	316.00	7387	433.00	1162
107.00	291904	213.00	1368	317.00	925	434.00	1512
108.00	42888	214.00	744	318.00	239	435.00	1627
110.00	398784	215.00	6474	319.00	154	436.00	2065
111.00	66960	216.00	3138	320.00	455	437.00	2409
112.00	10072	217.00	128912	321.00	2862	438.00	4683
113.00	3648	218.00	17160	323.00	35224	439.00	7955
115.00	2038	219.00	2618	324.00	5743	441.00	186816
117.00	312448	220.00	248	325.00	621	442.00	1100800
118.00	22312	221.00	60056	326.00	871	443.00	208128
119.00	3052	222.00	11824	327.00	7071	444.00	17424
120.00	1941	223.00	36408	328.00	3615	445.00	1726
121.00	2143	224.00	255744	329.00	813	446.00	4
122.00	18816	225.00	65096	330.00	373	447.00	141
123.00	23256	227.00	121808	332.00	2638	448.00	10
124.00	11506	228.00	19488	333.00	4081	449.00	5

Report Date: 13-Jun-2017 13:37:48 Chrom Revision: 2.2 25-Apr-2017 13:27:22
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7149.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 13-Jun-2017 06:08:30
Spectrum: Tune Spec :Average 491-493(4.44-4.44) Bgrd 484(4.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 404

m/z	Y	m/z	Y	m/z	Y	m/z	Y
125.00	11057	229.00	24024	334.00	24416	450.00	5
127.00	724160	230.00	5123	335.00	5580	451.00	4
128.00	60472	231.00	6109	336.00	1069	456.00	14
129.00	310144	232.00	2309	339.00	247	458.00	13
130.00	28800	233.00	2983	340.00	483	459.00	9
131.00	5645	234.00	7860	341.00	5473	460.00	32
132.00	1439	235.00	7438	342.00	1400	462.00	191
133.00	3262	236.00	5837	343.00	529	463.00	52
134.00	11613	237.00	7847	345.00	462	465.00	3
135.00	29200	238.00	1341	346.00	8480	466.00	4
136.00	11141	239.00	6683	347.00	1025	467.00	71
137.00	12283	240.00	3729	348.00	519	468.00	9
138.00	2703	241.00	9011	349.00	2	469.00	113
139.00	2902	242.00	13380	350.00	861	470.00	17
140.00	3307	243.00	11594	351.00	1224	471.00	117
141.00	42656	244.00	182464	352.00	13090	473.00	240
142.00	11569	245.00	22776	353.00	8193	474.00	75
143.00	8662	246.00	43720	354.00	11930	475.00	2
144.00	2467	247.00	6988	355.00	2785	476.00	213
145.00	2885	248.00	1964	356.00	361	478.00	339
146.00	6705	249.00	6044	357.00	758	479.00	127
147.00	24272	250.00	483	358.00	779	482.00	7
148.00	63264	251.00	3485	359.00	723	483.00	65
149.00	13336	252.00	3210	360.00	595	484.00	6
150.00	5079	253.00	5637	361.00	279	485.00	10
151.00	3923	255.00	883840	362.00	277	486.00	23
152.00	1741	256.00	136512	363.00	818	488.00	59
153.00	14483	257.00	12487	365.00	62096	489.00	196
154.00	11650	258.00	68272	366.00	7977	491.00	24
155.00	23376	259.00	10173	367.00	978	494.00	14
156.00	38712	260.00	3445	369.00	158	495.00	76
157.00	6635	261.00	418	370.00	1753	496.00	186
158.00	8746	262.00	73	371.00	2612	498.00	12
159.00	5481	263.00	1097	372.00	15868	500.00	47

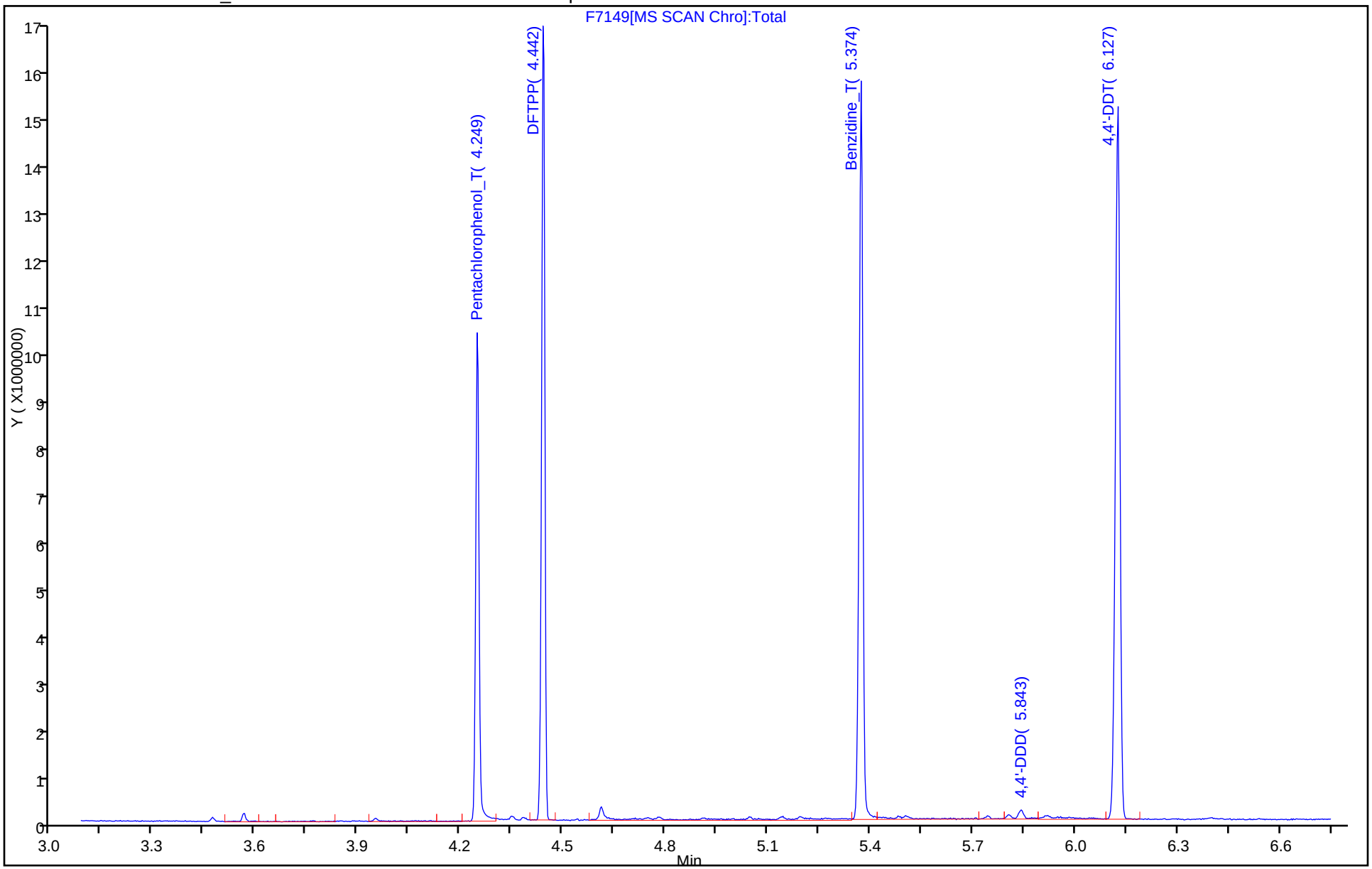
m/z	Y	m/z	Y	m/z	Y	m/z	Y
125.00	11057	229.00	24024	334.00	24416	450.00	5
127.00	724160	230.00	5123	335.00	5580	451.00	4
128.00	60472	231.00	6109	336.00	1069	456.00	14
129.00	310144	232.00	2309	339.00	247	458.00	13
130.00	28800	233.00	2983	340.00	483	459.00	9
131.00	5645	234.00	7860	341.00	5473	460.00	32
132.00	1439	235.00	7438	342.00	1400	462.00	191
133.00	3262	236.00	5837	343.00	529	463.00	52
134.00	11613	237.00	7847	345.00	462	465.00	3
135.00	29200	238.00	1341	346.00	8480	466.00	4
136.00	11141	239.00	6683	347.00	1025	467.00	71
137.00	12283	240.00	3729	348.00	519	468.00	9
138.00	2703	241.00	9011	349.00	2	469.00	113
139.00	2902	242.00	13380	350.00	861	470.00	17
140.00	3307	243.00	11594	351.00	1224	471.00	117
141.00	42656	244.00	182464	352.00	13090	473.00	240
142.00	11569	245.00	22776	353.00	8193	474.00	75
143.00	8662	246.00	43720	354.00	11930	475.00	2
144.00	2467	247.00	6988	355.00	2785	476.00	213
145.00	2885	248.00	1964	356.00	361	478.00	339
146.00	6705	249.00	6044	357.00	758	479.00	127
147.00	24272	250.00	483	358.00	779	482.00	7
148.00	63264	251.00	3485	359.00	723	483.00	65
149.00	13336	252.00	3210	360.00	595	484.00	6
150.00	5079	253.00	5637	361.00	279	485.00	10
151.00	3923	255.00	883840	362.00	277	486.00	23
152.00	1741	256.00	136512	363.00	818	488.00	59
153.00	14483	257.00	12487	365.00	62096	489.00	196
154.00	11650	258.00	68272	366.00	7977	491.00	24
155.00	23376	259.00	10173	367.00	978	494.00	14
156.00	38712	260.00	3445	369.00	158	495.00	76
157.00	6635	261.00	418	370.00	1753	496.00	186
158.00	8746	262.00	73	371.00	2612	498.00	12
159.00	5481	263.00	1097	372.00	15868	500.00	47

Report Date: 13-Jun-2017 13:37:48 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7149.D

Injection Date:	13-Jun-2017 06:08:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	DFTPP			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		

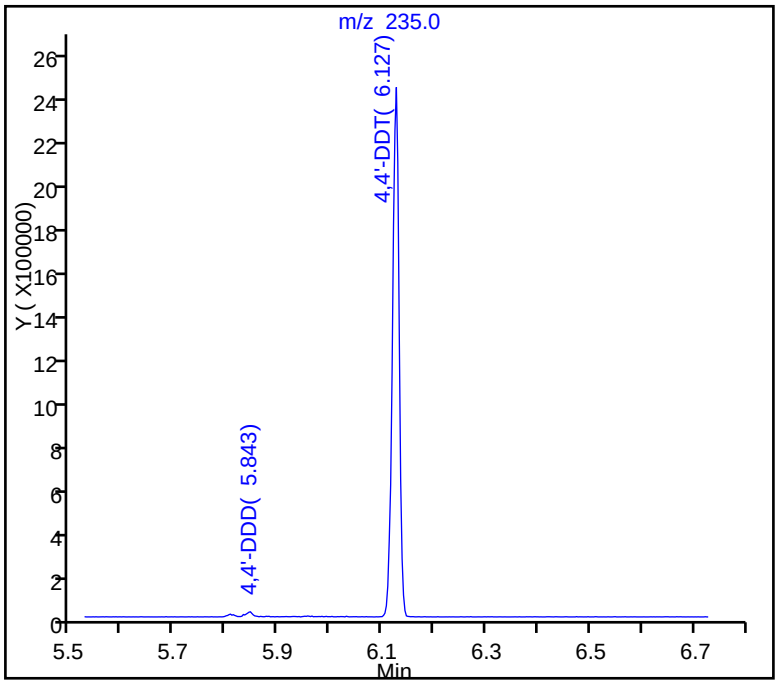


Breakdown Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7149.D
Injection Date: 13-Jun-2017 06:08:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

21 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

21 4,4'-DDT, Area = 2133956
19 4,4'-DDE, Area = 0
18 4,4'-DDD, Area = 21146

%Breakdown: 0.98%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Denver

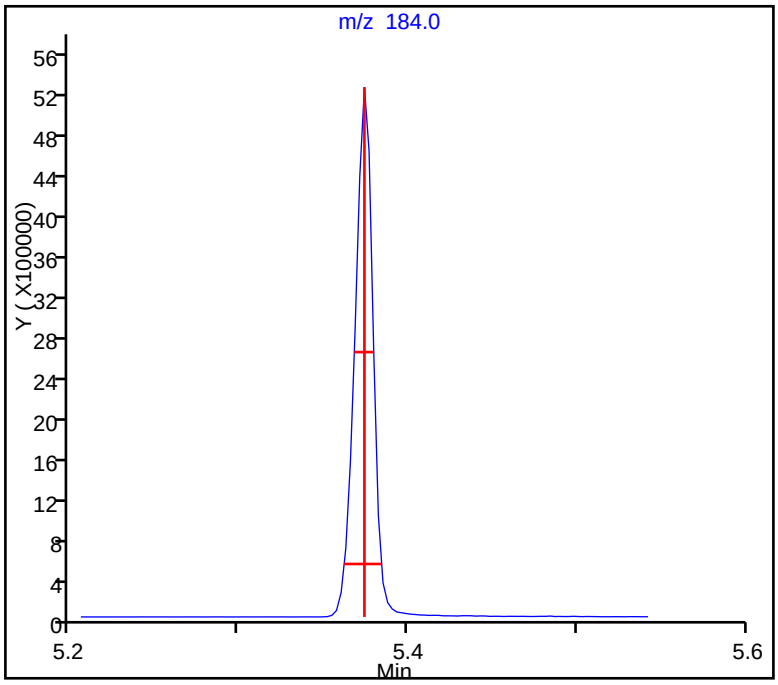
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7149.D
Injection Date: 13-Jun-2017 06:08:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

15 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.010 (min.)
Front Width = 0.012 (min.)

Tailing Factor = 0.9, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Denver

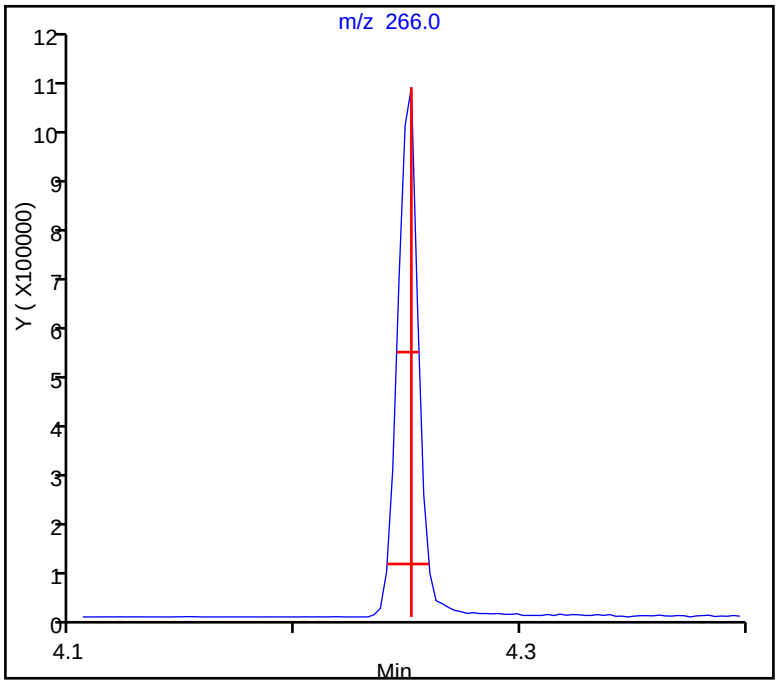
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7149.D
Injection Date: 13-Jun-2017 06:08:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

12 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.008 (min.)
Front Width = 0.011 (min.)

Tailing Factor = 0.7, Max. Tailing < 2.00
Passed



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7336.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 21-Jun-2017 19:11:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 22-Jun-2017 16:05:38 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: wickhamm Date: 21-Jun-2017 19:26:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 Pentachlorophenol_T	266	4.251	4.251	0.000	64	296258	NR	NR	
13 DFTPP									
15 Benzidine_T	184	5.382	5.382	0.000	94	2425638	NR	NR	
19 4,4'-DDE	246	5.495	5.495	0.000	43	1072	NR	NR	
18 4,4'-DDD	235	5.851	5.851	0.000	77	14997	NR	NR	
21 4,4'-DDT	235	6.135	6.135	0.000	86	1260083	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

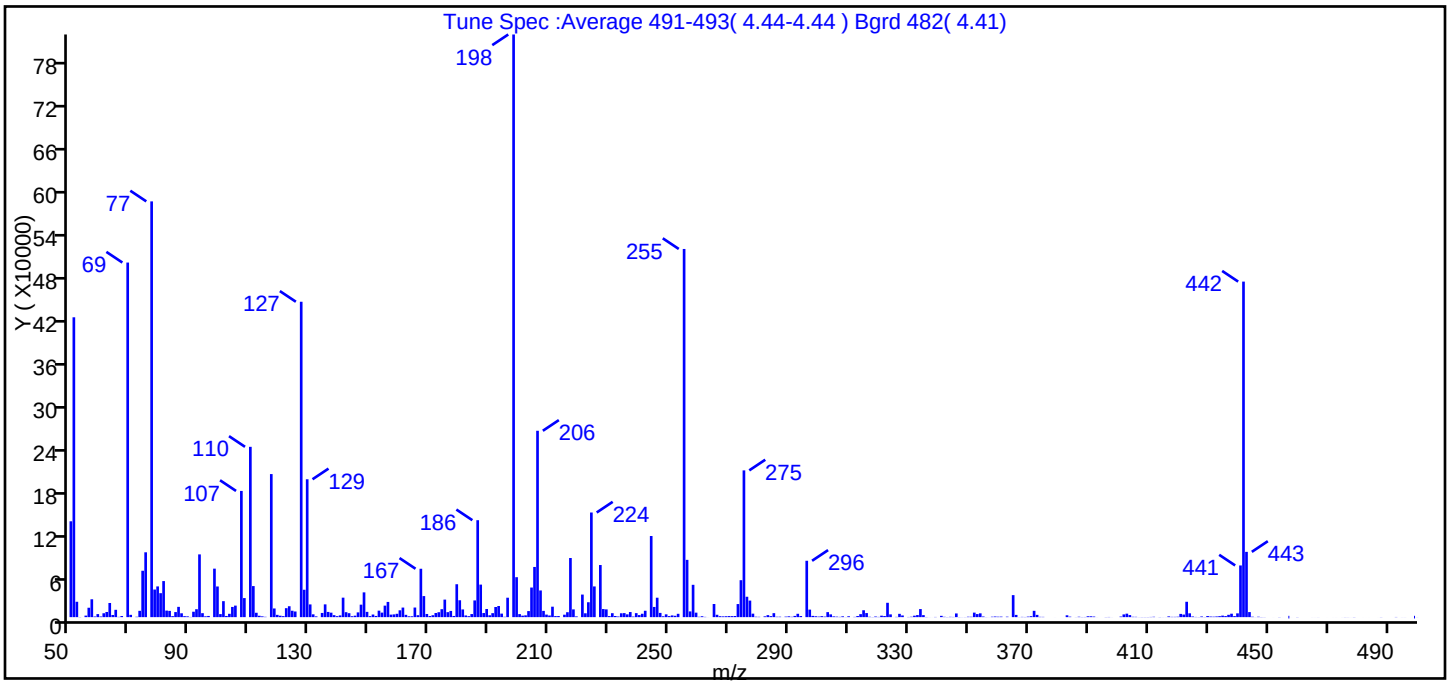
MS-DFTPP_00044 Amount Added: 0.50 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7336.D
Injection Date: 21-Jun-2017 19:11:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: WICKHAMM ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM
Tune Method: DFTPP Method 8270

13 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	51.5
68	<2% of mass 69	0.0 (0.0)
69	Present	60.9
70	<2% of mass 69	0.4 (0.6)
127	40-60% of mass 198	54.1
197	<1% of mass 198	0.0
199	5-9% of mass 198	6.9
275	10-30% of mass 198	25.2
365	>1% of mass 198	3.8
441	Present but less than mass 443	8.9 (79.2)
442	>40% of mass 198	57.6
443	17-23% of mass 442	11.2 (19.5)

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7336.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 21-Jun-2017 19:11:30
Spectrum: Tune Spec :Average 491-493(4.44-4.44) Bgrd 482(4.41)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 396

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	134592	159.00	4694	265.00	18448	371.00	1310
51.00	421056	160.00	9596	266.00	3339	372.00	8884
52.00	21584	161.00	13445	267.00	1322	373.00	3179
53.00	195	162.00	3243	268.00	1082	374.00	416
55.00	2152	163.00	1210	269.00	1277	375.00	377
56.00	13199	164.00	1211	270.00	1495	379.00	24
57.00	25096	165.00	13484	271.00	1440	383.00	2594
58.00	917	166.00	2713	272.00	1590	384.00	678
59.00	4270	167.00	67944	273.00	18368	386.00	102
60.00	907	168.00	29568	274.00	51880	387.00	581
61.00	5457	169.00	4458	275.00	206080	388.00	216
62.00	7246	170.00	1555	276.00	28632	389.00	241
63.00	19872	171.00	2702	277.00	23248	390.00	1234
64.00	3036	172.00	5815	278.00	4894	391.00	1196
65.00	10306	173.00	6918	279.00	593	392.00	821
66.00	375	174.00	11165	280.00	451	393.00	53
67.00	1548	175.00	24624	282.00	1129	395.00	6
69.00	497920	176.00	6994	283.00	2816	396.00	182
70.00	3229	177.00	8736	284.00	1421	397.00	255
72.00	521	178.00	1662	285.00	5602	398.00	55
73.00	8878	179.00	46216	286.00	570	401.00	818
74.00	65128	180.00	23704	287.00	620	402.00	3847
75.00	91056	181.00	10815	288.00	42	403.00	4888
77.00	583808	182.00	2355	289.00	733	404.00	2899
78.00	38784	183.00	1368	290.00	1147	405.00	500
79.00	43160	184.00	4339	291.00	504	406.00	437
80.00	33656	185.00	23488	292.00	1720	407.00	106
81.00	50640	186.00	136128	293.00	4728	408.00	181
82.00	9194	187.00	45688	294.00	1555	409.00	180
83.00	8786	188.00	5762	296.00	79160	410.00	194
84.00	1414	189.00	11437	297.00	10564	411.00	284
85.00	7123	190.00	2629	298.00	1770	412.00	515
86.00	14445	191.00	5607	299.00	1241	413.00	19

Report Date: 22-Jun-2017 16:05:38 Chrom Revision: 2.2 20-Jun-2017 07:42:38
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7336.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 21-Jun-2017 19:11:30
Spectrum: Tune Spec :Average 491-493(4.44-4.44) Bgrd 482(4.41)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 396

m/z	Y	m/z	Y	m/z	Y	m/z	Y
87.00	5415	192.00	14243	300.00	765	414.00	178
88.00	1377	193.00	15654	301.00	1390	415.00	67
89.00	1114	194.00	4958	302.00	757	416.00	62
90.00	265	195.00	487	303.00	7032	417.00	1048
91.00	7609	196.00	27288	304.00	3883	418.00	409
92.00	11138	198.00	818176	305.00	1033	419.00	416
93.00	88120	199.00	56088	306.00	711	420.00	583
94.00	5585	200.00	4261	307.00	378	421.00	4545
95.00	1152	201.00	2080	308.00	1141	422.00	3629
96.00	1672	202.00	2534	309.00	112	423.00	21584
98.00	68096	203.00	8523	310.00	1215	424.00	5375
99.00	43064	204.00	41576	312.00	347	425.00	921
100.00	4276	205.00	70472	313.00	1553	426.00	301
101.00	22448	206.00	261696	314.00	4197	427.00	202
102.00	1650	207.00	37480	315.00	9676	428.00	935
103.00	4702	208.00	8788	316.00	5725	429.00	184
104.00	14335	209.00	3562	317.00	528	430.00	1553
105.00	16189	210.00	2308	318.00	204	431.00	844
107.00	177216	211.00	14675	319.00	881	432.00	674
108.00	26768	212.00	1483	320.00	337	433.00	970
110.00	239168	213.00	1545	321.00	2044	434.00	1398
111.00	43616	215.00	3423	322.00	1537	435.00	2134
112.00	6151	216.00	6913	323.00	20144	436.00	1492
113.00	1918	217.00	83032	324.00	3875	437.00	3277
114.00	1083	218.00	10898	325.00	38	438.00	4841
115.00	453	219.00	1022	326.00	359	439.00	1450
117.00	200896	221.00	31704	327.00	4649	440.00	5323
118.00	12175	222.00	5425	328.00	2353	441.00	72584
119.00	3222	223.00	20928	330.00	260	442.00	471168
120.00	2002	224.00	146944	331.00	577	443.00	91672
121.00	1409	225.00	43120	332.00	2054	444.00	7107
122.00	12586	227.00	73184	333.00	2905	445.00	623
123.00	15324	228.00	11365	334.00	11344	446.00	88
124.00	8991	229.00	10895	335.00	2808	447.00	575

Report Date: 22-Jun-2017 16:05:38 Chrom Revision: 2.2 20-Jun-2017 07:42:38
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7336.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 21-Jun-2017 19:11:30
Spectrum: Tune Spec :Average 491-493(4.44-4.44) Bgrd 482(4.41)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 396

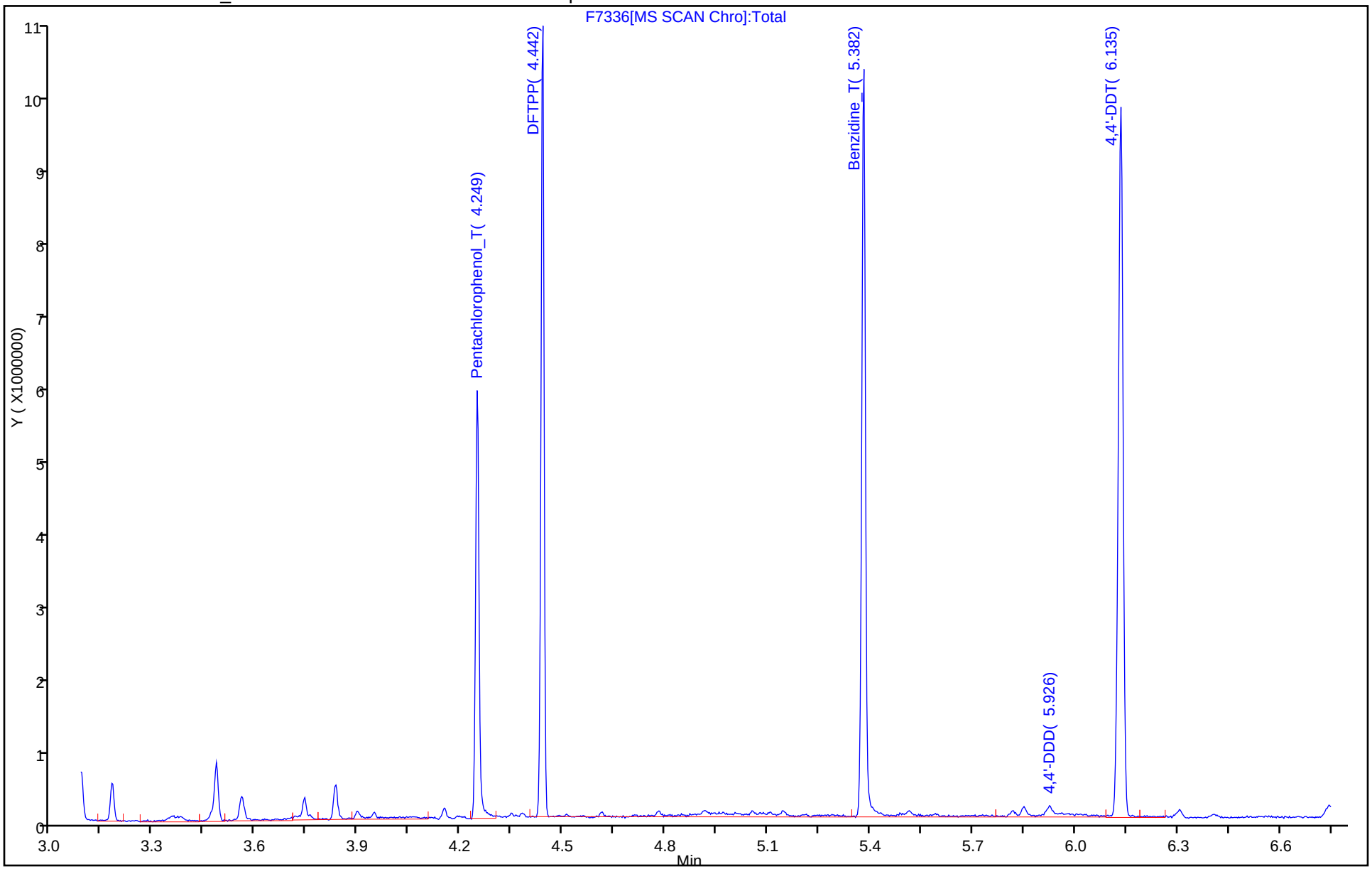
m/z	Y	m/z	Y	m/z	Y	m/z	Y
125.00	7947	230.00	1509	336.00	237	448.00	208
127.00	442880	231.00	5567	337.00	64	449.00	140
128.00	38472	232.00	1607	338.00	22	450.00	5
129.00	193600	233.00	897	339.00	276	452.00	23
130.00	17872	234.00	5445	341.00	1845	454.00	176
131.00	3958	235.00	5664	342.00	457	455.00	12
132.00	1058	236.00	3921	343.00	191	457.00	1
134.00	5886	237.00	7173	344.00	438	458.00	23
135.00	17952	238.00	814	345.00	295	460.00	171
136.00	7319	239.00	5628	346.00	5192	461.00	6
137.00	6280	240.00	2880	347.00	178	465.00	33
138.00	2783	241.00	4740	348.00	95	466.00	32
139.00	1402	242.00	8966	349.00	141	467.00	60
140.00	2413	244.00	113928	350.00	580	470.00	12
141.00	27360	245.00	14314	351.00	537	472.00	18
142.00	6947	246.00	27280	352.00	6347	473.00	23
143.00	5554	247.00	5964	353.00	4299	474.00	10
144.00	1308	248.00	1211	354.00	5341	475.00	35
145.00	2069	249.00	3929	355.00	873	476.00	121
146.00	6682	250.00	1491	356.00	124	477.00	85
147.00	17528	251.00	2411	357.00	58	478.00	30
148.00	34792	252.00	1914	358.00	602	479.00	165
149.00	7408	253.00	4693	359.00	893	482.00	13
150.00	1448	255.00	516992	360.00	626	483.00	9
151.00	3663	256.00	80440	361.00	736	484.00	17
152.00	1690	257.00	8049	363.00	668	487.00	15
153.00	9095	258.00	45408	365.00	30920	488.00	141
154.00	6357	259.00	6305	366.00	3142	493.00	244
155.00	16162	260.00	510	367.00	114	495.00	52
156.00	21368	261.00	1241	368.00	362	496.00	58
157.00	3543	262.00	359	369.00	243	499.00	2
158.00	3864	263.00	47	370.00	738	500.00	68

Report Date: 22-Jun-2017 16:05:38 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7336.D

Injection Date:	21-Jun-2017 19:11:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	DFTPP			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		

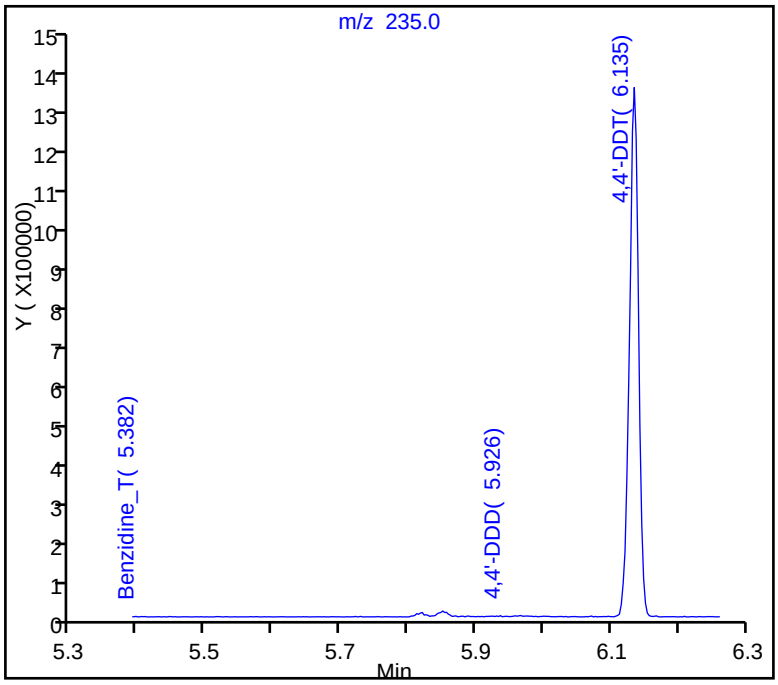


Breakdown Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7336.D
Injection Date: 21-Jun-2017 19:11:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: WICKHAMM ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

21 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

21 4,4'-DDT, Area = 1260083
19 4,4'-DDE, Area = 1072
18 4,4'-DDD, Area = 14997

%Breakdown: 1.26%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Denver

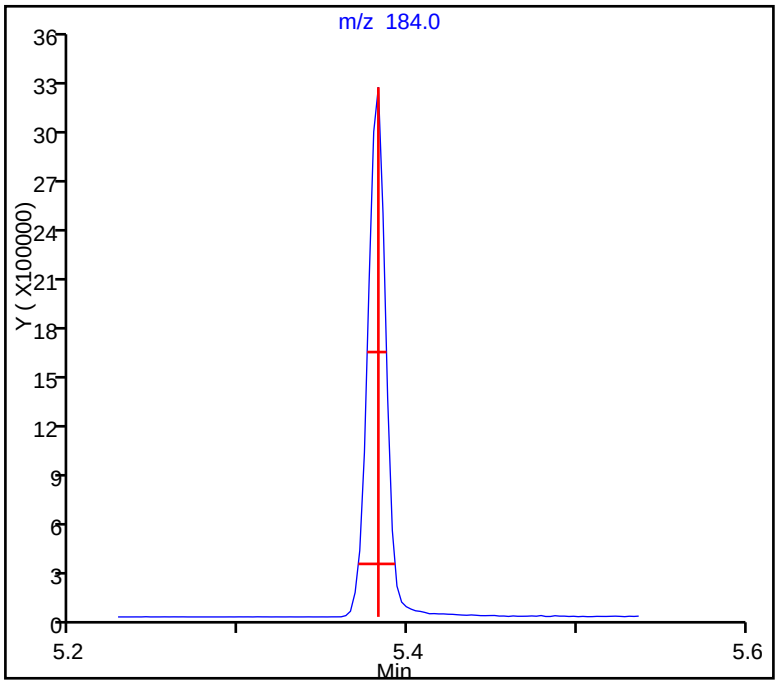
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7336.D
Injection Date: 21-Jun-2017 19:11:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: WICKHAMM ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

15 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.010 (min.)
Front Width = 0.012 (min.)

Tailing Factor = 0.8, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Denver

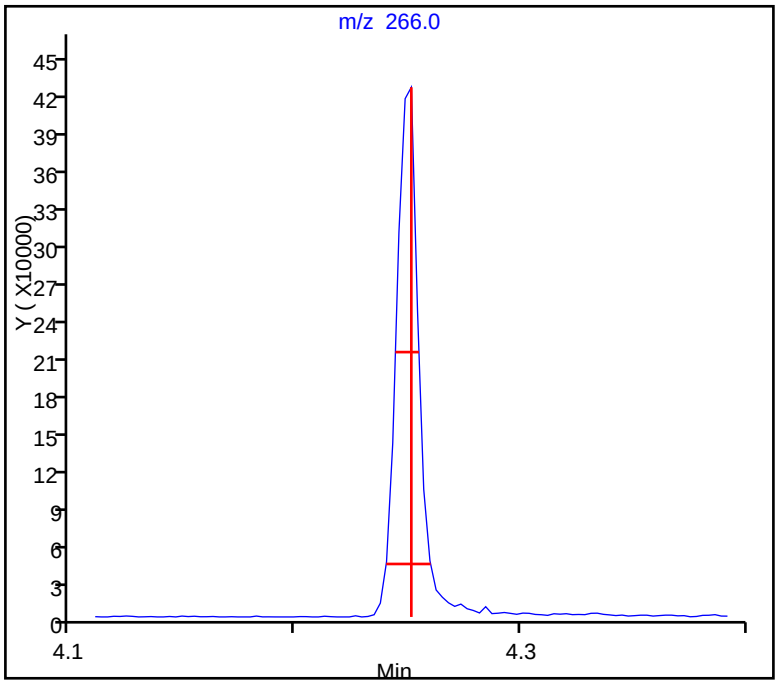
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7336.D
Injection Date: 21-Jun-2017 19:11:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: WICKHAMM ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

12 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.009 (min.)
Front Width = 0.011 (min.)

Tailing Factor = 0.8, Max. Tailing < 2.00
Passed



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7361.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 22-Jun-2017 17:13:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 23-Jun-2017 21:52:43 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK016

First Level Reviewer: wickhamm Date: 22-Jun-2017 17:30:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 Pentachlorophenol_T	266	4.249	4.249	0.000	65	228169	NR	NR	
13 DFTPP									
15 Benzidine_T	184	5.371	5.371	0.000	94	1977701	NR	NR	
19 4,4'-DDE	246	5.483	5.483	0.000	29	0	NR	NR	
18 4,4'-DDD	235	5.837	5.837	0.000	74	7369	NR	NR	
21 4,4'-DDT	235	6.119	6.119	0.000	88	1012071	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

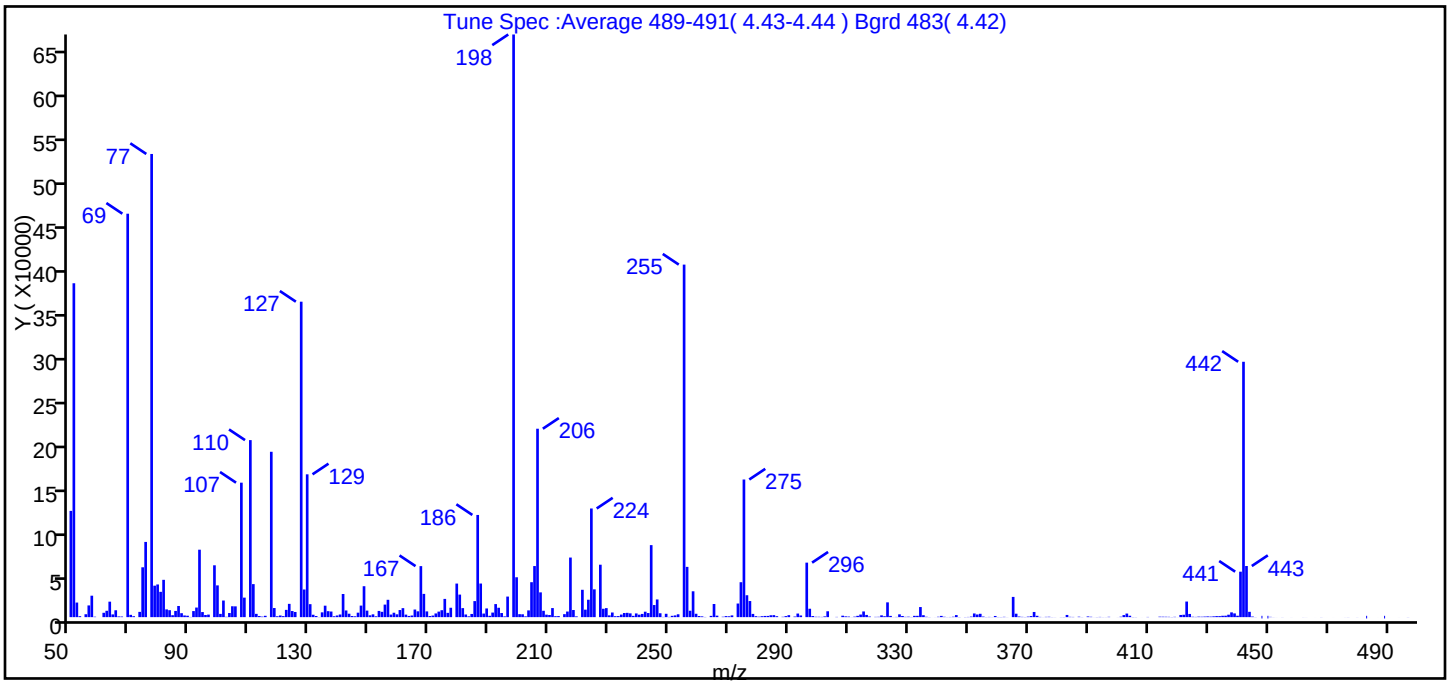
MS-DFTPP_00044 Amount Added: 0.50 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7361.D
Injection Date: 22-Jun-2017 17:13:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: WICKHAMM ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM
Tune Method: DFTPP Method 8270

13 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	57.3
68	<2% of mass 69	0.0 (0.0)
69	Present	69.2
70	<2% of mass 69	0.4 (0.6)
127	40-60% of mass 198	54.1
197	<1% of mass 198	0.0
199	5-9% of mass 198	6.8
275	10-30% of mass 198	23.6
365	>1% of mass 198	3.5
441	Present but less than mass 443	7.8 (88.9)
442	>40% of mass 198	43.8
443	17-23% of mass 442	8.8 (20.0)

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7361.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 22-Jun-2017 17:13:30
Spectrum: Tune Spec :Average 489-491(4.43-4.44) Bgrd 483(4.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 397

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	120656	160.00	8057	268.00	479	378.00	114
51.00	379136	161.00	10204	269.00	1176	379.00	73
52.00	16568	162.00	2868	270.00	979	381.00	116
53.00	1100	163.00	1362	271.00	1978	382.00	158
55.00	3301	164.00	1854	273.00	15459	383.00	2494
56.00	13303	165.00	8641	274.00	39664	384.00	350
57.00	24352	166.00	6621	275.00	156288	385.00	245
58.00	484	167.00	57944	276.00	24872	386.00	4
61.00	4943	168.00	26408	277.00	18288	387.00	500
62.00	7219	169.00	6517	278.00	3680	388.00	107
63.00	17576	170.00	1273	279.00	1083	389.00	3
64.00	3108	171.00	1800	280.00	530	390.00	782
65.00	7814	172.00	4192	281.00	1063	391.00	412
66.00	777	173.00	6285	282.00	1369	392.00	52
67.00	688	174.00	7875	283.00	1403	393.00	139
69.00	458112	175.00	20720	284.00	2138	394.00	265
70.00	2609	176.00	4878	285.00	2275	395.00	91
71.00	1047	177.00	10658	286.00	1051	396.00	77
72.00	15	179.00	38128	288.00	403	397.00	368
73.00	5977	180.00	25600	289.00	1187	398.00	3
74.00	56616	181.00	10250	290.00	2227	399.00	3
75.00	85416	182.00	3018	292.00	678	400.00	45
77.00	525952	183.00	914	293.00	4087	401.00	477
78.00	35728	184.00	3622	294.00	1880	402.00	2328
79.00	37112	185.00	18216	296.00	61888	403.00	4073
80.00	28736	186.00	116040	297.00	9546	404.00	1587
81.00	42376	187.00	38168	298.00	1241	405.00	164
82.00	8798	188.00	4069	299.00	434	406.00	123
83.00	7896	189.00	9855	300.00	403	408.00	21
84.00	2199	190.00	1532	301.00	268	409.00	3
85.00	7049	191.00	5186	302.00	850	410.00	228
86.00	12662	192.00	14825	303.00	6673	414.00	525
87.00	4489	193.00	10667	306.00	264	415.00	487

Report Date: 23-Jun-2017 21:52:45 Chrom Revision: 2.2 20-Jun-2017 07:42:38
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7361.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 22-Jun-2017 17:13:30
Spectrum: Tune Spec :Average 489-491(4.43-4.44) Bgrd 483(4.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 397

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	1902	194.00	4666	308.00	1633	416.00	441
89.00	1616	195.00	851	309.00	879	417.00	368
90.00	202	196.00	23360	310.00	660	418.00	161
91.00	6886	198.00	661632	311.00	76	419.00	344
92.00	10894	199.00	45280	312.00	573	420.00	55
93.00	76584	200.00	3386	313.00	1490	421.00	2468
94.00	5772	201.00	3257	314.00	2929	422.00	2701
95.00	2441	202.00	864	315.00	6466	423.00	17712
96.00	2888	203.00	7662	316.00	2519	424.00	3623
98.00	58880	204.00	39680	317.00	731	425.00	447
99.00	36064	205.00	58016	319.00	308	426.00	272
100.00	3697	206.00	213952	320.00	384	427.00	584
101.00	18872	207.00	28136	321.00	2027	428.00	481
102.00	384	208.00	7225	322.00	1017	429.00	646
103.00	4681	209.00	2807	323.00	16792	430.00	831
104.00	12350	210.00	2436	324.00	1419	431.00	621
105.00	12258	211.00	10302	325.00	98	432.00	904
107.00	152704	212.00	1084	326.00	256	433.00	1190
108.00	22160	213.00	1216	327.00	3186	434.00	1161
110.00	201024	215.00	3396	328.00	1316	435.00	1561
111.00	37496	216.00	6366	329.00	337	436.00	1624
112.00	3731	217.00	67672	330.00	524	437.00	2766
113.00	1260	218.00	8093	331.00	192	438.00	5425
114.00	596	219.00	850	332.00	1486	439.00	4246
115.00	1526	221.00	31064	333.00	1511	440.00	1613
117.00	187776	222.00	8515	334.00	11466	441.00	51624
118.00	10335	223.00	19768	335.00	2192	442.00	289984
119.00	1011	224.00	123384	336.00	429	443.00	58056
120.00	1867	225.00	31576	337.00	133	444.00	6048
121.00	1142	227.00	59544	338.00	17	445.00	673
122.00	8242	228.00	9505	339.00	56	446.00	107
123.00	15085	229.00	10251	340.00	440	448.00	1
124.00	6933	230.00	2020	341.00	1418	450.00	2
125.00	5874	231.00	5264	342.00	408	451.00	314

Report Date: 23-Jun-2017 21:52:45 Chrom Revision: 2.2 20-Jun-2017 07:42:38
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7361.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 22-Jun-2017 17:13:30
Spectrum: Tune Spec :Average 489-491(4.43-4.44) Bgrd 483(4.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 397

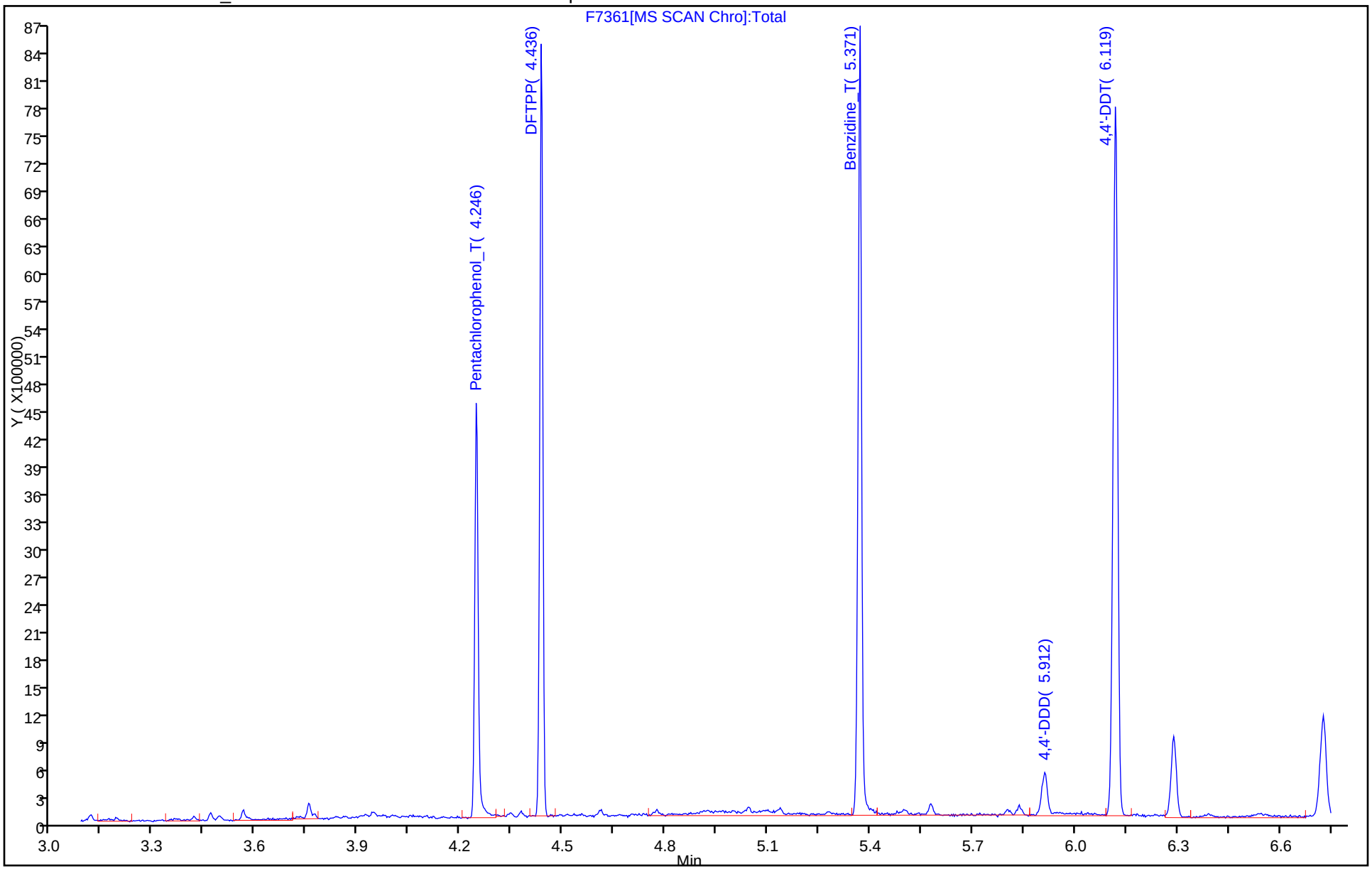
m/z	Y	m/z	Y	m/z	Y	m/z	Y
127.00	358208	232.00	1063	343.00	109	452.00	79
128.00	31400	233.00	1207	344.00	206	453.00	28
129.00	162176	234.00	2909	345.00	489	454.00	9
130.00	14737	235.00	4706	346.00	2332	455.00	66
131.00	2731	236.00	4881	347.00	160	458.00	27
132.00	1274	237.00	4311	349.00	166	462.00	56
133.00	136	238.00	1476	350.00	237	463.00	33
134.00	5436	239.00	4209	351.00	618	466.00	11
135.00	13010	240.00	2793	352.00	4177	467.00	3
136.00	6783	241.00	3651	353.00	3028	468.00	81
137.00	6377	242.00	6184	354.00	3802	469.00	7
138.00	1005	243.00	4648	355.00	640	470.00	6
139.00	1878	244.00	81776	356.00	147	472.00	14
140.00	2998	245.00	13741	357.00	271	474.00	3
141.00	26280	246.00	20096	358.00	107	475.00	6
142.00	7578	247.00	4421	359.00	1323	476.00	42
143.00	3885	248.00	251	360.00	187	477.00	73
144.00	1267	249.00	3820	361.00	168	479.00	3
145.00	945	250.00	279	362.00	345	480.00	56
146.00	5067	251.00	1494	363.00	74	482.00	14
147.00	13107	252.00	1966	365.00	22976	483.00	1
148.00	35120	253.00	3234	366.00	3895	484.00	19
149.00	7412	255.00	400320	367.00	706	485.00	3
150.00	2080	256.00	57080	368.00	325	486.00	5
151.00	3177	257.00	7280	369.00	180	487.00	12
152.00	933	258.00	29360	370.00	581	488.00	5
153.00	7044	259.00	3832	371.00	1197	489.00	1
154.00	6045	260.00	1290	372.00	5872	491.00	6
155.00	14245	261.00	863	373.00	1515	494.00	21
156.00	19696	262.00	205	374.00	269	497.00	89
157.00	2916	264.00	1440	375.00	65		
158.00	5011	265.00	14917	376.00	323		
159.00	3205	266.00	1676	377.00	418		

Report Date: 23-Jun-2017 21:52:45 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7361.D

Injection Date:	22-Jun-2017 17:13:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	DFTPP			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		

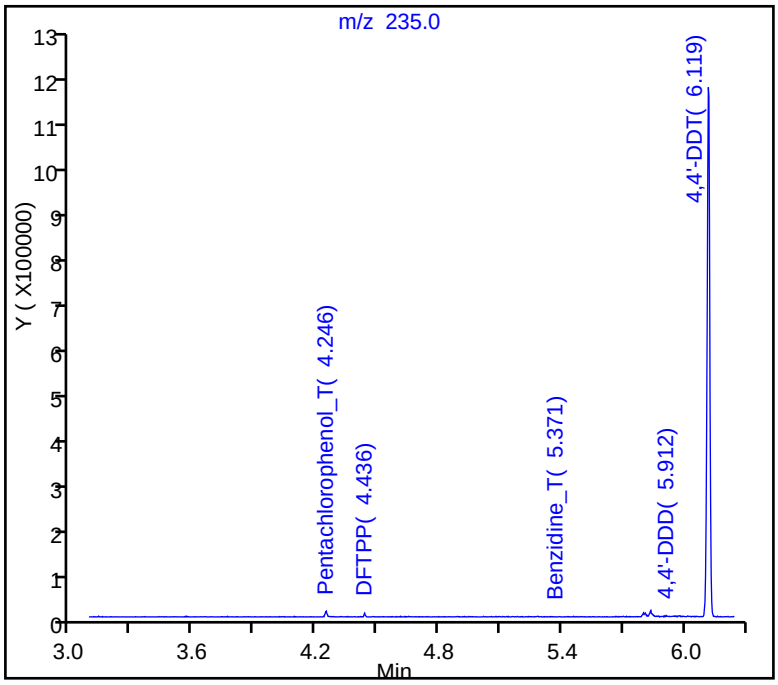


Breakdown Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7361.D
Injection Date: 22-Jun-2017 17:13:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: WICKHAMM ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

21 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

21 4,4'-DDT, Area = 1012071
19 4,4'-DDE, Area = 0
18 4,4'-DDD, Area = 7369

%Breakdown: 0.72%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Denver

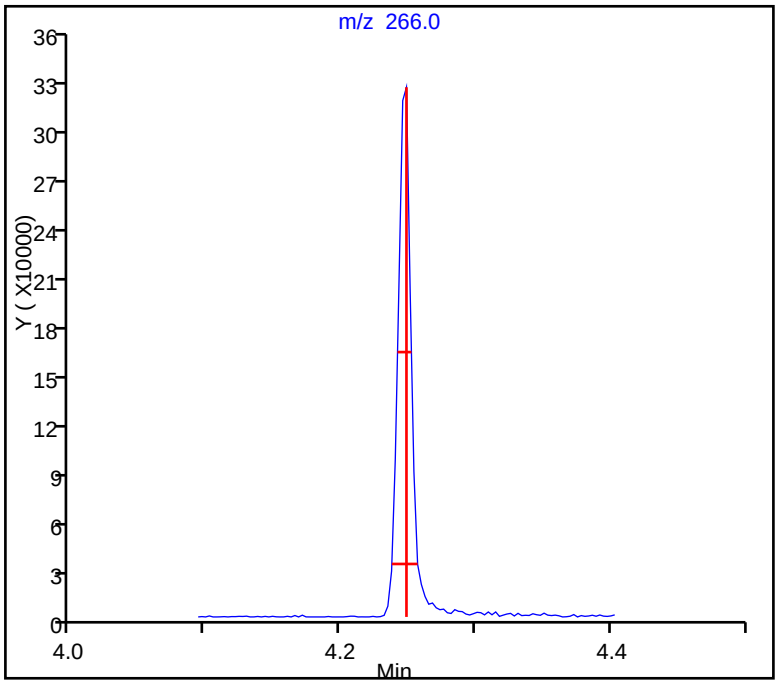
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7361.D
Injection Date: 22-Jun-2017 17:13:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: WICKHAMM ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

12 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.008 (min.)
Front Width = 0.011 (min.)

Tailing Factor = 0.8, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Denver

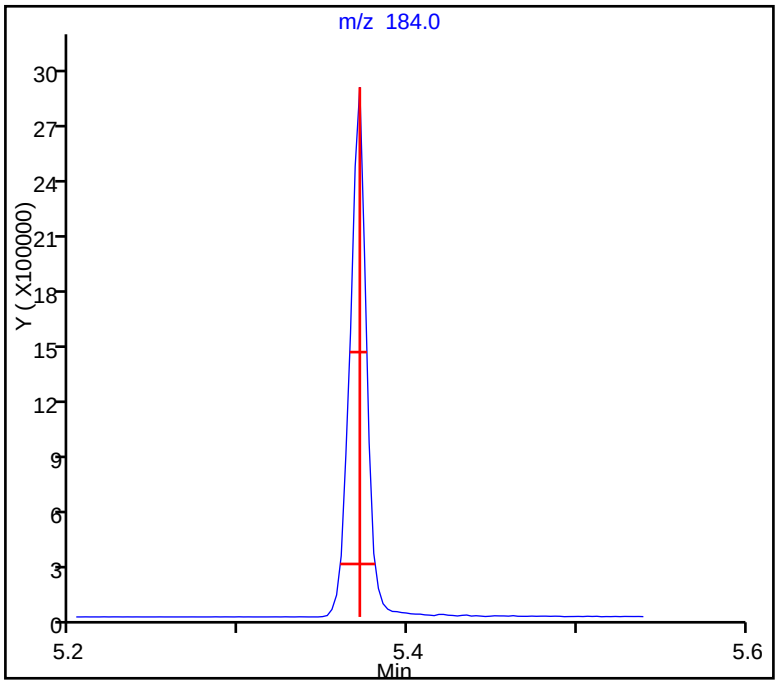
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b\F7361.D
Injection Date: 22-Jun-2017 17:13:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: WICKHAMM ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

15 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.009 (min.)
Front Width = 0.012 (min.)

Tailing Factor = 0.8, Max. Tailing < 2.00
Passed



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1342.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 01-Jun-2017 10:22:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: VASQUEZK Instrument ID: SMS_G5

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 02-Jun-2017 12:06:11 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK028

First Level Reviewer: vasquezk Date: 01-Jun-2017 11:07:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
9 Pentachlorophenol_T	266	4.290	4.290	0.000	0	492564	NR	NR	
10 DFTPP									
11 Benzidine_T	184	5.403	5.403	0.000	0	6589677	NR	NR	e
13 4,4'-DDD	235	5.766	5.766	0.000	0	3717	NR	NR	
12 4,4'-DDE	246	5.847	5.847	0.000	0	837	NR	NR	
14 4,4'-DDT	235	6.002	6.002	0.000	0	4058492	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
e - Potential Peak Saturated

Reagents:

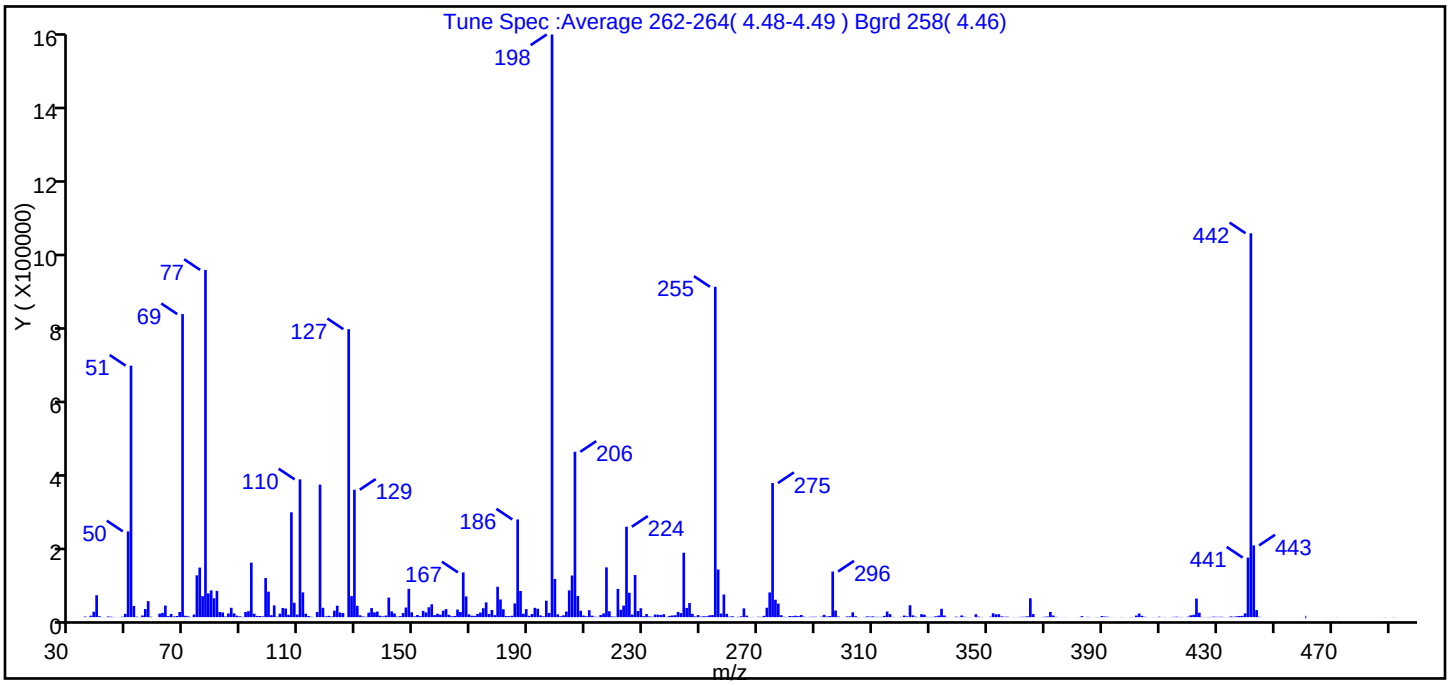
MS-DFTPP_00044 Amount Added: 0.50 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1342.D
Injection Date: 01-Jun-2017 10:22:30 Instrument ID: SMS_G5
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSG5_SIMX Limit Group: MSSV - 8270C-SIM
Tune Method: DFTPP Method 8270

10 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	43.2
68	<2% of mass 69	0.9 (1.7)
69	Present	52.0
70	<2% of mass 69	0.2 (0.5)
127	40-60% of mass 198	49.4
197	<1% of mass 198	0.7
199	5-9% of mass 198	6.6
275	10-30% of mass 198	23.0
365	>1% of mass 198	3.2
441	Present but less than mass 443	10.2 (83.0)
442	>40% of mass 198	65.9
443	17-23% of mass 442	12.3 (18.7)

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1342.D\SMSG5_SIMX.rslt\spectra.d
Injection Date: 01-Jun-2017 10:22:30
Spectrum: Tune Spec :Average 262-264(4.48-4.49) Bgrd 258(4.46)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 407

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	1577	141.00	52800	243.00	10879	353.00	7613
36.00	230	142.00	15544	244.00	173696	354.00	7848
37.00	3895	143.00	9997	245.00	24936	355.00	1996
38.00	14634	144.00	1475	246.00	37944	356.00	1172
39.00	59144	145.00	2656	247.00	8981	357.00	1282
40.00	2423	146.00	10971	248.00	1970	358.00	66
41.00	205	147.00	25848	249.00	5521	359.00	495
42.00	118	148.00	76208	250.00	1561	360.00	210
43.00	1843	149.00	12967	251.00	2432	361.00	610
44.00	1156	150.00	2181	252.00	2256	362.00	1024
45.00	541	151.00	5755	253.00	4881	363.00	1171
46.00	143	152.00	2763	254.00	5715	364.00	2346
47.00	221	153.00	17072	255.00	890240	365.00	50808
48.00	1344	154.00	12664	256.00	128400	366.00	8288
49.00	8965	155.00	26648	257.00	9783	367.00	191
50.00	231168	156.00	34672	258.00	61008	368.00	138
51.00	677760	157.00	5390	259.00	8869	369.00	352
52.00	30040	158.00	9206	260.00	1548	370.00	1233
53.00	1258	159.00	6596	261.00	2467	371.00	1726
54.00	428	160.00	17448	262.00	225	372.00	14125
55.00	4501	161.00	21600	263.00	819	373.00	4337
56.00	21768	162.00	6334	264.00	2361	374.00	757
57.00	43064	163.00	2396	265.00	23648	376.00	231
58.00	1103	164.00	3313	266.00	4027	377.00	318
61.00	9444	165.00	20360	267.00	263	378.00	180
62.00	11586	166.00	13933	268.00	566	381.00	161
63.00	31232	167.00	120608	270.00	1137	382.00	262
64.00	2824	168.00	55768	271.00	786	383.00	2792
65.00	8652	169.00	7521	272.00	3524	384.00	202
66.00	1938	170.00	3903	273.00	25296	385.00	872
67.00	3028	171.00	3489	274.00	66528	386.00	224
68.00	13849	172.00	8658	275.00	361344	387.00	123
69.00	816768	173.00	12442	276.00	46888	388.00	448

Report Date: 02-Jun-2017 12:06:11 Chrom Revision: 2.2 25-Apr-2017 13:27:22
Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1342.D\SMSG5_SIMX.rslt\spectra.d
Injection Date: 01-Jun-2017 10:22:30
Spectrum: Tune Spec :Average 262-264(4.48-4.49) Bgrd 258(4.46)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 407

m/z	Y	m/z	Y	m/z	Y	m/z	Y
70.00	3707	174.00	24080	277.00	36480	389.00	401
71.00	2249	175.00	39808	278.00	5240	390.00	2966
72.00	432	176.00	8588	279.00	1107	391.00	1639
73.00	6952	177.00	19200	280.00	555	392.00	1211
74.00	112696	178.00	5359	281.00	2986	393.00	243
75.00	133504	179.00	81904	282.00	2632	394.00	174
76.00	56488	180.00	47640	283.00	3876	397.00	463
77.00	935744	181.00	21352	284.00	2709	398.00	161
78.00	64000	182.00	2914	285.00	5772	400.00	428
79.00	72208	183.00	2810	286.00	1415	401.00	606
80.00	50760	184.00	3767	287.00	227	402.00	4202
81.00	70904	185.00	36960	288.00	833	403.00	9851
82.00	13739	186.00	263232	289.00	1107	404.00	3496
83.00	12542	187.00	70584	290.00	1106	405.00	1060
84.00	1809	188.00	9272	292.00	1381	406.00	334
85.00	9890	189.00	21688	293.00	6242	408.00	426
86.00	25184	190.00	3736	294.00	1806	409.00	236
87.00	10158	191.00	8430	295.00	3024	410.00	1218
88.00	3929	192.00	25088	296.00	122944	412.00	461
89.00	2405	193.00	22704	297.00	17776	414.00	202
90.00	734	194.00	4691	298.00	1846	415.00	763
91.00	13785	195.00	2236	300.00	123	416.00	1278
92.00	16101	196.00	44328	301.00	1869	417.00	671
93.00	146880	197.00	11266	302.00	2234	418.00	478
94.00	9199	198.00	1570304	303.00	12956	420.00	1220
95.00	3301	199.00	103024	304.00	2567	421.00	4851
96.00	3119	200.00	7616	305.00	411	422.00	6297
97.00	2024	201.00	2466	306.00	125	423.00	50128
98.00	105416	202.00	4965	307.00	452	424.00	11816
99.00	68688	203.00	14956	308.00	2179	425.00	660
100.00	5196	204.00	72128	309.00	1469	426.00	286
101.00	31696	205.00	112264	310.00	2084	427.00	622
102.00	1271	206.00	445632	311.00	891	428.00	611
103.00	9377	207.00	57112	312.00	846	429.00	1332

Report Date: 02-Jun-2017 12:06:11 Chrom Revision: 2.2 25-Apr-2017 13:27:22
Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1342.D\SMSG5_SIMX.rslt\spectra.d
Injection Date: 01-Jun-2017 10:22:30
Spectrum: Tune Spec :Average 262-264(4.48-4.49) Bgrd 258(4.46)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 407

m/z	Y	m/z	Y	m/z	Y	m/z	Y
104.00	24816	208.00	17272	313.00	798	430.00	925
105.00	23240	209.00	4277	314.00	3403	431.00	1010
106.00	6250	210.00	2368	315.00	15127	432.00	970
107.00	282560	211.00	18792	316.00	8233	433.00	401
108.00	38824	212.00	3932	317.00	694	434.00	353
109.00	7043	213.00	1275	319.00	169	435.00	2004
110.00	371264	214.00	783	320.00	750	436.00	1277
111.00	66720	215.00	5719	321.00	4288	437.00	2333
112.00	9122	216.00	10013	322.00	2116	438.00	3219
113.00	3059	217.00	134080	323.00	32040	439.00	3473
114.00	1039	218.00	15825	324.00	4810	440.00	10093
116.00	14033	219.00	1900	325.00	1488	441.00	160512
117.00	357120	220.00	1389	326.00	176	442.00	1034624
118.00	25192	221.00	76224	327.00	8113	443.00	193280
119.00	2056	222.00	19856	328.00	6493	444.00	19072
120.00	3601	223.00	31080	329.00	843	445.00	1047
121.00	1852	224.00	243648	330.00	522	448.00	148
122.00	17408	225.00	65688	331.00	757	449.00	119
123.00	30872	226.00	6803	332.00	2382	451.00	146
124.00	12411	227.00	113672	333.00	4187	453.00	152
125.00	10999	228.00	16664	334.00	22584	459.00	164
127.00	776128	229.00	24024	335.00	4327	461.00	1
128.00	56672	230.00	2748	336.00	479	466.00	107
129.00	343424	231.00	8369	337.00	18	468.00	115
130.00	30536	232.00	2107	339.00	1383	469.00	223
131.00	4993	233.00	1262	340.00	595	472.00	333
132.00	1961	234.00	7092	341.00	4575	474.00	101
133.00	1081	235.00	6692	342.00	1196	478.00	144
134.00	12219	236.00	5640	343.00	131	486.00	133
135.00	24496	237.00	7945	344.00	483	488.00	106
136.00	12879	238.00	821	346.00	7848	489.00	416
137.00	15025	239.00	3389	347.00	1390	492.00	500
138.00	3867	240.00	4531	348.00	494	493.00	164
139.00	2166	241.00	5225	351.00	1214	497.00	118

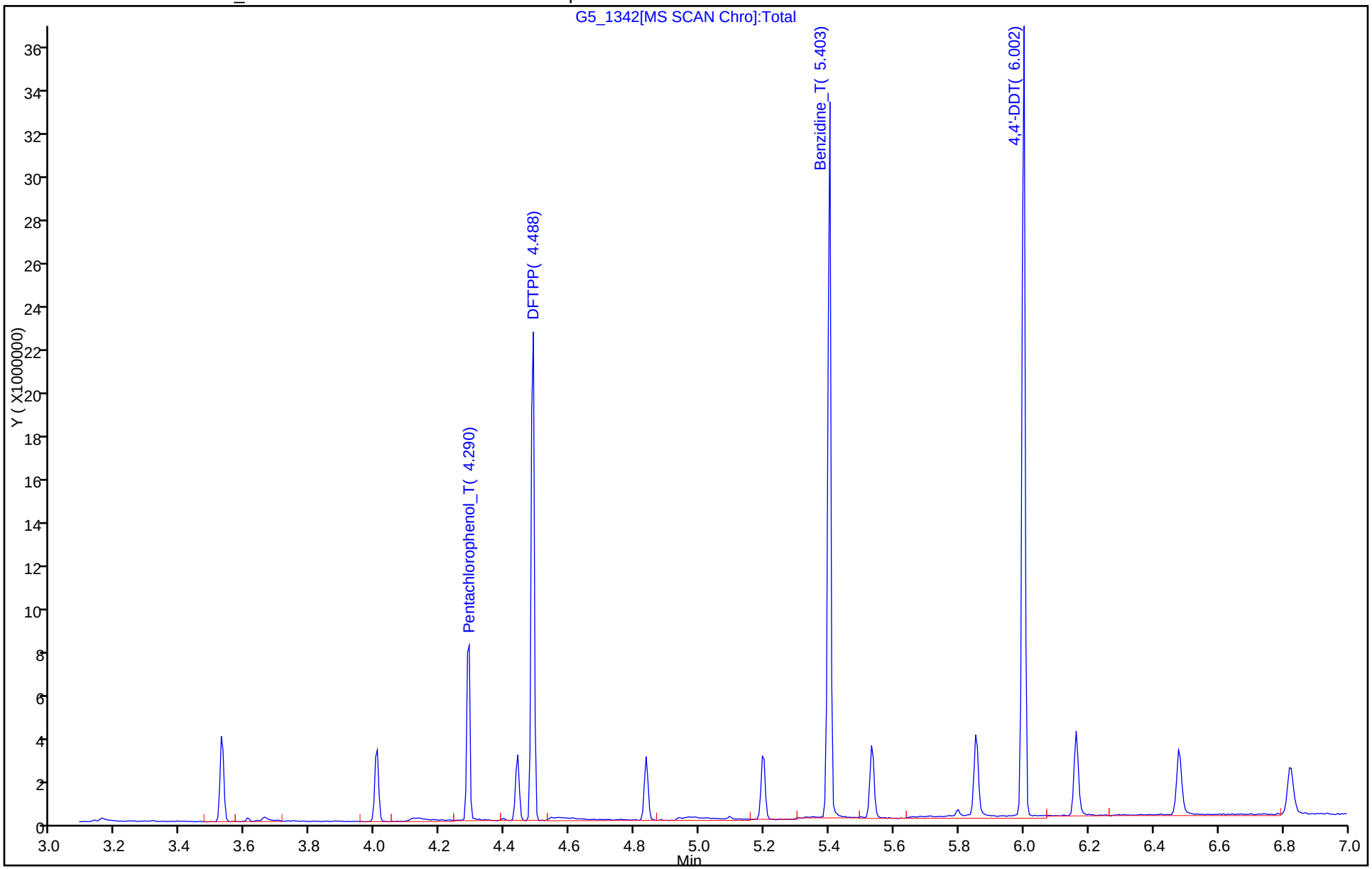
Report Date: 02-Jun-2017 12:06:12 Chrom Revision: 2.2 25-Apr-2017 13:27:22
Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1342.D\SMSG5_SIMX.rslt\spectra.d
Injection Date: 01-Jun-2017 10:22:30
Spectrum: Tune Spec :Average 262-264(4.48-4.49) Bgrd 258(4.46)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 407

m/z	Y	m/z	Y	m/z	Y	m/z	Y
140.00	4263	242.00	13975	352.00	10496		

Report Date: 02-Jun-2017 12:06:12 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1342.D				
Injection Date:	01-Jun-2017 10:22:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	DFTPP			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		

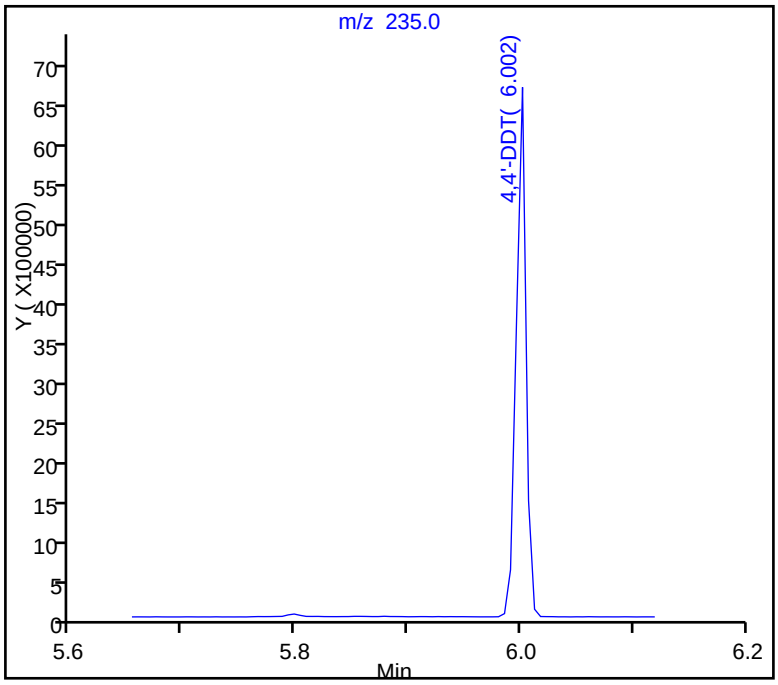


Breakdown Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1342.D
Injection Date: 01-Jun-2017 10:22:30 Instrument ID: SMS_G5
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSG5_SIMX Limit Group: MSSV - 8270C-SIM

14 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

14 4,4'-DDT, Area = 4058492
12 4,4'-DDE, Area = 837
13 4,4'-DDD, Area = 3717

%Breakdown: 0.11%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Denver

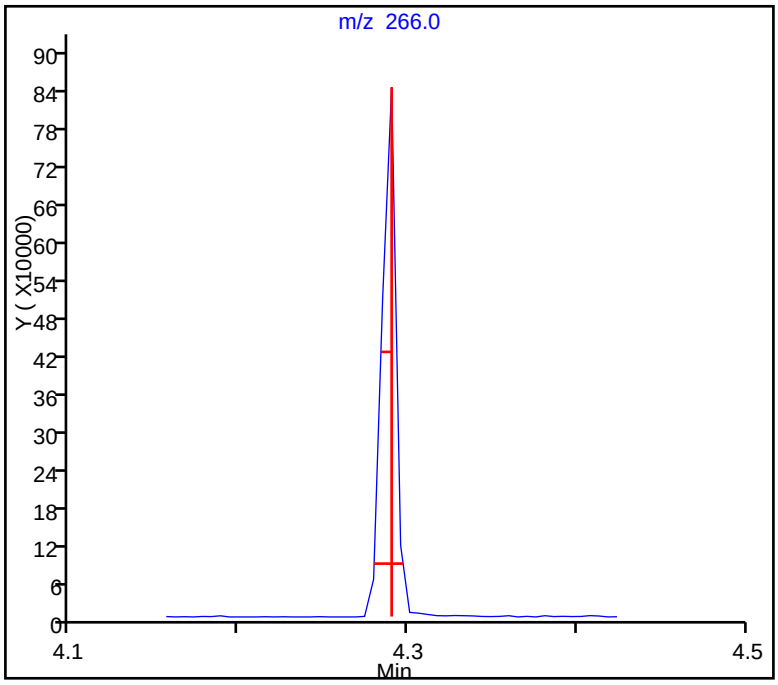
Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1342.D
Injection Date: 01-Jun-2017 10:22:30 Instrument ID: SMS_G5
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSG5_SIMX Limit Group: MSSV - 8270C-SIM

9 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.007 (min.)
Front Width = 0.010 (min.)

Tailing Factor = 0.7, Max. Tailing < 3.00
Passed



Peak Tailing Report

TestAmerica Denver

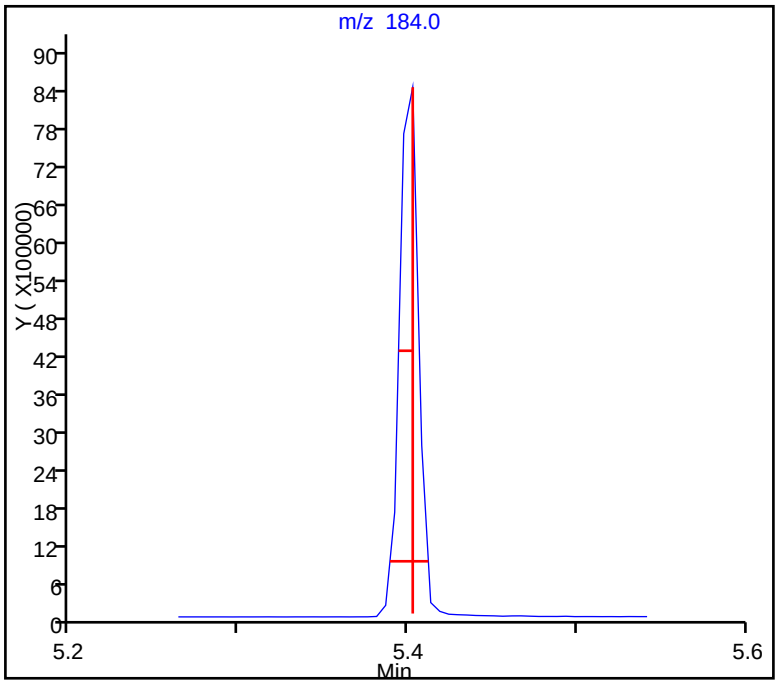
Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1342.D
Injection Date: 01-Jun-2017 10:22:30 Instrument ID: SMS_G5
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSG5_SIMX Limit Group: MSSV - 8270C-SIM

11 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.009 (min.)
Front Width = 0.014 (min.)

Tailing Factor = 0.7, Max. Tailing < 5.00
Passed



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1427.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 08-Jun-2017 08:58:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: VASQUEZK Instrument ID: SMS_G5

Method: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\SMSG5_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 11-Jun-2017 22:45:00 Calib Date: 01-Jun-2017 13:53:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b\G5_1350.D

Column 1 : Det: MS SCAN
Process Host: XAWRK013

First Level Reviewer: vasquezk Date: 08-Jun-2017 09:25:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
9 Pentachlorophenol_T	266	4.285	4.285	0.000	0	71264	NR	NR	
10 DFTPP									
11 Benzidine_T	184	5.387	5.387	0.000	0	1838947	NR	NR	
13 4,4'-DDD	235	5.777	5.777	0.000	0	11403	NR	NR	
12 4,4'-DDE	246	5.932	5.932	0.000	0	728	NR	NR	
14 4,4'-DDT	235	5.970	5.970	0.000	0	848789	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

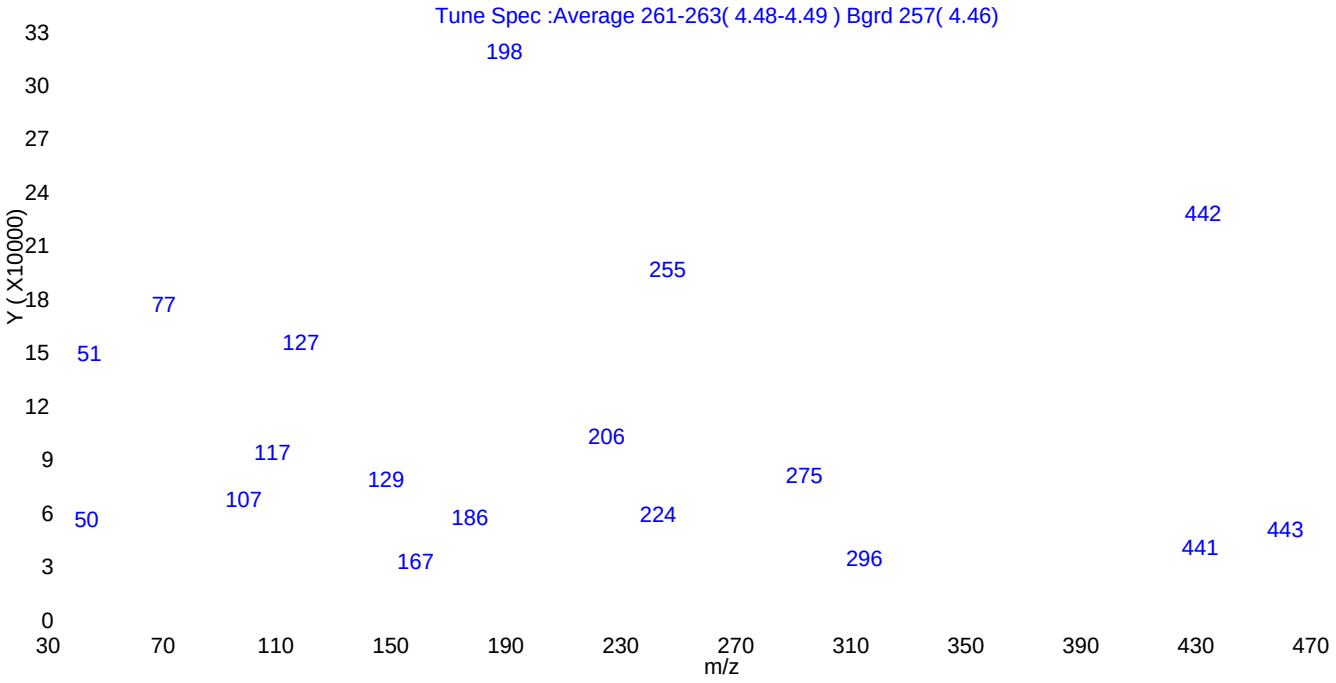
MS-DFTPP_00044 Amount Added: 0.50 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1427.D
Injection Date: 08-Jun-2017 08:58:30 Instrument ID: SMS_G5
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSG5_SIMX Limit Group: MSSV - 8270C-SIM
Tune Method: DFTPP Method 8270

10 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	44.5
68	<2% of mass 69	0.8 (1.9)
69	Present	39.8
70	<2% of mass 69	0.2 (0.6)
127	40-60% of mass 198	46.4
197	<1% of mass 198	0.7
199	5-9% of mass 198	7.0
275	10-30% of mass 198	23.6
365	>1% of mass 198	4.1
441	Present but less than mass 443	11.4 (79.1)
442	>40% of mass 198	68.6
443	17-23% of mass 442	14.4 (20.9)

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1427.D\SMSG5_SIMX.rslt\spectra.d
Injection Date: 08-Jun-2017 08:58:30
Spectrum: Tune Spec :Average 261-263(4.48-4.49) Bgrd 257(4.46)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 351

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	391	132.00	542	222.00	2412	327.00	1567
37.00	1323	133.00	43	223.00	6380	328.00	890
38.00	2794	134.00	2242	224.00	55688	329.00	149
39.00	12128	135.00	7745	225.00	14125	331.00	116
41.00	1044	136.00	2890	226.00	1655	332.00	776
42.00	29	137.00	4107	227.00	27248	333.00	986
43.00	480	138.00	731	228.00	2667	334.00	5862
44.00	649	139.00	230	229.00	5289	335.00	722
46.00	148	140.00	1796	230.00	56	336.00	127
47.00	502	141.00	10777	231.00	1070	337.00	175
48.00	699	142.00	4464	232.00	686	339.00	140
49.00	2792	143.00	2847	233.00	556	341.00	1078
50.00	52960	144.00	795	234.00	1856	342.00	251
51.00	146368	145.00	704	235.00	1324	346.00	1577
52.00	7029	146.00	2195	236.00	1981	347.00	119
55.00	1273	147.00	4868	237.00	2372	350.00	145
56.00	3718	148.00	18472	239.00	1315	351.00	113
57.00	7079	149.00	4535	240.00	498	352.00	2358
58.00	439	150.00	1570	241.00	1769	353.00	1571
59.00	487	151.00	697	242.00	3560	354.00	2089
60.00	693	152.00	415	243.00	3721	355.00	663
61.00	1603	153.00	3761	244.00	38264	359.00	235
62.00	2319	154.00	3035	245.00	5740	361.00	193
63.00	6483	155.00	7100	246.00	11252	362.00	547
64.00	839	156.00	11084	247.00	2285	363.00	320
65.00	2222	157.00	1924	248.00	332	365.00	13442
66.00	321	158.00	2224	249.00	1586	366.00	1504
67.00	307	159.00	2462	250.00	633	370.00	297
68.00	2486	160.00	3767	251.00	559	371.00	495
69.00	130752	161.00	5441	252.00	629	372.00	3197
70.00	744	162.00	1739	253.00	1372	373.00	1090
71.00	138	163.00	825	254.00	2131	381.00	148
72.00	116	164.00	70	255.00	193792	383.00	1309

Report Date: 11-Jun-2017 22:45:00 Chrom Revision: 2.2 25-Apr-2017 13:27:22
Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1427.D\SMSG5_SIMX.rslt\spectra.d
Injection Date: 08-Jun-2017 08:58:30
Spectrum: Tune Spec :Average 261-263(4.48-4.49) Bgrd 257(4.46)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 351

m/z	Y	m/z	Y	m/z	Y	m/z	Y
73.00	1371	165.00	4402	256.00	26136	384.00	107
74.00	21168	166.00	3487	257.00	2707	385.00	440
75.00	25304	167.00	29072	258.00	16392	386.00	119
76.00	10272	168.00	16284	259.00	1786	389.00	144
77.00	173888	169.00	2265	260.00	593	390.00	1221
78.00	11465	170.00	759	261.00	310	391.00	592
79.00	12643	171.00	1361	263.00	199	392.00	270
80.00	10171	172.00	2206	265.00	7759	393.00	127
81.00	15964	173.00	3044	266.00	723	398.00	105
82.00	4029	174.00	3500	268.00	175	400.00	152
83.00	2475	175.00	7414	269.00	474	401.00	383
84.00	298	176.00	2128	270.00	631	402.00	946
85.00	2137	177.00	3059	271.00	464	403.00	1661
86.00	5241	178.00	2080	272.00	1122	404.00	950
87.00	554	179.00	15115	273.00	4795	405.00	170
88.00	885	180.00	11105	274.00	15540	410.00	159
90.00	140	181.00	4369	275.00	77504	414.00	188
91.00	3731	182.00	601	276.00	9752	419.00	116
92.00	3986	183.00	408	277.00	10477	420.00	171
93.00	31784	184.00	1110	278.00	1630	421.00	2224
94.00	1200	185.00	9450	282.00	128	422.00	1023
96.00	992	186.00	53904	283.00	1658	423.00	10276
97.00	806	187.00	16520	284.00	1351	424.00	2425
98.00	24728	188.00	2013	285.00	1753	425.00	365
99.00	15210	189.00	5316	286.00	162	426.00	258
100.00	2311	190.00	1178	287.00	205	428.00	282
101.00	6715	191.00	2234	288.00	270	430.00	141
102.00	504	192.00	5451	289.00	258	431.00	525
103.00	2160	193.00	5649	292.00	584	432.00	274
104.00	4616	194.00	1245	293.00	1816	433.00	106
105.00	3374	195.00	710	294.00	503	434.00	311
106.00	1590	196.00	8908	295.00	1389	435.00	1054
107.00	63952	197.00	2320	296.00	30856	436.00	765
108.00	8508	198.00	328576	297.00	3790	437.00	806

Report Date: 11-Jun-2017 22:45:00 Chrom Revision: 2.2 25-Apr-2017 13:27:22
Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1427.D\SMSG5_SIMX.rslt\spectra.d
Injection Date: 08-Jun-2017 08:58:30
Spectrum: Tune Spec :Average 261-263(4.48-4.49) Bgrd 257(4.46)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 351

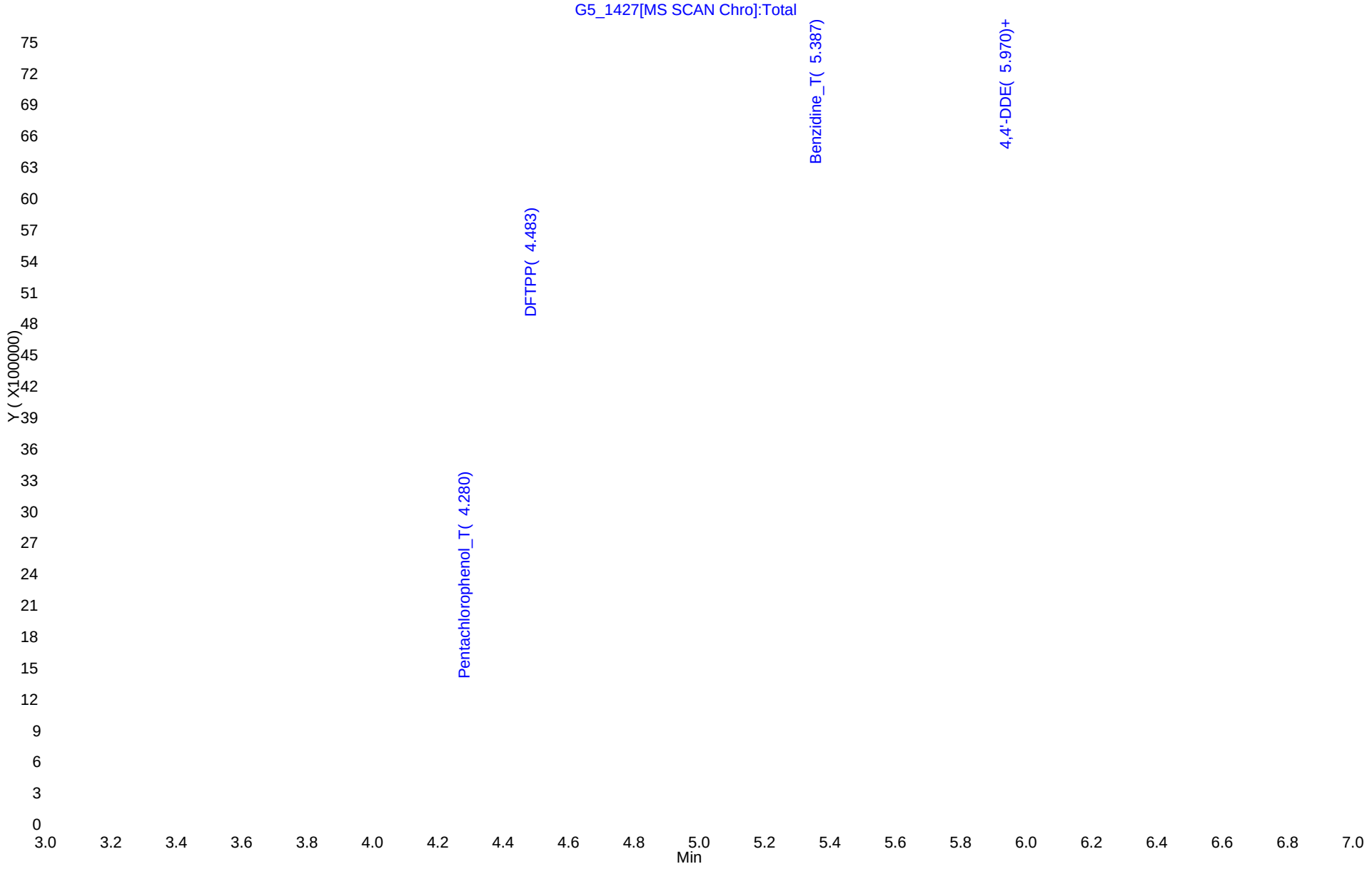
m/z	Y	m/z	Y	m/z	Y	m/z	Y
109.00	1144	199.00	22880	300.00	10	438.00	900
110.00	72608	200.00	2902	301.00	289	439.00	1847
111.00	12793	201.00	951	302.00	429	440.00	1225
112.00	2105	202.00	1114	303.00	2543	441.00	37360
113.00	875	203.00	3437	304.00	370	442.00	225472
115.00	427	204.00	14153	306.00	260	443.00	47216
116.00	4397	205.00	24048	308.00	31	444.00	3707
117.00	90904	206.00	99904	310.00	110	447.00	392
118.00	7052	207.00	11003	312.00	104	449.00	125
119.00	341	208.00	3289	313.00	286	456.00	145
121.00	175	209.00	1638	314.00	985	457.00	141
122.00	6278	210.00	1809	315.00	3227	458.00	139
123.00	6640	211.00	4592	316.00	2034	459.00	226
124.00	4484	213.00	250	317.00	647	464.00	192
125.00	3016	214.00	570	318.00	114	468.00	202
126.00	1018	215.00	1209	320.00	319	481.00	107
127.00	152576	216.00	3340	321.00	979	484.00	384
128.00	13247	217.00	33672	322.00	112	490.00	110
129.00	75624	218.00	3762	323.00	7098	493.00	133
130.00	6978	220.00	120	324.00	1103	499.00	101
131.00	925	221.00	13250	326.00	185		

Report Date: 11-Jun-2017 22:45:00 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1427.D

Injection Date:	08-Jun-2017 08:58:30	Instrument ID:	SMS_G5	Operator ID:	VASQUEZK
Lims ID:	DFTPP			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	SMSG5_SIMX	Limit Group:	MSSV - 8270C-SIM		



Breakdown Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1427.D
Injection Date: 08-Jun-2017 08:58:30 Instrument ID: SMS_G5
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSG5_SIMX Limit Group: MSSV - 8270C-SIM

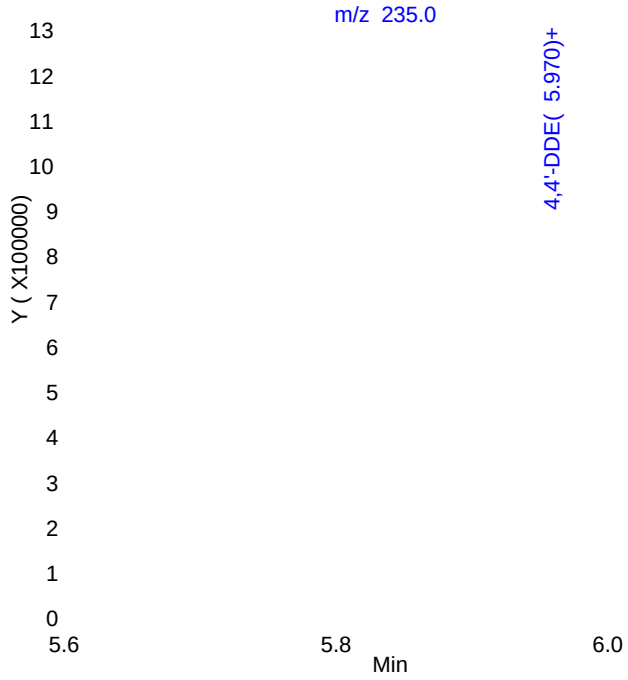
14 4,4'-DDT, Detector: MS SCAN

SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

14 4,4'-DDT, Area = 848789
12 4,4'-DDE, Area = 728
13 4,4'-DDD, Area = 11403

%Breakdown: 1.41%, Max Limit: 20.00%
Passed



Peak Tailing Report

TestAmerica Denver

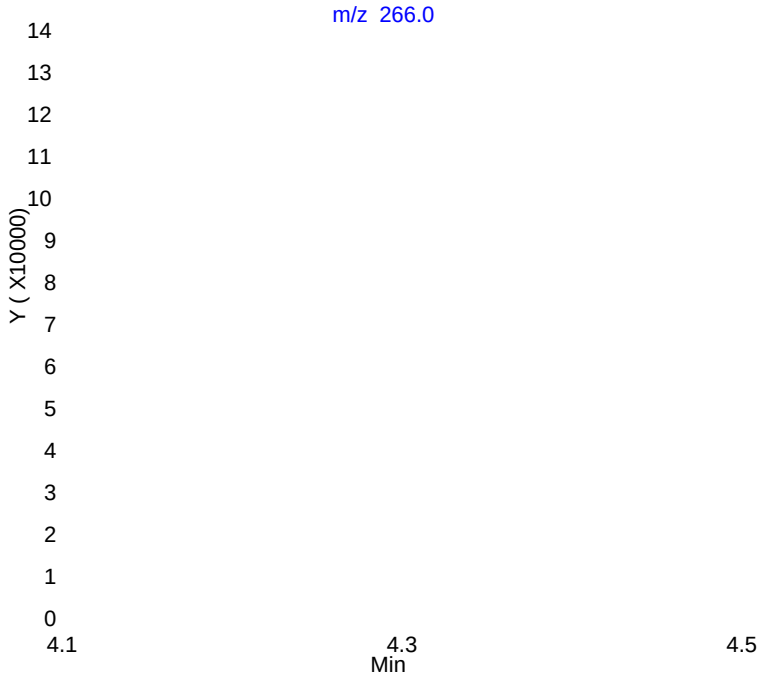
Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1427.D
Injection Date: 08-Jun-2017 08:58:30 Instrument ID: SMS_G5
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSG5_SIMX Limit Group: MSSV - 8270C-SIM

9 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.000 (min.)
Front Width = 0.010 (min.)

Tailing Factor = 0.0, Max. Tailing < 3.00
Passed



Peak Tailing Report

TestAmerica Denver

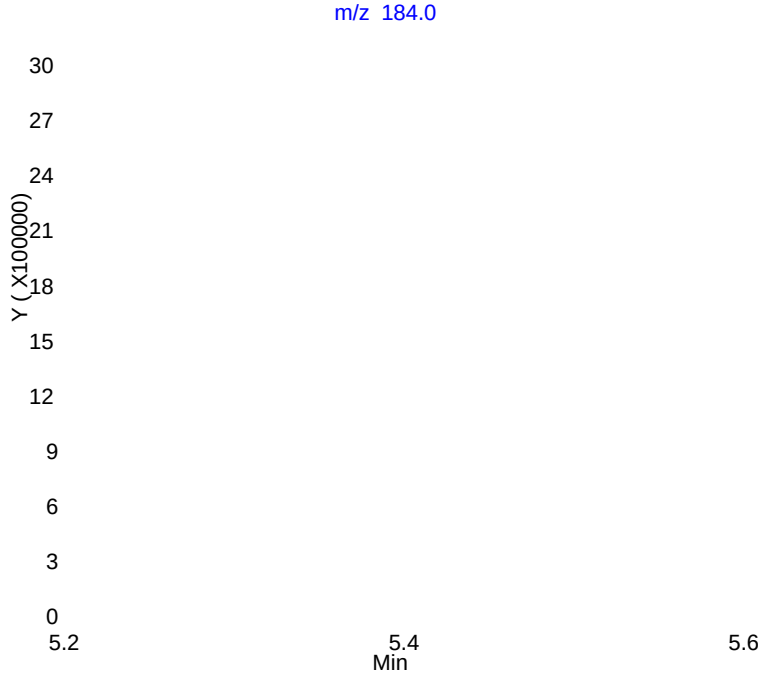
Data File: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b\G5_1427.D
Injection Date: 08-Jun-2017 08:58:30 Instrument ID: SMS_G5
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSG5_SIMX Limit Group: MSSV - 8270C-SIM

11 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.010 (min.)
Front Width = 0.011 (min.)

Tailing Factor = 0.9, Max. Tailing < 5.00
Passed



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-376088/1-A

Matrix: Solid | Lab File ID: F7045.D

Analysis Method: 8270D SIM | Date Collected:

Extract. Method: 3546 | Date Extracted: 06/05/2017 08:51

Sample wt/vol: 31.1(g) | Date Analyzed: 06/07/2017 09:24

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 376394 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.48	U	4.8	0.48	0.25
91-57-6	2-Methylnaphthalene	0.64	U	4.8	0.64	0.30
83-32-9	Acenaphthene	0.26	U	4.8	0.26	0.15
208-96-8	Acenaphthylene	0.64	U	4.8	0.64	0.16
120-12-7	Anthracene	2.4	U	4.8	2.4	0.69
56-55-3	Benzo[a]anthracene	2.4	U	4.8	2.4	0.87
50-32-8	Benzo[a]pyrene	2.4	U	4.8	2.4	0.71
205-99-2	Benzo[b]fluoranthene	2.4	U	4.8	2.4	1.2
191-24-2	Benzo[g,h,i]perylene	2.4	U	4.8	2.4	1.1
207-08-9	Benzo[k]fluoranthene	2.4	U	4.8	2.4	0.96
218-01-9	Chrysene	2.4	U	4.8	2.4	0.96
53-70-3	Dibenz(a,h)anthracene	2.4	U	4.8	2.4	1.3
206-44-0	Fluoranthene	2.4	U	4.8	2.4	0.96
86-73-7	Fluorene	0.64	U	4.8	0.64	0.45
193-39-5	Indeno[1,2,3-cd]pyrene	2.4	U	4.8	2.4	1.1
91-20-3	Naphthalene	0.64	U	4.8	0.64	0.31
85-01-8	Phenanthrene	2.4	U	4.8	2.4	1.1
129-00-0	Pyrene	2.4	U	4.8	2.4	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	85		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	80		44-125
1718-51-0	Terphenyl-d14 (Surr)	85		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\F7045.D
Lims ID: MB 280-376088/1-A
Client ID:
Sample Type: MB
Inject. Date: 07-Jun-2017 09:24:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: mb280-376088_1-a
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 07-Jun-2017 15:34:07 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: vasquezk Date: 07-Jun-2017 14:49:00

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
*	1 Acenaphthene-d10	164	6.038	6.029	0.009	97	17315	600.0	600.0	
*	2 Phenanthrene-d10	188	7.307	7.300	0.007	99	33184	600.0	600.0	
*	3 Chrysene-d12	240	11.377	11.377	0.000	93	28720	600.0	600.0	
$	4 Nitrobenzene-d5	82	4.005	4.001	0.004	99	10845	500.0	399.8	
$	5 2-Fluorobiphenyl	172	5.440	5.436	0.004	100	19023	500.0	423.7	
$	6 Terphenyl-d14	244	9.129	9.130	-0.001	99	14269	500.0	423.5	
	9 1,4-Dioxane	88		1.903					ND	
	11 Morpholine	87	1.896	1.916	-0.020	1	73		NC	
	10 N-Nitrosodimethylamine	74		2.033					ND	
	14 Naphthalene	128		4.590					ND	
	16 2-Methylnaphthalene	142		5.147					ND	
	17 1-Methylnaphthalene	142		5.235					ND	
	20 Dimethyl phthalate	163		5.753					ND	
	22 Acenaphthylene	152		5.917					ND	
	23 Acenaphthene	153		6.055					ND	
	32 Dibenzofuran	168		6.207					ND	
	24 Diethyl phthalate	149		6.328					ND	
	25 Fluorene	166		6.494					ND	
	26 N-Nitrosodiphenylamine	169		6.570					ND	
	27 Phenanthrene	178		7.320					ND	
	28 Anthracene	178		7.365					ND	
	29 Di-n-butyl phthalate	149	7.736	7.736	0.000	99	1131		12.5	
	30 Fluoranthene	202		8.628					ND	
	31 Pyrene	202		8.973					ND	
	33 Butyl benzyl phthalate	149		9.963					ND	
	34 Bis(2-ethylhexyl) phthalat	149	11.232	11.242	-0.010	100	2504		40.8	
	35 Benzo[a]anthracene	228		11.350					ND	
	36 Chrysene	228		11.440					ND	
	37 Di-n-octyl phthalate	149		13.170					ND	
	38 Benzo[b]fluoranthene	252		14.495					ND	
	39 Benzo[k]fluoranthene	252		14.582					ND	
	40 Benzo[a]pyrene	252		15.580					ND	

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41	Indeno[1,2,3-cd]pyrene	276		18.663					ND	
42	Dibenz(a,h)anthracene	278		18.694					ND	
43	Benzo[g,h,i]perylene	276		19.097					ND	
8	Benzidine	184		0.000					ND	
7	Pentachlorophenol	266		0.000					ND	
12	Pentachlorophenol_T	266		4.249					ND	
15	Benzidine_T	184		5.377					ND	
18	4,4'-DDD	235		5.813					ND	
21	4,4'-DDT	235		6.130					ND	
19	4,4'-DDE	246		6.133					ND	
S 52	TPAH	1		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

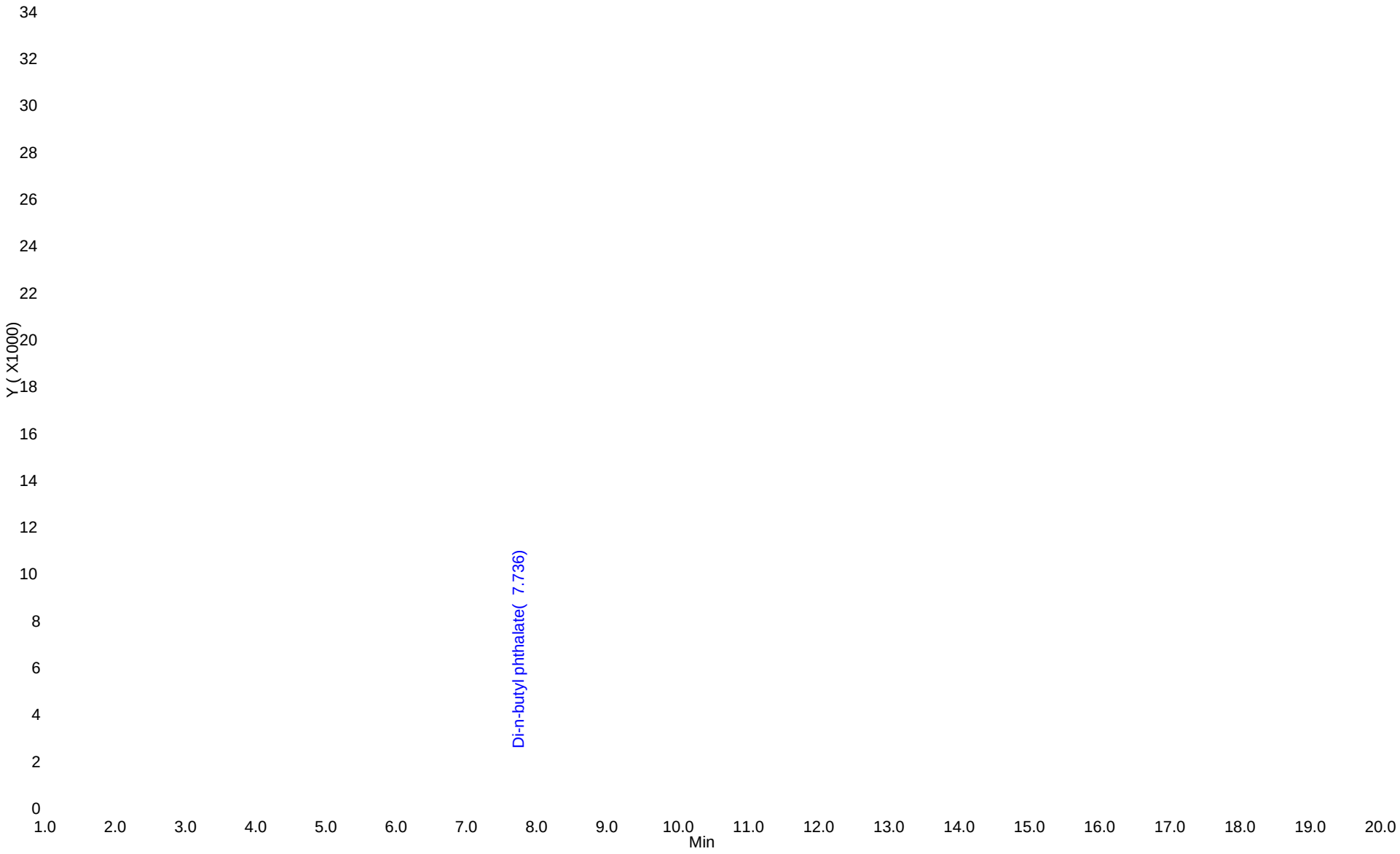
Report Date: 07-Jun-2017 15:34:10 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\F7045.D

Injection Date:	07-Jun-2017 09:24:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	MB 280-376088/1-A			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		

F7045[MS SCAN Chro]:Total



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\F7045.D				
Lims ID:	MB 280-376088/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	07-Jun-2017 09:24:30	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	mb280-376088_1-a				
Operator ID:	VASQUEZK	Instrument ID:	SMS_F		
Method:	\\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\SMSF_8270SIMX.m				
Limit Group:	MSSV - 8270C-SIM				
Last Update:	07-Jun-2017 15:34:07	Calib Date:	11-May-2017 16:07:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK006				
First Level Reviewer: vasquezk		Date:	07-Jun-2017 14:49:00		

	Compound	Amount Added	Amount Recovered	% Rec.
$	4 Nitrobenzene-d5	500.0	399.8	79.97
$	5 2-Fluorobiphenyl	500.0	423.7	84.74
$	6 Terphenyl-d14	500.0	423.5	84.70

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-376215/1-A

Matrix: Water | Lab File ID: F7151.D

Analysis Method: 8270D SIM | Date Collected:

Extract. Method: 3510C | Date Extracted: 06/06/2017 07:45

Sample wt/vol: 1000(mL) | Date Analyzed: 06/13/2017 06:49

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377034 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.012	U	0.10	0.012	0.0057
91-57-6	2-Methylnaphthalene	0.012	U	0.10	0.012	0.0052
83-32-9	Acenaphthene	0.030	U	0.10	0.030	0.011
208-96-8	Acenaphthylene	0.012	U	0.10	0.012	0.010
120-12-7	Anthracene	0.020	U	0.10	0.020	0.014
56-55-3	Benzo[a]anthracene	0.012	U	0.10	0.012	0.0032
50-32-8	Benzo[a]pyrene	0.012	U	0.10	0.012	0.0051
205-99-2	Benzo[b]fluoranthene	0.012	U	0.10	0.012	0.0034
191-24-2	Benzo[g,h,i]perylene	0.012	U	0.10	0.012	0.0036
207-08-9	Benzo[k]fluoranthene	0.012	U	0.10	0.012	0.0051
218-01-9	Chrysene	0.012	U	0.10	0.012	0.0032
53-70-3	Dibenz(a,h)anthracene	0.012	U	0.10	0.012	0.0048
206-44-0	Fluoranthene	0.012	U	0.10	0.012	0.0045
86-73-7	Fluorene	0.020	U	0.10	0.020	0.019
193-39-5	Indeno[1,2,3-cd]pyrene	0.020	U	0.10	0.020	0.015
91-20-3	Naphthalene	0.012	U	0.10	0.012	0.0053
85-01-8	Phenanthrene	0.020	U	0.10	0.020	0.0098
129-00-0	Pyrene	0.020	U	0.10	0.020	0.0081

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	71		53-106
4165-60-0	Nitrobenzene-d5 (Surr)	79		55-111
1718-51-0	Terphenyl-d14 (Surr)	86		58-132

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7151.D
Lims ID: MB 280-376215/1-A
Client ID:
Sample Type: MB
Inject. Date: 13-Jun-2017 06:49:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: mb280-376215_1-a
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 13-Jun-2017 13:37:48 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: vasquezk Date: 13-Jun-2017 10:27:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.038	6.029	0.009	99	17848	600.0	600.0	
* 2 Phenanthrene-d10	188	7.307	7.301	0.006	100	35326	600.0	600.0	
* 3 Chrysene-d12	240	11.386	11.380	0.006	93	32970	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.005	4.001	0.004	100	11082	500.0	396.4	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	16426	500.0	354.9	
$ 6 Terphenyl-d14	244	9.136	9.130	0.006	99	15456	500.0	430.9	
9 1,4-Dioxane	88		1.903					ND	
11 Morpholine	87		1.916					ND	
10 N-Nitrosodimethylamine	74		2.033					ND	
14 Naphthalene	128		4.589					ND	
16 2-Methylnaphthalene	142		5.147					ND	
17 1-Methylnaphthalene	142		5.235					ND	
20 Dimethyl phthalate	163		5.753					ND	
22 Acenaphthylene	152		5.917					ND	
23 Acenaphthene	153		6.055					ND	
32 Dibenzofuran	168		6.206					ND	
24 Diethyl phthalate	149	6.328	6.328	0.000	96	669		12.8	
25 Fluorene	166		6.494					ND	
26 N-Nitrosodiphenylamine	169		6.570					ND	
27 Phenanthrene	178		7.321					ND	
28 Anthracene	178		7.366					ND	
29 Di-n-butyl phthalate	149	7.736	7.731	0.005	99	2008		20.9	
30 Fluoranthene	202		8.629					ND	
31 Pyrene	202		8.974					ND	
33 Butyl benzyl phthalate	149		9.957					ND	
34 Bis(2-ethylhexyl) phthalat	149	11.233	11.236	-0.003	100	5850		89.6	
35 Benzo[a]anthracene	228		11.344					ND	
36 Chrysene	228		11.443					ND	
37 Di-n-octyl phthalate	149		13.164					ND	
38 Benzo[b]fluoranthene	252		14.503					ND	
39 Benzo[k]fluoranthene	252		14.586					ND	
40 Benzo[a]pyrene	252		15.587					ND	

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41	Indeno[1,2,3-cd]pyrene	276		18.671					ND	
42	Dibenz(a,h)anthracene	278		18.697					ND	
43	Benzo[g,h,i]perylene	276		19.104					ND	
8	Benzidine	184		0.000					ND	
7	Pentachlorophenol	266		0.000					ND	
12	Pentachlorophenol_T	266		4.251					ND	
15	Benzidine_T	184		5.374					ND	
18	4,4'-DDD	235		5.846					ND	
19	4,4'-DDE	246		6.127					ND	
21	4,4'-DDT	235		6.127					ND	
S 52	TPAH	1		0.000					ND	

Reagents:

MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

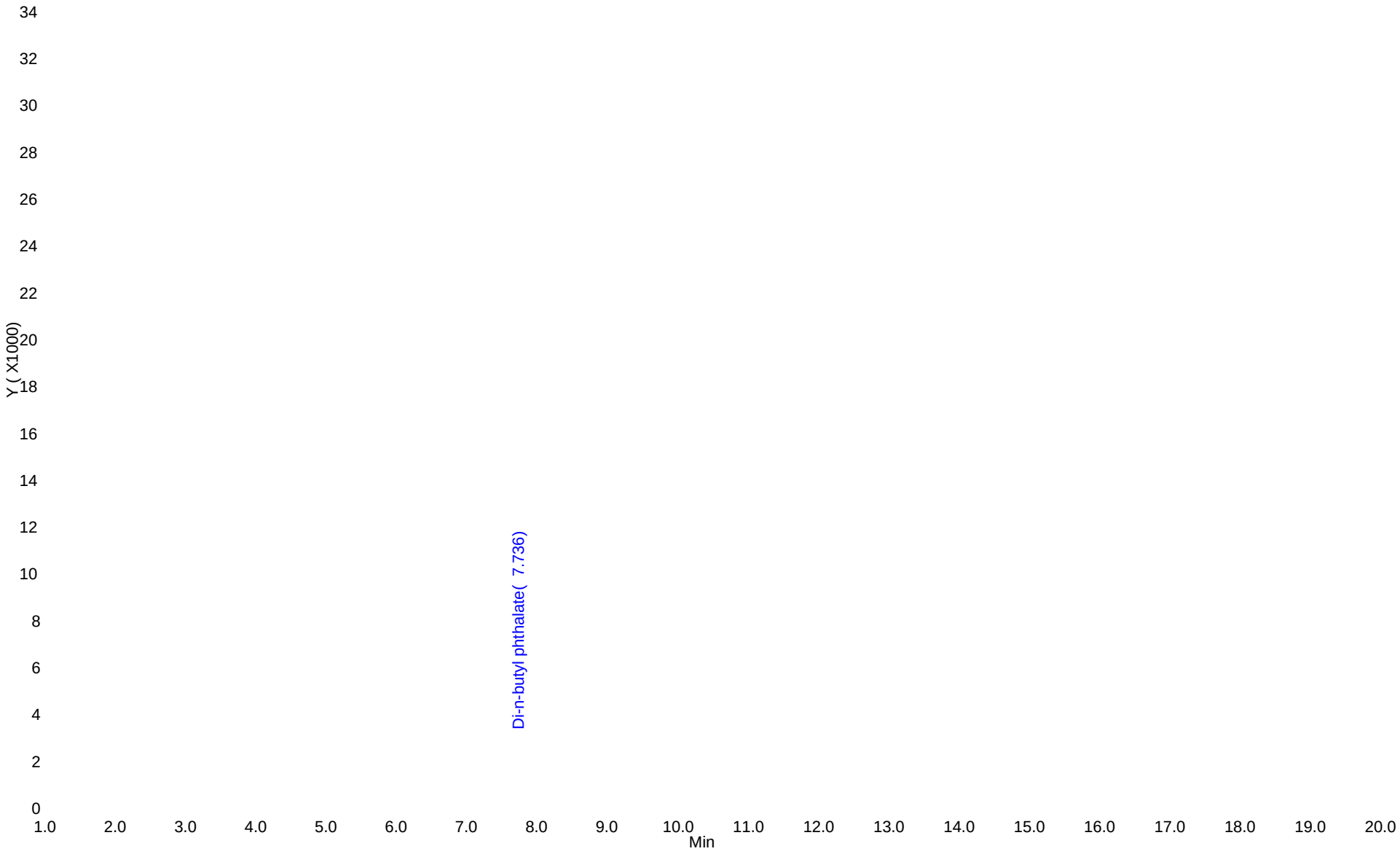
Report Date: 13-Jun-2017 13:37:50 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7151.D

Injection Date:	13-Jun-2017 06:49:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	MB 280-376215/1-A			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		

F7151[MS SCAN Chro]:Total



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7151.D				
Lims ID:	MB 280-376215/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	13-Jun-2017 06:49:30	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	mb280-376215_1-a				
Operator ID:	VASQUEZK	Instrument ID:	SMS_F		
Method:	\\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\SMSF_8270SIMX.m				
Limit Group:	MSSV - 8270C-SIM				
Last Update:	13-Jun-2017 13:37:48	Calib Date:	11-May-2017 16:07:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK012				
First Level Reviewer: vasquezk		Date:	13-Jun-2017 10:27:57		

	Compound	Amount Added	Amount Recovered	% Rec.
$	4 Nitrobenzene-d5	500.0	396.4	79.28
$	5 2-Fluorobiphenyl	500.0	354.9	70.99
$	6 Terphenyl-d14	500.0	430.9	86.18

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver
Job No.: 280-97803-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 280-377246/1-A
Matrix: Solid
Lab File ID: F7338.D
Analysis Method: 8270D SIM
Date Collected:
Extract. Method: 3546
Date Extracted: 06/14/2017 09:42
Sample wt/vol: 30.1(g)
Date Analyzed: 06/21/2017 19:51
Con. Extract Vol.: 1(mL)
Dilution Factor: 1
Injection Volume: 1(uL)
Level: (low/med) Low
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 378253
Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.50	U	5.0	0.50	0.26
91-57-6	2-Methylnaphthalene	0.66	U	5.0	0.66	0.31
83-32-9	Acenaphthene	0.27	U	5.0	0.27	0.16
208-96-8	Acenaphthylene	0.66	U	5.0	0.66	0.17
120-12-7	Anthracene	2.5	U	5.0	2.5	0.72
56-55-3	Benzo[a]anthracene	2.5	U	5.0	2.5	0.90
50-32-8	Benzo[a]pyrene	2.5	U	5.0	2.5	0.74
205-99-2	Benzo[b]fluoranthene	2.5	U	5.0	2.5	1.2
191-24-2	Benzo[g,h,i]perylene	2.5	U	5.0	2.5	1.1
207-08-9	Benzo[k]fluoranthene	2.5	U	5.0	2.5	1.0
218-01-9	Chrysene	2.5	U	5.0	2.5	1.0
53-70-3	Dibenz(a,h)anthracene	2.5	U	5.0	2.5	1.3
206-44-0	Fluoranthene	2.5	U	5.0	2.5	1.0
86-73-7	Fluorene	0.66	U	5.0	0.66	0.47
193-39-5	Indeno[1,2,3-cd]pyrene	2.5	U	5.0	2.5	1.1
91-20-3	Naphthalene	0.66	U	5.0	0.66	0.32
85-01-8	Phenanthrene	2.5	U	5.0	2.5	1.1
129-00-0	Pyrene	2.5	U	5.0	2.5	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	92		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	92		44-125
1718-51-0	Terphenyl-d14 (Surr)	89		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7338.D
Lims ID: MB 280-377246/1-A
Client ID:
Sample Type: MB
Inject. Date: 21-Jun-2017 19:51:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: mb280-377246_1-a
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 22-Jun-2017 16:05:39 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: wickhamm Date: 22-Jun-2017 15:36:59

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
*	1 Acenaphthene-d10	164	6.038	6.029	0.009	99	18967	600.0	600.0	
*	2 Phenanthrene-d10	188	7.308	7.302	0.006	100	37388	600.0	600.0	
*	3 Chrysene-d12	240	11.389	11.380	0.009	93	33948	600.0	600.0	
$	4 Nitrobenzene-d5	82	4.005	4.001	0.004	100	13725	500.0	462.0	
$	5 2-Fluorobiphenyl	172	5.440	5.436	0.004	100	22527	500.0	458.1	
$	6 Terphenyl-d14	244	9.130	9.131	-0.001	98	16981	500.0	447.3	
	9 1,4-Dioxane	88		1.903					ND	
	11 Morpholine	87	1.896	1.916	-0.020	1	148		NC	
	10 N-Nitrosodimethylamine	74		2.033					ND	
	14 Naphthalene	128		4.586					ND	
	16 2-Methylnaphthalene	142		5.147					ND	
	17 1-Methylnaphthalene	142		5.230					ND	
	20 Dimethyl phthalate	163		5.753					ND	
	22 Acenaphthylene	152		5.917					ND	
	23 Acenaphthene	153		6.055					ND	
	32 Dibenzofuran	168		6.207					ND	
	24 Diethyl phthalate	149		6.328					ND	
	25 Fluorene	166		6.494					ND	
	26 N-Nitrosodiphenylamine	169		6.570					ND	
	27 Phenanthrene	178	7.327	7.328	-0.001	34	1418		17.9	
	28 Anthracene	178		7.373					ND	
	29 Di-n-butyl phthalate	149	7.737	7.738	-0.001	96	1249		12.3	
	30 Fluoranthene	202	8.642	8.629	0.013	93	1423		15.6	
	31 Pyrene	202	8.981	8.974	0.007	89	979		10.4	
	33 Butyl benzyl phthalate	149		9.957					ND	
	34 Bis(2-ethylhexyl) phthalat	149	11.236	11.236	0.000	98	2190		31.7	
	35 Benzo[a]anthracene	228		11.353					ND	
	36 Chrysene	228	11.452	11.452	0.000	68	751		8.99	
	37 Di-n-octyl phthalate	149		13.165					ND	
	38 Benzo[b]fluoranthene	252		14.512					ND	
	39 Benzo[k]fluoranthene	252		14.595					ND	
	40 Benzo[a]pyrene	252	15.614	15.596	0.018	38	964		11.9	

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41	Indeno[1,2,3-cd]pyrene	276		18.680					ND	
42	Dibenz(a,h)anthracene	278		18.706					ND	
43	Benzo[g,h,i]perylene	276		19.113					ND	
7	Pentachlorophenol	266		0.000					ND	
8	Benzidine	184		0.000					ND	
12	Pentachlorophenol_T	266		4.251					ND	
15	Benzidine_T	184		5.382					ND	
19	4,4'-DDE	246		5.495					ND	
18	4,4'-DDD	235		5.851					ND	
21	4,4'-DDT	235		6.135					ND	
S 52	TPAH	1		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

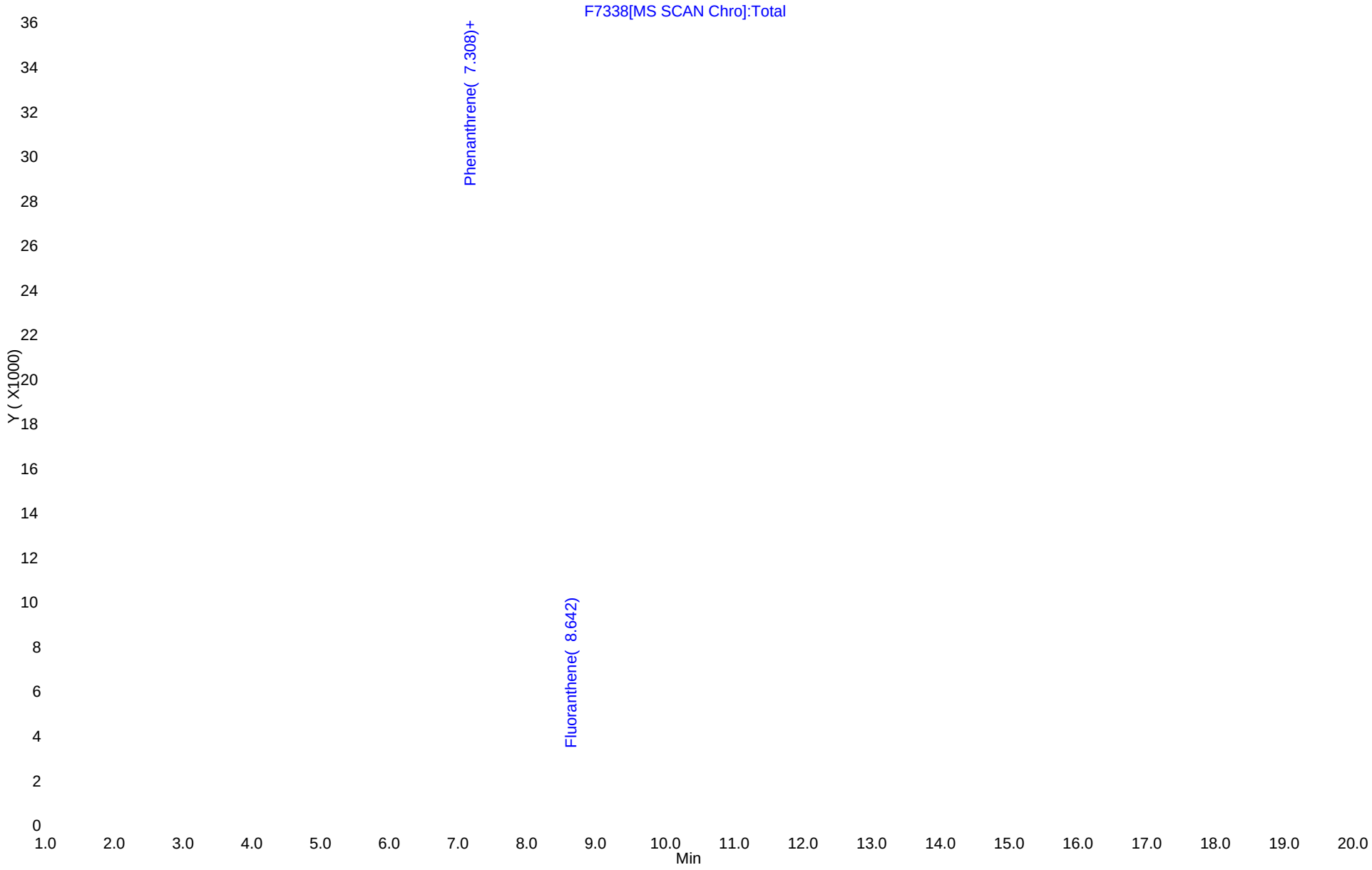
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 22-Jun-2017 16:05:40 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7338.D

Injection Date:	21-Jun-2017 19:51:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	MB 280-377246/1-A			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7338.D				
Lims ID:	MB 280-377246/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	21-Jun-2017 19:51:30	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	mb280-377246_1-a				
Operator ID:	WICKHAMM	Instrument ID:	SMS_F		
Method:	\\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\SMSF_8270SIMX.m				
Limit Group:	MSSV - 8270C-SIM				
Last Update:	22-Jun-2017 16:05:39	Calib Date:	11-May-2017 16:07:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK015				
First Level Reviewer: wickhamm		Date:	22-Jun-2017 15:36:59		

	Compound	Amount Added	Amount Recovered	% Rec.
$	4 Nitrobenzene-d5	500.0	462.0	92.39
$	5 2-Fluorobiphenyl	500.0	458.1	91.61
$	6 Terphenyl-d14	500.0	447.3	89.46

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-376088/2-A

Matrix: Solid | Lab File ID: F7046.D

Analysis Method: 8270D SIM | Date Collected:

Extract. Method: 3546 | Date Extracted: 06/05/2017 08:51

Sample wt/vol: 33.0(g) | Date Analyzed: 06/07/2017 09:50

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 376394 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	20.2		4.5	0.45	0.24
91-57-6	2-Methylnaphthalene	22.3		4.5	0.61	0.28
83-32-9	Acenaphthene	21.2		4.5	0.24	0.15
208-96-8	Acenaphthylene	18.7		4.5	0.61	0.15
120-12-7	Anthracene	19.9		4.5	2.3	0.65
56-55-3	Benzo[a]anthracene	21.2		4.5	2.3	0.82
50-32-8	Benzo[a]pyrene	18.2		4.5	2.3	0.67
205-99-2	Benzo[b]fluoranthene	21.2		4.5	2.3	1.1
191-24-2	Benzo[g,h,i]perylene	21.5		4.5	2.3	1.0
207-08-9	Benzo[k]fluoranthene	21.2		4.5	2.3	0.91
218-01-9	Chrysene	24.7		4.5	2.3	0.91
53-70-3	Dibenz(a,h)anthracene	20.9		4.5	2.3	1.2
206-44-0	Fluoranthene	21.7		4.5	2.3	0.91
86-73-7	Fluorene	21.9		4.5	0.61	0.43
193-39-5	Indeno[1,2,3-cd]pyrene	20.7		4.5	2.3	1.0
91-20-3	Naphthalene	21.4		4.5	0.61	0.30
85-01-8	Phenanthrene	21.5		4.5	2.3	1.0
129-00-0	Pyrene	21.6		4.5	2.3	1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	85		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	82		44-125
1718-51-0	Terphenyl-d14 (Surr)	83		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\F7046.D
Lims ID: LCS 280-376088/2-A
Client ID:
Sample Type: LCS
Inject. Date: 07-Jun-2017 09:50:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: lcs280-376088_2-a
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 07-Jun-2017 15:34:07 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: vasquezk Date: 07-Jun-2017 14:49:14

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
*	1 Acenaphthene-d10	164	6.029	6.029	0.000	97	14993	600.0	600.0	
*	2 Phenanthrene-d10	188	7.300	7.300	0.000	99	29386	600.0	600.0	
*	3 Chrysene-d12	240	11.368	11.377	-0.009	97	24448	600.0	600.0	
$	4 Nitrobenzene-d5	82	4.001	4.001	0.000	98	9598	500.0	408.7	
$	5 2-Fluorobiphenyl	172	5.431	5.436	-0.005	100	16545	500.0	425.6	
$	6 Terphenyl-d14	244	9.123	9.130	-0.007	99	12310	500.0	412.6	
	9 1,4-Dioxane	88	1.909	1.903	0.006	0	3175	900.0	392.2	
	10 N-Nitrosodimethylamine	74	2.039	2.033	0.006	83	8022	900.0	582.0	
	14 Naphthalene	128	4.589	4.590	-0.001	100	34260	900.0	704.9	
	16 2-Methylnaphthalene	142	5.147	5.147	0.000	97	22949	900.0	734.4	
	17 1-Methylnaphthalene	142	5.230	5.235	-0.005	97	20848	900.0	666.2	
	20 Dimethyl phthalate	163	5.753	5.753	0.000	100	30728	900.0	722.9	
	22 Acenaphthylene	152	5.917	5.917	0.000	100	31927	900.0	617.3	
	23 Acenaphthene	153	6.055	6.055	0.000	99	22082	900.0	698.5	
	32 Dibenzofuran	168	6.199	6.207	-0.008	89	36329	900.0	735.7	
	24 Diethyl phthalate	149	6.320	6.328	-0.008	96	31557	900.0	718.5	
	25 Fluorene	166	6.487	6.494	-0.007	98	28034	900.0	722.6	
	26 N-Nitrosodiphenylamine	169	6.563	6.570	-0.007	98	18424	900.0	669.8	
	27 Phenanthrene	178	7.320	7.320	0.000	100	44164	900.0	708.6	
	28 Anthracene	178	7.365	7.365	0.000	100	41411	900.0	658.0	
	29 Di-n-butyl phthalate	149	7.730	7.736	-0.006	100	47535	900.0	595.6	
	30 Fluoranthene	202	8.622	8.628	-0.006	100	51163	900.0	714.7	
	31 Pyrene	202	8.967	8.973	-0.006	99	52875	900.0	712.3	
	33 Butyl benzyl phthalate	149	9.950	9.963	-0.013	97	17802	900.0	482.7	
	34 Bis(2-ethylhexyl) phthalat	149	11.223	11.242	-0.019	99	26103	900.0	480.4	
	35 Benzo[a]anthracene	228	11.332	11.350	-0.018	98	45412	900.0	698.4	
	36 Chrysene	228	11.431	11.440	-0.009	100	49057	900.0	815.6	
	37 Di-n-octyl phthalate	149	13.152	13.170	-0.018	100	32028	900.0	387.5	
	38 Benzo[b]fluoranthene	252	14.482	14.495	-0.013	100	41359	900.0	700.7	
	39 Benzo[k]fluoranthene	252	14.569	14.582	-0.013	100	41627	900.0	701.1	
	40 Benzo[a]pyrene	252	15.562	15.580	-0.018	100	35001	900.0	600.8	
	41 Indeno[1,2,3-cd]pyrene	276	18.659	18.663	-0.004	79	45159	900.0	683.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
42 Dibenz(a,h)anthracene	278	18.690	18.694	-0.004	86	35602	900.0	690.4	
43 Benzo[g,h,i]perylene	276	19.092	19.097	-0.005	99	39770	900.0	709.4	
7 Pentachlorophenol	266		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

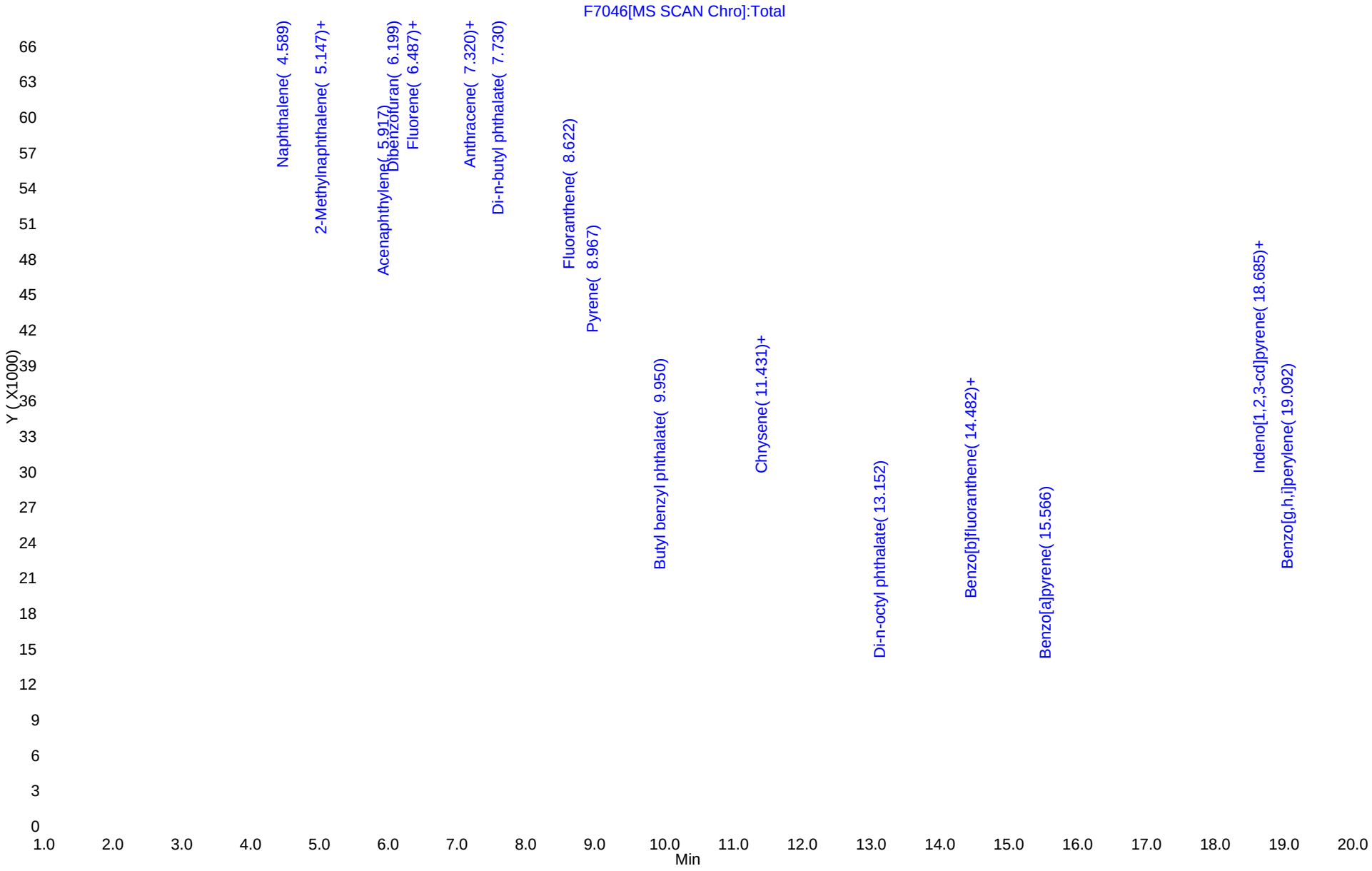
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 07-Jun-2017 15:34:12 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\F7046.D

Injection Date:	07-Jun-2017 09:50:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	LCS 280-376088/2-A			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\F7046.D
Lims ID: LCS 280-376088/2-A
Client ID:
Sample Type: LCS
Inject. Date: 07-Jun-2017 09:50:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: lcs280-376088_2-a
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170607-59500.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 07-Jun-2017 15:34:07 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: vasquezk Date: 07-Jun-2017 14:49:14

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	408.7	81.73
$ 5 2-Fluorobiphenyl	500.0	425.6	85.12
$ 6 Terphenyl-d14	500.0	412.6	82.52

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-376215/2-A

Matrix: Water | Lab File ID: F7152.D

Analysis Method: 8270D SIM | Date Collected:

Extract. Method: 3510C | Date Extracted: 06/06/2017 07:45

Sample wt/vol: 1000(mL) | Date Analyzed: 06/13/2017 07:14

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377034 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.615		0.10	0.012	0.0057
91-57-6	2-Methylnaphthalene	0.654		0.10	0.012	0.0052
83-32-9	Acenaphthene	0.685		0.10	0.030	0.011
208-96-8	Acenaphthylene	0.638		0.10	0.012	0.010
120-12-7	Anthracene	0.715		0.10	0.020	0.014
56-55-3	Benzo[a]anthracene	0.762		0.10	0.012	0.0032
50-32-8	Benzo[a]pyrene	0.715		0.10	0.012	0.0051
205-99-2	Benzo[b]fluoranthene	0.735		0.10	0.012	0.0034
191-24-2	Benzo[g,h,i]perylene	0.667		0.10	0.012	0.0036
207-08-9	Benzo[k]fluoranthene	0.765		0.10	0.012	0.0051
218-01-9	Chrysene	0.841		0.10	0.012	0.0032
53-70-3	Dibenz(a,h)anthracene	0.689		0.10	0.012	0.0048
206-44-0	Fluoranthene	0.743		0.10	0.012	0.0045
86-73-7	Fluorene	0.716		0.10	0.020	0.019
193-39-5	Indeno[1,2,3-cd]pyrene	0.690		0.10	0.020	0.015
91-20-3	Naphthalene	0.611		0.10	0.012	0.0053
85-01-8	Phenanthrene	0.696		0.10	0.020	0.0098
129-00-0	Pyrene	0.754		0.10	0.020	0.0081

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	83		53-106
4165-60-0	Nitrobenzene-d5 (Surr)	90		55-111
1718-51-0	Terphenyl-d14 (Surr)	83		58-132

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7152.D
Lims ID: LCS 280-376215/2-A
Client ID:
Sample Type: LCS
Inject. Date: 13-Jun-2017 07:14:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: lcs280-376215_2-a
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 13-Jun-2017 13:37:48 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: vasquezk Date: 13-Jun-2017 10:28:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	95	19217	600.0	600.0	
* 2 Phenanthrene-d10	188	7.300	7.301	-0.001	100	37083	600.0	600.0	
* 3 Chrysene-d12	240	11.368	11.380	-0.012	89	31549	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	13525	500.0	449.3	
$ 5 2-Fluorobiphenyl	172	5.431	5.436	-0.005	100	20574	500.0	412.9	
$ 6 Terphenyl-d14	244	9.129	9.130	-0.001	99	15596	500.0	414.2	
9 1,4-Dioxane	88	1.909	1.903	0.006	0	2615	900.0	252.0	M
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	71	4457	900.0	252.3	
14 Naphthalene	128	4.589	4.589	0.000	100	38082	900.0	611.3	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	95	26199	900.0	654.1	
17 1-Methylnaphthalene	142	5.230	5.235	-0.005	98	24679	900.0	615.2	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	43159	900.0	792.2	
22 Acenaphthylene	152	5.917	5.917	0.000	100	42311	900.0	638.3	
23 Acenaphthene	153	6.055	6.055	0.000	100	27764	900.0	685.2	
32 Dibenzofuran	168	6.199	6.206	-0.007	90	45377	900.0	716.9	
24 Diethyl phthalate	149	6.320	6.328	-0.008	96	44307	900.0	787.1	
25 Fluorene	166	6.487	6.494	-0.007	97	35589	900.0	715.7	
26 N-Nitrosodiphenylamine	169	6.563	6.570	-0.007	98	26170	900.0	753.9	
27 Phenanthrene	178	7.320	7.321	-0.001	100	54735	900.0	695.9	
28 Anthracene	178	7.365	7.366	-0.001	100	56754	900.0	714.6	
29 Di-n-butyl phthalate	149	7.730	7.731	-0.001	100	73942	900.0	734.2	
30 Fluoranthene	202	8.628	8.629	-0.001	100	67157	900.0	743.4	
31 Pyrene	202	8.967	8.974	-0.007	100	70643	900.0	754.1	
33 Butyl benzyl phthalate	149	9.956	9.957	-0.001	96	30744	900.0	660.5	
34 Bis(2-ethylhexyl) phthalat	149	11.232	11.236	-0.004	99	51926	900.0	757.3	
35 Benzo[a]anthracene	228	11.341	11.344	-0.003	98	63965	900.0	762.4	
36 Chrysene	228	11.440	11.443	-0.003	100	65281	900.0	841.0	
37 Di-n-octyl phthalate	149	13.161	13.164	-0.003	100	63682	900.0	597.1	
38 Benzo[b]fluoranthene	252	14.490	14.503	-0.013	100	55972	900.0	734.8	
39 Benzo[k]fluoranthene	252	14.578	14.586	-0.008	100	58629	900.0	765.2	
40 Benzo[a]pyrene	252	15.575	15.587	-0.012	100	53720	900.0	714.6	
41 Indeno[1,2,3-cd]pyrene	276	18.668	18.671	-0.003	81	58829	900.0	689.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
42 Dibenz(a,h)anthracene	278	18.694	18.697	-0.003	88	45877	900.0	689.4	
43 Benzo[g,h,i]perylene	276	19.101	19.104	-0.003	99	48285	900.0	667.5	
7 Pentachlorophenol	266		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

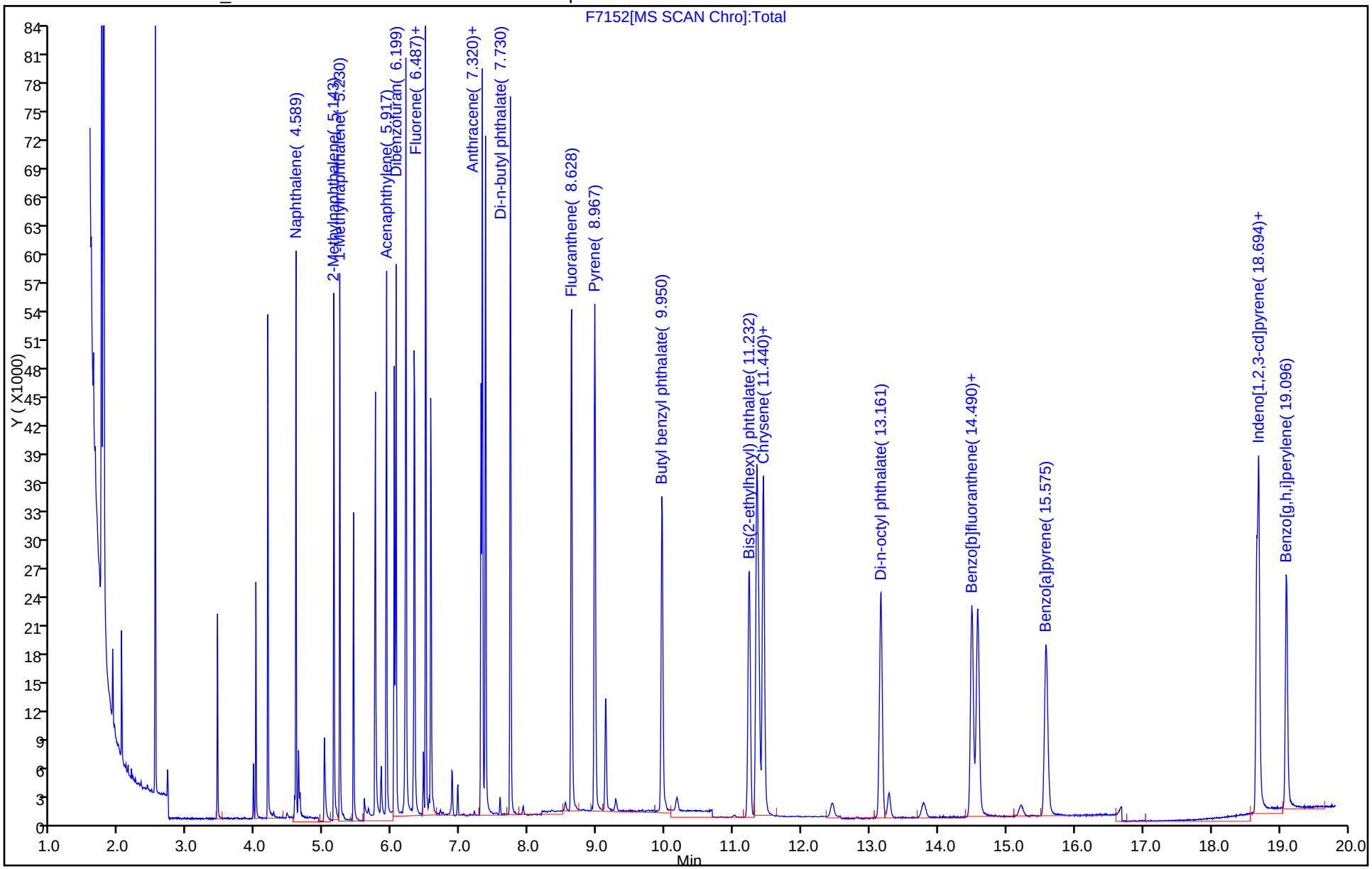
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 13-Jun-2017 13:37:51 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7152.D

Injection Date:	13-Jun-2017 07:14:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	LCS 280-376215/2-A			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\F7152.D
Lims ID: LCS 280-376215/2-A
Client ID:
Sample Type: LCS
Inject. Date: 13-Jun-2017 07:14:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: lcs280-376215_2-a
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170613-59679.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 13-Jun-2017 13:37:48 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: vasquezk Date: 13-Jun-2017 10:28:57

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	449.3	89.86
$ 5 2-Fluorobiphenyl	500.0	412.9	82.58
$ 6 Terphenyl-d14	500.0	414.2	82.84

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-377246/2-A

Matrix: Solid | Lab File ID: F7339.D

Analysis Method: 8270D SIM | Date Collected:

Extract. Method: 3546 | Date Extracted: 06/14/2017 09:42

Sample wt/vol: 31.2(g) | Date Analyzed: 06/21/2017 20:17

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378253 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	20.7		4.8	0.48	0.25
91-57-6	2-Methylnaphthalene	22.3		4.8	0.64	0.30
83-32-9	Acenaphthene	21.7		4.8	0.26	0.15
208-96-8	Acenaphthylene	20.8		4.8	0.64	0.16
120-12-7	Anthracene	22.7		4.8	2.4	0.69
56-55-3	Benzo[a]anthracene	24.4		4.8	2.4	0.87
50-32-8	Benzo[a]pyrene	21.8		4.8	2.4	0.71
205-99-2	Benzo[b]fluoranthene	22.7		4.8	2.4	1.2
191-24-2	Benzo[g,h,i]perylene	18.3		4.8	2.4	1.1
207-08-9	Benzo[k]fluoranthene	23.6		4.8	2.4	0.96
218-01-9	Chrysene	26.5		4.8	2.4	0.96
53-70-3	Dibenz(a,h)anthracene	18.4		4.8	2.4	1.3
206-44-0	Fluoranthene	24.6		4.8	2.4	0.96
86-73-7	Fluorene	22.4		4.8	0.64	0.45
193-39-5	Indeno[1,2,3-cd]pyrene	18.9		4.8	2.4	1.1
91-20-3	Naphthalene	21.1		4.8	0.64	0.31
85-01-8	Phenanthrene	22.1		4.8	2.4	1.1
129-00-0	Pyrene	25.0		4.8	2.4	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	84		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	92		44-125
1718-51-0	Terphenyl-d14 (Surr)	84		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7339.D
Lims ID: LCS 280-377246/2-A
Client ID:
Sample Type: LCS
Inject. Date: 21-Jun-2017 20:17:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: lcs280-377246_2-a
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 22-Jun-2017 16:05:39 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: wickhamm Date: 22-Jun-2017 15:37:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	92	22889	600.0	600.0	
* 2 Phenanthrene-d10	188	7.301	7.302	-0.001	100	44884	600.0	600.0	
* 3 Chrysene-d12	240	11.378	11.380	-0.002	98	39664	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	100	16547	500.0	461.5	
$ 5 2-Fluorobiphenyl	172	5.431	5.436	-0.005	100	24855	500.0	418.8	
$ 6 Terphenyl-d14	244	9.130	9.131	-0.001	99	19226	500.0	421.9	
9 1,4-Dioxane	88	1.909	1.903	0.006	0	4372	900.0	353.7	
10 N-Nitrosodimethylamine	74	2.039	2.033	0.006	86	11460	900.0	544.6	
14 Naphthalene	128	4.589	4.586	0.003	100	48771	900.0	657.3	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	97	33204	900.0	696.0	
17 1-Methylnaphthalene	142	5.230	5.230	0.000	97	30902	900.0	646.8	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	48085	900.0	741.0	
22 Acenaphthylene	152	5.917	5.917	0.000	100	51316	900.0	649.9	
23 Acenaphthene	153	6.055	6.055	0.000	100	32655	900.0	676.6	
32 Dibenzofuran	168	6.199	6.207	-0.008	89	53717	900.0	712.5	
24 Diethyl phthalate	149	6.320	6.328	-0.008	96	50678	900.0	755.9	
25 Fluorene	166	6.487	6.494	-0.007	95	41483	900.0	700.4	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	96	25828	900.0	614.7	
27 Phenanthrene	178	7.321	7.328	-0.007	100	65696	900.0	690.1	
28 Anthracene	178	7.366	7.373	-0.007	100	68033	900.0	707.8	
29 Di-n-butyl phthalate	149	7.731	7.738	-0.007	100	91191	900.0	748.1	
30 Fluoranthene	202	8.629	8.629	0.000	100	83872	900.0	767.1	
31 Pyrene	202	8.968	8.974	-0.006	100	88530	900.0	780.8	
33 Butyl benzyl phthalate	149	9.951	9.957	-0.006	99	39478	900.0	700.8	
34 Bis(2-ethylhexyl) phthalat	149	11.224	11.236	-0.012	99	62524	900.0	753.3	
35 Benzo[a]anthracene	228	11.342	11.353	-0.011	98	80456	900.0	762.7	
36 Chrysene	228	11.441	11.452	-0.011	100	80567	900.0	825.6	
37 Di-n-octyl phthalate	149	13.153	13.165	-0.011	100	80873	900.0	603.1	
38 Benzo[b]fluoranthene	252	14.500	14.512	-0.012	100	67902	900.0	709.0	
39 Benzo[k]fluoranthene	252	14.583	14.595	-0.012	100	70856	900.0	735.6	
40 Benzo[a]pyrene	252	15.589	15.596	-0.007	100	64169	900.0	679.0	
41 Indeno[1,2,3-cd]pyrene	276	18.677	18.680	-0.003	83	63105	900.0	588.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
42 Dibenz(a,h)anthracene	278	18.704	18.706	-0.002	89	47998	900.0	573.7	
43 Benzo[g,h,i]perylene	276	19.111	19.113	-0.002	100	51859	900.0	570.2	
7 Pentachlorophenol	266		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

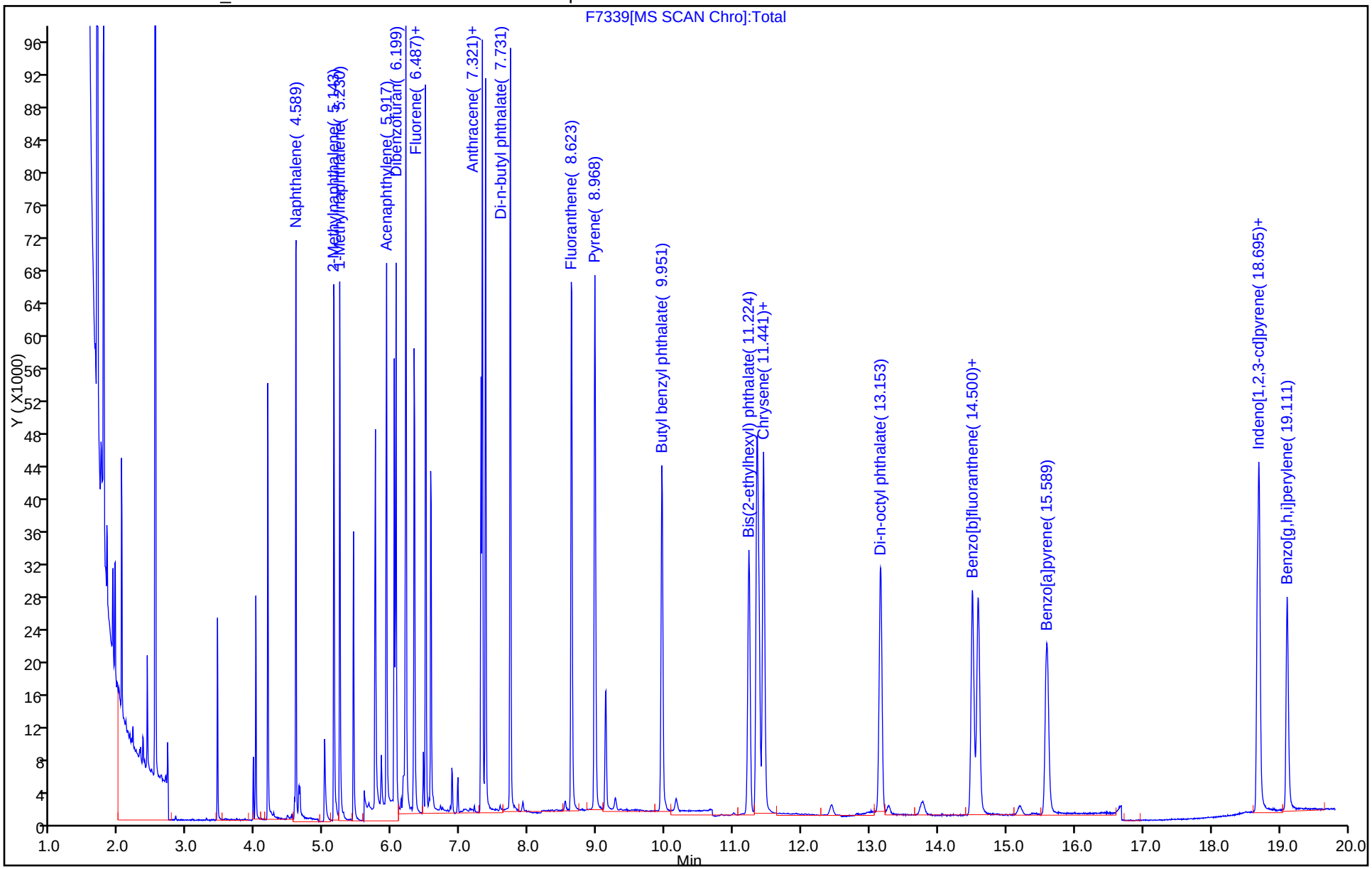
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 22-Jun-2017 16:05:42 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7339.D

Injection Date:	21-Jun-2017 20:17:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	LCS 280-377246/2-A			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7339.D
Lims ID: LCS 280-377246/2-A
Client ID:
Sample Type: LCS
Inject. Date: 21-Jun-2017 20:17:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: lcs280-377246_2-a
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 22-Jun-2017 16:05:39 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: wickhamm Date: 22-Jun-2017 15:37:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	461.5	92.30
$ 5 2-Fluorobiphenyl	500.0	418.8	83.76
$ 6 Terphenyl-d14	500.0	421.9	84.38

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB04(0-2) MS | Lab Sample ID: 280-97803-9 MS

Matrix: Solid | Lab File ID: F7347.D

Analysis Method: 8270D SIM | Date Collected: 05/31/2017 14:10

Extract. Method: 3546 | Date Extracted: 06/14/2017 09:42

Sample wt/vol: 30.5(g) | Date Analyzed: 06/21/2017 23:47

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 17.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378253 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	25.3		6.0	0.60	0.31
91-57-6	2-Methylnaphthalene	27.1		6.0	0.80	0.37
83-32-9	Acenaphthene	29.0		6.0	0.32	0.19
208-96-8	Acenaphthylene	25.5		6.0	0.80	0.20
120-12-7	Anthracene	26.3		6.0	3.0	0.86
56-55-3	Benzo[a]anthracene	27.4		6.0	3.0	1.1
50-32-8	Benzo[a]pyrene	24.8		6.0	3.0	0.89
205-99-2	Benzo[b]fluoranthene	25.7		6.0	3.0	1.4
191-24-2	Benzo[g,h,i]perylene	21.4		6.0	3.0	1.3
207-08-9	Benzo[k]fluoranthene	26.5		6.0	3.0	1.2
218-01-9	Chrysene	30.0		6.0	3.0	1.2
53-70-3	Dibenz(a,h)anthracene	21.5		6.0	3.0	1.6
206-44-0	Fluoranthene	26.2		6.0	3.0	1.2
86-73-7	Fluorene	28.1		6.0	0.80	0.56
193-39-5	Indeno[1,2,3-cd]pyrene	21.9		6.0	3.0	1.3
91-20-3	Naphthalene	25.2		6.0	0.80	0.39
85-01-8	Phenanthrene	25.9		6.0	3.0	1.3
129-00-0	Pyrene	26.2		6.0	3.0	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	81		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	82		44-125
1718-51-0	Terphenyl-d14 (Surr)	70		58-133

Report Date: 22-Jun-2017 16:05:50 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7347.D
Lims ID: 280-97803-B-9-C MS
Client ID:
Sample Type: MS
Inject. Date: 21-Jun-2017 23:47:30 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-b-9-cms
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 22-Jun-2017 16:05:39 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: wickhamm Date: 22-Jun-2017 16:00:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	97	24095	600.0	600.0	
* 2 Phenanthrene-d10	188	7.301	7.302	-0.001	99	49563	600.0	600.0	
* 3 Chrysene-d12	240	11.371	11.380	-0.009	94	37149	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	100	15434	500.0	408.9	
$ 5 2-Fluorobiphenyl	172	5.431	5.436	-0.005	100	25349	500.0	405.7	
$ 6 Terphenyl-d14	244	9.124	9.131	-0.007	98	17708	500.0	351.9	
9 1,4-Dioxane	88	1.909	1.903	0.006	0	4066	900.0	312.5	
11 Morpholine	87	1.909	1.916	-0.007	1	410		NC	
10 N-Nitrosodimethylamine	74	2.039	2.033	0.006	87	10735	900.0	484.6	
14 Naphthalene	128	4.586	4.586	0.000	100	49386	900.0	632.3	
16 2-Methylnaphthalene	142	5.143	5.147	-0.004	98	34129	900.0	679.6	
17 1-Methylnaphthalene	142	5.230	5.230	0.000	99	31948	900.0	635.2	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	48804	900.0	714.4	
22 Acenaphthylene	152	5.917	5.917	0.000	99	53123	900.0	639.1	
23 Acenaphthene	153	6.055	6.055	0.000	99	36958	900.0	727.4	
32 Dibenzofuran	168	6.199	6.207	-0.008	90	57376	900.0	723.0	
24 Diethyl phthalate	149	6.320	6.328	-0.008	97	51162	900.0	724.9	
25 Fluorene	166	6.487	6.494	-0.007	99	43985	900.0	705.5	
26 N-Nitrosodiphenylamine	169	6.563	6.570	-0.007	100	31056	900.0	669.4	
27 Phenanthrene	178	7.321	7.328	-0.007	100	68332	900.0	650.1	
28 Anthracene	178	7.366	7.373	-0.007	100	70107	900.0	660.5	
29 Di-n-butyl phthalate	149	7.724	7.738	-0.014	100	85876	900.0	638.0	
30 Fluoranthene	202	8.623	8.629	-0.006	100	79389	900.0	657.6	
31 Pyrene	202	8.968	8.974	-0.006	100	82348	900.0	657.7	
33 Butyl benzyl phthalate	149	9.951	9.957	-0.006	98	34741	900.0	558.5	
34 Bis(2-ethylhexyl) phthalat	149	11.218	11.236	-0.018	99	53634	900.0	585.2	
35 Benzo[a]anthracene	228	11.344	11.353	-0.009	99	67926	900.0	687.5	
36 Chrysene	228	11.443	11.452	-0.009	100	68637	900.0	751.0	
37 Di-n-octyl phthalate	149	13.151	13.165	-0.013	100	66165	900.0	526.8	
38 Benzo[b]fluoranthene	252	14.507	14.512	-0.005	100	57859	900.0	645.1	
39 Benzo[k]fluoranthene	252	14.586	14.595	-0.009	100	59880	900.0	663.8	
40 Benzo[a]pyrene	252	15.583	15.596	-0.013	100	55048	900.0	621.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.676	18.680	-0.004	82	55123	900.0	549.0	
42 Dibenz(a,h)anthracene	278	18.702	18.706	-0.004	89	42280	900.0	539.5	
43 Benzo[g,h,i]perylene	276	19.109	19.113	-0.004	100	45636	900.0	535.8	
7 Pentachlorophenol	266		0.000				ND	ND	
8 Benzidine	184		0.000					ND	
12 Pentachlorophenol_T	266		4.251					ND	
15 Benzidine_T	184		5.382					ND	
19 4,4'-DDE	246		5.495					ND	
18 4,4'-DDD	235		5.851					ND	
21 4,4'-DDT	235		6.135					ND	
S 52 TPAH	1		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

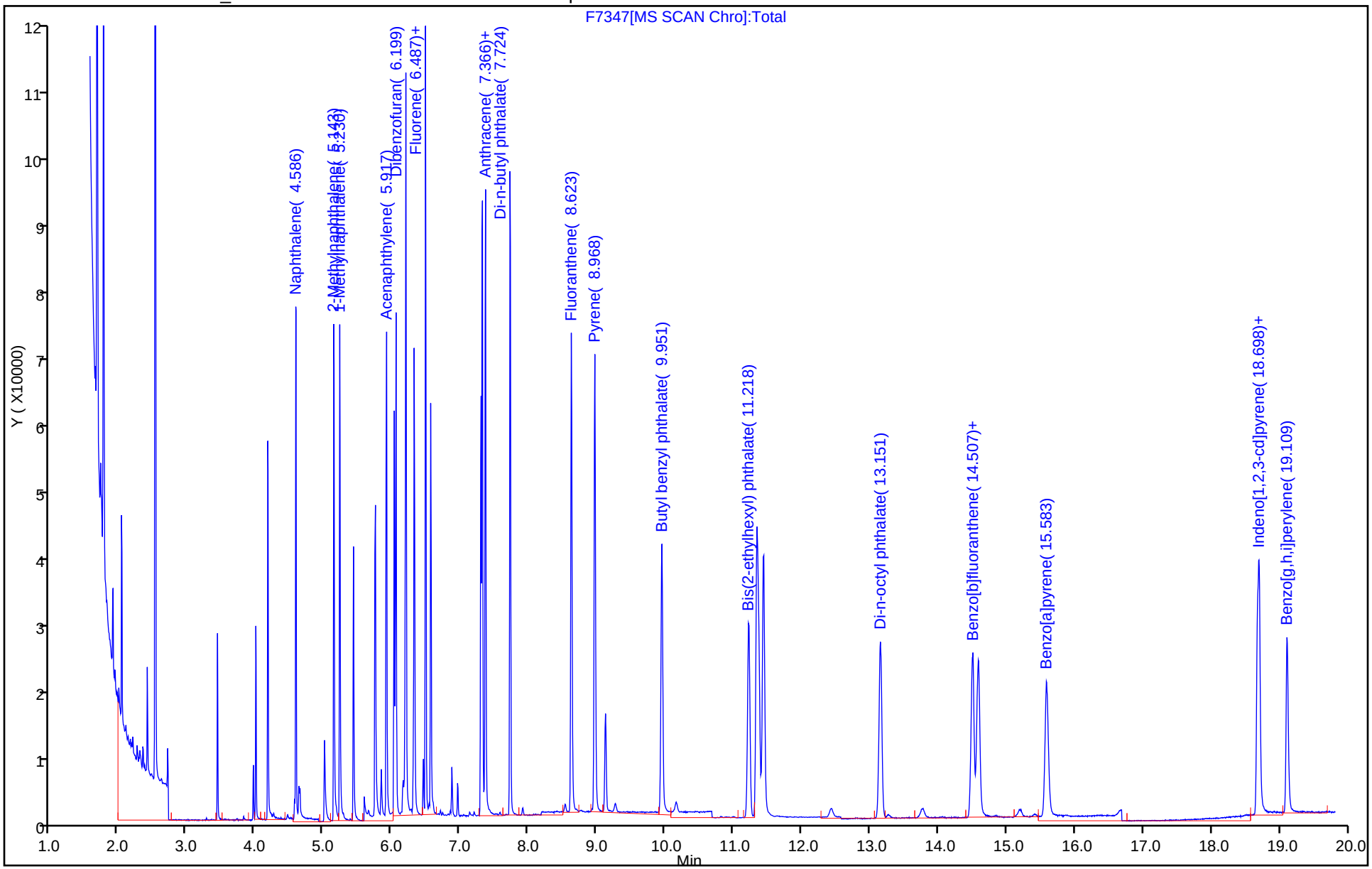
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 22-Jun-2017 16:05:50 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7347.D

Injection Date:	21-Jun-2017 23:47:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97803-B-9-C MS			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7347.D
Lims ID: 280-97803-B-9-C MS
Client ID:
Sample Type: MS
Inject. Date: 21-Jun-2017 23:47:30 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-b-9-cms
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 22-Jun-2017 16:05:39 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: wickhamm Date: 22-Jun-2017 16:00:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	408.9	81.78
$ 5 2-Fluorobiphenyl	500.0	405.7	81.15
$ 6 Terphenyl-d14	500.0	351.9	70.38

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB04(0-2) MSD | Lab Sample ID: 280-97803-9 MSD

Matrix: Solid | Lab File ID: F7348.D

Analysis Method: 8270D SIM | Date Collected: 05/31/2017 14:10

Extract. Method: 3546 | Date Extracted: 06/14/2017 09:42

Sample wt/vol: 31.4(g) | Date Analyzed: 06/22/2017 00:13

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 17.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378253 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	25.4		5.8	0.58	0.30
91-57-6	2-Methylnaphthalene	27.3		5.8	0.78	0.36
83-32-9	Acenaphthene	27.5		5.8	0.31	0.19
208-96-8	Acenaphthylene	25.4		5.8	0.78	0.20
120-12-7	Anthracene	26.2		5.8	2.9	0.84
56-55-3	Benzo[a]anthracene	27.4		5.8	2.9	1.0
50-32-8	Benzo[a]pyrene	25.1		5.8	2.9	0.86
205-99-2	Benzo[b]fluoranthene	26.8		5.8	2.9	1.4
191-24-2	Benzo[g,h,i]perylene	22.2		5.8	2.9	1.3
207-08-9	Benzo[k]fluoranthene	27.3		5.8	2.9	1.2
218-01-9	Chrysene	30.1		5.8	2.9	1.2
53-70-3	Dibenz(a,h)anthracene	22.5		5.8	2.9	1.5
206-44-0	Fluoranthene	27.2		5.8	2.9	1.2
86-73-7	Fluorene	28.1		5.8	0.78	0.55
193-39-5	Indeno[1,2,3-cd]pyrene	22.3		5.8	2.9	1.3
91-20-3	Naphthalene	25.4		5.8	0.78	0.38
85-01-8	Phenanthrene	25.9		5.8	2.9	1.3
129-00-0	Pyrene	27.3		5.8	2.9	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	86		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	87		44-125
1718-51-0	Terphenyl-d14 (Surr)	76		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7348.D
Lims ID: 280-97803-B-9-D MSD
Client ID:
Sample Type: MSD
Inject. Date: 22-Jun-2017 00:13:30 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-b-9-dmsd
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 22-Jun-2017 16:05:39 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: wickhamm Date: 22-Jun-2017 16:00:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	96	21805	600.0	600.0	
* 2 Phenanthrene-d10	188	7.301	7.302	-0.001	100	44248	600.0	600.0	
* 3 Chrysene-d12	240	11.378	11.380	-0.002	98	36049	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	14776	500.0	432.6	
$ 5 2-Fluorobiphenyl	172	5.431	5.436	-0.005	100	24375	500.0	431.1	
$ 6 Terphenyl-d14	244	9.124	9.131	-0.007	98	17094	500.0	380.5	
9 1,4-Dioxane	88	1.909	1.903	0.006	0	4983	900.0	423.2	
11 Morpholine	87	1.909	1.916	-0.007	1	308		NC	
10 N-Nitrosodimethylamine	74	2.039	2.033	0.006	86	10244	900.0	511.0	
14 Naphthalene	128	4.586	4.586	0.000	100	46253	900.0	654.3	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	97	31976	900.0	703.6	
17 1-Methylnaphthalene	142	5.230	5.230	0.000	99	29785	900.0	654.4	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	45007	900.0	728.1	
22 Acenaphthylene	152	5.917	5.917	0.000	100	49357	900.0	656.2	
23 Acenaphthene	153	6.055	6.055	0.000	99	32605	900.0	709.1	
32 Dibenzofuran	168	6.199	6.207	-0.008	90	53649	900.0	747.0	
24 Diethyl phthalate	149	6.320	6.328	-0.008	97	46767	900.0	732.2	
25 Fluorene	166	6.487	6.494	-0.007	98	40978	900.0	726.3	
26 N-Nitrosodiphenylamine	169	6.562	6.570	-0.008	99	26799	900.0	647.0	
27 Phenanthrene	178	7.321	7.328	-0.007	100	62676	900.0	667.9	
28 Anthracene	178	7.366	7.373	-0.007	100	64135	900.0	676.8	
29 Di-n-butyl phthalate	149	7.731	7.738	-0.007	100	78578	900.0	653.9	
30 Fluoranthene	202	8.623	8.629	-0.006	100	75615	900.0	701.5	
31 Pyrene	202	8.968	8.974	-0.006	100	78703	900.0	704.1	
33 Butyl benzyl phthalate	149	9.951	9.957	-0.006	100	33202	900.0	597.8	
34 Bis(2-ethylhexyl) phthalat	149	11.224	11.236	-0.012	99	50931	900.0	622.5	
35 Benzo[a]anthracene	228	11.341	11.353	-0.012	98	67805	900.0	707.3	
36 Chrysene	228	11.441	11.452	-0.011	100	68825	900.0	776.0	
37 Di-n-octyl phthalate	149	13.153	13.165	-0.011	100	63677	900.0	522.5	
38 Benzo[b]fluoranthene	252	14.500	14.512	-0.012	100	60120	900.0	690.7	
39 Benzo[k]fluoranthene	252	14.583	14.595	-0.012	100	61612	900.0	703.8	
40 Benzo[a]pyrene	252	15.589	15.596	-0.007	100	55658	900.0	648.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.673	18.680	-0.007	80	56038	900.0	575.1	
42 Dibenz(a,h)anthracene	278	18.699	18.706	-0.007	92	44189	900.0	581.1	
43 Benzo[g,h,i]perylene	276	19.111	19.113	-0.003	100	47315	900.0	572.4	
7 Pentachlorophenol	266		0.000				ND	ND	
8 Benzidine	184		0.000					ND	
12 Pentachlorophenol_T	266		4.251					ND	
15 Benzidine_T	184		5.382					ND	
19 4,4'-DDE	246		5.495					ND	
18 4,4'-DDD	235		5.851					ND	
21 4,4'-DDT	235		6.135					ND	
S 52 TPAH	1		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

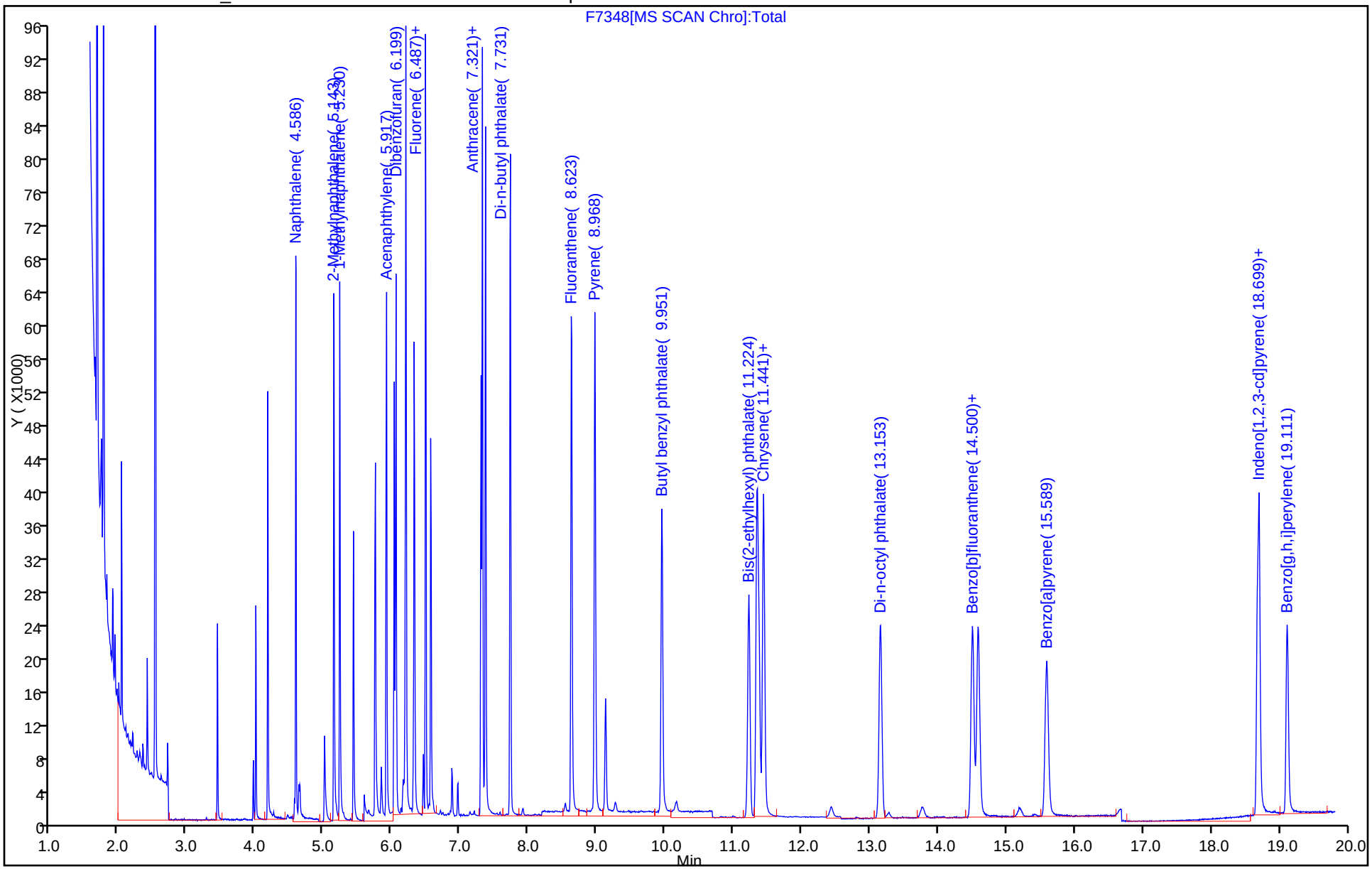
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 22-Jun-2017 16:05:51 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7348.D

Injection Date:	22-Jun-2017 00:13:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97803-B-9-D MSD			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\F7348.D
Lims ID: 280-97803-B-9-D MSD
Client ID:
Sample Type: MSD
Inject. Date: 22-Jun-2017 00:13:30 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-b-9-dmsd
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 22-Jun-2017 16:05:39 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK015

First Level Reviewer: wickhamm Date: 22-Jun-2017 16:00:42

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	432.6	86.52
$ 5 2-Fluorobiphenyl	500.0	431.1	86.22
$ 6 Terphenyl-d14	500.0	380.5	76.10

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SMS_F Start Date: 05/11/2017 12:39

Analysis Batch Number: 373158 End Date: 05/11/2017 20:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 280-373158/1		05/11/2017 12:39	1	F6543.D	Rxi-5Sil MS 0.25(mm)
ICIS 280-373158/2		05/11/2017 12:58	1	F6544.D	Rxi-5Sil MS 0.25(mm)
STD0020 280-373158/3 IC		05/11/2017 13:34	1	F6545.D	Rxi-5Sil MS 0.25(mm)
STD0100 280-373158/4 IC		05/11/2017 13:59	1	F6546.D	Rxi-5Sil MS 0.25(mm)
STD0300 280-373158/5 IC		05/11/2017 14:25	1	F6547.D	Rxi-5Sil MS 0.25(mm)
STD1200 280-373158/6 IC		05/11/2017 14:50	1	F6548.D	Rxi-5Sil MS 0.25(mm)
STD2500 280-373158/7 IC		05/11/2017 15:16	1	F6549.D	Rxi-5Sil MS 0.25(mm)
STD5000 280-373158/8 IC		05/11/2017 15:42	1	F6550.D	Rxi-5Sil MS 0.25(mm)
STD10000 280-373158/9 IC		05/11/2017 16:07	1	F6551.D	Rxi-5Sil MS 0.25(mm)
ICV 280-373158/10		05/11/2017 16:33	1	F6552.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		05/11/2017 16:59	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		05/11/2017 17:24	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		05/11/2017 17:50	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		05/11/2017 18:16	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		05/11/2017 18:41	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		05/11/2017 19:07	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		05/11/2017 19:33	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		05/11/2017 19:58	1		Rxi-5Sil MS 0.25(mm)
CCVC 280-373158/19		05/11/2017 20:24	1		Rxi-5Sil MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SMS_G5 Start Date: 06/01/2017 10:22

Analysis Batch Number: 375238 End Date: 06/01/2017 21:47

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 280-375238/1		06/01/2017 10:22	1	G5_1342.D	Rxi-5Sil MS 0.25(mm)
ICIS 280-375238/2		06/01/2017 10:39	1	G5_1343.D	Rxi-5Sil MS 0.25(mm)
STD0020 280-375238/3 IC		06/01/2017 11:09	1	G5_1344.D	Rxi-5Sil MS 0.25(mm)
STD0100 280-375238/4 IC		06/01/2017 11:37	1	G5_1345.D	Rxi-5Sil MS 0.25(mm)
STD0300 280-375238/5 IC		06/01/2017 12:04	1	G5_1346.D	Rxi-5Sil MS 0.25(mm)
STD1200 280-375238/6 IC		06/01/2017 12:31	1	G5_1347.D	Rxi-5Sil MS 0.25(mm)
STD2500 280-375238/7 IC		06/01/2017 12:58	1	G5_1348.D	Rxi-5Sil MS 0.25(mm)
STD5000 280-375238/8 IC		06/01/2017 13:26	1	G5_1349.D	Rxi-5Sil MS 0.25(mm)
STD10000 280-375238/9 IC		06/01/2017 13:53	1	G5_1350.D	Rxi-5Sil MS 0.25(mm)
ICV 280-375238/10		06/01/2017 14:20	1	G5_1351.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/01/2017 14:57	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/01/2017 15:24	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/01/2017 15:52	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/01/2017 16:19	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/01/2017 16:46	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/01/2017 17:14	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/01/2017 17:41	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/01/2017 18:08	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/01/2017 18:35	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/01/2017 19:03	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/01/2017 19:30	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/01/2017 19:57	1		Rxi-5Sil MS 0.25(mm)
CCVC 280-375238/26		06/01/2017 21:47	1		Rxi-5Sil MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SMS_F Start Date: 06/07/2017 08:29

Analysis Batch Number: 376394 End Date: 06/07/2017 19:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 280-376394/1		06/07/2017 08:29	1	F7043.D	Rxi-5Sil MS 0.25(mm)
CCV 280-376394/2		06/07/2017 08:53	1	F7044.D	Rxi-5Sil MS 0.25(mm)
MB 280-376088/1-A		06/07/2017 09:24	1	F7045.D	Rxi-5Sil MS 0.25(mm)
LCS 280-376088/2-A		06/07/2017 09:50	1	F7046.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/07/2017 10:24	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/07/2017 10:50	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/07/2017 11:16	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/07/2017 11:41	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/07/2017 12:46	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/07/2017 13:12	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/07/2017 13:37	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/07/2017 14:03	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/07/2017 14:29	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/07/2017 14:56	2		Rxi-5Sil MS 0.25(mm)
CCVC 280-376394/15		06/07/2017 15:22	1	F7057.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/07/2017 15:48	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/07/2017 16:13	5		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/07/2017 16:39	20		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/07/2017 17:05	4		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/07/2017 17:31	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/07/2017 17:57	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/07/2017 18:22	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/07/2017 18:48	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/07/2017 19:14	1		Rxi-5Sil MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SMS_G5 Start Date: 06/08/2017 08:58

Analysis Batch Number: 376547 End Date: 06/08/2017 20:51

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 280-376547/1		06/08/2017 08:58	1	G5_1427.D	Rxi-5Sil MS 0.25(mm)
CCV 280-376547/2		06/08/2017 09:13	1	G5_1428.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/08/2017 09:56	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/08/2017 10:23	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/08/2017 10:50	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/08/2017 11:17	1		Rxi-5Sil MS 0.25(mm)
280-97803-4		06/08/2017 12:12	1	G5_1434.D	Rxi-5Sil MS 0.25(mm)
280-97803-5		06/08/2017 12:39	1	G5_1435.D	Rxi-5Sil MS 0.25(mm)
280-97803-6		06/08/2017 13:06	1	G5_1436.D	Rxi-5Sil MS 0.25(mm)
280-97803-7		06/08/2017 13:33	1	G5_1437.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/08/2017 14:01	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/08/2017 14:28	1		Rxi-5Sil MS 0.25(mm)
280-97803-10		06/08/2017 14:55	1	G5_1440.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/08/2017 15:23	1		Rxi-5Sil MS 0.25(mm)
280-97803-12		06/08/2017 15:50	1	G5_1442.D	Rxi-5Sil MS 0.25(mm)
280-97803-13		06/08/2017 16:18	1	G5_1443.D	Rxi-5Sil MS 0.25(mm)
280-97803-14		06/08/2017 16:45	1	G5_1444.D	Rxi-5Sil MS 0.25(mm)
CCVC 280-376547/19		06/08/2017 17:12	1	G5_1445.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/08/2017 17:40	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/08/2017 18:07	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/08/2017 18:34	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/08/2017 19:02	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/08/2017 19:29	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/08/2017 19:56	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/08/2017 20:24	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/08/2017 20:51	1		Rxi-5Sil MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SMS_F Start Date: 06/12/2017 13:22

Analysis Batch Number: 376943 End Date: 06/13/2017 01:09

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 280-376943/1		06/12/2017 13:22	1	F7122.D	Rxi-5Sil MS 0.25(mm)
CCV 280-376943/2		06/12/2017 13:49	1	F7123.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/12/2017 14:44	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/12/2017 15:10	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/12/2017 15:39	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/12/2017 16:05	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/12/2017 16:31	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/12/2017 16:57	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/12/2017 17:23	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/12/2017 17:49	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/12/2017 18:15	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/12/2017 18:41	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/12/2017 19:07	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/12/2017 19:33	1		Rxi-5Sil MS 0.25(mm)
280-97803-1		06/12/2017 19:59	1	F7136.D	Rxi-5Sil MS 0.25(mm)
280-97803-1 DL		06/12/2017 20:25	5	F7137.D	Rxi-5Sil MS 0.25(mm)
280-97803-10 DL		06/12/2017 20:51	40	F7138.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/12/2017 21:17	2		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/12/2017 21:43	4		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/12/2017 22:09	2		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/12/2017 22:35	5		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/12/2017 23:00	40		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/12/2017 23:52	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/13/2017 00:18	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/13/2017 00:43	1		Rxi-5Sil MS 0.25(mm)
CCVC 280-376943/27		06/13/2017 01:09	1	F7148.D	Rxi-5Sil MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SMS_F Start Date: 06/13/2017 06:08

Analysis Batch Number: 377034 End Date: 06/13/2017 13:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 280-377034/1		06/13/2017 06:08	1	F7149.D	Rxi-5Sil MS 0.25(mm)
CCV 280-377034/2		06/13/2017 06:21	1	F7150.D	Rxi-5Sil MS 0.25(mm)
MB 280-376215/1-A		06/13/2017 06:49	1	F7151.D	Rxi-5Sil MS 0.25(mm)
LCS 280-376215/2-A		06/13/2017 07:14	1	F7152.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/13/2017 07:40	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/13/2017 08:05	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/13/2017 08:31	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/13/2017 08:56	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/13/2017 09:22	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/13/2017 09:48	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/13/2017 10:13	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/13/2017 10:39	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/13/2017 11:05	1		Rxi-5Sil MS 0.25(mm)
280-97803-3		06/13/2017 11:30	1	F7162.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/13/2017 11:56	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/13/2017 12:22	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/13/2017 12:48	20		Rxi-5Sil MS 0.25(mm)
CCVC 280-377034/18		06/13/2017 13:14	1	F7166.D	Rxi-5Sil MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SMS_F Start Date: 06/21/2017 19:11

Analysis Batch Number: 378253 End Date: 06/22/2017 04:59

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 280-378253/1		06/21/2017 19:11	1	F7336.D	Rxi-5Sil MS 0.25(mm)
CCV 280-378253/2		06/21/2017 19:23	1	F7337.D	Rxi-5Sil MS 0.25(mm)
MB 280-377246/1-A		06/21/2017 19:51	1	F7338.D	Rxi-5Sil MS 0.25(mm)
LCS 280-377246/2-A		06/21/2017 20:17	1	F7339.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/21/2017 20:44	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/21/2017 21:10	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/21/2017 21:36	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/21/2017 22:02	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/21/2017 22:28	1		Rxi-5Sil MS 0.25(mm)
280-97803-8		06/21/2017 22:55	1	F7345.D	Rxi-5Sil MS 0.25(mm)
280-97803-9		06/21/2017 23:21	1	F7346.D	Rxi-5Sil MS 0.25(mm)
280-97803-9 MS		06/21/2017 23:47	1	F7347.D	Rxi-5Sil MS 0.25(mm)
280-97803-9 MSD		06/22/2017 00:13	1	F7348.D	Rxi-5Sil MS 0.25(mm)
280-97803-11		06/22/2017 00:39	1	F7349.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/22/2017 01:05	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/22/2017 01:31	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/22/2017 01:57	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/22/2017 02:23	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/22/2017 02:50	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/22/2017 03:16	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/22/2017 03:41	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/22/2017 04:08	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/22/2017 04:33	1		Rxi-5Sil MS 0.25(mm)
CCVC 280-378253/24		06/22/2017 04:59	1	F7359.D	Rxi-5Sil MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SMS_F Start Date: 06/22/2017 17:13

Analysis Batch Number: 378412 End Date: 06/23/2017 04:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 280-378412/1		06/22/2017 17:13	1	F7361.D	Rxi-5Sil MS 0.25(mm)
CCV 280-378412/2		06/22/2017 17:25	1	F7362.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/22/2017 18:22	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/22/2017 18:47	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/22/2017 19:13	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/22/2017 19:39	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/22/2017 20:05	1		Rxi-5Sil MS 0.25(mm)
280-97803-8 DL		06/22/2017 21:23	2	F7371.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/22/2017 23:06	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/22/2017 23:32	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/22/2017 23:57	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/23/2017 00:23	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/23/2017 00:49	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/23/2017 01:15	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/23/2017 01:40	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/23/2017 02:06	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/23/2017 02:31	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/23/2017 02:57	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/23/2017 03:23	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/23/2017 03:48	1		Rxi-5Sil MS 0.25(mm)
CCVC 280-378412/27		06/23/2017 04:14	1	F7387.D	Rxi-5Sil MS 0.25(mm)

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GC/MS Semivolatile Data Review Checklist-CCV and Tune

LIMS Batch Number: 376547	Worklist #: 59555	Instrument ID: GS 060817
Analyst/1st Reviewer: KQN Date: 060817	Method (circle): 625 8270C (8270D)	Circle: Full Scan (SIM) BP LL SIM
QC Type (circle): (Standard) DOD Q4 (DoD Q5) QAPP_____ Other_____		

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable? (List NCM #)
A. Tune/Calibration Verification					
1. Did DFTPP meet tune criteria? If SIM, did the PFTBA Tune check meet ion ratio criteria?	✓			✓	
2. Are the Benzidine and PCP tailing ≤ 2? (8270D/DoD), Benzidine tailing ≤3 and PCP tailing ≤5? (8270C)	✓			✓	
3. Is the DDT degradation ≤ 20%	—			✓	
4. Were all standards injected within 12 hr of DFTPP? (or 24 hrs for 625)?	✓			✓	
5. Was the correct ICAL used for quantitation? Date & Instrument ID verified? (Check both Chrom and TALS)	✓			✓	
6. Do the RFs meet method minimum criteria? (8270D/625) Are the RFs for SPCCs ≥0.050? (8270C)	✓			✓	
7. Is the %D (difference or drift) 8270C: ≤20% for all CCCs? all other analytes within 35%, or 55% (poor performers) 8270D: %D ≤ 20% for all analytes, at least 80% of compounds meet criteria?	✓			✓	(8270C: %D high, samples ND?) (8270D: <20% of cmpds fail criteria & for failed cmpds RL std verifies sensitivity for NDs?) List Compounds outside criteria:
8. For any compound > 20% D (low), was RL standard analyzed and detected? (8270D)			—	NA	
9. NOTE: For any compounds > 20% D (high or low), detects will be flagged as "EST" & narrated. (8270D)			✓	↓	□ Must be done in consultation with client.
10. Are the internal standard responses within limits? (between -50% and +100% of the mid-level ICAL standard)	—			✓	
11. Are the internal standard retention times within method limits? (±30 sec of ICAL mid-pt for 8270C/D)	✓			✓	
12. Benzo(b & k)fluoranthene: height of the valley between must be less than 50% of the average of the two peak heights?	✓			✓	
13. Elution order checked isomeric pairs and coeluters?					(Chrom: View/Documents/Methods/Isomers)
• aniline / bis(2-chloroethyl)ether			—	NA	
• N-nitrosodiphenylamine/diphenylamine			—	↓	
• 1,3-, 1,4-, 1,2-dichlorobenzene			—	↓	
• benzyl alcohol / 2-methylphenol / 3/4-methylphenol			—	↓	
• 2 & 1 – methylnaphthalene	✓			✓	
• 2,4-dimethylphenol / 3,5-dimethylphenol			—	NA	
• 2,4,6- and 2,4,5-trichlorophenol			—	↓	
• phenanthrene / anthracene	✓			✓	

Panida R.
6/13/17

A. Tune/Calibration Verification (cont.)					
Review Items	**Yes**	**No**	**NA**	**2nd Rev**	**If No, why is data reportable? (List NCM #)**
• fluoranthene / pyrene	✓			✓	
• benzo(a)anthracene / chrysene	✓			✓	
• benzo(e)pyrene/benzo(a)pyrene	✓			✓	
• bis(2-ethylhexyl)/di-n-octyl phthalate	✓			✓	
• benzo(b)fluoranthene / benzo(k)fluoranthene	✓			✓	
• indeno(1,2,3-cd)pyrene / benzo(g,h,i)perylene	✓			✓	
• safrole/1-chloronaphthalene			✓	✓	
• 1-/2-naphthylamine			✓		
• 1 and 2-chloronaphthalene			✓		
• 2,4,6 and 2,4,5-tribromophenol			✓		
14. If any criteria from items above were not met, was a NCM generated?			✓		
15. Were manual integrations performed correctly and properly documented? (dated, initialed and reason given) 2nd review of all MIs required	✓			✓	

Comments: ICV 060817

2nd Reviewer: Alex Hoffler Review Date: 06/08/17

Panida K.
6/13/17

TestAmerica Laboratories
Worklist Run Log Report

Worklist Name: 060817 Worklist Num: 59555
Instrument: SMS_G5 Method: SMSG5_SIMX
Batch Directory: \\ChromNA\Denver\ChromData\SMS_G5\20170608-59555.b
Anaylysis Type: SemiVOA Creator: Vasquez, Karla G
Inj Volume: 1.00 Inj Vol Units: ul
Run Reagents:
MS-SIM IS_00029, Amount Added: 20.00 , Units: ul

Lab ID	Worklist ID	Sample Type	Inj Date/Time	File Name	Vial	Dil Factor	Client ID	Fract
DFTPP	280-0059555-001	DFTPP	08-Jun-2017 08:58:30	G5_1427.D	1	1.0		SV
CCV	280-0059555-002	CCV	08-Jun-2017 09:13:30	G5_1428.D	2	1.0		SV
MB 280-375221/1-A	280-0059555-003	MB	08-Jun-2017 09:56:30	G5_1429.D DNR	3	1.0		SV
MB 280-375019/1-A	280-0059555-004	MB	08-Jun-2017 10:23:30	G5_1430.D	4	1.0		SV
LCS 280-375019/2-A	280-0059555-005	LCS	08-Jun-2017 10:50:30	G5_1431.D DNR	5	1.0		SV
LCSD 280-375019/3-A	280-0059555-006	LCSD	08-Jun-2017 11:17:30	G5_1432.D	6	1.0		SV
280-97803-C-1-A	280-0059555-007	Client	08-Jun-2017 11:45:30	G5_1433.D DNR	7	1.0	SS025-SS01	SV
280-97803-C-4-A	280-0059555-008	Client	08-Jun-2017 12:12:30	G5_1434.D	8	1.0	SS025-SS02	SV
280-97803-A-5-B	280-0059555-009	Client	08-Jun-2017 12:39:30	G5_1435.D	9	1.0	SS025-SB02(0-2)	SV
280-97803-A-6-B	280-0059555-010	Client	08-Jun-2017 13:06:30	G5_1436.D	10	1.0	SS025-SS03	SV
280-97803-A-7-B	280-0059555-011	Client	08-Jun-2017 13:33:30	G5_1437.D	11	1.0	SS025-SB03(0-2)	SV
280-97803-A-8-B	280-0059555-012	Client	08-Jun-2017 14:01:30	G5_1438.D	12	1.0	SS025-SS04	SV
280-97803-A-9-B	280-0059555-013	Client	08-Jun-2017 14:28:30	G5_1439.D	13	1.0	SS025-SB04(0-2)	SV
280-97803-A-10-B	280-0059555-014	Client	08-Jun-2017 14:55:30	G5_1440.D	14	1.0	SS025-SS05	SV
280-97803-A-11-B	280-0059555-015	Client	08-Jun-2017 15:23:30	G5_1441.D	15	1.0	SS025-SB05(0-2)	SV
280-97803-A-12-B	280-0059555-016	Client	08-Jun-2017 15:50:30	G5_1442.D	16	1.0	SS025-SB05(2-4)	SV
280-97803-A-13-B	280-0059555-017	Client	08-Jun-2017 16:18:30	G5_1443.D	17	1.0	SS025-SS06	SV
280-97803-A-14-B	280-0059555-018	Client	08-Jun-2017 16:45:30	G5_1444.D	18	1.0	SS025-SS06-a	SV
CCVC	280-0059555-019	CCVC	08-Jun-2017 17:12:30	G5_1445.D	19	1.0		SV
280-97467-A-2-A	280-0059555-020	Client	08-Jun-2017 17:40:30	G5_1446.D	20	1.0	RFI2-9C	SV
280-97467-A-3-A	280-0059555-021	Client	08-Jun-2017 18:07:30	G5_1447.D	21	1.0	MW-40C	SV
280-97467-B-6-A	280-0059555-022	Client	08-Jun-2017 18:34:30	G5_1448.D	22	1.0	MW-25C	SV
280-97467-B-7-A	280-0059555-023	Client	08-Jun-2017 19:02:30	G5_1449.D	23	1.0	MW-24C	SV
280-97467-A-8-A	280-0059555-024	Client	08-Jun-2017 19:29:30	G5_1450.D	24	1.0	MW-26C	SV
280-97467-A-10-A	280-0059555-025	Client	08-Jun-2017 19:56:30	G5_1451.D	25	1.0	MW-42C	SV
280-97467-A-11-A	280-0059555-026	Client	08-Jun-2017 20:24:30	G5_1452.D	26	1.0	MW-41C	SV
280-97467-D-18-B	280-0059555-027	Client	08-Jun-2017 20:51:30	G5_1453.D	27	1.0	RFI2-3C	SV
280-97467-D-19-A	280-0059555-028	Client	08-Jun-2017 21:18:30	G5_1454.D DNR	28	1.0	RINSE BLANK (5/21/17)	SV
280-97467-B-24-A	280-0059555-029	Client	08-Jun-2017 21:45:30	G5_1455.D DNR	29	1.0	MW-39C	SV

TUNE: 0868-2051
CHROM WL: 59555
LIMS BATCH: 157164

METHOD(s): 8270 SIM
SOLVENT LOT: 157164
PIPETTE ID(s): SV-5

DAILY MAINTENANCE INCLUDED:

☐ REPLACED SEPTA
☑ REPLACED LINER
☐ REPLACED GOLD SEAL
☐ REPLACED FERRULE
☐ CLIPPED COLUMN_____

Panida R
6/13/17

TestAmerica
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GC/MS Semivolatile Data Review Checklist-CCV and Tune

LIMS Batch Number: 376843	Worklist #: 59648	Instrument ID: F 061217B
Analyst/1st Reviewer: KV	Method (circle): 625 8270C 8270D	Circle: Full Scan SIM BP LL SIM
Date: 061217		
QC Type (circle): Standard DoD Q4 DoD Q5	QAPP_____	Other_____

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable? (List NCM #)
A. Tune/Calibration Verification					
1. Did DFTPP meet tune criteria? If SIM, did the PFTBA Tune check meet ion ratio criteria?	✓			✓	
2. Are the Benzidine and PCP tailing ≤ 2? (8270D/DoD), Benzidine tailing ≤3 and PCP tailing ≤5? (8270C)	✓			✓	
3. Is the DDT degradation ≤ 20%	✓			✓	
4. Were all standards injected within 12 hr of DFTPP? (or 24 hrs for 625)?	✓			✓	
5. Was the correct ICAL used for quantitation? Date & Instrument ID verified? (Check both Chrom and TALS)	✓			✓	
6. Do the RFs meet method minimum criteria? (8270D/625) Are the RFs for SPCCs ≥0.050? (8270C)	✓			✓	
7. Is the %D (difference or drift) 8270C: ≤20% for all CCCs? all other analytes within 35%, or 55% (poor performers) 8270D: %D ≤ 20% for all analytes, at least 80% of compounds meet criteria?	✓			✓	(8270C: %D high, samples ND?) (8270D: <20% of cmpds fail criteria & for failed cmpds RL std verifies sensitivity for NDs?) List Compounds outside criteria:
8. For any compound > 20% D (low), was RL standard analyzed and detected? (8270D)			✓	M	
9. NOTE: For any compounds > 20% D (high or low), detects will be flagged as "EST" & narrated. (8270D)			✓	↓	□ Must be done in consultation with client.
10. Are the internal standard responses within limits? (between -50% and +100% of the mid-level ICAL standard)	✓			✓	
11. Are the internal standard retention times within method limits? (±30 sec of ICAL mid pt for 8270C/D)	✓			✓	
12. Benzo(b & k)fluoranthene: height of the valley between must be less than 50% of the average of the two peak heights?	✓			✓	
13. Elution order checked isomeric pairs and coeluters?					(Chrom: View/Documents/Methods/Isomers)
• aniline / bis(2-chloroethyl)ether			✓	M	
• N-nitrosodiphenylamine/diphenylamine			✓	↓	
• 1,3-, 1,4-, 1,2-dichlorobenzene			✓		
• benzyl alcohol / 2-methylphenol / 3/4-methylphenol			✓		
• 2 & 1 – methylnaphthalene	✓			✓	
• 2,4-dimethylphenol / 3,5-dimethylphenol			✓	M	
• 2,4,6- and 2,4,5-trichlorophenol			✓	↓	
• phenanthrene / anthracene	✓			✓	

Panida R.
6/14/17

A. Tune/Calibration Verification (cont.)					
Review Items	**Yes**	**No**	**NA**	**2nd Rev**	**If No, why is data reportable? (List NCM #)**
• fluoranthene / pyrene	✓			✓	
• benzo(a)anthracene / chrysene	✓			✓	
• benzo(e)pyrene/benzo(a)pyrene	✓			✓	
• bis(2-ethylhexyl)/di-n-octyl phthalate	✓			✓	
• benzo(b)fluoranthene / benzo(k)fluoranthene	✓			✓	
• indeno(1,2,3-cd)pyrene / benzo(g,h,i)perylene	✓			✓	
• safrole/1-chloronaphthalene			✓	NR	
• 1-/2-naphthylamine			✓		
• 1 and 2-chloronaphthalene			✓		
• 2,4,6 and 2,4,5-tribromophenol			✓		
14. If any criteria from items above were not met, was a NCM generated?			✓		
15. Were manual integrations performed correctly and properly documented? (dated, initialed and reason given) 2nd review of all MIs required	✓			✓	

Comments: KEP 6/12/17

2nd Reviewer: Alex Harper **Review Date:** 06/12/17

Panida R. 6/14/17

TestAmerica Laboratories
Worklist Run Log Report

Worklist Name: 061217B
Instrument: SMS_F
Batch Directory: \\ChromNA\Denver\ChromData\SMS_F\20170612-59648.b
Anaylysis Type: SemiVOA
Inj Volume: 1.00
Run Reagents:
MS-SIM IS_00029, Amount Added: 20.00, Units: uL

Worklist Num: 59648
Method: SWSF_8270SIMX
Creator: Vasquez, Karla G
Inj Vol Units: ul

Lab ID	Worklist ID	Sample Type	Inj Date/Time	File Name	Vial	Dil Factor	Client ID	Fract
DFTPP	280-0059648-001	DFTPP	12-Jun-2017 13:22:30	F7122.D	1	1.0		SV
CCV	280-0059648-002	CCV	12-Jun-2017 13:49:30	F7123.D	2	1.0		SV
MB 280-375616/1-A	280-0059648-003	MB	12-Jun-2017 14:44:30	F7124.D	3	1.0		SV
LCS 280-375616/2-A	280-0059648-004	LCS	12-Jun-2017 15:10:30	F7125.D	4	1.0		SV
MB 280-376788/1-A	280-0059648-005	MB	12-Jun-2017 15:39:30	F7126.D	5	1.0		SV
LCS 280-376788/2-A	280-0059648-006	LCS	12-Jun-2017 16:05:30	F7127.D	6	1.0		SV
280-97859-A-8-A	280-0059648-007	Client	12-Jun-2017 16:31:30	F7128.D	7	1.0	SR501-DEL-41	SV
280-97829-B-21-C	280-0059648-008	Client	12-Jun-2017 16:57:30	F7129.D	8	1.0	SS017-SB06(0-2)	SV
280-97829-A-22-C	280-0059648-009	Client	12-Jun-2017 17:23:30	F7130.D	9	1.0	SS017-SB06(2-4)	SV
280-97829-A-23-E	280-0059648-010	Client	12-Jun-2017 17:49:30	F7131.D	10	1.0	SS017-SB06(4-6)	SV
280-97829-A-24-C	280-0059648-011	Client	12-Jun-2017 18:15:30	F7132.D	11	1.0	SS017-SB05(0-2)	SV
280-97829-C-25-C	280-0059648-012	Client	12-Jun-2017 18:41:30	F7133.D	12	1.0	SS017-SB05(2-4)	SV
280-97829-A-26-C	280-0059648-013	Client	12-Jun-2017 19:07:30	F7134.D	13	1.0	SS017-SB05(4-6)	SV
280-97829-A-27-C	280-0059648-014	Client	12-Jun-2017 19:33:30	F7135.D	14	1.0	SS017-SB05(6-8)	SV
280-97803-C-1-A	280-0059648-015	Client	12-Jun-2017 19:59:30	F7136.D	15	1.0	SS025-SS01	SV
280-97803-C-1-A	280-0059648-016	Client	12-Jun-2017 20:25:30	F7137.D	16	5.0	SS025-SS01	SV
280-97803-A-10-B	280-0059648-017	Client	12-Jun-2017 20:51:30	F7138.D	17	40.0	SS025-SS05	SV
280-97803-A-11-B	280-0059648-018	Client	12-Jun-2017 21:17:30	F7139.D	18	2.0	SS025-SB05(0-2)	SV
280-97695-A-3-B	280-0059648-019	Client	12-Jun-2017 21:43:30	F7140.D	19	4.0	OW056-DPS11-0-6"	SV
280-97695-A-8-B	280-0059648-020	Client	12-Jun-2017 22:09:30	F7141.D	20	2.0	OW056-DPS5010-3-5	SV
280-97695-A-12-B	280-0059648-021	Client	12-Jun-2017 22:35:30	F7142.D	21	5.0	OW056-DPS09-10-11	SV
280-97695-A-18-B	280-0059648-022	Client	12-Jun-2017 23:00:30	F7143.D	22	40.0	OW056-DPS13-12	SV
280-97695-B-18-C	280-0059648-023	Client	12-Jun-2017 23:26:30	F7144.D -DNR	23	2.0	OW056-DPS13-12	SV
680-139234-E-2-A	280-0059648-024	Client	12-Jun-2017 23:52:30	F7145.D	24	1.0	SS275-MW-44_0517	SV
680-139234-D-2-A MS	280-0059648-025	MS	13-Jun-2017 00:18:30	F7146.D	25	1.0	SS275-MW-44_0517-ms	SV
680-139234-E-2-B MSD	280-0059648-026	MSD	13-Jun-2017 00:43:30	F7147.D	26	1.0	SS275-MW-44_0517-sd	SV
CCVC	280-0059648-027	CCVC	13-Jun-2017 01:09:30	F7148.D	27	1.0		SV

TUNE: 1322-010A
CHROM WL: 59648
LIMS BATCH: 376943

METHOD(s): 8270 SIM
SOLVENT LOT: 157164
REPETITIVE ID(s): SV-15

DAILY MAINTENANCE INCLUDED:

☐ REPLACED SEPTA
☒ REPLACED LINER
☐ REPLACED GOLD SEAL
☐ REPLACED FERRULE
☐ CLIPPED COLUMN

Panida R
6/14/17

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GC/MS Semivolatile Data Review Checklist-CCV and Tune

LIMS Batch Number: 377034	Worklist #: 59679	Instrument ID: F 061317
Analyst/1st Reviewer: KRV	Method (circle): 625 8270C (8270D)	Circle: Full Scan (SIM) BP LL SIM
Date: 061317		
QC Type (circle): (Standard) DOD Q4 (DoD Q5) QAPP_____		Other_____

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable? (List NCM #)
A. Tune/Calibration Verification					
1. Did DFTPP meet tune criteria? If SIM, did the PFTBA Tune check meet ion ratio criteria?	—			/	
2. Are the Benzidine and PCP tailing ≤ 2? (8270D/DoD), Benzidine tailing ≤3 and PCP tailing ≤5? (8270C)	—			/	
3. Is the DDT degradation ≤ 20%	—			/	
4. Were all standards injected within 12 hr of DFTPP? (or 24 hrs for 625)?	/			/	
5. Was the correct ICAL used for quantitation? Date & Instrument ID verified? (Check both Chrom and TALS)	—			/	
6. Do the RFs meet method minimum criteria? (8270D/625) Are the RFs for SPCCs ≥0.050? (8270C)	/			/	
7. Is the %D (difference or drift) 8270C: ≤20% for all CCCs? all other analytes within 35%, or 55% (poor performers) 8270D: %D ≤ 20% for all analytes, at least 80% of compounds meet criteria?	/			/	(8270C: %D high, samples ND?) (8270D: <20% of cmpds fail criteria & for failed cmpds RL std verifies sensitivity for NDs?) List Compounds outside criteria:
8. For any compound > 20% D (low), was RL standard analyzed and detected? (8270D)			—	NA	
9. NOTE: For any compounds > 20% D (high or low), detects will be flagged as "EST" & narrated. (8270D)			/		□ Must be done in consultation with client.
10. Are the internal standard responses within limits? (between -50% and +100% of the mid-level ICAL standard)	—			/	
11. Are the internal standard retention times within method limits? (±30 sec of ICAL mid pt for 8270C/D)	—			/	
12. Benzo(b & k)fluoranthene: height of the valley between must be less than 50% of the average of the two peak heights?	/			/	
13. Elution order checked isomeric pairs and coeluters?					(Chrom: View/Documents/Methods/Isomers)
• aniline / bis(2-chloroethyl)ether			—	NA	
• N-nitrosodiphenylamine/diphenylamine			—		
• 1,3-, 1,4-, 1,2-dichlorobenzene			—		
• benzyl alcohol / 2-methylphenol / 3/4-methylphenol			/	d	
• 2 & 1-methylnaphthalene	/			/	
• 2,4-dimethylphenol / 3,5-dimethylphenol			—	NA	
• 2,4,6- and 2,4,5-trichlorophenol			/		
• phenanthrene // anthracene	/			/	

Panida R.
6/14/17

A. Tune/Calibration Verification (cont.)					
Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable? (List NCM #)
• fluoranthene / pyrene	✓			✓	
• benzo(a)anthracene / chrysene	✓			✓	
• benzo(e)pyrene/benzo(a)pyrene	✓			✓	
• bis(2-ethylhexyl)/di-n-octyl phthalate	✓			✓	
• benzo(b)fluoranthene / benzo(k)fluoranthene	✓			✓	
• indeno(1,2,3-cd)pyrene / benzo(g,h,i)perylene	✓			✓	
• safrole/1-chloronaphthalene			✓	NA	
• 1-/2-naphthylamine			✓		
• 1 and 2-chloronaphthalene			✓		
• 2,4,6 and 2,4,5-trihromophenol			✓		
14. If any criteria from items above were not met, was a NCM generated?			✓	↓	
15. Were manual integrations performed correctly and properly documented? (dated, initialed and reason given) 2nd review of all MIs required	✓			✓	

Comments: _____

6/13/17

2nd Reviewer: Alexander Review Date: 06/13/17

Panida R.
6/14/17

TestAmerica Laboratories
Worklist Run Log Report

Worklist Name: 061317 Worklist Num: 596679
Instrument: SMS_F Method: SMSF_8270SIM-X
Batch Directory: \\ChromNA\Denver\ChromData\SMS_F\20170613-596679.b Data File:
Analysis Type: SemiVOA Creator: Vasquez, Karla G
Inj Volume: 1.00 Inj Vol Units: ul
Run Reagents:
MS-SIM-IS_00029, Amount Added: 20.00, Units: uL

Lab ID	Worklist ID	Sample Type	Inj Date/Time	File Name	Vial	Dil Factor	Client ID	Fract
DFTPP	280-0059679-001	DFTPP	13-Jun-2017 06:08:30	F7149.D	1	1.0		SV
CCV	280-0059679-002	CCV	13-Jun-2017 06:21:30	F7150.D	2	1.0		SV
MB 280-376215/1-A	280-0059679-003	MB	13-Jun-2017 06:48:30	F7151.D	3	1.0		SV
LCS 280-376215/2-A	280-0059679-004	LCS	13-Jun-2017 07:14:30	F7152.D	4	1.0		SV
LCS 280-375019/2-A	280-0059679-005	LCS	13-Jun-2017 07:40:30	F7153.D	5	1.0		SV
280-97802-B-1-A	280-0059679-006	Client	13-Jun-2017 08:05:30	F7154.D	6	1.0	MS-OW018-MW001-G-3	SV
280-97802-D-2-A	280-0059679-007	Client	13-Jun-2017 08:31:30	F7155.D	7	1.0	MS-OW018-MW002-G-3	SV
280-97802-A-3-A	280-0059679-008	Client	13-Jun-2017 08:56:30	F7156.D	8	1.0	MS-OW018-MW002-G-3-D	SV
280-97802-B-4-B	280-0059679-009	Client	13-Jun-2017 09:22:30	F7157.D	9	1.0	MS-OW018-MW003-G-3	SV
280-97802-F-4-A MS	280-0059679-010	MS	13-Jun-2017 09:48:30	F7158.D	10	1.0	MS-OW018-MW003-G-3	SV
280-97802-A-4-A MSD	280-0059679-011	MSD	13-Jun-2017 10:13:30	F7159.D	11	1.0	MS-OW018-MW003-G-3	SV
280-97802-D-5-A	280-0059679-012	Client	13-Jun-2017 10:39:30	F7160.D	12	1.0	MS-OW018-MW004-G-1	SV
280-97802-A-6-A	280-0059679-013	Client	13-Jun-2017 11:05:30	F7161.D	13	1.0	MS-OW018-MW005-G-2	SV
280-97803-B-3-A	280-0059679-014	Client	13-Jun-2017 11:30:30	F7162.D	14	1.0	SS025-AB-053117	SV
280-97829-A-18-A	280-0059679-015	Client	13-Jun-2017 11:56:30	F7163.D	15	1.0	SS017-AB-060117	SV
280-97872-A-16-A	280-0059679-016	Client	13-Jun-2017 12:22:30	F7164.D	16	1.0	SS017-AB-060217	SV
280-97895-B-18-G	280-0059679-017	Client	13-Jun-2017 12:48:30	F7165.D	17	20.0	OW058-DPS13-12	SV
CCVC	280-0059679-018	CCVC	13-Jun-2017 13:14:30	F7166.D	18	1.0		SV

TUNE: 0608-1314
CHROM WL: 596679
LIMS BATCH: 377034

METHOD(s): 8270SIM
SOLVENT LOT: 157164
PIPETTE ID(s): SV-5

DAILY MAINTENANCE INCLUDED:

- [x] REPLACED SEPTA
- [ ] REPLACED LINER
- [ ] REPLACED GOLD SEAL
- [ ] REPLACED FERRULE
- [ ] CLIPPED COLUMN

Panida P
6/14/17

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THE LEADER IN ENVIRONMENTAL TESTING

GC/MS Semivolatile Data Review Checklist-CCV and Tune

LIMS Batch Number: 378253	Worklist #: 60007	Instrument ID: F 6-21-17
Analyst/1st Reviewer: Date: MW 6-22-17	Method (circle): 625 8270C 8270D	Circle: Full Scan SIM BP LL SIM
QC Type (circle): Standard DOD Q4 DoD Q5	QAPP_____	Other_____

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable? (List NCM #)
A. Tune/Calibration Verification:					
1. Did DFTPP meet tune criteria? If SIM, did the PFTBA Tune check meet ion ratio criteria?	Y			/	
2. Are the Benzidine and PCP tailing ≤ 2? (8270D/DoD), Benzidine tailing ≤3 and PCP tailing ≤5? (8270C)	Y			/	
3. Is the DDT degradation ≤ 20%	Y			/	
4. Were all standards injected within 12 hr of DFTPP? (or 24 hrs for 625)?	Y			/	
5. Was the correct ICAL used for quantitation? Date & Instrument ID verified? (Check both Chrom and TALS)	Y			/	
6. Do the RFs meet method minimum criteria? (8270D/625) Are the RFs for SPCCs ≥0.050? (8270C)	Y			/	
7. Is the %D (difference or drift) 8270C: ≤20% for all CCCs? all other analytes within 35%, or 55% (poor performers) 8270D: %D ≤ 20% for all analytes, at least 80% of compounds meet criteria?	Y			/	(8270C: %D high, samples ND?) (8270D: <20% of cmpds fail criteria & for failed cmpds RL std verifies sensitivity for NDs?) List Compounds outside criteria:
8. For any compound > 20% D (low), was RL standard analyzed and detected? (8270D)			Y		
9. NOTE: For any compounds > 20% D (high or low), detects will be flagged as "EST" & narrated. (8270D)			Y		□ Must be done in consultation with client.
10. Are the internal standard responses within limits? (between -50% and +100% of the mid-level ICAL standard)	Y			/	
11. Are the internal standard retention times within method limits? (±30 sec of ICAL mid pt for 8270C/D)	Y			/	
12. Benzo(b & k)fluoranthene: height of the valley between must be less than 50% of the average of the two peak heights?	Y			/	
13. Elution order checked isomeric pairs and coeluters?					(Chrom: View/Documents/Methods/Isomers)
• aniline / bis(2-chloroethyl)ether			Y		
• N-nitrosodiphenylamine/diphenylamine			Y		
• 1,3-, 1,4-, 1,2-dichlorobenzene			Y		
• benzyl alcohol / 2-methylphenol / 3/4-methylphenol			Y		
• 2 & 1 – methylnaphthalene	Y			/	
• 2,4-dimethylphenol / 3,5-dimethylphenol			Y		
• 2,4,6- and 2,4,5-trichlorophenol			Y		
• phenanthrene / anthracene	Y			/	

Phenyl-
06/23/2017

A. Tune/Calibration Verification (cont.)					
Review Items	**Yes**	**No**	**NA**	**2nd Rev**	**If No, why is data reportable? (List NCM #)**
• fluoranthene / pyrene	X			/	
• benzo(a)anthracene / chrysene	X			/	
• benzo(a)pyrene/benzo(e)pyrene	X			/	
• bis(2-ethylhexyl)/di-n-octyl phthalate	X			/	
• benzo(b)fluoranthene / benzo(k)fluoranthene	X			/	
• indeno(1,2,3-cd)pyrene / benzo(g,h,i)perylene	X			/	
• safrole/1-chloronaphthalene			X	NA	
• 1-/2-naphthylamine			X		
• 1 and 2-chloronaphthalene			X		
• 2,4,6 and 2,4,5-tribromophenol			X		
14. If any criteria from items above were not met, was a NCM generated?			X		
15. Were manual integrations performed correctly and properly documented? (dated, initialed and reason given) 2nd review of all MIs required	X			/	

Comments: _____

2nd Reviewer: _____ Review Date: 6/22/17

MW 6.22.17

Phuniya 06/23/2017

TestAmerica Laboratories
Worklist Run Log Report

Worklist Name: 062117 Worklist Num: 60007
Instrument: SMS_F Method: SMSF_8270SIMX
Batch Directory: \\ChromNA\Denver\ChromData\SMS_F\20170621-60007.b
Anaylysis Type: SemiVOA Creator: Wickham, Melanie K
Inj Volume: 1.00 Inj Vol Units: ul
Run Reagents:
MS-SIM IS_00029, Amount Added: 20.00 , Units: uL

Lab ID	Worklist ID	Sample Type	Inj Date/Time	File Name	Vial	Dil Factor	Client ID	Fract.
DFTPP	280-0060007-001	DFTPP	21-Jun-2017 19:11:30	F7336.D	1	1.0		SV
CCV	280-0060007-002	CCV	21-Jun-2017 19:23:30	F7337.D	2	1.0		SV
MB 280-377246/1-A	280-0060007-003	MB	21-Jun-2017 19:51:30	F7338.D	3	1.0		SV
LCS 280-377246/2-A	280-0060007-004	LCS	21-Jun-2017 20:17:30	F7339.D	4	1.0		SV
MB 280-377264/1-A	280-0060007-005	MB	21-Jun-2017 20:44:30	F7340.D	5	1.0		SV
LCS 280-377264/2-A	280-0060007-006	LCS	21-Jun-2017 21:10:30	F7341.D	6	1.0		SV
LCSD 280-377264/3-A	280-0060007-007	LCSD	21-Jun-2017 21:36:30	F7342.D	7	1.0		SV
8270bc-simlcs_00024	280-0060007-008	LCS	21-Jun-2017 22:02:30	F7343.D	8	1.0		SV
MB 280-377061/1-A	280-0060007-009	MB	21-Jun-2017 22:28:30	F7344.D	9	1.0		SV
280-97803-C-8-A	280-0060007-010	Client	21-Jun-2017 22:55:30	F7345.D	10	1.0	SS025-SS04	SV
280-97803-B-9-B	280-0060007-011	Client	21-Jun-2017 23:21:30	F7346.D	11	1.0	SS025-SB04(0-2)	SV
280-97803-B-9-C MS	280-0060007-012	MS	21-Jun-2017 23:47:30	F7347.D	12	1.0		SV
280-97803-B-9-D MSD	280-0060007-013	MSD	22-Jun-2017 00:13:30	F7348.D	13	1.0		SV
280-97803-C-11-B	280-0060007-014	Client	22-Jun-2017 00:39:30	F7349.D	14	1.0	SS025-SB05(0-2)	SV
280-98030-C-7-A	280-0060007-015	Client	22-Jun-2017 01:05:30	F7350.D	15	1.0	TW5(060717)	SV
280-98030-B-8-A	280-0060007-016	Client	22-Jun-2017 01:31:30	F7351.D	16	1.0	FB-1(060717)	SV
280-98030-B-10-A	280-0060007-017	Client	22-Jun-2017 01:57:30	F7352.D	17	1.0	TW9(060717)	SV
280-98187-D-1-A	280-0060007-018	Client	22-Jun-2017 02:23:30	F7353.D	18	1.0	TW9(060817)	SV
280-98187-C-2-A	280-0060007-019	Client	22-Jun-2017 02:50:30	F7354.D	19	1.0	TW9(060817)	SV
280-98187-D-4-A	280-0060007-020	Client	22-Jun-2017 03:16:30	F7355.D	20	1.0	TW7(060817)	SV
280-98187-C-8-A	280-0060007-021	Client	22-Jun-2017 03:41:30	F7356.D	21	1.0	SW7(060817)	SV
280-98187-D-11-A	280-0060007-022	Client	22-Jun-2017 04:08:30	F7357.D	22	1.0	FB-2(060817)	SV
280-98187-D-12-A	280-0060007-023	Client	22-Jun-2017 04:33:30	F7358.D	23	1.0	SW5(060817)	SV
CCVC	280-0060007-024	CCVC	22-Jun-2017 04:59:30	F7359.D	24	1.0		SV

TUNE: 19:11
CHROM WL: 60007
LIMS BATCH: 378253

METHOD(s): 8270 D SIMS Pol 5
SOLVENT LOT: 157604
PIPETTE ID(s): SV-5

DAILY MAINTENANCE INCLUDED:

- ☐ REPLACED SEPTA
- ☑ REPLACED LINER
- ☐ REPLACED GOLD SEAL
- ☐ REPLACED FERRULE
- ☐ CLIPPED COLUMN_____

MW 6-22-17

Phunday 06/23/2017

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GC/MS Semivolatile Data Review Checklist-CCV and Tune

LIMS Batch Number: 378412	Worklist #: 60049	Instrument ID: F 6-22-17
Analyst/1st Reviewer: MW 6-22-17 Date:	Method (circle): 625 8270C 8270D	Circle: Full Scan SIM BP LL SIM
QC Type (circle): Standard DOD Q4 DoD Q5	QAPP_____	Other_____

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable? (List NCM #)
A. Tune/Calibration Verification					
1. Did DFTPP meet tune criteria? If SIM, did the PFTBA Tune check meet ion ratio criteria?	Y			/	
2. Are the Benzidine and PCP tailing ≤ 2? (8270D/DoD), Benzidine tailing ≤3 and PCP tailing ≤5? (8270C)	Y			/	
3. Is the DDT degradation ≤ 20%	Y			/	
4. Were all standards injected within 12 hr of DFTPP? (or 24 hrs for 625)?	Y			/	
5. Was the correct ICAL used for quantitation? Date & Instrument ID verified? (Check both Chrom and TALS)	Y			/	
6. Do the RFs meet method minimum criteria? (8270D/625) Are the RFs for SPCCs ≥0.050? (8270C)	Y			/	
7. Is the %D (difference or drift) 8270C: ≤20% for all CCCs? all other analytes within 35%, or 55% (poor performers) 8270D: %D ≤ 20% for all analytes, at least 80% of compounds meet criteria?	Y			/	(8270C: %D high, samples ND?) (8270D: <20% of cmpds fail criteria & for failed cmpds RL std verifies sensitivity for NDs?) List Compounds outside criteria:
8. For any compound > 20% D (low), was RL standard analyzed and detected? (8270D)			X	NA	
9. NOTE: For any compounds > 20% D (high or low), detects will be flagged as "EST" & narrated. (8270D)			Y		☐ Must be done in consultation with client.
10. Are the internal standard responses within limits? (between -50% and +100% of the mid-level ICAL standard)	Y			/	
11. Are the internal standard retention times within method limits? (±30 sec of ICAL mid pt. for 8270C/D)	Y			/	
12. Benzo(b & k)fluoranthene: height of the valley between must be less than 50% of the average of the two peak heights?	Y			/	
13. Elution order checked isomeric pairs and coeluters?					(Chrom: View/Documents/Methods/Isomers)
• aniline / bis(2-chloroethyl)ether			Y	NA	
• N-nitrosodiphenylamine/diphenylamine			Y		
• 1,3-, 1,4-, 1,2-dichlorobenzene			Y		
• benzyl alcohol / 2-methylphenol / 3/4-methylphenol			X	↓	
• 2 & 1 – methylnaphthalene	Y			/	
• 2,4-dimethylphenol / 3,5-dimethylphenol			Y	NA	
• 2,4,6- and 2,4,5-trichlorophenol			Y	↓	
• phenanthrene / anthracene	Y			/	

Phuong
06/26/2017

A. Tune/Calibration Verification (cont.)					
Review Items	**Yes**	**No**	**NA**	**2nd Rev**	**If No, why is data reportable? (List NCM #)**
• fluoranthene / pyrene	Y			✓	
• benzo(a)anthracene / chrysene	Y			✓	
• benzo(e)pyrene/benzo(a)pyrene	Y			✓	
• bis(2-ethylhexyl)/di-n-octyl phthalate	Y			✓	
• benzo(b)fluoranthene / benzo(k)fluoranthene	Y			✓	
• indeno(1,2,3-cd)pyrene / benzo(g,h,i)perylene	Y			✓	
• safrole/1-chloronaphthalene			N/A	✓	
• 1-/2-naphthylamine			N/A		
• 1 and 2-chloronaphthalene			N/A		
• 2,4,6 and 2,4,5-tribromophenol			N/A		
14. If any criteria from items above were not met, was a NCM generated?			N	✓	
15. Were manual integrations performed correctly and properly documented? (dated, initialed and reason given) 2nd review of all MIs required	Y			✓	

Comments:

2nd Reviewer: Alex Harper Review Date: 06/23/17

MW 6.22-17

Pending 06/26/2017

TestAmerica Laboratories
Worklist Run Log Report

Worklist Name: 062217 Worklist Num: 60049
Instrument: SMS_F Method: SMSF_8270SIMX
Batch Directory: \\ChromNA\Denver\ChromData\SMS_F\20170622-60049.b
Anaylysis Type: SemiVOA Creator: Wickham, Melanie K .
Inj Volume: 1.00 Inj Vol Units: ul
Run Reagents:
MS-SIM IS_00029, Amount Added: 20.00 , Units: uL

Lab ID	Worklist ID	Sample Type	Inj Date/Time	File Name	Vial	Dil Factor	Client ID	Fract
DFTPP	280-0060049-001	DFTPP	22-Jun-2017 17:13:30	F7361.D	1	1.0		sv
CCV	280-0060049-002	CCV	22-Jun-2017 17:26:30	F7362.D	2	1.0		sv
MB 280-377264/1-A conf.	280-0060049-003	MB	22-Jun-2017 17:56:30	F7363.D conf	3	1.0		sv
MB 280-377302/1-A	280-0060049-004	MB	22-Jun-2017 18:22:30	F7364.D	4	1.0		sv
LCS 280-377302/2-A	280-0060049-005	LCS	22-Jun-2017 18:47:30	F7365.D	5	1.0		sv
MB 280-377658/1-A	280-0060049-006	MB	22-Jun-2017 19:13:30	F7366.D	6	1.0		sv
LCS 280-377658/2-A	280-0060049-007	LCS	22-Jun-2017 19:39:30	F7367.D	7	1.0		sv
LCSD 280-377658/3-A	280-0060049-008	LCSD	22-Jun-2017 20:05:30	F7368.D	8	1.0		sv
MB 280-377264/1-A conf	280-0060049-009	MB	22-Jun-2017 20:31:30	F7369.D conf.	9	1.0		sv
MB 280-377302/1-A conf	280-0060049-010	MB	22-Jun-2017 20:57:30	F7370.D conf.	10	1.0	6-23-17	sv
280-97803-C-8-A	280-0060049-011	Client	22-Jun-2017 21:23:30	F7371.D	11	2.0	SS025-SS04	sv
280-98125-A-19-A 1ml 0.1	280-0060049-012	Client	22-Jun-2017 21:49:30	F7372.D 40 Dontuse	12	20	TU044-MW-22S-060617	sv
280-98125-A-21-A 1ml 0.1	280-0060049-013	Client	22-Jun-2017 22:14:30	F7373.D 20 Dontuse	13	10	TU044-MW-13-060617	sv
280-98125-A-22-A	280-0060049-014	Client	22-Jun-2017 22:40:30	F7374.D 4 conf	14	4	TU044-MW-18-060617	sv
280-98125-A-1-A	280-0060049-015	Client	22-Jun-2017 23:06:30	F7375.D	15	1.0	TU044-MW-5-060717	sv
280-98125-F-3-A	280-0060049-016	Client	22-Jun-2017 23:32:30	F7376.D	16	1.0	TU044-MW-16-060717	sv
280-98125-E-3-A MS	280-0060049-017	MS	22-Jun-2017 23:57:30	F7377.D	17	1.0	TU044-MW-16-060717	sv
280-98125-D-3-A MSD	280-0060049-018	MSD	23-Jun-2017 00:23:30	F7378.D	18	1.0	TU044-MW-16-060717	sv
280-98125-B-4-A	280-0060049-019	Client	23-Jun-2017 00:49:30	F7379.D	19	1.0	TU044-MW-21M-060717	sv
280-98125-B-5-A	280-0060049-020	Client	23-Jun-2017 01:15:30	F7380.D	20	1.0	TU044-MW-21D-060717	sv
280-98125-B-6-A	280-0060049-021	Client	23-Jun-2017 01:40:30	F7381.D	21	1.0	TU044-MW-12-060717	sv
280-98125-A-7-A	280-0060049-022	Client	23-Jun-2017 02:06:30	F7382.D	22	1.0	TU044-FD-MW-12-060717	sv
280-98125-A-8-A	280-0060049-023	Client	23-Jun-2017 02:31:30	F7383.D	23	1.0	TU044-MW-8-060717	sv
280-98125-A-9-A	280-0060049-024	Client	23-Jun-2017 02:57:30	F7384.D	24	1.0	TU044-MW-20-060717	sv
280-98187-D-24-A	280-0060049-025	Client	23-Jun-2017 03:23:30	F7385.D	25	1.0	FB-3(060917)	sv
280-98187-C-16-A	280-0060049-026	Client	23-Jun-2017 03:48:30	F7386.D	26	1.0	EME-MW-(060917)	sv
CCVC	280-0060049-027	CCVC	23-Jun-2017 04:14:30	F7387.D	27	1.0		sv

1. not Dil what enough eg. 100x+40x

RF. Not sure why not correct. They are correct on the Chrom Scan

TUNE: 17:13
CHROM WL: 8270D
LIMS BATCH: 378916

METHOD(s): 8270D SIM POD
SOLVENT LOT: 157164
PIPETTE ID(s): 50-75

DAILY MAINTENANCE INCLUDED:

☐ REPLACED SEPTA
☒ REPLACED LINER
☐ REPLACED GOLD SEAL
☐ REPLACED FERRULE
☐ CLIPPED COLUMN_____

MW 6-23-17

Phuriya 06/26/2017

TestAmerica-Denver

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GC/MS Semivolatile Initial Calibration Data Review Checklist

05/17

LIMS Batch Number: 37358	Worklist: 58577	ICIS/ICIV Line # 2/10	2nd Day ICV Line # NA	Instrument ID: F
Analyst/1st Reviewer: KJV Date: 05/12/17	Method (circle): 625 8270C 8270D		Circle: Full Scan SIM BP LLSIM	
QC Type (circle): Standard DoD Q4 DoD Q5		QAPP_____	Other_____	

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
A. Tune/Calibration Verification					
1. Did DFTPP meet tune criteria? If SIM, did the PFTBA Tune check meet ion ratio criteria?	✓			✓	
2. Are the Benzidine and PCP tailing ≤ 2? (8270D/DoD) Benzidine tailing ≤3 and PCP tailing ≤5? (8270C)	✓			✓	
3. Is the DDT degradation ≤ 20%	✓			✓	
4. Were all standards injected within 12 hr of DFTPP? (or 24 hrs for 625)?	✓			✓	
5. Were ≥ 5 levels of each compound and surrogate analyzed?	✓			✓	
6. At least 6 consecutive points used for quadratic curves?			✓	NA	
7. Was low level standard at or below RL?	✓			✓	
8. If calibration points removed, were reasons for removal documented? Did sufficient calibration points remain? (removal from middle of curve not allowed)			✓	NA	(e.g.; some points <RL removed)
9. Does the low level standard have enough sensitivity to produce at least 5-10 scans across the peak, and all secondary ions are present?	✓			✓	
10. Do the average RFs meet minimum RF requirements? (625 – not method defined) (8270C-SPCCs ≥0.05) (8270D- all cmpds have min RFs defined in method/SOP)	✓			✓	
10. Did the calibration %RSD meet method requirements? (625: ≤35% all cmpds) (8270C: ≤30% for CCCs & ≤15% for all other cmpds/ surrogates) (8270D: ≤20% for all cmpds/surrogates)	✓			✓	
11. Was a linear or quadratic regression fit used for analytes that exceeded the %RSD requirements?			✓	NA	
12. If regression fit used, r^2 ≥0.990?			✓	✓	
13. Does the low point of a linear regression fit meet the ±30% read-back criteria? (8270D)	✓			✓	
14. For quadratic – evaluate curve fitting errors: Does each point fall within criteria when "read-back" against the curve? (TA requirement – CA-Q-S-005; recommended limits ±30% low point & ±20% all other points) (Chrom Report – Details of Calibration per Analyte)			✓	NA	
15. Is the concentration intercept <|RL| for each cmpd? ("X" intercept in Chrom)	✓			✓	
16. Were manual integrations performed correctly and properly documented (Dated, initialed and reason given) for all calibration points? 2nd review of all MIs is required	✓			✓	
17. Was the high point checked for detector saturation?	✓			✓	
18. Do the relative retention times for each analyte in each standard agree within +/-0.06 units (abs RT +/-0.5 min))	✓			✓	
19. Benzo(b & k)fluoranthene: height of the valley between must be less than 50% of the average of the two peak heights?	✓			✓	

Panida R.
6/14/17

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
20. Elution order checked isomeric pairs and coeluters?					Chrom: View/Documents/Methods/Isomers)
• aniline / bis(2-chloroethyl)ether			✓	MA	
• N-nitrosodiphenylamine/diphenylamine			✓		
• 1,3- , 1,4- , 1,2-dichlorobenzene			✓		
• benzyl alcohol / 2-methylphenol / 3/4-methylphenol			✓		
• 2,4-dimethylphenol / 3,5-dimethylphenol			✓	↓	
• 2 & 1 - methylnaphthalene	✓			✓	
• 2,4,6- and 2,4,5-trichlorophenol			✓	MA	
• phenanthrene / anthracene	✓			✓	
• fluoranthene / pyrene	✓			✓	
• benzo(a)anthracene / chrysene	✓			✓	
• bis(2-ethylhexyl)/di-n-octyl phthalate	✓			✓	
• benzo(b)fluoranthene / benzo(k)fluoranthene	✓			✓	
• indeno(1,2,3-cd)pyrene / benzo(g,h,i)perylene	✓			✓	
• safrole/1-chloronaphthalene			✓	MA	
• 1-/2-naphthylamine			✓	↓	
• 1- and 2-chloronaphthalene			✓	↓	
• 2,4,6- and 2,4,5-tribromophenol			✓	↓	
• Benzo(e)pyrene / benzo(a)pyrene	✓			✓	
21. Was the ICV within required criteria? 625 = QCS method defined/Table6 8270C = ±35% or ±55% of expected for poor performers; 8270D = ±20% poor performers <50% DoD = ±20% QAPP/Other	✓			✓	
22. If any criteria from items above were not met, was NCM generated?			✓	MA	NCM #:
23. Were manual integrations for ICV performed correctly and properly documented? (dated, initialed and reason given; 2nd review of all MIs required)	✓			✓	
24. Are all files and QC linked and processed correctly?	✓			✓	☐ Files linked properly to calibration levels? ☐ All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed] ☐ Runs linked to DFTPP? [QC links] ☐ Checklist & run log scanned, attached & assigned properly?
25. Is the ICAL locked in TALS and Chrom?	✓			✓	

Comments: KPN 05/15/17

2nd Reviewer: Alex Hoffer Review Date: 05/15/17

Pamela R. 6/14/17

TestAmericaLaboratories
Worklist Run Log Report

Worklist Name: 051117 Worklist Num: 585577
Instrument: SMS_F Method: SMSF_8270SIM.MX
Batch Directory: \\ChromNA\Denver\ChromData\SMS_F\20170511-585577.b
Analysis Type: SemiVOA Creator: Vasquez, Karla G
Inj Volume: 1.00 Inj Vol Units: ul
Run Reagents:
MS-SIM IS_00029, Amount Added: 20.00, Units: uL

Lab ID	Worklist ID	Sample Type	Cal Lvl	Inj Date/Time	FileName	Vial	Dil Factor	Client ID	Fract
DFTPP	280-0058577-001	DFTPP	0	11-May-2017 12:39:30	F6543.D	1	1.0		SV
ICIS STD0600	280-0058577-002	ICIS	4	11-May-2017 12:58:30	F6544.D	2	1.0		SV
STD0020	280-0058577-003	IC	1	11-May-2017 13:34:30	F6545.D	3	1.0		SV
STD0100	280-0058577-004	IC	2	11-May-2017 13:59:30	F6546.D	4	1.0		SV
STD0300	280-0058577-005	IC	3	11-May-2017 14:25:30	F6547.D	5	1.0		SV
STD1200	280-0058577-006	IC	5	11-May-2017 14:50:30	F6548.D	6	1.0		SV
STD2500	280-0058577-007	IC	6	11-May-2017 15:16:30	F6549.D	7	1.0		SV
STD5000	280-0058577-008	IC	7	11-May-2017 15:42:30	F6550.D	8	1.0		SV
STD10000	280-0058577-009	IC	8	11-May-2017 16:07:30	F6551.D	9	1.0		SV
ICV	280-0058577-010	ICV	0	11-May-2017 16:33:30	F6552.D	10	1.0		SV
MB 280-371650/1-A	280-0058577-011	MB	0	11-May-2017 16:59:30	F6553.D	11	1.0		SV
LCS 280-371650/2-A	280-0058577-012	LCS	0	11-May-2017 17:24:30	F6554.D	12	1.0		SV
LCSD 280-371650/3-A	280-0058577-013	LCSD	0	11-May-2017 17:50:30	F6555.D	13	1.0		SV
280-96349-N-1-A	280-0058577-014	Client	0	11-May-2017 18:16:30	F6556.D	14	1.0	FWGmw-019-042517-GW	SV
280-96349-N-2-A	280-0058577-015	Client	0	11-May-2017 18:41:30	F6557.D	15	1.0	FWGmw-022-042517-GW	SV
280-96349-M-3-A	280-0058577-016	Client	0	11-May-2017 19:07:30	F6558.D	16	1.0	LL1mw-089-042517-GW	SV
280-96349-I-17-A	280-0058577-017	Client	0	11-May-2017 19:33:30	F6559.D	17	1.0	DET-003-042417-GW	SV
280-96349-I-18-A	280-0058577-018	Client	0	11-May-2017 19:58:30	F6560.D	18	1.0	DET-500-042417-GW	SV
CCVC	280-0058577-019	CCVC	0	11-May-2017 20:24:30	F6561.D	19	1.0		SV

TUNE: 1239-2024
CHROM WL: 585577
LIMS BATCH: 373158

METHOD(s): 8270 SIM
SOLVENT LOT: 157164
PURGE ID(s): SV-15

DAILY MAINTENANCE INCLUDED:

☐ REPLACED SEPTA
☒ REPLACED LINER
☐ REPLACED GOLD SEAL
☐ REPLACED FERRULE
☐ CLIPPED COLUMN

Panida P.
6/14/17

TestAmerica-Denver

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GC/MS Semivolatile Initial Calibration Data Review Checklist

05/11/17

LIMS Batch Number: 37358	Worklist: 58577	ICIS/ICV Line #: 2/10	2nd Day ICV Line #: NA	Instrument ID: F
Analyst/1st Reviewer: KW Date: 05/12/17	Method (circle): 625 8270C 8270D		Circle: Full Scan SIM BP LLSIM	
QC Type (circle): Standard DoD Q4 DoD Q5 QAPP_____ Other_____				

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
A. Tune/Calibration Verification					
1. Did DFTPP meet tune criteria? If SIM, did the BFTBA Tune check meet ion ratio criteria?	✓			✓	
2. Are the Benzidine and PCP tailing ≤ 2? (8270D/DoD) Benzidine tailing ≤3 and PCP tailing ≤5? (8270C)	✓			✓	
3. Is the DDT degradation ≤ 20% .	✓			✓	
4. Were all standards injected within 12 hr of DFTPP? (or 24 hrs for 625)?	✓			✓	
5. Were ≥ 5 levels of each compound and surrogate analyzed?	✓			✓	
6. At least 6 consecutive points used for quadratic curves?			✓	NA	
7. Was low level standard at or below RL?	✓			✓	
8. If calibration points removed, were reasons for removal documented? Did sufficient calibration points remain? (removal from middle of curve not allowed)			✓	NA	(e.g.: some points <RL removed)
9. Does the low level standard have enough sensitivity to produce at least 5-10 scans across the peak, and all secondary ions are present?	✓			✓	
10. Do the average RFs meet minimum RF requirements? (625 – not method defined) (8270C-SPCCs ≥0.05) (8270D- all cmpds have min RFs defined in method/SOP)	✓			✓	
10. Did the calibration %RSD meet method requirements? (625: ≤35% all cmpds) (8270C: ≤30% for CCCs & ≤15% for all other cmpds/ surrogates) (8270D: ≤20% for all cmpds/surrogates)	✓			✓	
11. Was a linear or quadratic regression fit used for analytes that exceeded the %RSD requirements?			✓	NA	
12. If regression fit used, r^2 ≥0.990?			✓	✓	
13. Does the low point of a linear regression fit meet the ±30% read-back criteria? (8270D)	✓			✓	
14. For quadratic – evaluate curve fitting errors: Does each point fall within criteria when 'read-back' against the curve? (TA requirement – CA-Q-S-005; recommended limits ±30% low point & ±20% all other points) (Chrom Report - Details of Calibration per Analyte)			✓	NA	
15. Is the concentration intercept <|RL| for each cmpd? ("X" Intercept in Chrom)	✓			✓	
16. Were manual integrations performed correctly and properly documented (Dated, initialed and reason given) for all calibration points? 2nd review of all hits required	✓			✓	
17. Was the high point checked for detector saturation?	✓			✓	
18. Do the relative retention times for each analyte in each standard agree within +/-0.06 units (abs RT +/-0.5 min)	✓			✓	
19. Benzo(b & k)fluoranthene: height of the valley between must be less than 50% of the average of the two peak heights?	✓			✓	

Analyst 06/12/2017

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
20. Elution order checked isomeric pairs and coeluters?					Chrom: View/Documents/Methods/Isomers)
• aniline / bis(2-chloroethyl)ether			—	MA	
• N-nitrosodiphenylamine/diphenylamine			—		
• 1,3- , 1,4- , 1,2-dichlorobenzene			—		
• benzyl alcohol / 2-methylphenol / 3/4-methylphenol			—		
• 2,4-dimethylphenol / 3,5-dimethylphenol			—		
• 2 & 1 - methylnaphthalene	—			—	
• 2,4,6- and 2,4,5-trichlorophenol			—	MA	
• phenanthrene / anthracene	—			—	
• fluoranthene / pyrene	—			—	
• benzo(a)anthracene / chrysene	—			—	
• bis(2-ethylhexyl)/di-n-octyl phthalate	—			—	
• benzo(b)fluoranthene / benzo(k)fluoranthene	—			—	
• indeno(1,2,3-cd)pyrene / benzo(g,h,i)perylene	—			—	
• safrole/1-chloronaphthalene			—	MA	
• 1-/2-naphthylamine			—		
• 1- and 2-chloronaphthalene			—		
• 2,4,6- and 2,4,5-tribromophenol			—		
• Benzo(e)pyrene / benzo(a)pyrene	✓			—	
21. Was the ICV within required criteria? 625 = QCS method defined/Table6 8270C = ±35% or ±55% of expected for poor performers; 8270D = ±20%/poor performers <50% 680D = ±20% QAPP/Other	—			—	
22. If any criteria from items above were not met, was NCM generated?			✓	NA	NCM #:
23. Were manual integrations for ICV performed correctly and properly documented? (dated, initialed and reason given; 2nd review of all MIs required)	—			—	
24. Are all files and QC linked and processed correctly?	—			—	☐ Files linked properly to calibration levels? ☐ All points are in the most recent active calibration event? [Calibration Events–'Fix ICAL linkage' if needed] ☐ Runs linked to DFTPP? [QC links] ☐ Checklist & run log scanned, attached & assigned properly?
25. Is the ICAL locked in TALS and Chrom?	✓			—	

Comments: KPV 05/15/17

2nd Reviewer: Alex Hoffer Review Date: 05/15/17

Phuong 05/23/2017

Test America Laboratories
Worklist Run Log Report

Worklist Name: 0511117 Worklist Num: [redacted]
Instrument: SMS_F Method: [redacted]
Batch Directory: \\ChromNA\Denver\ChromData\SMS_F\20170511-[redacted].b
Analysis Type: SemiVOA Creator: Vasquez, Kimberly
Inj Volume: 1.00 Inj Vol Units: ul
Run Reagents:
MS-SMIS_00029, Amount Added: 20.00, , Units: uL

Lab ID	Worklist ID	Sample Type	Cal Lvl	Inj Date/Time	File Name	Vial	Dil Factor	Chrom ID	Prep
DFTPP	280-[redacted]-001	DFTPP	0	11-May-2017 12:33:30	F0548.D	1	1.0		SV
ICIS STD0800	280-[redacted]-002	ICIS	4	11-May-2017 12:58:30	F0549.D	2	1.0		SV
STD0020	280-[redacted]-003	IC	1	11-May-2017 13:24:30	F0550.D	3	1.0		SV
STD0100	280-[redacted]-004	IC	2	11-May-2017 13:50:30	F0551.D	4	1.0		SV
STD0300	280-[redacted]-005	IC	3	11-May-2017 14:16:30	F0552.D	5	1.0		SV
STD1000	280-[redacted]-006	IC	5	11-May-2017 14:42:30	F0553.D	6	1.0		SV
STD2000	280-[redacted]-007	IC	6	11-May-2017 15:08:30	F0554.D	7	1.0		SV
STD5000	280-[redacted]-008	IC	7	11-May-2017 15:34:30	F0555.D	8	1.0		SV
STD10000	280-[redacted]-009	IC	8	11-May-2017 16:00:30	F0556.D	9	1.0		SV
ICV	280-[redacted]-010	ICV	0	11-May-2017 16:26:30	F0557.D	10	1.0		SV
MB 280-371659/1-A	280-[redacted]-011	MB	0	11-May-2017 16:52:30	F0558.D	11	1.0		SV
LCS 280-371659/2-A	280-[redacted]-012	LCS	0	11-May-2017 17:24:30	F0559.D	12	1.0		SV
LCSD 280-371659/3-A	280-[redacted]-013	LCSD	0	11-May-2017 17:50:30	F0560.D	13	1.0		SV
280-98349-N-1-A	280-[redacted]-014	Client	0	11-May-2017 18:16:30	F0561.D	14	1.0	FWDmw-010-042617-GW	SV
280-98349-N-2-A	280-[redacted]-015	Client	0	11-May-2017 18:41:30	F0562.D	15	1.0	FWDmw-022-042617-GW	SV
280-98349-M-3-A	280-[redacted]-016	Client	0	11-May-2017 19:07:30	F0563.D	16	1.0	LL1mw-009-042617-GW	SV
280-98349-L-17-A	280-[redacted]-017	Client	0	11-May-2017 19:33:30	F0564.D	17	1.0	DET-008-042417-GW	SV
280-98349-L-18-A	280-[redacted]-018	Client	0	11-May-2017 19:59:30	F0565.D	18	1.0	DET-500-042417-GW	SV
CCVC	280-[redacted]-019	CCVC	0	11-May-2017 20:24:30	F0566.D	19	1.0		SV

TUNE: 1239-2024
CHROM WL: 68577
LIMS BATCH: 373133

METHOD#: 8270SLH
SOLVENT LOT: 15[redacted]
PIPETTE ID#: 501-5

DAILY [redacted] INCLUDED:

[ ] [redacted]
[X] [redacted]
[ ] [redacted]
[ ] [redacted]
[ ] [redacted]

Phuong-
06/13/2017

TestAmerica-Denver

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GC/MS Semivolatile Initial Calibration Data Review Checklist

05/11/17

LIMS Batch Number: 373158	Worklist: 58577	ICIS/ICIV Line # 2/10	2nd Day ICV Line # NA	Instrument ID: F
Analyst/1st Reviewer: KW Date: 05/12/17	Method (circle): 625 (8270C) 8270D		Circle: Full Scan (SIM) BP LLSIM	
QC Type (circle): (Standard) DoD Q4 DoD Q5	QAPP_____	Other_____		

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
A. Tune/Calibration Verification					
1. Did DFTPP meet tune criteria? If SIM, did the PFTBA Tune check meet ion ratio criteria?	✓			✓	
2. Are the Benzidine and PCP tailing ≤2? (8270D/DoD) Benzidine tailing ≤3 and PCP tailing ≤5? (8270C)	✓			✓	
3. Is the DDT degradation ≤ 20% .	✓			✓	
4. Were all standards injected within 12 hr of DFTPP? (or 24 hrs for 625)?	✓			✓	
5. Were ≥ 5 levels of each compound and surrogate analyzed?	✓			✓	
6. At least 6 consecutive points used for quadratic curves?			✓	NA	
7. Was low level standard at or below RL?	✓			✓	
8. If calibration points removed, were reasons for removal documented? Did sufficient calibration points remain? (removal from middle of curve not allowed)			✓	NA	(e.g.; some points <RL removed)
9. Does the low level standard have enough sensitivity to produce at least 5-10 scans across the peak, and all secondary ions are present?	✓			✓	
10. Do the average RFs meet minimum RF requirements? (625 – not method defined) (8270C-SPCCs ≥0.05) (8270D- all cmpds have min RFs defined in method/SOP)	✓			✓	
10. Did the calibration %RSD meet method requirements? (625: ≤35% all cmpds) (8270C: ≤30% for CCCs & ≤15% for all other cmpds/ surrogates) (8270D: ≤20% for all cmpds/surrogates)	✓			✓	
11. Was a linear or quadratic regression fit used for analytes that exceeded the %RSD requirements?			✓	NA	
12. If regression fit used, r^2 ≥0.990?	—		✓	✓	
13. Does the low point of a linear regression fit meet the ±30% read-back criteria? (8270D)	✓			✓	
14. For quadratic – evaluate curve fitting errors: Does each point fall within criteria when 'read-back' against the curve? (TA requirement – CA-Q-S-005; recommended limits ±30% low point & ±20% all other points) (Chrom Report - Details of Calibration per Analyte)			✓	NA	
15. Is the concentration intercept <|RL| for each cmpd? ("X" intercept in Chrom)	✓			✓	
16. Were manual integrations performed correctly and properly documented (Dated, initialed and reason given) for all calibration points? 2nd review of all MIs required	✓			✓	
17. Was the high point checked for detector saturation?	✓			✓	
18. Do the relative retention times for each analyte in each standard agree within +/-0.06 units (abs RT +/-0.5 min)	✓			✓	
19. Benzo(b & k)fluoranthene: height of the valley between must be less than 50% of the average of the two peak heights?	✓			✓	

Phuong 05/12/2017

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
20. Elution order checked isomeric pairs and coeluters?					Chrom: View/Documents/Methods/Isomers)
• aniline / bis(2-chloroethyl)ether			—		
• N-nitrosodiphenylamine/diphenylamine			—		
• 1,3- , 1,4- , 1,2-dichlorobenzene			—		
• benzyl alcohol / 2-methylphenol / 3/4-methylphenol			—		
• 2,4-dimethylphenol / 3,5-dimethylphenol			—		
• 2 & 1 - methylnaphthalene	—				
• 2,4,6- and 2,4,5-trichlorophenol			—		
• phenanthrene / anthracene	—				
• fluoranthene / pyrene	—				
• benzo(a)anthracene / chrysene	—				
• bis(2-ethylhexyl)/di-n-octyl phthalate	—				
• benzo(b)fluoranthene / benzo(k)fluoranthene	—				
• indeno(1,2,3-cd)pyrene / benzo(g,h,i)perylene	—				
• safrole/1-chloronaphthalene			—		
• 1-/2-naphthylamine			—		
• 1- and 2-chloronaphthalene			—		
• 2,4,6- and 2,4,5-tribromophenol			—		
• Benzo(e)pyrene / benzo(a)pyrene	—				
21. Was the ICV within required criteria? 625 = QCS method defined/Table6 8270C = ±35% or ±55% of expected for poor performers; 8270D = ±20%; poor performers <50% 8260 = ±20% QAPP/Other	—			—	
22. If any criteria from items above were not met, was NCM generated?			—	NA	NCM#:
23. Were manual integrations for ICV performed correctly and properly documented? (dated, initialed and reason given; 2nd review of all MIs required)	—			—	
24. Are all files and QC linked and processed correctly?	—			—	☐ Files linked properly to calibration levels? ☐ All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed] ☐ Runs linked to DFTPP? [QC links] ☐ Checklist & run log scanned, attached & assigned properly?
25. Is the ICAL locked in TALS and Chrom?	—			—	

Comments: KPV 05/15/17

2nd Reviewer: Alex Hartler Review Date: 05/15/17

Pharming
04/26/2017

TestAmerica Laboratories
Worklist Run Log Report

Worklist Name: 051117 Worklist Num: 58577
Instrument: SMS_F Method: SMSF_8270SIMX
Batch Directory: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b
Anaylysis Type: SemiVOA Creator: Vasquez, Karla G
Inj Volume: 1.00 Inj Vol Units: ul
Run Reagents:
MS-SIM IS_00029, Amount Added: 20.00 , Units: uL

Lab ID	Worklist ID	Sample Type	Cal Lvl	Inj Date/Time	File Name	Vial	Dil Factor	Client ID	Fract
DFTPP	280-0058577-001	DFTPP	0	11-May-2017 12:39:30	F0543.D	1	1.0		SV
ICIS STD0600	280-0058577-002	ICIS	4	11-May-2017 12:58:30	F0544.D	2	1.0		SV
STD0020	280-0058577-003	IC	1	11-May-2017 13:34:30	F0545.D	3	1.0		SV
STD0100	280-0058577-004	IC	2	11-May-2017 13:59:30	F0546.D	4	1.0		SV
STD0300	280-0058577-005	IC	3	11-May-2017 14:25:30	F0547.D	5	1.0		SV
STD1200	280-0058577-006	IC	5	11-May-2017 14:50:30	F0548.D	6	1.0		SV
STD2500	280-0058577-007	IC	6	11-May-2017 15:16:30	F0549.D	7	1.0		SV
STD6000	280-0058577-008	IC	7	11-May-2017 15:42:30	F0550.D	8	1.0		SV
STD10000	280-0058577-009	IC	8	11-May-2017 16:07:30	F0551.D	9	1.0		SV
ICV	280-0058577-010	ICV	0	11-May-2017 16:33:30	F0552.D	10	1.0		SV
MB 280-371650/1-A	280-0058577-011	MB	0	11-May-2017 16:59:30	F0553.D	11	1.0		SV
LCS 280-371650/2-A	280-0058577-012	LCS	0	11-May-2017 17:24:30	F0554.D	12	1.0		SV
LCSD 280-371650/3-A	280-0058577-013	LCSD	0	11-May-2017 17:50:30	F0555.D	13	1.0		SV
280-96349-N-1-A	280-0058577-014	Client	0	11-May-2017 18:16:30	F0556.D	14	1.0	FWGmw-019-042617-GW	SV
280-96349-N-2-A	280-0058577-015	Client	0	11-May-2017 18:41:30	F0557.D	15	1.0	FWGmw-022-042617-GW	SV
280-96349-M-3-A	280-0058577-016	Client	0	11-May-2017 19:07:30	F0558.D	16	1.0	LL1mw-009-042617-GW	SV
280-96349-J-17-A	280-0058577-017	Client	0	11-May-2017 19:33:30	F0559.D	17	1.0	DET-003-042417-GW	SV
280-96349-J-18-A	280-0058577-018	Client	0	11-May-2017 19:58:30	F0560.D	18	1.0	DET-500-042417-GW	SV
CCVC	280-0058577-019	CCVC	0	11-May-2017 20:24:30	F0561.D	19	1.0		SV

TUNE: 1239-2024
CHROM WL: 58577
LIMS BATCH: 373188

METHOD(s): 8270 SIM
SOLVENT LOT: 157164
PIPETTE ID(s): SV-5

DAILY MAINTENANCE INCLUDED:

- ☐ REPLACED SEPTA
- ☒ REPLACED LINER
- ☐ REPLACED GOLD SEAL
- ☐ REPLACED FERRULE
- ☐ CLIPPED COLUMN

Phunthy
06/06/2017

TestAmerica Denver

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

GC/MS Semivolatile Initial Calibration Data Review Checklist

060117

LIMS Batch Number: 375238	Worklist: 59190	ICIS/ICIV Line#: 2/10	2nd Day ICV Line #: NA	Instrument ID: GS
Analyst/1st Reviewer: RV Date: 060217	Method (circle): 625 8270C 8270D		Circle: Full Scan SIM BP LLSIM	
QC Type (circle): Standard DOD Q4 DoD Q5	QAPP_____	Other_____		

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
A. Tune/Calibration Verification					
1. Did DFTPP meet tune criteria? If SIM, did the PFTBA Tune check meet ion ratio criteria?	✓			✓	
2. Are the Benzidine and PCP tailing ≤ 2? (8270D/DoD) Benzidine tailing ≤3 and PCP tailing ≤5? (8270C)	✓			✓	
3. Is the DDT degradation ≤ 20%	✓			✓	
4. Were all standards injected within 12 hr of DFTPP? (or 24 hrs for 625)?	✓			✓	
5. Were ≥ 5 levels of each compound and surrogate analyzed?	✓			✓	
6. At least 6 consecutive points used for quadratic curves?			✓	NA	
7. Was low level standard at or below RL?	✓			✓	
8. If calibration points removed, were reasons for removal documented? Did sufficient calibration points remain? (removal from middle of curve not allowed)	✓			✓	(e.g.; some points <RL removed)
9. Does the low level standard have enough sensitivity to produce at least 5-10 scans across the peak, and all secondary ions are present?	✓			✓	
10. Do the average RFs meet minimum RF requirements? (625 = not method defined) (8270C: SPCCs ≥0.05) (8270D: all cmpds have min RFs defined in method/SOP)	✓			✓	
10. Did the calibration %RSD meet method requirements? (625: ≤35% all cmpds) (8270C: ≤30% for CCCs & ≤15% for all other cmpds/ surrogates) (8270D: ≤20% for all cmpds/surrogates)	✓			✓	
11. Was a linear or quadratic regression fit used for analytes that exceeded the %RSD requirements?			✓	NA	
12. If regression fit used, $r^2 \geq 0.990$?			✓		
13. Does the low point of a linear regression fit meet the ±30% read-back criteria? (8270D)			✓		
14. For quadratic = evaluate curve fitting errors: Does each point fall within criteria when 'read-back' against the curve? (TA requirement – CA-Q-S-005; recommended limits ±30% low point & ±20% all other points) (Chrom Report - Details of Calibration per Analyte)			✓		
15. Is the concentration intercept <|RL| for each cmpd? ("0" intercept in Chrom)	✓			✓	
16. Were manual integrations performed correctly and properly documented (Dated, Initialed and reason given) for all calibration points? 2nd review of all MIs required	✓			✓	
17. Was the high point checked for detector saturation?	✓			✓	
18. Do the relative retention times for each analyte in each standard agree within +/-0.06 units (abs RT +/-0.5 min))	✓			✓	
19. For (b & k) fluoranthene: height of the valley between must be less than 50% of the average of the two peak heights?	✓			✓	

Pfm 06/22/17

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
20. Elution order checked isomeric pairs and coeluters?					Chrom: View/Documents/Methods/Isomers)
• aniline / bis(2-chloroethyl)ether			✓	NA	
• N-nitrosodiphenylamine/diphenylamine			✓		
• 1,3- , 1,4- , 1,2-dichlorobenzene			✓		
• benzyl alcohol / 2-methylphenol / 3/4-methylphenol			✓		
• 2,4-dimethylphenol / 3,5-dimethylphenol			✓		
• 2 & 1 - methylnaphthalene	✓			✓	
• 2,4,6- and 2,4,5-trichlorophenol			✓	NA	
• phenanthrene / anthracene	✓			✓	
• fluoranthene / pyrene	✓			✓	
• benzo(a)anthracene / chrysene	✓			✓	
• bis(2-ethylhexyl)/di-n-octyl phthalate	✓			✓	
• benzo(b)fluoranthene / benzo(k)fluoranthene	✓			✓	
• indeno(1,2,3-cd)pyrene / benzo(g,h,i)perylene	✓			✓	
• safrole/1-chloronaphthalene			✓	NA	
• 1-/2-naphthylamine			✓		
• 1- and 2-chloronaphthalene			✓		
• 2,4,6- and 2,4,5-tribromophenol			✓		
• Benzo(e)pyrene / benzo(a)pyrene			✓		
21. Was the ICV within required criteria? 625 = QCS method defined/Table6 8270C = ±35% or ±55% of expected for poor performers; 8270D = ±20%, poor performers <50% DoD = ±20% QAPP/Other _____	✓			✓	
22. If any criteria from items above were not met, was NCM generated?			✓	NA	NCM #:
23. Were manual integrations for ICV performed correctly and properly documented? (dated, initialed and reason given; 2nd review of all MIs required)	✓			✓	
24. Are all files and QC linked and processed correctly?	✓			✓	☐ Files linked properly to calibration levels? ☐ All points are in the most recent active calibration event? [Calibration Events ='Fix ICAL linkage' if needed] ☐ Runs linked to DFTPP? [QC links] ☐ Checklist & run log scanned, attached & assigned properly?
25. Is the ICAL locked in TALS and Chrom?	✓			✓	

Comments: KAF 100317

2nd Reviewer: Alex Hoefler Review Date: 10/03/17

TestAmerica Laboratories
WorkList Run Log Report

Worklist Name: 060117 Worklist Num: 59190
Instrument: SMS_G5 Method: SMSG5_SIWX
Batch Directory: \\ChromNA\Denver\ChromData\SMS_G5\20170526-59190.b
Anaylysis Type: SemiVOA Creator: Vasquez, Karla G
Inj Volume: 1.00 Inj Vol Units: ul
Run Reagents:
MS-SIM IS_00029, Amount Added: 20.00 , Units: uL

Lab ID	Worklist ID	Sample Type	Cal Lvl	Inj Date/Time	File Name	Vial	Dil Factor	Client ID	Fract
DFTPP	280-0059190-001	DFTPP	0	01-Jun-2017 10:22:30	G5_1342.D	1	1.0		SV
ICIS STD0600	280-0059190-002	ICIS	4	01-Jun-2017 10:39:30	G5_1343.D	2	1.0		SV
STD0020	280-0059190-003	IC	1	01-Jun-2017 11:08:30	G5_1344.D	3	1.0		SV
STD0100	280-0059190-004	IC	2	01-Jun-2017 11:37:30	G5_1345.D	4	1.0		SV
STD0300	280-0059190-005	IC	3	01-Jun-2017 12:04:30	G5_1346.D	5	1.0		SV
STD1200	280-0059190-006	IC	5	01-Jun-2017 12:31:30	G5_1347.D	6	1.0		SV
STD2500	280-0059190-007	IC	6	01-Jun-2017 12:58:30	G5_1348.D	7	1.0		SV
STD5000	280-0059190-008	IC	7	01-Jun-2017 13:26:30	G5_1349.D	8	1.0		SV
STD10000	280-0059190-009	IC	8	01-Jun-2017 13:53:30	G5_1350.D	9	1.0		SV
ICV	280-0059190-010	ICV	0	01-Jun-2017 14:20:30	G5_1351.D	10	1.0		SV
MB 280-375664/1-A	280-0059190-011	MB	0	01-Jun-2017 14:57:30	G5_1352.D	11	1.0		SV
LCS 280-375664/2-A	280-0059190-012	LCS	0	01-Jun-2017 15:24:30	G5_1353.D	12	1.0		SV
280-97682-A-1-A	280-0059190-013	Client	0	01-Jun-2017 15:52:30	G5_1354.D	13	1.0	SR501-2PECS-11	SV
280-97682-A-2-B	280-0059190-014	Client	0	01-Jun-2017 16:19:30	G5_1355.D	14	1.0	SR501-2PECS-12	SV
280-97682-A-3-C	280-0059190-015	Client	0	01-Jun-2017 16:46:30	G5_1356.D	15	1.0	SR501-5PECS-08	SV
280-97682-A-4-C	280-0059190-016	Client	0	01-Jun-2017 17:14:30	G5_1357.D	16	1.0	SR501-5PECS-09	SV
280-97682-A-5-C	280-0059190-017	Client	0	01-Jun-2017 17:41:30	G5_1358.D	17	1.0	SR501-5PECS-10	SV
280-97682-A-6-C	280-0059190-018	Client	0	01-Jun-2017 18:08:30	G5_1359.D	18	1.0	SR501-5PECS-11	SV
280-97682-A-7-C	280-0059190-019	Client	0	01-Jun-2017 18:35:30	G5_1360.D	19	1.0	SR501-5PECS-12	SV
280-97682-A-8-C	280-0059190-020	Client	0	01-Jun-2017 19:03:30	G5_1361.D	20	1.0	SR501-5PECS-13	SV
280-97682-A-9-B	280-0059190-021	Client	0	01-Jun-2017 19:30:30	G5_1362.D	21	1.0	SR501-5PECF-07	SV
280-97682-A-10-B	280-0059190-022	Client	0	01-Jun-2017 19:57:30	G5_1363.D	22	1.0	SR501-5PECF-08	SV
280-97661-A-7-B	280-0059190-023	Client	0	01-Jun-2017 20:25:30	G5_1364.D	23	1.0	OW056-DPS03-3-5	SV
280-97661-A-7-E MS	280-0059190-024	MS	0	01-Jun-2017 20:52:30	G5_1365.D	24	1.0	OW056-DPS03-3-5MS	SV
280-97661-A-7-F MSD	280-0059190-025	MSD	0	01-Jun-2017 21:19:30	G5_1366.D	25	1.0	OW056-DPS03-3-5MSD	SV
CCVC	280-0059190-026	CCVC	0	01-Jun-2017 21:47:30	G5_1367.D	26	1.0		SV

DWR

TUNE: 1022 - 1420
CHROM WL: 59190
LIMS BATCH: 375238

METHOD(S): 8270 SIM
SOLVENT LOT#: 153164
PIPETTE ID(S): SW-15

DAILY MAINTENANCE INCLUDED:

- [ ] REPLACED SEPTA
- [x] REPLACED LINER
- [ ] REPLACED GOLD SEAL
- [ ] REPLACED FERRULE
- [ ] CLIPPED COLUMN: _____

6/1/17

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 376088 Batch Start Date: 06/05/17 08:51 Batch Analyst: Wisniewski, Jared D

Batch Method: 3546 Batch End Date: 06/06/17 12:57

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8270 SIM Surr 00070	8270BO-SIMLCS 00022		
MB 280-376088/1		3546, 8270D SIM		31.1 g	1 mL	1 mL			
LCS 280-376088/2		3546, 8270D SIM		33.0 g	1 mL	1 mL	1 mL		
280-97803-C-1	SS025-SS01	3546, 8270D SIM	T	31.2 g	1 mL	1 mL			
280-97803-C-4	SS025-SS02	3546, 8270D SIM	T	30.6 g	1 mL	1 mL			
280-97803-A-5	SS025-SB02(0-2)	3546, 8270D SIM	T	30.4 g	1 mL	1 mL			
280-97803-A-6	SS025-SS03	3546, 8270D SIM	T	30.2 g	1 mL	1 mL			
280-97803-A-7	SS025-SB03(0-2)	3546, 8270D SIM	T	30.1 g	1 mL	1 mL			
280-97803-A-10	SS025-SS05	3546, 8270D SIM	T	32.1 g	1 mL	1 mL			
280-97803-A-12	SS025-SB05(2-4)	3546, 8270D SIM	T	32.7 g	1 mL	1 mL			
280-97803-A-13	SS025-SS06	3546, 8270D SIM	T	31.3 g	1 mL	1 mL			
280-97803-A-14	SS025-SS06-a	3546, 8270D SIM	T	31.4 g	1 mL	1 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 376088 Batch Start Date: 06/05/17 08:51 Batch Analyst: Wisniewski, Jared D

Batch Method: 3546 Batch End Date: 06/06/17 12:57

Batch Notes	
Balance ID	24750402
Analyst ID - Concentration	cdc
Final Concentrator Volume	1 mL
MeCL2 ID	see above
MeCl2 / Acetone ID	see above
Microwave Oven ID	MARS
Microwave Start Time	06/05/17@ 0905
Microwave Stop Time	06/05/17@ 0935
Na2SO4 ID	0000150871_00001/2
Ottawa Sand ID	170485
Pipette ID	K
Person's name who did the prep	JDW
Solvent Lot #	MeCl2_Cycl_00339/340//1:1AceMeCl2_00065
Solvent Name	1:1AceMeCl2/MeCl2
SOP Number	DV-OP-0015/0007
Analyst ID - Spike Analyst	JDW
Analyst ID - Spike Witness Analyst	reviewer: GLK
Water Bath ID	B
Water Bath Temperature	88 OBS: 89

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 376215 Batch Start Date: 06/06/17 07:45 Batch Analyst: Isberg, Kyle

Batch Method: 3510C Batch End Date: 06/12/17 13:33

Lab Sample ID	Client Sample ID	Method Chain	Basis	ReceivedpH	GrossWeight	TareWeight	InitialAmount	FinalAmount	8270 SIM Surr 00070
MB 280-376215/1		3510C, 8270D SIM		7			1000 mL	1 mL	1 mL
LCS 280-376215/2		3510C, 8270D SIM		7			1000 mL	1 mL	1 mL
280-97803-B-3	SS025-AB-053117	3510C, 8270D SIM	T	5	1499.5 g	503.9 g	995.6 mL	1 mL	1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	8270BO-SIMLCS 00022					
MB 280-376215/1		3510C, 8270D SIM							
LCS 280-376215/2		3510C, 8270D SIM		1 mL					
280-97803-B-3	SS025-AB-053117	3510C, 8270D SIM	T						

Batch Notes	
Balance ID	24750399
Batch Comment	DV-OP-0006/0007 H2O: S. Elga
Analyst ID - Concentration	MAVJr/JDW
Final Concentrator Volume	1 mL
Na2SO4 ID	0000158371_00001
NaCl ID	167538
Oven, Bath or Block Temperature 1	B OBS @ 84
Pipette ID	O
Prep Solvent ID	MeCl2_Cycl_00339/340
Prep Solvent Name	MeCl2
Prep Solvent Volume Used	180 mL
Person's name who did the prep	KI(
Analyst ID - Reagent Drop Witness	Reviewer:GLK
Sufficient volume for MS/MSD?	Yes
Uncorrected Temperature	85 Celsius

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 376215 Batch Start Date: 06/06/17 07:45 Batch Analyst: Isberg, Kyle

Batch Method: 3510C Batch End Date: 06/12/17 13:33

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 377246 Batch Start Date: 06/14/17 09:42 Batch Analyst: Isberg, Kyle

Batch Method: 3546 Batch End Date: 06/21/17 13:11

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8270 SIM Surr 00070	8270BO-SIMLCS 00022		
MB 280-377246/1		3546, 8270D SIM		30.1 g	1 mL	1 mL			
LCS 280-377246/2		3546, 8270D SIM		31.2 g	1 mL	1 mL	1 mL		
280-97803-C-8	SS025-SS04	3546, 8270D SIM	T	32.5 g	1 mL	1 mL			
280-97803-B-9	SS025-SB04(0-2)	3546, 8270D SIM	T	30.0 g	1 mL	1 mL			
280-97803-B-9 MS	SS025-SB04(0-2)	3546, 8270D SIM	T	30.5 g	1 mL	1 mL	1 mL		
280-97803-B-9 MSD	SS025-SB04(0-2)	3546, 8270D SIM	T	31.4 g	1 mL	1 mL	1 mL		
280-97803-C-11	SS025-SB05(0-2)	3546, 8270D SIM	T	32.3 g	1 mL	1 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 377246 Batch Start Date: 06/14/17 09:42 Batch Analyst: Isberg, Kyle

Batch Method: 3546 Batch End Date: 06/21/17 13:11

Batch Notes	
Balance ID	24750402
Analyst ID - Concentration	CDC, ELV
Final Concentrator Volume	1 mL
Hexane ID	see below
MeCL2 ID	see above
MeCl2 / Acetone ID	see above
Microwave Oven ID	MARS
Microwave Start Time	06/14/17 @1016
Microwave Stop Time	06/14/17 @1036
Na2SO4 ID	0000150871_00002
Ottawa Sand ID	170485
Pipette ID	L
Person's name who did the prep	KI
Solvent Lot #	MeCl2_Cycl_00341/342 / 1:1AceMeCl2_00065
Solvent Name	1:1AceMeCl2/MeCl2
SOP Number	DV-OP-0015/0007
Analyst ID - Spike Analyst	KI
Analyst ID - Spike Witness Analyst	reviewer:DB
Water Bath ID	B
Water Bath Temperature	88 (obs @ 89)

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8081B_DOD5

Organochlorine Pesticides (GC)

FORM II
PESTICIDES SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	TCX1 #	DCBP2 #	DCBP1 #
SS025-SS01	280-97803-1	67		68
SS025-SS02	280-97803-4	75		108
SS025-SB02(0-2)	280-97803-5	74		69
SS025-SS03	280-97803-6	67		81
SS025-SB03(0-2)	280-97803-7	74		65
SS025-SS04	280-97803-8	66		85
SS025-SB04(0-2)	280-97803-9	85		82
SS025-SS05	280-97803-10	64		77
SS025-SB05(0-2)	280-97803-11	78		82
SS025-SB05(2-4)	280-97803-12	81		80
SS025-SS06	280-97803-13	69		72
SS025-SS06-a	280-97803-14	58	83	
	MB 280-376892/1-A	71		70
	MB 280-377252/1-A	74 M		86
	LCS 280-376892/2-A	64		66
	LCS 280-376892/3-A	82		79
	LCS 280-377252/2-A	82		94
	LCS 280-377252/3-A	80		81 M
SS025-SS01 MS	280-97803-1 MS	61		92
SS025-SS03 MS	280-97803-6 MS	78		90
SS025-SS01 MSD	280-97803-1 MSD	60		106
SS025-SS03 MSD	280-97803-6 MSD	73		77

	QC LIMITS
TCX = Tetrachloro-m-xylene (Surr)	42-129
DCBP = DCB Decachlorobiphenyl (Surr)	63-121

Column to be used to flag recovery values

FORM II 8081B

FORM III
PESTICIDES LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06140015.D

Lab ID: LCS 280-376892/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
4,4'-DDD	15.9	10.8	68	56-139	
4,4'-DDE	15.9	10.8	68	56-134	
4,4'-DDT	15.9	11.5	72	50-141	
Aldrin	15.9	9.73	61	45-136	
alpha-BHC	15.9	10.1	64	45-137	
alpha-Chlordane	15.9	10.2	64	54-133	
beta-BHC	15.9	10.3	65	50-136	
delta-BHC	15.9	10.4	65	47-139	
Dieldrin	15.9	11.2	71	56-136	
Endosulfan I	15.9	11.1	69	53-132	
Endosulfan II	15.9	10.8	68	53-134	
Endosulfan sulfate	15.9	10.7	67	55-136	
Endrin	15.9	12.6	79	57-140	
Endrin aldehyde	15.9	9.64	61	35-137	
gamma-BHC (Lindane)	15.9	10.3	64	49-135	
gamma-Chlordane	15.9	10.4	65	53-135	
Heptachlor	15.9	11.4	71	47-136	
Heptachlor epoxide	15.9	10.9	68	52-136	
Methoxychlor	15.9	11.4	72	52-143	

Column to be used to flag recovery and RPD values

FORM III 8081B

FORM III
PESTICIDES LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06140016.D

Lab ID: LCS 280-376892/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Toxaphene	62.7	52.4 J	84	33-141	

Column to be used to flag recovery and RPD values

FORM III 8081B

FORM III
PESTICIDES LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06200015.D

Lab ID: LCS 280-377252/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
4,4'-DDD	16.3	13.9	85	56-139	
4,4'-DDE	16.3	13.9	85	56-134	
4,4'-DDT	16.3	15.0	92	50-141	
Aldrin	16.3	13.7	84	45-136	
alpha-BHC	16.3	13.8	85	45-137	
alpha-Chlordane	16.3	13.9	85	54-133	
beta-BHC	16.3	13.5	83	50-136	
delta-BHC	16.3	13.7	84	47-139	
Dieldrin	16.3	14.4	89	56-136	
Endosulfan I	16.3	14.4	88	53-132	
Endosulfan II	16.3	14.1	86	53-134	M
Endosulfan sulfate	16.3	14.6	90	55-136	
Endrin	16.3	15.8	97	57-140	
Endrin aldehyde	16.3	13.1	80	35-137	
gamma-BHC (Lindane)	16.3	13.9	85	49-135	
gamma-Chlordane	16.3	13.9	86	53-135	
Heptachlor	16.3	15.0	92	47-136	
Heptachlor epoxide	16.3	14.0	86	52-136	
Methoxychlor	16.3	14.9	91	52-143	

Column to be used to flag recovery and RPD values

FORM III 8081B

FORM III
PESTICIDES LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06200016.D

Lab ID: LCS 280-377252/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Toxaphene	64.9	60.6 J	93	33-141	

Column to be used to flag recovery and RPD values

FORM III 8081B

FORM III
PESTICIDES MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06140047.D

Lab ID: 280-97803-1 MS Client ID: SS025-SS01 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
4,4'-DDD	19.7	1.9 U	10.4	53	56-139	J
4,4'-DDE	19.7	1.9 J	11.3	48	56-134	J
4,4'-DDT	19.7	3.3	15.2	61	50-141	
Aldrin	19.7	0.78 U	11.3	57	45-136	
alpha-BHC	19.7	0.78 U	12.9	65	45-137	
alpha-Chlordane	19.7	0.78 U	10.6	54	54-133	
beta-BHC	19.7	1.9 U	11.2	57	50-136	
delta-BHC	19.7	1.2 U	12.8	65	47-139	
Dieldrin	19.7	0.78 U	12.9	65	56-136	
Endosulfan I	19.7	0.78 U	12.2	62	53-132	
Endosulfan II	19.7	0.78 U	11.8	60	53-134	
Endosulfan sulfate	19.7	0.67 J	11.5	55	55-136	
Endrin	19.7	0.78 U	14.0	71	57-140	
Endrin aldehyde	19.7	0.78 U	9.74	49	35-137	
gamma-BHC (Lindane)	19.7	1.2 U	12.8	65	49-135	
gamma-Chlordane	19.7	0.78 U	8.89	45	53-135	J
Heptachlor	19.7	0.78 U	13.3	67	47-136	
Heptachlor epoxide	19.7	1.2 U	12.3	62	52-136	
Methoxychlor	19.7	1.2 U	13.0	66	52-143	

Column to be used to flag recovery and RPD values

FORM III 8081B

FORM III
PESTICIDES MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06140051.D

Lab ID: 280-97803-6 MS Client ID: SS025-SS03 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Toxaphene	87.2	43 U	116 J	133	33-141	

Column to be used to flag recovery and RPD values

FORM III 8081B

FORM III
PESTICIDES MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06140048.D

Lab ID: 280-97803-1 MSD Client ID: SS025-SS01 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
4,4'-DDD	18.6	9.70	52	7	30	56-139	J
4,4'-DDE	18.6	11.2	50	0	30	56-134	J
4,4'-DDT	18.6	14.2	59	7	30	50-141	
Aldrin	18.6	10.7	58	5	30	45-136	
alpha-BHC	18.6	12.6	67	2	30	45-137	
alpha-Chlordane	18.6	10.1	54	4	30	54-133	
beta-BHC	18.6	10.8	58	4	30	50-136	
delta-BHC	18.6	12.5	67	3	30	47-139	
Dieldrin	18.6	12.4	66	4	30	56-136	
Endosulfan I	18.6	11.7	63	4	30	53-132	
Endosulfan II	18.6	11.2	60	5	30	53-134	
Endosulfan sulfate	18.6	11.0	56	5	30	55-136	
Endrin	18.6	13.1	71	6	30	57-140	
Endrin aldehyde	18.6	9.33	50	4	30	35-137	
gamma-BHC (Lindane)	18.6	12.2	65	5	30	49-135	
gamma-Chlordane	18.6	8.93	48	1	30	53-135	J
Heptachlor	18.6	12.6	68	5	30	47-136	
Heptachlor epoxide	18.6	11.7	63	5	30	52-136	
Methoxychlor	18.6	12.1	65	7	30	52-143	

Column to be used to flag recovery and RPD values

FORM III 8081B

FORM III
PESTICIDES MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06140052.D

Lab ID: 280-97803-6 MSD Client ID: SS025-SS03 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Toxaphene	88.6	76.9 J	87	41	30	33-141	J

Column to be used to flag recovery and RPD values

FORM III 8081B

FORM IV
PESTICIDES METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: MB 280-376892/1-A

Matrix: Solid Date Extracted: 06/12/2017 11:25

Lab File ID:(1) 06140014.D Lab File ID:(2) 06140014.D

Date Analyzed:(1) 06/14/2017 19:49 Date Analyzed:(2) 06/14/2017 19:49

Instrument ID:(1) SGC_P1 Instrument ID:(2) SGC_P1

GC Column:(1) CLP1 ID: 0.32(mm) GC Column:(2) CLP2 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-376892/2-A	06/14/2017 20:06	06/14/2017 20:06
	LCS 280-376892/3-A	06/14/2017 20:23	06/14/2017 20:23
SS025-SB02(0-2)	280-97803-5	06/15/2017 01:11	06/15/2017 01:11
SS025-SB03(0-2)	280-97803-7	06/15/2017 01:45	06/15/2017 01:45
SS025-SB04(0-2)	280-97803-9	06/15/2017 02:19	06/15/2017 02:19
SS025-SB05(2-4)	280-97803-12	06/15/2017 03:09	06/15/2017 03:09
SS025-SS01	280-97803-1	06/15/2017 04:51	06/15/2017 04:51
SS025-SS01 MS	280-97803-1 MS	06/15/2017 05:07	06/15/2017 05:07
SS025-SS01 MSD	280-97803-1 MSD	06/15/2017 05:24	06/15/2017 05:24
SS025-SS02	280-97803-4	06/15/2017 05:41	06/15/2017 05:41
SS025-SS03	280-97803-6	06/15/2017 05:58	06/15/2017 05:58
SS025-SS03 MS	280-97803-6 MS	06/15/2017 06:15	06/15/2017 06:15
SS025-SS03 MSD	280-97803-6 MSD	06/15/2017 06:32	06/15/2017 06:32
SS025-SS04	280-97803-8	06/15/2017 06:49	06/15/2017 06:49
SS025-SS05	280-97803-10	06/15/2017 07:06	06/15/2017 07:06
SS025-SB05(0-2)	280-97803-11	06/15/2017 07:22	06/15/2017 07:22
SS025-SS06	280-97803-13	06/15/2017 07:56	06/15/2017 07:56

FORM IV
PESTICIDES METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: MB 280-377252/1-A

Matrix: Solid Date Extracted: 06/14/2017 09:49

Lab File ID:(1) 06200014.D Lab File ID:(2) 06200014.D

Date Analyzed:(1) 06/20/2017 14:36 Date Analyzed:(2) 06/20/2017 14:36

Instrument ID:(1) SGC_P1 Instrument ID:(2) SGC_P1

GC Column:(1) CLP1 ID: 0.32(mm) GC Column:(2) CLP2 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-377252/2-A	06/20/2017 14:53	06/20/2017 14:53
	LCS 280-377252/3-A	06/20/2017 15:32	06/20/2017 15:32
SS025-SS06-a	280-97803-14	06/20/2017 16:06	06/20/2017 16:06

FORM VIII
PESTICIDES INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Sample No.: STD4 280-368670/26 Date Analyzed: 04/10/2017 17:56

Instrument ID: SGC_P1 GC Column: CLP1 ID: 0.32(mm)

Lab File ID (Standard): 04100026.D Heated Purge: (Y/N) N

Calibration ID: 28724

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1451506563	3.03				
UPPER LIMIT		2903013126	3.53				
LOWER LIMIT		725753282	2.53				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-368670/30		1563733843	3.03				
ICV 280-368670/31		1449739244	3.03				
ICV 280-368670/32		1469688333	3.03				
ICV 280-368670/33		1345529908	3.03				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8081B

FORM VIII
PESTICIDES INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Sample No.: STD4 280-368670/26 Date Analyzed: 04/10/2017 17:56

Instrument ID: SGC_P1 GC Column: CLP2 ID: 0.32(mm)

Lab File ID (Standard): 04100026.D Heated Purge: (Y/N) N

Calibration ID: 28725

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		339364371	2.84				
UPPER LIMIT		678728742	3.34				
LOWER LIMIT		169682186	2.34				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-368670/30		363246045	2.84				
ICV 280-368670/31		340722898	2.84				
ICV 280-368670/32		348163197	2.84				
ICV 280-368670/33		320310102	2.84				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8081B

FORM VIII
PESTICIDES INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Sample No.: CCVIS 280-377328/13 Date Analyzed: 06/14/2017 19:32

Instrument ID: SGC_P1 GC Column: CLP1 ID: 0.32(mm)

Lab File ID (Standard): 06140013.D Heated Purge: (Y/N) N

Calibration ID: 28724

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		2166840797	3.00				
UPPER LIMIT		4333681594	3.50				
LOWER LIMIT		1083420399	2.50				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 280-376892/1-A		2238781404	3.00				
LCS 280-376892/2-A		2105933351	3.00				
LCS 280-376892/3-A		2189214496	3.00				
CCV 280-377328/28		2108429137	3.00				
CCV 280-377328/30		2173382474	3.00				
280-97803-5	SS025-SB02(0-2)	2093633268	3.00				
280-97803-7	SS025-SB03(0-2)	2092503838	3.00				
280-97803-9	SS025-SB04(0-2)	2193781641	3.00				
280-97803-12	SS025-SB05(2-4)	2190722746	3.00				
CCV 280-377328/43		1924087834	3.00				
CCV 280-377328/45		2113936006	3.00				
280-97803-1	SS025-SS01	2156814895	3.00				
280-97803-1 MS	SS025-SS01 MS	2309884772	3.00				
280-97803-1 MSD	SS025-SS01 MSD	2589705296	3.00				
280-97803-4	SS025-SS02	2242322756	3.00				
280-97803-6	SS025-SS03	2153521070	3.00				
280-97803-6 MS	SS025-SS03 MS	1938393717	3.00				
280-97803-6 MSD	SS025-SS03 MSD	2096273415	3.00				
280-97803-8	SS025-SS04	2097073108	3.00				
280-97803-10	SS025-SS05	2157783935	3.00				
280-97803-11	SS025-SB05(0-2)	2175679730	3.00				
280-97803-13	SS025-SS06	2181460215	3.00				
CCV 280-377328/59		2134105825	3.00				
CCV 280-377328/61		2193688580	3.00				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8081B

FORM VIII
PESTICIDES INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Sample No.: CCVIS 280-377328/13 Date Analyzed: 06/14/2017 19:32

Instrument ID: SGC_P1 GC Column: CLP2 ID: 0.32(mm)

Lab File ID (Standard): 06140013.D Heated Purge: (Y/N) N

Calibration ID: 28725

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		464051677	2.77				
UPPER LIMIT		928103354	3.27				
LOWER LIMIT		232025839	2.27				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 280-376892/1-A		461938364	2.77				
LCS 280-376892/2-A		427486813	2.77				
LCS 280-376892/3-A		465381020	2.77				
CCV 280-377328/28		453744812	2.77				
CCV 280-377328/30		467775250	2.77				
280-97803-5	SS025-SB02(0-2)	461046083	2.77				
280-97803-7	SS025-SB03(0-2)	463407120	2.77				
280-97803-9	SS025-SB04(0-2)	467372567	2.77				
280-97803-12	SS025-SB05(2-4)	470320059	2.77				
CCV 280-377328/43		426035298	2.77				
CCV 280-377328/45		462135975	2.77				
280-97803-1	SS025-SS01	449654924	2.77				
280-97803-1 MS	SS025-SS01 MS	472131551	2.77				
280-97803-1 MSD	SS025-SS01 MSD	465488638	2.77				
280-97803-4	SS025-SS02	464395462	2.77				
280-97803-6	SS025-SS03	438745472	2.77				
280-97803-6 MS	SS025-SS03 MS	416693912	2.77				
280-97803-6 MSD	SS025-SS03 MSD	464023863	2.77				
280-97803-8	SS025-SS04	428927946	2.77				
280-97803-10	SS025-SS05	455661501	2.77				
280-97803-11	SS025-SB05(0-2)	467249458	2.77				
280-97803-13	SS025-SS06	452956820	2.77				
CCV 280-377328/59		461732186	2.77				
CCV 280-377328/61		468466369	2.77				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8081B

FORM VIII
PESTICIDES INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Sample No.: CCVIS 280-377996/13 Date Analyzed: 06/20/2017 14:19

Instrument ID: SGC_P1 GC Column: CLP1 ID: 0.32(mm)

Lab File ID (Standard): 06200013.D Heated Purge: (Y/N) N

Calibration ID: 28724

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		2338753398	3.00				
UPPER LIMIT		4677506796	3.50				
LOWER LIMIT		1169376699	2.50				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 280-377252/1-A		2203840186	3.00				
LCS 280-377252/2-A		2257421204	3.00				
LCS 280-377252/3-A		2466300303	2.99				
280-97803-14	SS025-SS06-a	2540863668	3.00				
CCV 280-377996/29		2197611986	3.00				
CCV 280-377996/31		2207395269	3.00				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8081B

FORM VIII
PESTICIDES INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Sample No.: CCVIS 280-377996/13 Date Analyzed: 06/20/2017 14:19

Instrument ID: SGC_P1 GC Column: CLP2 ID: 0.32(mm)

Lab File ID (Standard): 06200013.D Heated Purge: (Y/N) N

Calibration ID: 28725

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		459195506	2.77				
UPPER LIMIT		918391012	3.27				
LOWER LIMIT		229597753	2.27				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 280-377252/1-A		427473653	2.77				
LCS 280-377252/2-A		453559697	2.77				
LCS 280-377252/3-A		459316602	2.77				
280-97803-14	SS025-SS06-a	459794912	2.77				
CCV 280-377996/29		448750814	2.77				
CCV 280-377996/31		450353925	2.77				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8081B

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS01 Lab Sample ID: 280-97803-1

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/15/2017 04:51 Date Analyzed (2): 06/15/2017 04:51

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4,4'-DDE	1		6.45	6.45	6.47	1.4		30.9
	2		6.42	6.41	6.43	1.9		
4,4'-DDT	1		7.47	7.46	7.48	2.1		42.6
	2		7.47	7.46	7.48	3.3		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS01 MS Lab Sample ID: 280-97803-1 MS

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/15/2017 05:07 Date Analyzed (2): 06/15/2017 05:07

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
alpha-BHC	1		4.37	4.36	4.38	12.9		9.5
	2		4.25	4.24	4.26	14.1		
gamma-BHC (Lindane)	1		4.68	4.67	4.69	12.8		11.5
	2		4.57	4.56	4.58	14.3		
beta-BHC	1		4.76	4.76	4.78	11.2		17.3
	2		4.65	4.64	4.66	13.4		
delta-BHC	1		4.94	4.93	4.95	12.8		1.9
	2		4.93	4.92	4.94	13.1		
Heptachlor	1		5.15	5.14	5.16	13.3		3.1
	2		4.98	4.97	4.99	13.7		
Aldrin	1		5.43	5.43	5.45	11.3		16.5
	2		5.29	5.28	5.30	13.3		
Heptachlor epoxide	1		6.06	6.05	6.07	12.3		6.4
	2		5.84	5.83	5.85	13.1		
gamma-Chlordane	1		6.20	6.19	6.21	8.89		32.5
	2		6.04	6.03	6.05	12.3		
alpha-Chlordane	1		6.36	6.35	6.37	10.6		21.0
	2		6.21	6.20	6.22	13.0		
4,4'-DDE	1		6.45	6.45	6.47	11.3		37.5
	2		6.42	6.41	6.43	16.5		
Endosulfan I	1		6.53	6.52	6.54	12.2		1.4
	2		6.27	6.26	6.28	12.4		
Dieldrin	1		6.82	6.81	6.83	12.9		6.2
	2		6.61	6.60	6.62	13.7		
Endrin	1		7.09	7.08	7.10	14.0		7.0
	2		6.97	6.96	6.98	15.0		
4,4'-DDD	1		7.16	7.15	7.17	10.4		28.5
	2		7.12	7.11	7.13	13.8		
Endosulfan II	1		7.33	7.33	7.35	11.8		13.6
	2		7.21	7.20	7.22	13.5		
4,4'-DDT	1		7.47	7.46	7.48	15.2		14.7
	2		7.47	7.46	7.48	17.6		
Endrin aldehyde	1		7.79	7.78	7.80	9.74		21.0
	2		7.59	7.58	7.60	12.0		
Methoxychlor	1		7.98	7.98	8.00	13.0		20.3
	2		8.19	8.18	8.20	16.0		
Endosulfan sulfate	1		8.24	8.23	8.25	11.5		19.0
	2		7.88	7.87	7.89	13.9		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS01 MSD Lab Sample ID: 280-97803-1 MSD

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/15/2017 05:24 Date Analyzed (2): 06/15/2017 05:24

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
alpha-BHC	1		4.37	4.36	4.38	12.6		16.5
	2		4.25	4.24	4.26	14.8		
gamma-BHC (Lindane)	1		4.68	4.67	4.69	12.2		22.2
	2		4.57	4.56	4.58	15.2		
beta-BHC	1		4.77	4.76	4.78	10.8		26.2
	2		4.66	4.64	4.66	14.1		
delta-BHC	1		4.94	4.93	4.95	12.5		13.0
	2		4.93	4.92	4.94	14.2		
Heptachlor	1		5.15	5.14	5.16	12.6		13.0
	2		4.99	4.97	4.99	14.4		
Aldrin	1		5.43	5.43	5.45	10.7		26.5
	2		5.29	5.28	5.30	14.0		
Heptachlor epoxide	1		6.06	6.05	6.07	11.7		17.1
	2		5.84	5.83	5.85	13.9		
gamma-Chlordane	1		6.20	6.19	6.21	8.93		36.6
	2		6.04	6.03	6.05	12.9		
alpha-Chlordane	1		6.36	6.35	6.37	10.1		29.6
	2		6.21	6.20	6.22	13.6		
4,4'-DDE	1		6.46	6.45	6.47	11.2		41.6
	2		6.42	6.41	6.43	17.1		
Endosulfan I	1		6.53	6.52	6.54	11.7		10.7
	2		6.27	6.26	6.28	13.0		
Dieldrin	1		6.82	6.81	6.83	12.4		16.0
	2		6.61	6.60	6.62	14.5		
Endrin	1		7.09	7.08	7.10	13.1		19.6
	2		6.97	6.96	6.98	16.0		
4,4'-DDD	1		7.16	7.15	7.17	9.70		39.9
	2		7.12	7.11	7.13	14.5		
Endosulfan II	1		7.34	7.33	7.35	11.2		23.8
	2		7.21	7.20	7.22	14.2		
4,4'-DDT	1		7.47	7.46	7.48	14.2		26.4
	2		7.47	7.46	7.48	18.5		
Endrin aldehyde	1		7.79	7.78	7.80	9.33		31.0
	2		7.59	7.58	7.60	12.8		
Methoxychlor	1		7.98	7.98	8.00	12.1		31.9
	2		8.19	8.18	8.20	16.7		
Endosulfan sulfate	1		8.24	8.23	8.25	11.0		29.3
	2		7.88	7.87	7.89	14.8		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS02 Lab Sample ID: 280-97803-4

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/15/2017 05:41 Date Analyzed (2): 06/15/2017 05:41

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4,4'-DDE	1		6.45	6.45	6.47	0.36		31.3
	2		6.42	6.41	6.43	0.26		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS03 Lab Sample ID: 280-97803-6

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/15/2017 05:58 Date Analyzed (2): 06/15/2017 05:58

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Endosulfan I	1		6.53	6.52	6.54	0.55		22.2
	2		6.27	6.26	6.28	0.44		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS03 MS Lab Sample ID: 280-97803-6 MS

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/15/2017 06:15 Date Analyzed (2): 06/15/2017 06:15

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Toxaphene	1	1	5.63	5.59	5.63	183	116	22.2
		2	6.92	6.91	6.95	116		
		3	7.19	7.17	7.21	108		
		4	7.70	7.68	7.72	57.6		
	2	2	7.17	7.15	7.19	47.8	92.8	
		3	7.31	7.29	7.33	42.2		
		4	7.61	7.58	7.62	109		
		5	8.13	8.10	8.14	172		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS03 MSD Lab Sample ID: 280-97803-6 MSD

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/15/2017 06:32 Date Analyzed (2): 06/15/2017 06:32

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Toxaphene	1	2	6.93	6.91	6.95	103	76.9	34.7
		3	7.20	7.17	7.21	99.3		
		4	7.70	7.68	7.72	53.8		
		5	8.14	8.12	8.16	51.1		
	2	2	7.17	7.15	7.19	33.9	54.2	
		3	7.31	7.29	7.33	45.4		
		4	7.60	7.58	7.62	45.0		
		5	8.13	8.10	8.14	92.5		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS04 Lab Sample ID: 280-97803-8

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/15/2017 06:49 Date Analyzed (2): 06/15/2017 06:49

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4,4'-DDT	1		7.47	7.46	7.48	0.68		21.7
	2		7.47	7.46	7.48	0.84		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS06 Lab Sample ID: 280-97803-13

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/15/2017 07:56 Date Analyzed (2): 06/15/2017 07:56

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4,4'-DDE	1		6.46	6.45	6.47	1.2		36.2
	2		6.42	6.41	6.43	1.7		
4,4'-DDT	1		7.47	7.46	7.48	1.2		26.8
	2		7.47	7.46	7.48	1.5		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS06-a Lab Sample ID: 280-97803-14

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/20/2017 16:06 Date Analyzed (2): 06/20/2017 16:06

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4,4'-DDE	1		6.45	6.45	6.47	1.0		15.2
	2		6.42	6.41	6.43	1.2		
4,4'-DDT	1		7.47	7.46	7.48	1.1		49.3
	2		7.47	7.46	7.48	1.8		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-376892/2-A

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/14/2017 20:06 Date Analyzed (2): 06/14/2017 20:06

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
alpha-BHC	1		4.37	4.36	4.38	10.1		7.9
	2		4.25	4.24	4.26	11.0		
gamma-BHC (Lindane)	1		4.68	4.67	4.69	10.3		6.9
	2		4.57	4.56	4.58	11.0		
beta-BHC	1		4.76	4.76	4.78	10.3		8.8
	2		4.65	4.64	4.66	11.2		
delta-BHC	1		4.94	4.93	4.95	10.4		4.2
	2		4.93	4.92	4.94	10.8		
Heptachlor	1		5.15	5.14	5.16	11.4		1.1
	2		4.98	4.97	4.99	11.5		
Aldrin	1		5.43	5.43	5.45	9.73		12.0
	2		5.29	5.28	5.30	11.0		
Heptachlor epoxide	1		6.06	6.05	6.07	10.9		6.1
	2		5.84	5.83	5.85	11.5		
gamma-Chlordane	1		6.20	6.19	6.21	10.4		8.7
	2		6.04	6.03	6.05	11.4		
alpha-Chlordane	1		6.36	6.35	6.37	10.2		11.8
	2		6.21	6.20	6.22	11.4		
4,4'-DDE	1		6.46	6.45	6.47	10.8		3.9
	2		6.42	6.41	6.43	11.2		
Endosulfan I	1		6.53	6.52	6.54	11.1		2.9
	2		6.27	6.26	6.28	11.4		
Dieldrin	1		6.82	6.81	6.83	11.2		5.2
	2		6.61	6.60	6.62	11.8		
Endrin	1		7.09	7.08	7.10	12.6		6.0
	2		6.97	6.96	6.98	13.4		
4,4'-DDD	1		7.16	7.15	7.17	10.8		10.7
	2		7.12	7.11	7.13	12.1		
Endosulfan II	1		7.34	7.33	7.35	10.8		7.3
	2		7.21	7.20	7.22	11.7		
4,4'-DDT	1		7.47	7.46	7.48	11.5		7.6
	2		7.47	7.46	7.48	12.4		
Endrin aldehyde	1		7.79	7.78	7.80	9.64		7.2
	2		7.59	7.58	7.60	10.4		
Methoxychlor	1		7.98	7.98	8.00	11.4		9.9
	2		8.19	8.18	8.20	12.6		
Endosulfan sulfate	1		8.24	8.23	8.25	10.7		8.3
	2		7.88	7.87	7.89	11.6		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-376892/3-A

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/14/2017 20:23 Date Analyzed (2): 06/14/2017 20:23

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Toxaphene	1	1	5.61	5.59	5.63	35.4	52.4	8.0
		2	6.93	6.91	6.95	70.0		
		3	7.19	7.17	7.21	57.2		
		4	7.70	7.68	7.72	45.2		
		5	8.14	8.12	8.16	54.5		
	2	1	6.12	6.10	6.14	59.9	48.4	
		2	7.16	7.15	7.19	31.8		
		3	7.31	7.29	7.33	41.0		
		4	7.60	7.58	7.62	52.8		
		5	8.12	8.10	8.14	56.7		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-377252/2-A

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/20/2017 14:53 Date Analyzed (2): 06/20/2017 14:53

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
alpha-BHC	1		4.37	4.36	4.38	13.8		1.4
	2		4.25	4.24	4.26	13.6		
gamma-BHC (Lindane)	1		4.68	4.67	4.69	13.9		2.3
	2		4.57	4.56	4.58	13.6		
beta-BHC	1		4.76	4.75	4.77	13.5		0.6
	2		4.65	4.64	4.66	13.4		
delta-BHC	1		4.94	4.93	4.95	13.7		2.3
	2		4.93	4.92	4.94	13.4		
Heptachlor	1		5.15	5.14	5.16	15.0		5.5
	2		4.98	4.97	4.99	14.2		
Aldrin	1		5.43	5.42	5.44	13.7		3.1
	2		5.29	5.28	5.30	13.3		
Heptachlor epoxide	1		6.05	6.05	6.07	14.0		3.9
	2		5.83	5.82	5.84	13.5		
gamma-Chlordane	1		6.20	6.19	6.21	13.9		4.3
	2		6.04	6.03	6.05	13.3		
alpha-Chlordane	1		6.36	6.35	6.37	13.9		3.3
	2		6.20	6.19	6.21	13.5		
4,4'-DDE	1		6.45	6.45	6.47	13.9		5.1
	2		6.42	6.41	6.43	13.2		
Endosulfan I	1		6.53	6.52	6.54	14.4		8.7
	2		6.27	6.26	6.28	13.2		
Dieldrin	1		6.82	6.81	6.83	14.4		6.3
	2		6.61	6.60	6.62	13.6		
Endrin	1		7.08	7.07	7.09	15.8		5.8
	2		6.97	6.96	6.98	14.9		
4,4'-DDD	1		7.16	7.15	7.17	13.9		0.7
	2		7.12	7.11	7.13	13.8		
Endosulfan II	1		7.33	7.32	7.34	14.1		7.4
	2		7.21	7.20	7.22	13.1		
4,4'-DDT	1		7.47	7.46	7.48	15.0		7.3
	2		7.47	7.46	7.48	13.9		
Endrin aldehyde	1		7.79	7.78	7.80	13.1		9.7
	2		7.59	7.58	7.60	11.9		
Methoxychlor	1		7.98	7.97	7.99	14.9		6.3
	2		8.19	8.18	8.20	14.0		
Endosulfan sulfate	1		8.23	8.23	8.25	14.6		10.8
	2		7.88	7.87	7.89	13.1		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-377252/3-A

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/20/2017 15:32 Date Analyzed (2): 06/20/2017 15:32

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Toxaphene	1	1	5.61	5.59	5.63	48.8	60.6	18.8
		2	6.93	6.91	6.95	73.9		
		3	7.19	7.17	7.21	64.6		
		4	7.69	7.67	7.71	50.7		
		5	8.13	8.12	8.16	65.2		
	2	1	6.11	6.10	6.14	62.0	50.2	
		2	7.16	7.14	7.18	37.3		
		3	7.31	7.29	7.33	40.7		
		4	7.60	7.58	7.62	54.1		
		5	8.12	8.10	8.14	56.9		

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS01 | Lab Sample ID: 280-97803-1

Matrix: Solid | Lab File ID: 06140046.D

Analysis Method: 8081B | Date Collected: 05/31/2017 11:00

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 31.0(g) | Date Analyzed: 06/15/2017 04:51

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 16.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377328 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.9	U J	2.0	1.9	0.64
72-55-9	4,4'-DDE	1.4	J	2.0	0.78	0.28
50-29-3	4,4'-DDT	2.1	J	2.3	1.9	0.69
309-00-2	Aldrin	0.78	U	2.0	0.78	0.29
319-84-6	alpha-BHC	0.78	U	2.0	0.78	0.25
5103-71-9	alpha-Chlordane	0.78	U	2.0	0.78	0.38
319-85-7	beta-BHC	1.9	U	2.0	1.9	0.77
319-86-8	delta-BHC	1.2	U	2.0	1.2	0.47
60-57-1	Dieldrin	0.78	U	2.0	0.78	0.24
959-98-8	Endosulfan I	0.78	U	2.0	0.78	0.20
33213-65-9	Endosulfan II	0.78	U	2.0	0.78	0.33
1031-07-8	Endosulfan sulfate	0.78	U	2.0	0.78	0.32
72-20-8	Endrin	0.78	U	2.0	0.78	0.36
7421-93-4	Endrin aldehyde	0.78	U	2.0	0.78	0.20
58-89-9	gamma-BHC (Lindane)	1.2	U	2.0	1.2	0.54
5103-74-2	gamma-Chlordane	0.78	U J	2.0	0.78	0.31
76-44-8	Heptachlor	0.78	U	2.0	0.78	0.25
1024-57-3	Heptachlor epoxide	1.2	U	2.0	1.2	0.50
72-43-5	Methoxychlor	1.2	U	3.8	1.2	0.52
8001-35-2	Toxaphene	38	U	200	38	18

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	68		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	67		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140046.D
Lims ID: 280-97803-C-1-E
Client ID: SS025-SS01
Sample Type: Client
Inject. Date: 15-Jun-2017 04:51:06 ALS Bottle#: 40 Worklist Smp#: 46
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-C-1-E
Misc. Info.: 280-0059760-046
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:59:31 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: wellsd Date: 15-Jun-2017 09:27:51

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					0.5820	
2					-0.1216	
					RPD = 305.61	
LOD = 0.002000						
* 2 1-Bromo-2-nitrobenzene						
1	2.996	2.997	-0.001	2156814895	150.0	
2	2.770	2.771	-0.001	449654924	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.822	3.824	-0.002	217699774	13.4	
2	3.685	3.684	0.001	48283825	15.2	
					RPD = 12.81	
5 Hexachlorobenzene						M
1	4.195	4.204	-0.009	12323034	0.6261	
2	4.104	4.110	-0.006	2138466	-0.2172	M
					RPD = 412.50	
6 Diallate						
1		4.222			ND	
2		4.062				
7 Propachlor						
1		4.365			ND	
2		3.977				
8 alpha-BHC						
1		4.372			ND	
2		4.248				
9 gamma-BHC (Lindane)						M
1	4.679	4.680	-0.001	385749	0.5820	
2	4.572	4.573	-0.001	353782	-0.1216	M
					RPD = 305.61	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.765			ND	
2		4.654				
11 2,4,5-Trichlorophenol						M
1	4.844	4.861	-0.017	3261834	NC	
2	4.765	4.772	-0.007	363311	NC	M
					RPD = 0.00	
12 delta-BHC						
1		4.939			ND	
2		4.928				
14 Chlordane (technical)						M
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
13 Technical Chlordane						M
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
15 Heptachlor						
1		5.149			ND	
2		4.984				
16 Aldrin						M
1	5.431	5.435	-0.004	238420	0.2945	
2	5.290	5.291	-0.001	400254	-0.2300	M
					RPD = 1626.55	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						M
1		5.609			ND	
1		6.929				
1		7.192				
1		7.697				
1		8.140				
2		6.119				
2		7.168				
2		7.311				
2		7.600				
2		8.122				
17 Chlorpyrifos						
1		5.669			ND	
2		5.518				
18 Isodrin						
1		5.764			ND	
2		5.654				
19 Dicofol						
1		5.806			ND	
2		5.620				
20 2,4'-DDE						
1		6.045			ND	
2		6.047				
21 Heptachlor epoxide						
1		6.059			ND	
2		5.837				
22 gamma-Chlordane						
1		6.202			ND	
2		6.039				
23 alpha-Chlordane						M
1	6.369	6.363	0.006	545989	0.2330	
2	6.200	6.207	-0.007	1805355	-0.1265	M
					RPD = 674.73	
24 4,4'-DDE						
1	6.454	6.459	-0.005	72424027	3.53	
2	6.422	6.424	-0.002	17682789	4.82	
					RPD = 30.94	
25 Endosulfan I						
1		6.534			ND	
2		6.270				
26 2,4'-DDD						
1		6.668			ND	
2		6.671				
27 Dieldrin						
1		6.819			ND	
2		6.609				
29 2,4'-DDT						
1	6.964	6.967	-0.003	5525145	0.3147	
2	7.031	7.032	-0.001	2356283	0.7511	
					RPD = 81.89	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
30 Endrin						
1		7.088			ND	
2		6.969				
31 Kepone						
1		7.136			ND	
2		7.096				
32 4,4'-DDD						
1		7.163			ND	
2		7.121				
33 Chlorobenzilate						
1		7.179			ND	
2		6.981				
34 Endosulfan II						
1		7.337			ND	
2		7.214				
35 4,4'-DDT						
1	7.471	7.474	-0.003	91263516	5.44	
2	7.469	7.469	0.000	22220765	8.38	
					RPD = 42.57	
36 Endrin aldehyde						
1		7.791			ND	
2		7.589				
37 Methoxychlor						
1		7.986			ND	
2		8.192				
38 Mirex						
1		8.132			ND	
2		8.363				
39 Endosulfan sulfate						
1	8.241	8.239	0.002	1138373	0.2420	
2	7.877	7.883	-0.006	6606284	1.72	
					RPD = 150.79	
40 Endrin ketone						
1		8.519			ND	
2		8.410				
$ 41 DCB Decachlorobiphenyl						
1	9.495	9.497	-0.002	155963925	13.7	
2	9.604	9.606	-0.002	36566884	18.9	
					RPD = 31.82	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.271			ND	
2		11.328				
S 3 Endosulfan, Total						
1					0.2420	
2					1.72	
					RPD = 150.79	

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

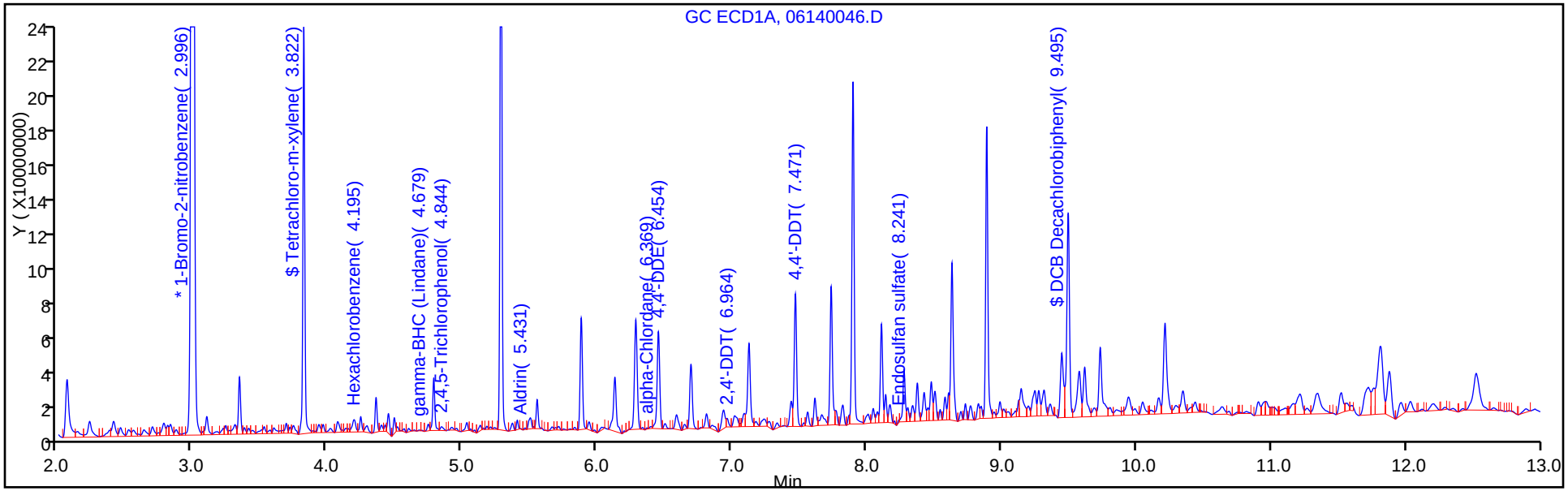
Report Date: 15-Jun-2017 15:11:07 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

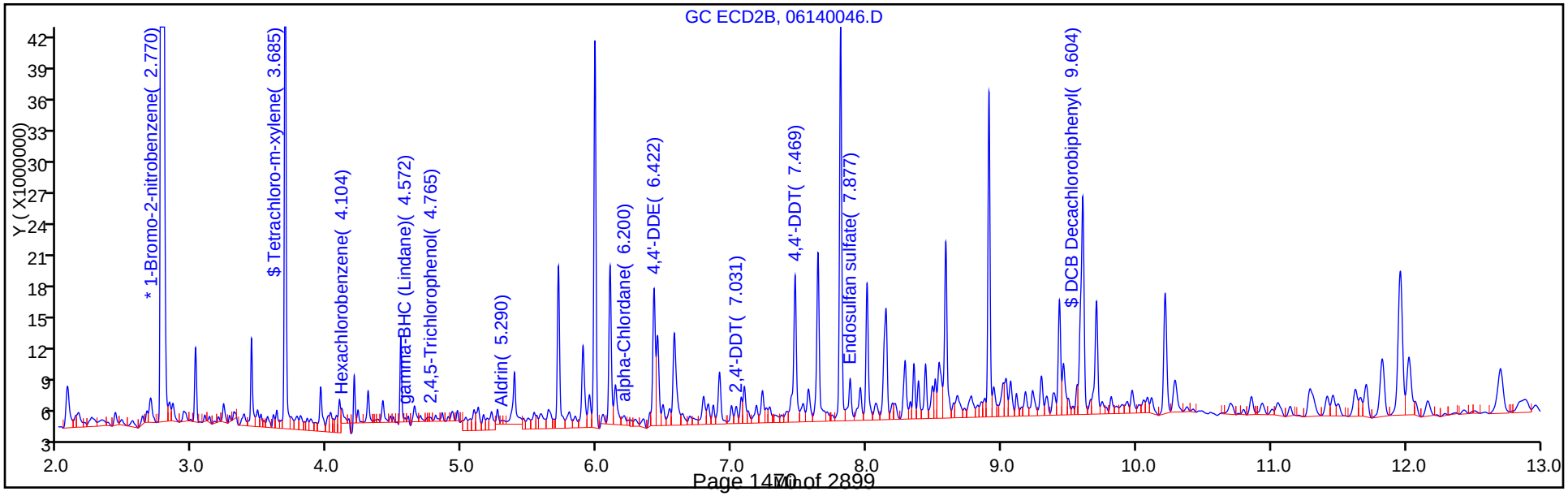
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140046.D

Injection Date:	15-Jun-2017 04:51:06	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97803-C-1-E	Lab Sample ID:	280-97803-1	Worklist Smp#:	46
Client ID:	SS025-SS01				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140046.D
Lims ID: 280-97803-C-1-E
Client ID: SS025-SS01
Sample Type: Client
Inject. Date: 15-Jun-2017 04:51:06 ALS Bottle#: 40 Worklist Smp#: 46
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-C-1-E
Misc. Info.: 280-0059760-046
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:59:31 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: wellsd Date: 15-Jun-2017 09:27:51

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	13.4	66.79
$ 41 DCB Decachlorobiphenyl	20.0	13.7	68.46

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	15.2	75.93
$ 41 DCB Decachlorobiphenyl	20.0	18.9	94.37

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS02 | Lab Sample ID: 280-97803-4

Matrix: Solid | Lab File ID: 06140049.D

Analysis Method: 8081B | Date Collected: 05/31/2017 12:50

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 32.6(g) | Date Analyzed: 06/15/2017 05:41

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 15.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377328 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.8	U	1.8	1.8	0.59
72-55-9	4,4'-DDE	0.36	J	1.8	0.73	0.26
50-29-3	4,4'-DDT	1.8	U	2.2	1.8	0.64
309-00-2	Aldrin	0.73	U	1.8	0.73	0.27
319-84-6	alpha-BHC	0.73	U	1.8	0.73	0.23
5103-71-9	alpha-Chlordane	0.73	U	1.8	0.73	0.35
319-85-7	beta-BHC	1.8	U	1.8	1.8	0.72
319-86-8	delta-BHC	1.1	U	1.8	1.1	0.44
60-57-1	Dieldrin	0.73	U	1.8	0.73	0.23
959-98-8	Endosulfan I	0.73	U	1.8	0.73	0.19
33213-65-9	Endosulfan II	0.73	U	1.8	0.73	0.31
1031-07-8	Endosulfan sulfate	0.73	U	1.8	0.73	0.30
72-20-8	Endrin	0.73	U	1.8	0.73	0.33
7421-93-4	Endrin aldehyde	0.73	U	1.8	0.73	0.19
58-89-9	gamma-BHC (Lindane)	1.1	U	1.8	1.1	0.50
5103-74-2	gamma-Chlordane	0.73	U	1.8	0.73	0.29
76-44-8	Heptachlor	0.73	U	1.8	0.73	0.23
1024-57-3	Heptachlor epoxide	1.1	U	1.8	1.1	0.46
72-43-5	Methoxychlor	1.1	U	3.6	1.1	0.49
8001-35-2	Toxaphene	36	U	180	36	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	108		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	75		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140049.D
Lims ID: 280-97803-C-4-C
Client ID: SS025-SS02
Sample Type: Client
Inject. Date: 15-Jun-2017 05:41:45 ALS Bottle#: 43 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-C-4-C
Misc. Info.: 280-0059760-049
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:59:31 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK017

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					0.5627	
2					0.1037	
					RPD = 137.75	
* 2 1-Bromo-2-nitrobenzene						
1	2.996	2.997	-0.001	2242322756	150.0	
2	2.769	2.771	-0.002	464395462	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.822	3.824	-0.002	255403504	15.1	
2	3.684	3.684	0.000	55870482	17.1	
					RPD = 12.60	
5 Hexachlorobenzene						
1	4.196	4.204	-0.008	10775134	0.5187	
2	4.111	4.110	0.001	674935	-0.6871	
					RPD = -1432.05	
6 Diallate						
1		4.222			ND	
2		4.062				
7 Propachlor						
1		4.365			ND	
2		3.977				
8 alpha-BHC						
1		4.372			ND	
2		4.248				
9 gamma-BHC (Lindane)						
1		4.680			ND	
2		4.573				
10 beta-BHC						
1		4.765			ND	
2		4.654				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
11 2,4,5-Trichlorophenol						
1	4.844	4.861	-0.017	1346403	NC	
2	4.764	4.772	-0.008	380746	NC	
					RPD = 0.00	
12 delta-BHC						
1	4.937	4.939	-0.002	831735	0.5627	
2	4.922	4.928	-0.006	997627	0.1037	
					RPD = 137.75	
14 Chlordane (technical)						
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
13 Technical Chlordane						
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
15 Heptachlor						
1		5.149			ND	
2		4.984				
16 Aldrin						
1		5.435			ND	
2		5.291				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.609			ND	
1		6.929				
1		7.192				
1		7.697				
1		8.140				
2		6.119				
2		7.168				
2		7.311				
2		7.600				
2		8.122				
17 Chlorpyrifos						
1		5.669			ND	
2		5.518				
18 Isodrin						
1	5.761	5.764	-0.003	362948	0.0231	
2	5.654	5.654	0.000	452098	-0.4845	
					RPD = -220.00	
19 Dicofol						
1		5.806			ND	
2		5.620				
20 2,4'-DDE						
1		6.045			ND	
2		6.047				
21 Heptachlor epoxide						
1	6.056	6.059	-0.003	4901691	0.1391	
2	5.842	5.837	0.005	258723	-0.6327	
					RPD = -312.70	
22 gamma-Chlordane						
1		6.202			ND	
2		6.039				
23 alpha-Chlordane						
1	6.369	6.363	0.006	2637508	0.3227	
2	6.199	6.207	-0.008	1383400	-0.2715	
					RPD = 2322.32	
24 4,4'-DDE						
1	6.454	6.459	-0.005	15041664	1.00	
2	6.422	6.424	-0.002	4231065	0.7279	
					RPD = 31.33	
25 Endosulfan I						
1		6.534			ND	
2		6.270				
26 2,4'-DDD						
1		6.668			ND	
2		6.671				
27 Dieldrin						
1		6.819			ND	
2		6.609				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
29 2,4'-DDT						
1		6.967			ND	
2		7.032				
30 Endrin						
1		7.088			ND	
2		6.969				
31 Kepone						
1		7.136			ND	
2		7.096				
32 4,4'-DDD						
1		7.163			ND	
2		7.121				
33 Chlorobenzilate						
1		7.179			ND	
2		6.981				
34 Endosulfan II						
1		7.337			ND	
2		7.214				
35 4,4'-DDT						
1	7.471	7.474	-0.003	21854490	1.68	
2	7.469	7.469	0.000	8667872	2.94	
					RPD = 54.78	
36 Endrin aldehyde						
1		7.791			ND	
2		7.589				
37 Methoxychlor						
1	7.995	7.986	0.009	725630	-0.2140	
2	8.194	8.192	0.002	1373561	0.1001	
					RPD = -551.51	
38 Mirex						
1		8.132			ND	
2		8.363				
39 Endosulfan sulfate						
1		8.239			ND	
2		7.883				
40 Endrin ketone						
1		8.519			ND	
2		8.410				
$ 41 DCB Decachlorobiphenyl						
1	9.495	9.497	-0.002	253898906	21.7	
2	9.604	9.606	-0.002	40106291	20.1	
					RPD = 7.36	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.271			ND	
2		11.328				
S 3 Endosulfan, Total						
1		0.000			ND	
2		0.000				

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

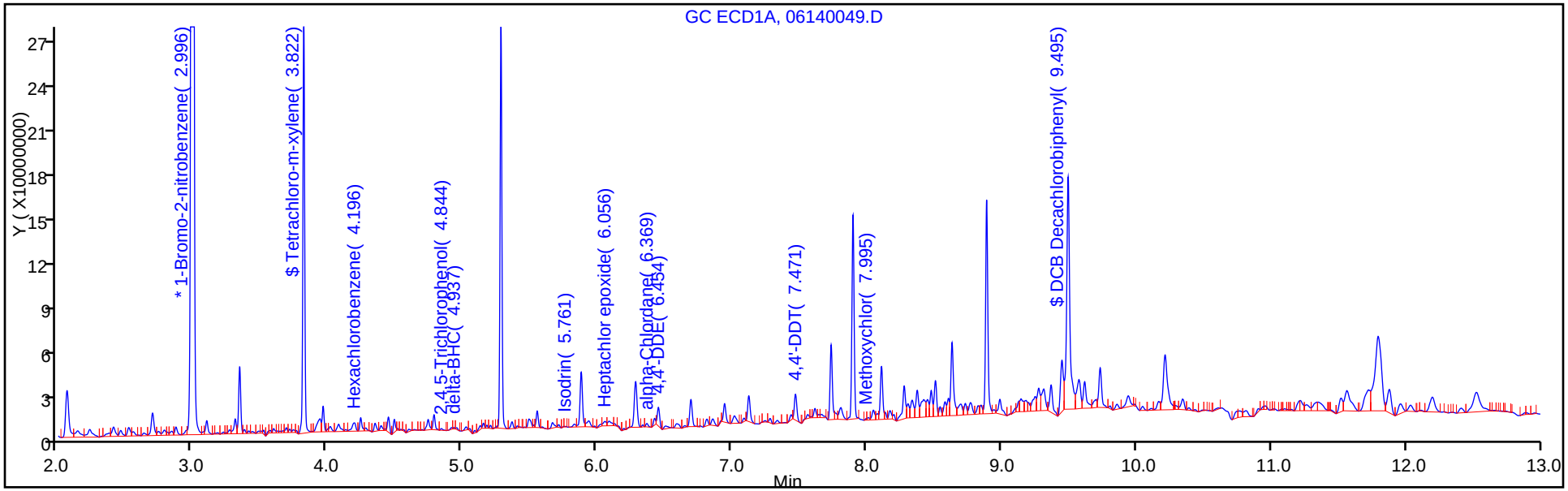
Report Date: 15-Jun-2017 15:11:14 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

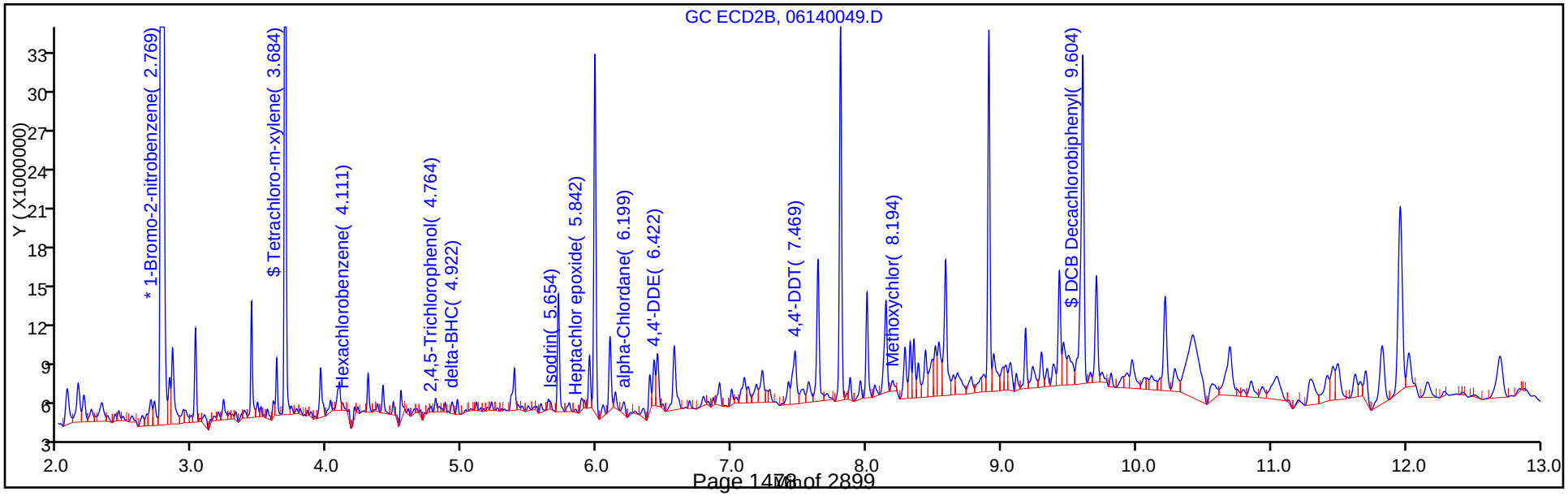
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Injection Date:	15-Jun-2017 05:41:45	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97803-C-4-C	Lab Sample ID:	280-97803-4	Worklist Smp#:	49
Client ID:	SS025-SS02				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140049.D				
Lims ID:	280-97803-C-4-C				
Client ID:	SS025-SS02				
Sample Type:	Client				
Inject. Date:	15-Jun-2017 05:41:45	ALS Bottle#:	43	Worklist Smp#:	49
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-C-4-C				
Misc. Info.:	280-0059760-049				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	15-Jun-2017 13:59:31	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK017				

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	15.1	75.31
$ 41 DCB Decachlorobiphenyl	20.0	21.7	108.27

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	17.1	85.43
$ 41 DCB Decachlorobiphenyl	20.0	20.1	100.58

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB02(0-2) | Lab Sample ID: 280-97803-5

Matrix: Solid | Lab File ID: 06140033.D

Analysis Method: 8081B | Date Collected: 05/31/2017 13:10

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 30.9(g) | Date Analyzed: 06/15/2017 01:11

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 17.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377328 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	2.0	U	2.0	2.0	0.64
72-55-9	4,4'-DDE	0.79	U	2.0	0.79	0.28
50-29-3	4,4'-DDT	2.0	U	2.4	2.0	0.70
309-00-2	Aldrin	0.79	U	2.0	0.79	0.30
319-84-6	alpha-BHC	0.79	U	2.0	0.79	0.25
5103-71-9	alpha-Chlordane	0.79	U	2.0	0.79	0.38
319-85-7	beta-BHC	2.0	U	2.0	2.0	0.78
319-86-8	delta-BHC	1.2	U	2.0	1.2	0.47
60-57-1	Dieldrin	0.79	U	2.0	0.79	0.25
959-98-8	Endosulfan I	0.79	U	2.0	0.79	0.21
33213-65-9	Endosulfan II	0.79	U	2.0	0.79	0.34
1031-07-8	Endosulfan sulfate	0.79	U	2.0	0.79	0.33
72-20-8	Endrin	0.79	U	2.0	0.79	0.36
7421-93-4	Endrin aldehyde	0.79	U	2.0	0.79	0.20
58-89-9	gamma-BHC (Lindane)	1.2	U	2.0	1.2	0.55
5103-74-2	gamma-Chlordane	0.79	U	2.0	0.79	0.31
76-44-8	Heptachlor	0.79	U	2.0	0.79	0.25
1024-57-3	Heptachlor epoxide	1.2	U	2.0	1.2	0.50
72-43-5	Methoxychlor	1.2	U	3.9	1.2	0.53
8001-35-2	Toxaphene	39	U	200	39	19

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	69		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	74		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140033.D
Lims ID: 280-97803-C-5-A
Client ID: SS025-SB02(0-2)
Sample Type: Client
Inject. Date: 15-Jun-2017 01:11:46 ALS Bottle#: 27 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-C-5-A
Misc. Info.: 280-0059760-033
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:58:30 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: wellsd Date: 15-Jun-2017 13:47:48

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					0.5661	
2					-0.0882	
					RPD = 273.86	
LOD = 0.002000						
* 2 1-Bromo-2-nitrobenzene						
1	2.997	2.997	0.001	2093633268	150.0	
2	2.771	2.771	0.000	461046083	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.823	3.824	-0.001	234154814	14.8	
2	3.684	3.684	0.000	49005831	15.0	
					RPD = 1.58	
5 Hexachlorobenzene						
1		4.204			ND	
2		4.110				
6 Diallate						
1		4.222			ND	
2		4.062				
7 Propachlor						
1	4.359	4.365	-0.006	551581	-7.57	
2	3.982	3.977	0.005	520652	-6.37	
					RPD = -17.26	
LOD = 0.002000						
8 alpha-BHC						
1		4.372			ND	
2		4.248				
9 gamma-BHC (Lindane)						
1		4.680			ND	
2		4.573				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.765			ND	
2		4.654				
11 2,4,5-Trichlorophenol						
1		4.861			ND	
2		4.772				
12 delta-BHC						
1	4.938	4.939	-0.001	868181	0.5661	
2	4.928	4.928	0.000	176000	-0.0882	
					RPD = 273.86	
14 Chlordane (technical)						
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
13 Technical Chlordane						
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
15 Heptachlor						
1		5.149			ND	
2		4.984				
16 Aldrin						
1		5.435			ND	
2		5.291				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.609			ND	
1		6.929				
1		7.192				
1		7.697				
1		8.140				
2		6.119				
2		7.168				
2		7.311				
2		7.600				
2		8.122				
17 Chlorpyrifos						
1		5.669			ND	
2		5.518				
18 Isodrin						
1		5.764			ND	
2		5.654				
19 Dicofol						
1		5.806			ND	
2		5.620				
20 2,4'-DDE						
1		6.045			ND	
2		6.047				
21 Heptachlor epoxide						
1		6.059			ND	
2		5.837				
22 gamma-Chlordane						
1	6.201	6.202	-0.001	407990	0.3221	
2	6.037	6.039	-0.002	157682	-0.5177	
					RPD = -859.06	
23 alpha-Chlordane						
1	6.362	6.363	-0.001	534950	0.2332	
2	6.206	6.207	-0.001	152076	-0.6424	
					RPD = -428.00	
24 4,4'-DDE						
1	6.458	6.459	-0.001	534979	0.3909	
2	6.427	6.424	0.003	122217	-0.4698	
					RPD = -2182.39	
25 Endosulfan I						
1		6.534			ND	
2		6.270				
26 2,4'-DDD						
1		6.668			ND	
2		6.671				
27 Dieldrin						
1		6.819			ND	
2		6.609				
29 2,4'-DDT						
1		6.967			ND	
2		7.032				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
30 Endrin						
1	7.086	7.088	-0.002	250895	0.1694	
2	6.965	6.969	-0.004	102386	-0.4432	
					RPD = -447.36	
31 Kepone						
1		7.136			ND	
2		7.096				
32 4,4'-DDD						
1		7.163			ND	
2		7.121				
33 Chlorobenzilate						
1		7.179			ND	
2		6.981				
34 Endosulfan II						
1	7.337	7.337	0.000	1006349	0.006602	
2	7.215	7.214	0.001	323595	-0.7591	
					RPD = -203.51	
35 4,4'-DDT						
1	7.472	7.474	-0.002	2410020	0.6831	
2	7.469	7.469	0.000	222316	-0.2760	
					RPD = 471.12	
36 Endrin aldehyde						
1	7.786	7.791	-0.005	448574	-0.001550	
2	7.591	7.589	0.002	323551	-0.6842	
					RPD = -199.10	
LOD = 0.002000						
37 Methoxychlor						
1	7.983	7.986	-0.003	194300	-0.2763	
2	8.188	8.192	-0.004	220034	-0.8385	
					RPD = -100.86	
LOD = 0.002000						
38 Mirex						
1	8.129	8.132	-0.003	1278223	-0.1210	
2	8.362	8.363	-0.001	599798	0.3011	
					RPD = 468.59	
39 Endosulfan sulfate						
1	8.236	8.239	-0.003	767442	0.2223	
2	7.882	7.883	-0.001	491168	-0.6914	
					RPD = -389.59	
40 Endrin ketone						
1	8.516	8.519	-0.003	782110	0.1619	
2	8.408	8.410	-0.002	359373	-0.5871	
					RPD = -352.33	
$ 41 DCB Decachlorobiphenyl						
1	9.496	9.497	-0.001	151613228	13.7	
2	9.605	9.606	-0.001	29122341	14.4	
					RPD = 4.87	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.271			ND	
2		11.328				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags

S 3 Endosulfan, Total

1	0.2289
2	-1.45
	RPD = -274.96

LOD = 0.002000

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

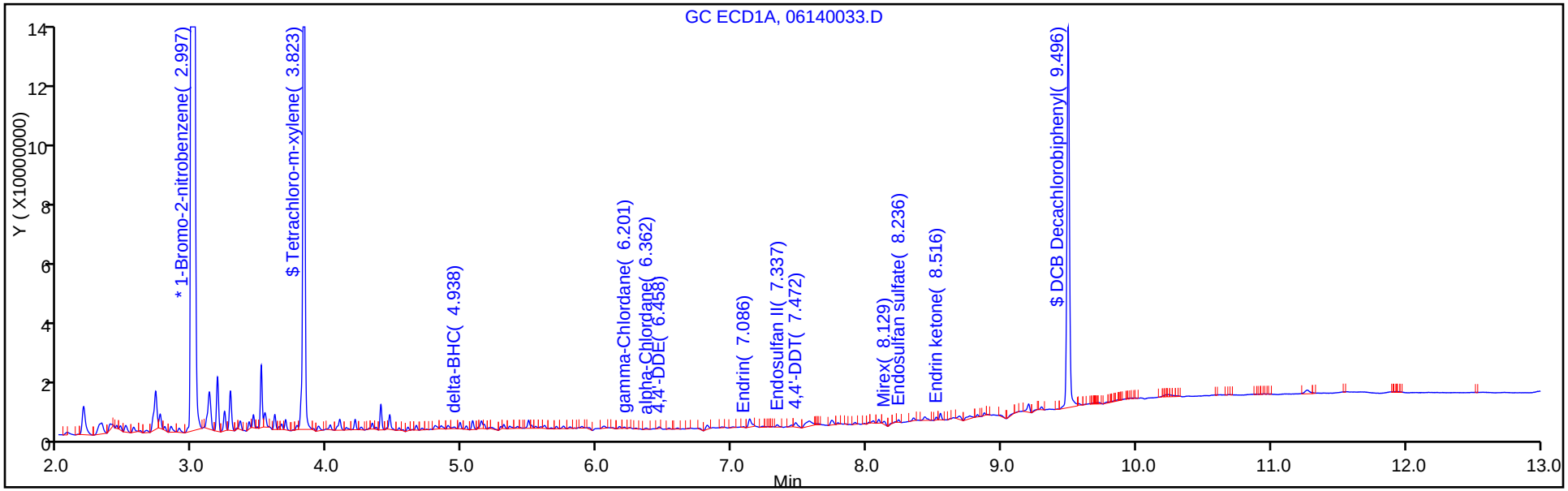
Report Date: 15-Jun-2017 13:58:37 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

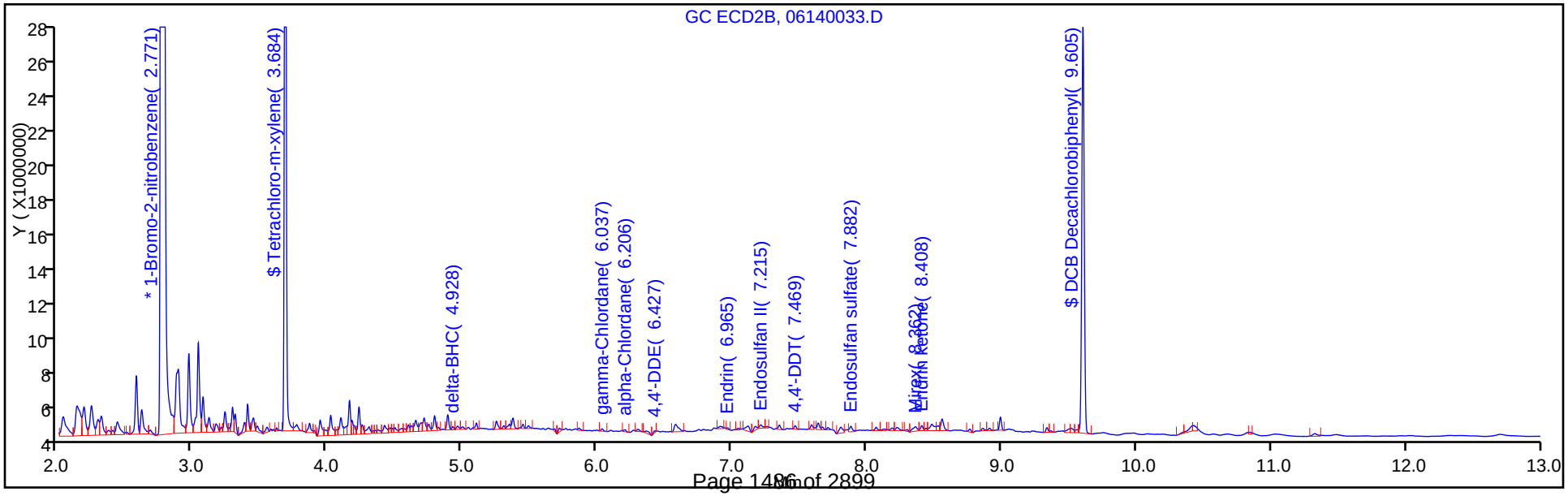
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140033.D

Injection Date:	15-Jun-2017 01:11:46	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97803-C-5-A	Lab Sample ID:	280-97803-5	Worklist Smp#:	33
Client ID:	SS025-SB02(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140033.D				
Lims ID:	280-97803-C-5-A				
Client ID:	SS025-SB02(0-2)				
Sample Type:	Client				
Inject. Date:	15-Jun-2017 01:11:46	ALS Bottle#:	27	Worklist Smp#:	33
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-C-5-A				
Misc. Info.:	280-0059760-033				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	15-Jun-2017 13:58:30	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: wellsd		Date:	15-Jun-2017 13:47:48		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	14.8	73.95
$ 41 DCB Decachlorobiphenyl	20.0	13.7	68.56

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	15.0	75.13
$ 41 DCB Decachlorobiphenyl	20.0	14.4	71.99

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS03 | Lab Sample ID: 280-97803-6

Matrix: Solid | Lab File ID: 06140050.D

Analysis Method: 8081B | Date Collected: 05/31/2017 13:25

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 30.5(g) | Date Analyzed: 06/15/2017 05:58

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 25.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377328 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	2.2	U	2.2	2.2	0.72
72-55-9	4,4'-DDE	0.88	U	2.2	0.88	0.31
50-29-3	4,4'-DDT	2.2	U	2.6	2.2	0.78
309-00-2	Aldrin	0.88	U	2.2	0.88	0.33
319-84-6	alpha-BHC	0.88	U	2.2	0.88	0.28
5103-71-9	alpha-Chlordane	0.88	U	2.2	0.88	0.43
319-85-7	beta-BHC	2.2	U	2.2	2.2	0.87
319-86-8	delta-BHC	1.3	U M	2.2	1.3	0.53
60-57-1	Dieldrin	0.88	U	2.2	0.88	0.28
959-98-8	Endosulfan I	0.55	J	2.2	0.88	0.23
33213-65-9	Endosulfan II	0.88	U	2.2	0.88	0.38
1031-07-8	Endosulfan sulfate	0.88	U	2.2	0.88	0.36
72-20-8	Endrin	0.88	U	2.2	0.88	0.40
7421-93-4	Endrin aldehyde	0.88	U	2.2	0.88	0.23
58-89-9	gamma-BHC (Lindane)	1.3	U M	2.2	1.3	0.61
5103-74-2	gamma-Chlordane	0.88	U	2.2	0.88	0.35
76-44-8	Heptachlor	0.88	U	2.2	0.88	0.28
1024-57-3	Heptachlor epoxide	1.3	U	2.2	1.3	0.56
72-43-5	Methoxychlor	1.3	U	4.3	1.3	0.59
8001-35-2	Toxaphene	43	U J	220	43	21

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	81		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	67		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140050.D
Lims ID: 280-97803-B-6-A
Client ID: SS025-SS03
Sample Type: Client
Inject. Date: 15-Jun-2017 05:58:34 ALS Bottle#: 44 Worklist Smp#: 50
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-B-6-A
Misc. Info.: 280-0059760-050
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:59:31 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: wellsd Date: 15-Jun-2017 13:54:17

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					2.03	
2					1.67	
					RPD = 19.39	
* 2 1-Bromo-2-nitrobenzene						
1	2.996	2.997	-0.001	2153521070	150.0	
2	2.770	2.771	-0.001	438745472	150.0	
$ 4 Tetrachloro-m-xylene						M
1	3.821	3.824	-0.003	217192516	13.3	
2	3.686	3.684	0.002	107691974	35.5	M
					RPD = 90.67	
5 Hexachlorobenzene						
1		4.204			ND	
2		4.110				
6 Diallate						
1		4.222			ND	
2		4.062				
7 Propachlor						M
1	4.358	4.365	-0.007	3974803	-4.78	M
2	3.986	3.977	0.009	5619030	23.9	M
					RPD = 300.27	
8 alpha-BHC						
1		4.372			ND	
2		4.248				
9 gamma-BHC (Lindane)						M
1	4.679	4.680	-0.001	13000419	1.07	M
2	4.569	4.573	-0.004	4803498	1.02	M
					RPD = 4.65	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.765			ND	
2		4.654				
11 2,4,5-Trichlorophenol						M
1	4.865	4.861	0.004	42966243	NC	M
2	4.780	4.772	0.008	18776295	NC	
					RPD = 0.00	
12 delta-BHC						M
1	4.946	4.939	0.007	11816814	0.9617	M
2	4.926	4.928	-0.002	3155217	0.6517	M
					RPD = 38.43	
14 Chlordane (technical)						
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
13 Technical Chlordane						
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
15 Heptachlor						
1		5.149			ND	
2		4.984				
16 Aldrin						
1		5.435			ND	
2		5.291				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.609			ND	
1		6.929				
1		7.192				
1		7.697				
1		8.140				
2		6.119				
2		7.168				
2		7.311				
2		7.600				
2		8.122				
17 Chlorpyrifos						
1		5.669			ND	
2		5.518				
18 Isodrin						M
1	5.755	5.764	-0.009	21500169	1.16	
2	5.651	5.654	-0.003	2541772	0.2810	M
					RPD = 122.18	
19 Dicofol						M
1	5.800	5.806	-0.006	8476871	44.2	
2	5.610	5.620	-0.010	532627	-0.7530	M
					RPD = 206.93	
20 2,4'-DDE						
1	6.051	6.045	0.006	10060784	0.4160	
2	6.050	6.047	0.003	2729195	0.9181	
					RPD = 75.27	
21 Heptachlor epoxide						
1		6.059			ND	
2		5.837				
22 gamma-Chlordane						
1		6.202			ND	
2		6.039				
23 alpha-Chlordane						
1	6.365	6.363	0.002	11153786	0.7116	
2	6.198	6.207	-0.009	3181950	0.3268	
					RPD = 74.11	
24 4,4'-DDE						
1		6.459			ND	
2		6.424				
25 Endosulfan I						
1	6.531	6.534	-0.003	27525841	1.25	
2	6.269	6.270	-0.001	5779281	1.00	
					RPD = 22.22	
26 2,4'-DDD						
1		6.668			ND	
2		6.671				
27 Dieldrin						
1		6.819			ND	
2		6.609				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
29 2,4'-DDT						
1		6.967			ND	
2		7.032				
30 Endrin						
1		7.088			ND	
2		6.969				
31 Kepone						
1		7.136			ND	
2		7.096				
32 4,4'-DDD						
1		7.163			ND	
2		7.121				
33 Chlorobenzilate						
1		7.179			ND	
2		6.981				
34 Endosulfan II						
1		7.337			ND	
2		7.214				
35 4,4'-DDT						
1	7.472	7.474	-0.002	6480231	0.8979	
2	7.471	7.469	0.002	1880331	0.3971	
					RPD = 77.35	
36 Endrin aldehyde						
1		7.791			ND	
2		7.589				
37 Methoxychlor						
1		7.986			ND	
2		8.192				
38 Mirex						
1		8.132			ND	
2		8.363				
39 Endosulfan sulfate						
1		8.239			ND	
2		7.883				
40 Endrin ketone						
1		8.519			ND	
2		8.410				
$ 41 DCB Decachlorobiphenyl						
1	9.495	9.497	-0.002	182918994	16.1	
2	9.605	9.606	-0.001	32715081	17.2	
					RPD = 6.35	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.271			ND	
2		11.328				
S 3 Endosulfan, Total						
1					1.25	
2					1.00	
					RPD = 22.22	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

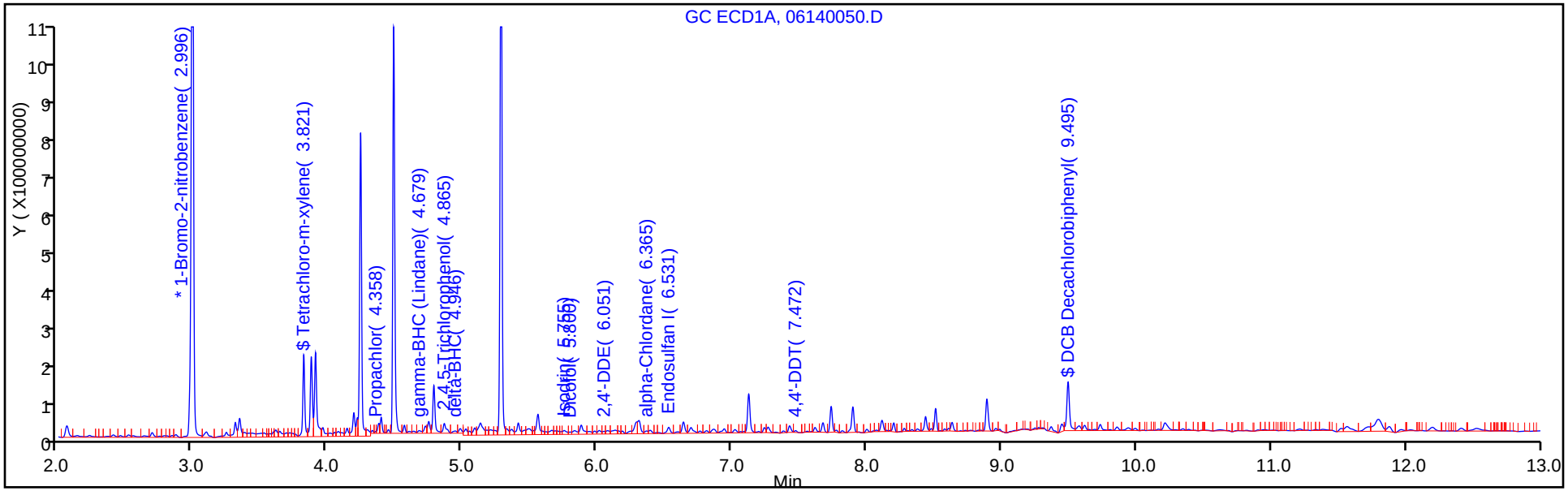
Report Date: 15-Jun-2017 15:11:16 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

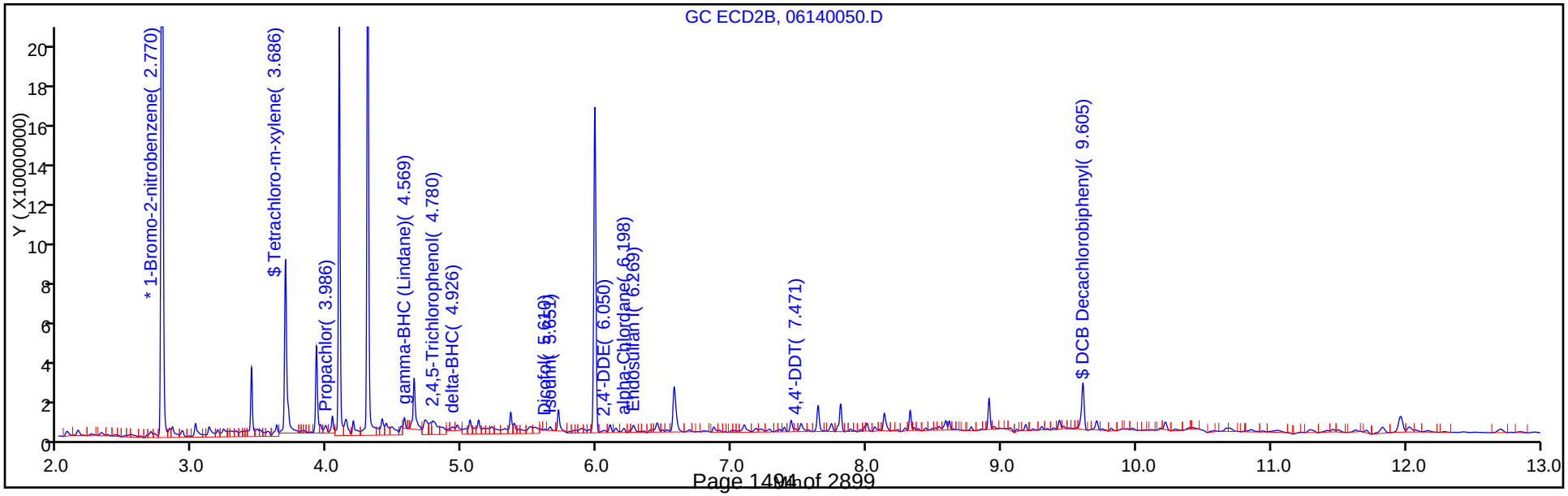
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140050.D

Injection Date:	15-Jun-2017 05:58:34	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97803-B-6-A	Lab Sample ID:	280-97803-6	Worklist Smp#:	50
Client ID:	SS025-SS03				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	44
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140050.D				
Lims ID:	280-97803-B-6-A				
Client ID:	SS025-SS03				
Sample Type:	Client				
Inject. Date:	15-Jun-2017 05:58:34	ALS Bottle#:	44	Worklist Smp#:	50
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-B-6-A				
Misc. Info.:	280-0059760-050				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	15-Jun-2017 13:59:31	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK017				
First Level Reviewer: wellsd		Date:	15-Jun-2017 13:54:17		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	13.3	66.74
$ 41 DCB Decachlorobiphenyl	20.0	16.1	80.74

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	35.5	177.42
$ 41 DCB Decachlorobiphenyl	20.0	17.2	86.04

Manual Integration/User Assign Peak Report

TestAmerica Denver

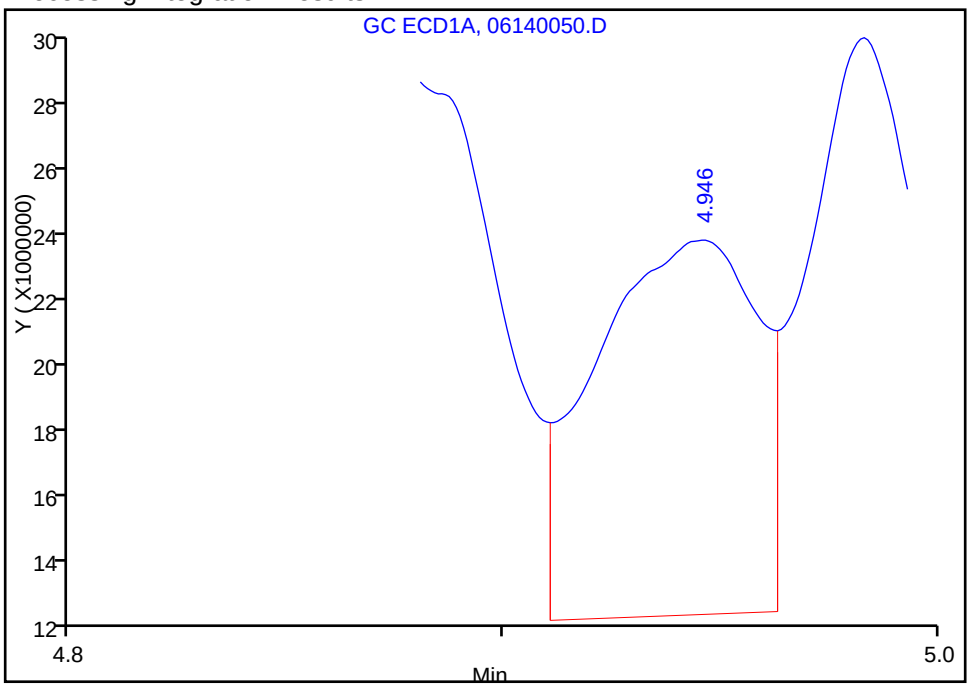
Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140050.D				
Injection Date:	15-Jun-2017 05:58:34	Instrument ID:	SGC_P1		
Lims ID:	280-97803-B-6-A	Lab Sample ID:	280-97803-6		
Client ID:	SS025-SS03				
Operator ID:	DAW	ALS Bottle#:	44	Worklist Smp#:	50
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

12 delta-BHC, CAS: 319-86-8

Signal: 1

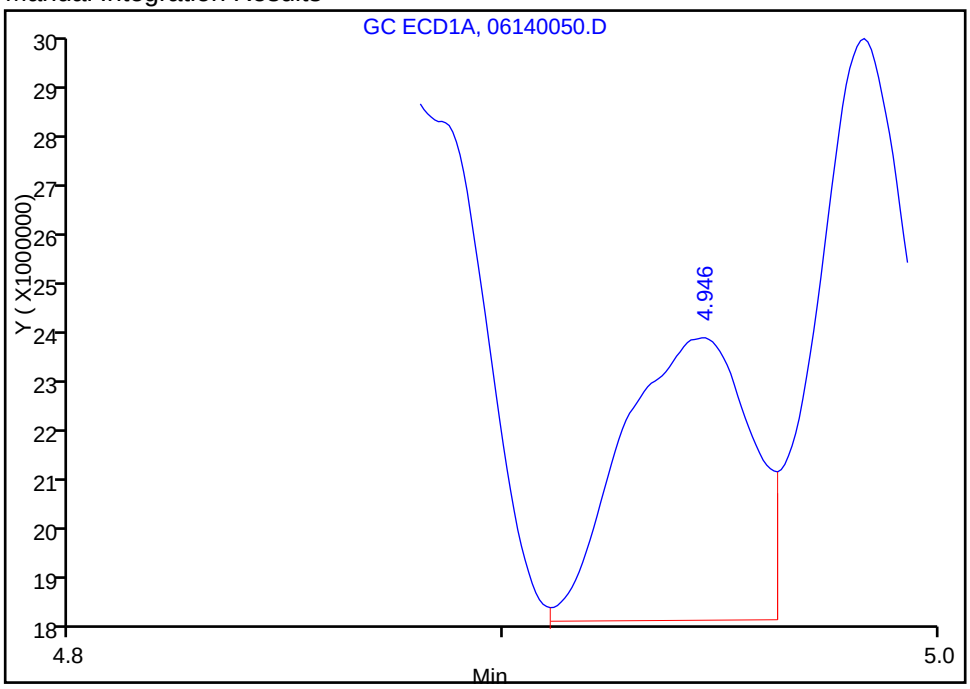
Processing Integration Results

RT: 4.95
Area: 29294308
Amount: 1.594735
Amount Units: ng/mL



Manual Integration Results

RT: 4.95
Area: 11816814
Amount: 0.961717
Amount Units: ng/mL



Reviewer: wellsd, 15-Jun-2017 13:54:28
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

TestAmerica Denver

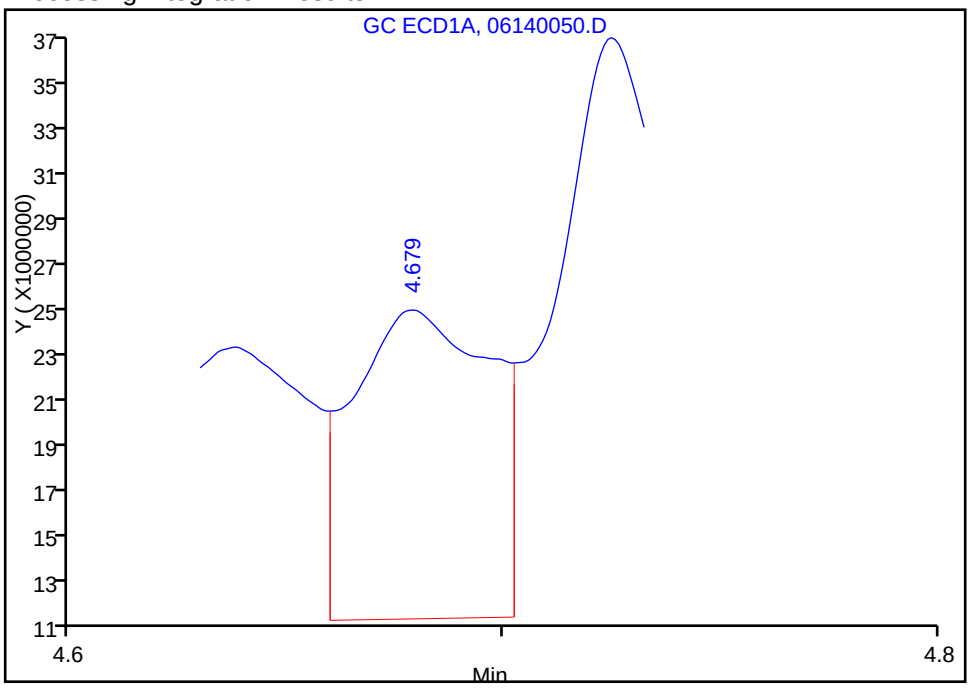
Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140050.D				
Injection Date:	15-Jun-2017 05:58:34	Instrument ID:	SGC_P1		
Lims ID:	280-97803-B-6-A	Lab Sample ID:	280-97803-6		
Client ID:	SS025-SS03				
Operator ID:	DAW	ALS Bottle#:	44	Worklist Smp#:	50
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

9 gamma-BHC (Lindane), CAS: 58-89-9

Signal: 1

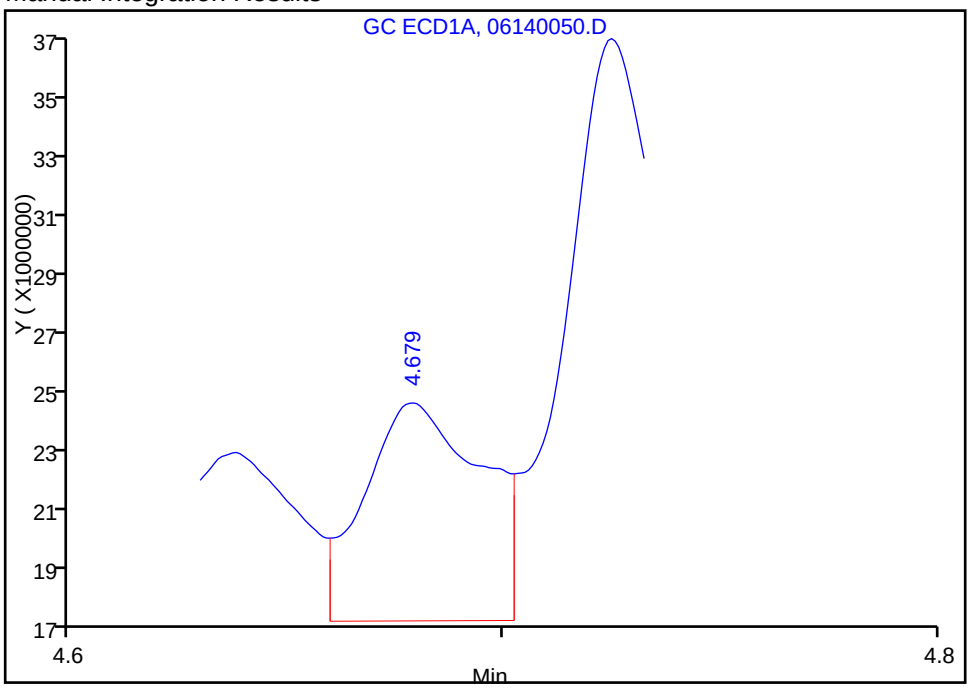
Processing Integration Results

RT: 4.68
Area: 28781790
Amount: 1.672038
Amount Units: ng/mL



Manual Integration Results

RT: 4.68
Area: 13000419
Amount: 1.066244
Amount Units: ng/mL



Reviewer: wellsd, 15-Jun-2017 13:54:28
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB03(0-2) | Lab Sample ID: 280-97803-7

Matrix: Solid | Lab File ID: 06140035.D

Analysis Method: 8081B | Date Collected: 05/31/2017 13:40

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 31.1(g) | Date Analyzed: 06/15/2017 01:45

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 13.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377328 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.9	U	1.9	1.9	0.61
72-55-9	4,4'-DDE	0.75	U	1.9	0.75	0.27
50-29-3	4,4'-DDT	1.9	U	2.2	1.9	0.66
309-00-2	Aldrin	0.75	U	1.9	0.75	0.28
319-84-6	alpha-BHC	0.75	U	1.9	0.75	0.24
5103-71-9	alpha-Chlordane	0.75	U	1.9	0.75	0.36
319-85-7	beta-BHC	1.9	U	1.9	1.9	0.74
319-86-8	delta-BHC	1.1	U	1.9	1.1	0.45
60-57-1	Dieldrin	0.75	U	1.9	0.75	0.24
959-98-8	Endosulfan I	0.75	U	1.9	0.75	0.20
33213-65-9	Endosulfan II	0.75	U	1.9	0.75	0.32
1031-07-8	Endosulfan sulfate	0.75	U	1.9	0.75	0.31
72-20-8	Endrin	0.75	U	1.9	0.75	0.34
7421-93-4	Endrin aldehyde	0.75	U	1.9	0.75	0.19
58-89-9	gamma-BHC (Lindane)	1.1	U	1.9	1.1	0.52
5103-74-2	gamma-Chlordane	0.75	U	1.9	0.75	0.30
76-44-8	Heptachlor	0.75	U	1.9	0.75	0.24
1024-57-3	Heptachlor epoxide	1.1	U	1.9	1.1	0.48
72-43-5	Methoxychlor	1.1	U	3.7	1.1	0.50
8001-35-2	Toxaphene	37	U	190	37	18

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	65		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	74		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140035.D
Lims ID: 280-97803-C-7-A
Client ID: SS025-SB03(0-2)
Sample Type: Client
Inject. Date: 15-Jun-2017 01:45:29 ALS Bottle#: 29 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-C-7-A
Misc. Info.: 280-0059760-035
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:58:30 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					0.5361	
2					-1.13	
					RPD = -562.50	
LOD = 0.002000						
* 2 1-Bromo-2-nitrobenzene						
1	2.998	2.997	0.001	2092503838	150.0	
2	2.772	2.771	0.001	463407120	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.823	3.824	-0.001	234252898	14.8	
2	3.685	3.684	0.001	51006255	15.6	
					RPD = 5.11	
5 Hexachlorobenzene						
1	4.203	4.204	-0.001	3497599	0.1480	
2	4.103	4.110	-0.007	118737	-0.8574	
					RPD = -283.44	
6 Diallate						
1		4.222			ND	
2		4.062				
7 Propachlor						
1		4.365			ND	
2		3.977				
8 alpha-BHC						
1		4.372			ND	
2		4.248				
9 gamma-BHC (Lindane)						
1		4.680			ND	
2		4.573				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1	4.765	4.765	0.000	236453	-0.0333	
2	4.655	4.654	0.001	102462	-1.03	
					RPD = -187.41	
LOD = 0.002000						
11 2,4,5-Trichlorophenol						
1	4.843	4.861	-0.018	1414245	NC	
2	4.791	4.772	0.019	113427	NC	
					RPD = 0.00	
12 delta-BHC						
1	4.937	4.939	-0.002	956961	0.5694	
2	4.928	4.928	0.000	118528	-0.1019	
					RPD = 287.21	
14 Chlordane (technical)						
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
13 Technical Chlordane						
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
15 Heptachlor						
1		5.149			ND	
2		4.984				
16 Aldrin						
1		5.435			ND	
2		5.291				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.609			ND	
1		6.929				
1		7.192				
1		7.697				
1		8.140				
2		6.119				
2		7.168				
2		7.311				
2		7.600				
2		8.122				
17 Chlorpyrifos						
1		5.669			ND	
2		5.518				
18 Isodrin						
1		5.764			ND	
2		5.654				
19 Dicofol						
1		5.806			ND	
2		5.620				
20 2,4'-DDE						
1		6.045			ND	
2		6.047				
21 Heptachlor epoxide						
1		6.059			ND	
2		5.837				
22 gamma-Chlordane						
1	6.198	6.202	-0.004	248688	0.3151	
2	6.039	6.039	0.000	149417	-0.5203	
					RPD = -814.33	
23 alpha-Chlordane						
1		6.363			ND	
2		6.207				
24 4,4'-DDE						
1		6.459			ND	
2		6.424				
25 Endosulfan I						
1		6.534			ND	
2		6.270				
26 2,4'-DDD						
1		6.668			ND	
2		6.671				
27 Dieldrin						
1	6.815	6.819	-0.004	1280660	0.1734	
2	6.605	6.609	-0.004	174067	-0.5209	
					RPD = -399.69	
29 2,4'-DDT						
1		6.967			ND	
2		7.032				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
30 Endrin						
1		7.088			ND	
2		6.969				
31 Kepone						
1		7.136			ND	
2		7.096				
32 4,4'-DDD						
1		7.163			ND	
2		7.121				
33 Chlorobenzilate						
1		7.179			ND	
2		6.981				
34 Endosulfan II						
1	7.334	7.337	-0.003	1056174	0.009331	
2	7.224	7.214	0.010	199369	-0.8025	
					RPD = -204.71	
35 4,4'-DDT						
1	7.473	7.474	-0.001	2432450	0.6845	
2	7.468	7.469	-0.001	394905	-0.2105	
					RPD = 377.66	
36 Endrin aldehyde						
1	7.784	7.791	-0.007	920118	0.0300	
2	7.588	7.589	-0.001	264834	-0.7098	
					RPD = -217.68	
37 Methoxychlor						
1		7.986			ND	
2		8.192				
38 Mirex						
1		8.132			ND	
2		8.363				
39 Endosulfan sulfate						
1	8.236	8.239	-0.003	319802	0.1962	
2	7.881	7.883	-0.002	537310	-0.6747	
					RPD = -364.08	
40 Endrin ketone						
1		8.519			ND	
2		8.410				
$ 41 DCB Decachlorobiphenyl						
1	9.495	9.497	-0.002	143153623	12.9	
2	9.605	9.606	-0.001	28031503	13.7	
					RPD = 6.03	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.271			ND	
2		11.328				
S 3 Endosulfan, Total						
1					0.2056	
2					-1.48	
					RPD = -264.67	

LOD = 0.002000

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

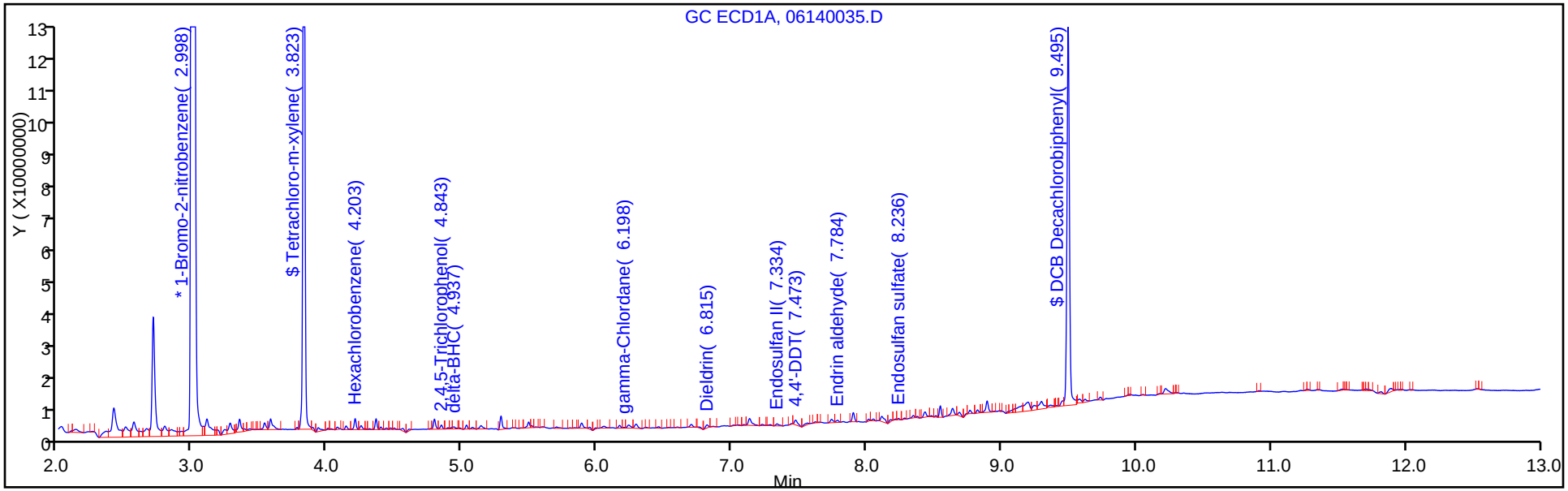
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TestAmerica Denver

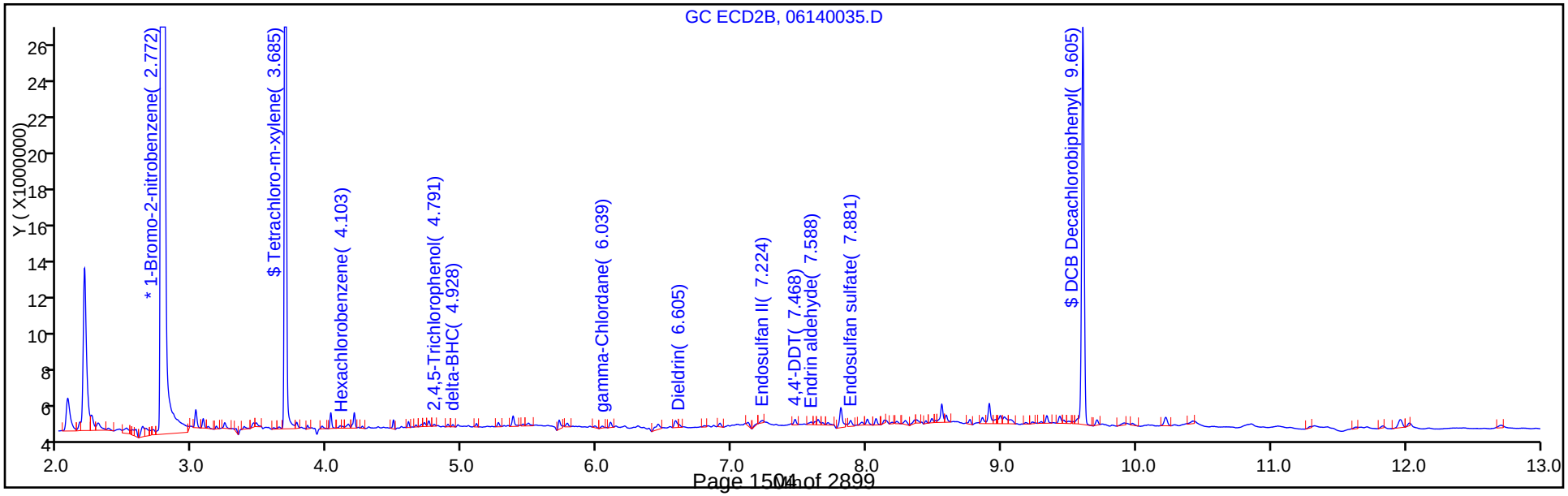
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140035.D

Injection Date:	15-Jun-2017 01:45:29	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97803-C-7-A	Lab Sample ID:	280-97803-7	Worklist Smp#:	35
Client ID:	SS025-SB03(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140035.D				
Lims ID:	280-97803-C-7-A				
Client ID:	SS025-SB03(0-2)				
Sample Type:	Client				
Inject. Date:	15-Jun-2017 01:45:29	ALS Bottle#:	29	Worklist Smp#:	35
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-C-7-A				
Misc. Info.:	280-0059760-035				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	15-Jun-2017 13:58:30	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	14.8	74.02
$ 41 DCB Decachlorobiphenyl	20.0	12.9	64.67

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	15.6	77.91
$ 41 DCB Decachlorobiphenyl	20.0	13.7	68.69

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS04 | Lab Sample ID: 280-97803-8

Matrix: Solid | Lab File ID: 06140053.D

Analysis Method: 8081B | Date Collected: 05/31/2017 14:00

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 32.3(g) | Date Analyzed: 06/15/2017 06:49

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 10.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377328 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.7	U	1.8	1.7	0.56
72-55-9	4,4'-DDE	0.69	U	1.8	0.69	0.25
50-29-3	4,4'-DDT	0.68	J	2.1	1.7	0.61
309-00-2	Aldrin	0.69	U	1.8	0.69	0.26
319-84-6	alpha-BHC	0.69	U	1.8	0.69	0.22
5103-71-9	alpha-Chlordane	0.69	U	1.8	0.69	0.33
319-85-7	beta-BHC	1.7	U	1.8	1.7	0.69
319-86-8	delta-BHC	1.0	U	1.8	1.0	0.41
60-57-1	Dieldrin	0.69	U	1.8	0.69	0.22
959-98-8	Endosulfan I	0.69	U	1.8	0.69	0.18
33213-65-9	Endosulfan II	0.69	U	1.8	0.69	0.30
1031-07-8	Endosulfan sulfate	0.69	U	1.8	0.69	0.28
72-20-8	Endrin	0.69	U	1.8	0.69	0.32
7421-93-4	Endrin aldehyde	0.69	U	1.8	0.69	0.18
58-89-9	gamma-BHC (Lindane)	1.0	U	1.8	1.0	0.48
5103-74-2	gamma-Chlordane	0.69	U	1.8	0.69	0.27
76-44-8	Heptachlor	0.69	U	1.8	0.69	0.22
1024-57-3	Heptachlor epoxide	1.0	U	1.8	1.0	0.44
72-43-5	Methoxychlor	1.0	U	3.4	1.0	0.46
8001-35-2	Toxaphene	34	U	180	34	16

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	85		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	66		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140053.D
Lims ID: 280-97803-B-8-A
Client ID: SS025-SS04
Sample Type: Client
Inject. Date: 15-Jun-2017 06:49:14 ALS Bottle#: 47 Worklist Smp#: 53
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-B-8-A
Misc. Info.: 280-0059760-053
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:59:31 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: wellsd Date: 15-Jun-2017 13:56:03

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					0.6705	
2					0.1765	
					RPD = 116.66	
* 2 1-Bromo-2-nitrobenzene						
1	2.997	2.997	0.000	2097073108	150.0	
2	2.771	2.771	0.000	428927946	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.823	3.824	-0.001	209192761	13.2	
2	3.685	3.684	0.001	45308924	14.9	
					RPD = 12.27	
5 Hexachlorobenzene						
1	4.196	4.204	-0.008	11789159	0.6152	
2	4.110	4.110	0.000	1165251	-0.5073	
					RPD = 2080.64	
6 Diallate						
1		4.222			ND	
2		4.062				
7 Propachlor						
1		4.365			ND	
2		3.977				
8 alpha-BHC						
1		4.372			ND	
2		4.248				
9 gamma-BHC (Lindane)						
1	4.680	4.680	0.000	2619733	0.6705	
2	4.571	4.573	-0.002	1477481	0.1765	
					RPD = 116.66	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.765			ND	
2		4.654				
11 2,4,5-Trichlorophenol						
1	4.854	4.861	-0.007	5537879	NC	
2	4.765	4.772	-0.007	191871	NC	
					RPD = 0.00	
12 delta-BHC						
1		4.939			ND	
2		4.928				
14 Chlordane (technical)						
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
13 Technical Chlordane						
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
15 Heptachlor						
1		5.149			ND	
2		4.984				
16 Aldrin						
1		5.435			ND	
2		5.291				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.609			ND	
1		6.929				
1		7.192				
1		7.697				
1		8.140				
2		6.119				
2		7.168				
2		7.311				
2		7.600				
2		8.122				
17 Chlorpyrifos						
1		5.669			ND	
2		5.518				
18 Isodrin						
1		5.764			ND	
2		5.654				
19 Dicofol						
1		5.806			ND	
2		5.620				
20 2,4'-DDE						
1		6.045			ND	
2		6.047				
21 Heptachlor epoxide						
1	6.054	6.059	-0.005	314267	-0.0710	
2	5.837	5.837	0.000	802884	-0.4492	
					RPD = -145.40	
LOD = 0.002000						
22 gamma-Chlordane						
1	6.198	6.202	-0.004	1822228	0.3846	
2	6.040	6.039	0.001	1713933	-0.0316	
					RPD = 235.77	
23 alpha-Chlordane						
1	6.366	6.363	0.003	1368299	0.2718	
2	6.199	6.207	-0.008	919051	-0.3886	
					RPD = -1130.83	
24 4,4'-DDE						
1		6.459			ND	
2		6.424				
25 Endosulfan I						
1		6.534			ND	
2		6.270				
26 2,4'-DDD						
1		6.668			ND	
2		6.671				
27 Dieldrin						
1		6.819			ND	
2		6.609				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
29 2,4'-DDT						
1		6.967			ND	
2		7.032				
30 Endrin						
1		7.088			ND	
2		6.969				
31 Kepone						
1		7.136			ND	
2		7.096				
32 4,4'-DDD						
1		7.163			ND	
2		7.121				
33 Chlorobenzilate						
1		7.179			ND	
2		6.981				
34 Endosulfan II						
1		7.337			ND	
2		7.214				
35 4,4'-DDT						
1	7.472	7.474	-0.002	25637383	1.96	
2	7.467	7.469	-0.002	6795625	2.44	
					RPD = 21.75	
36 Endrin aldehyde						
1		7.791			ND	
2		7.589				
37 Methoxychlor						
1		7.986			ND	
2		8.192				
38 Mirex						
1		8.132			ND	
2		8.363				
39 Endosulfan sulfate						
1		8.239			ND	
2		7.883				
40 Endrin ketone						
1		8.519			ND	
2		8.410				
$ 41 DCB Decachlorobiphenyl						
1	9.495	9.497	-0.002	188140258	17.1	
2	9.605	9.606	-0.001	38687765	21.1	
					RPD = 20.89	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.271			ND	
2		11.328				
S 3 Endosulfan, Total						
1		0.000			ND	
2		0.000				

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

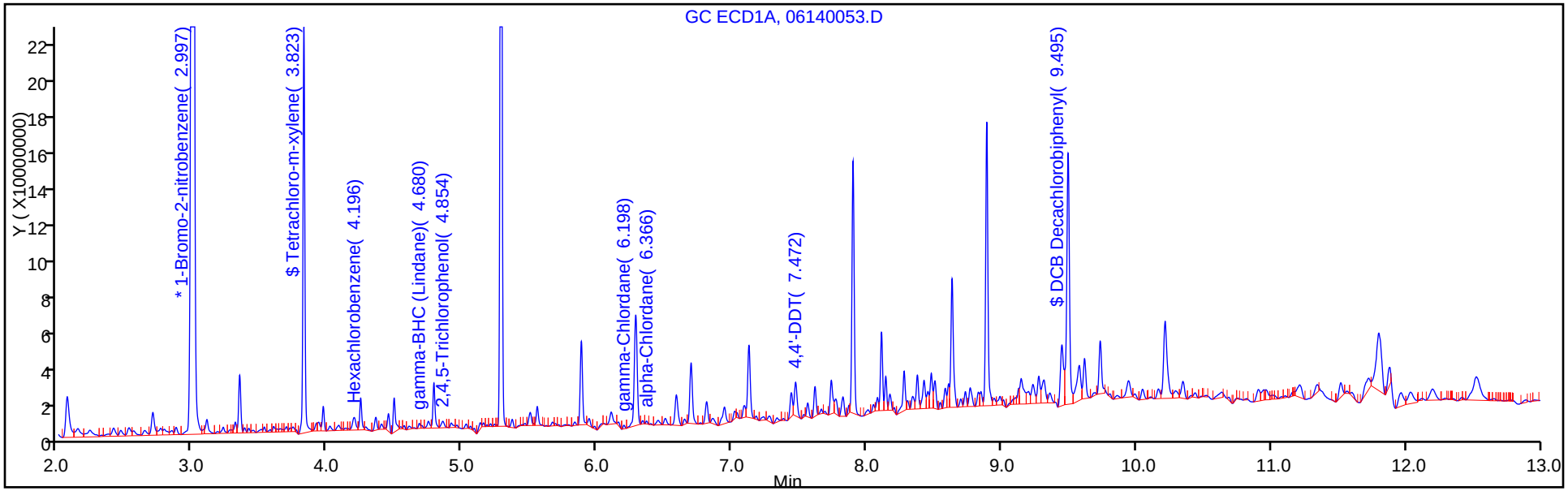
Report Date: 15-Jun-2017 15:11:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

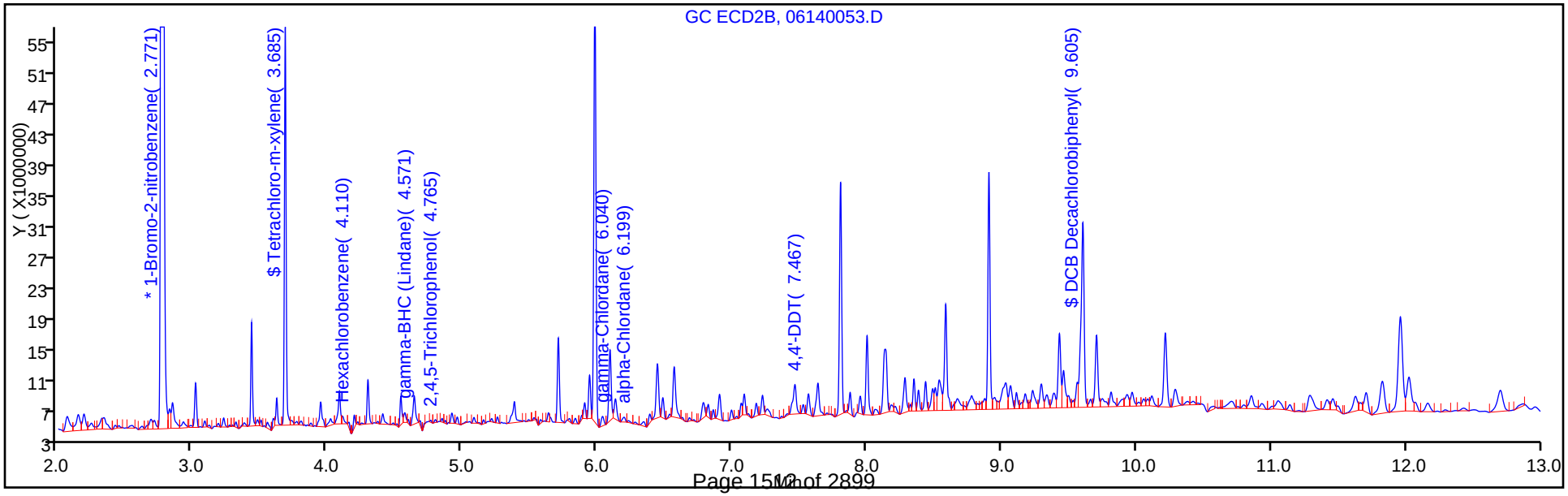
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Injection Date:	15-Jun-2017 06:49:14	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97803-B-8-A	Lab Sample ID:	280-97803-8	Worklist Smp#:	53
Client ID:	SS025-SS04				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	47
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140053.D				
Lims ID:	280-97803-B-8-A				
Client ID:	SS025-SS04				
Sample Type:	Client				
Inject. Date:	15-Jun-2017 06:49:14	ALS Bottle#:	47	Worklist Smp#:	53
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-B-8-A				
Misc. Info.:	280-0059760-053				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	15-Jun-2017 13:59:31	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK017				
First Level Reviewer: wellsd		Date:	15-Jun-2017 13:56:03		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	13.2	66.02
$ 41 DCB Decachlorobiphenyl	20.0	17.1	85.39

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	14.9	74.65
$ 41 DCB Decachlorobiphenyl	20.0	21.1	105.31

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB04(0-2) | Lab Sample ID: 280-97803-9

Matrix: Solid | Lab File ID: 06140037.D

Analysis Method: 8081B | Date Collected: 05/31/2017 14:10

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 30.7(g) | Date Analyzed: 06/15/2017 02:19

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 17.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377328 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	2.0	U	2.0	2.0	0.65
72-55-9	4,4'-DDE	0.80	U	2.0	0.80	0.28
50-29-3	4,4'-DDT	2.0	U	2.4	2.0	0.70
309-00-2	Aldrin	0.80	U	2.0	0.80	0.30
319-84-6	alpha-BHC	0.80	U	2.0	0.80	0.25
5103-71-9	alpha-Chlordane	0.80	U	2.0	0.80	0.38
319-85-7	beta-BHC	2.0	U	2.0	2.0	0.79
319-86-8	delta-BHC	1.2	U	2.0	1.2	0.48
60-57-1	Dieldrin	0.80	U	2.0	0.80	0.25
959-98-8	Endosulfan I	0.80	U	2.0	0.80	0.21
33213-65-9	Endosulfan II	0.80	U	2.0	0.80	0.34
1031-07-8	Endosulfan sulfate	0.80	U	2.0	0.80	0.33
72-20-8	Endrin	0.80	U	2.0	0.80	0.36
7421-93-4	Endrin aldehyde	0.80	U	2.0	0.80	0.20
58-89-9	gamma-BHC (Lindane)	1.2	U	2.0	1.2	0.55
5103-74-2	gamma-Chlordane	0.80	U	2.0	0.80	0.32
76-44-8	Heptachlor	0.80	U	2.0	0.80	0.25
1024-57-3	Heptachlor epoxide	1.2	U	2.0	1.2	0.51
72-43-5	Methoxychlor	1.2	U	3.9	1.2	0.53
8001-35-2	Toxaphene	39	U	200	39	19

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	82		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	85		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140037.D
Lims ID: 280-97803-B-9-A
Client ID: SS025-SB04(0-2)
Sample Type: Client
Inject. Date: 15-Jun-2017 02:19:18 ALS Bottle#: 31 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-B-9-A
Misc. Info.: 280-0059760-037
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:58:30 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: wellsd Date: 15-Jun-2017 13:48:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1		1.000			ND	
2		0.000				
* 2 1-Bromo-2-nitrobenzene						
1	2.998	2.997	0.001	2193781641	150.0	
2	2.771	2.771	0.000	467372567	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.823	3.824	-0.001	281183429	16.9	
2	3.685	3.684	0.001	58827343	17.9	
					RPD = 5.56	
5 Hexachlorobenzene						
1		4.204			ND	
2		4.110				
6 Diallate						
1		4.222			ND	
2		4.062				
7 Propachlor						
1		4.365			ND	
2		3.977				
8 alpha-BHC						
1		4.372			ND	
2		4.248				
9 gamma-BHC (Lindane)						
1		4.680			ND	
2		4.573				
10 beta-BHC						
1		4.765			ND	
2		4.654				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
11 2,4,5-Trichlorophenol						
1	4.843	4.861	-0.018	3975899	NC	
2	4.789	4.772	0.017	204771	NC	
					RPD = 0.00	
12 delta-BHC						
1		4.939			ND	
2		4.928				
14 Chlordane (technical)						
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
13 Technical Chlordane						
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
15 Heptachlor						
1	5.154	5.149	0.005	1414587	0.2022	
2	4.986	4.984	0.002	124162	-0.4848	
					RPD = -486.05	
16 Aldrin						
1		5.435			ND	
2		5.291				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.609			ND	
1		6.929				
1		7.192				
1		7.697				
1		8.140				
2		6.119				
2		7.168				
2		7.311				
2		7.600				
2		8.122				
17 Chlorpyrifos						
1		5.669			ND	
2		5.518				
18 Isodrin						
1		5.764			ND	
2		5.654				
19 Dicofol						
1		5.806			ND	
2		5.620				
20 2,4'-DDE						
1		6.045			ND	
2		6.047				
21 Heptachlor epoxide						
1		6.059			ND	
2		5.837				
22 gamma-Chlordane						
1	6.200	6.202	-0.002	215055	0.3132	
2	6.036	6.039	-0.003	219179	-0.5008	
					RPD = -867.74	
23 alpha-Chlordane						
1	6.364	6.363	0.001	649916	0.2372	
2	6.205	6.207	-0.002	115526	-0.6540	
					RPD = -427.63	
24 4,4'-DDE						
1		6.459			ND	
2		6.424				
25 Endosulfan I						
1		6.534			ND	
2		6.270				
26 2,4'-DDD						
1		6.668			ND	
2		6.671				
27 Dieldrin						
1		6.819			ND	
2		6.609				
29 2,4'-DDT						
1		6.967			ND	
2		7.032				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
30 Endrin						
1	7.088	7.088	0.000	1621698	0.2417	
2	6.969	6.969	0.000	101364	-0.4441	
					RPD = -677.50	
31 Kepone						
1		7.136			ND	
2		7.096				
32 4,4'-DDD						
1		7.163			ND	
2		7.121				
33 Chlorobenzilate						
1		7.179			ND	
2		6.981				
34 Endosulfan II						
1	7.335	7.337	-0.002	1121367	0.0101	
2	7.217	7.214	0.003	170297	-0.8130	
					RPD = -205.01	
35 4,4'-DDT						
1	7.472	7.474	-0.002	1080023	0.6070	
2	7.470	7.469	0.001	335962	-0.2341	
					RPD = 451.12	
36 Endrin aldehyde						
1	7.783	7.791	-0.008	599325	0.006707	
2	7.587	7.589	-0.002	127945	-0.7681	
					RPD = -203.52	
37 Methoxychlor						
1		7.986			ND	
2		8.192				
38 Mirex						
1		8.132			ND	
2		8.363				
39 Endosulfan sulfate						
1	8.238	8.239	-0.001	1389983	0.2549	
2	7.880	7.883	-0.003	122933	-0.8336	
					RPD = -376.17	
40 Endrin ketone						
1	8.517	8.519	-0.002	753541	0.1586	
2	8.409	8.410	-0.001	165606	-0.6531	
					RPD = -328.29	
$ 41 DCB Decachlorobiphenyl						
1	9.495	9.497	-0.002	188710363	16.4	
2	9.605	9.606	-0.001	34103984	16.8	
					RPD = 2.74	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.271			ND	
2		11.328				
S 3 Endosulfan, Total						
1					0.2650	
2					-1.65	
					RPD = -276.71	

LOD = 0.002000

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

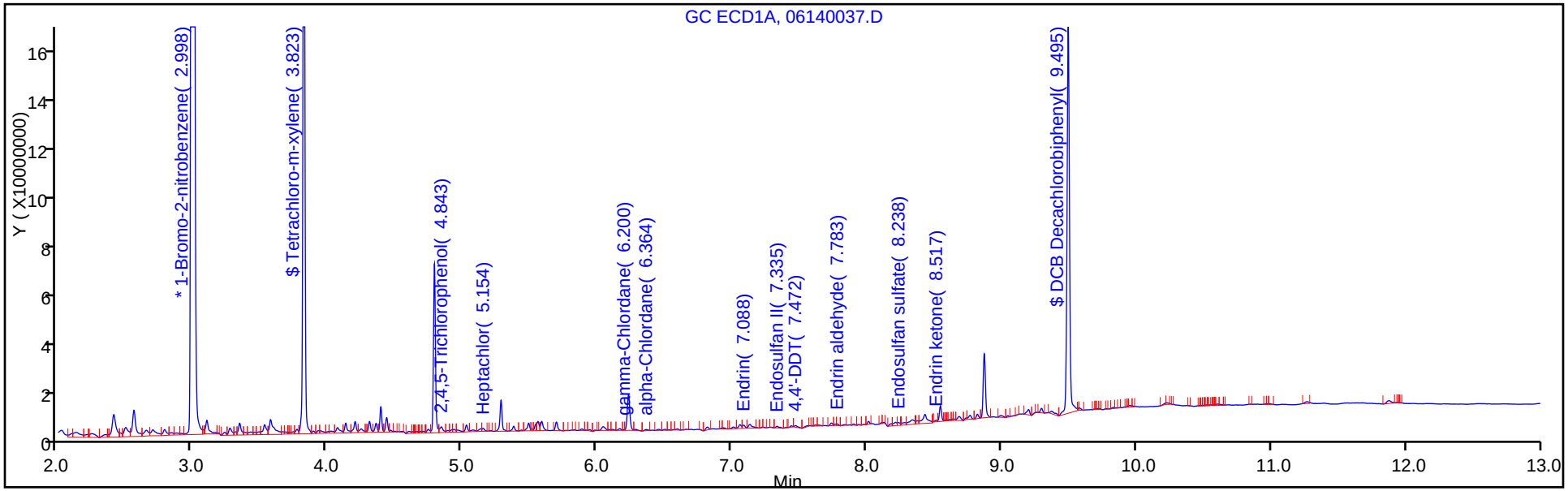
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TestAmerica Denver

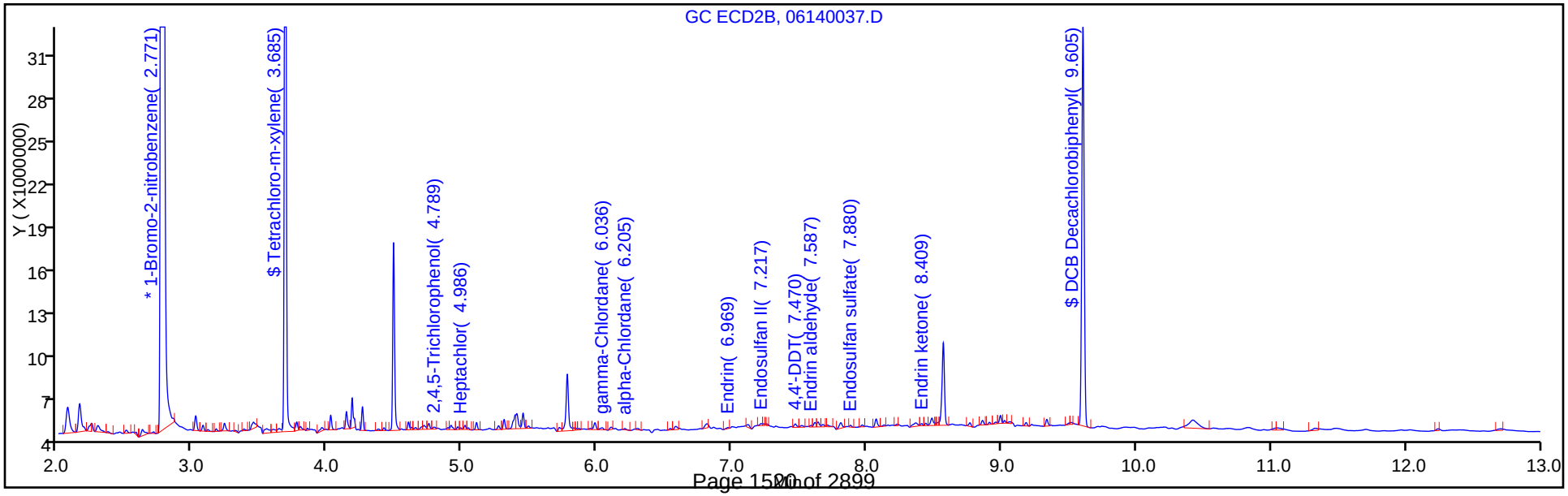
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Injection Date:	15-Jun-2017 02:19:18	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97803-B-9-A	Lab Sample ID:	280-97803-9	Worklist Smp#:	37
Client ID:	SS025-SB04(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140037.D				
Lims ID:	280-97803-B-9-A				
Client ID:	SS025-SB04(0-2)				
Sample Type:	Client				
Inject. Date:	15-Jun-2017 02:19:18	ALS Bottle#:	31	Worklist Smp#:	37
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-B-9-A				
Misc. Info.:	280-0059760-037				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	15-Jun-2017 13:58:30	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: wellsd		Date:	15-Jun-2017 13:48:47		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	16.9	84.68
$ 41 DCB Decachlorobiphenyl	20.0	16.4	81.80

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	17.9	89.52
$ 41 DCB Decachlorobiphenyl	20.0	16.8	84.07

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS05 | Lab Sample ID: 280-97803-10

Matrix: Solid | Lab File ID: 06140054.D

Analysis Method: 8081B | Date Collected: 05/31/2017 14:30

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 31.2(g) | Date Analyzed: 06/15/2017 07:06

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 13.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377328 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.8	U	1.9	1.8	0.60
72-55-9	4,4'-DDE	0.74	U	1.9	0.74	0.26
50-29-3	4,4'-DDT	1.8	U	2.2	1.8	0.65
309-00-2	Aldrin	0.74	U	1.9	0.74	0.28
319-84-6	alpha-BHC	0.74	U	1.9	0.74	0.24
5103-71-9	alpha-Chlordane	0.74	U	1.9	0.74	0.36
319-85-7	beta-BHC	1.8	U	1.9	1.8	0.74
319-86-8	delta-BHC	1.1	U	1.9	1.1	0.44
60-57-1	Dieldrin	0.74	U	1.9	0.74	0.23
959-98-8	Endosulfan I	0.74	U	1.9	0.74	0.19
33213-65-9	Endosulfan II	0.74	U	1.9	0.74	0.32
1031-07-8	Endosulfan sulfate	0.74	U	1.9	0.74	0.31
72-20-8	Endrin	0.74	U	1.9	0.74	0.34
7421-93-4	Endrin aldehyde	0.74	U	1.9	0.74	0.19
58-89-9	gamma-BHC (Lindane)	1.1	U	1.9	1.1	0.51
5103-74-2	gamma-Chlordane	0.74	U	1.9	0.74	0.29
76-44-8	Heptachlor	0.74	U	1.9	0.74	0.24
1024-57-3	Heptachlor epoxide	1.1	U	1.9	1.1	0.47
72-43-5	Methoxychlor	1.1	U	3.7	1.1	0.50
8001-35-2	Toxaphene	37	U	190	37	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	77		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	64		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140054.D
Lims ID: 280-97803-C-10-A
Client ID: SS025-SS05
Sample Type: Client
Inject. Date: 15-Jun-2017 07:06:04 ALS Bottle#: 48 Worklist Smp#: 54
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-C-10-A
Misc. Info.: 280-0059760-054
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:59:31 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: wellsd Date: 15-Jun-2017 13:56:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					1.12	
2					-0.0398	
					RPD = 214.66	
LOD = 0.002000						
* 2 1-Bromo-2-nitrobenzene						
1	2.996	2.997	-0.001	2157783935	150.0	
2	2.770	2.771	-0.001	455661501	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.822	3.824	-0.002	208395044	12.8	
2	3.684	3.684	0.000	45949356	14.2	
					RPD = 10.66	
5 Hexachlorobenzene						
1	4.201	4.204	-0.003	8705991	0.4275	
2	4.108	4.110	-0.002	288660	-0.8037	
					RPD = -654.57	
6 Diallate						
1		4.222			ND	
2		4.062				
7 Propachlor						
1		4.365			ND	
2		3.977				
8 alpha-BHC						
1		4.372			ND	
2		4.248				
9 gamma-BHC (Lindane)						
1	4.677	4.680	-0.003	127486	0.5721	
2	4.564	4.573	-0.009	162315	-0.1698	
					RPD = 368.90	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.765			ND	
2		4.654				
11 2,4,5-Trichlorophenol						
1	4.842	4.861	-0.019	642256	NC	
2	4.764	4.772	-0.008	777162	NC	
					RPD = 0.00	
12 delta-BHC						
1	4.935	4.939	-0.004	520656	0.5525	
2	4.921	4.928	-0.007	1089452	0.1301	
					RPD = 123.78	
14 Chlordane (technical)						
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
13 Technical Chlordane						
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
15 Heptachlor						
1		5.149			ND	
2		4.984				
16 Aldrin						
1		5.435			ND	
2		5.291				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.609			ND	
1		6.929				
1		7.192				
1		7.697				
1		8.140				
2		6.119				
2		7.168				
2		7.311				
2		7.600				
2		8.122				
17 Chlorpyrifos						
1	5.667	5.669	-0.002	2359623	-1.45	
2	5.528	5.518	0.010	219466	-2.56	
					RPD = -55.57	
LOD = 0.002000						
18 Isodrin						
1		5.764			ND	
2		5.654				
19 Dicofol						
1		5.806			ND	
2		5.620				
20 2,4'-DDE						
1		6.045			ND	
2		6.047				
21 Heptachlor epoxide						
1	6.057	6.059	-0.002	517716	-0.0617	
2	5.842	5.837	0.005	160662	-0.6612	
					RPD = -165.85	
LOD = 0.002000						
22 gamma-Chlordane						
1	6.198	6.202	-0.004	3435676	0.4516	
2	6.039	6.039	0.000	2026102	0.0284	
					RPD = 176.35	
23 alpha-Chlordane						
1	6.364	6.363	0.001	3259175	0.3551	
2	6.204	6.207	-0.003	1049566	-0.3661	
					RPD = -13183.98	
24 4,4'-DDE						
1		6.459			ND	
2		6.424				
25 Endosulfan I						
1		6.534			ND	
2		6.270				
26 2,4'-DDD						
1		6.668			ND	
2		6.671				
27 Dieldrin						
1		6.819			ND	
2		6.609				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
29 2,4'-DDT						
1		6.967			ND	
2		7.032				
30 Endrin						
1		7.088			ND	
2		6.969				
31 Kepone						
1		7.136			ND	
2		7.096				
32 4,4'-DDD						
1		7.163			ND	
2		7.121				
33 Chlorobenzilate						
1		7.179			ND	
2		6.981				
34 Endosulfan II						
1		7.337			ND	
2		7.214				
35 4,4'-DDT						
1	7.472	7.474	-0.002	13356411	1.27	
2	7.469	7.469	0.000	4674471	1.45	
					RPD = 13.86	
36 Endrin aldehyde						
1		7.791			ND	
2		7.589				
37 Methoxychlor						
1		7.986			ND	
2		8.192				
38 Mirex						
1		8.132			ND	
2		8.363				
39 Endosulfan sulfate						
1		8.239			ND	
2		7.883				
40 Endrin ketone						
1		8.519			ND	
2		8.410				
$ 41 DCB Decachlorobiphenyl						
1	9.494	9.497	-0.003	175454086	15.4	
2	9.605	9.606	-0.001	36228783	18.4	
					RPD = 17.61	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.271			ND	
2		11.328				
S 3 Endosulfan, Total						
1		0.000			ND	
2		0.000				

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

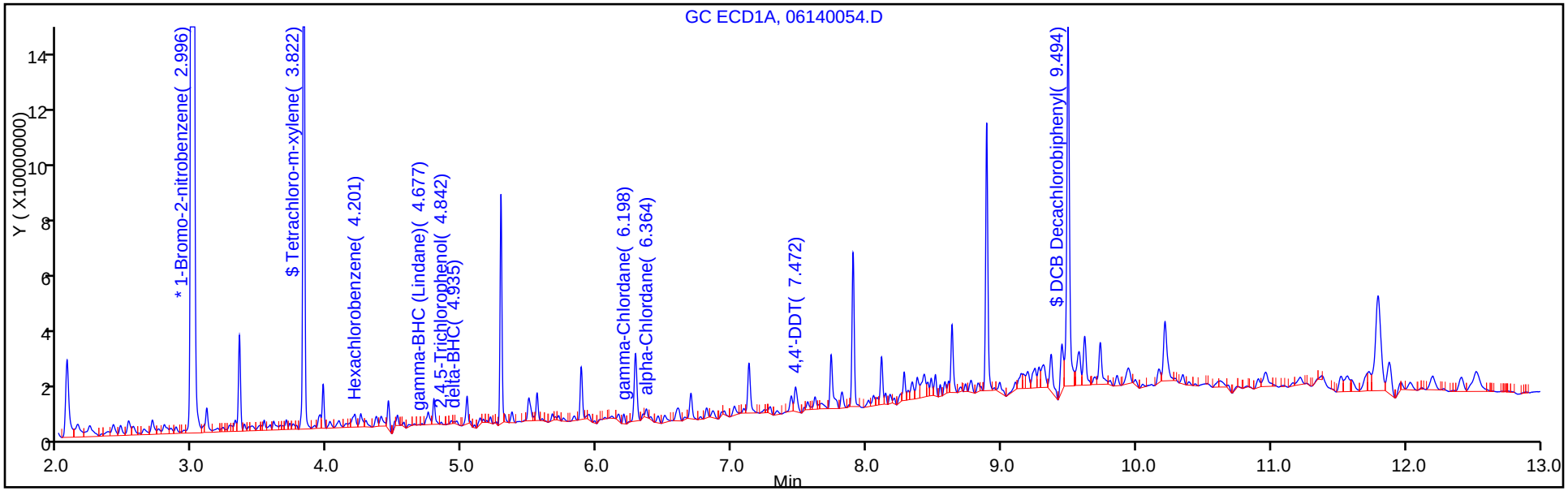
Report Date: 15-Jun-2017 15:11:28 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

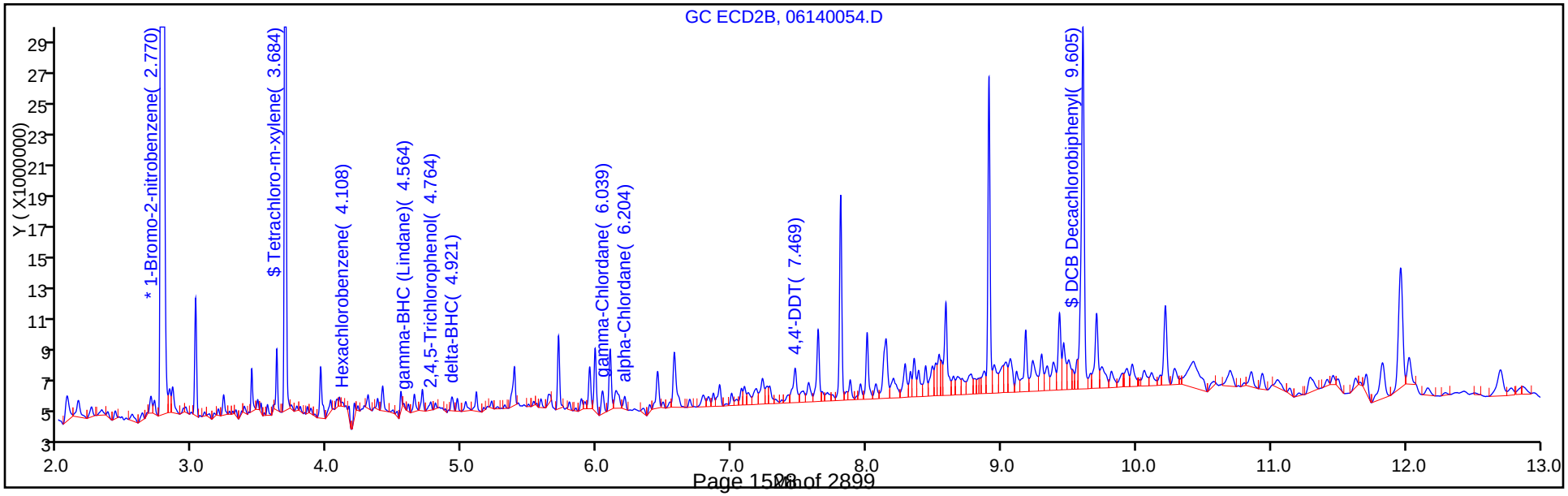
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140054.D

Injection Date:	15-Jun-2017 07:06:04	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97803-C-10-A	Lab Sample ID:	280-97803-10	Worklist Smp#:	54
Client ID:	SS025-SS05				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	48
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140054.D				
Lims ID:	280-97803-C-10-A				
Client ID:	SS025-SS05				
Sample Type:	Client				
Inject. Date:	15-Jun-2017 07:06:04	ALS Bottle#:	48	Worklist Smp#:	54
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-C-10-A				
Misc. Info.:	280-0059760-054				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	15-Jun-2017 13:59:31	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK017				
First Level Reviewer: wellsd		Date:	15-Jun-2017 13:56:13		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	12.8	63.93
$ 41 DCB Decachlorobiphenyl	20.0	15.4	77.22

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	14.2	71.12
$ 41 DCB Decachlorobiphenyl	20.0	18.4	92.13

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB05(0-2) | Lab Sample ID: 280-97803-11

Matrix: Solid | Lab File ID: 06140055.D

Analysis Method: 8081B | Date Collected: 05/31/2017 14:40

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 30.7(g) | Date Analyzed: 06/15/2017 07:22

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 14.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377328 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.9	U	1.9	1.9	0.62
72-55-9	4,4'-DDE	0.76	U	1.9	0.76	0.27
50-29-3	4,4'-DDT	1.9	U	2.3	1.9	0.67
309-00-2	Aldrin	0.76	U	1.9	0.76	0.29
319-84-6	alpha-BHC	0.76	U	1.9	0.76	0.24
5103-71-9	alpha-Chlordane	0.76	U	1.9	0.76	0.37
319-85-7	beta-BHC	1.9	U	1.9	1.9	0.76
319-86-8	delta-BHC	1.1	U	1.9	1.1	0.46
60-57-1	Dieldrin	0.76	U	1.9	0.76	0.24
959-98-8	Endosulfan I	0.76	U	1.9	0.76	0.20
33213-65-9	Endosulfan II	0.76	U	1.9	0.76	0.33
1031-07-8	Endosulfan sulfate	0.76	U	1.9	0.76	0.31
72-20-8	Endrin	0.76	U	1.9	0.76	0.35
7421-93-4	Endrin aldehyde	0.76	U	1.9	0.76	0.19
58-89-9	gamma-BHC (Lindane)	1.1	U	1.9	1.1	0.53
5103-74-2	gamma-Chlordane	0.76	U	1.9	0.76	0.30
76-44-8	Heptachlor	0.76	U	1.9	0.76	0.24
1024-57-3	Heptachlor epoxide	1.1	U	1.9	1.1	0.49
72-43-5	Methoxychlor	1.1	U	3.8	1.1	0.51
8001-35-2	Toxaphene	38	U	190	38	18

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	82		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	78		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140055.D
Lims ID: 280-97803-C-11-A
Client ID: SS025-SB05(0-2)
Sample Type: Client
Inject. Date: 15-Jun-2017 07:22:53 ALS Bottle#: 49 Worklist Smp#: 55
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-C-11-A
Misc. Info.: 280-0059760-055
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:59:31 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: wellsd Date: 15-Jun-2017 13:56:22

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1		1.000			ND	
2		0.000				
* 2 1-Bromo-2-nitrobenzene						
1	2.997	2.997	0.000	2175679730	150.0	
2	2.770	2.771	-0.001	467249458	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.823	3.824	-0.001	255605499	15.5	
2	3.684	3.684	0.000	54353912	16.5	
					RPD = 6.06	
5 Hexachlorobenzene						
1		4.204			ND	
2		4.110				
6 Diallate						
1		4.222			ND	
2		4.062				
7 Propachlor						
1	4.358	4.365	-0.007	1863370	-6.53	
2	3.986	3.977	0.009	150577	-8.46	
					RPD = -25.78	
LOD = 0.002000						
8 alpha-BHC						
1		4.372			ND	
2		4.248				
9 gamma-BHC (Lindane)						
1		4.680			ND	
2		4.573				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.765			ND	
2		4.654				
11 2,4,5-Trichlorophenol						
1	4.842	4.861	-0.019	1780884	NC	
2	4.786	4.772	0.014	175864	NC	
					RPD = 0.00	
12 delta-BHC						
1		4.939			ND	
2		4.928				
14 Chlordane (technical)						
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
13 Technical Chlordane						
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
15 Heptachlor						
1		5.149			ND	
2		4.984				
16 Aldrin						
1		5.435			ND	
2		5.291				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.609			ND	
1		6.929				
1		7.192				
1		7.697				
1		8.140				
2		6.119				
2		7.168				
2		7.311				
2		7.600				
2		8.122				
17 Chlorpyrifos						
1		5.669			ND	
2		5.518				
18 Isodrin						
1		5.764			ND	
2		5.654				
19 Dicofol						
1		5.806			ND	
2		5.620				
20 2,4'-DDE						
1		6.045			ND	
2		6.047				
21 Heptachlor epoxide						
1		6.059			ND	
2		5.837				
22 gamma-Chlordane						
1	6.199	6.202	-0.003	180370	0.3118	
2	6.037	6.039	-0.002	257506	-0.4898	
					RPD = -900.31	
23 alpha-Chlordane						
1	6.354	6.363	-0.009	250778	0.2196	
2	6.204	6.207	-0.003	131465	-0.6492	
					RPD = -404.48	
24 4,4'-DDE						
1		6.459			ND	
2		6.424				
25 Endosulfan I						
1		6.534			ND	
2		6.270				
26 2,4'-DDD						
1		6.668			ND	
2		6.671				
27 Dieldrin						
1		6.819			ND	
2		6.609				
29 2,4'-DDT						
1		6.967			ND	
2		7.032				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
30 Endrin						
1		7.088			ND	
2		6.969				
31 Kepone						
1	7.129	7.136	-0.007	6681053	1.36	
2	7.092	7.096	-0.004	796408	-0.8728	
					RPD = 911.32	
32 4,4'-DDD						
1		7.163			ND	
2		7.121				
33 Chlorobenzilate						
1		7.179			ND	
2		6.981				
34 Endosulfan II						
1		7.337			ND	
2		7.214				
35 4,4'-DDT						
1	7.471	7.474	-0.003	4338957	0.7806	
2	7.468	7.469	-0.001	569233	-0.1457	
					RPD = 291.81	
36 Endrin aldehyde						
1		7.791			ND	
2		7.589				
37 Methoxychlor						
1		7.986			ND	
2		8.192				
38 Mirex						
1		8.132			ND	
2		8.363				
39 Endosulfan sulfate						
1		8.239			ND	
2		7.883				
40 Endrin ketone						
1		8.519			ND	
2		8.410				
$ 41 DCB Decachlorobiphenyl						
1	9.494	9.497	-0.003	187544771	16.4	
2	9.604	9.606	-0.002	30999019	15.2	
					RPD = 7.69	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.271			ND	
2		11.328				
S 3 Endosulfan, Total						
1		0.000			ND	
2		0.000				

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

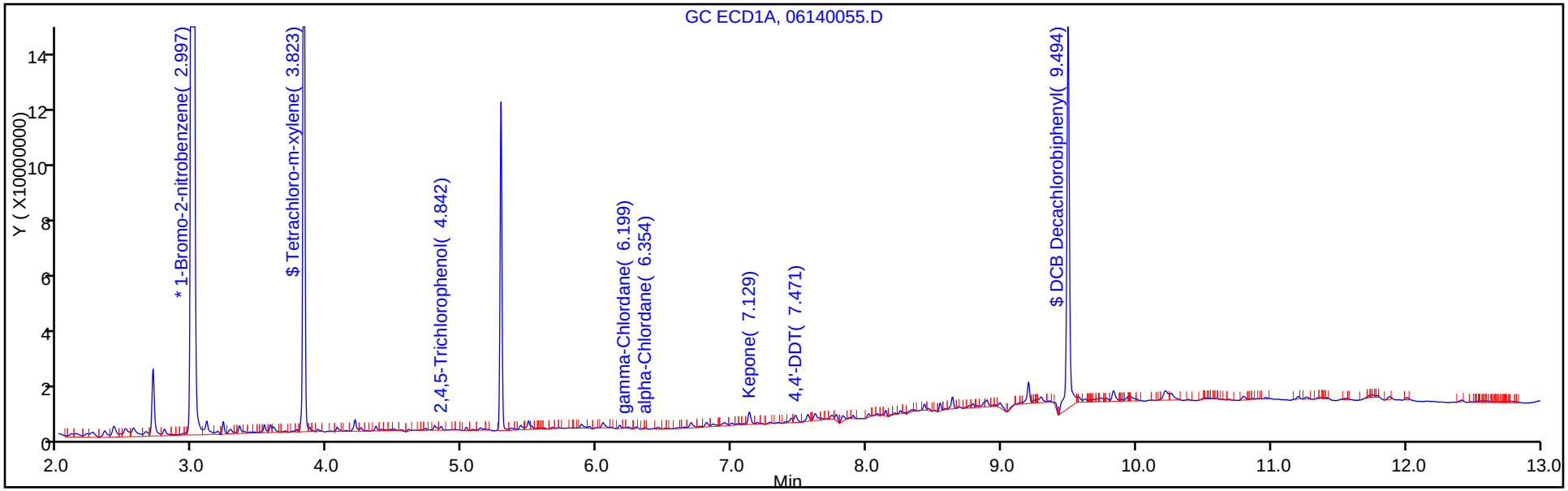
Report Date: 15-Jun-2017 15:11:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

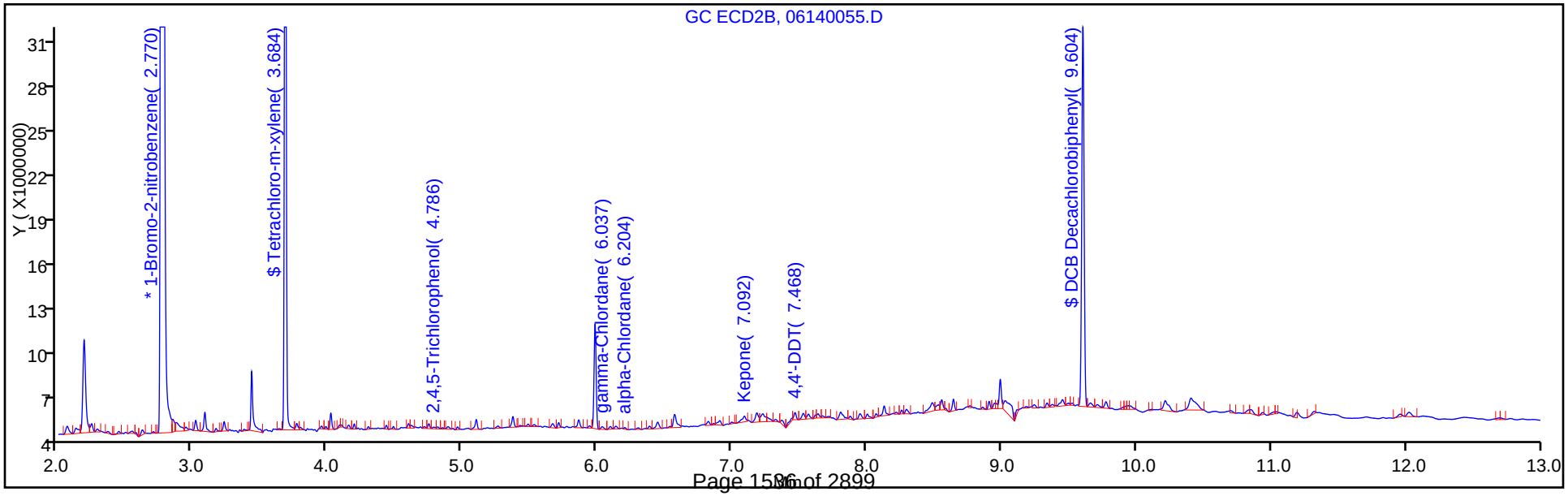
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140055.D

Injection Date:	15-Jun-2017 07:22:53	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97803-C-11-A	Lab Sample ID:	280-97803-11	Worklist Smp#:	55
Client ID:	SS025-SB05(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	49
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140055.D				
Lims ID:	280-97803-C-11-A				
Client ID:	SS025-SB05(0-2)				
Sample Type:	Client				
Inject. Date:	15-Jun-2017 07:22:53	ALS Bottle#:	49	Worklist Smp#:	55
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-C-11-A				
Misc. Info.:	280-0059760-055				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	15-Jun-2017 13:59:31	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK017				
First Level Reviewer: wellsd		Date:	15-Jun-2017 13:56:22		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	15.5	77.66
$ 41 DCB Decachlorobiphenyl	20.0	16.4	81.97

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	16.5	82.51
$ 41 DCB Decachlorobiphenyl	20.0	15.2	75.90

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB05(2-4) | Lab Sample ID: 280-97803-12

Matrix: Solid | Lab File ID: 06140040.D

Analysis Method: 8081B | Date Collected: 05/31/2017 15:00

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 31.1(g) | Date Analyzed: 06/15/2017 03:09

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 9.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377328 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.8	U	1.8	1.8	0.58
72-55-9	4,4'-DDE	0.72	U	1.8	0.72	0.25
50-29-3	4,4'-DDT	1.8	U	2.1	1.8	0.63
309-00-2	Aldrin	0.72	U	1.8	0.72	0.27
319-84-6	alpha-BHC	0.72	U	1.8	0.72	0.23
5103-71-9	alpha-Chlordane	0.72	U	1.8	0.72	0.35
319-85-7	beta-BHC	1.8	U	1.8	1.8	0.71
319-86-8	delta-BHC	1.1	U	1.8	1.1	0.43
60-57-1	Dieldrin	0.72	U	1.8	0.72	0.22
959-98-8	Endosulfan I	0.72	U	1.8	0.72	0.19
33213-65-9	Endosulfan II	0.72	U	1.8	0.72	0.31
1031-07-8	Endosulfan sulfate	0.72	U	1.8	0.72	0.30
72-20-8	Endrin	0.72	U	1.8	0.72	0.33
7421-93-4	Endrin aldehyde	0.72	U	1.8	0.72	0.18
58-89-9	gamma-BHC (Lindane)	1.1	U	1.8	1.1	0.50
5103-74-2	gamma-Chlordane	0.72	U	1.8	0.72	0.28
76-44-8	Heptachlor	0.72	U	1.8	0.72	0.23
1024-57-3	Heptachlor epoxide	1.1	U	1.8	1.1	0.46
72-43-5	Methoxychlor	1.1	U	3.5	1.1	0.48
8001-35-2	Toxaphene	35	U	180	35	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	80		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	81		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140040.D
Lims ID: 280-97803-C-12-A
Client ID: SS025-SB05(2-4)
Sample Type: Client
Inject. Date: 15-Jun-2017 03:09:50 ALS Bottle#: 34 Worklist Smp#: 40
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-C-12-A
Misc. Info.: 280-0059760-040
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:58:30 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: wellsd Date: 15-Jun-2017 13:49:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1		1.000			ND	
2		0.000				
* 2 1-Bromo-2-nitrobenzene						
1	2.997	2.997	0.000	2190722746	150.0	
2	2.771	2.771	0.000	470320059	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.822	3.824	-0.002	269382969	16.3	
2	3.684	3.684	0.000	56314675	17.0	
					RPD = 4.52	
5 Hexachlorobenzene						
1	4.198	4.204	-0.006	7185595	0.3382	
2	4.107	4.110	-0.003	242994	-0.8203	
					RPD = -480.66	
6 Diallate						
1		4.222			ND	
2		4.062				
7 Propachlor						
1		4.365			ND	
2		3.977				
8 alpha-BHC						
1		4.372			ND	
2		4.248				
9 gamma-BHC (Lindane)						
1		4.680			ND	
2		4.573				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.765			ND	
2		4.654				
11 2,4,5-Trichlorophenol						
1		4.861			ND	
2		4.772				
12 delta-BHC						
1		4.939			ND	
2		4.928				
14 Chlordane (technical)						
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
13 Technical Chlordane						
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
15 Heptachlor						
1		5.149			ND	
2		4.984				
16 Aldrin						
1		5.435			ND	
2		5.291				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.609			ND	
1		6.929				
1		7.192				
1		7.697				
1		8.140				
2		6.119				
2		7.168				
2		7.311				
2		7.600				
2		8.122				
17 Chlorpyrifos						
1		5.669			ND	
2		5.518				
18 Isodrin						
1	5.756	5.764	-0.008	354680	0.0231	
2	5.664	5.654	0.010	206872	-0.5692	
					RPD = -216.90	
19 Dicofol						
1		5.806			ND	
2		5.620				
20 2,4'-DDE						
1		6.045			ND	
2		6.047				
21 Heptachlor epoxide						
1		6.059			ND	
2		5.837				
22 gamma-Chlordane						
1		6.202			ND	
2		6.039				
23 alpha-Chlordane						
1		6.363			ND	
2		6.207				
24 4,4'-DDE						
1	6.455	6.459	-0.004	4269911	0.5503	
2	6.424	6.424	0.000	436057	-0.3801	
					RPD = 1093.52	
25 Endosulfan I						
1		6.534			ND	
2		6.270				
26 2,4'-DDD						
1		6.668			ND	
2		6.671				
27 Dieldrin						
1		6.819			ND	
2		6.609				
29 2,4'-DDT						
1		6.967			ND	
2		7.032				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
30 Endrin						
1		7.088			ND	
2		6.969				
31 Kepone						
1	7.129	7.136	-0.007	16596528	2.61	
2	7.094	7.096	-0.002	243049	-1.32	
					RPD = 612.29	
32 4,4'-DDD						
1		7.163			ND	
2		7.121				
33 Chlorobenzilate						
1		7.179			ND	
2		6.981				
34 Endosulfan II						
1		7.337			ND	
2		7.214				
35 4,4'-DDT						
1	7.470	7.474	-0.004	6702500	0.9037	
2	7.468	7.469	-0.001	2082169	0.4221	
					RPD = 72.65	
36 Endrin aldehyde						
1		7.791			ND	
2		7.589				
37 Methoxychlor						
1		7.986			ND	
2		8.192				
38 Mirex						
1	8.142	8.132	0.010	6725318	0.2927	
2	8.359	8.363	-0.004	254322	0.1252	
					RPD = 80.18	
39 Endosulfan sulfate						
1		8.239			ND	
2		7.883				
40 Endrin ketone						
1		8.519			ND	
2		8.410				
$ 41 DCB Decachlorobiphenyl						
1	9.496	9.497	-0.001	184920452	16.0	
2	9.606	9.606	0.000	33826582	16.6	
					RPD = 3.13	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.271			ND	
2		11.328				
S 3 Endosulfan, Total						
1		0.000			ND	
2		0.000				

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

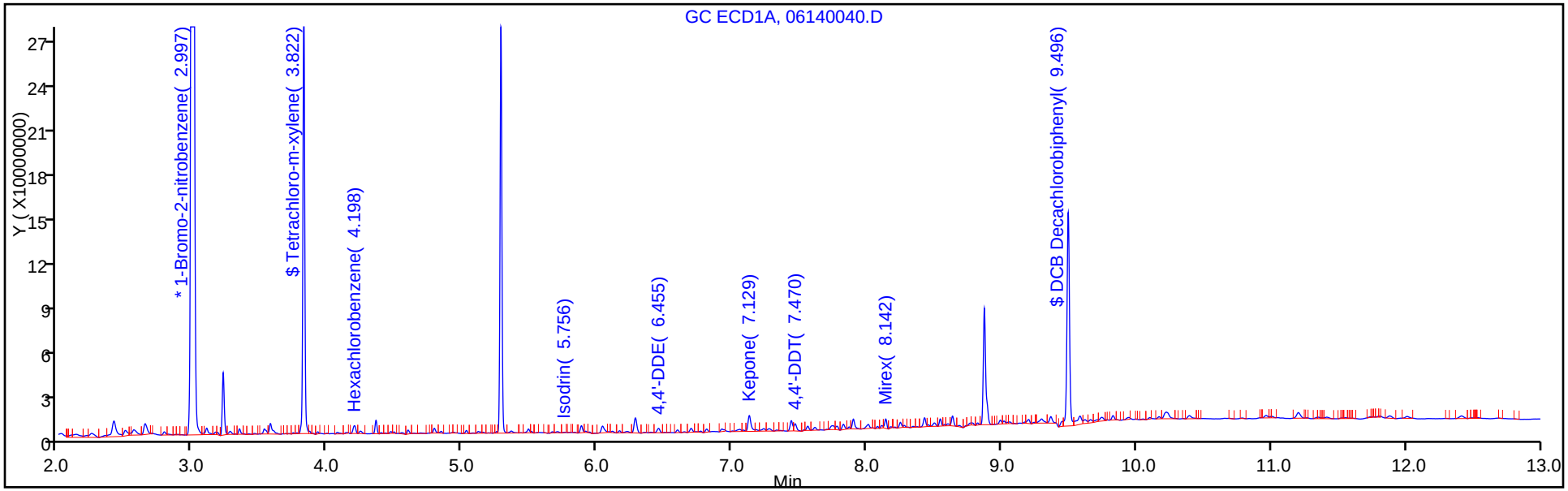
Report Date: 15-Jun-2017 13:58:50 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

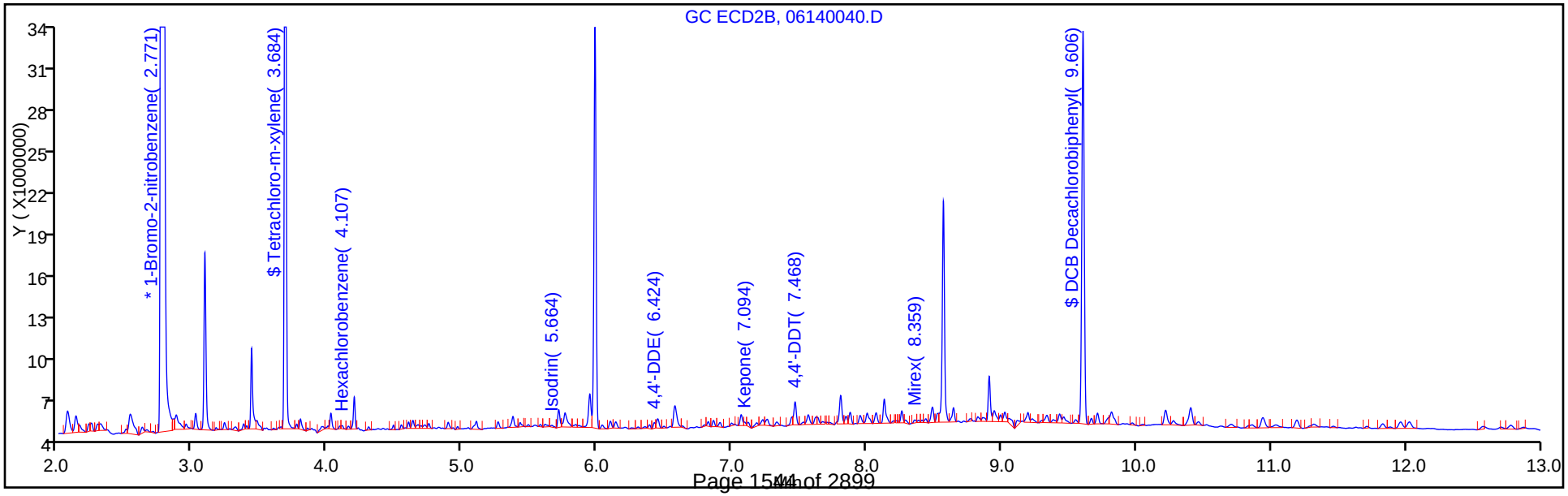
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140040.D

Injection Date:	15-Jun-2017 03:09:50	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97803-C-12-A	Lab Sample ID:	280-97803-12	Worklist Smp#:	40
Client ID:	SS025-SB05(2-4)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140040.D				
Lims ID:	280-97803-C-12-A				
Client ID:	SS025-SB05(2-4)				
Sample Type:	Client				
Inject. Date:	15-Jun-2017 03:09:50	ALS Bottle#:	34	Worklist Smp#:	40
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-C-12-A				
Misc. Info.:	280-0059760-040				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	15-Jun-2017 13:58:30	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: wellsd		Date:	15-Jun-2017 13:49:04		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	16.3	81.26
$ 41 DCB Decachlorobiphenyl	20.0	16.0	80.23

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	17.0	85.01
$ 41 DCB Decachlorobiphenyl	20.0	16.6	82.78

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS06 | Lab Sample ID: 280-97803-13

Matrix: Solid | Lab File ID: 06140057.D

Analysis Method: 8081B | Date Collected: 05/31/2017 15:40

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 32.0(g) | Date Analyzed: 06/15/2017 07:56

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 12.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377328 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.8	U	1.8	1.8	0.59
72-55-9	4,4'-DDE	1.2	J	1.8	0.72	0.26
50-29-3	4,4'-DDT	1.2	J	2.2	1.8	0.64
309-00-2	Aldrin	0.72	U	1.8	0.72	0.27
319-84-6	alpha-BHC	0.72	U	1.8	0.72	0.23
5103-71-9	alpha-Chlordane	0.72	U	1.8	0.72	0.35
319-85-7	beta-BHC	1.8	U	1.8	1.8	0.71
319-86-8	delta-BHC	1.1	U	1.8	1.1	0.43
60-57-1	Dieldrin	0.72	U	1.8	0.72	0.23
959-98-8	Endosulfan I	0.72	U	1.8	0.72	0.19
33213-65-9	Endosulfan II	0.72	U	1.8	0.72	0.31
1031-07-8	Endosulfan sulfate	0.72	U	1.8	0.72	0.30
72-20-8	Endrin	0.72	U	1.8	0.72	0.33
7421-93-4	Endrin aldehyde	0.72	U	1.8	0.72	0.18
58-89-9	gamma-BHC (Lindane)	1.1	U	1.8	1.1	0.50
5103-74-2	gamma-Chlordane	0.72	U	1.8	0.72	0.29
76-44-8	Heptachlor	0.72	U	1.8	0.72	0.23
1024-57-3	Heptachlor epoxide	1.1	U	1.8	1.1	0.46
72-43-5	Methoxychlor	1.1	U	3.6	1.1	0.48
8001-35-2	Toxaphene	36	U	180	36	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	72		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	69		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140057.D
Lims ID: 280-97803-B-13-A
Client ID: SS025-SS06
Sample Type: Client
Inject. Date: 15-Jun-2017 07:56:45 ALS Bottle#: 51 Worklist Smp#: 57
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-B-13-A
Misc. Info.: 280-0059760-057
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:59:31 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: wellsd Date: 15-Jun-2017 13:56:34

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					1.45	
2					0.1817	
					RPD = 155.40	
* 2 1-Bromo-2-nitrobenzene						
1	2.996	2.997	0.000	2181460215	150.0	
2	2.770	2.771	-0.001	452956820	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.822	3.824	-0.002	227869936	13.8	
2	3.684	3.684	0.000	49894946	15.6	
					RPD = 12.06	
5 Hexachlorobenzene						
1	4.201	4.204	-0.003	7040814	0.3320	
2	4.110	4.110	0.000	752560	-0.6575	
					RPD = -608.15	
6 Diallate						
1		4.222			ND	
2		4.062				
7 Propachlor						
1		4.365			ND	
2		3.977				
8 alpha-BHC						
1		4.372			ND	
2		4.248				
9 gamma-BHC (Lindane)						
1	4.671	4.680	-0.009	140262	0.5725	
2	4.565	4.573	-0.008	1090712	0.0602	
					RPD = 161.93	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.765			ND	
2		4.654				
11 2,4,5-Trichlorophenol						
1	4.843	4.861	-0.018	8816334	NC	
2	4.766	4.772	-0.006	199520	NC	
					RPD = 0.00	
12 delta-BHC						
1	4.937	4.939	-0.002	9558134	0.8755	
2	4.921	4.928	-0.007	1047233	0.1215	
					RPD = 151.25	
14 Chlordane (technical)						
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
13 Technical Chlordane						
1		5.069			ND	
1		5.564				
1		6.201				
1		6.342				
1		7.262				
2		4.848				
2		5.434				
2		6.039				
2		6.206				
2		7.264				
15 Heptachlor						
1		5.149			ND	
2		4.984				
16 Aldrin						
1		5.435			ND	
2		5.291				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.609			ND	
1		6.929				
1		7.192				
1		7.697				
1		8.140				
2		6.119				
2		7.168				
2		7.311				
2		7.600				
2		8.122				
17 Chlorpyrifos						
1		5.669			ND	
2		5.518				
18 Isodrin						
1		5.764			ND	
2		5.654				
19 Dicofol						
1		5.806			ND	
2		5.620				
20 2,4'-DDE						
1		6.045			ND	
2		6.047				
21 Heptachlor epoxide						
1		6.059			ND	
2		5.837				
22 gamma-Chlordane						
1	6.195	6.202	-0.007	494956	0.3251	
2	6.041	6.039	0.002	1020409	-0.2635	
					RPD = 1909.38	
23 alpha-Chlordane						
1		6.363			ND	
2		6.207				
24 4,4'-DDE						
1	6.456	6.459	-0.003	67917475	3.30	
2	6.422	6.424	-0.002	17602560	4.76	
					RPD = 36.22	
25 Endosulfan I						
1		6.534			ND	
2		6.270				
26 2,4'-DDD						
1		6.668			ND	
2		6.671				
27 Dieldrin						
1	6.814	6.819	-0.005	5902952	0.3719	
2	6.604	6.609	-0.005	872902	-0.3168	
					RPD = 2499.49	
29 2,4'-DDT						
1		6.967			ND	
2		7.032				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
30 Endrin						
1		7.088			ND	
2		6.969				
31 Kepone						
1	7.127	7.136	-0.009	20424456	3.10	
2	7.092	7.096	-0.004	845041	-0.8117	
					RPD = 341.90	
32 4,4'-DDD						
1		7.163			ND	
2		7.121				
33 Chlorobenzilate						
1		7.179			ND	
2		6.981				
34 Endosulfan II						
1		7.337			ND	
2		7.214				
35 4,4'-DDT						
1	7.471	7.474	-0.003	50295164	3.22	
2	7.469	7.469	0.000	11705147	4.21	
					RPD = 26.83	
36 Endrin aldehyde						
1		7.791			ND	
2		7.589				
37 Methoxychlor						
1		7.986			ND	
2		8.192				
38 Mirex						
1	8.141	8.132	0.009	9626580	0.5186	
2	8.370	8.363	0.007	304847	0.1558	
					RPD = 107.59	
39 Endosulfan sulfate						
1		8.239			ND	
2		7.883				
40 Endrin ketone						
1		8.519			ND	
2		8.410				
$ 41 DCB Decachlorobiphenyl						
1	9.495	9.497	-0.002	166358888	14.5	
2	9.606	9.606	0.000	33944386	17.3	
					RPD = 17.88	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.271			ND	
2		11.328				
S 3 Endosulfan, Total						
1		0.000			ND	
2		0.000				

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

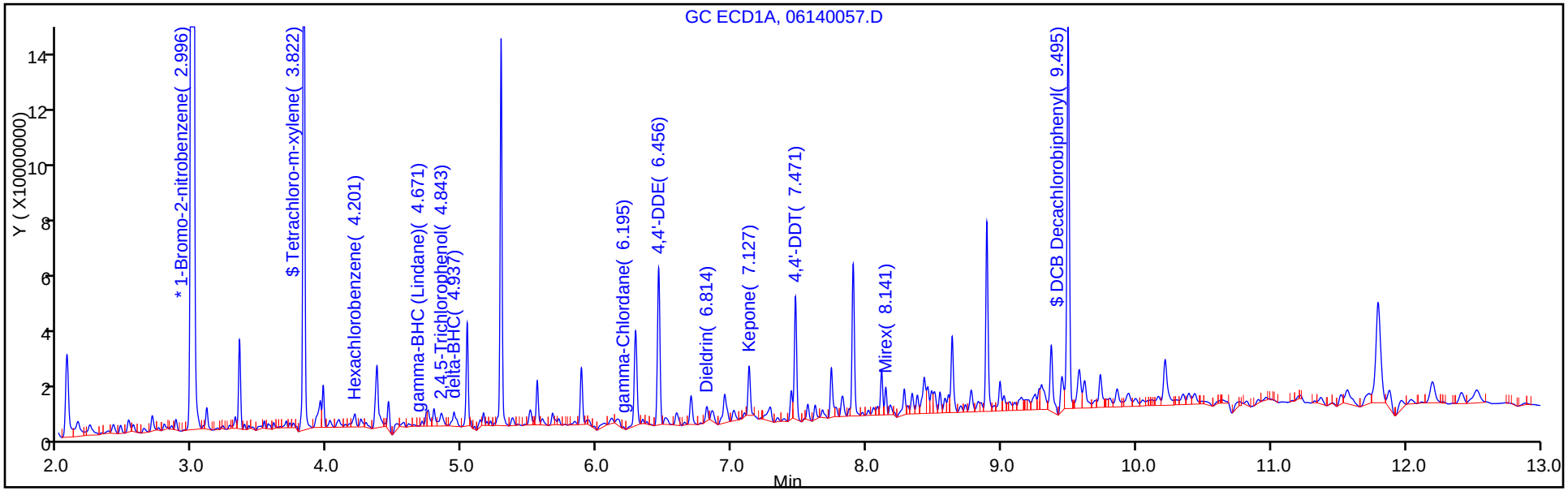
Report Date: 15-Jun-2017 15:11:33 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

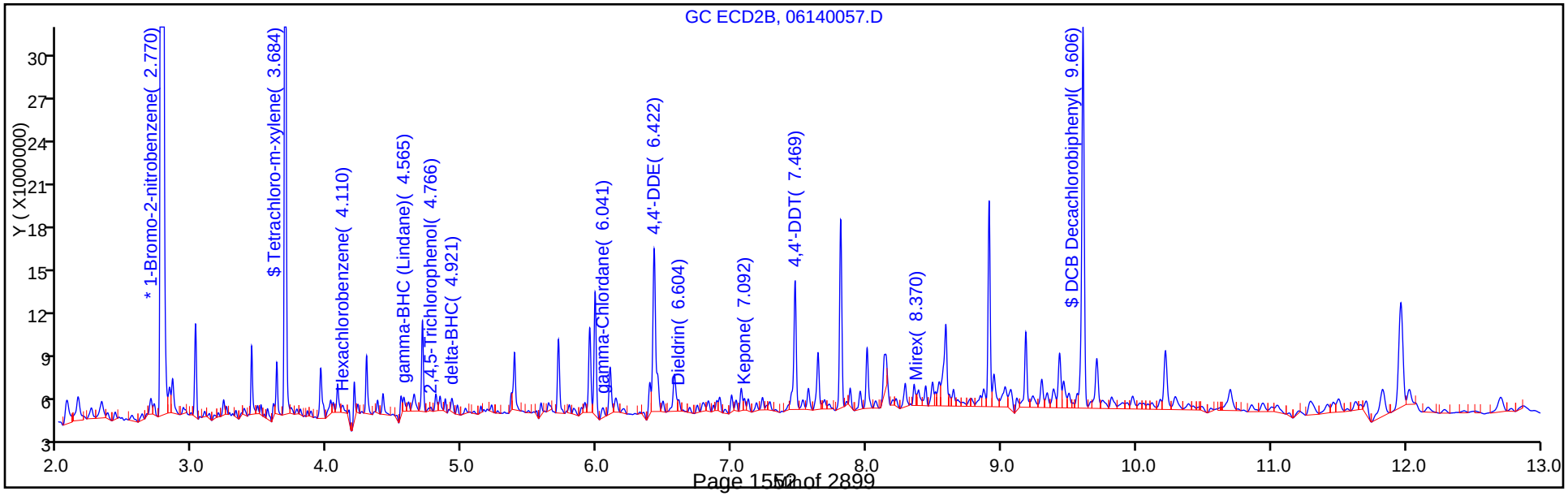
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Injection Date:	15-Jun-2017 07:56:45	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97803-B-13-A	Lab Sample ID:	280-97803-13	Worklist Smp#:	57
Client ID:	SS025-SS06				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	51
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140057.D				
Lims ID:	280-97803-B-13-A				
Client ID:	SS025-SS06				
Sample Type:	Client				
Inject. Date:	15-Jun-2017 07:56:45	ALS Bottle#:	51	Worklist Smp#:	57
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-B-13-A				
Misc. Info.:	280-0059760-057				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	15-Jun-2017 13:59:31	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK017				
First Level Reviewer: wellsd		Date:	15-Jun-2017 13:56:34		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	13.8	69.10
$ 41 DCB Decachlorobiphenyl	20.0	14.5	72.30

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	15.6	77.97
$ 41 DCB Decachlorobiphenyl	20.0	17.3	86.50

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS06-a | Lab Sample ID: 280-97803-14

Matrix: Solid | Lab File ID: 06200018.D

Analysis Method: 8081B | Date Collected: 05/31/2017 15:40

Extraction Method: 3546 | Date Extracted: 06/14/2017 09:49

Sample wt/vol: 30.8(g) | Date Analyzed: 06/20/2017 16:06

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 13.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377996 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.9	U Q	1.9	1.9	0.61
72-55-9	4,4'-DDE	1.0	J Q	1.9	0.75	0.27
50-29-3	4,4'-DDT	1.1	J Q	2.2	1.9	0.66
309-00-2	Aldrin	0.75	U Q	1.9	0.75	0.28
319-84-6	alpha-BHC	0.75	U Q	1.9	0.75	0.24
5103-71-9	alpha-Chlordane	0.75	U Q	1.9	0.75	0.36
319-85-7	beta-BHC	1.9	U Q	1.9	1.9	0.75
319-86-8	delta-BHC	1.1	U Q	1.9	1.1	0.45
60-57-1	Dieldrin	0.75	U Q	1.9	0.75	0.24
959-98-8	Endosulfan I	0.75	U Q	1.9	0.75	0.20
33213-65-9	Endosulfan II	0.75	U Q	1.9	0.75	0.32
1031-07-8	Endosulfan sulfate	0.75	U Q	1.9	0.75	0.31
72-20-8	Endrin	0.75	U Q	1.9	0.75	0.34
7421-93-4	Endrin aldehyde	0.75	U Q	1.9	0.75	0.19
58-89-9	gamma-BHC (Lindane)	1.1	U Q	1.9	1.1	0.52
5103-74-2	gamma-Chlordane	0.75	U Q	1.9	0.75	0.30
76-44-8	Heptachlor	0.75	U Q	1.9	0.75	0.24
1024-57-3	Heptachlor epoxide	1.1	U Q	1.9	1.1	0.48
72-43-5	Methoxychlor	1.1	U Q	3.7	1.1	0.51
8001-35-2	Toxaphene	37	U Q	190	37	18

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene (Surr)	58		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200018.D
Lims ID: 280-97803-A-14-E
Client ID: SS025-SS06-a
Sample Type: Client
Inject. Date: 20-Jun-2017 16:06:16 ALS Bottle#: 12 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-A-14-E
Misc. Info.: 280-0059933-018
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 21-Jun-2017 10:59:53 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK008

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					1.00	
2					0.0270	
					RPD = 189.51	
* 2 1-Bromo-2-nitrobenzene						
1	2.996	2.996	0.000	2540863668	150.0	
2	2.769	2.769	0.000	459794912	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.822	3.822	0.000	223173545	11.6	
2	3.684	3.682	0.002	45205770	13.9	
					RPD = 17.39	
5 Hexachlorobenzene						
1	4.193	4.202	-0.009	13825735	0.5939	
2	4.109	4.108	0.001	311519	-0.7974	
					RPD = -1367.11	
6 Diallate						
1		4.221			ND	
2		4.060				
7 Propachlor						
1		4.364			ND	
2		3.975				
8 alpha-BHC						
1		4.369			ND	
2		4.246				
9 gamma-BHC (Lindane)						
1		4.677			ND	
2		4.571				
10 beta-BHC						
1		4.762			ND	
2		4.652				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
11 2,4,5-Trichlorophenol						
1		4.861			ND	
2		4.772				
12 delta-BHC						
1	4.935	4.936	-0.001	15238347	1.00	
2	4.924	4.925	-0.001	663054	0.0270	
					RPD = 189.51	
14 Chlordane (technical)						
1		5.067			ND	
1		5.562				
1		6.199				
1		6.339				
1		7.260				
2		4.845				
2		5.431				
2		6.035				
2		6.204				
2		7.261				
13 Technical Chlordane						
1		5.067			ND	
1		5.562				
1		6.199				
1		6.339				
1		7.260				
2		4.845				
2		5.431				
2		6.035				
2		6.204				
2		7.261				
15 Heptachlor						
1		5.147			ND	
2		4.982				
16 Aldrin						
1		5.432			ND	
2		5.288				
28 Toxaphene						
1		5.607			ND	
1		6.926				
1		7.191				
1		7.694				
1		8.135				
2		6.115				
2		7.163				
2		7.308				
2		7.597				
2		8.119				
17 Chlorpyrifos						
1		5.668			ND	
2		5.515				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
18 Isodrin						
1		5.761			ND	
2		5.652				
19 Dicofol						
1		5.801			ND	
2		5.615				
20 2,4'-DDE						
1		6.044			ND	
2		6.045				
21 Heptachlor epoxide						
1	6.052	6.055	-0.003	9130147	0.2843	
2	5.834	5.834	0.000	565231	-0.5389	
					RPD = -646.62	
22 gamma-Chlordane						
1	6.195	6.198	-0.003	794371	0.3331	
2	6.039	6.035	0.004	1547757	-0.1153	
					RPD = 411.90	
23 alpha-Chlordane						
1	6.368	6.359	0.009	428191	0.2248	
2	6.195	6.203	-0.008	201287	-0.6273	
					RPD = -423.37	
24 4,4'-DDE						
1	6.454	6.456	-0.002	65235816	2.78	
2	6.419	6.420	-0.001	12719820	3.24	
					RPD = 15.15	
25 Endosulfan I						
1		6.530			ND	
2		6.267				
26 2,4'-DDD						
1		6.666			ND	
2		6.669				
27 Dieldrin						
1		6.816			ND	
2		6.607				
29 2,4'-DDT						
1		6.966			ND	
2		7.030				
30 Endrin						
1		7.084			ND	
2		6.967				
31 Kepone						
1	7.125	7.134	-0.009	20237536	2.71	
2	7.087	7.093	-0.006	6746055	4.04	
					RPD = 39.34	
32 4,4'-DDD						
1		7.160			ND	
2		7.118				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
33 Chlorobenzilate						
1		7.178			ND	
2		6.979				
34 Endosulfan II						
1		7.334			ND	
2		7.212				
35 4,4'-DDT						
1	7.469	7.470	-0.001	50661912	2.85	
2	7.465	7.467	-0.002	13212745	4.72	
					RPD = 49.32	
36 Endrin aldehyde						
1		7.787			ND	
2		7.587				
37 Methoxychlor						
1		7.983			ND	
2		8.189				
38 Mirex						
1		8.128			ND	
2		8.360				
39 Endosulfan sulfate						
1		8.236			ND	
2		7.879				
40 Endrin ketone						
1		8.514			ND	
2		8.407				
$ 41 DCB Decachlorobiphenyl						
1	9.493	9.494	-0.001	559662092	42.5	
2	9.602	9.602	0.000	33019664	16.5	
					RPD = 87.95	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.270			ND	
2		11.323				
S 3 Endosulfan, Total						
1		0.000			ND	
2		0.000				

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

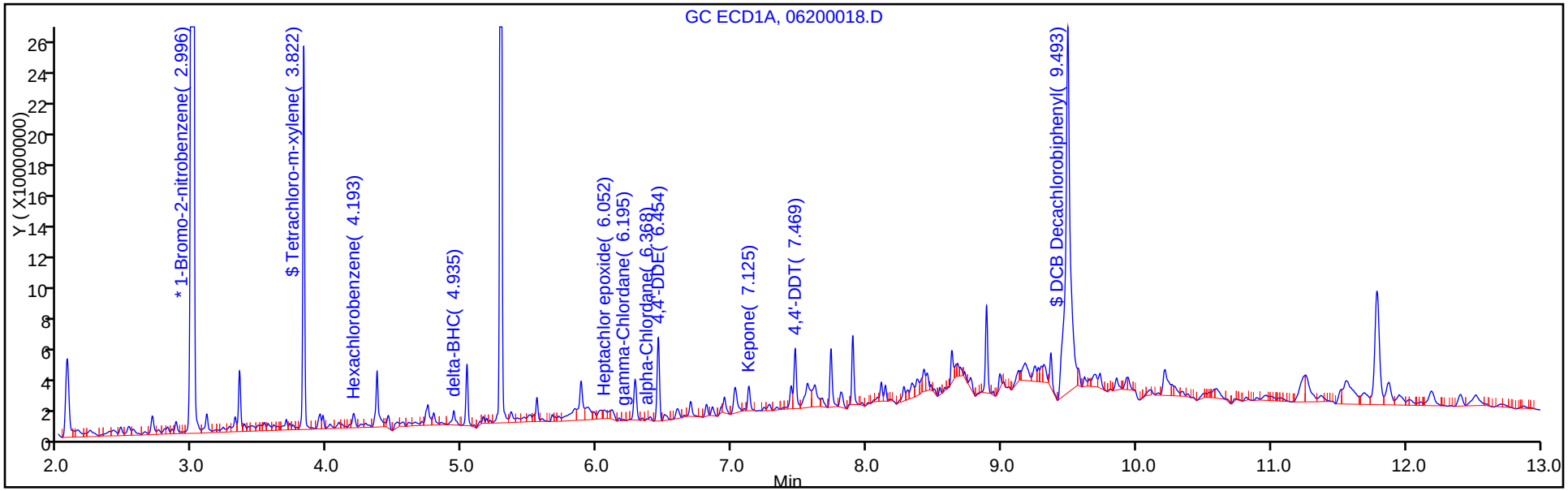
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TestAmerica Denver

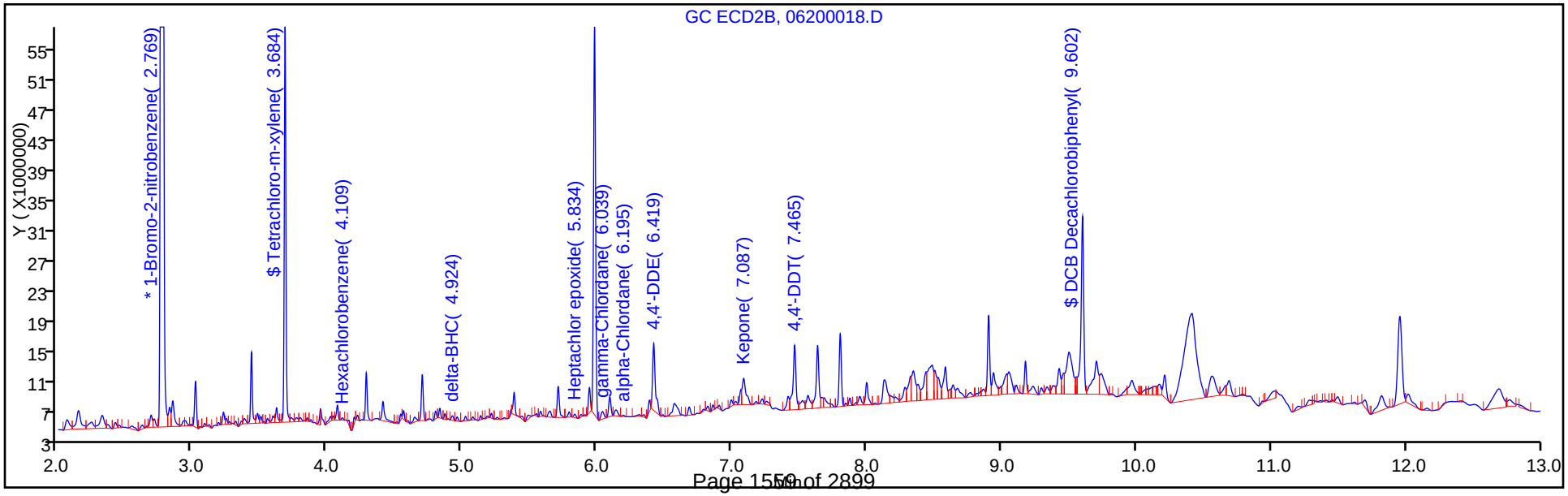
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Injection Date:	20-Jun-2017 16:06:16	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97803-A-14-E	Lab Sample ID:	280-97803-14	Worklist Smp#:	18
Client ID:	SS025-SS06-a				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200018.D				
Lims ID:	280-97803-A-14-E				
Client ID:	SS025-SS06-a				
Sample Type:	Client				
Inject. Date:	20-Jun-2017 16:06:16	ALS Bottle#:	12	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-A-14-E				
Misc. Info.:	280-0059933-018				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	21-Jun-2017 10:59:53	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK008				

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	11.6	58.19
$ 41 DCB Decachlorobiphenyl	20.0	42.5	212.39

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	13.9	69.27
$ 41 DCB Decachlorobiphenyl	20.0	16.5	82.65

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS06-a | Lab Sample ID: 280-97803-14

Matrix: Solid | Lab File ID: 06200018.D

Analysis Method: 8081B | Date Collected: 05/31/2017 15:40

Extraction Method: 3546 | Date Extracted: 06/14/2017 09:49

Sample wt/vol: 30.8(g) | Date Analyzed: 06/20/2017 16:06

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 13.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377996 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	83		63-121

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200018.D
Lims ID: 280-97803-A-14-E
Client ID: SS025-SS06-a
Sample Type: Client
Inject. Date: 20-Jun-2017 16:06:16 ALS Bottle#: 12 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-A-14-E
Misc. Info.: 280-0059933-018
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 21-Jun-2017 10:59:53 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK008

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					1.00	
2					0.0270	
					RPD = 189.51	
* 2 1-Bromo-2-nitrobenzene						
1	2.996	2.996	0.000	2540863668	150.0	
2	2.769	2.769	0.000	459794912	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.822	3.822	0.000	223173545	11.6	
2	3.684	3.682	0.002	45205770	13.9	
					RPD = 17.39	
5 Hexachlorobenzene						
1	4.193	4.202	-0.009	13825735	0.5939	
2	4.109	4.108	0.001	311519	-0.7974	
					RPD = -1367.11	
6 Diallate						
1		4.221			ND	
2		4.060				
7 Propachlor						
1		4.364			ND	
2		3.975				
8 alpha-BHC						
1		4.369			ND	
2		4.246				
9 gamma-BHC (Lindane)						
1		4.677			ND	
2		4.571				
10 beta-BHC						
1		4.762			ND	
2		4.652				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
11 2,4,5-Trichlorophenol						
1		4.861			ND	
2		4.772				
12 delta-BHC						
1	4.935	4.936	-0.001	15238347	1.00	
2	4.924	4.925	-0.001	663054	0.0270	
					RPD = 189.51	
14 Chlordane (technical)						
1		5.067			ND	
1		5.562				
1		6.199				
1		6.339				
1		7.260				
2		4.845				
2		5.431				
2		6.035				
2		6.204				
2		7.261				
13 Technical Chlordane						
1		5.067			ND	
1		5.562				
1		6.199				
1		6.339				
1		7.260				
2		4.845				
2		5.431				
2		6.035				
2		6.204				
2		7.261				
15 Heptachlor						
1		5.147			ND	
2		4.982				
16 Aldrin						
1		5.432			ND	
2		5.288				
28 Toxaphene						
1		5.607			ND	
1		6.926				
1		7.191				
1		7.694				
1		8.135				
2		6.115				
2		7.163				
2		7.308				
2		7.597				
2		8.119				
17 Chlorpyrifos						
1		5.668			ND	
2		5.515				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
18 Isodrin						
1		5.761			ND	
2		5.652				
19 Dicofol						
1		5.801			ND	
2		5.615				
20 2,4'-DDE						
1		6.044			ND	
2		6.045				
21 Heptachlor epoxide						
1	6.052	6.055	-0.003	9130147	0.2843	
2	5.834	5.834	0.000	565231	-0.5389	
					RPD = -646.62	
22 gamma-Chlordane						
1	6.195	6.198	-0.003	794371	0.3331	
2	6.039	6.035	0.004	1547757	-0.1153	
					RPD = 411.90	
23 alpha-Chlordane						
1	6.368	6.359	0.009	428191	0.2248	
2	6.195	6.203	-0.008	201287	-0.6273	
					RPD = -423.37	
24 4,4'-DDE						
1	6.454	6.456	-0.002	65235816	2.78	
2	6.419	6.420	-0.001	12719820	3.24	
					RPD = 15.15	
25 Endosulfan I						
1		6.530			ND	
2		6.267				
26 2,4'-DDD						
1		6.666			ND	
2		6.669				
27 Dieldrin						
1		6.816			ND	
2		6.607				
29 2,4'-DDT						
1		6.966			ND	
2		7.030				
30 Endrin						
1		7.084			ND	
2		6.967				
31 Kepone						
1	7.125	7.134	-0.009	20237536	2.71	
2	7.087	7.093	-0.006	6746055	4.04	
					RPD = 39.34	
32 4,4'-DDD						
1		7.160			ND	
2		7.118				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
33 Chlorobenzilate						
1		7.178			ND	
2		6.979				
34 Endosulfan II						
1		7.334			ND	
2		7.212				
35 4,4'-DDT						
1	7.469	7.470	-0.001	50661912	2.85	
2	7.465	7.467	-0.002	13212745	4.72	
					RPD = 49.32	
36 Endrin aldehyde						
1		7.787			ND	
2		7.587				
37 Methoxychlor						
1		7.983			ND	
2		8.189				
38 Mirex						
1		8.128			ND	
2		8.360				
39 Endosulfan sulfate						
1		8.236			ND	
2		7.879				
40 Endrin ketone						
1		8.514			ND	
2		8.407				
$ 41 DCB Decachlorobiphenyl						
1	9.493	9.494	-0.001	559662092	42.5	
2	9.602	9.602	0.000	33019664	16.5	
					RPD = 87.95	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.270			ND	
2		11.323				
S 3 Endosulfan, Total						
1		0.000			ND	
2		0.000				

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

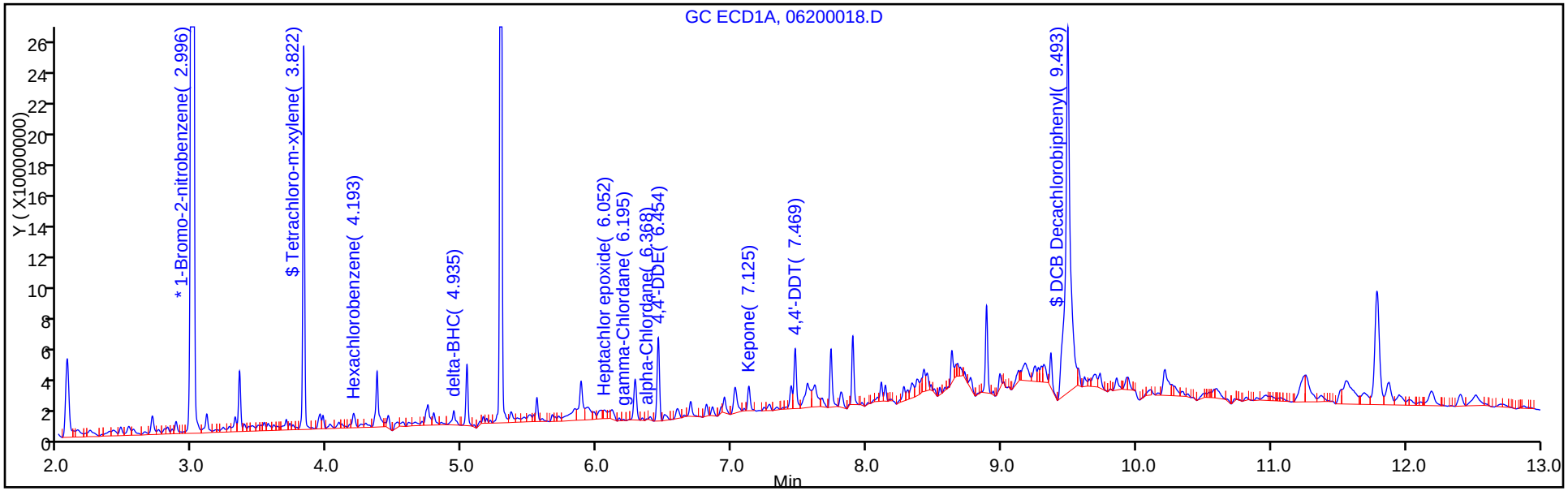
Report Date: 21-Jun-2017 11:00:03 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

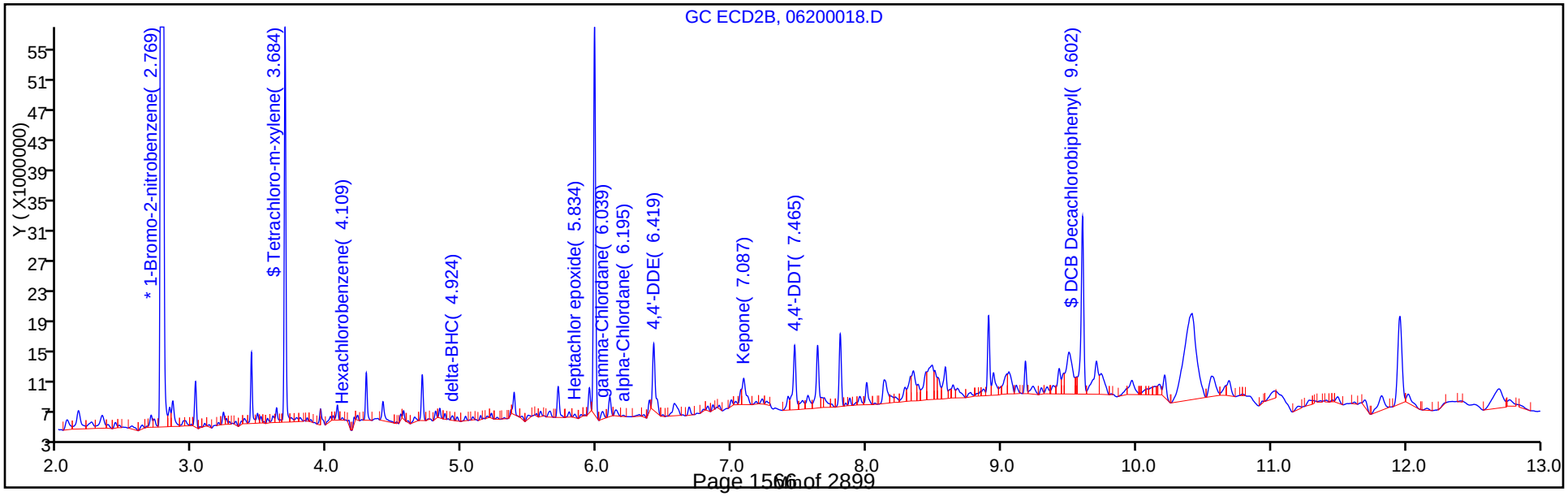
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200018.D

Injection Date:	20-Jun-2017 16:06:16	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97803-A-14-E	Lab Sample ID:	280-97803-14	Worklist Smp#:	18
Client ID:	SS025-SS06-a				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200018.D				
Lims ID:	280-97803-A-14-E				
Client ID:	SS025-SS06-a				
Sample Type:	Client				
Inject. Date:	20-Jun-2017 16:06:16	ALS Bottle#:	12	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-A-14-E				
Misc. Info.:	280-0059933-018				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	21-Jun-2017 10:59:53	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK008				

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	11.6	58.19
$ 41 DCB Decachlorobiphenyl	20.0	42.5	212.39

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	13.9	69.27
$ 41 DCB Decachlorobiphenyl	20.0	16.5	82.65

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 14:16 Calibration End Date: 04/10/2017 15:40 Calibration ID: 28716

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-368670/18	04100018.D
Level 2	STD2 280-368670/17	04100017.D
Level 3	STD3 280-368670/16	04100016.D
Level 4	STD4 280-368670/15	04100015.D
Level 5	STD5 280-368670/14	04100014.D
Level 6	STD6 280-368670/13	04100013.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Toxaphene Peak 1	0.0028 0.0027	0.0027	0.0027	0.0026	0.0028	Lin2	0.0096	0.0027							0.9990		0.9900
Toxaphene Peak 2	0.0220 0.0269	0.0199	0.0250	0.0267	0.0289	Qua	-4.920	0.0315	0						1.0000		0.9900
Toxaphene Peak 3	0.0154 0.0192	0.0165	0.0174	0.0200	0.0205	Lin2	-0.948	0.0196							0.9960		0.9900
Toxaphene Peak 4	0.0363 0.0453	0.0391	0.0418	0.0452	0.0491	Lin2	-2.199	0.0460							0.9970		0.9900
Toxaphene Peak 5	0.0410 0.0512	0.0445	0.0473	0.0528	0.0547	Lin2	-2.509	0.0523							0.9970		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 14:16 Calibration End Date: 04/10/2017 15:40 Calibration ID: 28716

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-368670/18	04100018.D
Level 2	STD2 280-368670/17	04100017.D
Level 3	STD3 280-368670/16	04100016.D
Level 4	STD4 280-368670/15	04100015.D
Level 5	STD5 280-368670/14	04100014.D
Level 6	STD6 280-368670/13	04100013.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Toxaphene Peak 1	BNB	Lin2	4842628 274960413	11506754	23922821	46012778	131950321	200 10000	500	1000	2000	5000
Toxaphene Peak 2	BNB	Qua	38516555 2723402477	84483421	221313458	474769847	1345059246	200 10000	500	1000	2000	5000
Toxaphene Peak 3	BNB	Lin2	26891128 1942487748	69922737	154272139	355461912	952730600	200 10000	500	1000	2000	5000
Toxaphene Peak 4	BNB	Lin2	63408945 4585703000	165888842	370003310	802936973	2284388717	200 10000	500	1000	2000	5000
Toxaphene Peak 5	BNB	Lin2	71753800 5187725515	188486212	418442324	938106314	2543887609	200 10000	500	1000	2000	5000

Curve Type Legend:

Lin2 = Linear 1/conc^2 ISTD
Qua = Quadratic ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100013.D
Lims ID: STD6 TOX
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 10-Apr-2017 14:16:20 ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD6 TOX
Misc. Info.: 280-0057376-013
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:22 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:43:22

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.030	3.031	-0.001	1518668051	150.0	150.0	
2	2.839	2.839	0.000	356597752	150.0	150.0	
28 Toxaphene							M
1	5.648	5.647	0.001	274960413	10000	10028	
1	6.976	6.974	0.002	2723402477	10000	9982.1	
1	7.238	7.237	0.001	1942487748	10000	9861.7	
1	7.743	7.742	0.001	4585703000	10000	9889.8	
1	8.184	8.184	0.000	5187725515	10000	9852.9	
		Average of Peak Amounts =				9923.0	
2	6.230	6.229	0.001	179222117	10000	9000.5	M
2	7.275	7.275	0.000	425486845	10000	9264.9	M
2	7.421	7.420	0.001	1192670953	10000	10221	M
2	7.705	7.704	0.001	745018660	10000	9387.8	M
2	8.226	8.225	0.001	639703048	10000	9408.8	M
		Average of Peak Amounts =				9456.6	
						RPD = 4.81	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxL6_00020 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

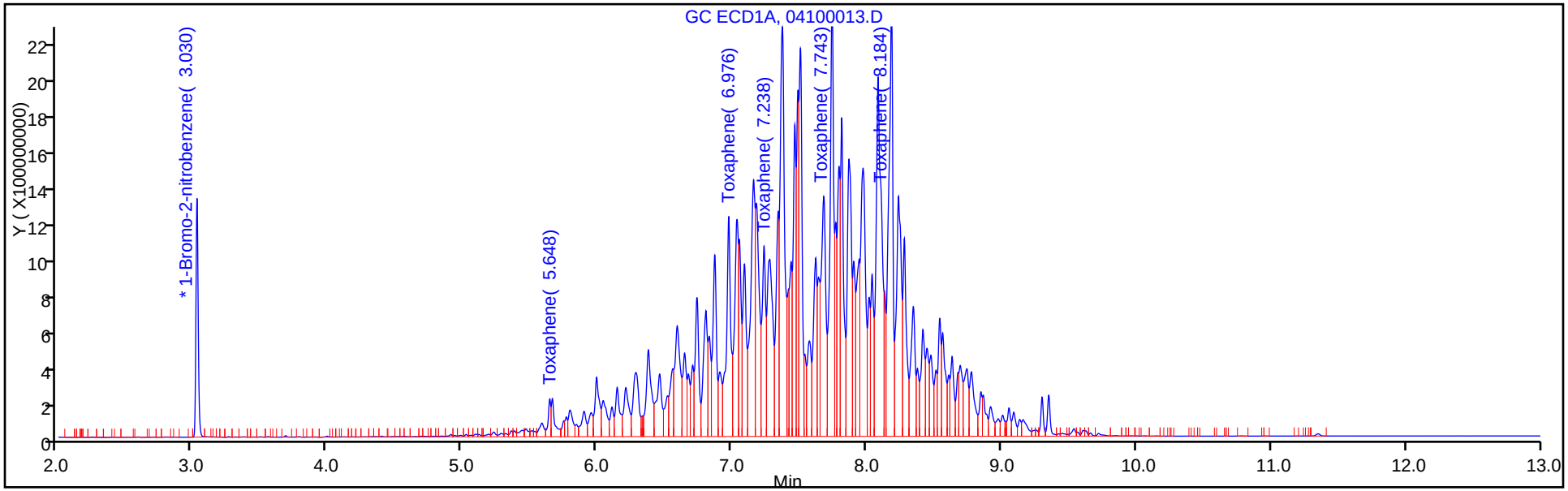
Report Date: 17-Apr-2017 13:21:24 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

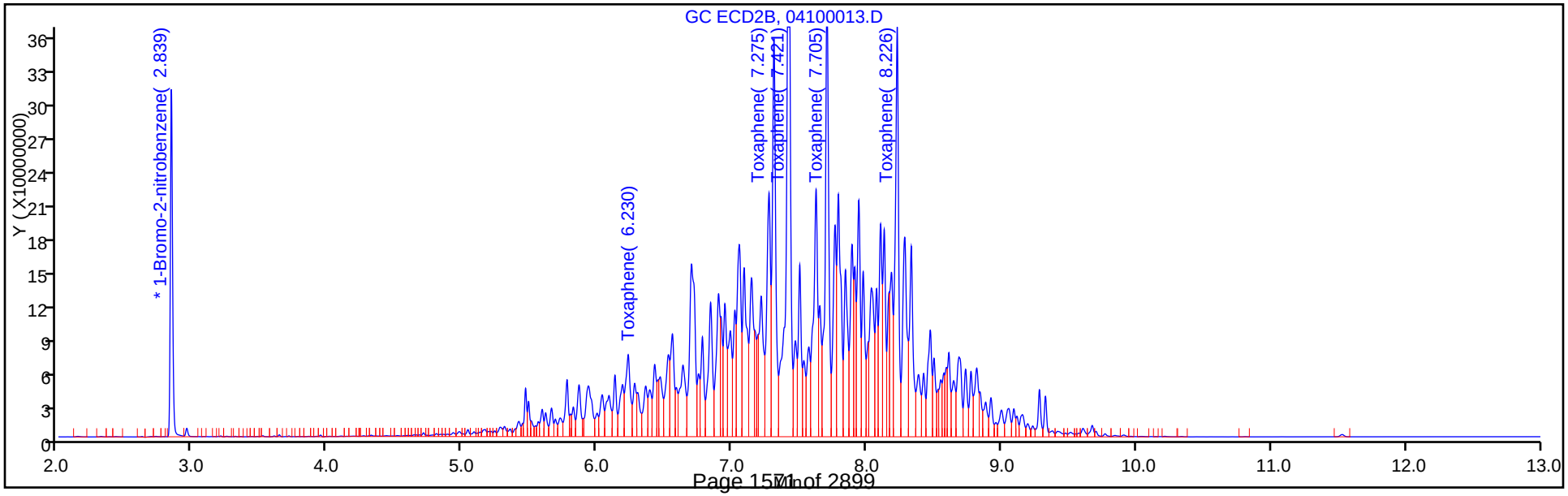
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100013.D

Injection Date:	10-Apr-2017 14:16:20	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD6 TOX			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100014.D
Lims ID: STD5 TOX
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 10-Apr-2017 14:33:12 ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD5 TOX
Misc. Info.: 280-0057376-014
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:26 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:43:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.029	3.031	-0.002	1396189255	150.0	150.0	
2	2.839	2.839	0.000	327973383	150.0	150.0	
28 Toxaphene							M
1	5.647	5.647	0.000	131950321	5000.0	5233.0	M
1	6.975	6.974	0.001	1345059246	5000.0	5079.9	M
1	7.235	7.237	-0.002	952730600	5000.0	5283.8	M
1	7.742	7.742	0.000	2284388717	5000.0	5380.7	M
1	8.184	8.184	0.000	2543887609	5000.0	5277.8	M
		Average of Peak Amounts =				5251.0	
2	6.229	6.229	0.000	91944119	5000.0	4976.4	M
2	7.273	7.275	-0.002	217561537	5000.0	5132.5	M
2	7.420	7.420	0.000	503382115	5000.0	4669.2	M
2	7.704	7.704	0.000	375808736	5000.0	5135.4	M
2	8.226	8.225	0.001	318242854	5000.0	5078.4	M
		Average of Peak Amounts =				4998.4	
						RPD = 4.93	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxL5_00018 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

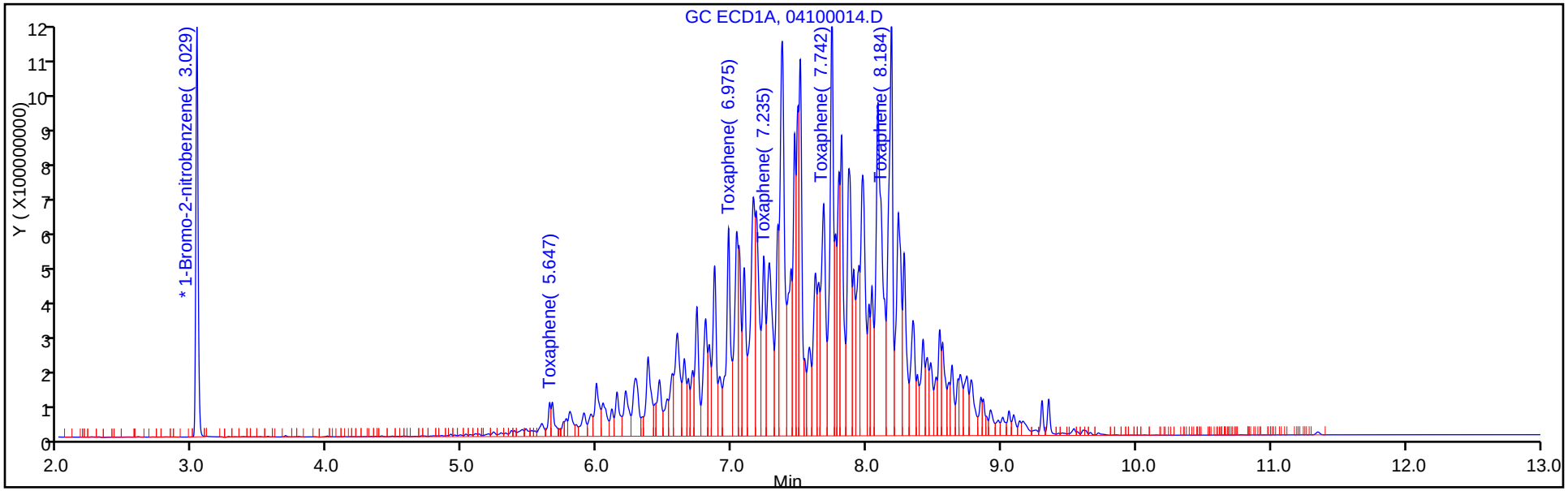
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TestAmerica Denver

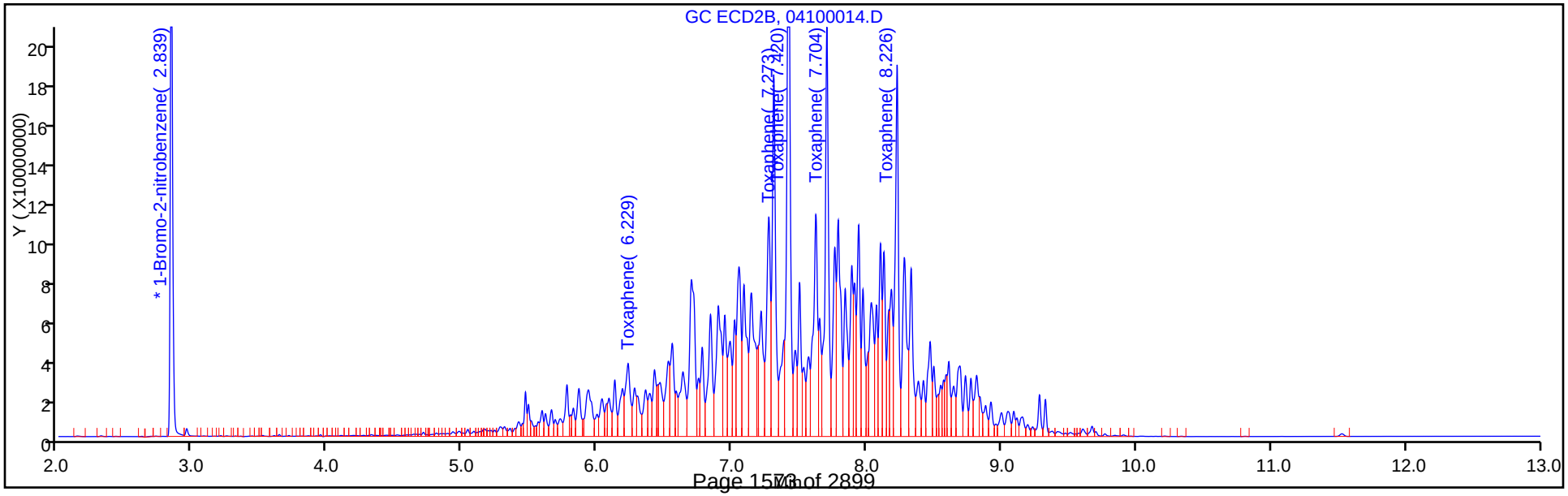
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Injection Date:	10-Apr-2017 14:33:12	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD5 TOX			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:28 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100014.D

Injection Date: 10-Apr-2017 14:33:12 Instrument ID: SGC_P1

Lims ID: STD5 TOX

Client ID:

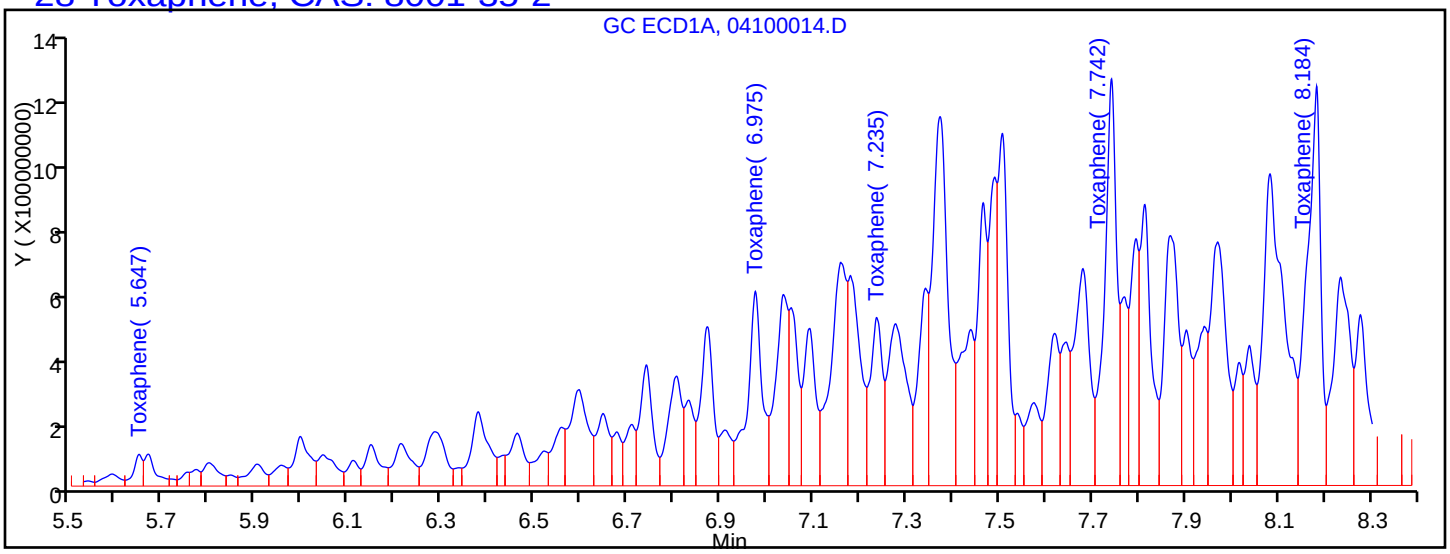
Operator ID: DAW ALS Bottle#: 12 Worklist Smp#: 14

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

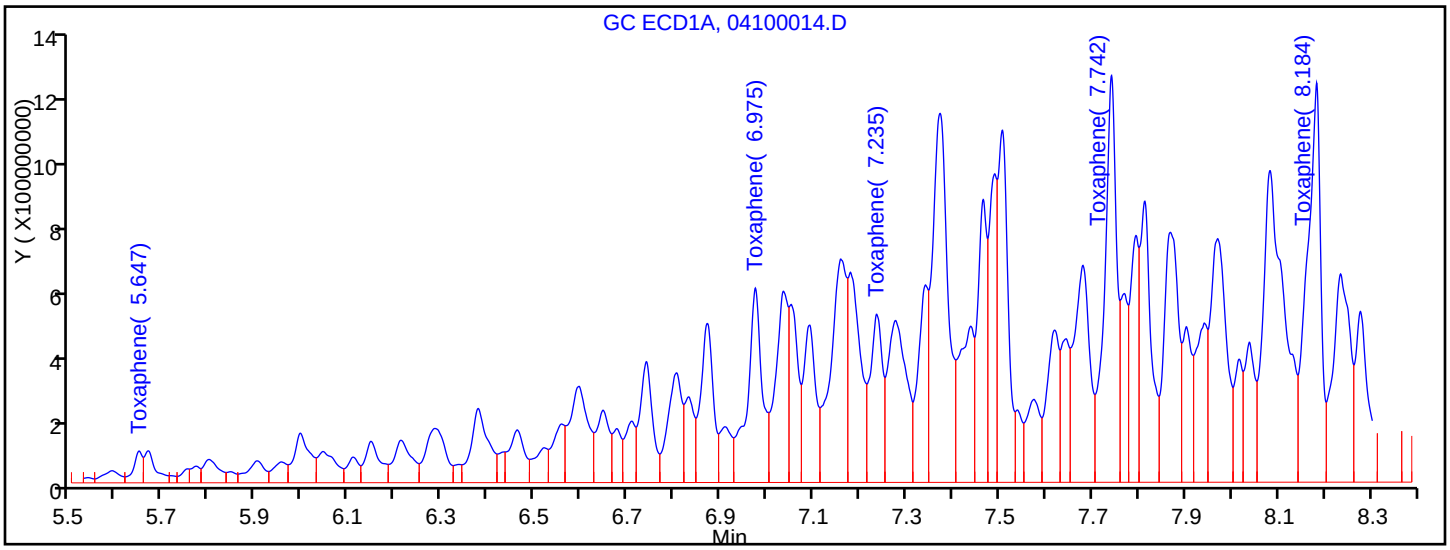
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.647	Response = 131494244
6.975	Response = 1344529103
7.235	Response = 952493378
7.742	Response = 2284118276
8.184	Response = 2543712898



Manual Integration Results

5.647	Response = 131950321	M
6.975	Response = 1345059246	M
7.235	Response = 952730600	M
7.742	Response = 2284388717	M
8.184	Response = 2543887609	M

Reviewer: wellsd, 17-Apr-2017 13:21:25

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100015.D
Lims ID: STD4 TOX
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 10-Apr-2017 14:50:03 ALS Bottle#: 13 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD4 TOX
Misc. Info.: 280-0057376-015
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:29 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:42:55

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.029	3.029	0.000	1331968560	150.0	150.0	
2	2.839	2.839	0.000	316438895	150.0	150.0	
28 Toxaphene							M
1	5.647	5.647	0.000	46012778	2000.0	1910.5	M
1	6.974	6.974	0.000	474769847	2000.0	1902.1	M
1	7.237	7.237	0.000	355461912	2000.0	2095.9	M
1	7.742	7.742	0.000	802936973	2000.0	2012.6	M
1	8.184	8.184	0.000	938106314	2000.0	2069.6	M
		Average of Peak Amounts =				1998.2	
2	6.229	6.229	0.000	37649797	2000.0	2054.8	M
2	7.275	7.275	0.000	84253007	2000.0	2035.5	M
2	7.420	7.420	0.000	195795188	2000.0	1858.9	M
2	7.704	7.704	0.000	145369209	2000.0	2041.1	M
2	8.225	8.225	0.000	125363190	2000.0	2059.4	M
		Average of Peak Amounts =				2009.9	
						RPD = 0.59	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00011 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

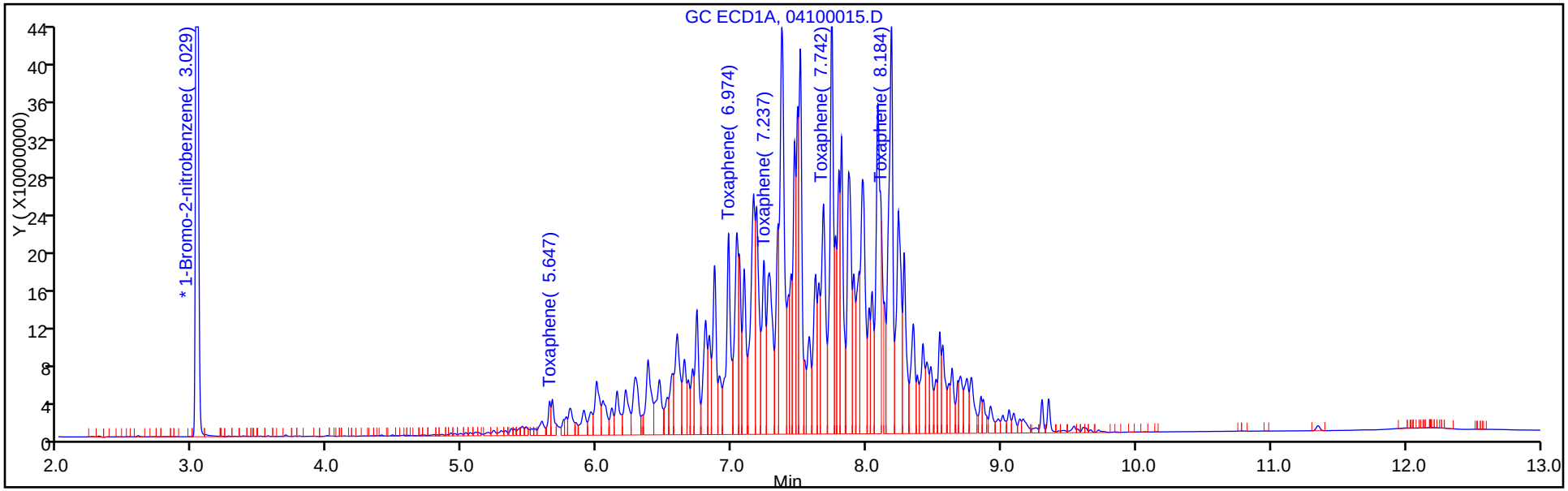
Report Date: 17-Apr-2017 13:21:31 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

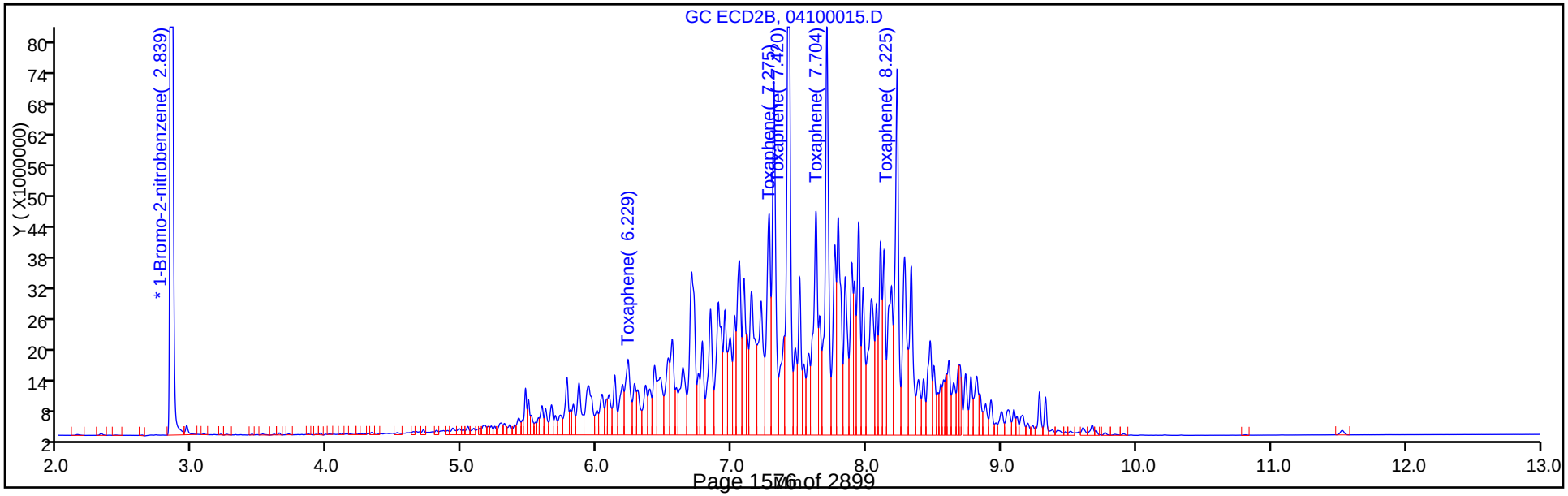
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100015.D

Injection Date:	10-Apr-2017 14:50:03	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD4 TOX			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:31 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100015.D

Injection Date: 10-Apr-2017 14:50:03 Instrument ID: SGC_P1

Lims ID: STD4 TOX

Client ID:

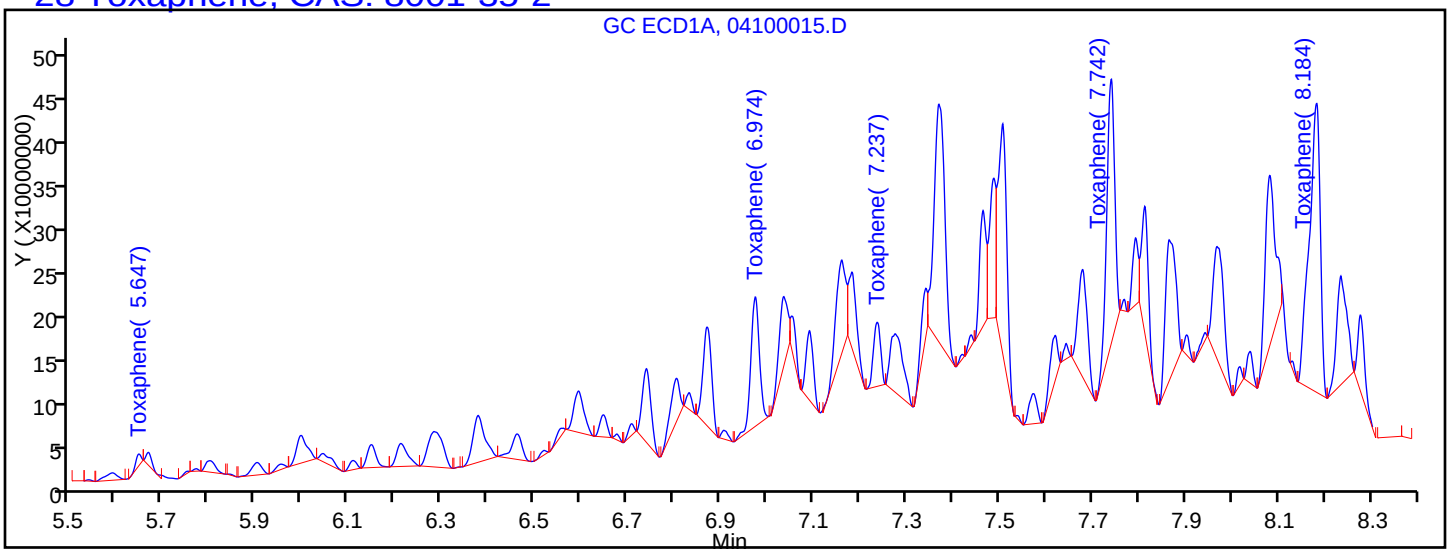
Operator ID: DAW ALS Bottle#: 13 Worklist Smp#: 15

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

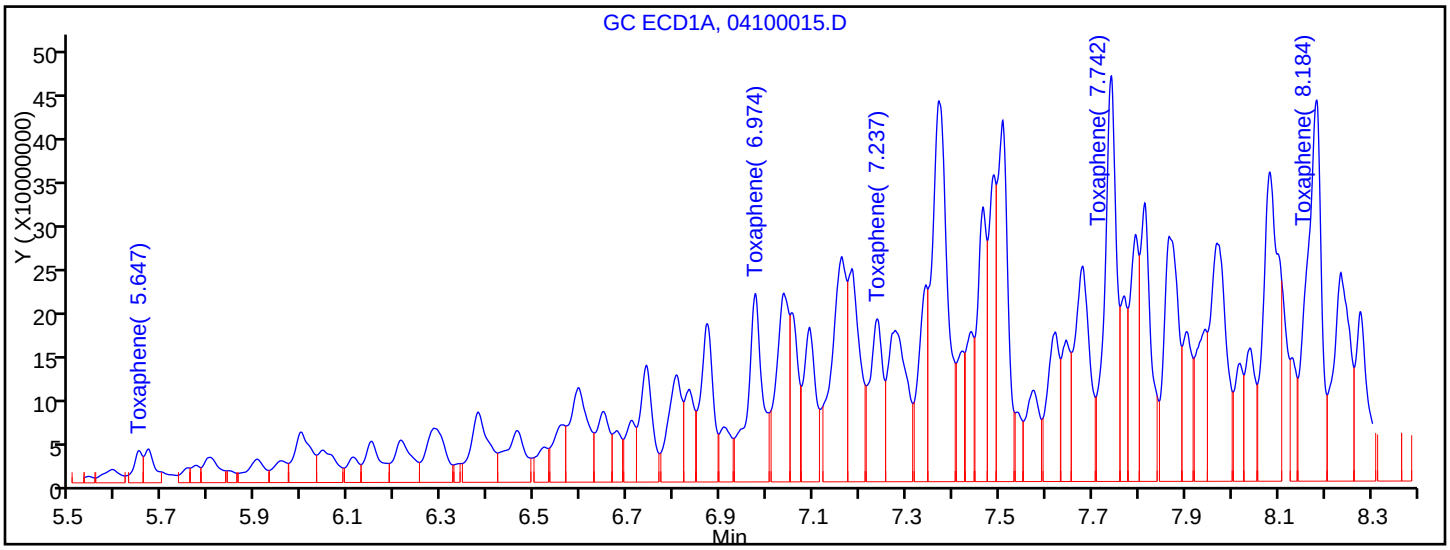
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.647	Response = 10597236
6.974	Response = 189137794
7.237	Response = 78098453
7.742	Response = 358120191
8.184	Response = 538408716



Manual Integration Results

5.647	Response = 46012778	M
6.974	Response = 474769847	M
7.237	Response = 355461912	M
7.742	Response = 802936973	M
8.184	Response = 938106314	M

Reviewer: wellsd, 17-Apr-2017 13:21:29

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100016.D
Lims ID: STD3 TOX
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 10-Apr-2017 15:06:53 ALS Bottle#: 14 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD3 TOX
Misc. Info.: 280-0057376-016
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:33 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:44:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.030	3.029	0.000	1328367555	150.0	150.0	
2	2.839	2.839	0.000	314624628	150.0	150.0	
28 Toxaphene							M
1	5.647	5.647	0.000	23922821	1000.0	994.3	M
1	6.975	6.974	0.001	221313458	1000.0	962.6	M
1	7.236	7.237	-0.001	154272139	1000.0	939.5	M
1	7.741	7.742	-0.001	370003310	1000.0	955.7	M
1	8.184	8.184	0.000	418442324	1000.0	952.2	M
		Average of Peak Amounts =				960.8	
2	6.230	6.229	0.001	19766153	1000.0	1038.0	M
2	7.275	7.275	0.000	42789752	1000.0	1019.6	M
2	7.420	7.420	0.000	118584476	1000.0	1116.9	M
2	7.704	7.704	0.000	72430934	1000.0	1008.1	M
2	8.226	8.225	0.001	61954620	1000.0	1011.7	M
		Average of Peak Amounts =				1038.9	
						RPD = 7.80	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxL3_00017 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

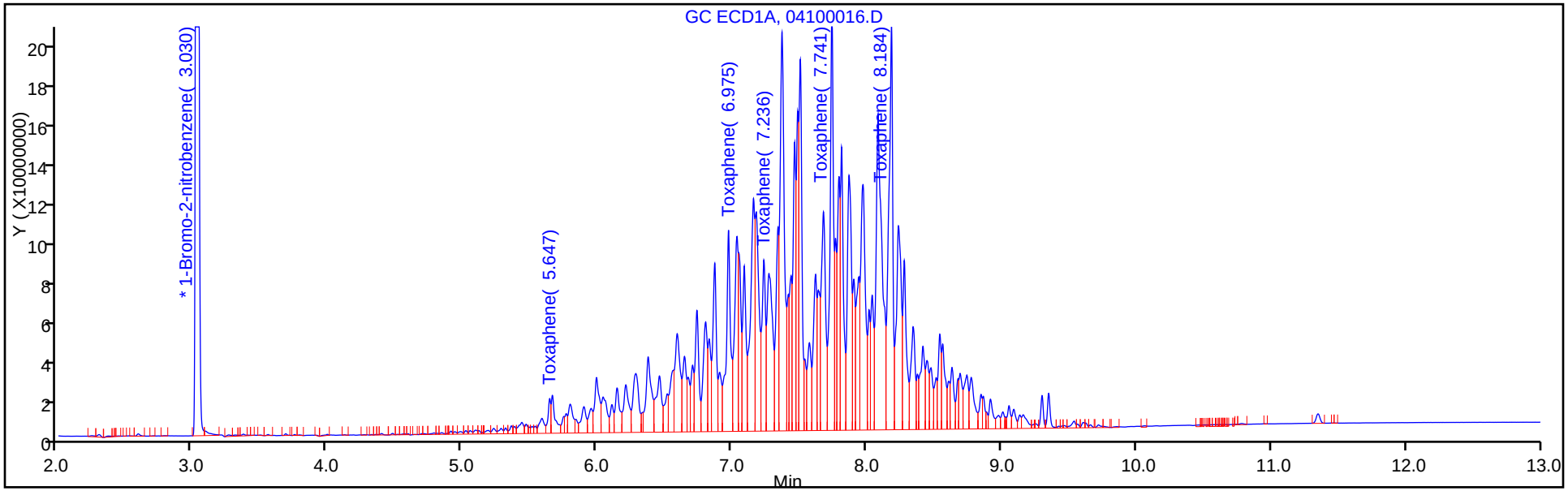
Report Date: 17-Apr-2017 13:21:35 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

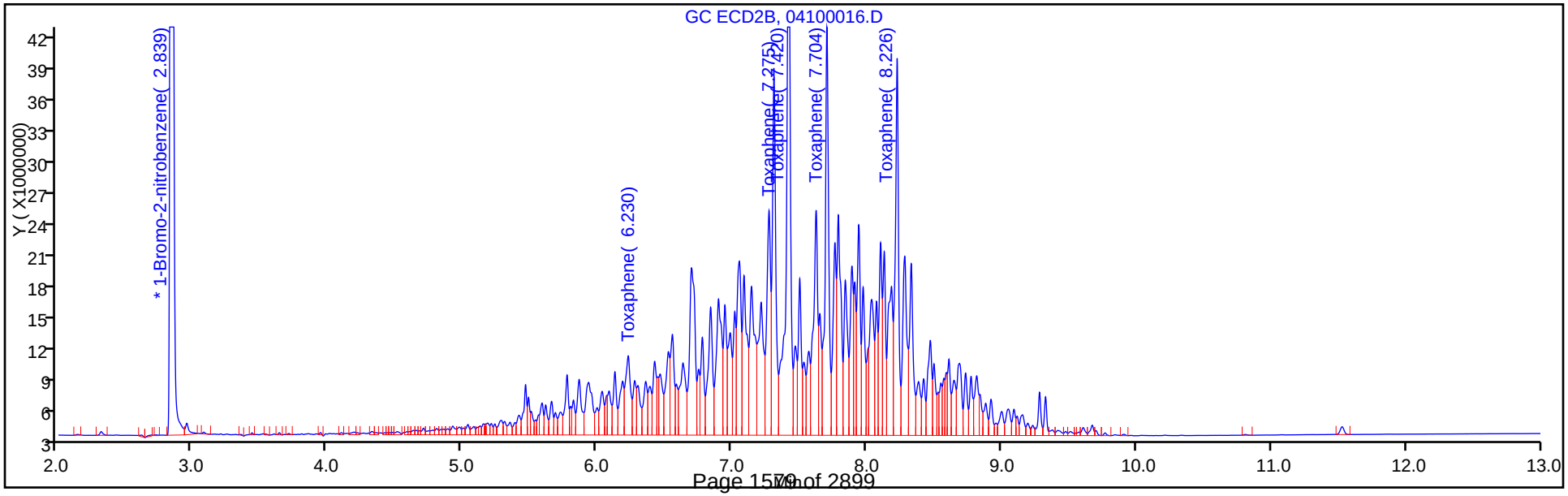
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100016.D

Injection Date:	10-Apr-2017 15:06:53	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD3 TOX			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:35 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100016.D

Injection Date: 10-Apr-2017 15:06:53 Instrument ID: SGC_P1

Lims ID: STD3 TOX

Client ID:

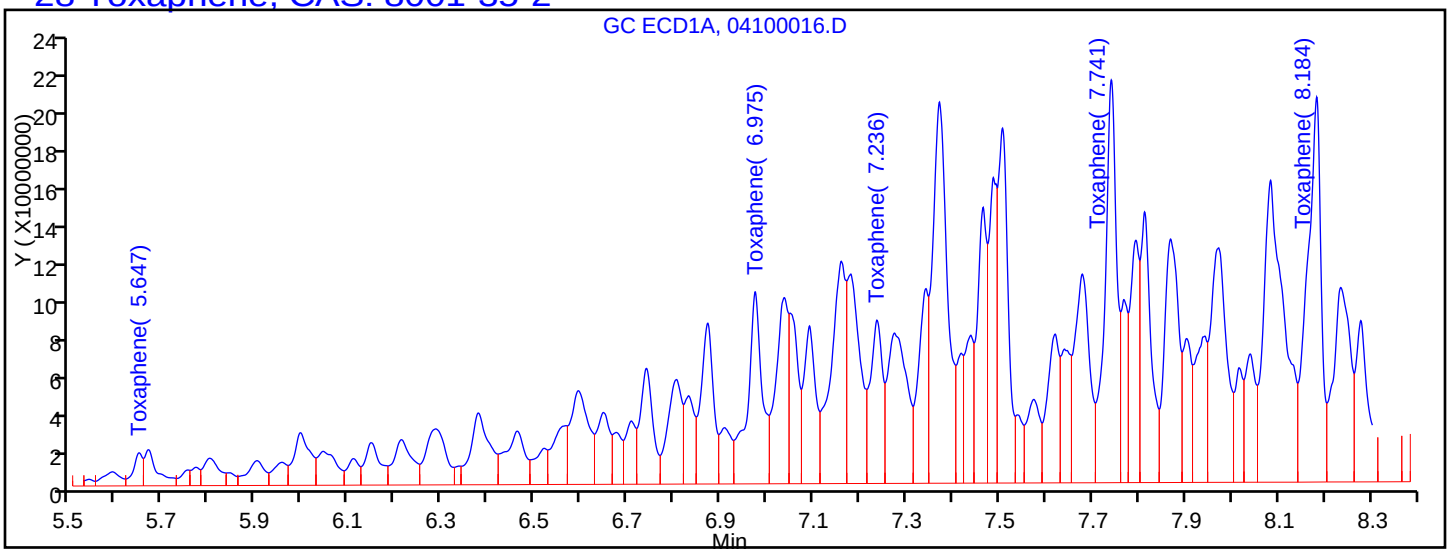
Operator ID: DAW ALS Bottle#: 14 Worklist Smp#: 16

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

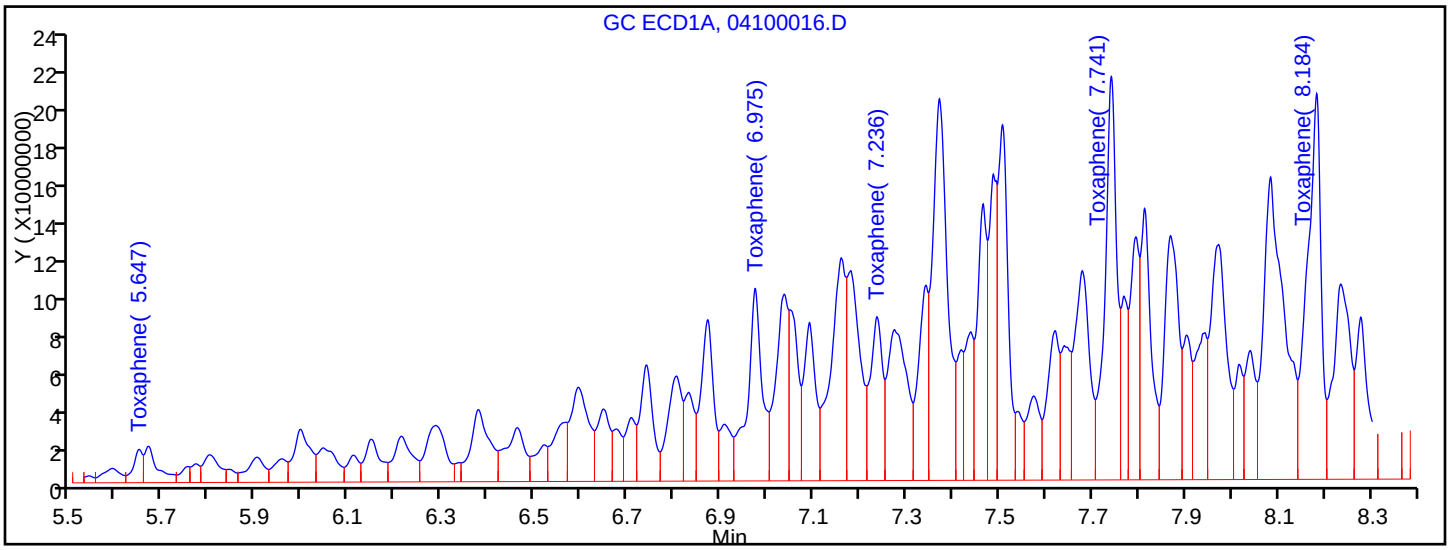
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.647	Response = 23586452
6.975	Response = 220095751
7.236	Response = 153595859
7.741	Response = 368896001
8.184	Response = 417065746



Manual Integration Results

5.647	Response = 23922821	M
6.975	Response = 221313458	M
7.236	Response = 154272139	M
7.741	Response = 370003310	M
8.184	Response = 418442324	M

Reviewer: wellsd, 17-Apr-2017 13:21:33

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100017.D
Lims ID: STD2 TOX
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 10-Apr-2017 15:23:55 ALS Bottle#: 15 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD2 TOX
Misc. Info.: 280-0057376-017
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:36 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:44:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.030	3.029	0.000	1271892489	150.0	150.0	
2	2.839	2.839	0.000	303577463	150.0	150.0	
28 Toxaphene							M
1	5.648	5.647	0.001	11506754	500.0	497.7	M
1	6.975	6.974	0.001	84483421	500.0	476.0	M
1	7.237	7.237	0.000	69922737	500.0	470.2	M
1	7.742	7.742	0.000	165888842	500.0	472.9	M
1	8.184	8.184	0.000	188486212	500.0	473.4	M
		Average of Peak Amounts =				478.0	
2	6.229	6.229	0.000	10714229	500.0	539.5	M
2	7.275	7.275	0.000	21547501	500.0	512.5	M
2	7.420	7.420	0.000	54344230	500.0	509.8	M
2	7.705	7.704	0.001	36174204	500.0	507.5	M
2	8.226	8.225	0.001	30565148	500.0	505.7	M
		Average of Peak Amounts =				515.0	
						RPD = 7.44	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxL2_00018 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

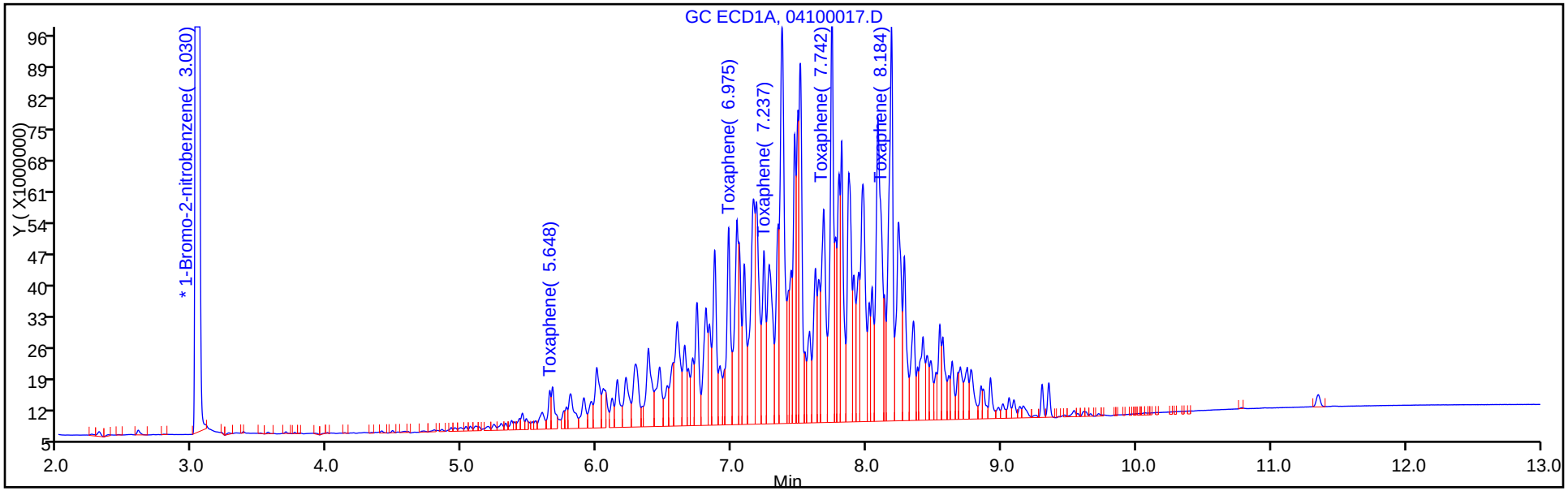
Report Date: 17-Apr-2017 13:21:39 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

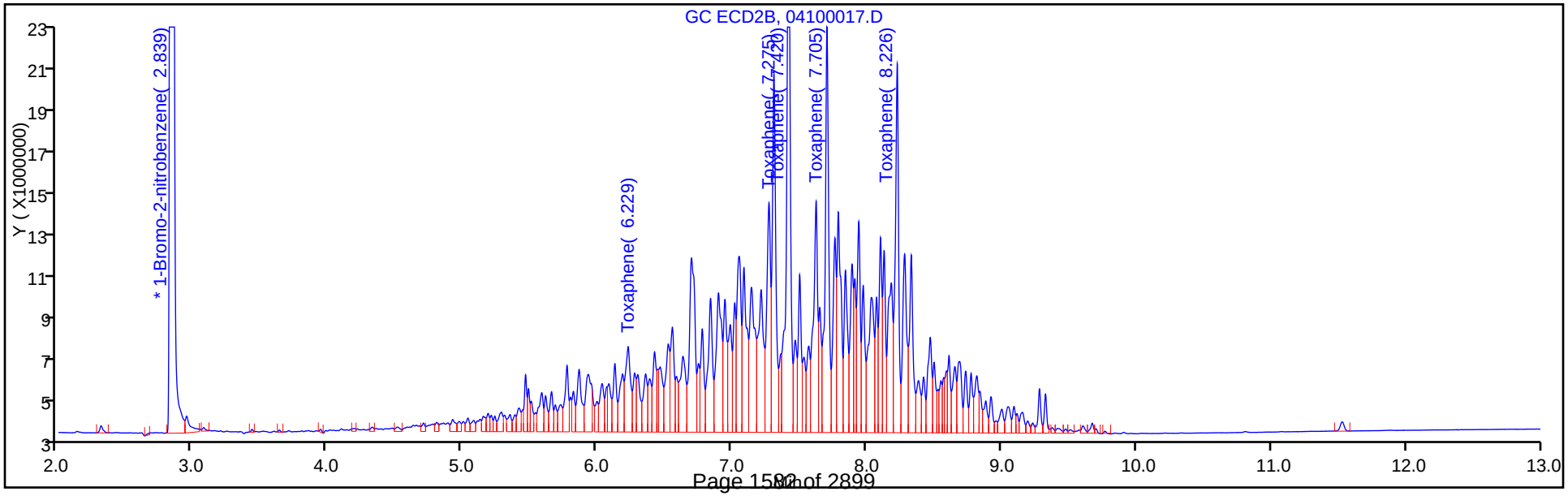
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100017.D

Injection Date:	10-Apr-2017 15:23:55	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD2 TOX			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:39 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100017.D

Injection Date: 10-Apr-2017 15:23:55 Instrument ID: SGC_P1

Lims ID: STD2 TOX

Client ID:

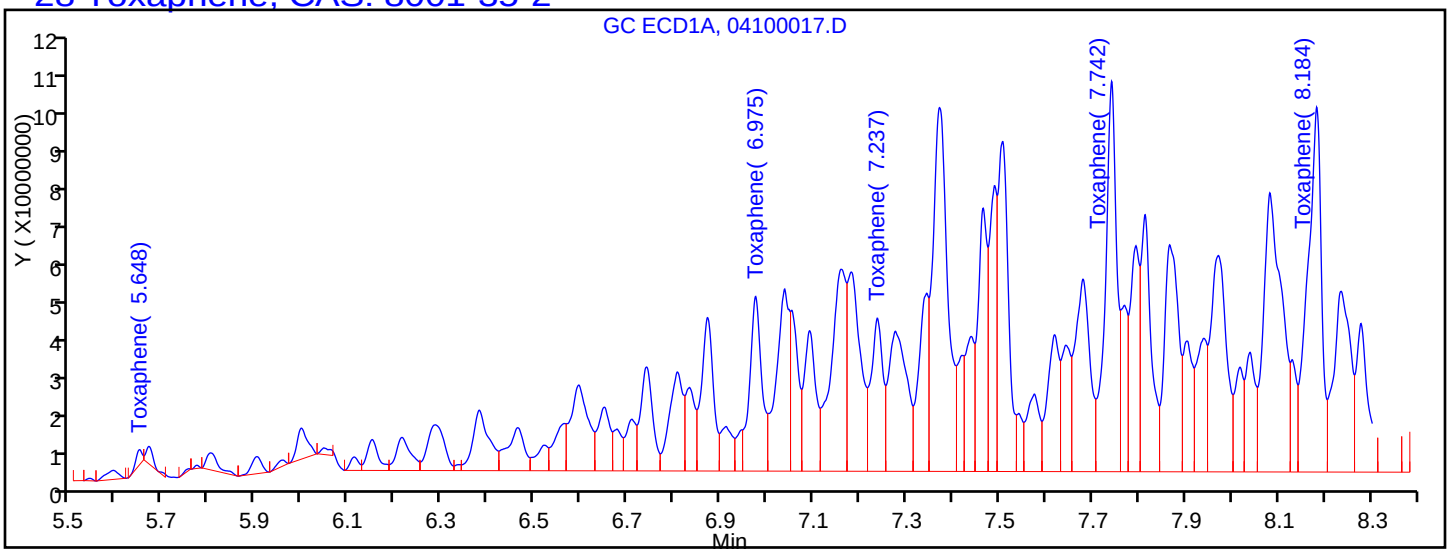
Operator ID: DAW ALS Bottle#: 15 Worklist Smp#: 17

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

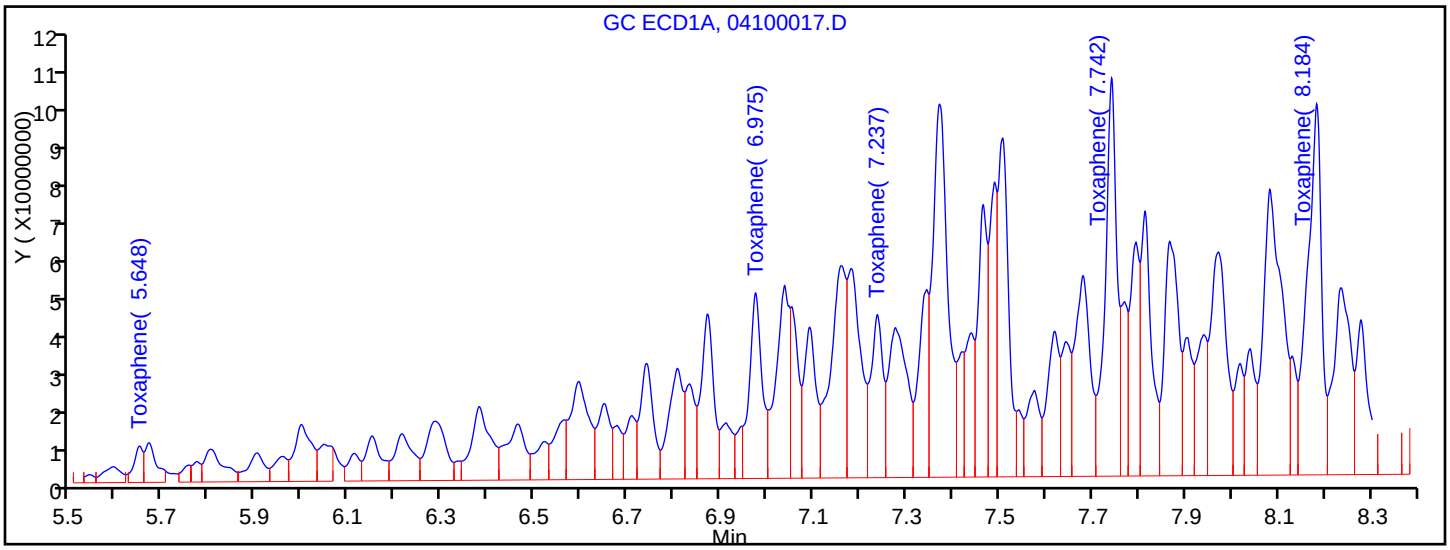
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.648	Response = 3345446
6.975	Response = 75950194
7.237	Response = 64306453
7.742	Response = 159678760
8.184	Response = 182620676



Manual Integration Results

5.648	Response = 11506754	M
6.975	Response = 84483421	M
7.237	Response = 69922737	M
7.742	Response = 165888842	M
8.184	Response = 188486212	M

Reviewer: wellsd, 17-Apr-2017 13:21:36

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100018.D
Lims ID: STD1 TOX
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 10-Apr-2017 15:40:48 ALS Bottle#: 16 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD1 TOX
Misc. Info.: 280-0057376-018
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:40 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:45:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.029	3.029	0.000	1311119836	150.0	150.0	
2	2.840	2.839	0.001	311390768	150.0	150.0	
28 Toxaphene							M
1	5.647	5.647	0.000	4842628	200.0	201.1	M
1	6.974	6.974	0.000	38516555	200.0	297.6	M
1	7.237	7.237	0.000	26891128	200.0	205.8	M
1	7.741	7.742	-0.001	63408945	200.0	205.4	M
1	8.184	8.184	0.000	71753800	200.0	205.1	M
		Average of Peak Amounts =				223.0	
2	6.229	6.229	0.000	5013988	200.0	192.0	M
2	7.275	7.275	0.000	9504996	200.0	196.9	M
2	7.420	7.420	0.000	23847616	200.0	195.6	M
2	7.705	7.704	0.001	15729985	200.0	198.1	M
2	8.226	8.225	0.001	13139084	200.0	198.1	M
		Average of Peak Amounts =				196.2	
						RPD = 12.80	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxL1_00017 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

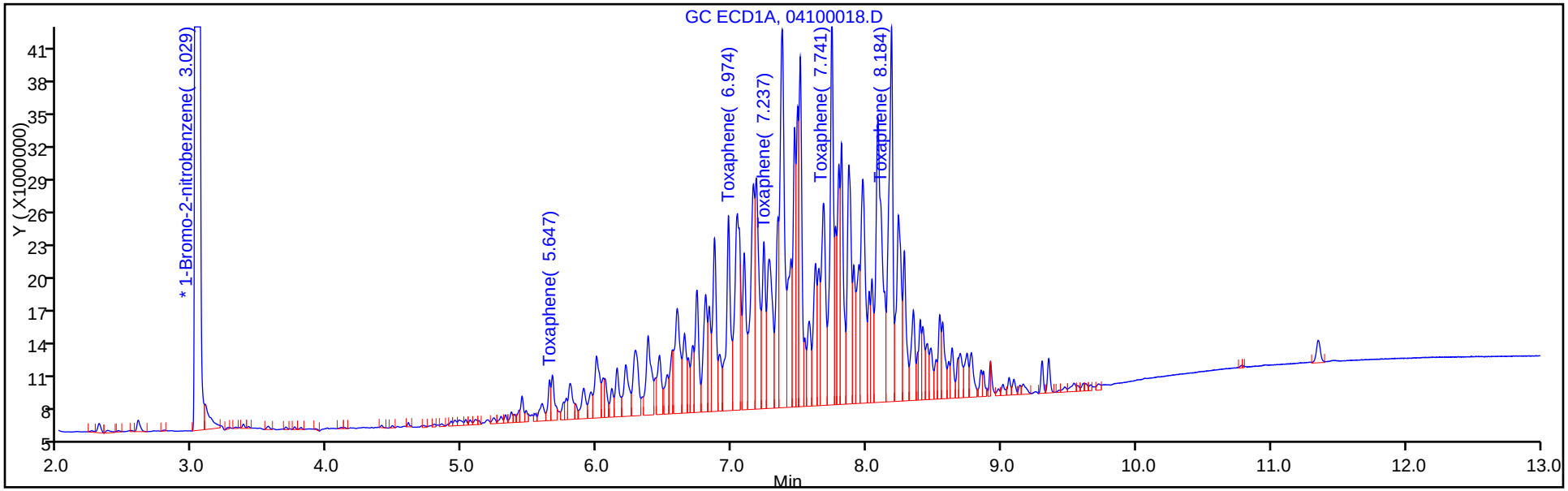
Report Date: 17-Apr-2017 13:21:41 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

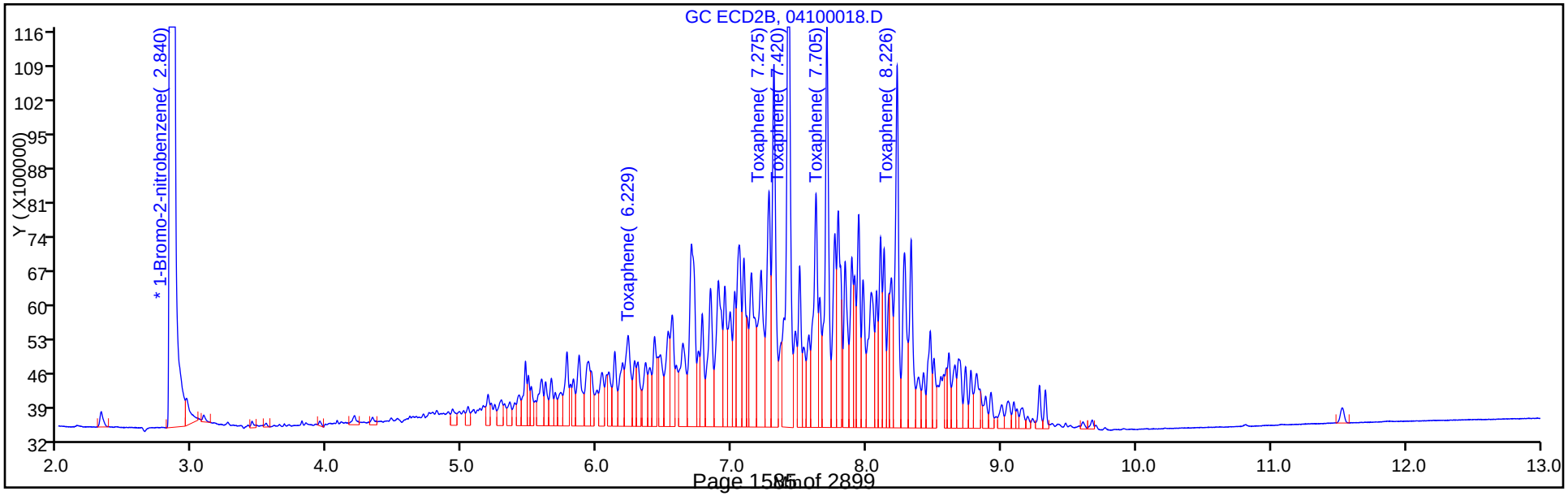
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100018.D

Injection Date:	10-Apr-2017 15:40:48	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD1 TOX			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:41 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100018.D

Injection Date: 10-Apr-2017 15:40:48 Instrument ID: SGC_P1

Lims ID: STD1 TOX

Client ID:

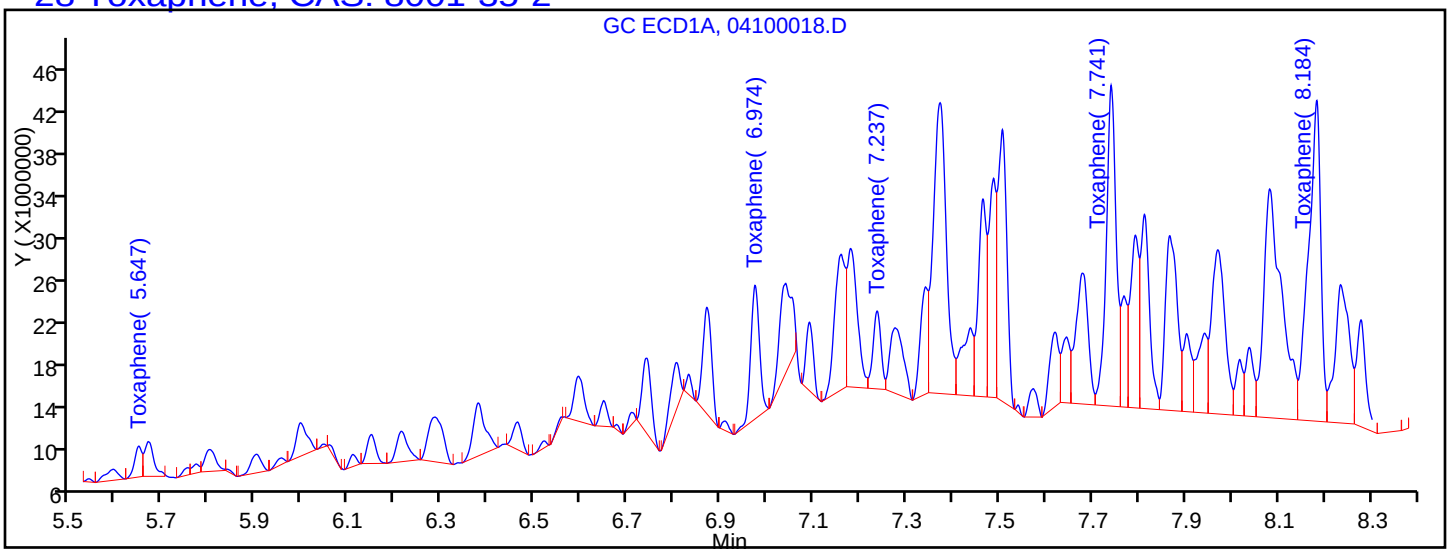
Operator ID: DAW ALS Bottle#: 16 Worklist Smp#: 18

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

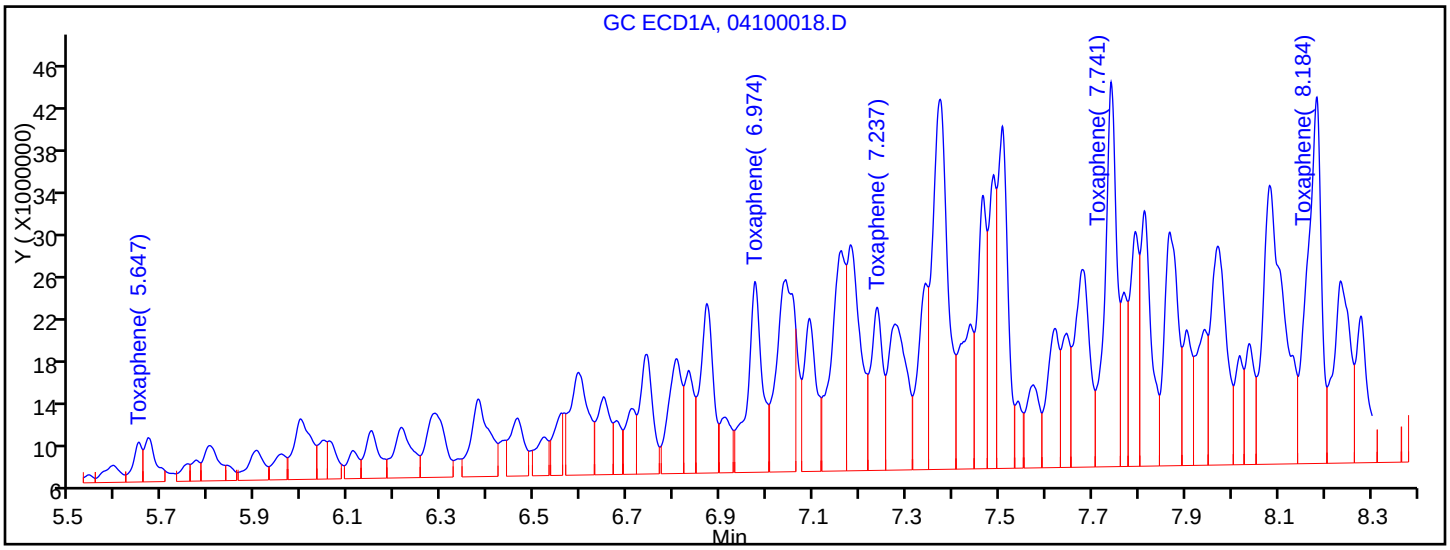
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.647	Response = 3130099
6.974	Response = 16195357
7.237	Response = 8707765
7.741	Response = 43916810
8.184	Response = 55376882



Manual Integration Results

5.647	Response = 4842628	M
6.974	Response = 38516555	M
7.237	Response = 26891128	M
7.741	Response = 63408945	M
8.184	Response = 71753800	M

Reviewer: wellsd, 17-Apr-2017 13:21:40

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 14:16 Calibration End Date: 04/10/2017 15:40 Calibration ID: 28717

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-368670/18	04100018.D
Level 2	STD2 280-368670/17	04100017.D
Level 3	STD3 280-368670/16	04100016.D
Level 4	STD4 280-368670/15	04100015.D
Level 5	STD5 280-368670/14	04100014.D
Level 6	STD6 280-368670/13	04100013.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Toxaphene Peak 1	0.0121 0.0075	0.0106	0.0094	0.0089	0.0084	Lin2	0.8243	0.0083							0.9940		0.9900
Toxaphene Peak 2	0.0229 0.0179	0.0213	0.0204	0.0200	0.0199	Lin2	0.7908	0.0192							0.9980		0.9900
Toxaphene Peak 3	0.0574 0.0502	0.0537	0.0565	0.0464	0.0460	Lin2	1.9237	0.0489							0.9930		0.9900
Toxaphene Peak 4	0.0379 0.0313	0.0357	0.0345	0.0345	0.0344	Lin2	0.9853	0.0333							0.9980		0.9900
Toxaphene Peak 5	0.0316 0.0269	0.0302	0.0295	0.0297	0.0291	Lin2	0.6768	0.0285							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 14:16 Calibration End Date: 04/10/2017 15:40 Calibration ID: 28717

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-368670/18	04100018.D
Level 2	STD2 280-368670/17	04100017.D
Level 3	STD3 280-368670/16	04100016.D
Level 4	STD4 280-368670/15	04100015.D
Level 5	STD5 280-368670/14	04100014.D
Level 6	STD6 280-368670/13	04100013.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Toxaphene Peak 1	BNB	Lin2	5013988 179222117	10714229	19766153	37649797	91944119	200 10000	500	1000	2000	5000
Toxaphene Peak 2	BNB	Lin2	9504996 425486845	21547501	42789752	84253007	217561537	200 10000	500	1000	2000	5000
Toxaphene Peak 3	BNB	Lin2	23847616 1192670953	54344230	118584476	195795188	503382115	200 10000	500	1000	2000	5000
Toxaphene Peak 4	BNB	Lin2	15729985 745018660	36174204	72430934	145369209	375808736	200 10000	500	1000	2000	5000
Toxaphene Peak 5	BNB	Lin2	13139084 639703048	30565148	61954620	125363190	318242854	200 10000	500	1000	2000	5000

Curve Type Legend:
Lin2 = Linear 1/conc^2 ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100013.D
Lims ID: STD6 TOX
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 10-Apr-2017 14:16:20 ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD6 TOX
Misc. Info.: 280-0057376-013
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:22 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:43:22

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.030	3.031	-0.001	1518668051	150.0	150.0	
2	2.839	2.839	0.000	356597752	150.0	150.0	
28 Toxaphene							M
1	5.648	5.647	0.001	274960413	10000	10028	
1	6.976	6.974	0.002	2723402477	10000	9982.1	
1	7.238	7.237	0.001	1942487748	10000	9861.7	
1	7.743	7.742	0.001	4585703000	10000	9889.8	
1	8.184	8.184	0.000	5187725515	10000	9852.9	
		Average of Peak Amounts =				9923.0	
2	6.230	6.229	0.001	179222117	10000	9000.5	M
2	7.275	7.275	0.000	425486845	10000	9264.9	M
2	7.421	7.420	0.001	1192670953	10000	10221	M
2	7.705	7.704	0.001	745018660	10000	9387.8	M
2	8.226	8.225	0.001	639703048	10000	9408.8	M
		Average of Peak Amounts =				9456.6	
						RPD = 4.81	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxL6_00020 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

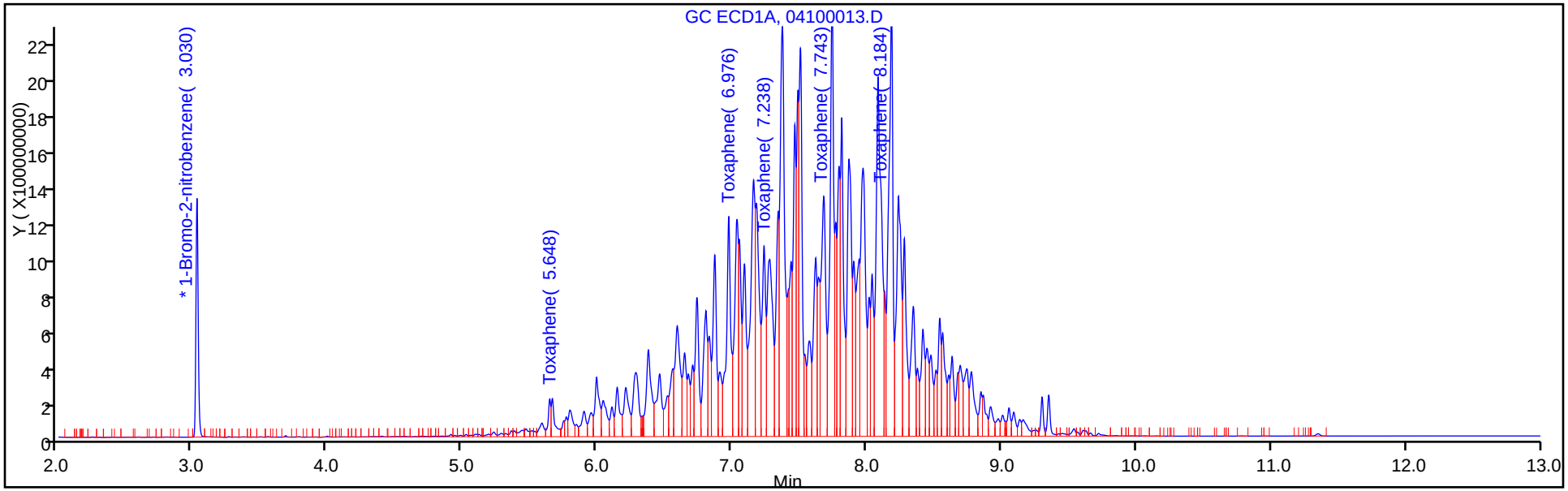
Report Date: 17-Apr-2017 13:21:24 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

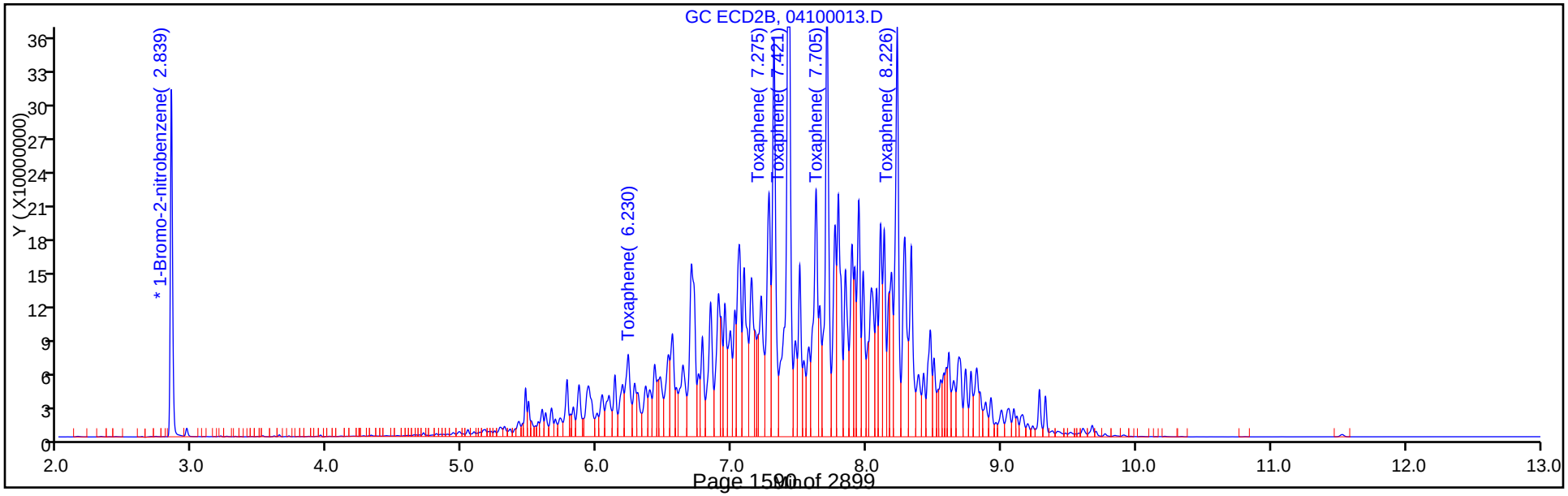
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100013.D

Injection Date:	10-Apr-2017 14:16:20	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD6 TOX			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:24 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100013.D

Injection Date: 10-Apr-2017 14:16:20 Instrument ID: SGC_P1

Lims ID: STD6 TOX

Client ID:

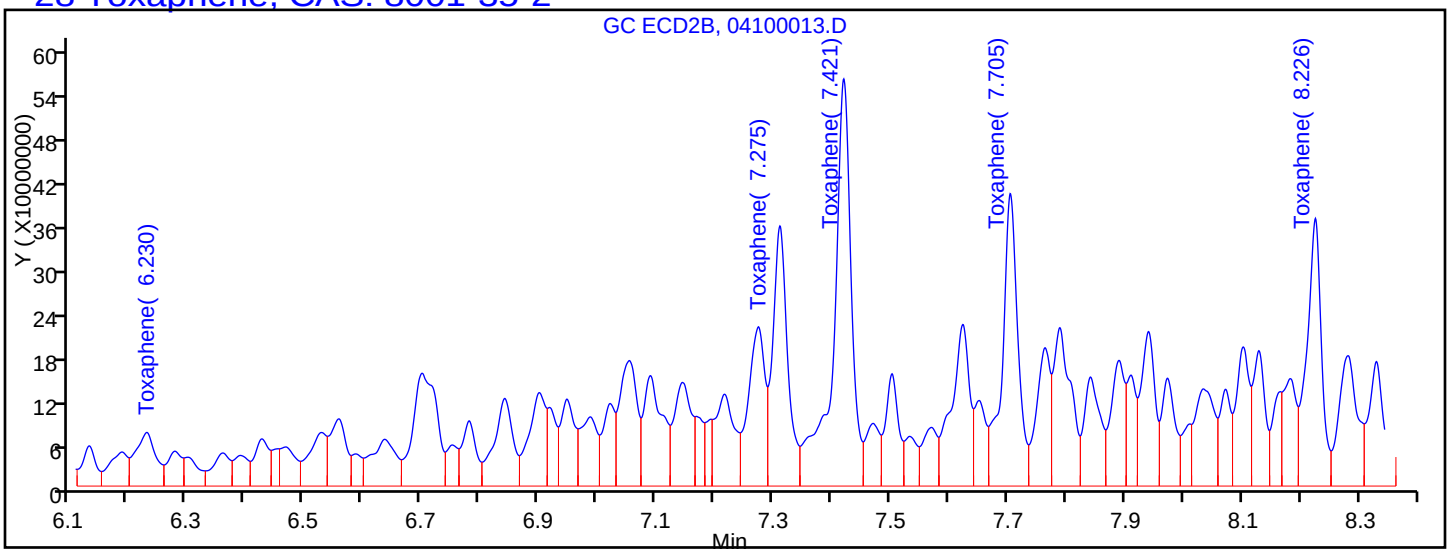
Operator ID: DAW ALS Bottle#: 11 Worklist Smp#: 13

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

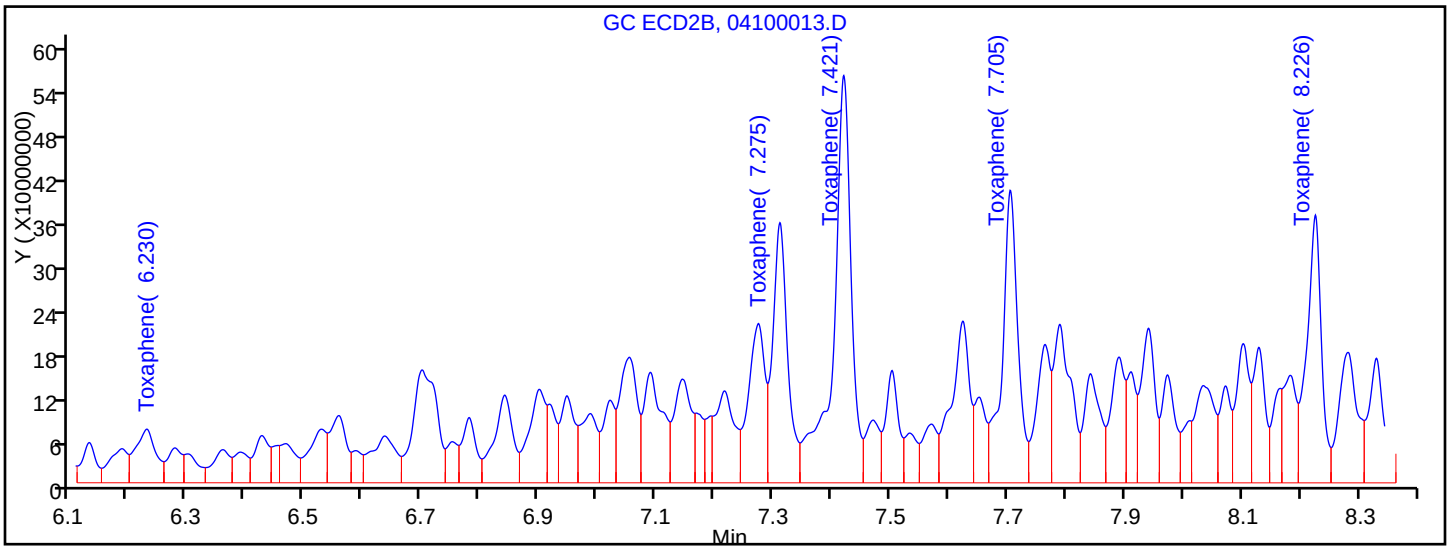
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.230	Response = 179233751
7.275	Response = 425304564
7.421	Response = 1192191230
7.705	Response = 744633992
8.226	Response = 639273238



Manual Integration Results

6.230	Response = 179222117	M
7.275	Response = 425486845	M
7.421	Response = 1192670953	M
7.705	Response = 745018660	M
8.226	Response = 639703048	M

Reviewer: wellsd, 17-Apr-2017 13:21:22

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100014.D
Lims ID: STD5 TOX
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 10-Apr-2017 14:33:12 ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD5 TOX
Misc. Info.: 280-0057376-014
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:26 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:43:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.029	3.031	-0.002	1396189255	150.0	150.0	
2	2.839	2.839	0.000	327973383	150.0	150.0	
28 Toxaphene							M
1	5.647	5.647	0.000	131950321	5000.0	5233.0	M
1	6.975	6.974	0.001	1345059246	5000.0	5079.9	M
1	7.235	7.237	-0.002	952730600	5000.0	5283.8	M
1	7.742	7.742	0.000	2284388717	5000.0	5380.7	M
1	8.184	8.184	0.000	2543887609	5000.0	5277.8	M
		Average of Peak Amounts =				5251.0	
2	6.229	6.229	0.000	91944119	5000.0	4976.4	M
2	7.273	7.275	-0.002	217561537	5000.0	5132.5	M
2	7.420	7.420	0.000	503382115	5000.0	4669.2	M
2	7.704	7.704	0.000	375808736	5000.0	5135.4	M
2	8.226	8.225	0.001	318242854	5000.0	5078.4	M
		Average of Peak Amounts =				4998.4	
						RPD = 4.93	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxL5_00018 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

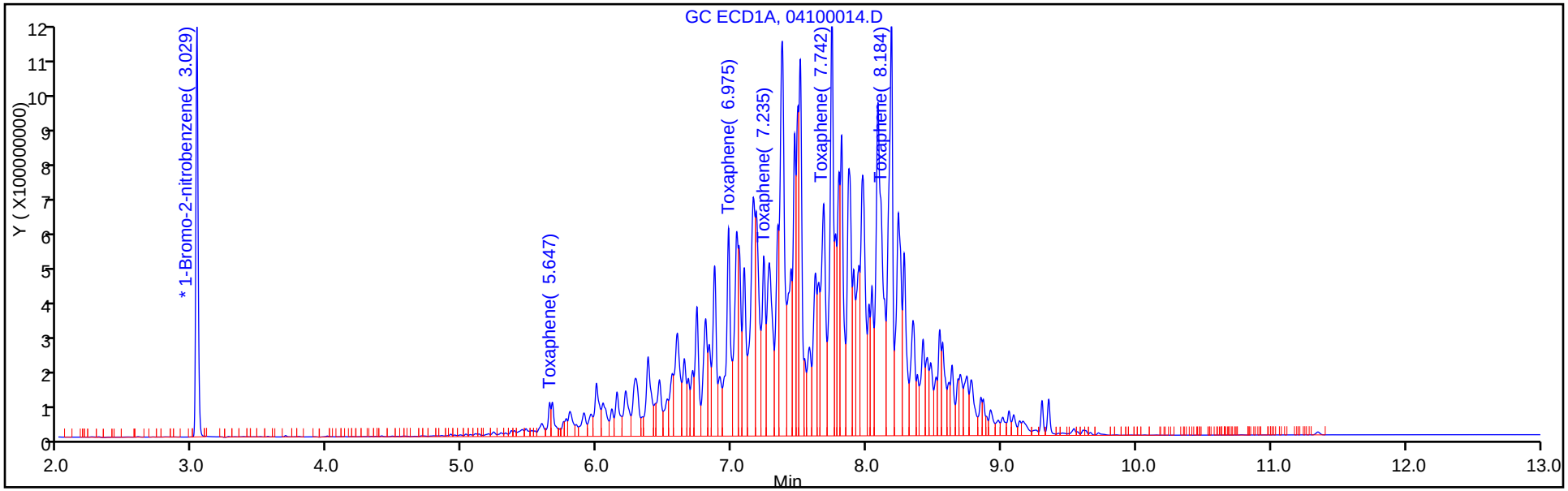
Report Date: 17-Apr-2017 13:21:28 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

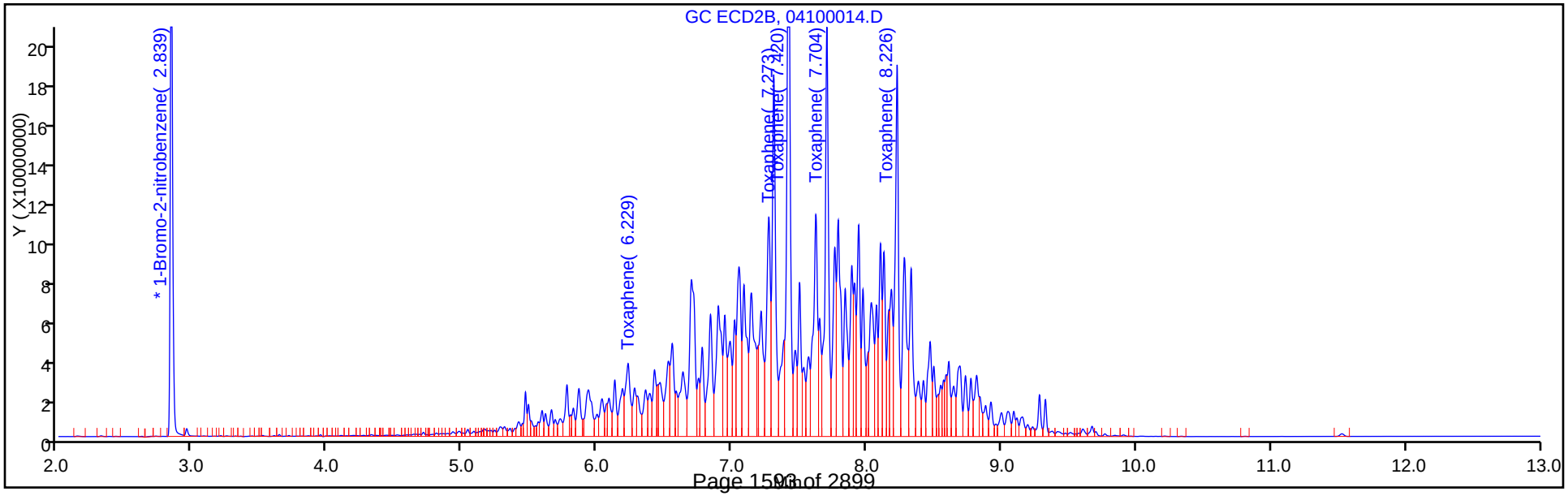
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100014.D

Injection Date:	10-Apr-2017 14:33:12	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD5 TOX			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:28 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100014.D

Injection Date: 10-Apr-2017 14:33:12 Instrument ID: SGC_P1

Lims ID: STD5 TOX

Client ID:

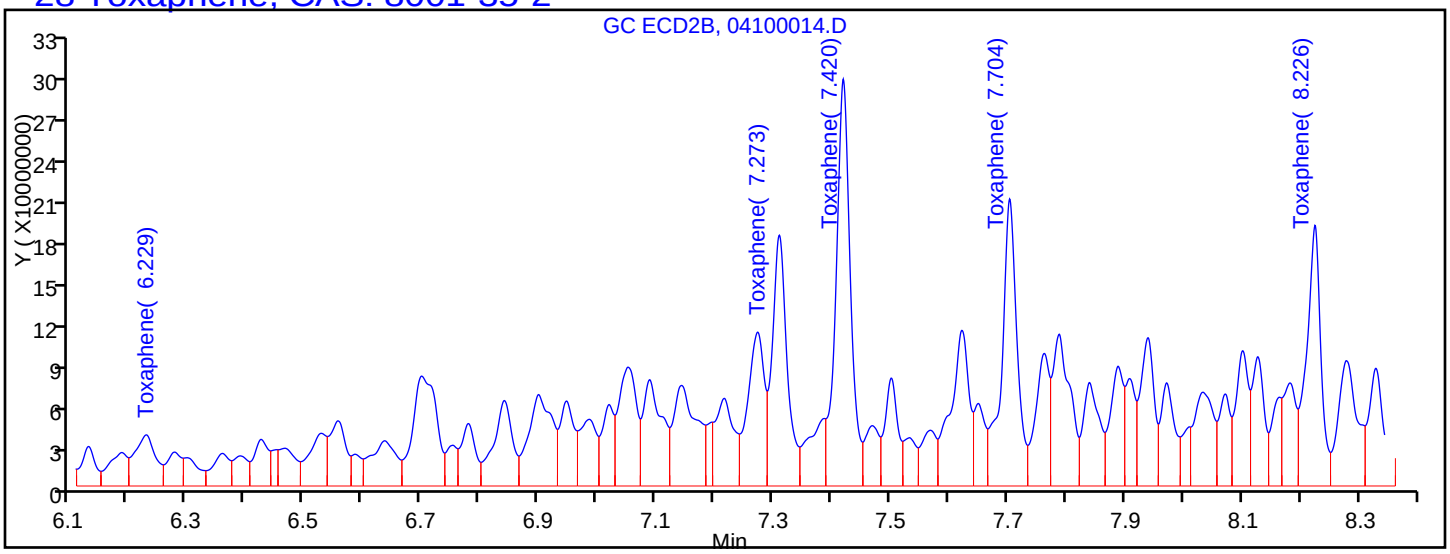
Operator ID: DAW ALS Bottle#: 12 Worklist Smp#: 14

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

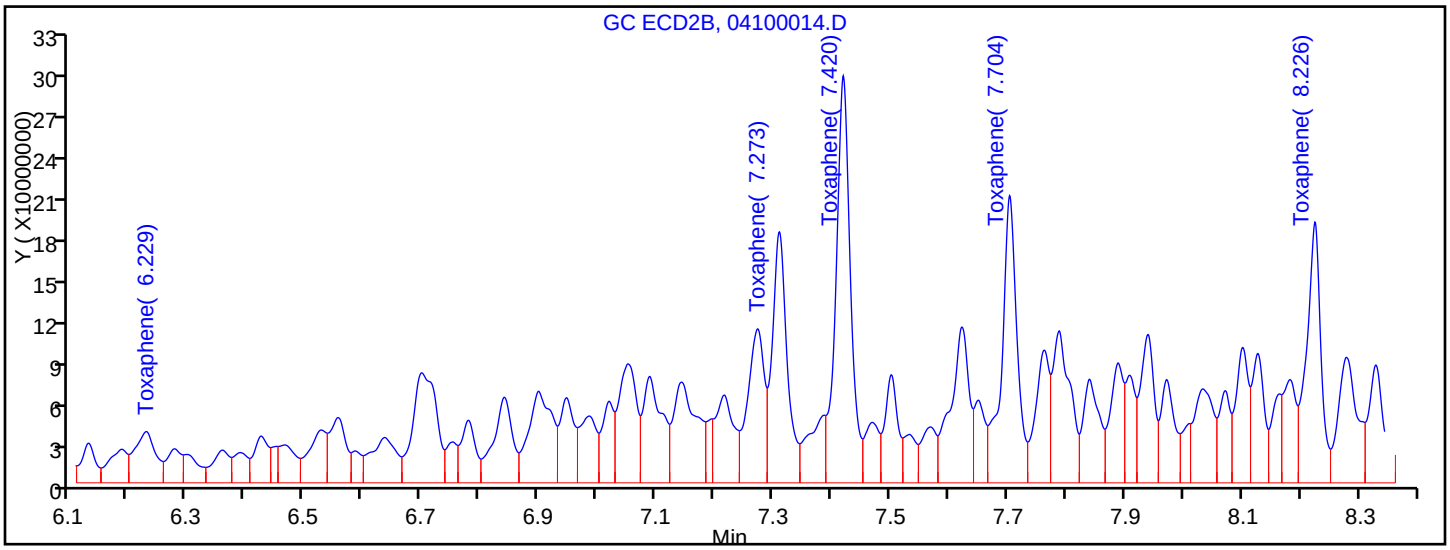
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.229	Response = 91668165
7.273	Response = 217276212
7.420	Response = 502988551
7.704	Response = 375359788
8.226	Response = 317844149



Manual Integration Results

6.229	Response = 91944119	M
7.273	Response = 217561537	M
7.420	Response = 503382115	M
7.704	Response = 375808736	M
8.226	Response = 318242854	M

Reviewer: wellsd, 17-Apr-2017 13:21:25

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100015.D
Lims ID: STD4 TOX
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 10-Apr-2017 14:50:03 ALS Bottle#: 13 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD4 TOX
Misc. Info.: 280-0057376-015
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:29 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:42:55

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.029	3.029	0.000	1331968560	150.0	150.0	
2	2.839	2.839	0.000	316438895	150.0	150.0	
28 Toxaphene							M
1	5.647	5.647	0.000	46012778	2000.0	1910.5	M
1	6.974	6.974	0.000	474769847	2000.0	1902.1	M
1	7.237	7.237	0.000	355461912	2000.0	2095.9	M
1	7.742	7.742	0.000	802936973	2000.0	2012.6	M
1	8.184	8.184	0.000	938106314	2000.0	2069.6	M
		Average of Peak Amounts =				1998.2	
2	6.229	6.229	0.000	37649797	2000.0	2054.8	M
2	7.275	7.275	0.000	84253007	2000.0	2035.5	M
2	7.420	7.420	0.000	195795188	2000.0	1858.9	M
2	7.704	7.704	0.000	145369209	2000.0	2041.1	M
2	8.225	8.225	0.000	125363190	2000.0	2059.4	M
		Average of Peak Amounts =				2009.9	
						RPD = 0.59	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00011 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

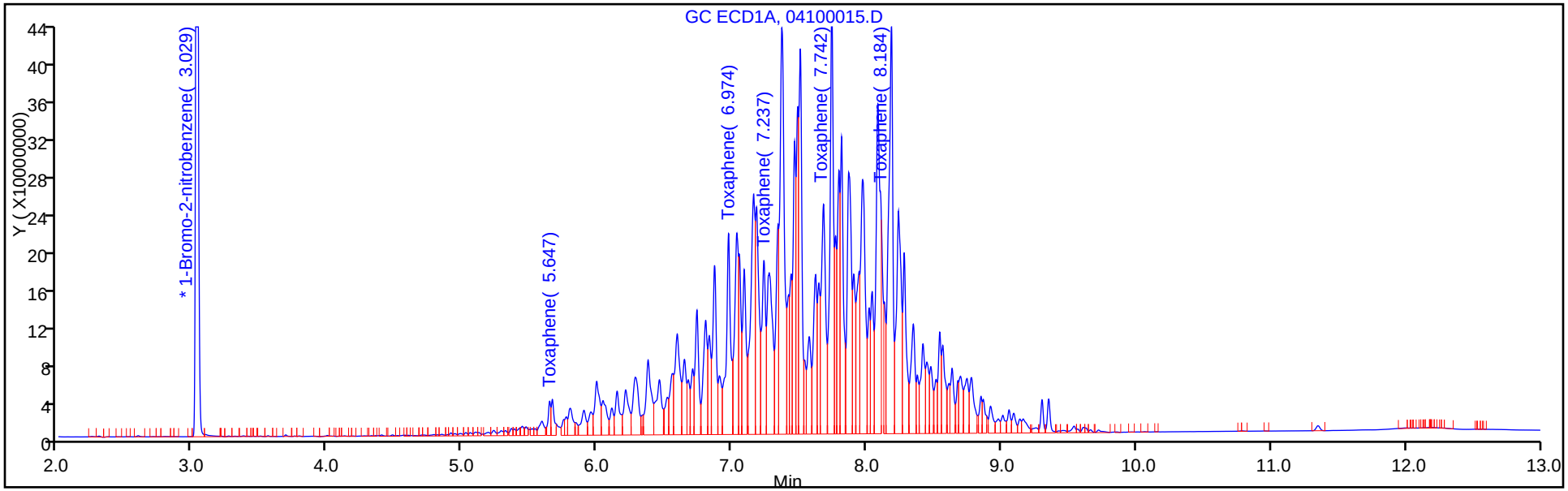
Report Date: 17-Apr-2017 13:21:32 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

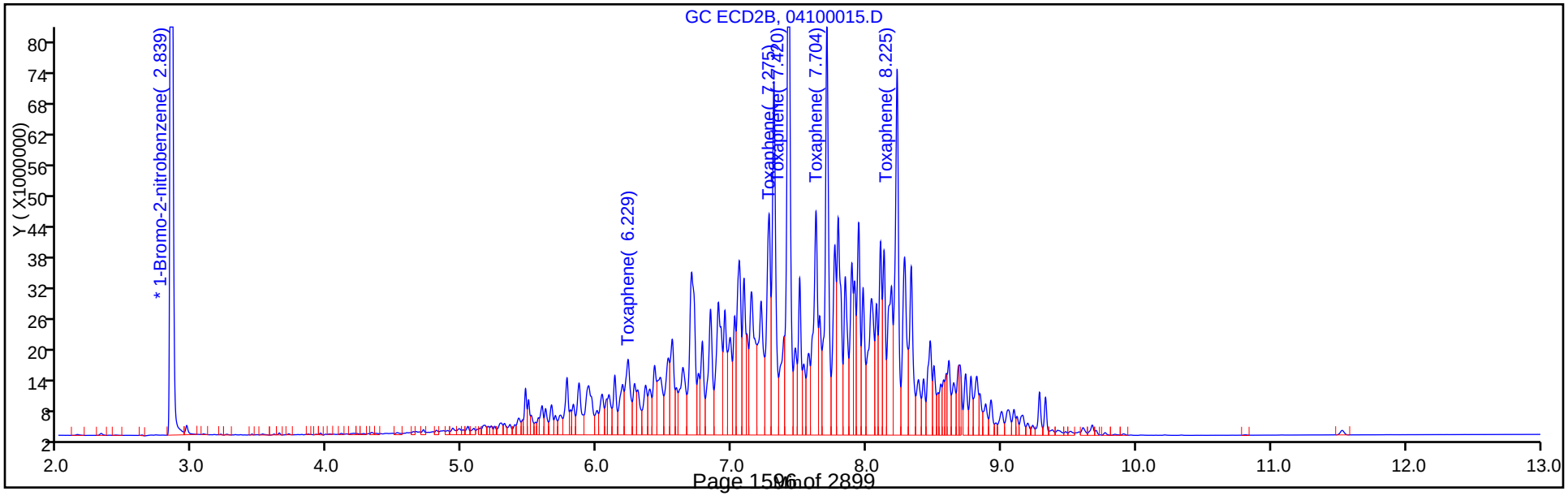
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100015.D

Injection Date:	10-Apr-2017 14:50:03	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD4 TOX			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:32 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100015.D

Injection Date: 10-Apr-2017 14:50:03 Instrument ID: SGC_P1

Lims ID: STD4 TOX

Client ID:

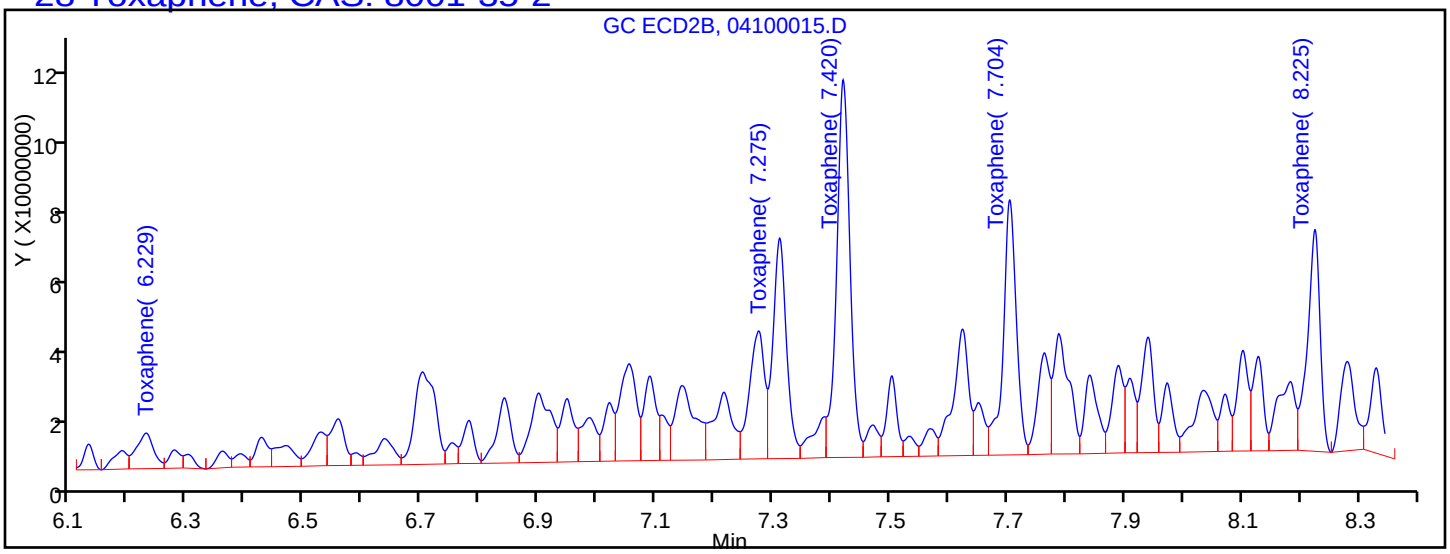
Operator ID: DAW ALS Bottle#: 13 Worklist Smp#: 15

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

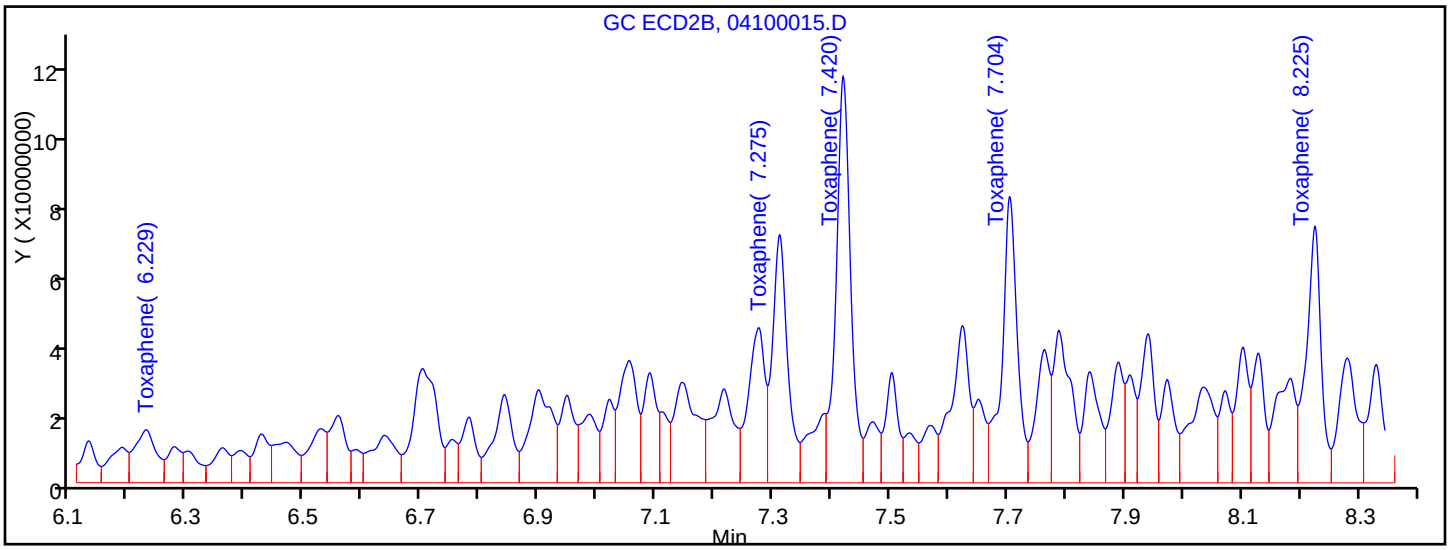
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.229	Response = 20460735
7.275	Response = 63319569
7.420	Response = 165790385
7.704	Response = 110604716
8.225	Response = 92229053



Manual Integration Results

6.229	Response = 37649797	M
7.275	Response = 84253007	M
7.420	Response = 195795188	M
7.704	Response = 145369209	M
8.225	Response = 125363190	M

Reviewer: wellsd, 17-Apr-2017 13:21:29

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100016.D
Lims ID: STD3 TOX
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 10-Apr-2017 15:06:53 ALS Bottle#: 14 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD3 TOX
Misc. Info.: 280-0057376-016
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:33 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:44:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.030	3.029	0.000	1328367555	150.0	150.0	
2	2.839	2.839	0.000	314624628	150.0	150.0	
28 Toxaphene							M
1	5.647	5.647	0.000	23922821	1000.0	994.3	M
1	6.975	6.974	0.001	221313458	1000.0	962.6	M
1	7.236	7.237	-0.001	154272139	1000.0	939.5	M
1	7.741	7.742	-0.001	370003310	1000.0	955.7	M
1	8.184	8.184	0.000	418442324	1000.0	952.2	M
		Average of Peak Amounts =				960.8	
2	6.230	6.229	0.001	19766153	1000.0	1038.0	M
2	7.275	7.275	0.000	42789752	1000.0	1019.6	M
2	7.420	7.420	0.000	118584476	1000.0	1116.9	M
2	7.704	7.704	0.000	72430934	1000.0	1008.1	M
2	8.226	8.225	0.001	61954620	1000.0	1011.7	M
		Average of Peak Amounts =				1038.9	
						RPD = 7.80	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxL3_00017 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

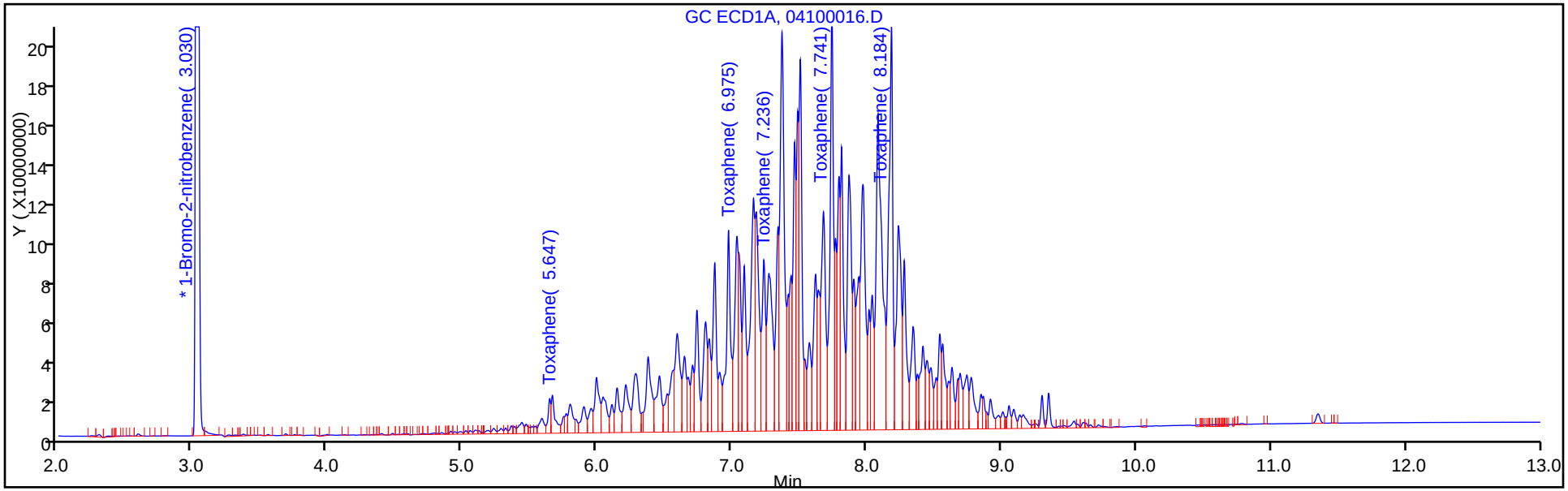
Report Date: 17-Apr-2017 13:21:35 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

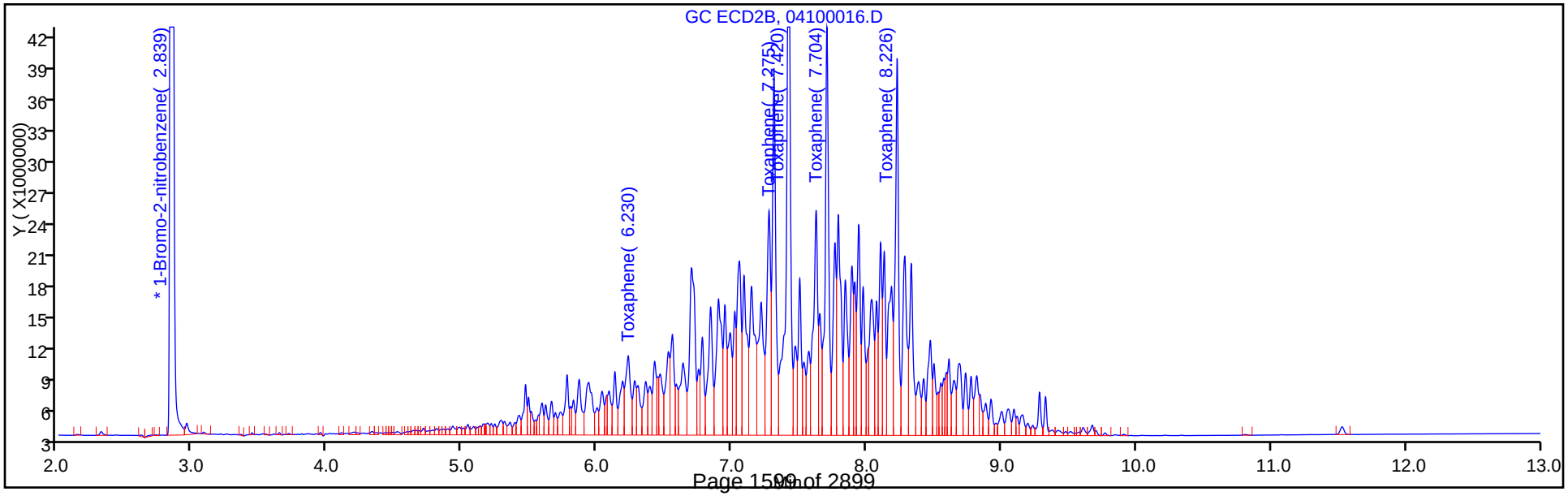
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100016.D

Injection Date:	10-Apr-2017 15:06:53	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD3 TOX			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:36 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100016.D

Injection Date: 10-Apr-2017 15:06:53 Instrument ID: SGC_P1

Lims ID: STD3 TOX

Client ID:

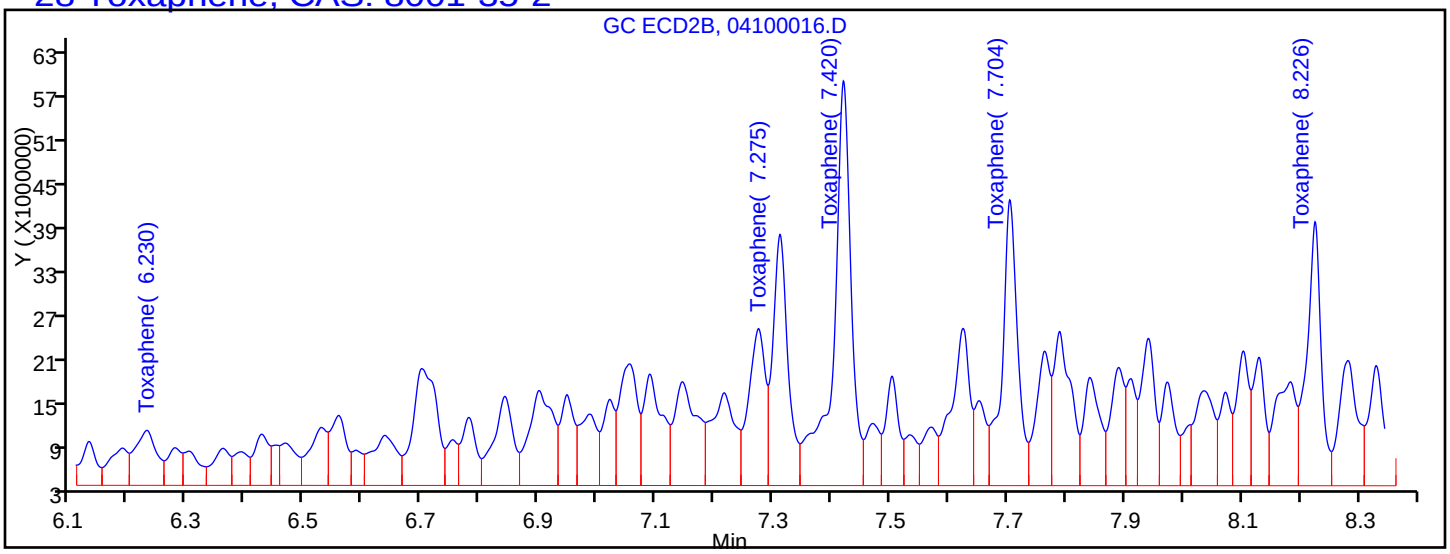
Operator ID: DAW ALS Bottle#: 14 Worklist Smp#: 16

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

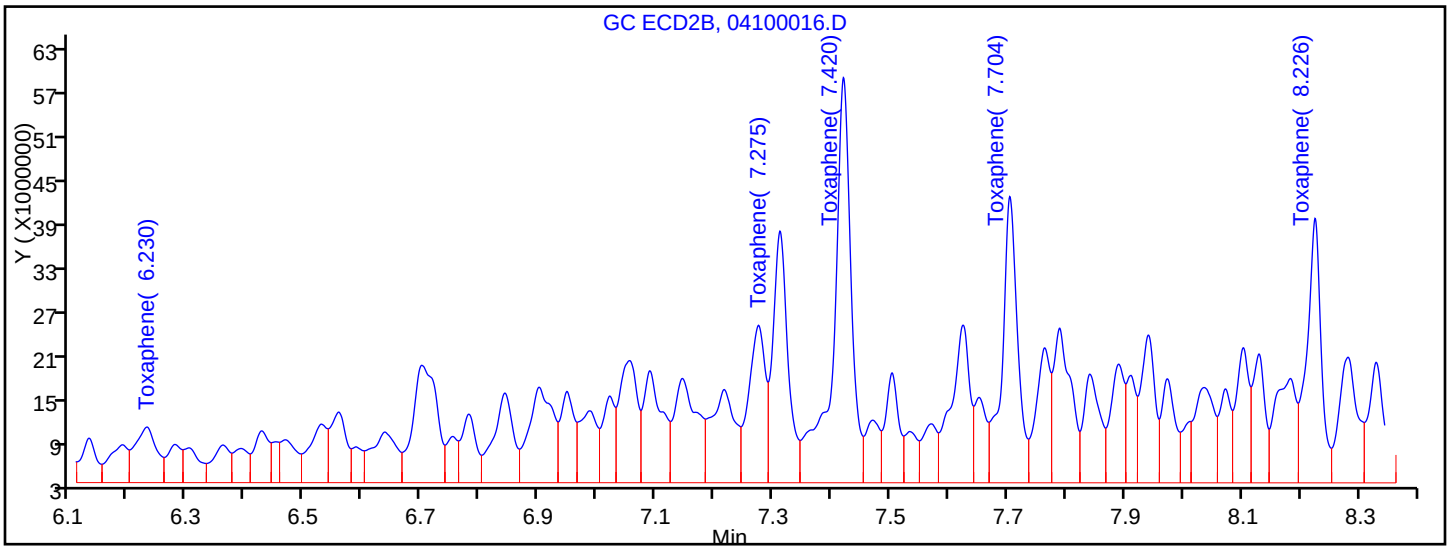
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.230	Response = 19484062
7.275	Response = 42600377
7.420	Response = 118154599
7.704	Response = 72177058
8.226	Response = 61761735



Manual Integration Results

6.230	Response = 19766153	M
7.275	Response = 42789752	M
7.420	Response = 118584476	M
7.704	Response = 72430934	M
8.226	Response = 61954620	M

Reviewer: wellsd, 17-Apr-2017 13:21:33

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100017.D
Lims ID: STD2 TOX
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 10-Apr-2017 15:23:55 ALS Bottle#: 15 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD2 TOX
Misc. Info.: 280-0057376-017
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:36 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:44:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.030	3.029	0.000	1271892489	150.0	150.0	
2	2.839	2.839	0.000	303577463	150.0	150.0	
28 Toxaphene							M
1	5.648	5.647	0.001	11506754	500.0	497.7	M
1	6.975	6.974	0.001	84483421	500.0	476.0	M
1	7.237	7.237	0.000	69922737	500.0	470.2	M
1	7.742	7.742	0.000	165888842	500.0	472.9	M
1	8.184	8.184	0.000	188486212	500.0	473.4	M
		Average of Peak Amounts =				478.0	
2	6.229	6.229	0.000	10714229	500.0	539.5	M
2	7.275	7.275	0.000	21547501	500.0	512.5	M
2	7.420	7.420	0.000	54344230	500.0	509.8	M
2	7.705	7.704	0.001	36174204	500.0	507.5	M
2	8.226	8.225	0.001	30565148	500.0	505.7	M
		Average of Peak Amounts =				515.0	
						RPD = 7.44	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxL2_00018 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

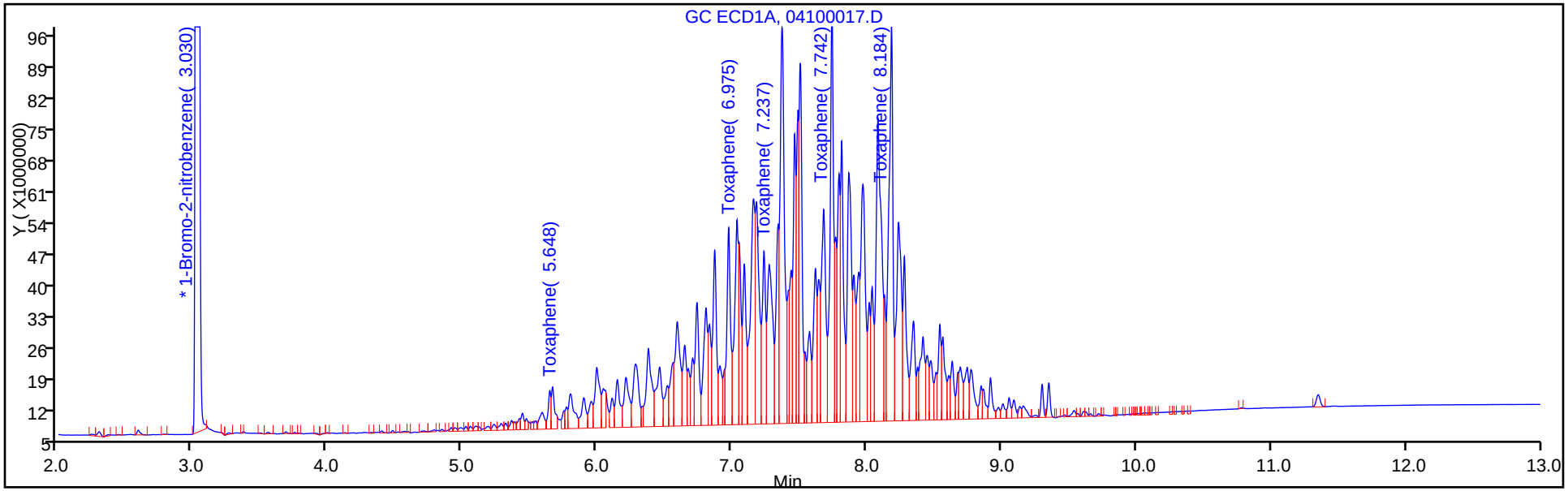
Report Date: 17-Apr-2017 13:21:39 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

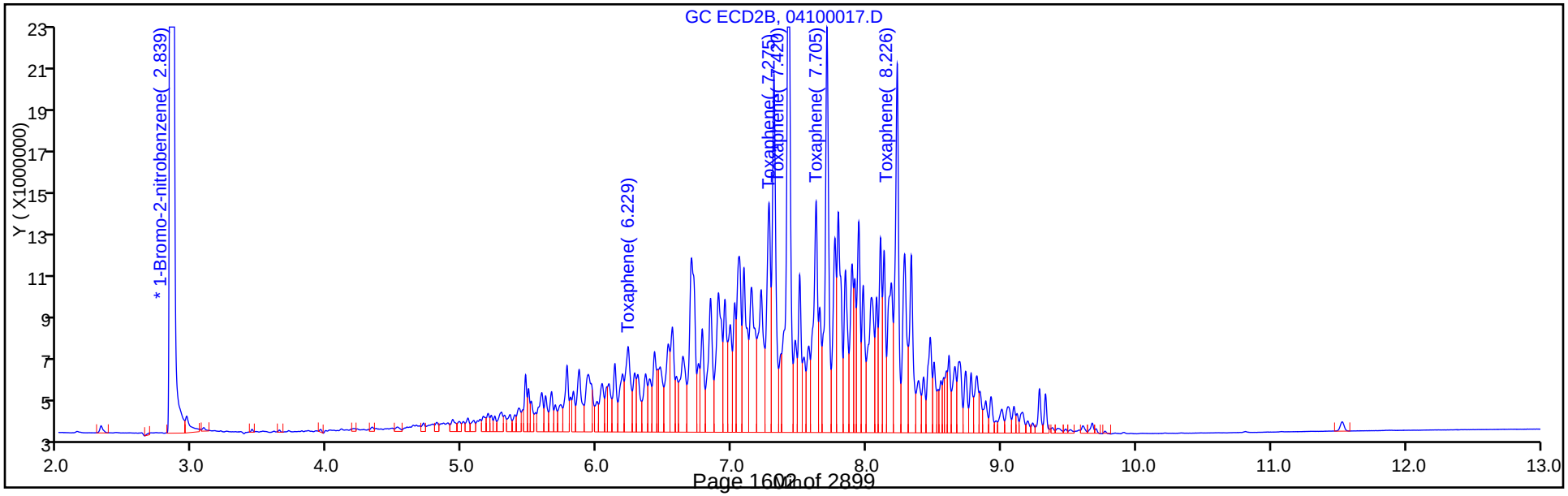
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100017.D

Injection Date:	10-Apr-2017 15:23:55	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD2 TOX			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:39 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100017.D

Injection Date: 10-Apr-2017 15:23:55 Instrument ID: SGC_P1

Lims ID: STD2 TOX

Client ID:

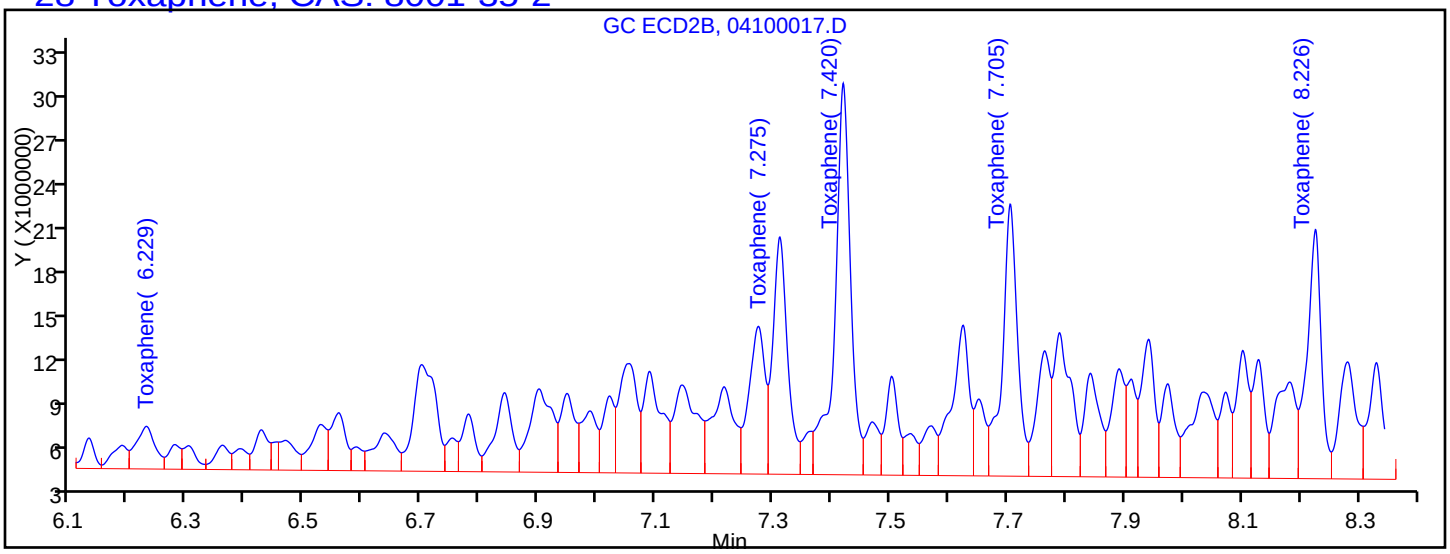
Operator ID: DAW ALS Bottle#: 15 Worklist Smp#: 17

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

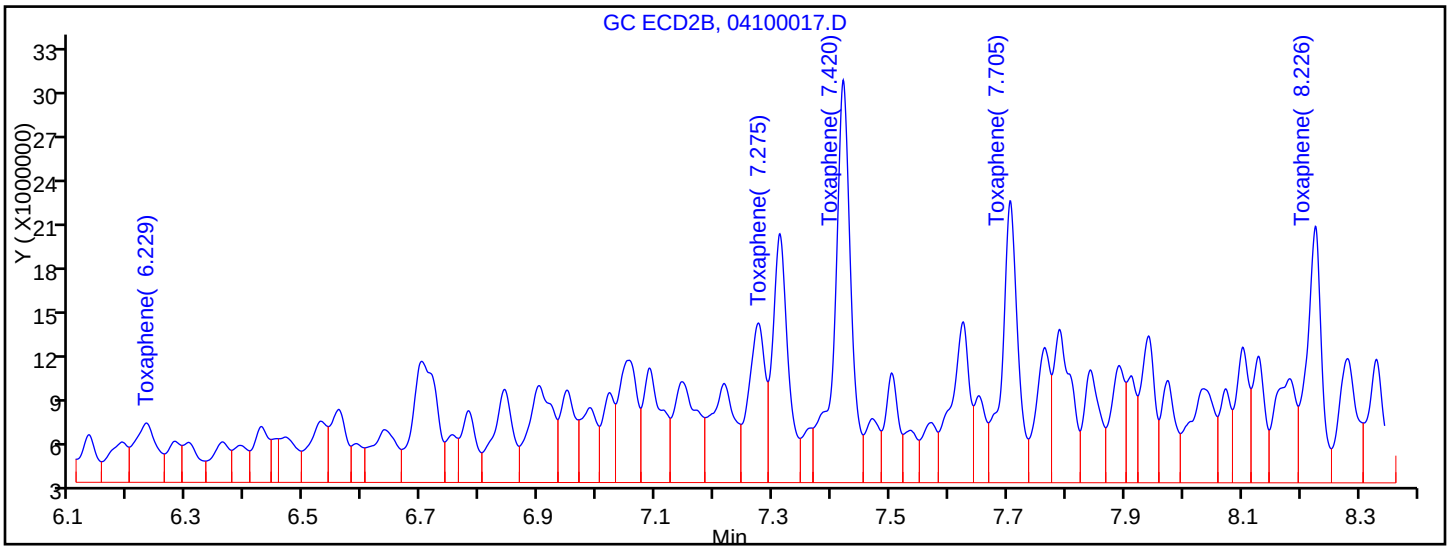
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.229	Response = 6638752
7.275	Response = 19290335
7.420	Response = 50423702
7.705	Response = 33427858
8.226	Response = 28846244



Manual Integration Results

6.229	Response = 10714229	M
7.275	Response = 21547501	M
7.420	Response = 54344230	M
7.705	Response = 36174204	M
8.226	Response = 30565148	M

Reviewer: wellsd, 17-Apr-2017 13:21:36

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100018.D
Lims ID: STD1 TOX
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 10-Apr-2017 15:40:48 ALS Bottle#: 16 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD1 TOX
Misc. Info.: 280-0057376-018
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:40 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:45:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.029	3.029	0.000	1311119836	150.0	150.0	
2	2.840	2.839	0.001	311390768	150.0	150.0	
28 Toxaphene							M
1	5.647	5.647	0.000	4842628	200.0	201.1	M
1	6.974	6.974	0.000	38516555	200.0	297.6	M
1	7.237	7.237	0.000	26891128	200.0	205.8	M
1	7.741	7.742	-0.001	63408945	200.0	205.4	M
1	8.184	8.184	0.000	71753800	200.0	205.1	M
		Average of Peak Amounts =				223.0	
2	6.229	6.229	0.000	5013988	200.0	192.0	M
2	7.275	7.275	0.000	9504996	200.0	196.9	M
2	7.420	7.420	0.000	23847616	200.0	195.6	M
2	7.705	7.704	0.001	15729985	200.0	198.1	M
2	8.226	8.225	0.001	13139084	200.0	198.1	M
		Average of Peak Amounts =				196.2	
						RPD = 12.80	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxL1_00017 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

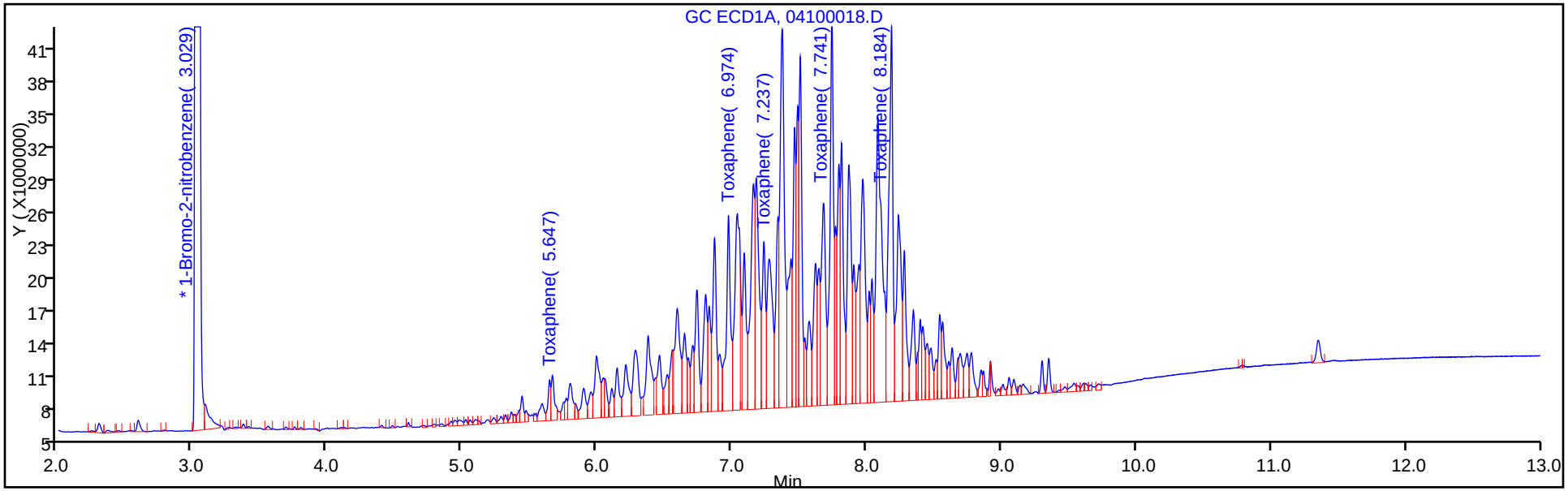
Report Date: 17-Apr-2017 13:21:42 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

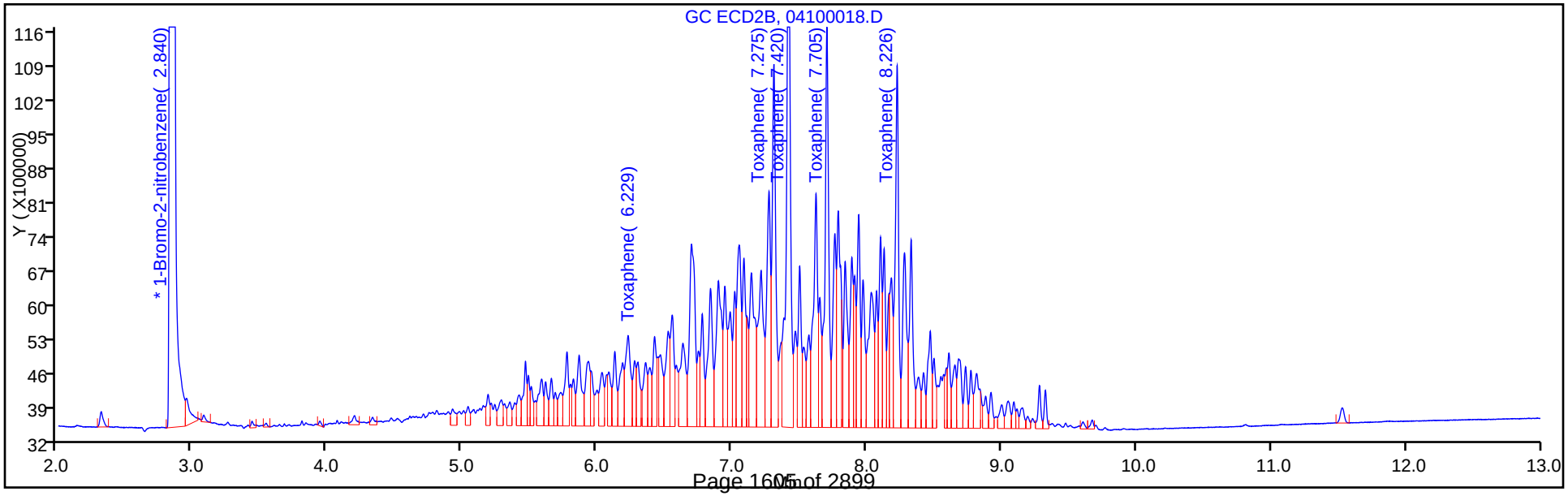
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100018.D

Injection Date:	10-Apr-2017 15:40:48	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD1 TOX			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:42 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100018.D

Injection Date: 10-Apr-2017 15:40:48 Instrument ID: SGC_P1

Lims ID: STD1 TOX

Client ID:

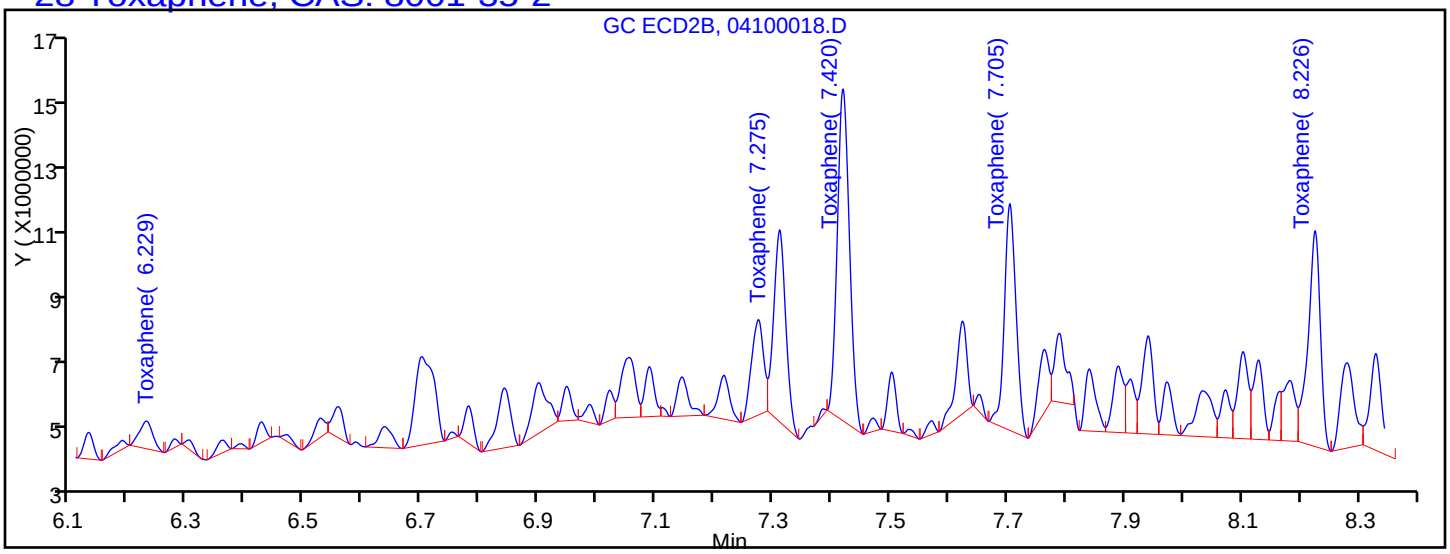
Operator ID: DAW ALS Bottle#: 16 Worklist Smp#: 18

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

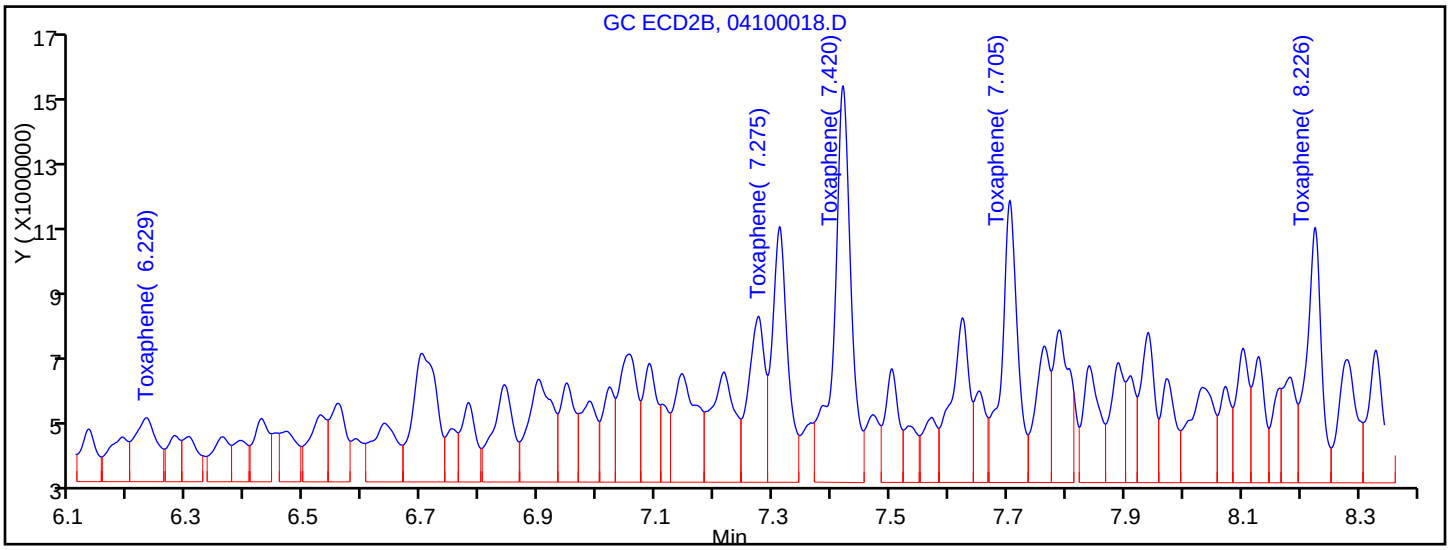
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.229	Response = 1298288
7.275	Response = 4055996
7.420	Response = 14110140
7.705	Response = 9161011
8.226	Response = 9236918



Manual Integration Results

6.229	Response = 5013988	M
7.275	Response = 9504996	M
7.420	Response = 23847616	M
7.705	Response = 15729985	M
8.226	Response = 13139084	M

Reviewer: wellsd, 17-Apr-2017 13:21:40

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 17:22 Calibration End Date: 04/10/2017 18:46 Calibration ID: 28724

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-368670/29	04100029.D
Level 2	STD2 280-368670/28	04100028.D
Level 3	STD3 280-368670/27	04100027.D
Level 4	STD4 280-368670/26	04100026.D
Level 5	STD5 280-368670/25	04100025.D
Level 6	STD6 280-368670/24	04100024.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Hexachlorobenzene	1.2831 1.2696	1.2805	1.2529	1.2928	1.2574	Lin2	0.0631	1.2682							1.0000		0.9900
alpha-BHC	1.7126 2.0585	1.8568	1.9112	2.0116	1.9788	Lin2	-1.270	2.0133							0.9990		0.9900
gamma-BHC (Lindane)	1.5708 1.8550	1.6873	1.7331	1.8158	1.7791	Lin2	-1.029	1.8145							0.9990		0.9900
beta-BHC	0.7018 0.7030	0.7000	0.6821	0.7009	0.6815	Lin2	0.0400	0.6920							1.0000		0.9900
delta-BHC	1.6778 1.9548	1.7992	1.8493	1.9322	1.8807	Lin2	-1.026	1.9231							1.0000		0.9900
Heptachlor	1.5848 1.6218	1.6724	1.6639	1.6936	1.6237	Lin2	-0.239	1.6606							0.9990		0.9900
Aldrin	1.5656 1.6660	1.6758	1.6864	1.7249	1.6610	Lin2	-0.484	1.6982							1.0000		0.9900
Heptachlor epoxide	1.4604 1.3991	1.5210	1.4834	1.4964	1.4165	Lin2	0.1257	1.4537							0.9990		0.9900
gamma-Chlordane	1.4969 1.6174	1.5733	1.5688	1.6437	1.5994	Lin2	-0.492	1.6188							1.0000		0.9900
alpha-Chlordane	1.4611 1.5339	1.5216	1.5111	1.5705	1.5259	Lin2	-0.322	1.5439							1.0000		0.9900
4,4'-DDE	1.4433 1.5664	1.5476	1.5535	1.6248	1.5728	Lin2	-0.585	1.5936							1.0000		0.9900
Endosulfan I	1.4184 1.3395	1.4637	1.4224	1.4491	1.3698	Lin2	0.1680	1.3984							0.9990		0.9900
Dieldrin	1.5213 1.5221	1.5991	1.5856	1.6309	1.5597	Lin2	-0.183	1.5830							0.9990		0.9900
Endrin	1.2329 1.2557	1.2775	1.2462	1.3136	1.2986	Lin2	-0.200	1.2852							0.9990		0.9900
4,4'-DDD	1.3479 1.3242	1.3228	1.3167	1.3732	1.3296	Lin2	0.0353	1.3332							1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 17:22 Calibration End Date: 04/10/2017 18:46 Calibration ID: 28724

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Endosulfan II	1.3210 1.2626	1.3650	1.3445	1.3706	1.3000	Lin2	0.0634	1.3227							0.9990		0.9900
4,4'-DDT	1.1289 1.2897	1.2095	1.2314	1.3093	1.3080	Lin2	-0.714	1.2977							1.0000		0.9900
Endrin aldehyde	1.0671 1.0310	1.0978	1.0880	1.1044	1.0503	Lin2	0.0338	1.0706							0.9990		0.9900
Methoxychlor	0.5894 0.5348	0.5918	0.5624	0.5692	0.5574	Lin2	0.1674	0.5554							0.9990		0.9900
Endosulfan sulfate	1.1681 1.2007	1.2251	1.2156	1.2556	1.2182	Lin2	-0.218	1.2297							1.0000		0.9900
Endrin ketone	1.3056 1.3116	1.3799	1.3733	1.3979	1.3369	Lin2	-0.165	1.3628							0.9990		0.9900
Tetrachloro-m-xylene (Surr)	1.1098 1.1277	1.1381	1.1358	1.1624	1.1287	Lin2	-0.116	1.1421							1.0000		0.9900
DCB Decachlorobiphenyl (Surr)	0.8362 0.7557	0.8183	0.7832	0.7893	0.7690	Lin2	0.2902	0.7710							1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 17:22 Calibration End Date: 04/10/2017 18:46 Calibration ID: 28724

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-368670/29	04100029.D
Level 2	STD2 280-368670/28	04100028.D
Level 3	STD3 280-368670/27	04100027.D
Level 4	STD4 280-368670/26	04100026.D
Level 5	STD5 280-368670/25	04100025.D
Level 6	STD6 280-368670/24	04100024.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Hexachlorobenzene	BNB	Lin2	50408254 1319385871	122073382	302011012	625478519	953751155	4.00 100	10.0	25.0	50.0	75.0
alpha-BHC	BNB	Lin2	67283578 2139137586	177015109	460689005	973305622	1500963941	4.00 100	10.0	25.0	50.0	75.0
gamma-BHC (Lindane)	BNB	Lin2	61711453 1927755733	160851275	417761684	878541538	1349509916	4.00 100	10.0	25.0	50.0	75.0
beta-BHC	BNB	Lin2	27570072 730597628	66733070	164419828	339126643	516930048	4.00 100	10.0	25.0	50.0	75.0
delta-BHC	BNB	Lin2	65915279 2031436177	171519904	445756739	934862866	1426546662	4.00 100	10.0	25.0	50.0	75.0
Heptachlor	BNB	Lin2	62263366 1685369246	159432609	401076446	819438517	1231615698	4.00 100	10.0	25.0	50.0	75.0
Aldrin	BNB	Lin2	61506570 1731342352	159758366	406498125	834572536	1259887652	4.00 100	10.0	25.0	50.0	75.0
Heptachlor epoxide	BNB	Lin2	57377311 1453989120	144999613	357575852	724013320	1074417824	4.00 100	10.0	25.0	50.0	75.0
gamma-Chlordane	BNB	Lin2	58808048 1680849049	149983574	378143079	795275882	1213169134	4.00 100	10.0	25.0	50.0	75.0
alpha-Chlordane	BNB	Lin2	57404226 1594072207	145056359	364243044	759869729	1157453219	4.00 100	10.0	25.0	50.0	75.0
4,4'-DDE	BNB	Lin2	56703371 1627815932	147537531	374471464	786120791	1192992637	4.00 100	10.0	25.0	50.0	75.0
Endosulfan I	BNB	Lin2	55727204 1392008263	139542986	342859423	701131485	1039014644	4.00 100	10.0	25.0	50.0	75.0
Dieldrin	BNB	Lin2	59769469 1581813705	152444419	382209842	789092288	1183080417	4.00 100	10.0	25.0	50.0	75.0
Endrin	BNB	Lin2	48438787 1304915588	121790203	300398177	635546942	984991714	4.00 100	10.0	25.0	50.0	75.0
4,4'-DDD	BNB	Lin2	52953763 1376055631	126102765	317389076	664379086	1008545196	4.00 100	10.0	25.0	50.0	75.0
Endosulfan II	BNB	Lin2	51900672 1312067628	130132659	324094271	663138940	986071296	4.00 100	10.0	25.0	50.0	75.0

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 17:22 Calibration End Date: 04/10/2017 18:46 Calibration ID: 28724

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
4,4'-DDT	BNB	Lin2	44351007 1340252548	115302783	296830977	633475863	992108573	4.00 100	10.0	25.0	50.0	75.0
Endrin aldehyde	BNB	Lin2	41923660 1071395989	104654709	262263031	534341175	796638608	4.00 100	10.0	25.0	50.0	75.0
Methoxychlor	BNB	Lin2	23156143 555725549	56417993	135571591	275387035	422779700	4.00 100	10.0	25.0	50.0	75.0
Endosulfan sulfate	BNB	Lin2	45892091 1247773585	116790690	293004864	607504059	924054452	4.00 100	10.0	25.0	50.0	75.0
Endrin ketone	BNB	Lin2	51293926 1363046988	131548129	331024497	676344945	1014092028	4.00 100	10.0	25.0	50.0	75.0
Tetrachloro-m-xylene (Surr)	BNB	Lin2	43599324 1171889809	108494839	273789743	562387248	856099240	4.00 100	10.0	25.0	50.0	75.0
DCB Decachlorobiphenyl (Surr)	BNB	Lin2	32850791 785371404	78010565	188781011	381877964	583329943	4.00 100	10.0	25.0	50.0	75.0

Curve Type Legend:
Lin2 = Linear 1/conc^2 ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100024.D
Lims ID: STD6 AB
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 10-Apr-2017 17:22:18 ALS Bottle#: 22 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD6 AB
Misc. Info.: 280-0057376-024
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:58 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						409.4	
2						398.2	
						RPD = 2.76	
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.029	-0.001	1558796871	150.0	150.0	
2	2.839	2.839	-0.001	366505847	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.852	3.851	0.001	1171889809	100.0	98.8	
2	3.746	3.746	0.000	242345914	100.0	96.6	
						RPD = 2.29	
5 Hexachlorobenzene							
1	4.233	4.232	0.001	1319385871	100.0	100.1	
2	4.179	4.179	0.000	253485608	100.0	97.5	
						RPD = 2.59	
8 alpha-BHC							
1	4.403	4.402	0.001	2139137586	100.0	102.9	
2	4.321	4.321	0.000	370997094	100.0	99.9	
						RPD = 2.95	
9 gamma-BHC (Lindane)							
1	4.713	4.712	0.001	1927755733	100.0	102.8	
2	4.652	4.652	0.000	327118196	100.0	99.9	
						RPD = 2.89	
10 beta-BHC							
1	4.798	4.797	0.001	730597628	100.0	101.5	
2	4.734	4.732	0.002	133734765	100.0	98.7	
						RPD = 2.84	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.973	4.973	0.000	2031436177	100.0	102.2	
2	5.011	5.011	0.000	337086663	100.0	99.8	
						RPD = 2.36	
15 Heptachlor							
1	5.183	5.183	0.000	1685369246	100.0	97.8	
2	5.068	5.067	0.001	295396332	100.0	98.0	
						RPD = 0.17	
16 Aldrin							
1	5.468	5.467	0.001	1731342352	100.0	98.4	
2	5.374	5.372	0.002	291642553	100.0	97.5	
						RPD = 0.89	
18 Isodrin							
1	5.803	5.803	0.000	1311049624	100.0	97.6	
2	5.749	5.747	0.002	224390799	100.0	96.6	
						RPD = 1.07	
21 Heptachlor epoxide							
1	6.102	6.101	0.001	1453989120	100.0	96.2	
2	5.937	5.936	0.001	253962352	100.0	96.0	
						RPD = 0.18	
22 gamma-Chlordane							
1	6.246	6.246	0.000	1680849049	100.0	100.2	
2	6.144	6.143	0.001	270338491	100.0	97.6	
						RPD = 2.69	
23 alpha-Chlordane							
1	6.410	6.408	0.002	1594072207	100.0	99.6	
2	6.319	6.318	0.001	255751262	100.0	97.0	
						RPD = 2.60	
24 4,4'-DDE							
1	6.503	6.504	-0.001	1627815932	100.0	98.7	
2	6.539	6.537	0.002	263208174	100.0	96.7	
						RPD = 1.98	
25 Endosulfan I							
1	6.580	6.580	0.000	1392008263	100.0	95.7	
2	6.388	6.387	0.001	240949933	100.0	95.4	
						RPD = 0.32	
27 Dieldrin							
1	6.865	6.864	0.001	1581813705	100.0	96.3	
2	6.728	6.727	0.001	269459295	100.0	96.1	
						RPD = 0.13	
30 Endrin							
1	7.133	7.132	0.001	1304915588	100.0	97.9	
2	7.084	7.083	0.001	219610884	100.0	97.8	
						RPD = 0.07	
32 4,4'-DDD							
1	7.206	7.206	0.000	1376055631	100.0	99.3	
2	7.227	7.227	0.000	211626206	100.0	98.1	
						RPD = 1.21	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.383	7.382	0.001	1312067628	100.0	95.4	
2	7.325	7.325	0.000	218906323	100.0	94.4	
						RPD = 1.01	
35 4,4'-DDT							
1	7.515	7.516	-0.001	1340252548	100.0	99.9	
2	7.572	7.571	0.001	204416040	100.0	98.3	
						RPD = 1.61	
36 Endrin aldehyde							
1	7.836	7.836	0.000	1071395989	100.0	96.3	
2	7.697	7.697	0.000	178319421	100.0	94.6	
						RPD = 1.75	
37 Methoxychlor							
1	8.027	8.027	0.000	555725549	100.0	96.0	
2	8.289	8.289	0.000	92769855	100.0	94.8	
						RPD = 1.29	
38 Mirex							
1	8.173	8.174	-0.001	912564075	100.0	98.2	
2	8.467	8.466	0.001	137845186	100.0	87.1	
						RPD = 12.07	
39 Endosulfan sulfate							
1	8.284	8.285	-0.001	1247773585	100.0	97.8	
2	7.988	7.987	0.001	199432581	100.0	95.6	
						RPD = 2.29	
40 Endrin ketone							
1	8.563	8.563	0.000	1363046988	100.0	96.4	
2	8.515	8.514	0.001	225857141	100.0	95.0	
						RPD = 1.43	
$ 41 DCB Decachlorobiphenyl							
1	9.542	9.541	0.001	785371404	100.0	97.6	
2	9.721	9.722	-0.001	142760332	100.0	94.9	
						RPD = 2.90	
S 3 Endosulfan, Total							
1						288.9	
2						285.4	
						RPD = 1.21	

Reagents:

8081IcalL6_00021	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

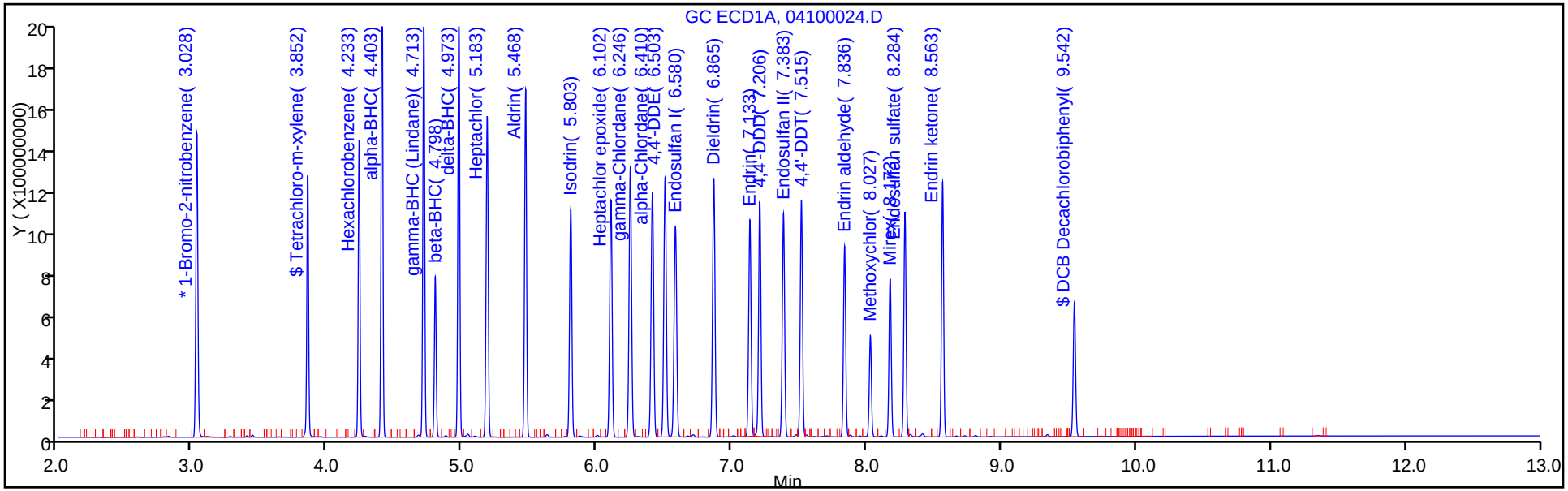
Report Date: 17-Apr-2017 13:22:00 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

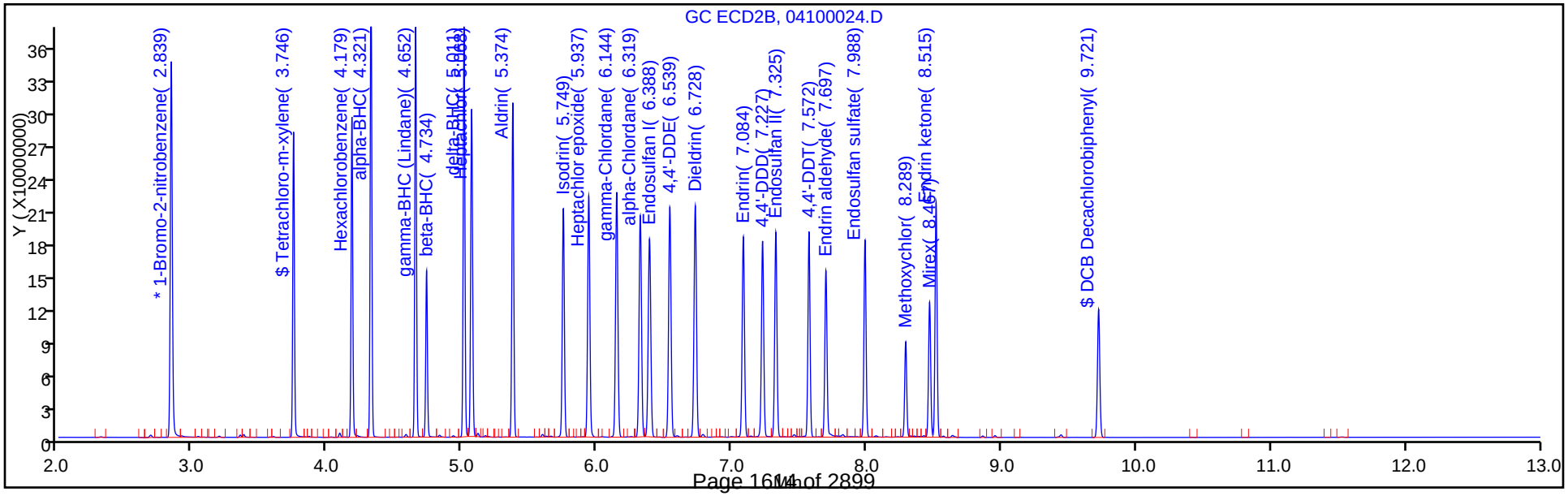
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100024.D

Injection Date:	10-Apr-2017 17:22:18	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD6 AB			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100025.D
Lims ID: STD5 AB
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 10-Apr-2017 17:39:16 ALS Bottle#: 23 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD5 AB
Misc. Info.: 280-0057376-025
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:01 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						296.1	
2						293.1	
						RPD = 1.03	
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.029	-0.001	1517029565	150.0	150.0	
2	2.838	2.839	-0.001	355277678	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.851	3.851	0.000	856099240	75.0	74.2	
2	3.746	3.746	0.000	178030117	75.0	73.1	
						RPD = 1.57	
5 Hexachlorobenzene							
1	4.233	4.232	0.001	953751155	75.0	74.3	
2	4.179	4.179	0.000	183033435	75.0	72.4	
						RPD = 2.61	
8 alpha-BHC							
1	4.403	4.402	0.001	1500963941	75.0	74.3	
2	4.321	4.321	0.000	264970568	75.0	73.6	
						RPD = 1.05	
9 gamma-BHC (Lindane)							
1	4.713	4.712	0.001	1349509916	75.0	74.1	
2	4.652	4.652	0.000	233222609	75.0	73.4	
						RPD = 0.96	
10 beta-BHC							
1	4.798	4.797	0.001	516930048	75.0	73.8	
2	4.733	4.732	0.001	95698762	75.0	72.6	
						RPD = 1.68	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.973	4.973	0.000	1426546662	75.0	73.9	
2	5.011	5.011	0.000	240986417	75.0	73.6	
						RPD = 0.42	
15 Heptachlor							
1	5.183	5.183	0.000	1231615698	75.0	73.5	
2	5.068	5.067	0.001	214523974	75.0	73.3	
						RPD = 0.28	
16 Aldrin							
1	5.468	5.467	0.001	1259887652	75.0	73.6	
2	5.374	5.372	0.002	212851933	75.0	73.3	
						RPD = 0.41	
18 Isodrin							
1	5.804	5.803	0.001	962034429	75.0	73.6	
2	5.748	5.747	0.001	165503258	75.0	73.3	
						RPD = 0.37	
21 Heptachlor epoxide							
1	6.102	6.101	0.001	1074417824	75.0	73.0	
2	5.937	5.936	0.001	187200128	75.0	72.8	
						RPD = 0.24	
22 gamma-Chlordane							
1	6.246	6.246	0.000	1213169134	75.0	74.4	
2	6.144	6.143	0.001	197434182	75.0	73.4	
						RPD = 1.41	
23 alpha-Chlordane							
1	6.409	6.408	0.001	1157453219	75.0	74.3	
2	6.319	6.318	0.001	187880416	75.0	73.4	
						RPD = 1.33	
24 4,4'-DDE							
1	6.504	6.504	0.000	1192992637	75.0	74.4	
2	6.539	6.537	0.002	194272112	75.0	73.5	
						RPD = 1.16	
25 Endosulfan I							
1	6.581	6.580	0.001	1039014644	75.0	73.3	
2	6.388	6.387	0.001	178467168	75.0	72.6	
						RPD = 0.96	
27 Dieldrin							
1	6.866	6.864	0.002	1183080417	75.0	74.0	
2	6.727	6.727	0.000	199141205	75.0	73.2	
						RPD = 1.15	
30 Endrin							
1	7.133	7.132	0.001	984991714	75.0	75.9	
2	7.084	7.083	0.001	164902943	75.0	75.6	
						RPD = 0.39	
32 4,4'-DDD							
1	7.208	7.206	0.002	1008545196	75.0	74.8	
2	7.226	7.227	-0.001	158020255	75.0	75.4	
						RPD = 0.80	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.383	7.382	0.001	986071296	75.0	73.7	
2	7.325	7.325	0.000	164394784	75.0	73.0	
						RPD = 0.95	
35 4,4'-DDT							
1	7.517	7.516	0.001	992108573	75.0	76.1	
2	7.572	7.571	0.001	150950240	75.0	74.8	
						RPD = 1.75	
36 Endrin aldehyde							
1	7.837	7.836	0.001	796638608	75.0	73.5	
2	7.697	7.697	0.000	133235574	75.0	72.7	
						RPD = 1.12	
37 Methoxychlor							
1	8.028	8.027	0.001	422779700	75.0	75.0	
2	8.289	8.289	0.000	70535274	75.0	74.1	
						RPD = 1.16	
38 Mirex							
1	8.174	8.174	0.000	676105049	75.0	74.7	
2	8.466	8.466	0.000	103451263	75.0	67.4	
						RPD = 10.32	
39 Endosulfan sulfate							
1	8.284	8.285	-0.001	924054452	75.0	74.5	
2	7.987	7.987	0.000	148963202	75.0	73.5	
						RPD = 1.37	
40 Endrin ketone							
1	8.564	8.563	0.001	1014092028	75.0	73.7	
2	8.515	8.514	0.001	168496296	75.0	73.0	
						RPD = 1.02	
$ 41 DCB Decachlorobiphenyl							
1	9.543	9.541	0.002	583329943	75.0	74.4	
2	9.722	9.722	0.000	106744621	75.0	72.9	
						RPD = 2.08	
S 3 Endosulfan, Total							
1						221.5	
2						219.1	
						RPD = 1.09	

Reagents:

8081IcalL5_00022	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

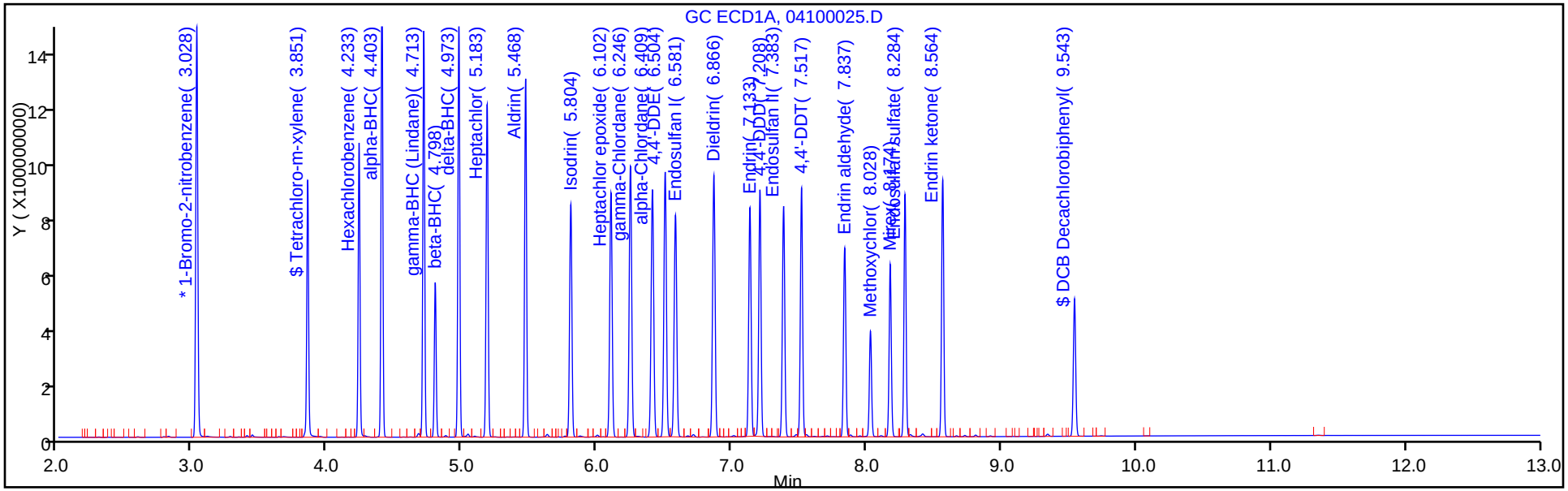
Report Date: 17-Apr-2017 13:22:03 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

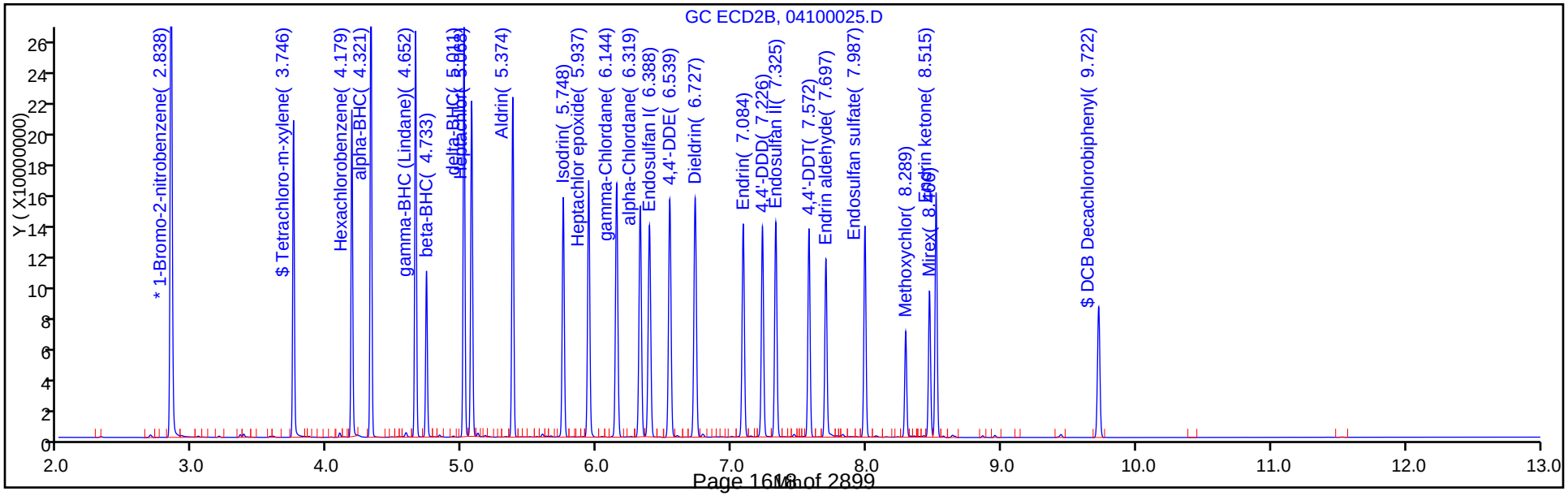
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100025.D

Injection Date:	10-Apr-2017 17:39:16	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD5 AB			Worklist Smp#:	25
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100026.D
Lims ID: STD4 AB
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 10-Apr-2017 17:56:08 ALS Bottle#: 24 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD4 AB
Misc. Info.: 280-0057376-026
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:04 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:50:49

	Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
*	2 1-Bromo-2-nitrobenzene							
	1	3.028	3.028	0.000	1451506563	150.0	150.0	
	2	2.837	2.837	0.000	339364371	150.0	150.0	
$	4 Tetrachloro-m-xylene							
	1	3.851	3.851	0.000	562387248	50.0	51.0	
	2	3.746	3.746	0.000	118986099	50.0	50.9	
							RPD = 0.09	
	5 Hexachlorobenzene							
	1	4.232	4.232	0.000	625478519	50.0	50.9	
	2	4.179	4.179	0.000	124406761	50.0	51.3	
							RPD = 0.67	
	8 alpha-BHC							
	1	4.402	4.402	0.000	973305622	50.0	50.6	
	2	4.321	4.321	0.000	174668568	50.0	50.7	
							RPD = 0.31	
	9 gamma-BHC (Lindane)							
	1	4.712	4.712	0.000	878541538	50.0	50.6	
	2	4.652	4.652	0.000	154208805	50.0	50.7	
							RPD = 0.28	
	10 beta-BHC							
	1	4.797	4.797	0.000	339126643	50.0	50.6	
	2	4.732	4.732	0.000	64160741	50.0	50.6	
							RPD = 0.06	
	12 delta-BHC							
	1	4.973	4.973	0.000	934862866	50.0	50.8	
	2	5.011	5.011	0.000	159334546	50.0	50.9	
							RPD = 0.23	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
15 Heptachlor							M
1	5.183	5.183	0.000	819438517	50.0	51.1	M
2	5.067	5.067	0.000	142994349	50.0	51.0	
						RPD = 0.32	
16 Aldrin							
1	5.467	5.467	0.000	834572536	50.0	51.1	
2	5.372	5.372	0.000	141683787	50.0	51.0	
						RPD = 0.13	
18 Isodrin							
1	5.803	5.803	0.000	640783415	50.0	51.2	
2	5.747	5.747	0.000	110988794	50.0	51.3	
						RPD = 0.10	
21 Heptachlor epoxide							
1	6.101	6.101	0.000	724013320	50.0	51.4	
2	5.936	5.936	0.000	126082810	50.0	51.1	
						RPD = 0.48	
22 gamma-Chlordane							
1	6.246	6.246	0.000	795275882	50.0	51.1	
2	6.143	6.143	0.000	131570155	50.0	51.0	
						RPD = 0.12	
23 alpha-Chlordane							
1	6.408	6.408	0.000	759869729	50.0	51.1	
2	6.318	6.318	0.000	125325291	50.0	51.0	
						RPD = 0.10	
24 4,4'-DDE							
1	6.504	6.504	0.000	786120791	50.0	51.3	
2	6.537	6.537	0.000	129314457	50.0	51.1	
						RPD = 0.51	
25 Endosulfan I							
1	6.580	6.580	0.000	701131485	50.0	51.7	
2	6.387	6.387	0.000	120761574	50.0	51.2	
						RPD = 0.97	
27 Dieldrin							
1	6.864	6.864	0.000	789092288	50.0	51.6	
2	6.727	6.727	0.000	133527150	50.0	51.2	
						RPD = 0.85	
30 Endrin							
1	7.132	7.132	0.000	635546942	50.0	51.3	
2	7.083	7.083	0.000	106053471	50.0	50.8	
						RPD = 0.95	
32 4,4'-DDD							
1	7.206	7.206	0.000	664379086	50.0	51.5	
2	7.227	7.227	0.000	104312966	50.0	51.8	
						RPD = 0.71	
34 Endosulfan II							
1	7.382	7.382	0.000	663138940	50.0	51.8	
2	7.325	7.325	0.000	111026040	50.0	51.3	
						RPD = 0.82	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
35 4,4'-DDT							
1	7.516	7.516	0.000	633475863	50.0	51.0	
2	7.571	7.571	0.000	98154653	50.0	50.8	
						RPD = 0.35	
36 Endrin aldehyde							
1	7.836	7.836	0.000	534341175	50.0	51.5	
2	7.697	7.697	0.000	90372120	50.0	51.4	
						RPD = 0.28	
37 Methoxychlor							
1	8.027	8.027	0.000	275387035	50.0	50.9	
2	8.289	8.289	0.000	46429927	50.0	50.7	
						RPD = 0.37	
38 Mirex							
1	8.174	8.174	0.000	443577236	50.0	51.2	
2	8.466	8.466	0.000	69614170	50.0	47.5	
						RPD = 7.49	
39 Endosulfan sulfate							
1	8.285	8.285	0.000	607504059	50.0	51.2	
2	7.987	7.987	0.000	99316939	50.0	51.0	
						RPD = 0.43	
40 Endrin ketone							
1	8.563	8.563	0.000	676344945	50.0	51.4	
2	8.514	8.514	0.000	113392553	50.0	51.2	
						RPD = 0.43	
$ 41 DCB Decachlorobiphenyl							
1	9.541	9.541	0.000	381877964	50.0	50.8	
2	9.722	9.722	0.000	71798840	50.0	51.0	
						RPD = 0.34	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081IcalL4_00024	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

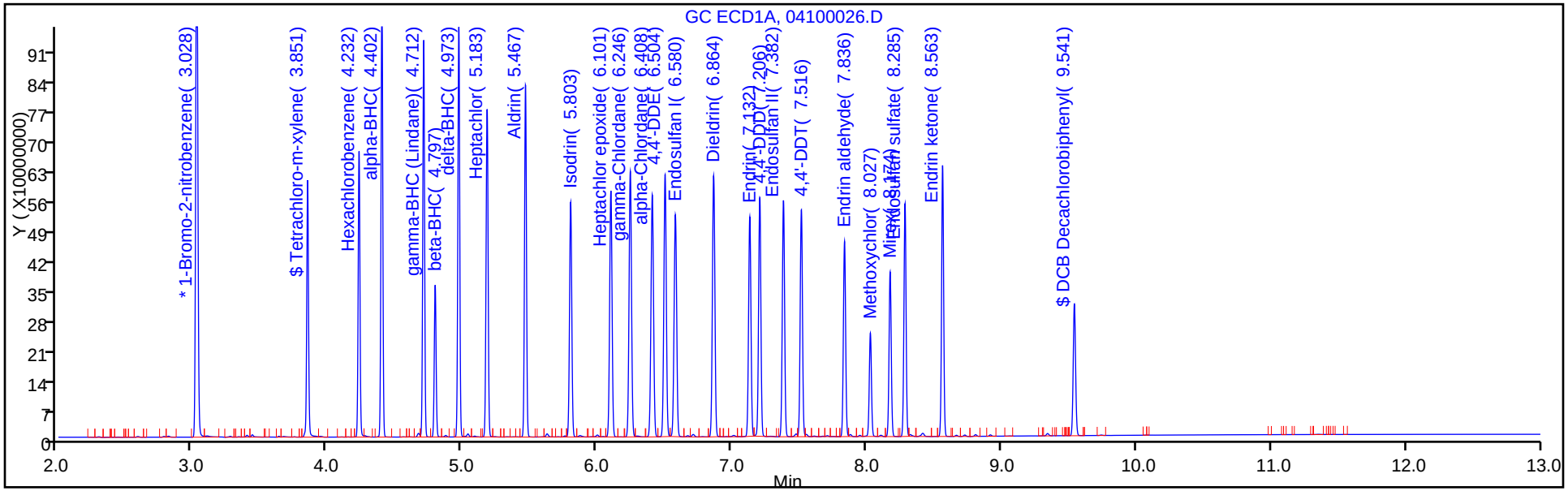
Report Date: 17-Apr-2017 13:22:06 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

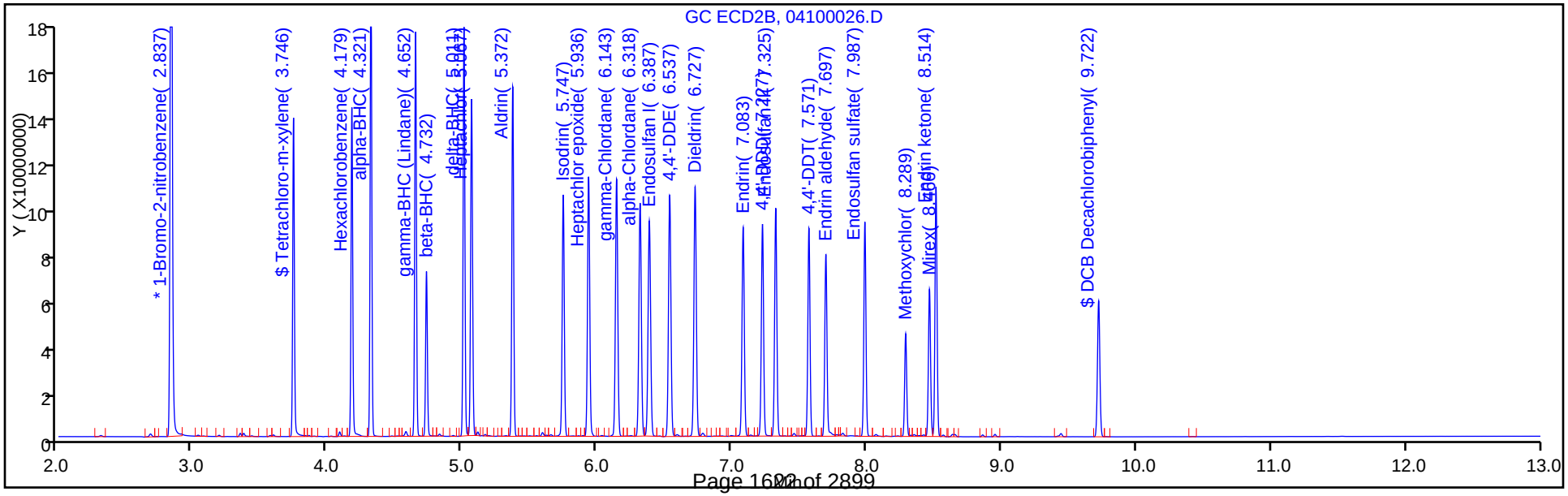
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100026.D

Injection Date:	10-Apr-2017 17:56:08	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD4 AB			Worklist Smp#:	26
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Manual Integration/User Assign Peak Report

TestAmerica Denver

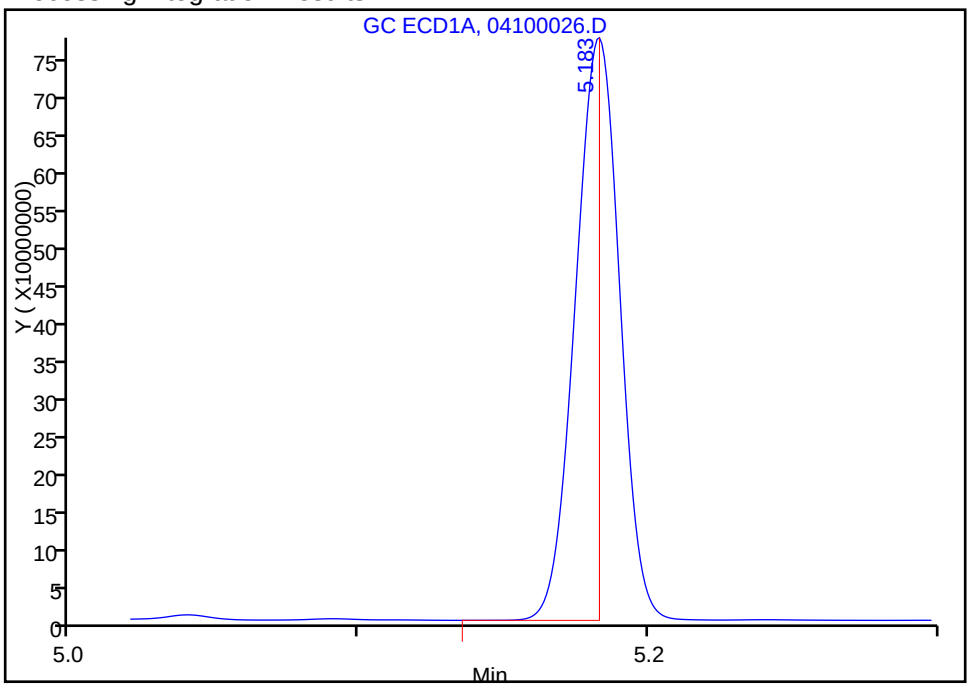
Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100026.D				
Injection Date:	10-Apr-2017 17:56:08	Instrument ID:	SGC_P1		
Lims ID:	STD4 AB				
Client ID:					
Operator ID:	DAW	ALS Bottle#:	24	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

15 Heptachlor, CAS: 76-44-8

Signal: 1

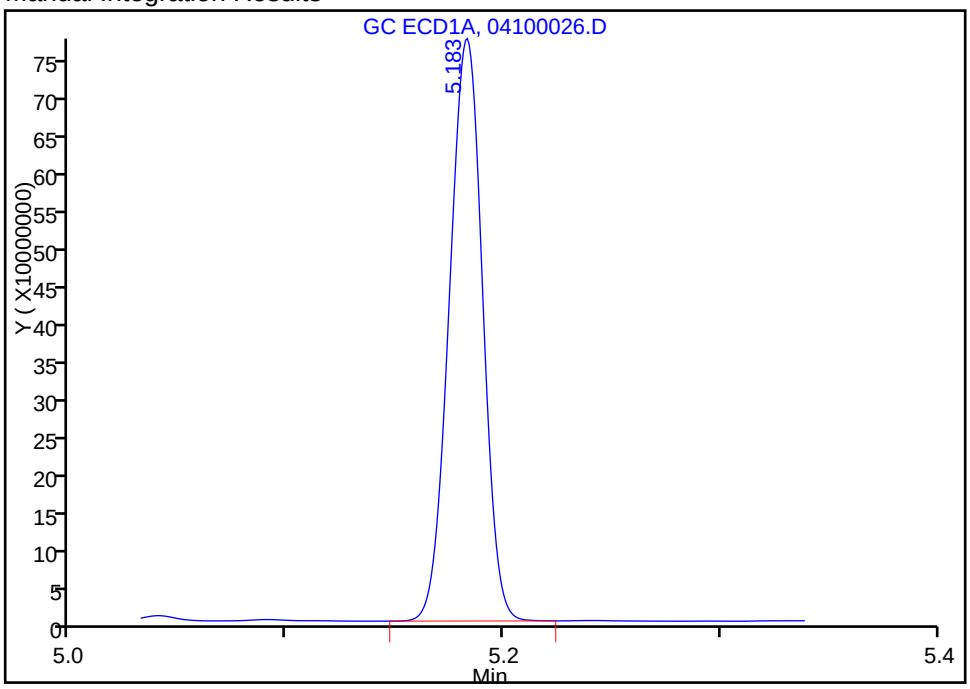
Processing Integration Results

RT: 5.18
Area: 435760377
Amount: 29.798580
Amount Units: ng/mL



Manual Integration Results

RT: 5.18
Area: 819438517
Amount: 51.137398
Amount Units: ng/mL



Reviewer: wellsd, 17-Apr-2017 13:22:04

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100027.D
Lims ID: STD3 AB
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 10-Apr-2017 18:13:01 ALS Bottle#: 25 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD3 AB
Misc. Info.: 280-0057376-027
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:07 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						98.0	
2						99.5	
						RPD = 1.58	
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.028	0.000	1446267602	150.0	150.0	
2	2.838	2.837	0.000	345787317	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.851	3.851	0.000	273789743	25.0	25.0	
2	3.746	3.746	0.000	60503421	25.0	25.1	
						RPD = 0.63	
5 Hexachlorobenzene							
1	4.233	4.232	0.001	302011012	25.0	24.7	
2	4.179	4.179	0.000	63899697	25.0	25.4	
						RPD = 2.99	
8 alpha-BHC							
1	4.402	4.402	0.000	460689005	25.0	24.4	
2	4.320	4.321	-0.001	87083564	25.0	24.8	
						RPD = 1.73	
9 gamma-BHC (Lindane)							
1	4.712	4.712	0.000	417761684	25.0	24.4	
2	4.651	4.652	-0.001	77141534	25.0	24.8	
						RPD = 1.46	
10 beta-BHC							
1	4.798	4.797	0.001	164419828	25.0	24.6	
2	4.732	4.732	0.000	33241659	25.0	25.2	
						RPD = 2.48	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.973	4.973	0.000	445756739	25.0	24.6	
2	5.010	5.011	-0.001	79129370	25.0	24.7	
						RPD = 0.65	
15 Heptachlor							
1	5.183	5.183	0.000	401076446	25.0	25.2	
2	5.067	5.067	0.000	72058218	25.0	24.9	
						RPD = 0.98	
16 Aldrin							
1	5.468	5.467	0.001	406498125	25.0	25.1	
2	5.372	5.372	0.000	71370151	25.0	25.0	
						RPD = 0.27	
18 Isodrin							
1	5.803	5.803	0.000	312423563	25.0	25.1	
2	5.747	5.747	0.000	56024647	25.0	25.1	
						RPD = 0.05	
21 Heptachlor epoxide							
1	6.101	6.101	0.000	357575852	25.0	25.4	
2	5.935	5.936	-0.001	64465114	25.0	25.3	
						RPD = 0.47	
22 gamma-Chlordane							
1	6.246	6.246	0.000	378143079	25.0	24.5	
2	6.143	6.143	0.000	66346703	25.0	25.0	
						RPD = 1.74	
23 alpha-Chlordane							
1	6.408	6.408	0.000	364243044	25.0	24.7	
2	6.318	6.318	0.000	63562482	25.0	25.0	
						RPD = 1.49	
24 4,4'-DDE							
1	6.503	6.504	-0.001	374471464	25.0	24.7	
2	6.537	6.537	0.000	65457244	25.0	25.1	
						RPD = 1.55	
25 Endosulfan I							
1	6.579	6.580	-0.001	342859423	25.0	25.3	
2	6.386	6.387	-0.001	62120738	25.0	25.4	
						RPD = 0.30	
27 Dieldrin							
1	6.864	6.864	0.000	382209842	25.0	25.2	
2	6.726	6.727	-0.001	67785138	25.0	25.2	
						RPD = 0.24	
30 Endrin							
1	7.132	7.132	0.000	300398177	25.0	24.4	
2	7.083	7.083	0.000	52425236	25.0	24.4	
						RPD = 0.05	
32 4,4'-DDD							
1	7.206	7.206	0.000	317389076	25.0	24.7	
2	7.225	7.227	-0.002	50752321	25.0	24.3	
						RPD = 1.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.383	7.382	0.001	324094271	25.0	25.4	
2	7.324	7.325	-0.001	56976525	25.0	25.4	
						RPD = 0.23	
35 4,4'-DDT							
1	7.515	7.516	-0.001	296830977	25.0	24.3	
2	7.571	7.571	0.000	48768461	25.0	24.6	
						RPD = 1.32	
36 Endrin aldehyde							
1	7.836	7.836	0.000	262263031	25.0	25.4	
2	7.696	7.697	-0.001	47066343	25.0	25.9	
						RPD = 1.94	
37 Methoxychlor							
1	8.028	8.027	0.001	135571591	25.0	25.0	
2	8.289	8.289	0.000	23885044	25.0	25.1	
						RPD = 0.41	
38 Mirex							
1	8.174	8.174	0.000	213842758	25.0	24.6	
2	8.466	8.466	0.000	36419123	25.0	24.4	
						RPD = 1.08	
39 Endosulfan sulfate							
1	8.284	8.285	-0.001	293004864	25.0	24.9	
2	7.986	7.987	-0.001	50867703	25.0	25.2	
						RPD = 1.25	
40 Endrin ketone							
1	8.563	8.563	0.000	331024497	25.0	25.3	
2	8.514	8.514	0.000	58223219	25.0	25.4	
						RPD = 0.51	
$ 41 DCB Decachlorobiphenyl							
1	9.542	9.541	0.001	188781011	25.0	25.0	
2	9.721	9.722	-0.001	37258509	25.0	25.4	
						RPD = 1.47	
S 3 Endosulfan, Total							
1						75.6	
2						76.0	
						RPD = 0.59	

Reagents:

8081IcalL3_00022	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

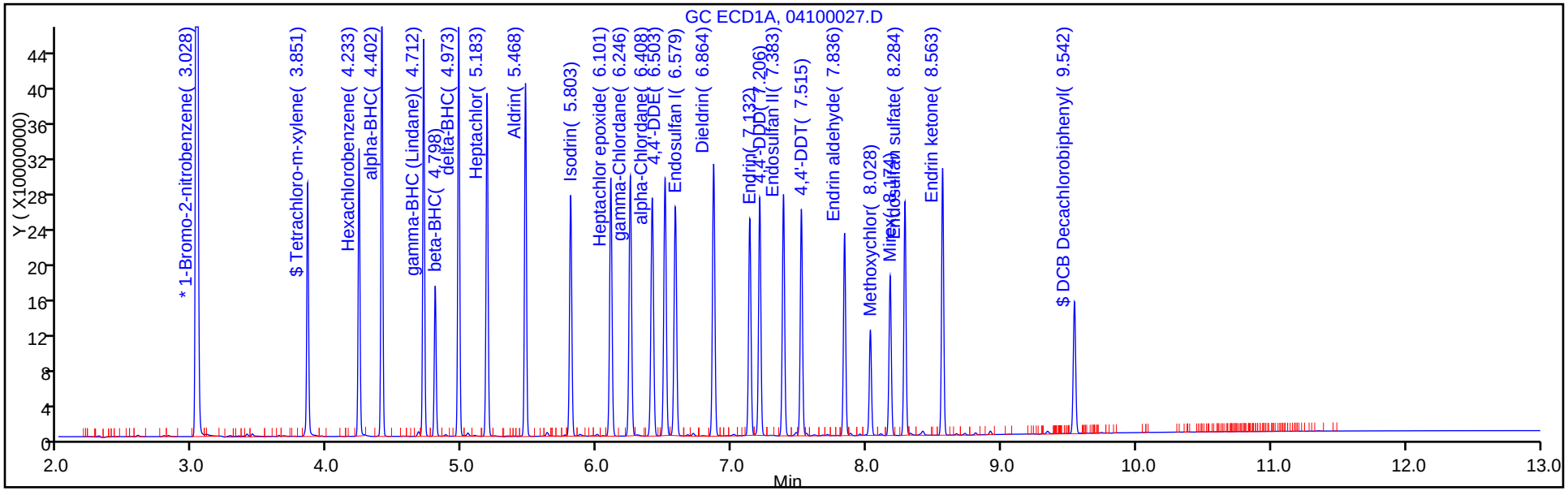
Report Date: 17-Apr-2017 13:22:09 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

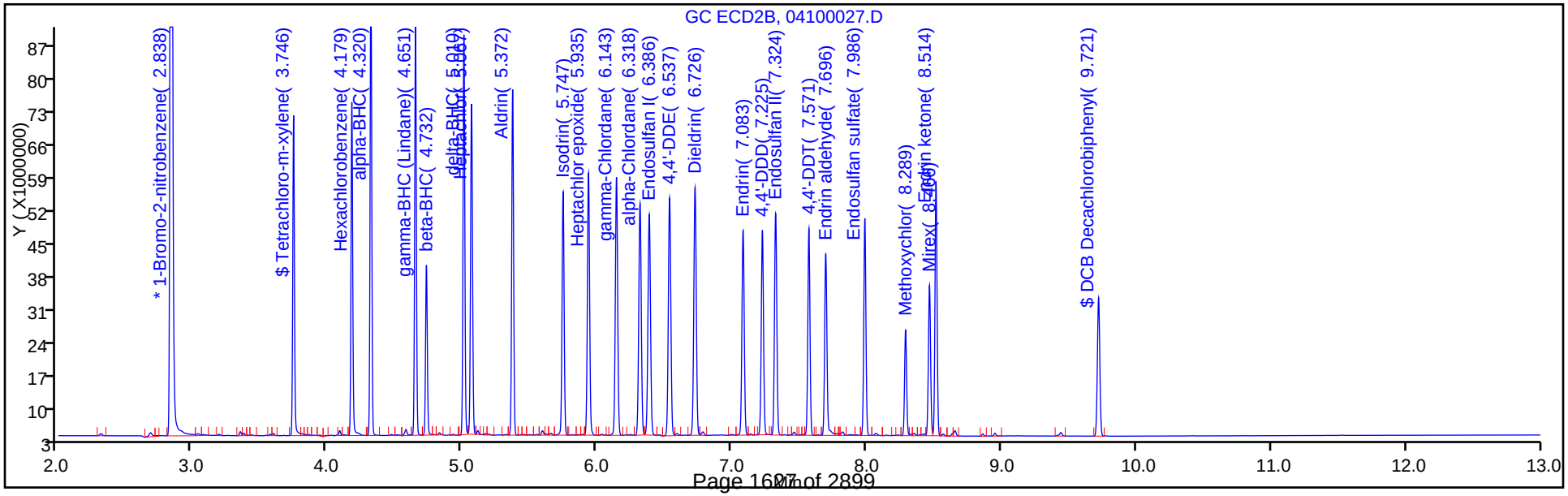
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100027.D

Injection Date:	10-Apr-2017 18:13:01	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD3 AB			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100028.D
Lims ID: STD2 AB
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 10-Apr-2017 18:29:51 ALS Bottle#: 26 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD2 AB
Misc. Info.: 280-0057376-028
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:11 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:52:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						39.7	
2						41.1	
						RPD = 3.49	
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.028	0.000	1429998779	150.0	150.0	
2	2.838	2.837	0.000	339336707	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.850	3.851	-0.001	108494839	10.0	10.1	
2	3.746	3.746	0.000	25832556	10.0	10.6	
						RPD = 5.09	
5 Hexachlorobenzene							
1	4.232	4.232	0.000	122073382	10.0	10.0	
2	4.179	4.179	0.000	26785004	10.0	10.3	
						RPD = 2.83	
8 alpha-BHC							
1	4.401	4.402	-0.001	177015109	10.0	9.85	
2	4.321	4.321	0.000	35363947	10.0	10.2	
						RPD = 3.56	
9 gamma-BHC (Lindane)							
1	4.711	4.712	-0.001	160851275	10.0	9.87	
2	4.652	4.652	0.000	31624492	10.0	10.2	
						RPD = 3.72	
10 beta-BHC							
1	4.797	4.797	0.000	66733070	10.0	10.1	
2	4.733	4.732	0.001	14272625	10.0	10.4	
						RPD = 3.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.971	4.973	-0.002	171519904	10.0	9.89	
2	5.011	5.011	0.000	32291959	10.0	10.2	
						RPD = 3.19	
15 Heptachlor							
1	5.181	5.183	-0.002	159432609	10.0	10.2	
2	5.068	5.067	0.001	30372278	10.0	10.4	
						RPD = 1.99	
16 Aldrin							
1	5.467	5.467	0.000	159758366	10.0	10.2	
2	5.373	5.372	0.001	29674030	10.0	10.4	
						RPD = 2.55	
18 Isodrin							
1	5.803	5.803	0.000	126129601	10.0	10.2	
2	5.748	5.747	0.001	23681593	10.0	10.4	
						RPD = 1.95	
21 Heptachlor epoxide							
1	6.100	6.101	-0.001	144999613	10.0	10.4	
2	5.936	5.936	0.000	27458496	10.0	10.6	
						RPD = 1.96	
22 gamma-Chlordane							M
1	6.245	6.246	-0.001	149983574	10.0	10.0	
2	6.144	6.143	0.001	28075644	10.0	10.4	M
						RPD = 4.11	
23 alpha-Chlordane							
1	6.408	6.408	0.000	145056359	10.0	10.1	
2	6.319	6.318	0.001	27086741	10.0	10.5	
						RPD = 4.12	
24 4,4'-DDE							
1	6.503	6.504	-0.001	147537531	10.0	10.1	
2	6.538	6.537	0.001	27415435	10.0	10.4	
						RPD = 3.46	
25 Endosulfan I							
1	6.579	6.580	-0.001	139542986	10.0	10.3	
2	6.387	6.387	0.000	26833467	10.0	10.7	
						RPD = 2.92	
27 Dieldrin							
1	6.863	6.864	-0.001	152444419	10.0	10.2	
2	6.726	6.727	-0.001	28593555	10.0	10.5	
						RPD = 2.87	
30 Endrin							
1	7.132	7.132	0.000	121790203	10.0	10.1	
2	7.084	7.083	0.001	22356175	10.0	10.3	
						RPD = 2.25	
32 4,4'-DDD							
1	7.205	7.206	-0.001	126102765	10.0	9.90	
2	7.226	7.227	-0.001	21500580	10.0	10.0	
						RPD = 1.42	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.383	7.382	0.001	130132659	10.0	10.3	
2	7.324	7.325	-0.001	24540848	10.0	10.7	
						RPD = 3.80	
35 4,4'-DDT							
1	7.514	7.516	-0.002	115302783	10.0	9.87	
2	7.571	7.571	0.000	20401372	10.0	10.3	
						RPD = 4.04	
36 Endrin aldehyde							M
1	7.835	7.836	-0.001	104654709	10.0	10.2	
2	7.697	7.697	0.000	19465371	10.0	10.4	M
						RPD = 1.99	
37 Methoxychlor							
1	8.026	8.027	-0.001	56417993	10.0	10.4	
2	8.289	8.289	0.000	10538870	10.0	10.7	
						RPD = 3.59	
38 Mirex							
1	8.174	8.174	0.000	88404883	10.0	10.2	
2	8.466	8.466	0.000	16304012	10.0	11.1	
						RPD = 8.90	
39 Endosulfan sulfate							
1	8.283	8.285	-0.002	116790690	10.0	10.1	
2	7.986	7.987	-0.001	21970039	10.0	10.6	
						RPD = 4.43	
40 Endrin ketone							
1	8.563	8.563	0.000	131548129	10.0	10.2	
2	8.514	8.514	0.000	24745189	10.0	10.6	
						RPD = 3.56	
$ 41 DCB Decachlorobiphenyl							
1	9.541	9.541	0.000	78010565	10.0	10.2	
2	9.720	9.722	-0.002	16408327	10.0	10.7	
						RPD = 4.85	
S 3 Endosulfan, Total							
1						30.8	
2						31.9	
						RPD = 3.71	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081IcalL2_00021	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

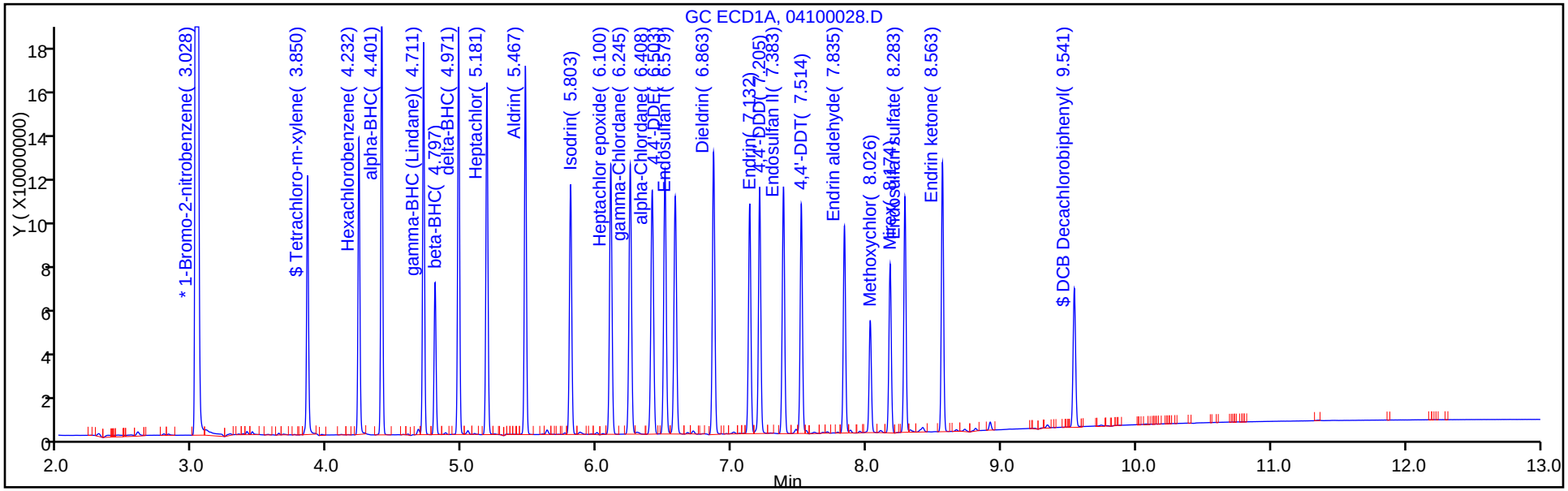
Report Date: 17-Apr-2017 13:22:12 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

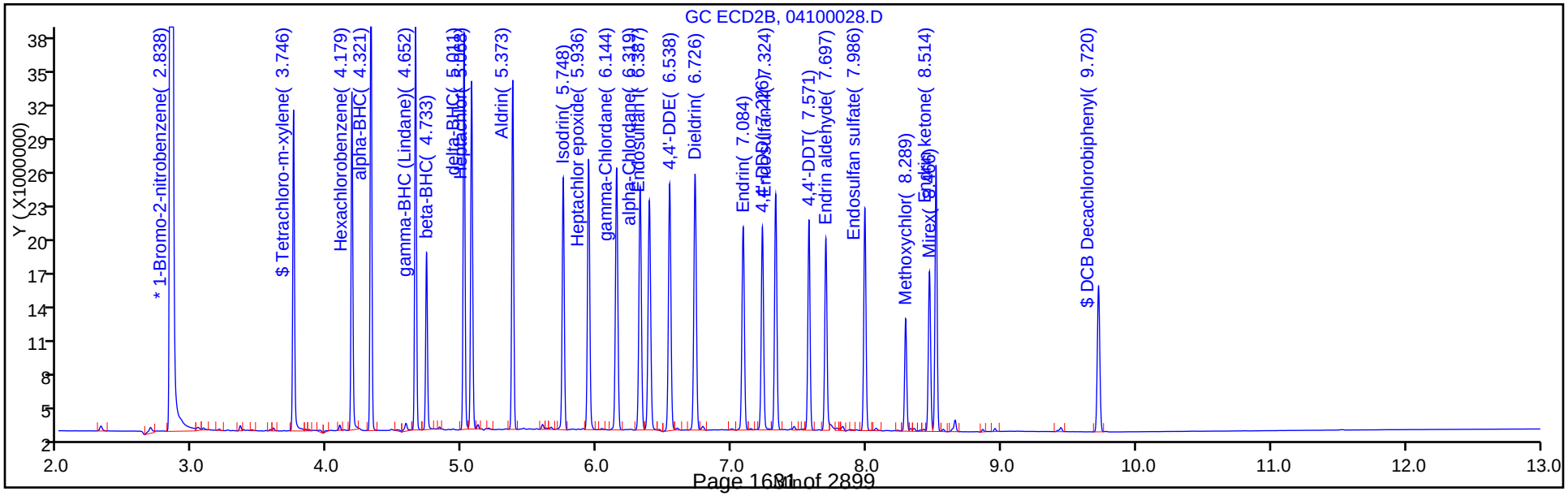
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100028.D

Injection Date:	10-Apr-2017 18:29:51	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD2 AB			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D
Lims ID: STD1 AB
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 10-Apr-2017 18:46:48 ALS Bottle#: 27 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD1 AB
Misc. Info.: 280-0057376-029
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:14 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:52:43

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						16.1	
2						15.8	
						RPD = 1.52	
* 2 1-Bromo-2-nitrobenzene							
1	3.029	3.028	0.001	1473279982	150.0	150.0	
2	2.838	2.837	0.001	348639046	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.851	3.851	0.000	43599324	4.00	3.99	
2	3.746	3.746	0.000	10687729	4.00	3.91	
						RPD = 2.05	
5 Hexachlorobenzene							
1	4.232	4.232	0.000	50408254	4.00	4.00	
2	4.179	4.179	0.000	11843720	4.00	3.94	
						RPD = 1.46	
8 alpha-BHC							
1	4.402	4.402	0.000	67283578	4.00	4.03	
2	4.320	4.321	-0.001	14307480	4.00	3.97	
						RPD = 1.55	
9 gamma-BHC (Lindane)							
1	4.712	4.712	0.000	61711453	4.00	4.03	
2	4.651	4.652	-0.001	12985616	4.00	3.97	
						RPD = 1.58	
10 beta-BHC							
1	4.798	4.797	0.001	27570072	4.00	4.00	
2	4.732	4.732	0.000	6399213	4.00	3.93	
						RPD = 1.65	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.972	4.973	-0.001	65915279	4.00	4.02	
2	5.010	5.011	-0.001	13161015	4.00	3.97	
						RPD = 1.29	
15 Heptachlor							
1	5.182	5.183	-0.001	62263366	4.00	3.96	
2	5.067	5.067	0.000	12705798	4.00	3.94	
						RPD = 0.64	
16 Aldrin							M
1	5.468	5.467	0.001	61506570	4.00	3.97	M
2	5.373	5.372	0.001	12117568	4.00	3.93	
						RPD = 0.95	
18 Isodrin							
1	5.803	5.803	0.000	50192475	4.00	3.96	
2	5.747	5.747	0.000	10027080	4.00	3.93	
						RPD = 0.77	
21 Heptachlor epoxide							
1	6.101	6.101	0.000	57377311	4.00	3.93	
2	5.936	5.936	0.000	11529652	4.00	3.90	
						RPD = 0.70	
22 gamma-Chlordane							
1	6.245	6.246	-0.001	58808048	4.00	4.00	
2	6.143	6.143	0.000	11780419	4.00	3.93	
						RPD = 1.78	
23 alpha-Chlordane							
1	6.409	6.408	0.001	57404226	4.00	3.99	
2	6.318	6.318	0.000	11485496	4.00	3.92	
						RPD = 1.77	
24 4,4'-DDE							
1	6.503	6.504	-0.001	56703371	4.00	3.99	
2	6.538	6.537	0.001	11422598	4.00	3.93	
						RPD = 1.50	
25 Endosulfan I							
1	6.580	6.580	0.000	55727204	4.00	3.94	
2	6.387	6.387	0.000	11474152	4.00	3.89	
						RPD = 1.16	
27 Dieldrin							
1	6.864	6.864	0.000	59769469	4.00	3.96	
2	6.726	6.727	-0.001	11889081	4.00	3.92	
						RPD = 1.11	
30 Endrin							
1	7.133	7.132	0.001	48438787	4.00	3.99	
2	7.083	7.083	0.000	9438768	4.00	3.96	
						RPD = 0.81	
32 4,4'-DDD							
1	7.207	7.206	0.001	52953763	4.00	4.02	
2	7.226	7.227	-0.001	9807152	4.00	4.00	
						RPD = 0.40	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.382	7.382	0.000	51900672	4.00	3.95	
2	7.325	7.325	0.000	10397764	4.00	3.89	
						RPD = 1.50	
35 4,4'-DDT							
1	7.515	7.516	-0.001	44351007	4.00	4.03	
2	7.571	7.571	0.000	8521262	4.00	3.96	
						RPD = 1.65	
36 Endrin aldehyde							
1	7.835	7.836	-0.001	41923660	4.00	3.96	
2	7.697	7.697	0.000	8422036	4.00	3.92	
						RPD = 1.01	
37 Methoxychlor							
1	8.028	8.027	0.001	23156143	4.00	3.94	
2	8.289	8.289	0.000	4519499	4.00	3.89	
						RPD = 1.47	
38 Mirex							
1	8.174	8.174	0.000	36796915	4.00	3.98	
2	8.465	8.466	-0.001	7191747	4.00	4.77	
						RPD = 18.23	
39 Endosulfan sulfate							
1	8.284	8.285	-0.001	45892091	4.00	3.98	
2	7.987	7.987	0.000	9406004	4.00	3.90	
						RPD = 1.87	
40 Endrin ketone							
1	8.564	8.563	0.001	51293926	4.00	3.95	
2	8.515	8.514	0.001	10335104	4.00	3.90	
						RPD = 1.45	
$ 41 DCB Decachlorobiphenyl							
1	9.543	9.541	0.002	32850791	4.00	3.96	
2	9.721	9.722	-0.001	7147355	4.00	3.88	
						RPD = 2.12	
S 3 Endosulfan, Total							
1						11.9	
2						11.7	
						RPD = 1.51	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081IcalL1_00021	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

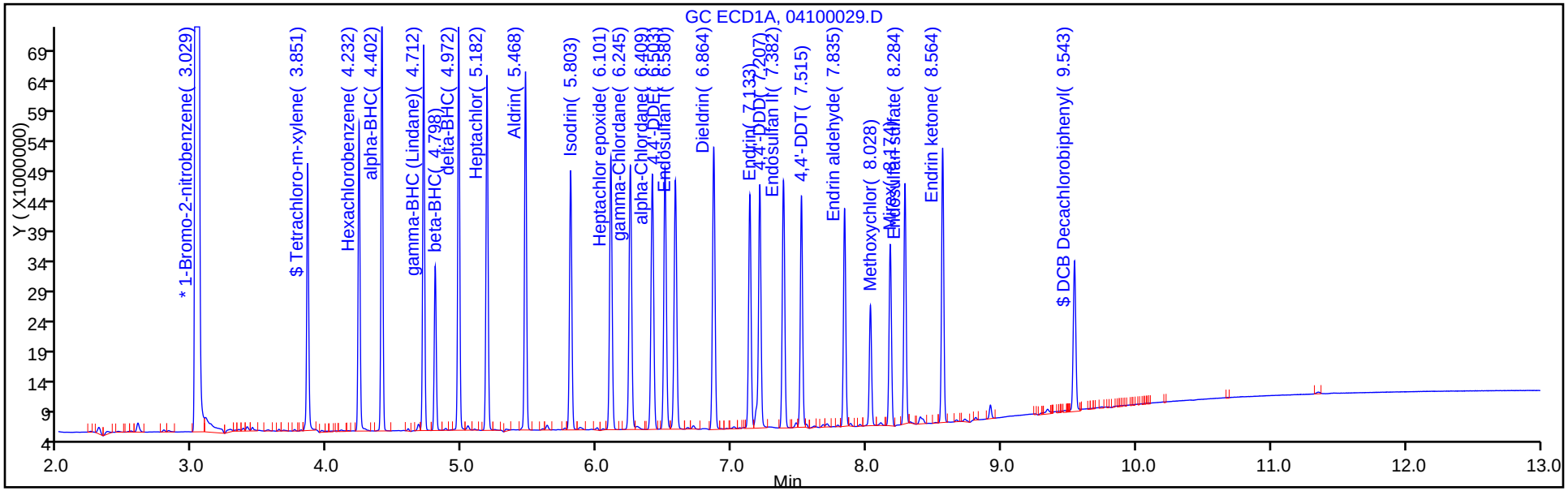
Report Date: 17-Apr-2017 13:22:15 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

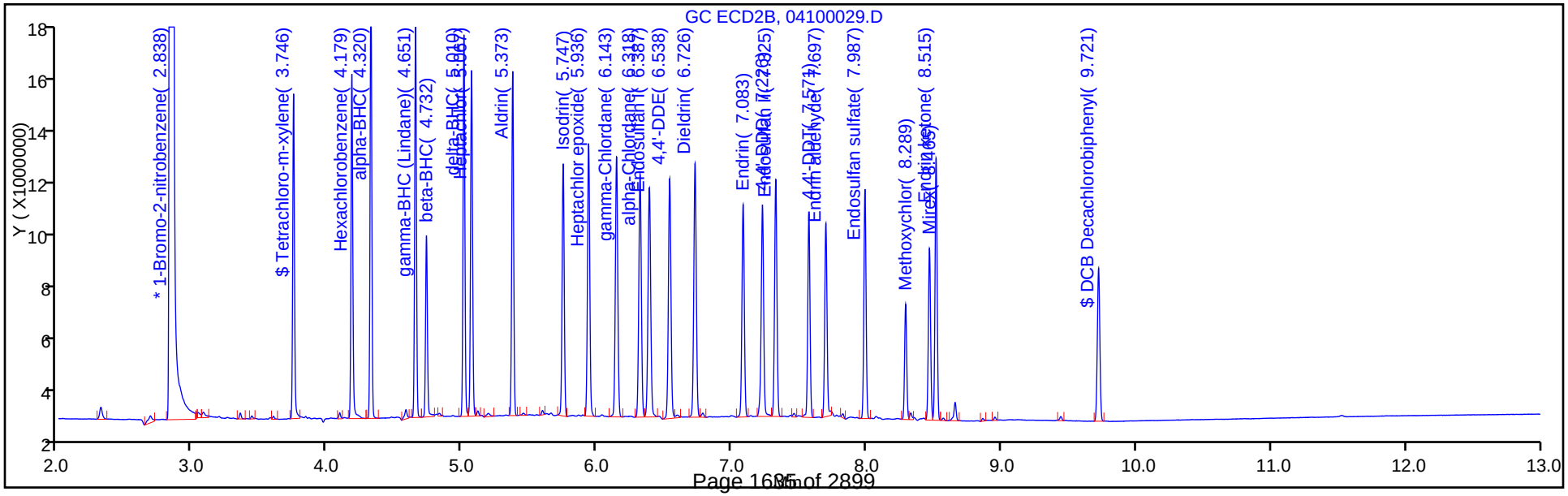
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Injection Date:	10-Apr-2017 18:46:48	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD1 AB			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Manual Integration/User Assign Peak Report

TestAmerica Denver

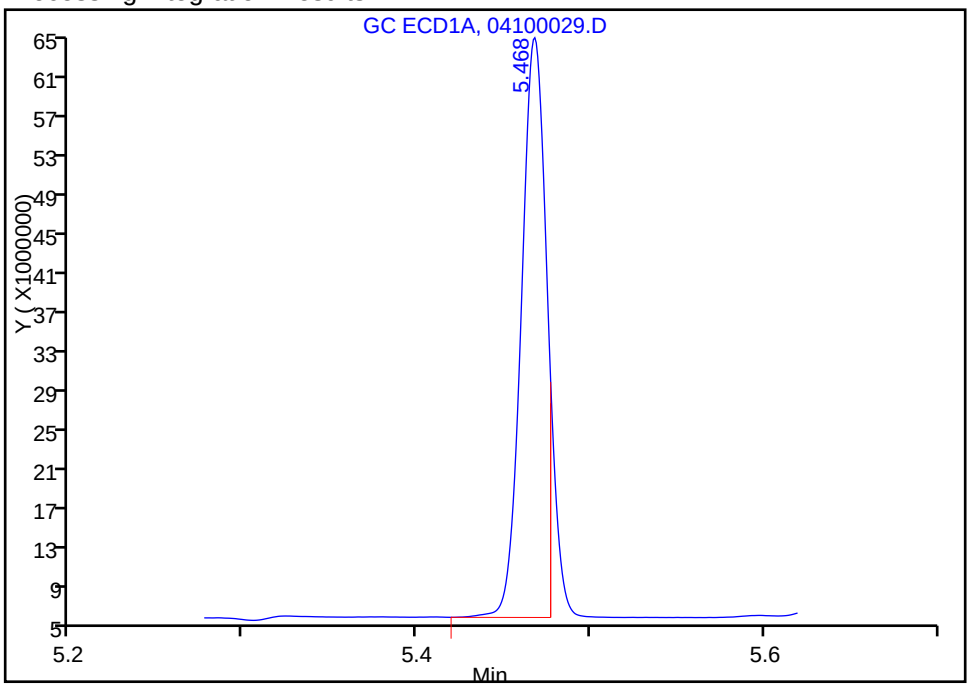
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Injection Date: 10-Apr-2017 18:46:48 Instrument ID: SGC_P1
Lims ID: STD1 AB
Client ID:
Operator ID: DAW ALS Bottle#: 27 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: P1 8081 IS Limit Group: GCSV - 8081A - IS
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

16 Aldrin, CAS: 309-00-2

Signal: 1

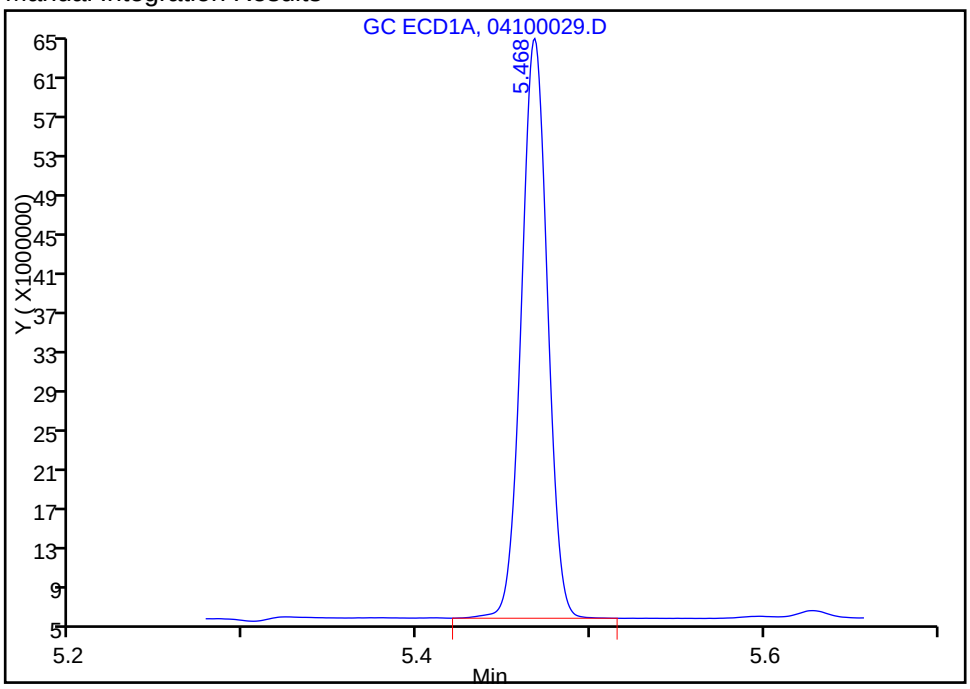
Processing Integration Results

RT: 5.47
Area: 55724276
Amount: 3.936104
Amount Units: ng/mL



Manual Integration Results

RT: 5.47
Area: 61506570
Amount: 3.972303
Amount Units: ng/mL



Reviewer: wellsd, 17-Apr-2017 13:22:13
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 17:22 Calibration End Date: 04/10/2017 18:46 Calibration ID: 28725

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-368670/29	04100029.D
Level 2	STD2 280-368670/28	04100028.D
Level 3	STD3 280-368670/27	04100027.D
Level 4	STD4 280-368670/26	04100026.D
Level 5	STD5 280-368670/25	04100025.D
Level 6	STD6 280-368670/24	04100024.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Hexachlorobenzene	1.2739 1.0374	1.1840	1.1088	1.0998	1.0304	Lin2	0.9424	1.0543							0.9990		0.9900
alpha-BHC	1.5389 1.5184	1.5632	1.5110	1.5441	1.4916	Lin2	0.1235	1.5190							1.0000		0.9900
gamma-BHC (Lindane)	1.3967 1.3388	1.3979	1.3385	1.3632	1.3129	Lin2	0.2806	1.3378							1.0000		0.9900
beta-BHC	0.6883 0.5473	0.6309	0.5768	0.5672	0.5387	Lin2	0.5957	0.5485							0.9990		0.9900
delta-BHC	1.4156 1.3796	1.4274	1.3730	1.4085	1.3566	Lin2	0.1791	1.3805							1.0000		0.9900
Heptachlor	1.3666 1.2090	1.3426	1.2503	1.2641	1.2076	Lin2	0.6350	1.2275							0.9990		0.9900
Aldrin	1.3034 1.1936	1.3117	1.2384	1.2525	1.1982	Lin2	0.4141	1.2197							0.9990		0.9900
Heptachlor epoxide	1.2401 1.0394	1.2138	1.1186	1.1146	1.0538	Lin2	0.7637	1.0749							0.9980		0.9900
gamma-Chlordane	1.2671 1.1064	1.2411	1.1512	1.1631	1.1114	Lin2	0.6350	1.1275							0.9990		0.9900
alpha-Chlordane	1.2354 1.0467	1.1973	1.1029	1.1079	1.0577	Lin2	0.7377	1.0714							0.9990		0.9900
Endosulfan I	1.2342 0.9861	1.1861	1.0779	1.0675	1.0047	Lin2	0.9510	1.0241							0.9970		0.9900
4,4'-DDE	1.2286 1.0772	1.2119	1.1358	1.1431	1.0936	Lin2	0.5602	1.1079							0.9990		0.9900
Dieldrin	1.2788 1.1028	1.2639	1.1762	1.1804	1.1210	Lin2	0.6502	1.1402							0.9980		0.9900
Endrin	1.0152 0.8988	0.9882	0.9097	0.9375	0.9283	Lin2	0.4387	0.9146							0.9990		0.9900
4,4'-DDD	1.0549 0.8661	0.9504	0.8806	0.9221	0.8896	Lin2	0.7158	0.8756							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 17:22 Calibration End Date: 04/10/2017 18:46 Calibration ID: 28725

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Endosulfan II	1.1184 0.8959	1.0848	0.9886	0.9815	0.9254	Lin2	0.8188	0.9400							0.9970		0.9900
4,4'-DDT	0.9166 0.8366	0.9018	0.8462	0.8677	0.8498	Lin2	0.3063	0.8477							1.0000		0.9900
Endrin aldehyde	0.9059 0.7298	0.8604	0.8167	0.7989	0.7500	Lin2	0.6286	0.7649							0.9980		0.9900
Endosulfan sulfate	1.0117 0.8162	0.9712	0.8826	0.8780	0.8386	Lin2	0.7446	0.8459							0.9980		0.9900
Methoxychlor	0.4861 0.3797	0.4659	0.4144	0.4104	0.3971	Lin2	0.4040	0.3964							0.9970		0.9900
Endrin ketone	1.1117 0.9244	1.0938	1.0103	1.0024	0.9485	Lin2	0.6839	0.9658							0.9980		0.9900
Tetrachloro-m-xylene (Surr)	1.1496 0.9919	1.1419	1.0498	1.0518	1.0022	Lin2	0.6117	1.0204							0.9980		0.9900
DCB Decachlorobiphenyl (Surr)	0.7688 0.5843	0.7253	0.6465	0.6347	0.6009	Lin2	0.7152	0.6084							0.9970		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 17:22 Calibration End Date: 04/10/2017 18:46 Calibration ID: 28725

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-368670/29	04100029.D
Level 2	STD2 280-368670/28	04100028.D
Level 3	STD3 280-368670/27	04100027.D
Level 4	STD4 280-368670/26	04100026.D
Level 5	STD5 280-368670/25	04100025.D
Level 6	STD6 280-368670/24	04100024.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Hexachlorobenzene	BNB	Lin2	11843720 253485608	26785004	63899697	124406761	183033435	4.00 100	10.0	25.0	50.0	75.0
alpha-BHC	BNB	Lin2	14307480 370997094	35363947	87083564	174668568	264970568	4.00 100	10.0	25.0	50.0	75.0
gamma-BHC (Lindane)	BNB	Lin2	12985616 327118196	31624492	77141534	154208805	233222609	4.00 100	10.0	25.0	50.0	75.0
beta-BHC	BNB	Lin2	6399213 133734765	14272625	33241659	64160741	95698762	4.00 100	10.0	25.0	50.0	75.0
delta-BHC	BNB	Lin2	13161015 337086663	32291959	79129370	159334546	240986417	4.00 100	10.0	25.0	50.0	75.0
Heptachlor	BNB	Lin2	12705798 295396332	30372278	72058218	142994349	214523974	4.00 100	10.0	25.0	50.0	75.0
Aldrin	BNB	Lin2	12117568 291642553	29674030	71370151	141683787	212851933	4.00 100	10.0	25.0	50.0	75.0
Heptachlor epoxide	BNB	Lin2	11529652 253962352	27458496	64465114	126082810	187200128	4.00 100	10.0	25.0	50.0	75.0
gamma-Chlordane	BNB	Lin2	11780419 270338491	28075644	66346703	131570155	197434182	4.00 100	10.0	25.0	50.0	75.0
alpha-Chlordane	BNB	Lin2	11485496 255751262	27086741	63562482	125325291	187880416	4.00 100	10.0	25.0	50.0	75.0
Endosulfan I	BNB	Lin2	11474152 240949933	26833467	62120738	120761574	178467168	4.00 100	10.0	25.0	50.0	75.0
4,4'-DDE	BNB	Lin2	11422598 263208174	27415435	65457244	129314457	194272112	4.00 100	10.0	25.0	50.0	75.0
Dieldrin	BNB	Lin2	11889081 269459295	28593555	67785138	133527150	199141205	4.00 100	10.0	25.0	50.0	75.0
Endrin	BNB	Lin2	9438768 219610884	22356175	52425236	106053471	164902943	4.00 100	10.0	25.0	50.0	75.0
4,4'-DDD	BNB	Lin2	9807152 211626206	21500580	50752321	104312966	158020255	4.00 100	10.0	25.0	50.0	75.0
Endosulfan II	BNB	Lin2	10397764 218906323	24540848	56976525	111026040	164394784	4.00 100	10.0	25.0	50.0	75.0

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 17:22 Calibration End Date: 04/10/2017 18:46 Calibration ID: 28725

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
4,4'-DDT	BNB	Lin2	8521262 204416040	20401372	48768461	98154653	150950240	4.00 100	10.0	25.0	50.0	75.0
Endrin aldehyde	BNB	Lin2	8422036 178319421	19465371	47066343	90372120	133235574	4.00 100	10.0	25.0	50.0	75.0
Endosulfan sulfate	BNB	Lin2	9406004 199432581	21970039	50867703	99316939	148963202	4.00 100	10.0	25.0	50.0	75.0
Methoxychlor	BNB	Lin2	4519499 92769855	10538870	23885044	46429927	70535274	4.00 100	10.0	25.0	50.0	75.0
Endrin ketone	BNB	Lin2	10335104 225857141	24745189	58223219	113392553	168496296	4.00 100	10.0	25.0	50.0	75.0
Tetrachloro-m-xylene (Surr)	BNB	Lin2	10687729 242345914	25832556	60503421	118986099	178030117	4.00 100	10.0	25.0	50.0	75.0
DCB Decachlorobiphenyl (Surr)	BNB	Lin2	7147355 142760332	16408327	37258509	71798840	106744621	4.00 100	10.0	25.0	50.0	75.0

Curve Type Legend:
Lin2 = Linear 1/conc^2 ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100024.D
Lims ID: STD6 AB
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 10-Apr-2017 17:22:18 ALS Bottle#: 22 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD6 AB
Misc. Info.: 280-0057376-024
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:58 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						409.4	
2						398.2	
						RPD = 2.76	
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.029	-0.001	1558796871	150.0	150.0	
2	2.839	2.839	-0.001	366505847	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.852	3.851	0.001	1171889809	100.0	98.8	
2	3.746	3.746	0.000	242345914	100.0	96.6	
						RPD = 2.29	
5 Hexachlorobenzene							
1	4.233	4.232	0.001	1319385871	100.0	100.1	
2	4.179	4.179	0.000	253485608	100.0	97.5	
						RPD = 2.59	
8 alpha-BHC							
1	4.403	4.402	0.001	2139137586	100.0	102.9	
2	4.321	4.321	0.000	370997094	100.0	99.9	
						RPD = 2.95	
9 gamma-BHC (Lindane)							
1	4.713	4.712	0.001	1927755733	100.0	102.8	
2	4.652	4.652	0.000	327118196	100.0	99.9	
						RPD = 2.89	
10 beta-BHC							
1	4.798	4.797	0.001	730597628	100.0	101.5	
2	4.734	4.732	0.002	133734765	100.0	98.7	
						RPD = 2.84	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.973	4.973	0.000	2031436177	100.0	102.2	
2	5.011	5.011	0.000	337086663	100.0	99.8	
						RPD = 2.36	
15 Heptachlor							
1	5.183	5.183	0.000	1685369246	100.0	97.8	
2	5.068	5.067	0.001	295396332	100.0	98.0	
						RPD = 0.17	
16 Aldrin							
1	5.468	5.467	0.001	1731342352	100.0	98.4	
2	5.374	5.372	0.002	291642553	100.0	97.5	
						RPD = 0.89	
18 Isodrin							
1	5.803	5.803	0.000	1311049624	100.0	97.6	
2	5.749	5.747	0.002	224390799	100.0	96.6	
						RPD = 1.07	
21 Heptachlor epoxide							
1	6.102	6.101	0.001	1453989120	100.0	96.2	
2	5.937	5.936	0.001	253962352	100.0	96.0	
						RPD = 0.18	
22 gamma-Chlordane							
1	6.246	6.246	0.000	1680849049	100.0	100.2	
2	6.144	6.143	0.001	270338491	100.0	97.6	
						RPD = 2.69	
23 alpha-Chlordane							
1	6.410	6.408	0.002	1594072207	100.0	99.6	
2	6.319	6.318	0.001	255751262	100.0	97.0	
						RPD = 2.60	
24 4,4'-DDE							
1	6.503	6.504	-0.001	1627815932	100.0	98.7	
2	6.539	6.537	0.002	263208174	100.0	96.7	
						RPD = 1.98	
25 Endosulfan I							
1	6.580	6.580	0.000	1392008263	100.0	95.7	
2	6.388	6.387	0.001	240949933	100.0	95.4	
						RPD = 0.32	
27 Dieldrin							
1	6.865	6.864	0.001	1581813705	100.0	96.3	
2	6.728	6.727	0.001	269459295	100.0	96.1	
						RPD = 0.13	
30 Endrin							
1	7.133	7.132	0.001	1304915588	100.0	97.9	
2	7.084	7.083	0.001	219610884	100.0	97.8	
						RPD = 0.07	
32 4,4'-DDD							
1	7.206	7.206	0.000	1376055631	100.0	99.3	
2	7.227	7.227	0.000	211626206	100.0	98.1	
						RPD = 1.21	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.383	7.382	0.001	1312067628	100.0	95.4	
2	7.325	7.325	0.000	218906323	100.0	94.4	
						RPD = 1.01	
35 4,4'-DDT							
1	7.515	7.516	-0.001	1340252548	100.0	99.9	
2	7.572	7.571	0.001	204416040	100.0	98.3	
						RPD = 1.61	
36 Endrin aldehyde							
1	7.836	7.836	0.000	1071395989	100.0	96.3	
2	7.697	7.697	0.000	178319421	100.0	94.6	
						RPD = 1.75	
37 Methoxychlor							
1	8.027	8.027	0.000	555725549	100.0	96.0	
2	8.289	8.289	0.000	92769855	100.0	94.8	
						RPD = 1.29	
38 Mirex							
1	8.173	8.174	-0.001	912564075	100.0	98.2	
2	8.467	8.466	0.001	137845186	100.0	87.1	
						RPD = 12.07	
39 Endosulfan sulfate							
1	8.284	8.285	-0.001	1247773585	100.0	97.8	
2	7.988	7.987	0.001	199432581	100.0	95.6	
						RPD = 2.29	
40 Endrin ketone							
1	8.563	8.563	0.000	1363046988	100.0	96.4	
2	8.515	8.514	0.001	225857141	100.0	95.0	
						RPD = 1.43	
$ 41 DCB Decachlorobiphenyl							
1	9.542	9.541	0.001	785371404	100.0	97.6	
2	9.721	9.722	-0.001	142760332	100.0	94.9	
						RPD = 2.90	
S 3 Endosulfan, Total							
1						288.9	
2						285.4	
						RPD = 1.21	

Reagents:

8081IcalL6_00021	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

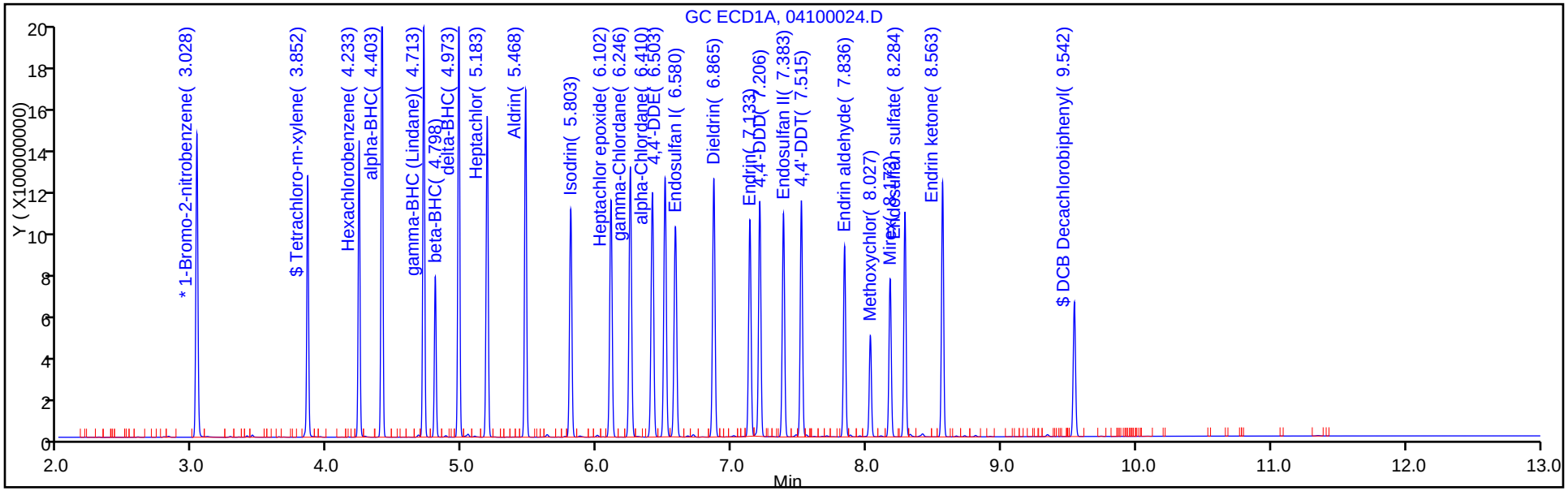
Report Date: 17-Apr-2017 13:22:00 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

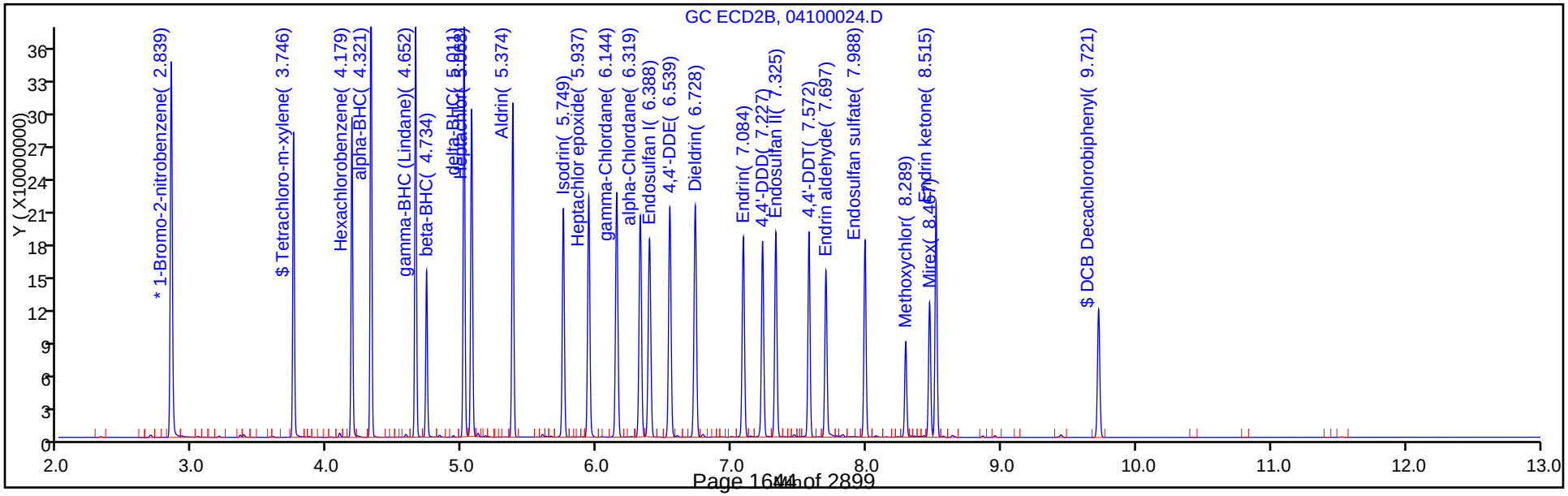
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100024.D

Injection Date:	10-Apr-2017 17:22:18	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD6 AB			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100025.D
Lims ID: STD5 AB
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 10-Apr-2017 17:39:16 ALS Bottle#: 23 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD5 AB
Misc. Info.: 280-0057376-025
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:01 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						296.1	
2						293.1	
						RPD = 1.03	
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.029	-0.001	1517029565	150.0	150.0	
2	2.838	2.839	-0.001	355277678	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.851	3.851	0.000	856099240	75.0	74.2	
2	3.746	3.746	0.000	178030117	75.0	73.1	
						RPD = 1.57	
5 Hexachlorobenzene							
1	4.233	4.232	0.001	953751155	75.0	74.3	
2	4.179	4.179	0.000	183033435	75.0	72.4	
						RPD = 2.61	
8 alpha-BHC							
1	4.403	4.402	0.001	1500963941	75.0	74.3	
2	4.321	4.321	0.000	264970568	75.0	73.6	
						RPD = 1.05	
9 gamma-BHC (Lindane)							
1	4.713	4.712	0.001	1349509916	75.0	74.1	
2	4.652	4.652	0.000	233222609	75.0	73.4	
						RPD = 0.96	
10 beta-BHC							
1	4.798	4.797	0.001	516930048	75.0	73.8	
2	4.733	4.732	0.001	95698762	75.0	72.6	
						RPD = 1.68	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.973	4.973	0.000	1426546662	75.0	73.9	
2	5.011	5.011	0.000	240986417	75.0	73.6	
						RPD = 0.42	
15 Heptachlor							
1	5.183	5.183	0.000	1231615698	75.0	73.5	
2	5.068	5.067	0.001	214523974	75.0	73.3	
						RPD = 0.28	
16 Aldrin							
1	5.468	5.467	0.001	1259887652	75.0	73.6	
2	5.374	5.372	0.002	212851933	75.0	73.3	
						RPD = 0.41	
18 Isodrin							
1	5.804	5.803	0.001	962034429	75.0	73.6	
2	5.748	5.747	0.001	165503258	75.0	73.3	
						RPD = 0.37	
21 Heptachlor epoxide							
1	6.102	6.101	0.001	1074417824	75.0	73.0	
2	5.937	5.936	0.001	187200128	75.0	72.8	
						RPD = 0.24	
22 gamma-Chlordane							
1	6.246	6.246	0.000	1213169134	75.0	74.4	
2	6.144	6.143	0.001	197434182	75.0	73.4	
						RPD = 1.41	
23 alpha-Chlordane							
1	6.409	6.408	0.001	1157453219	75.0	74.3	
2	6.319	6.318	0.001	187880416	75.0	73.4	
						RPD = 1.33	
24 4,4'-DDE							
1	6.504	6.504	0.000	1192992637	75.0	74.4	
2	6.539	6.537	0.002	194272112	75.0	73.5	
						RPD = 1.16	
25 Endosulfan I							
1	6.581	6.580	0.001	1039014644	75.0	73.3	
2	6.388	6.387	0.001	178467168	75.0	72.6	
						RPD = 0.96	
27 Dieldrin							
1	6.866	6.864	0.002	1183080417	75.0	74.0	
2	6.727	6.727	0.000	199141205	75.0	73.2	
						RPD = 1.15	
30 Endrin							
1	7.133	7.132	0.001	984991714	75.0	75.9	
2	7.084	7.083	0.001	164902943	75.0	75.6	
						RPD = 0.39	
32 4,4'-DDD							
1	7.208	7.206	0.002	1008545196	75.0	74.8	
2	7.226	7.227	-0.001	158020255	75.0	75.4	
						RPD = 0.80	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.383	7.382	0.001	986071296	75.0	73.7	
2	7.325	7.325	0.000	164394784	75.0	73.0	
						RPD = 0.95	
35 4,4'-DDT							
1	7.517	7.516	0.001	992108573	75.0	76.1	
2	7.572	7.571	0.001	150950240	75.0	74.8	
						RPD = 1.75	
36 Endrin aldehyde							
1	7.837	7.836	0.001	796638608	75.0	73.5	
2	7.697	7.697	0.000	133235574	75.0	72.7	
						RPD = 1.12	
37 Methoxychlor							
1	8.028	8.027	0.001	422779700	75.0	75.0	
2	8.289	8.289	0.000	70535274	75.0	74.1	
						RPD = 1.16	
38 Mirex							
1	8.174	8.174	0.000	676105049	75.0	74.7	
2	8.466	8.466	0.000	103451263	75.0	67.4	
						RPD = 10.32	
39 Endosulfan sulfate							
1	8.284	8.285	-0.001	924054452	75.0	74.5	
2	7.987	7.987	0.000	148963202	75.0	73.5	
						RPD = 1.37	
40 Endrin ketone							
1	8.564	8.563	0.001	1014092028	75.0	73.7	
2	8.515	8.514	0.001	168496296	75.0	73.0	
						RPD = 1.02	
$ 41 DCB Decachlorobiphenyl							
1	9.543	9.541	0.002	583329943	75.0	74.4	
2	9.722	9.722	0.000	106744621	75.0	72.9	
						RPD = 2.08	
S 3 Endosulfan, Total							
1						221.5	
2						219.1	
						RPD = 1.09	

Reagents:

8081IcalL5_00022	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

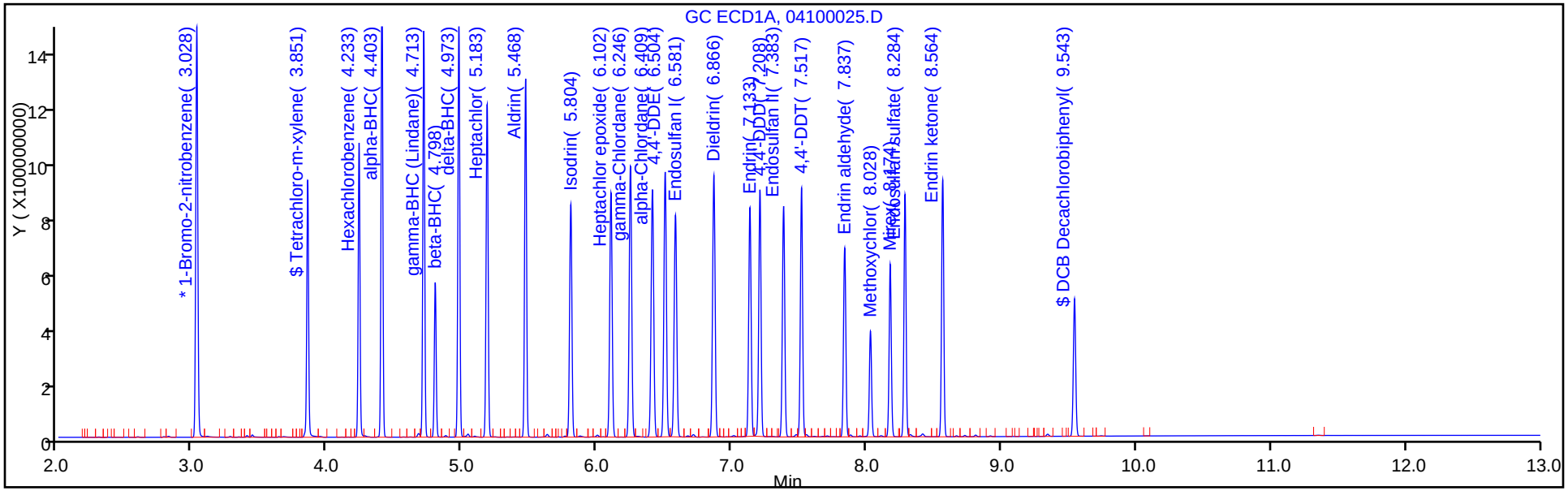
Report Date: 17-Apr-2017 13:22:03 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

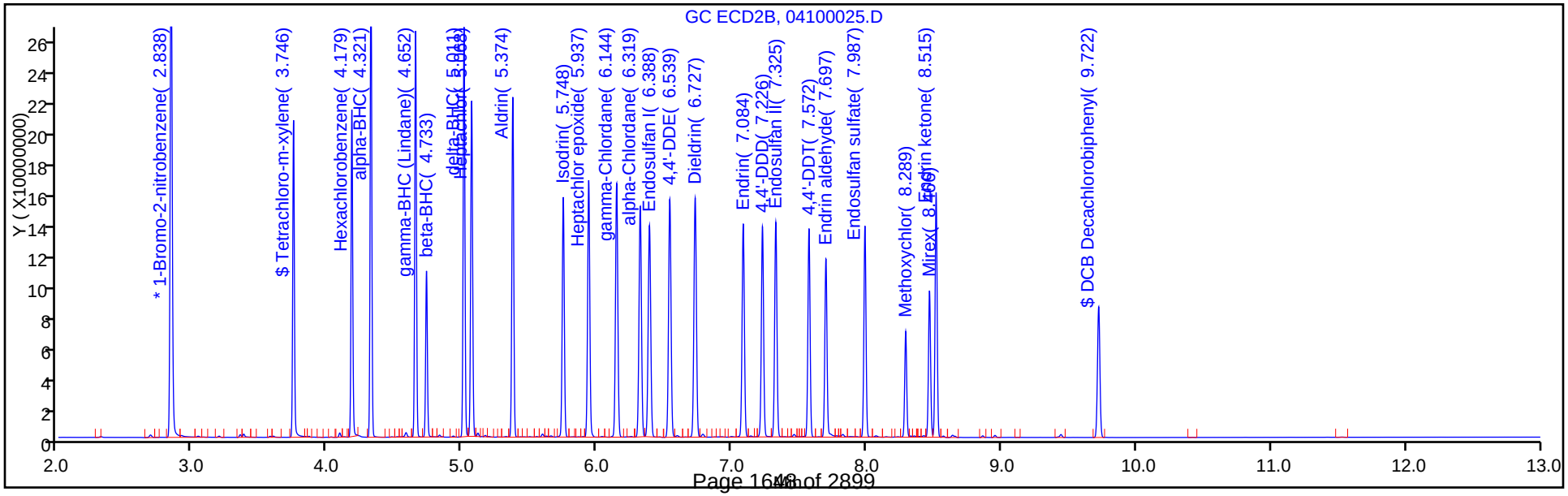
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100025.D

Injection Date:	10-Apr-2017 17:39:16	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD5 AB			Worklist Smp#:	25
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100026.D
Lims ID: STD4 AB
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 10-Apr-2017 17:56:08 ALS Bottle#: 24 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD4 AB
Misc. Info.: 280-0057376-026
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:04 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:50:49

	Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
*	2 1-Bromo-2-nitrobenzene							
	1	3.028	3.028	0.000	1451506563	150.0	150.0	
	2	2.837	2.837	0.000	339364371	150.0	150.0	
$	4 Tetrachloro-m-xylene							
	1	3.851	3.851	0.000	562387248	50.0	51.0	
	2	3.746	3.746	0.000	118986099	50.0	50.9	
							RPD = 0.09	
	5 Hexachlorobenzene							
	1	4.232	4.232	0.000	625478519	50.0	50.9	
	2	4.179	4.179	0.000	124406761	50.0	51.3	
							RPD = 0.67	
	8 alpha-BHC							
	1	4.402	4.402	0.000	973305622	50.0	50.6	
	2	4.321	4.321	0.000	174668568	50.0	50.7	
							RPD = 0.31	
	9 gamma-BHC (Lindane)							
	1	4.712	4.712	0.000	878541538	50.0	50.6	
	2	4.652	4.652	0.000	154208805	50.0	50.7	
							RPD = 0.28	
	10 beta-BHC							
	1	4.797	4.797	0.000	339126643	50.0	50.6	
	2	4.732	4.732	0.000	64160741	50.0	50.6	
							RPD = 0.06	
	12 delta-BHC							
	1	4.973	4.973	0.000	934862866	50.0	50.8	
	2	5.011	5.011	0.000	159334546	50.0	50.9	
							RPD = 0.23	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
15 Heptachlor							M
1	5.183	5.183	0.000	819438517	50.0	51.1	M
2	5.067	5.067	0.000	142994349	50.0	51.0	
						RPD = 0.32	
16 Aldrin							
1	5.467	5.467	0.000	834572536	50.0	51.1	
2	5.372	5.372	0.000	141683787	50.0	51.0	
						RPD = 0.13	
18 Isodrin							
1	5.803	5.803	0.000	640783415	50.0	51.2	
2	5.747	5.747	0.000	110988794	50.0	51.3	
						RPD = 0.10	
21 Heptachlor epoxide							
1	6.101	6.101	0.000	724013320	50.0	51.4	
2	5.936	5.936	0.000	126082810	50.0	51.1	
						RPD = 0.48	
22 gamma-Chlordane							
1	6.246	6.246	0.000	795275882	50.0	51.1	
2	6.143	6.143	0.000	131570155	50.0	51.0	
						RPD = 0.12	
23 alpha-Chlordane							
1	6.408	6.408	0.000	759869729	50.0	51.1	
2	6.318	6.318	0.000	125325291	50.0	51.0	
						RPD = 0.10	
24 4,4'-DDE							
1	6.504	6.504	0.000	786120791	50.0	51.3	
2	6.537	6.537	0.000	129314457	50.0	51.1	
						RPD = 0.51	
25 Endosulfan I							
1	6.580	6.580	0.000	701131485	50.0	51.7	
2	6.387	6.387	0.000	120761574	50.0	51.2	
						RPD = 0.97	
27 Dieldrin							
1	6.864	6.864	0.000	789092288	50.0	51.6	
2	6.727	6.727	0.000	133527150	50.0	51.2	
						RPD = 0.85	
30 Endrin							
1	7.132	7.132	0.000	635546942	50.0	51.3	
2	7.083	7.083	0.000	106053471	50.0	50.8	
						RPD = 0.95	
32 4,4'-DDD							
1	7.206	7.206	0.000	664379086	50.0	51.5	
2	7.227	7.227	0.000	104312966	50.0	51.8	
						RPD = 0.71	
34 Endosulfan II							
1	7.382	7.382	0.000	663138940	50.0	51.8	
2	7.325	7.325	0.000	111026040	50.0	51.3	
						RPD = 0.82	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
35 4,4'-DDT							
1	7.516	7.516	0.000	633475863	50.0	51.0	
2	7.571	7.571	0.000	98154653	50.0	50.8	
						RPD = 0.35	
36 Endrin aldehyde							
1	7.836	7.836	0.000	534341175	50.0	51.5	
2	7.697	7.697	0.000	90372120	50.0	51.4	
						RPD = 0.28	
37 Methoxychlor							
1	8.027	8.027	0.000	275387035	50.0	50.9	
2	8.289	8.289	0.000	46429927	50.0	50.7	
						RPD = 0.37	
38 Mirex							
1	8.174	8.174	0.000	443577236	50.0	51.2	
2	8.466	8.466	0.000	69614170	50.0	47.5	
						RPD = 7.49	
39 Endosulfan sulfate							
1	8.285	8.285	0.000	607504059	50.0	51.2	
2	7.987	7.987	0.000	99316939	50.0	51.0	
						RPD = 0.43	
40 Endrin ketone							
1	8.563	8.563	0.000	676344945	50.0	51.4	
2	8.514	8.514	0.000	113392553	50.0	51.2	
						RPD = 0.43	
$ 41 DCB Decachlorobiphenyl							
1	9.541	9.541	0.000	381877964	50.0	50.8	
2	9.722	9.722	0.000	71798840	50.0	51.0	
						RPD = 0.34	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081IcalL4_00024	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

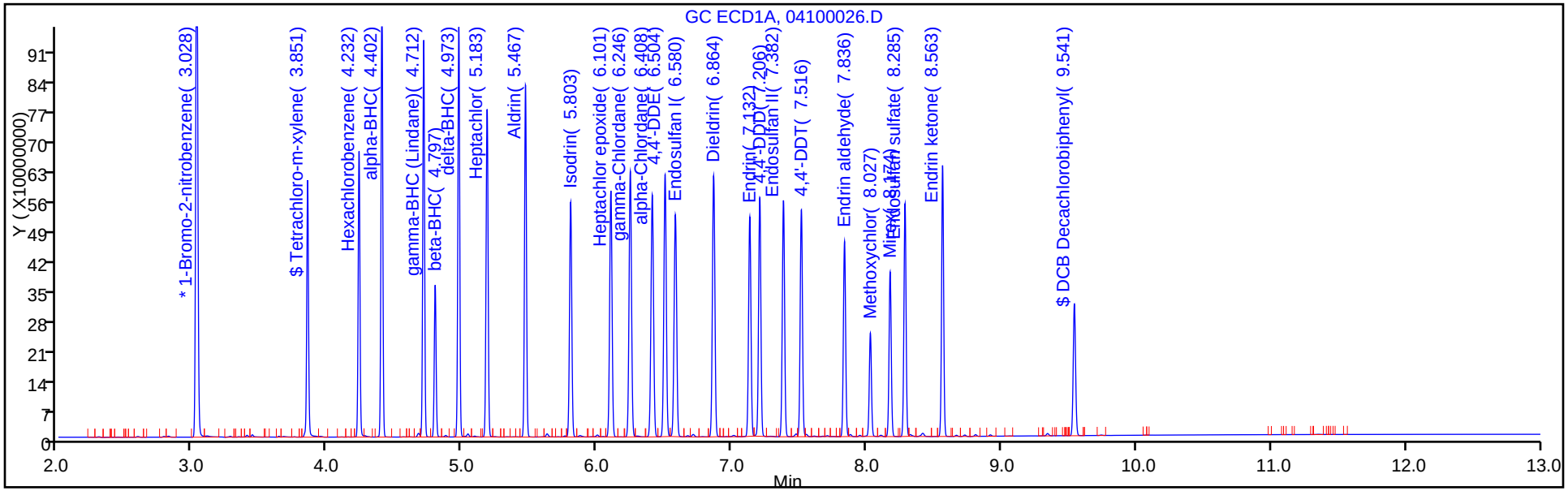
Report Date: 17-Apr-2017 13:22:07 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

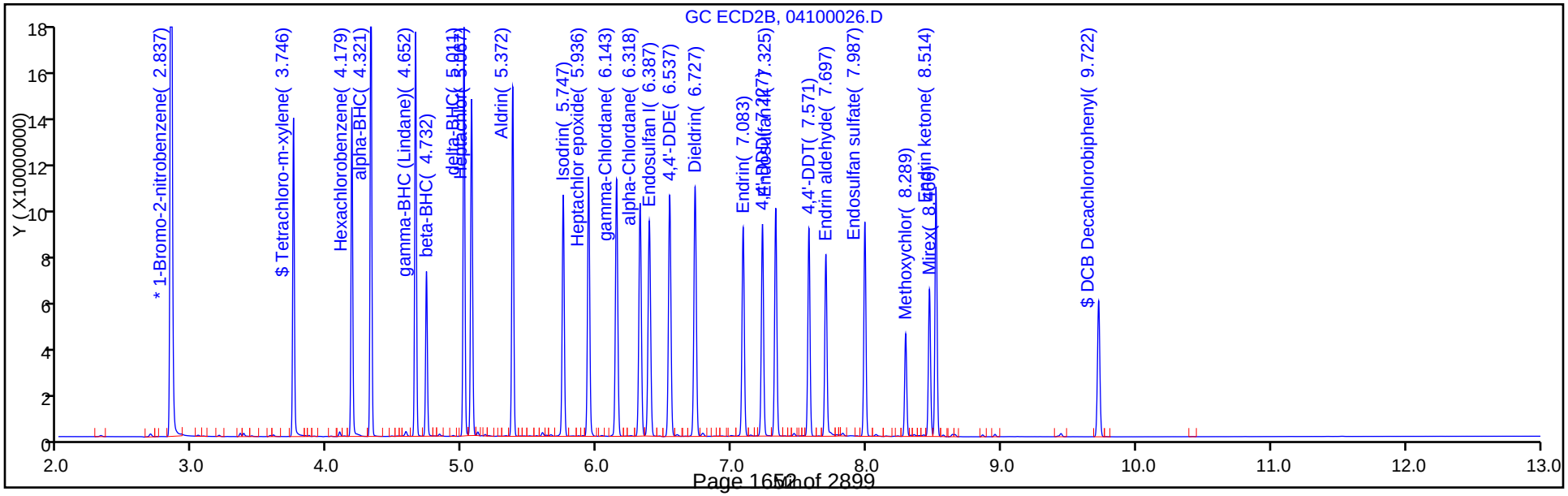
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100026.D

Injection Date:	10-Apr-2017 17:56:08	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD4 AB			Worklist Smp#:	26
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100027.D
Lims ID: STD3 AB
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 10-Apr-2017 18:13:01 ALS Bottle#: 25 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD3 AB
Misc. Info.: 280-0057376-027
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:07 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						98.0	
2						99.5	
						RPD = 1.58	
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.028	0.000	1446267602	150.0	150.0	
2	2.838	2.837	0.000	345787317	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.851	3.851	0.000	273789743	25.0	25.0	
2	3.746	3.746	0.000	60503421	25.0	25.1	
						RPD = 0.63	
5 Hexachlorobenzene							
1	4.233	4.232	0.001	302011012	25.0	24.7	
2	4.179	4.179	0.000	63899697	25.0	25.4	
						RPD = 2.99	
8 alpha-BHC							
1	4.402	4.402	0.000	460689005	25.0	24.4	
2	4.320	4.321	-0.001	87083564	25.0	24.8	
						RPD = 1.73	
9 gamma-BHC (Lindane)							
1	4.712	4.712	0.000	417761684	25.0	24.4	
2	4.651	4.652	-0.001	77141534	25.0	24.8	
						RPD = 1.46	
10 beta-BHC							
1	4.798	4.797	0.001	164419828	25.0	24.6	
2	4.732	4.732	0.000	33241659	25.0	25.2	
						RPD = 2.48	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.973	4.973	0.000	445756739	25.0	24.6	
2	5.010	5.011	-0.001	79129370	25.0	24.7	
						RPD = 0.65	
15 Heptachlor							
1	5.183	5.183	0.000	401076446	25.0	25.2	
2	5.067	5.067	0.000	72058218	25.0	24.9	
						RPD = 0.98	
16 Aldrin							
1	5.468	5.467	0.001	406498125	25.0	25.1	
2	5.372	5.372	0.000	71370151	25.0	25.0	
						RPD = 0.27	
18 Isodrin							
1	5.803	5.803	0.000	312423563	25.0	25.1	
2	5.747	5.747	0.000	56024647	25.0	25.1	
						RPD = 0.05	
21 Heptachlor epoxide							
1	6.101	6.101	0.000	357575852	25.0	25.4	
2	5.935	5.936	-0.001	64465114	25.0	25.3	
						RPD = 0.47	
22 gamma-Chlordane							
1	6.246	6.246	0.000	378143079	25.0	24.5	
2	6.143	6.143	0.000	66346703	25.0	25.0	
						RPD = 1.74	
23 alpha-Chlordane							
1	6.408	6.408	0.000	364243044	25.0	24.7	
2	6.318	6.318	0.000	63562482	25.0	25.0	
						RPD = 1.49	
24 4,4'-DDE							
1	6.503	6.504	-0.001	374471464	25.0	24.7	
2	6.537	6.537	0.000	65457244	25.0	25.1	
						RPD = 1.55	
25 Endosulfan I							
1	6.579	6.580	-0.001	342859423	25.0	25.3	
2	6.386	6.387	-0.001	62120738	25.0	25.4	
						RPD = 0.30	
27 Dieldrin							
1	6.864	6.864	0.000	382209842	25.0	25.2	
2	6.726	6.727	-0.001	67785138	25.0	25.2	
						RPD = 0.24	
30 Endrin							
1	7.132	7.132	0.000	300398177	25.0	24.4	
2	7.083	7.083	0.000	52425236	25.0	24.4	
						RPD = 0.05	
32 4,4'-DDD							
1	7.206	7.206	0.000	317389076	25.0	24.7	
2	7.225	7.227	-0.002	50752321	25.0	24.3	
						RPD = 1.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.383	7.382	0.001	324094271	25.0	25.4	
2	7.324	7.325	-0.001	56976525	25.0	25.4	
						RPD = 0.23	
35 4,4'-DDT							
1	7.515	7.516	-0.001	296830977	25.0	24.3	
2	7.571	7.571	0.000	48768461	25.0	24.6	
						RPD = 1.32	
36 Endrin aldehyde							
1	7.836	7.836	0.000	262263031	25.0	25.4	
2	7.696	7.697	-0.001	47066343	25.0	25.9	
						RPD = 1.94	
37 Methoxychlor							
1	8.028	8.027	0.001	135571591	25.0	25.0	
2	8.289	8.289	0.000	23885044	25.0	25.1	
						RPD = 0.41	
38 Mirex							
1	8.174	8.174	0.000	213842758	25.0	24.6	
2	8.466	8.466	0.000	36419123	25.0	24.4	
						RPD = 1.08	
39 Endosulfan sulfate							
1	8.284	8.285	-0.001	293004864	25.0	24.9	
2	7.986	7.987	-0.001	50867703	25.0	25.2	
						RPD = 1.25	
40 Endrin ketone							
1	8.563	8.563	0.000	331024497	25.0	25.3	
2	8.514	8.514	0.000	58223219	25.0	25.4	
						RPD = 0.51	
$ 41 DCB Decachlorobiphenyl							
1	9.542	9.541	0.001	188781011	25.0	25.0	
2	9.721	9.722	-0.001	37258509	25.0	25.4	
						RPD = 1.47	
S 3 Endosulfan, Total							
1						75.6	
2						76.0	
						RPD = 0.59	

Reagents:

8081IcalL3_00022	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

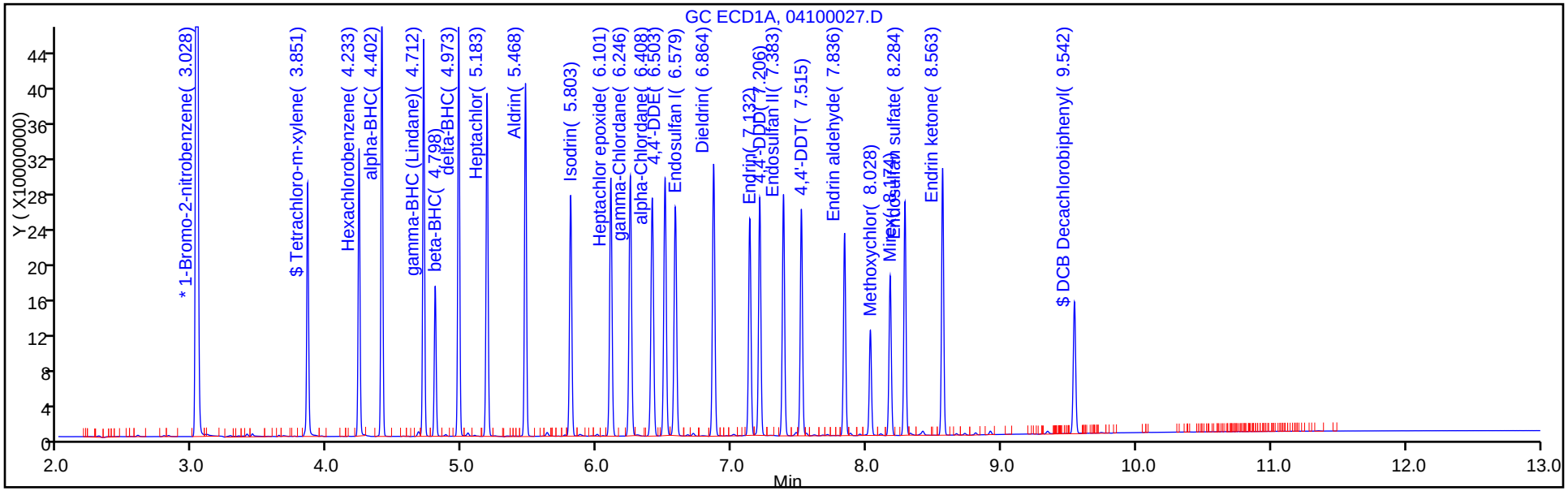
Report Date: 17-Apr-2017 13:22:09 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

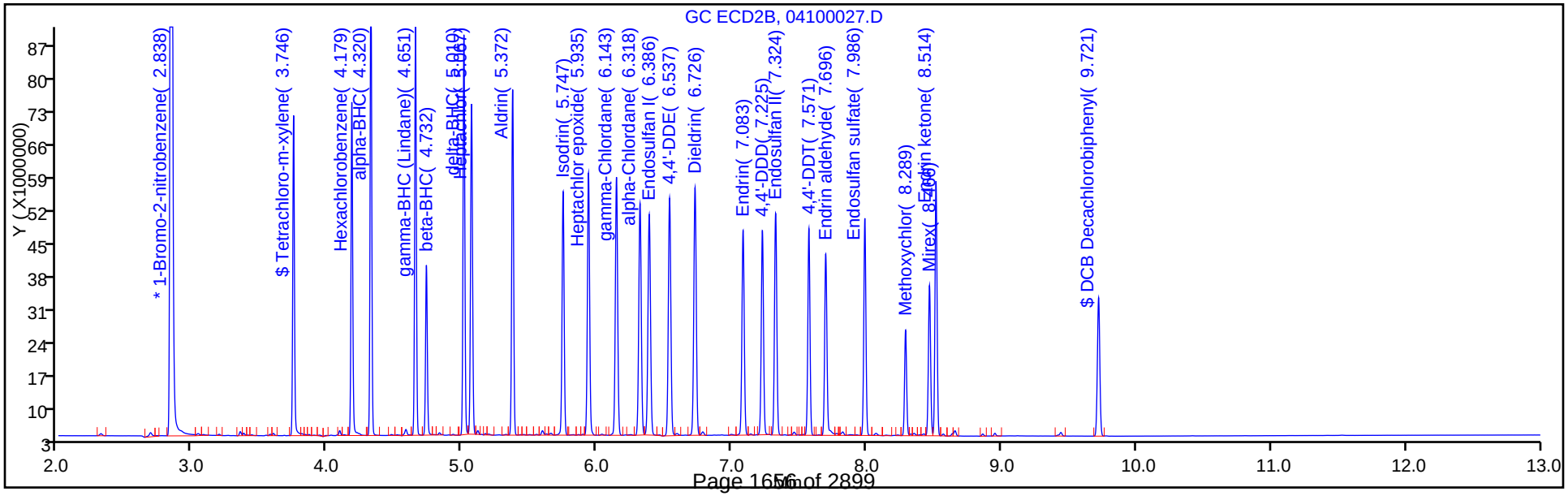
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100027.D

Injection Date:	10-Apr-2017 18:13:01	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD3 AB			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100028.D
Lims ID: STD2 AB
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 10-Apr-2017 18:29:51 ALS Bottle#: 26 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD2 AB
Misc. Info.: 280-0057376-028
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:11 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:52:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						39.7	
2						41.1	
						RPD = 3.49	
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.028	0.000	1429998779	150.0	150.0	
2	2.838	2.837	0.000	339336707	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.850	3.851	-0.001	108494839	10.0	10.1	
2	3.746	3.746	0.000	25832556	10.0	10.6	
						RPD = 5.09	
5 Hexachlorobenzene							
1	4.232	4.232	0.000	122073382	10.0	10.0	
2	4.179	4.179	0.000	26785004	10.0	10.3	
						RPD = 2.83	
8 alpha-BHC							
1	4.401	4.402	-0.001	177015109	10.0	9.85	
2	4.321	4.321	0.000	35363947	10.0	10.2	
						RPD = 3.56	
9 gamma-BHC (Lindane)							
1	4.711	4.712	-0.001	160851275	10.0	9.87	
2	4.652	4.652	0.000	31624492	10.0	10.2	
						RPD = 3.72	
10 beta-BHC							
1	4.797	4.797	0.000	66733070	10.0	10.1	
2	4.733	4.732	0.001	14272625	10.0	10.4	
						RPD = 3.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.971	4.973	-0.002	171519904	10.0	9.89	
2	5.011	5.011	0.000	32291959	10.0	10.2	
						RPD = 3.19	
15 Heptachlor							
1	5.181	5.183	-0.002	159432609	10.0	10.2	
2	5.068	5.067	0.001	30372278	10.0	10.4	
						RPD = 1.99	
16 Aldrin							
1	5.467	5.467	0.000	159758366	10.0	10.2	
2	5.373	5.372	0.001	29674030	10.0	10.4	
						RPD = 2.55	
18 Isodrin							
1	5.803	5.803	0.000	126129601	10.0	10.2	
2	5.748	5.747	0.001	23681593	10.0	10.4	
						RPD = 1.95	
21 Heptachlor epoxide							
1	6.100	6.101	-0.001	144999613	10.0	10.4	
2	5.936	5.936	0.000	27458496	10.0	10.6	
						RPD = 1.96	
22 gamma-Chlordane							M
1	6.245	6.246	-0.001	149983574	10.0	10.0	
2	6.144	6.143	0.001	28075644	10.0	10.4	M
						RPD = 4.11	
23 alpha-Chlordane							
1	6.408	6.408	0.000	145056359	10.0	10.1	
2	6.319	6.318	0.001	27086741	10.0	10.5	
						RPD = 4.12	
24 4,4'-DDE							
1	6.503	6.504	-0.001	147537531	10.0	10.1	
2	6.538	6.537	0.001	27415435	10.0	10.4	
						RPD = 3.46	
25 Endosulfan I							
1	6.579	6.580	-0.001	139542986	10.0	10.3	
2	6.387	6.387	0.000	26833467	10.0	10.7	
						RPD = 2.92	
27 Dieldrin							
1	6.863	6.864	-0.001	152444419	10.0	10.2	
2	6.726	6.727	-0.001	28593555	10.0	10.5	
						RPD = 2.87	
30 Endrin							
1	7.132	7.132	0.000	121790203	10.0	10.1	
2	7.084	7.083	0.001	22356175	10.0	10.3	
						RPD = 2.25	
32 4,4'-DDD							
1	7.205	7.206	-0.001	126102765	10.0	9.90	
2	7.226	7.227	-0.001	21500580	10.0	10.0	
						RPD = 1.42	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.383	7.382	0.001	130132659	10.0	10.3	
2	7.324	7.325	-0.001	24540848	10.0	10.7	
						RPD = 3.80	
35 4,4'-DDT							
1	7.514	7.516	-0.002	115302783	10.0	9.87	
2	7.571	7.571	0.000	20401372	10.0	10.3	
						RPD = 4.04	
36 Endrin aldehyde							M
1	7.835	7.836	-0.001	104654709	10.0	10.2	
2	7.697	7.697	0.000	19465371	10.0	10.4	M
						RPD = 1.99	
37 Methoxychlor							
1	8.026	8.027	-0.001	56417993	10.0	10.4	
2	8.289	8.289	0.000	10538870	10.0	10.7	
						RPD = 3.59	
38 Mirex							
1	8.174	8.174	0.000	88404883	10.0	10.2	
2	8.466	8.466	0.000	16304012	10.0	11.1	
						RPD = 8.90	
39 Endosulfan sulfate							
1	8.283	8.285	-0.002	116790690	10.0	10.1	
2	7.986	7.987	-0.001	21970039	10.0	10.6	
						RPD = 4.43	
40 Endrin ketone							
1	8.563	8.563	0.000	131548129	10.0	10.2	
2	8.514	8.514	0.000	24745189	10.0	10.6	
						RPD = 3.56	
$ 41 DCB Decachlorobiphenyl							
1	9.541	9.541	0.000	78010565	10.0	10.2	
2	9.720	9.722	-0.002	16408327	10.0	10.7	
						RPD = 4.85	
S 3 Endosulfan, Total							
1						30.8	
2						31.9	
						RPD = 3.71	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081IcalL2_00021	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

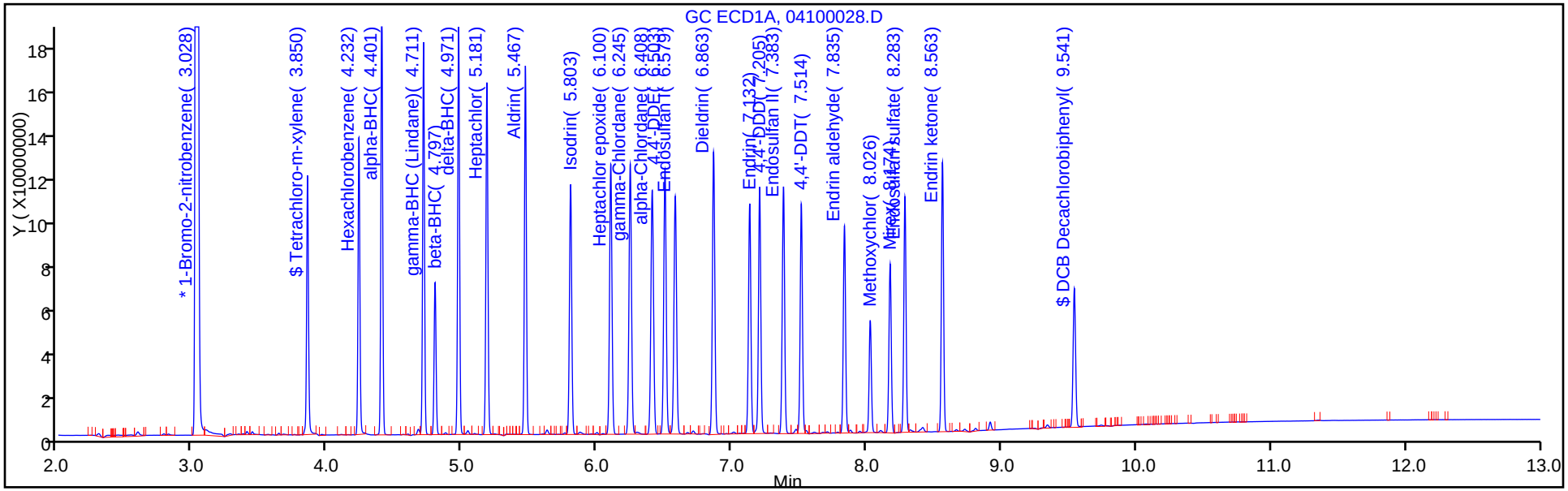
Report Date: 17-Apr-2017 13:22:13 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

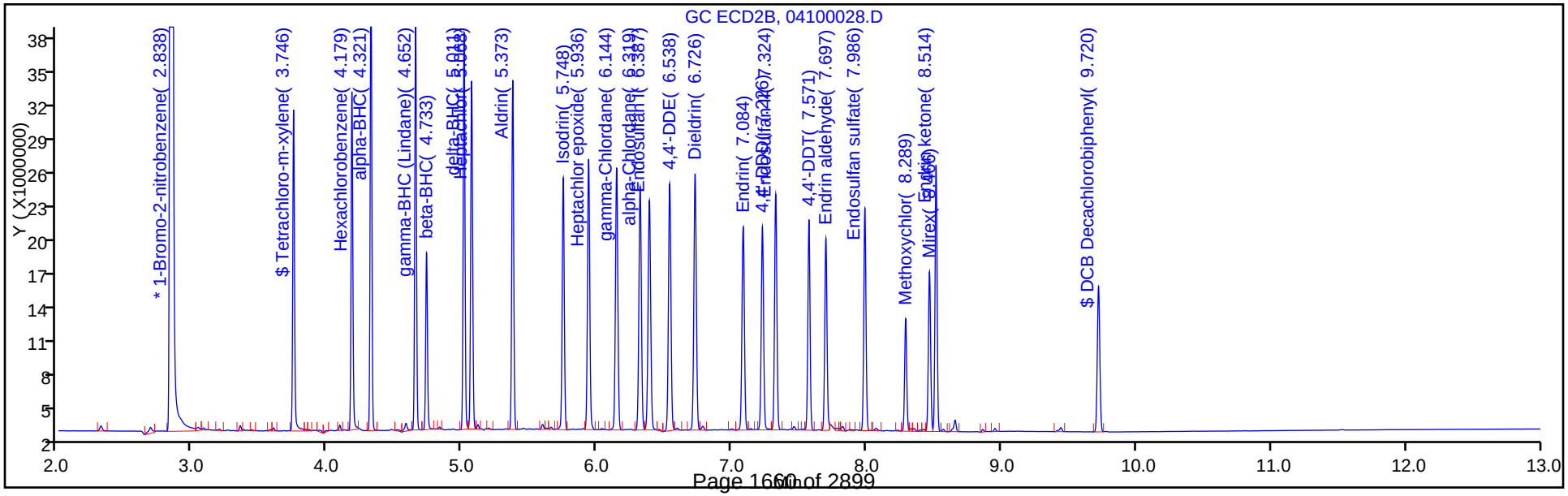
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100028.D

Injection Date:	10-Apr-2017 18:29:51	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD2 AB			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Manual Integration/User Assign Peak Report

TestAmerica Denver

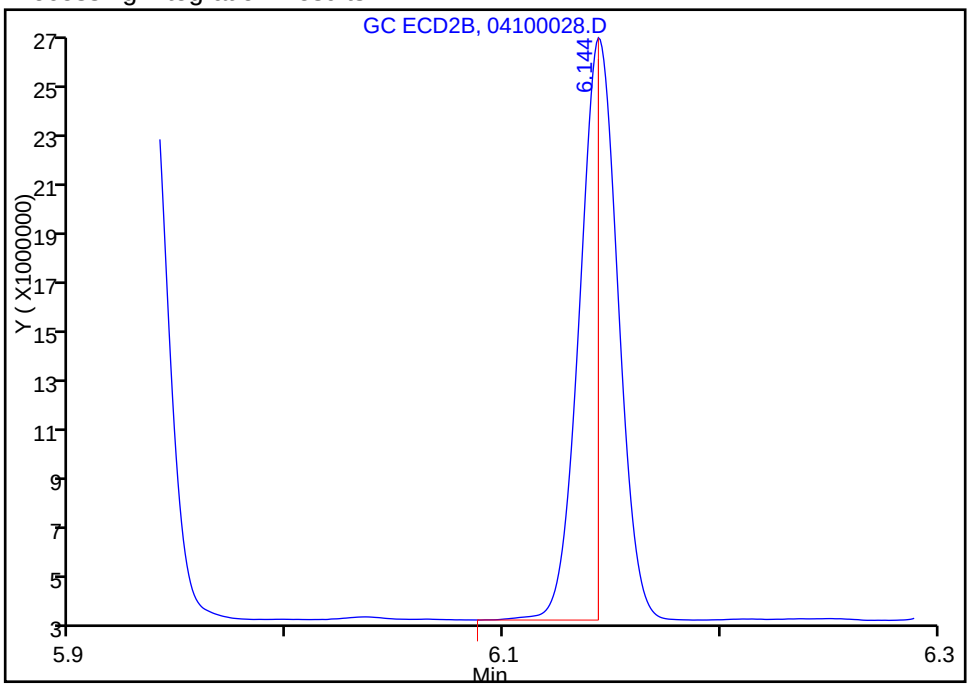
Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100028.D				
Injection Date:	10-Apr-2017 18:29:51	Instrument ID:	SGC_P1		
Lims ID:	STD2 AB				
Client ID:					
Operator ID:	DAW	ALS Bottle#:	26	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

22 gamma-Chlordane, CAS: 5103-74-2

Signal: 2

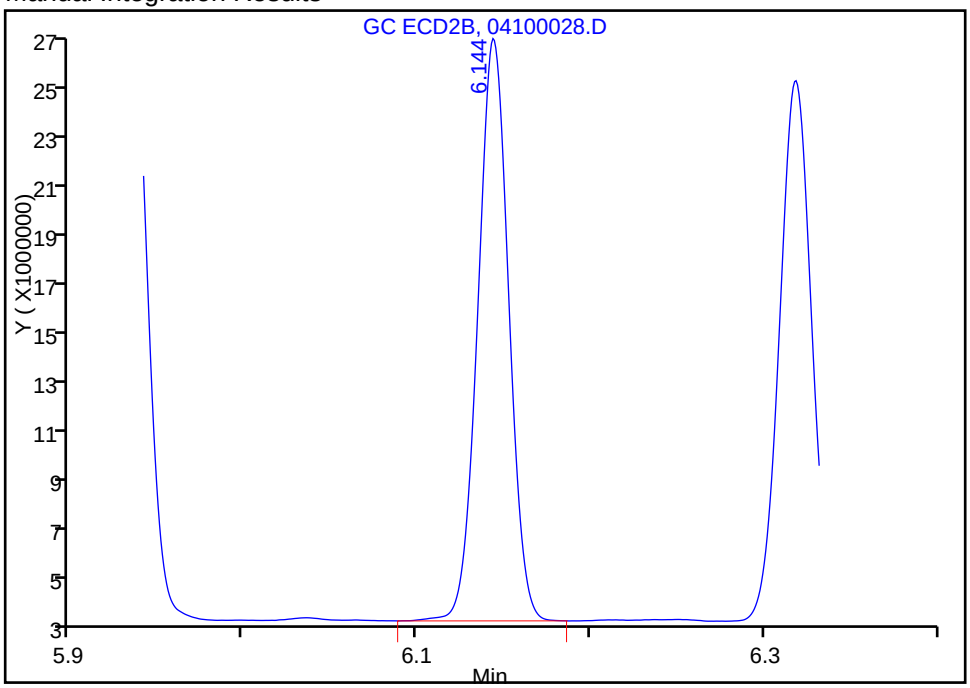
Processing Integration Results

RT: 6.14
Area: 13614808
Amount: 6.890232
Amount Units: ng/mL



Manual Integration Results

RT: 6.14
Area: 28075644
Amount: 10.443671
Amount Units: ng/mL



Reviewer: wellsd, 17-Apr-2017 13:22:10

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Denver

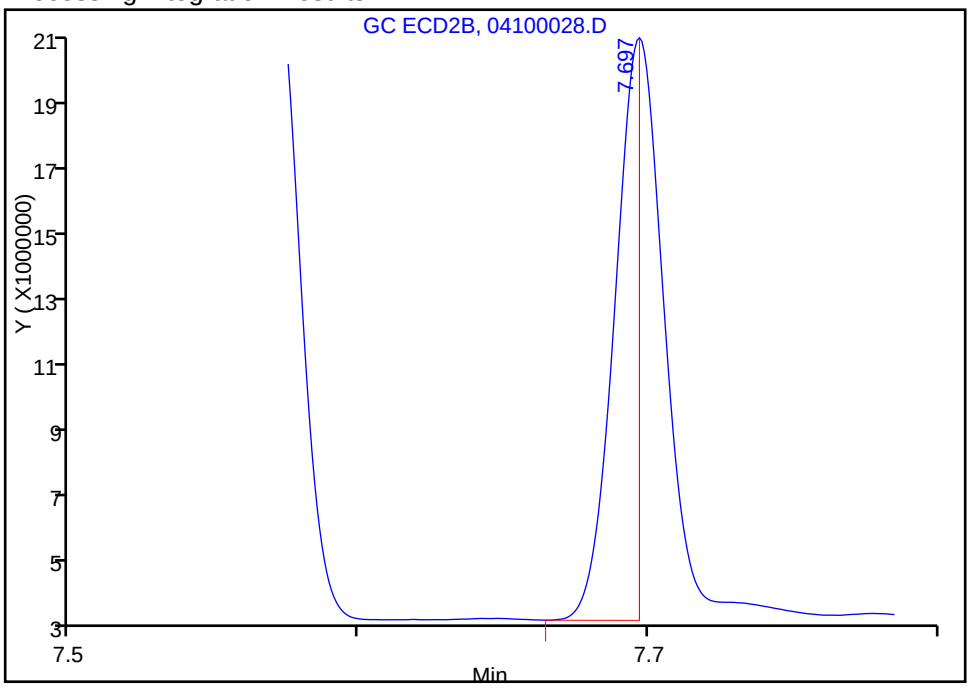
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100028.D
Injection Date: 10-Apr-2017 18:29:51 Instrument ID: SGC_P1
Lims ID: STD2 AB
Client ID:
Operator ID: DAW ALS Bottle#: 26 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: P1 8081 IS Limit Group: GCSV - 8081A - IS
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

36 Endrin aldehyde, CAS: 7421-93-4

Signal: 2

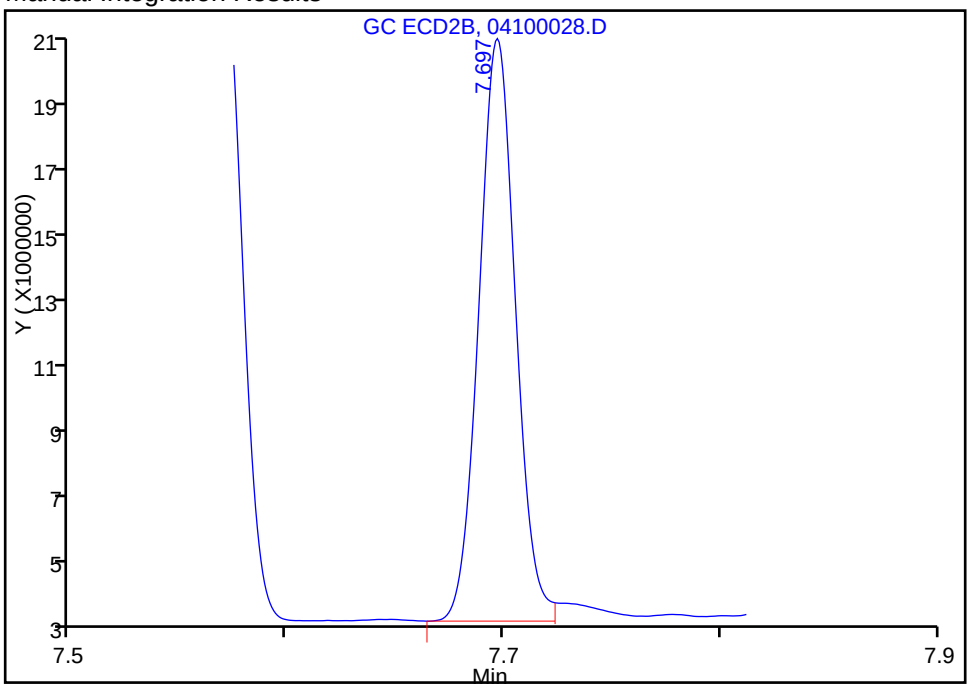
Processing Integration Results

RT: 7.70
Area: 9613067
Amount: 6.812311
Amount Units: ng/mL



Manual Integration Results

RT: 7.70
Area: 19465371
Amount: 10.427408
Amount Units: ng/mL



Reviewer: wellsd, 17-Apr-2017 13:22:10
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D
Lims ID: STD1 AB
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 10-Apr-2017 18:46:48 ALS Bottle#: 27 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD1 AB
Misc. Info.: 280-0057376-029
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:14 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:52:43

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						16.1	
2						15.8	
						RPD = 1.52	
* 2 1-Bromo-2-nitrobenzene							
1	3.029	3.028	0.001	1473279982	150.0	150.0	
2	2.838	2.837	0.001	348639046	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.851	3.851	0.000	43599324	4.00	3.99	
2	3.746	3.746	0.000	10687729	4.00	3.91	
						RPD = 2.05	
5 Hexachlorobenzene							
1	4.232	4.232	0.000	50408254	4.00	4.00	
2	4.179	4.179	0.000	11843720	4.00	3.94	
						RPD = 1.46	
8 alpha-BHC							
1	4.402	4.402	0.000	67283578	4.00	4.03	
2	4.320	4.321	-0.001	14307480	4.00	3.97	
						RPD = 1.55	
9 gamma-BHC (Lindane)							
1	4.712	4.712	0.000	61711453	4.00	4.03	
2	4.651	4.652	-0.001	12985616	4.00	3.97	
						RPD = 1.58	
10 beta-BHC							
1	4.798	4.797	0.001	27570072	4.00	4.00	
2	4.732	4.732	0.000	6399213	4.00	3.93	
						RPD = 1.65	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.972	4.973	-0.001	65915279	4.00	4.02	
2	5.010	5.011	-0.001	13161015	4.00	3.97	
						RPD = 1.29	
15 Heptachlor							
1	5.182	5.183	-0.001	62263366	4.00	3.96	
2	5.067	5.067	0.000	12705798	4.00	3.94	
						RPD = 0.64	
16 Aldrin							M
1	5.468	5.467	0.001	61506570	4.00	3.97	M
2	5.373	5.372	0.001	12117568	4.00	3.93	
						RPD = 0.95	
18 Isodrin							
1	5.803	5.803	0.000	50192475	4.00	3.96	
2	5.747	5.747	0.000	10027080	4.00	3.93	
						RPD = 0.77	
21 Heptachlor epoxide							
1	6.101	6.101	0.000	57377311	4.00	3.93	
2	5.936	5.936	0.000	11529652	4.00	3.90	
						RPD = 0.70	
22 gamma-Chlordane							
1	6.245	6.246	-0.001	58808048	4.00	4.00	
2	6.143	6.143	0.000	11780419	4.00	3.93	
						RPD = 1.78	
23 alpha-Chlordane							
1	6.409	6.408	0.001	57404226	4.00	3.99	
2	6.318	6.318	0.000	11485496	4.00	3.92	
						RPD = 1.77	
24 4,4'-DDE							
1	6.503	6.504	-0.001	56703371	4.00	3.99	
2	6.538	6.537	0.001	11422598	4.00	3.93	
						RPD = 1.50	
25 Endosulfan I							
1	6.580	6.580	0.000	55727204	4.00	3.94	
2	6.387	6.387	0.000	11474152	4.00	3.89	
						RPD = 1.16	
27 Dieldrin							
1	6.864	6.864	0.000	59769469	4.00	3.96	
2	6.726	6.727	-0.001	11889081	4.00	3.92	
						RPD = 1.11	
30 Endrin							
1	7.133	7.132	0.001	48438787	4.00	3.99	
2	7.083	7.083	0.000	9438768	4.00	3.96	
						RPD = 0.81	
32 4,4'-DDD							
1	7.207	7.206	0.001	52953763	4.00	4.02	
2	7.226	7.227	-0.001	9807152	4.00	4.00	
						RPD = 0.40	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.382	7.382	0.000	51900672	4.00	3.95	
2	7.325	7.325	0.000	10397764	4.00	3.89	
						RPD = 1.50	
35 4,4'-DDT							
1	7.515	7.516	-0.001	44351007	4.00	4.03	
2	7.571	7.571	0.000	8521262	4.00	3.96	
						RPD = 1.65	
36 Endrin aldehyde							
1	7.835	7.836	-0.001	41923660	4.00	3.96	
2	7.697	7.697	0.000	8422036	4.00	3.92	
						RPD = 1.01	
37 Methoxychlor							
1	8.028	8.027	0.001	23156143	4.00	3.94	
2	8.289	8.289	0.000	4519499	4.00	3.89	
						RPD = 1.47	
38 Mirex							
1	8.174	8.174	0.000	36796915	4.00	3.98	
2	8.465	8.466	-0.001	7191747	4.00	4.77	
						RPD = 18.23	
39 Endosulfan sulfate							
1	8.284	8.285	-0.001	45892091	4.00	3.98	
2	7.987	7.987	0.000	9406004	4.00	3.90	
						RPD = 1.87	
40 Endrin ketone							
1	8.564	8.563	0.001	51293926	4.00	3.95	
2	8.515	8.514	0.001	10335104	4.00	3.90	
						RPD = 1.45	
$ 41 DCB Decachlorobiphenyl							
1	9.543	9.541	0.002	32850791	4.00	3.96	
2	9.721	9.722	-0.001	7147355	4.00	3.88	
						RPD = 2.12	
S 3 Endosulfan, Total							
1						11.9	
2						11.7	
						RPD = 1.51	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081IcalL1_00021	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

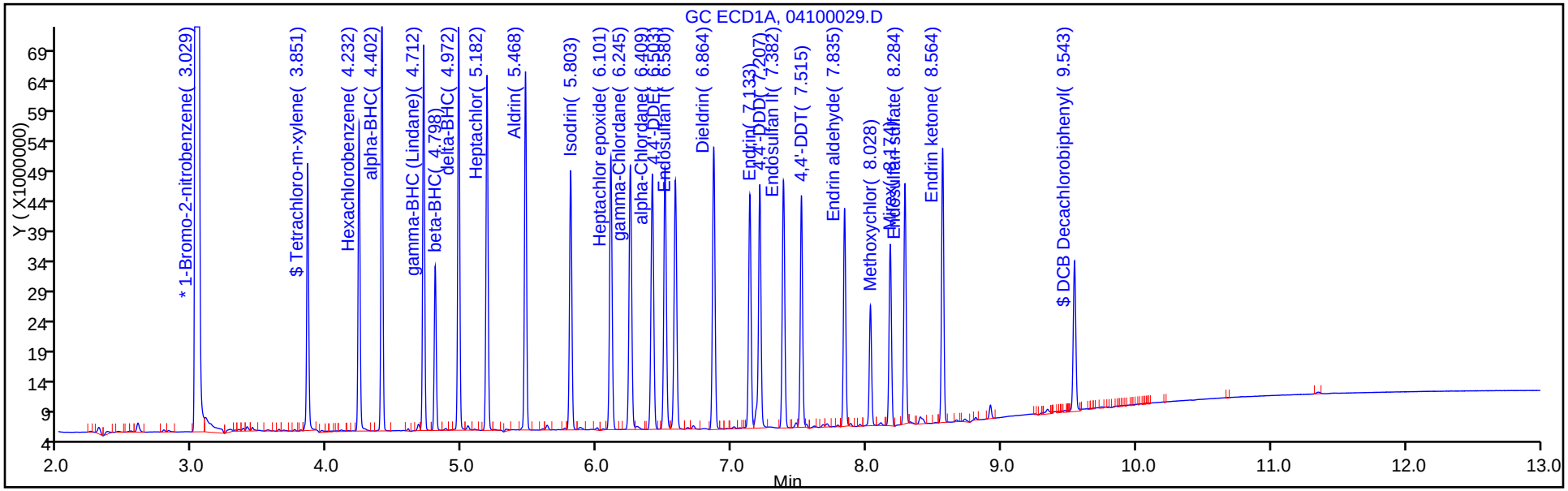
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TestAmerica Denver

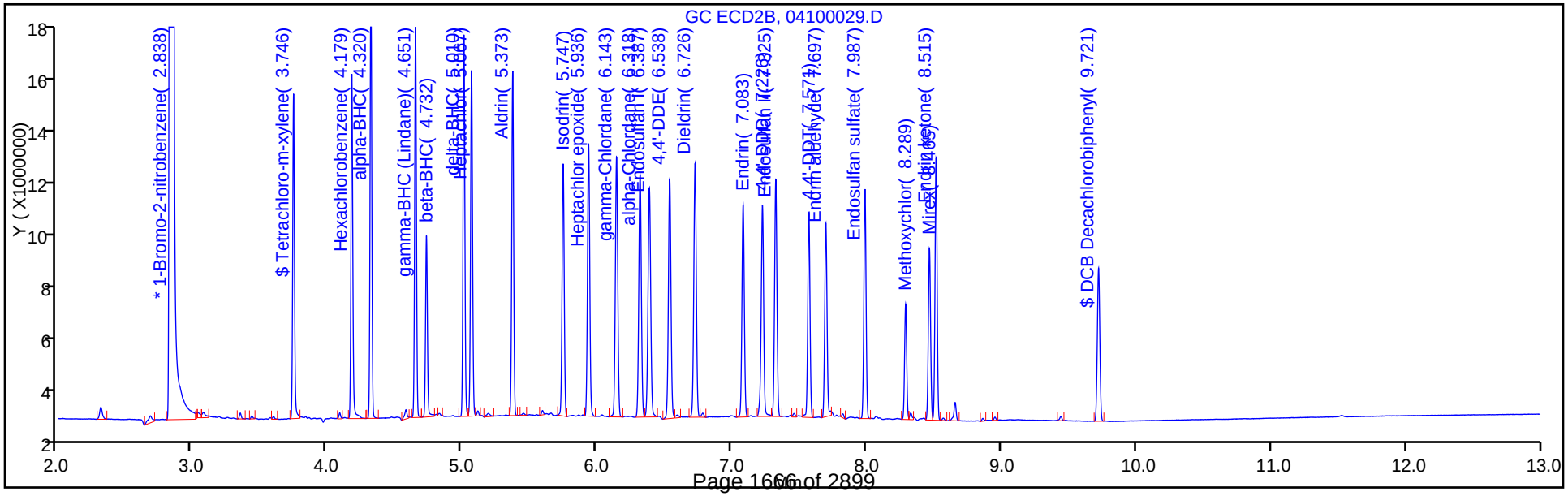
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Injection Date:	10-Apr-2017 18:46:48	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD1 AB			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID (1): PEM 280-377328/7 Instrument ID (1): SGC_P1

GC Column (1): CLP1 ID: 0.32(mm) Date Analyzed (1): 06/14/2017 17:50

ANALYTE	RT	RESOLUTION (%)
4,4'-DDE	6.46	100.0
Endrin	7.09	100.0
4,4'-DDD	7.16	100.0
4,4'-DDT	7.47	100.0
Endrin aldehyde	7.79	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID (2): PEM 280-377328/7 Instrument ID (2): SGC_P1

GC Column (2): CLP2 ID: 0.32(mm) Date Analyzed (2): 06/14/2017 17:50

ANALYTE	RT	RESOLUTION (%)
4,4'-DDE	6.43	100.0
Endrin	6.97	100.0
4,4'-DDD	7.12	100.0
4,4'-DDT	7.47	100.0
Endrin aldehyde	7.59	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID (1): PEM 280-377328/31 Instrument ID (1): SGC_P1

GC Column (1): CLP1 ID: 0.32(mm) Date Analyzed (1): 06/15/2017 00:37

ANALYTE	RT	RESOLUTION (%)
4,4'-DDE	6.46	100.0
Endrin	7.09	100.0
4,4'-DDD	7.16	100.0
4,4'-DDT	7.47	100.0
Endrin aldehyde	7.79	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID (2): PEM 280-377328/31 Instrument ID (2): SGC_P1

GC Column (2): CLP2 ID: 0.32(mm) Date Analyzed (2): 06/15/2017 00:37

ANALYTE	RT	RESOLUTION (%)
4,4'-DDE	6.43	100.0
Endrin	6.97	100.0
4,4'-DDD	7.12	100.0
4,4'-DDT	7.47	100.0
Endrin aldehyde	7.59	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID (1): PEM 280-377996/7 Instrument ID (1): SGC_P1

GC Column (1): CLP1 ID: 0.32(mm) Date Analyzed (1): 06/20/2017 12:18

ANALYTE	RT	RESOLUTION (%)
4,4'-DDE	6.46	100.0
Endrin	7.08	100.0
4,4'-DDD	7.16	100.0
4,4'-DDT	7.47	100.0
Endrin aldehyde	7.79	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID (2): PEM 280-377996/7 Instrument ID (2): SGC_P1

GC Column (2): CLP2 ID: 0.32(mm) Date Analyzed (2): 06/20/2017 12:18

ANALYTE	RT	RESOLUTION (%)
4,4'-DDE	6.42	100.0
Endrin	6.97	100.0
4,4'-DDD	7.12	100.0
4,4'-DDT	7.47	100.0
Endrin aldehyde	7.59	100.0

FORM VII
PESTICIDES PERFORMANCE EVALUATION MIXTURE (PEM)

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: PEM 280-377328/7 Calibration Date: 06/14/2017 17:50

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06140007.D Conc. Units: ug/L

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
Endrin	7.09	781606272	3.19	15	
Endrin aldehyde	7.79	12220516			
Endrin ketone	8.52	13560966			

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
4,4'-DDT	7.47	691537428	1.59	15	
4,4'-DDD	7.16	8014594			
4,4'-DDE	6.46	3192501			

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140007.D
Lims ID: PEM
Client ID:
Sample Type: PEM
Inject. Date: 14-Jun-2017 17:50:33 ALS Bottle#: 2 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: PEM
Misc. Info.: 280-0059760-007
Operator ID: DAW Instrument ID: SGC_P1
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:57:07 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.998	2.998	0.000	2236556612	150.0	150.0	
2	2.773	2.773	0.000	461231591	150.0	150.0	
24 4,4'-DDE							
1	6.458	6.459	-0.001	3192501		0.5012	
2	6.425	6.424	0.001	933622		-0.2316	
						RPD = 543.62	
30 Endrin							
1	7.086	7.088	-0.002	781606272	40.0	40.9	
2	6.971	6.969	0.002	121052475	40.0	42.6	
						RPD = 3.88	
32 4,4'-DDD							
1	7.163	7.163	0.000	8014594		0.3767	
2	7.121	7.121	0.000	1649640		-0.2048	
						RPD = 676.24	
35 4,4'-DDT							
1	7.473	7.474	-0.001	691537428	40.0	36.3	
2	7.470	7.469	0.001	103261100	40.0	39.3	
						RPD = 7.85	
36 Endrin aldehyde							
1	7.790	7.791	-0.001	12220516		0.7339	
2	7.591	7.589	0.002	2842458		0.3867	
						RPD = 61.97	
40 Endrin ketone							
1	8.518	8.519	-0.001	13560966		0.7882	
2	8.412	8.410	0.002	2975165		0.2937	
						RPD = 91.41	

Reagents:

8081_EvalBPEM_00008	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

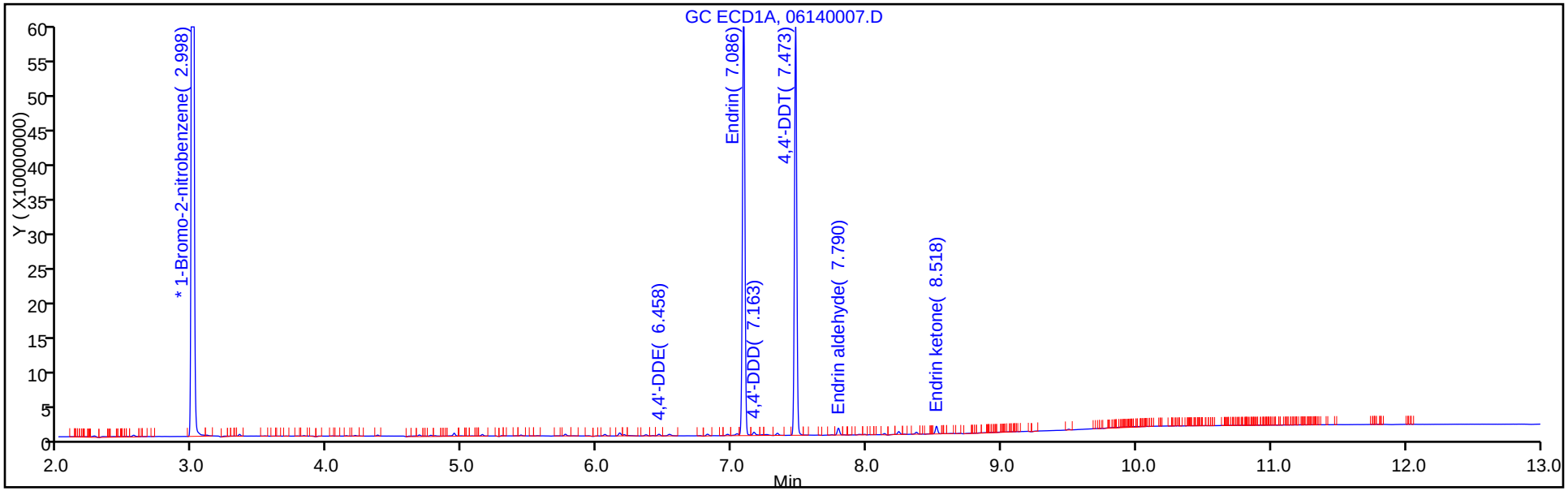
Report Date: 15-Jun-2017 13:57:39 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

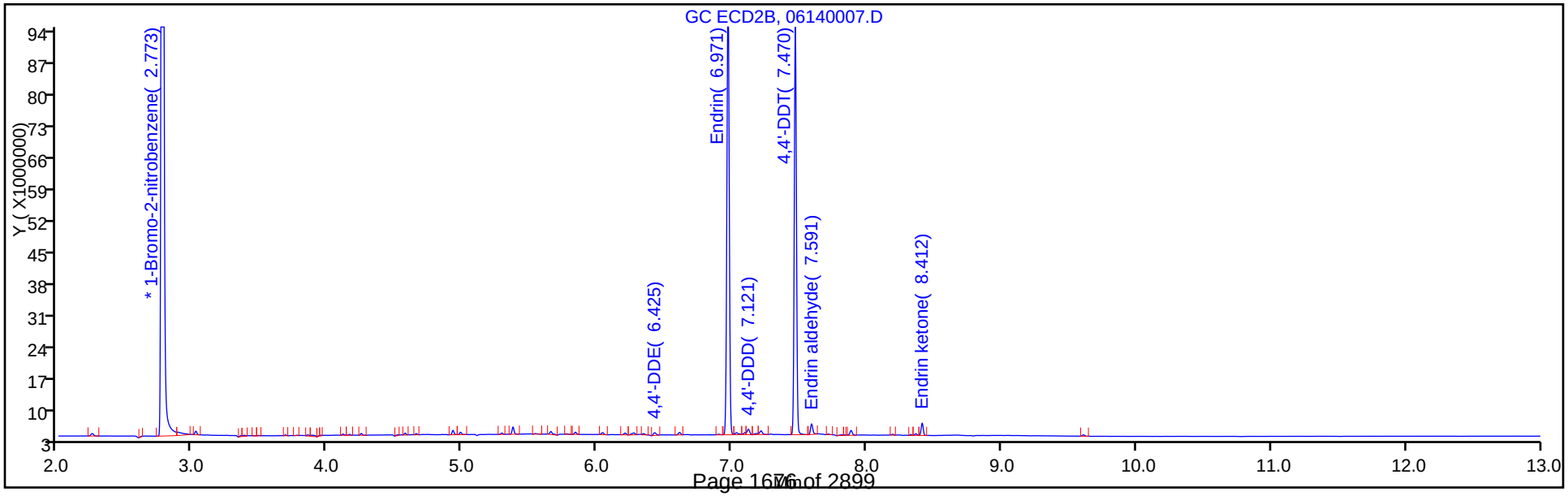
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140007.D

Injection Date:	14-Jun-2017 17:50:33	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	PEM			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES PERFORMANCE EVALUATION MIXTURE (PEM)

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: PEM 280-377328/7 Calibration Date: 06/14/2017 17:50

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06140007.D Conc. Units: ug/L

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
Endrin	6.97	121052475	4.59	15	
Endrin aldehyde	7.59	2842458			
Endrin ketone	8.41	2975165			

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
4,4'-DDT	7.47	103261100	2.44	15	
4,4'-DDD	7.12	1649640			
4,4'-DDE	6.43	933622			

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140007.D
Lims ID: PEM
Client ID:
Sample Type: PEM
Inject. Date: 14-Jun-2017 17:50:33 ALS Bottle#: 2 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: PEM
Misc. Info.: 280-0059760-007
Operator ID: DAW Instrument ID: SGC_P1
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:57:07 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.998	2.998	0.000	2236556612	150.0	150.0	
2	2.773	2.773	0.000	461231591	150.0	150.0	
24 4,4'-DDE							
1	6.458	6.459	-0.001	3192501		0.5012	
2	6.425	6.424	0.001	933622		-0.2316	
						RPD = 543.62	
30 Endrin							
1	7.086	7.088	-0.002	781606272	40.0	40.9	
2	6.971	6.969	0.002	121052475	40.0	42.6	
						RPD = 3.88	
32 4,4'-DDD							
1	7.163	7.163	0.000	8014594		0.3767	
2	7.121	7.121	0.000	1649640		-0.2048	
						RPD = 676.24	
35 4,4'-DDT							
1	7.473	7.474	-0.001	691537428	40.0	36.3	
2	7.470	7.469	0.001	103261100	40.0	39.3	
						RPD = 7.85	
36 Endrin aldehyde							
1	7.790	7.791	-0.001	12220516		0.7339	
2	7.591	7.589	0.002	2842458		0.3867	
						RPD = 61.97	
40 Endrin ketone							
1	8.518	8.519	-0.001	13560966		0.7882	
2	8.412	8.410	0.002	2975165		0.2937	
						RPD = 91.41	

Reagents:

8081_EvalBPEM_00008	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

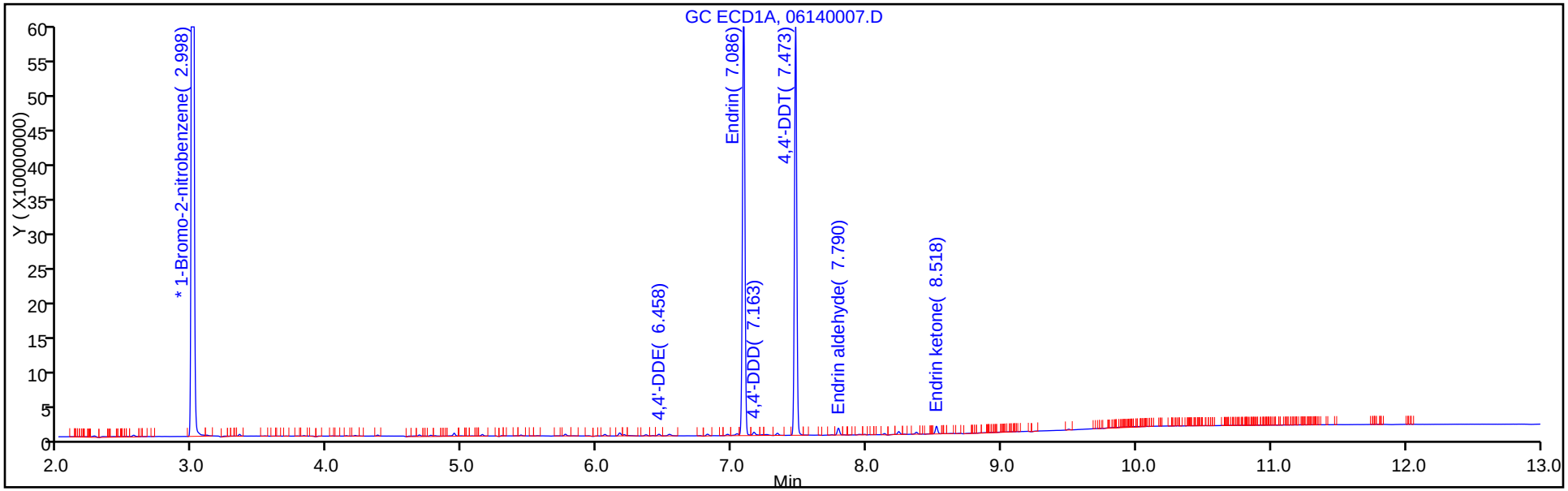
Report Date: 15-Jun-2017 13:57:39 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

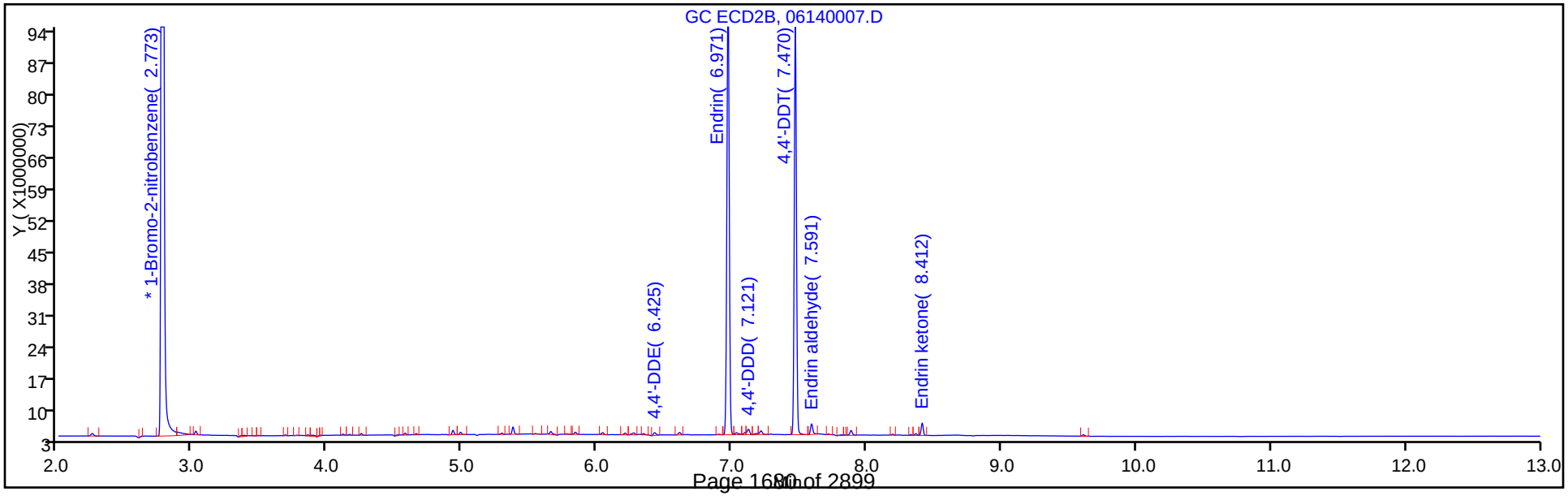
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140007.D

Injection Date:	14-Jun-2017 17:50:33	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	PEM			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES PERFORMANCE EVALUATION MIXTURE (PEM)

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: PEM 280-377328/31 Calibration Date: 06/15/2017 00:37

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06140031.D Conc. Units: ug/L

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
Endrin	7.09	778827652	3.00	15	
Endrin aldehyde	7.79	10440638			
Endrin ketone	8.52	13668409			

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
4,4'-DDT	7.47	709045963	1.61	15	
4,4'-DDD	7.16	9388076			
4,4'-DDE	6.46	2215033			

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140031.D
Lims ID: PEM
Client ID:
Sample Type: PEM
Inject. Date: 15-Jun-2017 00:37:54 ALS Bottle#: 25 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: PEM
Misc. Info.: 280-0059760-031
Operator ID: DAW Instrument ID: SGC_P1
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:58:30 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: wellsd Date: 15-Jun-2017 13:47:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.996	2.997	-0.001	2114080838	150.0	150.0	
2	2.771	2.771	0.000	457414811	150.0	150.0	
24 4,4'-DDE							
1	6.457	6.459	-0.002	2215033		0.4655	
2	6.426	6.424	0.002	635966		-0.3174	
						RPD = 1057.62	
30 Endrin							
1	7.086	7.088	-0.002	778827652	40.0	43.2	
2	6.970	6.969	0.001	121582860	40.0	43.1	
						RPD = 0.09	
32 4,4'-DDD							
1	7.161	7.163	-0.002	9388076		0.4732	
2	7.121	7.121	0.000	1517556		-0.2491	
						RPD = 644.69	
35 4,4'-DDT							M
1	7.472	7.474	-0.002	709045963	40.0	39.3	
2	7.469	7.469	0.000	105435192	40.0	40.4	M
						RPD = 2.78	
36 Endrin aldehyde							
1	7.789	7.791	-0.002	10440638		0.6603	
2	7.590	7.589	0.001	2386690		0.2014	
						RPD = 106.51	
40 Endrin ketone							
1	8.516	8.519	-0.003	13668409		0.8324	
2	8.411	8.410	0.001	2948492		0.2930	
						RPD = 95.86	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081_EvalBPEM_00008	Amount Added:	1.00	Units: mL	
8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

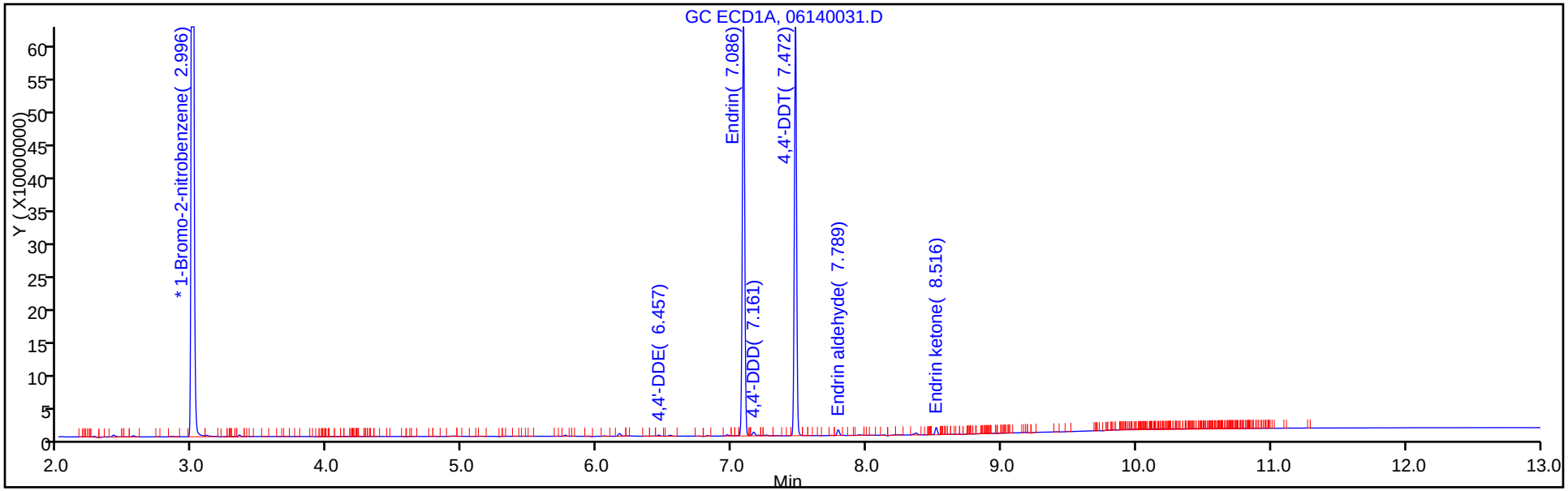
Report Date: 15-Jun-2017 13:58:33 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

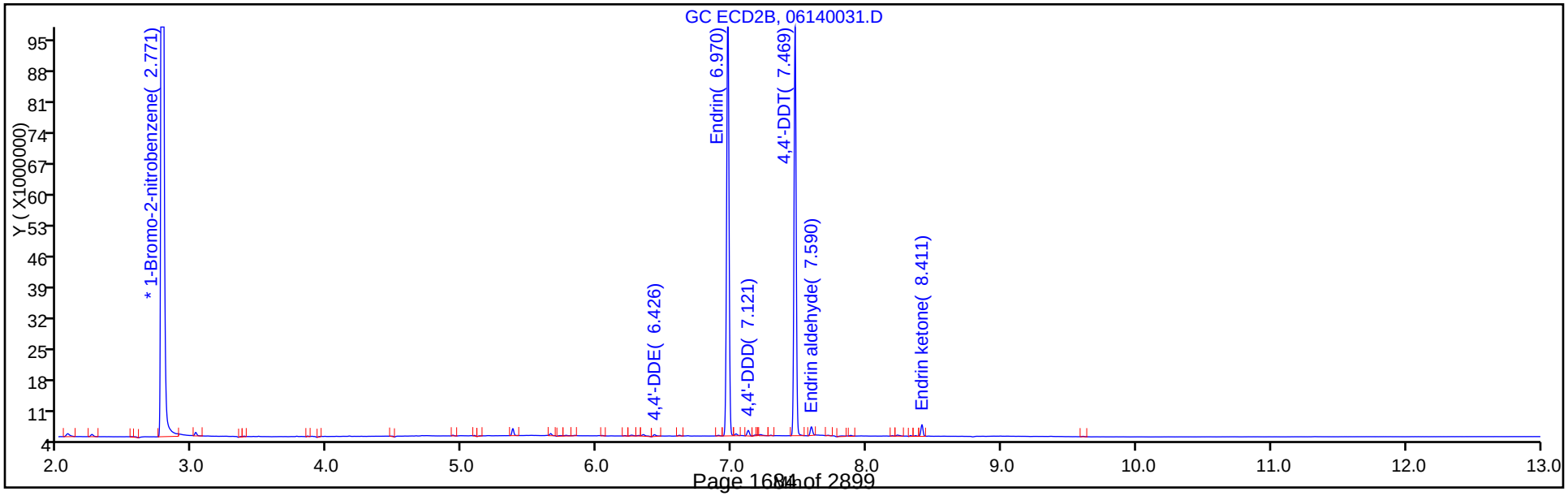
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140031.D

Injection Date:	15-Jun-2017 00:37:54	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	PEM			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES PERFORMANCE EVALUATION MIXTURE (PEM)

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: PEM 280-377328/31 Calibration Date: 06/15/2017 00:37

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06140031.D Conc. Units: ug/L

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
Endrin	6.97	121582860	4.20	15	
Endrin aldehyde	7.59	2386690			
Endrin ketone	8.41	2948492			

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
4,4'-DDT	7.47	105435192	2.00	15	
4,4'-DDD	7.12	1517556			
4,4'-DDE	6.43	635966			

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140031.D
Lims ID: PEM
Client ID:
Sample Type: PEM
Inject. Date: 15-Jun-2017 00:37:54 ALS Bottle#: 25 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: PEM
Misc. Info.: 280-0059760-031
Operator ID: DAW Instrument ID: SGC_P1
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:58:30 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: wellsd Date: 15-Jun-2017 13:47:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.996	2.997	-0.001	2114080838	150.0	150.0	
2	2.771	2.771	0.000	457414811	150.0	150.0	
24 4,4'-DDE							
1	6.457	6.459	-0.002	2215033		0.4655	
2	6.426	6.424	0.002	635966		-0.3174	
						RPD = 1057.62	
30 Endrin							
1	7.086	7.088	-0.002	778827652	40.0	43.2	
2	6.970	6.969	0.001	121582860	40.0	43.1	
						RPD = 0.09	
32 4,4'-DDD							
1	7.161	7.163	-0.002	9388076		0.4732	
2	7.121	7.121	0.000	1517556		-0.2491	
						RPD = 644.69	
35 4,4'-DDT							M
1	7.472	7.474	-0.002	709045963	40.0	39.3	
2	7.469	7.469	0.000	105435192	40.0	40.4	M
						RPD = 2.78	
36 Endrin aldehyde							
1	7.789	7.791	-0.002	10440638		0.6603	
2	7.590	7.589	0.001	2386690		0.2014	
						RPD = 106.51	
40 Endrin ketone							
1	8.516	8.519	-0.003	13668409		0.8324	
2	8.411	8.410	0.001	2948492		0.2930	
						RPD = 95.86	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081_EvalBPEM_00008	Amount Added:	1.00	Units: mL	
8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

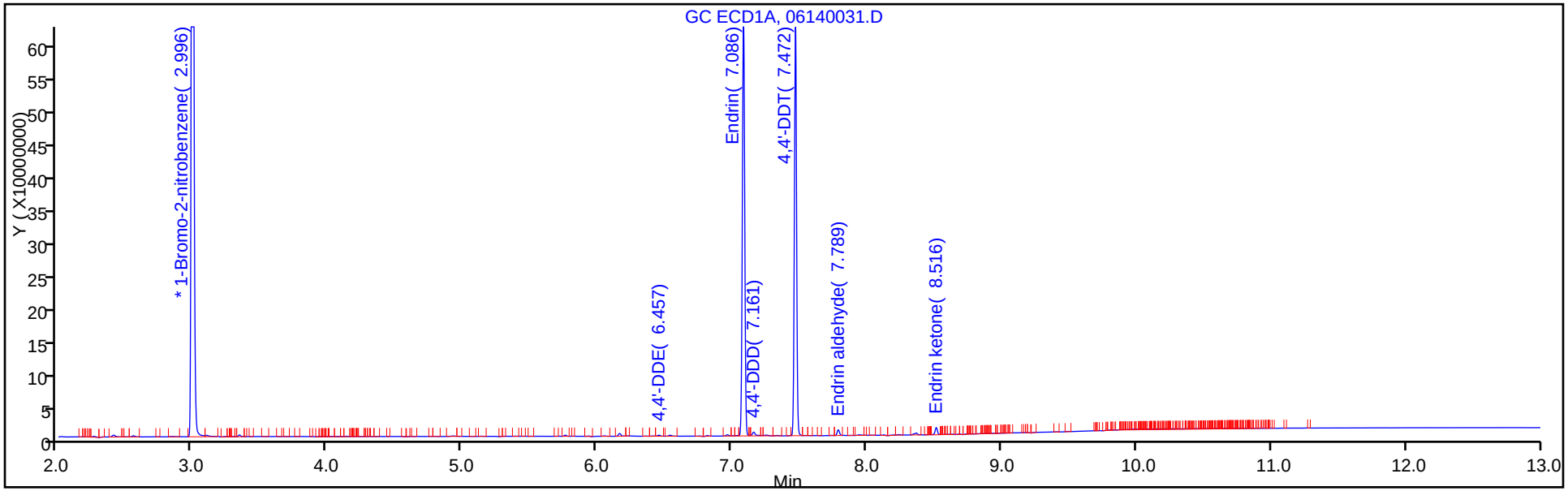
Report Date: 15-Jun-2017 13:58:33 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

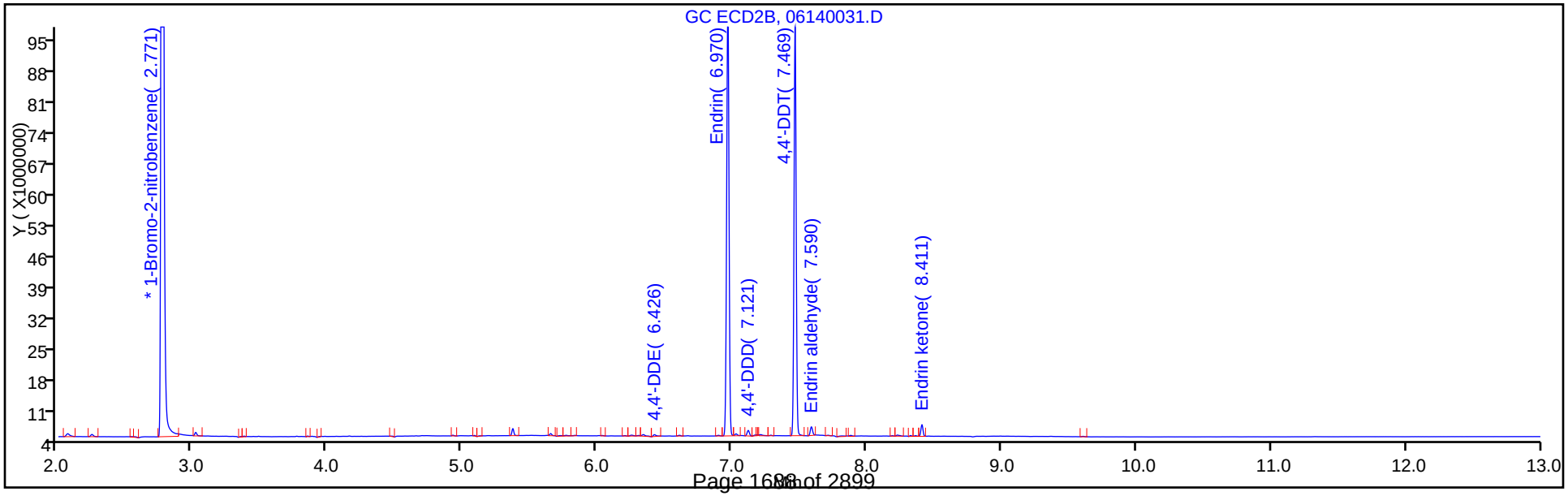
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140031.D

Injection Date:	15-Jun-2017 00:37:54	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	PEM			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Manual Integration/User Assign Peak Report

TestAmerica Denver

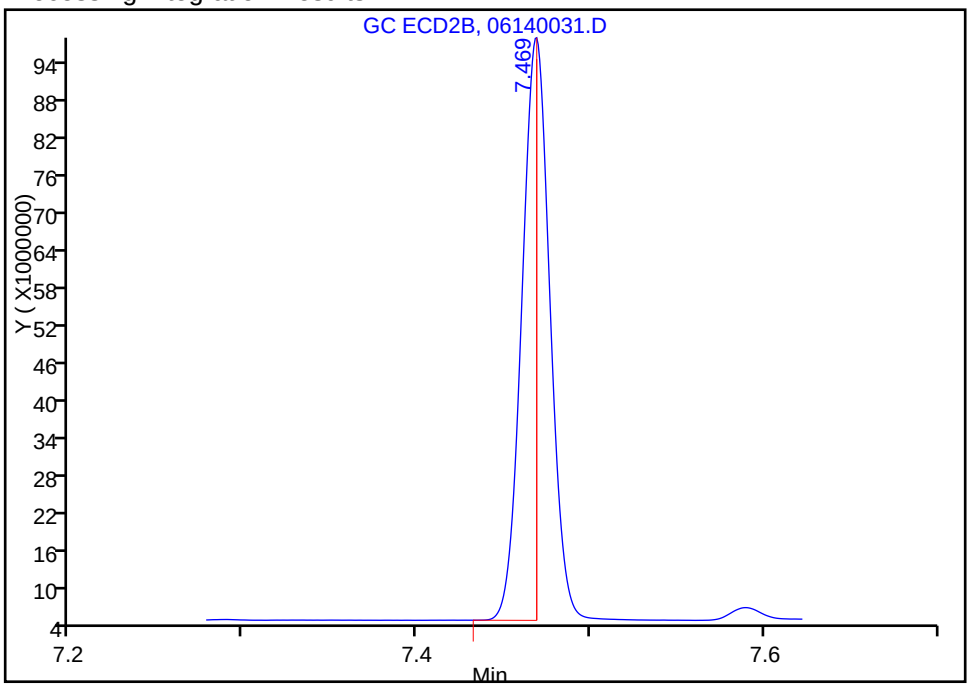
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Injection Date: 15-Jun-2017 00:37:54 Instrument ID: SGC_P1
Lims ID: PEM
Client ID:
Operator ID: DAW ALS Bottle#: 25 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: P1 8081 IS Limit Group: GCSV - 8081A - IS
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

35 4,4'-DDT, CAS: 50-29-3

Signal: 2

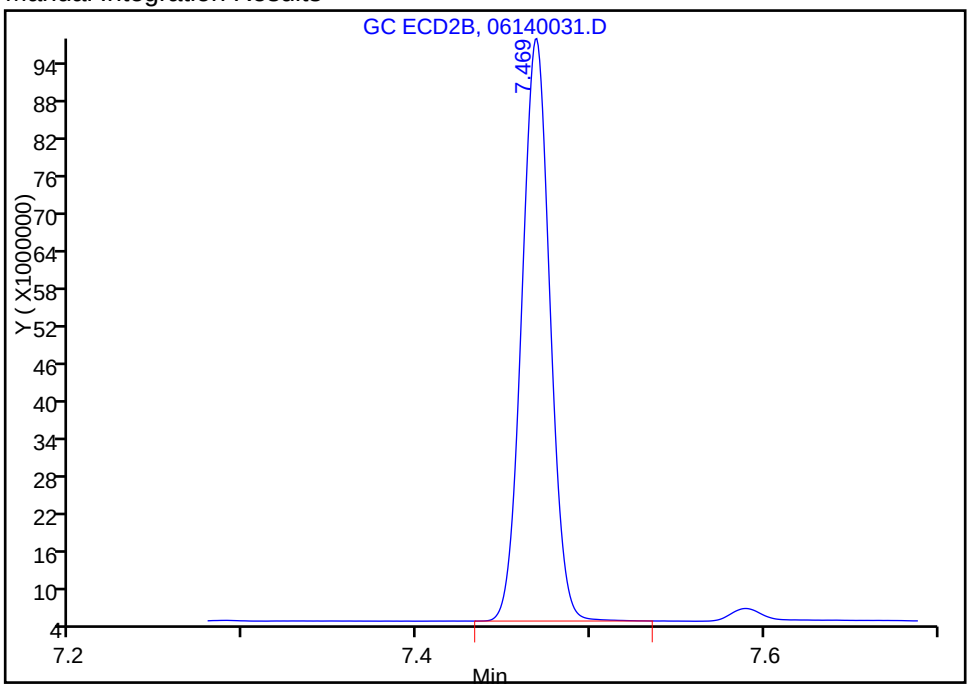
Processing Integration Results

RT: 7.47
Area: 54531393
Amount: 20.735042
Amount Units: ng/mL



Manual Integration Results

RT: 7.47
Area: 105435192
Amount: 40.427994
Amount Units: ng/mL



Reviewer: wellsd, 15-Jun-2017 13:47:28
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
PESTICIDES PERFORMANCE EVALUATION MIXTURE (PEM)

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: PEM 280-377996/7 Calibration Date: 06/20/2017 12:18

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06200007.D Conc. Units: ug/L

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
Endrin	7.08	823143767	2.35	15	
Endrin aldehyde	7.79	8105176			
Endrin ketone	8.51	11706498			

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
4,4'-DDT	7.47	768653855	1.01	15	
4,4'-DDD	7.16	5559227			
4,4'-DDE	6.46	2244496			

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200007.D
Lims ID: PEM
Client ID:
Sample Type: PEM
Inject. Date: 20-Jun-2017 12:18:04 ALS Bottle#: 2 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: PEM
Misc. Info.: 280-0059933-007
Operator ID: DAW Instrument ID: SGC_P1
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 21-Jun-2017 10:59:01 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK008

First Level Reviewer: wellsd Date: 21-Jun-2017 10:59:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.995	2.995	0.000	2267287998	150.0	150.0	
2	2.768	2.769	0.000	455979915	150.0	150.0	
24 4,4'-DDE							
1	6.455	6.456	-0.001	2244496		0.4600	
2	6.421	6.420	0.001	468159		-0.3666	
						RPD = 1770.72	
30 Endrin							
1	7.083	7.084	-0.001	823143767	40.0	42.5	
2	6.967	6.967	0.000	119491398	40.0	42.5	
						RPD = 0.07	
32 4,4'-DDD							
1	7.160	7.160	0.000	5559227		0.2494	
2	7.118	7.118	0.000	1254663		-0.3461	
						RPD = -1232.16	
35 4,4'-DDT							M
1	7.470	7.470	0.000	768653855	40.0	39.7	
2	7.466	7.467	-0.001	103188636	40.0	39.7	M
						RPD = 0.13	
36 Endrin aldehyde							
1	7.788	7.787	0.001	8105176		0.4693	
2	7.587	7.587	0.000	1675286		-0.1013	
						RPD = 310.15	
40 Endrin ketone							M
1	8.514	8.514	0.000	11706498		0.6891	
2	8.407	8.407	0.000	2328355		0.0849	M
						RPD = 156.10	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081_EvalBPEM_00008	Amount Added:	1.00	Units: mL	
8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

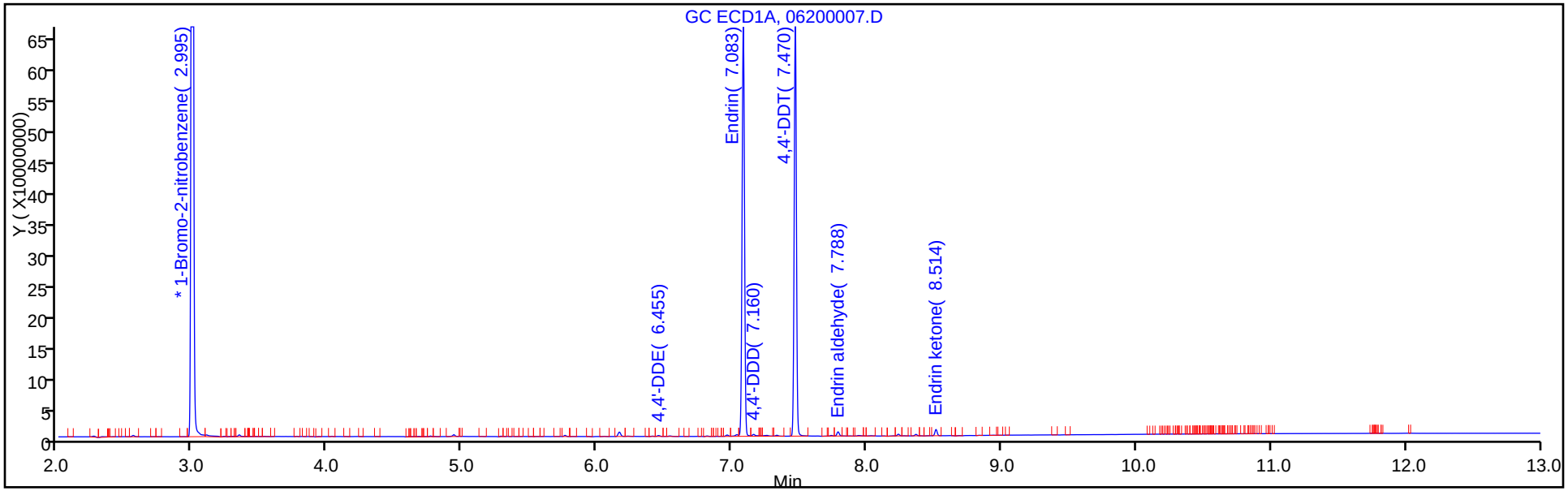
Report Date: 21-Jun-2017 10:59:42 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

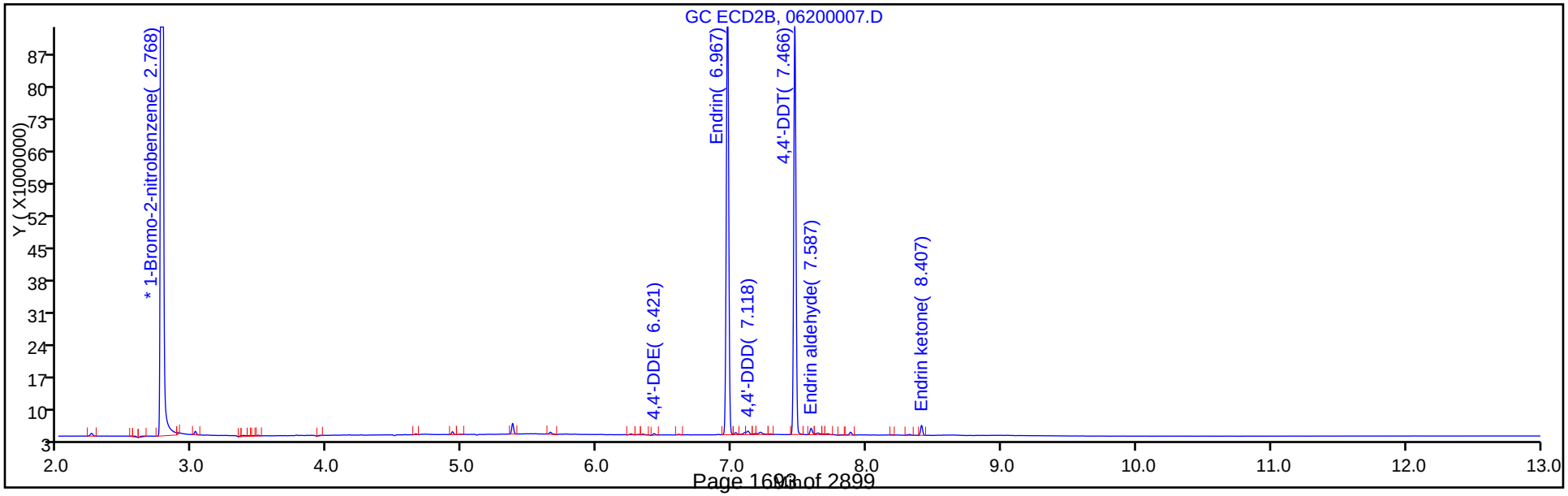
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200007.D

Injection Date:	20-Jun-2017 12:18:04	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	PEM			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES PERFORMANCE EVALUATION MIXTURE (PEM)

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: PEM 280-377996/7 Calibration Date: 06/20/2017 12:18

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06200007.D Conc. Units: ug/L

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
Endrin	6.97	119491398	3.24	15	
Endrin aldehyde	7.59	1675286			
Endrin ketone	8.41	2328355			

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
4,4'-DDT	7.47	103188636	1.64	15	
4,4'-DDD	7.12	1254663			
4,4'-DDE	6.42	468159			

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200007.D
Lims ID: PEM
Client ID:
Sample Type: PEM
Inject. Date: 20-Jun-2017 12:18:04 ALS Bottle#: 2 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: PEM
Misc. Info.: 280-0059933-007
Operator ID: DAW Instrument ID: SGC_P1
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 21-Jun-2017 10:59:01 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK008

First Level Reviewer: wellsd Date: 21-Jun-2017 10:59:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.995	2.995	0.000	2267287998	150.0	150.0	
2	2.768	2.769	0.000	455979915	150.0	150.0	
24 4,4'-DDE							
1	6.455	6.456	-0.001	2244496		0.4600	
2	6.421	6.420	0.001	468159		-0.3666	
						RPD = 1770.72	
30 Endrin							
1	7.083	7.084	-0.001	823143767	40.0	42.5	
2	6.967	6.967	0.000	119491398	40.0	42.5	
						RPD = 0.07	
32 4,4'-DDD							
1	7.160	7.160	0.000	5559227		0.2494	
2	7.118	7.118	0.000	1254663		-0.3461	
						RPD = -1232.16	
35 4,4'-DDT							M
1	7.470	7.470	0.000	768653855	40.0	39.7	
2	7.466	7.467	-0.001	103188636	40.0	39.7	M
						RPD = 0.13	
36 Endrin aldehyde							
1	7.788	7.787	0.001	8105176		0.4693	
2	7.587	7.587	0.000	1675286		-0.1013	
						RPD = 310.15	
40 Endrin ketone							M
1	8.514	8.514	0.000	11706498		0.6891	
2	8.407	8.407	0.000	2328355		0.0849	M
						RPD = 156.10	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081_EvalBPEM_00008	Amount Added:	1.00	Units: mL	
8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

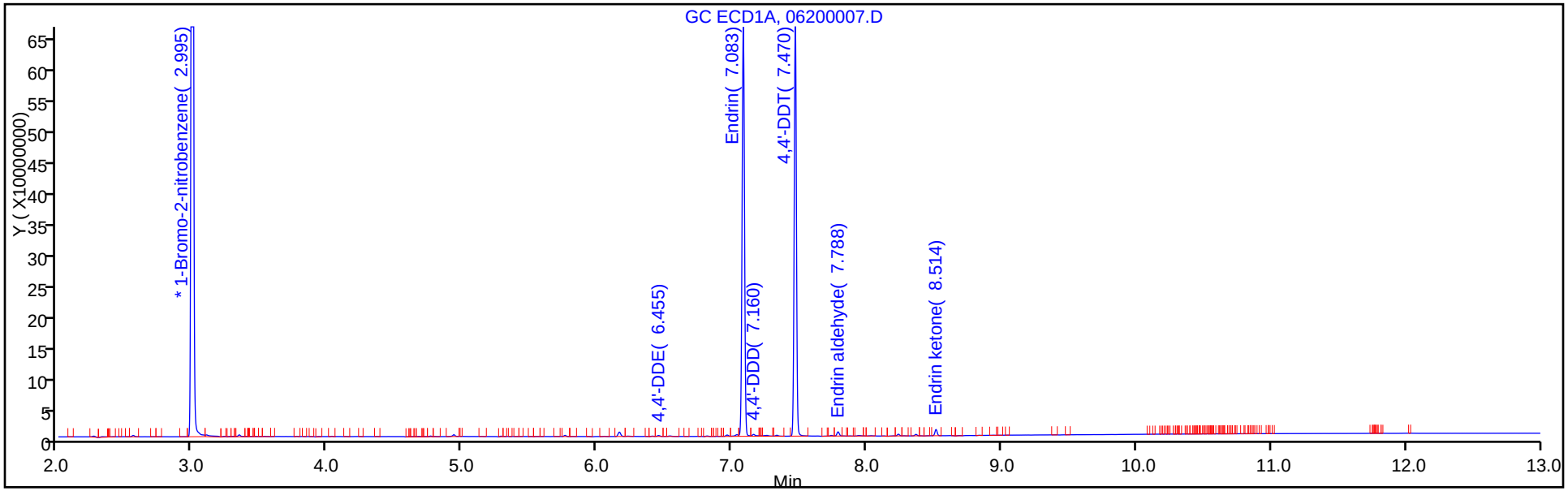
Report Date: 21-Jun-2017 10:59:42 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

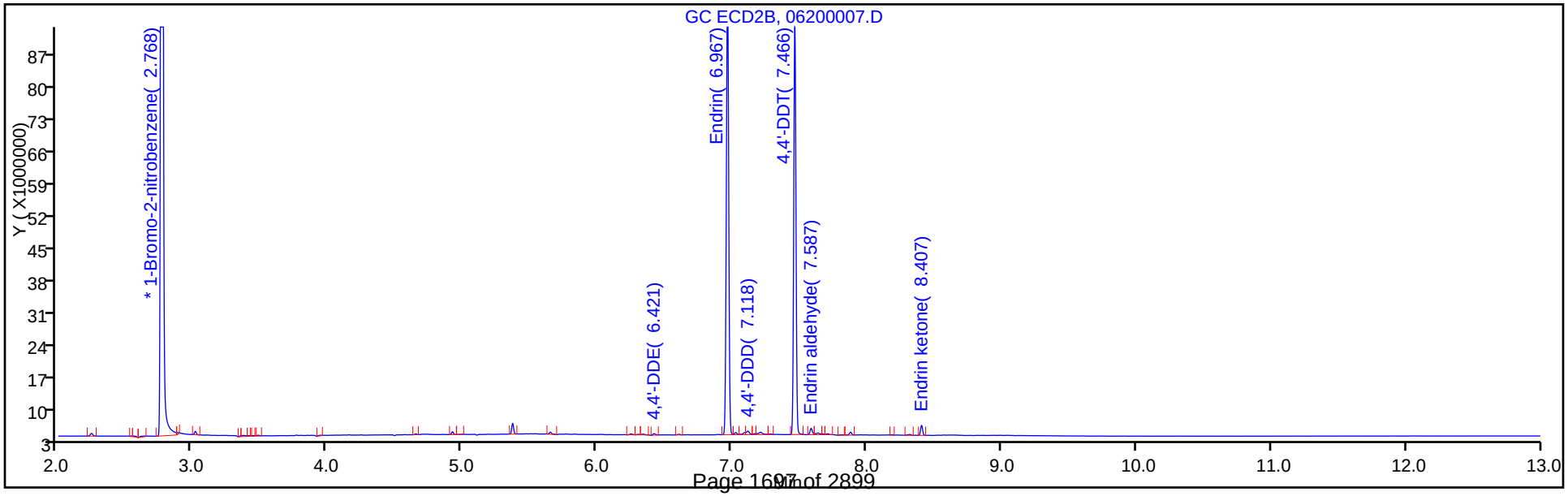
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200007.D

Injection Date:	20-Jun-2017 12:18:04	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	PEM			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Manual Integration/User Assign Peak Report

TestAmerica Denver

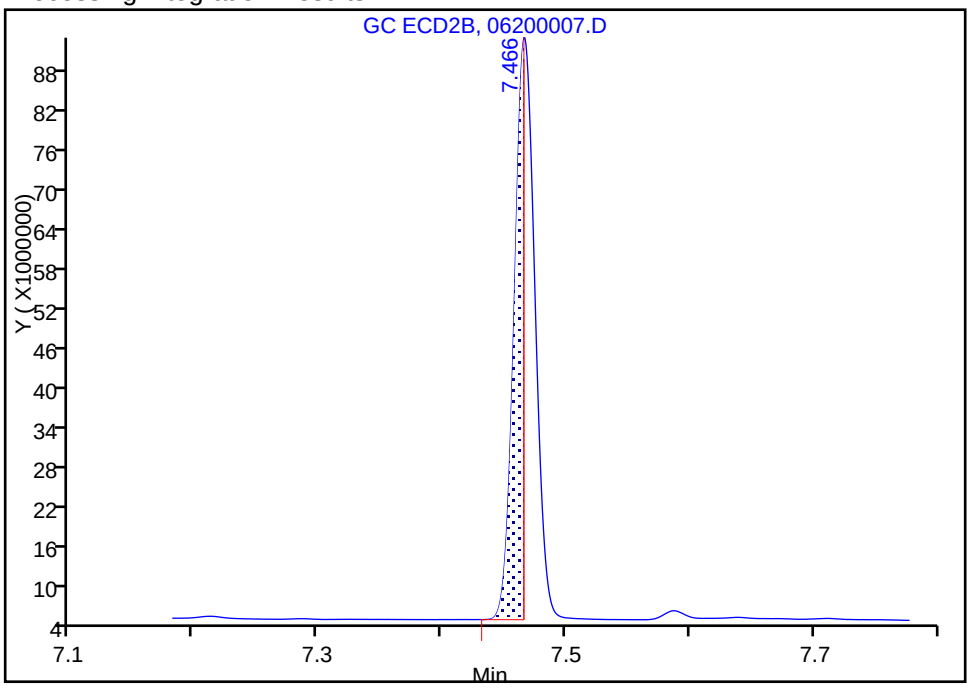
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200007.D
Injection Date: 20-Jun-2017 12:18:04 Instrument ID: SGC_P1
Lims ID: PEM
Client ID:
Operator ID: DAW ALS Bottle#: 2 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: P1 8081 IS Limit Group: GCSV - 8081A - IS
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

35 4,4'-DDT, CAS: 50-29-3

Signal: 2

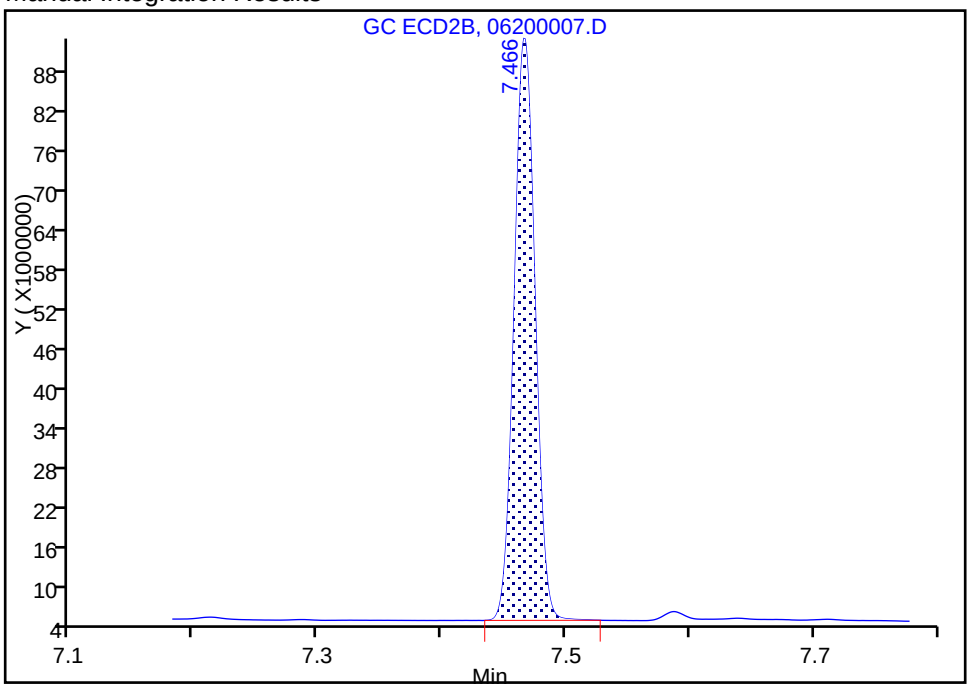
Processing Integration Results

RT: 7.47
Area: 47591176
Amount: 18.108045
Amount Units: ng/mL



Manual Integration Results

RT: 7.47
Area: 103188636
Amount: 39.684500
Amount Units: ng/mL



Reviewer: wellsd, 21-Jun-2017 10:58:59
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Denver

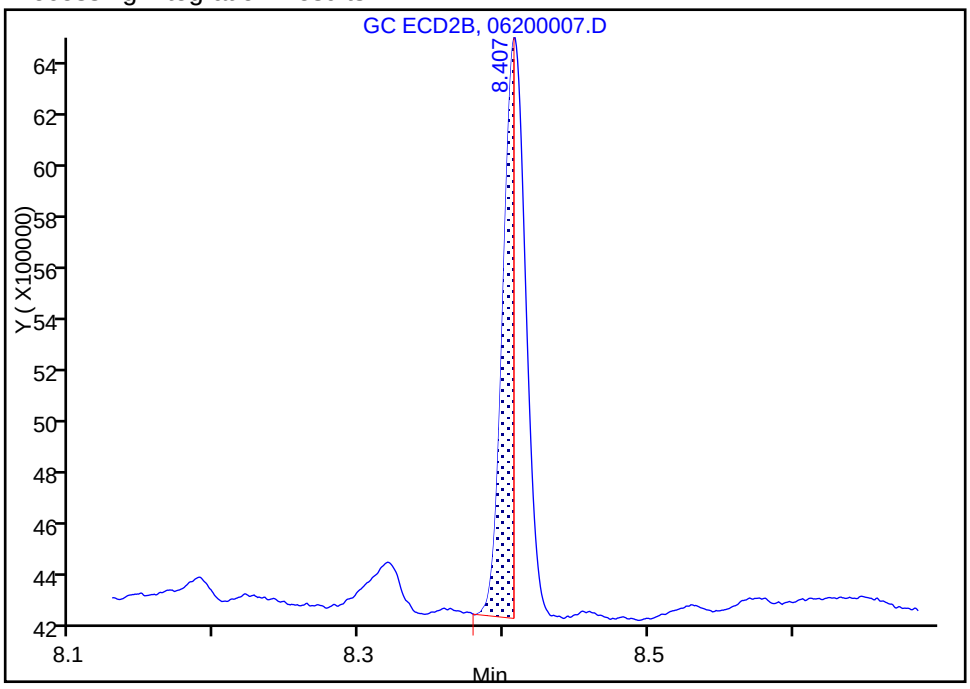
Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200007.D				
Injection Date:	20-Jun-2017 12:18:04	Instrument ID:	SGC_P1		
Lims ID:	PEM				
Client ID:					
Operator ID:	DAW	ALS Bottle#:	2	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

40 Endrin ketone, CAS: 53494-70-5

Signal: 2

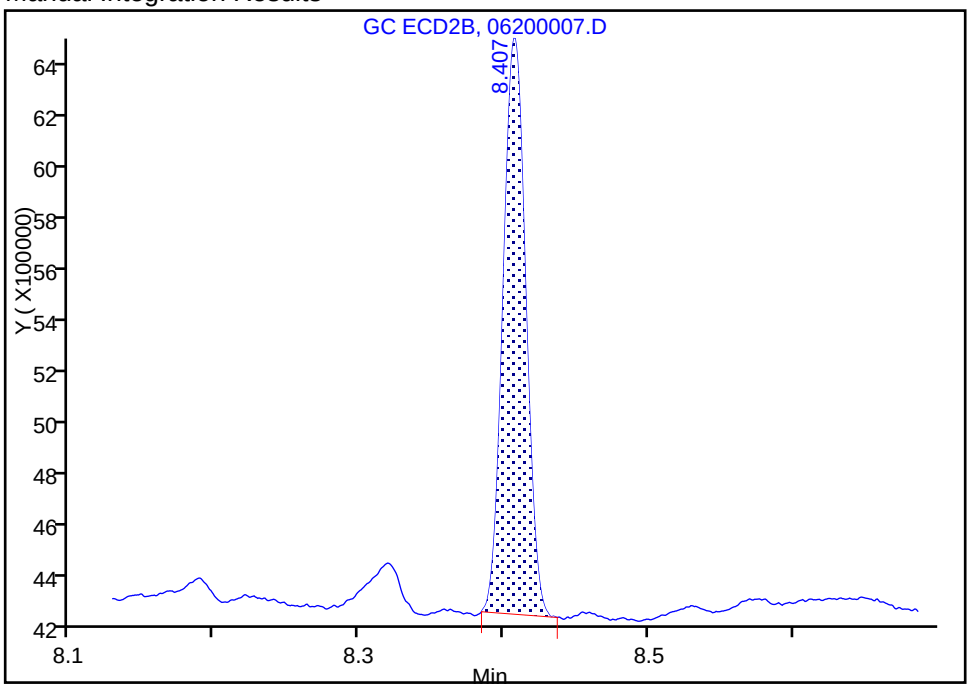
Processing Integration Results

RT: 8.41
Area: 1126206
Amount: -0.324527
Amount Units: ng/mL



Manual Integration Results

RT: 8.41
Area: 2328355
Amount: 0.084945
Amount Units: ng/mL



Reviewer: wellsd, 21-Jun-2017 10:58:57
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-368670/31 Calibration Date: 04/10/2017 19:20

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 04100031.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0028		1040	1000	3.8	20.0
Toxaphene Peak 2	Qua		0.0192		774	1000	-22.6*	20.0
Toxaphene Peak 3	Lin2		0.0205		1100	1000	9.8	20.0
Toxaphene Peak 4	Lin2		0.0317		736	1000	-26.4*	20.0
Toxaphene Peak 5	Lin2		0.0540		1080	1000	8.2	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-368670/31 Calibration Date: 04/10/2017 19:20

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 04100031.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	5.65	5.63	5.67
Toxaphene Peak 2	6.97	6.95	6.99
Toxaphene Peak 3	7.23	7.22	7.26
Toxaphene Peak 4	7.74	7.72	7.76
Toxaphene Peak 5	8.18	8.16	8.20

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100031.D
Lims ID: ICV TOX
Client ID:
Sample Type: ICV
Inject. Date: 10-Apr-2017 19:20:30 ALS Bottle#: 29 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV TOX
Misc. Info.: 280-0057376-031
Operator ID: DAW Instrument ID: SGC_P1
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:14 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:53:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.028	0.000	1449739244	150.0	150.0	
2	2.838	2.837	0.001	340722898	150.0	150.0	
28 Toxaphene							M
1	5.645	5.647	-0.002	27244956	1000.0	1037.7	M
1	6.974	6.974	0.000	185389448	1000.0	773.7	M
1	7.234	7.237	-0.003	198270883	1000.0	1097.7	M
1	7.742	7.742	0.000	306029774	1000.0	735.8	M
1	8.181	8.184	-0.003	522129257	1000.0	1081.8	M
		Average of Peak Amounts =				945.4	
2	6.228	6.229	-0.001	24572831	1000.0	1206.3	M
2	7.271	7.275	-0.004	32162765	1000.0	695.1	M
2	7.418	7.420	-0.002	81205109	1000.0	691.8	M
2	7.703	7.704	-0.001	75959214	1000.0	975.3	M
2	8.225	8.225	0.000	77110297	1000.0	1166.3	M
		Average of Peak Amounts =				947.0	
						RPD = 0.17	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxICVL3_00010 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

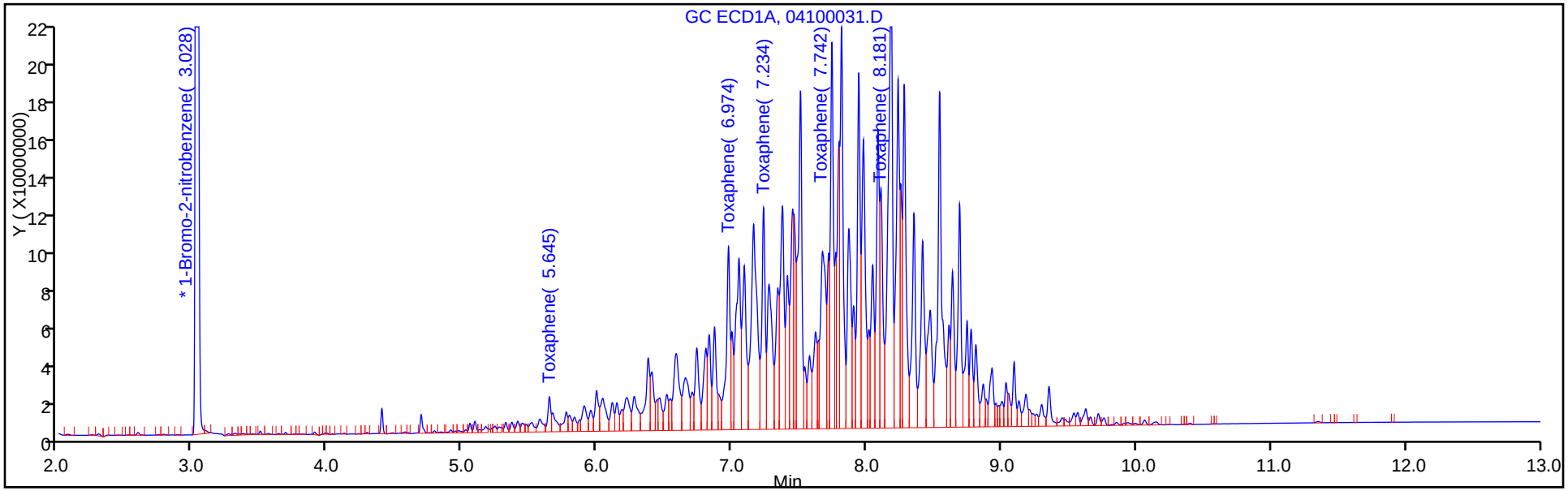
Report Date: 17-Apr-2017 13:22:19 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

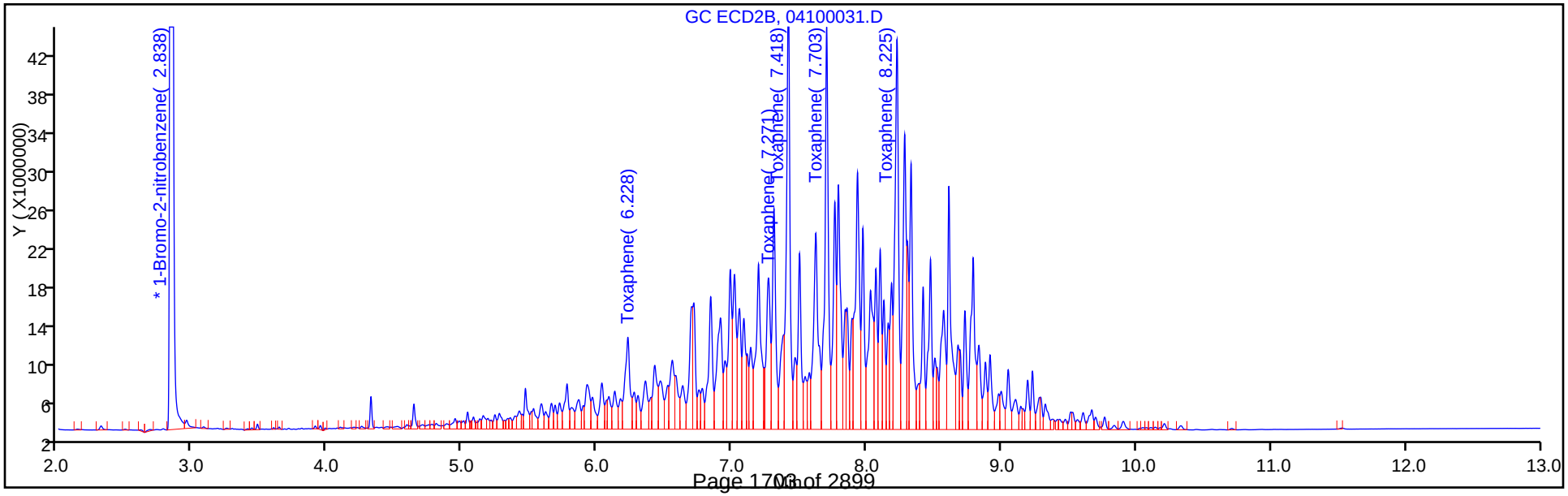
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100031.D

Injection Date:	10-Apr-2017 19:20:30	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	ICV TOX			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:22:20 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100031.D

Injection Date: 10-Apr-2017 19:20:30 Instrument ID: SGC_P1

Lims ID: ICV TOX

Client ID:

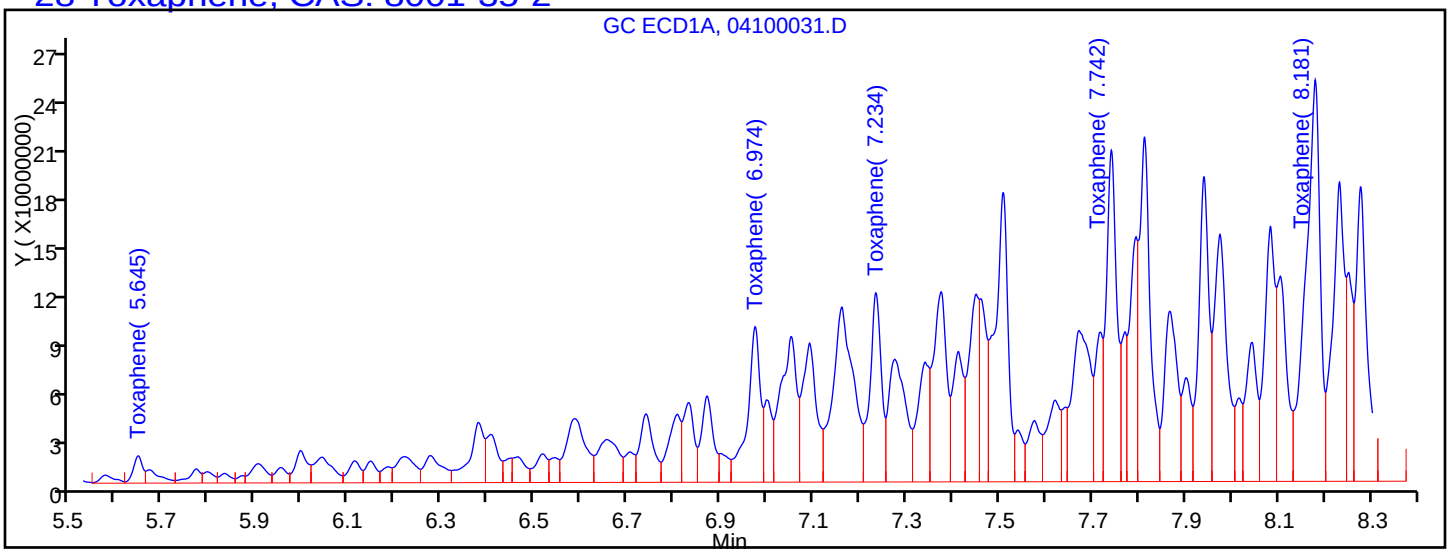
Operator ID: DAW ALS Bottle#: 29 Worklist Smp#: 31

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

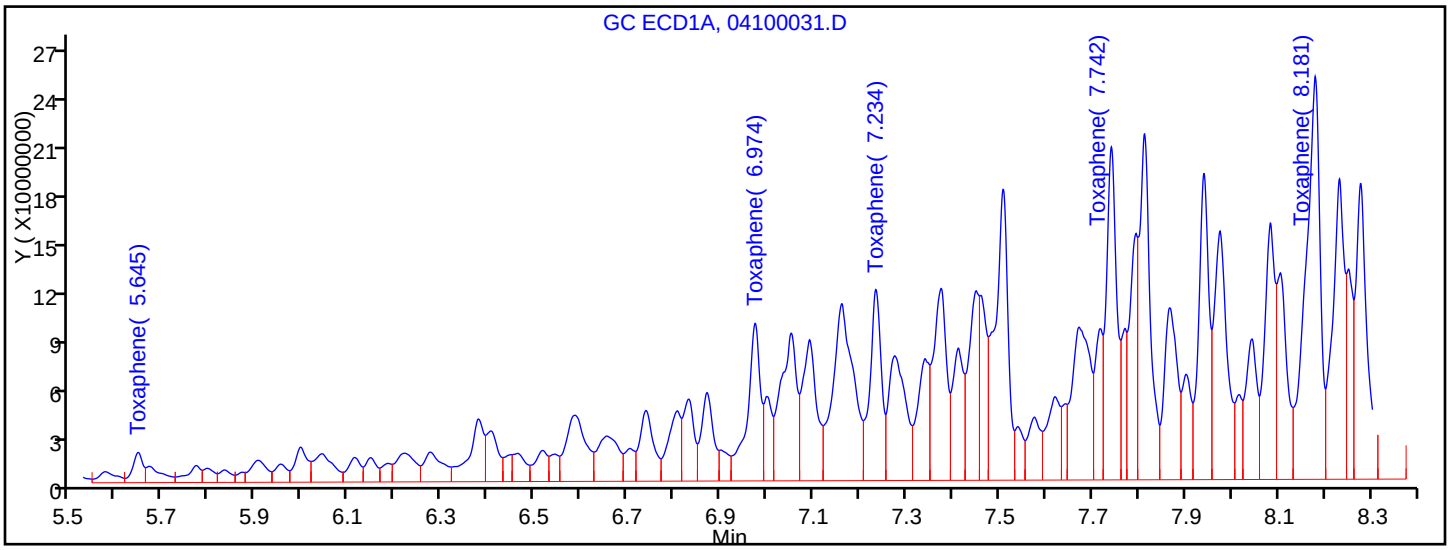
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.645	Response = 22462442
6.974	Response = 179946349
7.234	Response = 194806405
7.742	Response = 303683339
8.181	Response = 518523494



Manual Integration Results

5.645	Response = 27244956	M
6.974	Response = 185389448	M
7.234	Response = 198270883	M
7.742	Response = 306029774	M
8.181	Response = 522129257	M

Reviewer: wellsd, 17-Apr-2017 13:22:19

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-368670/31 Calibration Date: 04/10/2017 19:20

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 04100031.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0108		1210	1000	20.6*	20.0
Toxaphene Peak 2	Lin2		0.0142		695	1000	-30.5*	20.0
Toxaphene Peak 3	Lin2		0.0358		692	1000	-30.8*	20.0
Toxaphene Peak 4	Lin2		0.0334		975	1000	-2.5	20.0
Toxaphene Peak 5	Lin2		0.0340		1170	1000	16.6	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-368670/31 Calibration Date: 04/10/2017 19:20

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 04100031.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	6.23	6.21	6.25
Toxaphene Peak 2	7.27	7.26	7.30
Toxaphene Peak 3	7.42	7.40	7.44
Toxaphene Peak 4	7.70	7.68	7.72
Toxaphene Peak 5	8.23	8.21	8.25

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100031.D
Lims ID: ICV TOX
Client ID:
Sample Type: ICV
Inject. Date: 10-Apr-2017 19:20:30 ALS Bottle#: 29 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV TOX
Misc. Info.: 280-0057376-031
Operator ID: DAW Instrument ID: SGC_P1
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:14 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:53:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.028	0.000	1449739244	150.0	150.0	
2	2.838	2.837	0.001	340722898	150.0	150.0	
28 Toxaphene							M
1	5.645	5.647	-0.002	27244956	1000.0	1037.7	M
1	6.974	6.974	0.000	185389448	1000.0	773.7	M
1	7.234	7.237	-0.003	198270883	1000.0	1097.7	M
1	7.742	7.742	0.000	306029774	1000.0	735.8	M
1	8.181	8.184	-0.003	522129257	1000.0	1081.8	M
		Average of Peak Amounts =				945.4	
2	6.228	6.229	-0.001	24572831	1000.0	1206.3	M
2	7.271	7.275	-0.004	32162765	1000.0	695.1	M
2	7.418	7.420	-0.002	81205109	1000.0	691.8	M
2	7.703	7.704	-0.001	75959214	1000.0	975.3	M
2	8.225	8.225	0.000	77110297	1000.0	1166.3	M
		Average of Peak Amounts =				947.0	
						RPD = 0.17	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxICVL3_00010 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

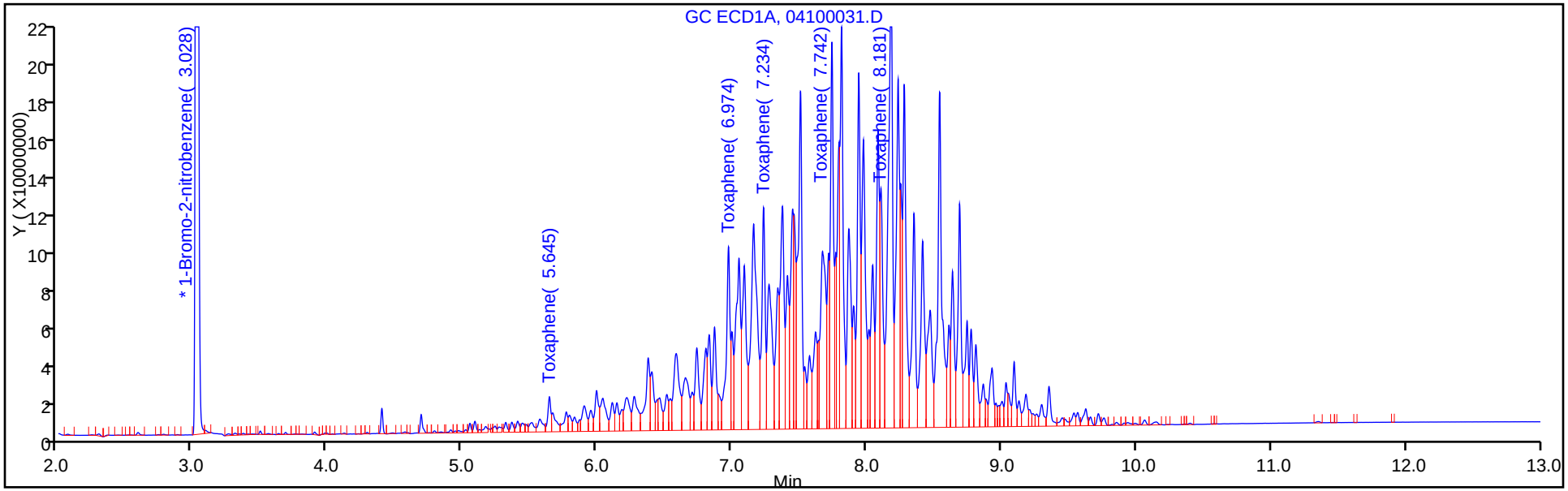
Report Date: 17-Apr-2017 13:22:20 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

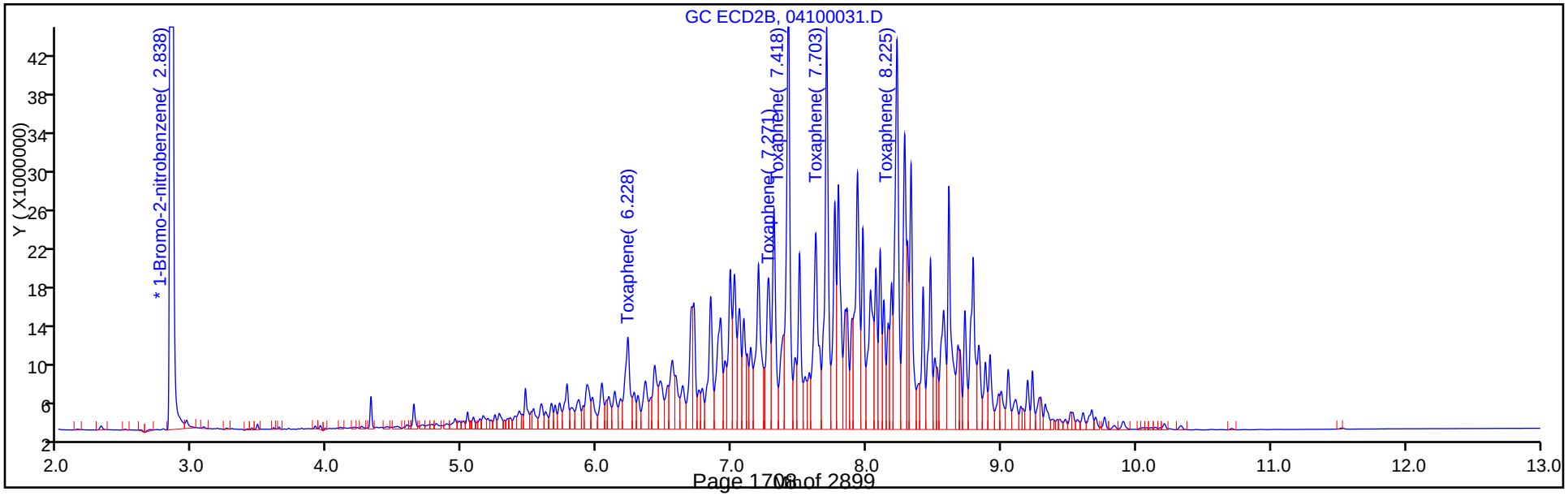
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100031.D

Injection Date:	10-Apr-2017 19:20:30	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	ICV TOX			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:22:21 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100031.D

Injection Date: 10-Apr-2017 19:20:30 Instrument ID: SGC_P1

Lims ID: ICV TOX

Client ID:

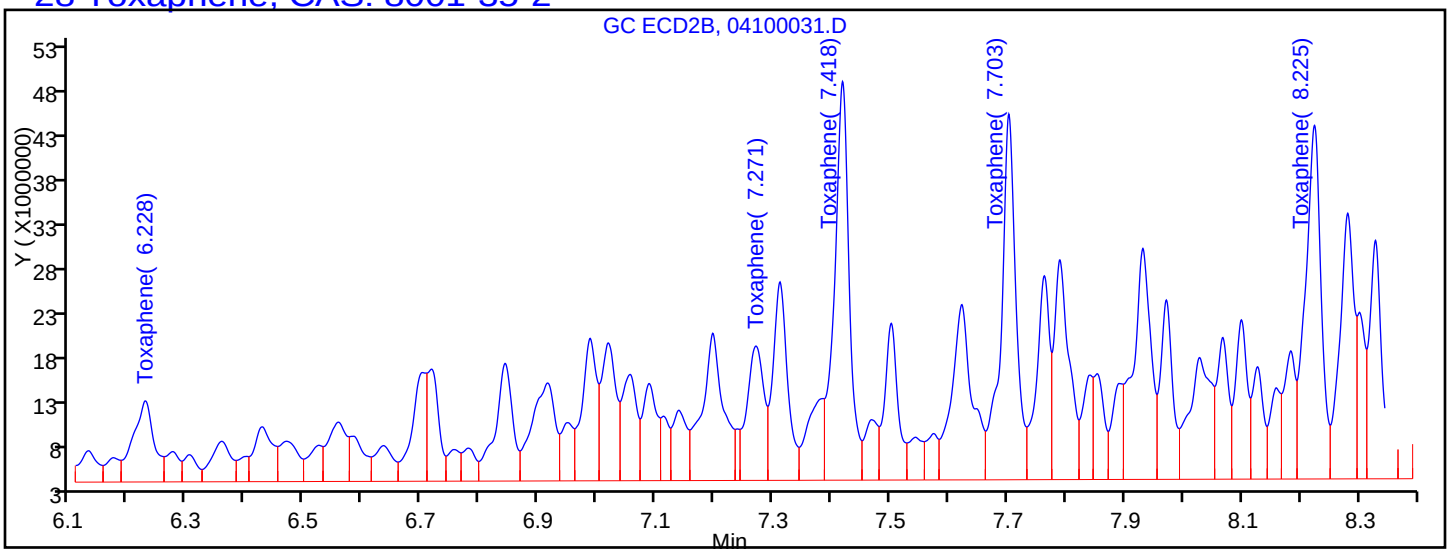
Operator ID: DAW ALS Bottle#: 29 Worklist Smp#: 31

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

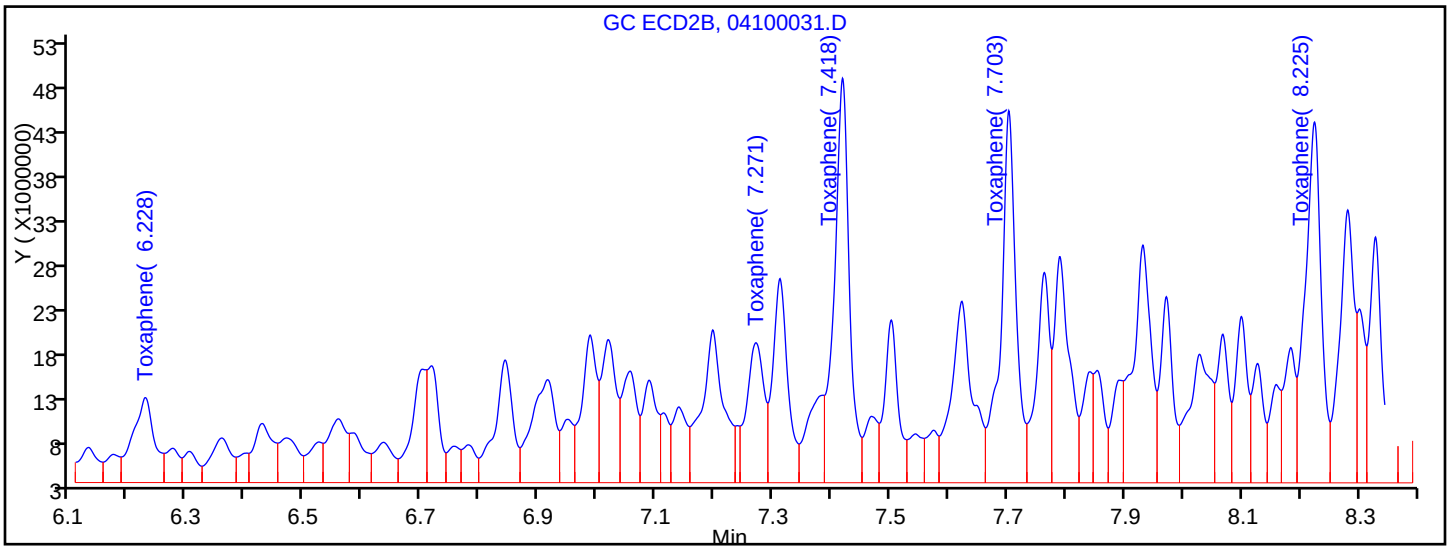
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.228	Response = 22659407
7.271	Response = 30375061
7.418	Response = 78683858
7.703	Response = 72975925
8.225	Response = 74391294



Manual Integration Results

6.228	Response = 24572831	M
7.271	Response = 32162765	M
7.418	Response = 81205109	M
7.703	Response = 75959214	M
8.225	Response = 77110297	M

Reviewer: wellsd, 17-Apr-2017 13:22:19

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-368670/33 Calibration Date: 04/10/2017 19:54

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 04100033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		1.422		28.0	25.0	12.0	20.0
alpha-BHC	Lin2		2.068		26.3	25.0	5.2	20.0
gamma-BHC (Lindane)	Lin2		1.852		26.1	25.0	4.3	20.0
beta-BHC	Lin2		0.7297		26.3	25.0	5.2	20.0
delta-BHC	Lin2		1.950		25.9	25.0	3.5	20.0
Heptachlor	Lin2		1.740		26.3	25.0	5.4	20.0
Aldrin	Lin2		1.880		28.0	25.0	11.8	20.0
Heptachlor epoxide	Lin2		1.619		27.7	25.0	11.0	20.0
gamma-Chlordane	Lin2		1.769		27.6	25.0	10.5	20.0
alpha-Chlordane	Lin2		1.734		28.3	25.0	13.1	20.0
4,4'-DDE	Lin2		1.733		27.6	25.0	10.2	20.0
Endosulfan I	Lin2		1.558		27.7	25.0	10.9	20.0
Dieldrin	Lin2		1.732		27.5	25.0	9.9	20.0
Endrin	Lin2		1.373		26.9	25.0	7.5	20.0
4,4'-DDD	Lin2		1.447		27.1	25.0	8.5	20.0
Endosulfan II	Lin2		1.490		28.1	25.0	12.5	20.0
4,4'-DDT	Lin2		1.387		27.3	25.0	9.1	20.0
Endrin aldehyde	Lin2		1.183		27.6	25.0	10.4	20.0
Methoxychlor	Lin2		0.6389		28.5	25.0	13.8	20.0
Endosulfan sulfate	Lin2		1.307		26.8	25.0	7.0	20.0
Endrin ketone	Lin2		1.520		28.0	25.0	12.0	20.0
Tetrachloro-m-xylene (Surr)	Lin2		1.230		27.0	25.0	8.1	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.8728		27.9	25.0	11.7	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-368670/33 Calibration Date: 04/10/2017 19:54

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 04100033.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.23	4.22	4.24
alpha-BHC	4.40	4.39	4.41
gamma-BHC (Lindane)	4.71	4.70	4.72
beta-BHC	4.80	4.79	4.81
delta-BHC	4.97	4.96	4.98
Heptachlor	5.18	5.17	5.19
Aldrin	5.47	5.46	5.48
Heptachlor epoxide	6.10	6.09	6.11
gamma-Chlordane	6.25	6.24	6.26
alpha-Chlordane	6.41	6.40	6.42
4,4'-DDE	6.50	6.49	6.51
Endosulfan I	6.58	6.57	6.59
Dieldrin	6.87	6.85	6.87
Endrin	7.13	7.12	7.14
4,4'-DDD	7.21	7.20	7.22
Endosulfan II	7.38	7.37	7.39
4,4'-DDT	7.52	7.51	7.53
Endrin aldehyde	7.84	7.83	7.85
Methoxychlor	8.03	8.02	8.04
Endosulfan sulfate	8.28	8.28	8.30
Endrin ketone	8.56	8.55	8.57
Tetrachloro-m-xylene (Surr)	3.85	3.84	3.86
DCB Decachlorobiphenyl (Surr)	9.54	9.53	9.55

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100033.D
Lims ID: ICV AB
Client ID:
Sample Type: ICV
Inject. Date: 10-Apr-2017 19:54:20 ALS Bottle#: 31 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV AB
Misc. Info.: 280-0057376-033
Operator ID: DAW Instrument ID: SGC_P1
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:14 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 17-Apr-2017 12:49:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1					100.0	104.6	
2					100.0	106.4	
						RPD = 1.73	
* 2 1-Bromo-2-nitrobenzene							
1	3.029	3.028	0.001	1345529908	150.0	150.0	
2	2.836	2.837	-0.001	320310102	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.850	3.851	-0.001	275882656	25.0	27.0	
2	3.746	3.746	0.000	61324356	25.0	27.5	
						RPD = 1.89	
5 Hexachlorobenzene							
1	4.232	4.232	0.000	318984854	25.0	28.0	
2	4.178	4.179	-0.001	65952851	25.0	28.4	
						RPD = 1.45	
8 alpha-BHC							
1	4.401	4.402	-0.001	463671527	25.0	26.3	
2	4.320	4.321	-0.001	86932516	25.0	26.7	
						RPD = 1.56	
9 gamma-BHC (Lindane)							
1	4.711	4.712	-0.001	415235195	25.0	26.1	
2	4.651	4.652	-0.001	76375366	25.0	26.5	
						RPD = 1.70	
10 beta-BHC							
1	4.798	4.797	0.001	163642455	25.0	26.3	
2	4.732	4.732	0.000	32942025	25.0	27.0	
						RPD = 2.75	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.972	4.973	-0.001	437344153	25.0	25.9	
2	5.011	5.011	0.000	77375614	25.0	26.1	
						RPD = 0.89	
15 Heptachlor							
1	5.182	5.183	-0.001	390284801	25.0	26.3	
2	5.067	5.067	0.000	69952138	25.0	26.2	
						RPD = 0.67	
16 Aldrin							
1	5.468	5.467	0.001	421597216	25.0	28.0	
2	5.372	5.372	0.000	73237638	25.0	27.8	
						RPD = 0.65	
18 Isodrin							
1	5.803	5.803	0.000	314133149	25.0	27.1	
2	5.746	5.747	-0.001	56369886	25.0	27.3	
						RPD = 0.75	
21 Heptachlor epoxide							
1	6.101	6.101	0.000	362955734	25.0	27.7	
2	5.935	5.936	-0.001	64684651	25.0	27.5	
						RPD = 1.00	
22 gamma-Chlordane							
1	6.246	6.246	0.000	396648481	25.0	27.6	
2	6.143	6.143	0.000	68701704	25.0	28.0	
						RPD = 1.26	
23 alpha-Chlordane							
1	6.409	6.408	0.001	388795379	25.0	28.3	
2	6.317	6.318	-0.001	67138235	25.0	28.7	
						RPD = 1.32	
24 4,4'-DDE							
1	6.504	6.504	0.000	388643138	25.0	27.6	
2	6.537	6.537	0.000	67151548	25.0	27.9	
						RPD = 1.17	
25 Endosulfan I							
1	6.580	6.580	0.000	349394667	25.0	27.7	
2	6.386	6.387	-0.001	62580402	25.0	27.7	
						RPD = 0.16	
27 Dieldrin							
1	6.865	6.864	0.001	388422094	25.0	27.5	
2	6.726	6.727	-0.001	68313438	25.0	27.5	
						RPD = 0.06	
30 Endrin							
1	7.132	7.132	0.000	307908028	25.0	26.9	
2	7.082	7.083	-0.001	53419049	25.0	26.9	
						RPD = 0.03	
32 4,4'-DDD							
1	7.206	7.206	0.000	324578925	25.0	27.1	
2	7.226	7.227	-0.001	52809298	25.0	27.4	
						RPD = 1.14	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.383	7.382	0.001	334143296	25.0	28.1	
2	7.324	7.325	-0.001	58029364	25.0	28.0	
						RPD = 0.27	
35 4,4'-DDT							
1	7.515	7.516	-0.001	310975000	25.0	27.3	
2	7.570	7.571	-0.001	50704627	25.0	27.7	
						RPD = 1.40	
36 Endrin aldehyde							
1	7.835	7.836	-0.001	265328498	25.0	27.6	
2	7.696	7.697	-0.001	47156314	25.0	28.0	
						RPD = 1.63	
37 Methoxychlor							
1	8.027	8.027	0.000	143281943	25.0	28.5	
2	8.288	8.289	-0.001	25055267	25.0	28.6	
						RPD = 0.42	
38 Mirex							
1	8.175	8.174	0.001	230114279	25.0	28.5	
2	8.466	8.466	0.000	38613708	25.0	27.9	
						RPD = 2.26	
39 Endosulfan sulfate							
1	8.284	8.285	-0.001	293158242	25.0	26.8	
2	7.986	7.987	-0.001	50495814	25.0	27.1	
						RPD = 1.18	
40 Endrin ketone							
1	8.564	8.563	0.001	340862580	25.0	28.0	
2	8.514	8.514	0.000	59577835	25.0	28.2	
						RPD = 0.62	
$ 41 DCB Decachlorobiphenyl							
1	9.542	9.541	0.001	195726844	25.0	27.9	
2	9.720	9.722	-0.002	38729311	25.0	28.6	
						RPD = 2.51	
S 3 Endosulfan, Total							
1					75.0	82.6	
2					75.0	82.8	
						RPD = 0.24	

Reagents:

8081ABICVL3_00028	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

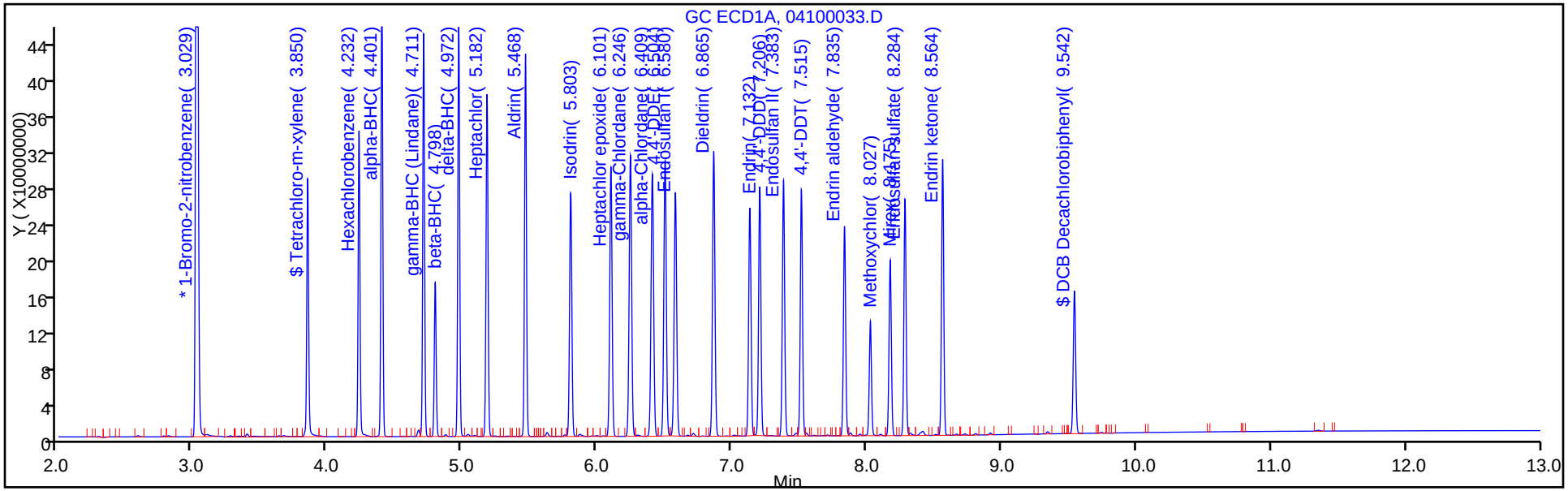
Report Date: 17-Apr-2017 13:22:29 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

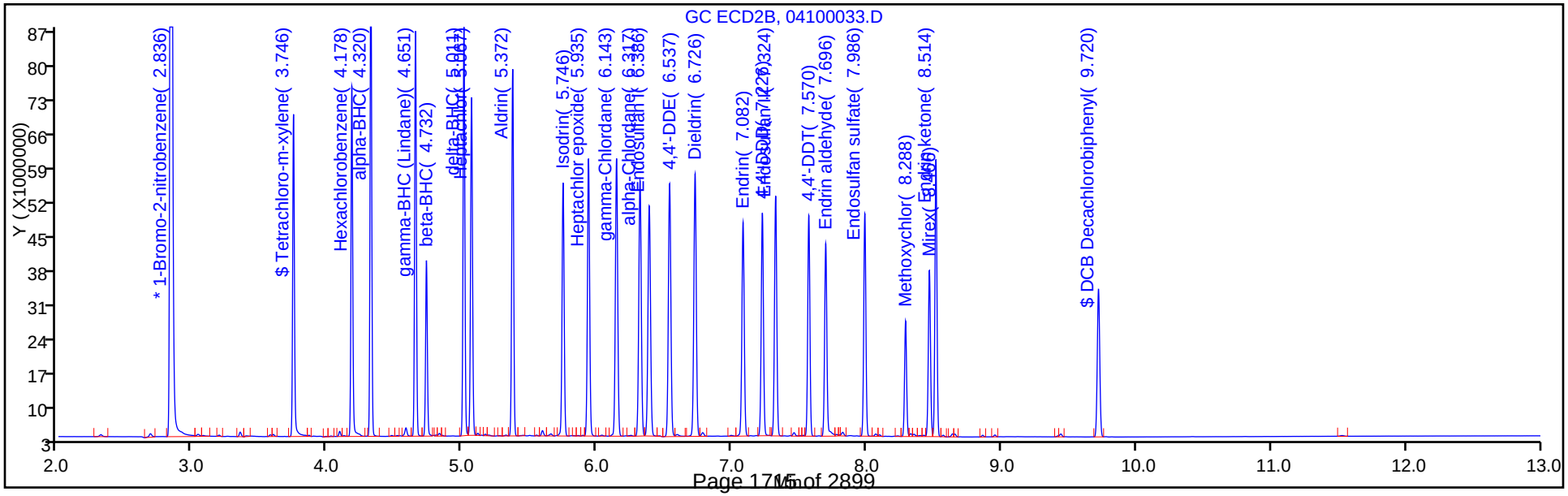
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100033.D

Injection Date:	10-Apr-2017 19:54:20	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	ICV AB			Worklist Smp#:	33
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-368670/33 Calibration Date: 04/10/2017 19:54

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 04100033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		1.235		28.4	25.0	13.6	20.0
alpha-BHC	Lin2		1.628		26.7	25.0	6.9	20.0
gamma-BHC (Lindane)	Lin2		1.431		26.5	25.0	6.1	20.0
beta-BHC	Lin2		0.6171		27.0	25.0	8.2	20.0
delta-BHC	Lin2		1.449		26.1	25.0	4.5	20.0
Heptachlor	Lin2		1.310		26.2	25.0	4.7	20.0
Aldrin	Lin2		1.372		27.8	25.0	11.1	20.0
Heptachlor epoxide	Lin2		1.212		27.5	25.0	9.9	20.0
gamma-Chlordane	Lin2		1.287		28.0	25.0	11.9	20.0
alpha-Chlordane	Lin2		1.258		28.7	25.0	14.6	20.0
Endosulfan I	Lin2		1.172		27.7	25.0	10.8	20.0
4,4'-DDE	Lin2		1.258		27.9	25.0	11.5	20.0
Dieldrin	Lin2		1.280		27.5	25.0	9.9	20.0
Endrin	Lin2		1.001		26.9	25.0	7.5	20.0
4,4'-DDD	Lin2		0.9892		27.4	25.0	9.7	20.0
Endosulfan II	Lin2		1.087		28.0	25.0	12.2	20.0
4,4'-DDT	Lin2		0.9498		27.7	25.0	10.6	20.0
Endrin aldehyde	Lin2		0.8833		28.0	25.0	12.2	20.0
Endosulfan sulfate	Lin2		0.9459		27.1	25.0	8.3	20.0
Methoxychlor	Lin2		0.4693		28.6	25.0	14.3	20.0
Endrin ketone	Lin2		1.116		28.2	25.0	12.7	20.0
Tetrachloro-m-xylene (Surr)	Lin2		1.149		27.5	25.0	10.2	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.7255		28.6	25.0	14.5	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-368670/33 Calibration Date: 04/10/2017 19:54

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 04100033.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.18	4.17	4.19
alpha-BHC	4.32	4.31	4.33
gamma-BHC (Lindane)	4.65	4.64	4.66
beta-BHC	4.73	4.72	4.74
delta-BHC	5.01	5.00	5.02
Heptachlor	5.07	5.06	5.08
Aldrin	5.37	5.36	5.38
Heptachlor epoxide	5.94	5.93	5.95
gamma-Chlordane	6.14	6.13	6.15
alpha-Chlordane	6.32	6.31	6.33
Endosulfan I	6.39	6.38	6.40
4,4'-DDE	6.54	6.53	6.55
Dieldrin	6.73	6.72	6.74
Endrin	7.08	7.07	7.09
4,4'-DDD	7.23	7.22	7.24
Endosulfan II	7.32	7.32	7.34
4,4'-DDT	7.57	7.56	7.58
Endrin aldehyde	7.70	7.69	7.71
Endosulfan sulfate	7.99	7.98	8.00
Methoxychlor	8.29	8.28	8.30
Endrin ketone	8.51	8.50	8.52
Tetrachloro-m-xylene (Surr)	3.75	3.74	3.76
DCB Decachlorobiphenyl (Surr)	9.72	9.71	9.73

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100033.D
Lims ID: ICV AB
Client ID:
Sample Type: ICV
Inject. Date: 10-Apr-2017 19:54:20 ALS Bottle#: 31 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV AB
Misc. Info.: 280-0057376-033
Operator ID: DAW Instrument ID: SGC_P1
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:14 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 17-Apr-2017 12:49:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1					100.0	104.6	
2					100.0	106.4	
						RPD = 1.73	
* 2 1-Bromo-2-nitrobenzene							
1	3.029	3.028	0.001	1345529908	150.0	150.0	
2	2.836	2.837	-0.001	320310102	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.850	3.851	-0.001	275882656	25.0	27.0	
2	3.746	3.746	0.000	61324356	25.0	27.5	
						RPD = 1.89	
5 Hexachlorobenzene							
1	4.232	4.232	0.000	318984854	25.0	28.0	
2	4.178	4.179	-0.001	65952851	25.0	28.4	
						RPD = 1.45	
8 alpha-BHC							
1	4.401	4.402	-0.001	463671527	25.0	26.3	
2	4.320	4.321	-0.001	86932516	25.0	26.7	
						RPD = 1.56	
9 gamma-BHC (Lindane)							
1	4.711	4.712	-0.001	415235195	25.0	26.1	
2	4.651	4.652	-0.001	76375366	25.0	26.5	
						RPD = 1.70	
10 beta-BHC							
1	4.798	4.797	0.001	163642455	25.0	26.3	
2	4.732	4.732	0.000	32942025	25.0	27.0	
						RPD = 2.75	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.972	4.973	-0.001	437344153	25.0	25.9	
2	5.011	5.011	0.000	77375614	25.0	26.1	
						RPD = 0.89	
15 Heptachlor							
1	5.182	5.183	-0.001	390284801	25.0	26.3	
2	5.067	5.067	0.000	69952138	25.0	26.2	
						RPD = 0.67	
16 Aldrin							
1	5.468	5.467	0.001	421597216	25.0	28.0	
2	5.372	5.372	0.000	73237638	25.0	27.8	
						RPD = 0.65	
18 Isodrin							
1	5.803	5.803	0.000	314133149	25.0	27.1	
2	5.746	5.747	-0.001	56369886	25.0	27.3	
						RPD = 0.75	
21 Heptachlor epoxide							
1	6.101	6.101	0.000	362955734	25.0	27.7	
2	5.935	5.936	-0.001	64684651	25.0	27.5	
						RPD = 1.00	
22 gamma-Chlordane							
1	6.246	6.246	0.000	396648481	25.0	27.6	
2	6.143	6.143	0.000	68701704	25.0	28.0	
						RPD = 1.26	
23 alpha-Chlordane							
1	6.409	6.408	0.001	388795379	25.0	28.3	
2	6.317	6.318	-0.001	67138235	25.0	28.7	
						RPD = 1.32	
24 4,4'-DDE							
1	6.504	6.504	0.000	388643138	25.0	27.6	
2	6.537	6.537	0.000	67151548	25.0	27.9	
						RPD = 1.17	
25 Endosulfan I							
1	6.580	6.580	0.000	349394667	25.0	27.7	
2	6.386	6.387	-0.001	62580402	25.0	27.7	
						RPD = 0.16	
27 Dieldrin							
1	6.865	6.864	0.001	388422094	25.0	27.5	
2	6.726	6.727	-0.001	68313438	25.0	27.5	
						RPD = 0.06	
30 Endrin							
1	7.132	7.132	0.000	307908028	25.0	26.9	
2	7.082	7.083	-0.001	53419049	25.0	26.9	
						RPD = 0.03	
32 4,4'-DDD							
1	7.206	7.206	0.000	324578925	25.0	27.1	
2	7.226	7.227	-0.001	52809298	25.0	27.4	
						RPD = 1.14	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.383	7.382	0.001	334143296	25.0	28.1	
2	7.324	7.325	-0.001	58029364	25.0	28.0	
						RPD = 0.27	
35 4,4'-DDT							
1	7.515	7.516	-0.001	310975000	25.0	27.3	
2	7.570	7.571	-0.001	50704627	25.0	27.7	
						RPD = 1.40	
36 Endrin aldehyde							
1	7.835	7.836	-0.001	265328498	25.0	27.6	
2	7.696	7.697	-0.001	47156314	25.0	28.0	
						RPD = 1.63	
37 Methoxychlor							
1	8.027	8.027	0.000	143281943	25.0	28.5	
2	8.288	8.289	-0.001	25055267	25.0	28.6	
						RPD = 0.42	
38 Mirex							
1	8.175	8.174	0.001	230114279	25.0	28.5	
2	8.466	8.466	0.000	38613708	25.0	27.9	
						RPD = 2.26	
39 Endosulfan sulfate							
1	8.284	8.285	-0.001	293158242	25.0	26.8	
2	7.986	7.987	-0.001	50495814	25.0	27.1	
						RPD = 1.18	
40 Endrin ketone							
1	8.564	8.563	0.001	340862580	25.0	28.0	
2	8.514	8.514	0.000	59577835	25.0	28.2	
						RPD = 0.62	
$ 41 DCB Decachlorobiphenyl							
1	9.542	9.541	0.001	195726844	25.0	27.9	
2	9.720	9.722	-0.002	38729311	25.0	28.6	
						RPD = 2.51	
S 3 Endosulfan, Total							
1					75.0	82.6	
2					75.0	82.8	
						RPD = 0.24	

Reagents:

8081ABICVL3_00028	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

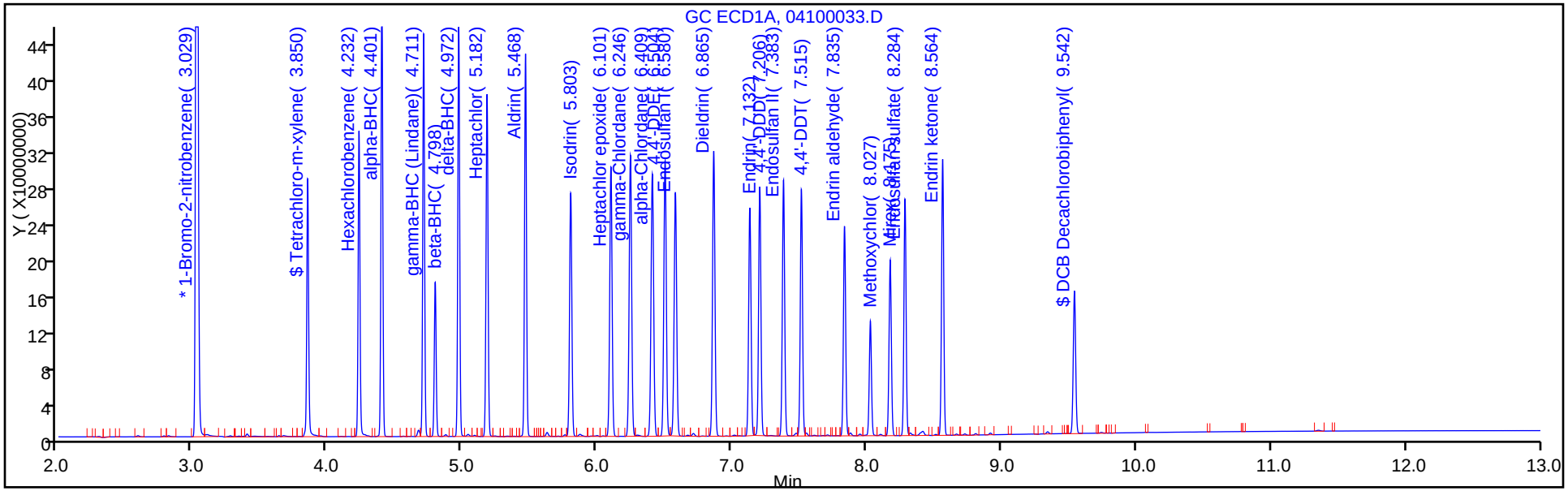
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TestAmerica Denver

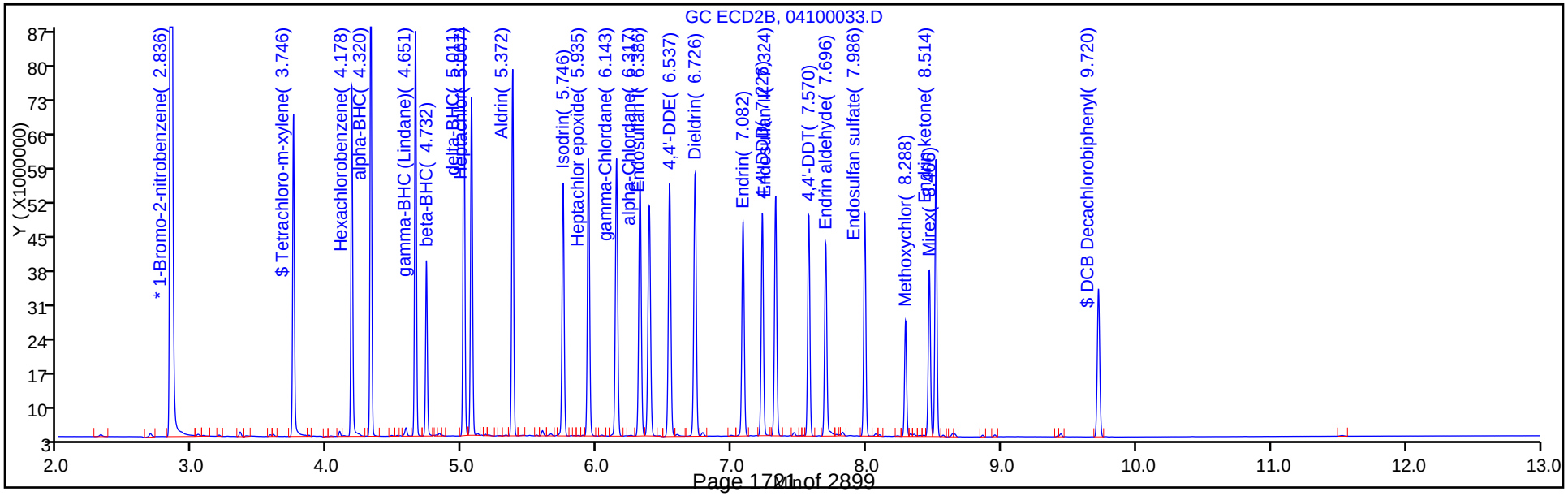
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Injection Date:	10-Apr-2017 19:54:20	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	ICV AB			Worklist Smp#:	33
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/11 Calibration Date: 06/14/2017 18:58

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06140011.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0021		1530	2000	-23.5*	20.0
Toxaphene Peak 2	Qua		0.0242		1730	2000	-13.5	20.0
Toxaphene Peak 3	Lin2		0.0164		1720	2000	-13.8	20.0
Toxaphene Peak 4	Lin2		0.0411		1830	2000	-8.4	20.0
Toxaphene Peak 5	Lin2		0.0442		1740	2000	-13.1	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/11 Calibration Date: 06/14/2017 18:58

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06140011.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	5.61	5.59	5.63
Toxaphene Peak 2	6.93	6.91	6.95
Toxaphene Peak 3	7.19	7.17	7.21
Toxaphene Peak 4	7.70	7.68	7.72
Toxaphene Peak 5	8.14	8.12	8.16

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140011.D
Lims ID: CCV TOX
Client ID:
Sample Type: CCV
Inject. Date: 14-Jun-2017 18:58:40 ALS Bottle#: 5 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV TOX
Misc. Info.: 280-0059760-011
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:57:46 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: wellsd Date: 15-Jun-2017 13:42:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.998	2.998	0.000	2167130083	150.0	150.0	
2	2.773	2.773	0.000	451018937	150.0	150.0	
28 Toxaphene							M
1	5.609	5.609	0.000	59958897	2000.0	1529.5	M
1	6.929	6.929	0.000	697761045	2000.0	1729.8	M
1	7.192	7.192	0.000	473501157	2000.0	1724.8	M
1	7.697	7.697	0.000	1186427377	2000.0	1832.2	M
1	8.140	8.140	0.000	1276180049	2000.0	1738.3	M
		Average of Peak Amounts =				1710.9	
2	6.119	6.119	0.000	47890479	2000.0	1823.1	M
2	7.168	7.168	0.000	101730583	2000.0	1718.1	M
2	7.311	7.311	0.000	244586269	2000.0	1624.3	M
2	7.600	7.600	0.000	182986555	2000.0	1799.2	M
2	8.122	8.122	0.000	150523805	2000.0	1731.1	M
		Average of Peak Amounts =				1739.2	
						RPD = 1.64	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00012 Amount Added: 1.00 Units: mL
8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

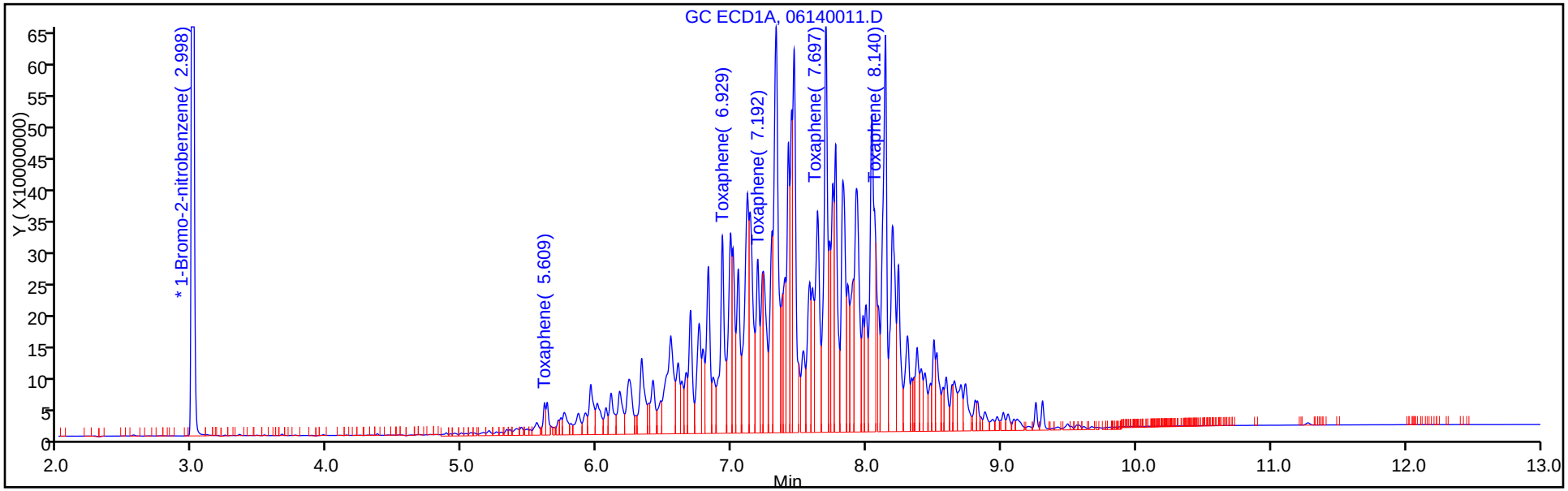
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TestAmerica Denver

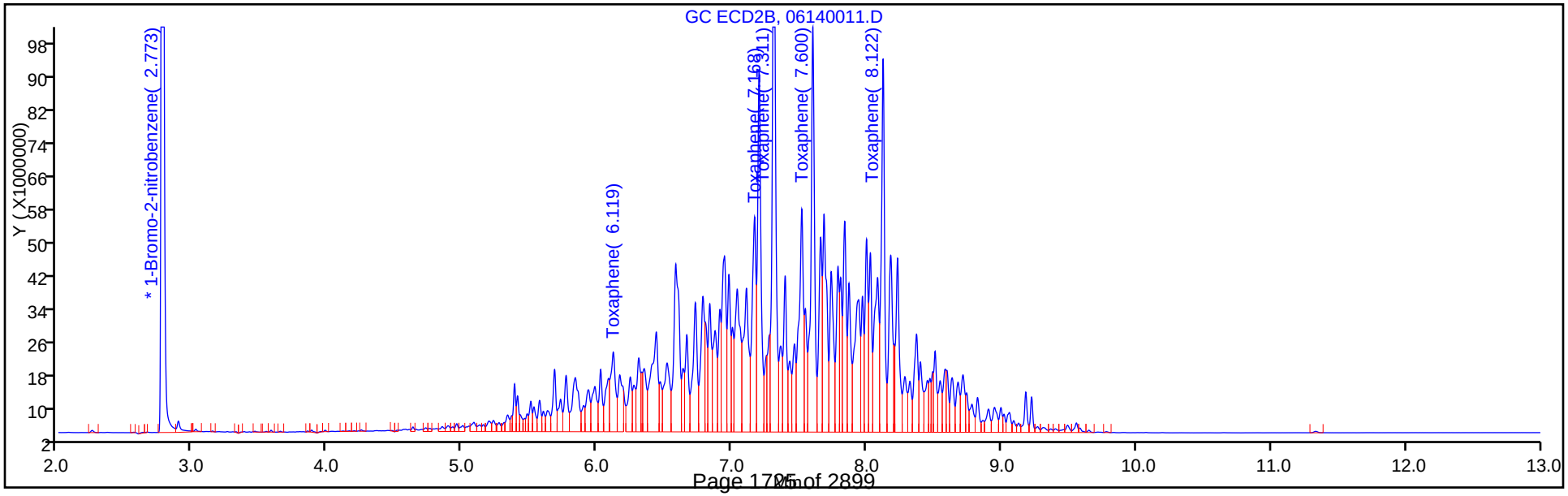
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Injection Date:	14-Jun-2017 18:58:40	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV TOX			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 15-Jun-2017 13:57:47 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140011.D

Injection Date: 14-Jun-2017 18:58:40 Instrument ID: SGC_P1

Lims ID: CCV TOX

Client ID:

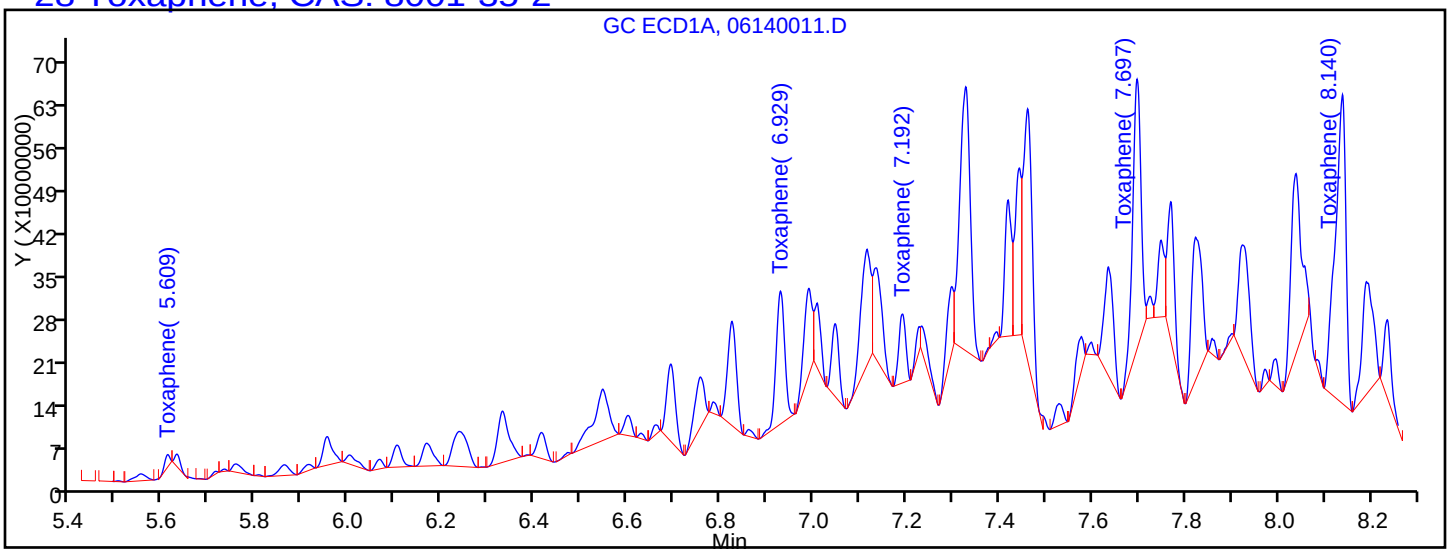
Operator ID: DAW ALS Bottle#: 5 Worklist Smp#: 11

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

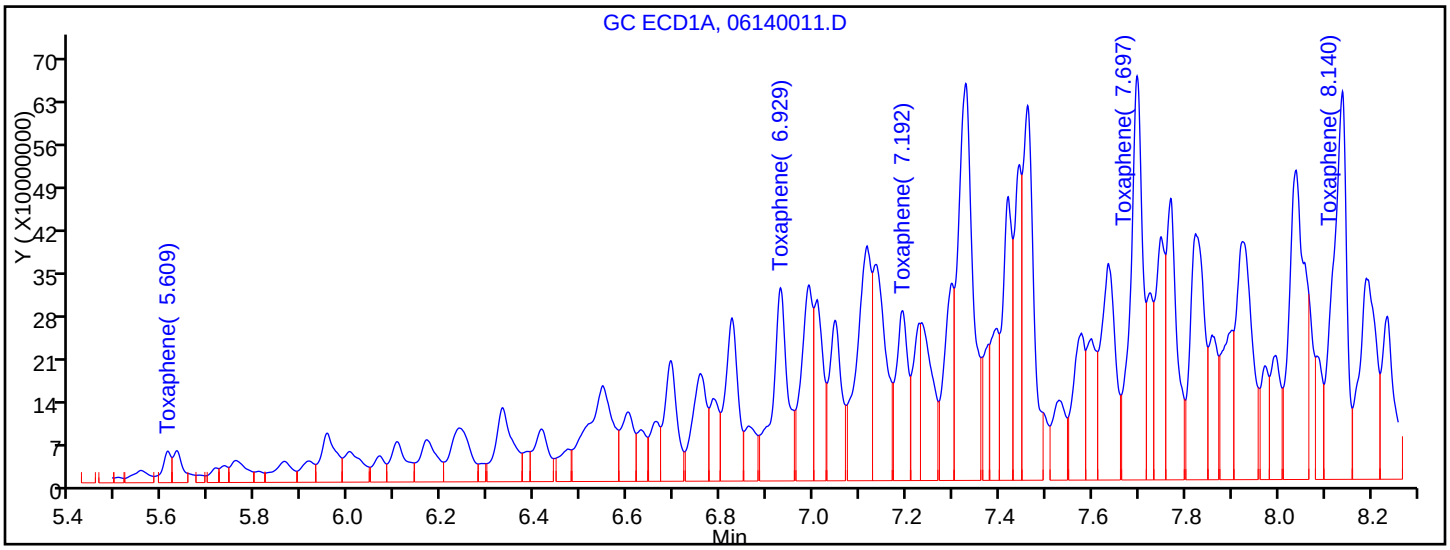
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.609	Response = 15822360
6.929	Response = 278694864
7.192	Response = 116260276
7.697	Response = 544883976
8.140	Response = 788848662



Manual Integration Results

5.609	Response = 59958897	M
6.929	Response = 697761045	M
7.192	Response = 473501157	M
7.697	Response = 1186427377	M
8.140	Response = 1276180049	M

Reviewer: wellsd, 15-Jun-2017 13:41:58

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/11 Calibration Date: 06/14/2017 18:58

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06140011.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0080		1820	2000	-8.8	20.0
Toxaphene Peak 2	Lin2		0.0169		1720	2000	-14.1	20.0
Toxaphene Peak 3	Lin2		0.0407		1620	2000	-18.8	20.0
Toxaphene Peak 4	Lin2		0.0304		1800	2000	-10.0	20.0
Toxaphene Peak 5	Lin2		0.0250		1730	2000	-13.4	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/11 Calibration Date: 06/14/2017 18:58

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06140011.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	6.12	6.10	6.14
Toxaphene Peak 2	7.17	7.15	7.19
Toxaphene Peak 3	7.31	7.29	7.33
Toxaphene Peak 4	7.60	7.58	7.62
Toxaphene Peak 5	8.12	8.10	8.14

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140011.D
Lims ID: CCV TOX
Client ID:
Sample Type: CCV
Inject. Date: 14-Jun-2017 18:58:40 ALS Bottle#: 5 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV TOX
Misc. Info.: 280-0059760-011
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:57:46 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: wellsd Date: 15-Jun-2017 13:42:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.998	2.998	0.000	2167130083	150.0	150.0	
2	2.773	2.773	0.000	451018937	150.0	150.0	
28 Toxaphene							M
1	5.609	5.609	0.000	59958897	2000.0	1529.5	M
1	6.929	6.929	0.000	697761045	2000.0	1729.8	M
1	7.192	7.192	0.000	473501157	2000.0	1724.8	M
1	7.697	7.697	0.000	1186427377	2000.0	1832.2	M
1	8.140	8.140	0.000	1276180049	2000.0	1738.3	M
		Average of Peak Amounts =				1710.9	
2	6.119	6.119	0.000	47890479	2000.0	1823.1	M
2	7.168	7.168	0.000	101730583	2000.0	1718.1	M
2	7.311	7.311	0.000	244586269	2000.0	1624.3	M
2	7.600	7.600	0.000	182986555	2000.0	1799.2	M
2	8.122	8.122	0.000	150523805	2000.0	1731.1	M
		Average of Peak Amounts =				1739.2	
						RPD = 1.64	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00012 Amount Added: 1.00 Units: mL
8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

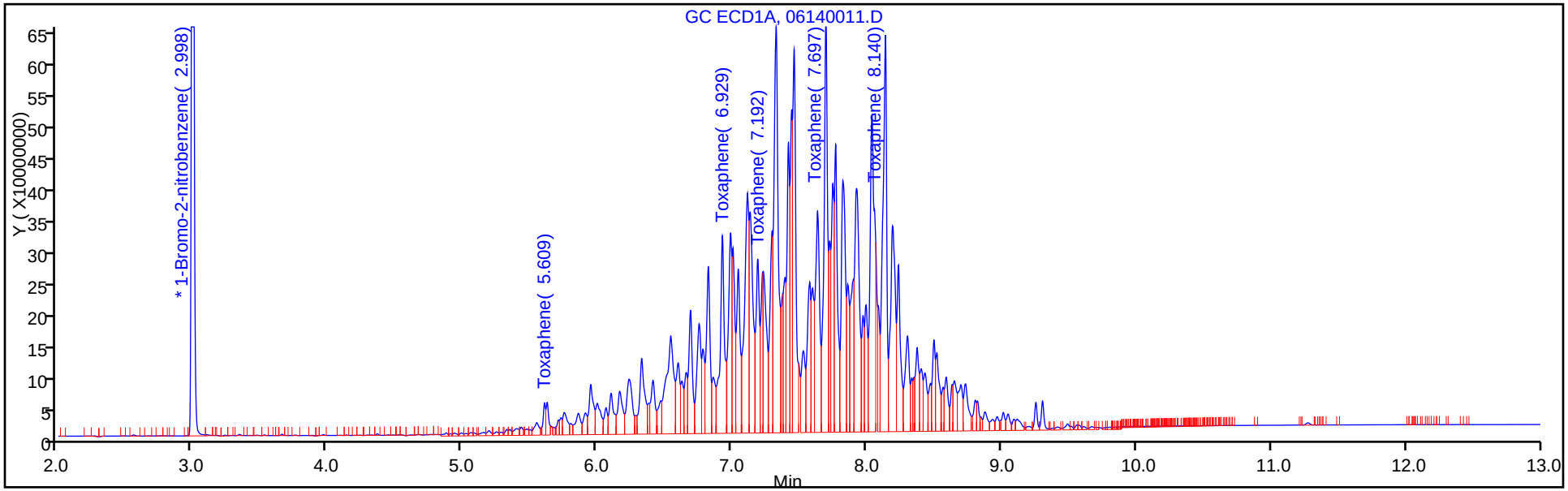
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TestAmerica Denver

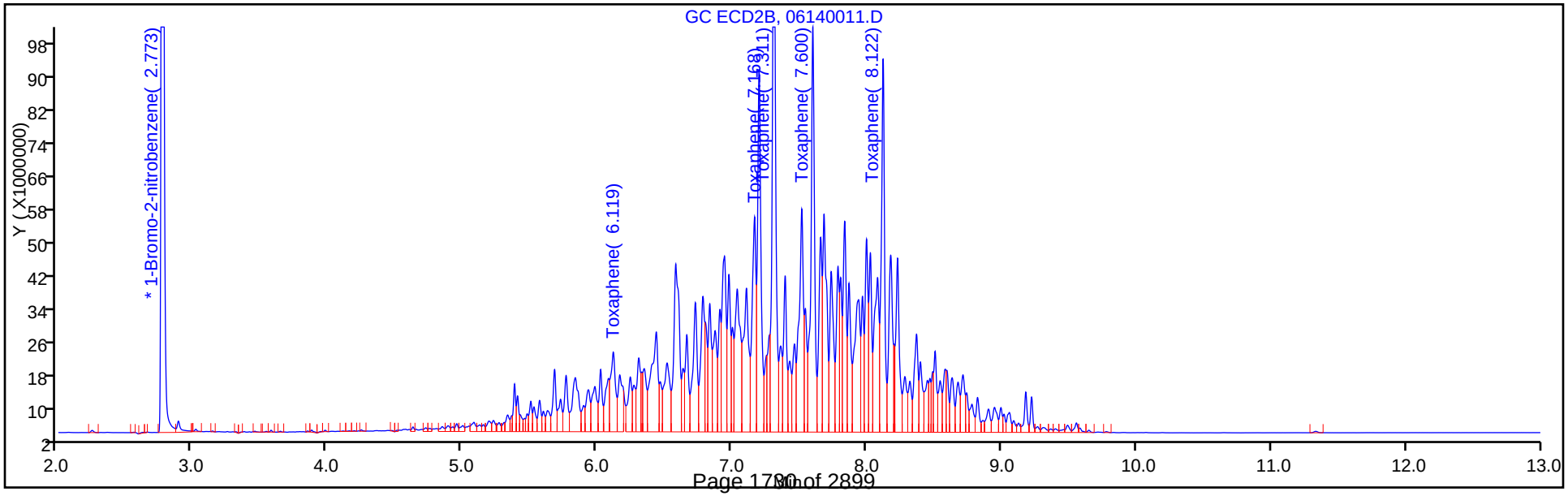
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Injection Date:	14-Jun-2017 18:58:40	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV TOX			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 15-Jun-2017 13:57:48 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140011.D

Injection Date: 14-Jun-2017 18:58:40 Instrument ID: SGC_P1

Lims ID: CCV TOX

Client ID:

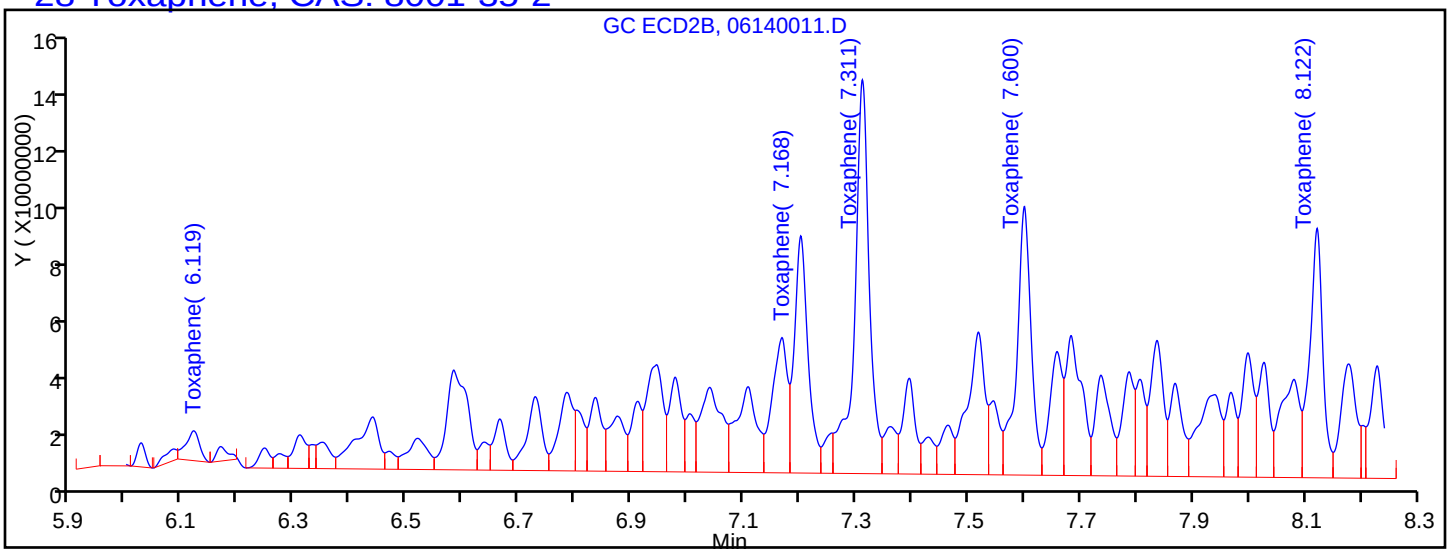
Operator ID: DAW ALS Bottle#: 5 Worklist Smp#: 11

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

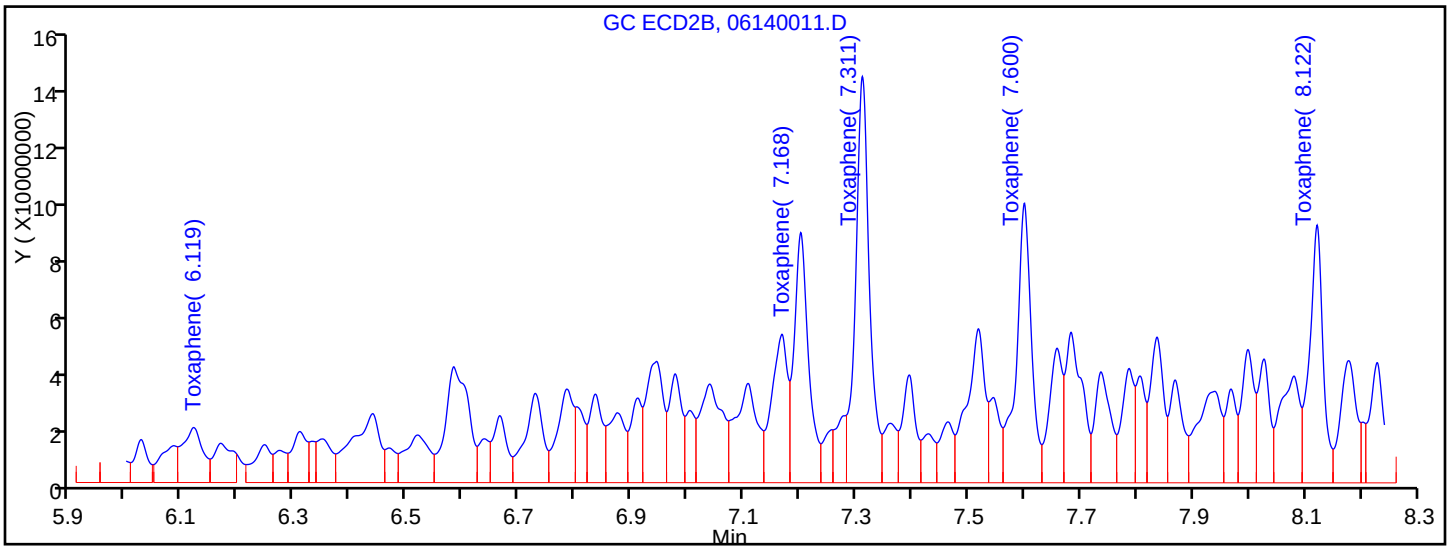
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.119	Response = 17787113
7.168	Response = 88942414
7.311	Response = 252324931
7.600	Response = 167202395
8.122	Response = 141001470



Manual Integration Results

6.119	Response = 47890479	M
7.168	Response = 101730583	M
7.311	Response = 244586269	M
7.600	Response = 182986555	M
8.122	Response = 150523805	M

Reviewer: wellsd, 15-Jun-2017 13:42:03

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVIS 280-377328/13 Calibration Date: 06/14/2017 19:32

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06140013.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		1.162		45.8	50.0	-8.4	20.0
alpha-BHC	Lin2		1.834		46.2	50.0	-7.7	20.0
gamma-BHC (Lindane)	Lin2		1.678		46.8	50.0	-6.4	20.0
beta-BHC	Lin2		0.6214		44.8	50.0	-10.3	20.0
delta-BHC	Lin2		1.745		45.9	50.0	-8.2	20.0
Heptachlor	Lin2		1.609		48.6	50.0	-2.8	20.0
Aldrin	Lin2		1.545		45.8	50.0	-8.5	20.0
Heptachlor epoxide	Lin2		1.350		46.4	50.0	-7.3	20.0
gamma-Chlordane	Lin2		1.479		46.0	50.0	-8.0	20.0
alpha-Chlordane	Lin2		1.414		46.0	50.0	-8.0	20.0
4,4'-DDE	Lin2		1.431		45.3	50.0	-9.5	20.0
Endosulfan I	Lin2		1.300		46.4	50.0	-7.3	20.0
Dieldrin	Lin2		1.453		46.0	50.0	-8.0	20.0
Endrin	Lin2		1.327		51.8	50.0	3.6	20.0
4,4'-DDD	Lin2		1.177		44.1	50.0	-11.7	20.0
Endosulfan II	Lin2		1.221		46.1	50.0	-7.8	20.0
4,4'-DDT	Lin2		1.201		46.8	50.0	-6.3	20.0
Endrin aldehyde	Lin2		0.9461		44.2	50.0	-11.7	20.0
Methoxychlor	Lin2		0.5013		44.8	50.0	-10.3	20.0
Endosulfan sulfate	Lin2		1.100		44.9	50.0	-10.2	20.0
Endrin ketone	Lin2		1.159		42.6	50.0	-14.7	20.0
Tetrachloro-m-xylene (Surr)	Lin2		1.035		45.4	50.0	-9.2	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.7014		45.1	50.0	-9.8	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVIS 280-377328/13 Calibration Date: 06/14/2017 19:32

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06140013.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.20	4.19	4.21
alpha-BHC	4.37	4.36	4.38
gamma-BHC (Lindane)	4.68	4.67	4.69
beta-BHC	4.77	4.76	4.78
delta-BHC	4.94	4.93	4.95
Heptachlor	5.15	5.14	5.16
Aldrin	5.44	5.43	5.45
Heptachlor epoxide	6.06	6.05	6.07
gamma-Chlordane	6.20	6.19	6.21
alpha-Chlordane	6.36	6.35	6.37
4,4'-DDE	6.46	6.45	6.47
Endosulfan I	6.53	6.52	6.54
Dieldrin	6.82	6.81	6.83
Endrin	7.09	7.08	7.10
4,4'-DDD	7.16	7.15	7.17
Endosulfan II	7.34	7.33	7.35
4,4'-DDT	7.47	7.46	7.48
Endrin aldehyde	7.79	7.78	7.80
Methoxychlor	7.99	7.98	8.00
Endosulfan sulfate	8.24	8.23	8.25
Endrin ketone	8.52	8.51	8.53
Tetrachloro-m-xylene (Surr)	3.82	3.81	3.83
DCB Decachlorobiphenyl (Surr)	9.50	9.49	9.51

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140013.D
Lims ID: CCVIS AB
Client ID:
Sample Type: CCVIS
Inject. Date: 14-Jun-2017 19:32:45 ALS Bottle#: 7 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVIS AB
Misc. Info.: 280-0059760-013
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:57:53 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.997	2.997	0.000	2166840797	150.0	150.0	
2	2.771	2.771	0.000	464051677	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.824	3.824	0.000	747318415	50.0	45.4	
2	3.684	3.684	0.000	152948749	50.0	47.9	
						RPD = 5.26	
5 Hexachlorobenzene							
1	4.204	4.204	0.000	839608284	50.0	45.8	
2	4.110	4.110	0.000	158050758	50.0	47.6	
						RPD = 3.81	
8 alpha-BHC							
1	4.372	4.372	0.000	1324463449	50.0	46.2	
2	4.248	4.248	0.000	226696928	50.0	48.2	
						RPD = 4.22	
9 gamma-BHC (Lindane)							
1	4.680	4.680	0.000	1212268901	50.0	46.8	
2	4.573	4.573	0.000	201713337	50.0	48.5	
						RPD = 3.60	
10 beta-BHC							
1	4.765	4.765	0.000	448791196	50.0	44.8	
2	4.654	4.654	0.000	82712312	50.0	47.7	
						RPD = 6.09	
12 delta-BHC							
1	4.939	4.939	0.000	1260661946	50.0	45.9	
2	4.928	4.928	0.000	205427643	50.0	48.0	
						RPD = 4.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
15 Heptachlor							
1	5.149	5.149	0.000	1161945813	50.0	48.6	
2	4.984	4.984	0.000	191379321	50.0	49.9	
						RPD = 2.64	
16 Aldrin							
1	5.435	5.435	0.000	1115785497	50.0	45.8	
2	5.291	5.291	0.000	182632050	50.0	48.1	
						RPD = 4.88	
18 Isodrin							
1	5.764	5.764	0.000	856183719	50.0	45.9	
2	5.654	5.654	0.000	143226870	50.0	48.4	
						RPD = 5.32	
21 Heptachlor epoxide							
1	6.059	6.059	0.000	975354880	50.0	46.4	
2	5.837	5.837	0.000	160712028	50.0	47.6	
						RPD = 2.68	
22 gamma-Chlordane							
1	6.202	6.202	0.000	1068383376	50.0	46.0	
2	6.039	6.039	0.000	166757337	50.0	47.2	
						RPD = 2.68	
23 alpha-Chlordane							
1	6.363	6.363	0.000	1021448631	50.0	46.0	
2	6.207	6.207	0.000	159190781	50.0	47.3	
						RPD = 2.86	
24 4,4'-DDE							
1	6.459	6.459	0.000	1033515321	50.0	45.3	
2	6.424	6.424	0.000	155819025	50.0	45.0	
						RPD = 0.68	
25 Endosulfan I							
1	6.534	6.534	0.000	939022209	50.0	46.4	
2	6.270	6.270	0.000	149401269	50.0	46.2	
						RPD = 0.30	
27 Dieldrin							
1	6.819	6.819	0.000	1049233236	50.0	46.0	
2	6.609	6.609	0.000	167731032	50.0	47.0	
						RPD = 2.11	
30 Endrin							
1	7.088	7.088	0.000	958500572	50.0	51.8	
2	6.969	6.969	0.000	155025662	50.0	54.3	
						RPD = 4.76	
32 4,4'-DDD							
1	7.163	7.163	0.000	850291249	50.0	44.1	
2	7.121	7.121	0.000	133516605	50.0	48.5	
						RPD = 9.39	
34 Endosulfan II							
1	7.337	7.337	0.000	881688967	50.0	46.1	
2	7.214	7.214	0.000	143471530	50.0	48.5	
						RPD = 5.01	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
35 4,4'-DDT							
1	7.474	7.474	0.000	867654588	50.0	46.8	
2	7.469	7.469	0.000	131795681	50.0	49.9	
						RPD = 6.33	
36 Endrin aldehyde							
1	7.791	7.791	0.000	683319778	50.0	44.2	
2	7.589	7.589	0.000	112520273	50.0	46.7	
						RPD = 5.68	
37 Methoxychlor							
1	7.986	7.986	0.000	362101998	50.0	44.8	
2	8.192	8.192	0.000	61440500	50.0	49.1	
						RPD = 9.05	
38 Mirex							
1	8.132	8.132	0.000	546761874	50.0	42.2	
2	8.363	8.363	0.000	90321448	50.0	45.1	
						RPD = 6.50	
39 Endosulfan sulfate							
1	8.239	8.239	0.000	794473087	50.0	44.9	
2	7.883	7.883	0.000	127033668	50.0	47.7	
						RPD = 5.96	
40 Endrin ketone							
1	8.519	8.519	0.000	836934895	50.0	42.6	
2	8.410	8.410	0.000	138958398	50.0	45.8	
						RPD = 7.16	
$ 41 DCB Decachlorobiphenyl							
1	9.497	9.497	0.000	506627735	50.0	45.1	
2	9.606	9.606	0.000	93059330	50.0	48.3	
						RPD = 6.75	

Reagents:

8081IcalL4_00026	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

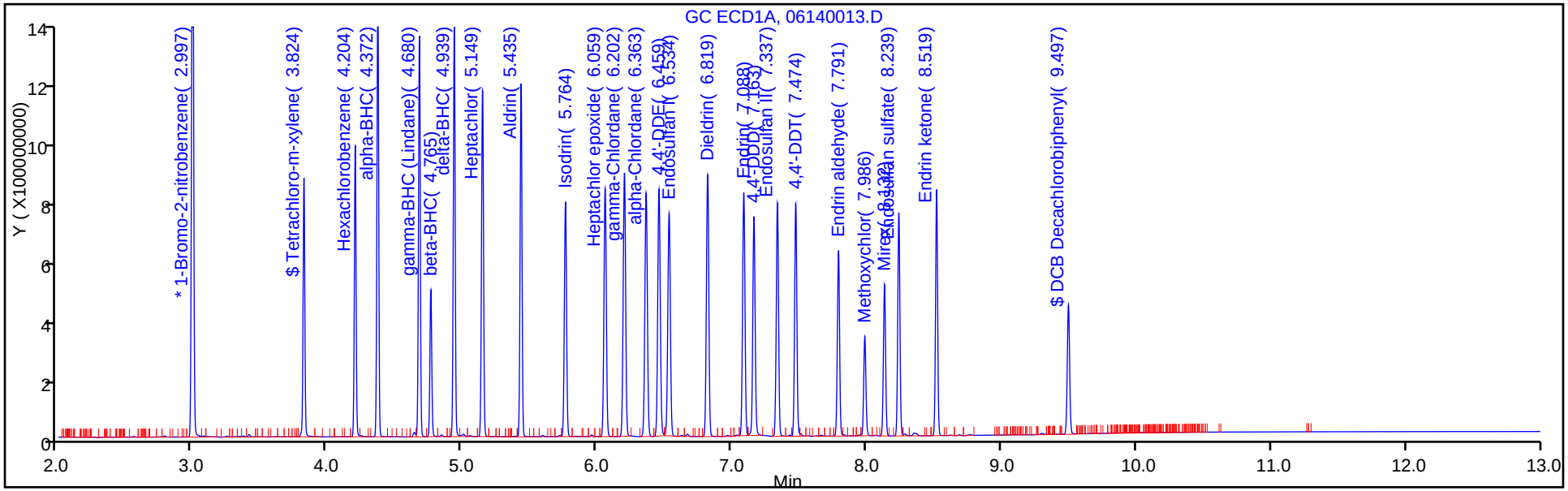
Report Date: 15-Jun-2017 13:57:53 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

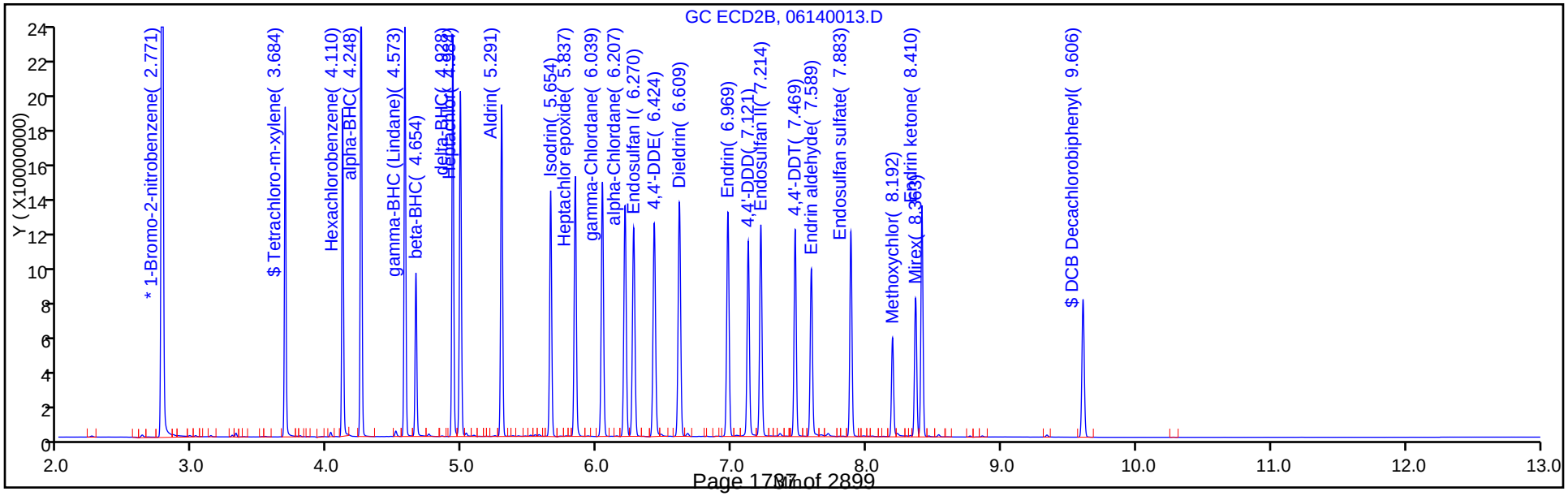
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140013.D

Injection Date:	14-Jun-2017 19:32:45	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCVIS AB			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVIS 280-377328/13 Calibration Date: 06/14/2017 19:32

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06140013.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		1.022		47.6	50.0	-4.9	20.0
alpha-BHC	Lin2		1.466		48.2	50.0	-3.7	20.0
gamma-BHC (Lindane)	Lin2		1.304		48.5	50.0	-2.9	20.0
beta-BHC	Lin2		0.5347		47.7	50.0	-4.7	20.0
delta-BHC	Lin2		1.328		48.0	50.0	-4.1	20.0
Heptachlor	Lin2		1.237		49.9	50.0	-0.2	20.0
Aldrin	Lin2		1.181		48.1	50.0	-3.9	20.0
Heptachlor epoxide	Lin2		1.039		47.6	50.0	-4.8	20.0
gamma-Chlordane	Lin2		1.078		47.2	50.0	-5.5	20.0
alpha-Chlordane	Lin2		1.029		47.3	50.0	-5.3	20.0
Endosulfan I	Lin2		0.9659		46.2	50.0	-7.5	20.0
4,4'-DDE	Lin2		1.007		45.0	50.0	-10.1	20.0
Dieldrin	Lin2		1.084		47.0	50.0	-6.0	20.0
Endrin	Lin2		1.002		54.3	50.0	8.6	20.0
4,4'-DDD	Lin2		0.8632		48.5	50.0	-3.1	20.0
Endosulfan II	Lin2		0.9275		48.5	50.0	-3.1	20.0
4,4'-DDT	Lin2		0.8520		49.9	50.0	-0.2	20.0
Endrin aldehyde	Lin2		0.7274		46.7	50.0	-6.5	20.0
Endosulfan sulfate	Lin2		0.8213		47.7	50.0	-4.7	20.0
Methoxychlor	Lin2		0.3972		49.1	50.0	-1.8	20.0
Endrin ketone	Lin2		0.8983		45.8	50.0	-8.4	20.0
Tetrachloro-m-xylene (Surr)	Lin2		0.9888		47.9	50.0	-4.3	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.6016		48.3	50.0	-3.5	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVIS 280-377328/13 Calibration Date: 06/14/2017 19:32

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06140013.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.11	4.10	4.12
alpha-BHC	4.25	4.24	4.26
gamma-BHC (Lindane)	4.57	4.56	4.58
beta-BHC	4.65	4.64	4.66
delta-BHC	4.93	4.92	4.94
Heptachlor	4.98	4.97	4.99
Aldrin	5.29	5.28	5.30
Heptachlor epoxide	5.84	5.83	5.85
gamma-Chlordane	6.04	6.03	6.05
alpha-Chlordane	6.21	6.20	6.22
Endosulfan I	6.27	6.26	6.28
4,4'-DDE	6.42	6.41	6.43
Dieldrin	6.61	6.60	6.62
Endrin	6.97	6.96	6.98
4,4'-DDD	7.12	7.11	7.13
Endosulfan II	7.21	7.20	7.22
4,4'-DDT	7.47	7.46	7.48
Endrin aldehyde	7.59	7.58	7.60
Endosulfan sulfate	7.88	7.87	7.89
Methoxychlor	8.19	8.18	8.20
Endrin ketone	8.41	8.40	8.42
Tetrachloro-m-xylene (Surr)	3.68	3.67	3.69
DCB Decachlorobiphenyl (Surr)	9.61	9.60	9.62

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140013.D
Lims ID: CCVIS AB
Client ID:
Sample Type: CCVIS
Inject. Date: 14-Jun-2017 19:32:45 ALS Bottle#: 7 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVIS AB
Misc. Info.: 280-0059760-013
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:57:53 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.997	2.997	0.000	2166840797	150.0	150.0	
2	2.771	2.771	0.000	464051677	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.824	3.824	0.000	747318415	50.0	45.4	
2	3.684	3.684	0.000	152948749	50.0	47.9	
						RPD = 5.26	
5 Hexachlorobenzene							
1	4.204	4.204	0.000	839608284	50.0	45.8	
2	4.110	4.110	0.000	158050758	50.0	47.6	
						RPD = 3.81	
8 alpha-BHC							
1	4.372	4.372	0.000	1324463449	50.0	46.2	
2	4.248	4.248	0.000	226696928	50.0	48.2	
						RPD = 4.22	
9 gamma-BHC (Lindane)							
1	4.680	4.680	0.000	1212268901	50.0	46.8	
2	4.573	4.573	0.000	201713337	50.0	48.5	
						RPD = 3.60	
10 beta-BHC							
1	4.765	4.765	0.000	448791196	50.0	44.8	
2	4.654	4.654	0.000	82712312	50.0	47.7	
						RPD = 6.09	
12 delta-BHC							
1	4.939	4.939	0.000	1260661946	50.0	45.9	
2	4.928	4.928	0.000	205427643	50.0	48.0	
						RPD = 4.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
15 Heptachlor							
1	5.149	5.149	0.000	1161945813	50.0	48.6	
2	4.984	4.984	0.000	191379321	50.0	49.9	
						RPD = 2.64	
16 Aldrin							
1	5.435	5.435	0.000	1115785497	50.0	45.8	
2	5.291	5.291	0.000	182632050	50.0	48.1	
						RPD = 4.88	
18 Isodrin							
1	5.764	5.764	0.000	856183719	50.0	45.9	
2	5.654	5.654	0.000	143226870	50.0	48.4	
						RPD = 5.32	
21 Heptachlor epoxide							
1	6.059	6.059	0.000	975354880	50.0	46.4	
2	5.837	5.837	0.000	160712028	50.0	47.6	
						RPD = 2.68	
22 gamma-Chlordane							
1	6.202	6.202	0.000	1068383376	50.0	46.0	
2	6.039	6.039	0.000	166757337	50.0	47.2	
						RPD = 2.68	
23 alpha-Chlordane							
1	6.363	6.363	0.000	1021448631	50.0	46.0	
2	6.207	6.207	0.000	159190781	50.0	47.3	
						RPD = 2.86	
24 4,4'-DDE							
1	6.459	6.459	0.000	1033515321	50.0	45.3	
2	6.424	6.424	0.000	155819025	50.0	45.0	
						RPD = 0.68	
25 Endosulfan I							
1	6.534	6.534	0.000	939022209	50.0	46.4	
2	6.270	6.270	0.000	149401269	50.0	46.2	
						RPD = 0.30	
27 Dieldrin							
1	6.819	6.819	0.000	1049233236	50.0	46.0	
2	6.609	6.609	0.000	167731032	50.0	47.0	
						RPD = 2.11	
30 Endrin							
1	7.088	7.088	0.000	958500572	50.0	51.8	
2	6.969	6.969	0.000	155025662	50.0	54.3	
						RPD = 4.76	
32 4,4'-DDD							
1	7.163	7.163	0.000	850291249	50.0	44.1	
2	7.121	7.121	0.000	133516605	50.0	48.5	
						RPD = 9.39	
34 Endosulfan II							
1	7.337	7.337	0.000	881688967	50.0	46.1	
2	7.214	7.214	0.000	143471530	50.0	48.5	
						RPD = 5.01	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
35 4,4'-DDT							
1	7.474	7.474	0.000	867654588	50.0	46.8	
2	7.469	7.469	0.000	131795681	50.0	49.9	
						RPD = 6.33	
36 Endrin aldehyde							
1	7.791	7.791	0.000	683319778	50.0	44.2	
2	7.589	7.589	0.000	112520273	50.0	46.7	
						RPD = 5.68	
37 Methoxychlor							
1	7.986	7.986	0.000	362101998	50.0	44.8	
2	8.192	8.192	0.000	61440500	50.0	49.1	
						RPD = 9.05	
38 Mirex							
1	8.132	8.132	0.000	546761874	50.0	42.2	
2	8.363	8.363	0.000	90321448	50.0	45.1	
						RPD = 6.50	
39 Endosulfan sulfate							
1	8.239	8.239	0.000	794473087	50.0	44.9	
2	7.883	7.883	0.000	127033668	50.0	47.7	
						RPD = 5.96	
40 Endrin ketone							
1	8.519	8.519	0.000	836934895	50.0	42.6	
2	8.410	8.410	0.000	138958398	50.0	45.8	
						RPD = 7.16	
$ 41 DCB Decachlorobiphenyl							
1	9.497	9.497	0.000	506627735	50.0	45.1	
2	9.606	9.606	0.000	93059330	50.0	48.3	
						RPD = 6.75	

Reagents:

8081IcalL4_00026	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

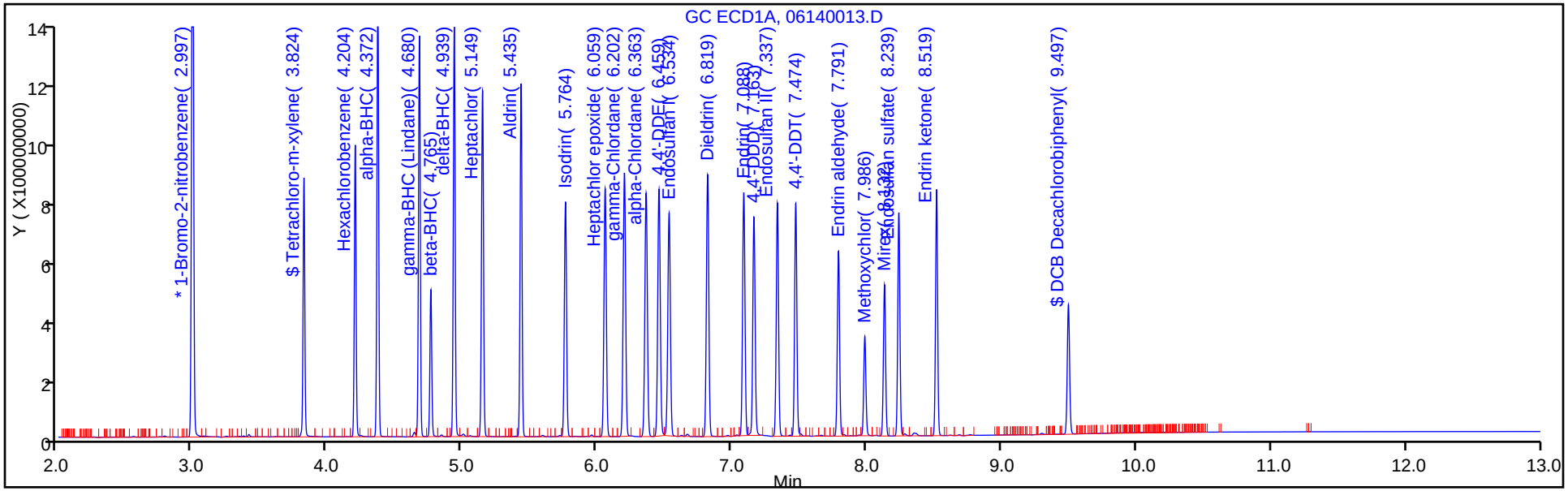
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TestAmerica Denver

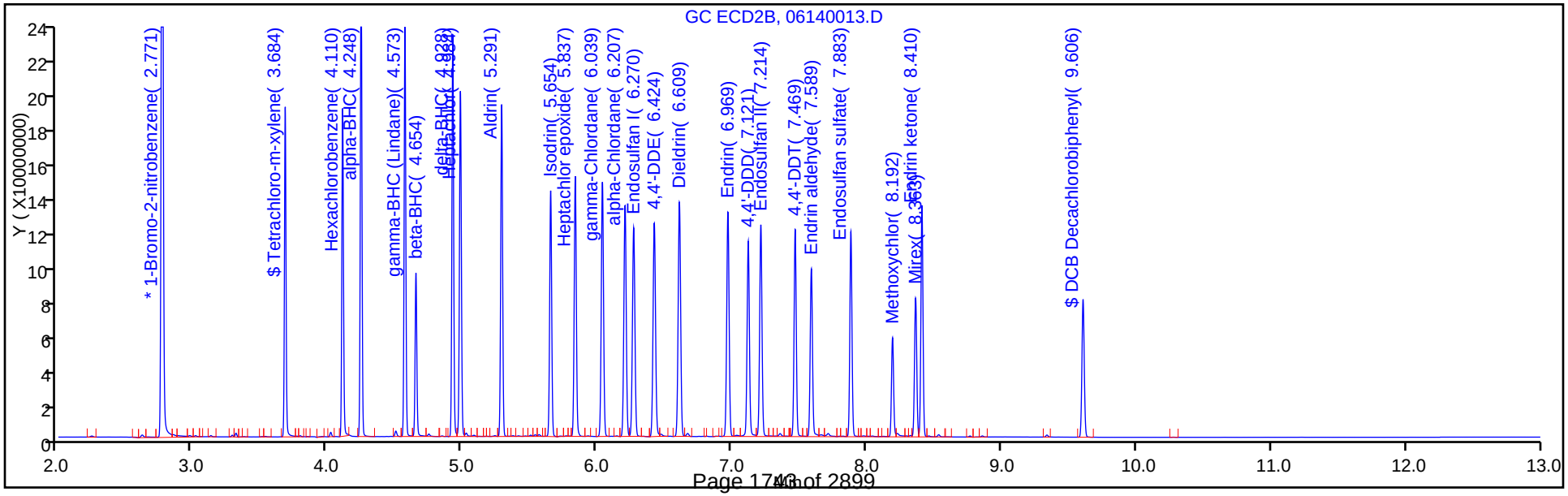
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Injection Date:	14-Jun-2017 19:32:45	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCVIS AB			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/28 Calibration Date: 06/14/2017 23:47

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06140028.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0023		1710	2000	-14.3	20.0
Toxaphene Peak 2	Qua		0.0246		1760	2000	-12.2	20.0
Toxaphene Peak 3	Lin2		0.0174		1830	2000	-8.5	20.0
Toxaphene Peak 4	Lin2		0.0431		1920	2000	-4.1	20.0
Toxaphene Peak 5	Lin2		0.0475		1870	2000	-6.6	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/28 Calibration Date: 06/14/2017 23:47

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06140028.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	5.61	5.59	5.63
Toxaphene Peak 2	6.93	6.91	6.95
Toxaphene Peak 3	7.19	7.17	7.21
Toxaphene Peak 4	7.70	7.68	7.72
Toxaphene Peak 5	8.14	8.12	8.16

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140028.D
Lims ID: CCV TOX
Client ID:
Sample Type: CCV
Inject. Date: 14-Jun-2017 23:47:11 ALS Bottle#: 22 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV TOX
Misc. Info.: 280-0059760-028
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:58:25 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: wellsd Date: 15-Jun-2017 13:47:12

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.997	2.997	0.001	2108429137	150.0	150.0	
2	2.772	2.771	0.001	453744812	150.0	150.0	
28 Toxaphene							M
1	5.608	5.609	-0.001	65390722	2000.0	1714.9	M
1	6.928	6.929	-0.001	690060574	2000.0	1756.3	M
1	7.191	7.192	-0.001	489492080	2000.0	1829.6	M
1	7.697	7.697	0.000	1210320177	2000.0	1918.8	M
1	8.137	8.140	-0.003	1336450017	2000.0	1867.4	M
		Average of Peak Amounts =				1817.4	
2	6.118	6.119	-0.001	47175035	2000.0	1783.0	M
2	7.166	7.168	-0.002	105331740	2000.0	1769.4	M
2	7.310	7.311	-0.001	246654313	2000.0	1628.3	M
2	7.598	7.600	-0.002	186406094	2000.0	1822.2	M
2	8.122	8.122	0.000	155057964	2000.0	1773.1	M
		Average of Peak Amounts =				1755.2	
						RPD = 3.48	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00012 Amount Added: 1.00 Units: mL
8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

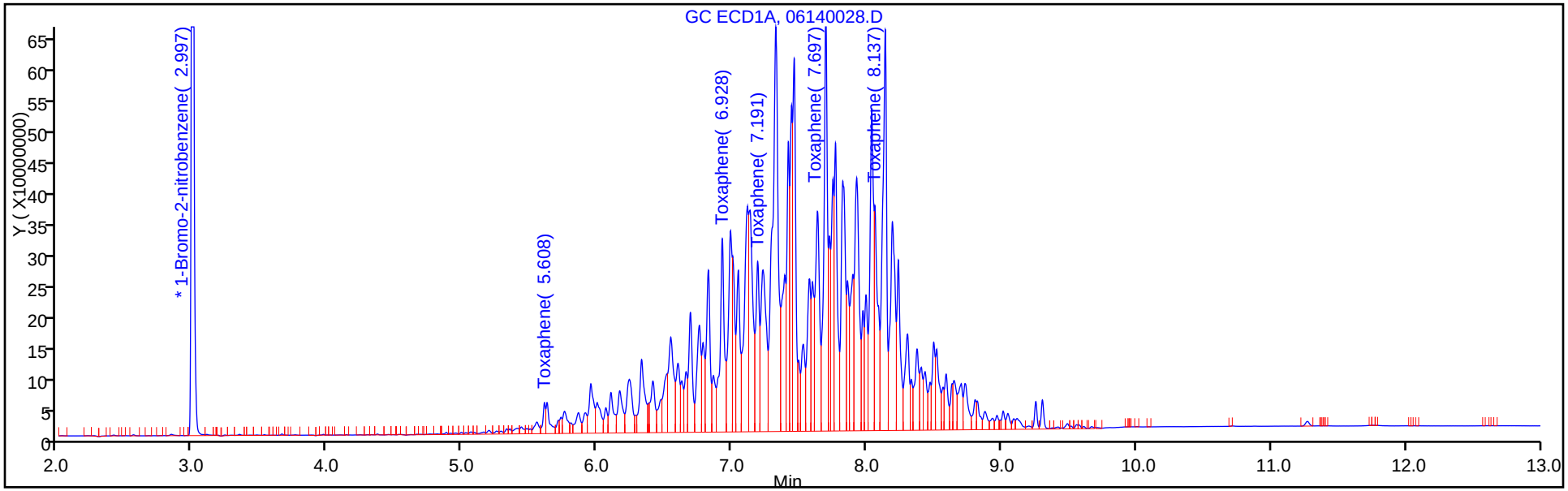
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TestAmerica Denver

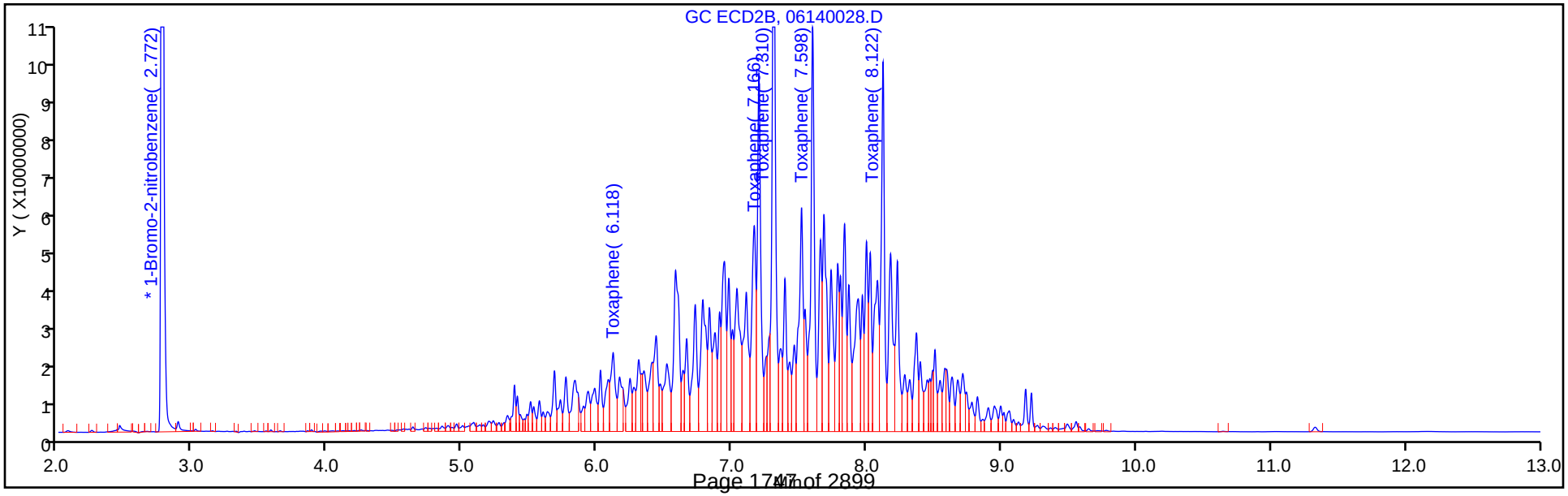
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Injection Date:	14-Jun-2017 23:47:11	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV TOX			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 15-Jun-2017 13:58:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140028.D

Injection Date: 14-Jun-2017 23:47:11 Instrument ID: SGC_P1

Lims ID: CCV TOX

Client ID:

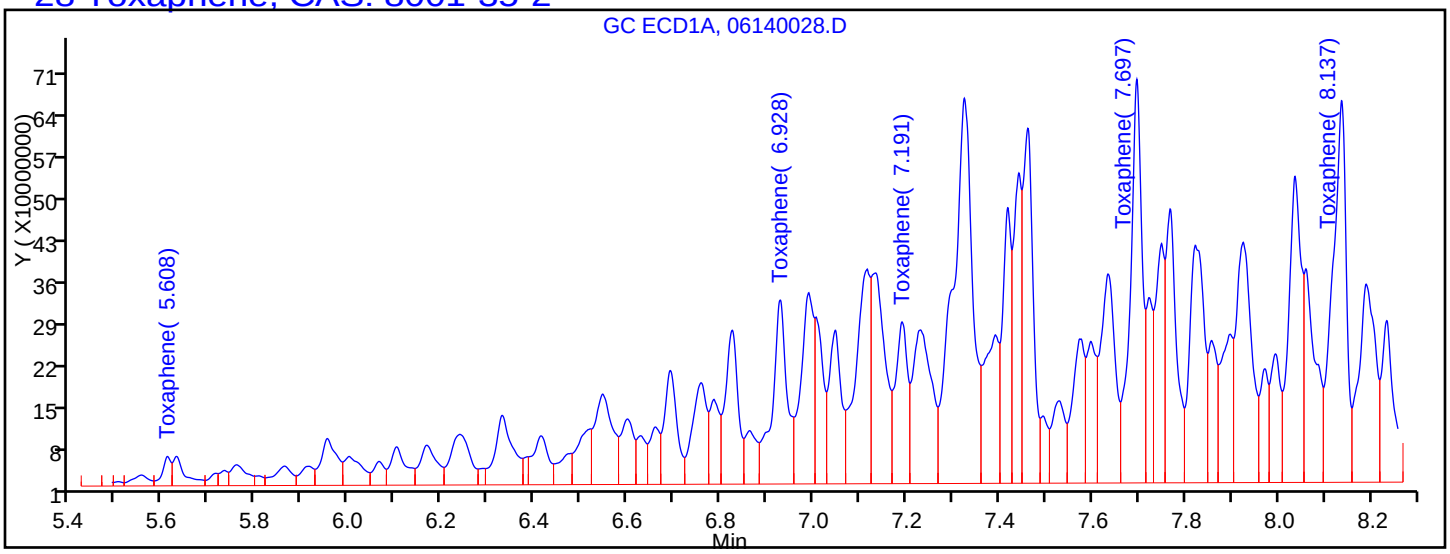
Operator ID: DAW ALS Bottle#: 22 Worklist Smp#: 28

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

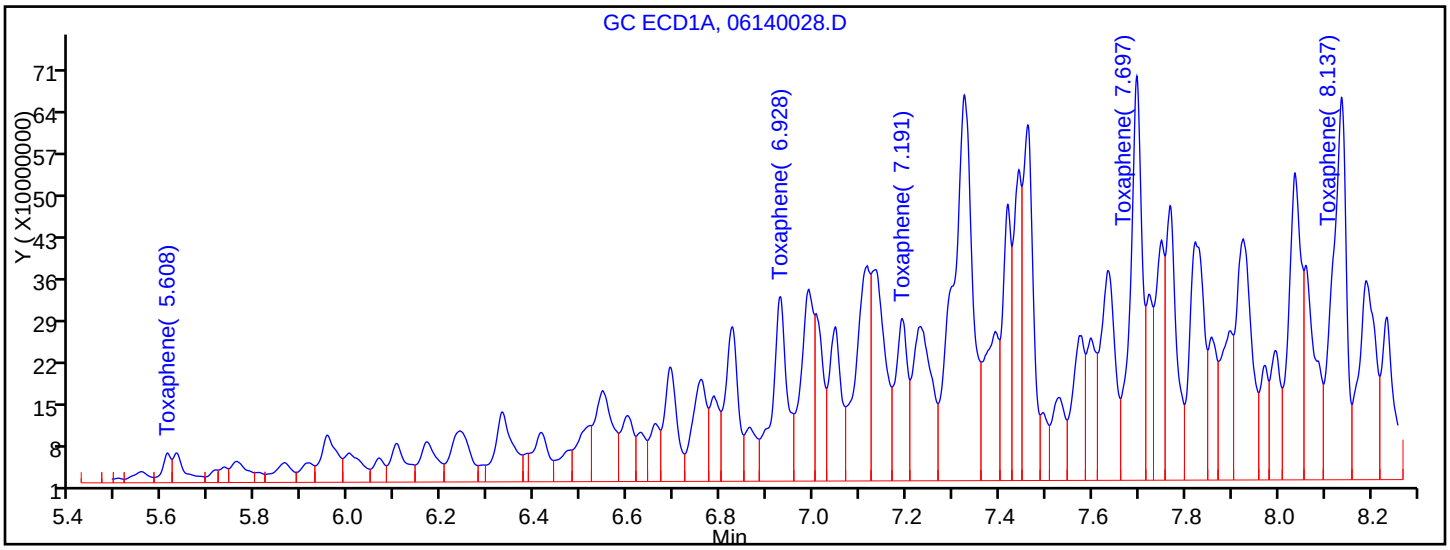
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.608	Response = 64335645
6.928	Response = 685783050
7.191	Response = 487057039
7.697	Response = 1206138983
8.137	Response = 1331155796



Manual Integration Results

5.608	Response = 65390722	M
6.928	Response = 690060574	M
7.191	Response = 489492080	M
7.697	Response = 1210320177	M
8.137	Response = 1336450017	M

Reviewer: wellsd, 15-Jun-2017 13:47:06

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/28 Calibration Date: 06/14/2017 23:47

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06140028.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0078		1780	2000	-10.9	20.0
Toxaphene Peak 2	Lin2		0.0174		1770	2000	-11.5	20.0
Toxaphene Peak 3	Lin2		0.0408		1630	2000	-18.6	20.0
Toxaphene Peak 4	Lin2		0.0308		1820	2000	-8.9	20.0
Toxaphene Peak 5	Lin2		0.0256		1770	2000	-11.3	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/28 Calibration Date: 06/14/2017 23:47

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06140028.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	6.12	6.10	6.14
Toxaphene Peak 2	7.17	7.15	7.19
Toxaphene Peak 3	7.31	7.29	7.33
Toxaphene Peak 4	7.60	7.58	7.62
Toxaphene Peak 5	8.12	8.10	8.14

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140028.D
Lims ID: CCV TOX
Client ID:
Sample Type: CCV
Inject. Date: 14-Jun-2017 23:47:11 ALS Bottle#: 22 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV TOX
Misc. Info.: 280-0059760-028
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:58:25 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: wellsd Date: 15-Jun-2017 13:47:12

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.997	2.997	0.001	2108429137	150.0	150.0	
2	2.772	2.771	0.001	453744812	150.0	150.0	
28 Toxaphene							M
1	5.608	5.609	-0.001	65390722	2000.0	1714.9	M
1	6.928	6.929	-0.001	690060574	2000.0	1756.3	M
1	7.191	7.192	-0.001	489492080	2000.0	1829.6	M
1	7.697	7.697	0.000	1210320177	2000.0	1918.8	M
1	8.137	8.140	-0.003	1336450017	2000.0	1867.4	M
		Average of Peak Amounts =				1817.4	
2	6.118	6.119	-0.001	47175035	2000.0	1783.0	M
2	7.166	7.168	-0.002	105331740	2000.0	1769.4	M
2	7.310	7.311	-0.001	246654313	2000.0	1628.3	M
2	7.598	7.600	-0.002	186406094	2000.0	1822.2	M
2	8.122	8.122	0.000	155057964	2000.0	1773.1	M
		Average of Peak Amounts =				1755.2	
						RPD = 3.48	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00012 Amount Added: 1.00 Units: mL
8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

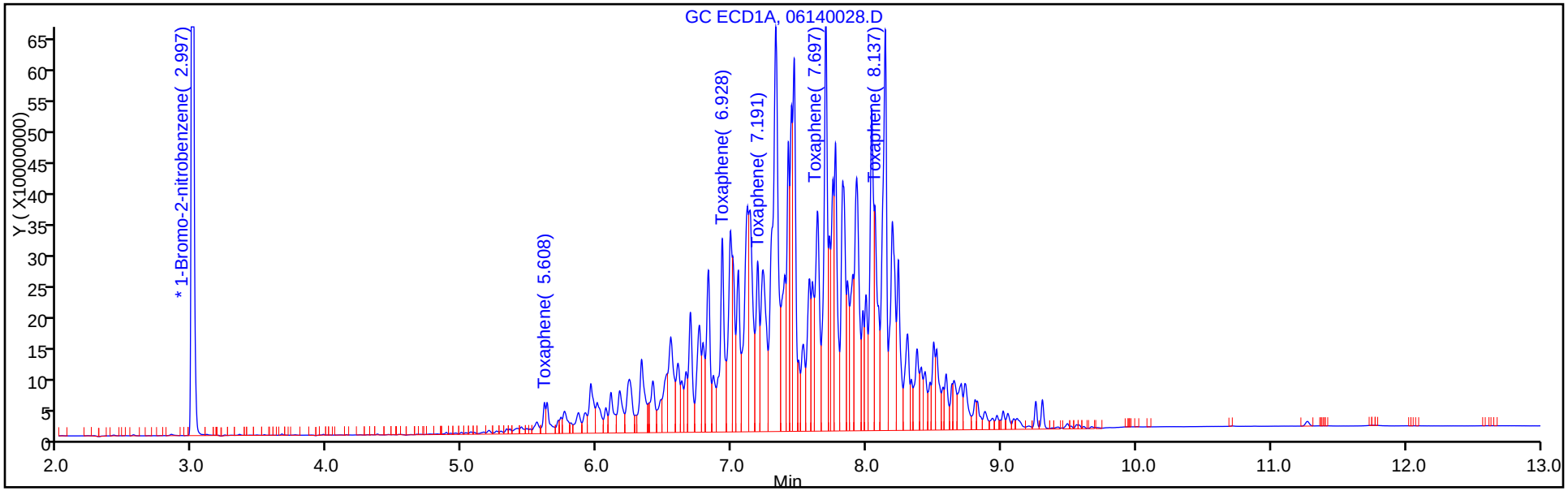
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TestAmerica Denver

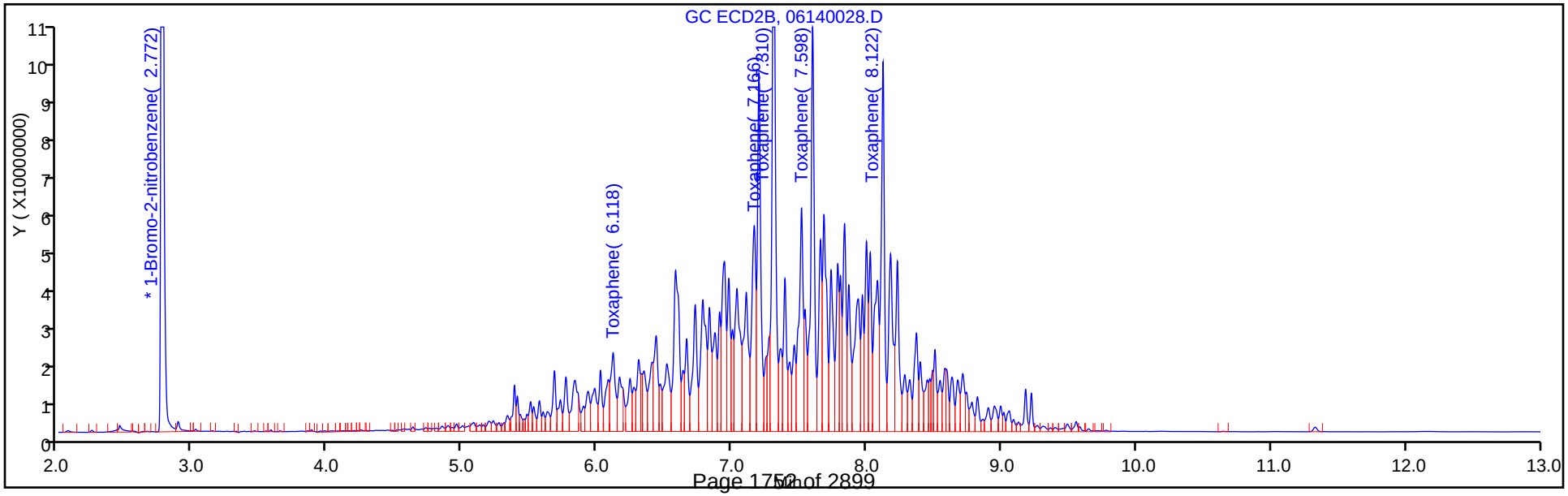
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Injection Date:	14-Jun-2017 23:47:11	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV TOX			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 15-Jun-2017 13:58:27 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140028.D

Injection Date: 14-Jun-2017 23:47:11 Instrument ID: SGC_P1

Lims ID: CCV TOX

Client ID:

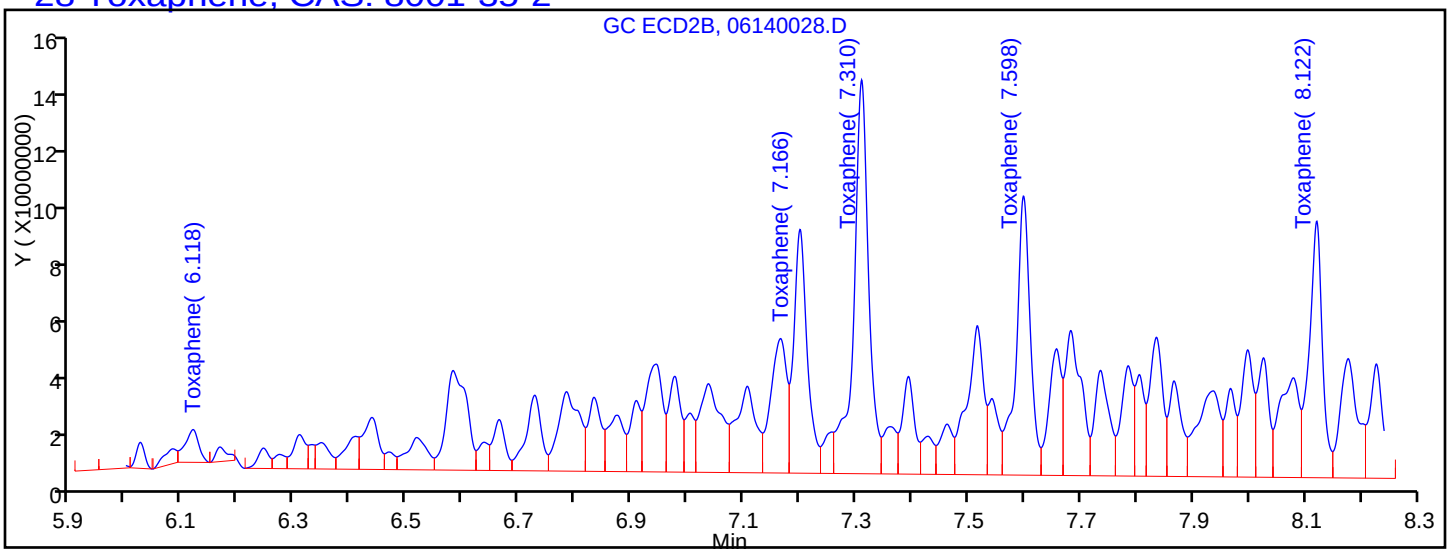
Operator ID: DAW ALS Bottle#: 22 Worklist Smp#: 28

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

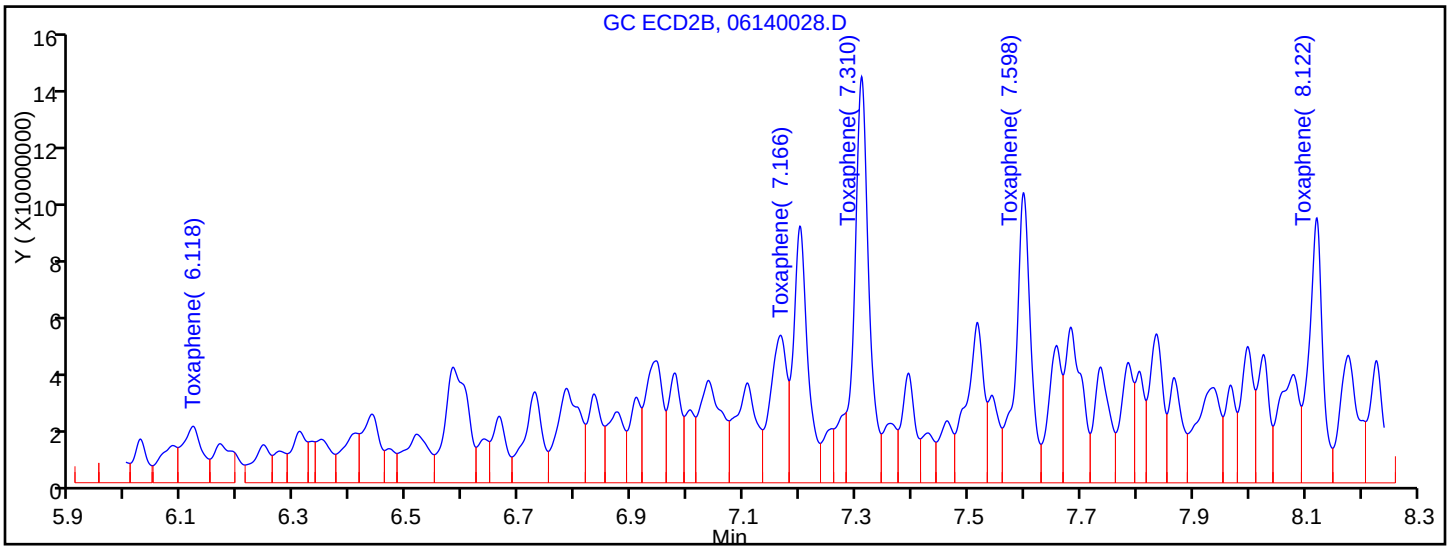
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.118	Response = 19464623
7.166	Response = 92463922
7.310	Response = 253858290
7.598	Response = 170713365
8.122	Response = 145343324



Manual Integration Results

6.118	Response = 47175035	M
7.166	Response = 105331740	M
7.310	Response = 246654313	M
7.598	Response = 186406094	M
8.122	Response = 155057964	M

Reviewer: wellsd, 15-Jun-2017 13:47:11

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/30 Calibration Date: 06/15/2017 00:21

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06140030.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		1.159		45.6	50.0	-8.7	20.0
alpha-BHC	Lin2		1.810		45.6	50.0	-8.9	20.0
gamma-BHC (Lindane)	Lin2		1.653		46.1	50.0	-7.8	20.0
beta-BHC	Lin2		0.6142		44.3	50.0	-11.4	20.0
delta-BHC	Lin2		1.733		45.6	50.0	-8.8	20.0
Heptachlor	Lin2		1.578		47.7	50.0	-4.7	20.0
Aldrin	Lin2		1.551		46.0	50.0	-8.1	20.0
Heptachlor epoxide	Lin2		1.345		46.2	50.0	-7.6	20.0
gamma-Chlordane	Lin2		1.494		46.5	50.0	-7.1	20.0
alpha-Chlordane	Lin2		1.424		46.3	50.0	-7.4	20.0
4,4'-DDE	Lin2		1.449		45.8	50.0	-8.3	20.0
Endosulfan I	Lin2		1.301		46.4	50.0	-7.2	20.0
Dieldrin	Lin2		1.457		46.1	50.0	-7.7	20.0
Endrin	Lin2		1.328		51.8	50.0	3.7	20.0
4,4'-DDD	Lin2		1.219		45.7	50.0	-8.6	20.0
Endosulfan II	Lin2		1.245		47.0	50.0	-5.9	20.0
4,4'-DDT	Lin2		1.242		48.4	50.0	-3.2	20.0
Endrin aldehyde	Lin2		0.9671		45.1	50.0	-9.7	20.0
Methoxychlor	Lin2		0.5351		47.9	50.0	-4.3	20.0
Endosulfan sulfate	Lin2		1.130		46.1	50.0	-7.7	20.0
Endrin ketone	Lin2		1.193		43.9	50.0	-12.2	20.0
Tetrachloro-m-xylene (Surr)	Lin2		1.021		44.8	50.0	-10.4	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.7057		45.4	50.0	-9.2	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/30 Calibration Date: 06/15/2017 00:21

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06140030.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.20	4.19	4.21
alpha-BHC	4.37	4.36	4.38
gamma-BHC (Lindane)	4.68	4.67	4.69
beta-BHC	4.76	4.76	4.78
delta-BHC	4.94	4.93	4.95
Heptachlor	5.15	5.14	5.16
Aldrin	5.43	5.43	5.45
Heptachlor epoxide	6.06	6.05	6.07
gamma-Chlordane	6.20	6.19	6.21
alpha-Chlordane	6.36	6.35	6.37
4,4'-DDE	6.46	6.45	6.47
Endosulfan I	6.53	6.52	6.54
Dieldrin	6.82	6.81	6.83
Endrin	7.09	7.08	7.10
4,4'-DDD	7.16	7.15	7.17
Endosulfan II	7.34	7.33	7.35
4,4'-DDT	7.47	7.46	7.48
Endrin aldehyde	7.79	7.78	7.80
Methoxychlor	7.98	7.98	8.00
Endosulfan sulfate	8.24	8.23	8.25
Endrin ketone	8.52	8.51	8.53
Tetrachloro-m-xylene (Surr)	3.82	3.81	3.83
DCB Decachlorobiphenyl (Surr)	9.50	9.49	9.51

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140030.D
Lims ID: CCV AB
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2017 00:21:02 ALS Bottle#: 24 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV AB
Misc. Info.: 280-0059760-030
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:58:30 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						181.6	
2						180.6	
						RPD = 0.53	
* 2 1-Bromo-2-nitrobenzene							
1	2.997	2.997	0.001	2173382474	150.0	150.0	
2	2.772	2.771	0.001	467775250	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.823	3.824	-0.001	739504286	50.0	44.8	
2	3.685	3.684	0.001	147219309	50.0	45.7	
						RPD = 1.94	
5 Hexachlorobenzene							
1	4.203	4.204	-0.001	839542563	50.0	45.6	
2	4.111	4.110	0.001	153447614	50.0	45.8	
						RPD = 0.30	
8 alpha-BHC							
1	4.371	4.372	-0.001	1310976117	50.0	45.6	
2	4.248	4.248	0.000	216312344	50.0	45.6	
						RPD = 0.03	
9 gamma-BHC (Lindane)							
1	4.679	4.680	-0.001	1197279447	50.0	46.1	
2	4.574	4.573	0.001	190493944	50.0	45.5	
						RPD = 1.43	
10 beta-BHC							
1	4.764	4.765	-0.001	444969086	50.0	44.3	
2	4.655	4.654	0.001	77458719	50.0	44.2	
						RPD = 0.28	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.937	4.939	-0.002	1255313097	50.0	45.6	
2	4.927	4.928	-0.001	195967571	50.0	45.4	
						RPD = 0.43	
15 Heptachlor							
1	5.147	5.149	-0.002	1143087745	50.0	47.7	
2	4.985	4.984	0.001	178869358	50.0	46.2	
						RPD = 3.07	
16 Aldrin							
1	5.434	5.435	-0.001	1123636196	50.0	46.0	
2	5.291	5.291	0.000	174792892	50.0	45.6	
						RPD = 0.74	
18 Isodrin							
1	5.763	5.764	-0.001	862178001	50.0	46.1	
2	5.654	5.654	0.000	136284908	50.0	45.6	
						RPD = 0.92	
21 Heptachlor epoxide							
1	6.057	6.059	-0.002	974541962	50.0	46.2	
2	5.837	5.837	0.000	153177450	50.0	45.0	
						RPD = 2.62	
22 gamma-Chlordane							
1	6.199	6.202	-0.003	1082473857	50.0	46.5	
2	6.038	6.039	-0.001	159258609	50.0	44.7	
						RPD = 3.78	
23 alpha-Chlordane							
1	6.362	6.363	-0.001	1031381826	50.0	46.3	
2	6.206	6.207	-0.001	152889985	50.0	45.1	
						RPD = 2.72	
24 4,4'-DDE							
1	6.457	6.459	-0.002	1049921045	50.0	45.8	
2	6.422	6.424	-0.002	152167823	50.0	43.5	
						RPD = 5.15	
25 Endosulfan I							
1	6.532	6.534	-0.002	942687204	50.0	46.4	
2	6.270	6.270	0.000	142089811	50.0	43.6	
						RPD = 6.32	
27 Dieldrin							
1	6.817	6.819	-0.002	1055650489	50.0	46.1	
2	6.609	6.609	0.000	160969219	50.0	44.7	
						RPD = 3.17	
30 Endrin							
1	7.086	7.088	-0.002	962195450	50.0	51.8	
2	6.969	6.969	0.000	147429618	50.0	51.2	
						RPD = 1.20	
32 4,4'-DDD							
1	7.161	7.163	-0.002	883361280	50.0	45.7	
2	7.120	7.121	-0.001	127099147	50.0	45.7	
						RPD = 0.06	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.336	7.337	-0.001	902240491	50.0	47.0	
2	7.213	7.214	-0.001	136363287	50.0	45.6	
						RPD = 2.98	
35 4,4'-DDT							
1	7.472	7.474	-0.002	899774134	50.0	48.4	
2	7.468	7.469	-0.001	128041171	50.0	48.1	
						RPD = 0.68	
36 Endrin aldehyde							
1	7.788	7.791	-0.003	700651286	50.0	45.1	
2	7.589	7.589	0.000	108702025	50.0	44.7	
						RPD = 0.86	
37 Methoxychlor							
1	7.984	7.986	-0.002	387642968	50.0	47.9	
2	8.192	8.192	0.000	60962891	50.0	48.3	
						RPD = 0.88	
38 Mirex							
1	8.130	8.132	-0.002	576944142	50.0	44.4	
2	8.362	8.363	-0.001	87719929	50.0	43.4	
						RPD = 2.32	
39 Endosulfan sulfate							
1	8.237	8.239	-0.002	818698495	50.0	46.1	
2	7.882	7.883	-0.001	122899297	50.0	45.7	
						RPD = 0.92	
40 Endrin ketone							
1	8.516	8.519	-0.003	864544012	50.0	43.9	
2	8.409	8.410	-0.001	137838422	50.0	45.1	
						RPD = 2.59	
$ 41 DCB Decachlorobiphenyl							
1	9.496	9.497	-0.001	511214446	50.0	45.4	
2	9.605	9.606	-0.001	92426192	50.0	47.5	
						RPD = 4.63	
S 3 Endosulfan, Total							
1						139.6	
2						134.9	
						RPD = 3.38	

Reagents:

8081IcalL4_00026	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

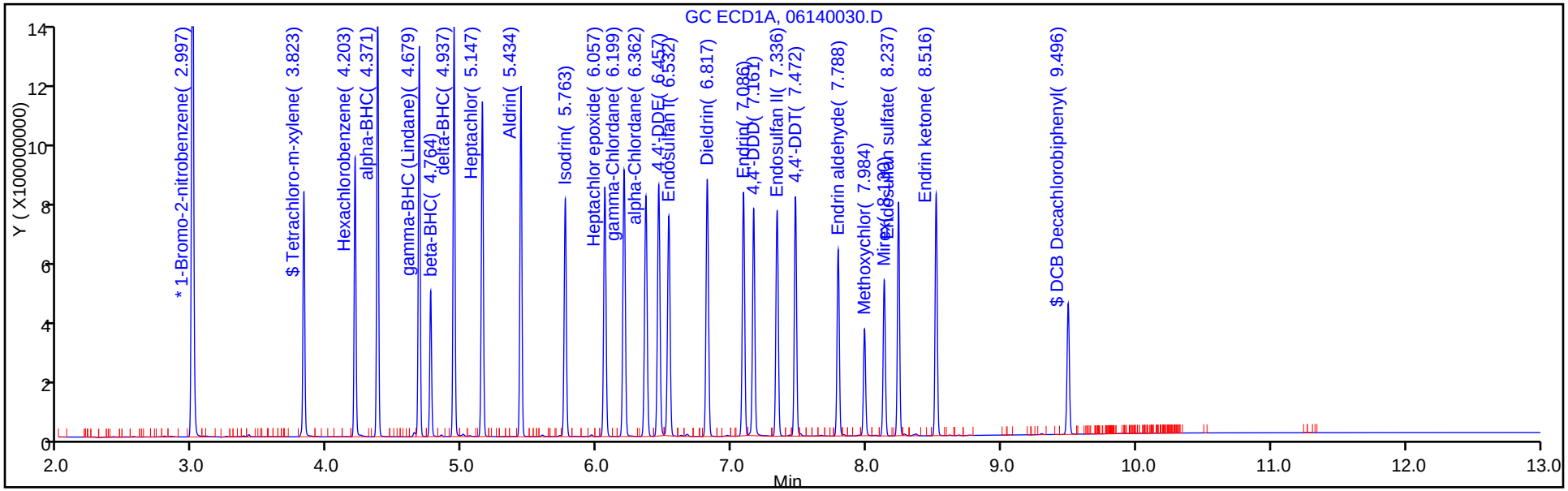
Report Date: 15-Jun-2017 13:58:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

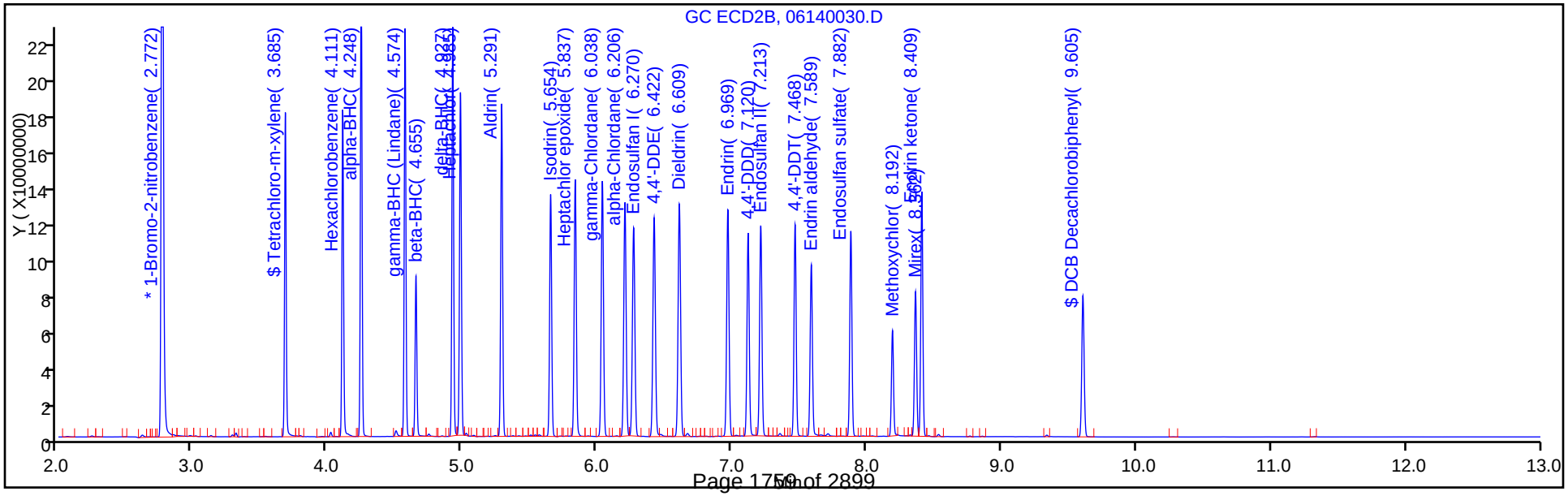
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Injection Date:	15-Jun-2017 00:21:02	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV AB			Worklist Smp#:	30
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/30 Calibration Date: 06/15/2017 00:21

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06140030.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		0.9841		45.8	50.0	-8.4	20.0
alpha-BHC	Lin2		1.387		45.6	50.0	-8.8	20.0
gamma-BHC (Lindane)	Lin2		1.222		45.5	50.0	-9.1	20.0
beta-BHC	Lin2		0.4968		44.2	50.0	-11.6	20.0
delta-BHC	Lin2		1.257		45.4	50.0	-9.2	20.0
Heptachlor	Lin2		1.147		46.2	50.0	-7.6	20.0
Aldrin	Lin2		1.121		45.6	50.0	-8.8	20.0
Heptachlor epoxide	Lin2		0.9824		45.0	50.0	-10.0	20.0
gamma-Chlordane	Lin2		1.021		44.7	50.0	-10.5	20.0
alpha-Chlordane	Lin2		0.9805		45.1	50.0	-9.9	20.0
Endosulfan I	Lin2		0.9113		43.6	50.0	-12.9	20.0
4,4'-DDE	Lin2		0.9759		43.5	50.0	-12.9	20.0
Dieldrin	Lin2		1.032		44.7	50.0	-10.6	20.0
Endrin	Lin2		0.9455		51.2	50.0	2.4	20.0
4,4'-DDD	Lin2		0.8151		45.7	50.0	-8.5	20.0
Endosulfan II	Lin2		0.8745		45.6	50.0	-8.7	20.0
4,4'-DDT	Lin2		0.8212		48.1	50.0	-3.8	20.0
Endrin aldehyde	Lin2		0.6971		44.7	50.0	-10.5	20.0
Endosulfan sulfate	Lin2		0.7882		45.7	50.0	-8.6	20.0
Methoxychlor	Lin2		0.3910		48.3	50.0	-3.4	20.0
Endrin ketone	Lin2		0.8840		45.1	50.0	-9.9	20.0
Tetrachloro-m-xylene (Surr)	Lin2		0.9442		45.7	50.0	-8.7	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.5928		47.5	50.0	-4.9	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/30 Calibration Date: 06/15/2017 00:21

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06140030.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.11	4.10	4.12
alpha-BHC	4.25	4.24	4.26
gamma-BHC (Lindane)	4.57	4.56	4.58
beta-BHC	4.66	4.64	4.66
delta-BHC	4.93	4.92	4.94
Heptachlor	4.99	4.97	4.99
Aldrin	5.29	5.28	5.30
Heptachlor epoxide	5.84	5.83	5.85
gamma-Chlordane	6.04	6.03	6.05
alpha-Chlordane	6.21	6.20	6.22
Endosulfan I	6.27	6.26	6.28
4,4'-DDE	6.42	6.41	6.43
Dieldrin	6.61	6.60	6.62
Endrin	6.97	6.96	6.98
4,4'-DDD	7.12	7.11	7.13
Endosulfan II	7.21	7.20	7.22
4,4'-DDT	7.47	7.46	7.48
Endrin aldehyde	7.59	7.58	7.60
Endosulfan sulfate	7.88	7.87	7.89
Methoxychlor	8.19	8.18	8.20
Endrin ketone	8.41	8.40	8.42
Tetrachloro-m-xylene (Surr)	3.69	3.67	3.69
DCB Decachlorobiphenyl (Surr)	9.61	9.60	9.62

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140030.D
Lims ID: CCV AB
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2017 00:21:02 ALS Bottle#: 24 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV AB
Misc. Info.: 280-0059760-030
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:58:30 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						181.6	
2						180.6	
						RPD = 0.53	
* 2 1-Bromo-2-nitrobenzene							
1	2.997	2.997	0.001	2173382474	150.0	150.0	
2	2.772	2.771	0.001	467775250	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.823	3.824	-0.001	739504286	50.0	44.8	
2	3.685	3.684	0.001	147219309	50.0	45.7	
						RPD = 1.94	
5 Hexachlorobenzene							
1	4.203	4.204	-0.001	839542563	50.0	45.6	
2	4.111	4.110	0.001	153447614	50.0	45.8	
						RPD = 0.30	
8 alpha-BHC							
1	4.371	4.372	-0.001	1310976117	50.0	45.6	
2	4.248	4.248	0.000	216312344	50.0	45.6	
						RPD = 0.03	
9 gamma-BHC (Lindane)							
1	4.679	4.680	-0.001	1197279447	50.0	46.1	
2	4.574	4.573	0.001	190493944	50.0	45.5	
						RPD = 1.43	
10 beta-BHC							
1	4.764	4.765	-0.001	444969086	50.0	44.3	
2	4.655	4.654	0.001	77458719	50.0	44.2	
						RPD = 0.28	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.937	4.939	-0.002	1255313097	50.0	45.6	
2	4.927	4.928	-0.001	195967571	50.0	45.4	
						RPD = 0.43	
15 Heptachlor							
1	5.147	5.149	-0.002	1143087745	50.0	47.7	
2	4.985	4.984	0.001	178869358	50.0	46.2	
						RPD = 3.07	
16 Aldrin							
1	5.434	5.435	-0.001	1123636196	50.0	46.0	
2	5.291	5.291	0.000	174792892	50.0	45.6	
						RPD = 0.74	
18 Isodrin							
1	5.763	5.764	-0.001	862178001	50.0	46.1	
2	5.654	5.654	0.000	136284908	50.0	45.6	
						RPD = 0.92	
21 Heptachlor epoxide							
1	6.057	6.059	-0.002	974541962	50.0	46.2	
2	5.837	5.837	0.000	153177450	50.0	45.0	
						RPD = 2.62	
22 gamma-Chlordane							
1	6.199	6.202	-0.003	1082473857	50.0	46.5	
2	6.038	6.039	-0.001	159258609	50.0	44.7	
						RPD = 3.78	
23 alpha-Chlordane							
1	6.362	6.363	-0.001	1031381826	50.0	46.3	
2	6.206	6.207	-0.001	152889985	50.0	45.1	
						RPD = 2.72	
24 4,4'-DDE							
1	6.457	6.459	-0.002	1049921045	50.0	45.8	
2	6.422	6.424	-0.002	152167823	50.0	43.5	
						RPD = 5.15	
25 Endosulfan I							
1	6.532	6.534	-0.002	942687204	50.0	46.4	
2	6.270	6.270	0.000	142089811	50.0	43.6	
						RPD = 6.32	
27 Dieldrin							
1	6.817	6.819	-0.002	1055650489	50.0	46.1	
2	6.609	6.609	0.000	160969219	50.0	44.7	
						RPD = 3.17	
30 Endrin							
1	7.086	7.088	-0.002	962195450	50.0	51.8	
2	6.969	6.969	0.000	147429618	50.0	51.2	
						RPD = 1.20	
32 4,4'-DDD							
1	7.161	7.163	-0.002	883361280	50.0	45.7	
2	7.120	7.121	-0.001	127099147	50.0	45.7	
						RPD = 0.06	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.336	7.337	-0.001	902240491	50.0	47.0	
2	7.213	7.214	-0.001	136363287	50.0	45.6	
						RPD = 2.98	
35 4,4'-DDT							
1	7.472	7.474	-0.002	899774134	50.0	48.4	
2	7.468	7.469	-0.001	128041171	50.0	48.1	
						RPD = 0.68	
36 Endrin aldehyde							
1	7.788	7.791	-0.003	700651286	50.0	45.1	
2	7.589	7.589	0.000	108702025	50.0	44.7	
						RPD = 0.86	
37 Methoxychlor							
1	7.984	7.986	-0.002	387642968	50.0	47.9	
2	8.192	8.192	0.000	60962891	50.0	48.3	
						RPD = 0.88	
38 Mirex							
1	8.130	8.132	-0.002	576944142	50.0	44.4	
2	8.362	8.363	-0.001	87719929	50.0	43.4	
						RPD = 2.32	
39 Endosulfan sulfate							
1	8.237	8.239	-0.002	818698495	50.0	46.1	
2	7.882	7.883	-0.001	122899297	50.0	45.7	
						RPD = 0.92	
40 Endrin ketone							
1	8.516	8.519	-0.003	864544012	50.0	43.9	
2	8.409	8.410	-0.001	137838422	50.0	45.1	
						RPD = 2.59	
$ 41 DCB Decachlorobiphenyl							
1	9.496	9.497	-0.001	511214446	50.0	45.4	
2	9.605	9.606	-0.001	92426192	50.0	47.5	
						RPD = 4.63	
S 3 Endosulfan, Total							
1						139.6	
2						134.9	
						RPD = 3.38	

Reagents:

8081IcalL4_00026	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

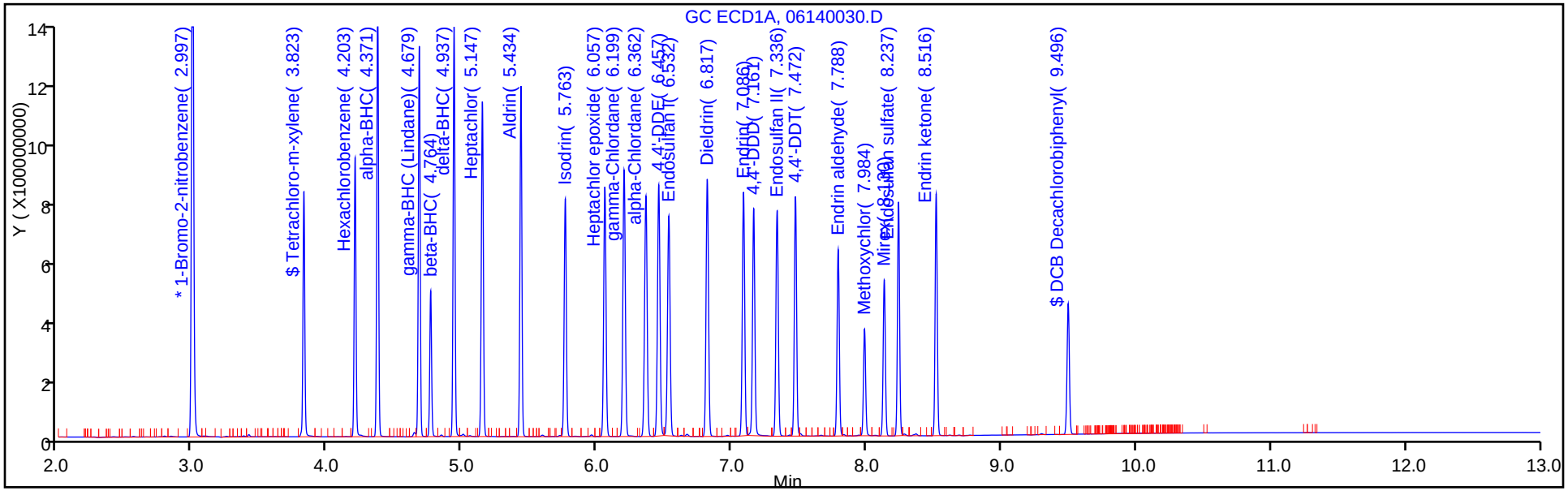
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TestAmerica Denver

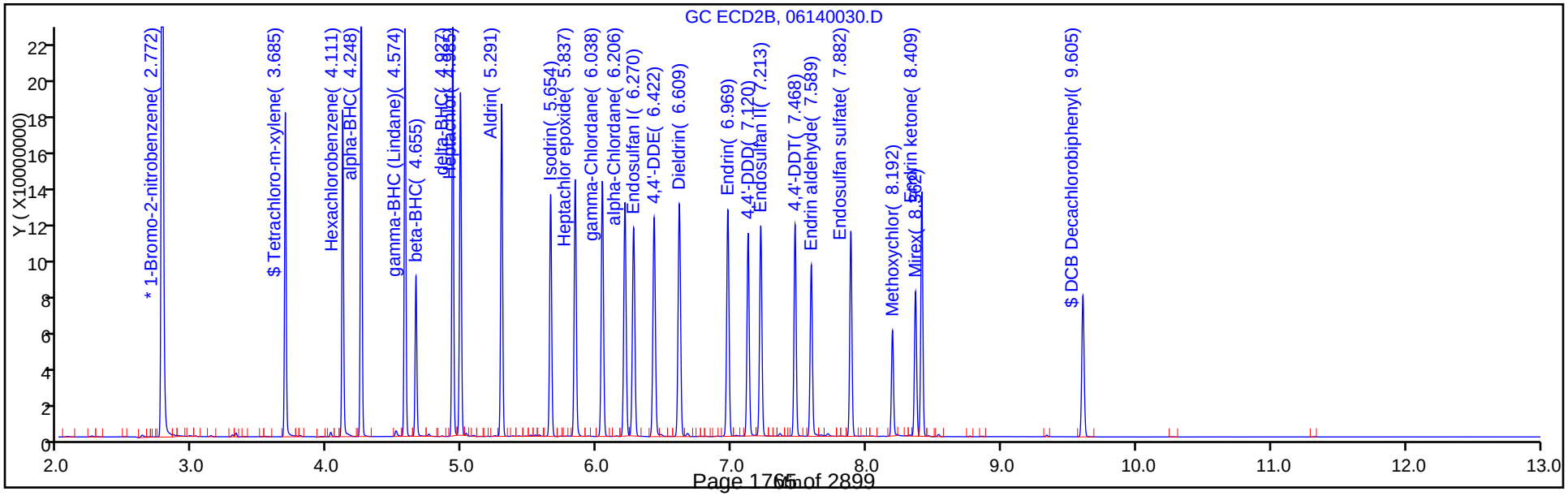
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Injection Date:	15-Jun-2017 00:21:02	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV AB			Worklist Smp#:	30
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/43 Calibration Date: 06/15/2017 04:00

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06140043.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0027		1960	2000	-1.8	20.0
Toxaphene Peak 2	Qua		0.0281		2000	2000	-0.2	20.0
Toxaphene Peak 3	Lin2		0.0196		2050	2000	2.4	20.0
Toxaphene Peak 4	Lin2		0.0494		2190	2000	9.7	20.0
Toxaphene Peak 5	Lin2		0.0542		2120	2000	6.1	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/43 Calibration Date: 06/15/2017 04:00

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06140043.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	5.61	5.59	5.63
Toxaphene Peak 2	6.93	6.91	6.95
Toxaphene Peak 3	7.19	7.17	7.21
Toxaphene Peak 4	7.70	7.68	7.72
Toxaphene Peak 5	8.14	8.12	8.16

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140043.D
Lims ID: CCV TOX
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2017 04:00:28 ALS Bottle#: 37 Worklist Smp#: 43
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV TOX
Misc. Info.: 280-0059760-043
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:58:55 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: wellsd Date: 15-Jun-2017 13:53:53

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.998	2.997	0.001	1924087834	150.0	150.0	
2	2.772	2.771	0.001	426035298	150.0	150.0	
28 Toxaphene							M
1	5.608	5.609	-0.001	68357237	2000.0	1965.0	M
1	6.927	6.929	-0.002	722025231	2000.0	1996.5	M
1	7.191	7.192	-0.001	501493649	2000.0	2048.1	M
1	7.697	7.697	0.000	1267477716	2000.0	2194.9	M
1	8.139	8.140	-0.001	1389721620	2000.0	2121.2	M
		Average of Peak Amounts =				2065.1	
2	6.118	6.119	-0.001	49064869	2000.0	1985.7	M
2	7.166	7.168	-0.002	105397511	2000.0	1888.4	M
2	7.311	7.311	0.000	250866633	2000.0	1767.1	M
2	7.598	7.600	-0.002	187364820	2000.0	1952.8	M
2	8.122	8.122	0.000	154266468	2000.0	1880.2	M
		Average of Peak Amounts =				1894.8	
						RPD = 8.60	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00012 Amount Added: 1.00 Units: mL
8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

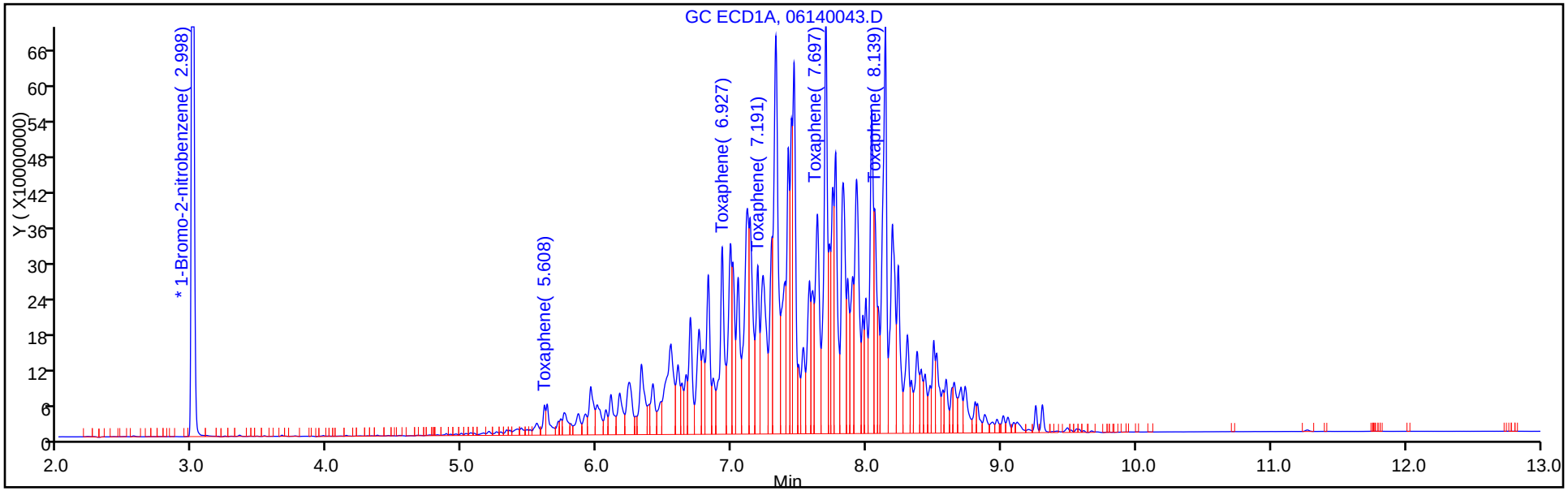
Report Date: 15-Jun-2017 13:58:55 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

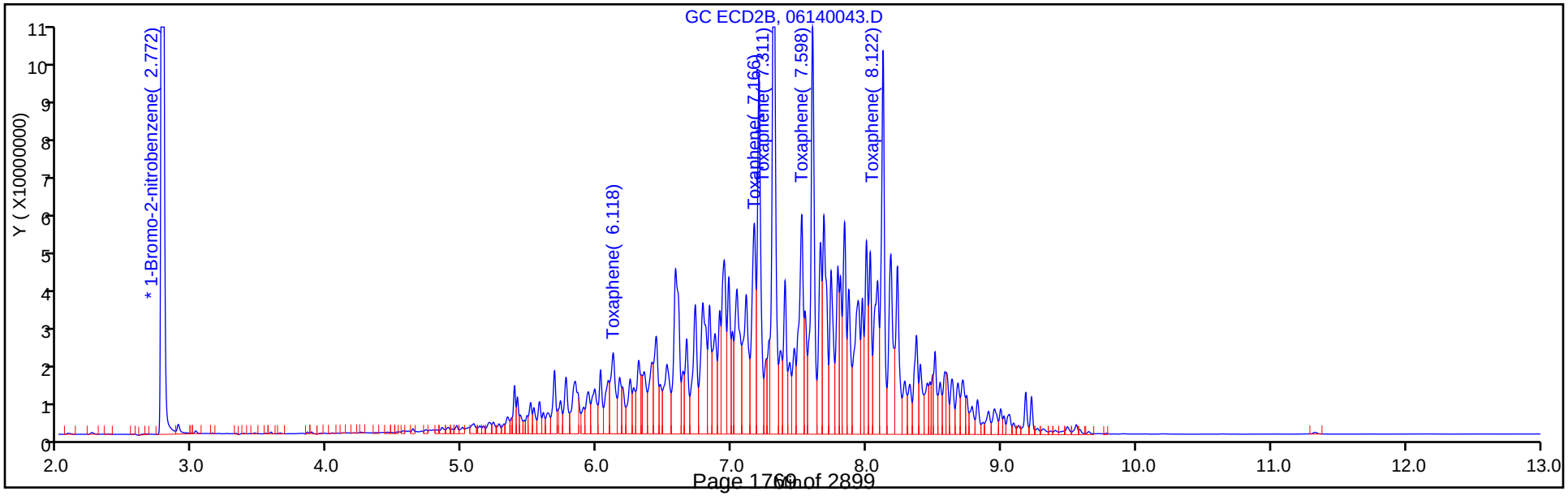
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140043.D

Injection Date:	15-Jun-2017 04:00:28	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV TOX			Worklist Smp#:	43
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 15-Jun-2017 13:58:56 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140043.D

Injection Date: 15-Jun-2017 04:00:28 Instrument ID: SGC_P1

Lims ID: CCV TOX

Client ID:

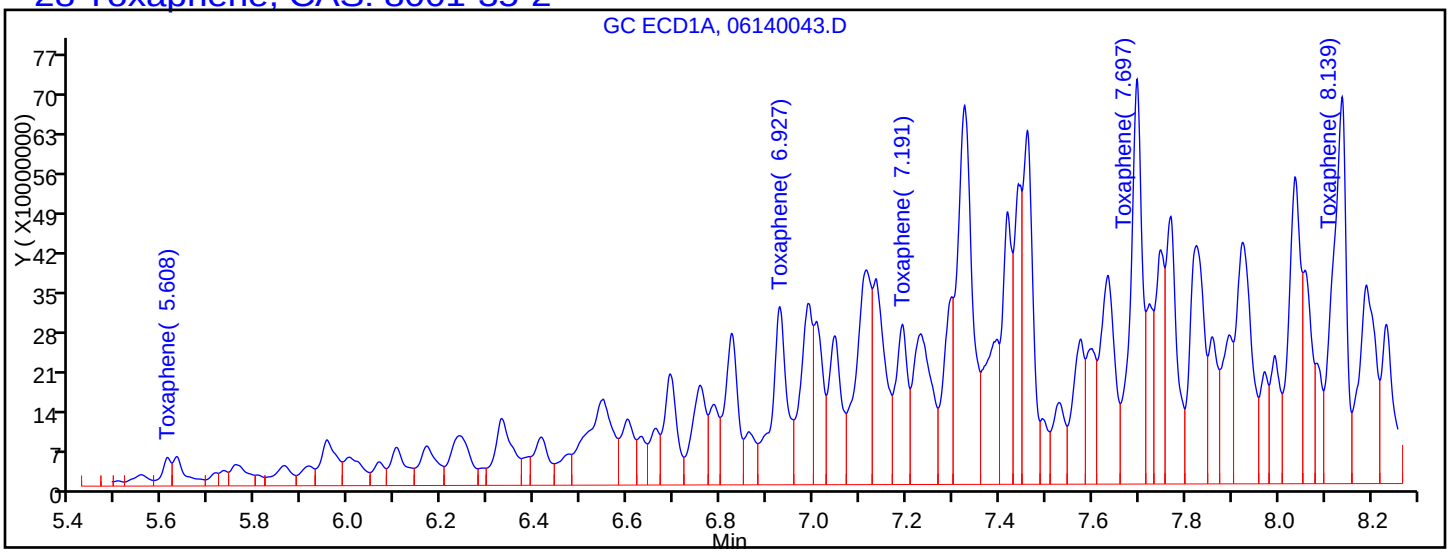
Operator ID: DAW ALS Bottle#: 37 Worklist Smp#: 43

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

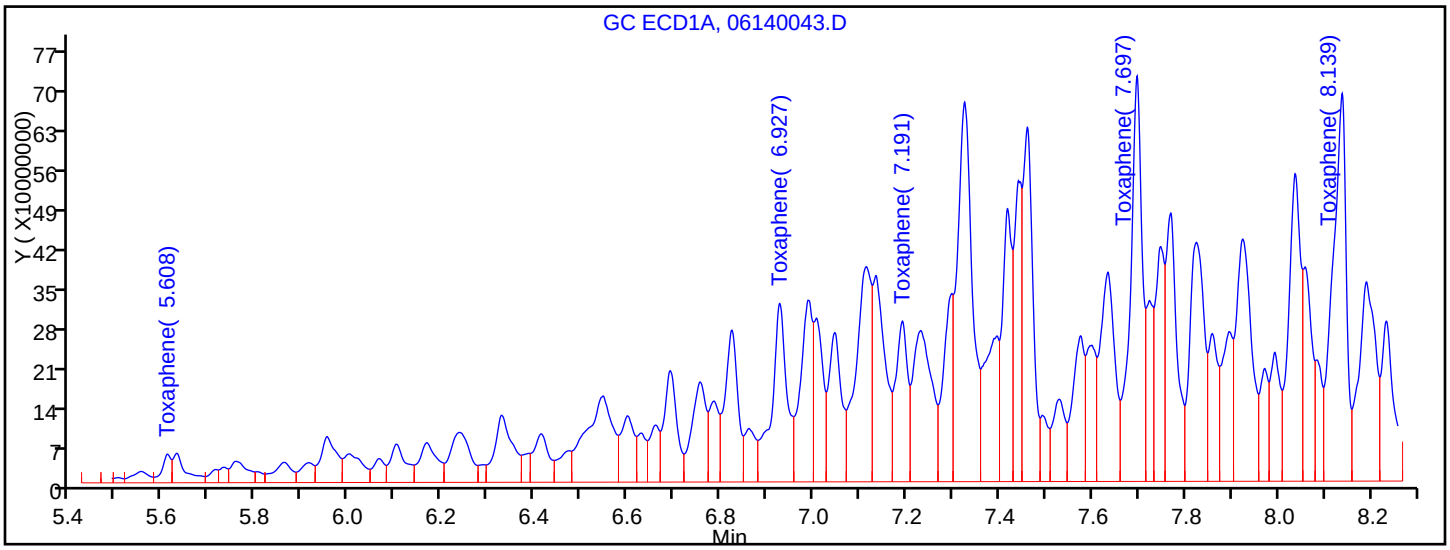
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.608	Response = 68221852
6.927	Response = 718639985
7.191	Response = 499505278
7.697	Response = 1263719389
8.139	Response = 1384777981



Manual Integration Results

5.608	Response = 68357237	M
6.927	Response = 722025231	M
7.191	Response = 501493649	M
7.697	Response = 1267477716	M
8.139	Response = 1389721620	M

Reviewer: wellsd, 15-Jun-2017 13:53:51

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/43 Calibration Date: 06/15/2017 04:00

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06140043.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0086		1990	2000	-0.7	20.0
Toxaphene Peak 2	Lin2		0.0186		1890	2000	-5.6	20.0
Toxaphene Peak 3	Lin2		0.0442		1770	2000	-11.6	20.0
Toxaphene Peak 4	Lin2		0.0330		1950	2000	-2.4	20.0
Toxaphene Peak 5	Lin2		0.0272		1880	2000	-6.0	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/43 Calibration Date: 06/15/2017 04:00

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06140043.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	6.12	6.10	6.14
Toxaphene Peak 2	7.17	7.15	7.19
Toxaphene Peak 3	7.31	7.29	7.33
Toxaphene Peak 4	7.60	7.58	7.62
Toxaphene Peak 5	8.12	8.10	8.14

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140043.D
Lims ID: CCV TOX
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2017 04:00:28 ALS Bottle#: 37 Worklist Smp#: 43
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV TOX
Misc. Info.: 280-0059760-043
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:58:55 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: wellsd Date: 15-Jun-2017 13:53:53

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.998	2.997	0.001	1924087834	150.0	150.0	
2	2.772	2.771	0.001	426035298	150.0	150.0	
28 Toxaphene							M
1	5.608	5.609	-0.001	68357237	2000.0	1965.0	M
1	6.927	6.929	-0.002	722025231	2000.0	1996.5	M
1	7.191	7.192	-0.001	501493649	2000.0	2048.1	M
1	7.697	7.697	0.000	1267477716	2000.0	2194.9	M
1	8.139	8.140	-0.001	1389721620	2000.0	2121.2	M
		Average of Peak Amounts =				2065.1	
2	6.118	6.119	-0.001	49064869	2000.0	1985.7	M
2	7.166	7.168	-0.002	105397511	2000.0	1888.4	M
2	7.311	7.311	0.000	250866633	2000.0	1767.1	M
2	7.598	7.600	-0.002	187364820	2000.0	1952.8	M
2	8.122	8.122	0.000	154266468	2000.0	1880.2	M
		Average of Peak Amounts =				1894.8	
						RPD = 8.60	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00012 Amount Added: 1.00 Units: mL
8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

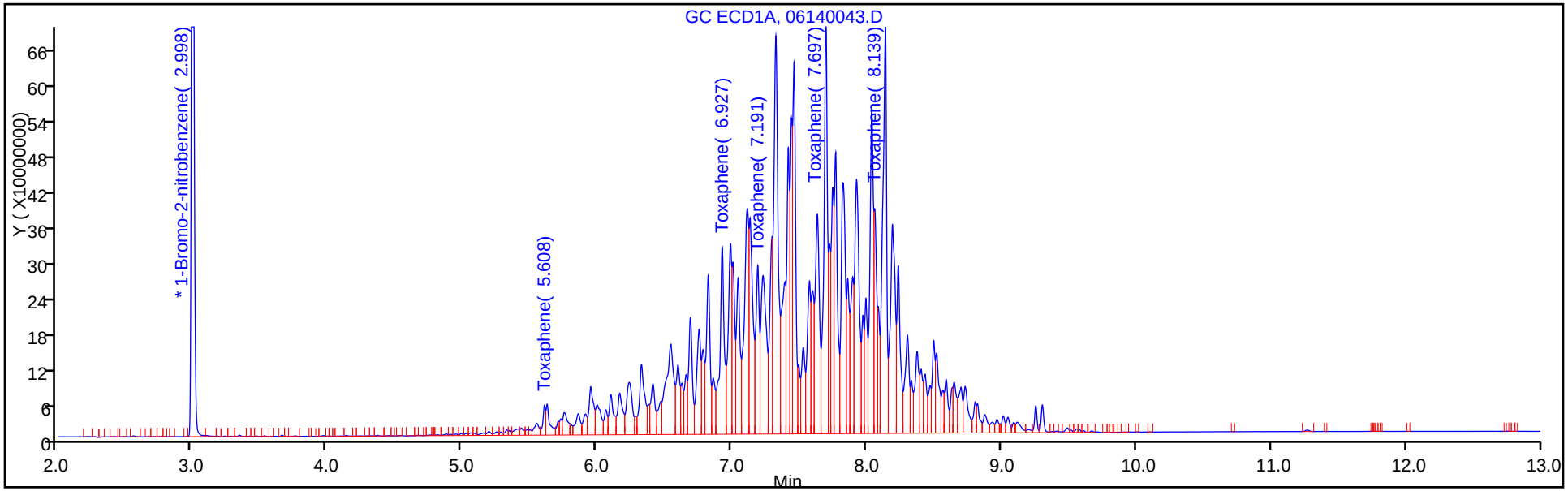
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TestAmerica Denver

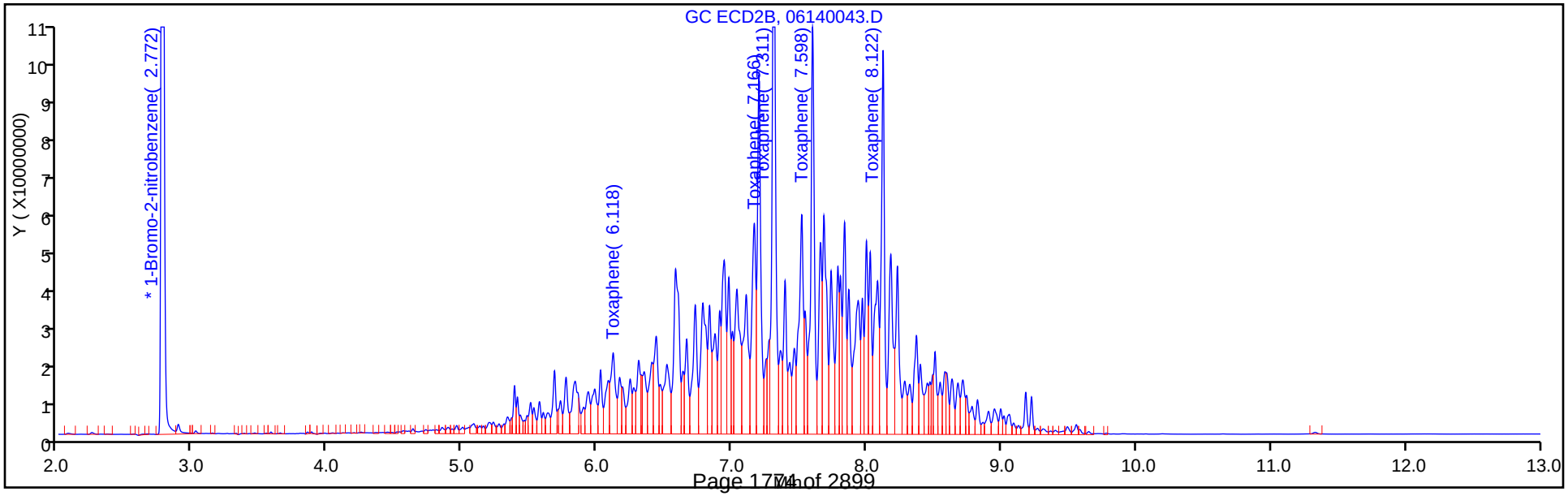
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140043.D

Injection Date:	15-Jun-2017 04:00:28	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV TOX			Worklist Smp#:	43
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 15-Jun-2017 13:58:56 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140043.D

Injection Date: 15-Jun-2017 04:00:28 Instrument ID: SGC_P1

Lims ID: CCV TOX

Client ID:

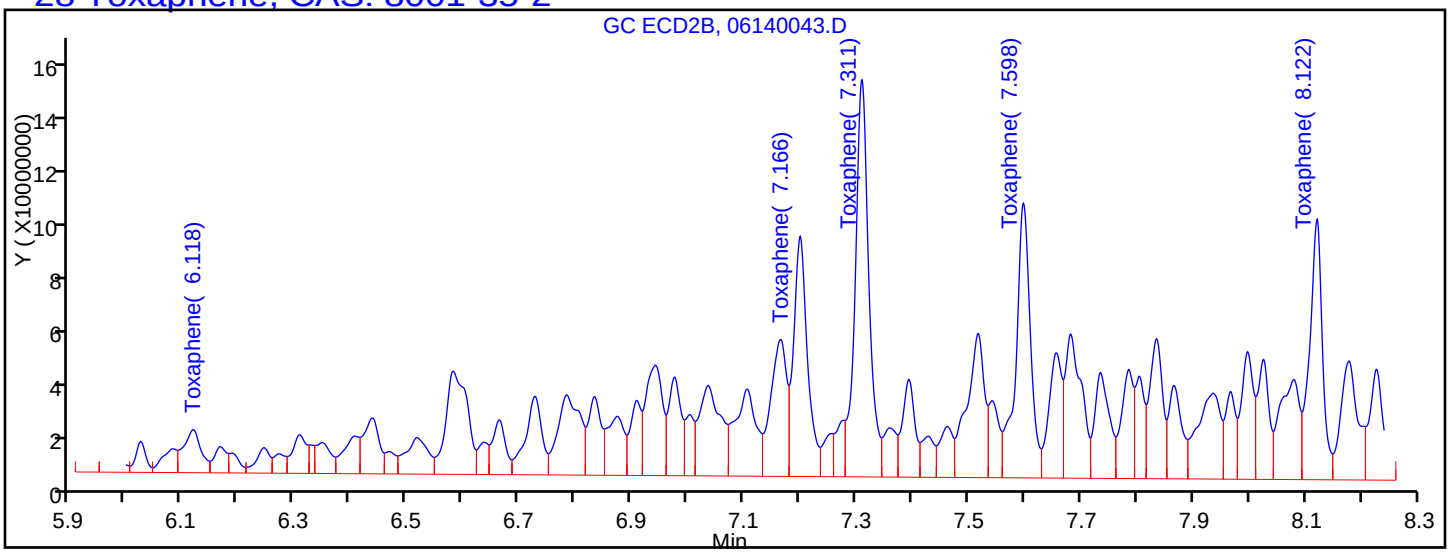
Operator ID: DAW ALS Bottle#: 37 Worklist Smp#: 43

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

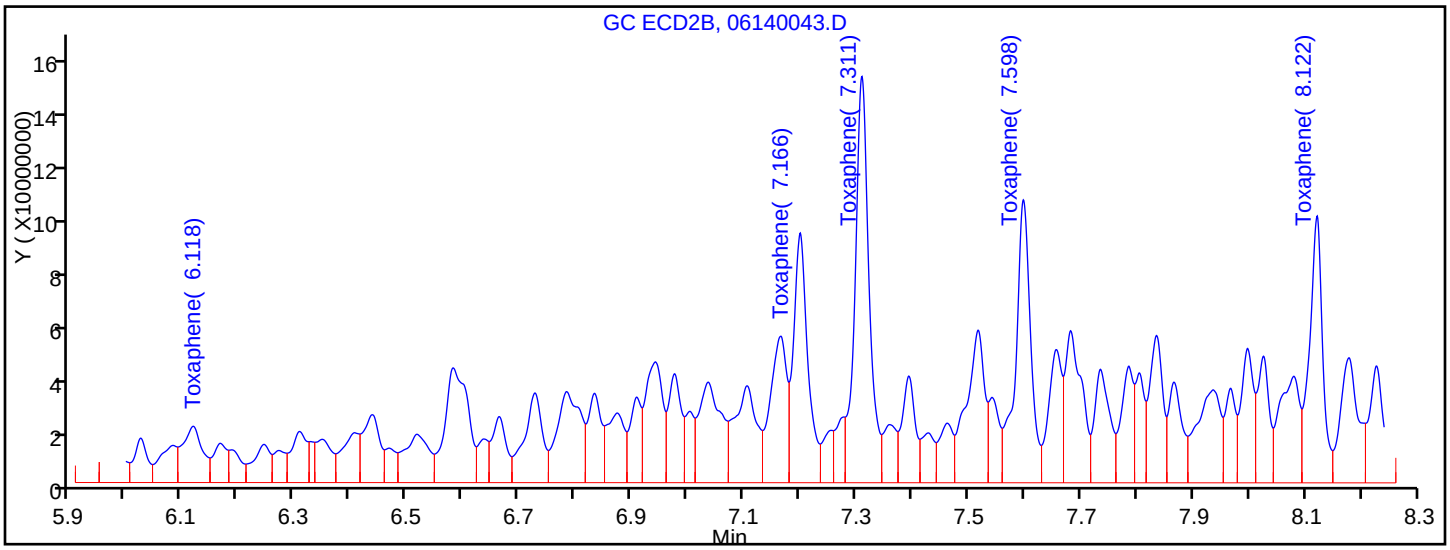
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.118	Response = 33113272
7.166	Response = 95720967
7.311	Response = 238346531
7.598	Response = 175286418
8.122	Response = 146834043



Manual Integration Results

6.118	Response = 49064869	M
7.166	Response = 105397511	M
7.311	Response = 250866633	M
7.598	Response = 187364820	M
8.122	Response = 154266468	M

Reviewer: wellsd, 15-Jun-2017 13:53:46

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/45 Calibration Date: 06/15/2017 04:34

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06140045.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		1.212		47.7	50.0	-4.5	20.0
alpha-BHC	Lin2		1.886		47.5	50.0	-5.0	20.0
gamma-BHC (Lindane)	Lin2		1.721		48.0	50.0	-4.0	20.0
beta-BHC	Lin2		0.6379		46.0	50.0	-7.9	20.0
delta-BHC	Lin2		1.814		47.7	50.0	-4.6	20.0
Heptachlor	Lin2		1.651		49.9	50.0	-0.3	20.0
Aldrin	Lin2		1.641		48.6	50.0	-2.8	20.0
Heptachlor epoxide	Lin2		1.422		48.8	50.0	-2.4	20.0
gamma-Chlordane	Lin2		1.590		49.4	50.0	-1.1	20.0
alpha-Chlordane	Lin2		1.516		49.3	50.0	-1.4	20.0
4,4'-DDE	Lin2		1.538		48.6	50.0	-2.7	20.0
Endosulfan I	Lin2		1.374		49.0	50.0	-2.0	20.0
Dieldrin	Lin2		1.552		49.1	50.0	-1.7	20.0
Endrin	Lin2		1.404		54.8	50.0	9.6	20.0
4,4'-DDD	Lin2		1.303		48.8	50.0	-2.4	20.0
Endosulfan II	Lin2		1.334		50.4	50.0	0.7	20.0
4,4'-DDT	Lin2		1.321		51.5	50.0	2.9	20.0
Endrin aldehyde	Lin2		1.051		49.1	50.0	-1.9	20.0
Methoxychlor	Lin2		0.5751		51.5	50.0	2.9	20.0
Endosulfan sulfate	Lin2		1.243		50.7	50.0	1.4	20.0
Endrin ketone	Lin2		1.323		48.7	50.0	-2.7	20.0
Tetrachloro-m-xylene (Surr)	Lin2		1.061		46.6	50.0	-6.9	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.7661		49.3	50.0	-1.4	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/45 Calibration Date: 06/15/2017 04:34

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06140045.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.20	4.19	4.21
alpha-BHC	4.37	4.36	4.38
gamma-BHC (Lindane)	4.68	4.67	4.69
beta-BHC	4.76	4.76	4.78
delta-BHC	4.94	4.93	4.95
Heptachlor	5.15	5.14	5.16
Aldrin	5.43	5.43	5.45
Heptachlor epoxide	6.06	6.05	6.07
gamma-Chlordane	6.20	6.19	6.21
alpha-Chlordane	6.36	6.35	6.37
4,4'-DDE	6.46	6.45	6.47
Endosulfan I	6.53	6.52	6.54
Dieldrin	6.82	6.81	6.83
Endrin	7.09	7.08	7.10
4,4'-DDD	7.16	7.15	7.17
Endosulfan II	7.34	7.33	7.35
4,4'-DDT	7.47	7.46	7.48
Endrin aldehyde	7.79	7.78	7.80
Methoxychlor	7.98	7.98	8.00
Endosulfan sulfate	8.24	8.23	8.25
Endrin ketone	8.52	8.51	8.53
Tetrachloro-m-xylene (Surr)	3.82	3.81	3.83
DCB Decachlorobiphenyl (Surr)	9.50	9.49	9.51

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140045.D
Lims ID: CCV AB
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2017 04:34:15 ALS Bottle#: 39 Worklist Smp#: 45
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV AB
Misc. Info.: 280-0059760-045
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:59:00 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						189.2	
2						186.1	
						RPD = 1.63	
* 2 1-Bromo-2-nitrobenzene							
1	2.998	2.997	0.001	2113936006	150.0	150.0	
2	2.771	2.771	0.000	462135975	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.824	3.824	0.000	747920761	50.0	46.6	
2	3.684	3.684	0.000	149855540	50.0	47.1	
						RPD = 1.07	
5 Hexachlorobenzene							
1	4.204	4.204	0.000	854038784	50.0	47.7	
2	4.111	4.110	0.001	156502624	50.0	47.3	
						RPD = 0.95	
8 alpha-BHC							
1	4.371	4.372	-0.001	1329156003	50.0	47.5	
2	4.249	4.248	0.001	220025689	50.0	46.9	
						RPD = 1.15	
9 gamma-BHC (Lindane)							
1	4.679	4.680	-0.001	1212529101	50.0	48.0	
2	4.574	4.573	0.001	193794179	50.0	46.8	
						RPD = 2.48	
10 beta-BHC							
1	4.764	4.765	-0.001	449481804	50.0	46.0	
2	4.654	4.654	0.000	78682026	50.0	45.5	
						RPD = 1.22	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.938	4.939	-0.001	1278252710	50.0	47.7	
2	4.928	4.928	0.000	200082026	50.0	46.9	
						RPD = 1.66	
15 Heptachlor							
1	5.149	5.149	0.000	1163497492	50.0	49.9	
2	4.985	4.984	0.001	182911147	50.0	47.8	
						RPD = 4.12	
16 Aldrin							
1	5.434	5.435	-0.001	1156085229	50.0	48.6	
2	5.291	5.291	0.000	180204632	50.0	47.6	
						RPD = 2.03	
18 Isodrin							
1	5.763	5.764	-0.001	889079953	50.0	48.8	
2	5.654	5.654	0.000	140877565	50.0	47.8	
						RPD = 2.18	
21 Heptachlor epoxide							
1	6.057	6.059	-0.002	1002012171	50.0	48.8	
2	5.837	5.837	0.000	158107794	50.0	47.0	
						RPD = 3.73	
22 gamma-Chlordane							
1	6.200	6.202	-0.002	1120618608	50.0	49.4	
2	6.039	6.039	0.000	165271625	50.0	47.0	
						RPD = 5.00	
23 alpha-Chlordane							
1	6.362	6.363	-0.001	1068396972	50.0	49.3	
2	6.206	6.207	-0.001	158088489	50.0	47.2	
						RPD = 4.36	
24 4,4'-DDE							
1	6.457	6.459	-0.002	1084015142	50.0	48.6	
2	6.423	6.424	-0.001	158822610	50.0	46.0	
						RPD = 5.52	
25 Endosulfan I							
1	6.532	6.534	-0.002	968037475	50.0	49.0	
2	6.271	6.270	0.001	146691578	50.0	45.6	
						RPD = 7.27	
27 Dieldrin							
1	6.818	6.819	-0.001	1093536305	50.0	49.1	
2	6.610	6.609	0.001	165994481	50.0	46.7	
						RPD = 5.12	
30 Endrin							
1	7.087	7.088	-0.001	989499449	50.0	54.8	
2	6.970	6.969	0.001	150374857	50.0	52.9	
						RPD = 3.53	
32 4,4'-DDD							
1	7.162	7.163	-0.001	917826538	50.0	48.8	
2	7.120	7.121	-0.001	132815738	50.0	48.4	
						RPD = 0.84	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.336	7.337	-0.001	939671110	50.0	50.4	
2	7.214	7.214	0.000	141104019	50.0	47.9	
						RPD = 5.11	
35 4,4'-DDT							
1	7.473	7.474	-0.001	931077629	50.0	51.5	
2	7.469	7.469	0.000	129168552	50.0	49.1	
						RPD = 4.70	
36 Endrin aldehyde							
1	7.789	7.791	-0.002	740768868	50.0	49.1	
2	7.589	7.589	0.000	112679651	50.0	47.0	
						RPD = 4.31	
37 Methoxychlor							
1	7.984	7.986	-0.002	405261759	50.0	51.5	
2	8.192	8.192	0.000	61654190	50.0	49.5	
						RPD = 3.99	
38 Mirex							
1	8.132	8.132	0.000	624671728	50.0	49.5	
2	8.363	8.363	0.000	90659996	50.0	45.4	
						RPD = 8.58	
39 Endosulfan sulfate							
1	8.238	8.239	-0.001	875599073	50.0	50.7	
2	7.882	7.883	-0.001	126953889	50.0	47.8	
						RPD = 5.83	
40 Endrin ketone							
1	8.518	8.519	-0.001	932316603	50.0	48.7	
2	8.410	8.410	0.000	142652344	50.0	47.2	
						RPD = 2.98	
$ 41 DCB Decachlorobiphenyl							
1	9.496	9.497	-0.001	539809620	50.0	49.3	
2	9.607	9.606	0.001	94577985	50.0	49.3	
						RPD = 0.05	
S 3 Endosulfan, Total							
1						150.1	
2						141.2	
						RPD = 6.05	

Reagents:

8081IcalL4_00026	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

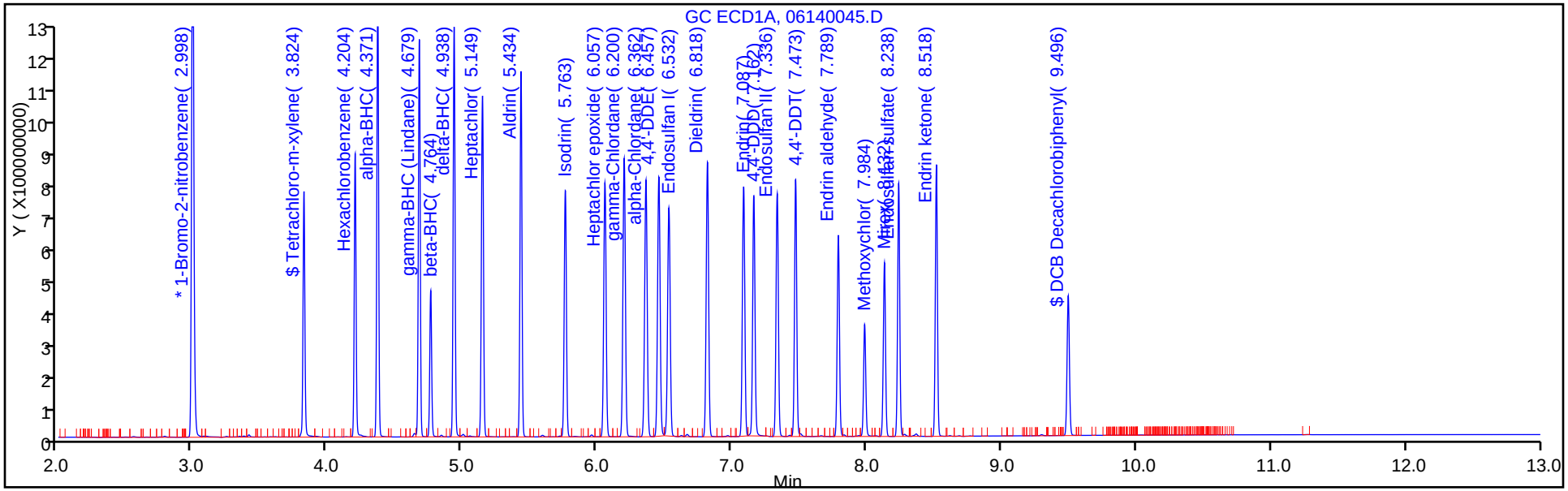
Report Date: 15-Jun-2017 13:59:00 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

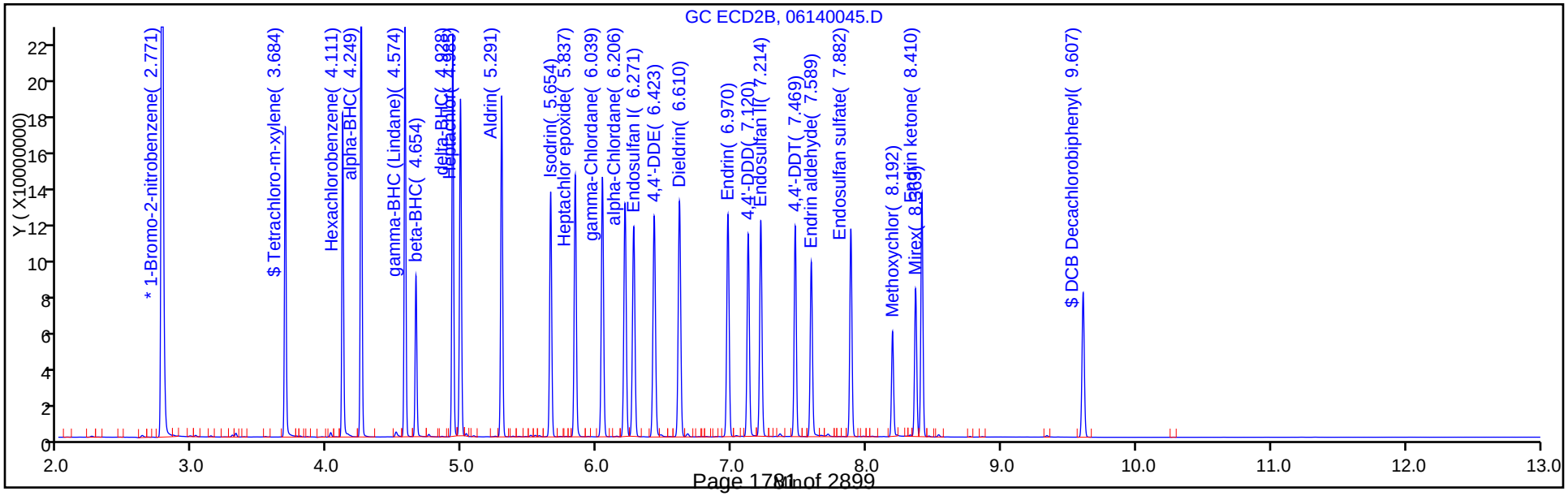
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140045.D

Injection Date:	15-Jun-2017 04:34:15	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV AB			Worklist Smp#:	45
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/45 Calibration Date: 06/15/2017 04:34

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06140045.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		1.016		47.3	50.0	-5.4	20.0
alpha-BHC	Lin2		1.428		46.9	50.0	-6.1	20.0
gamma-BHC (Lindane)	Lin2		1.258		46.8	50.0	-6.4	20.0
beta-BHC	Lin2		0.5108		45.5	50.0	-9.1	20.0
delta-BHC	Lin2		1.299		46.9	50.0	-6.2	20.0
Heptachlor	Lin2		1.187		47.8	50.0	-4.3	20.0
Aldrin	Lin2		1.170		47.6	50.0	-4.8	20.0
Heptachlor epoxide	Lin2		1.026		47.0	50.0	-5.9	20.0
gamma-Chlordane	Lin2		1.073		47.0	50.0	-6.0	20.0
alpha-Chlordane	Lin2		1.026		47.2	50.0	-5.6	20.0
Endosulfan I	Lin2		0.9523		45.6	50.0	-8.9	20.0
4,4'-DDE	Lin2		1.031		46.0	50.0	-8.0	20.0
Dieldrin	Lin2		1.078		46.7	50.0	-6.6	20.0
Endrin	Lin2		0.9762		52.9	50.0	5.8	20.0
4,4'-DDD	Lin2		0.8622		48.4	50.0	-3.2	20.0
Endosulfan II	Lin2		0.9160		47.9	50.0	-4.3	20.0
4,4'-DDT	Lin2		0.8385		49.1	50.0	-1.8	20.0
Endrin aldehyde	Lin2		0.7315		47.0	50.0	-6.0	20.0
Endosulfan sulfate	Lin2		0.8241		47.8	50.0	-4.3	20.0
Methoxychlor	Lin2		0.4002		49.5	50.0	-1.1	20.0
Endrin ketone	Lin2		0.9260		47.2	50.0	-5.5	20.0
Tetrachloro-m-xylene (Surr)	Lin2		0.9728		47.1	50.0	-5.9	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.6140		49.3	50.0	-1.4	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/45 Calibration Date: 06/15/2017 04:34

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06140045.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.11	4.10	4.12
alpha-BHC	4.25	4.24	4.26
gamma-BHC (Lindane)	4.57	4.56	4.58
beta-BHC	4.65	4.64	4.66
delta-BHC	4.93	4.92	4.94
Heptachlor	4.99	4.97	4.99
Aldrin	5.29	5.28	5.30
Heptachlor epoxide	5.84	5.83	5.85
gamma-Chlordane	6.04	6.03	6.05
alpha-Chlordane	6.21	6.20	6.22
Endosulfan I	6.27	6.26	6.28
4,4'-DDE	6.42	6.41	6.43
Dieldrin	6.61	6.60	6.62
Endrin	6.97	6.96	6.98
4,4'-DDD	7.12	7.11	7.13
Endosulfan II	7.21	7.20	7.22
4,4'-DDT	7.47	7.46	7.48
Endrin aldehyde	7.59	7.58	7.60
Endosulfan sulfate	7.88	7.87	7.89
Methoxychlor	8.19	8.18	8.20
Endrin ketone	8.41	8.40	8.42
Tetrachloro-m-xylene (Surr)	3.68	3.67	3.69
DCB Decachlorobiphenyl (Surr)	9.61	9.60	9.62

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140045.D
Lims ID: CCV AB
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2017 04:34:15 ALS Bottle#: 39 Worklist Smp#: 45
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV AB
Misc. Info.: 280-0059760-045
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:59:00 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						189.2	
2						186.1	
						RPD = 1.63	
* 2 1-Bromo-2-nitrobenzene							
1	2.998	2.997	0.001	2113936006	150.0	150.0	
2	2.771	2.771	0.000	462135975	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.824	3.824	0.000	747920761	50.0	46.6	
2	3.684	3.684	0.000	149855540	50.0	47.1	
						RPD = 1.07	
5 Hexachlorobenzene							
1	4.204	4.204	0.000	854038784	50.0	47.7	
2	4.111	4.110	0.001	156502624	50.0	47.3	
						RPD = 0.95	
8 alpha-BHC							
1	4.371	4.372	-0.001	1329156003	50.0	47.5	
2	4.249	4.248	0.001	220025689	50.0	46.9	
						RPD = 1.15	
9 gamma-BHC (Lindane)							
1	4.679	4.680	-0.001	1212529101	50.0	48.0	
2	4.574	4.573	0.001	193794179	50.0	46.8	
						RPD = 2.48	
10 beta-BHC							
1	4.764	4.765	-0.001	449481804	50.0	46.0	
2	4.654	4.654	0.000	78682026	50.0	45.5	
						RPD = 1.22	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.938	4.939	-0.001	1278252710	50.0	47.7	
2	4.928	4.928	0.000	200082026	50.0	46.9	
						RPD = 1.66	
15 Heptachlor							
1	5.149	5.149	0.000	1163497492	50.0	49.9	
2	4.985	4.984	0.001	182911147	50.0	47.8	
						RPD = 4.12	
16 Aldrin							
1	5.434	5.435	-0.001	1156085229	50.0	48.6	
2	5.291	5.291	0.000	180204632	50.0	47.6	
						RPD = 2.03	
18 Isodrin							
1	5.763	5.764	-0.001	889079953	50.0	48.8	
2	5.654	5.654	0.000	140877565	50.0	47.8	
						RPD = 2.18	
21 Heptachlor epoxide							
1	6.057	6.059	-0.002	1002012171	50.0	48.8	
2	5.837	5.837	0.000	158107794	50.0	47.0	
						RPD = 3.73	
22 gamma-Chlordane							
1	6.200	6.202	-0.002	1120618608	50.0	49.4	
2	6.039	6.039	0.000	165271625	50.0	47.0	
						RPD = 5.00	
23 alpha-Chlordane							
1	6.362	6.363	-0.001	1068396972	50.0	49.3	
2	6.206	6.207	-0.001	158088489	50.0	47.2	
						RPD = 4.36	
24 4,4'-DDE							
1	6.457	6.459	-0.002	1084015142	50.0	48.6	
2	6.423	6.424	-0.001	158822610	50.0	46.0	
						RPD = 5.52	
25 Endosulfan I							
1	6.532	6.534	-0.002	968037475	50.0	49.0	
2	6.271	6.270	0.001	146691578	50.0	45.6	
						RPD = 7.27	
27 Dieldrin							
1	6.818	6.819	-0.001	1093536305	50.0	49.1	
2	6.610	6.609	0.001	165994481	50.0	46.7	
						RPD = 5.12	
30 Endrin							
1	7.087	7.088	-0.001	989499449	50.0	54.8	
2	6.970	6.969	0.001	150374857	50.0	52.9	
						RPD = 3.53	
32 4,4'-DDD							
1	7.162	7.163	-0.001	917826538	50.0	48.8	
2	7.120	7.121	-0.001	132815738	50.0	48.4	
						RPD = 0.84	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.336	7.337	-0.001	939671110	50.0	50.4	
2	7.214	7.214	0.000	141104019	50.0	47.9	
						RPD = 5.11	
35 4,4'-DDT							
1	7.473	7.474	-0.001	931077629	50.0	51.5	
2	7.469	7.469	0.000	129168552	50.0	49.1	
						RPD = 4.70	
36 Endrin aldehyde							
1	7.789	7.791	-0.002	740768868	50.0	49.1	
2	7.589	7.589	0.000	112679651	50.0	47.0	
						RPD = 4.31	
37 Methoxychlor							
1	7.984	7.986	-0.002	405261759	50.0	51.5	
2	8.192	8.192	0.000	61654190	50.0	49.5	
						RPD = 3.99	
38 Mirex							
1	8.132	8.132	0.000	624671728	50.0	49.5	
2	8.363	8.363	0.000	90659996	50.0	45.4	
						RPD = 8.58	
39 Endosulfan sulfate							
1	8.238	8.239	-0.001	875599073	50.0	50.7	
2	7.882	7.883	-0.001	126953889	50.0	47.8	
						RPD = 5.83	
40 Endrin ketone							
1	8.518	8.519	-0.001	932316603	50.0	48.7	
2	8.410	8.410	0.000	142652344	50.0	47.2	
						RPD = 2.98	
$ 41 DCB Decachlorobiphenyl							
1	9.496	9.497	-0.001	539809620	50.0	49.3	
2	9.607	9.606	0.001	94577985	50.0	49.3	
						RPD = 0.05	
S 3 Endosulfan, Total							
1						150.1	
2						141.2	
						RPD = 6.05	

Reagents:

8081IcalL4_00026	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

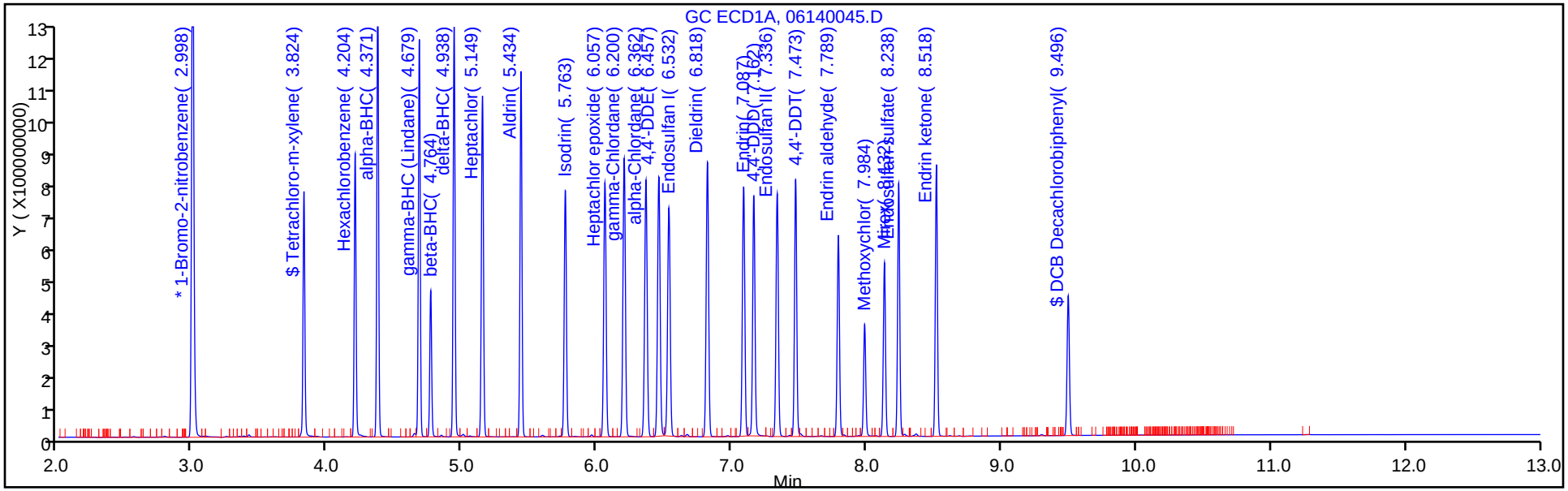
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TestAmerica Denver

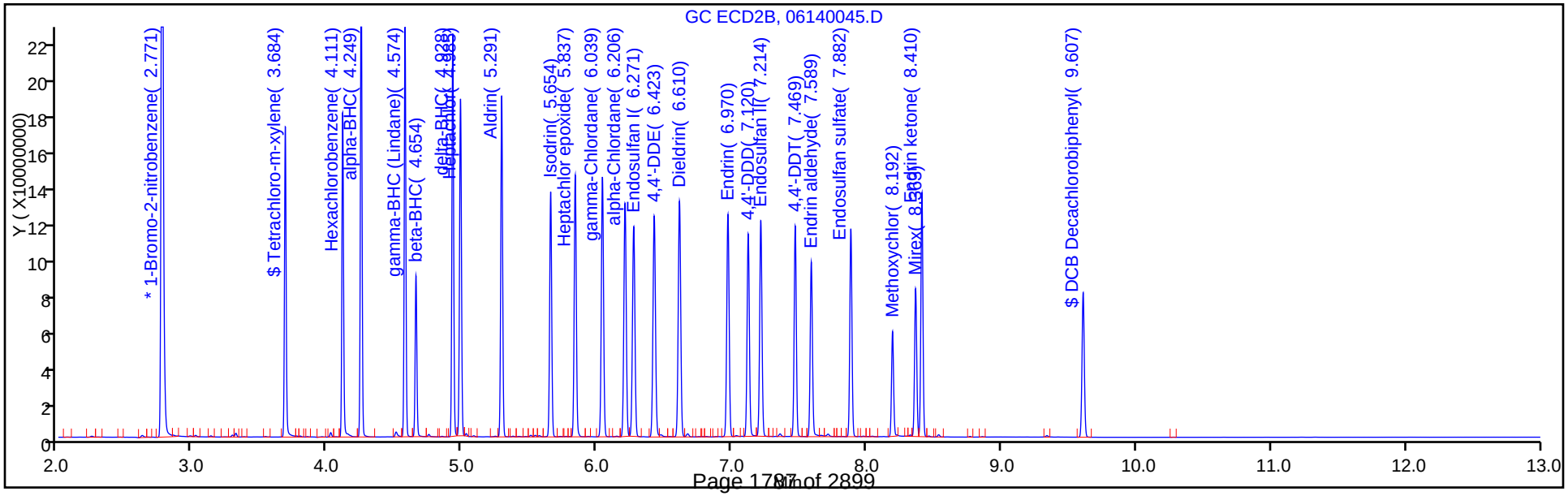
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Injection Date:	15-Jun-2017 04:34:15	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV AB			Worklist Smp#:	45
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/59 Calibration Date: 06/15/2017 08:30

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06140059.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0028		2050	2000	2.5	20.0
Toxaphene Peak 2	Qua		0.0261		1860	2000	-7.0	20.0
Toxaphene Peak 3	Lin2		0.0178		1870	2000	-6.7	20.0
Toxaphene Peak 4	Lin2		0.0420		1870	2000	-6.3	20.0
Toxaphene Peak 5	Lin2		0.0434		1710	2000	-14.5	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/59 Calibration Date: 06/15/2017 08:30

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06140059.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	5.61	5.59	5.63
Toxaphene Peak 2	6.93	6.91	6.95
Toxaphene Peak 3	7.19	7.17	7.21
Toxaphene Peak 4	7.70	7.68	7.72
Toxaphene Peak 5	8.14	8.12	8.16

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140059.D
Lims ID: CCV TOX
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2017 08:30:30 ALS Bottle#: 53 Worklist Smp#: 59
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV TOX
Misc. Info.: 280-0059760-059
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 15:11:37 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: wellsd Date: 15-Jun-2017 13:57:07

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.997	2.997	0.000	2134105825	150.0	150.0	
2	2.771	2.771	0.000	461732186	150.0	150.0	
28 Toxaphene							M
1	5.609	5.609	0.000	79059152	2000.0	2049.1	M
1	6.928	6.929	-0.001	742849362	2000.0	1860.2	M
1	7.190	7.192	-0.002	505565987	2000.0	1866.0	M
1	7.698	7.697	0.001	1195546265	2000.0	1873.7	M
1	8.138	8.140	-0.002	1235858713	2000.0	1710.2	M
		Average of Peak Amounts =				1871.9	
2	6.118	6.119	-0.001	58706153	2000.0	2202.6	M
2	7.166	7.168	-0.002	101307103	2000.0	1670.1	M
2	7.311	7.311	0.000	245316239	2000.0	1590.6	M
2	7.600	7.600	0.000	175078954	2000.0	1679.6	M
2	8.122	8.122	0.000	132068652	2000.0	1480.2	M
		Average of Peak Amounts =				1724.6	
						RPD = 8.19	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00012 Amount Added: 1.00 Units: mL
8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

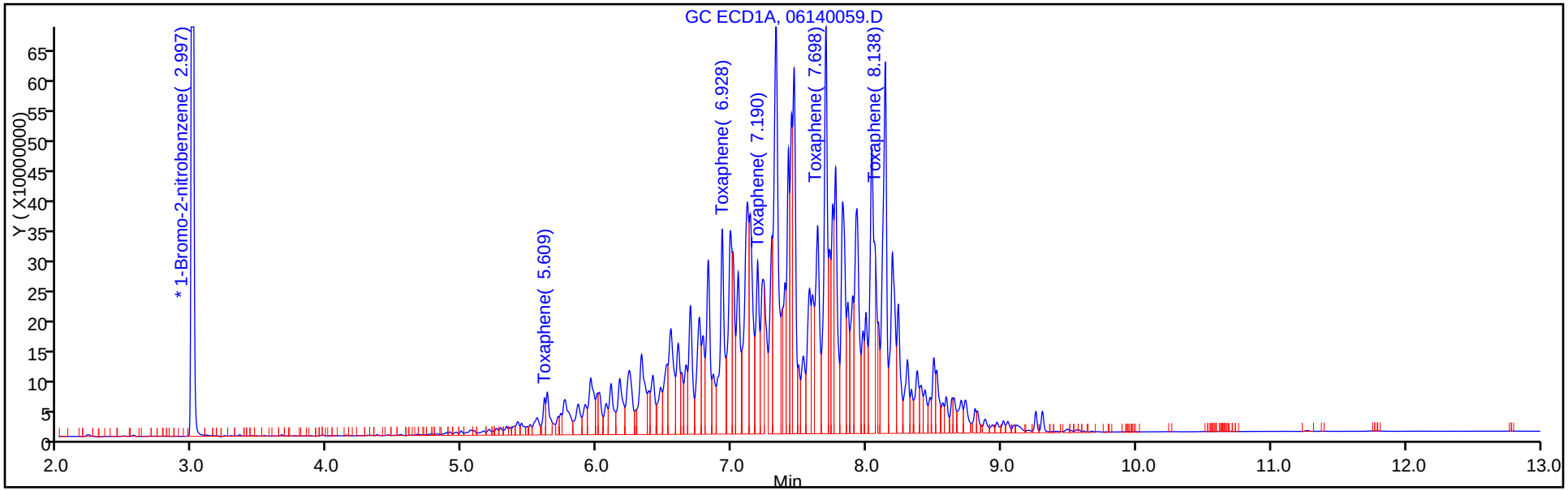
Report Date: 15-Jun-2017 15:11:38 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

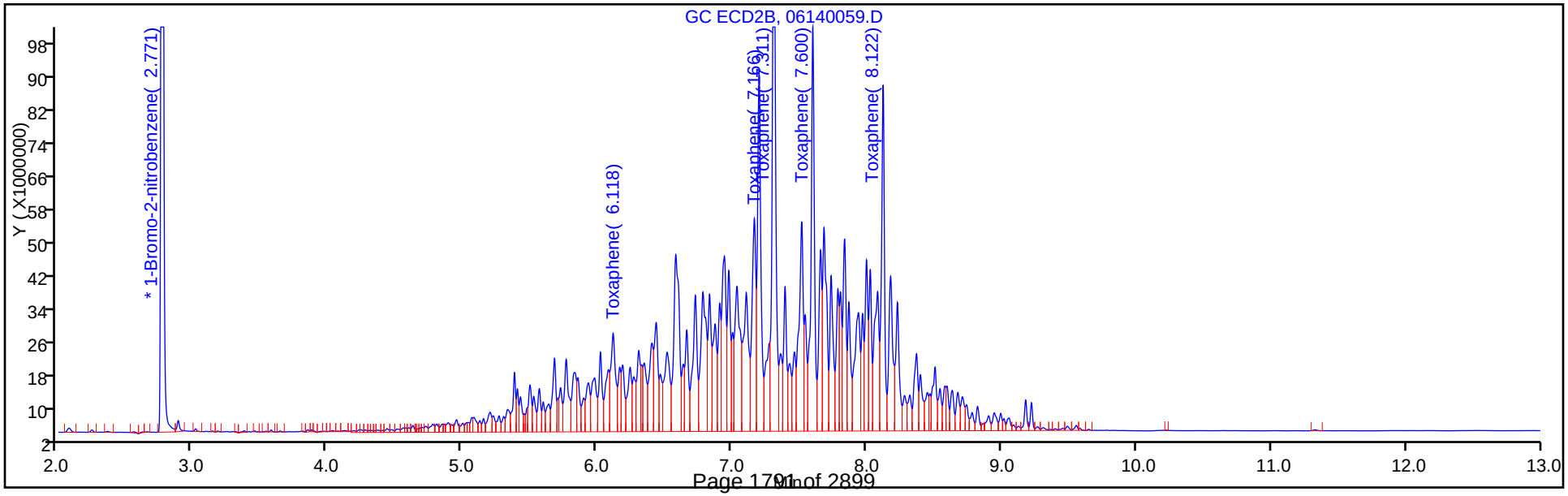
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140059.D

Injection Date:	15-Jun-2017 08:30:30	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV TOX			Worklist Smp#:	59
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	53
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 15-Jun-2017 15:11:38 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140059.D

Injection Date: 15-Jun-2017 08:30:30 Instrument ID: SGC_P1

Lims ID: CCV TOX

Client ID:

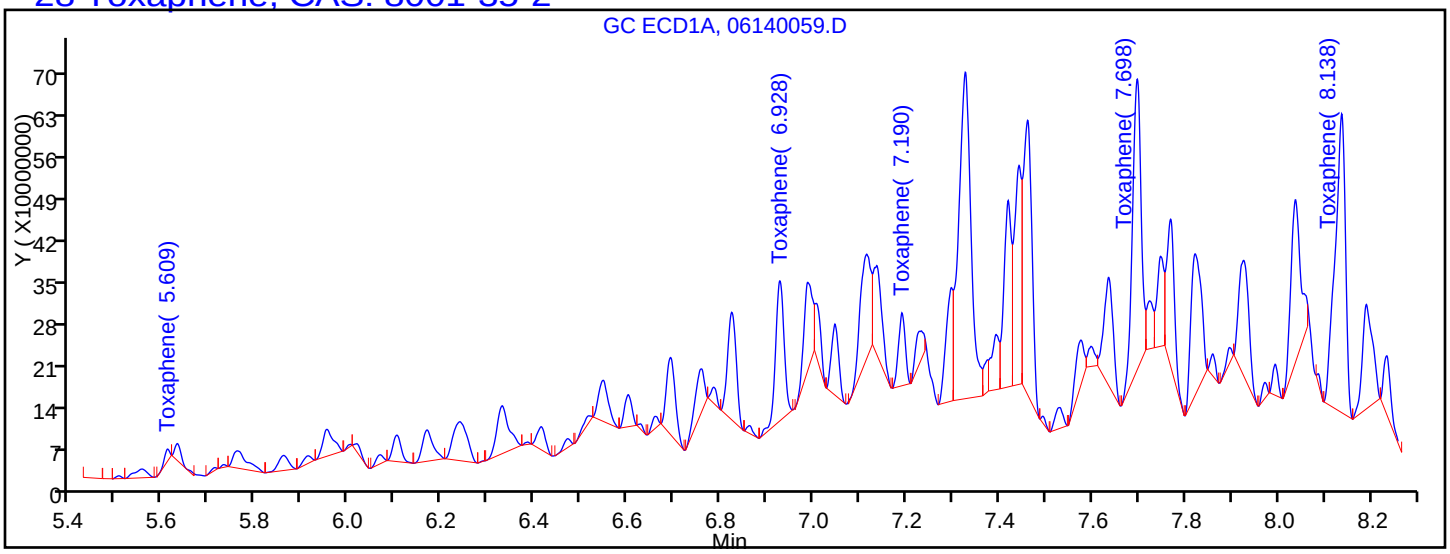
Operator ID: DAW ALS Bottle#: 53 Worklist Smp#: 59

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

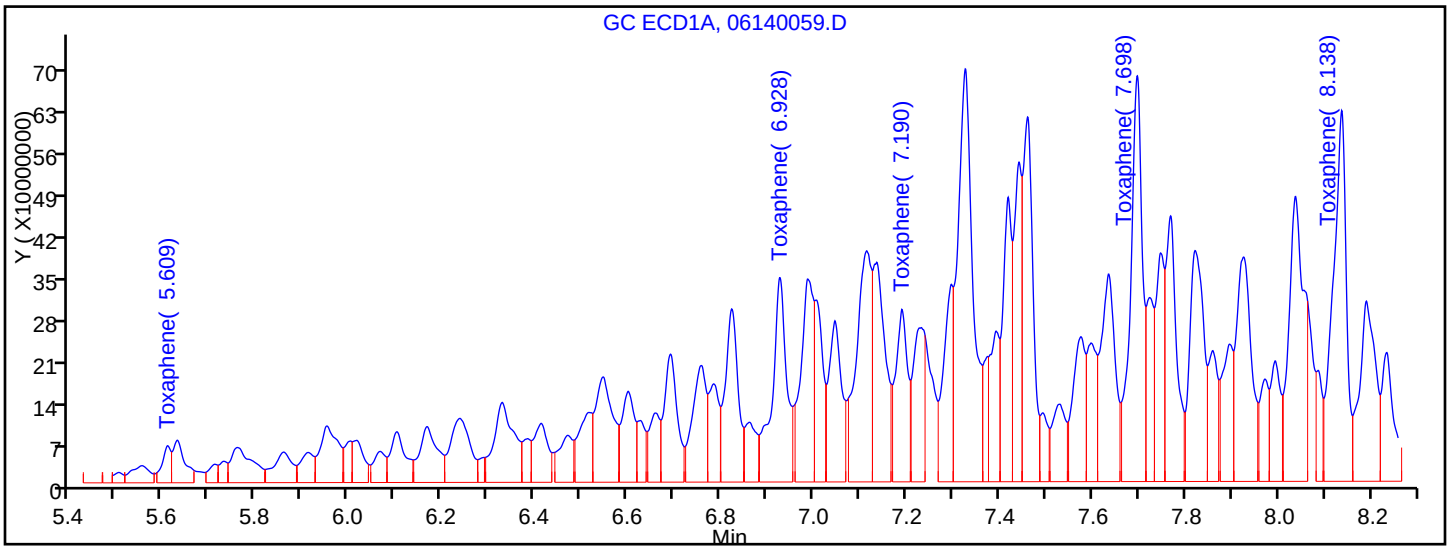
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.609	Response = 15786036
6.928	Response = 302101527
7.190	Response = 123514777
7.698	Response = 631400095
8.138	Response = 776988605



Manual Integration Results

5.609	Response = 79059152	M
6.928	Response = 742849362	M
7.190	Response = 505565987	M
7.698	Response = 1195546265	M
8.138	Response = 1235858713	M

Reviewer: wellsd, 15-Jun-2017 13:56:57

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/59 Calibration Date: 06/15/2017 08:30

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06140059.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0095		2200	2000	10.1	20.0
Toxaphene Peak 2	Lin2		0.0165		1670	2000	-16.5	20.0
Toxaphene Peak 3	Lin2		0.0399		1590	2000	-20.5*	20.0
Toxaphene Peak 4	Lin2		0.0284		1680	2000	-16.0	20.0
Toxaphene Peak 5	Lin2		0.0215		1480	2000	-26.0*	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/59 Calibration Date: 06/15/2017 08:30

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06140059.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	6.12	6.10	6.14
Toxaphene Peak 2	7.17	7.15	7.19
Toxaphene Peak 3	7.31	7.29	7.33
Toxaphene Peak 4	7.60	7.58	7.62
Toxaphene Peak 5	8.12	8.10	8.14

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140059.D
Lims ID: CCV TOX
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2017 08:30:30 ALS Bottle#: 53 Worklist Smp#: 59
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV TOX
Misc. Info.: 280-0059760-059
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 15:11:37 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: wellsd Date: 15-Jun-2017 13:57:07

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.997	2.997	0.000	2134105825	150.0	150.0	
2	2.771	2.771	0.000	461732186	150.0	150.0	
28 Toxaphene							M
1	5.609	5.609	0.000	79059152	2000.0	2049.1	M
1	6.928	6.929	-0.001	742849362	2000.0	1860.2	M
1	7.190	7.192	-0.002	505565987	2000.0	1866.0	M
1	7.698	7.697	0.001	1195546265	2000.0	1873.7	M
1	8.138	8.140	-0.002	1235858713	2000.0	1710.2	M
		Average of Peak Amounts =				1871.9	
2	6.118	6.119	-0.001	58706153	2000.0	2202.6	M
2	7.166	7.168	-0.002	101307103	2000.0	1670.1	M
2	7.311	7.311	0.000	245316239	2000.0	1590.6	M
2	7.600	7.600	0.000	175078954	2000.0	1679.6	M
2	8.122	8.122	0.000	132068652	2000.0	1480.2	M
		Average of Peak Amounts =				1724.6	
						RPD = 8.19	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00012 Amount Added: 1.00 Units: mL
8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

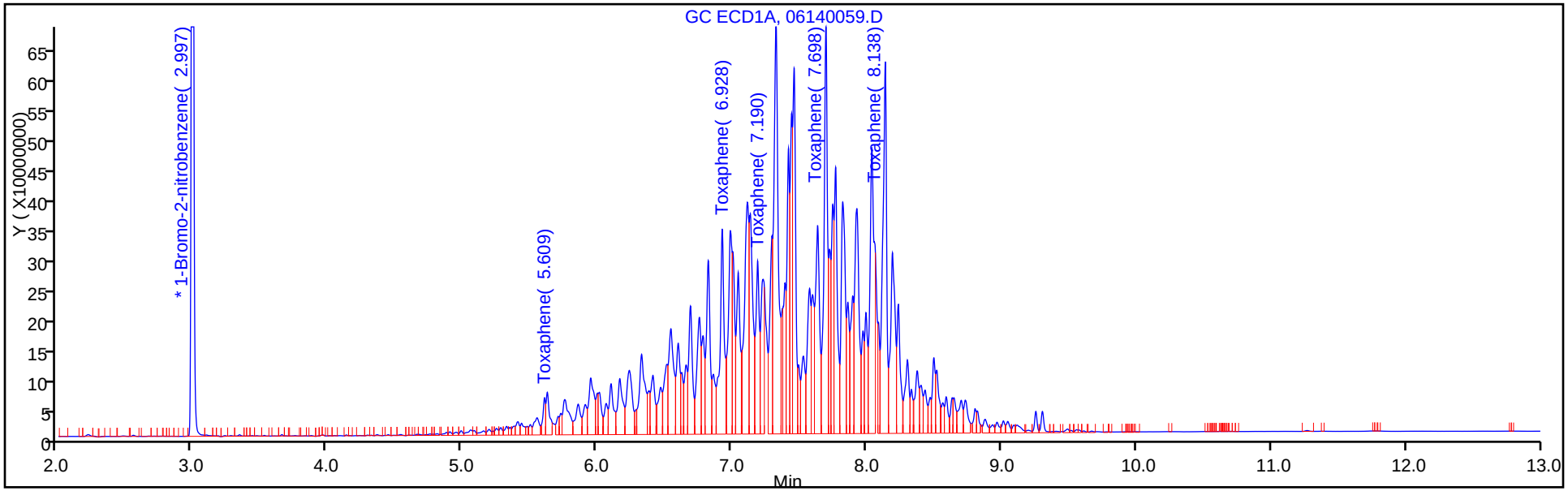
Report Date: 15-Jun-2017 15:11:38 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

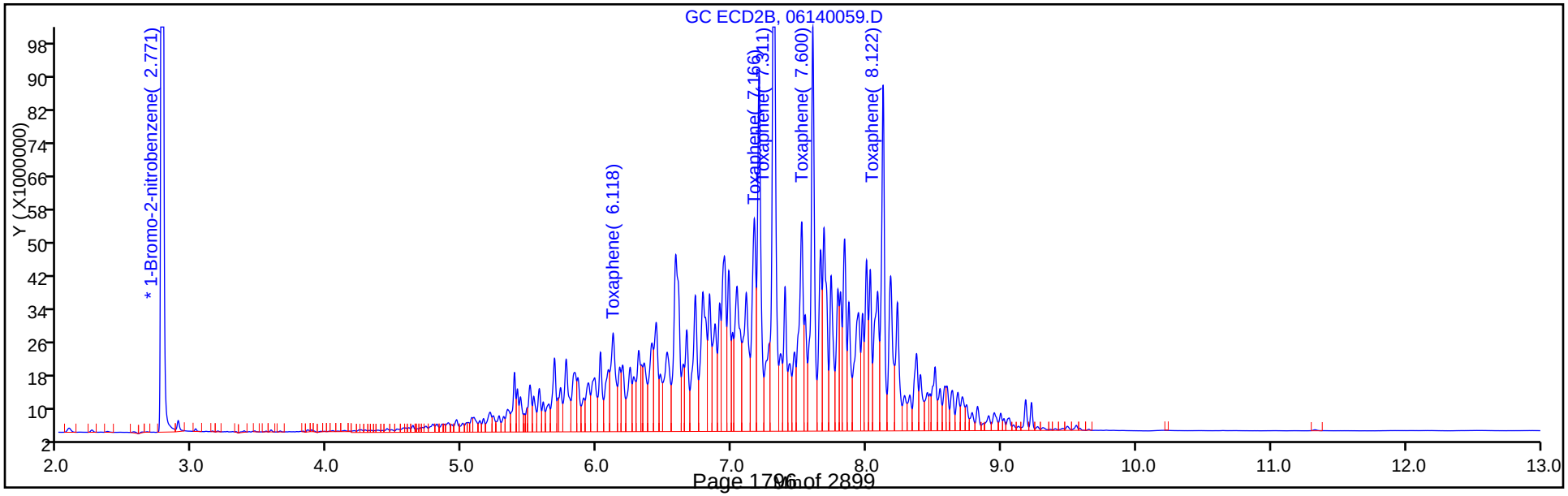
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140059.D

Injection Date:	15-Jun-2017 08:30:30	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV TOX			Worklist Smp#:	59
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	53
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 15-Jun-2017 15:11:39 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140059.D

Injection Date: 15-Jun-2017 08:30:30 Instrument ID: SGC_P1

Lims ID: CCV TOX

Client ID:

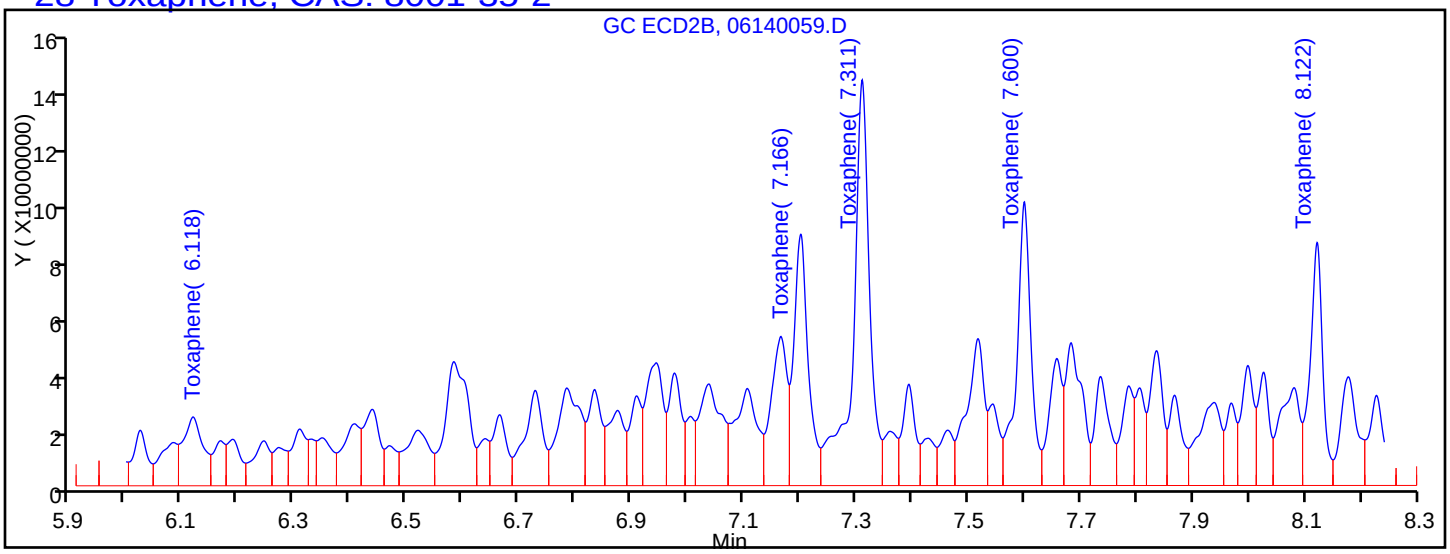
Operator ID: DAW ALS Bottle#: 53 Worklist Smp#: 59

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

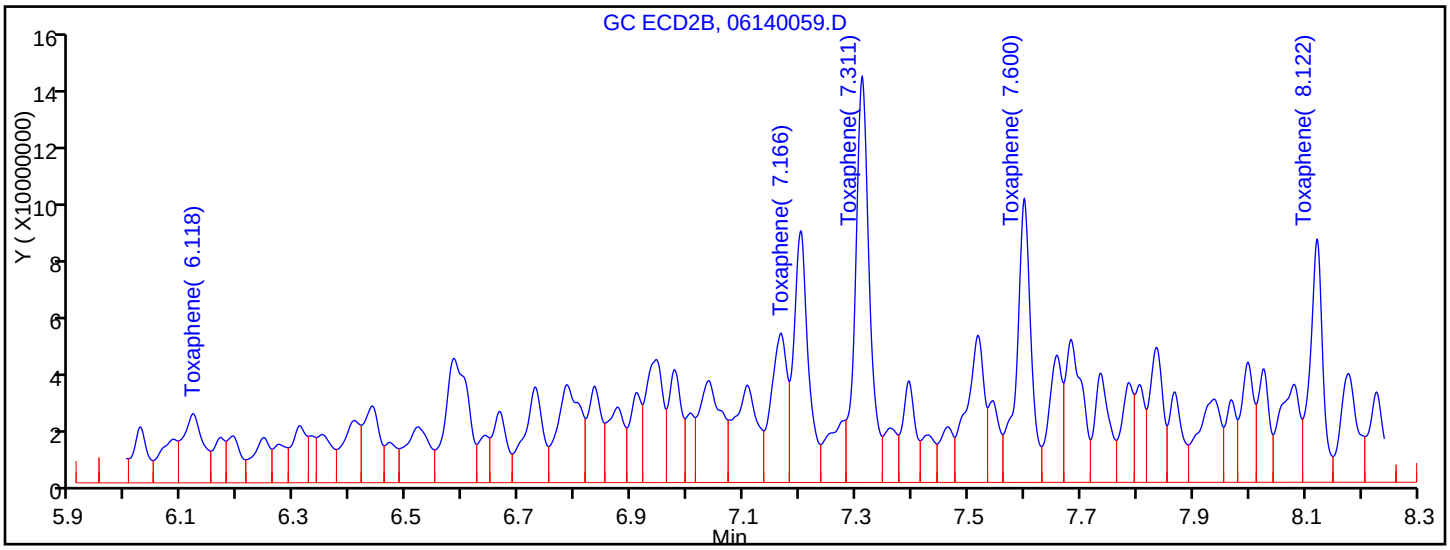
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.118	Response = 58273242
7.166	Response = 101084450
7.311	Response = 292051389
7.600	Response = 174822519
8.122	Response = 131940707



Manual Integration Results

6.118	Response = 58706153	M
7.166	Response = 101307103	M
7.311	Response = 245316239	M
7.600	Response = 175078954	M
8.122	Response = 132068652	M

Reviewer: wellsd, 15-Jun-2017 13:57:06

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/61 Calibration Date: 06/15/2017 09:04

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06140061.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		1.179		46.4	50.0	-7.1	20.0
alpha-BHC	Lin2		1.861		46.8	50.0	-6.3	20.0
gamma-BHC (Lindane)	Lin2		1.708		47.6	50.0	-4.7	20.0
beta-BHC	Lin2		0.6378		46.0	50.0	-8.0	20.0
delta-BHC	Lin2		1.793		47.1	50.0	-5.7	20.0
Heptachlor	Lin2		1.609		48.6	50.0	-2.8	20.0
Aldrin	Lin2		1.583		46.9	50.0	-6.2	20.0
Heptachlor epoxide	Lin2		1.363		46.8	50.0	-6.4	20.0
gamma-Chlordane	Lin2		1.519		47.2	50.0	-5.6	20.0
alpha-Chlordane	Lin2		1.439		46.8	50.0	-6.4	20.0
4,4'-DDE	Lin2		1.466		46.4	50.0	-7.3	20.0
Endosulfan I	Lin2		1.311		46.8	50.0	-6.5	20.0
Dieldrin	Lin2		1.472		46.6	50.0	-6.8	20.0
Endrin	Lin2		1.365		53.3	50.0	6.6	20.0
4,4'-DDD	Lin2		1.335		50.1	50.0	0.1	20.0
Endosulfan II	Lin2		1.264		47.7	50.0	-4.6	20.0
4,4'-DDT	Lin2		1.064		41.5	50.0	-16.9	20.0
Endrin aldehyde	Lin2		0.9789		45.7	50.0	-8.6	20.0
Methoxychlor	Lin2		0.4843		43.3	50.0	-13.4	20.0
Endosulfan sulfate	Lin2		1.163		47.5	50.0	-5.1	20.0
Endrin ketone	Lin2		1.212		44.6	50.0	-10.8	20.0
Tetrachloro-m-xylene (Surr)	Lin2		1.036		45.4	50.0	-9.1	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.7138		45.9	50.0	-8.2	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/61 Calibration Date: 06/15/2017 09:04

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06140061.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.20	4.19	4.21
alpha-BHC	4.37	4.36	4.38
gamma-BHC (Lindane)	4.68	4.67	4.69
beta-BHC	4.77	4.76	4.78
delta-BHC	4.94	4.93	4.95
Heptachlor	5.15	5.14	5.16
Aldrin	5.43	5.43	5.45
Heptachlor epoxide	6.06	6.05	6.07
gamma-Chlordane	6.20	6.19	6.21
alpha-Chlordane	6.36	6.35	6.37
4,4'-DDE	6.46	6.45	6.47
Endosulfan I	6.53	6.52	6.54
Dieldrin	6.82	6.81	6.83
Endrin	7.09	7.08	7.10
4,4'-DDD	7.16	7.15	7.17
Endosulfan II	7.34	7.33	7.35
4,4'-DDT	7.47	7.46	7.48
Endrin aldehyde	7.79	7.78	7.80
Methoxychlor	7.98	7.98	8.00
Endosulfan sulfate	8.24	8.23	8.25
Endrin ketone	8.52	8.51	8.53
Tetrachloro-m-xylene (Surr)	3.82	3.81	3.83
DCB Decachlorobiphenyl (Surr)	9.50	9.49	9.51

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140061.D
Lims ID: CCV AB
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2017 09:04:22 ALS Bottle#: 55 Worklist Smp#: 61
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV AB
Misc. Info.: 280-0059760-061
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 15:11:43 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK017

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						187.6	
2						187.3	
						RPD = 0.20	
* 2 1-Bromo-2-nitrobenzene							
1	2.997	2.997	0.001	2193688580	150.0	150.0	
2	2.771	2.771	0.000	468466369	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.823	3.824	-0.001	757238614	50.0	45.4	
2	3.685	3.684	0.001	149440536	50.0	46.3	
						RPD = 1.87	
5 Hexachlorobenzene							
1	4.203	4.204	-0.001	861964982	50.0	46.4	
2	4.111	4.110	0.001	154464849	50.0	46.0	
						RPD = 0.89	
8 alpha-BHC							
1	4.372	4.372	0.000	1360494792	50.0	46.8	
2	4.248	4.248	0.000	223793593	50.0	47.1	
						RPD = 0.55	
9 gamma-BHC (Lindane)							
1	4.680	4.680	0.000	1249217349	50.0	47.6	
2	4.573	4.573	0.000	197495834	50.0	47.1	
						RPD = 1.23	
10 beta-BHC							
1	4.765	4.765	0.000	466344440	50.0	46.0	
2	4.655	4.654	0.001	80970288	50.0	46.2	
						RPD = 0.34	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.938	4.939	-0.001	1310855677	50.0	47.1	
2	4.927	4.928	-0.001	202921600	50.0	46.9	
						RPD = 0.44	
15 Heptachlor							
1	5.148	5.149	-0.001	1176344523	50.0	48.6	
2	4.985	4.984	0.001	182165973	50.0	47.0	
						RPD = 3.31	
16 Aldrin							
1	5.434	5.435	-0.001	1157797014	50.0	46.9	
2	5.291	5.291	0.000	177648065	50.0	46.3	
						RPD = 1.30	
18 Isodrin							
1	5.762	5.764	-0.002	882788285	50.0	46.7	
2	5.654	5.654	0.000	138439952	50.0	46.3	
						RPD = 0.91	
21 Heptachlor epoxide							
1	6.057	6.059	-0.002	996728180	50.0	46.8	
2	5.837	5.837	0.000	153874966	50.0	45.1	
						RPD = 3.63	
22 gamma-Chlordane							
1	6.201	6.202	-0.001	1110659173	50.0	47.2	
2	6.039	6.039	0.000	161832855	50.0	45.4	
						RPD = 3.94	
23 alpha-Chlordane							
1	6.361	6.363	-0.002	1052283737	50.0	46.8	
2	6.207	6.207	0.000	154820426	50.0	45.6	
						RPD = 2.66	
24 4,4'-DDE							
1	6.457	6.459	-0.002	1072169919	50.0	46.4	
2	6.423	6.424	-0.001	152795830	50.0	43.7	
						RPD = 6.04	
25 Endosulfan I							
1	6.532	6.534	-0.002	958876488	50.0	46.8	
2	6.271	6.270	0.001	143866256	50.0	44.1	
						RPD = 5.98	
27 Dieldrin							
1	6.817	6.819	-0.002	1076397600	50.0	46.6	
2	6.610	6.609	0.001	161359476	50.0	44.7	
						RPD = 4.09	
30 Endrin							
1	7.087	7.088	-0.001	998410378	50.0	53.3	
2	6.969	6.969	0.000	149282459	50.0	51.8	
						RPD = 2.84	
32 4,4'-DDD							
1	7.162	7.163	-0.001	976518147	50.0	50.1	
2	7.120	7.121	-0.001	138880413	50.0	50.0	
						RPD = 0.18	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.336	7.337	-0.001	923917481	50.0	47.7	
2	7.213	7.214	-0.001	138003885	50.0	46.1	
						RPD = 3.36	
35 4,4'-DDT							
1	7.472	7.474	-0.002	777951079	50.0	41.5	
2	7.468	7.469	-0.001	106840208	50.0	40.0	
						RPD = 3.79	
36 Endrin aldehyde							
1	7.789	7.791	-0.002	715763571	50.0	45.7	
2	7.588	7.589	-0.001	108009653	50.0	44.4	
						RPD = 2.86	
37 Methoxychlor							
1	7.984	7.986	-0.002	354151792	50.0	43.3	
2	8.191	8.192	-0.001	54025798	50.0	42.6	
						RPD = 1.59	
38 Mirex							
1	8.131	8.132	-0.001	599161385	50.0	45.7	
2	8.362	8.363	-0.001	86988761	50.0	43.0	
						RPD = 6.16	
39 Endosulfan sulfate							
1	8.237	8.239	-0.002	850449319	50.0	47.5	
2	7.882	7.883	-0.001	123192279	50.0	45.7	
						RPD = 3.69	
40 Endrin ketone							
1	8.517	8.519	-0.002	886444743	50.0	44.6	
2	8.410	8.410	0.000	135166036	50.0	44.1	
						RPD = 1.12	
$ 41 DCB Decachlorobiphenyl							
1	9.496	9.497	-0.001	521918517	50.0	45.9	
2	9.605	9.606	-0.001	90927141	50.0	46.7	
						RPD = 1.65	
S 3 Endosulfan, Total							
1						142.0	
2						135.9	
						RPD = 4.32	

Reagents:

8081IcalL4_00026	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

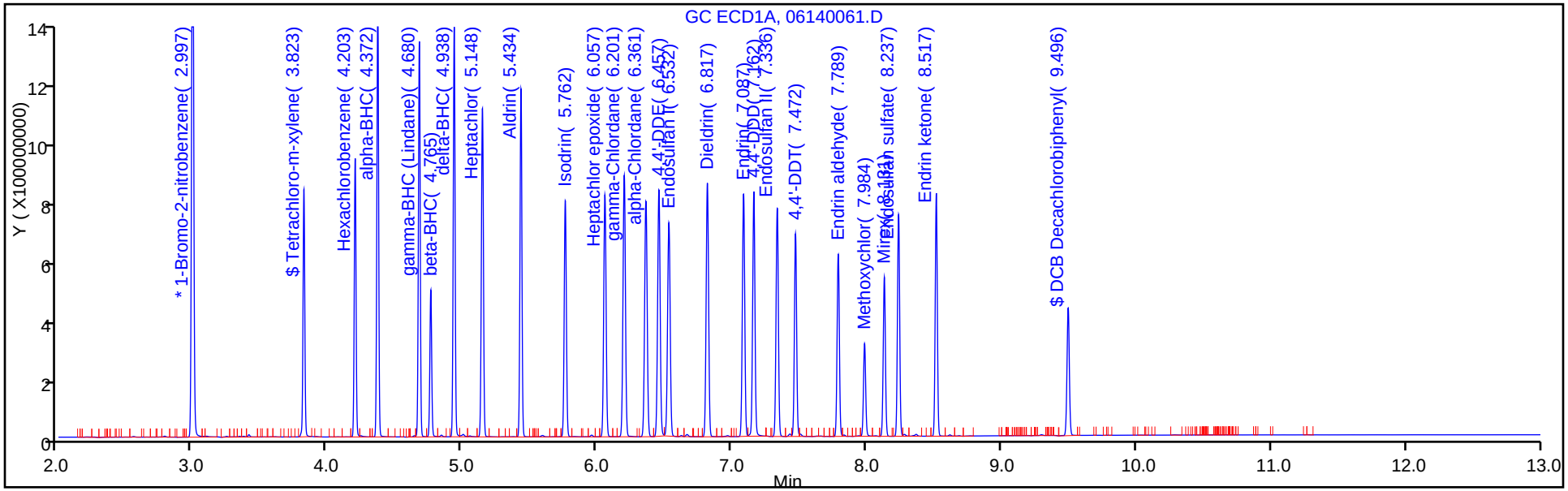
Report Date: 15-Jun-2017 15:11:44 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

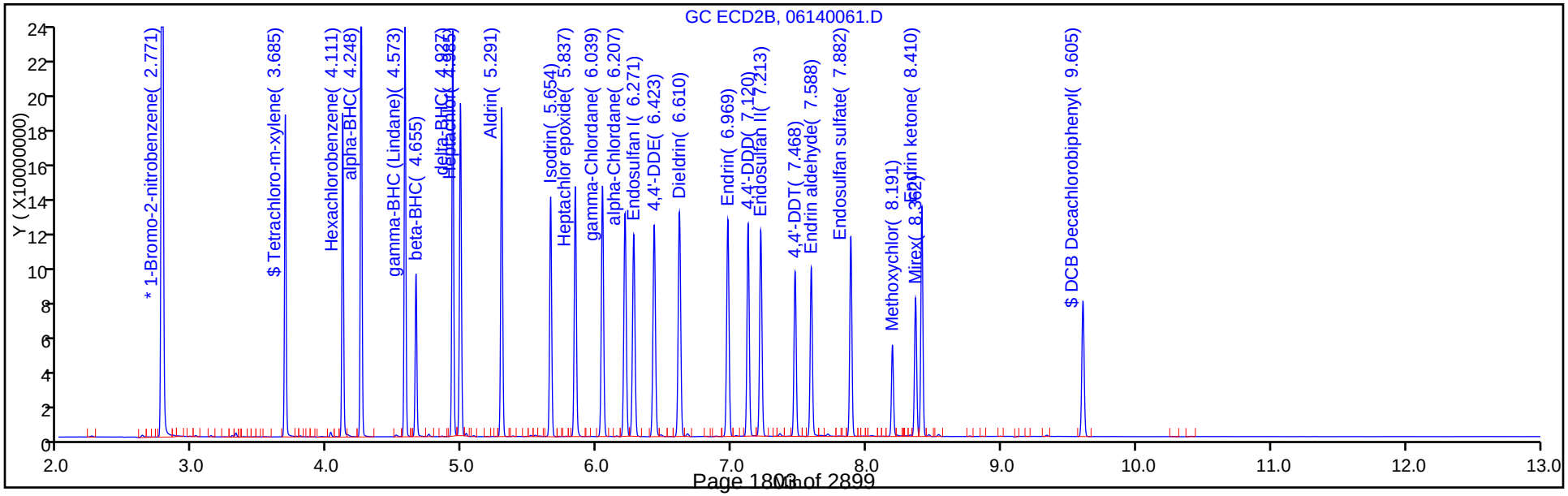
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140061.D

Injection Date:	15-Jun-2017 09:04:22	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV AB			Worklist Smp#:	61
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	55
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/61 Calibration Date: 06/15/2017 09:04

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06140061.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		0.9892		46.0	50.0	-8.0	20.0
alpha-BHC	Lin2		1.433		47.1	50.0	-5.8	20.0
gamma-BHC (Lindane)	Lin2		1.265		47.1	50.0	-5.9	20.0
beta-BHC	Lin2		0.5185		46.2	50.0	-7.6	20.0
delta-BHC	Lin2		1.299		46.9	50.0	-6.1	20.0
Heptachlor	Lin2		1.167		47.0	50.0	-6.0	20.0
Aldrin	Lin2		1.138		46.3	50.0	-7.4	20.0
Heptachlor epoxide	Lin2		0.9854		45.1	50.0	-9.7	20.0
gamma-Chlordane	Lin2		1.036		45.4	50.0	-9.2	20.0
alpha-Chlordane	Lin2		0.9915		45.6	50.0	-8.8	20.0
Endosulfan I	Lin2		0.9213		44.1	50.0	-11.9	20.0
4,4'-DDE	Lin2		0.9785		43.7	50.0	-12.7	20.0
Dieldrin	Lin2		1.033		44.7	50.0	-10.5	20.0
Endrin	Lin2		0.9560		51.8	50.0	3.6	20.0
4,4'-DDD	Lin2		0.8894		50.0	50.0	-0.0	20.0
Endosulfan II	Lin2		0.8838		46.1	50.0	-7.7	20.0
4,4'-DDT	Lin2		0.6842		40.0	50.0	-20.0	20.0
Endrin aldehyde	Lin2		0.6917		44.4	50.0	-11.2	20.0
Endosulfan sulfate	Lin2		0.7889		45.7	50.0	-8.5	20.0
Methoxychlor	Lin2		0.3460		42.6	50.0	-14.8	20.0
Endrin ketone	Lin2		0.8656		44.1	50.0	-11.8	20.0
Tetrachloro-m-xylene (Surr)	Lin2		0.9570		46.3	50.0	-7.4	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.5823		46.7	50.0	-6.6	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377328/61 Calibration Date: 06/15/2017 09:04

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06140061.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.11	4.10	4.12
alpha-BHC	4.25	4.24	4.26
gamma-BHC (Lindane)	4.57	4.56	4.58
beta-BHC	4.66	4.64	4.66
delta-BHC	4.93	4.92	4.94
Heptachlor	4.99	4.97	4.99
Aldrin	5.29	5.28	5.30
Heptachlor epoxide	5.84	5.83	5.85
gamma-Chlordane	6.04	6.03	6.05
alpha-Chlordane	6.21	6.20	6.22
Endosulfan I	6.27	6.26	6.28
4,4'-DDE	6.42	6.41	6.43
Dieldrin	6.61	6.60	6.62
Endrin	6.97	6.96	6.98
4,4'-DDD	7.12	7.11	7.13
Endosulfan II	7.21	7.20	7.22
4,4'-DDT	7.47	7.46	7.48
Endrin aldehyde	7.59	7.58	7.60
Endosulfan sulfate	7.88	7.87	7.89
Methoxychlor	8.19	8.18	8.20
Endrin ketone	8.41	8.40	8.42
Tetrachloro-m-xylene (Surr)	3.69	3.67	3.69
DCB Decachlorobiphenyl (Surr)	9.61	9.60	9.62

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140061.D
Lims ID: CCV AB
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2017 09:04:22 ALS Bottle#: 55 Worklist Smp#: 61
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV AB
Misc. Info.: 280-0059760-061
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 15:11:43 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK017

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						187.6	
2						187.3	
						RPD = 0.20	
* 2 1-Bromo-2-nitrobenzene							
1	2.997	2.997	0.001	2193688580	150.0	150.0	
2	2.771	2.771	0.000	468466369	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.823	3.824	-0.001	757238614	50.0	45.4	
2	3.685	3.684	0.001	149440536	50.0	46.3	
						RPD = 1.87	
5 Hexachlorobenzene							
1	4.203	4.204	-0.001	861964982	50.0	46.4	
2	4.111	4.110	0.001	154464849	50.0	46.0	
						RPD = 0.89	
8 alpha-BHC							
1	4.372	4.372	0.000	1360494792	50.0	46.8	
2	4.248	4.248	0.000	223793593	50.0	47.1	
						RPD = 0.55	
9 gamma-BHC (Lindane)							
1	4.680	4.680	0.000	1249217349	50.0	47.6	
2	4.573	4.573	0.000	197495834	50.0	47.1	
						RPD = 1.23	
10 beta-BHC							
1	4.765	4.765	0.000	466344440	50.0	46.0	
2	4.655	4.654	0.001	80970288	50.0	46.2	
						RPD = 0.34	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.938	4.939	-0.001	1310855677	50.0	47.1	
2	4.927	4.928	-0.001	202921600	50.0	46.9	
						RPD = 0.44	
15 Heptachlor							
1	5.148	5.149	-0.001	1176344523	50.0	48.6	
2	4.985	4.984	0.001	182165973	50.0	47.0	
						RPD = 3.31	
16 Aldrin							
1	5.434	5.435	-0.001	1157797014	50.0	46.9	
2	5.291	5.291	0.000	177648065	50.0	46.3	
						RPD = 1.30	
18 Isodrin							
1	5.762	5.764	-0.002	882788285	50.0	46.7	
2	5.654	5.654	0.000	138439952	50.0	46.3	
						RPD = 0.91	
21 Heptachlor epoxide							
1	6.057	6.059	-0.002	996728180	50.0	46.8	
2	5.837	5.837	0.000	153874966	50.0	45.1	
						RPD = 3.63	
22 gamma-Chlordane							
1	6.201	6.202	-0.001	1110659173	50.0	47.2	
2	6.039	6.039	0.000	161832855	50.0	45.4	
						RPD = 3.94	
23 alpha-Chlordane							
1	6.361	6.363	-0.002	1052283737	50.0	46.8	
2	6.207	6.207	0.000	154820426	50.0	45.6	
						RPD = 2.66	
24 4,4'-DDE							
1	6.457	6.459	-0.002	1072169919	50.0	46.4	
2	6.423	6.424	-0.001	152795830	50.0	43.7	
						RPD = 6.04	
25 Endosulfan I							
1	6.532	6.534	-0.002	958876488	50.0	46.8	
2	6.271	6.270	0.001	143866256	50.0	44.1	
						RPD = 5.98	
27 Dieldrin							
1	6.817	6.819	-0.002	1076397600	50.0	46.6	
2	6.610	6.609	0.001	161359476	50.0	44.7	
						RPD = 4.09	
30 Endrin							
1	7.087	7.088	-0.001	998410378	50.0	53.3	
2	6.969	6.969	0.000	149282459	50.0	51.8	
						RPD = 2.84	
32 4,4'-DDD							
1	7.162	7.163	-0.001	976518147	50.0	50.1	
2	7.120	7.121	-0.001	138880413	50.0	50.0	
						RPD = 0.18	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.336	7.337	-0.001	923917481	50.0	47.7	
2	7.213	7.214	-0.001	138003885	50.0	46.1	
						RPD = 3.36	
35 4,4'-DDT							
1	7.472	7.474	-0.002	777951079	50.0	41.5	
2	7.468	7.469	-0.001	106840208	50.0	40.0	
						RPD = 3.79	
36 Endrin aldehyde							
1	7.789	7.791	-0.002	715763571	50.0	45.7	
2	7.588	7.589	-0.001	108009653	50.0	44.4	
						RPD = 2.86	
37 Methoxychlor							
1	7.984	7.986	-0.002	354151792	50.0	43.3	
2	8.191	8.192	-0.001	54025798	50.0	42.6	
						RPD = 1.59	
38 Mirex							
1	8.131	8.132	-0.001	599161385	50.0	45.7	
2	8.362	8.363	-0.001	86988761	50.0	43.0	
						RPD = 6.16	
39 Endosulfan sulfate							
1	8.237	8.239	-0.002	850449319	50.0	47.5	
2	7.882	7.883	-0.001	123192279	50.0	45.7	
						RPD = 3.69	
40 Endrin ketone							
1	8.517	8.519	-0.002	886444743	50.0	44.6	
2	8.410	8.410	0.000	135166036	50.0	44.1	
						RPD = 1.12	
$ 41 DCB Decachlorobiphenyl							
1	9.496	9.497	-0.001	521918517	50.0	45.9	
2	9.605	9.606	-0.001	90927141	50.0	46.7	
						RPD = 1.65	
S 3 Endosulfan, Total							
1						142.0	
2						135.9	
						RPD = 4.32	

Reagents:

8081IcalL4_00026	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

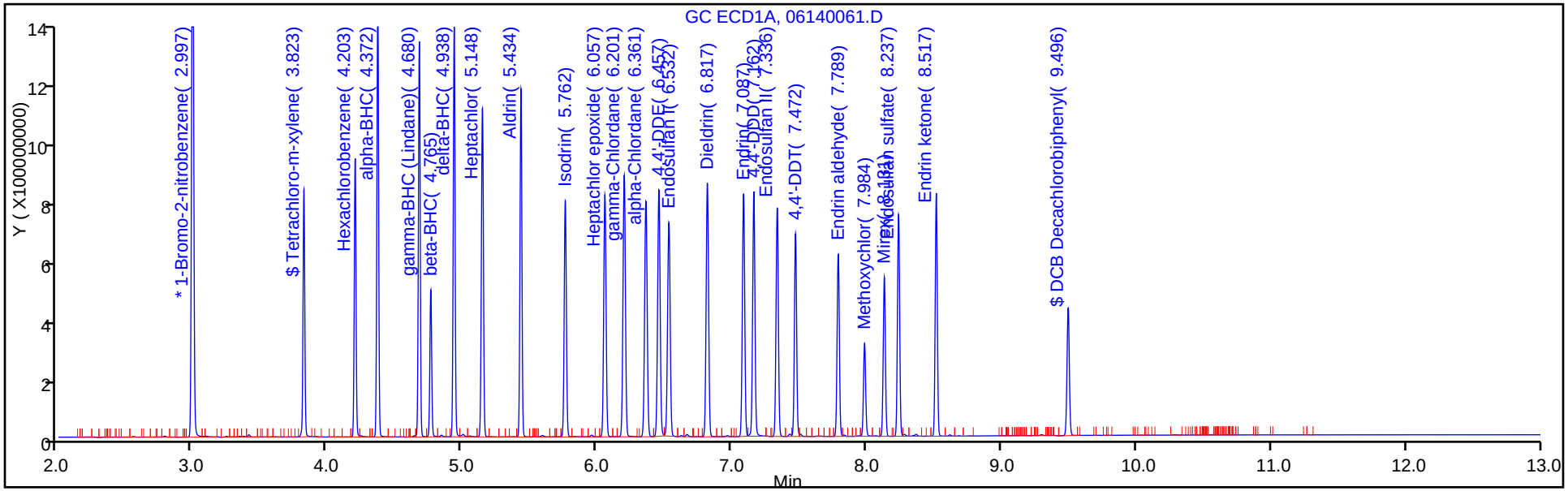
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TestAmerica Denver

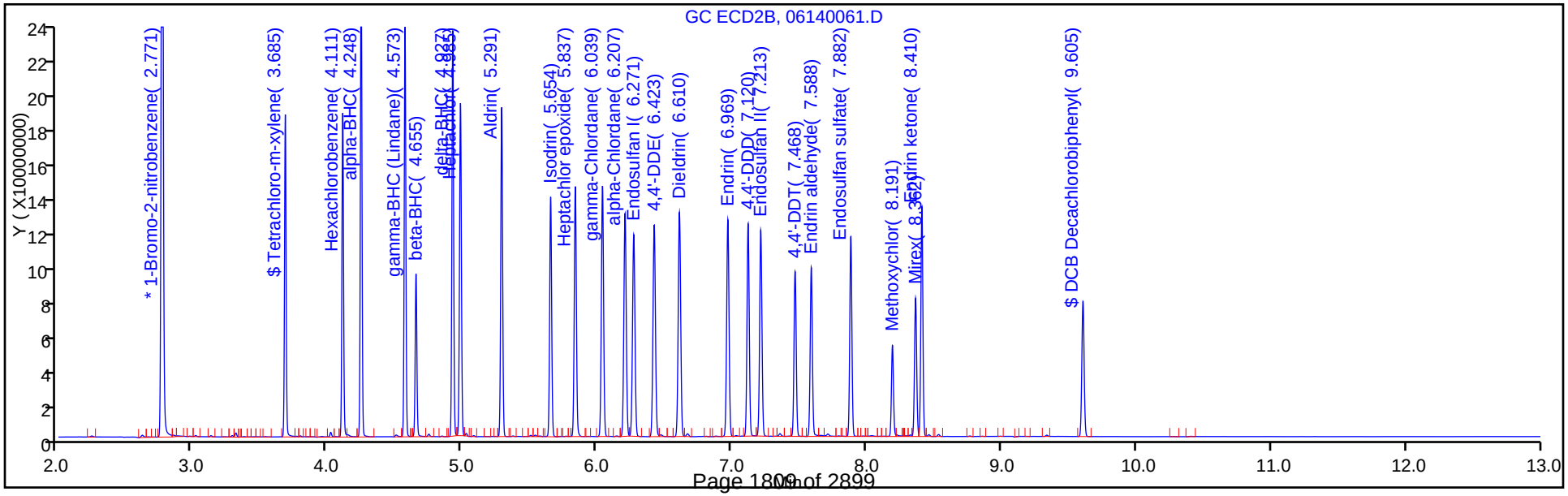
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Injection Date:	15-Jun-2017 09:04:22	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV AB			Worklist Smp#:	61
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	55
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377996/11 Calibration Date: 06/20/2017 13:45

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06200011.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0020		1490	2000	-25.3*	20.0
Toxaphene Peak 2	Qua		0.0250		1790	2000	-10.6	20.0
Toxaphene Peak 3	Lin2		0.0184		1930	2000	-3.7	20.0
Toxaphene Peak 4	Lin2		0.0466		2070	2000	3.6	20.0
Toxaphene Peak 5	Lin2		0.0537		2100	2000	5.2	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377996/11 Calibration Date: 06/20/2017 13:45

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06200011.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	5.61	5.59	5.63
Toxaphene Peak 2	6.93	6.91	6.95
Toxaphene Peak 3	7.19	7.17	7.21
Toxaphene Peak 4	7.69	7.67	7.71
Toxaphene Peak 5	8.14	8.12	8.16

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200011.D
Lims ID: CCV TOX
Client ID:
Sample Type: CCV
Inject. Date: 20-Jun-2017 13:45:25 ALS Bottle#: 5 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV TOX
Misc. Info.: 280-0059933-011
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 21-Jun-2017 10:59:46 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK008

First Level Reviewer: wellsd Date: 20-Jun-2017 15:27:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.995	2.995	0.000	2337615710	150.0	150.0	
2	2.769	2.769	0.000	461744226	150.0	150.0	
28 Toxaphene							M
1	5.607	5.607	0.000	63188223	2000.0	1494.2	M
1	6.926	6.926	0.000	779915895	2000.0	1788.0	M
1	7.191	7.191	0.000	571863203	2000.0	1925.4	M
1	7.694	7.694	0.000	1452058172	2000.0	2072.4	M
1	8.135	8.135	0.000	1674072230	2000.0	2103.6	M
		Average of Peak Amounts =				1876.7	
2	6.115	6.115	0.000	46523606	2000.0	1724.8	M
2	7.163	7.163	0.000	105339149	2000.0	1738.2	M
2	7.308	7.308	0.000	247094672	2000.0	1602.3	M
2	7.597	7.597	0.000	185251511	2000.0	1778.8	M
2	8.119	8.119	0.000	150740793	2000.0	1692.8	M
		Average of Peak Amounts =				1707.4	
						RPD = 9.45	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00012 Amount Added: 1.00 Units: mL
8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

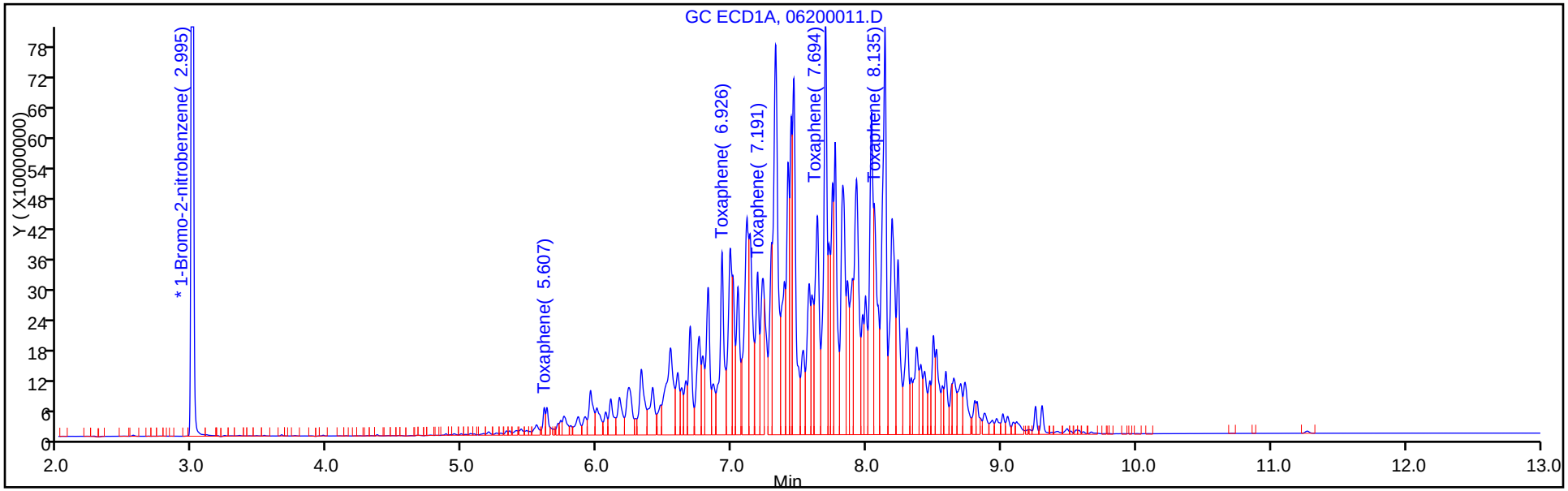
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TestAmerica Denver

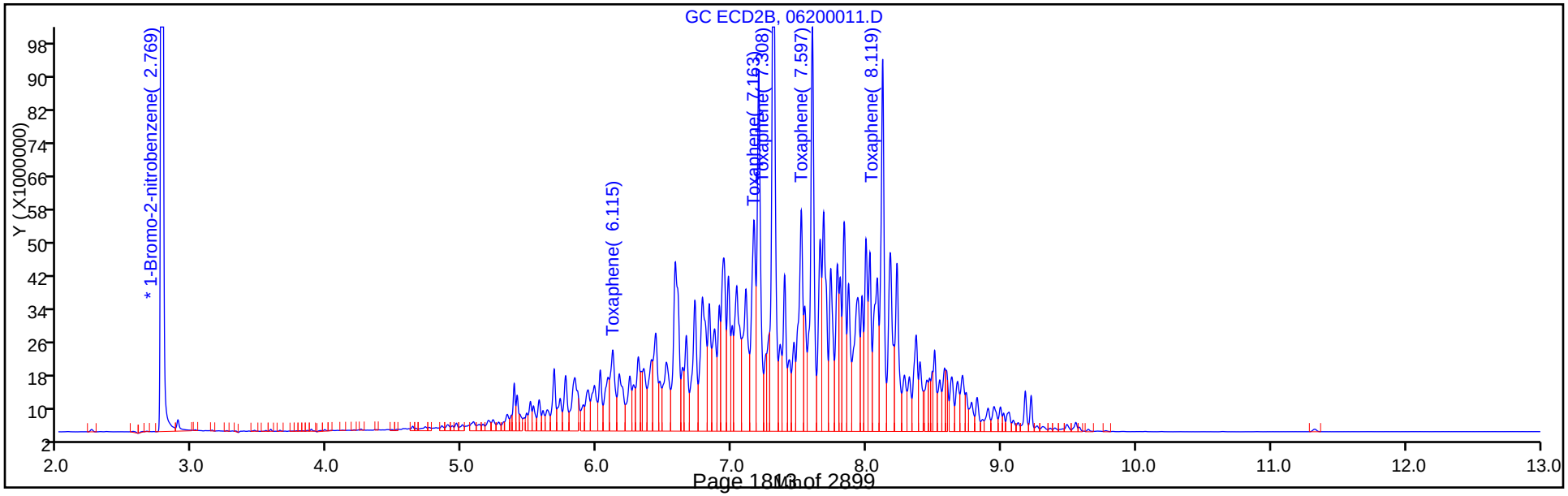
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Injection Date:	20-Jun-2017 13:45:25	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV TOX			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 21-Jun-2017 10:59:48 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200011.D

Injection Date: 20-Jun-2017 13:45:25 Instrument ID: SGC_P1

Lims ID: CCV TOX

Client ID:

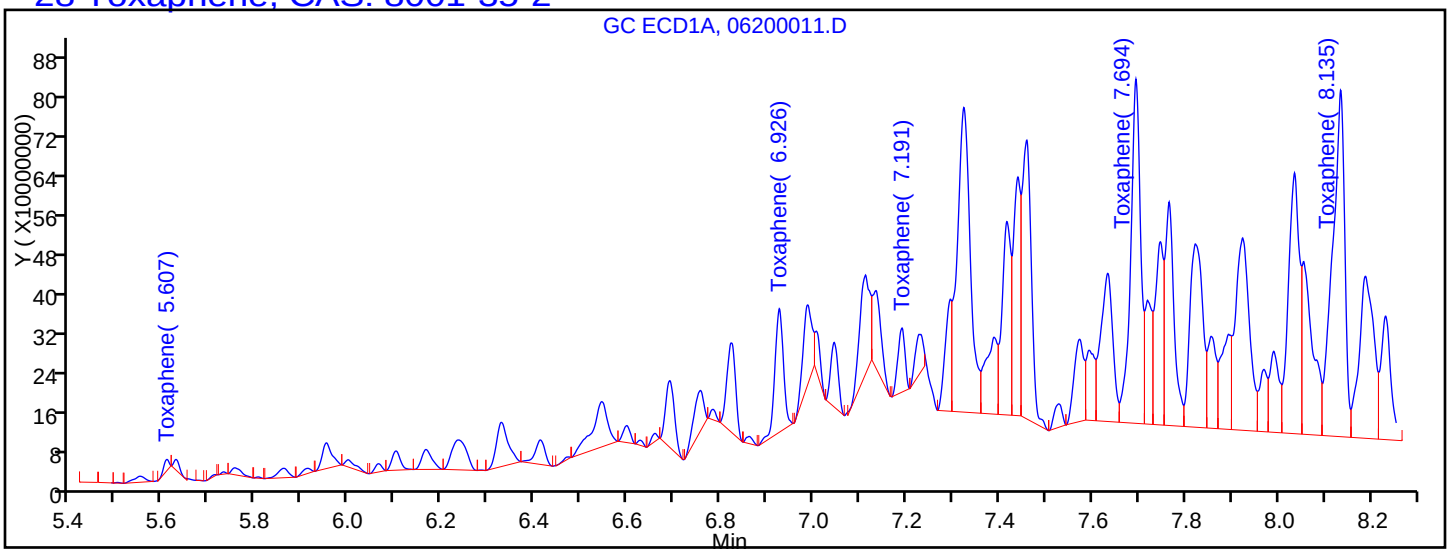
Operator ID: DAW ALS Bottle#: 5 Worklist Smp#: 11

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

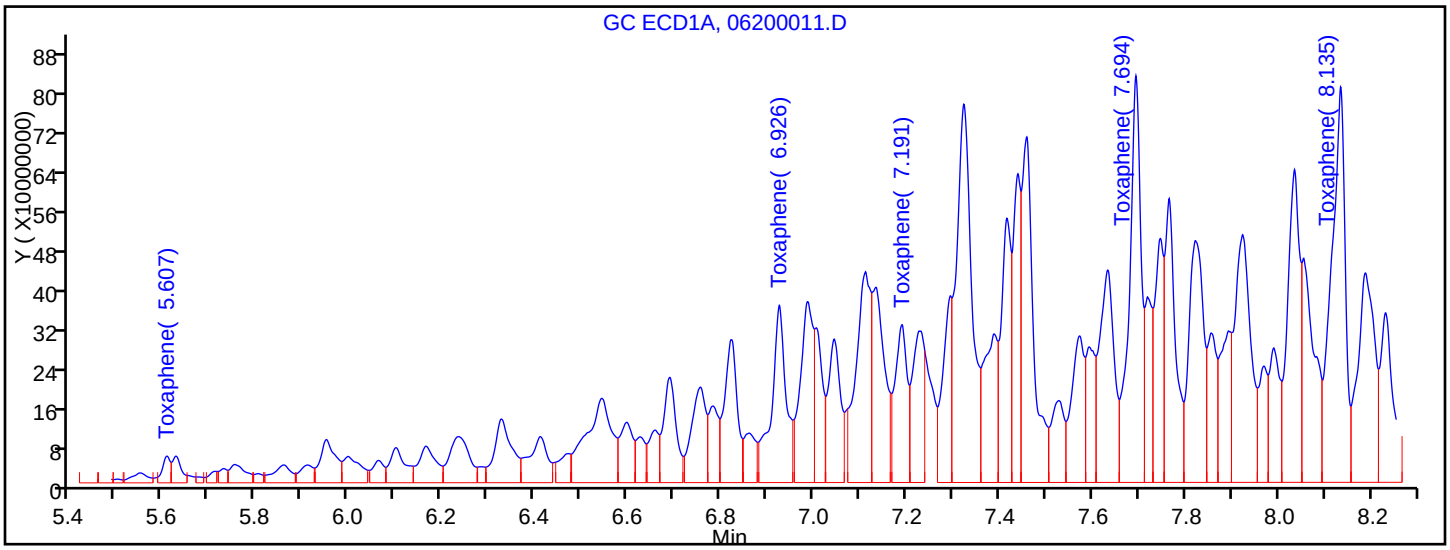
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.607	Response = 18459817
6.926	Response = 322935732
7.191	Response = 138501435
7.694	Response = 1040006829
8.135	Response = 1300427208



Manual Integration Results

5.607	Response = 63188223	M
6.926	Response = 779915895	M
7.191	Response = 571863203	M
7.694	Response = 1452058172	M
8.135	Response = 1674072230	M

Reviewer: wellsd, 20-Jun-2017 15:27:39

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377996/11 Calibration Date: 06/20/2017 13:45

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06200011.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0076		1720	2000	-13.8	20.0
Toxaphene Peak 2	Lin2		0.0171		1740	2000	-13.1	20.0
Toxaphene Peak 3	Lin2		0.0401		1600	2000	-19.9	20.0
Toxaphene Peak 4	Lin2		0.0301		1780	2000	-11.1	20.0
Toxaphene Peak 5	Lin2		0.0245		1690	2000	-15.4	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377996/11 Calibration Date: 06/20/2017 13:45

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06200011.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	6.12	6.10	6.14
Toxaphene Peak 2	7.16	7.14	7.18
Toxaphene Peak 3	7.31	7.29	7.33
Toxaphene Peak 4	7.60	7.58	7.62
Toxaphene Peak 5	8.12	8.10	8.14

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200011.D
Lims ID: CCV TOX
Client ID:
Sample Type: CCV
Inject. Date: 20-Jun-2017 13:45:25 ALS Bottle#: 5 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV TOX
Misc. Info.: 280-0059933-011
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 21-Jun-2017 10:59:46 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK008

First Level Reviewer: wellsd Date: 20-Jun-2017 15:27:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.995	2.995	0.000	2337615710	150.0	150.0	
2	2.769	2.769	0.000	461744226	150.0	150.0	
28 Toxaphene							M
1	5.607	5.607	0.000	63188223	2000.0	1494.2	M
1	6.926	6.926	0.000	779915895	2000.0	1788.0	M
1	7.191	7.191	0.000	571863203	2000.0	1925.4	M
1	7.694	7.694	0.000	1452058172	2000.0	2072.4	M
1	8.135	8.135	0.000	1674072230	2000.0	2103.6	M
		Average of Peak Amounts =				1876.7	
2	6.115	6.115	0.000	46523606	2000.0	1724.8	M
2	7.163	7.163	0.000	105339149	2000.0	1738.2	M
2	7.308	7.308	0.000	247094672	2000.0	1602.3	M
2	7.597	7.597	0.000	185251511	2000.0	1778.8	M
2	8.119	8.119	0.000	150740793	2000.0	1692.8	M
		Average of Peak Amounts =				1707.4	
						RPD = 9.45	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00012 Amount Added: 1.00 Units: mL
8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

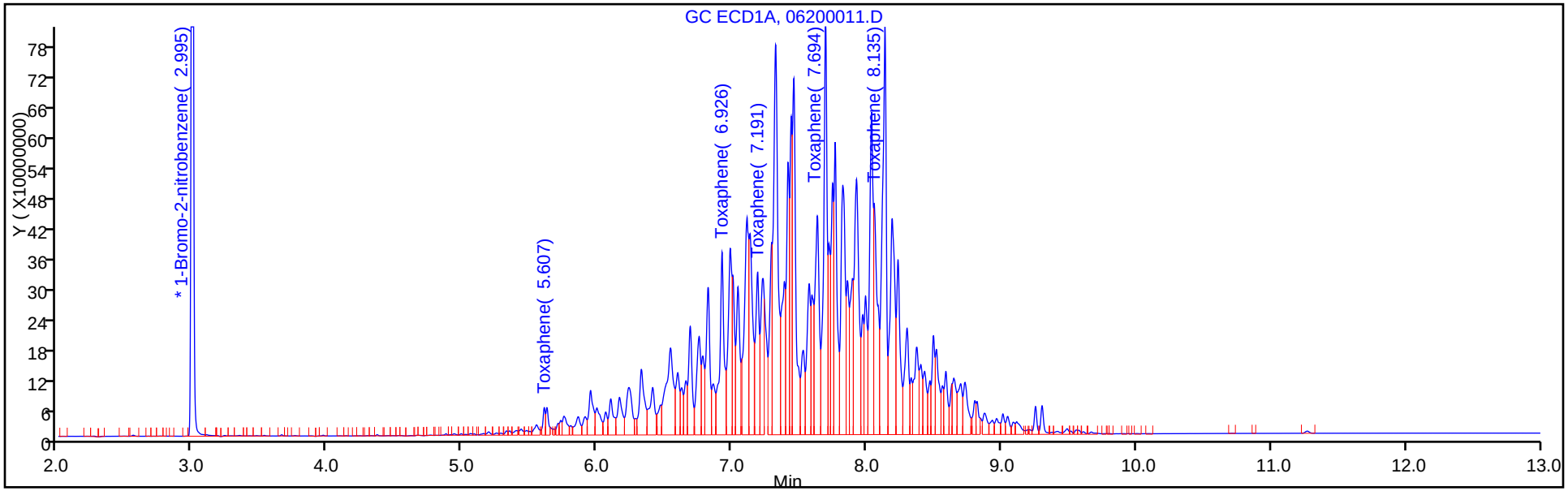
Report Date: 21-Jun-2017 10:59:49 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

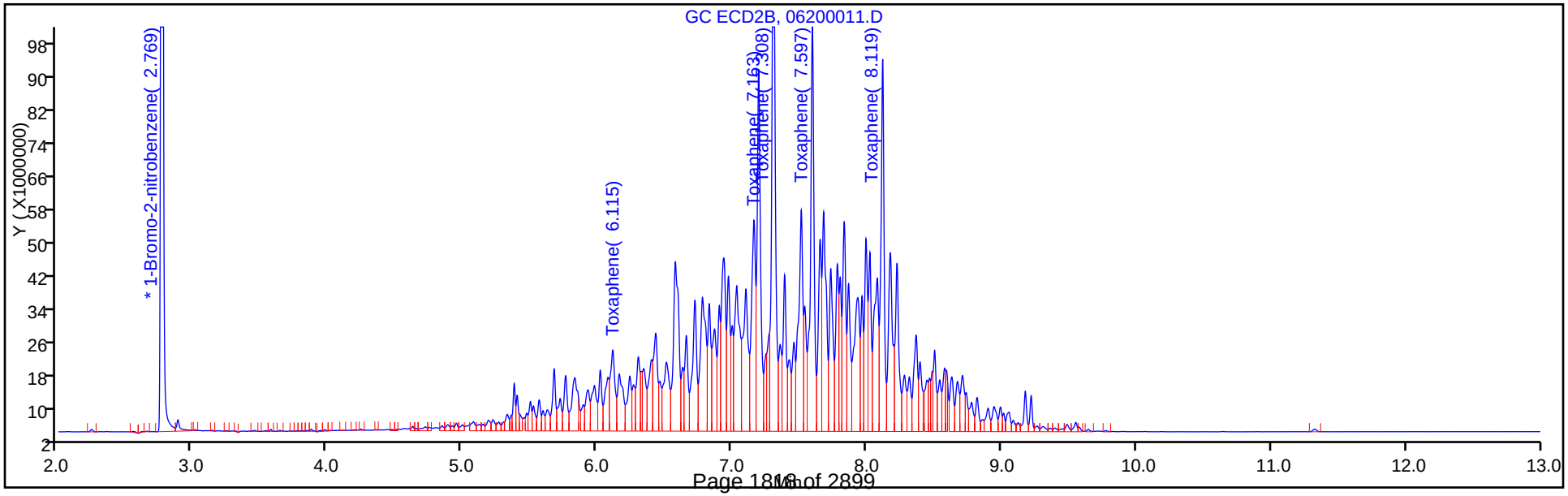
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Injection Date:	20-Jun-2017 13:45:25	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV TOX			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 21-Jun-2017 10:59:49 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200011.D

Injection Date: 20-Jun-2017 13:45:25 Instrument ID: SGC_P1

Lims ID: CCV TOX

Client ID:

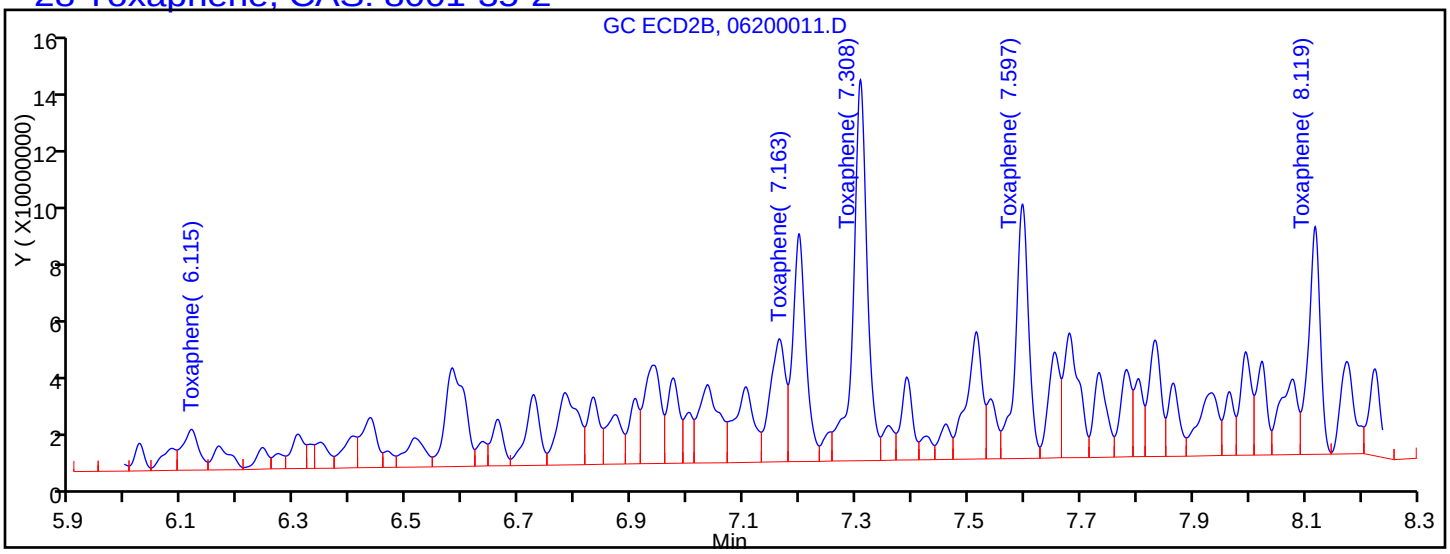
Operator ID: DAW ALS Bottle#: 5 Worklist Smp#: 11

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

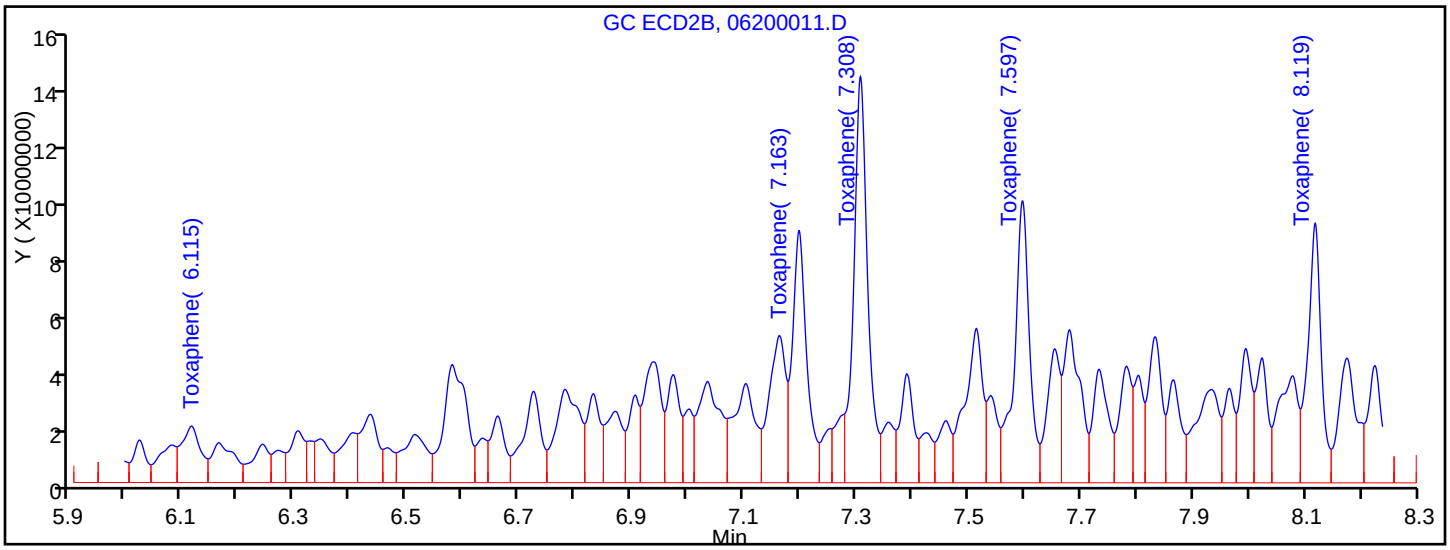
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.115	Response = 28539689
7.163	Response = 81532358
7.308	Response = 230502469
7.597	Response = 145146349
8.119	Response = 114353280



Manual Integration Results

6.115	Response = 46523606	M
7.163	Response = 105339149	M
7.308	Response = 247094672	M
7.597	Response = 185251511	M
8.119	Response = 150740793	M

Reviewer: wellsd, 20-Jun-2017 15:27:43

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVIS 280-377996/13 Calibration Date: 06/20/2017 14:19

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06200013.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		1.170		46.1	50.0	-7.9	20.0
alpha-BHC	Lin2		1.869		47.0	50.0	-5.9	20.0
gamma-BHC (Lindane)	Lin2		1.705		47.5	50.0	-4.9	20.0
beta-BHC	Lin2		0.6265		45.2	50.0	-9.6	20.0
delta-BHC	Lin2		1.773		46.6	50.0	-6.7	20.0
Heptachlor	Lin2		1.636		49.4	50.0	-1.2	20.0
Aldrin	Lin2		1.588		47.0	50.0	-5.9	20.0
Heptachlor epoxide	Lin2		1.367		46.9	50.0	-6.2	20.0
gamma-Chlordane	Lin2		1.524		47.4	50.0	-5.2	20.0
alpha-Chlordane	Lin2		1.450		47.2	50.0	-5.7	20.0
4,4'-DDE	Lin2		1.458		46.1	50.0	-7.8	20.0
Endosulfan I	Lin2		1.338		47.7	50.0	-4.6	20.0
Dieldrin	Lin2		1.483		47.0	50.0	-6.1	20.0
Endrin	Lin2		1.358		53.0	50.0	6.0	20.0
4,4'-DDD	Lin2		1.218		45.7	50.0	-8.7	20.0
Endosulfan II	Lin2		1.287		48.6	50.0	-2.8	20.0
4,4'-DDT	Lin2		1.315		51.2	50.0	2.4	20.0
Endrin aldehyde	Lin2		1.028		48.0	50.0	-4.0	20.0
Methoxychlor	Lin2		0.5668		50.7	50.0	1.4	20.0
Endosulfan sulfate	Lin2		1.230		50.2	50.0	0.4	20.0
Endrin ketone	Lin2		1.298		47.7	50.0	-4.5	20.0
Tetrachloro-m-xylene (Surr)	Lin2		1.031		45.2	50.0	-9.5	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.7893		50.8	50.0	1.6	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVIS 280-377996/13 Calibration Date: 06/20/2017 14:19

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06200013.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.20	4.19	4.21
alpha-BHC	4.37	4.36	4.38
gamma-BHC (Lindane)	4.68	4.67	4.69
beta-BHC	4.76	4.75	4.77
delta-BHC	4.94	4.93	4.95
Heptachlor	5.15	5.14	5.16
Aldrin	5.43	5.42	5.44
Heptachlor epoxide	6.06	6.05	6.07
gamma-Chlordane	6.20	6.19	6.21
alpha-Chlordane	6.36	6.35	6.37
4,4'-DDE	6.46	6.45	6.47
Endosulfan I	6.53	6.52	6.54
Dieldrin	6.82	6.81	6.83
Endrin	7.08	7.07	7.09
4,4'-DDD	7.16	7.15	7.17
Endosulfan II	7.33	7.32	7.34
4,4'-DDT	7.47	7.46	7.48
Endrin aldehyde	7.79	7.78	7.80
Methoxychlor	7.98	7.97	7.99
Endosulfan sulfate	8.24	8.23	8.25
Endrin ketone	8.51	8.50	8.52
Tetrachloro-m-xylene (Surr)	3.82	3.81	3.83
DCB Decachlorobiphenyl (Surr)	9.49	9.48	9.50

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200013.D
Lims ID: CCVIS AB
Client ID:
Sample Type: CCVIS
Inject. Date: 20-Jun-2017 14:19:30 ALS Bottle#: 7 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVIS AB
Misc. Info.: 280-0059933-013
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 21-Jun-2017 10:59:53 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK008

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.996	2.996	0.000	2338753398	150.0	150.0	
2	2.769	2.769	0.000	459195506	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.822	3.822	0.000	803818095	50.0	45.2	
2	3.682	3.682	0.000	145476849	50.0	46.0	
						RPD = 1.60	
5 Hexachlorobenzene							
1	4.202	4.202	0.000	911950095	50.0	46.1	
2	4.108	4.108	0.000	148695554	50.0	45.2	
						RPD = 1.96	
8 alpha-BHC							
1	4.369	4.369	0.000	1456677091	50.0	47.0	
2	4.246	4.246	0.000	215571180	50.0	46.3	
						RPD = 1.62	
9 gamma-BHC (Lindane)							
1	4.677	4.677	0.000	1329020768	50.0	47.5	
2	4.571	4.571	0.000	191304739	50.0	46.5	
						RPD = 2.21	
10 beta-BHC							
1	4.762	4.762	0.000	488444528	50.0	45.2	
2	4.652	4.652	0.000	78201723	50.0	45.5	
						RPD = 0.60	
12 delta-BHC							
1	4.936	4.936	0.000	1382562937	50.0	46.6	
2	4.925	4.925	0.000	195132083	50.0	46.0	
						RPD = 1.30	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
15 Heptachlor							
1	5.147	5.147	0.000	1275088827	50.0	49.4	
2	4.982	4.982	0.000	181860274	50.0	47.9	
						RPD = 3.11	
16 Aldrin							
1	5.432	5.432	0.000	1237731178	50.0	47.0	
2	5.288	5.288	0.000	172195064	50.0	45.8	
						RPD = 2.70	
18 Isodrin							
1	5.761	5.761	0.000	947899307	50.0	47.1	
2	5.652	5.652	0.000	134563710	50.0	45.9	
						RPD = 2.48	
21 Heptachlor epoxide							
1	6.055	6.055	0.000	1065416846	50.0	46.9	
2	5.834	5.834	0.000	151337688	50.0	45.3	
						RPD = 3.55	
22 gamma-Chlordane							
1	6.198	6.198	0.000	1188259790	50.0	47.4	
2	6.035	6.035	0.000	157269486	50.0	45.0	
						RPD = 5.16	
23 alpha-Chlordane							
1	6.359	6.359	0.000	1130100377	50.0	47.2	
2	6.203	6.203	0.000	150755911	50.0	45.3	
						RPD = 4.06	
24 4,4'-DDE							
1	6.456	6.456	0.000	1136477969	50.0	46.1	
2	6.420	6.420	0.000	149449091	50.0	43.6	
						RPD = 5.68	
25 Endosulfan I							
1	6.530	6.530	0.000	1042999287	50.0	47.7	
2	6.267	6.267	0.000	140572163	50.0	43.9	
						RPD = 8.31	
27 Dieldrin							
1	6.816	6.816	0.000	1156379818	50.0	47.0	
2	6.607	6.607	0.000	157536602	50.0	44.6	
						RPD = 5.26	
30 Endrin							
1	7.084	7.084	0.000	1058977892	50.0	53.0	
2	6.967	6.967	0.000	143528473	50.0	50.8	
						RPD = 4.28	
32 4,4'-DDD							
1	7.160	7.160	0.000	949780659	50.0	45.7	
2	7.118	7.118	0.000	126360317	50.0	46.3	
						RPD = 1.43	
34 Endosulfan II							
1	7.334	7.334	0.000	1003632351	50.0	48.6	
2	7.212	7.212	0.000	135730740	50.0	46.3	
						RPD = 4.89	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
35 4,4'-DDT							
1	7.470	7.470	0.000	1025240059	50.0	51.2	
2	7.467	7.467	0.000	125327665	50.0	47.9	
						RPD = 6.63	
36 Endrin aldehyde							
1	7.787	7.787	0.000	801534458	50.0	48.0	
2	7.587	7.587	0.000	107824090	50.0	45.2	
						RPD = 5.92	
37 Methoxychlor							
1	7.983	7.983	0.000	441838693	50.0	50.7	
2	8.189	8.189	0.000	59531544	50.0	48.0	
						RPD = 5.44	
38 Mirex							
1	8.128	8.128	0.000	671278344	50.0	48.1	
2	8.360	8.360	0.000	85983543	50.0	43.3	
						RPD = 10.30	
39 Endosulfan sulfate							
1	8.236	8.236	0.000	958625465	50.0	50.2	
2	7.879	7.879	0.000	120281771	50.0	45.6	
						RPD = 9.63	
40 Endrin ketone							
1	8.514	8.514	0.000	1011888408	50.0	47.7	
2	8.407	8.407	0.000	134498279	50.0	44.8	
						RPD = 6.40	
$ 41 DCB Decachlorobiphenyl							
1	9.494	9.494	0.000	615324202	50.0	50.8	
2	9.602	9.602	0.000	90747208	50.0	47.5	
						RPD = 6.64	

Reagents:

8081IcalL4_00026	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

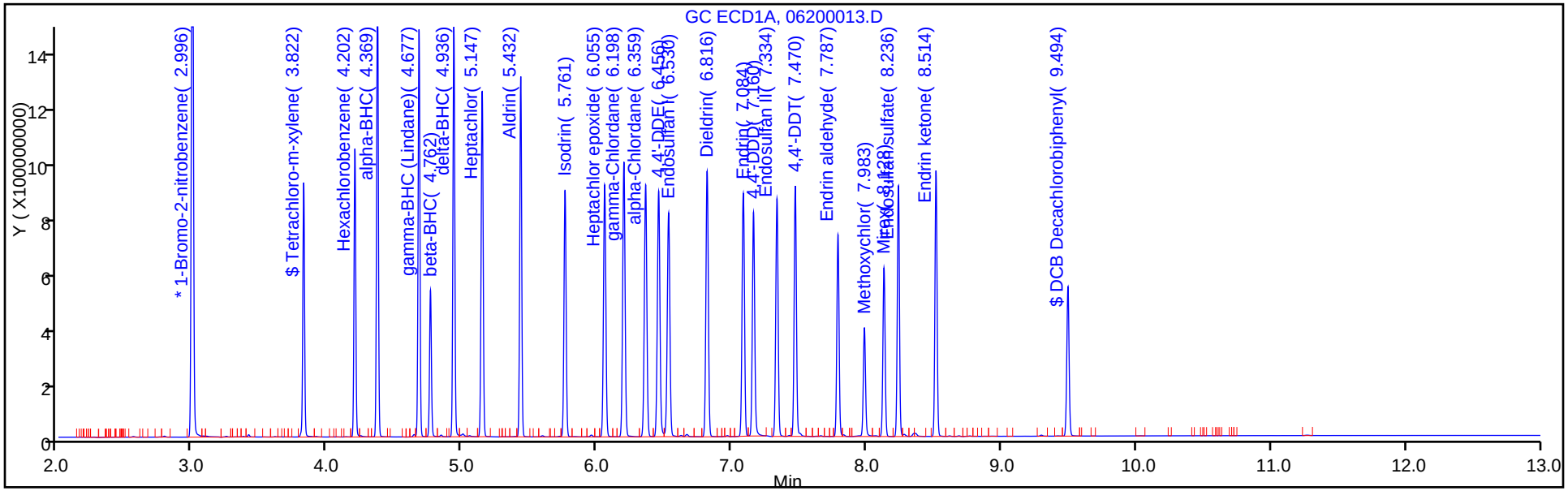
Report Date: 21-Jun-2017 10:59:53 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

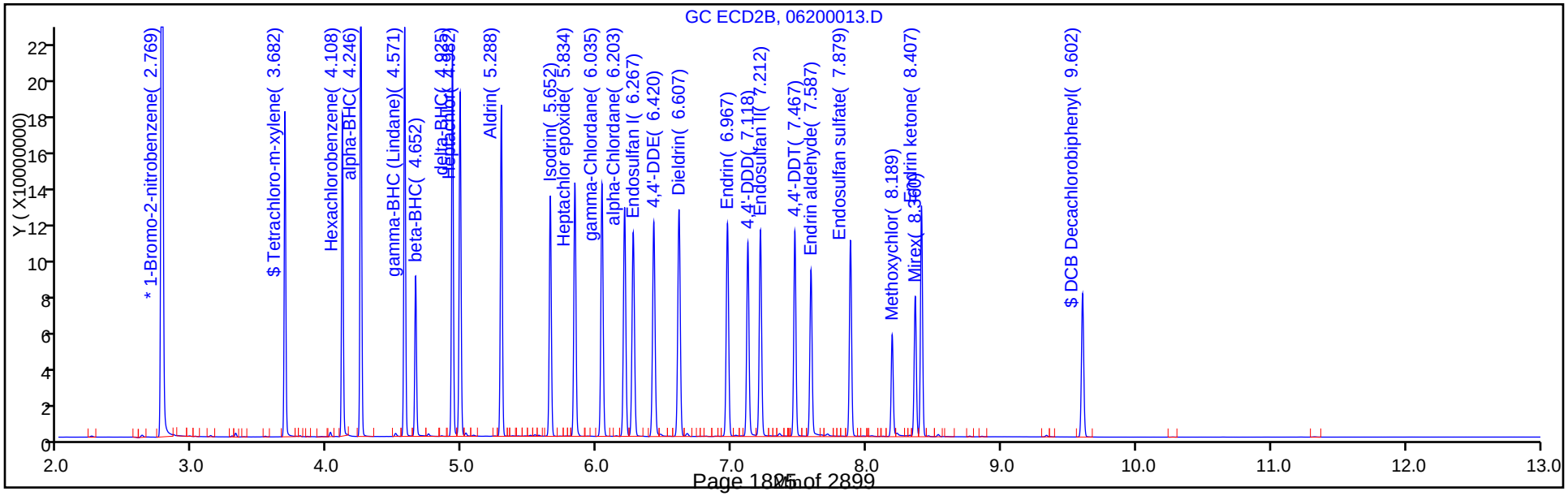
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200013.D

Injection Date:	20-Jun-2017 14:19:30	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCVIS AB			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVIS 280-377996/13 Calibration Date: 06/20/2017 14:19

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06200013.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		0.9715		45.2	50.0	-9.6	20.0
alpha-BHC	Lin2		1.408		46.3	50.0	-7.4	20.0
gamma-BHC (Lindane)	Lin2		1.250		46.5	50.0	-7.0	20.0
beta-BHC	Lin2		0.5109		45.5	50.0	-9.0	20.0
delta-BHC	Lin2		1.275		46.0	50.0	-7.9	20.0
Heptachlor	Lin2		1.188		47.9	50.0	-4.2	20.0
Aldrin	Lin2		1.125		45.8	50.0	-8.4	20.0
Heptachlor epoxide	Lin2		0.9887		45.3	50.0	-9.4	20.0
gamma-Chlordane	Lin2		1.027		45.0	50.0	-10.0	20.0
alpha-Chlordane	Lin2		0.9849		45.3	50.0	-9.4	20.0
Endosulfan I	Lin2		0.9184		43.9	50.0	-12.2	20.0
4,4'-DDE	Lin2		0.9764		43.6	50.0	-12.9	20.0
Dieldrin	Lin2		1.029		44.6	50.0	-10.9	20.0
Endrin	Lin2		0.9377		50.8	50.0	1.6	20.0
4,4'-DDD	Lin2		0.8255		46.3	50.0	-7.4	20.0
Endosulfan II	Lin2		0.8868		46.3	50.0	-7.4	20.0
4,4'-DDT	Lin2		0.8188		47.9	50.0	-4.1	20.0
Endrin aldehyde	Lin2		0.7044		45.2	50.0	-9.5	20.0
Endosulfan sulfate	Lin2		0.7858		45.6	50.0	-8.9	20.0
Methoxychlor	Lin2		0.3889		48.0	50.0	-3.9	20.0
Endrin ketone	Lin2		0.8787		44.8	50.0	-10.4	20.0
Tetrachloro-m-xylene (Surr)	Lin2		0.9504		46.0	50.0	-8.1	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.5929		47.5	50.0	-4.9	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVIS 280-377996/13 Calibration Date: 06/20/2017 14:19

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06200013.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.11	4.10	4.12
alpha-BHC	4.25	4.24	4.26
gamma-BHC (Lindane)	4.57	4.56	4.58
beta-BHC	4.65	4.64	4.66
delta-BHC	4.93	4.92	4.94
Heptachlor	4.98	4.97	4.99
Aldrin	5.29	5.28	5.30
Heptachlor epoxide	5.83	5.82	5.84
gamma-Chlordane	6.04	6.03	6.05
alpha-Chlordane	6.20	6.19	6.21
Endosulfan I	6.27	6.26	6.28
4,4'-DDE	6.42	6.41	6.43
Dieldrin	6.61	6.60	6.62
Endrin	6.97	6.96	6.98
4,4'-DDD	7.12	7.11	7.13
Endosulfan II	7.21	7.20	7.22
4,4'-DDT	7.47	7.46	7.48
Endrin aldehyde	7.59	7.58	7.60
Endosulfan sulfate	7.88	7.87	7.89
Methoxychlor	8.19	8.18	8.20
Endrin ketone	8.41	8.40	8.42
Tetrachloro-m-xylene (Surr)	3.68	3.67	3.69
DCB Decachlorobiphenyl (Surr)	9.60	9.59	9.61

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200013.D
Lims ID: CCVIS AB
Client ID:
Sample Type: CCVIS
Inject. Date: 20-Jun-2017 14:19:30 ALS Bottle#: 7 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVIS AB
Misc. Info.: 280-0059933-013
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 21-Jun-2017 10:59:53 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK008

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.996	2.996	0.000	2338753398	150.0	150.0	
2	2.769	2.769	0.000	459195506	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.822	3.822	0.000	803818095	50.0	45.2	
2	3.682	3.682	0.000	145476849	50.0	46.0	
						RPD = 1.60	
5 Hexachlorobenzene							
1	4.202	4.202	0.000	911950095	50.0	46.1	
2	4.108	4.108	0.000	148695554	50.0	45.2	
						RPD = 1.96	
8 alpha-BHC							
1	4.369	4.369	0.000	1456677091	50.0	47.0	
2	4.246	4.246	0.000	215571180	50.0	46.3	
						RPD = 1.62	
9 gamma-BHC (Lindane)							
1	4.677	4.677	0.000	1329020768	50.0	47.5	
2	4.571	4.571	0.000	191304739	50.0	46.5	
						RPD = 2.21	
10 beta-BHC							
1	4.762	4.762	0.000	488444528	50.0	45.2	
2	4.652	4.652	0.000	78201723	50.0	45.5	
						RPD = 0.60	
12 delta-BHC							
1	4.936	4.936	0.000	1382562937	50.0	46.6	
2	4.925	4.925	0.000	195132083	50.0	46.0	
						RPD = 1.30	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
15 Heptachlor							
1	5.147	5.147	0.000	1275088827	50.0	49.4	
2	4.982	4.982	0.000	181860274	50.0	47.9	
						RPD = 3.11	
16 Aldrin							
1	5.432	5.432	0.000	1237731178	50.0	47.0	
2	5.288	5.288	0.000	172195064	50.0	45.8	
						RPD = 2.70	
18 Isodrin							
1	5.761	5.761	0.000	947899307	50.0	47.1	
2	5.652	5.652	0.000	134563710	50.0	45.9	
						RPD = 2.48	
21 Heptachlor epoxide							
1	6.055	6.055	0.000	1065416846	50.0	46.9	
2	5.834	5.834	0.000	151337688	50.0	45.3	
						RPD = 3.55	
22 gamma-Chlordane							
1	6.198	6.198	0.000	1188259790	50.0	47.4	
2	6.035	6.035	0.000	157269486	50.0	45.0	
						RPD = 5.16	
23 alpha-Chlordane							
1	6.359	6.359	0.000	1130100377	50.0	47.2	
2	6.203	6.203	0.000	150755911	50.0	45.3	
						RPD = 4.06	
24 4,4'-DDE							
1	6.456	6.456	0.000	1136477969	50.0	46.1	
2	6.420	6.420	0.000	149449091	50.0	43.6	
						RPD = 5.68	
25 Endosulfan I							
1	6.530	6.530	0.000	1042999287	50.0	47.7	
2	6.267	6.267	0.000	140572163	50.0	43.9	
						RPD = 8.31	
27 Dieldrin							
1	6.816	6.816	0.000	1156379818	50.0	47.0	
2	6.607	6.607	0.000	157536602	50.0	44.6	
						RPD = 5.26	
30 Endrin							
1	7.084	7.084	0.000	1058977892	50.0	53.0	
2	6.967	6.967	0.000	143528473	50.0	50.8	
						RPD = 4.28	
32 4,4'-DDD							
1	7.160	7.160	0.000	949780659	50.0	45.7	
2	7.118	7.118	0.000	126360317	50.0	46.3	
						RPD = 1.43	
34 Endosulfan II							
1	7.334	7.334	0.000	1003632351	50.0	48.6	
2	7.212	7.212	0.000	135730740	50.0	46.3	
						RPD = 4.89	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
35 4,4'-DDT							
1	7.470	7.470	0.000	1025240059	50.0	51.2	
2	7.467	7.467	0.000	125327665	50.0	47.9	
						RPD = 6.63	
36 Endrin aldehyde							
1	7.787	7.787	0.000	801534458	50.0	48.0	
2	7.587	7.587	0.000	107824090	50.0	45.2	
						RPD = 5.92	
37 Methoxychlor							
1	7.983	7.983	0.000	441838693	50.0	50.7	
2	8.189	8.189	0.000	59531544	50.0	48.0	
						RPD = 5.44	
38 Mirex							
1	8.128	8.128	0.000	671278344	50.0	48.1	
2	8.360	8.360	0.000	85983543	50.0	43.3	
						RPD = 10.30	
39 Endosulfan sulfate							
1	8.236	8.236	0.000	958625465	50.0	50.2	
2	7.879	7.879	0.000	120281771	50.0	45.6	
						RPD = 9.63	
40 Endrin ketone							
1	8.514	8.514	0.000	1011888408	50.0	47.7	
2	8.407	8.407	0.000	134498279	50.0	44.8	
						RPD = 6.40	
$ 41 DCB Decachlorobiphenyl							
1	9.494	9.494	0.000	615324202	50.0	50.8	
2	9.602	9.602	0.000	90747208	50.0	47.5	
						RPD = 6.64	

Reagents:

8081IcalL4_00026	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

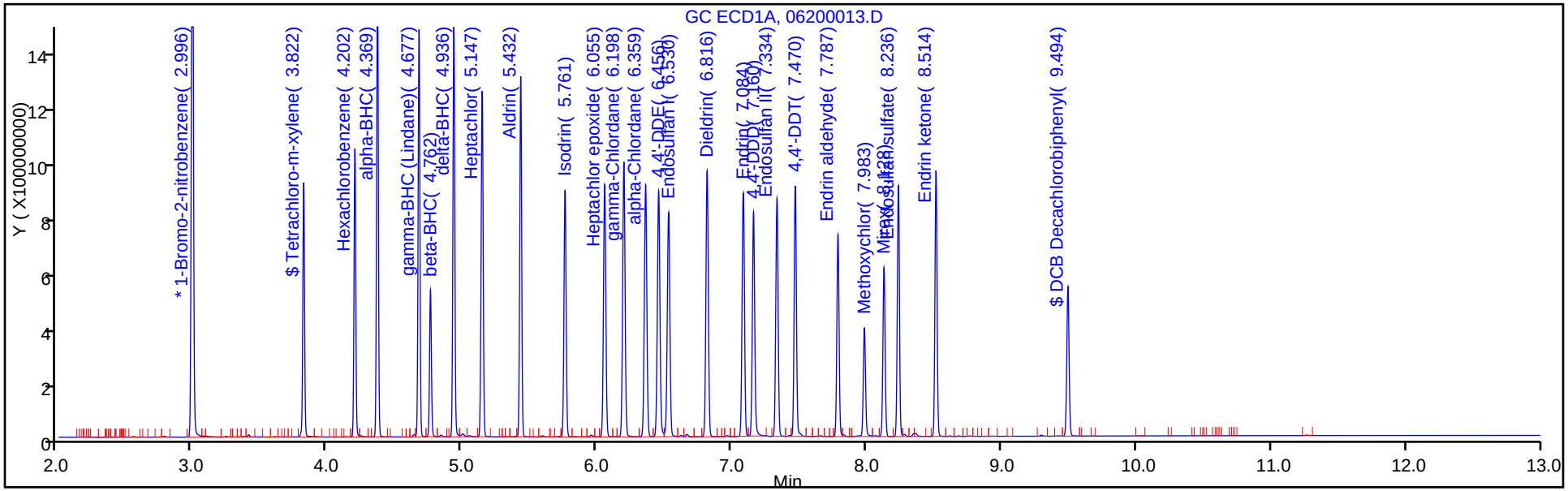
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TestAmerica Denver

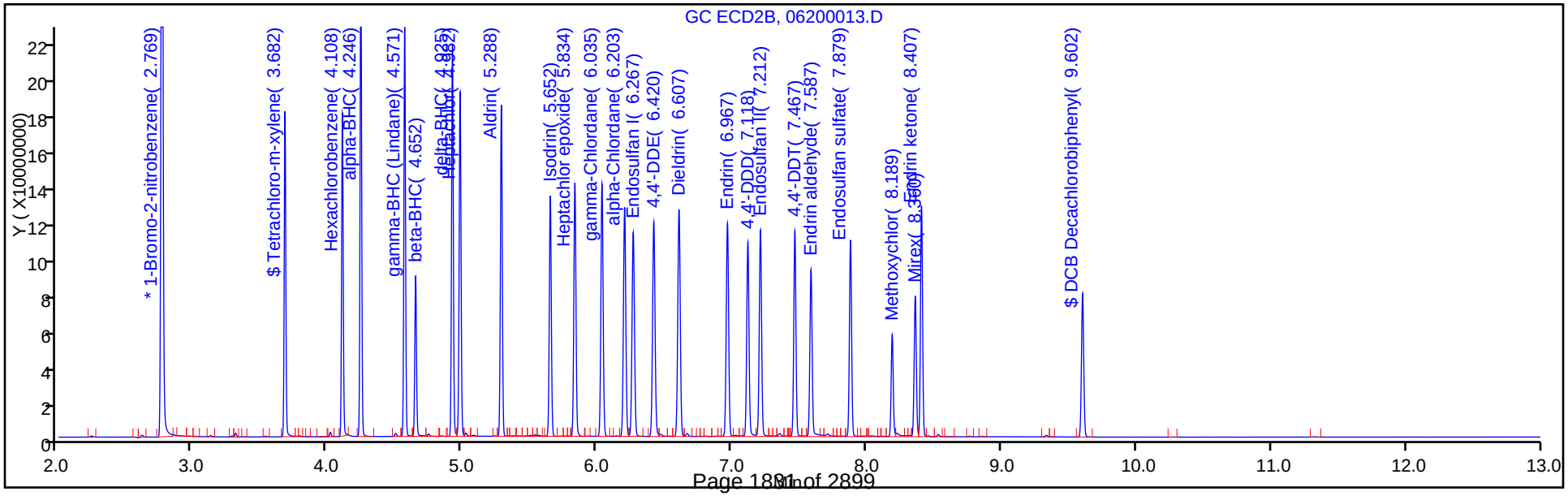
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Injection Date:	20-Jun-2017 14:19:30	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCVIS AB			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377996/29 Calibration Date: 06/20/2017 19:13

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06200029.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0030		2200	2000	10.2	20.0
Toxaphene Peak 2	Qua		0.0263		1870	2000	-6.4	20.0
Toxaphene Peak 3	Lin2		0.0177		1860	2000	-6.8	20.0
Toxaphene Peak 4	Lin2		0.0437		1950	2000	-2.6	20.0
Toxaphene Peak 5	Lin2		0.0449		1760	2000	-11.8	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377996/29 Calibration Date: 06/20/2017 19:13

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06200029.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	5.61	5.59	5.63
Toxaphene Peak 2	6.92	6.91	6.95
Toxaphene Peak 3	7.19	7.17	7.21
Toxaphene Peak 4	7.69	7.67	7.71
Toxaphene Peak 5	8.13	8.12	8.16

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200029.D
Lims ID: CCV TOX
Client ID:
Sample Type: CCV
Inject. Date: 20-Jun-2017 19:13:39 ALS Bottle#: 23 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV TOX
Misc. Info.: 280-0059933-029
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 21-Jun-2017 11:00:15 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK008

First Level Reviewer: wellsd Date: 21-Jun-2017 10:54:45

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.995	2.996	-0.001	2197611986	150.0	150.0	
2	2.769	2.769	0.000	448750814	150.0	150.0	
28 Toxaphene							M
1	5.605	5.607	-0.002	87577099	2000.0	2204.6	M
1	6.924	6.926	-0.002	769931715	2000.0	1871.6	M
1	7.188	7.191	-0.003	519832138	2000.0	1863.3	M
1	7.694	7.694	0.000	1280624646	2000.0	1947.2	M
1	8.134	8.135	-0.001	1314316041	2000.0	1764.6	M
		Average of Peak Amounts =				1930.2	
2	6.113	6.115	-0.002	54306799	2000.0	2091.7	M
2	7.162	7.163	-0.001	98948937	2000.0	1678.6	M
2	7.306	7.308	-0.002	235464790	2000.0	1570.4	M
2	7.595	7.597	-0.002	168319212	2000.0	1661.1	M
2	8.118	8.119	-0.001	129341829	2000.0	1491.8	M
		Average of Peak Amounts =				1698.7	
						RPD = 12.76	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00012 Amount Added: 1.00 Units: mL
8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

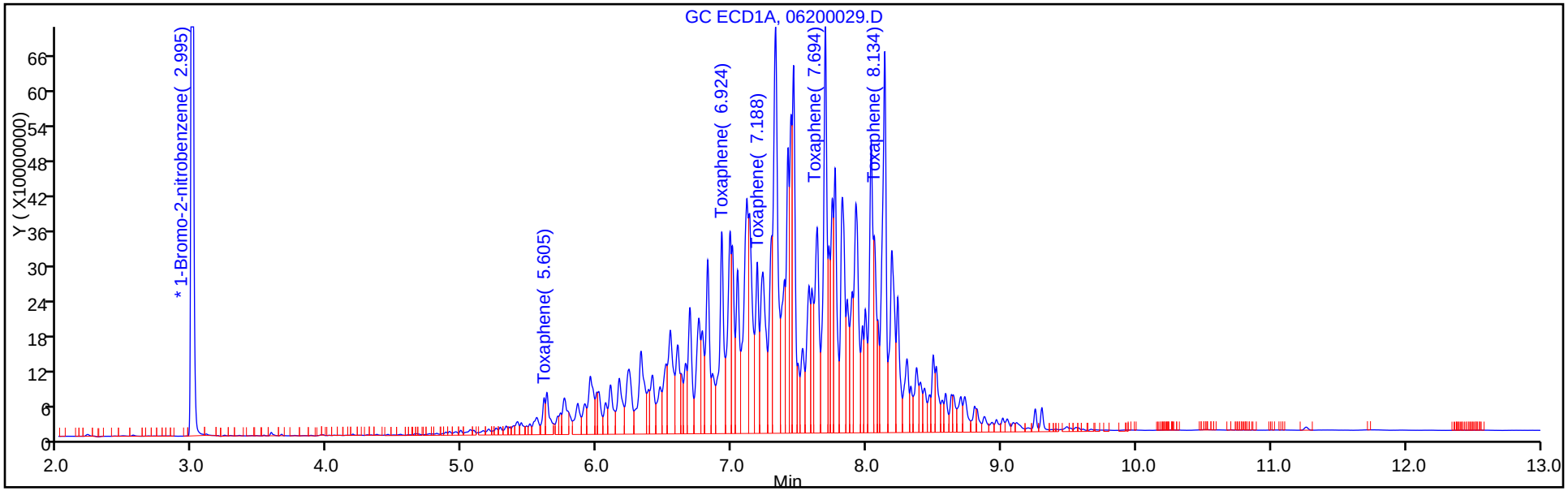
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TestAmerica Denver

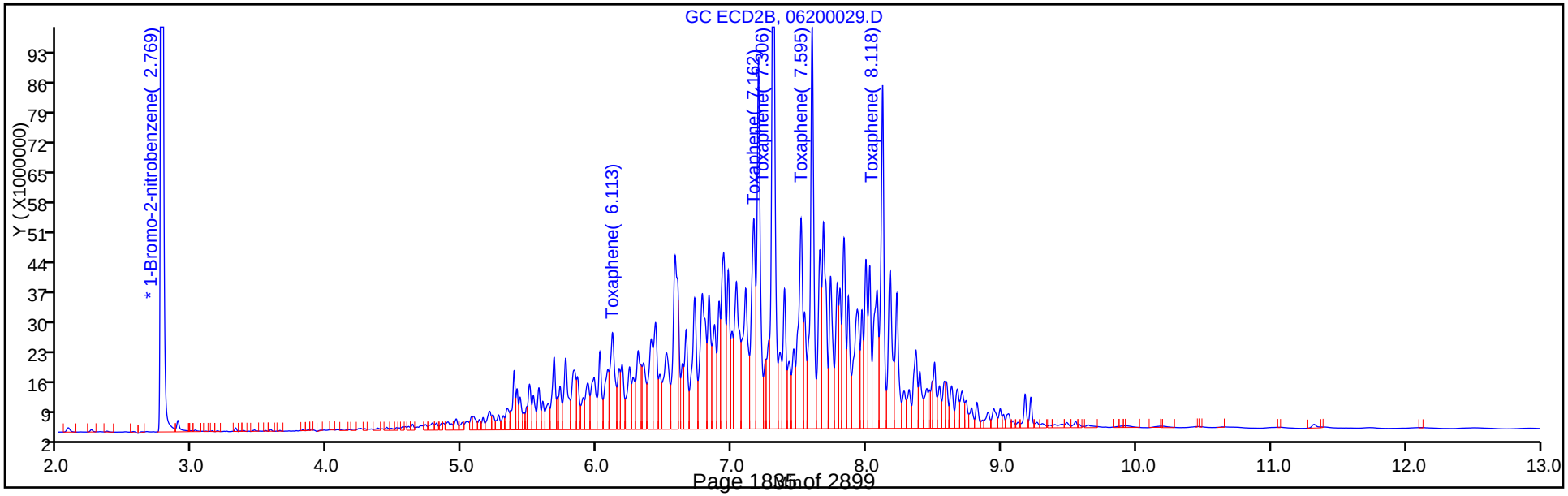
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Injection Date:	20-Jun-2017 19:13:39	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV TOX			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 21-Jun-2017 11:00:16 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200029.D

Injection Date: 20-Jun-2017 19:13:39 Instrument ID: SGC_P1

Lims ID: CCV TOX

Client ID:

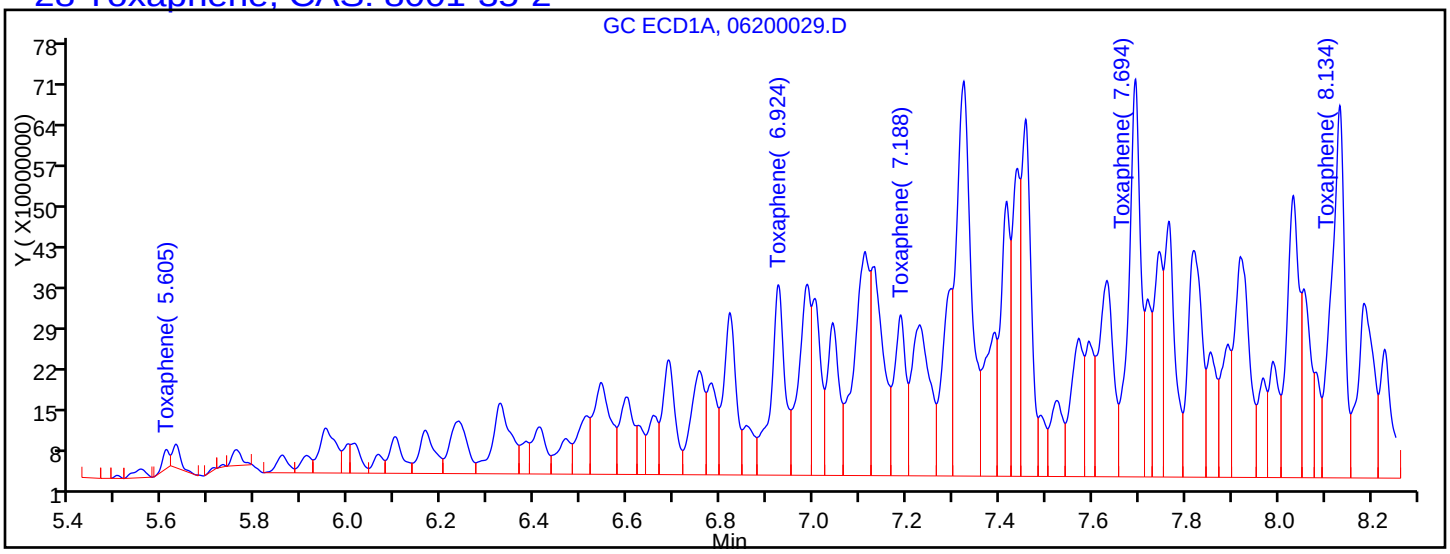
Operator ID: DAW ALS Bottle#: 23 Worklist Smp#: 29

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

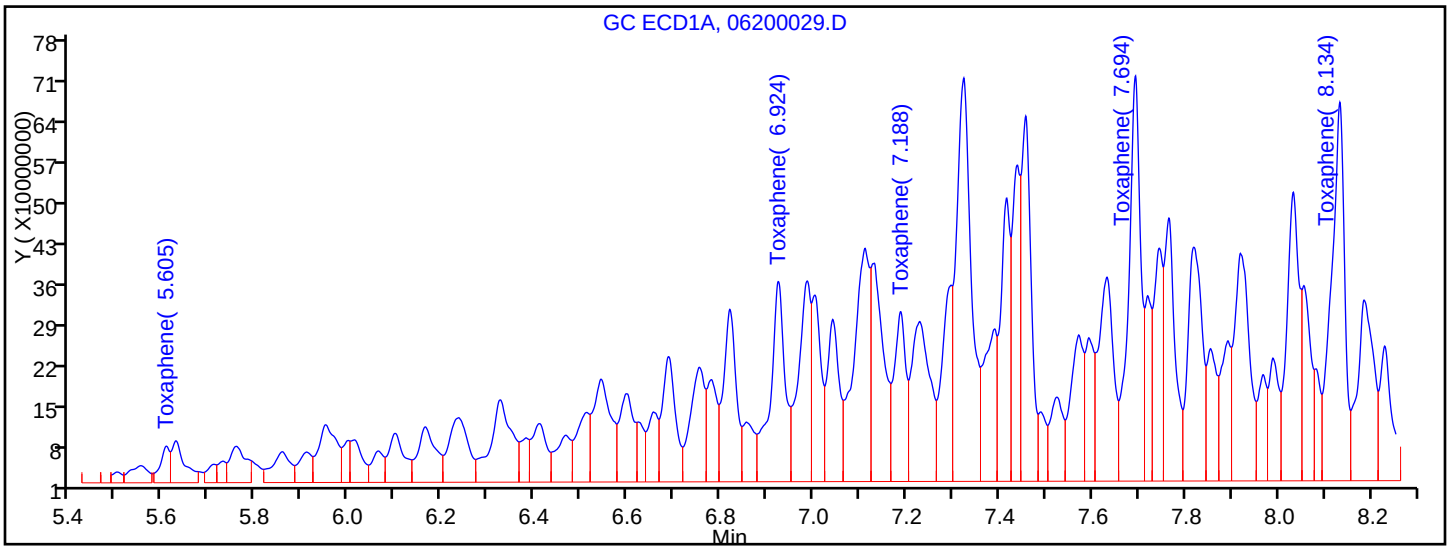
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.605	Response = 32963326
6.924	Response = 694328783
7.188	Response = 483585415
7.694	Response = 1236624131
8.134	Response = 1274296766



Manual Integration Results

5.605	Response = 87577099	M
6.924	Response = 769931715	M
7.188	Response = 519832138	M
7.694	Response = 1280624646	M
8.134	Response = 1314316041	M

Reviewer: wellsd, 21-Jun-2017 10:54:39

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377996/29 Calibration Date: 06/20/2017 19:13

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06200029.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0091		2090	2000	4.6	20.0
Toxaphene Peak 2	Lin2		0.0165		1680	2000	-16.1	20.0
Toxaphene Peak 3	Lin2		0.0394		1570	2000	-21.5*	20.0
Toxaphene Peak 4	Lin2		0.0281		1660	2000	-16.9	20.0
Toxaphene Peak 5	Lin2		0.0216		1490	2000	-25.4*	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377996/29 Calibration Date: 06/20/2017 19:13

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06200029.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	6.11	6.10	6.14
Toxaphene Peak 2	7.16	7.14	7.18
Toxaphene Peak 3	7.31	7.29	7.33
Toxaphene Peak 4	7.60	7.58	7.62
Toxaphene Peak 5	8.12	8.10	8.14

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200029.D
Lims ID: CCV TOX
Client ID:
Sample Type: CCV
Inject. Date: 20-Jun-2017 19:13:39 ALS Bottle#: 23 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV TOX
Misc. Info.: 280-0059933-029
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 21-Jun-2017 11:00:15 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK008

First Level Reviewer: wellsd Date: 21-Jun-2017 10:54:45

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.995	2.996	-0.001	2197611986	150.0	150.0	
2	2.769	2.769	0.000	448750814	150.0	150.0	
28 Toxaphene							M
1	5.605	5.607	-0.002	87577099	2000.0	2204.6	M
1	6.924	6.926	-0.002	769931715	2000.0	1871.6	M
1	7.188	7.191	-0.003	519832138	2000.0	1863.3	M
1	7.694	7.694	0.000	1280624646	2000.0	1947.2	M
1	8.134	8.135	-0.001	1314316041	2000.0	1764.6	M
		Average of Peak Amounts =				1930.2	
2	6.113	6.115	-0.002	54306799	2000.0	2091.7	M
2	7.162	7.163	-0.001	98948937	2000.0	1678.6	M
2	7.306	7.308	-0.002	235464790	2000.0	1570.4	M
2	7.595	7.597	-0.002	168319212	2000.0	1661.1	M
2	8.118	8.119	-0.001	129341829	2000.0	1491.8	M
		Average of Peak Amounts =				1698.7	
						RPD = 12.76	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00012 Amount Added: 1.00 Units: mL
8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

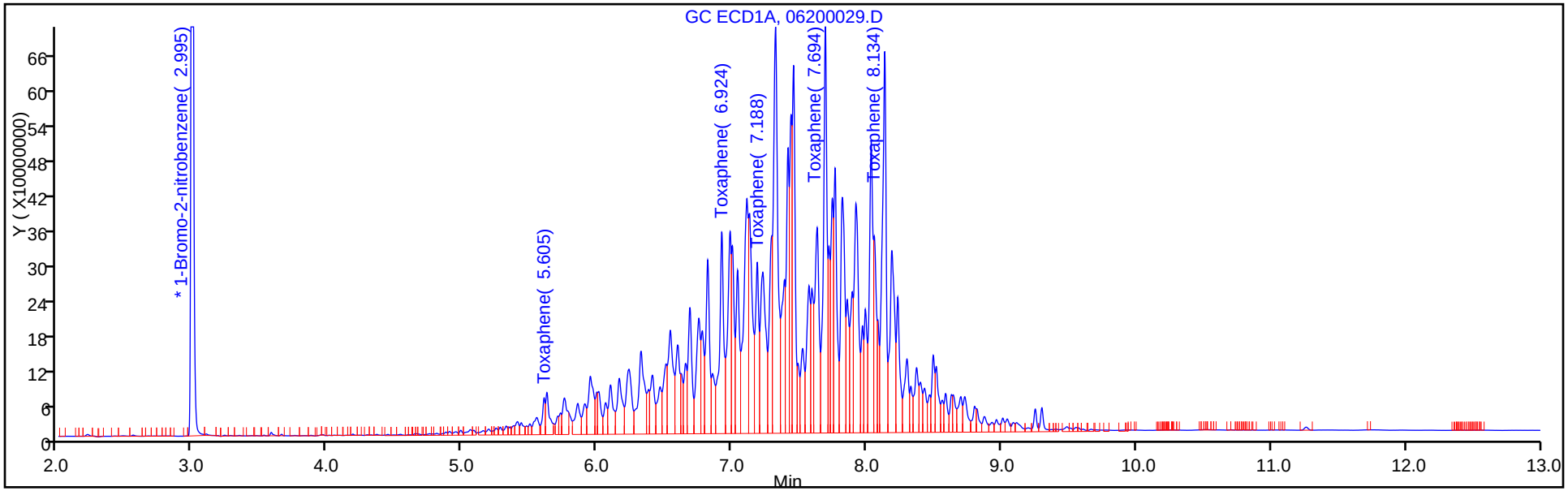
Report Date: 21-Jun-2017 11:00:17 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

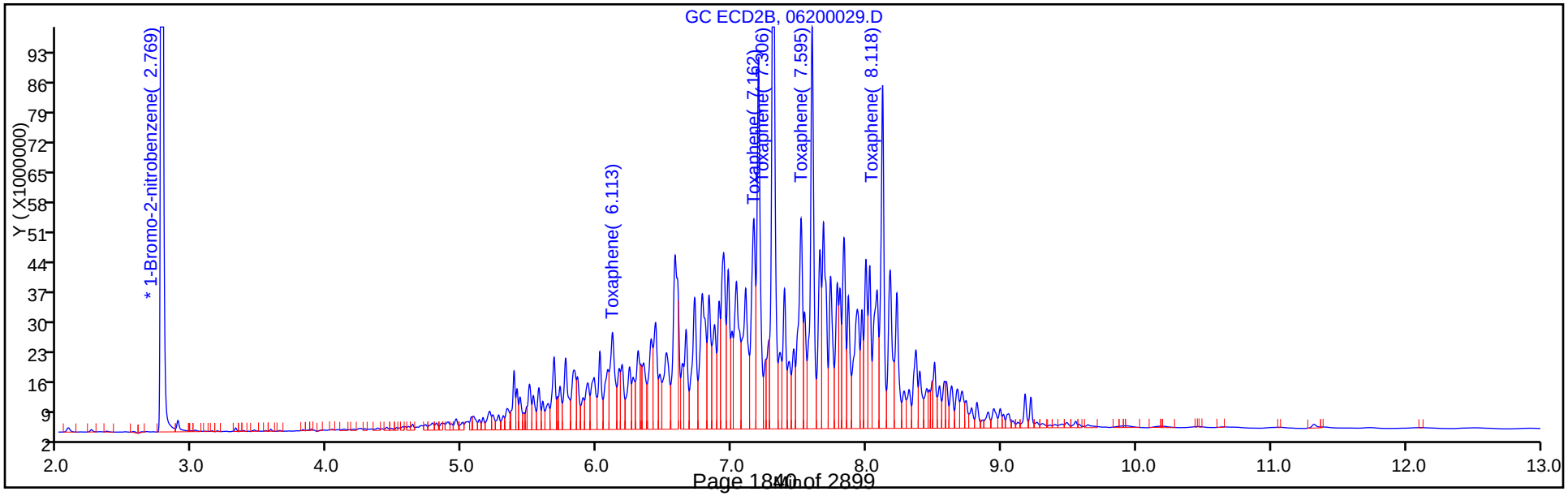
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Injection Date:	20-Jun-2017 19:13:39	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV TOX			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 21-Jun-2017 11:00:17 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200029.D

Injection Date: 20-Jun-2017 19:13:39 Instrument ID: SGC_P1

Lims ID: CCV TOX

Client ID:

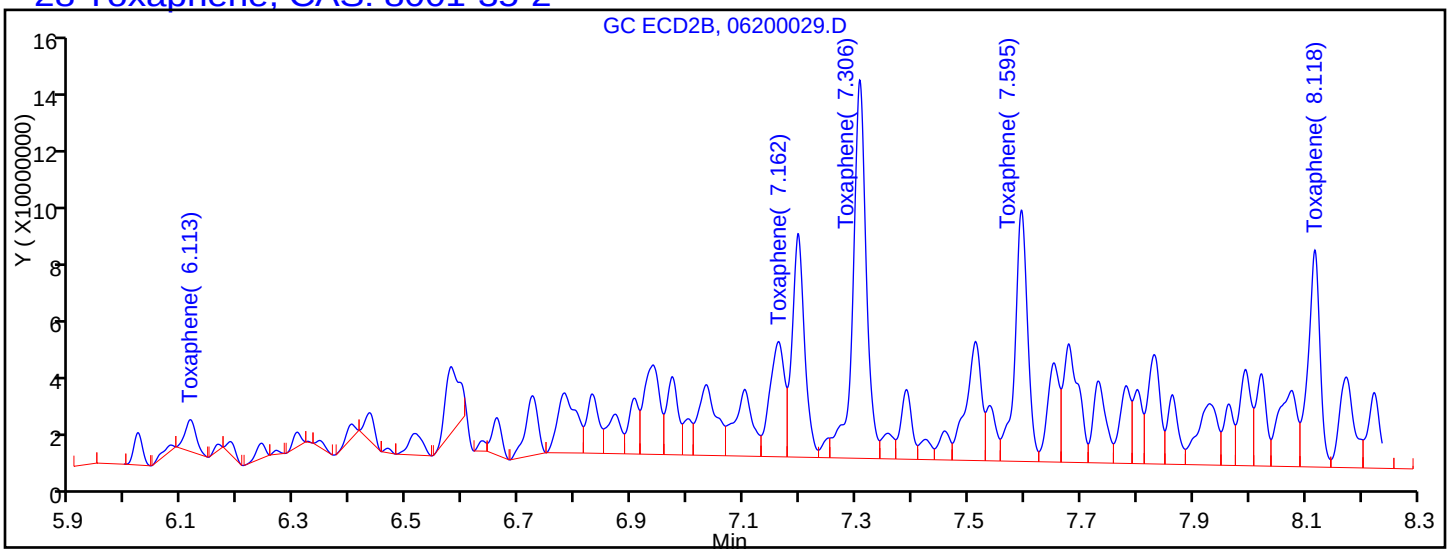
Operator ID: DAW ALS Bottle#: 23 Worklist Smp#: 29

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

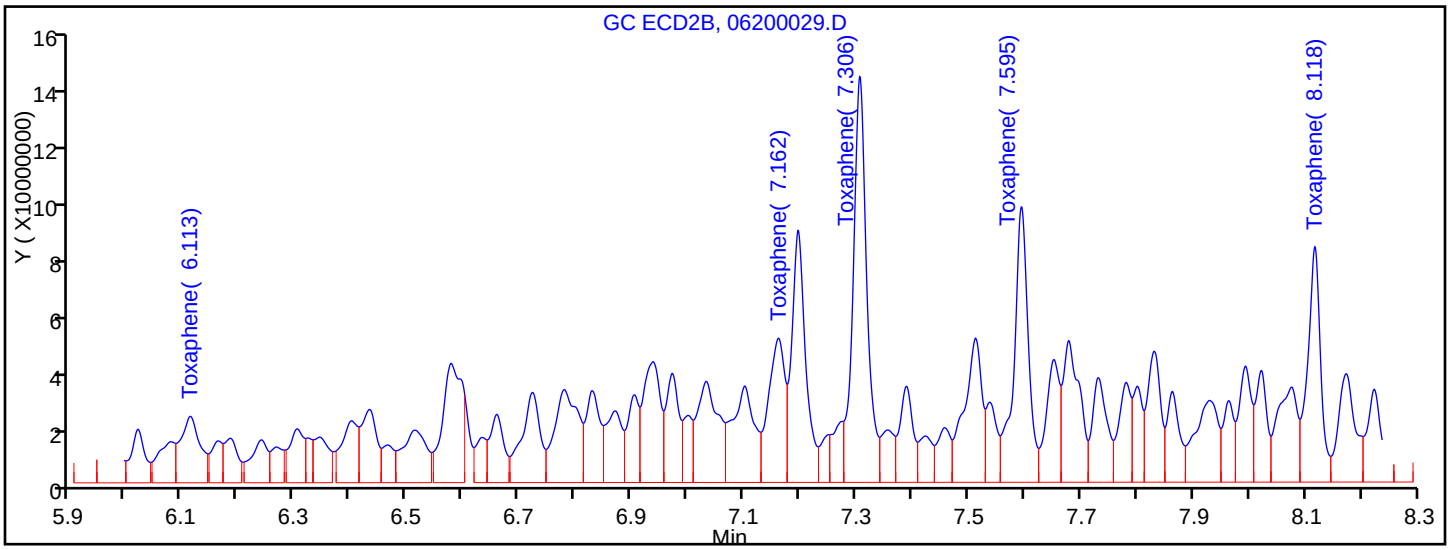
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.113	Response = 14918836
7.162	Response = 71368174
7.306	Response = 213275300
7.595	Response = 134668940
8.118	Response = 108794283



Manual Integration Results

6.113	Response = 54306799	M
7.162	Response = 98948937	M
7.306	Response = 235464790	M
7.595	Response = 168319212	M
8.118	Response = 129341829	M

Reviewer: wellsd, 21-Jun-2017 10:54:43

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377996/31 Calibration Date: 06/20/2017 19:47

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06200031.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		1.209		47.6	50.0	-4.8	20.0
alpha-BHC	Lin2		1.914		48.2	50.0	-3.7	20.0
gamma-BHC (Lindane)	Lin2		1.750		48.8	50.0	-2.4	20.0
beta-BHC	Lin2		0.6559		47.3	50.0	-5.3	20.0
delta-BHC	Lin2		1.861		48.9	50.0	-2.2	20.0
Heptachlor	Lin2		1.635		49.4	50.0	-1.3	20.0
Aldrin	Lin2		1.636		48.5	50.0	-3.1	20.0
Heptachlor epoxide	Lin2		1.409		48.4	50.0	-3.3	20.0
gamma-Chlordane	Lin2		1.574		48.9	50.0	-2.1	20.0
alpha-Chlordane	Lin2		1.496		48.7	50.0	-2.7	20.0
4,4'-DDE	Lin2		1.512		47.8	50.0	-4.4	20.0
Endosulfan I	Lin2		1.358		48.4	50.0	-3.1	20.0
Dieldrin	Lin2		1.526		48.3	50.0	-3.4	20.0
Endrin	Lin2		1.421		55.4	50.0	10.8	20.0
4,4'-DDD	Lin2		1.355		50.8	50.0	1.6	20.0
Endosulfan II	Lin2		1.327		50.1	50.0	0.2	20.0
4,4'-DDT	Lin2		1.144		44.6	50.0	-10.7	20.0
Endrin aldehyde	Lin2		1.034		48.3	50.0	-3.5	20.0
Methoxychlor	Lin2		0.5098		45.6	50.0	-8.8	20.0
Endosulfan sulfate	Lin2		1.233		50.3	50.0	0.7	20.0
Endrin ketone	Lin2		1.279		47.1	50.0	-5.9	20.0
Tetrachloro-m-xylene (Surr)	Lin2		1.055		46.3	50.0	-7.5	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.7815		50.3	50.0	0.6	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377996/31 Calibration Date: 06/20/2017 19:47

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06200031.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.20	4.19	4.21
alpha-BHC	4.37	4.36	4.38
gamma-BHC (Lindane)	4.68	4.67	4.69
beta-BHC	4.76	4.75	4.77
delta-BHC	4.94	4.93	4.95
Heptachlor	5.15	5.14	5.16
Aldrin	5.43	5.42	5.44
Heptachlor epoxide	6.05	6.05	6.07
gamma-Chlordane	6.20	6.19	6.21
alpha-Chlordane	6.36	6.35	6.37
4,4'-DDE	6.45	6.45	6.47
Endosulfan I	6.53	6.52	6.54
Dieldrin	6.81	6.81	6.83
Endrin	7.08	7.07	7.09
4,4'-DDD	7.16	7.15	7.17
Endosulfan II	7.33	7.32	7.34
4,4'-DDT	7.47	7.46	7.48
Endrin aldehyde	7.79	7.78	7.80
Methoxychlor	7.98	7.97	7.99
Endosulfan sulfate	8.23	8.23	8.25
Endrin ketone	8.51	8.50	8.52
Tetrachloro-m-xylene (Surr)	3.82	3.81	3.83
DCB Decachlorobiphenyl (Surr)	9.49	9.48	9.50

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200031.D
Lims ID: CCV AB
Client ID:
Sample Type: CCV
Inject. Date: 20-Jun-2017 19:47:46 ALS Bottle#: 25 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV AB
Misc. Info.: 280-0059933-031
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 21-Jun-2017 11:00:23 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK008

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						193.2	
2						189.5	
						RPD = 1.93	
* 2 1-Bromo-2-nitrobenzene							
1	2.995	2.996	0.000	2207395269	150.0	150.0	
2	2.769	2.769	0.000	450353925	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.822	3.822	0.000	775964906	50.0	46.3	
2	3.682	3.682	0.000	145512880	50.0	46.9	
						RPD = 1.35	
5 Hexachlorobenzene							
1	4.202	4.202	0.000	889511794	50.0	47.6	
2	4.108	4.108	0.000	149372941	50.0	46.3	
						RPD = 2.81	
8 alpha-BHC							
1	4.369	4.369	0.000	1407994188	50.0	48.2	
2	4.245	4.246	-0.001	216755843	50.0	47.4	
						RPD = 1.48	
9 gamma-BHC (Lindane)							
1	4.678	4.677	0.001	1287665034	50.0	48.8	
2	4.570	4.571	-0.001	191454348	50.0	47.5	
						RPD = 2.77	
10 beta-BHC							
1	4.763	4.762	0.001	482611960	50.0	47.3	
2	4.651	4.652	-0.001	79002568	50.0	46.9	
						RPD = 0.95	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.936	4.936	0.000	1369139568	50.0	48.9	
2	4.924	4.925	-0.001	198298693	50.0	47.7	
						RPD = 2.48	
15 Heptachlor							
1	5.146	5.147	-0.001	1202910296	50.0	49.4	
2	4.981	4.982	-0.001	175958159	50.0	47.2	
						RPD = 4.43	
16 Aldrin							
1	5.432	5.432	0.000	1203948290	50.0	48.5	
2	5.288	5.288	0.000	173911354	50.0	47.2	
						RPD = 2.74	
18 Isodrin							
1	5.761	5.761	0.000	919510933	50.0	48.4	
2	5.651	5.652	-0.001	135323795	50.0	47.1	
						RPD = 2.67	
21 Heptachlor epoxide							
1	6.054	6.055	-0.001	1036514098	50.0	48.4	
2	5.833	5.834	-0.001	152099552	50.0	46.4	
						RPD = 4.10	
22 gamma-Chlordane							
1	6.198	6.198	0.000	1158480686	50.0	48.9	
2	6.034	6.035	-0.001	158452427	50.0	46.2	
						RPD = 5.65	
23 alpha-Chlordane							
1	6.358	6.359	-0.001	1101065475	50.0	48.7	
2	6.202	6.203	-0.001	151732214	50.0	46.5	
						RPD = 4.60	
24 4,4'-DDE							
1	6.454	6.456	-0.002	1112876081	50.0	47.8	
2	6.418	6.420	-0.002	151999773	50.0	45.2	
						RPD = 5.66	
25 Endosulfan I							
1	6.529	6.530	-0.001	999406748	50.0	48.4	
2	6.266	6.267	-0.001	140971372	50.0	44.9	
						RPD = 7.55	
27 Dieldrin							
1	6.814	6.816	-0.002	1122932153	50.0	48.3	
2	6.606	6.607	-0.001	158366513	50.0	45.7	
						RPD = 5.59	
30 Endrin							
1	7.084	7.084	0.000	1045275643	50.0	55.4	
2	6.965	6.967	-0.002	145781453	50.0	52.6	
						RPD = 5.21	
32 4,4'-DDD							
1	7.159	7.160	-0.001	996873916	50.0	50.8	
2	7.117	7.118	-0.001	134048724	50.0	50.2	
						RPD = 1.21	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.334	7.334	0.000	976308834	50.0	50.1	
2	7.210	7.212	-0.002	135308062	50.0	47.1	
						RPD = 6.25	
35 4,4'-DDT							
1	7.469	7.470	-0.001	841884318	50.0	44.6	
2	7.465	7.467	-0.002	110321018	50.0	43.0	
						RPD = 3.76	
36 Endrin aldehyde							
1	7.786	7.787	-0.001	760914937	50.0	48.3	
2	7.585	7.587	-0.002	106289842	50.0	45.5	
						RPD = 5.98	
37 Methoxychlor							
1	7.981	7.983	-0.002	375074240	50.0	45.6	
2	8.188	8.189	-0.001	55276849	50.0	45.4	
						RPD = 0.36	
38 Mirex							
1	8.128	8.128	0.000	633058171	50.0	48.0	
2	8.359	8.360	-0.001	86262944	50.0	44.3	
						RPD = 7.96	
39 Endosulfan sulfate							
1	8.234	8.236	-0.002	907559483	50.0	50.3	
2	7.879	7.879	0.000	120488192	50.0	46.6	
						RPD = 7.78	
40 Endrin ketone							
1	8.514	8.514	0.000	941151000	50.0	47.1	
2	8.406	8.407	-0.001	133120183	50.0	45.2	
						RPD = 4.01	
$ 41 DCB Decachlorobiphenyl							
1	9.493	9.494	-0.001	575034086	50.0	50.3	
2	9.601	9.602	-0.001	89461419	50.0	47.8	
						RPD = 5.11	
S 3 Endosulfan, Total							
1						148.9	
2						138.6	
						RPD = 7.19	

Reagents:

8081IcalL4_00026	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

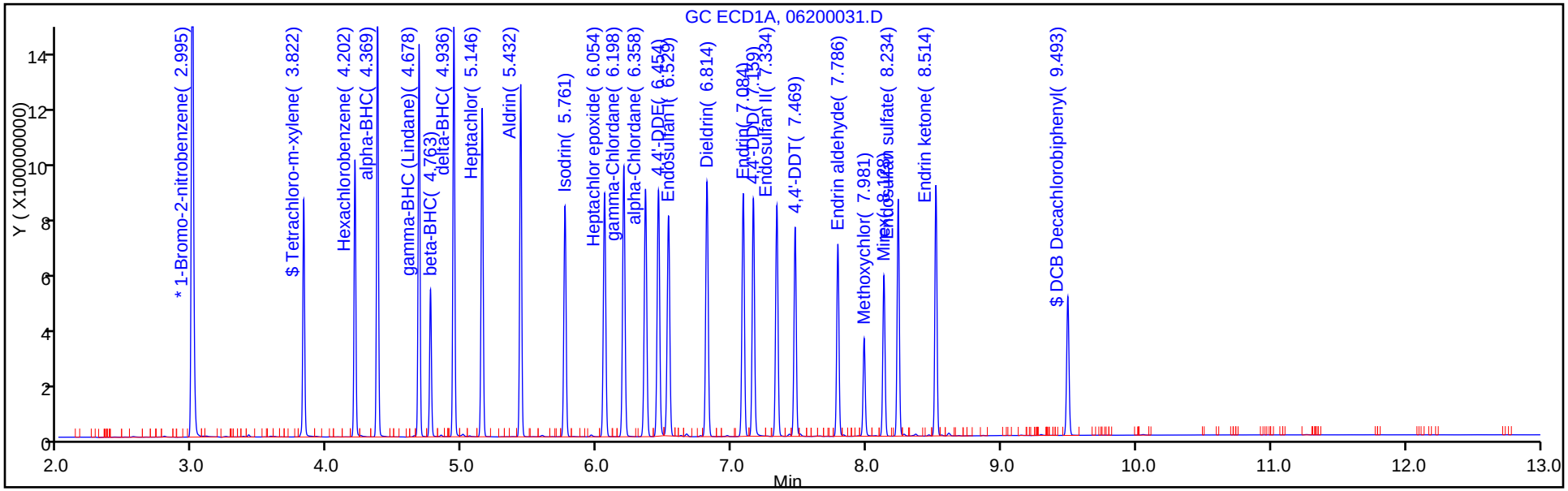
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TestAmerica Denver

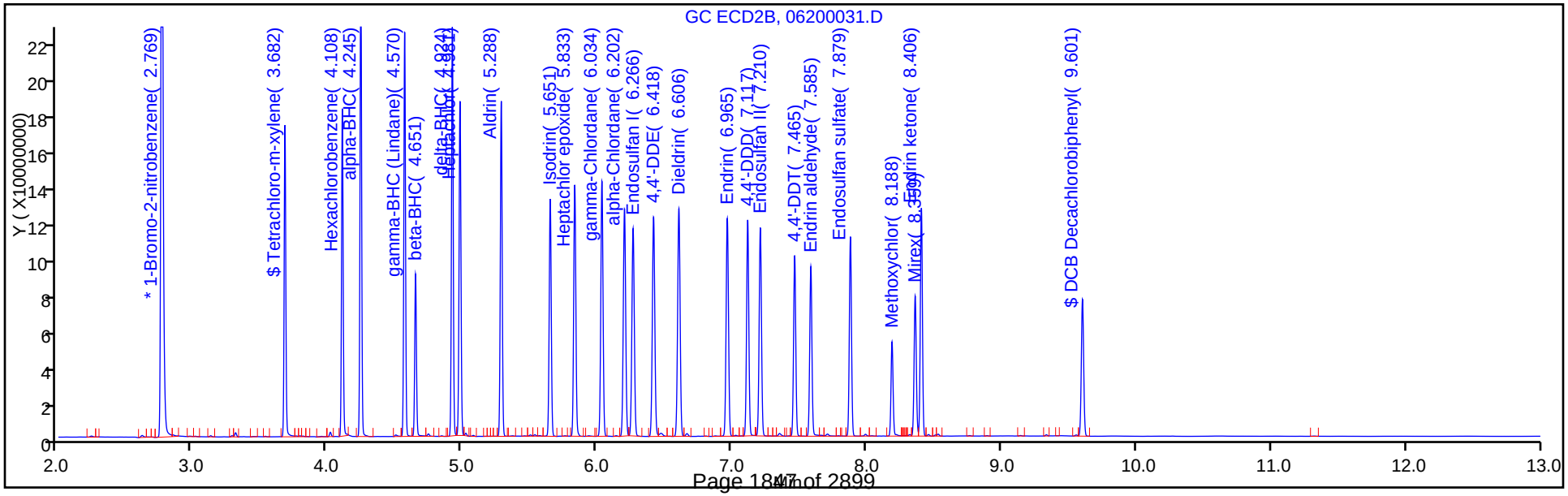
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Injection Date:	20-Jun-2017 19:47:46	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV AB			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377996/31 Calibration Date: 06/20/2017 19:47

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06200031.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		0.995		46.3	50.0	-7.4	20.0
alpha-BHC	Lin2		1.444		47.4	50.0	-5.1	20.0
gamma-BHC (Lindane)	Lin2		1.275		47.5	50.0	-5.1	20.0
beta-BHC	Lin2		0.5263		46.9	50.0	-6.2	20.0
delta-BHC	Lin2		1.321		47.7	50.0	-4.6	20.0
Heptachlor	Lin2		1.172		47.2	50.0	-5.5	20.0
Aldrin	Lin2		1.159		47.2	50.0	-5.7	20.0
Heptachlor epoxide	Lin2		1.013		46.4	50.0	-7.2	20.0
gamma-Chlordane	Lin2		1.056		46.2	50.0	-7.5	20.0
alpha-Chlordane	Lin2		1.011		46.5	50.0	-7.0	20.0
Endosulfan I	Lin2		0.9391		44.9	50.0	-10.2	20.0
4,4'-DDE	Lin2		1.013		45.2	50.0	-9.6	20.0
Dieldrin	Lin2		1.055		45.7	50.0	-8.6	20.0
Endrin	Lin2		0.9711		52.6	50.0	5.2	20.0
4,4'-DDD	Lin2		0.8930		50.2	50.0	0.3	20.0
Endosulfan II	Lin2		0.9013		47.1	50.0	-5.9	20.0
4,4'-DDT	Lin2		0.7349		43.0	50.0	-14.0	20.0
Endrin aldehyde	Lin2		0.7080		45.5	50.0	-9.1	20.0
Endosulfan sulfate	Lin2		0.8026		46.6	50.0	-6.9	20.0
Methoxychlor	Lin2		0.3682		45.4	50.0	-9.2	20.0
Endrin ketone	Lin2		0.8868		45.2	50.0	-9.6	20.0
Tetrachloro-m-xylene (Surr)	Lin2		0.9693		46.9	50.0	-6.2	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.5959		47.8	50.0	-4.4	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377996/31 Calibration Date: 06/20/2017 19:47

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06200031.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.11	4.10	4.12
alpha-BHC	4.25	4.24	4.26
gamma-BHC (Lindane)	4.57	4.56	4.58
beta-BHC	4.65	4.64	4.66
delta-BHC	4.92	4.92	4.94
Heptachlor	4.98	4.97	4.99
Aldrin	5.29	5.28	5.30
Heptachlor epoxide	5.83	5.82	5.84
gamma-Chlordane	6.03	6.03	6.05
alpha-Chlordane	6.20	6.19	6.21
Endosulfan I	6.27	6.26	6.28
4,4'-DDE	6.42	6.41	6.43
Dieldrin	6.61	6.60	6.62
Endrin	6.97	6.96	6.98
4,4'-DDD	7.12	7.11	7.13
Endosulfan II	7.21	7.20	7.22
4,4'-DDT	7.47	7.46	7.48
Endrin aldehyde	7.59	7.58	7.60
Endosulfan sulfate	7.88	7.87	7.89
Methoxychlor	8.19	8.18	8.20
Endrin ketone	8.41	8.40	8.42
Tetrachloro-m-xylene (Surr)	3.68	3.67	3.69
DCB Decachlorobiphenyl (Surr)	9.60	9.59	9.61

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200031.D
Lims ID: CCV AB
Client ID:
Sample Type: CCV
Inject. Date: 20-Jun-2017 19:47:46 ALS Bottle#: 25 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV AB
Misc. Info.: 280-0059933-031
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 21-Jun-2017 11:00:23 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK008

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						193.2	
2						189.5	
						RPD = 1.93	
* 2 1-Bromo-2-nitrobenzene							
1	2.995	2.996	0.000	2207395269	150.0	150.0	
2	2.769	2.769	0.000	450353925	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.822	3.822	0.000	775964906	50.0	46.3	
2	3.682	3.682	0.000	145512880	50.0	46.9	
						RPD = 1.35	
5 Hexachlorobenzene							
1	4.202	4.202	0.000	889511794	50.0	47.6	
2	4.108	4.108	0.000	149372941	50.0	46.3	
						RPD = 2.81	
8 alpha-BHC							
1	4.369	4.369	0.000	1407994188	50.0	48.2	
2	4.245	4.246	-0.001	216755843	50.0	47.4	
						RPD = 1.48	
9 gamma-BHC (Lindane)							
1	4.678	4.677	0.001	1287665034	50.0	48.8	
2	4.570	4.571	-0.001	191454348	50.0	47.5	
						RPD = 2.77	
10 beta-BHC							
1	4.763	4.762	0.001	482611960	50.0	47.3	
2	4.651	4.652	-0.001	79002568	50.0	46.9	
						RPD = 0.95	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.936	4.936	0.000	1369139568	50.0	48.9	
2	4.924	4.925	-0.001	198298693	50.0	47.7	
						RPD = 2.48	
15 Heptachlor							
1	5.146	5.147	-0.001	1202910296	50.0	49.4	
2	4.981	4.982	-0.001	175958159	50.0	47.2	
						RPD = 4.43	
16 Aldrin							
1	5.432	5.432	0.000	1203948290	50.0	48.5	
2	5.288	5.288	0.000	173911354	50.0	47.2	
						RPD = 2.74	
18 Isodrin							
1	5.761	5.761	0.000	919510933	50.0	48.4	
2	5.651	5.652	-0.001	135323795	50.0	47.1	
						RPD = 2.67	
21 Heptachlor epoxide							
1	6.054	6.055	-0.001	1036514098	50.0	48.4	
2	5.833	5.834	-0.001	152099552	50.0	46.4	
						RPD = 4.10	
22 gamma-Chlordane							
1	6.198	6.198	0.000	1158480686	50.0	48.9	
2	6.034	6.035	-0.001	158452427	50.0	46.2	
						RPD = 5.65	
23 alpha-Chlordane							
1	6.358	6.359	-0.001	1101065475	50.0	48.7	
2	6.202	6.203	-0.001	151732214	50.0	46.5	
						RPD = 4.60	
24 4,4'-DDE							
1	6.454	6.456	-0.002	1112876081	50.0	47.8	
2	6.418	6.420	-0.002	151999773	50.0	45.2	
						RPD = 5.66	
25 Endosulfan I							
1	6.529	6.530	-0.001	999406748	50.0	48.4	
2	6.266	6.267	-0.001	140971372	50.0	44.9	
						RPD = 7.55	
27 Dieldrin							
1	6.814	6.816	-0.002	1122932153	50.0	48.3	
2	6.606	6.607	-0.001	158366513	50.0	45.7	
						RPD = 5.59	
30 Endrin							
1	7.084	7.084	0.000	1045275643	50.0	55.4	
2	6.965	6.967	-0.002	145781453	50.0	52.6	
						RPD = 5.21	
32 4,4'-DDD							
1	7.159	7.160	-0.001	996873916	50.0	50.8	
2	7.117	7.118	-0.001	134048724	50.0	50.2	
						RPD = 1.21	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.334	7.334	0.000	976308834	50.0	50.1	
2	7.210	7.212	-0.002	135308062	50.0	47.1	
						RPD = 6.25	
35 4,4'-DDT							
1	7.469	7.470	-0.001	841884318	50.0	44.6	
2	7.465	7.467	-0.002	110321018	50.0	43.0	
						RPD = 3.76	
36 Endrin aldehyde							
1	7.786	7.787	-0.001	760914937	50.0	48.3	
2	7.585	7.587	-0.002	106289842	50.0	45.5	
						RPD = 5.98	
37 Methoxychlor							
1	7.981	7.983	-0.002	375074240	50.0	45.6	
2	8.188	8.189	-0.001	55276849	50.0	45.4	
						RPD = 0.36	
38 Mirex							
1	8.128	8.128	0.000	633058171	50.0	48.0	
2	8.359	8.360	-0.001	86262944	50.0	44.3	
						RPD = 7.96	
39 Endosulfan sulfate							
1	8.234	8.236	-0.002	907559483	50.0	50.3	
2	7.879	7.879	0.000	120488192	50.0	46.6	
						RPD = 7.78	
40 Endrin ketone							
1	8.514	8.514	0.000	941151000	50.0	47.1	
2	8.406	8.407	-0.001	133120183	50.0	45.2	
						RPD = 4.01	
$ 41 DCB Decachlorobiphenyl							
1	9.493	9.494	-0.001	575034086	50.0	50.3	
2	9.601	9.602	-0.001	89461419	50.0	47.8	
						RPD = 5.11	
S 3 Endosulfan, Total							
1						148.9	
2						138.6	
						RPD = 7.19	

Reagents:

8081IcalL4_00026	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

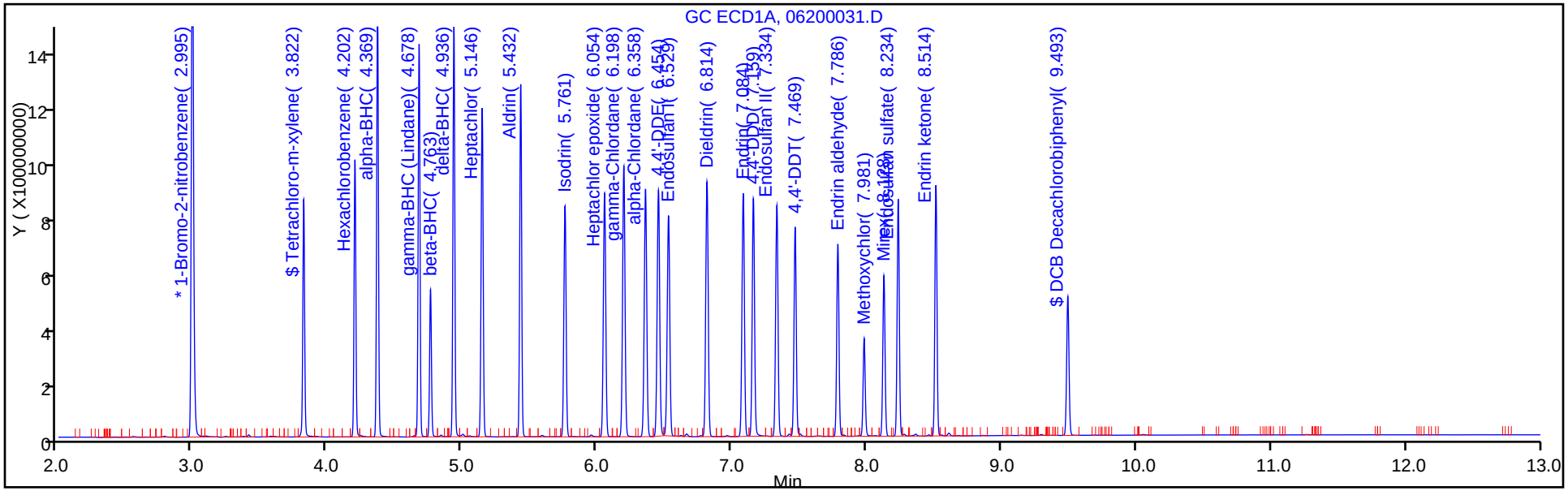
Report Date: 21-Jun-2017 11:00:24 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

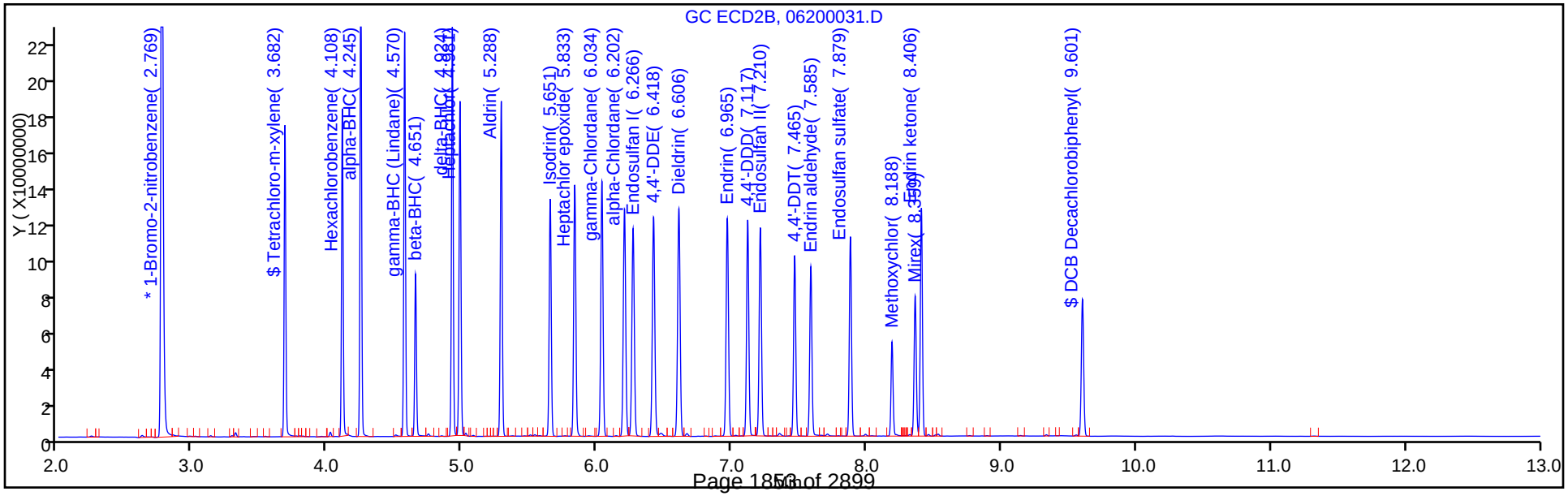
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200031.D

Injection Date:	20-Jun-2017 19:47:46	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV AB			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-376892/1-A

Matrix: Solid | Lab File ID: 06140014.D

Analysis Method: 8081B | Date Collected:

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 33.0(g) | Date Analyzed: 06/14/2017 19:49

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377328 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.5	U	1.5	1.5	0.50
72-55-9	4,4'-DDE	0.61	U	1.5	0.61	0.22
50-29-3	4,4'-DDT	1.5	U	1.8	1.5	0.54
309-00-2	Aldrin	0.61	U	1.5	0.61	0.23
319-84-6	alpha-BHC	0.61	U	1.5	0.61	0.19
5103-71-9	alpha-Chlordane	0.61	U	1.5	0.61	0.29
319-85-7	beta-BHC	1.5	U	1.5	1.5	0.60
319-86-8	delta-BHC	0.91	U	1.5	0.91	0.36
60-57-1	Dieldrin	0.61	U	1.5	0.61	0.19
959-98-8	Endosulfan I	0.61	U	1.5	0.61	0.16
33213-65-9	Endosulfan II	0.61	U	1.5	0.61	0.26
1031-07-8	Endosulfan sulfate	0.61	U	1.5	0.61	0.25
72-20-8	Endrin	0.61	U	1.5	0.61	0.28
7421-93-4	Endrin aldehyde	0.61	U	1.5	0.61	0.16
58-89-9	gamma-BHC (Lindane)	0.91	U	1.5	0.91	0.42
5103-74-2	gamma-Chlordane	0.61	U	1.5	0.61	0.24
76-44-8	Heptachlor	0.61	U	1.5	0.61	0.19
1024-57-3	Heptachlor epoxide	0.91	U	1.5	0.91	0.39
72-43-5	Methoxychlor	0.91	U	3.0	0.91	0.41
8001-35-2	Toxaphene	30	U	150	30	14

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	70		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	71		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140014.D
Lims ID: MB 280-376892/1-A
Client ID:
Sample Type: MB
Inject. Date: 14-Jun-2017 19:49:44 ALS Bottle#: 8 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-376892/1-
Misc. Info.: 280-0059760-014
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:57:53 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: wellsd Date: 15-Jun-2017 13:42:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						1.64	
2						0.6416	
						RPD = 87.53	
* 2 1-Bromo-2-nitrobenzene							
1	2.997	2.997	0.000	2238781404	150.0	150.0	
2	2.771	2.771	0.000	461938364	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.823	3.824	-0.001	239382649	20.0	14.1	
2	3.685	3.684	0.001	50306628	20.0	15.4	
						RPD = 8.56	
5 Hexachlorobenzene							
1	4.202	4.204	-0.002	7049047		0.3227	
2	4.113	4.110	0.003	600034		-0.7090	
						RPD = -534.13	
6 Diallate							
1		4.222				ND	
2		4.062					
7 Propachlor							
1		4.365				ND	
2		3.977					
8 alpha-BHC							
1		4.372				ND	
2		4.248					
9 gamma-BHC (Lindane)							
1	4.677	4.680	-0.003	2280668		0.6514	
2	4.574	4.573	0.001	788591		-0.0184	
						RPD = 211.61	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
10 beta-BHC							
1	4.765	4.765	0.000	3592108		0.2900	
2	4.653	4.654	-0.001	2672058		0.4957	
						RPD = 52.38	
11 2,4,5-Trichlorophenol							
1	4.843	4.861	-0.018	1328679		NC	
2	4.766	4.772	-0.006	1100589		NC	
						RPD = 0.00	
12 delta-BHC							
1	4.935	4.939	-0.004	4743410		0.6990	
2	4.931	4.928	0.003	1249728		0.1642	
						RPD = 123.89	
14 Chlordane (technical)							
1		5.069				ND	
1		5.564					
1		6.201					
1		6.342					
1		7.262					
2		4.848					
2		5.434					
2		6.039					
2		6.206					
2		7.264					
13 Technical Chlordane							
1		5.069				ND	
1		5.564					
1		6.201					
1		6.342					
1		7.262					
2		4.848					
2		5.434					
2		6.039					
2		6.206					
2		7.264					
15 Heptachlor							
1		5.149				ND	
2		4.984					
16 Aldrin							
1		5.435				ND	
2		5.291					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
28 Toxaphene							
1		5.609				ND	
1		6.929					
1		7.192					
1		7.697					
1		8.140					
2		6.119					
2		7.168					
2		7.311					
2		7.600					
2		8.122					
17 Chlorpyrifos							
1		5.669				ND	
2		5.518					
18 Isodrin							
1		5.764				ND	
2		5.654					
19 Dicofol							
1		5.806				ND	
2		5.620					
20 2,4'-DDE							
1		6.045				ND	
2		6.047					
21 Heptachlor epoxide							
1	6.056	6.059	-0.003	7145964		0.2429	
2	5.838	5.837	0.001	636236		-0.5182	
						RPD = -552.78	
22 gamma-Chlordane							
1	6.200	6.202	-0.002	1261788		0.3563	
2	6.038	6.039	-0.001	574211		-0.3978	
						RPD = -3636.11	
23 alpha-Chlordane							
1	6.366	6.363	0.003	4017279		0.3827	
2	6.205	6.207	-0.002	823461		-0.4390	
						RPD = -2921.04	
24 4,4'-DDE							
1	6.456	6.459	-0.003	1709534		0.4387	
2	6.426	6.424	0.002	696699		-0.3015	
						RPD = 1078.54	
25 Endosulfan I							
1	6.531	6.534	-0.003	2105022		-0.0193	
2	6.272	6.270	0.002	476142		-0.7777	
						RPD = -190.31	
LOD = 0.002000							
26 2,4'-DDD							
1		6.668				ND	
2		6.671					
27 Dieldrin							
1	6.817	6.819	-0.002	3621767		0.2687	
2	6.611	6.609	0.002	529471		-0.4195	
						RPD = -913.09	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
29 2,4'-DDT							
1		6.967				ND	
2		7.032					
30 Endrin							
1	7.086	7.088	-0.002	2724538		0.2974	
2	6.970	6.969	0.001	635891		-0.2539	
						RPD = 2533.70	
31 Kepone							
1	7.135	7.136	-0.001	2007563		0.7637	
2	7.091	7.096	-0.005	528525		-1.09	
						RPD = -1150.15	
32 4,4'-DDD							
1		7.163				ND	
2		7.121					
33 Chlorobenzilate							
1		7.179				ND	
2		6.981					
34 Endosulfan II							
1	7.335	7.337	-0.002	2643966		0.0860	
2	7.215	7.214	0.001	629072		-0.6538	
						RPD = -260.60	
35 4,4'-DDT							
1	7.471	7.474	-0.003	2212726		0.6643	
2	7.469	7.469	0.000	511897		-0.1652	
						RPD = 332.40	
36 Endrin aldehyde							
1	7.790	7.791	-0.001	1713198		0.0756	
2	7.590	7.589	0.001	587646		-0.5724	
						RPD = -260.92	
37 Methoxychlor							
1		7.986				ND	
2		8.192					
38 Mirex							
1	8.131	8.132	-0.001	2387555		-0.0443	
2	8.364	8.363	0.001	886497		0.4442	
						RPD = 244.30	
39 Endosulfan sulfate							
1	8.237	8.239	-0.002	1332087		0.2502	
2	7.883	7.883	0.000	515800		-0.6823	
						RPD = -431.61	
40 Endrin ketone							
1	8.516	8.519	-0.003	1419175		0.1906	
2	8.410	8.410	0.000	679564		-0.4796	
						RPD = -463.68	
$ 41 DCB Decachlorobiphenyl							M
1	9.496	9.497	-0.001	164854740	20.0	13.9	
2	9.606	9.606	0.000	32879143	20.0	16.4	M
						RPD = 15.98	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
42 Tris(2,3-dibromopropyl)phosphate							
1		11.271				ND	
2		11.328					
S 3 Endosulfan, Total							
1						0.3169	
2						-2.11	
						RPD = -270.54	

LOD = 0.002000

QC Flag Legend

Processing Flags
- NC - Not Calibrated
- 7 - Failed Limit of Detection

Review Flags
- M - Manually Integrated

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

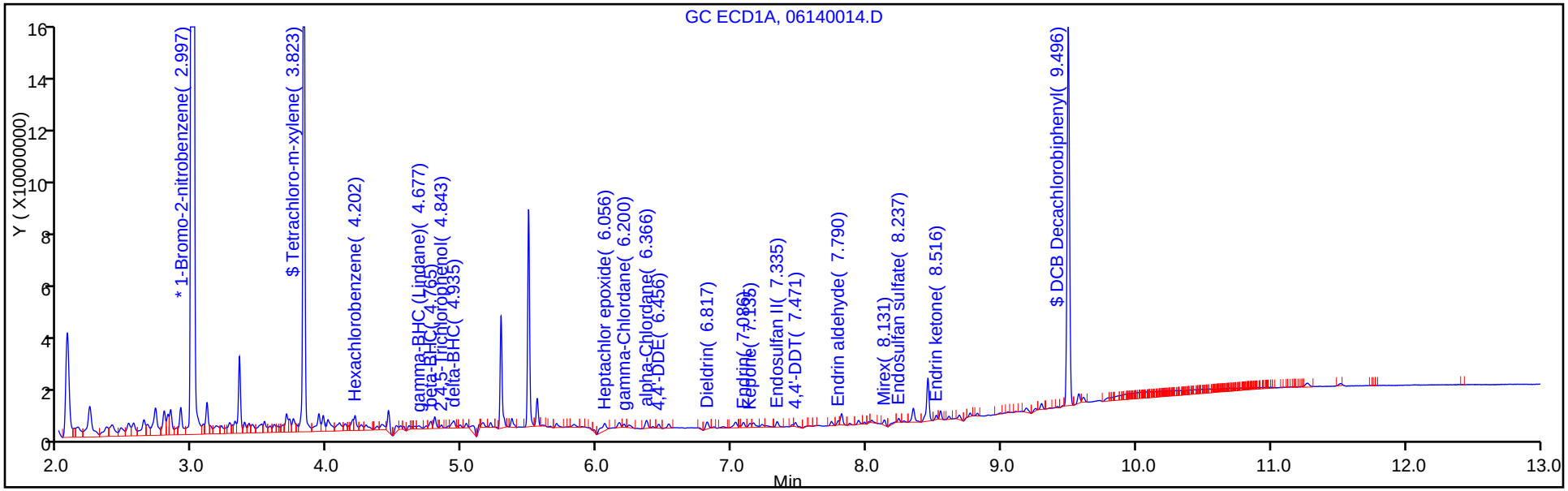
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TestAmerica Denver

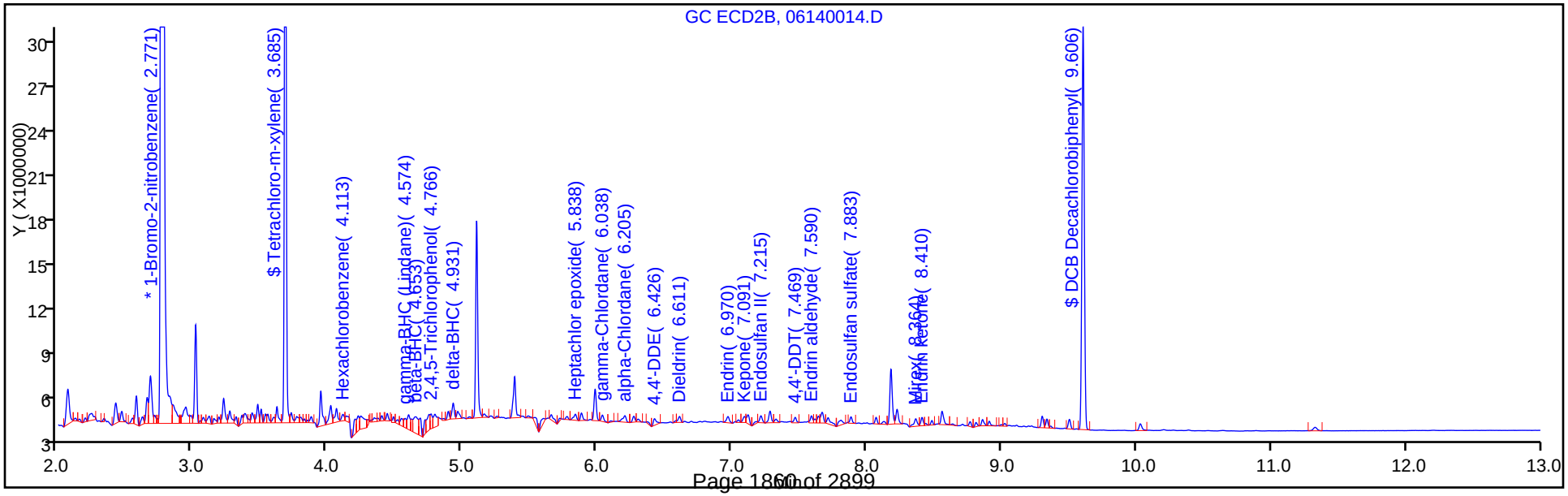
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Injection Date:	14-Jun-2017 19:49:44	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	MB 280-376892/1-A			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140014.D
Lims ID: MB 280-376892/1-A
Client ID:
Sample Type: MB
Inject. Date: 14-Jun-2017 19:49:44 ALS Bottle#: 8 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-376892/1-
Misc. Info.: 280-0059760-014
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:57:53 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: wellsd Date: 15-Jun-2017 13:42:30

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	14.1	70.72
$ 41 DCB Decachlorobiphenyl	20.0	13.9	69.75

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	15.4	77.05
$ 41 DCB Decachlorobiphenyl	20.0	16.4	81.86

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-377252/1-A

Matrix: Solid | Lab File ID: 06200014.D

Analysis Method: 8081B | Date Collected:

Extraction Method: 3546 | Date Extracted: 06/14/2017 09:49

Sample wt/vol: 31.5(g) | Date Analyzed: 06/20/2017 14:36

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377996 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.6	U	1.6	1.6	0.52
72-55-9	4,4'-DDE	0.64	U	1.6	0.64	0.23
50-29-3	4,4'-DDT	1.6	U	1.9	1.6	0.56
309-00-2	Aldrin	0.64	U	1.6	0.64	0.24
319-84-6	alpha-BHC	0.64	U	1.6	0.64	0.20
5103-71-9	alpha-Chlordane	0.64	U	1.6	0.64	0.31
319-85-7	beta-BHC	1.6	U M	1.6	1.6	0.63
319-86-8	delta-BHC	0.95	U M	1.6	0.95	0.38
60-57-1	Dieldrin	0.64	U	1.6	0.64	0.20
959-98-8	Endosulfan I	0.64	U	1.6	0.64	0.17
33213-65-9	Endosulfan II	0.64	U	1.6	0.64	0.27
1031-07-8	Endosulfan sulfate	0.64	U	1.6	0.64	0.26
72-20-8	Endrin	0.64	U	1.6	0.64	0.29
7421-93-4	Endrin aldehyde	0.64	U	1.6	0.64	0.16
58-89-9	gamma-BHC (Lindane)	0.95	U	1.6	0.95	0.44
5103-74-2	gamma-Chlordane	0.64	U	1.6	0.64	0.25
76-44-8	Heptachlor	0.64	U	1.6	0.64	0.20
1024-57-3	Heptachlor epoxide	0.95	U	1.6	0.95	0.41
72-43-5	Methoxychlor	0.95	U	3.1	0.95	0.43
8001-35-2	Toxaphene	31	U	160	31	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	86		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	74	M	42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200014.D
Lims ID: MB 280-377252/1-A
Client ID:
Sample Type: MB
Inject. Date: 20-Jun-2017 14:36:30 ALS Bottle#: 8 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-377252/1-
Misc. Info.: 280-0059933-014
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 21-Jun-2017 10:59:53 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK008

First Level Reviewer: wellsd Date: 20-Jun-2017 15:28:19

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						1.02	
2						-0.7587	
						RPD = 1376.31	
LOD = 0.002000							
* 2 1-Bromo-2-nitrobenzene							
1	2.995	2.996	-0.001	2203840186	150.0	150.0	
2	2.769	2.769	0.000	427473653	150.0	150.0	
$ 4 Tetrachloro-m-xylene							M
1	3.821	3.822	-0.001	246327174	20.0	14.8	M
2	3.683	3.682	0.001	49056161	20.0	16.3	
						RPD = 9.59	
5 Hexachlorobenzene							M
1	4.202	4.202	0.000	8006783		0.3800	M
2	4.110	4.108	0.002	1357407		-0.4421	
						RPD = -2649.90	
6 Diallate							
1		4.221				ND	
2		4.060					
7 Propachlor							
1		4.364				ND	
2		3.975					
8 alpha-BHC							
1		4.369				ND	
2		4.246					
9 gamma-BHC (Lindane)							
1		4.677				ND	
2		4.571					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
10 beta-BHC							M
1	4.754	4.762	-0.008	3554026		0.2917	M
2	4.652	4.652	0.000	205492		-0.9546	
						RPD = -376.03	
11 2,4,5-Trichlorophenol							M
1	4.842	4.861	-0.019	1258762		NC	M
2	4.764	4.772	-0.008	468462		NC	
						RPD = 0.00	
12 delta-BHC							M
1	4.934	4.936	-0.002	5404918		0.7250	M
2	4.925	4.925	0.000	1281058		0.1959	
						RPD = 114.91	
14 Chlordane (technical)							
1		5.067				ND	
1		5.562					
1		6.199					
1		6.339					
1		7.260					
2		4.845					
2		5.431					
2		6.035					
2		6.204					
2		7.261					
13 Technical Chlordane							
1		5.067				ND	
1		5.562					
1		6.199					
1		6.339					
1		7.260					
2		4.845					
2		5.431					
2		6.035					
2		6.204					
2		7.261					
15 Heptachlor							
1		5.147				ND	
2		4.982					
16 Aldrin							
1		5.432				ND	
2		5.288					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
28 Toxaphene							
1		5.607				ND	
1		6.926					
1		7.191					
1		7.694					
1		8.135					
2		6.115					
2		7.163					
2		7.308					
2		7.597					
2		8.119					
17 Chlorpyrifos							
1		5.668				ND	
2		5.515					
18 Isodrin							
1		5.761				ND	
2		5.652					
19 Dicofol							
1		5.801				ND	
2		5.615					
20 2,4'-DDE							
1		6.044				ND	
2		6.045					
21 Heptachlor epoxide							
1		6.055				ND	
2		5.834					
22 gamma-Chlordane							
1		6.198				ND	
2		6.035					
23 alpha-Chlordane							
1		6.359				ND	
2		6.203					
24 4,4'-DDE							
1		6.456				ND	
2		6.420					
25 Endosulfan I							
1	6.521	6.530	-0.009	745798		-0.0839	
2	6.268	6.267	0.001	129170		-0.8844	
						RPD = -165.35	
LOD = 0.002000							
26 2,4'-DDD							
1		6.666				ND	
2		6.669					
27 Dieldrin							
1		6.816				ND	
2		6.607					
29 2,4'-DDT							
1		6.966				ND	
2		7.030					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
30 Endrin							
1		7.084				ND	
2		6.967					
31 Kepone							
1	7.131	7.134	-0.003	1047608		0.6474	
2	7.088	7.093	-0.005	1684191		-0.0253	
						RPD = 216.29	
32 4,4'-DDD							
1		7.160				ND	
2		7.118					
33 Chlorobenzilate							
1		7.178				ND	
2		6.979					
34 Endosulfan II							
1	7.333	7.334	-0.001	1546180		0.0317	
2	7.208	7.212	-0.004	113112		-0.8289	
						RPD = -215.88	
35 4,4'-DDT							
1		7.470				ND	
2		7.467					
36 Endrin aldehyde							
1		7.787				ND	
2		7.587					
37 Methoxychlor							
1	7.982	7.983	-0.001	200304		-0.2768	
2	8.182	8.189	-0.007	731757		-0.3714	
						RPD = -29.18	
LOD = 0.002000							
38 Mirex							
1		8.128				ND	
2		8.360					
39 Endosulfan sulfate							
1	8.234	8.236	-0.002	799930		0.2219	
2	7.880	7.879	0.001	311792		-0.7509	
						RPD = -367.76	
40 Endrin ketone							
1	8.514	8.514	0.000	882152		0.1648	
2	8.412	8.407	0.005	921492		-0.3733	
						RPD = -516.29	
$ 41 DCB Decachlorobiphenyl							
1	9.492	9.494	-0.002	199762877	20.0	17.3	
2	9.602	9.602	0.000	34617721	20.0	18.8	
						RPD = 8.49	
42 Tris(2,3-dibromopropyl)phosphate							
1	11.263	11.270	-0.007	4039516		175.7	
2	11.322	11.323	-0.001	351434		237.4	
						RPD = 29.90	
S 3 Endosulfan, Total							
1						0.1697	
2						-2.46	
						RPD = -229.58	
LOD = 0.002000							

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

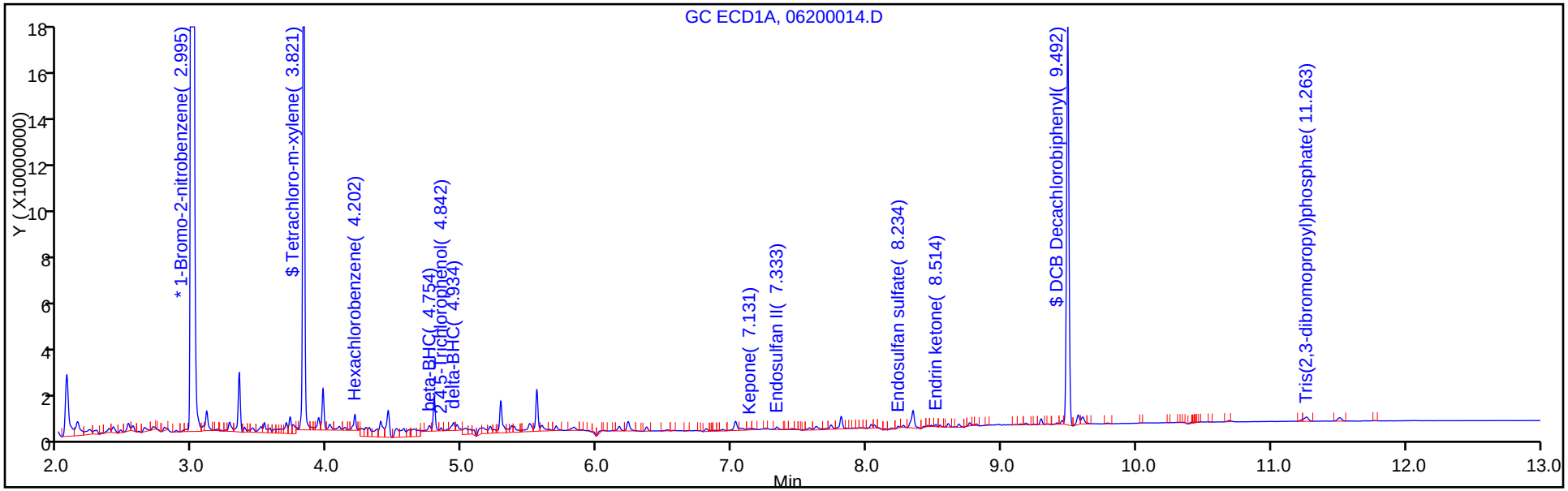
Report Date: 21-Jun-2017 10:59:55 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

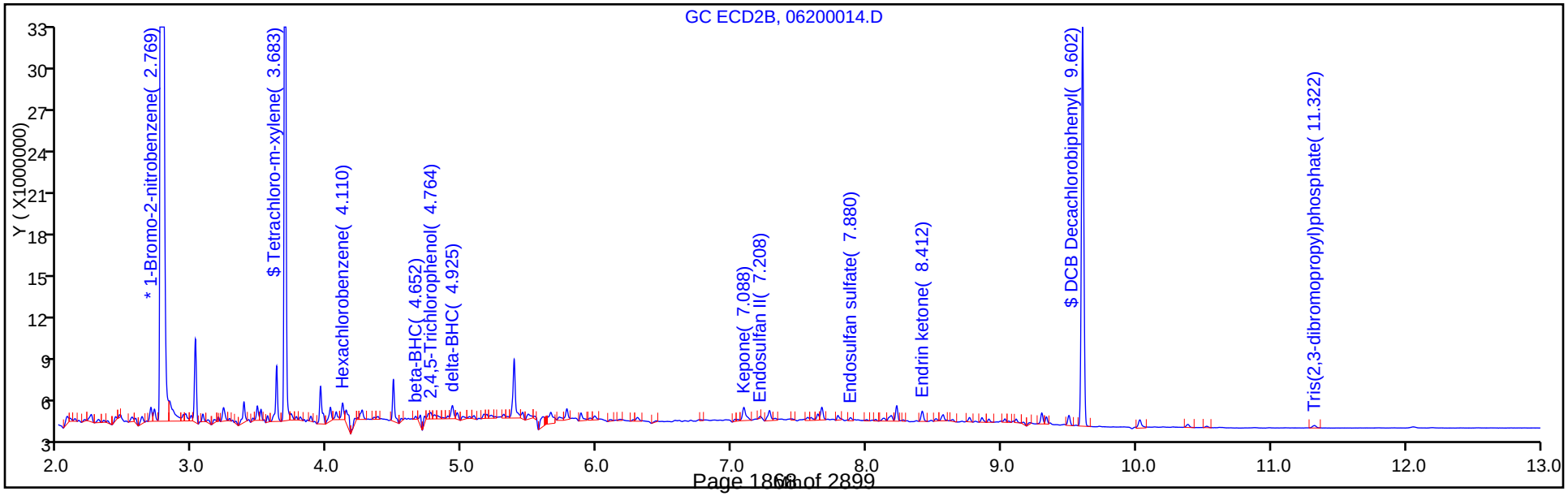
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200014.D

Injection Date:	20-Jun-2017 14:36:30	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	MB 280-377252/1-A			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200014.D				
Lims ID:	MB 280-377252/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	20-Jun-2017 14:36:30	ALS Bottle#:	8	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-377252/1-				
Misc. Info.:	280-0059933-014				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	21-Jun-2017 10:59:53	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK008				
First Level Reviewer: wellsd		Date:	20-Jun-2017 15:28:19		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	14.8	73.91
$ 41 DCB Decachlorobiphenyl	20.0	17.3	86.29

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	16.3	81.35
$ 41 DCB Decachlorobiphenyl	20.0	18.8	93.95

Manual Integration/User Assign Peak Report

TestAmerica Denver

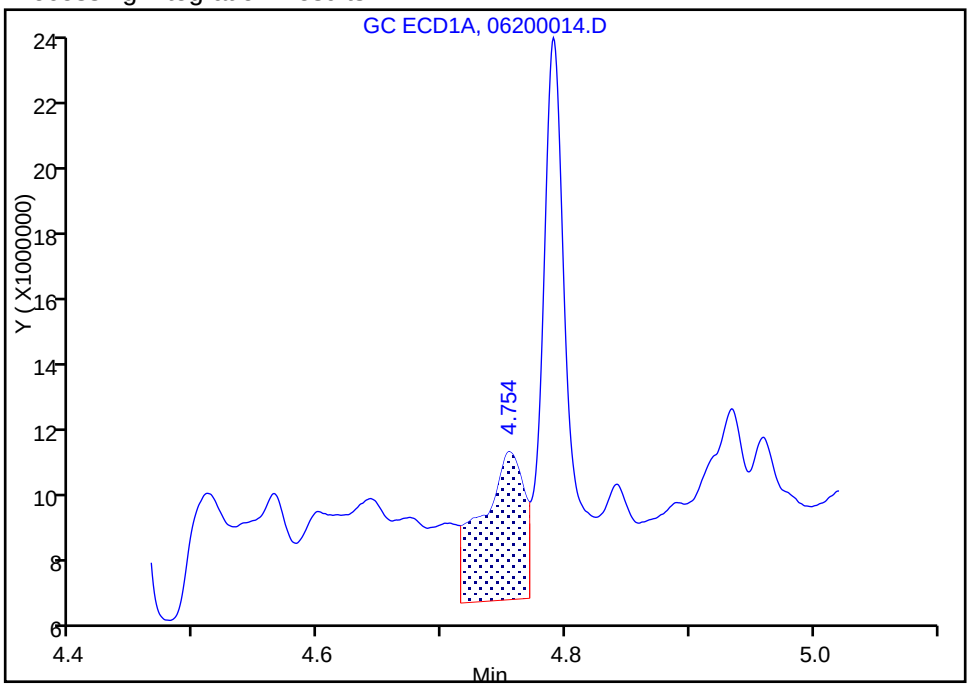
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Injection Date: 20-Jun-2017 14:36:30 Instrument ID: SGC_P1
Lims ID: MB 280-377252/1-A
Client ID:
Operator ID: DAW ALS Bottle#: 8 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: P1 8081 IS Limit Group: GCSV - 8081A - IS
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

10 beta-BHC, CAS: 319-85-7

Signal: 1

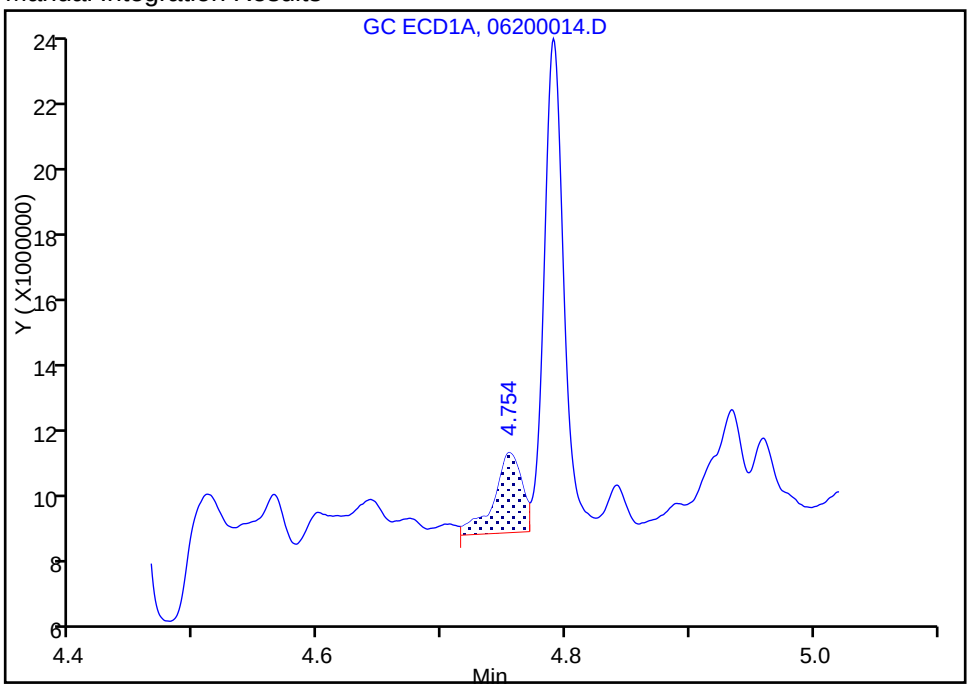
Processing Integration Results

RT: 4.75
Area: 9983758
Amount: 0.924141
Amount Units: ng/mL



Manual Integration Results

RT: 4.75
Area: 3554026
Amount: 0.291729
Amount Units: ng/mL



Reviewer: wellsd, 20-Jun-2017 15:28:14
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

TestAmerica Denver

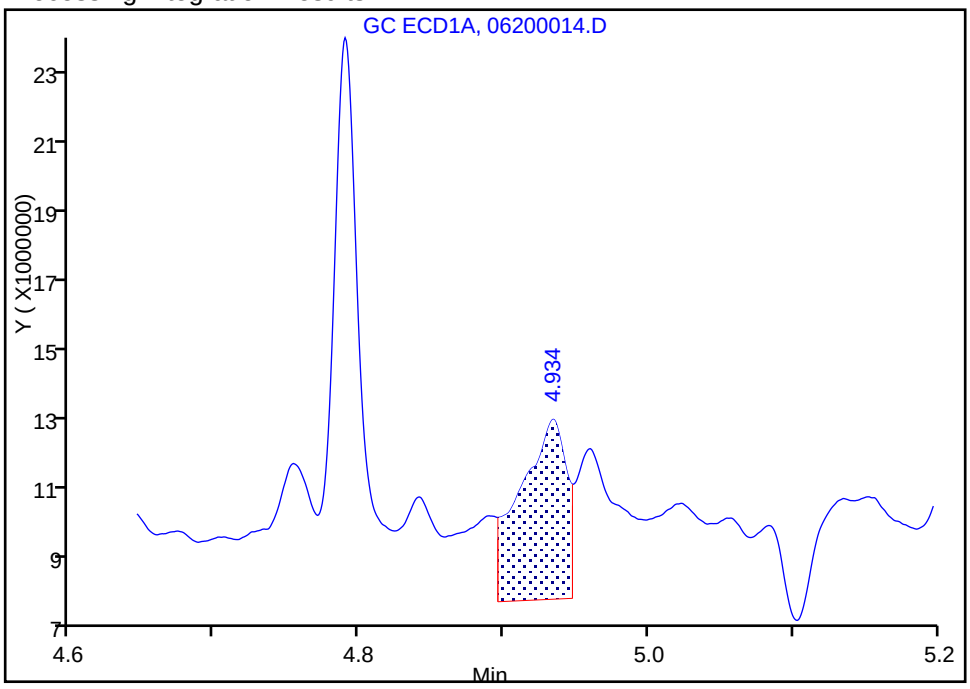
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200014.D
Injection Date: 20-Jun-2017 14:36:30 Instrument ID: SGC_P1
Lims ID: MB 280-377252/1-A
Client ID:
Operator ID: DAW ALS Bottle#: 8 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: P1 8081 IS Limit Group: GCSV - 8081A - IS
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

12 delta-BHC, CAS: 319-86-8

Signal: 1

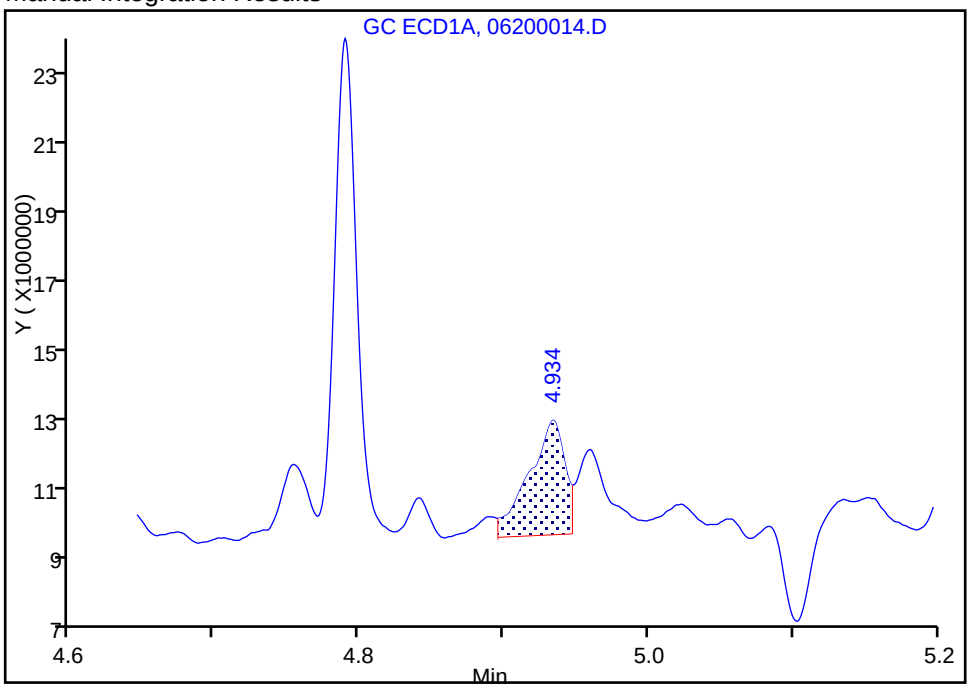
Processing Integration Results

RT: 4.93
Area: 10950278
Amount: 0.921277
Amount Units: ng/mL



Manual Integration Results

RT: 4.93
Area: 5404918
Amount: 0.725015
Amount Units: ng/mL



Reviewer: wellsd, 20-Jun-2017 15:28:14
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

Manual Integration/User Assign Peak Report

TestAmerica Denver

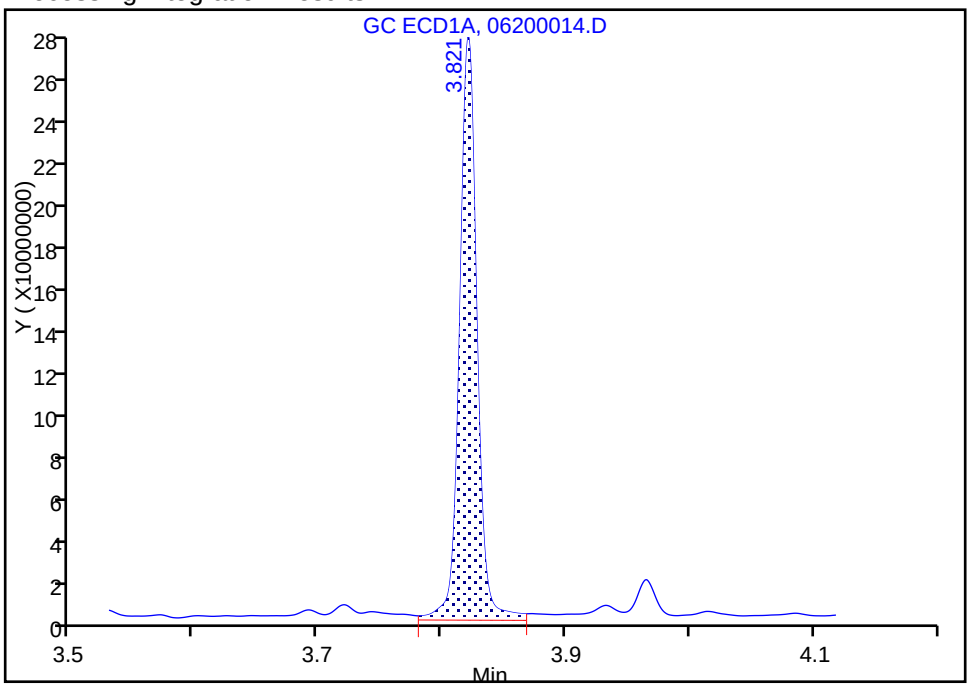
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200014.D
Injection Date: 20-Jun-2017 14:36:30 Instrument ID: SGC_P1
Lims ID: MB 280-377252/1-A
Client ID:
Operator ID: DAW ALS Bottle#: 8 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: P1 8081 IS Limit Group: GCSV - 8081A - IS
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

$ 4 Tetrachloro-m-xylene, CAS: 877-09-8

Signal: 1

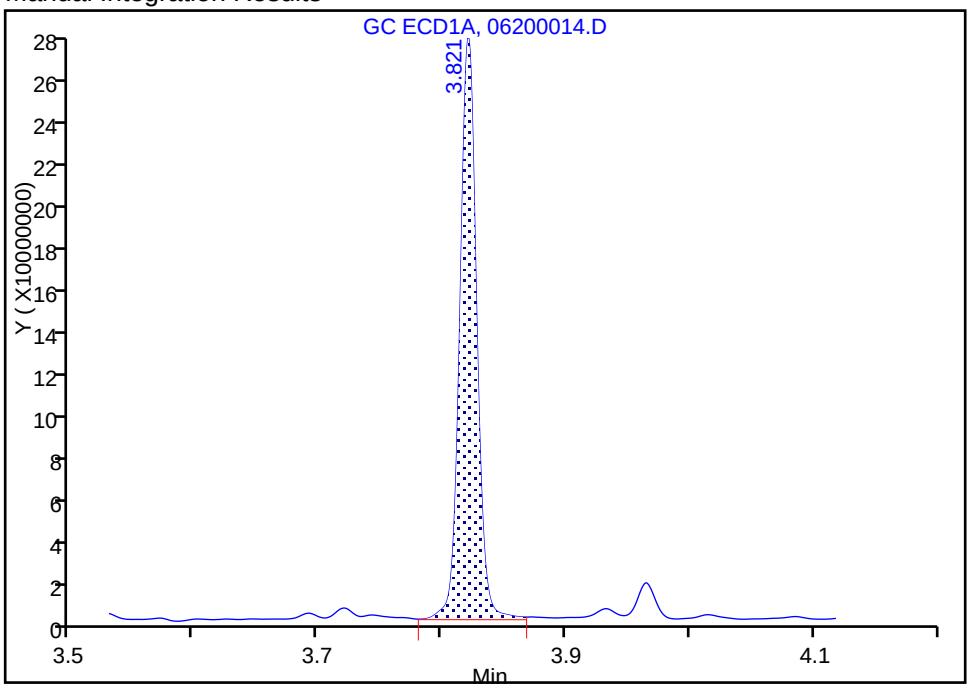
Processing Integration Results

RT: 3.82
Area: 255323298
Amount: 15.317457
Amount Units: ng/mL



Manual Integration Results

RT: 3.82
Area: 246327174
Amount: 14.781327
Amount Units: ng/mL



Reviewer: wellsd, 20-Jun-2017 15:28:18
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-376892/2-A

Matrix: Solid | Lab File ID: 06140015.D

Analysis Method: 8081B | Date Collected:

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 31.4(g) | Date Analyzed: 06/14/2017 20:06

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377328 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	10.8		1.6	1.6	0.52
72-55-9	4,4'-DDE	10.8		1.6	0.64	0.23
50-29-3	4,4'-DDT	11.5		1.9	1.6	0.56
309-00-2	Aldrin	9.73		1.6	0.64	0.24
319-84-6	alpha-BHC	10.1		1.6	0.64	0.20
5103-71-9	alpha-Chlordane	10.2		1.6	0.64	0.31
319-85-7	beta-BHC	10.3		1.6	1.6	0.63
319-86-8	delta-BHC	10.4		1.6	0.96	0.38
60-57-1	Dieldrin	11.2		1.6	0.64	0.20
959-98-8	Endosulfan I	11.1		1.6	0.64	0.17
33213-65-9	Endosulfan II	10.8		1.6	0.64	0.27
1031-07-8	Endosulfan sulfate	10.7		1.6	0.64	0.26
72-20-8	Endrin	12.6		1.6	0.64	0.29
7421-93-4	Endrin aldehyde	9.64		1.6	0.64	0.16
58-89-9	gamma-BHC (Lindane)	10.3		1.6	0.96	0.44
5103-74-2	gamma-Chlordane	10.4		1.6	0.64	0.25
76-44-8	Heptachlor	11.4		1.6	0.64	0.20
1024-57-3	Heptachlor epoxide	10.9		1.6	0.96	0.41
72-43-5	Methoxychlor	11.4		3.2	0.96	0.43

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	66		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	64		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140015.D
Lims ID: LCS 280-376892/2-A
Client ID:
Sample Type: LCS
Inject. Date: 14-Jun-2017 20:06:43 ALS Bottle#: 9 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-376892/2
Misc. Info.: 280-0059760-015
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:57:53 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.996	2.997	-0.001	2105933351	150.0	150.0	
2	2.770	2.771	-0.001	427486813	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.822	3.824	-0.002	203015234	20.0	12.8	
2	3.684	3.684	0.000	41595201	20.0	13.7	
						RPD = 7.12	
8 alpha-BHC							
1	4.370	4.372	-0.002	881656389	50.0	31.8	
2	4.248	4.248	0.000	149466501	50.0	34.4	
						RPD = 7.92	
9 gamma-BHC (Lindane)							
1	4.679	4.680	-0.001	805554909	50.0	32.2	
2	4.573	4.573	0.000	132345617	50.0	34.5	
						RPD = 6.94	
10 beta-BHC							
1	4.763	4.765	-0.002	314391741	50.0	32.3	
2	4.654	4.654	0.000	56846067	50.0	35.3	
						RPD = 8.81	
12 delta-BHC							
1	4.938	4.939	-0.001	863522925	50.0	32.5	
2	4.928	4.928	0.000	133977752	50.0	33.9	
						RPD = 4.23	
15 Heptachlor							
1	5.147	5.149	-0.002	828891894	50.0	35.7	
2	4.984	4.984	0.000	128083683	50.0	36.1	
						RPD = 1.11	
16 Aldrin							
1	5.433	5.435	-0.002	721415411	50.0	30.5	
2	5.291	5.291	0.000	120862931	50.0	34.4	
						RPD = 11.97	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
21 Heptachlor epoxide							
1	6.058	6.059	-0.001	697926408	50.0	34.1	
2	5.837	5.837	0.000	113186111	50.0	36.2	
						RPD = 6.05	
22 gamma-Chlordane							
1	6.199	6.202	-0.003	736436216	50.0	32.7	
2	6.038	6.039	-0.001	116521985	50.0	35.7	
						RPD = 8.74	
23 alpha-Chlordane							
1	6.362	6.363	-0.001	687193519	50.0	31.9	
2	6.206	6.207	-0.001	111774174	50.0	35.9	
						RPD = 11.82	
24 4,4'-DDE							
1	6.457	6.459	-0.002	751106223	50.0	33.9	
2	6.423	6.424	-0.001	113039664	50.0	35.3	
						RPD = 3.92	
25 Endosulfan I							
1	6.531	6.534	-0.003	684244523	50.0	34.7	
2	6.270	6.270	0.000	107026614	50.0	35.7	
						RPD = 2.87	
27 Dieldrin							
1	6.818	6.819	-0.001	782039965	50.0	35.3	
2	6.610	6.609	0.001	122691692	50.0	37.2	
						RPD = 5.19	
30 Endrin							
1	7.087	7.088	-0.001	711519185	50.0	39.6	
2	6.969	6.969	0.000	110814090	50.0	42.0	
						RPD = 5.99	
32 4,4'-DDD							
1	7.163	7.163	0.000	638035408	50.0	34.1	
2	7.120	7.121	-0.001	96673601	50.0	37.9	
						RPD = 10.73	
34 Endosulfan II							
1	7.336	7.337	-0.001	632756455	50.0	34.0	
2	7.214	7.214	0.000	100401600	50.0	36.6	
						RPD = 7.31	
35 4,4'-DDT							
1	7.471	7.474	-0.003	649060342	50.0	36.2	
2	7.468	7.469	-0.001	95169705	50.0	39.0	
						RPD = 7.60	
36 Endrin aldehyde							
1	7.788	7.791	-0.003	455557843	50.0	30.3	
2	7.589	7.589	0.000	72723245	50.0	32.5	
						RPD = 7.21	
37 Methoxychlor							
1	7.984	7.986	-0.002	281343457	50.0	35.8	
2	8.192	8.192	0.000	45767630	50.0	39.5	
						RPD = 9.86	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
39 Endosulfan sulfate							
1	8.237	8.239	-0.002	575700847	50.0	33.5	
2	7.882	7.883	-0.001	89922837	50.0	36.4	
						RPD = 8.28	
40 Endrin ketone							
1	8.517	8.519	-0.002	590188031	50.0	31.0	
2	8.409	8.410	-0.001	95627151	50.0	34.0	
						RPD = 9.44	
$ 41 DCB Decachlorobiphenyl							
1	9.497	9.497	0.000	147298954	20.0	13.2	
2	9.606	9.606	0.000	29641709	20.0	15.9	
						RPD = 18.44	

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

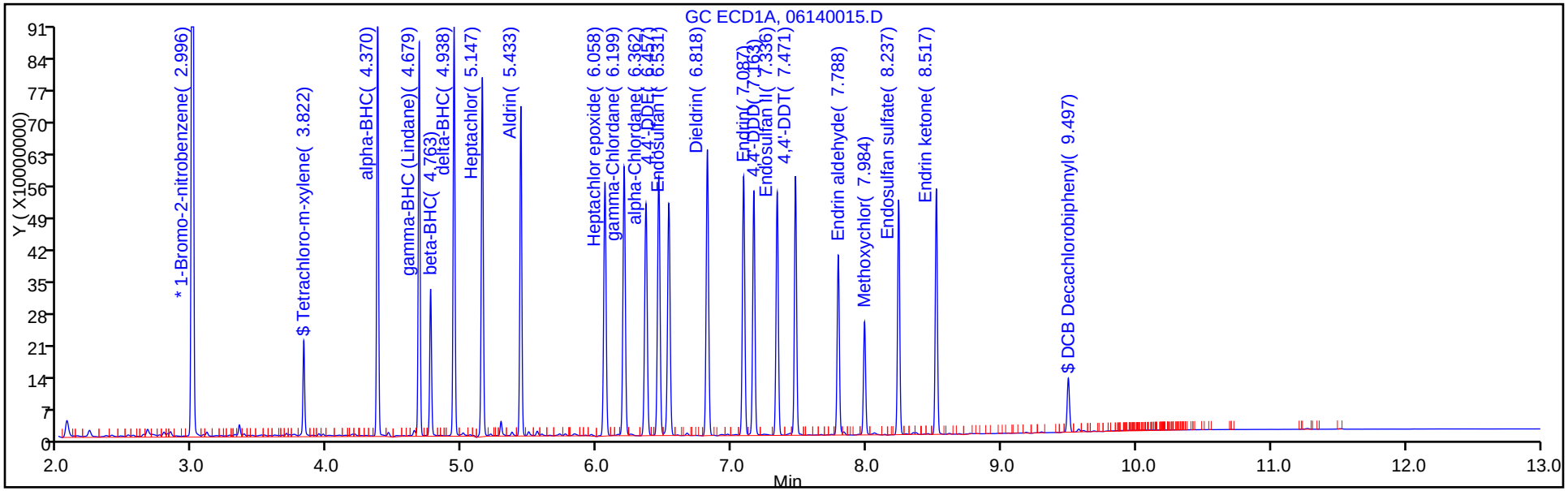
Report Date: 15-Jun-2017 13:57:57 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

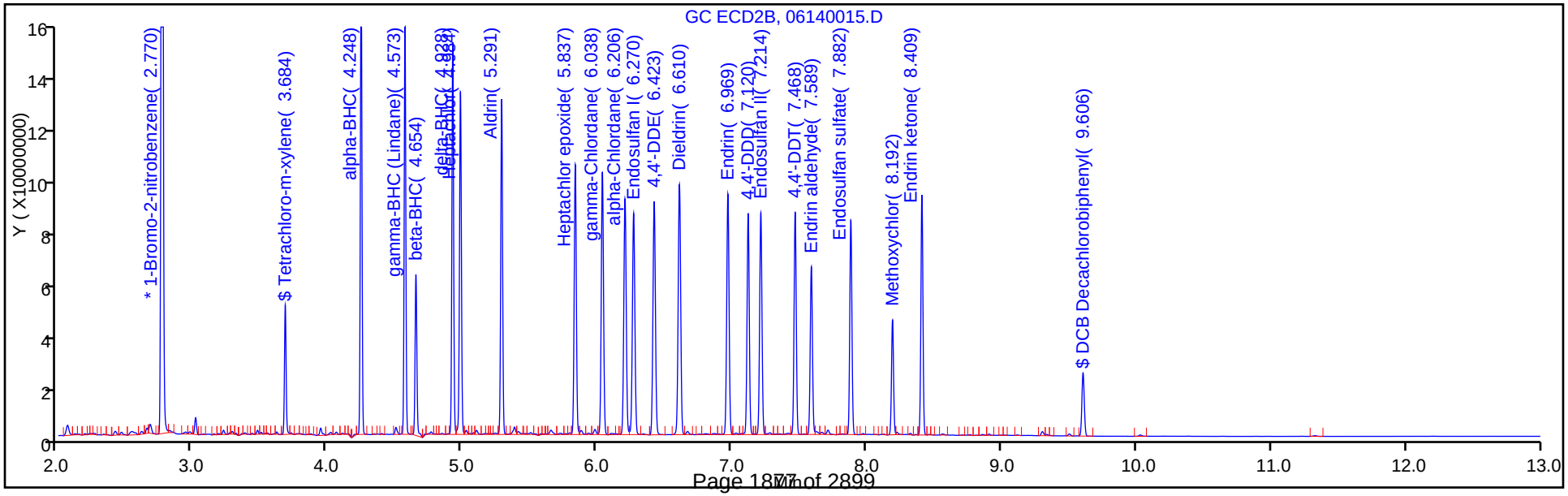
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Injection Date:	14-Jun-2017 20:06:43	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	LCS 280-376892/2-A			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140015.D				
Lims ID:	LCS 280-376892/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	14-Jun-2017 20:06:43	ALS Bottle#:	9	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-376892/2				
Misc. Info.:	280-0059760-015				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	15-Jun-2017 13:57:53	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	12.8	63.81
$ 41 DCB Decachlorobiphenyl	20.0	13.2	66.16

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	13.7	68.52
$ 41 DCB Decachlorobiphenyl	20.0	15.9	79.60

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-376892/3-A

Matrix: Solid | Lab File ID: 06140016.D

Analysis Method: 8081B | Date Collected:

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 31.9(g) | Date Analyzed: 06/14/2017 20:23

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377328 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
8001-35-2	Toxaphene	52.4	J	160	31	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	79		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	82		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140016.D
Lims ID: LCS 280-376892/3-A
Client ID:
Sample Type: LCS
Inject. Date: 14-Jun-2017 20:23:42 ALS Bottle#: 10 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-376892/3
Misc. Info.: 280-0059760-016
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:57:53 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: wellsd Date: 15-Jun-2017 13:42:48

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.997	2.997	0.000	2189214496	150.0	150.0	
2	2.772	2.771	0.001	465381020	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.823	3.824	-0.001	271680539	20.0	16.4	
2	3.685	3.684	0.001	57207787	20.0	17.5	
						RPD = 6.32	
28 Toxaphene							M
1	5.609	5.609	0.000	4597329	200.0	112.8	M
1	6.928	6.929	-0.001	30426519	200.0	223.3	M
1	7.190	7.192	-0.002	38218209	200.0	182.4	M
1	7.698	7.697	0.001	64729650	200.0	144.2	M
1	8.137	8.140	-0.003	96008643	200.0	173.9	M
		Average of Peak Amounts =				167.3	
2	6.118	6.119	-0.001	7467052	200.0	191.0	M
2	7.164	7.168	-0.004	8497665	200.0	101.3	M
2	7.311	7.311	0.000	25786194	200.0	130.6	M
2	7.599	7.600	-0.001	20433177	200.0	168.3	M
2	8.123	8.122	0.001	18106398	200.0	180.9	M
		Average of Peak Amounts =				154.4	
						RPD = 8.01	
$ 41 DCB Decachlorobiphenyl							
1	9.497	9.497	0.000	180947960	20.0	15.7	
2	9.607	9.606	0.001	34542993	20.0	17.1	
						RPD = 8.65	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

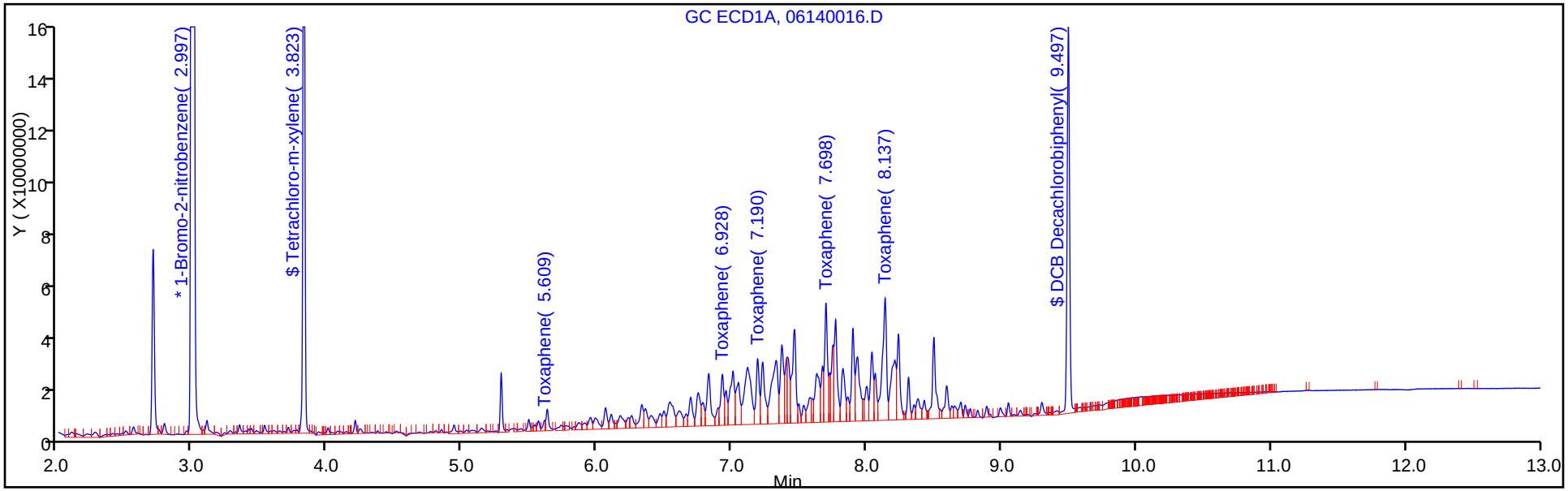
Report Date: 15-Jun-2017 13:58:00 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

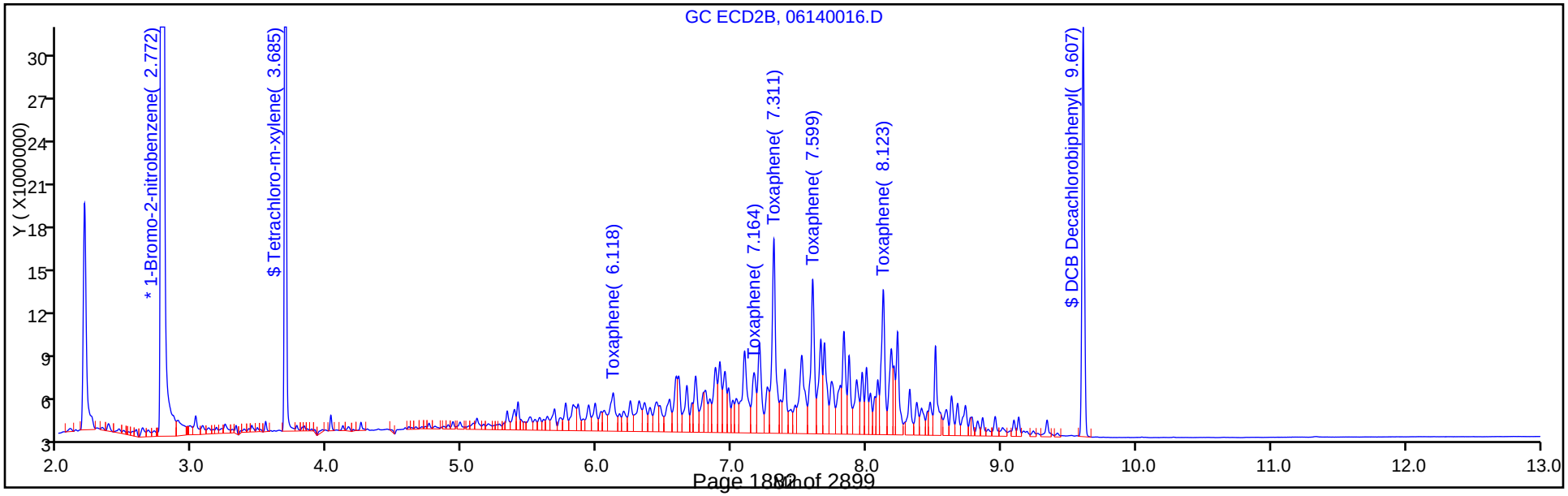
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Injection Date:	14-Jun-2017 20:23:42	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	LCS 280-376892/3-A			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140016.D
Lims ID: LCS 280-376892/3-A
Client ID:
Sample Type: LCS
Inject. Date: 14-Jun-2017 20:23:42 ALS Bottle#: 10 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-376892/3
Misc. Info.: 280-0059760-016
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:57:53 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: wellsd Date: 15-Jun-2017 13:42:48

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	16.4	82.00
$ 41 DCB Decachlorobiphenyl	20.0	15.7	78.52

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	17.5	87.36
$ 41 DCB Decachlorobiphenyl	20.0	17.1	85.62

Report Date: 15-Jun-2017 13:58:00 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140016.D

Injection Date: 14-Jun-2017 20:23:42 Instrument ID: SGC_P1

Lims ID: LCS 280-376892/3-A

Client ID:

Operator ID: DAW ALS Bottle#: 10 Worklist Smp#: 16

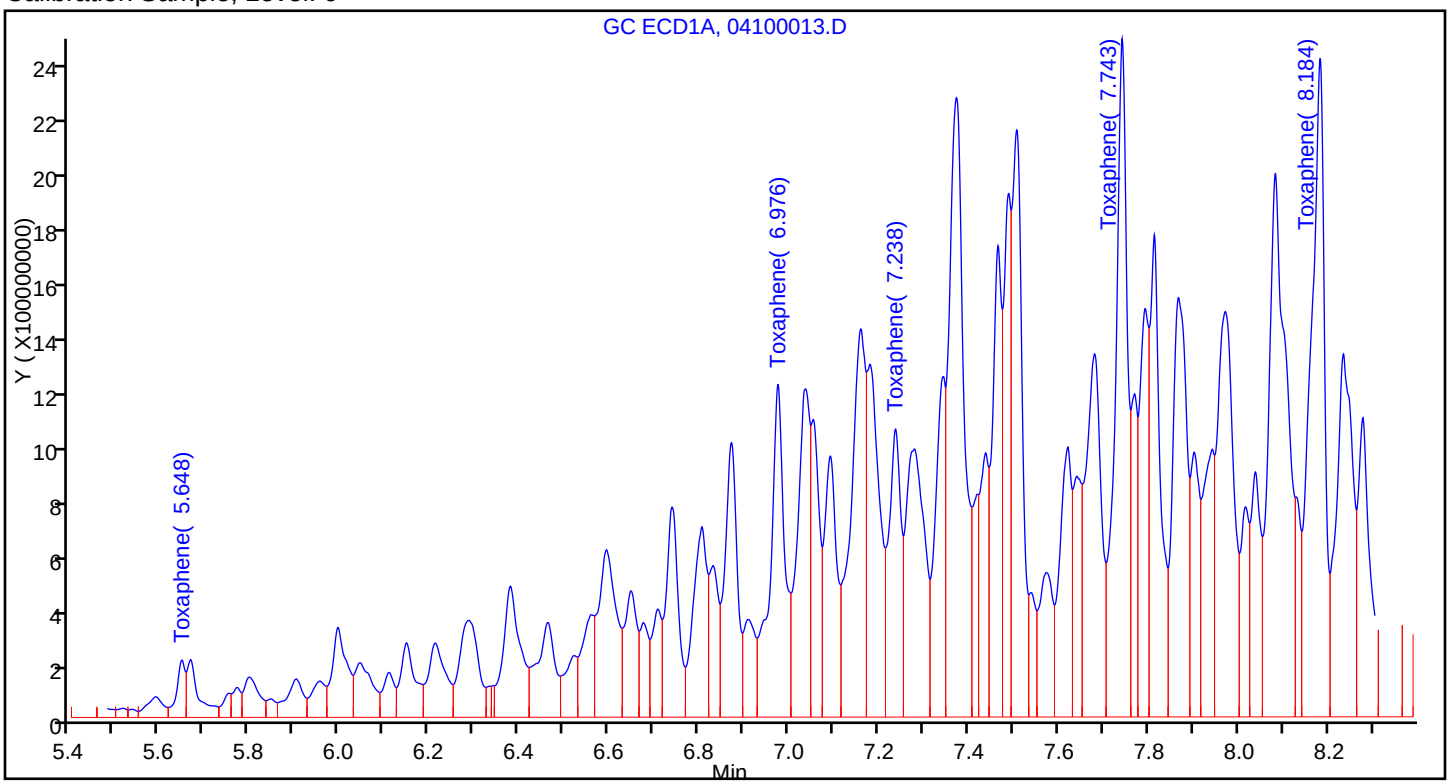
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

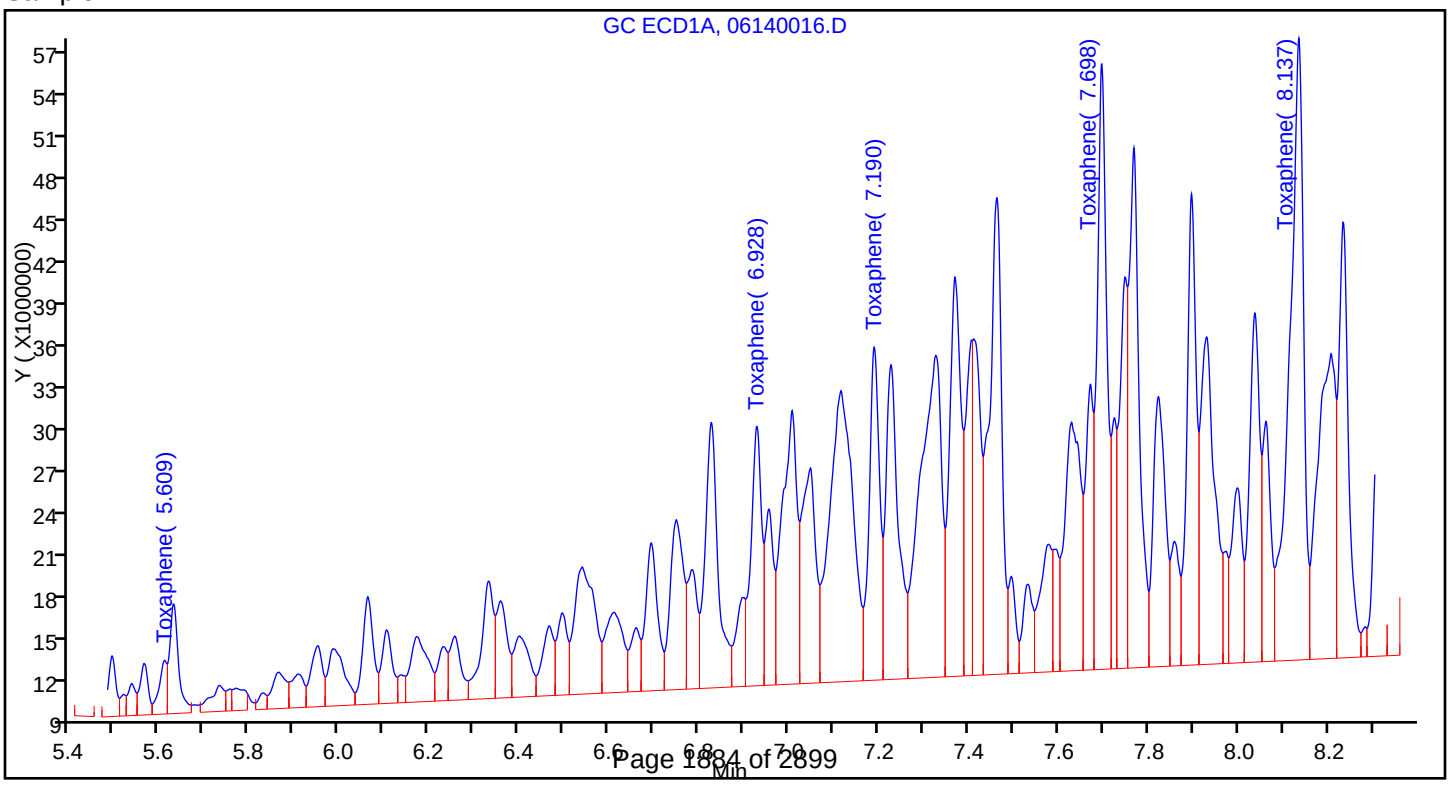
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2

Calibration Sample, Level: 6



Sample



Report Date: 15-Jun-2017 13:58:00 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140016.D

Injection Date: 14-Jun-2017 20:23:42 Instrument ID: SGC_P1

Lims ID: LCS 280-376892/3-A

Client ID:

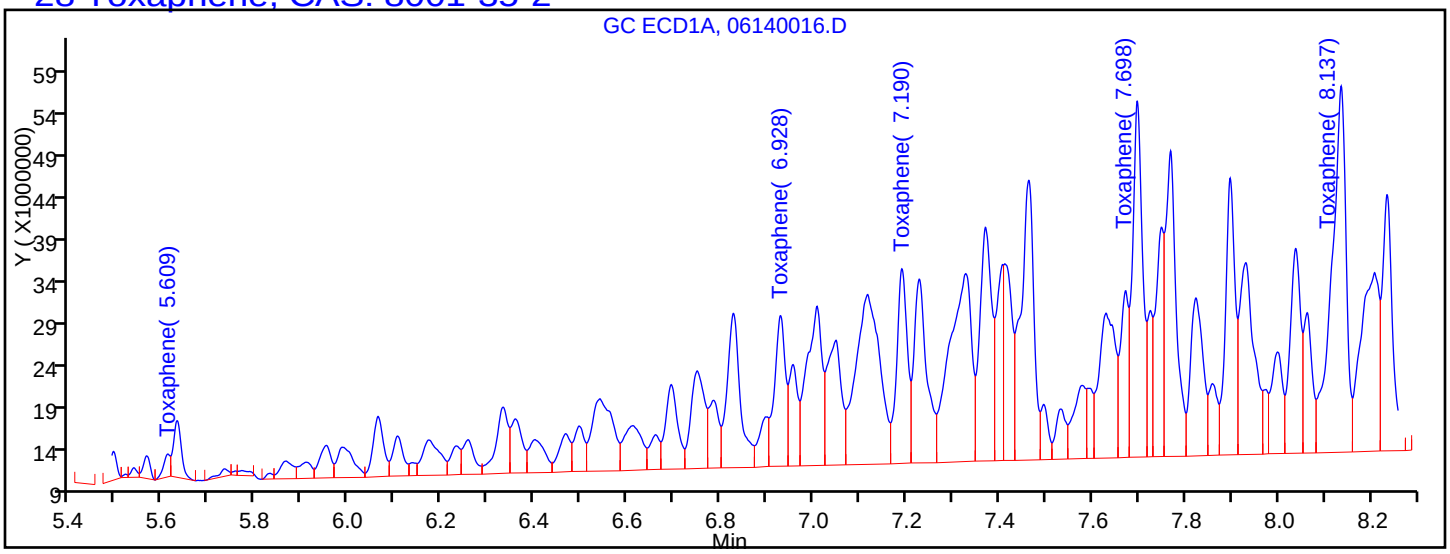
Operator ID: DAW ALS Bottle#: 10 Worklist Smp#: 16

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

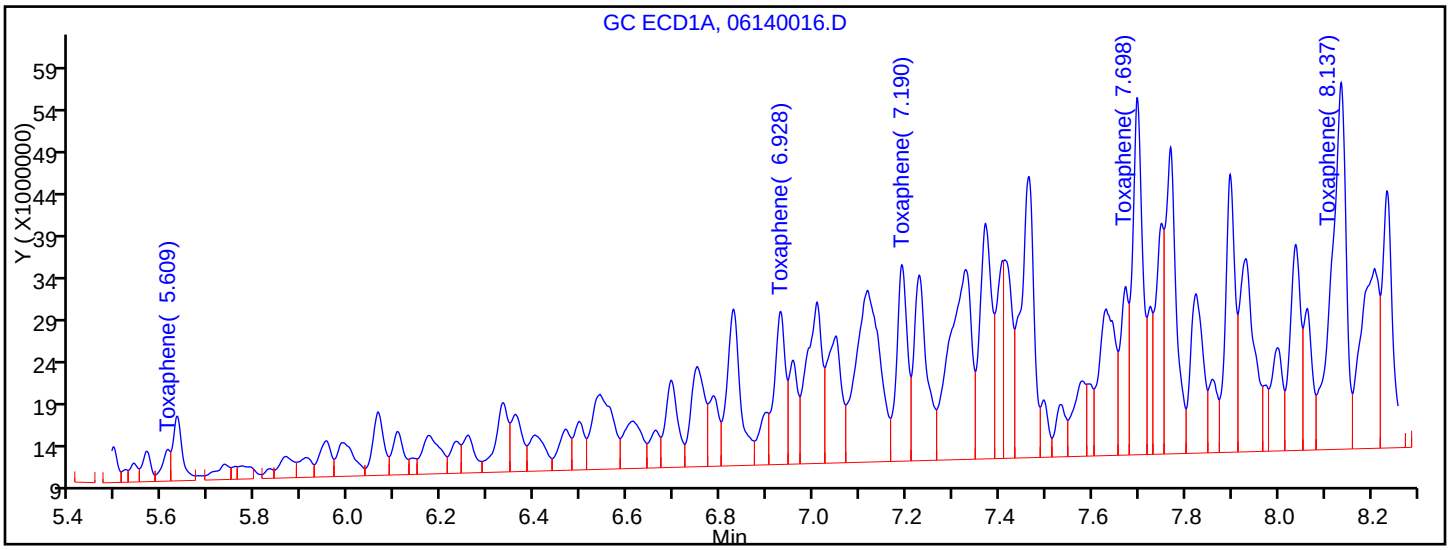
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.609	Response = 2718174
6.928	Response = 29552430
7.190	Response = 37456270
7.698	Response = 64104454
8.137	Response = 95109098



Manual Integration Results

5.609	Response = 4597329	M
6.928	Response = 30426519	M
7.190	Response = 38218209	M
7.698	Response = 64729650	M
8.137	Response = 96008643	M

Reviewer: wellsd, 15-Jun-2017 13:42:43

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-377252/2-A

Matrix: Solid | Lab File ID: 06200015.D

Analysis Method: 8081B | Date Collected:

Extraction Method: 3546 | Date Extracted: 06/14/2017 09:49

Sample wt/vol: 30.7(g) | Date Analyzed: 06/20/2017 14:53

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377996 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	13.9		1.7	1.6	0.53
72-55-9	4,4'-DDE	13.9		1.7	0.65	0.23
50-29-3	4,4'-DDT	15.0		2.0	1.6	0.58
309-00-2	Aldrin	13.7		1.7	0.65	0.25
319-84-6	alpha-BHC	13.8		1.7	0.65	0.21
5103-71-9	alpha-Chlordane	13.9		1.7	0.65	0.32
319-85-7	beta-BHC	13.5		1.7	1.6	0.65
319-86-8	delta-BHC	13.7		1.7	0.98	0.39
60-57-1	Dieldrin	14.4		1.7	0.65	0.21
959-98-8	Endosulfan I	14.4		1.7	0.65	0.17
33213-65-9	Endosulfan II	14.1	M	1.7	0.65	0.28
1031-07-8	Endosulfan sulfate	14.6		1.7	0.65	0.27
72-20-8	Endrin	15.8		1.7	0.65	0.30
7421-93-4	Endrin aldehyde	13.1		1.7	0.65	0.17
58-89-9	gamma-BHC (Lindane)	13.9		1.7	0.98	0.45
5103-74-2	gamma-Chlordane	13.9		1.7	0.65	0.26
76-44-8	Heptachlor	15.0		1.7	0.65	0.21
1024-57-3	Heptachlor epoxide	14.0		1.7	0.98	0.42
72-43-5	Methoxychlor	14.9		3.2	0.98	0.44

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	94		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	82		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200015.D
Lims ID: LCS 280-377252/2-A
Client ID:
Sample Type: LCS
Inject. Date: 20-Jun-2017 14:53:28 ALS Bottle#: 9 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-377252/2
Misc. Info.: 280-0059933-015
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 21-Jun-2017 10:59:53 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK008

First Level Reviewer: wellsd Date: 20-Jun-2017 15:28:31

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.995	2.996	-0.001	2257421204	150.0	150.0	
2	2.769	2.769	0.000	453559697	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.820	3.822	-0.002	281585439	20.0	16.5	
2	3.683	3.682	0.001	55076449	20.0	17.3	
						RPD = 4.55	
8 alpha-BHC							
1	4.368	4.369	-0.001	1268240094	50.0	42.5	
2	4.246	4.246	0.000	192757464	50.0	41.9	
						RPD = 1.43	
9 gamma-BHC (Lindane)							
1	4.678	4.677	0.001	1149330377	50.0	42.7	
2	4.571	4.571	0.000	169465233	50.0	41.7	
						RPD = 2.30	
10 beta-BHC							
1	4.762	4.762	0.000	431744052	50.0	41.4	
2	4.652	4.652	0.000	70070255	50.0	41.2	
						RPD = 0.58	
12 delta-BHC							
1	4.936	4.936	0.000	1200277323	50.0	42.0	
2	4.925	4.925	0.000	171870118	50.0	41.0	
						RPD = 2.32	
15 Heptachlor							
1	5.145	5.147	-0.002	1149178775	50.0	46.1	
2	4.982	4.982	0.000	163963330	50.0	43.7	
						RPD = 5.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
16 Aldrin							
1	5.432	5.432	0.000	1071253564	50.0	42.2	
2	5.288	5.288	0.000	152109479	50.0	40.9	
						RPD = 3.12	
21 Heptachlor epoxide							
1	6.054	6.055	-0.001	943234174	50.0	43.0	
2	5.834	5.834	0.000	136835339	50.0	41.4	
						RPD = 3.88	
22 gamma-Chlordane							
1	6.198	6.198	0.000	1034781238	50.0	42.8	
2	6.035	6.035	0.000	141590188	50.0	41.0	
						RPD = 4.33	
23 alpha-Chlordane							
1	6.358	6.359	-0.001	987769068	50.0	42.7	
2	6.203	6.203	0.000	136131765	50.0	41.3	
						RPD = 3.30	
24 4,4'-DDE							
1	6.454	6.456	-0.002	1013223177	50.0	42.6	
2	6.419	6.420	-0.001	137343704	50.0	40.5	
						RPD = 5.11	
25 Endosulfan I							
1	6.528	6.530	-0.002	930576932	50.0	44.1	
2	6.267	6.267	0.000	128082053	50.0	40.4	
						RPD = 8.67	
27 Dieldrin							
1	6.815	6.816	-0.001	1053498930	50.0	44.3	
2	6.607	6.607	0.000	145504055	50.0	41.6	
						RPD = 6.29	
30 Endrin							
1	7.083	7.084	-0.001	937520766	50.0	48.6	
2	6.966	6.967	-0.001	128225531	50.0	45.9	
						RPD = 5.80	
32 4,4'-DDD							
1	7.159	7.160	-0.001	854952780	50.0	42.6	
2	7.118	7.118	0.000	114092673	50.0	42.3	
						RPD = 0.73	
34 Endosulfan II							M
1	7.333	7.334	-0.001	861458863	50.0	43.2	M
2	7.211	7.212	-0.001	116608166	50.0	40.2	
						RPD = 7.37	
35 4,4'-DDT							
1	7.469	7.470	-0.001	887440834	50.0	46.0	
2	7.466	7.467	-0.001	110476700	50.0	42.7	
						RPD = 7.32	
36 Endrin aldehyde							
1	7.786	7.787	-0.001	648013429	50.0	40.2	
2	7.585	7.587	-0.002	86211077	50.0	36.5	
						RPD = 9.74	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
37 Methoxychlor							
1	7.982	7.983	-0.001	384418415	50.0	45.7	
2	8.189	8.189	0.000	52630028	50.0	42.9	
						RPD = 6.33	
39 Endosulfan sulfate							
1	8.234	8.236	-0.002	825418741	50.0	44.8	
2	7.880	7.879	0.001	105083764	50.0	40.2	
						RPD = 10.78	
40 Endrin ketone							
1	8.514	8.514	0.000	838930951	50.0	41.0	
2	8.407	8.407	0.000	113953151	50.0	38.3	
						RPD = 6.84	
$ 41 DCB Decachlorobiphenyl							
1	9.493	9.494	-0.001	222572849	20.0	18.8	
2	9.603	9.602	0.001	34584372	20.0	17.6	
						RPD = 6.49	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

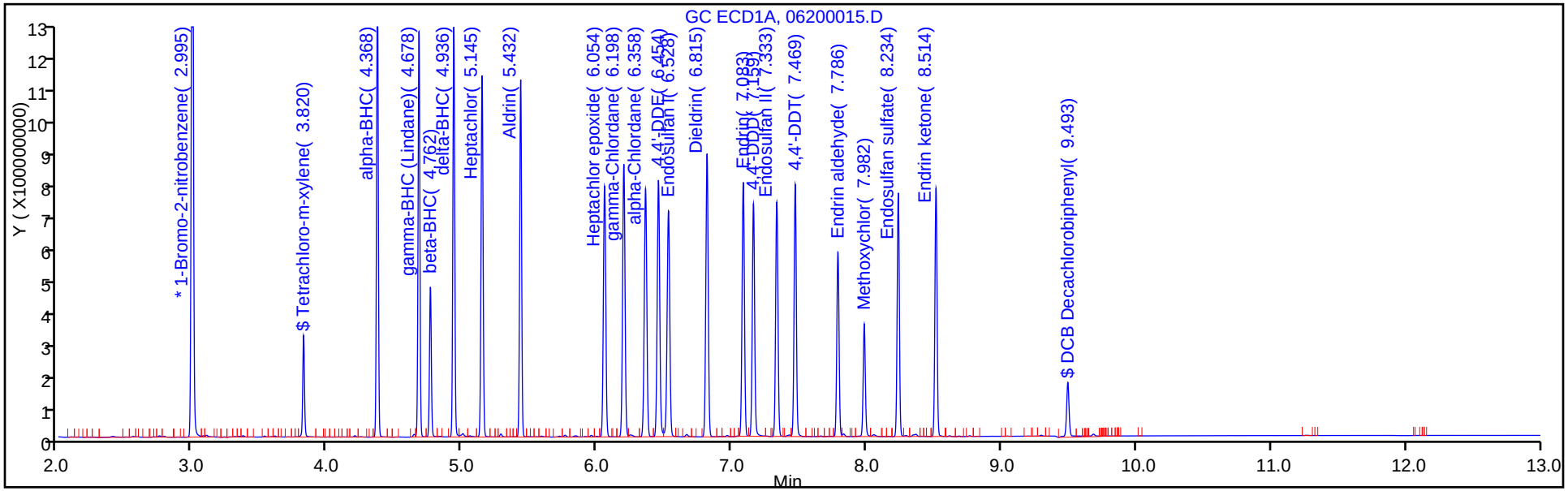
Report Date: 21-Jun-2017 10:59:56 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

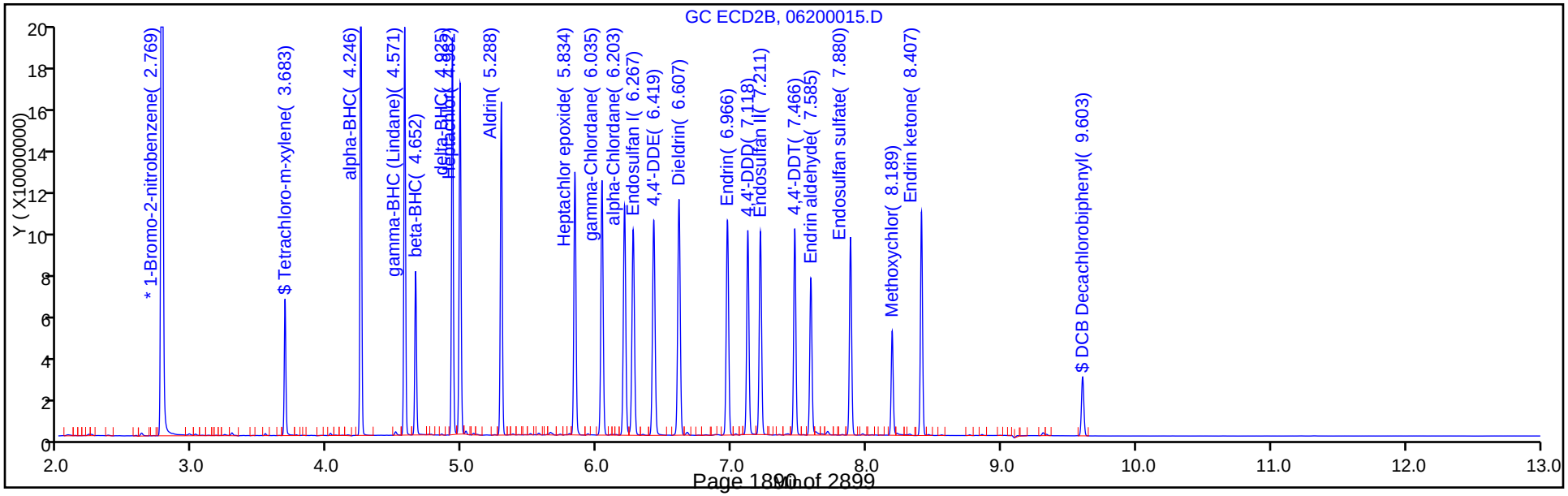
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200015.D

Injection Date:	20-Jun-2017 14:53:28	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	LCS 280-377252/2-A			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200015.D				
Lims ID:	LCS 280-377252/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	20-Jun-2017 14:53:28	ALS Bottle#:	9	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-377252/2				
Misc. Info.:	280-0059933-015				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	21-Jun-2017 10:59:53	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK008				
First Level Reviewer: wellsd		Date:	20-Jun-2017 15:28:31		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	16.5	82.42
$ 41 DCB Decachlorobiphenyl	20.0	18.8	94.03

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	17.3	86.26
$ 41 DCB Decachlorobiphenyl	20.0	17.6	88.12

Manual Integration/User Assign Peak Report

TestAmerica Denver

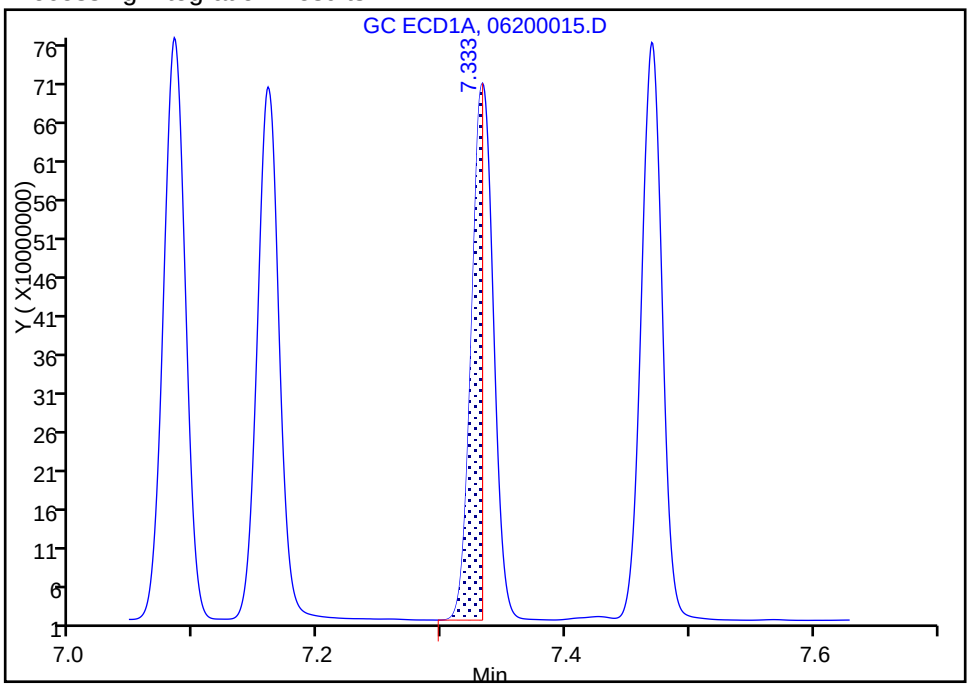
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Injection Date:	20-Jun-2017 14:53:28	Instrument ID:	SGC_P1		
Lims ID:	LCS 280-377252/2-A				
Client ID:					
Operator ID:	DAW	ALS Bottle#:	9	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

34 Endosulfan II, CAS: 33213-65-9

Signal: 1

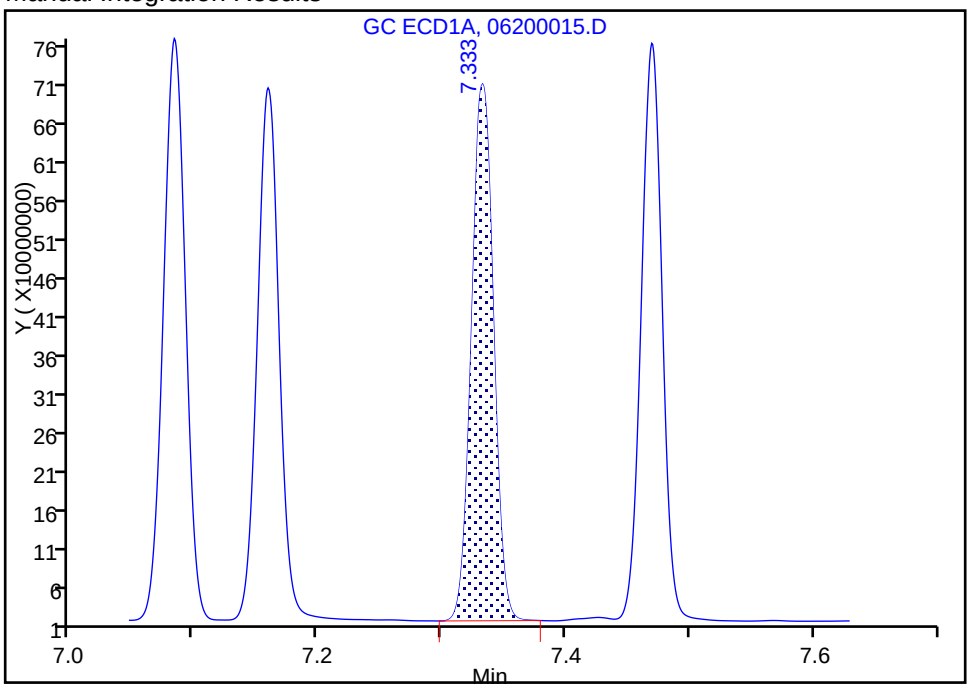
Processing Integration Results

RT: 7.33
Area: 426239006
Amount: 21.364404
Amount Units: ng/mL



Manual Integration Results

RT: 7.33
Area: 861458863
Amount: 43.227873
Amount Units: ng/mL



Reviewer: wellsd, 20-Jun-2017 15:28:30

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-377252/3-A

Matrix: Solid | Lab File ID: 06200016.D

Analysis Method: 8081B | Date Collected:

Extraction Method: 3546 | Date Extracted: 06/14/2017 09:49

Sample wt/vol: 30.8(g) | Date Analyzed: 06/20/2017 15:32

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377996 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
8001-35-2	Toxaphene	60.6	J	170	32	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	81	M	63-121
877-09-8	Tetrachloro-m-xylene (Surr)	80		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200016.D
Lims ID: LCS 280-377252/3-A
Client ID:
Sample Type: LCS
Inject. Date: 20-Jun-2017 15:32:13 ALS Bottle#: 10 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-377252/3
Misc. Info.: 280-0059933-016
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 21-Jun-2017 10:59:53 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK008

First Level Reviewer: wellsd Date: 20-Jun-2017 16:06:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.994	2.996	-0.002	2466300303	150.0	150.0	
2	2.768	2.769	-0.001	459316602	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.821	3.822	-0.001	297652792	20.0	16.0	
2	3.682	3.682	0.000	55062487	20.0	17.0	
						RPD = 6.50	
28 Toxaphene							M
1	5.607	5.607	0.000	6851239	200.0	150.4	M
1	6.926	6.926	0.000	36512067	200.0	227.6	M
1	7.187	7.191	-0.004	48335632	200.0	198.8	M
1	7.694	7.694	0.000	81923097	200.0	156.1	M
1	8.133	8.135	-0.002	131227442	200.0	200.7	M
		Average of Peak Amounts =				186.7	
2	6.114	6.115	-0.001	7368495	200.0	191.0	M
2	7.159	7.163	-0.004	9179015	200.0	114.7	M
2	7.307	7.308	-0.001	24667603	200.0	125.4	M
2	7.596	7.597	-0.001	19993843	200.0	166.6	M
2	8.119	8.119	0.000	17384095	200.0	175.3	M
		Average of Peak Amounts =				154.6	
						RPD = 18.82	
$ 41 DCB Decachlorobiphenyl							M
1	9.492	9.494	-0.002	209499588	20.0	16.2	M
2	9.603	9.602	0.001	34804367	20.0	17.5	
						RPD = 8.06	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

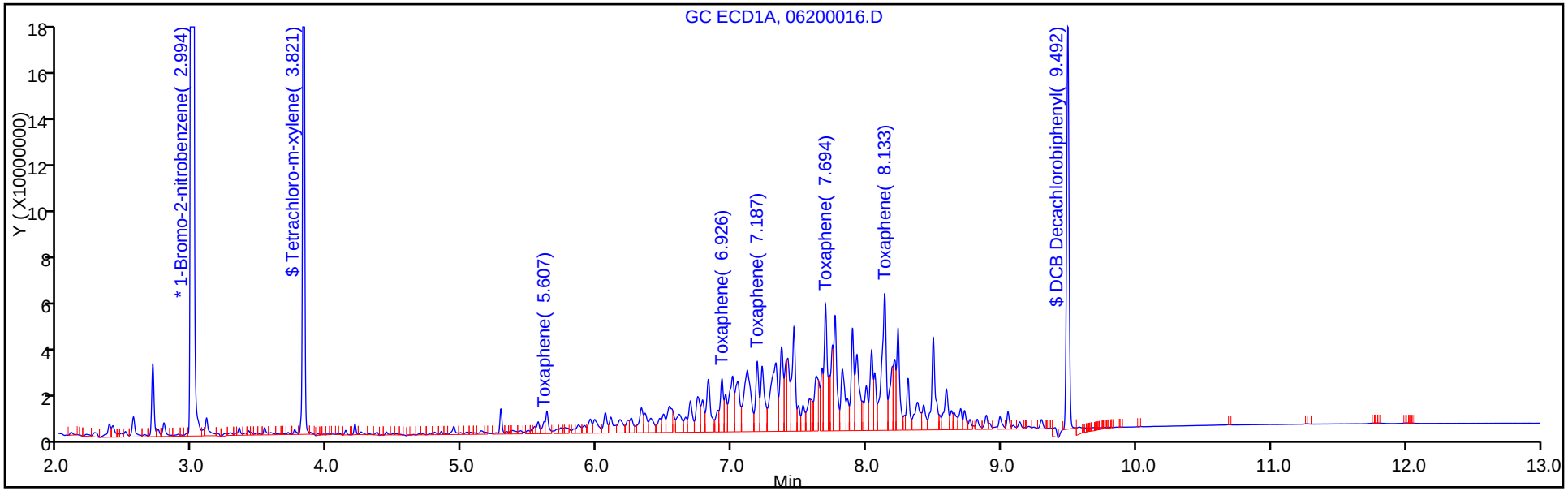
Report Date: 21-Jun-2017 10:59:58 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

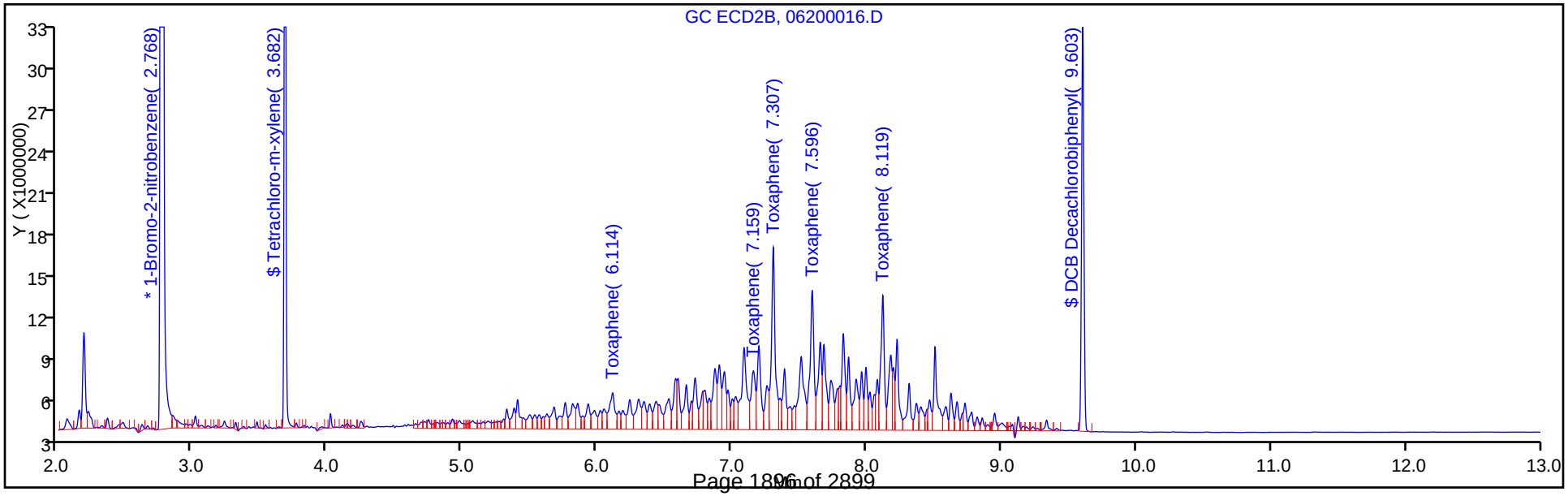
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200016.D

Injection Date:	20-Jun-2017 15:32:13	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	LCS 280-377252/3-A			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200016.D				
Lims ID:	LCS 280-377252/3-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	20-Jun-2017 15:32:13	ALS Bottle#:	10	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-377252/3				
Misc. Info.:	280-0059933-016				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	21-Jun-2017 10:59:53	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK008				
First Level Reviewer: wellsd		Date:	20-Jun-2017 16:06:20		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	16.0	79.76
$ 41 DCB Decachlorobiphenyl	20.0	16.2	80.75

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	17.0	85.12
$ 41 DCB Decachlorobiphenyl	20.0	17.5	87.53

Report Date: 21-Jun-2017 10:59:58 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200016.D

Injection Date: 20-Jun-2017 15:32:13 Instrument ID: SGC_P1

Lims ID: LCS 280-377252/3-A

Client ID:

Operator ID: DAW ALS Bottle#: 10 Worklist Smp#: 16

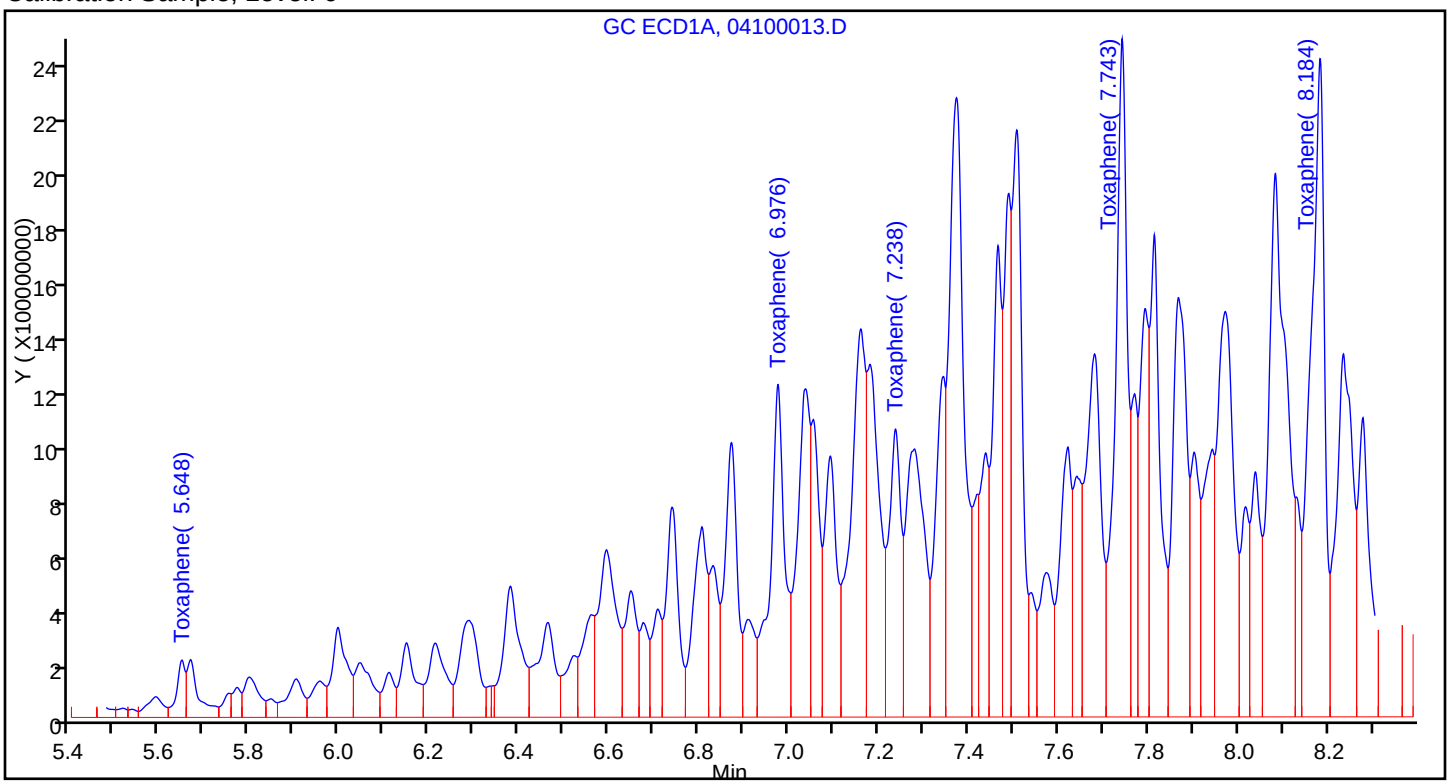
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

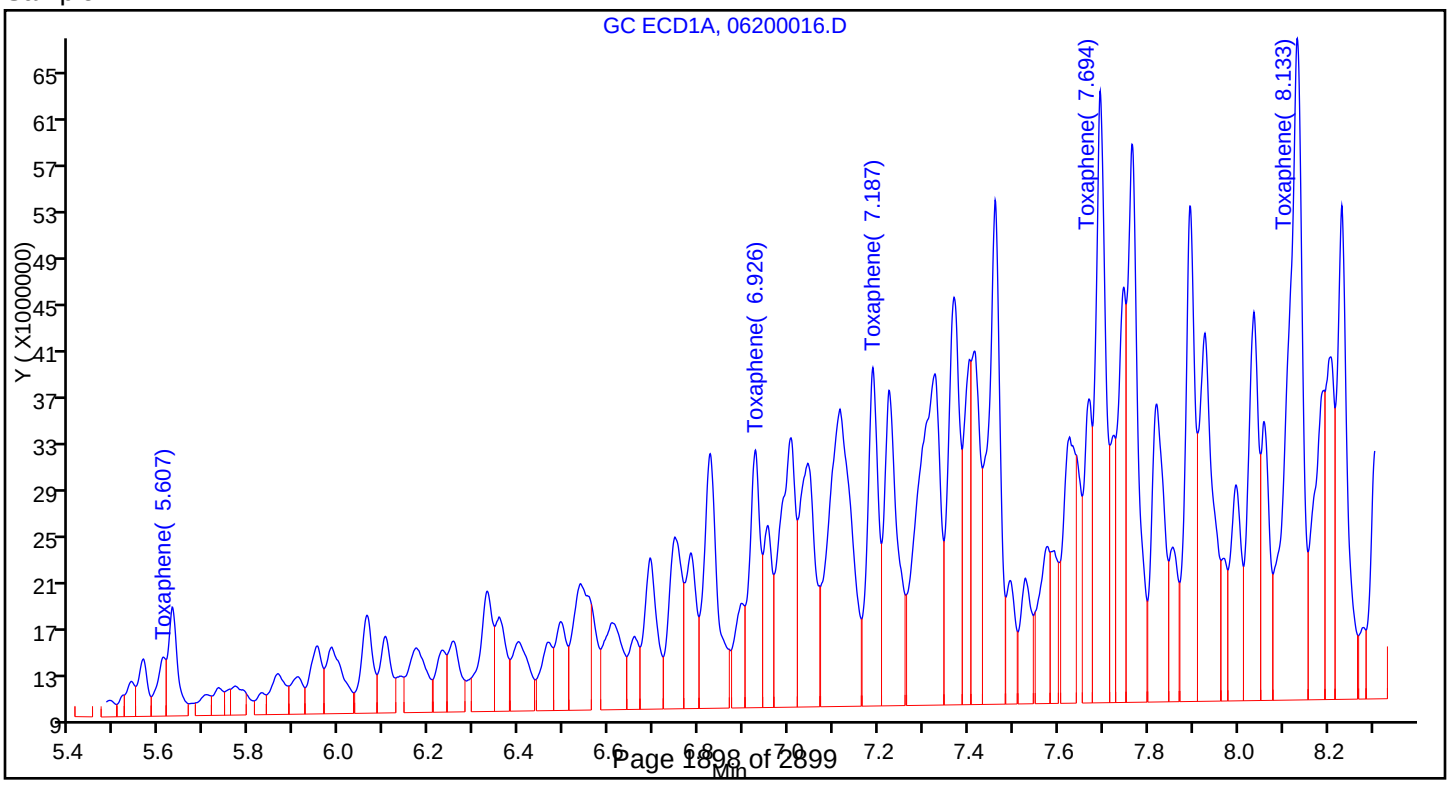
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2

Calibration Sample, Level: 6



Sample



Manual Integration/User Assign Peak Report

TestAmerica Denver

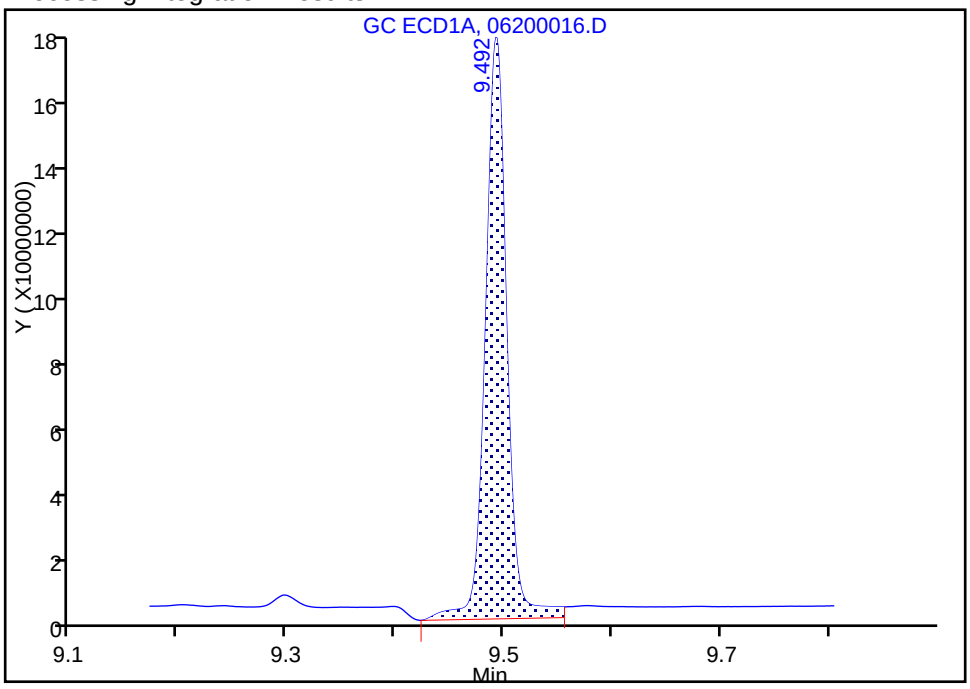
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Injection Date: 20-Jun-2017 15:32:13 Instrument ID: SGC_P1
Lims ID: LCS 280-377252/3-A
Client ID:
Operator ID: DAW ALS Bottle#: 10 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: P1 8081 IS Limit Group: GCSV - 8081A - IS
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

$ 41 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 1

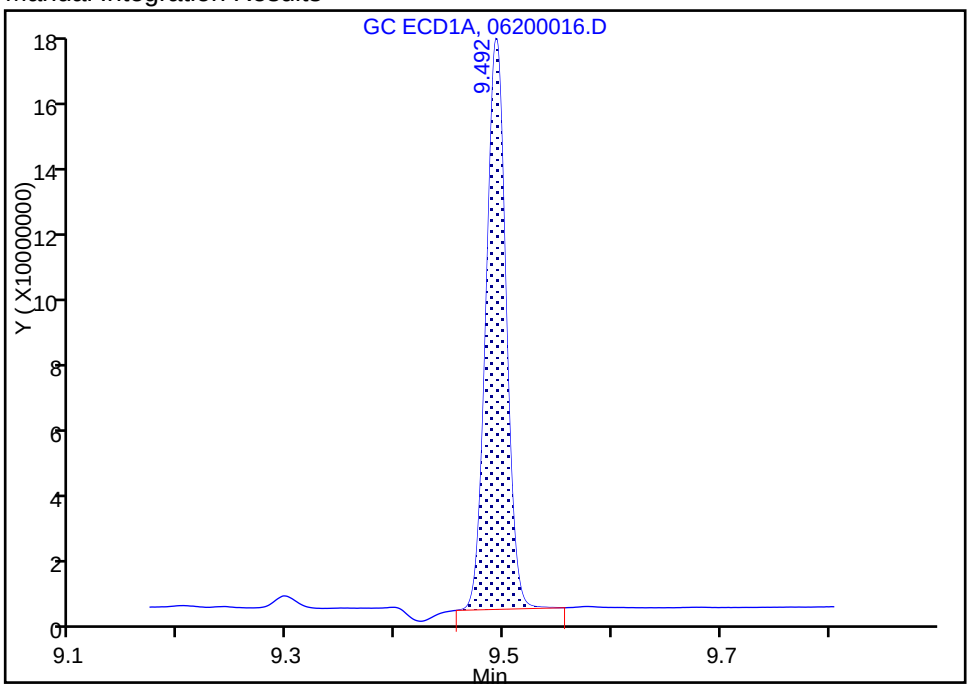
Processing Integration Results

RT: 9.49
Area: 231006939
Amount: 17.846632
Amount Units: ng/mL



Manual Integration Results

RT: 9.49
Area: 209499588
Amount: 16.150027
Amount Units: ng/mL



Reviewer: wellsd, 20-Jun-2017 16:06:16
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Report Date: 21-Jun-2017 10:59:58 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170620-59933.b\06200016.D

Injection Date: 20-Jun-2017 15:32:13 Instrument ID: SGC_P1

Lims ID: LCS 280-377252/3-A

Client ID:

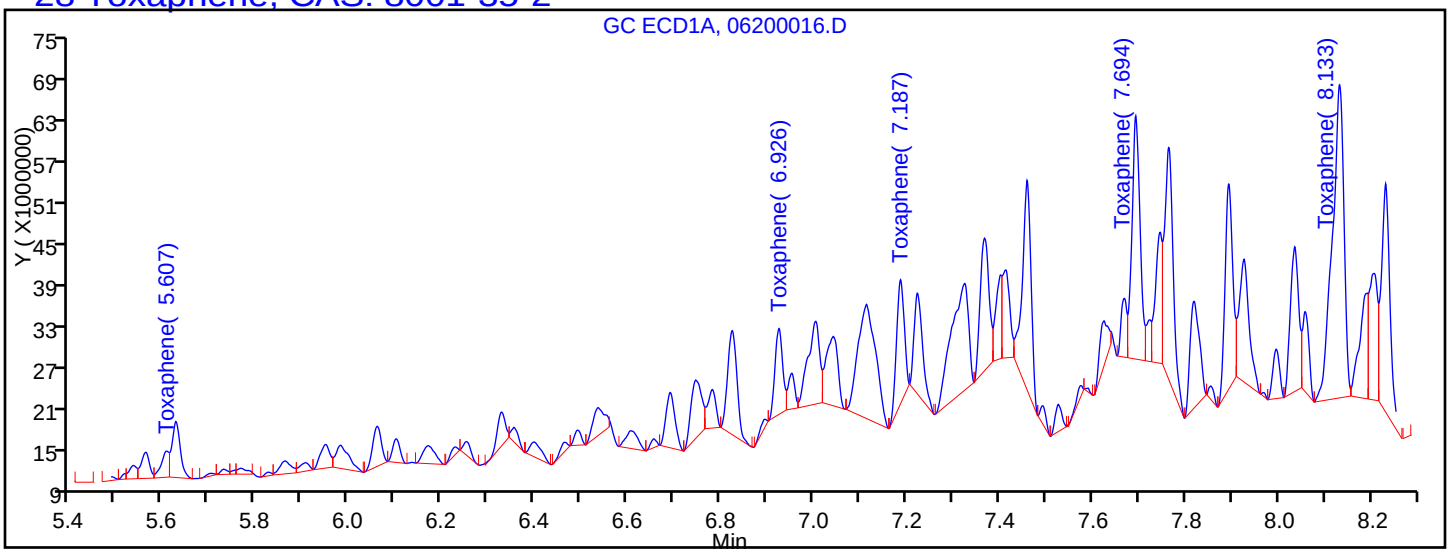
Operator ID: DAW ALS Bottle#: 10 Worklist Smp#: 16

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

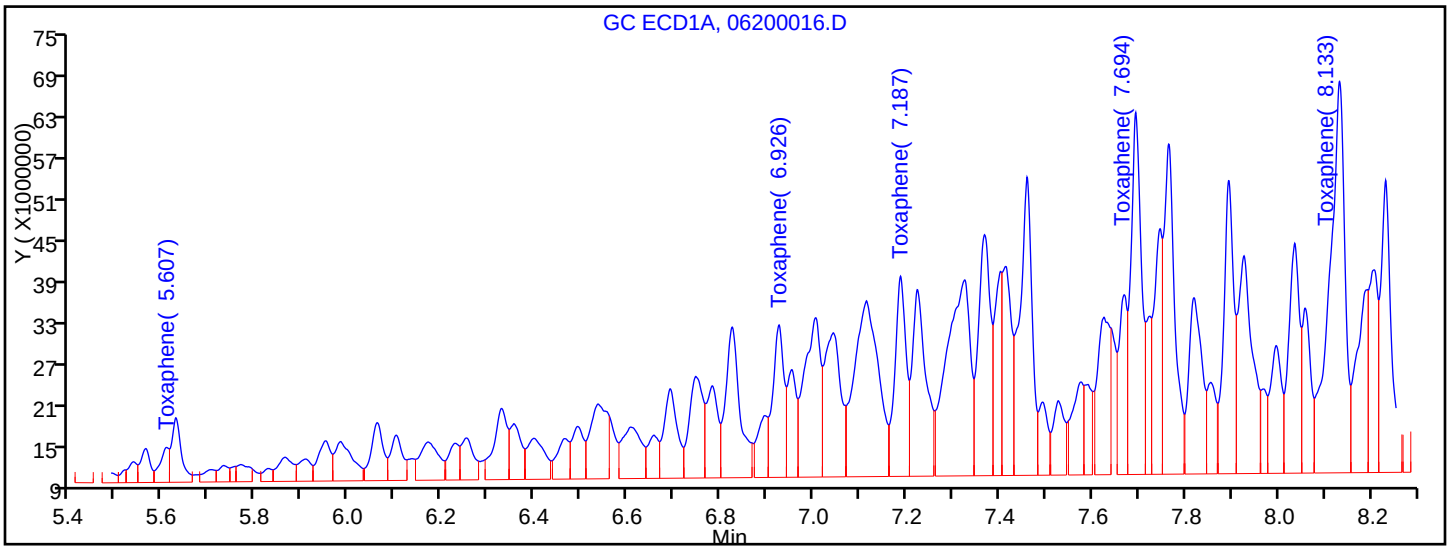
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.607	Response = 4397837
6.926	Response = 14338498
7.187	Response = 20788485
7.694	Response = 42643776
8.133	Response = 78915640



Manual Integration Results

5.607	Response = 6851239	M
6.926	Response = 36512067	M
7.187	Response = 48335632	M
7.694	Response = 81923097	M
8.133	Response = 131227442	M

Reviewer: wellsd, 20-Jun-2017 16:06:02

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS01 MS | Lab Sample ID: 280-97803-1 MS

Matrix: Solid | Lab File ID: 06140047.D

Analysis Method: 8081B | Date Collected: 05/31/2017 11:00

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 30.5(g) | Date Analyzed: 06/15/2017 05:07

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 16.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377328 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	10.4	J	2.0	2.0	0.65
72-55-9	4,4'-DDE	11.3	J	2.0	0.79	0.28
50-29-3	4,4'-DDT	15.2		2.4	2.0	0.70
309-00-2	Aldrin	11.3		2.0	0.79	0.30
319-84-6	alpha-BHC	12.9		2.0	0.79	0.25
5103-71-9	alpha-Chlordane	10.6		2.0	0.79	0.38
319-85-7	beta-BHC	11.2		2.0	2.0	0.79
319-86-8	delta-BHC	12.8		2.0	1.2	0.47
60-57-1	Dieldrin	12.9		2.0	0.79	0.25
959-98-8	Endosulfan I	12.2		2.0	0.79	0.21
33213-65-9	Endosulfan II	11.8		2.0	0.79	0.34
1031-07-8	Endosulfan sulfate	11.5		2.0	0.79	0.33
72-20-8	Endrin	14.0		2.0	0.79	0.36
7421-93-4	Endrin aldehyde	9.74		2.0	0.79	0.20
58-89-9	gamma-BHC (Lindane)	12.8		2.0	1.2	0.55
5103-74-2	gamma-Chlordane	8.89	J	2.0	0.79	0.31
76-44-8	Heptachlor	13.3		2.0	0.79	0.25
1024-57-3	Heptachlor epoxide	12.3		2.0	1.2	0.50
72-43-5	Methoxychlor	13.0		3.9	1.2	0.53

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	92		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	61		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140047.D
Lims ID: 280-97803-C-1-F MS
Client ID:
Sample Type: MS
Inject. Date: 15-Jun-2017 05:07:57 ALS Bottle#: 41 Worklist Smp#: 47
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-C-1-F
Misc. Info.: 280-0059760-047
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:59:31 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK017

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.995	2.997	-0.002	2309884772	150.0	150.0	
2	2.770	2.771	-0.001	472131551	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.821	3.824	-0.003	211818711	20.0	12.1	
2	3.684	3.684	0.000	53248077	20.0	16.0	
						RPD = 27.27	
8 alpha-BHC							
1	4.370	4.372	-0.002	991205588	50.0	32.6	
2	4.247	4.248	-0.001	171800993	50.0	35.9	
						RPD = 9.50	
9 gamma-BHC (Lindane)							
1	4.678	4.680	-0.002	890421186	50.0	32.4	
2	4.573	4.573	0.000	154073862	50.0	36.4	
						RPD = 11.47	
10 beta-BHC							
1	4.763	4.765	-0.002	304000560	50.0	28.5	
2	4.654	4.654	0.000	60362714	50.0	33.9	
						RPD = 17.34	
12 delta-BHC							
1	4.936	4.939	-0.003	946605598	50.0	32.5	
2	4.927	4.928	-0.001	144458122	50.0	33.1	
						RPD = 1.88	
15 Heptachlor							
1	5.146	5.149	-0.003	858703949	50.0	33.7	
2	4.984	4.984	0.000	136401052	50.0	34.8	
						RPD = 3.10	
16 Aldrin							
1	5.432	5.435	-0.003	739762881	50.0	28.6	
2	5.290	5.291	-0.001	130691397	50.0	33.7	
						RPD = 16.47	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
21 Heptachlor epoxide							
1	6.055	6.059	-0.004	697946183	50.0	31.1	
2	5.836	5.837	-0.001	114584402	50.0	33.2	
						RPD = 6.43	
22 gamma-Chlordane							
1	6.197	6.202	-0.005	554419215	50.0	22.5	
2	6.038	6.039	-0.001	113101652	50.0	31.3	
						RPD = 32.54	
23 alpha-Chlordane							
1	6.360	6.363	-0.003	631787313	50.0	26.8	
2	6.206	6.207	-0.001	113800343	50.0	33.1	
						RPD = 20.98	
24 4,4'-DDE							
1	6.453	6.459	-0.006	692764350	50.0	28.6	
2	6.422	6.424	-0.002	147484140	50.0	41.8	
						RPD = 37.48	
25 Endosulfan I							
1	6.530	6.534	-0.004	668441371	50.0	30.9	
2	6.270	6.270	0.000	104113911	50.0	31.4	
						RPD = 1.45	
27 Dieldrin							
1	6.816	6.819	-0.003	795309124	50.0	32.7	
2	6.608	6.609	-0.001	127060045	50.0	34.8	
						RPD = 6.19	
30 Endrin							
1	7.085	7.088	-0.003	700896507	50.0	35.6	
2	6.968	6.969	-0.001	111160566	50.0	38.1	
						RPD = 6.96	
32 4,4'-DDD							
1	7.160	7.163	-0.003	541297735	50.0	26.3	
2	7.119	7.121	-0.002	99011396	50.0	35.1	
						RPD = 28.54	
34 Endosulfan II							
1	7.333	7.337	-0.004	611546640	50.0	30.0	
2	7.213	7.214	-0.001	104200084	50.0	34.3	
						RPD = 13.60	
35 4,4'-DDT							
1	7.471	7.474	-0.003	761243674	50.0	38.6	
2	7.467	7.469	-0.002	120390041	50.0	44.8	
						RPD = 14.67	
36 Endrin aldehyde							
1	7.787	7.791	-0.004	407784727	50.0	24.7	
2	7.587	7.589	-0.002	75404421	50.0	30.5	
						RPD = 21.00	
37 Methoxychlor							
1	7.983	7.986	-0.003	284999816	50.0	33.0	
2	8.190	8.192	-0.002	51761080	50.0	40.5	
						RPD = 20.26	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
39 Endosulfan sulfate							
1	8.237	8.239	-0.002	550489519	50.0	29.2	
2	7.882	7.883	-0.001	96550568	50.0	35.4	
						RPD = 18.98	
40 Endrin ketone							
1	8.515	8.519	-0.004	647960986	50.0	31.0	
2	8.408	8.410	-0.002	107336129	50.0	34.6	
						RPD = 10.99	
$ 41 DCB Decachlorobiphenyl							
1	9.496	9.497	-0.001	223707108	20.0	18.5	
2	9.602	9.606	-0.004	50902774	20.0	25.4	
						RPD = 31.63	

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

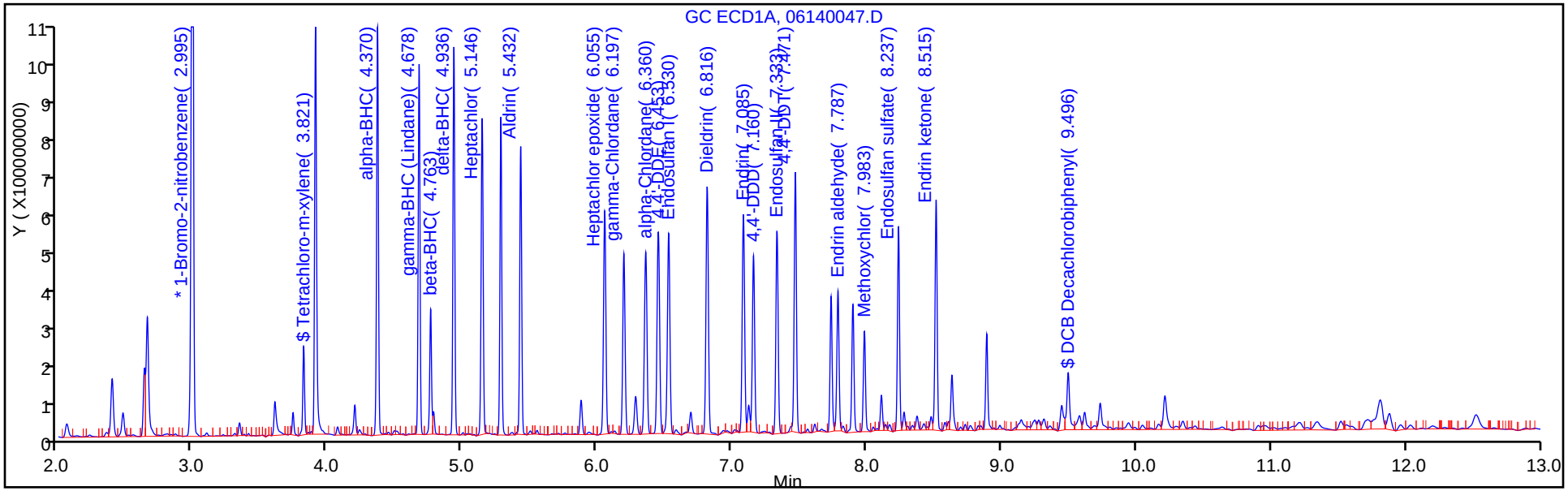
Report Date: 15-Jun-2017 15:11:09 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

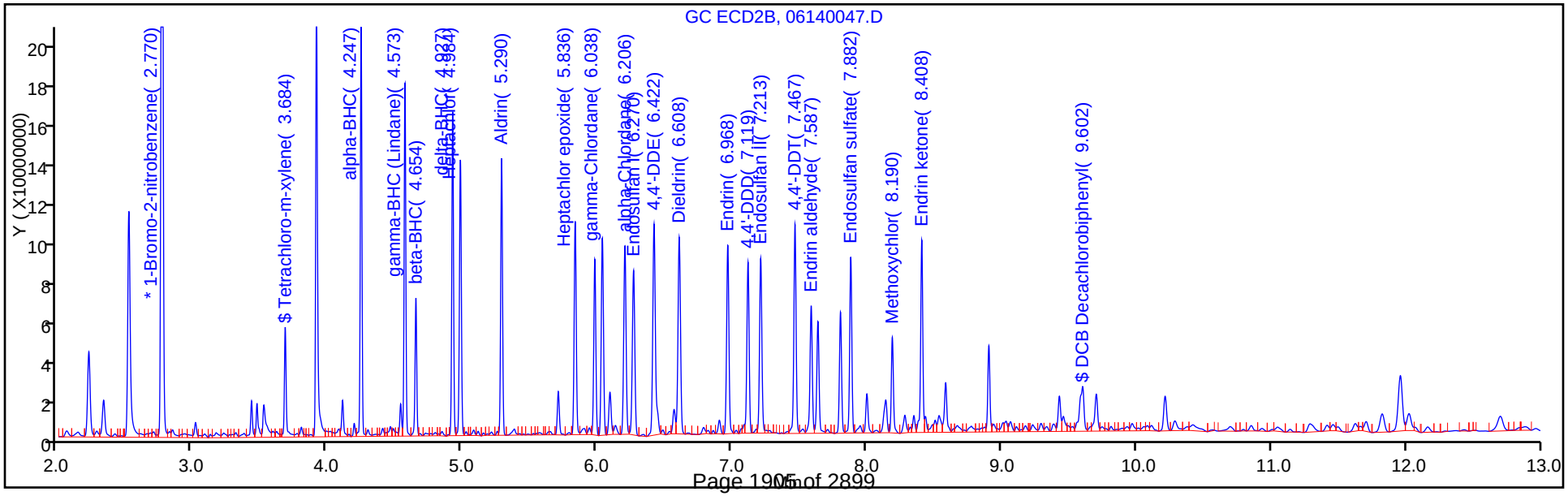
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Injection Date:	15-Jun-2017 05:07:57	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97803-C-1-F MS			Worklist Smp#:	47
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140047.D				
Lims ID:	280-97803-C-1-F MS				
Client ID:					
Sample Type:	MS				
Inject. Date:	15-Jun-2017 05:07:57	ALS Bottle#:	41	Worklist Smp#:	47
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-C-1-F				
Misc. Info.:	280-0059760-047				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	15-Jun-2017 13:59:31	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK017				

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	12.1	60.73
$ 41 DCB Decachlorobiphenyl	20.0	18.5	92.33

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	16.0	79.90
$ 41 DCB Decachlorobiphenyl	20.0	25.4	127.02

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS03 MS | Lab Sample ID: 280-97803-6 MS

Matrix: Solid | Lab File ID: 06140051.D

Analysis Method: 8081B | Date Collected: 05/31/2017 13:25

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 30.7(g) | Date Analyzed: 06/15/2017 06:15

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 25.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377328 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
8001-35-2	Toxaphene	116	J	220	43	21

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	90		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	78		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140051.D
Lims ID: 280-97803-B-6-B MS
Client ID:
Sample Type: MS
Inject. Date: 15-Jun-2017 06:15:25 ALS Bottle#: 45 Worklist Smp#: 51
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-B-6-B
Misc. Info.: 280-0059760-051
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:59:31 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: wellsd Date: 15-Jun-2017 13:55:32

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.996	2.997	-0.001	1938393717	150.0	150.0	
2	2.770	2.771	-0.001	416693912	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.822	3.824	-0.002	229770619	20.0	15.7	
2	3.684	3.684	0.000	55570705	20.0	19.0	
						RPD = 19.24	
28 Toxaphene							M
1	5.627	5.609	0.018	14826358	200.0	420.3	M
1	6.917	6.929	-0.012	44161368	200.0	265.9	M
1	7.192	7.192	0.000	50057887	200.0	246.6	M
1	7.696	7.697	-0.001	50110732	200.0	132.0	M
1	0.000	8.140	-8.140	0	200.0	0	
		Average of Peak Amounts =				266.2	
2	0.000	6.119	-6.119	0	200.0	0	
2	7.168	7.168	0.000	8051864	200.0	109.6	M
2	7.310	7.311	-0.001	18488161	200.0	96.8	M
2	7.606	7.600	0.006	25906508	200.0	250.6	M
2	8.129	8.122	0.007	33167267	200.0	394.8	M
		Average of Peak Amounts =				212.9	
						RPD = 22.23	
$ 41 DCB Decachlorobiphenyl							
1	9.495	9.497	-0.002	183033745	20.0	18.0	
2	9.605	9.606	-0.001	37460438	20.0	21.0	
						RPD = 15.36	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

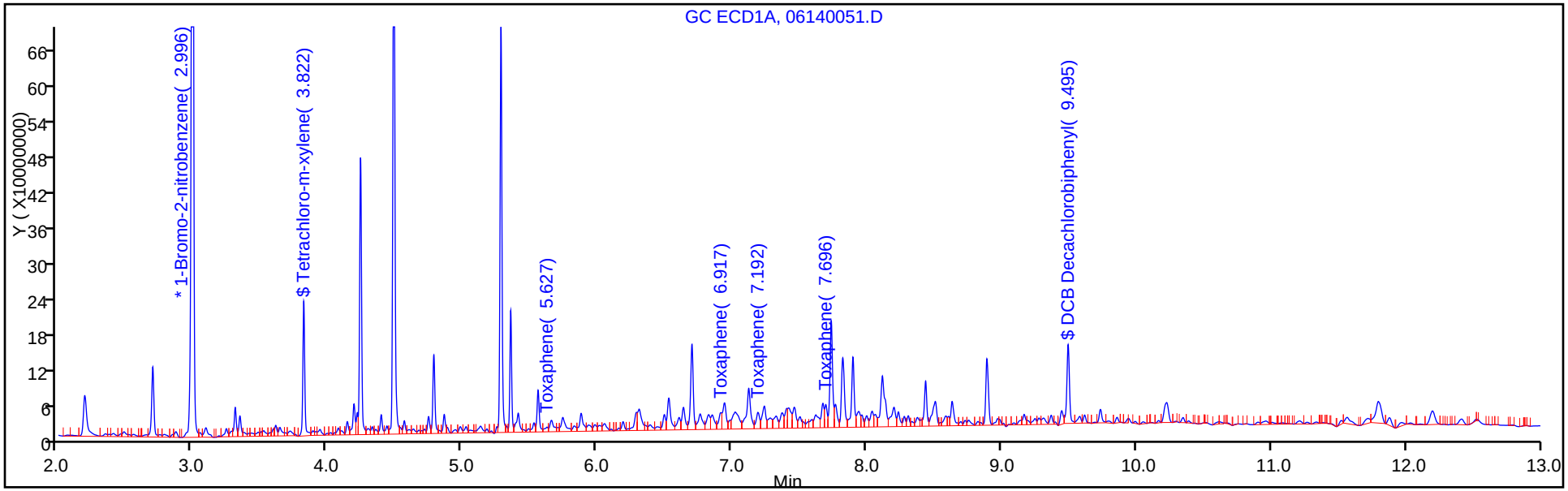
Report Date: 15-Jun-2017 15:11:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

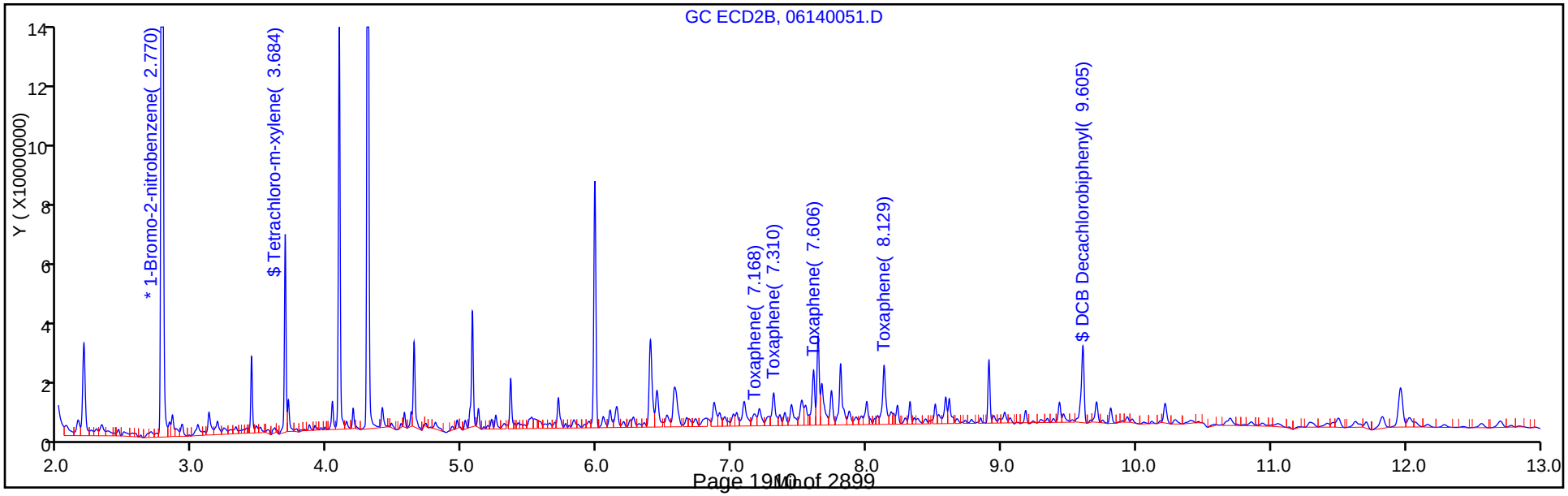
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140051.D

Injection Date:	15-Jun-2017 06:15:25	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97803-B-6-B MS			Worklist Smp#:	51
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	45
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140051.D
Lims ID: 280-97803-B-6-B MS
Client ID:
Sample Type: MS
Inject. Date: 15-Jun-2017 06:15:25 ALS Bottle#: 45 Worklist Smp#: 51
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-B-6-B
Misc. Info.: 280-0059760-051
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:59:31 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: wellsd Date: 15-Jun-2017 13:55:32

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	15.7	78.35
$ 41 DCB Decachlorobiphenyl	20.0	18.0	89.97

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	19.0	95.03
$ 41 DCB Decachlorobiphenyl	20.0	21.0	104.94

Report Date: 15-Jun-2017 15:11:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140051.D

Injection Date: 15-Jun-2017 06:15:25 Instrument ID: SGC_P1

Lims ID: 280-97803-B-6-B MS

Client ID:

Operator ID: DAW ALS Bottle#: 45 Worklist Smp#: 51

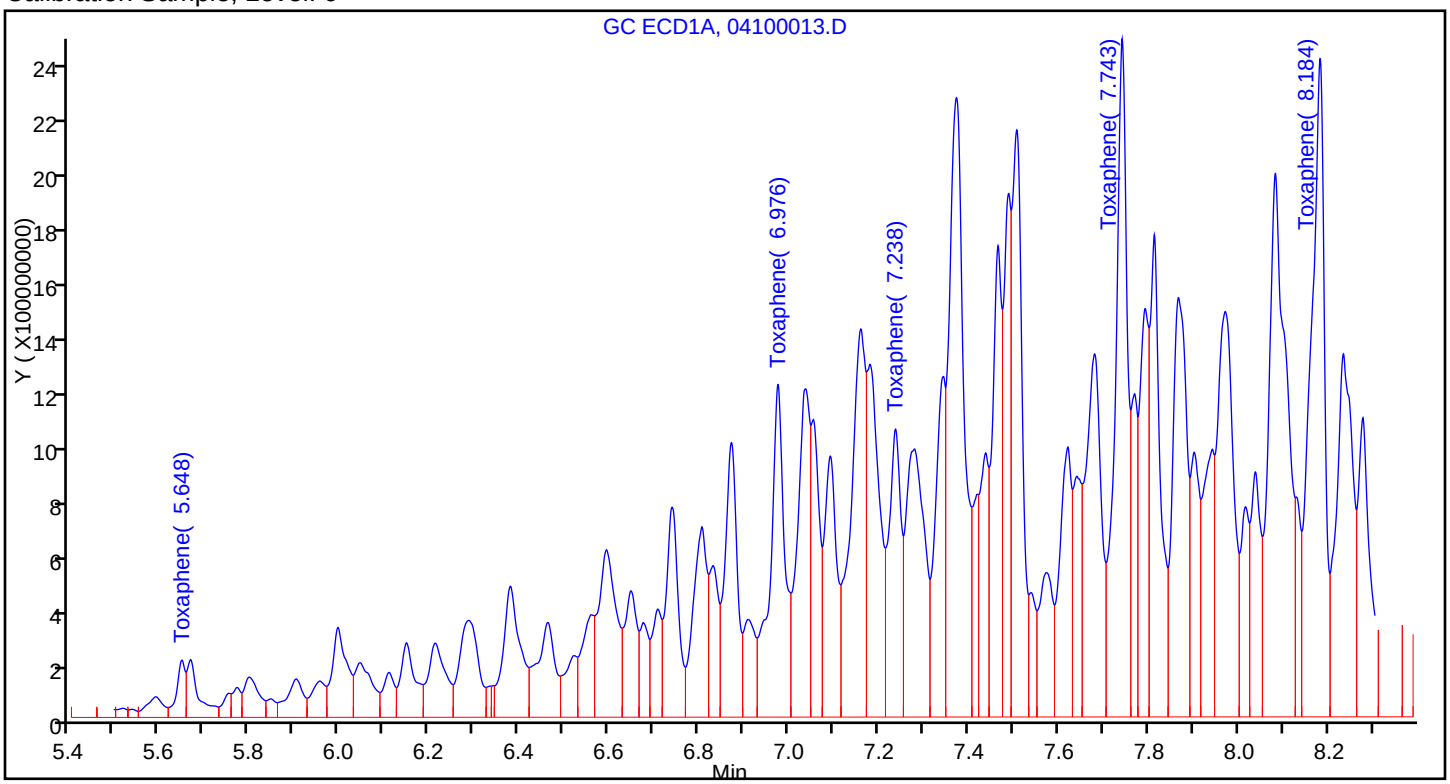
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

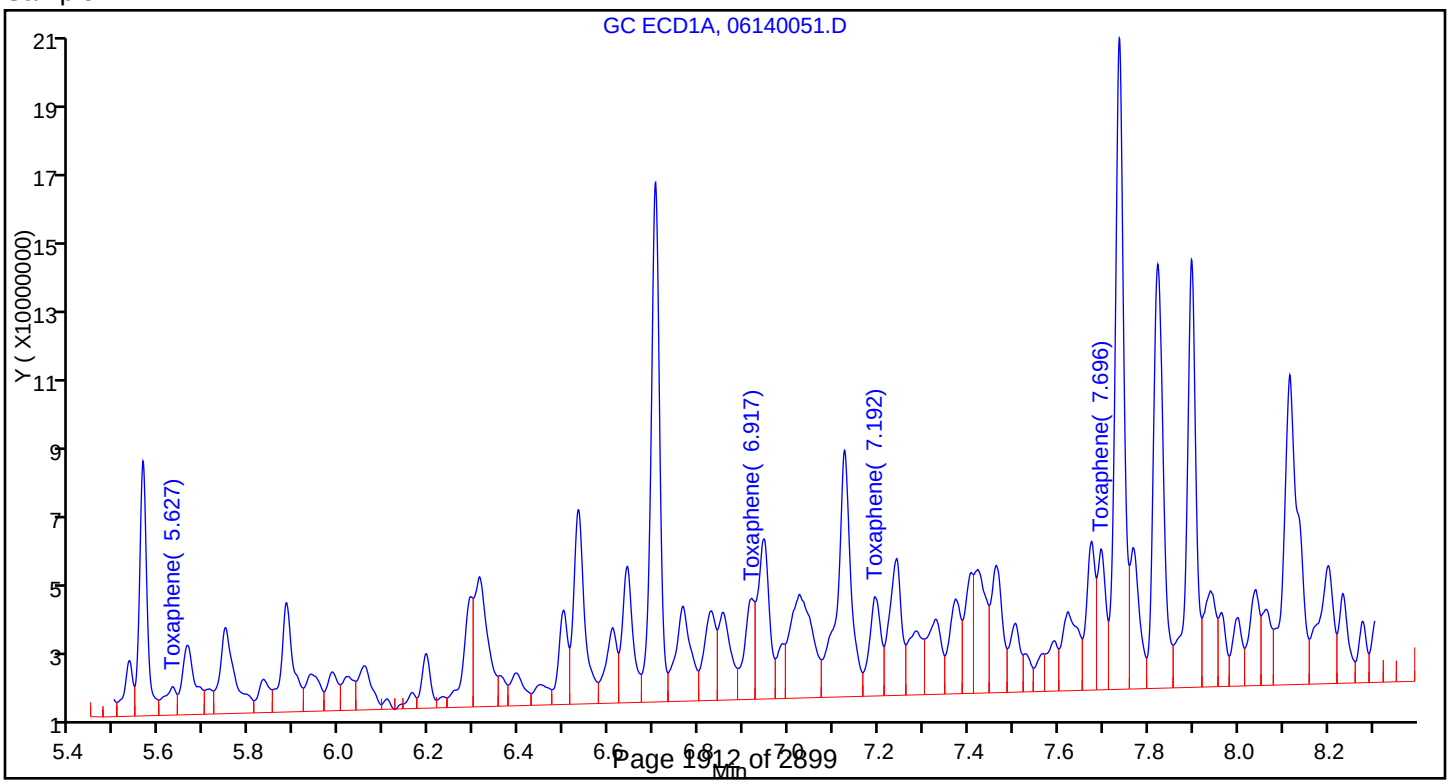
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2

Calibration Sample, Level: 6



Sample



Report Date: 15-Jun-2017 15:11:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140051.D

Injection Date: 15-Jun-2017 06:15:25 Instrument ID: SGC_P1

Lims ID: 280-97803-B-6-B MS

Client ID:

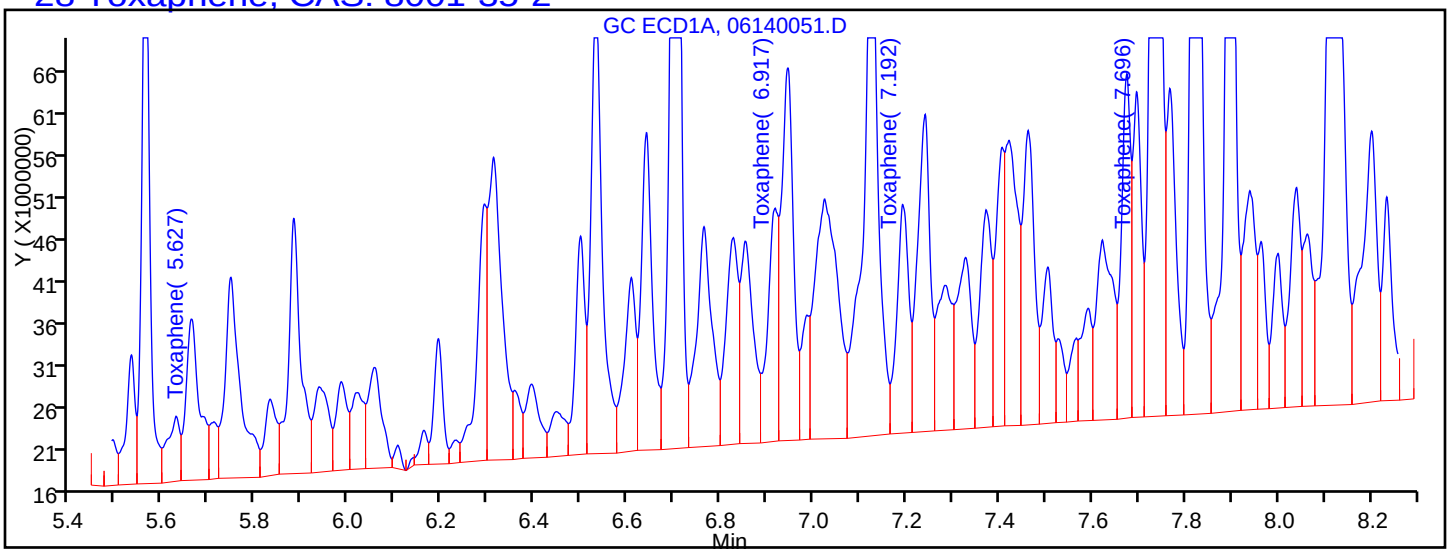
Operator ID: DAW ALS Bottle#: 45 Worklist Smp#: 51

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

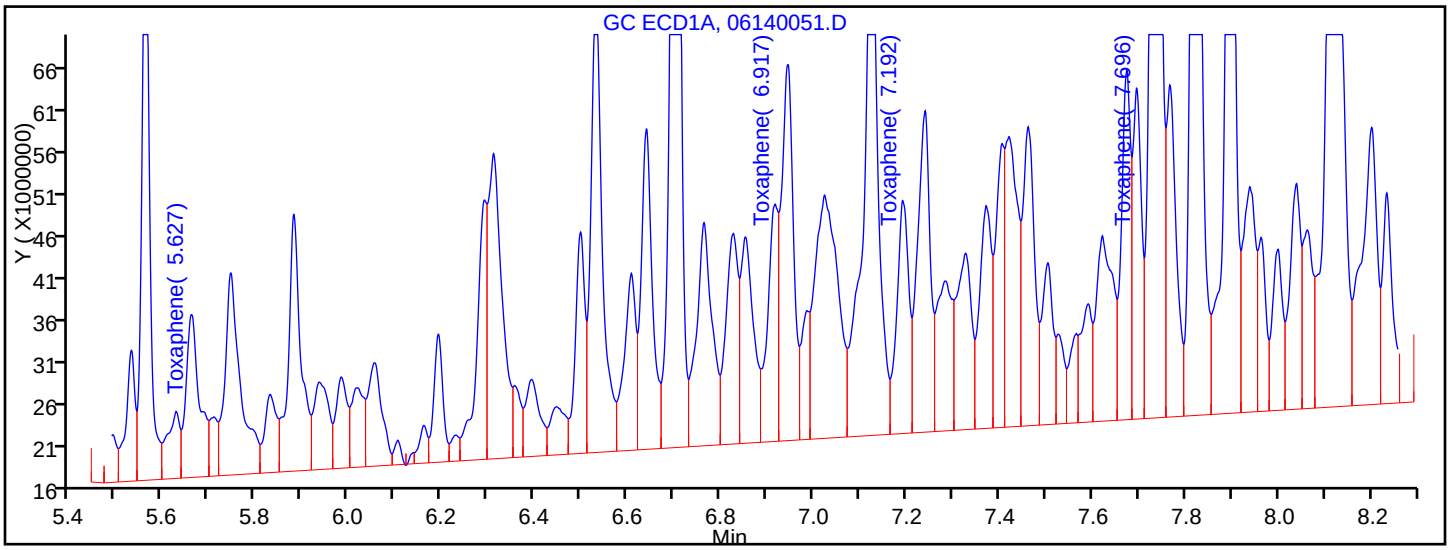
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.627	Response = 14246491
6.917	Response = 42833531
7.192	Response = 48262175
7.696	Response = 48851986
8.140	Response = 0



Manual Integration Results

5.627	Response = 14826358	M
6.917	Response = 44161368	M
7.192	Response = 50057887	M
7.696	Response = 50110732	M
8.140	Response = 0	

Reviewer: wellsd, 15-Jun-2017 13:55:25

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS01 MSD | Lab Sample ID: 280-97803-1 MSD

Matrix: Solid | Lab File ID: 06140048.D

Analysis Method: 8081B | Date Collected: 05/31/2017 11:00

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 32.3(g) | Date Analyzed: 06/15/2017 05:24

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 16.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377328 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	9.70	J	1.9	1.9	0.61
72-55-9	4,4'-DDE	11.2	J	1.9	0.75	0.27
50-29-3	4,4'-DDT	14.2		2.2	1.9	0.66
309-00-2	Aldrin	10.7		1.9	0.75	0.28
319-84-6	alpha-BHC	12.6		1.9	0.75	0.24
5103-71-9	alpha-Chlordane	10.1		1.9	0.75	0.36
319-85-7	beta-BHC	10.8		1.9	1.9	0.74
319-86-8	delta-BHC	12.5		1.9	1.1	0.45
60-57-1	Dieldrin	12.4		1.9	0.75	0.23
959-98-8	Endosulfan I	11.7		1.9	0.75	0.20
33213-65-9	Endosulfan II	11.2		1.9	0.75	0.32
1031-07-8	Endosulfan sulfate	11.0		1.9	0.75	0.31
72-20-8	Endrin	13.1		1.9	0.75	0.34
7421-93-4	Endrin aldehyde	9.33		1.9	0.75	0.19
58-89-9	gamma-BHC (Lindane)	12.2		1.9	1.1	0.52
5103-74-2	gamma-Chlordane	8.93	J	1.9	0.75	0.30
76-44-8	Heptachlor	12.6		1.9	0.75	0.24
1024-57-3	Heptachlor epoxide	11.7		1.9	1.1	0.48
72-43-5	Methoxychlor	12.1		3.7	1.1	0.50

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	106		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	60		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140048.D
Lims ID: 280-97803-C-1-G MSD
Client ID:
Sample Type: MSD
Inject. Date: 15-Jun-2017 05:24:47 ALS Bottle#: 42 Worklist Smp#: 48
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-C-1-G
Misc. Info.: 280-0059760-048
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:59:31 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK017

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.995	2.997	-0.002	2589705296	150.0	150.0	
2	2.770	2.771	-0.001	465488638	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.822	3.824	-0.002	235330753	20.0	12.0	
2	3.685	3.684	0.001	53397574	20.0	16.3	
						RPD = 29.88	
8 alpha-BHC							
1	4.370	4.372	-0.002	1150278480	50.0	33.7	
2	4.248	4.248	0.000	187916915	50.0	39.8	
						RPD = 16.49	
9 gamma-BHC (Lindane)							
1	4.679	4.680	-0.001	1006839639	50.0	32.7	
2	4.573	4.573	0.000	170558348	50.0	40.9	
						RPD = 22.20	
10 beta-BHC							
1	4.765	4.765	0.000	347365444	50.0	29.0	
2	4.655	4.654	0.001	66160110	50.0	37.8	
						RPD = 26.24	
12 delta-BHC							
1	4.938	4.939	-0.001	1093466244	50.0	33.5	
2	4.927	4.928	-0.001	163939348	50.0	38.1	
						RPD = 13.04	
15 Heptachlor							
1	5.147	5.149	-0.002	967745022	50.0	33.9	
2	4.985	4.984	0.001	149119099	50.0	38.6	
						RPD = 13.05	
16 Aldrin							
1	5.433	5.435	-0.002	834578723	50.0	28.8	
2	5.290	5.291	-0.001	143281871	50.0	37.5	
						RPD = 26.45	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
21 Heptachlor epoxide							
1	6.056	6.059	-0.003	791149046	50.0	31.4	
2	5.837	5.837	0.000	126863926	50.0	37.3	
						RPD = 17.12	
22 gamma-Chlordane							
1	6.199	6.202	-0.003	662328598	50.0	24.0	
2	6.038	6.039	-0.001	123627436	50.0	34.8	
						RPD = 36.64	
23 alpha-Chlordane							
1	6.360	6.363	-0.003	717922540	50.0	27.1	
2	6.206	6.207	-0.001	123909052	50.0	36.6	
						RPD = 29.62	
24 4,4'-DDE							
1	6.455	6.459	-0.004	819055148	50.0	30.1	
2	6.422	6.424	-0.002	159777883	50.0	46.0	
						RPD = 41.60	
25 Endosulfan I							
1	6.531	6.534	-0.003	760564915	50.0	31.4	
2	6.270	6.270	0.000	113989171	50.0	34.9	
						RPD = 10.73	
27 Dieldrin							
1	6.817	6.819	-0.002	904258308	50.0	33.2	
2	6.610	6.609	0.001	139948075	50.0	39.0	
						RPD = 16.01	
30 Endrin							
1	7.086	7.088	-0.002	779913332	50.0	35.3	
2	6.969	6.969	0.000	123326097	50.0	43.0	
						RPD = 19.59	
32 4,4'-DDD							
1	7.160	7.163	-0.003	600204774	50.0	26.1	
2	7.120	7.121	-0.001	108254805	50.0	39.0	
						RPD = 39.87	
34 Endosulfan II							
1	7.335	7.337	-0.002	687577166	50.0	30.1	
2	7.214	7.214	0.000	113886578	50.0	38.2	
						RPD = 23.77	
35 4,4'-DDT							
1	7.471	7.474	-0.003	841775988	50.0	38.1	
2	7.468	7.469	-0.001	131709771	50.0	49.7	
						RPD = 26.38	
36 Endrin aldehyde							
1	7.788	7.791	-0.003	463726290	50.0	25.1	
2	7.589	7.589	0.000	83272950	50.0	34.3	
						RPD = 31.04	
37 Methoxychlor							
1	7.984	7.986	-0.002	314849460	50.0	32.5	
2	8.191	8.192	-0.001	56450658	50.0	44.9	
						RPD = 31.87	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
39 Endosulfan sulfate							
1	8.238	8.239	-0.001	624095114	50.0	29.6	
2	7.882	7.883	-0.001	106593287	50.0	39.7	
						RPD = 29.29	
40 Endrin ketone							
1	8.516	8.519	-0.003	726142924	50.0	31.0	
2	8.409	8.410	-0.001	119797368	50.0	39.3	
						RPD = 23.57	
$ 41 DCB Decachlorobiphenyl							
1	9.495	9.497	-0.002	286405832	20.0	21.1	
2	9.604	9.606	-0.002	56073768	20.0	28.5	
						RPD = 29.73	

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

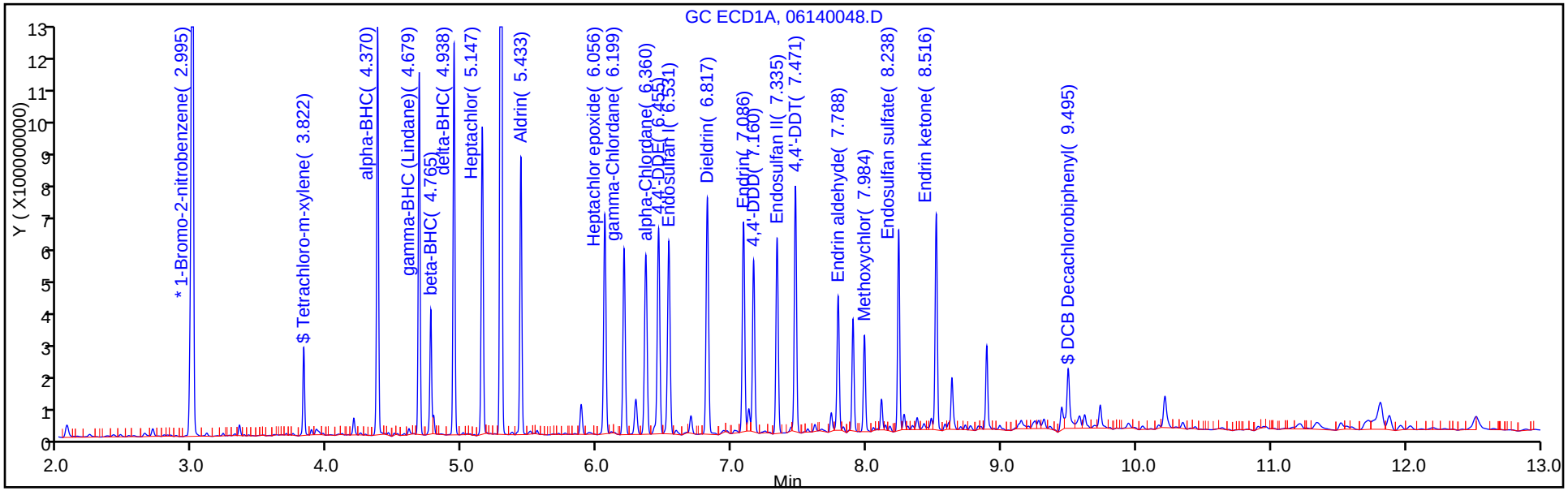
Report Date: 15-Jun-2017 15:11:12 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

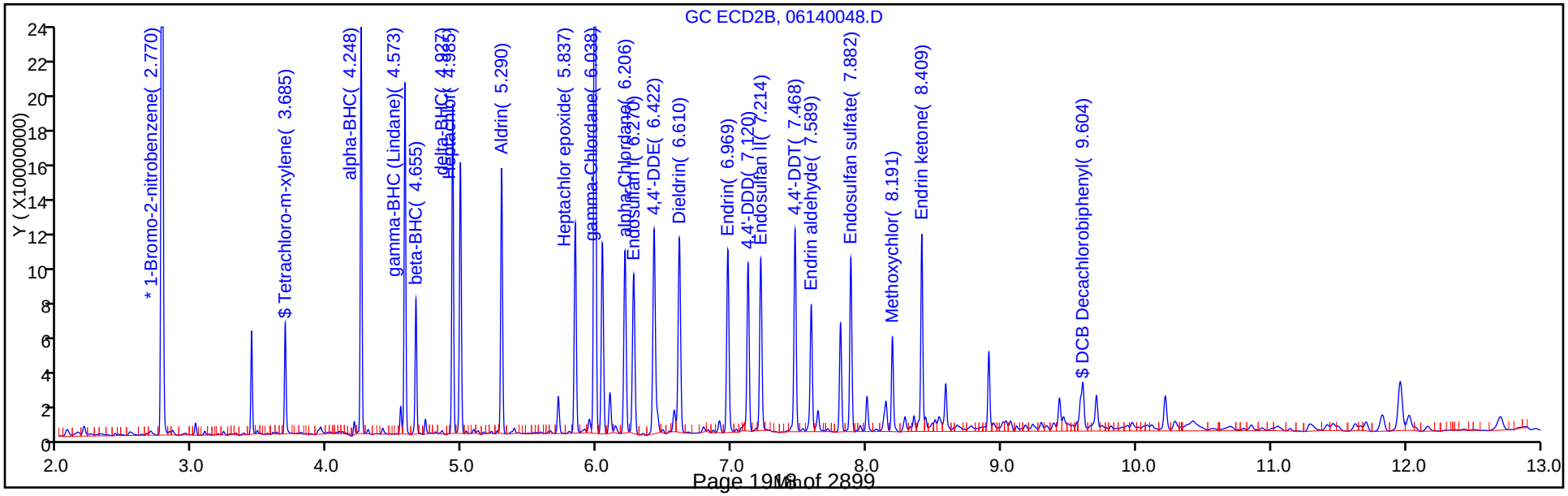
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Injection Date:	15-Jun-2017 05:24:47	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97803-C-1-G MSD			Worklist Smp#:	48
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140048.D				
Lims ID:	280-97803-C-1-G MSD				
Client ID:					
Sample Type:	MSD				
Inject. Date:	15-Jun-2017 05:24:47	ALS Bottle#:	42	Worklist Smp#:	48
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-C-1-G				
Misc. Info.:	280-0059760-048				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	15-Jun-2017 13:59:31	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK017				

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	12.0	60.18
$ 41 DCB Decachlorobiphenyl	20.0	21.1	105.70

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	16.3	81.32
$ 41 DCB Decachlorobiphenyl	20.0	28.5	142.62

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS03 MSD | Lab Sample ID: 280-97803-6 MSD

Matrix: Solid | Lab File ID: 06140052.D

Analysis Method: 8081B | Date Collected: 05/31/2017 13:25

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 30.2(g) | Date Analyzed: 06/15/2017 06:32

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 25.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377328 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
8001-35-2	Toxaphene	76.9	J	230	44	21

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	77		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	73		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140052.D
Lims ID: 280-97803-B-6-C MSD
Client ID:
Sample Type: MSD
Inject. Date: 15-Jun-2017 06:32:17 ALS Bottle#: 46 Worklist Smp#: 52
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-B-6-C
Misc. Info.: 280-0059760-052
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:59:31 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: wellsd Date: 15-Jun-2017 13:55:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.996	2.997	0.000	2096273415	150.0	150.0	
2	2.771	2.771	0.000	464023863	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.822	3.824	-0.002	230629233	20.0	14.6	
2	3.685	3.684	0.001	51235555	20.0	15.6	
						RPD = 7.17	
28 Toxaphene							M
1	0.000	5.609	-5.609	0	200.0	0	
1	6.926	6.929	-0.003	33411512	200.0	233.1	M
1	7.196	7.192	0.004	47995650	200.0	224.1	M
1	7.697	7.697	0.000	47402343	200.0	121.5	M
1	8.137	8.140	-0.003	49134725	200.0	115.3	M
		Average of Peak Amounts =				173.5	
2	0.000	6.119	-6.119	0	200.0	0	
2	7.166	7.168	-0.002	6996740	200.0	76.5	M
2	7.309	7.311	-0.002	21427684	200.0	102.3	M
2	7.600	7.600	0.000	13508373	200.0	101.6	M
2	8.126	8.122	0.004	20500959	200.0	208.6	M
		Average of Peak Amounts =				122.2	
						RPD = 34.65	
$ 41 DCB Decachlorobiphenyl							
1	9.496	9.497	-0.001	170438033	20.0	15.4	
2	9.605	9.606	-0.001	34965218	20.0	17.4	
						RPD = 11.93	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

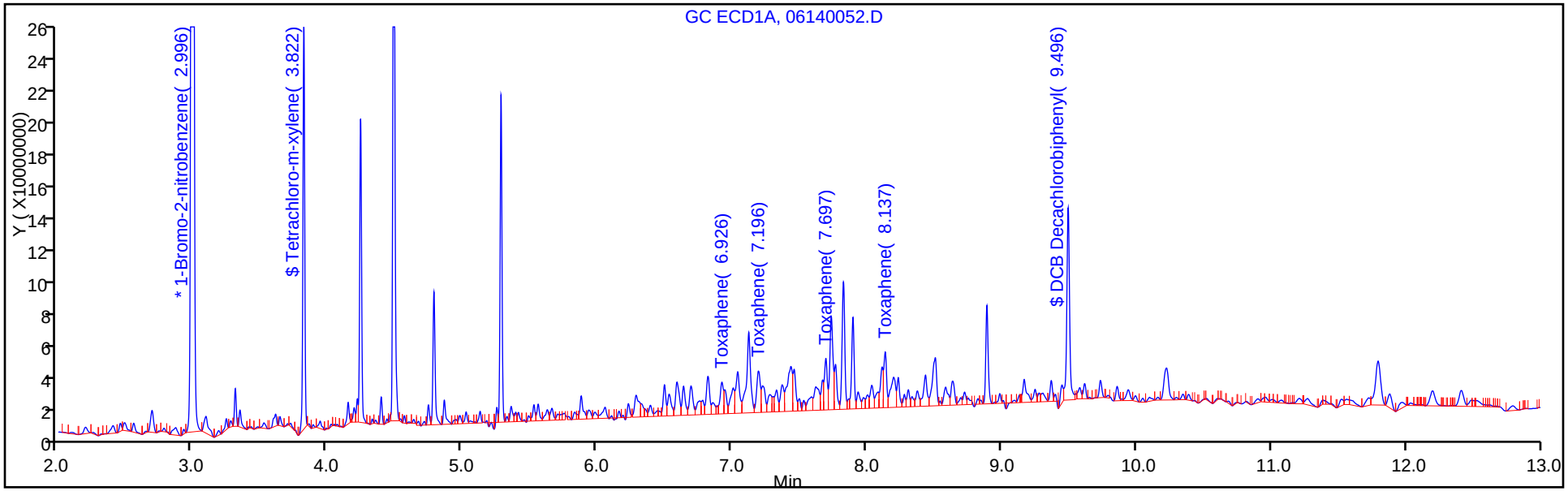
Report Date: 15-Jun-2017 15:11:23 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

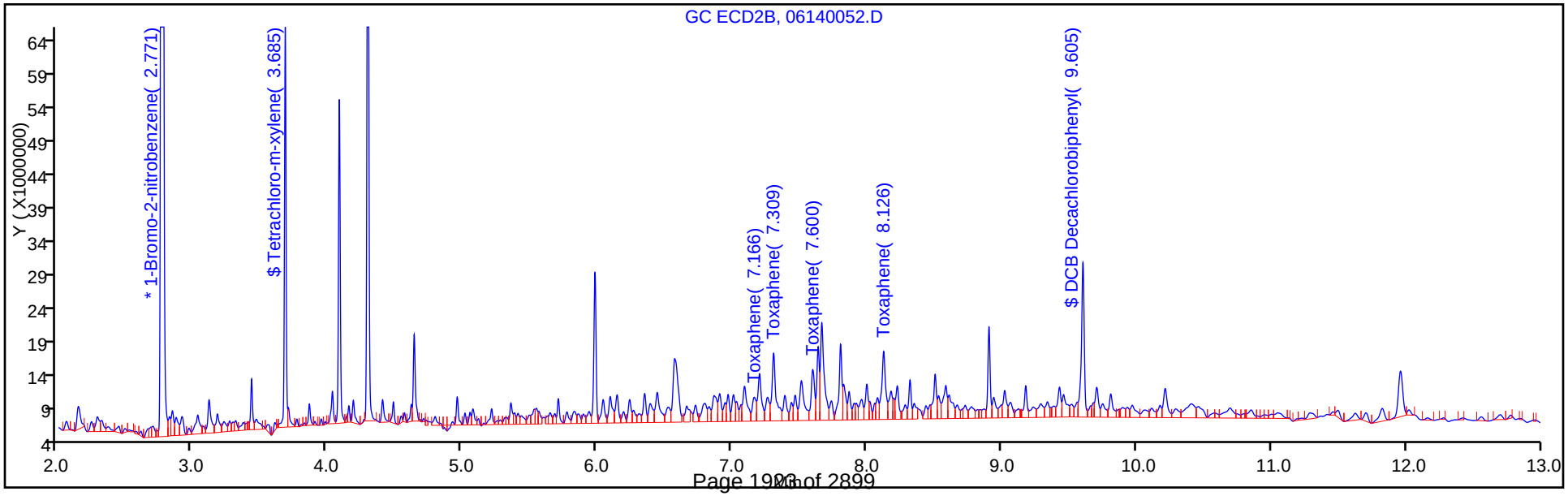
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Injection Date:	15-Jun-2017 06:32:17	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97803-B-6-C MSD			Worklist Smp#:	52
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	46
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140052.D
Lims ID: 280-97803-B-6-C MSD
Client ID:
Sample Type: MSD
Inject. Date: 15-Jun-2017 06:32:17 ALS Bottle#: 46 Worklist Smp#: 52
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-B-6-C
Misc. Info.: 280-0059760-052
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 15-Jun-2017 13:59:31 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK017

First Level Reviewer: wellsd Date: 15-Jun-2017 13:55:49

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	14.6	72.76
$ 41 DCB Decachlorobiphenyl	20.0	15.4	77.21

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	15.6	78.16
$ 41 DCB Decachlorobiphenyl	20.0	17.4	87.01

Report Date: 15-Jun-2017 15:11:23 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140052.D

Injection Date: 15-Jun-2017 06:32:17 Instrument ID: SGC_P1

Lims ID: 280-97803-B-6-C MSD

Client ID:

Operator ID: DAW ALS Bottle#: 46 Worklist Smp#: 52

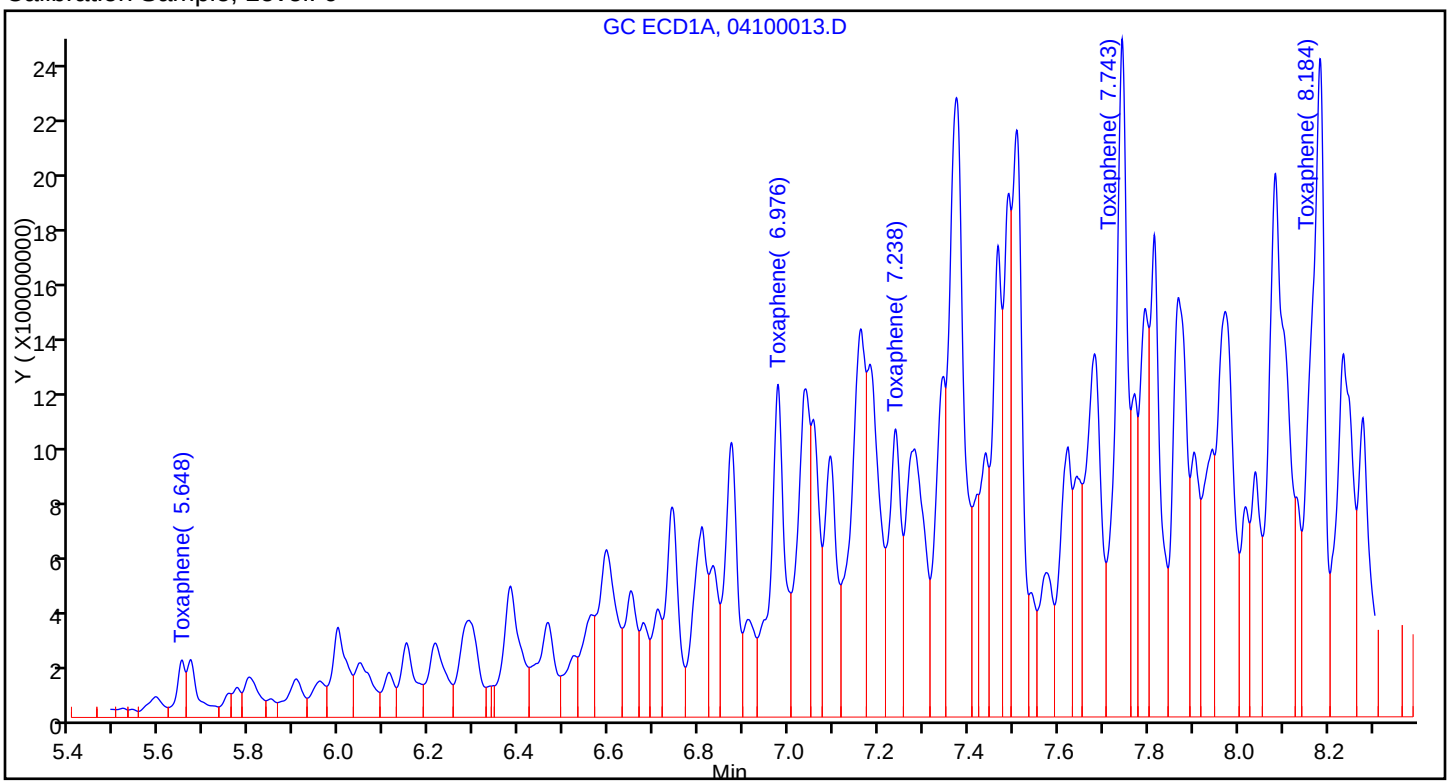
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

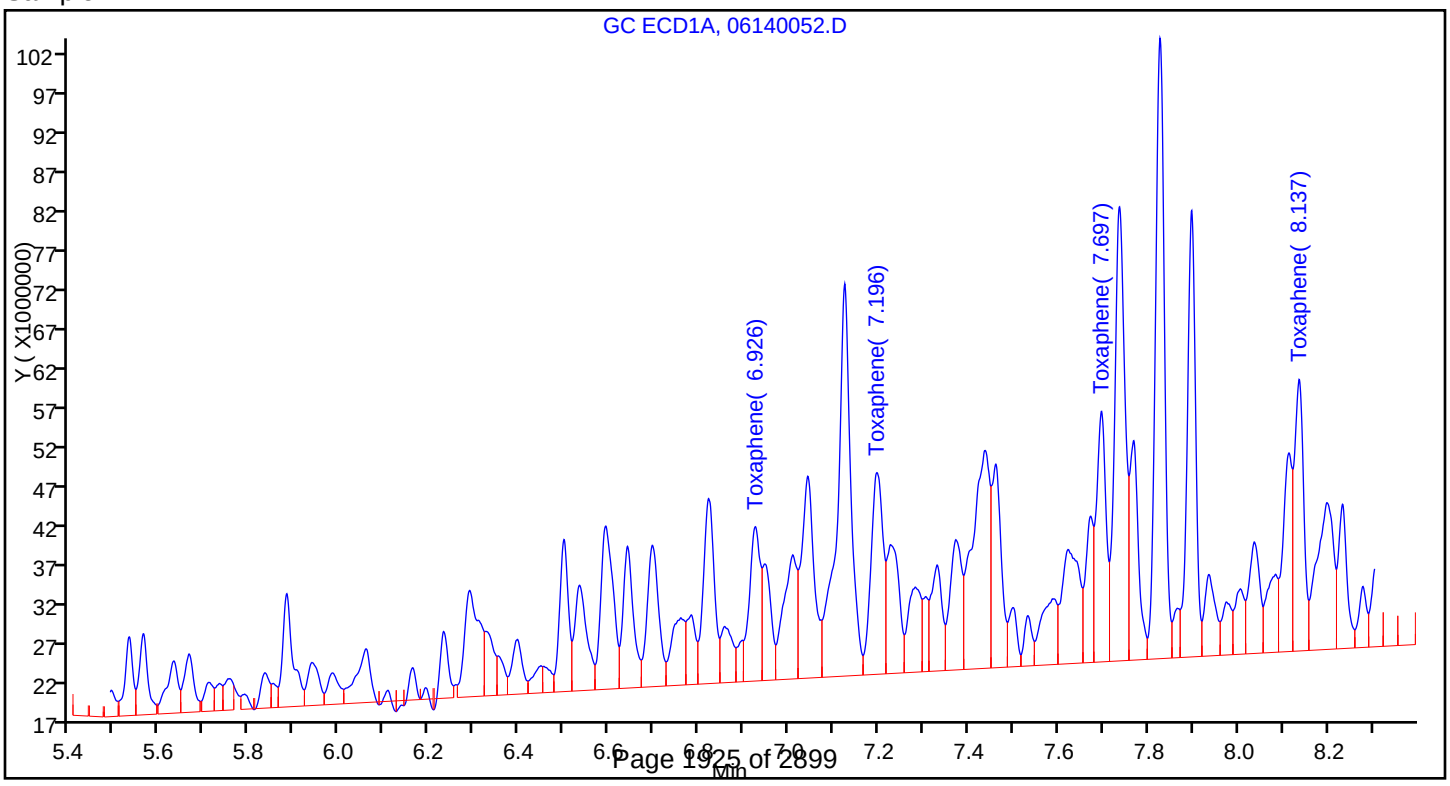
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2

Calibration Sample, Level: 6



Sample



Report Date: 15-Jun-2017 15:11:23 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170614-59760.b\06140052.D

Injection Date: 15-Jun-2017 06:32:17 Instrument ID: SGC_P1

Lims ID: 280-97803-B-6-C MSD

Client ID:

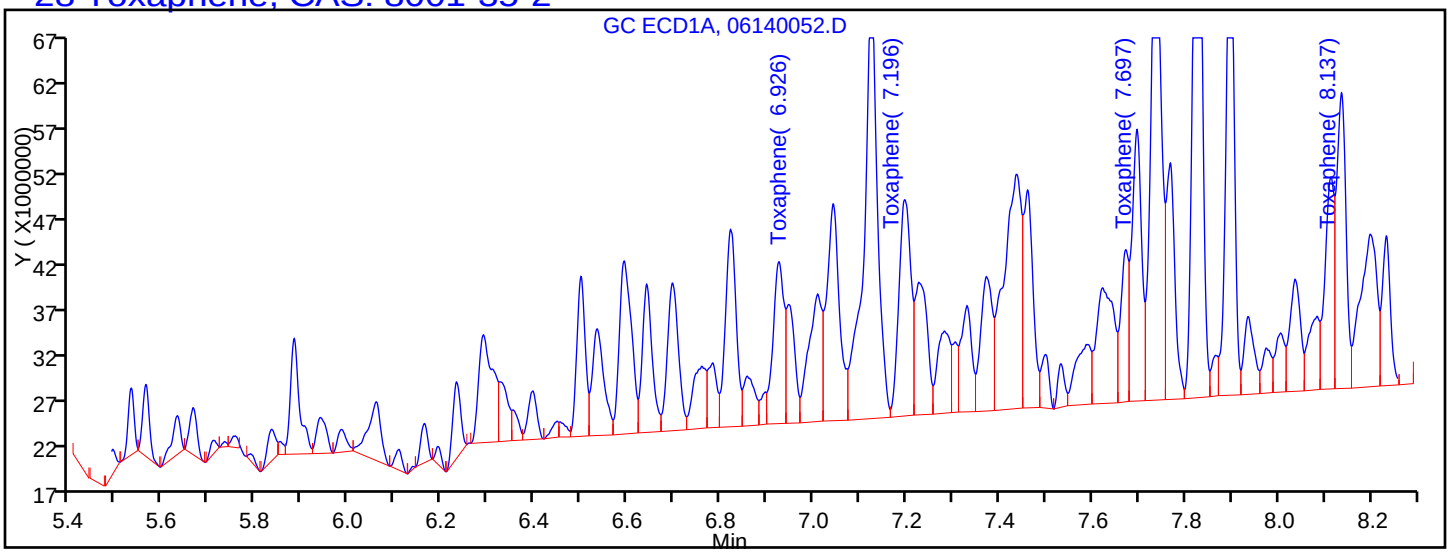
Operator ID: DAW ALS Bottle#: 46 Worklist Smp#: 52

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

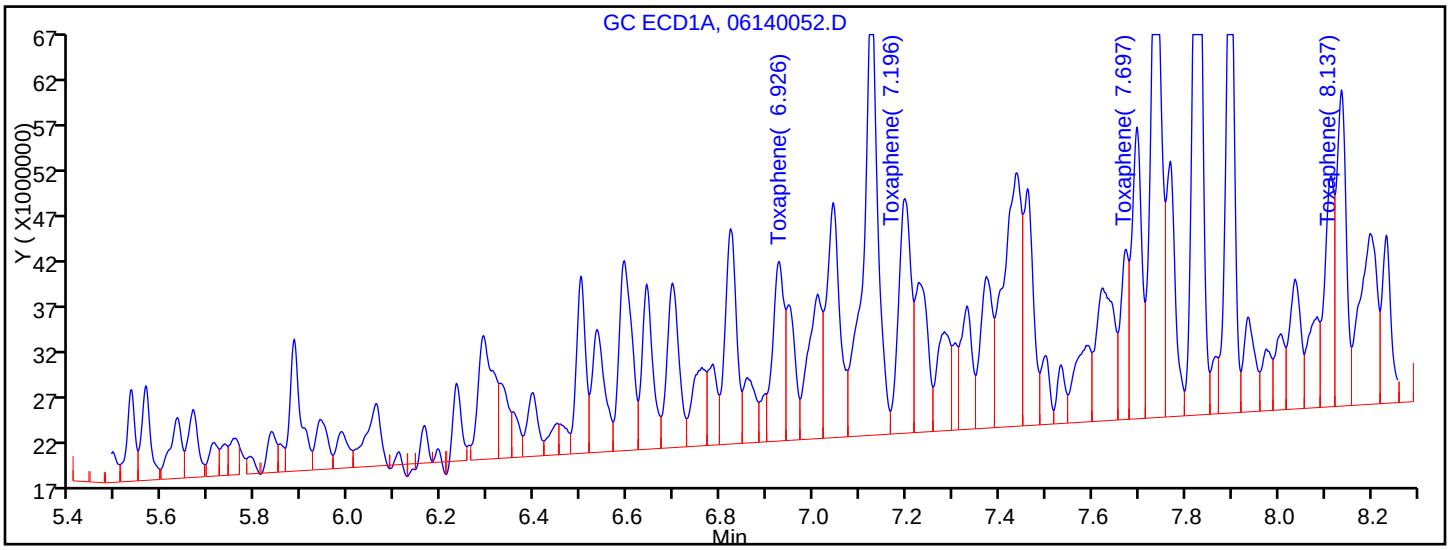
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.609	Response = 0
6.926	Response = 29240660
7.196	Response = 42978601
7.697	Response = 43764949
8.137	Response = 45425009



Manual Integration Results

5.609	Response = 0	
6.926	Response = 33411512	M
7.196	Response = 47995650	M
7.697	Response = 47402343	M
8.137	Response = 49134725	M

Reviewer: wellsd, 15-Jun-2017 13:55:43

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Start Date: 04/10/2017 11:26

Analysis Batch Number: 368670 End Date: 04/11/2017 08:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
PEM 280-368670/3		04/10/2017 11:26	1		CLP1 0.32(mm)
PEM 280-368670/3		04/10/2017 11:26	1		CLP2 0.32(mm)
STD7 280-368670/6 IC		04/10/2017 12:17	1		CLP1 0.32(mm)
STD7 280-368670/6 IC		04/10/2017 12:17	1		CLP2 0.32(mm)
STD6 280-368670/7 IC		04/10/2017 12:34	1		CLP1 0.32(mm)
STD6 280-368670/7 IC		04/10/2017 12:34	1		CLP2 0.32(mm)
STD5 280-368670/8 IC		04/10/2017 12:51	1		CLP1 0.32(mm)
STD5 280-368670/8 IC		04/10/2017 12:51	1		CLP2 0.32(mm)
STD4 280-368670/9 IC		04/10/2017 13:08	1		CLP1 0.32(mm)
STD4 280-368670/9 IC		04/10/2017 13:08	1		CLP2 0.32(mm)
STD3 280-368670/10 IC		04/10/2017 13:25	1		CLP1 0.32(mm)
STD3 280-368670/10 IC		04/10/2017 13:25	1		CLP2 0.32(mm)
STD2 280-368670/11 IC		04/10/2017 13:42	1		CLP1 0.32(mm)
STD2 280-368670/11 IC		04/10/2017 13:42	1		CLP2 0.32(mm)
STD1 280-368670/12 IC		04/10/2017 13:59	1		CLP1 0.32(mm)
STD1 280-368670/12 IC		04/10/2017 13:59	1		CLP2 0.32(mm)
STD6 280-368670/13 IC		04/10/2017 14:16	1	04100013.D	CLP1 0.32(mm)
STD6 280-368670/13 IC		04/10/2017 14:16	1	04100013.D	CLP2 0.32(mm)
STD5 280-368670/14 IC		04/10/2017 14:33	1	04100014.D	CLP1 0.32(mm)
STD5 280-368670/14 IC		04/10/2017 14:33	1	04100014.D	CLP2 0.32(mm)
STD4 280-368670/15 IC		04/10/2017 14:50	1	04100015.D	CLP1 0.32(mm)
STD4 280-368670/15 IC		04/10/2017 14:50	1	04100015.D	CLP2 0.32(mm)
STD3 280-368670/16 IC		04/10/2017 15:06	1	04100016.D	CLP1 0.32(mm)
STD3 280-368670/16 IC		04/10/2017 15:06	1	04100016.D	CLP2 0.32(mm)
STD2 280-368670/17 IC		04/10/2017 15:23	1	04100017.D	CLP1 0.32(mm)
STD2 280-368670/17 IC		04/10/2017 15:23	1	04100017.D	CLP2 0.32(mm)
STD1 280-368670/18 IC		04/10/2017 15:40	1	04100018.D	CLP1 0.32(mm)
STD1 280-368670/18 IC		04/10/2017 15:40	1	04100018.D	CLP2 0.32(mm)
STD5 280-368670/19 IC		04/10/2017 15:57	1		CLP1 0.32(mm)
STD5 280-368670/19 IC		04/10/2017 15:57	1		CLP2 0.32(mm)
STD4 280-368670/20 IC		04/10/2017 16:14	1		CLP1 0.32(mm)
STD4 280-368670/20 IC		04/10/2017 16:14	1		CLP2 0.32(mm)
STD3 280-368670/21 IC		04/10/2017 16:31	1		CLP1 0.32(mm)
STD3 280-368670/21 IC		04/10/2017 16:31	1		CLP2 0.32(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Start Date: 04/10/2017 11:26

Analysis Batch Number: 368670 End Date: 04/11/2017 08:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD2 280-368670/22 IC		04/10/2017 16:48	1		CLP1 0.32(mm)
STD2 280-368670/22 IC		04/10/2017 16:48	1		CLP2 0.32(mm)
STD1 280-368670/23 IC		04/10/2017 17:05	1		CLP1 0.32(mm)
STD1 280-368670/23 IC		04/10/2017 17:05	1		CLP2 0.32(mm)
STD6 280-368670/24 IC		04/10/2017 17:22	1	04100024.D	CLP1 0.32(mm)
STD6 280-368670/24 IC		04/10/2017 17:22	1	04100024.D	CLP2 0.32(mm)
STD5 280-368670/25 IC		04/10/2017 17:39	1	04100025.D	CLP1 0.32(mm)
STD5 280-368670/25 IC		04/10/2017 17:39	1	04100025.D	CLP2 0.32(mm)
STD4 280-368670/26 ICIS		04/10/2017 17:56	1	04100026.D	CLP1 0.32(mm)
STD4 280-368670/26 ICIS		04/10/2017 17:56	1	04100026.D	CLP2 0.32(mm)
STD3 280-368670/27 IC		04/10/2017 18:13	1	04100027.D	CLP1 0.32(mm)
STD3 280-368670/27 IC		04/10/2017 18:13	1	04100027.D	CLP2 0.32(mm)
STD2 280-368670/28 IC		04/10/2017 18:29	1	04100028.D	CLP1 0.32(mm)
STD2 280-368670/28 IC		04/10/2017 18:29	1	04100028.D	CLP2 0.32(mm)
STD1 280-368670/29 IC		04/10/2017 18:46	1	04100029.D	CLP1 0.32(mm)
STD1 280-368670/29 IC		04/10/2017 18:46	1	04100029.D	CLP2 0.32(mm)
ICV 280-368670/30		04/10/2017 19:03	1	04100030.D	CLP1 0.32(mm)
ICV 280-368670/30		04/10/2017 19:03	1	04100030.D	CLP2 0.32(mm)
ICV 280-368670/31		04/10/2017 19:20	1	04100031.D	CLP1 0.32(mm)
ICV 280-368670/31		04/10/2017 19:20	1	04100031.D	CLP2 0.32(mm)
ICV 280-368670/32		04/10/2017 19:37	1	04100032.D	CLP1 0.32(mm)
ICV 280-368670/32		04/10/2017 19:37	1	04100032.D	CLP2 0.32(mm)
ICV 280-368670/33		04/10/2017 19:54	1	04100033.D	CLP1 0.32(mm)
ICV 280-368670/33		04/10/2017 19:54	1	04100033.D	CLP2 0.32(mm)
PEM 280-368670/34		04/10/2017 20:11	1		CLP1 0.32(mm)
PEM 280-368670/34		04/10/2017 20:11	1		CLP2 0.32(mm)
ZZZZZ		04/10/2017 20:28	1		CLP1 0.32(mm)
ZZZZZ		04/10/2017 20:28	1		CLP2 0.32(mm)
280-94919-A-1-A MDLV		04/10/2017 20:44	1		CLP1 0.32(mm)
280-94919-A-1-A MDLV		04/10/2017 20:44	1		CLP2 0.32(mm)
280-94919-A-2-A MDLV		04/10/2017 21:01	1		CLP1 0.32(mm)
280-94919-A-2-A MDLV		04/10/2017 21:01	1		CLP2 0.32(mm)
280-94919-A-3-A MDLV		04/10/2017 21:18	1		CLP1 0.32(mm)
280-94919-A-3-A MDLV		04/10/2017 21:18	1		CLP2 0.32(mm)
280-94919-A-4-A MDLV		04/10/2017 21:35	1		CLP1 0.32(mm)
280-94919-A-4-A MDLV		04/10/2017 21:35	1		CLP2 0.32(mm)
280-94919-A-5-A MDLV		04/10/2017 21:52	1		CLP1 0.32(mm)
280-94919-A-5-A MDLV		04/10/2017 21:52	1		CLP2 0.32(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Start Date: 04/10/2017 11:26

Analysis Batch Number: 368670 End Date: 04/11/2017 08:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-94919-A-6-A MDLV		04/10/2017 22:09	1		CLP1 0.32(mm)
280-94919-A-6-A MDLV		04/10/2017 22:09	1		CLP2 0.32(mm)
280-94919-A-7-A MDLV		04/10/2017 22:26	1		CLP1 0.32(mm)
280-94919-A-7-A MDLV		04/10/2017 22:26	1		CLP2 0.32(mm)
280-94919-A-8-A MDLV		04/10/2017 22:43	1		CLP1 0.32(mm)
280-94919-A-8-A MDLV		04/10/2017 22:43	1		CLP2 0.32(mm)
280-94919-A-9-A MDLV		04/10/2017 23:00	1		CLP1 0.32(mm)
280-94919-A-9-A MDLV		04/10/2017 23:00	1		CLP2 0.32(mm)
280-94919-A-10-A MDLV		04/10/2017 23:17	1		CLP1 0.32(mm)
280-94919-A-10-A MDLV		04/10/2017 23:17	1		CLP2 0.32(mm)
280-94919-A-11-A MDLV		04/10/2017 23:34	1		CLP1 0.32(mm)
280-94919-A-11-A MDLV		04/10/2017 23:34	1		CLP2 0.32(mm)
280-94919-A-12-A MDLV		04/10/2017 23:50	1		CLP1 0.32(mm)
280-94919-A-12-A MDLV		04/10/2017 23:50	1		CLP2 0.32(mm)
ZZZZZ		04/11/2017 00:07	1		CLP1 0.32(mm)
ZZZZZ		04/11/2017 00:07	1		CLP2 0.32(mm)
280-94919-A-13-A MDLV		04/11/2017 00:24	1		CLP1 0.32(mm)
280-94919-A-13-A MDLV		04/11/2017 00:24	1		CLP2 0.32(mm)
280-94919-A-14-A MDLV		04/11/2017 00:41	1		CLP1 0.32(mm)
280-94919-A-14-A MDLV		04/11/2017 00:41	1		CLP2 0.32(mm)
280-94919-A-15-A MDLV		04/11/2017 00:58	1		CLP1 0.32(mm)
280-94919-A-15-A MDLV		04/11/2017 00:58	1		CLP2 0.32(mm)
280-94919-A-16-A MDLV		04/11/2017 01:15	1		CLP1 0.32(mm)
280-94919-A-16-A MDLV		04/11/2017 01:15	1		CLP2 0.32(mm)
280-94919-A-17-A MDLV		04/11/2017 01:32	1		CLP1 0.32(mm)
280-94919-A-17-A MDLV		04/11/2017 01:32	1		CLP2 0.32(mm)
280-94919-A-18-A MDLV		04/11/2017 01:49	1		CLP1 0.32(mm)
280-94919-A-18-A MDLV		04/11/2017 01:49	1		CLP2 0.32(mm)
280-94919-A-19-A MDLV		04/11/2017 02:06	1		CLP1 0.32(mm)
280-94919-A-19-A MDLV		04/11/2017 02:06	1		CLP2 0.32(mm)
CCV 280-368670/56		04/11/2017 02:23	1		CLP1 0.32(mm)
CCV 280-368670/56		04/11/2017 02:23	1		CLP2 0.32(mm)
CCV 280-368670/57		04/11/2017 02:39	1		CLP1 0.32(mm)
CCV 280-368670/57		04/11/2017 02:39	1		CLP2 0.32(mm)
CCV 280-368670/58		04/11/2017 02:56	1		CLP1 0.32(mm)
CCV 280-368670/58		04/11/2017 02:56	1		CLP2 0.32(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Start Date: 04/10/2017 11:26

Analysis Batch Number: 368670 End Date: 04/11/2017 08:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-368670/59		04/11/2017 03:13	1		CLP1 0.32(mm)
CCV 280-368670/59		04/11/2017 03:13	1		CLP2 0.32(mm)
280-94919-A-20-A MDLV		04/11/2017 03:30	1		CLP1 0.32(mm)
280-94919-A-20-A MDLV		04/11/2017 03:30	1		CLP2 0.32(mm)
280-94919-A-21-A MDLV		04/11/2017 03:47	1		CLP1 0.32(mm)
280-94919-A-21-A MDLV		04/11/2017 03:47	1		CLP2 0.32(mm)
280-94919-A-22-A MDLV		04/11/2017 04:04	1		CLP1 0.32(mm)
280-94919-A-22-A MDLV		04/11/2017 04:04	1		CLP2 0.32(mm)
280-94919-A-23-A MDLV		04/11/2017 04:21	1		CLP1 0.32(mm)
280-94919-A-23-A MDLV		04/11/2017 04:21	1		CLP2 0.32(mm)
280-94919-A-24-A MDLV		04/11/2017 04:38	1		CLP1 0.32(mm)
280-94919-A-24-A MDLV		04/11/2017 04:38	1		CLP2 0.32(mm)
280-94919-A-25-A MDLV		04/11/2017 04:55	1		CLP1 0.32(mm)
280-94919-A-25-A MDLV		04/11/2017 04:55	1		CLP2 0.32(mm)
ZZZZZ		04/11/2017 05:12	1		CLP1 0.32(mm)
ZZZZZ		04/11/2017 05:12	1		CLP2 0.32(mm)
280-94919-A-26-A MDLV		04/11/2017 05:29	1		CLP1 0.32(mm)
280-94919-A-26-A MDLV		04/11/2017 05:29	1		CLP2 0.32(mm)
280-94919-A-27-A MDLV		04/11/2017 05:45	1		CLP1 0.32(mm)
280-94919-A-27-A MDLV		04/11/2017 05:45	1		CLP2 0.32(mm)
280-94919-A-28-A MDLV		04/11/2017 06:02	1		CLP1 0.32(mm)
280-94919-A-28-A MDLV		04/11/2017 06:02	1		CLP2 0.32(mm)
280-94919-A-29-A MDLV		04/11/2017 06:19	1		CLP1 0.32(mm)
280-94919-A-29-A MDLV		04/11/2017 06:19	1		CLP2 0.32(mm)
280-94919-A-30-A MDLV		04/11/2017 06:36	1		CLP1 0.32(mm)
280-94919-A-30-A MDLV		04/11/2017 06:36	1		CLP2 0.32(mm)
280-94919-A-31-A MDLV		04/11/2017 06:53	1		CLP1 0.32(mm)
280-94919-A-31-A MDLV		04/11/2017 06:53	1		CLP2 0.32(mm)
280-94919-A-32-A MDLV		04/11/2017 07:10	1		CLP1 0.32(mm)
280-94919-A-32-A MDLV		04/11/2017 07:10	1		CLP2 0.32(mm)
280-94919-A-33-A MDLV		04/11/2017 07:27	1		CLP1 0.32(mm)
280-94919-A-33-A MDLV		04/11/2017 07:27	1		CLP2 0.32(mm)
280-94919-A-34-A MDLV		04/11/2017 07:44	1		CLP1 0.32(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Start Date: 04/10/2017 11:26

Analysis Batch Number: 368670 End Date: 04/11/2017 08:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-94919-A-34-A MDLV		04/11/2017 07:44	1		CLP2 0.32(mm)
280-94919-A-35-A MDLV		04/11/2017 08:01	1		CLP1 0.32(mm)
280-94919-A-35-A MDLV		04/11/2017 08:01	1		CLP2 0.32(mm)
280-94919-A-36-A MDLV		04/11/2017 08:18	1		CLP1 0.32(mm)
280-94919-A-36-A MDLV		04/11/2017 08:18	1		CLP2 0.32(mm)
280-94919-A-37-A MDLV		04/11/2017 08:35	1		CLP1 0.32(mm)
280-94919-A-37-A MDLV		04/11/2017 08:35	1		CLP2 0.32(mm)
280-94919-A-38-A MDLV		04/11/2017 08:52	1		CLP1 0.32(mm)
280-94919-A-38-A MDLV		04/11/2017 08:52	1		CLP2 0.32(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Start Date: 06/14/2017 17:50

Analysis Batch Number: 377328 End Date: 06/15/2017 09:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
PEM 280-377328/7		06/14/2017 17:50	1	06140007.D	CLP1 0.32(mm)
PEM 280-377328/7		06/14/2017 17:50	1	06140007.D	CLP2 0.32(mm)
CCV 280-377328/10		06/14/2017 18:41	1		CLP1 0.32(mm)
CCV 280-377328/10		06/14/2017 18:41	1		CLP2 0.32(mm)
CCV 280-377328/11		06/14/2017 18:58	1	06140011.D	CLP1 0.32(mm)
CCV 280-377328/11		06/14/2017 18:58	1	06140011.D	CLP2 0.32(mm)
CCV 280-377328/12		06/14/2017 19:15	1		CLP1 0.32(mm)
CCV 280-377328/12		06/14/2017 19:15	1		CLP2 0.32(mm)
CCVIS 280-377328/13		06/14/2017 19:32	1	06140013.D	CLP1 0.32(mm)
CCVIS 280-377328/13		06/14/2017 19:32	1	06140013.D	CLP2 0.32(mm)
MB 280-376892/1-A		06/14/2017 19:49	1	06140014.D	CLP1 0.32(mm)
MB 280-376892/1-A		06/14/2017 19:49	1	06140014.D	CLP2 0.32(mm)
LCS 280-376892/2-A		06/14/2017 20:06	1	06140015.D	CLP1 0.32(mm)
LCS 280-376892/2-A		06/14/2017 20:06	1	06140015.D	CLP2 0.32(mm)
LCS 280-376892/3-A		06/14/2017 20:23	1	06140016.D	CLP1 0.32(mm)
LCS 280-376892/3-A		06/14/2017 20:23	1	06140016.D	CLP2 0.32(mm)
ZZZZZ		06/14/2017 20:40	1		CLP1 0.32(mm)
ZZZZZ		06/14/2017 20:40	1		CLP2 0.32(mm)
ZZZZZ		06/14/2017 20:57	1		CLP1 0.32(mm)
ZZZZZ		06/14/2017 20:57	1		CLP2 0.32(mm)
ZZZZZ		06/14/2017 21:14	1		CLP1 0.32(mm)
ZZZZZ		06/14/2017 21:14	1		CLP2 0.32(mm)
ZZZZZ		06/14/2017 21:31	1		CLP1 0.32(mm)
ZZZZZ		06/14/2017 21:31	1		CLP2 0.32(mm)
ZZZZZ		06/14/2017 21:48	1		CLP1 0.32(mm)
ZZZZZ		06/14/2017 21:48	1		CLP2 0.32(mm)
ZZZZZ		06/14/2017 22:05	1		CLP1 0.32(mm)
ZZZZZ		06/14/2017 22:05	1		CLP2 0.32(mm)
ZZZZZ		06/14/2017 22:22	1		CLP1 0.32(mm)
ZZZZZ		06/14/2017 22:22	1		CLP2 0.32(mm)
ZZZZZ		06/14/2017 22:39	1		CLP1 0.32(mm)
ZZZZZ		06/14/2017 22:39	1		CLP2 0.32(mm)
ZZZZZ		06/14/2017 22:56	1		CLP1 0.32(mm)
ZZZZZ		06/14/2017 22:56	1		CLP2 0.32(mm)
ZZZZZ		06/14/2017 23:13	5		CLP1 0.32(mm)
ZZZZZ		06/14/2017 23:13	5		CLP2 0.32(mm)
CCV 280-377328/27		06/14/2017 23:30	1		CLP1 0.32(mm)
CCV 280-377328/27		06/14/2017 23:30	1		CLP2 0.32(mm)
CCV 280-377328/28		06/14/2017 23:47	1	06140028.D	CLP1 0.32(mm)
CCV 280-377328/28		06/14/2017 23:47	1	06140028.D	CLP2 0.32(mm)
CCV 280-377328/29		06/15/2017 00:04	1		CLP1 0.32(mm)
CCV 280-377328/29		06/15/2017 00:04	1		CLP2 0.32(mm)
CCV 280-377328/30		06/15/2017 00:21	1	06140030.D	CLP1 0.32(mm)
CCV 280-377328/30		06/15/2017 00:21	1	06140030.D	CLP2 0.32(mm)
PEM 280-377328/31		06/15/2017 00:37	1	06140031.D	CLP1 0.32(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Start Date: 06/14/2017 17:50

Analysis Batch Number: 377328 End Date: 06/15/2017 09:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
PEM 280-377328/31		06/15/2017 00:37	1	06140031.D	CLP2 0.32(mm)
ZZZZZ		06/15/2017 00:54	5		CLP1 0.32(mm)
ZZZZZ		06/15/2017 00:54	5		CLP2 0.32(mm)
280-97803-5		06/15/2017 01:11	1	06140033.D	CLP1 0.32(mm)
280-97803-5		06/15/2017 01:11	1	06140033.D	CLP2 0.32(mm)
ZZZZZ		06/15/2017 01:28	5		CLP1 0.32(mm)
ZZZZZ		06/15/2017 01:28	5		CLP2 0.32(mm)
280-97803-7		06/15/2017 01:45	1	06140035.D	CLP1 0.32(mm)
280-97803-7		06/15/2017 01:45	1	06140035.D	CLP2 0.32(mm)
ZZZZZ		06/15/2017 02:02	5		CLP1 0.32(mm)
ZZZZZ		06/15/2017 02:02	5		CLP2 0.32(mm)
280-97803-9		06/15/2017 02:19	1	06140037.D	CLP1 0.32(mm)
280-97803-9		06/15/2017 02:19	1	06140037.D	CLP2 0.32(mm)
ZZZZZ		06/15/2017 02:36	5		CLP1 0.32(mm)
ZZZZZ		06/15/2017 02:36	5		CLP2 0.32(mm)
ZZZZZ		06/15/2017 02:53	5		CLP1 0.32(mm)
ZZZZZ		06/15/2017 02:53	5		CLP2 0.32(mm)
280-97803-12		06/15/2017 03:09	1	06140040.D	CLP1 0.32(mm)
280-97803-12		06/15/2017 03:09	1	06140040.D	CLP2 0.32(mm)
ZZZZZ		06/15/2017 03:26	5		CLP1 0.32(mm)
ZZZZZ		06/15/2017 03:26	5		CLP2 0.32(mm)
CCV 280-377328/42		06/15/2017 03:43	1		CLP1 0.32(mm)
CCV 280-377328/42		06/15/2017 03:43	1		CLP2 0.32(mm)
CCV 280-377328/43		06/15/2017 04:00	1	06140043.D	CLP1 0.32(mm)
CCV 280-377328/43		06/15/2017 04:00	1	06140043.D	CLP2 0.32(mm)
CCV 280-377328/44		06/15/2017 04:17	1		CLP1 0.32(mm)
CCV 280-377328/44		06/15/2017 04:17	1		CLP2 0.32(mm)
CCV 280-377328/45		06/15/2017 04:34	1	06140045.D	CLP1 0.32(mm)
CCV 280-377328/45		06/15/2017 04:34	1	06140045.D	CLP2 0.32(mm)
280-97803-1		06/15/2017 04:51	1	06140046.D	CLP1 0.32(mm)
280-97803-1		06/15/2017 04:51	1	06140046.D	CLP2 0.32(mm)
280-97803-1 MS		06/15/2017 05:07	1	06140047.D	CLP1 0.32(mm)
280-97803-1 MS		06/15/2017 05:07	1	06140047.D	CLP2 0.32(mm)
280-97803-1 MSD		06/15/2017 05:24	1	06140048.D	CLP1 0.32(mm)
280-97803-1 MSD		06/15/2017 05:24	1	06140048.D	CLP2 0.32(mm)
280-97803-4		06/15/2017 05:41	1	06140049.D	CLP1 0.32(mm)
280-97803-4		06/15/2017 05:41	1	06140049.D	CLP2 0.32(mm)
280-97803-6		06/15/2017 05:58	1	06140050.D	CLP1 0.32(mm)
280-97803-6		06/15/2017 05:58	1	06140050.D	CLP2 0.32(mm)
280-97803-6 MS		06/15/2017 06:15	1	06140051.D	CLP1 0.32(mm)
280-97803-6 MS		06/15/2017 06:15	1	06140051.D	CLP2 0.32(mm)
280-97803-6 MSD		06/15/2017 06:32	1	06140052.D	CLP1 0.32(mm)
280-97803-6 MSD		06/15/2017 06:32	1	06140052.D	CLP2 0.32(mm)
280-97803-8		06/15/2017 06:49	1	06140053.D	CLP1 0.32(mm)
280-97803-8		06/15/2017 06:49	1	06140053.D	CLP2 0.32(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Start Date: 06/14/2017 17:50

Analysis Batch Number: 377328 End Date: 06/15/2017 09:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-97803-10		06/15/2017 07:06	1	06140054.D	CLP1 0.32(mm)
280-97803-10		06/15/2017 07:06	1	06140054.D	CLP2 0.32(mm)
280-97803-11		06/15/2017 07:22	1	06140055.D	CLP1 0.32(mm)
280-97803-11		06/15/2017 07:22	1	06140055.D	CLP2 0.32(mm)
280-97803-13		06/15/2017 07:56	1	06140057.D	CLP1 0.32(mm)
280-97803-13		06/15/2017 07:56	1	06140057.D	CLP2 0.32(mm)
CCV 280-377328/58		06/15/2017 08:13	1		CLP1 0.32(mm)
CCV 280-377328/58		06/15/2017 08:13	1		CLP2 0.32(mm)
CCV 280-377328/59		06/15/2017 08:30	1	06140059.D	CLP1 0.32(mm)
CCV 280-377328/59		06/15/2017 08:30	1	06140059.D	CLP2 0.32(mm)
CCV 280-377328/60		06/15/2017 08:47	1		CLP1 0.32(mm)
CCV 280-377328/60		06/15/2017 08:47	1		CLP2 0.32(mm)
CCV 280-377328/61		06/15/2017 09:04	1	06140061.D	CLP1 0.32(mm)
CCV 280-377328/61		06/15/2017 09:04	1	06140061.D	CLP2 0.32(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Start Date: 06/20/2017 12:18

Analysis Batch Number: 377996 End Date: 06/21/2017 01:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
PEM 280-377996/7		06/20/2017 12:18	1	06200007.D	CLP1 0.32(mm)
PEM 280-377996/7		06/20/2017 12:18	1	06200007.D	CLP2 0.32(mm)
CCV 280-377996/10		06/20/2017 13:28	1		CLP1 0.32(mm)
CCV 280-377996/10		06/20/2017 13:28	1		CLP2 0.32(mm)
CCV 280-377996/11		06/20/2017 13:45	1	06200011.D	CLP1 0.32(mm)
CCV 280-377996/11		06/20/2017 13:45	1	06200011.D	CLP2 0.32(mm)
CCV 280-377996/12		06/20/2017 14:02	1		CLP1 0.32(mm)
CCV 280-377996/12		06/20/2017 14:02	1		CLP2 0.32(mm)
CCVIS 280-377996/13		06/20/2017 14:19	1	06200013.D	CLP1 0.32(mm)
CCVIS 280-377996/13		06/20/2017 14:19	1	06200013.D	CLP2 0.32(mm)
MB 280-377252/1-A		06/20/2017 14:36	1	06200014.D	CLP1 0.32(mm)
MB 280-377252/1-A		06/20/2017 14:36	1	06200014.D	CLP2 0.32(mm)
LCS 280-377252/2-A		06/20/2017 14:53	1	06200015.D	CLP1 0.32(mm)
LCS 280-377252/2-A		06/20/2017 14:53	1	06200015.D	CLP2 0.32(mm)
LCS 280-377252/3-A		06/20/2017 15:32	1	06200016.D	CLP1 0.32(mm)
LCS 280-377252/3-A		06/20/2017 15:32	1	06200016.D	CLP2 0.32(mm)
ZZZZZ		06/20/2017 15:49	10		CLP1 0.32(mm)
ZZZZZ		06/20/2017 15:49	10		CLP2 0.32(mm)
280-97803-14		06/20/2017 16:06	1	06200018.D	CLP1 0.32(mm)
280-97803-14		06/20/2017 16:06	1	06200018.D	CLP2 0.32(mm)
ZZZZZ		06/20/2017 16:40	1		CLP1 0.32(mm)
ZZZZZ		06/20/2017 16:40	1		CLP2 0.32(mm)
ZZZZZ		06/20/2017 16:57	1		CLP1 0.32(mm)
ZZZZZ		06/20/2017 16:57	1		CLP2 0.32(mm)
ZZZZZ		06/20/2017 17:14	1		CLP1 0.32(mm)
ZZZZZ		06/20/2017 17:14	1		CLP2 0.32(mm)
CCV 280-377996/28		06/20/2017 18:56	1		CLP1 0.32(mm)
CCV 280-377996/28		06/20/2017 18:56	1		CLP2 0.32(mm)
CCV 280-377996/29		06/20/2017 19:13	1	06200029.D	CLP1 0.32(mm)
CCV 280-377996/29		06/20/2017 19:13	1	06200029.D	CLP2 0.32(mm)
CCV 280-377996/30		06/20/2017 19:30	1		CLP1 0.32(mm)
CCV 280-377996/30		06/20/2017 19:30	1		CLP2 0.32(mm)
CCV 280-377996/31		06/20/2017 19:47	1	06200031.D	CLP1 0.32(mm)
CCV 280-377996/31		06/20/2017 19:47	1	06200031.D	CLP2 0.32(mm)
ZZZZZ		06/20/2017 20:04	1		CLP1 0.32(mm)
ZZZZZ		06/20/2017 20:04	1		CLP2 0.32(mm)
ZZZZZ		06/20/2017 20:55	1		CLP1 0.32(mm)
ZZZZZ		06/20/2017 20:55	1		CLP2 0.32(mm)
ZZZZZ		06/20/2017 21:12	1		CLP1 0.32(mm)
ZZZZZ		06/20/2017 21:12	1		CLP2 0.32(mm)
ZZZZZ		06/20/2017 21:29	1		CLP1 0.32(mm)
ZZZZZ		06/20/2017 21:29	1		CLP2 0.32(mm)
ZZZZZ		06/20/2017 22:03	1		CLP1 0.32(mm)
ZZZZZ		06/20/2017 22:03	1		CLP2 0.32(mm)
CCV 280-377996/42		06/20/2017 22:54	1		CLP1 0.32(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P1 Start Date: 06/20/2017 12:18

Analysis Batch Number: 377996 End Date: 06/21/2017 01:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-377996/42		06/20/2017 22:54	1		CLP2 0.32(mm)
CCV 280-377996/43		06/20/2017 23:11	1		CLP1 0.32(mm)
CCV 280-377996/43		06/20/2017 23:11	1		CLP2 0.32(mm)
CCV 280-377996/44		06/20/2017 23:28	1		CLP1 0.32(mm)
CCV 280-377996/44		06/20/2017 23:28	1		CLP2 0.32(mm)
CCV 280-377996/45		06/20/2017 23:45	1		CLP1 0.32(mm)
CCV 280-377996/45		06/20/2017 23:45	1		CLP2 0.32(mm)
ZZZZZ		06/21/2017 00:19	1		CLP1 0.32(mm)
ZZZZZ		06/21/2017 00:19	1		CLP2 0.32(mm)
CCV 280-377996/48		06/21/2017 00:36	1		CLP1 0.32(mm)
CCV 280-377996/48		06/21/2017 00:36	1		CLP2 0.32(mm)
CCV 280-377996/49		06/21/2017 00:53	1		CLP1 0.32(mm)
CCV 280-377996/49		06/21/2017 00:53	1		CLP2 0.32(mm)
CCV 280-377996/50		06/21/2017 01:10	1		CLP1 0.32(mm)
CCV 280-377996/50		06/21/2017 01:10	1		CLP2 0.32(mm)
CCV 280-377996/51		06/21/2017 01:27	1		CLP1 0.32(mm)
CCV 280-377996/51		06/21/2017 01:27	1		CLP2 0.32(mm)

PESTICIDES BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 376892 Batch Start Date: 06/12/17 11:25 Batch Analyst: Isberg, Kyle

Batch Method: 3546 Batch End Date: 06/13/17 12:26

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8081 LCS 00378	8081/82 Surr 00093	8081Toxaphene 00027	AnalysisComment
MB 280-376892/1		3546, 8081B		33.0 g	10 mL		1 mL		
LCS 280-376892/2		3546, 8081B		31.4 g	10 mL	1 mL	1 mL		81
LCS 280-376892/3		3546, 8081B		31.9 g	10 mL		1 mL	1 mL	TOX
280-97803-C-1	SS025-SS01	3546, 8081B	T	31.0 g	10 mL		1 mL		
280-97803-C-1 MS	SS025-SS01	3546, 8081B	T	30.5 g	10 mL	1 mL	1 mL		81
280-97803-C-1 MSD	SS025-SS01	3546, 8081B	T	32.3 g	10 mL	1 mL	1 mL		81
280-97803-C-4	SS025-SS02	3546, 8081B	T	32.6 g	10 mL		1 mL		
280-97803-C-5	SS025-SB02(0-2)	3546, 8081B	T	30.9 g	10 mL		1 mL		
280-97803-B-6	SS025-SS03	3546, 8081B	T	30.5 g	10 mL		1 mL		
280-97803-B-6 MS	SS025-SS03	3546, 8081B	T	30.7 g	10 mL		1 mL	1 mL	TOX
280-97803-B-6 MSD	SS025-SS03	3546, 8081B	T	30.2 g	10 mL		1 mL	1 mL	TOX
280-97803-C-7	SS025-SB03(0-2)	3546, 8081B	T	31.1 g	10 mL		1 mL		
280-97803-B-8	SS025-SS04	3546, 8081B	T	32.3 g	10 mL		1 mL		
280-97803-B-9	SS025-SB04(0-2)	3546, 8081B	T	30.7 g	10 mL		1 mL		
280-97803-C-10	SS025-SS05	3546, 8081B	T	31.2 g	10 mL		1 mL		
280-97803-C-11	SS025-SB05(0-2)	3546, 8081B	T	30.7 g	10 mL		1 mL		
280-97803-C-12	SS025-SB05(2-4)	3546, 8081B	T	31.1 g	10 mL		1 mL		
280-97803-B-13	SS025-SS06	3546, 8081B	T	32.0 g	10 mL		1 mL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PESTICIDES BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 376892 Batch Start Date: 06/12/17 11:25 Batch Analyst: Isberg, Kyle

Batch Method: 3546 Batch End Date: 06/13/17 12:26

Batch Notes	
Balance ID	24750402
Batch Comment	pip: BB-8 (10.00), R2-D2 (2.00), 1n2s (1.00x2)
Analyst ID - Concentration	MAVJr
Exchange Solvent ID	Hexane_Cycl_00044
Exchange Solvent Name	Hexane
Final Concentrator Volume	10 mL
Florisil ID	3441026, FlorisilSol_00130
Hexane ID	see below
MeCL2 ID	see above
MeCl2 / Acetone ID	see above
Microwave Oven ID	MARS
Microwave Start Time	06/12/17 @1146
Microwave Stop Time	06/12/17 @1216
Na2SO4 ID	0000150871_00002
Ottawa Sand ID	170485
Pipette ID	L
Person's name who did the prep	KI
Solvent Lot #	MeCl2_Cycl_00340/1:1AceMeCl2_00065
Solvent Name	1:1AceMeCl2/MeCl2
SOP Number	DV-OP-0015/0007
Analyst ID - Spike Analyst	KI
Analyst ID - Spike Witness Analyst	reviewer:GLK
Water Bath ID	B@89
Water Bath Temperature	88

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PESTICIDES BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 377252 Batch Start Date: 06/14/17 09:49 Batch Analyst: Isberg, Kyle

Batch Method: 3546 Batch End Date: 06/19/17 13:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8081 LCS 00378	8081/82 Surr 00093	8081Toxaphene 00027	AnalysisComment
MB 280-377252/1		3546, 8081B		31.5 g	10 mL		1 mL		
LCS 280-377252/2		3546, 8081B		30.7 g	10 mL	1 mL	1 mL		81
LCS 280-377252/3		3546, 8081B		30.8 g	10 mL		1 mL	1 mL	TOX
280-97803-A-14	SS025-SS06-a	3546, 8081B	T	30.8 g	10 mL		1 mL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PESTICIDES BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 377252 Batch Start Date: 06/14/17 09:49 Batch Analyst: Isberg, Kyle

Batch Method: 3546 Batch End Date: 06/19/17 13:05

Batch Notes	
Balance ID	24750402
Batch Comment	Filtered by: HA, pip: BB-8 (10.00), R2-D2 (2.00), L (2x1.00)
Analyst ID - Concentration	CDC/ELV
Exchange Solvent ID	Hexane_Cycl_00044
Exchange Solvent Name	Hexane
Final Concentrator Volume	10 mL
Florisil ID	FlorisilSol_00130, cart 3441026
Hexane ID	see below
MeCL2 ID	see above
MeCl2 / Acetone ID	see above
Microwave Oven ID	MARS
Microwave Start Time	06/14/17 @1016
Microwave Stop Time	06/14/17 @1046
Na2SO4 ID	0000150871_00002
Ottawa Sand ID	170485
Pipette ID	L
Person's name who did the prep	KI
Solvent Lot #	MeCl2_Cycl_00341/342 / 1:1AceMeCl2_00065
Solvent Name	1:1AceMeCl2/MeCl2
SOP Number	DV-OP-0015/0007
Analyst ID - Spike Analyst	KI
Analyst ID - Spike Witness Analyst	reviewer:DB
Water Bath ID	B
Water Bath Temperature	88 (obs @ 89)

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8082A_DOD5

Polychlorinated Biphenyls (PCBs) by Gas Chromatography

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): CLP2 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	DCBP1 #
SS025-SS01	280-97803-1	67
SS025-SS02	280-97803-4	80
SS025-SB02(0-2)	280-97803-5	76
SS025-SS03	280-97803-6	81
SS025-SB03(0-2)	280-97803-7	71
SS025-SS04	280-97803-8	83
SS025-SB04(0-2)	280-97803-9	88
SS025-SS05	280-97803-10	83
SS025-SB05(0-2)	280-97803-11	87
SS025-SB05(2-4)	280-97803-12	89
SS025-SS06	280-97803-13	81
SS025-SS06-a	280-97803-14	67
	MB 280-376892/1-A	92
	MB 280-377252/1-A	98
	LCS 280-376892/4-A	91
	LCS 280-377252/4-A	96
SS025-SS04 MS	280-97803-8 MS	80
SS025-SS04 MSD	280-97803-8 MSD	82

	QC LIMITS
DCBP = DCB Decachlorobiphenyl (Surr)	59-130

Column to be used to flag recovery values

FORM II 8082A

FORM III
PCBS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06171706.D

Lab ID: LCS 280-376892/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Arochlor 1016	63.3	62.2	98	47-134	
Arochlor 1260	63.3	62.4	99	53-140	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM III
PCBS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06211705.D

Lab ID: LCS 280-377252/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Arochlor 1016	62.1	59.6	96	47-134	
Arochlor 1260	62.1	60.4	97	53-140	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM III
PCBS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06171714.D

Lab ID: 280-97803-8 MS Client ID: SS025-SS04 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Arochlor 1016	68.4	15 U	69.6	102	47-134	
Arochlor 1260	68.4	6.2 J	76.1	102	53-140	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM III
PCBS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06171715.D

Lab ID: 280-97803-8 MSD Client ID: SS025-SS04 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Arochlor 1016	67.9	66.4	98	5	30	47-134	
Arochlor 1260	67.9	64.3	85	17	30	53-140	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM IV
PCBS METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: MB 280-376892/1-A

Matrix: Solid Date Extracted: 06/12/2017 11:25

Lab File ID:(1) 06171705.D Lab File ID:(2) 06171705.D

Date Analyzed:(1) 06/17/2017 12:45 Date Analyzed:(2) 06/17/2017 12:45

Instrument ID:(1) SGC_P3 Instrument ID:(2) SGC_P3

GC Column:(1) CLP2 ID: 0.32(mm) GC Column:(2) CLP1 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-376892/4-A	06/17/2017 13:07	06/17/2017 13:07
SS025-SS01	280-97803-1	06/17/2017 13:28	06/17/2017 13:28
SS025-SS02	280-97803-4	06/17/2017 13:50	06/17/2017 13:50
SS025-SB02(0-2)	280-97803-5	06/17/2017 14:12	06/17/2017 14:12
SS025-SS03	280-97803-6	06/17/2017 14:33	06/17/2017 14:33
SS025-SB03(0-2)	280-97803-7	06/17/2017 14:55	06/17/2017 14:55
SS025-SS04	280-97803-8	06/17/2017 15:39	06/17/2017 15:39
SS025-SS04 MS	280-97803-8 MS	06/17/2017 16:00	06/17/2017 16:00
SS025-SS04 MSD	280-97803-8 MSD	06/17/2017 16:22	06/17/2017 16:22
SS025-SB04(0-2)	280-97803-9	06/17/2017 16:44	06/17/2017 16:44
SS025-SS05	280-97803-10	06/17/2017 17:06	06/17/2017 17:06
SS025-SB05(0-2)	280-97803-11	06/17/2017 17:27	06/17/2017 17:27
SS025-SB05(2-4)	280-97803-12	06/17/2017 17:49	06/17/2017 17:49
SS025-SS06	280-97803-13	06/17/2017 18:11	06/17/2017 18:11

FORM IV
PCBS METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: MB 280-377252/1-A

Matrix: Solid Date Extracted: 06/14/2017 09:49

Lab File ID:(1) 06211704.D Lab File ID:(2) 06211704.D

Date Analyzed:(1) 06/21/2017 14:35 Date Analyzed:(2) 06/21/2017 14:35

Instrument ID:(1) SGC_P3 Instrument ID:(2) SGC_P3

GC Column:(1) CLP2 ID: 0.32(mm) GC Column:(2) CLP1 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-377252/4-A	06/21/2017 14:57	06/21/2017 14:57
SS025-SS06-a	280-97803-14	06/21/2017 15:41	06/21/2017 15:41

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Sample No.: STDL51660 280-376236/17 Date Analyzed: 06/06/2017 19:36

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm)

Lab File ID (Standard): 06061717.D Heated Purge: (Y/N) N

Calibration ID: 29393

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		347177456	1.83				
UPPER LIMIT		694354912	2.33				
LOWER LIMIT		173588728	1.33				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-376236/36		350254462	1.83				
ICV 280-376236/37		352622017	1.83				
ICV 280-376236/38		353177277	1.83				
ICV 280-376236/39		352348854	1.83				
ICV 280-376236/40		353734205	1.83				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Sample No.: STDL51660 280-376236/17 Date Analyzed: 06/06/2017 19:36

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm)

Lab File ID (Standard): 06061717.D Heated Purge: (Y/N) N

Calibration ID: 29394

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		402955781	1.60				
UPPER LIMIT		805911562	2.10				
LOWER LIMIT		201477891	1.10				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-376236/36		389956483	1.60				
ICV 280-376236/37		393234638	1.60				
ICV 280-376236/38		392415021	1.60				
ICV 280-376236/39		393122135	1.60				
ICV 280-376236/40		393095785	1.60				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Sample No.: CCVIS 280-377714/3 Date Analyzed: 06/17/2017 12:01

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm)

Lab File ID (Standard): 06171703.D Heated Purge: (Y/N) N

Calibration ID: 29401

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		363053222	1.83				
UPPER LIMIT		726106444	2.33				
LOWER LIMIT		181526611	1.33				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 280-377714/4		359395406	1.82				
MB 280-376892/1-A		355534319	1.83				
LCS 280-376892/4-A		354758593	1.82				
280-97803-1	SS025-SS01	375458640	1.82				
280-97803-4	SS025-SS02	364314195	1.83				
280-97803-5	SS025-SB02(0-2)	355748187	1.82				
280-97803-6	SS025-SS03	347851007	1.82				
280-97803-7	SS025-SB03(0-2)	358238787	1.83				
CCV 280-377714/12		363663086	1.82				
280-97803-8	SS025-SS04	348581594	1.82				
280-97803-8 MS	SS025-SS04 MS	362019323	1.82				
280-97803-8 MSD	SS025-SS04 MSD	359172735	1.82				
280-97803-9	SS025-SB04(0-2)	358920969	1.83				
280-97803-10	SS025-SS05	362391472	1.82				
280-97803-11	SS025-SB05(0-2)	356668653	1.83				
280-97803-12	SS025-SB05(2-4)	362381411	1.82				
280-97803-13	SS025-SS06	368212907	1.83				
CCV 280-377714/21		370226837	1.82				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Sample No.: CCVIS 280-377714/3 Date Analyzed: 06/17/2017 12:01

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm)

Lab File ID (Standard): 06171703.D Heated Purge: (Y/N) N

Calibration ID: 29402

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		409486487	1.59				
UPPER LIMIT		818972974	2.09				
LOWER LIMIT		204743244	1.09				
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 280-377714/4		405726711	1.59				
MB 280-376892/1-A		403823975	1.59				
LCS 280-376892/4-A		405091207	1.59				
280-97803-1	SS025-SS01	416373855	1.59				
280-97803-4	SS025-SS02	408738047	1.59				
280-97803-5	SS025-SB02(0-2)	399592588	1.59				
280-97803-6	SS025-SS03	400480880	1.59				
280-97803-7	SS025-SB03(0-2)	408782353	1.59				
CCV 280-377714/12		414790412	1.59				
280-97803-8	SS025-SS04	401049398	1.59				
280-97803-8 MS	SS025-SS04 MS	415417475	1.59				
280-97803-8 MSD	SS025-SS04 MSD	402940161	1.59				
280-97803-9	SS025-SB04(0-2)	412475548	1.59				
280-97803-10	SS025-SS05	411572179	1.59				
280-97803-11	SS025-SB05(0-2)	403360367	1.59				
280-97803-12	SS025-SB05(2-4)	409065500	1.59				
280-97803-13	SS025-SS06	415031752	1.59				
CCV 280-377714/21		413242843	1.59				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Sample No.: CCVIS 280-378200/3 Date Analyzed: 06/21/2017 14:14

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm)

Lab File ID (Standard): 06211703.D Heated Purge: (Y/N) N

Calibration ID: 29401

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		365206462	1.83				
UPPER LIMIT		730412924	2.33				
LOWER LIMIT		182603231	1.33				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 280-377252/1-A		379522771	1.83				
LCS 280-377252/4-A		379484497	1.82				
280-97803-14	SS025-SS06-a	394920525	1.82				
CCV 280-378200/16		380146120	1.83				
CCV 280-378200/41		454144448	1.82				
CCV 280-378200/45		371068971	1.83				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Sample No.: CCVIS 280-378200/3 Date Analyzed: 06/21/2017 14:14

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm)

Lab File ID (Standard): 06211703.D Heated Purge: (Y/N) N

Calibration ID: 29402

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		416926787	1.59				
UPPER LIMIT		833853574	2.09				
LOWER LIMIT		208463394	1.09				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 280-377252/1-A		431726756	1.59				
LCS 280-377252/4-A		433381249	1.59				
280-97803-14	SS025-SS06-a	442174095	1.58				
CCV 280-378200/16		408079328	1.59				
CCV 280-378200/41		482420725	1.58				
CCV 280-378200/45		401519189	1.59				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS01 Lab Sample ID: 280-97803-1

Instrument ID (1): SGC_P3 Instrument ID (2): SGC_P3

Date Analyzed (1): 06/17/2017 13:28 Date Analyzed (2): 06/17/2017 13:28

GC Column (1): CLP2 ID: 0.32(mm) GC Column (2): CLP1 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Arochlor 1260	1	3	7.36	7.11	7.61	4.01	3.8	11.5
		5	8.22	7.97	8.47	6.80		
	2	2	6.74	6.49	6.99	3.61	3.4	
		3	7.23	6.98	7.48	3.32		
		5	8.05	7.80	8.30	5.58		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS04 Lab Sample ID: 280-97803-8

Instrument ID (1): SGC_P3 Instrument ID (2): SGC_P3

Date Analyzed (1): 06/17/2017 15:39 Date Analyzed (2): 06/17/2017 15:39

GC Column (1): CLP2 ID: 0.32(mm) GC Column (2): CLP1 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Arochlor 1260	1	2	6.84	6.59	7.09	8.73	6.2	5.2
		3	7.35	7.11	7.61	7.20		
		4	7.72	7.48	7.98	4.87		
		5	8.22	7.97	8.47	7.83		
	2	1	6.01	5.76	6.26	5.01	5.9	
		2	6.74	6.49	6.99	5.38		
		3	7.23	6.98	7.48	6.74		
		4	7.66	7.42	7.92	4.71		
		5	8.05	7.80	8.30	7.62		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS04 MS Lab Sample ID: 280-97803-8 MS

Instrument ID (1): SGC_P3 Instrument ID (2): SGC_P3

Date Analyzed (1): 06/17/2017 16:00 Date Analyzed (2): 06/17/2017 16:00

GC Column (1): CLP2 ID: 0.32(mm) GC Column (2): CLP1 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Arochlor 1016	1	1	3.50	3.25	3.75	73.3	69.6	10.7
		2	3.94	3.69	4.19	70.3		
		3	4.07	3.83	4.33	69.2		
		4	4.30	4.05	4.55	63.9		
		5	4.57	4.33	4.83	71.3		
	2	1	3.48	3.24	3.74	127	77.5	
		2	3.95	3.70	4.20	61.7		
		3	4.09	3.84	4.34	63.7		
		5	4.53	4.29	4.79	56.9		
Arochlor 1260	1	1	6.38	6.14	6.64	68.3	76.1	4.5
		2	6.84	6.59	7.09	74.3		
		3	7.36	7.11	7.61	83.8		
		4	7.72	7.48	7.98	73.1		
		5	8.22	7.97	8.47	81.1		
	2	1	6.01	5.76	6.26	71.1	72.8	
		2	6.74	6.49	6.99	71.5		
		3	7.23	6.98	7.48	79.1		
		4	7.66	7.42	7.92	67.2		
		5	8.05	7.80	8.30	75.0		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS04 MSD Lab Sample ID: 280-97803-8 MSD

Instrument ID (1): SGC_P3 Instrument ID (2): SGC_P3

Date Analyzed (1): 06/17/2017 16:22 Date Analyzed (2): 06/17/2017 16:22

GC Column (1): CLP2 ID: 0.32(mm) GC Column (2): CLP1 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Arochlor 1016	1	1	3.50	3.25	3.75	72.9	66.4	1.1
		2	3.94	3.69	4.19	69.5		
		3	4.07	3.83	4.33	68.8		
		4	4.30	4.05	4.55	55.6		
		5	4.57	4.33	4.83	65.5		
	2	1	3.48	3.24	3.74	75.0	65.7	
		2	3.95	3.70	4.20	61.2		
		3	4.09	3.84	4.34	68.5		
		5	4.53	4.29	4.79	58.1		
Arochlor 1260	1	1	6.38	6.14	6.64	61.0	64.3	9.7
		2	6.84	6.59	7.09	61.5		
		3	7.36	7.11	7.61	71.5		
		4	7.72	7.48	7.98	55.6		
		5	8.22	7.97	8.47	71.9		
	2	1	6.01	5.76	6.26	60.4	58.3	
		2	6.74	6.49	6.99	59.5		
		3	7.23	6.98	7.48	61.2		
		4	7.66	7.42	7.92	46.6		
		5	8.05	7.80	8.30	64.0		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-376892/4-A

Instrument ID (1): SGC_P3 Instrument ID (2): SGC_P3

Date Analyzed (1): 06/17/2017 13:07 Date Analyzed (2): 06/17/2017 13:07

GC Column (1): CLP2 ID: 0.32(mm) GC Column (2): CLP1 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Arochlor 1016	1	1	3.50	3.25	3.75	63.6	62.2	4.4
		2	3.94	3.69	4.19	62.5		
		3	4.08	3.83	4.33	61.9		
		4	4.30	4.05	4.55	61.1		
		5	4.57	4.33	4.83	61.9		
	2	1	3.48	3.24	3.74	59.7	65.0	
		2	3.95	3.70	4.20	59.0		
		3	4.09	3.84	4.34	63.3		
		4	4.15	3.90	4.40	80.7		
		5	4.53	4.29	4.79	62.5		
Arochlor 1260	1	1	6.39	6.14	6.64	60.2	62.4	8.9
		2	6.84	6.59	7.09	55.5		
		3	7.36	7.11	7.61	67.4		
		4	7.73	7.48	7.98	64.7		
		5	8.22	7.97	8.47	64.4		
	2	1	6.01	5.76	6.26	57.0	57.1	
		2	6.74	6.49	6.99	50.9		
		3	7.23	6.98	7.48	60.2		
		4	7.66	7.42	7.92	60.5		
		5	8.05	7.80	8.30	57.0		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-377252/4-A

Instrument ID (1): SGC_P3 Instrument ID (2): SGC_P3

Date Analyzed (1): 06/21/2017 14:57 Date Analyzed (2): 06/21/2017 14:57

GC Column (1): CLP2 ID: 0.32(mm) GC Column (2): CLP1 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Arochlor 1016	1	1	3.50	3.25	3.75	60.9	59.6	1.4
		2	3.93	3.68	4.18	61.1		
		3	4.07	3.82	4.32	59.7		
		4	4.29	4.04	4.54	58.7		
		5	4.57	4.32	4.82	57.4		
	2	1	3.48	3.23	3.73	57.7	58.7	
		2	3.95	3.70	4.20	56.2		
		3	4.09	3.84	4.34	57.4		
		4	4.15	3.90	4.40	64.7		
		5	4.53	4.29	4.79	57.6		
Arochlor 1260	1	1	6.38	6.12	6.62	57.1	60.4	8.1
		2	6.83	6.58	7.08	53.6		
		3	7.35	7.10	7.60	65.0		
		4	7.72	7.46	7.96	63.4		
		5	8.21	7.96	8.46	62.9		
	2	1	6.01	5.76	6.26	55.1	55.7	
		2	6.74	6.49	6.99	49.8		
		3	7.23	6.97	7.47	59.3		
		4	7.66	7.41	7.91	58.4		
		5	8.05	7.79	8.29	55.9		

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS01 | Lab Sample ID: 280-97803-1

Matrix: Solid | Lab File ID: 06171707.D

Analysis Method: 8082A | Date Collected: 05/31/2017 11:00

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 31.0(g) | Date Analyzed: 06/17/2017 13:28

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 16.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377714 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	17	U	38	17	5.9
11104-28-2	Arochlor 1221	20	U	55	20	18
11141-16-5	Arochlor 1232	17	U	38	17	6.0
53469-21-9	Arochlor 1242	38	U	38	38	11
12672-29-6	Arochlor 1248	23	U	38	23	6.5
11097-69-1	Arochlor 1254	20	U	38	20	6.4
11096-82-5	Arochlor 1260	3.8	J	38	9.0	3.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	67		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171707.D
Lims ID: 280-97803-C-1-E
Client ID: SS025-SS01
Sample Type: Client
Inject. Date: 17-Jun-2017 13:28:45 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-C-1-E
Misc. Info.: 280-0059856-007
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:13 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:09:43

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.823	1.825	-0.002	375458640	1000.0	
2	1.590	1.591	-0.001	416373855	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.750	2.748	0.002	61464314	15.0	
2	2.640	2.641	-0.001	76001583	15.6	
					RPD = 4.13	
3 PCB-1221						
1		2.963			ND	
1		3.106				
1		3.143				
2		2.966				
2		3.090				
2		3.143				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.485			ND	
1		3.948				
1		4.085				
1		4.151				
1		4.535				
2		3.501				
2		3.941				
2		4.075				
2		4.298				
2		4.575				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.293			ND	
1		5.623				
1		5.776				
1		6.483				
1		6.743				
2		5.310				
2		5.713				
2		5.860				
2		6.163				
2		6.860				
12 PCB-1260						
1	6.006	6.008	-0.002	3521244	5.66	
1	6.736	6.738	-0.002	6629240	9.31	
1	7.226	7.228	-0.002	3260036	8.55	
1	7.663	7.665	-0.002	4644488	5.74	
1	8.046	8.048	-0.002	4997734	14.4	
		Average of Peak Amounts =			8.73	
2	6.386	6.388	-0.002	6012493	5.35	
2	0.000	6.841	0.000	0	0	
2	7.356	7.358	-0.002	4985764	10.3	
2	7.726	7.728	-0.002	8650098	5.97	
2	8.220	8.221	-0.001	9859862	17.5	
		Average of Peak Amounts =			9.80	
					RPD = 11.53	
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.623	9.625	-0.002	46593947	11.6	
2	9.876	9.878	-0.002	54011547	13.4	
					RPD = 14.27	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total						
1					8.73	
2					9.80	
					RPD = 11.53	
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

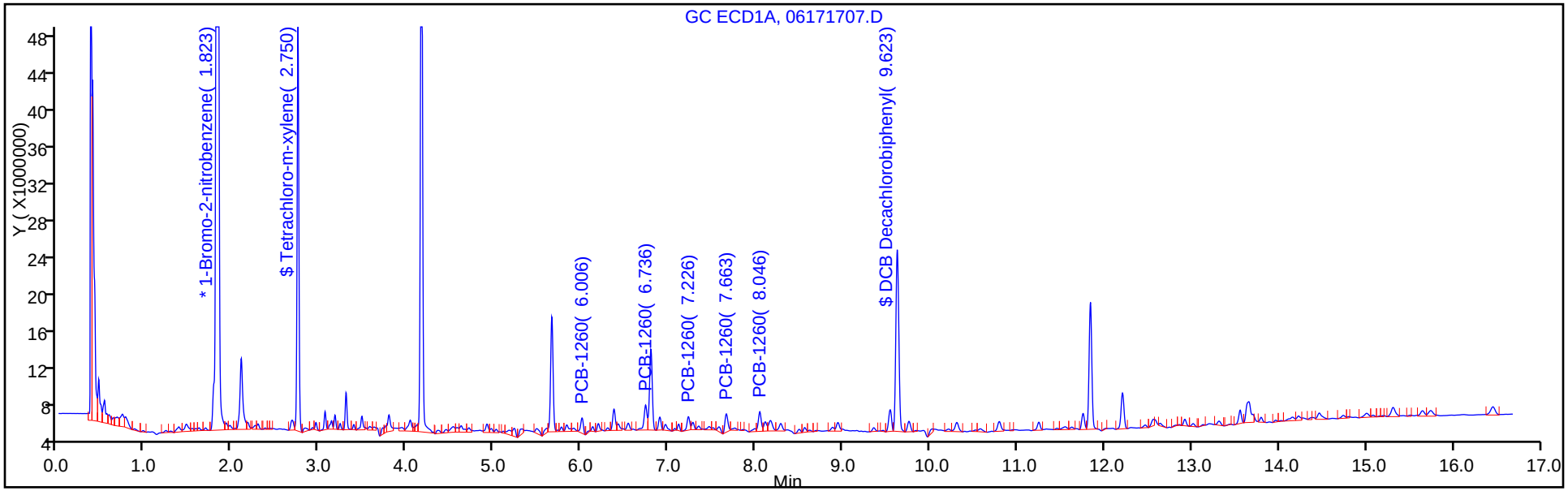
Report Date: 18-Jun-2017 10:14:29 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

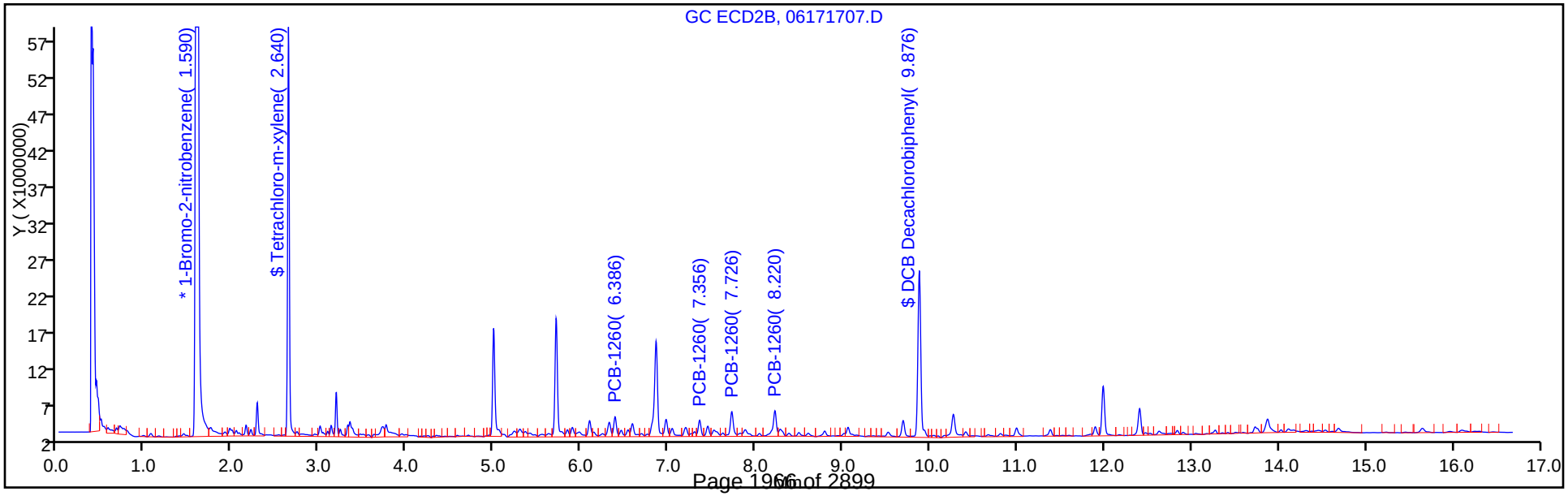
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171707.D

Injection Date:	17-Jun-2017 13:28:45	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97803-C-1-E	Lab Sample ID:	280-97803-1	Worklist Smp#:	7
Client ID:	SS025-SS01				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171707.D				
Lims ID:	280-97803-C-1-E				
Client ID:	SS025-SS01				
Sample Type:	Client				
Inject. Date:	17-Jun-2017 13:28:45	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-C-1-E				
Misc. Info.:	280-0059856-007				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	18-Jun-2017 10:14:13	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK004				
First Level Reviewer: jacksonto		Date:	18-Jun-2017 10:09:43		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	15.0	75.05
$ 15 DCB Decachlorobiphenyl	20.0	11.6	58.08

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	15.6	78.21
$ 15 DCB Decachlorobiphenyl	20.0	13.4	67.00

Report Date: 18-Jun-2017 10:14:29 Chrom Revision: 2.2 25-Apr-2017 13:27:22

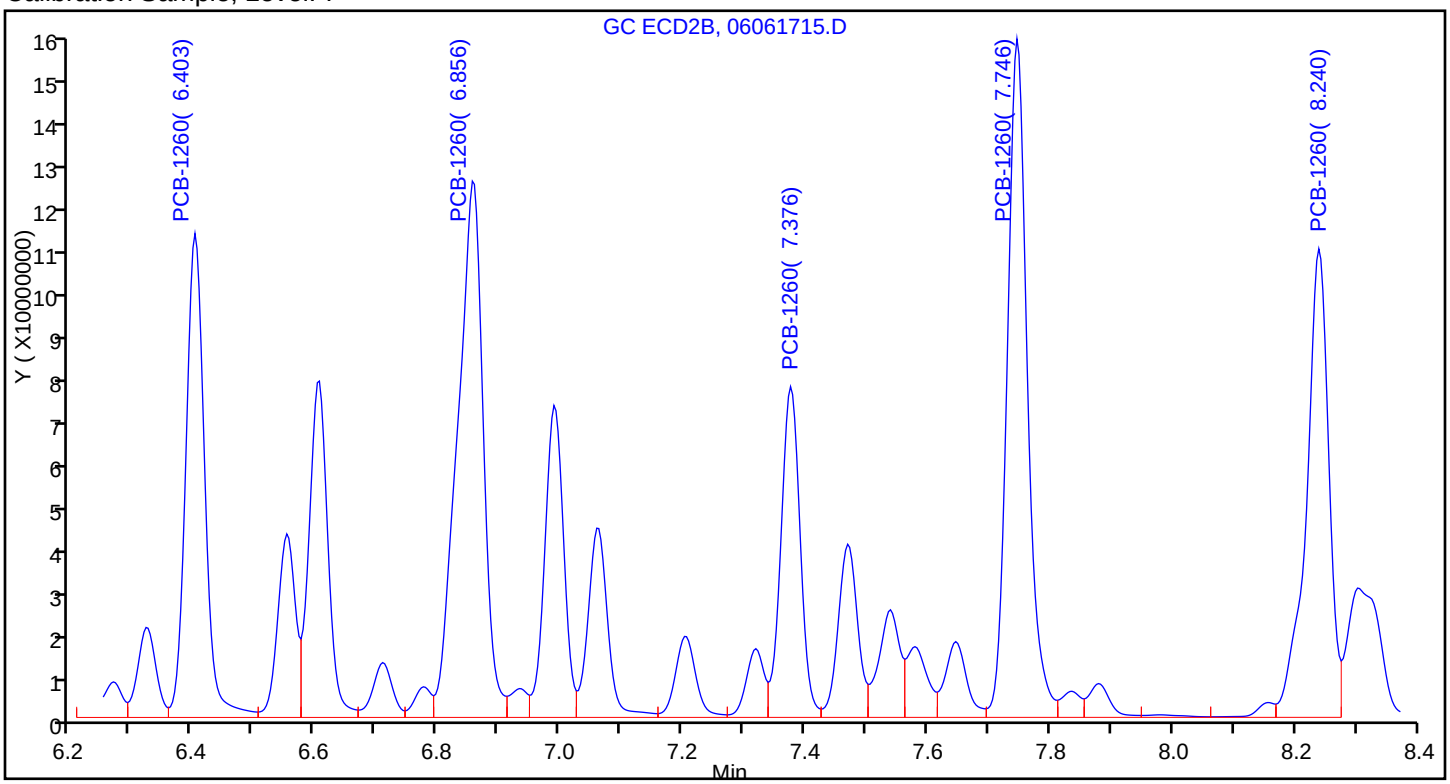
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171707.D

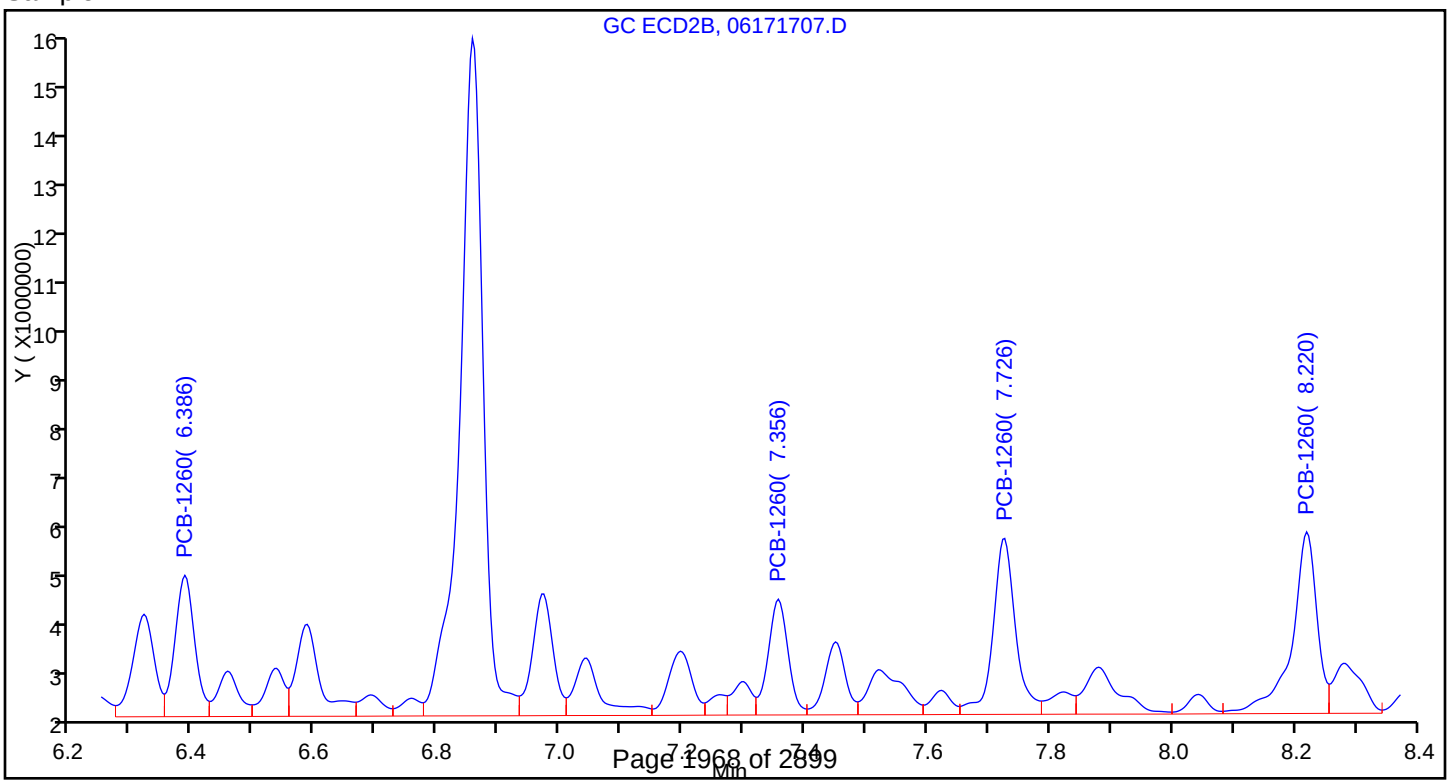
Injection Date:	17-Jun-2017 13:28:45	Instrument ID:	SGC_P3		
Lims ID:	280-97803-C-1-E	Lab Sample ID:	280-97803-1		
Client ID:	SS025-SS01				
Operator ID:	jax	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

12 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS02 | Lab Sample ID: 280-97803-4

Matrix: Solid | Lab File ID: 06171708.D

Analysis Method: 8082A | Date Collected: 05/31/2017 12:50

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 32.6(g) | Date Analyzed: 06/17/2017 13:50

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 15.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377714 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	16	U	36	16	5.5
11104-28-2	Arochlor 1221	18	U	51	18	17
11141-16-5	Arochlor 1232	16	U	36	16	5.6
53469-21-9	Arochlor 1242	36	U	36	36	9.9
12672-29-6	Arochlor 1248	22	U	36	22	6.1
11097-69-1	Arochlor 1254	18	U	36	18	6.0
11096-82-5	Arochlor 1260	8.4	U	36	8.4	2.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	80		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171708.D
Lims ID: 280-97803-C-4-C
Client ID: SS025-SS02
Sample Type: Client
Inject. Date: 17-Jun-2017 13:50:29 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-C-4-C
Misc. Info.: 280-0059856-008
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:13 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:09:55

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.825	1.825	0.000	364314195	1000.0	
2	1.588	1.591	-0.003	408738047	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.748	2.748	0.000	68095119	17.2	
2	2.638	2.641	-0.003	84979892	17.9	
					RPD = 4.20	
3 PCB-1221						
1		2.963			ND	
1		3.106				
1		3.143				
2		2.966				
2		3.090				
2		3.143				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.485			ND	
1		3.948				
1		4.085				
1		4.151				
1		4.535				
2		3.501				
2		3.941				
2		4.075				
2		4.298				
2		4.575				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.293			ND	
1		5.623				
1		5.776				
1		6.483				
1		6.743				
2		5.310				
2		5.713				
2		5.860				
2		6.163				
2		6.860				
12 PCB-1260						
1		6.008			ND	
1		6.738				
1		7.228				
1		7.665				
1		8.048				
2		6.388				
2		6.841				
2		7.358				
2		7.728				
2		8.221				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.625	9.625	0.000	55759392	14.5	
2	9.875	9.878	-0.003	62358397	15.9	
					RPD = 9.43	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

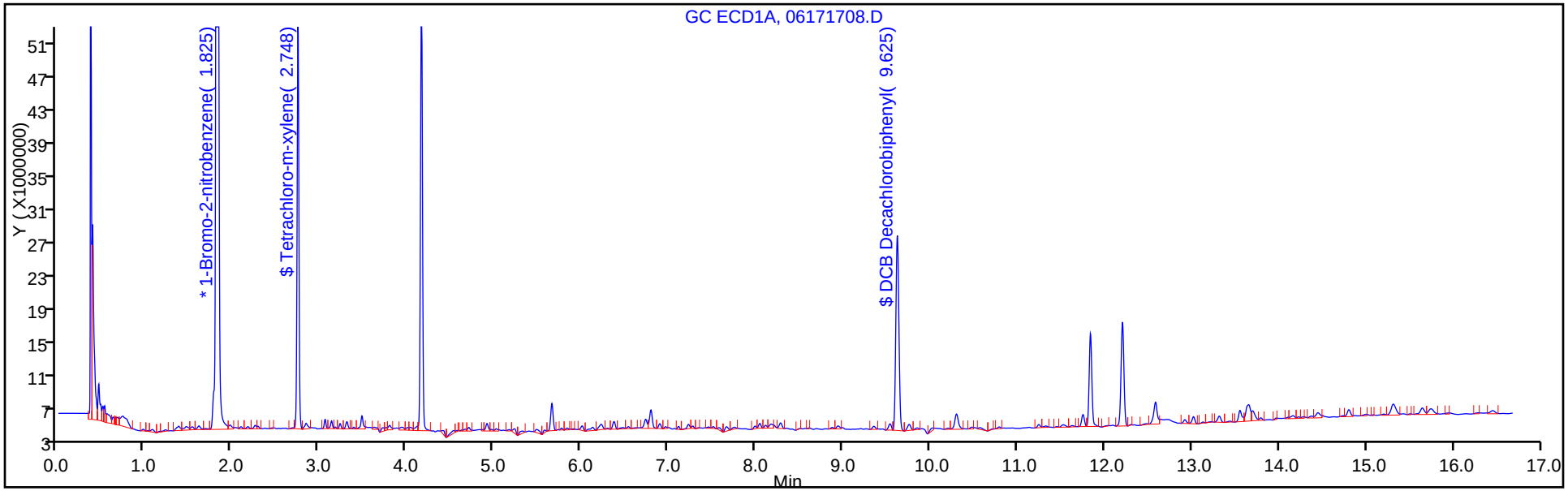
Report Date: 18-Jun-2017 10:14:30 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

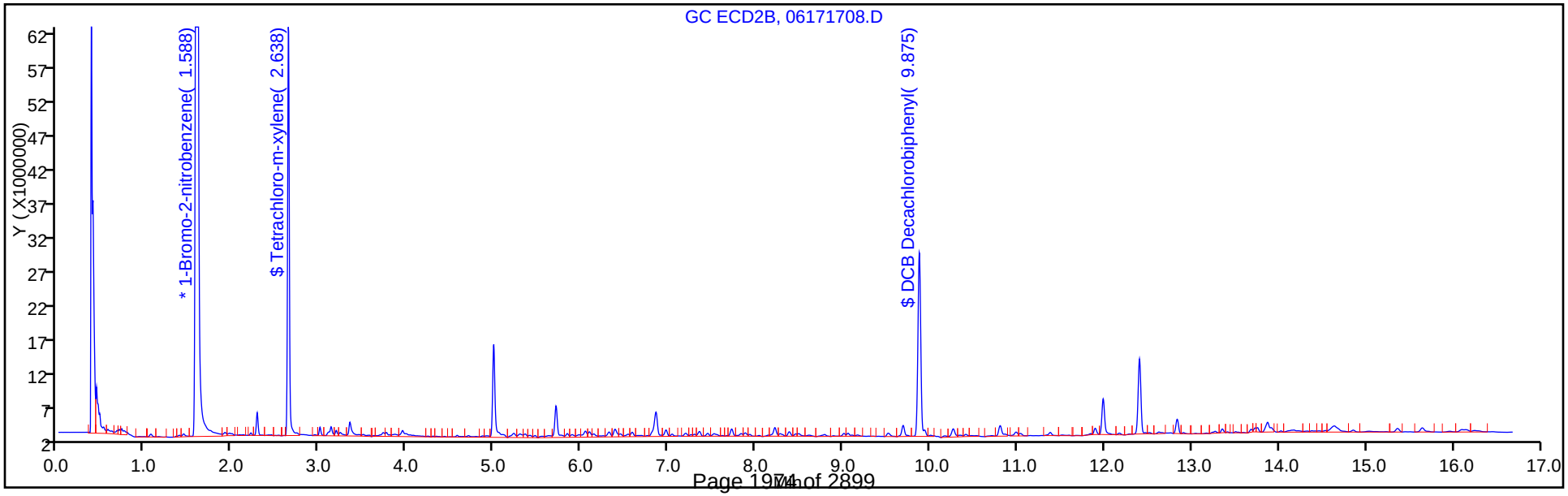
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171708.D

Injection Date:	17-Jun-2017 13:50:29	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97803-C-4-C	Lab Sample ID:	280-97803-4	Worklist Smp#:	8
Client ID:	SS025-SS02				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171708.D				
Lims ID:	280-97803-C-4-C				
Client ID:	SS025-SS02				
Sample Type:	Client				
Inject. Date:	17-Jun-2017 13:50:29	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-C-4-C				
Misc. Info.:	280-0059856-008				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	18-Jun-2017 10:14:13	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK004				
First Level Reviewer: jacksonto		Date:	18-Jun-2017 10:09:55		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.2	85.96
$ 15 DCB Decachlorobiphenyl	20.0	14.5	72.41

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.9	89.65
$ 15 DCB Decachlorobiphenyl	20.0	15.9	79.57

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB02(0-2) | Lab Sample ID: 280-97803-5

Matrix: Solid | Lab File ID: 06171709.D

Analysis Method: 8082A | Date Collected: 05/31/2017 13:10

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 30.9(g) | Date Analyzed: 06/17/2017 14:12

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 17.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377714 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	18	U	39	18	6.0
11104-28-2	Arochlor 1221	20	U	55	20	18
11141-16-5	Arochlor 1232	18	U	39	18	6.0
53469-21-9	Arochlor 1242	39	U	39	39	11
12672-29-6	Arochlor 1248	24	U	39	24	6.6
11097-69-1	Arochlor 1254	20	U	39	20	6.5
11096-82-5	Arochlor 1260	9.1	U	39	9.1	3.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	76		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171709.D
Lims ID: 280-97803-C-5-A
Client ID: SS025-SB02(0-2)
Sample Type: Client
Inject. Date: 17-Jun-2017 14:12:12 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-C-5-A
Misc. Info.: 280-0059856-009
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:13 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:10:07

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.824	1.825	-0.001	355748187	1000.0	
2	1.590	1.591	-0.001	399592588	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.750	2.748	0.002	61364405	15.8	
2	2.640	2.641	-0.001	79304015	17.1	
					RPD = 7.55	
3 PCB-1221						
1		2.963			ND	
1		3.106				
1		3.143				
2		2.966				
2		3.090				
2		3.143				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.485			ND	
1		3.948				
1		4.085				
1		4.151				
1		4.535				
2		3.501				
2		3.941				
2		4.075				
2		4.298				
2		4.575				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.293			ND	
1		5.623				
1		5.776				
1		6.483				
1		6.743				
2		5.310				
2		5.713				
2		5.860				
2		6.163				
2		6.860				
12 PCB-1260						
1		6.008			ND	
1		6.738				
1		7.228				
1		7.665				
1		8.048				
2		6.388				
2		6.841				
2		7.358				
2		7.728				
2		8.221				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.624	9.625	-0.001	54573771	14.5	
2	9.877	9.878	-0.001	58077691	15.1	
					RPD = 4.07	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

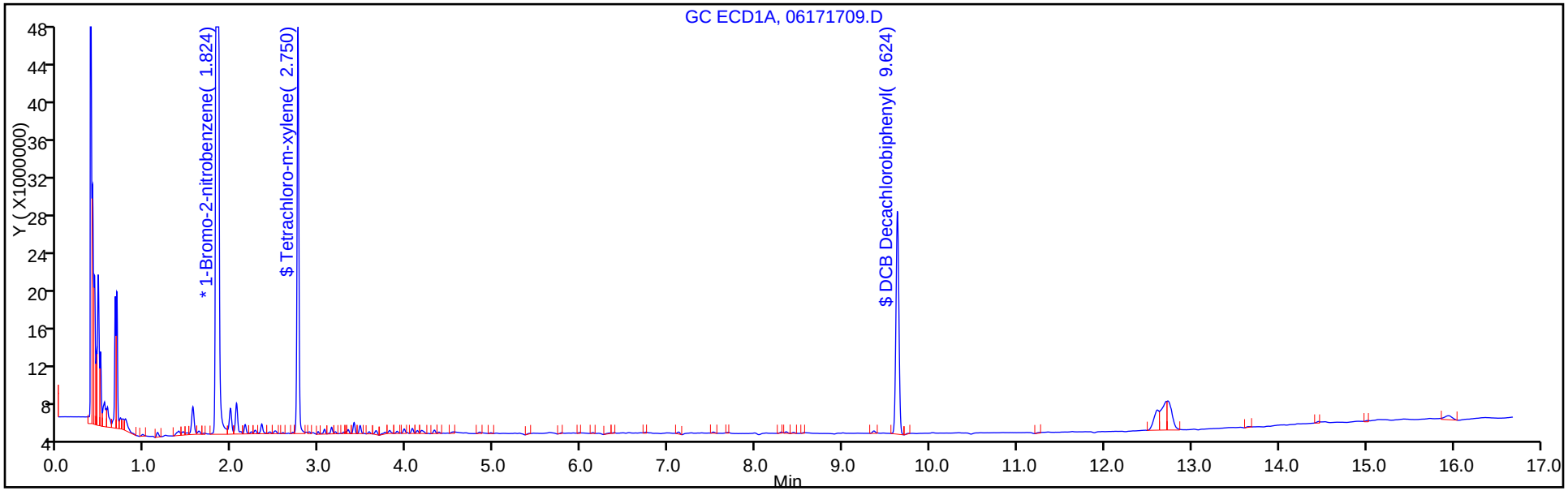
Report Date: 18-Jun-2017 10:14:32 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

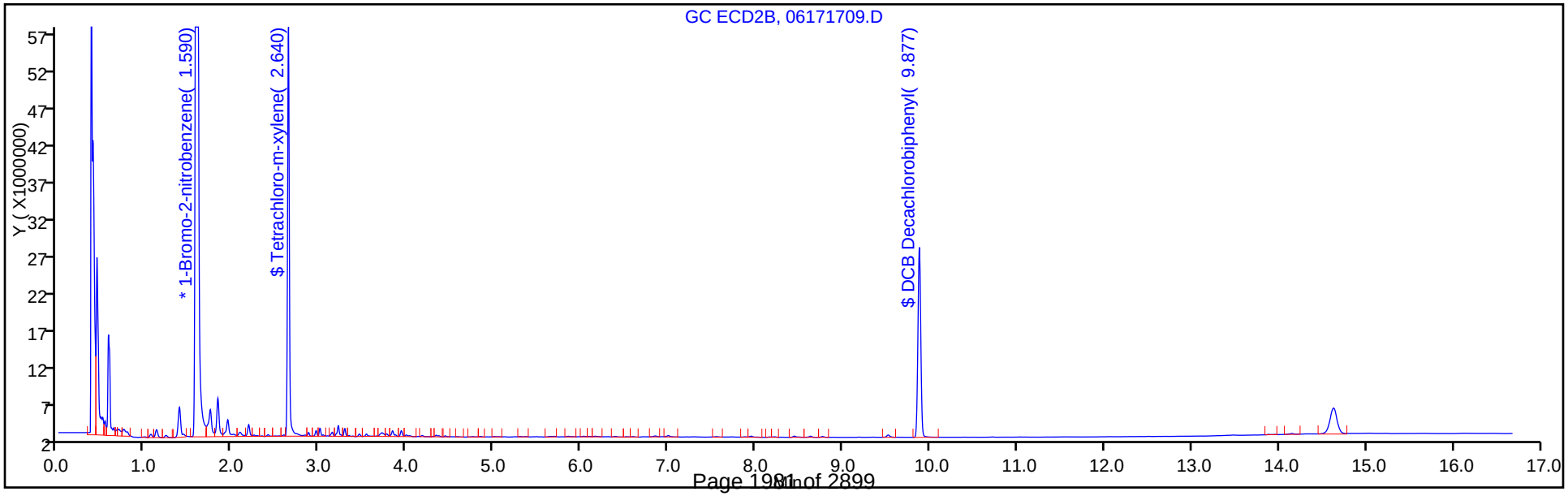
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171709.D

Injection Date:	17-Jun-2017 14:12:12	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97803-C-5-A	Lab Sample ID:	280-97803-5	Worklist Smp#:	9
Client ID:	SS025-SB02(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171709.D				
Lims ID:	280-97803-C-5-A				
Client ID:	SS025-SB02(0-2)				
Sample Type:	Client				
Inject. Date:	17-Jun-2017 14:12:12	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-C-5-A				
Misc. Info.:	280-0059856-009				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	18-Jun-2017 10:14:13	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK004				
First Level Reviewer: jacksonto		Date:	18-Jun-2017 10:10:07		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	15.8	79.18
$ 15 DCB Decachlorobiphenyl	20.0	14.5	72.58

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.1	85.39
$ 15 DCB Decachlorobiphenyl	20.0	15.1	75.60

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS03 | Lab Sample ID: 280-97803-6

Matrix: Solid | Lab File ID: 06171710.D

Analysis Method: 8082A | Date Collected: 05/31/2017 13:25

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 30.5(g) | Date Analyzed: 06/17/2017 14:33

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 25.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377714 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	20	U	43	20	6.7
11104-28-2	Arochlor 1221	22	U	62	22	21
11141-16-5	Arochlor 1232	20	U	43	20	6.7
53469-21-9	Arochlor 1242	43	U	43	43	12
12672-29-6	Arochlor 1248	26	U	43	26	7.4
11097-69-1	Arochlor 1254	22	U	43	22	7.3
11096-82-5	Arochlor 1260	10	U	43	10	3.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	81		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171710.D
Lims ID: 280-97803-B-6-A
Client ID: SS025-SS03
Sample Type: Client
Inject. Date: 17-Jun-2017 14:33:57 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-B-6-A
Misc. Info.: 280-0059856-010
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:13 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:10:19

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.823	1.825	-0.002	347851007	1000.0	
2	1.590	1.591	-0.001	400480880	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.750	2.748	0.002	62284111	16.5	
2	2.640	2.641	-0.001	65785828	14.0	
					RPD = 16.15	
3 PCB-1221						
1		2.963			ND	
1		3.106				
1		3.143				
2		2.966				
2		3.090				
2		3.143				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.485			ND	
1		3.948				
1		4.085				
1		4.151				
1		4.535				
2		3.501				
2		3.941				
2		4.075				
2		4.298				
2		4.575				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.293			ND	
1		5.623				
1		5.776				
1		6.483				
1		6.743				
2		5.310				
2		5.713				
2		5.860				
2		6.163				
2		6.860				
12 PCB-1260						
1		6.008			ND	
1		6.738				
1		7.228				
1		7.665				
1		8.048				
2		6.388				
2		6.841				
2		7.358				
2		7.728				
2		8.221				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.623	9.625	-0.002	57293127	15.6	
2	9.876	9.878	-0.002	62004515	16.2	
					RPD = 3.33	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

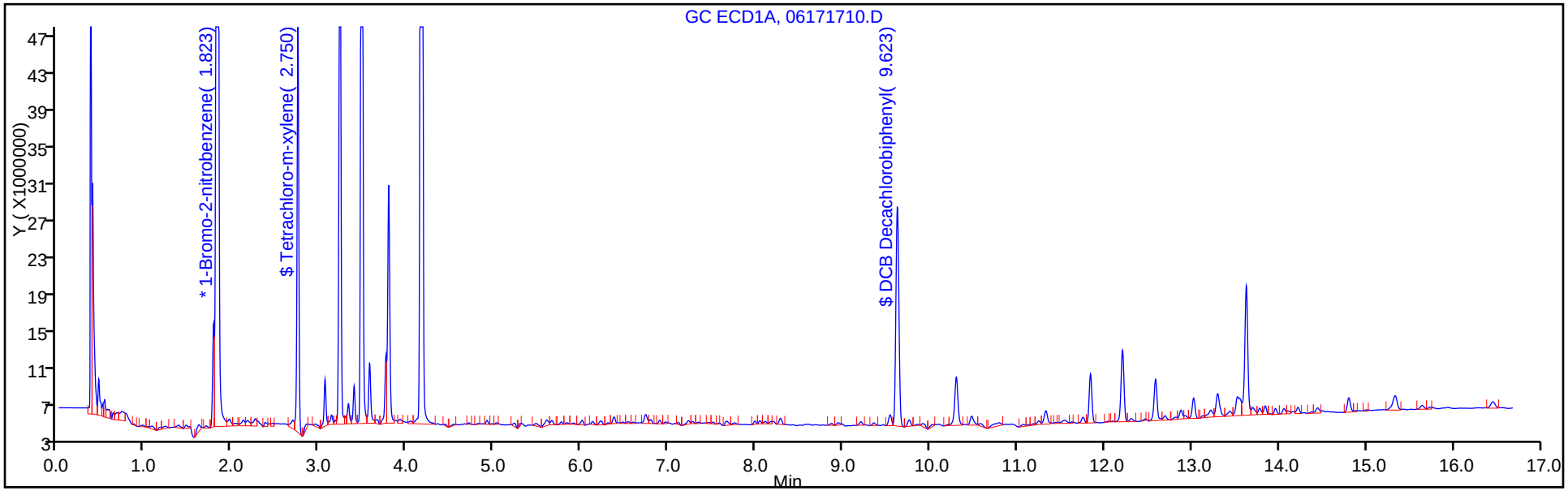
Report Date: 18-Jun-2017 10:14:34 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

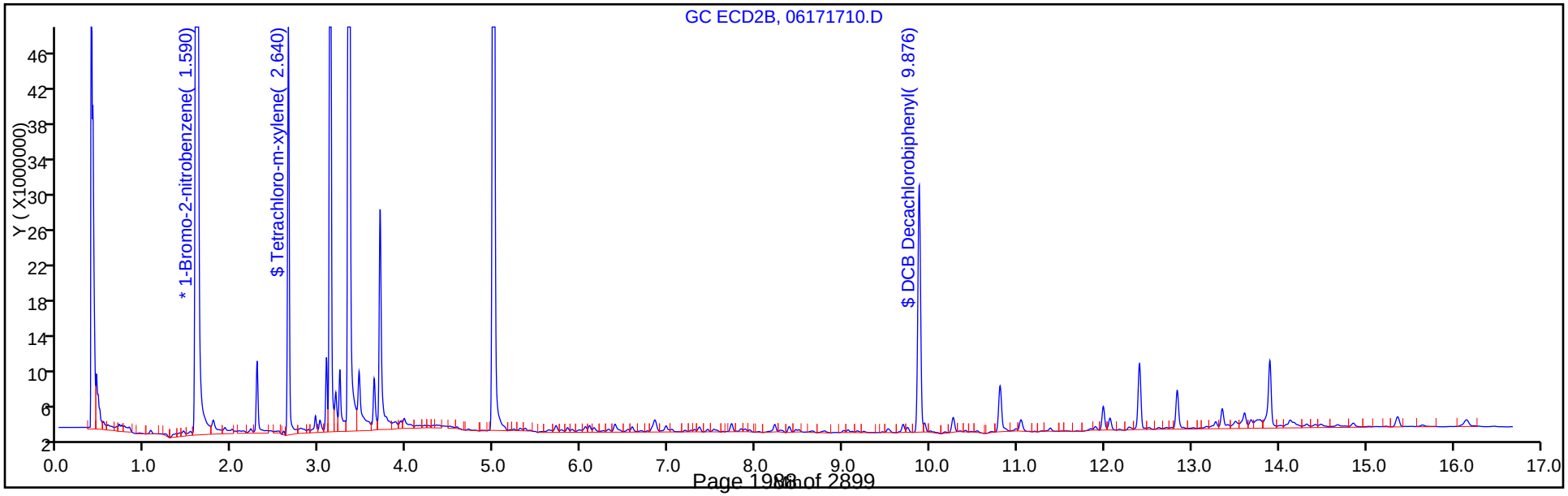
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171710.D

Injection Date:	17-Jun-2017 14:33:57	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97803-B-6-A	Lab Sample ID:	280-97803-6	Worklist Smp#:	10
Client ID:	SS025-SS03				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171710.D				
Lims ID:	280-97803-B-6-A				
Client ID:	SS025-SS03				
Sample Type:	Client				
Inject. Date:	17-Jun-2017 14:33:57	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-B-6-A				
Misc. Info.:	280-0059856-010				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	18-Jun-2017 10:14:13	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK004				
First Level Reviewer: jacksonto		Date:	18-Jun-2017 10:10:19		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	16.5	82.27
$ 15 DCB Decachlorobiphenyl	20.0	15.6	78.17

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	14.0	69.98
$ 15 DCB Decachlorobiphenyl	20.0	16.2	80.82

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB03(0-2) | Lab Sample ID: 280-97803-7

Matrix: Solid | Lab File ID: 06171711.D

Analysis Method: 8082A | Date Collected: 05/31/2017 13:40

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 31.1(g) | Date Analyzed: 06/17/2017 14:55

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 13.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377714 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	17	U	37	17	5.7
11104-28-2	Arochlor 1221	19	U	53	19	17
11141-16-5	Arochlor 1232	17	U	37	17	5.7
53469-21-9	Arochlor 1242	37	U	37	37	10
12672-29-6	Arochlor 1248	22	U	37	22	6.3
11097-69-1	Arochlor 1254	19	U	37	19	6.2
11096-82-5	Arochlor 1260	8.6	U	37	8.6	3.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	71		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171711.D
Lims ID: 280-97803-C-7-A
Client ID: SS025-SB03(0-2)
Sample Type: Client
Inject. Date: 17-Jun-2017 14:55:41 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-C-7-A
Misc. Info.: 280-0059856-011
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:13 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:10:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.825	1.825	0.000	358238787	1000.0	
2	1.588	1.591	-0.003	408782353	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.748	2.748	0.000	61962165	15.9	
2	2.638	2.641	-0.003	80400653	16.9	
					RPD = 6.33	
3 PCB-1221						
1		2.963			ND	
1		3.106				
1		3.143				
2		2.966				
2		3.090				
2		3.143				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.485			ND	
1		3.948				
1		4.085				
1		4.151				
1		4.535				
2		3.501				
2		3.941				
2		4.075				
2		4.298				
2		4.575				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.293			ND	
1		5.623				
1		5.776				
1		6.483				
1		6.743				
2		5.310				
2		5.713				
2		5.860				
2		6.163				
2		6.860				
12 PCB-1260						
1		6.008			ND	
1		6.738				
1		7.228				
1		7.665				
1		8.048				
2		6.388				
2		6.841				
2		7.358				
2		7.728				
2		8.221				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.625	9.625	0.000	51616565	13.6	
2	9.875	9.878	-0.003	55849413	14.2	
					RPD = 4.08	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

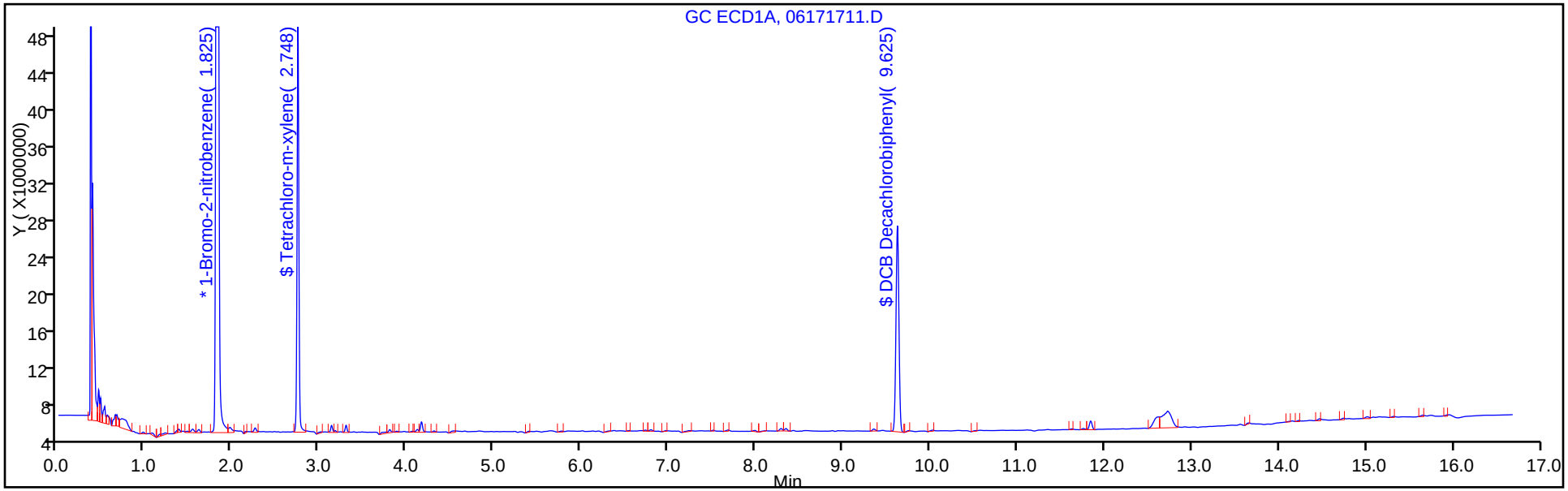
Report Date: 18-Jun-2017 10:14:36 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

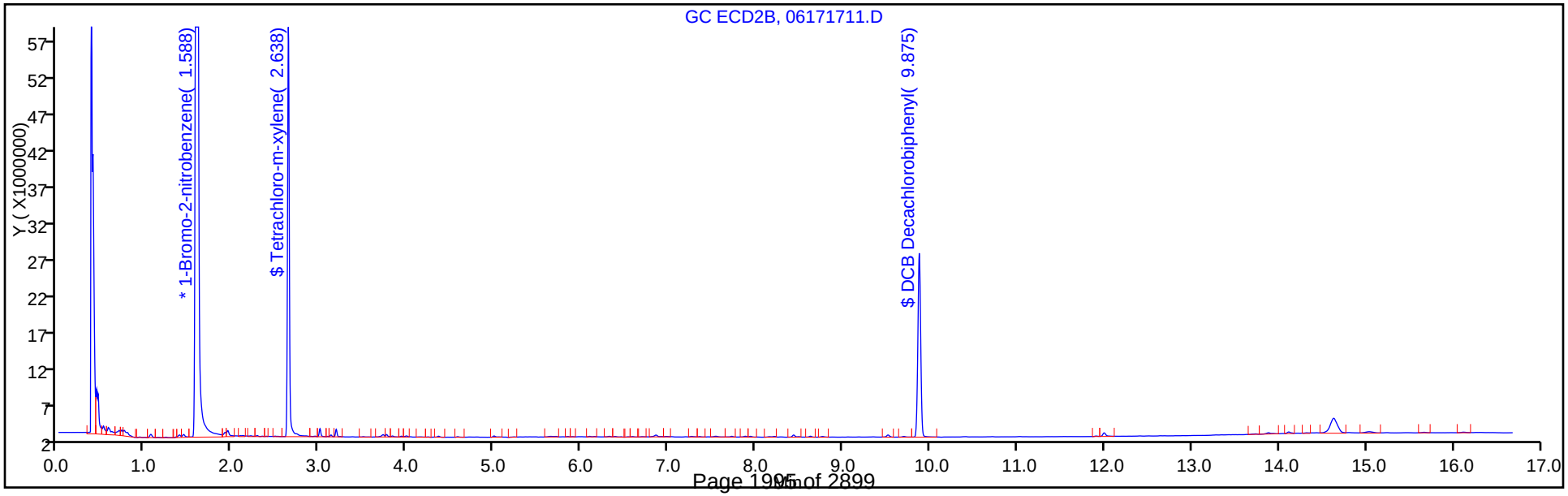
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171711.D

Injection Date:	17-Jun-2017 14:55:41	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97803-C-7-A	Lab Sample ID:	280-97803-7	Worklist Smp#:	11
Client ID:	SS025-SB03(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171711.D				
Lims ID:	280-97803-C-7-A				
Client ID:	SS025-SB03(0-2)				
Sample Type:	Client				
Inject. Date:	17-Jun-2017 14:55:41	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-C-7-A				
Misc. Info.:	280-0059856-011				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	18-Jun-2017 10:14:13	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK004				
First Level Reviewer: jacksonto		Date:	18-Jun-2017 10:10:27		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	15.9	79.40
$ 15 DCB Decachlorobiphenyl	20.0	13.6	67.97

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	16.9	84.59
$ 15 DCB Decachlorobiphenyl	20.0	14.2	70.80

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS04 | Lab Sample ID: 280-97803-8

Matrix: Solid | Lab File ID: 06171713.D

Analysis Method: 8082A | Date Collected: 05/31/2017 14:00

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 32.3(g) | Date Analyzed: 06/17/2017 15:39

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 10.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377714 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	15	U	34	15	5.3
11104-28-2	Arochlor 1221	18	U	48	18	16
11141-16-5	Arochlor 1232	15	U	34	15	5.3
53469-21-9	Arochlor 1242	34	U	34	34	9.4
12672-29-6	Arochlor 1248	21	U	34	21	5.8
11097-69-1	Arochlor 1254	18	U	34	18	5.7
11096-82-5	Arochlor 1260	6.2	J	34	7.9	2.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	83		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171713.D
Lims ID: 280-97803-B-8-A
Client ID: SS025-SS04
Sample Type: Client
Inject. Date: 17-Jun-2017 15:39:11 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-B-8-A
Misc. Info.: 280-0059856-013
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:11:16

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.823	1.825	-0.002	348581594	1000.0	
2	1.590	1.591	-0.001	401049398	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.750	2.748	0.002	63391556	16.7	
2	2.640	2.641	-0.001	77109596	16.5	
					RPD = 1.18	
3 PCB-1221						
1		2.963			ND	
1		3.106				
1		3.143				
2		2.966				
2		3.090				
2		3.143				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.485			ND	
1		3.948				
1		4.085				
1		4.151				
1		4.535				
2		3.501				
2		3.941				
2		4.075				
2		4.298				
2		4.575				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.293			ND	
1		5.623				
1		5.776				
1		6.483				
1		6.743				
2		5.310				
2		5.713				
2		5.860				
2		6.163				
2		6.860				
12 PCB-1260						
1	6.007	6.008	-0.001	4805301	14.6	
1	6.737	6.738	-0.001	8318181	15.6	
1	7.227	7.228	-0.001	4770339	19.6	
1	7.663	7.665	-0.002	7105847	13.7	
1	8.047	8.048	-0.001	6205644	22.2	
		Average of Peak Amounts =			17.1	
2	6.387	6.388	-0.001	6212285	7.03	
2	6.843	6.841	0.002	16341020	25.4	
2	7.353	7.358	-0.005	6636842	20.9	
2	7.723	7.728	-0.005	11382678	14.2	
2	8.217	8.221	-0.004	11002404	22.8	
		Average of Peak Amounts =			18.1	
					RPD = 5.25	
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.627	9.625	0.002	31209058	8.19	
2	9.877	9.878	-0.001	63688117	16.6	
					RPD = 67.81	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total						
1					17.1	
2					18.1	
					RPD = 5.25	
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

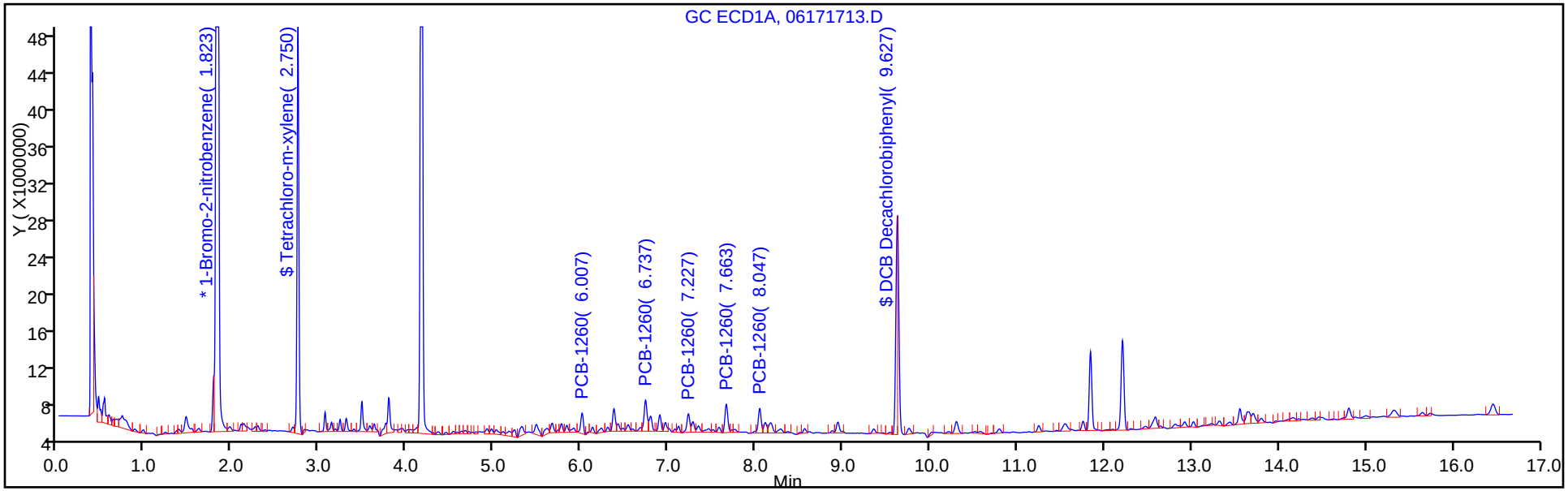
Report Date: 18-Jun-2017 10:14:40 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

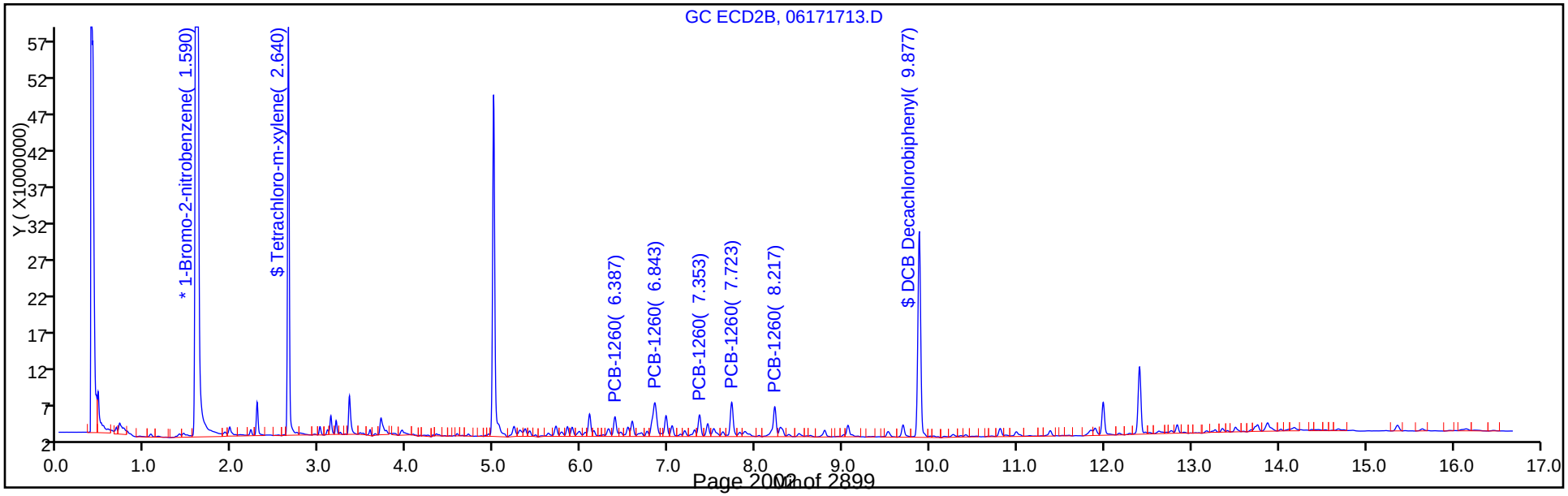
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171713.D

Injection Date:	17-Jun-2017 15:39:11	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97803-B-8-A	Lab Sample ID:	280-97803-8	Worklist Smp#:	13
Client ID:	SS025-SS04				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171713.D				
Lims ID:	280-97803-B-8-A				
Client ID:	SS025-SS04				
Sample Type:	Client				
Inject. Date:	17-Jun-2017 15:39:11	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-B-8-A				
Misc. Info.:	280-0059856-013				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	18-Jun-2017 10:14:37	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK004				
First Level Reviewer: jacksonto		Date:	18-Jun-2017 10:11:16		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	16.7	83.58
$ 15 DCB Decachlorobiphenyl	20.0	8.19	40.97

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	16.5	82.60
$ 15 DCB Decachlorobiphenyl	20.0	16.6	83.01

Report Date: 18-Jun-2017 10:14:41 Chrom Revision: 2.2 25-Apr-2017 13:27:22

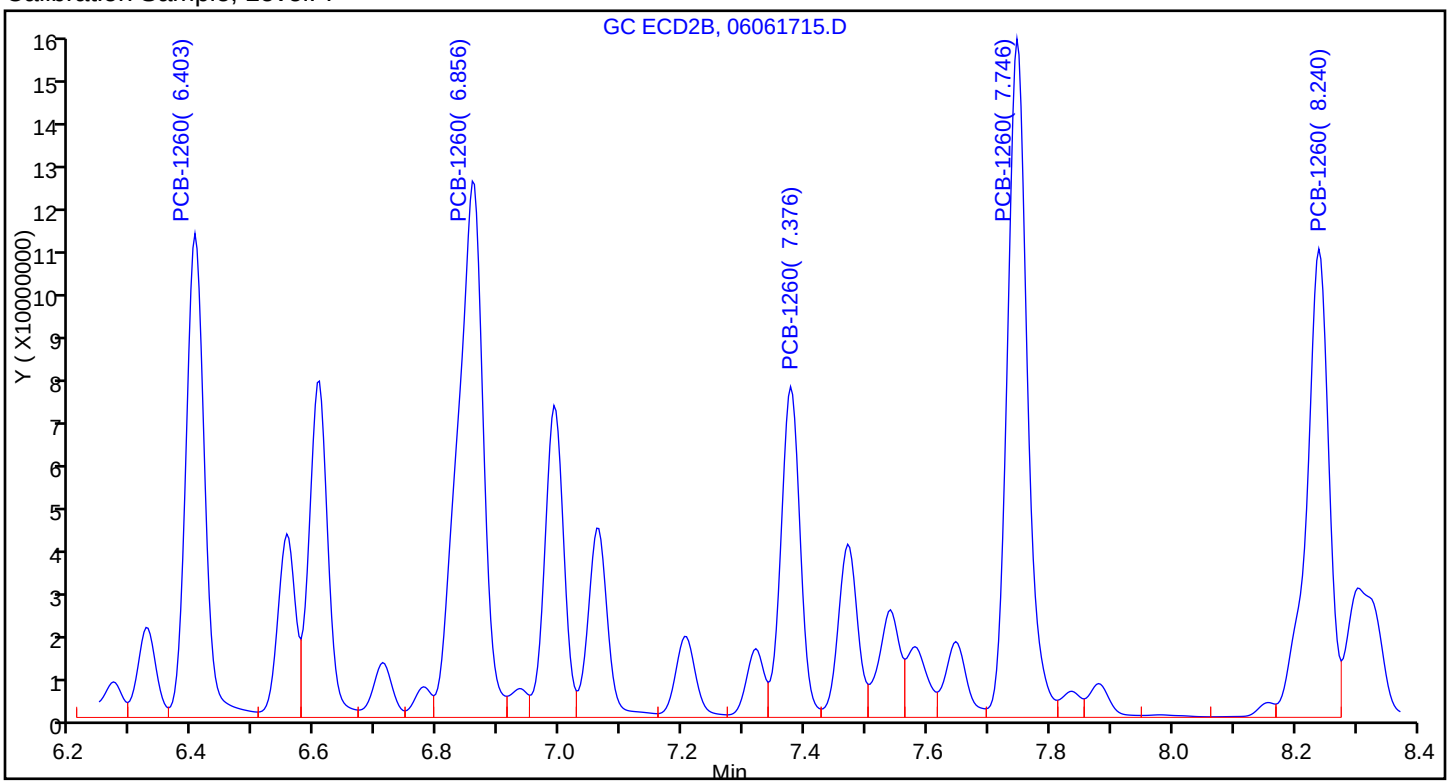
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171713.D

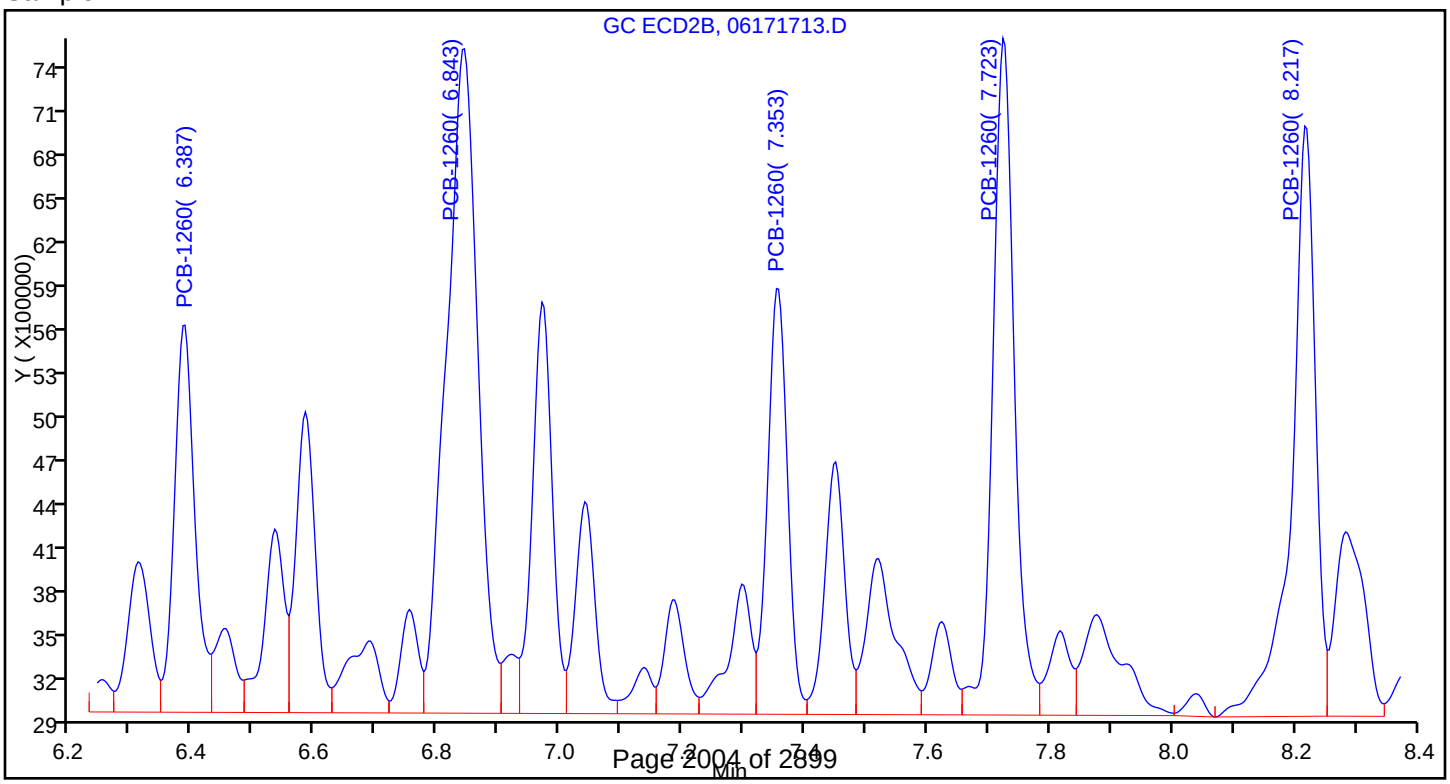
Injection Date:	17-Jun-2017 15:39:11	Instrument ID:	SGC_P3		
Lims ID:	280-97803-B-8-A	Lab Sample ID:	280-97803-8		
Client ID:	SS025-SS04				
Operator ID:	jax	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

12 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB04(0-2) | Lab Sample ID: 280-97803-9

Matrix: Solid | Lab File ID: 06171716.D

Analysis Method: 8082A | Date Collected: 05/31/2017 14:10

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 30.7(g) | Date Analyzed: 06/17/2017 16:44

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 17.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377714 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	18	U	39	18	6.1
11104-28-2	Arochlor 1221	20	U	56	20	19
11141-16-5	Arochlor 1232	18	U	39	18	6.1
53469-21-9	Arochlor 1242	39	U	39	39	11
12672-29-6	Arochlor 1248	24	U	39	24	6.7
11097-69-1	Arochlor 1254	20	U	39	20	6.6
11096-82-5	Arochlor 1260	9.2	U	39	9.2	3.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	88		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171716.D
Lims ID: 280-97803-B-9-A
Client ID: SS025-SB04(0-2)
Sample Type: Client
Inject. Date: 17-Jun-2017 16:44:27 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-B-9-A
Misc. Info.: 280-0059856-016
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:12:00

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.825	1.825	0.000	358920969	1000.0	
2	1.588	1.591	-0.003	412475548	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.748	2.748	0.000	68731274	17.6	
2	2.638	2.641	-0.003	87369882	18.3	
					RPD = 3.67	
3 PCB-1221						
1		2.963			ND	
1		3.106				
1		3.143				
2		2.966				
2		3.090				
2		3.143				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.485			ND	
1		3.948				
1		4.085				
1		4.151				
1		4.535				
2		3.501				
2		3.941				
2		4.075				
2		4.298				
2		4.575				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.293			ND	
1		5.623				
1		5.776				
1		6.483				
1		6.743				
2		5.310				
2		5.713				
2		5.860				
2		6.163				
2		6.860				
12 PCB-1260						
1		6.008			ND	
1		6.738				
1		7.228				
1		7.665				
1		8.048				
2		6.388				
2		6.841				
2		7.358				
2		7.728				
2		8.221				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.625	9.625	0.000	64779104	17.2	
2	9.875	9.878	-0.003	69188319	17.6	
					RPD = 2.24	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

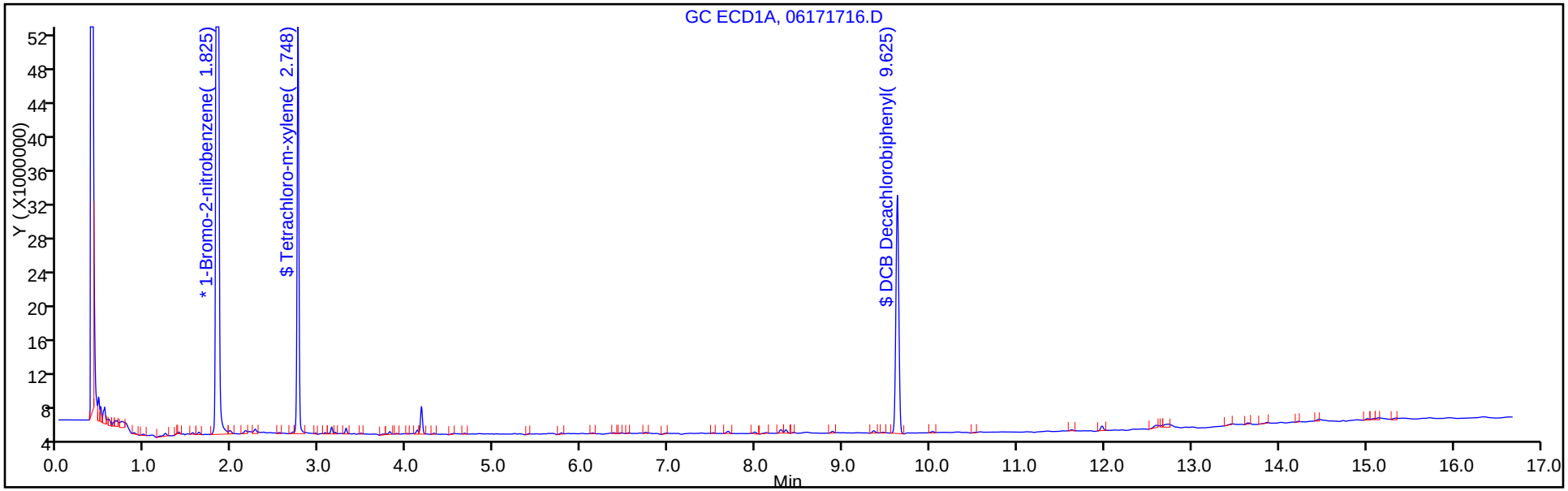
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TestAmerica Denver

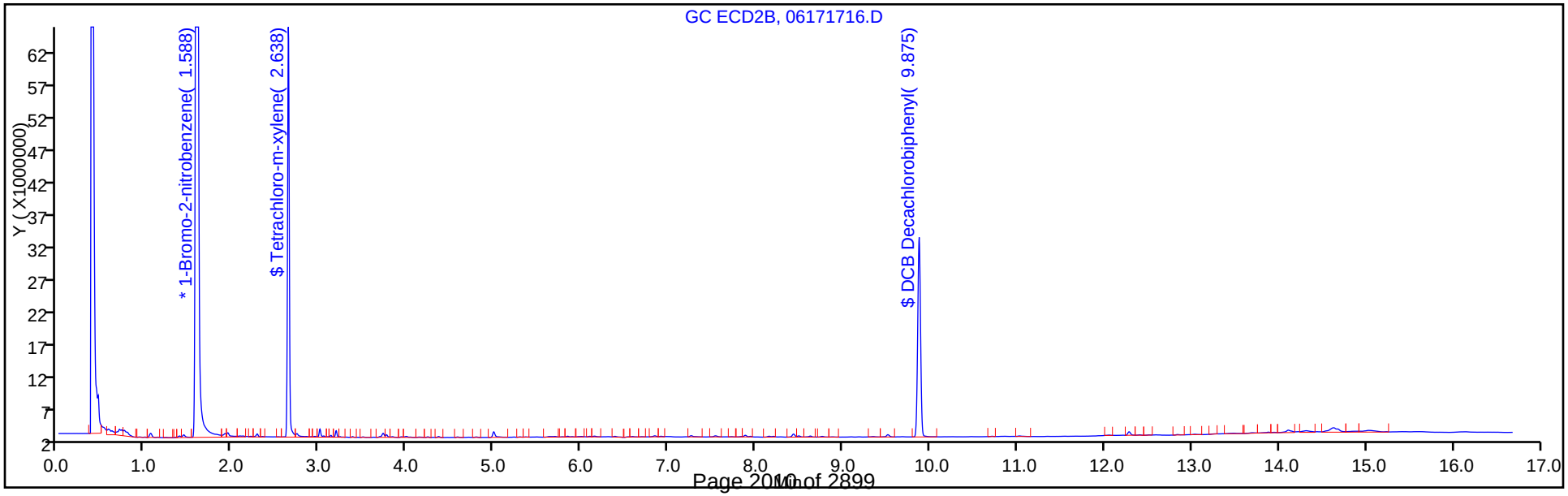
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Injection Date:	17-Jun-2017 16:44:27	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97803-B-9-A	Lab Sample ID:	280-97803-9	Worklist Smp#:	16
Client ID:	SS025-SB04(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171716.D				
Lims ID:	280-97803-B-9-A				
Client ID:	SS025-SB04(0-2)				
Sample Type:	Client				
Inject. Date:	17-Jun-2017 16:44:27	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-B-9-A				
Misc. Info.:	280-0059856-016				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	18-Jun-2017 10:14:37	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK004				
First Level Reviewer: jacksonto		Date:	18-Jun-2017 10:12:00		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.6	88.12
$ 15 DCB Decachlorobiphenyl	20.0	17.2	85.98

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	18.3	91.42
$ 15 DCB Decachlorobiphenyl	20.0	17.6	87.93

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS05 | Lab Sample ID: 280-97803-10

Matrix: Solid | Lab File ID: 06171717.D

Analysis Method: 8082A | Date Collected: 05/31/2017 14:30

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 31.2(g) | Date Analyzed: 06/17/2017 17:06

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 13.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377714 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	17	U	37	17	5.6
11104-28-2	Arochlor 1221	19	U	52	19	17
11141-16-5	Arochlor 1232	17	U	37	17	5.7
53469-21-9	Arochlor 1242	37	U	37	37	10
12672-29-6	Arochlor 1248	22	U	37	22	6.2
11097-69-1	Arochlor 1254	19	U	37	19	6.1
11096-82-5	Arochlor 1260	8.5	U	37	8.5	2.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	83		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171717.D
Lims ID: 280-97803-C-10-A
Client ID: SS025-SS05
Sample Type: Client
Inject. Date: 17-Jun-2017 17:06:10 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-C-10-A
Misc. Info.: 280-0059856-017
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:12:10

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.823	1.825	-0.002	362391472	1000.0	
2	1.590	1.591	-0.001	411572179	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.750	2.748	0.002	65220353	16.5	
2	2.640	2.641	-0.001	82778813	17.3	
					RPD = 4.60	
3 PCB-1221						
1		2.963			ND	
1		3.106				
1		3.143				
2		2.966				
2		3.090				
2		3.143				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.485			ND	
1		3.948				
1		4.085				
1		4.151				
1		4.535				
2		3.501				
2		3.941				
2		4.075				
2		4.298				
2		4.575				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.293			ND	
1		5.623				
1		5.776				
1		6.483				
1		6.743				
2		5.310				
2		5.713				
2		5.860				
2		6.163				
2		6.860				
12 PCB-1260						
1		6.008			ND	
1		6.738				
1		7.228				
1		7.665				
1		8.048				
2		6.388				
2		6.841				
2		7.358				
2		7.728				
2		8.221				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.623	9.625	-0.002	57687655	15.1	
2	9.873	9.878	-0.005	65047450	16.5	
					RPD = 9.05	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

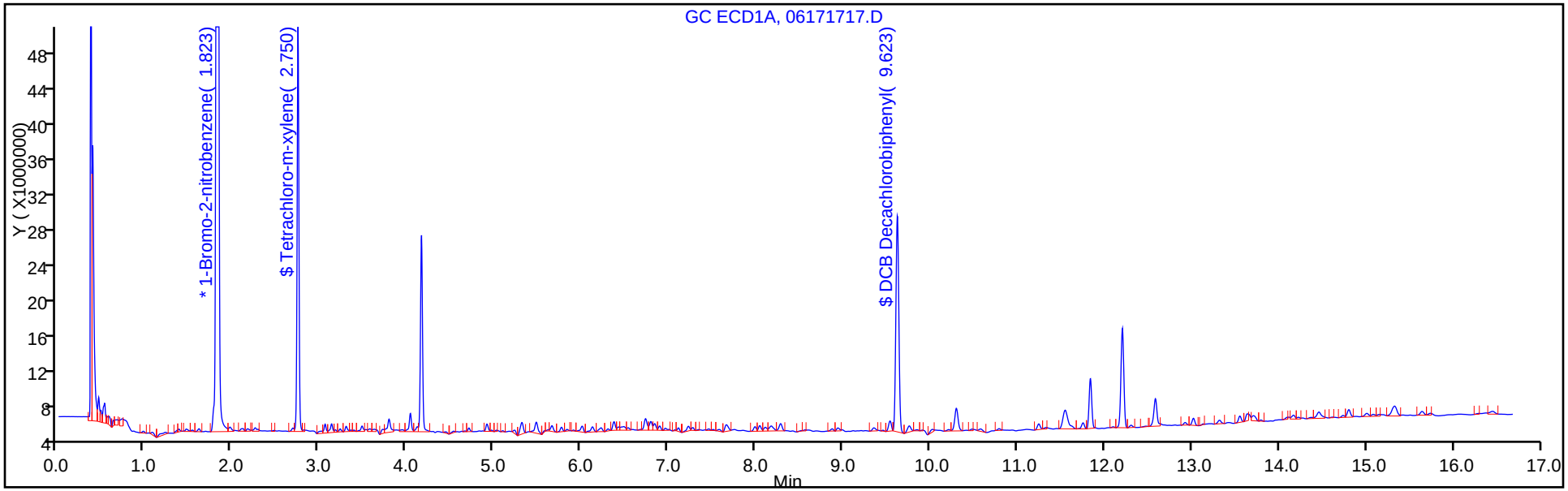
Report Date: 18-Jun-2017 10:14:48 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

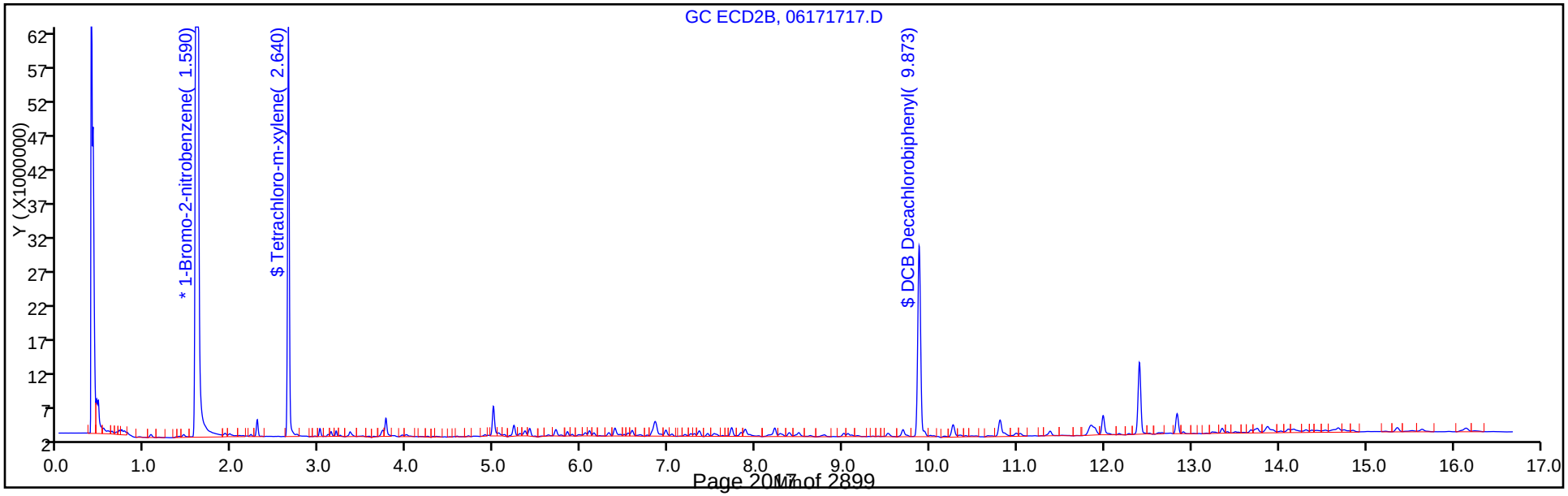
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171717.D

Injection Date:	17-Jun-2017 17:06:10	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97803-C-10-A	Lab Sample ID:	280-97803-10	Worklist Smp#:	17
Client ID:	SS025-SS05				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171717.D				
Lims ID:	280-97803-C-10-A				
Client ID:	SS025-SS05				
Sample Type:	Client				
Inject. Date:	17-Jun-2017 17:06:10	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-C-10-A				
Misc. Info.:	280-0059856-017				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	18-Jun-2017 10:14:37	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK004				
First Level Reviewer: jacksonto		Date:	18-Jun-2017 10:12:10		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	16.5	82.70
$ 15 DCB Decachlorobiphenyl	20.0	15.1	75.44

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.3	86.60
$ 15 DCB Decachlorobiphenyl	20.0	16.5	82.59

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB05(0-2) | Lab Sample ID: 280-97803-11

Matrix: Solid | Lab File ID: 06171718.D

Analysis Method: 8082A | Date Collected: 05/31/2017 14:40

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 30.7(g) | Date Analyzed: 06/17/2017 17:27

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 14.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377714 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	17	U	38	17	5.8
11104-28-2	Arochlor 1221	19	U	54	19	18
11141-16-5	Arochlor 1232	17	U	38	17	5.8
53469-21-9	Arochlor 1242	38	U	38	38	10
12672-29-6	Arochlor 1248	23	U	38	23	6.4
11097-69-1	Arochlor 1254	19	U	38	19	6.3
11096-82-5	Arochlor 1260	8.8	U	38	8.8	3.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	87		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171718.D
Lims ID: 280-97803-C-11-A
Client ID: SS025-SB05(0-2)
Sample Type: Client
Inject. Date: 17-Jun-2017 17:27:53 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-C-11-A
Misc. Info.: 280-0059856-018
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:12:19

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.825	1.825	0.000	356668653	1000.0	
2	1.588	1.591	-0.003	403360367	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.748	2.748	0.000	64890782	16.7	
2	2.638	2.641	-0.003	83564535	17.9	
					RPD = 6.59	
3 PCB-1221						
1		2.963			ND	
1		3.106				
1		3.143				
2		2.966				
2		3.090				
2		3.143				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.485			ND	
1		3.948				
1		4.085				
1		4.151				
1		4.535				
2		3.501				
2		3.941				
2		4.075				
2		4.298				
2		4.575				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.293			ND	
1		5.623				
1		5.776				
1		6.483				
1		6.743				
2		5.310				
2		5.713				
2		5.860				
2		6.163				
2		6.860				
12 PCB-1260						
1		6.008			ND	
1		6.738				
1		7.228				
1		7.665				
1		8.048				
2		6.388				
2		6.841				
2		7.358				
2		7.728				
2		8.221				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.622	9.625	-0.003	62667009	16.7	
2	9.875	9.878	-0.003	66879434	17.4	
					RPD = 3.81	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

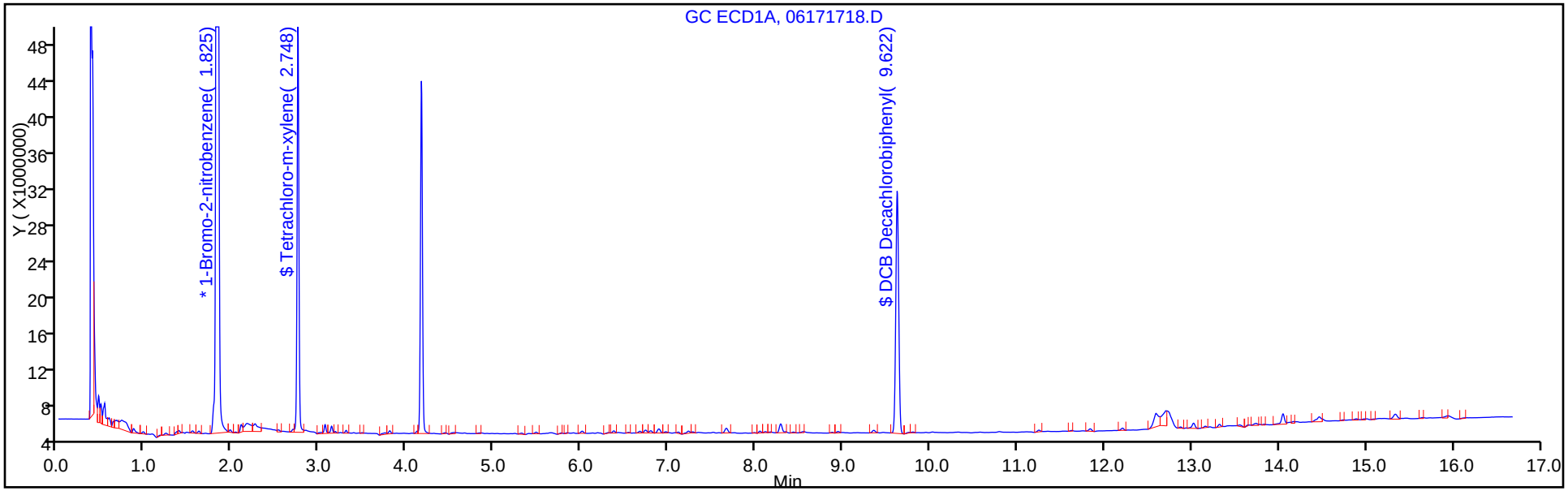
Report Date: 18-Jun-2017 10:14:50 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

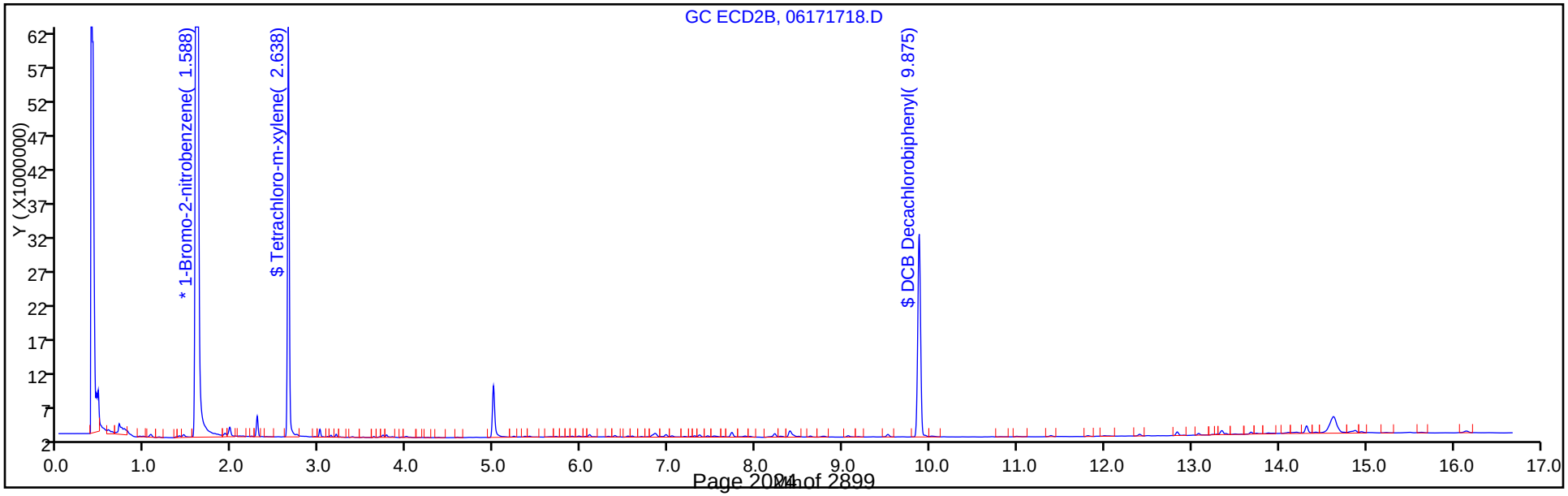
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171718.D

Injection Date:	17-Jun-2017 17:27:53	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97803-C-11-A	Lab Sample ID:	280-97803-11	Worklist Smp#:	18
Client ID:	SS025-SB05(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171718.D				
Lims ID:	280-97803-C-11-A				
Client ID:	SS025-SB05(0-2)				
Sample Type:	Client				
Inject. Date:	17-Jun-2017 17:27:53	ALS Bottle#:	18	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-C-11-A				
Misc. Info.:	280-0059856-018				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	18-Jun-2017 10:14:37	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK004				
First Level Reviewer: jacksonto		Date:	18-Jun-2017 10:12:19		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	16.7	83.62
$ 15 DCB Decachlorobiphenyl	20.0	16.7	83.62

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.9	89.32
$ 15 DCB Decachlorobiphenyl	20.0	17.4	86.86

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SB05(2-4) | Lab Sample ID: 280-97803-12

Matrix: Solid | Lab File ID: 06171719.D

Analysis Method: 8082A | Date Collected: 05/31/2017 15:00

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 31.1(g) | Date Analyzed: 06/17/2017 17:49

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 9.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377714 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	16	U	35	16	5.4
11104-28-2	Arochlor 1221	18	U	50	18	17
11141-16-5	Arochlor 1232	16	U	35	16	5.5
53469-21-9	Arochlor 1242	35	U	35	35	9.8
12672-29-6	Arochlor 1248	21	U	35	21	6.0
11097-69-1	Arochlor 1254	18	U	35	18	5.9
11096-82-5	Arochlor 1260	8.2	U	35	8.2	2.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	89		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171719.D
Lims ID: 280-97803-C-12-A
Client ID: SS025-SB05(2-4)
Sample Type: Client
Inject. Date: 17-Jun-2017 17:49:36 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-C-12-A
Misc. Info.: 280-0059856-019
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:12:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.824	1.825	-0.001	362381411	1000.0	
2	1.590	1.591	-0.001	409065500	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.750	2.748	0.002	68228603	17.3	
2	2.640	2.641	-0.001	86599471	18.3	
					RPD = 5.35	
3 PCB-1221						
1		2.963			ND	
1		3.106				
1		3.143				
2		2.966				
2		3.090				
2		3.143				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.485			ND	
1		3.948				
1		4.085				
1		4.151				
1		4.535				
2		3.501				
2		3.941				
2		4.075				
2		4.298				
2		4.575				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.293			ND	
1		5.623				
1		5.776				
1		6.483				
1		6.743				
2		5.310				
2		5.713				
2		5.860				
2		6.163				
2		6.860				
12 PCB-1260						
1		6.008			ND	
1		6.738				
1		7.228				
1		7.665				
1		8.048				
2		6.388				
2		6.841				
2		7.358				
2		7.728				
2		8.221				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.624	9.625	-0.001	65537294	17.2	
2	9.874	9.878	-0.004	69207147	17.7	
					RPD = 2.93	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

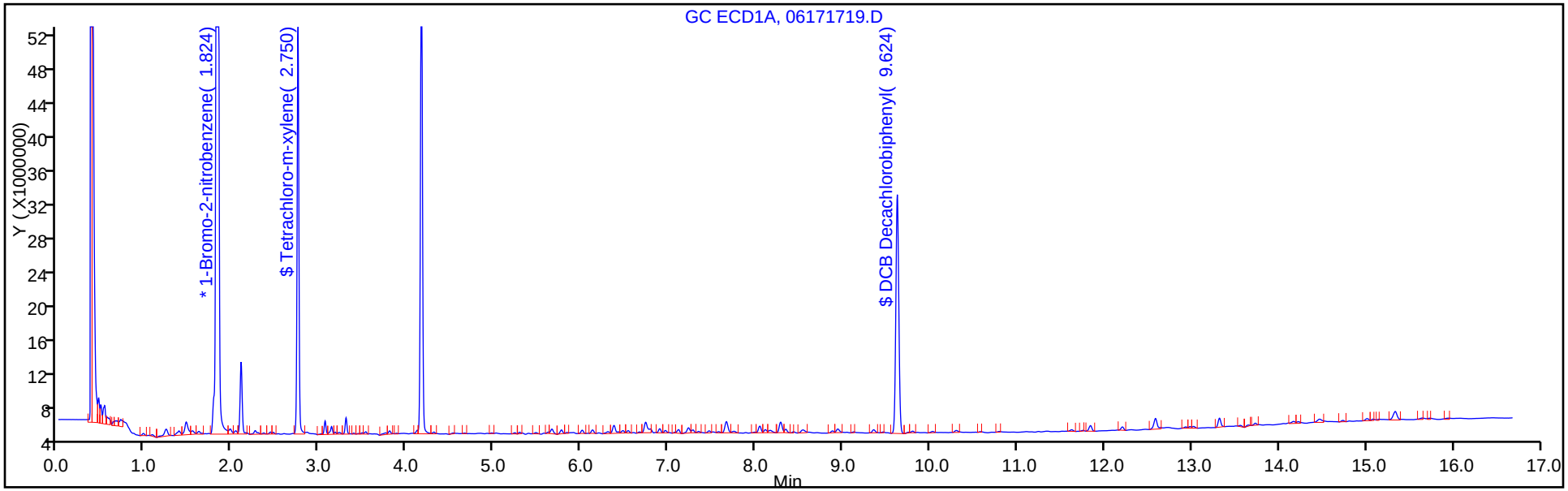
Report Date: 18-Jun-2017 10:14:52 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

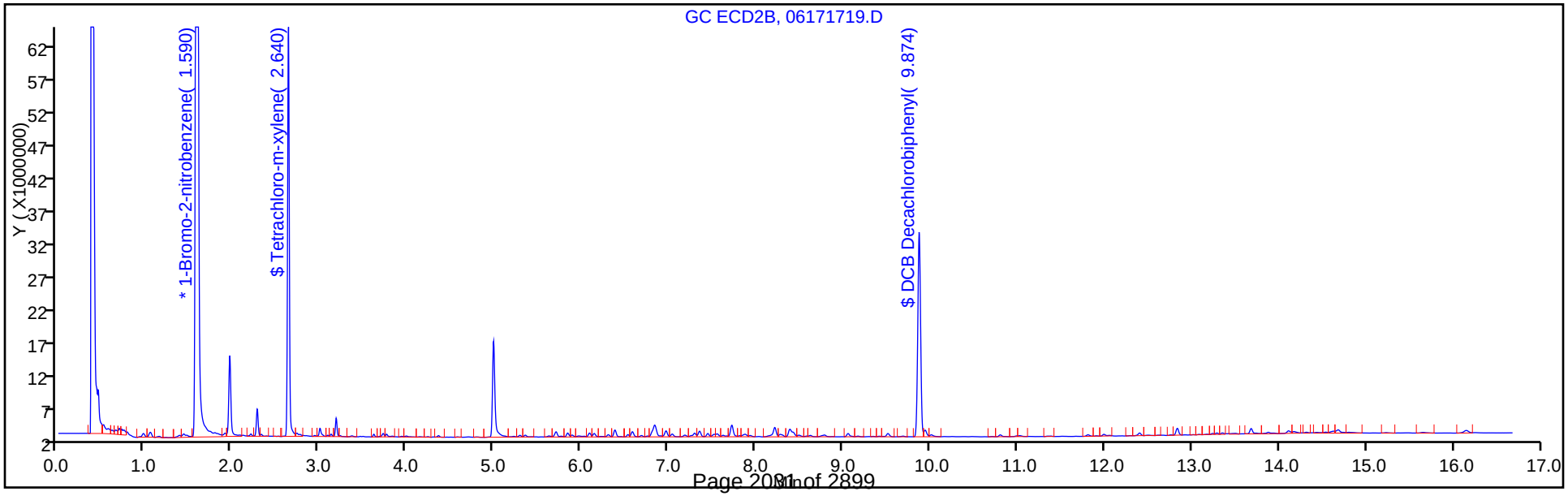
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171719.D

Injection Date:	17-Jun-2017 17:49:36	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97803-C-12-A	Lab Sample ID:	280-97803-12	Worklist Smp#:	19
Client ID:	SS025-SB05(2-4)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171719.D				
Lims ID:	280-97803-C-12-A				
Client ID:	SS025-SB05(2-4)				
Sample Type:	Client				
Inject. Date:	17-Jun-2017 17:49:36	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-C-12-A				
Misc. Info.:	280-0059856-019				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	18-Jun-2017 10:14:37	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK004				
First Level Reviewer: jacksonto		Date:	18-Jun-2017 10:12:35		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.3	86.60
$ 15 DCB Decachlorobiphenyl	20.0	17.2	86.16

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	18.3	91.36
$ 15 DCB Decachlorobiphenyl	20.0	17.7	88.72

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS06 | Lab Sample ID: 280-97803-13

Matrix: Solid | Lab File ID: 06171720.D

Analysis Method: 8082A | Date Collected: 05/31/2017 15:40

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 32.0(g) | Date Analyzed: 06/17/2017 18:11

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 12.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377714 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	16	U	36	16	5.5
11104-28-2	Arochlor 1221	18	U	51	18	17
11141-16-5	Arochlor 1232	16	U	36	16	5.5
53469-21-9	Arochlor 1242	36	U	36	36	9.8
12672-29-6	Arochlor 1248	22	U	36	22	6.0
11097-69-1	Arochlor 1254	18	U	36	18	5.9
11096-82-5	Arochlor 1260	8.3	U	36	8.3	2.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	81		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171720.D
Lims ID: 280-97803-B-13-A
Client ID: SS025-SS06
Sample Type: Client
Inject. Date: 17-Jun-2017 18:11:19 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-B-13-A
Misc. Info.: 280-0059856-020
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:12:51

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.825	1.825	0.000	368212907	1000.0	
2	1.592	1.591	0.001	415031752	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.748	2.748	0.000	65048706	16.2	
2	2.638	2.641	-0.003	81371178	16.9	
					RPD = 3.83	
3 PCB-1221						
1		2.963			ND	
1		3.106				
1		3.143				
2		2.966				
2		3.090				
2		3.143				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.485			ND	
1		3.948				
1		4.085				
1		4.151				
1		4.535				
2		3.501				
2		3.941				
2		4.075				
2		4.298				
2		4.575				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.293			ND	
1		5.623				
1		5.776				
1		6.483				
1		6.743				
2		5.310				
2		5.713				
2		5.860				
2		6.163				
2		6.860				
12 PCB-1260						
1		6.008			ND	
1		6.738				
1		7.228				
1		7.665				
1		8.048				
2		6.388				
2		6.841				
2		7.358				
2		7.728				
2		8.221				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.625	9.625	0.000	59448620	15.3	
2	9.875	9.878	-0.003	64193367	16.1	
					RPD = 5.30	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

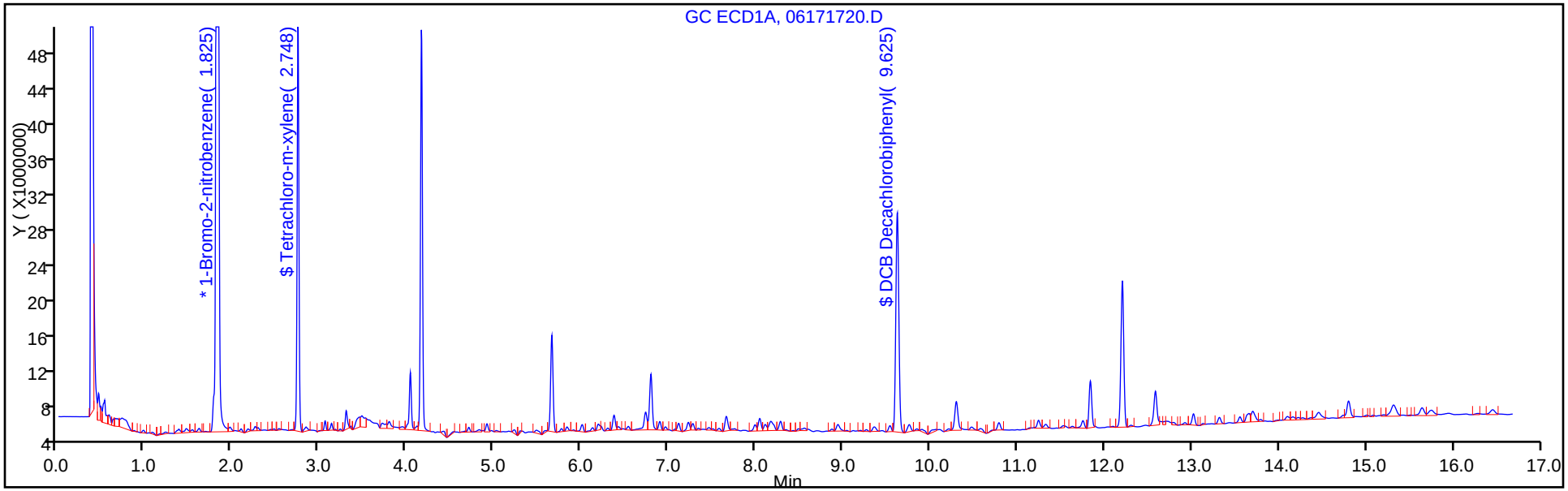
Report Date: 18-Jun-2017 10:14:54 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

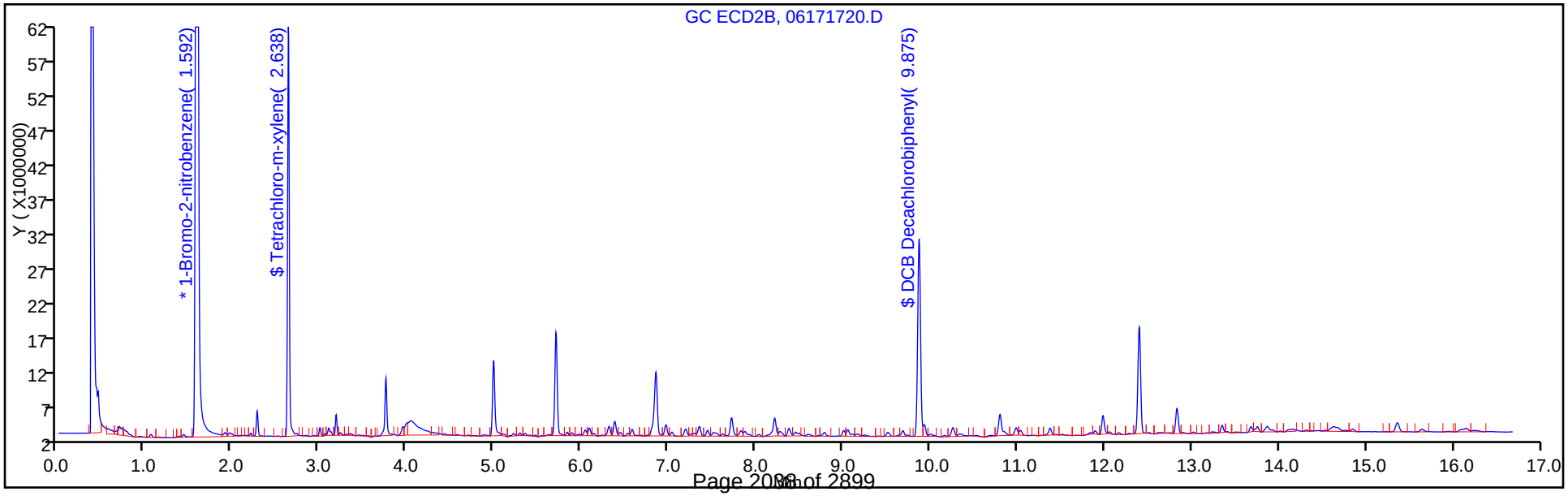
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171720.D

Injection Date:	17-Jun-2017 18:11:19	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97803-B-13-A	Lab Sample ID:	280-97803-13	Worklist Smp#:	20
Client ID:	SS025-SS06				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171720.D				
Lims ID:	280-97803-B-13-A				
Client ID:	SS025-SS06				
Sample Type:	Client				
Inject. Date:	17-Jun-2017 18:11:19	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-B-13-A				
Misc. Info.:	280-0059856-020				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	18-Jun-2017 10:14:37	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK004				
First Level Reviewer: jacksonto		Date:	18-Jun-2017 10:12:51		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	16.2	81.14
$ 15 DCB Decachlorobiphenyl	20.0	15.3	76.56

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	16.9	84.31
$ 15 DCB Decachlorobiphenyl	20.0	16.1	80.73

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS06-a | Lab Sample ID: 280-97803-14

Matrix: Solid | Lab File ID: 06211707.D

Analysis Method: 8082A | Date Collected: 05/31/2017 15:40

Extraction Method: 3546 | Date Extracted: 06/14/2017 09:49

Sample wt/vol: 30.8(g) | Date Analyzed: 06/21/2017 15:41

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 13.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378200 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	17	U	37	17	5.7
11104-28-2	Arochlor 1221	19	U	53	19	18
11141-16-5	Arochlor 1232	17	U	37	17	5.7
53469-21-9	Arochlor 1242	37	U	37	37	10
12672-29-6	Arochlor 1248	22	U	37	22	6.3
11097-69-1	Arochlor 1254	19	U	37	19	6.2
11096-82-5	Arochlor 1260	8.6	U	37	8.6	3.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	67		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211707.D
Lims ID: 280-97803-A-14-E
Client ID: SS025-SS06-a
Sample Type: Client
Inject. Date: 21-Jun-2017 15:41:22 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-A-14-E
Misc. Info.: 280-0059992-007
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 22-Jun-2017 10:07:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK002

First Level Reviewer: jacksonto Date: 22-Jun-2017 06:26:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.823	1.825	-0.002	394920525	1000.0	
2	1.583	1.585	-0.002	442174095	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.749	2.748	0.001	70648592	16.4	
2	2.636	2.635	0.001	91337052	17.8	
					RPD = 8.01	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.481			ND	
1		3.948				
1		4.085				
1		4.151				
1		4.535				
2		3.495				
2		3.931				
2		4.065				
2		4.291				
2		4.565				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						
1		6.008			ND	
1		6.738				
1		7.224				
1		7.661				
1		8.044				
2		6.374				
2		6.828				
2		7.348				
2		7.714				
2		8.208				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.626	9.624	0.002	52478831	12.5	
2	9.866	9.864	0.002	57148930	13.3	
					RPD = 6.68	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

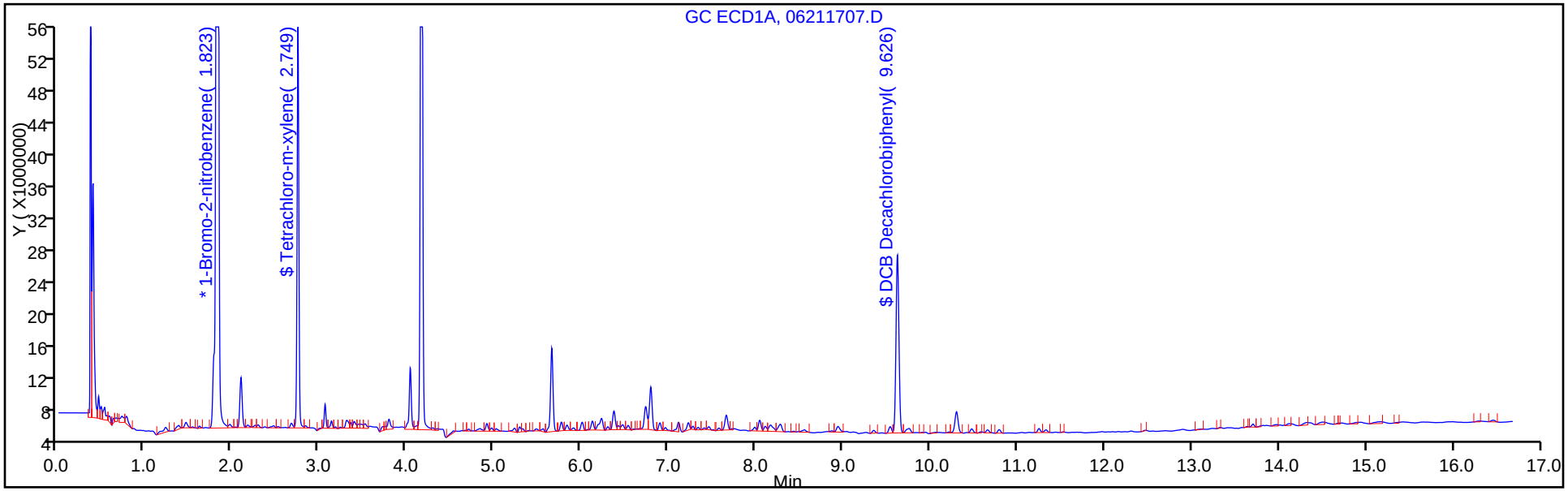
Report Date: 22-Jun-2017 10:07:46 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

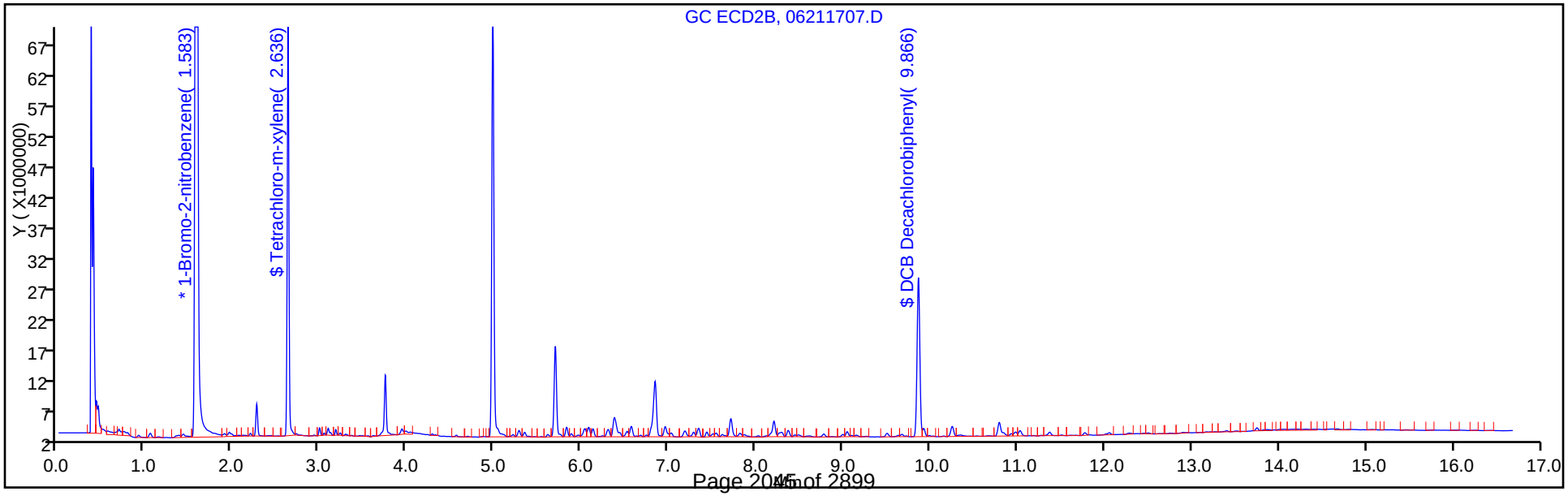
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211707.D

Injection Date:	21-Jun-2017 15:41:22	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97803-A-14-E	Lab Sample ID:	280-97803-14	Worklist Smp#:	7
Client ID:	SS025-SS06-a				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211707.D				
Lims ID:	280-97803-A-14-E				
Client ID:	SS025-SS06-a				
Sample Type:	Client				
Inject. Date:	21-Jun-2017 15:41:22	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-A-14-E				
Misc. Info.:	280-0059992-007				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	22-Jun-2017 10:07:37	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK002				
First Level Reviewer: jacksonto		Date:	22-Jun-2017 06:26:30		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	16.4	82.19
$ 15 DCB Decachlorobiphenyl	20.0	12.5	62.43

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.8	89.05
$ 15 DCB Decachlorobiphenyl	20.0	13.3	66.74

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 13:49 Calibration End Date: 06/06/2017 15:59 Calibration ID: 29385

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11248 280-376236/7	06061707.D
Level 2	STDL21248 280-376236/6	06061706.D
Level 3	STDL31248 280-376236/5	06061705.D
Level 4	STDL41248 280-376236/4	06061704.D
Level 5	STDL51248 280-376236/3	06061703.D
Level 6	STDL61248 280-376236/2	06061702.D
Level 7	STDL71248 280-376236/1	06061701.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1248 Peak 1	0.2147 0.1570	0.2000 0.1549	0.1787	0.1603	0.1525	Lin1	1.8880	0.1529							0.9990		0.9900
PCB-1248 Peak 2	0.5593 0.4171	0.5102 0.4262	0.4604	0.4247	0.4148	Lin1	3.9052	0.4153							1.0000		0.9900
PCB-1248 Peak 3	0.5996 0.4309	0.5434 0.4343	0.4919	0.4389	0.4282	Lin1	4.9722	0.4254							1.0000		0.9900
PCB-1248 Peak 4	0.6338 0.4207	0.5489 0.4256	0.5003	0.4398	0.4216	Lin1	6.1277	0.4158							1.0000		0.9900
PCB-1248 Peak 5	0.4237 0.3132	0.3859 0.3168	0.3471	0.3233	0.3143	Lin1	3.1452	0.3111							1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 13:49 Calibration End Date: 06/06/2017 15:59 Calibration ID: 29385

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11248 280-376236/7	06061707.D
Level 2	STDL21248 280-376236/6	06061706.D
Level 3	STDL31248 280-376236/5	06061705.D
Level 4	STDL41248 280-376236/4	06061704.D
Level 5	STDL51248 280-376236/3	06061703.D
Level 6	STDL61248 280-376236/2	06061702.D
Level 7	STDL71248 280-376236/1	06061701.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1248 Peak 1	BNB	Lin1	1738031 37083917	3291704 48550285	6019277	13436171	24749110	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 2	BNB	Lin1	4527237 98499824	8395956 133611078	15503715	35602134	67300939	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 3	BNB	Lin1	4853502 101771802	8940744 136147687	16563599	36790257	69471291	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 4	BNB	Lin1	5130218 99347497	9031280 133399245	16846461	36867560	68399630	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 5	BNB	Lin1	3429912 73957477	6349225 99315895	11688134	27101154	51001785	25.0 750	50.0 1000	100	250	500

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061701.D
Lims ID: STDL71248
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 13:49:03 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL71248
Misc. Info.: 280-0059455-001
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:16 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 06-Jun-2017 14:49:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	313463735	1000.0	1000.0	
2	1.598	1.599	-0.001	337522132	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							M
1	3.488	3.486	0.002	48550285	1000.0	1000.6	
1	3.948	3.946	0.002	133611078	1000.0	1017.0	
1	4.301	4.302	-0.001	136147687	1000.0	1009.4	
1	4.538	4.539	-0.001	133399245	1000.0	1008.8	
1	5.291	5.289	0.002	99315895	1000.0	1008.2	
		Average of Peak Amounts =				1008.8	
2	3.948	3.949	-0.001	155312014	1000.0	1000.0	M
2	4.585	4.586	-0.001	119725030	1000.0	1008.0	M
2	4.718	4.719	-0.001	138430869	1000.0	990.5	M
2	5.028	5.029	-0.001	133820350	1000.0	1002.1	M
2	5.071	5.072	-0.001	157166673	1000.0	992.9	M
		Average of Peak Amounts =				998.7	
						RPD = 1.01	
S 8 Polychlorinated biphenyls, Total							
1						1008.8	
2						998.7	
						RPD = 1.01	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1248_L7_00014	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

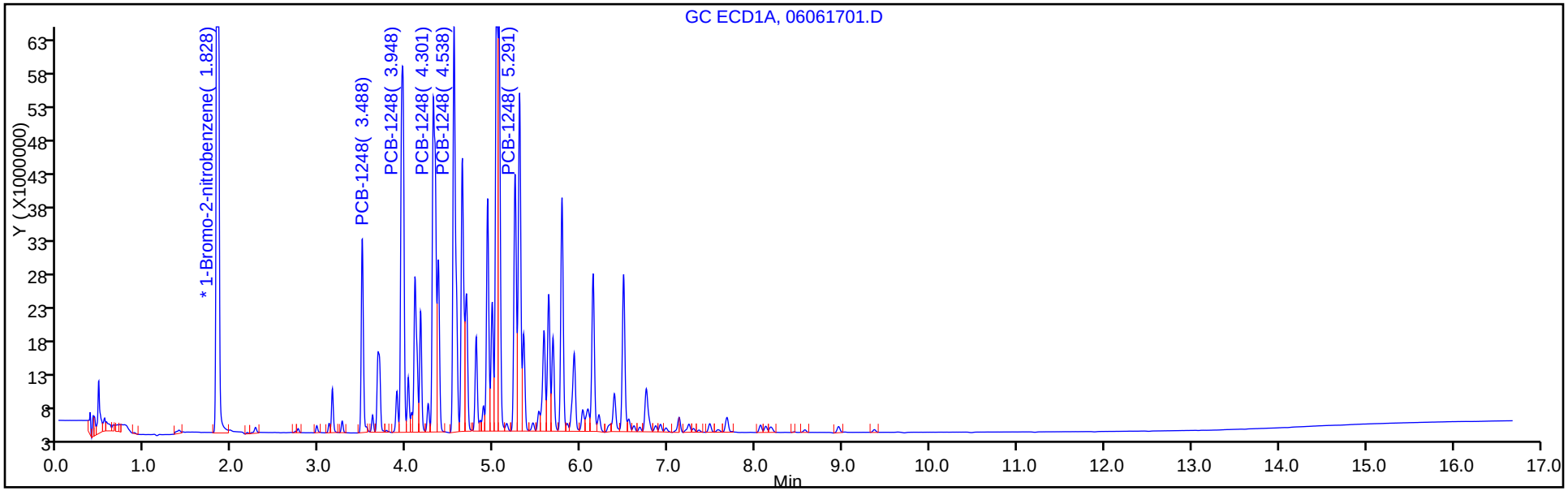
Report Date: 07-Jun-2017 06:52:17 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

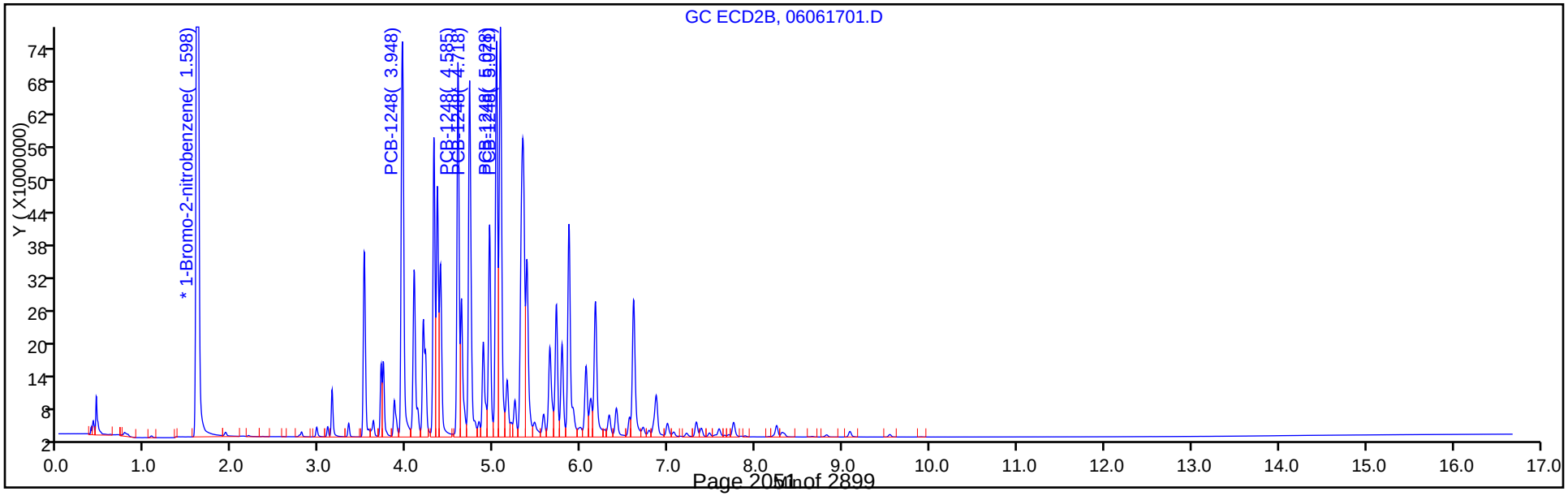
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061701.D

Injection Date:	06-Jun-2017 13:49:03	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL71248			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061702.D
Lims ID: STDL61248
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Jun-2017 14:10:47 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL61248
Misc. Info.: 280-0059455-002
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:18 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 06-Jun-2017 14:49:51

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	314882116	1000.0	1000.0	
2	1.600	1.599	0.001	349495294	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							M
1	3.484	3.486	-0.002	37083917	750.0	757.9	
1	3.947	3.946	0.001	98499824	750.0	743.9	
1	4.300	4.302	-0.002	101771802	750.0	748.1	
1	4.537	4.539	-0.002	99347497	750.0	744.1	
1	5.290	5.289	0.001	73957477	750.0	744.8	
		Average of Peak Amounts =				747.8	
2	3.950	3.949	0.001	120287134	750.0	744.7	M
2	4.587	4.586	0.001	91229179	750.0	737.5	M
2	4.720	4.719	0.001	108775603	750.0	748.4	M
2	5.027	5.029	-0.002	104787269	750.0	755.6	M
2	5.074	5.072	0.002	121390047	750.0	736.3	M
		Average of Peak Amounts =				744.5	
						RPD = 0.44	
S 8 Polychlorinated biphenyls, Total							
1						747.8	
2						744.5	
						RPD = 0.44	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1248_L6_00016	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

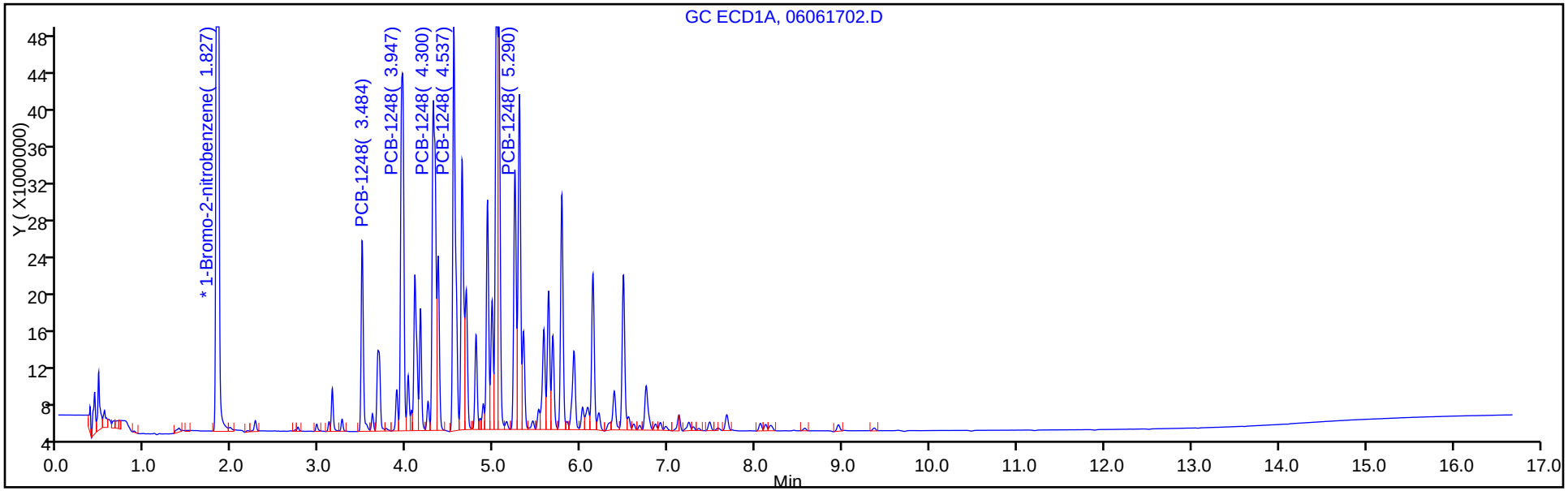
Report Date: 07-Jun-2017 06:52:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

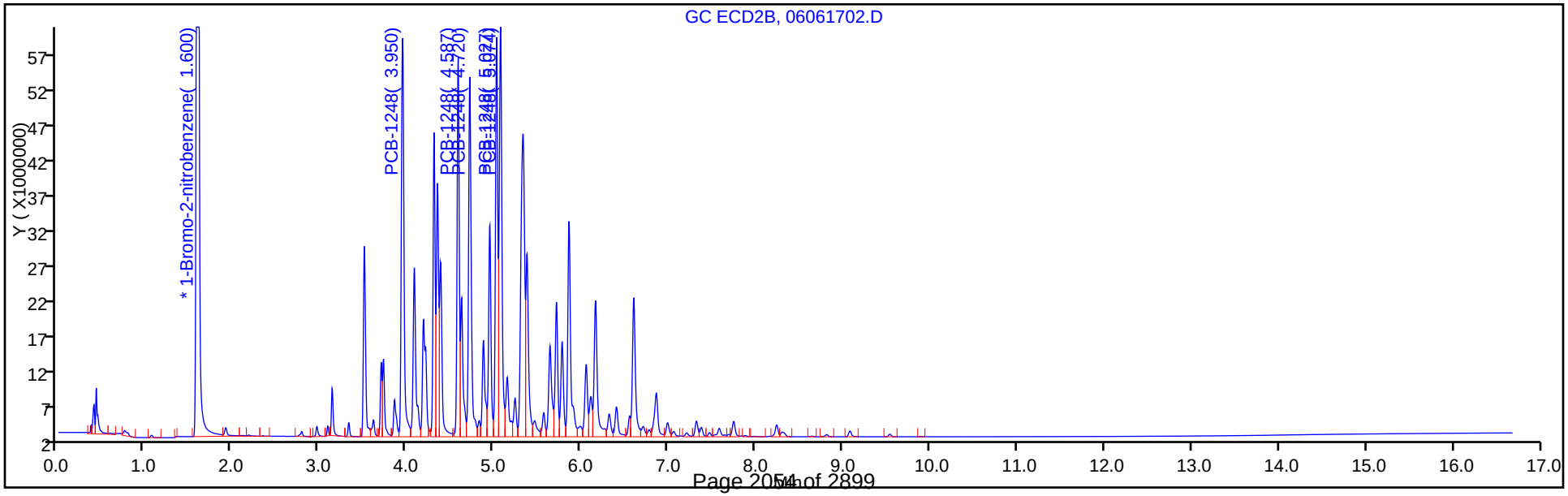
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061702.D

Injection Date:	06-Jun-2017 14:10:47	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL61248			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061703.D
Lims ID: STDL51248
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 06-Jun-2017 14:32:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL51248
Misc. Info.: 280-0059455-003
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:20 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 06-Jun-2017 14:58:06

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	324506738	1000.0	1000.0	
2	1.599	1.599	0.000	366994281	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							M
1	3.486	3.486	0.000	24749110	500.0	486.4	
1	3.946	3.946	0.000	67300939	500.0	490.0	
1	4.302	4.302	0.000	69471291	500.0	491.6	
1	4.539	4.539	0.000	68399630	500.0	492.2	
1	5.289	5.289	0.000	51001785	500.0	495.0	
		Average of Peak Amounts =				491.1	
2	3.949	3.949	0.000	86095391	500.0	503.5	M
2	4.586	4.586	0.000	65804904	500.0	501.5	M
2	4.719	4.719	0.000	77873035	500.0	506.1	M
2	5.029	5.029	0.000	71686977	500.0	489.1	M
2	5.072	5.072	0.000	89792945	500.0	513.7	M
		Average of Peak Amounts =				502.8	
						RPD = 2.36	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

AR_1248_L5_00018 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

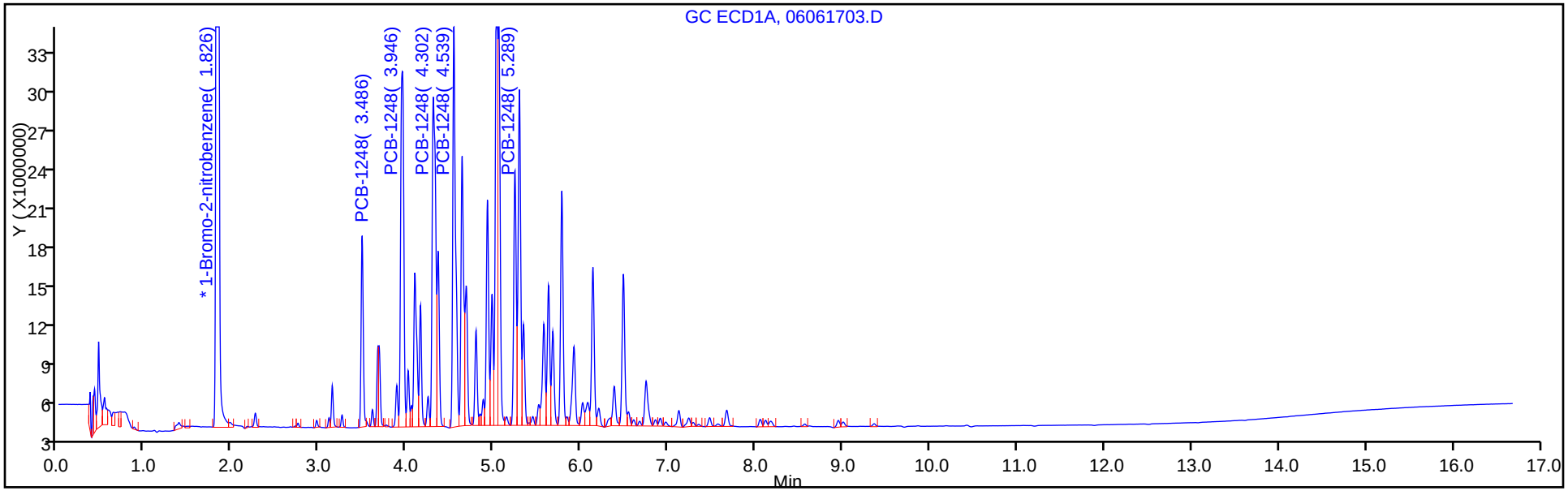
Report Date: 07-Jun-2017 06:52:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

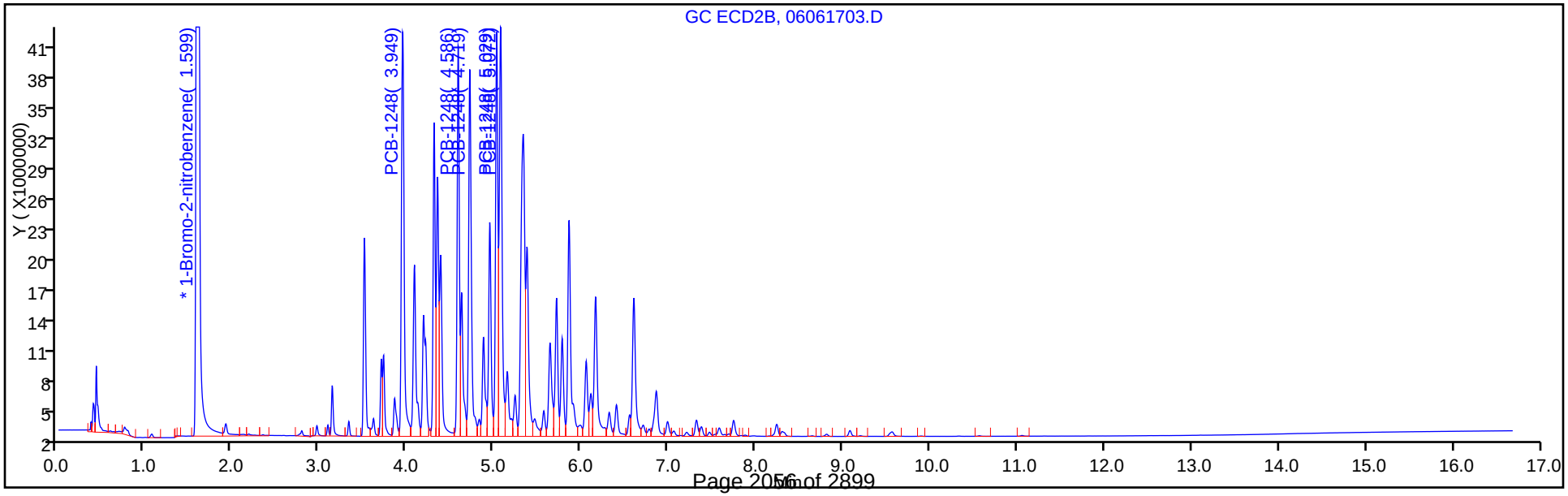
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061703.D

Injection Date:	06-Jun-2017 14:32:30	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL51248			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061704.D
Lims ID: STDL41248
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Jun-2017 14:54:14 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL41248
Misc. Info.: 280-0059455-004
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:22 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	335308096	1000.0	1000.0	
2	1.598	1.599	-0.001	382534910	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							
1	3.485	3.486	-0.001	13436171	250.0	249.7	
1	3.948	3.946	0.002	35602134	250.0	246.3	
1	4.301	4.302	-0.001	36790257	250.0	246.2	
1	4.538	4.539	-0.001	36867560	250.0	249.7	
1	5.288	5.289	-0.001	27101154	250.0	249.7	
		Average of Peak Amounts =				248.3	
2	3.951	3.949	0.002	45463769	250.0	248.7	
2	4.588	4.586	0.002	35114541	250.0	248.8	
2	4.721	4.719	0.002	41404953	250.0	251.7	
2	5.028	5.029	-0.001	39323682	250.0	253.1	
2	5.075	5.072	0.003	47383534	250.0	251.7	
		Average of Peak Amounts =				250.8	
						RPD = 0.99	
S 8 Polychlorinated biphenyls, Total							
1						248.3	
2						250.8	
						RPD = 0.99	

Reagents:

AR_1248_L4_00019 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

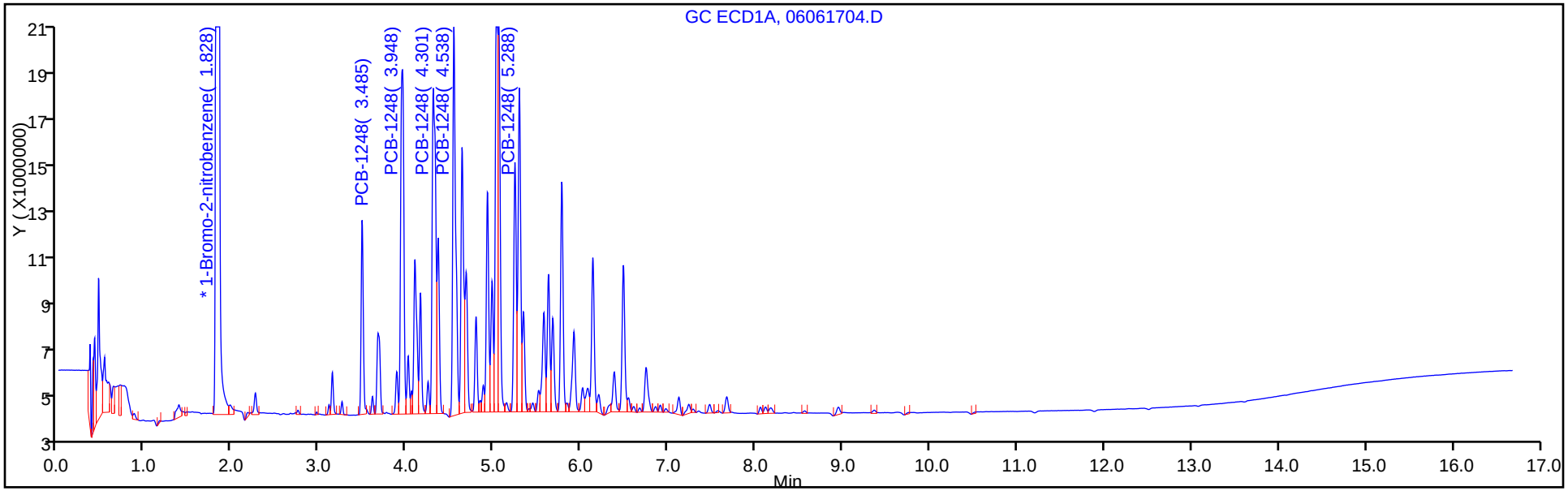
Report Date: 07-Jun-2017 06:52:22 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

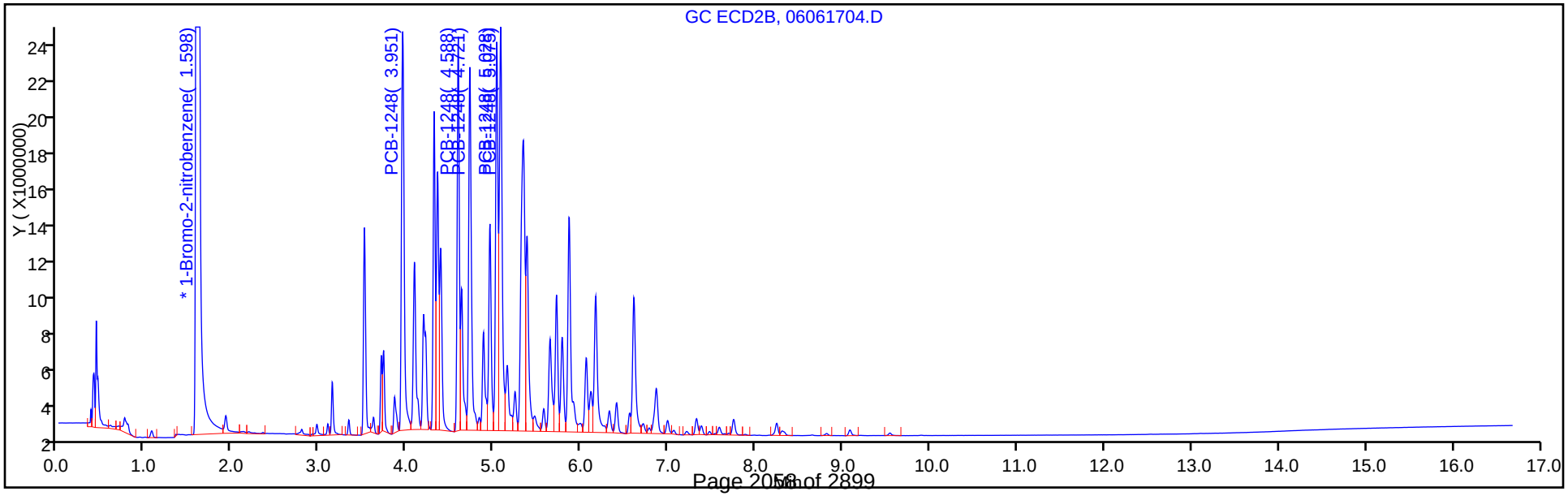
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061704.D

Injection Date:	06-Jun-2017 14:54:14	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL41248			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061705.D
Lims ID: STDL31248
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Jun-2017 15:16:00 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL31248
Misc. Info.: 280-0059455-005
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:24 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	336751844	1000.0	1000.0	
2	1.601	1.599	0.002	386854498	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							
1	3.484	3.486	-0.002	6019277	100.0	104.6	
1	3.947	3.946	0.001	15503715	100.0	101.5	
1	4.301	4.302	-0.001	16563599	100.0	103.9	
1	4.537	4.539	-0.002	16846461	100.0	105.6	
1	5.291	5.289	0.002	11688134	100.0	101.4	
		Average of Peak Amounts =				103.4	
2	3.951	3.949	0.002	20203711	100.0	102.1	
2	4.587	4.586	0.001	16080114	100.0	103.7	
2	4.721	4.719	0.002	18307755	100.0	102.7	
2	5.031	5.029	0.002	16388685	100.0	99.0	
2	5.074	5.072	0.002	21842398	100.0	105.5	
		Average of Peak Amounts =				102.6	
						RPD = 0.78	
S 8 Polychlorinated biphenyls, Total							
1						103.4	
2						102.6	
						RPD = 0.78	

Reagents:

AR_1248_L3_00018 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

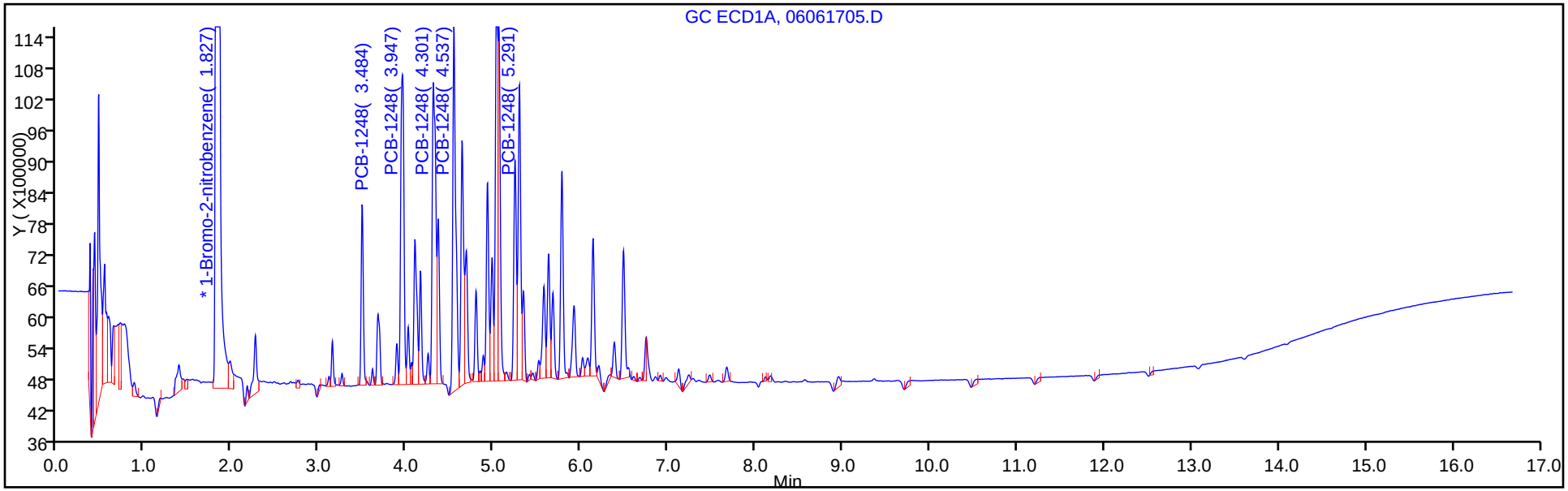
Report Date: 07-Jun-2017 06:52:24 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

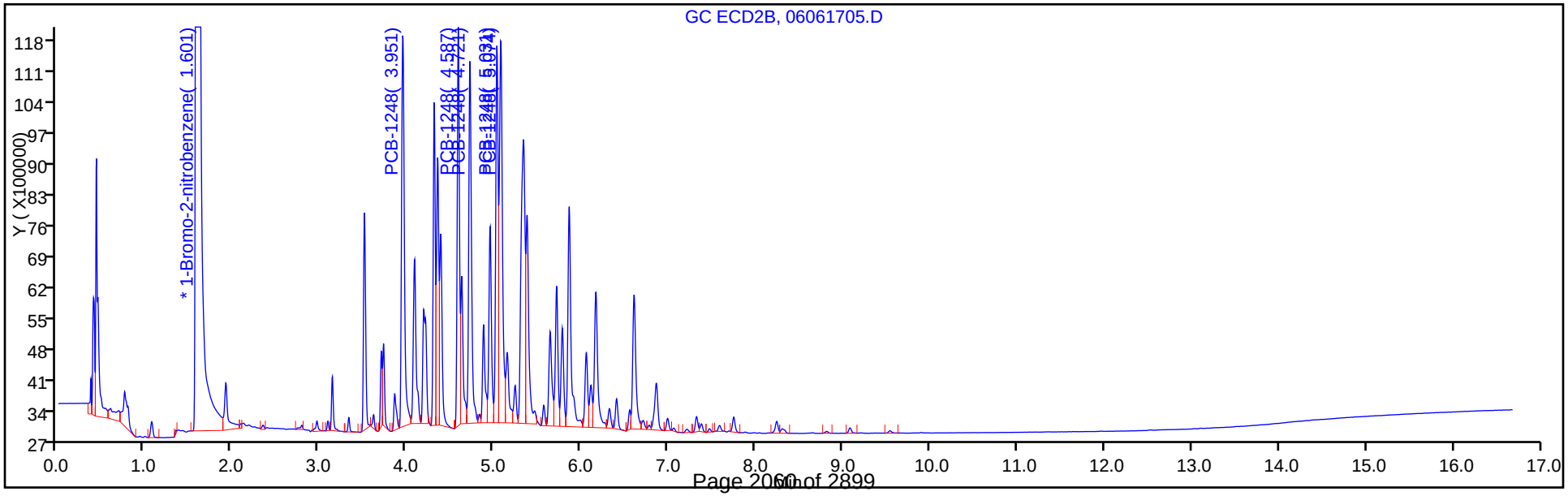
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061705.D

Injection Date:	06-Jun-2017 15:16:00	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL31248			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061706.D
Lims ID: STDL21248
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Jun-2017 15:37:43 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL21248
Misc. Info.: 280-0059455-006
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:25 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	329096535	1000.0	1000.0	
2	1.599	1.599	0.000	380878712	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							
1	3.486	3.486	0.000	3291704	50.0	53.1	
1	3.949	3.946	0.003	8395956	50.0	52.0	
1	4.302	4.302	0.000	8940744	50.0	52.2	
1	4.539	4.539	0.000	9031280	50.0	51.3	
1	5.289	5.289	0.000	6349225	50.0	51.9	
		Average of Peak Amounts =				52.1	
2	3.952	3.949	0.003	11389337	50.0	52.9	
2	4.589	4.586	0.003	9088866	50.0	52.6	
2	4.722	4.719	0.003	10286784	50.0	53.0	
2	5.032	5.029	0.003	9091862	50.0	51.8	
2	5.076	5.072	0.004	12277558	50.0	53.0	
		Average of Peak Amounts =				52.7	
						RPD = 1.08	
S 8 Polychlorinated biphenyls, Total							
1						52.1	
2						52.7	
						RPD = 1.08	

Reagents:

AR_1248_L2_00018 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

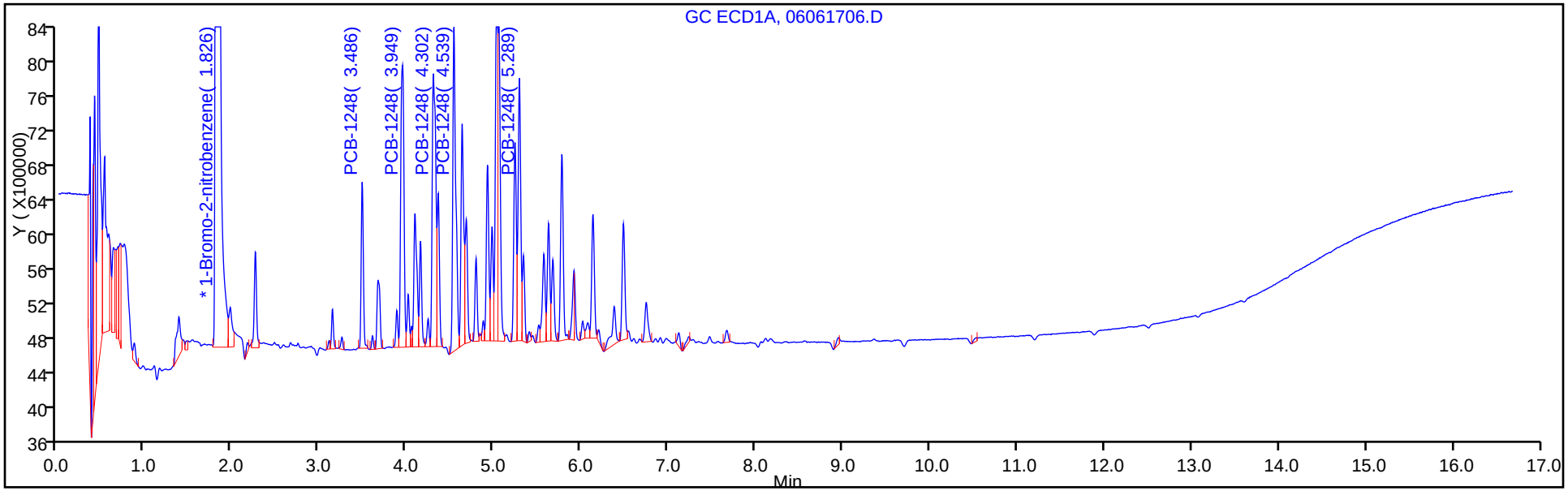
Report Date: 07-Jun-2017 06:52:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

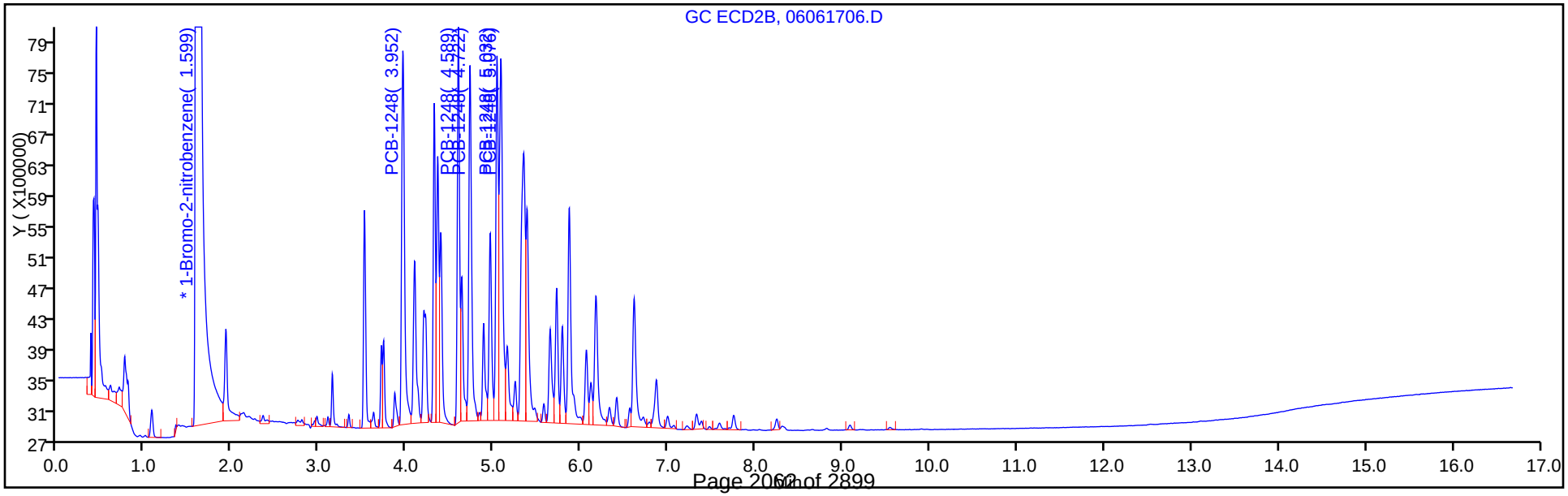
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061706.D

Injection Date:	06-Jun-2017 15:37:43	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL21248			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061707.D
Lims ID: STDL11248
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Jun-2017 15:59:26 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL11248
Misc. Info.: 280-0059455-007
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:27 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	323790667	1000.0	1000.0	
2	1.601	1.599	0.002	376309903	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							
1	3.484	3.486	-0.002	1738031	25.0	22.8	
1	3.948	3.946	0.002	4527237	25.0	24.3	
1	4.301	4.302	-0.001	4853502	25.0	23.5	
1	4.538	4.539	-0.001	5130218	25.0	23.4	
1	5.291	5.289	0.002	3429912	25.0	23.9	
		Average of Peak Amounts =				23.6	
2	3.954	3.949	0.005	6160645	25.0	23.1	
2	4.588	4.586	0.002	5129916	25.0	23.0	
2	4.724	4.719	0.005	5505999	25.0	22.7	
2	5.034	5.029	0.005	4933253	25.0	24.4	
2	5.078	5.072	0.006	6731688	25.0	21.9	
		Average of Peak Amounts =				23.0	
						RPD = 2.37	
S 8 Polychlorinated biphenyls, Total							
1						23.6	
2						23.0	
						RPD = 2.37	

Reagents:

AR_1248_L1_00019 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

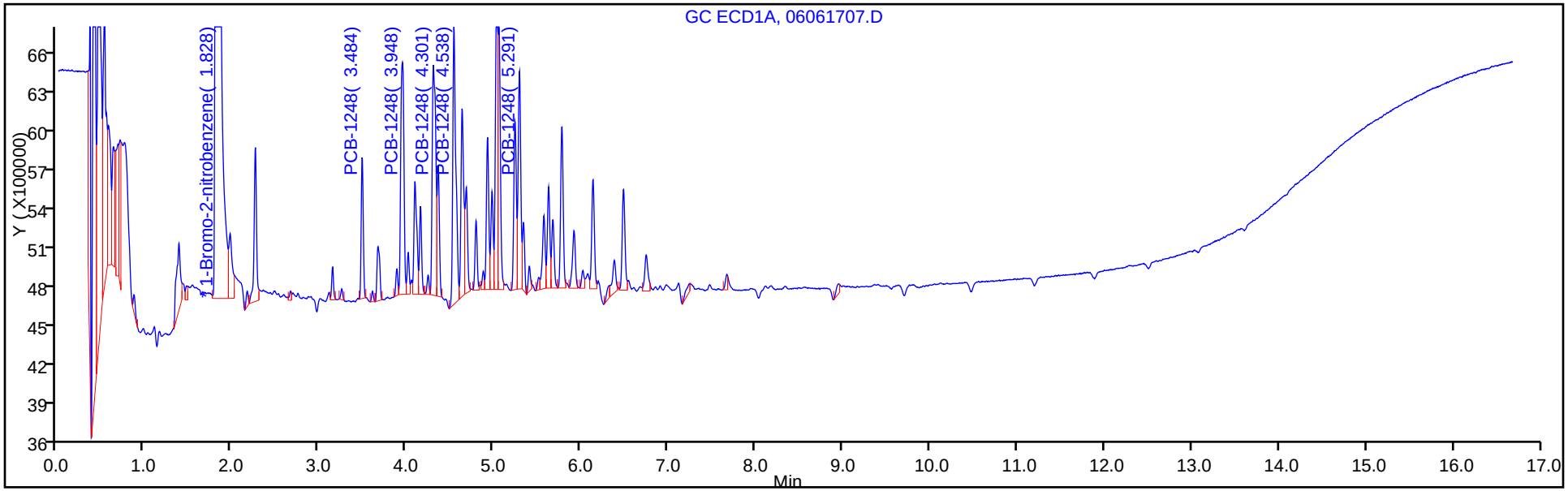
Report Date: 07-Jun-2017 06:52:28 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

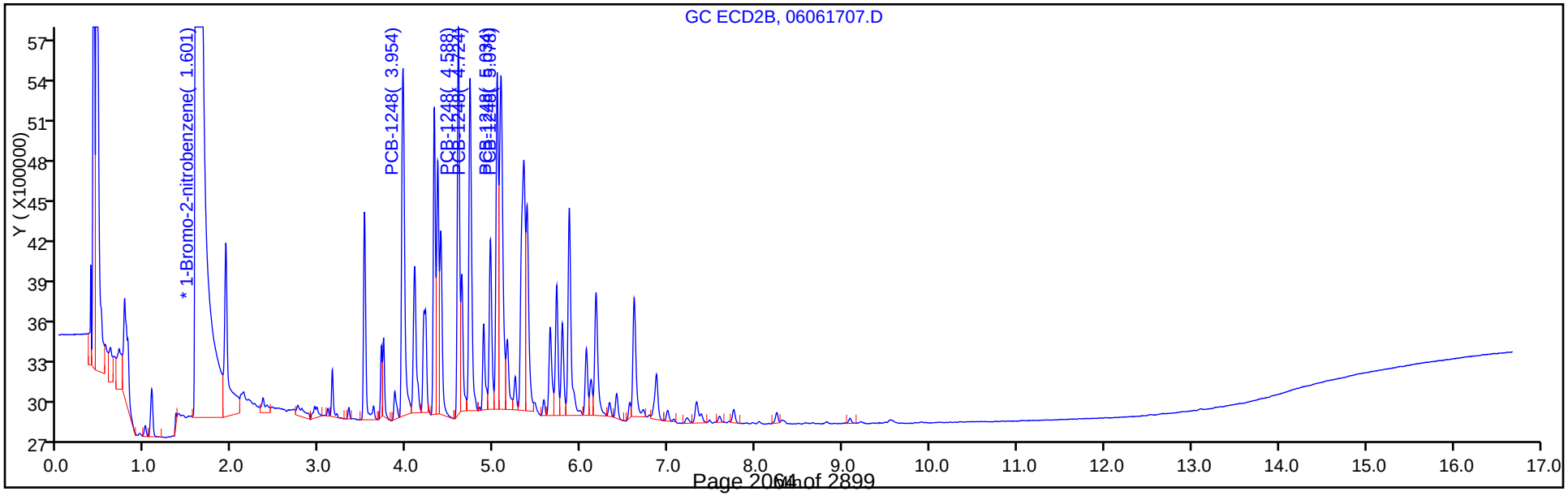
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061707.D

Injection Date:	06-Jun-2017 15:59:26	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL11248			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 13:49 Calibration End Date: 06/06/2017 15:59 Calibration ID: 29386

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11248 280-376236/7	06061707.D
Level 2	STDL21248 280-376236/6	06061706.D
Level 3	STDL31248 280-376236/5	06061705.D
Level 4	STDL41248 280-376236/4	06061704.D
Level 5	STDL51248 280-376236/3	06061703.D
Level 6	STDL61248 280-376236/2	06061702.D
Level 7	STDL71248 280-376236/1	06061701.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1248 Peak 1	0.6548 0.4589	0.5981 0.4602	0.5223	0.4754	0.4692	Lin1	5.8545	0.4543							1.0000		0.9900
PCB-1248 Peak 2	0.5453 0.3480	0.4773 0.3547	0.4157	0.3672	0.3586	Lin1	5.6508	0.3463							1.0000		0.9900
PCB-1248 Peak 3	0.5853 0.4150	0.5402 0.4101	0.4732	0.4330	0.4244	Lin1	5.3670	0.4087							1.0000		0.9900
PCB-1248 Peak 4	0.5244 0.3998	0.4774 0.3965	0.4236	0.4112	0.3907	Lin1	3.5599	0.3921							1.0000		0.9900
PCB-1248 Peak 5	0.7155 0.4631	0.6447 0.4656	0.5646	0.4955	0.4893	Lin1	7.7928	0.4611							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 13:49 Calibration End Date: 06/06/2017 15:59 Calibration ID: 29386

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11248 280-376236/7	06061707.D
Level 2	STDL21248 280-376236/6	06061706.D
Level 3	STDL31248 280-376236/5	06061705.D
Level 4	STDL41248 280-376236/4	06061704.D
Level 5	STDL51248 280-376236/3	06061703.D
Level 6	STDL61248 280-376236/2	06061702.D
Level 7	STDL71248 280-376236/1	06061701.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1248 Peak 1	BNB	Lin1	6160645 120287134	11389337 155312014	20203711	45463769	86095391	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 2	BNB	Lin1	5129916 91229179	9088866 119725030	16080114	35114541	65804904	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 3	BNB	Lin1	5505999 108775603	10286784 138430869	18307755	41404953	77873035	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 4	BNB	Lin1	4933253 104787269	9091862 133820350	16388685	39323682	71686977	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 5	BNB	Lin1	6731688 121390047	12277558 157166673	21842398	47383534	89792945	25.0 750	50.0 1000	100	250	500

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061701.D
Lims ID: STDL71248
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 13:49:03 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL71248
Misc. Info.: 280-0059455-001
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:16 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 06-Jun-2017 14:49:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	313463735	1000.0	1000.0	
2	1.598	1.599	-0.001	337522132	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							M
1	3.488	3.486	0.002	48550285	1000.0	1000.6	
1	3.948	3.946	0.002	133611078	1000.0	1017.0	
1	4.301	4.302	-0.001	136147687	1000.0	1009.4	
1	4.538	4.539	-0.001	133399245	1000.0	1008.8	
1	5.291	5.289	0.002	99315895	1000.0	1008.2	
		Average of Peak Amounts =				1008.8	
2	3.948	3.949	-0.001	155312014	1000.0	1000.0	M
2	4.585	4.586	-0.001	119725030	1000.0	1008.0	M
2	4.718	4.719	-0.001	138430869	1000.0	990.5	M
2	5.028	5.029	-0.001	133820350	1000.0	1002.1	M
2	5.071	5.072	-0.001	157166673	1000.0	992.9	M
		Average of Peak Amounts =				998.7	
						RPD = 1.01	
S 8 Polychlorinated biphenyls, Total							
1						1008.8	
2						998.7	
						RPD = 1.01	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1248_L7_00014	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

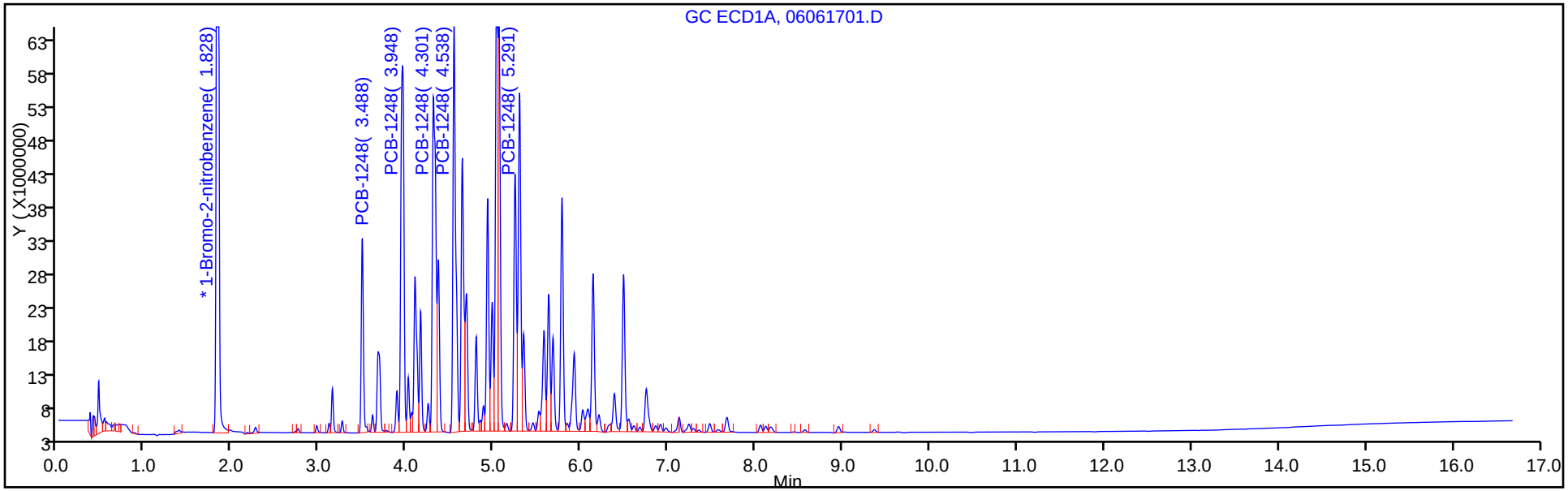
Report Date: 07-Jun-2017 06:52:17 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

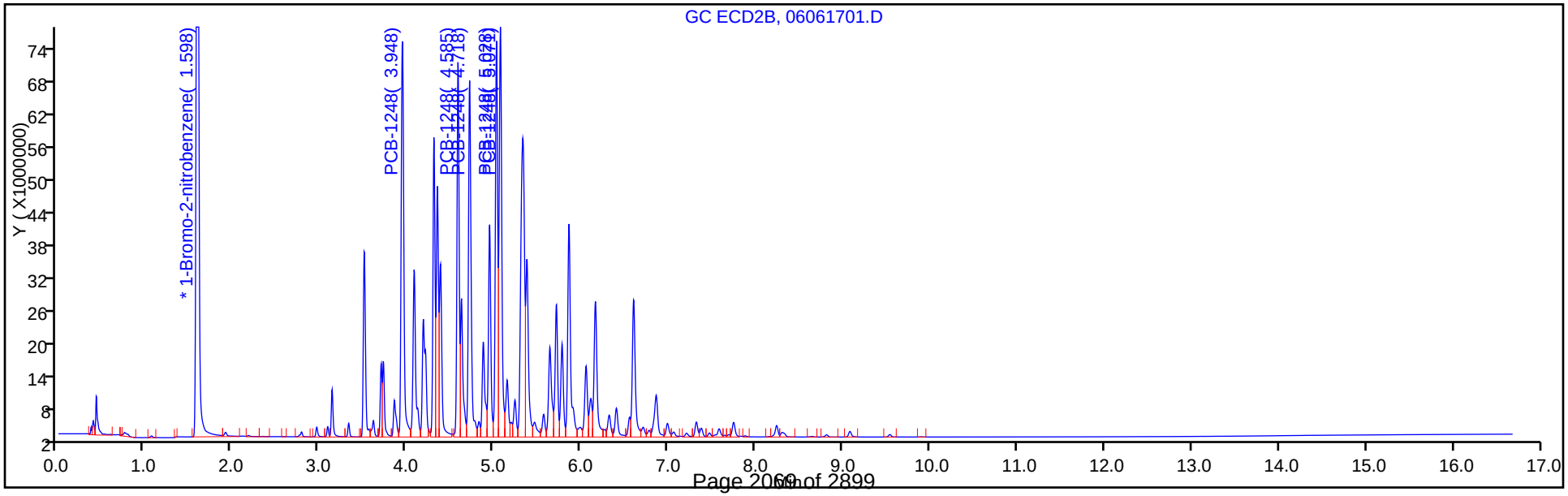
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061701.D

Injection Date:	06-Jun-2017 13:49:03	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL71248			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:52:17 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061701.D

Injection Date: 06-Jun-2017 13:49:03 Instrument ID: SGC_P3

Lims ID: STDL71248

Client ID:

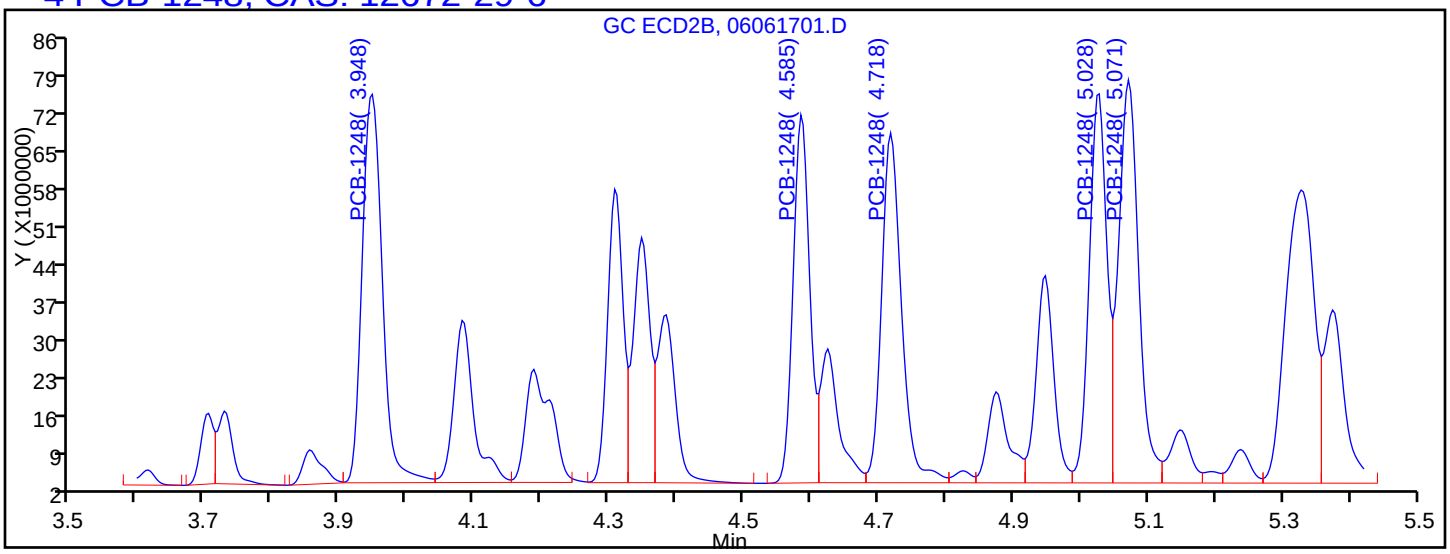
Operator ID: jax ALS Bottle#: 1 Worklist Smp#: 1

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

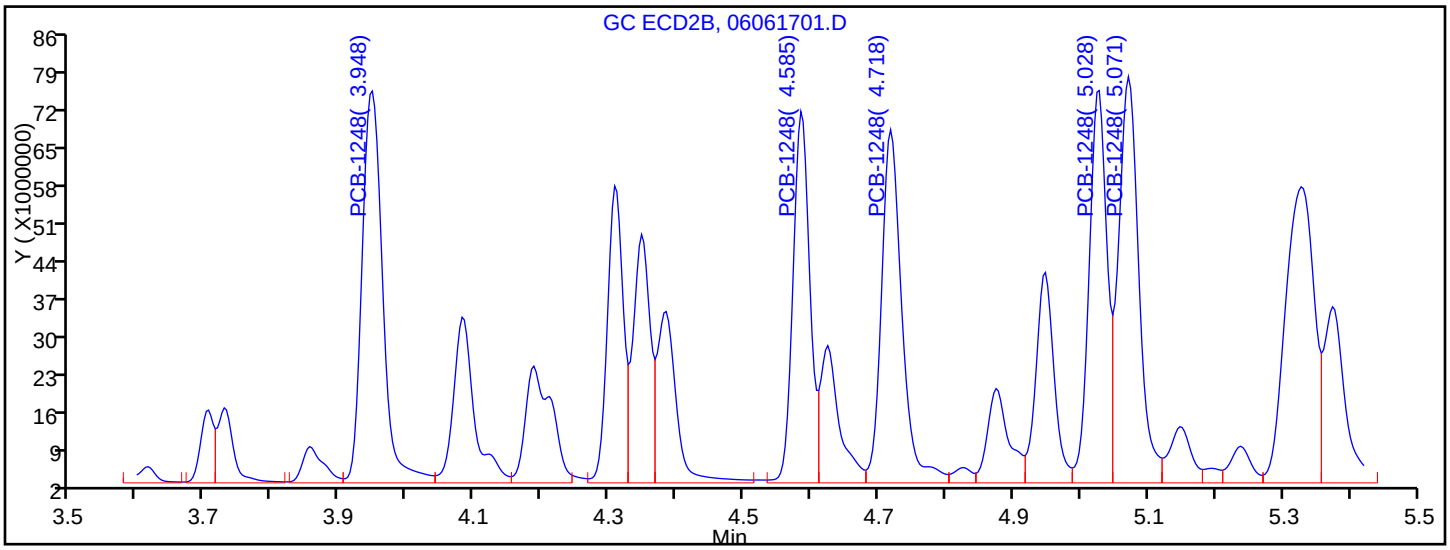
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

4 PCB-1248, CAS: 12672-29-6



Processing Integration Results

3.948	Response = 150080976
4.585	Response = 117052766
4.718	Response = 133755057
5.028	Response = 131666371
5.071	Response = 154567511



Manual Integration Results

3.948	Response = 155312014	M
4.585	Response = 119725030	M
4.718	Response = 138430869	M
5.028	Response = 133820350	M
5.071	Response = 157166673	M

Reviewer: jacksonto, 06-Jun-2017 14:59:04

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061702.D
Lims ID: STDL61248
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Jun-2017 14:10:47 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL61248
Misc. Info.: 280-0059455-002
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:18 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 06-Jun-2017 14:49:51

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	314882116	1000.0	1000.0	
2	1.600	1.599	0.001	349495294	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							M
1	3.484	3.486	-0.002	37083917	750.0	757.9	
1	3.947	3.946	0.001	98499824	750.0	743.9	
1	4.300	4.302	-0.002	101771802	750.0	748.1	
1	4.537	4.539	-0.002	99347497	750.0	744.1	
1	5.290	5.289	0.001	73957477	750.0	744.8	
		Average of Peak Amounts =				747.8	
2	3.950	3.949	0.001	120287134	750.0	744.7	M
2	4.587	4.586	0.001	91229179	750.0	737.5	M
2	4.720	4.719	0.001	108775603	750.0	748.4	M
2	5.027	5.029	-0.002	104787269	750.0	755.6	M
2	5.074	5.072	0.002	121390047	750.0	736.3	M
		Average of Peak Amounts =				744.5	
						RPD = 0.44	
S 8 Polychlorinated biphenyls, Total							
1						747.8	
2						744.5	
						RPD = 0.44	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1248_L6_00016	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

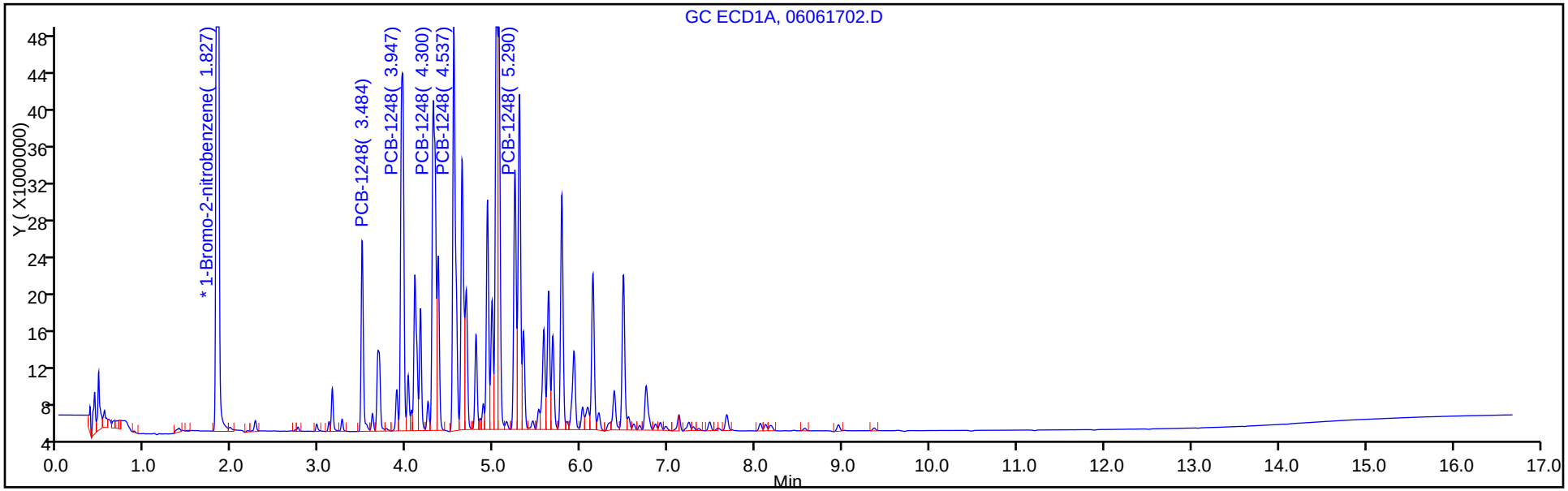
Report Date: 07-Jun-2017 06:52:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

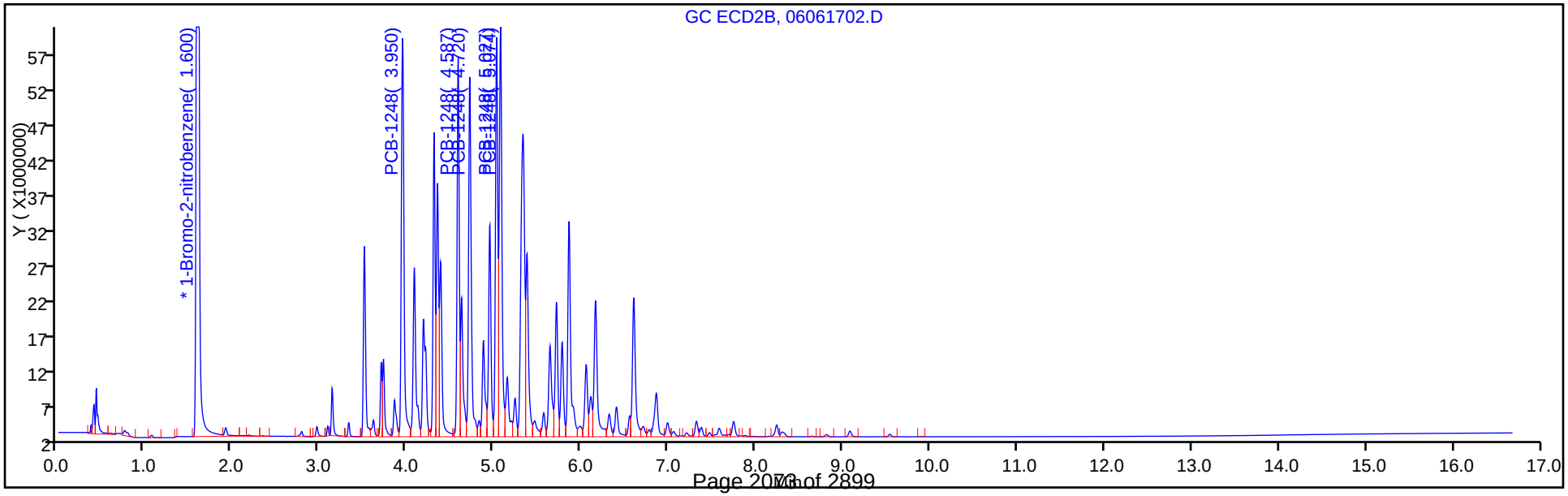
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061702.D

Injection Date:	06-Jun-2017 14:10:47	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL61248			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:52:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061702.D

Injection Date: 06-Jun-2017 14:10:47 Instrument ID: SGC_P3

Lims ID: STDL61248

Client ID:

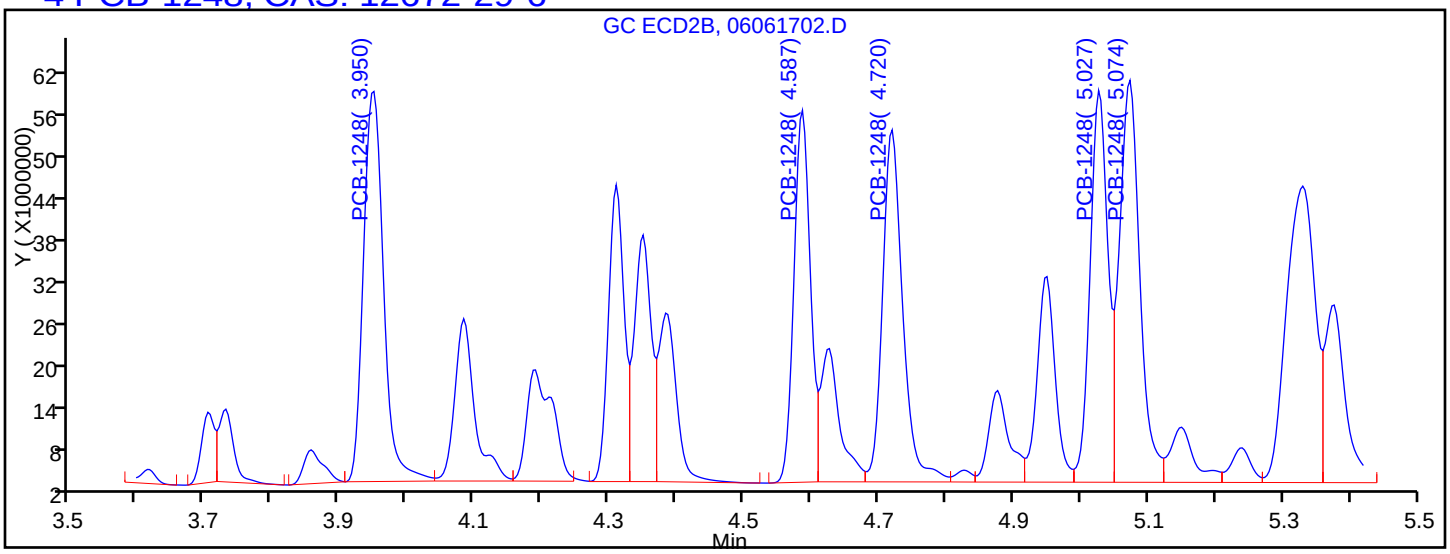
Operator ID: jax ALS Bottle#: 2 Worklist Smp#: 2

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

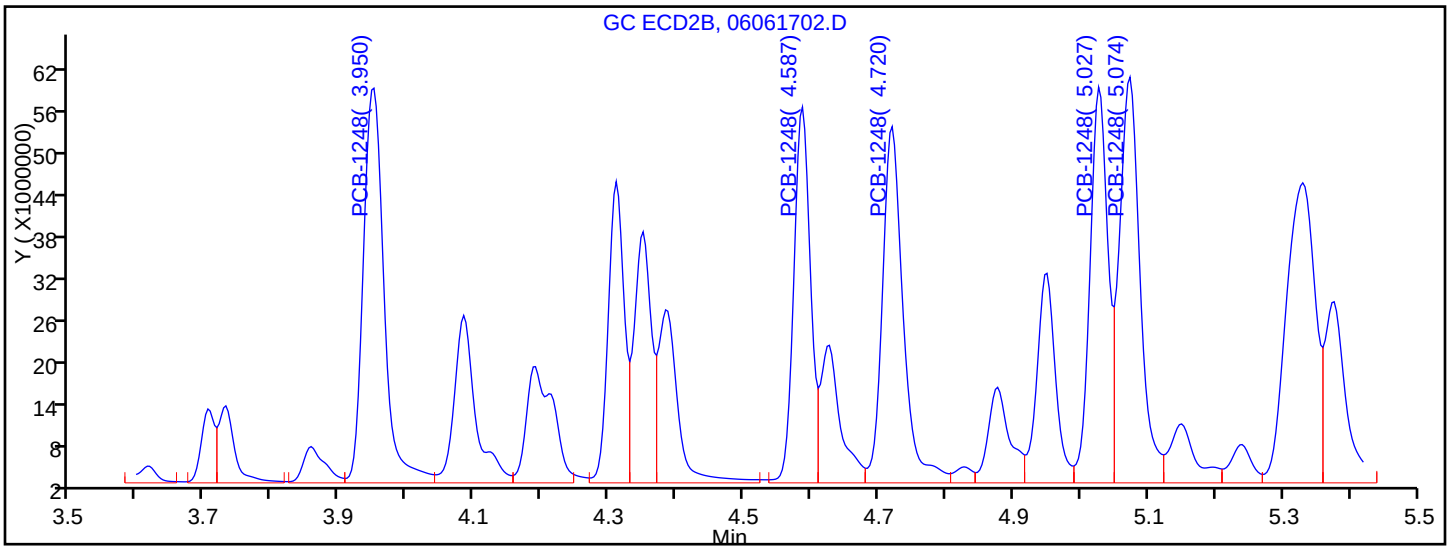
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

4 PCB-1248, CAS: 12672-29-6



Processing Integration Results

3.950	Response = 114908670
4.587	Response = 88921245
4.720	Response = 104198221
5.027	Response = 102783381
5.074	Response = 118984177



Manual Integration Results

3.950	Response = 120287134	M
4.587	Response = 91229179	M
4.720	Response = 108775603	M
5.027	Response = 104787269	M
5.074	Response = 121390047	M

Reviewer: jacksonto, 06-Jun-2017 14:58:39

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061703.D
Lims ID: STDL51248
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 06-Jun-2017 14:32:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL51248
Misc. Info.: 280-0059455-003
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:20 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 06-Jun-2017 14:58:06

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	324506738	1000.0	1000.0	
2	1.599	1.599	0.000	366994281	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							M
1	3.486	3.486	0.000	24749110	500.0	486.4	
1	3.946	3.946	0.000	67300939	500.0	490.0	
1	4.302	4.302	0.000	69471291	500.0	491.6	
1	4.539	4.539	0.000	68399630	500.0	492.2	
1	5.289	5.289	0.000	51001785	500.0	495.0	
		Average of Peak Amounts =				491.1	
2	3.949	3.949	0.000	86095391	500.0	503.5	M
2	4.586	4.586	0.000	65804904	500.0	501.5	M
2	4.719	4.719	0.000	77873035	500.0	506.1	M
2	5.029	5.029	0.000	71686977	500.0	489.1	M
2	5.072	5.072	0.000	89792945	500.0	513.7	M
		Average of Peak Amounts =				502.8	
						RPD = 2.36	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

AR_1248_L5_00018 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

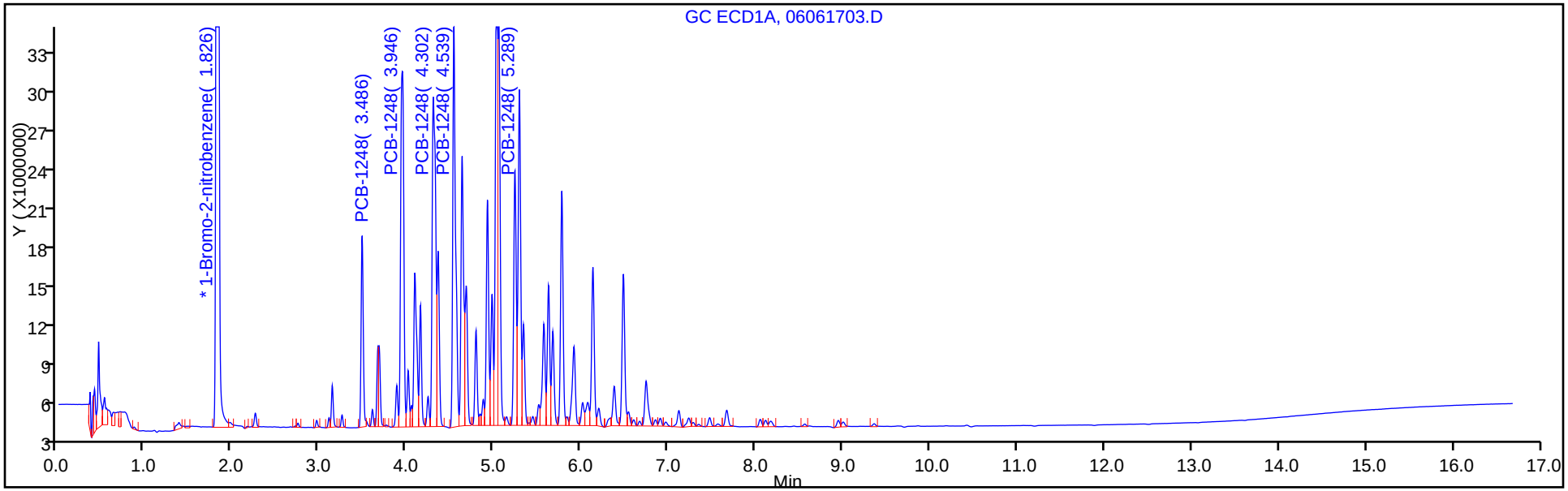
Report Date: 07-Jun-2017 06:52:21 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

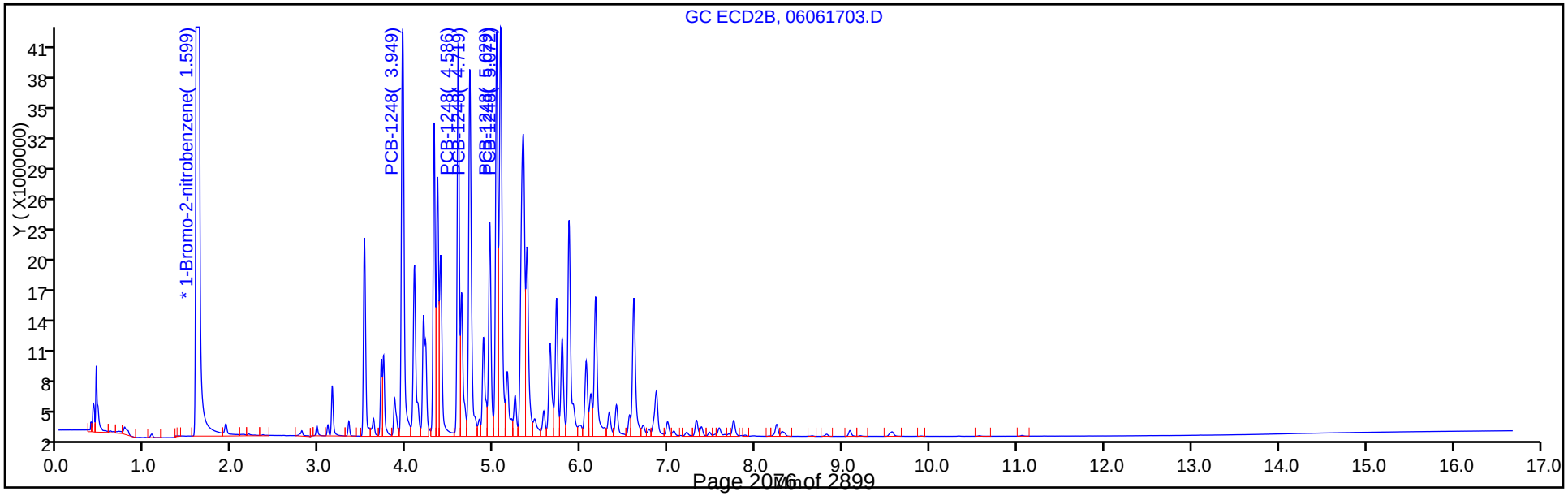
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061703.D

Injection Date:	06-Jun-2017 14:32:30	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL51248			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:52:21 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061703.D

Injection Date: 06-Jun-2017 14:32:30 Instrument ID: SGC_P3

Lims ID: STDL51248

Client ID:

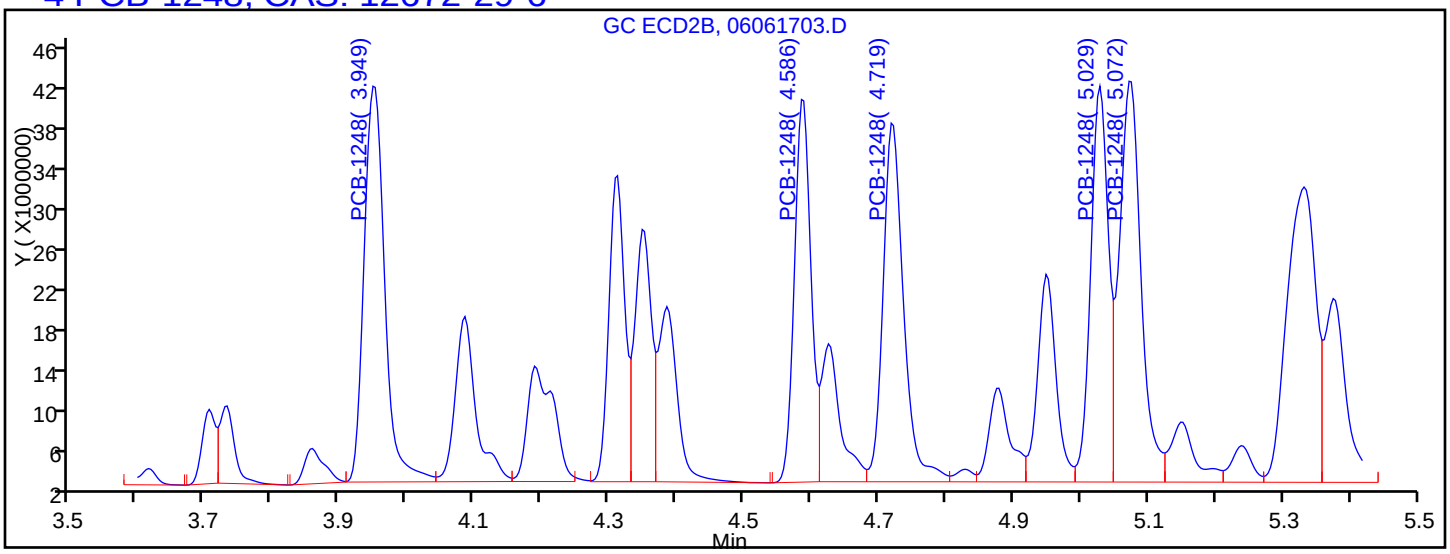
Operator ID: jax ALS Bottle#: 3 Worklist Smp#: 3

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

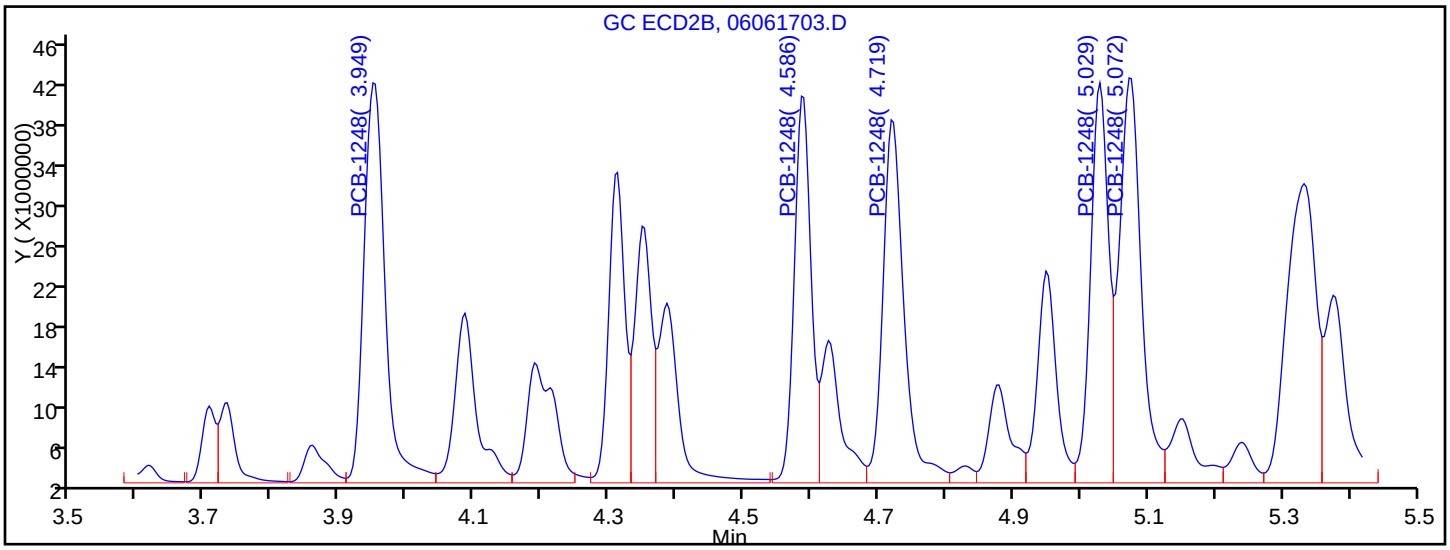
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

4 PCB-1248, CAS: 12672-29-6



Processing Integration Results

3.949	Response = 82794271
4.586	Response = 64203713
4.719	Response = 74705472
5.029	Response = 70307442
5.072	Response = 87951572



Manual Integration Results

3.949	Response = 86095391	M
4.586	Response = 65804904	M
4.719	Response = 77873035	M
5.029	Response = 71686977	M
5.072	Response = 89792945	M

Reviewer: jacksonto, 06-Jun-2017 14:59:22

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061704.D
Lims ID: STDL41248
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Jun-2017 14:54:14 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL41248
Misc. Info.: 280-0059455-004
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:22 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	335308096	1000.0	1000.0	
2	1.598	1.599	-0.001	382534910	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							
1	3.485	3.486	-0.001	13436171	250.0	249.7	
1	3.948	3.946	0.002	35602134	250.0	246.3	
1	4.301	4.302	-0.001	36790257	250.0	246.2	
1	4.538	4.539	-0.001	36867560	250.0	249.7	
1	5.288	5.289	-0.001	27101154	250.0	249.7	
		Average of Peak Amounts =				248.3	
2	3.951	3.949	0.002	45463769	250.0	248.7	
2	4.588	4.586	0.002	35114541	250.0	248.8	
2	4.721	4.719	0.002	41404953	250.0	251.7	
2	5.028	5.029	-0.001	39323682	250.0	253.1	
2	5.075	5.072	0.003	47383534	250.0	251.7	
		Average of Peak Amounts =				250.8	
						RPD = 0.99	
S 8 Polychlorinated biphenyls, Total							
1						248.3	
2						250.8	
						RPD = 0.99	

Reagents:

AR_1248_L4_00019 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

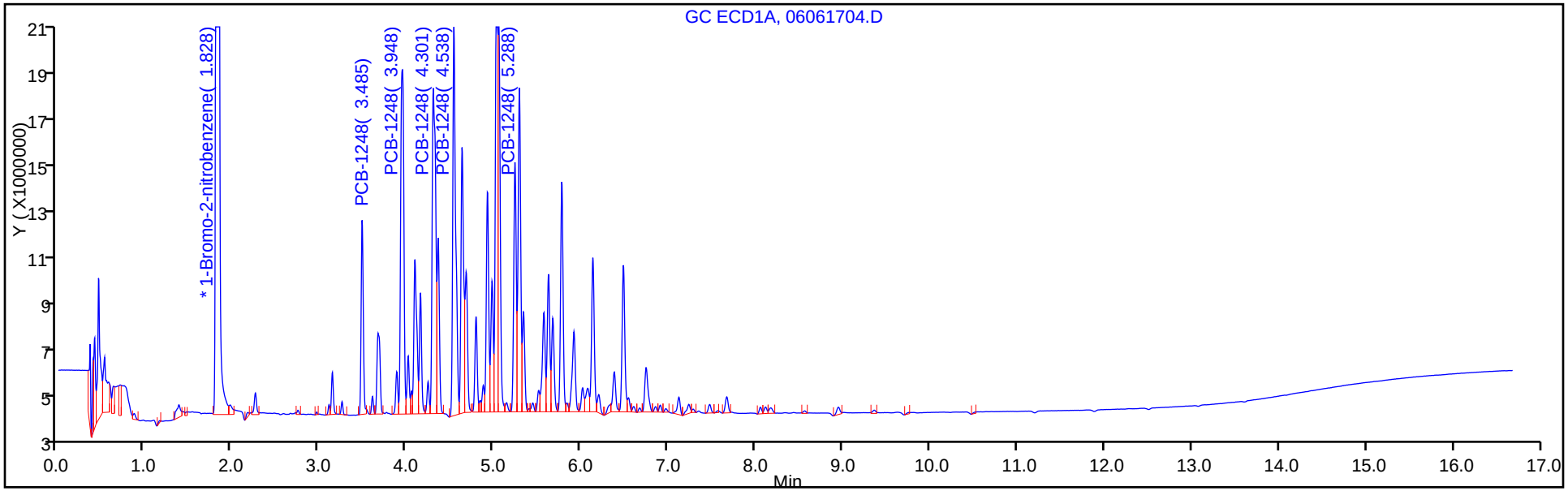
Report Date: 07-Jun-2017 06:52:22 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

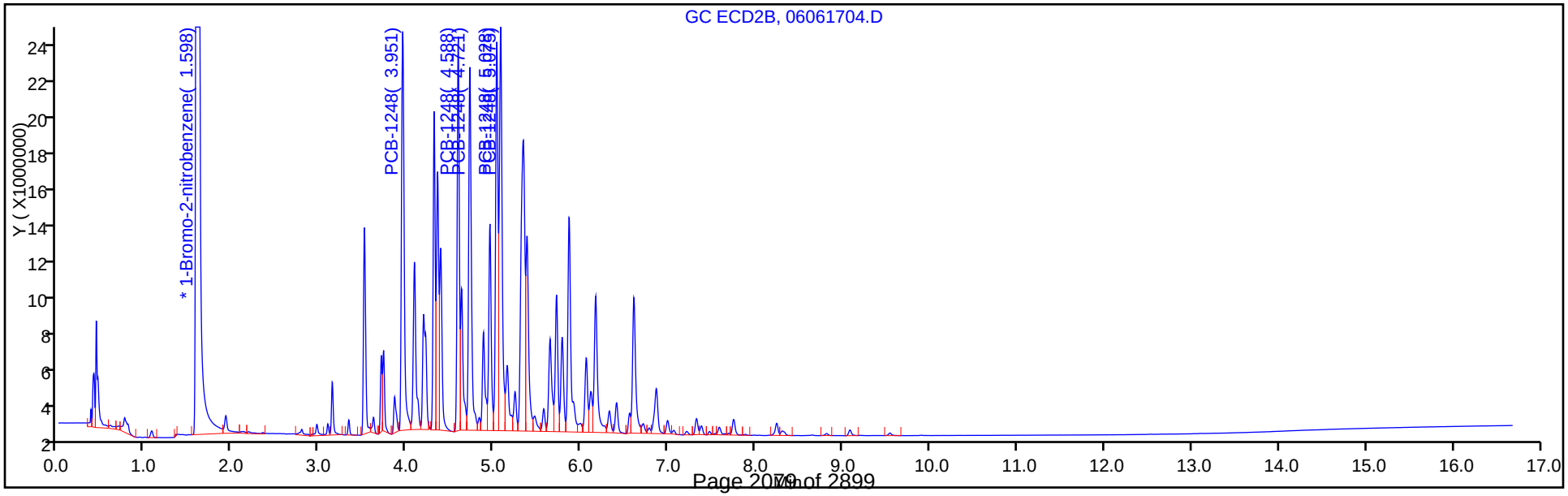
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061704.D

Injection Date:	06-Jun-2017 14:54:14	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL41248			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061705.D
Lims ID: STDL31248
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Jun-2017 15:16:00 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL31248
Misc. Info.: 280-0059455-005
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:24 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	336751844	1000.0	1000.0	
2	1.601	1.599	0.002	386854498	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							
1	3.484	3.486	-0.002	6019277	100.0	104.6	
1	3.947	3.946	0.001	15503715	100.0	101.5	
1	4.301	4.302	-0.001	16563599	100.0	103.9	
1	4.537	4.539	-0.002	16846461	100.0	105.6	
1	5.291	5.289	0.002	11688134	100.0	101.4	
		Average of Peak Amounts =				103.4	
2	3.951	3.949	0.002	20203711	100.0	102.1	
2	4.587	4.586	0.001	16080114	100.0	103.7	
2	4.721	4.719	0.002	18307755	100.0	102.7	
2	5.031	5.029	0.002	16388685	100.0	99.0	
2	5.074	5.072	0.002	21842398	100.0	105.5	
		Average of Peak Amounts =				102.6	
						RPD = 0.78	
S 8 Polychlorinated biphenyls, Total							
1						103.4	
2						102.6	
						RPD = 0.78	

Reagents:

AR_1248_L3_00018 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

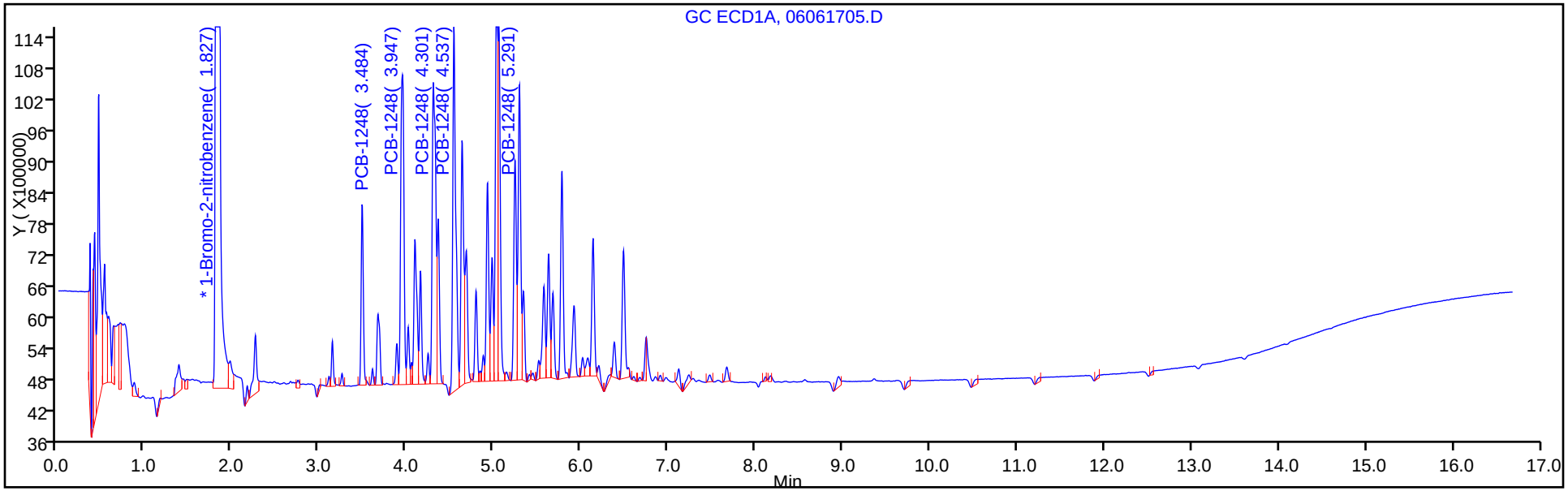
Report Date: 07-Jun-2017 06:52:24 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

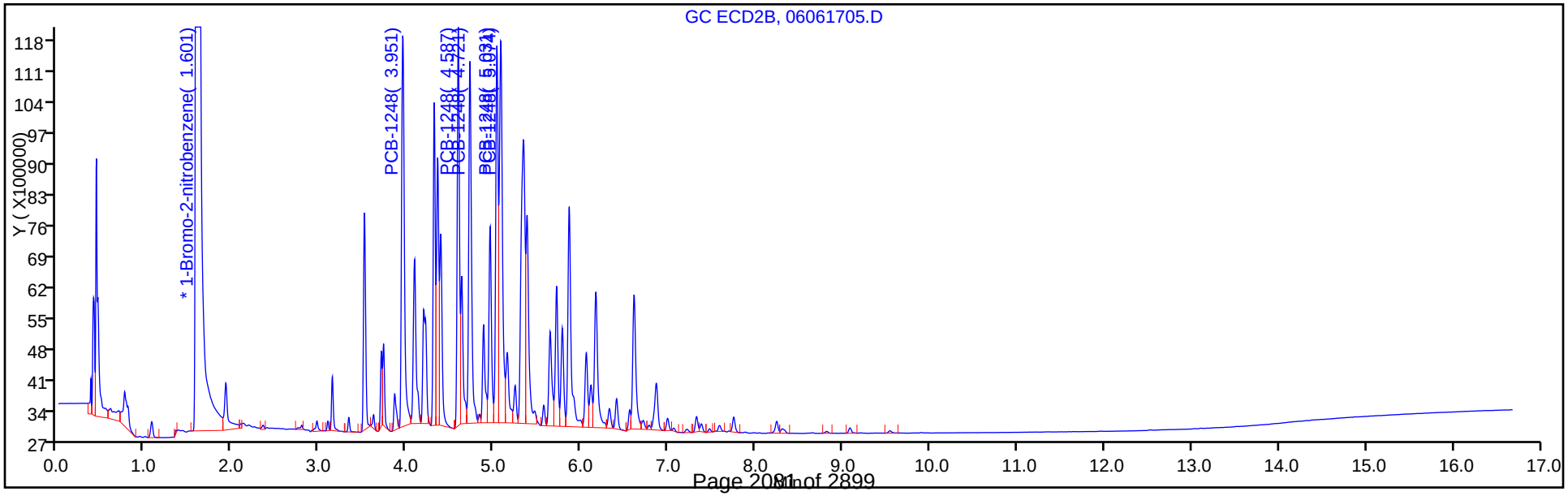
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061705.D

Injection Date:	06-Jun-2017 15:16:00	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL31248			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061706.D
Lims ID: STDL21248
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Jun-2017 15:37:43 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL21248
Misc. Info.: 280-0059455-006
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:25 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	329096535	1000.0	1000.0	
2	1.599	1.599	0.000	380878712	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							
1	3.486	3.486	0.000	3291704	50.0	53.1	
1	3.949	3.946	0.003	8395956	50.0	52.0	
1	4.302	4.302	0.000	8940744	50.0	52.2	
1	4.539	4.539	0.000	9031280	50.0	51.3	
1	5.289	5.289	0.000	6349225	50.0	51.9	
		Average of Peak Amounts =				52.1	
2	3.952	3.949	0.003	11389337	50.0	52.9	
2	4.589	4.586	0.003	9088866	50.0	52.6	
2	4.722	4.719	0.003	10286784	50.0	53.0	
2	5.032	5.029	0.003	9091862	50.0	51.8	
2	5.076	5.072	0.004	12277558	50.0	53.0	
		Average of Peak Amounts =				52.7	
						RPD = 1.08	
S 8 Polychlorinated biphenyls, Total							
1						52.1	
2						52.7	
						RPD = 1.08	

Reagents:

AR_1248_L2_00018 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

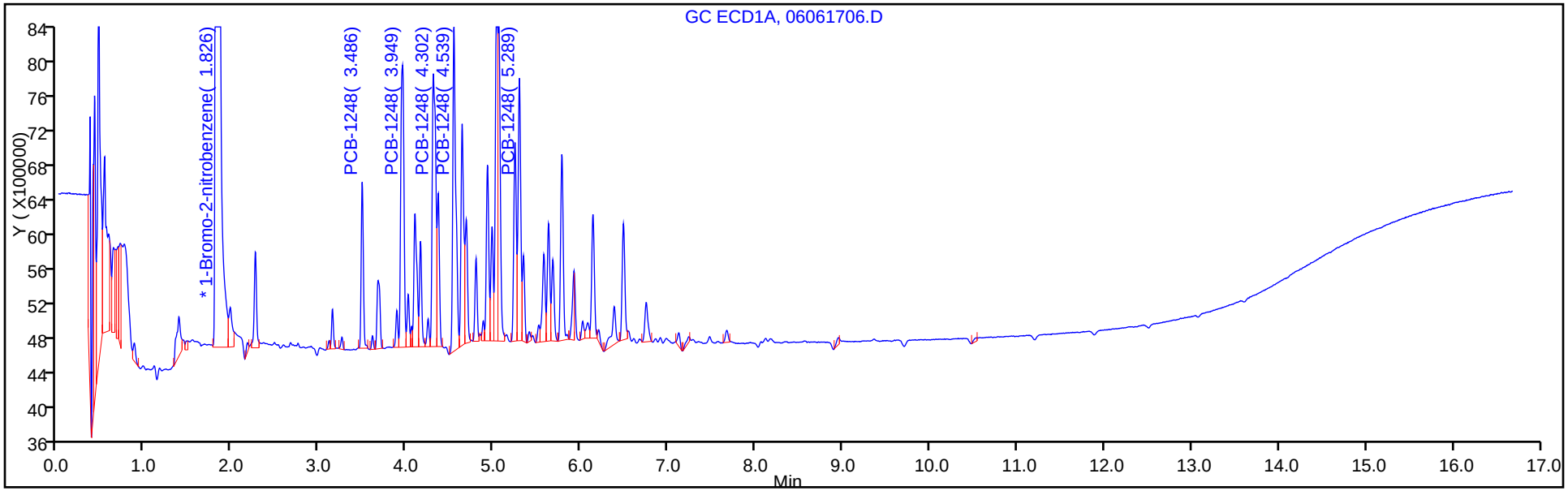
Report Date: 07-Jun-2017 06:52:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

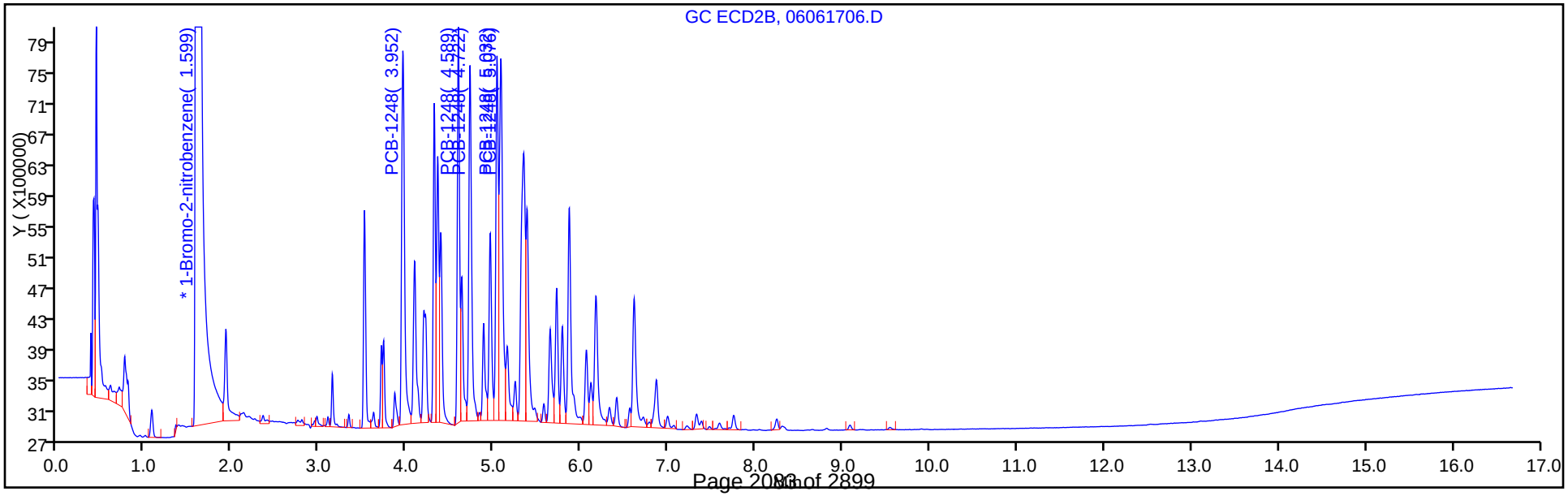
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061706.D

Injection Date:	06-Jun-2017 15:37:43	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL21248			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061707.D
Lims ID: STDL11248
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Jun-2017 15:59:26 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL11248
Misc. Info.: 280-0059455-007
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:27 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	323790667	1000.0	1000.0	
2	1.601	1.599	0.002	376309903	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							
1	3.484	3.486	-0.002	1738031	25.0	22.8	
1	3.948	3.946	0.002	4527237	25.0	24.3	
1	4.301	4.302	-0.001	4853502	25.0	23.5	
1	4.538	4.539	-0.001	5130218	25.0	23.4	
1	5.291	5.289	0.002	3429912	25.0	23.9	
		Average of Peak Amounts =				23.6	
2	3.954	3.949	0.005	6160645	25.0	23.1	
2	4.588	4.586	0.002	5129916	25.0	23.0	
2	4.724	4.719	0.005	5505999	25.0	22.7	
2	5.034	5.029	0.005	4933253	25.0	24.4	
2	5.078	5.072	0.006	6731688	25.0	21.9	
		Average of Peak Amounts =				23.0	
						RPD = 2.37	
S 8 Polychlorinated biphenyls, Total							
1						23.6	
2						23.0	
						RPD = 2.37	

Reagents:

AR_1248_L1_00019 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

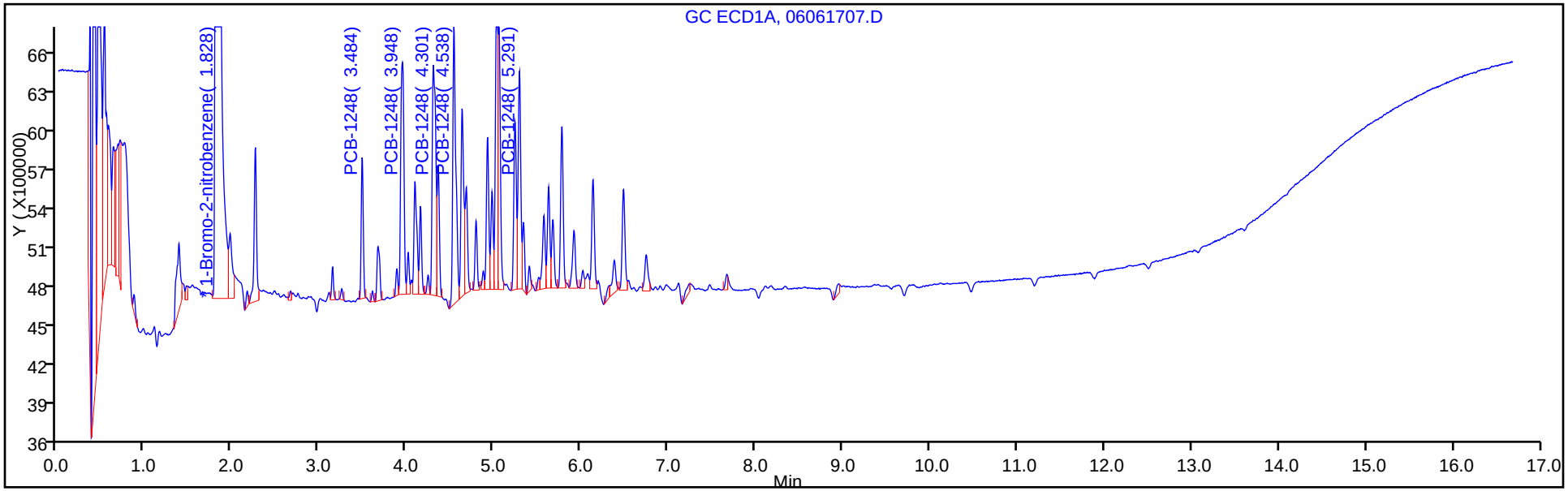
Report Date: 07-Jun-2017 06:52:28 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

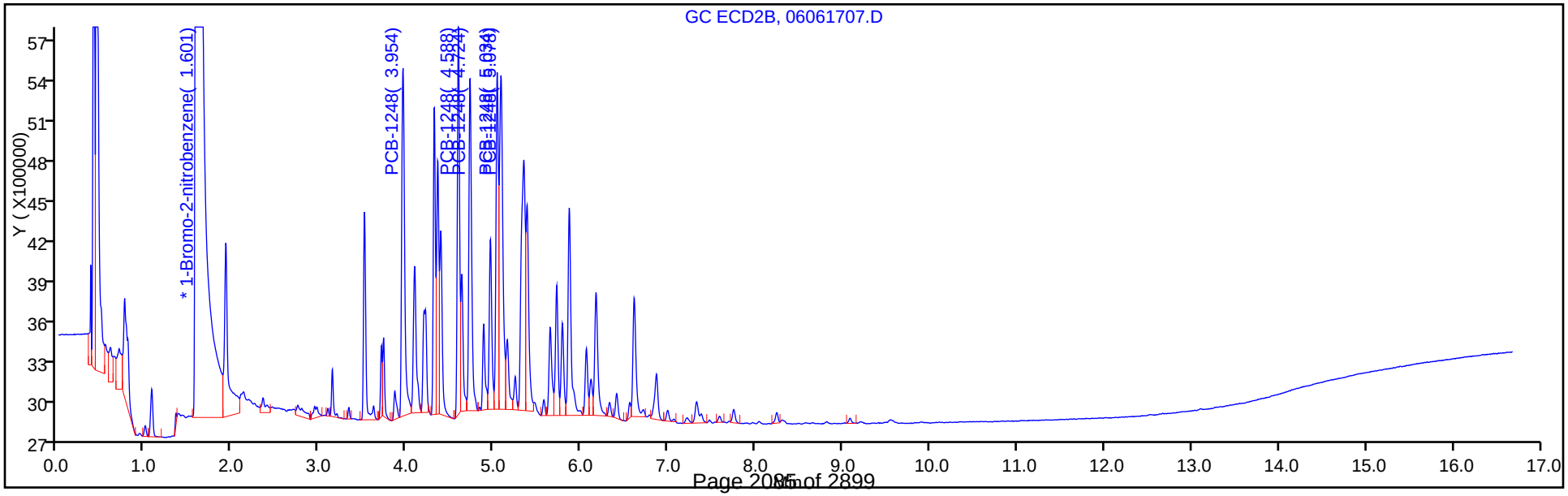
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061707.D

Injection Date:	06-Jun-2017 15:59:26	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL11248			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 16:21 Calibration End Date: 06/06/2017 18:31 Calibration ID: 29389

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL12154 280-376236/14	06061714.D
Level 2	STDL22154 280-376236/13	06061713.D
Level 3	STDL32154 280-376236/12	06061712.D
Level 4	STDL42154 280-376236/11	06061711.D
Level 5	STDL52154 280-376236/10	06061710.D
Level 6	STDL62154 280-376236/9	06061709.D
Level 7	STDL72154 280-376236/8	06061708.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1221 Peak 1	0.1253 0.0972	0.1023 0.1064	0.0980	0.1080	0.1054	Lin1	0.2950	0.1028							0.9980		0.9900
PCB-1221 Peak 2	0.1048 0.0683	0.0929 0.0655	0.0796	0.0733	0.0671	Lin1	1.1733	0.0657							0.9990		0.9900
PCB-1221 Peak 3	0.3470 0.2431	0.3100 0.2506	0.2789	0.2485	0.2442	Lin1	2.8504	0.2427							0.9990		0.9900
PCB-1254 Peak 1	0.6296 0.4420	0.5693 0.4559	0.5036	0.4705	0.4535	Lin1	5.2533	0.4447							1.0000		0.9900
PCB-1254 Peak 2	0.5031 0.3724	0.4682 0.3797	0.4245	0.3823	0.3715	Lin1	3.9292	0.3706							1.0000		0.9900
PCB-1254 Peak 3	0.8580 0.6550	0.7972 0.6726	0.7289	0.6684	0.6540	Lin1	5.7371	0.6550							1.0000		0.9900
PCB-1254 Peak 4	0.4424 0.3015	0.3589 0.3108	0.3286	0.3017	0.3008	Lin1	3.1112	0.3001							0.9990		0.9900
PCB-1254 Peak 5	0.9624 0.6830	0.8421 0.6993	0.7701	0.6992	0.6849	Lin1	7.3700	0.6805							1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 16:21 Calibration End Date: 06/06/2017 18:31 Calibration ID: 29389

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL12154 280-376236/14	06061714.D
Level 2	STDL22154 280-376236/13	06061713.D
Level 3	STDL32154 280-376236/12	06061712.D
Level 4	STDL42154 280-376236/11	06061711.D
Level 5	STDL52154 280-376236/10	06061710.D
Level 6	STDL62154 280-376236/9	06061709.D
Level 7	STDL72154 280-376236/8	06061708.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1221 Peak 1	BNB	Lin1	1018371 23963442	1705036 33640746	3318748	9170289	17607107	25.0 750	50.0 1000	100	250	500
PCB-1221 Peak 2	BNB	Lin1	851869 16837948	1547959 20724612	2693650	6227622	11206513	25.0 750	50.0 1000	100	250	500
PCB-1221 Peak 3	BNB	Lin1	2819790 59902311	5166102 79270143	9441334	21102703	40802556	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 1	BNB	Lin1	5116092 108912956	9488010 144211497	17048738	39951293	75771132	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 2	BNB	Lin1	4087907 91761761	7803681 120105022	14371710	32459148	62065761	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 3	BNB	Lin1	6971281 161409171	13287742 212753675	24674939	56756901	109266180	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 4	BNB	Lin1	3594296 74297254	5981741 98319369	11123568	25618583	50250511	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 5	BNB	Lin1	7819837 168315474	14035652 221189851	26068218	59368878	114428399	25.0 750	50.0 1000	100	250	500

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061708.D
Lims ID: STDL72154
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 16:21:08 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL72154
Misc. Info.: 280-0059455-008
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:29 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	316300518	1000.0	1000.0	
2	1.599	1.599	0.000	372219415	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.962	2.963	-0.001	33640746	1000.0	1031.8	
1	3.106	3.106	0.000	20724612	1000.0	980.0	
1	3.142	3.143	-0.001	79270143	1000.0	1020.8	
		Average of Peak Amounts =				1010.8	
2	2.966	2.966	0.000	46394184	1000.0	976.3	
2	3.092	3.090	0.002	28508769	1000.0	974.7	
2	3.142	3.143	-0.001	102422041	1000.0	974.0	
		Average of Peak Amounts =				975.0	
						RPD = 3.61	
9 PCB-1254							
1	5.292	5.293	-0.001	144211497	1000.0	1013.4	
1	5.622	5.623	-0.001	120105022	1000.0	1014.1	
1	5.776	5.776	0.000	212753675	1000.0	1018.2	
1	6.482	6.483	-0.001	98319369	1000.0	1025.3	
1	6.742	6.743	-0.001	221189851	1000.0	1016.8	
		Average of Peak Amounts =				1017.6	
2	5.309	5.310	-0.001	174597621	1000.0	992.0	
2	5.712	5.713	-0.001	134782458	1000.0	991.6	
2	5.859	5.860	-0.001	241478572	1000.0	981.5	
2	6.159	6.163	-0.004	186005612	1000.0	992.3	
2	6.859	6.860	-0.001	255987198	1000.0	988.6	
		Average of Peak Amounts =				989.2	
						RPD = 2.83	

Report Date: 07-Jun-2017 06:52:30 Chrom Revision: 2.2 25-Apr-2017 13:27:22
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061708.D

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						2028.4	
2						1964.2	
						RPD = 3.22	

Reagents:

AR_2154_L7_00014	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

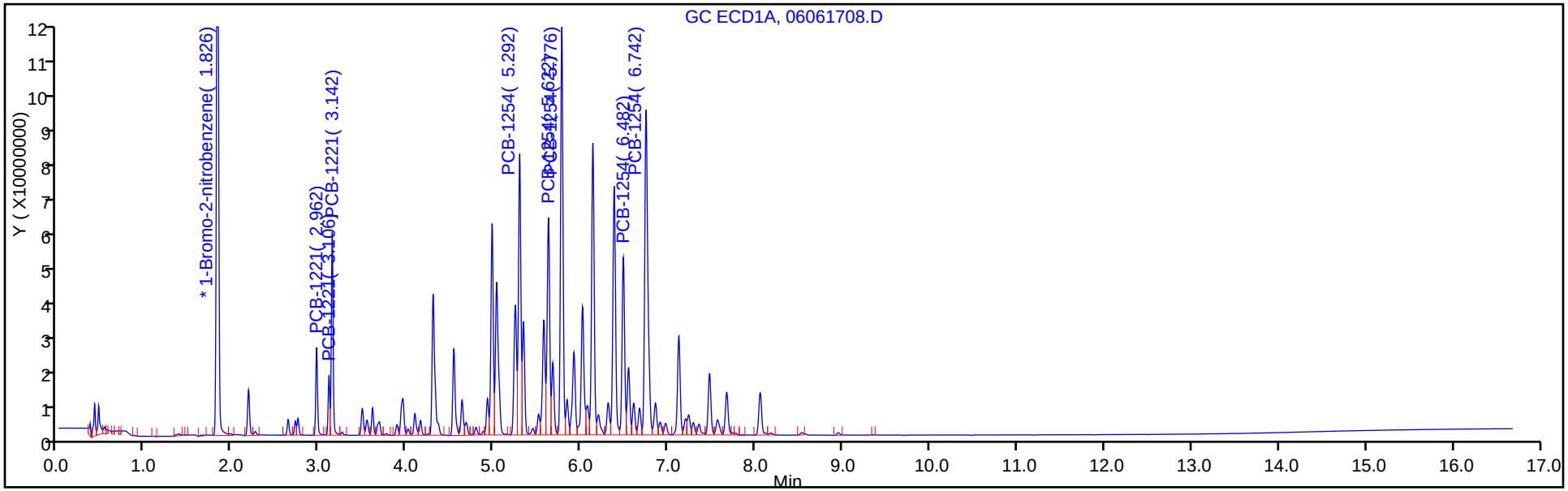
Report Date: 07-Jun-2017 06:52:30 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

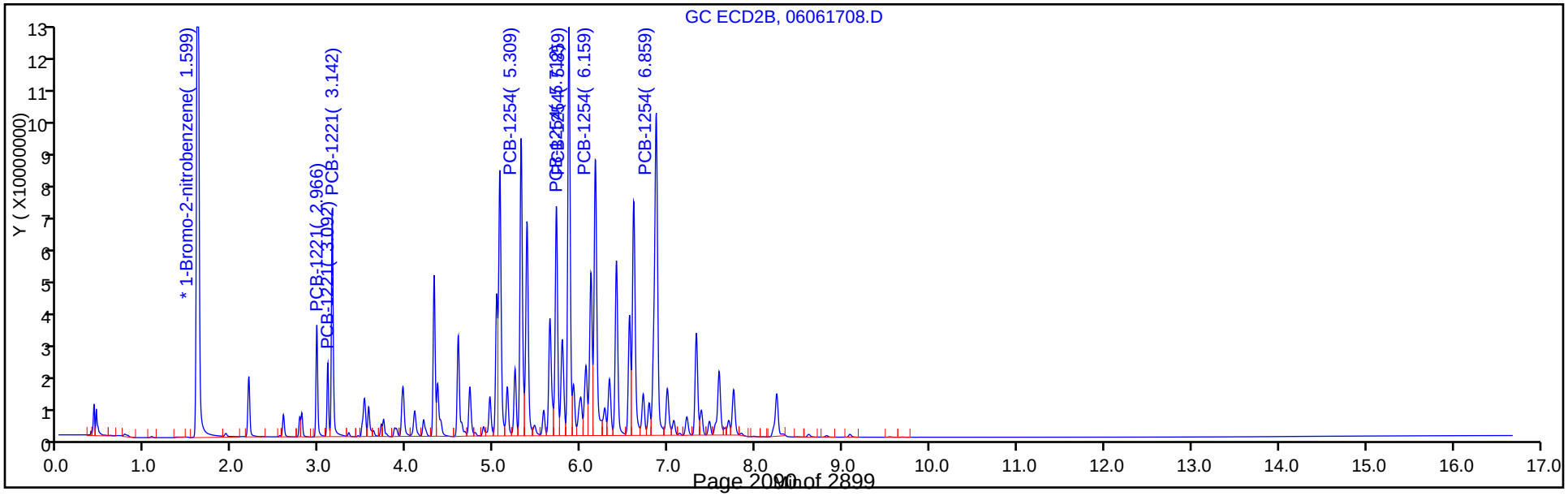
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061708.D

Injection Date:	06-Jun-2017 16:21:08	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL72154			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061709.D
Lims ID: STDL62154
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Jun-2017 16:42:53 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL62154
Misc. Info.: 280-0059455-009
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:31 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	328567077	1000.0	1000.0	
2	1.598	1.599	-0.001	380847710	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.962	2.963	-0.001	23963442	750.0	706.6	
1	3.105	3.106	-0.001	16837948	750.0	762.6	
1	3.142	3.143	-0.001	59902311	750.0	739.4	
		Average of Peak Amounts =				736.2	
2	2.965	2.966	-0.001	36157066	750.0	737.6	
2	3.092	3.090	0.002	21964316	750.0	728.4	
2	3.142	3.143	-0.001	80047709	750.0	738.4	
		Average of Peak Amounts =				734.8	
						RPD = 0.19	
9 PCB-1254							
1	5.295	5.293	0.002	108912956	750.0	733.6	
1	5.622	5.623	-0.001	91761761	750.0	743.1	
1	5.775	5.776	-0.001	161409171	750.0	741.3	
1	6.482	6.483	-0.001	74297254	750.0	743.0	
1	6.742	6.743	-0.001	168315474	750.0	741.9	
		Average of Peak Amounts =				740.6	
2	5.308	5.310	-0.002	133710123	750.0	738.0	
2	5.715	5.713	0.002	103746642	750.0	741.6	
2	5.858	5.860	-0.002	185343534	750.0	729.5	
2	6.162	6.163	-0.001	141015897	750.0	730.2	
2	6.858	6.860	-0.002	197027605	750.0	738.8	
		Average of Peak Amounts =				735.6	
						RPD = 0.67	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						1476.8	
2						1470.4	
						RPD = 0.43	

Reagents:

AR_2154_L6_00016	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

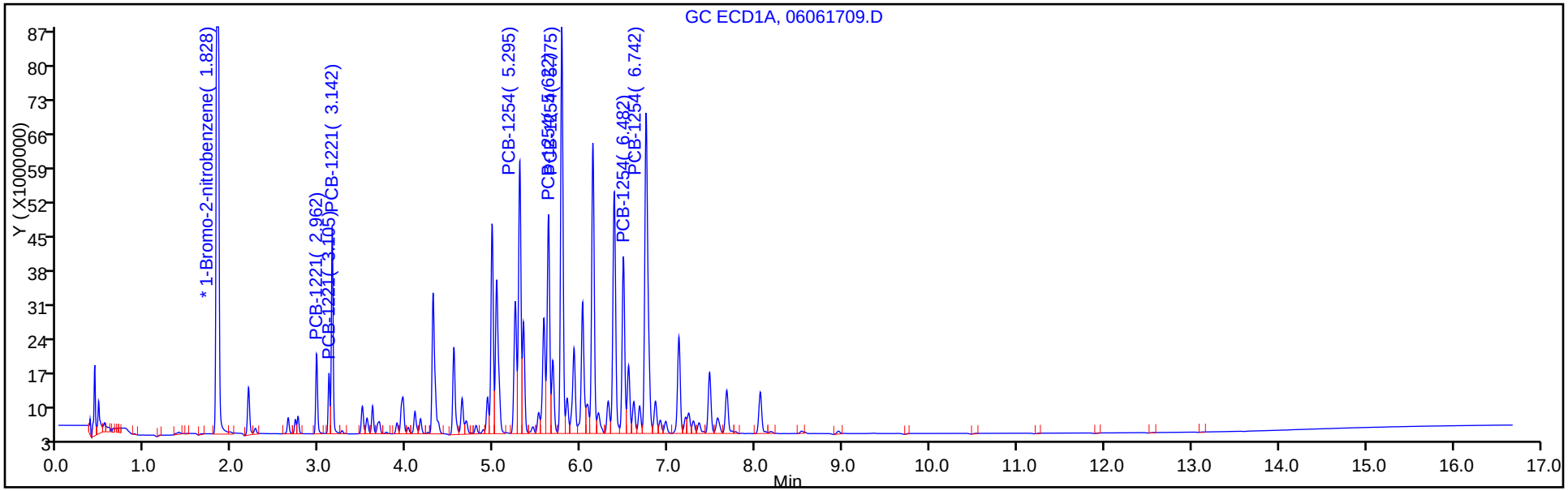
Report Date: 07-Jun-2017 06:52:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

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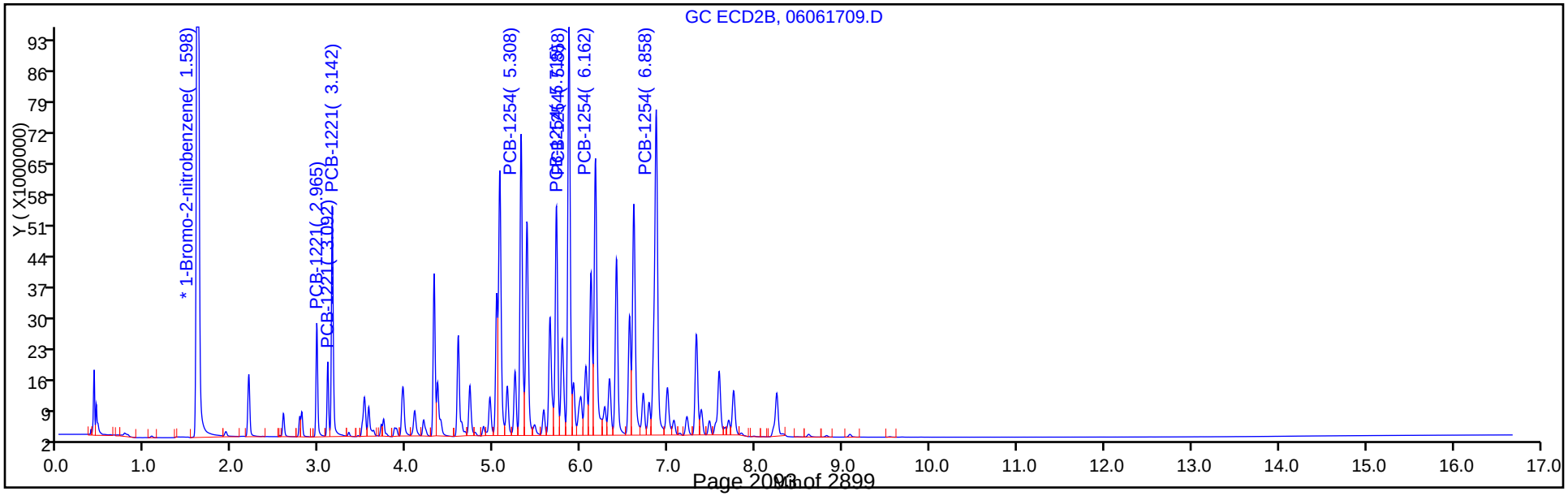
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061709.D

Injection Date:	06-Jun-2017 16:42:53	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL62154			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061710.D
Lims ID: STDL52154
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 06-Jun-2017 17:04:36 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL52154
Misc. Info.: 280-0059455-010
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:33 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:29:24

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	334139738	1000.0	1000.0	
2	1.600	1.600	0.000	386892170	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.963	2.963	0.000	17607107	500.0	509.8	
1	3.106	3.106	0.000	11206513	500.0	492.9	
1	3.143	3.143	0.000	40802556	500.0	491.3	
		Average of Peak Amounts =				498.0	
2	2.966	2.966	0.000	25638632	500.0	507.3	
2	3.090	3.090	0.000	16029821	500.0	517.0	
2	3.143	3.143	0.000	57049824	500.0	511.0	
		Average of Peak Amounts =				511.8	
						RPD = 2.73	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
9 PCB-1254							
1	5.293	5.293	0.000	75771132	500.0	498.1	
1	5.623	5.623	0.000	62065761	500.0	490.7	
1	5.776	5.776	0.000	109266180	500.0	490.5	
1	6.483	6.483	0.000	50250511	500.0	490.7	
1	6.743	6.743	0.000	114428399	500.0	492.4	
		Average of Peak Amounts =				492.5	
2	5.310	5.310	0.000	93742064	500.0	503.8	
2	5.713	5.713	0.000	72065281	500.0	501.4	
2	5.860	5.860	0.000	129031405	500.0	491.3	
2	6.163	6.163	0.000	100338904	500.0	505.7	
2	6.860	6.860	0.000	137801037	500.0	502.5	
		Average of Peak Amounts =				500.9	
						RPD = 1.71	

Reagents:

AR_2154_L5_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

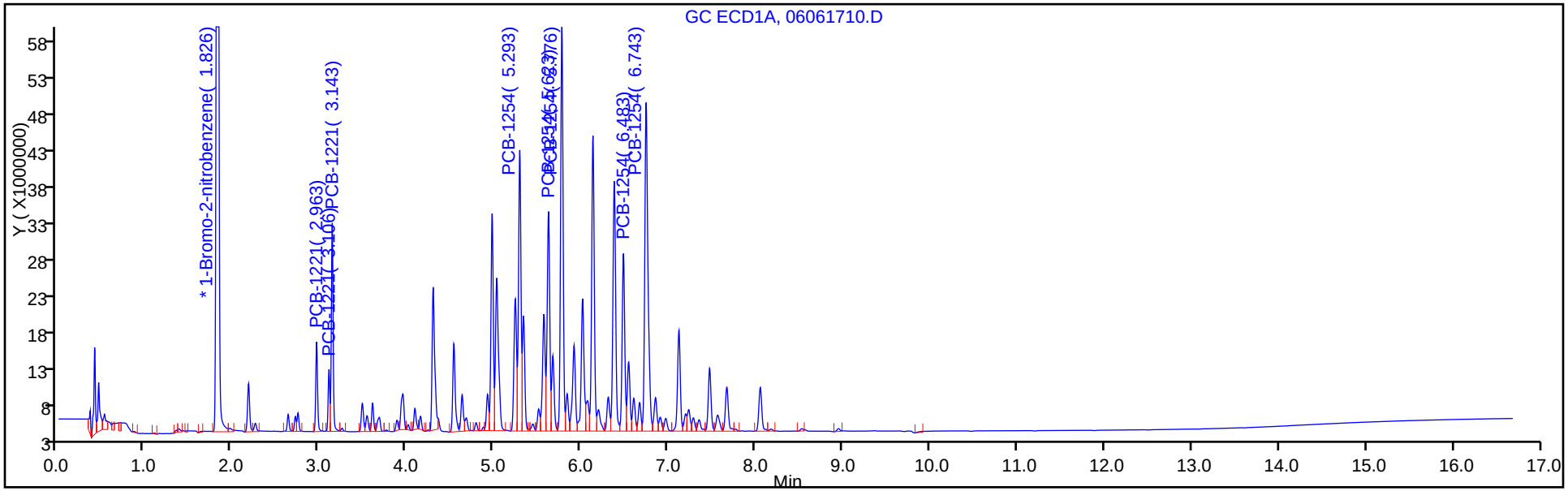
Report Date: 07-Jun-2017 06:52:33 Chrom Revision: 2.2 25-Apr-2017 13:27:22

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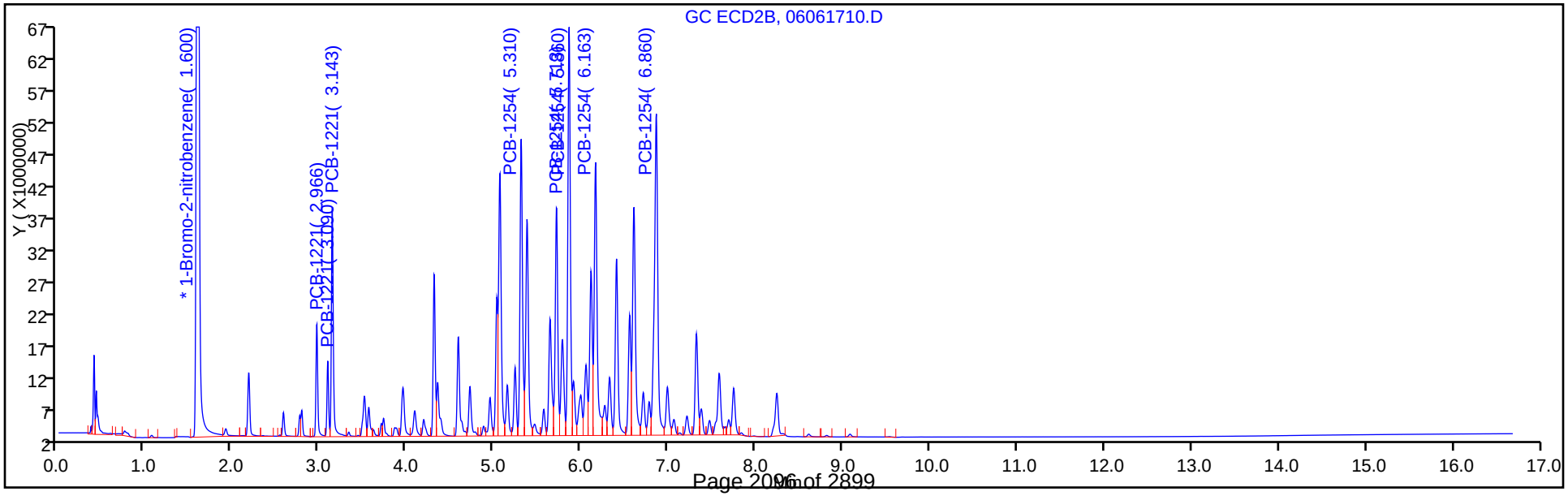
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061710.D

Injection Date:	06-Jun-2017 17:04:36	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL52154			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061711.D
Lims ID: STDL42154
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Jun-2017 17:26:17 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL42154
Misc. Info.: 280-0059455-011
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:35 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	339641861	1000.0	1000.0	
2	1.601	1.600	0.001	392534131	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.964	2.963	0.001	9170289	250.0	259.8	
1	3.104	3.106	-0.002	6227622	250.0	261.4	
1	3.141	3.143	-0.002	21102703	250.0	244.2	
		Average of Peak Amounts =				255.1	
2	2.964	2.966	-0.002	14237129	250.0	266.3	
2	3.091	3.090	0.001	8747606	250.0	267.7	
2	3.141	3.143	-0.002	31352454	250.0	265.9	
		Average of Peak Amounts =				266.7	
						RPD = 4.42	
9 PCB-1254							
1	5.294	5.293	0.001	39951293	250.0	252.7	
1	5.624	5.623	0.001	32459148	250.0	247.3	
1	5.774	5.776	-0.002	56756901	250.0	246.4	
1	6.481	6.483	-0.002	25618583	250.0	240.9	
1	6.744	6.743	0.001	59368878	250.0	246.0	
		Average of Peak Amounts =				246.7	
2	5.311	5.310	0.001	50891523	250.0	261.3	
2	5.714	5.713	0.001	39005754	250.0	259.2	
2	5.861	5.860	0.001	79398910	250.0	287.3	
2	6.164	6.163	0.001	55012397	250.0	264.3	
2	6.861	6.860	0.001	75955522	250.0	264.1	
		Average of Peak Amounts =				267.2	
						RPD = 8.00	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						501.8	
2						533.9	
						RPD = 6.19	

Reagents:

AR_2154_L4_00019	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

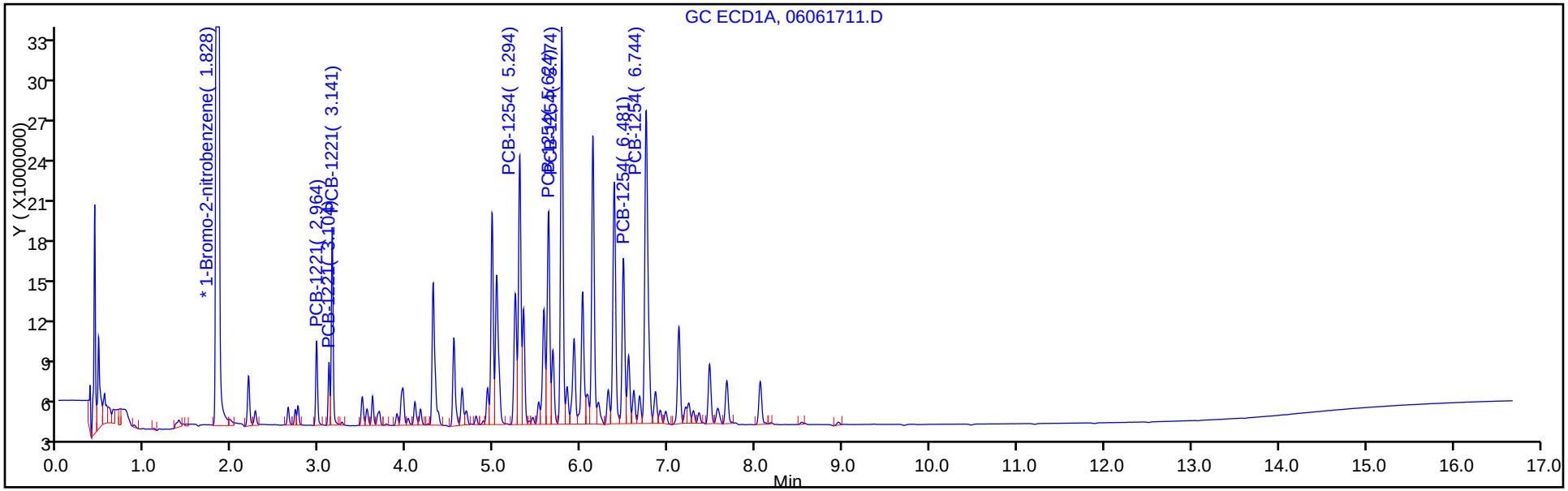
Report Date: 07-Jun-2017 06:52:35 Chrom Revision: 2.2 25-Apr-2017 13:27:22

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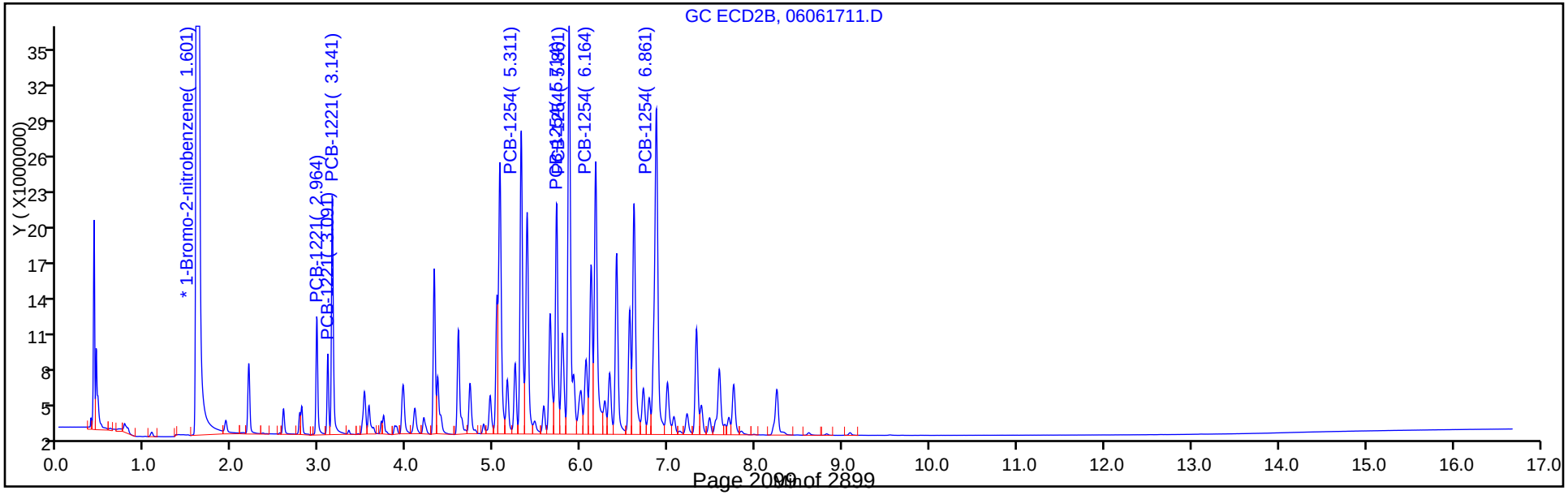
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061711.D

Injection Date:	06-Jun-2017 17:26:17	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL42154			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061712.D
Lims ID: STDL32154
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Jun-2017 17:47:59 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL32154
Misc. Info.: 280-0059455-012
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	338520893	1000.0	1000.0	
2	1.599	1.600	-0.001	389851526	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.963	2.963	0.000	3318748	100.0	92.5	
1	3.106	3.106	0.000	2693650	100.0	103.3	
1	3.143	3.143	0.000	9441334	100.0	103.2	
		Average of Peak Amounts =				99.7	
2	2.966	2.966	0.000	6759704	100.0	114.2	
2	3.093	3.090	0.003	4089850	100.0	114.2	
2	3.143	3.143	0.000	14699343	100.0	113.1	
		Average of Peak Amounts =				113.8	
						RPD = 13.27	
9 PCB-1254							
1	5.293	5.293	0.000	17048738	100.0	101.4	
1	5.623	5.623	0.000	14371710	100.0	104.0	
1	5.776	5.776	0.000	24674939	100.0	102.5	
1	6.483	6.483	0.000	11123568	100.0	99.1	
1	6.746	6.743	0.003	26068218	100.0	102.3	
		Average of Peak Amounts =				101.9	
2	5.313	5.310	0.003	22558142	100.0	106.7	
2	5.716	5.713	0.003	17593511	100.0	107.9	
2	5.859	5.860	-0.001	35750963	100.0	115.4	
2	6.166	6.163	0.003	24838007	100.0	109.6	
2	6.859	6.860	-0.001	33922293	100.0	108.0	
		Average of Peak Amounts =				109.5	
						RPD = 7.24	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						201.5	
2						223.3	
						RPD = 10.26	

Reagents:

AR_2154_L3_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

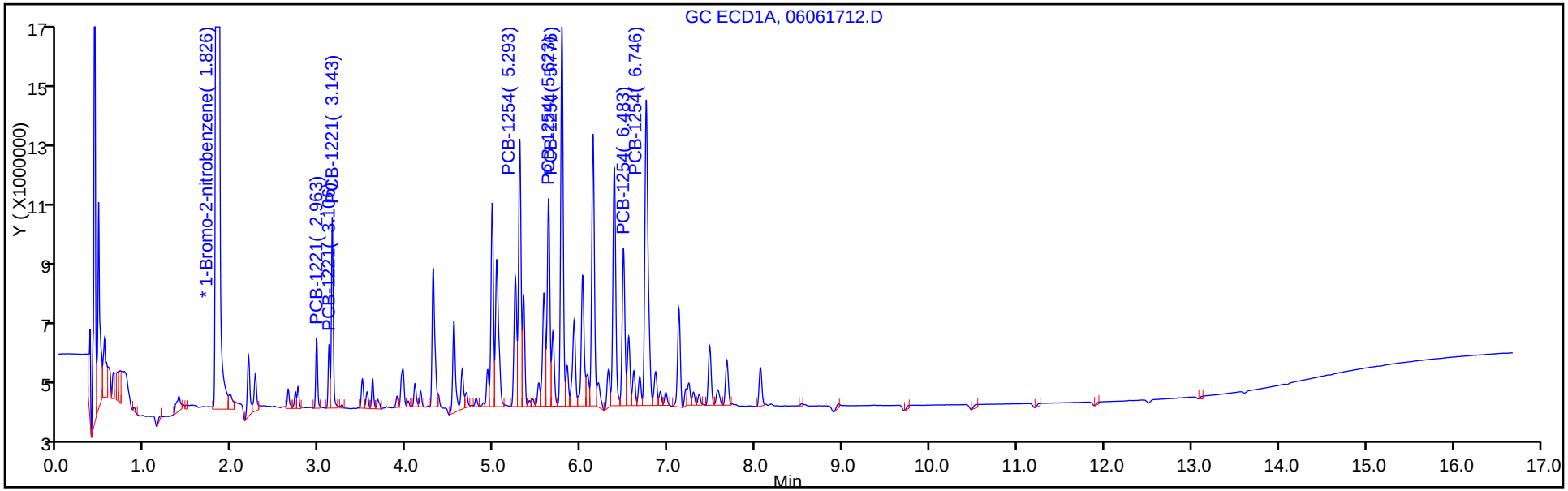
Report Date: 07-Jun-2017 06:52:37 Chrom Revision: 2.2 25-Apr-2017 13:27:22

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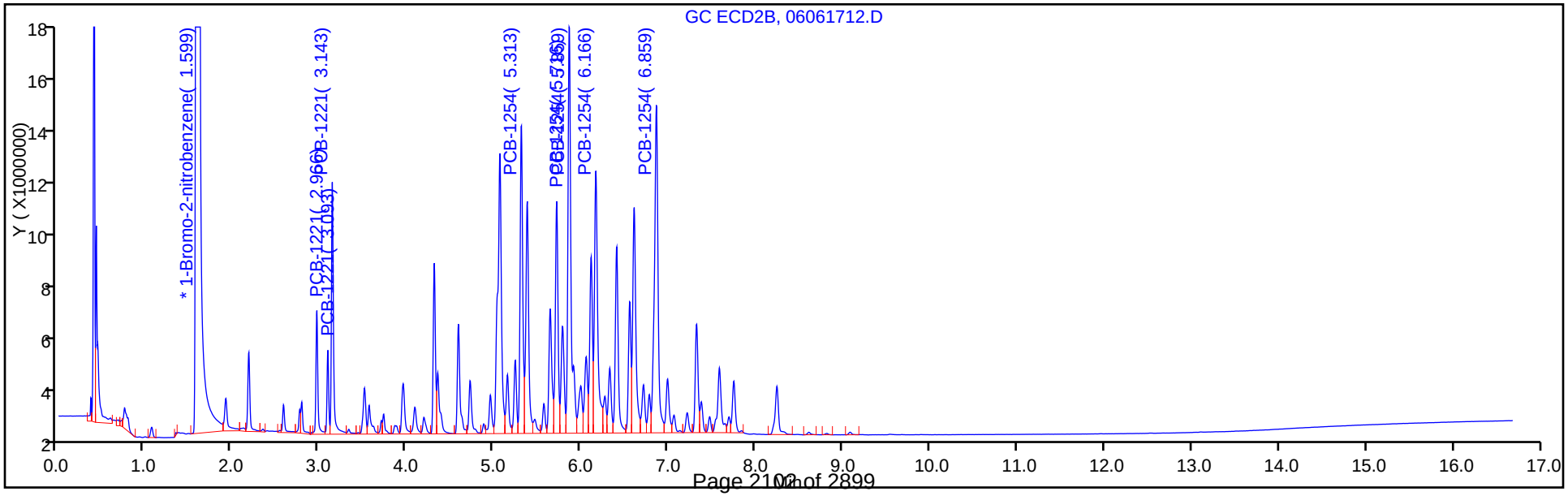
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061712.D

Injection Date:	06-Jun-2017 17:47:59	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL32154			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061713.D
Lims ID: STDL22154
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Jun-2017 18:09:41 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL22154
Misc. Info.: 280-0059455-013
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:38 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	333347331	1000.0	1000.0	
2	1.600	1.600	0.000	384100570	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.964	2.963	0.001	1705036	50.0	46.9	
1	3.107	3.106	0.001	1547959	50.0	52.9	
1	3.144	3.143	0.001	5166102	50.0	52.1	
		Average of Peak Amounts =				50.6	
2	2.967	2.966	0.001	3864936	50.0	55.7	
2	3.094	3.090	0.004	2301219	50.0	55.6	
2	3.144	3.143	0.001	8219031	50.0	53.9	
		Average of Peak Amounts =				55.1	
						RPD = 8.48	
9 PCB-1254							
1	5.294	5.293	0.001	9488010	50.0	52.2	
1	5.624	5.623	0.001	7803681	50.0	52.6	
1	5.777	5.776	0.001	13287742	50.0	52.1	
1	6.484	6.483	0.001	5981741	50.0	49.4	
1	6.744	6.743	0.001	14035652	50.0	51.0	
		Average of Peak Amounts =				51.5	
2	5.310	5.310	0.000	12340322	50.0	51.3	
2	5.717	5.713	0.004	9569387	50.0	51.6	
2	5.860	5.860	0.000	19574882	50.0	52.0	
2	6.167	6.163	0.004	13590764	50.0	52.2	
2	6.860	6.860	0.000	18701747	50.0	51.8	
		Average of Peak Amounts =				51.8	
						RPD = 0.64	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						102.1	
2						106.9	
						RPD = 4.60	

Reagents:

AR_2154_L2_00019	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

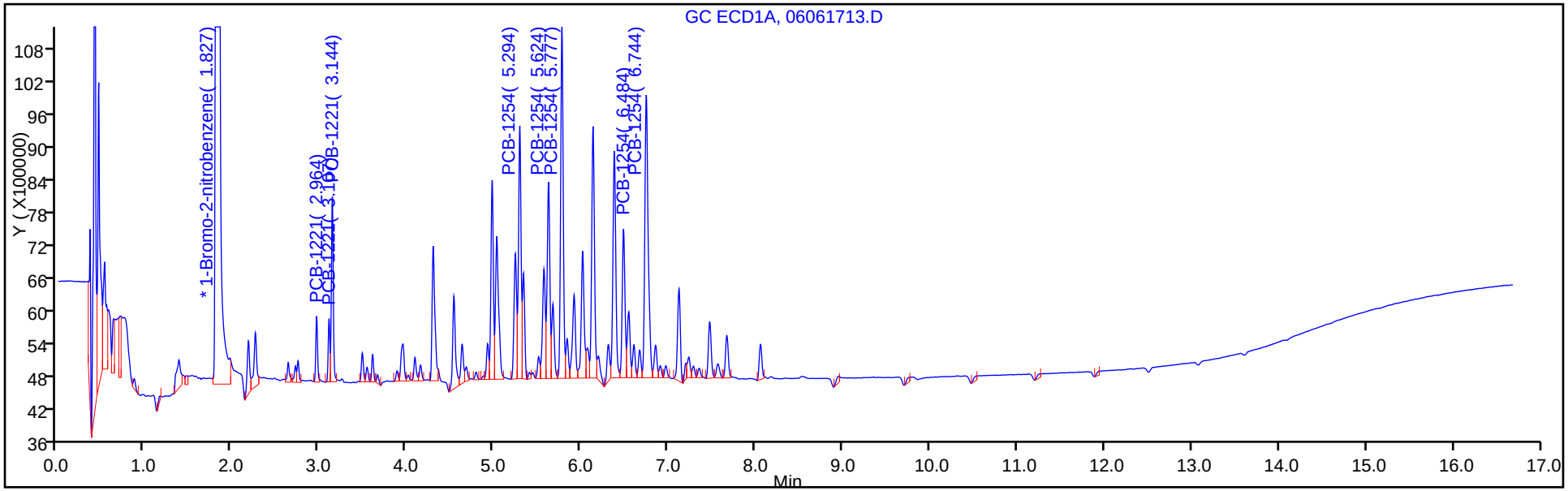
Report Date: 07-Jun-2017 06:52:39 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

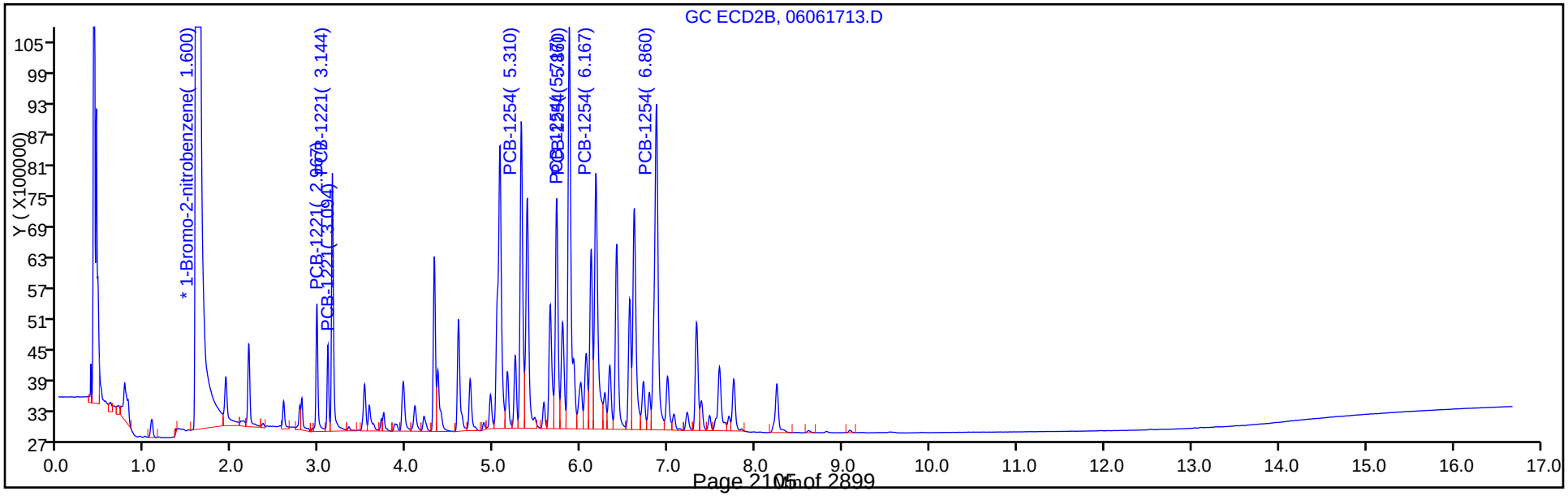
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061713.D

Injection Date:	06-Jun-2017 18:09:41	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL22154			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061714.D
Lims ID: STDL12154
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Jun-2017 18:31:23 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL12154
Misc. Info.: 280-0059455-014
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:40 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.826	-0.001	325012905	1000.0	1000.0	
2	1.599	1.600	-0.001	375991567	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.962	2.963	-0.001	1018371	25.0	27.6	
1	3.105	3.106	-0.001	851869	25.0	22.0	
1	3.142	3.143	-0.001	2819790	25.0	24.0	
		Average of Peak Amounts =				24.6	
2	2.965	2.966	-0.001	1998442	25.0	17.6	
2	3.092	3.090	0.002	1147785	25.0	17.4	
2	3.142	3.143	-0.001	4387732	25.0	18.7	
		Average of Peak Amounts =				17.9	
						RPD = 31.48	
9 PCB-1254							
1	5.292	5.293	-0.001	5116092	25.0	23.6	
1	5.622	5.623	-0.001	4087907	25.0	23.3	
1	5.775	5.776	-0.001	6971281	25.0	24.0	
1	6.485	6.483	0.002	3594296	25.0	26.5	
1	6.745	6.743	0.002	7819837	25.0	24.5	
		Average of Peak Amounts =				24.4	
2	5.312	5.310	0.002	6943955	25.0	21.9	
2	5.718	5.713	0.005	5341101	25.0	21.7	
2	5.862	5.860	0.002	10932751	25.0	18.0	
2	6.168	6.163	0.005	7440552	25.0	20.6	
2	6.858	6.860	-0.002	10458541	25.0	21.2	
		Average of Peak Amounts =				20.7	
						RPD = 16.33	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						48.9	
2						38.6	
						RPD = 23.67	

Reagents:

AR_2154_L1_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

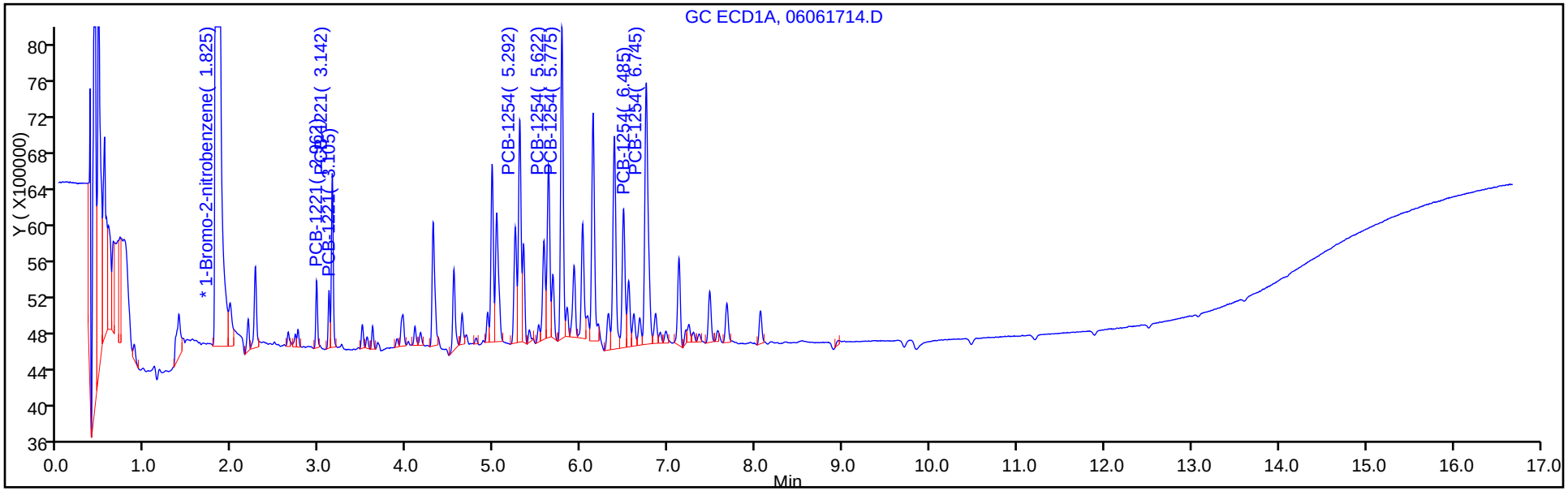
Report Date: 07-Jun-2017 06:52:40 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

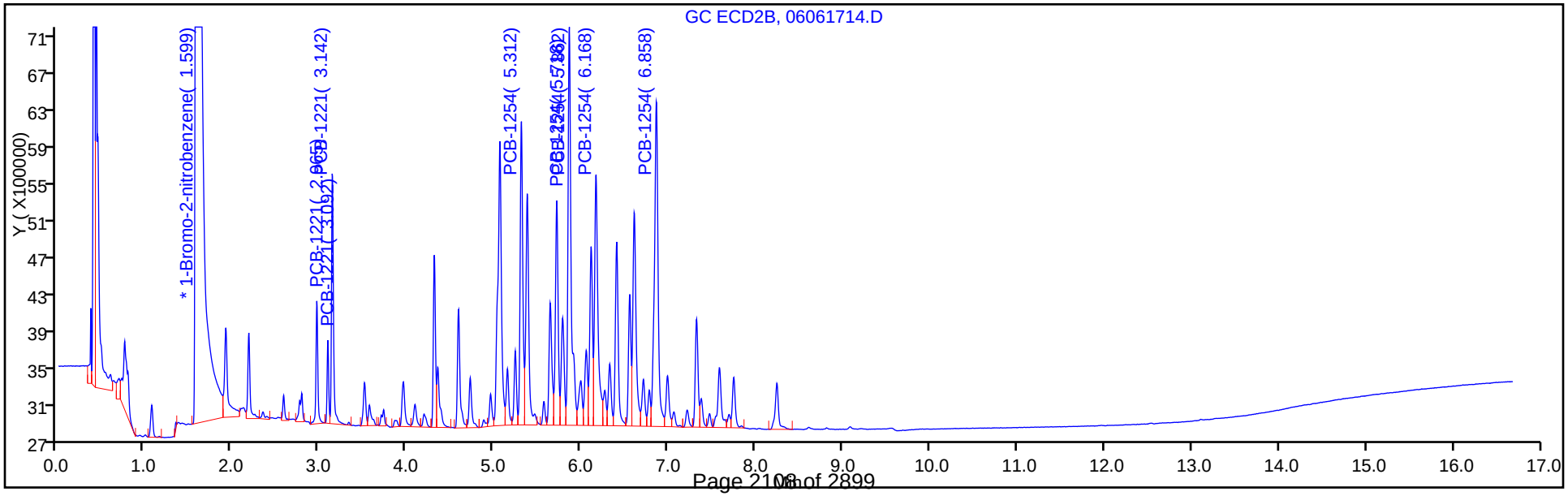
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061714.D

Injection Date:	06-Jun-2017 18:31:23	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL12154			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 16:21 Calibration End Date: 06/06/2017 18:31 Calibration ID: 29390

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL12154 280-376236/14	06061714.D
Level 2	STDL22154 280-376236/13	06061713.D
Level 3	STDL32154 280-376236/12	06061712.D
Level 4	STDL42154 280-376236/11	06061711.D
Level 5	STDL52154 280-376236/10	06061710.D
Level 6	STDL62154 280-376236/9	06061709.D
Level 7	STDL72154 280-376236/8	06061708.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1221 Peak 1	0.2126 0.1266	0.2012 0.1246	0.1734	0.1451	0.1325	Lin1	3.1249	0.1245							0.9970		0.9900
PCB-1221 Peak 2	0.1221 0.0769	0.1198 0.0766	0.1049	0.0891	0.0829	Lin1	1.7184	0.0768							0.9960		0.9900
PCB-1221 Peak 3	0.4668 0.2802	0.4280 0.2752	0.3770	0.3195	0.2949	Lin1	6.5227	0.2758							0.9970		0.9900
PCB-1254 Peak 1	0.7387 0.4681	0.6426 0.4691	0.5786	0.5186	0.4846	Lin1	8.2805	0.4645							0.9990		0.9900
PCB-1254 Peak 2	0.5682 0.3632	0.4983 0.3621	0.4513	0.3975	0.3725	Lin1	6.4112	0.3587							0.9990		0.9900
PCB-1254 Peak 3	1.1631 0.6489	1.0193 0.6488	0.9170	0.8091	0.6670	Lin1	17.503	0.6431							0.9950		0.9900
PCB-1254 Peak 4	0.7916 0.4937	0.7077 0.4997	0.6371	0.5606	0.5187	Lin1	9.5964	0.4939							0.9980		0.9900
PCB-1254 Peak 5	1.1126 0.6898	0.9738 0.6877	0.8701	0.7740	0.7123	Lin1	13.341	0.6822							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 16:21 Calibration End Date: 06/06/2017 18:31 Calibration ID: 29390

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL12154 280-376236/14	06061714.D
Level 2	STDL22154 280-376236/13	06061713.D
Level 3	STDL32154 280-376236/12	06061712.D
Level 4	STDL42154 280-376236/11	06061711.D
Level 5	STDL52154 280-376236/10	06061710.D
Level 6	STDL62154 280-376236/9	06061709.D
Level 7	STDL72154 280-376236/8	06061708.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1221 Peak 1	BNB	Lin1	1998442 36157066	3864936 46394184	6759704	14237129	25638632	25.0 750	50.0 1000	100	250	500
PCB-1221 Peak 2	BNB	Lin1	1147785 21964316	2301219 28508769	4089850	8747606	16029821	25.0 750	50.0 1000	100	250	500
PCB-1221 Peak 3	BNB	Lin1	4387732 80047709	8219031 102422041	14699343	31352454	57049824	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 1	BNB	Lin1	6943955 133710123	12340322 174597621	22558142	50891523	93742064	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 2	BNB	Lin1	5341101 103746642	9569387 134782458	17593511	39005754	72065281	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 3	BNB	Lin1	10932751 185343534	19574882 241478572	35750963	79398910	129031405	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 4	BNB	Lin1	7440552 141015897	13590764 186005612	24838007	55012397	100338904	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 5	BNB	Lin1	10458541 197027605	18701747 255987198	33922293	75955522	137801037	25.0 750	50.0 1000	100	250	500

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061708.D
Lims ID: STDL72154
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 16:21:08 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL72154
Misc. Info.: 280-0059455-008
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:29 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	316300518	1000.0	1000.0	
2	1.599	1.599	0.000	372219415	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.962	2.963	-0.001	33640746	1000.0	1031.8	
1	3.106	3.106	0.000	20724612	1000.0	980.0	
1	3.142	3.143	-0.001	79270143	1000.0	1020.8	
		Average of Peak Amounts =				1010.8	
2	2.966	2.966	0.000	46394184	1000.0	976.3	
2	3.092	3.090	0.002	28508769	1000.0	974.7	
2	3.142	3.143	-0.001	102422041	1000.0	974.0	
		Average of Peak Amounts =				975.0	
						RPD = 3.61	
9 PCB-1254							
1	5.292	5.293	-0.001	144211497	1000.0	1013.4	
1	5.622	5.623	-0.001	120105022	1000.0	1014.1	
1	5.776	5.776	0.000	212753675	1000.0	1018.2	
1	6.482	6.483	-0.001	98319369	1000.0	1025.3	
1	6.742	6.743	-0.001	221189851	1000.0	1016.8	
		Average of Peak Amounts =				1017.6	
2	5.309	5.310	-0.001	174597621	1000.0	992.0	
2	5.712	5.713	-0.001	134782458	1000.0	991.6	
2	5.859	5.860	-0.001	241478572	1000.0	981.5	
2	6.159	6.163	-0.004	186005612	1000.0	992.3	
2	6.859	6.860	-0.001	255987198	1000.0	988.6	
		Average of Peak Amounts =				989.2	
						RPD = 2.83	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						2028.4	
2						1964.2	
						RPD = 3.22	

Reagents:

AR_2154_L7_00014	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

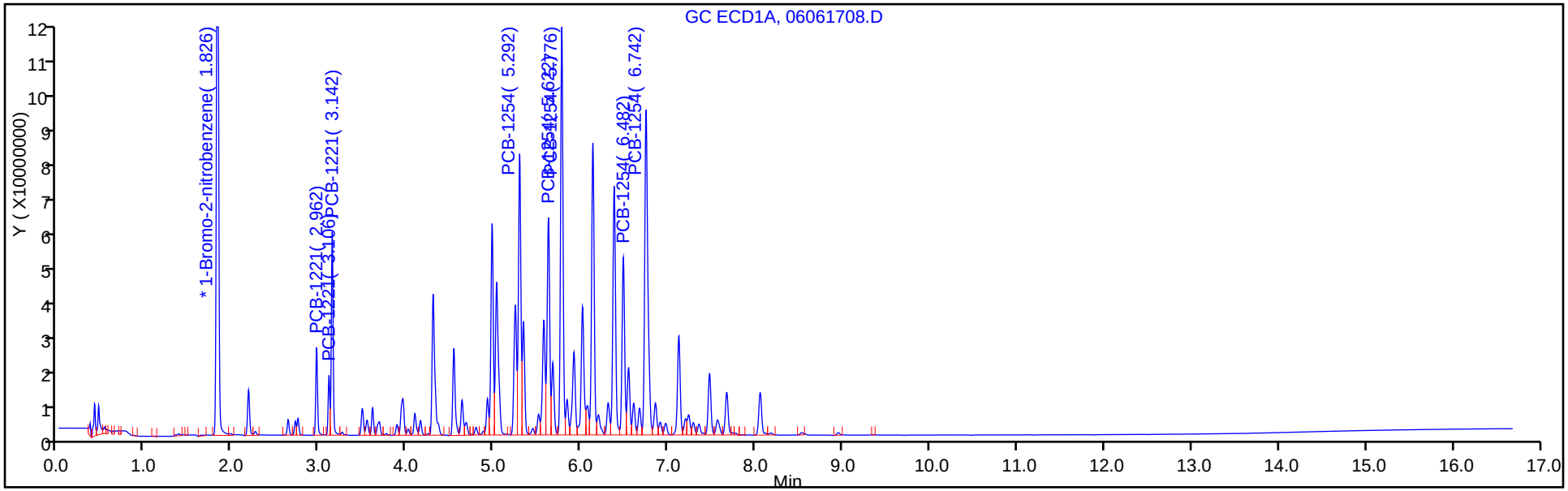
Report Date: 07-Jun-2017 06:52:30 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

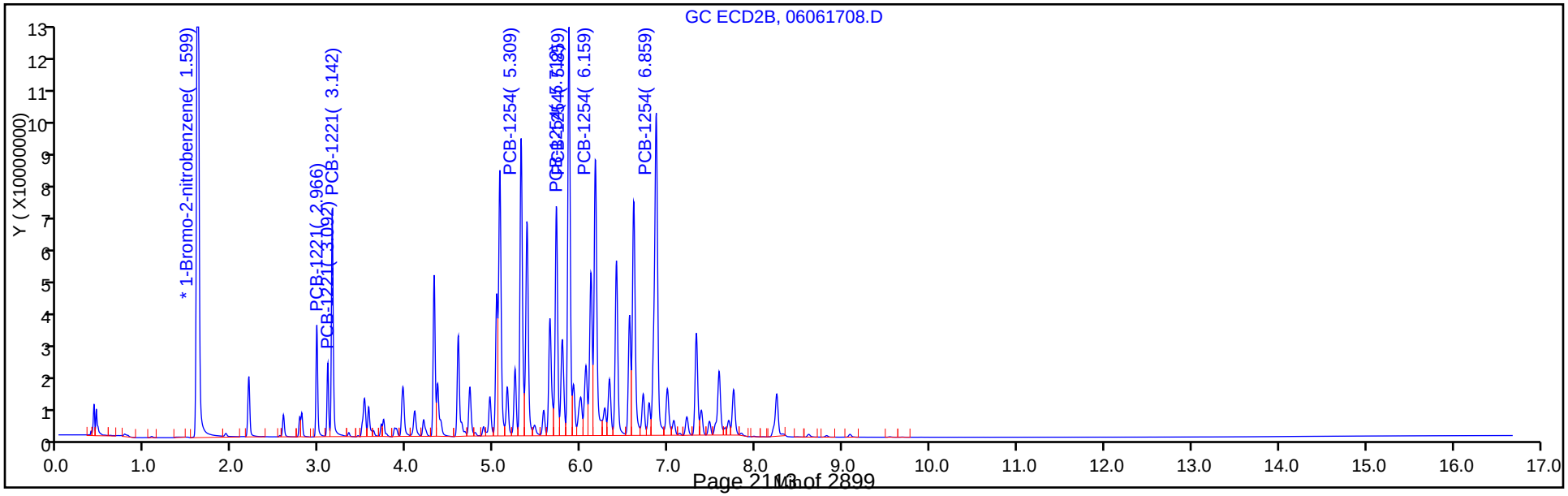
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061708.D

Injection Date:	06-Jun-2017 16:21:08	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL72154			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061709.D
Lims ID: STDL62154
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Jun-2017 16:42:53 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL62154
Misc. Info.: 280-0059455-009
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:31 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	328567077	1000.0	1000.0	
2	1.598	1.599	-0.001	380847710	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.962	2.963	-0.001	23963442	750.0	706.6	
1	3.105	3.106	-0.001	16837948	750.0	762.6	
1	3.142	3.143	-0.001	59902311	750.0	739.4	
		Average of Peak Amounts =				736.2	
2	2.965	2.966	-0.001	36157066	750.0	737.6	
2	3.092	3.090	0.002	21964316	750.0	728.4	
2	3.142	3.143	-0.001	80047709	750.0	738.4	
		Average of Peak Amounts =				734.8	
						RPD = 0.19	
9 PCB-1254							
1	5.295	5.293	0.002	108912956	750.0	733.6	
1	5.622	5.623	-0.001	91761761	750.0	743.1	
1	5.775	5.776	-0.001	161409171	750.0	741.3	
1	6.482	6.483	-0.001	74297254	750.0	743.0	
1	6.742	6.743	-0.001	168315474	750.0	741.9	
		Average of Peak Amounts =				740.6	
2	5.308	5.310	-0.002	133710123	750.0	738.0	
2	5.715	5.713	0.002	103746642	750.0	741.6	
2	5.858	5.860	-0.002	185343534	750.0	729.5	
2	6.162	6.163	-0.001	141015897	750.0	730.2	
2	6.858	6.860	-0.002	197027605	750.0	738.8	
		Average of Peak Amounts =				735.6	
						RPD = 0.67	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						1476.8	
2						1470.4	
						RPD = 0.43	

Reagents:

AR_2154_L6_00016	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

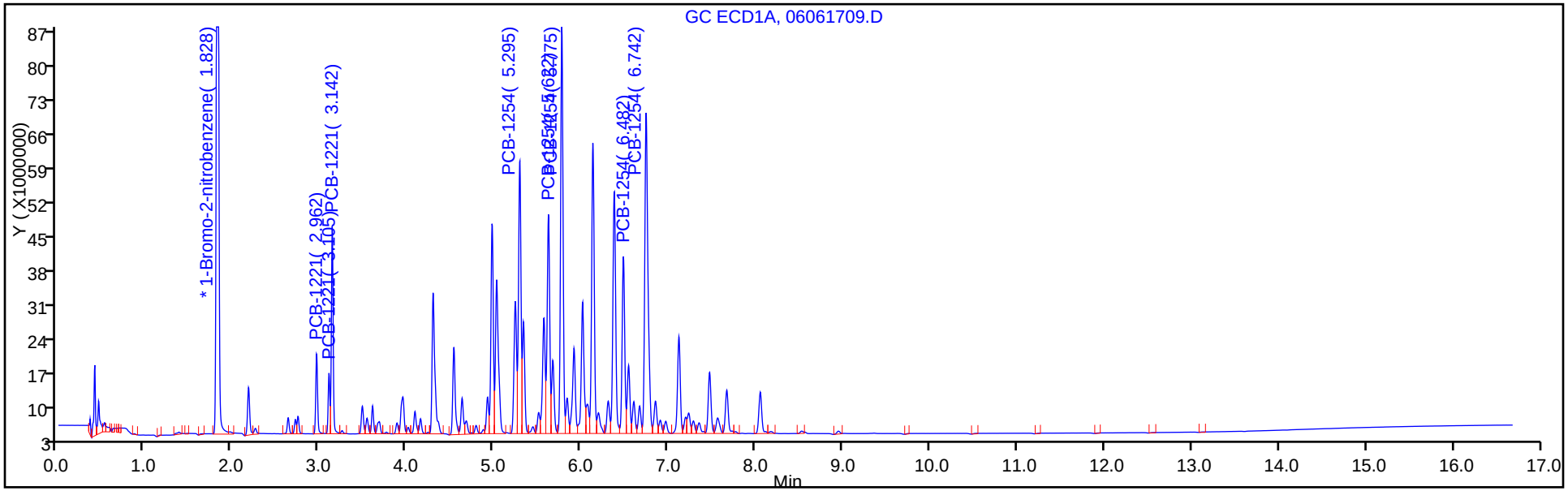
Report Date: 07-Jun-2017 06:52:32 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

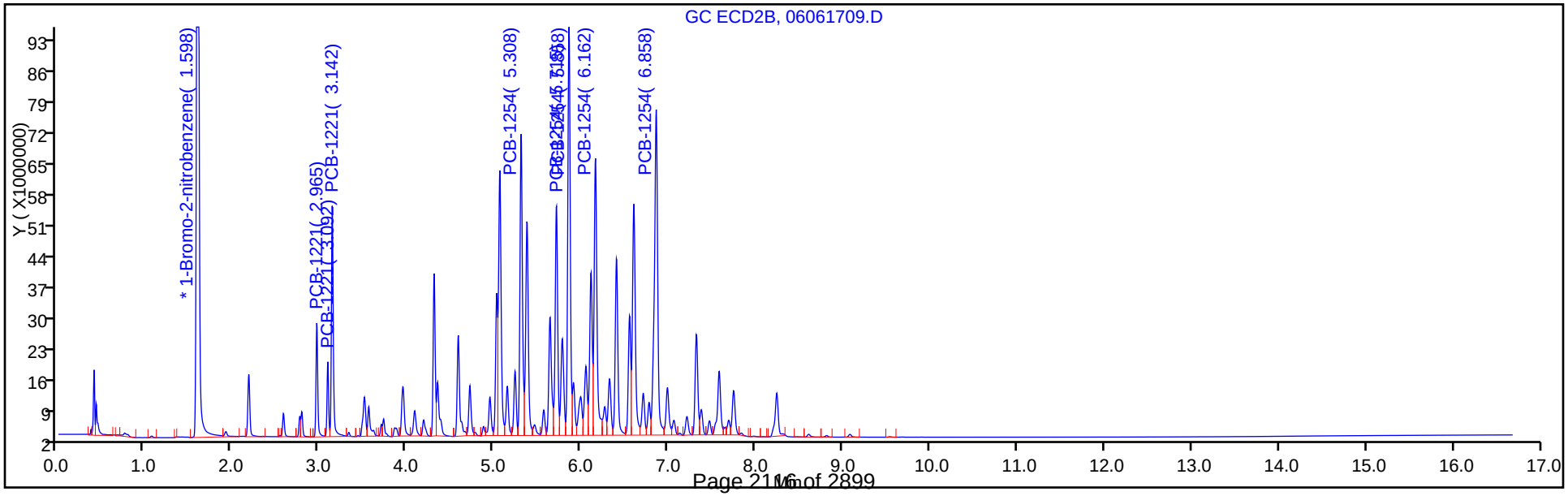
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061709.D

Injection Date:	06-Jun-2017 16:42:53	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL62154			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061710.D
Lims ID: STDL52154
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 06-Jun-2017 17:04:36 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL52154
Misc. Info.: 280-0059455-010
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:33 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:29:24

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	334139738	1000.0	1000.0	
2	1.600	1.600	0.000	386892170	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.963	2.963	0.000	17607107	500.0	509.8	
1	3.106	3.106	0.000	11206513	500.0	492.9	
1	3.143	3.143	0.000	40802556	500.0	491.3	
		Average of Peak Amounts =				498.0	
2	2.966	2.966	0.000	25638632	500.0	507.3	
2	3.090	3.090	0.000	16029821	500.0	517.0	
2	3.143	3.143	0.000	57049824	500.0	511.0	
		Average of Peak Amounts =				511.8	
						RPD = 2.73	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
9 PCB-1254							
1	5.293	5.293	0.000	75771132	500.0	498.1	
1	5.623	5.623	0.000	62065761	500.0	490.7	
1	5.776	5.776	0.000	109266180	500.0	490.5	
1	6.483	6.483	0.000	50250511	500.0	490.7	
1	6.743	6.743	0.000	114428399	500.0	492.4	
		Average of Peak Amounts =				492.5	
2	5.310	5.310	0.000	93742064	500.0	503.8	
2	5.713	5.713	0.000	72065281	500.0	501.4	
2	5.860	5.860	0.000	129031405	500.0	491.3	
2	6.163	6.163	0.000	100338904	500.0	505.7	
2	6.860	6.860	0.000	137801037	500.0	502.5	
		Average of Peak Amounts =				500.9	
						RPD = 1.71	

Reagents:

AR_2154_L5_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

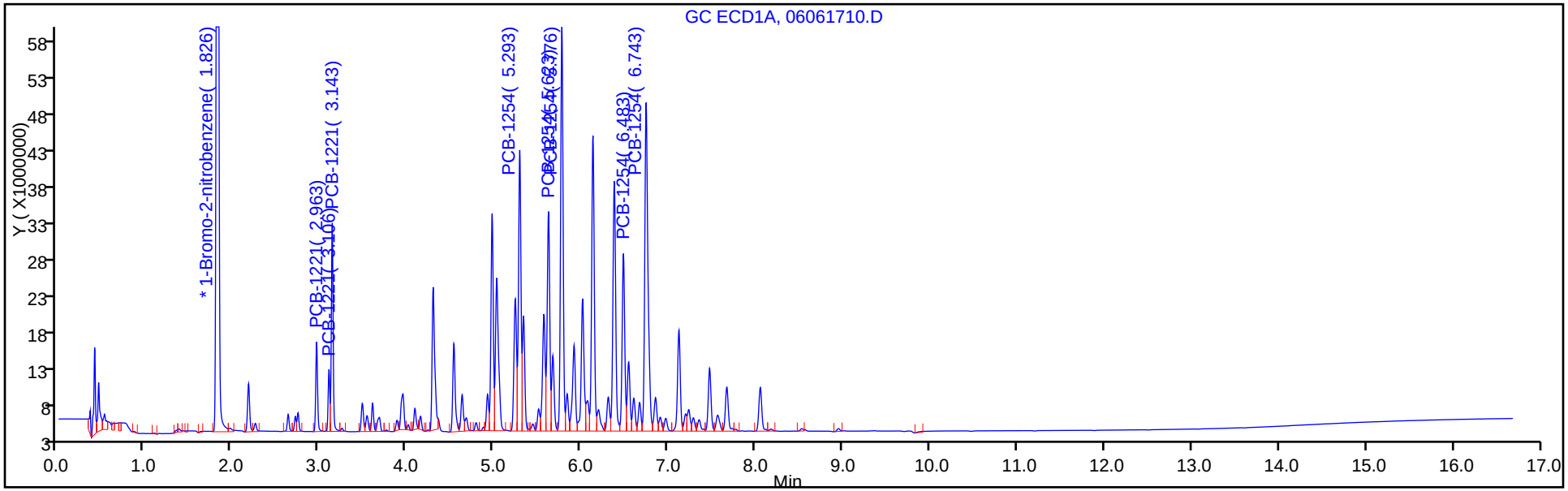
Report Date: 07-Jun-2017 06:52:34 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

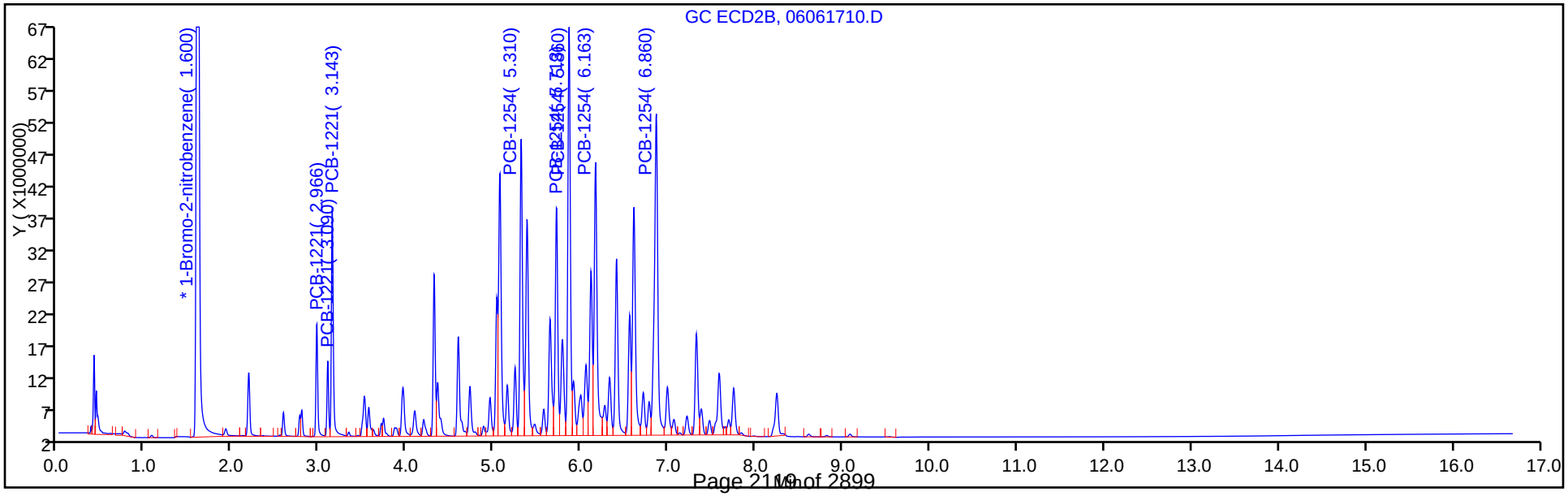
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061710.D

Injection Date:	06-Jun-2017 17:04:36	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL52154			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061711.D
Lims ID: STDL42154
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Jun-2017 17:26:17 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL42154
Misc. Info.: 280-0059455-011
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:35 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	339641861	1000.0	1000.0	
2	1.601	1.600	0.001	392534131	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.964	2.963	0.001	9170289	250.0	259.8	
1	3.104	3.106	-0.002	6227622	250.0	261.4	
1	3.141	3.143	-0.002	21102703	250.0	244.2	
		Average of Peak Amounts =				255.1	
2	2.964	2.966	-0.002	14237129	250.0	266.3	
2	3.091	3.090	0.001	8747606	250.0	267.7	
2	3.141	3.143	-0.002	31352454	250.0	265.9	
		Average of Peak Amounts =				266.7	
						RPD = 4.42	
9 PCB-1254							
1	5.294	5.293	0.001	39951293	250.0	252.7	
1	5.624	5.623	0.001	32459148	250.0	247.3	
1	5.774	5.776	-0.002	56756901	250.0	246.4	
1	6.481	6.483	-0.002	25618583	250.0	240.9	
1	6.744	6.743	0.001	59368878	250.0	246.0	
		Average of Peak Amounts =				246.7	
2	5.311	5.310	0.001	50891523	250.0	261.3	
2	5.714	5.713	0.001	39005754	250.0	259.2	
2	5.861	5.860	0.001	79398910	250.0	287.3	
2	6.164	6.163	0.001	55012397	250.0	264.3	
2	6.861	6.860	0.001	75955522	250.0	264.1	
		Average of Peak Amounts =				267.2	
						RPD = 8.00	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						501.8	
2						533.9	
						RPD = 6.19	

Reagents:

AR_2154_L4_00019	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

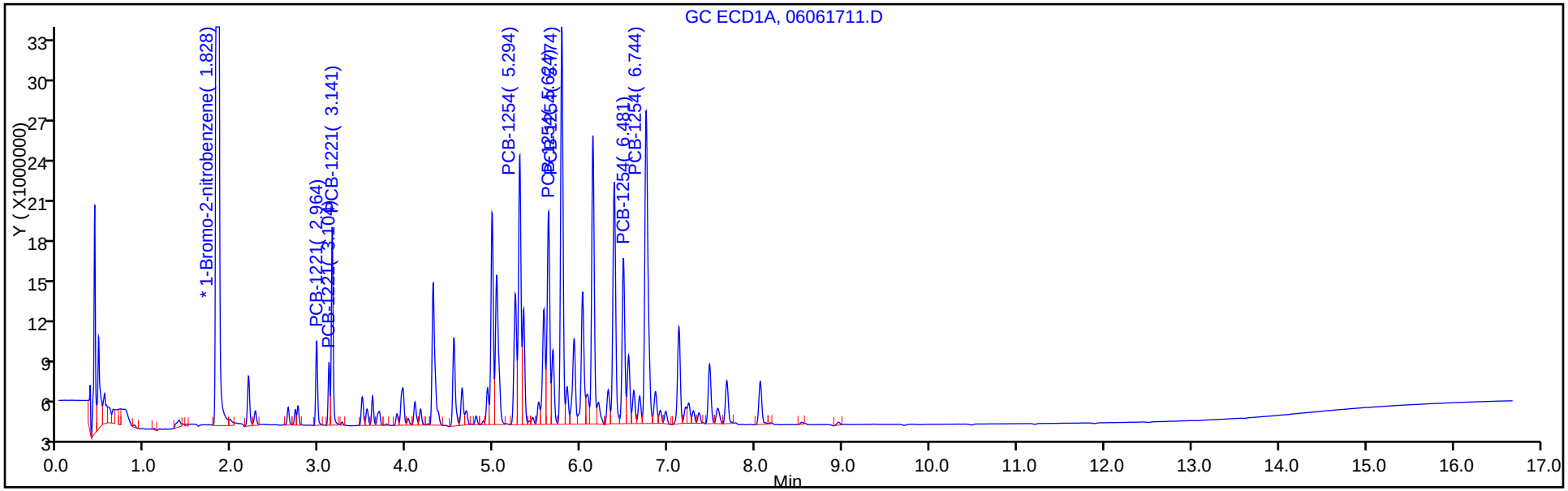
Report Date: 07-Jun-2017 06:52:35 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

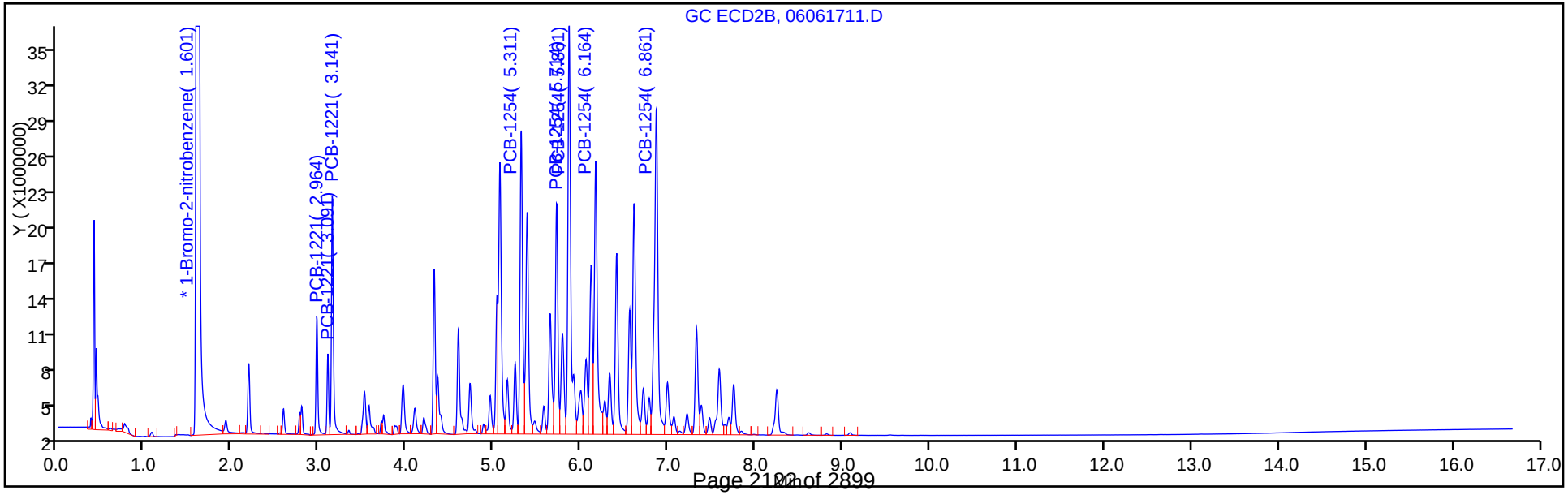
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061711.D

Injection Date:	06-Jun-2017 17:26:17	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL42154			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061712.D
Lims ID: STDL32154
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Jun-2017 17:47:59 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL32154
Misc. Info.: 280-0059455-012
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	338520893	1000.0	1000.0	
2	1.599	1.600	-0.001	389851526	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.963	2.963	0.000	3318748	100.0	92.5	
1	3.106	3.106	0.000	2693650	100.0	103.3	
1	3.143	3.143	0.000	9441334	100.0	103.2	
		Average of Peak Amounts =				99.7	
2	2.966	2.966	0.000	6759704	100.0	114.2	
2	3.093	3.090	0.003	4089850	100.0	114.2	
2	3.143	3.143	0.000	14699343	100.0	113.1	
		Average of Peak Amounts =				113.8	
						RPD = 13.27	
9 PCB-1254							
1	5.293	5.293	0.000	17048738	100.0	101.4	
1	5.623	5.623	0.000	14371710	100.0	104.0	
1	5.776	5.776	0.000	24674939	100.0	102.5	
1	6.483	6.483	0.000	11123568	100.0	99.1	
1	6.746	6.743	0.003	26068218	100.0	102.3	
		Average of Peak Amounts =				101.9	
2	5.313	5.310	0.003	22558142	100.0	106.7	
2	5.716	5.713	0.003	17593511	100.0	107.9	
2	5.859	5.860	-0.001	35750963	100.0	115.4	
2	6.166	6.163	0.003	24838007	100.0	109.6	
2	6.859	6.860	-0.001	33922293	100.0	108.0	
		Average of Peak Amounts =				109.5	
						RPD = 7.24	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S	8 Polychlorinated biphenyls, Total						
1						201.5	
2						223.3	
						RPD = 10.26	

Reagents:

AR_2154_L3_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

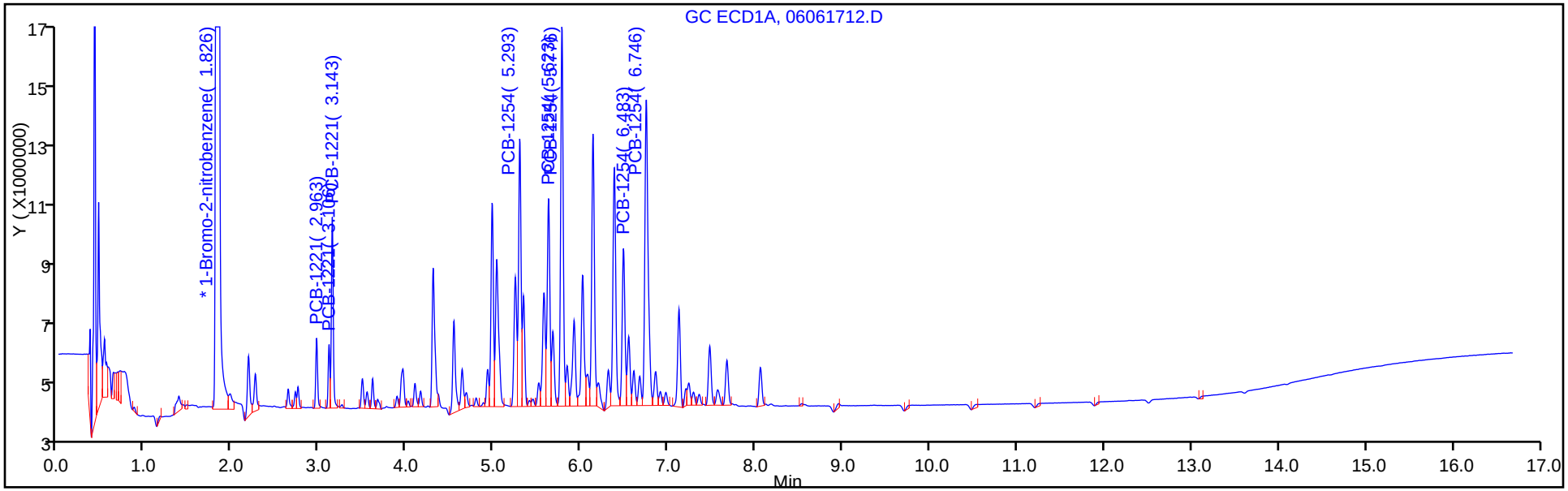
Report Date: 07-Jun-2017 06:52:37 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

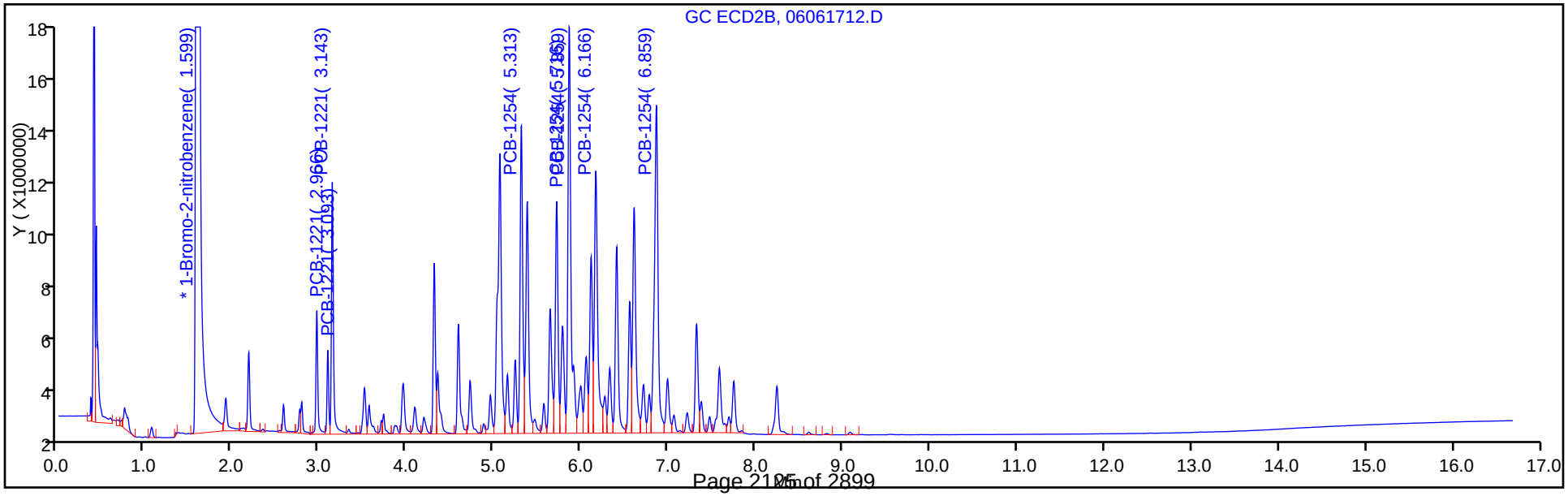
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061712.D

Injection Date:	06-Jun-2017 17:47:59	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL32154			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061713.D
Lims ID: STDL22154
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Jun-2017 18:09:41 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL22154
Misc. Info.: 280-0059455-013
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:38 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	333347331	1000.0	1000.0	
2	1.600	1.600	0.000	384100570	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.964	2.963	0.001	1705036	50.0	46.9	
1	3.107	3.106	0.001	1547959	50.0	52.9	
1	3.144	3.143	0.001	5166102	50.0	52.1	
		Average of Peak Amounts =				50.6	
2	2.967	2.966	0.001	3864936	50.0	55.7	
2	3.094	3.090	0.004	2301219	50.0	55.6	
2	3.144	3.143	0.001	8219031	50.0	53.9	
		Average of Peak Amounts =				55.1	
						RPD = 8.48	
9 PCB-1254							
1	5.294	5.293	0.001	9488010	50.0	52.2	
1	5.624	5.623	0.001	7803681	50.0	52.6	
1	5.777	5.776	0.001	13287742	50.0	52.1	
1	6.484	6.483	0.001	5981741	50.0	49.4	
1	6.744	6.743	0.001	14035652	50.0	51.0	
		Average of Peak Amounts =				51.5	
2	5.310	5.310	0.000	12340322	50.0	51.3	
2	5.717	5.713	0.004	9569387	50.0	51.6	
2	5.860	5.860	0.000	19574882	50.0	52.0	
2	6.167	6.163	0.004	13590764	50.0	52.2	
2	6.860	6.860	0.000	18701747	50.0	51.8	
		Average of Peak Amounts =				51.8	
						RPD = 0.64	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						102.1	
2						106.9	
						RPD = 4.60	

Reagents:

AR_2154_L2_00019	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

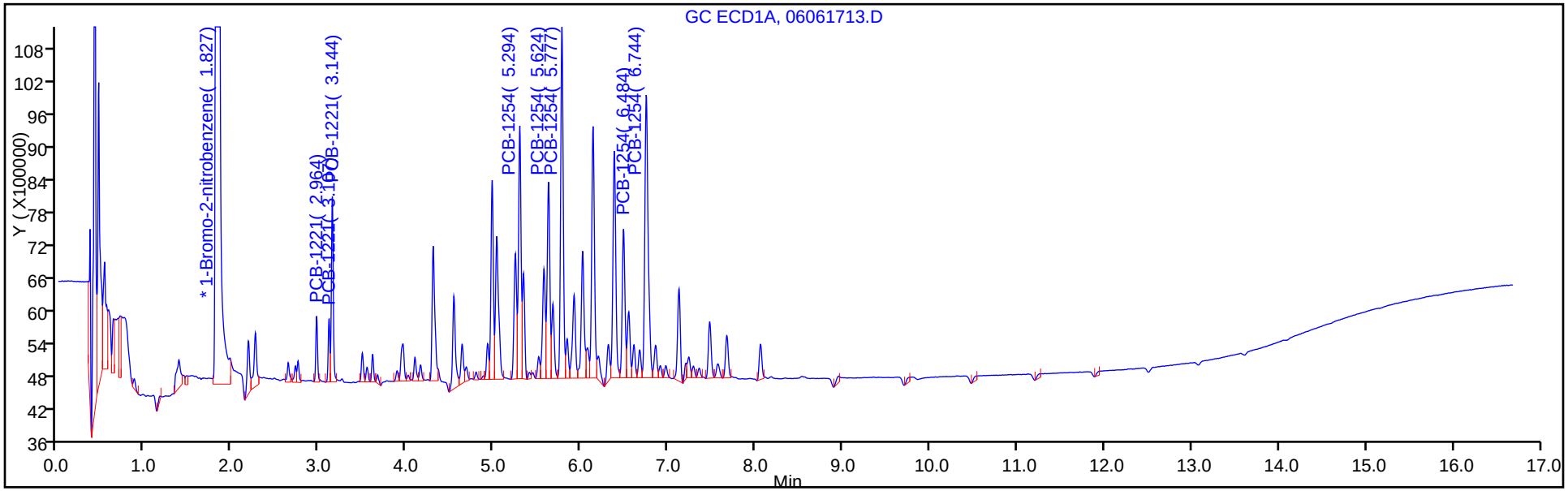
Report Date: 07-Jun-2017 06:52:39 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

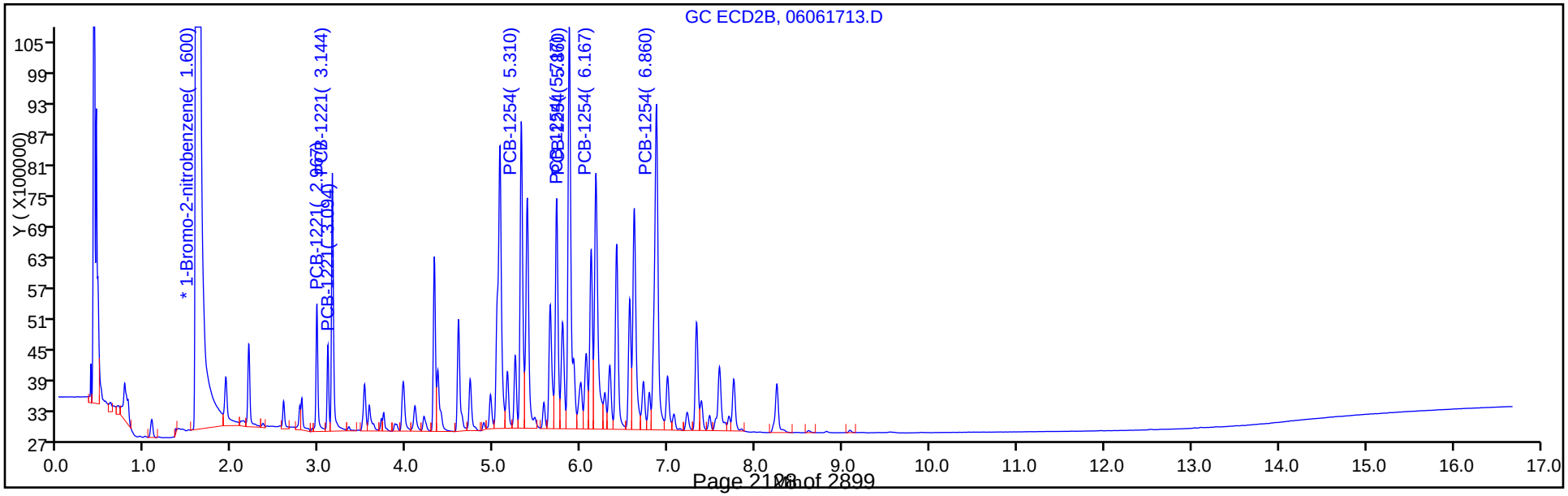
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061713.D

Injection Date:	06-Jun-2017 18:09:41	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL22154			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061714.D
Lims ID: STDL12154
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Jun-2017 18:31:23 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL12154
Misc. Info.: 280-0059455-014
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:40 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.826	-0.001	325012905	1000.0	1000.0	
2	1.599	1.600	-0.001	375991567	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.962	2.963	-0.001	1018371	25.0	27.6	
1	3.105	3.106	-0.001	851869	25.0	22.0	
1	3.142	3.143	-0.001	2819790	25.0	24.0	
		Average of Peak Amounts =				24.6	
2	2.965	2.966	-0.001	1998442	25.0	17.6	
2	3.092	3.090	0.002	1147785	25.0	17.4	
2	3.142	3.143	-0.001	4387732	25.0	18.7	
		Average of Peak Amounts =				17.9	
						RPD = 31.48	
9 PCB-1254							
1	5.292	5.293	-0.001	5116092	25.0	23.6	
1	5.622	5.623	-0.001	4087907	25.0	23.3	
1	5.775	5.776	-0.001	6971281	25.0	24.0	
1	6.485	6.483	0.002	3594296	25.0	26.5	
1	6.745	6.743	0.002	7819837	25.0	24.5	
		Average of Peak Amounts =				24.4	
2	5.312	5.310	0.002	6943955	25.0	21.9	
2	5.718	5.713	0.005	5341101	25.0	21.7	
2	5.862	5.860	0.002	10932751	25.0	18.0	
2	6.168	6.163	0.005	7440552	25.0	20.6	
2	6.858	6.860	-0.002	10458541	25.0	21.2	
		Average of Peak Amounts =				20.7	
						RPD = 16.33	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						48.9	
2						38.6	
						RPD = 23.67	

Reagents:

AR_2154_L1_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

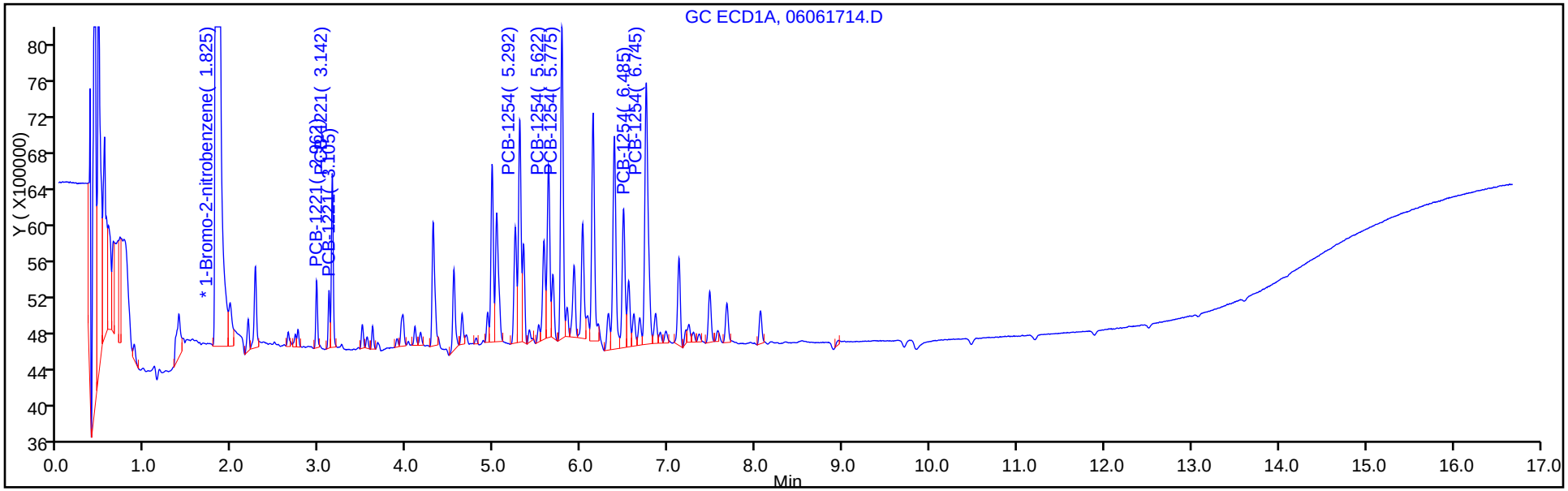
Report Date: 07-Jun-2017 06:52:40 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

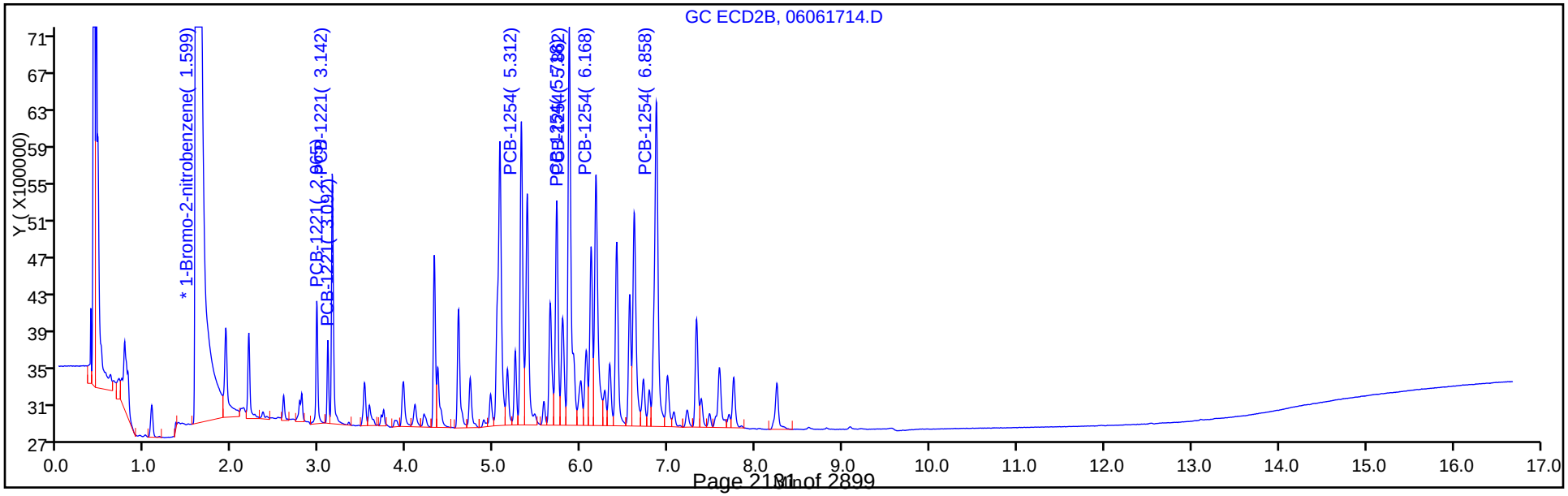
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061714.D

Injection Date:	06-Jun-2017 18:31:23	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL12154			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 18:53 Calibration End Date: 06/06/2017 21:03 Calibration ID: 29393

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11660 280-376236/21	06061721.D
Level 2	STDL21660 280-376236/20	06061720.D
Level 3	STDL31660 280-376236/19	06061719.D
Level 4	STDL41660 280-376236/18	06061718.D
Level 5	STDL51660 280-376236/17	06061717.D
Level 6	STDL61660 280-376236/16	06061716.D
Level 7	STDL71660 280-376236/15	06061715.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1016 Peak 1	0.4917 0.3208	0.4393 0.3273	0.3887	0.3488	0.3315	Lin1	5.1435	0.3207							0.9990		0.9900
PCB-1016 Peak 2	0.9983 0.7457	0.8937 0.7708	0.8354	0.7785	0.7619	Lin1	6.6090	0.7524							1.0000		0.9900
PCB-1016 Peak 3	0.4697 0.3068	0.4012 0.3185	0.3643	0.3330	0.3188	Lin1	4.3862	0.3098							0.9990		0.9900
PCB-1016 Peak 4	0.3007 0.2010	0.2574 0.2054	0.2384	0.2125	0.2053	Lin1	2.7562	0.2007							1.0000		0.9900
PCB-1016 Peak 5	0.5169 0.3215	0.4338 0.3305	0.3942	0.3486	0.3341	Lin1	5.4106	0.3223							1.0000		0.9900
PCB-1260 Peak 1	0.7311 0.4900	0.6328 0.5100	0.5840	0.5263	0.5034	Lin1	6.5791	0.4946							0.9990		0.9900
PCB-1260 Peak 2	1.2770 0.9640	1.1750 1.0105	1.1023	1.0112	0.9859	Lin1	8.5383	0.9796							0.9990		0.9900
PCB-1260 Peak 3	0.6142 0.4426	0.5620 0.4674	0.5206	0.4797	0.4617	Lin1	4.8074	0.4531							0.9990		0.9900
PCB-1260 Peak 4	1.2563 0.9886	1.1559 1.0424	1.0982	1.0232	1.0094	Lin1	6.5850	1.0083							0.9990		0.9900
PCB-1260 Peak 5	0.7698 0.5724	0.6767 0.5957	0.6466	0.5993	0.5823	Lin1	4.9739	0.5790							1.0000		0.9900
Tetrachloro-m-xylene	13.655 10.513	12.568 10.904	11.596	10.936	10.732	Lin1	4.1404	10.631							1.0000		0.9900
DCB Decachlorobiphenyl (Surr)	14.882 9.9663	13.215 10.447	11.824	10.571	10.382	Lin1	6.7423	10.103							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 18:53 Calibration End Date: 06/06/2017 21:03 Calibration ID: 29393

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11660 280-376236/21	06061721.D
Level 2	STDL21660 280-376236/20	06061720.D
Level 3	STDL31660 280-376236/19	06061719.D
Level 4	STDL41660 280-376236/18	06061718.D
Level 5	STDL51660 280-376236/17	06061717.D
Level 6	STDL61660 280-376236/16	06061716.D
Level 7	STDL71660 280-376236/15	06061715.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	BNB	Lin1	4092312 82791241	7487332 105338158	13576390	30630958	57542662	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 2	BNB	Lin1	8308605 192453551	15232704 248061775	29176200	68368331	132265539	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 3	BNB	Lin1	3909235 79177898	6838654 102498619	12724584	29242149	55335667	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 4	BNB	Lin1	2502681 51885493	4388185 66091491	8326427	18665090	35641561	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 5	BNB	Lin1	4302074 82989882	7393798 106371789	13769298	30611537	58003485	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 1	BNB	Lin1	6084608 126475373	10786770 164134452	20396415	46213959	87377831	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 2	BNB	Lin1	10628001 248807451	20028581 325199626	38501119	88801710	171141272	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 3	BNB	Lin1	5112131 114243529	9579328 150433029	18183829	42122701	80138230	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 4	BNB	Lin1	10456027 255142631	19703088 335464075	38357309	89857466	175214565	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 5	BNB	Lin1	6406784 147731172	11533959 191696219	22581951	52630695	101076767	25.0 750	50.0 1000	100	250	500
Tetrachloro-m-xylene	BNB	Lin1	5682531 135663505	10710894 175452107	20251060	48018977	93146869	1.25 37.5	2.50 50.0	5.00	12.5	25.0
DCB Decachlorobiphenyl (Surr)	BNB	Lin1	6193110 128612077	11262263 168104066	20648715	46414402	90106465	1.25 37.5	2.50 50.0	5.00	12.5	25.0

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061715.D
Lims ID: STDL71660
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 18:53:04 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL71660
Misc. Info.: 280-0059455-015
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:42 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	321825122	1000.0	1000.0	
2	1.600	1.600	0.000	374030457	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.753	2.752	0.001	175452107	50.0	50.9	
2	2.650	2.649	0.001	208703729	50.0	49.5	
						RPD = 2.78	
1 PCB-1016							
1	3.486	3.486	0.000	105338158	1000.0	1004.5	
1	3.953	3.952	0.001	248061775	1000.0	1015.7	
1	4.090	4.089	0.001	102498619	1000.0	1013.9	
1	4.156	4.156	0.000	66091491	1000.0	1009.5	
1	4.540	4.539	0.001	106371789	1000.0	1008.8	
		Average of Peak Amounts =				1010.5	
2	3.513	3.512	0.001	129837588	1000.0	979.4	
2	3.950	3.952	-0.002	293501737	1000.0	991.2	
2	4.086	4.086	0.000	133413833	1000.0	990.9	
2	4.310	4.312	-0.002	71370957	1000.0	974.2	
2	4.586	4.586	0.000	98944888	1000.0	996.1	
		Average of Peak Amounts =				986.4	
						RPD = 2.42	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.013	6.012	0.001	164134452	1000.0	1017.9	
1	6.743	6.742	0.001	325199626	1000.0	1022.8	
1	7.233	7.232	0.001	150433029	1000.0	1021.0	
1	7.666	7.666	0.000	335464075	1000.0	1027.3	
1	8.050	8.049	0.001	191696219	1000.0	1020.2	
		Average of Peak Amounts =				1021.8	
2	6.403	6.402	0.001	239675892	1000.0	1006.0	
2	6.856	6.859	-0.003	362610626	1000.0	1010.5	
2	7.376	7.376	0.000	166712528	1000.0	1014.6	
2	7.746	7.746	0.000	357449619	1000.0	1011.1	
2	8.240	8.239	0.001	275897553	1000.0	1014.0	
		Average of Peak Amounts =				1011.2	
						RPD = 1.04	
$ 15 DCB Decachlorobiphenyl							
1	9.630	9.629	0.001	168104066	50.0	51.0	
2	9.900	9.896	0.004	174736569	50.0	50.5	
						RPD = 0.95	
S 8 Polychlorinated biphenyls, Total							
1						2032.3	
2						1997.6	
						RPD = 1.72	

Reagents:

AR_1660_L7_00022	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

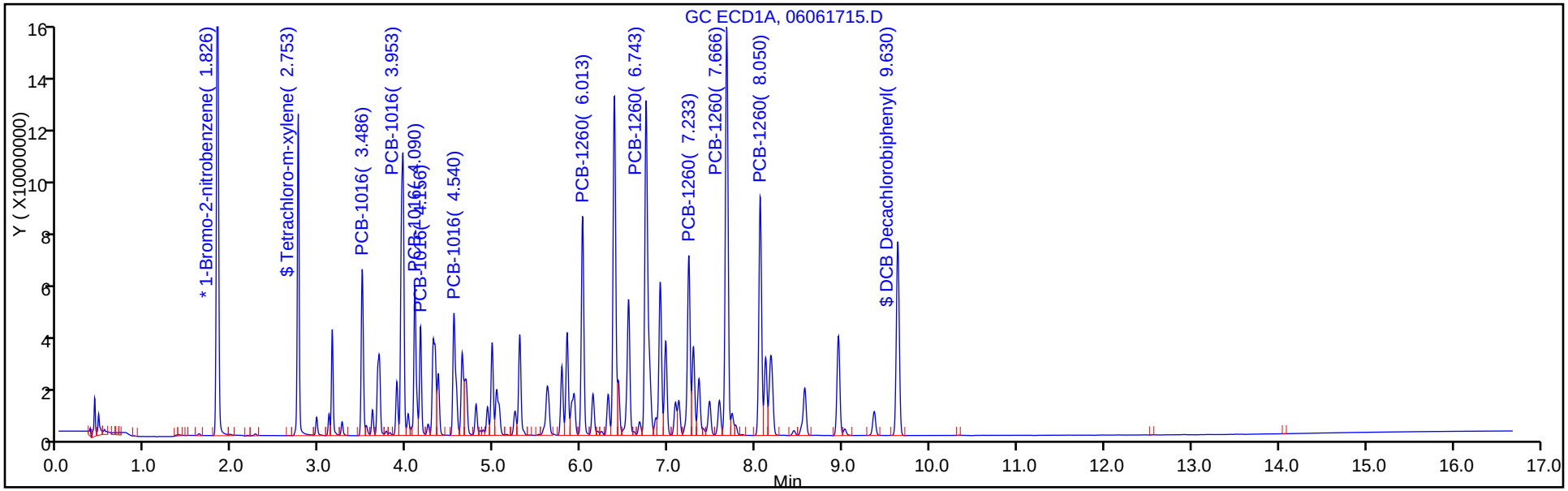
Report Date: 07-Jun-2017 06:52:42 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

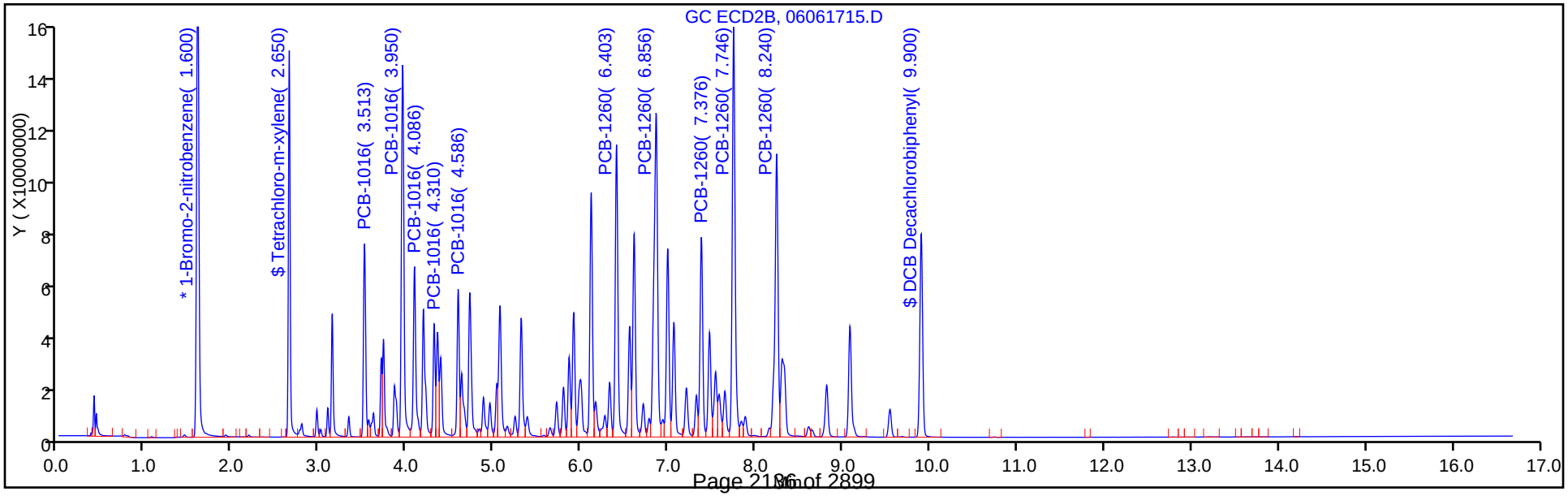
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061715.D

Injection Date:	06-Jun-2017 18:53:04	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL71660			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061716.D
Lims ID: STDL61660
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Jun-2017 19:14:47 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL61660
Misc. Info.: 280-0059455-016
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:43 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	344124721	1000.0	1000.0	
2	1.601	1.600	0.001	398623816	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.751	2.752	-0.001	135663505	37.5	36.7	
2	2.648	2.649	-0.001	165562777	37.5	36.6	
						RPD = 0.16	
1 PCB-1016							
1	3.488	3.486	0.002	82791241	750.0	734.1	
1	3.951	3.952	-0.001	192453551	750.0	734.5	
1	4.091	4.089	0.002	79177898	750.0	728.5	
1	4.154	4.156	-0.002	51885493	750.0	737.5	
1	4.538	4.539	-0.001	82989882	750.0	731.5	
		Average of Peak Amounts =				733.2	
2	3.511	3.512	-0.001	104124315	750.0	731.2	
2	3.951	3.952	-0.001	232024594	750.0	730.7	
2	4.084	4.086	-0.002	105182049	750.0	727.6	
2	4.311	4.312	-0.001	58197834	750.0	740.5	
2	4.588	4.586	0.002	78260144	750.0	734.4	
		Average of Peak Amounts =				732.9	
						RPD = 0.05	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.014	6.012	0.002	126475373	750.0	729.8	
1	6.741	6.742	-0.001	248807451	750.0	729.4	
1	7.231	7.232	-0.001	114243529	750.0	722.1	
1	7.668	7.666	0.002	255142631	750.0	728.8	
1	8.051	8.049	0.002	147731172	750.0	732.8	
		Average of Peak Amounts =				728.6	
2	6.401	6.402	-0.001	185671410	750.0	726.4	
2	6.858	6.859	-0.001	280310149	750.0	728.1	
2	7.374	7.376	-0.002	127525216	750.0	723.3	
2	7.744	7.746	-0.002	276328319	750.0	728.9	
2	8.241	8.239	0.002	211869985	750.0	726.3	
		Average of Peak Amounts =				726.6	
						RPD = 0.27	
$ 15 DCB Decachlorobiphenyl							
1	9.631	9.629	0.002	128612077	37.5	36.3	
2	9.898	9.896	0.002	135357270	37.5	36.5	
						RPD = 0.48	
S 8 Polychlorinated biphenyls, Total							
1						1461.8	
2						1459.5	
						RPD = 0.16	

Reagents:

AR_1660_L6_00029	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

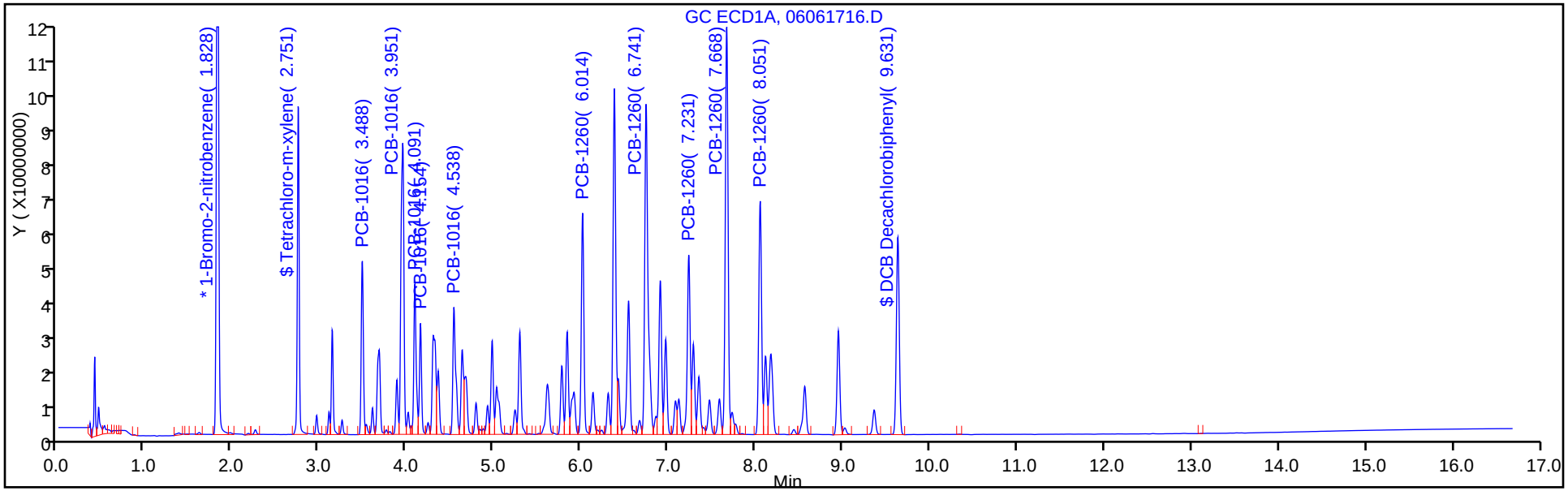
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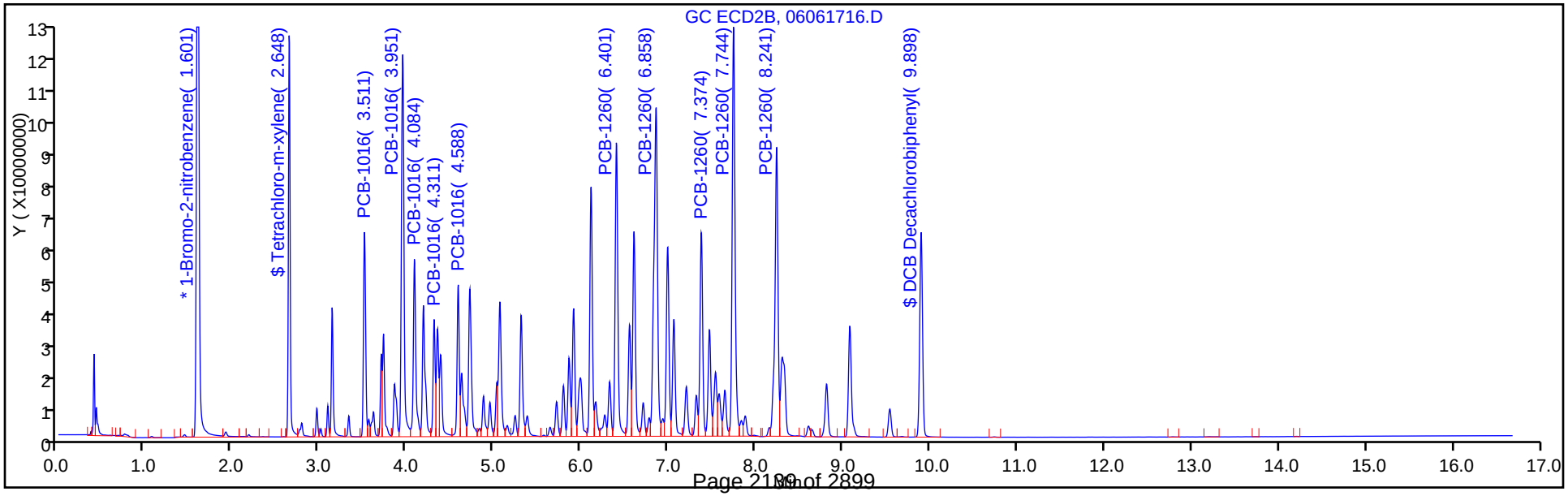
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061716.D

Injection Date:	06-Jun-2017 19:14:47	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL61660			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061717.D
Lims ID: STDL51660
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 06-Jun-2017 19:36:29 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL51660
Misc. Info.: 280-0059455-017
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:45 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:29:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	347177456	1000.0	1000.0	
2	1.599	1.599	0.000	402955781	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.752	2.752	0.000	93146869	25.0	24.8	
2	2.649	2.649	0.000	117388845	25.0	25.5	
						RPD = 2.40	
1 PCB-1016							
1	3.486	3.486	0.000	57542662	500.0	500.7	
1	3.952	3.952	0.000	132265539	500.0	497.6	
1	4.089	4.089	0.000	55335667	500.0	500.3	
1	4.156	4.156	0.000	35641561	500.0	497.8	
1	4.539	4.539	0.000	58003485	500.0	501.6	
		Average of Peak Amounts =				499.6	
2	3.512	3.512	0.000	74393220	500.0	510.0	
2	3.952	3.952	0.000	164511841	500.0	507.3	
2	4.086	4.086	0.000	74822022	500.0	505.8	
2	4.312	4.312	0.000	41568287	500.0	517.1	
2	4.586	4.586	0.000	55402125	500.0	508.6	
		Average of Peak Amounts =				509.7	
						RPD = 2.01	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							M
1	6.012	6.012	0.000	87377831	500.0	495.6	M
1	6.742	6.742	0.000	171141272	500.0	494.5	M
1	7.232	7.232	0.000	80138230	500.0	498.8	M
1	7.666	7.666	0.000	175214565	500.0	494.0	M
1	8.049	8.049	0.000	101076767	500.0	494.2	M
		Average of Peak Amounts =				495.4	
2	6.402	6.402	0.000	131171686	500.0	502.3	
2	6.859	6.859	0.000	196787463	500.0	500.2	
2	7.376	7.376	0.000	89679438	500.0	497.9	
2	7.746	7.746	0.000	192606616	500.0	497.5	
2	8.239	8.239	0.000	148410731	500.0	498.5	
		Average of Peak Amounts =				499.3	
						RPD = 0.78	
$ 15 DCB Decachlorobiphenyl							
1	9.629	9.629	0.000	90106465	25.0	25.0	
2	9.896	9.896	0.000	94188936	25.0	24.9	
						RPD = 0.68	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

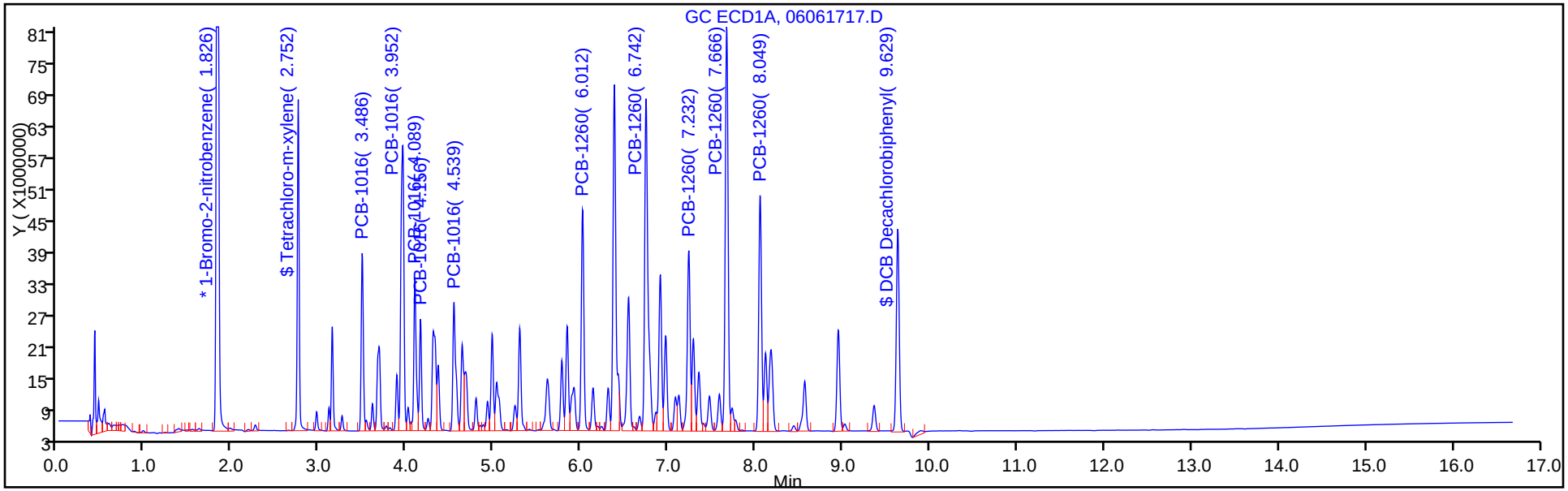
Report Date: 07-Jun-2017 06:52:46 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

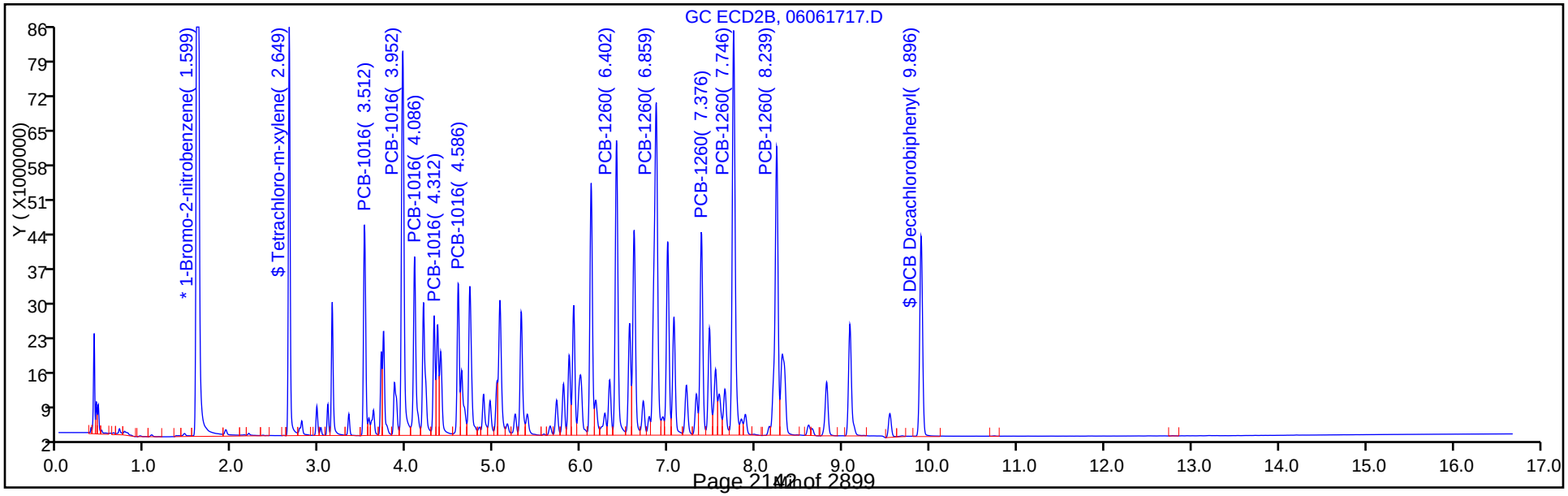
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Injection Date:	06-Jun-2017 19:36:29	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL51660			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:52:46 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061717.D

Injection Date: 06-Jun-2017 19:36:29 Instrument ID: SGC_P3

Lims ID: STDL51660

Client ID:

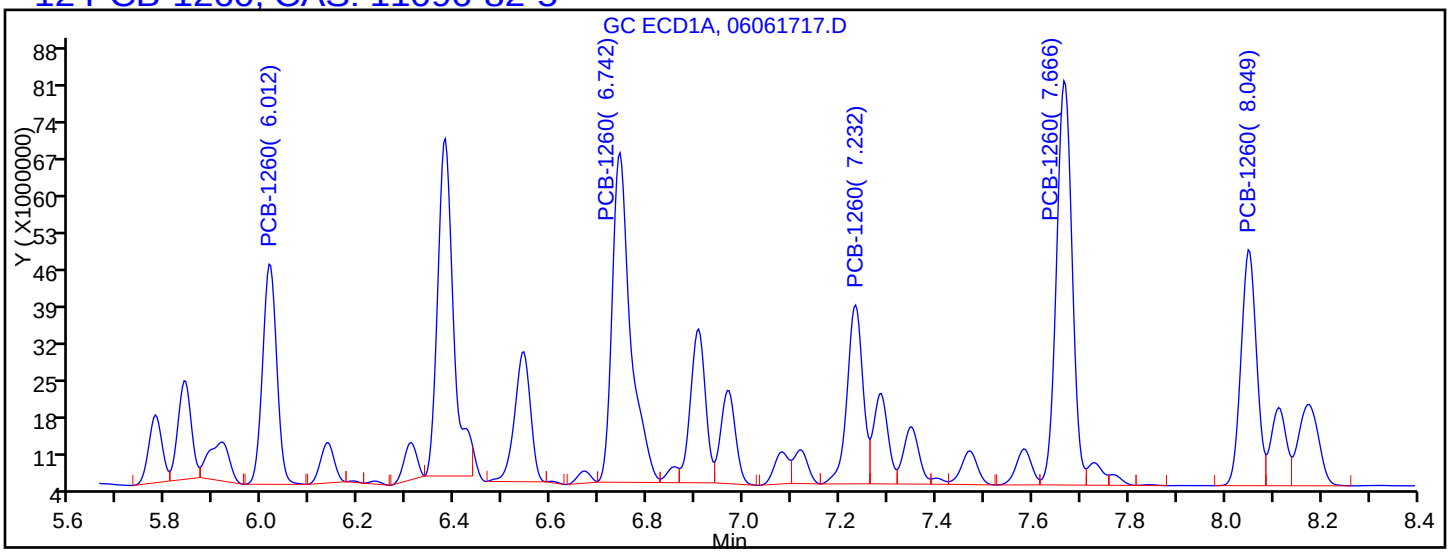
Operator ID: jax ALS Bottle#: 17 Worklist Smp#: 17

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

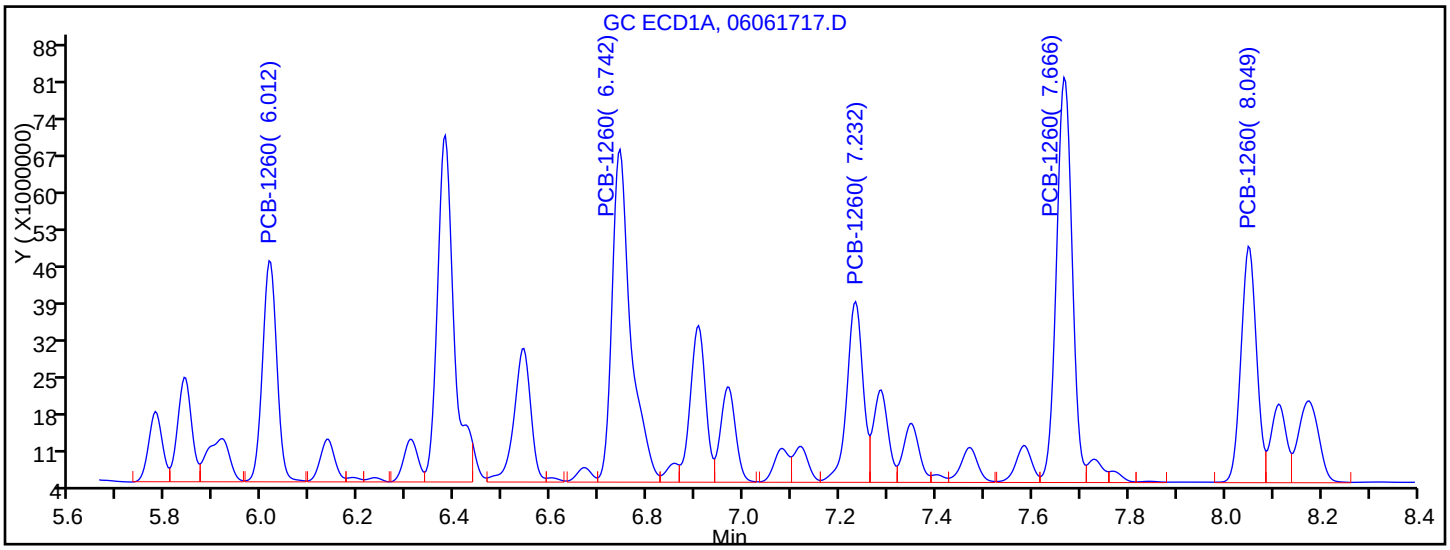
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

12 PCB-1260, CAS: 11096-82-5



Processing Integration Results

6.012	Response = 85994187
6.742	Response = 166321094
7.232	Response = 77883820
7.666	Response = 174128404
8.049	Response = 100529603



Manual Integration Results

6.012	Response = 87377831	M
6.742	Response = 171141272	M
7.232	Response = 80138230	M
7.666	Response = 175214565	M
8.049	Response = 101076767	M

Reviewer: jacksonto, 07-Jun-2017 06:44:38

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061718.D
Lims ID: STDL41660
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Jun-2017 19:58:10 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL41660
Misc. Info.: 280-0059455-018
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:47 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:44:59

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	351266835	1000.0	1000.0	
2	1.600	1.599	0.001	406000007	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.754	2.752	0.002	48018977	12.5	12.5	
2	2.650	2.649	0.001	62936226	12.5	13.2	
						RPD = 5.40	
1 PCB-1016							
1	3.487	3.486	0.001	30630958	250.0	255.8	
1	3.950	3.952	-0.002	68368331	250.0	249.9	
1	4.090	4.089	0.001	29242149	250.0	254.5	
1	4.154	4.156	-0.002	18665090	250.0	251.0	
1	4.537	4.539	-0.002	30611537	250.0	253.6	
		Average of Peak Amounts =				253.0	
2	3.514	3.512	0.002	41290967	250.0	270.4	
2	3.954	3.952	0.002	89114924	250.0	264.6	
2	4.087	4.086	0.001	41182323	250.0	266.8	
2	4.310	4.312	-0.002	21824117	250.0	259.4	
2	4.587	4.586	0.001	29054635	250.0	255.7	
		Average of Peak Amounts =				263.4	
						RPD = 4.03	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							M
1	6.014	6.012	0.002	46213959	250.0	252.7	M
1	6.744	6.742	0.002	88801710	250.0	249.4	M
1	7.234	7.232	0.002	42122701	250.0	254.1	M
1	7.667	7.666	0.001	89857466	250.0	247.2	M
1	8.050	8.049	0.001	52630695	250.0	250.2	M
		Average of Peak Amounts =				250.7	
2	6.404	6.402	0.002	70279490	250.0	258.8	
2	6.857	6.859	-0.002	104568912	250.0	255.4	
2	7.377	7.376	0.001	48056088	250.0	256.7	
2	7.747	7.746	0.001	103428097	250.0	257.5	
2	8.240	8.239	0.001	78925507	250.0	255.8	
		Average of Peak Amounts =				256.8	
						RPD = 2.42	
$ 15 DCB Decachlorobiphenyl							
1	9.630	9.629	0.001	46414402	12.5	12.4	
2	9.897	9.896	0.001	50266976	12.5	12.7	
						RPD = 2.69	
S 8 Polychlorinated biphenyls, Total							
1						503.7	
2						520.2	
						RPD = 3.23	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1660_L4_00065	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

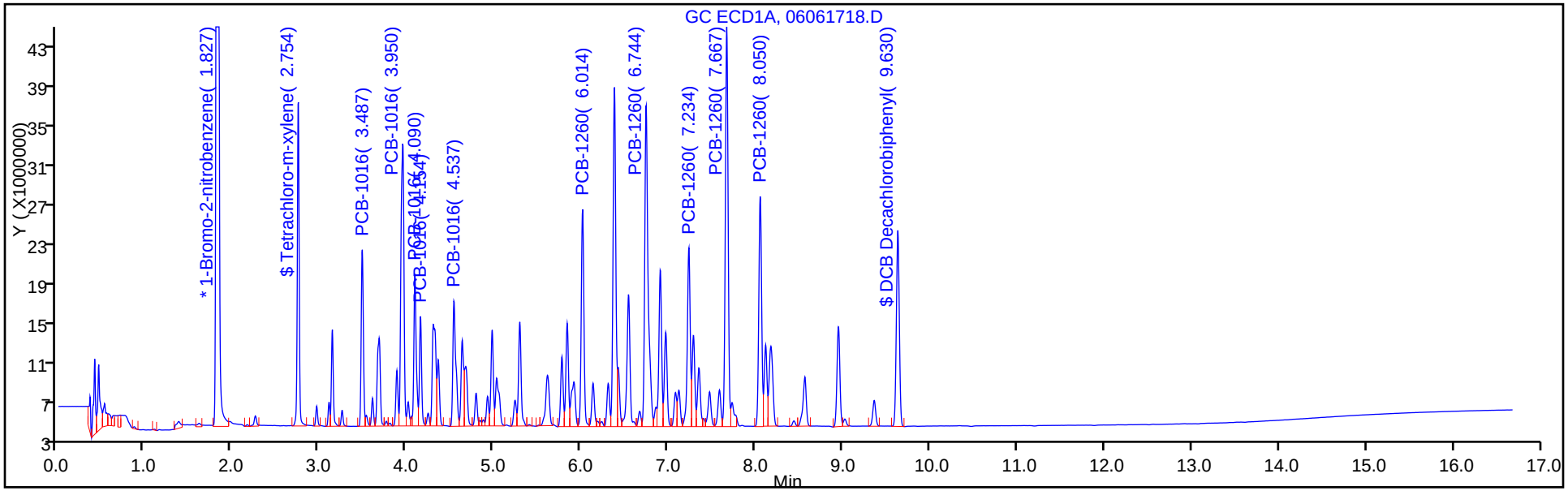
Report Date: 07-Jun-2017 06:52:48 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

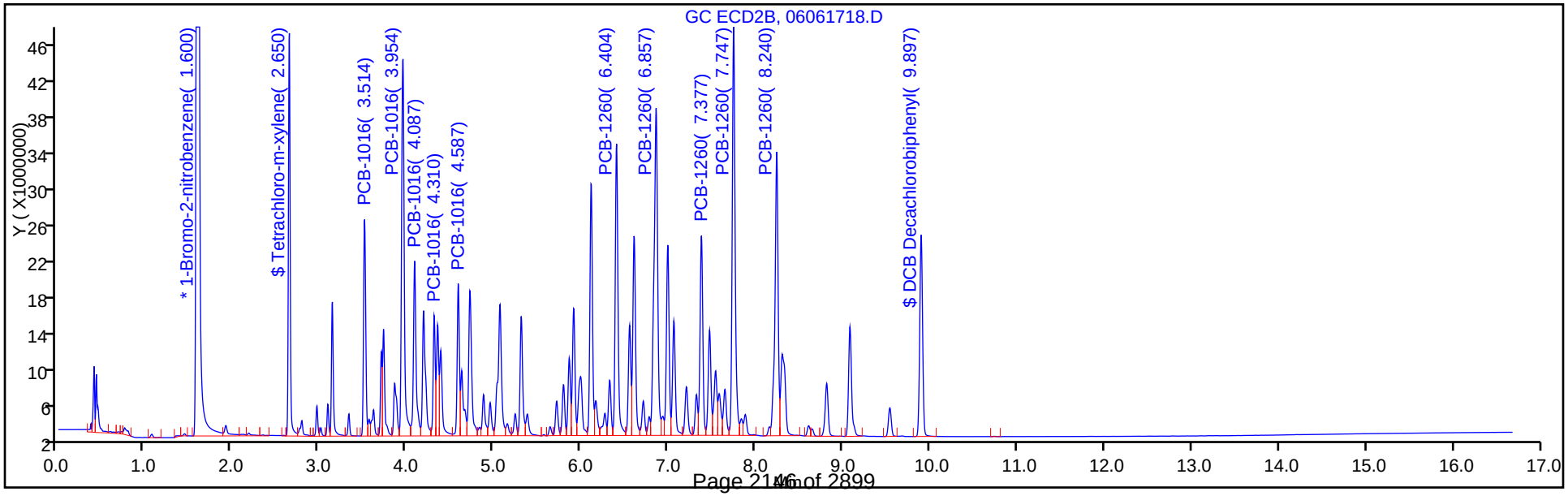
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061718.D

Injection Date:	06-Jun-2017 19:58:10	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL41660			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:52:48 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061718.D

Injection Date: 06-Jun-2017 19:58:10 Instrument ID: SGC_P3

Lims ID: STDL41660

Client ID:

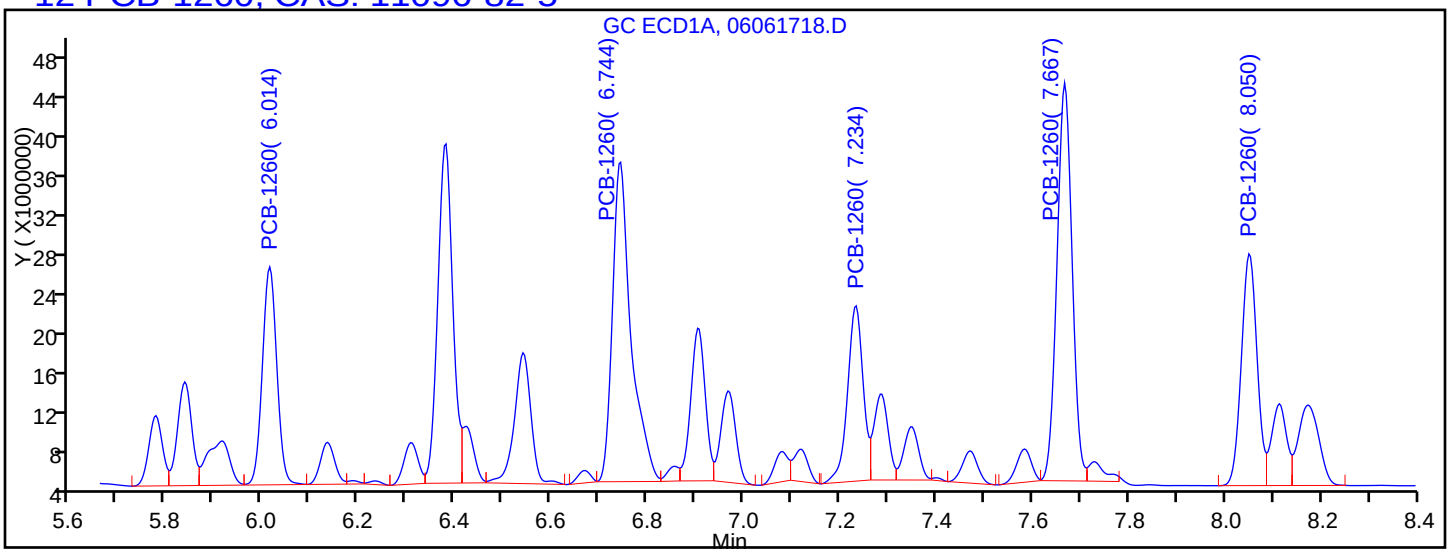
Operator ID: jax ALS Bottle#: 18 Worklist Smp#: 18

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

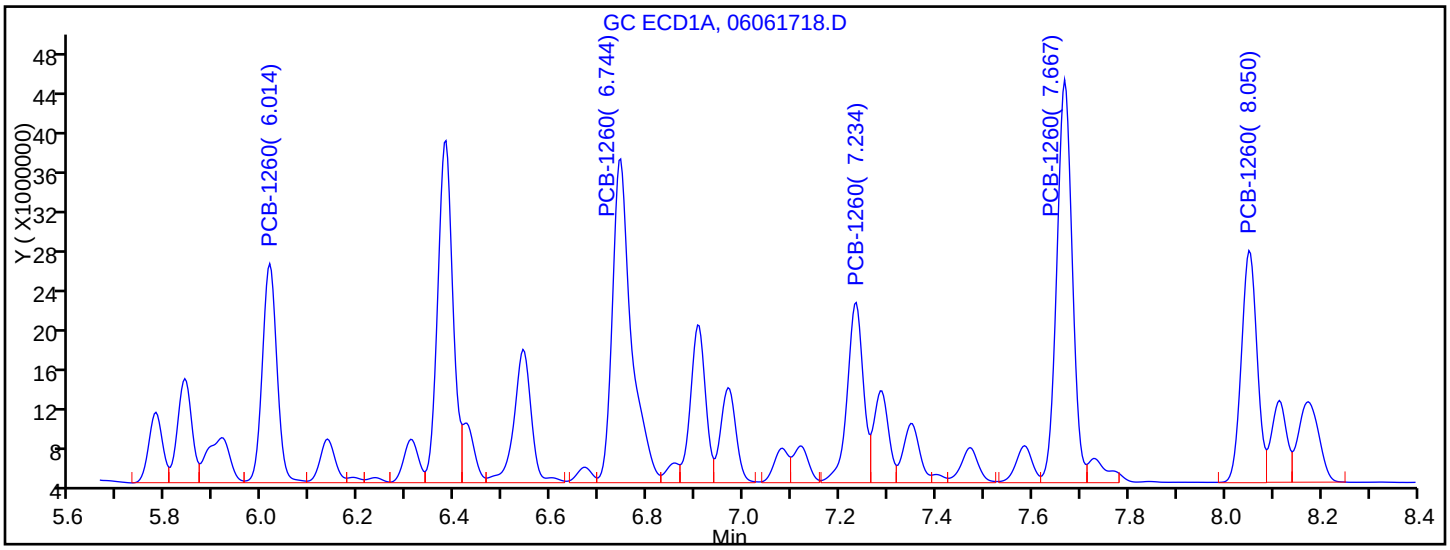
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

12 PCB-1260, CAS: 11096-82-5



Processing Integration Results

6.014	Response = 45271282
6.744	Response = 85314182
7.234	Response = 39599298
7.667	Response = 86876793
8.050	Response = 52413624



Manual Integration Results

6.014	Response = 46213959	M
6.744	Response = 88801710	M
7.234	Response = 42122701	M
7.667	Response = 89857466	M
8.050	Response = 52630695	M

Reviewer: jacksonto, 07-Jun-2017 06:44:56

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061719.D
Lims ID: STDL31660
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Jun-2017 20:19:52 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL31660
Misc. Info.: 280-0059455-019
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:50 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:45:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.826	-0.001	349267665	1000.0	1000.0	
2	1.598	1.599	-0.001	401174526	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.752	2.752	0.000	20251060	5.00	5.06	
2	2.648	2.649	-0.001	27564865	5.00	5.38	
						RPD = 6.01	
1 PCB-1016							
1	3.485	3.486	-0.001	13576390	100.0	105.2	
1	3.952	3.952	0.000	29176200	100.0	102.2	
1	4.092	4.089	0.003	12724584	100.0	103.4	
1	4.155	4.156	-0.001	8326427	100.0	105.0	
1	4.538	4.539	-0.001	13769298	100.0	105.5	
		Average of Peak Amounts =				104.3	
2	3.512	3.512	0.000	18866129	100.0	112.5	
2	3.952	3.952	0.000	39486542	100.0	109.0	
2	4.088	4.086	0.002	18812749	100.0	112.1	
2	4.312	4.312	0.000	10118153	100.0	110.6	
2	4.588	4.586	0.002	13141078	100.0	106.8	
		Average of Peak Amounts =				110.2	
						RPD = 5.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							M
1	6.012	6.012	0.000	20396415	100.0	104.8	M
1	6.742	6.742	0.000	38501119	100.0	103.8	M
1	7.232	7.232	0.000	18183829	100.0	104.3	M
1	7.665	7.666	-0.001	38357309	100.0	102.4	M
1	8.052	8.049	0.003	22581951	100.0	103.1	
		Average of Peak Amounts =				103.7	
2	6.405	6.402	0.003	31630755	100.0	108.2	
2	6.858	6.859	-0.001	46948114	100.0	106.3	
2	7.375	7.376	-0.001	21934007	100.0	109.2	
2	7.745	7.746	-0.001	46020806	100.0	107.0	
2	8.238	8.239	-0.001	35117129	100.0	106.6	
		Average of Peak Amounts =				107.5	
						RPD = 3.60	
$ 15 DCB Decachlorobiphenyl							
1	9.628	9.629	-0.001	20648715	5.00	5.18	
2	9.895	9.896	-0.001	22903310	5.00	5.40	
						RPD = 4.17	
S 8 Polychlorinated biphenyls, Total							
1						208.0	
2						217.7	
						RPD = 4.56	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1660_L3_00028	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

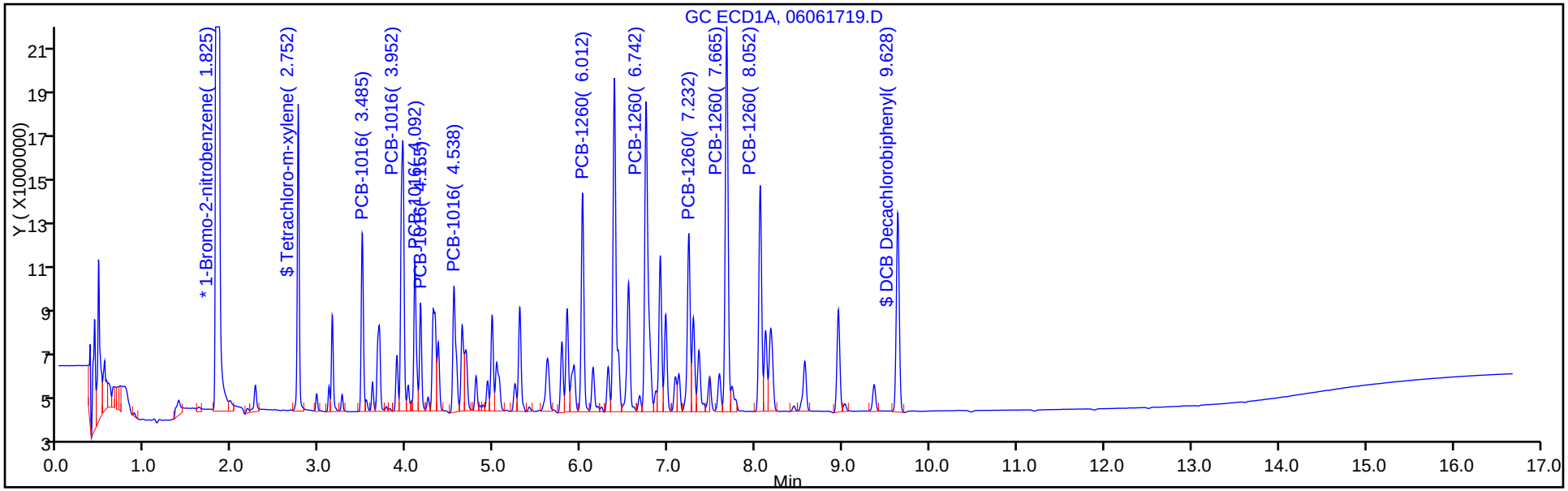
Report Date: 07-Jun-2017 06:52:50 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

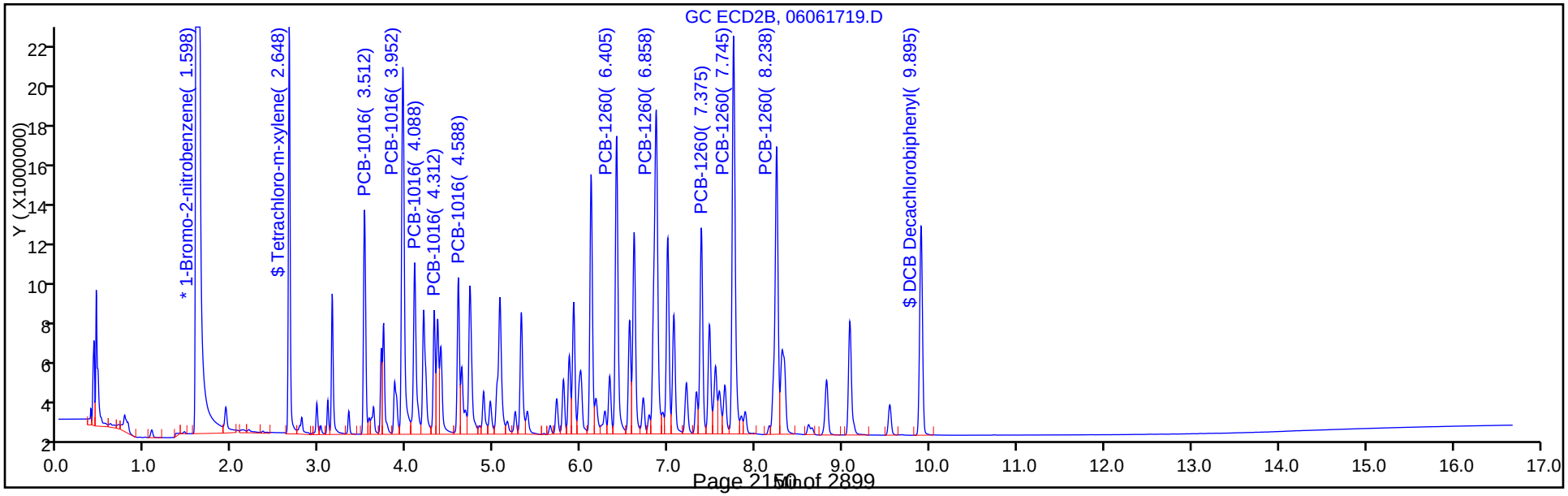
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061719.D

Injection Date:	06-Jun-2017 20:19:52	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL31660			Worklist Smp#:	19
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:52:50 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061719.D

Injection Date: 06-Jun-2017 20:19:52 Instrument ID: SGC_P3

Lims ID: STDL31660

Client ID:

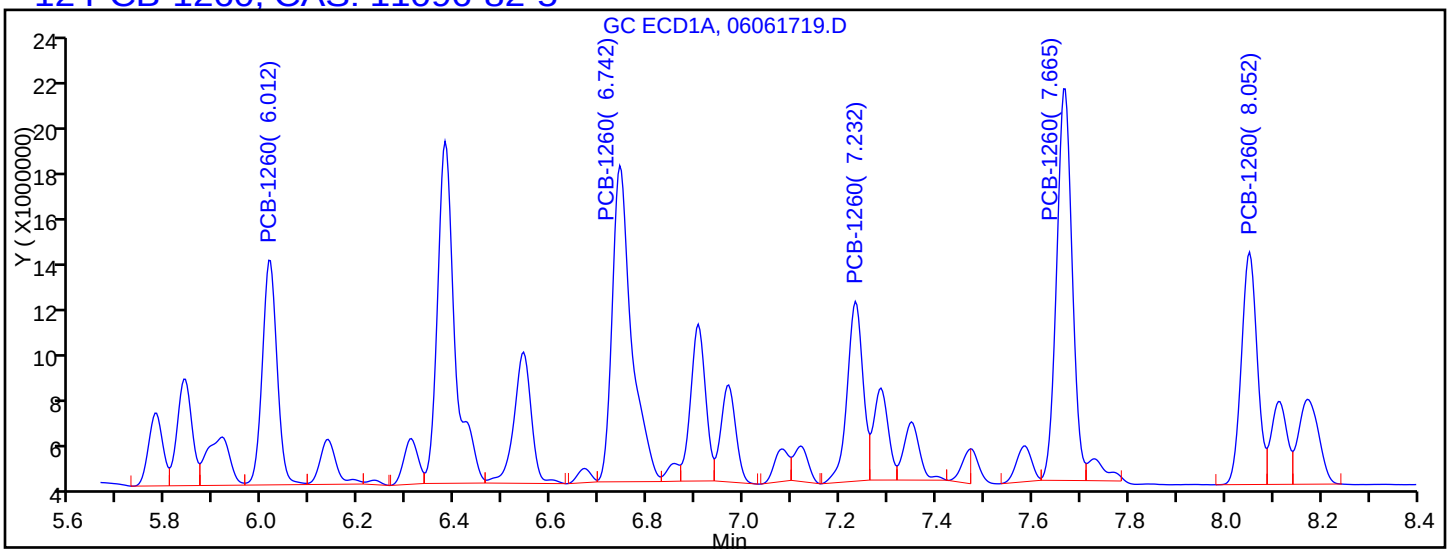
Operator ID: jax ALS Bottle#: 19 Worklist Smp#: 19

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

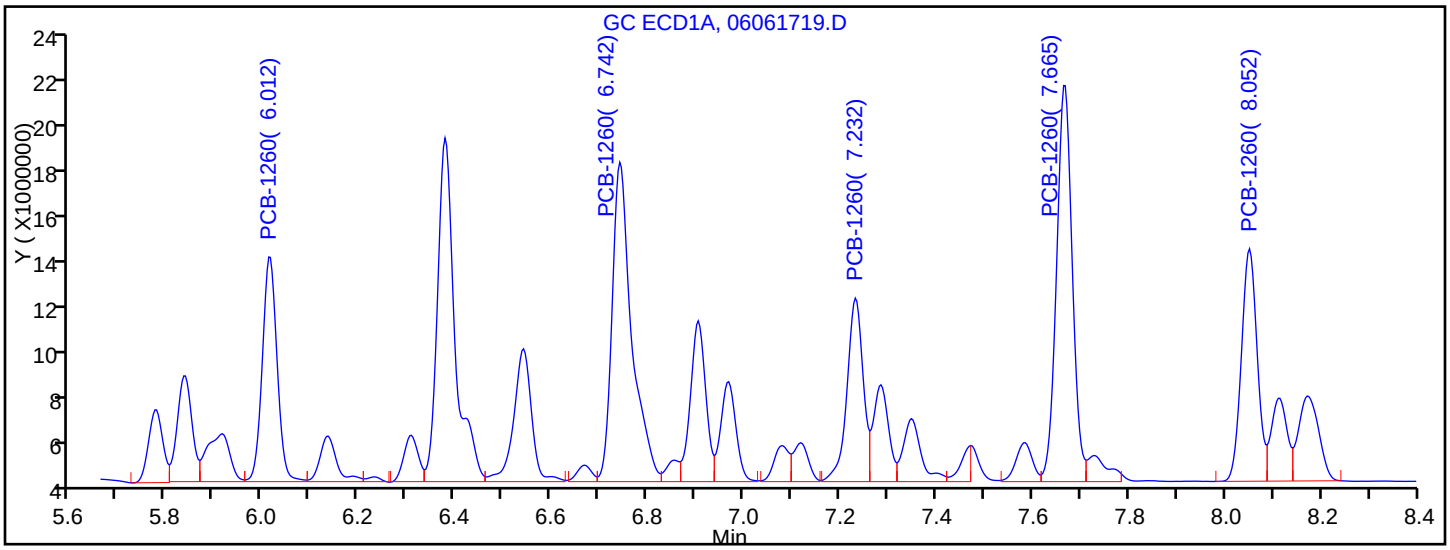
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

12 PCB-1260, CAS: 11096-82-5



Processing Integration Results

6.012	Response = 20360098
6.742	Response = 37411651
7.232	Response = 17416363
7.665	Response = 37287242
8.052	Response = 22581951



Manual Integration Results

6.012	Response = 20396415	M
6.742	Response = 38501119	M
7.232	Response = 18183829	M
7.665	Response = 38357309	M
8.052	Response = 22581951	

Reviewer: jacksonto, 07-Jun-2017 06:45:11

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061720.D
Lims ID: STDL21660
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Jun-2017 20:41:35 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL21660
Misc. Info.: 280-0059455-020
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:52 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:45:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	340905881	1000.0	1000.0	
2	1.600	1.599	0.001	397262080	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.750	2.752	-0.002	10710894	2.50	2.57	
2	2.650	2.649	0.001	14763535	2.50	2.53	
						RPD = 1.27	
1 PCB-1016							M
1	3.487	3.486	0.001	7487332	50.0	52.4	M
1	3.950	3.952	-0.002	15232704	50.0	50.6	M
1	4.090	4.089	0.001	6838654	50.0	50.6	M
1	4.154	4.156	-0.002	4388185	50.0	50.4	M
1	4.537	4.539	-0.002	7393798	50.0	50.5	M
		Average of Peak Amounts =				50.9	
2	3.514	3.512	0.002	10340490	50.0	51.8	
2	3.954	3.952	0.002	21185063	50.0	51.0	
2	4.087	4.086	0.001	10182486	50.0	51.7	
2	4.314	4.312	0.002	5663090	50.0	53.4	
2	4.587	4.586	0.001	7265300	50.0	51.2	
		Average of Peak Amounts =				51.9	
						RPD = 1.84	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.014	6.012	0.002	10786770	50.0	50.7	
1	6.744	6.742	0.002	20028581	50.0	51.3	
1	7.230	7.232	-0.002	9579328	50.0	51.4	
1	7.667	7.666	0.001	19703088	50.0	50.8	
1	8.050	8.049	0.001	11533959	50.0	49.8	
		Average of Peak Amounts =				50.8	
2	6.404	6.402	0.002	17185730	50.0	51.4	
2	6.857	6.859	-0.002	26266856	50.0	52.3	
2	7.377	7.376	0.001	11810705	50.0	51.5	
2	7.747	7.746	0.001	24394598	50.0	49.7	
2	8.240	8.239	0.001	18973980	50.0	51.1	
		Average of Peak Amounts =				51.2	
						RPD = 0.77	
$ 15 DCB Decachlorobiphenyl							
1	9.630	9.629	0.001	11262263	2.50	2.60	
2	9.897	9.896	0.001	12516089	2.50	2.59	
						RPD = 0.54	
S 8 Polychlorinated biphenyls, Total							
1						101.7	
2						103.0	
						RPD = 1.31	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1660_L2_00027	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

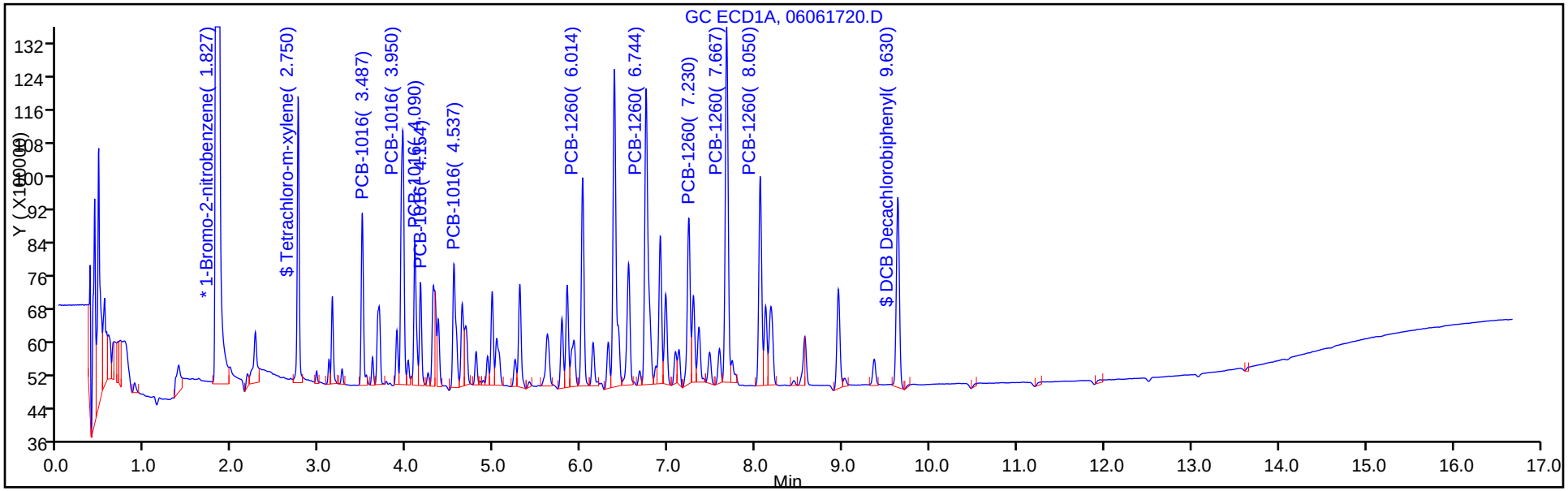
Report Date: 07-Jun-2017 06:52:53 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

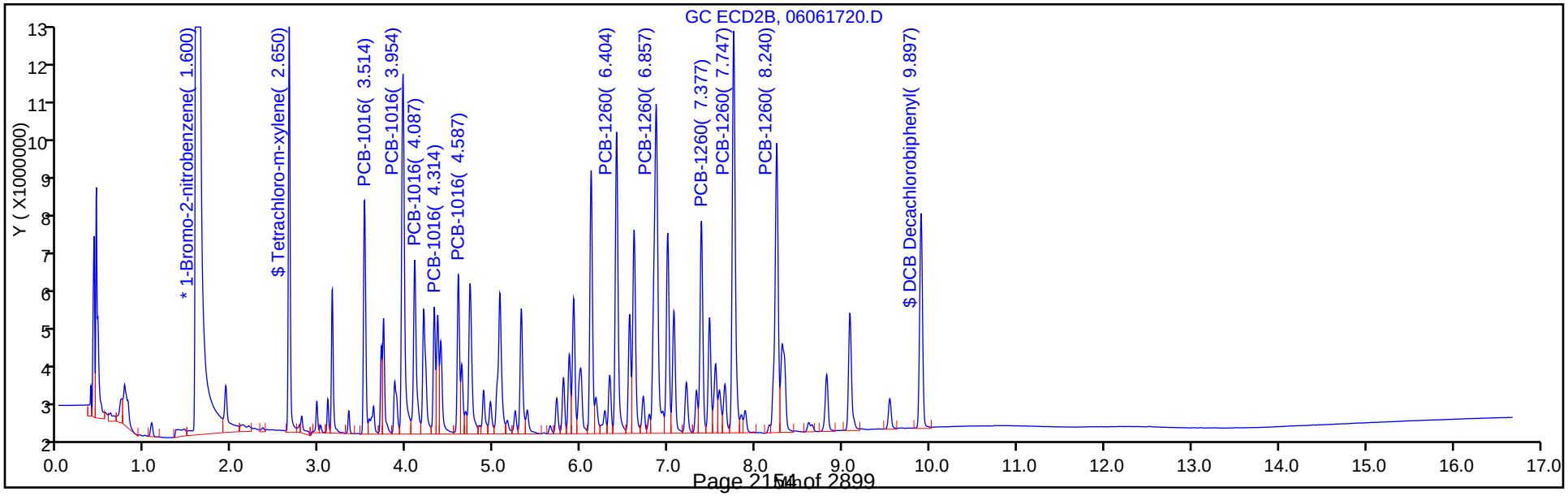
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061720.D

Injection Date:	06-Jun-2017 20:41:35	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL21660			Worklist Smp#:	20
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:52:53 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061720.D

Injection Date: 06-Jun-2017 20:41:35 Instrument ID: SGC_P3

Lims ID: STDL21660

Client ID:

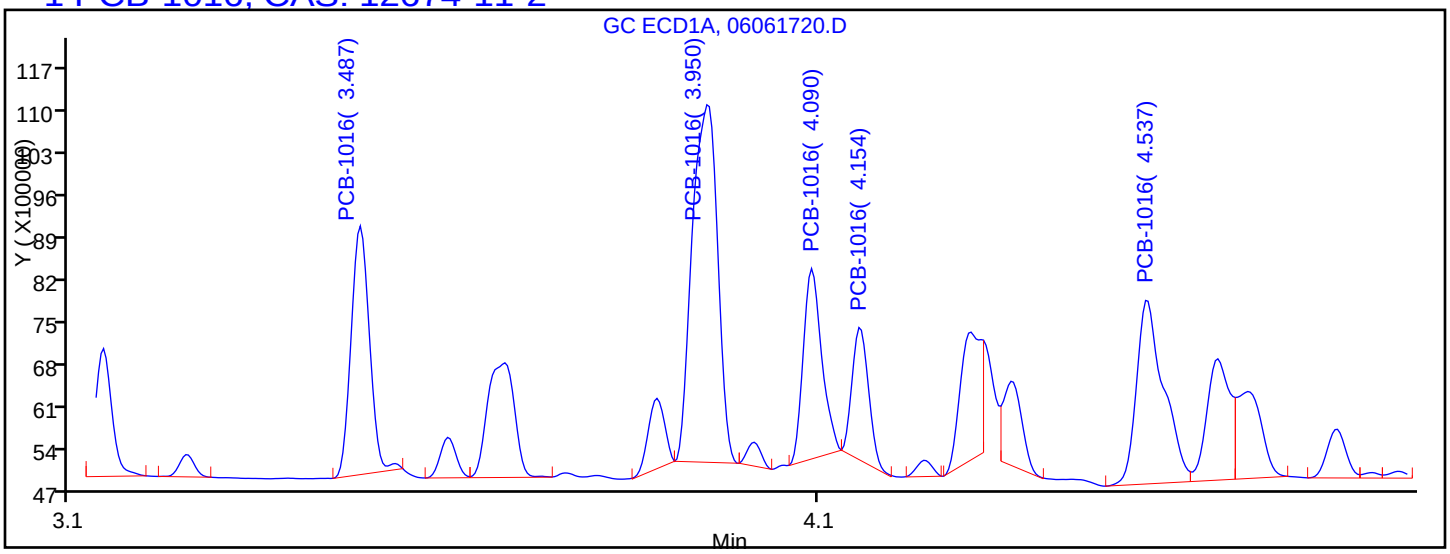
Operator ID: jax ALS Bottle#: 20 Worklist Smp#: 20

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

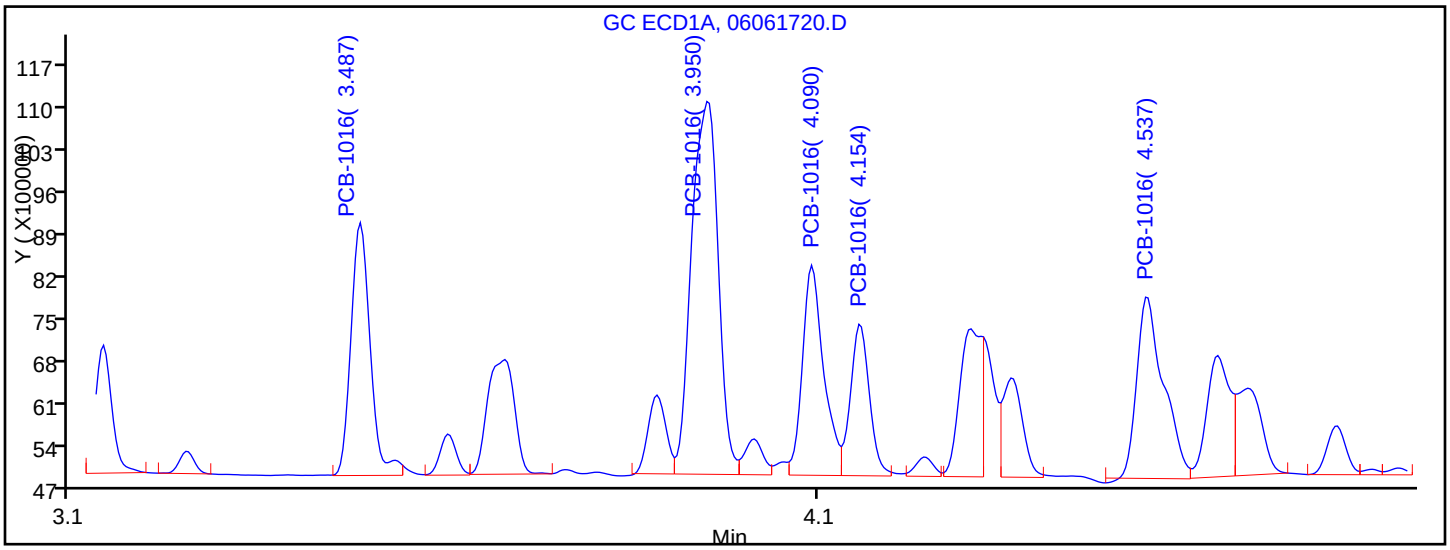
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

1 PCB-1016, CAS: 12674-11-2



Processing Integration Results

3.487	Response = 7008499	
3.950	Response = 13925344	
4.090	Response = 5407273	
4.154	Response = 3366057	
4.537	Response = 7632070	



Manual Integration Results

3.487	Response = 7487332	M
3.950	Response = 15232704	M
4.090	Response = 6838654	M
4.154	Response = 4388185	M
4.537	Response = 7393798	M

Reviewer: jacksonto, 07-Jun-2017 06:45:29

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061721.D
Lims ID: STDL11660
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Jun-2017 21:03:19 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL11660
Misc. Info.: 280-0059455-021
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:54 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.826	-0.001	332915517	1000.0	1000.0	
2	1.599	1.599	0.000	383255503	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.752	2.752	0.000	5682531	1.25	1.22	
2	2.649	2.649	0.000	8113860	1.25	1.09	
						RPD = 10.81	
1 PCB-1016							
1	3.485	3.486	-0.001	4092312	25.0	22.3	
1	3.952	3.952	0.000	8308605	25.0	24.4	
1	4.092	4.089	0.003	3909235	25.0	23.7	
1	4.155	4.156	-0.001	2502681	25.0	23.7	
1	4.539	4.539	0.000	4302074	25.0	23.3	
		Average of Peak Amounts =				23.5	
2	3.512	3.512	0.000	5691344	25.0	19.5	
2	3.955	3.952	0.003	11577594	25.0	21.3	
2	4.089	4.086	0.003	5549736	25.0	20.1	
2	4.312	4.312	0.000	2990008	25.0	19.8	
2	4.589	4.586	0.003	4118821	25.0	22.3	
		Average of Peak Amounts =				20.6	
						RPD = 13.06	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.015	6.012	0.003	6084608	25.0	23.7	
1	6.742	6.742	0.000	10628001	25.0	23.9	
1	7.232	7.232	0.000	5112131	25.0	23.3	
1	7.669	7.666	0.003	10456027	25.0	24.6	
1	8.052	8.049	0.003	6406784	25.0	24.6	
		Average of Peak Amounts =				24.0	
2	6.405	6.402	0.003	9499407	25.0	21.9	
2	6.859	6.859	0.000	14466167	25.0	22.2	
2	7.375	7.376	-0.001	6507193	25.0	21.9	
2	7.749	7.746	0.003	14111422	25.0	23.2	
2	8.242	8.239	0.003	10499776	25.0	22.7	
		Average of Peak Amounts =				22.4	
						RPD = 7.00	
$ 15 DCB Decachlorobiphenyl							
1	9.632	9.629	0.003	6193110	1.25	1.17	
2	9.899	9.896	0.003	6915591	1.25	1.11	
						RPD = 5.90	
S 8 Polychlorinated biphenyls, Total							
1						47.5	
2						43.0	
						RPD = 9.95	

Reagents:

AR_1660_L1_00028	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

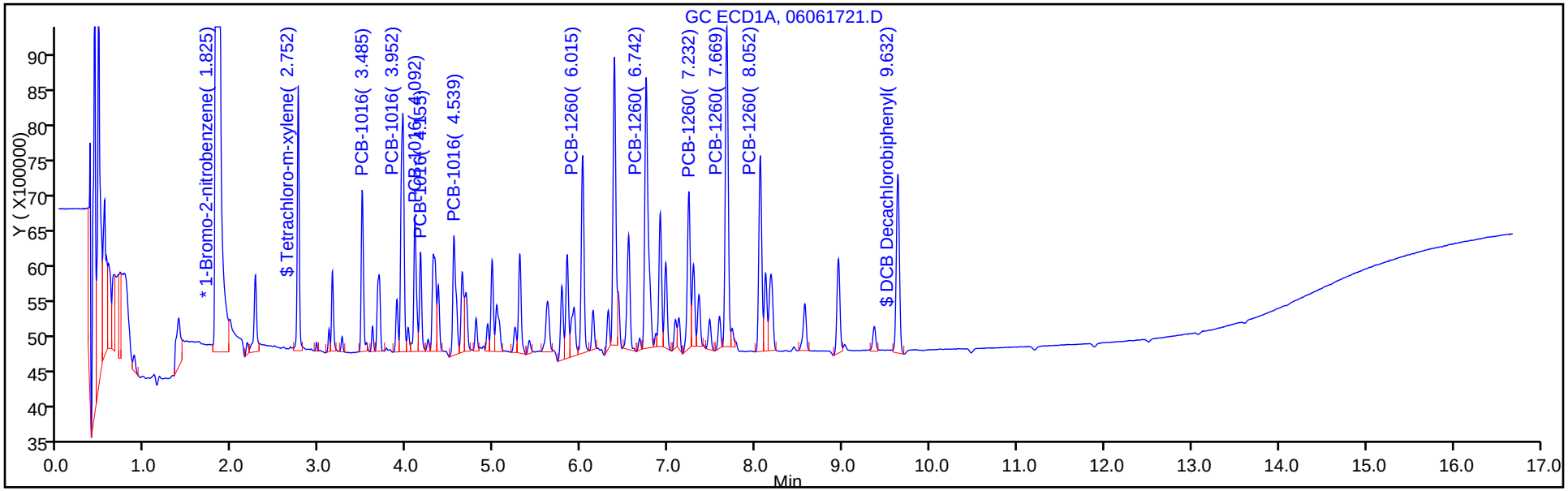
Report Date: 07-Jun-2017 06:52:55 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

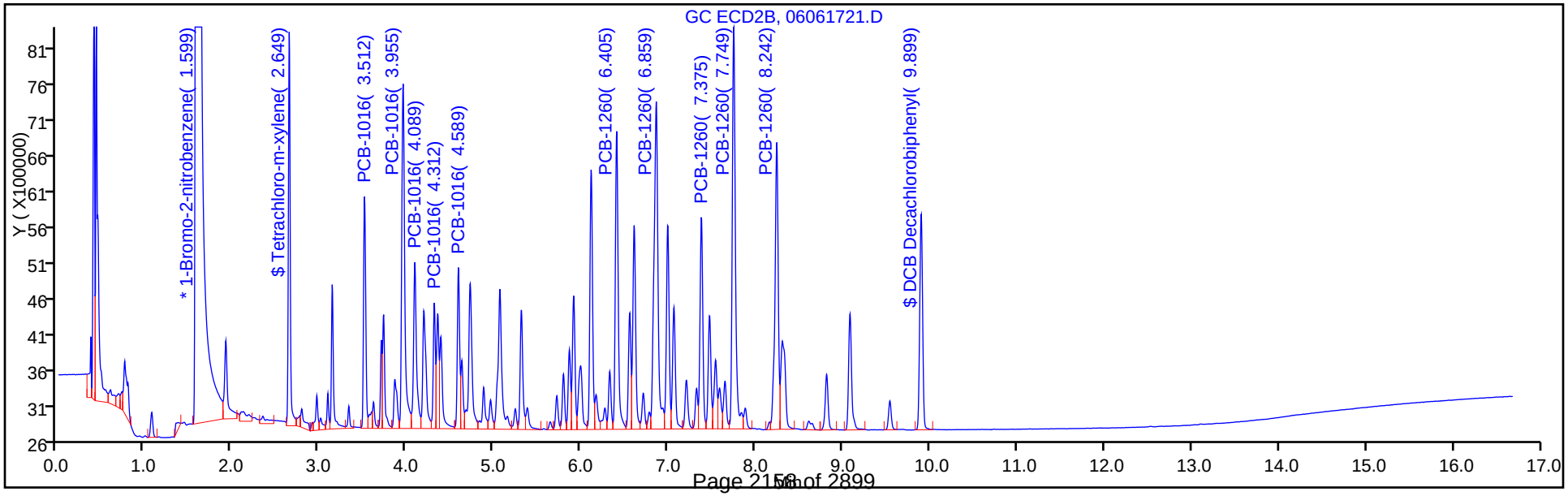
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061721.D

Injection Date:	06-Jun-2017 21:03:19	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL11660			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 18:53 Calibration End Date: 06/06/2017 21:03 Calibration ID: 29394

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11660 280-376236/21	06061721.D
Level 2	STDL21660 280-376236/20	06061720.D
Level 3	STDL31660 280-376236/19	06061719.D
Level 4	STDL41660 280-376236/18	06061718.D
Level 5	STDL51660 280-376236/17	06061717.D
Level 6	STDL61660 280-376236/16	06061716.D
Level 7	STDL71660 280-376236/15	06061715.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1016 Peak 1	0.5940 0.3483	0.5206 0.3471	0.4703	0.4068	0.3692	Lin1	8.0831	0.3462							0.9970		0.9900
PCB-1016 Peak 2	1.2083 0.7761	1.0666 0.7847	0.9843	0.8780	0.8165	Lin1	13.646	0.7779							0.9990		0.9900
PCB-1016 Peak 3	0.5792 0.3518	0.5126 0.3567	0.4689	0.4057	0.3714	Lin1	7.3899	0.3525							0.9980		0.9900
PCB-1016 Peak 4	0.3121 0.1947	0.2851 0.1908	0.2522	0.2150	0.2063	Lin1	4.0070	0.1918							0.9980		0.9900
PCB-1016 Peak 5	0.4299 0.2618	0.3658 0.2645	0.3276	0.2863	0.2750	Lin1	4.9320	0.2606							0.9990		0.9900
PCB-1260 Peak 1	0.9914 0.6210	0.8652 0.6408	0.7885	0.6924	0.6510	Lin1	11.089	0.6260							0.9990		0.9900
PCB-1260 Peak 2	1.5098 0.9376	1.3224 0.9695	1.1703	1.0302	0.9767	Lin1	16.820	0.9427							0.9990		0.9900
PCB-1260 Peak 3	0.6791 0.4266	0.5946 0.4457	0.5467	0.4735	0.4451	Lin1	7.5045	0.4319							0.9990		0.9900
PCB-1260 Peak 4	1.4728 0.9243	1.2281 0.9557	1.1472	1.0190	0.9560	Lin1	15.221	0.9301							0.9990		0.9900
PCB-1260 Peak 5	1.0959 0.7087	0.9552 0.7376	0.8754	0.7776	0.7366	Lin1	11.124	0.7165							0.9990		0.9900
Tetrachloro-m-xylene	16.937 11.076	14.865 11.160	13.742	12.401	11.653	Lin1	9.0681	11.090							0.9990		0.9900
DCB Decachlorobiphenyl (Surr)	14.435 9.0550	12.602 9.3434	11.418	9.9048	9.3498	Lin1	7.9921	9.0840							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 18:53 Calibration End Date: 06/06/2017 21:03 Calibration ID: 29394

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11660 280-376236/21	06061721.D
Level 2	STDL21660 280-376236/20	06061720.D
Level 3	STDL31660 280-376236/19	06061719.D
Level 4	STDL41660 280-376236/18	06061718.D
Level 5	STDL51660 280-376236/17	06061717.D
Level 6	STDL61660 280-376236/16	06061716.D
Level 7	STDL71660 280-376236/15	06061715.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	BNB	Lin1	5691344 104124315	10340490 129837588	18866129	41290967	74393220	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 2	BNB	Lin1	11577594 232024594	21185063 293501737	39486542	89114924	164511841	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 3	BNB	Lin1	5549736 105182049	10182486 133413833	18812749	41182323	74822022	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 4	BNB	Lin1	2990008 58197834	5663090 71370957	10118153	21824117	41568287	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 5	BNB	Lin1	4118821 78260144	7265300 98944888	13141078	29054635	55402125	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 1	BNB	Lin1	9499407 185671410	17185730 239675892	31630755	70279490	131171686	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 2	BNB	Lin1	14466167 280310149	26266856 362610626	46948114	104568912	196787463	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 3	BNB	Lin1	6507193 127525216	11810705 166712528	21934007	48056088	89679438	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 4	BNB	Lin1	14111422 276328319	24394598 357449619	46020806	103428097	192606616	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 5	BNB	Lin1	10499776 211869985	18973980 275897553	35117129	78925507	148410731	25.0 750	50.0 1000	100	250	500
Tetrachloro-m-xylene	BNB	Lin1	8113860 165562777	14763535 208703729	27564865	62936226	117388845	1.25 37.5	2.50 50.0	5.00	12.5	25.0
DCB Decachlorobiphenyl (Surr)	BNB	Lin1	6915591 135357270	12516089 174736569	22903310	50266976	94188936	1.25 37.5	2.50 50.0	5.00	12.5	25.0

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061715.D
Lims ID: STDL71660
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 18:53:04 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL71660
Misc. Info.: 280-0059455-015
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:42 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	321825122	1000.0	1000.0	
2	1.600	1.600	0.000	374030457	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.753	2.752	0.001	175452107	50.0	50.9	
2	2.650	2.649	0.001	208703729	50.0	49.5	
						RPD = 2.78	
1 PCB-1016							
1	3.486	3.486	0.000	105338158	1000.0	1004.5	
1	3.953	3.952	0.001	248061775	1000.0	1015.7	
1	4.090	4.089	0.001	102498619	1000.0	1013.9	
1	4.156	4.156	0.000	66091491	1000.0	1009.5	
1	4.540	4.539	0.001	106371789	1000.0	1008.8	
		Average of Peak Amounts =				1010.5	
2	3.513	3.512	0.001	129837588	1000.0	979.4	
2	3.950	3.952	-0.002	293501737	1000.0	991.2	
2	4.086	4.086	0.000	133413833	1000.0	990.9	
2	4.310	4.312	-0.002	71370957	1000.0	974.2	
2	4.586	4.586	0.000	98944888	1000.0	996.1	
		Average of Peak Amounts =				986.4	
						RPD = 2.42	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.013	6.012	0.001	164134452	1000.0	1017.9	
1	6.743	6.742	0.001	325199626	1000.0	1022.8	
1	7.233	7.232	0.001	150433029	1000.0	1021.0	
1	7.666	7.666	0.000	335464075	1000.0	1027.3	
1	8.050	8.049	0.001	191696219	1000.0	1020.2	
		Average of Peak Amounts =				1021.8	
2	6.403	6.402	0.001	239675892	1000.0	1006.0	
2	6.856	6.859	-0.003	362610626	1000.0	1010.5	
2	7.376	7.376	0.000	166712528	1000.0	1014.6	
2	7.746	7.746	0.000	357449619	1000.0	1011.1	
2	8.240	8.239	0.001	275897553	1000.0	1014.0	
		Average of Peak Amounts =				1011.2	
						RPD = 1.04	
$ 15 DCB Decachlorobiphenyl							
1	9.630	9.629	0.001	168104066	50.0	51.0	
2	9.900	9.896	0.004	174736569	50.0	50.5	
						RPD = 0.95	
S 8 Polychlorinated biphenyls, Total							
1						2032.3	
2						1997.6	
						RPD = 1.72	

Reagents:

AR_1660_L7_00022	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

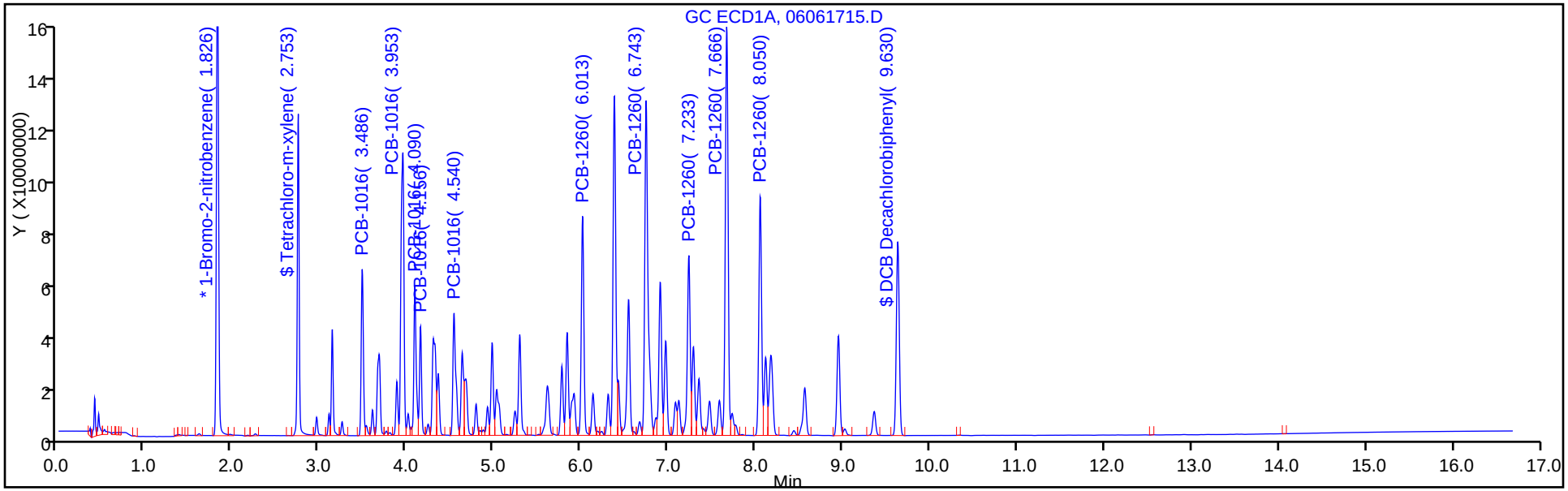
Report Date: 07-Jun-2017 06:52:42 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

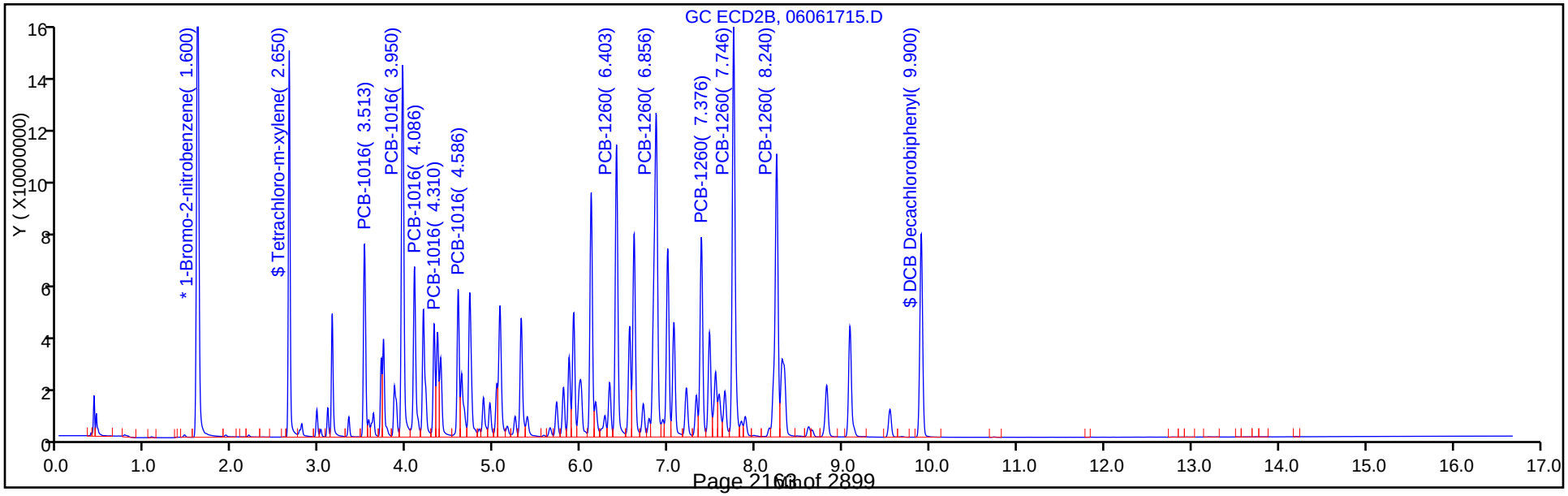
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061715.D

Injection Date:	06-Jun-2017 18:53:04	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL71660			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061716.D
Lims ID: STDL61660
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Jun-2017 19:14:47 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL61660
Misc. Info.: 280-0059455-016
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:43 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	344124721	1000.0	1000.0	
2	1.601	1.600	0.001	398623816	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.751	2.752	-0.001	135663505	37.5	36.7	
2	2.648	2.649	-0.001	165562777	37.5	36.6	
						RPD = 0.16	
1 PCB-1016							
1	3.488	3.486	0.002	82791241	750.0	734.1	
1	3.951	3.952	-0.001	192453551	750.0	734.5	
1	4.091	4.089	0.002	79177898	750.0	728.5	
1	4.154	4.156	-0.002	51885493	750.0	737.5	
1	4.538	4.539	-0.001	82989882	750.0	731.5	
		Average of Peak Amounts =				733.2	
2	3.511	3.512	-0.001	104124315	750.0	731.2	
2	3.951	3.952	-0.001	232024594	750.0	730.7	
2	4.084	4.086	-0.002	105182049	750.0	727.6	
2	4.311	4.312	-0.001	58197834	750.0	740.5	
2	4.588	4.586	0.002	78260144	750.0	734.4	
		Average of Peak Amounts =				732.9	
						RPD = 0.05	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.014	6.012	0.002	126475373	750.0	729.8	
1	6.741	6.742	-0.001	248807451	750.0	729.4	
1	7.231	7.232	-0.001	114243529	750.0	722.1	
1	7.668	7.666	0.002	255142631	750.0	728.8	
1	8.051	8.049	0.002	147731172	750.0	732.8	
		Average of Peak Amounts =				728.6	
2	6.401	6.402	-0.001	185671410	750.0	726.4	
2	6.858	6.859	-0.001	280310149	750.0	728.1	
2	7.374	7.376	-0.002	127525216	750.0	723.3	
2	7.744	7.746	-0.002	276328319	750.0	728.9	
2	8.241	8.239	0.002	211869985	750.0	726.3	
		Average of Peak Amounts =				726.6	
						RPD = 0.27	
$ 15 DCB Decachlorobiphenyl							
1	9.631	9.629	0.002	128612077	37.5	36.3	
2	9.898	9.896	0.002	135357270	37.5	36.5	
						RPD = 0.48	
S 8 Polychlorinated biphenyls, Total							
1						1461.8	
2						1459.5	
						RPD = 0.16	

Reagents:

AR_1660_L6_00029	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

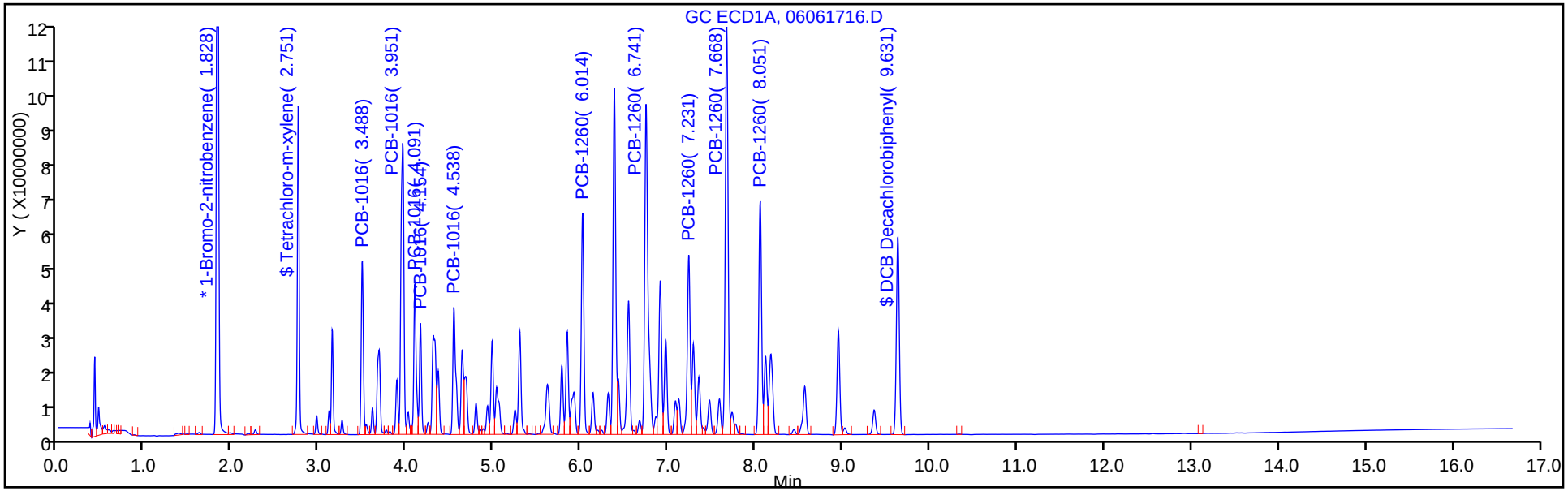
Report Date: 07-Jun-2017 06:52:44 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

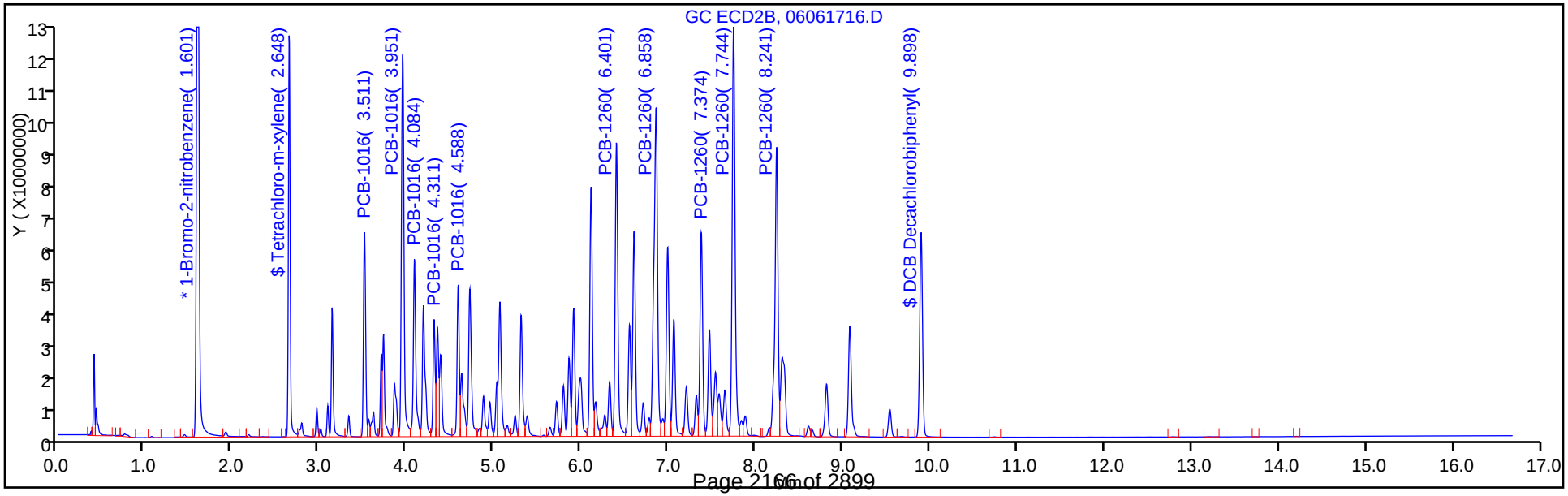
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061716.D

Injection Date:	06-Jun-2017 19:14:47	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL61660			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061717.D
Lims ID: STDL51660
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 06-Jun-2017 19:36:29 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL51660
Misc. Info.: 280-0059455-017
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:45 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:29:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	347177456	1000.0	1000.0	
2	1.599	1.599	0.000	402955781	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.752	2.752	0.000	93146869	25.0	24.8	
2	2.649	2.649	0.000	117388845	25.0	25.5	
						RPD = 2.40	
1 PCB-1016							
1	3.486	3.486	0.000	57542662	500.0	500.7	
1	3.952	3.952	0.000	132265539	500.0	497.6	
1	4.089	4.089	0.000	55335667	500.0	500.3	
1	4.156	4.156	0.000	35641561	500.0	497.8	
1	4.539	4.539	0.000	58003485	500.0	501.6	
		Average of Peak Amounts =				499.6	
2	3.512	3.512	0.000	74393220	500.0	510.0	
2	3.952	3.952	0.000	164511841	500.0	507.3	
2	4.086	4.086	0.000	74822022	500.0	505.8	
2	4.312	4.312	0.000	41568287	500.0	517.1	
2	4.586	4.586	0.000	55402125	500.0	508.6	
		Average of Peak Amounts =				509.7	
						RPD = 2.01	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							M
1	6.012	6.012	0.000	87377831	500.0	495.6	M
1	6.742	6.742	0.000	171141272	500.0	494.5	M
1	7.232	7.232	0.000	80138230	500.0	498.8	M
1	7.666	7.666	0.000	175214565	500.0	494.0	M
1	8.049	8.049	0.000	101076767	500.0	494.2	M
		Average of Peak Amounts =				495.4	
2	6.402	6.402	0.000	131171686	500.0	502.3	
2	6.859	6.859	0.000	196787463	500.0	500.2	
2	7.376	7.376	0.000	89679438	500.0	497.9	
2	7.746	7.746	0.000	192606616	500.0	497.5	
2	8.239	8.239	0.000	148410731	500.0	498.5	
		Average of Peak Amounts =				499.3	
						RPD = 0.78	
$ 15 DCB Decachlorobiphenyl							
1	9.629	9.629	0.000	90106465	25.0	25.0	
2	9.896	9.896	0.000	94188936	25.0	24.9	
						RPD = 0.68	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

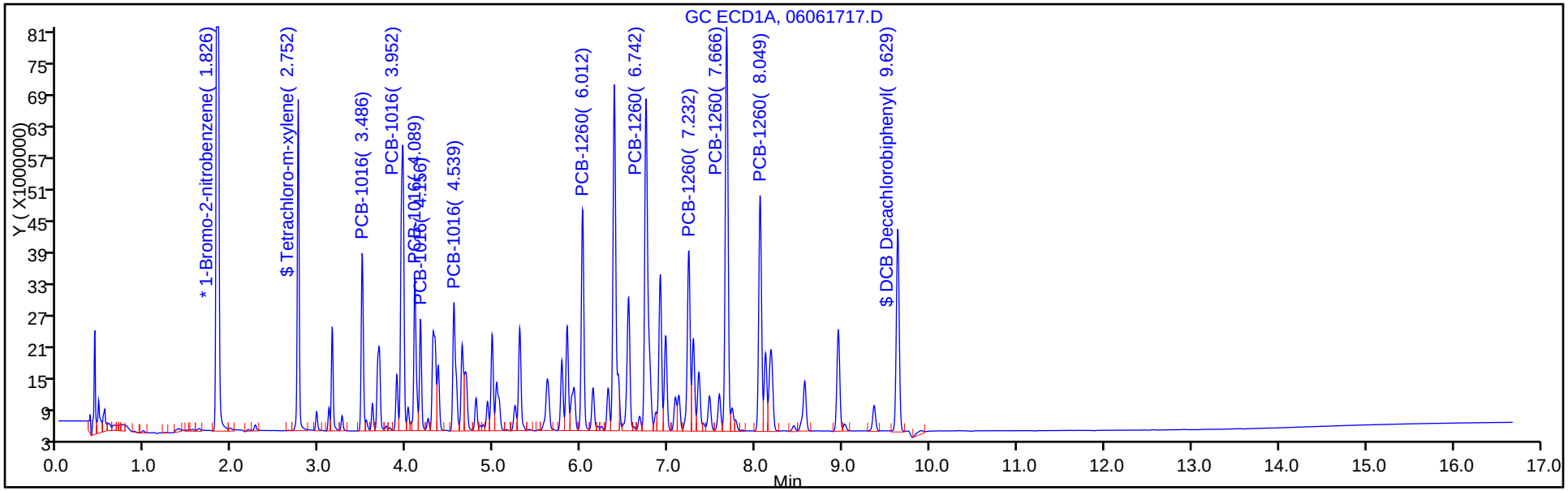
Report Date: 07-Jun-2017 06:52:46 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

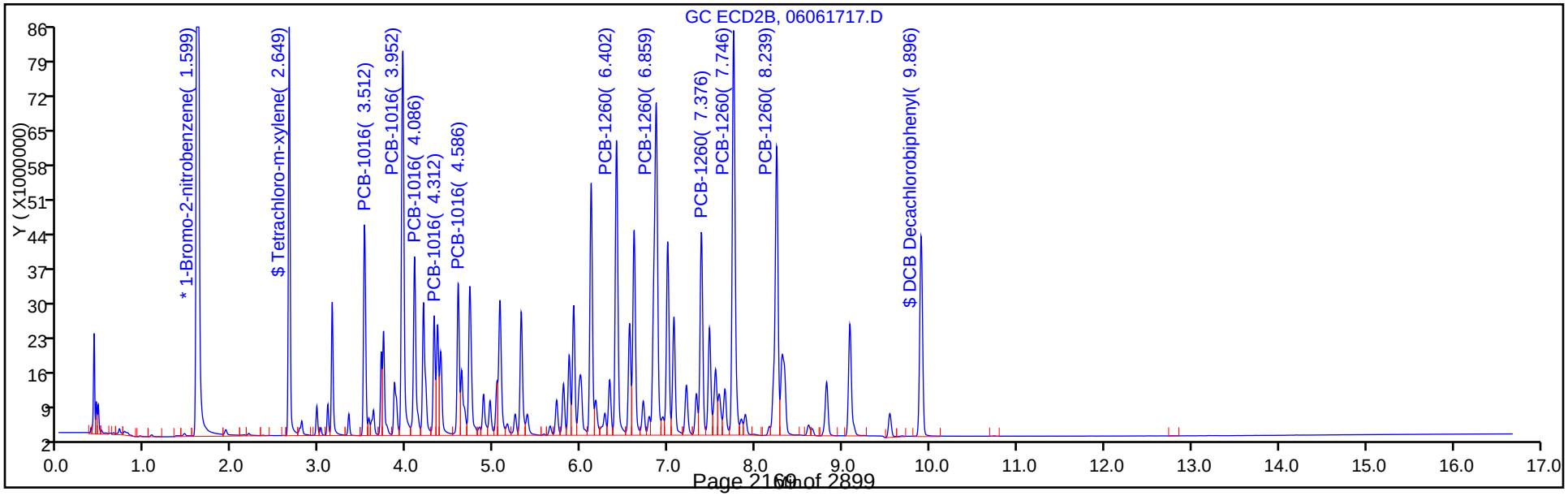
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061717.D

Injection Date:	06-Jun-2017 19:36:29	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL51660			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061718.D
Lims ID: STDL41660
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Jun-2017 19:58:10 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL41660
Misc. Info.: 280-0059455-018
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:47 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:44:59

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	351266835	1000.0	1000.0	
2	1.600	1.599	0.001	406000007	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.754	2.752	0.002	48018977	12.5	12.5	
2	2.650	2.649	0.001	62936226	12.5	13.2	
						RPD = 5.40	
1 PCB-1016							
1	3.487	3.486	0.001	30630958	250.0	255.8	
1	3.950	3.952	-0.002	68368331	250.0	249.9	
1	4.090	4.089	0.001	29242149	250.0	254.5	
1	4.154	4.156	-0.002	18665090	250.0	251.0	
1	4.537	4.539	-0.002	30611537	250.0	253.6	
		Average of Peak Amounts =				253.0	
2	3.514	3.512	0.002	41290967	250.0	270.4	
2	3.954	3.952	0.002	89114924	250.0	264.6	
2	4.087	4.086	0.001	41182323	250.0	266.8	
2	4.310	4.312	-0.002	21824117	250.0	259.4	
2	4.587	4.586	0.001	29054635	250.0	255.7	
		Average of Peak Amounts =				263.4	
						RPD = 4.03	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							M
1	6.014	6.012	0.002	46213959	250.0	252.7	M
1	6.744	6.742	0.002	88801710	250.0	249.4	M
1	7.234	7.232	0.002	42122701	250.0	254.1	M
1	7.667	7.666	0.001	89857466	250.0	247.2	M
1	8.050	8.049	0.001	52630695	250.0	250.2	M
		Average of Peak Amounts =				250.7	
2	6.404	6.402	0.002	70279490	250.0	258.8	
2	6.857	6.859	-0.002	104568912	250.0	255.4	
2	7.377	7.376	0.001	48056088	250.0	256.7	
2	7.747	7.746	0.001	103428097	250.0	257.5	
2	8.240	8.239	0.001	78925507	250.0	255.8	
		Average of Peak Amounts =				256.8	
						RPD = 2.42	
$ 15 DCB Decachlorobiphenyl							
1	9.630	9.629	0.001	46414402	12.5	12.4	
2	9.897	9.896	0.001	50266976	12.5	12.7	
						RPD = 2.69	
S 8 Polychlorinated biphenyls, Total							
1						503.7	
2						520.2	
						RPD = 3.23	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1660_L4_00065	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

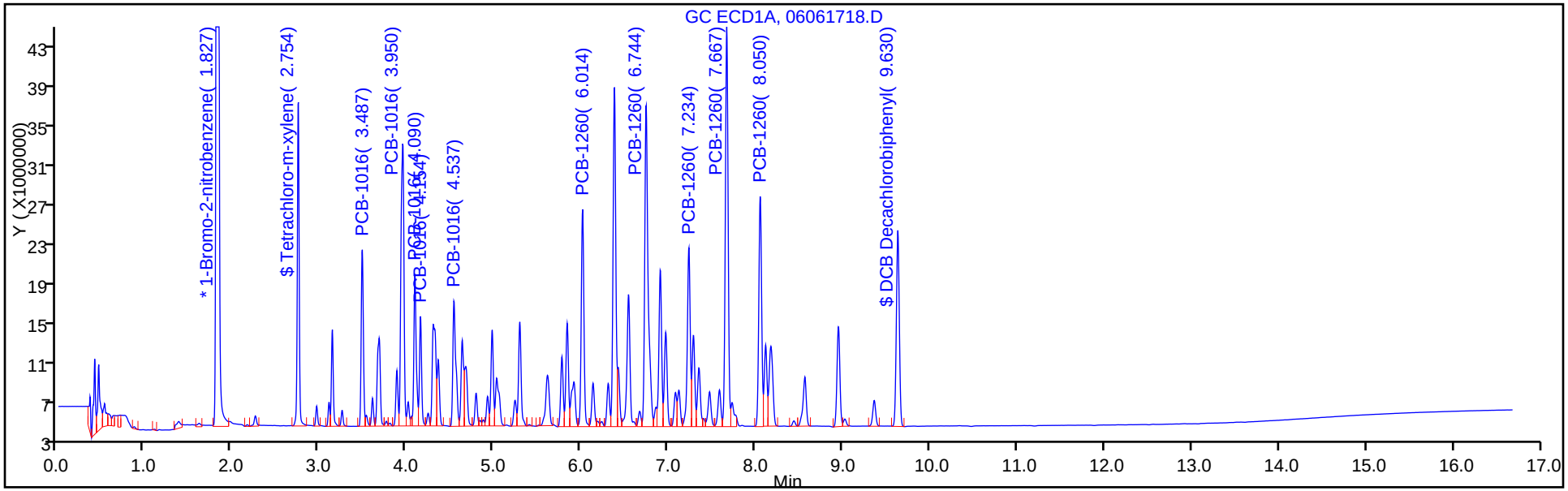
Report Date: 07-Jun-2017 06:52:48 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

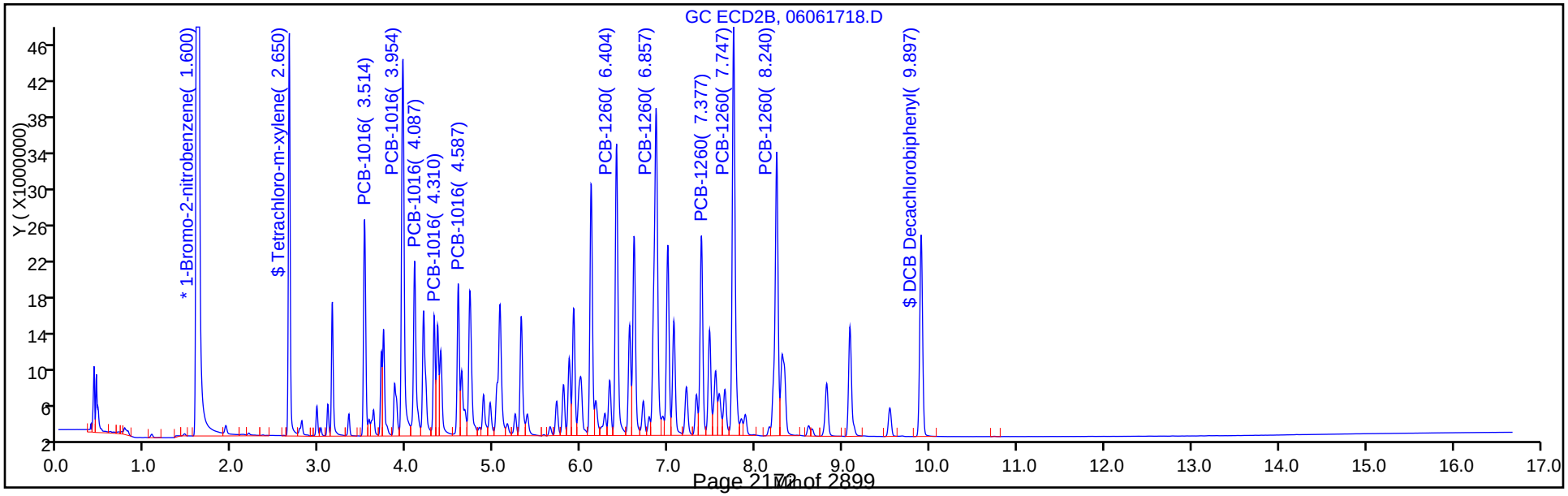
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061718.D

Injection Date:	06-Jun-2017 19:58:10	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL41660			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061719.D
Lims ID: STDL31660
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Jun-2017 20:19:52 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL31660
Misc. Info.: 280-0059455-019
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:50 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:45:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.826	-0.001	349267665	1000.0	1000.0	
2	1.598	1.599	-0.001	401174526	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.752	2.752	0.000	20251060	5.00	5.06	
2	2.648	2.649	-0.001	27564865	5.00	5.38	
						RPD = 6.01	
1 PCB-1016							
1	3.485	3.486	-0.001	13576390	100.0	105.2	
1	3.952	3.952	0.000	29176200	100.0	102.2	
1	4.092	4.089	0.003	12724584	100.0	103.4	
1	4.155	4.156	-0.001	8326427	100.0	105.0	
1	4.538	4.539	-0.001	13769298	100.0	105.5	
		Average of Peak Amounts =				104.3	
2	3.512	3.512	0.000	18866129	100.0	112.5	
2	3.952	3.952	0.000	39486542	100.0	109.0	
2	4.088	4.086	0.002	18812749	100.0	112.1	
2	4.312	4.312	0.000	10118153	100.0	110.6	
2	4.588	4.586	0.002	13141078	100.0	106.8	
		Average of Peak Amounts =				110.2	
						RPD = 5.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							M
1	6.012	6.012	0.000	20396415	100.0	104.8	M
1	6.742	6.742	0.000	38501119	100.0	103.8	M
1	7.232	7.232	0.000	18183829	100.0	104.3	M
1	7.665	7.666	-0.001	38357309	100.0	102.4	M
1	8.052	8.049	0.003	22581951	100.0	103.1	
		Average of Peak Amounts =				103.7	
2	6.405	6.402	0.003	31630755	100.0	108.2	
2	6.858	6.859	-0.001	46948114	100.0	106.3	
2	7.375	7.376	-0.001	21934007	100.0	109.2	
2	7.745	7.746	-0.001	46020806	100.0	107.0	
2	8.238	8.239	-0.001	35117129	100.0	106.6	
		Average of Peak Amounts =				107.5	
						RPD = 3.60	
$ 15 DCB Decachlorobiphenyl							
1	9.628	9.629	-0.001	20648715	5.00	5.18	
2	9.895	9.896	-0.001	22903310	5.00	5.40	
						RPD = 4.17	
S 8 Polychlorinated biphenyls, Total							
1						208.0	
2						217.7	
						RPD = 4.56	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1660_L3_00028	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

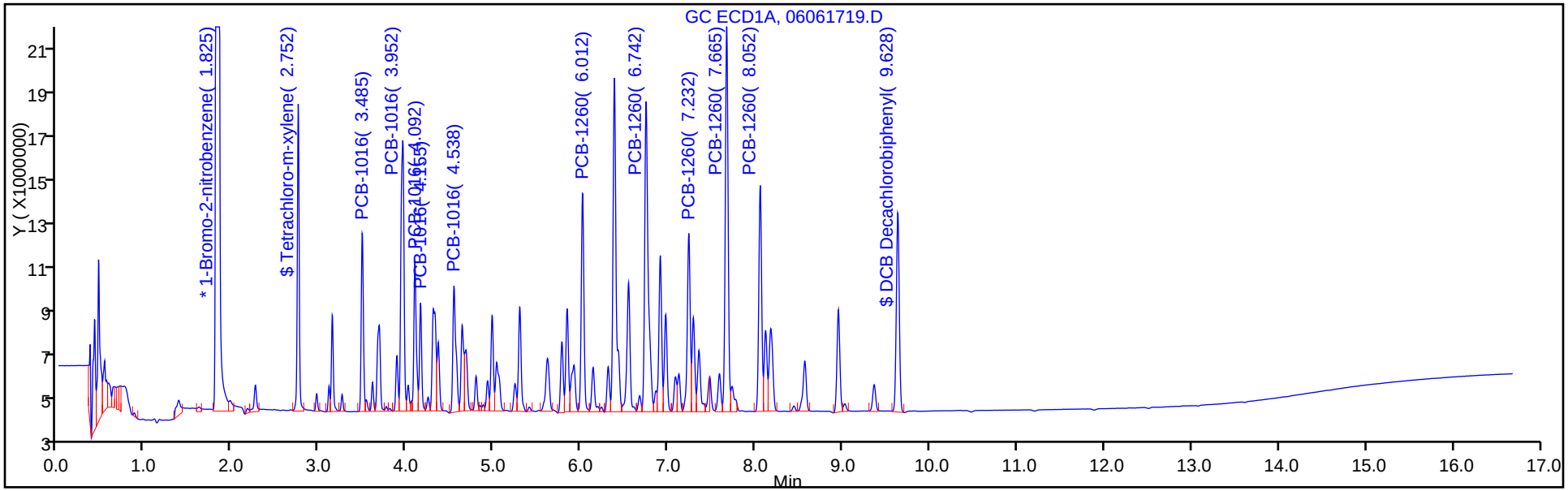
Report Date: 07-Jun-2017 06:52:50 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

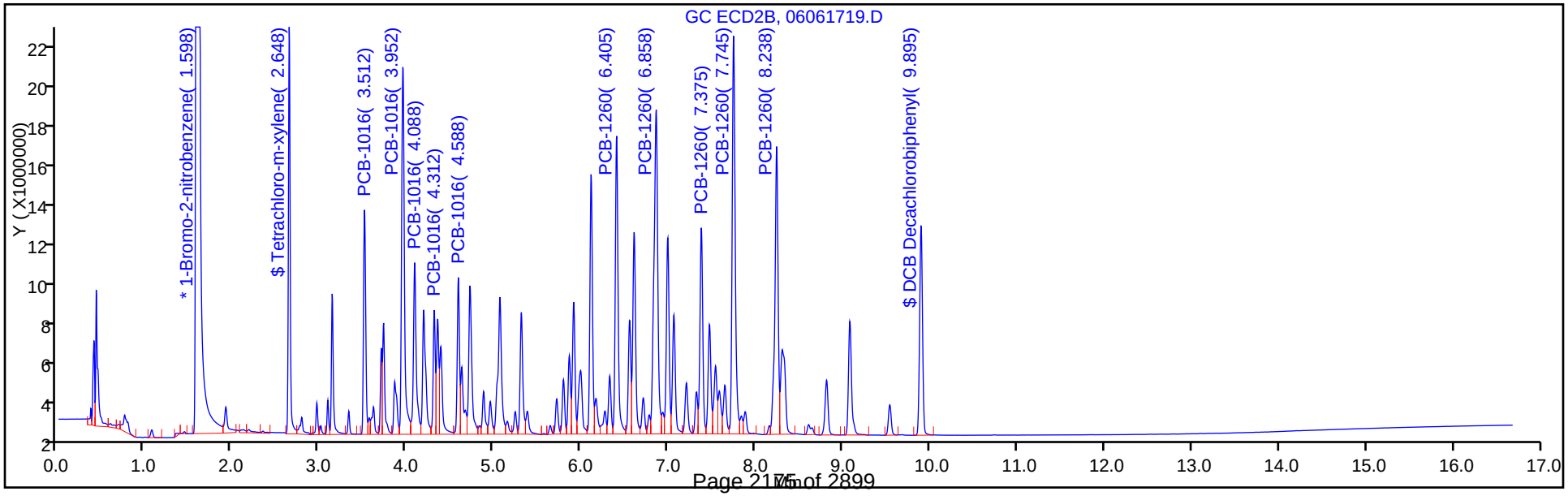
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061719.D

Injection Date:	06-Jun-2017 20:19:52	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL31660			Worklist Smp#:	19
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061720.D
Lims ID: STDL21660
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Jun-2017 20:41:35 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL21660
Misc. Info.: 280-0059455-020
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:52 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:45:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	340905881	1000.0	1000.0	
2	1.600	1.599	0.001	397262080	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.750	2.752	-0.002	10710894	2.50	2.57	
2	2.650	2.649	0.001	14763535	2.50	2.53	
						RPD = 1.27	
1 PCB-1016							M
1	3.487	3.486	0.001	7487332	50.0	52.4	M
1	3.950	3.952	-0.002	15232704	50.0	50.6	M
1	4.090	4.089	0.001	6838654	50.0	50.6	M
1	4.154	4.156	-0.002	4388185	50.0	50.4	M
1	4.537	4.539	-0.002	7393798	50.0	50.5	M
		Average of Peak Amounts =				50.9	
2	3.514	3.512	0.002	10340490	50.0	51.8	
2	3.954	3.952	0.002	21185063	50.0	51.0	
2	4.087	4.086	0.001	10182486	50.0	51.7	
2	4.314	4.312	0.002	5663090	50.0	53.4	
2	4.587	4.586	0.001	7265300	50.0	51.2	
		Average of Peak Amounts =				51.9	
						RPD = 1.84	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.014	6.012	0.002	10786770	50.0	50.7	
1	6.744	6.742	0.002	20028581	50.0	51.3	
1	7.230	7.232	-0.002	9579328	50.0	51.4	
1	7.667	7.666	0.001	19703088	50.0	50.8	
1	8.050	8.049	0.001	11533959	50.0	49.8	
		Average of Peak Amounts =				50.8	
2	6.404	6.402	0.002	17185730	50.0	51.4	
2	6.857	6.859	-0.002	26266856	50.0	52.3	
2	7.377	7.376	0.001	11810705	50.0	51.5	
2	7.747	7.746	0.001	24394598	50.0	49.7	
2	8.240	8.239	0.001	18973980	50.0	51.1	
		Average of Peak Amounts =				51.2	
						RPD = 0.77	
$ 15 DCB Decachlorobiphenyl							
1	9.630	9.629	0.001	11262263	2.50	2.60	
2	9.897	9.896	0.001	12516089	2.50	2.59	
						RPD = 0.54	
S 8 Polychlorinated biphenyls, Total							
1						101.7	
2						103.0	
						RPD = 1.31	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1660_L2_00027	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

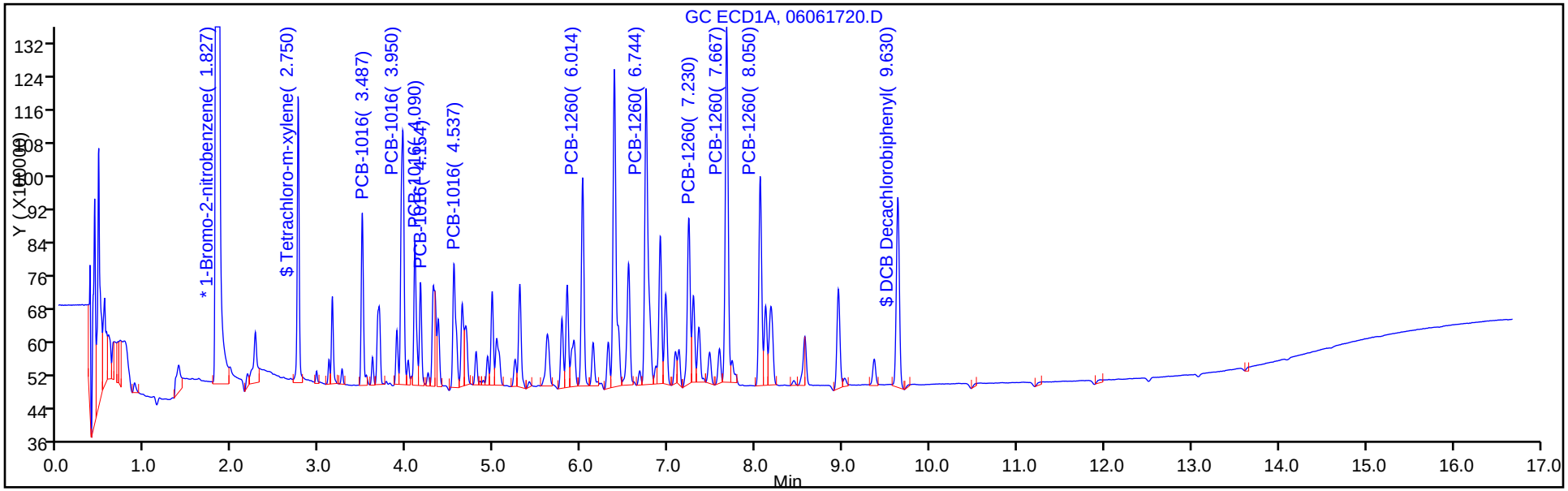
Report Date: 07-Jun-2017 06:52:53 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

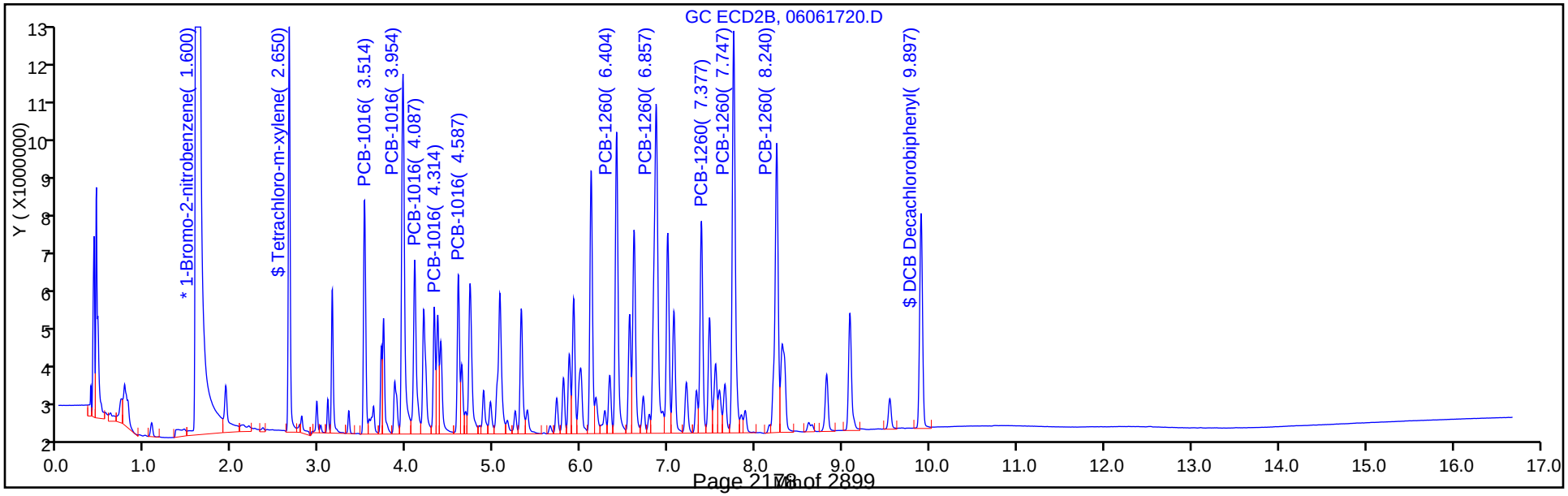
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061720.D

Injection Date:	06-Jun-2017 20:41:35	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL21660			Worklist Smp#:	20
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061721.D
Lims ID: STDL11660
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Jun-2017 21:03:19 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL11660
Misc. Info.: 280-0059455-021
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:54 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.826	-0.001	332915517	1000.0	1000.0	
2	1.599	1.599	0.000	383255503	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.752	2.752	0.000	5682531	1.25	1.22	
2	2.649	2.649	0.000	8113860	1.25	1.09	
						RPD = 10.81	
1 PCB-1016							
1	3.485	3.486	-0.001	4092312	25.0	22.3	
1	3.952	3.952	0.000	8308605	25.0	24.4	
1	4.092	4.089	0.003	3909235	25.0	23.7	
1	4.155	4.156	-0.001	2502681	25.0	23.7	
1	4.539	4.539	0.000	4302074	25.0	23.3	
		Average of Peak Amounts =				23.5	
2	3.512	3.512	0.000	5691344	25.0	19.5	
2	3.955	3.952	0.003	11577594	25.0	21.3	
2	4.089	4.086	0.003	5549736	25.0	20.1	
2	4.312	4.312	0.000	2990008	25.0	19.8	
2	4.589	4.586	0.003	4118821	25.0	22.3	
		Average of Peak Amounts =				20.6	
						RPD = 13.06	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.015	6.012	0.003	6084608	25.0	23.7	
1	6.742	6.742	0.000	10628001	25.0	23.9	
1	7.232	7.232	0.000	5112131	25.0	23.3	
1	7.669	7.666	0.003	10456027	25.0	24.6	
1	8.052	8.049	0.003	6406784	25.0	24.6	
		Average of Peak Amounts =				24.0	
2	6.405	6.402	0.003	9499407	25.0	21.9	
2	6.859	6.859	0.000	14466167	25.0	22.2	
2	7.375	7.376	-0.001	6507193	25.0	21.9	
2	7.749	7.746	0.003	14111422	25.0	23.2	
2	8.242	8.239	0.003	10499776	25.0	22.7	
		Average of Peak Amounts =				22.4	
						RPD = 7.00	
$ 15 DCB Decachlorobiphenyl							
1	9.632	9.629	0.003	6193110	1.25	1.17	
2	9.899	9.896	0.003	6915591	1.25	1.11	
						RPD = 5.90	
S 8 Polychlorinated biphenyls, Total							
1						47.5	
2						43.0	
						RPD = 9.95	

Reagents:

AR_1660_L1_00028	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

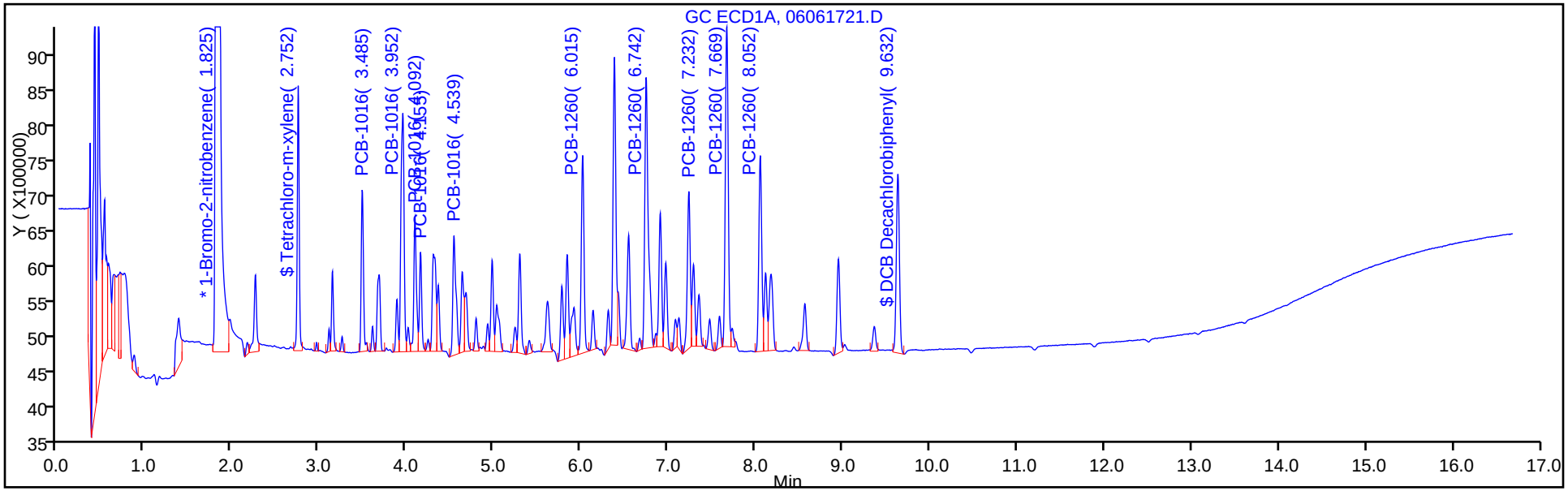
Report Date: 07-Jun-2017 06:52:55 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

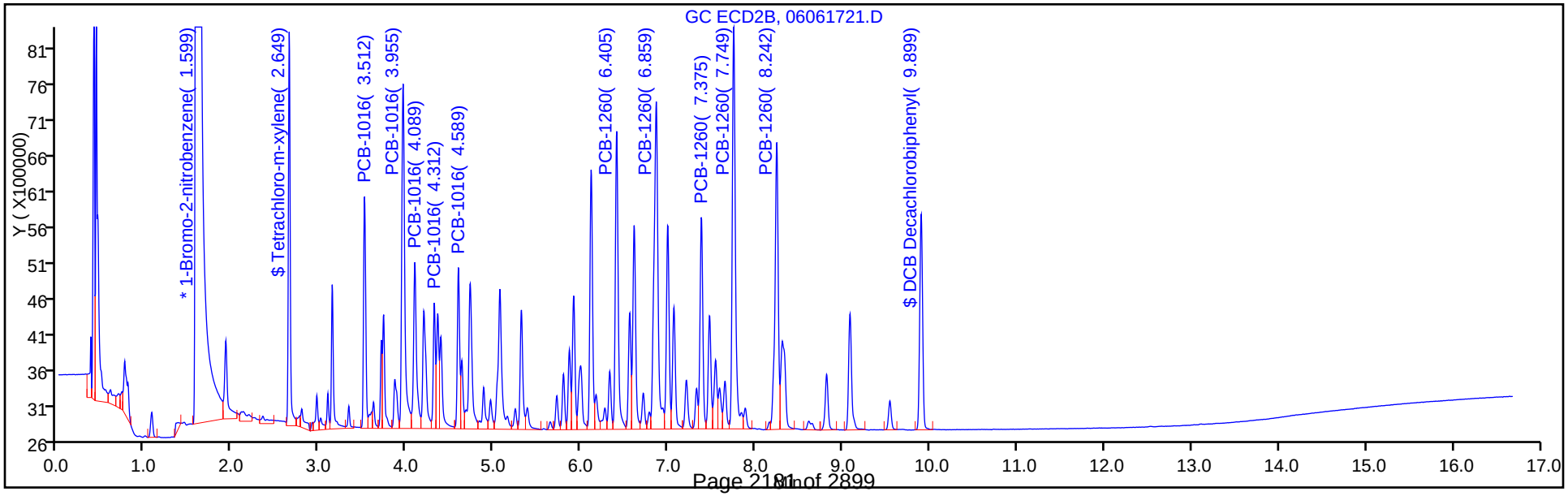
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061721.D

Injection Date:	06-Jun-2017 21:03:19	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL11660			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 21:25 Calibration End Date: 06/06/2017 23:35 Calibration ID: 29397

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL13262 280-376236/28	06061728.D
Level 2	STDL23262 280-376236/27	06061727.D
Level 3	STDL33262 280-376236/26	06061726.D
Level 4	STDL43262 280-376236/25	06061725.D
Level 5	STDL53262 280-376236/24	06061724.D
Level 6	STDL63262 280-376236/23	06061723.D
Level 7	STDL73262 280-376236/22	06061722.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1232 Peak 1	0.2668 0.1981	0.2506 0.2047	0.2106	0.2117	0.1886	Lin1	1.9328	0.1971							0.9980		0.9900
PCB-1232 Peak 2	0.2418 0.1650	0.2198 0.1688	0.1934	0.1771	0.1665	Lin1	2.2999	0.1646							0.9990		0.9900
PCB-1232 Peak 3	0.4975 0.3699	0.4578 0.3811	0.4069	0.3817	0.3708	Lin1	3.4776	0.3705							1.0000		0.9900
PCB-1232 Peak 4	0.2095 0.1546	0.2136 0.1599	0.1815	0.1653	0.1587	Lin1	1.9369	0.1559							0.9990		0.9900
PCB-1232 Peak 5	0.3017 0.1526	0.2235 0.1548	0.1918	0.1658	0.1570	Lin1	3.8240	0.1497							1.0000		0.9900
PCB-1262 Peak 1	0.8061 0.5511	0.6919 0.5644	0.6136	0.5742	0.5466	Lin1	6.5770	0.5475							1.0000		0.9900
PCB-1262 Peak 2	0.9084 0.6695	0.8056 0.6983	0.7211	0.6978	0.6717	Lin1	5.7027	0.6751							0.9990		0.9900
PCB-1262 Peak 3	0.8781 0.6333	0.7606 0.6642	0.6818	0.6557	0.6401	Lin1	5.5151	0.6403							0.9990		0.9900
PCB-1262 Peak 4	1.6450 1.3271	1.4966 1.3783	1.3873	1.3397	1.3135	Lin1	6.9100	1.3352							0.9990		0.9900
PCB-1262 Peak 5	0.5954 0.4784	0.5666 0.4960	0.5092	0.4895	0.4711	Lin1	3.1055	0.4804							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 21:25 Calibration End Date: 06/06/2017 23:35 Calibration ID: 29397

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL13262 280-376236/28	06061728.D
Level 2	STDL23262 280-376236/27	06061727.D
Level 3	STDL33262 280-376236/26	06061726.D
Level 4	STDL43262 280-376236/25	06061725.D
Level 5	STDL53262 280-376236/24	06061724.D
Level 6	STDL63262 280-376236/23	06061723.D
Level 7	STDL73262 280-376236/22	06061722.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1232 Peak 1	BNB	Lin1	2254800 49950534	4332251 66831187	7625374	18582944	32574776	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 2	BNB	Lin1	2043724 41602498	3800391 55100752	7002746	15543577	28758007	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 3	BNB	Lin1	4204179 93282372	7916345 124406074	14731505	33505628	64030988	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 4	BNB	Lin1	1770550 38993619	3692971 52209473	6571821	14507611	27407244	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 5	BNB	Lin1	2549767 38490320	3864320 50543394	6943036	14557895	27108738	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 1	BNB	Lin1	6812468 138973554	11962772 184259486	22214790	50411406	94379620	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 2	BNB	Lin1	7676871 168829991	13930001 227961906	26104325	61260216	115993986	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 3	BNB	Lin1	7420682 159690802	13151829 216838119	24683282	57567381	110540902	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 4	BNB	Lin1	13901548 334643148	25877583 449972880	50224652	117615624	226813809	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 5	BNB	Lin1	5031849 120647458	9797565 161934653	18434551	42973067	81344778	25.0 750	50.0 1000	100	250	500

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061722.D
Lims ID: STDL73262
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 21:25:02 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL73262
Misc. Info.: 280-0059455-022
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:56 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:42:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	326469961	1000.0	1000.0	
2	1.597	1.599	-0.002	378335438	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							M
1	3.144	3.144	0.000	66831187	1000.0	1028.8	
1	3.487	3.487	0.000	55100752	1000.0	1011.4	
1	3.951	3.950	0.001	124406074	1000.0	1019.2	
1	4.091	4.090	0.001	52209473	1000.0	1013.3	
1	4.537	4.537	0.000	50543394	1000.0	1008.8	
		Average of Peak Amounts =				1016.3	
2	3.141	3.140	0.001	88477099	1000.0	989.4	M
2	3.511	3.510	0.001	74313105	1000.0	990.0	M
2	3.951	3.950	0.001	154518713	1000.0	999.6	M
2	4.087	4.087	0.000	70104319	1000.0	996.2	M
2	4.721	4.720	0.001	58730430	1000.0	993.5	M
		Average of Peak Amounts =				993.8	
						RPD = 2.24	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.377	6.377	0.000	184259486	1000.0	1018.8	
1	6.904	6.904	0.000	227961906	1000.0	1025.9	
1	7.231	7.230	0.001	216838119	1000.0	1028.8	
1	7.667	7.667	0.000	449972880	1000.0	1027.1	
1	8.051	8.050	0.001	161934653	1000.0	1026.0	
		Average of Peak Amounts =				1025.3	
2	6.404	6.400	0.004	179846346	1000.0	980.0	
2	6.991	6.990	0.001	246080866	1000.0	993.0	
2	7.377	7.377	0.000	233547010	1000.0	994.1	
2	7.744	7.744	0.000	451765891	1000.0	1003.0	
2	8.241	8.237	0.004	336602637	1000.0	1003.9	
		Average of Peak Amounts =				994.8	
						RPD = 3.02	
S 8 Polychlorinated biphenyls, Total							
1						2041.6	
2						1988.5	
						RPD = 2.63	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_3262_L7_00014	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

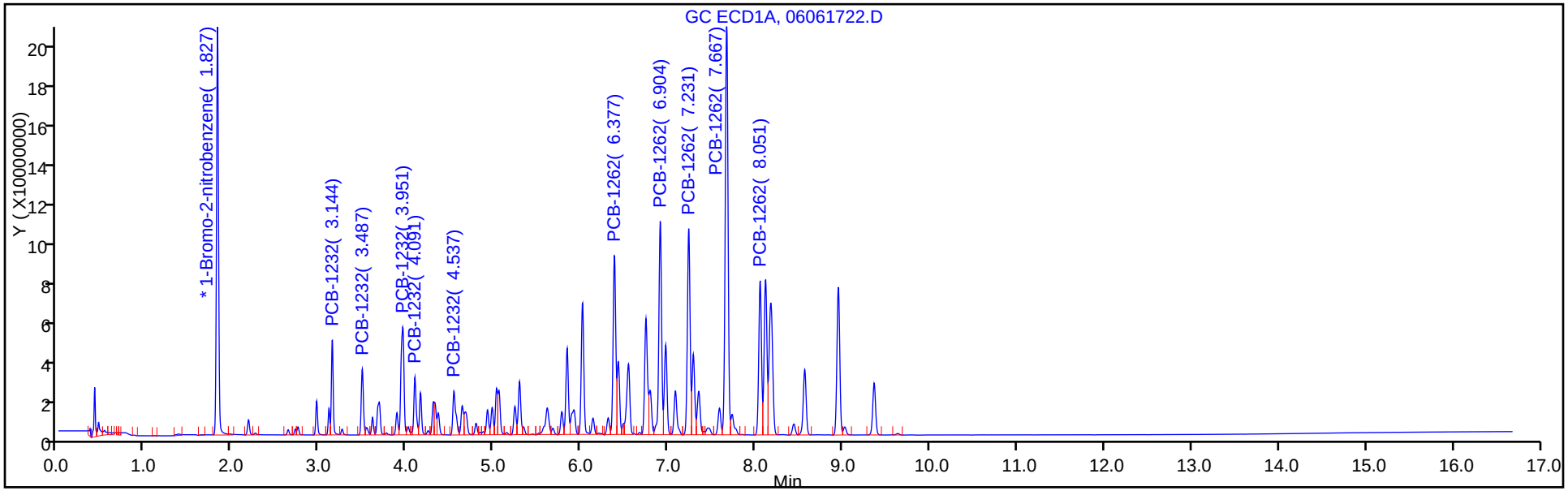
Report Date: 07-Jun-2017 06:52:57 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

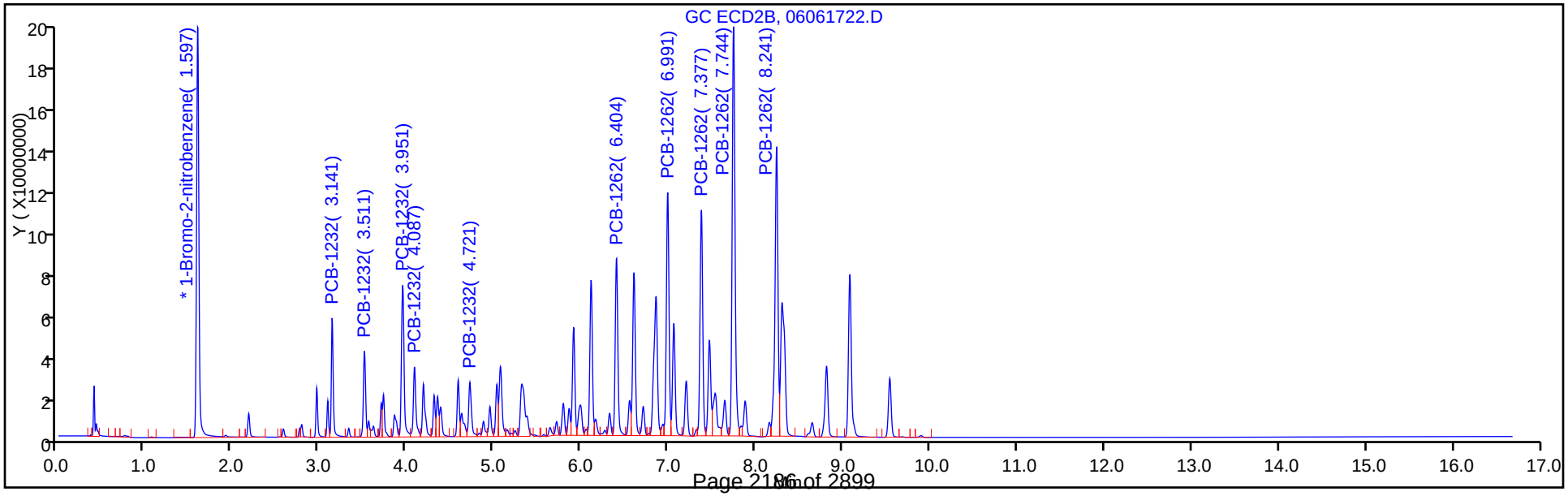
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061722.D

Injection Date:	06-Jun-2017 21:25:02	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL73262			Worklist Smp#:	22
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061723.D
Lims ID: STDL63262
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Jun-2017 21:46:42 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL63262
Misc. Info.: 280-0059455-023
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:58 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:42:21

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.826	-0.001	336227049	1000.0	1000.0	
2	1.598	1.599	-0.001	386918312	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							M
1	3.141	3.144	-0.003	49950534	750.0	743.9	
1	3.485	3.487	-0.002	41602498	750.0	737.7	
1	3.951	3.950	0.001	93282372	750.0	739.5	
1	4.091	4.090	0.001	38993619	750.0	731.4	
1	4.538	4.537	0.001	38490320	750.0	739.3	
		Average of Peak Amounts =				738.4	
2	3.141	3.140	0.001	67001709	750.0	726.9	M
2	3.511	3.510	0.001	56933808	750.0	736.8	M
2	3.951	3.950	0.001	116505142	750.0	733.0	
2	4.088	4.087	0.001	52421719	750.0	723.5	
2	4.721	4.720	0.001	43643074	750.0	716.7	
		Average of Peak Amounts =				727.4	
						RPD = 1.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.378	6.377	0.001	138973554	750.0	742.9	
1	6.905	6.904	0.001	168829991	750.0	735.3	
1	7.231	7.230	0.001	159690802	750.0	733.2	
1	7.665	7.667	-0.002	334643148	750.0	740.3	
1	8.048	8.050	-0.002	120647458	750.0	740.4	
		Average of Peak Amounts =				738.4	
2	6.401	6.400	0.001	140538968	750.0	744.7	
2	6.988	6.990	-0.002	188941264	750.0	741.4	
2	7.375	7.377	-0.002	179185616	750.0	741.7	
2	7.745	7.744	0.001	342965563	750.0	740.6	
2	8.238	8.237	0.001	253251911	750.0	734.5	
		Average of Peak Amounts =				740.6	
						RPD = 0.29	
S 8 Polychlorinated biphenyls, Total							
1						1476.8	
2						1467.9	
						RPD = 0.60	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_3262_L6_00016	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

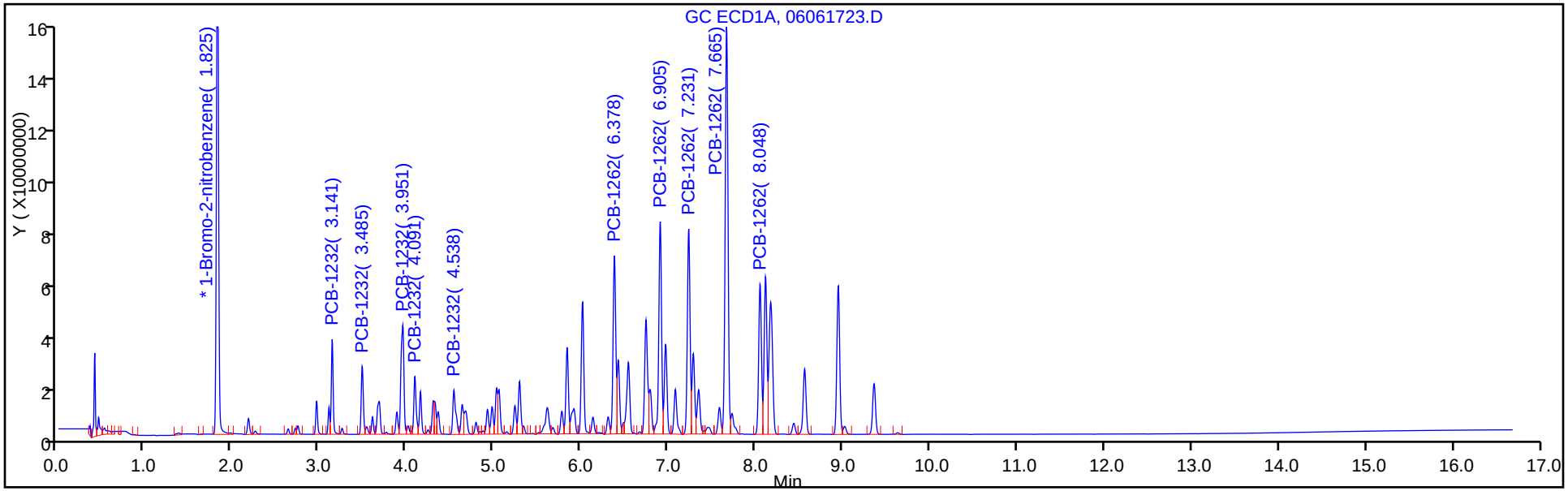
Report Date: 07-Jun-2017 06:52:59 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

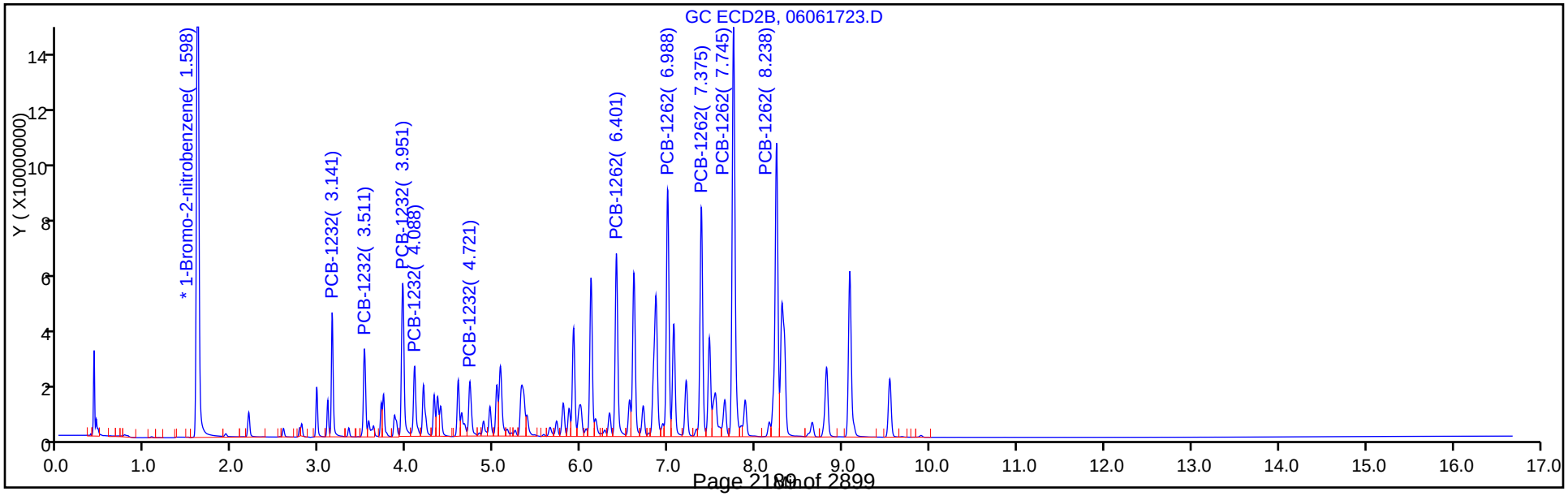
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061723.D

Injection Date:	06-Jun-2017 21:46:42	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL63262			Worklist Smp#:	23
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061724.D
Lims ID: STDL53262
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 06-Jun-2017 22:08:19 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL53262
Misc. Info.: 280-0059455-024
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:00 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:36:43

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	345363738	1000.0	1000.0	
2	1.600	1.600	0.000	394714346	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							M
1	3.144	3.144	0.000	32574776	500.0	468.7	
1	3.487	3.487	0.000	28758007	500.0	491.9	
1	3.950	3.950	0.000	64030988	500.0	491.1	
1	4.090	4.090	0.000	27407244	500.0	496.6	
1	4.537	4.537	0.000	27108738	500.0	498.9	
		Average of Peak Amounts =				489.4	
2	3.140	3.140	0.000	47980333	500.0	503.8	M
2	3.510	3.510	0.000	39960058	500.0	500.9	M
2	3.950	3.950	0.000	81987882	500.0	500.9	M
2	4.087	4.087	0.000	37731995	500.0	505.0	M
2	4.720	4.720	0.000	31747336	500.0	505.6	M
		Average of Peak Amounts =				503.2	
						RPD = 2.78	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.377	6.377	0.000	94379620	500.0	487.1	
1	6.904	6.904	0.000	115993986	500.0	489.1	
1	7.230	7.230	0.000	110540902	500.0	491.3	
1	7.667	7.667	0.000	226813809	500.0	486.7	
1	8.050	8.050	0.000	81344778	500.0	483.8	
		Average of Peak Amounts =				487.6	
2	6.400	6.400	0.000	97962805	500.0	503.3	
2	6.990	6.990	0.000	131184185	500.0	499.2	
2	7.377	7.377	0.000	124354300	500.0	499.3	
2	7.744	7.744	0.000	235948648	500.0	494.5	
2	8.237	8.237	0.000	177257747	500.0	499.2	
		Average of Peak Amounts =				499.1	
						RPD = 2.33	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_3262_L5_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

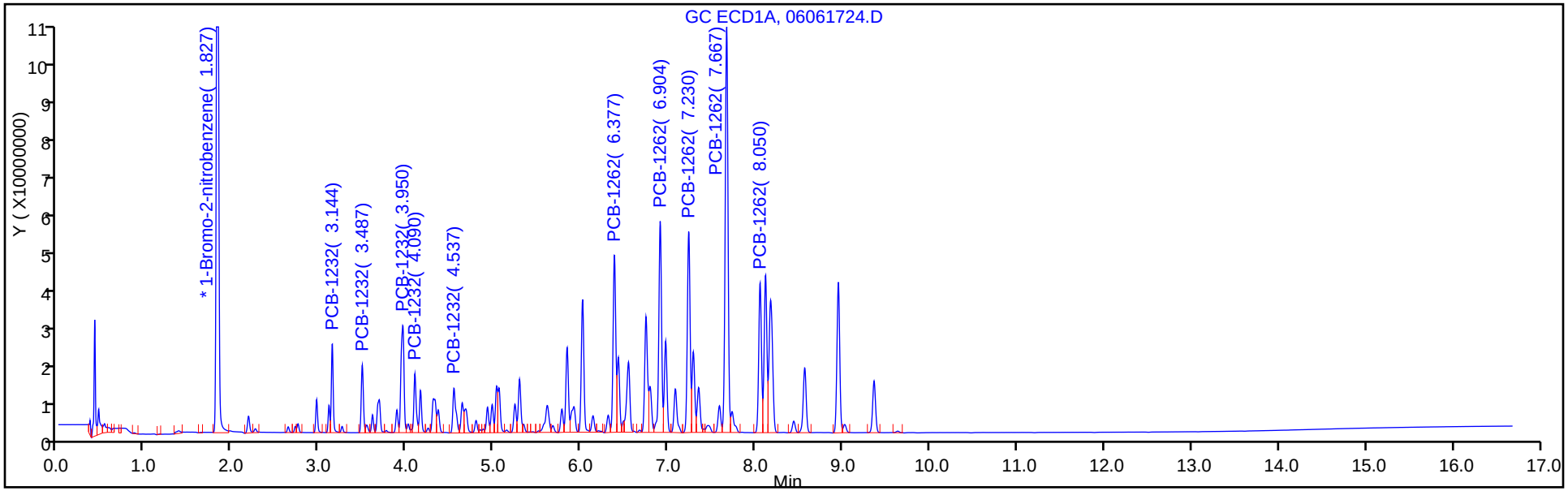
Report Date: 07-Jun-2017 06:53:01 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

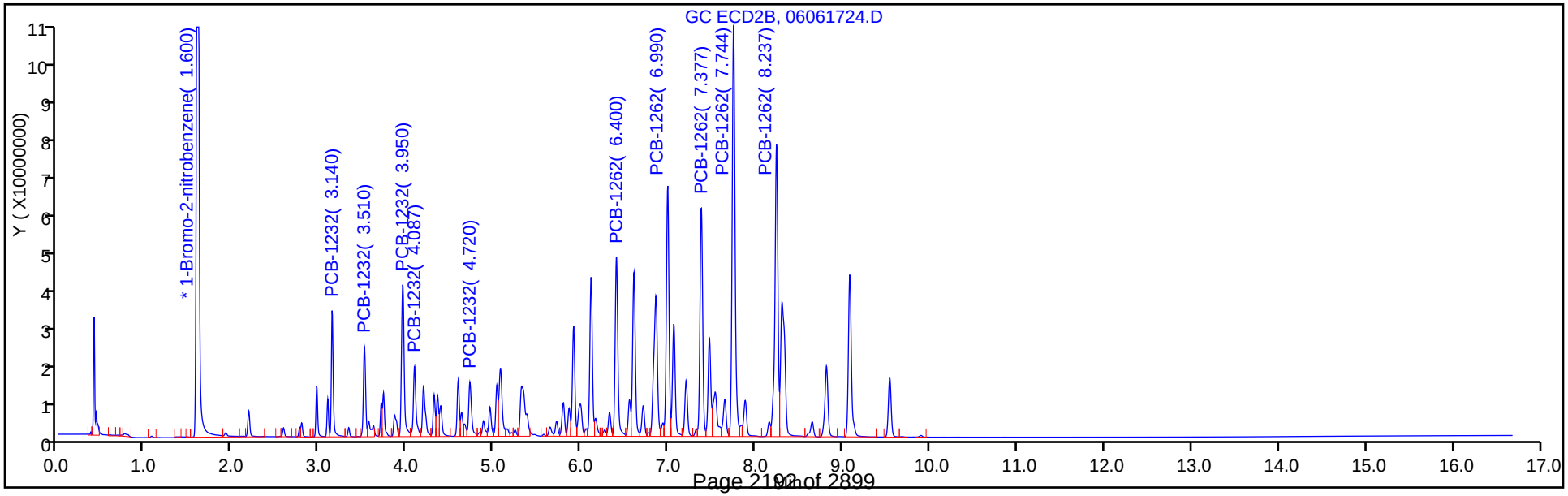
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061724.D

Injection Date:	06-Jun-2017 22:08:19	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL53262			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061725.D
Lims ID: STDL43262
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Jun-2017 22:30:01 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL43262
Misc. Info.: 280-0059455-025
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:03 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:42:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.827	-0.002	351163612	1000.0	1000.0	
2	1.599	1.600	-0.001	398318609	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							
1	3.142	3.144	-0.002	18582944	250.0	258.7	
1	3.485	3.487	-0.002	15543577	250.0	254.9	
1	3.952	3.950	0.002	33505628	250.0	248.2	
1	4.089	4.090	-0.001	14507611	250.0	252.5	
1	4.539	4.537	0.002	14557895	250.0	251.4	
		Average of Peak Amounts =				253.1	
2	3.142	3.140	0.002	26849747	250.0	269.6	
2	3.512	3.510	0.002	22036182	250.0	264.9	
2	3.952	3.950	0.002	44391565	250.0	261.6	
2	4.089	4.087	0.002	20818050	250.0	267.7	
2	4.722	4.720	0.002	17945127	250.0	274.8	
		Average of Peak Amounts =				267.7	
						RPD = 5.60	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.379	6.377	0.002	50411406	250.0	250.2	
1	6.905	6.904	0.001	61260216	250.0	250.0	
1	7.232	7.230	0.002	57567381	250.0	247.4	
1	7.665	7.667	-0.002	117615624	250.0	245.7	
1	8.049	8.050	-0.001	42973067	250.0	248.3	
		Average of Peak Amounts =				248.3	
2	6.402	6.400	0.002	53835004	250.0	266.0	
2	6.989	6.990	-0.001	71465471	250.0	261.9	
2	7.375	7.377	-0.002	67384151	250.0	260.4	
2	7.745	7.744	0.001	127652955	250.0	258.1	
2	8.239	8.237	0.002	95117097	250.0	258.4	
		Average of Peak Amounts =				260.9	
						RPD = 4.97	
S 8 Polychlorinated biphenyls, Total							
1						501.4	
2						528.7	
						RPD = 5.29	

Reagents:

AR_3262_L4_00019	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

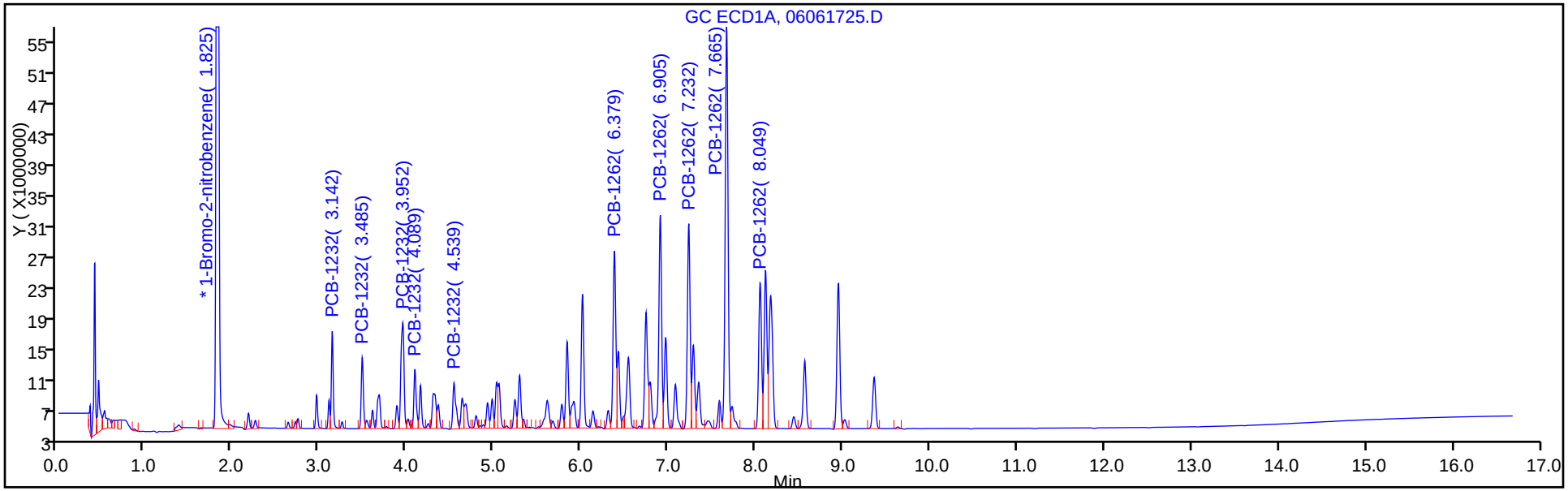
Report Date: 07-Jun-2017 06:53:03 Chrom Revision: 2.2 25-Apr-2017 13:27:22

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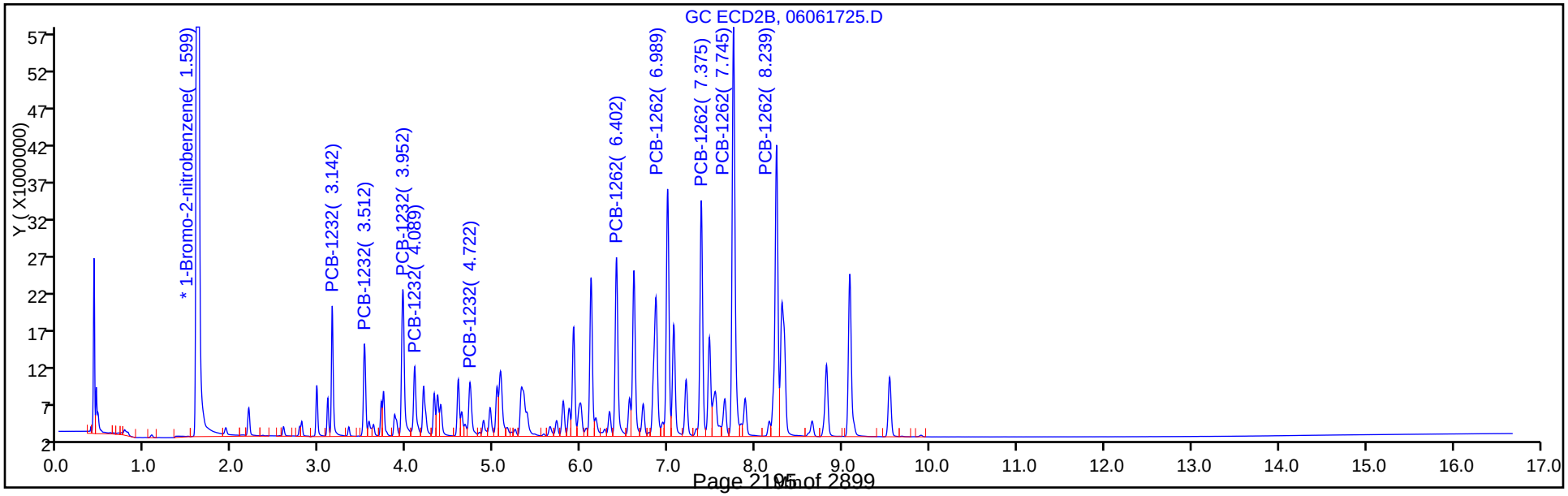
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061725.D

Injection Date:	06-Jun-2017 22:30:01	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL43262			Worklist Smp#:	25
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061726.D
Lims ID: STDL33262
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Jun-2017 22:51:40 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL33262
Misc. Info.: 280-0059455-026
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:05 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.827	-0.002	362023594	1000.0	1000.0	
2	1.599	1.600	-0.001	407648233	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							
1	3.142	3.144	-0.002	7625374	100.0	97.1	
1	3.485	3.487	-0.002	7002746	100.0	103.5	
1	3.952	3.950	0.002	14731505	100.0	100.5	
1	4.089	4.090	-0.001	6571821	100.0	104.0	
1	4.539	4.537	0.002	6943036	100.0	102.6	
		Average of Peak Amounts =				101.5	
2	3.142	3.140	0.002	12639596	100.0	112.2	
2	3.512	3.510	0.002	10204639	100.0	109.3	
2	3.955	3.950	0.005	19941032	100.0	106.2	
2	4.089	4.087	0.002	9609816	100.0	110.6	
2	4.725	4.720	0.005	8246500	100.0	112.9	
		Average of Peak Amounts =				110.2	
						RPD = 8.22	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.379	6.377	0.002	22214790	100.0	100.1	
1	6.905	6.904	0.001	26104325	100.0	98.4	
1	7.232	7.230	0.002	24683282	100.0	97.9	
1	7.669	7.667	0.002	50224652	100.0	98.7	
1	8.052	8.050	0.002	18434551	100.0	99.5	
		Average of Peak Amounts =				98.9	
2	6.402	6.400	0.002	24313865	100.0	107.6	
2	6.989	6.990	-0.001	32077578	100.0	105.5	
2	7.375	7.377	-0.002	30344872	100.0	105.3	
2	7.745	7.744	0.001	56659168	100.0	103.3	
2	8.239	8.237	0.002	42683559	100.0	104.8	
		Average of Peak Amounts =				105.3	
						RPD = 6.25	
S 8 Polychlorinated biphenyls, Total							
1						200.4	
2						215.5	
						RPD = 7.26	

Reagents:

AR_3262_L3_00018	Amount Added: 1.00	Units: mL		
BNB IS_00009	Amount Added: 1.00	Units: mL	Run Reagent	

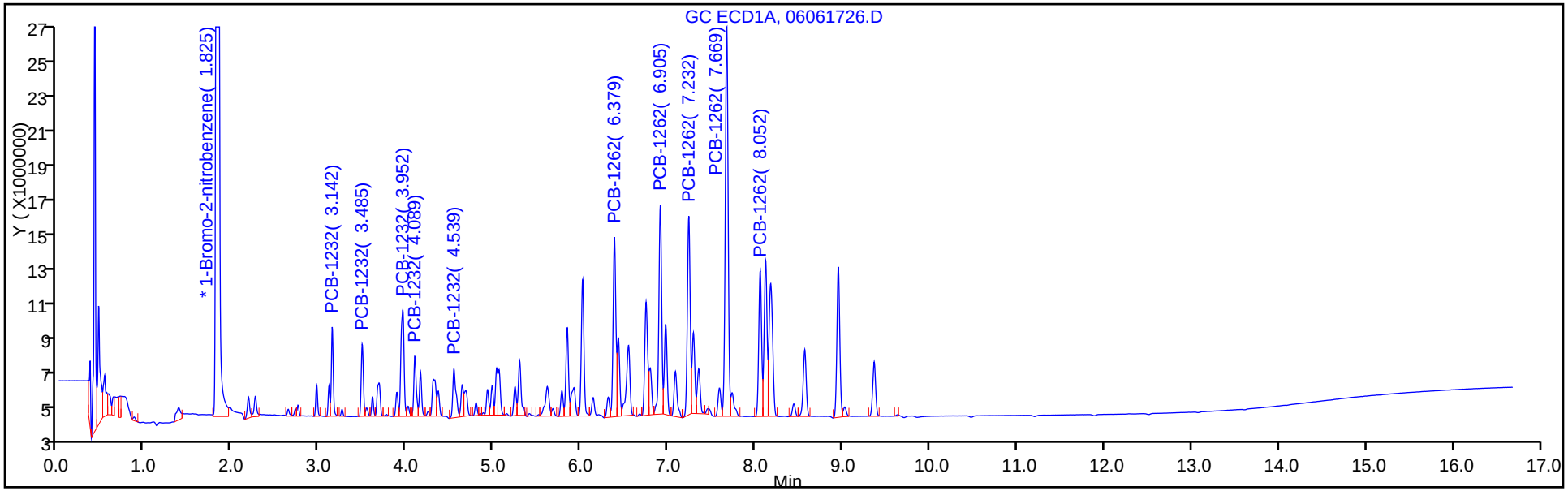
Report Date: 07-Jun-2017 06:53:05 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

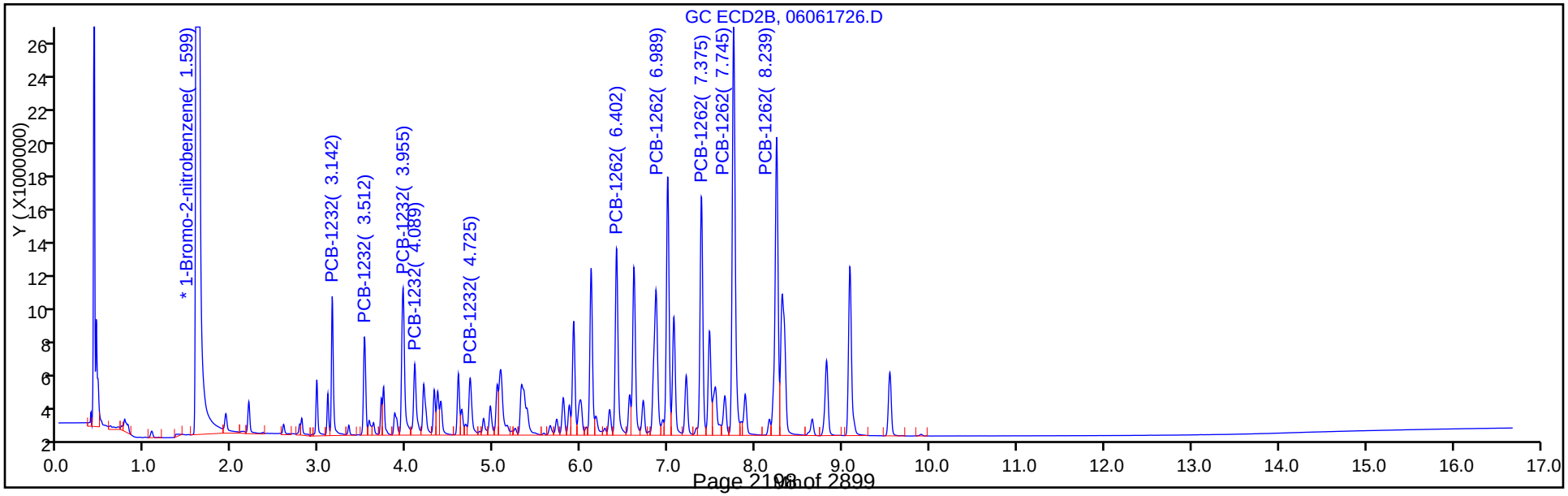
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061726.D

Injection Date:	06-Jun-2017 22:51:40	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL33262			Worklist Smp#:	26
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061727.D
Lims ID: STDL23262
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Jun-2017 23:13:20 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL23262
Misc. Info.: 280-0059455-027
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:08 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.827	-0.001	345816428	1000.0	1000.0	
2	1.599	1.600	-0.001	391077106	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							
1	3.142	3.144	-0.002	4332251	50.0	53.8	
1	3.486	3.487	-0.001	3800391	50.0	52.8	
1	3.952	3.950	0.002	7916345	50.0	52.4	
1	4.089	4.090	-0.001	3692971	50.0	56.1	
1	4.539	4.537	0.002	3864320	50.0	49.1	
		Average of Peak Amounts =				52.8	
2	3.142	3.140	0.002	6917575	50.0	54.6	
2	3.512	3.510	0.002	5483232	50.0	52.7	
2	3.956	3.950	0.006	10568168	50.0	51.8	
2	4.089	4.087	0.002	4998211	50.0	51.5	
2	4.726	4.720	0.006	4272758	50.0	52.2	
		Average of Peak Amounts =				52.6	
						RPD = 0.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.379	6.377	0.002	11962772	50.0	51.2	
1	6.906	6.904	0.002	13930001	50.0	51.2	
1	7.232	7.230	0.002	13151829	50.0	50.8	
1	7.666	7.667	-0.001	25877583	50.0	50.9	
1	8.052	8.050	0.002	9797565	50.0	52.5	
		Average of Peak Amounts =				51.3	
2	6.406	6.400	0.006	13115771	50.0	52.8	
2	6.989	6.990	-0.001	17363273	50.0	52.3	
2	7.376	7.377	-0.001	16435175	50.0	52.3	
2	7.746	7.744	0.002	31404984	50.0	53.3	
2	8.239	8.237	0.002	22837988	50.0	51.7	
		Average of Peak Amounts =				52.5	
						RPD = 2.22	
S 8 Polychlorinated biphenyls, Total							
1						104.1	
2						105.0	
						RPD = 0.85	

Reagents:

AR_3262_L2_00018	Amount Added: 1.00	Units: mL		
BNB IS_00009	Amount Added: 1.00	Units: mL	Run Reagent	

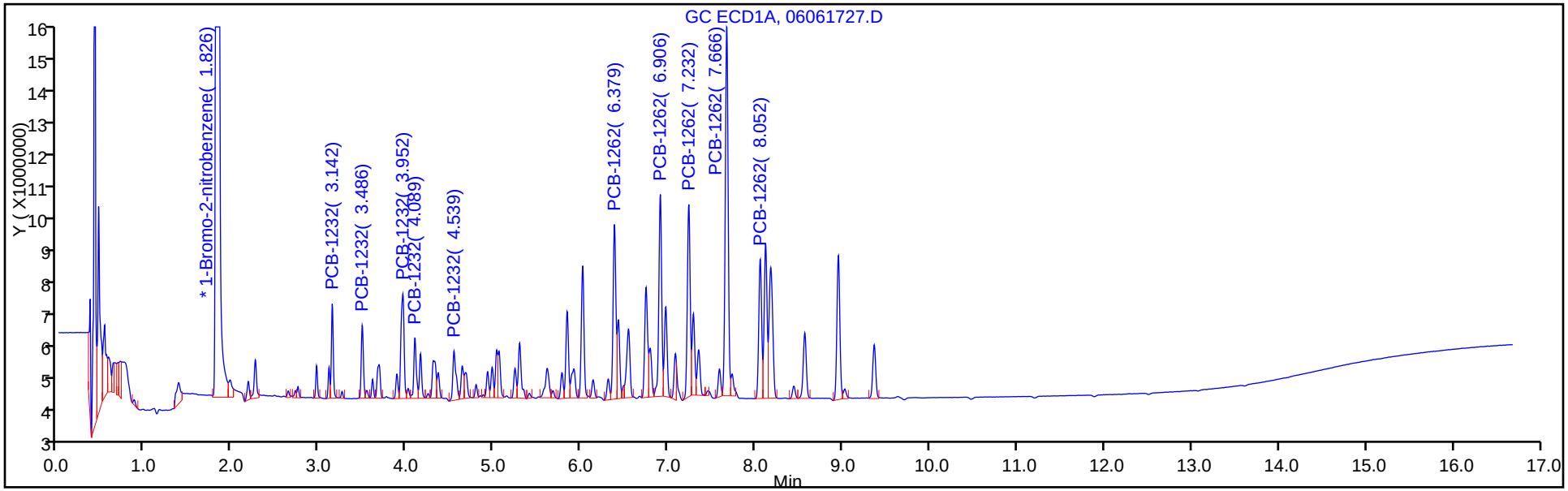
Report Date: 07-Jun-2017 06:53:08 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

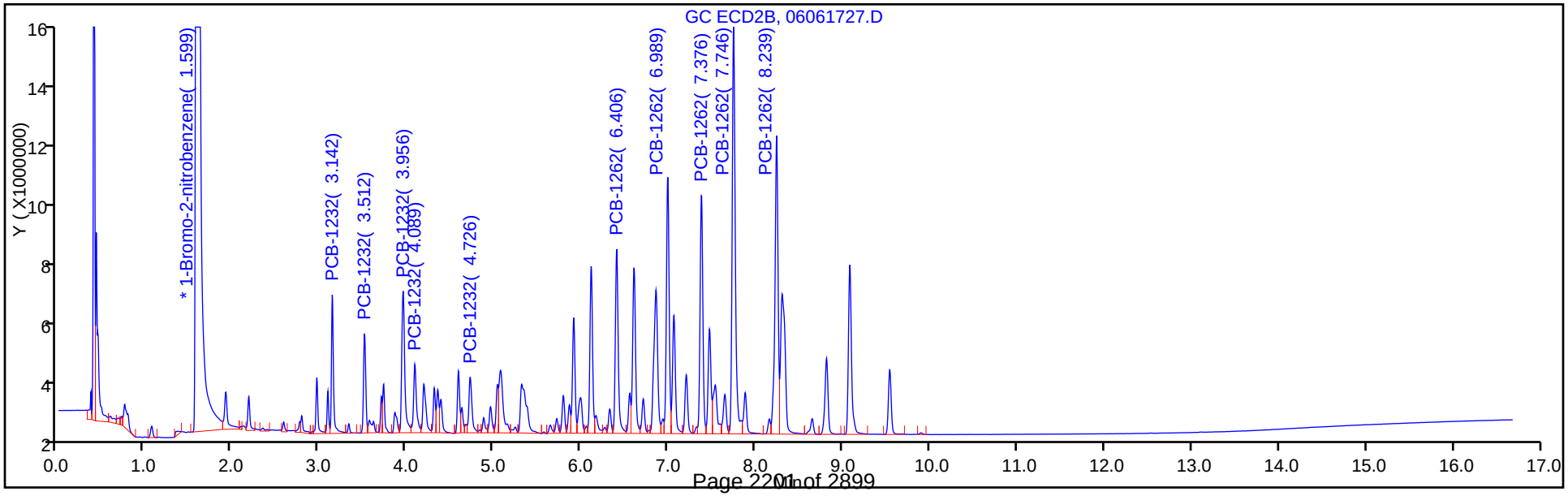
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061727.D

Injection Date:	06-Jun-2017 23:13:20	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL23262			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061728.D
Lims ID: STDL13262
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Jun-2017 23:35:00 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL13262
Misc. Info.: 280-0059455-028
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.827	-0.001	338038512	1000.0	1000.0	
2	1.600	1.600	0.000	381673034	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							
1	3.143	3.144	-0.001	2254800	25.0	24.0	
1	3.486	3.487	-0.001	2043724	25.0	22.8	
1	3.953	3.950	0.003	4204179	25.0	24.2	
1	4.090	4.090	0.000	1770550	25.0	21.2	
1	4.540	4.537	0.003	2549767	25.0	24.8	
		Average of Peak Amounts =				23.4	
2	3.143	3.140	0.003	3569366	25.0	18.5	
2	3.513	3.510	0.003	2956752	25.0	20.5	
2	3.956	3.950	0.006	5725234	25.0	21.9	
2	4.090	4.087	0.003	2726167	25.0	20.6	
2	4.723	4.720	0.003	2234999	25.0	19.2	
		Average of Peak Amounts =				20.1	
						RPD = 14.98	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.380	6.377	0.003	6812468	25.0	24.8	
1	6.903	6.904	-0.001	7676871	25.0	25.2	
1	7.233	7.230	0.003	7420682	25.0	25.7	
1	7.666	7.667	-0.001	13901548	25.0	25.6	
1	8.053	8.050	0.003	5031849	25.0	24.5	
		Average of Peak Amounts =				25.2	
2	6.403	6.400	0.003	6953757	25.0	20.6	
2	6.990	6.990	0.000	9456656	25.0	21.8	
2	7.376	7.377	-0.001	8973726	25.0	22.0	
2	7.746	7.744	0.002	16769672	25.0	22.3	
2	8.240	8.237	0.003	12567737	25.0	22.6	
		Average of Peak Amounts =				21.8	
						RPD = 14.13	
S 8 Polychlorinated biphenyls, Total							
1						48.6	
2						42.0	
						RPD = 14.54	

Reagents:

AR_3262_L1_00019	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

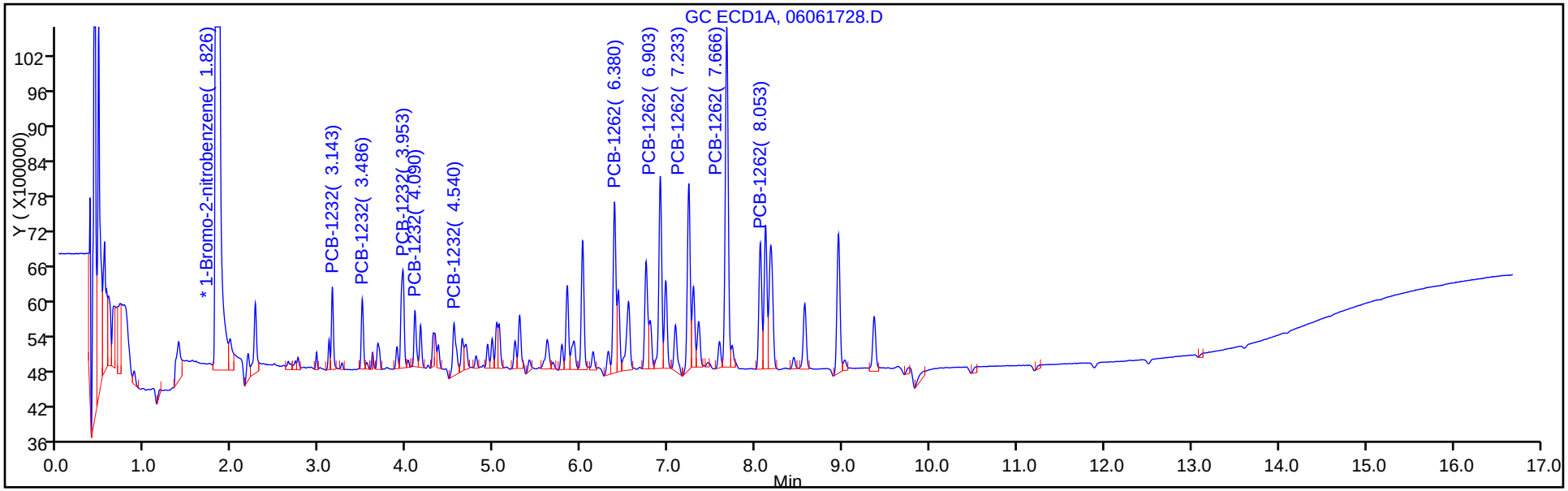
Report Date: 07-Jun-2017 06:53:10 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

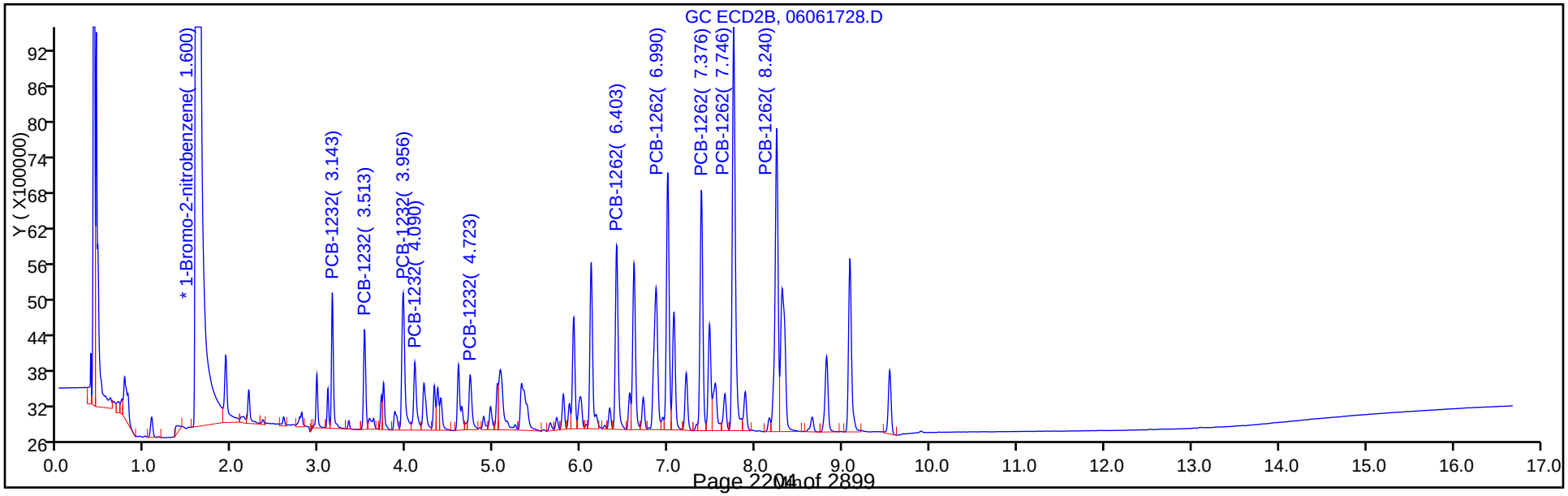
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061728.D

Injection Date:	06-Jun-2017 23:35:00	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL13262			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 21:25 Calibration End Date: 06/06/2017 23:35 Calibration ID: 29398

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL13262 280-376236/28	06061728.D
Level 2	STDL23262 280-376236/27	06061727.D
Level 3	STDL33262 280-376236/26	06061726.D
Level 4	STDL43262 280-376236/25	06061725.D
Level 5	STDL53262 280-376236/24	06061724.D
Level 6	STDL63262 280-376236/23	06061723.D
Level 7	STDL73262 280-376236/22	06061722.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1232 Peak 1	0.3741 0.2309	0.3538 0.2339	0.3101	0.2696	0.2431	Lin1	5.0637	0.2312							0.9970		0.9900
PCB-1232 Peak 2	0.3099 0.1962	0.2804 0.1964	0.2503	0.2213	0.2025	Lin1	3.7621	0.1946							0.9990		0.9900
PCB-1232 Peak 3	0.6000 0.4015	0.5405 0.4084	0.4892	0.4458	0.4154	Lin1	6.1800	0.4024							0.9990		0.9900
PCB-1232 Peak 4	0.2857 0.1806	0.2556 0.1853	0.2357	0.2091	0.1912	Lin1	3.3837	0.1826							0.9980		0.9900
PCB-1232 Peak 5	0.2342 0.1504	0.2185 0.1552	0.2023	0.1802	0.1609	Lin1	2.9181	0.1533							0.9970		0.9900
PCB-1262 Peak 1	0.7288 0.4843	0.6708 0.4754	0.5964	0.5406	0.4964	Lin1	8.3899	0.4765							0.9990		0.9900
PCB-1262 Peak 2	0.9911 0.6511	0.8880 0.6504	0.7869	0.7177	0.6647	Lin1	10.727	0.6442							0.9990		0.9900
PCB-1262 Peak 3	0.9405 0.6175	0.8405 0.6173	0.7444	0.6767	0.6301	Lin1	10.102	0.6108							0.9990		0.9900
PCB-1262 Peak 4	1.7575 1.1819	1.6061 1.1941	1.3899	1.2819	1.1955	Lin1	17.843	1.1727							0.9990		0.9900
PCB-1262 Peak 5	1.3171 0.8727	1.1680 0.8897	1.0471	0.9552	0.8982	Lin1	13.228	0.8731							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 21:25 Calibration End Date: 06/06/2017 23:35 Calibration ID: 29398

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL13262 280-376236/28	06061728.D
Level 2	STDL23262 280-376236/27	06061727.D
Level 3	STDL33262 280-376236/26	06061726.D
Level 4	STDL43262 280-376236/25	06061725.D
Level 5	STDL53262 280-376236/24	06061724.D
Level 6	STDL63262 280-376236/23	06061723.D
Level 7	STDL73262 280-376236/22	06061722.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1232 Peak 1	BNB	Lin1	3569366 67001709	6917575 88477099	12639596	26849747	47980333	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 2	BNB	Lin1	2956752 56933808	5483232 74313105	10204639	22036182	39960058	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 3	BNB	Lin1	5725234 116505142	10568168 154518713	19941032	44391565	81987882	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 4	BNB	Lin1	2726167 52421719	4998211 70104319	9609816	20818050	37731995	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 5	BNB	Lin1	2234999 43643074	4272758 58730430	8246500	17945127	31747336	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 1	BNB	Lin1	6953757 140538968	13115771 179846346	24313865	53835004	97962805	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 2	BNB	Lin1	9456656 188941264	17363273 246080866	32077578	71465471	131184185	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 3	BNB	Lin1	8973726 179185616	16435175 233547010	30344872	67384151	124354300	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 4	BNB	Lin1	16769672 342965563	31404984 451765891	56659168	127652955	235948648	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 5	BNB	Lin1	12567737 253251911	22837988 336602637	42683559	95117097	177257747	25.0 750	50.0 1000	100	250	500

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061722.D
Lims ID: STDL73262
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 21:25:02 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL73262
Misc. Info.: 280-0059455-022
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:56 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:42:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	326469961	1000.0	1000.0	
2	1.597	1.599	-0.002	378335438	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							M
1	3.144	3.144	0.000	66831187	1000.0	1028.8	
1	3.487	3.487	0.000	55100752	1000.0	1011.4	
1	3.951	3.950	0.001	124406074	1000.0	1019.2	
1	4.091	4.090	0.001	52209473	1000.0	1013.3	
1	4.537	4.537	0.000	50543394	1000.0	1008.8	
		Average of Peak Amounts =				1016.3	
2	3.141	3.140	0.001	88477099	1000.0	989.4	M
2	3.511	3.510	0.001	74313105	1000.0	990.0	M
2	3.951	3.950	0.001	154518713	1000.0	999.6	M
2	4.087	4.087	0.000	70104319	1000.0	996.2	M
2	4.721	4.720	0.001	58730430	1000.0	993.5	M
		Average of Peak Amounts =				993.8	
						RPD = 2.24	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.377	6.377	0.000	184259486	1000.0	1018.8	
1	6.904	6.904	0.000	227961906	1000.0	1025.9	
1	7.231	7.230	0.001	216838119	1000.0	1028.8	
1	7.667	7.667	0.000	449972880	1000.0	1027.1	
1	8.051	8.050	0.001	161934653	1000.0	1026.0	
		Average of Peak Amounts =				1025.3	
2	6.404	6.400	0.004	179846346	1000.0	980.0	
2	6.991	6.990	0.001	246080866	1000.0	993.0	
2	7.377	7.377	0.000	233547010	1000.0	994.1	
2	7.744	7.744	0.000	451765891	1000.0	1003.0	
2	8.241	8.237	0.004	336602637	1000.0	1003.9	
		Average of Peak Amounts =				994.8	
						RPD = 3.02	
S 8 Polychlorinated biphenyls, Total							
1						2041.6	
2						1988.5	
						RPD = 2.63	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_3262_L7_00014	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

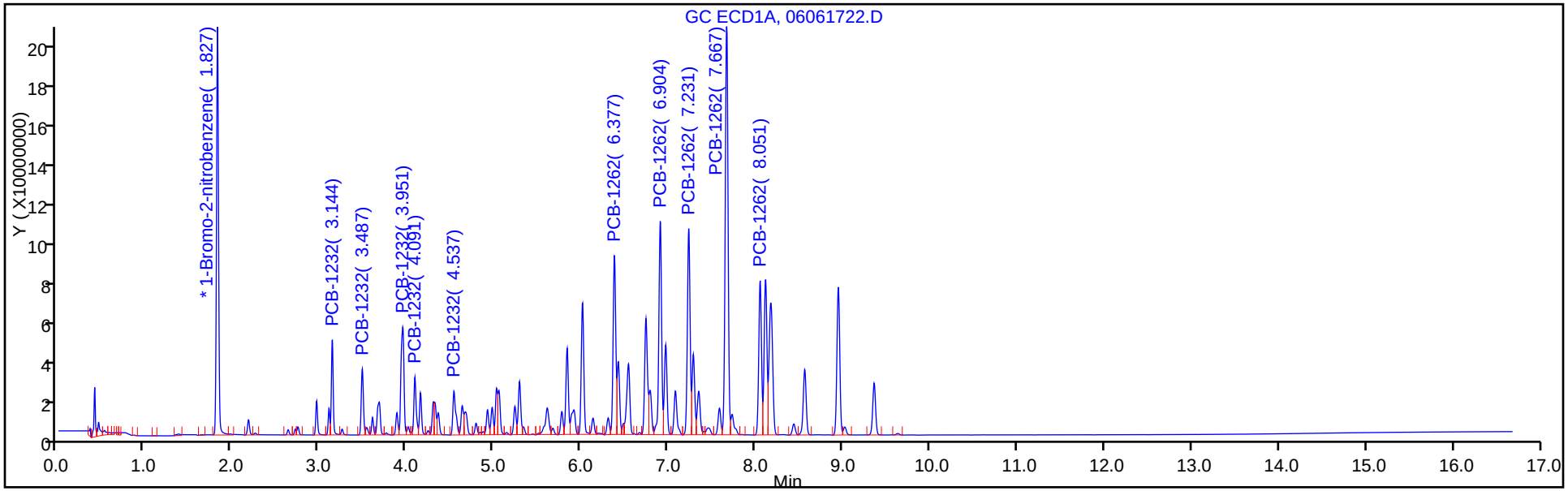
Report Date: 07-Jun-2017 06:52:57 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

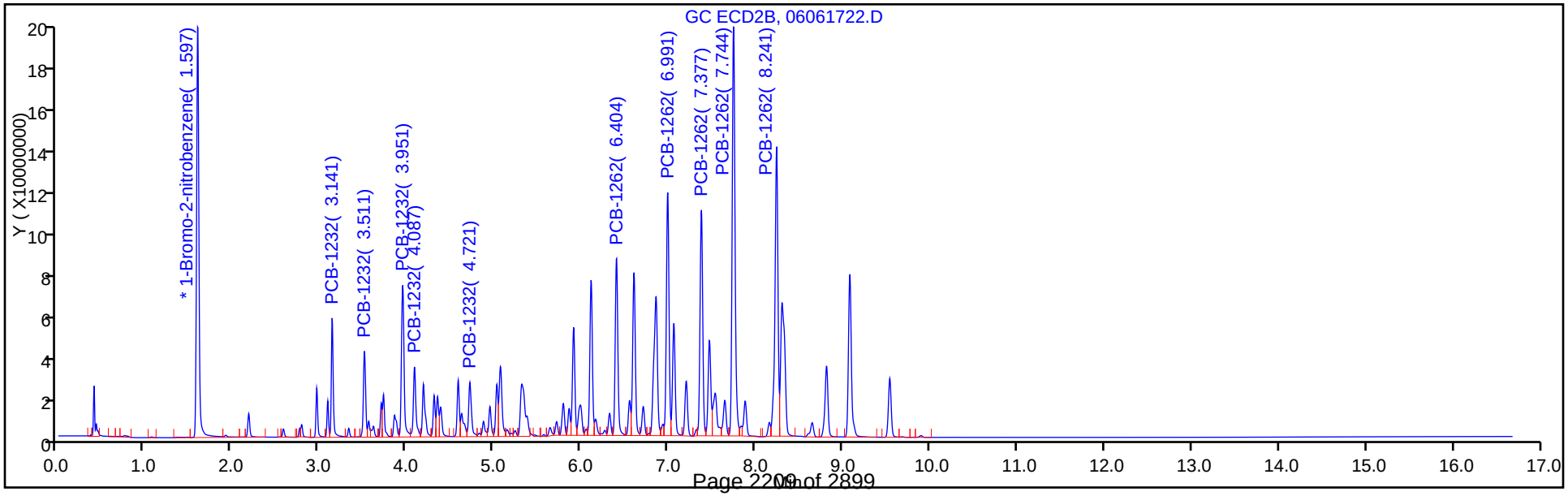
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Injection Date:	06-Jun-2017 21:25:02	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL73262			Worklist Smp#:	22
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:52:57 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061722.D

Injection Date: 06-Jun-2017 21:25:02 Instrument ID: SGC_P3

Lims ID: STDL73262

Client ID:

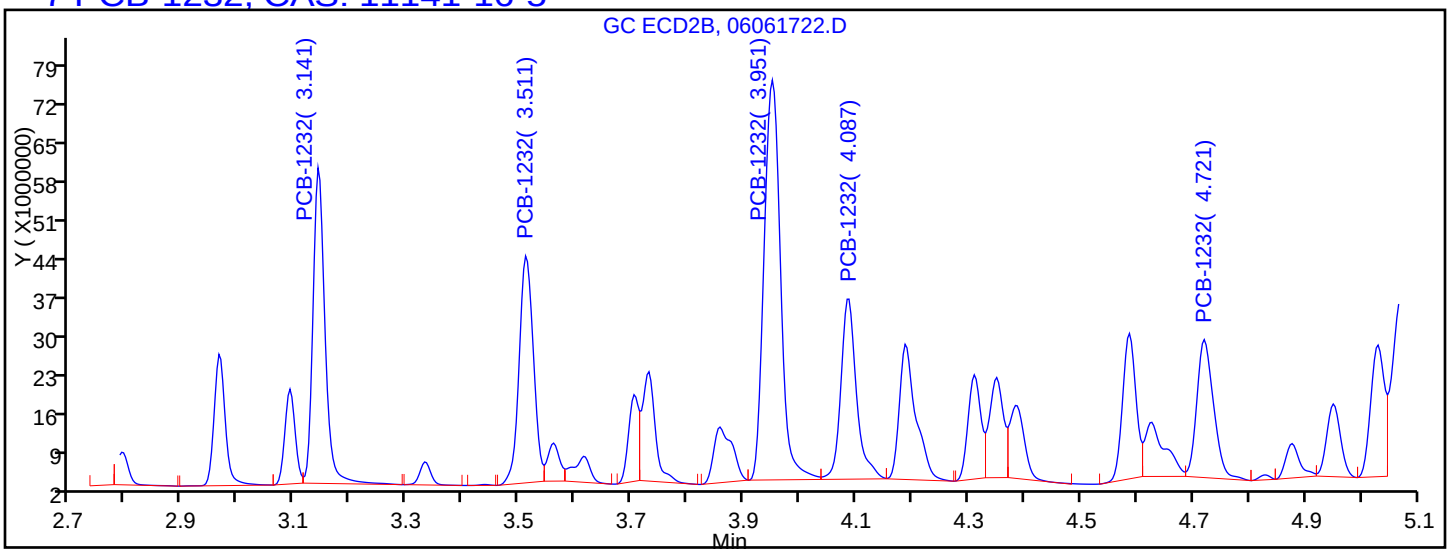
Operator ID: jax ALS Bottle#: 22 Worklist Smp#: 22

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

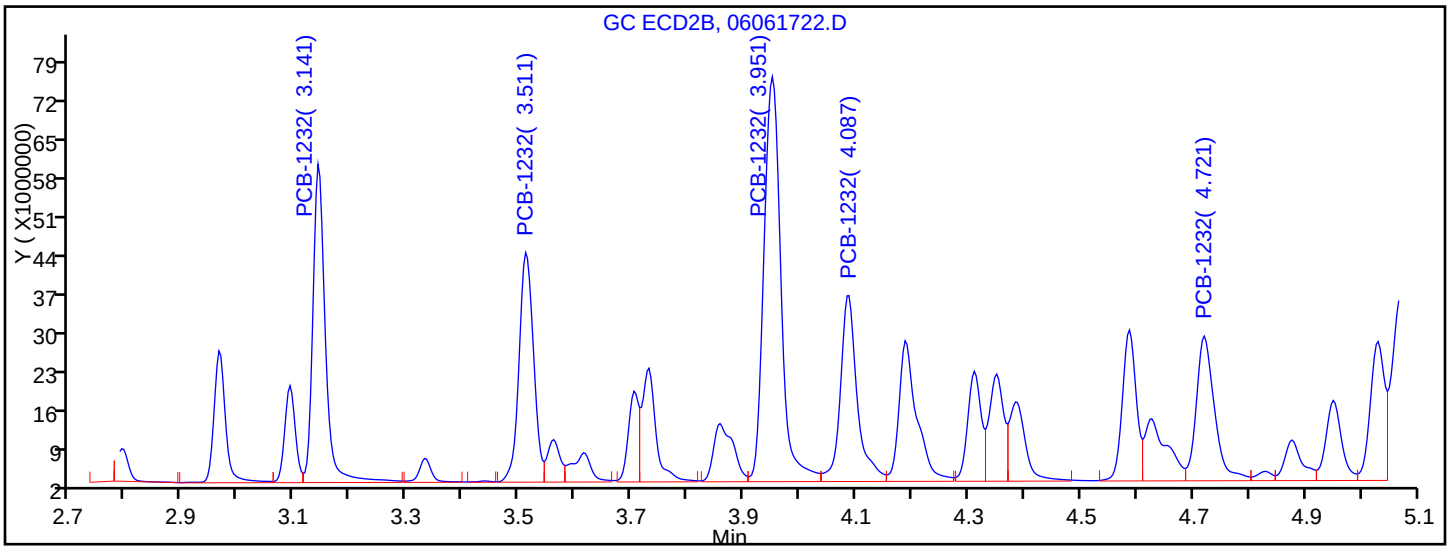
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

7 PCB-1232, CAS: 11141-16-5



Processing Integration Results

3.141	Response = 84345261
3.511	Response = 72152310
3.951	Response = 146991393
4.087	Response = 62696776
4.721	Response = 51440808



Manual Integration Results

3.141	Response = 88477099	M
3.511	Response = 74313105	M
3.951	Response = 154518713	M
4.087	Response = 70104319	M
4.721	Response = 58730430	M

Reviewer: jacksonto, 07-Jun-2017 06:41:55

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061723.D
Lims ID: STDL63262
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Jun-2017 21:46:42 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL63262
Misc. Info.: 280-0059455-023
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:58 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:42:21

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.826	-0.001	336227049	1000.0	1000.0	
2	1.598	1.599	-0.001	386918312	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							M
1	3.141	3.144	-0.003	49950534	750.0	743.9	
1	3.485	3.487	-0.002	41602498	750.0	737.7	
1	3.951	3.950	0.001	93282372	750.0	739.5	
1	4.091	4.090	0.001	38993619	750.0	731.4	
1	4.538	4.537	0.001	38490320	750.0	739.3	
		Average of Peak Amounts =				738.4	
2	3.141	3.140	0.001	67001709	750.0	726.9	M
2	3.511	3.510	0.001	56933808	750.0	736.8	M
2	3.951	3.950	0.001	116505142	750.0	733.0	
2	4.088	4.087	0.001	52421719	750.0	723.5	
2	4.721	4.720	0.001	43643074	750.0	716.7	
		Average of Peak Amounts =				727.4	
						RPD = 1.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.378	6.377	0.001	138973554	750.0	742.9	
1	6.905	6.904	0.001	168829991	750.0	735.3	
1	7.231	7.230	0.001	159690802	750.0	733.2	
1	7.665	7.667	-0.002	334643148	750.0	740.3	
1	8.048	8.050	-0.002	120647458	750.0	740.4	
		Average of Peak Amounts =				738.4	
2	6.401	6.400	0.001	140538968	750.0	744.7	
2	6.988	6.990	-0.002	188941264	750.0	741.4	
2	7.375	7.377	-0.002	179185616	750.0	741.7	
2	7.745	7.744	0.001	342965563	750.0	740.6	
2	8.238	8.237	0.001	253251911	750.0	734.5	
		Average of Peak Amounts =				740.6	
						RPD = 0.29	
S 8 Polychlorinated biphenyls, Total							
1						1476.8	
2						1467.9	
						RPD = 0.60	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_3262_L6_00016	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

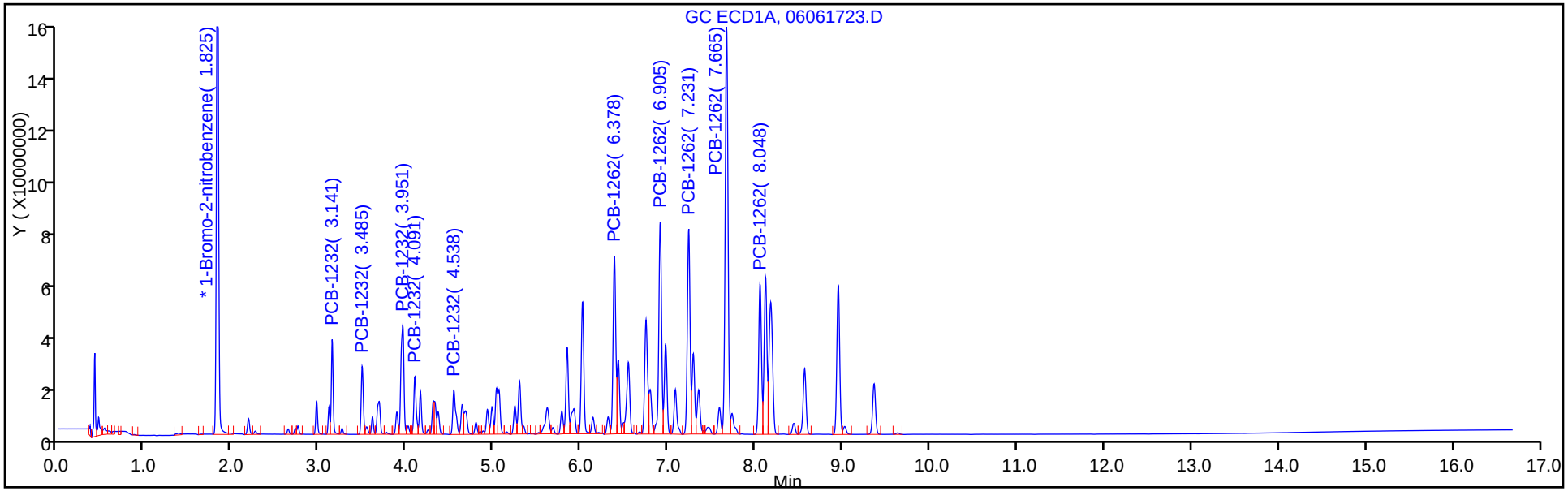
Report Date: 07-Jun-2017 06:52:59 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

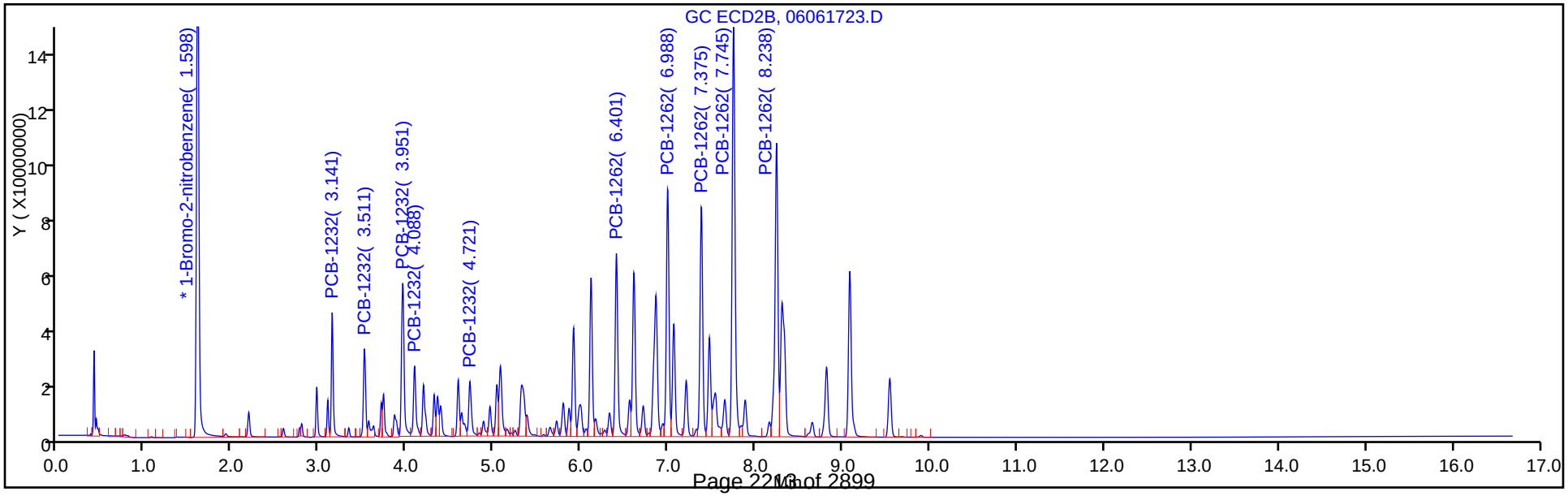
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061723.D

Injection Date:	06-Jun-2017 21:46:42	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL63262			Worklist Smp#:	23
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:52:59 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061723.D

Injection Date: 06-Jun-2017 21:46:42 Instrument ID: SGC_P3

Lims ID: STDL63262

Client ID:

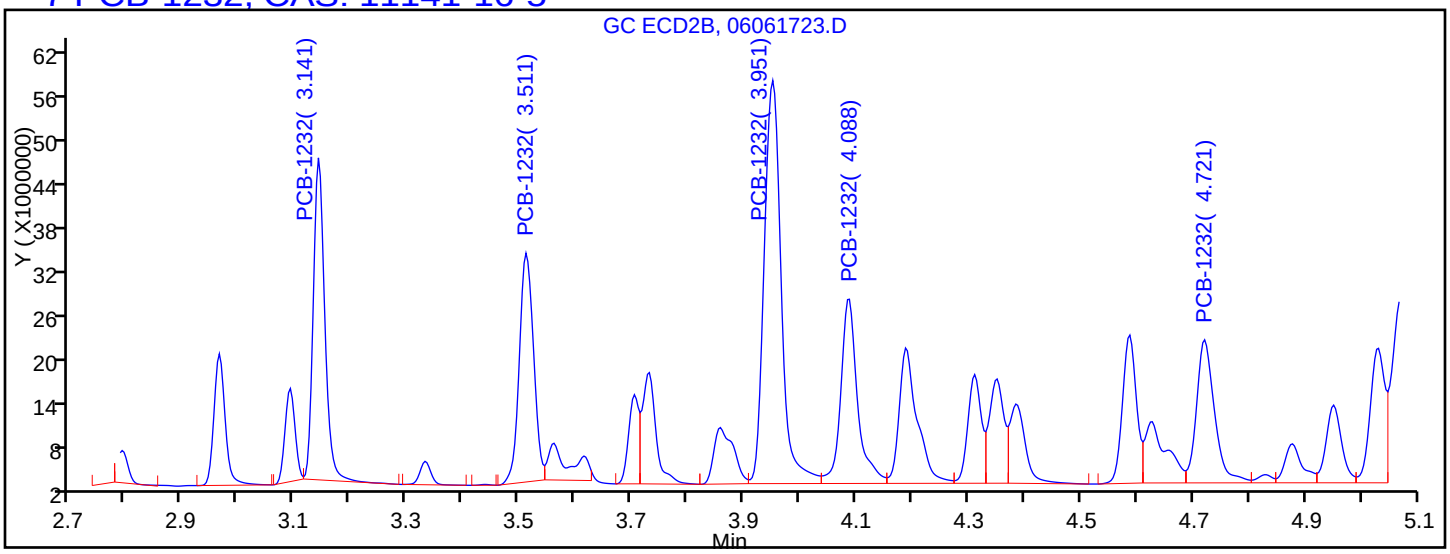
Operator ID: jax ALS Bottle#: 23 Worklist Smp#: 23

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

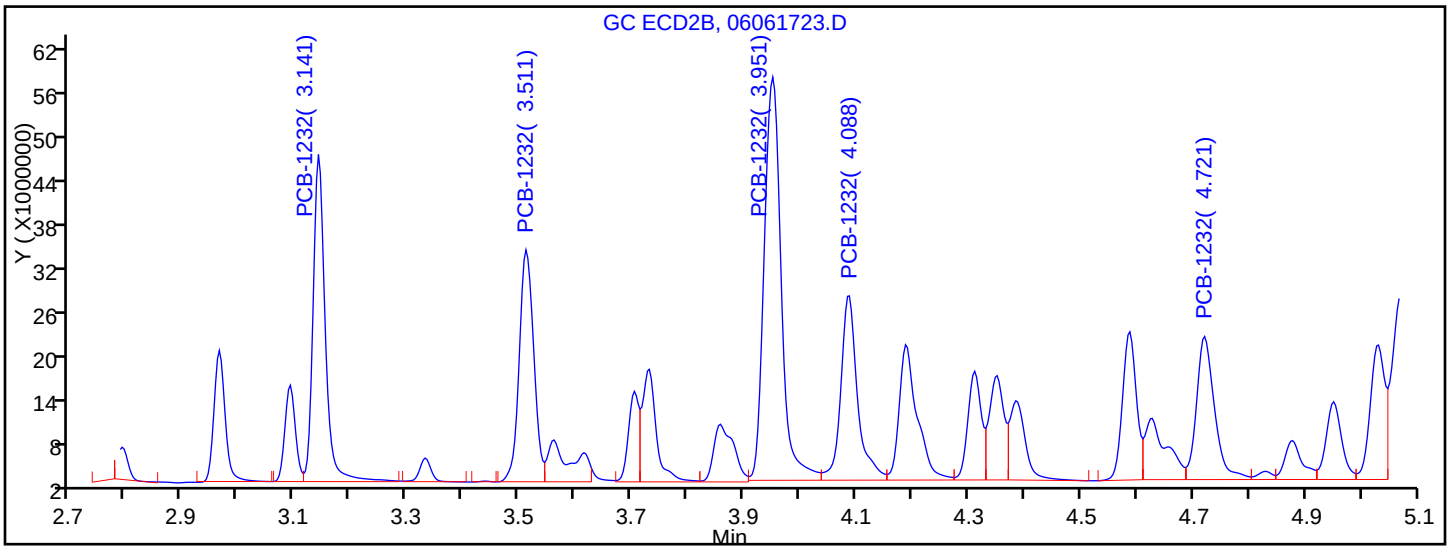
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

7 PCB-1232, CAS: 11141-16-5



Processing Integration Results

3.141	Response = 62581631
3.511	Response = 55214998
3.951	Response = 116505142
4.088	Response = 52421719
4.721	Response = 43643074



Manual Integration Results

3.141	Response = 67001709	M
3.511	Response = 56933808	M
3.951	Response = 116505142	
4.088	Response = 52421719	
4.721	Response = 43643074	

Reviewer: jacksonto, 07-Jun-2017 06:42:18

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061724.D
Lims ID: STDL53262
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 06-Jun-2017 22:08:19 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL53262
Misc. Info.: 280-0059455-024
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:00 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:36:43

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	345363738	1000.0	1000.0	
2	1.600	1.600	0.000	394714346	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							M
1	3.144	3.144	0.000	32574776	500.0	468.7	
1	3.487	3.487	0.000	28758007	500.0	491.9	
1	3.950	3.950	0.000	64030988	500.0	491.1	
1	4.090	4.090	0.000	27407244	500.0	496.6	
1	4.537	4.537	0.000	27108738	500.0	498.9	
		Average of Peak Amounts =				489.4	
2	3.140	3.140	0.000	47980333	500.0	503.8	M
2	3.510	3.510	0.000	39960058	500.0	500.9	M
2	3.950	3.950	0.000	81987882	500.0	500.9	M
2	4.087	4.087	0.000	37731995	500.0	505.0	M
2	4.720	4.720	0.000	31747336	500.0	505.6	M
		Average of Peak Amounts =				503.2	
						RPD = 2.78	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.377	6.377	0.000	94379620	500.0	487.1	
1	6.904	6.904	0.000	115993986	500.0	489.1	
1	7.230	7.230	0.000	110540902	500.0	491.3	
1	7.667	7.667	0.000	226813809	500.0	486.7	
1	8.050	8.050	0.000	81344778	500.0	483.8	
		Average of Peak Amounts =				487.6	
2	6.400	6.400	0.000	97962805	500.0	503.3	
2	6.990	6.990	0.000	131184185	500.0	499.2	
2	7.377	7.377	0.000	124354300	500.0	499.3	
2	7.744	7.744	0.000	235948648	500.0	494.5	
2	8.237	8.237	0.000	177257747	500.0	499.2	
		Average of Peak Amounts =				499.1	
						RPD = 2.33	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_3262_L5_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

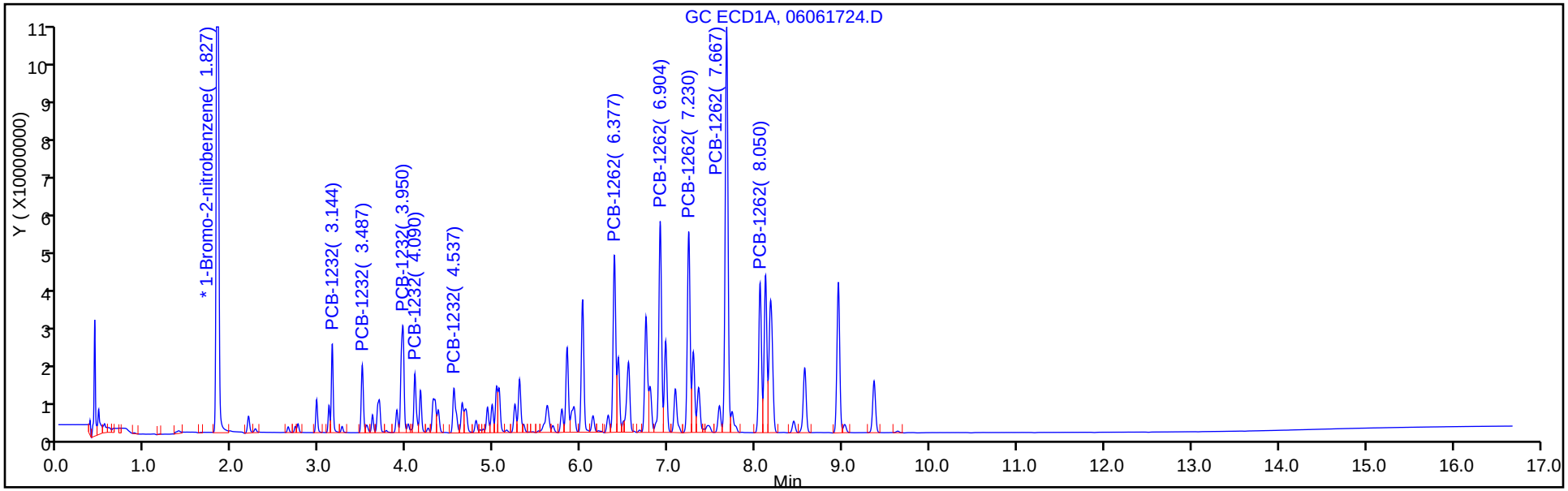
Report Date: 07-Jun-2017 06:53:01 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

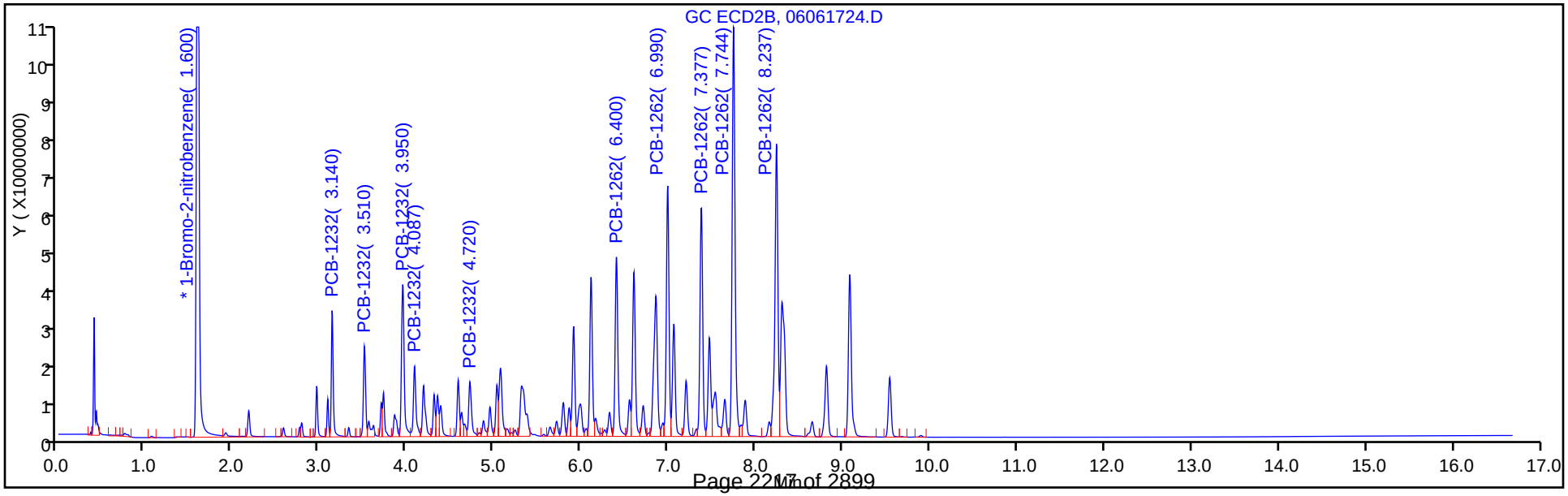
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061724.D

Injection Date:	06-Jun-2017 22:08:19	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL53262			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:53:01 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061724.D

Injection Date: 06-Jun-2017 22:08:19 Instrument ID: SGC_P3

Lims ID: STDL53262

Client ID:

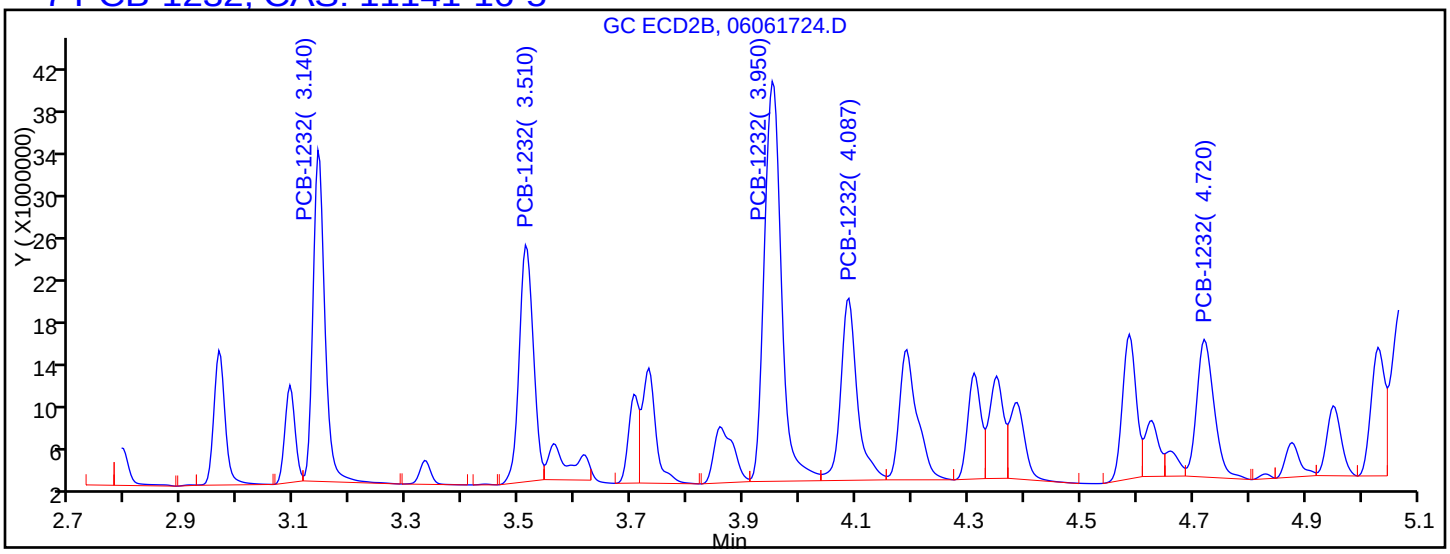
Operator ID: jax ALS Bottle#: 24 Worklist Smp#: 24

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

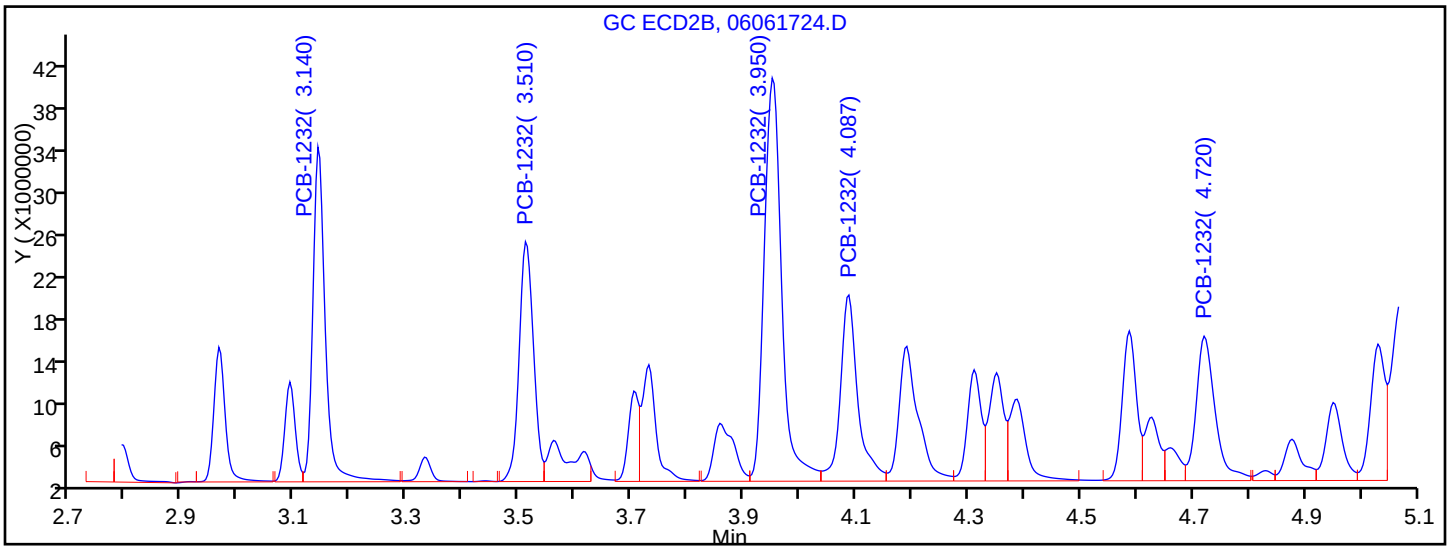
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

7 PCB-1232, CAS: 11141-16-5



Processing Integration Results

3.140	Response = 45436893
3.510	Response = 38780103
3.950	Response = 79604263
4.087	Response = 35020667
4.720	Response = 27733035



Manual Integration Results

3.140	Response = 47980333	M
3.510	Response = 39960058	M
3.950	Response = 81987882	M
4.087	Response = 37731995	M
4.720	Response = 31747336	M

Reviewer: jacksonto, 07-Jun-2017 06:43:27

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061725.D
Lims ID: STDL43262
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Jun-2017 22:30:01 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL43262
Misc. Info.: 280-0059455-025
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:03 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:42:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.827	-0.002	351163612	1000.0	1000.0	
2	1.599	1.600	-0.001	398318609	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							
1	3.142	3.144	-0.002	18582944	250.0	258.7	
1	3.485	3.487	-0.002	15543577	250.0	254.9	
1	3.952	3.950	0.002	33505628	250.0	248.2	
1	4.089	4.090	-0.001	14507611	250.0	252.5	
1	4.539	4.537	0.002	14557895	250.0	251.4	
		Average of Peak Amounts =				253.1	
2	3.142	3.140	0.002	26849747	250.0	269.6	
2	3.512	3.510	0.002	22036182	250.0	264.9	
2	3.952	3.950	0.002	44391565	250.0	261.6	
2	4.089	4.087	0.002	20818050	250.0	267.7	
2	4.722	4.720	0.002	17945127	250.0	274.8	
		Average of Peak Amounts =				267.7	
						RPD = 5.60	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.379	6.377	0.002	50411406	250.0	250.2	
1	6.905	6.904	0.001	61260216	250.0	250.0	
1	7.232	7.230	0.002	57567381	250.0	247.4	
1	7.665	7.667	-0.002	117615624	250.0	245.7	
1	8.049	8.050	-0.001	42973067	250.0	248.3	
		Average of Peak Amounts =				248.3	
2	6.402	6.400	0.002	53835004	250.0	266.0	
2	6.989	6.990	-0.001	71465471	250.0	261.9	
2	7.375	7.377	-0.002	67384151	250.0	260.4	
2	7.745	7.744	0.001	127652955	250.0	258.1	
2	8.239	8.237	0.002	95117097	250.0	258.4	
		Average of Peak Amounts =				260.9	
						RPD = 4.97	
S 8 Polychlorinated biphenyls, Total							
1						501.4	
2						528.7	
						RPD = 5.29	

Reagents:

AR_3262_L4_00019	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

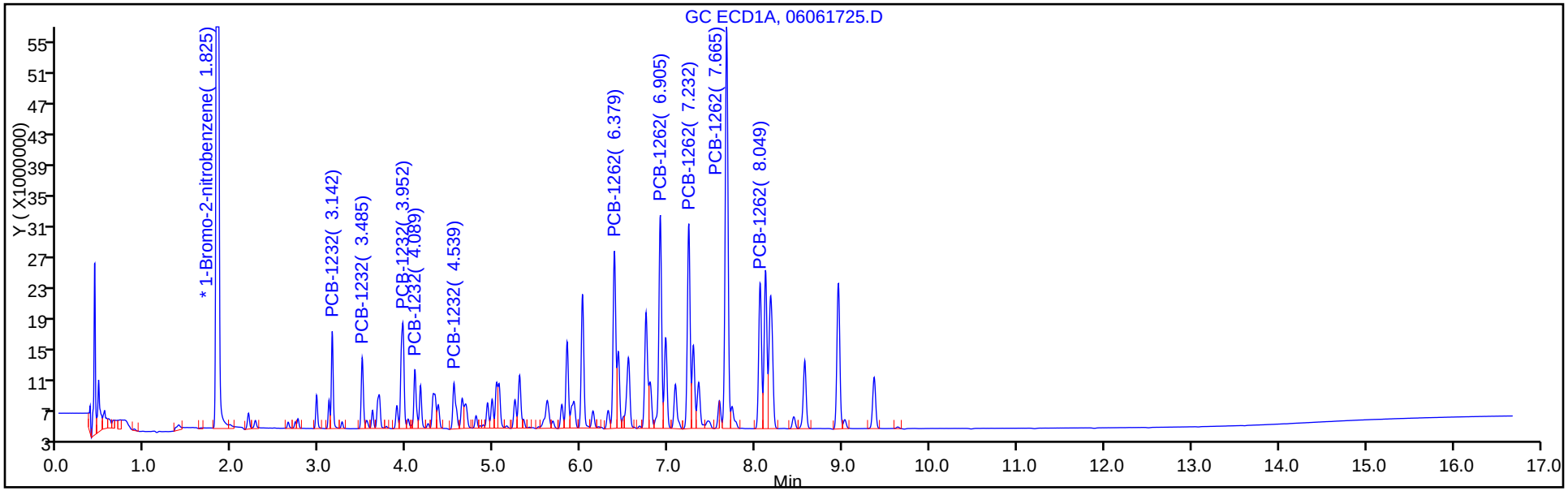
Report Date: 07-Jun-2017 06:53:04 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

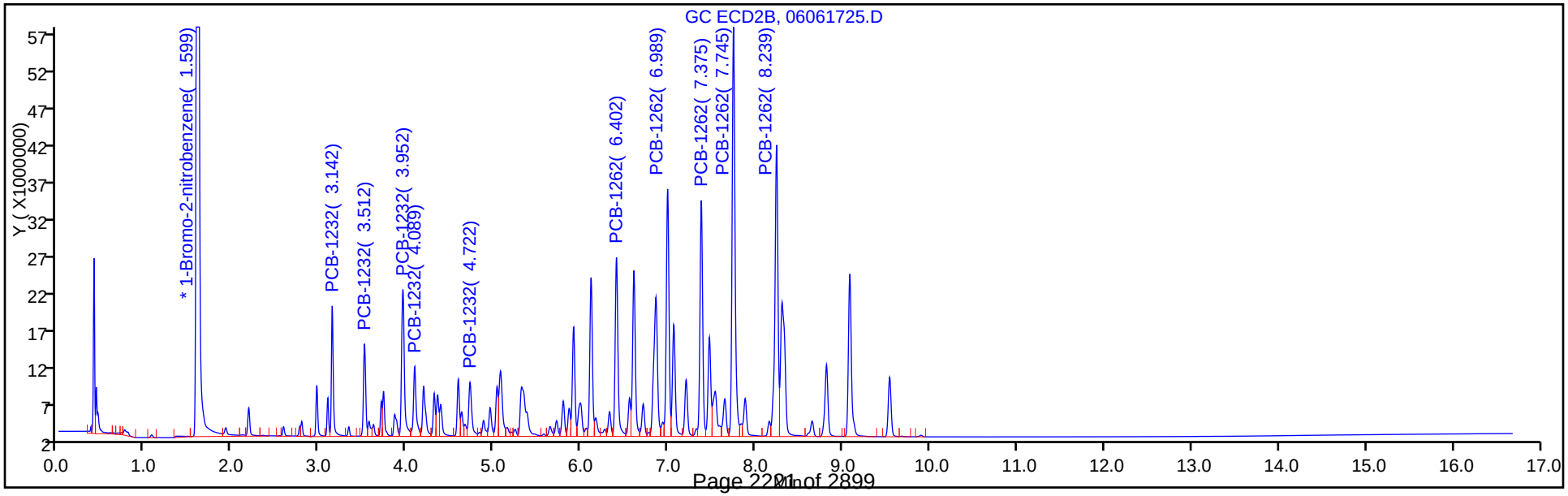
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061725.D

Injection Date:	06-Jun-2017 22:30:01	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL43262			Worklist Smp#:	25
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061726.D
Lims ID: STDL33262
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Jun-2017 22:51:40 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL33262
Misc. Info.: 280-0059455-026
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:05 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.827	-0.002	362023594	1000.0	1000.0	
2	1.599	1.600	-0.001	407648233	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							
1	3.142	3.144	-0.002	7625374	100.0	97.1	
1	3.485	3.487	-0.002	7002746	100.0	103.5	
1	3.952	3.950	0.002	14731505	100.0	100.5	
1	4.089	4.090	-0.001	6571821	100.0	104.0	
1	4.539	4.537	0.002	6943036	100.0	102.6	
		Average of Peak Amounts =				101.5	
2	3.142	3.140	0.002	12639596	100.0	112.2	
2	3.512	3.510	0.002	10204639	100.0	109.3	
2	3.955	3.950	0.005	19941032	100.0	106.2	
2	4.089	4.087	0.002	9609816	100.0	110.6	
2	4.725	4.720	0.005	8246500	100.0	112.9	
		Average of Peak Amounts =				110.2	
						RPD = 8.22	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.379	6.377	0.002	22214790	100.0	100.1	
1	6.905	6.904	0.001	26104325	100.0	98.4	
1	7.232	7.230	0.002	24683282	100.0	97.9	
1	7.669	7.667	0.002	50224652	100.0	98.7	
1	8.052	8.050	0.002	18434551	100.0	99.5	
		Average of Peak Amounts =				98.9	
2	6.402	6.400	0.002	24313865	100.0	107.6	
2	6.989	6.990	-0.001	32077578	100.0	105.5	
2	7.375	7.377	-0.002	30344872	100.0	105.3	
2	7.745	7.744	0.001	56659168	100.0	103.3	
2	8.239	8.237	0.002	42683559	100.0	104.8	
		Average of Peak Amounts =				105.3	
						RPD = 6.25	
S 8 Polychlorinated biphenyls, Total							
1						200.4	
2						215.5	
						RPD = 7.26	

Reagents:

AR_3262_L3_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

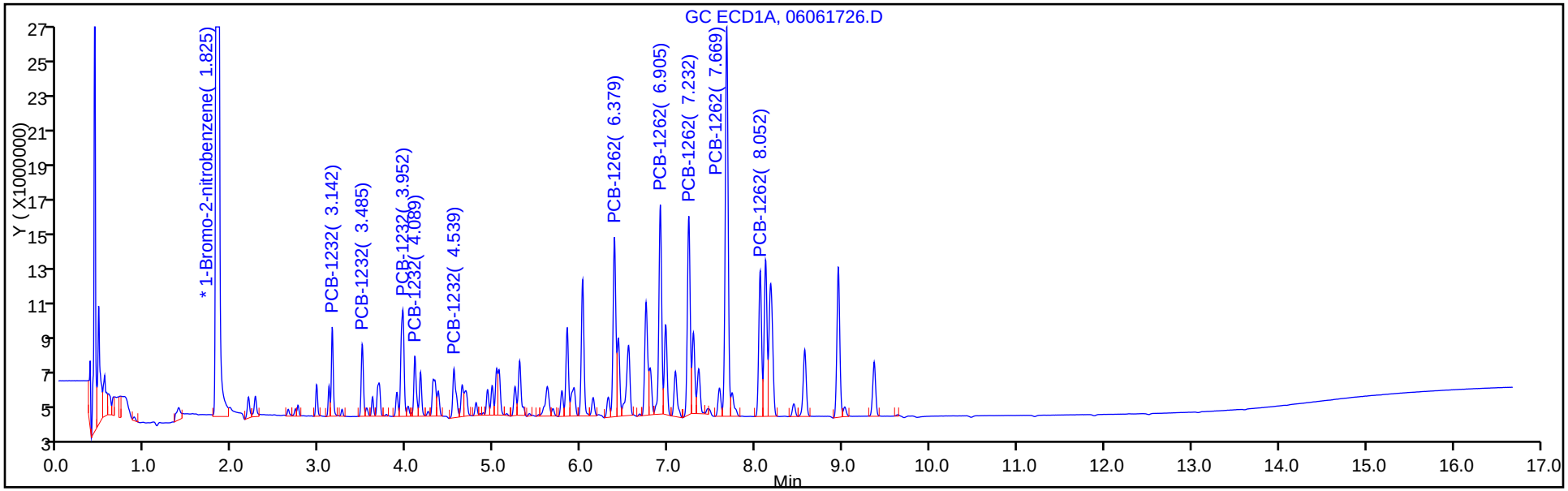
Report Date: 07-Jun-2017 06:53:06 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

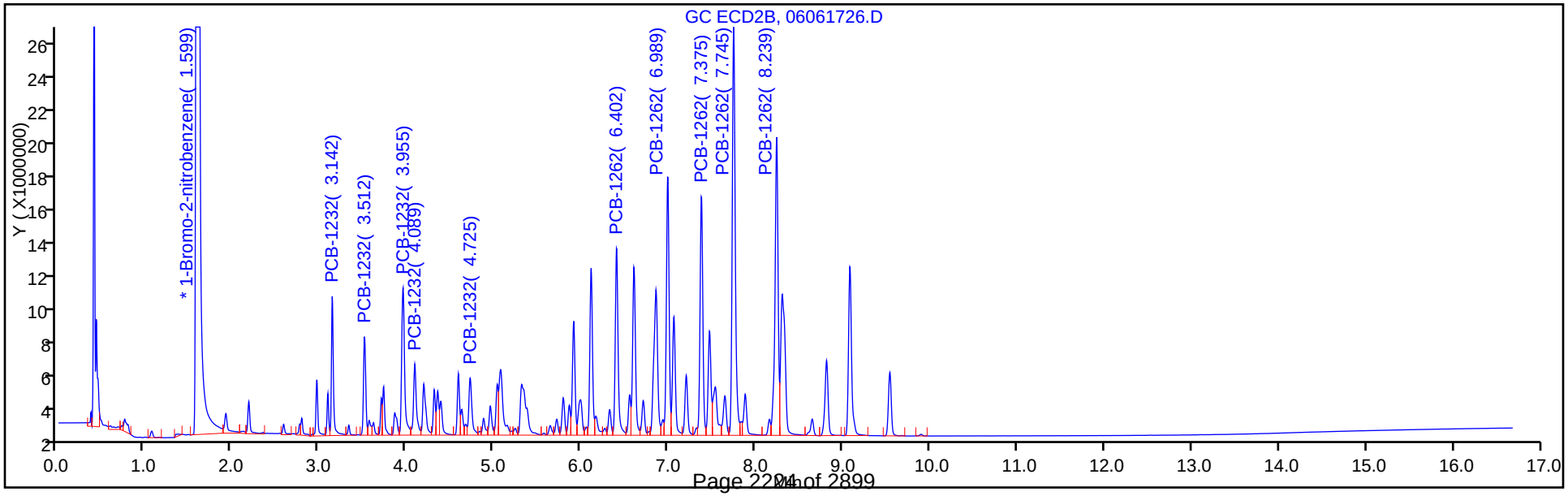
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061726.D

Injection Date:	06-Jun-2017 22:51:40	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL33262			Worklist Smp#:	26
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061727.D
Lims ID: STDL23262
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Jun-2017 23:13:20 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL23262
Misc. Info.: 280-0059455-027
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:08 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.827	-0.001	345816428	1000.0	1000.0	
2	1.599	1.600	-0.001	391077106	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							
1	3.142	3.144	-0.002	4332251	50.0	53.8	
1	3.486	3.487	-0.001	3800391	50.0	52.8	
1	3.952	3.950	0.002	7916345	50.0	52.4	
1	4.089	4.090	-0.001	3692971	50.0	56.1	
1	4.539	4.537	0.002	3864320	50.0	49.1	
		Average of Peak Amounts =				52.8	
2	3.142	3.140	0.002	6917575	50.0	54.6	
2	3.512	3.510	0.002	5483232	50.0	52.7	
2	3.956	3.950	0.006	10568168	50.0	51.8	
2	4.089	4.087	0.002	4998211	50.0	51.5	
2	4.726	4.720	0.006	4272758	50.0	52.2	
		Average of Peak Amounts =				52.6	
						RPD = 0.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.379	6.377	0.002	11962772	50.0	51.2	
1	6.906	6.904	0.002	13930001	50.0	51.2	
1	7.232	7.230	0.002	13151829	50.0	50.8	
1	7.666	7.667	-0.001	25877583	50.0	50.9	
1	8.052	8.050	0.002	9797565	50.0	52.5	
		Average of Peak Amounts =				51.3	
2	6.406	6.400	0.006	13115771	50.0	52.8	
2	6.989	6.990	-0.001	17363273	50.0	52.3	
2	7.376	7.377	-0.001	16435175	50.0	52.3	
2	7.746	7.744	0.002	31404984	50.0	53.3	
2	8.239	8.237	0.002	22837988	50.0	51.7	
		Average of Peak Amounts =				52.5	
						RPD = 2.22	
S 8 Polychlorinated biphenyls, Total							
1						104.1	
2						105.0	
						RPD = 0.85	

Reagents:

AR_3262_L2_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

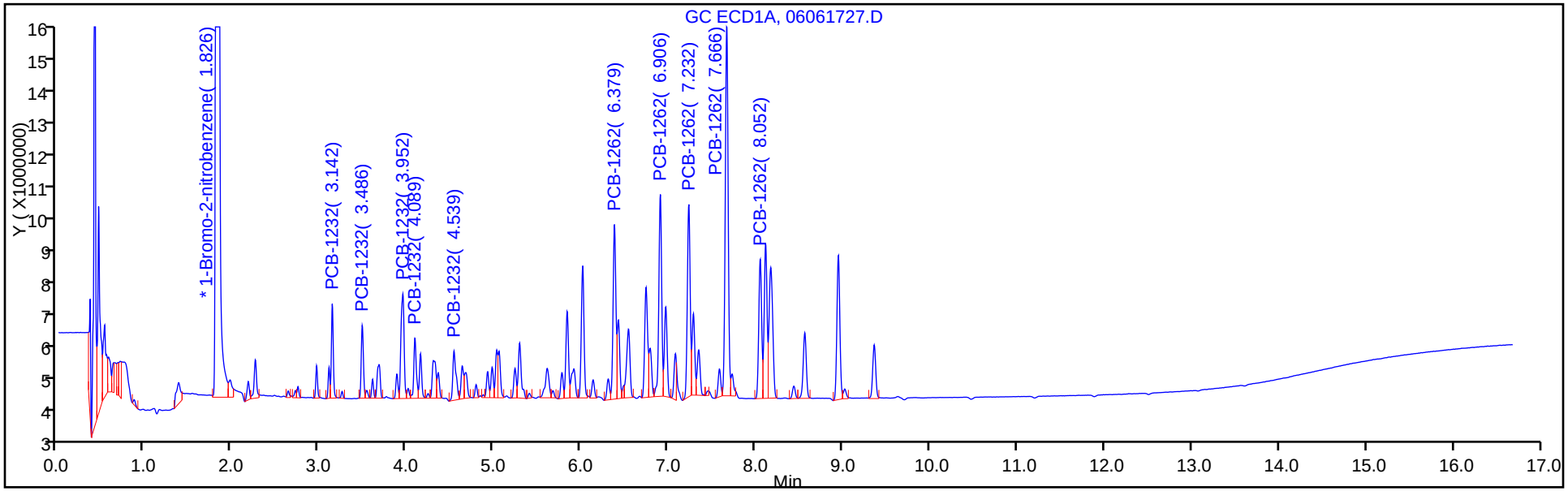
Report Date: 07-Jun-2017 06:53:08 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

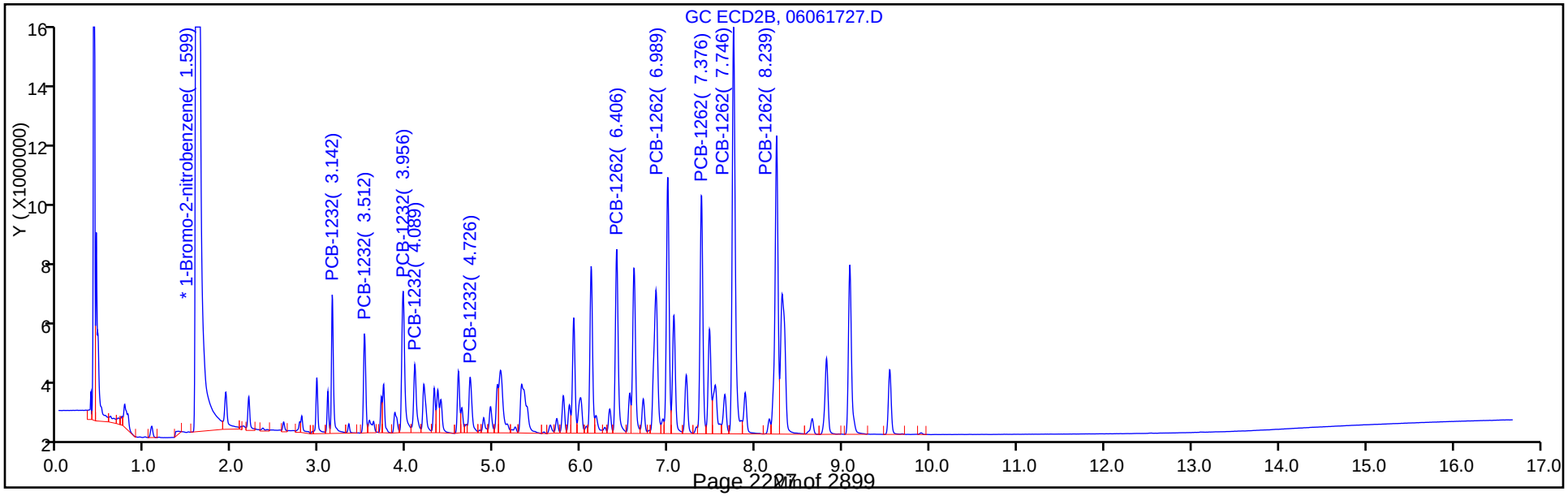
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061727.D

Injection Date:	06-Jun-2017 23:13:20	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL23262			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061728.D
Lims ID: STDL13262
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Jun-2017 23:35:00 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL13262
Misc. Info.: 280-0059455-028
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.827	-0.001	338038512	1000.0	1000.0	
2	1.600	1.600	0.000	381673034	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							
1	3.143	3.144	-0.001	2254800	25.0	24.0	
1	3.486	3.487	-0.001	2043724	25.0	22.8	
1	3.953	3.950	0.003	4204179	25.0	24.2	
1	4.090	4.090	0.000	1770550	25.0	21.2	
1	4.540	4.537	0.003	2549767	25.0	24.8	
		Average of Peak Amounts =				23.4	
2	3.143	3.140	0.003	3569366	25.0	18.5	
2	3.513	3.510	0.003	2956752	25.0	20.5	
2	3.956	3.950	0.006	5725234	25.0	21.9	
2	4.090	4.087	0.003	2726167	25.0	20.6	
2	4.723	4.720	0.003	2234999	25.0	19.2	
		Average of Peak Amounts =				20.1	
						RPD = 14.98	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.380	6.377	0.003	6812468	25.0	24.8	
1	6.903	6.904	-0.001	7676871	25.0	25.2	
1	7.233	7.230	0.003	7420682	25.0	25.7	
1	7.666	7.667	-0.001	13901548	25.0	25.6	
1	8.053	8.050	0.003	5031849	25.0	24.5	
		Average of Peak Amounts =				25.2	
2	6.403	6.400	0.003	6953757	25.0	20.6	
2	6.990	6.990	0.000	9456656	25.0	21.8	
2	7.376	7.377	-0.001	8973726	25.0	22.0	
2	7.746	7.744	0.002	16769672	25.0	22.3	
2	8.240	8.237	0.003	12567737	25.0	22.6	
		Average of Peak Amounts =				21.8	
						RPD = 14.13	
S 8 Polychlorinated biphenyls, Total							
1						48.6	
2						42.0	
						RPD = 14.54	

Reagents:

AR_3262_L1_00019	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

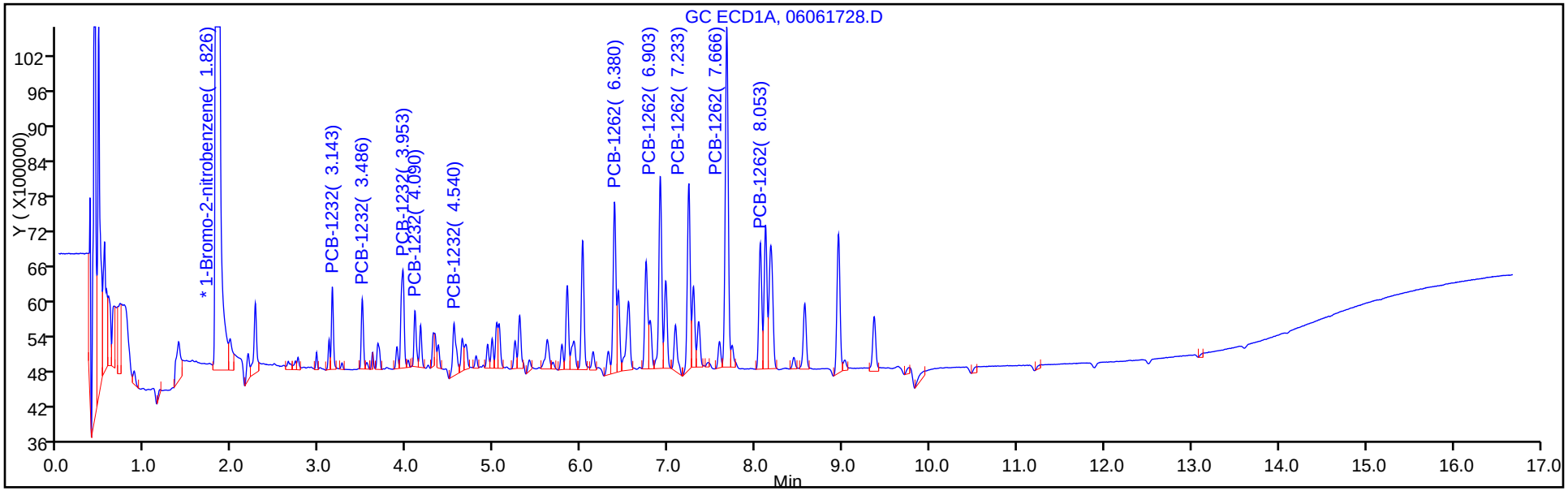
Report Date: 07-Jun-2017 06:53:10 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

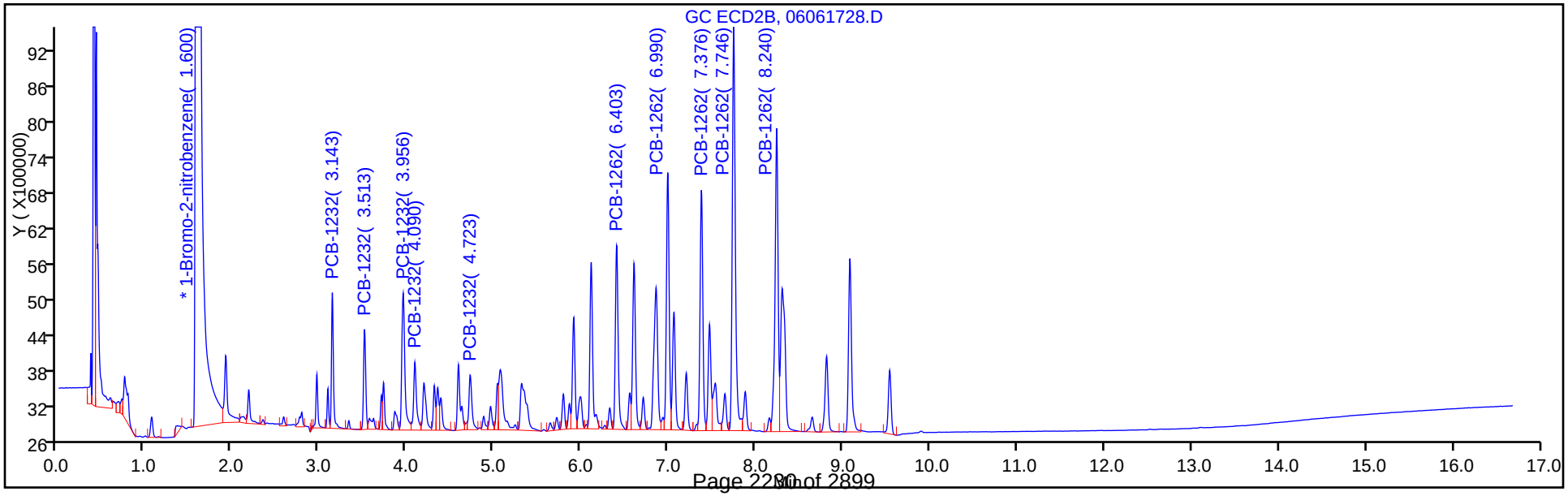
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061728.D

Injection Date:	06-Jun-2017 23:35:00	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL13262			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 23:56 Calibration End Date: 06/07/2017 02:06 Calibration ID: 29401

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL14268 280-376236/35	06061735.D
Level 2	STDL24268 280-376236/34	06061734.D
Level 3	STDL34268 280-376236/33	06061733.D
Level 4	STDL44268 280-376236/32	06061732.D
Level 5	STDL54268 280-376236/31	06061731.D
Level 6	STDL64268 280-376236/30	06061730.D
Level 7	STDL74268 280-376236/29	06061729.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1242 Peak 1	0.4206 0.2818	0.3722 0.2807	0.3263	0.2932	0.2843	Lin1	4.0999	0.2768							1.0000		0.9900
PCB-1242 Peak 2	0.8413 0.6465	0.7541 0.6520	0.6949	0.6448	0.6395	Lin1	5.0673	0.6395							1.0000		0.9900
PCB-1242 Peak 3	0.3999 0.2699	0.3372 0.2705	0.3051	0.2789	0.2710	Lin1	3.4628	0.2659							1.0000		0.9900
PCB-1242 Peak 4	0.3027 0.2201	0.2733 0.2196	0.2522	0.2220	0.2194	Lin1	2.4793	0.2164							1.0000		0.9900
PCB-1242 Peak 5	0.3020 0.2244	0.2731 0.2274	0.2408	0.2338	0.2285	Lin1	2.0677	0.2240							1.0000		0.9900
PCB-1268 Peak 1	1.8520 1.5143	1.6284 1.5160	1.5904	1.4695	1.5079	Lin1	7.5759	1.4978							1.0000		0.9900
PCB-1268 Peak 2	1.7248 1.3249	1.5509 1.3503	1.4585	1.3036	1.3238	Lin1	10.343	1.3181							1.0000		0.9900
PCB-1268 Peak 3	1.4883 1.1739	1.3575 1.1872	1.2662	1.1616	1.1691	Lin1	8.2872	1.1650							1.0000		0.9900
PCB-1268 Peak 4	0.7362 0.5446	0.6647 0.5474	0.6242	0.5467	0.5464	Lin1	5.6309	0.5384							1.0000		0.9900
PCB-1268 Peak 5	4.5000 3.7506	4.1730 3.7868	3.9394	3.6935	3.7424	Lin1	18.847	3.7299							1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 23:56 Calibration End Date: 06/07/2017 02:06 Calibration ID: 29401

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL14268 280-376236/35	06061735.D
Level 2	STDL24268 280-376236/34	06061734.D
Level 3	STDL34268 280-376236/33	06061733.D
Level 4	STDL44268 280-376236/32	06061732.D
Level 5	STDL54268 280-376236/31	06061731.D
Level 6	STDL64268 280-376236/30	06061730.D
Level 7	STDL74268 280-376236/29	06061729.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1242 Peak 1	BNB	Lin1	3674493 70020435	6334637 91708535	11134685	25661290	47551350	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 2	BNB	Lin1	7351035 160614929	12834381 213025667	23715179	56434653	106978681	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 3	BNB	Lin1	3494368 67049695	5738481 88378438	10410653	24410165	45330386	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 4	BNB	Lin1	2645013 54684692	4650896 71750055	8605894	19431100	36710146	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 5	BNB	Lin1	2638273 55742619	4647866 74299071	8218340	20462038	38229137	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 1	BNB	Lin1	16180997 376220426	27715280 495331868	54271619	128607568	252241454	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 2	BNB	Lin1	15069585 329159696	26396914 441196713	49772095	114090191	221446416	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 3	BNB	Lin1	13004037 291651767	23105572 387907316	43210879	101656959	195576665	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 4	BNB	Lin1	6432094 135309757	11312963 178840786	21302708	47849944	91399906	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 5	BNB	Lin1	39317946 931831022	71024384 1237299243	134431811	323246560	626046071	25.0 750	50.0 1000	100	250	500

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061729.D
Lims ID: STDL74268
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 23:56:39 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL74268
Misc. Info.: 280-0059455-029
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:11 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	326738142	1000.0	1000.0	
2	1.600	1.600	0.000	373438498	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.487	3.487	0.000	91708535	1000.0	999.1	
1	3.950	3.951	-0.001	213025667	1000.0	1011.7	
1	4.090	4.091	-0.001	88378438	1000.0	1004.3	
1	5.027	5.027	0.000	71750055	1000.0	1003.1	
1	5.054	5.054	0.000	74299071	1000.0	1005.9	
		Average of Peak Amounts =				1004.8	
2	3.510	3.511	-0.001	111207386	1000.0	975.4	
2	3.950	3.951	-0.001	245465999	1000.0	980.5	
2	4.084	4.087	-0.003	109301278	1000.0	970.7	
2	5.027	5.031	-0.004	83124728	1000.0	986.4	
2	5.074	5.074	0.000	101377377	1000.0	973.2	
		Average of Peak Amounts =				977.3	
						RPD = 2.78	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.114	8.111	0.003	495331868	1000.0	1007.1	
1	8.167	8.164	0.003	441196713	1000.0	1016.6	
1	8.437	8.437	0.000	387907316	1000.0	1012.0	
1	8.947	8.947	0.000	178840786	1000.0	1006.1	
1	9.357	9.357	0.000	1237299243	1000.0	1010.2	
		Average of Peak Amounts =				1010.4	
2	8.237	8.237	0.000	489685565	1000.0	993.1	
2	8.300	8.301	-0.001	472715160	1000.0	990.5	
2	8.647	8.647	0.000	396502502	1000.0	992.9	
2	9.080	9.077	0.003	189860561	1000.0	996.9	
2	9.537	9.537	0.000	1120913687	1000.0	993.7	
		Average of Peak Amounts =				993.4	
						RPD = 1.70	
S 8 Polychlorinated biphenyls, Total							
1						2015.2	
2						1970.7	
						RPD = 2.23	

Reagents:

AR_4268_L7_00013	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

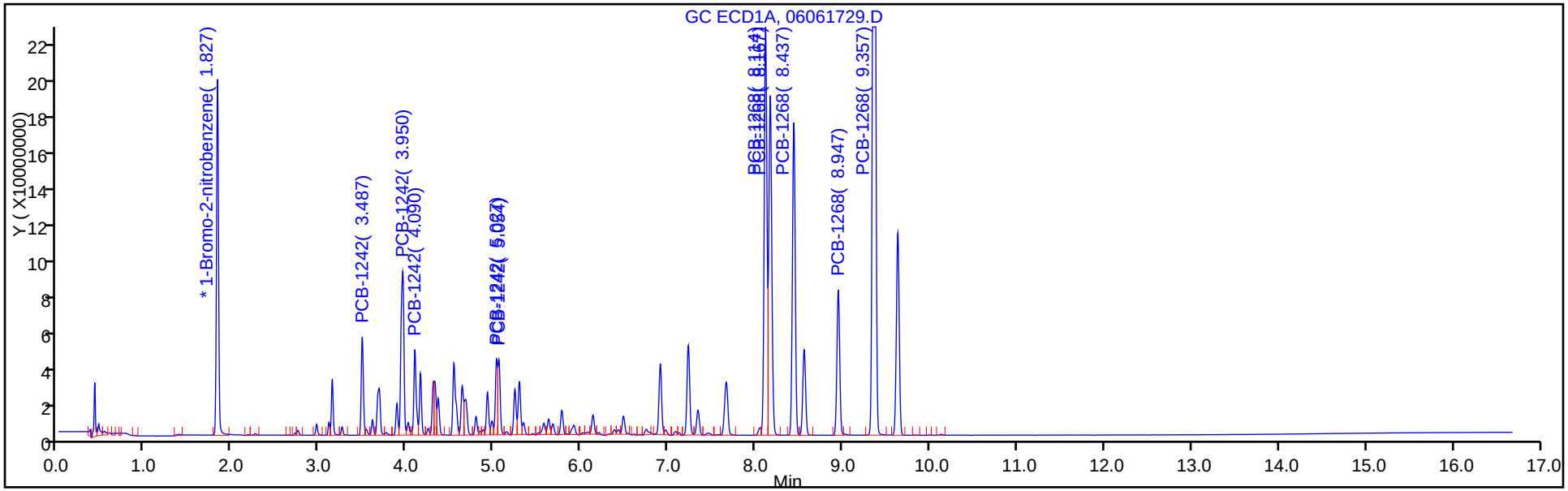
Report Date: 07-Jun-2017 06:53:11 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

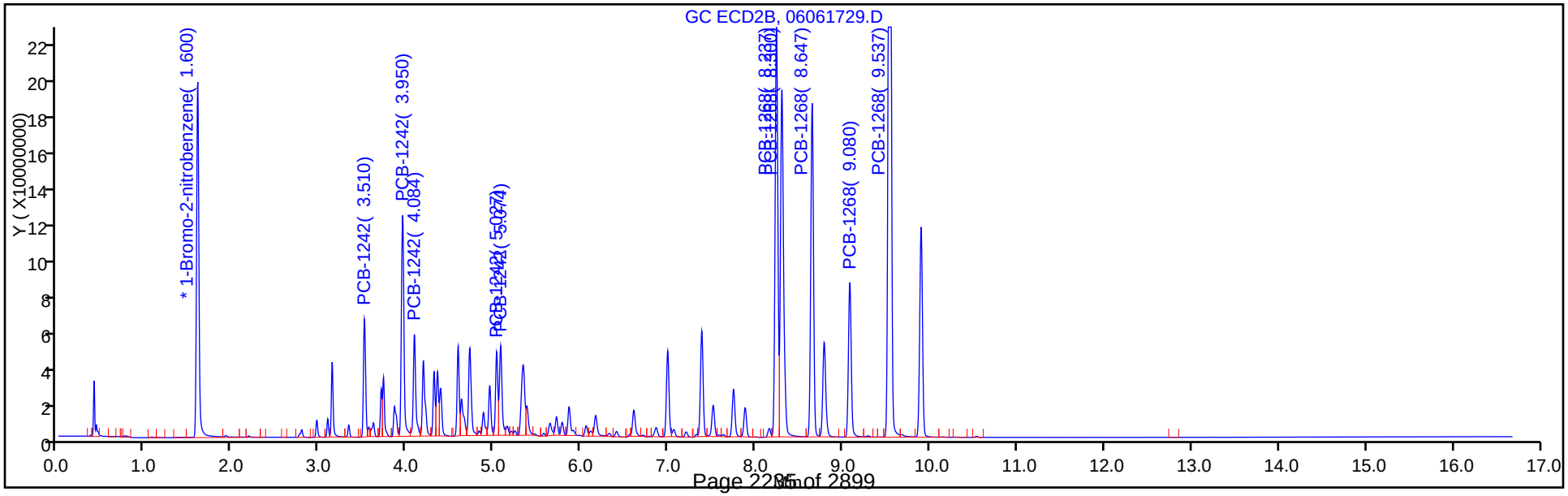
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061729.D

Injection Date:	06-Jun-2017 23:56:39	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL74268			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061730.D
Lims ID: STDL64268
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 07-Jun-2017 00:18:17 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL64268
Misc. Info.: 280-0059455-030
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:13 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	331265536	1000.0	1000.0	
2	1.600	1.600	0.000	374274762	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.487	3.487	0.000	70020435	750.0	748.7	
1	3.950	3.951	-0.001	160614929	750.0	750.3	
1	4.090	4.091	-0.001	67049695	750.0	748.2	
1	5.027	5.027	0.000	54684692	750.0	751.2	
1	5.053	5.054	-0.001	55742619	750.0	742.0	
		Average of Peak Amounts =				748.1	
2	3.510	3.511	-0.001	87406129	750.0	760.2	
2	3.950	3.951	-0.001	193160522	750.0	766.4	
2	4.084	4.087	-0.003	88198812	750.0	777.7	
2	5.027	5.031	-0.004	66046116	750.0	779.8	
2	5.073	5.074	-0.001	82175931	750.0	782.5	
		Average of Peak Amounts =				773.3	
						RPD = 3.32	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.113	8.111	0.002	376220426	750.0	753.2	
1	8.163	8.164	-0.001	329159696	750.0	746.0	
1	8.437	8.437	0.000	291651767	750.0	748.6	
1	8.947	8.947	0.000	135309757	750.0	748.1	
1	9.357	9.357	0.000	931831022	750.0	749.1	
		Average of Peak Amounts =				749.0	
2	8.237	8.237	0.000	375862624	750.0	756.9	
2	8.300	8.301	-0.001	364422945	750.0	757.6	
2	8.647	8.647	0.000	304637424	750.0	757.3	
2	9.077	9.077	0.000	145734267	750.0	759.2	
2	9.537	9.537	0.000	865114672	750.0	762.6	
		Average of Peak Amounts =				758.7	
						RPD = 1.29	
S 8 Polychlorinated biphenyls, Total							
1						1497.1	
2						1532.0	
						RPD = 2.31	

Reagents:

AR_4268_L6_00015	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

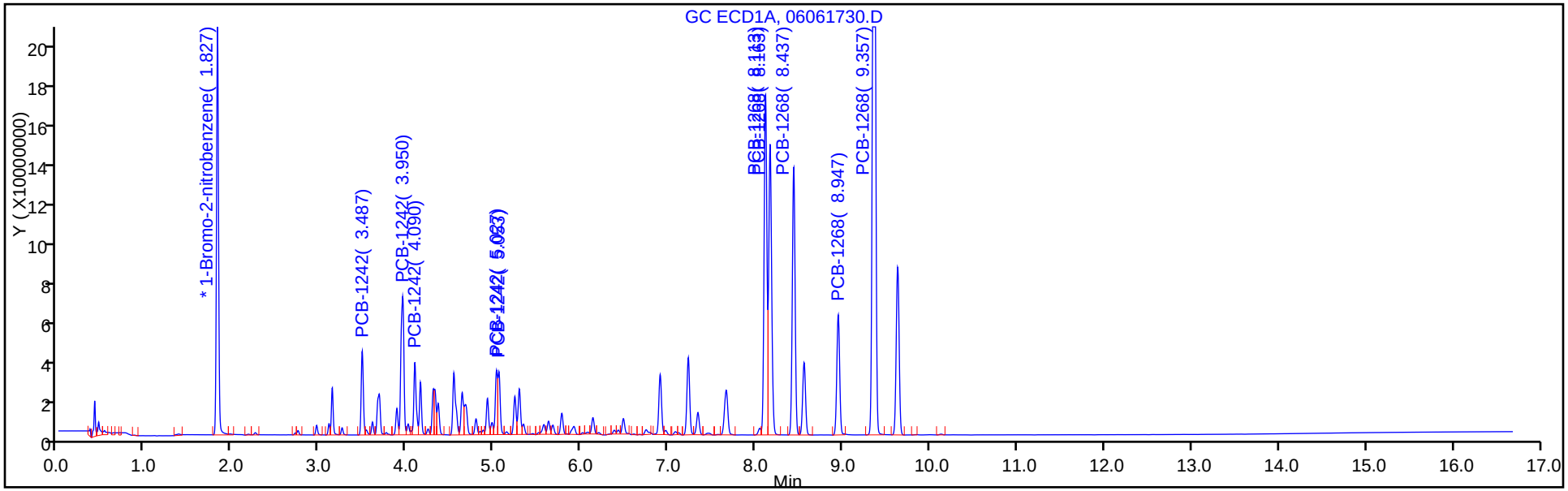
Report Date: 07-Jun-2017 06:53:13 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

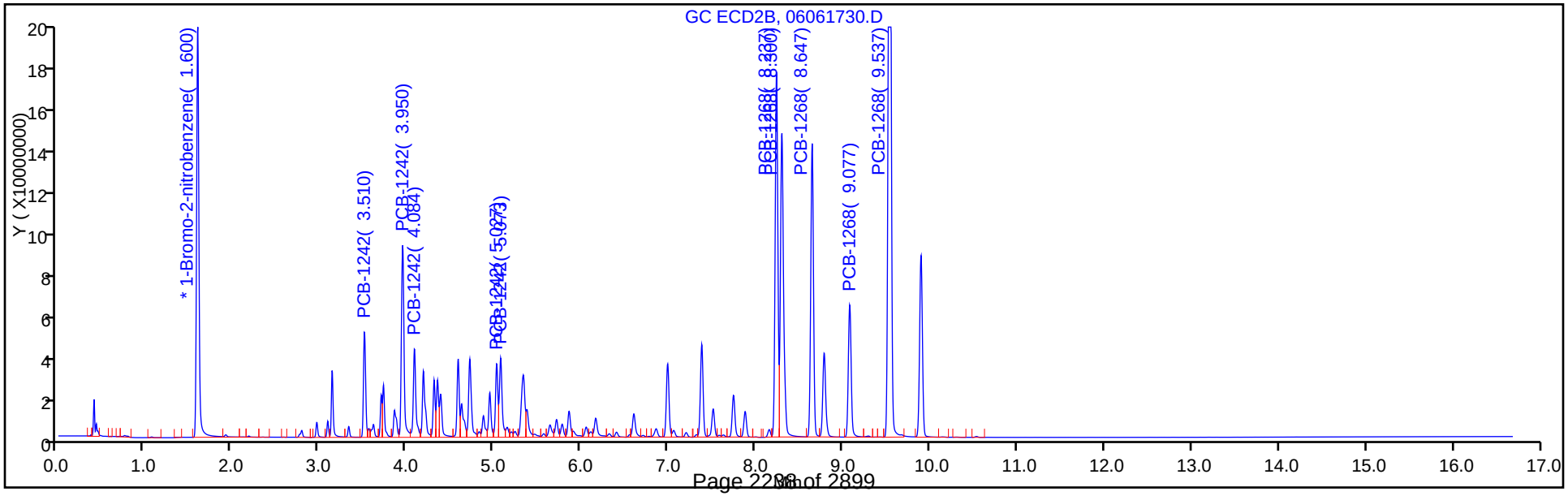
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061730.D

Injection Date:	07-Jun-2017 00:18:17	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL64268			Worklist Smp#:	30
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061731.D
Lims ID: STDL54268
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 07-Jun-2017 00:39:57 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL54268
Misc. Info.: 280-0059455-031
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:15 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:39:12

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	334569204	1000.0	1000.0	
2	1.601	1.601	0.000	393108124	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							M
1	3.487	3.487	0.000	47551350	500.0	498.6	
1	3.951	3.951	0.000	106978681	500.0	492.1	
1	4.091	4.091	0.000	45330386	500.0	496.6	
1	5.027	5.027	0.000	36710146	500.0	495.5	
1	5.054	5.054	0.000	38229137	500.0	500.9	
		Average of Peak Amounts =				496.7	
2	3.511	3.511	0.000	60026238	500.0	489.4	M
2	3.951	3.951	0.000	130260242	500.0	486.2	M
2	4.087	4.087	0.000	58486099	500.0	483.8	M
2	5.031	5.031	0.000	43289629	500.0	482.6	M
2	5.074	5.074	0.000	54294666	500.0	483.4	M
		Average of Peak Amounts =				485.1	
						RPD = 2.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.111	8.111	0.000	252241454	500.0	498.3	
1	8.164	8.164	0.000	221446416	500.0	494.3	
1	8.437	8.437	0.000	195576665	500.0	494.7	
1	8.947	8.947	0.000	91399906	500.0	496.9	
1	9.357	9.357	0.000	626046071	500.0	496.6	
		Average of Peak Amounts =				496.2	
2	8.237	8.237	0.000	256821960	500.0	486.9	
2	8.301	8.301	0.000	246814466	500.0	481.9	
2	8.647	8.647	0.000	207312245	500.0	484.9	
2	9.077	9.077	0.000	97882118	500.0	478.9	
2	9.537	9.537	0.000	594839483	500.0	495.2	
		Average of Peak Amounts =				485.6	
						RPD = 2.16	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_4268_L5_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

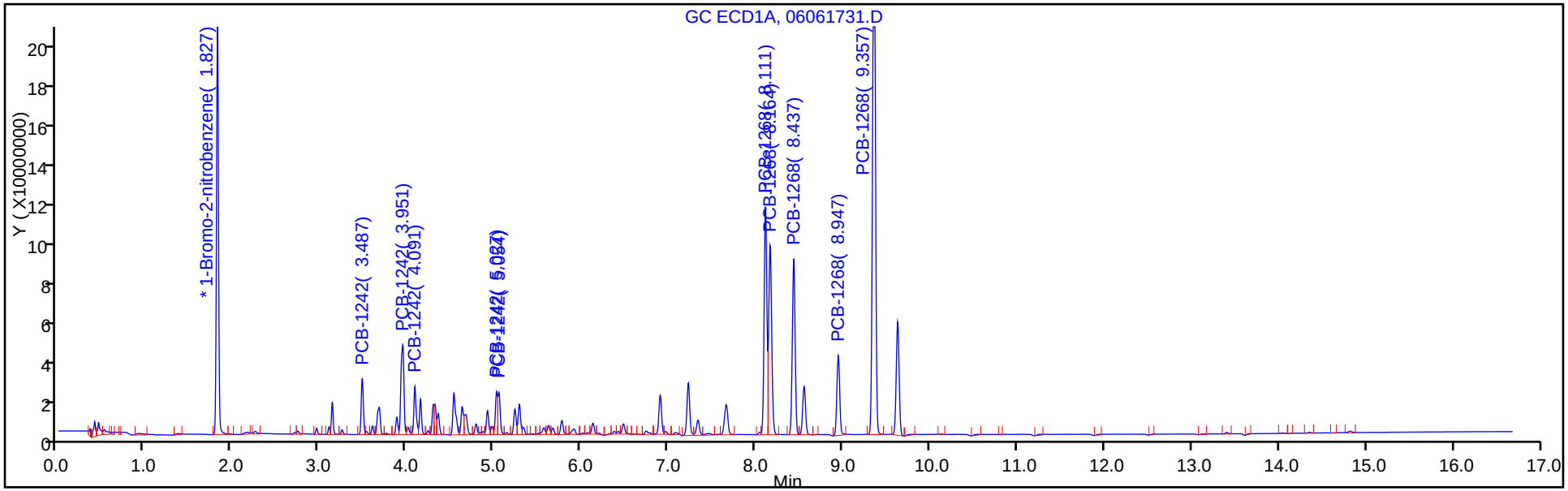
Report Date: 07-Jun-2017 06:53:15 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

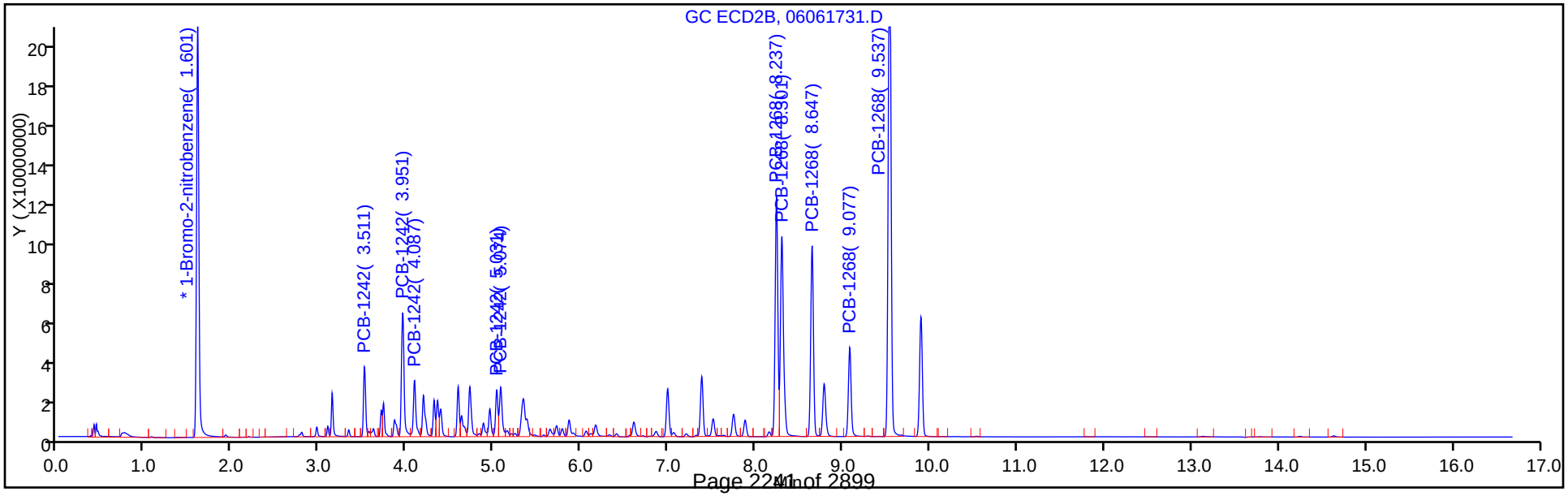
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061731.D

Injection Date:	07-Jun-2017 00:39:57	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL54268			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061732.D
Lims ID: STDL44268
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 07-Jun-2017 01:01:38 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL44268
Misc. Info.: 280-0059455-032
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:17 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.827	0.001	350069398	1000.0	1000.0	
2	1.598	1.601	-0.003	392158539	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.488	3.487	0.001	25661290	250.0	250.0	
1	3.952	3.951	0.001	56434653	250.0	244.2	
1	4.092	4.091	0.001	24410165	250.0	249.2	
1	5.028	5.027	0.001	19431100	250.0	245.0	
1	5.055	5.054	0.001	20462038	250.0	251.7	
		Average of Peak Amounts =				248.0	
2	3.512	3.511	0.001	33868899	250.0	267.2	
2	3.952	3.951	0.001	72054410	250.0	262.4	
2	4.085	4.087	-0.002	32802033	250.0	263.4	
2	5.032	5.031	0.001	22808356	250.0	249.8	
2	5.078	5.074	0.004	30128035	250.0	258.2	
		Average of Peak Amounts =				260.2	
						RPD = 4.79	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.112	8.111	0.001	128607568	250.0	240.2	
1	8.165	8.164	0.001	114090191	250.0	239.4	
1	8.438	8.437	0.001	101656959	250.0	242.2	
1	8.948	8.947	0.001	47849944	250.0	243.4	
1	9.358	9.357	0.001	323246560	250.0	242.5	
		Average of Peak Amounts =				241.5	
2	8.238	8.237	0.001	139301330	250.0	257.6	
2	8.298	8.301	-0.003	138814681	250.0	263.6	
2	8.645	8.647	-0.002	113703825	250.0	259.3	
2	9.078	9.077	0.001	54263572	250.0	258.1	
2	9.535	9.537	-0.002	297236332	250.0	242.2	
		Average of Peak Amounts =				256.1	
						RPD = 5.87	
S 8 Polychlorinated biphenyls, Total							
1						489.6	
2						516.3	
						RPD = 5.32	

Reagents:

AR_4268_L4_00020	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

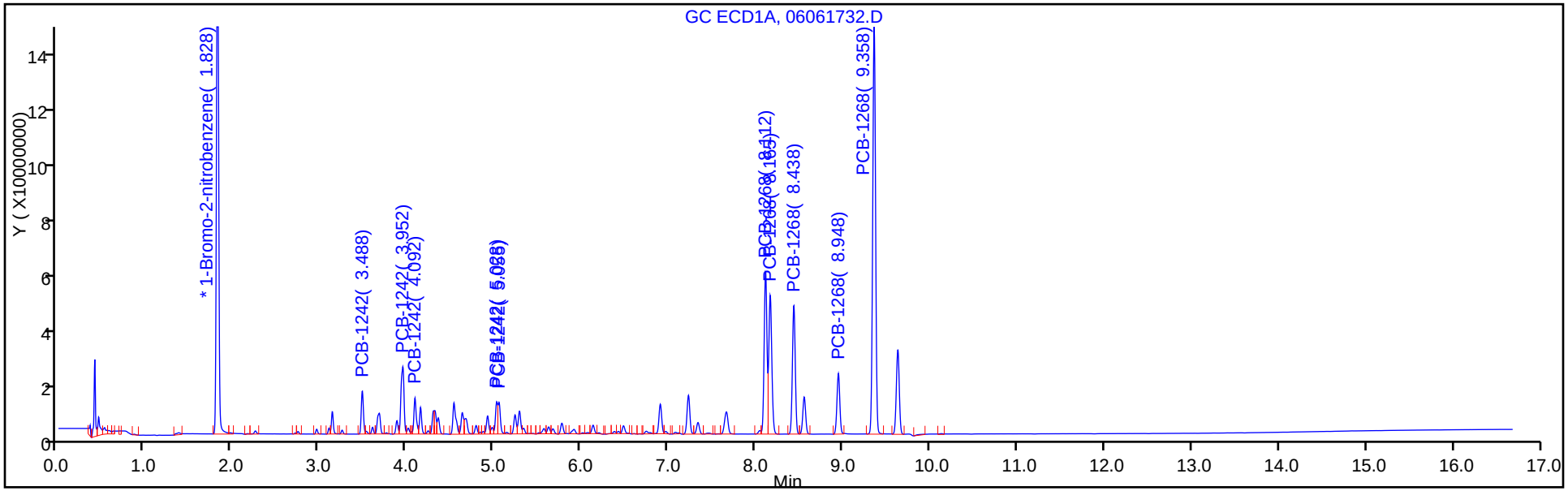
Report Date: 07-Jun-2017 06:53:18 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

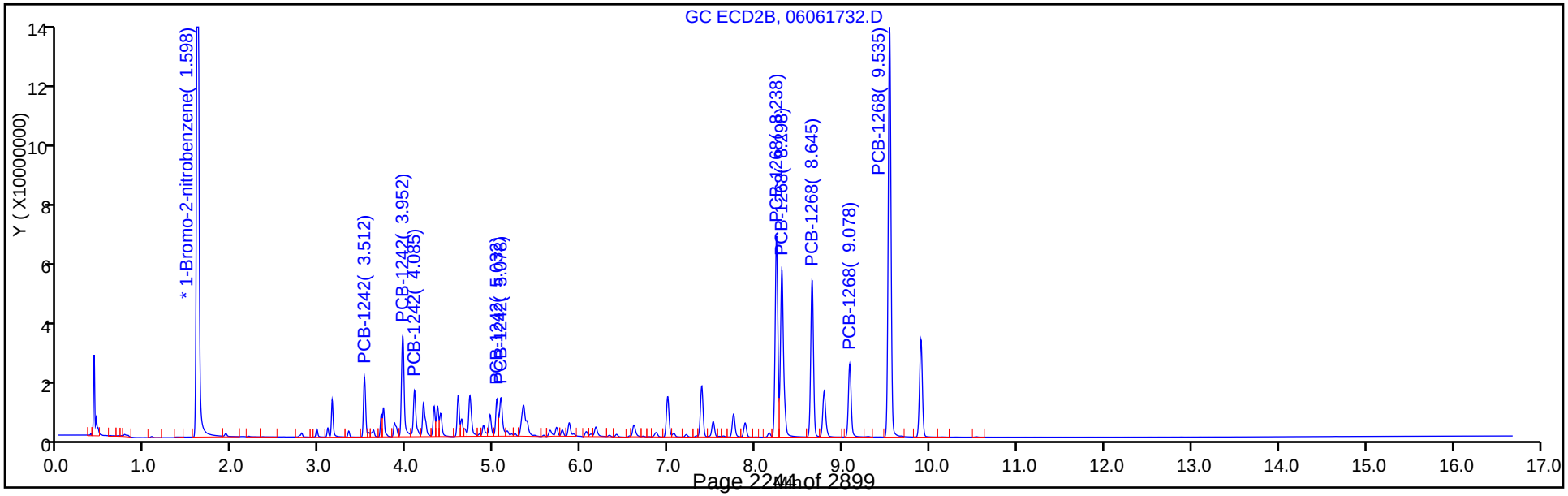
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061732.D

Injection Date:	07-Jun-2017 01:01:38	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL44268			Worklist Smp#:	32
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061733.D
Lims ID: STDL34268
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 07-Jun-2017 01:23:18 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL34268
Misc. Info.: 280-0059455-033
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:19 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.827	-0.001	341253589	1000.0	1000.0	
2	1.599	1.601	-0.002	385917675	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.486	3.487	-0.001	11134685	100.0	103.1	
1	3.952	3.951	0.001	23715179	100.0	100.8	
1	4.089	4.091	-0.002	10410653	100.0	101.7	
1	5.029	5.027	0.002	8605894	100.0	105.1	
1	5.052	5.054	-0.002	8218340	100.0	98.3	
		Average of Peak Amounts =				101.8	
2	3.512	3.511	0.001	15218261	100.0	110.0	
2	3.952	3.951	0.001	30927611	100.0	105.3	
2	4.086	4.087	-0.001	14198041	100.0	104.8	
2	5.032	5.031	0.001	9326503	100.0	97.5	
2	5.079	5.074	0.005	12794721	100.0	97.8	
		Average of Peak Amounts =				103.1	
						RPD = 1.27	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.112	8.111	0.001	54271619	100.0	101.1	
1	8.166	8.164	0.002	49772095	100.0	102.8	
1	8.436	8.437	-0.001	43210879	100.0	101.6	
1	8.949	8.947	0.002	21302708	100.0	105.5	
1	9.359	9.357	0.002	134431811	100.0	100.6	
		Average of Peak Amounts =				102.3	
2	8.239	8.237	0.002	61258487	100.0	106.4	
2	8.299	8.301	-0.002	61273778	100.0	108.0	
2	8.646	8.647	-0.001	49902329	100.0	106.6	
2	9.079	9.077	0.002	24173023	100.0	106.9	
2	9.536	9.537	-0.001	142487319	100.0	112.0	
		Average of Peak Amounts =				108.0	
						RPD = 5.39	
S 8 Polychlorinated biphenyls, Total							
1						204.1	
2						211.1	
						RPD = 3.36	

Reagents:

AR_4268_L3_00017	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

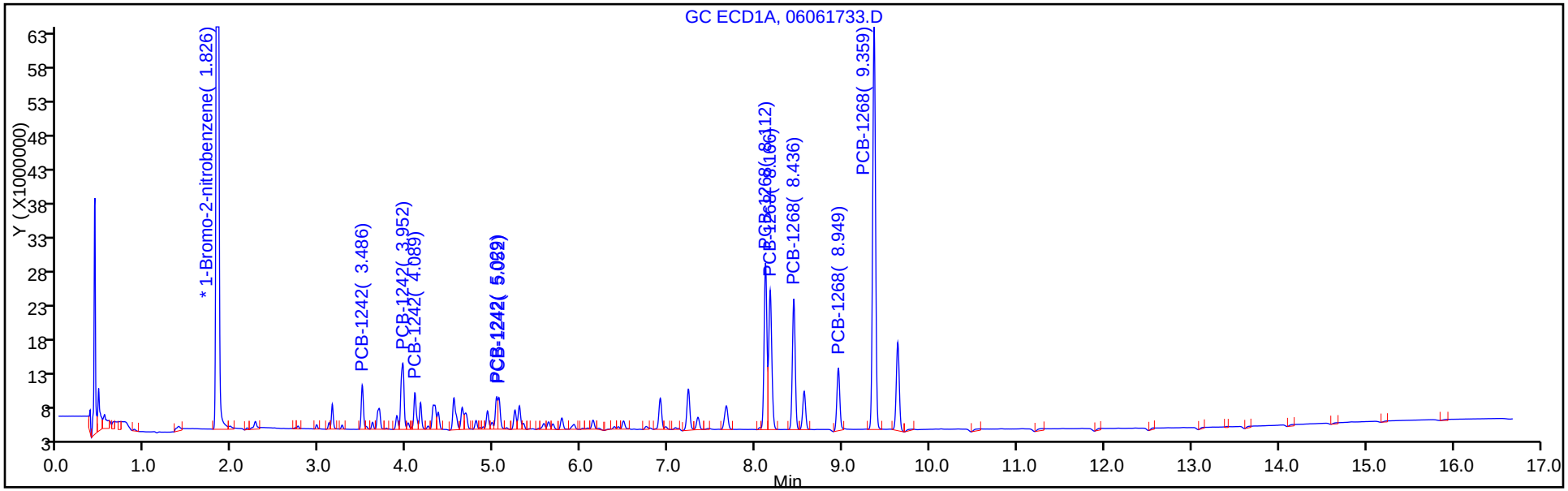
Report Date: 07-Jun-2017 06:53:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

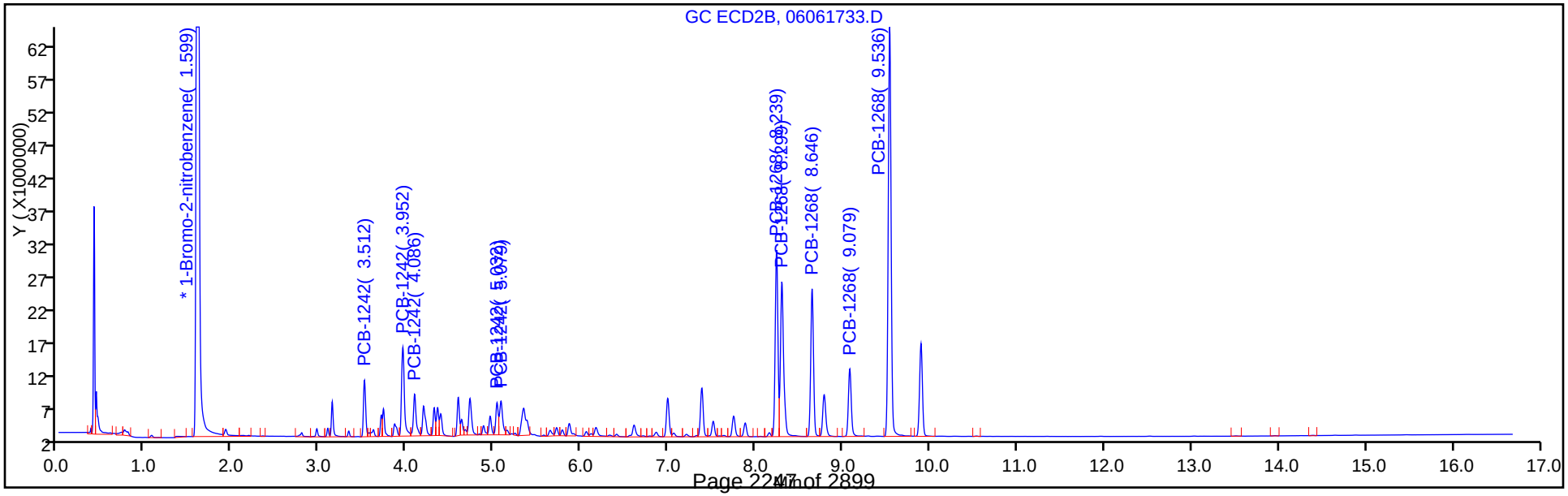
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061733.D

Injection Date:	07-Jun-2017 01:23:18	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL34268			Worklist Smp#:	33
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061734.D
Lims ID: STDL24268
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 07-Jun-2017 01:44:57 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL24268
Misc. Info.: 280-0059455-034
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:21 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.827	-0.001	340401659	1000.0	1000.0	
2	1.599	1.601	-0.002	381213212	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.486	3.487	-0.001	6334637	50.0	52.4	
1	3.953	3.951	0.002	12834381	50.0	51.0	
1	4.089	4.091	-0.002	5738481	50.0	50.4	
1	5.029	5.027	0.002	4650896	50.0	51.7	
1	5.053	5.054	-0.001	4647866	50.0	51.7	
		Average of Peak Amounts =				51.4	
2	3.513	3.511	0.002	8487710	50.0	52.5	
2	3.953	3.951	0.002	17236325	50.0	52.3	
2	4.089	4.087	0.002	8198701	50.0	53.1	
2	5.033	5.031	0.002	5702897	50.0	56.2	
2	5.079	5.074	0.005	8665327	50.0	59.5	
		Average of Peak Amounts =				54.7	
						RPD = 6.18	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.113	8.111	0.002	27715280	50.0	49.3	
1	8.166	8.164	0.002	26396914	50.0	51.0	
1	8.436	8.437	-0.001	23105572	50.0	51.2	
1	8.946	8.947	-0.001	11312963	50.0	51.3	
1	9.356	9.357	-0.001	71024384	50.0	50.9	
		Average of Peak Amounts =				50.7	
2	8.239	8.237	0.002	33504018	50.0	51.9	
2	8.299	8.301	-0.002	33651062	50.0	51.8	
2	8.646	8.647	-0.001	27314787	50.0	51.8	
2	9.079	9.077	0.002	13682052	50.0	53.5	
2	9.536	9.537	-0.001	62238620	50.0	43.0	
		Average of Peak Amounts =				50.4	
						RPD = 0.62	
S 8 Polychlorinated biphenyls, Total							
1						102.2	
2						105.1	
						RPD = 2.86	

Reagents:

AR_4268_L2_00017	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

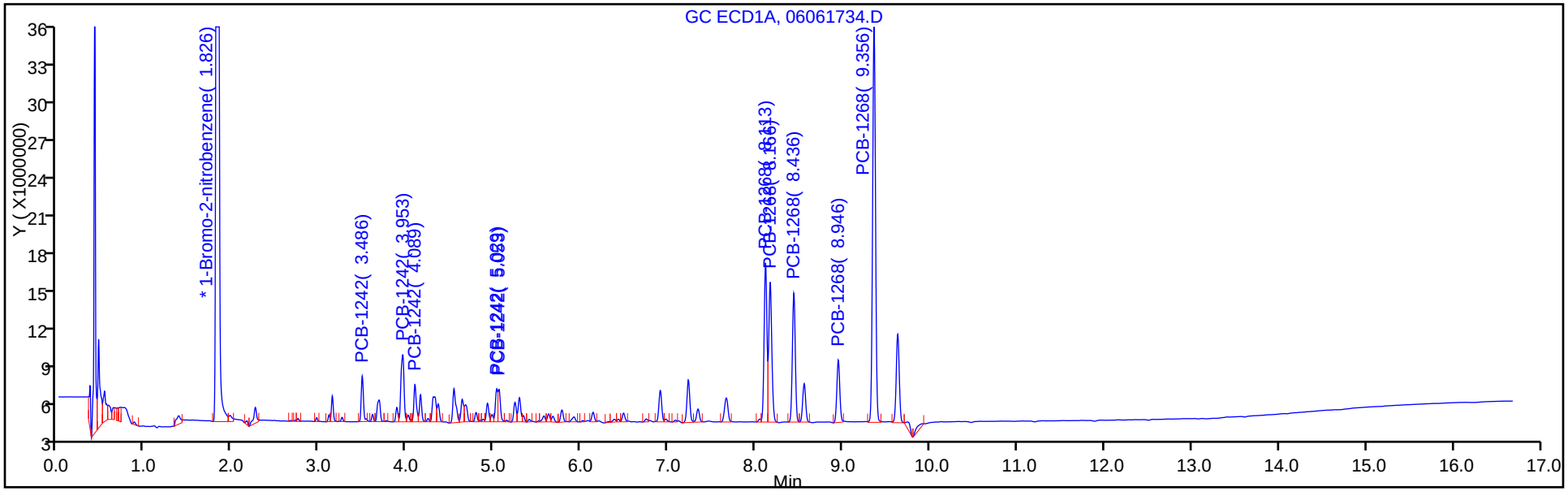
Report Date: 07-Jun-2017 06:53:21 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

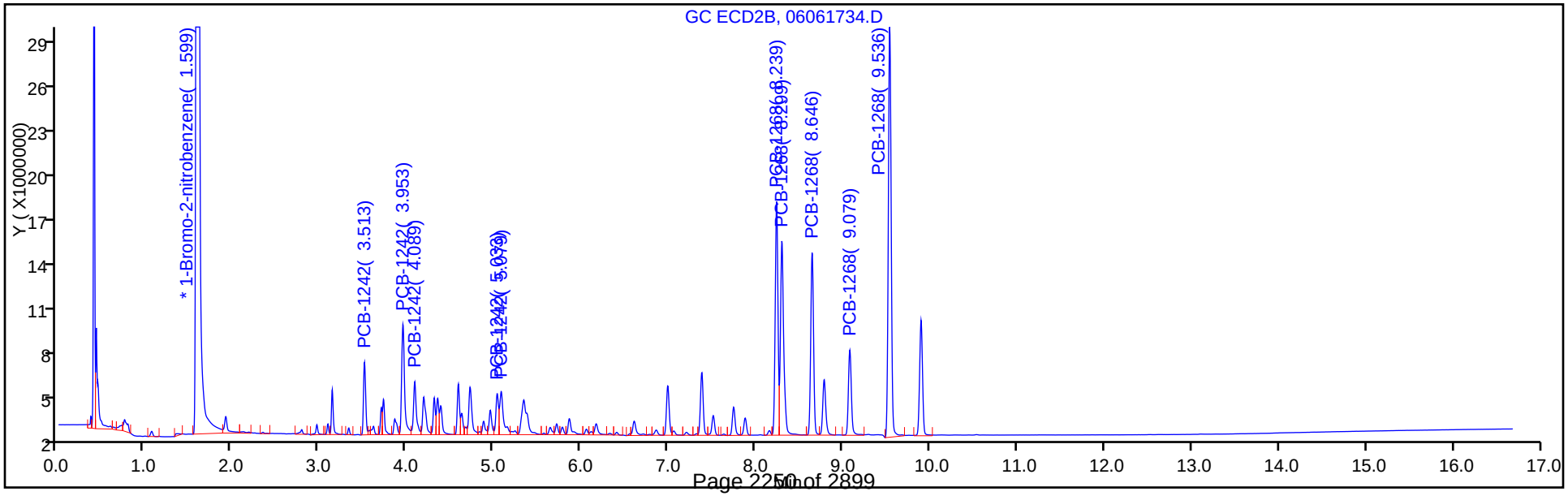
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061734.D

Injection Date:	07-Jun-2017 01:44:57	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL24268			Worklist Smp#:	34
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D
Lims ID: STDL14268
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 07-Jun-2017 02:06:36 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL14268
Misc. Info.: 280-0059455-035
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:47:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.827	-0.001	349490165	1000.0	1000.0	
2	1.599	1.601	-0.002	389549671	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.486	3.487	-0.001	3674493	25.0	23.2	
1	3.952	3.951	0.001	7351035	25.0	25.0	
1	4.089	4.091	-0.002	3494368	25.0	24.6	
1	5.029	5.027	0.002	2645013	25.0	23.5	
1	5.056	5.054	0.002	2638273	25.0	24.5	
		Average of Peak Amounts =				24.1	
2	3.512	3.511	0.001	4937680	25.0	20.4	
2	3.956	3.951	0.005	9815527	25.0	21.9	
2	4.089	4.087	0.002	4737116	25.0	21.5	
2	5.036	5.031	0.005	2914022	25.0	22.7	
2	5.082	5.074	0.008	4712376	25.0	20.4	
		Average of Peak Amounts =				21.4	
						RPD = 12.08	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.112	8.111	0.001	16180997	25.0	25.9	
1	8.166	8.164	0.002	15069585	25.0	24.9	
1	8.436	8.437	-0.001	13004037	25.0	24.8	
1	8.946	8.947	-0.001	6432094	25.0	23.7	
1	9.359	9.357	0.002	39317946	25.0	25.1	
		Average of Peak Amounts =				24.9	
2	8.239	8.237	0.002	19225655	25.0	22.3	
2	8.302	8.301	0.001	19663896	25.0	21.6	
2	8.646	8.647	-0.001	15779970	25.0	22.2	
2	9.079	9.077	0.002	7754270	25.0	21.6	
2	9.539	9.537	0.002	44047982	25.0	26.2	
		Average of Peak Amounts =				22.8	
						RPD = 8.78	
S 8 Polychlorinated biphenyls, Total							
1						49.0	
2						44.2	
						RPD = 10.39	

Reagents:

AR_4268_L1_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

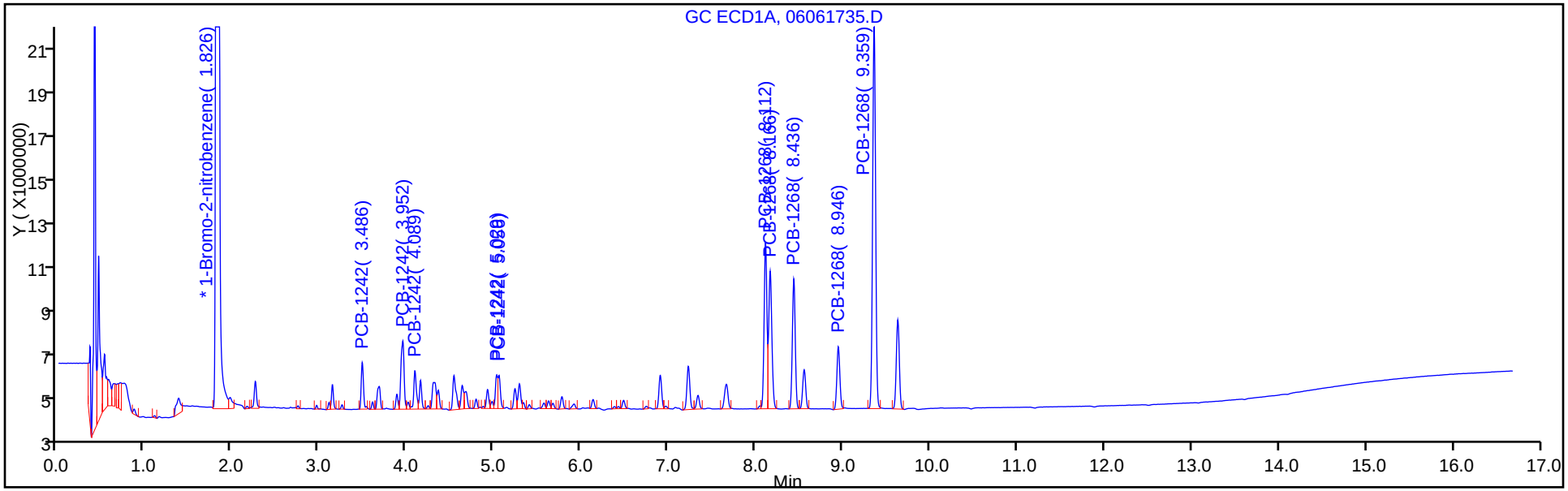
Report Date: 07-Jun-2017 06:53:23 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

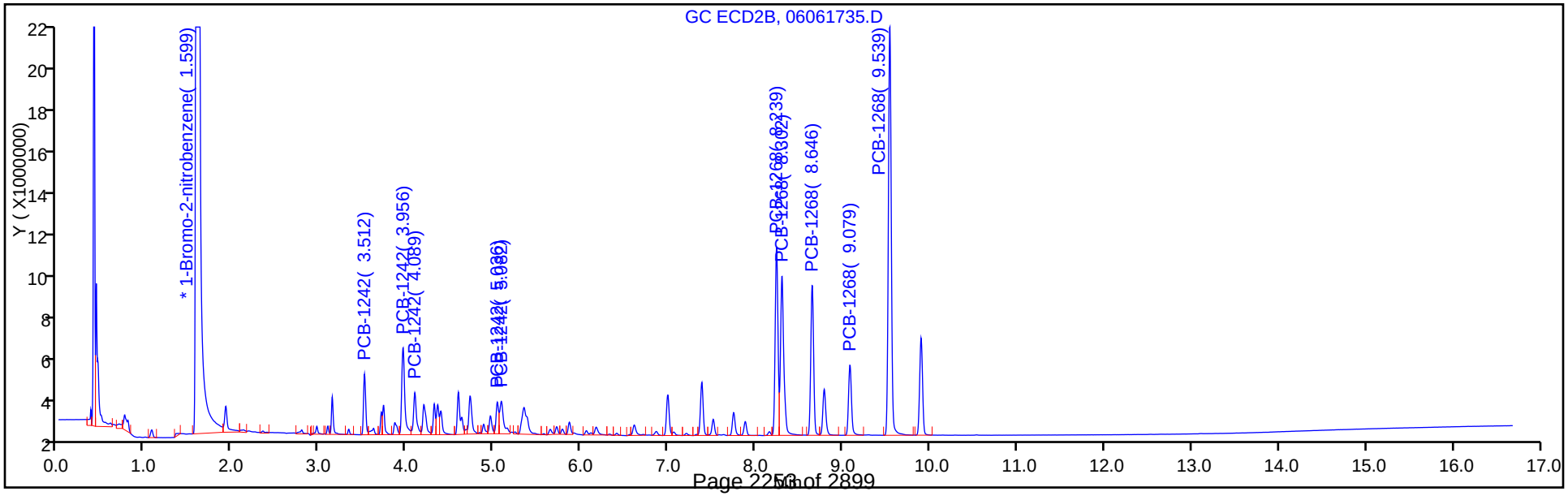
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Injection Date:	07-Jun-2017 02:06:36	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL14268			Worklist Smp#:	35
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 23:56 Calibration End Date: 06/07/2017 02:06 Calibration ID: 29402

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL14268 280-376236/35	06061735.D
Level 2	STDL24268 280-376236/34	06061734.D
Level 3	STDL34268 280-376236/33	06061733.D
Level 4	STDL44268 280-376236/32	06061732.D
Level 5	STDL54268 280-376236/31	06061731.D
Level 6	STDL64268 280-376236/30	06061730.D
Level 7	STDL74268 280-376236/29	06061729.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1242 Peak 1	0.5070 0.3114	0.4453 0.2978	0.3943	0.3455	0.3054	Lin1	6.5997	0.2985							0.9980		0.9900
PCB-1242 Peak 2	1.0079 0.6881	0.9043 0.6573	0.8014	0.7350	0.6627	Lin1	10.734	0.6594							0.9990		0.9900
PCB-1242 Peak 3	0.4864 0.3142	0.4301 0.2927	0.3679	0.3346	0.2976	Lin1	5.8039	0.2955							0.9980		0.9900
PCB-1242 Peak 4	0.2992 0.2353	0.2992 0.2226	0.2417	0.2326	0.2202	Lin1	2.4038	0.2232							0.9990		0.9900
PCB-1242 Peak 5	0.4839 0.2927	0.4546 0.2715	0.3315	0.3073	0.2762	Lin1	6.5398	0.2722							0.9970		0.9900
PCB-1268 Peak 1	1.9741 1.3390	1.7578 1.3113	1.5873	1.4209	1.3066	Lin1	20.395	1.2999							0.9990		0.9900
PCB-1268 Peak 2	2.0191 1.2982	1.7655 1.2658	1.5877	1.4159	1.2557	Lin1	23.323	1.2544							0.9990		0.9900
PCB-1268 Peak 3	1.6203 1.0853	1.4330 1.0618	1.2931	1.1598	1.0547	Lin1	17.145	1.0521							0.9990		0.9900
PCB-1268 Peak 4	0.7962 0.5192	0.7178 0.5084	0.6264	0.5535	0.4980	Lin1	9.1065	0.5009							0.9990		0.9900
PCB-1268 Peak 5	4.5230 3.0819	3.2653 3.0016	3.6922	3.0318	3.0263	Lin1	34.764	2.9856							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97803-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 23:56 Calibration End Date: 06/07/2017 02:06 Calibration ID: 29402

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL14268 280-376236/35	06061735.D
Level 2	STDL24268 280-376236/34	06061734.D
Level 3	STDL34268 280-376236/33	06061733.D
Level 4	STDL44268 280-376236/32	06061732.D
Level 5	STDL54268 280-376236/31	06061731.D
Level 6	STDL64268 280-376236/30	06061730.D
Level 7	STDL74268 280-376236/29	06061729.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1242 Peak 1	BNB	Lin1	4937680 87406129	8487710 111207386	15218261	33868899	60026238	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 2	BNB	Lin1	9815527 193160522	17236325 245465999	30927611	72054410	130260242	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 3	BNB	Lin1	4737116 88198812	8198701 109301278	14198041	32802033	58486099	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 4	BNB	Lin1	2914022 66046116	5702897 83124728	9326503	22808356	43289629	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 5	BNB	Lin1	4712376 82175931	8665327 101377377	12794721	30128035	54294666	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 1	BNB	Lin1	19225655 375862624	33504018 489685565	61258487	139301330	256821960	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 2	BNB	Lin1	19663896 364422945	33651062 472715160	61273778	138814681	246814466	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 3	BNB	Lin1	15779970 304637424	27314787 396502502	49902329	113703825	207312245	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 4	BNB	Lin1	7754270 145734267	13682052 189860561	24173023	54263572	97882118	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 5	BNB	Lin1	44047982 865114672	62238620 1120913687	142487319	297236332	594839483	25.0 750	50.0 1000	100	250	500

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061729.D
Lims ID: STDL74268
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 23:56:39 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL74268
Misc. Info.: 280-0059455-029
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:11 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	326738142	1000.0	1000.0	
2	1.600	1.600	0.000	373438498	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.487	3.487	0.000	91708535	1000.0	999.1	
1	3.950	3.951	-0.001	213025667	1000.0	1011.7	
1	4.090	4.091	-0.001	88378438	1000.0	1004.3	
1	5.027	5.027	0.000	71750055	1000.0	1003.1	
1	5.054	5.054	0.000	74299071	1000.0	1005.9	
		Average of Peak Amounts =				1004.8	
2	3.510	3.511	-0.001	111207386	1000.0	975.4	
2	3.950	3.951	-0.001	245465999	1000.0	980.5	
2	4.084	4.087	-0.003	109301278	1000.0	970.7	
2	5.027	5.031	-0.004	83124728	1000.0	986.4	
2	5.074	5.074	0.000	101377377	1000.0	973.2	
		Average of Peak Amounts =				977.3	
						RPD = 2.78	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.114	8.111	0.003	495331868	1000.0	1007.1	
1	8.167	8.164	0.003	441196713	1000.0	1016.6	
1	8.437	8.437	0.000	387907316	1000.0	1012.0	
1	8.947	8.947	0.000	178840786	1000.0	1006.1	
1	9.357	9.357	0.000	1237299243	1000.0	1010.2	
		Average of Peak Amounts =				1010.4	
2	8.237	8.237	0.000	489685565	1000.0	993.1	
2	8.300	8.301	-0.001	472715160	1000.0	990.5	
2	8.647	8.647	0.000	396502502	1000.0	992.9	
2	9.080	9.077	0.003	189860561	1000.0	996.9	
2	9.537	9.537	0.000	1120913687	1000.0	993.7	
		Average of Peak Amounts =				993.4	
						RPD = 1.70	
S 8 Polychlorinated biphenyls, Total							
1						2015.2	
2						1970.7	
						RPD = 2.23	

Reagents:

AR_4268_L7_00013	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

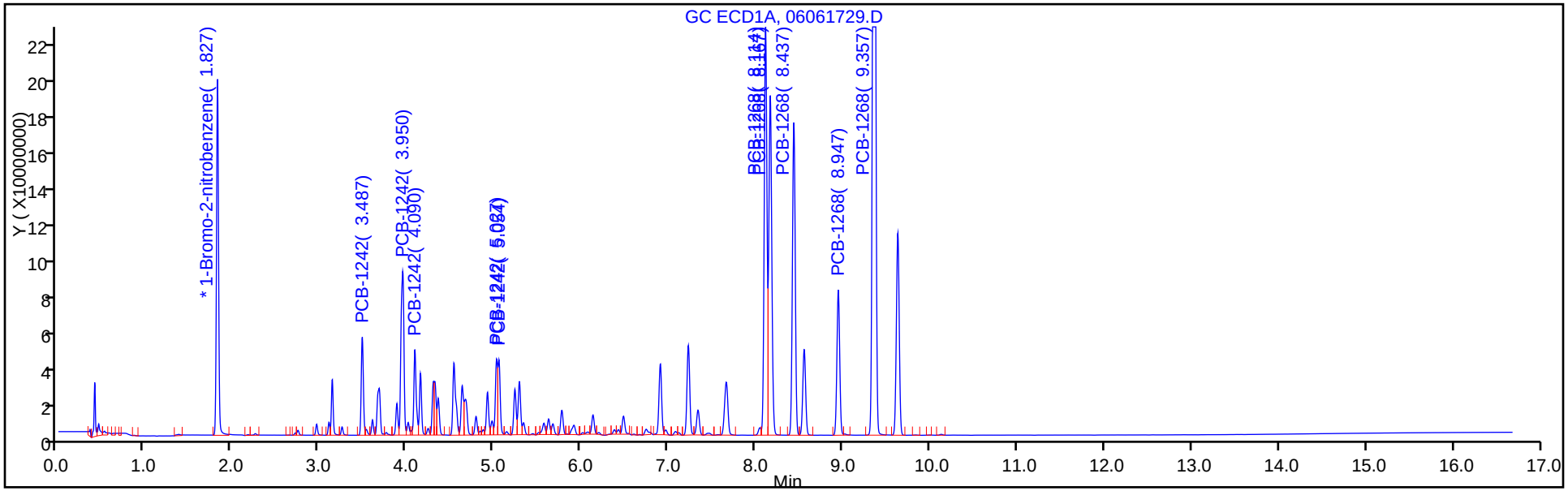
Report Date: 07-Jun-2017 06:53:12 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

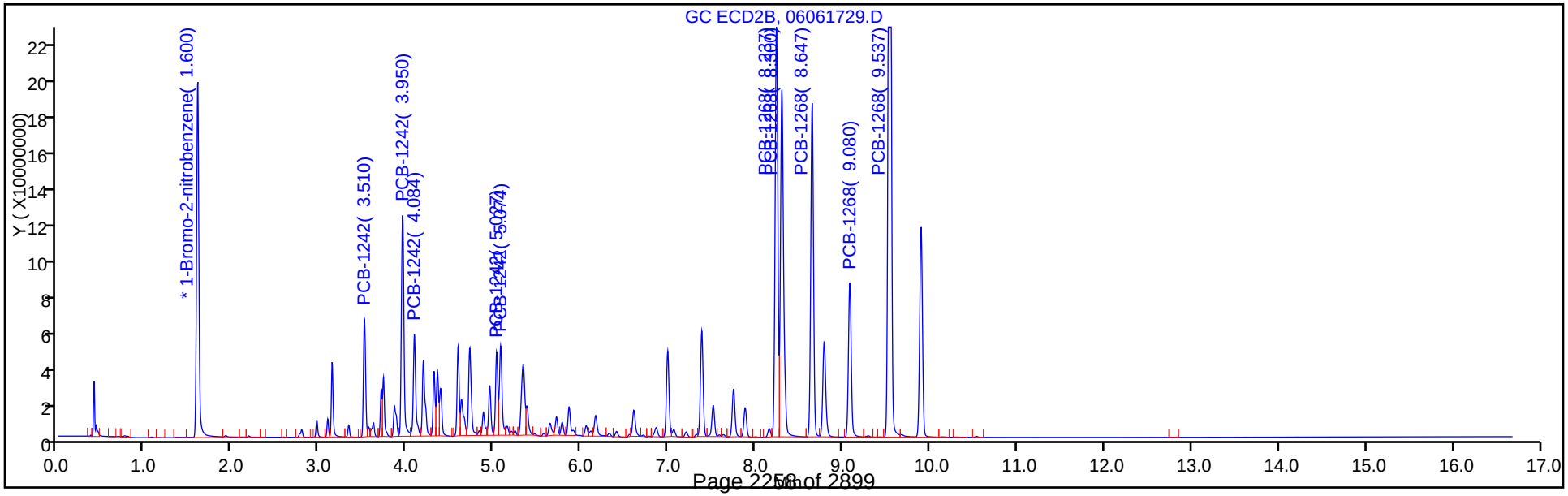
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061729.D

Injection Date:	06-Jun-2017 23:56:39	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL74268			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061730.D
Lims ID: STDL64268
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 07-Jun-2017 00:18:17 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL64268
Misc. Info.: 280-0059455-030
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:13 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	331265536	1000.0	1000.0	
2	1.600	1.600	0.000	374274762	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.487	3.487	0.000	70020435	750.0	748.7	
1	3.950	3.951	-0.001	160614929	750.0	750.3	
1	4.090	4.091	-0.001	67049695	750.0	748.2	
1	5.027	5.027	0.000	54684692	750.0	751.2	
1	5.053	5.054	-0.001	55742619	750.0	742.0	
		Average of Peak Amounts =				748.1	
2	3.510	3.511	-0.001	87406129	750.0	760.2	
2	3.950	3.951	-0.001	193160522	750.0	766.4	
2	4.084	4.087	-0.003	88198812	750.0	777.7	
2	5.027	5.031	-0.004	66046116	750.0	779.8	
2	5.073	5.074	-0.001	82175931	750.0	782.5	
		Average of Peak Amounts =				773.3	
						RPD = 3.32	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.113	8.111	0.002	376220426	750.0	753.2	
1	8.163	8.164	-0.001	329159696	750.0	746.0	
1	8.437	8.437	0.000	291651767	750.0	748.6	
1	8.947	8.947	0.000	135309757	750.0	748.1	
1	9.357	9.357	0.000	931831022	750.0	749.1	
		Average of Peak Amounts =				749.0	
2	8.237	8.237	0.000	375862624	750.0	756.9	
2	8.300	8.301	-0.001	364422945	750.0	757.6	
2	8.647	8.647	0.000	304637424	750.0	757.3	
2	9.077	9.077	0.000	145734267	750.0	759.2	
2	9.537	9.537	0.000	865114672	750.0	762.6	
		Average of Peak Amounts =				758.7	
						RPD = 1.29	
S 8 Polychlorinated biphenyls, Total							
1						1497.1	
2						1532.0	
						RPD = 2.31	

Reagents:

AR_4268_L6_00015	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

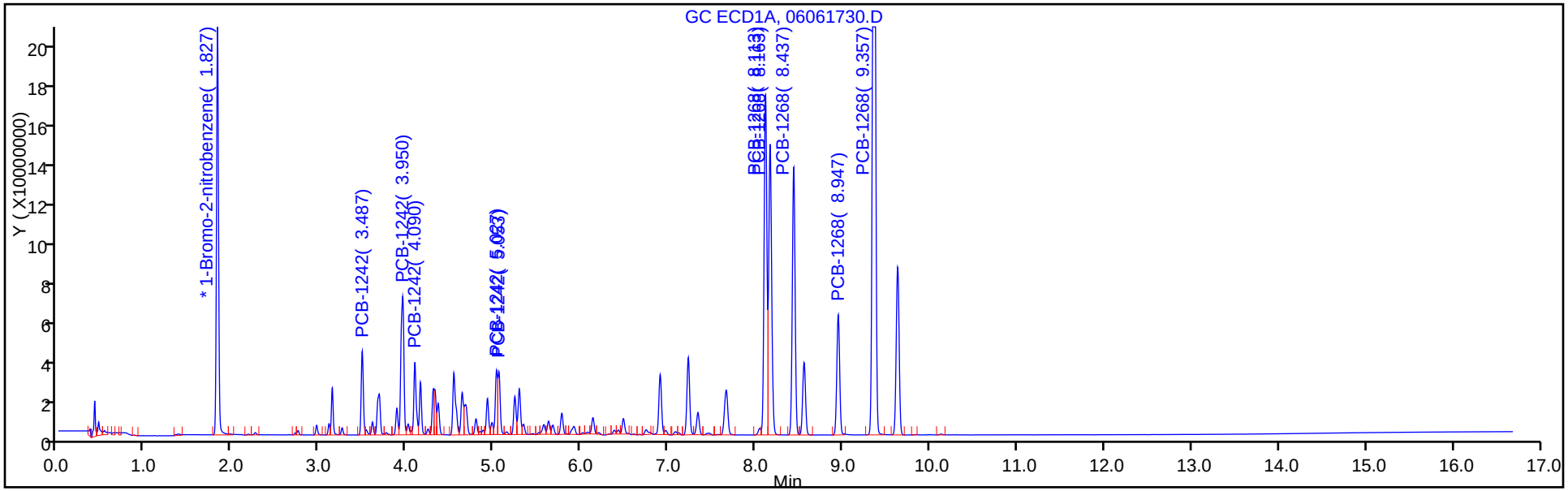
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TestAmerica Denver

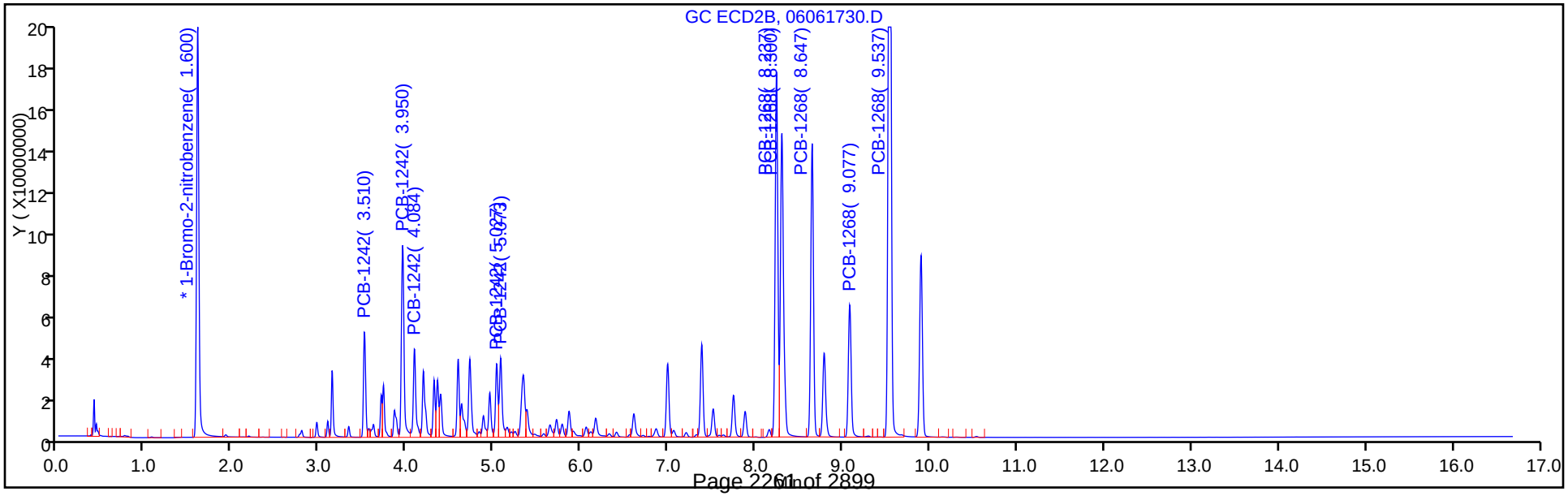
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061730.D

Injection Date:	07-Jun-2017 00:18:17	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL64268			Worklist Smp#:	30
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061731.D
Lims ID: STDL54268
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 07-Jun-2017 00:39:57 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL54268
Misc. Info.: 280-0059455-031
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:15 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:39:12

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	334569204	1000.0	1000.0	
2	1.601	1.601	0.000	393108124	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							M
1	3.487	3.487	0.000	47551350	500.0	498.6	
1	3.951	3.951	0.000	106978681	500.0	492.1	
1	4.091	4.091	0.000	45330386	500.0	496.6	
1	5.027	5.027	0.000	36710146	500.0	495.5	
1	5.054	5.054	0.000	38229137	500.0	500.9	
		Average of Peak Amounts =				496.7	
2	3.511	3.511	0.000	60026238	500.0	489.4	M
2	3.951	3.951	0.000	130260242	500.0	486.2	M
2	4.087	4.087	0.000	58486099	500.0	483.8	M
2	5.031	5.031	0.000	43289629	500.0	482.6	M
2	5.074	5.074	0.000	54294666	500.0	483.4	M
		Average of Peak Amounts =				485.1	
						RPD = 2.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.111	8.111	0.000	252241454	500.0	498.3	
1	8.164	8.164	0.000	221446416	500.0	494.3	
1	8.437	8.437	0.000	195576665	500.0	494.7	
1	8.947	8.947	0.000	91399906	500.0	496.9	
1	9.357	9.357	0.000	626046071	500.0	496.6	
		Average of Peak Amounts =				496.2	
2	8.237	8.237	0.000	256821960	500.0	486.9	
2	8.301	8.301	0.000	246814466	500.0	481.9	
2	8.647	8.647	0.000	207312245	500.0	484.9	
2	9.077	9.077	0.000	97882118	500.0	478.9	
2	9.537	9.537	0.000	594839483	500.0	495.2	
		Average of Peak Amounts =				485.6	
						RPD = 2.16	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_4268_L5_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

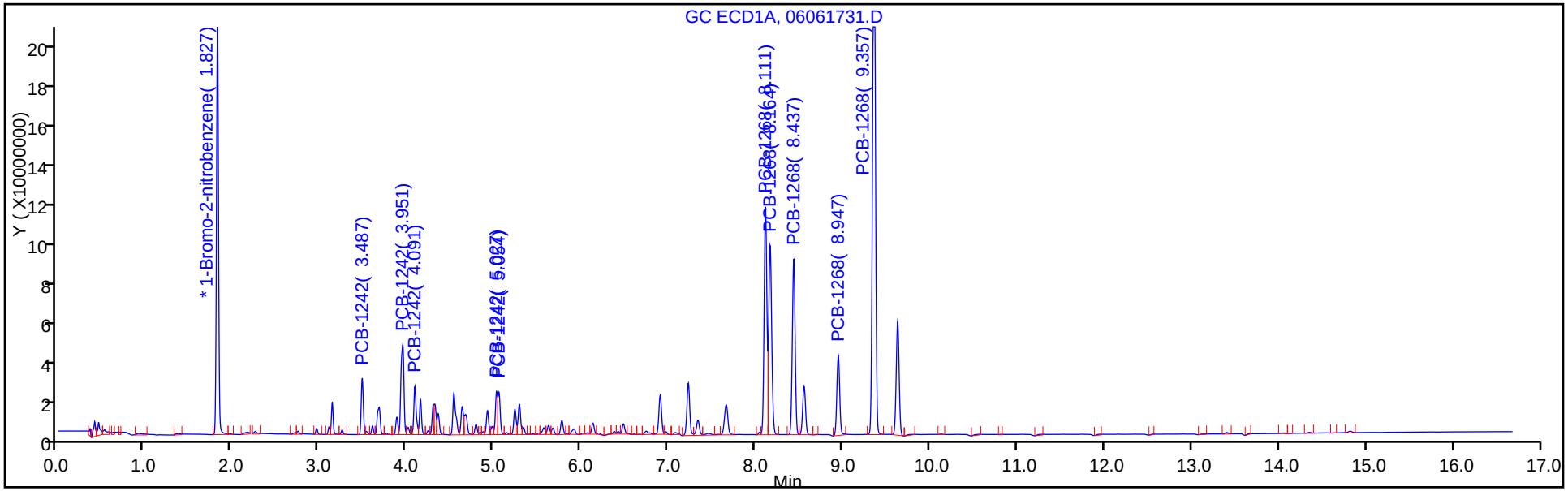
Report Date: 07-Jun-2017 06:53:16 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

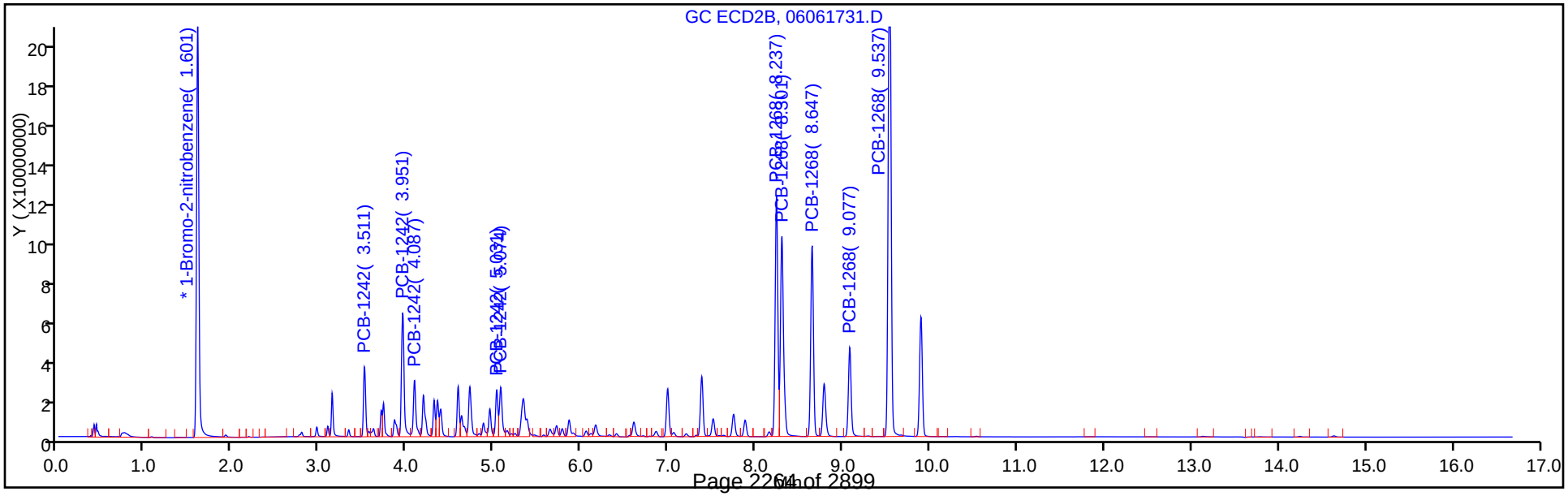
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061731.D

Injection Date:	07-Jun-2017 00:39:57	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL54268			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:53:16 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061731.D

Injection Date: 07-Jun-2017 00:39:57 Instrument ID: SGC_P3

Lims ID: STDL54268

Client ID:

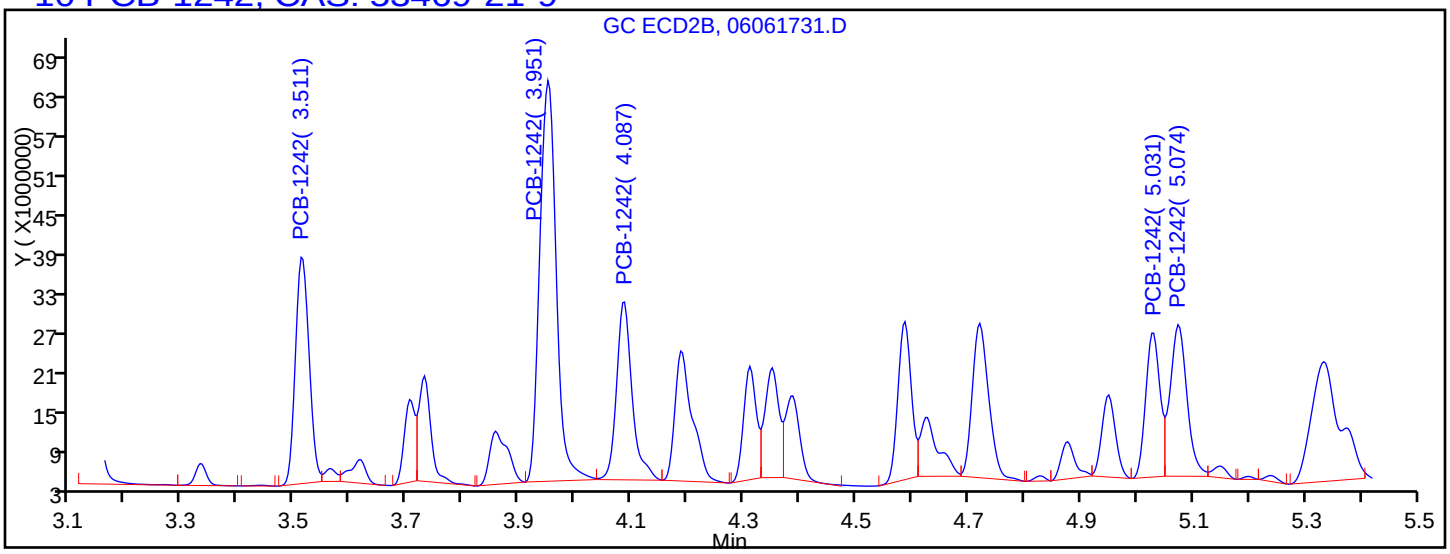
Operator ID: jax ALS Bottle#: 31 Worklist Smp#: 31

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

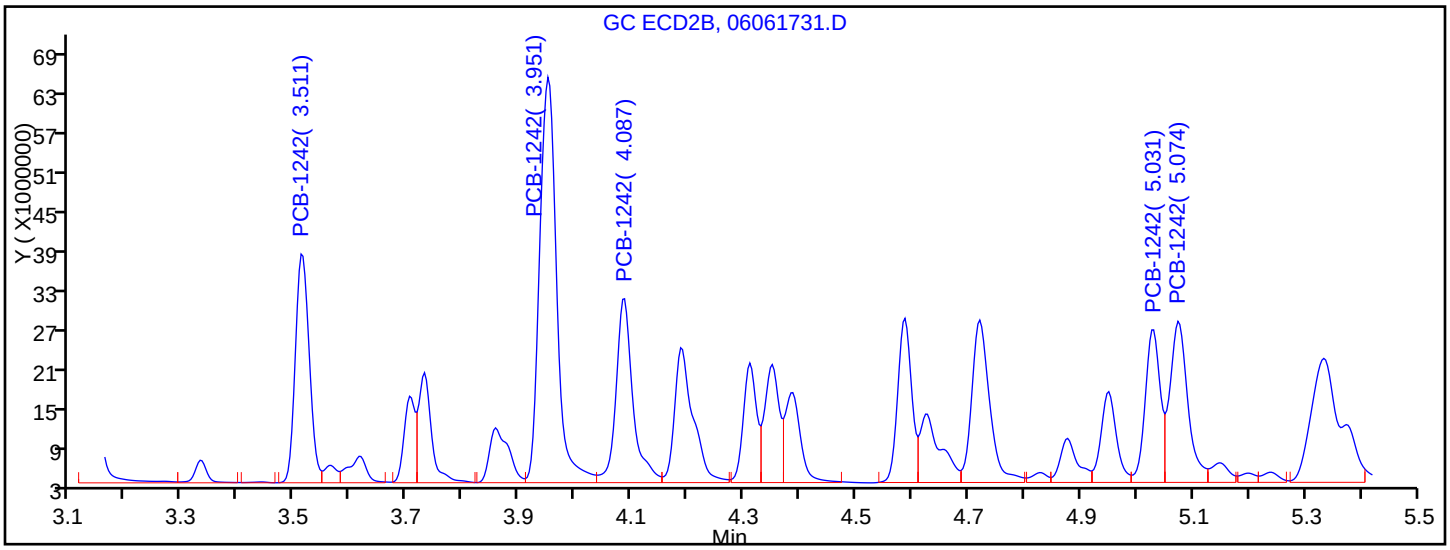
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

10 PCB-1242, CAS: 53469-21-9



Processing Integration Results

3.511	Response = 58435883
3.951	Response = 124311311
4.087	Response = 52071618
5.031	Response = 38724194
5.074	Response = 47725539



Manual Integration Results

3.511	Response = 60026238	M
3.951	Response = 130260242	M
4.087	Response = 58486099	M
5.031	Response = 43289629	M
5.074	Response = 54294666	M

Reviewer: jacksonto, 07-Jun-2017 06:40:13

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061732.D
Lims ID: STDL44268
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 07-Jun-2017 01:01:38 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL44268
Misc. Info.: 280-0059455-032
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:17 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.827	0.001	350069398	1000.0	1000.0	
2	1.598	1.601	-0.003	392158539	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.488	3.487	0.001	25661290	250.0	250.0	
1	3.952	3.951	0.001	56434653	250.0	244.2	
1	4.092	4.091	0.001	24410165	250.0	249.2	
1	5.028	5.027	0.001	19431100	250.0	245.0	
1	5.055	5.054	0.001	20462038	250.0	251.7	
		Average of Peak Amounts =				248.0	
2	3.512	3.511	0.001	33868899	250.0	267.2	
2	3.952	3.951	0.001	72054410	250.0	262.4	
2	4.085	4.087	-0.002	32802033	250.0	263.4	
2	5.032	5.031	0.001	22808356	250.0	249.8	
2	5.078	5.074	0.004	30128035	250.0	258.2	
		Average of Peak Amounts =				260.2	
						RPD = 4.79	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.112	8.111	0.001	128607568	250.0	240.2	
1	8.165	8.164	0.001	114090191	250.0	239.4	
1	8.438	8.437	0.001	101656959	250.0	242.2	
1	8.948	8.947	0.001	47849944	250.0	243.4	
1	9.358	9.357	0.001	323246560	250.0	242.5	
		Average of Peak Amounts =				241.5	
2	8.238	8.237	0.001	139301330	250.0	257.6	
2	8.298	8.301	-0.003	138814681	250.0	263.6	
2	8.645	8.647	-0.002	113703825	250.0	259.3	
2	9.078	9.077	0.001	54263572	250.0	258.1	
2	9.535	9.537	-0.002	297236332	250.0	242.2	
		Average of Peak Amounts =				256.1	
						RPD = 5.87	
S 8 Polychlorinated biphenyls, Total							
1						489.6	
2						516.3	
						RPD = 5.32	

Reagents:

AR_4268_L4_00020	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

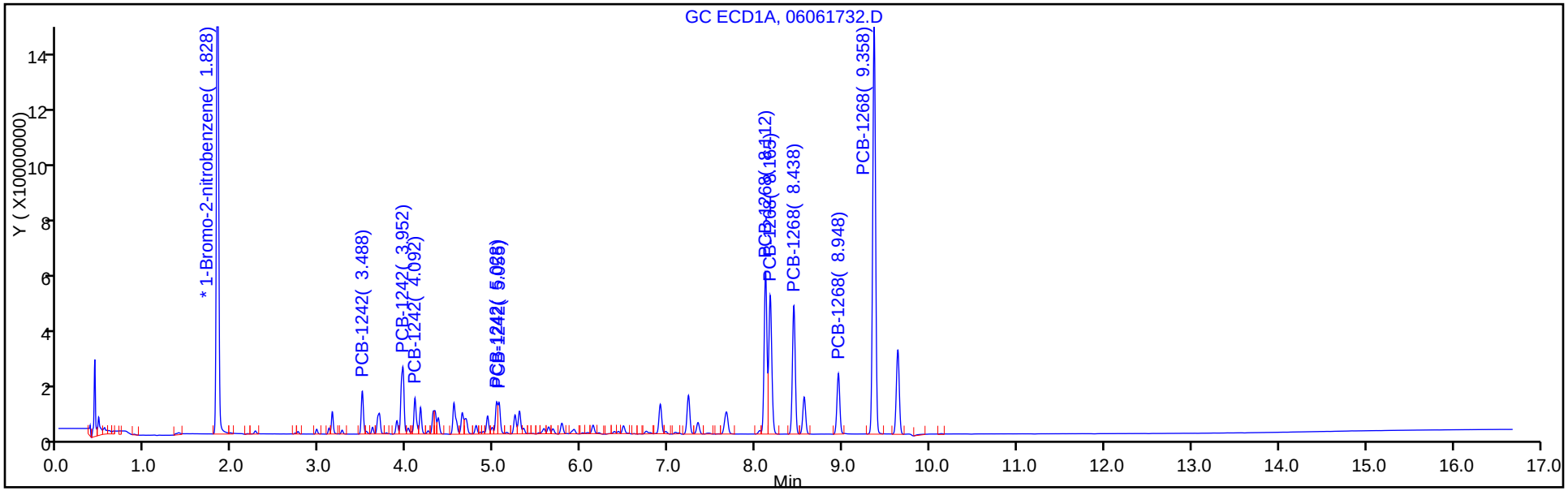
Report Date: 07-Jun-2017 06:53:18 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

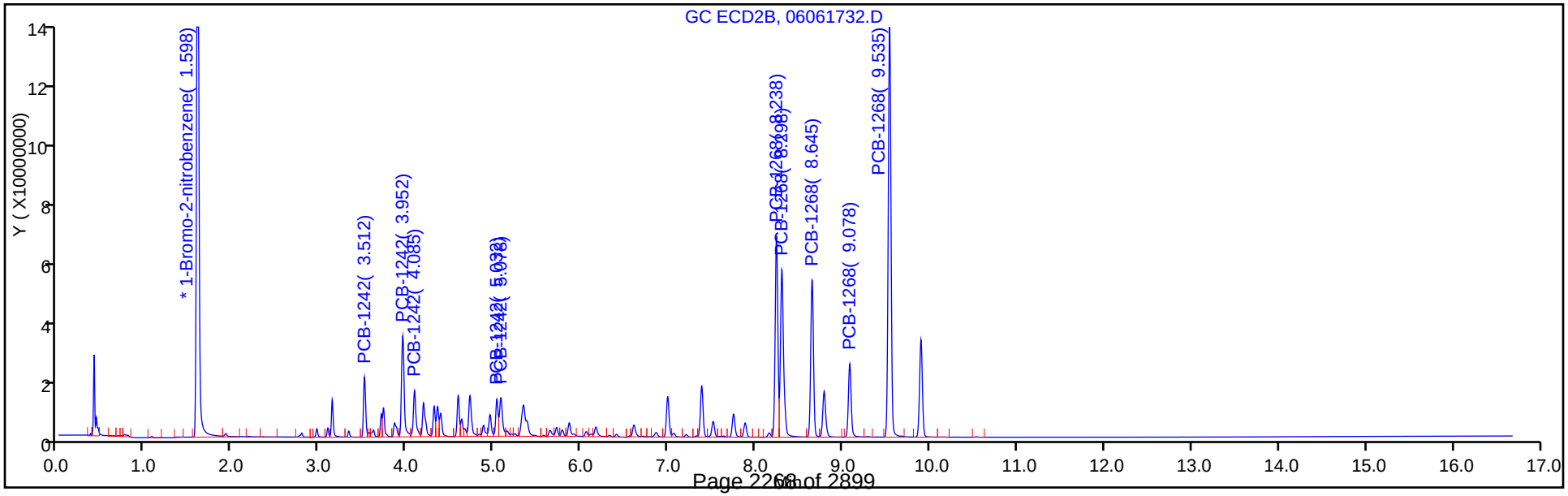
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061732.D

Injection Date:	07-Jun-2017 01:01:38	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL44268			Worklist Smp#:	32
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061733.D
Lims ID: STDL34268
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 07-Jun-2017 01:23:18 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL34268
Misc. Info.: 280-0059455-033
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:19 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.827	-0.001	341253589	1000.0	1000.0	
2	1.599	1.601	-0.002	385917675	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.486	3.487	-0.001	11134685	100.0	103.1	
1	3.952	3.951	0.001	23715179	100.0	100.8	
1	4.089	4.091	-0.002	10410653	100.0	101.7	
1	5.029	5.027	0.002	8605894	100.0	105.1	
1	5.052	5.054	-0.002	8218340	100.0	98.3	
		Average of Peak Amounts =				101.8	
2	3.512	3.511	0.001	15218261	100.0	110.0	
2	3.952	3.951	0.001	30927611	100.0	105.3	
2	4.086	4.087	-0.001	14198041	100.0	104.8	
2	5.032	5.031	0.001	9326503	100.0	97.5	
2	5.079	5.074	0.005	12794721	100.0	97.8	
		Average of Peak Amounts =				103.1	
						RPD = 1.27	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.112	8.111	0.001	54271619	100.0	101.1	
1	8.166	8.164	0.002	49772095	100.0	102.8	
1	8.436	8.437	-0.001	43210879	100.0	101.6	
1	8.949	8.947	0.002	21302708	100.0	105.5	
1	9.359	9.357	0.002	134431811	100.0	100.6	
		Average of Peak Amounts =				102.3	
2	8.239	8.237	0.002	61258487	100.0	106.4	
2	8.299	8.301	-0.002	61273778	100.0	108.0	
2	8.646	8.647	-0.001	49902329	100.0	106.6	
2	9.079	9.077	0.002	24173023	100.0	106.9	
2	9.536	9.537	-0.001	142487319	100.0	112.0	
		Average of Peak Amounts =				108.0	
						RPD = 5.39	
S 8 Polychlorinated biphenyls, Total							
1						204.1	
2						211.1	
						RPD = 3.36	

Reagents:

AR_4268_L3_00017	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

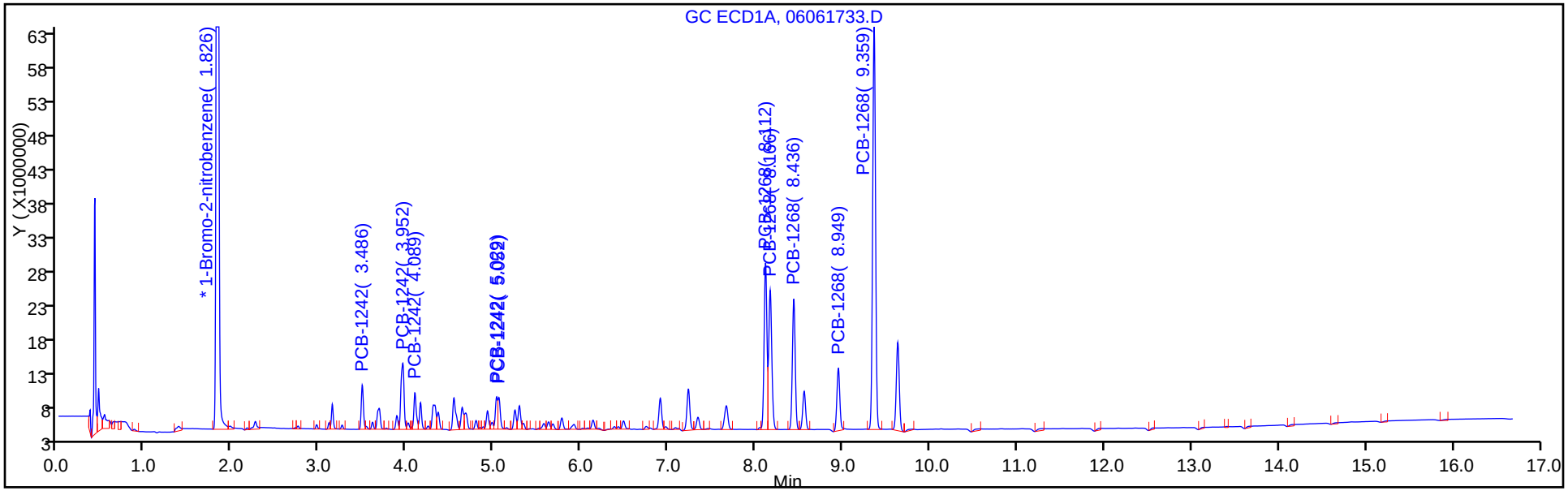
Report Date: 07-Jun-2017 06:53:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

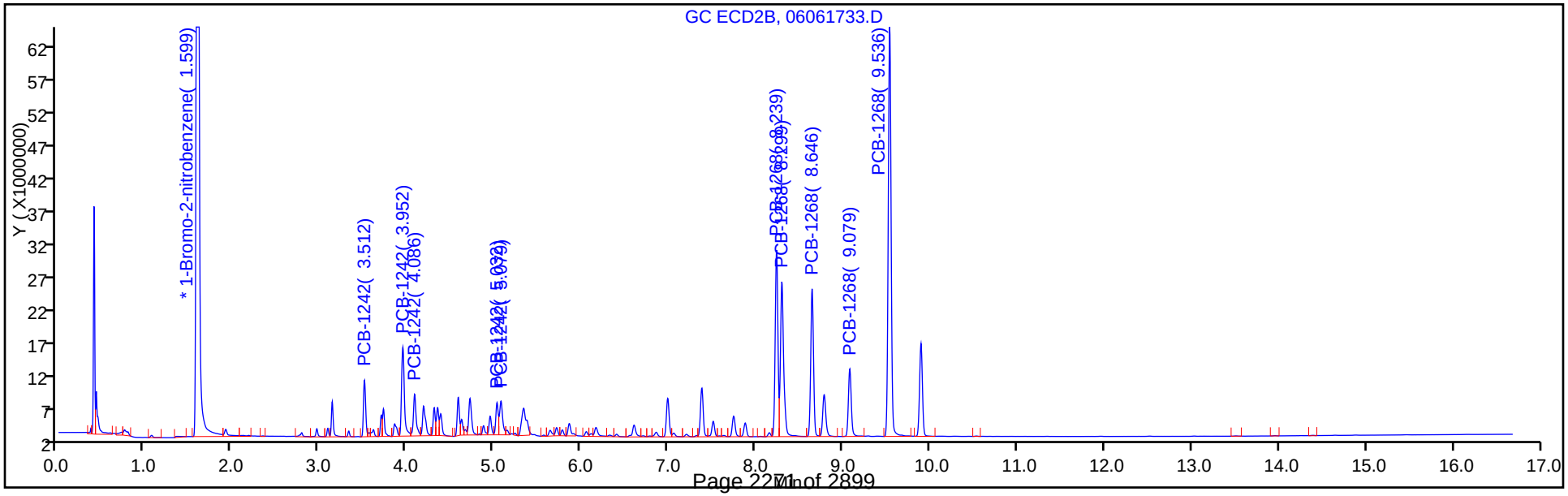
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061733.D

Injection Date:	07-Jun-2017 01:23:18	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL34268			Worklist Smp#:	33
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061734.D
Lims ID: STDL24268
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 07-Jun-2017 01:44:57 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL24268
Misc. Info.: 280-0059455-034
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:21 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.827	-0.001	340401659	1000.0	1000.0	
2	1.599	1.601	-0.002	381213212	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.486	3.487	-0.001	6334637	50.0	52.4	
1	3.953	3.951	0.002	12834381	50.0	51.0	
1	4.089	4.091	-0.002	5738481	50.0	50.4	
1	5.029	5.027	0.002	4650896	50.0	51.7	
1	5.053	5.054	-0.001	4647866	50.0	51.7	
		Average of Peak Amounts =				51.4	
2	3.513	3.511	0.002	8487710	50.0	52.5	
2	3.953	3.951	0.002	17236325	50.0	52.3	
2	4.089	4.087	0.002	8198701	50.0	53.1	
2	5.033	5.031	0.002	5702897	50.0	56.2	
2	5.079	5.074	0.005	8665327	50.0	59.5	
		Average of Peak Amounts =				54.7	
						RPD = 6.18	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.113	8.111	0.002	27715280	50.0	49.3	
1	8.166	8.164	0.002	26396914	50.0	51.0	
1	8.436	8.437	-0.001	23105572	50.0	51.2	
1	8.946	8.947	-0.001	11312963	50.0	51.3	
1	9.356	9.357	-0.001	71024384	50.0	50.9	
		Average of Peak Amounts =				50.7	
2	8.239	8.237	0.002	33504018	50.0	51.9	
2	8.299	8.301	-0.002	33651062	50.0	51.8	
2	8.646	8.647	-0.001	27314787	50.0	51.8	
2	9.079	9.077	0.002	13682052	50.0	53.5	
2	9.536	9.537	-0.001	62238620	50.0	43.0	
		Average of Peak Amounts =				50.4	
						RPD = 0.62	
S 8 Polychlorinated biphenyls, Total							
1						102.2	
2						105.1	
						RPD = 2.86	

Reagents:

AR_4268_L2_00017	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

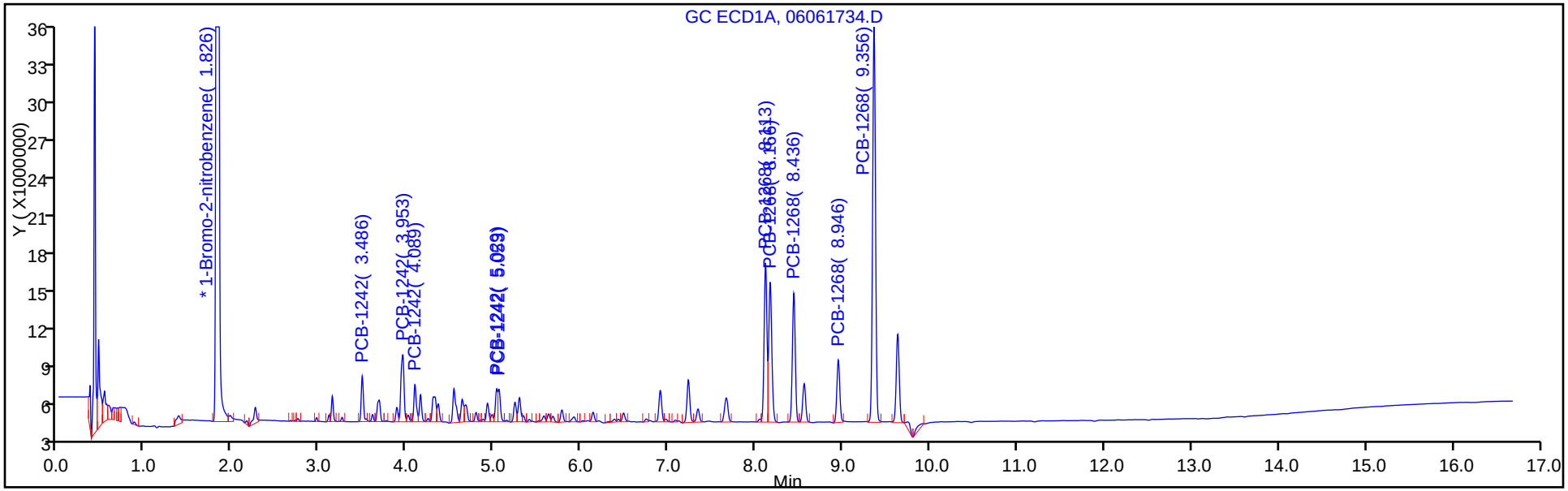
Report Date: 07-Jun-2017 06:53:21 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

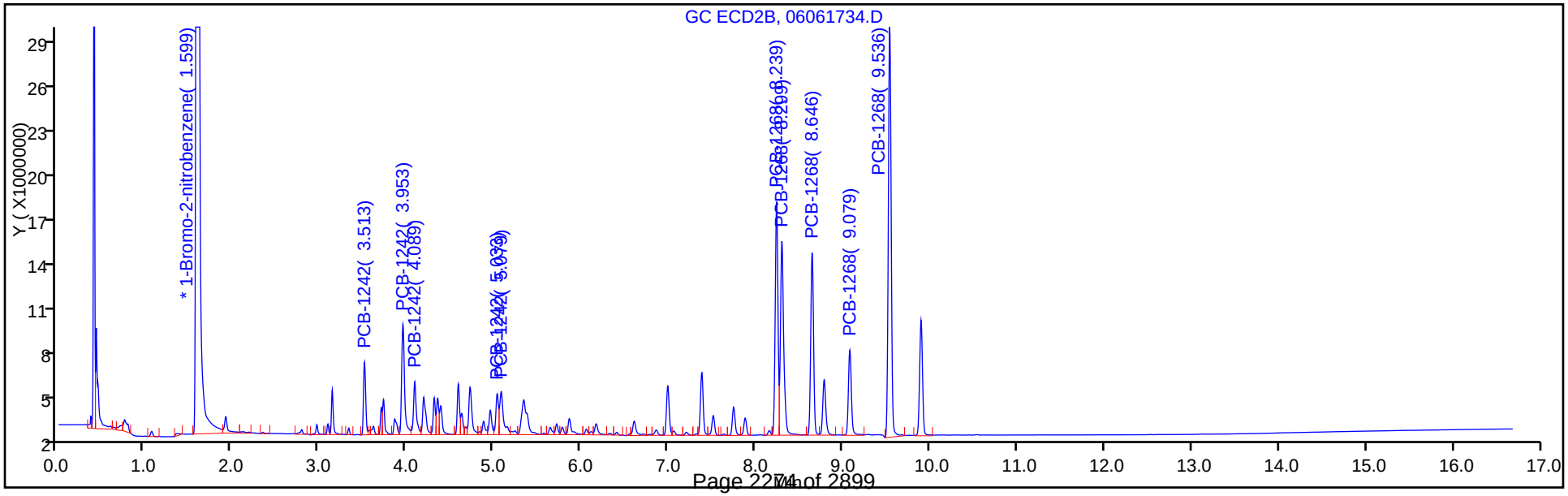
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061734.D

Injection Date:	07-Jun-2017 01:44:57	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL24268			Worklist Smp#:	34
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D
Lims ID: STDL14268
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 07-Jun-2017 02:06:36 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL14268
Misc. Info.: 280-0059455-035
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:47:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.827	-0.001	349490165	1000.0	1000.0	
2	1.599	1.601	-0.002	389549671	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.486	3.487	-0.001	3674493	25.0	23.2	
1	3.952	3.951	0.001	7351035	25.0	25.0	
1	4.089	4.091	-0.002	3494368	25.0	24.6	
1	5.029	5.027	0.002	2645013	25.0	23.5	
1	5.056	5.054	0.002	2638273	25.0	24.5	
		Average of Peak Amounts =				24.1	
2	3.512	3.511	0.001	4937680	25.0	20.4	
2	3.956	3.951	0.005	9815527	25.0	21.9	
2	4.089	4.087	0.002	4737116	25.0	21.5	
2	5.036	5.031	0.005	2914022	25.0	22.7	
2	5.082	5.074	0.008	4712376	25.0	20.4	
		Average of Peak Amounts =				21.4	
						RPD = 12.08	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.112	8.111	0.001	16180997	25.0	25.9	
1	8.166	8.164	0.002	15069585	25.0	24.9	
1	8.436	8.437	-0.001	13004037	25.0	24.8	
1	8.946	8.947	-0.001	6432094	25.0	23.7	
1	9.359	9.357	0.002	39317946	25.0	25.1	
		Average of Peak Amounts =				24.9	
2	8.239	8.237	0.002	19225655	25.0	22.3	
2	8.302	8.301	0.001	19663896	25.0	21.6	
2	8.646	8.647	-0.001	15779970	25.0	22.2	
2	9.079	9.077	0.002	7754270	25.0	21.6	
2	9.539	9.537	0.002	44047982	25.0	26.2	
		Average of Peak Amounts =				22.8	
						RPD = 8.78	
S 8 Polychlorinated biphenyls, Total							
1						49.0	
2						44.2	
						RPD = 10.39	

Reagents:

AR_4268_L1_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

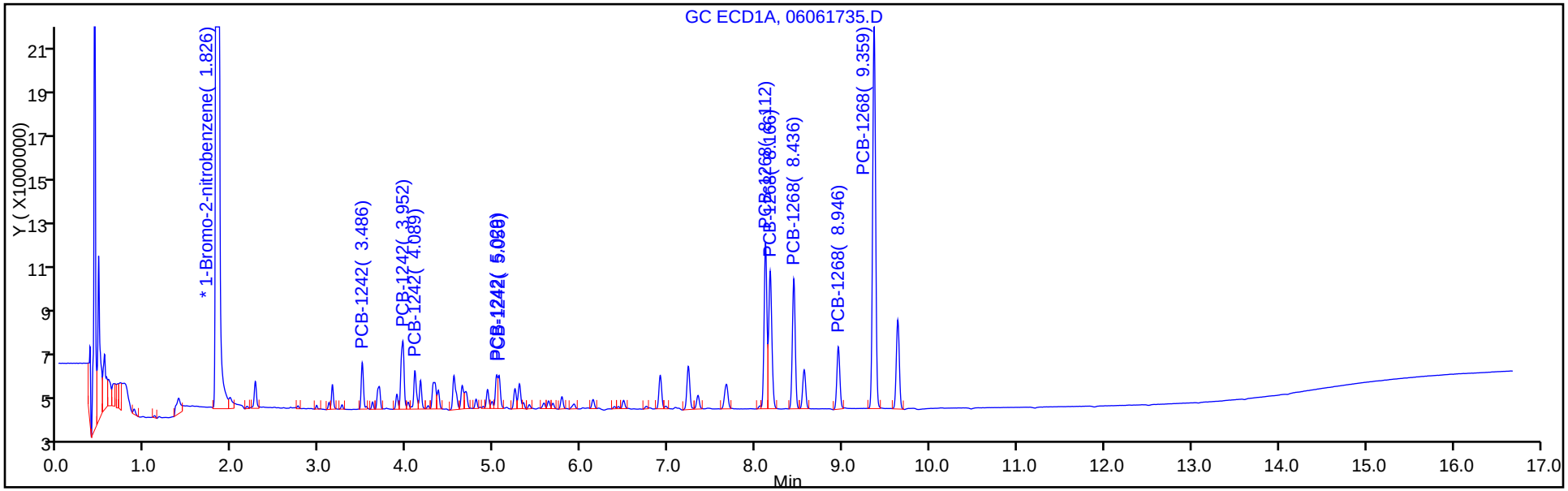
Report Date: 07-Jun-2017 06:53:23 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

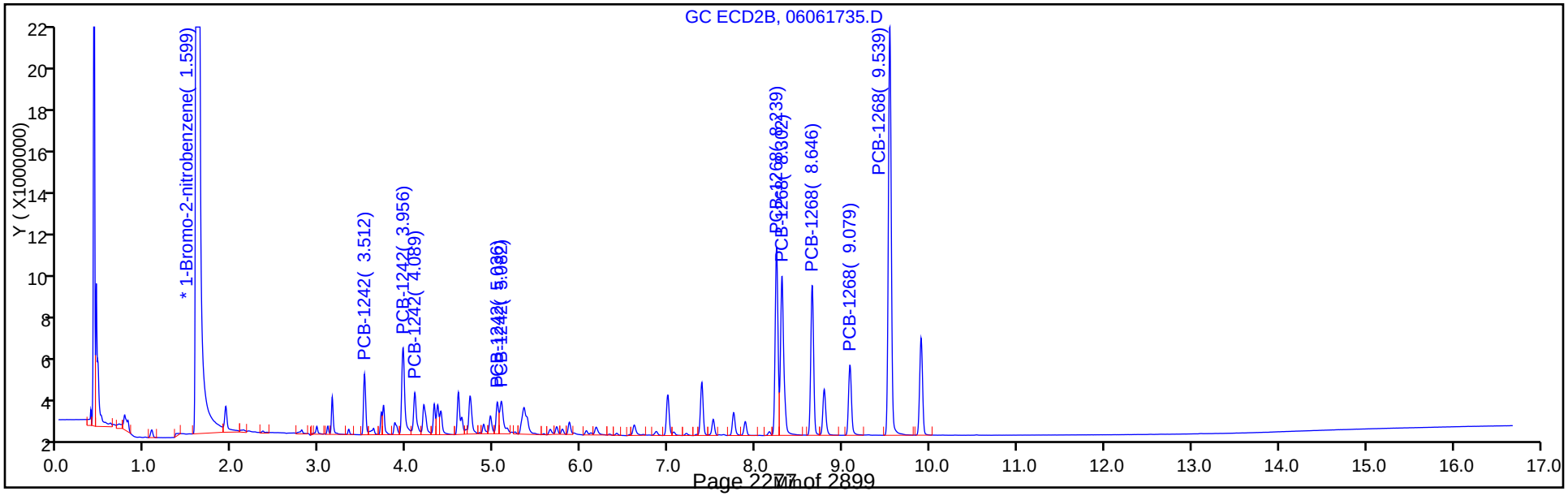
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Injection Date:	07-Jun-2017 02:06:36	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL14268			Worklist Smp#:	35
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-376236/36 Calibration Date: 06/07/2017 02:28

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 13:49

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 15:59

Lab File ID: 06061736.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Lin1		0.1630		254	250	1.7	20.0
PCB-1248 Peak 2	Lin1		0.4264		247	250	-1.1	20.0
PCB-1248 Peak 3	Lin1		0.4453		250	250	0.0	20.0
PCB-1248 Peak 4	Lin1		0.4447		253	250	1.0	20.0
PCB-1248 Peak 5	Lin1		0.3252		251	250	0.5	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-376236/36 Calibration Date: 06/07/2017 02:28

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 13:49

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 15:59

Lab File ID: 06061736.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1248 Peak 1	3.49	3.24	3.74
PCB-1248 Peak 2	3.95	3.70	4.20
PCB-1248 Peak 3	4.30	4.05	4.55
PCB-1248 Peak 4	4.54	4.29	4.79
PCB-1248 Peak 5	5.29	5.04	5.54

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061736.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Jun-2017 02:28:13 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0059455-036
Operator ID: jax Instrument ID: SGC_P3
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:47:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.827	-0.002	350254462	1000.0	1000.0	
2	1.598	1.601	-0.003	389956483	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							
1	3.485	3.486	-0.001	14275550	250.0	254.2	
1	3.948	3.946	0.002	37339460	250.0	247.3	
1	4.302	4.302	0.000	38995407	250.0	250.0	
1	4.538	4.539	-0.001	38935476	250.0	252.6	
1	5.288	5.289	-0.001	28479069	250.0	251.2	
		Average of Peak Amounts =				251.1	
2	3.952	3.949	0.003	48844636	250.0	262.8	
2	4.585	4.586	-0.001	37170114	250.0	258.9	
2	4.722	4.719	0.003	44822000	250.0	268.1	
2	5.028	5.029	-0.001	38926573	250.0	245.5	
2	5.075	5.072	0.003	51606018	250.0	270.1	
		Average of Peak Amounts =				261.1	
						RPD = 3.91	

Reagents:

AR_1248_ICV_00011 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

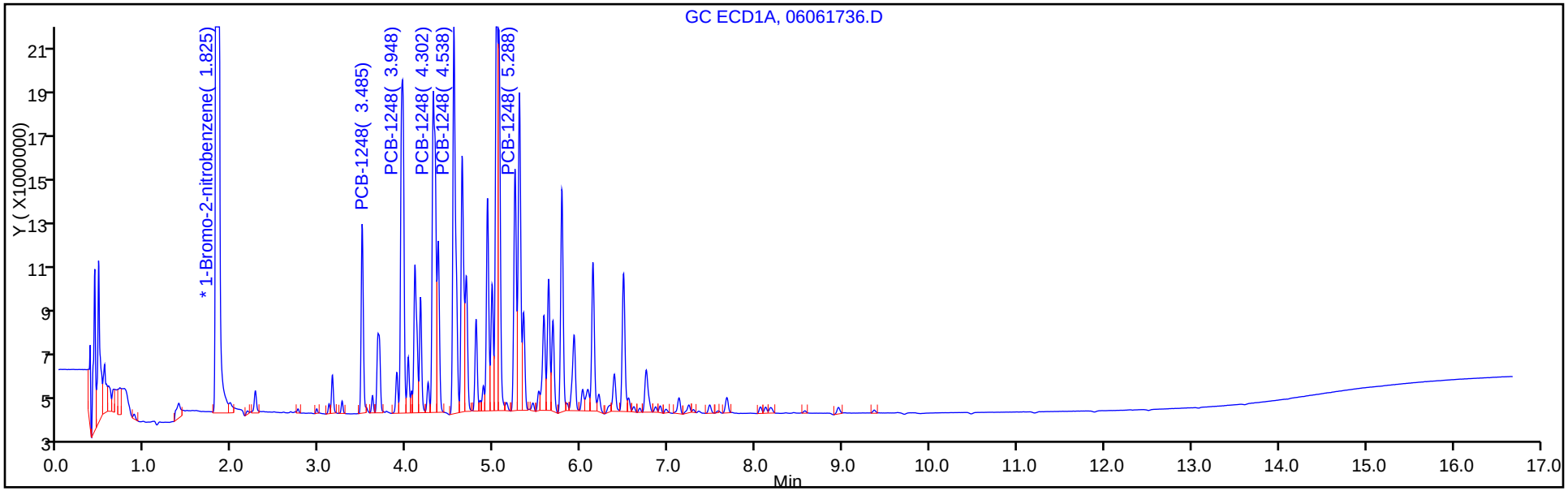
Report Date: 07-Jun-2017 06:53:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

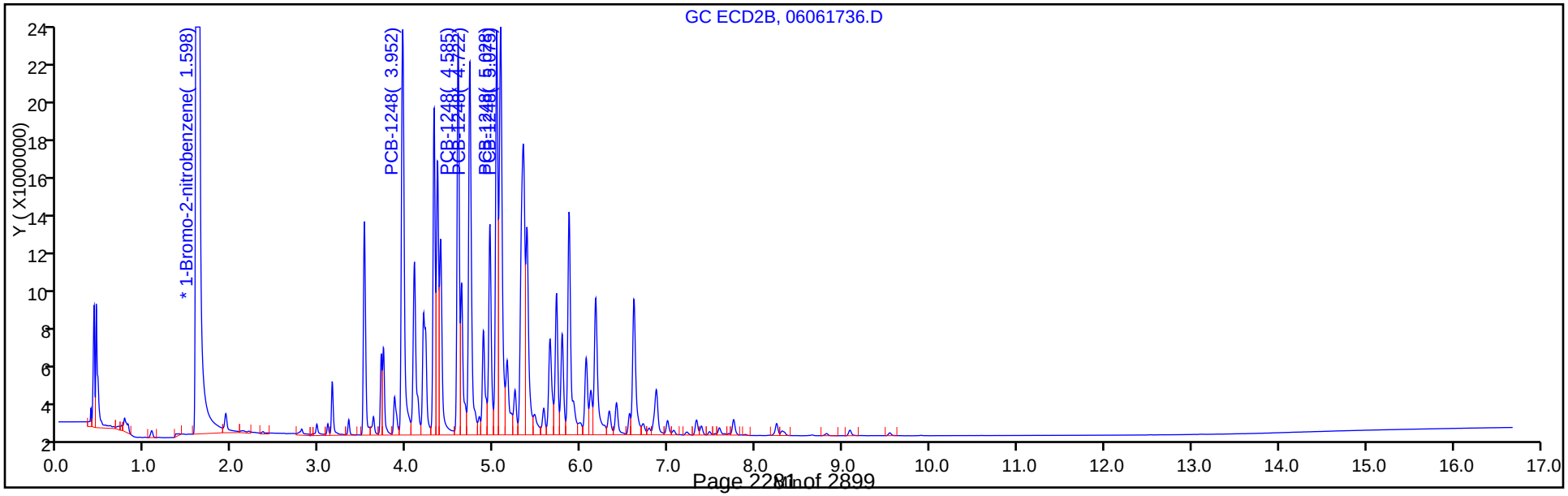
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061736.D

Injection Date:	07-Jun-2017 02:28:13	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	ICV			Worklist Smp#:	36
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-376236/36 Calibration Date: 06/07/2017 02:28

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 13:49

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 15:59

Lab File ID: 06061736.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Lin1		0.5010		263	250	5.1	20.0
PCB-1248 Peak 2	Lin1		0.3813		259	250	3.6	20.0
PCB-1248 Peak 3	Lin1		0.4598		268	250	7.2	20.0
PCB-1248 Peak 4	Lin1		0.3993		246	250	-1.8	20.0
PCB-1248 Peak 5	Lin1		0.5294		270	250	8.0	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-376236/36 Calibration Date: 06/07/2017 02:28

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 13:49

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 15:59

Lab File ID: 06061736.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1248 Peak 1	3.95	3.70	4.20
PCB-1248 Peak 2	4.59	4.34	4.84
PCB-1248 Peak 3	4.72	4.47	4.97
PCB-1248 Peak 4	5.03	4.78	5.28
PCB-1248 Peak 5	5.08	4.82	5.32

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061736.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Jun-2017 02:28:13 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0059455-036
Operator ID: jax Instrument ID: SGC_P3
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:47:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.827	-0.002	350254462	1000.0	1000.0	
2	1.598	1.601	-0.003	389956483	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							
1	3.485	3.486	-0.001	14275550	250.0	254.2	
1	3.948	3.946	0.002	37339460	250.0	247.3	
1	4.302	4.302	0.000	38995407	250.0	250.0	
1	4.538	4.539	-0.001	38935476	250.0	252.6	
1	5.288	5.289	-0.001	28479069	250.0	251.2	
		Average of Peak Amounts =				251.1	
2	3.952	3.949	0.003	48844636	250.0	262.8	
2	4.585	4.586	-0.001	37170114	250.0	258.9	
2	4.722	4.719	0.003	44822000	250.0	268.1	
2	5.028	5.029	-0.001	38926573	250.0	245.5	
2	5.075	5.072	0.003	51606018	250.0	270.1	
		Average of Peak Amounts =				261.1	
						RPD = 3.91	

Reagents:

AR_1248_ICV_00011 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

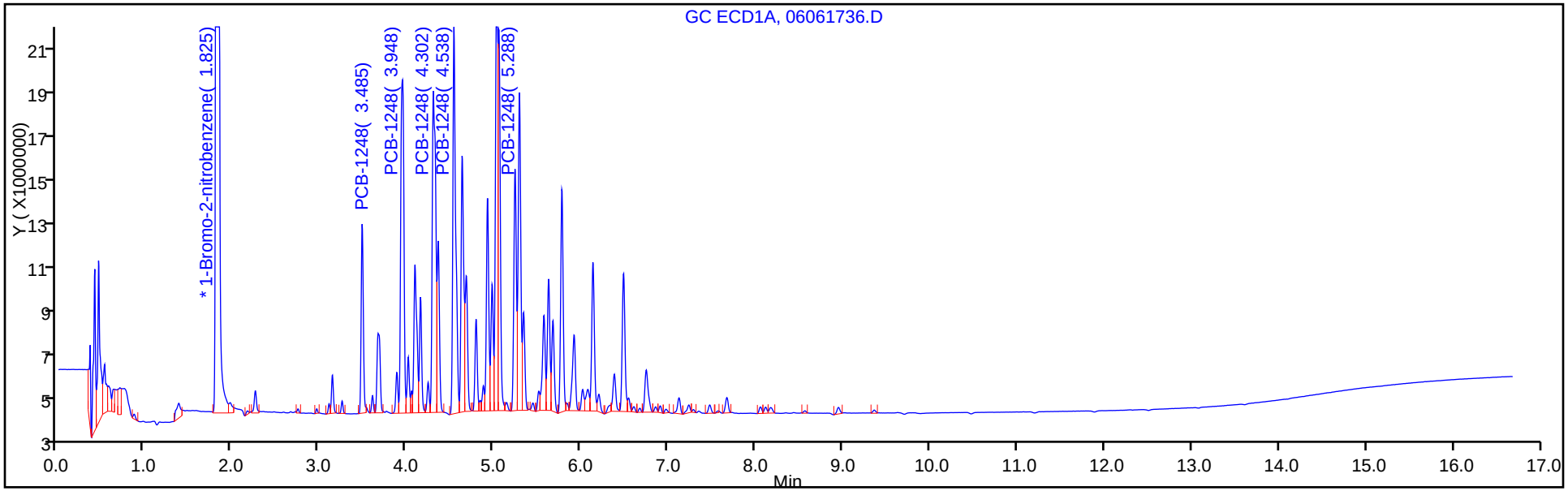
Report Date: 07-Jun-2017 06:53:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

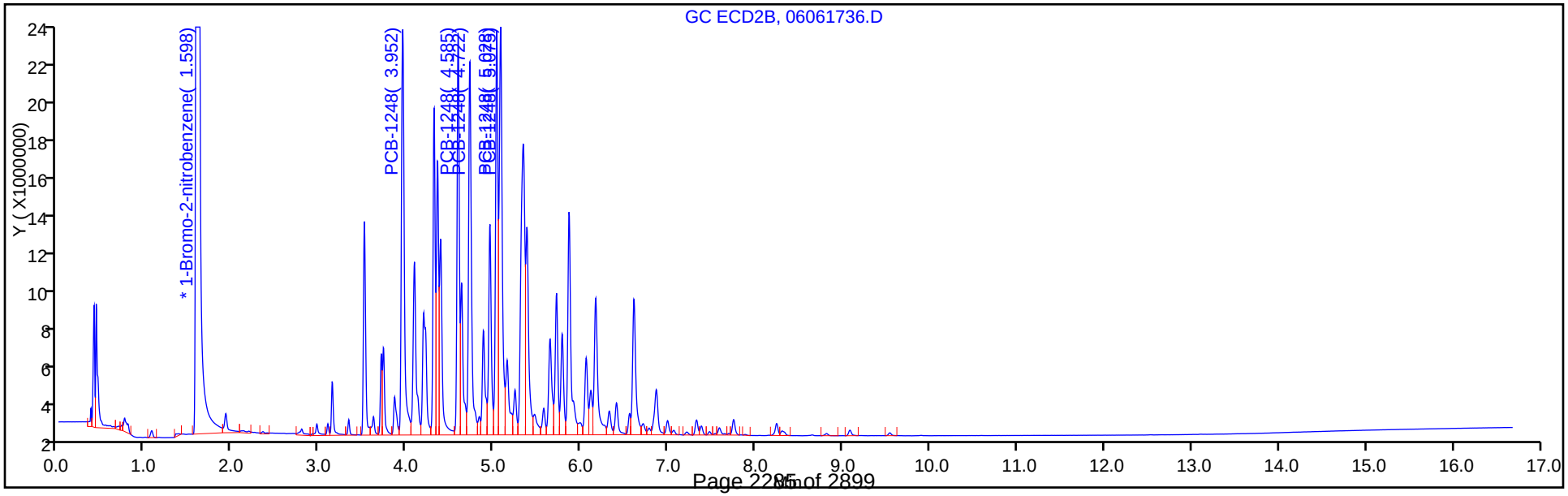
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061736.D

Injection Date:	07-Jun-2017 02:28:13	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	ICV			Worklist Smp#:	36
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-376236/37 Calibration Date: 06/07/2017 02:49

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 16:21

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 18:31

Lab File ID: 06061737.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Lin1		0.1048		252	250	0.8	20.0
PCB-1221 Peak 2	Lin1		0.0735		262	250	4.7	20.0
PCB-1221 Peak 3	Lin1		0.2537		250	250	-0.2	20.0
PCB-1254 Peak 1	Lin1		0.4775		257	250	2.6	20.0
PCB-1254 Peak 2	Lin1		0.3907		253	250	1.2	20.0
PCB-1254 Peak 3	Lin1		0.6645		245	250	-2.1	20.0
PCB-1254 Peak 4	Lin1		0.2993		239	250	-4.4	20.0
PCB-1254 Peak 5	Lin1		0.6952		245	250	-2.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-376236/37 Calibration Date: 06/07/2017 02:49

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 16:21

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 18:31

Lab File ID: 06061737.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1221 Peak 1	2.97	2.71	3.21
PCB-1221 Peak 2	3.11	2.86	3.36
PCB-1221 Peak 3	3.14	2.89	3.39
PCB-1254 Peak 1	5.29	5.04	5.54
PCB-1254 Peak 2	5.62	5.37	5.87
PCB-1254 Peak 3	5.77	5.53	6.03
PCB-1254 Peak 4	6.48	6.23	6.73
PCB-1254 Peak 5	6.74	6.49	6.99

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061737.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Jun-2017 02:49:50 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0059455-037
Operator ID: jax Instrument ID: SGC_P3
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.827	-0.002	352622017	1000.0	1000.0	
2	1.598	1.601	-0.003	393234638	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.965	2.963	0.002	9235162	250.0	251.9	
1	3.105	3.106	-0.001	6475917	250.0	261.8	
1	3.141	3.143	-0.002	22361733	250.0	249.5	
		Average of Peak Amounts =				254.4	
2	2.965	2.966	-0.001	13625908	250.0	253.3	
2	3.091	3.090	0.001	8392060	250.0	255.4	
2	3.141	3.143	-0.002	30724420	250.0	259.6	
		Average of Peak Amounts =				256.1	
						RPD = 0.67	
9 PCB-1254							
1	5.291	5.293	-0.002	42092565	250.0	256.6	
1	5.624	5.623	0.001	34445141	250.0	253.0	
1	5.774	5.776	-0.002	58574950	250.0	244.9	
1	6.484	6.483	0.001	26387330	250.0	239.0	
1	6.741	6.743	-0.002	61284656	250.0	244.6	
		Average of Peak Amounts =				247.6	
2	5.308	5.310	-0.002	49678127	250.0	254.1	
2	5.714	5.713	0.001	38640313	250.0	256.1	
2	5.858	5.860	-0.002	79041625	250.0	285.3	
2	6.161	6.163	-0.002	53781939	250.0	257.5	
2	6.858	6.860	-0.002	74768390	250.0	259.2	
		Average of Peak Amounts =				262.4	
						RPD = 5.82	

Reagents:

AR_2154_ICV_00011	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

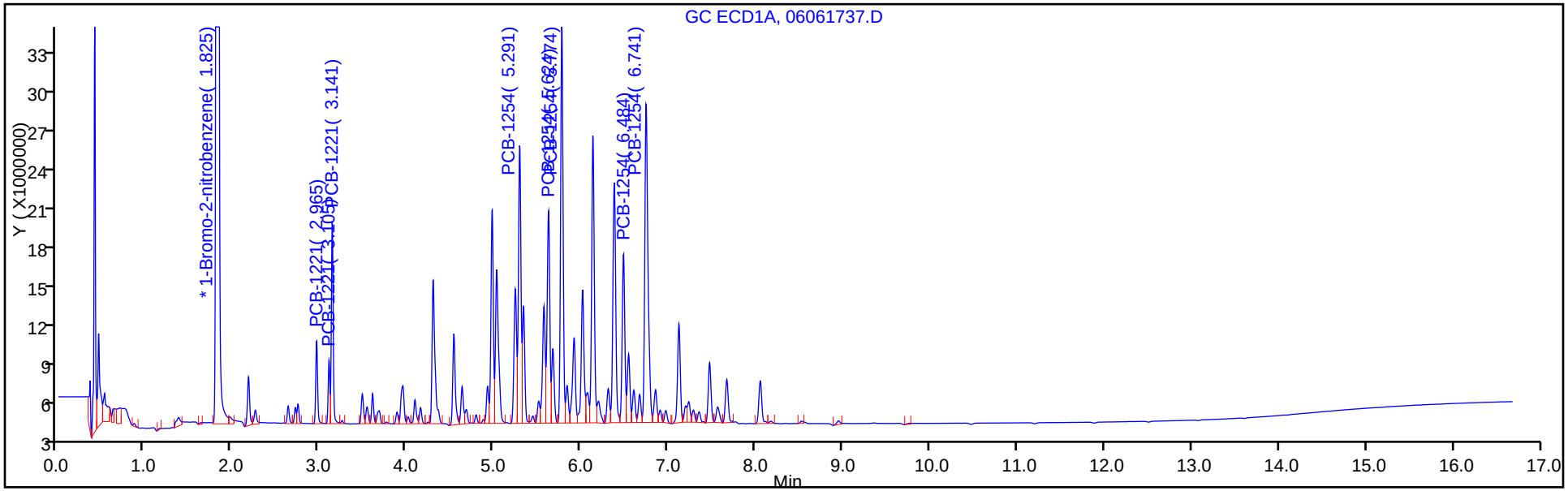
Report Date: 07-Jun-2017 06:53:28 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

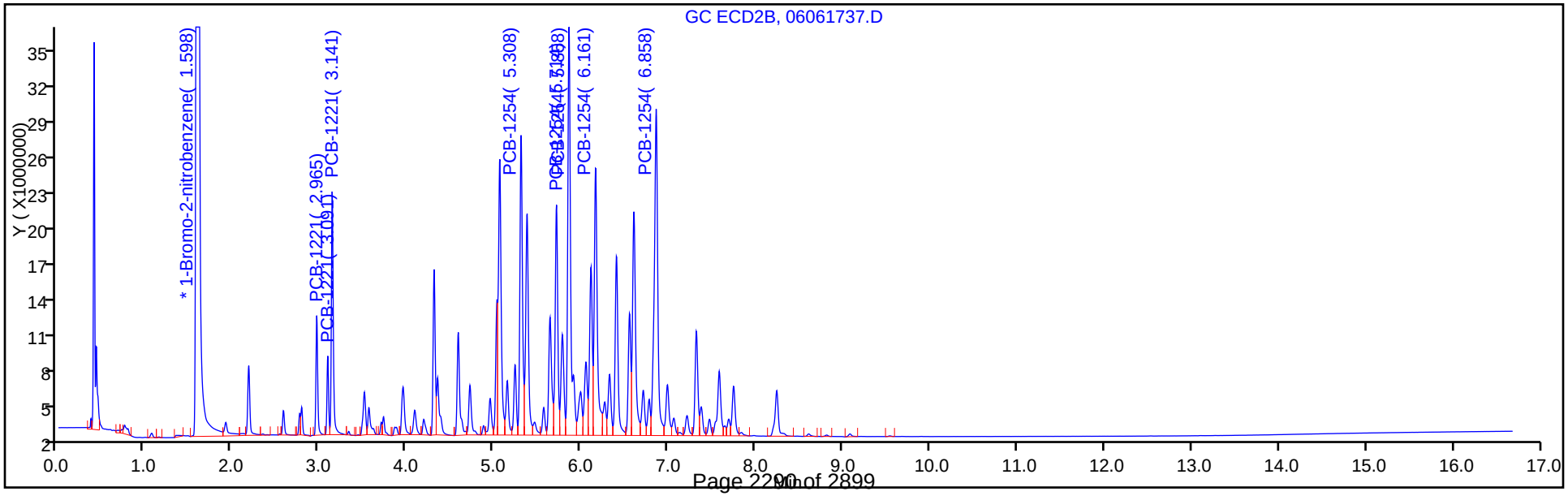
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061737.D

Injection Date:	07-Jun-2017 02:49:50	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	ICV			Worklist Smp#:	37
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-376236/37 Calibration Date: 06/07/2017 02:49

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 16:21

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 18:31

Lab File ID: 06061737.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Lin1		0.1386		253	250	1.3	20.0
PCB-1221 Peak 2	Lin1		0.0854		255	250	2.2	20.0
PCB-1221 Peak 3	Lin1		0.3125		260	250	3.9	20.0
PCB-1254 Peak 1	Lin1		0.5053		254	250	1.7	20.0
PCB-1254 Peak 2	Lin1		0.3931		256	250	2.4	20.0
PCB-1254 Peak 3	Lin1		0.8040		285	250	14.1	20.0
PCB-1254 Peak 4	Lin1		0.5471		257	250	3.0	20.0
PCB-1254 Peak 5	Lin1		0.7606		259	250	3.7	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-376236/37 Calibration Date: 06/07/2017 02:49

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 16:21

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 18:31

Lab File ID: 06061737.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1221 Peak 1	2.97	2.72	3.22
PCB-1221 Peak 2	3.09	2.84	3.34
PCB-1221 Peak 3	3.14	2.89	3.39
PCB-1254 Peak 1	5.31	5.06	5.56
PCB-1254 Peak 2	5.71	5.46	5.96
PCB-1254 Peak 3	5.86	5.61	6.11
PCB-1254 Peak 4	6.16	5.91	6.41
PCB-1254 Peak 5	6.86	6.61	7.11

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061737.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Jun-2017 02:49:50 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0059455-037
Operator ID: jax Instrument ID: SGC_P3
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.827	-0.002	352622017	1000.0	1000.0	
2	1.598	1.601	-0.003	393234638	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.965	2.963	0.002	9235162	250.0	251.9	
1	3.105	3.106	-0.001	6475917	250.0	261.8	
1	3.141	3.143	-0.002	22361733	250.0	249.5	
		Average of Peak Amounts =				254.4	
2	2.965	2.966	-0.001	13625908	250.0	253.3	
2	3.091	3.090	0.001	8392060	250.0	255.4	
2	3.141	3.143	-0.002	30724420	250.0	259.6	
		Average of Peak Amounts =				256.1	
						RPD = 0.67	
9 PCB-1254							
1	5.291	5.293	-0.002	42092565	250.0	256.6	
1	5.624	5.623	0.001	34445141	250.0	253.0	
1	5.774	5.776	-0.002	58574950	250.0	244.9	
1	6.484	6.483	0.001	26387330	250.0	239.0	
1	6.741	6.743	-0.002	61284656	250.0	244.6	
		Average of Peak Amounts =				247.6	
2	5.308	5.310	-0.002	49678127	250.0	254.1	
2	5.714	5.713	0.001	38640313	250.0	256.1	
2	5.858	5.860	-0.002	79041625	250.0	285.3	
2	6.161	6.163	-0.002	53781939	250.0	257.5	
2	6.858	6.860	-0.002	74768390	250.0	259.2	
		Average of Peak Amounts =				262.4	
						RPD = 5.82	

Reagents:

AR_2154_ICV_00011	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

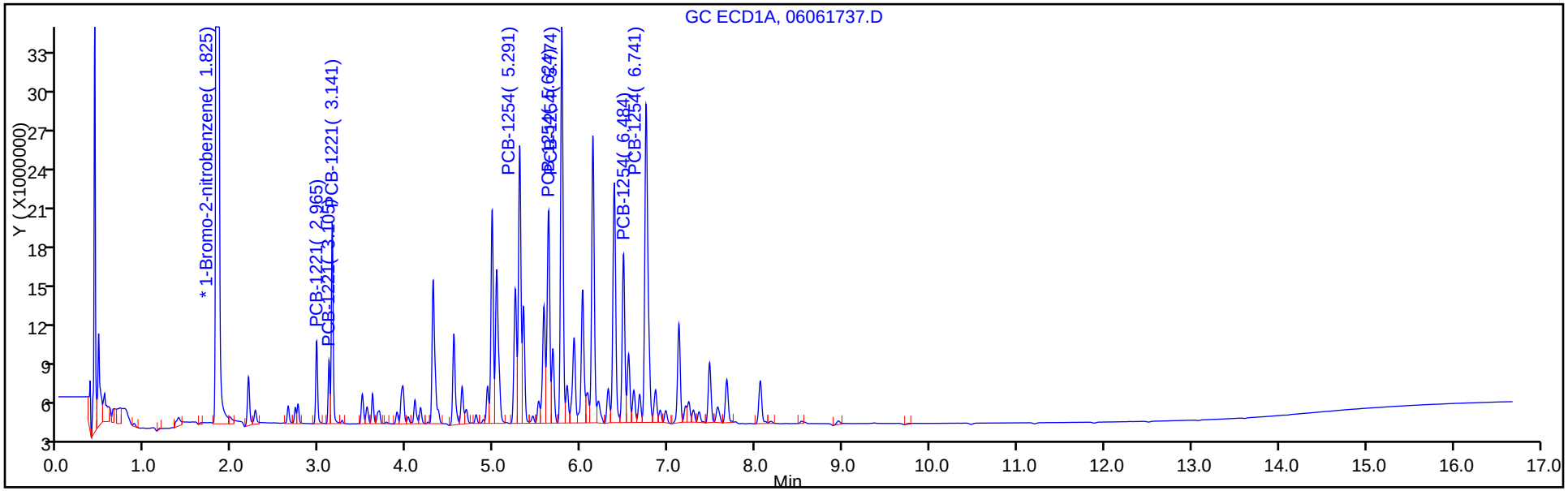
Report Date: 07-Jun-2017 06:53:29 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

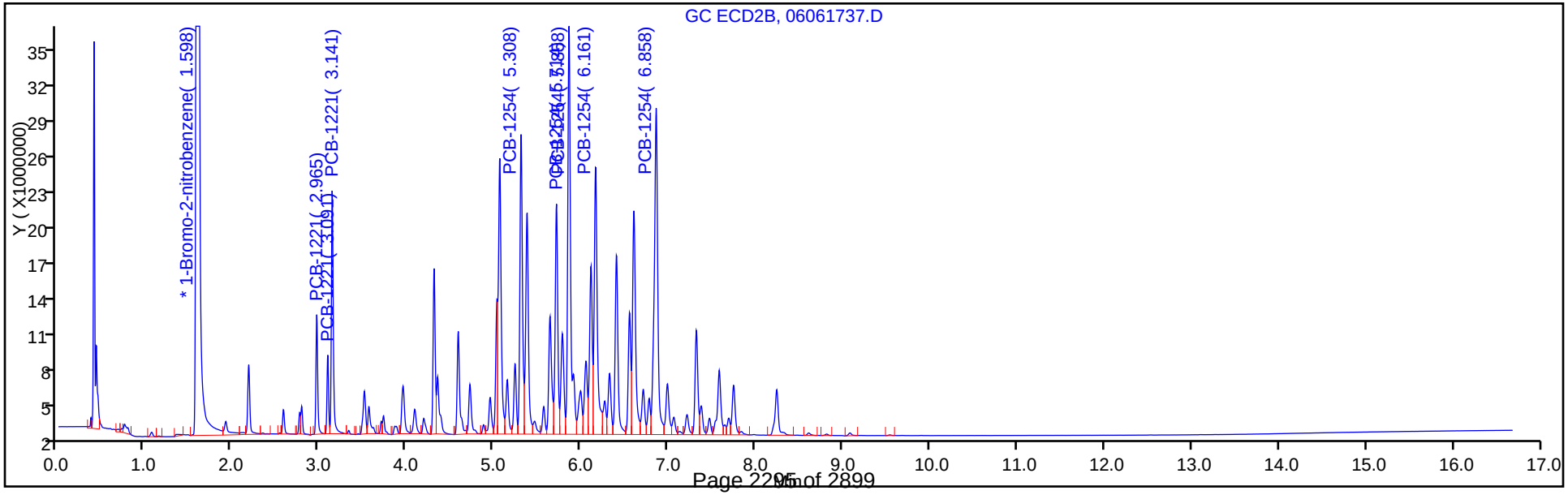
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061737.D

Injection Date:	07-Jun-2017 02:49:50	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	ICV			Worklist Smp#:	37
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-376236/38 Calibration Date: 06/07/2017 03:11

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06061738.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3415		250	250	0.0	20.0
PCB-1016 Peak 2	Lin1		0.7595		244	250	-2.6	20.0
PCB-1016 Peak 3	Lin1		0.3263		249	250	-0.3	20.0
PCB-1016 Peak 4	Lin1		0.2082		246	250	-1.8	20.0
PCB-1016 Peak 5	Lin1		0.3426		249	250	-0.4	20.0
PCB-1260 Peak 1	Lin1		0.5288		254	250	1.6	20.0
PCB-1260 Peak 2	Lin1		1.003		247	250	-1.1	20.0
PCB-1260 Peak 3	Lin1		0.4654		246	250	-1.5	20.0
PCB-1260 Peak 4	Lin1		1.006		243	250	-2.8	20.0
PCB-1260 Peak 5	Lin1		0.5928		247	250	-1.0	20.0
Tetrachloro-m-xylene	Lin1		10.67		12.2	12.5	-2.8	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		10.53		12.4	12.5	-1.1	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-376236/38 Calibration Date: 06/07/2017 03:11

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06061738.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.49	3.24	3.74
PCB-1016 Peak 2	3.95	3.70	4.20
PCB-1016 Peak 3	4.09	3.84	4.34
PCB-1016 Peak 4	4.15	3.91	4.41
PCB-1016 Peak 5	4.54	4.29	4.79
PCB-1260 Peak 1	6.01	5.76	6.26
PCB-1260 Peak 2	6.74	6.49	6.99
PCB-1260 Peak 3	7.23	6.98	7.48
PCB-1260 Peak 4	7.67	7.42	7.92
PCB-1260 Peak 5	8.05	7.80	8.30
Tetrachloro-m-xylene	2.75	2.50	3.00
DCB Decachlorobiphenyl (Surr)	9.63	9.38	9.88

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061738.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Jun-2017 03:11:28 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0059455-038
Operator ID: jax Instrument ID: SGC_P3
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:48:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	353177277	1000.0	1000.0	
2	1.597	1.601	-0.004	392415021	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.751	2.752	-0.001	47095268	12.5	12.2	
2	2.647	2.649	-0.002	59520712	12.5	12.9	
						RPD = 5.65	
1 PCB-1016							
1	3.487	3.486	0.001	30150603	250.0	250.1	
1	3.951	3.952	-0.001	67059557	250.0	243.6	
1	4.091	4.089	0.002	28813487	250.0	249.2	
1	4.154	4.156	-0.002	18379811	250.0	245.6	
1	4.537	4.539	-0.002	30250957	250.0	249.0	
		Average of Peak Amounts =				247.5	
2	3.511	3.512	-0.001	39142146	250.0	264.8	
2	3.951	3.952	-0.001	84456917	250.0	259.1	
2	4.087	4.086	0.001	39286347	250.0	263.0	
2	4.311	4.312	-0.001	21088945	250.0	259.4	
2	4.587	4.586	0.001	27802392	250.0	252.9	
		Average of Peak Amounts =				259.8	
						RPD = 4.87	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							M
1	6.014	6.012	0.002	46693764	250.0	254.0	M
1	6.741	6.742	-0.001	88517492	250.0	247.1	M
1	7.231	7.232	-0.001	41090358	250.0	246.2	M
1	7.667	7.666	0.001	88850114	250.0	243.0	M
1	8.051	8.049	0.002	52343202	250.0	247.4	
		Average of Peak Amounts =				247.5	
2	6.401	6.402	-0.001	67698534	250.0	257.9	
2	6.857	6.859	-0.002	101007625	250.0	255.2	
2	7.374	7.376	-0.002	46406413	250.0	256.4	
2	7.744	7.746	-0.002	99672020	250.0	256.7	
2	8.237	8.239	-0.002	76904623	250.0	258.0	
		Average of Peak Amounts =				256.8	
						RPD = 3.69	
$ 15 DCB Decachlorobiphenyl							
1	9.631	9.629	0.002	46489399	12.5	12.4	
2	9.897	9.896	0.001	49070072	12.5	12.9	
						RPD = 4.16	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1660_ICV_00011	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

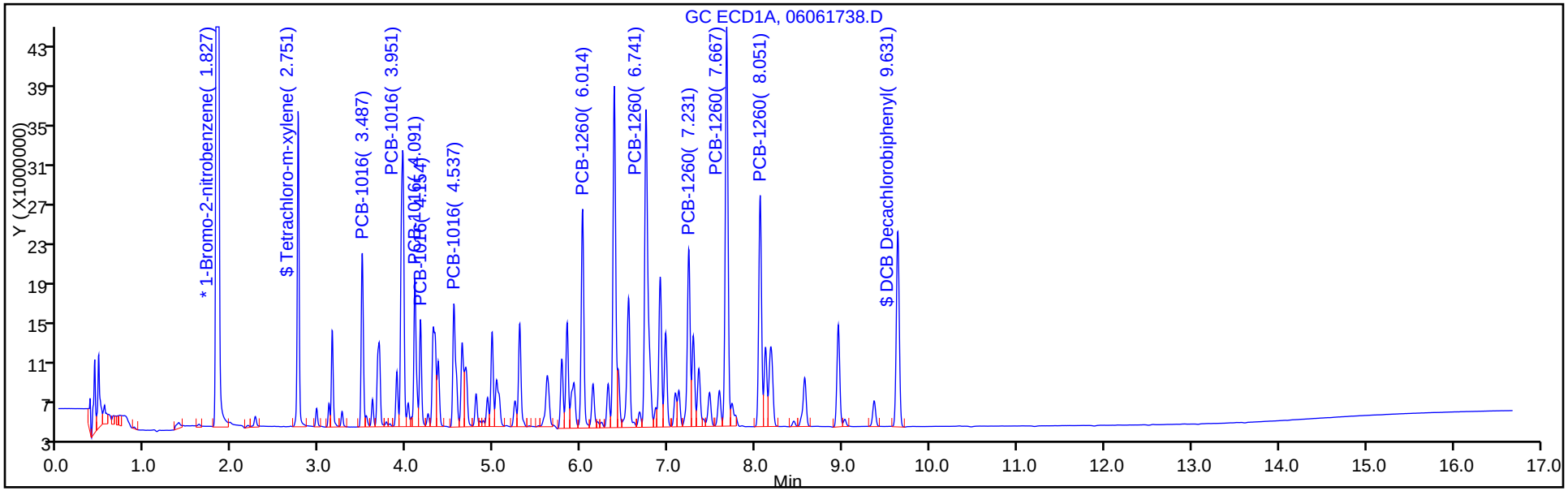
Report Date: 07-Jun-2017 06:53:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

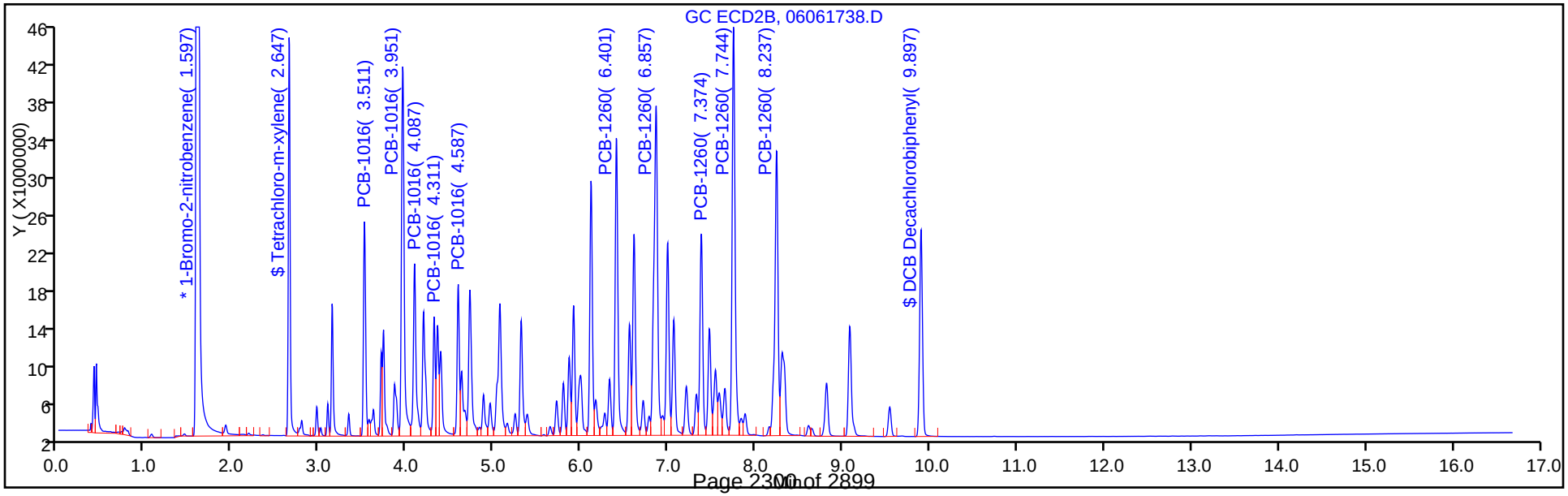
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061738.D

Injection Date:	07-Jun-2017 03:11:28	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	ICV			Worklist Smp#:	38
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:53:32 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061738.D

Injection Date: 07-Jun-2017 03:11:28 Instrument ID: SGC_P3

Lims ID: ICV

Client ID:

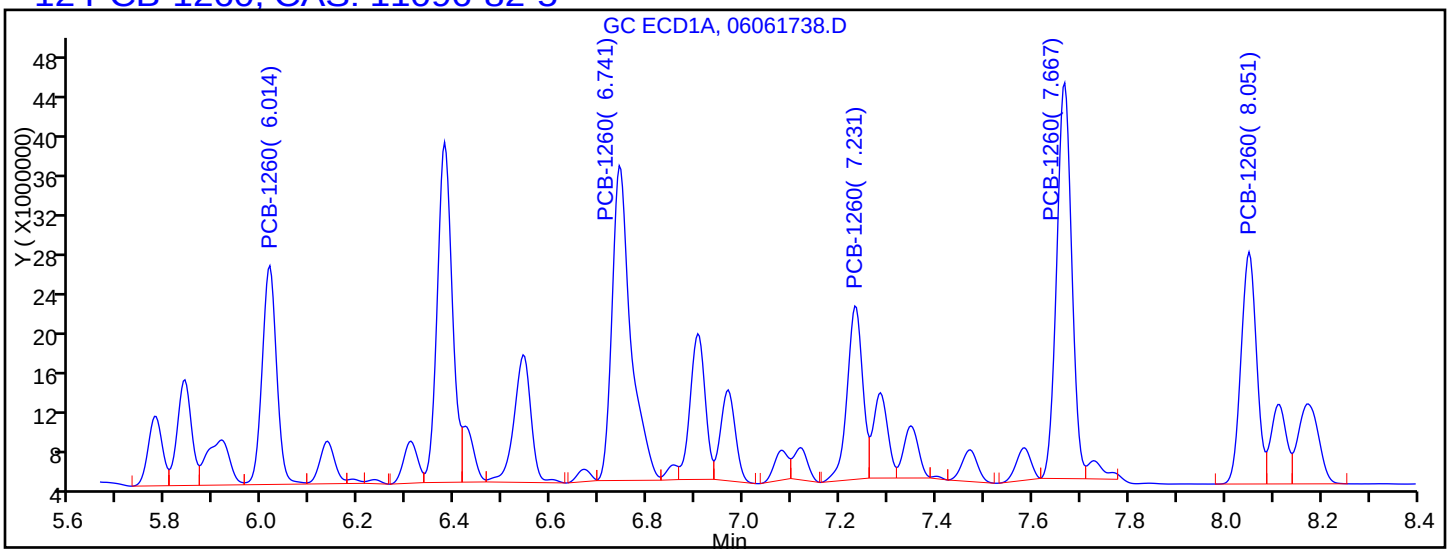
Operator ID: jax ALS Bottle#: 38 Worklist Smp#: 38

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

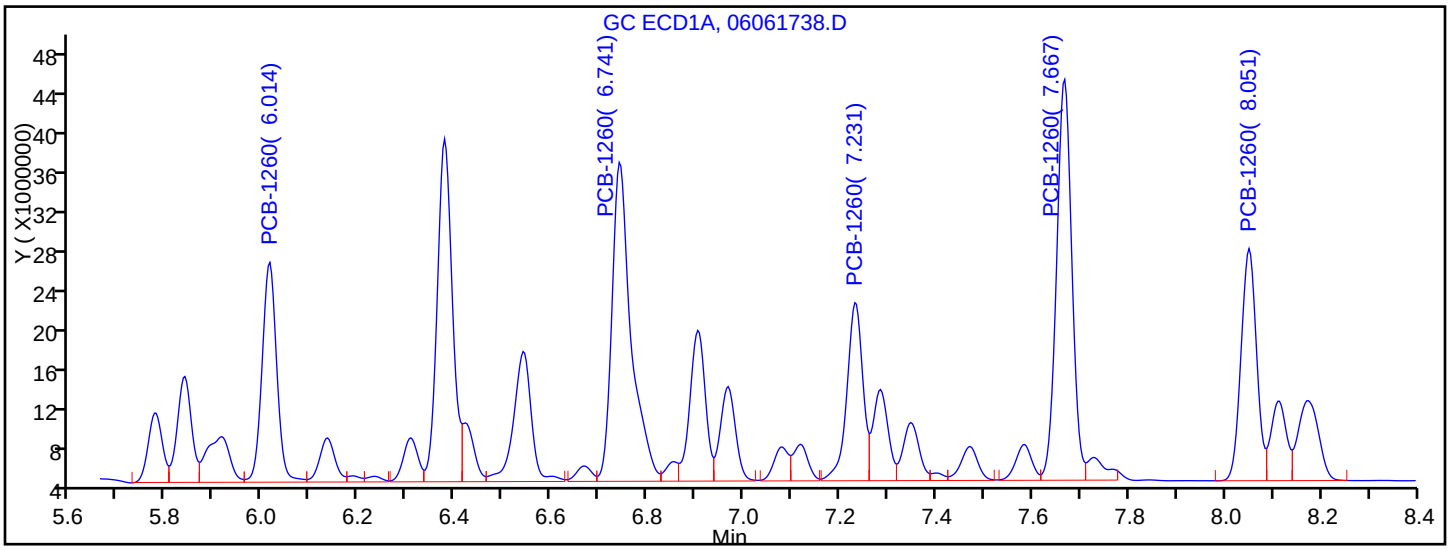
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

12 PCB-1260, CAS: 11096-82-5



Processing Integration Results

6.014	Response = 45869784
6.741	Response = 85183880
7.231	Response = 38814816
7.667	Response = 86080682
8.051	Response = 52343202



Manual Integration Results

6.014	Response = 46693764	M
6.741	Response = 88517492	M
7.231	Response = 41090358	M
7.667	Response = 88850114	M
8.051	Response = 52343202	

Reviewer: jacksonto, 07-Jun-2017 06:48:23

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-376236/38 Calibration Date: 06/07/2017 03:11

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06061738.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3990		265	250	5.9	20.0
PCB-1016 Peak 2	Lin1		0.8609		259	250	3.6	20.0
PCB-1016 Peak 3	Lin1		0.4005		263	250	5.2	20.0
PCB-1016 Peak 4	Lin1		0.2150		259	250	3.7	20.0
PCB-1016 Peak 5	Lin1		0.2834		253	250	1.2	20.0
PCB-1260 Peak 1	Lin1		0.6901		258	250	3.2	20.0
PCB-1260 Peak 2	Lin1		1.030		255	250	2.1	20.0
PCB-1260 Peak 3	Lin1		0.4730		256	250	2.6	20.0
PCB-1260 Peak 4	Lin1		1.016		257	250	2.7	20.0
PCB-1260 Peak 5	Lin1		0.7839		258	250	3.2	20.0
Tetrachloro-m-xylene	Lin1		12.13		12.9	12.5	2.9	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		10.00		12.9	12.5	3.1	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-376236/38 Calibration Date: 06/07/2017 03:11

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06061738.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.51	3.26	3.76
PCB-1016 Peak 2	3.95	3.70	4.20
PCB-1016 Peak 3	4.09	3.84	4.34
PCB-1016 Peak 4	4.31	4.06	4.56
PCB-1016 Peak 5	4.59	4.34	4.84
PCB-1260 Peak 1	6.40	6.15	6.65
PCB-1260 Peak 2	6.86	6.61	7.11
PCB-1260 Peak 3	7.37	7.13	7.63
PCB-1260 Peak 4	7.74	7.50	8.00
PCB-1260 Peak 5	8.24	7.99	8.49
Tetrachloro-m-xylene	2.65	2.40	2.90
DCB Decachlorobiphenyl (Surr)	9.90	9.65	10.15

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061738.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Jun-2017 03:11:28 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0059455-038
Operator ID: jax Instrument ID: SGC_P3
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:48:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	353177277	1000.0	1000.0	
2	1.597	1.601	-0.004	392415021	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.751	2.752	-0.001	47095268	12.5	12.2	
2	2.647	2.649	-0.002	59520712	12.5	12.9	
						RPD = 5.65	
1 PCB-1016							
1	3.487	3.486	0.001	30150603	250.0	250.1	
1	3.951	3.952	-0.001	67059557	250.0	243.6	
1	4.091	4.089	0.002	28813487	250.0	249.2	
1	4.154	4.156	-0.002	18379811	250.0	245.6	
1	4.537	4.539	-0.002	30250957	250.0	249.0	
		Average of Peak Amounts =				247.5	
2	3.511	3.512	-0.001	39142146	250.0	264.8	
2	3.951	3.952	-0.001	84456917	250.0	259.1	
2	4.087	4.086	0.001	39286347	250.0	263.0	
2	4.311	4.312	-0.001	21088945	250.0	259.4	
2	4.587	4.586	0.001	27802392	250.0	252.9	
		Average of Peak Amounts =				259.8	
						RPD = 4.87	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							M
1	6.014	6.012	0.002	46693764	250.0	254.0	M
1	6.741	6.742	-0.001	88517492	250.0	247.1	M
1	7.231	7.232	-0.001	41090358	250.0	246.2	M
1	7.667	7.666	0.001	88850114	250.0	243.0	M
1	8.051	8.049	0.002	52343202	250.0	247.4	
		Average of Peak Amounts =				247.5	
2	6.401	6.402	-0.001	67698534	250.0	257.9	
2	6.857	6.859	-0.002	101007625	250.0	255.2	
2	7.374	7.376	-0.002	46406413	250.0	256.4	
2	7.744	7.746	-0.002	99672020	250.0	256.7	
2	8.237	8.239	-0.002	76904623	250.0	258.0	
		Average of Peak Amounts =				256.8	
						RPD = 3.69	
$ 15 DCB Decachlorobiphenyl							
1	9.631	9.629	0.002	46489399	12.5	12.4	
2	9.897	9.896	0.001	49070072	12.5	12.9	
						RPD = 4.16	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1660_ICV_00011	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

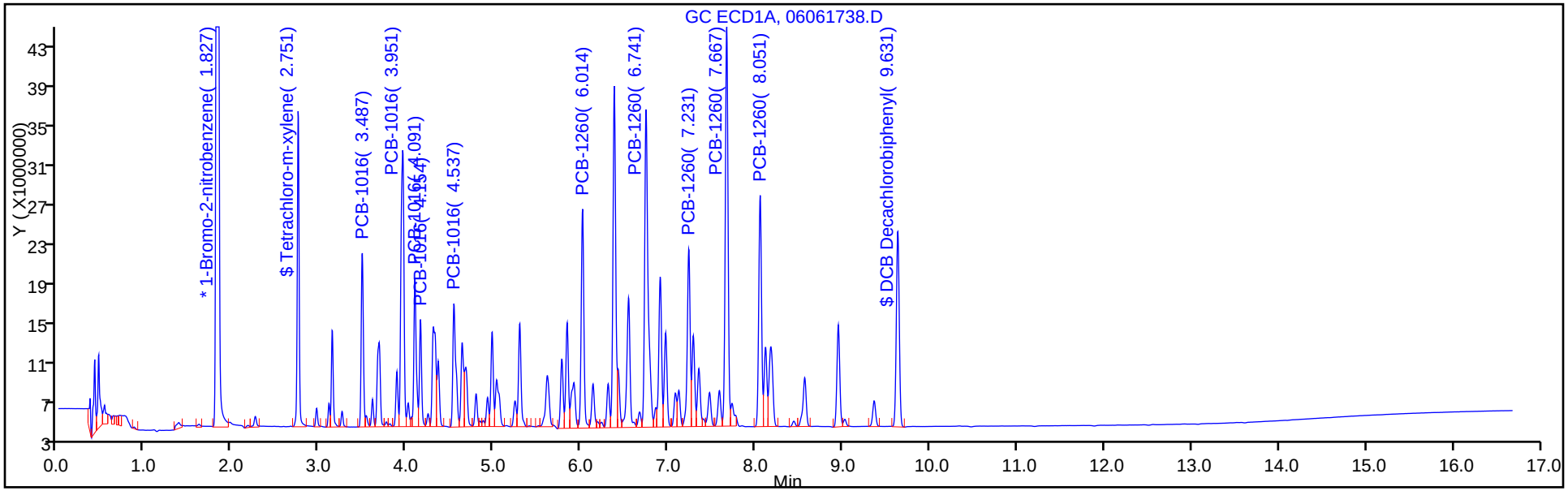
Report Date: 07-Jun-2017 06:53:32 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

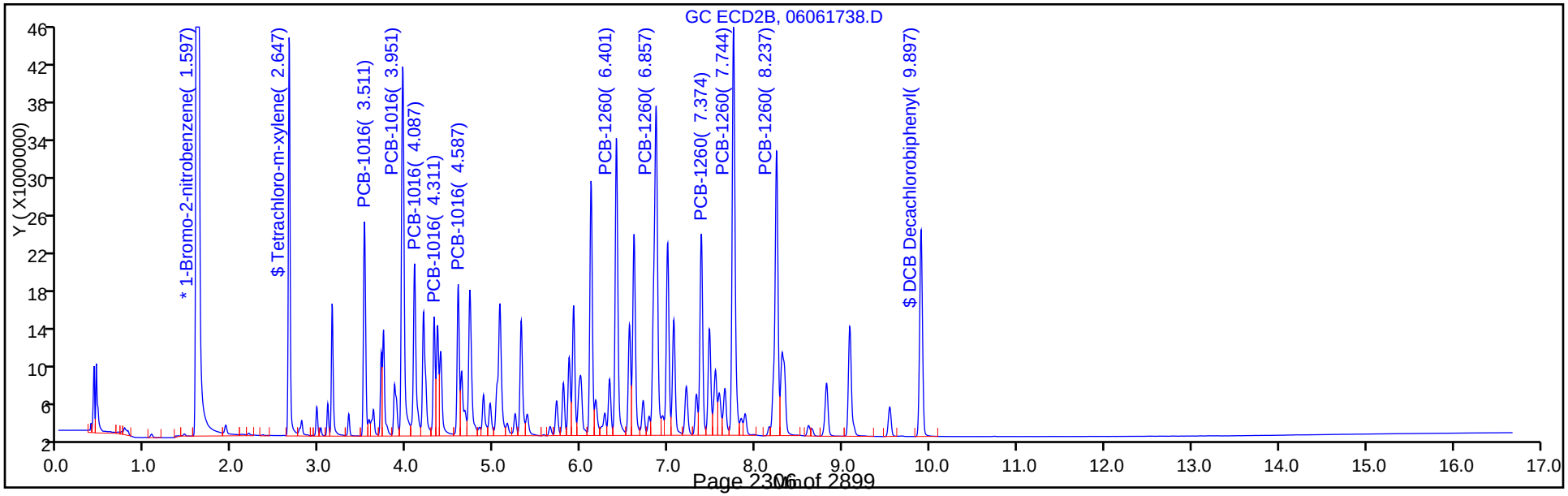
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061738.D

Injection Date:	07-Jun-2017 03:11:28	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	ICV			Worklist Smp#:	38
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-376236/39 Calibration Date: 06/07/2017 03:33

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 21:25

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 23:35

Lab File ID: 06061739.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1232 Peak 1	Lin1		0.2091		255	250	2.1	20.0
PCB-1232 Peak 2	Lin1		0.1763		254	250	1.5	20.0
PCB-1232 Peak 3	Lin1		0.3776		245	250	-1.8	20.0
PCB-1232 Peak 4	Lin1		0.1639		250	250	0.2	20.0
PCB-1232 Peak 5	Lin1		0.1643		249	250	-0.4	20.0
PCB-1262 Peak 1	Lin1		0.5689		248	250	-0.9	20.0
PCB-1262 Peak 2	Lin1		0.6927		248	250	-0.8	20.0
PCB-1262 Peak 3	Lin1		0.6640		251	250	0.3	20.0
PCB-1262 Peak 4	Lin1		1.336		245	250	-2.0	20.0
PCB-1262 Peak 5	Lin1		0.4832		245	250	-2.0	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-376236/39 Calibration Date: 06/07/2017 03:33

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 21:25

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 23:35

Lab File ID: 06061739.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1232 Peak 1	3.14	2.89	3.39
PCB-1232 Peak 2	3.49	3.24	3.74
PCB-1232 Peak 3	3.95	3.70	4.20
PCB-1232 Peak 4	4.09	3.84	4.34
PCB-1232 Peak 5	4.54	4.29	4.79
PCB-1262 Peak 1	6.38	6.13	6.63
PCB-1262 Peak 2	6.90	6.65	7.15
PCB-1262 Peak 3	7.23	6.98	7.48
PCB-1262 Peak 4	7.67	7.42	7.92
PCB-1262 Peak 5	8.05	7.80	8.30

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061739.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Jun-2017 03:33:05 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0059455-039
Operator ID: jax Instrument ID: SGC_P3
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	352348854	1000.0	1000.0	
2	1.597	1.601	-0.004	393122135	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							
1	3.141	3.144	-0.003	18415671	250.0	255.4	
1	3.487	3.487	0.000	15526378	250.0	253.7	
1	3.951	3.950	0.001	33262296	250.0	245.4	
1	4.091	4.090	0.001	14439832	250.0	250.4	
1	4.537	4.537	0.000	14475247	250.0	248.9	
		Average of Peak Amounts =				250.8	
2	3.141	3.140	0.001	25714120	250.0	261.0	
2	3.511	3.510	0.001	21356999	250.0	259.8	
2	3.951	3.950	0.001	43123663	250.0	257.3	
2	4.087	4.087	0.000	20299068	250.0	264.3	
2	4.721	4.720	0.001	17541798	250.0	272.0	
		Average of Peak Amounts =				262.9	
						RPD = 4.71	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.377	6.377	0.000	50114282	250.0	247.8	
1	6.904	6.904	0.000	61018643	250.0	248.1	
1	7.231	7.230	0.001	58486055	250.0	250.6	
1	7.667	7.667	0.000	117712381	250.0	245.0	
1	8.051	8.050	0.001	42561718	250.0	245.0	
		Average of Peak Amounts =				247.3	
2	6.401	6.400	0.001	52963165	250.0	265.1	
2	6.987	6.990	-0.003	70418776	250.0	261.4	
2	7.374	7.377	-0.003	66797711	250.0	261.6	
2	7.744	7.744	0.000	125508430	250.0	257.0	
2	8.237	8.237	0.000	94818921	250.0	261.1	
		Average of Peak Amounts =				261.3	
						RPD = 5.49	

Reagents:

AR_3262_ICV_00011	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

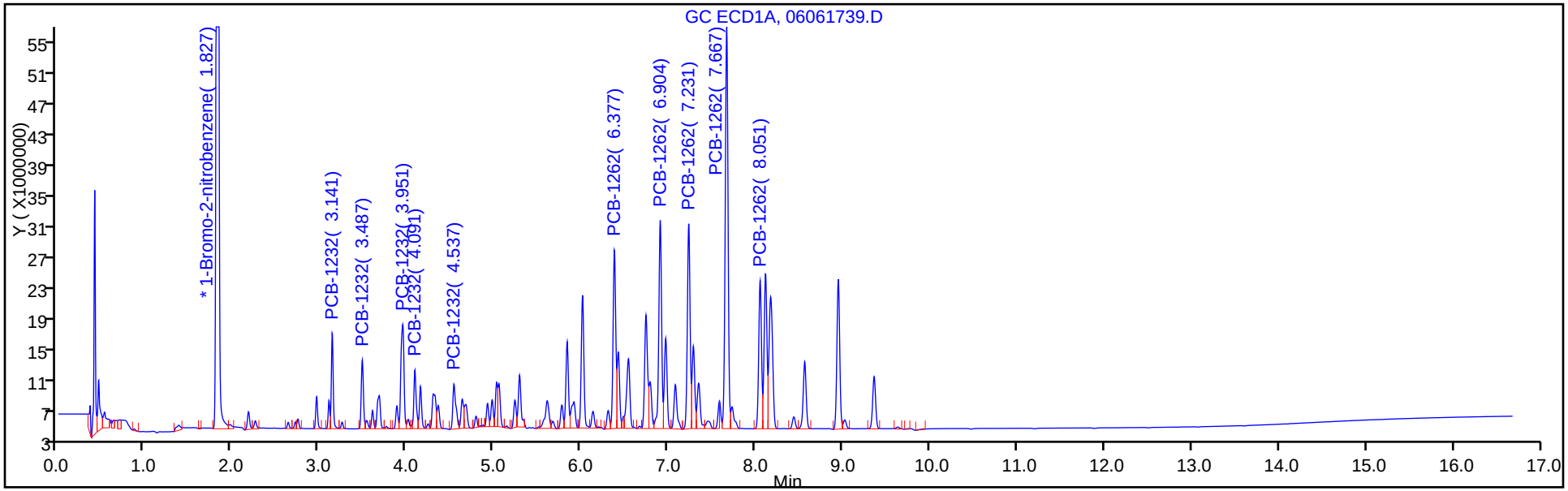
Report Date: 07-Jun-2017 06:53:35 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

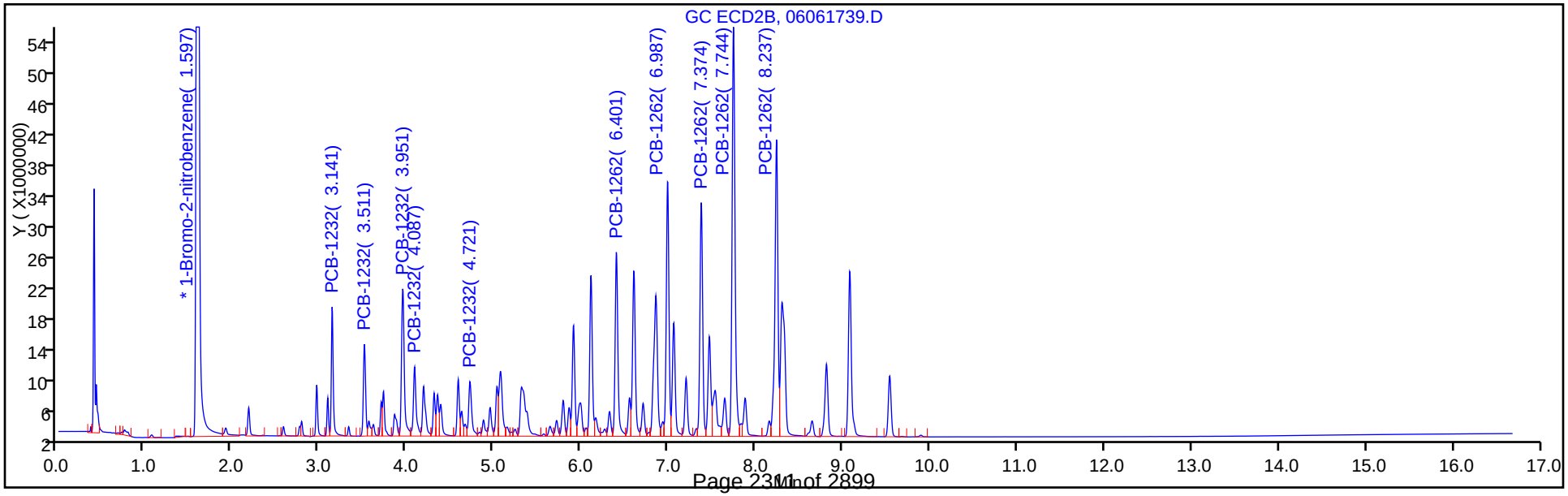
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061739.D

Injection Date:	07-Jun-2017 03:33:05	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	ICV			Worklist Smp#:	39
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-376236/39 Calibration Date: 06/07/2017 03:33

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 21:25

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 23:35

Lab File ID: 06061739.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1232 Peak 1	Lin1		0.2616		261	250	4.4	20.0
PCB-1232 Peak 2	Lin1		0.2173		260	250	3.9	20.0
PCB-1232 Peak 3	Lin1		0.4388		257	250	2.9	20.0
PCB-1232 Peak 4	Lin1		0.2065		264	250	5.7	20.0
PCB-1232 Peak 5	Lin1		0.1785		272	250	8.8	20.0
PCB-1262 Peak 1	Lin1		0.5389		265	250	6.1	20.0
PCB-1262 Peak 2	Lin1		0.7165		261	250	4.6	20.0
PCB-1262 Peak 3	Lin1		0.6797		262	250	4.7	20.0
PCB-1262 Peak 4	Lin1		1.277		257	250	2.8	20.0
PCB-1262 Peak 5	Lin1		0.9648		261	250	4.4	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-376236/39 Calibration Date: 06/07/2017 03:33

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 21:25

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 23:35

Lab File ID: 06061739.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1232 Peak 1	3.14	2.89	3.39
PCB-1232 Peak 2	3.51	3.26	3.76
PCB-1232 Peak 3	3.95	3.70	4.20
PCB-1232 Peak 4	4.09	3.84	4.34
PCB-1232 Peak 5	4.72	4.47	4.97
PCB-1262 Peak 1	6.40	6.15	6.65
PCB-1262 Peak 2	6.99	6.74	7.24
PCB-1262 Peak 3	7.37	7.13	7.63
PCB-1262 Peak 4	7.74	7.49	7.99
PCB-1262 Peak 5	8.24	7.99	8.49

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061739.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Jun-2017 03:33:05 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0059455-039
Operator ID: jax Instrument ID: SGC_P3
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	352348854	1000.0	1000.0	
2	1.597	1.601	-0.004	393122135	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							
1	3.141	3.144	-0.003	18415671	250.0	255.4	
1	3.487	3.487	0.000	15526378	250.0	253.7	
1	3.951	3.950	0.001	33262296	250.0	245.4	
1	4.091	4.090	0.001	14439832	250.0	250.4	
1	4.537	4.537	0.000	14475247	250.0	248.9	
		Average of Peak Amounts =				250.8	
2	3.141	3.140	0.001	25714120	250.0	261.0	
2	3.511	3.510	0.001	21356999	250.0	259.8	
2	3.951	3.950	0.001	43123663	250.0	257.3	
2	4.087	4.087	0.000	20299068	250.0	264.3	
2	4.721	4.720	0.001	17541798	250.0	272.0	
		Average of Peak Amounts =				262.9	
						RPD = 4.71	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.377	6.377	0.000	50114282	250.0	247.8	
1	6.904	6.904	0.000	61018643	250.0	248.1	
1	7.231	7.230	0.001	58486055	250.0	250.6	
1	7.667	7.667	0.000	117712381	250.0	245.0	
1	8.051	8.050	0.001	42561718	250.0	245.0	
		Average of Peak Amounts =				247.3	
2	6.401	6.400	0.001	52963165	250.0	265.1	
2	6.987	6.990	-0.003	70418776	250.0	261.4	
2	7.374	7.377	-0.003	66797711	250.0	261.6	
2	7.744	7.744	0.000	125508430	250.0	257.0	
2	8.237	8.237	0.000	94818921	250.0	261.1	
		Average of Peak Amounts =				261.3	
						RPD = 5.49	

Reagents:

AR_3262_ICV_00011	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

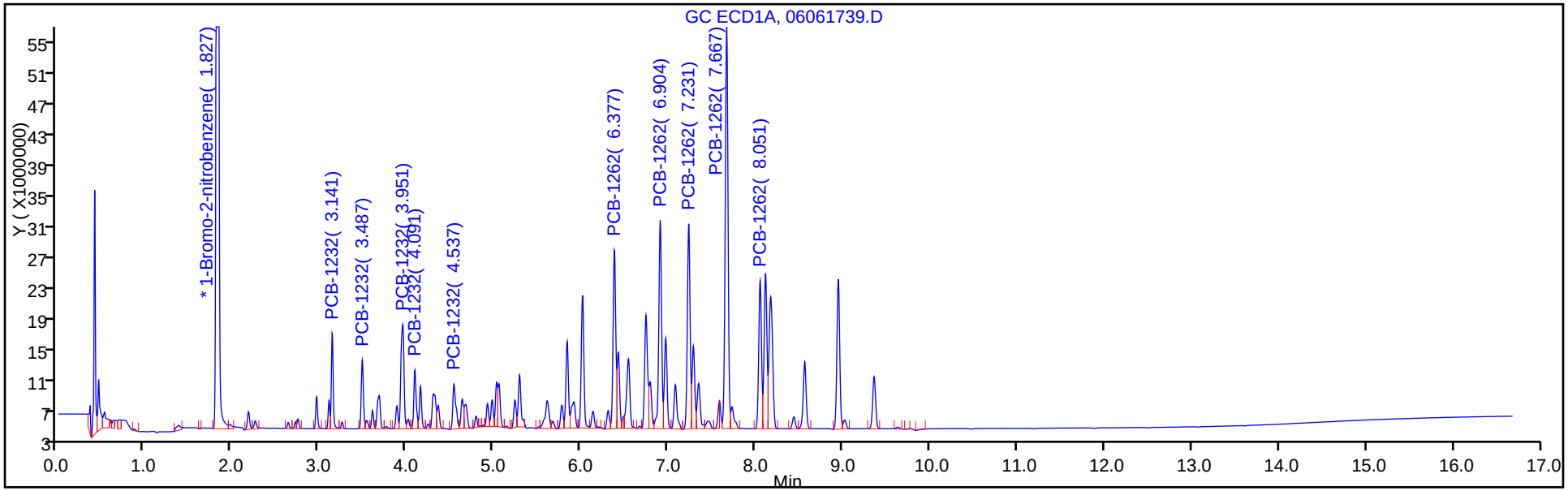
Report Date: 07-Jun-2017 06:53:36 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

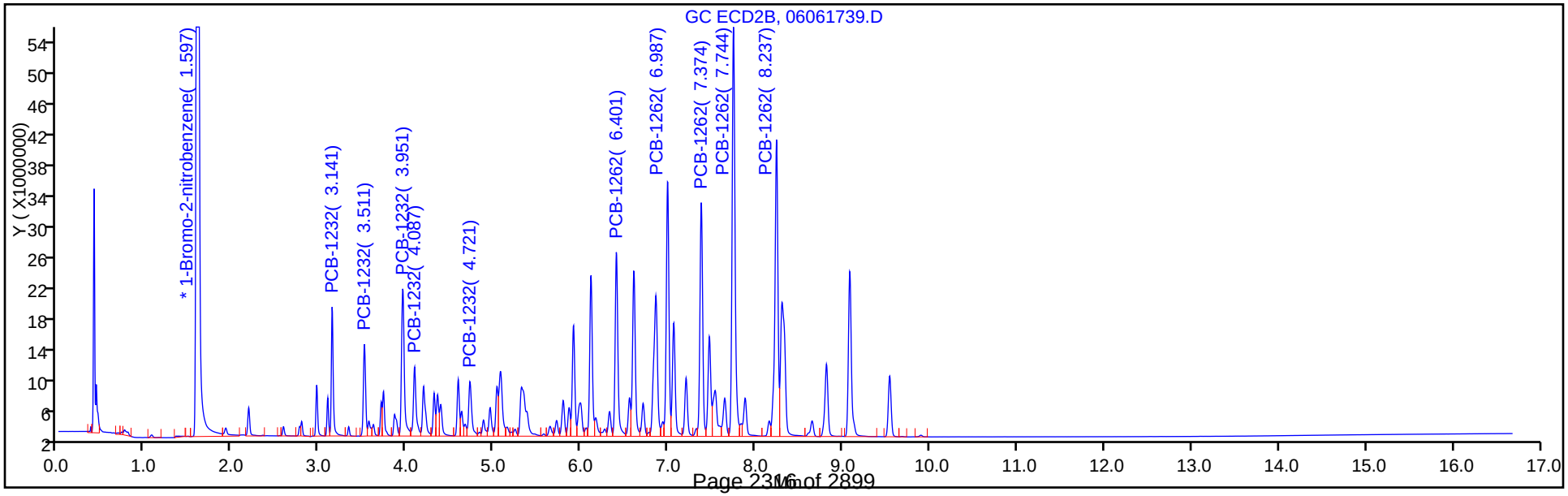
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061739.D

Injection Date:	07-Jun-2017 03:33:05	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	ICV			Worklist Smp#:	39
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-376236/40 Calibration Date: 06/07/2017 03:54

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 23:56

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/07/2017 02:06

Lab File ID: 06061740.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1242 Peak 1	Lin1		0.2901		247	250	-1.1	20.0
PCB-1242 Peak 2	Lin1		0.6363		241	250	-3.7	20.0
PCB-1242 Peak 3	Lin1		0.2749		245	250	-1.8	20.0
PCB-1242 Peak 4	Lin1		0.2157		238	250	-4.9	20.0
PCB-1242 Peak 5	Lin1		0.2352		253	250	1.3	20.0
PCB-1268 Peak 1	Lin1		1.450		237	250	-5.2	20.0
PCB-1268 Peak 2	Lin1		1.304		239	250	-4.2	20.0
PCB-1268 Peak 3	Lin1		1.150		240	250	-4.2	20.0
PCB-1268 Peak 4	Lin1		0.5498		245	250	-2.1	20.0
PCB-1268 Peak 5	Lin1		3.652		240	250	-4.1	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-376236/40 Calibration Date: 06/07/2017 03:54

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 23:56

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/07/2017 02:06

Lab File ID: 06061740.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1242 Peak 1	3.49	3.24	3.74
PCB-1242 Peak 2	3.95	3.70	4.20
PCB-1242 Peak 3	4.09	3.84	4.34
PCB-1242 Peak 4	5.03	4.78	5.28
PCB-1242 Peak 5	5.05	4.80	5.30
PCB-1268 Peak 1	8.11	7.86	8.36
PCB-1268 Peak 2	8.17	7.91	8.41
PCB-1268 Peak 3	8.44	8.19	8.69
PCB-1268 Peak 4	8.95	8.70	9.20
PCB-1268 Peak 5	9.36	9.11	9.61

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061740.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Jun-2017 03:54:43 ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0059455-040
Operator ID: jax Instrument ID: SGC_P3
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 07:10:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 07:09:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	353734205	1000.0	1000.0	
2	1.600	1.601	-0.001	393095785	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							M
1	3.487	3.487	0.000	25650440	250.0	247.1	
1	3.950	3.951	-0.001	56273160	250.0	240.9	
1	4.090	4.091	-0.001	24307301	250.0	245.4	
1	5.027	5.027	0.000	19072399	250.0	237.6	
1	5.053	5.054	-0.001	20797009	250.0	253.2	
		Average of Peak Amounts =				244.9	
2	3.510	3.511	-0.001	33296452	250.0	261.6	M
2	3.950	3.951	-0.001	71014285	250.0	257.7	M
2	4.087	4.087	0.000	32684472	250.0	261.7	M
2	5.030	5.031	-0.001	23650766	250.0	258.8	M
2	5.077	5.074	0.003	29285976	250.0	249.7	M
		Average of Peak Amounts =				257.9	
						RPD = 5.18	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.113	8.111	0.002	128196036	250.0	236.9	
1	8.167	8.164	0.003	115310011	250.0	239.5	
1	8.437	8.437	0.000	101662501	250.0	239.6	
1	8.947	8.947	0.000	48617452	250.0	244.8	
1	9.357	9.357	0.000	322930892	250.0	239.7	
		Average of Peak Amounts =				240.1	
2	8.237	8.237	0.000	138904968	250.0	256.1	
2	8.300	8.301	-0.001	134771073	250.0	254.7	
2	8.647	8.647	0.000	112001039	250.0	254.5	
2	9.077	9.077	0.000	53587240	250.0	254.0	
2	9.537	9.537	0.000	308907286	250.0	251.6	
		Average of Peak Amounts =				254.2	
						RPD = 5.70	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_4268_ICV_00011	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

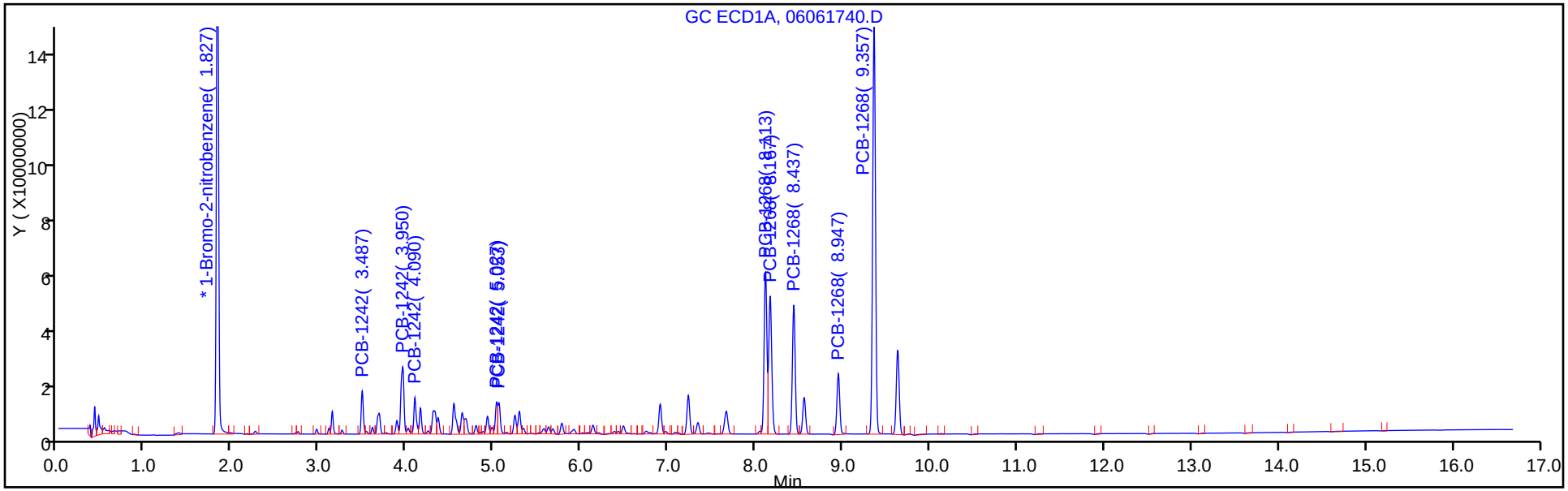
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TestAmerica Denver

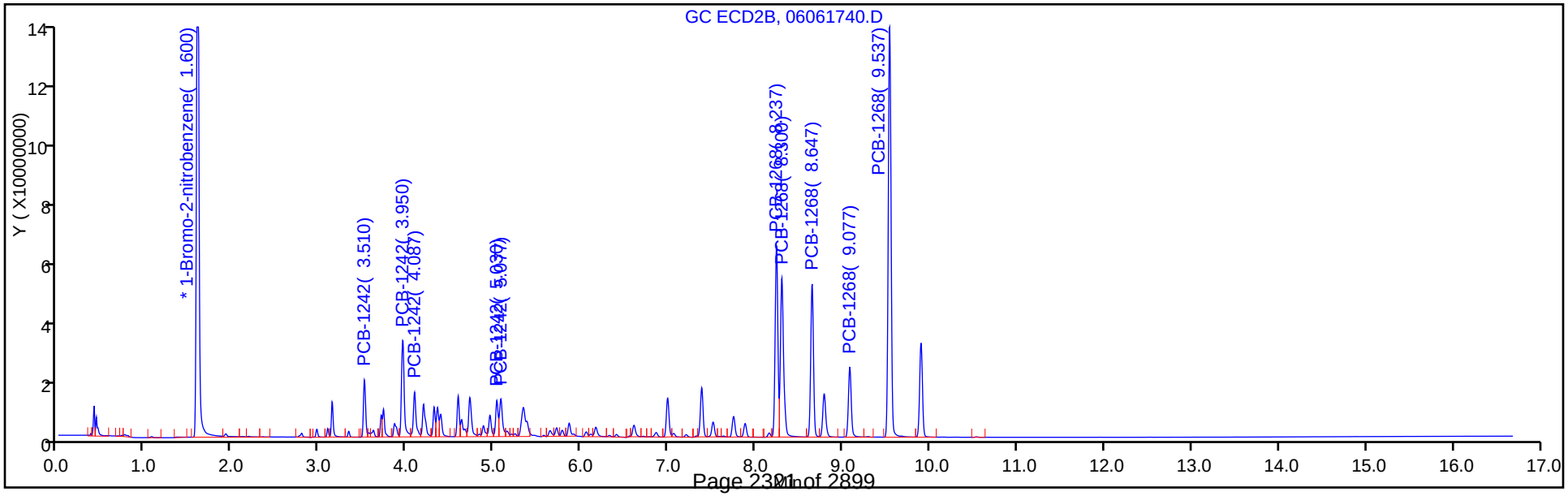
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061740.D

Injection Date:	07-Jun-2017 03:54:43	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	ICV			Worklist Smp#:	40
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-376236/40 Calibration Date: 06/07/2017 03:54

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 23:56

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/07/2017 02:06

Lab File ID: 06061740.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1242 Peak 1	Lin1		0.3388		262	250	4.7	20.0
PCB-1242 Peak 2	Lin1		0.7226		258	250	3.1	20.0
PCB-1242 Peak 3	Lin1		0.3326		262	250	4.7	20.0
PCB-1242 Peak 4	Lin1		0.2407		259	250	3.5	20.0
PCB-1242 Peak 5	Lin1		0.2980		250	250	-0.1	20.0
PCB-1268 Peak 1	Lin1		1.413		256	250	2.5	20.0
PCB-1268 Peak 2	Lin1		1.371		255	250	1.9	20.0
PCB-1268 Peak 3	Lin1		1.140		255	250	1.8	20.0
PCB-1268 Peak 4	Lin1		0.5453		254	250	1.6	20.0
PCB-1268 Peak 5	Lin1		3.143		252	250	0.6	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICV 280-376236/40 Calibration Date: 06/07/2017 03:54

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 23:56

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/07/2017 02:06

Lab File ID: 06061740.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1242 Peak 1	3.51	3.26	3.76
PCB-1242 Peak 2	3.95	3.70	4.20
PCB-1242 Peak 3	4.09	3.84	4.34
PCB-1242 Peak 4	5.03	4.78	5.28
PCB-1242 Peak 5	5.08	4.82	5.32
PCB-1268 Peak 1	8.24	7.99	8.49
PCB-1268 Peak 2	8.30	8.05	8.55
PCB-1268 Peak 3	8.65	8.40	8.90
PCB-1268 Peak 4	9.08	8.83	9.33
PCB-1268 Peak 5	9.54	9.29	9.79

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061740.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Jun-2017 03:54:43 ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0059455-040
Operator ID: jax Instrument ID: SGC_P3
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 07:10:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 07:09:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	353734205	1000.0	1000.0	
2	1.600	1.601	-0.001	393095785	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							M
1	3.487	3.487	0.000	25650440	250.0	247.1	
1	3.950	3.951	-0.001	56273160	250.0	240.9	
1	4.090	4.091	-0.001	24307301	250.0	245.4	
1	5.027	5.027	0.000	19072399	250.0	237.6	
1	5.053	5.054	-0.001	20797009	250.0	253.2	
		Average of Peak Amounts =				244.9	
2	3.510	3.511	-0.001	33296452	250.0	261.6	M
2	3.950	3.951	-0.001	71014285	250.0	257.7	M
2	4.087	4.087	0.000	32684472	250.0	261.7	M
2	5.030	5.031	-0.001	23650766	250.0	258.8	M
2	5.077	5.074	0.003	29285976	250.0	249.7	M
		Average of Peak Amounts =				257.9	
						RPD = 5.18	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.113	8.111	0.002	128196036	250.0	236.9	
1	8.167	8.164	0.003	115310011	250.0	239.5	
1	8.437	8.437	0.000	101662501	250.0	239.6	
1	8.947	8.947	0.000	48617452	250.0	244.8	
1	9.357	9.357	0.000	322930892	250.0	239.7	
		Average of Peak Amounts =				240.1	
2	8.237	8.237	0.000	138904968	250.0	256.1	
2	8.300	8.301	-0.001	134771073	250.0	254.7	
2	8.647	8.647	0.000	112001039	250.0	254.5	
2	9.077	9.077	0.000	53587240	250.0	254.0	
2	9.537	9.537	0.000	308907286	250.0	251.6	
		Average of Peak Amounts =				254.2	
						RPD = 5.70	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_4268_ICV_00011	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

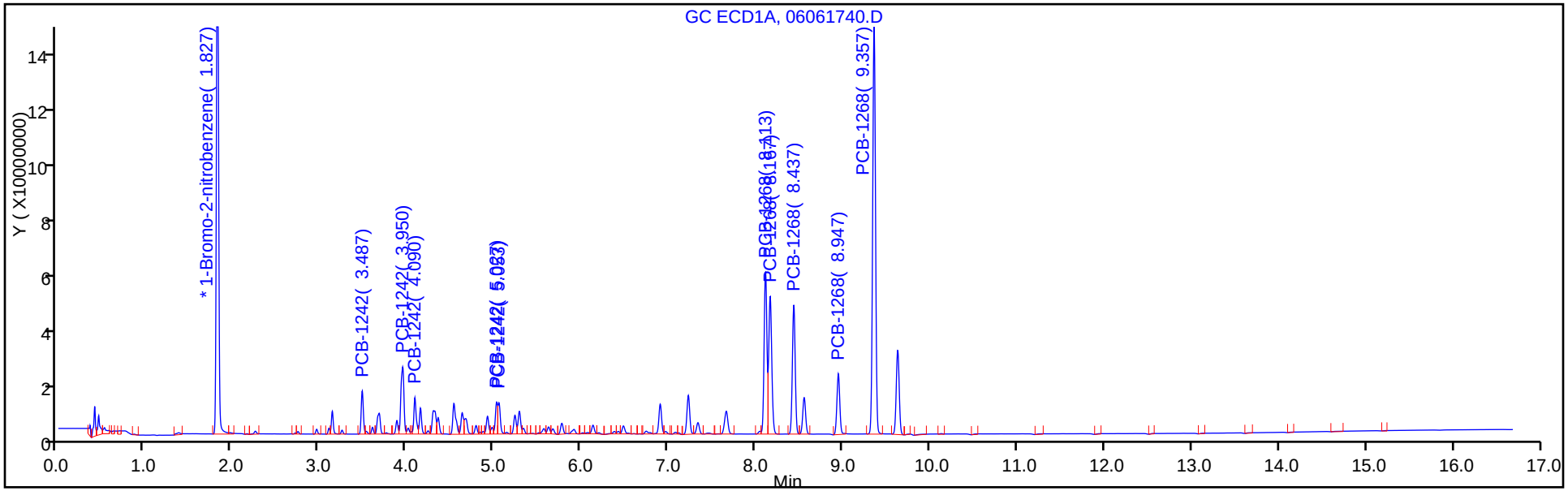
Report Date: 07-Jun-2017 07:10:24 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

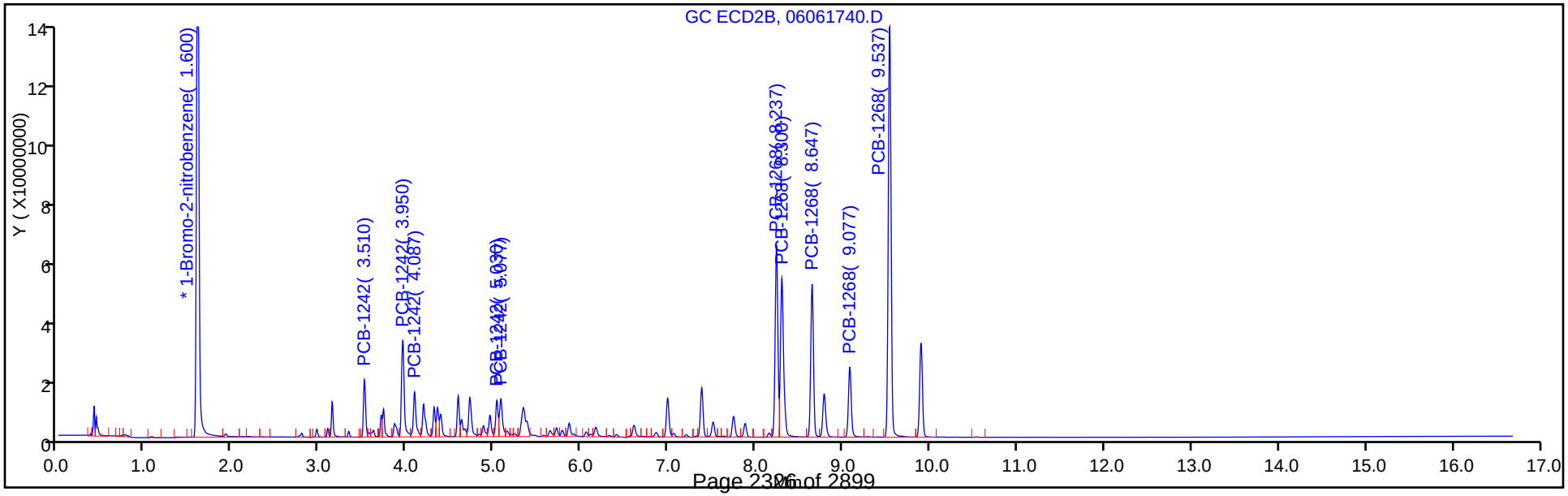
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061740.D

Injection Date:	07-Jun-2017 03:54:43	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	ICV			Worklist Smp#:	40
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 07:10:24 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061740.D

Injection Date: 07-Jun-2017 03:54:43 Instrument ID: SGC_P3

Lims ID: ICV

Client ID:

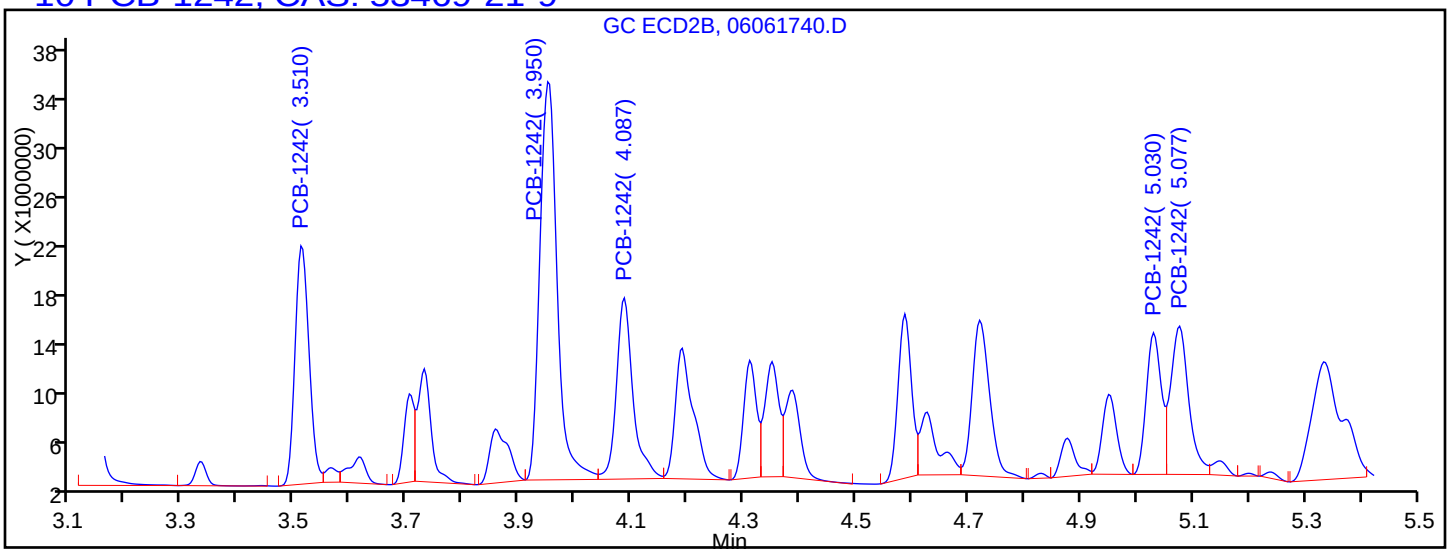
Operator ID: jax ALS Bottle#: 40 Worklist Smp#: 40

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

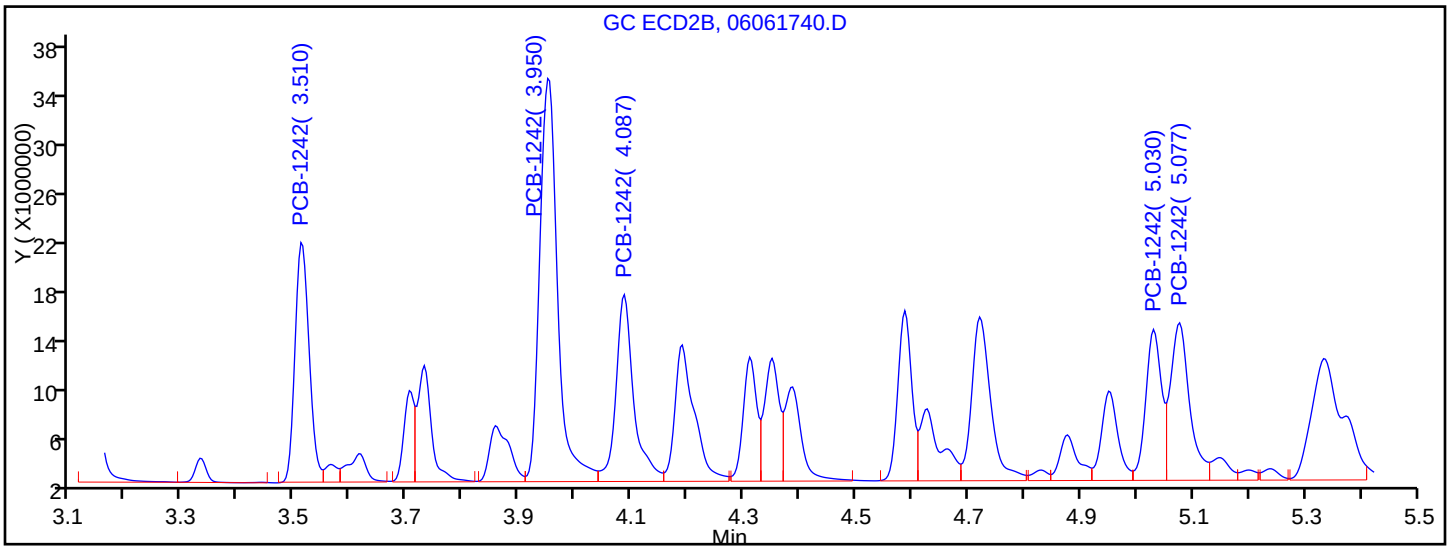
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

10 PCB-1242, CAS: 53469-21-9



Processing Integration Results

3.510	Response = 32836080
3.950	Response = 67831748
4.087	Response = 29465232
5.030	Response = 21021715
5.077	Response = 25978056



Manual Integration Results

3.510	Response = 33296452	M
3.950	Response = 71014285	M
4.087	Response = 32684472	M
5.030	Response = 23650766	M
5.077	Response = 29285976	M

Reviewer: jacksonto, 07-Jun-2017 06:49:36

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVIS 280-377714/3 Calibration Date: 06/17/2017 12:01

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06171703.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3243		490	500	-2.1	20.0
PCB-1016 Peak 2	Lin1		0.7398		483	500	-3.4	20.0
PCB-1016 Peak 3	Lin1		0.3086		484	500	-3.2	20.0
PCB-1016 Peak 4	Lin1		0.2018		489	500	-2.2	20.0
PCB-1016 Peak 5	Lin1		0.3220		483	500	-3.4	20.0
PCB-1260 Peak 1	Lin1		0.4884		480	500	-3.9	20.0
PCB-1260 Peak 2	Lin1		0.9520		477	500	-4.6	20.0
PCB-1260 Peak 3	Lin1		0.4441		480	500	-4.1	20.0
PCB-1260 Peak 4	Lin1		0.9758		477	500	-4.5	20.0
PCB-1260 Peak 5	Lin1		0.5650		479	500	-4.1	20.0
Tetrachloro-m-xylene	Lin1		10.47		24.2	25.0	-3.1	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		9.98		24.0	25.0	-3.8	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVIS 280-377714/3 Calibration Date: 06/17/2017 12:01

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06171703.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.49	3.24	3.74
PCB-1016 Peak 2	3.95	3.70	4.20
PCB-1016 Peak 3	4.09	3.84	4.34
PCB-1016 Peak 4	4.15	3.90	4.40
PCB-1016 Peak 5	4.54	4.29	4.79
PCB-1260 Peak 1	6.01	5.76	6.26
PCB-1260 Peak 2	6.74	6.49	6.99
PCB-1260 Peak 3	7.23	6.98	7.48
PCB-1260 Peak 4	7.67	7.42	7.92
PCB-1260 Peak 5	8.05	7.80	8.30
Tetrachloro-m-xylene	2.75	2.50	3.00
DCB Decachlorobiphenyl (Surr)	9.63	9.38	9.88

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171703.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 17-Jun-2017 12:01:50 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 280-0059856-003
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:58 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:08:31

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.825	0.000	363053222	1000.0	1000.0	
2	1.591	1.591	0.000	409486487	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.748	2.748	0.000	95001878	25.0	24.2	
2	2.641	2.641	0.000	113986333	25.0	24.3	
						RPD = 0.24	
1 PCB-1016							
1	3.485	3.485	0.000	58875001	500.0	489.6	
1	3.948	3.948	0.000	134296475	500.0	482.9	
1	4.085	4.085	0.000	56017796	500.0	483.9	
1	4.151	4.151	0.000	36631324	500.0	489.0	
1	4.535	4.535	0.000	58458138	500.0	482.9	
		Average of Peak Amounts =				485.6	
2	3.501	3.501	0.000	74204850	500.0	500.1	
2	3.941	3.941	0.000	162821912	500.0	493.6	
2	4.075	4.075	0.000	74459179	500.0	494.9	
2	4.298	4.298	0.000	39331378	500.0	480.0	
2	4.575	4.575	0.000	53024186	500.0	477.9	
		Average of Peak Amounts =				489.3	
						RPD = 0.75	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.008	6.008	0.000	88656632	500.0	480.4	
1	6.738	6.738	0.000	172811117	500.0	477.2	
1	7.228	7.228	0.000	80622686	500.0	479.5	
1	7.665	7.665	0.000	177130848	500.0	477.3	
1	8.048	8.048	0.000	102562680	500.0	479.3	
		Average of Peak Amounts =				478.8	
2	6.388	6.388	0.000	128545249	500.0	483.8	
2	6.841	6.841	0.000	193476084	500.0	483.4	
2	7.358	7.358	0.000	88813233	500.0	484.8	
2	7.728	7.728	0.000	192478997	500.0	489.0	
2	8.221	8.221	0.000	147037566	500.0	485.6	
		Average of Peak Amounts =				485.3	
						RPD = 1.36	
$ 15 DCB Decachlorobiphenyl							
1	9.625	9.625	0.000	90621531	25.0	24.0	
2	9.878	9.878	0.000	94149739	25.0	24.4	
						RPD = 1.62	
19 1260 Res 1							
1	8.048	8.048	0.000	102562680	NR	NR	
16 1260 Res 2							
1	8.108	8.108	0.000	34707473	NR	NR	
18 1260 Res 3							
1	8.171	8.171	0.000	46968745	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

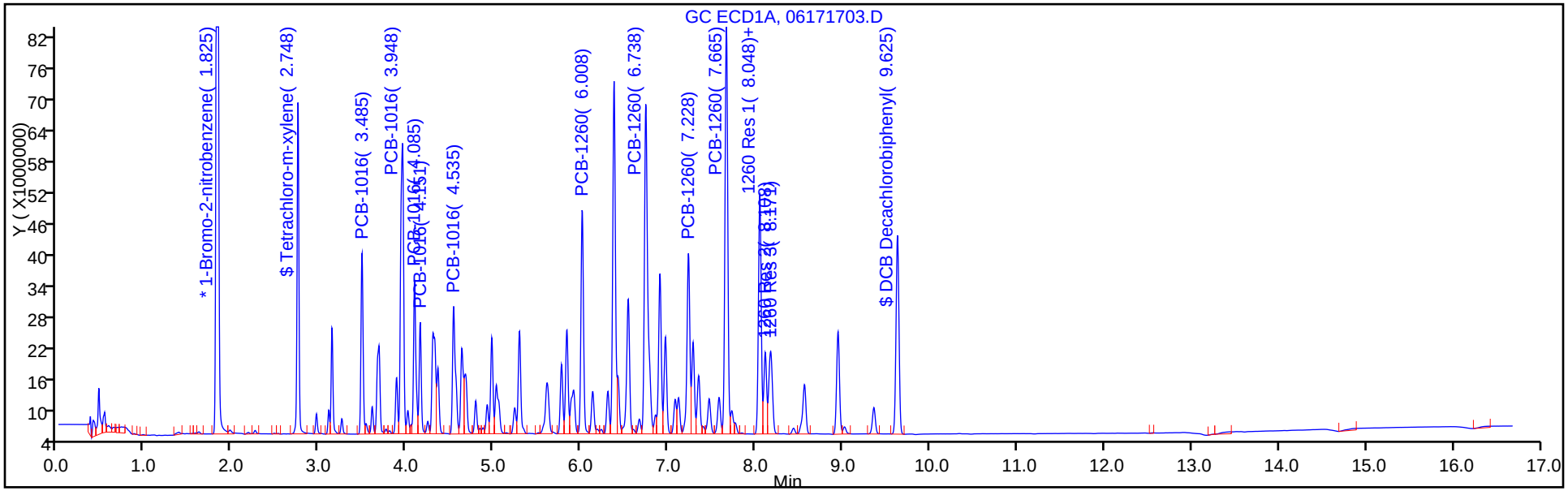
Report Date: 18-Jun-2017 10:14:58 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

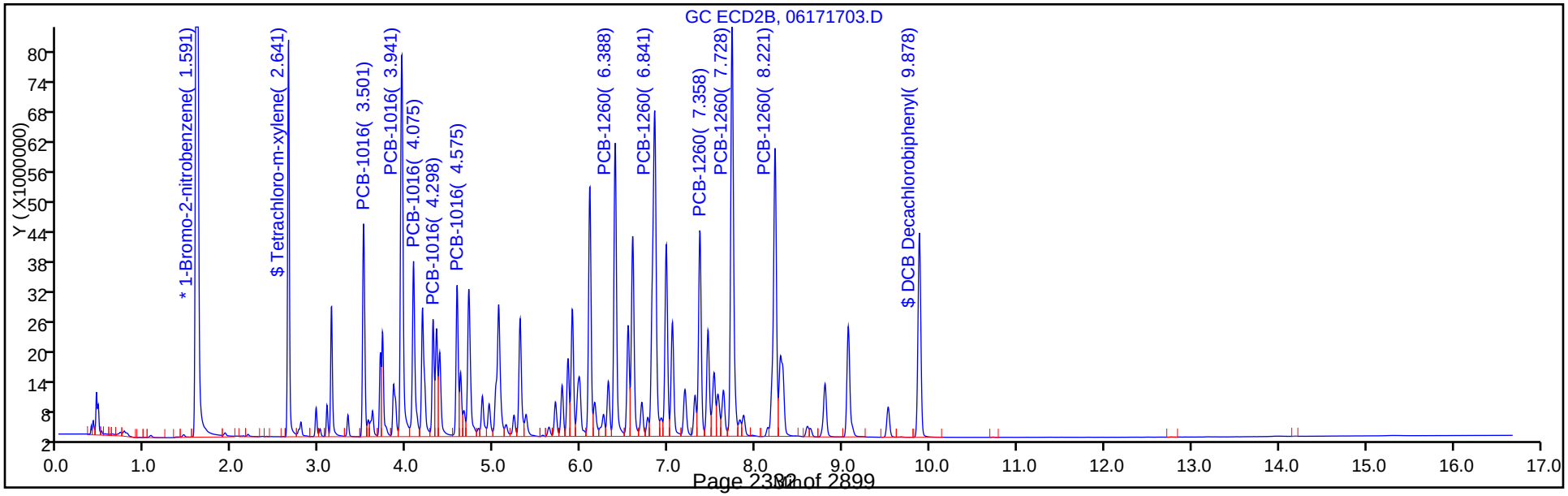
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171703.D

Injection Date:	17-Jun-2017 12:01:50	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVIS 280-377714/3 Calibration Date: 06/17/2017 12:01

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06171703.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3624		500	500	0.0	20.0
PCB-1016 Peak 2	Lin1		0.7953		494	500	-1.3	20.0
PCB-1016 Peak 3	Lin1		0.3637		495	500	-1.0	20.0
PCB-1016 Peak 4	Lin1		0.1921		480	500	-4.0	20.0
PCB-1016 Peak 5	Lin1		0.2590		478	500	-4.4	20.0
PCB-1260 Peak 1	Lin1		0.6278		484	500	-3.2	20.0
PCB-1260 Peak 2	Lin1		0.9450		483	500	-3.3	20.0
PCB-1260 Peak 3	Lin1		0.4338		485	500	-3.0	20.0
PCB-1260 Peak 4	Lin1		0.9401		489	500	-2.2	20.0
PCB-1260 Peak 5	Lin1		0.7182		486	500	-2.9	20.0
Tetrachloro-m-xylene	Lin1		11.13		24.3	25.0	-2.9	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		9.197		24.4	25.0	-2.3	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVIS 280-377714/3 Calibration Date: 06/17/2017 12:01

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06171703.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.50	3.25	3.75
PCB-1016 Peak 2	3.94	3.69	4.19
PCB-1016 Peak 3	4.08	3.83	4.33
PCB-1016 Peak 4	4.30	4.05	4.55
PCB-1016 Peak 5	4.58	4.33	4.83
PCB-1260 Peak 1	6.39	6.14	6.64
PCB-1260 Peak 2	6.84	6.59	7.09
PCB-1260 Peak 3	7.36	7.11	7.61
PCB-1260 Peak 4	7.73	7.48	7.98
PCB-1260 Peak 5	8.22	7.97	8.47
Tetrachloro-m-xylene	2.64	2.39	2.89
DCB Decachlorobiphenyl (Surr)	9.88	9.63	10.13

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171703.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 17-Jun-2017 12:01:50 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 280-0059856-003
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:58 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:08:31

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.825	0.000	363053222	1000.0	1000.0	
2	1.591	1.591	0.000	409486487	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.748	2.748	0.000	95001878	25.0	24.2	
2	2.641	2.641	0.000	113986333	25.0	24.3	
						RPD = 0.24	
1 PCB-1016							
1	3.485	3.485	0.000	58875001	500.0	489.6	
1	3.948	3.948	0.000	134296475	500.0	482.9	
1	4.085	4.085	0.000	56017796	500.0	483.9	
1	4.151	4.151	0.000	36631324	500.0	489.0	
1	4.535	4.535	0.000	58458138	500.0	482.9	
		Average of Peak Amounts =				485.6	
2	3.501	3.501	0.000	74204850	500.0	500.1	
2	3.941	3.941	0.000	162821912	500.0	493.6	
2	4.075	4.075	0.000	74459179	500.0	494.9	
2	4.298	4.298	0.000	39331378	500.0	480.0	
2	4.575	4.575	0.000	53024186	500.0	477.9	
		Average of Peak Amounts =				489.3	
						RPD = 0.75	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.008	6.008	0.000	88656632	500.0	480.4	
1	6.738	6.738	0.000	172811117	500.0	477.2	
1	7.228	7.228	0.000	80622686	500.0	479.5	
1	7.665	7.665	0.000	177130848	500.0	477.3	
1	8.048	8.048	0.000	102562680	500.0	479.3	
		Average of Peak Amounts =				478.8	
2	6.388	6.388	0.000	128545249	500.0	483.8	
2	6.841	6.841	0.000	193476084	500.0	483.4	
2	7.358	7.358	0.000	88813233	500.0	484.8	
2	7.728	7.728	0.000	192478997	500.0	489.0	
2	8.221	8.221	0.000	147037566	500.0	485.6	
		Average of Peak Amounts =				485.3	
						RPD = 1.36	
$ 15 DCB Decachlorobiphenyl							
1	9.625	9.625	0.000	90621531	25.0	24.0	
2	9.878	9.878	0.000	94149739	25.0	24.4	
						RPD = 1.62	
19 1260 Res 1							
1	8.048	8.048	0.000	102562680	NR	NR	
16 1260 Res 2							
1	8.108	8.108	0.000	34707473	NR	NR	
18 1260 Res 3							
1	8.171	8.171	0.000	46968745	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

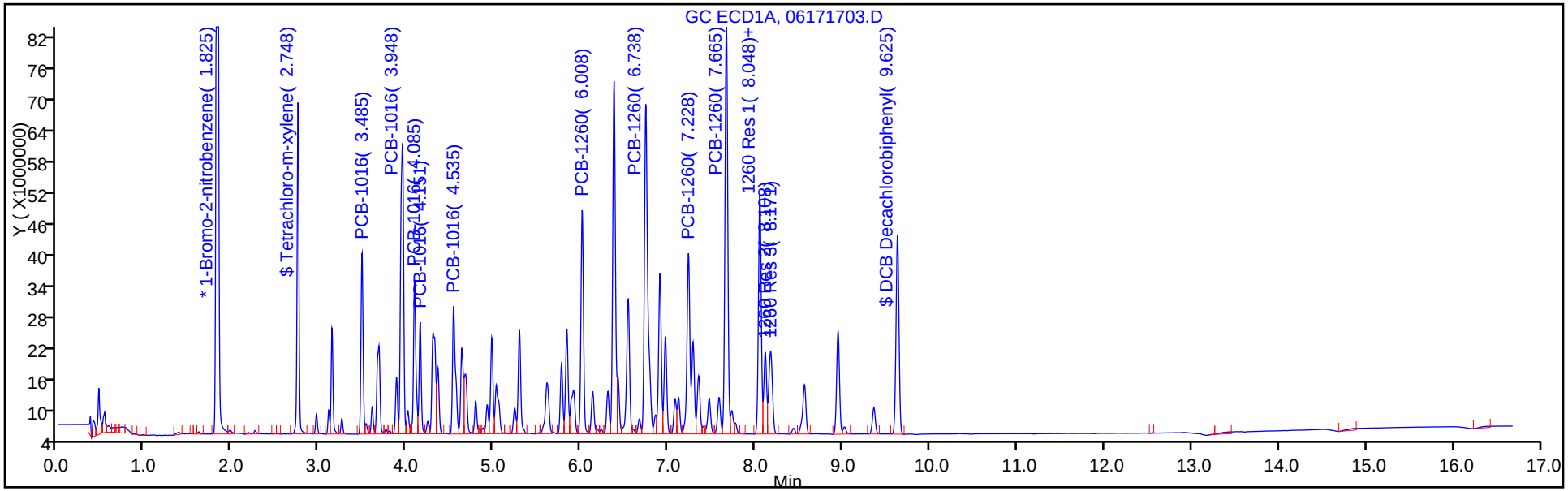
Report Date: 18-Jun-2017 10:14:59 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

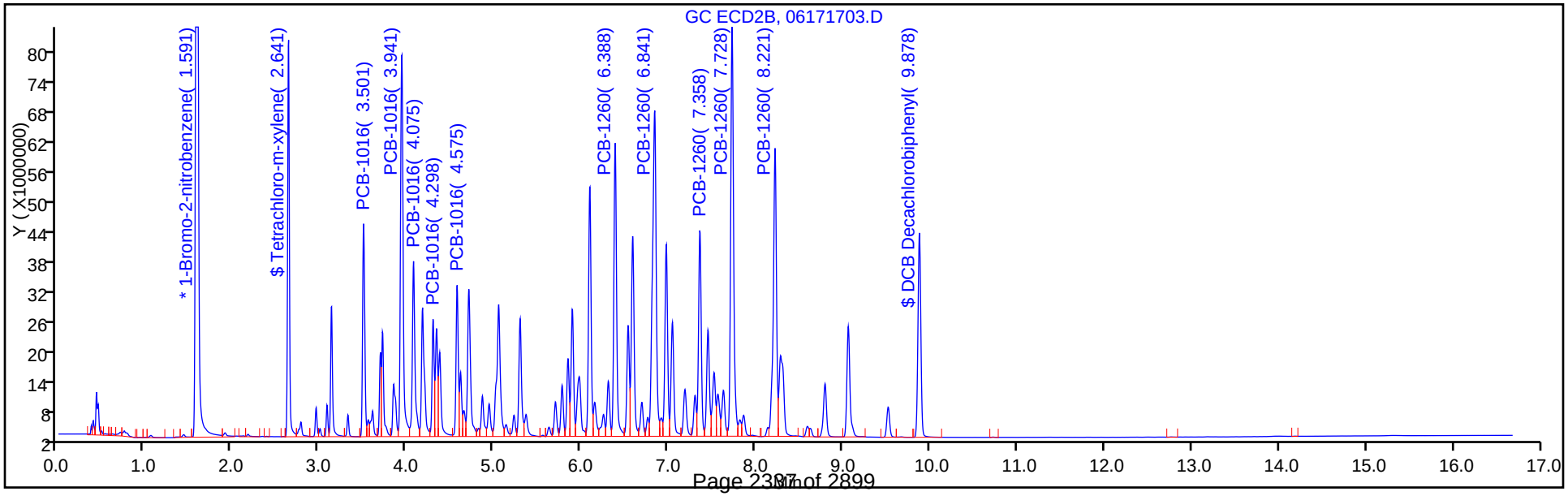
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171703.D

Injection Date:	17-Jun-2017 12:01:50	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377714/4 Calibration Date: 06/17/2017 12:23

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 16:21

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 18:31

Lab File ID: 06171704.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Lin1		0.1006		486	500	-2.7	20.0
PCB-1221 Peak 2	Lin1		0.0641		470	500	-6.0	20.0
PCB-1221 Peak 3	Lin1		0.2474		498	500	-0.4	20.0
PCB-1254 Peak 1	Lin1		0.4360		478	500	-4.3	20.0
PCB-1254 Peak 2	Lin1		0.3539		467	500	-6.6	20.0
PCB-1254 Peak 3	Lin1		0.6209		465	500	-6.9	20.0
PCB-1254 Peak 4	Lin1		0.2847		464	500	-7.2	20.0
PCB-1254 Peak 5	Lin1		0.6485		466	500	-6.9	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377714/4 Calibration Date: 06/17/2017 12:23

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 16:21

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 18:31

Lab File ID: 06171704.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1221 Peak 1	2.96	2.71	3.21
PCB-1221 Peak 2	3.10	2.86	3.36
PCB-1221 Peak 3	3.14	2.89	3.39
PCB-1254 Peak 1	5.29	5.04	5.54
PCB-1254 Peak 2	5.62	5.37	5.87
PCB-1254 Peak 3	5.77	5.53	6.03
PCB-1254 Peak 4	6.48	6.23	6.73
PCB-1254 Peak 5	6.74	6.49	6.99

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171704.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 17-Jun-2017 12:23:33 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV 2154
Misc. Info.: 280-0059856-004
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:15:00 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:08:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.823	1.825	-0.002	359395406	1000.0	1000.0	
2	1.589	1.591	-0.002	405726711	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.959	2.963	-0.004	18076943	500.0	486.4	
1	3.103	3.106	-0.003	11513528	500.0	470.0	
1	3.139	3.143	-0.004	44455151	500.0	497.9	
		Average of Peak Amounts =				484.8	
2	2.956	2.966	-0.010	25972383	500.0	489.2	
2	3.083	3.090	-0.007	16044045	500.0	492.4	
2	3.133	3.143	-0.010	58259804	500.0	497.0	
		Average of Peak Amounts =				492.9	
						RPD = 1.65	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
9 PCB-1254							
1	5.289	5.293	-0.004	78345849	500.0	478.4	
1	5.619	5.623	-0.004	63598311	500.0	466.9	
1	5.773	5.776	-0.003	111579220	500.0	465.3	
1	6.479	6.483	-0.004	51153107	500.0	463.9	
1	6.739	6.743	-0.004	116531976	500.0	465.6	
		Average of Peak Amounts =				468.0	
2	5.296	5.310	-0.014	93368153	500.0	477.6	
2	5.699	5.713	-0.014	72409492	500.0	479.7	
2	5.843	5.860	-0.017	145699559	500.0	531.1	
2	6.149	6.163	-0.014	99968972	500.0	479.4	
2	6.843	6.860	-0.017	138725796	500.0	481.6	
		Average of Peak Amounts =				489.9	
						RPD = 4.57	
S 8 Polychlorinated biphenyls, Total							
1						952.8	
2						982.8	
						RPD = 3.10	

Reagents:

AR_2154_L5_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

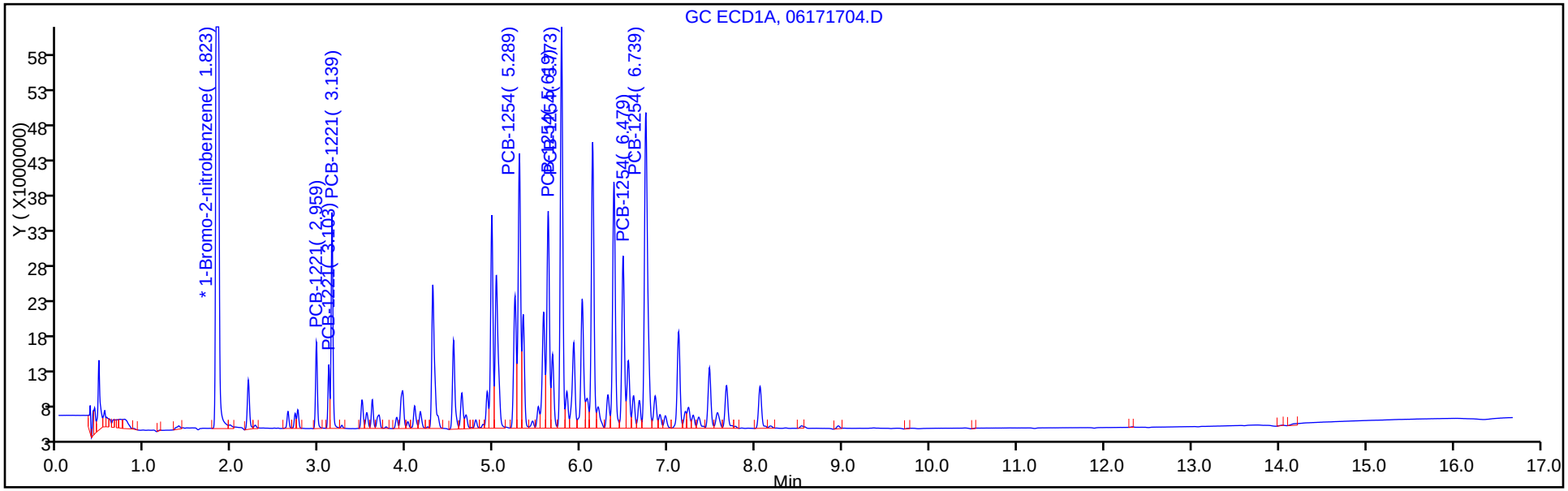
Report Date: 18-Jun-2017 10:15:00 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

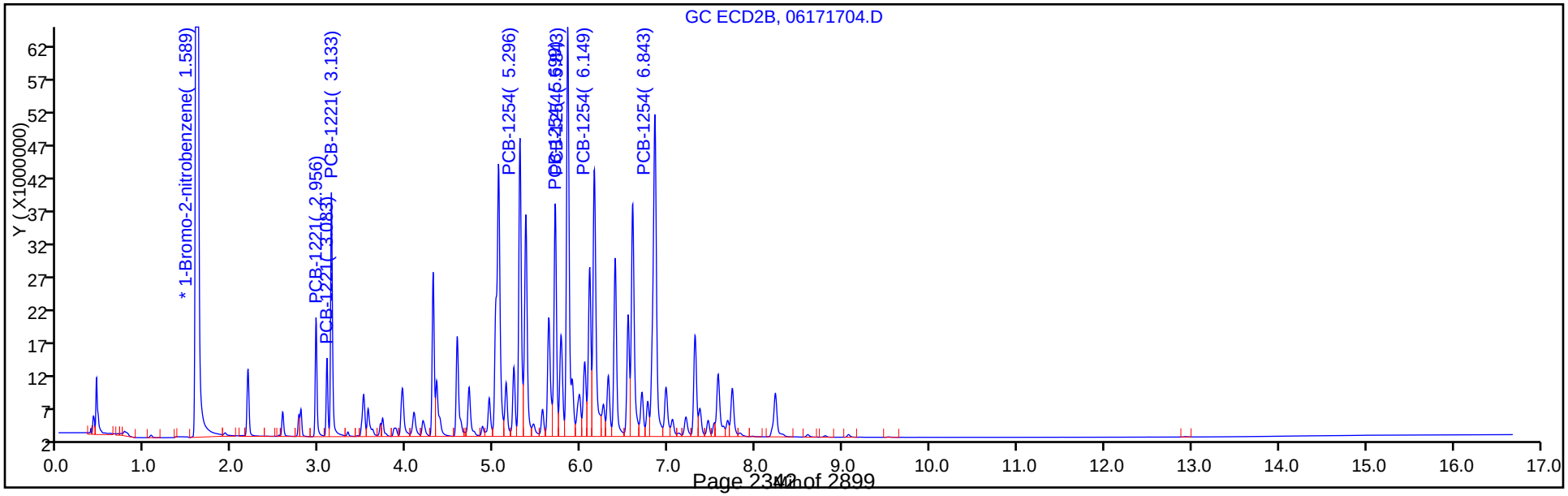
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171704.D

Injection Date:	17-Jun-2017 12:23:33	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCV			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377714/4 Calibration Date: 06/17/2017 12:23

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 16:21

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 18:31

Lab File ID: 06171704.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Lin1		0.1280		489	500	-2.2	20.0
PCB-1221 Peak 2	Lin1		0.0791		492	500	-1.5	20.0
PCB-1221 Peak 3	Lin1		0.2872		497	500	-0.6	20.0
PCB-1254 Peak 1	Lin1		0.4603		478	500	-4.5	20.0
PCB-1254 Peak 2	Lin1		0.3569		480	500	-4.1	20.0
PCB-1254 Peak 3	Lin1		0.7182		531	500	6.2	20.0
PCB-1254 Peak 4	Lin1		0.4928		479	500	-4.1	20.0
PCB-1254 Peak 5	Lin1		0.6838		482	500	-3.7	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377714/4 Calibration Date: 06/17/2017 12:23

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 16:21

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 18:31

Lab File ID: 06171704.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1221 Peak 1	2.96	2.72	3.22
PCB-1221 Peak 2	3.08	2.84	3.34
PCB-1221 Peak 3	3.13	2.89	3.39
PCB-1254 Peak 1	5.30	5.06	5.56
PCB-1254 Peak 2	5.70	5.46	5.96
PCB-1254 Peak 3	5.84	5.61	6.11
PCB-1254 Peak 4	6.15	5.91	6.41
PCB-1254 Peak 5	6.84	6.61	7.11

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171704.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 17-Jun-2017 12:23:33 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV 2154
Misc. Info.: 280-0059856-004
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:15:00 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:08:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.823	1.825	-0.002	359395406	1000.0	1000.0	
2	1.589	1.591	-0.002	405726711	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.959	2.963	-0.004	18076943	500.0	486.4	
1	3.103	3.106	-0.003	11513528	500.0	470.0	
1	3.139	3.143	-0.004	44455151	500.0	497.9	
		Average of Peak Amounts =				484.8	
2	2.956	2.966	-0.010	25972383	500.0	489.2	
2	3.083	3.090	-0.007	16044045	500.0	492.4	
2	3.133	3.143	-0.010	58259804	500.0	497.0	
		Average of Peak Amounts =				492.9	
						RPD = 1.65	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
9 PCB-1254							
1	5.289	5.293	-0.004	78345849	500.0	478.4	
1	5.619	5.623	-0.004	63598311	500.0	466.9	
1	5.773	5.776	-0.003	111579220	500.0	465.3	
1	6.479	6.483	-0.004	51153107	500.0	463.9	
1	6.739	6.743	-0.004	116531976	500.0	465.6	
		Average of Peak Amounts =				468.0	
2	5.296	5.310	-0.014	93368153	500.0	477.6	
2	5.699	5.713	-0.014	72409492	500.0	479.7	
2	5.843	5.860	-0.017	145699559	500.0	531.1	
2	6.149	6.163	-0.014	99968972	500.0	479.4	
2	6.843	6.860	-0.017	138725796	500.0	481.6	
		Average of Peak Amounts =				489.9	
						RPD = 4.57	
S 8 Polychlorinated biphenyls, Total							
1						952.8	
2						982.8	
						RPD = 3.10	

Reagents:

AR_2154_L5_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

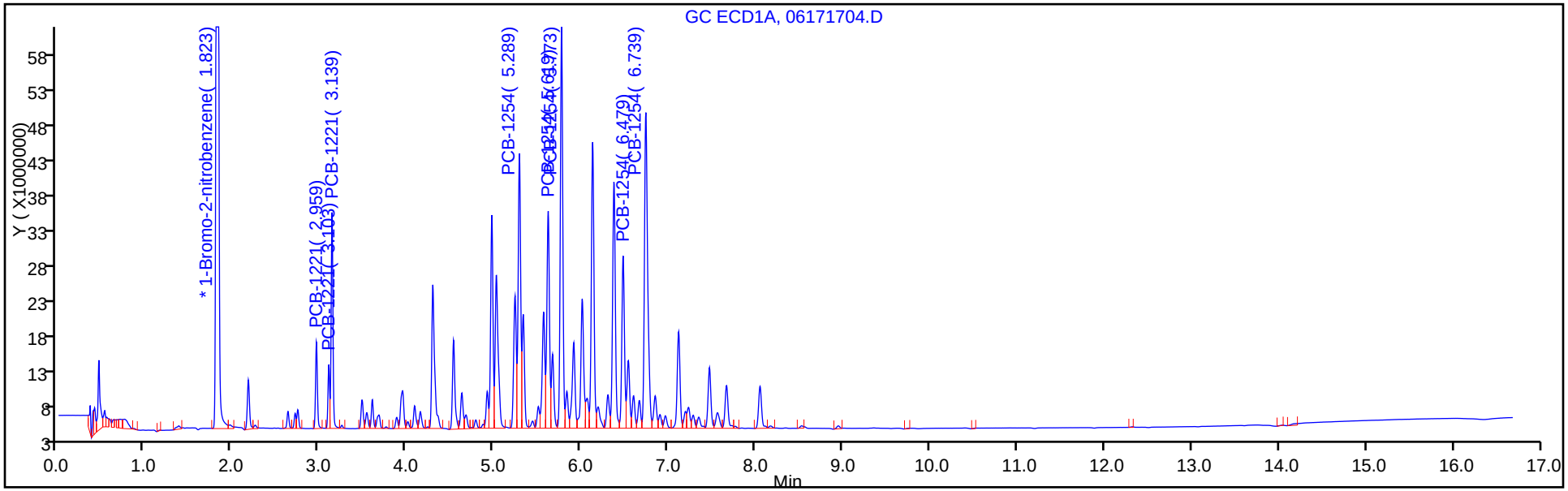
Report Date: 18-Jun-2017 10:15:03 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

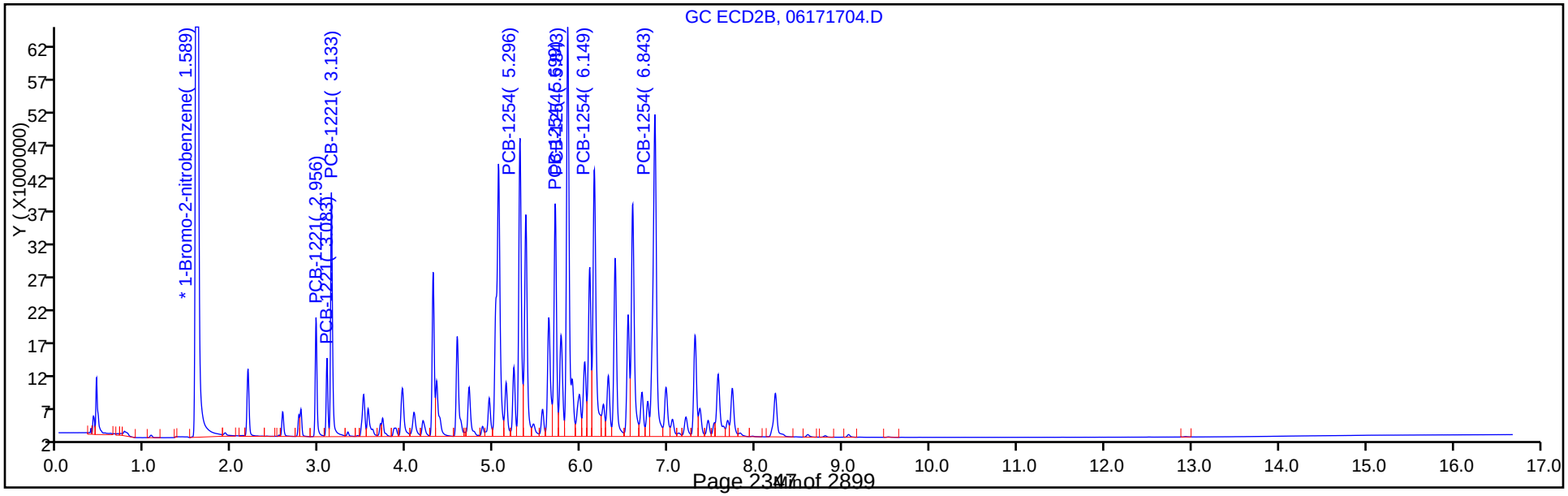
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171704.D

Injection Date:	17-Jun-2017 12:23:33	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCV			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377714/12 Calibration Date: 06/17/2017 15:17

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06171712.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3230		487	500	-2.5	20.0
PCB-1016 Peak 2	Lin1		0.7396		483	500	-3.5	20.0
PCB-1016 Peak 3	Lin1		0.3074		482	500	-3.6	20.0
PCB-1016 Peak 4	Lin1		0.2019		489	500	-2.2	20.0
PCB-1016 Peak 5	Lin1		0.3223		483	500	-3.4	20.0
PCB-1260 Peak 1	Lin1		0.4906		483	500	-3.5	20.0
PCB-1260 Peak 2	Lin1		0.9506		476	500	-4.7	20.0
PCB-1260 Peak 3	Lin1		0.4445		480	500	-4.0	20.0
PCB-1260 Peak 4	Lin1		0.9726		476	500	-4.8	20.0
PCB-1260 Peak 5	Lin1		0.5666		481	500	-3.9	20.0
Tetrachloro-m-xylene	Lin1		10.43		24.1	25.0	-3.5	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		10.02		24.1	25.0	-3.5	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377714/12 Calibration Date: 06/17/2017 15:17

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06171712.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.48	3.24	3.74
PCB-1016 Peak 2	3.95	3.70	4.20
PCB-1016 Peak 3	4.09	3.84	4.34
PCB-1016 Peak 4	4.15	3.90	4.40
PCB-1016 Peak 5	4.53	4.29	4.79
PCB-1260 Peak 1	6.01	5.76	6.26
PCB-1260 Peak 2	6.74	6.49	6.99
PCB-1260 Peak 3	7.23	6.98	7.48
PCB-1260 Peak 4	7.66	7.42	7.92
PCB-1260 Peak 5	8.05	7.80	8.30
Tetrachloro-m-xylene	2.75	2.50	3.00
DCB Decachlorobiphenyl (Surr)	9.63	9.38	9.88

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171712.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 17-Jun-2017 15:17:25 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0059856-012
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:10:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.824	1.825	-0.001	363663086	1000.0	1000.0	
2	1.591	1.591	0.000	414790412	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.751	2.748	0.003	94809616	25.0	24.1	
2	2.637	2.641	-0.004	114944221	25.0	24.2	
						RPD = 0.15	
1 PCB-1016							
1	3.484	3.485	-0.001	58722022	500.0	487.4	
1	3.947	3.948	-0.001	134482582	500.0	482.7	
1	4.087	4.085	0.002	55901917	500.0	482.0	
1	4.151	4.151	0.000	36706648	500.0	489.2	
1	4.534	4.535	-0.001	58598940	500.0	483.2	
		Average of Peak Amounts =				484.9	
2	3.501	3.501	0.000	75774000	500.0	504.4	
2	3.937	3.941	-0.004	165197622	500.0	494.4	
2	4.074	4.075	-0.001	74896733	500.0	491.3	
2	4.297	4.298	-0.001	40903984	500.0	493.4	
2	4.571	4.575	-0.004	55868499	500.0	497.9	
		Average of Peak Amounts =				496.3	
						RPD = 2.31	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.007	6.008	-0.001	89196789	500.0	482.6	
1	6.737	6.738	-0.001	172847880	500.0	476.5	
1	7.227	7.228	-0.001	80826865	500.0	479.9	
1	7.664	7.665	-0.001	176846248	500.0	475.8	
1	8.047	8.048	-0.001	103025983	500.0	480.7	
		Average of Peak Amounts =				479.1	
2	6.384	6.388	-0.004	130272066	500.0	484.0	
2	6.837	6.841	-0.004	197619269	500.0	487.5	
2	7.357	7.358	-0.001	91198814	500.0	491.7	
2	7.727	7.728	-0.001	195460962	500.0	490.3	
2	8.221	8.221	0.000	151581016	500.0	494.5	
		Average of Peak Amounts =				489.6	
						RPD = 2.17	
$ 15 DCB Decachlorobiphenyl							
1	9.627	9.625	0.002	91080339	25.0	24.1	
2	9.877	9.878	-0.001	96482310	25.0	24.7	
						RPD = 2.47	
S 8 Polychlorinated biphenyls, Total							
1						964.0	
2						985.9	
						RPD = 2.24	
19 1260 Res 1							
1		8.048			ND	ND	
16 1260 Res 2							
1		8.108			ND	ND	
18 1260 Res 3							
1		8.171			ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

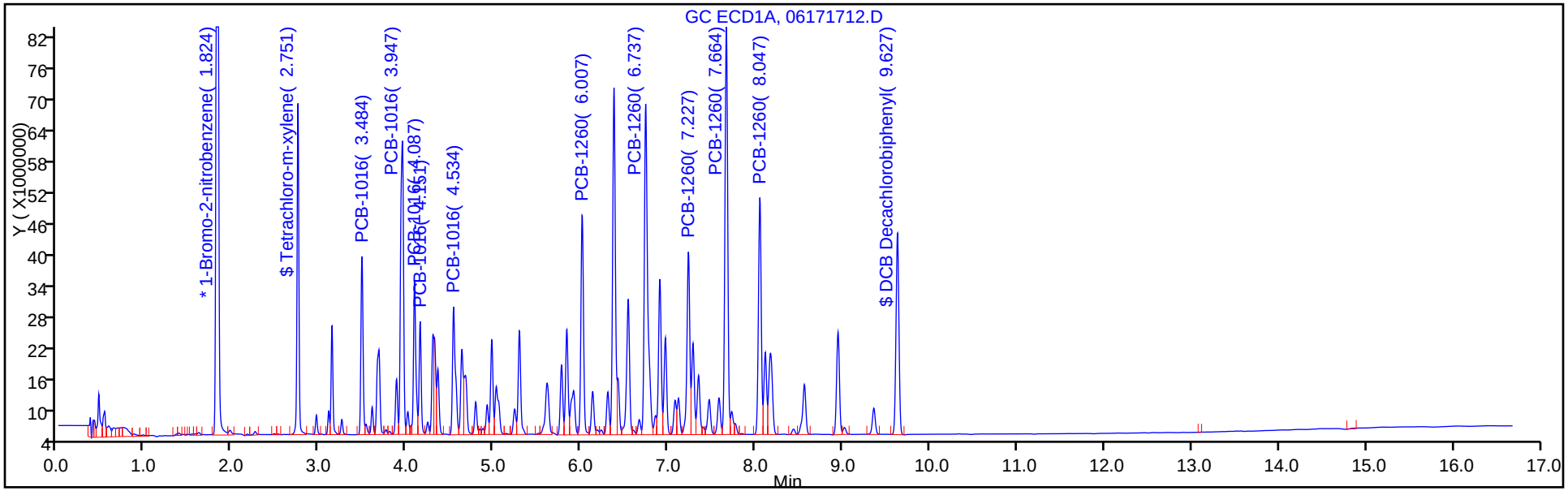
Report Date: 18-Jun-2017 10:14:37 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

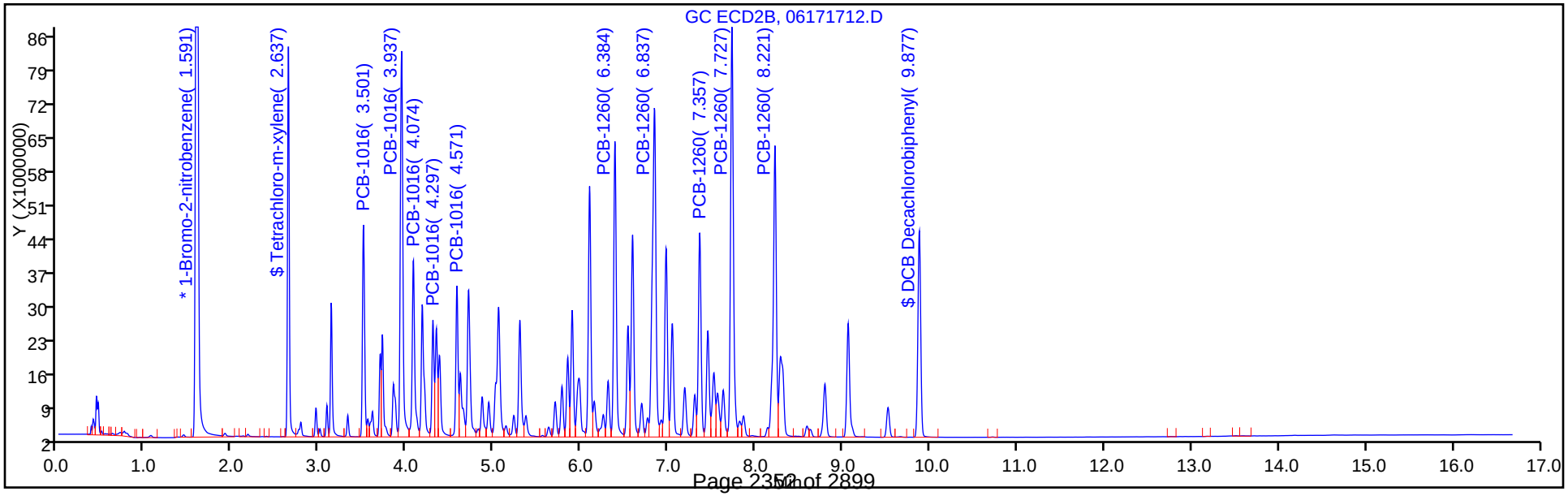
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171712.D

Injection Date:	17-Jun-2017 15:17:25	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCV			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377714/12 Calibration Date: 06/17/2017 15:17

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06171712.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3654		504	500	0.9	20.0
PCB-1016 Peak 2	Lin1		0.7965		494	500	-1.1	20.0
PCB-1016 Peak 3	Lin1		0.3611		491	500	-1.7	20.0
PCB-1016 Peak 4	Lin1		0.1972		493	500	-1.3	20.0
PCB-1016 Peak 5	Lin1		0.2694		498	500	-0.4	20.0
PCB-1260 Peak 1	Lin1		0.6281		484	500	-3.2	20.0
PCB-1260 Peak 2	Lin1		0.9529		488	500	-2.5	20.0
PCB-1260 Peak 3	Lin1		0.4397		492	500	-1.7	20.0
PCB-1260 Peak 4	Lin1		0.9425		490	500	-1.9	20.0
PCB-1260 Peak 5	Lin1		0.7309		495	500	-1.1	20.0
Tetrachloro-m-xylene	Lin1		11.08		24.2	25.0	-3.3	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		9.304		24.7	25.0	-1.1	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377714/12 Calibration Date: 06/17/2017 15:17

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06171712.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.50	3.25	3.75
PCB-1016 Peak 2	3.94	3.69	4.19
PCB-1016 Peak 3	4.07	3.83	4.33
PCB-1016 Peak 4	4.30	4.05	4.55
PCB-1016 Peak 5	4.57	4.33	4.83
PCB-1260 Peak 1	6.38	6.14	6.64
PCB-1260 Peak 2	6.84	6.59	7.09
PCB-1260 Peak 3	7.36	7.11	7.61
PCB-1260 Peak 4	7.73	7.48	7.98
PCB-1260 Peak 5	8.22	7.97	8.47
Tetrachloro-m-xylene	2.64	2.39	2.89
DCB Decachlorobiphenyl (Surr)	9.88	9.63	10.13

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171712.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 17-Jun-2017 15:17:25 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0059856-012
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:10:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.824	1.825	-0.001	363663086	1000.0	1000.0	
2	1.591	1.591	0.000	414790412	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.751	2.748	0.003	94809616	25.0	24.1	
2	2.637	2.641	-0.004	114944221	25.0	24.2	
						RPD = 0.15	
1 PCB-1016							
1	3.484	3.485	-0.001	58722022	500.0	487.4	
1	3.947	3.948	-0.001	134482582	500.0	482.7	
1	4.087	4.085	0.002	55901917	500.0	482.0	
1	4.151	4.151	0.000	36706648	500.0	489.2	
1	4.534	4.535	-0.001	58598940	500.0	483.2	
		Average of Peak Amounts =				484.9	
2	3.501	3.501	0.000	75774000	500.0	504.4	
2	3.937	3.941	-0.004	165197622	500.0	494.4	
2	4.074	4.075	-0.001	74896733	500.0	491.3	
2	4.297	4.298	-0.001	40903984	500.0	493.4	
2	4.571	4.575	-0.004	55868499	500.0	497.9	
		Average of Peak Amounts =				496.3	
						RPD = 2.31	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.007	6.008	-0.001	89196789	500.0	482.6	
1	6.737	6.738	-0.001	172847880	500.0	476.5	
1	7.227	7.228	-0.001	80826865	500.0	479.9	
1	7.664	7.665	-0.001	176846248	500.0	475.8	
1	8.047	8.048	-0.001	103025983	500.0	480.7	
		Average of Peak Amounts =				479.1	
2	6.384	6.388	-0.004	130272066	500.0	484.0	
2	6.837	6.841	-0.004	197619269	500.0	487.5	
2	7.357	7.358	-0.001	91198814	500.0	491.7	
2	7.727	7.728	-0.001	195460962	500.0	490.3	
2	8.221	8.221	0.000	151581016	500.0	494.5	
		Average of Peak Amounts =				489.6	
						RPD = 2.17	
$ 15 DCB Decachlorobiphenyl							
1	9.627	9.625	0.002	91080339	25.0	24.1	
2	9.877	9.878	-0.001	96482310	25.0	24.7	
						RPD = 2.47	
S 8 Polychlorinated biphenyls, Total							
1						964.0	
2						985.9	
						RPD = 2.24	
19 1260 Res 1							
1		8.048			ND	ND	
16 1260 Res 2							
1		8.108			ND	ND	
18 1260 Res 3							
1		8.171			ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

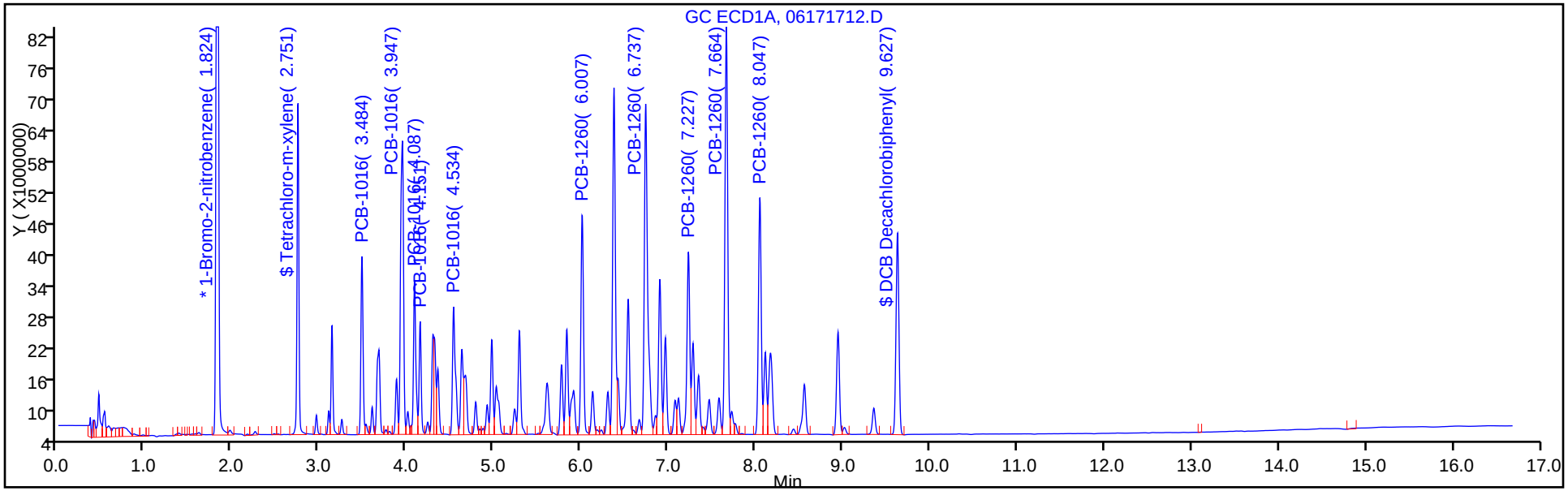
Report Date: 18-Jun-2017 10:14:38 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

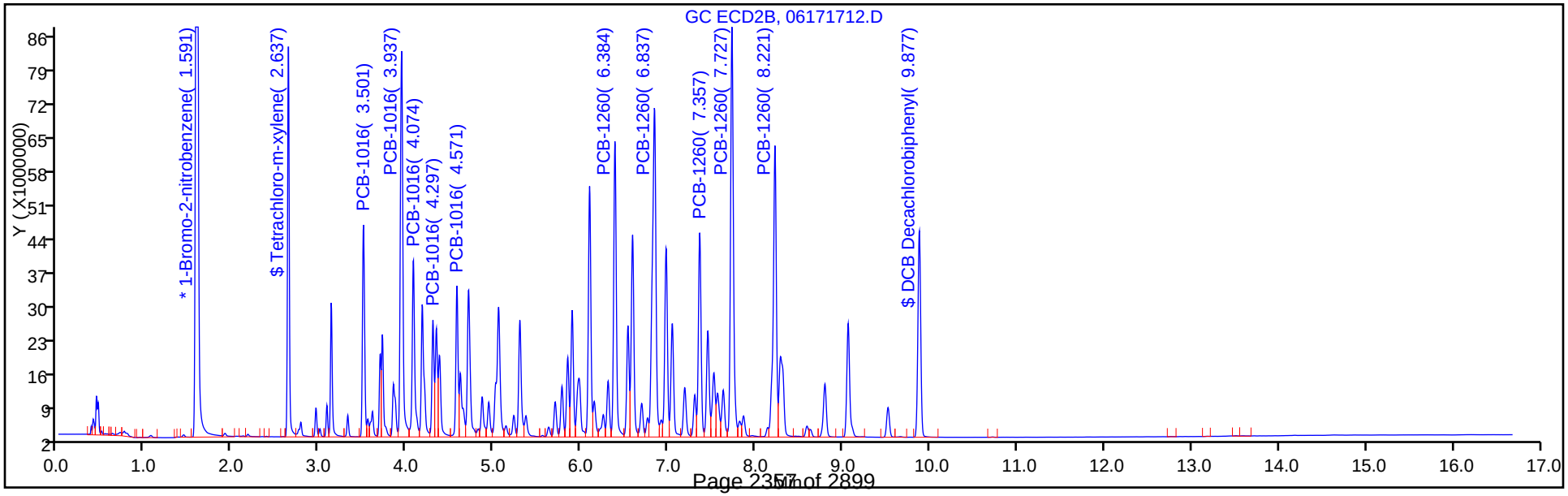
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171712.D

Injection Date:	17-Jun-2017 15:17:25	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCV			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377714/21 Calibration Date: 06/17/2017 18:33

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06171721.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3273		494	500	-1.2	20.0
PCB-1016 Peak 2	Lin1		0.7531		492	500	-1.7	20.0
PCB-1016 Peak 3	Lin1		0.3125		490	500	-2.0	20.0
PCB-1016 Peak 4	Lin1		0.2041		495	500	-1.1	20.0
PCB-1016 Peak 5	Lin1		0.3263		489	500	-2.1	20.0
PCB-1260 Peak 1	Lin1		0.4974		490	500	-2.1	20.0
PCB-1260 Peak 2	Lin1		0.9662		484	500	-3.1	20.0
PCB-1260 Peak 3	Lin1		0.4516		488	500	-2.4	20.0
PCB-1260 Peak 4	Lin1		0.9870		483	500	-3.4	20.0
PCB-1260 Peak 5	Lin1		0.5636		478	500	-4.4	20.0
Tetrachloro-m-xylene	Lin1		10.50		24.3	25.0	-2.8	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		10.04		24.2	25.0	-3.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377714/21 Calibration Date: 06/17/2017 18:33

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06171721.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.48	3.24	3.74
PCB-1016 Peak 2	3.95	3.70	4.20
PCB-1016 Peak 3	4.09	3.84	4.34
PCB-1016 Peak 4	4.15	3.90	4.40
PCB-1016 Peak 5	4.53	4.29	4.79
PCB-1260 Peak 1	6.01	5.76	6.26
PCB-1260 Peak 2	6.74	6.49	6.99
PCB-1260 Peak 3	7.23	6.98	7.48
PCB-1260 Peak 4	7.66	7.42	7.92
PCB-1260 Peak 5	8.05	7.80	8.30
Tetrachloro-m-xylene	2.75	2.50	3.00
DCB Decachlorobiphenyl (Surr)	9.62	9.38	9.88

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171721.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 17-Jun-2017 18:33:02 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0059856-021
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:55 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:13:21

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.824	1.825	-0.001	370226837	1000.0	1000.0	
2	1.587	1.591	-0.004	413242843	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.751	2.748	0.003	97165442	25.0	24.3	
2	2.637	2.641	-0.004	116509490	25.0	24.6	
						RPD = 1.26	
1 PCB-1016							
1	3.484	3.485	-0.001	60579143	500.0	494.1	
1	3.947	3.948	-0.001	139414231	500.0	491.7	
1	4.087	4.085	0.002	57852700	500.0	490.2	
1	4.151	4.151	0.000	37774034	500.0	494.6	
1	4.534	4.535	-0.001	60393408	500.0	489.4	
		Average of Peak Amounts =				492.0	
2	3.501	3.501	0.000	77031152	500.0	515.1	
2	3.937	3.941	-0.004	169341916	500.0	509.2	
2	4.071	4.075	-0.004	76048555	500.0	501.1	
2	4.297	4.298	-0.001	40517193	500.0	490.4	
2	4.571	4.575	-0.004	56657270	500.0	507.1	
		Average of Peak Amounts =				504.6	
						RPD = 2.52	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.007	6.008	-0.001	92082124	500.0	489.6	
1	6.737	6.738	-0.001	178859450	500.0	484.5	
1	7.227	7.228	-0.001	83602059	500.0	487.8	
1	7.661	7.665	-0.004	182697974	500.0	482.9	
1	8.047	8.048	-0.001	104322663	500.0	478.1	
		Average of Peak Amounts =				484.5	
2	6.384	6.388	-0.004	132685666	500.0	495.2	
2	6.837	6.841	-0.004	201335889	500.0	499.0	
2	7.354	7.358	-0.004	91541737	500.0	495.5	
2	7.724	7.728	-0.004	196350056	500.0	494.5	
2	8.217	8.221	-0.004	153091964	500.0	501.5	
		Average of Peak Amounts =				497.1	
						RPD = 2.57	
$ 15 DCB Decachlorobiphenyl							
1	9.624	9.625	-0.001	92971515	25.0	24.2	
2	9.874	9.878	-0.004	96622049	25.0	24.9	
						RPD = 2.74	
S 8 Polychlorinated biphenyls, Total							
1						976.6	
2						1001.7	
						RPD = 2.54	
19 1260 Res 1							
1		8.048			ND	ND	
16 1260 Res 2							
1		8.108			ND	ND	
18 1260 Res 3							
1		8.171			ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

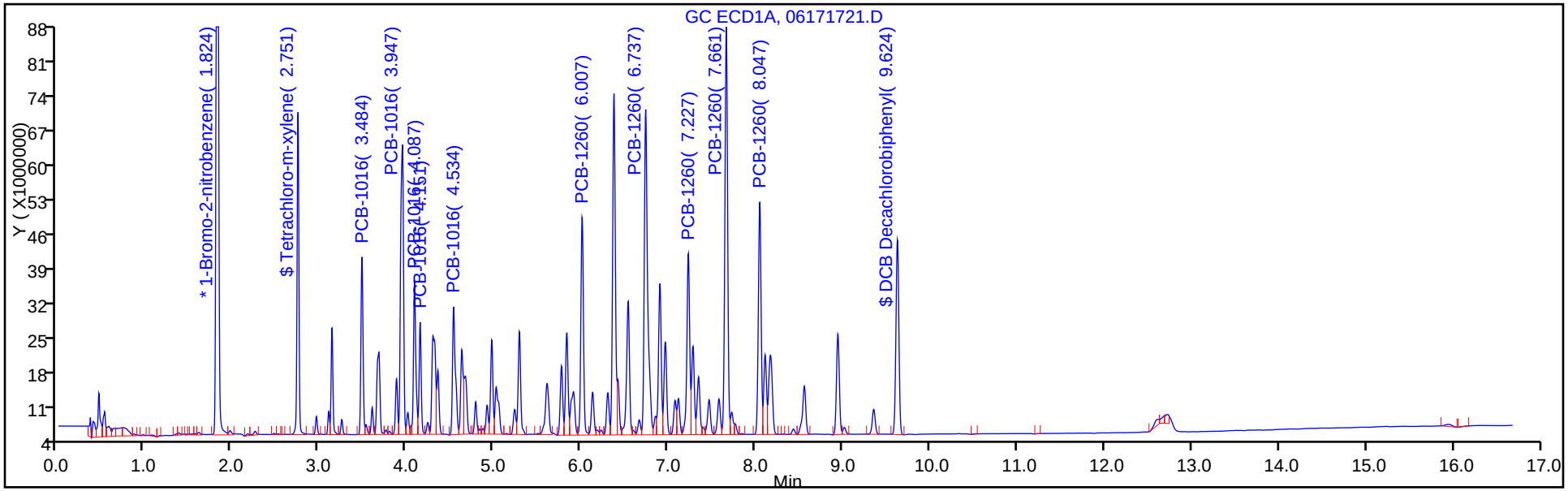
Report Date: 18-Jun-2017 10:14:55 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

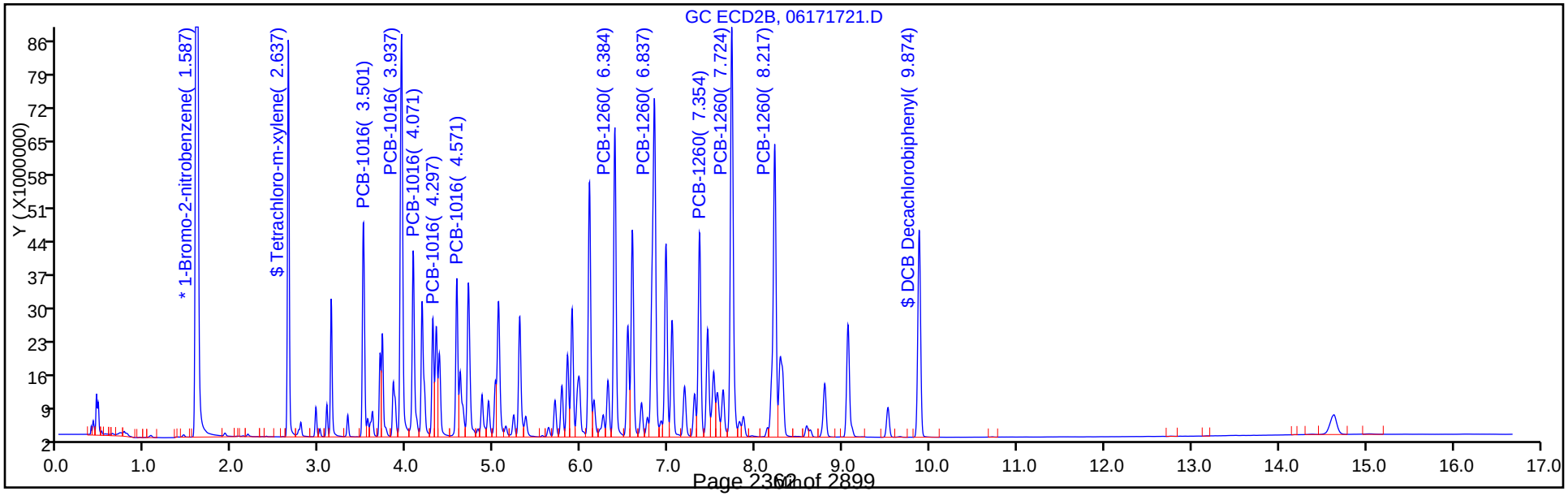
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171721.D

Injection Date:	17-Jun-2017 18:33:02	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCV			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377714/21 Calibration Date: 06/17/2017 18:33

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06171721.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3728		515	500	3.0	20.0
PCB-1016 Peak 2	Lin1		0.8196		509	500	1.8	20.0
PCB-1016 Peak 3	Lin1		0.3681		501	500	0.2	20.0
PCB-1016 Peak 4	Lin1		0.1961		490	500	-1.9	20.0
PCB-1016 Peak 5	Lin1		0.2742		507	500	1.4	20.0
PCB-1260 Peak 1	Lin1		0.6422		495	500	-1.0	20.0
PCB-1260 Peak 2	Lin1		0.9744		499	500	-0.2	20.0
PCB-1260 Peak 3	Lin1		0.4430		495	500	-0.9	20.0
PCB-1260 Peak 4	Lin1		0.9503		494	500	-1.1	20.0
PCB-1260 Peak 5	Lin1		0.7409		502	500	0.3	20.0
Tetrachloro-m-xylene	Lin1		11.28		24.6	25.0	-1.6	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		9.353		24.9	25.0	-0.6	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-377714/21 Calibration Date: 06/17/2017 18:33

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06171721.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.50	3.25	3.75
PCB-1016 Peak 2	3.94	3.69	4.19
PCB-1016 Peak 3	4.07	3.83	4.33
PCB-1016 Peak 4	4.30	4.05	4.55
PCB-1016 Peak 5	4.57	4.33	4.83
PCB-1260 Peak 1	6.38	6.14	6.64
PCB-1260 Peak 2	6.84	6.59	7.09
PCB-1260 Peak 3	7.35	7.11	7.61
PCB-1260 Peak 4	7.72	7.48	7.98
PCB-1260 Peak 5	8.22	7.97	8.47
Tetrachloro-m-xylene	2.64	2.39	2.89
DCB Decachlorobiphenyl (Surr)	9.87	9.63	10.13

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171721.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 17-Jun-2017 18:33:02 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0059856-021
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:55 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:13:21

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.824	1.825	-0.001	370226837	1000.0	1000.0	
2	1.587	1.591	-0.004	413242843	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.751	2.748	0.003	97165442	25.0	24.3	
2	2.637	2.641	-0.004	116509490	25.0	24.6	
						RPD = 1.26	
1 PCB-1016							
1	3.484	3.485	-0.001	60579143	500.0	494.1	
1	3.947	3.948	-0.001	139414231	500.0	491.7	
1	4.087	4.085	0.002	57852700	500.0	490.2	
1	4.151	4.151	0.000	37774034	500.0	494.6	
1	4.534	4.535	-0.001	60393408	500.0	489.4	
		Average of Peak Amounts =				492.0	
2	3.501	3.501	0.000	77031152	500.0	515.1	
2	3.937	3.941	-0.004	169341916	500.0	509.2	
2	4.071	4.075	-0.004	76048555	500.0	501.1	
2	4.297	4.298	-0.001	40517193	500.0	490.4	
2	4.571	4.575	-0.004	56657270	500.0	507.1	
		Average of Peak Amounts =				504.6	
						RPD = 2.52	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.007	6.008	-0.001	92082124	500.0	489.6	
1	6.737	6.738	-0.001	178859450	500.0	484.5	
1	7.227	7.228	-0.001	83602059	500.0	487.8	
1	7.661	7.665	-0.004	182697974	500.0	482.9	
1	8.047	8.048	-0.001	104322663	500.0	478.1	
		Average of Peak Amounts =				484.5	
2	6.384	6.388	-0.004	132685666	500.0	495.2	
2	6.837	6.841	-0.004	201335889	500.0	499.0	
2	7.354	7.358	-0.004	91541737	500.0	495.5	
2	7.724	7.728	-0.004	196350056	500.0	494.5	
2	8.217	8.221	-0.004	153091964	500.0	501.5	
		Average of Peak Amounts =				497.1	
						RPD = 2.57	
$ 15 DCB Decachlorobiphenyl							
1	9.624	9.625	-0.001	92971515	25.0	24.2	
2	9.874	9.878	-0.004	96622049	25.0	24.9	
						RPD = 2.74	
S 8 Polychlorinated biphenyls, Total							
1						976.6	
2						1001.7	
						RPD = 2.54	
19 1260 Res 1							
1		8.048			ND	ND	
16 1260 Res 2							
1		8.108			ND	ND	
18 1260 Res 3							
1		8.171			ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

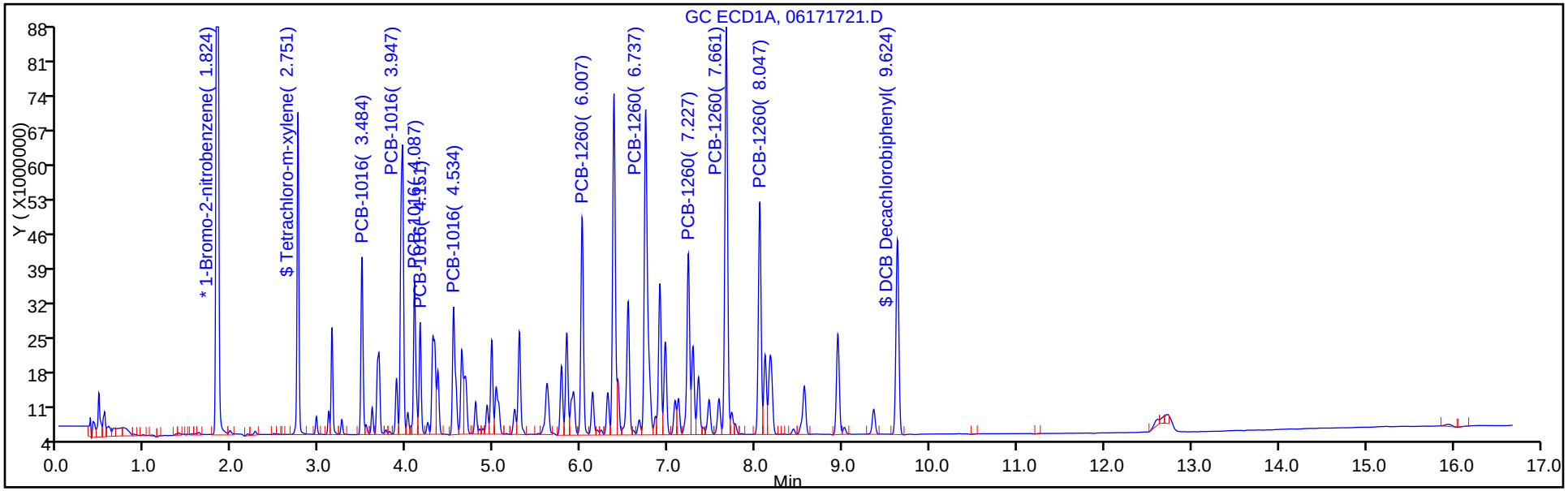
Report Date: 18-Jun-2017 10:14:56 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

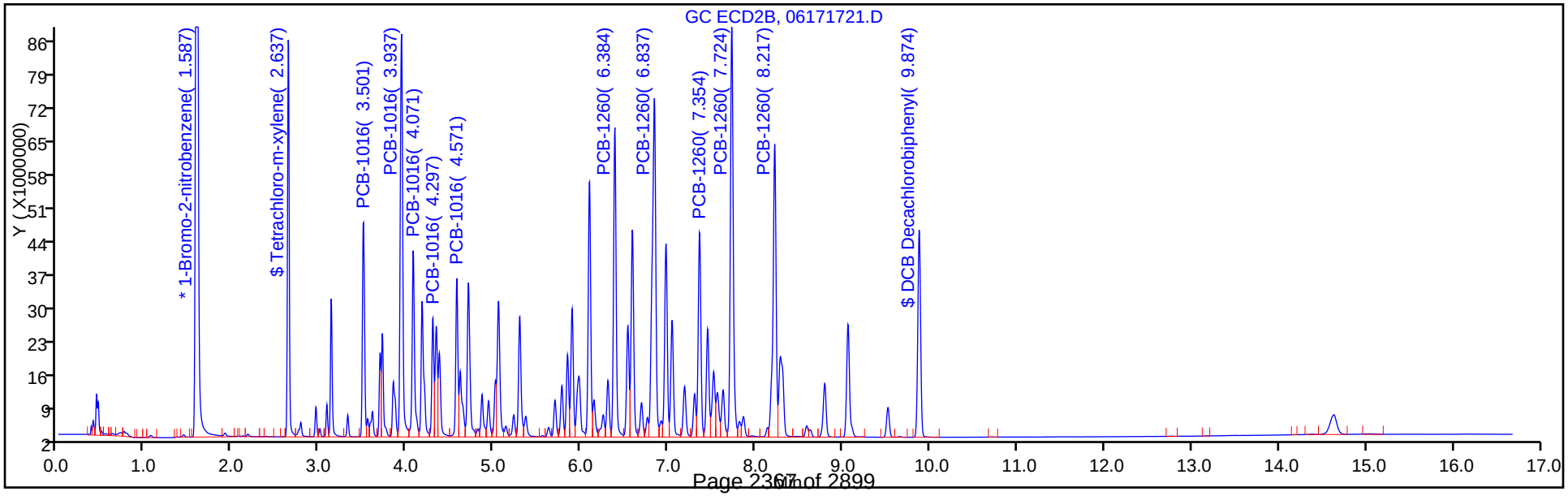
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171721.D

Injection Date:	17-Jun-2017 18:33:02	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCV			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVIS 280-378200/3 Calibration Date: 06/21/2017 14:14

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06211703.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3361		508	500	1.6	20.0
PCB-1016 Peak 2	Lin1		0.7731		505	500	1.0	20.0
PCB-1016 Peak 3	Lin1		0.3240		509	500	1.8	20.0
PCB-1016 Peak 4	Lin1		0.2085		506	500	1.2	20.0
PCB-1016 Peak 5	Lin1		0.3417		513	500	2.7	20.0
PCB-1260 Peak 1	Lin1		0.5075		500	500	-0.0	20.0
PCB-1260 Peak 2	Lin1		0.9928		498	500	-0.4	20.0
PCB-1260 Peak 3	Lin1		0.4653		503	500	0.6	20.0
PCB-1260 Peak 4	Lin1		1.012		495	500	-0.9	20.0
PCB-1260 Peak 5	Lin1		0.5610		476	500	-4.8	20.0
Tetrachloro-m-xylene	Lin1		10.73		24.9	25.0	-0.6	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		10.42		25.1	25.0	0.5	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVIS 280-378200/3 Calibration Date: 06/21/2017 14:14

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06211703.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.48	3.23	3.73
PCB-1016 Peak 2	3.95	3.70	4.20
PCB-1016 Peak 3	4.09	3.84	4.34
PCB-1016 Peak 4	4.15	3.90	4.40
PCB-1016 Peak 5	4.54	4.29	4.79
PCB-1260 Peak 1	6.01	5.76	6.26
PCB-1260 Peak 2	6.74	6.49	6.99
PCB-1260 Peak 3	7.22	6.97	7.47
PCB-1260 Peak 4	7.66	7.41	7.91
PCB-1260 Peak 5	8.04	7.79	8.29
Tetrachloro-m-xylene	2.75	2.50	3.00
DCB Decachlorobiphenyl (Surr)	9.62	9.37	9.87

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211703.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 21-Jun-2017 14:14:10 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 280-0059992-003
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 22-Jun-2017 10:07:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK002

First Level Reviewer: jacksonto Date: 22-Jun-2017 06:26:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.825	0.000	365206462	1000.0	1000.0	
2	1.585	1.585	0.000	416926787	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.748	2.748	0.000	98005365	25.0	24.9	
2	2.635	2.635	0.000	120098139	25.0	25.2	
						RPD = 1.22	
1 PCB-1016							
1	3.481	3.481	0.000	61364447	500.0	507.8	
1	3.948	3.948	0.000	141160538	500.0	505.0	
1	4.085	4.085	0.000	59167939	500.0	508.8	
1	4.151	4.151	0.000	38077247	500.0	505.8	
1	4.535	4.535	0.000	62397957	500.0	513.4	
		Average of Peak Amounts =				508.1	
2	3.495	3.495	0.000	77355302	500.0	512.6	
2	3.931	3.931	0.000	171594708	500.0	511.5	
2	4.065	4.065	0.000	77086406	500.0	503.5	
2	4.291	4.291	0.000	41143634	500.0	493.7	
2	4.565	4.565	0.000	57187469	500.0	507.4	
		Average of Peak Amounts =				505.8	
						RPD = 0.47	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.008	6.008	0.000	92671817	500.0	499.7	
1	6.738	6.738	0.000	181282287	500.0	498.0	
1	7.224	7.224	0.000	84961615	500.0	502.8	
1	7.661	7.661	0.000	184865228	500.0	495.5	
1	8.044	8.044	0.000	102442769	500.0	475.9	
		Average of Peak Amounts =				494.4	
2	6.374	6.374	0.000	134772616	500.0	498.7	
2	6.828	6.828	0.000	204769181	500.0	503.1	
2	7.348	7.348	0.000	93134701	500.0	499.8	
2	7.714	7.714	0.000	190155761	500.0	474.0	
2	8.208	8.208	0.000	155493723	500.0	505.0	
		Average of Peak Amounts =				496.1	
						RPD = 0.35	
$ 15 DCB Decachlorobiphenyl							
1	9.624	9.624	0.000	95175982	25.0	25.1	
2	9.864	9.864	0.000	97838950	25.0	25.0	
						RPD = 0.69	
19 1260 Res 1							
1	8.044	8.044	0.000	102442769	NR	NR	
16 1260 Res 2							
1	8.108	8.108	0.000	35856190	NR	NR	
18 1260 Res 3							
1	8.168	8.168	0.000	48349301	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

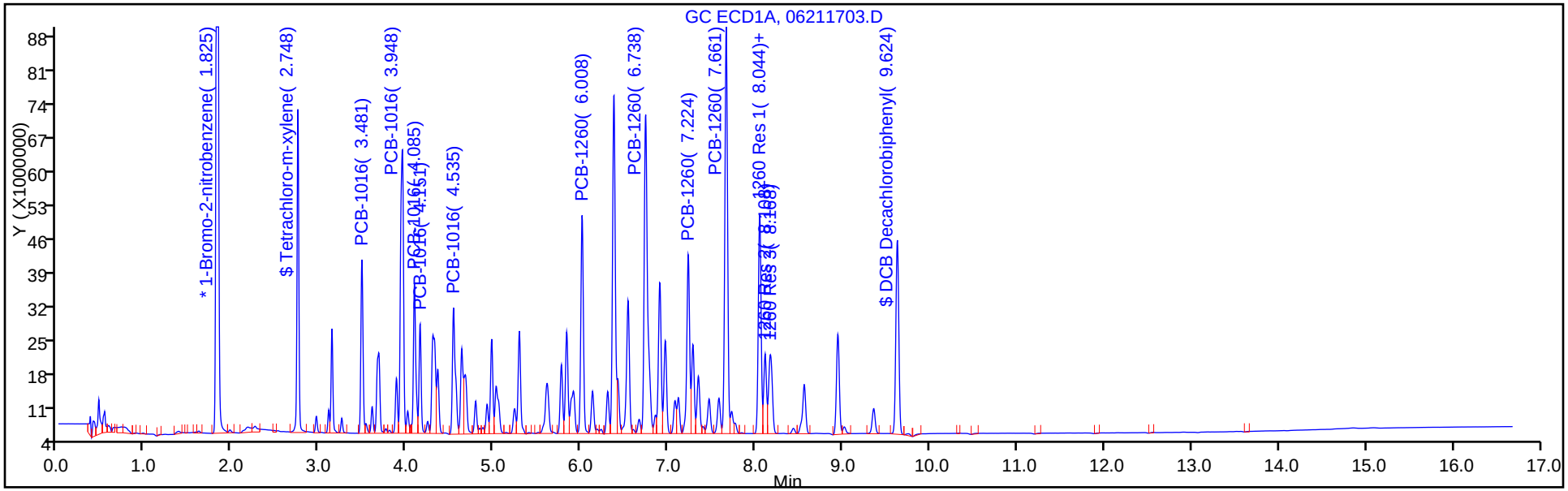
Report Date: 22-Jun-2017 10:07:37 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

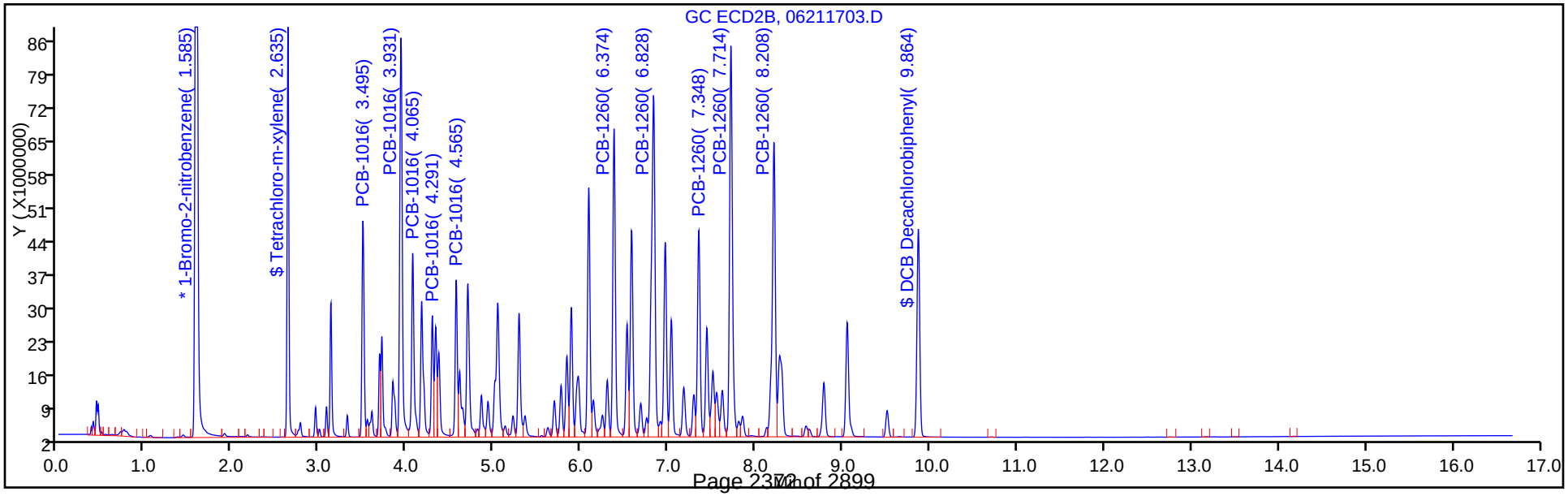
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211703.D

Injection Date:	21-Jun-2017 14:14:10	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVIS 280-378200/3 Calibration Date: 06/21/2017 14:14

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06211703.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3711		513	500	2.5	20.0
PCB-1016 Peak 2	Lin1		0.8231		512	500	2.3	20.0
PCB-1016 Peak 3	Lin1		0.3698		504	500	0.7	20.0
PCB-1016 Peak 4	Lin1		0.1974		494	500	-1.3	20.0
PCB-1016 Peak 5	Lin1		0.2743		507	500	1.5	20.0
PCB-1260 Peak 1	Lin1		0.6465		499	500	-0.3	20.0
PCB-1260 Peak 2	Lin1		0.9823		503	500	0.6	20.0
PCB-1260 Peak 3	Lin1		0.4468		500	500	-0.0	20.0
PCB-1260 Peak 4	Lin1		0.9122		474	500	-5.2	20.0
PCB-1260 Peak 5	Lin1		0.7459		505	500	1.0	20.0
Tetrachloro-m-xylene	Lin1		11.52		25.2	25.0	0.6	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		9.387		25.0	25.0	-0.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCVIS 280-378200/3 Calibration Date: 06/21/2017 14:14

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06211703.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.50	3.25	3.75
PCB-1016 Peak 2	3.93	3.68	4.18
PCB-1016 Peak 3	4.07	3.82	4.32
PCB-1016 Peak 4	4.29	4.04	4.54
PCB-1016 Peak 5	4.57	4.32	4.82
PCB-1260 Peak 1	6.37	6.12	6.62
PCB-1260 Peak 2	6.83	6.58	7.08
PCB-1260 Peak 3	7.35	7.10	7.60
PCB-1260 Peak 4	7.71	7.46	7.96
PCB-1260 Peak 5	8.21	7.96	8.46
Tetrachloro-m-xylene	2.64	2.39	2.89
DCB Decachlorobiphenyl (Surr)	9.86	9.61	10.11

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211703.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 21-Jun-2017 14:14:10 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 280-0059992-003
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 22-Jun-2017 10:07:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK002

First Level Reviewer: jacksonto Date: 22-Jun-2017 06:26:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.825	0.000	365206462	1000.0	1000.0	
2	1.585	1.585	0.000	416926787	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.748	2.748	0.000	98005365	25.0	24.9	
2	2.635	2.635	0.000	120098139	25.0	25.2	
						RPD = 1.22	
1 PCB-1016							
1	3.481	3.481	0.000	61364447	500.0	507.8	
1	3.948	3.948	0.000	141160538	500.0	505.0	
1	4.085	4.085	0.000	59167939	500.0	508.8	
1	4.151	4.151	0.000	38077247	500.0	505.8	
1	4.535	4.535	0.000	62397957	500.0	513.4	
		Average of Peak Amounts =				508.1	
2	3.495	3.495	0.000	77355302	500.0	512.6	
2	3.931	3.931	0.000	171594708	500.0	511.5	
2	4.065	4.065	0.000	77086406	500.0	503.5	
2	4.291	4.291	0.000	41143634	500.0	493.7	
2	4.565	4.565	0.000	57187469	500.0	507.4	
		Average of Peak Amounts =				505.8	
						RPD = 0.47	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.008	6.008	0.000	92671817	500.0	499.7	
1	6.738	6.738	0.000	181282287	500.0	498.0	
1	7.224	7.224	0.000	84961615	500.0	502.8	
1	7.661	7.661	0.000	184865228	500.0	495.5	
1	8.044	8.044	0.000	102442769	500.0	475.9	
		Average of Peak Amounts =				494.4	
2	6.374	6.374	0.000	134772616	500.0	498.7	
2	6.828	6.828	0.000	204769181	500.0	503.1	
2	7.348	7.348	0.000	93134701	500.0	499.8	
2	7.714	7.714	0.000	190155761	500.0	474.0	
2	8.208	8.208	0.000	155493723	500.0	505.0	
		Average of Peak Amounts =				496.1	
						RPD = 0.35	
$ 15 DCB Decachlorobiphenyl							
1	9.624	9.624	0.000	95175982	25.0	25.1	
2	9.864	9.864	0.000	97838950	25.0	25.0	
						RPD = 0.69	
19 1260 Res 1							
1	8.044	8.044	0.000	102442769	NR	NR	
16 1260 Res 2							
1	8.108	8.108	0.000	35856190	NR	NR	
18 1260 Res 3							
1	8.168	8.168	0.000	48349301	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

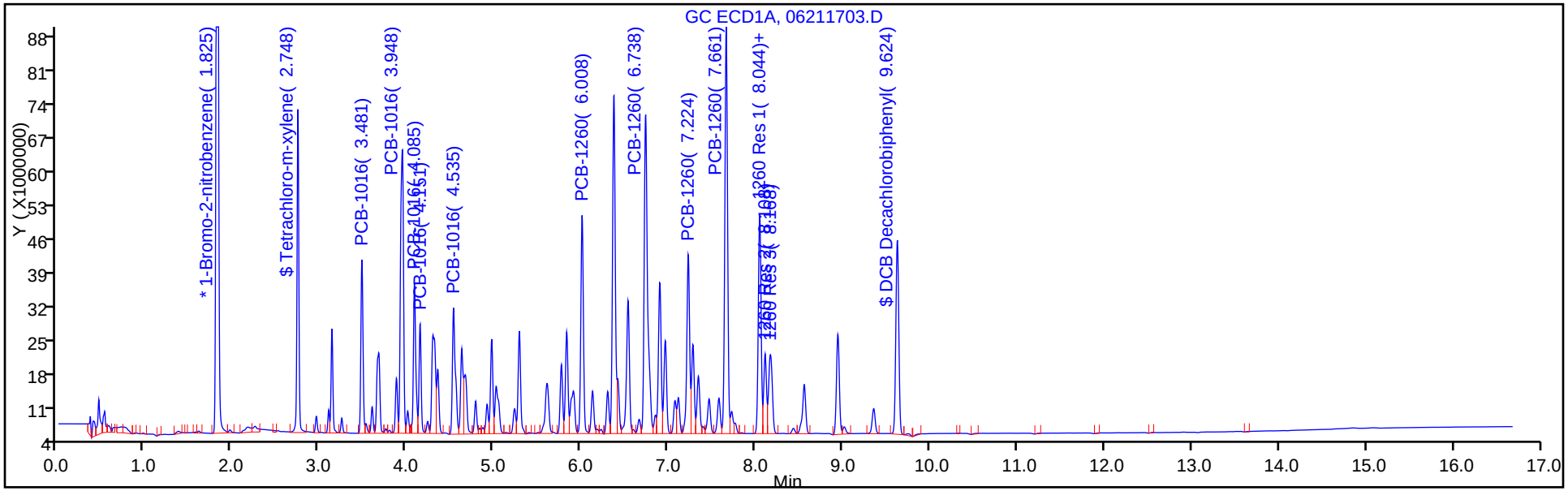
Report Date: 22-Jun-2017 10:07:38 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

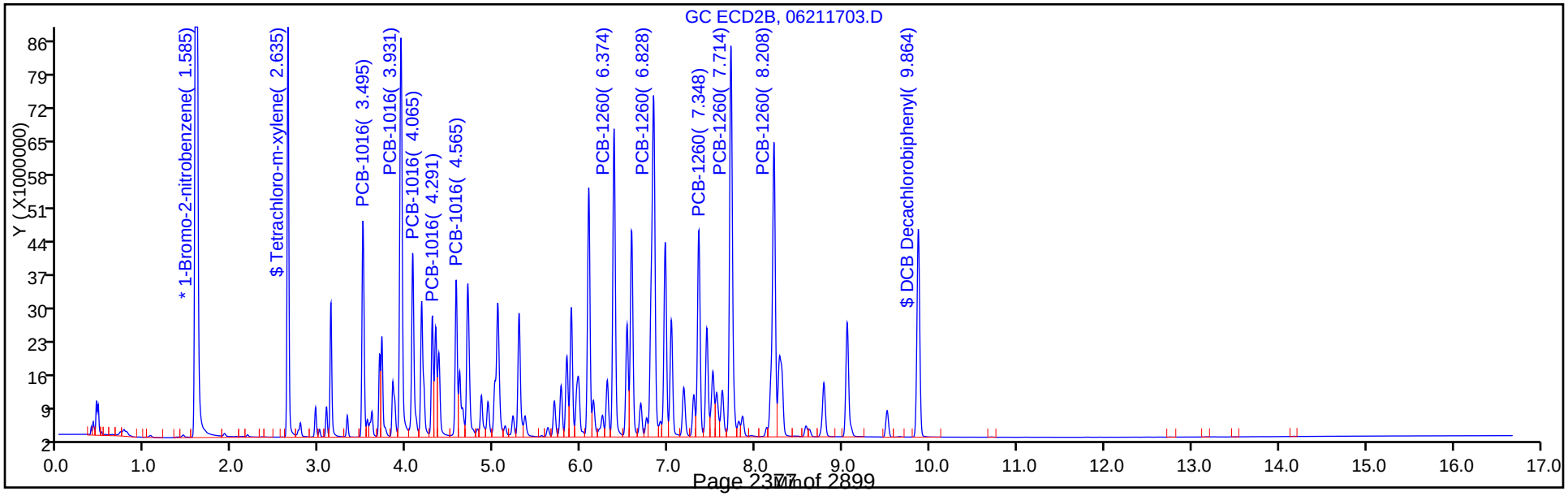
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211703.D

Injection Date:	21-Jun-2017 14:14:10	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-378200/16 Calibration Date: 06/21/2017 18:57

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06211716.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3358		507	500	1.5	20.0
PCB-1016 Peak 2	Lin1		0.7724		505	500	0.9	20.0
PCB-1016 Peak 3	Lin1		0.3235		508	500	1.6	20.0
PCB-1016 Peak 4	Lin1		0.2078		504	500	0.8	20.0
PCB-1016 Peak 5	Lin1		0.3379		507	500	1.5	20.0
PCB-1260 Peak 1	Lin1		0.5087		501	500	0.2	20.0
PCB-1260 Peak 2	Lin1		0.9875		495	500	-0.9	20.0
PCB-1260 Peak 3	Lin1		0.4560		493	500	-1.5	20.0
PCB-1260 Peak 4	Lin1		1.003		491	500	-1.8	20.0
PCB-1260 Peak 5	Lin1		0.5757		489	500	-2.3	20.0
Tetrachloro-m-xylene	Lin1		10.84		25.1	25.0	0.4	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		9.879		23.8	25.0	-4.9	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-378200/16 Calibration Date: 06/21/2017 18:57

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06211716.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.48	3.23	3.73
PCB-1016 Peak 2	3.95	3.70	4.20
PCB-1016 Peak 3	4.09	3.84	4.34
PCB-1016 Peak 4	4.15	3.90	4.40
PCB-1016 Peak 5	4.53	4.29	4.79
PCB-1260 Peak 1	6.01	5.76	6.26
PCB-1260 Peak 2	6.74	6.49	6.99
PCB-1260 Peak 3	7.23	6.97	7.47
PCB-1260 Peak 4	7.66	7.41	7.91
PCB-1260 Peak 5	8.05	7.79	8.29
Tetrachloro-m-xylene	2.75	2.50	3.00
DCB Decachlorobiphenyl (Surr)	9.63	9.37	9.87

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211716.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 21-Jun-2017 18:57:32 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0059992-016
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 22-Jun-2017 10:08:04 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK002

First Level Reviewer: jacksonto Date: 22-Jun-2017 06:29:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.825	0.000	380146120	1000.0	1000.0	
2	1.585	1.585	0.000	408079328	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.749	2.748	0.001	102987268	25.0	25.1	
2	2.635	2.635	0.000	128243490	25.0	27.5	
						RPD = 9.22	
1 PCB-1016							
1	3.482	3.481	0.001	63820009	500.0	507.4	
1	3.945	3.948	-0.003	146819347	500.0	504.6	
1	4.085	4.085	0.000	61486319	500.0	507.9	
1	4.149	4.151	-0.002	39490837	500.0	503.9	
1	4.532	4.535	-0.003	64225016	500.0	507.5	
		Average of Peak Amounts =				506.2	
2	3.495	3.495	0.000	82152005	500.0	558.2	
2	3.929	3.931	-0.002	181638933	500.0	554.6	
2	4.065	4.065	0.000	81342013	500.0	544.5	
2	4.289	4.291	-0.002	45184227	500.0	556.5	
2	4.562	4.565	-0.003	60930922	500.0	554.0	
		Average of Peak Amounts =				553.6	
						RPD = 8.93	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.009	6.008	0.001	96692202	500.0	501.0	
1	6.735	6.738	-0.003	187702428	500.0	495.3	
1	7.225	7.224	0.001	86664822	500.0	492.5	
1	7.662	7.661	0.001	190733842	500.0	491.1	
1	8.045	8.044	0.001	109432034	500.0	488.6	
		Average of Peak Amounts =				493.7	
2	6.375	6.374	0.001	142182403	500.0	538.9	
2	6.829	6.828	0.001	216702667	500.0	545.5	
2	7.345	7.348	-0.003	99023599	500.0	544.4	
2	7.715	7.714	0.001	209660453	500.0	536.0	
2	8.209	8.208	0.001	164147666	500.0	545.9	
		Average of Peak Amounts =				542.1	
						RPD = 9.35	
$ 15 DCB Decachlorobiphenyl							
1	9.625	9.624	0.001	93889808	25.0	23.8	
2	9.865	9.864	0.001	98877561	25.0	25.8	
						RPD = 8.13	
S 8 Polychlorinated biphenyls, Total							
1						999.9	
2						1095.7	
						RPD = 9.14	
19 1260 Res 1							
1		8.044			ND	ND	
16 1260 Res 2							
1		8.108			ND	ND	
18 1260 Res 3							
1		8.168			ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

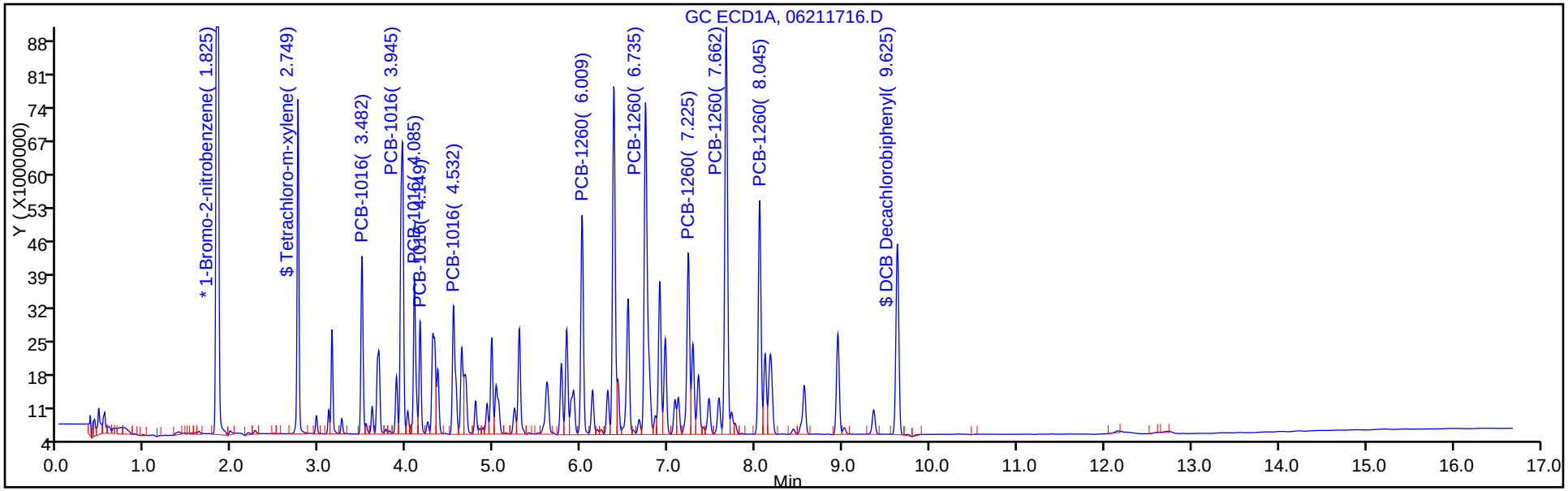
Report Date: 22-Jun-2017 10:08:04 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

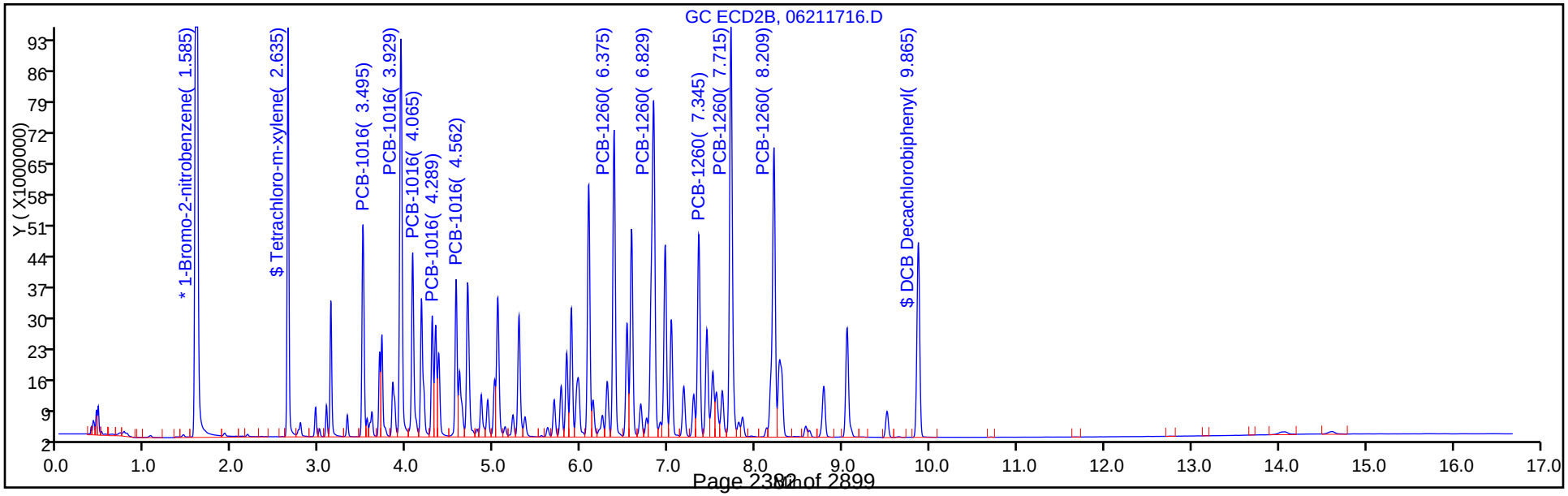
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211716.D

Injection Date:	21-Jun-2017 18:57:32	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCV			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-378200/16 Calibration Date: 06/21/2017 18:57

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06211716.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.4026		558	500	11.6	20.0
PCB-1016 Peak 2	Lin1		0.8902		555	500	10.9	20.0
PCB-1016 Peak 3	Lin1		0.3987		545	500	8.9	20.0
PCB-1016 Peak 4	Lin1		0.2215		557	500	11.3	20.0
PCB-1016 Peak 5	Lin1		0.2986		554	500	10.8	20.0
PCB-1260 Peak 1	Lin1		0.6968		539	500	7.8	20.0
PCB-1260 Peak 2	Lin1		1.062		545	500	9.1	20.0
PCB-1260 Peak 3	Lin1		0.4853		544	500	8.9	20.0
PCB-1260 Peak 4	Lin1		1.028		536	500	7.2	20.0
PCB-1260 Peak 5	Lin1		0.8045		546	500	9.2	20.0
Tetrachloro-m-xylene	Lin1		12.57		27.5	25.0	10.1	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		9.692		25.8	25.0	3.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-378200/16 Calibration Date: 06/21/2017 18:57

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06211716.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.50	3.25	3.75
PCB-1016 Peak 2	3.93	3.68	4.18
PCB-1016 Peak 3	4.07	3.82	4.32
PCB-1016 Peak 4	4.29	4.04	4.54
PCB-1016 Peak 5	4.56	4.32	4.82
PCB-1260 Peak 1	6.38	6.12	6.62
PCB-1260 Peak 2	6.83	6.58	7.08
PCB-1260 Peak 3	7.35	7.10	7.60
PCB-1260 Peak 4	7.72	7.46	7.96
PCB-1260 Peak 5	8.21	7.96	8.46
Tetrachloro-m-xylene	2.64	2.39	2.89
DCB Decachlorobiphenyl (Surr)	9.87	9.61	10.11

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211716.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 21-Jun-2017 18:57:32 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0059992-016
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 22-Jun-2017 10:08:04 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK002

First Level Reviewer: jacksonto Date: 22-Jun-2017 06:29:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.825	0.000	380146120	1000.0	1000.0	
2	1.585	1.585	0.000	408079328	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.749	2.748	0.001	102987268	25.0	25.1	
2	2.635	2.635	0.000	128243490	25.0	27.5	
						RPD = 9.22	
1 PCB-1016							
1	3.482	3.481	0.001	63820009	500.0	507.4	
1	3.945	3.948	-0.003	146819347	500.0	504.6	
1	4.085	4.085	0.000	61486319	500.0	507.9	
1	4.149	4.151	-0.002	39490837	500.0	503.9	
1	4.532	4.535	-0.003	64225016	500.0	507.5	
		Average of Peak Amounts =				506.2	
2	3.495	3.495	0.000	82152005	500.0	558.2	
2	3.929	3.931	-0.002	181638933	500.0	554.6	
2	4.065	4.065	0.000	81342013	500.0	544.5	
2	4.289	4.291	-0.002	45184227	500.0	556.5	
2	4.562	4.565	-0.003	60930922	500.0	554.0	
		Average of Peak Amounts =				553.6	
						RPD = 8.93	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.009	6.008	0.001	96692202	500.0	501.0	
1	6.735	6.738	-0.003	187702428	500.0	495.3	
1	7.225	7.224	0.001	86664822	500.0	492.5	
1	7.662	7.661	0.001	190733842	500.0	491.1	
1	8.045	8.044	0.001	109432034	500.0	488.6	
		Average of Peak Amounts =				493.7	
2	6.375	6.374	0.001	142182403	500.0	538.9	
2	6.829	6.828	0.001	216702667	500.0	545.5	
2	7.345	7.348	-0.003	99023599	500.0	544.4	
2	7.715	7.714	0.001	209660453	500.0	536.0	
2	8.209	8.208	0.001	164147666	500.0	545.9	
		Average of Peak Amounts =				542.1	
						RPD = 9.35	
$ 15 DCB Decachlorobiphenyl							
1	9.625	9.624	0.001	93889808	25.0	23.8	
2	9.865	9.864	0.001	98877561	25.0	25.8	
						RPD = 8.13	
S 8 Polychlorinated biphenyls, Total							
1						999.9	
2						1095.7	
						RPD = 9.14	
19 1260 Res 1							
1		8.044			ND	ND	
16 1260 Res 2							
1		8.108			ND	ND	
18 1260 Res 3							
1		8.168			ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

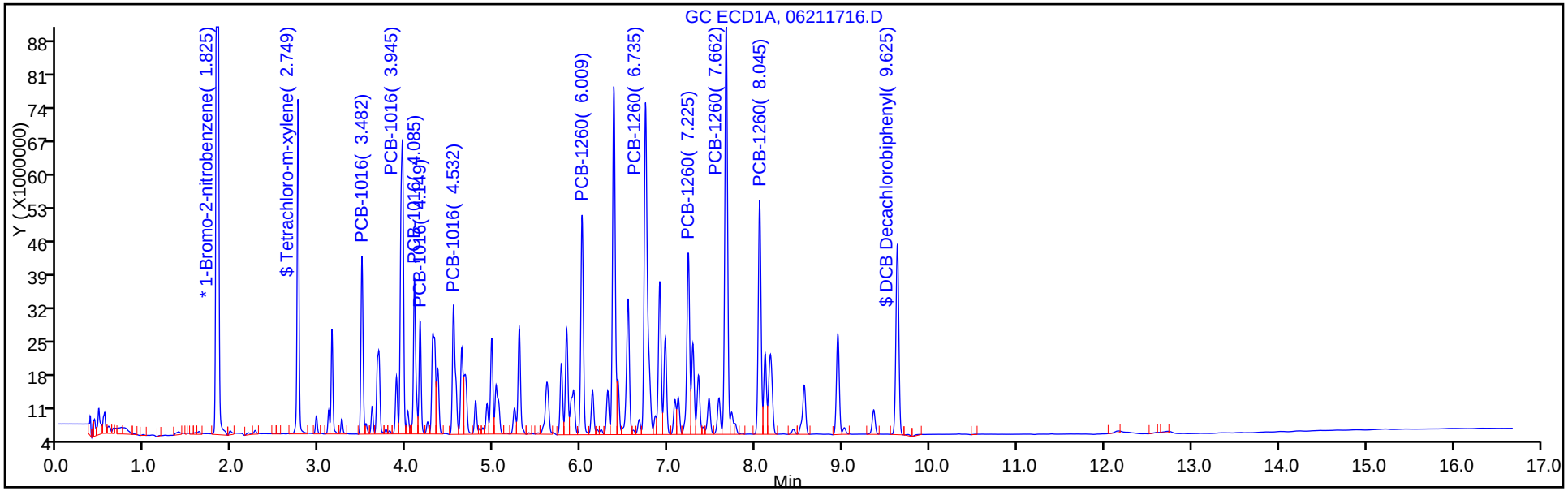
Report Date: 22-Jun-2017 10:08:05 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

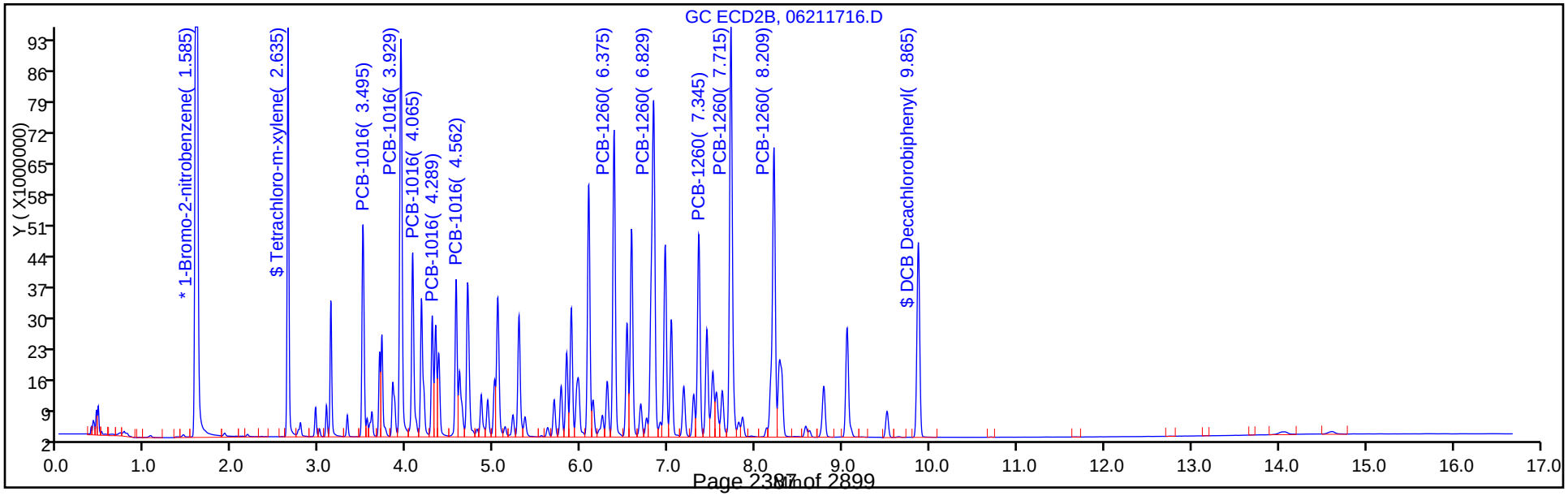
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211716.D

Injection Date:	21-Jun-2017 18:57:32	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCV			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-378200/41 Calibration Date: 06/22/2017 04:01

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06211741.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3237		489	500	-2.3	20.0
PCB-1016 Peak 2	Lin1		0.7373		481	500	-3.8	20.0
PCB-1016 Peak 3	Lin1		0.3116		489	500	-2.3	20.0
PCB-1016 Peak 4	Lin1		0.2061		500	500	-0.0	20.0
PCB-1016 Peak 5	Lin1		0.3113		466	500	-6.8	20.0
PCB-1260 Peak 1	Lin1		0.4816		474	500	-5.3	20.0
PCB-1260 Peak 2	Lin1		0.9564		479	500	-4.1	20.0
PCB-1260 Peak 3	Lin1		0.4477		483	500	-3.3	20.0
PCB-1260 Peak 4	Lin1		0.9810		480	500	-4.0	20.0
PCB-1260 Peak 5	Lin1		0.5411		459	500	-8.3	20.0
Tetrachloro-m-xylene	Lin1		10.45		24.2	25.0	-3.3	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		10.98		26.5	25.0	6.0	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-378200/41 Calibration Date: 06/22/2017 04:01

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06211741.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.48	3.23	3.73
PCB-1016 Peak 2	3.95	3.70	4.20
PCB-1016 Peak 3	4.08	3.84	4.34
PCB-1016 Peak 4	4.15	3.90	4.40
PCB-1016 Peak 5	4.53	4.29	4.79
PCB-1260 Peak 1	6.01	5.76	6.26
PCB-1260 Peak 2	6.74	6.49	6.99
PCB-1260 Peak 3	7.23	6.97	7.47
PCB-1260 Peak 4	7.66	7.41	7.91
PCB-1260 Peak 5	8.04	7.79	8.29
Tetrachloro-m-xylene	2.75	2.50	3.00
DCB Decachlorobiphenyl (Surr)	9.62	9.37	9.87

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211741.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 22-Jun-2017 04:01:01 ALS Bottle#: 41 Worklist Smp#: 41
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0059992-041
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 22-Jun-2017 10:08:25 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK002

First Level Reviewer: jacksonto Date: 22-Jun-2017 06:39:32

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.823	1.825	-0.002	454144448	1000.0	1000.0	
2	1.583	1.585	-0.002	482420725	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.750	2.748	0.002	118604532	25.0	24.2	
2	2.633	2.635	-0.002	140866973	25.0	25.5	
						RPD = 5.38	
1 PCB-1016							
1	3.483	3.481	0.002	73499466	500.0	488.6	
1	3.947	3.948	-0.001	167410573	500.0	481.2	
1	4.083	4.085	-0.002	70754934	500.0	488.7	
1	4.150	4.151	-0.001	46800056	500.0	499.7	
1	4.533	4.535	-0.002	70686522	500.0	466.2	
		Average of Peak Amounts =				484.9	
2	3.493	3.495	-0.002	89699169	500.0	513.8	
2	3.930	3.931	-0.001	199760114	500.0	514.7	
2	4.063	4.065	-0.002	88761001	500.0	501.0	
2	4.290	4.291	-0.001	48166251	500.0	499.8	
2	4.563	4.565	-0.002	66980855	500.0	513.8	
		Average of Peak Amounts =				508.6	
						RPD = 4.78	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.007	6.008	-0.001	109356814	500.0	473.6	
1	6.737	6.738	-0.001	217166646	500.0	479.4	
1	7.227	7.224	0.003	101657544	500.0	483.4	
1	7.660	7.661	-0.001	222760561	500.0	479.9	
1	8.043	8.044	-0.001	122858008	500.0	458.6	
		Average of Peak Amounts =				475.0	
2	6.373	6.374	-0.001	156990773	500.0	502.2	
2	6.827	6.828	-0.001	242510333	500.0	515.4	
2	7.347	7.348	-0.001	110327414	500.0	512.1	
2	7.713	7.714	-0.001	226282684	500.0	487.9	
2	8.207	8.208	-0.001	180717320	500.0	507.3	
		Average of Peak Amounts =				505.0	
						RPD = 6.12	
$ 15 DCB Decachlorobiphenyl							
1	9.623	9.624	-0.001	124660832	25.0	26.5	
2	9.863	9.864	-0.001	115414003	25.0	25.5	
						RPD = 4.02	
S 8 Polychlorinated biphenyls, Total							
1						959.9	
2						1013.6	
						RPD = 5.44	
19 1260 Res 1							
1		8.044			ND	ND	
16 1260 Res 2							
1		8.108			ND	ND	
18 1260 Res 3							
1		8.168			ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

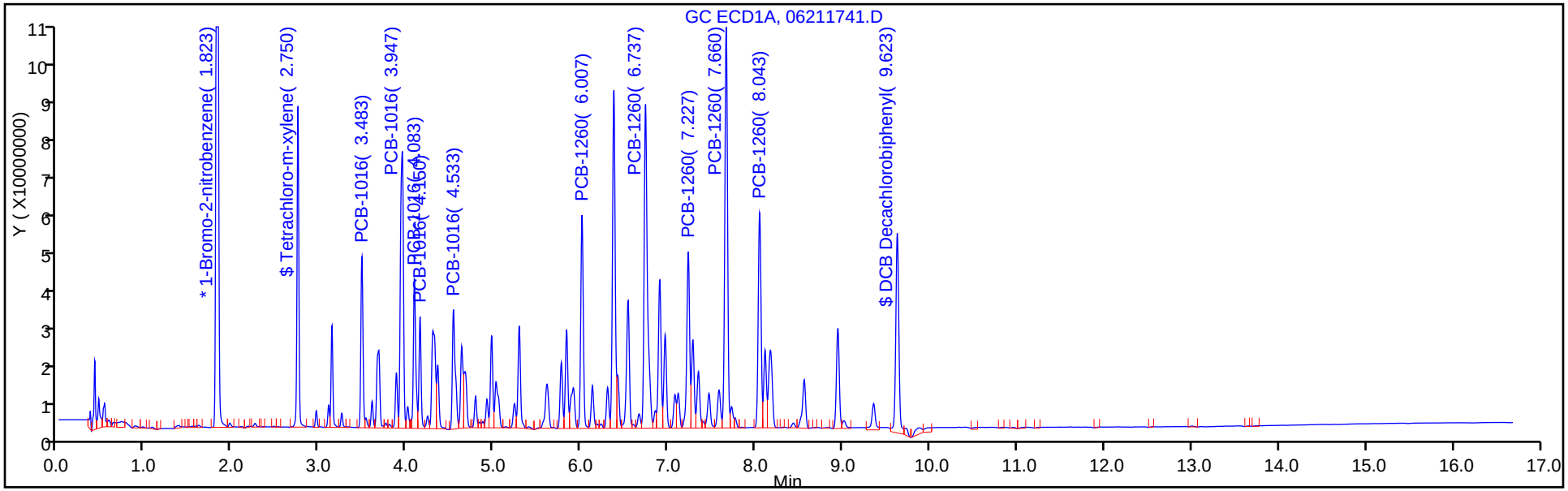
Report Date: 22-Jun-2017 10:08:26 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

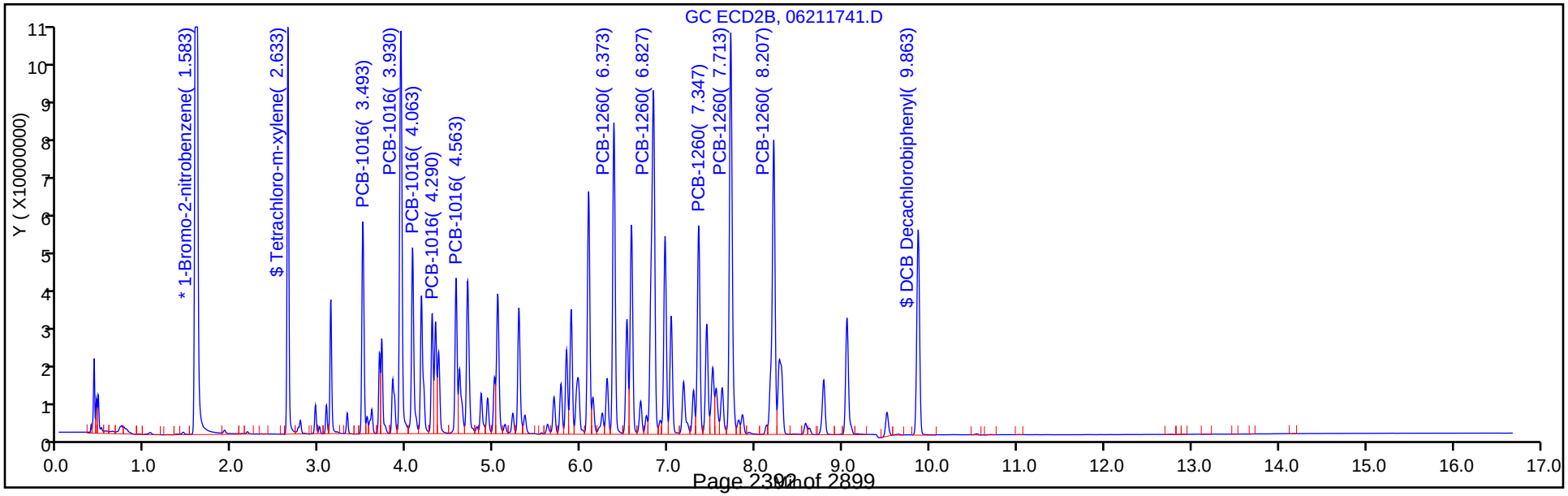
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211741.D

Injection Date:	22-Jun-2017 04:01:01	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCV			Worklist Smp#:	41
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-378200/41 Calibration Date: 06/22/2017 04:01

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06211741.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3719		514	500	2.8	20.0
PCB-1016 Peak 2	Lin1		0.8282		515	500	2.9	20.0
PCB-1016 Peak 3	Lin1		0.3680		501	500	0.2	20.0
PCB-1016 Peak 4	Lin1		0.1997		500	500	-0.0	20.0
PCB-1016 Peak 5	Lin1		0.2777		514	500	2.8	20.0
PCB-1260 Peak 1	Lin1		0.6509		502	500	0.4	20.0
PCB-1260 Peak 2	Lin1		1.005		515	500	3.1	20.0
PCB-1260 Peak 3	Lin1		0.4574		512	500	2.4	20.0
PCB-1260 Peak 4	Lin1		0.9381		488	500	-2.4	20.0
PCB-1260 Peak 5	Lin1		0.7492		507	500	1.5	20.0
Tetrachloro-m-xylene	Lin1		11.68		25.5	25.0	2.1	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		9.570		25.5	25.0	1.8	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-378200/41 Calibration Date: 06/22/2017 04:01

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06211741.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.49	3.25	3.75
PCB-1016 Peak 2	3.93	3.68	4.18
PCB-1016 Peak 3	4.06	3.82	4.32
PCB-1016 Peak 4	4.29	4.04	4.54
PCB-1016 Peak 5	4.56	4.32	4.82
PCB-1260 Peak 1	6.37	6.12	6.62
PCB-1260 Peak 2	6.83	6.58	7.08
PCB-1260 Peak 3	7.35	7.10	7.60
PCB-1260 Peak 4	7.71	7.46	7.96
PCB-1260 Peak 5	8.21	7.96	8.46
Tetrachloro-m-xylene	2.63	2.39	2.89
DCB Decachlorobiphenyl (Surr)	9.86	9.61	10.11

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211741.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 22-Jun-2017 04:01:01 ALS Bottle#: 41 Worklist Smp#: 41
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0059992-041
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 22-Jun-2017 10:08:25 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK002

First Level Reviewer: jacksonto Date: 22-Jun-2017 06:39:32

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.823	1.825	-0.002	454144448	1000.0	1000.0	
2	1.583	1.585	-0.002	482420725	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.750	2.748	0.002	118604532	25.0	24.2	
2	2.633	2.635	-0.002	140866973	25.0	25.5	
						RPD = 5.38	
1 PCB-1016							
1	3.483	3.481	0.002	73499466	500.0	488.6	
1	3.947	3.948	-0.001	167410573	500.0	481.2	
1	4.083	4.085	-0.002	70754934	500.0	488.7	
1	4.150	4.151	-0.001	46800056	500.0	499.7	
1	4.533	4.535	-0.002	70686522	500.0	466.2	
		Average of Peak Amounts =				484.9	
2	3.493	3.495	-0.002	89699169	500.0	513.8	
2	3.930	3.931	-0.001	199760114	500.0	514.7	
2	4.063	4.065	-0.002	88761001	500.0	501.0	
2	4.290	4.291	-0.001	48166251	500.0	499.8	
2	4.563	4.565	-0.002	66980855	500.0	513.8	
		Average of Peak Amounts =				508.6	
						RPD = 4.78	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.007	6.008	-0.001	109356814	500.0	473.6	
1	6.737	6.738	-0.001	217166646	500.0	479.4	
1	7.227	7.224	0.003	101657544	500.0	483.4	
1	7.660	7.661	-0.001	222760561	500.0	479.9	
1	8.043	8.044	-0.001	122858008	500.0	458.6	
		Average of Peak Amounts =				475.0	
2	6.373	6.374	-0.001	156990773	500.0	502.2	
2	6.827	6.828	-0.001	242510333	500.0	515.4	
2	7.347	7.348	-0.001	110327414	500.0	512.1	
2	7.713	7.714	-0.001	226282684	500.0	487.9	
2	8.207	8.208	-0.001	180717320	500.0	507.3	
		Average of Peak Amounts =				505.0	
						RPD = 6.12	
$ 15 DCB Decachlorobiphenyl							
1	9.623	9.624	-0.001	124660832	25.0	26.5	
2	9.863	9.864	-0.001	115414003	25.0	25.5	
						RPD = 4.02	
S 8 Polychlorinated biphenyls, Total							
1						959.9	
2						1013.6	
						RPD = 5.44	
19 1260 Res 1							
1		8.044			ND	ND	
16 1260 Res 2							
1		8.108			ND	ND	
18 1260 Res 3							
1		8.168			ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

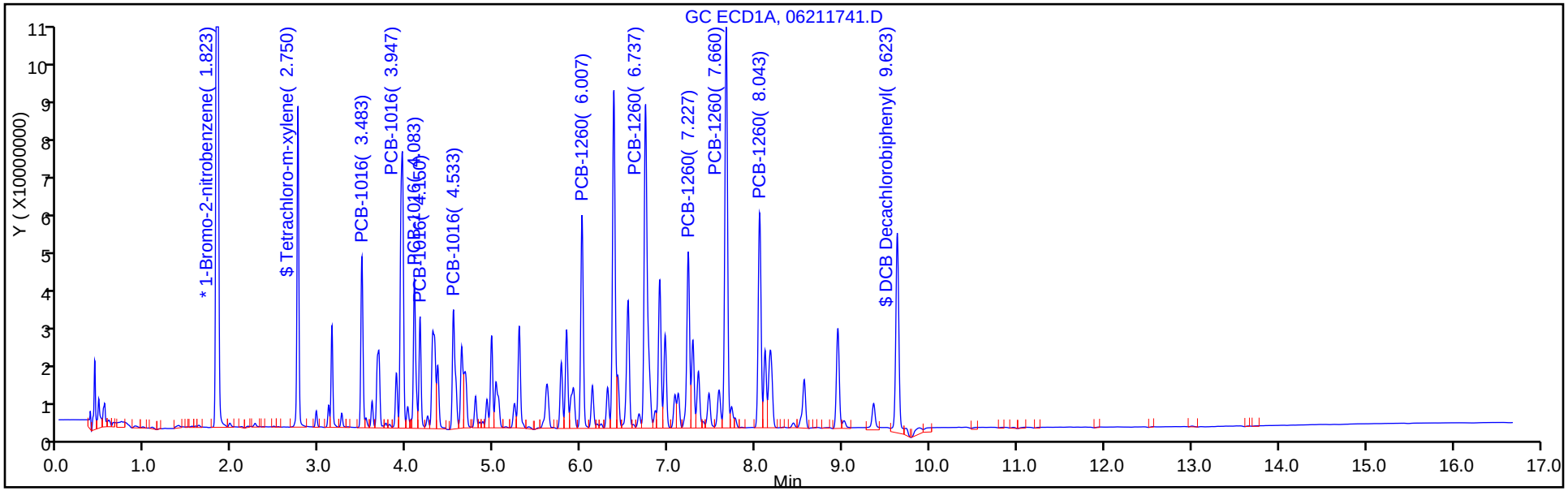
Report Date: 22-Jun-2017 10:08:26 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

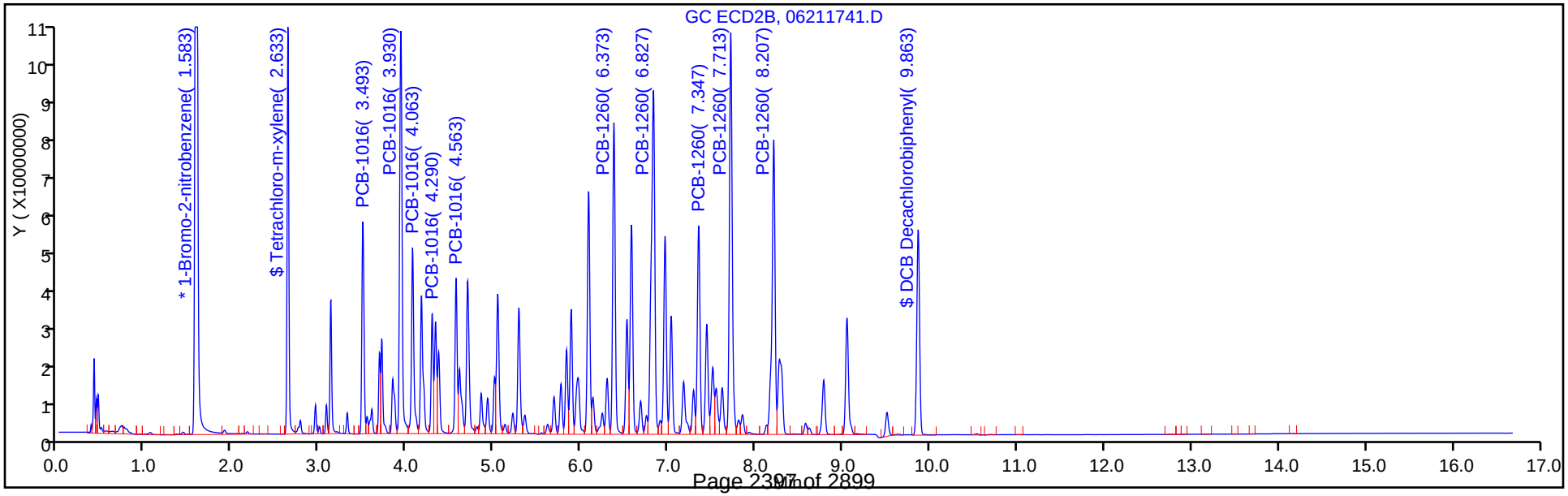
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211741.D

Injection Date:	22-Jun-2017 04:01:01	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCV			Worklist Smp#:	41
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-378200/45 Calibration Date: 06/22/2017 09:39

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06211745.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3390		512	500	2.5	20.0
PCB-1016 Peak 2	Lin1		0.7782		508	500	1.7	20.0
PCB-1016 Peak 3	Lin1		0.3261		512	500	2.4	20.0
PCB-1016 Peak 4	Lin1		0.2100		509	500	1.9	20.0
PCB-1016 Peak 5	Lin1		0.3417		513	500	2.7	20.0
PCB-1260 Peak 1	Lin1		0.5107		503	500	0.6	20.0
PCB-1260 Peak 2	Lin1		1.002		502	500	0.5	20.0
PCB-1260 Peak 3	Lin1		0.4623		500	500	-0.0	20.0
PCB-1260 Peak 4	Lin1		1.021		500	500	-0.0	20.0
PCB-1260 Peak 5	Lin1		0.5930		503	500	0.7	20.0
Tetrachloro-m-xylene	Lin1		10.92		25.3	25.0	1.1	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		10.54		25.4	25.0	1.6	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-378200/45 Calibration Date: 06/22/2017 09:39

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06211745.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.48	3.23	3.73
PCB-1016 Peak 2	3.95	3.70	4.20
PCB-1016 Peak 3	4.09	3.84	4.34
PCB-1016 Peak 4	4.15	3.90	4.40
PCB-1016 Peak 5	4.54	4.29	4.79
PCB-1260 Peak 1	6.01	5.76	6.26
PCB-1260 Peak 2	6.74	6.49	6.99
PCB-1260 Peak 3	7.23	6.97	7.47
PCB-1260 Peak 4	7.66	7.41	7.91
PCB-1260 Peak 5	8.05	7.79	8.29
Tetrachloro-m-xylene	2.75	2.50	3.00
DCB Decachlorobiphenyl (Surr)	9.63	9.37	9.87

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211745.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 22-Jun-2017 09:39:19 ALS Bottle#: 45 Worklist Smp#: 45
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0059992-045
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 22-Jun-2017 10:08:33 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK002

First Level Reviewer: jacksonto Date: 22-Jun-2017 10:05:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.825	0.000	371068971	1000.0	1000.0	
2	1.585	1.585	0.000	401519189	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.748	2.748	0.000	101262256	25.0	25.3	
2	2.635	2.635	0.000	119122922	25.0	25.9	
						RPD = 2.56	
1 PCB-1016							
1	3.481	3.481	0.000	62896941	500.0	512.4	
1	3.945	3.948	-0.003	144388054	500.0	508.4	
1	4.085	4.085	0.000	60509406	500.0	512.2	
1	4.151	4.151	0.000	38955025	500.0	509.3	
1	4.535	4.535	0.000	63401348	500.0	513.4	
		Average of Peak Amounts =				511.2	
2	3.495	3.495	0.000	76492330	500.0	527.0	
2	3.928	3.931	-0.003	170046136	500.0	526.9	
2	4.065	4.065	0.000	76777103	500.0	521.5	
2	4.288	4.291	-0.003	42520905	500.0	531.4	
2	4.561	4.565	-0.004	56872315	500.0	524.5	
		Average of Peak Amounts =				526.2	
						RPD = 2.91	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.008	6.008	0.000	94751372	500.0	503.0	
1	6.735	6.738	-0.003	185822020	500.0	502.5	
1	7.225	7.224	0.001	85772429	500.0	499.5	
1	7.661	7.661	0.000	189496226	500.0	499.9	
1	8.045	8.044	0.001	110014030	500.0	503.5	
		Average of Peak Amounts =				501.7	
2	6.371	6.374	-0.003	136052001	500.0	523.6	
2	6.825	6.828	-0.003	207079449	500.0	529.2	
2	7.345	7.348	-0.003	94963889	500.0	530.2	
2	7.711	7.714	-0.003	201343761	500.0	522.8	
2	8.205	8.208	-0.003	158386902	500.0	535.0	
		Average of Peak Amounts =				528.2	
						RPD = 5.14	
$ 15 DCB Decachlorobiphenyl							
1	9.625	9.624	0.001	97746601	25.0	25.4	
2	9.861	9.864	-0.003	99565602	25.0	26.4	
						RPD = 3.91	
S 8 Polychlorinated biphenyls, Total							
1						1012.8	
2						1054.4	
						RPD = 4.02	
19 1260 Res 1							
1		8.044			ND	ND	
16 1260 Res 2							
1		8.108			ND	ND	
18 1260 Res 3							
1		8.168			ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

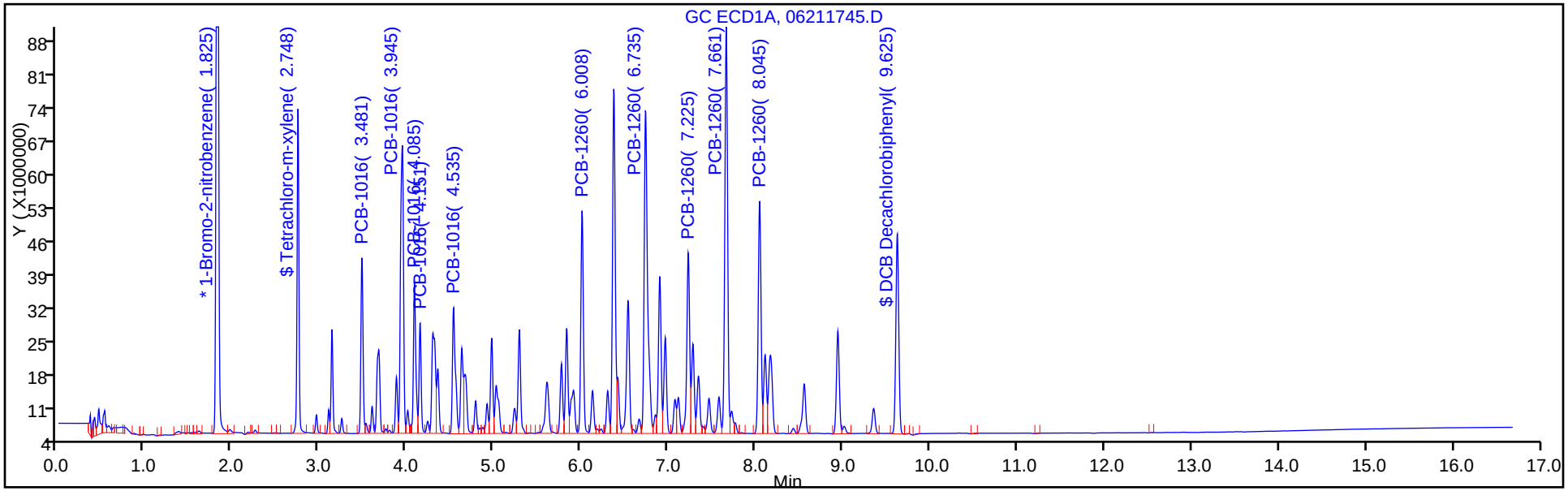
Report Date: 22-Jun-2017 10:08:33 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

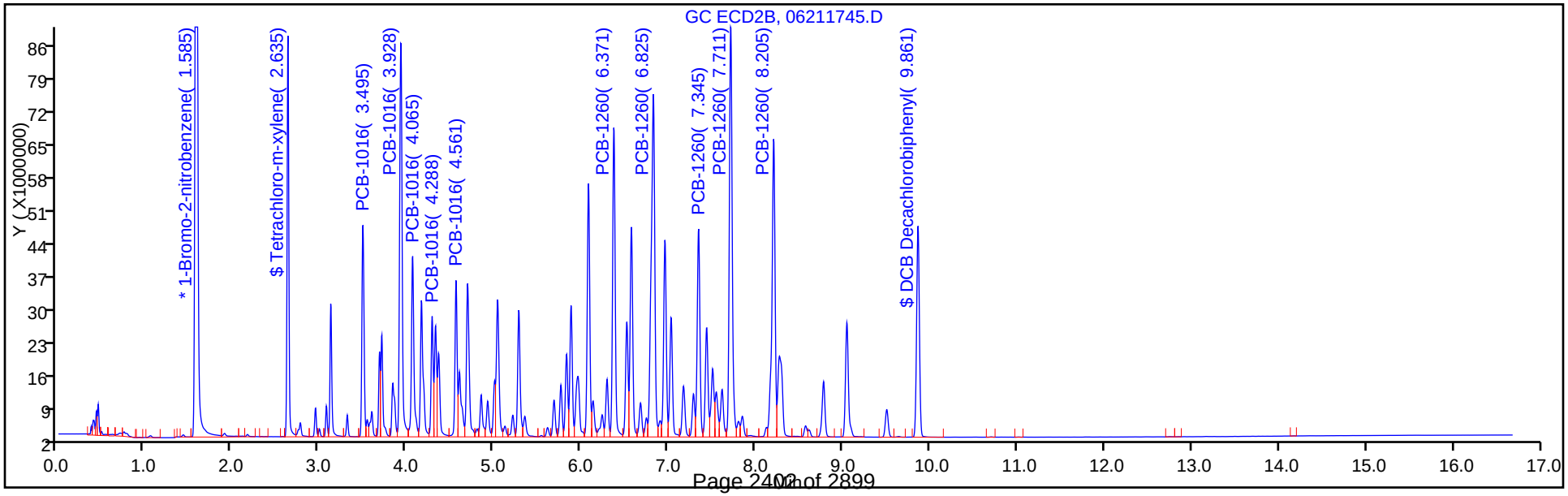
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211745.D

Injection Date:	22-Jun-2017 09:39:19	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCV			Worklist Smp#:	45
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	45
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-378200/45 Calibration Date: 06/22/2017 09:39

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06211745.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3810		527	500	5.4	20.0
PCB-1016 Peak 2	Lin1		0.8470		527	500	5.4	20.0
PCB-1016 Peak 3	Lin1		0.3824		521	500	4.3	20.0
PCB-1016 Peak 4	Lin1		0.2118		531	500	6.3	20.0
PCB-1016 Peak 5	Lin1		0.2833		525	500	4.9	20.0
PCB-1260 Peak 1	Lin1		0.6777		524	500	4.7	20.0
PCB-1260 Peak 2	Lin1		1.031		529	500	5.8	20.0
PCB-1260 Peak 3	Lin1		0.4730		530	500	6.0	20.0
PCB-1260 Peak 4	Lin1		1.003		523	500	4.6	20.0
PCB-1260 Peak 5	Lin1		0.7889		535	500	7.0	20.0
Tetrachloro-m-xylene	Lin1		11.87		25.9	25.0	3.7	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		9.919		26.4	25.0	5.7	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: CCV 280-378200/45 Calibration Date: 06/22/2017 09:39

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06211745.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.50	3.25	3.75
PCB-1016 Peak 2	3.93	3.68	4.18
PCB-1016 Peak 3	4.07	3.82	4.32
PCB-1016 Peak 4	4.29	4.04	4.54
PCB-1016 Peak 5	4.56	4.32	4.82
PCB-1260 Peak 1	6.37	6.12	6.62
PCB-1260 Peak 2	6.83	6.58	7.08
PCB-1260 Peak 3	7.35	7.10	7.60
PCB-1260 Peak 4	7.71	7.46	7.96
PCB-1260 Peak 5	8.21	7.96	8.46
Tetrachloro-m-xylene	2.64	2.39	2.89
DCB Decachlorobiphenyl (Surr)	9.86	9.61	10.11

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211745.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 22-Jun-2017 09:39:19 ALS Bottle#: 45 Worklist Smp#: 45
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0059992-045
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 22-Jun-2017 10:08:33 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK002

First Level Reviewer: jacksonto Date: 22-Jun-2017 10:05:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.825	0.000	371068971	1000.0	1000.0	
2	1.585	1.585	0.000	401519189	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.748	2.748	0.000	101262256	25.0	25.3	
2	2.635	2.635	0.000	119122922	25.0	25.9	
						RPD = 2.56	
1 PCB-1016							
1	3.481	3.481	0.000	62896941	500.0	512.4	
1	3.945	3.948	-0.003	144388054	500.0	508.4	
1	4.085	4.085	0.000	60509406	500.0	512.2	
1	4.151	4.151	0.000	38955025	500.0	509.3	
1	4.535	4.535	0.000	63401348	500.0	513.4	
		Average of Peak Amounts =				511.2	
2	3.495	3.495	0.000	76492330	500.0	527.0	
2	3.928	3.931	-0.003	170046136	500.0	526.9	
2	4.065	4.065	0.000	76777103	500.0	521.5	
2	4.288	4.291	-0.003	42520905	500.0	531.4	
2	4.561	4.565	-0.004	56872315	500.0	524.5	
		Average of Peak Amounts =				526.2	
						RPD = 2.91	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.008	6.008	0.000	94751372	500.0	503.0	
1	6.735	6.738	-0.003	185822020	500.0	502.5	
1	7.225	7.224	0.001	85772429	500.0	499.5	
1	7.661	7.661	0.000	189496226	500.0	499.9	
1	8.045	8.044	0.001	110014030	500.0	503.5	
		Average of Peak Amounts =				501.7	
2	6.371	6.374	-0.003	136052001	500.0	523.6	
2	6.825	6.828	-0.003	207079449	500.0	529.2	
2	7.345	7.348	-0.003	94963889	500.0	530.2	
2	7.711	7.714	-0.003	201343761	500.0	522.8	
2	8.205	8.208	-0.003	158386902	500.0	535.0	
		Average of Peak Amounts =				528.2	
						RPD = 5.14	
$ 15 DCB Decachlorobiphenyl							
1	9.625	9.624	0.001	97746601	25.0	25.4	
2	9.861	9.864	-0.003	99565602	25.0	26.4	
						RPD = 3.91	
S 8 Polychlorinated biphenyls, Total							
1						1012.8	
2						1054.4	
						RPD = 4.02	
19 1260 Res 1							
1		8.044			ND	ND	
16 1260 Res 2							
1		8.108			ND	ND	
18 1260 Res 3							
1		8.168			ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

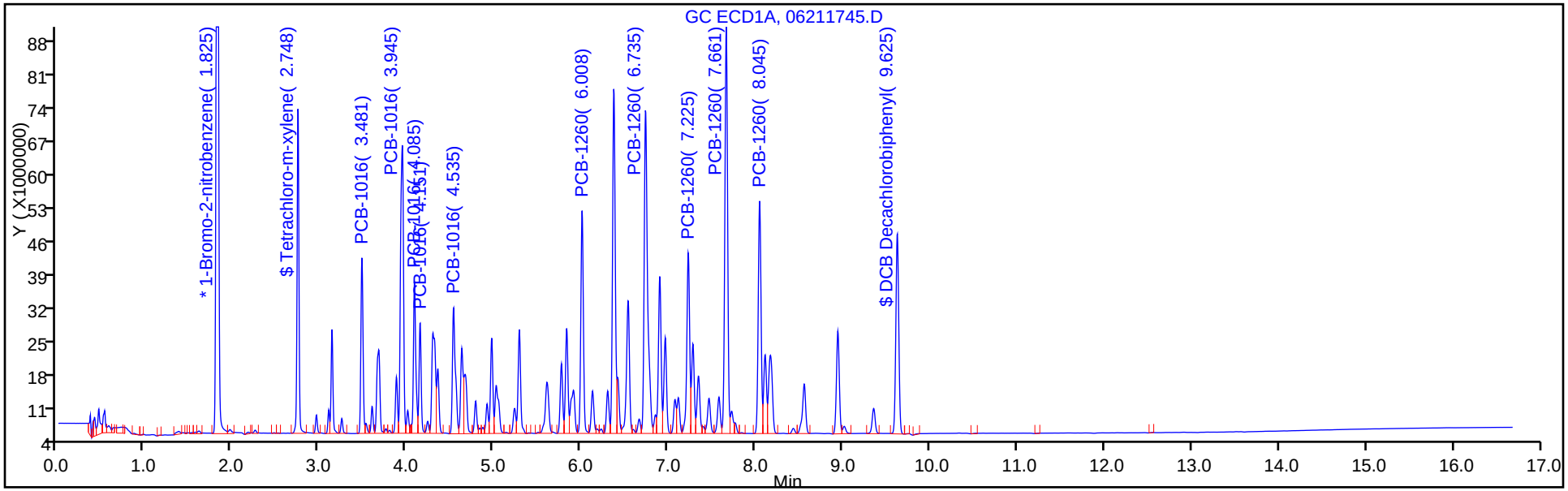
Report Date: 22-Jun-2017 10:08:34 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

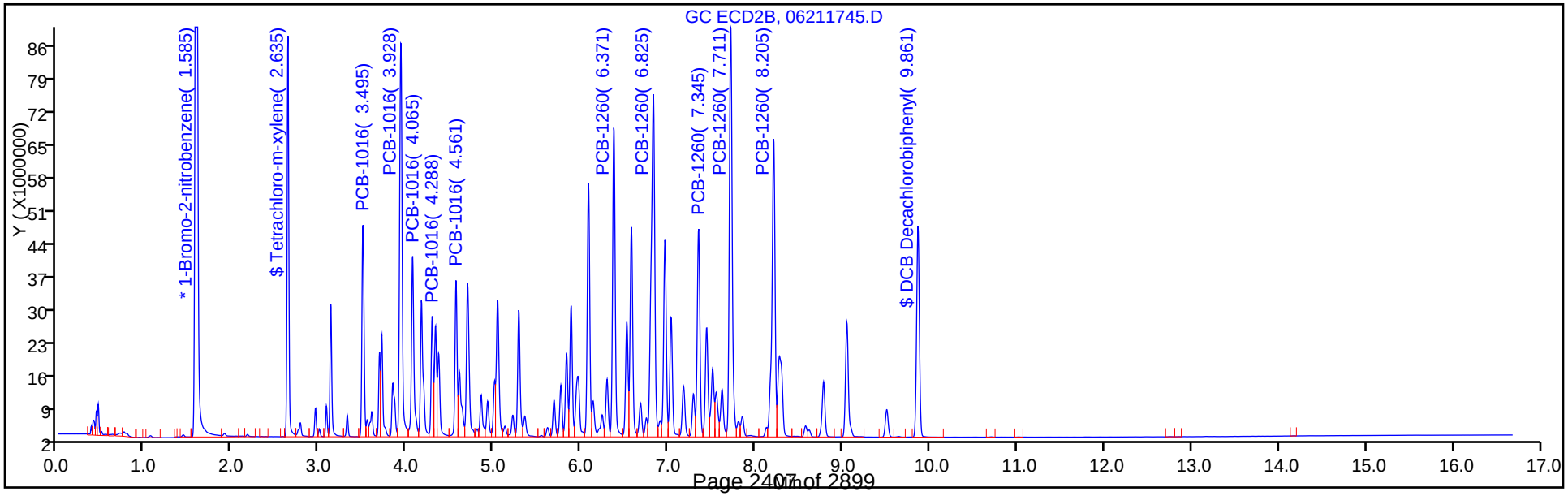
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211745.D

Injection Date:	22-Jun-2017 09:39:19	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCV			Worklist Smp#:	45
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	45
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-376892/1-A

Matrix: Solid | Lab File ID: 06171705.D

Analysis Method: 8082A | Date Collected:

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 33.0(g) | Date Analyzed: 06/17/2017 12:45

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377714 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	14	U	30	14	4.6
11104-28-2	Arochlor 1221	15	U	43	15	14
11141-16-5	Arochlor 1232	14	U	30	14	4.7
53469-21-9	Arochlor 1242	30	U	30	30	8.3
12672-29-6	Arochlor 1248	18	U	30	18	5.1
11097-69-1	Arochlor 1254	15	U	30	15	5.0
11096-82-5	Arochlor 1260	7.0	U	30	7.0	2.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	92		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171705.D
Lims ID: MB 280-376892/1-A
Client ID:
Sample Type: MB
Inject. Date: 17-Jun-2017 12:45:17 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-376892/1-
Misc. Info.: 280-0059856-005
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:13 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:08:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.825	0.000	355534319	1000.0	1000.0	
2	1.589	1.591	-0.002	403823975	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.749	2.748	0.001	69579528	20.0	18.0	
2	2.639	2.641	-0.002	89090445	20.0	19.1	
						RPD = 5.70	
3 PCB-1221							
1		2.963				ND	
1		3.106					
1		3.143					
2		2.966					
2		3.090					
2		3.143					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
7 PCB-1232							
1		3.144				ND	
1		3.487					
1		3.950					
1		4.090					
1		4.537					
2		3.140					
2		3.510					
2		3.950					
2		4.087					
2		4.720					
1 PCB-1016							
1		3.485				ND	
1		3.948					
1		4.085					
1		4.151					
1		4.535					
2		3.501					
2		3.941					
2		4.075					
2		4.298					
2		4.575					
4 PCB-1248							
1		3.486				ND	
1		3.946					
1		4.302					
1		4.539					
1		5.289					
2		3.949					
2		4.586					
2		4.719					
2		5.029					
2		5.072					
10 PCB-1242							
1		3.487				ND	
1		3.951					
1		4.091					
1		5.027					
1		5.054					
2		3.511					
2		3.951					
2		4.087					
2		5.031					
2		5.074					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
9 PCB-1254							
1		5.293				ND	
1		5.623					
1		5.776					
1		6.483					
1		6.743					
2		5.310					
2		5.713					
2		5.860					
2		6.163					
2		6.860					
12 PCB-1260							
1		6.008				ND	
1		6.738					
1		7.228					
1		7.665					
1		8.048					
2		6.388					
2		6.841					
2		7.358					
2		7.728					
2		8.221					
5 PCB-1262							
1		6.377				ND	
1		6.904					
1		7.230					
1		7.667					
1		8.050					
2		6.400					
2		6.990					
2		7.377					
2		7.744					
2		8.237					
13 PCB-1268							
1		8.111				ND	
1		8.164					
1		8.437					
1		8.947					
1		9.357					
2		8.237					
2		8.301					
2		8.647					
2		9.077					
2		9.537					
$ 15 DCB Decachlorobiphenyl							
1	9.625	9.625	0.000	66975003	20.0	18.0	
2	9.879	9.878	0.001	70686844	20.0	18.4	
						RPD = 2.26	
S 8 Polychlorinated biphenyls, Total							
1		0.000				ND	
2		0.000					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 PCB-5460							
1		0.000				ND	
1		12.739					
1		0.000					
1		13.802					
1		14.259					
2		0.000					
2		0.000					
2		0.000					
2		0.000					
2		0.000					
6 PCB-5432							
1		7.063				ND	
1		7.693					
1		8.203					
1		9.029					
1		9.459					
2		0.000					
2		0.000					
2		0.000					
2		0.000					
2		0.000					
11 PCB-5442							
1		9.459				ND	
1		9.923					
1		10.079					
1		10.289					
1		0.000					
2		0.000					
2		0.000					
2		0.000					
2		0.000					
2		0.000					

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

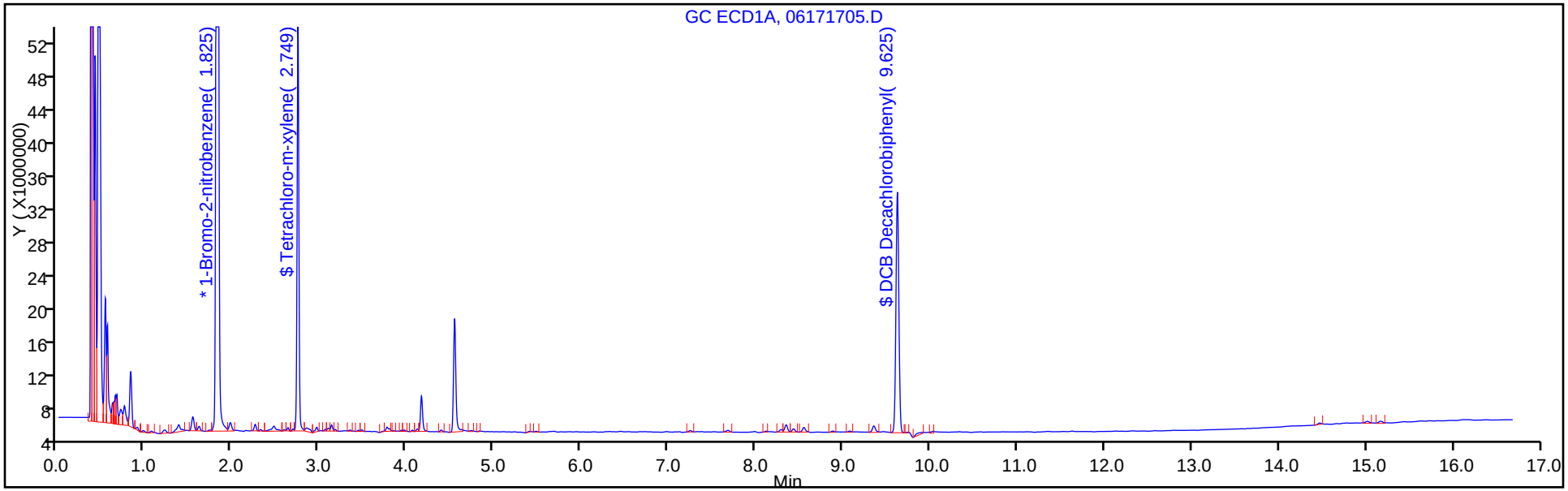
Report Date: 18-Jun-2017 10:14:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

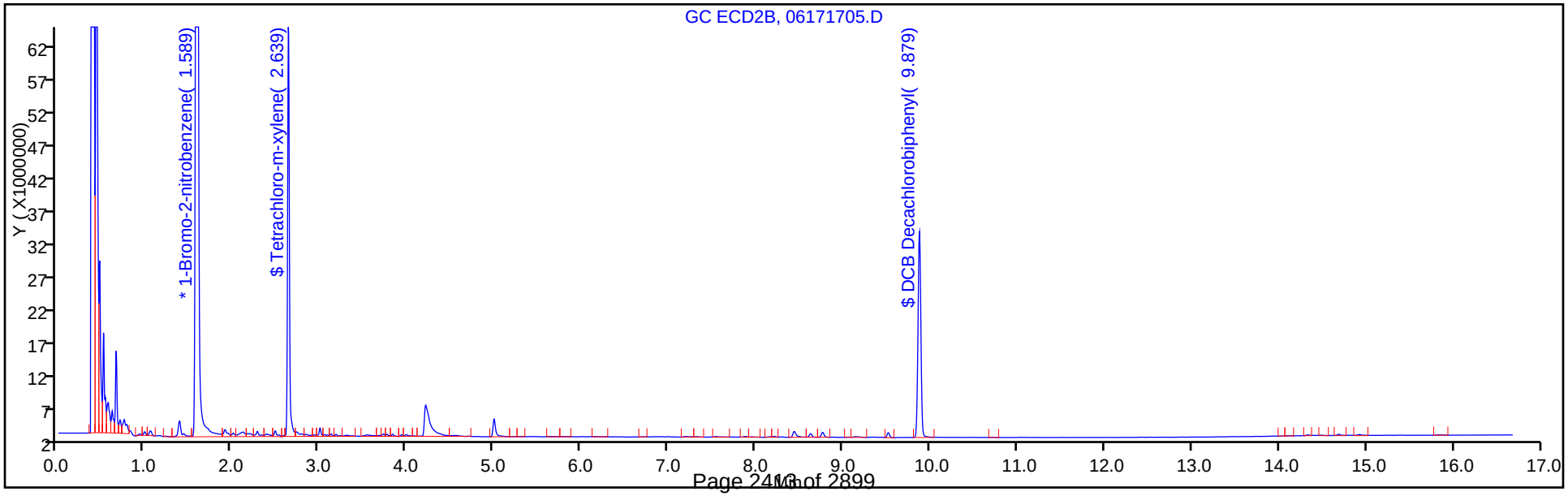
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171705.D

Injection Date:	17-Jun-2017 12:45:17	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	MB 280-376892/1-A			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171705.D
Lims ID: MB 280-376892/1-A
Client ID:
Sample Type: MB
Inject. Date: 17-Jun-2017 12:45:17 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-376892/1-
Misc. Info.: 280-0059856-005
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:13 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:08:57

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	18.0	90.10
$ 15 DCB Decachlorobiphenyl	20.0	18.0	89.89

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	19.1	95.38
$ 15 DCB Decachlorobiphenyl	20.0	18.4	91.95

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-377252/1-A

Matrix: Solid | Lab File ID: 06211704.D

Analysis Method: 8082A | Date Collected:

Extraction Method: 3546 | Date Extracted: 06/14/2017 09:49

Sample wt/vol: 31.5(g) | Date Analyzed: 06/21/2017 14:35

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378200 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	14	U	31	14	4.8
11104-28-2	Arochlor 1221	16	U	45	16	15
11141-16-5	Arochlor 1232	14	U	31	14	4.9
53469-21-9	Arochlor 1242	31	U	31	31	8.7
12672-29-6	Arochlor 1248	19	U	31	19	5.3
11097-69-1	Arochlor 1254	16	U	31	16	5.3
11096-82-5	Arochlor 1260	7.3	U	31	7.3	2.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	98		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211704.D
Lims ID: MB 280-377252/1-A
Client ID:
Sample Type: MB
Inject. Date: 21-Jun-2017 14:35:59 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-377252/1-
Misc. Info.: 280-0059992-004
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 22-Jun-2017 10:07:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK002

First Level Reviewer: jacksonto Date: 21-Jun-2017 15:38:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.825	0.000	379522771	1000.0	1000.0	
2	1.585	1.585	0.000	431726756	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.748	2.748	0.000	77134943	20.0	18.7	
2	2.635	2.635	0.000	100625407	20.0	20.2	
						RPD = 7.56	
3 PCB-1221							
1		2.959				ND	
1		3.102					
1		3.139					
2		2.952					
2		3.079					
2		3.129					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
7 PCB-1232							
1		3.144				ND	
1		3.487					
1		3.950					
1		4.090					
1		4.537					
2		3.140					
2		3.510					
2		3.950					
2		4.087					
2		4.720					
1 PCB-1016							
1		3.481				ND	
1		3.948					
1		4.085					
1		4.151					
1		4.535					
2		3.495					
2		3.931					
2		4.065					
2		4.291					
2		4.565					
4 PCB-1248							
1		3.486				ND	
1		3.946					
1		4.302					
1		4.539					
1		5.289					
2		3.949					
2		4.586					
2		4.719					
2		5.029					
2		5.072					
10 PCB-1242							
1		3.487				ND	
1		3.951					
1		4.091					
1		5.027					
1		5.054					
2		3.511					
2		3.951					
2		4.087					
2		5.031					
2		5.074					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
9 PCB-1254							
1		5.286				ND	
1		5.616					
1		5.769					
1		6.476					
1		6.736					
2		5.289					
2		5.692					
2		5.839					
2		6.142					
2		6.836					
12 PCB-1260							
1		6.008				ND	
1		6.738					
1		7.224					
1		7.661					
1		8.044					
2		6.374					
2		6.828					
2		7.348					
2		7.714					
2		8.208					
5 PCB-1262							
1		6.377				ND	
1		6.904					
1		7.230					
1		7.667					
1		8.050					
2		6.400					
2		6.990					
2		7.377					
2		7.744					
2		8.237					
13 PCB-1268							
1		8.111				ND	
1		8.164					
1		8.437					
1		8.947					
1		9.357					
2		8.237					
2		8.301					
2		8.647					
2		9.077					
2		9.537					
$ 15 DCB Decachlorobiphenyl							
1	9.625	9.624	0.001	75065354	20.0	18.9	
2	9.865	9.864	0.001	80591244	20.0	19.7	
						RPD = 3.94	
S 8 Polychlorinated biphenyls, Total							
1		0.000				ND	
2		0.000					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 PCB-5460							
1		0.000				ND	
1		12.739					
1		0.000					
1		13.802					
1		14.259					
2		0.000					
2		0.000					
2		0.000					
2		0.000					
2		0.000					
6 PCB-5432							
1		7.063				ND	
1		7.693					
1		8.203					
1		9.029					
1		9.459					
2		0.000					
2		0.000					
2		0.000					
2		0.000					
2		0.000					
11 PCB-5442							
1		9.459				ND	
1		9.923					
1		10.079					
1		10.289					
1		0.000					
2		0.000					
2		0.000					
2		0.000					
2		0.000					
2		0.000					

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

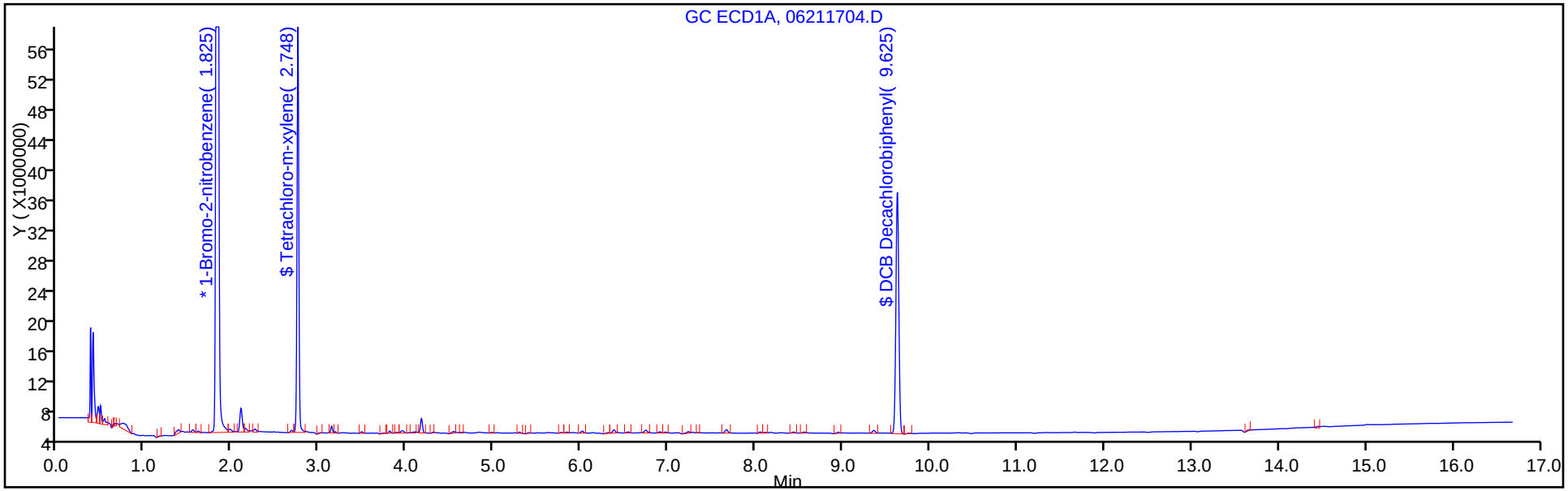
Report Date: 22-Jun-2017 10:07:40 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

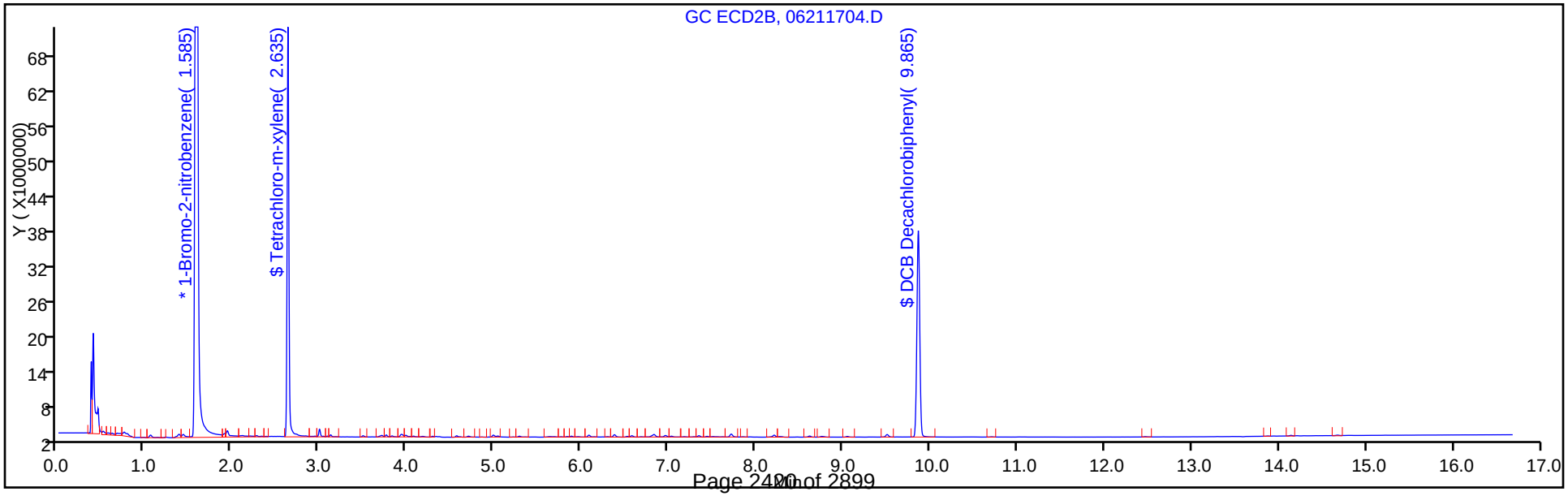
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211704.D

Injection Date:	21-Jun-2017 14:35:59	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	MB 280-377252/1-A			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211704.D
Lims ID: MB 280-377252/1-A
Client ID:
Sample Type: MB
Inject. Date: 21-Jun-2017 14:35:59 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-377252/1-
Misc. Info.: 280-0059992-004
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 22-Jun-2017 10:07:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK002

First Level Reviewer: jacksonto Date: 21-Jun-2017 15:38:36

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	18.7	93.64
$ 15 DCB Decachlorobiphenyl	20.0	18.9	94.55

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	20.2	101.00
$ 15 DCB Decachlorobiphenyl	20.0	19.7	98.35

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-376892/4-A

Matrix: Solid | Lab File ID: 06171706.D

Analysis Method: 8082A | Date Collected:

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 31.6(g) | Date Analyzed: 06/17/2017 13:07

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377714 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	62.2		31	14	4.8
11096-82-5	Arochlor 1260	62.4		31	7.3	2.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	91		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171706.D
Lims ID: LCS 280-376892/4-A
Client ID:
Sample Type: LCS
Inject. Date: 17-Jun-2017 13:07:01 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-376892/4
Misc. Info.: 280-0059856-006
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:13 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:09:06

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.824	1.825	-0.001	354758593	1000.0	1000.0	
2	1.591	1.591	0.000	405091207	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.751	2.748	0.003	69793225	20.0	18.1	
2	2.641	2.641	0.000	87995780	20.0	18.8	
						RPD = 3.55	
1 PCB-1016							
1	3.484	3.485	-0.001	23276134	200.0	188.5	
1	3.947	3.948	-0.001	52100811	200.0	186.4	
1	4.087	4.085	0.002	23543744	200.0	200.1	
1	4.154	4.151	0.003	19137068	200.0	255.0	
1	4.534	4.535	-0.001	24482467	200.0	197.4	
		Average of Peak Amounts =				205.5	
2	3.501	3.501	0.000	31444010	200.0	200.9	
2	3.941	3.941	0.000	67716899	200.0	197.3	
2	4.077	4.075	0.002	30946490	200.0	195.8	
2	4.301	4.298	0.003	16617167	200.0	193.0	
2	4.574	4.575	-0.001	22664230	200.0	195.7	
		Average of Peak Amounts =				196.5	
						RPD = 4.44	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.011	6.008	0.003	33930582	200.0	180.1	
1	6.737	6.738	-0.001	58924793	200.0	160.8	
1	7.227	7.228	-0.001	32287391	200.0	190.3	
1	7.664	7.665	-0.001	70723514	200.0	191.2	
1	8.047	8.048	-0.001	38778614	200.0	180.2	
		Average of Peak Amounts =				180.5	
2	6.387	6.388	-0.001	52753744	200.0	190.3	
2	6.841	6.841	0.000	73772781	200.0	175.3	
2	7.357	7.358	-0.001	40299120	200.0	212.9	
2	7.727	7.728	-0.001	83200035	200.0	204.5	
2	8.221	8.221	0.000	63584022	200.0	203.5	
		Average of Peak Amounts =				197.3	
						RPD = 8.90	
$ 15 DCB Decachlorobiphenyl							
1	9.624	9.625	-0.001	67357517	20.0	18.1	
2	9.877	9.878	-0.001	70086830	20.0	18.2	
						RPD = 0.23	

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

Report Date: 18-Jun-2017 10:14:27 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171706.D

Injection Date: 17-Jun-2017 13:07:01 Instrument ID: SGC_P3 Operator ID: jax

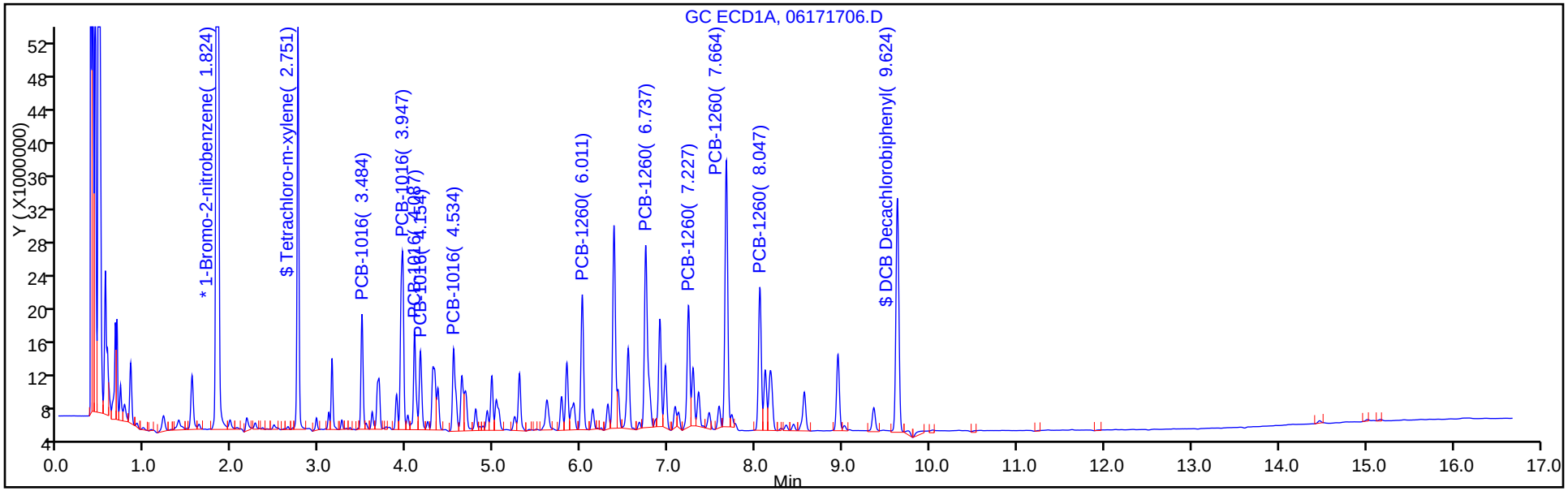
Lims ID: LCS 280-376892/4-A Worklist Smp#: 6

Client ID:

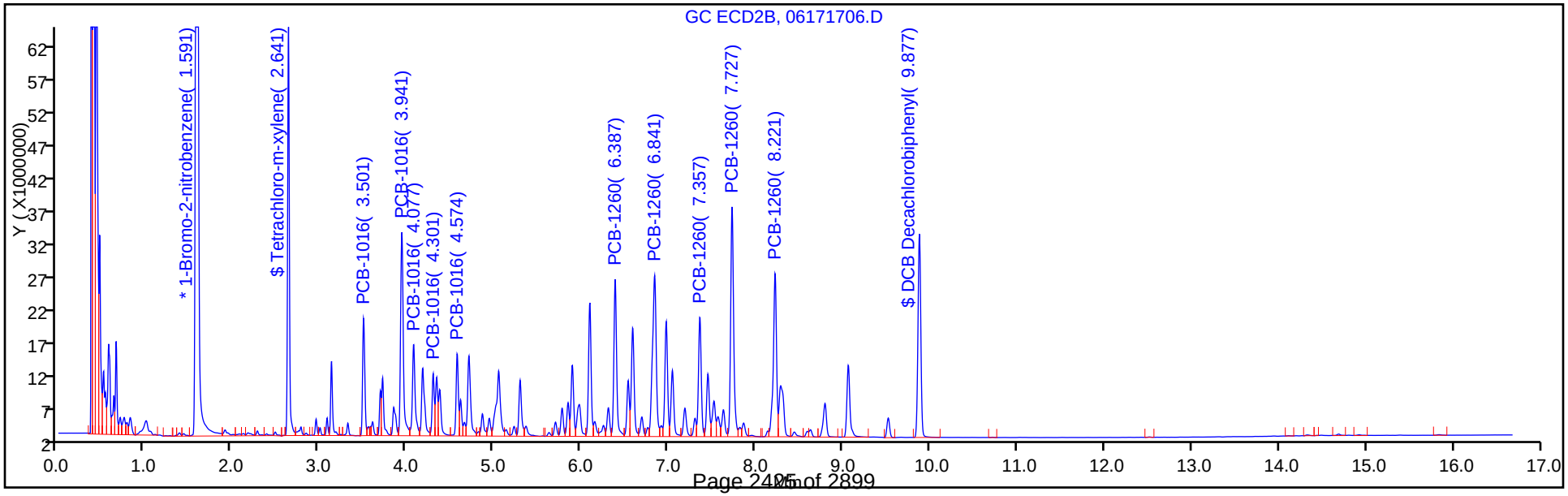
Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 6

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171706.D
Lims ID: LCS 280-376892/4-A
Client ID:
Sample Type: LCS
Inject. Date: 17-Jun-2017 13:07:01 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-376892/4
Misc. Info.: 280-0059856-006
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:13 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:09:06

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	18.1	90.58
$ 15 DCB Decachlorobiphenyl	20.0	18.1	90.63

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	18.8	93.85
$ 15 DCB Decachlorobiphenyl	20.0	18.2	90.83

Report Date: 18-Jun-2017 10:14:27 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171706.D

Injection Date: 17-Jun-2017 13:07:01 Instrument ID: SGC_P3

Lims ID: LCS 280-376892/4-A

Client ID:

Operator ID: jax ALS Bottle#: 6 Worklist Smp#: 6

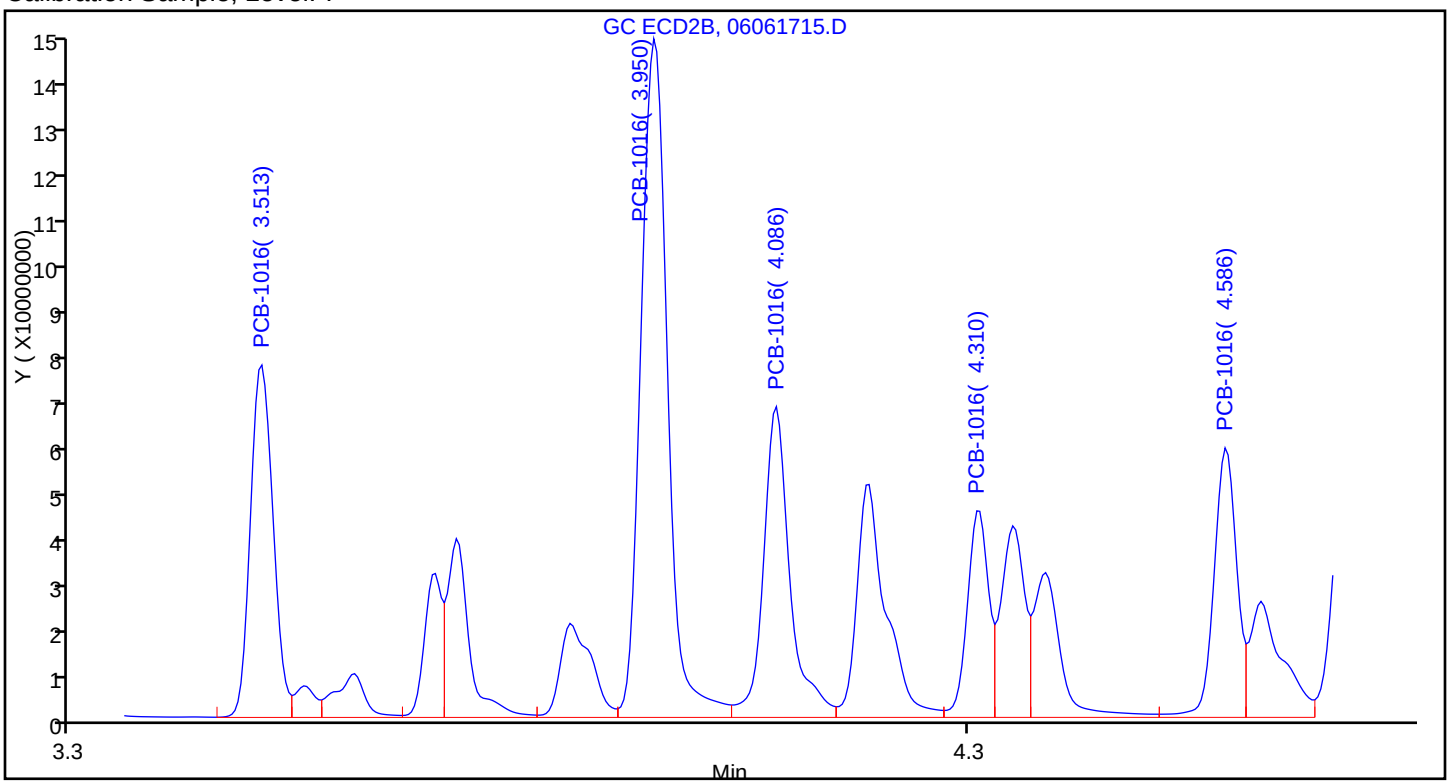
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

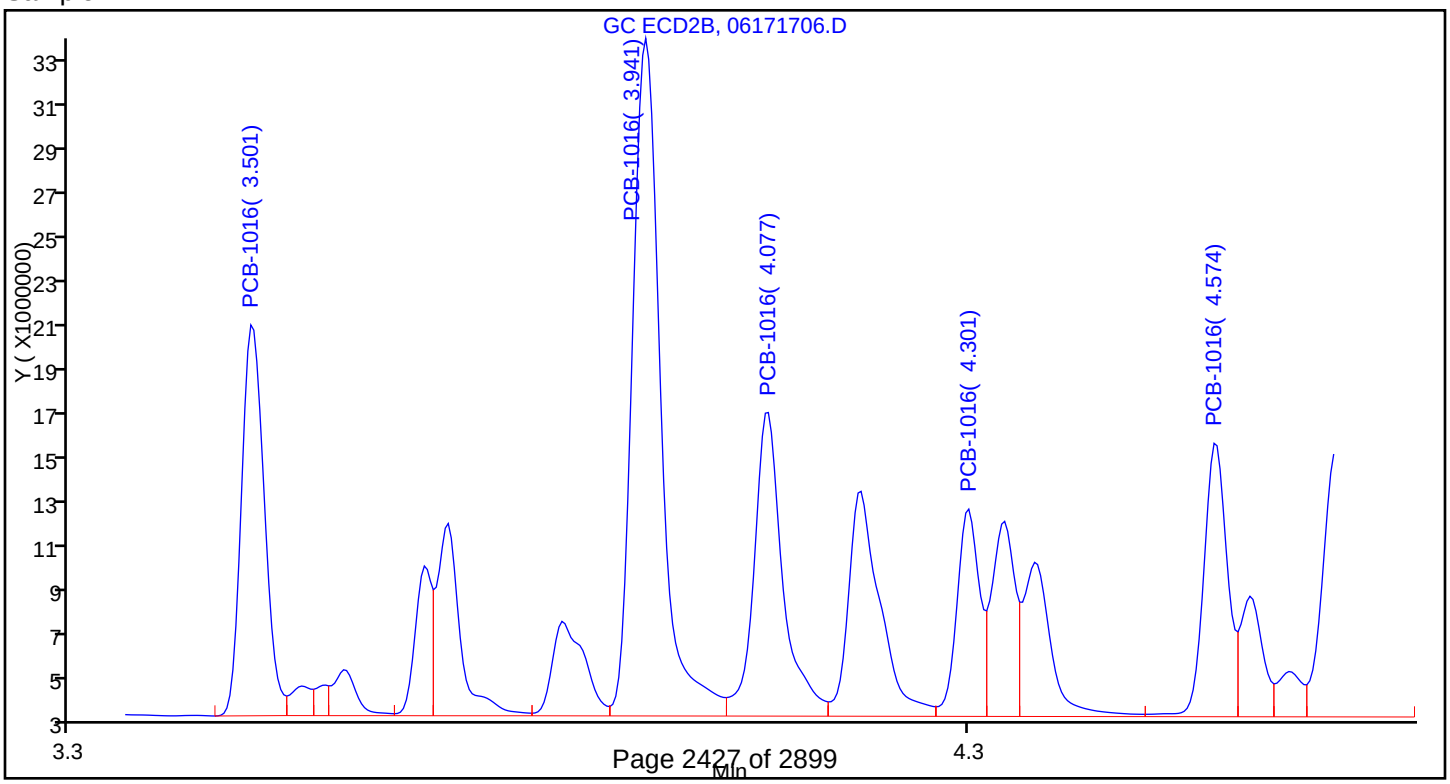
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

1 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 7



Sample



Report Date: 18-Jun-2017 10:14:27 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171706.D

Injection Date: 17-Jun-2017 13:07:01 Instrument ID: SGC_P3

Lims ID: LCS 280-376892/4-A

Client ID:

Operator ID: jax ALS Bottle#: 6 Worklist Smp#: 6

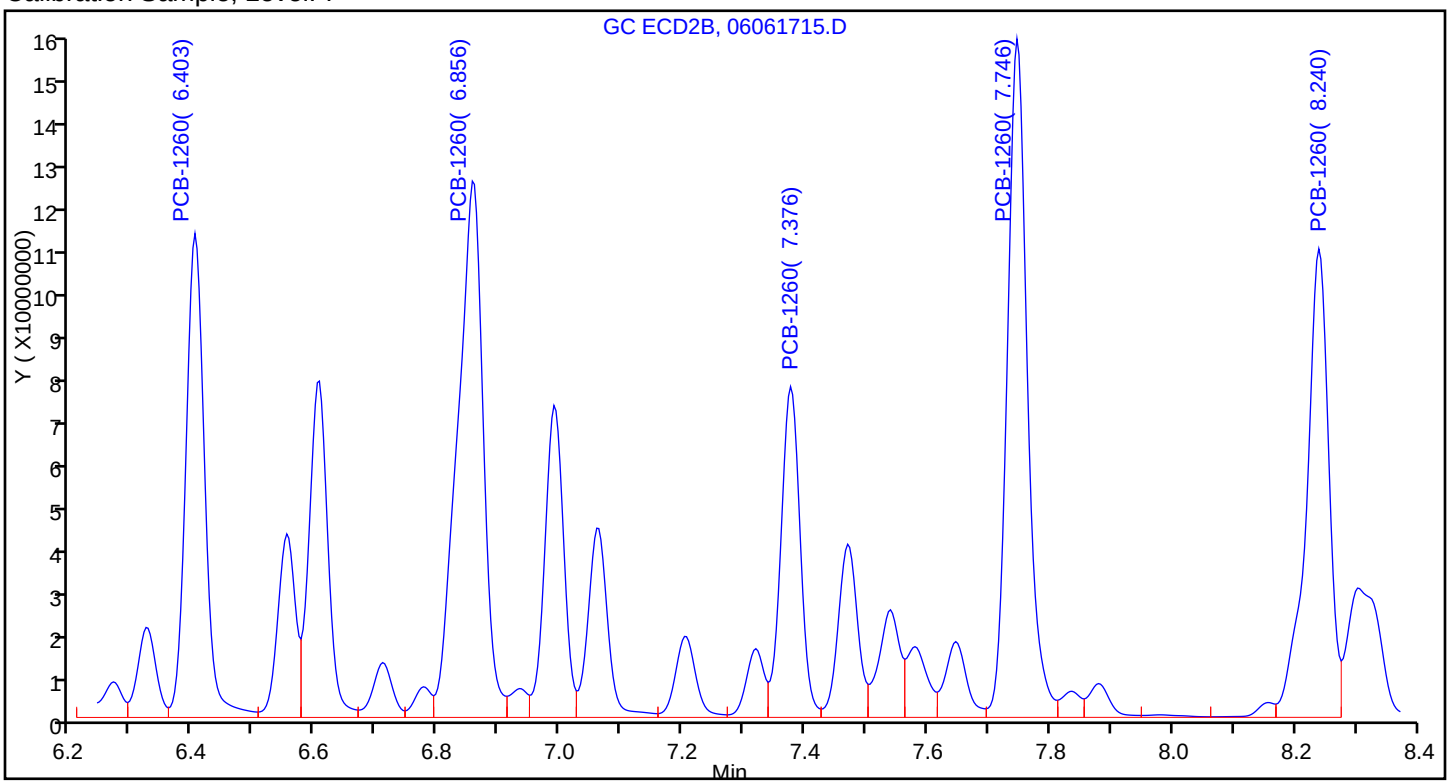
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

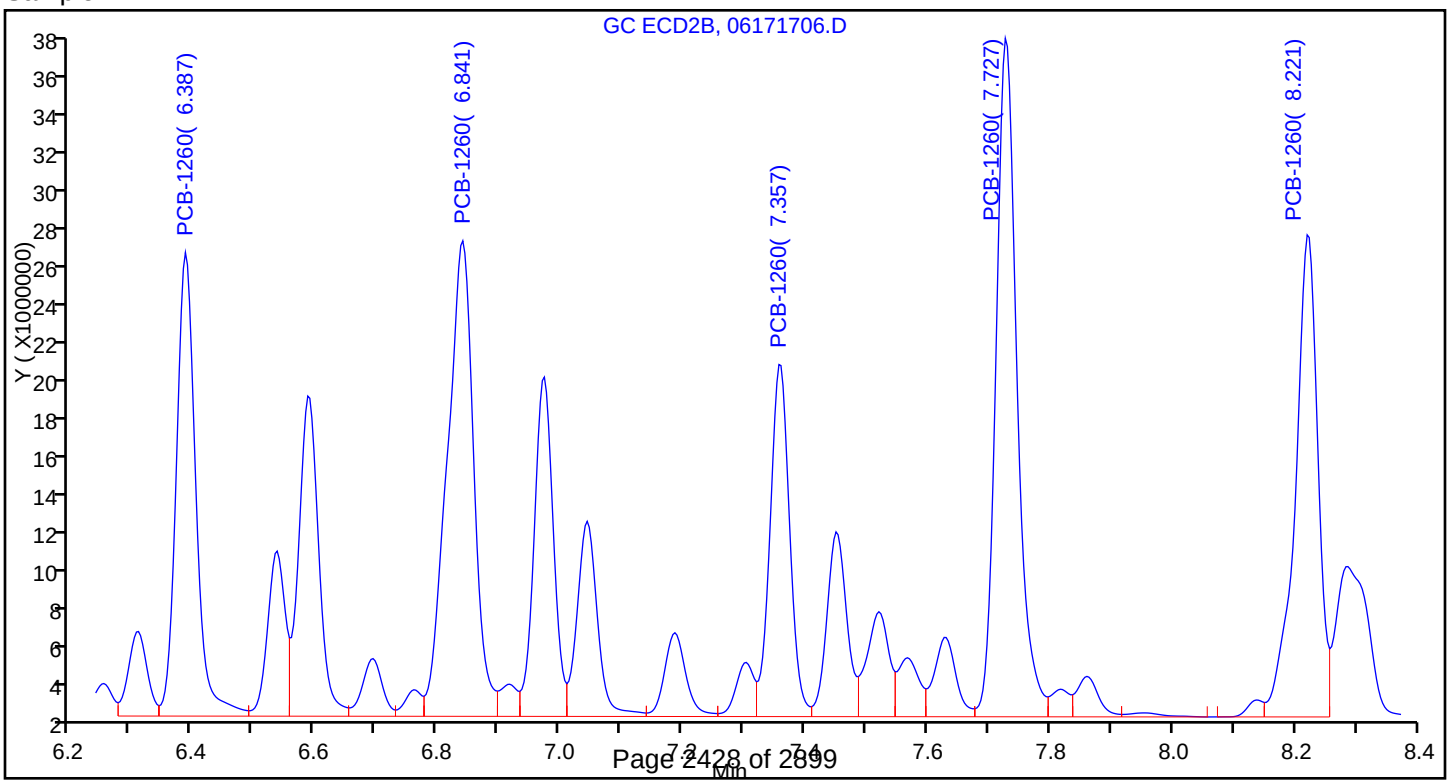
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

12 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-377252/4-A

Matrix: Solid | Lab File ID: 06211705.D

Analysis Method: 8082A | Date Collected:

Extraction Method: 3546 | Date Extracted: 06/14/2017 09:49

Sample wt/vol: 32.21(g) | Date Analyzed: 06/21/2017 14:57

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378200 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	59.6		31	14	4.7
11096-82-5	Arochlor 1260	60.4		31	7.2	2.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	96		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211705.D
Lims ID: LCS 280-377252/4-A
Client ID:
Sample Type: LCS
Inject. Date: 21-Jun-2017 14:57:46 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-377252/4
Misc. Info.: 280-0059992-005
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 22-Jun-2017 10:07:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK002

First Level Reviewer: jacksonto Date: 21-Jun-2017 15:38:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.822	1.825	-0.003	379484497	1000.0	1000.0	
2	1.585	1.585	0.000	433381249	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.748	2.748	0.000	75211168	20.0	18.3	
2	2.635	2.635	0.000	96928304	20.0	19.4	
						RPD = 5.83	
1 PCB-1016							
1	3.482	3.481	0.001	24577824	200.0	185.9	
1	3.945	3.948	-0.003	54224421	200.0	181.1	
1	4.085	4.085	0.000	23418643	200.0	185.0	
1	4.152	4.151	0.001	16921381	200.0	208.4	
1	4.532	4.535	-0.003	24757966	200.0	185.7	
		Average of Peak Amounts =				189.2	
2	3.495	3.495	0.000	32945794	200.0	196.3	
2	3.932	3.931	0.001	72281348	200.0	196.9	
2	4.068	4.065	0.003	32558361	200.0	192.2	
2	4.292	4.291	0.001	17436533	200.0	188.9	
2	4.565	4.565	0.000	23026231	200.0	184.9	
		Average of Peak Amounts =				191.8	
						RPD = 1.36	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.008	6.008	0.000	35827255	200.0	177.6	
1	6.738	6.738	0.000	62858899	200.0	160.4	
1	7.225	7.224	0.001	34671375	200.0	191.0	
1	7.662	7.661	0.001	74432420	200.0	188.0	
1	8.045	8.044	0.001	41436351	200.0	180.0	
		Average of Peak Amounts =				179.4	
2	6.375	6.374	0.001	54696674	200.0	183.9	
2	6.828	6.828	0.000	77758095	200.0	172.5	
2	7.348	7.348	0.000	42436844	200.0	209.3	
2	7.718	7.714	0.004	88867991	200.0	204.1	
2	8.208	8.208	0.000	67775558	200.0	202.7	
		Average of Peak Amounts =				194.5	
						RPD = 8.09	
$ 15 DCB Decachlorobiphenyl							
1	9.625	9.624	0.001	73290530	20.0	18.4	
2	9.865	9.864	0.001	79057607	20.0	19.2	
						RPD = 4.00	

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

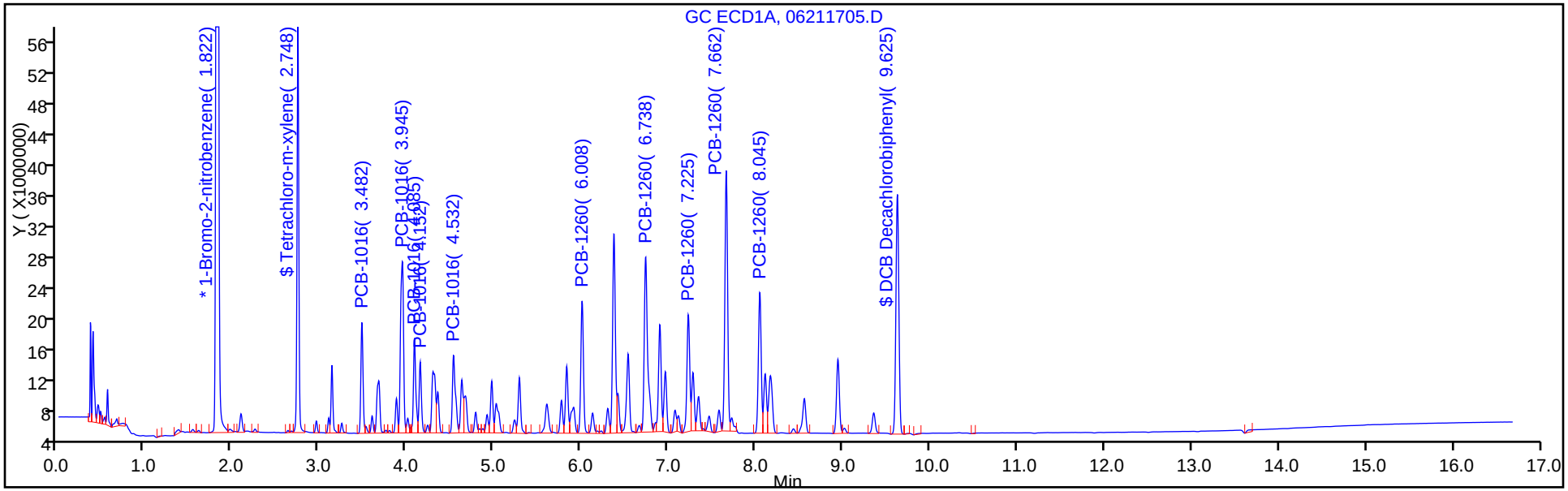
Report Date: 22-Jun-2017 10:07:42 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

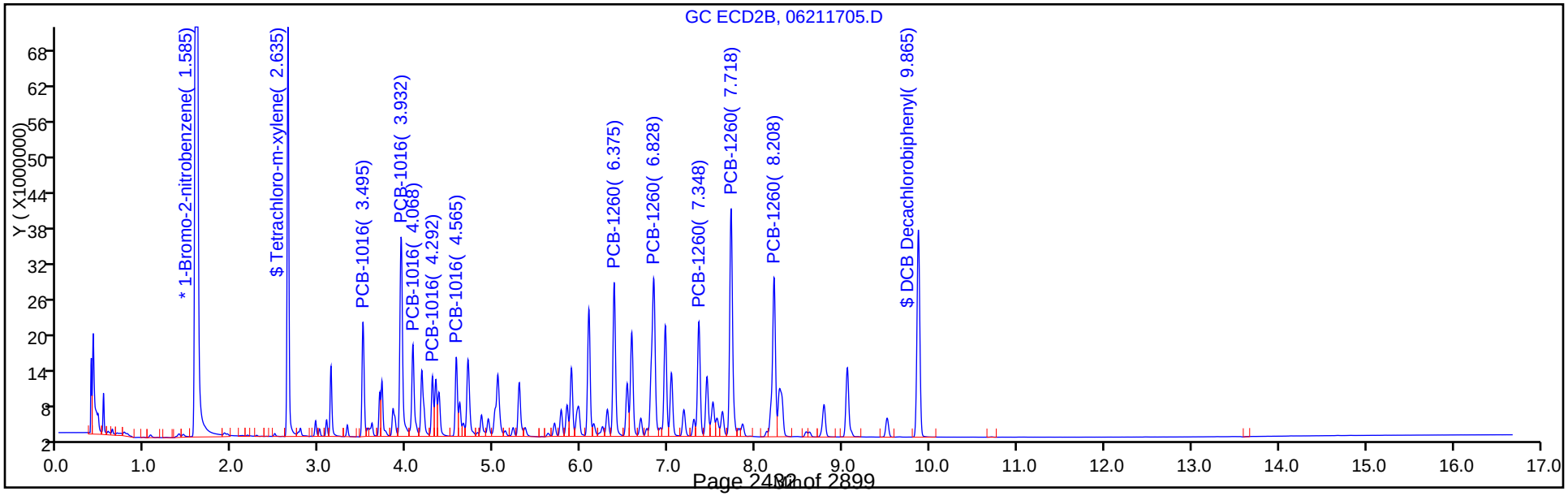
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211705.D

Injection Date:	21-Jun-2017 14:57:46	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	LCS 280-377252/4-A			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211705.D
Lims ID: LCS 280-377252/4-A
Client ID:
Sample Type: LCS
Inject. Date: 21-Jun-2017 14:57:46 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-377252/4
Misc. Info.: 280-0059992-005
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 22-Jun-2017 10:07:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK002

First Level Reviewer: jacksonto Date: 21-Jun-2017 15:38:47

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	18.3	91.27
$ 15 DCB Decachlorobiphenyl	20.0	18.4	92.24

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	19.4	96.75
$ 15 DCB Decachlorobiphenyl	20.0	19.2	96.01

Report Date: 22-Jun-2017 10:07:42 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211705.D

Injection Date: 21-Jun-2017 14:57:46 Instrument ID: SGC_P3

Lims ID: LCS 280-377252/4-A

Client ID:

Operator ID: jax ALS Bottle#: 5 Worklist Smp#: 5

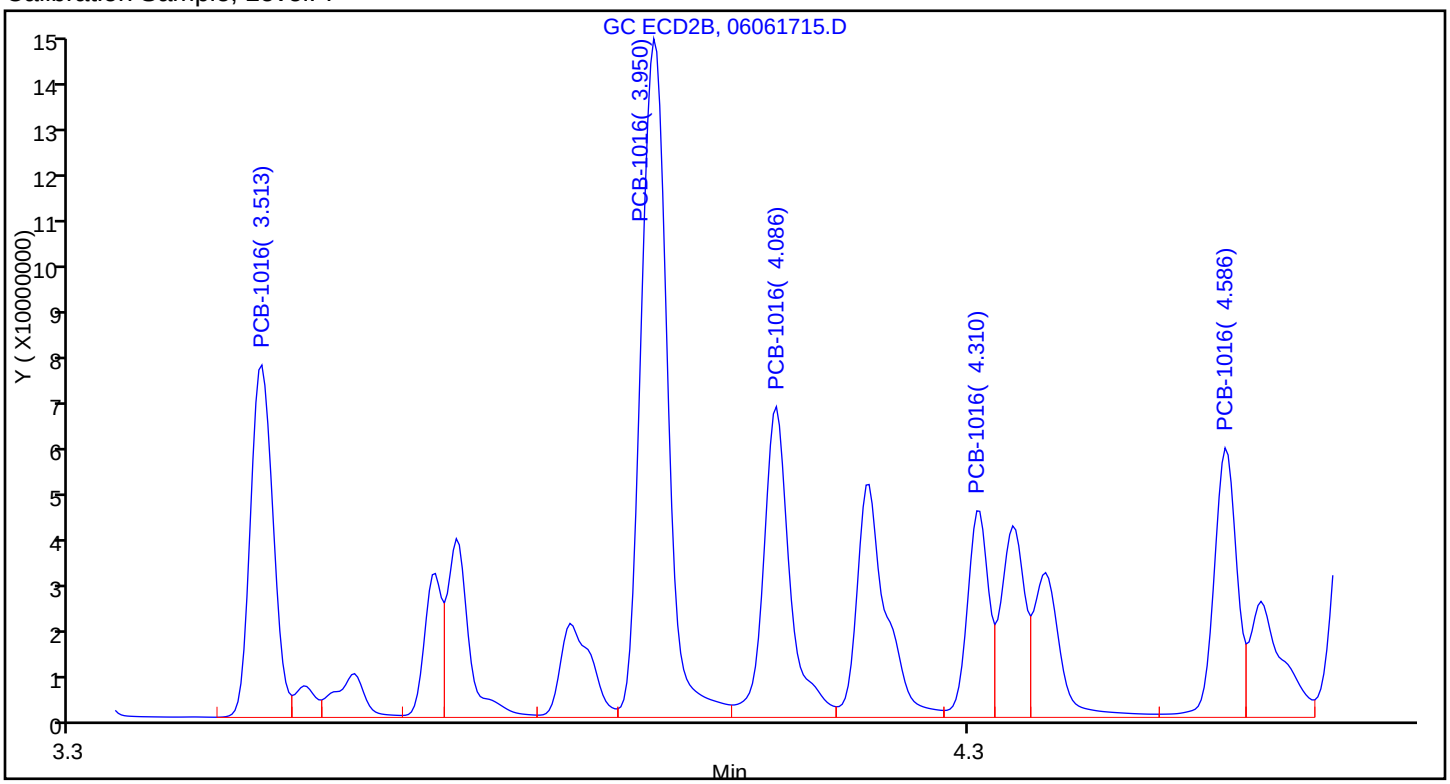
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

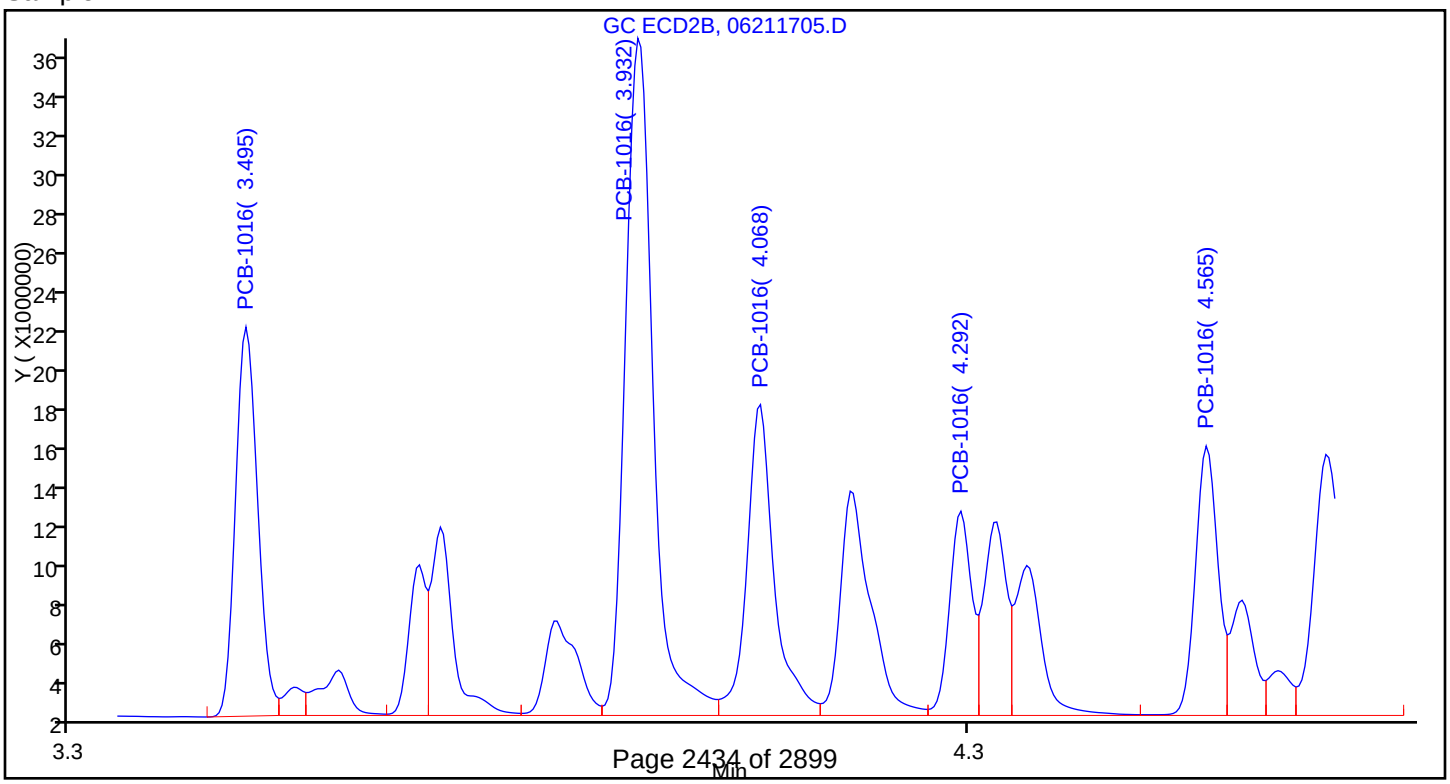
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

1 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 7



Sample



Report Date: 22-Jun-2017 10:07:42 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170621-59992.b\06211705.D

Injection Date: 21-Jun-2017 14:57:46 Instrument ID: SGC_P3

Lims ID: LCS 280-377252/4-A

Client ID:

Operator ID: jax ALS Bottle#: 5 Worklist Smp#: 5

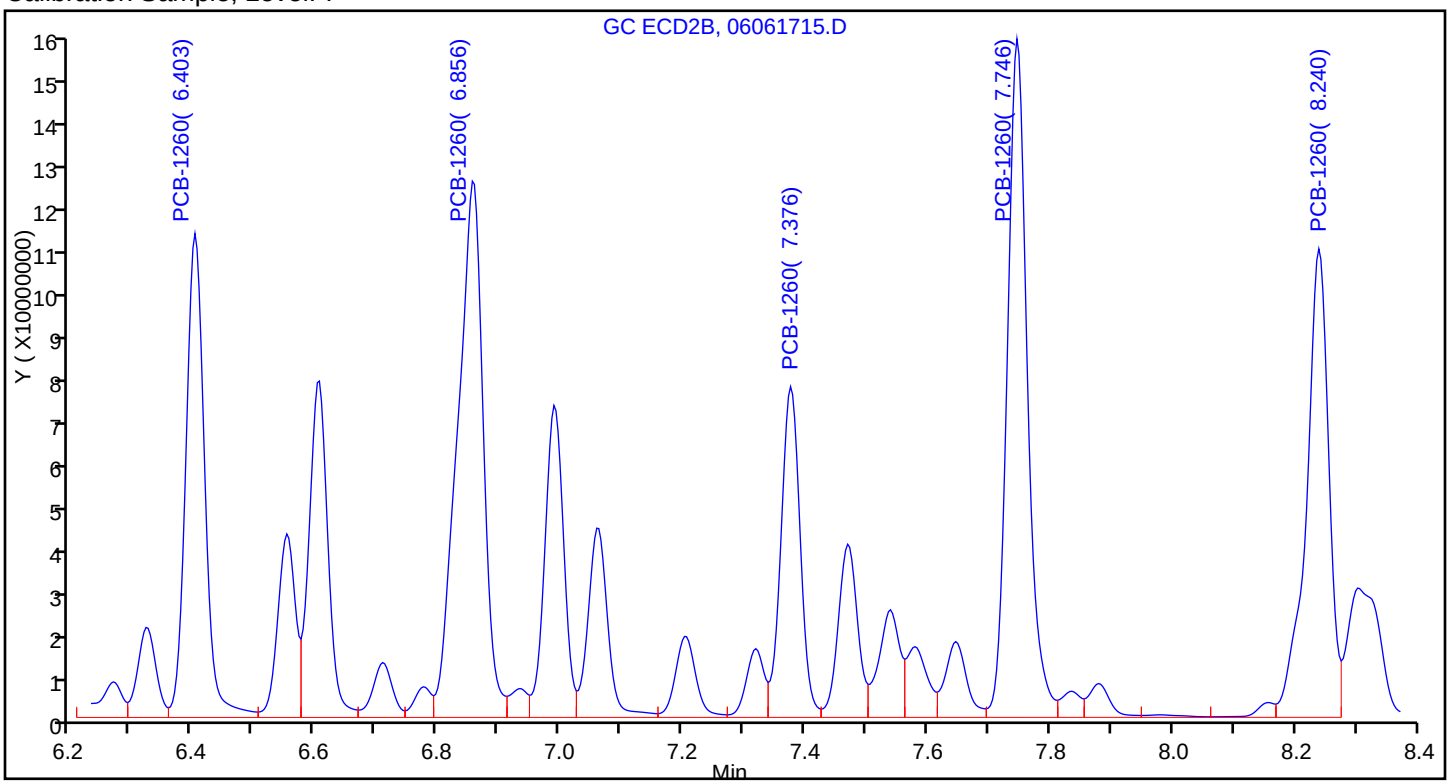
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

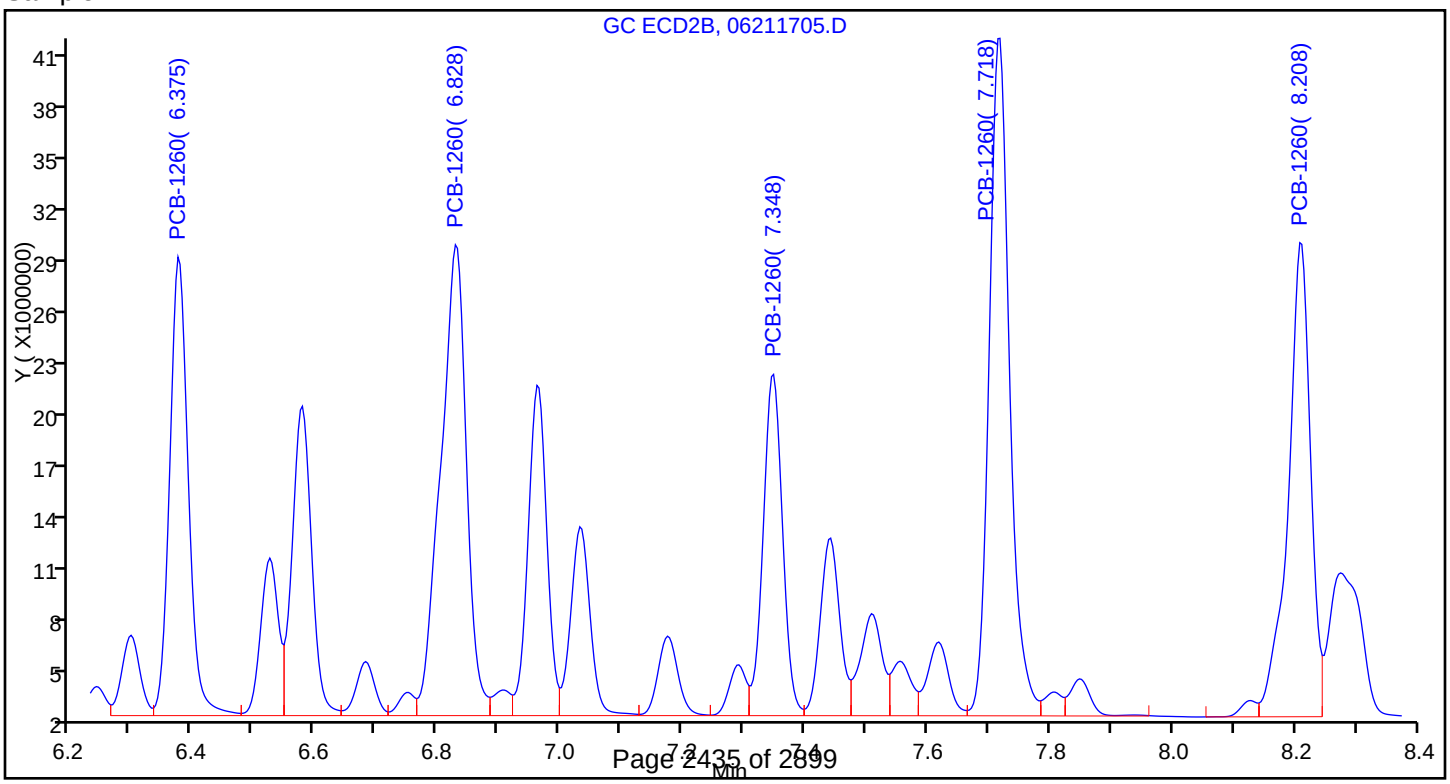
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

12 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS04 MS | Lab Sample ID: 280-97803-8 MS

Matrix: Solid | Lab File ID: 06171714.D

Analysis Method: 8082A | Date Collected: 05/31/2017 14:00

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 32.5(g) | Date Analyzed: 06/17/2017 16:00

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 10.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377714 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	69.6		34	15	5.2
11096-82-5	Arochlor 1260	76.1		34	7.9	2.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	80		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171714.D
Lims ID: 280-97803-B-8-B MS
Client ID:
Sample Type: MS
Inject. Date: 17-Jun-2017 16:00:57 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-B-8-B
Misc. Info.: 280-0059856-014
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:11:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.823	1.825	-0.002	362019323	1000.0	1000.0	
2	1.590	1.591	-0.001	415417475	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.750	2.748	0.002	67507840	20.0	17.2	
2	2.640	2.641	-0.001	74578125	20.0	15.4	
						RPD = 10.95	
1 PCB-1016							
1	3.483	3.485	-0.002	45168580	200.0	373.0	
1	3.946	3.948	-0.002	51573397	200.0	180.6	
1	4.086	4.085	0.001	22479339	200.0	186.3	
1	0.000	4.151	0.000	0	200.0	0	
1	4.533	4.535	-0.002	21396666	200.0	166.6	
		Average of Peak Amounts =				226.6	
2	3.500	3.501	-0.001	34189409	200.0	214.4	
2	3.936	3.941	-0.005	72138103	200.0	205.7	
2	4.070	4.075	-0.005	32711892	200.0	202.4	
2	4.296	4.298	-0.002	16546009	200.0	186.8	
2	4.570	4.575	-0.005	24625442	200.0	208.5	
		Average of Peak Amounts =				203.6	
						RPD = 10.71	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.010	6.008	0.002	39624719	200.0	208.0	
1	6.736	6.738	-0.002	77244974	200.0	209.1	
1	7.226	7.228	-0.002	39691052	200.0	231.4	
1	7.660	7.665	-0.005	74127270	200.0	196.5	
1	8.046	8.048	-0.002	47800442	200.0	219.5	
		Average of Peak Amounts =				212.9	
2	6.383	6.388	-0.005	56531158	200.0	199.7	
2	6.836	6.841	-0.005	92119606	200.0	217.4	
2	7.356	7.358	-0.002	47095546	200.0	245.1	
2	7.723	7.728	-0.005	88982670	200.0	213.9	
2	8.216	8.221	-0.005	75263221	200.0	237.3	
		Average of Peak Amounts =				222.7	
						RPD = 4.50	
$ 15 DCB Decachlorobiphenyl							
1	9.623	9.625	-0.002	58012875	20.0	15.2	
2	9.876	9.878	-0.002	63360183	20.0	15.9	
						RPD = 4.61	

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

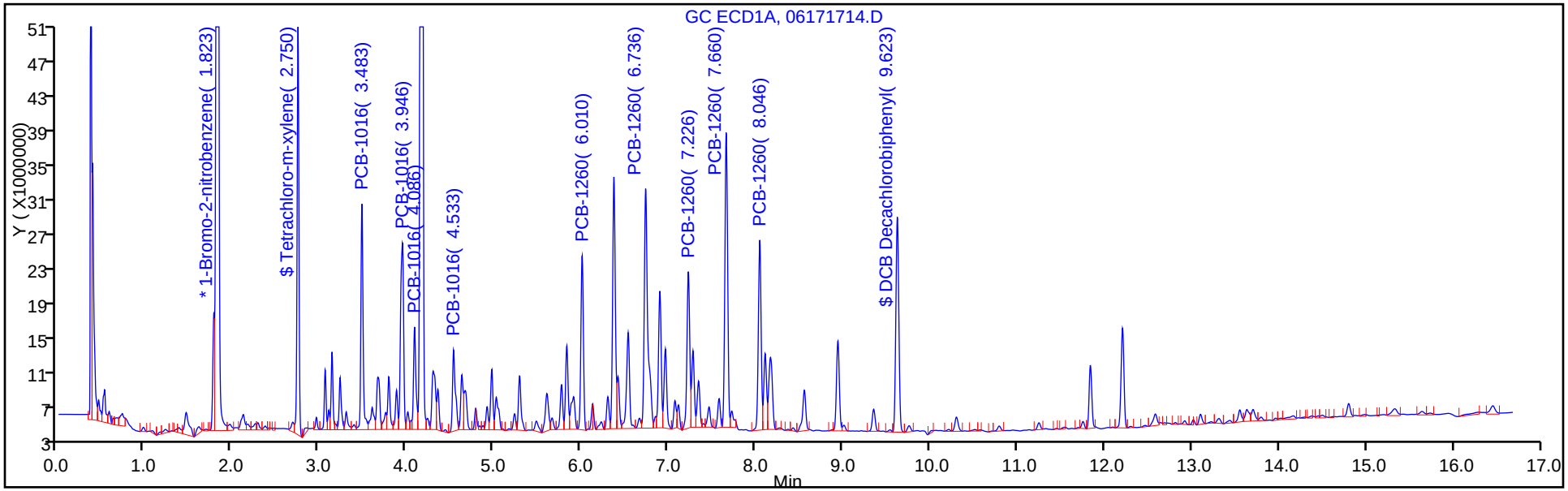
Report Date: 18-Jun-2017 10:14:42 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

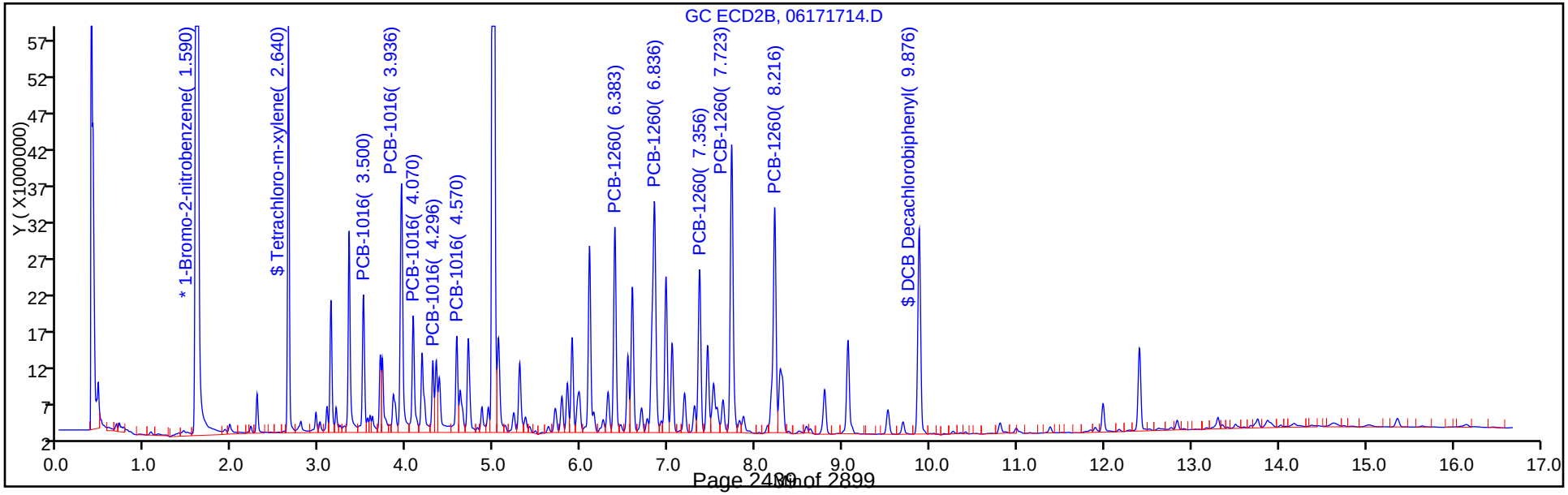
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171714.D

Injection Date:	17-Jun-2017 16:00:57	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97803-B-8-B MS			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171714.D				
Lims ID:	280-97803-B-8-B MS				
Client ID:					
Sample Type:	MS				
Inject. Date:	17-Jun-2017 16:00:57	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97803-B-8-B				
Misc. Info.:	280-0059856-014				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	18-Jun-2017 10:14:37	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK004				
First Level Reviewer: jacksonto		Date:	18-Jun-2017 10:11:35		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.2	85.76
$ 15 DCB Decachlorobiphenyl	20.0	15.2	75.97

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	15.4	76.86
$ 15 DCB Decachlorobiphenyl	20.0	15.9	79.55

Report Date: 18-Jun-2017 10:14:43 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171714.D

Injection Date: 17-Jun-2017 16:00:57 Instrument ID: SGC_P3

Lims ID: 280-97803-B-8-B MS

Client ID:

Operator ID: jax ALS Bottle#: 14 Worklist Smp#: 14

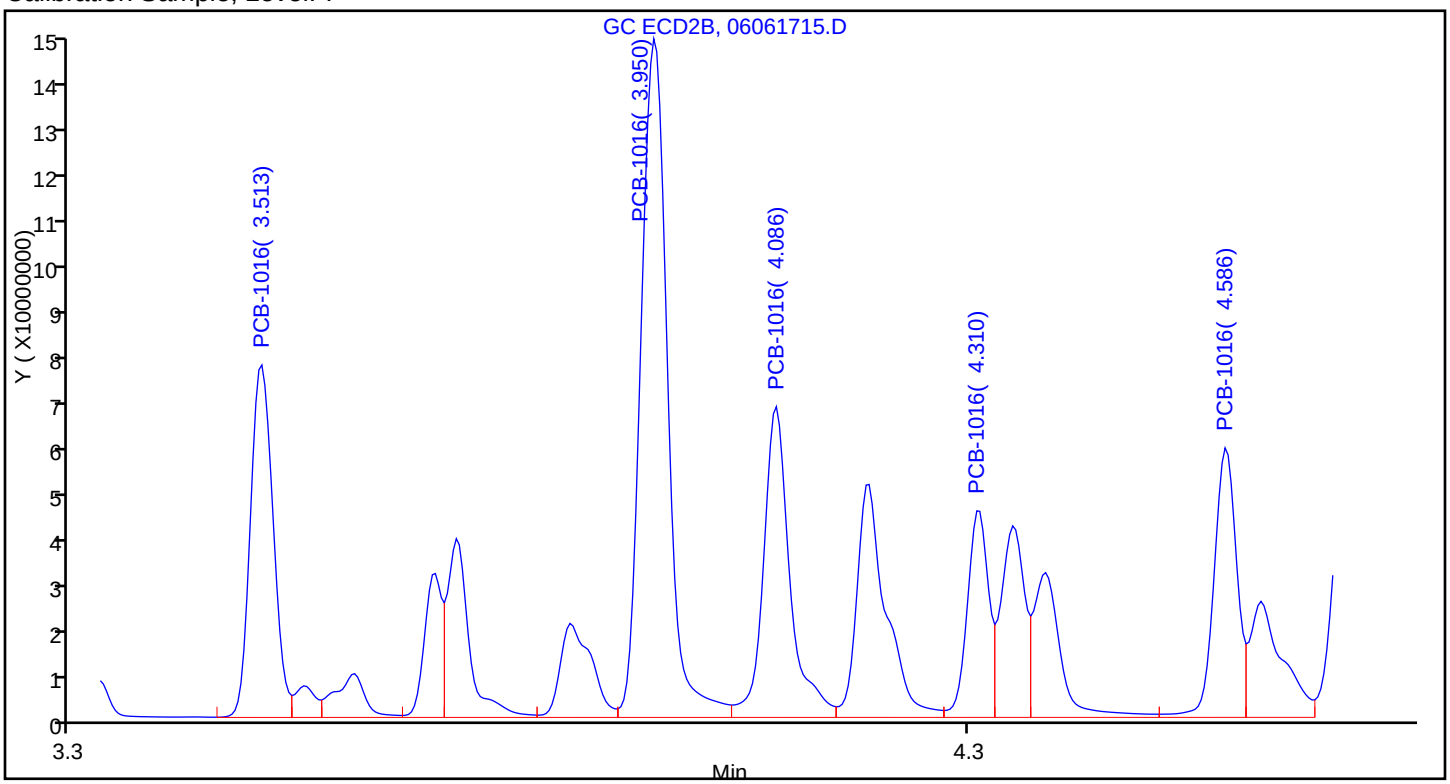
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

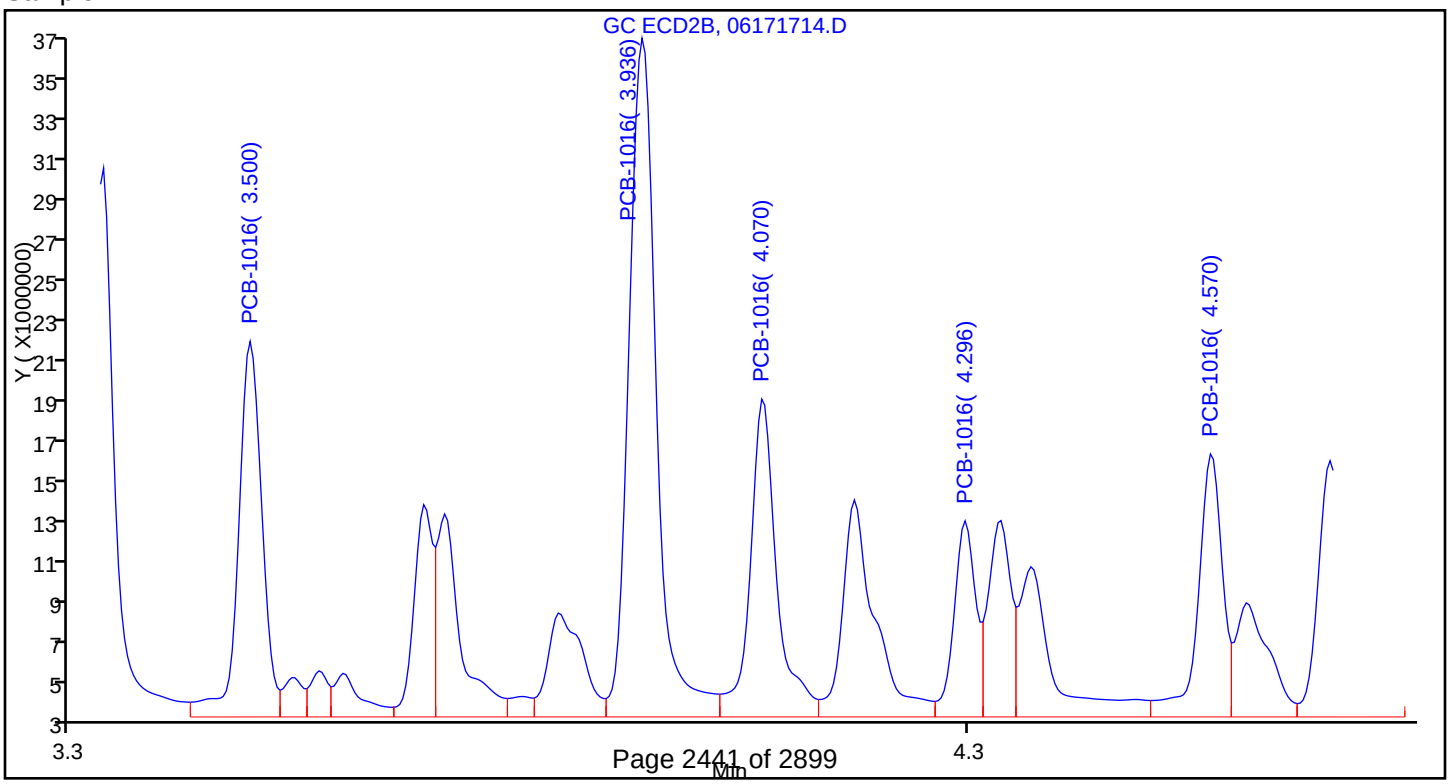
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

1 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 7



Sample



Report Date: 18-Jun-2017 10:14:43 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171714.D

Injection Date: 17-Jun-2017 16:00:57 Instrument ID: SGC_P3

Lims ID: 280-97803-B-8-B MS

Client ID:

Operator ID: jax ALS Bottle#: 14 Worklist Smp#: 14

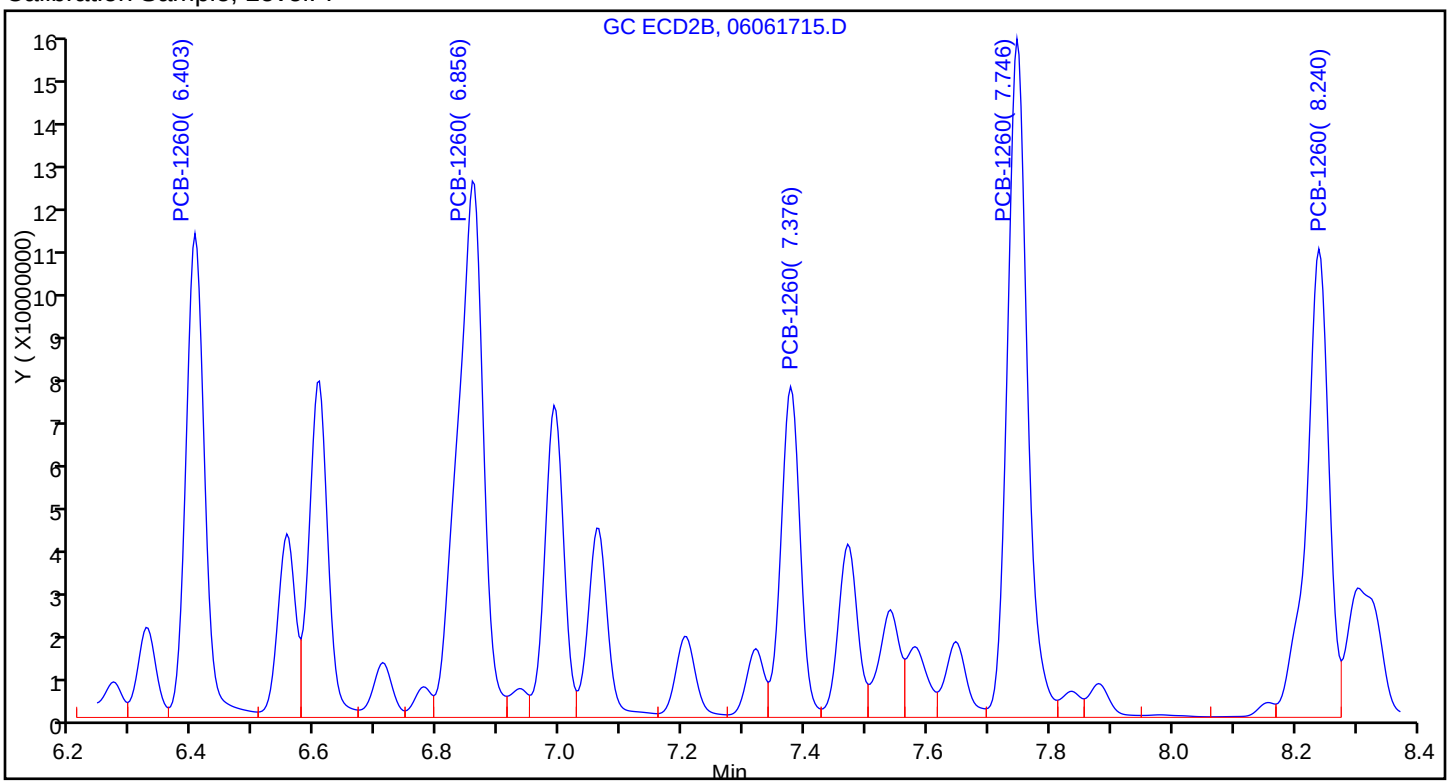
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

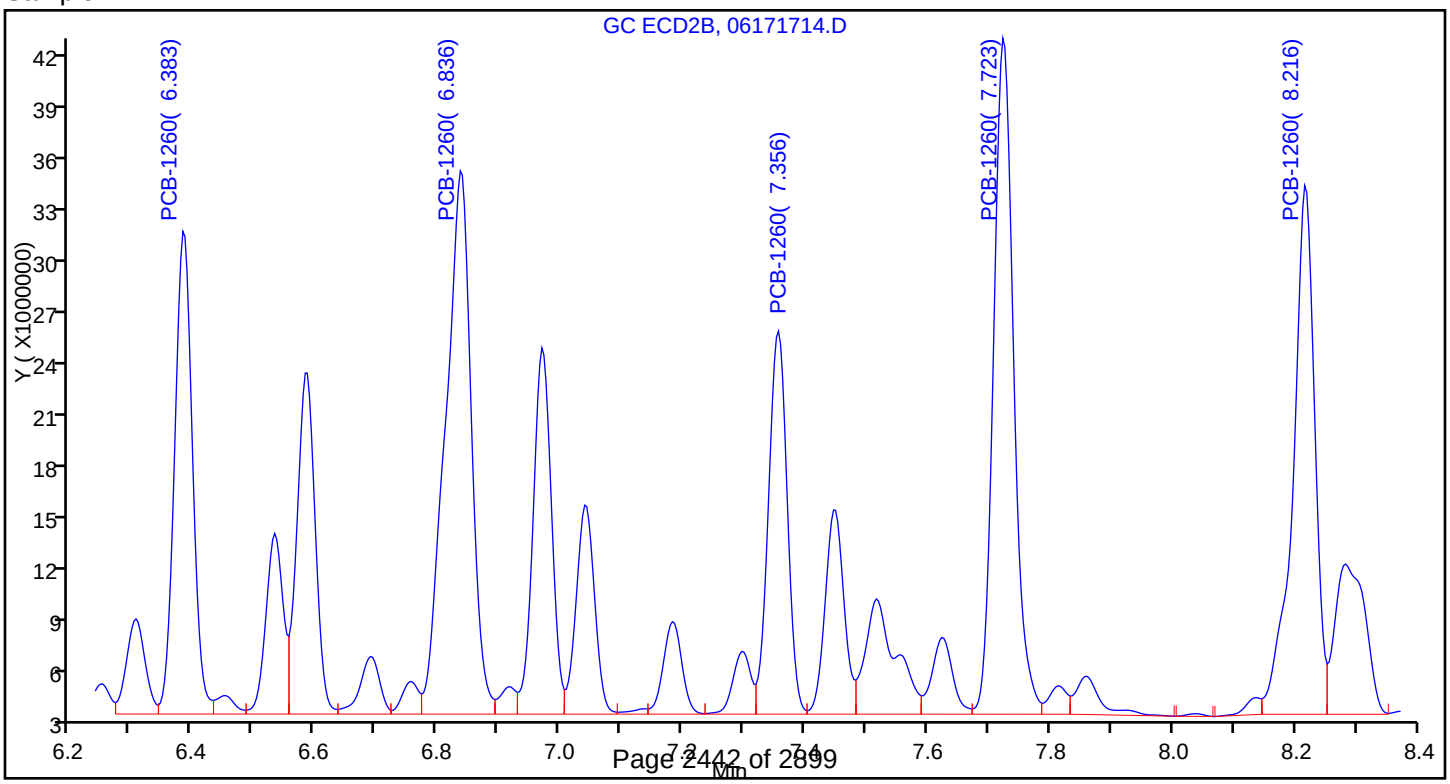
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

12 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Client Sample ID: SS025-SS04 MSD | Lab Sample ID: 280-97803-8 MSD

Matrix: Solid | Lab File ID: 06171715.D

Analysis Method: 8082A | Date Collected: 05/31/2017 14:00

Extraction Method: 3546 | Date Extracted: 06/12/2017 11:25

Sample wt/vol: 32.7(g) | Date Analyzed: 06/17/2017 16:22

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 10.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377714 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	66.4		34	15	5.2
11096-82-5	Arochlor 1260	64.3		34	7.8	2.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	82		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171715.D
Lims ID: 280-97803-B-8-C MSD
Client ID:
Sample Type: MSD
Inject. Date: 17-Jun-2017 16:22:43 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-B-8-C
Misc. Info.: 280-0059856-015
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:11:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.823	1.825	-0.002	359172735	1000.0	1000.0	
2	1.590	1.591	-0.001	402940161	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.750	2.748	0.002	59259646	20.0	15.1	
2	2.640	2.641	-0.001	75734983	20.0	16.1	
						RPD = 6.40	
1 PCB-1016							
1	3.483	3.485	-0.002	27287527	200.0	220.8	
1	3.946	3.948	-0.002	51022252	200.0	180.0	
1	4.086	4.085	0.001	24019534	200.0	201.7	
1	0.000	4.151	0.000	0	200.0	0	
1	4.533	4.535	-0.002	21733145	200.0	171.0	
		Average of Peak Amounts =				193.4	
2	3.500	3.501	-0.001	33177052	200.0	214.5	
2	3.936	3.941	-0.005	69595142	200.0	204.5	
2	4.070	4.075	-0.005	31744318	200.0	202.5	
2	4.296	4.298	-0.002	14253684	200.0	163.6	
2	4.573	4.575	-0.002	22233280	200.0	192.8	
		Average of Peak Amounts =				195.6	
						RPD = 1.13	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.009	6.008	0.001	33934666	200.0	177.7	
1	6.736	6.738	-0.002	64690150	200.0	175.1	
1	7.226	7.228	-0.002	31050496	200.0	180.2	
1	7.663	7.665	-0.002	52016797	200.0	137.1	
1	8.046	8.048	-0.002	40961794	200.0	188.4	
		Average of Peak Amounts =				171.7	
2	6.383	6.388	-0.005	49748960	200.0	179.5	
2	6.836	6.841	-0.005	75491580	200.0	180.9	
2	7.356	7.358	-0.002	39638313	200.0	210.4	
2	7.723	7.728	-0.005	67493297	200.0	163.7	
2	8.216	8.221	-0.005	65545186	200.0	211.5	
		Average of Peak Amounts =				189.2	
						RPD = 9.70	
$ 15 DCB Decachlorobiphenyl							
1	9.619	9.625	-0.006	84610340	20.0	22.6	
2	9.873	9.878	-0.005	62904764	20.0	16.3	
						RPD = 32.57	

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

Report Date: 18-Jun-2017 10:14:44 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171715.D

Injection Date: 17-Jun-2017 16:22:43 Instrument ID: SGC_P3 Operator ID: jax

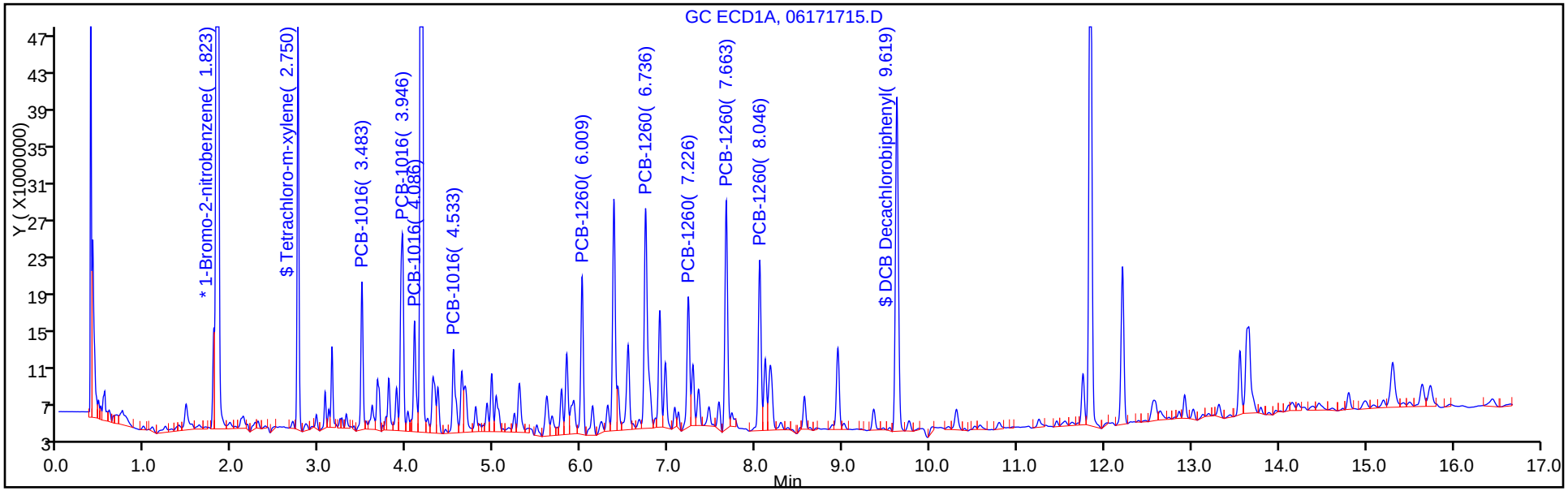
Lims ID: 280-97803-B-8-C MSD Worklist Smp#: 15

Client ID:

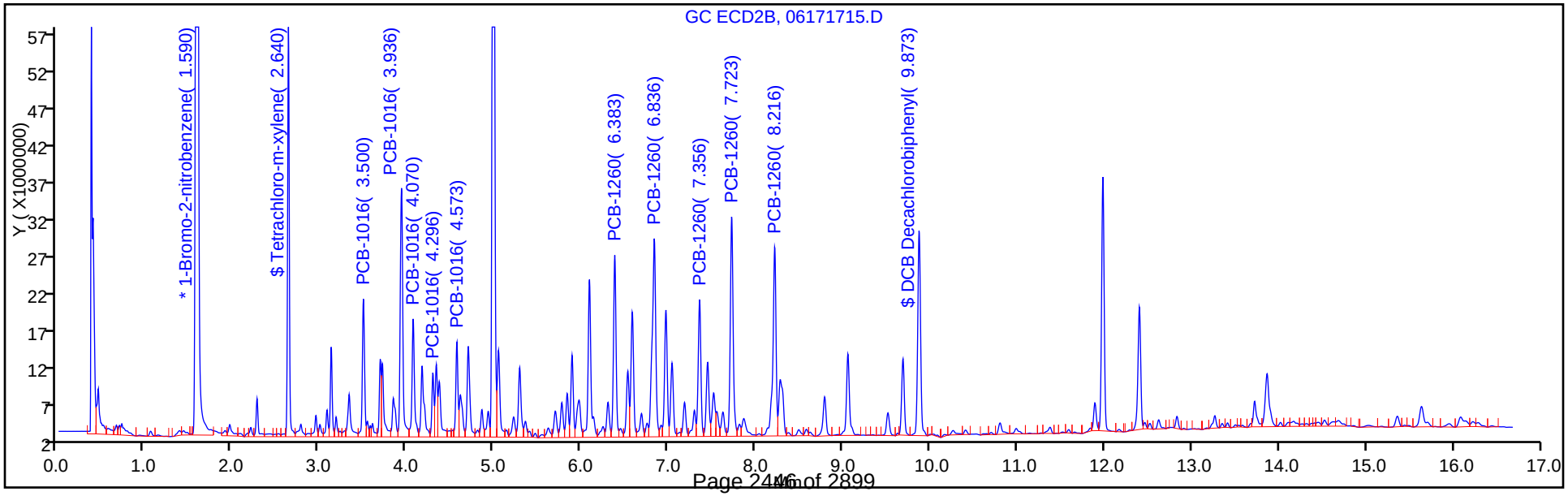
Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 15

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171715.D
Lims ID: 280-97803-B-8-C MSD
Client ID:
Sample Type: MSD
Inject. Date: 17-Jun-2017 16:22:43 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97803-B-8-C
Misc. Info.: 280-0059856-015
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 18-Jun-2017 10:14:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK004

First Level Reviewer: jacksonto Date: 18-Jun-2017 10:11:49

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	15.1	75.65
$ 15 DCB Decachlorobiphenyl	20.0	22.6	113.24

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	16.1	80.66
$ 15 DCB Decachlorobiphenyl	20.0	16.3	81.53

Report Date: 18-Jun-2017 10:14:45 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171715.D

Injection Date: 17-Jun-2017 16:22:43 Instrument ID: SGC_P3

Lims ID: 280-97803-B-8-C MSD

Client ID:

Operator ID: jax ALS Bottle#: 15 Worklist Smp#: 15

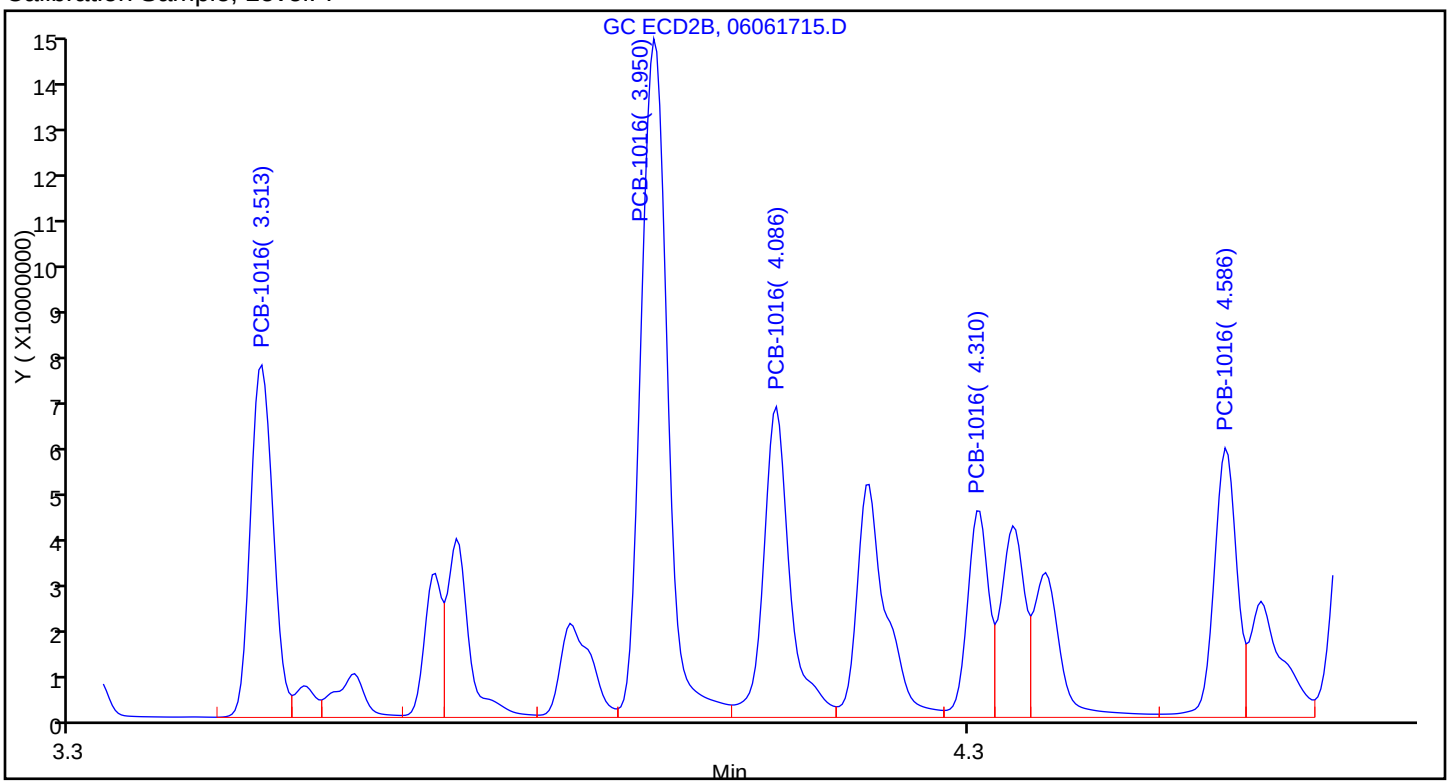
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

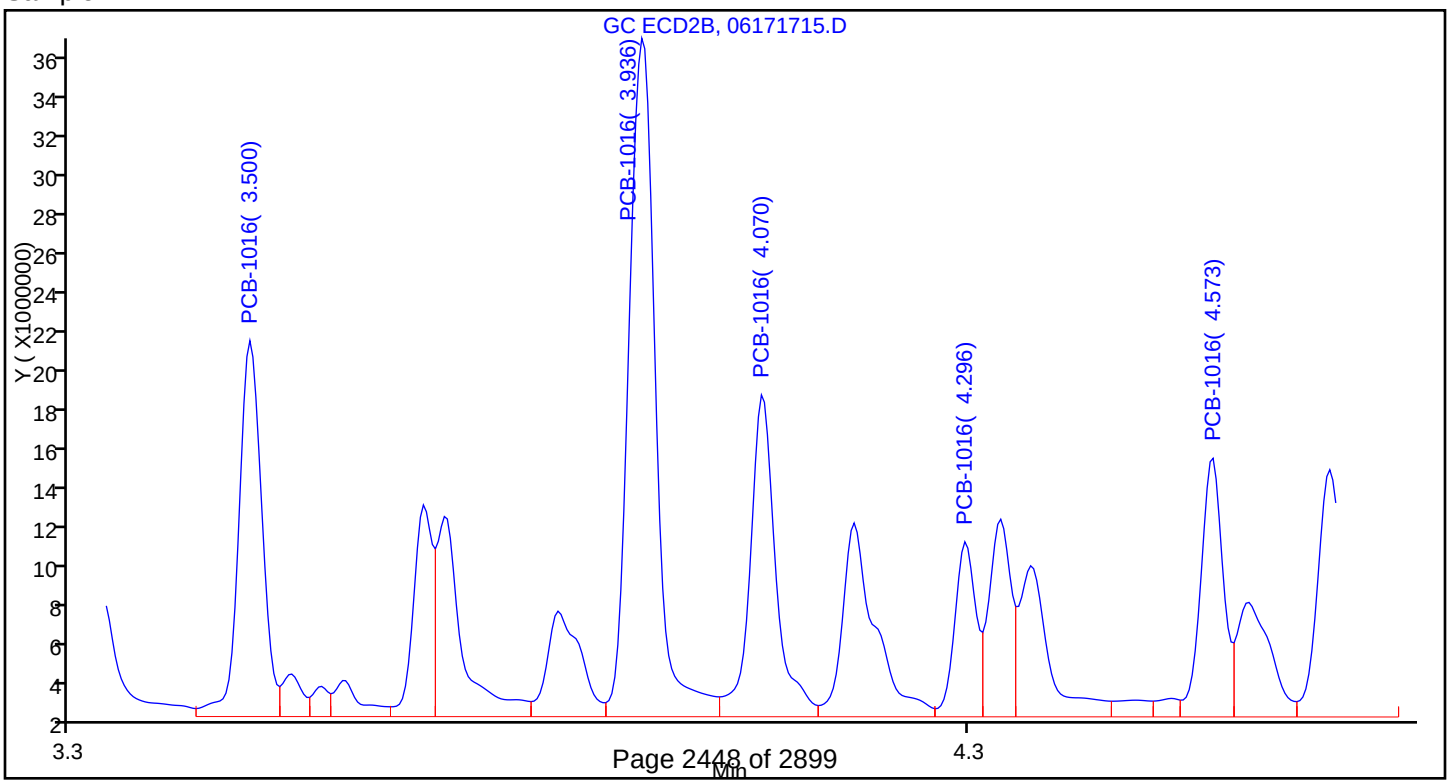
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

1 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 7



Sample



Report Date: 18-Jun-2017 10:14:45 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170617-59856.b\06171715.D

Injection Date: 17-Jun-2017 16:22:43 Instrument ID: SGC_P3

Lims ID: 280-97803-B-8-C MSD

Client ID:

Operator ID: jax ALS Bottle#: 15 Worklist Smp#: 15

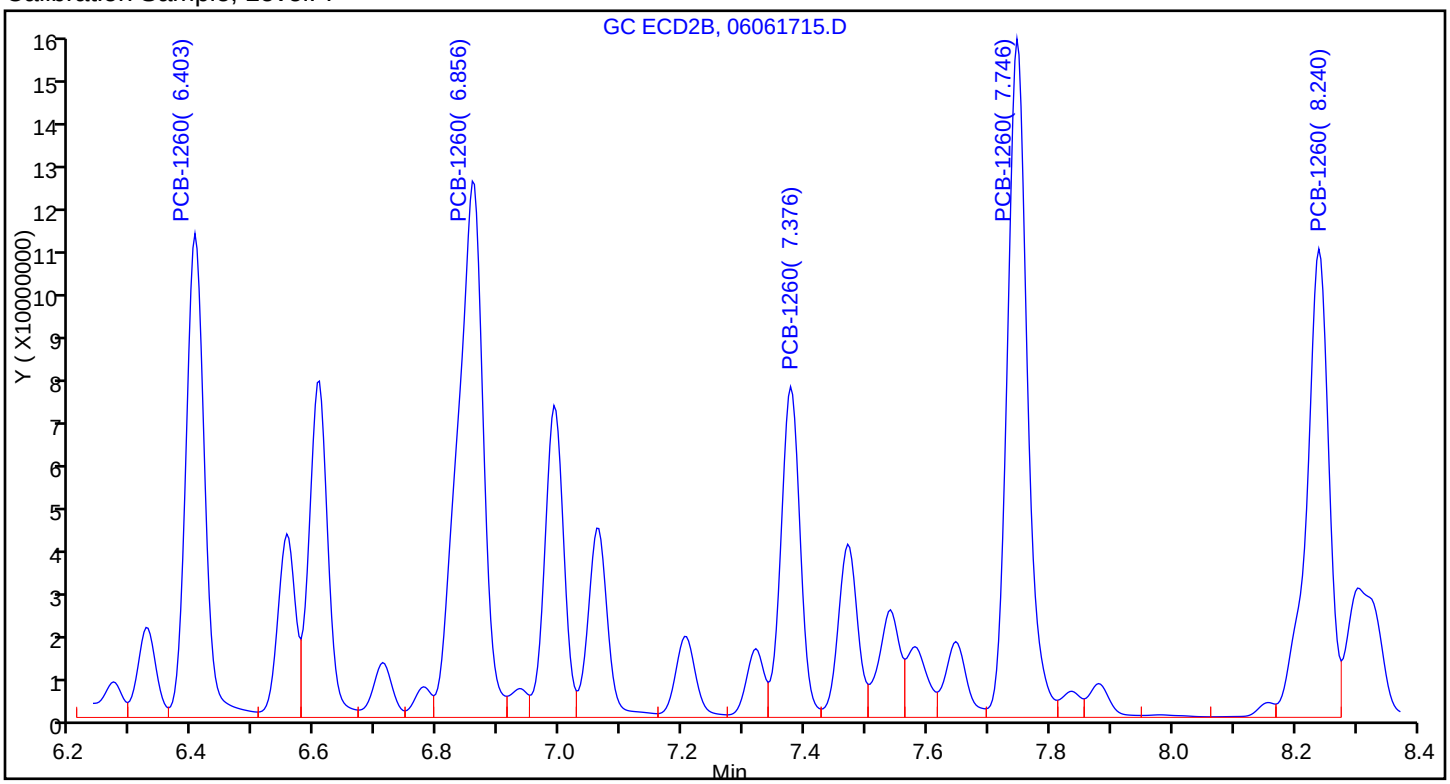
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

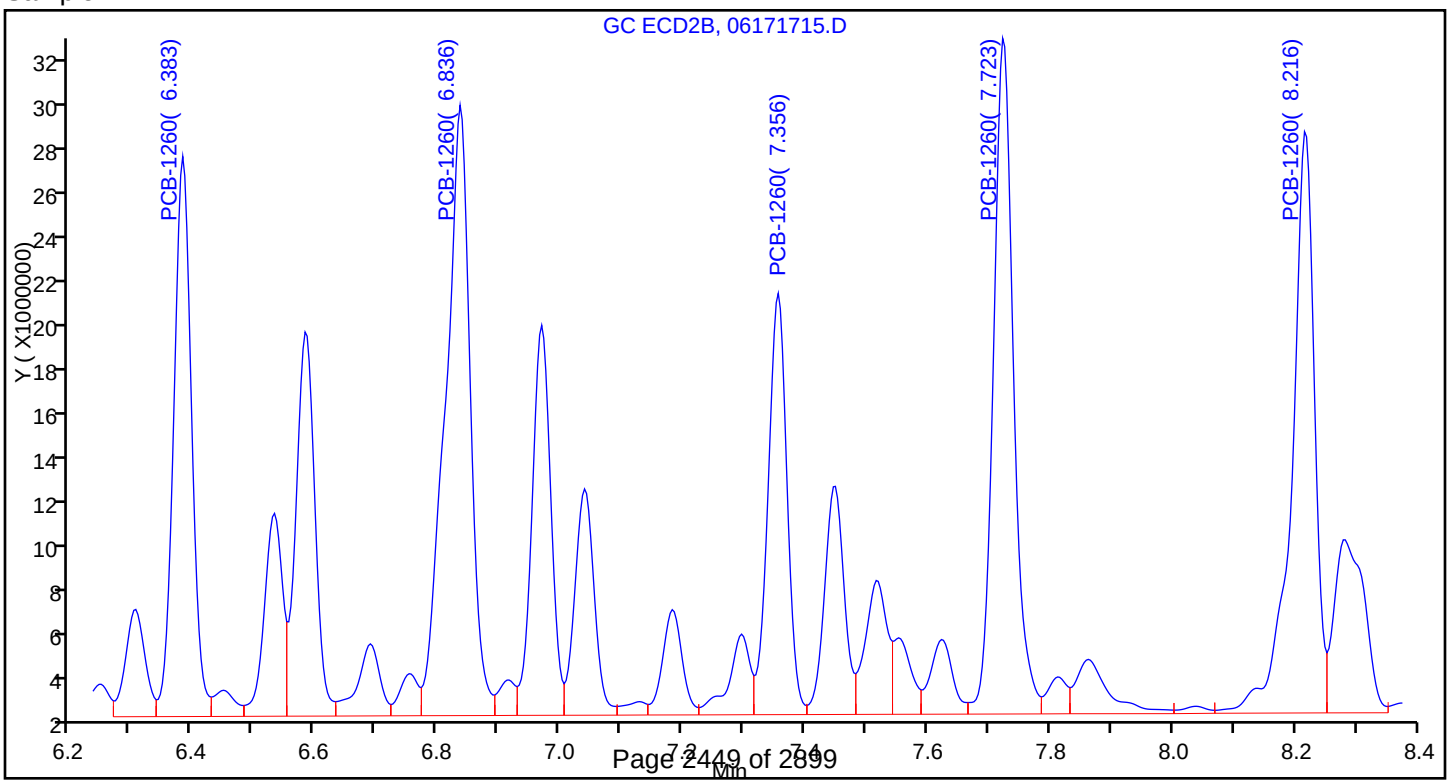
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

12 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



Sample



PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P3 Start Date: 06/06/2017 13:49

Analysis Batch Number: 376236 End Date: 06/07/2017 04:16

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STDL71248 280-376236/1 IC		06/06/2017 13:49	1	06061701.D	CLP1 0.32(mm)
STDL71248 280-376236/1 IC		06/06/2017 13:49	1	06061701.D	CLP2 0.32(mm)
STDL61248 280-376236/2 IC		06/06/2017 14:10	1	06061702.D	CLP1 0.32(mm)
STDL61248 280-376236/2 IC		06/06/2017 14:10	1	06061702.D	CLP2 0.32(mm)
STDL51248 280-376236/3 IC		06/06/2017 14:32	1	06061703.D	CLP1 0.32(mm)
STDL51248 280-376236/3 IC		06/06/2017 14:32	1	06061703.D	CLP2 0.32(mm)
STDL41248 280-376236/4 IC		06/06/2017 14:54	1	06061704.D	CLP1 0.32(mm)
STDL41248 280-376236/4 IC		06/06/2017 14:54	1	06061704.D	CLP2 0.32(mm)
STDL31248 280-376236/5 IC		06/06/2017 15:16	1	06061705.D	CLP1 0.32(mm)
STDL31248 280-376236/5 IC		06/06/2017 15:16	1	06061705.D	CLP2 0.32(mm)
STDL21248 280-376236/6 IC		06/06/2017 15:37	1	06061706.D	CLP1 0.32(mm)
STDL21248 280-376236/6 IC		06/06/2017 15:37	1	06061706.D	CLP2 0.32(mm)
STDL11248 280-376236/7 IC		06/06/2017 15:59	1	06061707.D	CLP1 0.32(mm)
STDL11248 280-376236/7 IC		06/06/2017 15:59	1	06061707.D	CLP2 0.32(mm)
STDL72154 280-376236/8 IC		06/06/2017 16:21	1	06061708.D	CLP1 0.32(mm)
STDL72154 280-376236/8 IC		06/06/2017 16:21	1	06061708.D	CLP2 0.32(mm)
STDL62154 280-376236/9 IC		06/06/2017 16:42	1	06061709.D	CLP1 0.32(mm)
STDL62154 280-376236/9 IC		06/06/2017 16:42	1	06061709.D	CLP2 0.32(mm)
STDL52154 280-376236/10 IC		06/06/2017 17:04	1	06061710.D	CLP1 0.32(mm)
STDL52154 280-376236/10 IC		06/06/2017 17:04	1	06061710.D	CLP2 0.32(mm)
STDL42154 280-376236/11 IC		06/06/2017 17:26	1	06061711.D	CLP1 0.32(mm)
STDL42154 280-376236/11 IC		06/06/2017 17:26	1	06061711.D	CLP2 0.32(mm)
STDL32154 280-376236/12 IC		06/06/2017 17:47	1	06061712.D	CLP1 0.32(mm)
STDL32154 280-376236/12 IC		06/06/2017 17:47	1	06061712.D	CLP2 0.32(mm)
STDL22154 280-376236/13 IC		06/06/2017 18:09	1	06061713.D	CLP1 0.32(mm)
STDL22154 280-376236/13 IC		06/06/2017 18:09	1	06061713.D	CLP2 0.32(mm)
STDL12154 280-376236/14 IC		06/06/2017 18:31	1	06061714.D	CLP1 0.32(mm)
STDL12154 280-376236/14 IC		06/06/2017 18:31	1	06061714.D	CLP2 0.32(mm)
STDL71660 280-376236/15 IC		06/06/2017 18:53	1	06061715.D	CLP1 0.32(mm)
STDL71660 280-376236/15 IC		06/06/2017 18:53	1	06061715.D	CLP2 0.32(mm)
STDL61660 280-376236/16 IC		06/06/2017 19:14	1	06061716.D	CLP1 0.32(mm)

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PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P3 Start Date: 06/06/2017 13:49

Analysis Batch Number: 376236 End Date: 06/07/2017 04:16

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STDL61660 280-376236/16 IC		06/06/2017 19:14	1	06061716.D	CLP2 0.32(mm)
STDL51660 280-376236/17 ICIS		06/06/2017 19:36	1	06061717.D	CLP1 0.32(mm)
STDL51660 280-376236/17 ICIS		06/06/2017 19:36	1	06061717.D	CLP2 0.32(mm)
STDL41660 280-376236/18 IC		06/06/2017 19:58	1	06061718.D	CLP1 0.32(mm)
STDL41660 280-376236/18 IC		06/06/2017 19:58	1	06061718.D	CLP2 0.32(mm)
STDL31660 280-376236/19 IC		06/06/2017 20:19	1	06061719.D	CLP1 0.32(mm)
STDL31660 280-376236/19 IC		06/06/2017 20:19	1	06061719.D	CLP2 0.32(mm)
STDL21660 280-376236/20 IC		06/06/2017 20:41	1	06061720.D	CLP1 0.32(mm)
STDL21660 280-376236/20 IC		06/06/2017 20:41	1	06061720.D	CLP2 0.32(mm)
STDL11660 280-376236/21 IC		06/06/2017 21:03	1	06061721.D	CLP1 0.32(mm)
STDL11660 280-376236/21 IC		06/06/2017 21:03	1	06061721.D	CLP2 0.32(mm)
STDL73262 280-376236/22 IC		06/06/2017 21:25	1	06061722.D	CLP1 0.32(mm)
STDL73262 280-376236/22 IC		06/06/2017 21:25	1	06061722.D	CLP2 0.32(mm)
STDL63262 280-376236/23 IC		06/06/2017 21:46	1	06061723.D	CLP1 0.32(mm)
STDL63262 280-376236/23 IC		06/06/2017 21:46	1	06061723.D	CLP2 0.32(mm)
STDL53262 280-376236/24 IC		06/06/2017 22:08	1	06061724.D	CLP1 0.32(mm)
STDL53262 280-376236/24 IC		06/06/2017 22:08	1	06061724.D	CLP2 0.32(mm)
STDL43262 280-376236/25 IC		06/06/2017 22:30	1	06061725.D	CLP1 0.32(mm)
STDL43262 280-376236/25 IC		06/06/2017 22:30	1	06061725.D	CLP2 0.32(mm)
STDL33262 280-376236/26 IC		06/06/2017 22:51	1	06061726.D	CLP1 0.32(mm)
STDL33262 280-376236/26 IC		06/06/2017 22:51	1	06061726.D	CLP2 0.32(mm)
STDL23262 280-376236/27 IC		06/06/2017 23:13	1	06061727.D	CLP1 0.32(mm)
STDL23262 280-376236/27 IC		06/06/2017 23:13	1	06061727.D	CLP2 0.32(mm)
STDL13262 280-376236/28 IC		06/06/2017 23:35	1	06061728.D	CLP1 0.32(mm)
STDL13262 280-376236/28 IC		06/06/2017 23:35	1	06061728.D	CLP2 0.32(mm)
STDL74268 280-376236/29 IC		06/06/2017 23:56	1	06061729.D	CLP1 0.32(mm)
STDL74268 280-376236/29 IC		06/06/2017 23:56	1	06061729.D	CLP2 0.32(mm)
STDL64268 280-376236/30 IC		06/07/2017 00:18	1	06061730.D	CLP1 0.32(mm)
STDL64268 280-376236/30 IC		06/07/2017 00:18	1	06061730.D	CLP2 0.32(mm)
STDL54268 280-376236/31 IC		06/07/2017 00:39	1	06061731.D	CLP1 0.32(mm)
STDL54268 280-376236/31 IC		06/07/2017 00:39	1	06061731.D	CLP2 0.32(mm)

8082A

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P3 Start Date: 06/06/2017 13:49

Analysis Batch Number: 376236 End Date: 06/07/2017 04:16

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STDL44268 280-376236/32 IC		06/07/2017 01:01	1	06061732.D	CLP1 0.32(mm)
STDL44268 280-376236/32 IC		06/07/2017 01:01	1	06061732.D	CLP2 0.32(mm)
STDL34268 280-376236/33 IC		06/07/2017 01:23	1	06061733.D	CLP1 0.32(mm)
STDL34268 280-376236/33 IC		06/07/2017 01:23	1	06061733.D	CLP2 0.32(mm)
STDL24268 280-376236/34 IC		06/07/2017 01:44	1	06061734.D	CLP1 0.32(mm)
STDL24268 280-376236/34 IC		06/07/2017 01:44	1	06061734.D	CLP2 0.32(mm)
STDL14268 280-376236/35 IC		06/07/2017 02:06	1	06061735.D	CLP1 0.32(mm)
STDL14268 280-376236/35 IC		06/07/2017 02:06	1	06061735.D	CLP2 0.32(mm)
ICV 280-376236/36		06/07/2017 02:28	1	06061736.D	CLP1 0.32(mm)
ICV 280-376236/36		06/07/2017 02:28	1	06061736.D	CLP2 0.32(mm)
ICV 280-376236/37		06/07/2017 02:49	1	06061737.D	CLP1 0.32(mm)
ICV 280-376236/37		06/07/2017 02:49	1	06061737.D	CLP2 0.32(mm)
ICV 280-376236/38		06/07/2017 03:11	1	06061738.D	CLP1 0.32(mm)
ICV 280-376236/38		06/07/2017 03:11	1	06061738.D	CLP2 0.32(mm)
ICV 280-376236/39		06/07/2017 03:33	1	06061739.D	CLP1 0.32(mm)
ICV 280-376236/39		06/07/2017 03:33	1	06061739.D	CLP2 0.32(mm)
ICV 280-376236/40		06/07/2017 03:54	1	06061740.D	CLP1 0.32(mm)
ICV 280-376236/40		06/07/2017 03:54	1	06061740.D	CLP2 0.32(mm)
ZZZZZ		06/07/2017 04:16	1		CLP1 0.32(mm)
ZZZZZ		06/07/2017 04:16	1		CLP2 0.32(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P3 Start Date: 06/17/2017 12:01

Analysis Batch Number: 377714 End Date: 06/17/2017 18:33

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVIS 280-377714/3		06/17/2017 12:01	1	06171703.D	CLP1 0.32(mm)
CCVIS 280-377714/3		06/17/2017 12:01	1	06171703.D	CLP2 0.32(mm)
CCV 280-377714/4		06/17/2017 12:23	1	06171704.D	CLP1 0.32(mm)
CCV 280-377714/4		06/17/2017 12:23	1	06171704.D	CLP2 0.32(mm)
MB 280-376892/1-A		06/17/2017 12:45	1	06171705.D	CLP1 0.32(mm)
MB 280-376892/1-A		06/17/2017 12:45	1	06171705.D	CLP2 0.32(mm)
LCS 280-376892/4-A		06/17/2017 13:07	1	06171706.D	CLP1 0.32(mm)
LCS 280-376892/4-A		06/17/2017 13:07	1	06171706.D	CLP2 0.32(mm)
280-97803-1		06/17/2017 13:28	1	06171707.D	CLP1 0.32(mm)
280-97803-1		06/17/2017 13:28	1	06171707.D	CLP2 0.32(mm)
280-97803-4		06/17/2017 13:50	1	06171708.D	CLP1 0.32(mm)
280-97803-4		06/17/2017 13:50	1	06171708.D	CLP2 0.32(mm)
280-97803-5		06/17/2017 14:12	1	06171709.D	CLP1 0.32(mm)
280-97803-5		06/17/2017 14:12	1	06171709.D	CLP2 0.32(mm)
280-97803-6		06/17/2017 14:33	1	06171710.D	CLP1 0.32(mm)
280-97803-6		06/17/2017 14:33	1	06171710.D	CLP2 0.32(mm)
280-97803-7		06/17/2017 14:55	1	06171711.D	CLP1 0.32(mm)
280-97803-7		06/17/2017 14:55	1	06171711.D	CLP2 0.32(mm)
CCV 280-377714/12		06/17/2017 15:17	1	06171712.D	CLP1 0.32(mm)
CCV 280-377714/12		06/17/2017 15:17	1	06171712.D	CLP2 0.32(mm)
280-97803-8		06/17/2017 15:39	1	06171713.D	CLP1 0.32(mm)
280-97803-8		06/17/2017 15:39	1	06171713.D	CLP2 0.32(mm)
280-97803-8 MS		06/17/2017 16:00	1	06171714.D	CLP1 0.32(mm)
280-97803-8 MS		06/17/2017 16:00	1	06171714.D	CLP2 0.32(mm)
280-97803-8 MSD		06/17/2017 16:22	1	06171715.D	CLP1 0.32(mm)
280-97803-8 MSD		06/17/2017 16:22	1	06171715.D	CLP2 0.32(mm)
280-97803-9		06/17/2017 16:44	1	06171716.D	CLP1 0.32(mm)
280-97803-9		06/17/2017 16:44	1	06171716.D	CLP2 0.32(mm)
280-97803-10		06/17/2017 17:06	1	06171717.D	CLP1 0.32(mm)
280-97803-10		06/17/2017 17:06	1	06171717.D	CLP2 0.32(mm)
280-97803-11		06/17/2017 17:27	1	06171718.D	CLP1 0.32(mm)
280-97803-11		06/17/2017 17:27	1	06171718.D	CLP2 0.32(mm)
280-97803-12		06/17/2017 17:49	1	06171719.D	CLP1 0.32(mm)
280-97803-12		06/17/2017 17:49	1	06171719.D	CLP2 0.32(mm)
280-97803-13		06/17/2017 18:11	1	06171720.D	CLP1 0.32(mm)
280-97803-13		06/17/2017 18:11	1	06171720.D	CLP2 0.32(mm)
CCV 280-377714/21		06/17/2017 18:33	1	06171721.D	CLP1 0.32(mm)
CCV 280-377714/21		06/17/2017 18:33	1	06171721.D	CLP2 0.32(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P3 Start Date: 06/21/2017 14:14

Analysis Batch Number: 378200 End Date: 06/22/2017 09:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVIS 280-378200/3		06/21/2017 14:14	1	06211703.D	CLP1 0.32(mm)
CCVIS 280-378200/3		06/21/2017 14:14	1	06211703.D	CLP2 0.32(mm)
MB 280-377252/1-A		06/21/2017 14:35	1	06211704.D	CLP1 0.32(mm)
MB 280-377252/1-A		06/21/2017 14:35	1	06211704.D	CLP2 0.32(mm)
LCS 280-377252/4-A		06/21/2017 14:57	1	06211705.D	CLP1 0.32(mm)
LCS 280-377252/4-A		06/21/2017 14:57	1	06211705.D	CLP2 0.32(mm)
ZZZZZ		06/21/2017 15:19	1		CLP1 0.32(mm)
ZZZZZ		06/21/2017 15:19	1		CLP2 0.32(mm)
280-97803-14		06/21/2017 15:41	1	06211707.D	CLP1 0.32(mm)
280-97803-14		06/21/2017 15:41	1	06211707.D	CLP2 0.32(mm)
ZZZZZ		06/21/2017 16:03	1		CLP1 0.32(mm)
ZZZZZ		06/21/2017 16:03	1		CLP2 0.32(mm)
ZZZZZ		06/21/2017 16:24	1		CLP1 0.32(mm)
ZZZZZ		06/21/2017 16:24	1		CLP2 0.32(mm)
ZZZZZ		06/21/2017 16:46	1		CLP1 0.32(mm)
ZZZZZ		06/21/2017 16:46	1		CLP2 0.32(mm)
ZZZZZ		06/21/2017 17:08	1		CLP1 0.32(mm)
ZZZZZ		06/21/2017 17:08	1		CLP2 0.32(mm)
ZZZZZ		06/21/2017 17:30	1		CLP1 0.32(mm)
ZZZZZ		06/21/2017 17:30	1		CLP2 0.32(mm)
ZZZZZ		06/21/2017 17:52	1		CLP1 0.32(mm)
ZZZZZ		06/21/2017 17:52	1		CLP2 0.32(mm)
ZZZZZ		06/21/2017 18:13	1		CLP1 0.32(mm)
ZZZZZ		06/21/2017 18:13	1		CLP2 0.32(mm)
ZZZZZ		06/21/2017 18:35	1		CLP1 0.32(mm)
ZZZZZ		06/21/2017 18:35	1		CLP2 0.32(mm)
CCV 280-378200/16		06/21/2017 18:57	1	06211716.D	CLP1 0.32(mm)
CCV 280-378200/16		06/21/2017 18:57	1	06211716.D	CLP2 0.32(mm)
ZZZZZ		06/21/2017 19:19	1		CLP1 0.32(mm)
ZZZZZ		06/21/2017 19:19	1		CLP2 0.32(mm)
ZZZZZ		06/21/2017 19:41	1		CLP1 0.32(mm)
ZZZZZ		06/21/2017 19:41	1		CLP2 0.32(mm)
ZZZZZ		06/21/2017 20:02	1		CLP1 0.32(mm)
ZZZZZ		06/21/2017 20:02	1		CLP2 0.32(mm)
ZZZZZ		06/21/2017 20:24	1		CLP1 0.32(mm)
ZZZZZ		06/21/2017 20:24	1		CLP2 0.32(mm)
ZZZZZ		06/21/2017 20:46	1		CLP1 0.32(mm)
ZZZZZ		06/21/2017 20:46	1		CLP2 0.32(mm)
ZZZZZ		06/21/2017 21:08	1		CLP1 0.32(mm)
ZZZZZ		06/21/2017 21:08	1		CLP2 0.32(mm)
ZZZZZ		06/21/2017 21:29	1		CLP1 0.32(mm)
ZZZZZ		06/21/2017 21:29	1		CLP2 0.32(mm)
ZZZZZ		06/21/2017 21:51	1		CLP1 0.32(mm)
ZZZZZ		06/21/2017 21:51	1		CLP2 0.32(mm)
ZZZZZ		06/21/2017 22:13	2		CLP1 0.32(mm)

8082A

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: SGC_P3 Start Date: 06/21/2017 14:14

Analysis Batch Number: 378200 End Date: 06/22/2017 09:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		06/21/2017 22:13	2		CLP2 0.32(mm)
CCV 280-378200/29		06/21/2017 23:40	1		CLP1 0.32(mm)
CCV 280-378200/29		06/21/2017 23:40	1		CLP2 0.32(mm)
ZZZZZ		06/22/2017 00:02	1		CLP1 0.32(mm)
ZZZZZ		06/22/2017 00:02	1		CLP2 0.32(mm)
ZZZZZ		06/22/2017 00:23	1		CLP1 0.32(mm)
ZZZZZ		06/22/2017 00:23	1		CLP2 0.32(mm)
ZZZZZ		06/22/2017 00:45	1		CLP1 0.32(mm)
ZZZZZ		06/22/2017 00:45	1		CLP2 0.32(mm)
ZZZZZ		06/22/2017 01:07	1		CLP1 0.32(mm)
ZZZZZ		06/22/2017 01:07	1		CLP2 0.32(mm)
ZZZZZ		06/22/2017 01:28	1		CLP1 0.32(mm)
ZZZZZ		06/22/2017 01:28	1		CLP2 0.32(mm)
ZZZZZ		06/22/2017 01:50	1		CLP1 0.32(mm)
ZZZZZ		06/22/2017 01:50	1		CLP2 0.32(mm)
ZZZZZ		06/22/2017 02:12	1		CLP1 0.32(mm)
ZZZZZ		06/22/2017 02:12	1		CLP2 0.32(mm)
ZZZZZ		06/22/2017 02:34	20		CLP1 0.32(mm)
ZZZZZ		06/22/2017 02:34	20		CLP2 0.32(mm)
ZZZZZ		06/22/2017 02:55	20		CLP1 0.32(mm)
ZZZZZ		06/22/2017 02:55	20		CLP2 0.32(mm)
ZZZZZ		06/22/2017 03:17	20		CLP1 0.32(mm)
ZZZZZ		06/22/2017 03:17	20		CLP2 0.32(mm)
CCV 280-378200/41		06/22/2017 04:01	1	06211741.D	CLP1 0.32(mm)
CCV 280-378200/41		06/22/2017 04:01	1	06211741.D	CLP2 0.32(mm)
ZZZZZ		06/22/2017 08:13	4		CLP1 0.32(mm)
ZZZZZ		06/22/2017 08:13	4		CLP2 0.32(mm)
ZZZZZ		06/22/2017 08:55	4		CLP1 0.32(mm)
ZZZZZ		06/22/2017 08:55	4		CLP2 0.32(mm)
ZZZZZ		06/22/2017 09:17	4		CLP1 0.32(mm)
ZZZZZ		06/22/2017 09:17	4		CLP2 0.32(mm)
CCV 280-378200/45		06/22/2017 09:39	1	06211745.D	CLP1 0.32(mm)
CCV 280-378200/45		06/22/2017 09:39	1	06211745.D	CLP2 0.32(mm)

PCBS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 376892 Batch Start Date: 06/12/17 11:25 Batch Analyst: Isberg, Kyle

Batch Method: 3546 Batch End Date: 06/13/17 12:26

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8081/82 Surr 00093	8082 LCS 00046	AnalysisComment	
MB 280-376892/1		3546, 8082A		33.0 g	10 mL	1 mL			
LCS 280-376892/4		3546, 8082A		31.6 g	10 mL	1 mL	1 mL	82	
280-97803-C-1	SS025-SS01	3546, 8082A	T	31.0 g	10 mL	1 mL			
280-97803-C-4	SS025-SS02	3546, 8082A	T	32.6 g	10 mL	1 mL			
280-97803-C-5	SS025-SB02(0-2)	3546, 8082A	T	30.9 g	10 mL	1 mL			
280-97803-B-6	SS025-SS03	3546, 8082A	T	30.5 g	10 mL	1 mL			
280-97803-C-7	SS025-SB03(0-2)	3546, 8082A	T	31.1 g	10 mL	1 mL			
280-97803-B-8	SS025-SS04	3546, 8082A	T	32.3 g	10 mL	1 mL			
280-97803-B-8 MS	SS025-SS04	3546, 8082A	T	32.5 g	10 mL	1 mL	1 mL	82	
280-97803-B-8 MSD	SS025-SS04	3546, 8082A	T	32.7 g	10 mL	1 mL	1 mL	82	
280-97803-B-9	SS025-SB04(0-2)	3546, 8082A	T	30.7 g	10 mL	1 mL			
280-97803-C-10	SS025-SS05	3546, 8082A	T	31.2 g	10 mL	1 mL			
280-97803-C-11	SS025-SB05(0-2)	3546, 8082A	T	30.7 g	10 mL	1 mL			
280-97803-C-12	SS025-SB05(2-4)	3546, 8082A	T	31.1 g	10 mL	1 mL			
280-97803-B-13	SS025-SS06	3546, 8082A	T	32.0 g	10 mL	1 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PCBS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 376892 Batch Start Date: 06/12/17 11:25 Batch Analyst: Isberg, Kyle

Batch Method: 3546 Batch End Date: 06/13/17 12:26

Batch Notes	
Balance ID	24750402
Batch Comment	pip: BB-8 (10.00), R2-D2 (2.00), 1n2s (1.00x2)
Analyst ID - Concentration	MAVJr
Exchange Solvent ID	Hexane_Cycl_00044
Exchange Solvent Name	Hexane
Final Concentrator Volume	10 mL
Florisil ID	3441026, FlorisilSol_00130
Hexane ID	see below
MeCL2 ID	see above
MeCl2 / Acetone ID	see above
Microwave Oven ID	MARS
Microwave Start Time	06/12/17 @1146
Microwave Stop Time	06/12/17 @1216
Na2SO4 ID	0000150871_00002
Ottawa Sand ID	170485
Pipette ID	L
Person's name who did the prep	KI
Solvent Lot #	MeCl2_Cycl_00340/1:1AceMeCl2_00065
Solvent Name	1:1AceMeCl2/MeCl2
SOP Number	DV-OP-0015/0007
Analyst ID - Spike Analyst	KI
Analyst ID - Spike Witness Analyst	reviewer:GLK
Water Bath ID	B@89
Water Bath Temperature	88

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PCBS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 377252 Batch Start Date: 06/14/17 09:49 Batch Analyst: Isberg, Kyle

Batch Method: 3546 Batch End Date: 06/19/17 13:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8081/82 Surr 00093	8082 LCS 00046	AnalysisComment	
MB 280-377252/1		3546, 8082A		31.5 g	10 mL	1 mL			
LCS 280-377252/4		3546, 8082A		32.21 g	10 mL	1 mL	1 mL	82	
280-97803-A-14	SS025-SS06-a	3546, 8082A	T	30.8 g	10 mL	1 mL			

Batch Notes	
Balance ID	24750402
Batch Comment	Filtered by: HA, pip: BB-8 (10.00), R2-D2 (2.00), L (2x1.00)
Analyst ID - Concentration	CDC/ELV
Exchange Solvent ID	Hexane_Cycl_00044
Exchange Solvent Name	Hexane
Final Concentrator Volume	10 mL
Florisil ID	FlorisilSol_00130, cart 3441026
Hexane ID	see below
MeCL2 ID	see above
MeCl2 / Acetone ID	see above
Microwave Oven ID	MARS
Microwave Start Time	06/14/17 @1016
Microwave Stop Time	06/14/17 @1046
Na2SO4 ID	0000150871_00002
Ottawa Sand ID	170485
Pipette ID	L
Person's name who did the prep	KI
Solvent Lot #	MeCl2_Cycl_00341/342 / 1:1AceMeCl2_00065
Solvent Name	1:1AceMeCl2/MeCl2
SOP Number	DV-OP-0015/0007
Analyst ID - Spike Analyst	KI
Analyst ID - Spike Witness Analyst	reviewer:DB
Water Bath ID	B
Water Bath Temperature	88 (obs @ 89)

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PCBS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 377252 Batch Start Date: 06/14/17 09:49 Batch Analyst: Isberg, Kyle

Batch Method: 3546 Batch End Date: 06/19/17 13:05

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Denver Job Number: 280-97803-1

SDG No.:

Project: Griffiss AFB, NY - SS025

Client Sample ID	Lab Sample ID
SS025-SS01	280-97803-1
SS025-SS02	280-97803-4
SS025-SB02(0-2)	280-97803-5
SS025-SS03	280-97803-6
SS025-SB03(0-2)	280-97803-7
SS025-SS04	280-97803-8
SS025-SB04(0-2)	280-97803-9
SS025-SS05	280-97803-10
SS025-SB05(0-2)	280-97803-11
SS025-SB05(2-4)	280-97803-12
SS025-SS06	280-97803-13
SS025-SS06-a	280-97803-14

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SS01 Lab Sample ID: 280-97803-1

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG ID.:

Matrix: Solid Date Sampled: 05/31/2017 11:00

Reporting Basis: DRY Date Received: 06/01/2017 08:50

% Solids: 83.2

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	7700	57	6.8	1.8	mg/Kg		J	1	6010C
Antimony	1.7	2.3	1.7	0.83	mg/Kg	U	J	1	6010C
Arsenic	6.2	2.8	2.8	0.75	mg/Kg			1	6010C
Barium	33	2.3	0.34	0.12	mg/Kg			1	6010C
Beryllium	0.33	0.57	0.14	0.037	mg/Kg	J		1	6010C
Cadmium	0.20	0.57	0.17	0.046	mg/Kg	J		1	6010C
Calcium	10000	110	57	16	mg/Kg		J	1	6010C
Chromium	9.4	4.0	0.23	0.066	mg/Kg			1	6010C
Cobalt	5.3	1.1	0.45	0.11	mg/Kg			1	6010C
Copper	23	5.7	0.90	0.25	mg/Kg			1	6010C
Iron	16000	90	17	4.3	mg/Kg		J	1	6010C
Lead	9.6	1.0	0.90	0.35	mg/Kg			1	6010C
Magnesium	4800	34	16	4.2	mg/Kg			1	6010C
Manganese	620	5.1	0.45	0.11	mg/Kg		J	1	6010C
Nickel	12	4.5	0.51	0.15	mg/Kg			1	6010C
Potassium	1100	340	180	46	mg/Kg		J	1	6010C
Selenium	3.4	3.4	3.4	0.97	mg/Kg	U		1	6010C
Silver	0.68	1.7	0.68	0.18	mg/Kg	U		1	6010C
Sodium	68	570	230	67	mg/Kg	J		1	6010C
Thallium	2.8	3.4	2.8	0.74	mg/Kg	U		1	6010C
Vanadium	14	2.3	0.40	0.11	mg/Kg			1	6010C
Zinc	42	9.0	1.7	0.45	mg/Kg			1	6010C
Mercury	24	23	18	7.5	ug/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SS02 | Lab Sample ID: 280-97803-4

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG ID.:

Matrix: Solid | Date Sampled: 05/31/2017 12:50

Reporting Basis: DRY | Date Received: 06/01/2017 08:50

% Solids: 84.8

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	7500	56	6.7	1.7	mg/Kg			1	6010C
Antimony	1.7	2.2	1.7	0.82	mg/Kg	U		1	6010C
Arsenic	4.3	2.8	2.8	0.74	mg/Kg			1	6010C
Barium	30	2.2	0.34	0.12	mg/Kg			1	6010C
Beryllium	0.32	0.56	0.13	0.037	mg/Kg	J		1	6010C
Cadmium	0.14	0.56	0.17	0.046	mg/Kg	J		1	6010C
Calcium	1600	110	56	16	mg/Kg			1	6010C
Chromium	7.7	3.9	0.22	0.065	mg/Kg			1	6010C
Cobalt	4.4	1.1	0.45	0.11	mg/Kg			1	6010C
Copper	18	5.6	0.89	0.24	mg/Kg			1	6010C
Iron	13000	89	17	4.2	mg/Kg			1	6010C
Lead	7.7	1.0	0.89	0.35	mg/Kg			1	6010C
Magnesium	2100	34	16	4.1	mg/Kg			1	6010C
Manganese	600	5.0	0.45	0.11	mg/Kg			1	6010C
Nickel	9.2	4.5	0.50	0.15	mg/Kg			1	6010C
Potassium	900	340	180	46	mg/Kg			1	6010C
Selenium	3.4	3.4	3.4	0.96	mg/Kg	U		1	6010C
Silver	0.67	1.7	0.67	0.18	mg/Kg	U		1	6010C
Sodium	220	560	220	66	mg/Kg	U		1	6010C
Thallium	2.8	3.4	2.8	0.73	mg/Kg	U		1	6010C
Vanadium	13	2.2	0.39	0.11	mg/Kg			1	6010C
Zinc	38	8.9	1.7	0.44	mg/Kg			1	6010C
Mercury	34	24	19	7.8	ug/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB02(0-2)
Lab Sample ID: 280-97803-5
Lab Name: TestAmerica Denver
Job No.: 280-97803-1
SDG ID.:
Matrix: Solid
Date Sampled: 05/31/2017 13:10
Reporting Basis: DRY
Date Received: 06/01/2017 08:50
% Solids: 82.4

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	3700	48	5.8	1.5	mg/Kg			1	6010C
Antimony	1.4	1.9	1.4	0.70	mg/Kg	U		1	6010C
Arsenic	3.4	2.4	2.4	0.64	mg/Kg			1	6010C
Barium	14	1.9	0.29	0.10	mg/Kg			1	6010C
Beryllium	0.16	0.48	0.12	0.032	mg/Kg	J		1	6010C
Cadmium	0.083	0.48	0.14	0.039	mg/Kg	J		1	6010C
Calcium	11000	96	48	14	mg/Kg			1	6010C
Chromium	4.5	3.4	0.19	0.056	mg/Kg			1	6010C
Cobalt	3.2	0.96	0.38	0.096	mg/Kg			1	6010C
Copper	11	4.8	0.77	0.21	mg/Kg			1	6010C
Iron	8400	77	14	3.6	mg/Kg			1	6010C
Lead	3.2	0.86	0.77	0.30	mg/Kg			1	6010C
Magnesium	3700	29	13	3.5	mg/Kg			1	6010C
Manganese	320	4.3	0.38	0.096	mg/Kg			1	6010C
Nickel	6.2	3.8	0.43	0.13	mg/Kg			1	6010C
Potassium	700	290	150	39	mg/Kg			1	6010C
Selenium	2.9	2.9	2.9	0.83	mg/Kg	U		1	6010C
Silver	0.58	1.4	0.58	0.15	mg/Kg	U		1	6010C
Sodium	190	480	190	57	mg/Kg	U		1	6010C
Thallium	2.4	2.9	2.4	0.62	mg/Kg	U		1	6010C
Vanadium	6.7	1.9	0.34	0.090	mg/Kg			1	6010C
Zinc	20	7.7	1.4	0.38	mg/Kg			1	6010C
Mercury	21	22	17	7.2	ug/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SS03 | Lab Sample ID: 280-97803-6

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG ID.:

Matrix: Solid | Date Sampled: 05/31/2017 13:25

Reporting Basis: DRY | Date Received: 06/01/2017 08:50

% Solids: 74.7

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	11000	56	6.7	1.7	mg/Kg			1	6010C
Antimony	1.7	2.2	1.7	0.82	mg/Kg	U		1	6010C
Arsenic	6.2	2.8	2.8	0.74	mg/Kg			1	6010C
Barium	49	2.2	0.33	0.12	mg/Kg			1	6010C
Beryllium	0.46	0.56	0.13	0.037	mg/Kg	J		1	6010C
Cadmium	0.20	0.56	0.17	0.046	mg/Kg	J		1	6010C
Calcium	1800	110	56	16	mg/Kg			1	6010C
Chromium	11	3.9	0.22	0.065	mg/Kg			1	6010C
Cobalt	7.0	1.1	0.45	0.11	mg/Kg			1	6010C
Copper	33	5.6	0.89	0.24	mg/Kg			1	6010C
Iron	21000	89	17	4.2	mg/Kg			1	6010C
Lead	9.3	1.0	0.89	0.35	mg/Kg			1	6010C
Magnesium	3400	33	16	4.1	mg/Kg			1	6010C
Manganese	1200	5.0	0.45	0.11	mg/Kg			1	6010C
Nickel	15	4.5	0.50	0.15	mg/Kg			1	6010C
Potassium	1100	330	180	46	mg/Kg			1	6010C
Selenium	3.3	3.3	3.3	0.96	mg/Kg	U		1	6010C
Silver	0.67	1.7	0.67	0.18	mg/Kg	U		1	6010C
Sodium	220	560	220	66	mg/Kg	U		1	6010C
Thallium	2.8	3.3	2.8	0.73	mg/Kg	U		1	6010C
Vanadium	18	2.2	0.39	0.10	mg/Kg			1	6010C
Zinc	59	8.9	1.7	0.44	mg/Kg			1	6010C
Mercury	35	23	18	7.5	ug/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB03(0-2) Lab Sample ID: 280-97803-7

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG ID.:

Matrix: Solid Date Sampled: 05/31/2017 13:40

Reporting Basis: DRY Date Received: 06/01/2017 08:50

% Solids: 86.2

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	3400	52	6.3	1.6	mg/Kg			1	6010C
Antimony	1.6	2.1	1.6	0.77	mg/Kg	U		1	6010C
Arsenic	2.2	2.6	2.6	0.70	mg/Kg	J		1	6010C
Barium	11	2.1	0.31	0.11	mg/Kg			1	6010C
Beryllium	0.16	0.52	0.13	0.035	mg/Kg	J		1	6010C
Cadmium	0.078	0.52	0.16	0.043	mg/Kg	J		1	6010C
Calcium	5600	100	52	15	mg/Kg			1	6010C
Chromium	3.6	3.7	0.21	0.061	mg/Kg	J		1	6010C
Cobalt	2.4	1.0	0.42	0.10	mg/Kg			1	6010C
Copper	8.0	5.2	0.84	0.23	mg/Kg			1	6010C
Iron	6800	84	16	4.0	mg/Kg			1	6010C
Lead	1.8	0.94	0.84	0.33	mg/Kg			1	6010C
Magnesium	1800	31	15	3.9	mg/Kg			1	6010C
Manganese	230	4.7	0.42	0.10	mg/Kg			1	6010C
Nickel	5.2	4.2	0.47	0.14	mg/Kg			1	6010C
Potassium	580	310	170	43	mg/Kg			1	6010C
Selenium	3.1	3.1	3.1	0.90	mg/Kg	U		1	6010C
Silver	0.63	1.6	0.63	0.17	mg/Kg	U		1	6010C
Sodium	210	520	210	62	mg/Kg	U		1	6010C
Thallium	2.6	3.1	2.6	0.68	mg/Kg	U		1	6010C
Vanadium	5.7	2.1	0.37	0.099	mg/Kg			1	6010C
Zinc	13	8.4	1.6	0.42	mg/Kg			1	6010C
Mercury	18	23	18	7.4	ug/Kg	U		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SS04 | Lab Sample ID: 280-97803-8

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG ID.:

Matrix: Solid | Date Sampled: 05/31/2017 14:00

Reporting Basis: DRY | Date Received: 06/01/2017 08:50

% Solids: 90.0

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	5500	47	5.7	1.5	mg/Kg			1	6010C
Antimony	1.4	1.9	1.4	0.69	mg/Kg	U		1	6010C
Arsenic	2.6	2.4	2.4	0.63	mg/Kg			1	6010C
Barium	21	1.9	0.28	0.098	mg/Kg			1	6010C
Beryllium	0.25	0.47	0.11	0.031	mg/Kg	J		1	6010C
Cadmium	0.13	0.47	0.14	0.039	mg/Kg	J		1	6010C
Calcium	1100	95	47	13	mg/Kg			1	6010C
Chromium	6.3	3.3	0.19	0.055	mg/Kg			1	6010C
Cobalt	3.7	0.95	0.38	0.095	mg/Kg			1	6010C
Copper	18	4.7	0.76	0.21	mg/Kg			1	6010C
Iron	10000	76	14	3.6	mg/Kg			1	6010C
Lead	5.3	0.85	0.76	0.29	mg/Kg			1	6010C
Magnesium	2000	28	13	3.5	mg/Kg			1	6010C
Manganese	400	4.3	0.38	0.095	mg/Kg			1	6010C
Nickel	8.0	3.8	0.43	0.13	mg/Kg			1	6010C
Potassium	720	280	150	39	mg/Kg			1	6010C
Selenium	2.8	2.8	2.8	0.81	mg/Kg	U		1	6010C
Silver	0.57	1.4	0.57	0.15	mg/Kg	U		1	6010C
Sodium	190	470	190	56	mg/Kg	U		1	6010C
Thallium	2.4	2.8	2.4	0.62	mg/Kg	U		1	6010C
Vanadium	9.5	1.9	0.33	0.089	mg/Kg			1	6010C
Zinc	29	7.6	1.4	0.38	mg/Kg			1	6010C
Mercury	12	19	15	6.2	ug/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB04(0-2) Lab Sample ID: 280-97803-9

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG ID.:

Matrix: Solid Date Sampled: 05/31/2017 14:10

Reporting Basis: DRY Date Received: 06/01/2017 08:50

% Solids: 82.2

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	4500	44	5.3	1.4	mg/Kg			1	6010C
Antimony	1.3	1.8	1.3	0.65	mg/Kg	U		1	6010C
Arsenic	2.4	2.2	2.2	0.59	mg/Kg			1	6010C
Barium	16	1.8	0.27	0.092	mg/Kg			1	6010C
Beryllium	0.20	0.44	0.11	0.029	mg/Kg	J		1	6010C
Cadmium	0.069	0.44	0.13	0.036	mg/Kg	J		1	6010C
Calcium	1000	88	44	12	mg/Kg			1	6010C
Chromium	4.6	3.1	0.18	0.051	mg/Kg			1	6010C
Cobalt	2.8	0.88	0.35	0.088	mg/Kg			1	6010C
Copper	9.9	4.4	0.71	0.19	mg/Kg			1	6010C
Iron	8200	71	13	3.4	mg/Kg			1	6010C
Lead	2.1	0.80	0.71	0.27	mg/Kg			1	6010C
Magnesium	1700	27	12	3.3	mg/Kg			1	6010C
Manganese	260	4.0	0.35	0.088	mg/Kg			1	6010C
Nickel	6.5	3.5	0.40	0.12	mg/Kg			1	6010C
Potassium	730	270	140	36	mg/Kg			1	6010C
Selenium	2.7	2.7	2.7	0.76	mg/Kg	U		1	6010C
Silver	0.53	1.3	0.53	0.14	mg/Kg	U		1	6010C
Sodium	180	440	180	52	mg/Kg	U		1	6010C
Thallium	2.2	2.7	2.2	0.57	mg/Kg	U		1	6010C
Vanadium	7.2	1.8	0.31	0.083	mg/Kg			1	6010C
Zinc	17	7.1	1.3	0.35	mg/Kg			1	6010C
Mercury	18	23	18	7.5	ug/Kg	U		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SS05 | Lab Sample ID: 280-97803-10

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG ID.:

Matrix: Solid | Date Sampled: 05/31/2017 14:30

Reporting Basis: DRY | Date Received: 06/01/2017 08:50

% Solids: 86.8

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	6400	50	6.0	1.6	mg/Kg			1	6010C
Antimony	1.5	2.0	1.5	0.74	mg/Kg	U		1	6010C
Arsenic	3.3	2.5	2.5	0.67	mg/Kg			1	6010C
Barium	24	2.0	0.30	0.10	mg/Kg			1	6010C
Beryllium	0.26	0.50	0.12	0.033	mg/Kg	J		1	6010C
Cadmium	0.11	0.50	0.15	0.041	mg/Kg	J		1	6010C
Calcium	1400	100	50	14	mg/Kg			1	6010C
Chromium	6.5	3.5	0.20	0.058	mg/Kg			1	6010C
Cobalt	4.2	1.0	0.40	0.10	mg/Kg			1	6010C
Copper	15	5.0	0.80	0.22	mg/Kg			1	6010C
Iron	12000	80	15	3.8	mg/Kg			1	6010C
Lead	5.5	0.90	0.80	0.31	mg/Kg			1	6010C
Magnesium	2100	30	14	3.7	mg/Kg			1	6010C
Manganese	520	4.5	0.40	0.10	mg/Kg			1	6010C
Nickel	8.4	4.0	0.45	0.13	mg/Kg			1	6010C
Potassium	730	300	160	41	mg/Kg			1	6010C
Selenium	0.91	3.0	3.0	0.86	mg/Kg	J		1	6010C
Silver	0.60	1.5	0.60	0.16	mg/Kg	U		1	6010C
Sodium	200	500	200	59	mg/Kg	U		1	6010C
Thallium	2.5	3.0	2.5	0.65	mg/Kg	U		1	6010C
Vanadium	10	2.0	0.35	0.094	mg/Kg			1	6010C
Zinc	31	8.0	1.5	0.40	mg/Kg			1	6010C
Mercury	23	23	18	7.5	ug/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB05(0-2) Lab Sample ID: 280-97803-11

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG ID.:

Matrix: Solid Date Sampled: 05/31/2017 14:40

Reporting Basis: DRY Date Received: 06/01/2017 08:50

% Solids: 85.8

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	11000	43	5.2	1.3	mg/Kg			1	6010C
Antimony	1.3	1.7	1.3	0.64	mg/Kg	U		1	6010C
Arsenic	4.6	2.2	2.2	0.58	mg/Kg			1	6010C
Barium	49	1.7	0.26	0.090	mg/Kg			1	6010C
Beryllium	0.54	0.43	0.10	0.029	mg/Kg			1	6010C
Cadmium	0.26	0.43	0.13	0.036	mg/Kg	J		1	6010C
Calcium	3200	87	43	12	mg/Kg			1	6010C
Chromium	12	3.0	0.17	0.050	mg/Kg			1	6010C
Cobalt	9.3	0.87	0.35	0.087	mg/Kg			1	6010C
Copper	20	4.3	0.69	0.19	mg/Kg			1	6010C
Iron	17000	69	13	3.3	mg/Kg			1	6010C
Lead	15	0.78	0.69	0.27	mg/Kg			1	6010C
Magnesium	2900	26	12	3.2	mg/Kg			1	6010C
Manganese	730	3.9	0.35	0.087	mg/Kg			1	6010C
Nickel	12	3.5	0.39	0.11	mg/Kg			1	6010C
Potassium	1000	260	140	36	mg/Kg			1	6010C
Selenium	2.6	2.6	2.6	0.75	mg/Kg	U		1	6010C
Silver	0.52	1.3	0.52	0.14	mg/Kg	U		1	6010C
Sodium	170	430	170	51	mg/Kg	U		1	6010C
Thallium	2.2	2.6	2.2	0.56	mg/Kg	U		1	6010C
Vanadium	19	1.7	0.30	0.082	mg/Kg			1	6010C
Zinc	52	6.9	1.3	0.35	mg/Kg			1	6010C
Mercury	19	20	16	6.4	ug/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB05(2-4) Lab Sample ID: 280-97803-12

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG ID.:

Matrix: Solid Date Sampled: 05/31/2017 15:00

Reporting Basis: DRY Date Received: 06/01/2017 08:50

% Solids: 90.2

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	10000	53	6.4	1.7	mg/Kg			1	6010C
Antimony	1.6	2.1	1.6	0.78	mg/Kg	U		1	6010C
Arsenic	6.9	2.7	2.7	0.71	mg/Kg			1	6010C
Barium	51	2.1	0.32	0.11	mg/Kg			1	6010C
Beryllium	0.48	0.53	0.13	0.035	mg/Kg	J		1	6010C
Cadmium	0.13	0.53	0.16	0.044	mg/Kg	J		1	6010C
Calcium	1800	110	53	15	mg/Kg			1	6010C
Chromium	12	3.7	0.21	0.062	mg/Kg			1	6010C
Cobalt	7.6	1.1	0.43	0.11	mg/Kg			1	6010C
Copper	52	5.3	0.85	0.23	mg/Kg			1	6010C
Iron	27000	85	16	4.0	mg/Kg			1	6010C
Lead	5.5	0.96	0.85	0.33	mg/Kg			1	6010C
Magnesium	4000	32	15	3.9	mg/Kg			1	6010C
Manganese	570	4.8	0.43	0.11	mg/Kg			1	6010C
Nickel	17	4.3	0.48	0.14	mg/Kg			1	6010C
Potassium	1000	320	170	44	mg/Kg			1	6010C
Selenium	3.2	3.2	3.2	0.92	mg/Kg	U		1	6010C
Silver	0.64	1.6	0.64	0.17	mg/Kg	U		1	6010C
Sodium	210	530	210	63	mg/Kg	U		1	6010C
Thallium	2.7	3.2	2.7	0.69	mg/Kg	U		1	6010C
Vanadium	18	2.1	0.37	0.10	mg/Kg			1	6010C
Zinc	60	8.5	1.6	0.42	mg/Kg			1	6010C
Mercury	23	19	15	6.1	ug/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SS06 | Lab Sample ID: 280-97803-13

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG ID.:

Matrix: Solid | Date Sampled: 05/31/2017 15:40

Reporting Basis: DRY | Date Received: 06/01/2017 08:50

% Solids: 87.1

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	7800	49	5.9	1.5	mg/Kg			1	6010C
Antimony	1.5	2.0	1.5	0.72	mg/Kg	U		1	6010C
Arsenic	4.7	2.4	2.4	0.65	mg/Kg			1	6010C
Barium	32	2.0	0.29	0.10	mg/Kg			1	6010C
Beryllium	0.30	0.49	0.12	0.032	mg/Kg	J		1	6010C
Cadmium	0.17	0.49	0.15	0.040	mg/Kg	J		1	6010C
Calcium	1300	98	49	14	mg/Kg			1	6010C
Chromium	7.4	3.4	0.20	0.057	mg/Kg			1	6010C
Cobalt	4.4	0.98	0.39	0.098	mg/Kg			1	6010C
Copper	14	4.9	0.78	0.21	mg/Kg			1	6010C
Iron	13000	78	15	3.7	mg/Kg			1	6010C
Lead	7.8	0.88	0.78	0.30	mg/Kg			1	6010C
Magnesium	2000	29	14	3.6	mg/Kg			1	6010C
Manganese	640	4.4	0.39	0.098	mg/Kg			1	6010C
Nickel	9.2	3.9	0.44	0.13	mg/Kg			1	6010C
Potassium	710	290	160	40	mg/Kg			1	6010C
Selenium	0.87	2.9	2.9	0.84	mg/Kg	J		1	6010C
Silver	0.59	1.5	0.59	0.16	mg/Kg	U		1	6010C
Sodium	200	490	200	58	mg/Kg	U		1	6010C
Thallium	2.4	2.9	2.4	0.64	mg/Kg	U		1	6010C
Vanadium	13	2.0	0.34	0.092	mg/Kg			1	6010C
Zinc	37	7.8	1.5	0.39	mg/Kg			1	6010C
Mercury	33	22	17	7.1	ug/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SS06-a
Lab Sample ID: 280-97803-14
Lab Name: TestAmerica Denver
Job No.: 280-97803-1
SDG ID.:
Matrix: Solid
Date Sampled: 05/31/2017 15:40
Reporting Basis: DRY
Date Received: 06/01/2017 08:50
% Solids: 86.8

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	7500	52	6.3	1.6	mg/Kg			1	6010C
Antimony	1.6	2.1	1.6	0.77	mg/Kg	U		1	6010C
Arsenic	4.4	2.6	2.6	0.70	mg/Kg			1	6010C
Barium	33	2.1	0.31	0.11	mg/Kg			1	6010C
Beryllium	0.31	0.52	0.13	0.035	mg/Kg	J		1	6010C
Cadmium	0.18	0.52	0.16	0.043	mg/Kg	J		1	6010C
Calcium	1400	100	52	15	mg/Kg			1	6010C
Chromium	7.6	3.7	0.21	0.061	mg/Kg			1	6010C
Cobalt	4.3	1.0	0.42	0.10	mg/Kg			1	6010C
Copper	15	5.2	0.84	0.23	mg/Kg			1	6010C
Iron	13000	84	16	4.0	mg/Kg			1	6010C
Lead	8.2	0.94	0.84	0.32	mg/Kg			1	6010C
Magnesium	2000	31	15	3.9	mg/Kg			1	6010C
Manganese	620	4.7	0.42	0.10	mg/Kg			1	6010C
Nickel	8.9	4.2	0.47	0.14	mg/Kg			1	6010C
Potassium	720	310	170	43	mg/Kg			1	6010C
Selenium	3.1	3.1	3.1	0.90	mg/Kg	U		1	6010C
Silver	0.63	1.6	0.63	0.17	mg/Kg	U		1	6010C
Sodium	210	520	210	62	mg/Kg	U		1	6010C
Thallium	2.6	3.1	2.6	0.68	mg/Kg	U		1	6010C
Vanadium	13	2.1	0.37	0.098	mg/Kg			1	6010C
Zinc	36	8.4	1.6	0.42	mg/Kg			1	6010C
Mercury	30	21	17	7.0	ug/Kg			1	7471A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

ICV Source: ICP ICVH_00414 Concentration Units: ug/L

CCV Source: ICP CCVH_00539

Analyte	ICVH 280-376356/6 06/06/2017 11:25				ICVH 280-376356/7 06/06/2017 11:28				CCVH 280-376356/26 06/06/2017 17:25			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	81200		80000	102	80800		80000	101	48700		50000	97
Aluminum	41200		40000	103	41200		40000	103	49600		50000	99
Sodium	42000		40000	105	41400		40000	104	255000		250000	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

ICV Source: ICP ICVH_00414 Concentration Units: ug/L

CCV Source: ICP CCVH_00539

Analyte	CCVH 280-376356/40 06/06/2017 18:01				CCVH 280-376356/52 06/06/2017 18:31							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	49700		50000	99	48900		50000	98				
Aluminum	50200		50000	100	49200		50000	98				
Sodium	258000		250000	103	253000		250000	101				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

ICV Source: ICP ICV_00298 Concentration Units: ug/L

CCV Source: ICP CCV_00270

Analyte	ICV 280-376356/8 06/06/2017 11:32				ICV 280-376356/9 06/06/2017 11:34				CCV 280-376356/27 06/06/2017 17:28			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	260		250	104	251		250	101	988		1000	99
Arsenic	260		250	104	254		250	102	976		1000	98
Barium	250		250	100	252		250	101	499		500	100
Beryllium	251		250	100	250		250	100	492		500	98
Cadmium	255		250	102	247		250	99	494		500	99
Calcium	1990		2000	99	2000		2000	100	4950		5000	99
Chromium	255		250	102	248		250	99	493		500	99
Cobalt	255		250	102	248		250	99	494		500	99
Copper	264		250	106	258		250	103	499		500	100
Iron	268		250	107	262		250	105	2490		2500	99
Lead	261		250	104	253		250	101	1000		1000	100
Magnesium	10100		10000	101	10000		10000	100	19700		20000	98
Manganese	260		250	104	256		250	103	491		500	98
Nickel	256		250	102	250		250	100	492		500	98
Potassium	20200		20000	101	20300		20000	101	50400		50000	101
Silver	255		250	102	254		250	102	500		500	100
Thallium	525		500	105	527		500	105	1020		1000	102
Vanadium	253		250	101	248		250	99	487		500	97
Zinc	251		250	100	247		250	99	481		500	96
Selenium	499		500	100	494		500	99	969		1000	97
Sodium	2070	J	2000	104	2060	J	2000	103				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

ICV Source: ICP ICV_00298 Concentration Units: ug/L

CCV Source: ICP CCV_00270

Analyte	CCV 280-376356/41 06/06/2017 18:03				CCV 280-376356/53 06/06/2017 18:34							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	994		1000	99	963		1000	96				
Arsenic	1010		1000	101	955		1000	95				
Barium	505		500	101	490		500	98				
Beryllium	501		500	100	486		500	97				
Cadmium	503		500	101	487		500	97				
Calcium	5030		5000	101	4900		5000	98				
Chromium	500		500	100	485		500	97				
Cobalt	505		500	101	491		500	98				
Copper	515		500	103	503		500	101				
Iron	2560		2500	102	2460		2500	98				
Lead	1010		1000	101	983		1000	98				
Magnesium	20200		20000	101	19700		20000	98				
Manganese	507		500	101	494		500	99				
Nickel	504		500	101	487		500	97				
Potassium	51400		50000	103	50100		50000	100				
Silver	508		500	102	494		500	99				
Thallium	1030		1000	103	1000		1000	100				
Vanadium	505		500	101	492		500	98				
Zinc	501		500	100	490		500	98				
Selenium	980		1000	98	944		1000	94				
Sodium	5370		5000	107	5250		5000	105				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

ICV Source: ICP LLCCV_01980 Concentration Units: ug/L

CCV Source: ICP LLCCV_01980

Analyte	ICVL 280-376356/10 06/06/2017 11:38				CCVL 280-376356/29 06/06/2017 17:33				CCVL 280-376356/43 06/06/2017 18:08			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	17.4	J	20.0	87	20.2		20.0	101	22.1		20.0	110
Arsenic	16.3	J	15.0	109	18.8	J	15.0	125	16.1	J	15.0	107
Barium	9.66	J	10.0	97	9.48	J	10.0	95	9.75	J	10.0	98
Beryllium	0.950	J	1.00	95	1.06	J	1.00	106	1.01	J	1.00	101
Cadmium	5.16		5.00	103	5.15		5.00	103	5.25		5.00	105
Calcium	195	J	200	98	202	J	200	101	201	J	200	100
Chromium	10.3	J	10.0	103	9.78	J	10.0	98	10.2	J	10.0	102
Cobalt	9.62	J	10.0	96	10.4	J	10.0	104	10.1	J	10.0	101
Copper	16.5		15.0	110	17.3		15.0	115	16.3		15.0	109
Iron	101		100	101	103		100	103	126		100	126
Lead	8.58	J	9.00	95	8.43	J	9.00	94	11.4	J	9.00	127
Magnesium	201	J	200	101	198	J	200	99	208	J	200	104
Manganese	10.1		10.0	101	10.3		10.0	103	10.7		10.0	107
Nickel	38.5	J	40.0	96	38.1	J	40.0	95	39.2	J	40.0	98
Potassium	2900	J	3000	97	3170		3000	106	3130		3000	104
Silver	10.1	J	10.0	101	9.93	J	10.0	99	10.7	J	10.0	107
Thallium	18.6	J	15.0	124	17.6	J	15.0	117	17.8	J	15.0	119
Vanadium	9.87	J	10.0	99	9.80	J	10.0	98	10.2	J	10.0	102
Zinc	19.3	J	20.0	96	21.0	J	20.0	105	20.5	J	20.0	102
Aluminum	104	J	100	104	128	J	100	128				
Selenium	20.0	J	20.0	100					17.7	J	20.0	88
Sodium	1030	J	1000	103					1170	J	1000	117

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

ICV Source: ICP LLCCV_01980 Concentration Units: ug/L

CCV Source: ICP LLCCV_01980

Analyte	CCVL 280-376356/55 06/06/2017 18:39											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	18.1	J	20.0	91								
Arsenic	14.9	J	15.0	100								
Barium	9.61	J	10.0	96								
Beryllium	0.940	J	1.00	94								
Cadmium	5.22		5.00	104								
Calcium	198	J	200	99								
Chromium	9.79	J	10.0	98								
Cobalt	9.77	J	10.0	98								
Copper	15.6		15.0	104								
Iron	113		100	113								
Lead	10.5	J	9.00	116								
Magnesium	201	J	200	100								
Manganese	10.4		10.0	104								
Nickel	38.8	J	40.0	97								
Potassium	3020		3000	101								
Silver	10.3	J	10.0	103								
Thallium	19.2	J	15.0	128								
Vanadium	9.77	J	10.0	98								
Zinc	19.8	J	20.0	99								
Aluminum	128	J	100	128								
Selenium												
Sodium	1110	J	1000	111								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

ICV Source: ICP ICVH_00414 Concentration Units: ug/L

CCV Source: ICP CCVH_00540

Analyte	ICVH 280-376450/6 06/07/2017 09:11				ICVH 280-376450/7 06/07/2017 09:14				CCVH 280-376450/58 06/07/2017 11:54			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	41000		40000	103	41200		40000	103	50400		50000	101
Sodium	41900		40000	105	41600		40000	104	256000		250000	103
Iron	80900		80000	101	81300		80000	102	50300		50000	101

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

ICV Source: ICP ICVH_00414 Concentration Units: ug/L

CCV Source: ICP CCVH_00540

Analyte	CCVH 280-376450/72 06/07/2017 12:30				CCVH 280-376450/86 06/07/2017 13:06							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	50300		50000	101	50600		50000	101				
Sodium	256000		250000	102	258000		250000	103				
Iron	50600		50000	101	50400		50000	101				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

ICV Source: ICP ICV_00298 Concentration Units: ug/L

CCV Source: ICP CCV_00270

Analyte	ICV 280-376450/9 06/07/2017 09:25				ICV 280-376450/10 06/07/2017 09:27				CCV 280-376450/59 06/07/2017 11:57			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	266	J	250	106	267	J	250	107	536		500	107
Selenium	506		500	101	497		500	99	1000		1000	100
Sodium	2000	J	2000	100	2000	J	2000	100	5290		5000	106
Antimony	260		250	104	250		250	100	995		1000	100
Arsenic	253		250	101	252		250	101	993		1000	99
Barium	247		250	99	246		250	98	496		500	99
Beryllium	248		250	99	246		250	99	498		500	100
Cadmium	253		250	101	250		250	100	504		500	101
Calcium	1960		2000	98	1950		2000	97	5020		5000	100
Chromium	254		250	101	250		250	100	495		500	99
Cobalt	253		250	101	251		250	101	509		500	102
Copper	256		250	102	256		250	103	533		500	107
Iron	252		250	101	254		250	102	2540		2500	102
Lead	258		250	103	256		250	102	1000		1000	100
Magnesium	10100		10000	101	10100		10000	101	21000		20000	105
Manganese	256		250	102	256		250	102	529		500	106
Nickel	256		250	102	254		250	102	509		500	102
Potassium	19700		20000	99	19800		20000	99	50600		50000	101
Silver	252		250	101	251		250	100	520		500	104
Thallium	539		500	108	523		500	105	1030		1000	103
Vanadium	248		250	99	248		250	99	523		500	105
Zinc	252		250	101	250		250	100	537		500	107

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

ICV Source: ICP ICV_00298 Concentration Units: ug/L

CCV Source: ICP CCV_00270

Analyte	CCV 280-376450/73 06/07/2017 12:33				CCV 280-376450/87 06/07/2017 13:08							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	541		500	108								
Selenium	1010		1000	101	1010		1000	101				
Sodium	5270		5000	105	5380		5000	108				
Antimony	1000		1000	100	1000		1000	100				
Arsenic	996		1000	100	994		1000	99				
Barium	498		500	100	505		500	101				
Beryllium	501		500	100	505		500	101				
Cadmium	507		500	101	506		500	101				
Calcium	5060		5000	101	5140		5000	103				
Chromium	495		500	99	500		500	100				
Cobalt	509		500	102	511		500	102				
Copper	533		500	107	527		500	105				
Iron	2600		2500	104	2590		2500	104				
Lead	1010		1000	101	1010		1000	101				
Magnesium	21100		20000	106	21300		20000	107				
Manganese	532		500	106	532		500	106				
Nickel	509		500	102	511		500	102				
Potassium	51200		50000	102	51800		50000	104				
Silver	519		500	104	522		500	104				
Thallium	1030		1000	103	1030		1000	103				
Vanadium	520		500	104	522		500	104				
Zinc	538		500	108	547		500	109				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

ICV Source: ICP LLCCV_01981 Concentration Units: ug/L

CCV Source: ICP LLCCV_01981

Analyte	ICVL 280-376450/11 06/07/2017 09:32				CCVL 280-376450/61 06/07/2017 12:02				CCVL 280-376450/75 06/07/2017 12:38			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	111	J	100	111	106	J	100	106	114	J	100	114
Selenium	17.5	J	20.0	87	15.2	J	20.0	76	17.5	J	20.0	87
Sodium	1020	J	1000	102	1100	J	1000	110	1080	J	1000	108
Antimony	21.1		20.0	105	18.2	J	20.0	91	18.1	J	20.0	91
Arsenic	13.3	J	15.0	89					13.8	J	15.0	92
Barium	9.96	J	10.0	100	10.1		10.0	101	10.2		10.0	102
Beryllium	0.710	J	1.00	71	0.850	J	1.00	85	0.710	J	1.00	71
Cadmium	5.72		5.00	114	5.54		5.00	111	5.16		5.00	103
Calcium	203	J	200	101	206	J	200	103	207	J	200	103
Chromium	10.5	J	10.0	105	9.85	J	10.0	99	10.1	J	10.0	101
Cobalt	10.1	J	10.0	101	9.47	J	10.0	95	10.1	J	10.0	101
Copper	16.6		15.0	111	15.8		15.0	105	16.7		15.0	111
Iron	121		100	121	113		100	113	127		100	127
Lead	11.5	J	9.00	128	10.4	J	9.00	115	8.91	J	9.00	99
Magnesium	216	J	200	108	214	J	200	107	223	J	200	112
Manganese	10.9		10.0	109	10.8		10.0	108	11.6		10.0	116
Nickel	43.3		40.0	108	41.0		40.0	102	41.6		40.0	104
Potassium	3000		3000	100	3090		3000	103	3100		3000	103
Silver	10.8	J	10.0	108	10.4	J	10.0	104	11.2	J	10.0	112
Thallium	17.5	J	15.0	116	18.4	J	15.0	122	16.3	J	15.0	108
Vanadium	10.6	J	10.0	106	10.0	J	10.0	100	9.88	J	10.0	99
Zinc	21.0	J	20.0	105	21.6	J	20.0	108	22.1	J	20.0	111

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

ICV Source: ICP LLCCV_01981 Concentration Units: ug/L

CCV Source: ICP LLCCV_01981

Analyte	CCVL 280-376450/89 06/07/2017 13:14											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	126	J	100	126								
Selenium	22.1		20.0	110								
Sodium	1080	J	1000	108								
Antimony	16.8	J	20.0	84								
Arsenic												
Barium	10.4		10.0	104								
Beryllium												
Cadmium	5.54		5.00	111								
Calcium	208	J	200	104								
Chromium	10.3	J	10.0	103								
Cobalt	10.4	J	10.0	104								
Copper	17.2		15.0	115								
Iron	113		100	113								
Lead	10.2	J	9.00	113								
Magnesium	228	J	200	114								
Manganese	11.4		10.0	114								
Nickel	42.7		40.0	107								
Potassium	3090		3000	103								
Silver	11.6	J	10.0	116								
Thallium	18.5	J	15.0	123								
Vanadium	10.2	J	10.0	102								
Zinc	22.6	J	20.0	113								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

ICV Source: Hg Soil ICV_00516 Concentration Units: ug/L

CCV Source: Hg Soil CCV_00913

Analyte	ICV 280-376375/8 06/06/2017 14:03				CCV 280-376375/11 06/06/2017 14:09				CCV 280-376375/23 06/06/2017 14:38			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	3.98		4.00	100	4.73		5.00	95	5.46		5.00	109

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

ICV Source: Hg Soil ICV_00516 Concentration Units: ug/L

CCV Source: Hg Soil CCV_00913

Analyte	CCV 280-376375/35 06/06/2017 15:04				CCV 280-376375/47 06/06/2017 15:31							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.52		5.00	110	5.50		5.00	110				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Method: 6010C Instrument ID: MT_025

Lab Sample ID: CRI 280-376356/14 Concentration Units: ug/L

CRQL Check Standard Source: ICP CRI_00712

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	100	108	J	108	80-120
Antimony	10.0	9.84	J	98	80-120
Arsenic	10.0	8.94	J	89	80-120
Barium	5.00	5.04	J	101	80-120
Beryllium	1.00	0.990	J	99	80-120
Cadmium	5.00	5.13		103	80-120
Calcium	200	197	J	99	80-120
Chromium	10.0	10.4	J	104	80-120
Cobalt	5.00	4.73	J	95	80-120
Copper	10.0	10.4	J	104	80-120
Lead	3.00	3.11	J	104	80-120
Magnesium	200	211	J	106	80-120
Manganese	3.00	3.27	J	109	80-120
Nickel	10.0	8.95	J	90	80-120
Potassium	1000	945	J	95	80-120
Silver	10.0	9.14	J	91	80-120
Sodium	1000	1040	J	104	80-120
Vanadium	10.0	9.77	J	98	80-120
Zinc	10.0	11.6	J	116	80-120

Lab Sample ID: CRI 280-376356/16 Concentration Units: ug/L

CRQL Check Standard Source: Alt Fe Se_00009

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Selenium	20.0	18.9	J	94	80-120

Lab Sample ID: CRI 280-376356/17 Concentration Units: ug/L

CRQL Check Standard Source: Alt Fe Se_00010

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Thallium	15.0	16.9	J	113	80-120

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Method: 6010C Instrument ID: MT_025

Lab Sample ID: CRI 280-376356/18 Concentration Units: ug/L

CRQL Check Standard Source: Alt Fe Se_00011

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Iron	100	96.7	J	97	80-120

Lab Sample ID: CRI 280-376450/15 Concentration Units: ug/L

CRQL Check Standard Source: ICP CRI_00713

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	100	111	J	111	80-120
Barium	5.00	5.23	J	105	80-120
Cadmium	5.00	5.56		111	80-120
Calcium	200	210	J	105	80-120
Chromium	10.0	10.5	J	105	80-120
Cobalt	5.00	4.76	J	95	80-120
Copper	10.0	10.6	J	106	80-120
Iron	30.0	33.5	J	112	80-120
Magnesium	200	222	J	111	80-120
Manganese	3.00	3.25	J	108	80-120
Nickel	10.0	11.4	J	114	80-120
Potassium	1000	947	J	95	80-120
Silver	10.0	9.46	J	95	80-120
Sodium	1000	1030	J	103	80-120
Thallium	10.0	9.40	J	94	80-120
Vanadium	10.0	11.3	J	113	80-120
Zinc	10.0	11.0	J	110	80-120

Lab Sample ID: CRI 280-376450/17 Concentration Units: ug/L

CRQL Check Standard Source: Alt AsPbSbSe*_00001

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	20.0	21.9		109	80-120
Arsenic	15.0	13.9	J	93	80-120
Lead	9.00	8.18	J	91	80-120
Selenium	20.0	19.6	J	98	80-120

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 280-376356/13 06/06/2017 11:46		CCB 280-376356/28 06/06/2017 17:30		CCB 280-376356/42 06/06/2017 18:06		CCB 280-376356/54 06/06/2017 18:36	
		Found	C	Found	C	Found	C	Found	C
Antimony	20	12	U	12	U	12	U	12	U
Arsenic	25	15	U	15	U	15	U	15	U
Barium	10	2.0	U	2.0	U	2.0	U	2.0	U
Beryllium	1.5	1.2	U	1.2	U	1.2	U	1.2	U
Cadmium	5.0	1.8	U	1.8	U	1.8	U	1.8	U
Calcium	1000	140	U	140	U	140	U	140	U
Chromium	15	2.6	U	2.6	U	2.6	U	2.6	U
Cobalt	15	4.5	U	4.5	U	4.5	U	4.5	U
Copper	15	10	U	10	U	10	U	10	U
Iron	100	85	U	85	U	85	U	85	U
Lead	15	4.85	J	10	U	10	U	10	U
Magnesium	500	40	U	40	U	40	U	40	U
Manganese	10	1.0	U	1.0	U	1.0	U	1.0	U
Nickel	40	5.0	U	5.0	U	5.0	U	5.0	U
Potassium	3000	940	U	940	U	940	U	940	U
Silver	15	3.5	U	3.5	U	3.5	U	3.5	U
Thallium	40	19	U	19	U	19	U	19	U
Vanadium	15	4.0	U	4.0	U	4.0	U	4.0	U
Zinc	150	15	U	15	U	15	U	15	U
Aluminum	300	70	U	70	U	70	U	70	U
Selenium	22	19	U	19	U	19	U	19	U
Sodium	5000	350	U	351	J	134	J	350	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 280-376450/14 06/07/2017 09:44		CCB 280-376450/60 06/07/2017 11:59		CCB 280-376450/74 06/07/2017 12:35		CCB 280-376450/88 06/07/2017 13:11	
		Found	C	Found	C	Found	C	Found	C
Aluminum	300	70	U	70	U	70	U	70	U
Selenium	22	19	U	19	U	19	U	7.38	J
Sodium	5000	350	U	350	U	350	U	350	U
Antimony	20	12	U	12	U	12	U	12	U
Arsenic	25	15	U	15	U	15	U	15	U
Barium	10	2.0	U	2.0	U	2.0	U	2.0	U
Beryllium	1.5	1.2	U	1.2	U	1.2	U	1.2	U
Cadmium	5.0	0.470	J	1.8	U	1.8	U	0.490	J
Calcium	1000	140	U	140	U	140	U	140	U
Chromium	15	2.6	U	2.6	U	2.6	U	2.6	U
Cobalt	15	4.5	U	4.5	U	4.5	U	4.5	U
Copper	15	10	U	10	U	10	U	10	U
Iron	100	22.1	J	85	U	85	U	85	U
Lead	15	10	U	10	U	10	U	10	U
Magnesium	500	40	U	40	U	40	U	40	U
Manganese	10	1.0	U	1.0	U	0.320	J	0.360	J
Nickel	40	5.0	U	5.0	U	5.0	U	5.0	U
Potassium	3000	940	U	940	U	940	U	940	U
Silver	15	3.5	U	3.5	U	0.940	J	1.23	J
Thallium	40	19	U	19	U	19	U	19	U
Vanadium	15	4.0	U	4.0	U	4.0	U	4.0	U
Zinc	150	15	U	15	U	15	U	15	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 280-376375/9 06/06/2017 14:05		CCB 280-376375/12 06/06/2017 14:12		CCB 280-376375/24 06/06/2017 14:40		CCB 280-376375/36 06/06/2017 15:07	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.080	U	0.080	U	0.080	U	0.080	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 280-376375/48 06/06/2017 15:33							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.080	U						

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 280-375991/1-A

Instrument Code: MT_025 Batch No.: 376356

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony	1.5	U		6010C_DOD5
7440-38-2	Arsenic	2.5	U		6010C_DOD5
7440-39-3	Barium	0.30	U		6010C_DOD5
7440-41-7	Beryllium	0.12	U		6010C_DOD5
7440-43-9	Cadmium	0.15	U		6010C_DOD5
7440-70-2	Calcium	15.3	J		6010C_DOD5
7440-47-3	Chromium	0.0900	J		6010C_DOD5
7440-48-4	Cobalt	0.40	U		6010C_DOD5
7440-50-8	Copper	0.80	U		6010C_DOD5
7439-89-6	Iron	3.85	J		6010C_DOD5
7439-92-1	Lead	0.80	U		6010C_DOD5
7439-95-4	Magnesium	3.89	J		6010C_DOD5
7439-96-5	Manganese	0.40	U		6010C_DOD5
7440-02-0	Nickel	0.45	U		6010C_DOD5
7440-09-7	Potassium	160	U		6010C_DOD5
7440-22-4	Silver	0.60	U		6010C_DOD5
7440-28-0	Thallium	2.5	U		6010C_DOD5
7440-62-2	Vanadium	0.35	U		6010C_DOD5
7440-66-6	Zinc	1.5	U		6010C_DOD5

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 280-375991/1-A

Instrument Code: MT_025 Batch No.: 376450

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	6.0	U		6010C_DOD5
7782-49-2	Selenium	3.0	U		6010C_DOD5
7440-23-5	Sodium	200	U		6010C_DOD5

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Concentration Units: ug/Kg Lab Sample ID: MB 280-376183/1-A

Instrument Code: MT_033 Batch No.: 376375

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	13	U		7471A_DOD5

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICSA 280-376356/19 Instrument ID: MT_025

Lab File ID: 25A060617b.asc ICS Source: ICP ICSA_00146

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**-7.40**	
Arsenic		**-3.32**	
Barium		**0.560**	
Beryllium		**-0.110**	
Cadmium		**0.820**	
Calcium	**500000**	**467640**	**94**
Chromium		**1.51**	
Cobalt		**0.640**	
Copper		**3.57**	
Iron	**200000**	**186620**	**93**
Lead		**-6.78**	
Magnesium	**500000**	**517890**	**104**
Manganese		**0.790**	
Nickel		**0.870**	
Potassium		**-120**	
Silver		**0.880**	
Thallium		**-5.64**	
Vanadium		**-3.70**	
Zinc		**3.36**	
Aluminum	*500000*	*511020*	*102*
Boron		*-4.88*	
Lithium		*6.25*	
Phosphorus		*-3.36*	
Selenium		*-9.54*	
Silicon		*-9.38*	
SiO2		*-20.1*	
Sodium		*19.1*	
Tin		*-1.42*	
Titanium		*0.220*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICSAB 280-376356/20 Instrument ID: MT_025

Lab File ID: 25A060617b.asc ICS Source: ICP ICSAB_00162

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**1000**	**1003**	**100**
Arsenic	**2000**	**2043**	**102**
Barium	**500**	**500**	**100**
Beryllium	**500**	**493**	**99**
Cadmium	**1000**	**1027**	**103**
Calcium	**500000**	**469120**	**94**
Chromium	**500**	**492**	**98**
Cobalt	**500**	**463**	**93**
Copper	**500**	**535**	**107**
Iron	**200000**	**188280**	**94**
Lead	**1000**	**928**	**93**
Magnesium	**500000**	**527950**	**106**
Manganese	**500**	**505**	**101**
Nickel	**1000**	**925**	**93**
Potassium	**50000**	**52123**	**104**
Silver	**1000**	**1108**	**111**
Thallium	**10000**	**8808**	**88**
Vanadium	**500**	**508**	**102**
Zinc	**1000**	**988**	**99**
Aluminum	*500000*	*518530*	*104*
Boron	*2000*	*1912*	*96*
Lithium	*1000*	*1037*	*104*
Molybdenum	*1000*	*948*	*95*
Phosphorus	*2000*	*2010*	*100*
Selenium	*5000*	*4872*	*97*
Silicon	*10000*	*10010*	*100*
SiO2	*21400*	*21421*	*100*
Sodium	*50000*	*51927*	*104*
Strontium	*1000*	*1000*	*100*
Tin	*10000*	*9474*	*95*
Titanium	*1000*	*1033*	*103*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICSA 280-376450/18 Instrument ID: MT_025

Lab File ID: 25A060717Z.asc ICS Source: ICP ICSA_00147

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500000**	**510480**	**102**
Selenium		**9.36**	
Sodium		**72.9**	
Arsenic		*-0.250*	
Barium		*-0.180*	
Beryllium		*-0.260*	
Boron		*-3.07*	
Cadmium		*1.30*	
Calcium	*500000*	*466570*	*93*
Chromium		*0.550*	
Cobalt		*-0.600*	
Copper		*2.16*	
Iron	*200000*	*186740*	*93*
Lead		*-6.12*	
Lithium		*0.740*	
Magnesium	*500000*	*525140*	*105*
Nickel		*1.82*	
Phosphorus		*-9.66*	
Potassium		*-20.4*	
Silicon		*20.0*	
Silver		*-0.140*	
SiO2		*42.9*	
Thallium		*-7.52*	
Tin		*-0.290*	
Titanium		*0.510*	
Vanadium		*-3.16*	
Zinc		*4.50*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Lab Sample ID: ICSAB 280-376450/19 Instrument ID: MT_025

Lab File ID: 25A060717Z.asc ICS Source: ICP ICSAB_00163

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**500000**	**502540**	**101**
Selenium	**5000**	**4910**	**98**
Sodium	**50000**	**51142**	**102**
Antimony	*1000*	*993*	*99*
Arsenic	*2000*	*2010*	*101*
Barium	*500*	*487*	*97*
Beryllium	*500*	*484*	*97*
Boron	*2000*	*1932*	*97*
Cadmium	*1000*	*1007*	*101*
Calcium	*500000*	*463000*	*93*
Chromium	*500*	*465*	*93*
Cobalt	*500*	*448*	*90*
Copper	*500*	*553*	*111*
Iron	*200000*	*183310*	*92*
Lead	*1000*	*882*	*88*
Lithium	*1000*	*1032*	*103*
Magnesium	*500000*	*523630*	*105*
Manganese	*500*	*504*	*101*
Molybdenum	*1000*	*894*	*89*
Nickel	*1000*	*896*	*90*
Phosphorus	*2000*	*1963*	*98*
Potassium	*50000*	*51753*	*104*
Silicon	*10000*	*9795*	*98*
Silver	*1000*	*1113*	*111*
SiO2	*21400*	*20962*	*98*
Strontium	*1000*	*985*	*98*
Thallium	*10000*	*8429*	*84*
Tin	*10000*	*8974*	*90*
Titanium	*1000*	*1020*	*102*
Vanadium	*500*	*510*	*102*
Zinc	*1000*	*984*	*98*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: SS025-SS01 MS | Lab ID: 280-97803-1 MS

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Matrix: Solid | Concentration Units: mg/Kg

% Solids: 83.2

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	11200		7700		201	1717	74-119	4	6010C
Antimony	26.7		1.7	U	50.2	53	79-114	J	6010C
Arsenic	95.7		6.2		100	89	82-111		6010C
Barium	226		33		201	96	83-113		6010C
Beryllium	4.88		0.33	J	5.02	91	83-113		6010C
Cadmium	9.47		0.20	J	10.0	92	82-113		6010C
Calcium	12400		10000		5020	47	81-116	J	6010C
Chromium	29.7		9.4		20.1	101	85-113		6010C
Cobalt	48.1		5.3		50.2	85	85-112		6010C
Copper	45.7		23		25.1	91	81-117		6010C
Iron	15400		16000		100	-426	81-118	4	6010C
Lead	52.2		9.6		50.2	85	81-112		6010C
Magnesium	8860		4800		5020	82	78-115		6010C
Manganese	653		620		50.2	56	84-114	4	6010C
Nickel	53.6		12		50.2	84	83-113		6010C
Potassium	7080		1100		5020	120	81-116	J	6010C
Selenium	180		3.4	U	201	90	78-111		6010C
Silver	4.47		0.68	U	5.02	89	82-112		6010C
Sodium	4880		68	J	5020	96	83-118		6010C
Thallium	169		2.8	U	201	84	83-111		6010C
Vanadium	66.9		14		50.2	106	82-114		6010C
Zinc	87.4		42		50.2	90	82-113		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: SS025-SS01 MS
Lab ID: 280-97803-1 MS
Lab Name: TestAmerica Denver
Job No.: 280-97803-1
SDG No.:
Matrix: Solid
Concentration Units: ug/Kg
% Solids: 83.2

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	525		24		462	108	80-124		7471A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: SS025-SS01 MSD
Lab ID: 280-97803-1 MSD
Lab Name: TestAmerica Denver
Job No.: 280-97803-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 83.2

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	12600		226	2164	74-119	12	20	4	6010C
Antimony	28.3		56.6	50	79-114	6	20	J	6010C
Arsenic	109		113	91	82-111	13	20		6010C
Barium	255		226	98	83-113	12	20		6010C
Beryllium	5.57		5.66	93	83-113	13	20		6010C
Cadmium	10.8		11.3	94	82-113	13	20		6010C
Calcium	13600		5660	64	81-116	9	20	J	6010C
Chromium	34.0		22.6	109	85-113	14	20		6010C
Cobalt	55.3		56.6	88	85-112	14	20		6010C
Copper	52.3		28.3	104	81-117	14	20		6010C
Iron	17600		113	1579	81-118	13	20	4	6010C
Lead	58.5		56.6	87	81-112	11	20		6010C
Magnesium	10400		5660	99	78-115	16	20		6010C
Manganese	715		56.6	159	84-114	9	20	4	6010C
Nickel	62.2		56.6	89	83-113	15	20		6010C
Potassium	7890		5660	121	81-116	11	20	J	6010C
Selenium	205		226	91	78-111	13	20		6010C
Silver	5.14		5.66	91	82-112	14	20		6010C
Sodium	5520		5660	96	83-118	12	20		6010C
Thallium	192		226	85	83-111	13	20		6010C
Vanadium	74.4		56.6	107	82-114	11	20		6010C
Zinc	100		56.6	103	82-113	14	20		6010C

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: SS025-SS01 MSD
Lab ID: 280-97803-1 MSD
Lab Name: TestAmerica Denver
Job No.: 280-97803-1
SDG No.:
Matrix: Solid
Concentration Units: ug/Kg
% Solids: 83.2

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	503		445	108	80-124	4	20		7471A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: SS025-SS01 PDS | Lab ID: 280-97803-1 PDS

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Matrix: Solid | Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	7640		7700		113	-66	80-120	J	6010C
Antimony	9.49		1.7	U	11.3	84	80-120		6010C
Arsenic	25.6		6.2		22.6	86	80-120		6010C
Barium	42.5		33		11.3	82	80-120		6010C
Beryllium	5.35		0.33	J	5.66	89	80-120		6010C
Cadmium	5.30		0.20	J	5.66	90	80-120		6010C
Calcium	11800		10000		2260	78	80-120	J	6010C
Chromium	14.1		9.4		5.66	83	80-120		6010C
Cobalt	10.0		5.3		5.66	84	80-120		6010C
Copper	27.8		23		5.66	89	80-120		6010C
Iron	15700		16000		113	-119	80-120	J	6010C
Lead	18.7		9.6		11.3	81	80-120		6010C
Magnesium	6690		4800		2260	85	80-120		6010C
Manganese	621		620		5.66	-71	80-120	J	6010C
Nickel	16.3		12		5.66	83	80-120		6010C
Potassium	3130		1100		2260	91	80-120		6010C
Selenium	20.3		3.4	U	22.6	90	80-120		6010C
Silver	5.10		0.68	U	5.66	90	80-120		6010C
Sodium	2400		68	J	2260	103	80-120		6010C
Thallium	20.0		2.8	U	22.6	88	80-120		6010C
Vanadium	19.0		14		5.66	90	80-120		6010C
Zinc	61.7		42		22.6	87	80-120		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: SS025-SS01 PDS | Lab ID: 280-97803-1 PDS

Lab Name: TestAmerica Denver | Job No.: 280-97803-1

SDG No.:

Matrix: Solid | Concentration Units: ug/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	395		24		340	109	80-120		7471A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 280-375991/2-A

Lab Name: TestAmerica Denver Job No.: 280-97803-1

Sample Matrix: Solid LCS Source: ICP SPK 2B_00062

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Antimony	50.0	46.9		94	79	114		6010C
Arsenic	100	96.0		96	82	111		6010C
Barium	200	191		95	83	113		6010C
Beryllium	5.00	4.72		94	83	113		6010C
Cadmium	10.0	9.77		98	82	113		6010C
Calcium	5000	4610		92	81	116		6010C
Chromium	20.0	18.7		93	85	113		6010C
Cobalt	50.0	46.3		93	85	112		6010C
Copper	25.0	25.1		100	81	117		6010C
Iron	100	102		102	81	118		6010C
Lead	50.0	46.4		93	81	112		6010C
Magnesium	5000	4620		92	78	115		6010C
Manganese	50.0	46.8		94	84	114		6010C
Nickel	50.0	45.7		91	83	113		6010C
Potassium	5000	4840		97	81	116		6010C
Silver	5.00	4.73		95	82	112		6010C
Thallium	200	185		93	83	111		6010C
Vanadium	50.0	47.4		95	82	114		6010C
Zinc	50.0	46.4		93	82	113		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 280-375991/2-A

Lab Name: TestAmerica Denver Job No.: 280-97803-1

Sample Matrix: Solid LCS Source: ICP SPK 3A_00133

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	200	190		95	74	119		6010C
Selenium	200	189		95	78	111		6010C
Sodium	5000	5020		100	83	118		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 280-376183/2-A

Lab Name: TestAmerica Denver Job No.: 280-97803-1

Sample Matrix: Solid LCS Source: Hg Daily Spk_01936

Analyte	Solid(ug/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	333	307		92	80	124		7471A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 280-97803-1

SDG No:

Lab Name: TestAmerica Denver Job No: 280-97803-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	7700		8120		5.2	D	6010C
Antimony	1.7	U	8.5	U	NC		6010C
Arsenic	6.2		14	U	NC		6010C
Barium	33		36.3		NC	D	6010C
Beryllium	0.33	J	0.441	J	NC	D	6010C
Cadmium	0.20	J	0.85	U	NC		6010C
Calcium	10000		11100		10	D	6010C
Chromium	9.4		10.4	J	NC	D	6010C
Cobalt	5.3		5.69	J	NC	D	6010C
Copper	23		25.4	J	NC	D	6010C
Iron	16000		17000		7.7	D	6010C
Lead	9.6		10.4		NC	D	6010C
Magnesium	4800		5290		11	D V	6010C
Manganese	620		687		9.9	D	6010C
Nickel	12		12.6	J	NC	D	6010C
Potassium	1100		1140	J	NC	D	6010C
Selenium	3.4	U	17	U	NC		6010C
Silver	0.68	U	3.4	U	NC		6010C
Sodium	68	J	1100	U	NC		6010C
Thallium	2.8	U	14	U	NC		6010C
Vanadium	14		15.2		NC	D	6010C
Zinc	42		47.2		NC	D	6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 280-97803-1

SDG No:

Lab Name: TestAmerica Denver Job No: 280-97803-1

Matrix: Solid Concentration Units: ug/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Mercury	24		91	U	NC		7471A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Denver Job Number: 280-97803-1

SDG Number:

Matrix: Solid Instrument ID: MT_025

Method: 6010C DL Date: 12/22/2016 00:00

Prep Method: 3050B

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Aluminum	167	50	1.55
Antimony	206.8	2	0.733
Arsenic	189	2.5	0.665
Barium	455.4	2	0.104
Beryllium	313	0.5	0.033
Cadmium	228.8	0.5	0.041
Calcium	317.9	100	14.1
Chromium	205.5	3.5	0.058
Cobalt	228.6	1	0.1
Copper	324.7	5	0.217
Iron	259.9	80	3.8
Lead	220.3	0.9	0.31
Magnesium	279	30	3.7
Manganese	257.6	4.5	0.1
Nickel	231.6	4	0.132
Potassium	766.4	300	41
Selenium	196	3	0.86
Silver	328	1.5	0.16
Sodium	589.5	500	59
Thallium	190.8	3	0.65
Vanadium	292.4	2	0.094
Zinc	206.2	8	0.398

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Denver Job Number: 280-97803-1

SDG Number:

Matrix: Solid Instrument ID: MT_025

Method: 6010C XMDL Date: 12/22/2016 00:00

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Aluminum		300	18
Antimony		20	5.17
Arsenic		25	4.41
Barium		10	0.82
Beryllium		1.5	0.474
Cadmium		5	0.452
Calcium		1000	34.5
Chromium		15	0.663
Cobalt		15	1.23
Copper		15	4.2
Iron		100	22
Lead		15	2.74
Magnesium		500	10.7
Manganese		10	0.264
Nickel		40	2.56
Potassium		3000	237
Selenium		22	4.86
Silver		15	0.933
Sodium		5000	117
Thallium		40	4.91
Vanadium		15	1.11
Zinc		150	4.53

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Denver Job Number: 280-97803-1

SDG Number:

Matrix: Solid Instrument ID: MT_033

Method: 7471A DL Date: 02/16/2014 00:00

Prep Method: 7471A

Analyte	Wavelength/ Mass	LOQ (ug/Kg)	DL (ug/Kg)
Mercury		17	5.53

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Denver Job Number: 280-97803-1

SDG Number:

Matrix: Solid Instrument ID: MT_033

Method: 7471A XMDL Date: 02/16/2014 00:00

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.027

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 280-97803-1

SDG No.:

ICP-AES Instrument ID: MT_025 Date: 02/14/2017

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
Aluminum	167.079													0.001157	
Aluminum	309.271														
Antimony	206.833		0.000021						-0.000010			0.009455		-0.000057	
Arsenic	189.042		-0.000026						0.000005			0.000564		-0.000020	
Barium	455.403														
Beryllium	313.042														
Bismuth	223.061		-0.000012			-0.000360						0.001346		0.000174	
Boron	208.959														
Cadmium	228.802			0.005241		-0.000082					0.000036				
Calcium	317.933										-0.000132				
Chromium	205.552						-0.000930								
Cobalt	228.616					0.000052						0.000001			
Copper	324.754													0.000010	
Iron	259.940														
Iron	271.441										0.076500				
Lead	220.353		-0.000073					-0.000040	-0.000011		-0.000742		0.000658	0.000003	
Lithium	670.784								0.000009						
Magnesium	279.079													0.000149	
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604						-0.000094		-0.000007		-0.000384			0.000021	
Phosphorus	178.284														
Potassium	766.490														
Selenium	196.090		0.000039						-0.000005					0.000013	
Silicon	288.158											-0.013955			
Silver	328.068														
Sodium	589.592														
Sodium	818.326														
Strontium	407.771								0.000067						
Sulfur	182.034		-0.000049						0.000017						

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 280-97803-1

SDG No.:

ICP-AES Instrument ID: MT_025 Date: 02/14/2017

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
Thallium	190.856		-0.000001						0.000002		0.001114	0.000274		-0.000033	
Thorium	283.730									0.000025		0.000144		0.000720	
Tin	189.989														
Titanium	334.904								0.000005			0.000255			
Uranium	370.152				0.001475				-0.000012			-0.003937		-0.000628	
Vanadium	292.402													0.000006	
Zinc	206.200							-0.000075				-0.000468			
Zirconium	339.198													-0.000036	

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 280-97803-1

SDG No.:

ICP-AES Instrument ID: MT_025 Date: 02/14/2017

Analyte	Wave Length	Li	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	SiO2	Sn	Sr
Aluminum	309.271		0.001655												
Aluminum	167.079														
Antimony	206.833						-0.000251					0.000031	0.000031	0.000093	
Arsenic	189.042				0.000879							-0.000100	-0.000100		
Barium	455.403														
Beryllium	313.042														
Bismuth	223.061														
Boron	208.959				0.036727										
Cadmium	228.802														
Calcium	317.933														
Chromium	205.552														
Cobalt	228.616			-0.000001	-0.001642		0.000125								
Copper	324.754				0.000377										
Iron	259.940														
Iron	271.441		0.000330												
Lead	220.353				-0.000474		0.000027					0.000246	0.000246		
Lithium	670.784														
Magnesium	279.079			-0.004762											
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604				0.000080										
Phosphorus	178.284				-0.001297										
Potassium	766.490														
Selenium	196.090			0.000474											
Silicon	288.158				-0.001696										
Silver	328.068			0.000114	-0.000029										
Sodium	818.326														
Sodium	589.592														
Strontium	407.771														
Sulfur	182.034			0.000590	-0.007495										

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 280-97803-1

SDG No.:

ICP-AES Instrument ID: MT_025 Date: 02/14/2017

Analyte	Wave Length	Li	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	SiO2	Sn	Sr
Thallium	190.856			0.000104											
Thorium	283.730		-0.000006		0.001202		0.000116								
Tin	189.989														
Titanium	334.904		0.000001		0.000220										
Uranium	370.152														
Vanadium	292.402			-0.000132	-0.016697										
Zinc	206.200				0.000123										
Zirconium	339.198				0.000270										

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 280-97803-1

SDG No.:

ICP-AES Instrument ID: MT_025 Date: 02/14/2017

Analyte	Wave Length	Th	Ti	Tl	U	V	Zn	Zr							
Aluminum	167.079														
Aluminum	309.271														
Antimony	206.833		0.000161		-0.001924	0.000070		-0.000720							
Arsenic	189.042														
Barium	455.403							0.000631							
Beryllium	313.042		0			0.000449									
Bismuth	223.061				-0.003000										
Boron	208.959														
Cadmium	228.802				-0.000172										
Calcium	317.933	0.000027													
Chromium	205.552														
Cobalt	228.616		0.002396		0.000180										
Copper	324.754	0.003648	-0.000473		-0.000990	-0.000078		-0.003223							
Iron	259.940														
Iron	271.441					-0.209000		-0.033							
Lead	220.353		-0.000058		0.001102			-0.000169							
Lithium	670.784														
Magnesium	279.079		0.000196		-0.006018										
Manganese	257.610				0.000099										
Molybdenum	202.030				-0.000094										
Nickel	231.604														
Phosphorus	178.284				0.000030										
Potassium	766.490														
Selenium	196.090	-0.000057			-0.000758										
Silicon	288.158														
Silver	328.068	0.000214			0.0010386			0.003966							
Sodium	589.592														
Sodium	818.326														
Strontium	407.771														
Sulfur	182.034	0.000409				-0.001026									

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 280-97803-1

SDG No.:

ICP-AES Instrument ID: MT_025 Date: 02/14/2017

Analyte	Wave Length	Th	Ti	Tl	U	V	Zn	Zr							
Thallium	190.856	-0.000005			0.000038	0.000659									
Thorium	283.730				0.026785			0.003118							
Tin	189.989	-0.000081	-0.000188		0.000171										
Titanium	334.904	0.006776			-0.000731										
Uranium	370.152		0.007353												
Vanadium	292.402	0.001165	0.000643		-0.001180										
Zinc	206.200														
Zirconium	339.198	0.044492			-0.000206										

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Denver Job No: 280-97803-1

SDG No.:

Instrument ID: MT_025 Date: 04/05/2017 13:53

Analyte	Integ. Time (Sec.)	Concentration (mg/L)	Method
Aluminum		900	6010C
Antimony		45	6010C
Arsenic		45	6010C
Barium		45	6010C
Beryllium		18	6010C
Cadmium		18	6010C
Calcium		900	6010C
Chromium		45	6010C
Cobalt		45	6010C
Copper		45	6010C
Iron		1800	6010C
Lead		180	6010C
Magnesium		1350	6010C
Manganese		18	6010C
Nickel		45	6010C
Potassium		450	6010C
Selenium		45	6010C
Silver		1.8	6010C
Sodium		9000	6010C
Thallium		45	6010C
Vanadium		45	6010C
Zinc		45	6010C

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 280-375991/1-A	06/06/2017 07:01	375991	1		100
LCS 280-375991/2-A	06/06/2017 07:01	375991	1		100
280-97803-1	06/06/2017 07:01	375991	1.063		100
280-97803-1 MS	06/06/2017 07:01	375991	1.198		100
280-97803-1 MSD	06/06/2017 07:01	375991	1.062		100
280-97803-4	06/06/2017 07:01	375991	1.055		100
280-97803-5	06/06/2017 07:01	375991	1.265		100
280-97803-6	06/06/2017 07:01	375991	1.199		100
280-97803-7	06/06/2017 07:01	375991	1.107		100
280-97803-8	06/06/2017 07:01	375991	1.173		100
280-97803-9	06/06/2017 07:01	375991	1.376		100
280-97803-10	06/06/2017 07:01	375991	1.147		100
280-97803-11	06/06/2017 07:01	375991	1.344		100
280-97803-12	06/06/2017 07:01	375991	1.041		100
280-97803-13	06/06/2017 07:01	375991	1.172		100
280-97803-14	06/06/2017 07:01	375991	1.102		100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Prep Method: 7471A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 280-376183/1-A	06/06/2017 11:48	376183	0.6		50
LCS 280-376183/2-A	06/06/2017 11:48	376183	0.6		50
280-97803-1	06/06/2017 11:48	376183	0.53		50
280-97803-1 MS	06/06/2017 11:48	376183	0.52		50
280-97803-1 MSD	06/06/2017 11:48	376183	0.54		50
280-97803-4	06/06/2017 11:48	376183	0.50		50
280-97803-5	06/06/2017 11:48	376183	0.56		50
280-97803-6	06/06/2017 11:48	376183	0.59		50
280-97803-7	06/06/2017 11:48	376183	0.52		50
280-97803-8	06/06/2017 11:48	376183	0.59		50
280-97803-9	06/06/2017 11:48	376183	0.54		50
280-97803-10	06/06/2017 11:48	376183	0.51		50
280-97803-11	06/06/2017 11:48	376183	0.60		50
280-97803-12	06/06/2017 11:48	376183	0.60		50
280-97803-13	06/06/2017 11:48	376183	0.54		50
280-97803-14	06/06/2017 11:48	376183	0.55		50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 06/06/2017 11:12 End Date: 06/06/2017 21:44

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Ni	Pb	Sb	Tl	V	Zn							
ICIS 280-376356/1	1		11:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
IC 280-376356/2			11:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
IC 280-376356/3			11:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
ZZZZZZ			11:20																									
ZZZZZZ			11:23																									
ICVH 280-376356/6	1		11:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
ICVH 280-376356/7	1		11:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
ICV 280-376356/8	1		11:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
ICV 280-376356/9	1		11:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
ICVL 280-376356/10	1		11:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCVH 280-376356/11			11:41																									
CCV 280-376356/12			11:43																									
ICB 280-376356/13	1		11:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CRI 280-376356/14	1		11:48	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X		X	X							
ZZZZZZ			11:56																									
CRI 280-376356/16	1		12:00																									
CRI 280-376356/17	1		12:08																	X								
CRI 280-376356/18	1		12:14										X															
ICSA 280-376356/19	1		12:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
ICSAB 280-376356/20	1		12:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
LRA 280-376356/21			12:26																									
CCVH 280-376356/22			12:29																									
CCV 280-376356/23			12:31																									
CCB 280-376356/24			12:34																									
CCVL 280-376356/25			12:37																									
CCVH 280-376356/26	1		17:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCV 280-376356/27	1		17:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCB 280-376356/28	1		17:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCVL 280-376356/29	1		17:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
MB 280-375991/1-A	1	T	17:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
LCS 280-375991/2-A	1	T	17:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
280-97803-1	1	T	17:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
280-97803-1 SD	5	T	17:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
280-97803-1 MS	1	T	17:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
280-97803-1 MSD	1	T	17:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
280-97803-1 PDS	1	T	17:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
280-97803-4	1	T	17:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
280-97803-5	1	T	17:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
280-97803-6	1	T	17:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCVH 280-376356/40	1		18:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCV 280-376356/41	1		18:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCB 280-376356/42	1		18:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 06/06/2017 11:12 End Date: 06/06/2017 21:44

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Ni	Pb	Sb	Tl	V	Zn							
CCVL 280-376356/43	1		18:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
280-97803-7	1	T	18:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
280-97803-8	1	T	18:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
280-97803-9	1	T	18:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
280-97803-10	1	T	18:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
280-97803-11	1	T	18:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
280-97803-12	1	T	18:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
280-97803-13	1	T	18:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
280-97803-14	1	T	18:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCVH 280-376356/52	1		18:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCV 280-376356/53	1		18:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCB 280-376356/54	1		18:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
CCVL 280-376356/55	1		18:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
ZZZZZZ			18:42																									
ZZZZZZ			18:44																									
ZZZZZZ			18:47																									
ZZZZZZ			18:49																									
ZZZZZZ			18:52																									
ZZZZZZ			18:54																									
ZZZZZZ			18:57																									
CCVH 280-376356/63			18:59																									
CCV 280-376356/64			19:02																									
CCB 280-376356/65			19:04																									
CCVL 280-376356/66			19:07																									
ZZZZZZ			19:10																									
ZZZZZZ			19:12																									
ZZZZZZ			19:15																									
ZZZZZZ			19:17																									
CCVH 280-376356/71			19:20																									
CCV 280-376356/72			19:22																									
CCB 280-376356/73			19:25																									
CCVL 280-376356/74			19:28																									
ZZZZZZ			19:30																									
ZZZZZZ			19:33																									
ZZZZZZ			19:35																									
ZZZZZZ			19:38																									
ZZZZZZ			19:40																									
ZZZZZZ			19:43																									
ZZZZZZ			19:45																									
ZZZZZZ			19:48																									
CCVH 280-376356/83			19:50																									
CCV 280-376356/84			19:53																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 06/06/2017 11:12 End Date: 06/06/2017 21:44

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Ni	Pb	Sb	Tl	V	Zn								
CCB 280-376356/85			19:55																											
CCVL 280-376356/86			19:58																											
ZZZZZZ			20:01																											
ZZZZZZ			20:03																											
ZZZZZZ			20:06																											
ZZZZZZ			20:09																											
ZZZZZZ			20:11																											
ZZZZZZ			20:15																											
ZZZZZZ			20:17																											
CCVH 280-376356/94			20:19																											
CCV 280-376356/95			20:22																											
CCB 280-376356/96			20:24																											
CCVL 280-376356/97			20:27																											
ZZZZZZ			20:30																											
ZZZZZZ			20:32																											
ZZZZZZ			20:35																											
ZZZZZZ			20:37																											
ZZZZZZ			20:40																											
ZZZZZZ			20:42																											
ZZZZZZ			20:45																											
CCVH 280-376356/105			20:47																											
CCV 280-376356/106			20:50																											
CCB 280-376356/107			20:52																											
CCVL 280-376356/108			20:55																											
ZZZZZZ			20:58																											
ZZZZZZ			21:00																											
ZZZZZZ			21:03																											
ZZZZZZ			21:06																											
ZZZZZZ			21:08																											
ZZZZZZ			21:11																											
CCVH 280-376356/115			21:14																											
CCV 280-376356/116			21:16																											
CCB 280-376356/117			21:19																											
CCVL 280-376356/118			21:21																											
ZZZZZZ			21:24																											
ZZZZZZ			21:26																											
ZZZZZZ			21:29																											
ZZZZZZ			21:32																											
ZZZZZZ			21:34																											
CCVH 280-376356/124			21:37																											
CCV 280-376356/125			21:39																											
CCB 280-376356/126			21:42																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 06/06/2017 11:12 End Date: 06/06/2017 21:44

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ag	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Ni	Pb	Sb	Tl	V	Zn								
CCVL 280-376356/127			21:44																											

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 06/07/2017 08:58 End Date: 06/07/2017 13:48

Lab Sample Id	D/F	Type	Time	Analytes																										
				Al	Na	Se																								
ICIS 280-376450/1	1		08:58	X	X	X																								
IC 280-376450/2			09:01	X	X	X																								
IC 280-376450/3			09:03	X	X	X																								
ZZZZZZ			09:06																											
ZZZZZZ			09:08																											
ICVH 280-376450/6	1		09:11	X	X	X																								
ICVH 280-376450/7	1		09:14	X	X	X																								
ZZZZZZ			09:18																											
ICV 280-376450/9	1		09:25	X	X	X																								
ICV 280-376450/10	1		09:27	X	X	X																								
ICVL 280-376450/11	1		09:32	X	X	X																								
CCVH 280-376450/12			09:39																											
CCV 280-376450/13			09:41																											
ICB 280-376450/14	1		09:44	X	X	X																								
CRI 280-376450/15	1		09:47	X	X																									
CRI 280-376450/16			09:54																											
CRI 280-376450/17	1		10:01			X																								
ICSA 280-376450/18	1		10:08	X	X	X																								
ICSAB 280-376450/19	1		10:11	X	X	X																								
LRA 280-376450/20			10:13																											
CCVH 280-376450/21			10:16																											
CCV 280-376450/22			10:19																											
CCB 280-376450/23			10:22																											
CCVL 280-376450/24			10:25																											
ZZZZZZ			10:29																											
ZZZZZZ			10:32																											
ZZZZZZ			10:34																											
ZZZZZZ			10:37																											
ZZZZZZ			10:39																											
ZZZZZZ			10:42																											
ZZZZZZ			10:44																											
ZZZZZZ			10:47																											
CCVH 280-376450/33			10:49																											
CCV 280-376450/34			10:52																											
CCB 280-376450/35			10:54																											
CCVL 280-376450/36			10:57																											
ZZZZZZ			10:59																											
ZZZZZZ			11:02																											
ZZZZZZ			11:05																											
ZZZZZZ			11:07																											
ZZZZZZ			11:10																											
ZZZZZZ			11:13																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 06/07/2017 08:58 End Date: 06/07/2017 13:48

Lab Sample Id	D/F	Type	Time	Analytes																										
				Al	Na	Se																								
ZZZZZZ			11:15																											
ZZZZZZ			11:18																											
CCVH 280-376450/45			11:20																											
CCV 280-376450/46			11:23																											
CCB 280-376450/47			11:25																											
CCVL 280-376450/48			11:28																											
ZZZZZZ			11:31																											
ZZZZZZ			11:34																											
ZZZZZZ			11:36																											
ZZZZZZ			11:39																											
ZZZZZZ			11:42																											
ZZZZZZ			11:44																											
ZZZZZZ			11:46																											
ZZZZZZ			11:49																											
ZZZZZZ			11:52																											
CCVH 280-376450/58	1		11:54	X	X	X																								
CCV 280-376450/59	1		11:57	X	X	X																								
CCB 280-376450/60	1		11:59	X	X	X																								
CCVL 280-376450/61	1		12:02	X	X	X																								
MB 280-375991/1-A	1	T	12:05	X	X	X																								
LCS 280-375991/2-A	1	T	12:07	X	X	X																								
280-97803-1	1	T	12:10	X	X	X																								
280-97803-1 SD	5	T	12:12	X	X	X																								
280-97803-1 MS	1	T	12:15	X	X	X																								
280-97803-1 MSD	1	T	12:17	X	X	X																								
280-97803-1 PDS	1	T	12:20	X	X	X																								
280-97803-4	1	T	12:22	X	X	X																								
280-97803-5	1	T	12:25	X	X	X																								
280-97803-6	1	T	12:27	X	X	X																								
CCVH 280-376450/72	1		12:30	X	X	X																								
CCV 280-376450/73	1		12:33	X	X	X																								
CCB 280-376450/74	1		12:35	X	X	X																								
CCVL 280-376450/75	1		12:38	X	X	X																								
280-97803-7	1	T	12:40	X	X	X																								
280-97803-8	1	T	12:43	X	X	X																								
280-97803-9	1	T	12:45	X	X	X																								
280-97803-10	1	T	12:48	X	X	X																								
280-97803-11	1	T	12:50	X	X	X																								
280-97803-12	1	T	12:53	X	X	X																								
280-97803-13	1	T	12:56	X	X	X																								
280-97803-14	1	T	12:58	X	X	X																								
ZZZZZZ			13:01																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 06/07/2017 08:58 End Date: 06/07/2017 13:48

Lab Sample Id	D/F	Type	Time	Analytes																										
				Al	Na	Se																								
ZZZZZZ			13:04																											
CCVH 280-376450/86	1		13:06	X	X	X																								
CCV 280-376450/87	1		13:08		X	X																								
CCB 280-376450/88	1		13:11	X	X	X																								
CCVL 280-376450/89	1		13:14	X	X	X																								
ZZZZZZ			13:16																											
ZZZZZZ			13:19																											
ZZZZZZ			13:21																											
ZZZZZZ			13:24																											
ZZZZZZ			13:26																											
ZZZZZZ			13:29																											
ZZZZZZ			13:31																											
ZZZZZZ			13:34																											
ZZZZZZ			13:36																											
CCVH 280-376450/99			13:40																											
CCV 280-376450/100			13:43																											
CCB 280-376450/101			13:45																											
CCVL 280-376450/102			13:48																											

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: MT_033 Analysis Method: 7471A

Start Date: 06/06/2017 13:42 End Date: 06/06/2017 16:45

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
STD0 280-376375/1 IC			13:42	X																								
STD1 280-376375/2 IC			13:44	X																								
STD2 280-376375/3 IC			13:47	X																								
STD3 280-376375/4 IC			13:49	X																								
STD4 280-376375/5 IC			13:51	X																								
STD5 280-376375/6 IC			13:53	X																								
STD6 280-376375/7 IC			13:56	X																								
ICV 280-376375/8	1		14:03	X																								
ICB 280-376375/9	1		14:05	X																								
CRA 280-376375/10			14:07																									
CCV 280-376375/11	1		14:09	X																								
CCB 280-376375/12	1		14:12	X																								
ZZZZZZ			14:14																									
ZZZZZZ			14:16																									
ZZZZZZ			14:18																									
ZZZZZZ			14:22																									
MB 280-376183/1-A	1	T	14:24	X																								
LCS 280-376183/2-A	1	T	14:27	X																								
ZZZZZZ			14:29																									
ZZZZZZ			14:31																									
280-97803-1	1	T	14:33	X																								
280-97803-1 SD	5	T	14:36	X																								
CCV 280-376375/23	1		14:38	X																								
CCB 280-376375/24	1		14:40	X																								
280-97803-1 MS	1	T	14:42	X																								
280-97803-1 MSD	1	T	14:45	X																								
280-97803-1 PDS	1	T	14:47	X																								
280-97803-4	1	T	14:49	X																								
280-97803-5	1	T	14:51	X																								
280-97803-6	1	T	14:53	X																								
280-97803-7	1	T	14:56	X																								
280-97803-8	1	T	14:58	X																								
280-97803-9	1	T	15:00	X																								
280-97803-10	1	T	15:02	X																								
CCV 280-376375/35	1		15:04	X																								
CCB 280-376375/36	1		15:07	X																								
280-97803-11	1	T	15:09	X																								
280-97803-12	1	T	15:11	X																								
280-97803-13	1	T	15:13	X																								
280-97803-14	1	T	15:16	X																								
ZZZZZZ			15:18																									
ZZZZZZ			15:20																									

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: MT_033 Analysis Method: 7471A

Start Date: 06/06/2017 13:42 End Date: 06/06/2017 16:45

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
ZZZZZZ			15:22																									
ZZZZZZ			15:24																									
ZZZZZZ			15:27																									
ZZZZZZ			15:29																									
CCV 280-376375/47	1		15:31	X																								
CCB 280-376375/48	1		15:33	X																								
ZZZZZZ			15:36																									
ZZZZZZ			15:38																									
ZZZZZZ			15:40																									
ZZZZZZ			15:42																									
ZZZZZZ			15:44																									
ZZZZZZ			15:47																									
ZZZZZZ			15:49																									
ZZZZZZ			15:51																									
ZZZZZZ			15:53																									
ZZZZZZ			15:56																									
CCV 280-376375/59			15:58																									
CCB 280-376375/60			16:00																									
ZZZZZZ			16:02																									
ZZZZZZ			16:04																									
ZZZZZZ			16:07																									
ZZZZZZ			16:09																									
ZZZZZZ			16:11																									
ZZZZZZ			16:13																									
ZZZZZZ			16:16																									
ZZZZZZ			16:18																									
ZZZZZZ			16:20																									
ZZZZZZ			16:22																									
CCV 280-376375/71			16:25																									
CCB 280-376375/72			16:27																									
ZZZZZZ			16:29																									
ZZZZZZ			16:31																									
ZZZZZZ			16:33																									
ZZZZZZ			16:36																									
ZZZZZZ			16:40																									
CCV 280-376375/78			16:42																									
CCB 280-376375/79			16:45																									

Prep Types:
T = Total/NA

FORM XIII-IN

METALS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 375991 Batch Start Date: 06/06/17 07:01 Batch Analyst: Baca, Tessa E

Batch Method: 3050B Batch End Date: 06/06/17 12:01

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	InitialAmount	FinalAmount	ICP SPK 2B 00062	ICP SPK 3A 00133	AnalysisComment
MB 280-375991/1		3050B, 6010C		CALC NOT SET TO RUN	1 g	100 mL			Actual: 1.300
LCS 280-375991/2		3050B, 6010C		CALC NOT SET TO RUN	1 g	100 mL	1 mL	1 mL	Actual: 1.240
280-97803-A-1	SS025-SS01	3050B, 6010C	T	CALC NOT SET TO RUN	1.063 g	100 mL			
280-97803-A-1 MS	SS025-SS01	3050B, 6010C	T	CALC NOT SET TO RUN	1.198 g	100 mL	1 mL	1 mL	
280-97803-A-1 MSD	SS025-SS01	3050B, 6010C	T	CALC NOT SET TO RUN	1.062 g	100 mL	1 mL	1 mL	
280-97803-A-4	SS025-SS02	3050B, 6010C	T	CALC NOT SET TO RUN	1.055 g	100 mL			
280-97803-A-5	SS025-SB02(0-2)	3050B, 6010C	T	CALC NOT SET TO RUN	1.265 g	100 mL			
280-97803-A-6	SS025-SS03	3050B, 6010C	T	CALC NOT SET TO RUN	1.199 g	100 mL			
280-97803-A-7	SS025-SB03(0-2)	3050B, 6010C	T	CALC NOT SET TO RUN	1.107 g	100 mL			
280-97803-A-8	SS025-SS04	3050B, 6010C	T	CALC NOT SET TO RUN	1.173 g	100 mL			
280-97803-A-9	SS025-SB04(0-2)	3050B, 6010C	T	CALC NOT SET TO RUN	1.376 g	100 mL			
280-97803-A-10	SS025-SS05	3050B, 6010C	T	CALC NOT SET TO RUN	1.147 g	100 mL			
280-97803-A-11	SS025-SB05(0-2)	3050B, 6010C	T	CALC NOT SET TO RUN	1.344 g	100 mL			
280-97803-A-12	SS025-SB05(2-4)	3050B, 6010C	T	CALC NOT SET TO RUN	1.041 g	100 mL			
280-97803-A-13	SS025-SS06	3050B, 6010C	T	CALC NOT SET TO RUN	1.172 g	100 mL			
280-97803-A-14	SS025-SS06-a	3050B, 6010C	T	CALC NOT SET TO RUN	1.102 g	100 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 375991 Batch Start Date: 06/06/17 07:01 Batch Analyst: Baca, Tessa E

Batch Method: 3050B Batch End Date: 06/06/17 12:01

Batch Notes	
Balance ID	26950384
Filter Paper ID	9752724
Hydrogen Peroxide ID	0000134024-01/31
Lot # of hydrochloric acid	000151528-07/21
Lot # of Nitric Acid	0000160739-06/21
Hot Block ID	11
Oven, Bath or Block Temperature 1	90 Degrees C
Oven, Bath or Block Temperature 2	91 Degrees C
Pipette ID	MET-89
Thermometer ID	QA-30
Digestion Tube/Cup ID	1610138
Uncorrected Temperature	90 Celsius
Uncorrected Temperature 2	91 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 376183 Batch Start Date: 06/06/17 11:48 Batch Analyst: Henning, Christopher D

Batch Method: 7471A Batch End Date: 06/06/17 12:18

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Hg Daily Spk 01936	AnalysisComment		
MB 280-376183/1		7471A, 7471A		0.6 g	50 mL		Glass Beads: 0.56g		
LCS 280-376183/2		7471A, 7471A		0.6 g	50 mL	2 mL	Glass Beads: 0.54g		
280-97803-C-1	SS025-SS01	7471A, 7471A	T	0.53 g	50 mL				
280-97803-C-1 MS	SS025-SS01	7471A, 7471A	T	0.52 g	50 mL	2 mL			
280-97803-C-1 MSD	SS025-SS01	7471A, 7471A	T	0.54 g	50 mL	2 mL			
280-97803-C-4	SS025-SS02	7471A, 7471A	T	0.50 g	50 mL				
280-97803-A-5	SS025-SB02(0-2)	7471A, 7471A	T	0.56 g	50 mL				
280-97803-A-6	SS025-SS03	7471A, 7471A	T	0.59 g	50 mL				
280-97803-A-7	SS025-SB03(0-2)	7471A, 7471A	T	0.52 g	50 mL				
280-97803-A-8	SS025-SS04	7471A, 7471A	T	0.59 g	50 mL				
280-97803-A-9	SS025-SB04(0-2)	7471A, 7471A	T	0.54 g	50 mL				
280-97803-A-10	SS025-SS05	7471A, 7471A	T	0.51 g	50 mL				
280-97803-A-11	SS025-SB05(0-2)	7471A, 7471A	T	0.60 g	50 mL				
280-97803-A-12	SS025-SB05(2-4)	7471A, 7471A	T	0.60 g	50 mL				
280-97803-A-13	SS025-SS06	7471A, 7471A	T	0.54 g	50 mL				
280-97803-A-14	SS025-SS06-a	7471A, 7471A	T	0.55 g	50 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 376183 Batch Start Date: 06/06/17 11:48 Batch Analyst: Henning, Christopher D

Batch Method: 7471A Batch End Date: 06/06/17 12:18

Batch Notes	
Hydroxylamine Hydrochloride ID	164843-06/02/17
Aqua Regia ID	162118-06/01/17
Balance ID	24750837
Filter ID	9782091
Lot # of hydrochloric acid	162118-06/06/17
Lot # of Nitric Acid	160739-06/02/17
Hot Block ID	14
Potassium Permanganate ID	156411-06/06/17
NaCl ID	167535-04/12/17
Oven, Bath or Block Temperature 1	95 Celsius
Oven, Bath or Block Temperature 2	94 Celsius
Pipette ID	MET70
Stannous Chloride ID	169502-06/01/17
SOP Number	DVMT0016
Syringe ID	7031873
Thermometer ID	QA-9
Digestion Tube/Cup ID	1610138
Uncorrected Temperature	94 Celsius
Uncorrected Temperature 2	93 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Sample Name: ICIS Acquired: 6/6/2017 11:12:59 Type: Cal
Method: 6500_025 Mode: IR Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00133**	**.00219**	**-.02369**	**-.00046**	**.00070**	**.03027**	**-.00808**	**-.00270**	**.00135**	**-.00188**	**.00054**	**-.00106**
Stddev	.00003	.00023	.00039	.00027	.00019	.00131	.00109	.00002	.00034	.00003	.00029	.00023
%RSD	1.9320	10.549	1.6586	58.928	27.884	4.3391	13.439	.62807	25.007	1.3761	54.521	21.421
#1	-.00131	.00203	-.02341	-.00065	.00056	.03120	-.00731	-.00268	.00111	-.00190	.00075	-.00122
#2	-.00134	.00236	-.02397	-.00027	.00084	.02934	-.00885	-.00271	.00159	-.00186	.00033	-.00090

Elem	Cu3247	Fe2599	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00579**	**-.00119**	**.00011**	**-.00717**	**-.00424**	**.00017**	**.00009**	**-.00098**	**-.01508**	**.00098**	**.00329**	**-.00005**
Stddev	.00026	.00032	.00034	.00058	.00191	.00008	.00009	.00015	.00113	.00107	.00021	.00001
%RSD	4.4444	26.586	314.44	8.1159	44.970	44.781	105.30	15.473	7.4876	109.05	6.4692	13.709
#1	.00597	-.00142	.00034	-.00758	-.00559	.00022	.00015	-.00087	-.01428	.00022	.00345	-.00005
#2	.00561	-.00097	-.00013	-.00676	-.00289	.00011	.00002	-.00108	-.01588	.00173	.00314	-.00005

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00271**	**.00053**	**.00068**	**.00047**	**.00103**	**.00103**	**.00039**	**-.01053**	**-.00007**	**-.00037**	**-.00028**	**.00093**
Stddev	.00003	.00029	.00016	.00003	.00000	.00000	.00023	.00051	.00004	.00012	.00024	.00005
%RSD	.97863	54.163	23.985	7.0500	.37653	.37653	59.040	4.8151	52.699	34.069	85.997	4.9977
#1	-.00269	.00073	.00056	.00049	.00103	.00103	.00055	-.01088	-.00009	-.00028	-.00045	.00090
#2	-.00272	.00033	.00079	.00044	.00102	.00102	.00023	-.01017	-.00004	-.00045	-.00011	.00096

Elem	V_2924	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S
Avg	**-.00039**	**.00001**	**.00002**
Stddev	.00011	.00002	.00126
%RSD	27.915	129.45	6836.4
#1	-.00047	.00000	.00091
#2	-.00032	.00003	-.00087

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2011.0**	**46274.**	**4067.9**
Stddev	20.2	10.	13.4
%RSD	1.0020	.02193	.32882
#1	1996.8	46267.	4077.3
#2	2025.3	46281.	4058.4

Sample Name: ICAL1 Acquired: 6/6/2017 11:15:37 Type: Cal
Method: 6500_025 Mode: IR Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.20368**	**.12759**	**.07008**	**.26576**	**5.9526**	**5.8612**	**1.6451**	**1.7674**	**1.0073**	**.84875**	**.21705**	**.58539**	**3.3343**
Stddev	.00005	.00126	.00061	.00242	.0004	.0039	.0009	.0186	.0101	.01103	.00066	.00166	.0002
%RSD	.02633	.98629	.87486	.90963	.00637	.06586	.05586	1.0523	1.0020	1.2992	.30577	.28311	.00563
#1	.20364	.12848	.07052	.26747	5.9529	5.8639	1.6458	1.7805	1.0145	.85655	.21658	.58422	3.3342
#2	.20371	.12670	.06965	.26405	5.9524	5.8584	1.6445	1.7542	1.0002	.84096	.21752	.58656	3.3345

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.7620**	**.74520**	**.97798**	**.39141**	**1.4253**	**.68099**	**.08182**	**.42472**	**.17070**	**.06306**	**.25443**	**.25443**	**.18453**
Stddev	.0032	.00087	.00010	.00406	.0055	.00735	.00108	.00434	.00170	.00095	.00034	.00034	.00172
%RSD	.17938	.11731	.01036	1.0376	.38494	1.0793	1.3253	1.0210	.99855	1.5034	.13556	.13556	.93373
#1	1.7598	.74458	.97791	.39428	1.4214	.68618	.08259	.42779	.17190	.06373	.25468	.25468	.18575
#2	1.7643	.74582	.97805	.38854	1.4292	.67579	.08106	.42165	.16949	.06239	.25419	.25419	.18331

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**10.001**	**.30925**	**.13646**	**.16152**	**.01825**	**.32500**
Stddev	.002	.00022	.00187	.00020	.00002	.00149
%RSD	.02489	.07068	1.3698	.12499	.10836	.45716
#1	10.003	.30941	.13778	.16166	.01823	.32395
#2	9.9992	.30910	.13514	.16137	.01826	.32605

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1995.4**	**43614.**	**3975.9**
Stddev	45.4	308.	44.1
%RSD	2.2745	.70526	1.1091
#1	2027.5	43832.	4007.1
#2	1963.3	43397.	3944.7

Sample Name: ICAL2 Acquired: 6/6/2017 11:18:03 Type: Cal
Method: 6500_025 Mode: IR Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Al3092	Bi2230	Fe2714	Na8183	S_1820	Th2837	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4.4401**	**.25223**	**.58523**	**1.9063**	**.21321**	**.45212**	**.12353**
Stddev	.0181	.00486	.00024	.0120	.00481	.00072	.00042
%RSD	.40792	1.9270	.04062	.62944	2.2546	.16005	.34367
#1	4.4530	.25566	.58506	1.9148	.21660	.45263	.12383
#2	4.4273	.24879	.58539	1.8978	.20981	.45160	.12322

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1894.3**	**41190.**	**3821.9**
Stddev	19.9	67.	5.3
%RSD	1.0530	.16154	.13802
#1	1880.2	41237.	3818.2
#2	1908.4	41143.	3825.6

Sample Name: S1-4567763 Acquired: 6/6/2017 11:20:42 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99928**	**1.0108**	**1.9921**	**.99579**	**.99576**	**1.0032**	**.00099**	**9.9806**	**1.0022**	**.99941**	**.99522**	**1.0054**	**5.0291**
Stddev	.00176	.0105	.0096	.00578	.00511	.0057	.00744	.0525	.0083	.00850	.01107	.0001	.0171
%RSD	.17639	1.0386	.48338	.58080	.51340	.57281	752.16	.52643	.82999	.85009	1.1122	.01273	.34057
#1	1.0005	1.0183	1.9990	.99988	.99214	.99913	-.00427	9.9434	1.0081	1.0054	1.0030	1.0055	5.0170
#2	.99804	1.0034	1.9853	.99170	.99937	1.0073	.00625	10.018	.99631	.99340	.98739	1.0053	5.0412
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**99.951**	**1.9962**	**39.957**	**.99869**	**.99577**	**10.142**	**.99850**	**1.9996**	**1.9900**	**-.01005**	**1.9978**	**1.9839**	**10.077**
Stddev	.746	.0133	.125	.00007	.00816	.061	.00664	.0265	.0203	.00700	.0253	.0168	.133
%RSD	.74640	.66415	.31245	.00749	.81993	.60181	.66457	1.3250	1.0185	69.628	1.2649	.84775	1.3222
#1	99.423	1.9868	39.869	.99864	1.0015	10.099	1.0032	2.0183	2.0043	-.00510	2.0156	1.9958	9.9827
#2	100.48	2.0055	40.046	.99875	.99000	10.186	.99381	1.9809	1.9756	-.01500	1.9799	1.9720	10.171
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**21.565**	**1.9963**	**1.0007**	**.00936**	**.99907**	**1.9993**	**-.01795**	**.99725**	**1.0014**	**1.0048**
Stddev	.285	.0132	.0059	.00315	.00359	.0060	.05465	.00472	.0023	.0054
%RSD	1.3222	.65967	.58623	33.687	.35951	.29868	304.46	.47345	.23157	.53369
#1	21.363	2.0056	.99652	.01160	.99653	2.0035	-.05660	1.0006	.99974	1.0010
#2	21.766	1.9870	1.0048	.00713	1.0016	1.9951	.02070	.99391	1.0030	1.0085
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2007.7**	**44034.**	**4002.0**
Stddev	17.7	104.	80.2
%RSD	.88000	.23700	2.0029
#1	1995.2	44108.	4058.7
#2	2020.2	43960.	3945.3

Sample Name: S2-4569080 Acquired: 6/6/2017 11:23:09 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01297**	**100.93**	**-.00010**	**.00595**	**.00160**	**.00036**	**1.9751**	**.01148**	**.00017**	**-.00182**	**.00077**	**.04846**	**100.72**
Stddev	.00082	1.43	.00894	.00009	.00028	.00002	.0418	.00992	.00048	.00077	.00022	.00189	1.52
%RSD	6.2863	1.4205	9074.7	1.5695	17.336	5.7964	2.1146	86.400	290.09	42.439	27.812	3.8923	1.5129
#1	-.01240	101.94	-.00642	.00588	.00140	.00037	2.0047	.01850	-.00017	-.00127	.00062	.04980	101.80
#2	-.01355	99.914	.00622	.00601	.00179	.00034	1.9456	.00447	.00051	-.00237	.00093	.04713	99.640
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.03246**	**.00715**	**.13912**	**-.00292**	**-.00268**	**505.60**	**.00062**	**.01439**	**-.00161**	**9.9932**	**-.01205**	**-.01381**	**-.02133**
Stddev	.07426	.00215	.00251	.00001	.00050	8.50	.00043	.00328	.00126	.2143	.00057	.00767	.01003
%RSD	228.75	30.033	1.8014	.27676	18.705	1.6809	68.590	22.823	78.435	2.1445	4.7219	55.511	47.024
#1	-.08497	.00563	.14089	-.00292	-.00304	511.61	.00032	.01671	-.00250	10.145	-.01164	-.00839	-.01424
#2	.02005	.00867	.13734	-.00293	-.00233	499.59	.00092	.01206	-.00072	9.8417	-.01245	-.01924	-.02843
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.04565**	**-.00427**	**.00089**	**9.9349**	**.03534**	**.00311**	**20.065**	**.02992**	**.00455**	**.23625**
Stddev	.02147	.00107	.00017	.0620	.00071	.00288	.203	.00001	.00100	.00898
%RSD	47.024	25.097	19.057	.62378	1.9975	92.525	1.0137	.03418	22.082	3.7991
#1	-.03047	-.00503	.00101	9.9788	.03583	.00514	20.209	.02993	.00384	.24260
#2	-.06083	-.00351	.00077	9.8911	.03484	.00107	19.921	.02991	.00526	.22991
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1926.5**	**42041.**	**3868.8**
Stddev	6.8	526.	75.8
%RSD	.35125	1.2508	1.9597
#1	1921.8	41669.	3815.2
#2	1931.3	42413.	3922.4

Sample Name: ICVH-4569263 Acquired: 6/6/2017 11:25:48 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00344**	**41.213**	**-.00138**	**.00256**	**.00040**	**.00000**	W **.53598**	**.05053**	**.00005**	**.00004**	**.00137**	**.01395**
Stddev	.00018	.002	.00071	.00032	.00024	.00018	.01704	.00090	.00023	.00038	.00028	.00087
%RSD	5.2093	.00525	51.774	12.569	61.575	143900.	3.1800	1.7724	437.68	855.89	20.677	6.2131
#1	-.00356	41.212	-.00188	.00278	.00022	-.00013	.54804	.05116	-.00011	.00031	.00117	.01457
#2	-.00331	41.215	-.00087	.00233	.00057	.00013	.52393	.04989	.00022	-.00022	.00157	.01334
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							.50000					
Range							5.4900%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**81.212**	**-.06363**	**.00316**	**.04803**	**-.00091**	**-.00105**	**42.016**	**-.00112**	**.01081**	**.00069**	**4.0978**	**-.01085**
Stddev	.112	.09940	.00081	.00661	.00007	.00027	.603	.00072	.00530	.00042	.1509	.00355
%RSD	.13776	156.21	25.486	13.756	7.2308	25.752	1.4351	64.076	49.017	60.112	3.6821	32.722
#1	81.291	.00665	.00259	.05270	-.00096	-.00124	41.589	-.00061	.01456	.00040	4.2044	-.00834
#2	81.133	-.13392	.00373	.04336	-.00086	-.00086	42.442	-.00162	.00706	.00099	3.9911	-.01335
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00824**	**-.00847**	**-.01813**	**-.00112**	**.00030**	**3.0991**	**.01085**	**-.00092**	W **5.2779**	**.00763**	**.00957**	**.07052**
Stddev	.00072	.00795	.01702	.00054	.00008	.0096	.00087	.00035	.0493	.00036	.00079	.00039
%RSD	8.6960	93.907	93.907	48.444	27.020	.30845	8.0318	38.043	.93492	4.6714	8.2108	.55997
#1	-.00875	-.01409	-.03016	-.00074	.00024	3.1058	.01024	-.00117	5.3128	.00789	.01012	.07024
#2	-.00774	-.00285	-.00609	-.00150	.00035	3.0923	.01147	-.00068	5.2430	.00738	.00901	.07079
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Warn	None	None	None
Value									5.0000			
Range									5.4900%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2044.6**	**45619.**	**4068.4**
Stddev	13.8	82.	14.7
%RSD	.67646	.17890	.36182
#1	2054.4	45562.	4078.8
#2	2034.9	45677.	4058.0

Sample Name: ICVH-4569263 Acquired: 6/6/2017 11:28:23 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00397**	**41.189**	**.00088**	**.00185**	**.00124**	**.00054**	W **.53713**	**.06356**	**.00061**	**.00118**	**.00249**	**.01449**
Stddev	.00005	.059	.00128	.00037	.00006	.00010	.01142	.00536	.00035	.00043	.00013	.00023
%RSD	1.2648	.14367	145.23	20.205	4.9792	18.254	2.1254	8.4350	57.993	36.948	5.2636	1.6114
#1	-.00400	41.147	-.00002	.00158	.00119	.00047	.54520	.05977	.00036	.00087	.00258	.01432
#2	-.00393	41.231	.00179	.00211	.00128	.00061	.52905	.06735	.00085	.00148	.00240	.01465
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							.50000					
Range							5.4900%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**80.786**	**-.02999**	**.00364**	**.08111**	**-.00017**	**-.00083**	**41.405**	**.00032**	**.01428**	**.00134**	**4.1160**	**-.00649**
Stddev	.185	.07507	.00012	.00477	.00013	.00135	.086	.00029	.00081	.00053	.0906	.00560
%RSD	.22887	250.30	3.3683	5.8799	73.793	163.37	.20793	91.726	5.6835	39.644	2.1999	86.341
#1	80.917	-.08307	.00356	.08448	-.00026	-.00178	41.466	.00052	.01486	.00096	4.1800	-.00253
#2	80.655	.02309	.00373	.07773	-.00008	.00013	41.344	.00011	.01371	.00171	4.0520	-.01045
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00327**	**.00425**	**.00909**	**-.00032**	**.00089**	**3.1071**	**.01124**	**.00667**	W **5.3082**	**.00973**	**.01105**	**.07017**
Stddev	.00142	.01782	.03814	.00079	.00009	.0016	.00016	.00419	.0081	.00023	.00013	.00123
%RSD	43.548	419.55	419.55	249.62	9.7182	.05167	1.4121	62.847	.15298	2.3188	1.1997	1.7574
#1	-.00226	.01685	.03606	-.00087	.00095	3.1082	.01113	.00370	5.3139	.00957	.01114	.06930
#2	-.00428	-.00836	-.01788	.00024	.00083	3.1060	.01136	.00963	5.3024	.00989	.01096	.07104
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Warn	None	None	None
Value									5.0000			
Range									5.4900%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2071.0**	**45071.**	**4145.1**
Stddev	10.8	507.	75.1
%RSD	.52274	1.1244	1.8127
#1	2063.4	44713.	4198.2
#2	2078.7	45430.	4091.9

Sample Name: ICV-4576614 Acquired: 6/6/2017 11:32:12 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25482**	W **.26829**	**.25996**	**.25124**	**.25038**	**.25054**	**.00004**	**1.9872**	**.25462**	**.25538**	**.25548**	W **.26394**
Stddev	.00024	.00111	.00191	.00139	.00022	.00057	.00268	.0025	.00023	.00078	.00015	.00048
%RSD	.09532	.41249	.73660	.55474	.08973	.22881	7021.8	.12773	.09215	.30537	.05698	.18312
#1	.25500	.26751	.25861	.25025	.25022	.25095	-.00186	1.9890	.25445	.25483	.25558	.26360
#2	.25465	.26907	.26132	.25222	.25054	.25014	.00194	1.9854	.25478	.25593	.25537	.26428
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
Value		.25000										.25000
Range		5.4900%										5.4900%

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.26784**	**20.166**	**.25990**	**10.132**	**.26007**	**.24105**	**2.0725**	**.25615**	**2.0124**	**.26065**	**-.00735**	**.25975**
Stddev	.00215	.084	.00135	.008	.00019	.00038	.0076	.00070	.0063	.00325	.00688	.00910
%RSD	.80220	.41577	.51885	.08045	.07462	.15778	.36919	.27422	.31338	1.2482	93.652	3.5034
#1	.26936	20.225	.25894	10.127	.25994	.24132	2.0779	.25665	2.0079	.25834	-.00248	.26619
#2	.26632	20.106	.26085	10.138	.26021	.24078	2.0671	.25565	2.0168	.26295	-.01222	.25332
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value	.25000											
Range	5.4900%											

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49903**	**2.0364**	**4.3580**	**.50685**	**.25364**	**.00323**	**.24999**	**.52495**	**-.00303**	**.25263**	**.25097**	**.24705**
Stddev	.00676	.0146	.0313	.00409	.00035	.00094	.00062	.00052	.01741	.00172	.00080	.00029
%RSD	1.3543	.71889	.71889	.80656	.13752	29.127	.24991	.09842	573.98	.68138	.31902	.11591
#1	.50380	2.0468	4.3801	.50396	.25388	.00390	.24955	.52459	-.01535	.25385	.25040	.24685
#2	.49425	2.0261	4.3358	.50974	.25339	.00257	.25043	.52532	.00928	.25141	.25153	.24726
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2063.3**	**45307.**	**4144.0**
Stddev	14.4	326.	71.2
%RSD	.69944	.71992	1.7184
#1	2053.1	45538.	4093.7
#2	2073.5	45077.	4194.4

Sample Name: ICV-4576614 Acquired: 6/6/2017 11:34:44 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25384**	W **.26375**	**.25441**	**.24429**	**.25175**	**.25032**	**.00216**	**1.9979**	**.24678**	**.24821**	**.24834**	**.25764**
Stddev	.00069	.00463	.00873	.00417	.00023	.00011	.00011	.0031	.00632	.00697	.00554	.00090
%RSD	.27187	1.7570	3.4329	1.7081	.09116	.04365	4.8687	.15372	2.5624	2.8064	2.2325	.35115
#1	.25335	.26703	.26059	.24724	.25158	.25024	.00209	2.0000	.25125	.25314	.25226	.25828
#2	.25433	.26047	.24824	.24134	.25191	.25039	.00224	1.9957	.24231	.24328	.24442	.25700
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.25000										
Range		5.4900%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.26204**	**20.297**	**.25846**	**10.038**	**.25625**	W **.23583**	**2.0568**	**.24968**	**1.9481**	**.25322**	**-.00088**	**.25146**
Stddev	.00345	.025	.00285	.014	.00063	.00578	.0221	.00631	.0379	.00627	.01774	.00353
%RSD	1.3166	.12257	1.1027	.13815	.24763	2.4507	1.0746	2.5265	1.9473	2.4753	2021.8	1.4051
#1	.26448	20.279	.25645	10.028	.25670	.23991	2.0411	.25414	1.9750	.25765	-.01342	.25396
#2	.25960	20.314	.26048	10.048	.25580	.23174	2.0724	.24522	1.9213	.24879	.01166	.24896
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value						.25000						
Range						-5.4900%						

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49350**	**2.0190**	**4.3206**	**.49223**	**.25342**	**.00084**	**.24738**	**.52660**	**-.00910**	**.24802**	**.24743**	**.24433**
Stddev	.00736	.0076	.0163	.01438	.00026	.00105	.00105	.01008	.01364	.00145	.00150	.00090
%RSD	1.4915	.37712	.37712	2.9213	.10247	125.92	.42249	1.9138	149.84	.58427	.60751	.36812
#1	.49870	2.0244	4.3322	.50239	.25361	.00009	.24664	.53372	.00054	.24905	.24637	.24496
#2	.48829	2.0136	4.3091	.48206	.25324	.00158	.24812	.51947	-.01874	.24700	.24850	.24369
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2030.9**	**46149.**	**4122.9**
Stddev	9.6	387.	85.7
%RSD	.47190	.83827	2.0786
#1	2024.1	46422.	4183.5
#2	2037.7	45875.	4062.3

Sample Name: ICVL-4576167 Acquired: 6/6/2017 11:38:38 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01012**	**.10405**	**.01630**	**.09732**	**.00966**	**.00095**	**.12062**	**.19535**	**.00516**	**.00962**	**.01032**	**.01651**
Stddev	.00027	.00248	.00623	.00435	.00005	.00004	.00083	.00252	.00004	.00027	.00036	.00076
%RSD	2.6895	2.3879	38.206	4.4680	.47535	3.8396	.68587	1.2915	.75956	2.7778	3.4767	4.6257
#1	.01031	.10580	.02070	.10039	.00963	.00097	.12121	.19356	.00514	.00981	.01058	.01705
#2	.00992	.10229	.01190	.09424	.00969	.00092	.12004	.19713	.00519	.00943	.01007	.01597
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10136**	**2.9005**	F **.02777**	**.20111**	**.01014**	**.01759**	**1.0295**	**.03846**	**2.7645**	**.00858**	**.10585**	**.01740**
Stddev	.00346	.0153	.00194	.00073	.00011	.00044	.0094	.00133	.0662	.00102	.01144	.00258
%RSD	3.4114	.52770	6.9837	.36424	1.0668	2.5090	.91041	3.4627	2.3945	11.901	10.808	14.835
#1	.09892	2.9113	.02640	.20163	.01022	.01790	1.0362	.03940	2.8113	.00931	.11394	.01923
#2	.10381	2.8897	.02915	.20059	.01006	.01728	1.0229	.03752	2.7177	.00786	.09776	.01558
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.02000									
Range			30.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02003**	**.45769**	**.97945**	**.09363**	**.00998**	**.01620**	**.00988**	**.01863**	**.06246**	**.00987**	**.01925**	**.01287**
Stddev	.00336	.03194	.06836	.00140	.00001	.00192	.00028	.00146	.01021	.00051	.00058	.00071
%RSD	16.753	6.9790	6.9790	1.4917	.13249	11.847	2.8490	7.8472	16.346	5.2002	3.0056	5.5007
#1	.02241	.43510	.93111	.09462	.00999	.01485	.00968	.01966	.05524	.01023	.01966	.01237
#2	.01766	.48027	1.0278	.09264	.00997	.01756	.01008	.01759	.06968	.00951	.01884	.01337
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2094.5**	**47330.**	**4169.4**
Stddev	6.6	1101.	4.6
%RSD	.31710	2.3271	.11128
#1	2089.8	46551.	4166.1
#2	2099.2	48109.	4172.6

Sample Name: CCVH-4569081 Acquired: 6/6/2017 11:41:17 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00532**	**49.654**	**-.00132**	**.00255**	**.00198**	**.00124**	**1.0219**	**.00596**	**.00123**	**-.00017**	**.00141**	**.02621**	**49.287**
Stddev	.00062	.057	.00789	.00124	.00039	.00002	.0214	.00322	.00025	.00054	.00037	.00004	.110
%RSD	11.618	.11572	597.56	48.795	19.788	1.8739	2.0906	54.045	20.197	326.60	25.908	.13967	.22321
#1	-.00488	49.613	.00426	.00343	.00225	.00126	1.0370	.00368	.00106	-.00055	.00167	.02618	49.209
#2	-.00575	49.695	-.00690	.00167	.00170	.00122	1.0068	.00823	.00141	.00022	.00115	.02623	49.365
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.13384**	**.01045**	**.11093**	**-.00036**	**-.00110**	**248.69**	**.00078**	**.00802**	**.00242**	**5.0408**	**-.00764**	**-.00879**	**-.01192**
Stddev	.00488	.00082	.00118	.00004	.00034	.88	.00043	.00517	.00140	.0852	.00368	.00092	.00848
%RSD	3.6437	7.8434	1.0612	12.194	31.204	.35438	55.071	64.433	57.919	1.6904	48.146	10.506	71.115
#1	.13039	.01103	.11177	-.00033	-.00085	248.06	.00048	.01167	.00143	5.1011	-.01024	-.00944	-.00593
#2	.13729	.00987	.11010	-.00039	-.00134	249.31	.00108	.00436	.00341	4.9806	-.00504	-.00813	-.01792
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.02551**	**-.00081**	**.00153**	**4.9225**	**.01797**	**.00453**	**10.107**	**.01596**	**.00212**	**.11445**
Stddev	.01814	.00031	.00017	.0237	.00029	.00888	.008	.00033	.00028	.00110
%RSD	71.115	38.014	10.842	.48072	1.6166	195.80	.08027	2.0646	13.389	.96033
#1	-.01268	-.00059	.00165	4.9392	.01818	.01081	10.102	.01619	.00232	.11368
#2	-.03834	-.00103	.00141	4.9057	.01777	-.00174	10.113	.01572	.00192	.11523
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1969.4**	**44133.**	**4083.0**
Stddev	13.2	486.	3.1
%RSD	.66812	1.1021	.07556
#1	1978.7	43790.	4085.2
#2	1960.1	44477.	4080.8

Sample Name: CCV-4567764 Acquired: 6/6/2017 11:43:51 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50626**	**.52235**	**.96742**	**.49665**	**.49636**	**.49697**	**-.00206**	**4.9729**	**.49796**	**.49678**	**.49060**	**.51256**	**2.4999**
Stddev	.00009	.00857	.02037	.00833	.00054	.00011	.00114	.0070	.00857	.00947	.00894	.00085	.0066
%RSD	.01862	1.6404	2.1052	1.6774	.10801	.02148	55.514	.14163	1.7203	1.9056	1.8221	.16626	.26228
#1	.50620	.52841	.98182	.50254	.49674	.49689	-.00125	4.9680	.50401	.50347	.49693	.51316	2.4953
#2	.50633	.51629	.95302	.49076	.49598	.49704	-.00287	4.9779	.49190	.49009	.48428	.51196	2.5046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.103**	**1.0084**	**20.045**	**.50397**	**.48793**	**5.1128**	**.49574**	**.99001**	**.99630**	**-.00167**	**.98711**	**.97695**	**4.9695**
Stddev	.094	.0007	.020	.00122	.00851	.0023	.00921	.01180	.01439	.00140	.01999	.03129	.0633
%RSD	.18797	.07019	.09835	.24210	1.7433	.04502	1.8571	1.1922	1.4440	83.938	2.0256	3.2027	1.2731
#1	50.036	1.0079	20.059	.50483	.49394	5.1112	.50225	.99836	1.0065	-.00266	1.0012	.99907	5.0142
#2	50.170	1.0089	20.031	.50311	.48191	5.1145	.48923	.98167	.98613	-.00068	.97297	.95482	4.9247
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.635**	**.98570**	**.49875**	**.00659**	**.49848**	**1.0118**	**-.00204**	**.49981**	**.50112**	**.49831**
Stddev	.135	.01455	.00077	.00019	.00274	.0151	.01432	.00030	.00184	.00179
%RSD	1.2731	1.4759	.15377	2.9349	.54957	1.4905	703.43	.06054	.36770	.36014
#1	10.730	.99599	.49820	.00645	.50042	1.0224	.00809	.49960	.50242	.49704
#2	10.539	.97541	.49929	.00672	.49655	1.0011	-.01216	.50003	.49981	.49958
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2026.3**	**44819.**	**4055.6**
Stddev	8.3	107.	30.5
%RSD	.41052	.23898	.75171
#1	2032.2	44894.	4077.1
#2	2020.4	44743.	4034.0

Sample Name: ICB Acquired: 6/6/2017 11:46:21 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00033**	**.00201**	**-.00304**	**.00159**	**.00030**	**-.00013**	**.00327**	**.00285**	**.00034**	**.00000**	**.00017**	**.00142**
Stddev	.00045	.00231	.00080	.00025	.00005	.00011	.00231	.00708	.00010	.00021	.00001	.00013
%RSD	134.64	114.62	26.181	15.499	15.361	81.797	70.436	248.82	30.359	32244.	8.9215	9.1775
#1	.00065	.00038	-.00248	.00141	.00034	-.00006	.00164	-.00216	.00041	.00015	.00016	.00151
#2	.00002	.00365	-.00360	.00176	.00027	-.00021	.00491	.00785	.00027	-.00015	.00018	.00133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00050**	**-.01943**	**.00393**	**.00806**	**.00001**	**-.00064**	**.02903**	**-.00103**	**.00685**	W **.00485**	**.00330**	**-.00110**
Stddev	.00246	.13873	.00132	.00398	.00004	.00042	.02056	.00010	.00151	.00213	.00024	.00052
%RSD	488.50	714.08	33.565	49.317	826.84	64.968	70.829	9.6333	22.067	43.790	7.2982	47.780
#1	-.00225	.07867	.00486	.00525	.00004	-.00035	.04357	-.00110	.00578	.00335	.00313	-.00147
#2	.00124	-.11752	.00299	.01088	-.00003	-.00094	.01449	-.00096	.00791	.00636	.00347	-.00073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit										.00450		
Low Limit										-.00450		

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00611**	**.03048**	**.06522**	**.00211**	**-.00003**	**.00175**	**.00062**	**.00037**	**.00329**	**-.00066**	**.00163**	**-.00047**
Stddev	.00885	.04199	.08985	.00035	.00003	.00258	.00041	.00300	.04438	.00091	.00006	.00078
%RSD	144.81	137.77	137.77	16.710	110.29	147.49	65.911	814.09	1349.8	137.55	3.7323	166.32
#1	.00015	.00079	.00168	.00236	-.00001	.00357	.00033	-.00175	-.02810	-.00130	.00167	.00008
#2	-.01237	.06016	.12875	.00186	-.00005	-.00008	.00090	.00249	.03467	-.00002	.00159	-.00102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2022.7**	**46072.**	**4046.7**
Stddev	26.0	36.	47.2
%RSD	1.2850	.07849	1.1658
#1	2041.1	46098.	4080.0
#2	2004.3	46047.	4013.3

Sample Name: CRI-4576171 Acquired: 6/6/2017 11:48:59 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00914**	**.10786**	**.00894**	**.09907**	**.00504**	**.00099**	**.11683**	**.19722**	**.00513**	**.00473**	**.01038**	**.01044**
Stddev	.00016	.00465	.00167	.00164	.00020	.00005	.00382	.00126	.00005	.00023	.00022	.00116
%RSD	1.7112	4.3147	18.720	1.6572	3.8783	5.4214	3.2707	.63697	.96902	4.9451	2.1415	11.067
#1	.00925	.11115	.01013	.10023	.00518	.00095	.11953	.19633	.00516	.00490	.01054	.01126
#2	.00902	.10457	.00776	.09791	.00491	.00103	.11412	.19811	.00509	.00457	.01022	.00962
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.04618**	**.94544**	F **.01690**	**.21126**	**.00327**	**.00975**	**1.0449**	**.00895**	**.95741**	**.00311**	**.10794**	**.00984**
Stddev	.00303	.10039	.00287	.00014	.00005	.00039	.0063	.00014	.02628	.00144	.01223	.00108
%RSD	6.5585	10.619	16.963	.06581	1.6603	3.9627	.60122	1.5601	2.7451	46.302	11.329	10.922
#1	.04832	1.0164	.01487	.21136	.00331	.00947	1.0493	.00905	.97599	.00413	.11659	.01060
#2	.04404	.87445	.01893	.21116	.00323	.01002	1.0404	.00885	.93883	.00209	.09929	.00908
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.03000		.01000									
Range	50.000%		50.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **-.00266**	**.46917**	**1.0040**	**.01617**	**.00507**	W **.01277**	**.01005**	W **.01300**	F **.02085**	**.00977**	**.01163**	**.01067**
Stddev	.00237	.00456	.0098	.00146	.00027	.00428	.00033	.00214	.01484	.00030	.00129	.00029
%RSD	89.300	.97119	.97119	9.0424	5.2519	33.467	3.2394	16.487	71.167	3.0577	11.093	2.7595
#1	-.00098	.47239	1.0109	.01720	.00488	.01580	.00981	.01452	.03134	.00998	.01254	.01046
#2	-.00434	.46595	.99713	.01513	.00525	.00975	.01028	.01149	.01036	.00956	.01072	.01088
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01000					.01000		.01000	.06000			
Range	-50.000%					20.490%		20.490%	-50.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2052.6**	**45608.**	**4082.3**
Stddev	17.7	273.	16.0
%RSD	.86023	.59940	.39162
#1	2040.1	45801.	4071.0
#2	2065.1	45415.	4093.6

Sample Name: XICB Acquired: 6/6/2017 11:56:27 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00030**	**.00076**	**.00433**	**.00072**	**-.00012**	**-.00009**	**.00679**	**-.00287**	**-.00001**	**-.00013**	**.00045**
Stddev	.00024	.00023	.00179	.00121	.00035	.00017	.00120	.00230	.00012	.00034	.00069
%RSD	82.098	30.797	41.433	166.34	292.92	196.77	17.678	80.046	1182.8	262.71	152.52
#1	.00047	.00059	.00306	.00158	.00013	-.00021	.00594	-.00125	.00007	.00011	-.00004
#2	.00013	.00092	.00559	-.00013	-.00037	.00003	.00764	-.00450	-.00009	-.00037	.00093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**.00113**	**-.08279**	W **.00316**	**-.00216**	**-.00005**	**.00011**	**.02325**	**-.00078**	**.00476**	**.00152**
Stddev	.00008	.00263	.06837	.00242	.00076	.00006	.00049	.01488	.00042	.00009	.00230
%RSD	378.22	233.61	82.581	76.632	35.180	111.45	454.21	63.978	53.477	1.8420	151.56
#1	.00007	.00298	-.03445	.00145	-.00162	-.00010	.00046	.01273	-.00049	.00483	-.00011
#2	-.00003	-.00073	-.13113	.00487	-.00269	-.00001	-.00024	.03377	-.00108	.00470	.00315
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00261							
Low Limit				-.00261							

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00416**	**.00122**	**.00009**	**-.00013**	**-.00027**	**.00085**	**-.00003**	**.00105**	**.00017**	**.00209**	**-.01727**
Stddev	.00589	.00378	.00694	.00739	.01581	.00015	.00007	.00098	.00017	.00145	.01799
%RSD	141.60	309.03	7361.8	5777.0	5777.0	17.328	255.93	93.273	103.29	69.047	104.18
#1	.00832	.00389	-.00481	-.00535	-.01145	.00095	-.00008	.00175	.00029	.00311	-.02999
#2	-.00001	-.00145	.00500	.00509	.01090	.00074	.00002	.00036	.00005	.00107	-.00455
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	**.00012**	**.00079**	W **-.00285**
Stddev	.00032	.00055	.00071
%RSD	260.01	69.993	25.082
#1	.00035	.00118	-.00335
#2	-.00010	.00040	-.00234
Check ?	Chk Pass	Chk Pass	Chk Warn
High Limit			.00238
Low Limit			-.00238

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2088.4**	**47599.**	**4136.7**
Stddev	7.7	12.	63.6
%RSD	.36874	.02543	1.5370
#1	2093.8	47608.	4091.8
#2	2082.9	47591.	4181.7

Sample Name: CRI-4576884 Acquired: 6/6/2017 12:00:42 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00060**	**.00001**	**.00694**	**-.00012**	**-.00034**	**.00004**	**.00010**	**-.00025**	**.00011**	**.00013**	**.00018**	**.00066**
Stddev	.00035	.00103	.00339	.00060	.00022	.00005	.00163	.00346	.00011	.00021	.00035	.00053
%RSD	57.644	8413.0	48.782	501.13	64.014	110.08	1705.5	1407.6	100.22	161.30	190.58	79.810
#1	.00084	.00074	.00934	-.00055	-.00050	.00007	.00125	-.00269	.00019	-.00002	-.00006	.00103
#2	.00035	-.00072	.00455	.00031	-.00019	.00001	-.00105	.00220	.00003	.00028	.00043	.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01432**	**-.05513**	F **.02591**	**-.00111**	**.00000**	**-.00045**	**.01839**	**-.00100**	**.00550**	**.00105**	**-.00248**	**-.00027**
Stddev	.00492	.06377	.00050	.00259	.00003	.00027	.00063	.00013	.00169	.00144	.00649	.00094
%RSD	34.359	115.67	1.9465	232.20	539.05	61.092	3.4496	13.243	30.702	136.86	262.13	342.99
#1	.01779	-.10022	.02627	.00072	.00002	-.00064	.01794	-.00091	.00430	.00003	-.00707	-.00094
#2	.01084	-.01004	.02555	-.00294	-.00001	-.00025	.01884	-.00110	.00669	.00207	.00211	.00039
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.01000									
Low Limit			-.01000									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.01887**	**-.00273**	**-.00583**	**-.00083**	**.00004**	**.00106**	**.00055**	F **.02030**	**-.01282**	**-.00039**	**.00090**	**-.00309**
Stddev	.00186	.00218	.00467	.00114	.00018	.00071	.00035	.00112	.02427	.00012	.00059	.00088
%RSD	9.8735	80.067	80.067	136.34	438.67	66.768	64.044	5.5156	189.33	30.764	65.702	28.479
#1	.02018	-.00427	-.00913	-.00164	.00017	.00157	.00030	.02110	.00434	-.00048	.00048	-.00247
#2	.01755	-.00118	-.00253	-.00003	-.00008	.00056	.00080	.01951	-.02998	-.00031	.00132	-.00372
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00750							.01900				
Low Limit	-.01500							-.01900				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2088.7**	**46910.**	**4195.2**
Stddev	7.0	123.	65.1
%RSD	.33642	.26160	1.5524
#1	2083.7	46823.	4241.3
#2	2093.7	46996.	4149.2

Sample Name: cri-4576885 Acquired: 6/6/2017 12:08:12 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00046**	**.00227**	**.00178**	**-.00050**	**.00037**	**-.00009**	**.00458**	**.00129**	**-.00017**	**-.00020**	**.00049**	**.00063**
Stddev	.00046	.00040	.00260	.00180	.00003	.00020	.00183	.00018	.00040	.00028	.00017	.00084
%RSD	100.00	17.607	145.98	360.84	7.3582	222.42	39.877	14.167	231.88	137.90	35.462	132.32
#1	-.00014	.00255	.00361	-.00177	.00035	-.00023	.00587	.00142	.00011	-.00040	.00036	.00004
#2	-.00079	.00199	-.00006	.00077	.00039	.00005	.00329	.00116	-.00046	-.00001	.00061	.00123
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00987**	**-.03641**	F **.02344**	**.00115**	**-.00008**	**-.00035**	**.00675**	**-.00172**	**.00665**	**.00117**	**.00283**	**-.00018**
Stddev	.00066	.02276	.00058	.00028	.00003	.00034	.00932	.00036	.00251	.00022	.00693	.00172
%RSD	6.7067	62.507	2.4671	24.663	44.399	96.430	138.07	20.897	37.689	18.716	245.27	947.88
#1	.01034	-.02032	.02385	.00095	-.00010	-.00059	.00016	-.00147	.00488	.00102	-.00208	-.00139
#2	.00940	-.05251	.02304	.00135	-.00005	-.00011	.01334	-.00198	.00843	.00133	.00773	.00103
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.01000									
Low Limit			-.01000									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01229**	**-.02232**	**-.04776**	**-.00159**	**-.00002**	**.00173**	**.00019**	W **.01693**	**.00229**	**.00019**	**.00099**	**-.00093**
Stddev	.00365	.00502	.01075	.00058	.00004	.00127	.00046	.00001	.01940	.00030	.00052	.00117
%RSD	29.706	22.506	22.506	36.187	193.79	73.196	246.38	.08040	847.23	157.54	52.184	125.04
#1	-.01487	-.01876	-.04016	-.00200	.00001	.00263	.00051	.01692	-.01143	.00041	.00135	-.00176
#2	-.00971	-.02587	-.05536	-.00118	-.00005	.00084	-.00014	.01694	.01601	-.00002	.00062	-.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								.00750				
Low Limit								-.01900				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2043.8**	**47463.**	**4127.0**
Stddev	9.8	771.	55.6
%RSD	.47729	1.6237	1.3470
#1	2036.9	48008.	4087.7
#2	2050.7	46918.	4166.3

Sample Name: cri-4576886 Acquired: 6/6/2017 12:14:44 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00033**	**.00174**	**-.00041**	**-.00003**	**-.00034**	**-.00007**	**.00173**	**-.00253**	**-.00009**	**.00015**	**.00048**	**.00048**
Stddev	.00072	.00025	.00692	.00102	.00019	.00005	.00245	.00281	.00007	.00012	.00009	.00027
%RSD	215.82	14.275	1670.9	2990.3	56.618	77.934	141.58	111.26	81.826	82.806	18.307	57.296
#1	-.00018	.00156	-.00531	.00069	-.00020	-.00003	.00347	-.00451	-.00004	.00006	.00042	.00028
#2	.00085	.00191	.00448	-.00076	-.00048	-.00011	-.00000	-.00054	-.00014	.00023	.00054	.00067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.09668**	**-.10240**	W **.00631**	**-.00590**	**-.00014**	**-.00022**	**.02010**	**-.00069**	**.00085**	**.00093**	**.00505**	**.00304**
Stddev	.00532	.04404	.00041	.00297	.00014	.00014	.01612	.00137	.00057	.00018	.00558	.00183
%RSD	5.5046	43.005	6.4584	50.251	103.74	61.577	80.193	198.35	67.413	19.797	110.60	60.110
#1	.09292	-.07126	.00660	-.00380	-.00004	-.00032	.03149	.00028	.00045	.00106	.00110	.00175
#2	.10044	-.13354	.00602	-.00800	-.00024	-.00013	.00870	-.00166	.00126	.00080	.00900	.00433
Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.05000		.00500									
Low Limit	-.05000		-.01000									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00474**	**-.00050**	**-.00108**	**-.00090**	**-.00004**	**.00035**	**.00015**	**.00346**	**.02504**	**-.00069**	**.00026**	**-.00178**
Stddev	.00109	.00870	.01862	.00091	.00009	.00082	.00005	.00192	.05431	.00132	.00106	.00257
%RSD	23.059	1730.2	1730.2	101.34	215.98	236.26	33.065	55.464	216.90	190.32	413.24	144.66
#1	.00397	-.00665	-.01424	-.00026	-.00010	.00093	.00018	.00482	-.01336	-.00162	-.00049	.00004
#2	.00551	.00565	.01209	-.00155	.00002	-.00023	.00011	.00210	.06344	.00024	.00101	-.00359
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2046.8**	**47331.**	**4131.1**
Stddev	17.9	149.	37.6
%RSD	.87229	.31486	.90986
#1	2034.2	47225.	4104.5
#2	2059.4	47436.	4157.7

Sample Name: ICSA-4543937 Acquired: 6/6/2017 12:20:14 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00088**	**511.02**	**-.00332**	**-.00488**	**.00056**	**-.00011**	W **.01382**	**467.64**	W **.00082**	**.00064**	**.00151**
Stddev	.00002	3.78	.00428	.00099	.00010	.00009	.00597	10.86	.00032	.00025	.00019
%RSD	2.3959	.74017	128.78	20.273	17.793	78.375	43.160	2.3215	39.703	39.675	12.406
#1	.00086	508.34	-.00635	-.00418	.00063	-.00005	.00960	475.32	.00059	.00082	.00138
#2	.00089	513.69	-.00030	-.00558	.00049	-.00017	.01804	459.96	.00105	.00046	.00164
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							.01200		.00080		
Low Limit							-.01200		-.00080		

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.00357**	**186.62**	**-.11977**	W **.00625**	**517.89**	W **.00079**	W **-.00813**	**.01914**	**.00087**	**-.00336**	W **-.00678**
Stddev	.00131	.83	.01914	.00248	3.22	.00007	.00096	.00534	.00071	.00516	.00338
%RSD	36.619	.44394	15.982	39.714	.62132	8.8697	11.754	27.898	82.080	153.53	49.827
#1	.00265	186.03	-.13330	.00449	520.16	.00074	-.00881	.02291	.00036	-.00701	-.00916
#2	.00450	187.21	-.10623	.00800	515.61	.00084	-.00746	.01536	.00137	.00029	-.00439
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit	.00272			.00522		.00050	.00626				.00500
Low Limit	-.00272			-.00522		-.00050	-.00626				-.00500

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.12726**	W **-.00740**	**-.00954**	**-.00938**	**-.02006**	**-.00142**	W **.00417**	W **.01740**	**.00022**	**-.00564**	**-.04121**
Stddev	.00591	.00792	.00051	.03245	.06944	.00225	.00002	.00409	.00077	.00011	.01798
%RSD	4.6441	106.97	5.3084	346.12	346.12	158.47	.48098	23.505	355.01	1.9471	43.633
#1	-.12308	-.00180	-.00918	.01357	.02904	-.00301	.00418	.02029	.00076	-.00572	-.05392
#2	-.13144	-.01300	-.00990	-.03232	-.06917	.00017	.00415	.01451	-.00033	-.00557	-.02849
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit		.00628					.00050	.00800			
Low Limit		-.00628					-.00050	-.00800			

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	W **-.00370**	**.00336**	**-.00373**
Stddev	.00096	.00005	.00060
%RSD	25.935	1.5621	16.148
#1	-.00302	.00339	-.00330
#2	-.00438	.00332	-.00416
Check ?	Chk Warn	Chk Pass	Chk Pass
High Limit	.00222		
Low Limit	-.00222		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1705.1**	**37045.**	**3700.8**
Stddev	.3	923.	29.5
%RSD	.01742	2.4923	.79725
#1	1704.8	36393.	3721.7
#2	1705.3	37698.	3680.0

Sample Name: ICSAB-4562596 Acquired: 6/6/2017 12:24:03 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.1081**	**518.53**	**2.0429**	**1.9119**	**.49960**	**.49286**	**1.0706**	**469.12**	**1.0273**	**.46327**	**.49221**	**.53481**	**188.28**	**52.123**
Stddev	.0059	2.22	.0125	.0025	.00432	.00315	.0090	7.37	.0037	.00168	.00167	.00391	1.23	.211
%RSD	.53058	.42718	.60998	.13173	.86469	.63955	.84171	1.5717	.36168	.36346	.33890	.73139	.65580	.40467
#1	1.1123	516.97	2.0341	1.9137	.49654	.49063	1.0770	474.34	1.0299	.46446	.49339	.53758	187.41	51.974
#2	1.1040	520.10	2.0517	1.9102	.50265	.49509	1.0642	463.91	1.0247	.46208	.49103	.53205	189.16	52.272
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0374**	**527.95**	**.50499**	**.94758**	**51.927**	**.92549**	**2.0099**	**.92765**	**.98323**	**1.0029**	**4.8716**	**10.010**	**21.421**	**9.4739**
Stddev	.0035	4.24	.00083	.00286	.511	.00289	.0071	.00783	.01388	.0047	.0219	.044	.094	.0390
%RSD	.33401	.80268	.16385	.30209	.98484	.31210	.35248	.84362	1.4118	.47365	.44928	.43675	.43675	.41149
#1	1.0349	524.95	.50558	.94961	51.565	.92754	2.0049	.93319	.99305	1.0062	4.8871	9.9787	21.354	9.5015
#2	1.0398	530.94	.50441	.94556	52.288	.92345	2.0149	.92212	.97341	.99952	4.8561	10.041	21.487	9.4463
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0003**	**2.1191**	**1.0334**	**8.8075**	**.00065**	**.50764**	**.98787**	**1.0197**
Stddev	.0053	.0020	.0004	.0544	.00182	.00194	.00055	.0000
%RSD	.53010	.09322	.04114	.61736	280.91	.38291	.05520	.00142
#1	.99652	2.1205	1.0331	8.8460	.00194	.50901	.98826	1.0197
#2	1.0040	2.1177	1.0337	8.7691	-.00064	.50626	.98748	1.0197
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1713.8**	**35999.**	**3495.4**
Stddev	2.1	147.	29.5
%RSD	.12132	.40701	.84375
#1	1715.3	36103.	3474.5
#2	1712.3	35895.	3516.3

Sample Name: LRA-4556451 Acquired: 6/6/2017 12:26:36 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00203**	**-.03794**	**9.6116**	**9.4353**	**12.100**	**-.00244**	**-.02744**	**.07433**	**1.9667**	**4.8335**	**9.7743**	**10.351**	**509.15**
Stddev	.00020	.01761	.2893	.2525	.324	.00019	.00000	.00588	.0648	.1517	.3365	.046	1.36
%RSD	9.8349	46.427	3.0100	2.6756	2.6782	7.8010	.00645	7.9109	3.2950	3.1380	3.4423	.44742	.26702
#1	-.00217	-.02549	9.8162	9.6138	12.330	-.00257	-.02745	.07849	2.0125	4.9408	10.012	10.384	510.11
#2	-.00189	-.05040	9.4070	9.2568	11.871	-.00230	-.02744	.07017	1.9209	4.7263	9.5364	10.319	508.19
Check ?	None	None	Chk Pass	Chk Pass	Chk Pass	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.21104**	**.00306**	**.03820**	**10.266**	**4.7998**	**.06454**	**9.7869**	**-.00571**	**9.9020**	**-.04806**	**.05760**	**4.7418**	**48.845**
Stddev	.06609	.00054	.00963	.180	.1708	.00382	.2992	.00784	.3178	.00274	.00114	.1478	.191
%RSD	31.316	17.626	25.200	1.7518	3.5583	5.9141	3.0574	137.22	3.2093	5.6924	1.9774	3.1178	.39030
#1	-.25778	.00268	.04500	10.394	4.9205	.06724	9.9985	-.00017	10.127	-.04999	.05840	4.8464	48.710
#2	-.16431	.00344	.03139	10.139	4.6790	.06184	9.5753	-.01126	9.6773	-.04612	.05679	4.6373	48.980
Check ?	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**104.53**	**.00463**	**10.319**	**.03003**	**9.8258**	**4.9045**	**-.00750**	**9.9427**	**9.7244**	**-.00160**
Stddev	.41	.00059	.110	.00263	.0206	.1625	.00050	.0454	.0018	.00141
%RSD	.39030	12.631	1.0669	8.7685	.20985	3.3133	6.6539	.45675	.01823	88.423
#1	104.24	.00505	10.396	.03190	9.8404	5.0194	-.00715	9.9748	9.7256	-.00260
#2	104.82	.00422	10.241	.02817	9.8112	4.7896	-.00785	9.9106	9.7231	-.00060
Check ?	None	None	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1949.7**	**43224.**	**3900.9**
Stddev	8.5	343.	31.7
%RSD	.43699	.79333	.81222
#1	1943.6	43466.	3878.5
#2	1955.7	42981.	3923.3

Sample Name: CCVH-4569081 Acquired: 6/6/2017 12:29:19 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00619**	**50.835**	**-.00054**	**.02868**	**.00161**	**.00002**	**1.0328**	**-.00175**	**-.00010**	**-.00107**	**.00116**	**.02683**	**50.349**
Stddev	.00068	.002	.00232	.00374	.00035	.00013	.0204	.00301	.00013	.00047	.00018	.00033	.226
%RSD	11.046	.00329	425.61	13.024	21.603	592.12	1.9734	172.12	136.60	43.885	15.561	1.2312	.44927
#1	-.00571	50.834	.00109	.03132	.00137	-.00007	1.0472	-.00387	-.00019	-.00074	.00103	.02706	50.509
#2	-.00668	50.836	-.00218	.02604	.00186	.00011	1.0184	.00038	-.00000	-.00141	.00129	.02659	50.189
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.10985**	**.00886**	**.06258**	**-.00109**	**-.00076**	**254.50**	**.00053**	**.01372**	**-.00258**	**5.1731**	**-.01131**	**-.00706**	**.03953**
Stddev	.00015	.00352	.00322	.00011	.00040	.53	.00091	.00023	.00291	.0901	.00372	.00256	.01738
%RSD	.13757	39.713	5.1436	10.286	53.104	.20717	173.49	1.6453	113.01	1.7426	32.866	36.213	43.965
#1	-.10995	.00637	.06030	-.00101	-.00047	254.12	.00117	.01388	-.00463	5.2368	-.01394	-.00525	.05182
#2	-.10974	.01135	.06486	-.00117	-.00104	254.87	-.00012	.01356	-.00052	5.1093	-.00868	-.00886	.02724
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.08460**	**-.00307**	**.00128**	**4.9742**	**.01849**	**-.00176**	**10.303**	**.01464**	**.00162**	**.12135**
Stddev	.03719	.00080	.00045	.0170	.00011	.00116	.002	.00087	.00039	.00156
%RSD	43.965	26.009	35.188	.34206	.60869	65.601	.01627	5.9234	24.049	1.2838
#1	.11090	-.00250	.00160	4.9863	.01841	-.00258	10.305	.01403	.00190	.12025
#2	.05830	-.00363	.00096	4.9622	.01857	-.00094	10.302	.01525	.00134	.12246
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1964.6**	**43405.**	**3950.4**
Stddev	22.6	240.	29.1
%RSD	1.1528	.55242	.73734
#1	1948.6	43236.	3971.0
#2	1980.6	43575.	3929.8

Sample Name: CCV-4567764 Acquired: 6/6/2017 12:31:54 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50951**	F **.55665**	**1.0039**	**.51892**	**.50515**	**.50369**	**.00175**	**5.0501**	**.50266**	**.50208**	**.50059**	**.50755**
Stddev	.00196	.01231	.0235	.00948	.00165	.00197	.00447	.0049	.01069	.00979	.01174	.00293
%RSD	.38442	2.2115	2.3437	1.8275	.32597	.39039	255.14	.09782	2.1275	1.9495	2.3446	.57789
#1	.51089	.56536	1.0205	.52562	.50632	.50508	-.00141	5.0466	.51022	.50900	.50889	.50962
#2	.50812	.54795	.98725	.51221	.50399	.50230	.00492	5.0536	.49510	.49516	.49229	.50548
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5429**	**50.437**	**1.0152**	**20.278**	**.50398**	**.49815**	**5.1269**	**.50235**	**1.0185**	**1.0175**	**.00078**	**.99914**
Stddev	.0214	.068	.0002	.097	.00284	.01158	.0391	.01087	.0104	.0198	.00169	.01952
%RSD	.84278	.13529	.01860	.47785	.56382	2.3250	.76347	2.1632	1.0257	1.9478	216.02	1.9535
#1	2.5580	50.485	1.0151	20.346	.50599	.50634	5.1546	.51004	1.0259	1.0315	.00198	1.0129
#2	2.5277	50.389	1.0154	20.209	.50197	.48996	5.0992	.49467	1.0111	1.0035	-.00041	.98534
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99828**	**5.0505**	**10.808**	**1.0069**	**.50536**	**.00410**	**.50086**	**1.0353**	**-.04319**	**.49921**	**.49865**	**.49922**
Stddev	.01562	.0048	.010	.0172	.00161	.00040	.00114	.0207	.02716	.00084	.00354	.00176
%RSD	1.5642	.09542	.09542	1.7042	.31780	9.7854	.22832	2.0011	62.887	.16921	.70961	.35252
#1	1.0093	5.0471	10.801	1.0191	.50650	.00381	.50166	1.0499	-.06239	.49981	.50116	.50047
#2	.98724	5.0539	10.815	.99479	.50423	.00438	.50005	1.0206	-.02398	.49862	.49615	.49798
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2023.9**	**45283.**	**4160.8**
Stddev	16.6	817.	33.9
%RSD	.82152	1.8051	.81523
#1	2012.2	44705.	4184.7
#2	2035.7	45861.	4136.8

Sample Name: CCB Acquired: 6/6/2017 12:34:23 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00022**	**.00149**	W **.01121**	**.01374**	**-.00010**	**.00002**	**.00675**	**.00242**	**.00023**	**-.00002**	**.00034**	**.00094**
Stddev	.00018	.00077	.00324	.00034	.00045	.00009	.00237	.00438	.00005	.00027	.00001	.00066
%RSD	81.417	51.895	28.901	2.4762	426.24	355.38	35.164	180.60	20.269	1122.6	2.7405	69.668
#1	.00034	.00204	.01350	.01350	.00021	-.00004	.00843	-.00067	.00027	-.00021	.00034	.00141
#2	.00009	.00094	.00892	.01398	-.00042	.00009	.00507	.00552	.00020	.00017	.00033	.00048
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00750									
Low Limit			-.01500									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00408**	**-.08217**	**.00418**	**.00092**	**-.00000**	**.00047**	**.01851**	**-.00127**	**.00575**	**-.00148**	**.00087**	**.00308**
Stddev	.00411	.04161	.00093	.00535	.00005	.00003	.00733	.00062	.00044	.00099	.01546	.00124
%RSD	100.60	50.647	22.322	584.80	1168.9	5.4144	39.624	48.465	7.6126	66.542	1786.3	40.389
#1	.00699	-.05274	.00352	.00470	.00003	.00049	.01332	-.00171	.00606	-.00218	-.01007	.00220
#2	.00118	-.11159	.00484	-.00287	-.00004	.00045	.02369	-.00084	.00544	-.00079	.01180	.00396
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00327**	**.00620**	**.01327**	**-.00045**	**.00013**	**.00064**	**.00049**	**-.00042**	**-.01796**	**.00053**	**.00167**	**-.00229**
Stddev	.00211	.01846	.03950	.00020	.00022	.00228	.00009	.00152	.07302	.00084	.00067	.00082
%RSD	64.479	297.59	297.59	44.202	169.50	356.68	17.436	359.97	406.46	159.01	40.402	35.551
#1	-.00477	-.00685	-.01466	-.00031	.00028	.00225	.00043	-.00150	-.06960	-.00007	.00215	-.00287
#2	-.00178	.01926	.04121	-.00060	-.00003	-.00097	.00055	.00065	.03367	.00113	.00119	-.00172
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2029.2**	**46436.**	**4186.2**
Stddev	20.4	1079.	39.3
%RSD	1.0039	2.3238	.93862
#1	2014.8	45673.	4214.0
#2	2043.6	47199.	4158.4

Sample Name: CCVL-4576167 Acquired: 6/6/2017 12:37:02 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01034**	**.10999**	F **.02118**	**.10560**	**.00976**	**.00090**	**.11966**	**.19359**	**.00480**	**.00944**	**.00973**	**.01539**
Stddev	.00002	.00119	.00070	.00384	.00038	.00016	.00474	.00043	.00054	.00062	.00019	.00011
%RSD	.18781	1.0794	3.3056	3.6375	3.9302	18.018	3.9592	.22278	11.233	6.5893	1.9864	.71362
#1	.01032	.10915	.02168	.10832	.01003	.00078	.12301	.19390	.00518	.00988	.00986	.01531
#2	.01035	.11083	.02069	.10289	.00949	.00101	.11631	.19329	.00442	.00900	.00959	.01547
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10201**	**2.9750**	**.02319**	**.20059**	**.01014**	**.01877**	**1.0270**	**.03850**	**2.8405**	**.01143**	**.10101**	**.01942**
Stddev	.00373	.0522	.00381	.00543	.00003	.00019	.0146	.00017	.0630	.00118	.00300	.00529
%RSD	3.6591	1.7552	16.433	2.7061	.27109	1.0085	1.4164	.44083	2.2174	10.352	2.9710	27.260
#1	.09937	3.0120	.02050	.20442	.01016	.01864	1.0167	.03838	2.8850	.01059	.10313	.02316
#2	.10465	2.9381	.02588	.19675	.01012	.01891	1.0372	.03862	2.7960	.01227	.09889	.01567
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02005**	**.48464**	**1.0371**	**.09736**	**.01005**	**.01730**	**.00994**	**.01735**	**.04869**	**.00972**	**.01979**	**.01308**
Stddev	.00806	.01780	.0381	.00287	.00012	.00599	.00053	.00480	.03803	.00130	.00028	.00119
%RSD	40.197	3.6733	3.6733	2.9474	1.1504	34.645	5.2903	27.678	78.108	13.324	1.4011	9.1149
#1	.01435	.49722	1.0641	.09939	.01013	.02154	.01031	.01396	.02180	.00881	.01999	.01392
#2	.02575	.47205	1.0102	.09533	.00997	.01306	.00957	.02075	.07557	.01064	.01959	.01223
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2063.6**	**46628.**	**4101.8**
Stddev	16.8	238.	11.3
%RSD	.81375	.50977	.27482
#1	2051.8	46797.	4109.7
#2	2075.5	46460.	4093.8

Sample Name: CCVH-4569081 Acquired: 6/6/2017 12:40:44 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00604**	**50.164**	**-.00909**	**.00858**	**.00102**	**-.00011**	W **1.0508**	**-.00981**	**-.00001**	**-.00131**	**.00060**	**.02600**
Stddev	.00073	.123	.00315	.00046	.00052	.00023	.0045	.00204	.00032	.00014	.00015	.00040
%RSD	12.099	.24478	34.640	5.4075	50.916	209.36	.42686	20.754	3300.1	10.375	25.339	1.5576
#1	-.00655	50.251	-.00686	.00825	.00139	-.00027	1.0539	-.01125	-.00024	-.00122	.00050	.02571
#2	-.00552	50.078	-.01131	.00891	.00065	.00005	1.0476	-.00837	.00022	-.00141	.00071	.02628
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.649**	**-.08412**	**.00375**	**.06102**	**-.00149**	**-.00197**	**251.60**	**-.00054**	**.00650**	**-.00218**	**5.1032**	**-.01299**
Stddev	.116	.02917	.00003	.00270	.00002	.00058	.70	.00042	.00697	.00273	.0308	.00435
%RSD	.23392	34.676	.86925	4.4166	1.3273	29.212	.27771	76.921	107.12	125.24	.60449	33.442
#1	49.567	-.06350	.00373	.05912	-.00147	-.00238	252.09	-.00025	.01143	-.00411	5.0814	-.00992
#2	49.731	-.10475	.00378	.06293	-.00150	-.00157	251.10	-.00084	.00158	-.00025	5.1250	-.01607
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00029**	**.01164**	**.02490**	**-.00187**	**.00028**	**4.9130**	**.01689**	**-.00352**	**10.191**	**.01389**	**.00030**	**.11916**
Stddev	.00029	.01678	.03591	.00012	.00006	.0164	.00020	.00031	.019	.00001	.00032	.00192
%RSD	99.802	144.21	144.21	6.1905	23.162	.33329	1.1800	8.9061	.19037	.09602	106.47	1.6122
#1	-.00049	.02350	.05029	-.00179	.00023	4.9246	.01703	-.00374	10.205	.01390	.00053	.12052
#2	-.00008	-.00023	-.00049	-.00196	.00032	4.9014	.01675	-.00330	10.177	.01388	.00008	.11780
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1875.7**	**41193.**	**3731.8**
Stddev	13.4	64.	47.4
%RSD	.71649	.15485	1.2710
#1	1866.2	41238.	3698.3
#2	1885.2	41148.	3765.4

Sample Name: CCV-4567764 Acquired: 6/6/2017 12:43:19 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50300**	**.54790**	**.96466**	**.48882**	**.49897**	**.49701**	**.00065**	**5.0061**	**.48905**	**.49200**	**.48820**	**.50146**	**2.4932**
Stddev	.00257	.01724	.01823	.01419	.00322	.00105	.00213	.0184	.01358	.01377	.01399	.00094	.0127
%RSD	.51069	3.1471	1.8896	2.9036	.64620	.21027	327.27	.36776	2.7759	2.7979	2.8660	.18834	.51151
#1	.50118	.56009	.97755	.49886	.50125	.49775	-.00086	5.0191	.49865	.50174	.49809	.50213	2.5022
#2	.50482	.53571	.95177	.47878	.49669	.49627	.00216	4.9931	.47945	.48227	.47831	.50079	2.4842
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.950**	**1.0106**	**19.875**	**.49723**	**.48715**	**5.0906**	**.48874**	**.98922**	**.99316**	**.00021**	**.97435**	**.97054**	**4.9462**
Stddev	.251	.0057	.042	.00076	.01123	.0363	.01282	.02725	.02996	.00103	.03502	.02773	.0178
%RSD	.50298	.56599	.21157	.15265	2.3045	.71379	2.6230	2.7546	3.0166	495.00	3.5943	2.8575	.36075
#1	50.128	1.0146	19.846	.49669	.49508	5.1163	.49780	1.0085	1.0143	.00093	.99912	.99015	4.9335
#2	49.772	1.0065	19.905	.49776	.47921	5.0649	.47967	.96995	.97197	-.00052	.94959	.95093	4.9588
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.585**	**.98165**	**.50068**	**.00381**	**.49334**	**1.0027**	**-.02538**	**.49448**	**.49328**	**.49357**
Stddev	.038	.03611	.00161	.00036	.00079	.0262	.02251	.00056	.00005	.00064
%RSD	.36075	3.6783	.32119	9.5178	.15924	2.6102	88.702	.11251	.01032	.12958
#1	10.558	1.0072	.50182	.00406	.49279	1.0212	-.04130	.49487	.49325	.49402
#2	10.612	.95612	.49955	.00355	.49390	.98417	-.00946	.49409	.49332	.49312
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2004.7**	**44177.**	**4009.3**
Stddev	18.5	741.	4.1
%RSD	.92506	1.6775	.10324
#1	1991.6	44701.	4006.4
#2	2017.8	43653.	4012.3

Sample Name: CCB Acquired: 6/6/2017 12:46:31 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00033**	**.00125**	**.00715**	**.00533**	**.00001**	**-.00023**	**.00513**	**.01164**	**.00002**	**-.00013**	**.00048**	**.00101**	**-.00086**
Stddev	.00013	.00198	.00660	.00042	.00007	.00015	.00247	.00172	.00003	.00014	.00048	.00084	.00228
%RSD	39.442	158.99	92.288	7.8128	488.66	68.300	48.180	14.769	155.99	104.59	99.423	82.342	265.93
#1	-.00043	.00265	.00249	.00562	.00007	-.00033	.00687	.01285	-.00000	-.00023	.00014	.00042	-.00247
#2	-.00024	-.00015	.01182	.00503	-.00004	-.00012	.00338	.01042	.00004	-.00003	.00082	.00161	.00075
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.05936**	**.00423**	**-.00490**	**-.00008**	**-.00022**	**.01475**	**-.00102**	**.00394**	**.00258**	**.00135**	**.00138**	**-.00242**	**-.01517**
Stddev	.00738	.00288	.00245	.00004	.00127	.00439	.00031	.00786	.00400	.00311	.00309	.00159	.01406
%RSD	12.436	68.056	49.973	52.357	576.10	29.795	30.609	199.41	154.98	230.64	223.56	65.584	92.631
#1	-.06458	.00626	-.00663	-.00005	.00068	.01164	-.00080	.00951	.00540	-.00085	-.00080	-.00354	-.00524
#2	-.05414	.00219	-.00317	-.00010	-.00112	.01785	-.00125	-.00162	-.00025	.00355	.00357	-.00130	-.02511
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.03247**	**.00088**	**-.00011**	**.00052**	**.00054**	**.00261**	**.01849**	**.00017**	**.00283**	**-.00282**
Stddev	.03008	.00107	.00010	.00015	.00038	.00439	.02486	.00031	.00002	.00301
%RSD	92.631	121.70	93.363	27.916	70.710	168.21	134.49	179.51	.66772	106.89
#1	-.01120	.00164	-.00004	.00042	.00081	-.00049	.00091	-.00005	.00282	-.00069
#2	-.05374	.00012	-.00018	.00062	.00027	.00571	.03607	.00039	.00285	-.00494
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2051.9**	**46836.**	**4029.0**
Stddev	31.5	94.	94.5
%RSD	1.5356	.20162	2.3450
#1	2074.2	46769.	3962.2
#2	2029.6	46903.	4095.8

Sample Name: CCVL-4576167 Acquired: 6/6/2017 12:49:10 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00979**	**.11022**	**.01763**	**.09736**	**.00988**	**.00085**	**.11639**	**.19740**	**.00490**	**.00977**	**.00984**	**.01583**
Stddev	.00052	.00462	.00473	.00251	.00042	.00003	.00274	.00258	.00023	.00053	.00027	.00163
%RSD	5.3154	4.1899	26.814	2.5797	4.2223	3.0717	2.3572	1.3075	4.7872	5.3964	2.7708	10.302
#1	.00943	.11349	.01429	.09914	.01018	.00083	.11833	.19557	.00507	.01015	.01004	.01699
#2	.01016	.10695	.02098	.09559	.00959	.00087	.11445	.19922	.00474	.00940	.00965	.01468
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10095**	**2.9249**	F **.02689**	**.19356**	**.01009**	**.01743**	**1.0295**	**.03827**	**2.8051**	**.01110**	**.11070**	**.01616**
Stddev	.00040	.0961	.00419	.00263	.00002	.00045	.0031	.00146	.0895	.00155	.00000	.00114
%RSD	.39948	3.2869	15.601	1.3571	.18204	2.5975	.29718	3.8141	3.1905	13.926	.00378	7.0537
#1	.10066	2.9928	.02985	.19170	.01008	.01775	1.0316	.03930	2.8684	.01000	.11070	.01535
#2	.10123	2.8569	.02392	.19541	.01011	.01711	1.0273	.03723	2.7418	.01219	.11071	.01696
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.02000									
Range			30.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01240**	**.45751**	**.97907**	**.09432**	**.00988**	**.01527**	**.00990**	**.01313**	F **.03729**	**.00910**	**.02094**	**.01195**
Stddev	.00348	.02604	.05573	.00310	.00022	.00135	.00075	.00151	.00858	.00006	.00018	.00195
%RSD	28.054	5.6926	5.6926	3.2842	2.2647	8.8085	7.5882	11.496	23.004	.65099	.83901	16.319
#1	.00994	.47593	1.0185	.09651	.00972	.01622	.01043	.01206	.03122	.00906	.02106	.01333
#2	.01486	.43909	.93966	.09213	.01004	.01432	.00936	.01420	.04336	.00914	.02081	.01057
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.02000								.06000			
Range	-30.000%								-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2030.6**	**46380.**	**4049.3**
Stddev	18.4	296.	34.2
%RSD	.90567	.63734	.84399
#1	2043.6	46589.	4073.4
#2	2017.5	46171.	4025.1

Sample Name: LB 280-375810/1-B Acquired: 6/6/2017 12:51:59 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/5 Custom ID2: Custom ID3:
Comment: 375990 TCLP 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**.00477**	**.00107**	**.01325**	**.00093**	**-.00008**	**.00295**	**.07604**	**.00003**
Stddev	.00011	.00079	.00345	.00061	.00000	.00009	.00572	.00715	.00087
%RSD	405.51	16.506	323.43	4.6203	.44118	118.32	193.77	9.3973	2943.4
#1	-.00005	.00422	.00350	.01368	.00094	-.00014	-.00109	.07098	-.00058
#2	.00011	.00533	-.00137	.01282	.00093	-.00001	.00700	.08109	.00064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00025**	**.00069**	**.00541**	**.01914**	**-.01741**	**.00398**	**.02246**	**.00046**	**.00005**
Stddev	.00088	.00066	.00019	.00060	.11130	.00486	.00422	.00009	.00006
%RSD	349.94	95.517	3.4220	3.1249	639.23	121.96	18.797	20.018	119.67
#1	.00037	.00022	.00554	.01956	-.09611	.00055	.02544	.00053	.00001
#2	-.00087	.00115	.00528	.01872	.06129	.00742	.01947	.00040	.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**278.37**	**-.00076**	**.00441**	**.00053**	**-.00137**	**.00173**	**-.00659**	**.00293**	**.00628**
Stddev	1.95	.00042	.00756	.00423	.00764	.00005	.00445	.01033	.02211
%RSD	.70019	55.445	171.52	802.90	558.41	2.7946	67.527	352.06	352.06
#1	279.75	-.00046	-.00094	-.00246	.00403	.00177	-.00974	-.00437	-.00936
#2	276.99	-.00106	.00975	.00352	-.00677	.00170	-.00344	.01024	.02192
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00088**	**.00042**	**-.00016**	**.00011**	**.00280**	**.04404**	**-.00001**	**.00183**	**-.00294**
Stddev	.00048	.00006	.00025	.00024	.00101	.04331	.00032	.00123	.00086
%RSD	54.594	13.825	155.02	216.66	35.983	98.350	3272.2	66.979	29.325
#1	-.00123	.00038	.00002	-.00006	.00209	.01341	.00022	.00097	-.00233
#2	-.00054	.00046	-.00034	.00028	.00351	.07466	-.00024	.00270	-.00355
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1989.7**	**43424.**	**4063.5**
Stddev	30.1	127.	59.3
%RSD	1.5126	.29327	1.4587
#1	1968.4	43514.	4021.5
#2	2011.0	43334.	4105.4

Sample Name: LCS 280-375810/2-B Acquired: 6/6/2017 12:54:37 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 TCLP 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.19853**	W **.39704**	**.74716**	**.19312**	**2.2303**	**.00933**	**.39608**	**9.2435**	**.20518**
Stddev	.00285	.00981	.02005	.00107	.0057	.00006	.00579	.0232	.00435
%RSD	1.4355	2.4705	2.6834	.55462	.25611	.68279	1.4620	.25141	2.1179
#1	.19651	.40397	.76133	.19387	2.2262	.00938	.40017	9.2271	.20825
#2	.20054	.39010	.73298	.19236	2.2343	.00929	.39198	9.2599	.20210
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit		.43200							
Low Limit		1.7200							

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09048**	F **.94910**	**.43066**	F **.24184**	**9.3585**	**.19105**	F **8.9488**	**.09320**	**.18032**
Stddev	.00288	.02419	.00865	.00342	.0506	.00150	.1890	.00177	.00353
%RSD	3.1799	2.5489	2.0084	1.4156	.54098	.78497	2.1118	1.9009	1.9567
#1	.09252	.96621	.42455	.24426	9.3227	.18999	8.8151	.09194	.18281
#2	.08845	.93199	.43678	.23942	9.3943	.19211	9.0824	.09445	.17782
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit		.25200		.22800			11.300		
Low Limit		.16800		.17600			9.2000		

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **272.83**	**.08929**	**1.9467**	**.99589**	**.41261**	**.09991**	**.55754**	F **1.8629**	F **3.9866**
Stddev	.17	.00263	.0464	.02399	.01312	.00008	.01413	.0338	.0722
%RSD	.06101	2.9475	2.3848	2.4094	3.1807	.08247	2.5348	1.8124	1.8124
#1	272.94	.09115	1.9795	1.0129	.42189	.09985	.56753	1.8868	4.0377
#2	272.71	.08743	1.9138	.97892	.40333	.09996	.54755	1.8390	3.9355
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Fail
High Limit	11.200							2.3000	4.9220
Low Limit	9.1000							1.8800	4.0200

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.36264**	**.18699**	**.18873**	**.19026**	**.35563**	**.40589**	**.09227**	**.47117**	**.09452**
Stddev	.00711	.00004	.00312	.00397	.00328	.07419	.00069	.01141	.00293
%RSD	1.9605	.02297	1.6551	2.0863	.92192	18.279	.74836	2.4222	3.1040
#1	.36767	.18702	.18652	.18745	.35795	.35343	.09179	.46310	.09244
#2	.35761	.18696	.19094	.19307	.35332	.45835	.09276	.47924	.09659
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1972.8**	**43942.**	**4078.6**
Stddev	2.6	1394.	70.3
%RSD	.13266	3.1733	1.7235
#1	1974.7	44928.	4028.9
#2	1970.9	42956.	4128.4

Sample Name: 280-97709-A-2-B Acquired: 6/6/2017 12:57:10 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 TCLP 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00047**	**.01551**	**.00153**	**.10909**	**.04094**	**-.00012**	**.00914**	**48.342**	**.00030**
Stddev	.00017	.00245	.00418	.00172	.00013	.00007	.00007	.039	.00033
%RSD	35.958	15.790	273.84	1.5780	.32704	57.422	.72642	.08143	110.07
#1	.00059	.01724	.00448	.11031	.04103	-.00017	.00909	48.370	.00053
#2	.00035	.01377	-.00143	.10788	.04084	-.00007	.00919	48.314	.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00135**	**.01300**	**.02011**	**1.6067**	**11.201**	**.03324**	**9.9378**	**.08203**	**.00690**
Stddev	.00025	.00125	.00257	.0011	.019	.00060	.2589	.00192	.00059
%RSD	18.168	9.6305	12.799	.06639	.17100	1.8049	2.6050	2.3422	8.6171
#1	-.00118	.01389	.01829	1.6074	11.215	.03281	9.7547	.08067	.00732
#2	-.00153	.01211	.02193	1.6059	11.187	.03366	10.121	.08338	.00648
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1930.1**	**.01233**	**9.9170**	**.00102**	F **740.34**	**-.00164**	**.01264**	**.38289**	**.81939**
Stddev	1.0	.00093	.2862	.00060	19.83	.00553	.01455	.02359	.05049
%RSD	.05389	7.5241	2.8858	59.113	2.6785	337.48	115.15	6.1616	6.1616
#1	1930.8	.01298	10.119	.00144	754.36	.00227	.02292	.39957	.85509
#2	1929.4	.01167	9.7146	.00059	726.32	-.00555	.00235	.36621	.78369
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00090**	**.49537**	**.00156**	**.00333**	**-.00152**	**.01644**	**.00151**	**.09883**	**-.00171**
Stddev	.00192	.00017	.00237	.00033	.00116	.05179	.00066	.00335	.00069
%RSD	214.23	.03425	151.69	9.8137	76.375	315.06	43.557	3.3861	40.254
#1	-.00225	.49549	.00324	.00356	-.00070	-.02018	.00104	.09646	-.00220
#2	.00046	.49525	-.00011	.00310	-.00235	.05306	.00197	.10119	-.00123
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1772.9**	**38666.**	**3885.8**
Stddev	16.4	588.	11.9
%RSD	.92602	1.5206	.30495
#1	1784.6	39082.	3877.4
#2	1761.3	38250.	3894.2

Sample Name: 280-97713-B-2-B Acquired: 6/6/2017 12:59:51 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 TCLP 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00016**	**.00484**	**-.00207**	**.13440**	**.11740**	**-.00016**	**.00363**	**89.117**	**.00023**
Stddev	.00048	.00220	.00217	.00334	.00013	.00025	.00475	.148	.00012
%RSD	295.97	45.460	104.93	2.4826	.10769	152.12	130.68	.16654	50.865
#1	-.00018	.00639	-.00360	.13676	.11749	.00001	.00028	89.222	.00032
#2	.00050	.00328	-.00053	.13204	.11731	-.00034	.00699	89.013	.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00155**	**.01652**	**.01865**	**2.5409**	**15.936**	**.04275**	**15.618**	**.11386**	**.00861**
Stddev	.00034	.00058	.00010	.0006	.030	.00053	.001	.00043	.00014
%RSD	21.971	3.5024	.51533	.02226	.18705	1.2346	.00664	.38103	1.5830
#1	-.00179	.01693	.01858	2.5413	15.915	.04312	15.617	.11417	.00851
#2	-.00131	.01612	.01872	2.5405	15.957	.04238	15.619	.11356	.00871
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1963.6**	**.01332**	**16.598**	**-.00205**	F **810.77**	**-.00235**	**.01506**	**.50056**	**1.0712**
Stddev	1.1	.00004	.575	.00346	23.90	.00081	.00608	.00684	.0146
%RSD	.05610	.28333	3.4618	168.70	2.9482	34.486	40.332	1.3664	1.3664
#1	1964.3	.01329	17.004	-.00450	827.68	-.00178	.01936	.50539	1.0815
#2	1962.8	.01334	16.192	.00040	793.87	-.00293	.01077	.49572	1.0608
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00152**	**.89693**	**-.00098**	**.00412**	**.00266**	**.02000**	**.00077**	**.12511**	**-.00116**
Stddev	.00127	.00147	.00071	.00009	.00010	.04675	.00018	.00098	.00026
%RSD	83.788	.16375	71.924	2.2018	3.7444	233.77	23.762	.78234	22.118
#1	-.00062	.89797	-.00048	.00419	.00273	.05306	.00064	.12442	-.00098
#2	-.00242	.89590	-.00148	.00406	.00259	-.01306	.00090	.12580	-.00134
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1793.9**	**39078.**	**3894.3**
Stddev	19.6	165.	24.7
%RSD	1.0904	.42192	.63545
#1	1780.1	39194.	3911.8
#2	1807.8	38961.	3876.8

Sample Name: 280-97714-B-2-B Acquired: 6/6/2017 13:02:30 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 TCLP 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00043**	**.01313**	**.00500**	**.10971**	**.04622**	**-.00008**	**.00788**	**58.492**	**.00004**
Stddev	.00095	.00038	.00270	.00446	.00114	.00010	.00130	.550	.00028
%RSD	222.68	2.8806	54.059	4.0662	2.4690	115.40	16.539	.94047	727.34
#1	-.00110	.01339	.00692	.11287	.04542	-.00002	.00880	58.103	.00023
#2	.00025	.01286	.00309	.10656	.04703	-.00015	.00696	58.881	-.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00174**	**.01189**	**.02035**	**1.8036**	**12.271**	**.03855**	**10.571**	**.09201**	**.00602**
Stddev	.00070	.00041	.00049	.0097	.248	.00261	.033	.00008	.00013
%RSD	40.245	3.4663	2.3996	.53501	2.0204	6.7619	.31459	.08652	2.0873
#1	-.00224	.01218	.02069	1.7967	12.096	.03671	10.595	.09206	.00611
#2	-.00125	.01160	.02000	1.8104	12.446	.04039	10.548	.09195	.00593
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2072.4**	**.01152**	**10.901**	**-.00140**	F **803.29**	**-.00046**	**.01795**	**.34923**	**.74736**
Stddev	19.3	.00069	.403	.00233	24.21	.00027	.00343	.00370	.00791
%RSD	.93139	6.0107	3.6997	166.22	3.0137	59.285	19.101	1.0586	1.0586
#1	2058.8	.01201	11.186	.00025	820.41	-.00066	.02038	.34662	.74176
#2	2086.1	.01103	10.616	-.00304	786.17	-.00027	.01553	.35185	.75295
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00230**	**.60058**	**.00151**	**.00379**	**.00195**	**.05975**	**.00087**	**.10467**	**-.00056**
Stddev	.00045	.00355	.00091	.00043	.00365	.01036	.00010	.00138	.00213
%RSD	19.736	.59142	60.464	11.402	187.38	17.332	11.283	1.3198	382.66
#1	-.00198	.59807	.00086	.00348	.00452	.05243	.00093	.10369	.00095
#2	-.00262	.60309	.00216	.00409	-.00063	.06707	.00080	.10565	-.00206
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1808.0**	**39146.**	**3856.1**
Stddev	10.2	268.	202.5
%RSD	.56431	.68391	5.2502
#1	1815.3	38956.	3999.3
#2	1800.8	39335.	3713.0

Sample Name: 280-97715-A-2-B Acquired: 6/6/2017 13:05:10 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 TCLP 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**.00837**	**-.00639**	**.12115**	**.06683**	**.00004**	**.00436**	**68.581**	**.00037**
Stddev	.00122	.00108	.00427	.00448	.00037	.00020	.00180	.074	.00009
%RSD	4106.4	12.905	66.872	3.7014	.54647	548.93	41.275	.10757	23.787
#1	-.00089	.00913	-.00337	.12432	.06709	.00018	.00309	68.633	.00044
#2	.00083	.00761	-.00940	.11798	.06658	-.00010	.00564	68.529	.00031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00207**	**.01344**	**.02242**	**2.0920**	**13.363**	**.03678**	**12.551**	**.10613**	**.00816**
Stddev	.00029	.00014	.00161	.0008	.021	.00188	.042	.00042	.00028
%RSD	14.217	1.0127	7.1645	.03721	.15460	5.1065	.33084	.39608	3.4402
#1	-.00186	.01354	.02355	2.0925	13.377	.03545	12.580	.10643	.00836
#2	-.00227	.01335	.02128	2.0914	13.348	.03810	12.521	.10584	.00796
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2224.3**	**.01211**	**13.101**	**-.00188**	F **894.54**	**-.00127**	**.02298**	**.30368**	**.64988**
Stddev	.9	.00076	.434	.00138	24.21	.00431	.00355	.00972	.02080
%RSD	.03965	6.2881	3.3093	73.370	2.7061	339.88	15.454	3.2001	3.2001
#1	2223.7	.01265	13.408	-.00285	911.66	.00178	.02047	.31056	.66459
#2	2224.9	.01157	12.795	-.00090	877.42	-.00431	.02549	.29681	.63518
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00152**	**.70394**	**.00051**	**.00397**	**.00136**	**-.01277**	**.00098**	**.11749**	**-.00065**
Stddev	.00168	.00112	.00055	.00073	.00189	.02974	.00018	.00102	.00400
%RSD	110.90	.15873	107.78	18.314	139.04	232.91	18.050	.87007	616.34
#1	-.00033	.70473	.00012	.00346	.00002	.00826	.00110	.11676	.00218
#2	-.00271	.70315	.00090	.00449	.00270	-.03379	.00085	.11821	-.00348
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1797.3**	**38811.**	**3919.4**
Stddev	11.8	1375.	60.7
%RSD	.65886	3.5431	1.5498
#1	1788.9	37839.	3962.4
#2	1805.7	39784.	3876.5

Sample Name: 280-97688-A-1-C Acquired: 6/6/2017 13:07:50 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 TCLP 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00025**	**.00626**	**.00664**	**.01494**	**.50275**	**-.00001**	**.00606**	**153.71**	**.00032**
Stddev	.00021	.00014	.00350	.00017	.00143	.00018	.00129	.07	.00025
%RSD	83.736	2.2042	52.721	1.1637	.28408	1555.5	21.307	.04461	77.829
#1	-.00010	.00636	.00911	.01481	.50174	-.00014	.00515	153.66	.00015
#2	-.00040	.00616	.00416	.01506	.50376	.00011	.00698	153.76	.00050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00046**	**.00058**	**.00377**	**.03293**	**1.9964**	**.00686**	**7.5435**	**.03631**	**-.00091**
Stddev	.00011	.00096	.00024	.00153	.0078	.00425	.0002	.00031	.00074
%RSD	24.647	165.74	6.4199	4.6609	.39309	61.980	.00259	.86186	81.406
#1	-.00054	.00126	.00394	.03402	2.0020	.00385	7.5436	.03654	-.00143
#2	-.00038	-.00010	.00360	.03185	1.9909	.00986	7.5433	.03609	-.00039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**278.21**	**-.00073**	**.00723**	**.00045**	**1.0960**	**.00081**	**-.01405**	**.68013**	**1.4555**
Stddev	.68	.00004	.00377	.00182	.0176	.00100	.00553	.00024	.0005
%RSD	.24472	5.5564	52.093	405.06	1.6023	123.04	39.335	.03571	.03571
#1	278.69	-.00071	.00457	.00173	1.1084	.00011	-.01796	.68031	1.4559
#2	277.73	-.00076	.00990	-.00084	1.0836	.00152	-.01014	.67996	1.4551
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00097**	**.85279**	**.00108**	**-.00026**	**.00322**	**-.03068**	**-.00075**	**.00148**	**-.00141**
Stddev	.00421	.00112	.00003	.00007	.00021	.00115	.00106	.00091	.00294
%RSD	433.42	.13133	2.4171	28.461	6.4259	3.7505	140.31	61.776	208.06
#1	.00200	.85199	.00106	-.00031	.00336	-.02987	-.00150	.00083	.00067
#2	-.00395	.85358	.00110	-.00021	.00307	-.03149	-.00001	.00212	-.00349
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1928.9**	**42944.**	**3972.6**
Stddev	29.1	1157.	84.6
%RSD	1.5089	2.6951	2.1307
#1	1908.4	42125.	3912.8
#2	1949.5	43762.	4032.5

Sample Name: 280-97688-C-2-C Acquired: 6/6/2017 13:10:26 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 TCLP 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00029**	**.00702**	**-.00041**	**.02510**	**.03046**	**-.00009**	**.00399**	**83.445**	**.00032**
Stddev	.00054	.00023	.00876	.00158	.00004	.00003	.00160	.037	.00022
%RSD	189.88	3.2238	2118.9	6.2845	.12805	33.694	40.051	.04459	68.597
#1	-.00067	.00718	.00578	.02399	.03048	-.00011	.00512	83.472	.00048
#2	.00010	.00686	-.00661	.02622	.03043	-.00007	.00286	83.419	.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00302**	**.00042**	**.00823**	**1.0740**	**1.5138**	**.00949**	**3.9737**	**.98560**	**-.00009**
Stddev	.00033	.00061	.00051	.0002	.0396	.00176	.0082	.00110	.00009
%RSD	10.999	143.95	6.1681	.01960	2.6136	18.499	.20738	.11133	107.07
#1	.00325	-.00001	.00787	1.0738	1.4858	.01073	3.9796	.98637	-.00002
#2	.00278	.00085	.00859	1.0741	1.5418	.00825	3.9679	.98482	-.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**461.43**	**.02379**	**.00751**	**-.00183**	**89.390**	**-.00178**	**-.01380**	**3.8814**	**8.3063**
Stddev	1.08	.00089	.00060	.00195	2.663	.00022	.00114	.0045	.0097
%RSD	.23346	3.7408	7.9515	106.50	2.9792	12.217	8.2441	.11693	.11693
#1	462.20	.02442	.00709	-.00045	91.273	-.00162	-.01300	3.8782	8.2994
#2	460.67	.02316	.00794	-.00320	87.507	-.00193	-.01461	3.8846	8.3131
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00123**	**.54243**	**-.00072**	**.00050**	**.00076**	**-.01322**	**-.00111**	**.04263**	**-.00066**
Stddev	.00100	.00020	.00021	.00015	.00265	.00846	.00041	.00043	.00154
%RSD	81.819	.03661	28.485	31.119	349.72	63.999	36.983	1.0197	232.70
#1	-.00194	.54229	-.00058	.00039	-.00112	-.00724	-.00082	.04294	.00043
#2	-.00052	.54257	-.00087	.00061	.00263	-.01920	-.00140	.04232	-.00175
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1891.6**	**42106.**	**3984.4**
Stddev	17.7	593.	70.1
%RSD	.93712	1.4080	1.7582
#1	1904.1	42525.	3934.9
#2	1879.0	41686.	4034.0

Sample Name: CCVH-4569081 Acquired: 6/6/2017 13:13:08 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00612**	**50.577**	**.00414**	**.00250**	**.00074**	**.00000**	**1.0355**	**.01092**	**.00012**	**-.00141**	**.00067**	**.02620**
Stddev	.00017	.027	.00453	.00014	.00016	.00009	.0202	.00214	.00029	.00015	.00008	.00196
%RSD	2.7778	.05274	109.38	5.6641	22.174	3684.0	1.9536	19.579	237.65	10.820	11.702	7.4663
#1	-.00624	50.596	.00734	.00260	.00085	-.00006	1.0498	.00941	.00033	-.00131	.00072	.02481
#2	-.00600	50.558	.00094	.00240	.00062	.00006	1.0212	.01243	-.00008	-.00152	.00061	.02758
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.954**	**.05880**	**.00700**	**.06079**	**-.00159**	**-.00137**	**255.96**	**.00011**	**.01315**	**.00223**	W **5.2712**	**-.01097**
Stddev	.046	.07060	.00178	.00242	.00003	.00096	.56	.00075	.00149	.00106	.0814	.00134
%RSD	.09185	120.08	25.434	3.9877	2.0663	70.479	.21684	653.29	11.336	47.219	1.5451	12.180
#1	49.921	.00887	.00826	.05907	-.00156	-.00205	255.56	.00064	.01421	.00298	5.3288	-.01192
#2	49.986	.10872	.00574	.06250	-.00161	-.00069	256.35	-.00042	.01210	.00149	5.2136	-.01003
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Warn	None
Value											5.0000	
Range											5.0000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01455**	**-.03794**	**-.08120**	**-.00056**	**.00036**	**4.9720**	**.01749**	**.00178**	**10.315**	**.01499**	**.00167**	**.12007**
Stddev	.00585	.00789	.01688	.00168	.00013	.0141	.00001	.00005	.033	.00069	.00006	.00451
%RSD	40.198	20.788	20.788	300.99	35.549	.28428	.07788	2.6288	.31734	4.5811	3.7204	3.7523
#1	-.01041	-.04352	-.09313	-.00175	.00027	4.9620	.01748	.00181	10.292	.01451	.00171	.12326
#2	-.01868	-.03236	-.06926	.00063	.00045	4.9820	.01750	.00174	10.338	.01548	.00162	.11689
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1938.7**	**43530.**	**3891.0**
Stddev	2.8	705.	26.7
%RSD	.14681	1.6204	.68602
#1	1936.6	44029.	3872.1
#2	1940.7	43031.	3909.9

Sample Name: CCV-4567764 Acquired: 6/6/2017 13:15:42 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50928**	F **.57063**	**.98202**	**.49694**	**.50305**	**.50077**	**.00073**	**5.0174**	**.50051**	**.50091**	**.49986**	**.51066**
Stddev	.00002	.01062	.01007	.00820	.00012	.00023	.00594	.0077	.00973	.01122	.01214	.00040
%RSD	.00326	1.8612	1.0258	1.6509	.02466	.04570	812.16	.15423	1.9435	2.2403	2.4289	.07827
#1	.50927	.57814	.98915	.50274	.50313	.50061	.00493	5.0229	.50739	.50885	.50845	.51038
#2	.50929	.56312	.97490	.49114	.50296	.50094	-.00347	5.0119	.49363	.49298	.49128	.51095
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5257**	**50.710**	**1.0245**	**20.047**	**.50356**	**.49750**	**5.3562**	**.49886**	**1.0236**	**1.0119**	**.13175**	**1.0009**
Stddev	.0030	.060	.0026	.039	.00179	.01163	.0190	.01086	.0196	.0177	.01073	.0186
%RSD	.11985	.11761	.25734	.19431	.35574	2.3377	.35375	2.1773	1.9109	1.7537	8.1425	1.8616
#1	2.5279	50.753	1.0226	20.074	.50482	.50573	5.3696	.50654	1.0375	1.0245	.13933	1.0141
#2	2.5236	50.668	1.0263	20.019	.50229	.48928	5.3428	.49118	1.0098	.99936	.12416	.98772
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99056**	**4.9775**	**10.652**	**1.0021**	**.50476**	**.00441**	**.50095**	**1.0270**	**-.03071**	**.50194**	**.49392**	**.49643**
Stddev	.01538	.0124	.027	.0150	.00022	.00072	.00163	.0243	.04470	.00456	.00032	.00214
%RSD	1.5528	.24971	.24971	1.4963	.04364	16.300	.32618	2.3639	145.53	.90925	.06458	.43074
#1	1.0014	4.9863	10.671	1.0127	.50460	.00492	.50210	1.0441	.00089	.50517	.49369	.49794
#2	.97969	4.9687	10.633	.99153	.50491	.00390	.49979	1.0098	-.06232	.49872	.49414	.49492
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1994.8**	**44703.**	**4089.5**
Stddev	31.0	983.	5.8
%RSD	1.5544	2.1993	.14285
#1	1972.9	44008.	4085.4
#2	2016.7	45398.	4093.7

Sample Name: CCV-4567764 Acquired: 6/6/2017 13:20:02 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50105**	F **.57679**	**1.0040**	**.50034**	**.49947**	**.49636**	**.00231**	**4.9974**	**.50495**	**.50488**	**.50589**	**.50407**
Stddev	.00002	.00306	.0028	.00050	.00000	.00159	.00097	.0097	.00067	.00268	.00176	.00258
%RSD	.00369	.53106	.27873	.10079	.00046	.31971	42.024	.19400	.13209	.53056	.34870	.51233
#1	.50106	.57463	1.0021	.49998	.49947	.49524	.00300	4.9905	.50448	.50299	.50464	.50590
#2	.50104	.57896	1.0060	.50069	.49947	.49748	.00162	5.0042	.50542	.50678	.50713	.50224
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4888**	**50.118**	**1.0167**	**19.775**	**.49485**	**.50439**	**5.1980**	**.50265**	**1.0336**	**1.0238**	**.09778**	**1.0130**
Stddev	.0077	.278	.0013	.015	.00150	.00286	.0538	.00208	.0083	.0039	.00253	.0055
%RSD	.30805	.55559	.12255	.07390	.30335	.56681	1.0342	.41337	.80594	.38397	2.5826	.53757
#1	2.4834	49.921	1.0158	19.785	.49591	.50237	5.1600	.50119	1.0278	1.0266	.09599	1.0092
#2	2.4942	50.314	1.0176	19.765	.49379	.50641	5.2360	.50412	1.0395	1.0210	.09956	1.0169
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99205**	**4.9598**	**10.614**	**1.0135**	**.50089**	**.00423**	**.49339**	**1.0340**	**-.00187**	**.49233**	**.48648**	**.49269**
Stddev	.00975	.0375	.080	.0001	.00003	.00186	.00285	.0002	.02185	.00084	.00380	.00121
%RSD	.98285	.75594	.75594	.01373	.00540	44.081	.57683	.02338	1171.1	.17007	.78073	.24657
#1	.99895	4.9333	10.557	1.0136	.50087	.00291	.49540	1.0339	.01358	.49293	.48379	.49355
#2	.98516	4.9863	10.671	1.0134	.50091	.00554	.49137	1.0342	-.01731	.49174	.48916	.49183
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2057.8**	**46688.**	**4105.6**
Stddev	26.5	199.	162.7
%RSD	1.2885	.42650	3.9625
#1	2076.6	46829.	4220.7
#2	2039.1	46548.	3990.6

Sample Name: CCB Acquired: 6/6/2017 13:23:59 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00078**	**.00158**	**.00598**	**.00339**	**-.00004**	**-.00000**	**-.00074**	**.00447**	**.00040**	**.00021**	**.00026**	**.00060**
Stddev	.00018	.00010	.00257	.00011	.00006	.00001	.00353	.00036	.00014	.00068	.00005	.00022
%RSD	23.340	6.4450	43.023	3.2768	158.00	106.74	474.23	8.1103	34.255	319.16	17.683	36.156
#1	.00065	.00151	.00416	.00331	-.00008	-.00001	-.00324	.00421	.00030	-.00027	.00023	.00075
#2	.00091	.00165	.00779	.00346	.00000	-.00000	.00175	.00473	.00050	.00069	.00030	.00045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00224**	**-.04371**	**.00481**	**-.00633**	**-.00006**	**-.00003**	**.13795**	**-.00081**	**.00149**	**.00192**	W **.07107**	**-.00255**
Stddev	.00374	.00084	.00153	.00082	.00005	.00028	.00509	.00013	.00077	.00110	.00213	.00441
%RSD	167.25	1.9109	31.788	12.882	83.317	897.20	3.6924	16.487	51.453	57.255	2.9945	173.26
#1	-.00041	-.04312	.00589	-.00575	-.00009	.00017	.13435	-.00090	.00203	.00114	.07257	-.00567
#2	.00489	-.04430	.00373	-.00690	-.00002	-.00023	.14155	-.00071	.00095	.00270	.06956	.00057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit											.05000	
Low Limit											-.20000	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00757**	**-.00339**	**-.00727**	**-.00317**	**-.00008**	**.00046**	**.00014**	**-.00045**	**-.00759**	**-.00052**	**.00175**	**-.00007**
Stddev	.00146	.01141	.02442	.00107	.00001	.00020	.00008	.00292	.00338	.00027	.00057	.00183
%RSD	19.257	336.12	336.12	33.881	15.149	44.739	55.138	647.05	44.479	51.229	32.418	2543.3
#1	-.00654	.00467	.01000	-.00241	-.00008	.00031	.00020	.00161	-.00520	-.00033	.00135	.00122
#2	-.00860	-.01146	-.02453	-.00393	-.00007	.00060	.00009	-.00251	-.00998	-.00071	.00215	-.00137
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2036.3**	**46940.**	**4145.6**
Stddev	3.5	588.	23.7
%RSD	.17268	1.2521	.57196
#1	2033.8	46524.	4128.9
#2	2038.8	47355.	4162.4

Sample Name: xCCVL-4576167 Acquired: 6/6/2017 13:27:08 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01075**	**.12059**	F **.02385**	**.10181**	**.01064**	**.00096**	**.12062**	**.20001**	**.00536**	**.01048**	**.01080**	**.01683**
Stddev	.00003	.00087	.00381	.00024	.00026	.00020	.00492	.00124	.00037	.00063	.00049	.00004
%RSD	.29936	.72548	15.992	.23398	2.4728	20.298	4.0779	.61802	6.9930	5.9733	4.5403	.26392
#1	.01077	.11997	.02655	.10164	.01045	.00110	.11714	.20088	.00509	.01004	.01115	.01680
#2	.01073	.12121	.02116	.10198	.01083	.00083	.12409	.19914	.00562	.01093	.01046	.01686
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11015**	**3.0025**	**.02205**	**.20026**	**.01034**	**.01937**	**1.1416**	**.04094**	**2.9756**	**.00924**	F **.16323**	**.02165**
Stddev	.00562	.0013	.00169	.00523	.00004	.00052	.0055	.00042	.0175	.00301	.01078	.00261
%RSD	5.1047	.04309	7.6835	2.6092	.41133	2.6742	.47713	1.0364	.58863	32.548	6.6071	12.037
#1	.11413	3.0016	.02325	.20395	.01031	.01973	1.1454	.04064	2.9632	.01136	.15560	.02349
#2	.10617	3.0034	.02086	.19656	.01037	.01900	1.1377	.04124	2.9880	.00711	.17085	.01981
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01764**	**.49759**	**1.0648**	**.10103**	**.01005**	**.01670**	**.00987**	**.01445**	**.04801**	**.00984**	**.02055**	**.01120**
Stddev	.00216	.03868	.0828	.00242	.00005	.00078	.00068	.00252	.02208	.00051	.00035	.00294
%RSD	12.231	7.7729	7.7729	2.3964	.46272	4.6589	6.9108	17.408	45.994	5.1868	1.7248	26.269
#1	.01917	.47024	1.0063	.10274	.01002	.01615	.00939	.01623	.06362	.00948	.02080	.01328
#2	.01612	.52494	1.1234	.09931	.01008	.01725	.01036	.01267	.03240	.01020	.02030	.00912
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1992.5**	**45637.**	**3906.1**
Stddev	.8	26.	29.8
%RSD	.04134	.05706	.76316
#1	1993.1	45656.	3885.0
#2	1991.9	45619.	3927.2

Sample Name: CCVL-4576167 Acquired: 6/6/2017 13:32:30 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00979**	**.11964**	**.01496**	**.09864**	**.01070**	**.00099**	**.11854**	**.20257**	**.00537**	**.01007**	**.01063**	**.01606**
Stddev	.00003	.00154	.00985	.00318	.00040	.00007	.00434	.00623	.00034	.00035	.00019	.00007
%RSD	.29064	1.2903	65.862	3.2253	3.6986	7.0647	3.6617	3.0759	6.2532	3.4470	1.7948	.45353
#1	.00981	.11854	.00799	.10089	.01098	.00094	.12161	.19816	.00560	.01032	.01050	.01611
#2	.00977	.12073	.02193	.09639	.01042	.00104	.11547	.20698	.00513	.00983	.01077	.01600
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09833**	**2.9870**	**.02424**	**.19822**	**.00990**	**.01906**	**1.0711**	**.04026**	**2.9217**	**.00994**	F **.15587**	**.01806**
Stddev	.00018	.0325	.00157	.00312	.00001	.00015	.0097	.00113	.0078	.00079	.00380	.00132
%RSD	.18697	1.0886	6.4691	1.5746	.14681	.78570	.90525	2.7978	.26808	7.9260	2.4365	7.2809
#1	.09846	3.0100	.02535	.19601	.00989	.01917	1.0780	.04106	2.9272	.00938	.15856	.01899
#2	.09820	2.9640	.02313	.20042	.00991	.01895	1.0642	.03946	2.9161	.01049	.15319	.01713
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01752**	**.45598**	**.97579**	**.10052**	**.00996**	**.01469**	**.00983**	**.01741**	**.06219**	**.00898**	**.02019**	**.01076**
Stddev	.00127	.00813	.01740	.00045	.00013	.00088	.00023	.00313	.02727	.00104	.00010	.00317
%RSD	7.2667	1.7833	1.7833	.44885	1.2622	6.0027	2.3279	17.962	43.858	11.553	.51110	29.478
#1	.01842	.46173	.98809	.10021	.01005	.01531	.00999	.01962	.08147	.00972	.02012	.01300
#2	.01662	.45023	.96349	.10084	.00987	.01407	.00967	.01520	.04290	.00825	.02026	.00852
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1978.2**	**45838.**	**3966.5**
Stddev	24.7	153.	13.0
%RSD	1.2492	.33425	.32708
#1	1995.7	45946.	3957.4
#2	1960.7	45730.	3975.7

Sample Name: CCVL-4576167 Acquired: 6/6/2017 13:34:47 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00921**	**.12058**	**.01540**	**.09774**	**.01053**	**.00077**	**.12142**	**.20027**	**.00519**	**.01029**	**.01055**	**.01561**
Stddev	.00080	.00120	.00482	.00111	.00032	.00008	.00618	.00348	.00056	.00001	.00021	.00075
%RSD	8.7168	.99196	31.309	1.1375	3.0524	10.005	5.0895	1.7355	10.837	.11344	2.0143	4.8312
#1	.00864	.11973	.01881	.09695	.01076	.00082	.11705	.19781	.00479	.01028	.01040	.01507
#2	.00977	.12142	.01199	.09852	.01030	.00071	.12579	.20272	.00559	.01029	.01070	.01614
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10149**	**3.0253**	**.02060**	**.19529**	**.01003**	**.01892**	**1.0791**	**.04079**	**2.9357**	**.00968**	F **.14191**	**.01830**
Stddev	.00214	.0057	.00119	.00204	.00005	.00035	.0005	.00031	.0011	.00045	.00167	.00033
%RSD	2.1112	.18890	5.7888	1.0424	.50469	1.8654	.04250	.76776	.03843	4.6473	1.1752	1.8098
#1	.09998	3.0294	.01976	.19673	.00999	.01917	1.0794	.04057	2.9349	.01000	.14073	.01853
#2	.10301	3.0213	.02144	.19385	.01006	.01867	1.0787	.04101	2.9365	.00936	.14309	.01806
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01260**	**.46634**	**.99796**	**.09983**	**.00987**	**.01714**	**.01000**	F **.02045**	F **.02536**	**.01001**	**.02033**	**.01345**
Stddev	.00122	.00821	.01757	.00237	.00014	.00102	.00030	.00001	.01228	.00002	.00031	.00205
%RSD	9.6604	1.7608	1.7608	2.3768	1.3758	5.9427	2.9871	.06642	48.418	.19889	1.5395	15.226
#1	.01346	.46053	.98553	.09815	.00996	.01786	.00979	.02046	.01668	.01000	.02055	.01489
#2	.01174	.47214	1.0104	.10151	.00977	.01641	.01022	.02044	.03404	.01003	.02011	.01200
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.02000							.01500	.06000			
Range	-30.000%							30.000%	-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2020.2**	**46417.**	**3978.8**
Stddev	7.9	126.	7.7
%RSD	.39192	.27166	.19347
#1	2014.6	46327.	3973.4
#2	2025.8	46506.	3984.3

Sample Name: x280-97688-A-3-D Acquired: 6/6/2017 13:39:40 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 TCLP 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k **.00010**	**.03943**	k **.00687**	**.01760**	**.02112**	**.00004**	k **.00893**	^ *****	k **.00071**
Stddev	.00023	.00031	.00229	.00205	.00948	.00013	.00002	-----	.00017
%RSD	222.31	.78597	33.278	11.623	44.889	302.45	.25519	-----	24.016
#1	k .00026	.03965	k .00526	.01904	.01442	-.00005	k .00895	^ -----	k .00083
#2	-.00006	.03921	.00849	.01615	.02783	.00013	.00892	104.01	.00059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k **-.00042**	**.00140**	k **.00548**	**.01355**	**.30797**	k **.00364**	**6.2709**	**.10938**	k **-.00135**
Stddev	.00015	.00096	.00023	.00743	.16632	.00131	.0065	.00002	.00042
%RSD	35.850	68.485	4.2374	54.831	54.006	36.156	.10337	.02198	31.413
#1	k -.00053	.00207	k .00532	.00830	.19036	k .00457	6.2663	.10940	k -.00105
#2	-.00032	.00072	.00565	.01880	.42557	.00271	6.2754	.10936	-.00164
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**211.73**	k **.00102**	**.01273**	k **-.00015**	k **42.732**	k **-.00370**	k **-.00850**	**.76823**	**1.6440**
Stddev	92.08	.00030	.00497	.00030	.056	.00316	.00768	.31732	.6791
%RSD	43.491	29.154	39.043	198.50	.13030	85.270	90.332	41.305	41.305
#1	146.62	k .00081	.01624	k -.00037	k 42.771	k -.00593	k -.01393	.54385	1.1638
#2	276.84	.00123	.00921	.00006	42.693	-.00147	-.00307	.99260	2.1242
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k **.00041**	^ *****	k **.00202**	k **.00021**	k **-.00168**	k **-.01679**	k **-.00025**	k **.00463**	k **-.00312**
Stddev	.00156	-----	.00120	.00062	.00138	.00688	.00021	.00009	.00042
%RSD	379.77	-----	59.343	298.04	82.107	41.006	83.883	1.8790	13.493
#1	k .00151	^ -----	k .00117	k .00065	k -.00266	k -.01192	k -.00010	k .00469	k -.00282
#2	-.00069	.51380	.00287	-.00023	-.00071	-.02166	-.00039	.00456	-.00342
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1940.8**	**43647.**	**3992.1**
Stddev	3.7	275.	61.8
%RSD	.18895	.63110	1.5473
#1	1943.4	43841.	4035.8
#2	1938.2	43452.	3948.4

Sample Name: 280-97688-A-3-D SD@5 Acquired: 6/6/2017 13:41:58 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 TCLP 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00014**	**.00989**	**.00104**	**.00464**	**.00599**	**.00006**	**.00291**	**21.390**	**.00014**
Stddev	.00013	.00206	.00287	.00093	.00042	.00002	.00273	.180	.00029
%RSD	91.828	20.805	276.27	20.149	6.9970	38.052	93.633	.83997	204.22
#1	.00024	.00844	-.00099	.00398	.00628	.00008	.00484	21.263	.00035
#2	.00005	.01135	.00307	.00530	.00569	.00005	.00098	21.517	-.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00026**	**.00095**	**.00212**	**.02709**	**.03685**	**.00465**	**1.3896**	**.02429**	**-.00076**
Stddev	.00020	.00001	.00062	.00004	.01092	.00048	.0034	.00009	.00088
%RSD	77.391	.60753	29.362	.14494	29.633	10.432	.24278	.37101	115.76
#1	-.00040	.00096	.00255	.02712	.04457	.00499	1.3872	.02422	-.00139
#2	-.00012	.00095	.00168	.02706	.02913	.00430	1.3920	.02435	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**57.256**	**-.00076**	**.00904**	**-.00199**	**9.0786**	**.00078**	**-.00520**	**.19958**	**.42711**
Stddev	.243	.00081	.00545	.00076	.0019	.00289	.00012	.01737	.03718
%RSD	.42377	106.35	60.286	38.152	.02152	369.72	2.2392	8.7050	8.7050
#1	57.084	-.00134	.01289	-.00252	9.0799	.00282	-.00529	.21187	.45340
#2	57.427	-.00019	.00519	-.00145	9.0772	-.00126	-.00512	.18730	.40082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**.10711**	**.00126**	**-.00002**	**.00352**	**.00653**	**-.00035**	**.00185**	**-.00131**
Stddev	.00047	.00077	.00004	.00074	.00374	.00768	.00057	.00004	.00068
%RSD	2226.6	.71957	2.7756	4213.3	106.37	117.71	160.28	2.0457	52.055
#1	.00035	.10657	.00129	.00051	.00616	.00109	-.00075	.00182	-.00179
#2	-.00031	.10766	.00124	-.00054	.00087	.01196	.00005	.00188	-.00083
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2008.1**	**45614.**	**4064.4**
Stddev	11.4	86.	22.9
%RSD	.56941	.18814	.56443
#1	2016.1	45675.	4048.2
#2	2000.0	45554.	4080.7

Sample Name: 280-97688-A-3-E MS Acquired: 6/6/2017 13:44:34 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 TCLP 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.20707**	**.45697**	**.78620**	**.20541**	**2.3513**	**.00977**	**.41073**	**109.86**	**.21322**
Stddev	.00034	.00437	.00375	.00167	.0054	.00007	.00185	.25	.00234
%RSD	.16455	.95633	.47758	.81081	.22821	.70381	.45030	.22473	1.0963
#1	.20731	.46006	.78885	.20659	2.3475	.00973	.41204	109.69	.21487
#2	.20683	.45388	.78354	.20423	2.3551	.00982	.40943	110.04	.21156
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000								
Low Limit	-.02000								

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09323**	**.99240**	**.43915**	**.22098**	**10.236**	**.20033**	**15.367**	**.20344**	**.18740**
Stddev	.00067	.01434	.00172	.00552	.012	.00006	.008	.00022	.00354
%RSD	.71556	1.4449	.39127	2.4975	.11674	.02862	.04988	.11019	1.8869
#1	.09371	1.0025	.44037	.22489	10.227	.20029	15.361	.20360	.18990
#2	.09276	.98226	.43794	.21708	10.244	.20037	15.372	.20328	.18490
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**278.14**	**.09304**	**2.0689**	**1.0300**	**41.747**	**.10594**	**.56742**	**2.8659**	**6.1331**
Stddev	.24	.00219	.0279	.0107	.430	.00976	.00919	.0273	.0583
%RSD	.08463	2.3551	1.3483	1.0436	1.0290	9.2096	1.6196	.95135	.95135
#1	277.97	.09459	2.0887	1.0376	42.050	.11284	.57392	2.8466	6.0918
#2	278.30	.09149	2.0492	1.0224	41.443	.09904	.56092	2.8852	6.1743
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.38051**	**.69303**	**.19429**	**.19566**	**.36030**	**.37213**	**.09666**	**.48285**	**.09870**
Stddev	.01026	.00245	.00211	.00069	.00390	.02843	.00048	.00339	.00080
%RSD	2.6953	.35360	1.0870	.35456	1.0813	7.6412	.49994	.70156	.80884
#1	.38776	.69130	.19280	.19615	.36305	.35202	.09700	.48525	.09927
#2	.37325	.69477	.19578	.19517	.35754	.39223	.09632	.48045	.09814
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1922.5**	**42781.**	**4029.5**
Stddev	1.7	125.	33.1
%RSD	.08924	.29332	.82262
#1	1921.3	42692.	4052.9
#2	1923.7	42870.	4006.0

Sample Name: 280-97688-A-3-F MSD Acquired: 6/6/2017 13:47:07 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 TCLP 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.21121**	**.46219**	**.80162**	**.20781**	**2.4031**	**.00981**	**.41895**	**112.27**	**.21600**
Stddev	.00167	.01356	.02128	.00298	.0127	.00008	.01318	.51	.00500
%RSD	.79171	2.9333	2.6551	1.4360	.52864	.84289	3.1454	.45054	2.3128
#1	.21003	.47178	.81667	.20992	2.3941	.00975	.42827	111.91	.21953
#2	.21240	.45261	.78657	.20570	2.4121	.00987	.40964	112.63	.21247
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000								
Low Limit	-.02000								

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09367**	**1.0038**	**.44777**	**.21250**	**10.480**	**.20411**	**15.690**	**.20702**	**.18851**
Stddev	.00286	.0281	.00158	.00118	.015	.00250	.001	.00019	.00422
%RSD	3.0563	2.7969	.35382	.55711	.14174	1.2258	.00761	.09030	2.2375
#1	.09569	1.0236	.44889	.21167	10.469	.20234	15.689	.20689	.19149
#2	.09165	.98390	.44665	.21334	10.490	.20587	15.691	.20715	.18553
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**284.59**	**.09381**	**2.0971**	**1.0444**	**42.368**	**.10426**	**.57151**	**2.9420**	**6.2958**
Stddev	1.73	.00153	.0492	.0286	.946	.00547	.02333	.0432	.0925
%RSD	.60778	1.6268	2.3446	2.7429	2.2332	5.2487	4.0818	1.4688	1.4688
#1	283.37	.09489	2.1319	1.0647	43.037	.10813	.58801	2.9114	6.2304
#2	285.81	.09273	2.0624	1.0242	41.699	.10039	.55501	2.9725	6.3612
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.38332**	**.70902**	**.19741**	**.19949**	**.36782**	**.37566**	**.09868**	**.49101**	**.10157**
Stddev	.00623	.00267	.00363	.00134	.00779	.02764	.00050	.00187	.00265
%RSD	1.6261	.37609	1.8385	.67387	2.1174	7.3572	.50402	.38018	2.6063
#1	.38772	.70713	.19998	.20044	.37333	.35612	.09833	.49233	.10344
#2	.37891	.71091	.19484	.19854	.36232	.39521	.09903	.48969	.09970
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1935.8**	**43630.**	**3995.7**
Stddev	14.1	186.	27.0
%RSD	.73078	.42669	.67505
#1	1925.8	43499.	4014.8
#2	1945.8	43762.	3976.6

Sample Name: 280-97688-A-3-D PDS Acquired: 6/6/2017 13:49:40 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 TCLP 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04992**	**1.0738**	**.19742**	**.11749**	**.12491**	**.04866**	**-.00131**	**119.56**	**.04907**
Stddev	.00042	.0278	.01924	.00181	.00101	.00028	.00178	.73	.00131
%RSD	.83922	2.5915	9.7478	1.5430	.81097	.56815	135.41	.61141	2.6721
#1	.05022	1.0935	.21103	.11877	.12563	.04886	-.00257	120.08	.05000
#2	.04962	1.0541	.18381	.11621	.12419	.04847	-.00006	119.05	.04814
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04621**	**.04814**	**.05452**	**.99566**	**20.389**	**.10818**	**24.705**	**.15772**	**.04706**
Stddev	.00111	.00197	.00080	.00234	.037	.00066	.054	.00020	.00049
%RSD	2.4012	4.0878	1.4705	.23515	.17975	.61208	.21824	.12645	1.0343
#1	.04699	.04953	.05395	.99731	20.415	.10864	24.666	.15786	.04740
#2	.04542	.04674	.05509	.99400	20.363	.10771	24.743	.15758	.04671
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**288.99**	**.04595**	**2.0987**	**.09618**	**41.118**	**.09492**	**.18700**	**5.9378**	**12.707**
Stddev	2.95	.00158	.0555	.00009	.967	.00253	.00414	.0651	.139
%RSD	1.0197	3.4405	2.6443	.08937	2.3529	2.6630	2.2118	1.0966	1.0966
#1	291.08	.04707	2.1379	.09612	41.802	.09313	.18408	5.9838	12.805
#2	286.91	.04483	2.0594	.09624	40.434	.09671	.18992	5.8918	12.608
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09677**	**.55274**	**.19790**	**.05145**	**.18213**	**.46614**	**.05001**	**.19853**	**.05187**
Stddev	.00475	.00333	.00201	.00005	.00474	.01424	.00029	.00003	.00000
%RSD	4.9071	.60332	1.0147	.10380	2.6005	3.0546	.57275	.01345	.00732
#1	.10013	.55510	.19932	.05141	.18548	.45607	.04981	.19855	.05187
#2	.09341	.55038	.19648	.05148	.17878	.47621	.05021	.19852	.05187
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1955.4**	**44025.**	**4186.5**
Stddev	1.4	73.	59.7
%RSD	.07413	.16648	1.4250
#1	1956.4	43974.	4144.3
#2	1954.3	44077.	4228.7

Sample Name: 280-97675-A-12-C MS Acquired: 6/6/2017 13:52:14 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/2 Custom ID2: Custom ID3:
Comment: 375659 TCLP 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.21166**	**.42461**	**.79159**	**.19965**	**2.3804**	**.00972**	**.41850**	**144.91**	**.21524**
Stddev	.00038	.01073	.01769	.00148	.0052	.00003	.01121	.40	.00500
%RSD	.17720	2.5270	2.2349	.74066	.21616	.25839	2.6796	.27563	2.3237
#1	.21193	.43219	.80410	.20070	2.3767	.00974	.42643	144.62	.21878
#2	.21140	.41702	.77908	.19861	2.3840	.00970	.41057	145.19	.21170
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000								
Low Limit	-.02000								

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09252**	**.99229**	**.44752**	**.30017**	**10.917**	**.20156**	**9.3033**	**.09552**	**.18725**
Stddev	.00172	.02496	.00105	.00093	.060	.00023	.0617	.00027	.00441
%RSD	1.8642	2.5151	.23546	.30924	.54838	.11243	.66301	.27901	2.3542
#1	.09374	1.0099	.44826	.30083	10.874	.20140	9.3469	.09571	.19037
#2	.09130	.97464	.44677	.29951	10.959	.20172	9.2597	.09533	.18414
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**296.73**	**.09234**	**2.0864**	**1.0282**	**3.5038**	**.10144**	**.58252**	**10.102**	**21.618**
Stddev	.72	.00300	.0628	.0188	.0639	.00451	.00397	.004	.008
%RSD	.24403	3.2456	3.0113	1.8285	1.8234	4.4444	.68135	.03867	.03867
#1	296.22	.09446	2.1309	1.0415	3.5490	.10463	.58532	10.105	21.624
#2	297.25	.09022	2.0420	1.0149	3.4586	.09825	.57971	10.099	21.612
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.37885**	**.72407**	**.19997**	**.19702**	**.36352**	**.34369**	**.09860**	**.48245**	**.09850**
Stddev	.01202	.00232	.00237	.00034	.00068	.00577	.00097	.00146	.00102
%RSD	3.1722	.32055	1.1851	.17104	.18780	1.6783	.98648	.30177	1.0402
#1	.38734	.72243	.19830	.19725	.36303	.34777	.09929	.48142	.09923
#2	.37035	.72571	.20165	.19678	.36400	.33961	.09791	.48348	.09778
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1959.7**	**43795.**	**4118.5**
Stddev	10.3	518.	34.6
%RSD	.52442	1.1830	.83942
#1	1966.9	43428.	4142.9
#2	1952.4	44161.	4094.0

Sample Name: 280-97675-A-12-D MSD Acquired: 6/6/2017 13:54:47 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375659 TCLP 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.21086**	**.42910**	**.79787**	**.20094**	**2.3987**	**.00993**	**.41859**	**145.63**	**.21693**
Stddev	.00143	.01362	.02299	.00648	.0080	.00007	.01741	.62	.00524
%RSD	.67706	3.1747	2.8813	3.2263	.33528	.70352	4.1597	.42850	2.4135
#1	.20985	.43874	.81412	.20553	2.4044	.00998	.43090	146.07	.22063
#2	.21187	.41947	.78161	.19636	2.3931	.00988	.40628	145.19	.21322
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000								
Low Limit	-.02000								

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09286**	**.99652**	**.45531**	**.25167**	**11.010**	**.20246**	**9.3896**	**.09662**	**.18742**
Stddev	.00247	.03113	.00475	.00617	.026	.00272	.0397	.00017	.00527
%RSD	2.6600	3.1236	1.0441	2.4497	.23251	1.3451	.42268	.17187	2.8125
#1	.09460	1.0185	.45195	.25603	11.028	.20439	9.3615	.09650	.19115
#2	.09111	.97451	.45868	.24731	10.992	.20054	9.4176	.09673	.18370
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**296.75**	**.09214**	**2.1089**	**1.0323**	**3.5238**	**.10364**	**.58758**	**10.205**	**21.839**
Stddev	2.52	.00134	.0415	.0217	.0791	.00318	.02612	.039	.083
%RSD	.85000	1.4588	1.9689	2.1058	2.2435	3.0681	4.4458	.38210	.38210
#1	298.54	.09309	2.1383	1.0476	3.5797	.10139	.60605	10.233	21.898
#2	294.97	.09119	2.0795	1.0169	3.4679	.10589	.56911	10.178	21.780
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.37734**	**.72853**	**.20309**	**.19894**	**.36666**	**.38757**	**.10058**	**.48777**	**.09740**
Stddev	.00713	.00270	.00127	.00067	.01225	.04235	.00071	.00185	.00041
%RSD	1.8886	.37081	.62338	.33592	3.3404	10.928	.71054	.37960	.42207
#1	.38237	.73044	.20220	.19941	.37532	.35762	.10108	.48646	.09711
#2	.37230	.72662	.20399	.19846	.35800	.41752	.10007	.48908	.09769
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1965.5**	**44457.**	**4261.0**
Stddev	4.5	1097.	71.0
%RSD	.22836	2.4684	1.6661
#1	1962.3	45233.	4210.8
#2	1968.7	43681.	4311.2

Sample Name: CCVH-4569081 Acquired: 6/6/2017 13:57:20 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00592**	**50.206**	**-.00454**	**.00217**	**.00035**	**.00005**	**1.0388**	**.01104**	**.00011**	**-.00121**	**.00071**	**.02516**	**49.637**
Stddev	.00047	.123	.00486	.00047	.00006	.00004	.0232	.00531	.00048	.00060	.00070	.00121	.095
%RSD	7.9331	.24423	107.25	21.578	16.952	84.836	2.2373	48.035	433.70	49.407	98.284	4.7959	.19102
#1	-.00559	50.292	-.00798	.00250	.00039	.00008	1.0552	.01480	.00045	-.00079	.00121	.02431	49.705
#2	-.00625	50.119	-.00110	.00184	.00031	.00002	1.0223	.00729	-.00023	-.00164	.00022	.02601	49.570
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06841**	**.00758**	**.05944**	**-.00167**	**-.00164**	**253.81**	**-.00045**	**.00842**	**-.00036**	**5.1791**	**-.01344**	**-.00528**	**-.01576**
Stddev	.05548	.00028	.00286	.00011	.00064	.40	.00013	.00766	.00000	.1262	.00424	.01698	.02048
%RSD	81.096	3.6654	4.8088	6.7377	38.634	.15754	28.551	90.976	.03416	2.4372	31.582	321.82	129.90
#1	.10763	.00738	.05742	-.00175	-.00209	254.09	-.00054	.00300	-.00036	5.2684	-.01644	.00673	-.03024
#2	.02918	.00778	.06147	-.00159	-.00120	253.53	-.00036	.01383	-.00036	5.0899	-.01044	-.01728	-.00128
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.03373**	**-.00439**	**.00044**	**4.9700**	**.01702**	**.00225**	**10.322**	**.01417**	**.00107**	**.12157**
Stddev	.04382	.00077	.00018	.0010	.00038	.00137	.031	.00002	.00022	.00225
%RSD	129.90	17.506	42.024	.01969	2.2099	61.020	.29840	.12722	20.949	1.8495
#1	-.06472	-.00384	.00031	4.9707	.01729	.00322	10.300	.01418	.00123	.12316
#2	-.00275	-.00493	.00057	4.9693	.01676	.00128	10.343	.01416	.00091	.11998
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1992.6**	**44627.**	**4140.7**
Stddev	5.0	52.	4.0
%RSD	.24901	.11702	.09775
#1	1989.1	44664.	4143.6
#2	1996.1	44591.	4137.9

Sample Name: CCV-4567764 Acquired: 6/6/2017 13:59:54 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50515**	F **.58431**	**.99665**	**.49418**	**.50439**	**.49923**	**.00073**	**5.0385**	**.49793**	**.49853**	**.50003**	**.50625**
Stddev	.00064	.01286	.00665	.00679	.00170	.00035	.00576	.0232	.00664	.00802	.00869	.00053
%RSD	.12605	2.2002	.66738	1.3732	.33737	.06958	786.47	.46066	1.3345	1.6077	1.7376	.10389
#1	.50470	.59340	1.0014	.49898	.50560	.49947	.00481	5.0549	.50263	.50420	.50617	.50587
#2	.50560	.57522	.99195	.48938	.50319	.49898	-.00334	5.0220	.49323	.49286	.49388	.50662
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4983**	**50.576**	**1.0261**	**20.024**	**.50105**	**.49647**	**5.3100**	**.49527**	**1.0242**	**1.0126**	**.01833**	**.99154**
Stddev	.0109	.177	.0055	.001	.00062	.00908	.0468	.00927	.0154	.0154	.00253	.01751
%RSD	.43680	.35031	.53302	.00438	.12340	1.8284	.88117	1.8711	1.4992	1.5197	13.826	1.7656
#1	2.4905	50.701	1.0299	20.023	.50149	.50288	5.3431	.50183	1.0351	1.0234	.02012	1.0039
#2	2.5060	50.450	1.0222	20.024	.50062	.49005	5.2770	.48872	1.0134	1.0017	.01654	.97917
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.98586**	**4.9690**	**10.634**	**1.0042**	**.50490**	**.00418**	**.49735**	**1.0353**	**.00405**	**.50013**	**.49574**	**.49629**
Stddev	.01773	.0090	.019	.0153	.00102	.00263	.00039	.0120	.01822	.00035	.00152	.00145
%RSD	1.7985	.18188	.18188	1.5229	.20130	62.981	.07785	1.1545	450.20	.06958	.30689	.29232
#1	.99840	4.9754	10.647	1.0150	.50562	.00604	.49708	1.0438	.01693	.50038	.49681	.49526
#2	.97332	4.9626	10.620	.99340	.50418	.00232	.49762	1.0268	-.00884	.49988	.49466	.49731
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2067.6**	**45331.**	**4140.7**
Stddev	6.3	123.	103.9
%RSD	.30410	.27209	2.5081
#1	2072.0	45244.	4067.3
#2	2063.1	45418.	4214.2

Sample Name: CCB Acquired: 6/6/2017 14:02:24 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00024**	**.00116**	**.00741**	**.00183**	**-.00005**	**-.00001**	**.00083**	**-.00314**	**.00028**	**-.00002**	**.00036**	**.00120**	**.00895**
Stddev	.00047	.00014	.00520	.00075	.00017	.00001	.00263	.00082	.00038	.00036	.00014	.00019	.00536
%RSD	195.93	11.806	70.161	40.970	348.19	96.787	316.51	25.977	135.53	1449.7	37.492	15.476	59.896
#1	.00009	.00107	.01109	.00130	-.00017	-.00000	-.00103	-.00372	.00055	.00023	.00046	.00107	.01274
#2	-.00057	.00126	.00373	.00236	.00007	-.00002	.00269	-.00256	.00001	-.00028	.00027	.00134	.00516
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01693**	**.00427**	**-.00182**	**.00011**	**.00017**	**.16229**	**-.00121**	**.00553**	**.00250**	**.00790**	**.00252**	**.00084**	**-.01157**
Stddev	.03010	.00192	.00613	.00011	.00005	.02255	.00040	.00104	.00120	.01071	.00257	.00810	.00808
%RSD	177.76	45.066	336.86	100.36	29.491	13.892	33.347	18.842	48.097	135.61	101.83	962.51	69.864
#1	-.00435	.00291	.00251	.00019	.00013	.14635	-.00093	.00627	.00165	.00032	.00071	-.00488	-.00585
#2	.03822	.00563	-.00615	.00003	.00020	.17823	-.00150	.00480	.00335	.01547	.00434	.00657	-.01729
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.02476**	**.00206**	**.00008**	**.00393**	**.00013**	**.00340**	**-.01017**	**.00080**	**.00048**	**-.00213**
Stddev	.01730	.00225	.00000	.00191	.00049	.00043	.01112	.00064	.00030	.00197
%RSD	69.864	109.43	1.5070	48.726	377.72	12.648	109.37	79.885	62.694	92.369
#1	-.01253	.00365	.00008	.00528	.00048	.00310	-.00231	.00125	.00070	-.00074
#2	-.03699	.00047	.00008	.00258	-.00022	.00371	-.01804	.00035	.00027	-.00352
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2079.2**	**47150.**	**4098.6**
Stddev	19.9	156.	8.6
%RSD	.95485	.33042	.20970
#1	2065.2	47260.	4104.7
#2	2093.3	47039.	4092.5

Sample Name: CCVL-4576167 Acquired: 6/6/2017 14:05:01 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01032**	**.11791**	**.01859**	**.09697**	**.01029**	**.00091**	**.11599**	**.20325**	**.00503**	**.00964**	**.01027**	**.01635**
Stddev	.00020	.00188	.00639	.00160	.00000	.00001	.00363	.00028	.00031	.00019	.00027	.00127
%RSD	1.9344	1.5970	34.381	1.6480	.04158	1.1742	3.1329	.13537	6.0846	1.9938	2.5931	7.7633
#1	.01018	.11924	.01407	.09810	.01030	.00090	.11856	.20345	.00525	.00977	.01046	.01546
#2	.01046	.11657	.02311	.09584	.01029	.00091	.11342	.20306	.00481	.00950	.01008	.01725
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11233**	**3.0267**	**.02336**	**.19790**	**.01026**	**.01875**	**1.1520**	**.03943**	**2.9329**	F **.01315**	**.11691**	**.01966**
Stddev	.00569	.0295	.00211	.00083	.00005	.00092	.0145	.00090	.0887	.00189	.01702	.00529
%RSD	5.0666	.97603	9.0473	.42076	.48192	4.8916	1.2564	2.2808	3.0251	14.372	14.556	26.925
#1	.10831	3.0476	.02187	.19849	.01030	.01940	1.1622	.04006	2.9956	.01449	.12895	.01592
#2	.11635	3.0058	.02486	.19731	.01023	.01810	1.1417	.03879	2.8702	.01181	.10488	.02340
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value										.00900		
Range										30.000%		

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01399**	**.49934**	**1.0686**	**.09900**	**.00999**	**.01575**	**.01029**	**.01457**	**.05279**	**.01045**	**.01990**	**.01367**
Stddev	.00949	.00585	.0125	.00422	.00014	.00196	.00070	.00075	.04290	.00081	.00062	.00195
%RSD	67.888	1.1715	1.1715	4.2675	1.4203	12.424	6.7681	5.1212	81.269	7.7632	3.1338	14.246
#1	.00727	.50347	1.0774	.10199	.01009	.01437	.01078	.01509	.02246	.00987	.01946	.01505
#2	.02070	.49520	1.0597	.09601	.00989	.01713	.00980	.01404	.08313	.01102	.02034	.01230
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.02000											
Range	-30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2064.6**	**47461.**	**4075.9**
Stddev	11.4	275.	64.5
%RSD	.55066	.57930	1.5820
#1	2072.7	47267.	4121.5
#2	2056.6	47656.	4030.3

Sample Name: 280-97688-A-3-D Acquired: 6/6/2017 14:10:45 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 TCLP 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00004**	**.03858**	**-.00048**	**.01884**	**.02609**	**-.00003**	**-.00049**	**101.36**	**.00018**
Stddev	.00093	.00128	.00033	.00199	.00034	.00013	.00480	1.04	.00007
%RSD	2448.2	3.3222	69.452	10.571	1.2978	444.89	974.12	1.0218	42.019
#1	-.00069	.03767	-.00071	.01743	.02585	.00006	.00290	100.63	.00023
#2	.00062	.03949	-.00024	.02025	.02633	-.00012	-.00389	102.09	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00024**	**.00051**	**.00472**	**.01136**	**.48523**	**.00544**	**6.2785**	**.11071**	**-.00168**
Stddev	.00065	.00033	.00128	.00049	.00187	.00204	.0272	.00035	.00088
%RSD	272.46	64.508	27.132	4.2969	.38619	37.541	.43316	.31223	52.168
#1	.00022	.00028	.00381	.01101	.48655	.00400	6.2593	.11047	-.00230
#2	-.00070	.00074	.00562	.01170	.48390	.00688	6.2977	.11096	-.00106
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**273.45**	**.00080**	**.00551**	**.00255**	**42.863**	**.00339**	**-.00943**	**.98442**	**2.1067**
Stddev	.99	.00073	.00545	.00047	.175	.00166	.00136	.02923	.0626
%RSD	.36250	91.032	98.808	18.606	.40841	49.093	14.425	2.9695	2.9695
#1	272.75	.00028	.00166	.00222	42.740	.00221	-.00847	.96375	2.0624
#2	274.15	.00131	.00936	.00289	42.987	.00456	-.01040	1.0051	2.1509
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00091**	**.50786**	**-.00133**	**-.00012**	**.00234**	**-.02847**	**-.00012**	**.00470**	**-.00059**
Stddev	.00048	.00496	.00160	.00016	.00026	.02087	.00030	.00100	.00289
%RSD	52.671	.97652	121.04	134.25	10.904	73.312	245.31	21.363	486.53
#1	-.00057	.50436	-.00019	-.00001	.00216	-.01371	.00009	.00541	.00145
#2	-.00125	.51137	-.00246	-.00024	.00252	-.04323	-.00033	.00399	-.00263
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1961.6**	**44452.**	**4125.5**
Stddev	11.0	256.	13.5
%RSD	.55857	.57666	.32687
#1	1969.3	44271.	4116.0
#2	1953.8	44634.	4135.0

Sample Name: CCVH-4569081 Acquired: 6/6/2017 14:13:36 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00539**	**50.601**	**.00083**	**.00118**	**.00035**	**-.00010**	W **1.0573**	**.00616**	**.00009**	**-.00129**	**.00018**	**.02592**
Stddev	.00013	.030	.00585	.00030	.00030	.00010	.0064	.00233	.00042	.00027	.00010	.00031
%RSD	2.3390	.05936	703.04	25.794	85.147	101.32	.60677	37.763	440.28	21.093	55.736	1.2109
#1	-.00548	50.580	.00497	.00139	.00014	-.00003	1.0619	.00451	.00039	-.00110	.00026	.02570
#2	-.00530	50.622	-.00330	.00096	.00056	-.00017	1.0528	.00780	-.00020	-.00148	.00011	.02614
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.867**	**.01762**	**.00499**	**.06566**	**-.00146**	**-.00202**	**256.76**	**-.00033**	**.00937**	**-.00073**	W **5.3218**	**-.01383**
Stddev	.145	.04735	.00098	.00683	.00001	.00136	.20	.00005	.00431	.00228	.0333	.00495
%RSD	.29062	268.76	19.724	10.402	.53359	67.331	.07628	16.253	45.972	310.45	.62482	35.786
#1	49.970	.05110	.00569	.07049	-.00146	-.00299	256.89	-.00029	.01241	-.00235	5.3453	-.01033
#2	49.765	-.01587	.00430	.06083	-.00145	-.00106	256.62	-.00037	.00632	.00088	5.2983	-.01732
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Warn	None
Value											5.0000	
Range											5.0000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01420**	**-.02454**	**-.05252**	**-.00352**	**.00016**	**4.9540**	**.01712**	**.00242**	**10.278**	**.01469**	**.00126**	**.12054**
Stddev	.00220	.00492	.01053	.00274	.00013	.0013	.00011	.00157	.097	.00011	.00043	.00045
%RSD	15.488	20.042	20.042	78.060	79.018	.02610	.63987	64.966	.93934	.73859	34.297	.37231
#1	-.01265	-.02802	-.05996	-.00546	.00007	4.9531	.01704	.00353	10.346	.01476	.00095	.12086
#2	-.01576	-.02106	-.04507	-.00158	.00025	4.9549	.01720	.00131	10.210	.01461	.00156	.12022
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1970.8**	**44606.**	**3848.9**
Stddev	20.1	285.	63.2
%RSD	1.0199	.63787	1.6416
#1	1956.6	44807.	3893.6
#2	1985.0	44405.	3804.2

Sample Name: CCV-4567764 Acquired: 6/6/2017 14:16:10 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50408**	F **.58848**	**.97359**	**.49192**	**.51028**	**.50435**	**-.00068**	**5.0740**	**.49591**	**.49723**	**.49768**	**.49911**
Stddev	.00054	.01928	.01828	.00746	.00038	.00112	.00119	.0012	.00997	.01108	.01237	.00226
%RSD	.10620	3.2760	1.8781	1.5165	.07370	.22162	174.57	.02339	2.0106	2.2290	2.4851	.45195
#1	.50445	.60211	.98652	.49720	.51002	.50356	.00016	5.0748	.50296	.50507	.50643	.50070
#2	.50370	.57484	.96066	.48665	.51055	.50514	-.00152	5.0731	.48886	.48940	.48894	.49751
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5336**	**51.141**	**1.0357**	**19.873**	**.49362**	**.49472**	**5.3245**	**.49455**	**1.0212**	**1.0122**	**.03055**	**.98761**
Stddev	.0270	.180	.0019	.068	.00207	.01284	.0297	.01109	.0248	.0228	.00044	.01797
%RSD	1.0654	.35251	.18267	.34370	.42028	2.5961	.55817	2.2423	2.4319	2.2523	1.4472	1.8198
#1	2.5527	51.013	1.0344	19.922	.49509	.50380	5.3455	.50239	1.0387	1.0283	.03086	1.0003
#2	2.5145	51.268	1.0371	19.825	.49215	.48563	5.3035	.48671	1.0036	.99606	.03023	.97490
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.98376**	**5.0111**	**10.724**	**.99898**	**.51073**	**.00556**	**.49254**	**1.0218**	**-.01561**	**.48969**	**.48655**	**.49429**
Stddev	.02065	.0117	.025	.02610	.00056	.00449	.00139	.0229	.03987	.00066	.00033	.00403
%RSD	2.0991	.23311	.23311	2.6122	.11060	80.799	.28129	2.2443	255.39	.13520	.06733	.81451
#1	.99837	5.0193	10.741	1.0174	.51113	.00238	.49351	1.0380	-.04381	.49016	.48632	.49714
#2	.96916	5.0028	10.706	.98052	.51033	.00873	.49156	1.0055	.01258	.48922	.48678	.49145
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2006.4**	**46263.**	**4040.7**
Stddev	9.4	220.	75.8
%RSD	.46961	.47598	1.8763
#1	1999.8	46419.	4094.3
#2	2013.1	46107.	3987.1

Sample Name: CCB Acquired: 6/6/2017 14:18:40 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00025**	**.00054**	**-.00413**	**.00174**	**.00016**	**-.00001**	**.00567**	**.00109**	**.00006**	**-.00071**	**-.00003**	**.00092**
Stddev	.00015	.00039	.00410	.00086	.00008	.00019	.00612	.00441	.00001	.00052	.00005	.00035
%RSD	61.443	71.945	99.238	49.313	47.135	1351.8	107.97	405.61	15.636	73.213	164.36	37.448
#1	.00035	.00027	-.00703	.00234	.00011	.00012	.00134	-.00203	.00005	-.00108	.00000	.00117
#2	.00014	.00082	-.00123	.00113	.00022	-.00015	.01000	.00421	.00006	-.00034	-.00006	.00068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00390**	**-.01203**	W **.00560**	**-.00044**	**.00002**	**-.00031**	**.12699**	**-.00122**	**.00607**	**.00174**	**.02620**	**.00475**
Stddev	.00242	.06699	.00324	.00242	.00003	.00028	.01470	.00052	.00155	.00273	.00892	.00015
%RSD	62.032	556.65	57.778	556.25	133.09	91.405	11.577	42.872	25.500	156.58	34.052	3.1146
#1	.00219	-.05941	.00331	-.00215	.00000	-.00011	.13739	-.00159	.00717	.00367	.01989	.00485
#2	.00562	.03534	.00789	.00128	.00005	-.00050	.11660	-.00085	.00498	-.00019	.03251	.00464
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500									
Low Limit			-.01000									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00206**	**.01953**	**.04179**	**-.00077**	**-.00004**	**.00350**	**.00074**	**.00497**	**-.00801**	**-.00122**	**.00063**	**-.00160**
Stddev	.00576	.01350	.02890	.00040	.00007	.00367	.00084	.00078	.00156	.00030	.00096	.00103
%RSD	279.42	69.152	69.152	51.653	156.17	104.87	113.53	15.618	19.501	24.567	152.32	64.094
#1	.00613	.02908	.06222	-.00106	-.00009	.00609	.00015	.00442	-.00911	-.00101	.00131	-.00087
#2	-.00201	.00998	.02136	-.00049	.00000	.00090	.00133	.00552	-.00690	-.00143	-.00005	-.00232
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2004.7**	**45938.**	**3986.9**
Stddev	5.8	612.	45.8
%RSD	.28885	1.3322	1.1499
#1	2008.8	46371.	4019.3
#2	2000.6	45506.	3954.5

Sample Name: CCVL-4576167 Acquired: 6/6/2017 14:21:19 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00999**	**.11926**	**.01561**	**.09636**	**.01036**	**.00092**	**.11615**	**.20020**	**.00510**	**.00942**	**.00997**	**.01603**	**.10216**	**2.9621**
Stddev	.00023	.00152	.00055	.00109	.00006	.00011	.00285	.00450	.00003	.00043	.00050	.00037	.00112	.0564
%RSD	2.3032	1.2784	3.5033	1.1288	.58982	11.506	2.4569	2.2464	.54436	4.5983	5.0342	2.3286	1.0949	1.9052
#1	.00983	.12034	.01523	.09713	.01040	.00099	.11816	.19702	.00512	.00973	.01032	.01629	.10137	2.9222
#2	.01015	.11818	.01600	.09559	.01032	.00084	.11413	.20338	.00508	.00912	.00961	.01576	.10295	3.0020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02598**	**.19493**	**.01014**	**.01816**	**1.1177**	**.03837**	**2.8766**	**.00884**	**.11692**	**.01879**	**.01941**	**.48790**	**1.0441**	**.09699**
Stddev	.00275	.00311	.00018	.00039	.0124	.00017	.0665	.00139	.00702	.00237	.01044	.01186	.0254	.00309
%RSD	10.575	1.5974	1.7369	2.1620	1.1066	.45145	2.3105	15.717	6.0037	12.598	53.775	2.4307	2.4307	3.1893
#1	.02404	.19272	.01027	.01844	1.1265	.03825	2.9236	.00786	.11196	.01711	.01203	.49629	1.0621	.09917
#2	.02792	.19713	.01002	.01789	1.1090	.03850	2.8296	.00982	.12188	.02046	.02679	.47952	1.0262	.09480
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00994**	**.01423**	**.00937**	**.01517**	**.06935**	**.00908**	**.01990**	**.01396**
Stddev	.00012	.00082	.00032	.00582	.00045	.00020	.00154	.00015
%RSD	1.1972	5.7365	3.4096	38.333	.64576	2.1671	7.7251	1.0979
#1	.00986	.01365	.00960	.01929	.06904	.00922	.02099	.01385
#2	.01003	.01481	.00915	.01106	.06967	.00894	.01881	.01406
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2011.7**	**45987.**	**3927.5**
Stddev	.3	375.	101.4
%RSD	.01431	.81602	2.5820
#1	2011.5	45722.	3999.2
#2	2011.9	46252.	3855.8

Sample Name: MB 280-375972/1-A Acquired: 6/6/2017 14:26:56 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/5 Custom ID2: Custom ID3:
Comment: 375972 SOIL 6010C (Pb) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00023**	**.03176**	**.00171**	**.00134**	**.00122**	**-.00008**	**.00272**	F **.23014**	**.00042**
Stddev	.00004	.00133	.01155	.00036	.00038	.00028	.00182	.00234	.00016
%RSD	19.000	4.1921	674.53	27.230	31.377	358.95	67.070	1.0157	38.976
#1	.00026	.03082	.00988	.00160	.00149	-.00027	.00401	.22848	.00030
#2	.00020	.03271	-.00645	.00108	.00095	.00012	.00143	.23179	.00053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								.20000	
Low Limit								-.20000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00029**	**.00124**	**.00218**	W **.05989**	**-.02328**	W **.00640**	**.07573**	**.00082**	**.00030**
Stddev	.00012	.00031	.00002	.00160	.07200	.00102	.00573	.00001	.00011
%RSD	40.341	25.409	.89695	2.6705	309.29	16.021	7.5633	1.7090	36.412
#1	-.00037	.00146	.00217	.05876	-.07419	.00567	.07978	.00081	.00022
#2	-.00020	.00102	.00220	.06103	.02763	.00712	.07168	.00083	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit				.05000		.00500			
Low Limit				-.05000		-.00500			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.29307**	**-.00068**	**.01887**	**.00317**	**.02000**	**-.00158**	**-.00324**	**.01509**	**.03229**
Stddev	.01145	.00012	.00223	.00041	.00865	.00311	.00060	.01796	.03843
%RSD	3.9063	17.365	11.816	12.850	43.264	196.63	18.637	119.00	119.00
#1	.30116	-.00060	.01729	.00345	.01388	-.00378	-.00366	.00239	.00512
#2	.28497	-.00077	.02044	.00288	.02611	.00062	-.00281	.02779	.05946
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00981**	**.00092**	**.00152**	**.00141**	**.00188**	**.00987**	**-.00027**	**.00194**	**-.00025**
Stddev	.00064	.00003	.00109	.00012	.00464	.05260	.00036	.00016	.00140
%RSD	6.5103	2.8783	72.026	8.3266	246.41	533.07	130.27	8.0825	564.36
#1	.01026	.00090	.00074	.00149	-.00140	-.02733	-.00052	.00183	-.00124
#2	.00936	.00094	.00229	.00132	.00516	.04706	-.00002	.00205	.00074
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2070.0**	**45885.**	**4198.7**
Stddev	12.8	843.	110.4
%RSD	.61947	1.8363	2.6294
#1	2079.1	46481.	4120.6
#2	2061.0	45289.	4276.7

Sample Name: LCS 280-375972/2-A Acquired: 6/6/2017 14:29:34 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375972 SOIL 6010C (Pb) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.04775**	F **2.1730**	F **.98308**	F **.94306**	F **1.9869**	F **.04912**	**2.0844**	F **48.376**	F **.10006**
Stddev	.00065	.0568	.03963	.02106	.0007	.00013	.0566	.014	.00234
%RSD	1.3543	2.6139	4.0317	2.2337	.03539	.25610	2.7128	.02824	2.3362
#1	.04821	2.2131	1.0111	.95795	1.9874	.04921	2.1244	48.385	.10171
#2	.04729	2.1328	.95505	.92816	1.9864	.04903	2.0444	48.366	.09840
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	None	Chk Fail	Chk Fail
High Limit	.25200	.43200	.95200	.22000	2.6400	.01120		11.000	.26400
Low Limit	.16800	.34400	.71200	.17800	2.1360	.00800		8.9000	.17600

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.47164**	**.19378**	F **.24920**	F **1.0209**	F **49.895**	F **1.0048**	F **47.442**	F **.47369**	F **.94248**
Stddev	.01132	.00462	.00194	.0093	.113	.0003	.375	.00366	.02224
%RSD	2.4001	2.3859	.77835	.90931	.22586	.02491	.79030	.77371	2.3598
#1	.47965	.19704	.25057	1.0144	49.815	1.0049	47.707	.47628	.95821
#2	.46364	.19051	.24783	1.0275	49.975	1.0046	47.177	.47110	.92675
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit	.11000		.54000	.22800	11.000	.22800	11.300	.11000	.22000
Low Limit	.08900		.36000	.17600	8.9000	.17800	9.2000	.09000	.18000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **49.732**	F **.46735**	F **10.194**	F **.48515**	**2.1160**	F **.48159**	F **1.8893**	F **2.4982**	F **5.3462**
Stddev	.160	.01023	.219	.01188	.0731	.00917	.0583	.0262	.0561
%RSD	.32087	2.1890	2.1435	2.4481	3.4555	1.9044	3.0852	1.0504	1.0504
#1	49.845	.47459	10.349	.49355	2.1678	.48807	1.9305	2.5168	5.3859
#2	49.620	.46012	10.040	.47675	2.0643	.47510	1.8481	2.4797	5.3065
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	None	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit	11.200	.11100	2.2200	1.1550		.10800	.72000	2.3000	4.9220
Low Limit	9.1000	.08900	1.8200	.99000		.08800	.52200	1.8800	4.0200

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **1.9325**	F **.98887**	**.97342**	F **.96199**	F **1.9269**	F **2.0040**	F **.47631**	**.47296**	F **.50382**
Stddev	.0453	.00099	.00772	.00820	.0421	.0212	.00557	.00454	.00253
%RSD	2.3419	.10008	.79271	.85234	2.1843	1.0574	1.1698	.96017	.50187
#1	1.9646	.98957	.97888	.96779	1.9566	1.9890	.48026	.47617	.50560
#2	1.9005	.98817	.96797	.95620	1.8971	2.0190	.47237	.46975	.50203
Check ?	Chk Fail	Chk Fail	Chk Pass	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Pass	Chk Fail
High Limit	.45200	.22000		.27000	.43200	.46400	.11200		.12500
Low Limit	.34000	.18200		.18000	.35200	.34000	.08800		.07500

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1982.6**	**44854.**	**4059.8**
Stddev	17.9	229.	34.6
%RSD	.90215	.51113	.85252
#1	1969.9	44692.	4084.3
#2	1995.2	45016.	4035.3

Sample Name: 280-97791-B-1-A Acquired: 6/6/2017 14:31:59 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375972 SOIL 6010C (Pb) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00402**	**75.247**	**.03509**	**.02728**	**1.1153**	**.00506**	**-.01150**	**26.895**	**.00134**
Stddev	.00009	.283	.00292	.00104	.0049	.00024	.00248	.143	.00025
%RSD	2.1904	.37641	8.3162	3.8093	.43653	4.7731	21.576	.53000	18.947
#1	-.00408	75.047	.03715	.02654	1.1118	.00489	-.01325	26.794	.00116
#2	-.00396	75.447	.03303	.02801	1.1187	.00523	-.00974	26.995	.00152
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02893**	**.08591**	**.07774**	**95.925**	**22.151**	**.08301**	**20.418**	**1.0197**	**.00122**
Stddev	.00039	.00191	.00068	.880	.119	.00184	.140	.0073	.00048
%RSD	1.3638	2.2192	.87633	.91789	.53807	2.2216	.68684	.71114	39.843
#1	.02921	.08726	.07822	95.303	22.067	.08171	20.518	1.0248	.00156
#2	.02865	.08456	.07725	96.548	22.235	.08432	20.319	1.0145	.00087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8277**	**.04282**	**3.5011**	**.11616**	**.94713**	**-.00380**	**-.00202**	**2.0858**	**4.4637**
Stddev	.0061	.00025	.0300	.00269	.00911	.00233	.00076	.0170	.0364
%RSD	.33181	.58204	.85561	2.3119	.96169	61.319	37.614	.81548	.81548
#1	1.8234	.04299	3.5223	.11806	.95357	-.00215	-.00255	2.0738	4.4380
#2	1.8320	.04264	3.4800	.11426	.94068	-.00545	-.00148	2.0979	4.4894
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01492**	**.81068**	**.13536**	**3.9955**	**.00250**	**-.07319**	**.17953**	**.40802**	**.09160**
Stddev	.00105	.00296	.00345	.0277	.00127	.00076	.00198	.00585	.00488
%RSD	7.0600	.36474	2.5494	.69329	50.649	1.0450	1.1008	1.4330	5.3243
#1	.01566	.80859	.13780	4.0151	.00161	-.07373	.18093	.41215	.08815
#2	.01417	.81277	.13292	3.9759	.00340	-.07265	.17813	.40388	.09504
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2344.1**	**51804.**	**4799.3**
Stddev	.4	85.	54.1
%RSD	.01523	.16403	1.1263
#1	2344.4	51744.	4837.5
#2	2343.8	51864.	4761.1

Sample Name: 280-97791-B-1-A SD@5 Acquired: 6/6/2017 14:34:31 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375972 SOIL 6010C (Pb) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00039**	**16.425**	**.01442**	**.00606**	**.24020**	**.00112**	**.00197**	**5.8716**	**.00048**
Stddev	.00086	.069	.00414	.00102	.00002	.00010	.00256	.0176	.00030
%RSD	222.19	.42074	28.706	16.817	.00717	9.1595	130.03	.29964	61.715
#1	.00022	16.376	.01149	.00679	.24021	.00120	.00016	5.8591	.00070
#2	-.00100	16.474	.01735	.00534	.24019	.00105	.00378	5.8840	.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00662**	**.01862**	**.01732**	**20.514**	**4.7752**	**.02226**	**4.5214**	**.22049**	**.00041**
Stddev	.00005	.00009	.00062	.072	.0646	.00471	.0878	.00294	.00023
%RSD	.79671	.48462	3.5969	.35198	1.3525	21.144	1.9422	1.3316	56.264
#1	.00658	.01869	.01776	20.463	4.8208	.02559	4.5835	.22257	.00057
#2	.00666	.01856	.01688	20.565	4.7295	.01893	4.4593	.21841	.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.45172**	**.00854**	**.75941**	**.02592**	**.20272**	**-.00498**	**-.00035**	**.47713**	**1.0210**
Stddev	.00889	.00040	.01504	.00171	.00327	.00300	.00319	.01423	.0305
%RSD	1.9686	4.7099	1.9800	6.5796	1.6150	60.335	912.58	2.9822	2.9822
#1	.45801	.00882	.77004	.02471	.20504	-.00285	-.00260	.48719	1.0426
#2	.44543	.00826	.74878	.02712	.20041	-.00710	.00190	.46706	.99952
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00413**	**.17560**	**.03095**	**.84089**	**.00233**	**-.01056**	**.03767**	**.09071**	**.01755**
Stddev	.00116	.00053	.00054	.01394	.00466	.01442	.00039	.00183	.00027
%RSD	28.208	.29946	1.7370	1.6574	199.85	136.60	1.0293	2.0190	1.5639
#1	.00495	.17523	.03133	.85074	-.00096	-.00036	.03794	.09200	.01735
#2	.00330	.17598	.03057	.83104	.00563	-.02075	.03739	.08941	.01774
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2156.2**	**48083.**	**4262.6**
Stddev	.9	750.	88.6
%RSD	.04232	1.5590	2.0790
#1	2156.9	47553.	4325.3
#2	2155.6	48614.	4199.9

Sample Name: 280-97791-B-1-B MS Acquired: 6/6/2017 14:37:05 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375972 SOIL 6010C (Pb) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03891**	**114.28**	**.88561**	**.83128**	**3.0123**	**.05092**	**1.7862**	**74.635**	**.08898**
Stddev	.00171	.48	.00527	.00557	.0140	.00040	.0216	.360	.00130
%RSD	4.4042	.42090	.59504	.66970	.46453	.77882	1.2110	.48192	1.4643
#1	.03770	114.62	.88188	.83522	3.0222	.05120	1.8015	74.889	.08990
#2	.04012	113.94	.88933	.82735	3.0024	.05063	1.7709	74.380	.08806
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.45125**	**.26844**	**.31910**	**110.49**	**68.794**	**.96395**	**66.966**	**1.7034**	**.78088**
Stddev	.00281	.00143	.00068	.37	.316	.00340	.075	.0012	.00677
%RSD	.62319	.53125	.21465	.33441	.45875	.35247	.11233	.07219	.86705
#1	.45324	.26945	.31958	110.75	69.017	.96635	66.912	1.7043	.78567
#2	.44926	.26743	.31861	110.23	68.571	.96155	67.019	1.7025	.77610
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**46.331**	**.47417**	**12.728**	**.51233**	**2.8414**	**.21850**	**1.6424**	**4.4948**	**9.6190**
Stddev	.037	.00182	.059	.00343	.0488	.00200	.0292	.0031	.0066
%RSD	.08006	.38351	.46301	.67007	1.7184	.91546	1.7770	.06847	.06847
#1	46.305	.47546	12.770	.51475	2.8759	.21992	1.6630	4.4970	9.6236
#2	46.357	.47289	12.687	.50990	2.8068	.21709	1.6218	4.4927	9.6143
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.5950**	**1.8467**	**.96373**	**6.5515**	**1.5999**	**1.6712**	**.64927**	**.90929**	**.53835**
Stddev	.0056	.0068	.00285	.0088	.0185	.0136	.00142	.00128	.00171
%RSD	.35173	.36587	.29527	.13436	1.1546	.81357	.21946	.14060	.31769
#1	1.5990	1.8515	.96172	6.5577	1.6130	1.6616	.65028	.91020	.53714
#2	1.5910	1.8419	.96574	6.5452	1.5869	1.6808	.64826	.90839	.53956
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2340.1**	**52563.**	**4862.7**
Stddev	66.7	598.	72.2
%RSD	2.8506	1.1375	1.4841
#1	2387.3	52986.	4811.7
#2	2293.0	52140.	4913.7

Sample Name: 280-97791-B-1-C MSD Acquired: 6/6/2017 14:39:27 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375972 SOIL 6010C (Pb) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03915**	**110.95**	**.89375**	**.82916**	**3.0143**	**.04918**	**1.7967**	**73.334**	**.08955**
Stddev	.00004	.22	.00682	.01651	.0093	.00008	.0273	.156	.00197
%RSD	.10034	.20217	.76308	1.9915	.30734	.15622	1.5217	.21277	2.2030
#1	.03918	110.79	.89857	.84084	3.0078	.04912	1.8161	73.223	.09094
#2	.03913	111.11	.88893	.81748	3.0209	.04923	1.7774	73.444	.08815
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.44487**	**.25957**	**.31601**	**108.97**	**66.508**	**.96304**	**65.185**	**1.9272**	**.78107**
Stddev	.00879	.00465	.00112	.16	.217	.00032	.294	.0078	.01283
%RSD	1.9755	1.7911	.35423	.14245	.32583	.03356	.45159	.40541	1.6426
#1	.45108	.26286	.31680	108.86	66.355	.96281	65.394	1.9328	.79014
#2	.43865	.25628	.31522	109.08	66.661	.96326	64.977	1.9217	.77200
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**46.006**	**.45802**	**12.706**	**.58932**	**2.7971**	**.22438**	**1.6435**	**4.3093**	**9.2219**
Stddev	.037	.00802	.242	.01207	.0458	.00096	.0278	.0091	.0195
%RSD	.07938	1.7517	1.9072	2.0481	1.6360	.43007	1.6915	.21173	.21173
#1	45.980	.46369	12.877	.59786	2.8294	.22506	1.6631	4.3028	9.2081
#2	46.032	.45234	12.534	.58079	2.7647	.22370	1.6238	4.3157	9.2357
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.6038**	**1.8060**	**.97205**	**6.0807**	**1.6094**	**1.6657**	**.65308**	**.91974**	**.54298**
Stddev	.0288	.0050	.00376	.0294	.0234	.0182	.00377	.00252	.00153
%RSD	1.7940	.27736	.38656	.48415	1.4551	1.0912	.57707	.27357	.28230
#1	1.6242	1.8024	.97471	6.1015	1.6259	1.6528	.65574	.92152	.54190
#2	1.5835	1.8095	.96939	6.0599	1.5928	1.6786	.65041	.91796	.54407
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2345.3**	**51968.**	**4937.4**
Stddev	18.4	819.	42.9
%RSD	.78264	1.5769	.86833
#1	2358.3	51389.	4907.1
#2	2332.4	52548.	4967.7

Sample Name: 280-97791-B-1-A PDS Acquired: 6/6/2017 14:41:50 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375972 SOIL 6010C (Pb) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04073**	**74.710**	**.20074**	**.11431**	**1.1775**	**.04737**	**-.01277**	**43.140**	**.04440**
Stddev	.00067	.112	.00606	.00218	.0027	.00009	.00094	.024	.00123
%RSD	1.6357	.14974	3.0173	1.9075	.23251	.18854	7.3543	.05575	2.7645
#1	.04120	74.789	.19646	.11585	1.1794	.04744	-.01343	43.157	.04527
#2	.04026	74.631	.20503	.11277	1.1755	.04731	-.01210	43.123	.04353
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06954**	**.12506**	**.12325**	**94.391**	**39.230**	**.16745**	**36.997**	**1.0362**	**.04178**
Stddev	.00156	.00456	.00034	.032	.097	.00115	.316	.0071	.00144
%RSD	2.2360	3.6480	.27672	.03348	.24753	.68382	.85376	.68447	3.4426
#1	.07064	.12829	.12349	94.414	39.298	.16664	37.221	1.0412	.04279
#2	.06845	.12183	.12301	94.369	39.161	.16826	36.774	1.0312	.04076
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.290**	**.08256**	**5.1997**	**.19217**	**.90820**	**.08362**	**.16912**	**6.3733**	**13.639**
Stddev	.280	.00252	.1109	.00810	.02969	.00285	.00554	.0081	.017
%RSD	1.4503	3.0536	2.1322	4.2164	3.2696	3.4110	3.2759	.12727	.12727
#1	19.488	.08434	5.2781	.19790	.92920	.08563	.17304	6.3791	13.651
#2	19.092	.08078	5.1213	.18644	.88720	.08160	.16520	6.3676	13.627
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09897**	**.83744**	**.31224**	**3.9650**	**.16665**	**.38420**	**.22221**	**.56465**	**.13821**
Stddev	.00239	.00237	.00013	.0289	.00084	.02030	.00090	.00437	.00031
%RSD	2.4134	.28310	.04288	.72837	.50690	5.2830	.40674	.77378	.22541
#1	.10066	.83912	.31233	3.9854	.16725	.39855	.22285	.56774	.13843
#2	.09728	.83577	.31214	3.9445	.16606	.36985	.22158	.56156	.13799
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2352.8**	**51783.**	**4817.4**
Stddev	9.1	964.	22.0
%RSD	.38741	1.8615	.45601
#1	2359.2	51101.	4832.9
#2	2346.3	52464.	4801.9

Sample Name: 280-97791-B-2-A Acquired: 6/6/2017 14:44:21 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375972 SOIL 6010C (Pb) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00215**	**88.520**	**.06289**	**.01263**	**1.4511**	**.00560**	**.00310**	**47.276**	**.00389**
Stddev	.00019	.887	.00308	.00033	.0145	.00007	.00285	.512	.00005
%RSD	8.9362	1.0017	4.9008	2.6005	.99635	1.1874	91.925	1.0834	1.1772
#1	-.00202	87.893	.06072	.01286	1.4408	.00556	.00108	46.913	.00392
#2	-.00229	89.147	.06507	.01239	1.4613	.00565	.00511	47.638	.00385
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04108**	**.05923**	**.11763**	**103.22**	**10.534**	**.06366**	**17.156**	**2.7563**	**.00549**
Stddev	.00106	.00063	.00027	1.23	.012	.00350	.034	.0044	.00006
%RSD	2.5867	1.0590	.22584	1.1933	.11247	5.4964	.19563	.15925	1.0756
#1	.04183	.05968	.11782	102.35	10.542	.06118	17.133	2.7594	.00553
#2	.04033	.05879	.11744	104.09	10.525	.06613	17.180	2.7532	.00544
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4339**	**.06330**	**2.1198**	**.12544**	**6.0662**	**-.00324**	**-.00070**	**2.5940**	**5.5512**
Stddev	.0158	.00128	.0423	.00551	.0751	.00509	.00128	.0340	.0728
%RSD	.64888	2.0297	1.9966	4.3888	1.2376	157.21	183.72	1.3114	1.3114
#1	2.4227	.06421	2.1497	.12934	6.1193	.00036	-.00160	2.5700	5.4997
#2	2.4450	.06239	2.0898	.12155	6.0131	-.00684	.00021	2.6181	5.6027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01187**	**1.2008**	**.05823**	**.76726**	**.00288**	**-.00085**	**.13506**	**.73150**	**.06998**
Stddev	.00172	.0125	.00053	.00123	.00119	.00323	.00059	.00066	.00127
%RSD	14.475	1.0443	.91792	.16069	41.260	379.83	.43809	.09062	1.8150
#1	.01065	1.1919	.05785	.76639	.00373	-.00313	.13548	.73196	.06908
#2	.01308	1.2097	.05861	.76813	.00204	.00143	.13464	.73103	.07087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2200.3**	**47607.**	**4480.1**
Stddev	7.9	501.	10.3
%RSD	.35723	1.0524	.23011
#1	2194.7	47253.	4487.4
#2	2205.8	47961.	4472.8

Sample Name: 280-97791-B-3-A Acquired: 6/6/2017 14:46:54 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375972 SOIL 6010C (Pb) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00251**	**148.47**	**.04022**	**.00976**	**.96931**	**.01067**	**.00858**	**83.177**	**.00316**
Stddev	.00003	1.11	.00110	.00004	.00608	.00001	.00073	.588	.00034
%RSD	1.1594	.74451	2.7316	.43929	.62715	.06855	8.4825	.70687	10.853
#1	-.00249	147.69	.03944	.00979	.96502	.01068	.00807	82.761	.00340
#2	-.00253	149.25	.04100	.00973	.97361	.01067	.00910	83.593	.00291
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04823**	**.07788**	**.20168**	**139.98**	**13.035**	**.05954**	**26.669**	**4.3871**	**-.00027**
Stddev	.00071	.00323	.00133	.28	.072	.00030	.013	.0078	.00026
%RSD	1.4749	4.1441	.66074	.19984	.55047	.50572	.05016	.17890	98.411
#1	.04874	.08016	.20262	139.78	12.984	.05975	26.660	4.3927	-.00008
#2	.04773	.07560	.20074	140.18	13.085	.05933	26.679	4.3816	-.00045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.3200**	**.08554**	**1.2008**	**.19814**	**1.7299**	**-.00184**	**-.00478**	**3.0206**	**6.4640**
Stddev	.0308	.00315	.0319	.00516	.0188	.00459	.00848	.0347	.0742
%RSD	.92874	3.6835	2.6541	2.6055	1.0876	250.02	177.41	1.1487	1.1487
#1	3.2982	.08777	1.2233	.20179	1.7432	.00141	.00122	2.9960	6.4115
#2	3.3418	.08332	1.1782	.19449	1.7166	-.00509	-.01077	3.0451	6.5165
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01244**	**.77591**	**.09157**	**.36140**	**.00291**	**-.05102**	**.15073**	**.72796**	**.07732**
Stddev	.00025	.00572	.00032	.00228	.00023	.04847	.00030	.00273	.00408
%RSD	1.9865	.73717	.35028	.63129	7.7777	94.998	.19813	.37497	5.2710
#1	.01262	.77186	.09134	.36302	.00307	-.01675	.15094	.72603	.07444
#2	.01227	.77995	.09179	.35979	.00275	-.08530	.15052	.72989	.08020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2276.9**	**49939.**	**4764.3**
Stddev	105.0	209.	1.7
%RSD	4.6114	.41831	.03622
#1	2202.7	50087.	4765.5
#2	2351.2	49792.	4763.1

Sample Name: 280-97791-B-4-A Acquired: 6/6/2017 14:49:28 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375972 SOIL 6010C (Pb) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00199**	**150.28**	**.15183**	**.02393**	**1.8557**	**.00479**	**-.04429**	**93.449**	**.01225**
Stddev	.00016	.10	.00705	.00097	.0045	.00003	.00390	.123	.00033
%RSD	7.9448	.06626	4.6409	4.0608	.24122	.70224	8.8057	.13113	2.6794
#1	-.00210	150.35	.15681	.02462	1.8589	.00481	-.04153	93.535	.01249
#2	-.00188	150.21	.14685	.02324	1.8525	.00476	-.04705	93.362	.01202
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11033**	**.44643**	**.31787**	**285.98**	**92.867**	**.16623**	**85.500**	**4.4987**	**.00062**
Stddev	.00455	.01390	.00185	.57	.109	.00326	.935	.0488	.00129
%RSD	4.1285	3.1142	.58267	.19868	.11760	1.9599	1.0932	1.0848	208.99
#1	.11355	.45626	.31656	286.39	92.944	.16853	84.839	4.4642	.00153
#2	.10711	.43659	.31918	285.58	92.790	.16392	86.161	4.5332	-.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.7171**	**.25326**	**5.0786**	**.26114**	**19.300**	**-.00105**	**-.00423**	**2.3156**	**4.9555**
Stddev	.0101	.00649	.1330	.00601	.425	.00585	.00747	.0061	.0130
%RSD	.37063	2.5640	2.6184	2.3028	2.1999	556.67	176.70	.26304	.26304
#1	2.7242	.25785	5.1726	.26539	19.601	.00308	.00105	2.3113	4.9463
#2	2.7100	.24866	4.9846	.25689	19.000	-.00518	-.00951	2.3199	4.9647
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02272**	**.33269**	**.07305**	W **15.025**	**.00907**	**-.09647**	**.45973**	**.92225**	**.06489**
Stddev	.00346	.00037	.00428	.154	.00231	.01255	.00272	.00867	.00072
%RSD	15.246	.11226	5.8523	1.0231	25.502	13.008	.59224	.93972	1.1037
#1	.02517	.33296	.07003	14.917	.01071	-.10534	.45781	.91612	.06539
#2	.02027	.33243	.07608	15.134	.00744	-.08759	.46166	.92838	.06438
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.02000					

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2231.2**	**49234.**	**4746.8**
Stddev	13.8	799.	15.1
%RSD	.61633	1.6232	.31736
#1	2221.5	49799.	4757.5
#2	2240.9	48669.	4736.2

Sample Name: CCVH-4569081 Acquired: 6/6/2017 14:51:55 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00629**	**50.068**	**-.00730**	**.00205**	**.00050**	**.00003**	**1.0377**	**.01381**	**-.00003**	**-.00099**	**.00082**	**.02670**	**49.981**
Stddev	.00008	.161	.00050	.00177	.00036	.00026	.0205	.00744	.00017	.00086	.00026	.00115	.522
%RSD	1.2171	.32140	6.8878	86.525	72.056	931.81	1.9778	53.911	539.53	86.560	31.377	4.3152	1.0449
#1	-.00634	50.182	-.00765	.00330	.00075	-.00016	1.0522	.01907	.00009	-.00038	.00064	.02589	50.350
#2	-.00623	49.954	-.00694	.00079	.00024	.00021	1.0232	.00854	-.00015	-.00160	.00100	.02752	49.612
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01581**	**.00455**	**.07846**	**-.00122**	**-.00169**	**254.55**	**-.00063**	**.00435**	**.00168**	**5.2068**	**-.01219**	**-.00533**	**-.01254**
Stddev	.00933	.00149	.00223	.00007	.00006	.54	.00029	.00519	.00267	.0945	.00186	.01314	.00359
%RSD	59.001	32.693	2.8389	6.1156	3.6145	.21408	45.443	119.34	159.12	1.8142	15.244	246.53	28.644
#1	.02241	.00560	.08003	-.00127	-.00173	254.94	-.00043	.00801	-.00021	5.2736	-.01350	-.01462	-.01508
#2	.00921	.00350	.07688	-.00116	-.00165	254.17	-.00084	.00068	.00357	5.1400	-.01087	.00396	-.01000
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.02683**	**-.00309**	**.00038**	**4.9779**	**.02049**	**.00195**	**10.318**	**.01437**	**.00120**	**.11711**
Stddev	.00769	.00230	.00005	.0055	.00022	.00664	.041	.00045	.00030	.00402
%RSD	28.644	74.593	11.863	.10945	1.0891	341.05	.39775	3.1337	25.025	3.4347
#1	-.03227	-.00472	.00041	4.9817	.02065	.00664	10.289	.01405	.00141	.11996
#2	-.02140	-.00146	.00035	4.9740	.02034	-.00275	10.347	.01469	.00098	.11427
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2037.4**	**43300.**	**4112.8**
Stddev	19.1	487.	53.9
%RSD	.93933	1.1247	1.3101
#1	2023.9	43645.	4150.9
#2	2050.9	42956.	4074.7

Sample Name: CCV-4567764 Acquired: 6/6/2017 14:54:30 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50594**	F **.60753**	**1.0011**	**.49773**	**.50418**	**.50158**	**-.00283**	**5.0278**	**.50144**	**.50019**	**.49767**	**.51009**
Stddev	.00028	.01884	.0127	.00966	.00269	.00347	.00330	.0285	.00916	.01037	.00968	.00203
%RSD	.05505	3.1015	1.2667	1.9402	.53386	.69154	116.65	.56612	1.8273	2.0736	1.9443	.39776
#1	.50613	.62085	1.0101	.50456	.50228	.49913	-.00517	5.0076	.50792	.50753	.50451	.51152
#2	.50574	.59420	.99218	.49090	.50608	.50403	-.00050	5.0479	.49496	.49286	.49082	.50865
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5054**	**50.598**	**1.0306**	**19.936**	**.49752**	**.49798**	**5.2305**	**.49789**	**1.0446**	**1.0148**	**.00569**	**1.0037**
Stddev	.0244	.431	.0075	.027	.00003	.00956	.0536	.01085	.0214	.0171	.00418	.0226
%RSD	.97343	.85125	.72269	.13760	.00698	1.9190	1.0243	2.1793	2.0462	1.6903	73.482	2.2523
#1	2.4881	50.293	1.0253	19.956	.49754	.50474	5.1926	.50556	1.0598	1.0269	.00864	1.0197
#2	2.5226	50.902	1.0359	19.917	.49749	.49123	5.2684	.49022	1.0295	1.0027	.00273	.98769
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.98857**	**4.9682**	**10.632**	**1.0063**	**.50684**	**.00598**	**.49568**	**1.0291**	**-.01204**	**.49307**	**.49062**	**.49613**
Stddev	.02238	.0272	.058	.0208	.00481	.00148	.00149	.0221	.01394	.00231	.00030	.00452
%RSD	2.2636	.54688	.54688	2.0666	.94921	24.764	.29983	2.1434	115.80	.46903	.06117	.91162
#1	1.0044	4.9490	10.591	1.0210	.50344	.00703	.49463	1.0447	-.00218	.49470	.49041	.49293
#2	.97275	4.9875	10.673	.99163	.51024	.00494	.49673	1.0135	-.02190	.49143	.49083	.49932
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2085.0**	**45573.**	**4181.6**
Stddev	9.6	222.	94.7
%RSD	.45899	.48726	2.2637
#1	2091.8	45416.	4248.5
#2	2078.2	45730.	4114.6

Sample Name: CCB Acquired: 6/6/2017 14:56:59 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00033**	**.00409**	**.00112**	**.00229**	**-.00030**	**-.00004**	**.00367**	**.00111**	**.00006**	**.00024**	**.00001**	**.00143**	**.00667**
Stddev	.00020	.00231	.00762	.00139	.00024	.00010	.00433	.00101	.00027	.00012	.00022	.00091	.00130
%RSD	58.542	56.431	683.17	60.805	77.139	286.23	118.03	91.193	485.35	47.932	2503.4	63.096	19.537
#1	.00020	.00572	-.00427	.00327	-.00014	.00004	.00061	.00039	.00025	.00016	-.00015	.00079	.00760
#2	.00047	.00246	.00651	.00130	-.00047	-.00011	.00673	.00183	-.00014	.00032	.00017	.00208	.00575
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00426**	**.00407**	**-.00211**	**.00008**	**.00034**	**.06021**	**-.00146**	**.00290**	**.00335**	**-.00964**	**.00061**	**-.00622**	**-.02151**
Stddev	.00212	.00391	.00199	.00003	.00019	.00356	.00013	.00109	.00038	.00727	.00134	.00314	.00917
%RSD	49.906	96.133	94.073	36.959	54.111	5.9193	8.6298	37.532	11.261	75.444	219.41	50.455	42.639
#1	.00576	.00683	-.00352	.00010	.00021	.06273	-.00137	.00367	.00308	-.01478	-.00034	-.00844	-.02799
#2	.00275	.00130	-.00071	.00006	.00048	.05769	-.00155	.00213	.00362	-.00450	.00156	-.00400	-.01502
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.04602**	**-.00057**	**.00006**	**.00290**	**.00073**	**-.00010**	**-.01954**	**.00011**	**.00211**	**-.00177**
Stddev	.01962	.00085	.00000	.00133	.00037	.00129	.08006	.00042	.00059	.00132
%RSD	42.639	147.94	1.8379	45.810	51.440	1282.4	409.66	367.74	28.214	74.763
#1	-.05990	-.00117	.00006	.00383	.00099	.00081	.03707	-.00018	.00169	-.00083
#2	-.03215	.00003	.00006	.00196	.00046	-.00101	-.07615	.00041	.00253	-.00270
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2062.1**	**47269.**	**4188.5**
Stddev	18.6	101.	10.6
%RSD	.90032	.21412	.25373
#1	2075.2	47197.	4180.9
#2	2049.0	47340.	4196.0

Sample Name: CCVL-4576167 Acquired: 6/6/2017 14:59:38 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01032**	**.12398**	**.01614**	**.09917**	**.01006**	**.00097**	**.12206**	**.19991**	**.00522**	**.00991**	**.01037**	**.01563**
Stddev	.00022	.00341	.00702	.00110	.00008	.00007	.00353	.00156	.00055	.00007	.00015	.00184
%RSD	2.1218	2.7535	43.528	1.1052	.77867	6.9892	2.8921	.78054	10.600	.74130	1.4434	11.752
#1	.01047	.12640	.01117	.09994	.01000	.00102	.12456	.19881	.00562	.00986	.01047	.01693
#2	.01016	.12157	.02110	.09839	.01012	.00093	.11957	.20101	.00483	.00996	.01026	.01433
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10849**	**3.0869**	**.02587**	**.20171**	**.01042**	**.01815**	**1.0755**	**.03971**	**2.9791**	**.00754**	**.10498**	**.01476**
Stddev	.00312	.0066	.00308	.00237	.00014	.00035	.0216	.00156	.0553	.00128	.00107	.00415
%RSD	2.8768	.21462	11.922	1.1754	1.3118	1.9039	2.0082	3.9297	1.8562	17.023	1.0176	28.091
#1	.10628	3.0916	.02805	.20339	.01052	.01839	1.0908	.04081	3.0182	.00844	.10573	.01769
#2	.11070	3.0822	.02369	.20004	.01032	.01790	1.0603	.03860	2.9400	.00663	.10422	.01183
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01440**	**.48453**	**1.0369**	**.09723**	**.01031**	**.01741**	**.00987**	**.01722**	F **.04042**	**.00936**	**.02124**	**.01339**
Stddev	.00580	.01909	.0409	.00314	.00017	.00190	.00021	.00129	.01043	.00012	.00015	.00020
%RSD	40.260	3.9401	3.9401	3.2328	1.6396	10.905	2.1069	7.5073	25.810	1.2826	.72830	1.4889
#1	.01850	.47104	1.0080	.09946	.01019	.01875	.01001	.01814	.03305	.00927	.02113	.01353
#2	.01030	.49803	1.0658	.09501	.01043	.01607	.00972	.01631	.04780	.00944	.02135	.01325
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2043.2**	**46503.**	**4124.7**
Stddev	3.9	60.	17.9
%RSD	.18865	.12888	.43442
#1	2046.0	46545.	4137.3
#2	2040.5	46460.	4112.0

Sample Name: MB 280-375859/1-A Acquired: 6/6/2017 15:02:16 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/5 Custom ID2: Custom ID3:
Comment: 375859 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**.04962**	**-.00105**	**.00117**	**-.00005**	**-.00009**	**.00571**	**.00841**	**.00024**
Stddev	.00007	.06393	.00271	.00077	.00022	.00025	.00019	.00169	.00001
%RSD	491.07	128.84	258.97	65.731	470.93	268.95	3.3814	20.045	3.4687
#1	-.00004	.00442	-.00296	.00171	.00011	-.00027	.00585	.00961	.00023
#2	.00007	.09482	.00087	.00063	-.00021	.00008	.00558	.00722	.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00038**	**.00031**	**.00061**	W **.06964**	**-.03119**	W **.00703**	**-.00624**	**.00014**	**-.00043**
Stddev	.00024	.00031	.00007	.00235	.03238	.00170	.00906	.00003	.00021
%RSD	63.975	99.711	11.137	3.3700	103.82	24.240	145.12	22.010	48.739
#1	.00055	.00009	.00056	.06798	-.05409	.00823	.00016	.00012	-.00058
#2	.00021	.00053	.00065	.07130	-.00829	.00582	-.01265	.00016	-.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit				.05000		.00500			
Low Limit				-.05000		-.00500			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07042**	**-.00131**	**.00584**	**.00090**	**.00303**	**.00025**	**-.00095**	**.00452**	**.00967**
Stddev	.04232	.00058	.01019	.00019	.00336	.00015	.00218	.01848	.03955
%RSD	60.104	44.578	174.57	21.512	110.81	58.988	230.31	408.98	408.98
#1	.04049	-.00172	-.00137	.00076	.00066	.00036	-.00249	.01759	.03763
#2	.10035	-.00089	.01304	.00103	.00540	.00015	.00060	-.00855	-.01829
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00210**	**.00006**	**.00430**	**.00031**	**.00128**	**.00417**	**-.00042**	**.00207**	**.00020**
Stddev	.00038	.00008	.00161	.00017	.00165	.04773	.00036	.00018	.00193
%RSD	18.013	135.27	37.534	54.388	129.15	1144.1	86.703	8.5175	985.67
#1	-.00184	.00000	.00316	.00043	.00011	.03792	-.00067	.00195	-.00117
#2	-.00237	.00011	.00544	.00019	.00245	-.02958	-.00016	.00220	.00156
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2097.1**	**46832.**	**4166.2**
Stddev	54.7	811.	87.8
%RSD	2.6095	1.7317	2.1073
#1	2058.4	46258.	4228.2
#2	2135.8	47405.	4104.1

Sample Name: LCS 280-375859/2-A Acquired: 6/6/2017 15:04:55 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375859 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05126**	F **2.3387**	**1.0515**	**1.0134**	**2.0772**	**.05118**	**2.2227**	**50.295**	**.10704**
Stddev	.00027	.0331	.0089	.0143	.0009	.00012	.0297	.013	.00139
%RSD	.53296	1.4143	.84576	1.4088	.04284	.24036	1.3342	.02600	1.3005
#1	.05145	2.3621	1.0578	1.0235	2.0765	.05127	2.2436	50.285	.10802
#2	.05106	2.3154	1.0452	1.0033	2.0778	.05110	2.2017	50.304	.10606
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit		2.2299							
Low Limit		1.7300							

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50241**	**.20458**	**.26879**	**1.0605**	**52.245**	**1.0508**	**50.886**	**.51004**	**.98954**
Stddev	.00715	.00273	.00045	.0073	.149	.0001	.132	.00031	.01324
%RSD	1.4241	1.3339	.16752	.69296	.28455	.00637	.26035	.06097	1.3378
#1	.50747	.20651	.26848	1.0553	52.140	1.0508	50.979	.50982	.99890
#2	.49735	.20265	.26911	1.0657	52.350	1.0507	50.792	.51026	.98018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**53.567**	**.49883**	**10.928**	**.51100**	**2.2187**	**.52138**	**2.0445**	**10.019**	**21.441**
Stddev	.132	.00727	.150	.00819	.0238	.00813	.0224	.014	.030
%RSD	.24706	1.4567	1.3724	1.6021	1.0710	1.5590	1.0949	.14224	.14224
#1	53.474	.50396	11.034	.51679	2.2355	.52713	2.0603	10.029	21.463
#2	53.661	.49369	10.822	.50521	2.2019	.51563	2.0287	10.009	21.419
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0279**	**1.0361**	**1.0482**	**1.0251**	**2.0304**	**2.1534**	**.51595**	**.50942**	**.52628**
Stddev	.0324	.0012	.0007	.0005	.0255	.0419	.00257	.00329	.00112
%RSD	1.5997	.11523	.06841	.05075	1.2577	1.9462	.49745	.64514	.21350
#1	2.0508	1.0352	1.0476	1.0248	2.0484	2.1830	.51777	.51175	.52549
#2	2.0049	1.0369	1.0487	1.0255	2.0123	2.1237	.51414	.50710	.52708
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2011.6**	**45369.**	**4223.3**
Stddev	10.5	1106.	58.8
%RSD	.51957	2.4387	1.3921
#1	2004.2	44587.	4181.8
#2	2019.0	46151.	4264.9

Sample Name: 280-97741-D-1-A Acquired: 6/6/2017 15:07:18 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375859 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00009**	**.02146**	**.00818**	**.04379**	**.16987**	**.00009**	**.00377**	**63.567**	**.00014**
Stddev	.00024	.00003	.00067	.00107	.00086	.00026	.00038	.016	.00002
%RSD	274.70	.15170	8.2533	2.4336	.50867	308.11	10.173	.02594	18.150
#1	.00025	.02149	.00866	.04454	.17048	.00027	.00404	63.556	.00012
#2	-.00008	.02144	.00770	.04303	.16925	-.00010	.00350	63.579	.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00056**	**.00162**	**.00185**	**.03352**	**2.9834**	**.03037**	**12.062**	**.00292**	**.00117**
Stddev	.00003	.00033	.00034	.00013	.0570	.00050	.079	.00010	.00021
%RSD	5.1341	20.420	18.114	.39038	1.9087	1.6437	.65220	3.4646	18.293
#1	-.00058	.00185	.00161	.03343	2.9432	.03072	12.007	.00285	.00102
#2	-.00054	.00138	.00209	.03361	3.0237	.03002	12.118	.00300	.00133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.513**	**-.00135**	**.01158**	**-.00153**	**14.630**	**.00014**	**.00219**	**12.198**	**26.104**
Stddev	.265	.00015	.00628	.00072	.294	.00026	.00560	.023	.049
%RSD	.99801	11.475	54.229	46.923	2.0102	181.81	255.88	.18735	.18735
#1	26.700	-.00124	.01602	-.00204	14.838	-.00004	.00614	12.182	26.070
#2	26.326	-.00146	.00714	-.00102	14.422	.00033	-.00177	12.215	26.139
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00058**	**.59195**	**.00306**	**.00108**	**.00084**	**-.02593**	**.00413**	**.00306**	**.00203**
Stddev	.00111	.00077	.00102	.00029	.00394	.00714	.00041	.00067	.00218
%RSD	191.53	.12971	33.337	26.462	467.89	27.543	9.8751	21.964	107.42
#1	.00021	.59250	.00378	.00088	.00363	-.03098	.00442	.00259	.00049
#2	-.00137	.59141	.00234	.00129	-.00194	-.02088	.00385	.00354	.00357
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2076.4**	**46594.**	**4241.9**
Stddev	.5	357.	7.2
%RSD	.02191	.76553	.17060
#1	2076.7	46846.	4236.8
#2	2076.1	46341.	4247.0

Sample Name: 280-97741-D-1-A SD@5 Acquired: 6/6/2017 15:09:53 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375859 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00081**	**.00944**	**-.00334**	**.00961**	**.03395**	**.00006**	**.00656**	**12.866**	**.00017**
Stddev	.00096	.00125	.00005	.00012	.00039	.00001	.00466	.056	.00025
%RSD	119.08	13.298	1.3661	1.2981	1.1502	21.626	70.967	.43470	146.31
#1	.00013	.01032	-.00331	.00953	.03423	.00006	.00986	12.905	.00034
#2	.00148	.00855	-.00337	.00970	.03368	.00005	.00327	12.826	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00038**	**.00055**	**.00039**	**.01339**	**.56311**	**.00976**	**2.5168**	**.00068**	**.00023**
Stddev	.00033	.00004	.00034	.00250	.04671	.00502	.0136	.00004	.00006
%RSD	85.615	7.0918	85.848	18.638	8.2951	51.475	.53887	6.2732	25.773
#1	-.00015	.00053	.00063	.01162	.53008	.00621	2.5264	.00065	.00019
#2	-.00061	.00058	.00015	.01515	.59614	.01331	2.5072	.00071	.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.3871**	**-.00065**	**.00726**	**.00012**	**2.9029**	**.00202**	**-.00411**	**2.4597**	**5.2637**
Stddev	.0297	.00010	.00205	.00306	.0544	.00045	.00298	.0024	.0052
%RSD	.55110	14.827	28.266	2473.8	1.8754	22.128	72.485	.09811	.09811
#1	5.4081	-.00059	.00581	-.00204	2.9414	.00233	-.00621	2.4614	5.2674
#2	5.3661	-.00072	.00871	.00229	2.8644	.00170	-.00200	2.4580	5.2601
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00096**	**.11989**	**.00247**	**.00027**	**.00382**	**-.02981**	**.00114**	**.00167**	**-.00242**
Stddev	.00083	.00086	.00018	.00059	.00188	.01386	.00093	.00043	.00329
%RSD	86.947	.71415	7.4715	220.44	49.216	46.484	82.039	25.635	135.91
#1	-.00037	.12049	.00234	-.00015	.00249	-.02001	.00180	.00197	-.00009
#2	-.00154	.11928	.00260	.00068	.00515	-.03961	.00048	.00137	-.00475
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2121.9**	**47238.**	**4101.7**
Stddev	12.0	1226.	2.0
%RSD	.56634	2.5956	.04897
#1	2130.4	46371.	4103.2
#2	2113.4	48105.	4100.3

Sample Name: 280-97741-D-1-B MS Acquired: 6/6/2017 15:12:29 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375859 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05193**	**2.3376**	**1.0627**	**1.0641**	**2.2425**	**.05200**	W **2.2277**	**113.14**	**.10817**
Stddev	.00018	.0535	.0178	.0205	.0132	.00004	.0579	.54	.00218
%RSD	.34451	2.2898	1.6773	1.9236	.58942	.08362	2.6000	.47671	2.0190
#1	.05180	2.3755	1.0753	1.0786	2.2331	.05203	2.2686	112.76	.10971
#2	.05205	2.2998	1.0501	1.0496	2.2518	.05197	2.1867	113.52	.10662
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49882**	**.20553**	**.27301**	**1.0517**	**55.432**	**1.0782**	**62.691**	**.51225**	**.99202**
Stddev	.01088	.00540	.00238	.0108	.285	.0066	.163	.00288	.02366
%RSD	2.1818	2.6256	.87084	1.0294	.51453	.61263	.25927	.56216	2.3854
#1	.50652	.20934	.27469	1.0441	55.231	1.0736	62.806	.51429	1.0088
#2	.49113	.20171	.27133	1.0594	55.634	1.0829	62.576	.51021	.97529
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**80.034**	**.49309**	**11.141**	**.50203**	**17.156**	**.52369**	**2.0379**	**22.311**	**47.746**
Stddev	.353	.01125	.198	.01123	.370	.01434	.0613	.140	.299
%RSD	.44053	2.2819	1.7790	2.2360	2.1588	2.7385	3.0100	.62690	.62690
#1	79.785	.50105	11.282	.50996	17.418	.53384	2.0813	22.212	47.535
#2	80.283	.48513	11.001	.49409	16.894	.51355	1.9945	22.410	47.958
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2.0202**	**1.6308**	**1.0544**	**1.0327**	**1.9918**	**2.0935**	**.52536**	**.50735**	**.53015**
Stddev	.0412	.0080	.0048	.0051	.0370	.0127	.00410	.00675	.00314
%RSD	2.0377	.49377	.45836	.49481	1.8594	.60518	.78095	1.3314	.59187
#1	2.0493	1.6251	1.0578	1.0363	2.0180	2.1024	.52826	.51213	.53237
#2	1.9911	1.6365	1.0510	1.0291	1.9656	2.0845	.52246	.50258	.52793
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.20000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1984.8**	**43933.**	**4188.5**
Stddev	1.6	251.	82.0
%RSD	.07890	.57166	1.9578
#1	1985.9	44110.	4246.5
#2	1983.7	43755.	4130.5

Sample Name: 280-97741-D-1-C MSD Acquired: 6/6/2017 15:14:53 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375859 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05075**	**2.3116**	**1.0429**	**1.0579**	**2.2407**	**.05162**	W **2.1980**	**113.31**	**.10667**
Stddev	.00056	.0451	.0139	.0184	.0109	.00003	.0377	.50	.00225
%RSD	1.1133	1.9494	1.3344	1.7377	.48610	.05423	1.7129	.44386	2.1139
#1	.05035	2.3435	1.0527	1.0709	2.2330	.05164	2.2246	112.95	.10826
#2	.05115	2.2798	1.0330	1.0449	2.2484	.05160	2.1714	113.66	.10507
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49137**	**.20323**	**.26971**	**1.0416**	**55.171**	**1.0732**	**62.003**	**.50398**	**.98673**
Stddev	.01008	.00429	.00047	.0029	.143	.0041	.042	.00026	.02045
%RSD	2.0511	2.1100	.17294	.27428	.25898	.38507	.06738	.05215	2.0730
#1	.49850	.20627	.27004	1.0396	55.070	1.0702	62.033	.50379	1.0012
#2	.48424	.20020	.26938	1.0436	55.273	1.0761	61.974	.50416	.97227
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**80.163**	**.48656**	**10.995**	**.49480**	**17.045**	**.51899**	**2.0119**	**22.349**	**47.826**
Stddev	.113	.00924	.175	.01001	.263	.00132	.0361	.082	.174
%RSD	.14116	1.8989	1.5961	2.0235	1.5452	.25356	1.7960	.36486	.36486
#1	80.083	.49309	11.119	.50188	17.232	.51992	2.0375	22.291	47.703
#2	80.243	.48002	10.871	.48772	16.859	.51806	1.9864	22.406	47.950
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2.0174**	**1.6289**	**1.0364**	**1.0259**	**1.9692**	**2.1074**	**.51561**	**.49670**	**.53034**
Stddev	.0449	.0050	.0076	.0040	.0245	.0406	.00010	.00122	.00204
%RSD	2.2246	.30670	.73270	.38607	1.2415	1.9261	.02036	.24544	.38506
#1	2.0491	1.6253	1.0418	1.0287	1.9865	2.0787	.51554	.49583	.52890
#2	1.9857	1.6324	1.0311	1.0231	1.9520	2.1361	.51569	.49756	.53179
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.20000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1985.0**	**45015.**	**4176.9**
Stddev	2.8	89.	28.0
%RSD	.14200	.19756	.66986
#1	1987.0	45077.	4196.7
#2	1983.0	44952.	4157.1

Sample Name: 280-97741-D-1-A PDS Acquired: 6/6/2017 15:17:18 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375859 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05065**	**1.1506**	**.20211**	**.14559**	**.26775**	**.05018**	**-.00105**	**82.259**	**.05019**
Stddev	.00030	.0300	.00575	.00268	.00043	.00016	.00004	.044	.00115
%RSD	.58539	2.6084	2.8461	1.8414	.15888	.31018	4.0526	.05308	2.2815
#1	.05086	1.1718	.19804	.14749	.26805	.05007	-.00102	82.290	.05100
#2	.05044	1.1294	.20618	.14370	.26744	.05029	-.00108	82.228	.04938
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04713**	**.05052**	**.05417**	**1.0602**	**23.168**	**.13165**	**31.345**	**.05292**	**.04919**
Stddev	.00194	.00137	.00053	.0021	.099	.00131	.001	.00014	.00065
%RSD	4.1268	2.7193	.98523	.19527	.42920	.99591	.00322	.26750	1.3240
#1	.04850	.05149	.05380	1.0588	23.238	.13258	31.346	.05302	.04965
#2	.04575	.04955	.05455	1.0617	23.098	.13073	31.345	.05282	.04873
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**47.594**	**.04756**	**2.1317**	**.09418**	**14.467**	**.10098**	**.19374**	**17.084**	**36.560**
Stddev	.629	.00251	.0606	.00572	.413	.00649	.00318	.055	.117
%RSD	1.3213	5.2687	2.8411	6.0731	2.8580	6.4272	1.6413	.31902	.31902
#1	47.149	.04933	2.1745	.09822	14.759	.10556	.19149	17.123	36.642
#2	48.038	.04579	2.0889	.09013	14.175	.09639	.19599	17.046	36.478
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10032**	**.63505**	**.20480**	**.05198**	**.19863**	**.45361**	**.05419**	**.19826**	**.05378**
Stddev	.00362	.00136	.00380	.00052	.00767	.02018	.00008	.00008	.00243
%RSD	3.6082	.21374	1.8573	1.0007	3.8612	4.4494	.15442	.04250	4.5191
#1	.10288	.63601	.20211	.05234	.20406	.46788	.05413	.19832	.05550
#2	.09776	.63409	.20749	.05161	.19321	.43934	.05425	.19820	.05206
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2027.8**	**45356.**	**4203.0**
Stddev	28.0	108.	54.7
%RSD	1.3810	.23809	1.3011
#1	2047.6	45432.	4241.6
#2	2008.0	45279.	4164.3

Sample Name: 280-97760-D-1-A Acquired: 6/6/2017 15:19:52 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375859 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00042**	**.02814**	**-.00033**	**.02085**	**.02839**	**.00009**	**-.00120**	**43.526**	**.00036**
Stddev	.00159	.00083	.00594	.00110	.00028	.00012	.00288	.237	.00007
%RSD	379.83	2.9423	1818.2	5.2767	.99467	129.25	239.10	.54545	18.496
#1	-.00070	.02873	.00388	.02163	.02819	.00018	-.00324	43.358	.00032
#2	.00154	.02756	-.00453	.02007	.02859	.00001	.00083	43.694	.00041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00009**	**.00047**	**.00294**	**.62629**	**2.9232**	**.00557**	**6.4338**	**.11307**	**.00066**
Stddev	.00055	.00025	.00001	.00185	.0097	.00147	.0017	.00063	.00108
%RSD	614.44	53.862	.47036	.29462	.33148	26.473	.02669	.55548	163.70
#1	.00030	.00065	.00293	.62498	2.9164	.00661	6.4326	.11263	-.00010
#2	-.00047	.00029	.00295	.62759	2.9301	.00453	6.4350	.11352	.00142
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.3599**	**-.00179**	**.01859**	**.00215**	**3.8186**	**-.00282**	**-.00944**	**3.1691**	**6.7818**
Stddev	.0313	.00089	.00102	.00243	.0717	.00379	.00062	.0395	.0845
%RSD	.49237	49.735	5.4661	112.94	1.8773	134.09	6.5484	1.2464	1.2464
#1	6.3377	-.00116	.01787	.00043	3.8693	-.00550	-.00988	3.1411	6.7220
#2	6.3820	-.00242	.01930	.00387	3.7679	-.00015	-.00900	3.1970	6.8415
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00032**	**.16037**	**.00143**	**.00223**	**.00449**	**-.00152**	**.00023**	**.00407**	**-.00177**
Stddev	.00111	.00004	.00081	.00174	.00694	.04693	.00032	.00022	.00151
%RSD	344.84	.02604	56.174	77.901	154.70	3084.1	142.08	5.4506	85.274
#1	.00046	.16034	.00086	.00100	-.00042	.03166	.00046	.00391	-.00283
#2	-.00111	.16040	.00200	.00346	.00939	-.03471	-.00000	.00422	-.00070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2000.4**	**46468.**	**4185.3**
Stddev	12.0	308.	45.4
%RSD	.60229	.66199	1.0849
#1	2008.9	46250.	4217.4
#2	1991.8	46685.	4153.2

Sample Name: 280-97760-F-2-A Acquired: 6/6/2017 15:22:28 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375859 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00064**	**.00506**	**.00089**	**.03323**	**.00876**	**-.00009**	**.00076**	**65.700**	**.00047**
Stddev	.00024	.00138	.00139	.00092	.00011	.00014	.00035	.123	.00025
%RSD	37.353	27.291	155.85	2.7588	1.2804	154.52	46.409	.18703	53.750
#1	.00047	.00603	.00187	.03388	.00884	.00001	.00051	65.613	.00064
#2	.00081	.00408	-.00009	.03258	.00868	-.00019	.00101	65.787	.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00009**	**.00056**	**.00190**	**.32313**	**1.6882**	**.00540**	**18.281**	**.11880**	**-.00059**
Stddev	.00024	.00028	.00005	.00313	.0101	.00077	.013	.00018	.00018
%RSD	263.90	50.488	2.8895	.96757	.59780	14.221	.07279	.14988	30.559
#1	.00026	.00076	.00194	.32534	1.6953	.00595	18.290	.11867	-.00072
#2	-.00008	.00036	.00186	.32092	1.6811	.00486	18.271	.11893	-.00047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**21.168**	**-.00071**	**.01112**	**-.00208**	**6.8445**	**-.00341**	**-.00550**	**6.2703**	**13.418**
Stddev	.263	.00019	.00203	.00334	.1417	.00517	.00435	.0120	.026
%RSD	1.2424	26.357	18.221	160.92	2.0705	151.65	79.076	.19065	.19065
#1	20.982	-.00084	.01256	-.00444	6.9447	.00025	-.00857	6.2619	13.400
#2	21.354	-.00058	.00969	.00029	6.7443	-.00707	-.00242	6.2788	13.437
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00180**	**.22082**	**-.00039**	**.00050**	**.00379**	**-.00339**	**-.00032**	**.00242**	**-.00206**
Stddev	.00064	.00054	.00102	.00018	.00474	.02027	.00004	.00017	.00137
%RSD	35.652	.24617	261.12	35.849	124.89	597.33	11.637	7.0816	66.366
#1	-.00135	.22044	.00033	.00037	.00714	.01094	-.00029	.00230	-.00109
#2	-.00226	.22121	-.00111	.00063	.00044	-.01773	-.00034	.00254	-.00302
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2053.7**	**46301.**	**4249.3**
Stddev	3.4	847.	6.6
%RSD	.16531	1.8285	.15641
#1	2056.1	46900.	4244.6
#2	2051.3	45703.	4254.0

Sample Name: CCVH-4569081 Acquired: 6/6/2017 15:25:05 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00590**	**50.184**	**-.00381**	**.00299**	**-.00002**	**-.00006**	**1.0325**	**.00337**	**.00005**	**-.00153**	**.00049**	**.02532**	**49.560**
Stddev	.00057	.162	.00899	.00147	.00061	.00024	.0199	.00542	.00032	.00035	.00014	.00112	.236
%RSD	9.6822	.32254	236.18	48.997	2842.2	427.54	1.9313	160.81	652.64	22.730	28.095	4.4233	.47573
#1	-.00549	50.070	-.01017	.00196	-.00045	.00011	1.0466	.00721	-.00018	-.00128	.00059	.02453	49.727
#2	-.00630	50.299	.00255	.00403	.00041	-.00022	1.0184	-.00046	.00028	-.00177	.00039	.02611	49.394
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00615**	**.00473**	**.06602**	**-.00163**	**-.00089**	**255.27**	**-.00056**	**.00939**	**.00307**	**5.1469**	**-.01417**	**-.00918**	**-.03410**
Stddev	.02540	.00146	.00786	.00001	.00009	1.46	.00096	.00512	.00277	.1057	.00554	.00458	.03243
%RSD	413.28	30.955	11.906	.87534	10.157	.57207	171.96	54.578	90.270	2.0539	39.075	49.823	95.123
#1	.01181	.00576	.06047	-.00162	-.00082	254.24	.00012	.01301	.00111	5.2217	-.01026	-.00595	-.05703
#2	-.02410	.00369	.07158	-.00164	-.00095	256.30	-.00124	.00577	.00504	5.0722	-.01809	-.01242	-.01116
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.07297**	**-.00306**	**.00035**	**4.9605**	**.01713**	**.00114**	**10.274**	**.01479**	**.00056**	**.11906**
Stddev	.06941	.00198	.00014	.0196	.00022	.00113	.041	.00044	.00056	.00486
%RSD	95.123	64.854	39.374	.39488	1.2659	99.061	.40190	2.9961	100.18	4.0862
#1	-.12205	-.00446	.00025	4.9744	.01698	.00034	10.245	.01448	.00095	.11562
#2	-.02389	-.00166	.00044	4.9467	.01728	.00194	10.304	.01510	.00016	.12250
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1962.4**	**44434.**	**4064.8**
Stddev	8.9	256.	55.3
%RSD	.45515	.57673	1.3603
#1	1968.7	44615.	4103.9
#2	1956.1	44252.	4025.7

Sample Name: CCV-4567764 Acquired: 6/6/2017 15:27:40 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50717**	F **.61070**	**.99922**	**.49654**	**.51195**	**.50183**	**.00013**	**5.0252**	**.50055**	**.50109**	**.50095**	**.50852**
Stddev	.00140	.01268	.01612	.00974	.00095	.00210	.00238	.0452	.00852	.00980	.00823	.00011
%RSD	.27537	2.0760	1.6129	1.9617	.18595	.41921	1815.6	.89868	1.7023	1.9556	1.6425	.02158
#1	.50815	.61966	1.0106	.50343	.51262	.50331	.00182	5.0571	.50657	.50802	.50677	.50860
#2	.50618	.60173	.98783	.48965	.51128	.50034	-.00155	4.9933	.49452	.49416	.49513	.50844
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5059**	**50.861**	**1.0313**	**19.984**	**.50072**	**.49794**	**5.2578**	**.49792**	**1.0476**	**1.0169**	**.00263**	**1.0028**
Stddev	.0066	.092	.0044	.020	.00016	.00817	.0243	.00961	.0160	.0127	.00052	.0180
%RSD	.26220	.18138	.42861	.10210	.03224	1.6399	.46174	1.9297	1.5244	1.2464	19.798	1.7957
#1	2.5105	50.927	1.0344	19.970	.50061	.50371	5.2750	.50472	1.0589	1.0259	.00226	1.0155
#2	2.5012	50.796	1.0282	19.999	.50083	.49216	5.2407	.49113	1.0363	1.0080	.00300	.99004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.98649**	**5.0305**	**10.765**	**.99872**	**.50780**	**.00708**	**.49851**	**1.0353**	**-.01653**	**.49664**	**.49012**	**.50022**
Stddev	.01612	.0389	.083	.01686	.00095	.00063	.00088	.0188	.00152	.00012	.00258	.00524
%RSD	1.6341	.77277	.77277	1.6879	.18712	8.8809	.17674	1.8151	9.1756	.02394	.52658	1.0484
#1	.99789	5.0031	10.707	1.0106	.50847	.00752	.49788	1.0485	-.01546	.49656	.49195	.50393
#2	.97509	5.0580	10.824	.98680	.50713	.00663	.49913	1.0220	-.01760	.49673	.48830	.49651
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2010.7**	**45830.**	**4120.7**
Stddev	6.4	152.	23.7
%RSD	.32058	.33256	.57467
#1	2015.3	45937.	4137.4
#2	2006.1	45722.	4103.9

Sample Name: CCB Acquired: 6/6/2017 15:30:09 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00061**	**.00116**	**-.00213**	**.00287**	**-.00007**	**-.00003**	**.00422**	**.02503**	**.00031**	**.00009**	**.00013**	**.00149**
Stddev	.00086	.00086	.00953	.00042	.00003	.00006	.00243	.00010	.00005	.00041	.00004	.00073
%RSD	140.53	74.415	447.90	14.598	38.533	200.12	57.564	.40581	15.153	445.52	28.020	49.264
#1	.00122	.00055	.00461	.00316	-.00005	-.00008	.00250	.02510	.00034	.00038	.00011	.00201
#2	.00000	.00177	-.00886	.00257	-.00009	.00001	.00594	.02496	.00028	-.00020	.00016	.00097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00128**	**-.00904**	W **.00543**	**-.00250**	**.00008**	**.00028**	**.06945**	**-.00110**	**.00899**	**.00123**	**.00298**	**-.00105**
Stddev	.00072	.05101	.00215	.00405	.00004	.00038	.00999	.00058	.00596	.00255	.00375	.00017
%RSD	56.345	564.13	39.564	161.92	47.642	133.88	14.379	52.804	66.231	207.09	125.96	16.379
#1	.00180	.02703	.00695	.00036	.00005	.00055	.06239	-.00151	.01321	.00304	.00033	-.00117
#2	.00077	-.04511	.00391	-.00537	.00011	.00001	.07652	-.00069	.00478	-.00057	.00563	-.00093
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500									
Low Limit			-.01000									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00112**	**.00051**	**.00110**	**-.00053**	**.00012**	**.00476**	**.00014**	**-.00098**	**-.04956**	**-.00028**	**.00210**	**-.00215**
Stddev	.00514	.00871	.01863	.00256	.00001	.00084	.00042	.00279	.02742	.00052	.00031	.00085
%RSD	456.99	1698.0	1698.0	485.88	10.467	17.592	309.19	285.79	55.314	187.80	14.499	39.544
#1	.00251	.00667	.01427	.00128	.00011	.00417	-.00016	.00100	-.06895	.00009	.00232	-.00155
#2	-.00476	-.00564	-.01208	-.00234	.00013	.00536	.00043	-.00295	-.03018	-.00064	.00189	-.00275
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2021.7**	**45711.**	**4021.7**
Stddev	18.9	1354.	52.0
%RSD	.93568	2.9627	1.2923
#1	2008.3	44754.	4058.5
#2	2035.1	46669.	3985.0

Sample Name: CCVL-4576167 Acquired: 6/6/2017 15:32:47 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01006**	**.12406**	**.01622**	**.09815**	**.01016**	**.00104**	**.12297**	**.20219**	**.00520**	**.00998**	**.01042**	**.01660**
Stddev	.00057	.00016	.00857	.00213	.00066	.00002	.00434	.00296	.00017	.00003	.00025	.00129
%RSD	5.6821	.13266	52.848	2.1753	6.5307	1.8012	3.5310	1.4621	3.3016	.30105	2.3949	7.7958
#1	.00966	.12417	.01016	.09966	.01063	.00102	.12604	.20428	.00532	.01000	.01059	.01752
#2	.01047	.12394	.02229	.09664	.00969	.00105	.11990	.20010	.00508	.00996	.01024	.01569
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.12908**	**2.9841**	**.02492**	**.19960**	**.01061**	**.01800**	**1.0942**	**.03888**	**2.9848**	F **.01273**	**.10920**	**.01774**
Stddev	.00455	.0308	.00174	.00539	.00005	.00065	.0004	.00032	.0724	.00120	.00270	.00555
%RSD	3.5255	1.0320	6.9854	2.7028	.51474	3.6188	.03213	.82960	2.4267	9.4437	2.4685	31.268
#1	.13230	3.0059	.02616	.20342	.01065	.01846	1.0940	.03911	3.0360	.01358	.10730	.02167
#2	.12587	2.9623	.02369	.19579	.01057	.01754	1.0945	.03865	2.9336	.01188	.11111	.01382
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value										.00900		
Range										30.000%		

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01456**	**.51136**	**1.0943**	**.09665**	**.01007**	F **.01991**	**.00997**	**.01469**	F **.01645**	**.01077**	**.01994**	**.01456**
Stddev	.00531	.01114	.0238	.00365	.00003	.00057	.00060	.00318	.03038	.00105	.00038	.00031
%RSD	36.442	2.1790	2.1790	3.7731	.32553	2.8622	6.0383	21.646	184.67	9.7746	1.9260	2.0970
#1	.01831	.50349	1.0775	.09922	.01009	.02032	.01039	.01694	-.00503	.01152	.01967	.01477
#2	.01081	.51924	1.1112	.09407	.01004	.01951	.00954	.01244	.03793	.01003	.02021	.01434
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value						.01500			.06000			
Range						30.000%			-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2059.9**	**46689.**	**3955.1**
Stddev	7.8	677.	135.2
%RSD	.37879	1.4511	3.4189
#1	2065.4	46210.	3859.5
#2	2054.4	47168.	4050.7

Sample Name: MB 280-375993/1-A Acquired: 6/6/2017 15:35:25 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/5 Custom ID2: Custom ID3:
Comment: 375993 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00036**	**.00487**	**-.00069**	**.00162**	**-.00001**	**-.00005**	**.00335**	**.02219**	**.00050**
Stddev	.00025	.00004	.00179	.00073	.00040	.00008	.00001	.00187	.00016
%RSD	69.146	.81331	257.57	44.966	3346.1	152.84	.38256	8.4242	32.618
#1	.00054	.00489	.00057	.00110	-.00029	.00000	.00334	.02086	.00062
#2	.00018	.00484	-.00196	.00213	.00027	-.00010	.00336	.02351	.00039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00018**	**.00047**	**.00174**	**.02981**	**-.08337**	**.00465**	**.00526**	**.00025**	**.00034**
Stddev	.00019	.00034	.00019	.00287	.00203	.00104	.00702	.00002	.00056
%RSD	105.32	70.884	10.653	9.6435	2.4362	22.419	133.48	8.8882	165.64
#1	-.00032	.00024	.00187	.03184	-.08194	.00391	.01023	.00024	-.00006
#2	-.00005	.00071	.00161	.02777	-.08481	.00538	.00030	.00027	.00073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07766**	**-.00123**	**.00702**	**.00219**	**.01058**	**.00037**	W **-.01411**	**-.03107**	**-.06650**
Stddev	.01648	.00023	.00701	.00429	.00719	.00192	.01001	.00646	.01383
%RSD	21.220	18.928	99.953	196.55	68.013	514.63	70.957	20.794	20.794
#1	.08931	-.00139	.00206	-.00085	.00549	.00173	-.00703	-.02651	-.05672
#2	.06601	-.00106	.01198	.00522	.01566	-.00098	-.02119	-.03564	-.07628
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	None
High Limit							.00750		
Low Limit							-.00750		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00292**	**.00008**	**.00122**	**.00098**	**.00046**	**-.02702**	**-.00013**	**.00268**	**-.00054**
Stddev	.00106	.00015	.00162	.00038	.00198	.01011	.00013	.00036	.00090
%RSD	36.303	189.97	133.28	38.387	425.13	37.410	102.04	13.483	169.07
#1	-.00367	-.00003	.00007	.00072	-.00093	-.01988	-.00022	.00294	.00010
#2	-.00217	.00019	.00236	.00125	.00186	-.03417	-.00004	.00243	-.00117
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2113.9**	**47736.**	**4170.3**
Stddev	24.2	124.	29.3
%RSD	1.1456	.26026	.70177
#1	2096.8	47648.	4149.6
#2	2131.0	47824.	4191.0

Sample Name: LCS 280-375993/2-A Acquired: 6/6/2017 15:38:03 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375993 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04955**	F **2.3176**	**1.0376**	**1.0080**	**2.0512**	**.05057**	**2.1845**	**49.471**	**.10536**
Stddev	.00120	.0241	.0007	.0097	.0118	.00023	.0346	.318	.00095
%RSD	2.4247	1.0400	.06809	.96378	.57303	.46309	1.5842	.64335	.89756
#1	.05040	2.3346	1.0371	1.0149	2.0596	.05074	2.2090	49.696	.10603
#2	.04870	2.3006	1.0381	1.0012	2.0429	.05041	2.1601	49.246	.10469
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit		2.2299							
Low Limit		1.7300							

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49456**	**.20115**	**.26332**	**1.0560**	**51.375**	**1.0333**	**49.630**	**.49758**	**.98215**
Stddev	.00586	.00273	.00139	.0047	.406	.0080	.209	.00036	.01296
%RSD	1.1854	1.3587	.52701	.44978	.79039	.77612	.42181	.07243	1.3195
#1	.49870	.20308	.26430	1.0594	51.662	1.0390	49.482	.49733	.99132
#2	.49041	.19921	.26234	1.0527	51.088	1.0276	49.778	.49784	.97299
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**52.214**	**.48993**	**10.830**	**.50002**	**2.1809**	**.51889**	**1.9798**	**9.9576**	**21.309**
Stddev	.472	.00595	.139	.00552	.0168	.00174	.0230	.0193	.041
%RSD	.90401	1.2152	1.2840	1.1041	.76872	.33439	1.1614	.19350	.19350
#1	52.548	.49414	10.928	.50392	2.1928	.52012	1.9961	9.9712	21.338
#2	51.881	.48572	10.732	.49611	2.1691	.51767	1.9636	9.9440	21.280
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0049**	**1.0181**	**1.0277**	**1.0148**	**1.9951**	**2.1071**	**.50693**	**.49649**	**.52445**
Stddev	.0281	.0057	.0027	.0002	.0152	.0033	.00208	.00256	.00099
%RSD	1.4031	.56496	.26512	.02402	.76181	.15796	.40980	.51502	.18830
#1	2.0248	1.0221	1.0296	1.0150	2.0059	2.1094	.50840	.49468	.52515
#2	1.9850	1.0140	1.0257	1.0146	1.9844	2.1047	.50546	.49830	.52375
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2005.0**	**45444.**	**4272.9**
Stddev	9.9	1262.	28.2
%RSD	.49228	2.7764	.66018
#1	2012.0	46336.	4253.0
#2	1998.0	44552.	4292.9

Sample Name: 280-97761-E-1-A Acquired: 6/6/2017 15:40:27 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375993 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00060**	**.04606**	**.00630**	**.08394**	**.02627**	**.00011**	**.00016**	**77.944**	**.00037**
Stddev	.00119	.00212	.00280	.00031	.00023	.00013	.00192	.315	.00001
%RSD	199.36	4.5924	44.521	.37155	.89253	122.67	1211.8	.40354	1.6807
#1	.00025	.04756	.00828	.08416	.02644	.00001	.00152	78.167	.00037
#2	-.00144	.04457	.00432	.08372	.02611	.00020	-.00120	77.722	.00038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00224**	**.00100**	**.00349**	**.09088**	**7.0707**	**.00882**	**7.2866**	**.24185**	**.00027**
Stddev	.00005	.00030	.00128	.00024	.0209	.00176	.0174	.00087	.00027
%RSD	2.3805	29.725	36.676	.26122	.29606	19.908	.23824	.36047	103.48
#1	.00227	.00079	.00259	.09105	7.0559	.00758	7.2743	.24247	.00007
#2	.00220	.00121	.00440	.09071	7.0855	.01006	7.2989	.24124	.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**16.483**	**.02144**	**.01936**	**-.00113**	**8.6495**	**-.00377**	**-.00796**	**5.0709**	**10.852**
Stddev	.370	.00012	.00062	.00041	.1681	.00141	.00324	.0315	.067
%RSD	2.2448	.54925	3.2162	36.696	1.9438	37.444	40.662	.62138	.62138
#1	16.221	.02152	.01980	-.00084	8.7683	-.00277	-.00567	5.0486	10.804
#2	16.744	.02136	.01892	-.00142	8.5306	-.00476	-.01025	5.0931	10.899
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00114**	**.13801**	**.00105**	**.00047**	**.00311**	**-.02963**	**.00021**	**.02378**	**-.00143**
Stddev	.00305	.00004	.00165	.00043	.00147	.02106	.00002	.00055	.00017
%RSD	267.35	.02680	157.64	91.434	47.306	71.062	10.985	2.2947	11.909
#1	-.00329	.13804	-.00012	.00078	.00415	-.01474	.00019	.02417	-.00131
#2	.00101	.13799	.00221	.00017	.00207	-.04452	.00023	.02340	-.00155
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2029.1**	**45907.**	**4091.7**
Stddev	15.5	529.	8.7
%RSD	.76402	1.1521	.21158
#1	2018.1	46281.	4085.5
#2	2040.0	45533.	4097.8

Sample Name: 280-97761-E-2-A Acquired: 6/6/2017 15:43:02 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375993 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00032**	**.09218**	**.00541**	**.01336**	**.01061**	**-.00006**	**.00444**	**25.606**	**.00037**
Stddev	.00113	.00293	.00537	.00029	.00031	.00004	.00131	.074	.00000
%RSD	351.82	3.1808	99.170	2.1871	2.9055	63.587	29.532	.28707	.42037
#1	-.00048	.09425	.00920	.01356	.01083	-.00003	.00536	25.554	.00037
#2	.00112	.09011	.00162	.01315	.01040	-.00009	.00351	25.658	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00010**	**.00031**	**.00151**	**.13436**	**.90407**	**.01001**	**2.4830**	**.03734**	**.00041**
Stddev	.00073	.00027	.00112	.00101	.07779	.00065	.0120	.00019	.00067
%RSD	757.45	88.391	74.488	.75348	8.6044	6.4798	.48217	.50028	163.41
#1	-.00061	.00012	.00230	.13508	.84907	.00955	2.4915	.03747	.00089
#2	.00042	.00050	.00071	.13364	.95908	.01047	2.4745	.03721	-.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9763**	**-.00091**	**.01746**	**.00112**	**1.9398**	**-.00129**	**-.00968**	**3.3404**	**7.1485**
Stddev	.0037	.00117	.00563	.00080	.0358	.00538	.00347	.0170	.0364
%RSD	.18742	129.14	32.263	72.160	1.8452	418.19	35.827	.50930	.50930
#1	1.9736	-.00008	.02144	.00055	1.9651	-.00509	-.01213	3.3525	7.1743
#2	1.9789	-.00173	.01348	.00168	1.9145	.00252	-.00723	3.3284	7.1228
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00072**	**.04679**	**.00350**	**.00125**	**.00112**	**-.05268**	**.00003**	**.00328**	**-.00126**
Stddev	.00253	.00016	.00126	.00056	.00187	.02207	.00016	.00048	.00126
%RSD	352.02	.33638	36.078	44.514	167.28	41.904	468.06	14.560	99.581
#1	.00251	.04668	.00439	.00086	-.00020	-.06829	-.00008	.00294	-.00037
#2	-.00107	.04690	.00261	.00164	.00245	-.03707	.00015	.00361	-.00215
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2073.6**	**46499.**	**4217.2**
Stddev	38.8	708.	6.5
%RSD	1.8724	1.5222	.15479
#1	2046.1	45998.	4212.6
#2	2101.0	46999.	4221.8

Sample Name: 280-97761-E-3-A Acquired: 6/6/2017 15:45:38 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375993 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00018**	**.01529**	**.00695**	**.02030**	**.03413**	**.00010**	**.00013**	**23.230**	**.00042**
Stddev	.00053	.00179	.00613	.00070	.00015	.00002	.00305	.005	.00014
%RSD	303.85	11.721	88.263	3.4615	.42501	20.896	2290.5	.02308	32.672
#1	-.00055	.01656	.00261	.02080	.03423	.00011	.00229	23.234	.00052
#2	.00020	.01402	.01129	.01980	.03403	.00008	-.00202	23.226	.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00445**	**.00058**	**.00048**	**5.4536**	**1.4304**	**.01301**	**1.8816**	**3.6800**	**-.00020**
Stddev	.00055	.00028	.00097	.0109	.0809	.00310	.0058	.0015	.00007
%RSD	12.311	47.346	200.23	.20015	5.6584	23.861	.30981	.04016	36.456
#1	.00484	.00078	.00117	5.4613	1.3732	.01081	1.8857	3.6789	-.00025
#2	.00407	.00039	-.00020	5.4459	1.4877	.01520	1.8775	3.6810	-.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9028**	**.00724**	**.02179**	**.00200**	**.40148**	**-.00095**	**.00067**	**2.0574**	**4.4028**
Stddev	.0333	.00014	.00743	.00038	.01157	.00896	.00983	.0301	.0644
%RSD	1.7488	1.8762	34.083	19.114	2.8817	940.95	1472.8	1.4621	1.4621
#1	1.9264	.00714	.02704	.00227	.40966	-.00729	.00762	2.0787	4.4484
#2	1.8793	.00734	.01654	.00173	.39330	.00538	-.00628	2.0361	4.3573
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00035**	**.03739**	**.00384**	**.00030**	**.00476**	**-.02584**	**.00038**	**.00372**	**-.00200**
Stddev	.00093	.00019	.00207	.00009	.00126	.05320	.00013	.00006	.00232
%RSD	266.34	.50449	53.890	28.408	26.361	205.90	35.309	1.7257	115.71
#1	.00100	.03753	.00237	.00024	.00388	.01178	.00048	.00368	-.00364
#2	-.00031	.03726	.00530	.00036	.00565	-.06346	.00029	.00377	-.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2082.8**	**46802.**	**4253.8**
Stddev	23.5	119.	29.9
%RSD	1.1269	.25349	.70276
#1	2099.4	46886.	4232.7
#2	2066.2	46718.	4275.0

Sample Name: 280-97761-E-4-A Acquired: 6/6/2017 15:48:13 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375993 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**.05071**	**-.00549**	**.01031**	**.00851**	**-.00018**	**.00322**	**10.197**	**.00044**
Stddev	.00054	.00148	.00033	.00120	.00004	.00005	.00799	.001	.00006
%RSD	1128.4	2.9155	5.9608	11.639	.46126	28.572	248.62	.01345	14.496
#1	-.00034	.05175	-.00526	.01116	.00849	-.00014	-.00244	10.198	.00040
#2	.00043	.04966	-.00572	.00946	.00854	-.00021	.00887	10.196	.00049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00011**	**.00074**	**.00115**	**.08191**	**.89217**	**.01189**	**1.5924**	**.09756**	**-.00074**
Stddev	.00080	.00038	.00008	.00169	.01431	.00468	.0093	.00042	.00050
%RSD	714.64	51.673	7.1173	2.0664	1.6039	39.370	.58345	.43382	67.363
#1	-.00045	.00100	.00121	.08310	.90229	.00858	1.5990	.09786	-.00109
#2	.00068	.00047	.00109	.08071	.88206	.01521	1.5859	.09726	-.00039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.5167**	**-.00049**	**.01197**	**.00143**	**1.1947**	**.00191**	**-.00064**	**2.9112**	**6.2300**
Stddev	.0107	.00126	.00276	.00106	.0204	.01121	.00402	.0157	.0335
%RSD	.70271	258.67	23.066	74.230	1.7111	587.56	631.41	.53788	.53788
#1	1.5092	-.00138	.01392	.00068	1.2092	-.00602	.00221	2.9223	6.2537
#2	1.5243	.00040	.01002	.00218	1.1803	.00983	-.00348	2.9002	6.2063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00096**	**.02097**	**.00202**	**.00081**	**.00244**	**-.05003**	**.00111**	**.00299**	**-.00249**
Stddev	.00158	.00001	.00150	.00024	.00378	.01917	.00029	.00151	.00167
%RSD	165.57	.06186	74.241	29.136	154.96	38.325	26.336	50.730	66.904
#1	.00016	.02098	.00308	.00098	-.00023	-.06359	.00131	.00406	-.00131
#2	-.00208	.02096	.00096	.00064	.00512	-.03647	.00090	.00191	-.00367
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2083.6**	**47358.**	**4191.9**
Stddev	11.8	216.	51.5
%RSD	.56574	.45668	1.2288
#1	2075.3	47511.	4228.3
#2	2092.0	47205.	4155.4

Sample Name: 280-97761-E-5-A Acquired: 6/6/2017 15:50:50 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375993 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00020**	**.31993**	**.00264**	**.02057**	**.02097**	**.00003**	**.00401**	**33.326**	**.00028**
Stddev	.00023	.00642	.00175	.00059	.00016	.00017	.00027	.185	.00015
%RSD	119.67	2.0059	66.264	2.8644	.78455	547.41	6.6456	.55540	54.603
#1	.00003	.32447	.00140	.02015	.02108	-.00009	.00382	33.457	.00038
#2	.00036	.31539	.00387	.02099	.02085	.00015	.00420	33.195	.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00108**	**.00077**	**.00155**	**.74457**	**1.3141**	**.00705**	**3.1826**	**1.7230**	**-.00091**
Stddev	.00010	.00011	.00035	.00813	.0152	.00318	.0044	.0001	.00053
%RSD	9.5030	14.650	22.589	1.0913	1.1531	45.085	.13890	.00287	57.449
#1	.00101	.00085	.00130	.75031	1.3033	.00480	3.1795	1.7230	-.00129
#2	.00116	.00069	.00180	.73882	1.3248	.00930	3.1858	1.7230	-.00054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.1811**	**.00834**	**.02425**	**-.00183**	**1.3808**	**.00318**	**-.00139**	**2.8517**	**6.1027**
Stddev	.0086	.00048	.00110	.00214	.0381	.00156	.00935	.0246	.0526
%RSD	.26935	5.7119	4.5446	116.69	2.7582	49.001	672.94	.86128	.86128
#1	3.1872	.00867	.02503	-.00335	1.4077	.00428	-.00800	2.8691	6.1398
#2	3.1750	.00800	.02347	-.00032	1.3539	.00208	.00522	2.8343	6.0655
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**.05490**	**.00160**	**.00415**	**.00055**	**-.04648**	**.00100**	**.02931**	**-.00257**
Stddev	.00068	.00008	.00382	.00043	.00326	.03919	.00059	.00005	.00000
%RSD	11198.	.14578	239.23	10.407	587.98	84.330	58.685	.18134	.18227
#1	-.00049	.05495	.00429	.00385	.00286	-.01876	.00058	.02927	-.00258
#2	.00048	.05484	-.00110	.00446	-.00175	-.07419	.00141	.02934	-.00257
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2089.7**	**47685.**	**4306.3**
Stddev	4.5	344.	6.3
%RSD	.21502	.72052	.14613
#1	2086.5	47928.	4310.7
#2	2092.8	47442.	4301.8

Sample Name: 280-97761-E-6-A Acquired: 6/6/2017 15:53:26 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375993 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00054**	**.84499**	**.00519**	**.01950**	**.09262**	**.00032**	**.00399**	**34.364**	**.00053**
Stddev	.00024	.02768	.00265	.00143	.00007	.00005	.00138	.054	.00009
%RSD	45.518	3.2758	51.077	7.3103	.07227	15.763	34.626	.15650	16.473
#1	-.00071	.86456	.00707	.02051	.09257	.00028	.00497	34.402	.00059
#2	-.00036	.82542	.00332	.01849	.09266	.00035	.00302	34.326	.00047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01153**	**.00107**	**.00236**	**2.4589**	**.90667**	**.00614**	**4.4462**	**5.3739**	**-.00092**
Stddev	.00052	.00003	.00087	.0040	.03309	.00008	.0026	.0159	.00007
%RSD	4.5383	3.2341	36.835	.16098	3.6492	1.3640	.05873	.29611	7.9208
#1	.01190	.00105	.00174	2.4561	.93006	.00608	4.4443	5.3851	-.00086
#2	.01116	.00109	.00297	2.4617	.88327	.00620	4.4480	5.3626	-.00097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.6465**	**.09686**	**.05758**	**.00125**	**1.7041**	**.00028**	**-.00322**	**3.1315**	**6.7013**
Stddev	.0032	.00201	.00015	.00302	.0511	.00202	.00092	.0457	.0979
%RSD	.11972	2.0755	.26234	241.71	2.9981	711.90	28.574	1.4609	1.4609
#1	2.6443	.09828	.05769	-.00089	1.7402	.00171	-.00387	3.0991	6.6321
#2	2.6487	.09544	.05747	.00339	1.6679	-.00115	-.00257	3.1638	6.7706
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00155**	**.05978**	**.00101**	**.00874**	**.00172**	**-.01630**	**.00191**	**.05642**	**.00035**
Stddev	.00010	.00017	.00112	.00042	.00139	.00775	.00016	.00133	.00100
%RSD	6.3193	.29039	111.36	4.7761	80.792	47.537	8.5790	2.3658	284.36
#1	-.00161	.05965	.00021	.00845	.00074	-.02178	.00203	.05548	.00106
#2	-.00148	.05990	.00180	.00904	.00270	-.01082	.00180	.05736	-.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2157.3**	**48708.**	**4321.9**
Stddev	22.8	178.	8.0
%RSD	1.0553	.36559	.18438
#1	2141.2	48582.	4316.3
#2	2173.4	48834.	4327.5

Sample Name: CCVH-4569081 Acquired: 6/6/2017 15:56:02 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00567**	**49.658**	**-.00619**	**.00222**	**.00067**	**.00003**	**1.0213**	**.04426**	**-.00014**	**-.00160**	**.00095**	**.02629**	**49.460**
Stddev	.00106	.021	.01191	.00030	.00031	.00016	.0300	.05107	.00030	.00064	.00021	.00049	.079
%RSD	18.682	.04150	192.58	13.309	46.039	561.10	2.9375	115.40	214.88	39.834	22.564	1.8651	.15931
#1	-.00642	49.672	.00224	.00243	.00045	-.00009	1.0425	.00814	-.00035	-.00205	.00080	.02594	49.404
#2	-.00492	49.643	-.01461	.00202	.00088	.00015	1.0000	.08037	.00007	-.00115	.00110	.02664	49.515
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03108**	**.00694**	**.07071**	**-.00102**	**-.00158**	**252.72**	**.00034**	**.01484**	**.00089**	**5.0626**	**-.01199**	**-.01185**	**-.01950**
Stddev	.05637	.00010	.00387	.00016	.00011	.66	.00005	.00695	.00128	.0776	.00104	.01047	.00000
%RSD	181.34	1.4712	5.4683	15.636	6.8650	.26045	15.941	46.844	144.84	1.5328	8.7042	88.291	.01664
#1	-.00878	.00687	.06798	-.00091	-.00151	253.19	.00037	.01976	-.00002	5.1175	-.01273	-.01925	-.01950
#2	.07094	.00701	.07344	-.00114	-.00166	252.26	.00030	.00993	.00179	5.0077	-.01125	-.00445	-.01950
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.04173**	**-.00308**	**.00054**	**4.9285**	**.01715**	**-.00494**	**10.227**	**.01438**	**.00084**	**.11964**
Stddev	.00001	.00046	.00055	.0211	.00028	.00092	.016	.00096	.00067	.00042
%RSD	.01664	15.092	102.20	.42773	1.6139	18.565	.15988	6.6591	80.367	.34920
#1	-.04173	-.00341	.00015	4.9434	.01735	-.00430	10.239	.01505	.00036	.11994
#2	-.04172	-.00275	.00092	4.9136	.01696	-.00559	10.216	.01370	.00131	.11935
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1975.8**	**44525.**	**4111.3**
Stddev	14.4	111.	31.0
%RSD	.72988	.24839	.75498
#1	1965.6	44603.	4133.3
#2	1986.0	44447.	4089.4

Sample Name: CCV-4567764 Acquired: 6/6/2017 15:58:36 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50409**	F **.61190**	**.97983**	**.49076**	**.50156**	**.49585**	**.00097**	**4.9960**	**.49572**	**.49649**	**.49630**	**.50613**
Stddev	.00142	.01482	.01658	.00986	.00017	.00102	.00545	.0036	.01034	.01054	.01188	.00275
%RSD	.28232	2.4227	1.6920	2.0098	.03450	.20600	561.04	.07278	2.0865	2.1224	2.3944	.54356
#1	.50308	.62238	.99155	.49774	.50144	.49657	-.00288	4.9986	.50303	.50394	.50471	.50807
#2	.50509	.60142	.96810	.48379	.50168	.49512	.00483	4.9934	.48841	.48904	.48790	.50418
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4893**	**50.465**	**1.0251**	**19.896**	**.49730**	**.49537**	**5.2319**	**.49372**	**1.0395**	**1.0077**	**.00376**	**.98699**
Stddev	.0023	.164	.0008	.020	.00289	.01043	.0086	.01179	.0208	.0241	.00019	.01933
%RSD	.09229	.32548	.07852	.09828	.58155	2.1048	.16416	2.3883	2.0040	2.3930	4.9193	1.9585
#1	2.4877	50.581	1.0257	19.910	.49934	.50274	5.2379	.50206	1.0543	1.0247	.00363	1.0007
#2	2.4909	50.349	1.0245	19.882	.49525	.48800	5.2258	.48538	1.0248	.99064	.00390	.97333
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.97366**	**4.9531**	**10.600**	**.99782**	**.50191**	**.00401**	**.49419**	**1.0282**	**.02594**	**.49178**	**.48877**	**.49018**
Stddev	.02165	.0041	.009	.02435	.00119	.00028	.00194	.0218	.01847	.00339	.00400	.00086
%RSD	2.2232	.08205	.08205	2.4406	.23747	7.0698	.39333	2.1229	71.217	.68844	.81801	.17549
#1	.98896	4.9560	10.606	1.0150	.50275	.00421	.49556	1.0436	.03900	.49417	.49160	.49079
#2	.95835	4.9502	10.593	.98060	.50107	.00381	.49281	1.0128	.01288	.48938	.48595	.48957
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2036.3**	**45185.**	**4043.4**
Stddev	2.1	223.	.3
%RSD	.10376	.49265	.00864
#1	2037.8	45027.	4043.2
#2	2034.8	45342.	4043.7

Sample Name: CCB Acquired: 6/6/2017 16:01:05 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00073**	**.00007**	**.00604**	**.00130**	**-.00001**	**.00015**	**.00360**	**-.00127**	**.00005**	**-.00042**	**.00040**	**.00109**	**.00085**
Stddev	.00091	.00114	.00380	.00070	.00000	.00016	.00166	.00411	.00021	.00043	.00047	.00075	.00073
%RSD	125.18	1651.4	62.946	54.151	35.382	107.78	46.001	324.74	439.48	103.14	115.83	69.185	86.198
#1	.00137	.00087	.00335	.00179	-.00001	.00026	.00243	-.00417	.00019	-.00011	.00007	.00056	.00033
#2	.00008	-.00074	.00873	.00080	-.00001	.00004	.00477	.00164	-.00010	-.00073	.00073	.00162	.00137
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09806**	**.00467**	**-.00515**	**.00009**	**-.00026**	**.07703**	**-.00143**	**.00572**	**.00135**	**-.00535**	**.00497**	**-.00331**	**.00477**
Stddev	.02327	.00322	.00965	.00000	.00058	.01304	.00074	.00402	.00162	.01011	.00236	.00119	.00077
%RSD	23.734	68.895	187.48	1.6026	225.63	16.932	51.959	70.249	120.39	189.10	47.412	36.005	16.081
#1	.08160	.00695	.00168	.00009	.00015	.08625	-.00196	.00288	.00020	-.01249	.00330	-.00416	.00531
#2	.11451	.00240	-.01198	.00009	-.00067	.06781	-.00091	.00856	.00250	.00180	.00663	-.00247	.00422
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01020**	**-.00031**	**.00008**	**.00213**	**.00045**	**.00541**	**-.00749**	**-.00014**	**.00072**	**-.00188**
Stddev	.00164	.00056	.00009	.00135	.00014	.00212	.03367	.00107	.00126	.00298
%RSD	16.081	179.91	120.57	63.338	30.533	39.150	449.55	752.86	176.41	158.36
#1	.01136	.00008	.00001	.00118	.00035	.00691	-.03129	.00062	.00161	.00023
#2	.00904	-.00071	.00014	.00309	.00054	.00392	.01632	-.00090	-.00018	-.00399
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2038.8**	**45636.**	**4061.9**
Stddev	18.9	495.	24.4
%RSD	.92524	1.0839	.60106
#1	2025.5	45986.	4044.6
#2	2052.1	45286.	4079.2

Sample Name: CCVL-4576167 Acquired: 6/6/2017 16:03:44 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00988**	**.12222**	**.01449**	**.09731**	**.00976**	**.00104**	**.11568**	**.19753**	**.00483**	**.00976**	**.01012**	**.01597**
Stddev	.00060	.00162	.00050	.00224	.00026	.00020	.00350	.00028	.00010	.00039	.00038	.00031
%RSD	6.0476	1.3223	3.4303	2.3058	2.6825	19.263	3.0263	.14126	2.1046	3.9877	3.7504	1.9209
#1	.01030	.12336	.01484	.09889	.00995	.00090	.11816	.19733	.00490	.00948	.01039	.01576
#2	.00946	.12108	.01414	.09572	.00958	.00118	.11320	.19772	.00476	.01003	.00985	.01619
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10364**	**3.0324**	F **.02868**	**.20265**	**.01024**	**.01856**	**1.0863**	**.03880**	**2.9702**	**.01154**	**.10743**	**.02427**
Stddev	.00003	.0172	.00157	.00147	.00010	.00098	.0035	.00205	.0796	.00009	.01168	.00517
%RSD	.02780	.56779	5.4655	.72348	1.0015	5.2550	.32209	5.2837	2.6791	.74397	10.874	21.298
#1	.10366	3.0203	.02757	.20161	.01031	.01925	1.0838	.04025	3.0264	.01148	.11569	.02062
#2	.10362	3.0446	.02978	.20369	.01017	.01787	1.0887	.03735	2.9139	.01160	.09917	.02793
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.02000									
Range			30.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02175**	**.45722**	**.97845**	**.09719**	**.00987**	**.01792**	**.00936**	**.01621**	**.07726**	**.00984**	**.01985**	**.01401**
Stddev	.00233	.00053	.00113	.00119	.00001	.00156	.00003	.00243	.05023	.00002	.00061	.00194
%RSD	10.696	.11516	.11516	1.2292	.05334	8.6875	.36372	15.000	65.014	.17262	3.0581	13.818
#1	.02340	.45759	.97925	.09804	.00987	.01902	.00938	.01449	.04174	.00983	.01942	.01264
#2	.02011	.45685	.97765	.09635	.00988	.01682	.00933	.01793	.11278	.00985	.02028	.01538
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2091.7**	**46938.**	**4109.4**
Stddev	43.9	538.	78.5
%RSD	2.1004	1.1470	1.9110
#1	2122.7	46558.	4165.0
#2	2060.6	47319.	4053.9

Sample Name: 280-97761-E-7-A Acquired: 6/6/2017 16:06:21 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375993 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00067**	**.04913**	**.00534**	**.00568**	**.01284**	**.00011**	**.00550**	**7.8300**	**.00026**
Stddev	.00017	.00209	.00911	.00108	.00034	.00012	.00120	.0004	.00018
%RSD	25.900	4.2619	170.72	18.993	2.6731	106.73	21.730	.00548	69.701
#1	.00055	.05062	.01178	.00645	.01260	.00020	.00466	7.8297	.00013
#2	.00080	.04765	-.00111	.00492	.01308	.00003	.00635	7.8303	.00039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00011**	**.00082**	**.00019**	**.07010**	**.36714**	**.00449**	**1.0431**	**.00575**	**.00050**
Stddev	.00041	.00014	.00057	.00139	.10420	.00168	.0008	.00010	.00009
%RSD	370.43	17.025	294.46	1.9795	28.383	37.490	.07515	1.6872	16.979
#1	.00018	.00072	-.00021	.07108	.44082	.00330	1.0437	.00568	.00056
#2	-.00040	.00092	.00060	.06912	.29345	.00569	1.0426	.00582	.00044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.80230**	**-.00006**	**.01062**	**.00259**	**1.3441**	**.00098**	**-.00126**	**3.6619**	**7.8365**
Stddev	.01995	.00015	.00137	.00244	.0324	.00408	.01242	.0112	.0240
%RSD	2.4868	234.79	12.937	94.195	2.4112	417.48	985.99	.30590	.30590
#1	.78819	-.00017	.01159	.00086	1.3671	.00387	.00752	3.6540	7.8196
#2	.81641	.00004	.00965	.00431	1.3212	-.00191	-.01004	3.6698	7.8535
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00164**	**.01511**	**.00175**	**.00098**	**.00079**	**.00641**	**-.00063**	**.00206**	**-.00320**
Stddev	.00192	.00028	.00028	.00036	.00500	.02195	.00014	.00026	.00222
%RSD	116.94	1.8788	16.163	36.984	635.71	342.49	22.253	12.590	69.467
#1	-.00028	.01532	.00155	.00073	.00433	.02193	-.00073	.00187	-.00163
#2	-.00300	.01491	.00195	.00124	-.00275	-.00911	-.00053	.00224	-.00477
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2094.5**	**47020.**	**4185.3**
Stddev	7.6	110.	118.1
%RSD	.36075	.23442	2.8212
#1	2089.1	46942.	4268.8
#2	2099.8	47097.	4101.8

Sample Name: 280-97761-K-8-A Acquired: 6/6/2017 16:08:57 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375993 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**.11768**	**.00383**	**.00671**	**.01421**	**.00005**	**.00744**	**4.5408**	**.00031**
Stddev	.00020	.00269	.00265	.00147	.00043	.00007	.00485	.0123	.00027
%RSD	665.02	2.2889	69.218	21.936	3.0063	150.15	65.187	.26974	89.907
#1	-.00011	.11959	.00571	.00775	.01391	.00009	.00401	4.5322	.00011
#2	.00017	.11578	.00196	.00567	.01451	-.00000	.01087	4.5495	.00050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00031**	**.00012**	**.00062**	**.10980**	**.71539**	**.00632**	**1.0769**	**.05716**	**.00008**
Stddev	.00055	.00039	.00029	.00362	.01682	.00144	.0028	.00006	.00028
%RSD	176.26	322.59	45.722	3.3008	2.3507	22.740	.26299	.10018	337.35
#1	.00008	.00039	.00042	.10723	.70350	.00734	1.0789	.05712	-.00011
#2	-.00070	-.00015	.00083	.11236	.72728	.00531	1.0749	.05720	.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.1490**	**-.00036**	**.01687**	**.00040**	**.95663**	**-.00016**	**.00128**	**2.9889**	**6.3962**
Stddev	.0133	.00002	.00271	.00134	.02459	.00099	.00337	.0505	.1082
%RSD	1.1574	6.0807	16.079	336.53	2.5702	621.48	262.35	1.6912	1.6912
#1	1.1584	-.00035	.01879	.00134	.97401	.00054	.00367	2.9531	6.3197
#2	1.1396	-.00038	.01495	-.00055	.93924	-.00086	-.00110	3.0246	6.4727
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00148**	**.01186**	**.00293**	**.00144**	**.00328**	**-.04910**	**-.00037**	**.00264**	**-.00136**
Stddev	.00128	.00008	.00052	.00022	.00015	.01572	.00017	.00084	.00062
%RSD	86.912	.64662	17.595	15.089	4.6595	32.025	46.174	31.814	45.683
#1	.00057	.01181	.00329	.00159	.00339	-.03798	-.00025	.00204	-.00092
#2	.00238	.01192	.00257	.00128	.00317	-.06021	-.00048	.00323	-.00179
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2100.7**	**47798.**	**4215.5**
Stddev	18.2	195.	36.2
%RSD	.86493	.40738	.85756
#1	2113.6	47936.	4241.1
#2	2087.9	47661.	4190.0

Sample Name: 280-97761-K-9-A Acquired: 6/6/2017 16:11:34 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375993 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00020**	**.00506**	**.00074**	**.00026**	**-.00008**	**-.00015**	**-.00058**	**.02902**	**-.00002**
Stddev	.00019	.00017	.00378	.00157	.00018	.00005	.00283	.00712	.00005
%RSD	92.680	3.4294	510.28	614.81	211.95	34.995	490.03	24.547	239.04
#1	.00007	.00518	-.00193	.00137	.00004	-.00011	-.00258	.02398	-.00006
#2	.00033	.00494	.00341	-.00085	-.00021	-.00018	.00142	.03405	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00038**	**.00069**	**.00068**	**.01423**	**.03783**	**.00579**	**.00060**	**.00015**	**-.00060**
Stddev	.00016	.00021	.00001	.00006	.03620	.00191	.00172	.00006	.00004
%RSD	42.947	30.670	2.1669	.42901	95.678	32.933	284.12	42.679	7.3641
#1	.00026	.00054	.00069	.01418	.01224	.00714	-.00061	.00011	-.00063
#2	.00049	.00084	.00067	.01427	.06343	.00444	.00182	.00020	-.00057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10885**	**-.00117**	**.00605**	**.00075**	**.00340**	**-.00131**	**-.00204**	**-.00934**	**-.01999**
Stddev	.00208	.00071	.00119	.00080	.00922	.00464	.00090	.03292	.07044
%RSD	1.9092	61.045	19.701	107.39	270.86	355.03	44.170	352.31	352.31
#1	.10738	-.00067	.00521	.00018	-.00312	-.00458	-.00267	-.03262	-.06980
#2	.11032	-.00168	.00690	.00132	.00992	.00197	-.00140	.01393	.02981
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00145**	**.00013**	**.00348**	**.00043**	**.00390**	**-.02009**	**.00028**	**.00263**	**-.00157**
Stddev	.00110	.00007	.00093	.00003	.00160	.02305	.00050	.00014	.00231
%RSD	76.212	54.261	26.622	6.0905	41.109	114.71	182.40	5.4921	147.32
#1	-.00223	.00008	.00413	.00044	.00504	-.00379	.00063	.00253	-.00320
#2	-.00067	.00017	.00282	.00041	.00277	-.03639	-.00008	.00273	.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2096.7**	**46637.**	**4123.5**
Stddev	.2	667.	49.5
%RSD	.01051	1.4309	1.2016
#1	2096.9	46165.	4088.4
#2	2096.6	47109.	4158.5

Sample Name: 280-97764-I-1-A Acquired: 6/6/2017 16:14:12 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375993 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00012**	**.04807**	**.00030**	**3.6095**	**.14785**	**-.00004**	**.00504**	**188.70**	**.00113**
Stddev	.00024	.00319	.00015	.0854	.00055	.00002	.00421	.46	.00043
%RSD	190.03	6.6414	49.142	2.3665	.37201	42.422	83.568	.24447	38.067
#1	-.00029	.05033	.00040	3.6699	.14824	-.00003	.00206	189.03	.00082
#2	.00004	.04581	.00019	3.5491	.14746	-.00005	.00801	188.37	.00143
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00775**	**.01618**	**.03690**	**.28422**	W **423.98**	**1.6100**	**64.770**	**.77861**	**.00215**
Stddev	.00040	.00080	.00020	.00017	1.17	.0049	.039	.00001	.00157
%RSD	5.1646	4.9672	.52877	.06115	.27626	.30271	.05998	.00187	73.024
#1	.00747	.01675	.03704	.28410	424.80	1.6134	64.743	.77860	.00104
#2	.00803	.01562	.03677	.28435	423.15	1.6065	64.798	.77862	.00326
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **744.49**	**.19811**	**.28887**	**-.00310**	**176.17**	**.00199**	**-.00500**	**6.6953**	**14.328**
Stddev	4.46	.00627	.01170	.00050	3.83	.00058	.00209	.0548	.117
%RSD	.59885	3.1663	4.0500	16.006	2.1761	28.910	41.822	.81879	.81879
#1	747.64	.20255	.29714	-.00275	178.88	.00158	-.00352	6.6566	14.245
#2	741.34	.19368	.28060	-.00345	173.46	.00240	-.00647	6.7341	14.411
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00216**	**.65981**	**-.00022**	**.00169**	**-.00048**	**-.01403**	**.00782**	**.05228**	**.14593**
Stddev	.00315	.00172	.00097	.00021	.00077	.00474	.00018	.00049	.00128
%RSD	145.75	.26048	448.32	12.656	160.77	33.784	2.3504	.94434	.87569
#1	.00007	.66103	-.00090	.00154	.00007	-.01068	.00795	.05263	.14502
#2	-.00439	.65860	.00047	.00184	-.00102	-.01738	.00769	.05193	.14683
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1908.9**	**42187.**	**4111.8**
Stddev	32.1	18.	13.0
%RSD	1.6829	.04227	.31717
#1	1886.2	42200.	4102.6
#2	1931.6	42175.	4121.0

Sample Name: 280-97773-D-1-C Acquired: 6/6/2017 16:16:51 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375993 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00007**	**.08130**	**.00581**	**3.1267**	**.13632**	**.00004**	**.00324**	**171.89**	**.00122**
Stddev	.00026	.00422	.00243	.0792	.00058	.00009	.00126	.02	.00005
%RSD	354.35	5.1923	41.794	2.5344	.42785	208.63	38.801	.01060	4.1098
#1	.00011	.08428	.00753	3.1828	.13673	.00011	.00235	171.88	.00119
#2	-.00025	.07831	.00409	3.0707	.13591	-.00002	.00413	171.90	.00126
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00612**	**.01206**	**.50083**	**.53123**	W **376.50**	**1.4357**	**57.926**	**.61067**	**.00154**
Stddev	.00029	.00053	.00177	.00277	1.05	.0030	.189	.00113	.00022
%RSD	4.8096	4.3785	.35431	.52113	.27992	.20706	.32655	.18481	13.963
#1	.00633	.01243	.49958	.53319	375.75	1.4336	58.060	.61147	.00170
#2	.00591	.01168	.50209	.52928	377.24	1.4378	57.793	.60988	.00139
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **660.28**	**.18586**	**.20620**	**.02810**	**150.77**	**.00085**	**.00458**	**5.7061**	**12.211**
Stddev	.69	.00518	.01481	.00102	4.08	.00159	.00302	.0521	.111
%RSD	.10455	2.7874	7.1835	3.6197	2.7092	187.51	65.978	.91283	.91283
#1	659.79	.18953	.21667	.02738	153.66	-.00028	.00672	5.6693	12.132
#2	660.77	.18220	.19572	.02882	147.88	.00197	.00244	5.7429	12.290
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00139**	**.57882**	**.00237**	**.00123**	**.00216**	**.00314**	**.00426**	**.51131**	**.08611**
Stddev	.00074	.00028	.00016	.00021	.00097	.01876	.00044	.00044	.00134
%RSD	53.348	.04806	6.8226	16.912	45.024	597.15	10.257	.08603	1.5619
#1	-.00191	.57902	.00226	.00108	.00147	-.01013	.00457	.51162	.08706
#2	-.00086	.57862	.00249	.00138	.00285	.01641	.00395	.51100	.08516
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1906.7**	**41616.**	**4118.1**
Stddev	5.0	86.	49.2
%RSD	.26344	.20587	1.1956
#1	1910.2	41677.	4152.9
#2	1903.1	41556.	4083.2

Sample Name: 280-97773-D-1-C SD@5 Acquired: 6/6/2017 16:19:30 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375993 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00019**	**.01961**	**.00226**	**.72459**	**.02744**	**.00020**	**.00544**	**34.784**	**.00027**
Stddev	.00040	.00148	.00015	.00841	.00033	.00017	.00485	.474	.00031
%RSD	217.14	7.5686	6.8305	1.1609	1.1885	84.823	89.157	1.3628	112.34
#1	-.00010	.01856	.00237	.73054	.02721	.00008	.00201	34.449	.00006
#2	.00047	.02066	.00215	.71864	.02767	.00033	.00888	35.119	.00049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00133**	**.00289**	**.10617**	**.10659**	**75.737**	**.29631**	**12.414**	**.12890**	**.00040**
Stddev	.00021	.00022	.00003	.00062	.962	.00280	.128	.00108	.00010
%RSD	16.020	7.7197	.03064	.58163	1.2708	.94383	1.0337	.84139	24.940
#1	.00148	.00305	.10615	.10615	75.056	.29433	12.323	.12813	.00047
#2	.00118	.00273	.10620	.10703	76.417	.29829	12.504	.12966	.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**134.55**	**.04056**	**.05104**	**.00462**	**32.462**	**-.00382**	**-.00310**	**1.2396**	**2.6528**
Stddev	1.22	.00084	.00399	.00342	.414	.00235	.00364	.0147	.0314
%RSD	.90659	2.0762	7.8150	74.092	1.2763	61.701	117.64	1.1830	1.1830
#1	133.69	.04115	.04822	.00704	32.755	-.00548	-.00567	1.2500	2.6750
#2	135.41	.03996	.05386	.00220	32.169	-.00215	-.00052	1.2293	2.6306
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00058**	**.11780**	**-.00132**	**-.00007**	**.00262**	**.03218**	**.00030**	**.10847**	**.01482**
Stddev	.00087	.00136	.00036	.00015	.00110	.07807	.00007	.00186	.00200
%RSD	149.31	1.1525	27.004	225.39	41.934	242.62	22.123	1.7175	13.530
#1	.00003	.11684	-.00157	-.00018	.00340	-.02303	.00025	.10716	.01624
#2	-.00120	.11876	-.00107	.00004	.00185	.08738	.00035	.10979	.01340
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1981.1**	**44068.**	**4100.7**
Stddev	37.0	265.	9.3
%RSD	1.8696	.60046	.22615
#1	2007.3	44255.	4094.2
#2	1954.9	43881.	4107.3

Sample Name: 280-97773-D-1-D MS Acquired: 6/6/2017 16:22:03 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375993 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05224**	**2.3045**	**1.0854**	**4.4653**	**2.2281**	**.05144**	W **2.1459**	**238.49**	**.10783**
Stddev	.00018	.0460	.0257	.0837	.0019	.00013	.0551	.02	.00332
%RSD	.33817	1.9947	2.3639	1.8751	.08302	.24655	2.5690	.00701	3.0788
#1	.05236	2.3370	1.1036	4.5245	2.2268	.05153	2.1849	238.50	.11018
#2	.05211	2.2720	1.0673	4.4061	2.2294	.05135	2.1069	238.47	.10549
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49125**	**.21294**	**.81067**	**1.5776**	W **467.68**	W **2.6366**	**113.10**	**1.1614**	**.98833**
Stddev	.00910	.00477	.00238	.0099	.32	.0043	.08	.0018	.02354
%RSD	1.8518	2.2393	.29344	.62927	.06929	.16172	.07421	.15335	2.3822
#1	.49768	.21631	.81235	1.5846	467.45	2.6335	113.16	1.1627	1.0050
#2	.48481	.20957	.80899	1.5706	467.91	2.6396	113.04	1.1602	.97168
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00	2.0000			
Low Limit					-6.0000	-.02000			

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **777.92**	**.68325**	**11.844**	**.49837**	**171.40**	**.53018**	**2.0476**	**13.743**	**29.409**
Stddev	2.12	.01345	.234	.00916	3.78	.01834	.0403	.002	.004
%RSD	.27230	1.9687	1.9727	1.8370	2.2025	3.4582	1.9708	.01252	.01252
#1	776.43	.69276	12.009	.50484	174.07	.54315	2.0761	13.744	29.412
#2	779.42	.67374	11.679	.49190	168.73	.51722	2.0190	13.742	29.407
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9517**	**1.6823**	**1.0512**	**1.0437**	**1.7659**	**2.0386**	**.52371**	**1.0437**	**.62667**
Stddev	.0499	.0023	.0018	.0029	.0344	.0432	.00325	.0014	.00232
%RSD	2.5565	.13932	.16793	.28047	1.9463	2.1190	.62073	.13123	.36992
#1	1.9870	1.6806	1.0524	1.0457	1.7902	2.0080	.52601	1.0447	.62831
#2	1.9164	1.6839	1.0500	1.0416	1.7416	2.0691	.52141	1.0427	.62503
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1864.1**	**41810.**	**4128.4**
Stddev	1.8	258.	12.1
%RSD	.09624	.61712	.29365
#1	1862.8	41627.	4119.8
#2	1865.3	41992.	4137.0

Sample Name: 280-97773-D-1-E MSD Acquired: 6/6/2017 16:24:31 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375993 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05153**	**2.2480**	**1.0630**	**4.3002**	**2.1629**	**.05003**	W **2.1000**	**227.46**	**.10496**
Stddev	.00060	.0522	.0155	.0837	.0087	.00047	.0507	1.17	.00187
%RSD	1.1623	2.3208	1.4622	1.9467	.40428	.93972	2.4135	.51373	1.7859
#1	.05110	2.2849	1.0740	4.3594	2.1690	.05036	2.1358	228.29	.10628
#2	.05195	2.2111	1.0521	4.2410	2.1567	.04970	2.0642	226.64	.10363
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48085**	**.20688**	**.79090**	**1.5295**	W **446.16**	W **2.5316**	**109.17**	**1.1280**	**.96208**
Stddev	.01126	.00503	.00038	.0026	1.43	.0018	.29	.0012	.02173
%RSD	2.3415	2.4294	.04825	.16680	.32063	.07018	.26579	.10652	2.2585
#1	.48881	.21043	.79117	1.5313	447.17	2.5329	109.38	1.1289	.97744
#2	.47289	.20333	.79063	1.5277	445.15	2.5304	108.97	1.1272	.94672
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00	2.0000			
Low Limit					-6.0000	-.02000			

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **745.83**	**.66168**	**11.604**	**.48442**	**162.97**	**.51858**	**2.0161**	**13.224**	**28.299**
Stddev	2.45	.01603	.241	.00278	2.81	.01540	.0292	.029	.061
%RSD	.32912	2.4233	2.0733	.57427	1.7262	2.9690	1.4462	.21607	.21607
#1	747.57	.67301	11.774	.48638	164.96	.52946	2.0367	13.244	28.342
#2	744.10	.65034	11.433	.48245	160.98	.50769	1.9954	13.204	28.256
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9017**	**1.6207**	**1.0313**	**1.0200**	**1.7231**	**2.0618**	**.51715**	**1.0174**	**.61193**
Stddev	.0395	.0059	.0046	.0007	.0261	.0348	.00139	.0128	.00122
%RSD	2.0756	.36313	.44743	.06435	1.5159	1.6894	.26782	1.2610	.19959
#1	1.9296	1.6248	1.0280	1.0196	1.7416	2.0864	.51813	1.0264	.61279
#2	1.8738	1.6165	1.0345	1.0205	1.7047	2.0371	.51617	1.0083	.61106
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1897.6**	**40797.**	**4117.9**
Stddev	3.4	1291.	3.7
%RSD	.17773	3.1640	.08902
#1	1900.0	39884.	4120.5
#2	1895.2	41709.	4115.3

Sample Name: CCVH-4569081 Acquired: 6/6/2017 16:26:59 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00607**	**49.445**	**-.00618**	**.02375**	**.00039**	**.00009**	**1.0172**	**.20890**	**.00024**	**-.00109**	**.00063**	**.02642**	**48.742**
Stddev	.00099	.115	.00218	.00152	.00040	.00012	.0208	.00243	.00013	.00029	.00079	.00151	.003
%RSD	16.346	.23339	35.375	6.4202	101.79	139.16	2.0446	1.1616	52.901	26.554	124.94	5.7262	.00557
#1	-.00677	49.527	-.00463	.02483	.00011	.00017	1.0319	.20719	.00015	-.00129	.00007	.02749	48.744
#2	-.00537	49.364	-.00772	.02267	.00067	.00000	1.0025	.21062	.00034	-.00088	.00119	.02535	48.740
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.73710**	**.00623**	**.08334**	**.00828**	**-.00132**	**252.80**	**-.00023**	**.01240**	**-.00124**	**5.1235**	**-.01233**	**-.00776**	**.04741**
Stddev	.01209	.00065	.00666	.00008	.00021	.28	.00005	.00089	.00019	.0988	.00077	.00032	.02493
%RSD	1.6395	10.457	7.9954	1.0017	15.798	.11080	21.290	7.1852	15.174	1.9277	6.2757	4.1776	52.590
#1	.72856	.00577	.08805	.00822	-.00146	253.00	-.00019	.01177	-.00111	5.1933	-.01178	-.00799	.06504
#2	.74565	.00670	.07863	.00833	-.00117	252.61	-.00026	.01303	-.00137	5.0536	-.01287	-.00753	.02978
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10146**	**-.00257**	**.00055**	**4.8737**	**.01655**	**.00169**	**10.106**	**.01429**	**.00172**	**.11949**
Stddev	.05336	.00147	.00007	.0155	.00040	.00196	.099	.00045	.00096	.00136
%RSD	52.590	57.194	12.077	.31754	2.4326	115.82	.97912	3.1251	55.679	1.1355
#1	.13919	-.00153	.00051	4.8628	.01626	.00307	10.176	.01460	.00104	.12045
#2	.06373	-.00361	.00060	4.8847	.01683	.00031	10.036	.01397	.00240	.11853
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1957.9**	**43468.**	**3985.6**
Stddev	12.1	298.	5.4
%RSD	.61861	.68638	.13439
#1	1949.3	43257.	3989.4
#2	1966.5	43678.	3981.8

Sample Name: CCV-4567764 Acquired: 6/6/2017 16:29:34 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50256**	F **.61570**	**.97386**	**.50419**	**.49906**	**.49491**	**.00418**	**4.9389**	**.49652**	**.49859**	**.49467**	**.51061**
Stddev	.00041	.01108	.01412	.00532	.00150	.00036	.00001	.0046	.00772	.00749	.01054	.00307
%RSD	.08203	1.7989	1.4500	1.0558	.30070	.07315	.30164	.09231	1.5549	1.5024	2.1298	.60103
#1	.50226	.62353	.98384	.50796	.49800	.49517	.00419	4.9421	.50198	.50389	.50212	.51278
#2	.50285	.60787	.96387	.50043	.50012	.49465	.00417	4.9357	.49106	.49329	.48722	.50844
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4811**	**50.589**	**1.0288**	**19.750**	**.49878**	**.49336**	W **5.5108**	**.49585**	**1.0499**	**1.0003**	**.01847**	**.98862**
Stddev	.0018	.119	.0008	.046	.00139	.00826	.0131	.00757	.0233	.0159	.01792	.01748
%RSD	.07176	.23530	.08170	.23358	.27890	1.6752	.23750	1.5269	2.2231	1.5943	97.022	1.7685
#1	2.4823	50.673	1.0294	19.782	.49977	.49920	5.5200	.50121	1.0664	1.0115	.03114	1.0010
#2	2.4798	50.505	1.0282	19.717	.49780	.48752	5.5015	.49050	1.0334	.98898	.00580	.97625
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							5.0000					
Range							10.000%					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.96933**	**4.9653**	**10.626**	**.98918**	**.50133**	**.00399**	**.49740**	**1.0122**	**.00207**	**.49827**	**.48913**	**.49255**
Stddev	.00467	.0181	.039	.01342	.00019	.00409	.00088	.0058	.03883	.00120	.00045	.00172
%RSD	.48200	.36491	.36491	1.3569	.03703	102.32	.17631	.57401	1877.8	.23998	.09290	.34872
#1	.96602	4.9781	10.653	.99867	.50120	.00110	.49803	1.0163	.02953	.49911	.48945	.49133
#2	.97263	4.9525	10.598	.97969	.50146	.00688	.49678	1.0081	-.02539	.49742	.48881	.49376
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2005.8**	**45641.**	**4083.1**
Stddev	18.1	727.	49.0
%RSD	.90093	1.5924	1.1992
#1	2018.6	46155.	4048.5
#2	1993.0	45127.	4117.7

Sample Name: CCB Acquired: 6/6/2017 16:32:03 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00018**	**.00341**	**.00266**	**.01335**	**-.00022**	**.00006**	**.00434**	**-.00254**	**.00011**	**-.00033**	**.00012**	**.00044**
Stddev	.00040	.00006	.00214	.00131	.00078	.00000	.00066	.00384	.00031	.00036	.00036	.00063
%RSD	226.12	1.6919	80.551	9.8220	349.11	7.3220	15.155	150.94	292.07	109.90	291.83	145.06
#1	.00046	.00337	.00418	.01427	-.00078	.00006	.00388	-.00526	-.00011	-.00058	.00038	.00088
#2	-.00011	.00345	.00115	.01242	.00033	.00007	.00481	.00017	.00033	-.00007	-.00013	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00045**	**.18990**	W **.00599**	**-.00018**	**-.00004**	**.00036**	**.31617**	**-.00141**	**.00165**	**.00199**	**.01751**	**.00419**
Stddev	.00099	.07660	.00184	.00212	.00014	.00053	.02832	.00057	.00193	.00244	.00466	.00496
%RSD	218.34	40.337	30.651	1178.3	359.01	144.97	8.9577	40.776	116.76	122.67	26.620	118.33
#1	.00115	.13574	.00469	.00132	.00006	.00073	.33620	-.00181	.00029	.00371	.02081	.00770
#2	-.00025	.24406	.00729	-.00168	-.00014	-.00001	.29615	-.00100	.00302	.00026	.01422	.00068
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500									
Low Limit			-.01000									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00399**	**-.01840**	**-.03938**	**-.00045**	**-.00007**	**.00240**	**.00013**	**.00296**	**.00103**	**.00025**	**.00110**	**-.00315**
Stddev	.00064	.00998	.02137	.00075	.00007	.00093	.00082	.00146	.01119	.00013	.00101	.00011
%RSD	16.027	54.253	54.253	167.77	95.394	38.706	639.12	49.290	1088.6	53.142	91.409	3.4857
#1	-.00354	-.01134	-.02427	.00008	-.00012	.00174	-.00045	.00193	.00894	.00015	.00039	-.00323
#2	-.00444	-.02546	-.05449	-.00098	-.00002	.00305	.00071	.00399	-.00688	.00034	.00182	-.00307
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1999.2**	**45100.**	**4000.7**
Stddev	12.2	246.	45.2
%RSD	.60882	.54616	1.1296
#1	1990.6	44926.	4032.7
#2	2007.8	45274.	3968.8

Sample Name: CCVL-4576167 Acquired: 6/6/2017 16:34:40 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01076**	**.12494**	**.01452**	**.10585**	**.00974**	**.00108**	**.11575**	**.20494**	**.00503**	**.00953**	**.01003**	**.01560**
Stddev	.00020	.00484	.00460	.00356	.00035	.00000	.00539	.00072	.00035	.00020	.00025	.00043
%RSD	1.8903	3.8771	31.667	3.3637	3.6001	.44584	4.6554	.35189	6.8748	2.0716	2.5372	2.7645
#1	.01062	.12836	.01777	.10836	.00949	.00107	.11956	.20545	.00528	.00967	.01021	.01590
#2	.01091	.12151	.01127	.10333	.00999	.00108	.11194	.20443	.00479	.00939	.00985	.01529
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10951**	**3.2561**	F **.02682**	**.19792**	**.01027**	**.01833**	F **1.3287**	**.03812**	**2.9529**	**.01142**	**.11111**	**.01650**
Stddev	.00567	.0008	.00117	.00771	.00009	.00016	.0058	.00098	.0699	.00137	.00276	.00383
%RSD	5.1737	.02412	4.3783	3.8968	.83704	.85728	.43682	2.5664	2.3688	11.995	2.4844	23.196
#1	.10550	3.2555	.02765	.20338	.01033	.01822	1.3328	.03882	3.0024	.01045	.11306	.01380
#2	.11351	3.2566	.02599	.19247	.01021	.01844	1.3246	.03743	2.9034	.01239	.10915	.01921
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.02000				1.0000					
Range			30.000%				30.000%					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02290**	**.47784**	**1.0226**	**.09421**	**.01017**	**.01365**	**.00989**	**.01495**	F **.08928**	**.00992**	**.02072**	**.01210**
Stddev	.00082	.00038	.0008	.00311	.00017	.00303	.00028	.00121	.00849	.00028	.00097	.00055
%RSD	3.5986	.07885	.07885	3.3054	1.6995	22.200	2.8307	8.0949	9.5127	2.7733	4.6921	4.5725
#1	.02231	.47810	1.0231	.09641	.01030	.01579	.00969	.01581	.09528	.00973	.02141	.01249
#2	.02348	.47757	1.0220	.09200	.01005	.01150	.01009	.01410	.08327	.01012	.02004	.01171
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2072.5**	**46953.**	**4034.7**
Stddev	2.3	885.	16.4
%RSD	.11093	1.8851	.40523
#1	2070.9	46327.	4023.1
#2	2074.1	47579.	4046.2

Sample Name: MB 280-375494/1-A Acquired: 6/6/2017 16:37:18 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/5 Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00059**	**.00541**	W **.01124**	**.00822**	**.00012**	**.00014**	**-.00158**	**.03184**	**.00012**
Stddev	.00007	.00086	.00999	.00019	.00049	.00003	.00396	.00157	.00010
%RSD	12.424	15.934	88.895	2.3251	409.57	20.601	251.48	4.9448	86.808
#1	.00064	.00480	.01830	.00808	.00047	.00012	-.00438	.03295	.00019
#2	.00054	.00602	.00417	.00835	-.00023	.00016	.00123	.03072	.00005
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00750						
Low Limit			-.00750						

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00032**	**.00042**	**.00052**	**.02487**	**.11921**	**.00332**	**.00989**	**.00017**	**.00040**
Stddev	.00011	.00040	.00031	.00050	.06512	.00090	.00938	.00006	.00001
%RSD	35.556	95.487	59.287	1.9906	54.626	27.090	94.845	36.166	3.3956
#1	-.00040	.00070	.00030	.02452	.16526	.00268	.01652	.00021	.00041
#2	-.00024	.00013	.00074	.02522	.07316	.00395	.00326	.00013	.00039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25731**	**-.00142**	**.00989**	**.00188**	**.03105**	**.00421**	**.00040**	**-.00365**	**-.00782**
Stddev	.00060	.00033	.00547	.00204	.00650	.00131	.00783	.01656	.03544
%RSD	.23428	23.079	55.278	108.39	20.945	31.055	1963.6	453.27	453.27
#1	.25688	-.00119	.00603	.00333	.02645	.00329	.00594	.00806	.01724
#2	.25774	-.00165	.01376	.00044	.03565	.00514	-.00514	-.01536	-.03288
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00043**	**.00009**	**.00474**	**.00070**	**.00103**	**-.02833**	**-.00084**	**.00206**	**-.00246**
Stddev	.00214	.00012	.00048	.00018	.00145	.01943	.00015	.00038	.00278
%RSD	496.44	132.45	10.191	26.242	139.87	68.602	17.492	18.199	113.09
#1	-.00194	.00018	.00440	.00083	.00206	-.04207	-.00073	.00233	-.00049
#2	.00108	.00001	.00509	.00057	.00001	-.01459	-.00094	.00180	-.00442
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2124.4**	**47988.**	**4216.0**
Stddev	10.6	426.	98.9
%RSD	.49931	.88712	2.3468
#1	2116.9	48289.	4146.1
#2	2131.9	47687.	4286.0

Sample Name: LCS 280-375494/2-A Acquired: 6/6/2017 16:39:56 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04969**	F **2.3536**	**1.0294**	**1.0059**	**2.0273**	**.05000**	**2.1783**	**48.849**	**.10447**
Stddev	.00097	.0453	.0097	.0087	.0150	.00022	.0243	.236	.00183
%RSD	1.9577	1.9252	.93891	.86417	.74038	.43918	1.1165	.48381	1.7494
#1	.04900	2.3856	1.0362	1.0120	2.0379	.05016	2.1955	49.016	.10576
#2	.05037	2.3215	1.0226	.99972	2.0167	.04984	2.1611	48.682	.10318
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit		2.2299							
Low Limit		1.7300							

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48997**	**.19981**	**.26130**	**.99310**	**50.900**	**1.0251**	**49.431**	**.49456**	**.97946**
Stddev	.00687	.00411	.00154	.00224	.317	.0016	.087	.00236	.01831
%RSD	1.4015	2.0594	.59069	.22550	.62253	.15354	.17595	.47653	1.8696
#1	.49483	.20271	.26239	.99468	51.124	1.0262	49.492	.49623	.99241
#2	.48512	.19690	.26021	.99151	50.676	1.0240	49.369	.49289	.96651
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.530**	**.48387**	**10.798**	**.49478**	**2.2325**	**.51380**	**1.9790**	**9.7082**	**20.776**
Stddev	.148	.00745	.167	.00334	.0297	.00940	.0328	.0282	.060
%RSD	.28721	1.5388	1.5497	.67406	1.3323	1.8288	1.6588	.29067	.29067
#1	51.635	.48913	10.916	.49714	2.2535	.52045	2.0022	9.7282	20.818
#2	51.426	.47860	10.680	.49242	2.2115	.50716	1.9558	9.6883	20.733
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0049**	**1.0071**	**1.0130**	**1.0084**	**1.9893**	**2.0718**	**.49892**	**.48972**	**.51391**
Stddev	.0310	.0073	.0035	.0055	.0361	.0102	.00284	.00123	.00663
%RSD	1.5481	.72219	.34726	.54908	1.8162	.49188	.56832	.25017	1.2901
#1	2.0269	1.0122	1.0155	1.0123	2.0149	2.0790	.50093	.48885	.51859
#2	1.9830	1.0019	1.0105	1.0044	1.9638	2.0646	.49692	.49059	.50922
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1998.5**	**45865.**	**4305.4**
Stddev	10.7	1180.	90.9
%RSD	.53787	2.5728	2.1124
#1	2006.1	46699.	4369.7
#2	1990.9	45030.	4241.1

Sample Name: 280-97532-C-1-A Acquired: 6/6/2017 16:42:20 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00009**	**9.9391**	**.00762**	**3.1036**	**.46703**	**.00107**	**.00519**	**180.73**	**.00319**
Stddev	.00004	.0173	.00516	.0501	.00078	.00008	.00119	.23	.00017
%RSD	37.840	.17437	67.712	1.6140	.16801	7.1709	22.924	.12547	5.3309
#1	.00012	9.9269	.01126	3.1390	.46758	.00112	.00604	180.89	.00331
#2	.00007	9.9514	.00397	3.0682	.46647	.00102	.00435	180.57	.00307
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02679**	**.06654**	**.05358**	**83.663**	**15.154**	**.03622**	**14.018**	**3.5712**	**.40796**
Stddev	.00003	.00188	.00220	.420	.092	.00085	.001	.0073	.00622
%RSD	.11391	2.8272	4.1098	.50186	.60484	2.3532	.00605	.20465	1.5255
#1	.02677	.06787	.05203	83.366	15.089	.03683	14.018	3.5661	.41236
#2	.02681	.06521	.05514	83.960	15.219	.03562	14.017	3.5764	.40356
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**114.27**	**.06534**	**6.4123**	**.15117**	**84.539**	**-.00111**	**-.01026**	**24.235**	**51.862**
Stddev	.07	.00137	.1042	.00079	1.465	.00108	.00003	.164	.351
%RSD	.06274	2.0930	1.6254	.52494	1.7326	96.739	.32268	.67658	.67658
#1	114.32	.06631	6.4860	.15173	85.575	-.00035	-.01024	24.119	51.614
#2	114.22	.06437	6.3386	.15060	83.504	-.00187	-.01029	24.351	52.110
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00404**	**.81474**	**.00899**	**.06542**	**.01550**	**-.03904**	**.03449**	**6.0552**	**.00490**
Stddev	.00045	.00125	.00295	.00017	.00117	.03808	.00005	.0229	.00282
%RSD	11.040	.15299	32.805	.25360	7.5142	97.536	.15005	.37879	57.464
#1	.00373	.81562	.01108	.06530	.01468	-.06596	.03452	6.0390	.00689
#2	.00436	.81386	.00691	.06553	.01633	-.01211	.03445	6.0714	.00291
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2087.4**	**47231.**	**4320.1**
Stddev	24.4	543.	24.9
%RSD	1.1709	1.1499	.57629
#1	2104.7	47615.	4337.7
#2	2070.1	46847.	4302.5

Sample Name: 280-97532-E-2-A Acquired: 6/6/2017 16:44:48 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00015**	**.11008**	**.00360**	**.94835**	**.04294**	**.00012**	**.00265**	**40.780**	**.00031**
Stddev	.00014	.00285	.00172	.01365	.00023	.00007	.00664	.033	.00031
%RSD	94.185	2.5872	47.844	1.4394	.52769	57.583	250.56	.07977	100.55
#1	-.00025	.11210	.00482	.95800	.04278	.00007	-.00204	40.757	.00053
#2	-.00005	.10807	.00239	.93870	.04310	.00017	.00734	40.803	.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00065**	**.00080**	**.02006**	**.27056**	**6.3945**	**.01909**	**3.3180**	**.10030**	**.75788**
Stddev	.00005	.00007	.00021	.00109	.0321	.00306	.0064	.00026	.01296
%RSD	7.8119	8.6483	1.0466	.40345	.50147	16.042	.19160	.25906	1.7107
#1	.00068	.00075	.01991	.27133	6.4171	.02125	3.3135	.10012	.76705
#2	.00061	.00085	.02021	.26979	6.3718	.01692	3.3225	.10049	.74871
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**47.742**	**.00367**	**.14651**	**.00199**	**37.208**	**-.00078**	**-.00345**	**3.6256**	**7.7587**
Stddev	.138	.00017	.00486	.00068	.671	.00175	.01289	.0032	.0069
%RSD	.28911	4.6775	3.3179	33.894	1.8039	223.67	373.85	.08829	.08829
#1	47.645	.00354	.14994	.00247	37.683	.00045	.00566	3.6233	7.7538
#2	47.840	.00379	.14307	.00152	36.733	-.00202	-.01256	3.6278	7.7635
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00009**	**.23294**	**.00152**	**.00164**	**-.00183**	**-.05439**	**-.00720**	**7.1649**	**-.00210**
Stddev	.00064	.00014	.00137	.00019	.00028	.00420	.00125	.0130	.00151
%RSD	738.02	.05950	89.886	11.718	15.256	7.7185	17.364	.18141	71.728
#1	-.00036	.23304	.00249	.00151	-.00203	-.05736	-.00632	7.1557	-.00317
#2	.00054	.23284	.00055	.00178	-.00163	-.05142	-.00809	7.1741	-.00104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2061.1**	**46960.**	**4321.8**
Stddev	9.1	141.	12.7
%RSD	.44133	.30106	.29374
#1	2067.6	47060.	4312.8
#2	2054.7	46860.	4330.8

Sample Name: 280-97532-E-2-A SD@5 Acquired: 6/6/2017 16:47:20 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**.02482**	**-.00327**	**.19761**	**.00834**	**.00010**	**.00202**	**8.2730**	**.00025**
Stddev	.00030	.00033	.00663	.00436	.00008	.00009	.00596	.0011	.00031
%RSD	959.52	1.3312	202.63	2.2060	.90565	92.821	294.64	.01330	125.18
#1	-.00018	.02459	-.00796	.20070	.00829	.00016	.00624	8.2738	.00046
#2	.00024	.02506	.00142	.19453	.00840	.00003	-.00219	8.2722	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00035**	**.00048**	**.00431**	**.05146**	**1.3850**	**.00863**	**.68900**	**.02018**	**.14813**
Stddev	.00019	.00003	.00138	.00370	.0762	.00061	.00055	.00006	.00315
%RSD	54.367	6.9478	31.968	7.1963	5.4997	7.0447	.07968	.31916	2.1286
#1	.00048	.00050	.00334	.05408	1.4389	.00906	.68939	.02023	.15036
#2	.00021	.00046	.00528	.04884	1.3311	.00820	.68862	.02014	.14590
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.5778**	**-.00018**	**.03242**	**-.00216**	**7.2868**	**-.00655**	**-.00767**	**.69625**	**1.4900**
Stddev	.0412	.00118	.00187	.00017	.1470	.00424	.00812	.01410	.0302
%RSD	.43005	662.86	5.7640	7.9235	2.0175	64.781	105.89	2.0249	2.0249
#1	9.5487	.00065	.03110	-.00228	7.3908	-.00955	-.01341	.68628	1.4686
#2	9.6070	-.00101	.03374	-.00203	7.1829	-.00355	-.00193	.70622	1.5113
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00050**	**.04675**	**.00184**	**.00012**	**.00573**	**.01132**	**-.00146**	**1.4536**	**-.00185**
Stddev	.00088	.00004	.00062	.00023	.00198	.02421	.00039	.0097	.00376
%RSD	176.71	.07818	33.789	188.16	34.544	213.95	26.650	.66715	203.57
#1	.00012	.04673	.00140	-.00004	.00713	-.00580	-.00119	1.4604	.00081
#2	-.00113	.04678	.00228	.00028	.00433	.02844	-.00174	1.4467	-.00451
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2032.4**	**46362.**	**4093.7**
Stddev	20.5	201.	84.8
%RSD	1.0063	.43451	2.0705
#1	2017.9	46504.	4153.7
#2	2046.8	46219.	4033.8

Sample Name: 280-97532-E-2-B MS Acquired: 6/6/2017 16:49:55 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04798**	**2.3962**	**.99526**	**1.9147**	**2.0124**	**.04878**	W **2.0870**	**87.841**	**.10160**
Stddev	.00063	.0350	.01608	.0303	.0003	.00013	.0376	.036	.00191
%RSD	1.3142	1.4624	1.6158	1.5815	.01533	.27440	1.8007	.04129	1.8778
#1	.04843	2.4210	1.0066	1.9361	2.0122	.04888	2.1136	87.816	.10295
#2	.04753	2.3714	.98389	1.8933	2.0126	.04869	2.0604	87.867	.10025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47383**	**.19299**	**.27355**	**1.1989**	**56.197**	**1.0087**	**51.005**	**.57813**	**1.7013**
Stddev	.00751	.00464	.00145	.0038	.214	.0005	.010	.00079	.0337
%RSD	1.5851	2.4034	.52973	.31370	.38043	.05313	.01953	.13630	1.9822
#1	.47914	.19627	.27458	1.2016	56.046	1.0083	51.012	.57757	1.7252
#2	.46852	.18971	.27253	1.1963	56.348	1.0091	50.998	.57869	1.6775
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**97.040**	**.47328**	**10.740**	**.47536**	**39.331**	**.50089**	**1.9127**	**13.105**	**28.045**
Stddev	.327	.00826	.212	.00363	.848	.01988	.0390	.018	.038
%RSD	.33679	1.7451	1.9758	.76454	2.1563	3.9689	2.0395	.13470	.13470
#1	96.809	.47912	10.890	.47793	39.931	.51494	1.9403	13.117	28.071
#2	97.271	.46744	10.590	.47279	38.732	.48683	1.8852	13.092	28.018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9497**	**1.2135**	**.98800**	**.98482**	**1.8860**	**2.0327**	**.48186**	**7.5373**	**.49619**
Stddev	.0415	.0003	.00596	.00026	.0397	.0239	.00328	.0258	.00197
%RSD	2.1271	.02287	.60292	.02654	2.1064	1.1732	.68034	.34181	.39614
#1	1.9790	1.2137	.98379	.98500	1.9141	2.0496	.48417	7.5555	.49758
#2	1.9204	1.2133	.99221	.98463	1.8579	2.0158	.47954	7.5190	.49480
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1900.0**	**43193.**	**4060.8**
Stddev	38.5	422.	34.9
%RSD	2.0272	.97766	.86001
#1	1927.3	42895.	4085.5
#2	1872.8	43492.	4036.2

Sample Name: 280-97532-E-2-C MSD Acquired: 6/6/2017 16:52:17 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04982**	**2.4508**	**1.0466**	**1.9585**	**2.0543**	**.05004**	W **2.1601**	**89.340**	**.10393**
Stddev	.00078	.0570	.0040	.0193	.0020	.00012	.0351	.260	.00214
%RSD	1.5732	2.3246	.37704	.98657	.09693	.23063	1.6233	.29051	2.0564
#1	.05038	2.4911	1.0494	1.9722	2.0557	.04996	2.1849	89.523	.10545
#2	.04927	2.4105	1.0438	1.9449	2.0529	.05012	2.1353	89.156	.10242
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48591**	**.19932**	**.27938**	**1.2256**	**57.591**	**1.0360**	**52.272**	**.59113**	**1.7418**
Stddev	.00767	.00293	.00076	.0124	.183	.0023	.082	.00044	.0257
%RSD	1.5782	1.4696	.27194	1.0147	.31776	.22398	.15717	.07438	1.4754
#1	.49133	.20139	.27992	1.2344	57.721	1.0376	52.214	.59082	1.7600
#2	.48049	.19725	.27885	1.2168	57.462	1.0343	52.330	.59144	1.7236
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**100.05**	**.48426**	**11.042**	**.48833**	**40.459**	**.50706**	**1.9666**	**13.344**	**28.555**
Stddev	.06	.00679	.189	.00340	.415	.00375	.0311	.027	.058
%RSD	.05595	1.4024	1.7101	.69645	1.0248	.73876	1.5801	.20422	.20422
#1	100.09	.48907	11.176	.49073	40.752	.50970	1.9886	13.363	28.597
#2	100.01	.47946	10.909	.48592	40.166	.50441	1.9447	13.324	28.514
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9886**	**1.2365**	**1.0118**	**1.0052**	**1.9469**	**2.0878**	**.49357**	**7.6401**	**.51440**
Stddev	.0369	.0027	.0016	.0016	.0372	.0342	.00035	.0078	.00009
%RSD	1.8552	.21518	.15919	.15522	1.9084	1.6393	.07081	.10275	.01818
#1	2.0147	1.2384	1.0130	1.0063	1.9732	2.0636	.49332	7.6346	.51446
#2	1.9625	1.2347	1.0107	1.0041	1.9206	2.1120	.49381	7.6457	.51433
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1978.3**	**43909.**	**3998.0**
Stddev	14.8	510.	10.5
%RSD	.74617	1.1606	.26246
#1	1967.9	44269.	4005.4
#2	1988.8	43549.	3990.6

Sample Name: CCVH-4569081 Acquired: 6/6/2017 16:54:39 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00545**	**50.014**	**-.00126**	**.01385**	**.00053**	**-.00003**	**1.0321**	**.00601**	**.00007**	**-.00107**	**.00040**	**.02625**	**49.414**
Stddev	.00052	.204	.00456	.00115	.00028	.00006	.0214	.00197	.00036	.00042	.00014	.00196	.238
%RSD	9.6094	.40729	361.67	8.3120	52.021	214.81	2.0733	32.699	508.58	39.243	33.699	7.4613	.48244
#1	-.00508	50.158	.00196	.01467	.00072	-.00007	1.0472	.00740	-.00018	-.00137	.00050	.02763	49.583
#2	-.00582	49.870	-.00448	.01304	.00033	.00002	1.0169	.00462	.00032	-.00077	.00031	.02486	49.245
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.19855**	**.00417**	**.06339**	**-.00153**	**-.00096**	**255.20**	**.00008**	**.01618**	**.00150**	**5.1712**	**-.00936**	**-.01194**	**-.01086**
Stddev	.02196	.00024	.00421	.00004	.00006	.04	.00007	.00001	.00193	.1306	.00164	.00674	.01607
%RSD	11.061	5.7805	6.6332	2.3892	6.0222	.01508	88.912	.08912	128.25	2.5258	17.569	56.472	148.04
#1	.18302	.00434	.06637	-.00156	-.00092	255.18	.00003	.01619	.00286	5.2636	-.00819	-.01671	-.02222
#2	.21408	.00400	.06042	-.00150	-.00101	255.23	.00013	.01617	.00014	5.0789	-.01052	-.00717	.00051
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.02324**	**-.00199**	**.00049**	**4.9344**	**.01720**	**.00236**	**10.281**	**.01518**	**.00155**	**.11830**
Stddev	.03440	.00319	.00019	.0288	.00023	.00036	.037	.00042	.00004	.00131
%RSD	148.04	160.62	38.347	.58327	1.3338	15.385	.36064	2.7616	2.4056	1.1067
#1	-.04756	.00027	.00063	4.9547	.01737	.00211	10.307	.01547	.00153	.11737
#2	.00109	-.00425	.00036	4.9140	.01704	.00262	10.254	.01488	.00158	.11922
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1989.3**	**44055.**	**4030.9**
Stddev	3.6	463.	65.4
%RSD	.17926	1.0506	1.6223
#1	1986.8	43728.	3984.7
#2	1991.8	44383.	4077.2

Sample Name: CCV-4567764 Acquired: 6/6/2017 16:57:13 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50784**	F **.62684**	**.99032**	**.50354**	**.50474**	**.50004**	**-.00003**	**5.0018**	**.50065**	**.50169**	**.50129**	**.51157**
Stddev	.00253	.01154	.02053	.01062	.00134	.00037	.00294	.0125	.00897	.00849	.00944	.00053
%RSD	.49871	1.8403	2.0731	2.1097	.26501	.07431	11656.	.25049	1.7924	1.6931	1.8830	.10285
#1	.50963	.63500	1.0048	.51105	.50379	.49978	-.00210	4.9930	.50700	.50770	.50796	.51120
#2	.50605	.61868	.97580	.49602	.50568	.50031	.00205	5.0107	.49431	.49569	.49461	.51194
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4823**	**50.752**	**1.0310**	**19.993**	**.49997**	**.49930**	**5.3581**	**.49881**	**1.0596**	**1.0170**	**.01225**	**1.0020**
Stddev	.0065	.077	.0009	.072	.00153	.00681	.0238	.00743	.0142	.0132	.00961	.0143
%RSD	.26129	.15157	.09142	.35966	.30597	1.3645	.44409	1.4899	1.3403	1.2946	78.441	1.4306
#1	2.4778	50.697	1.0303	20.044	.50105	.50412	5.3750	.50406	1.0696	1.0263	.01904	1.0121
#2	2.4869	50.806	1.0317	19.942	.49889	.49449	5.3413	.49355	1.0495	1.0077	.00545	.99183
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.98662**	**4.9564**	**10.607**	**1.0040**	**.50622**	**.00657**	**.49839**	**1.0353**	**-.00703**	**.49816**	**.49115**	**.49497**
Stddev	.00865	.0105	.022	.0144	.00051	.00182	.00079	.0081	.04201	.00039	.00273	.00181
%RSD	.87721	.21174	.21174	1.4331	.09977	27.678	.15948	.78349	597.86	.07881	.55605	.36506
#1	.99274	4.9639	10.623	1.0141	.50587	.00785	.49895	1.0410	-.03673	.49844	.49308	.49625
#2	.98050	4.9490	10.591	.99380	.50658	.00528	.49782	1.0296	.02268	.49789	.48922	.49369
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2055.0**	**46442.**	**4250.5**
Stddev	32.8	804.	51.7
%RSD	1.5938	1.7304	1.2158
#1	2078.2	45874.	4214.0
#2	2031.8	47010.	4287.0

Sample Name: CCB Acquired: 6/6/2017 16:59:41 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00012**	**.00083**	W **.00825**	**.00754**	**-.00036**	**.00015**	**.00455**	**.00013**	**.00030**	**-.00039**	**.00040**	**.00026**
Stddev	.00040	.00019	.00750	.00114	.00023	.00009	.00094	.00153	.00001	.00007	.00049	.00043
%RSD	331.46	23.169	90.940	15.186	63.801	56.478	20.757	1163.8	2.7319	19.043	124.09	169.74
#1	.00040	.00097	.01355	.00673	-.00053	.00021	.00522	.00122	.00031	-.00033	.00005	.00056
#2	-.00016	.00070	.00294	.00835	-.00020	.00009	.00388	-.00095	.00030	-.00044	.00074	-.00005
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00750									
Low Limit			-.01500									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01202**	**.12944**	W **.00582**	**-.00100**	**.00016**	**.00013**	**.17148**	**-.00129**	**.00227**	**.00083**	**.01113**	**.00015**
Stddev	.00013	.08064	.00123	.00441	.00004	.00015	.01000	.00010	.00517	.00180	.02205	.00528
%RSD	1.0403	62.297	21.202	443.35	22.742	114.39	5.8285	7.5982	227.83	216.33	198.10	3476.1
#1	.01193	.07242	.00495	-.00412	.00018	.00003	.16442	-.00122	-.00139	.00210	.02672	.00389
#2	.01211	.18645	.00669	.00213	.00013	.00024	.17855	-.00136	.00592	-.00044	-.00446	-.00358
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500									
Low Limit			-.01000									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00209**	**-.00434**	**-.00930**	**.00107**	**.00008**	**.00142**	**.00015**	**.00085**	**-.02322**	**-.00065**	**.00036**	**-.00304**
Stddev	.00366	.01719	.03679	.00054	.00007	.00033	.00013	.00227	.00300	.00006	.00001	.00396
%RSD	175.42	395.70	395.70	50.990	84.170	23.392	92.531	267.09	12.930	9.9637	2.1793	129.98
#1	-.00467	.00781	.01672	.00068	.00013	.00119	.00005	-.00076	-.02110	-.00061	.00036	-.00584
#2	.00050	-.01650	-.03531	.00145	.00003	.00166	.00024	.00246	-.02534	-.00070	.00035	-.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2077.0**	**47688.**	**4204.4**
Stddev	29.0	232.	41.9
%RSD	1.3960	.48686	.99647
#1	2097.5	47852.	4174.8
#2	2056.5	47524.	4234.0

Sample Name: CCVL-4576167 Acquired: 6/6/2017 17:02:17 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00955**	**.12693**	**.01702**	**.10204**	**.00954**	**.00098**	**.11833**	**.19945**	**.00515**	**.01001**	**.00984**	**.01601**
Stddev	.00105	.00659	.00419	.00163	.00015	.00017	.00798	.00309	.00024	.00031	.00069	.00022
%RSD	11.009	5.1950	24.639	1.5950	1.5666	17.473	6.7437	1.5478	4.5998	3.1035	6.9613	1.3596
#1	.00881	.13159	.01999	.10320	.00964	.00086	.12397	.20163	.00498	.01023	.01033	.01586
#2	.01030	.12227	.01406	.10089	.00943	.00110	.11268	.19727	.00532	.00979	.00936	.01617
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10927**	**3.1544**	**.02087**	**.19386**	**.01015**	**.01922**	**1.1959**	**.03830**	**2.9906**	**.00943**	**.11774**	**.01881**
Stddev	.00295	.0520	.00156	.00451	.00017	.00021	.0362	.00152	.0723	.00058	.00869	.00025
%RSD	2.7004	1.6478	7.4913	2.3272	1.6691	1.1110	3.0280	3.9820	2.4179	6.1086	7.3779	1.3223
#1	.11135	3.1912	.02197	.19067	.01027	.01937	1.2215	.03937	3.0418	.00984	.12388	.01899
#2	.10718	3.1177	.01976	.19705	.01003	.01907	1.1703	.03722	2.9395	.00903	.11160	.01863
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01351**	**.48369**	**1.0351**	**.09826**	**.01018**	**.01667**	**.01001**	**.01836**	**.05266**	**.00954**	**.01985**	**.01313**
Stddev	.00009	.01618	.0346	.00229	.00008	.00002	.00011	.00293	.03135	.00041	.00054	.00178
%RSD	.67274	3.3448	3.3448	2.3318	.77320	.10593	1.1248	15.958	59.524	4.2840	2.7271	13.559
#1	.01345	.49513	1.0596	.09988	.01012	.01668	.00994	.01629	.03050	.00983	.01946	.01187
#2	.01358	.47225	1.0106	.09664	.01023	.01665	.01009	.02043	.07483	.00925	.02023	.01439
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.02000											
Range	-30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2077.5**	**48397.**	**4241.1**
Stddev	23.0	197.	35.1
%RSD	1.1075	.40805	.82676
#1	2061.2	48537.	4216.3
#2	2093.7	48257.	4265.9

Sample Name: 280-97532-E-4-A Acquired: 6/6/2017 17:04:54 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00059**	**.05513**	**-.00132**	**.65202**	**.07189**	**.00006**	**-.00245**	**53.406**	**.00031**
Stddev	.00091	.00072	.00815	.01596	.00017	.00005	.00208	.086	.00024
%RSD	152.91	1.3136	617.55	2.4472	.23841	87.716	84.707	.16059	76.577
#1	-.00005	.05462	.00444	.66331	.07201	.00002	-.00392	53.467	.00048
#2	.00124	.05565	-.00708	.64074	.07177	.00010	-.00098	53.346	.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00124**	**.00147**	**.16522**	**.58236**	**11.934**	**.04205**	**2.6390**	**.02022**	**.19555**
Stddev	.00080	.00006	.00082	.00284	.008	.00104	.0169	.00008	.00485
%RSD	64.718	4.0509	.49401	.48726	.06830	2.4808	.63899	.41004	2.4803
#1	.00181	.00152	.16464	.58437	11.939	.04279	2.6509	.02028	.19898
#2	.00067	.00143	.16580	.58036	11.928	.04131	2.6270	.02016	.19212
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **746.59**	**.01787**	**.22368**	**.00063**	**102.31**	**-.00242**	**.01595**	**43.139**	**92.316**
Stddev	.15	.00121	.00787	.00230	2.92	.00429	.00447	.058	.124
%RSD	.02002	6.7765	3.5184	366.67	2.8545	176.99	28.062	.13416	.13416
#1	746.48	.01873	.22924	.00226	104.38	.00061	.01278	43.179	92.404
#2	746.70	.01702	.21811	-.00100	100.25	-.00545	.01911	43.098	92.229
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00217**	**.39068**	**.00220**	**.00108**	**.00084**	**-.03184**	**-.00071**	**.01803**	**-.00184**
Stddev	.00293	.00022	.00073	.00014	.00304	.03105	.00104	.00031	.00045
%RSD	135.09	.05691	33.344	12.945	363.76	97.500	146.94	1.7375	24.278
#1	-.00010	.39052	.00272	.00098	-.00131	-.00989	.00003	.01825	-.00152
#2	-.00424	.39084	.00168	.00118	.00298	-.05380	-.00145	.01781	-.00215
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1985.6**	**44141.**	**4139.8**
Stddev	7.8	94.	84.4
%RSD	.39177	.21314	2.0395
#1	1991.1	44074.	4080.1
#2	1980.1	44207.	4199.5

Sample Name: 280-97532-C-5-A Acquired: 6/6/2017 17:07:33 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00054**	**5.3182**	**.02135**	**.99065**	**.43698**	**.00057**	**.00558**	**82.557**	**.11811**
Stddev	.00022	.0219	.00865	.02010	.00177	.00013	.00469	.243	.00267
%RSD	41.776	.41142	40.526	2.0286	.40421	22.706	84.131	.29431	2.2602
#1	.00069	5.3027	.02746	1.0049	.43574	.00067	.00890	82.385	.12000
#2	.00038	5.3337	.01523	.97644	.43823	.00048	.00226	82.728	.11622
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05932**	**.07703**	**.65146**	**67.891**	W **133.20**	**.05913**	**2.6733**	**.44020**	**.03230**
Stddev	.00138	.00186	.00201	.176	.31	.00113	.0106	.00008	.00111
%RSD	2.3279	2.4135	.30872	.25919	.23536	1.9061	.39505	.01878	3.4308
#1	.06029	.07834	.65004	68.015	132.98	.05833	2.6658	.44026	.03308
#2	.05834	.07571	.65288	67.767	133.43	.05993	2.6808	.44014	.03152
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**71.410**	**.04421**	**1.3304**	**.98534**	**49.108**	**.00786**	**-.00412**	**19.646**	**42.042**
Stddev	.984	.00116	.0349	.02583	1.054	.00662	.00178	.006	.013
%RSD	1.3786	2.6185	2.6214	2.6211	2.1456	84.232	43.310	.03133	.03133
#1	70.714	.04503	1.3550	1.0036	49.853	.01255	-.00286	19.641	42.033
#2	72.106	.04339	1.3057	.96707	48.363	.00318	-.00538	19.650	42.051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01250**	**1.5671**	**.00831**	**.13371**	**.00036**	**-.00586**	**.13235**	**3.2572**	**.00914**
Stddev	.00032	.0016	.00362	.00012	.00221	.00048	.00033	.0112	.00287
%RSD	2.5548	.10010	43.508	.08924	611.88	8.2378	.24932	.34411	31.385
#1	.01227	1.5660	.00576	.13380	-.00120	-.00620	.13212	3.2651	.01116
#2	.01272	1.5682	.01087	.13363	.00192	-.00551	.13259	3.2493	.00711
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2049.1**	**45948.**	**4253.7**
Stddev	15.2	261.	52.3
%RSD	.74001	.56795	1.2287
#1	2038.4	45763.	4290.6
#2	2059.8	46132.	4216.7

Sample Name: 280-97532-E-6-A Acquired: 6/6/2017 17:10:02 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00079**	**.20401**	**.00784**	**.94373**	**.04213**	**.00007**	**.00395**	**21.088**	**.00159**
Stddev	.00039	.00619	.00629	.01791	.00016	.00004	.00065	.106	.00001
%RSD	49.355	3.0316	80.214	1.8977	.37068	60.007	16.538	.50026	.42585
#1	.00106	.20839	.01228	.95639	.04224	.00004	.00349	21.163	.00158
#2	.00051	.19964	.00339	.93106	.04202	.00010	.00441	21.014	.00159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00061**	**.00268**	**.01793**	**1.0218**	W **127.47**	**.05089**	**.61029**	**.00867**	**.04336**
Stddev	.00027	.00024	.00034	.0054	.55	.00028	.00275	.00013	.00030
%RSD	44.881	8.7938	1.9127	.52417	.42966	.55548	.45037	1.4640	.69686
#1	.00042	.00251	.01817	1.0256	127.86	.05069	.61223	.00876	.04358
#2	.00080	.00284	.01768	1.0180	127.08	.05109	.60835	.00858	.04315
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**69.131**	**.00041**	**.09100**	**.01218**	**49.069**	**.00482**	**-.00548**	**4.9407**	**10.573**
Stddev	.132	.00019	.00105	.00046	1.015	.00371	.00378	.0442	.095
%RSD	.19123	46.925	1.1580	3.7449	2.0684	76.948	68.888	.89464	.89464
#1	69.037	.00027	.09025	.01251	49.787	.00744	-.00281	4.9720	10.640
#2	69.224	.00054	.09174	.01186	48.352	.00220	-.00816	4.9094	10.506
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00187**	**.87974**	**.00377**	**.00500**	**.00492**	**-.02488**	**.00757**	**.04463**	**-.00001**
Stddev	.00027	.00372	.00212	.00005	.00355	.01847	.00031	.00002	.00039
%RSD	14.524	.42285	56.276	1.0562	72.243	74.226	4.1495	.05326	3575.4
#1	.00206	.88237	.00528	.00504	.00240	-.01182	.00780	.04462	-.00029
#2	.00168	.87711	.00227	.00497	.00743	-.03794	.00735	.04465	.00026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2052.2**	**46810.**	**4264.2**
Stddev	4.6	180.	22.7
%RSD	.22322	.38527	.53134
#1	2049.0	46682.	4248.1
#2	2055.5	46937.	4280.2

Sample Name: 280-97532-D-7-A Acquired: 6/6/2017 17:12:37 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00311**	**49.118**	**.01848**	**.48389**	**2.0841**	**.00684**	**.00387**	W **779.94**	**.00990**
Stddev	.00004	.144	.00642	.01146	.0141	.00017	.00078	.76	.00070
%RSD	1.3682	.29312	34.742	2.3690	.67839	2.4851	20.117	.09793	7.0892
#1	-.00308	49.220	.01394	.49200	2.0941	.00696	.00442	780.48	.01039
#2	-.00314	49.016	.02302	.47579	2.0741	.00672	.00332	779.40	.00940
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09947**	**.16975**	**.05143**	**154.41**	**51.619**	**1.1118**	**148.55**	**3.9452**	**.00478**
Stddev	.00303	.00490	.00017	.70	.013	.0003	.40	.0051	.00078
%RSD	3.0478	2.8866	.32548	.45298	.02489	.02770	.26620	.13033	16.395
#1	.10162	.17322	.05132	154.90	51.628	1.1120	148.83	3.9488	.00533
#2	.09733	.16629	.05155	153.91	51.610	1.1116	148.27	3.9415	.00423
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2193.3**	**.15565**	**6.7752**	**.08415**	**36.806**	**-.00540**	**-.00168**	W **50.413**	**107.88**
Stddev	4.8	.00445	.2059	.00147	1.073	.00333	.00253	1.013	2.17
%RSD	.21998	2.8622	3.0387	1.7467	2.9151	61.592	150.91	2.0095	2.0095
#1	2196.7	.15880	6.9208	.08519	37.565	-.00775	-.00347	51.130	109.42
#2	2189.9	.15250	6.6296	.08311	36.047	-.00305	.00011	49.697	106.35
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit	500.00							50.000	
Low Limit	11.000							-1.0000	

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00739**	**4.2205**	**.01441**	**.39610**	**.00680**	**-.03992**	**.27153**	W **10.468**	**.01757**
Stddev	.00128	.0216	.00371	.00025	.00338	.03158	.00057	.033	.00010
%RSD	17.285	.51200	25.732	.06369	49.708	79.106	.20860	.31514	.57691
#1	.00649	4.2357	.01179	.39628	.00441	-.06226	.27113	10.492	.01764
#2	.00829	4.2052	.01704	.39592	.00919	-.01759	.27193	10.445	.01749
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.04000	

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1947.7**	**42826.**	**4427.0**
Stddev	17.5	327.	93.9
%RSD	.89883	.76463	2.1208
#1	1960.1	43058.	4493.4
#2	1935.3	42595.	4360.6

Sample Name: 280-97532-E-8-A Acquired: 6/6/2017 17:15:17 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00056**	**.07460**	**-.00301**	**.18748**	**.04475**	**.00015**	**.00673**	**21.979**	**.00042**
Stddev	.00046	.00324	.00315	.00313	.00042	.00003	.00140	.033	.00040
%RSD	82.751	4.3441	104.69	1.6721	.93391	16.490	20.752	.15036	96.252
#1	-.00089	.07689	-.00523	.18969	.04505	.00017	.00574	22.003	.00013
#2	-.00023	.07231	-.00078	.18526	.04445	.00014	.00772	21.956	.00070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00072**	**.00378**	**.00804**	**.14217**	**22.924**	**.27788**	**11.326**	**.01005**	**.00832**
Stddev	.00015	.00005	.00020	.00647	.052	.00067	.021	.00014	.00042
%RSD	21.080	1.2530	2.4607	4.5527	.22683	.23949	.18683	1.4216	5.1095
#1	-.00083	.00382	.00790	.14674	22.887	.27835	11.341	.01015	.00802
#2	-.00061	.00375	.00818	.13759	22.961	.27741	11.311	.00994	.00862
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**490.72**	**.00076**	**.06954**	**-.00311**	**11.282**	**-.00033**	**-.00323**	**3.8475**	**8.2337**
Stddev	.80	.00002	.00276	.00330	.242	.00013	.00070	.0596	.1276
%RSD	.16359	2.6822	3.9661	106.05	2.1433	39.249	21.574	1.5497	1.5497
#1	490.15	.00074	.07149	-.00544	11.453	-.00043	-.00273	3.8054	8.1435
#2	491.29	.00077	.06759	-.00078	11.111	-.00024	-.00372	3.8897	8.3239
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00175**	**.22498**	**-.00145**	**.00175**	**-.00048**	**.01421**	**.00635**	**.02132**	**.00222**
Stddev	.00210	.00030	.00235	.00023	.00306	.00929	.00022	.00072	.00042
%RSD	119.46	.13252	162.35	13.058	635.82	65.394	3.5221	3.3841	18.998
#1	-.00027	.22519	.00021	.00159	.00168	.00764	.00619	.02183	.00192
#2	-.00324	.22477	-.00311	.00191	-.00265	.02077	.00650	.02081	.00252
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1970.8**	**43938.**	**4058.6**
Stddev	7.6	54.	146.7
%RSD	.38792	.12388	3.6134
#1	1976.2	43976.	4162.3
#2	1965.4	43899.	3954.9

Sample Name: 280-97532-E-10-A Acquired: 6/6/2017 17:17:59 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**.07869**	**.00479**	**.02206**	**.02455**	**.00011**	**.00129**	**27.371**	**.00032**
Stddev	.00063	.00408	.00178	.00122	.00007	.00000	.00319	.013	.00008
%RSD	1163.2	5.1809	37.189	5.5318	.26923	.04170	247.38	.04743	25.580
#1	.00039	.08158	.00353	.02292	.02459	.00011	.00355	27.380	.00027
#2	-.00050	.07581	.00605	.02119	.02450	.00011	-.00097	27.362	.00038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00010**	**.00030**	**.00889**	**.21798**	**6.8145**	**.00952**	**2.2364**	**.02859**	**.00112**
Stddev	.00023	.00064	.00004	.00026	.0271	.00095	.0052	.00012	.00064
%RSD	236.94	217.18	.44696	.11712	.39702	9.9333	.23446	.42274	57.551
#1	.00026	.00075	.00887	.21816	6.7953	.00885	2.2401	.02851	.00158
#2	-.00007	-.00016	.00892	.21780	6.8336	.01019	2.2327	.02868	.00066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.417**	**-.00029**	**.21114**	**.00341**	**9.0070**	**-.00101**	**-.00754**	**4.3547**	**9.3191**
Stddev	1.157	.00033	.00132	.00020	.3060	.00125	.00326	.0215	.0460
%RSD	8.0217	114.51	.62494	5.9005	3.3968	123.82	43.232	.49350	.49350
#1	15.235	-.00006	.21207	.00355	9.2233	-.00190	-.00524	4.3699	9.3517
#2	13.599	-.00053	.21021	.00327	8.7906	-.00013	-.00985	4.3395	9.2866
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00103**	**.17126**	**.00068**	**.00158**	**.00730**	**-.00855**	**.00838**	**.01529**	**-.00087**
Stddev	.00324	.00038	.00416	.00011	.00340	.00259	.00087	.00004	.00363
%RSD	313.58	.22044	609.68	6.8154	46.594	30.270	10.346	.28872	417.03
#1	-.00333	.17153	-.00226	.00166	.00970	-.00672	.00777	.01526	-.00343
#2	.00126	.17100	.00362	.00150	.00489	-.01038	.00899	.01532	.00169
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2062.3**	**47842.**	**4182.9**
Stddev	9.3	133.	20.4
%RSD	.45031	.27891	.48684
#1	2055.7	47936.	4197.3
#2	2068.8	47748.	4168.5

Sample Name: 280-97532-E-12-A Acquired: 6/6/2017 17:20:34 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00028**	**5.4789**	**-.00251**	**.09327**	**.17169**	**.00041**	**.00465**	**76.398**	**.00068**
Stddev	.00085	.0105	.00454	.00102	.00031	.00003	.01182	.176	.00027
%RSD	308.67	.19164	180.58	1.0977	.17993	6.8136	254.39	.23094	39.773
#1	.00033	5.4863	.00070	.09400	.17190	.00039	-.00371	76.523	.00049
#2	-.00088	5.4715	-.00572	.09255	.17147	.00043	.01301	76.274	.00087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00288**	**.00427**	**.02724**	**4.5886**	**9.8436**	**.04203**	**10.185**	**.30876**	**.00307**
Stddev	.00046	.00000	.00064	.0211	.0924	.00091	.010	.00133	.00002
%RSD	15.879	.04998	2.3495	.46044	.93849	2.1604	.09745	.43134	.53594
#1	.00256	.00427	.02769	4.6035	9.7782	.04138	10.192	.30970	.00309
#2	.00321	.00427	.02679	4.5737	9.9089	.04267	10.178	.30782	.00306
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **746.56**	**.00535**	**.90419**	**-.00012**	**35.883**	**-.00012**	**-.00393**	**25.957**	**55.547**
Stddev	.09	.00012	.01659	.00115	.733	.00132	.00325	.043	.092
%RSD	.01265	2.1718	1.8344	951.69	2.0437	1069.9	82.790	.16547	.16547
#1	746.49	.00543	.91592	-.00093	36.401	-.00106	-.00163	25.926	55.482
#2	746.63	.00527	.89247	.00069	35.364	.00081	-.00623	25.987	55.612
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00231**	**.50486**	**.00350**	**.10536**	**.00525**	**.00530**	**.01342**	**.06908**	**.00363**
Stddev	.00305	.00054	.00108	.00180	.00105	.01122	.00068	.00021	.00048
%RSD	132.11	.10651	30.938	1.7105	19.950	211.74	5.0817	.30861	13.286
#1	-.00015	.50524	.00427	.10663	.00599	-.00263	.01294	.06893	.00329
#2	-.00447	.50448	.00274	.10409	.00451	.01323	.01391	.06923	.00397
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1980.6**	**43600.**	**4240.1**
Stddev	1.4	51.	7.5
%RSD	.07157	.11793	.17795
#1	1979.6	43564.	4234.8
#2	1981.6	43636.	4245.5

Sample Name: 280-97532-E-14-A Acquired: 6/6/2017 17:23:12 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00031**	**.39693**	**.01298**	**.24073**	**.06747**	**.00014**	**.00075**	**51.820**	**.00065**
Stddev	.00018	.00813	.00462	.00353	.00015	.00011	.00018	.223	.00047
%RSD	58.964	2.0488	35.620	1.4649	.22447	72.900	23.920	.43080	72.581
#1	-.00044	.40268	.01625	.24322	.06736	.00022	.00087	51.662	.00031
#2	-.00018	.39118	.00971	.23824	.06757	.00007	.00062	51.978	.00098
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00044**	**.00278**	**.04296**	**.50951**	**6.6339**	**.02362**	**5.9397**	**.09893**	**.00237**
Stddev	.00023	.00062	.00056	.00121	.0392	.00044	.0094	.00029	.00038
%RSD	51.949	22.109	1.3051	.23711	.59053	1.8597	.15860	.29698	16.051
#1	.00061	.00235	.04257	.51036	6.6616	.02393	5.9464	.09914	.00210
#2	.00028	.00322	.04336	.50865	6.6062	.02331	5.9331	.09872	.00264
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**73.607**	**.00943**	**.80306**	**-.00073**	**24.103**	**-.00163**	**-.00559**	**14.959**	**32.013**
Stddev	1.327	.00039	.02654	.00166	.566	.00428	.00258	.052	.111
%RSD	1.8023	4.0985	3.3044	229.09	2.3495	263.14	46.096	.34732	.34732
#1	72.669	.00971	.82182	.00045	24.504	-.00465	-.00741	14.996	32.092
#2	74.545	.00916	.78430	-.00190	23.703	.00140	-.00377	14.923	31.934
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00067**	**.32741**	**.00388**	**.00619**	**.00253**	**-.02672**	**.00121**	**.04829**	**-.00194**
Stddev	.00035	.00118	.00094	.00001	.00233	.00655	.00029	.00001	.00055
%RSD	52.304	.36167	24.330	.08900	91.983	24.533	24.347	.02859	28.265
#1	.00042	.32658	.00455	.00619	.00418	-.02208	.00142	.04828	-.00233
#2	.00092	.32825	.00321	.00618	.00089	-.03135	.00100	.04830	-.00155
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2081.8**	**47546.**	**4355.0**
Stddev	7.9	568.	32.6
%RSD	.38012	1.1946	.74822
#1	2076.2	47947.	4378.1
#2	2087.4	47144.	4332.0

Sample Name: CCVH-4569081 Acquired: 6/6/2017 17:25:46 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00631**	**49.604**	**-.00009**	**.00543**	**.00004**	**.00021**	**1.0235**	**.00470**	**-.00020**	**-.00102**	**.00052**	**.02539**	**48.746**
Stddev	.00042	.038	.00138	.00082	.00027	.00001	.0219	.00109	.00010	.00045	.00024	.00024	.403
%RSD	6.7004	.07649	1614.1	15.027	663.68	5.8528	2.1397	23.243	48.818	44.722	46.560	.94488	.82649
#1	-.00601	49.578	.00089	.00485	-.00015	.00022	1.0390	.00547	-.00027	-.00134	.00069	.02522	49.031
#2	-.00661	49.631	-.00106	.00600	.00023	.00020	1.0081	.00393	-.00013	-.00069	.00035	.02556	48.461
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.23789**	**.00744**	**.06468**	**-.00154**	**-.00135**	**254.89**	**.00021**	**.00978**	**.00031**	**5.1144**	**-.01300**	**-.01777**	**-.00014**
Stddev	.05072	.00049	.00164	.00008	.00103	.52	.00030	.00311	.00037	.1032	.00993	.00749	.01213
%RSD	21.321	6.5883	2.5430	4.9892	76.170	.20454	143.10	31.807	120.67	2.0176	76.407	42.120	8876.9
#1	.27375	.00709	.06351	-.00160	-.00062	255.26	.00042	.00758	.00005	5.1874	-.00598	-.01248	-.00872
#2	.20202	.00779	.06584	-.00149	-.00208	254.52	-.00000	.01197	.00057	5.0415	-.02003	-.02307	.00844
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00029**	**-.00209**	**.00042**	**4.9021**	**.01680**	**.00140**	**10.147**	**.01466**	**.00105**	**.12056**
Stddev	.02596	.00069	.00006	.0300	.00006	.00546	.072	.00016	.00111	.00625
%RSD	8876.9	33.222	13.265	.61128	.38640	389.25	.71311	1.1252	105.67	5.1879
#1	-.01865	-.00258	.00038	4.9233	.01685	.00526	10.198	.01477	.00183	.11614
#2	.01807	-.00160	.00046	4.8809	.01676	-.00246	10.096	.01454	.00027	.12498
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2001.2**	**44459.**	**4066.9**
Stddev	3.5	94.	197.4
%RSD	.17683	.21053	4.8528
#1	1998.7	44393.	4206.5
#2	2003.7	44525.	3927.4

Sample Name: CCV-4567764 Acquired: 6/6/2017 17:28:20 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50013**	F **.62261**	**.97626**	**.48949**	**.49926**	**.49242**	**.00201**	**4.9452**	**.49435**	**.49406**	**.49308**	**.49872**
Stddev	.00103	.01143	.02686	.00626	.00013	.00086	.00209	.0029	.00798	.01001	.00936	.00024
%RSD	.20553	1.8355	2.7515	1.2796	.02618	.17497	103.86	.05967	1.6145	2.0264	1.8974	.04854
#1	.50085	.63069	.99526	.49392	.49935	.49302	.00053	4.9473	.49999	.50114	.49970	.49889
#2	.49940	.61453	.95727	.48507	.49917	.49181	.00349	4.9431	.48871	.48698	.48647	.49855
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4850**	**50.352**	**1.0229**	**19.652**	**.49147**	**.49103**	F **5.5361**	**.49209**	**1.0393**	**1.0014**	**.01080**	**.98768**
Stddev	.0149	.042	.0003	.028	.00000	.01142	.0348	.00689	.0151	.0269	.01665	.02018
%RSD	.59766	.08325	.02722	.13997	.00038	2.3253	.62869	1.4005	1.4507	2.6887	154.21	2.0434
#1	2.4955	50.382	1.0230	19.671	.49147	.49911	5.5607	.49697	1.0500	1.0204	-.00098	1.0020
#2	2.4745	50.323	1.0227	19.632	.49147	.48296	5.5115	.48722	1.0286	.98235	.02257	.97341
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							5.0000					
Range							10.490%					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.96910**	**4.9356**	**10.562**	**.99019**	**.49952**	**.00319**	**.48892**	**1.0169**	**-.00887**	**.48687**	**.48099**	**.49230**
Stddev	.01836	.0072	.015	.02471	.00057	.00051	.00009	.0170	.01499	.00156	.00021	.00146
%RSD	1.8944	.14533	.14533	2.4952	.11356	16.102	.01832	1.6736	169.01	.31949	.04320	.29659
#1	.98208	4.9305	10.551	1.0077	.49912	.00356	.48898	1.0290	.00173	.48577	.48084	.49127
#2	.95612	4.9406	10.573	.97272	.49992	.00283	.48886	1.0049	-.01947	.48797	.48114	.49334
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2021.8**	**45452.**	**4167.8**
Stddev	26.6	135.	10.5
%RSD	1.3143	.29761	.25184
#1	2040.6	45548.	4175.3
#2	2003.1	45356.	4160.4

Sample Name: CCB Acquired: 6/6/2017 17:30:48 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00043**	**.00338**	**.00046**	**.00345**	**.00022**	**.00006**	**.00402**	**-.00127**	**.00017**	**-.00022**	**.00046**	**.00071**
Stddev	.00083	.00069	.00123	.00050	.00011	.00005	.00073	.00426	.00016	.00076	.00006	.00007
%RSD	192.08	20.455	269.56	14.429	49.717	85.905	18.292	334.66	94.485	338.76	12.845	9.6039
#1	-.00016	.00387	-.00041	.00380	.00015	.00002	.00454	.00174	.00005	.00031	.00042	.00066
#2	.00102	.00289	.00133	.00309	.00030	.00009	.00350	-.00428	.00028	-.00076	.00051	.00076
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00223**	**.03560**	W **.00591**	**.00045**	**.00011**	**-.00015**	W **.35116**	**-.00120**	**.00631**	**.00148**	**.01759**	**.00114**
Stddev	.00222	.08617	.00293	.00461	.00016	.00056	.00002	.00007	.00020	.00192	.01146	.00245
%RSD	99.520	242.01	49.574	1028.8	146.19	372.26	.00539	5.5787	3.1669	129.53	65.137	214.15
#1	-.00066	.09653	.00799	.00371	.00022	-.00055	.35118	-.00115	.00616	.00284	.02569	.00288
#2	-.00380	-.02533	.00384	-.00281	-.00000	.00025	.35115	-.00125	.00645	.00012	.00949	-.00059
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500				.35000					
Low Limit			-.01000				-.35000					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00175**	**-.00350**	**-.00750**	**-.00124**	**-.00007**	**.00175**	**.00056**	**.00372**	**.01231**	**.00007**	**.00124**	**-.00289**
Stddev	.00136	.00991	.02120	.00316	.00006	.00021	.00024	.00037	.01002	.00159	.00069	.00032
%RSD	77.557	282.89	282.89	254.73	82.322	11.863	44.000	9.9797	81.396	2353.8	56.023	11.089
#1	-.00079	-.01051	-.02249	.00099	-.00011	.00189	.00073	.00346	.00523	.00119	.00075	-.00266
#2	-.00271	.00350	.00750	-.00347	-.00003	.00160	.00038	.00399	.01940	-.00105	.00173	-.00311
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1989.4**	**45937.**	**3908.5**
Stddev	34.8	134.	113.4
%RSD	1.7503	.29165	2.9000
#1	1964.8	45843.	3988.6
#2	2014.0	46032.	3828.3

Sample Name: CCVL-4576167 Acquired: 6/6/2017 17:33:26 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00993**	**.12795**	**.01876**	**.09895**	**.00948**	**.00106**	**.11484**	**.20164**	**.00515**	**.01038**	**.00978**	**.01728**
Stddev	.00015	.00414	.00337	.00326	.00016	.00008	.00165	.00376	.00031	.00026	.00032	.00159
%RSD	1.5544	3.2391	17.966	3.2972	1.6667	7.2696	1.4405	1.8638	6.1046	2.4814	3.2713	9.1947
#1	.01004	.13088	.01638	.10126	.00959	.00111	.11601	.20430	.00537	.01056	.01000	.01841
#2	.00982	.12502	.02115	.09664	.00937	.00100	.11367	.19899	.00492	.01020	.00955	.01616
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10335**	**3.1721**	**.02383**	**.19803**	**.01027**	**.01854**	F **1.3622**	**.03808**	**2.9864**	**.00843**	**.11305**	**.02016**
Stddev	.00375	.0170	.00177	.00456	.00002	.00096	.0026	.00071	.0793	.00296	.00422	.00243
%RSD	3.6275	.53526	7.4241	2.3037	.18388	5.1994	.18884	1.8641	2.6536	35.155	3.7346	12.055
#1	.10601	3.1601	.02508	.19480	.01026	.01922	1.3640	.03858	3.0424	.01053	.11007	.02188
#2	.10070	3.1841	.02258	.20125	.01029	.01786	1.3604	.03758	2.9304	.00634	.11604	.01844
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							1.0000					
Range							30.000%					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01116**	**.48268**	**1.0329**	**.09467**	**.01016**	**.01675**	**.01017**	**.01761**	**.06718**	**.00980**	**.02102**	**.01482**
Stddev	.00066	.02939	.0629	.00517	.00013	.00416	.00020	.00154	.02160	.00011	.00039	.00055
%RSD	5.9424	6.0891	6.0891	5.4640	1.2936	24.838	1.9643	8.7655	32.146	1.1052	1.8551	3.7029
#1	.01163	.46190	.98846	.09833	.01006	.01969	.01003	.01870	.08245	.00973	.02130	.01520
#2	.01069	.50346	1.0774	.09102	.01025	.01381	.01031	.01652	.05191	.00988	.02075	.01443
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.02000											
Range	-30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2041.6**	**46664.**	**4161.4**
Stddev	7.2	519.	89.7
%RSD	.35276	1.1125	2.1545
#1	2036.5	46296.	4224.8
#2	2046.6	47031.	4098.0

Sample Name: MB 280-375991/1-A Acquired: 6/6/2017 17:36:03 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/6 Custom ID2: Custom ID3:
Comment: 375991 6010c s

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**.00841**	**-.00155**	**.01517**	**.00092**	**.00015**	**.00245**	W **.15256**	**-.00006**
Stddev	.00001	.00124	.00035	.00013	.00012	.00012	.00549	.00131	.00003
%RSD	56.885	14.690	22.535	.83157	13.221	78.935	223.98	.86129	52.105
#1	.00003	.00929	-.00130	.01526	.00100	.00007	-.00143	.15349	-.00008
#2	.00001	.00754	-.00180	.01508	.00083	.00024	.00634	.15163	-.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								.10000	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00028**	**.00090**	**.00122**	**.03846**	**.07722**	**.00406**	**.03889**	**.00033**	**.00044**
Stddev	.00021	.00011	.00035	.00245	.01891	.00073	.00395	.00003	.00016
%RSD	76.192	12.644	28.404	6.3651	24.492	17.953	10.149	9.2294	35.646
#1	-.00042	.00082	.00097	.04019	.06385	.00458	.04169	.00035	.00033
#2	-.00013	.00098	.00146	.03673	.09060	.00355	.03610	.00031	.00055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.54554**	**-.00061**	**.01465**	**-.00047**	**.02010**	**.00142**	**-.00373**	**.03564**	**.07626**
Stddev	.01112	.00039	.00341	.00137	.00600	.00036	.00126	.01705	.03649
%RSD	2.0374	63.946	23.239	290.46	29.850	25.079	33.827	47.849	47.849
#1	.55340	-.00089	.01706	-.00144	.01586	.00168	-.00462	.04769	.10206
#2	.53768	-.00034	.01225	.00050	.02434	.00117	-.00284	.02358	.05046
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit	.50000								
Low Limit	-.50000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00767**	**.00059**	**.00365**	**.00020**	**-.00014**	W **-.05068**	**.00051**	**.00228**	**-.00054**
Stddev	.00051	.00014	.00241	.00047	.00014	.03089	.00037	.00025	.00272
%RSD	6.6019	23.012	66.064	238.13	97.740	60.956	71.685	11.140	502.43
#1	.00802	.00069	.00535	-.00013	-.00004	-.07252	.00025	.00246	.00138
#2	.00731	.00050	.00194	.00053	-.00024	-.02884	.00077	.00210	-.00246
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						.05000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2126.8**	**49018.**	**4294.3**
Stddev	43.7	731.	28.1
%RSD	2.0535	1.4917	.65455
#1	2157.7	48501.	4274.5
#2	2095.9	49535.	4314.2

Sample Name: LCS 280-375991/2-A Acquired: 6/6/2017 17:38:40 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 6010c s

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04727**	**2.2725**	**.96004**	**1.0000**	**1.9091**	**.04718**	**2.0529**	**46.122**	**.09772**
Stddev	.00037	.0226	.01416	.0125	.0021	.00023	.0241	.116	.00097
%RSD	.77952	.99485	1.4749	1.2456	.11025	.49359	1.1753	.25168	.99706
#1	.04753	2.2885	.97005	1.0088	1.9076	.04701	2.0700	46.040	.09841
#2	.04701	2.2565	.95003	.99122	1.9106	.04734	2.0358	46.204	.09703
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.46269**	W **.18695**	**.25108**	**1.0198**	**48.373**	**.97273**	**46.213**	**.46820**	**.90561**
Stddev	.00859	.00250	.00051	.0024	.040	.00133	.083	.00034	.01238
%RSD	1.8571	1.3387	.20454	.23339	.08295	.13687	.17881	.07319	1.3666
#1	.46877	.18872	.25072	1.0181	48.402	.97178	46.155	.46796	.91436
#2	.45661	.18518	.25145	1.0214	48.345	.97367	46.271	.46844	.89685
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.21000							
Low Limit		.19000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.117**	**.45729**	**10.267**	**.46353**	**2.0620**	**.46942**	**1.8438**	**2.3771**	**5.0869**
Stddev	.533	.00732	.157	.00500	.0227	.00799	.0158	.0056	.0120
%RSD	1.0853	1.6017	1.5254	1.0786	1.1003	1.7026	.85533	.23594	.23594
#1	49.494	.46246	10.378	.46707	2.0780	.47507	1.8550	2.3731	5.0784
#2	48.740	.45211	10.156	.46000	2.0459	.46377	1.8327	2.3810	5.0954
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8541**	**.95076**	**.95650**	**.94722**	**1.8522**	**1.9567**	**.47376**	**.46360**	**.48457**
Stddev	.0317	.00140	.00108	.00266	.0299	.0919	.00173	.00067	.00010
%RSD	1.7090	.14702	.11295	.28084	1.6147	4.6943	.36492	.14416	.01997
#1	1.8765	.94977	.95726	.94534	1.8734	1.8917	.47254	.46312	.48450
#2	1.8317	.95175	.95574	.94910	1.8311	2.0216	.47499	.46407	.48464
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2054.5**	**45880.**	**4242.6**
Stddev	7.1	411.	54.5
%RSD	.34789	.89603	1.2840
#1	2059.6	45589.	4204.1
#2	2049.5	46170.	4281.1

Sample Name: 280-97803-A-1-A Acquired: 6/6/2017 17:41:04 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00106**	**67.108**	**.05456**	**.02923**	**.29320**	**.00293**	**.00838**	**88.685**	**.00176**
Stddev	.00051	.124	.00053	.00118	.00071	.00001	.00021	.052	.00006
%RSD	48.100	.18546	.96594	4.0352	.24384	.38784	2.5099	.05822	3.1800
#1	-.00070	67.020	.05419	.03006	.29370	.00292	.00852	88.648	.00179
#2	-.00142	67.196	.05493	.02839	.29269	.00294	.00823	88.721	.00172
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04677**	**.08275**	**.20148**	**139.58**	**9.4042**	**.14017**	**42.031**	**5.5240**	**.00020**
Stddev	.00120	.00170	.00102	.24	.0563	.00176	.110	.0023	.00048
%RSD	2.5558	2.0535	.50803	.17319	.59834	1.2539	.26080	.04133	241.42
#1	.04762	.08395	.20076	139.41	9.3644	.14141	42.108	5.5256	-.00014
#2	.04593	.08155	.20220	139.75	9.4440	.13892	41.953	5.5224	.00054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.82882**	**.10232**	**5.3317**	**.08456**	**2.9348**	**-.00451**	**-.00591**	**3.8315**	**8.1993**
Stddev	.00071	.00384	.1261	.00040	.0629	.00581	.00787	.0967	.2070
%RSD	.08541	3.7489	2.3644	.47207	2.1417	128.92	133.31	2.5246	2.5246
#1	.82932	.10504	5.4208	.08428	2.9793	-.00040	-.00034	3.8999	8.3457
#2	.82832	.09961	5.2425	.08484	2.8904	-.00861	-.01147	3.7631	8.0530
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00761**	**.16599**	**.03256**	**.47960**	**.00395**	**-.03598**	**.12318**	**.37196**	**.01991**
Stddev	.00079	.00014	.00122	.00479	.00140	.01437	.00100	.00083	.00053
%RSD	10.449	.08440	3.7524	.99788	35.277	39.945	.81451	.22205	2.6430
#1	.00817	.16609	.03169	.47622	.00494	-.04615	.12247	.37138	.01954
#2	.00704	.16589	.03342	.48298	.00297	-.02582	.12389	.37254	.02028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2224.3**	**49708.**	**4653.1**
Stddev	8.4	607.	22.7
%RSD	.37686	1.2218	.48861
#1	2218.4	49279.	4669.1
#2	2230.2	50138.	4637.0

Sample Name: 280-97803-A-1-Asd@5 Acquired: 6/6/2017 17:43:36 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00011**	**14.782**	**.00666**	**.00859**	**.06411**	**.00078**	**.00690**	**19.591**	**.00035**
Stddev	.00048	.034	.00910	.00059	.00096	.00019	.00417	.078	.00017
%RSD	437.66	.23210	136.61	6.9051	1.4968	24.652	60.384	.39725	49.015
#1	-.00023	14.807	.01310	.00817	.06343	.00091	.00985	19.536	.00047
#2	.00045	14.758	.00023	.00901	.06479	.00064	.00395	19.646	.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01006**	**.01833**	**.04493**	**30.055**	**2.0216**	**.03777**	**9.3516**	**1.2139**	**.00041**
Stddev	.00024	.00125	.00020	.039	.0266	.00208	.0284	.0001	.00059
%RSD	2.3959	6.8129	.44781	.13105	1.3136	5.5185	.30322	.00915	144.60
#1	.01023	.01922	.04508	30.027	2.0028	.03630	9.3316	1.2138	-.00001
#2	.00989	.01745	.04479	30.082	2.0403	.03924	9.3717	1.2140	.00083
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.30811**	**.02220**	**1.1497**	**.01846**	**.63973**	**.00298**	**-.00176**	**.83145**	**1.7793**
Stddev	.00135	.00046	.0349	.00266	.02191	.00447	.00093	.05709	.1222
%RSD	.43716	2.0838	3.0371	14.421	3.4243	149.87	52.940	6.8663	6.8663
#1	.30907	.02253	1.1743	.02034	.65522	.00615	-.00242	.87182	1.8657
#2	.30716	.02187	1.1250	.01658	.62424	-.00018	-.00110	.79108	1.6929
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00190**	**.03666**	**.00819**	**.10450**	**-.00139**	**-.02852**	**.02690**	**.08340**	**.00231**
Stddev	.00079	.00018	.00005	.00089	.00246	.00434	.00029	.00048	.00309
%RSD	41.651	.47818	.62972	.84792	177.50	15.228	1.0776	.57380	133.94
#1	.00246	.03653	.00823	.10512	-.00313	-.02545	.02711	.08306	.00449
#2	.00134	.03678	.00815	.10387	.00035	-.03159	.02670	.08374	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2080.3**	**47408.**	**4219.5**
Stddev	25.7	213.	2.5
%RSD	1.2358	.44930	.05808
#1	2098.5	47558.	4217.8
#2	2062.1	47257.	4221.2

Sample Name: 280-97803-A-1-B MS Acquired: 6/6/2017 17:46:09 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04453**	**111.03**	**.95385**	**.92492**	**2.2521**	**.04865**	**1.9359**	**123.62**	**.09433**
Stddev	.00091	.27	.02213	.01426	.0086	.00008	.0324	.54	.00219
%RSD	2.0529	.24387	2.3198	1.5420	.38380	.15942	1.6718	.43480	2.3266
#1	.04389	110.84	.96950	.93500	2.2460	.04871	1.9588	123.24	.09588
#2	.04518	111.23	.93821	.91483	2.2583	.04860	1.9130	124.00	.09278
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47902**	**.29555**	**.45490**	**153.05**	**70.578**	**1.0727**	**88.325**	**6.5055**	**.84159**
Stddev	.00920	.00574	.00095	.39	.277	.0042	.018	.0327	.01289
%RSD	1.9215	1.9406	.20818	.25223	.39289	.39072	.01999	.50325	1.5322
#1	.48553	.29960	.45424	152.78	70.382	1.0697	88.337	6.4824	.85070
#2	.47251	.29149	.45557	153.32	70.774	1.0756	88.312	6.5287	.83247
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.555**	**.53446**	**14.006**	**.52028**	**5.1055**	**.26600**	**1.7379**	**9.7559**	**20.878**
Stddev	.164	.01094	.239	.00809	.1038	.00715	.0329	.1548	.331
%RSD	.33692	2.0471	1.7041	1.5544	2.0333	2.6888	1.8956	1.5872	1.5872
#1	48.671	.54220	14.175	.52600	5.1789	.27106	1.7612	9.8654	21.112
#2	48.440	.52673	13.838	.51456	5.0321	.26095	1.7146	9.6464	20.643
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.6612**	**1.0853**	**.90536**	**1.8015**	**1.6836**	**1.8829**	**.66704**	**.87038**	**.40068**
Stddev	.0267	.0027	.00181	.0034	.0271	.0465	.00080	.00115	.00071
%RSD	1.6087	.24852	.20013	.18699	1.6108	2.4698	.12006	.13226	.17802
#1	1.6801	1.0834	.90664	1.7991	1.7028	1.8501	.66761	.87119	.40018
#2	1.6423	1.0872	.90408	1.8039	1.6644	1.9158	.66647	.86956	.40119
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2147.6**	**48125.**	**4463.4**
Stddev	37.2	51.	7.5
%RSD	1.7337	.10555	.16850
#1	2173.9	48089.	4468.7
#2	2121.3	48161.	4458.1

Sample Name: 280-97803-A-1-C MSD Acquired: 6/6/2017 17:48:37 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04542**	**110.81**	**.96648**	**.92427**	**2.2482**	**.04923**	**1.9368**	**120.45**	**.09559**
Stddev	.00035	.22	.01148	.01461	.0005	.00019	.0322	.00	.00168
%RSD	.78117	.20069	1.1881	1.5802	.02413	.38126	1.6642	.00244	1.7609
#1	.04517	110.96	.97460	.93460	2.2486	.04936	1.9596	120.45	.09678
#2	.04567	110.65	.95836	.91394	2.2478	.04910	1.9140	120.45	.09440
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48843**	**.30000**	**.46167**	**155.24**	**69.722**	**1.0886**	**91.692**	**6.3116**	**.84209**
Stddev	.00802	.00551	.00201	.20	.011	.0044	.065	.0183	.01436
%RSD	1.6429	1.8368	.43570	.13150	.01609	.40543	.07142	.28939	1.7055
#1	.49411	.30390	.46310	155.10	69.714	1.0855	91.738	6.3246	.85225
#2	.48276	.29610	.46025	155.39	69.730	1.0917	91.645	6.2987	.83194
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.246**	**.54898**	**13.749**	**.51714**	**4.4488**	**.25023**	**1.7519**	**7.6621**	**16.397**
Stddev	.035	.00935	.231	.00549	.0666	.00364	.0248	.0273	.058
%RSD	.07198	1.7028	1.6831	1.0615	1.4961	1.4556	1.4151	.35641	.35641
#1	48.221	.55559	13.913	.52102	4.4959	.25281	1.7694	7.6428	16.356
#2	48.270	.54237	13.585	.51326	4.4017	.24766	1.7344	7.6814	16.438
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.6739**	**1.0555**	**.89766**	**1.6840**	**1.6917**	**1.8840**	**.65731**	**.88513**	**.40508**
Stddev	.0305	.0006	.00062	.0117	.0311	.0406	.00306	.00489	.00147
%RSD	1.8192	.05973	.06938	.69160	1.8397	2.1527	.46592	.55243	.36395
#1	1.6954	1.0559	.89810	1.6922	1.7137	1.8554	.65947	.88859	.40404
#2	1.6523	1.0550	.89722	1.6757	1.6696	1.9127	.65514	.88167	.40613
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2155.3**	**47839.**	**4558.0**
Stddev	.8	432.	5.2
%RSD	.03639	.90343	.11371
#1	2155.8	48145.	4554.4
#2	2154.7	47533.	4561.7

Sample Name: 280-97803-A-1-Apds Acquired: 6/6/2017 17:50:59 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04508**	**67.055**	**.22620**	**.11654**	**.37564**	**.04728**	**.00283**	**104.19**	**.04682**
Stddev	.00049	.470	.00287	.00063	.00138	.00005	.00193	.46	.00067
%RSD	1.0840	.70167	1.2698	.54095	.36830	.10179	68.232	.44311	1.4217
#1	.04473	66.722	.22417	.11698	.37467	.04731	.00420	103.86	.04729
#2	.04542	67.387	.22823	.11609	.37662	.04725	.00147	104.51	.04635
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.08857**	**.12445**	**.24610**	**138.39**	**27.653**	**.22985**	**59.128**	**5.4887**	**.04203**
Stddev	.00220	.00334	.00301	.87	.029	.00015	.191	.0245	.00030
%RSD	2.4784	2.6801	1.2222	.63007	.10662	.06665	.32237	.44563	.71048
#1	.09012	.12681	.24822	137.78	27.632	.22974	59.263	5.5060	.04182
#2	.08702	.12209	.24397	139.01	27.673	.22996	58.994	5.4714	.04224
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.831**	**.14399**	**7.1522**	**.16521**	**2.8683**	**.08388**	**.17577**	**8.3985**	**17.973**
Stddev	.116	.00295	.1072	.00311	.0547	.00577	.00760	.1098	.235
%RSD	.58301	2.0478	1.4994	1.8835	1.9085	6.8809	4.3258	1.3069	1.3069
#1	19.913	.14608	7.2280	.16741	2.9070	.07980	.17039	8.4762	18.139
#2	19.749	.14191	7.0764	.16301	2.8296	.08796	.18114	8.3209	17.807
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09484**	**.20845**	**.21905**	**.52466**	**.17686**	**.42940**	**.16803**	**.54586**	**.06623**
Stddev	.00252	.00076	.00159	.01129	.00550	.05924	.00113	.00118	.00105
%RSD	2.6518	.36655	.72580	2.1519	3.1123	13.797	.67522	.21684	1.5880
#1	.09662	.20791	.22017	.53264	.18075	.47129	.16884	.54669	.06549
#2	.09306	.20899	.21793	.51668	.17297	.38751	.16723	.54502	.06697
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2187.6**	**48535.**	**4461.4**
Stddev	17.0	415.	185.7
%RSD	.77643	.85425	4.1614
#1	2199.6	48242.	4592.6
#2	2175.6	48829.	4330.1

Sample Name: 280-97803-A-4-A Acquired: 6/6/2017 17:53:29 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00121**	**66.935**	**.03831**	**.02485**	**.27249**	**.00284**	**.00574**	**14.358**	**.00126**
Stddev	.00020	.260	.00451	.00049	.00154	.00003	.00056	.078	.00009
%RSD	16.491	.38821	11.765	1.9590	.56513	.92362	9.8174	.54539	7.1826
#1	-.00107	66.751	.04150	.02450	.27140	.00286	.00534	14.302	.00133
#2	-.00136	67.119	.03512	.02519	.27358	.00282	.00614	14.413	.00120
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03953**	**.06877**	**.15745**	**119.10**	**8.0119**	**.10677**	**18.911**	**5.3804**	**-.00061**
Stddev	.00066	.00188	.00118	.32	.1080	.00369	.014	.0164	.00057
%RSD	1.6760	2.7276	.75040	.27242	1.3477	3.4518	.07370	.30426	92.528
#1	.04000	.07010	.15829	118.87	7.9355	.10416	18.920	5.3920	-.00021
#2	.03906	.06744	.15662	119.33	8.0882	.10937	18.901	5.3689	-.00102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.62182**	**.08249**	**4.1237**	**.06904**	**1.2167**	**-.00528**	**-.00148**	**3.8375**	**8.2123**
Stddev	.00776	.00135	.0884	.00197	.0255	.00905	.00564	.0766	.1640
%RSD	1.2482	1.6365	2.1436	2.8525	2.0920	171.24	380.61	1.9966	1.9966
#1	.61633	.08345	4.1862	.07043	1.2347	.00111	.00251	3.7833	8.0963
#2	.62731	.08154	4.0612	.06765	1.1987	-.01168	-.00547	3.8917	8.3282
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00838**	**.04269**	**.02702**	**.45383**	**.00219**	**-.00907**	**.11625**	**.34272**	**.01116**
Stddev	.00033	.00030	.00079	.00256	.00034	.04441	.00049	.00123	.00311
%RSD	3.9972	.70496	2.9268	.56426	15.477	489.75	.42154	.35949	27.859
#1	.00861	.04248	.02758	.45564	.00195	.02233	.11659	.34185	.01336
#2	.00814	.04290	.02647	.45202	.00243	-.04047	.11590	.34359	.00896
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2214.9**	**49588.**	**4526.8**
Stddev	40.0	292.	20.1
%RSD	1.8072	.58927	.44292
#1	2186.6	49794.	4541.0
#2	2243.2	49381.	4512.6

Sample Name: 280-97803-A-5-A Acquired: 6/6/2017 17:56:01 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00137**	**38.199**	**.03570**	**.02490**	**.14079**	**.00171**	**.00364**	**114.13**	**.00087**
Stddev	.00002	.160	.00620	.00073	.00015	.00032	.00177	.21	.00010
%RSD	1.1996	.41776	17.377	2.9148	.10485	18.490	48.668	.18534	10.985
#1	-.00138	38.086	.04009	.02541	.14068	.00149	.00239	113.98	.00080
#2	-.00136	38.312	.03131	.02438	.14089	.00194	.00489	114.28	.00093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03306**	**.04740**	**.11641**	**87.637**	**7.3219**	**.07947**	**38.241**	**3.2994**	**-.00163**
Stddev	.00163	.00129	.00032	.341	.0498	.00314	.053	.0128	.00078
%RSD	4.9264	2.7316	.27717	.38921	.68010	3.9477	.13945	.38676	47.716
#1	.03421	.04832	.11664	87.396	7.2867	.07725	38.279	3.3084	-.00218
#2	.03191	.04649	.11618	87.878	7.3571	.08168	38.203	3.2903	-.00108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.61575**	**.06433**	**3.8630**	**.03330**	**.32097**	**-.00230**	**-.01228**	**4.3958**	**9.4070**
Stddev	.00947	.00197	.0954	.00090	.00574	.00249	.00197	.0186	.0398
%RSD	1.5374	3.0637	2.4696	2.7141	1.7877	108.28	16.070	.42313	.42313
#1	.60905	.06573	3.9305	.03394	.32503	-.00054	-.01089	4.3826	9.3789
#2	.62244	.06294	3.7956	.03266	.31691	-.00407	-.01368	4.4090	9.4352
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00642**	**.14496**	**.02937**	**.32546**	**.00270**	**-.04084**	**.06994**	**.21105**	**.03517**
Stddev	.00375	.00023	.00106	.00666	.00158	.00481	.00208	.00070	.00066
%RSD	58.404	.15901	3.6070	2.0469	58.610	11.785	2.9808	.33190	1.8661
#1	.00907	.14480	.02863	.33017	.00158	-.04425	.07142	.21155	.03563
#2	.00377	.14512	.03012	.32075	.00381	-.03744	.06847	.21056	.03470
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2126.7**	**46725.**	**4465.6**
Stddev	3.8	949.	17.7
%RSD	.17702	2.0306	.39611
#1	2124.1	47396.	4453.1
#2	2129.4	46055.	4478.2

Sample Name: 280-97803-A-6-A Acquired: 6/6/2017 17:58:34 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00259**	**93.146**	**.05582**	**.02247**	**.43533**	**.00414**	**.00738**	**16.201**	**.00177**
Stddev	.00024	.424	.00745	.00245	.00362	.00011	.00217	.194	.00030
%RSD	9.1514	.45515	13.338	10.923	.83094	2.6855	29.371	1.1994	16.995
#1	-.00242	92.847	.06109	.02074	.43277	.00406	.00585	16.064	.00155
#2	-.00275	93.446	.05056	.02421	.43789	.00421	.00891	16.339	.00198
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06293**	**.09986**	**.29708**	**186.32**	**9.4466**	**.17690**	**30.082**	W **10.940**	**.00018**
Stddev	.00191	.00179	.00073	1.04	.0926	.00066	.058	.046	.00019
%RSD	3.0409	1.7917	.24437	.55898	.98044	.37101	.19227	.42427	102.90
#1	.06428	.10112	.29760	185.58	9.3811	.17644	30.123	10.972	.00005
#2	.06158	.09859	.29657	187.06	9.5121	.17737	30.041	10.907	.00031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.55258**	**.13846**	**5.9415**	**.08335**	**1.1582**	**-.00564**	**-.00359**	**3.3237**	**7.1128**
Stddev	.03908	.00269	.1462	.00640	.0205	.00155	.00057	.0521	.1116
%RSD	7.0732	1.9413	2.4600	7.6819	1.7722	27.462	15.961	1.5688	1.5688
#1	.52494	.14037	6.0449	.07882	1.1727	-.00455	-.00400	3.3606	7.1917
#2	.58022	.13656	5.8382	.08787	1.1437	-.00674	-.00319	3.2869	7.0339
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00871**	**.06022**	**.05628**	**.45642**	**-.00047**	**-.02993**	**.16269**	**.52849**	**.01711**
Stddev	.00023	.00071	.00447	.00253	.00350	.00129	.00222	.00361	.00313
%RSD	2.6942	1.1753	7.9412	.55530	745.46	4.3150	1.3651	.68318	18.267
#1	.00888	.05972	.05944	.45821	-.00295	-.02902	.16426	.53104	.01490
#2	.00855	.06072	.05312	.45463	.00201	-.03085	.16112	.52594	.01932
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2281.1**	**49418.**	**4631.1**
Stddev	17.6	111.	35.4
%RSD	.77353	.22365	.76357
#1	2293.5	49496.	4656.2
#2	2268.6	49340.	4606.1

Sample Name: CCVH-4569081 Acquired: 6/6/2017 18:01:10 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00594**	**50.199**	**-.00198**	**.00292**	**.00024**	**-.00005**	**1.0200**	**.00601**	**.00015**	**-.00124**	**.00043**	**.02695**	**49.689**
Stddev	.00046	.211	.00690	.00067	.00008	.00002	.0218	.00087	.00022	.00013	.00029	.00077	.214
%RSD	7.7953	.41999	347.55	22.752	34.305	48.954	2.1409	14.478	152.51	10.438	67.137	2.8492	.42984
#1	-.00626	50.348	-.00686	.00340	.00018	-.00003	1.0354	.00539	-.00001	-.00115	.00064	.02749	49.840
#2	-.00561	50.050	.00289	.00245	.00029	-.00006	1.0046	.00662	.00030	-.00133	.00023	.02641	49.538
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07694**	**.00450**	**.06695**	**-.00032**	**-.00210**	**257.86**	**-.00002**	**.01252**	**.00082**	**5.0845**	**-.01282**	**-.00716**	**-.02218**
Stddev	.03691	.00250	.00243	.00021	.00070	1.59	.00006	.00070	.00234	.0794	.00084	.00132	.02241
%RSD	47.979	55.640	3.6223	63.671	33.156	.61609	321.88	5.6027	284.46	1.5618	6.5821	18.419	101.04
#1	.10304	.00273	.06866	-.00018	-.00259	258.99	-.00006	.01302	-.00083	5.1407	-.01222	-.00809	-.03803
#2	.05084	.00626	.06523	-.00047	-.00161	256.74	.00002	.01202	.00248	5.0284	-.01341	-.00622	-.00633
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.04746**	**-.00447**	**.00015**	**4.9605**	**.01735**	**-.00160**	**10.291**	**.01504**	**.00159**	**.11646**
Stddev	.04796	.00003	.00015	.0074	.00014	.00139	.006	.00064	.00001	.00301
%RSD	101.04	.65977	96.124	.14985	.80307	87.192	.05757	4.2612	.82444	2.5825
#1	-.08137	-.00449	.00005	4.9658	.01745	-.00061	10.287	.01459	.00160	.11433
#2	-.01355	-.00445	.00026	4.9553	.01725	-.00259	10.295	.01550	.00159	.11858
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1943.5**	**42067.**	**3872.6**
Stddev	28.8	935.	24.5
%RSD	1.4800	2.2220	.63255
#1	1923.2	41406.	3889.9
#2	1963.8	42728.	3855.3

Sample Name: CCV-4567764 Acquired: 6/6/2017 18:03:44 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50754**	F **.64775**	**1.0053**	**.49644**	**.50501**	**.50108**	**-.00210**	**5.0314**	**.50317**	**.50462**	**.50034**	**.51528**
Stddev	.00197	.01692	.0223	.00912	.00159	.00303	.00325	.0251	.01140	.00985	.01208	.00154
%RSD	.38779	2.6114	2.2195	1.8376	.31528	.60392	154.42	.49875	2.2661	1.9515	2.4149	.29912
#1	.50615	.65971	1.0211	.50289	.50389	.49894	.00019	5.0137	.51123	.51158	.50888	.51419
#2	.50894	.63579	.98951	.48999	.50614	.50322	-.00440	5.0492	.49510	.49765	.49179	.51637
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5599**	**51.402**	**1.0486**	**20.211**	**.50680**	**.49756**	**5.3727**	**.50407**	**1.0709**	**1.0113**	**.01376**	**.99432**
Stddev	.0130	.082	.0050	.023	.00169	.01019	.0672	.01090	.0296	.0217	.00539	.02118
%RSD	.50865	.15941	.47514	.11342	.33344	2.0477	1.2516	2.1630	2.7653	2.1455	39.157	2.1297
#1	2.5507	51.344	1.0451	20.227	.50561	.50477	5.4202	.51178	1.0918	1.0267	.01756	1.0093
#2	2.5691	51.460	1.0521	20.195	.50800	.49036	5.3251	.49636	1.0499	.99598	.00995	.97934
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.98017**	**5.0075**	**10.716**	**1.0039**	**.50789**	**.00518**	**.50335**	**1.0306**	**.06436**	**.50540**	**.50137**	**.49688**
Stddev	.03153	.0706	.151	.0188	.00219	.00204	.00052	.0240	.02696	.00356	.00342	.00250
%RSD	3.2163	1.4092	1.4092	1.8723	.43047	39.380	.10348	2.3288	41.892	.70523	.68155	.50337
#1	1.0025	4.9576	10.609	1.0172	.50634	.00663	.50298	1.0476	.04530	.50288	.49895	.49511
#2	.95788	5.0574	10.823	.99062	.50944	.00374	.50372	1.0137	.08343	.50792	.50378	.49865
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1970.7**	**43742.**	**3846.7**
Stddev	20.4	777.	65.3
%RSD	1.0332	1.7764	1.6985
#1	1956.3	44292.	3800.5
#2	1985.1	43193.	3892.9

Sample Name: CCB Acquired: 6/6/2017 18:06:12 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00038**	**.00363**	**-.00050**	**.00191**	**.00021**	**-.00005**	**.00237**	**-.00676**	**-.00012**	**-.00016**	**.00049**	**.00037**
Stddev	.00151	.00080	.00053	.00160	.00007	.00008	.00038	.00181	.00036	.00005	.00017	.00047
%RSD	396.37	21.942	106.06	83.407	33.672	163.49	16.060	26.766	311.90	29.991	34.207	126.79
#1	-.00069	.00306	-.00088	.00304	.00016	.00001	.00210	-.00804	.00014	-.00013	.00060	.00071
#2	.00145	.00419	-.00013	.00078	.00026	-.00010	.00264	-.00548	-.00037	-.00019	.00037	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00117**	**.07366**	W **.00670**	**-.00238**	**.00012**	**.00019**	**.13369**	**-.00072**	**.00480**	**-.00078**	**.00263**	**-.00242**
Stddev	.00278	.02097	.00405	.00253	.00002	.00012	.01081	.00036	.00377	.00214	.00548	.00079
%RSD	236.90	28.464	60.498	106.35	18.992	60.583	8.0851	50.166	78.624	276.06	208.76	32.400
#1	.00079	.08849	.00956	-.00059	.00011	.00027	.12604	-.00097	.00746	.00074	.00650	-.00298
#2	-.00314	.05884	.00383	-.00416	.00014	.00011	.14133	-.00046	.00213	-.00229	-.00125	-.00187
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500									
Low Limit			-.01000									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00578**	**-.00834**	**-.01784**	**-.00162**	**.00004**	**.00229**	**.00044**	**-.00025**	**-.03713**	**.00078**	**.00049**	**.00252**
Stddev	.00342	.00511	.01094	.00209	.00014	.00150	.00008	.00636	.04259	.00017	.00017	.00037
%RSD	59.173	61.296	61.296	128.79	336.91	65.423	17.567	2511.5	114.71	21.513	34.495	14.800
#1	-.00336	-.00472	-.01011	-.00310	.00014	.00335	.00038	.00424	-.06725	.00066	.00061	.00279
#2	-.00819	-.01195	-.02558	-.00014	-.00006	.00123	.00049	-.00475	-.00701	.00090	.00037	.00226
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1988.1**	**45529.**	**3979.1**
Stddev	4.3	1145.	108.0
%RSD	.21584	2.5148	2.7134
#1	1991.2	44720.	4055.5
#2	1985.1	46339.	3902.8

Sample Name: CCVL-4576167 Acquired: 6/6/2017 18:08:50 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01068**	F **.14410**	**.01607**	**.09766**	**.00975**	**.00101**	**.11698**	**.20096**	**.00525**	**.01014**	**.01015**	**.01632**
Stddev	.00012	.02463	.01083	.00113	.00031	.00016	.00854	.00401	.00011	.00008	.00049	.00065
%RSD	1.1544	17.090	67.385	1.1572	3.1731	15.971	7.3018	1.9967	2.1296	.74216	4.8669	3.9759
#1	.01077	.16151	.02372	.09846	.00953	.00089	.12302	.19812	.00533	.01020	.01050	.01587
#2	.01059	.12668	.00841	.09686	.00997	.00112	.11094	.20380	.00517	.01009	.00980	.01678
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000										
Range		30.000%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.12564**	**3.1336**	**.02531**	**.20827**	**.01066**	**.01832**	**1.1715**	**.03915**	**2.9953**	**.01143**	**.11990**	**.02208**
Stddev	.00185	.0050	.00215	.00843	.00005	.00034	.0089	.00163	.0656	.00113	.00467	.00417
%RSD	1.4736	.16023	8.5042	4.0487	.46989	1.8576	.76279	4.1562	2.1908	9.8665	3.8962	18.890
#1	.12433	3.1301	.02683	.21423	.01069	.01856	1.1652	.04030	3.0417	.01223	.12320	.02502
#2	.12695	3.1372	.02379	.20231	.01062	.01808	1.1778	.03800	2.9489	.01064	.11660	.01913
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01767**	**.47135**	**1.0087**	**.09581**	**.01010**	**.01568**	**.00978**	**.01778**	**.05586**	**.01016**	**.02048**	**.01124**
Stddev	.01284	.01093	.0234	.00136	.00008	.00084	.00000	.00145	.01140	.00074	.00125	.00372
%RSD	72.692	2.3181	2.3181	1.4164	.77809	5.3609	.00349	8.1746	20.416	7.2475	6.0844	33.076
#1	.02675	.47908	1.0252	.09677	.01015	.01627	.00978	.01675	.04780	.01068	.01960	.01387
#2	.00859	.46362	.99215	.09485	.01004	.01508	.00978	.01881	.06392	.00964	.02136	.00861
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2063.0**	**45865.**	**4036.2**
Stddev	26.7	1913.	101.6
%RSD	1.2947	4.1714	2.5170
#1	2044.1	47218.	4108.0
#2	2081.9	44512.	3964.4

Sample Name: 280-97803-A-7-A Acquired: 6/6/2017 18:11:28 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00087**	**32.450**	**.02107**	**.01540**	**.10019**	**.00150**	**.00635**	**53.499**	**.00074**
Stddev	.00100	.069	.00341	.00040	.00077	.00010	.00239	.146	.00006
%RSD	114.47	.21371	16.163	2.6280	.76650	6.9234	37.695	.27316	7.8926
#1	-.00017	32.499	.01867	.01511	.10074	.00157	.00804	53.603	.00078
#2	-.00158	32.401	.02348	.01569	.09965	.00142	.00465	53.396	.00070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02250**	**.03470**	**.07637**	**64.720**	**5.5652**	**.05955**	**16.979**	**2.2220**	**-.00153**
Stddev	.00028	.00054	.00178	.012	.0868	.00344	.029	.0021	.00097
%RSD	1.2314	1.5457	2.3285	.01861	1.5590	5.7688	.17159	.09226	63.629
#1	.02269	.03508	.07512	64.711	5.5039	.06198	17.000	2.2206	-.00084
#2	.02230	.03432	.07763	64.728	5.6266	.05712	16.959	2.2235	-.00221
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.59947**	**.04922**	**2.3909**	**.01716**	**.06000**	**-.00489**	**-.00310**	**4.6362**	**9.9216**
Stddev	.01210	.00163	.0476	.00289	.00122	.00469	.00549	.0212	.0453
%RSD	2.0181	3.3170	1.9895	16.822	2.0287	95.908	177.07	.45685	.45685
#1	.60802	.05037	2.4246	.01921	.06086	-.00158	-.00699	4.6512	9.9536
#2	.59091	.04807	2.3573	.01512	.05914	-.00821	.00078	4.6213	9.8895
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00664**	**.05330**	**.02842**	**.27314**	**.00340**	**-.03960**	**.05401**	**.12628**	**.02616**
Stddev	.00204	.00001	.00141	.00202	.00086	.01214	.00062	.00026	.00093
%RSD	30.684	.02198	4.9688	.74038	25.390	30.644	1.1508	.20477	3.5484
#1	.00809	.05331	.02942	.27171	.00279	-.04818	.05445	.12609	.02550
#2	.00520	.05329	.02742	.27457	.00401	-.03102	.05357	.12646	.02682
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2209.6**	**48763.**	**4407.3**
Stddev	2.3	282.	29.7
%RSD	.10456	.57910	.67407
#1	2211.3	48963.	4428.3
#2	2208.0	48563.	4386.2

Sample Name: 280-97803-A-8-A Acquired: 6/6/2017 18:14:01 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00089**	**57.344**	**.02719**	**.01984**	**.22250**	**.00268**	**.00796**	**11.779**	**.00134**
Stddev	.00011	.078	.00095	.00050	.00130	.00012	.00060	.039	.00020
%RSD	12.012	.13543	3.5060	2.5345	.58453	4.6289	7.5783	.32836	14.722
#1	-.00097	57.289	.02651	.02019	.22158	.00276	.00754	11.752	.00120
#2	-.00081	57.399	.02786	.01948	.22342	.00259	.00839	11.806	.00148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03879**	**.06674**	**.18647**	**110.26**	**7.5829**	**.11649**	**21.633**	**4.2496**	**-.00039**
Stddev	.00131	.00143	.00105	.09	.0649	.00280	.039	.0077	.00078
%RSD	3.3668	2.1392	.56237	.08350	.85632	2.4025	.18223	.18102	198.27
#1	.03972	.06775	.18573	110.20	7.5370	.11847	21.605	4.2441	.00016
#2	.03787	.06573	.18721	110.33	7.6288	.11451	21.661	4.2550	-.00095
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.53007**	**.08449**	**3.2583**	**.05559**	**.71104**	**-.00267**	**-.00060**	**4.0140**	**8.5899**
Stddev	.00981	.00127	.0683	.00002	.00100	.00167	.01174	.0329	.0704
%RSD	1.8507	1.5012	2.0957	.04001	.14029	62.421	1969.8	.82013	.82013
#1	.53701	.08539	3.3066	.05558	.71174	-.00149	.00771	3.9907	8.5401
#2	.52313	.08359	3.2100	.05561	.71033	-.00385	-.00890	4.0373	8.6398
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00756**	**.04487**	**.02962**	**.43491**	**.00294**	**-.01867**	**.10031**	**.30875**	**.02030**
Stddev	.00209	.00030	.00191	.00670	.00213	.02016	.00023	.00076	.00015
%RSD	27.652	.66875	6.4337	1.5412	72.540	107.96	.22595	.24555	.74304
#1	.00609	.04466	.02827	.43965	.00444	-.03293	.10047	.30929	.02019
#2	.00904	.04508	.03097	.43017	.00143	-.00442	.10015	.30822	.02040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2320.7**	**51065.**	**4568.5**
Stddev	8.5	132.	20.4
%RSD	.36755	.25795	.44686
#1	2326.7	51159.	4582.9
#2	2314.6	50972.	4554.1

Sample Name: 280-97803-A-9-A Acquired: 6/6/2017 18:16:33 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00101**	**50.842**	**.02771**	**.02198**	**.17603**	**.00227**	**.00012**	**11.712**	**.00078**
Stddev	.00011	.335	.00778	.00003	.00246	.00013	.00033	.082	.00011
%RSD	11.133	.65972	28.062	.13743	1.3990	5.7404	276.32	.69987	14.564
#1	-.00093	51.080	.03320	.02200	.17777	.00218	.00035	11.769	.00070
#2	-.00109	50.605	.02221	.02196	.17428	.00237	-.00011	11.654	.00086
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03219**	**.05183**	**.11184**	**92.603**	**8.2066**	**.08627**	**19.061**	**2.9616**	**-.00081**
Stddev	.00063	.00090	.00152	.984	.1314	.00065	.090	.0075	.00029
%RSD	1.9658	1.7361	1.3624	1.0624	1.6015	.75576	.47057	.25346	36.432
#1	.03263	.05247	.11077	93.298	8.2995	.08674	18.997	2.9563	-.00102
#2	.03174	.05119	.11292	91.907	8.1136	.08581	19.124	2.9669	-.00060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.68073**	**.07333**	**2.9470**	**.02356**	**.02539**	**-.00551**	**-.00347**	**5.7369**	**12.277**
Stddev	.00228	.00170	.0709	.00176	.01118	.00297	.00319	.1883	.403
%RSD	.33485	2.3190	2.4064	7.4558	44.048	53.971	91.777	3.2821	3.2821
#1	.68234	.07454	2.9972	.02232	.03330	-.00761	-.00573	5.8700	12.562
#2	.67911	.07213	2.8969	.02481	.01748	-.00341	-.00122	5.6038	11.992
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00793**	**.04415**	**.03751**	**.43834**	**-.00037**	**-.05835**	**.08105**	**.18872**	**.03687**
Stddev	.00300	.00002	.00056	.00319	.00273	.03358	.00076	.00062	.00297
%RSD	37.772	.04593	1.5008	.72846	732.14	57.556	.93360	.32848	8.0513
#1	.01005	.04416	.03791	.44059	-.00231	-.03460	.08052	.18916	.03477
#2	.00581	.04413	.03711	.43608	.00156	-.08209	.08159	.18828	.03897
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2176.4**	**48859.**	**4574.8**
Stddev	17.4	1423.	65.5
%RSD	.79908	2.9130	1.4310
#1	2164.1	49865.	4621.1
#2	2188.6	47853.	4528.5

Sample Name: 280-97803-A-10-A Acquired: 6/6/2017 18:19:05 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00031**	**62.971**	**.03270**	**.01933**	**.23975**	**.00263**	**.00546**	**13.648**	**.00111**
Stddev	.00005	.281	.01080	.00066	.00074	.00001	.00261	.081	.00018
%RSD	17.580	.44645	33.042	3.4324	.30681	.22112	47.904	.59704	16.000
#1	-.00027	62.772	.02506	.01980	.23923	.00263	.00361	13.590	.00098
#2	-.00034	63.170	.04034	.01886	.24027	.00262	.00730	13.705	.00123
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04143**	**.06428**	**.14886**	**116.83**	**7.2577**	**.10946**	**20.608**	**5.1822**	**.00045**
Stddev	.00067	.00160	.00202	.84	.0291	.00237	.109	.0260	.00041
%RSD	1.6120	2.4849	1.3575	.71996	.40153	2.1667	.53063	.50191	90.053
#1	.04190	.06541	.15029	116.24	7.2371	.10778	20.685	5.2006	.00016
#2	.04095	.06315	.14743	117.43	7.2783	.11114	20.530	5.1638	.00074
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49316**	**.08370**	**3.8280**	**.05515**	**.74640**	**-.00360**	**-.00549**	**4.1413**	**8.8623**
Stddev	.00550	.00280	.0788	.00197	.01691	.00754	.00133	.0767	.1642
%RSD	1.1145	3.3507	2.0582	3.5729	2.2660	209.26	24.288	1.8532	1.8532
#1	.49705	.08568	3.8837	.05654	.75836	-.00894	-.00454	4.1955	8.9785
#2	.48928	.08172	3.7723	.05376	.73444	.00173	-.00643	4.0870	8.7462
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00698**	**.03885**	**.03092**	**.37463**	**-.00067**	**-.06862**	**.10189**	**.30765**	**.01326**
Stddev	.00121	.00002	.00335	.00603	.00278	.01283	.00121	.00219	.00037
%RSD	17.269	.06126	10.845	1.6091	415.51	18.694	1.1863	.71201	2.7665
#1	.00784	.03887	.03329	.37889	-.00263	-.07769	.10103	.30610	.01300
#2	.00613	.03884	.02854	.37036	.00130	-.05955	.10274	.30920	.01352
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2189.8**	**48504.**	**4330.8**
Stddev	28.9	598.	69.4
%RSD	1.3190	1.2333	1.6028
#1	2169.4	48927.	4379.8
#2	2210.2	48081.	4281.7

Sample Name: 280-97803-A-11-A Acquired: 6/6/2017 18:21:36 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00308**	**124.90**	**.05258**	**.02443**	**.56206**	**.00621**	**.00168**	**36.329**	**.00304**
Stddev	.00052	.38	.00876	.00022	.00080	.00007	.00037	.079	.00024
%RSD	16.736	.30618	16.667	.89398	.14277	1.0838	22.018	.21759	8.0119
#1	-.00345	125.17	.05877	.02427	.56263	.00616	.00142	36.385	.00321
#2	-.00272	124.63	.04638	.02458	.56150	.00626	.00195	36.273	.00287
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10735**	**.14139**	**.22660**	**199.84**	**11.540**	**.23108**	**33.510**	**8.4478**	**.04061**
Stddev	.00333	.00430	.00082	.26	.036	.00437	.203	.0178	.00141
%RSD	3.1026	3.0398	.36093	.12988	.31230	1.8912	.60583	.21100	3.4751
#1	.10970	.14443	.22602	200.02	11.566	.23417	33.654	8.4352	.04161
#2	.10499	.13836	.22718	199.66	11.515	.22799	33.366	8.4604	.03961
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.65805**	**.14031**	**3.7096**	**.17004**	**.92740**	**-.00371**	**-.00266**	**3.3233**	**7.1118**
Stddev	.01355	.00505	.1141	.00392	.02630	.00113	.00484	.0527	.1128
%RSD	2.0588	3.5995	3.0755	2.3068	2.8360	30.401	181.95	1.5863	1.5863
#1	.64847	.14388	3.7903	.17281	.94600	-.00291	.00076	3.3606	7.1916
#2	.66763	.13674	3.6289	.16726	.90881	-.00451	-.00608	3.2860	7.0321
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01327**	**.14568**	**.10519**	**1.4153**	**.00451**	**-.02372**	**.22452**	**.60484**	**.04567**
Stddev	.00099	.00027	.00136	.0030	.00065	.02081	.00034	.00129	.00000
%RSD	7.4546	.18303	1.2945	.21499	14.433	87.754	.15270	.21366	.00724
#1	.01257	.14587	.10615	1.4175	.00405	-.03844	.22476	.60575	.04567
#2	.01397	.14549	.10422	1.4132	.00497	-.00900	.22428	.60393	.04567
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2312.1**	**51321.**	**4780.8**
Stddev	5.5	212.	35.7
%RSD	.23899	.41232	.74732
#1	2316.0	51171.	4806.1
#2	2308.2	51471.	4755.6

Sample Name: 280-97803-A-12-A Acquired: 6/6/2017 18:24:11 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00217**	**95.516**	**.06451**	**.01853**	**.48268**	**.00450**	**.00983**	**16.545**	**.00118**
Stddev	.00062	.515	.00023	.00100	.00235	.00010	.00557	.102	.00043
%RSD	28.353	.53868	.35622	5.3716	.48737	2.1943	56.675	.61494	36.698
#1	-.00174	95.152	.06435	.01782	.48102	.00443	.01377	16.473	.00087
#2	-.00261	95.880	.06467	.01923	.48435	.00457	.00589	16.617	.00148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07095**	**.11203**	**.48501**	**251.53**	**9.7459**	**.20991**	**37.763**	**5.3111**	**.00139**
Stddev	.00150	.00209	.00072	.76	.0739	.00227	.036	.0073	.00064
%RSD	2.1181	1.8656	.14916	.30063	.75828	1.0803	.09460	.13719	45.709
#1	.07201	.11351	.48552	251.00	9.6937	.21151	37.737	5.3059	.00184
#2	.06989	.11055	.48449	252.07	9.7982	.20830	37.788	5.3162	.00094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49622**	**.15664**	**6.3382**	**.05138**	**.36512**	**-.00299**	**-.00643**	**2.1652**	**4.6334**
Stddev	.00181	.00197	.0958	.00124	.00683	.00324	.00256	.0544	.1165
%RSD	.36382	1.2546	1.5116	2.4230	1.8702	108.35	39.750	2.5135	2.5135
#1	.49749	.15803	6.4060	.05226	.36995	-.00070	-.00462	2.2036	4.7158
#2	.49494	.15525	6.2705	.05050	.36029	-.00528	-.00823	2.1267	4.5511
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00823**	**.05275**	**.05171**	**.66370**	**.00139**	**-.00962**	**.16556**	**.56000**	**.05372**
Stddev	.00033	.00058	.00001	.00202	.00035	.05057	.00134	.00106	.00026
%RSD	4.0326	1.1005	.02806	.30456	25.287	525.89	.80641	.18954	.48515
#1	.00846	.05234	.05172	.66227	.00115	-.04537	.16461	.56075	.05390
#2	.00799	.05316	.05170	.66512	.00164	.02614	.16650	.55925	.05353
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2501.4**	**54197.**	**5050.8**
Stddev	21.9	783.	32.6
%RSD	.87652	1.4453	.64534
#1	2516.9	54751.	5027.8
#2	2485.9	53643.	5073.9

Sample Name: 280-97803-A-13-A Acquired: 6/6/2017 18:26:42 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00076**	**78.810**	**.04755**	**.01625**	**.33078**	**.00310**	**.01189**	**13.306**	**.00174**
Stddev	.00073	.122	.01056	.00143	.00115	.00009	.00128	.036	.00025
%RSD	96.371	.15466	22.211	8.8174	.34701	2.9316	10.795	.26822	14.555
#1	-.00127	78.896	.05502	.01726	.33159	.00303	.01280	13.332	.00156
#2	-.00024	78.724	.04008	.01523	.32997	.00316	.01098	13.281	.00192
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04439**	**.07547**	**.14776**	**133.27**	**7.2228**	**.12310**	**20.171**	**6.4930**	**-.00019**
Stddev	.00204	.00293	.00133	.06	.0478	.00193	.049	.2657	.00043
%RSD	4.5859	3.8836	.89694	.04622	.66173	1.5682	.24440	4.0920	234.37
#1	.04583	.07754	.14683	133.22	7.2566	.12173	20.206	6.6809	-.00049
#2	.04295	.07339	.14870	133.31	7.1890	.12446	20.136	6.3051	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.67727**	**.09427**	**4.4878**	**.07938**	**.84752**	**-.00824**	**-.00065**	**5.0504**	**10.808**
Stddev	.01084	.00178	.1235	.00106	.01570	.00628	.00729	.1405	.301
%RSD	1.6004	1.8883	2.7512	1.3385	1.8528	76.220	1124.7	2.7812	2.7812
#1	.68494	.09552	4.5751	.08013	.85862	-.01268	-.00580	5.1497	11.020
#2	.66961	.09301	4.4005	.07862	.83641	-.00380	.00451	4.9511	10.595
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00465**	**.04104**	**.02908**	**.39837**	**-.00050**	**-.03105**	**.12882**	**.37890**	**.01250**
Stddev	.00028	.00041	.00129	.01663	.00001	.00894	.00082	.00161	.00031
%RSD	5.9362	.99843	4.4302	4.1749	1.2041	28.778	.63892	.42427	2.5174
#1	.00484	.04075	.02817	.38661	-.00049	-.03737	.12823	.37777	.01227
#2	.00445	.04133	.02999	.41013	-.00050	-.02473	.12940	.38004	.01272
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2215.4**	**48518.**	**4411.3**
Stddev	22.8	1165.	10.8
%RSD	1.0291	2.4008	.24392
#1	2231.5	47694.	4419.0
#2	2199.3	49341.	4403.7

Sample Name: 280-97803-A-14-A Acquired: 6/6/2017 18:29:20 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00088**	**70.148**	**.04245**	**.01799**	**.31166**	**.00299**	**.00536**	**13.288**	**.00173**
Stddev	.00019	.406	.00165	.00058	.00128	.00001	.00394	.003	.00008
%RSD	21.942	.57811	3.8808	3.2226	.41068	.43968	73.545	.02367	4.6225
#1	-.00074	70.435	.04362	.01840	.31257	.00300	.00814	13.286	.00168
#2	-.00101	69.861	.04129	.01758	.31076	.00298	.00257	13.291	.00179
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04086**	**.07239**	**.14141**	**123.89**	**6.8717**	**.11276**	**18.992**	**5.8907**	**.00019**
Stddev	.00142	.00196	.00121	.51	.0733	.00315	.110	.0208	.00027
%RSD	3.4674	2.7042	.85361	.41458	1.0672	2.7906	.57880	.35341	138.77
#1	.04186	.07377	.14056	124.25	6.9236	.11053	18.915	5.8760	.00038
#2	.03986	.07100	.14227	123.53	6.8199	.11498	19.070	5.9054	.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50523**	**.08488**	**4.2264**	**.07812**	**.87122**	**-.00282**	**.00881**	**3.6514**	**7.8139**
Stddev	.00965	.00153	.1189	.00074	.02460	.00382	.00633	.0652	.1394
%RSD	1.9103	1.8001	2.8139	.94886	2.8238	135.37	71.915	1.7842	1.7842
#1	.51205	.08596	4.3105	.07864	.88862	-.00553	.00433	3.6974	7.9125
#2	.49841	.08380	4.1423	.07759	.85383	-.00012	.01329	3.6053	7.7153
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00952**	**.04005**	**.02776**	**.42846**	**.00050**	**.00405**	**.12532**	**.34456**	**.01164**
Stddev	.00089	.00002	.00420	.00353	.00155	.02432	.00146	.00288	.00224
%RSD	9.3438	.05601	15.136	.82340	309.46	600.63	1.1625	.83589	19.214
#1	.01015	.04007	.03073	.43095	.00160	.02124	.12429	.34252	.01005
#2	.00889	.04004	.02479	.42597	-.00060	-.01315	.12635	.34660	.01322
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2230.9**	**48741.**	**4394.3**
Stddev	28.1	1548.	266.5
%RSD	1.2610	3.1766	6.0646
#1	2211.1	49835.	4205.9
#2	2250.8	47646.	4582.8

Sample Name: CCVH-4569081 Acquired: 6/6/2017 18:31:52 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00583**	**49.224**	**-.00374**	**.00143**	**.00083**	**.00004**	**1.0101**	**.00049**	**.00015**	**-.00080**	**.00013**	**.02543**	**48.852**
Stddev	.00084	.308	.00200	.00128	.00024	.00006	.0260	.00524	.00001	.00115	.00016	.00035	.013
%RSD	14.440	.62567	53.393	89.440	29.549	161.87	2.5694	1068.4	7.8995	144.37	124.23	1.3824	.02636
#1	-.00643	49.006	-.00233	.00053	.00065	-.00001	1.0284	.00419	.00016	-.00161	.00024	.02568	48.861
#2	-.00524	49.442	-.00515	.00234	.00100	.00008	.99175	-.00321	.00015	.00002	.00002	.02518	48.843
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01748**	**.00651**	**.06449**	**-.00073**	**-.00230**	**252.68**	**-.00036**	**.01379**	**.00057**	**5.0162**	**-.00957**	**-.00745**	**-.01007**
Stddev	.03215	.00144	.00868	.00037	.00019	1.42	.00093	.00204	.00055	.1474	.00380	.01285	.02347
%RSD	183.94	22.119	13.454	51.426	8.3624	.56329	260.82	14.825	96.327	2.9385	39.682	172.52	233.15
#1	.04022	.00753	.05836	-.00046	-.00217	251.67	.00030	.01235	.00018	5.1205	-.00689	-.01654	.00653
#2	-.00526	.00549	.07063	-.00099	-.00244	253.69	-.00102	.01524	.00097	4.9120	-.01226	.00164	-.02666
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.02154**	**-.00177**	**.00032**	**4.8850**	**.01672**	**.00115**	**10.145**	**.01429**	**.00172**	**.11644**
Stddev	.05022	.00021	.00011	.0212	.00009	.00017	.040	.00040	.00041	.00252
%RSD	233.15	11.750	33.738	.43313	.55882	15.025	.39212	2.7889	23.650	2.1654
#1	.01397	-.00162	.00039	4.9000	.01678	.00103	10.173	.01401	.00201	.11465
#2	-.05705	-.00191	.00024	4.8700	.01665	.00128	10.117	.01457	.00143	.11822
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1953.3**	**43947.**	**3948.4**
Stddev	5.6	1590.	200.6
%RSD	.28484	3.6185	5.0802
#1	1957.2	45071.	4090.3
#2	1949.4	42822.	3806.6

Sample Name: CCV-4567764 Acquired: 6/6/2017 18:34:27 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49420**	F **.63369**	**.95466**	**.47768**	**.49035**	**.48588**	**-.00018**	**4.8950**	**.48681**	**.49057**	**.48481**	**.50258**
Stddev	.00236	.01253	.02057	.00350	.00076	.00123	.00354	.0260	.00774	.00811	.00797	.00229
%RSD	.47745	1.9774	2.1551	.73306	.15462	.25319	1986.2	.53130	1.5898	1.6526	1.6444	.45520
#1	.49253	.64255	.96921	.48016	.49089	.48675	-.00268	4.9134	.49228	.49631	.49045	.50097
#2	.49587	.62483	.94012	.47521	.48982	.48501	.00233	4.8766	.48133	.48484	.47918	.50420
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4612**	**50.146**	**1.0206**	**19.650**	**.49440**	**.48245**	**5.2472**	**.48711**	**1.0361**	**.98259**	**.01210**	**.96327**
Stddev	.0040	.091	.0089	.104	.00131	.00705	.0114	.00624	.0247	.01216	.00354	.02517
%RSD	.16446	.18095	.86883	.53126	.26528	1.4616	.21745	1.2814	2.3818	1.2376	29.236	2.6128
#1	2.4640	50.082	1.0144	19.576	.49347	.48744	5.2552	.49152	1.0535	.99119	.00959	.98107
#2	2.4583	50.210	1.0269	19.724	.49532	.47747	5.2391	.48270	1.0186	.97399	.01460	.94547
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.94436**	**4.8923**	**10.470**	**.97450**	**.49291**	**.00386**	**.48934**	**1.0015**	**.04413**	**.49180**	**.48955**	**.48513**
Stddev	.00238	.0148	.032	.01517	.00191	.00171	.00219	.0103	.03689	.00154	.00054	.00154
%RSD	.25184	.30289	.30289	1.5565	.38843	44.309	.44783	1.0261	83.611	.31314	.10944	.31733
#1	.94604	4.8819	10.447	.98523	.49426	.00507	.48779	1.0088	.01804	.49071	.48917	.48622
#2	.94268	4.9028	10.492	.96378	.49155	.00265	.49089	.99424	.07022	.49288	.48993	.48405
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1979.1**	**44005.**	**3883.0**
Stddev	15.2	1132.	157.3
%RSD	.76677	2.5718	4.0498
#1	1989.9	44805.	3994.2
#2	1968.4	43205.	3771.8

Sample Name: CCB Acquired: 6/6/2017 18:36:56 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00021**	**.00475**	**.00023**	**.00070**	**.00021**	**.00021**	**.00004**	**-.00448**	**-.00022**	**.00015**	**.00037**	**.00106**
Stddev	.00002	.00032	.00118	.00073	.00001	.00010	.00214	.00035	.00013	.00010	.00044	.00069
%RSD	7.7242	6.7188	504.10	103.92	5.5607	44.444	4900.0	7.7382	58.778	64.788	120.56	64.676
#1	-.00020	.00453	-.00060	.00121	.00021	.00028	-.00147	-.00473	-.00013	.00008	.00005	.00058
#2	-.00023	.00498	.00107	.00019	.00020	.00015	.00156	-.00424	-.00031	.00021	.00068	.00155
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01243**	**.02102**	W **.00691**	**.00296**	**.00019**	**-.00011**	**.10727**	**-.00138**	**.00644**	**.00113**	**-.00196**	**.00201**
Stddev	.00680	.12066	.00283	.00397	.00010	.00002	.01593	.00011	.00149	.00017	.00105	.00268
%RSD	54.732	574.15	40.959	134.19	55.938	19.534	14.849	7.9738	23.140	15.012	53.594	133.41
#1	.01724	.10633	.00491	.00577	.00026	-.00010	.11853	-.00131	.00749	.00101	-.00122	.00391
#2	.00762	-.06430	.00892	.00015	.00011	-.00013	.09601	-.00146	.00538	.00125	-.00271	.00011
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500									
Low Limit			-.01000									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00276**	**-.00329**	**-.00703**	**.00009**	**.00007**	**.00234**	**.00043**	**.00094**	**-.01283**	**-.00032**	**.00006**	**-.00506**
Stddev	.00490	.00229	.00491	.00164	.00000	.00295	.00031	.00179	.01455	.00041	.00030	.00076
%RSD	177.31	69.805	69.805	1729.9	2.4201	125.97	73.572	190.21	113.43	126.88	541.78	14.962
#1	.00070	-.00166	-.00356	-.00107	.00007	.00443	.00020	.00221	-.02311	-.00003	.00027	-.00453
#2	-.00623	-.00491	-.01050	.00126	.00007	.00026	.00065	-.00033	-.00254	-.00062	-.00016	-.00560
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2016.6**	**43952.**	**3817.4**
Stddev	53.1	912.	107.4
%RSD	2.6327	2.0740	2.8125
#1	1979.0	44597.	3893.3
#2	2054.1	43308.	3741.5

Sample Name: CCVL-4576167 Acquired: 6/6/2017 18:39:34 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01029**	**.12821**	**.01494**	**.09543**	**.00961**	**.00094**	**.11337**	**.19798**	**.00522**	**.00977**	**.00979**	**.01560**
Stddev	.00048	.00522	.01508	.00107	.00035	.00014	.00012	.00202	.00015	.00023	.00003	.00058
%RSD	4.6359	4.0716	100.99	1.1185	3.6862	15.263	.10454	1.0214	2.8182	2.3550	.28734	3.7031
#1	.00996	.13190	.02560	.09619	.00936	.00104	.11345	.19941	.00533	.00993	.00981	.01601
#2	.01063	.12452	.00427	.09468	.00986	.00084	.11329	.19655	.00512	.00960	.00977	.01519
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11288**	**3.0195**	**.02493**	**.20065**	**.01044**	**.01844**	**1.1148**	**.03875**	**2.9535**	**.01045**	**.10484**	**.01813**
Stddev	.00094	.0543	.00253	.00422	.00012	.00054	.0192	.00056	.0629	.00019	.01021	.00184
%RSD	.83515	1.7997	10.141	2.1015	1.1742	2.9368	1.7237	1.4538	2.1300	1.8534	9.7376	10.151
#1	.11355	3.0579	.02672	.20363	.01053	.01882	1.1012	.03915	2.9980	.01059	.11206	.01943
#2	.11222	2.9811	.02314	.19766	.01035	.01806	1.1284	.03835	2.9090	.01032	.09762	.01683
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01224**	**.44843**	**.95964**	**.09412**	**.00994**	**.01860**	**.00969**	**.01915**	F **.03490**	**.00977**	**.01977**	**.01505**
Stddev	.00362	.01236	.02645	.00297	.00007	.00052	.00025	.00046	.03068	.00033	.00008	.00117
%RSD	29.552	2.7565	2.7565	3.1556	.69307	2.7706	2.5458	2.3992	87.892	3.3671	.40271	7.7639
#1	.00968	.43969	.94093	.09622	.00999	.01823	.00987	.01883	.05660	.01000	.01983	.01422
#2	.01479	.45717	.97834	.09202	.00989	.01896	.00952	.01948	.01321	.00953	.01972	.01587
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.02000								.06000			
Range	-30.000%								-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2053.3**	**45811.**	**3985.6**
Stddev	.6	690.	162.6
%RSD	.02766	1.5052	4.0789
#1	2053.7	45324.	4100.5
#2	2052.9	46299.	3870.6

Sample Name: MB 280-375948/1-A Acquired: 6/6/2017 18:42:11 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/6 Custom ID2: Custom ID3:
Comment: 375948 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**.00480**	**.00204**	**.00024**	**-.00000**	**.00009**	**.00283**	**.00249**	**-.00012**
Stddev	.00007	.00100	.00257	.00072	.00050	.00009	.00206	.00435	.00013
%RSD	109.53	20.798	125.70	293.19	22195.	104.43	72.741	174.66	112.04
#1	.00011	.00409	.00023	.00075	.00035	.00016	.00138	-.00059	-.00002
#2	.00001	.00551	.00386	-.00026	-.00036	.00002	.00429	.00557	-.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00009**	**.00039**	**.00152**	**.02371**	**.00283**	W **.00628**	**.00275**	**.00012**	**.00061**
Stddev	.00011	.00054	.00012	.00011	.03539	.00116	.00703	.00003	.00041
%RSD	117.96	138.47	7.7451	.47038	1252.4	18.396	255.84	21.444	67.133
#1	-.00017	.00001	.00160	.02363	-.02220	.00546	.00772	.00010	.00090
#2	-.00002	.00078	.00143	.02379	.02785	.00710	-.00222	.00014	.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						.00500			
Low Limit						-.00500			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11294**	**-.00103**	**.00906**	**-.00031**	**.00127**	**-.00229**	**.00315**	**.00583**	**.01248**
Stddev	.00373	.00049	.00334	.00220	.00737	.00122	.00120	.00160	.00342
%RSD	3.3001	47.568	36.824	708.32	578.41	53.301	38.230	27.414	27.414
#1	.11557	-.00068	.01142	-.00187	-.00394	-.00143	.00230	.00696	.01490
#2	.11030	-.00138	.00670	.00125	.00649	-.00316	.00400	.00470	.01006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00009**	**.00008**	**.00320**	**.00060**	**.00429**	**.00095**	**-.00057**	**.00186**	**-.00290**
Stddev	.00063	.00004	.00024	.00032	.00142	.00693	.00007	.00031	.00214
%RSD	669.57	54.491	7.3826	52.902	33.000	727.71	11.918	16.512	73.787
#1	.00035	.00005	.00336	.00038	.00329	.00585	-.00062	.00165	-.00139
#2	-.00054	.00011	.00303	.00083	.00529	-.00395	-.00052	.00208	-.00441
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2084.0**	**46802.**	**4165.5**
Stddev	14.6	29.	138.3
%RSD	.70105	.06091	3.3198
#1	2094.3	46822.	4067.8
#2	2073.6	46781.	4263.3

Sample Name: LCS 280-375948/2-A Acquired: 6/6/2017 18:44:49 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04992**	F **2.4267**	**1.0137**	**1.0011**	**2.0070**	**.04990**	**2.1628**	**48.501**	**.10463**
Stddev	.00028	.0481	.0239	.0192	.0074	.00001	.0508	.104	.00209
%RSD	.56286	1.9812	2.3585	1.9162	.36685	.01139	2.3483	.21488	1.9933
#1	.05012	2.4607	1.0306	1.0147	2.0018	.04991	2.1987	48.428	.10610
#2	.04972	2.3927	.99681	.98754	2.0122	.04990	2.1269	48.575	.10315
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit		2.2299							
Low Limit		1.7300							

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49134**	**.19702**	**.26775**	**.99741**	**51.166**	**1.0292**	**49.771**	**.50213**	**.95772**
Stddev	.00967	.00382	.00048	.00149	.013	.0038	.016	.00136	.01816
%RSD	1.9688	1.9407	.17855	.14891	.02574	.37354	.03164	.27107	1.8960
#1	.49818	.19973	.26809	.99636	51.175	1.0265	49.760	.50117	.97056
#2	.48450	.19432	.26742	.99846	51.157	1.0319	49.782	.50309	.94488
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**52.944**	**.48556**	**10.987**	**.49151**	**2.1323**	**.51471**	**1.9746**	**9.8483**	**21.075**
Stddev	.217	.01079	.204	.01227	.0341	.01536	.0476	.0954	.204
%RSD	.40929	2.2213	1.8613	2.4972	1.5972	2.9839	2.4113	.96839	.96839
#1	53.098	.49319	11.131	.50019	2.1564	.52557	2.0083	9.7808	20.931
#2	52.791	.47793	10.842	.48283	2.1082	.50385	1.9409	9.9157	21.220
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9717**	**1.0039**	**1.0305**	**1.0117**	**1.9786**	**2.0898**	**.50897**	**.49639**	**.51441**
Stddev	.0354	.0023	.0066	.0015	.0390	.0332	.00088	.00111	.00233
%RSD	1.7951	.23111	.63837	.14417	1.9692	1.5871	.17340	.22323	.45382
#1	1.9967	1.0022	1.0258	1.0106	2.0061	2.1133	.50959	.49717	.51276
#2	1.9467	1.0055	1.0351	1.0127	1.9510	2.0664	.50835	.49560	.51606
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1970.5**	**44738.**	**4073.0**
Stddev	1.3	108.	73.6
%RSD	.06345	.24142	1.8067
#1	1969.6	44814.	4021.0
#2	1971.4	44662.	4125.1

Sample Name: 280-97780-D-1-A Acquired: 6/6/2017 18:47:14 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**.00933**	**.00016**	**.16510**	**.11965**	**.00003**	**.00162**	**183.04**	**.00095**
Stddev	.00022	.00048	.00441	.00678	.00011	.00003	.00200	.60	.00033
%RSD	1393.8	5.1405	2753.7	4.1063	.09076	84.806	123.90	.32947	35.011
#1	-.00017	.00967	-.00296	.16989	.11972	.00001	.00020	183.47	.00119
#2	.00014	.00899	.00328	.16031	.11957	.00005	.00304	182.62	.00072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00033**	**.00146**	**.00503**	**.04893**	**8.7223**	**.16885**	**40.363**	**.00177**	**-.00010**
Stddev	.00007	.00067	.00153	.00353	.0051	.00011	.058	.00203	.00010
%RSD	21.083	46.107	30.445	7.2065	.05872	.06282	.14398	114.67	106.36
#1	-.00038	.00194	.00611	.04644	8.7259	.16893	40.404	.00321	-.00017
#2	-.00028	.00099	.00395	.05143	8.7187	.16878	40.322	.00034	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**202.67**	**-.00026**	**.00983**	**-.00103**	**71.886**	**.00185**	**-.00302**	**15.897**	**34.020**
Stddev	1.56	.00105	.00239	.00280	1.742	.00331	.00089	.033	.070
%RSD	.77086	403.08	24.296	271.49	2.4234	179.15	29.511	.20702	.20702
#1	203.78	.00048	.00814	.00095	73.118	-.00049	-.00365	15.921	34.070
#2	201.57	-.00100	.01151	-.00301	70.654	.00419	-.00239	15.874	33.970
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00016**	**1.7243**	**.00068**	**.00098**	**.00354**	**-.01262**	**.00565**	**.00148**	**-.00098**
Stddev	.00118	.0058	.00028	.00010	.00262	.04065	.00022	.00001	.00049
%RSD	756.90	.33532	40.578	10.636	74.119	322.18	3.9551	.50919	50.202
#1	-.00099	1.7284	.00049	.00091	.00539	.01613	.00581	.00148	-.00132
#2	.00068	1.7202	.00088	.00106	.00168	-.04136	.00549	.00149	-.00063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1972.0**	**42875.**	**3859.0**
Stddev	15.3	1334.	22.1
%RSD	.77360	3.1108	.57208
#1	1982.7	41932.	3843.4
#2	1961.2	43818.	3874.6

Sample Name: 280-97780-D-1-Asd@5 Acquired: 6/6/2017 18:49:48 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00123**	**.00574**	**.00108**	**.03379**	**.02457**	**-.00009**	**.00351**	**36.742**	**-.00002**
Stddev	.00025	.00148	.00900	.00011	.00027	.00021	.00203	.012	.00024
%RSD	19.854	25.839	833.26	.33380	1.1103	235.51	57.762	.03398	1506.5
#1	.00106	.00679	.00744	.03387	.02438	.00006	.00208	36.751	.00015
#2	.00141	.00469	-.00528	.03371	.02477	-.00023	.00494	36.733	-.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00024**	**.00088**	**.00198**	**.01207**	**1.7983**	**.03720**	**8.3047**	**.00031**	**-.00013**
Stddev	.00090	.00015	.00009	.00310	.0527	.00352	.0091	.00008	.00095
%RSD	376.56	17.580	4.5454	25.690	2.9297	9.4583	.10951	25.519	722.14
#1	-.00088	.00077	.00205	.01426	1.8355	.03471	8.3111	.00025	.00054
#2	.00040	.00098	.00192	.00987	1.7610	.03969	8.2983	.00036	-.00080
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**41.776**	**-.00097**	**.00461**	**-.00063**	**13.843**	**.00365**	**-.00966**	**3.1292**	**6.6965**
Stddev	.483	.00036	.00248	.00085	.309	.00484	.00544	.0128	.0274
%RSD	1.1553	37.033	53.792	135.20	2.2313	132.70	56.316	.40945	.40945
#1	42.117	-.00123	.00637	-.00003	14.061	.00022	-.01351	3.1382	6.7158
#2	41.435	-.00072	.00286	-.00123	13.625	.00707	-.00581	3.1201	6.6771
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00131**	**.34534**	**.00380**	**.00026**	**.00476**	**-.00130**	**.00150**	**.00215**	**.00032**
Stddev	.00017	.00040	.00067	.00001	.00252	.02074	.00004	.00092	.00068
%RSD	13.173	.11620	17.561	3.2345	53.007	1594.9	2.9576	42.648	210.99
#1	.00119	.34562	.00427	.00027	.00298	.01337	.00153	.00279	.00081
#2	.00143	.34506	.00333	.00026	.00654	-.01597	.00147	.00150	-.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2011.1**	**45362.**	**4061.9**
Stddev	3.3	1147.	132.4
%RSD	.16272	2.5293	3.2597
#1	2013.4	44551.	4155.5
#2	2008.8	46173.	3968.2

Sample Name: 280-97780-D-1-B MS Acquired: 6/6/2017 18:52:24 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05168**	**2.3931**	**1.0620**	**1.1782**	**2.1755**	**.05078**	W **2.1941**	**228.79**	**.10757**
Stddev	.00094	.0363	.0213	.0135	.0004	.00018	.0354	.00	.00157
%RSD	1.8284	1.5166	2.0091	1.1431	.01720	.36106	1.6138	.00158	1.4619
#1	.05235	2.4187	1.0771	1.1878	2.1758	.05091	2.2192	228.79	.10868
#2	.05101	2.3674	1.0469	1.1687	2.1753	.05065	2.1691	228.80	.10646
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48706**	**.20147**	**.27232**	**1.0229**	**61.134**	**1.2010**	**89.225**	**.50132**	**.97722**
Stddev	.00599	.00222	.00124	.0013	.029	.0011	.064	.00053	.01576
%RSD	1.2305	1.1030	.45672	.12870	.04734	.09435	.07152	.10500	1.6128
#1	.49130	.20304	.27320	1.0239	61.113	1.2002	89.270	.50169	.98836
#2	.48282	.19990	.27144	1.0220	61.154	1.2018	89.180	.50094	.96607
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**250.78**	**.48296**	**11.585**	**.47885**	**73.764**	**.52242**	**2.0459**	**25.418**	**54.395**
Stddev	.13	.00578	.156	.00605	1.086	.00637	.0361	.043	.091
%RSD	.05265	1.1962	1.3467	1.2639	1.4729	1.2185	1.7651	.16739	.16739
#1	250.88	.48704	11.696	.48313	74.533	.52692	2.0714	25.388	54.331
#2	250.69	.47887	11.475	.47457	72.996	.51792	2.0203	25.448	54.459
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9810**	**2.7413**	**1.0462**	**1.0292**	**1.8775**	**2.0902**	**.52168**	**.49783**	**.52286**
Stddev	.0301	.0014	.0035	.0011	.0250	.0487	.00040	.00014	.00183
%RSD	1.5181	.05003	.33618	.10494	1.3300	2.3303	.07607	.02910	.35014
#1	2.0023	2.7423	1.0487	1.0299	1.8951	2.0558	.52196	.49772	.52415
#2	1.9598	2.7404	1.0437	1.0284	1.8598	2.1247	.52140	.49793	.52156
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1955.5**	**43928.**	**4148.1**
Stddev	17.4	18.	25.2
%RSD	.88982	.04118	.60818
#1	1967.8	43915.	4130.2
#2	1943.2	43940.	4165.9

Sample Name: 280-97780-D-1-C MSD Acquired: 6/6/2017 18:54:47 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05120**	**2.3935**	**1.0783**	**1.1763**	**2.2007**	**.05155**	W **2.1850**	**232.47**	**.10749**
Stddev	.00137	.0292	.0084	.0128	.0060	.00002	.0286	.56	.00128
%RSD	2.6691	1.2217	.78304	1.0915	.27375	.03260	1.3089	.24189	1.1862
#1	.05024	2.4142	1.0842	1.1854	2.1965	.05153	2.2052	232.08	.10839
#2	.05217	2.3729	1.0723	1.1672	2.2050	.05156	2.1648	232.87	.10659
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48796**	**.20258**	**.27450**	**1.0295**	**62.210**	**1.2284**	**89.903**	**.50551**	**.97367**
Stddev	.00676	.00251	.00158	.0066	.306	.0022	.019	.00006	.01391
%RSD	1.3863	1.2371	.57469	.63857	.49177	.18050	.02065	.01147	1.4289
#1	.49274	.20436	.27339	1.0341	61.993	1.2299	89.890	.50555	.98351
#2	.48317	.20081	.27562	1.0248	62.426	1.2268	89.916	.50547	.96384
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**257.57**	**.48455**	**11.548**	**.47906**	**73.407**	**.52351**	**2.0431**	**25.936**	**55.503**
Stddev	1.44	.00708	.195	.00385	.667	.00258	.0243	.014	.030
%RSD	.55733	1.4616	1.6925	.80392	.90857	.49282	1.1907	.05440	.05440
#1	256.56	.48955	11.686	.48178	73.879	.52533	2.0603	25.946	55.524
#2	258.59	.47954	11.410	.47633	72.936	.52168	2.0259	25.926	55.481
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9720**	**2.7801**	**1.0577**	**1.0323**	**1.8719**	**2.1322**	**.52710**	**.49917**	**.52886**
Stddev	.0287	.0077	.0011	.0018	.0339	.0033	.00055	.00020	.00312
%RSD	1.4559	.27874	.10103	.17087	1.8114	.15315	.10486	.03907	.58974
#1	1.9923	2.7747	1.0570	1.0310	1.8959	2.1345	.52749	.49904	.53107
#2	1.9517	2.7856	1.0585	1.0335	1.8479	2.1299	.52671	.49931	.52666
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1900.0**	**43019.**	**4062.1**
Stddev	4.9	116.	57.0
%RSD	.25825	.26964	1.4038
#1	1896.5	43101.	4102.4
#2	1903.4	42937.	4021.7

Sample Name: 280-97780-D-1-Apds Acquired: 6/6/2017 18:57:11 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05141**	**1.1773**	**.20561**	**.26170**	**.21551**	**.04940**	**-.00299**	**196.96**	**.05090**
Stddev	.00111	.0336	.00274	.00567	.00102	.00021	.00272	.14	.00107
%RSD	2.1582	2.8508	1.3333	2.1680	.47208	.42643	90.945	.07122	2.1057
#1	.05219	1.2010	.20755	.26571	.21479	.04955	-.00492	197.06	.05166
#2	.05062	1.1535	.20367	.25769	.21623	.04925	-.00107	196.86	.05014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04616**	**.04913**	**.05687**	**1.0251**	**28.905**	**.26809**	**58.040**	**.04967**	**.04648**
Stddev	.00202	.00115	.00013	.0050	.051	.00126	.056	.00003	.00144
%RSD	4.3729	2.3389	.22512	.49133	.17599	.47066	.09656	.05089	3.0909
#1	.04759	.04995	.05678	1.0216	28.869	.26899	58.080	.04965	.04749
#2	.04473	.04832	.05696	1.0287	28.941	.26720	58.000	.04969	.04546
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**218.12**	**.04647**	**2.2274**	**.09095**	**68.692**	**.09474**	**.18582**	**20.258**	**43.352**
Stddev	.71	.00111	.0487	.00540	1.699	.01038	.00896	.031	.067
%RSD	.32435	2.3941	2.1855	5.9360	2.4727	10.952	4.8194	.15500	.15500
#1	217.62	.04726	2.2618	.09477	69.894	.10207	.17949	20.280	43.400
#2	218.62	.04568	2.1930	.08713	67.491	.08740	.19215	20.236	43.305
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09198**	**1.7314**	**.20413**	**.05169**	**.18548**	**.46699**	**.05651**	**.19661**	**.05464**
Stddev	.00342	.0005	.00106	.00081	.00842	.01065	.00114	.00034	.00203
%RSD	3.7163	.03028	.51835	1.5584	4.5392	2.2798	2.0256	.17164	3.7166
#1	.09440	1.7318	.20338	.05112	.19144	.45947	.05732	.19685	.05607
#2	.08956	1.7310	.20488	.05226	.17953	.47452	.05570	.19638	.05320
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1932.0**	**43157.**	**4052.1**
Stddev	11.5	174.	49.6
%RSD	.59761	.40311	1.2232
#1	1940.2	43280.	4087.2
#2	1923.9	43034.	4017.1

Sample Name: CCVH-4569081 Acquired: 6/6/2017 18:59:44 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00653**	**49.332**	**.00057**	**.00474**	**.00049**	**-.00000**	**1.0205**	**.03179**	**-.00016**	**-.00147**	**.00051**	**.02545**	**49.036**
Stddev	.00081	.501	.00369	.00175	.00013	.00006	.0211	.00459	.00021	.00029	.00010	.00089	.536
%RSD	12.454	1.0160	651.31	36.884	27.497	6054.3	2.0643	14.445	135.07	19.993	18.976	3.4960	1.0924
#1	-.00711	49.686	.00317	.00598	.00058	.00004	1.0354	.03504	-.00001	-.00167	.00044	.02608	49.415
#2	-.00596	48.977	-.00204	.00351	.00039	-.00004	1.0056	.02854	-.00031	-.00126	.00058	.02482	48.657
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.16192**	**.00759**	**.06922**	**-.00143**	**-.00175**	**253.79**	**-.00029**	**.00663**	**-.00185**	**5.1184**	**-.00775**	**-.01157**	**-.00755**
Stddev	.01911	.00047	.00807	.00005	.00020	1.84	.00064	.00093	.00146	.0953	.00269	.00507	.01540
%RSD	11.804	6.1644	11.663	3.4938	11.216	.72585	223.34	13.958	79.011	1.8619	34.661	43.841	204.06
#1	.17543	.00792	.07493	-.00139	-.00161	255.10	-.00074	.00728	-.00289	5.1858	-.00585	-.00799	.00334
#2	.14840	.00726	.06351	-.00146	-.00189	252.49	.00017	.00597	-.00082	5.0510	-.00965	-.01516	-.01843
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01615**	**-.00287**	**.00071**	**4.9426**	**.01729**	**.00047**	**10.268**	**.01433**	**.00185**	**.11554**
Stddev	.03295	.00011	.00004	.0065	.00022	.00066	.046	.00090	.00082	.00529
%RSD	204.06	3.9257	5.8378	.13094	1.2795	140.28	.44538	6.3094	44.233	4.5753
#1	.00715	-.00279	.00068	4.9380	.01713	.00000	10.236	.01497	.00127	.11928
#2	-.03945	-.00295	.00074	4.9472	.01745	.00094	10.301	.01369	.00243	.11180
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2027.9**	**42505.**	**3975.6**
Stddev	39.2	208.	67.5
%RSD	1.9337	.48858	1.6979
#1	2000.2	42652.	4023.3
#2	2055.6	42358.	3927.9

Sample Name: CCV-4567764 Acquired: 6/6/2017 19:02:18 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49960**	F **.63617**	**.96886**	**.49029**	**.49335**	**.49162**	**.00283**	**4.9076**	**.49284**	**.49332**	**.48699**	**.51228**
Stddev	.00175	.01092	.01556	.00922	.00031	.00241	.00184	.0253	.01107	.01057	.01084	.00200
%RSD	.34979	1.7173	1.6063	1.8805	.06199	.49011	64.861	.51494	2.2466	2.1435	2.2265	.38980
#1	.49836	.64389	.97986	.49680	.49356	.49332	.00413	4.8897	.50067	.50079	.49466	.51369
#2	.50083	.62844	.95786	.48377	.49313	.48992	.00153	4.9255	.48501	.48584	.47933	.51087
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4610**	**50.070**	**1.0217**	**19.641**	**.49733**	**.48603**	**5.3177**	**.49201**	**1.0515**	**.99068**	**.00903**	**.98154**
Stddev	.0013	.166	.0008	.006	.00033	.01061	.0235	.00976	.0189	.01411	.00600	.02230
%RSD	.05459	.33181	.07369	.03107	.06733	2.1834	.44164	1.9834	1.7939	1.4239	66.519	2.2719
#1	2.4619	50.187	1.0212	19.645	.49757	.49353	5.3343	.49891	1.0648	1.0007	.00478	.99731
#2	2.4600	49.953	1.0222	19.636	.49710	.47853	5.3011	.48511	1.0381	.98071	.01327	.96577
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.95860**	**4.9116**	**10.511**	**.97837**	**.49738**	**.00494**	**.49510**	**1.0053**	**.00556**	**.49825**	**.48561**	**.49074**
Stddev	.00247	.0216	.046	.02807	.00184	.00214	.00014	.0128	.01763	.00019	.00260	.00324
%RSD	.25804	.43865	.43865	2.8687	.36958	43.375	.02771	1.2750	317.07	.03895	.53550	.65985
#1	.96035	4.8964	10.478	.99822	.49868	.00645	.49520	1.0143	.01802	.49811	.48377	.48845
#2	.95685	4.9269	10.544	.95853	.49608	.00342	.49501	.99620	-.00690	.49838	.48745	.49303
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2048.1**	**47186.**	**4304.9**
Stddev	72.9	408.	39.2
%RSD	3.5586	.86521	.91126
#1	2099.6	47475.	4277.1
#2	1996.5	46898.	4332.6

Sample Name: CCB Acquired: 6/6/2017 19:04:48 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00022**	**.00077**	**.00742**	**.00240**	**.00003**	**.00014**	**.00386**	**.00388**	**.00048**	**-.00011**	**.00070**	**-.00019**
Stddev	.00116	.00129	.00285	.00062	.00023	.00000	.00433	.00342	.00017	.00007	.00009	.00074
%RSD	537.40	166.25	38.385	25.847	721.32	.83198	112.05	88.276	35.749	63.686	12.855	384.73
#1	-.00060	.00168	.00944	.00196	-.00013	.00014	.00692	.00146	.00060	-.00006	.00076	-.00071
#2	.00103	-.00014	.00541	.00284	.00019	.00014	.00080	.00629	.00036	-.00016	.00064	.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02224**	**.01702**	W **.00609**	**-.00367**	**.00017**	**.00056**	**.18473**	**-.00161**	**.00138**	**.00152**	**.00941**	**.00527**
Stddev	.00016	.06019	.00055	.00603	.00015	.00024	.01270	.00059	.00142	.00012	.00564	.00490
%RSD	.70063	353.56	9.0669	164.58	88.243	43.914	6.8737	36.697	102.81	7.7690	59.955	92.857
#1	.02213	-.02554	.00570	.00060	.00027	.00073	.19371	-.00202	.00238	.00143	.00542	.00181
#2	.02235	.05959	.00648	-.00793	.00006	.00038	.17575	-.00119	.00038	.00160	.01340	.00873
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500									
Low Limit			-.01000									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00709**	**-.00091**	**-.00195**	**.00075**	**.00013**	**.00142**	**.00027**	**-.00122**	**-.03381**	**.00028**	**-.00001**	**.00052**
Stddev	.00383	.02183	.04671	.00112	.00005	.00186	.00028	.00125	.03903	.00044	.00004	.00230
%RSD	54.072	2396.8	2396.8	149.77	33.776	131.13	105.50	103.09	115.44	157.06	435.63	441.73
#1	-.00438	.01452	.03108	-.00004	.00010	.00010	.00007	-.00033	-.00621	.00059	.00002	.00215
#2	-.00980	-.01634	-.03498	.00153	.00017	.00274	.00047	-.00210	-.06141	-.00003	-.00003	-.00111
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2113.9**	**47816.**	**3879.8**
Stddev	16.8	20.	27.9
%RSD	.79539	.04214	.72016
#1	2102.0	47830.	3860.0
#2	2125.7	47802.	3899.5

Sample Name: CCVL-4576167 Acquired: 6/6/2017 19:07:26 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00993**	**.12819**	**.01644**	**.09799**	**.00984**	**.00105**	**.11984**	**.19604**	**.00515**	**.00950**	**.01003**	**.01597**
Stddev	.00053	.00435	.00042	.00105	.00075	.00001	.00052	.00245	.00007	.00033	.00056	.00019
%RSD	5.3730	3.3913	2.5406	1.0707	7.5852	.54270	.43052	1.2482	1.4106	3.4353	5.6067	1.1659
#1	.01030	.13126	.01614	.09873	.01037	.00104	.11948	.19777	.00520	.00973	.01043	.01584
#2	.00955	.12511	.01673	.09724	.00932	.00105	.12021	.19431	.00509	.00927	.00963	.01610
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.12233**	**3.0625**	F **.02827**	**.19286**	**.01026**	**.01811**	**1.1902**	**.03748**	**3.0031**	F **.01334**	**.10875**	**.01929**
Stddev	.00255	.0767	.00280	.00714	.00009	.00158	.0210	.00135	.0656	.00058	.00296	.00306
%RSD	2.0818	2.5056	9.9128	3.7041	.91672	8.7383	1.7644	3.5931	2.1848	4.3285	2.7206	15.838
#1	.12413	3.1167	.03025	.19791	.01032	.01923	1.2050	.03843	3.0495	.01374	.11084	.02146
#2	.12053	3.0082	.02628	.18781	.01019	.01699	1.1753	.03653	2.9568	.01293	.10666	.01713
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value			.02000							.00900		
Range			30.000%							30.000%		

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01224**	**.46500**	**.99510**	**.09695**	**.01012**	**.01585**	**.00974**	**.01681**	**.04855**	**.00910**	**.01986**	**.01403**
Stddev	.00219	.00266	.00569	.00431	.00015	.00065	.00020	.00107	.07670	.00009	.00136	.00082
%RSD	17.873	.57188	.57188	4.4475	1.4776	4.1222	2.0873	6.3551	157.97	1.0087	6.8404	5.8784
#1	.01069	.46688	.99912	.10000	.01023	.01632	.00989	.01606	-.00568	.00917	.01890	.01462
#2	.01378	.46312	.99108	.09390	.01002	.01539	.00960	.01757	.10279	.00904	.02082	.01345
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.02000											
Range	-30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2150.6**	**48255.**	**4097.3**
Stddev	2.6	342.	270.7
%RSD	.11919	.70887	6.6073
#1	2148.8	48013.	3905.8
#2	2152.4	48497.	4288.7

Sample Name: 280-97780-D-2-A Acquired: 6/6/2017 19:10:04 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00011**	**.01560**	**.00204**	**.16156**	**.11528**	**-.00010**	**.00144**	**178.07**	**.00060**
Stddev	.00086	.00011	.00626	.00148	.00097	.00001	.00029	.41	.00008
%RSD	794.46	.68149	307.64	.91418	.83774	13.702	20.380	.23251	13.183
#1	.00071	.01567	-.00239	.16261	.11596	-.00011	.00165	178.36	.00065
#2	-.00050	.01552	.00647	.16052	.11460	-.00009	.00124	177.77	.00054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00124**	**.00179**	**.00415**	**.02990**	**8.5187**	**.16685**	**38.811**	**.00025**	**-.00036**
Stddev	.00047	.00010	.00030	.00247	.1301	.00083	.023	.00003	.00041
%RSD	37.993	5.4415	7.1322	8.2457	1.5278	.49901	.05811	12.180	112.16
#1	-.00157	.00172	.00394	.03164	8.6107	.16626	38.795	.00023	-.00008
#2	-.00090	.00185	.00436	.02815	8.4266	.16744	38.827	.00027	-.00065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**196.89**	**-.00041**	**.00767**	**-.00340**	**69.372**	**-.00184**	**-.00279**	**15.372**	**32.895**
Stddev	1.29	.00092	.00231	.00168	1.858	.00143	.00561	.008	.017
%RSD	.65480	227.90	30.152	49.291	2.6778	77.553	200.87	.05275	.05275
#1	197.80	-.00106	.00930	-.00459	70.685	-.00083	-.00676	15.377	32.907
#2	195.97	.00025	.00603	-.00222	68.058	-.00285	.00117	15.366	32.883
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00245**	**1.6824**	**-.00130**	**.00031**	**.00213**	**.00830**	**.00575**	**.00839**	**-.00124**
Stddev	.00198	.0052	.00075	.00043	.00396	.03626	.00029	.00094	.00198
%RSD	80.946	.30804	57.798	139.22	185.54	436.99	4.9892	11.220	160.23
#1	-.00385	1.6861	-.00182	.00000	.00494	-.01734	.00555	.00906	-.00264
#2	-.00105	1.6788	-.00077	.00062	-.00067	.03393	.00595	.00773	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2015.4**	**45690.**	**4242.1**
Stddev	9.2	118.	3.0
%RSD	.45472	.25760	.07178
#1	2021.9	45773.	4239.9
#2	2008.9	45607.	4244.2

Sample Name: 280-97780-D-3-A Acquired: 6/6/2017 19:12:40 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**.02405**	**.00232**	**.15278**	**.09251**	**-.00002**	**.00321**	**158.23**	**.00070**
Stddev	.00177	.00034	.01530	.00302	.00009	.00015	.00119	.24	.00027
%RSD	27391.	1.4212	658.97	1.9788	.09952	803.75	36.993	.15399	38.947
#1	.00126	.02381	-.00850	.15492	.09257	-.00013	.00237	158.40	.00089
#2	-.00124	.02429	.01314	.15064	.09244	.00009	.00404	158.06	.00051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00095**	**.00137**	**.00416**	**.06138**	**7.8531**	**.14762**	**35.267**	**.00080**	**-.00047**
Stddev	.00018	.00000	.00163	.00301	.0544	.00201	.063	.00008	.00011
%RSD	19.053	.12116	39.105	4.9101	.69316	1.3609	.17733	9.9259	24.350
#1	-.00108	.00137	.00301	.06351	7.8916	.14904	35.311	.00086	-.00055
#2	-.00082	.00137	.00531	.05924	7.8146	.14620	35.223	.00075	-.00039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**174.26**	**-.00071**	**.00317**	**.00089**	**64.489**	**-.00590**	**.00108**	**14.782**	**31.633**
Stddev	1.18	.00157	.00485	.00177	.941	.00112	.00031	.041	.088
%RSD	.67930	222.16	153.14	198.35	1.4590	18.920	28.908	.27868	.27868
#1	175.09	.00040	-.00026	-.00036	65.154	-.00669	.00086	14.753	31.570
#2	173.42	-.00181	.00660	.00215	63.823	-.00511	.00131	14.811	31.695
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00111**	**1.5188**	**.00091**	**.00094**	**.00023**	**-.00994**	**.00563**	**.00208**	**-.00253**
Stddev	.00008	.0035	.00195	.00003	.00466	.01363	.00002	.00036	.00057
%RSD	6.9868	.22965	213.48	3.0405	2050.9	137.08	.34317	17.125	22.341
#1	-.00117	1.5213	.00229	.00092	-.00307	-.01957	.00562	.00233	-.00293
#2	-.00106	1.5163	-.00046	.00097	.00352	-.00031	.00565	.00183	-.00213
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2027.5**	**45649.**	**4261.7**
Stddev	3.9	506.	40.8
%RSD	.19009	1.1077	.95624
#1	2030.2	45291.	4290.5
#2	2024.7	46006.	4232.9

Sample Name: 280-97780-D-4-A Acquired: 6/6/2017 19:15:15 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010c

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00088**	**8.5571**	**.00757**	**.35395**	**.18303**	**.00040**	**-.00239**	**245.13**	**.00116**
Stddev	.00073	.1142	.00266	.00940	.00090	.00002	.00036	1.96	.00000
%RSD	82.707	1.3345	35.169	2.6559	.49160	4.2564	15.217	.79939	.24983
#1	.00036	8.4763	.00945	.36059	.18239	.00039	-.00213	243.75	.00116
#2	.00139	8.6378	.00568	.34730	.18366	.00041	-.00265	246.52	.00116
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00194**	**.02037**	**.02729**	**12.280**	**11.099**	**.18804**	**56.960**	**.19101**	**.00174**
Stddev	.00030	.00073	.00083	.083	.118	.00065	.025	.00014	.00081
%RSD	15.392	3.5624	3.0513	.67944	1.0629	.34620	.04333	.07519	46.794
#1	.00173	.02089	.02671	12.221	11.015	.18758	56.978	.19091	.00231
#2	.00215	.01986	.02788	12.339	11.182	.18850	56.943	.19111	.00116
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**193.54**	**.00826**	**.22788**	**.00025**	**117.59**	**-.00269**	**-.00569**	**34.973**	**74.842**
Stddev	1.35	.00035	.00975	.00024	2.92	.00262	.00495	.216	.463
%RSD	.69832	4.2413	4.2783	94.657	2.4862	97.504	86.921	.61804	.61804
#1	192.59	.00851	.23478	.00008	119.66	-.00084	-.00219	34.820	74.515
#2	194.50	.00801	.22099	.00041	115.52	-.00455	-.00919	35.126	75.169
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00137**	**2.4158**	**.00283**	**.25511**	**.00024**	**.00351**	**.02110**	**.03085**	**.00565**
Stddev	.00222	.0182	.00060	.00128	.00133	.02129	.00005	.00032	.00017
%RSD	161.56	.75526	21.063	.50116	557.39	605.67	.22347	1.0497	3.0579
#1	.00020	2.4029	.00241	.25421	.00118	.01857	.02113	.03108	.00577
#2	-.00294	2.4287	.00325	.25602	-.00070	-.01154	.02107	.03062	.00553
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2036.8**	**45720.**	**4336.1**
Stddev	7.8	162.	88.5
%RSD	.38172	.35357	2.0401
#1	2031.3	45606.	4398.7
#2	2042.3	45834.	4273.6

Sample Name: 280-97852-A-1-B Acquired: 6/6/2017 19:17:48 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00038**	**.54122**	**.00653**	**.01886**	**.01791**	**.00021**	**.00038**	**61.214**	**.00055**
Stddev	.00112	.01758	.00169	.00063	.00013	.00004	.00138	.091	.00005
%RSD	297.33	3.2477	25.884	3.3275	.71092	20.627	359.62	.14791	9.6735
#1	.00042	.55365	.00533	.01931	.01782	.00024	.00136	61.150	.00051
#2	-.00117	.52879	.00772	.01842	.01800	.00018	-.00059	61.278	.00059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00020**	**.00168**	**.00174**	**.36714**	**.92268**	**.00799**	**1.9827**	**.02326**	**.00757**
Stddev	.00011	.00036	.00074	.00159	.01440	.00140	.0064	.00012	.00055
%RSD	52.512	21.509	42.255	.43176	1.5609	17.492	.32274	.50295	7.2614
#1	-.00013	.00143	.00122	.36602	.91249	.00700	1.9872	.02334	.00796
#2	-.00027	.00194	.00226	.36826	.93286	.00898	1.9782	.02317	.00718
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.295**	**-.00049**	**.20881**	**-.00103**	**1.8418**	**-.00252**	**-.00286**	**4.6158**	**9.8779**
Stddev	.835	.00017	.01136	.00008	.0629	.00218	.00489	.0289	.0619
%RSD	7.3957	35.717	5.4416	7.5717	3.4146	86.220	170.88	.62613	.62613
#1	11.885	-.00037	.21685	-.00108	1.8863	-.00099	-.00632	4.5954	9.8341
#2	10.704	-.00061	.20078	-.00097	1.7973	-.00406	.00060	4.6363	9.9216
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00061**	**.11859**	**.00212**	**.01487**	**.00257**	**-.05765**	**.00194**	**.01304**	**-.00043**
Stddev	.00099	.00006	.00081	.00371	.00207	.00290	.00001	.00038	.00242
%RSD	162.41	.04807	38.379	24.960	80.595	5.0292	.68245	2.8752	569.36
#1	-.00130	.11855	.00154	.01225	.00403	-.05560	.00195	.01331	-.00214
#2	.00009	.11864	.00269	.01750	.00110	-.05971	.00193	.01278	.00129
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2084.7**	**47330.**	**4281.1**
Stddev	13.0	327.	2.8
%RSD	.62175	.69056	.06494
#1	2093.8	47562.	4279.2
#2	2075.5	47099.	4283.1

Sample Name: CCVH-4569081 Acquired: 6/6/2017 19:20:24 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00666**	**50.056**	**-.00387**	**.00340**	**-.00018**	**.00019**	**1.0289**	**.01284**	**.00024**	**-.00131**	**.00085**	**.02527**	**49.378**
Stddev	.00076	.056	.00486	.00049	.00013	.00004	.0284	.00175	.00055	.00033	.00022	.00035	.075
%RSD	11.470	.11098	125.49	14.300	73.193	19.445	2.7602	13.625	232.83	25.088	25.376	1.3885	.15133
#1	-.00720	50.017	-.00731	.00375	-.00027	.00016	1.0489	.01161	.00063	-.00108	.00070	.02503	49.430
#2	-.00612	50.096	-.00044	.00306	-.00009	.00022	1.0088	.01408	-.00015	-.00154	.00100	.02552	49.325
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11816**	**.00616**	**.06915**	**-.00147**	**-.00154**	**257.85**	**-.00008**	**.01180**	**.00062**	**5.1304**	**-.00724**	**-.01261**	**-.04409**
Stddev	.04806	.00073	.00590	.00001	.00012	.16	.00014	.00715	.00009	.1333	.00534	.00722	.01540
%RSD	40.675	11.814	8.5398	.35133	8.0083	.06379	172.62	60.576	14.994	2.5985	73.828	57.270	34.922
#1	.15215	.00668	.07332	-.00148	-.00163	257.96	.00002	.00675	.00055	5.2247	-.01102	-.01772	-.05498
#2	.08418	.00565	.06497	-.00147	-.00145	257.73	-.00018	.01686	.00068	5.0362	-.00346	-.00750	-.03321
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.09436**	**-.00334**	**.00052**	**4.9756**	**.01757**	**-.00011**	**10.306**	**.01428**	**.00157**	**.11642**
Stddev	.03295	.00077	.00006	.0065	.00056	.00272	.047	.00159	.00032	.00071
%RSD	34.922	23.019	10.756	.13007	3.1809	2515.0	.45964	11.157	20.347	.60989
#1	-.11766	-.00279	.00055	4.9801	.01797	-.00203	10.339	.01541	.00135	.11692
#2	-.07106	-.00388	.00048	4.9710	.01718	.00181	10.272	.01316	.00180	.11592
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1975.9**	**44868.**	**4125.9**
Stddev	68.6	122.	12.6
%RSD	3.4729	.27137	.30653
#1	2024.4	44954.	4117.0
#2	1927.4	44782.	4134.9

Sample Name: CCV-4567764 Acquired: 6/6/2017 19:22:59 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50402**	F **.65253**	**.98529**	**.49370**	**.50285**	**.49764**	**.00002**	**4.9707**	**.49822**	**.49977**	**.49647**	**.51097**
Stddev	.00252	.01261	.02403	.00329	.00396	.00421	.00453	.0126	.00837	.00759	.00974	.00376
%RSD	.50062	1.9325	2.4389	.66668	.78783	.84531	19250.	.25295	1.6790	1.5180	1.9622	.73655
#1	.50224	.66145	1.0023	.49603	.50005	.49467	-.00318	4.9618	.50414	.50514	.50336	.50831
#2	.50581	.64362	.96830	.49137	.50565	.50062	.00322	4.9796	.49231	.49441	.48959	.51363
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4854**	**50.946**	**1.0325**	**19.914**	**.50129**	**.49290**	**5.3987**	**.49771**	**1.0610**	**1.0043**	**.01455**	**.99566**
Stddev	.0175	.080	.0045	.058	.00063	.01120	.0107	.00746	.0130	.0148	.01301	.02636
%RSD	.70262	.15763	.43628	.29280	.12646	2.2717	.19918	1.4987	1.2290	1.4703	89.393	2.6471
#1	2.4731	50.889	1.0294	19.873	.50084	.50081	5.4063	.50299	1.0702	1.0147	.00535	1.0143
#2	2.4978	51.003	1.0357	19.955	.50174	.48498	5.3911	.49244	1.0518	.99382	.02375	.97702
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.97045**	**4.9274**	**10.545**	**.99140**	**.50599**	**.00698**	**.49906**	**1.0226**	**-.02875**	**.49959**	**.49032**	**.49415**
Stddev	.02042	.0103	.022	.02426	.00279	.00047	.00193	.0145	.00754	.00195	.00273	.00404
%RSD	2.1044	.20806	.20806	2.4474	.55155	6.7306	.38681	1.4175	26.225	.38991	.55610	.81715
#1	.98489	4.9201	10.529	1.0086	.50402	.00665	.49770	1.0329	-.02342	.50096	.48839	.49130
#2	.95601	4.9346	10.560	.97424	.50797	.00732	.50043	1.0124	-.03408	.49821	.49225	.49701
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2019.9**	**46444.**	**4067.1**
Stddev	26.9	318.	125.9
%RSD	1.3310	.68492	3.0945
#1	2000.8	46669.	3978.1
#2	2038.9	46219.	4156.1

Sample Name: CCB Acquired: 6/6/2017 19:25:28 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00059**	**.00229**	**-.00356**	**.00109**	**.00027**	**-.00002**	**.00658**	**.00770**	**.00029**	**.00013**	**.00050**	**-.00001**
Stddev	.00048	.00125	.00263	.00157	.00043	.00005	.00057	.00366	.00011	.00003	.00013	.00101
%RSD	81.857	54.437	73.817	143.79	157.30	251.23	8.7200	47.481	39.517	20.959	25.397	11605.
#1	.00092	.00141	-.00170	.00220	-.00003	.00001	.00618	.01029	.00037	.00011	.00041	-.00072
#2	.00025	.00317	-.00542	-.00002	.00057	-.00005	.00699	.00512	.00021	.00015	.00058	.00071
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00226**	**.12132**	W **.00632**	**-.00041**	**-.00008**	**-.00013**	**.20176**	**-.00145**	**-.00272**	**.00096**	**.01061**	**.00026**
Stddev	.00090	.06781	.00227	.00177	.00005	.00038	.00351	.00030	.00200	.00107	.00673	.00498
%RSD	39.912	55.898	35.889	427.81	60.969	300.52	1.7405	20.484	73.566	111.05	63.446	1885.1
#1	.00162	.07337	.00471	-.00166	-.00012	-.00040	.19928	-.00166	-.00131	.00171	.00585	-.00326
#2	.00290	.16927	.00792	.00084	-.00005	.00014	.20425	-.00124	-.00414	.00021	.01537	.00379
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500									
Low Limit			-.01000									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00223**	**-.00159**	**-.00339**	**-.00083**	**.00021**	**.00175**	**.00031**	**.00312**	**-.04329**	**-.00041**	**.00054**	**-.00067**
Stddev	.00540	.01066	.02282	.00074	.00008	.00074	.00020	.00247	.04039	.00064	.00008	.00260
%RSD	241.96	672.52	672.52	88.896	37.885	42.295	64.871	79.070	93.306	157.17	15.534	389.09
#1	.00159	.00595	.01274	-.00135	.00026	.00227	.00017	.00486	-.07185	-.00086	.00048	.00117
#2	-.00605	-.00912	-.01953	-.00031	.00015	.00123	.00045	.00138	-.01473	.00005	.00060	-.00251
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1998.0**	**44995.**	**4010.3**
Stddev	8.5	69.	56.9
%RSD	.42564	.15302	1.4192
#1	2004.0	45044.	4050.5
#2	1992.0	44946.	3970.0

Sample Name: CCVL-4576167 Acquired: 6/6/2017 19:28:05 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00972**	F **.13076**	**.01340**	**.09679**	**.00976**	**.00093**	**.11488**	**.19860**	**.00508**	**.00979**	**.01009**	**.01640**
Stddev	.00062	.00132	.00212	.00251	.00020	.00007	.00210	.00103	.00013	.00015	.00021	.00057
%RSD	6.3325	1.0067	15.799	2.5925	2.0820	7.4257	1.8288	.51950	2.6181	1.5595	2.1174	3.4795
#1	.00929	.13169	.01190	.09856	.00990	.00098	.11637	.19933	.00498	.00990	.01024	.01600
#2	.01016	.12983	.01490	.09501	.00961	.00088	.11340	.19787	.00517	.00968	.00994	.01681
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000										
Range		30.000%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10440**	**3.0931**	F **.02720**	**.20179**	**.01032**	**.01862**	**1.2235**	**.03914**	**2.9955**	**.00949**	**.12100**	**.01603**
Stddev	.00060	.1024	.00098	.00283	.00004	.00076	.0043	.00134	.0617	.00355	.00865	.00160
%RSD	.57701	3.3100	3.6073	1.4027	.36138	4.0581	.35505	3.4178	2.0601	37.372	7.1478	9.9548
#1	.10397	3.0207	.02651	.20379	.01029	.01809	1.2205	.04008	3.0392	.00698	.12711	.01490
#2	.10482	3.1655	.02789	.19979	.01035	.01916	1.2266	.03819	2.9519	.01200	.11488	.01715
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.02000									
Range			30.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01644**	**.46397**	**.99290**	**.09555**	**.00998**	**.01893**	**.00984**	**.01606**	**.05029**	**.00975**	**.02167**	**.01121**
Stddev	.00187	.00163	.00348	.00326	.00004	.00077	.00004	.00059	.01830	.00082	.00152	.00286
%RSD	11.343	.35038	.35038	3.4072	.40374	4.0887	.36062	3.6690	36.388	8.4467	7.0107	25.479
#1	.01512	.46282	.99044	.09785	.00995	.01947	.00986	.01564	.03735	.00916	.02060	.00919
#2	.01776	.46512	.99536	.09324	.01001	.01838	.00981	.01648	.06323	.01033	.02275	.01323
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2029.5**	**45276.**	**3958.0**
Stddev	42.6	9.	14.3
%RSD	2.0979	.01936	.36061
#1	1999.4	45270.	3947.9
#2	2059.6	45283.	3968.1

Sample Name: MB 280-376133/1-A Acquired: 6/6/2017 19:30:43 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/6 Custom ID2: Custom ID3:
Comment: 376133 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00098**	**.00578**	**.00624**	**.00084**	**.00020**	**.00016**	**.00073**	**.02695**	**.00040**
Stddev	.00033	.00215	.00518	.00076	.00020	.00039	.00093	.00193	.00014
%RSD	33.144	37.139	82.987	90.629	101.07	251.80	127.90	7.1763	34.154
#1	.00075	.00730	.00258	.00030	.00006	-.00012	.00007	.02559	.00050
#2	.00121	.00426	.00991	.00138	.00034	.00043	.00139	.02832	.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00011**	**.00021**	**.00118**	**.01657**	**.07539**	**.00272**	**.00240**	**.00014**	**.00006**
Stddev	.00048	.00017	.00048	.00284	.03681	.00218	.00282	.00013	.00035
%RSD	432.24	81.213	40.655	17.143	48.828	80.036	117.58	95.798	622.11
#1	-.00045	.00009	.00084	.01858	.10142	.00426	.00040	.00023	.00030
#2	.00023	.00033	.00152	.01456	.04936	.00118	.00439	.00004	-.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.18202**	**-.00111**	**.00744**	**.00058**	**.00624**	**.00194**	**-.00534**	**-.02626**	**-.05619**
Stddev	.00083	.00043	.00229	.00133	.00271	.00658	.00107	.01407	.03010
%RSD	.45426	39.107	30.785	230.79	43.352	340.15	20.014	53.570	53.570
#1	.18260	-.00080	.00582	-.00037	.00815	-.00272	-.00609	-.03621	-.07748
#2	.18143	-.00141	.00906	.00152	.00433	.00659	-.00458	-.01631	-.03491
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00146**	**.00015**	**.00409**	**.00059**	**.00310**	**-.03167**	**.00032**	**.00447**	**-.00056**
Stddev	.00072	.00005	.00206	.00021	.00160	.07520	.00110	.00035	.00036
%RSD	49.620	34.910	50.331	36.235	51.698	237.43	342.82	7.9351	64.826
#1	-.00094	.00019	.00263	.00074	.00424	.02150	-.00046	.00472	-.00082
#2	-.00197	.00011	.00554	.00044	.00197	-.08485	.00110	.00422	-.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2062.3**	**47355.**	**4073.2**
Stddev	51.9	3.	154.7
%RSD	2.5160	.00624	3.7977
#1	2025.6	47353.	3963.8
#2	2099.0	47357.	4182.6

Sample Name: LCS 280-376133/2-A Acquired: 6/6/2017 19:33:20 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376133 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05187**	F **2.5147**	**1.0333**	**1.0419**	**2.0965**	**.05186**	**2.2457**	**50.470**	**.10813**
Stddev	.00118	.0569	.0278	.0219	.0064	.00005	.0457	.211	.00231
%RSD	2.2769	2.2615	2.6877	2.0971	.30345	.09190	2.0350	.41823	2.1364
#1	.05271	2.5550	1.0529	1.0573	2.1010	.05189	2.2780	50.619	.10976
#2	.05104	2.4745	1.0137	1.0264	2.0920	.05182	2.2134	50.321	.10650
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit		2.2299							
Low Limit		1.7300							

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50667**	**.20346**	**.27347**	**1.1090**	**53.148**	**1.0681**	**51.049**	**.51413**	**.99429**
Stddev	.01229	.00502	.00022	.0036	.245	.0065	.267	.00295	.02447
%RSD	2.4249	2.4681	.08093	.32697	.46070	.60384	.52229	.57412	2.4611
#1	.51535	.20701	.27363	1.1115	53.321	1.0727	51.238	.51622	1.0116
#2	.49798	.19991	.27332	1.1064	52.974	1.0636	50.861	.51204	.97699
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**54.308**	**.50133**	F **11.389**	**.50747**	**2.2665**	**.53422**	**2.0384**	**10.216**	**21.861**
Stddev	.469	.01159	.237	.01089	.0607	.01876	.0508	.062	.132
%RSD	.86444	2.3118	2.0811	2.1469	2.6773	3.5124	2.4931	.60389	.60389
#1	54.640	.50953	11.557	.51518	2.3094	.54749	2.0743	10.259	21.955
#2	53.976	.49314	11.222	.49977	2.2236	.52095	2.0024	10.172	21.768
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit			11.100						
Low Limit			9.1000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0389**	**1.0457**	**1.0581**	**1.0464**	**2.0272**	**2.1573**	**.52122**	**.50802**	**.53588**
Stddev	.0572	.0019	.0060	.0063	.0481	.0342	.00059	.00479	.00559
%RSD	2.8037	.18640	.56368	.60043	2.3741	1.5865	.11319	.94324	1.0436
#1	2.0793	1.0471	1.0623	1.0509	2.0612	2.1331	.52163	.51141	.53983
#2	1.9985	1.0444	1.0539	1.0420	1.9932	2.1815	.52080	.50463	.53192
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2042.8**	**45310.**	**4129.4**
Stddev	22.3	684.	114.1
%RSD	1.0918	1.5092	2.7618
#1	2027.0	44827.	4048.8
#2	2058.6	45794.	4210.1

Sample Name: LCSD 280-376133/3-A Acquired: 6/6/2017 19:35:44 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376133 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05137**	F **2.5237**	**1.0578**	**1.0274**	**2.0905**	**.05177**	**2.2333**	**50.296**	**.10781**
Stddev	.00012	.0362	.0192	.0096	.0047	.00015	.0212	.047	.00126
%RSD	.22911	1.4349	1.8151	.93243	.22446	.29256	.94832	.09331	1.1668
#1	.05129	2.5493	1.0714	1.0342	2.0872	.05188	2.2483	50.263	.10870
#2	.05145	2.4981	1.0443	1.0206	2.0938	.05166	2.2183	50.329	.10692
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit		2.2299							
Low Limit		1.7300							

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50678**	**.20436**	**.27133**	**1.0793**	**52.968**	**1.0615**	**50.909**	**.51412**	**.98884**
Stddev	.00711	.00255	.00194	.0016	.054	.0006	.015	.00296	.01257
%RSD	1.4034	1.2499	.71342	.14833	.10240	.05770	.02995	.57609	1.2714
#1	.51181	.20616	.26997	1.0805	53.006	1.0620	50.920	.51203	.99773
#2	.50175	.20255	.27270	1.0782	52.929	1.0611	50.899	.51622	.97995
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**54.287**	**.50255**	F **11.328**	**.50711**	**2.2360**	**.52847**	**2.0293**	**10.104**	**21.622**
Stddev	.258	.00753	.132	.00530	.0145	.01396	.0274	.001	.001
%RSD	.47448	1.4977	1.1628	1.0452	.64927	2.6424	1.3519	.00518	.00518
#1	54.469	.50787	11.421	.51086	2.2463	.53834	2.0487	10.103	21.621
#2	54.105	.49723	11.235	.50336	2.2257	.51859	2.0099	10.104	21.622
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit			11.100						
Low Limit			9.1000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0254**	**1.0402**	**1.0535**	**1.0352**	**2.0345**	**2.1491**	**.51975**	**.50768**	**.53138**
Stddev	.0203	.0004	.0048	.0035	.0293	.1106	.00190	.00055	.00080
%RSD	1.0012	.03988	.45731	.34051	1.4388	5.1478	.36522	.10788	.14975
#1	2.0398	1.0400	1.0501	1.0327	2.0552	2.0709	.51840	.50729	.53194
#2	2.0111	1.0405	1.0569	1.0377	2.0138	2.2273	.52109	.50807	.53082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2016.4**	**44971.**	**4029.4**
Stddev	12.5	631.	58.7
%RSD	.62021	1.4023	1.4567
#1	2007.5	44525.	3987.9
#2	2025.2	45417.	4070.9

Sample Name: 280-97818-A-1-A Acquired: 6/6/2017 19:38:07 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376133 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00039**	**1.0024**	**.00493**	**.02774**	**.11968**	**.00012**	**.00222**	**36.731**	**.00013**
Stddev	.00070	.0287	.00118	.00032	.00118	.00002	.00106	.321	.00008
%RSD	181.63	2.8640	23.912	1.1615	.98644	13.850	47.652	.87340	62.464
#1	.00011	1.0227	.00409	.02751	.12052	.00013	.00297	36.958	.00019
#2	-.00088	.98213	.00576	.02797	.11885	.00011	.00147	36.505	.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00027**	**.00764**	**.00741**	**.08065**	**10.683**	**.04248**	**.04719**	**.00119**	**.00564**
Stddev	.00025	.00045	.00016	.00321	.094	.00193	.00066	.00006	.00069
%RSD	92.405	5.9460	2.1743	3.9815	.87964	4.5350	1.3964	5.0878	12.288
#1	.00045	.00796	.00730	.07838	10.749	.04112	.04673	.00123	.00515
#2	.00009	.00732	.00753	.08292	10.617	.04384	.04766	.00115	.00613
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**17.677**	**.00015**	**.01078**	**-.00101**	**3.4894**	**.00260**	**-.00719**	**6.1022**	**13.059**
Stddev	.057	.00043	.00002	.00022	.0983	.00136	.00732	.0674	.144
%RSD	.32297	297.13	.15654	21.332	2.8161	52.257	101.82	1.1049	1.1049
#1	17.718	.00045	.01080	-.00116	3.5589	.00164	-.00201	6.1499	13.161
#2	17.637	-.00016	.01077	-.00086	3.4200	.00356	-.01236	6.0545	12.957
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00098**	**.37239**	**-.00005**	**.00141**	**.00141**	**.00115**	**.00402**	**.00813**	**-.00237**
Stddev	.00043	.00304	.00024	.00044	.00007	.00458	.00048	.00109	.00094
%RSD	43.682	.81566	489.08	31.298	5.1411	396.66	11.981	13.417	39.437
#1	-.00068	.37453	-.00022	.00110	.00136	-.00208	.00436	.00736	-.00171
#2	-.00128	.37024	.00012	.00172	.00146	.00439	.00368	.00890	-.00304
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2070.6**	**46640.**	**4270.4**
Stddev	17.1	91.	48.3
%RSD	.82589	.19594	1.1319
#1	2058.5	46576.	4236.2
#2	2082.7	46705.	4304.6

Sample Name: 280-97818-A-1-Asd@5 Acquired: 6/6/2017 19:40:44 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376133 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**.21375**	**.00451**	**.00792**	**.02417**	**.00016**	**.00489**	**7.6593**	**-.00014**
Stddev	.00052	.00641	.00146	.00036	.00005	.00000	.00094	.0438	.00004
%RSD	1135.6	2.9973	32.334	4.5983	.19252	.85975	19.142	.57199	30.947
#1	.00041	.21828	.00348	.00818	.02413	.00016	.00555	7.6283	-.00017
#2	-.00032	.20922	.00554	.00766	.02420	.00016	.00423	7.6903	-.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00008**	**.00248**	**.00206**	**.02300**	**2.2619**	**.01415**	**.00599**	**.00028**	**.00127**
Stddev	.00029	.00021	.00026	.00094	.0055	.00166	.00863	.00004	.00028
%RSD	361.67	8.2980	12.541	4.0724	.24203	11.766	144.04	13.819	21.967
#1	.00028	.00233	.00188	.02234	2.2580	.01297	.01210	.00025	.00146
#2	-.00012	.00262	.00224	.02367	2.2657	.01533	-.00011	.00030	.00107
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.7558**	**-.00103**	**.00525**	**.00058**	**.71222**	**.00003**	**-.00305**	**1.2435**	**2.6612**
Stddev	.0069	.00026	.00392	.00109	.01487	.00038	.00228	.0193	.0413
%RSD	.18234	25.430	74.665	188.99	2.0882	1103.7	74.812	1.5510	1.5510
#1	3.7607	-.00122	.00248	-.00019	.72274	.00030	-.00467	1.2299	2.6320
#2	3.7510	-.00085	.00802	.00134	.70170	-.00023	-.00144	1.2572	2.6904
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00153**	**.07739**	**.00202**	**.00084**	**-.00153**	**-.06196**	**.00033**	**.00202**	**.00079**
Stddev	.00051	.00053	.00184	.00040	.00102	.00860	.00049	.00031	.00026
%RSD	33.257	.67962	91.173	47.921	66.282	13.873	148.92	15.251	33.031
#1	-.00189	.07702	.00072	.00112	-.00081	-.06804	.00067	.00224	.00061
#2	-.00117	.07776	.00332	.00055	-.00225	-.05589	-.00002	.00181	.00098
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2064.5**	**48311.**	**4321.4**
Stddev	23.1	800.	60.2
%RSD	1.1184	1.6564	1.3922
#1	2048.2	48877.	4364.0
#2	2080.9	47745.	4278.9

Sample Name: 280-97818-A-1-B MS Acquired: 6/6/2017 19:43:22 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376133 6010c

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05141**	W **3.0508**	**1.0535**	**1.0468**	**2.2093**	**.05191**	W **2.2158**	**87.396**	**.10694**
Stddev	.00021	.0068	.0000	.0151	.0097	.00005	.0343	.375	.00135
%RSD	.40740	.22278	.00096	1.4404	.44100	.09579	1.5467	.42882	1.2603
#1	.05156	3.0460	1.0535	1.0575	2.2162	.05194	2.2401	87.661	.10790
#2	.05127	3.0556	1.0535	1.0361	2.2024	.05187	2.1916	87.131	.10599
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit		500.00					2.0000		
Low Limit		3.2000					-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50155**	**.21050**	**.28121**	**1.0879**	**63.764**	**1.1041**	**50.579**	**.51469**	**.98870**
Stddev	.00934	.00401	.00169	.0056	.174	.0007	.007	.00088	.01222
%RSD	1.8623	1.9044	.59947	.51211	.27236	.06151	.01309	.17093	1.2356
#1	.50815	.21333	.28240	1.0918	63.887	1.1036	50.584	.51531	.99734
#2	.49494	.20766	.28002	1.0839	63.642	1.1046	50.575	.51407	.98006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**72.487**	**.49650**	**11.331**	**.49665**	**5.8835**	**.52226**	**2.0280**	**16.426**	**35.152**
Stddev	.850	.00805	.198	.00848	.0877	.00836	.0431	.030	.064
%RSD	1.1730	1.6208	1.7459	1.7068	1.4915	1.6003	2.1245	.18088	.18088
#1	73.088	.50219	11.471	.50264	5.9455	.52817	2.0585	16.447	35.197
#2	71.886	.49081	11.191	.49066	5.8214	.51635	1.9975	16.405	35.107
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2.0005**	**1.4254**	**1.0608**	**1.0419**	**1.9866**	**2.1632**	**.52810**	**.50923**	**.53100**
Stddev	.0289	.0058	.0023	.0014	.0327	.0016	.00170	.00199	.00280
%RSD	1.4453	.40412	.21736	.13231	1.6472	.07521	.32173	.39009	.52671
#1	2.0210	1.4295	1.0624	1.0428	2.0097	2.1643	.52930	.51063	.53298
#2	1.9801	1.4214	1.0591	1.0409	1.9634	2.1620	.52690	.50782	.52902
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.20000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1992.0**	**44228.**	**4033.8**
Stddev	7.3	379.	2.5
%RSD	.36558	.85669	.06226
#1	1997.2	43960.	4032.1
#2	1986.9	44496.	4035.6

Sample Name: 280-97818-A-1-C MSD Acquired: 6/6/2017 19:45:47 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376133 6010c

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05101**	W **2.9694**	**1.0518**	**1.0535**	**2.1859**	**.05132**	W **2.2104**	**86.262**	**.10696**
Stddev	.00072	.0171	.0093	.0165	.0042	.00004	.0332	.168	.00196
%RSD	1.4071	.57524	.88586	1.5698	.19299	.07215	1.5011	.19447	1.8293
#1	.05152	2.9815	1.0584	1.0652	2.1889	.05129	2.2339	86.380	.10835
#2	.05051	2.9574	1.0452	1.0418	2.1829	.05134	2.1869	86.143	.10558
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit		500.00					2.0000		
Low Limit		3.2000					-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49742**	**.20977**	**.27864**	**1.0934**	**62.833**	**1.0919**	**49.931**	**.50832**	**.99586**
Stddev	.01130	.00414	.00103	.0038	.191	.0010	.156	.00135	.02018
%RSD	2.2711	1.9754	.37038	.34556	.30395	.08680	.31142	.26507	2.0259
#1	.50540	.21270	.27937	1.0907	62.968	1.0926	50.041	.50928	1.0101
#2	.48943	.20684	.27791	1.0961	62.698	1.0912	49.821	.50737	.98159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**71.493**	**.49191**	**11.302**	**.49836**	**5.9123**	**.52943**	**2.0135**	**16.279**	**34.838**
Stddev	.820	.00977	.224	.00811	.0568	.01513	.0272	.044	.094
%RSD	1.1471	1.9858	1.9850	1.6271	.96028	2.8579	1.3495	.26944	.26944
#1	72.073	.49882	11.461	.50409	5.9524	.54013	2.0327	16.310	34.904
#2	70.913	.48501	11.143	.49262	5.8721	.51873	1.9943	16.248	34.772
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2.0081**	**1.4078**	**1.0485**	**1.0376**	**1.9819**	**2.1155**	**.52318**	**.50070**	**.52786**
Stddev	.0430	.0025	.0051	.0010	.0304	.0119	.00227	.00380	.00290
%RSD	2.1413	.17889	.48897	.09718	1.5321	.56065	.43464	.75829	.54924
#1	2.0385	1.4096	1.0521	1.0383	2.0034	2.1071	.52479	.50338	.52991
#2	1.9777	1.4060	1.0449	1.0369	1.9604	2.1239	.52157	.49801	.52581
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.20000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2047.7**	**45515.**	**4114.5**
Stddev	24.3	16.	46.6
%RSD	1.1864	.03577	1.1325
#1	2030.5	45526.	4081.5
#2	2064.9	45503.	4147.4

Sample Name: 280-97818-A-1-Apds Acquired: 6/6/2017 19:48:11 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376133 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05168**	**2.1802**	**.20211**	**.13010**	**.21812**	**.05082**	**.00381**	**55.427**	**.05083**
Stddev	.00018	.0371	.00595	.00056	.00136	.00031	.00052	.358	.00119
%RSD	.35340	1.7013	2.9441	.42720	.62504	.61832	13.656	.64603	2.3371
#1	.05155	2.2064	.19790	.12970	.21715	.05060	.00417	55.174	.05167
#2	.05181	2.1540	.20632	.13049	.21908	.05105	.00344	55.681	.04999
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04852**	**.05733**	**.06033**	**1.0796**	**30.798**	**.14594**	**19.542**	**.05133**	**.05409**
Stddev	.00073	.00084	.00010	.0067	.223	.00000	.044	.00021	.00047
%RSD	1.5002	1.4679	.16682	.62087	.72462	.00314	.22616	.41039	.87499
#1	.04904	.05792	.06040	1.0749	30.640	.14593	19.573	.05148	.05442
#2	.04801	.05673	.06026	1.0843	30.956	.14594	19.510	.05118	.05375
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**38.056**	**.04827**	**2.2257**	**.10149**	**3.5689**	**.10711**	**.19407**	**10.927**	**23.384**
Stddev	.464	.00129	.0430	.00249	.0542	.00702	.00812	.000	.000
%RSD	1.2183	2.6768	1.9320	2.4523	1.5183	6.5564	4.1837	.00190	.00190
#1	38.384	.04918	2.2561	.10325	3.6072	.11207	.18833	10.927	23.384
#2	37.728	.04735	2.1953	.09973	3.5306	.10214	.19981	10.927	23.384
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10025**	**.41751**	**.20690**	**.05341**	**.20660**	**.50878**	**.05567**	**.20128**	**.05647**
Stddev	.00283	.00203	.00051	.00033	.00433	.04728	.00004	.00148	.00158
%RSD	2.8246	.48537	.24642	.61023	2.0975	9.2923	.07064	.73672	2.8038
#1	.10225	.41608	.20726	.05364	.20966	.54221	.05570	.20233	.05759
#2	.09825	.41894	.20654	.05318	.20353	.47535	.05564	.20024	.05535
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2078.7**	**47501.**	**4377.3**
Stddev	12.1	184.	12.9
%RSD	.58248	.38687	.29436
#1	2070.1	47631.	4368.2
#2	2087.3	47371.	4386.4

Sample Name: CCVH-4569081 Acquired: 6/6/2017 19:50:45 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00585**	**50.451**	**-.00114**	**.00636**	**.00022**	**.00013**	**1.0403**	**.01116**	**-.00005**	**-.00058**	**.00080**	**.02733**	**49.842**
Stddev	.00029	.060	.00215	.00095	.00003	.00001	.0186	.00820	.00034	.00022	.00054	.00181	.025
%RSD	4.9499	.11809	187.94	14.901	13.116	8.4594	1.7879	73.513	742.82	39.084	67.692	6.6296	.05084
#1	-.00565	50.493	.00038	.00703	.00024	.00014	1.0535	.01696	-.00028	-.00042	.00118	.02605	49.860
#2	-.00606	50.409	-.00266	.00569	.00020	.00012	1.0272	.00536	.00019	-.00073	.00042	.02861	49.824
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.17543**	**.00588**	**.07236**	**-.00156**	**-.00185**	**258.91**	**-.00022**	**.00981**	**-.00019**	**5.2109**	**-.00980**	**-.01067**	**-.02029**
Stddev	.01397	.00262	.00811	.00002	.00005	.04	.00023	.00057	.00137	.1199	.00280	.00018	.01345
%RSD	7.9620	44.600	11.203	1.1543	2.8526	.01582	104.60	5.8158	732.12	2.3007	28.601	1.7037	66.278
#1	.18530	.00403	.07810	-.00155	-.00189	258.88	-.00039	.00940	-.00116	5.2957	-.00782	-.01079	-.02980
#2	.16555	.00774	.06663	-.00158	-.00181	258.94	-.00006	.01021	.00078	5.1262	-.01178	-.01054	-.01078
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.04343**	**-.00422**	**.00042**	**4.9933**	**.01795**	**.00163**	**10.385**	**.01464**	**.00144**	**.11831**
Stddev	.02878	.00034	.00008	.0006	.00065	.00366	.011	.00055	.00137	.00136
%RSD	66.278	8.0171	18.018	.01133	3.5944	225.20	.10276	3.7826	95.242	1.1461
#1	-.06378	-.00446	.00047	4.9937	.01840	-.00096	10.377	.01424	.00047	.11736
#2	-.02308	-.00398	.00036	4.9929	.01749	.00422	10.392	.01503	.00241	.11927
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1992.4**	**44678.**	**4086.7**
Stddev	1.9	29.	56.2
%RSD	.09688	.06601	1.3743
#1	1991.1	44699.	4047.0
#2	1993.8	44658.	4126.4

Sample Name: CCV-4567764 Acquired: 6/6/2017 19:53:20 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50849**	F **.65998**	**.98765**	**.49871**	**.50369**	**.50009**	**-.00117**	**4.9912**	**.50326**	**.50435**	**.50020**	**.51425**
Stddev	.00168	.01786	.02099	.00895	.00032	.00064	.00041	.0304	.01159	.01123	.01220	.00284
%RSD	.32978	2.7057	2.1253	1.7948	.06366	.12710	34.812	.60925	2.3039	2.2269	2.4389	.55142
#1	.50968	.67261	1.0025	.50503	.50392	.50054	-.00146	5.0127	.51146	.51230	.50883	.51625
#2	.50731	.64735	.97281	.49238	.50346	.49964	-.00089	4.9697	.49506	.49641	.49158	.51224
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5036**	**51.098**	**1.0377**	**20.054**	**.50450**	**.49897**	**5.4312**	**.50078**	**1.0810**	**1.0124**	**.00207**	**1.0053**
Stddev	.0179	.026	.0020	.142	.00375	.01158	.0154	.01080	.0201	.0210	.00227	.0279
%RSD	.71578	.05116	.19536	.70724	.74325	2.3206	.28320	2.1571	1.8594	2.0752	109.78	2.7760
#1	2.5162	51.080	1.0391	20.154	.50715	.50716	5.4421	.50842	1.0952	1.0273	.00046	1.0251
#2	2.4909	51.117	1.0363	19.954	.50185	.49079	5.4203	.49314	1.0668	.99754	.00367	.98561
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99078**	**4.9894**	**10.677**	**1.0049**	**.50575**	**.00520**	**.50172**	**1.0225**	**-.01405**	**.50199**	**.49641**	**.49988**
Stddev	.02392	.0590	.126	.0319	.00031	.00138	.00255	.0272	.01196	.00178	.00324	.00149
%RSD	2.4146	1.1817	1.1817	3.1735	.06086	26.623	.50819	2.6611	85.083	.35475	.65271	.29816
#1	1.0077	4.9477	10.588	1.0275	.50597	.00422	.50352	1.0417	-.02251	.50325	.49870	.50093
#2	.97386	5.0310	10.766	.98237	.50553	.00618	.49992	1.0032	-.00560	.50073	.49412	.49882
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1998.0**	**44984.**	**4105.9**
Stddev	6.6	261.	89.7
%RSD	.33069	.58021	2.1851
#1	1993.3	44799.	4169.3
#2	2002.7	45169.	4042.5

Sample Name: CCB Acquired: 6/6/2017 19:55:49 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00035**	**.00214**	**-.00033**	**.00299**	**.00042**	**.00014**	**.00278**	**.00459**	**.00040**	**-.00009**	**.00069**	**.00155**
Stddev	.00044	.00087	.00240	.00038	.00030	.00003	.00511	.00295	.00022	.00026	.00004	.00062
%RSD	124.13	40.707	735.75	12.752	70.448	21.791	183.74	64.216	54.669	301.88	5.6529	39.690
#1	.00004	.00276	.00137	.00272	.00021	.00012	.00639	.00668	.00025	.00010	.00066	.00199
#2	.00066	.00152	-.00203	.00326	.00064	.00016	-.00083	.00251	.00056	-.00027	.00072	.00112
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00179**	**.06901**	W **.00573**	**.00773**	**.00015**	**-.00034**	**.17320**	**-.00107**	**.00373**	**-.00015**	**-.00115**	**.00321**
Stddev	.00259	.02054	.00078	.00816	.00010	.00050	.01188	.00070	.00182	.00087	.01549	.00153
%RSD	144.55	29.763	13.669	105.52	69.846	148.74	6.8605	65.687	48.773	583.67	1345.3	47.779
#1	.00362	.08353	.00629	.01350	.00022	-.00069	.18161	-.00057	.00502	-.00076	.00980	.00212
#2	-.00004	.05448	.00518	.00196	.00007	.00002	.16480	-.00157	.00245	.00047	-.01210	.00429
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500									
Low Limit			-.01000									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00142**	**-.01688**	**-.03612**	**-.00133**	**-.00003**	**.00342**	**-.00026**	**.00266**	**-.01125**	**-.00055**	**.00108**	**-.00286**
Stddev	.00891	.02489	.05327	.00072	.00002	.00315	.00025	.00187	.01008	.00025	.00088	.00181
%RSD	626.48	147.50	147.50	54.190	80.023	92.093	97.869	70.369	89.603	45.298	80.806	63.386
#1	.00488	.00073	.00155	-.00082	-.00001	.00565	-.00008	.00398	-.01838	-.00037	.00046	-.00158
#2	-.00772	-.03448	-.07379	-.00184	-.00004	.00119	-.00044	.00134	-.00412	-.00072	.00170	-.00414
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1981.9**	**45415.**	**4009.1**
Stddev	11.6	976.	25.1
%RSD	.58721	2.1494	.62693
#1	1973.6	44725.	4026.9
#2	1990.1	46106.	3991.4

Sample Name: CCVL-4576167 Acquired: 6/6/2017 19:58:27 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01043**	F **.13586**	**.01322**	**.09771**	**.01041**	**.00109**	**.11512**	**.19656**	**.00523**	**.00998**	**.01010**	**.01622**
Stddev	.00044	.00486	.00849	.00305	.00011	.00002	.00658	.00932	.00036	.00047	.00012	.00030
%RSD	4.2173	3.5781	64.234	3.1188	1.0560	1.8926	5.7152	4.7404	6.8046	4.7245	1.1546	1.8324
#1	.01074	.13929	.00721	.09987	.01049	.00107	.11977	.18997	.00498	.01031	.01018	.01643
#2	.01012	.13242	.01922	.09556	.01033	.00110	.11047	.20315	.00549	.00965	.01001	.01601
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000										
Range		30.000%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10535**	**3.1560**	F **.02653**	**.20593**	**.01045**	**.01789**	**1.1929**	**.03888**	**3.0102**	**.00871**	**.10358**	**.02068**
Stddev	.00063	.0822	.00112	.00223	.00003	.00097	.0010	.00118	.0852	.00123	.00129	.00066
%RSD	.60091	2.6045	4.2070	1.0819	.25220	5.4460	.08049	3.0393	2.8288	14.137	1.2453	3.2058
#1	.10491	3.2141	.02574	.20751	.01043	.01858	1.1936	.03971	3.0704	.00958	.10449	.02115
#2	.10580	3.0978	.02732	.20436	.01047	.01720	1.1922	.03804	2.9500	.00784	.10267	.02021
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.02000									
Range			30.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01563**	**.46999**	**1.0058**	**.09761**	**.01033**	**.01464**	**.01008**	**.01821**	**.05664**	**.00869**	**.02126**	**.01410**
Stddev	.00414	.00801	.0171	.00249	.00007	.00154	.00053	.00231	.01138	.00061	.00089	.00274
%RSD	26.467	1.7034	1.7034	2.5495	.67609	10.507	5.2517	12.661	20.092	7.0391	4.1917	19.430
#1	.01856	.46433	.99367	.09937	.01028	.01573	.01046	.01984	.06469	.00913	.02189	.01216
#2	.01271	.47565	1.0179	.09585	.01038	.01355	.00971	.01658	.04860	.00826	.02063	.01604
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1984.2**	**44677.**	**3964.2**
Stddev	16.6	421.	31.5
%RSD	.83662	.94296	.79499
#1	1995.9	44379.	3986.5
#2	1972.5	44975.	3942.0

Sample Name: 280-97818-A-2-A Acquired: 6/6/2017 20:01:04 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376133 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00030**	**1.0070**	**.05835**	**.04641**	**1.6952**	**.00001**	**.00376**	**141.78**	**.00111**
Stddev	.00009	.0300	.00549	.00272	.0107	.00008	.00111	.98	.00008
%RSD	31.280	2.9803	9.4118	5.8525	.63321	632.09	29.488	.68991	7.5425
#1	-.00037	1.0282	.05446	.04833	1.7028	.00007	.00455	142.47	.00105
#2	-.00023	.98575	.06223	.04449	1.6877	-.00005	.00298	141.09	.00117
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03044**	**.00570**	**.02099**	**72.900**	**13.973**	**.10686**	**46.314**	**8.6942**	**.01894**
Stddev	.00114	.00030	.00076	.005	.104	.00164	.100	.0759	.00150
%RSD	3.7468	5.1948	3.6201	.00661	.74544	1.5392	.21561	.87334	7.9368
#1	.03125	.00549	.02153	72.903	14.047	.10802	46.384	8.7479	.02000
#2	.02964	.00590	.02045	72.896	13.899	.10570	46.243	8.6405	.01787
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**230.87**	**.01275**	**.74861**	**.00018**	**1.4635**	**-.00256**	**-.00559**	**15.228**	**32.588**
Stddev	3.17	.00081	.03148	.00093	.0633	.00196	.00165	.081	.172
%RSD	1.3728	6.3406	4.2047	502.12	4.3261	76.581	29.528	.52895	.52895
#1	233.11	.01332	.77086	.00084	1.5083	-.00117	-.00675	15.285	32.710
#2	228.63	.01218	.72635	-.00047	1.4187	-.00394	-.00442	15.171	32.466
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00072**	**2.9924**	**.00628**	**.02068**	**.00322**	**-.02786**	**.00246**	**.14118**	**-.00006**
Stddev	.00405	.0202	.00413	.00064	.00213	.02127	.00076	.00220	.00103
%RSD	561.83	.67324	65.861	3.1135	66.164	76.343	30.912	1.5578	1697.9
#1	.00358	3.0067	.00335	.02114	.00473	-.01282	.00300	.14273	-.00079
#2	-.00214	2.9782	.00920	.02023	.00171	-.04290	.00192	.13962	.00067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2057.4**	**44852.**	**4239.5**
Stddev	18.0	18.	60.7
%RSD	.87468	.03997	1.4321
#1	2044.7	44864.	4196.6
#2	2070.1	44839.	4282.4

Sample Name: 280-97818-A-3-A Acquired: 6/6/2017 20:03:45 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376133 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00018**	**.04712**	**.06995**	**.11537**	**.37252**	**.00007**	**.00503**	**35.815**	**.00151**
Stddev	.00022	.00608	.00301	.00321	.00025	.00011	.00035	.051	.00058
%RSD	121.83	12.903	4.3096	2.7820	.06630	146.74	7.0291	.14134	38.259
#1	-.00002	.05142	.07208	.11764	.37269	.00015	.00528	35.851	.00191
#2	-.00033	.04282	.06782	.11310	.37234	-.00000	.00478	35.779	.00110
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09091**	**.00086**	**.00435**	**50.892**	**28.598**	**.26626**	**57.925**	**8.0750**	**.00086**
Stddev	.00247	.00020	.00033	.344	.063	.00148	.163	.0720	.00081
%RSD	2.7217	23.568	7.6754	.67519	.22029	.55437	.28122	.89101	94.597
#1	.09266	.00072	.00412	51.135	28.643	.26521	58.040	8.1258	.00028
#2	.08916	.00100	.00459	50.649	28.554	.26730	57.810	8.0241	.00143
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**237.30**	**.03320**	**1.7575**	**.00095**	**1.0754**	**-.00101**	**-.00074**	**19.321**	**41.347**
Stddev	.39	.00201	.0688	.00086	.0203	.00090	.00506	.076	.162
%RSD	.16445	6.0438	3.9130	91.421	1.8873	88.825	687.28	.39230	.39230
#1	237.58	.03462	1.8062	.00156	1.0897	-.00164	.00284	19.374	41.461
#2	237.03	.03178	1.7089	.00033	1.0610	-.00038	-.00431	19.267	41.232
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00270**	**1.4287**	**.00298**	**.00098**	**-.00189**	**-.02200**	**.00048**	**.05182**	**-.00025**
Stddev	.00060	.0032	.00241	.00010	.00474	.03369	.00005	.00009	.00078
%RSD	22.287	.22319	80.952	9.7821	250.06	153.18	9.9616	.17821	317.31
#1	-.00313	1.4310	.00469	.00091	.00146	-.04582	.00045	.05189	-.00080
#2	-.00228	1.4264	.00128	.00105	-.00524	.00183	.00052	.05176	.00031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2111.2**	**47427.**	**4544.9**
Stddev	2.8	288.	7.1
%RSD	.13412	.60660	.15704
#1	2113.2	47630.	4539.9
#2	2109.2	47223.	4550.0

Sample Name: 280-97818-A-4-A Acquired: 6/6/2017 20:06:26 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376133 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00014**	**.83000**	**.00390**	**.05708**	**.03652**	**.00009**	**-.00058**	**2.5226**	**.00067**
Stddev	.00006	.01516	.00709	.00215	.00011	.00005	.00162	.0022	.00029
%RSD	44.741	1.8268	181.84	3.7619	.30208	56.493	277.39	.08809	43.298
#1	-.00019	.84072	-.00111	.05860	.03644	.00005	.00056	2.5242	.00088
#2	-.00010	.81928	.00892	.05557	.03659	.00013	-.00173	2.5210	.00047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00552**	**.00392**	**.00315**	**2.4051**	**.79130**	**.02185**	**1.8266**	**1.0422**	**-.00045**
Stddev	.00040	.00050	.00034	.0063	.01753	.00139	.0041	.0027	.00084
%RSD	7.2425	12.792	10.788	.25992	2.2159	6.3550	.22323	.25880	187.60
#1	.00523	.00357	.00291	2.4095	.77890	.02283	1.8295	1.0441	.00015
#2	.00580	.00428	.00339	2.4007	.80370	.02086	1.8237	1.0403	-.00104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**76.410**	**-.00079**	**.06933**	**.00142**	**4.1122**	**-.00285**	**-.01105**	**23.558**	**50.415**
Stddev	.241	.00001	.00825	.00049	.0868	.00296	.00868	.026	.056
%RSD	.31566	1.2607	11.901	34.695	2.1098	104.16	78.491	.11182	.11182
#1	76.581	-.00078	.07517	.00107	4.1735	-.00075	-.00492	23.540	50.375
#2	76.239	-.00079	.06350	.00177	4.0508	-.00494	-.01719	23.577	50.455
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00035**	**.02954**	**.00245**	**.01331**	**.00219**	**-.02508**	**.00225**	**.00906**	**.00025**
Stddev	.00114	.00006	.00012	.00054	.00071	.00353	.00058	.00013	.00138
%RSD	322.26	.20255	5.0358	4.0284	32.500	14.096	25.802	1.3908	561.29
#1	-.00116	.02958	.00237	.01293	.00269	-.02258	.00266	.00897	-.00073
#2	.00045	.02950	.00254	.01369	.00168	-.02757	.00184	.00915	.00123
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2142.7**	**48804.**	**4521.3**
Stddev	12.2	390.	18.2
%RSD	.57119	.79879	.40338
#1	2151.3	49080.	4508.4
#2	2134.0	48528.	4534.2

Sample Name: 280-97700-A-1-A Acquired: 6/6/2017 20:09:01 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376133 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**.01374**	**.00763**	**.02071**	**.09689**	**.00012**	**-.00274**	**68.052**	**.00059**
Stddev	.00044	.00058	.01032	.00045	.00024	.00013	.00463	.217	.00013
%RSD	1050.6	4.2456	135.24	2.1827	.24481	103.37	168.86	.31841	22.151
#1	-.00027	.01333	.00033	.02039	.09705	.00003	-.00602	68.205	.00050
#2	.00036	.01416	.01493	.02103	.09672	.00021	.00053	67.899	.00068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**.00416**	**.00351**	**.03744**	**4.7020**	**.01151**	**15.112**	**.00105**	**.00074**
Stddev	.00001	.00029	.00021	.00297	.0642	.00059	.018	.00006	.00037
%RSD	31.025	7.0763	5.9989	7.9221	1.3657	5.0973	.12051	5.4576	50.738
#1	.00005	.00395	.00336	.03953	4.7474	.01109	15.124	.00109	.00100
#2	.00003	.00437	.00366	.03534	4.6566	.01192	15.099	.00101	.00047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**37.428**	**-.00095**	**.02401**	**-.00107**	**61.650**	**-.00016**	**-.00235**	**15.636**	**33.460**
Stddev	.293	.00042	.00507	.00022	1.738	.00270	.01086	.002	.004
%RSD	.78402	44.846	21.122	20.221	2.8193	1672.6	461.26	.01307	.01307
#1	37.636	-.00065	.02042	-.00122	62.879	.00175	.00532	15.637	33.463
#2	37.221	-.00125	.02759	-.00091	60.421	-.00207	-.01003	15.634	33.457
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00012**	**.42794**	**.00162**	**.00086**	**.00131**	**-.04610**	**.00488**	**.00919**	**-.00165**
Stddev	.00060	.00127	.00268	.00029	.00305	.00494	.00005	.00087	.00283
%RSD	512.72	.29674	164.79	33.069	233.23	10.722	1.0390	9.4801	172.00
#1	.00054	.42884	-.00027	.00066	.00347	-.04960	.00484	.00981	-.00365
#2	-.00031	.42704	.00352	.00107	-.00085	-.04261	.00491	.00858	.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2031.4**	**46289.**	**4221.7**
Stddev	2.2	29.	.1
%RSD	.10657	.06336	.00337
#1	2029.9	46310.	4221.6
#2	2032.9	46268.	4221.8

Sample Name: MB 280-376137/1-A Acquired: 6/6/2017 20:11:36 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/6 Custom ID2: Custom ID3:
Comment: 376137 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00049**	**.00474**	**.00530**	**.00205**	**-.00065**	**.00003**	**.00395**	**.05019**	**.00007**
Stddev	.00010	.00050	.00370	.00028	.00007	.00010	.00535	.00035	.00033
%RSD	20.366	10.654	69.816	13.480	10.578	288.30	135.31	.70098	447.01
#1	-.00056	.00510	.00792	.00225	-.00070	-.00004	.00017	.05044	-.00016
#2	-.00042	.00438	.00269	.00186	-.00060	.00010	.00774	.04994	.00031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00007**	**.00009**	**.00086**	**.02214**	**.06102**	**.00424**	**.00294**	**.00015**	**-.00047**
Stddev	.00009	.00014	.00015	.00045	.03360	.00165	.00359	.00007	.00062
%RSD	122.71	169.58	17.345	2.0366	55.068	38.830	122.00	45.633	132.54
#1	-.00014	.00019	.00076	.02182	.03726	.00540	.00548	.00020	-.00003
#2	-.00001	-.00002	.00097	.02246	.08478	.00308	.00040	.00010	-.00090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.23318**	**-.00075**	**.00758**	**.00082**	**.02159**	**-.00105**	**.00106**	**-.00931**	**-.01993**
Stddev	.00798	.00025	.00121	.00110	.00734	.00082	.00520	.00533	.01141
%RSD	3.4209	33.350	15.961	134.04	33.986	78.284	490.36	57.238	57.238
#1	.23882	-.00092	.00844	.00004	.02678	-.00164	.00474	-.01308	-.02799
#2	.22753	-.00057	.00673	.00160	.01640	-.00047	-.00262	-.00554	-.01186
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00167**	**.00021**	**.00093**	**.00089**	**-.00049**	**-.00895**	**-.00042**	**.00320**	**-.00306**
Stddev	.00085	.00002	.00182	.00020	.00583	.00179	.00093	.00022	.00121
%RSD	50.853	10.933	195.16	22.860	1197.4	19.954	220.69	6.7669	39.349
#1	-.00107	.00023	.00222	.00104	.00363	-.00769	-.00107	.00305	-.00221
#2	-.00227	.00020	-.00035	.00075	-.00461	-.01021	.00024	.00335	-.00392
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2073.9**	**47359.**	**4265.9**
Stddev	17.5	327.	31.7
%RSD	.84313	.69132	.74355
#1	2061.6	47127.	4288.3
#2	2086.3	47590.	4243.4

Sample Name: LCS 280-376137/2-A Acquired: 6/6/2017 20:15:03 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376137 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05098**	F **2.5145**	**1.0477**	**1.0142**	**2.0388**	**.05045**	**2.2279**	**48.994**	**.10615**
Stddev	.00057	.0453	.0199	.0103	.0019	.00002	.0190	.034	.00147
%RSD	1.1265	1.8015	1.8993	1.0125	.09213	.03357	.85143	.06940	1.3884
#1	.05058	2.5465	1.0618	1.0214	2.0402	.05044	2.2413	49.018	.10720
#2	.05139	2.4825	1.0336	1.0069	2.0375	.05046	2.2145	48.970	.10511
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit		2.2299							
Low Limit		1.7300							

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49890**	**.20315**	**.26847**	**1.0092**	**51.668**	**1.0376**	**49.787**	**.50026**	**.98045**
Stddev	.00667	.00192	.00088	.0037	.082	.0008	.379	.00417	.01349
%RSD	1.3377	.94347	.32790	.37174	.15907	.08134	.76090	.83367	1.3759
#1	.50362	.20450	.26785	1.0118	51.726	1.0370	49.519	.49731	.98999
#2	.49418	.20179	.26909	1.0065	51.610	1.0382	50.054	.50321	.97091
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**52.865**	**.49313**	F **11.240**	**.50374**	**2.2454**	**.51459**	**2.0111**	**9.8235**	**21.022**
Stddev	.273	.00535	.156	.00176	.0161	.00274	.0150	.0444	.095
%RSD	.51562	1.0852	1.3842	.34961	.71530	.53219	.74337	.45159	.45159
#1	53.058	.49691	11.350	.50498	2.2567	.51653	2.0217	9.7922	20.955
#2	52.673	.48935	11.130	.50249	2.2340	.51265	2.0005	9.8549	21.090
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit			11.100						
Low Limit			9.1000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0005**	**1.0156**	**1.0315**	**1.0089**	**2.0222**	**2.1076**	**.50727**	**.48964**	**.51441**
Stddev	.0249	.0024	.0043	.0074	.0308	.0266	.00281	.00596	.00127
%RSD	1.2460	.23325	.41714	.73345	1.5220	1.2626	.55349	1.2169	.24773
#1	2.0181	1.0173	1.0284	1.0037	2.0439	2.0888	.50528	.48543	.51531
#2	1.9829	1.0139	1.0345	1.0141	2.0004	2.1264	.50925	.49386	.51351
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2047.2**	**46882.**	**4193.8**
Stddev	16.4	558.	24.1
%RSD	.80355	1.1902	.57563
#1	2035.6	47277.	4210.9
#2	2058.8	46488.	4176.7

Sample Name: LCSD 280-376137/3-A Acquired: 6/6/2017 20:17:26 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376137 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05216**	F **2.5470**	**1.0662**	**1.0398**	**2.1118**	**.05217**	**2.2787**	**50.690**	**.10887**
Stddev	.00001	.0402	.0182	.0145	.0060	.00037	.0401	.231	.00184
%RSD	.02043	1.5788	1.7081	1.3954	.28654	.71435	1.7589	.45615	1.6908
#1	.05217	2.5754	1.0791	1.0500	2.1161	.05191	2.3070	50.853	.11017
#2	.05215	2.5185	1.0534	1.0295	2.1075	.05244	2.2503	50.526	.10757
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit		2.2299							
Low Limit		1.7300							

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50731**	**.20637**	**.27813**	**1.0560**	**53.249**	**1.0721**	**51.130**	**.51390**	**1.0016**
Stddev	.00947	.00297	.00116	.0033	.209	.0012	.035	.00044	.0197
%RSD	1.8664	1.4389	.41588	.31660	.39166	.10947	.06822	.08567	1.9706
#1	.51400	.20847	.27731	1.0584	53.396	1.0712	51.155	.51359	1.0156
#2	.50061	.20427	.27895	1.0537	53.102	1.0729	51.106	.51421	.98766
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**54.662**	**.50086**	F **11.489**	**.51822**	**2.2924**	**.53587**	**2.0603**	**10.184**	**21.793**
Stddev	.526	.00794	.201	.00620	.0256	.00526	.0527	.023	.050
%RSD	.96150	1.5844	1.7512	1.1959	1.1173	.98170	2.5599	.22979	.22979
#1	54.290	.50648	11.631	.52260	2.3105	.53959	2.0976	10.200	21.829
#2	55.033	.49525	11.346	.51383	2.2743	.53215	2.0230	10.167	21.758
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit			11.100						
Low Limit			9.1000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0461**	**1.0514**	**1.0624**	**1.0424**	**2.0589**	**2.1602**	**.52084**	**.50882**	**.53408**
Stddev	.0404	.0043	.0037	.0002	.0285	.0399	.00028	.00084	.00381
%RSD	1.9738	.41173	.35101	.02218	1.3862	1.8455	.05330	.16531	.71258
#1	2.0747	1.0544	1.0650	1.0426	2.0791	2.1320	.52065	.50822	.53139
#2	2.0176	1.0483	1.0598	1.0423	2.0388	2.1884	.52104	.50941	.53677
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2044.9**	**46203.**	**4355.0**
Stddev	3.6	224.	41.0
%RSD	.17824	.48546	.94106
#1	2042.3	46362.	4326.0
#2	2047.4	46044.	4383.9

Sample Name: CCVH-4569081 Acquired: 6/6/2017 20:19:49 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00605**	**49.707**	**-.00631**	**.00528**	**.00042**	**.00019**	**1.0421**	**.00978**	**.00013**	**-.00070**	**.00047**	**.02640**	**49.222**
Stddev	.00143	.250	.00949	.00111	.00009	.00011	.0345	.00240	.00002	.00029	.00033	.00121	.207
%RSD	23.685	.50285	150.47	20.964	20.268	61.528	3.3118	24.515	12.199	41.103	71.298	4.5989	.42038
#1	-.00707	49.884	.00040	.00606	.00049	.00027	1.0665	.00809	.00012	-.00050	.00070	.02726	49.369
#2	-.00504	49.530	-.01302	.00450	.00036	.00011	1.0177	.01148	.00015	-.00091	.00023	.02554	49.076
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10646**	**.00343**	**.06894**	**-.00151**	**-.00089**	**255.44**	**-.00085**	**.00968**	**.00121**	**5.2143**	**-.01079**	**-.00576**	**-.01333**
Stddev	.05973	.00157	.00216	.00016	.00026	.72	.00017	.01214	.00391	.1299	.00084	.00902	.00568
%RSD	56.104	45.745	3.1402	10.643	29.458	.28060	19.695	125.44	323.29	2.4915	7.7983	156.69	42.622
#1	.14869	.00232	.07047	-.00163	-.00071	255.95	-.00073	.01827	-.00155	5.3062	-.01019	.00062	-.00931
#2	.06423	.00454	.06741	-.00140	-.00108	254.94	-.00097	.00109	.00397	5.1224	-.01138	-.01214	-.01734
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.02852**	**-.00180**	**.00056**	**4.9370**	**.01745**	**.00013**	**10.182**	**.01433**	**.00066**	**.11800**
Stddev	.01216	.00043	.00011	.0076	.00016	.00260	.014	.00017	.00021	.00089
%RSD	42.622	23.872	18.898	.15482	.89223	1970.5	.14062	1.1548	32.347	.75401
#1	-.01993	-.00210	.00063	4.9316	.01756	-.00171	10.192	.01445	.00051	.11863
#2	-.03712	-.00149	.00048	4.9424	.01734	.00197	10.172	.01421	.00082	.11737
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2080.7**	**46398.**	**4333.3**
Stddev	9.9	545.	51.3
%RSD	.47643	1.1754	1.1839
#1	2073.7	46783.	4369.6
#2	2087.8	46012.	4297.0

Sample Name: CCV-4567764 Acquired: 6/6/2017 20:22:24 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50565**	F **.65110**	**.97794**	**.49757**	**.50151**	**.49500**	**-.00315**	**4.9679**	**.49891**	**.49539**	**.49187**	**.51489**
Stddev	.00182	.01193	.02551	.00648	.00095	.00116	.00187	.0186	.00852	.00821	.00920	.00076
%RSD	.36077	1.8322	2.6087	1.3019	.18945	.23479	59.351	.37423	1.7071	1.6571	1.8707	.14797
#1	.50694	.65954	.99598	.50215	.50084	.49417	-.00447	4.9547	.50494	.50120	.49837	.51543
#2	.50436	.64267	.95990	.49299	.50218	.49582	-.00183	4.9810	.49289	.48959	.48536	.51435
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4683**	**50.369**	**1.0231**	**19.825**	**.49496**	**.49076**	**5.3316**	**.49240**	**1.0735**	**1.0044**	**-.00555**	**1.0012**
Stddev	.0066	.183	.0007	.101	.00264	.01124	.0099	.00875	.0191	.0214	.00710	.0111
%RSD	.26825	.36359	.07186	.50796	.53345	2.2911	.18541	1.7773	1.7764	2.1259	128.04	1.1093
#1	2.4636	50.239	1.0226	19.896	.49682	.49871	5.3386	.49859	1.0870	1.0195	-.00053	1.0091
#2	2.4730	50.498	1.0236	19.754	.49309	.48281	5.3246	.48621	1.0600	.98929	-.01057	.99336
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.98318**	**4.8853**	**10.454**	**.98781**	**.50121**	**.00383**	**.49355**	**1.0169**	**-.03263**	**.49546**	**.48274**	**.49019**
Stddev	.02821	.0139	.030	.02060	.00022	.00184	.00161	.0204	.00546	.00220	.00046	.00251
%RSD	2.8688	.28516	.28516	2.0856	.04392	48.150	.32590	2.0078	16.723	.44326	.09507	.51305
#1	1.0031	4.8951	10.476	1.0024	.50106	.00253	.49468	1.0313	-.02877	.49701	.48241	.49197
#2	.96323	4.8754	10.433	.97325	.50137	.00513	.49241	1.0025	-.03649	.49391	.48306	.48841
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2098.8**	**47634.**	**4363.3**
Stddev	5.7	172.	52.1
%RSD	.26963	.36032	1.1933
#1	2102.8	47756.	4400.1
#2	2094.8	47513.	4326.5

Sample Name: CCB Acquired: 6/6/2017 20:24:53 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00022**	**.00157**	**.00045**	**.00397**	**-.00046**	**.00013**	**-.00192**	**.00047**	**.00024**	**.00004**	**.00039**	**.00115**	**.00317**
Stddev	.00047	.00112	.00144	.00142	.00031	.00004	.00493	.00154	.00027	.00019	.00052	.00026	.00086
%RSD	210.16	71.444	320.90	35.904	67.157	31.913	256.38	325.60	112.02	540.68	132.40	22.771	27.177
#1	-.00011	.00237	.00147	.00497	-.00024	.00016	.00156	.00156	.00043	.00017	.00003	.00133	.00378
#2	.00056	.00078	-.00057	.00296	-.00068	.00010	-.00541	-.00061	.00005	-.00010	.00076	.00096	.00256
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00716**	**.00418**	**.00366**	**.00008**	**.00041**	**.20121**	**-.00105**	**.00149**	**.00325**	**.00868**	**.00028**	**-.00010**	**-.01439**
Stddev	.04177	.00198	.00257	.00012	.00052	.00118	.00036	.00421	.00336	.00855	.00091	.00007	.02260
%RSD	583.23	47.454	70.353	141.19	126.48	.58892	34.751	282.93	103.31	98.509	318.95	70.578	157.10
#1	.02237	.00278	.00548	.00017	.00004	.20037	-.00079	-.00149	.00088	.00263	-.00036	-.00014	.00160
#2	-.03670	.00558	.00184	.00000	.00078	.20205	-.00131	.00446	.00562	.01472	.00093	-.00005	-.03037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.03079**	**-.00018**	**.00025**	**.00146**	**.00012**	**-.00318**	**-.04000**	**-.00074**	**.00184**	**.00128**
Stddev	.04837	.00345	.00022	.00169	.00016	.00043	.01933	.00066	.00001	.00091
%RSD	157.10	1944.1	84.716	116.05	133.21	13.405	48.330	88.375	.74157	70.642
#1	.00341	.00226	.00041	.00026	.00001	-.00349	-.02633	-.00028	.00185	.00064
#2	-.06499	-.00262	.00010	.00265	.00023	-.00288	-.05368	-.00121	.00183	.00192
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2127.1**	**48367.**	**4291.5**
Stddev	3.5	30.	17.7
%RSD	.16520	.06254	.41311
#1	2124.6	48345.	4304.0
#2	2129.6	48388.	4278.9

Sample Name: CCVL-4576167 Acquired: 6/6/2017 20:27:31 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01033**	F **.13149**	**.01106**	**.09761**	**.00982**	**.00092**	**.11883**	**.19948**	**.00498**	**.00979**	**.01022**	**.01683**
Stddev	.00026	.00587	.00299	.00305	.00005	.00001	.00417	.00197	.00024	.00005	.00022	.00069
%RSD	2.4713	4.4659	27.072	3.1296	.50188	.61158	3.5098	.98550	4.7633	.50254	2.1491	4.0828
#1	.01015	.13564	.01317	.09977	.00978	.00093	.12178	.20087	.00514	.00975	.01038	.01731
#2	.01051	.12733	.00894	.09545	.00985	.00092	.11588	.19809	.00481	.00982	.01007	.01634
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000										
Range		30.000%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10252**	**3.0584**	**.02367**	**.20025**	**.01011**	**.01918**	**1.1911**	**.03766**	**3.0130**	**.01119**	**.10001**	**.02049**
Stddev	.00428	.0451	.00070	.00535	.00010	.00007	.0190	.00016	.0903	.00001	.01154	.00383
%RSD	4.1701	1.4735	2.9450	2.6724	1.0047	.37145	1.5926	.43218	2.9958	.07756	11.535	18.709
#1	.09950	3.0903	.02416	.20403	.01018	.01923	1.1777	.03755	3.0768	.01118	.10816	.01778
#2	.10554	3.0266	.02318	.19646	.01004	.01913	1.2045	.03778	2.9492	.01120	.09185	.02320
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01806**	**.44868**	**.96017**	**.09497**	**.01014**	**.01576**	**.00965**	**.01395**	**.06138**	**.00958**	**.02120**	**.01510**
Stddev	.00442	.00261	.00560	.00090	.00007	.00010	.00035	.00397	.00298	.00033	.00027	.00133
%RSD	24.449	.58272	.58272	.94617	.69215	.63154	3.5853	28.442	4.8546	3.4273	1.2923	8.8261
#1	.01494	.44683	.95621	.09560	.01009	.01569	.00941	.01675	.06349	.00935	.02139	.01605
#2	.02119	.45053	.96412	.09433	.01019	.01584	.00990	.01114	.05927	.00981	.02101	.01416
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2144.1**	**49081.**	**4323.6**
Stddev	2.8	48.	16.6
%RSD	.13227	.09843	.38439
#1	2146.1	49047.	4335.4
#2	2142.1	49116.	4311.9

Sample Name: 280-97817-A-8-A Acquired: 6/6/2017 20:30:08 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376137 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**.01127**	**.00682**	**.32977**	**.05634**	**.00013**	**.00464**	**35.492**	**.00063**
Stddev	.00068	.00152	.00581	.00752	.00030	.00002	.00107	.101	.00010
%RSD	6793.7	13.517	85.141	2.2816	.53494	13.429	22.992	.28401	15.712
#1	.00047	.01235	.00271	.33509	.05656	.00012	.00389	35.421	.00056
#2	-.00049	.01019	.01092	.32445	.05613	.00015	.00540	35.563	.00070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03534**	**.00045**	**.00298**	**20.803**	**2.1713**	**.01679**	**18.395**	**5.9989**	**-.00058**
Stddev	.00081	.00024	.00018	.094	.0316	.00191	.055	.0154	.00034
%RSD	2.3004	54.614	6.1328	.45343	1.4570	11.360	.29934	.25666	58.802
#1	.03591	.00027	.00285	20.736	2.1490	.01544	18.356	5.9880	-.00034
#2	.03476	.00062	.00311	20.869	2.1937	.01813	18.434	6.0098	-.00082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.4593**	**.00288**	**.00308**	**.00178**	**21.302**	**.00027**	**-.00189**	**5.7851**	**12.380**
Stddev	.0352	.00048	.00490	.00120	.440	.00465	.00018	.0200	.043
%RSD	.47136	16.642	159.07	67.065	2.0641	1740.1	9.4620	.34651	.34651
#1	7.4344	.00322	.00654	.00263	21.613	-.00302	-.00176	5.7709	12.350
#2	7.4841	.00254	-.00038	.00094	20.991	.00356	-.00201	5.7992	12.410
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00028**	**.47267**	**.00270**	**.00036**	**.00155**	**-.01190**	**.00091**	**.00896**	**-.00130**
Stddev	.00201	.00055	.00127	.00008	.00502	.03972	.00002	.00003	.00034
%RSD	722.12	.11542	47.069	22.972	324.51	333.84	2.1418	.31419	26.128
#1	-.00114	.47228	.00180	.00042	.00509	-.03998	.00092	.00894	-.00106
#2	.00170	.47305	.00359	.00030	-.00200	.01619	.00089	.00898	-.00154
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2149.0**	**48366.**	**4400.1**
Stddev	8.9	82.	13.7
%RSD	.41508	.17045	.31035
#1	2155.3	48424.	4409.7
#2	2142.7	48307.	4390.4

Sample Name: 280-97817-A-16-A Acquired: 6/6/2017 20:32:47 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376137 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00090**	**.24952**	**.00496**	**.08882**	**.01803**	**.00000**	**.00327**	**121.48**	**.00125**
Stddev	.00100	.01315	.00744	.00374	.00005	.00011	.00150	.14	.00033
%RSD	110.32	5.2685	150.11	4.2111	.26275	3106.6	45.878	.11787	26.253
#1	.00161	.25881	-.00030	.09146	.01806	.00008	.00433	121.38	.00148
#2	.00020	.24022	.01022	.08617	.01799	-.00007	.00221	121.58	.00102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00060**	**.00238**	**.00376**	**.46388**	**3.1697**	**.04794**	**64.879**	**.06508**	**.00097**
Stddev	.00003	.00030	.00081	.00368	.0210	.00172	.355	.00228	.00035
%RSD	4.7283	12.521	21.545	.79333	.66163	3.5908	.54765	3.5075	36.129
#1	.00062	.00259	.00433	.46648	3.1549	.04672	65.130	.06670	.00121
#2	.00058	.00217	.00319	.46128	3.1845	.04916	64.627	.06347	.00072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**56.554**	**.00157**	**.01795**	**-.00297**	**112.84**	**.00098**	**-.01080**	**13.928**	**29.806**
Stddev	.364	.00069	.00816	.00075	3.17	.00302	.00591	.031	.067
%RSD	.64336	43.699	45.452	25.124	2.8107	307.56	54.733	.22593	.22593
#1	56.811	.00206	.02372	-.00244	115.08	.00312	-.00662	13.950	29.854
#2	56.297	.00109	.01218	-.00350	110.59	-.00115	-.01497	13.906	29.758
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00056**	**.63898**	**.00190**	**.00671**	**.00069**	**-.05299**	**.00014**	**.00589**	**-.00099**
Stddev	.00162	.00066	.00490	.00001	.00203	.03926	.00041	.00039	.00119
%RSD	291.39	.10398	258.42	.18151	293.85	74.090	301.45	6.6037	121.05
#1	-.00170	.63851	.00536	.00672	.00212	-.08076	-.00016	.00562	-.00183
#2	.00059	.63945	-.00157	.00670	-.00074	-.02523	.00043	.00617	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2041.8**	**46553.**	**4258.5**
Stddev	18.9	170.	68.4
%RSD	.92336	.36498	1.6067
#1	2028.5	46673.	4210.1
#2	2055.2	46432.	4306.9

Sample Name: 280-97817-A-24-A Acquired: 6/6/2017 20:35:22 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376137 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00037**	**.00513**	**.00699**	**1.4132**	**.01470**	**.00008**	**.00022**	**74.731**	**.00105**
Stddev	.00035	.00182	.00000	.0314	.00010	.00004	.00045	.000	.00012
%RSD	93.587	35.369	.05014	2.2203	.70236	51.873	201.76	.00024	11.090
#1	.00013	.00385	.00699	1.4353	.01463	.00005	.00054	74.731	.00114
#2	.00062	.00642	.00700	1.3910	.01477	.00011	-.00009	74.731	.00097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00006**	**.00047**	**.00369**	**.02909**	**1.2568**	**.01522**	**42.701**	**.01020**	**-.00101**
Stddev	.00001	.00015	.00025	.00060	.0595	.00293	.203	.00015	.00024
%RSD	20.748	32.789	6.7168	2.0564	4.7313	19.274	.47524	1.5117	23.712
#1	-.00005	.00058	.00352	.02867	1.2988	.01315	42.558	.01009	-.00118
#2	-.00007	.00036	.00387	.02951	1.2147	.01729	42.845	.01031	-.00084
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**35.274**	**.00179**	**.00640**	**-.00344**	**86.969**	**-.00641**	**.00110**	**11.080**	**23.711**
Stddev	.313	.00009	.00122	.00192	1.923	.00198	.00042	.013	.028
%RSD	.88653	5.2060	19.132	55.842	2.2113	30.875	38.654	.12015	.12015
#1	35.495	.00173	.00553	-.00480	88.329	-.00501	.00140	11.071	23.691
#2	35.053	.00186	.00727	-.00208	85.609	-.00781	.00080	11.089	23.731
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00192**	**.21560**	**.00237**	**.00028**	**.00096**	**-.09698**	**-.00025**	**.01136**	**-.00290**
Stddev	.00018	.00012	.00072	.00010	.00094	.01491	.00073	.00043	.00070
%RSD	9.2678	.05439	30.244	35.101	97.244	15.371	289.94	3.7512	24.213
#1	-.00179	.21568	.00186	.00021	.00030	-.10752	.00026	.01166	-.00240
#2	-.00204	.21552	.00288	.00035	.00163	-.08644	-.00077	.01106	-.00340
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2098.3**	**47387.**	**4273.4**
Stddev	.5	963.	72.9
%RSD	.02224	2.0326	1.7068
#1	2097.9	48068.	4221.9
#2	2098.6	46706.	4325.0

Sample Name: 280-97817-A-24-Asd@5 Acquired: 6/6/2017 20:37:57 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376137 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00026**	**.00188**	**.00510**	**.29108**	**.00223**	**.00015**	**.00553**	**15.114**	**.00041**
Stddev	.00077	.00100	.00183	.00818	.00011	.00006	.00301	.013	.00002
%RSD	291.63	53.107	35.875	2.8093	4.7146	43.695	54.421	.08292	4.9217
#1	-.00028	.00117	.00381	.29686	.00215	.00019	.00340	15.105	.00039
#2	.00080	.00258	.00640	.28529	.00230	.00010	.00765	15.123	.00042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00015**	**.00051**	**.00086**	**.02608**	**.26734**	**.01080**	**8.8270**	**.00231**	**-.00031**
Stddev	.00014	.00032	.00023	.00123	.02790	.00034	.0316	.00016	.00033
%RSD	93.958	61.739	26.349	4.7345	10.437	3.1787	.35770	7.0562	106.29
#1	.00005	.00029	.00102	.02695	.24761	.01056	8.8494	.00219	-.00055
#2	.00025	.00074	.00070	.02520	.28707	.01104	8.8047	.00242	-.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.1100**	**-.00094**	**.00552**	**.00276**	**17.381**	**.00174**	**.00498**	**2.2108**	**4.7310**
Stddev	.0289	.00058	.00316	.00064	.527	.00296	.00617	.0024	.0052
%RSD	.40599	61.825	57.345	23.224	3.0320	169.85	124.03	.10921	.10921
#1	7.1304	-.00053	.00776	.00231	17.754	-.00035	.00061	2.2125	4.7347
#2	7.0896	-.00135	.00328	.00322	17.008	.00383	.00934	2.2091	4.7274
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00049**	**.04368**	**.00325**	**.00064**	**.00375**	**-.02459**	**.00023**	**.00291**	**-.00228**
Stddev	.00150	.00028	.00120	.00007	.00128	.02902	.00002	.00070	.00284
%RSD	306.37	.64936	37.059	10.459	34.131	118.05	10.590	24.141	124.17
#1	.00155	.04348	.00410	.00059	.00465	-.04511	.00025	.00241	-.00028
#2	-.00057	.04388	.00240	.00069	.00284	-.00406	.00022	.00341	-.00429
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2139.4**	**49323.**	**4446.5**
Stddev	25.1	211.	55.2
%RSD	1.1732	.42777	1.2420
#1	2121.6	49472.	4407.4
#2	2157.1	49174.	4485.5

Sample Name: 280-97817-A-24-B MS Acquired: 6/6/2017 20:40:33 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376137 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05155**	**2.4934**	**1.0886**	**2.4387**	**2.1002**	**.05127**	W **2.2555**	**123.77**	**.10946**
Stddev	.00055	.0464	.0194	.0312	.0053	.00008	.0395	.35	.00217
%RSD	1.0683	1.8615	1.7818	1.2773	.25382	.16501	1.7503	.28680	1.9859
#1	.05116	2.5262	1.1023	2.4607	2.1040	.05121	2.2834	124.02	.11099
#2	.05194	2.4605	1.0749	2.4167	2.0965	.05133	2.2275	123.52	.10792
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49630**	**.20426**	**.27406**	**1.0243**	**53.830**	**1.0679**	**92.456**	**.51010**	**.98963**
Stddev	.00952	.00370	.00024	.0074	.128	.0056	.033	.00040	.02170
%RSD	1.9180	1.8131	.08586	.72126	.23752	.52609	.03548	.07869	2.1923
#1	.50303	.20688	.27422	1.0191	53.921	1.0719	92.479	.50981	1.0050
#2	.48956	.20164	.27389	1.0296	53.740	1.0639	92.432	.51038	.97428
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**87.781**	**.49512**	**11.577**	**.50053**	**90.711**	**.53246**	**2.0754**	**20.772**	**44.453**
Stddev	.826	.00823	.203	.01034	1.759	.01270	.0131	.012	.026
%RSD	.94144	1.6622	1.7560	2.0658	1.9394	2.3856	.63043	.05884	.05884
#1	88.365	.50094	11.721	.50785	91.955	.54145	2.0846	20.781	44.471
#2	87.196	.48930	11.434	.49322	89.467	.52348	2.0661	20.764	44.434
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2.0134**	**1.2522**	**1.0434**	**1.0180**	**1.9871**	**2.1243**	**.51100**	**.49389**	**.52069**
Stddev	.0476	.0023	.0070	.0002	.0342	.0224	.00051	.00177	.00179
%RSD	2.3656	.18036	.66771	.02090	1.7220	1.0553	.09951	.35876	.34421
#1	2.0471	1.2538	1.0483	1.0181	2.0113	2.1085	.51064	.49263	.52195
#2	1.9798	1.2506	1.0385	1.0178	1.9629	2.1402	.51136	.49514	.51942
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.20000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2037.6**	**46163.**	**4321.8**
Stddev	1.9	908.	.5
%RSD	.09115	1.9661	.01064
#1	2036.3	46805.	4322.1
#2	2038.9	45521.	4321.4

Sample Name: 280-97817-A-24-C MSD Acquired: 6/6/2017 20:42:56 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376137 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05168**	W **2.5042**	**1.0759**	**2.4602**	**2.1097**	**.05181**	W **2.2521**	**125.24**	**.10937**
Stddev	.00013	.0465	.0068	.0356	.0021	.00031	.0278	.05	.00181
%RSD	.25673	1.8564	.63288	1.4458	.09979	.59898	1.2322	.04003	1.6529
#1	.05177	2.5371	1.0808	2.4854	2.1112	.05159	2.2717	125.21	.11064
#2	.05158	2.4714	1.0711	2.4351	2.1082	.05203	2.2324	125.28	.10809
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit		2.5000					2.0000		
Low Limit		-.20000					-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49705**	**.20341**	**.27524**	**1.0412**	**54.384**	**1.0823**	**93.374**	**.51372**	**.99473**
Stddev	.00866	.00455	.00226	.0030	.125	.0014	.218	.00193	.01651
%RSD	1.7427	2.2382	.82087	.28996	.23047	.13328	.23329	.37504	1.6602
#1	.50317	.20663	.27684	1.0391	54.295	1.0812	93.528	.51508	1.0064
#2	.49092	.20019	.27365	1.0434	54.472	1.0833	93.220	.51235	.98305
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**89.721**	**.49315**	**11.535**	**.50448**	**91.207**	**.53131**	**2.0638**	**21.240**	**45.455**
Stddev	.251	.00777	.184	.01140	1.187	.01080	.0366	.013	.027
%RSD	.27956	1.5755	1.5966	2.2595	1.3011	2.0332	1.7738	.05920	.05920
#1	89.544	.49864	11.666	.51254	92.046	.53895	2.0897	21.232	45.436
#2	89.898	.48766	11.405	.49642	90.368	.52367	2.0379	21.249	45.474
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2.0268**	**1.2617**	**1.0556**	**1.0338**	**1.9911**	**2.1118**	**.51365**	**.50185**	**.52929**
Stddev	.0313	.0003	.0008	.0037	.0318	.0355	.00474	.00136	.00226
%RSD	1.5460	.02013	.07987	.35896	1.5979	1.6822	.92274	.27072	.42791
#1	2.0489	1.2615	1.0562	1.0364	2.0136	2.1369	.51700	.50281	.52769
#2	2.0046	1.2619	1.0550	1.0312	1.9686	2.0867	.51030	.50089	.53089
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.20000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2020.4**	**45595.**	**4216.4**
Stddev	19.1	337.	75.7
%RSD	.94701	.73891	1.7960
#1	2006.9	45356.	4270.0
#2	2034.0	45833.	4162.9

Sample Name: 280-97817-A-24-Apds Acquired: 6/6/2017 20:45:19 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376137 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04990**	**1.2333**	**.20683**	**1.4999**	**.11505**	**.04932**	**.00069**	**91.819**	**.05186**
Stddev	.00060	.0260	.00544	.0309	.00004	.00002	.00121	.467	.00115
%RSD	1.1973	2.1068	2.6299	2.0637	.03427	.03648	174.72	.50914	2.2217
#1	.05032	1.2517	.20299	1.5218	.11507	.04931	.00154	91.489	.05267
#2	.04948	1.2150	.21068	1.4780	.11502	.04933	-.00016	92.150	.05104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04736**	**.04996**	**.05610**	**1.1100**	**21.433**	**.11658**	**60.677**	**.05964**	**.04782**
Stddev	.00086	.00127	.00104	.0036	.042	.00060	.009	.00005	.00048
%RSD	1.8228	2.5426	1.8479	.32580	.19798	.51854	.01517	.07756	1.0043
#1	.04797	.05086	.05536	1.1075	21.403	.11701	60.684	.05968	.04815
#2	.04675	.04906	.05683	1.1126	21.463	.11616	60.671	.05961	.04748
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**54.968**	**.04930**	**2.2425**	**.09748**	**86.077**	**.09849**	**.20255**	**15.621**	**33.428**
Stddev	.439	.00112	.0606	.00076	1.868	.00518	.00431	.058	.125
%RSD	.79935	2.2683	2.7003	.78309	2.1704	5.2607	2.1301	.37407	.37407
#1	54.657	.05009	2.2853	.09802	87.398	.09483	.20561	15.579	33.340
#2	55.279	.04851	2.1996	.09694	84.756	.10216	.19950	15.662	33.517
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09935**	**.25933**	**.20124**	**.05094**	**.19451**	**.49490**	**.04967**	**.20403**	**.05414**
Stddev	.00044	.00135	.00018	.00026	.00884	.04743	.00025	.00091	.00059
%RSD	.43927	.52120	.08786	.50743	4.5423	9.5832	.51027	.44423	1.0818
#1	.09965	.25837	.20112	.05075	.20075	.52844	.04985	.20339	.05456
#2	.09904	.26028	.20137	.05112	.18826	.46137	.04949	.20467	.05373
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2061.6**	**46982.**	**4339.5**
Stddev	4.8	600.	103.6
%RSD	.23306	1.2761	2.3873
#1	2065.0	47405.	4412.8
#2	2058.2	46558.	4266.3

Sample Name: CCVH-4569081 Acquired: 6/6/2017 20:47:51 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00565**	**49.893**	**-.00491**	**.01063**	**-.00043**	**.00014**	**1.0480**	**.02472**	**-.00000**	**-.00113**	**.00095**	**.02650**
Stddev	.00081	.294	.00178	.00035	.00042	.00014	.0314	.00614	.00009	.00023	.00067	.00085
%RSD	14.370	.58952	36.229	3.3113	97.951	97.890	2.9928	24.832	1955.4	20.605	70.539	3.2041
#1	-.00623	50.101	-.00617	.01088	-.00073	.00004	1.0702	.02906	.00006	-.00129	.00142	.02590
#2	-.00508	49.685	-.00365	.01038	-.00013	.00024	1.0258	.02038	-.00007	-.00096	.00047	.02710
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.189**	**.16181**	**.00720**	**.07178**	**-.00156**	**-.00188**	**256.35**	**-.00006**	**.01284**	**.00072**	W **5.3107**	**-.00743**
Stddev	.024	.03273	.00227	.00547	.00009	.00042	.82	.00055	.00324	.00152	.1013	.00338
%RSD	.04819	20.224	31.494	7.6178	5.4848	22.499	.32114	882.16	25.197	212.75	1.9076	45.467
#1	49.172	.13867	.00881	.06792	-.00162	-.00217	256.93	-.00045	.01513	.00179	5.3823	-.00982
#2	49.205	.18495	.00560	.07565	-.00150	-.00158	255.77	.00032	.01056	-.00036	5.2390	-.00504
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Warn	None
Value											5.0000	
Range											5.0000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01133**	**-.01852**	**-.03964**	**-.00259**	**.00049**	**4.9312**	**.01759**	**-.00015**	**10.249**	**.01520**	**.00469**	**.12211**
Stddev	.00102	.01034	.02213	.00155	.00015	.0026	.00035	.00140	.018	.00116	.00153	.00115
%RSD	8.9573	55.817	55.817	59.651	31.568	.05348	1.9844	936.13	.17078	7.6079	32.746	.94027
#1	-.01062	-.01121	-.02400	-.00150	.00038	4.9293	.01784	-.00114	10.236	.01439	.00577	.12292
#2	-.01205	-.02584	-.05529	-.00369	.00060	4.9331	.01735	.00084	10.261	.01602	.00360	.12130
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2041.5**	**46211.**	**4343.4**
Stddev	11.2	392.	26.7
%RSD	.54693	.84907	.61468
#1	2033.6	45933.	4362.3
#2	2049.4	46488.	4324.5

Sample Name: CCV-4567764 Acquired: 6/6/2017 20:50:26 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50723**	F **.66188**	**.99340**	**.50221**	**.50342**	**.49682**	**.00101**	**4.9808**	**.50314**	**.50034**	**.50021**	**.51096**
Stddev	.00084	.01337	.00897	.01008	.00045	.00104	.00000	.0120	.01158	.01084	.01245	.00111
%RSD	.16566	2.0207	.90261	2.0076	.08868	.20980	.37728	.24148	2.3014	2.1663	2.4896	.21817
#1	.50782	.67134	.99974	.50933	.50373	.49756	.00102	4.9893	.51132	.50800	.50901	.51175
#2	.50663	.65243	.98706	.49508	.50310	.49608	.00101	4.9723	.49495	.49267	.49140	.51018
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4635**	**50.642**	**1.0343**	**19.844**	**.49592**	**.49949**	**5.3622**	**.49571**	**1.0932**	**1.0159**	**.02728**	**1.0097**
Stddev	.0008	.091	.0059	.049	.00105	.01250	.0166	.01142	.0258	.0218	.01466	.0182
%RSD	.03372	.17886	.57218	.24478	.21206	2.5027	.30889	2.3032	2.3593	2.1438	53.753	1.8073
#1	2.4641	50.706	1.0385	19.879	.49666	.50833	5.3739	.50379	1.1114	1.0313	.03764	1.0226
#2	2.4629	50.578	1.0301	19.810	.49518	.49065	5.3505	.48764	1.0749	1.0005	.01691	.99682
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.98941**	**4.9296**	**10.549**	**1.0079**	**.50369**	**.00348**	**.49447**	**1.0360**	**-.00007**	**.49634**	**.48537**	**.49104**
Stddev	.02846	.0282	.060	.0218	.00137	.00029	.00052	.0183	.03923	.00096	.00120	.00063
%RSD	2.8762	.57278	.57278	2.1594	.27283	8.2437	.10475	1.7683	54864.	.19324	.24680	.12840
#1	1.0095	4.9096	10.507	1.0233	.50466	.00328	.49484	1.0489	-.02781	.49701	.48452	.49149
#2	.96928	4.9495	10.592	.99252	.50271	.00368	.49411	1.0230	.02767	.49566	.48622	.49059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2062.4**	**47203.**	**4254.2**
Stddev	2.7	442.	28.3
%RSD	.13063	.93677	.66534
#1	2060.5	46891.	4274.2
#2	2064.3	47516.	4234.2

Sample Name: CCB Acquired: 6/6/2017 20:52:55 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00045**	**.00188**	**.00478**	**.00561**	**-.00002**	**.00016**	**.00181**	**.00136**	**.00033**	**-.00015**	**.00009**	**.00162**
Stddev	.00086	.00134	.00207	.00189	.00023	.00015	.00330	.00103	.00002	.00041	.00000	.00074
%RSD	190.17	71.288	43.359	33.611	1262.7	95.989	182.23	75.732	7.4057	265.18	4.8772	45.744
#1	.00106	.00093	.00625	.00428	-.00018	.00026	.00415	.00063	.00031	.00013	.00009	.00215
#2	-.00016	.00283	.00331	.00695	.00014	.00005	-.00052	.00209	.00035	-.00044	.00010	.00110
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00297**	**.08668**	W **.00531**	**.00036**	**.00010**	**.00055**	**.18336**	**-.00091**	**.00748**	**.00158**	**.01362**	**-.00068**
Stddev	.00121	.06413	.00097	.00092	.00003	.00004	.01264	.00126	.00268	.00163	.00628	.00064
%RSD	40.757	73.980	18.304	256.58	30.851	7.0498	6.8939	138.49	35.904	103.16	46.135	94.966
#1	.00383	.13202	.00462	.00100	.00012	.00058	.19230	-.00002	.00937	.00273	.01806	-.00022
#2	.00211	.04134	.00600	-.00029	.00007	.00053	.17442	-.00180	.00558	.00043	.00917	-.00113
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500									
Low Limit			-.01000									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00006**	**.00237**	**.00508**	**.00052**	**.00016**	**.00171**	**.00053**	**.00479**	**-.02608**	**.00079**	**.00103**	**-.00211**
Stddev	.00401	.01910	.04087	.00269	.00007	.00375	.00058	.00490	.04879	.00055	.00069	.00126
%RSD	6945.1	804.21	804.21	519.46	46.028	219.73	109.33	102.28	187.11	68.810	66.419	59.568
#1	.00278	-.01113	-.02382	-.00139	.00011	-.00095	.00095	.00825	.00842	.00118	.00055	-.00300
#2	-.00289	.01588	.03398	.00242	.00021	.00436	.00012	.00133	-.06058	.00041	.00152	-.00122
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2068.0**	**47511.**	**4175.6**
Stddev	9.7	251.	32.6
%RSD	.46793	.52881	.77961
#1	2074.9	47334.	4198.6
#2	2061.2	47689.	4152.6

Sample Name: CCVL-4576167 Acquired: 6/6/2017 20:55:33 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01018**	F **.13365**	**.01411**	**.10029**	**.00978**	**.00100**	**.12191**	**.19541**	**.00536**	**.00980**	**.01032**	**.01695**
Stddev	.00020	.00535	.00364	.00016	.00033	.00014	.00022	.00058	.00035	.00051	.00008	.00044
%RSD	1.9375	4.0002	25.833	.15722	3.4211	14.111	.18173	.29888	6.5164	5.2103	.79039	2.5824
#1	.01004	.13743	.01153	.10040	.00955	.00110	.12207	.19500	.00560	.01016	.01026	.01664
#2	.01032	.12987	.01668	.10018	.01002	.00090	.12176	.19583	.00511	.00944	.01037	.01725
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000										
Range		30.000%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11262**	**3.1331**	F **.02617**	**.20442**	**.01027**	**.01774**	**1.2285**	**.03906**	**3.0227**	F **.01220**	**.12460**	**.02002**
Stddev	.00142	.0927	.00053	.00473	.00008	.00057	.0365	.00094	.0734	.00062	.00713	.00056
%RSD	1.2639	2.9574	2.0168	2.3146	.77738	3.1881	2.9709	2.4155	2.4276	5.1027	5.7199	2.7735
#1	.11362	3.0676	.02654	.20107	.01033	.01814	1.2543	.03973	3.0746	.01264	.12964	.02041
#2	.11161	3.1986	.02580	.20776	.01021	.01734	1.2027	.03839	2.9708	.01176	.11956	.01962
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value			.02000							.00900		
Range			30.000%							30.000%		

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01876**	**.46372**	**.99236**	**.09680**	**.01022**	**.01518**	**.00978**	**.01759**	**.06842**	**.00909**	**.02098**	**.01310**
Stddev	.00048	.00754	.01613	.00297	.00021	.00029	.00015	.00175	.03584	.00011	.00012	.00016
%RSD	2.5794	1.6250	1.6250	3.0641	2.0062	1.9286	1.5213	9.9372	52.390	1.1591	.57397	1.2237
#1	.01910	.46905	1.0038	.09890	.01007	.01539	.00967	.01636	.04307	.00917	.02107	.01321
#2	.01842	.45839	.98095	.09471	.01036	.01498	.00988	.01883	.09376	.00902	.02090	.01298
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2062.7**	**47294.**	**4159.8**
Stddev	1.1	286.	16.1
%RSD	.05473	.60574	.38720
#1	2061.9	47497.	4171.2
#2	2063.5	47091.	4148.4

Sample Name: LB 280-375810/1-B Acquired: 6/6/2017 20:58:10 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/5 Custom ID2: Custom ID3:
Comment: 375990 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**.00697**	**-.00595**	**.01359**	**.00013**	**.00024**	**.00369**	**.07225**	**.00030**
Stddev	.00139	.00089	.00472	.00291	.00020	.00010	.00171	.01019	.00047
%RSD	2540.3	12.755	79.342	21.413	152.05	39.430	46.311	14.110	154.28
#1	-.00104	.00634	-.00929	.01565	.00027	.00018	.00248	.07946	.00063
#2	.00093	.00760	-.00261	.01154	-.00001	.00031	.00490	.06504	-.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00036**	**.00004**	**.00522**	**.01853**	**.19291**	**.00337**	**.02140**	**.00036**	**.00087**
Stddev	.00006	.00026	.00115	.00329	.02582	.00238	.00480	.00007	.00071
%RSD	17.361	640.29	22.077	17.734	13.387	70.678	22.429	18.211	81.745
#1	-.00031	-.00015	.00604	.01620	.21117	.00505	.02479	.00032	.00138
#2	-.00040	.00023	.00441	.02085	.17465	.00169	.01800	.00041	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**286.36**	**-.00071**	**.00769**	**.00128**	**.01707**	**-.00077**	**.00165**	**-.01077**	**-.02304**
Stddev	.12	.00099	.00356	.00109	.00865	.00117	.00228	.02393	.05122
%RSD	.04231	138.72	46.304	85.062	50.659	151.51	138.08	222.29	222.29
#1	286.45	-.00001	.01021	.00051	.02318	.00006	.00327	-.02769	-.05926
#2	286.28	-.00141	.00517	.00204	.01095	-.00160	.00004	.00616	.01318
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00026**	**.00031**	**.00260**	**.00043**	**.00312**	**-.00096**	**-.00024**	**.00262**	**.00040**
Stddev	.00161	.00010	.00201	.00064	.00038	.00635	.00031	.00011	.00280
%RSD	619.51	31.765	77.145	149.19	12.243	659.04	125.18	4.1783	697.50
#1	.00088	.00024	.00118	.00088	.00285	.00353	-.00046	.00270	.00238
#2	-.00140	.00038	.00403	-.00002	.00339	-.00546	-.00003	.00255	-.00158
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2061.4**	**45745.**	**4219.5**
Stddev	10.5	102.	10.3
%RSD	.51053	.22225	.24363
#1	2054.0	45817.	4212.3
#2	2068.9	45673.	4226.8

Sample Name: LCS 280-375810/2-B Acquired: 6/6/2017 21:00:48 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.20285**	F **.46986**	F **.77336**	F **.19653**	F **2.2696**	F **.00962**	**.41025**	F **9.2244**	F **.20749**
Stddev	.00052	.01300	.02785	.00294	.0094	.00008	.00723	.0263	.00591
%RSD	.25482	2.7662	3.6016	1.4983	.41599	.83348	1.7626	.28518	2.8501
#1	.20248	.47905	.79305	.19861	2.2629	.00968	.41536	9.2058	.21167
#2	.20321	.46067	.75366	.19445	2.2763	.00956	.40514	9.2430	.20330
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	None	Chk Fail	Chk Fail
High Limit	.05750	2.2299	1.1050	1.1050	2.2499	.05650		55.500	.11100
Low Limit	.04275	1.7300	.87500	.86000	1.7900	.04450		44.750	.08800

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.09022**	F **.95605**	F **.43682**	F **.25032**	F **9.8042**	F **.19621**	F **8.9422**	F **.09266**	F **.18148**
Stddev	.00265	.02656	.00003	.00420	.0646	.00537	.0031	.00030	.00607
%RSD	2.9364	2.7785	.00653	1.6769	.65916	2.7362	.03516	.32327	3.3462
#1	.09209	.97484	.43680	.24735	9.8499	.20001	8.9445	.09287	.18577
#2	.08834	.93727	.43684	.25328	9.7585	.19242	8.9400	.09245	.17718
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit	.55500	.22000	.28000	1.1500	57.000	1.1400	56.500	.55000	1.1000
Low Limit	.44500	.18000	.21500	.89000	44.500	.89000	46.000	.45000	.90000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **277.23**	F **.08889**	F **2.0956**	F **1.0034**	**.43022**	F **.10101**	F **.57112**	F **1.8054**	**3.8637**
Stddev	.46	.00280	.0665	.0259	.00286	.00741	.01356	.0201	.0430
%RSD	.16474	3.1549	3.1713	2.5788	.66497	7.3377	2.3748	1.1140	1.1140
#1	277.55	.09088	2.1426	1.0217	.43224	.10625	.58071	1.8197	3.8941
#2	276.91	.08691	2.0486	.98512	.42819	.09577	.56153	1.7912	3.8332
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	None	Chk Fail	Chk Fail	Chk Fail	None
High Limit	56.000	.55500	11.100	.55000		.55499	2.2400	11.000	
Low Limit	45.500	.44500	9.1000	.44500		.44000	1.7000	9.0000	

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.36542**	F **.18894**	F **.18900**	F **.18983**	F **.35956**	F **.40269**	F **.09227**	**.46188**	F **.09451**
Stddev	.00949	.00076	.00264	.00041	.00875	.00742	.00092	.00078	.00077
%RSD	2.5960	.40194	1.3952	.21853	2.4348	1.8436	.99351	.16795	.81405
#1	.37213	.18840	.19086	.19012	.36575	.39744	.09292	.46134	.09505
#2	.35871	.18948	.18713	.18954	.35337	.40794	.09163	.46243	.09396
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Pass	Chk Fail
High Limit	2.2600	1.1100	1.2000	1.1100	2.2000	2.3000	.55500		.57500
Low Limit	1.7000	.90000	.80000	.90000	1.7600	1.7000	.45000		.42500

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2052.9**	**46207.**	**4392.9**
Stddev	3.0	117.	7.8
%RSD	.14615	.25275	.17661
#1	2050.8	46125.	4398.4
#2	2055.0	46290.	4387.4

Sample Name: 280-97709-A-2-B Acquired: 6/6/2017 21:03:22 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00118**	**.01477**	**-.01030**	**.10824**	**.04091**	**.00016**	**.00465**	**48.062**	**.00071**
Stddev	.00080	.00118	.00629	.00191	.00039	.00022	.00325	.194	.00037
%RSD	67.768	8.0081	61.054	1.7692	.95610	133.90	69.924	.40337	51.862
#1	.00175	.01394	-.00586	.10959	.04119	.00001	.00696	48.199	.00045
#2	.00062	.01561	-.01475	.10688	.04063	.00032	.00235	47.925	.00097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00129**	**.01319**	**.02100**	**1.5923**	**12.305**	**.03614**	**9.7575**	**.08054**	**.00706**
Stddev	.00026	.00126	.00049	.0006	.000	.00035	.0381	.00023	.00026
%RSD	20.214	9.5412	2.3250	.03652	.00244	.97298	.39082	.29171	3.6255
#1	-.00110	.01407	.02065	1.5927	12.305	.03589	9.7306	.08071	.00724
#2	-.00147	.01230	.02134	1.5919	12.304	.03639	9.7845	.08038	.00688
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1970.1**	**.01071**	**10.639**	**.00112**	F **761.80**	**-.00011**	**.01389**	**.37673**	**.80621**
Stddev	2.4	.00029	.428	.00382	26.97	.00366	.00691	.03047	.06520
%RSD	.12151	2.6995	4.0204	339.44	3.5396	3374.4	49.717	8.0877	8.0877
#1	1968.4	.01092	10.941	-.00158	780.87	.00248	.00901	.35519	.76010
#2	1971.8	.01051	10.336	.00383	742.73	-.00270	.01877	.39828	.85231
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00301**	**.49909**	**.00116**	**.00374**	**.00119**	**-.01139**	**.00028**	**.09456**	**-.00148**
Stddev	.00282	.00067	.00159	.00018	.00216	.02491	.00081	.00094	.00071
%RSD	93.626	.13405	136.65	4.7827	181.24	218.67	286.16	.99813	47.872
#1	-.00500	.49862	.00229	.00362	.00272	.00622	.00086	.09389	-.00098
#2	-.00102	.49956	.00004	.00387	-.00034	-.02900	-.00029	.09522	-.00198
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1921.6**	**42747.**	**4248.9**
Stddev	7.8	170.	117.7
%RSD	.40649	.39763	2.7702
#1	1927.2	42867.	4165.6
#2	1916.1	42627.	4332.1

Sample Name: 280-97713-B-2-B Acquired: 6/6/2017 21:06:03 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00049**	**.00665**	**.00836**	**.13760**	**.11821**	**.00017**	**.00458**	**88.358**	**.00048**
Stddev	.00035	.00064	.00131	.00410	.00081	.00026	.00011	.218	.00003
%RSD	72.417	9.7035	15.616	2.9787	.68423	147.15	2.3837	.24630	6.0504
#1	.00074	.00710	.00744	.14050	.11763	-.00001	.00466	88.204	.00046
#2	.00024	.00619	.00929	.13471	.11878	.00035	.00450	88.512	.00050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00154**	**.01612**	**.02009**	**2.5078**	**17.308**	**.04630**	**15.379**	**.11212**	**.00920**
Stddev	.00015	.00029	.00075	.0054	.215	.00151	.042	.00067	.00001
%RSD	9.5263	1.8046	3.7435	.21600	1.2423	3.2615	.27409	.59820	.09125
#1	-.00164	.01632	.01956	2.5039	17.156	.04737	15.409	.11259	.00920
#2	-.00144	.01591	.02063	2.5116	17.460	.04523	15.349	.11165	.00921
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1999.3**	**.01248**	**17.933**	**.00028**	F **846.32**	**-.00061**	**.02056**	**.45864**	**.98149**
Stddev	6.3	.00049	.605	.00020	24.51	.00246	.00325	.02710	.05800
%RSD	.31371	3.9271	3.3727	70.060	2.8966	404.11	15.810	5.9089	5.9089
#1	1994.9	.01283	18.361	.00042	863.66	.00113	.01827	.47780	1.0225
#2	2003.8	.01214	17.505	.00014	828.99	-.00235	.02286	.43948	.94048
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00199**	**.90019**	**.00263**	**.00440**	**-.00300**	**-.03302**	**.00048**	**.12334**	**-.00446**
Stddev	.00224	.00184	.00136	.00027	.00219	.02801	.00041	.00031	.00211
%RSD	112.38	.20442	51.594	6.1955	72.983	84.819	85.806	.25410	47.328
#1	-.00041	.89889	.00167	.00459	-.00455	-.05283	.00077	.12356	-.00595
#2	-.00357	.90149	.00359	.00420	-.00145	-.01322	.00019	.12311	-.00296
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1924.3**	**41863.**	**4249.6**
Stddev	26.2	41.	.7
%RSD	1.3590	.09737	.01753
#1	1905.8	41892.	4250.1
#2	1942.8	41834.	4249.1

Sample Name: 280-97714-B-2-B Acquired: 6/6/2017 21:08:43 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00012**	**.01500**	**-.00543**	**.11020**	**.04580**	**.00011**	**.00315**	**57.473**	**.00018**
Stddev	.00024	.00070	.00403	.00498	.00062	.00004	.00305	.239	.00001
%RSD	194.55	4.6958	74.216	4.5179	1.3448	36.784	97.034	.41668	5.0687
#1	-.00005	.01550	-.00258	.11372	.04536	.00014	.00099	57.304	.00018
#2	.00029	.01450	-.00828	.10668	.04623	.00008	.00531	57.643	.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00171**	**.01158**	**.02143**	**1.7741**	**13.762**	**.03305**	**10.470**	**.09027**	**.00779**
Stddev	.00001	.00045	.00068	.0169	.203	.00194	.017	.00033	.00012
%RSD	.72334	3.8886	3.1884	.95147	1.4766	5.8712	.15982	.37029	1.5368
#1	-.00170	.01189	.02095	1.7622	13.618	.03168	10.482	.09050	.00788
#2	-.00172	.01126	.02191	1.7860	13.906	.03442	10.458	.09003	.00771
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2084.5**	**.01166**	**11.618**	**.00040**	F **824.62**	**.00174**	**.01652**	**.36018**	**.77078**
Stddev	11.3	.00078	.457	.00058	28.73	.00491	.00370	.01382	.02957
%RSD	.54030	6.6675	3.9306	144.42	3.4836	282.48	22.423	3.8367	3.8367
#1	2076.5	.01221	11.940	-.00001	844.94	.00521	.01914	.35040	.74986
#2	2092.4	.01111	11.295	.00081	804.31	-.00173	.01390	.36995	.79169
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00176**	**.59783**	**.00154**	**.00372**	**-.00186**	**-.03612**	**.00046**	**.10004**	**-.00171**
Stddev	.00088	.00117	.00048	.00052	.00000	.03962	.00006	.00119	.00097
%RSD	50.339	.19541	31.160	14.070	.14209	109.70	13.398	1.1912	56.722
#1	-.00113	.59700	.00188	.00409	-.00186	-.06413	.00050	.09920	-.00240
#2	-.00238	.59866	.00120	.00335	-.00186	-.00810	.00042	.10088	-.00103
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1882.6**	**41273.**	**4244.0**
Stddev	1.2	129.	128.3
%RSD	.06151	.31317	3.0232
#1	1881.8	41365.	4334.8
#2	1883.4	41182.	4153.3

Sample Name: 280-97715-A-2-B Acquired: 6/6/2017 21:11:24 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00033**	**.01122**	**.00151**	**.12222**	**.06686**	**.00017**	**.00249**	**67.910**	**.00013**
Stddev	.00130	.00289	.00761	.00180	.00056	.00014	.00059	.461	.00021
%RSD	393.48	25.787	503.76	1.4763	.84247	80.699	23.653	.67865	161.28
#1	-.00059	.01326	-.00387	.12350	.06726	.00027	.00208	68.236	.00028
#2	.00125	.00917	.00689	.12095	.06646	.00007	.00291	67.584	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00174**	**.01359**	**.02258**	**2.0748**	**15.197**	**.04062**	**12.333**	**.10385**	**.00786**
Stddev	.00026	.00122	.00094	.0199	.043	.00143	.028	.00037	.00017
%RSD	15.050	8.9918	4.1615	.95967	.28031	3.5166	.22815	.35404	2.1267
#1	-.00192	.01446	.02324	2.0888	15.227	.03961	12.352	.10411	.00774
#2	-.00155	.01273	.02191	2.0607	15.167	.04163	12.313	.10359	.00797
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2252.6**	**.01192**	**14.007**	**.00125**	F **918.75**	**-.00277**	**.01216**	**.29189**	**.62465**
Stddev	12.5	.00010	.398	.00007	19.92	.00654	.00443	.00216	.00461
%RSD	.55590	.84199	2.8420	5.9047	2.1685	235.87	36.440	.73849	.73849
#1	2261.4	.01199	14.289	.00130	932.84	-.00740	.00903	.29342	.62791
#2	2243.7	.01185	13.726	.00120	904.67	.00185	.01530	.29037	.62139
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00155**	**.70359**	**-.00109**	**.00438**	**-.00304**	**.00847**	**.00043**	**.11402**	**-.00126**
Stddev	.00109	.00547	.00247	.00016	.00316	.01674	.00027	.00054	.00129
%RSD	70.204	.77744	226.92	3.7575	103.70	197.55	61.236	.47229	102.57
#1	-.00078	.70746	-.00283	.00450	-.00528	-.00336	.00025	.11440	-.00035
#2	-.00231	.69972	.00066	.00427	-.00081	.02031	.00062	.11364	-.00218
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1899.2**	**41496.**	**4225.5**
Stddev	28.1	291.	98.0
%RSD	1.4818	.70179	2.3181
#1	1879.3	41702.	4156.2
#2	1919.1	41291.	4294.8

Sample Name: CCVH-4569081 Acquired: 6/6/2017 21:14:04 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00609**	**49.439**	**-.00303**	**.00280**	**-.00037**	**.00037**	**1.0404**	**.00959**	**.00032**	**-.00135**	**.00015**	**.02555**
Stddev	.00129	.037	.00189	.00168	.00001	.00006	.0218	.00821	.00005	.00036	.00025	.00020
%RSD	21.276	.07513	62.425	59.860	2.8996	15.892	2.0949	85.545	16.516	26.778	166.24	.76550
#1	-.00700	49.465	-.00437	.00399	-.00037	.00042	1.0558	.01540	.00028	-.00110	.00033	.02542
#2	-.00517	49.413	-.00169	.00162	-.00036	.00033	1.0250	.00379	.00035	-.00161	-.00003	.02569
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.635**	**.48976**	**.00565**	**.05890**	**-.00149**	**-.00123**	**254.50**	**-.00047**	**.00771**	**.00321**	W **5.4785**	**-.00788**
Stddev	.075	.06154	.00295	.00692	.00006	.00020	2.05	.00027	.00337	.00099	.1210	.00243
%RSD	.15437	12.566	52.218	11.741	3.8077	15.877	.80362	58.217	43.755	30.958	2.2078	30.802
#1	48.582	.53328	.00774	.06379	-.00153	-.00109	255.95	-.00066	.00533	.00391	5.5640	-.00960
#2	48.688	.44625	.00357	.05401	-.00145	-.00137	253.06	-.00027	.01010	.00251	5.3930	-.00617
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Warn	None
Value											5.0000	
Range											5.0000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01440**	**-.03674**	**-.07861**	**-.00290**	**.00045**	**4.8798**	**.01690**	**.00108**	**10.145**	**.01479**	**.00076**	**.12324**
Stddev	.00337	.00778	.01665	.00384	.00014	.0037	.00045	.00424	.006	.00131	.00028	.00071
%RSD	23.405	21.173	21.173	132.54	30.676	.07564	2.6453	393.00	.06215	8.8709	37.078	.57225
#1	-.01202	-.04224	-.09038	-.00561	.00055	4.8824	.01722	-.00192	10.149	.01572	.00096	.12274
#2	-.01678	-.03124	-.06684	-.00018	.00036	4.8772	.01659	.00408	10.141	.01387	.00056	.12374
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2063.1**	**46799.**	**4359.2**
Stddev	10.2	134.	3.8
%RSD	.49265	.28630	.08763
#1	2070.2	46704.	4356.5
#2	2055.9	46893.	4361.9

Sample Name: CCV-4567764 Acquired: 6/6/2017 21:16:40 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50818**	F **.66995**	**.99415**	**.49788**	**.50771**	**.49927**	**.00364**	**5.0377**	**.50193**	**.49816**	**.50053**	**.50445**
Stddev	.00082	.01490	.02692	.00808	.00123	.00143	.00092	.0096	.00955	.00784	.01086	.00116
%RSD	.16087	2.2235	2.7077	1.6233	.24291	.28639	25.265	.19094	1.9026	1.5738	2.1691	.22949
#1	.50875	.68049	1.0132	.50359	.50684	.49826	.00429	5.0309	.50868	.50370	.50820	.50527
#2	.50760	.65942	.97512	.49216	.50858	.50028	.00299	5.0445	.49518	.49262	.49285	.50363
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5038**	**51.164**	**1.0389**	**19.775**	**.48870**	**.50083**	F **5.9579**	**.49535**	**1.0850**	**1.0238**	**.17237**	**1.0086**
Stddev	.0083	.227	.0058	.014	.00120	.01063	.0707	.00875	.0191	.0185	.00204	.0177
%RSD	.33200	.44457	.56005	.07189	.24656	2.1234	1.1860	1.7659	1.7566	1.8068	1.1857	1.7598
#1	2.4980	51.003	1.0348	19.765	.48956	.50835	6.0079	.50153	1.0985	1.0368	.17382	1.0212
#2	2.5097	51.324	1.0431	19.785	.48785	.49331	5.9079	.48916	1.0715	1.0107	.17093	.99608
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							5.0000					
Range							10.490%					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99131**	**4.9252**	**10.540**	**1.0066**	**.50707**	**.00504**	**.48998**	**1.0386**	**.01157**	**.48731**	**.47922**	**.48911**
Stddev	.01234	.0071	.015	.0196	.00061	.00024	.00030	.0198	.02350	.00252	.00155	.00241
%RSD	1.2449	.14376	.14376	1.9444	.11961	4.8007	.06072	1.9053	203.19	.51795	.32273	.49222
#1	1.0000	4.9302	10.551	1.0204	.50664	.00521	.49019	1.0526	.02819	.48910	.48032	.48741
#2	.98258	4.9202	10.529	.99272	.50750	.00487	.48977	1.0246	-.00505	.48553	.47813	.49081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2093.7**	**48773.**	**4282.4**
Stddev	5.4	512.	65.2
%RSD	.25586	1.0490	1.5223
#1	2097.5	49135.	4328.5
#2	2089.9	48411.	4236.3

Sample Name: CCB Acquired: 6/6/2017 21:19:08 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00046**	**.00113**	**.00083**	**.00066**	**-.00012**	**.00026**	**.00143**	**.00390**	**.00013**	**-.00003**	**.00053**	**.00122**
Stddev	.00030	.00121	.00422	.00004	.00017	.00008	.00123	.00076	.00032	.00025	.00025	.00017
%RSD	65.034	106.95	511.17	5.5209	145.41	29.239	85.498	19.529	241.60	924.38	47.782	13.545
#1	.00068	.00198	-.00216	.00064	-.00024	.00031	.00230	.00336	-.00009	.00015	.00071	.00134
#2	.00025	.00027	.00381	.00069	.00000	.00020	.00057	.00444	.00035	-.00020	.00035	.00110
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00679**	**.18462**	W **.00513**	**-.00066**	**.00005**	**.00018**	F **.66486**	**-.00098**	**.00624**	**.00036**	F **.13534**	**.00368**
Stddev	.00083	.00155	.00077	.00047	.00004	.00013	.00903	.00018	.00106	.00073	.00807	.00017
%RSD	12.187	.83859	15.087	69.981	78.399	73.809	1.3574	18.352	17.064	201.08	5.9634	4.5608
#1	.00621	.18353	.00567	-.00099	.00002	.00009	.67125	-.00085	.00548	.00087	.14105	.00356
#2	.00738	.18572	.00458	-.00034	.00007	.00027	.65848	-.00110	.00699	-.00015	.12964	.00380
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			.00500				.50000				.10000	
Low Limit			-.01000				-.50000				-.20000	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00549**	**-.01559**	**-.03337**	**-.00098**	**.00016**	**.00323**	**.00055**	**-.00060**	**-.02511**	**.00061**	**.00224**	**-.00334**
Stddev	.00289	.01038	.02222	.00106	.00006	.00153	.00025	.00107	.01438	.00025	.00016	.00282
%RSD	52.703	66.587	66.587	108.95	40.589	47.409	44.631	179.45	57.262	41.055	7.0260	84.439
#1	-.00753	-.00825	-.01766	-.00173	.00020	.00215	.00073	.00016	-.03528	.00043	.00236	-.00533
#2	-.00344	-.02293	-.04908	-.00022	.00011	.00431	.00038	-.00135	-.01494	.00078	.00213	-.00135
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2097.2**	**48471.**	**4199.4**
Stddev	18.3	268.	25.7
%RSD	.87354	.55265	.61221
#1	2084.2	48282.	4181.2
#2	2110.1	48660.	4217.5

Sample Name: CCVL-4576167 Acquired: 6/6/2017 21:21:46 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01057**	F **.13223**	**.01866**	**.09755**	**.00922**	**.00102**	**.12001**	**.20339**	**.00546**	**.00956**	**.01022**	**.01610**
Stddev	.00025	.00179	.00691	.00261	.00025	.00001	.00519	.00424	.00012	.00010	.00034	.00005
%RSD	2.3240	1.3506	37.037	2.6739	2.7128	.92146	4.3232	2.0866	2.2251	1.0412	3.2800	.30195
#1	.01039	.13349	.01377	.09940	.00939	.00103	.12368	.20639	.00555	.00963	.01045	.01614
#2	.01074	.13097	.02355	.09571	.00904	.00101	.11634	.20039	.00537	.00949	.00998	.01607
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000										
Range		30.000%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10214**	**3.2195**	F **.02656**	**.19632**	**.00997**	**.01892**	F **1.5842**	**.03850**	**3.0251**	**.01085**	F **.20712**	**.01817**
Stddev	.00027	.0022	.00313	.00123	.00003	.00105	.0044	.00116	.0738	.00259	.01002	.00047
%RSD	.26427	.06894	11.775	.62516	.34752	5.5437	.27567	3.0196	2.4381	23.864	4.8364	2.5665
#1	.10195	3.2211	.02877	.19545	.00995	.01966	1.5811	.03932	3.0773	.00902	.20004	.01850
#2	.10233	3.2179	.02435	.19719	.01000	.01818	1.5873	.03768	2.9730	.01268	.21420	.01784
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value			.02000				1.0000				.10000	
Range			30.000%				30.000%				30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01715**	**.45605**	**.97596**	**.09444**	**.01017**	**.01647**	**.00983**	**.01788**	**.06901**	**.00898**	**.01988**	**.01225**
Stddev	.00108	.03667	.07847	.00169	.00006	.00106	.00002	.00330	.03775	.00027	.00042	.00028
%RSD	6.2767	8.0401	8.0401	1.7911	.60858	6.4549	.21991	18.483	54.698	2.9848	2.0996	2.2494
#1	.01791	.48198	1.0314	.09563	.01021	.01572	.00984	.01554	.04232	.00879	.01958	.01206
#2	.01639	.43013	.92047	.09324	.01012	.01722	.00981	.02021	.09571	.00917	.02017	.01245
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2130.7**	**49654.**	**4335.2**
Stddev	.8	89.	41.3
%RSD	.03868	.17893	.95365
#1	2131.3	49591.	4306.0
#2	2130.2	49716.	4364.5

Sample Name: 280-97688-A-3-D Acquired: 6/6/2017 21:24:23 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00032**	**.04279**	**.00735**	**.01929**	**.02599**	**.00031**	**.00617**	**101.47**	**.00090**
Stddev	.00077	.00192	.00604	.00085	.00028	.00019	.00619	.53	.00005
%RSD	238.49	4.4945	82.215	4.4032	1.0678	61.928	100.18	.51898	5.5950
#1	.00022	.04415	.00308	.01990	.02579	.00044	.00180	101.10	.00086
#2	-.00087	.04143	.01163	.01869	.02619	.00017	.01055	101.84	.00093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00090**	**.00093**	**.00468**	**.01769**	**.68855**	**.00607**	**6.2528**	**.10943**	**-.00125**
Stddev	.00002	.00035	.00007	.00028	.05410	.00380	.0031	.00005	.00063
%RSD	2.0231	37.487	1.4583	1.5862	7.8573	62.605	.05021	.04594	50.312
#1	-.00091	.00069	.00464	.01789	.72681	.00338	6.2550	.10940	-.00170
#2	-.00089	.00118	.00473	.01749	.65030	.00876	6.2505	.10947	-.00081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**276.43**	**.00017**	**.01030**	**-.00195**	**42.770**	**-.00139**	**.00057**	**.98397**	**2.1057**
Stddev	1.70	.00048	.00045	.00120	1.117	.00492	.00319	.01795	.0384
%RSD	.61380	283.55	4.3999	61.643	2.6112	353.32	556.29	1.8241	1.8241
#1	275.23	-.00017	.00998	-.00110	43.559	-.00488	-.00168	.99667	2.1329
#2	277.63	.00051	.01062	-.00280	41.980	.00209	.00283	.97128	2.0785
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00398**	**.51150**	**.00017**	**.00012**	**.00456**	**-.04002**	**.00022**	**.00385**	**-.00073**
Stddev	.00115	.00350	.00016	.00007	.00021	.04523	.00007	.00014	.00169
%RSD	28.801	.68456	93.271	53.175	4.7052	113.02	32.208	3.7363	230.53
#1	-.00317	.50902	.00029	.00008	.00471	-.07200	.00027	.00375	-.00192
#2	-.00479	.51397	.00006	.00017	.00441	-.00804	.00017	.00395	.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2023.2**	**46207.**	**4375.1**
Stddev	20.8	495.	7.1
%RSD	1.0271	1.0709	.16208
#1	2008.5	46557.	4370.1
#2	2037.9	45857.	4380.2

Sample Name: 280-97688-A-3-Dsd@5 Acquired: 6/6/2017 21:26:59 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00082**	**.01189**	**.00477**	**.00472**	**.00504**	**.00008**	**.00591**	**20.455**	**.00004**
Stddev	.00017	.00205	.00685	.00041	.00014	.00002	.00308	.009	.00001
%RSD	20.681	17.204	143.58	8.6631	2.7050	21.204	52.083	.04258	24.116
#1	.00094	.01334	-.00007	.00501	.00495	.00007	.00373	20.449	.00003
#2	.00070	.01045	.00961	.00444	.00514	.00009	.00809	20.461	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**.00036**	**.00322**	**.03099**	**.25121**	**.00509**	**1.3080**	**.02215**	**.00038**
Stddev	.00011	.00018	.00008	.00168	.04043	.00094	.0010	.00017	.00115
%RSD	764.51	50.237	2.4438	5.4068	16.094	18.507	.07661	.77030	300.04
#1	.00009	.00023	.00316	.03218	.27980	.00576	1.3073	.02203	-.00043
#2	-.00006	.00049	.00327	.02981	.22263	.00442	1.3087	.02227	.00119
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**56.748**	**-.00093**	**.00678**	**.00192**	**8.5119**	**-.00079**	**-.00195**	**.18754**	**.40134**
Stddev	.195	.00015	.00166	.00280	.1745	.00522	.00204	.01195	.02558
%RSD	.34427	16.435	24.446	145.70	2.0501	658.40	104.43	6.3733	6.3733
#1	56.886	-.00103	.00561	.00390	8.6352	-.00448	-.00051	.19599	.41943
#2	56.610	-.00082	.00796	-.00006	8.3885	.00290	-.00340	.17909	.38325
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00014**	**.10372**	**.00276**	**.00019**	**.00075**	**-.05946**	**-.00050**	**.00220**	**-.00223**
Stddev	.00276	.00014	.00170	.00043	.00241	.02518	.00024	.00021	.00124
%RSD	1925.0	.13342	61.542	224.06	323.24	42.343	47.014	9.3811	55.474
#1	.00181	.10363	.00156	.00050	-.00096	-.07726	-.00034	.00235	-.00136
#2	-.00209	.10382	.00396	-.00011	.00245	-.04166	-.00067	.00206	-.00311
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2084.0**	**47363.**	**4306.2**
Stddev	17.8	150.	15.2
%RSD	.85375	.31589	.35345
#1	2071.5	47258.	4295.4
#2	2096.6	47469.	4316.9

Sample Name: 280-97688-A-3-E MS Acquired: 6/6/2017 21:29:34 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .**20894**	**.51991**	**.81223**	**.20746**	**2.3562**	**.00984**	**.41900**	**108.92**	**.21467**
Stddev	.00127	.00987	.02632	.00160	.0018	.00010	.00912	.26	.00461
%RSD	.60702	1.8978	3.2406	.77049	.07621	1.0100	2.1774	.24159	2.1462
#1	.20984	.52689	.83084	.20859	2.3574	.00991	.42546	109.10	.21793
#2	.20805	.51293	.79362	.20633	2.3549	.00977	.41255	108.73	.21141
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000								
Low Limit	-.02000								

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09235**	**.99326**	**.43902**	**.22006**	**10.528**	**.19989**	**15.176**	**.20017**	**.18736**
Stddev	.00273	.01976	.00066	.00378	.096	.00206	.034	.00019	.00489
%RSD	2.9584	1.9898	.15054	1.7191	.91553	1.0320	.22449	.09621	2.6099
#1	.09428	1.0072	.43855	.22273	10.596	.19843	15.152	.20030	.19082
#2	.09042	.97929	.43949	.21738	10.460	.20135	15.200	.20003	.18390
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**281.82**	**.09282**	**2.1930**	**1.0367**	**43.198**	**.10583**	**.59243**	**2.8337**	**6.0642**
Stddev	.18	.00172	.0534	.0216	.920	.00086	.01084	.0232	.0496
%RSD	.06212	1.8573	2.4358	2.0847	2.1298	.81178	1.8289	.81778	.81778
#1	281.95	.09404	2.2308	1.0520	43.849	.10644	.60009	2.8501	6.0993
#2	281.70	.09160	2.1553	1.0214	42.548	.10522	.58477	2.8173	6.0291
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.38343**	**.69386**	**.19513**	**.19390**	**.36772**	**.37377**	**.09481**	**.47309**	**.09597**
Stddev	.01208	.00121	.00111	.00131	.00374	.01252	.00042	.00131	.00197
%RSD	3.1503	.17446	.56634	.67671	1.0173	3.3491	.44662	.27705	2.0533
#1	.39197	.69472	.19435	.19297	.37036	.36492	.09451	.47217	.09737
#2	.37489	.69301	.19591	.19482	.36507	.38262	.09511	.47402	.09458
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2019.1**	**46097.**	**4312.3**
Stddev	7.1	161.	97.0
%RSD	.35270	.34862	2.2497
#1	2024.1	45983.	4243.7
#2	2014.1	46210.	4380.8

Sample Name: 280-97688-A-3-F MSD Acquired: 6/6/2017 21:32:06 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.21042**	**.52792**	**.80732**	**.21014**	**2.4014**	**.01003**	**.41940**	**110.89**	**.21673**
Stddev	.00052	.01317	.02222	.00265	.0043	.00009	.00892	.06	.00551
%RSD	.24674	2.4943	2.7527	1.2633	.17739	.86472	2.1262	.05614	2.5415
#1	.21079	.53723	.82303	.21202	2.3984	.00997	.42570	110.85	.22063
#2	.21006	.51861	.79161	.20826	2.4044	.01009	.41309	110.93	.21284
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000								
Low Limit	-.02000								

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09299**	**1.0007**	**.44444**	**.20755**	**10.795**	**.20601**	**15.400**	**.20204**	**.18906**
Stddev	.00205	.0230	.00321	.00076	.015	.00188	.061	.00076	.00466
%RSD	2.2039	2.3028	.72116	.36780	.14208	.91040	.39904	.37837	2.4636
#1	.09444	1.0170	.44671	.20701	10.784	.20734	15.443	.20258	.19236
#2	.09154	.98438	.44217	.20809	10.806	.20468	15.356	.20150	.18577
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**287.24**	**.09378**	**2.2164**	**1.0451**	**43.666**	**.10492**	**.59020**	**2.8863**	**6.1767**
Stddev	1.10	.00219	.0389	.0176	.700	.00001	.00359	.0143	.0306
%RSD	.38309	2.3319	1.7570	1.6802	1.6029	.01110	.60891	.49538	.49538
#1	286.46	.09533	2.2439	1.0575	44.161	.10493	.59274	2.8964	6.1983
#2	288.01	.09224	2.1888	1.0327	43.171	.10492	.58765	2.8762	6.1550
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.38303**	**.70489**	**.19486**	**.19570**	**.36968**	**.37690**	**.09660**	**.47400**	**.09865**
Stddev	.00600	.00082	.00068	.00043	.01463	.00645	.00154	.00152	.00156
%RSD	1.5652	.11656	.34649	.21781	3.9584	1.7113	1.5919	.32170	1.5831
#1	.38727	.70430	.19534	.19540	.38003	.38146	.09769	.47508	.09975
#2	.37880	.70547	.19438	.19600	.35933	.37234	.09552	.47292	.09755
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2029.8**	**46232.**	**4232.2**
Stddev	14.9	695.	50.7
%RSD	.73215	1.5023	1.1982
#1	2019.3	45740.	4268.1
#2	2040.4	46723.	4196.4

Sample Name: 280-97688-A-3-Dpds Acquired: 6/6/2017 21:34:38 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375990 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04035**	**1.2486**	**.19621**	**.11678**	**.12755**	**.04996**	**.00011**	**119.17**	**.05047**
Stddev	.00045	.0379	.00276	.00141	.00037	.00015	.00419	.41	.00109
%RSD	1.1120	3.0328	1.4063	1.2062	.28981	.30831	3861.8	.34604	2.1537
#1	.04067	1.2754	.19816	.11778	.12729	.04986	.00307	118.88	.05124
#2	.04004	1.2218	.19426	.11578	.12781	.05007	-.00285	119.47	.04970
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04613**	**.04923**	**.05626**	**1.0064**	**21.276**	**.10613**	**24.877**	**.15483**	**.04721**
Stddev	.00130	.00148	.00146	.0018	.082	.00136	.058	.00032	.00293
%RSD	2.8196	3.0041	2.5942	.18284	.38547	1.2812	.23147	.20623	6.2071
#1	.04705	.05028	.05729	1.0051	21.218	.10709	24.917	.15505	.04928
#2	.04521	.04818	.05523	1.0077	21.334	.10517	24.836	.15460	.04514
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**292.15**	**.04703**	**2.2583**	**.09721**	**42.185**	**.09823**	**.19019**	**5.8036**	**12.420**
Stddev	.53	.00168	.0587	.00370	1.265	.00533	.00269	.0515	.110
%RSD	.18099	3.5746	2.5989	3.8014	2.9982	5.4305	1.4133	.88809	.88809
#1	291.78	.04822	2.2998	.09982	43.079	.10200	.19209	5.7671	12.342
#2	292.53	.04584	2.2168	.09459	41.291	.09446	.18829	5.8400	12.498
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09428**	**.55304**	**.20010**	**.05125**	**.19193**	**.46111**	**.04963**	**.19640**	**.05349**
Stddev	.00161	.00262	.00052	.00056	.00044	.02743	.00041	.00085	.00112
%RSD	1.7024	.47389	.26108	1.0894	.22801	5.9481	.81768	.43067	2.0989
#1	.09542	.55119	.20047	.05164	.19162	.44171	.04934	.19700	.05428
#2	.09315	.55490	.19973	.05085	.19224	.48050	.04992	.19580	.05269
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2045.7**	**46117.**	**4306.9**
Stddev	7.9	552.	39.9
%RSD	.38588	1.1962	.92746
#1	2040.2	45727.	4335.1
#2	2051.3	46507.	4278.6

Sample Name: CCVH-4569081 Acquired: 6/6/2017 21:37:11 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00559**	**50.368**	**.00189**	**.00206**	**.00047**	**.00034**	W **1.0648**	**.08054**	**.00011**	**-.00089**	**.00048**	**.02635**
Stddev	.00038	.115	.00788	.00022	.00075	.00022	.0244	.09190	.00012	.00028	.00076	.00139
%RSD	6.7973	.22928	416.69	10.744	160.70	65.114	2.2885	114.11	110.94	31.675	159.82	5.2694
#1	-.00585	50.450	-.00368	.00190	-.00006	.00018	1.0820	.01556	.00002	-.00108	.00102	.02537
#2	-.00532	50.287	.00747	.00222	.00100	.00049	1.0475	.14553	.00019	-.00069	-.00006	.02734
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.985**	**.18690**	**.00588**	**.05648**	**-.00150**	**-.00117**	**258.71**	**-.00064**	**.00525**	**.00349**	W **5.4378**	**-.01470**
Stddev	.068	.05159	.00258	.01363	.00017	.00062	.89	.00045	.00043	.00028	.1285	.00366
%RSD	.13933	27.604	43.805	24.135	11.569	52.418	.34526	69.600	8.1725	7.9524	2.3625	24.897
#1	48.936	.15042	.00406	.04684	-.00138	-.00074	259.35	-.00096	.00495	.00368	5.5287	-.01729
#2	49.033	.22339	.00771	.06612	-.00162	-.00161	258.08	-.00033	.00556	.00329	5.3470	-.01211
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Warn	None
Value											5.0000	
Range											5.0000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00884**	**-.01645**	**-.03519**	**-.00329**	**.00075**	**4.8854**	**.01622**	**-.00137**	**10.200**	**.01522**	**.00075**	**.12673**
Stddev	.00544	.00046	.00099	.00204	.00053	.0159	.00012	.00058	.028	.00017	.00046	.00049
%RSD	61.504	2.8030	2.8030	61.883	71.271	.32514	.74942	42.767	.27586	1.1013	62.159	.38498
#1	-.00500	-.01677	-.03589	-.00185	.00037	4.8966	.01614	-.00095	10.180	.01510	.00042	.12707
#2	-.01269	-.01612	-.03450	-.00473	.00113	4.8742	.01631	-.00178	10.220	.01534	.00108	.12638
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2042.9**	**47100.**	**4302.0**
Stddev	23.8	262.	12.2
%RSD	1.1628	.55672	.28453
#1	2059.7	47285.	4293.4
#2	2026.1	46914.	4310.7

Sample Name: CCV-4567764 Acquired: 6/6/2017 21:39:46 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51119**	F **.67626**	**1.0134**	**.50191**	**.51286**	**.50402**	**.00227**	**5.0702**	**.50584**	**.50148**	**.50798**	**.50564**
Stddev	.00080	.01278	.0196	.00816	.00027	.00079	.00369	.0111	.00955	.01023	.00917	.00022
%RSD	.15578	1.8905	1.9380	1.6263	.05242	.15605	162.75	.21793	1.8887	2.0393	1.8053	.04336
#1	.51063	.68530	1.0273	.50768	.51305	.50458	.00487	5.0623	.51260	.50872	.51447	.50548
#2	.51175	.66722	.99950	.49614	.51267	.50346	-.00034	5.0780	.49909	.49425	.50150	.50579
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4980**	**51.642**	**1.0501**	**19.958**	**.49041**	**.50668**	F **5.6429**	**.49840**	**1.0940**	**1.0426**	**.06784**	**1.0185**
Stddev	.0095	.095	.0011	.080	.00070	.01038	.0333	.00984	.0169	.0128	.00141	.0223
%RSD	.38152	.18392	.10778	.40235	.14231	2.0480	.58961	1.9751	1.5415	1.2290	2.0796	2.1871
#1	2.4913	51.575	1.0493	19.901	.48992	.51402	5.6664	.50536	1.1059	1.0517	.06684	1.0343
#2	2.5048	51.710	1.0509	20.014	.49091	.49935	5.6194	.49144	1.0821	1.0336	.06884	1.0028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							5.0000					
Range							10.490%					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0125**	**4.9542**	**10.602**	**1.0197**	**.51062**	**.00325**	**.49179**	**1.0566**	**.03770**	**.48982**	**.48073**	**.49247**
Stddev	.0159	.0549	.118	.0207	.00021	.00216	.00044	.0179	.00147	.00038	.00171	.00158
%RSD	1.5749	1.1091	1.1091	2.0253	.04173	66.438	.09013	1.6977	3.8929	.07730	.35547	.32125
#1	1.0238	4.9154	10.519	1.0343	.51077	.00478	.49210	1.0693	.03667	.49009	.47952	.49135
#2	1.0013	4.9931	10.685	1.0051	.51047	.00172	.49148	1.0439	.03874	.48956	.48194	.49359
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2094.5**	**47891.**	**4216.4**
Stddev	4.7	246.	4.1
%RSD	.22243	.51454	.09764
#1	2097.8	48065.	4213.4
#2	2091.2	47716.	4219.3

Sample Name: CCB Acquired: 6/6/2017 21:42:15 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00004**	**.00095**	**.00700**	**.00168**	W **.00431**	**.00100**	**.00499**	F **.34264**	**.00037**	**-.00009**	**.00040**	**.00165**
Stddev	.00008	.00141	.00304	.00021	.00644	.00094	.00378	.47593	.00017	.00047	.00024	.00069
%RSD	176.87	148.58	43.415	12.420	149.29	93.613	75.851	138.90	46.728	538.35	60.988	41.556
#1	-.00010	-.00005	.00915	.00153	-.00024	.00034	.00766	.00611	.00025	-.00042	.00023	.00117
#2	.00001	.00195	.00485	.00183	.00886	.00167	.00231	.67917	.00049	.00025	.00057	.00214
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					.00200			.13500				
Low Limit					-.00200			-.13500				

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.06748**	**.23729**	W **.00844**	**-.00377**	**.00016**	**.00028**	F **1.5213**	**-.00180**	**.00615**	**.00180**	W **.05195**	**-.00174**
Stddev	.09125	.16701	.00007	.00634	.00001	.00058	1.5838	.00010	.00351	.00053	.00950	.00004
%RSD	135.24	70.384	.79171	168.22	3.7519	206.17	104.11	5.6335	57.082	29.637	18.289	2.2996
#1	.00295	.11919	.00849	.00071	.00016	-.00013	.40135	-.00187	.00863	.00218	.05867	-.00171
#2	.13200	.35539	.00840	-.00825	.00015	.00069	2.6412	-.00172	.00367	.00143	.04523	-.00177
Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit	.05000		.00500				.50000				.05000	
Low Limit	-.05000		-.01000				-.50000				-.20000	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00225**	**.04318**	**.09241**	**-.00124**	W **.00281**	**.00289**	**.00050**	**-.00090**	**-.03461**	**.00017**	**.00122**	**.00107**
Stddev	.00818	.01289	.02759	.00069	.00355	.00106	.00006	.00298	.00375	.00016	.00089	.00280
%RSD	363.35	29.859	29.859	55.906	126.36	36.622	12.116	329.77	10.838	98.176	73.013	261.93
#1	.00353	.03406	.07290	-.00075	.00030	.00214	.00055	-.00301	-.03196	.00005	.00059	-.00091
#2	-.00804	.05230	.11192	-.00173	.00533	.00364	.00046	.00120	-.03726	.00028	.00185	.00305
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					.00120							
Low Limit					-.00120							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2095.1**	**48938.**	**4250.4**
Stddev	8.4	35.	21.6
%RSD	.40031	.07129	.50714
#1	2089.1	48913.	4235.1
#2	2101.0	48962.	4265.6

Sample Name: CCVL-4576167 Acquired: 6/6/2017 21:44:54 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01053**	F **.13847**	**.01703**	**.09772**	**.00940**	**.00115**	**.11946**	**.20484**	**.00528**	**.00977**	**.01056**	**.01676**
Stddev	.00004	.00980	.00565	.00193	.00003	.00003	.00531	.00642	.00022	.00007	.00032	.00082
%RSD	.34363	7.0758	33.172	1.9760	.32038	2.9416	4.4427	3.1327	4.2292	.76705	3.0692	4.8733
#1	.01056	.14540	.01304	.09909	.00942	.00113	.12321	.20938	.00544	.00972	.01079	.01734
#2	.01051	.13154	.02103	.09636	.00937	.00118	.11570	.20030	.00513	.00983	.01033	.01619
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000										
Range		30.000%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10296**	**3.1713**	**.02376**	**.19659**	**.00999**	**.01890**	F **1.3835**	**.03813**	**3.0406**	F **.01234**	F **.15366**	**.02166**
Stddev	.00036	.0609	.00033	.00005	.00001	.00072	.0063	.00142	.0871	.00317	.01609	.00728
%RSD	.35328	1.9209	1.3894	.02723	.08887	3.7835	.45368	3.7346	2.8636	25.722	10.473	33.596
#1	.10270	3.2144	.02399	.19655	.00998	.01941	1.3791	.03914	3.1022	.01009	.16504	.02680
#2	.10322	3.1282	.02352	.19662	.01000	.01840	1.3879	.03713	2.9790	.01458	.14228	.01651
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass
Value							1.0000			.00900	.10000	
Range							30.000%			30.000%	30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01846**	**.44304**	**.94811**	**.09482**	**.01019**	**.01773**	**.00979**	**.01690**	F **.01725**	**.00921**	**.01841**	**.01214**
Stddev	.00072	.00625	.01337	.00069	.00000	.00147	.00043	.00070	.01925	.00006	.00003	.00250
%RSD	3.9124	1.4105	1.4105	.72764	.02738	8.3081	4.3687	4.1138	111.63	.66406	.18336	20.607
#1	.01897	.43862	.93865	.09531	.01019	.01669	.01009	.01641	.03086	.00916	.01839	.01037
#2	.01795	.44746	.95757	.09433	.01019	.01877	.00948	.01740	.00363	.00925	.01843	.01391
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2102.6**	**49418.**	**4282.2**
Stddev	13.1	105.	11.2
%RSD	.62365	.21266	.26210
#1	2111.8	49492.	4274.3
#2	2093.3	49344.	4290.2

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ICP Data Review Checklist

ICP Data Review Checklist

LIMS Batch Number(s): 370355 + 356

Analyst: [illegible] Date(s) Analyzed: 6/7/17

Matrix (circle): Water Solid Leachate

Filename(s): 25A060617.pdf

Instrument ID (circle one): ICP25 ICP26

Method (circle): 200.7 6010B 6010C

QC Type (circle): Standard DoD QSM DoD QS QAPP Other

Circle: Total TAR MD Dissolved

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
A. Calibration/Instrument Run QC					
1. Instrument calibrated per lab SOP?	✓				
2. Reanalysis of Calibration Standards before samples: 85-105% recovery	✓				
3. ICB/CCB: run before samples, 10% frequency, & closing. Result ≤ ½ RL (routine); Result ≤ LOD/2x MDL (DoD or special project)	✓				If no, list details:
4. ICV/CCV: frequency initial, 10%, & closing. 90-110% recovery, 5% RSD (6010); 95-105% recovery, 3% RSD (200.7)	✓				If no, list details:
5. ICVL/CCVL: 70-130% recovery (6010C)	✓				If no, list details:
6. ICSA/ICSAB: run before samples. ICSA detections for non-spiked elements ≤ 2x RL	✓				☐ Results outside limits due to contamination. ☐ Concentration of affected analyte in sample is less than RL.
ICSA detections for non-spiked ≤ [LOD/2x MDL for DoD or special project]					
ICSAB for spiked elements 80-120%					
If no, list analytes:					
7. RL level check standard (CRI): 50-150% (routine); 80-120% recovery (DoD or special projects)	✓				If no, list details:
B. Blank/Sample and QC Sample Results					
1. Samples with target element concentrations > 90% linear range diluted and reanalyzed? (200.7)	✓				Comments:
2. Were all hits reported from a run with interfering elements < linear range? (If Flags investigated)	✓				Comments:
3. Internal standard (IS) response ± 30% of ICB IS?	✓				☐ High IS response. Sample(s) rerun at dilution. ☐ Low IS response. Sample(s) rerun at dilution.
If no, list details:					
C. Preparation/Matrix QC					
1. Method Blank: one per preparation batch. Result ≤ ½ RL (routine)	✓				☐ No analyte > RL in associated samples ☐ Sample results >10x blank ☐ Insufficient sample for reanalysis
2. LCS: one per preparation batch. 80-120% recovery or historical (routine); 85-115% recovery or historical (200.7); project limits (other)	✓				☐ Insufficient sample for reanalysis ☐ LCS %R > QC limits & samples < RL
3. MS/MSD or MS/Dup frequency: a pair per batch (routine); a pair per 10 samples (200.7)	✓				☐ Insufficient sample – LCS/LCSD analyzed
C. Preparation/Matrix QC (cont.)					
4. MS/MSD recovery & RPD: 75-125% recovery or historical (routine); 70-130% recovery or historical (200.7); 20% RPD; project limits (other)	✓				☐ LCS acceptable – matrix effects ☐ Native analyte > 4x spike level ☐ Matrix effect and native analyte >> 4x spike ☐ Matrix effect [illegible] native analyte >> 4x spike

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Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
5. If MSD %R is <80% and sample result 80-100% of toxicity characteristic limit, was MSA run?	✓				Comments: Comments:
6. Serial dilution: present for each prep batch (routine). Required if MS/MSD fail (DoD/QS). run at 5x dilution of parent sample ≤ 10% difference	✓				☐ Sample result < 50 x MDL ☐ Sample result < 50 x MDL
7. Post digestion spike: Required if MS/MSD fail (DoD and 6010C) or by client request. 75-125% recovery	✓				
D. Raw Data & TALS Data Entry					
1. TALS Sample List Tab	✓				
a. LIMS Sample IDs/ Containers are correct	✓				
b. Method and matrix are correct	✓				
c. Date and time are correct	✓				
d. Dilutions are correct	✓				
e. Correct suffix designated; e.g., DU, (where applicable)	✓				
2. TALS Sample Results Tab	✓				
a. All reported analytes are marked Primary or Secondary	✓				
b. All unused data are marked Rejected or Accepted. Unused data are clearly identified with reason not used	✓				
c. Out of control QC is clearly identified	✓				
d. Any data that has a qualifier is reviewed with appropriate action taken (NCM if needed)	✓				
e. The attached data file includes the filename, instrument, and analyst initials	✓				
3. TALS Worksheet Tab is complete and correct	✓				
4. TALS Reagent Tab is complete and correct	✓				
5. TALS QC Links Tab is correct	✓				
6. TALS Batch Information Screen documentation is complete	✓				
7. TALS Status set to appropriate review level	✓				
E. Final Report (2nd level review only)					
1. Were all project requirements met?					
2. Results for samples and QC correct on final report?					
3. Are all necessary scanned documents in TALS?					
4. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?					
5. Raw Data PDF attached as document					

Comments: [illegible]

2nd Reviewer: [signature] Review Date: 6/7/17

Sample Name: ICIS Acquired: 6/7/2017 8:58:40 Type: Cal
Method: 6500_025 Mode: IR Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00132**	**.00182**	**-.01473**	**-.00020**	**.00067**	**.02005**	**-.00485**	**-.00129**	**.00180**	**-.00162**	**.00068**	**-.00072**
Stddev	.00014	.00009	.00040	.00004	.00010	.00065	.00011	.00059	.00038	.00057	.00013	.00027
%RSD	10.360	5.0053	2.7040	19.173	14.621	3.2623	2.3096	45.369	21.275	35.259	19.461	36.738
#1	-.00122	.00175	-.01501	-.00017	.00074	.02052	-.00477	-.00088	.00207	-.00203	.00077	-.00053
#2	-.00141	.00188	-.01445	-.00023	.00060	.01959	-.00493	-.00171	.00153	-.00122	.00059	-.00091

Elem	Cu3247	Fe2599	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00593**	**-.00068**	**.00026**	**-.00214**	**.00200**	**.00010**	**.00006**	**-.00057**	**.01583**	**-.01356**	**.00181**	**.00000**
Stddev	.00011	.00024	.00002	.00006	.00125	.00004	.00001	.00003	.00264	.00088	.00021	.00006
%RSD	1.7781	36.011	9.2864	2.9617	62.307	34.771	14.314	5.2524	16.695	6.5219	11.459	1498.8
#1	.00586	-.00085	.00028	-.00209	.00112	.00008	.00006	-.00054	.01396	-.01293	.00196	-.00004
#2	.00601	-.00051	.00024	-.00218	.00289	.00013	.00005	-.00059	.01770	-.01418	.00167	.00005

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00197**	**.00155**	**.00091**	**.00031**	**.00026**	**.00026**	**.00026**	**-.00879**	**-.00004**	**-.00023**	**-.00013**	**.00070**
Stddev	.00003	.00012	.00030	.00002	.00006	.00006	.00006	.00031	.00002	.00010	.00014	.00008
%RSD	1.3384	8.0414	32.770	5.9569	21.257	21.257	24.037	3.5579	48.545	45.936	106.24	11.599
#1	-.00195	.00146	.00113	.00030	.00030	.00030	.00021	-.00857	-.00005	-.00015	-.00023	.00064
#2	-.00199	.00164	.00070	.00032	.00022	.00022	.00030	-.00901	-.00002	-.00030	-.00003	.00075

Elem	V_2924	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S
Avg	**-.00037**	**.00002**	**-.00059**
Stddev	.00006	.00001	.00016
%RSD	15.535	25.965	27.616
#1	-.00042	.00003	-.00047
#2	-.00033	.00002	-.00071

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2400.5**	**56094.**	**5366.3**
Stddev	6.4	187.	6.2
%RSD	.26641	.33258	.11583
#1	2405.0	55962.	5370.7
#2	2396.0	56226.	5361.9

Sample Name: ICAL1 Acquired: 6/7/2017 9:01:20 Type: Cal
Method: 6500_025 Mode: IR Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.19387**	**.15853**	**.06725**	**.25718**	**5.7048**	**5.4448**	**1.4895**	**1.7160**	**.95711**	**.80304**	**.21611**	**.52080**	**3.1749**
Stddev	.00005	.00248	.00125	.00370	.0228	.0240	.0029	.0276	.01684	.01365	.00038	.00184	.0175
%RSD	.02397	1.5629	1.8658	1.4396	.39889	.44171	.19151	1.6097	1.7590	1.6993	.17532	.35297	.55034
#1	.19391	.16028	.06814	.25980	5.6887	5.4278	1.4875	1.7355	.96901	.81269	.21584	.51950	3.1625
#2	.19384	.15678	.06636	.25456	5.7209	5.4618	1.4915	1.6965	.94520	.79339	.21638	.52210	3.1872

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.7167**	**.66581**	**.89690**	**.37364**	**1.3335**	**.64409**	**.08840**	**.40012**	**.16818**	**.06037**	**.22650**	**.22650**	**.17292**
Stddev	.0104	.00057	.00026	.00721	.0053	.00997	.00082	.00708	.00276	.00081	.00089	.00089	.00276
%RSD	.60808	.08518	.02929	1.9290	.39567	1.5474	.93195	1.7688	1.6440	1.3465	.39179	.39179	1.5971
#1	1.7093	.66541	.89708	.37874	1.3298	.65113	.08898	.40513	.17013	.06094	.22587	.22587	.17487
#2	1.7241	.66621	.89671	.36854	1.3372	.63704	.08782	.39512	.16622	.05979	.22713	.22713	.17097

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**9.6279**	**.29027**	**.12811**	**.15442**	**.01571**	**.30342**
Stddev	.0447	.00015	.00116	.00031	.00005	.00035
%RSD	.46371	.05283	.90232	.19790	.31771	.11545
#1	9.5963	.29016	.12893	.15421	.01574	.30367
#2	9.6595	.29038	.12729	.15464	.01567	.30317

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2335.4**	**55123.**	**5356.1**
Stddev	10.7	358.	28.6
%RSD	.45939	.64967	.53432
#1	2327.8	55376.	5335.9
#2	2343.0	54869.	5376.3

Sample Name: ICAL2 Acquired: 6/7/2017 9:03:46 Type: Cal
Method: 6500_025 Mode: IR Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Al3092	Bi2230	Fe2714	Na8183	S_1820	Th2837	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4.0685**	**.25843**	**.53174**	**2.0225**	**.22247**	**.43223**	**.11895**
Stddev	.0216	.00527	.00422	.0148	.00491	.00001	.00021
%RSD	.53125	2.0406	.79287	.73090	2.2083	.00236	.17456
#1	4.0838	.26216	.53472	2.0329	.22594	.43223	.11881
#2	4.0532	.25470	.52875	2.0120	.21900	.43224	.11910

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2305.1**	**52679.**	**5361.4**
Stddev	.2	194.	50.6
%RSD	.01016	.36829	.94456
#1	2305.3	52541.	5325.6
#2	2305.0	52816.	5397.2

Sample Name: S1-4567763 Acquired: 6/7/2017 9:06:25 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0040**	**1.0104**	**1.9816**	**.99209**	**.99634**	**1.0021**	**-.01085**	**10.044**	**.99666**	**.99761**	**.99003**	**1.0260**	**5.1048**
Stddev	.0000	.0173	.0170	.00627	.00127	.0008	.00566	.025	.01218	.01219	.01491	.0006	.0035
%RSD	.00444	1.7127	.85831	.63171	.12788	.08217	52.167	.25260	1.2225	1.2217	1.5058	.06147	.06783
#1	1.0040	1.0226	1.9936	.99652	.99544	1.0015	-.01486	10.027	1.0053	1.0062	1.0006	1.0255	5.1023
#2	1.0039	.99815	1.9696	.98766	.99724	1.0026	-.00685	10.062	.98805	.98899	.97948	1.0264	5.1072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**99.688**	**2.0002**	**40.325**	**1.0170**	**.98742**	**10.277**	**10.942**	**.99690**	**2.0086**	**1.9756**	**-.01191**	**1.9888**	**1.9676**
Stddev	.337	.0083	.070	.0024	.01570	.012	.333	.01279	.0267	.0181	.00680	.0313	.0304
%RSD	.33805	.41684	.17383	.23347	1.5896	.11394	3.0411	1.2829	1.3290	.91489	57.095	1.5727	1.5455
#1	99.450	1.9943	40.375	1.0187	.99851	10.269	11.177	1.0059	2.0275	1.9884	-.01671	2.0109	1.9891
#2	99.927	2.0061	40.276	1.0154	.97632	10.286	10.707	.98786	1.9898	1.9628	-.00710	1.9667	1.9461
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value													
Range													

Elem	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.9840**	**21.366**	**1.9658**	**.99822**	**.00697**	**1.0130**	**1.9773**	**.01706**	**1.0130**	**1.0338**	**1.0101**
Stddev	.0568	.122	.0277	.00198	.00264	.0004	.0246	.02333	.0008	.0009	.0036
%RSD	.56879	.56879	1.4106	.19835	37.868	.03903	1.2423	136.78	.07686	.08877	.35164
#1	9.9439	21.280	1.9854	.99682	.00510	1.0127	1.9947	.03355	1.0135	1.0345	1.0075
#2	10.024	21.452	1.9462	.99962	.00883	1.0132	1.9600	.00056	1.0124	1.0332	1.0126
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2359.1**	**53831.**	**5293.0**
Stddev	8.0	109.	45.2
%RSD	.33899	.20247	.85412
#1	2364.8	53754.	5325.0
#2	2353.4	53908.	5261.0

Sample Name: S2-4569080 Acquired: 6/7/2017 9:08:50 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01333**	**100.06**	**-.01183**	**.00500**	**.00053**	**.00011**	**1.9921**	**.00107**	**.00049**	**-.00201**	**.00109**	**.04563**	**100.29**
Stddev	.00003	.15	.00741	.00008	.00033	.00009	.0319	.00050	.00006	.00011	.00008	.00057	.11
%RSD	.21054	.15031	62.678	1.5035	61.925	82.517	1.6031	46.927	11.982	5.2706	7.3888	1.2384	.11091
#1	-.01335	100.17	-.01707	.00494	.00077	.00017	2.0147	.00071	.00053	-.00194	.00103	.04603	100.21
#2	-.01331	99.957	-.00659	.00505	.00030	.00004	1.9695	.00142	.00045	-.00209	.00115	.04523	100.37
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00448**	**.00217**	**.14214**	**-.00303**	**-.00298**	**501.35**	**.00277**	**.01194**	**.00138**	**9.9994**	**-.02157**	**-.00859**	**-.00632**
Stddev	.02782	.00057	.00615	.00002	.00083	1.54	.00012	.00212	.00255	.1178	.00572	.00191	.02094
%RSD	621.44	26.124	4.3243	.81320	27.784	.30634	4.4877	17.804	184.71	1.1780	26.529	22.300	331.48
#1	.01520	.00177	.13780	-.00301	-.00356	500.26	.00286	.01344	.00318	10.083	-.02562	-.00994	-.02112
#2	-.02415	.00257	.14649	-.00305	-.00239	502.43	.00268	.01043	-.00042	9.9161	-.01752	-.00723	.00849
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01352**	**-.00127**	**.00090**	**9.9971**	**.03648**	**.00040**	**20.177**	**.02990**	**.00232**	**.24640**
Stddev	.04480	.00051	.00011	.0236	.00029	.00169	.008	.00023	.00029	.00122
%RSD	331.48	40.344	12.456	.23624	.78971	420.19	.03731	.78207	12.524	.49580
#1	-.04519	-.00163	.00098	10.014	.03628	.00159	20.172	.03006	.00252	.24554
#2	.01816	-.00091	.00082	9.9804	.03668	-.00079	20.183	.02973	.00211	.24726
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2284.0**	**52025.**	**5336.3**
Stddev	25.6	710.	75.5
%RSD	1.1222	1.3639	1.4141
#1	2265.8	52527.	5389.7
#2	2302.1	51523.	5283.0

Sample Name: ICVH-4569263 Acquired: 6/7/2017 9:11:29 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00475**	**41.039**	**-.00837**	**.00094**	**.00030**	**-.00024**	W **.53460**	**.02425**	**.00028**	**-.00017**	**.00095**	**.01302**
Stddev	.00045	.013	.00912	.00003	.00043	.00001	.01505	.00069	.00024	.00019	.00052	.00001
%RSD	9.4173	.03103	109.05	3.0837	140.99	5.1507	2.8148	2.8337	84.134	117.20	54.555	.04691
#1	-.00506	41.048	-.01482	.00096	.00060	-.00023	.54524	.02376	.00045	-.00030	.00132	.01302
#2	-.00443	41.030	-.00192	.00092	.00000	-.00024	.52396	.02473	.00011	-.00003	.00059	.01303
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							.50000					
Range							5.4900%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**80.887**	**-.14353**	**-.00031**	**.03629**	**-.00106**	**-.00204**	**41.854**	**.00006**	**.00637**	**.00044**	**4.1897**	**-.00880**
Stddev	.160	.04377	.00038	.00291	.00025	.00001	.287	.00035	.00101	.00083	.0820	.00332
%RSD	.19750	30.494	122.85	8.0120	23.394	.55440	.68511	539.44	15.920	188.53	1.9575	37.787
#1	80.774	-.17448	-.00004	.03424	-.00089	-.00205	41.652	-.00018	.00709	.00102	4.2477	-.00645
#2	81.000	-.11258	-.00057	.03835	-.00124	-.00204	42.057	.00031	.00565	-.00015	4.1317	-.01115
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00524**	**-.00157**	**-.00337**	**.00083**	**.00024**	**3.0649**	**.01083**	**-.00076**	**5.2138**	**.00846**	**.00310**	**.07415**
Stddev	.00129	.00434	.00928	.00032	.00005	.0040	.00003	.00333	.0305	.00009	.00031	.00287
%RSD	24.506	275.60	275.60	38.709	19.755	.13135	.31685	440.00	.58406	1.0680	9.9491	3.8737
#1	-.00615	-.00464	-.00993	.00061	.00027	3.0678	.01080	.00160	5.1922	.00852	.00288	.07212
#2	-.00434	.00149	.00320	.00106	.00020	3.0621	.01085	-.00311	5.2353	.00839	.00332	.07618
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2413.7**	**55055.**	**5339.8**
Stddev	29.9	742.	48.0
%RSD	1.2374	1.3484	.89974
#1	2434.8	54530.	5305.8
#2	2392.6	55580.	5373.8

Sample Name: ICVH-4569263 Acquired: 6/7/2017 9:14:55 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00451**	**41.195**	**-.00435**	**.00093**	**.00039**	**-.00025**	W **.53989**	**.02891**	**.00059**	**.00003**	**.00112**	**.01293**
Stddev	.00023	.274	.00147	.00023	.00040	.00013	.00267	.00564	.00039	.00010	.00068	.00036
%RSD	5.1616	.66463	33.753	25.125	103.64	52.916	.49419	19.511	65.954	390.84	60.897	2.7663
#1	-.00435	41.002	-.00331	.00110	.00067	-.00035	.53800	.02492	.00031	.00010	.00160	.01318
#2	-.00468	41.389	-.00539	.00077	.00010	-.00016	.54178	.03290	.00086	-.00005	.00064	.01268
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							.50000					
Range							5.4900%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**81.346**	**-.14526**	**.00055**	**.04568**	**-.00127**	**-.00167**	**41.612**	**-.00037**	**.00605**	**-.00102**	**4.2169**	**-.00949**
Stddev	.688	.02726	.00014	.00143	.00002	.00005	.032	.00029	.00009	.00071	.0112	.00002
%RSD	.84624	18.764	25.739	3.1272	1.7698	2.7077	.07757	77.652	1.5507	69.849	.26556	.23212
#1	80.859	-.16453	.00065	.04467	-.00128	-.00170	41.635	-.00017	.00611	-.00052	4.2248	-.00948
#2	81.833	-.12599	.00045	.04669	-.00125	-.00163	41.589	-.00058	.00598	-.00152	4.2089	-.00951
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00180**	**.01701**	**.03641**	**.00114**	**.00023**	**3.0834**	**.01106**	**.00138**	**5.2619**	**.00870**	**.00424**	**.07329**
Stddev	.01105	.01696	.03629	.00159	.00005	.0088	.00020	.00141	.0238	.00060	.00095	.00031
%RSD	615.61	99.673	99.673	139.15	23.878	.28400	1.7738	102.75	.45149	6.9158	22.525	.42578
#1	.00961	.00502	.01075	.00002	.00019	3.0772	.01120	.00238	5.2787	.00912	.00356	.07351
#2	-.00602	.02900	.06207	.00226	.00027	3.0896	.01092	.00038	5.2451	.00827	.00491	.07307
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2430.8**	**55568.**	**5348.8**
Stddev	26.3	220.	37.1
%RSD	1.0801	.39563	.69330
#1	2412.2	55723.	5375.0
#2	2449.4	55412.	5322.6

Sample Name: ICV-4576614 Acquired: 6/7/2017 9:18:42 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.24893**	W **.26516**	**.25241**	**.25266**	**.24457**	**.24600**	**-.00816**	**1.9500**	**.25132**	**.25133**	**.25058**	**.25677**
Stddev	.00077	.00186	.00177	.00045	.00066	.00197	.00224	.0138	.00031	.00041	.00130	.00126
%RSD	.30837	.70292	.70213	.17745	.26849	.79887	27.447	.70838	.12241	.16361	.51697	.48919
#1	.24839	.26384	.25116	.25234	.24504	.24739	-.00657	1.9597	.25110	.25104	.24966	.25589
#2	.24947	.26647	.25367	.25298	.24411	.24461	-.00974	1.9402	.25153	.25162	.25150	.25766
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.25000										
Range		5.4900%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.29103**	**19.696**	**.25279**	**10.014**	**.25500**	**.23665**	**2.0370**	**.25404**	**1.9891**	**.25323**	**-.01565**	**.25557**
Stddev	.03914	.056	.00254	.007	.00026	.00026	.0247	.00090	.0074	.00060	.00432	.00086
%RSD	13.450	.28641	1.0063	.07422	.10069	.10919	1.2134	.35583	.37397	.23849	27.603	.33727
#1	.26335	19.736	.25459	10.020	.25518	.23683	2.0195	.25340	1.9838	.25280	-.01870	.25618
#2	.31871	19.656	.25099	10.009	.25482	.23646	2.0545	.25468	1.9943	.25366	-.01259	.25496
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value	.25000											
Range	10.490%											

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50950**	**1.9770**	**4.2308**	**.49884**	**.24732**	**.00093**	**.24391**	W **.52860**	**.02489**	**.24686**	**.24900**	**.24749**
Stddev	.00173	.0091	.0196	.00297	.00106	.00259	.00008	.00212	.01697	.00032	.00006	.00089
%RSD	.34035	.46210	.46210	.59566	.42970	277.05	.03076	.40036	68.157	.13097	.02255	.35838
#1	.50827	1.9835	4.2446	.49673	.24808	-.00089	.24386	.52711	.03689	.24663	.24904	.24812
#2	.51072	1.9705	4.2170	.50094	.24657	.00276	.24397	.53010	.01290	.24709	.24896	.24687
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	None	Chk Pass	Chk Pass	Chk Pass
Value								.50000				
Range								5.4900%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2398.4**	**56330.**	**5448.5**
Stddev	32.2	75.	52.2
%RSD	1.3429	.13228	.95843
#1	2421.2	56278.	5485.4
#2	2375.7	56383.	5411.5

Sample Name: ICV-4576614 Acquired: 6/7/2017 9:25:30 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25195**	W **.26587**	**.25349**	**.25342**	**.24659**	**.24757**	**-.00801**	**1.9605**	**.25277**	**.25313**	**.25361**	**.25616**
Stddev	.00282	.00134	.00423	.00083	.00067	.00041	.00296	.0047	.00081	.00026	.00008	.00026
%RSD	1.1192	.50536	1.6674	.32583	.27112	.16459	36.923	.23798	.31928	.10414	.03006	.10199
#1	.24996	.26682	.25648	.25400	.24706	.24729	-.01010	1.9572	.25334	.25331	.25367	.25634
#2	.25395	.26492	.25050	.25283	.24612	.24786	-.00592	1.9638	.25220	.25294	.25356	.25597
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.25000										
Range		5.4900%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25174**	**19.700**	**.25082**	**10.103**	**.25614**	**.23893**	**2.0024**	**.25614**	**2.0069**	**.25762**	**-.02323**	**.25995**
Stddev	.00183	.049	.00057	.056	.00106	.00023	.0007	.00114	.0007	.00200	.00018	.00754
%RSD	.72585	.25071	.22625	.54994	.41263	.09703	.03564	.44663	.03510	.77575	.78876	2.9004
#1	.25045	19.735	.25122	10.063	.25540	.23876	2.0019	.25695	2.0064	.25903	-.02336	.26528
#2	.25304	19.665	.25042	10.142	.25689	.23909	2.0029	.25533	2.0074	.25621	-.02310	.25462
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50642**	**1.9649**	**4.2050**	**.50171**	**.24907**	**.00236**	**.24526**	W **.53893**	**.00256**	**.24788**	**.25162**	**.24560**
Stddev	.00244	.0096	.0205	.00047	.00026	.00055	.00151	.00429	.01072	.00250	.00088	.00149
%RSD	.48116	.48697	.48697	.09410	.10638	23.432	.61507	.79669	419.27	1.0087	.34849	.60472
#1	.50814	1.9582	4.1905	.50204	.24888	.00275	.24419	.54197	.01014	.24611	.25100	.24665
#2	.50470	1.9717	4.2194	.50137	.24926	.00197	.24633	.53590	-.00503	.24965	.25224	.24454
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	None	Chk Pass	Chk Pass	Chk Pass
Value								.50000				
Range								5.4900%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2379.0**	**55942.**	**5426.1**
Stddev	11.5	605.	28.2
%RSD	.48297	1.0823	.51909
#1	2370.8	55514.	5446.0
#2	2387.1	56370.	5406.2

Sample Name: ICV-4576614 Acquired: 6/7/2017 9:27:43 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25087**	W **.26666**	**.25248**	**.25010**	**.24578**	**.24634**	**-.00530**	**1.9487**	**.24984**	**.25134**	**.25042**	**.25626**
Stddev	.00105	.00083	.00269	.00268	.00005	.00071	.00158	.0182	.00297	.00224	.00112	.00149
%RSD	.41686	.31077	1.0641	1.0725	.01936	.28890	29.910	.93582	1.1874	.89086	.44587	.58312
#1	.25161	.26607	.25058	.25200	.24582	.24584	-.00642	1.9358	.25194	.25292	.25121	.25732
#2	.25013	.26725	.25438	.24820	.24575	.24684	-.00418	1.9616	.24775	.24975	.24963	.25520
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.25000										
Range		5.4900%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25436**	**19.807**	**.25444**	**10.078**	**.25607**	W **.23618**	**1.9972**	**.25434**	**1.9653**	**.25600**	**-.01676**	**.25008**
Stddev	.00261	.036	.00342	.018	.00028	.00191	.0043	.00120	.0129	.00353	.00413	.00086
%RSD	1.0247	.18240	1.3458	.18255	.10992	.80697	.21482	.47030	.65731	1.3807	24.628	.34302
#1	.25620	19.781	.25202	10.091	.25626	.23752	2.0002	.25518	1.9744	.25850	-.01384	.25069
#2	.25252	19.832	.25686	10.065	.25587	.23483	1.9941	.25349	1.9561	.25350	-.01968	.24948
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value						.25000						
Range						-5.4900%						

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49711**	**1.9680**	**4.2116**	**.49777**	**.24822**	**.00292**	**.24498**	**.52313**	**-.01346**	**.24804**	**.24952**	**.24672**
Stddev	.00820	.0043	.0091	.00142	.00049	.00156	.00096	.00255	.02306	.00075	.00239	.00256
%RSD	1.6503	.21574	.21574	.28608	.19854	53.454	.39358	.48729	171.32	.30182	.95641	1.0389
#1	.50291	1.9710	4.2180	.49878	.24787	.00181	.24566	.52493	.00285	.24857	.25121	.24491
#2	.49131	1.9650	4.2051	.49677	.24857	.00402	.24430	.52132	-.02977	.24751	.24783	.24854
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2325.8**	**56071.**	**5290.2**
Stddev	45.9	197.	5.0
%RSD	1.9721	.35085	.09543
#1	2358.2	55932.	5286.6
#2	2293.3	56210.	5293.7

Sample Name: ICVL-4578237 Acquired: 6/7/2017 9:32:38 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01076**	**.11115**	**.01334**	**.10329**	**.00996**	**.00071**	**.11168**	**.20269**	**.00572**	**.01013**	**.01054**	**.01658**	**.12140**	**2.9961**
Stddev	.00021	.00039	.00205	.00226	.00031	.00002	.00295	.00242	.00059	.00034	.00048	.00032	.00335	.0066
%RSD	1.9109	.34723	15.389	2.1879	3.1335	2.5066	2.6372	1.1946	10.256	3.3340	4.5047	1.9552	2.7558	.22086
#1	.01061	.11088	.01480	.10170	.01018	.00070	.11377	.20440	.00613	.01036	.01088	.01635	.11904	2.9914
#2	.01090	.11143	.01189	.10489	.00974	.00072	.10960	.20098	.00530	.00989	.01021	.01681	.12377	3.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01992**	**.21559**	**.01085**	**.01819**	**1.0178**	**.04332**	**2.9627**	**.01149**	**.08638**	**.02106**	**.01747**	**.51680**	**1.1059**	**.10180**
Stddev	.00148	.00228	.00000	.00006	.0037	.00020	.0035	.00058	.00299	.00304	.00551	.01392	.0298	.00254
%RSD	7.4297	1.0595	.03531	.33347	.36274	.46804	.11875	5.0620	3.4625	14.422	31.506	2.6941	2.6941	2.4935
#1	.01888	.21721	.01086	.01823	1.0204	.04318	2.9602	.01108	.08850	.02321	.01358	.50695	1.0849	.10000
#2	.02097	.21398	.01085	.01814	1.0152	.04346	2.9652	.01190	.08427	.01891	.02137	.52664	1.1270	.10359
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01048**	**.01793**	**.00993**	**.01747**	**.04599**	**.01056**	**.02097**	**.01663**
Stddev	.00002	.00001	.00075	.00089	.05044	.00022	.00007	.00082
%RSD	.16760	.07828	7.5102	5.0810	109.67	2.0691	.35683	4.9419
#1	.01049	.01792	.00940	.01809	.01033	.01041	.02102	.01605
#2	.01047	.01794	.01045	.01684	.08166	.01072	.02091	.01722
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2420.3**	**57212.**	**5526.7**
Stddev	6.4	62.	3.4
%RSD	.26328	.10783	.06194
#1	2415.8	57256.	5524.3
#2	2424.8	57168.	5529.1

Sample Name: CCVH-4569081 Acquired: 6/7/2017 9:39:05 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00651**	**49.642**	**-.00490**	**.00251**	**.00014**	**-.00024**	**1.0292**	**-.00283**	**.00048**	**-.00127**	**.00045**	**.02321**	**49.949**
Stddev	.00047	.296	.00054	.00075	.00005	.00001	.0064	.00363	.00029	.00003	.00003	.00048	.198
%RSD	7.1998	.59538	11.010	29.775	33.834	2.6709	.61833	128.23	61.140	2.3361	6.8578	2.0885	.39569
#1	-.00617	49.433	-.00452	.00304	.00011	-.00025	1.0247	-.00540	.00027	-.00125	.00047	.02355	50.088
#2	-.00684	49.851	-.00529	.00198	.00018	-.00024	1.0337	-.00026	.00069	-.00130	.00043	.02287	49.809
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.06860**	**.00136**	**.07477**	**-.00165**	**-.00269**	**249.80**	**.00084**	**.00408**	**.00019**	**5.0329**	**-.01621**	**-.00141**	**.00888**
Stddev	.04691	.00016	.00706	.00004	.00059	.67	.00000	.00689	.00034	.0042	.00317	.00337	.00923
%RSD	68.389	12.097	9.4360	2.4536	21.834	.26986	.43587	168.86	182.29	.08333	19.551	238.61	103.97
#1	-.03543	.00147	.07976	-.00168	-.00228	249.33	.00084	-.00079	.00042	5.0299	-.01845	.00097	.01541
#2	-.10177	.00124	.06979	-.00162	-.00311	250.28	.00084	.00895	-.00005	5.0359	-.01397	-.00380	.00235
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01900**	**-.00251**	**.00032**	**4.9799**	**.01753**	**.00020**	**10.355**	**.01602**	**-.00051**	**.12296**
Stddev	.01976	.00052	.00006	.0169	.00048	.00193	.040	.00114	.00089	.00129
%RSD	103.97	20.683	19.432	.33884	2.7300	956.78	.38205	7.0880	175.10	1.0476
#1	.03297	-.00288	.00037	4.9680	.01787	.00157	10.327	.01682	-.00114	.12387
#2	.00503	-.00215	.00028	4.9919	.01719	-.00116	10.383	.01521	.00012	.12205
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2366.7**	**54186.**	**5426.6**
Stddev	25.7	77.	40.3
%RSD	1.0869	.14255	.74335
#1	2384.9	54240.	5455.1
#2	2348.5	54131.	5398.0

Sample Name: CCV-4567764 Acquired: 6/7/2017 9:41:55 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51061**	**.52314**	**1.0005**	**.50826**	**.50129**	**.50320**	**-.00988**	**5.0689**	**.50378**	**.50558**	**.49530**	**.51804**	**2.5500**
Stddev	.00003	.00995	.0062	.00609	.00141	.00149	.00378	.0102	.00746	.00874	.00873	.00011	.0165
%RSD	.00572	1.9021	.61770	1.1984	.28219	.29655	38.199	.20086	1.4803	1.7278	1.7617	.02207	.64692
#1	.51063	.53018	1.0049	.51256	.50229	.50425	-.00721	5.0617	.50906	.51175	.50147	.51812	2.5617
#2	.51059	.51611	.99614	.50395	.50029	.50214	-.01255	5.0761	.49851	.49940	.48913	.51796	2.5383
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.228**	**1.0190**	**20.393**	**.51160**	**.49163**	**5.1873**	**.50293**	**1.0038**	**1.0054**	**-.01666**	**1.0107**	**1.0148**	**5.0564**
Stddev	.155	.0080	.013	.00010	.00923	.0132	.00810	.0157	.0191	.00340	.0195	.0204	.0144
%RSD	.30849	.78155	.06457	.02004	1.8765	.25351	1.6104	1.5624	1.8985	20.425	1.9287	2.0104	.28401
#1	50.337	1.0246	20.402	.51168	.49815	5.1966	.50865	1.0149	1.0188	-.01426	1.0245	1.0293	5.0462
#2	50.118	1.0134	20.383	.51153	.48510	5.1780	.49720	.99275	.99186	-.01907	.99692	1.0004	5.0665
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.821**	**.99769**	**.50351**	**.00501**	**.50357**	**1.0302**	**.00605**	**.50499**	**.50883**	**.50803**
Stddev	.031	.01918	.00151	.00349	.00069	.0105	.02160	.00080	.00152	.00236
%RSD	.28401	1.9221	.29934	69.686	.13794	1.0220	356.95	.15915	.29813	.46360
#1	10.799	1.0113	.50458	.00254	.50308	1.0377	.02132	.50556	.50990	.50637
#2	10.842	.98413	.50245	.00748	.50406	1.0228	-.00922	.50442	.50775	.50970
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2420.2**	**56026.**	**5453.8**
Stddev	4.5	279.	31.7
%RSD	.18640	.49810	.58193
#1	2417.0	56223.	5431.4
#2	2423.4	55829.	5476.2

Sample Name: ICB Acquired: 6/7/2017 9:44:24 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00058**	**.00133**	**-.00009**	**.00140**	**-.00003**	**-.00001**	**-.00410**	**.00698**	**.00047**	**-.00052**	**-.00037**	**-.00036**	**.02210**
Stddev	.00033	.00106	.00147	.00061	.00037	.00017	.00094	.00251	.00016	.00004	.00046	.00011	.03089
%RSD	56.468	79.825	1708.3	43.340	1209.6	1470.8	22.818	36.017	34.047	7.4487	123.99	31.212	139.80
#1	.00082	.00209	.00096	.00097	-.00029	-.00013	-.00477	.00520	.00036	-.00055	-.00069	-.00045	.00025
#2	.00035	.00058	-.00113	.00183	.00023	.00011	-.00344	.00876	.00058	-.00049	-.00005	-.00028	.04395
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.05890**	**.00078**	**.00608**	**.00002**	**-.00060**	**.09234**	**-.00034**	**.00296**	**-.00038**	**-.02045**	**-.00305**	**.00061**	**.02804**
Stddev	.05946	.00065	.00354	.00007	.00056	.14946	.00026	.00127	.00076	.00032	.00336	.00346	.00358
%RSD	100.96	82.781	58.288	304.07	94.096	161.86	75.446	43.069	198.88	1.5678	110.29	570.16	12.767
#1	-.10094	.00032	.00357	.00008	-.00100	-.01335	-.00052	.00386	.00016	-.02023	-.00067	.00305	.03057
#2	-.01685	.00124	.00859	-.00003	-.00020	.19803	-.00016	.00206	-.00092	-.02068	-.00542	-.00184	.02551
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06000**	**-.00009**	**.00033**	**.00161**	**-.00009**	**-.00246**	**-.01590**	**-.00025**	**.00037**	**.00348**
Stddev	.00766	.00091	.00030	.00198	.00031	.00575	.03201	.00019	.00055	.00022
%RSD	12.767	1056.3	90.041	123.38	354.32	233.78	201.31	77.027	151.53	6.4451
#1	.06542	-.00073	.00012	.00301	.00013	.00161	-.03853	-.00039	.00076	.00364
#2	.05458	.00056	.00054	.00020	-.00031	-.00652	.00673	-.00011	-.00003	.00332
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2378.0**	**55590.**	**5348.9**
Stddev	7.5	366.	23.5
%RSD	.31371	.65787	.43969
#1	2383.3	55331.	5365.5
#2	2372.7	55848.	5332.3

Sample Name: CRI-4578241 Acquired: 6/7/2017 9:47:27 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00946**	**.11111**	F **.00248**	**.10373**	**.00523**	W **.00068**	**.10855**	**.21045**	**.00556**	**.00476**	**.01051**	**.01055**
Stddev	.00037	.00111	.00074	.00033	.00010	.00012	.00146	.00311	.00001	.00025	.00034	.00070
%RSD	3.9392	.99510	29.815	.31782	1.8192	17.443	1.3459	1.4764	.13056	5.1963	3.2606	6.6841
#1	.00919	.11190	.00301	.10396	.00516	.00076	.10752	.21264	.00556	.00494	.01027	.01105
#2	.00972	.11033	.00196	.10349	.00530	.00059	.10958	.20825	.00557	.00459	.01075	.01005
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01000			.00100						
Range			-50.000%			-20.490%						

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03348**	**.94722**	**.01137**	**.22176**	**.00325**	**.00876**	**1.0324**	**.01141**	**1.0013**	F **.00537**	**.08104**	W **.00666**
Stddev	.00200	.04264	.00034	.00180	.00007	.00016	.0101	.00019	.0016	.00029	.01213	.00658
%RSD	5.9772	4.5016	3.0193	.81232	2.2698	1.8449	.97555	1.6600	.16196	5.3620	14.968	98.700
#1	.03490	.91707	.01161	.22303	.00320	.00888	1.0396	.01154	1.0024	.00516	.08962	.00201
#2	.03207	.97737	.01113	.22048	.00330	.00865	1.0253	.01127	1.0001	.00557	.07247	.01131
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Warn
Value										.00300		.01000
Range										50.000%		-20.490%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.00698**	**.50588**	**1.0826**	**.01902**	**.00533**	**.01016**	**.00949**	**.00940**	F **.10421**	**.01126**	**.01096**	**.00982**
Stddev	.00467	.00195	.0042	.00210	.00003	.00115	.00009	.00249	.00005	.00046	.00002	.00160
%RSD	66.829	.38554	.38554	11.022	.63109	11.306	.93890	26.433	.05228	4.1181	.15715	16.317
#1	.00368	.50450	1.0796	.01754	.00536	.00935	.00956	.01116	.10417	.01158	.01095	.01095
#2	.01028	.50726	1.0855	.02051	.00531	.01097	.00943	.00765	.10425	.01093	.01097	.00869
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01000								.06000			
Range	-20.490%								50.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2359.3**	**54048.**	**5377.6**
Stddev	10.7	35.	10.3
%RSD	.45300	.06460	.19106
#1	2351.7	54023.	5384.9
#2	2366.8	54072.	5370.4

Sample Name: CRI- Acquired: 6/7/2017 9:54:19 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: Alt CRI As Pb Sb Se

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00014**	**.00090**	W **.00799**	**-.00069**	**.00011**	**-.00024**	**-.00727**	**.00045**	**.00033**	**-.00016**	**.00013**	**-.00029**
Stddev	.00029	.00059	.00562	.00070	.00061	.00002	.00115	.00369	.00010	.00023	.00020	.00072
%RSD	213.04	65.533	70.328	101.10	551.81	6.3799	15.788	813.63	28.728	145.95	147.91	246.89
#1	.00034	.00049	.00402	-.00020	.00055	-.00023	-.00808	-.00216	.00040	-.00032	-.00001	-.00080
#2	-.00007	.00132	.01196	-.00118	-.00032	-.00025	-.00646	.00306	.00027	.00001	.00027	.00022
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00750									
Low Limit			-.01500									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00051**	**-.10547**	**-.00091**	**-.00111**	**.00004**	**-.00061**	**-.04332**	**.00008**	**.00379**	F **.01135**	**-.01572**	**.00549**
Stddev	.00354	.01113	.00181	.00332	.00004	.00042	.00851	.00013	.00026	.00073	.01224	.00202
%RSD	692.88	10.554	198.38	300.31	104.51	68.695	19.633	162.97	6.9354	6.3887	77.871	36.782
#1	.00301	-.09760	-.00219	.00124	.00007	-.00031	-.03731	.00017	.00397	.01084	-.00707	.00406
#2	-.00199	-.11334	.00037	-.00345	.00001	-.00090	-.04934	-.00001	.00360	.01187	-.02438	.00692
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit										.01000		
Low Limit										-.01000		

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.01214**	**.00280**	**.00599**	**-.00078**	**.00000**	**.00089**	**-.00009**	**-.00006**	**-.00882**	**-.00007**	**-.00002**	**-.00160**
Stddev	.00584	.01011	.02164	.00065	.00001	.00052	.00028	.00274	.00497	.00039	.00040	.00135
%RSD	48.114	361.31	361.31	82.888	252.45	58.065	304.00	4376.5	56.384	584.99	1631.4	84.422
#1	.01627	-.00435	-.00931	-.00032	.00001	.00052	.00010	.00187	-.01234	-.00034	.00026	-.00256
#2	.00801	.00995	.02129	-.00124	-.00000	.00125	-.00029	-.00200	-.00530	.00021	-.00031	-.00065
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00750											
Low Limit	-.01500											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2468.3**	**56762.**	**5273.6**
Stddev	12.9	175.	88.9
%RSD	.52307	.30784	1.6862
#1	2477.4	56638.	5210.7
#2	2459.2	56885.	5336.5

Sample Name: CRI- Acquired: 6/7/2017 10:01:56 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: Alt CRI As Pb Sb Se

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00062**	**.00127**	W **.01392**	**-.00041**	**-.00003**	**-.00030**	**-.00691**	**-.00051**	**.00056**	**-.00051**	**.00006**	**-.00038**
Stddev	.00013	.00003	.00053	.00072	.00021	.00002	.00042	.00100	.00030	.00006	.00031	.00015
%RSD	20.271	2.0562	3.8017	175.62	652.47	6.1184	6.0678	195.72	52.920	12.399	503.21	39.281
#1	.00071	.00129	.01354	-.00091	.00012	-.00029	-.00662	-.00122	.00035	-.00046	-.00016	-.00028
#2	.00053	.00125	.01429	.00010	-.00018	-.00032	-.00721	.00020	.00077	-.00055	.00028	-.00049
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00750									
Low Limit			-.01500									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00103**	**-.12488**	**.00048**	**.00127**	**.00006**	**-.00073**	**-.03884**	**.00022**	**-.00088**	W **.00818**	**-.02040**	F **.02185**
Stddev	.00096	.04137	.00309	.00137	.00003	.00017	.00987	.00021	.00178	.00308	.00092	.00237
%RSD	92.867	33.131	645.21	107.95	44.419	22.869	25.405	97.385	203.22	37.603	4.5009	10.843
#1	-.00171	-.15414	-.00170	.00223	.00008	-.00085	-.03187	.00037	-.00214	.00600	-.02105	.02352
#2	-.00035	-.09562	.00266	.00030	.00004	-.00061	-.04582	.00007	.00038	.01035	-.01975	.02017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Fail
High Limit										.00450		.01200
Low Limit										-.00450		-.01200

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01955**	**.03492**	**.07473**	**.00061**	**.00002**	**.00067**	**-.00002**	**.00069**	**-.02198**	**.00051**	**.00027**	**.00022**
Stddev	.00081	.02708	.05794	.00133	.00003	.00170	.00004	.00185	.02595	.00059	.00031	.00128
%RSD	4.1627	77.530	77.530	219.35	120.38	252.31	177.59	267.86	118.10	116.90	113.03	582.22
#1	.02013	.01578	.03376	.00155	.00004	.00188	-.00004	-.00062	-.04033	.00009	.00049	.00112
#2	.01898	.05407	.11570	-.00033	.00000	-.00053	.00001	.00200	-.00362	.00092	.00005	-.00068
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.01900											
Low Limit	-.01900											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2460.9**	**57663.**	**5325.6**
Stddev	18.2	63.	1.5
%RSD	.74095	.10861	.02731
#1	2473.7	57708.	5324.6
#2	2448.0	57619.	5326.6

Sample Name: ICSA-4576193 Acquired: 6/7/2017 10:08:16 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00014**	**510.48**	**-.00025**	**-.00307**	**-.00018**	**-.00026**	**.00150**	**466.57**	W **.00130**	**-.00060**	**.00055**
Stddev	.00066	4.76	.00433	.00163	.00018	.00004	.00101	.28	.00005	.00001	.00055
%RSD	458.85	.93195	1761.7	53.222	103.23	14.832	67.382	.06016	4.0752	2.4160	100.71
#1	-.00061	507.11	.00282	-.00191	-.00030	-.00023	.00079	466.37	.00126	-.00061	.00016
#2	.00032	513.84	-.00331	-.00422	-.00005	-.00029	.00221	466.77	.00133	-.00059	.00094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit									.00080		
Low Limit									-.00080		

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00216**	**186.74**	**-.02035**	**.00074**	**525.14**	W **.00351**	W **-.00796**	**.07294**	**.00182**	**-.00966**	W **-.00612**
Stddev	.00013	1.26	.10749	.00125	1.73	.00003	.00091	.02267	.00079	.00096	.00181
%RSD	5.8143	.67509	528.28	169.06	.33004	.88238	11.380	31.073	43.384	9.9577	29.596
#1	.00207	185.84	-.09636	-.00014	526.37	.00349	-.00860	.05692	.00126	-.00898	-.00484
#2	.00225	187.63	.05566	.00162	523.92	.00353	-.00732	.08897	.00238	-.01034	-.00740
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit						.00050	.00626				.00500
Low Limit						-.00050	-.00626				-.00500

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07117**	W **-.01291**	**.00936**	**.02003**	**.04286**	**-.00029**	W **.00452**	W **.01171**	**.00051**	**-.00752**	**-.04149**
Stddev	.01090	.00444	.00080	.00393	.00840	.00203	.00002	.00274	.00008	.00042	.01347
%RSD	15.321	34.371	8.5746	19.604	19.604	708.52	.39672	23.428	14.716	5.6062	32.459
#1	.07888	-.01604	.00992	.02281	.04881	-.00173	.00450	.01365	.00046	-.00782	-.03197
#2	.06346	-.00977	.00879	.01725	.03692	.00115	.00453	.00977	.00057	-.00723	-.05102
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit		.00628					.00050	.00800			
Low Limit		-.00628					-.00050	-.00800			

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	W **-.00316**	**.00450**	**.00005**
Stddev	.00043	.00032	.00060
%RSD	13.736	7.1303	1172.7
#1	-.00286	.00427	-.00037
#2	-.00347	.00472	.00048
Check ?	Chk Warn	Chk Pass	Chk Pass
High Limit	.00222		
Low Limit	-.00222		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2206.5**	**48228.**	**5347.7**
Stddev	4.2	406.	64.9
%RSD	.19103	.84166	1.2131
#1	2203.6	47941.	5393.5
#2	2209.5	48515.	5301.8

Sample Name: ICSAB-4562596 Acquired: 6/7/2017 10:11:22 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.1129**	**502.54**	**2.0101**	**1.9315**	**.48667**	**.48432**	**1.0196**	**463.00**	**1.0073**	**.44808**	**.46455**	**.55263**	**183.31**
Stddev	.0006	1.84	.0215	.0280	.00218	.00213	.0217	1.18	.0201	.00800	.00877	.00195	.71
%RSD	.04993	.36524	1.0676	1.4477	.44822	.44053	2.1309	.25438	1.9970	1.7861	1.8886	.35249	.38620
#1	1.1133	501.25	2.0253	1.9513	.48513	.48281	1.0349	463.83	1.0215	.45374	.47076	.55125	182.81
#2	1.1125	503.84	1.9949	1.9117	.48821	.48582	1.0042	462.17	.99308	.44242	.45835	.55400	183.81
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.753**	**1.0320**	**523.63**	**.50424**	**.89392**	**51.142**	**.89641**	**1.9629**	**.88155**	**1.1181**	**.99321**	**4.9101**	**9.7952**
Stddev	.197	.0051	1.15	.00003	.01732	.232	.01484	.0334	.01578	.0128	.02271	.0805	.0327
%RSD	.38087	.49600	.22041	.00551	1.9371	.45366	1.6551	1.7007	1.7905	1.1460	2.2867	1.6400	.33405
#1	51.614	1.0284	522.81	.50422	.90616	50.978	.90690	1.9865	.89271	1.1272	1.0093	4.9670	9.8183
#2	51.893	1.0357	524.44	.50426	.88168	51.306	.88592	1.9393	.87039	1.1091	.97715	4.8531	9.7721
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**20.962**	**8.9737**	**.98459**	**2.0924**	**1.0204**	**8.4291**	**-.01583**	**.51033**	**.98432**	**1.0338**
Stddev	.070	.1581	.00536	.0010	.0014	.1276	.01269	.00066	.00096	.0061
%RSD	.33405	1.7613	.54403	.04910	.13358	1.5136	80.157	.12919	.09759	.59125
#1	21.011	9.0854	.98080	2.0931	1.0194	8.5193	-.00686	.51079	.98364	1.0295
#2	20.912	8.8619	.98838	2.0916	1.0214	8.3388	-.02480	.50986	.98500	1.0381
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2211.7**	**48709.**	**5449.7**
Stddev	7.5	377.	62.3
%RSD	.34128	.77303	1.1437
#1	2217.1	48976.	5405.6
#2	2206.4	48443.	5493.8

Sample Name: LRA-4556451 Acquired: 6/7/2017 10:13:55 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00149**	**-.01327**	**9.7356**	**9.6651**	**12.289**	**-.00270**	**-.04479**	**.11417**	**1.9816**	**4.8618**	**9.6766**	**10.779**	**503.93**
Stddev	.00026	.02809	.2371	.2047	.178	.00011	.00276	.02650	.0527	.1251	.2622	.081	.47
%RSD	17.402	211.69	2.4349	2.1181	1.4480	4.0850	6.1585	23.211	2.6585	2.5734	2.7102	.74988	.09343
#1	-.00131	.00659	9.9032	9.8099	12.164	-.00278	-.04284	.13291	2.0189	4.9503	9.8621	10.836	503.60
#2	-.00167	-.03314	9.5680	9.5204	12.415	-.00262	-.04674	.09544	1.9444	4.7733	9.4912	10.722	504.26
Check ?	None	None	Chk Pass	Chk Pass	Chk Pass	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.29052**	**-.00326**	**.07689**	**10.309**	**4.7306**	**.00074**	**9.8305**	**-.00546**	**9.8085**	**-.03653**	**.04523**	**4.8882**	**48.824**
Stddev	.01063	.00052	.00944	.036	.1230	.01248	.2403	.00005	.2104	.00059	.00178	.1276	.381
%RSD	3.6605	15.834	12.282	.34883	2.6008	1682.3	2.4446	.87363	2.1452	1.6233	3.9449	2.6106	.78112
#1	-.28300	-.00363	.08356	10.334	4.8176	.00957	10.000	-.00543	9.9572	-.03611	.04649	4.9785	48.554
#2	-.29804	-.00290	.07021	10.283	4.6436	-.00809	9.6606	-.00550	9.6597	-.03695	.04397	4.7980	49.094
Check ?	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**104.48**	**.00231**	**10.260**	**.01426**	**10.009**	**4.9701**	**.02855**	**10.261**	**10.108**	**.00130**
Stddev	.82	.00036	.238	.00096	.063	.1231	.02284	.080	.035	.00099
%RSD	.78112	15.765	2.3212	6.7104	.63398	2.4759	80.010	.77907	.34198	75.803
#1	103.91	.00256	10.429	.01494	10.054	5.0571	.04470	10.318	10.132	.00061
#2	105.06	.00205	10.092	.01358	9.9638	4.8831	.01240	10.205	10.083	.00200
Check ?	None	None	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2358.4**	**55051.**	**5513.4**
Stddev	6.6	47.	17.6
%RSD	.27809	.08561	.31892
#1	2353.7	55017.	5525.8
#2	2363.0	55084.	5501.0

Sample Name: CCVH-4569081 Acquired: 6/7/2017 10:16:37 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00584**	**49.100**	**-.00945**	**.02034**	**.00243**	**-.00033**	**.99457**	**.00412**	**.00076**	**-.00042**	**.00188**	**.02432**	**49.563**
Stddev	.00026	.099	.00419	.00188	.00051	.00021	.01886	.00128	.00044	.00088	.00114	.00026	.111
%RSD	4.5314	.20257	44.345	9.2415	20.965	63.882	1.8961	30.983	57.816	208.34	60.825	1.0592	.22429
#1	-.00566	49.030	-.01241	.02167	.00279	-.00048	1.0079	.00502	.00106	.00020	.00269	.02450	49.642
#2	-.00603	49.170	-.00649	.01901	.00207	-.00018	.98123	.00322	.00045	-.00104	.00107	.02414	49.484
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.11097**	**.00192**	**.07720**	**-.00049**	**-.00027**	**248.95**	**.00239**	**.00705**	**.00285**	**4.8743**	**-.01192**	**.00122**	**.03010**
Stddev	.00356	.00157	.00909	.00008	.00007	.03	.00153	.00028	.00141	.0752	.00223	.00331	.01154
%RSD	3.2075	81.890	11.770	16.033	24.980	.01187	64.014	3.9441	49.487	1.5434	18.694	270.53	38.343
#1	-.10845	.00303	.07077	-.00044	-.00032	248.97	.00347	.00686	.00385	4.9275	-.01350	-.00112	.02194
#2	-.11349	.00081	.08362	-.00055	-.00023	248.93	.00131	.00725	.00185	4.8211	-.01035	.00357	.03826
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06442**	**-.00168**	**.00221**	**4.9630**	**.01980**	**.00143**	**10.173**	**.01589**	**.00128**	**.12179**
Stddev	.02470	.00060	.00041	.0039	.00005	.00600	.010	.00105	.00072	.00282
%RSD	38.343	35.490	18.377	.07861	.24408	420.94	.09638	6.5872	56.335	2.3140
#1	.04695	-.00210	.00250	4.9602	.01977	.00567	10.180	.01515	.00179	.11980
#2	.08188	-.00126	.00192	4.9657	.01983	-.00282	10.166	.01663	.00077	.12378
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2338.0**	**53546.**	**5397.0**
Stddev	20.4	44.	43.8
%RSD	.87102	.08159	.81084
#1	2323.6	53577.	5428.0
#2	2352.4	53515.	5366.1

Sample Name: CCV-4567764 Acquired: 6/7/2017 10:19:13 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51005**	**.54840**	**.99053**	**.51278**	**.49549**	**.49810**	**-.00725**	**5.0129**	**.50065**	**.50090**	**.49062**	**.52194**	**2.5602**
Stddev	.00156	.04251	.01312	.00380	.00429	.00361	.00015	.0133	.00781	.00843	.00813	.00040	.0027
%RSD	.30603	7.7508	1.3247	.74114	.86533	.72451	2.0724	.26424	1.5602	1.6836	1.6578	.07596	.10541
#1	.50895	.57845	.99981	.51546	.49246	.49555	-.00714	5.0035	.50617	.50687	.49637	.52166	2.5583
#2	.51116	.51834	.98125	.51009	.49853	.50065	-.00736	5.0223	.49513	.49494	.48487	.52222	2.5621
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.006**	**1.0128**	**20.503**	**.51594**	**.48736**	**5.1462**	**.50156**	**.99908**	**.99931**	**-.02997**	**.99919**	**1.0070**	**5.0105**
Stddev	.420	.0046	.023	.00003	.00828	.0082	.00979	.02176	.01317	.00452	.00659	.0136	.0626
%RSD	.83900	.45053	.11206	.00654	1.6981	.16014	1.9523	2.1781	1.3179	15.072	.65961	1.3458	1.2503
#1	49.709	1.0096	20.486	.51591	.49321	5.1520	.50849	1.0145	1.0086	-.02678	1.0039	1.0166	4.9662
#2	50.303	1.0160	20.519	.51596	.48151	5.1404	.49464	.98369	.99000	-.03317	.99453	.99746	5.0548
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.722**	**.99345**	**.49988**	**.00480**	**.50626**	**1.0278**	**-.04197**	**.50990**	**.51591**	**.50498**
Stddev	.134	.01147	.00330	.00239	.00023	.0095	.00879	.00444	.00214	.00276
%RSD	1.2503	1.1541	.66093	49.658	.04466	.92439	20.934	.87146	.41461	.54754
#1	10.628	1.0016	.49754	.00649	.50610	1.0345	-.03576	.51305	.51742	.50693
#2	10.817	.98534	.50222	.00312	.50642	1.0211	-.04819	.50676	.51439	.50302
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2398.7**	**55332.**	**5373.0**
Stddev	7.8	101.	108.5
%RSD	.32320	.18196	2.0184
#1	2404.1	55403.	5449.7
#2	2393.2	55260.	5296.3

Sample Name: CCB Acquired: 6/7/2017 10:22:19 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00031**	**.00384**	**-.00374**	**.00732**	**-.00020**	**-.00030**	**-.00703**	**.00450**	**.00042**	**-.00040**	**.00011**	**-.00023**	**.00769**
Stddev	.00034	.00055	.00753	.00081	.00012	.00003	.00086	.00198	.00037	.00015	.00000	.00091	.00042
%RSD	110.24	14.387	201.55	11.009	58.325	10.120	12.187	44.125	87.696	38.389	1.0406	397.83	5.5061
#1	-.00007	.00423	-.00907	.00788	-.00028	-.00028	-.00643	.00309	.00016	-.00051	.00012	-.00087	.00799
#2	-.00054	.00345	.00159	.00675	-.00012	-.00032	-.00764	.00590	.00068	-.00029	.00011	.00042	.00739
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.10337**	**-.00189**	**.00326**	**.00020**	**-.00051**	**-.03600**	**.00021**	**.00095**	**.00054**	**-.03571**	**-.00316**	**.00287**	**.02335**
Stddev	.03992	.00035	.00313	.00025	.00052	.00718	.00053	.00288	.00066	.00386	.00080	.00283	.01892
%RSD	38.619	18.356	96.019	125.30	100.52	19.959	246.30	303.11	123.60	10.822	25.337	98.855	81.025
#1	-.13160	-.00213	.00105	.00002	-.00088	-.04108	.00059	-.00109	.00100	-.03298	-.00260	.00487	.00997
#2	-.07514	-.00164	.00548	.00038	-.00015	-.03091	-.00016	.00298	.00007	-.03844	-.00373	.00086	.03672
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04996**	**-.00050**	**.00019**	**.00046**	**.00021**	**.00032**	**-.02648**	**.00055**	**.00067**	**-.00086**
Stddev	.04048	.00006	.00019	.00073	.00006	.00082	.00393	.00012	.00073	.00170
%RSD	81.025	12.985	104.75	157.89	27.248	252.95	14.829	21.090	109.26	197.04
#1	.02134	-.00045	.00032	-.00005	.00017	.00091	-.02371	.00063	.00118	-.00206
#2	.07858	-.00054	.00005	.00098	.00025	-.00026	-.02926	.00047	.00015	.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2376.2**	**56592.**	**5459.0**
Stddev	18.8	885.	90.7
%RSD	.78936	1.5640	1.6615
#1	2362.9	57218.	5523.1
#2	2389.4	55966.	5394.9

Sample Name: CCVL-4578237 Acquired: 6/7/2017 10:25:06 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01087**	**.11119**	**.01058**	**.10705**	**.01008**	**.00075**	**.11276**	**.20727**	**.00564**	**.00988**	**.01039**	**.01646**
Stddev	.00004	.00423	.00791	.00084	.00048	.00004	.00491	.00531	.00008	.00009	.00032	.00007
%RSD	.35200	3.8071	74.758	.78178	4.7247	5.9692	4.3535	2.5635	1.4728	.95420	3.0590	.43177
#1	.01089	.11418	.01617	.10764	.00974	.00072	.11623	.20351	.00570	.00995	.01062	.01641
#2	.01084	.10819	.00499	.10646	.01041	.00078	.10929	.21103	.00559	.00982	.01017	.01651
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11161**	**2.9412**	**.02244**	**.22198**	**.01095**	**.01848**	**1.0167**	**.04223**	**2.9213**	**.00966**	F **.06810**	**.01801**
Stddev	.00031	.0516	.00076	.00465	.00009	.00037	.0162	.00039	.0329	.00100	.00052	.00251
%RSD	.27446	1.7556	3.3801	2.0931	.79650	1.9868	1.5884	.92912	1.1263	10.398	.76017	13.967
#1	.11140	2.9047	.02190	.22527	.01102	.01822	1.0281	.04251	2.9445	.01037	.06846	.01623
#2	.11183	2.9777	.02297	.21870	.01089	.01874	1.0052	.04195	2.8980	.00895	.06773	.01978
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02013**	**.50883**	**1.0889**	**.09767**	**.01034**	**.01626**	**.01024**	**.01570**	**.05781**	**.01051**	**.02106**	**.01501**
Stddev	.00237	.01372	.0294	.00020	.00007	.00071	.00015	.00105	.02246	.00005	.00031	.00055
%RSD	11.787	2.6965	2.6965	.20229	.68692	4.3390	1.5074	6.6826	38.843	.44528	1.4536	3.6765
#1	.02181	.49913	1.0681	.09753	.01029	.01676	.01035	.01645	.04193	.01048	.02084	.01540
#2	.01845	.51853	1.1097	.09781	.01039	.01576	.01013	.01496	.07369	.01054	.02128	.01462
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2418.8**	**56376.**	**5390.7**
Stddev	11.7	175.	5.2
%RSD	.48460	.31059	.09629
#1	2410.5	56500.	5387.0
#2	2427.1	56252.	5394.4

Sample Name: LCS 280-375810/2-B Acquired: 6/7/2017 10:29:15 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/5 Custom ID2: Custom ID3:
Comment: 375990 TCLP 6010C Q5 (Fe)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.20415**	W **.38463**	**.77482**	**.20498**	**2.2152**	**.00902**	**.38915**	**9.2462**	**.21216**
Stddev	.00092	.00145	.01602	.00251	.0130	.00001	.00041	.0829	.00015
%RSD	.45196	.37606	2.0682	1.2244	.58805	.11763	.10597	.89616	.07182
#1	.20349	.38566	.76349	.20321	2.2059	.00901	.38886	9.1876	.21206
#2	.20480	.38361	.78615	.20676	2.2244	.00903	.38945	9.3048	.21227
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit		.43200							
Low Limit		1.7200							

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09313**	F **.96744**	**.44381**	F **.30084**	**9.4649**	**.18797**	**9.3237**	**.09692**	**.18211**
Stddev	.00004	.00218	.00119	.01346	.0388	.00162	.0194	.00039	.00016
%RSD	.04572	.22528	.26769	4.4748	.40954	.86247	.20849	.40596	.08982
#1	.09316	.96590	.44297	.31036	9.4375	.18683	9.3100	.09665	.18223
#2	.09310	.96898	.44465	.29132	9.4923	.18912	9.3375	.09720	.18200
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.25200		.22800					
Low Limit		.16800		.17600					

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **269.96**	**.09419**	**1.9774**	**1.0074**	**.37774**	**.09871**	**.58644**	F **1.8665**	F **3.9943**
Stddev	1.95	.00040	.0030	.0003	.00087	.00691	.00360	.0568	.1215
%RSD	.72105	.42413	.15177	.03327	.23158	6.9967	.61319	3.0420	3.0420
#1	268.58	.09447	1.9753	1.0077	.37712	.10359	.58390	1.8264	3.9084
#2	271.33	.09391	1.9796	1.0072	.37836	.09383	.58898	1.9067	4.0802
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Fail
High Limit	11.200							2.3000	4.9220
Low Limit	9.1000							1.8800	4.0200

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.37275**	**.18546**	**.19330**	**.19468**	**.36711**	**.41789**	**.09722**	**.50254**	**.09811**
Stddev	.00028	.00095	.00338	.00078	.00564	.05297	.00017	.00305	.00054
%RSD	.07393	.51234	1.7467	.39844	1.5370	12.676	.17823	.60738	.54769
#1	.37255	.18479	.19569	.19523	.36312	.38043	.09734	.50470	.09773
#2	.37294	.18613	.19091	.19413	.37110	.45534	.09710	.50038	.09849
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2365.5**	**53227.**	**5333.8**
Stddev	11.2	40.	14.2
%RSD	.47548	.07439	.26700
#1	2357.6	53199.	5343.8
#2	2373.5	53255.	5323.7

Sample Name: MB 280-375494/1-A Acquired: 6/7/2017 10:32:14 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/5 Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00016**	**.00600**	**-.00425**	**.00272**	**-.00007**	**-.00024**	**-.00651**	**.03240**	**.00053**
Stddev	.00003	.00040	.00452	.00021	.00016	.00008	.00322	.00025	.00007
%RSD	16.173	6.6502	106.42	7.6012	238.31	32.823	49.454	.77884	13.217
#1	.00018	.00628	-.00105	.00257	-.00018	-.00029	-.00423	.03258	.00058
#2	.00014	.00571	-.00745	.00287	.00005	-.00018	-.00878	.03222	.00048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00039**	**.00039**	**.00058**	**.02695**	**-.13106**	**-.00007**	**.01830**	**.00032**	**-.00057**
Stddev	.00041	.00028	.00076	.00119	.02763	.00135	.01102	.00023	.00012
%RSD	104.78	72.409	130.62	4.4037	21.082	1818.4	60.254	72.437	21.527
#1	-.00010	.00019	.00112	.02779	-.15059	.00088	.02609	.00048	-.00066
#2	-.00068	.00059	.00004	.02611	-.11152	-.00103	.01050	.00016	-.00048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06423**	**-.00032**	**-.00134**	**.00130**	**-.01395**	**-.00264**	**-.00372**	**.03739**	**.08002**
Stddev	.00328	.00043	.00163	.00107	.00860	.00390	.00001	.01647	.03524
%RSD	5.1104	133.15	122.10	82.578	61.614	147.57	.28178	44.046	44.046
#1	.06655	-.00002	-.00249	.00206	-.00787	-.00539	-.00371	.02575	.05510
#2	.06190	-.00062	-.00018	.00054	-.02003	.00011	-.00373	.04904	.10494
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00031**	**.00012**	**.00305**	**.00057**	**.00062**	**-.01898**	**.00054**	**.00187**	**.00247**
Stddev	.00147	.00019	.00140	.00055	.00303	.03105	.00072	.00040	.00077
%RSD	479.38	156.64	45.887	96.267	486.76	163.57	132.07	21.361	31.154
#1	-.00073	-.00001	.00404	.00095	-.00152	.00297	.00105	.00216	.00192
#2	.00135	.00026	.00206	.00018	.00276	-.04094	.00004	.00159	.00301
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2450.0**	**57805.**	**5582.0**
Stddev	12.9	424.	40.6
%RSD	.52745	.73335	.72683
#1	2440.9	58104.	5553.3
#2	2459.2	57505.	5610.7

Sample Name: LCS 280-375494/2-A Acquired: 6/7/2017 10:34:54 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04974**	**1.9494**	**1.0031**	**1.0175**	**2.0049**	**.04983**	**2.0844**	**49.114**	**.10403**
Stddev	.00062	.0161	.0166	.0183	.0046	.00005	.0462	.024	.00135
%RSD	1.2433	.82398	1.6551	1.8012	.22905	.09752	2.2154	.04931	1.2963
#1	.04931	1.9607	1.0148	1.0304	2.0017	.04986	2.1170	49.097	.10499
#2	.05018	1.9380	.99132	1.0045	2.0082	.04980	2.0517	49.131	.10308
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49175**	**.19506**	**.26759**	**1.0314**	**50.566**	**1.0115**	**50.731**	**.50975**	**.95102**
Stddev	.00527	.00313	.00123	.0003	.035	.0003	.050	.00005	.00902
%RSD	1.0709	1.6054	.46032	.02757	.06885	.02910	.09944	.00907	.94863
#1	.49547	.19728	.26846	1.0312	50.590	1.0117	50.766	.50978	.95740
#2	.48802	.19285	.26671	1.0316	50.541	1.0113	50.695	.50971	.94464
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.275**	**.48870**	**10.163**	**.48627**	**2.0243**	**.50475**	**2.0076**	**9.9031**	**21.193**
Stddev	.103	.00593	.176	.00559	.0462	.00860	.0396	.0219	.047
%RSD	.20081	1.2130	1.7367	1.1495	2.2834	1.7030	1.9750	.22095	.22095
#1	51.348	.49289	10.287	.49022	2.0570	.51083	2.0356	9.8877	21.160
#2	51.202	.48450	10.038	.48231	1.9916	.49867	1.9795	9.9186	21.226
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9702**	**1.0038**	**1.0137**	**1.0235**	**1.9673**	**2.0806**	**.50979**	**.51127**	**.52659**
Stddev	.0170	.0012	.0004	.0003	.0218	.0024	.00091	.00125	.00142
%RSD	.86270	.11932	.03417	.02550	1.1078	.11381	.17782	.24539	.27048
#1	1.9823	1.0030	1.0139	1.0237	1.9827	2.0790	.51043	.51216	.52760
#2	1.9582	1.0047	1.0135	1.0233	1.9519	2.0823	.50915	.51038	.52558
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2345.6**	**54570.**	**5465.1**
Stddev	54.3	177.	54.3
%RSD	2.3165	.32442	.99307
#1	2384.1	54444.	5426.7
#2	2307.2	54695.	5503.4

Sample Name: 280-97532-C-1-A Acquired: 6/7/2017 10:37:20 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00057**	**9.7533**	**-.00245**	**3.1754**	**.45887**	**.00058**	**-.00877**	**180.87**	**.00299**
Stddev	.00027	.0306	.00206	.0314	.00008	.00011	.00372	.22	.00001
%RSD	47.123	.31361	84.184	.98751	.01803	19.182	42.407	.12064	.48763
#1	-.00038	9.7750	-.00099	3.1975	.45881	.00050	-.00614	180.72	.00300
#2	-.00076	9.7317	-.00390	3.1532	.45893	.00066	-.01139	181.03	.00298
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02665**	**.06559**	**.05549**	**84.101**	**14.877**	**.03116**	**14.520**	**3.7283**	**.40636**
Stddev	.00000	.00067	.00027	.351	.054	.00007	.003	.0053	.00450
%RSD	.00590	1.0143	.49484	.41794	.36628	.23691	.01777	.14346	1.1077
#1	.02665	.06606	.05530	83.852	14.838	.03111	14.518	3.7321	.40955
#2	.02665	.06512	.05569	84.349	14.915	.03121	14.522	3.7246	.40318
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**112.53**	**.06897**	**6.1170**	**.15172**	**79.790**	**-.00652**	**.00279**	**24.523**	**52.480**
Stddev	.51	.00031	.0755	.00422	.843	.00370	.00650	.080	.172
%RSD	.45717	.44486	1.2336	2.7807	1.0559	56.797	233.15	.32823	.32823
#1	112.16	.06875	6.1704	.15471	80.385	-.00390	-.00181	24.467	52.358
#2	112.89	.06919	6.0636	.14874	79.194	-.00913	.00738	24.580	52.602
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00637**	**.80673**	**.00611**	**.06694**	**.01771**	**-.02325**	**.03659**	**6.4928**	**.00865**
Stddev	.00057	.00108	.00017	.00008	.00611	.02750	.00007	.0085	.00098
%RSD	8.9916	.13349	2.7140	.11579	34.499	118.27	.19613	.13088	11.304
#1	.00596	.80597	.00599	.06699	.01339	-.04270	.03664	6.4988	.00796
#2	.00677	.80749	.00622	.06688	.02204	-.00381	.03654	6.4868	.00934
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2361.0**	**54216.**	**5507.1**
Stddev	17.2	51.	10.5
%RSD	.72889	.09323	.19082
#1	2373.1	54180.	5499.7
#2	2348.8	54252.	5514.6

Sample Name: 280-97532-E-2-A Acquired: 6/7/2017 10:39:49 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00048**	**.09292**	**-.00741**	**.96577**	**.04244**	**-.00033**	**-.00880**	**40.863**	**.00038**
Stddev	.00055	.00338	.00299	.02224	.00002	.00007	.00078	.116	.00002
%RSD	115.56	3.6361	40.412	2.3033	.05158	22.222	8.8210	.28278	5.5970
#1	-.00009	.09531	-.00529	.98150	.04243	-.00028	-.00935	40.781	.00037
#2	-.00087	.09053	-.00953	.95004	.04246	-.00038	-.00825	40.945	.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00044**	**.00023**	**.02018**	**.27753**	**6.2900**	**.01447**	**3.4245**	**.10407**	**.74603**
Stddev	.00002	.00008	.00009	.00169	.0190	.00343	.0055	.00001	.01773
%RSD	4.9026	35.814	.43122	.60722	.30180	23.689	.16177	.01156	2.3760
#1	.00043	.00017	.02012	.27872	6.2766	.01689	3.4284	.10406	.75856
#2	.00046	.00029	.02024	.27634	6.3034	.01205	3.4206	.10408	.73349
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**47.582**	**.00502**	**.13929**	**-.00074**	**35.058**	**-.00313**	**.00417**	**3.7215**	**7.9640**
Stddev	.346	.00054	.00368	.00133	.694	.00317	.00218	.0146	.0312
%RSD	.72807	10.802	2.6413	178.45	1.9802	101.28	52.400	.39206	.39206
#1	47.337	.00464	.14189	-.00168	35.549	-.00089	.00571	3.7318	7.9861
#2	47.827	.00541	.13669	.00019	34.567	-.00537	.00262	3.7112	7.9419
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00099**	**.22997**	**.00083**	**.00062**	**.00017**	**-.00761**	**-.00653**	**7.5936**	**-.00020**
Stddev	.00127	.00075	.00360	.00059	.00486	.01575	.00094	.0615	.00104
%RSD	128.69	.32428	435.24	95.191	2922.9	206.95	14.440	.81034	519.60
#1	.00009	.22944	-.00172	.00020	.00360	.00353	-.00586	7.6371	.00054
#2	.00189	.23049	.00338	.00105	-.00327	-.01875	-.00720	7.5501	-.00094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2374.6**	**54436.**	**5298.0**
Stddev	1.5	579.	24.7
%RSD	.06228	1.0633	.46553
#1	2375.7	54027.	5280.6
#2	2373.6	54846.	5315.5

Sample Name: 280-97532-E-2-A SD@5 Acquired: 6/7/2017 10:42:22 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00055**	**.01995**	**-.00531**	**.19292**	**.00845**	**-.00038**	**-.00556**	**8.2674**	**.00073**
Stddev	.00093	.00098	.00233	.00599	.00002	.00002	.00140	.0004	.00037
%RSD	168.81	4.8969	43.840	3.1028	.25073	6.2270	25.150	.00490	51.411
#1	.00121	.02064	-.00695	.19715	.00846	-.00037	-.00457	8.2672	.00046
#2	-.00011	.01926	-.00366	.18869	.00843	-.00040	-.00654	8.2677	.00099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00035**	**.00021**	**.00383**	**.05708**	**1.1598**	**.00331**	**.69254**	**.02096**	**.14503**
Stddev	.00016	.00010	.00084	.00313	.0212	.00037	.00090	.00000	.00405
%RSD	44.541	48.548	21.817	5.4856	1.8271	11.132	.12957	.01527	2.7902
#1	-.00024	.00028	.00324	.05929	1.1748	.00305	.69318	.02096	.14789
#2	-.00047	.00014	.00443	.05486	1.1448	.00357	.69191	.02097	.14217
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.3926**	**.00069**	**.02889**	**.00011**	**6.6968**	**-.00322**	**.00537**	**.74080**	**1.5853**
Stddev	.0454	.00009	.00350	.00255	.1628	.00044	.00032	.02072	.0444
%RSD	.48295	12.433	12.103	2338.5	2.4318	13.676	5.9179	2.7974	2.7974
#1	9.4247	.00075	.03136	-.00170	6.8119	-.00291	.00559	.72615	1.5540
#2	9.3605	.00063	.02641	.00191	6.5816	-.00354	.00514	.75546	1.6167
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**.04662**	**-.00014**	**-.00006**	**.00161**	**.00331**	**-.00113**	**1.5229**	**.00292**
Stddev	.00095	.00033	.00223	.00000	.00203	.00542	.00013	.0006	.00263
%RSD	11147.	.70036	1582.9	6.0235	126.03	163.68	11.427	.03762	90.086
#1	-.00066	.04685	-.00172	-.00006	.00305	-.00052	-.00122	1.5233	.00106
#2	.00068	.04639	.00143	-.00006	.00018	.00715	-.00103	1.5225	.00478
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2412.9**	**55968.**	**5347.3**
Stddev	4.2	149.	85.6
%RSD	.17489	.26700	1.6011
#1	2410.0	56074.	5407.8
#2	2415.9	55863.	5286.7

Sample Name: 280-97532-E-2-B MS Acquired: 6/7/2017 10:44:57 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04945**	**1.9938**	**1.0130**	**1.9749**	**2.0088**	**.04906**	W **2.0498**	**89.246**	**.10298**
Stddev	.00040	.0250	.0075	.0320	.0002	.00017	.0377	.107	.00162
%RSD	.80582	1.2515	.73860	1.6198	.00964	.34342	1.8416	.11996	1.5685
#1	.04973	2.0114	1.0183	1.9975	2.0086	.04894	2.0765	89.321	.10412
#2	.04917	1.9761	1.0077	1.9522	2.0089	.04918	2.0231	89.170	.10184
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48184**	**.19219**	**.28269**	**1.2310**	**56.617**	**1.0158**	**52.836**	**.60144**	**1.6860**
Stddev	.00577	.00340	.00043	.0058	.086	.0005	.170	.00127	.0346
%RSD	1.1965	1.7703	.15128	.47000	.15114	.05051	.32222	.21110	2.0538
#1	.48592	.19460	.28239	1.2351	56.556	1.0154	52.957	.60234	1.7105
#2	.47777	.18979	.28300	1.2270	56.677	1.0161	52.716	.60055	1.6615
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**97.934**	**.48401**	**10.320**	**.47496**	**38.024**	**.50262**	**1.9856**	**13.552**	**29.002**
Stddev	.064	.00706	.162	.00471	.696	.00565	.0352	.035	.074
%RSD	.06560	1.4580	1.5732	.99184	1.8292	1.1238	1.7704	.25513	.25513
#1	97.889	.48900	10.435	.47829	38.516	.50661	2.0104	13.577	29.054
#2	97.980	.47902	10.205	.47163	37.532	.49863	1.9607	13.528	28.949
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9386**	**1.2167**	**1.0041**	**1.0141**	**1.9105**	**2.0141**	**.49744**	**7.9735**	**.51932**
Stddev	.0293	.0002	.0020	.0012	.0284	.0095	.00029	.0138	.00506
%RSD	1.5109	.01596	.19865	.11931	1.4841	.46944	.05864	.17323	.97398
#1	1.9593	1.2166	1.0056	1.0149	1.9306	2.0208	.49724	7.9833	.51574
#2	1.9178	1.2168	1.0027	1.0132	1.8905	2.0074	.49765	7.9637	.52289
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2295.6**	**52802.**	**5273.0**
Stddev	4.8	97.	17.7
%RSD	.20817	.18435	.33642
#1	2299.0	52871.	5260.4
#2	2292.3	52733.	5285.5

Sample Name: 280-97532-E-2-C MSD Acquired: 6/7/2017 10:47:19 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05016**	**2.0406**	**1.0243**	**2.0103**	**2.0445**	**.05006**	W **2.0921**	**90.384**	**.10569**
Stddev	.00020	.0325	.0028	.0177	.0071	.00032	.0301	.495	.00194
%RSD	.39839	1.5911	.27315	.88226	.34713	.63248	1.4388	.54722	1.8333
#1	.05001	2.0635	1.0263	2.0228	2.0495	.05028	2.1134	90.734	.10706
#2	.05030	2.0176	1.0223	1.9977	2.0394	.04983	2.0708	90.034	.10432
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49484**	**.19652**	**.28901**	**1.2634**	**57.394**	**1.0339**	**53.966**	**.61723**	**1.7166**
Stddev	.00590	.00267	.00210	.0057	.210	.0021	.097	.00298	.0238
%RSD	1.1923	1.3601	.72508	.45406	.36612	.20702	.17917	.48276	1.3886
#1	.49901	.19841	.29049	1.2675	57.543	1.0323	54.034	.61934	1.7334
#2	.49067	.19463	.28753	1.2594	57.246	1.0354	53.897	.61512	1.6997
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**98.813**	**.49610**	**10.553**	**.48182**	**38.362**	**.51310**	**2.0217**	**13.720**	**29.360**
Stddev	.376	.00669	.131	.00852	.397	.00768	.0213	.024	.051
%RSD	.38073	1.3478	1.2418	1.7683	1.0359	1.4974	1.0511	.17357	.17357
#1	99.079	.50082	10.645	.48785	38.643	.51853	2.0367	13.736	29.396
#2	98.546	.49137	10.460	.47580	38.081	.50766	2.0067	13.703	29.324
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9689**	**1.2392**	**1.0342**	**1.0333**	**1.9440**	**2.0975**	**.51023**	**8.1175**	**.53080**
Stddev	.0269	.0043	.0015	.0038	.0259	.0004	.00074	.0451	.00031
%RSD	1.3665	.34838	.14746	.36513	1.3334	.01996	.14494	.55514	.05754
#1	1.9879	1.2422	1.0332	1.0359	1.9623	2.0972	.51076	8.1494	.53101
#2	1.9499	1.2361	1.0353	1.0306	1.9256	2.0978	.50971	8.0857	.53058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2312.9**	**52901.**	**5271.6**
Stddev	1.8	463.	46.1
%RSD	.07638	.87471	.87499
#1	2314.1	52573.	5239.0
#2	2311.6	53228.	5304.2

Sample Name: CCVH-4569081 Acquired: 6/7/2017 10:49:41 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00633**	**49.507**	**-.01938**	**.00957**	**.00165**	**-.00026**	**.97856**	**.05229**	**.00054**	**-.00114**	**.00071**	**.02290**	**49.728**
Stddev	.00039	.115	.00299	.00070	.00103	.00009	.02550	.04528	.00011	.00029	.00045	.00029	.202
%RSD	6.1191	.23320	15.406	7.3022	62.506	33.503	2.6062	86.579	19.606	25.435	63.595	1.2676	.40606
#1	-.00606	49.589	-.02149	.00908	.00238	-.00033	.99659	.08431	.00047	-.00134	.00103	.02310	49.871
#2	-.00661	49.426	-.01727	.01007	.00092	-.00020	.96052	.02028	.00062	-.00093	.00039	.02269	49.585
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05667**	**.00091**	**.08798**	**-.00152**	**-.00152**	**250.58**	**.00084**	**.00936**	**-.00156**	**4.8018**	**-.01576**	**-.00922**	**.01077**
Stddev	.04118	.00125	.00163	.00004	.00013	.02	.00018	.00428	.00045	.0954	.00458	.00446	.00460
%RSD	72.673	136.82	1.8482	2.7942	8.3335	.00909	20.894	45.672	29.064	1.9863	29.074	48.323	42.694
#1	.08579	.00003	.08913	-.00155	-.00143	250.60	.00072	.00634	-.00124	4.8693	-.01899	-.01237	.00752
#2	.02755	.00179	.08683	-.00149	-.00161	250.57	.00097	.01239	-.00189	4.7344	-.01252	-.00607	.01402
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02304**	**-.00098**	**.00111**	**4.9800**	**.01882**	**-.00081**	**10.267**	**.01468**	**.00208**	**.11961**
Stddev	.00984	.00237	.00067	.0228	.00087	.00100	.050	.00027	.00048	.00010
%RSD	42.694	240.89	60.683	.45739	4.6016	123.41	.48265	1.8280	23.237	.08050
#1	.01608	-.00266	.00158	4.9961	.01943	-.00152	10.302	.01449	.00242	.11967
#2	.02999	.00069	.00063	4.9639	.01821	-.00010	10.232	.01487	.00174	.11954
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2256.6**	**51200.**	**5066.3**
Stddev	2.6	125.	11.4
%RSD	.11458	.24376	.22541
#1	2254.7	51288.	5074.4
#2	2258.4	51111.	5058.3

Sample Name: CCV-4567764 Acquired: 6/7/2017 10:52:15 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50978**	**.52368**	**.98575**	**.50485**	**.49402**	**.49876**	**-.01149**	**5.0224**	**.49975**	**.50360**	**.49117**	**.51985**	**2.6319**
Stddev	.00233	.00986	.02552	.00956	.00335	.00336	.00038	.0450	.01009	.00965	.01071	.00040	.0084
%RSD	.45625	1.8824	2.5884	1.8941	.67887	.67302	3.3253	.89512	2.0191	1.9164	2.1798	.07773	.31917
#1	.50813	.53065	1.0038	.51161	.49165	.49638	-.01176	4.9906	.50689	.51043	.49874	.52014	2.6259
#2	.51142	.51671	.96771	.49809	.49640	.50113	-.01122	5.0542	.49262	.49678	.48360	.51957	2.6378
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.345**	**1.0195**	**20.680**	**.52122**	**.48682**	**5.2182**	**.50502**	**.99635**	**.99901**	**-.01970**	**.99139**	**.99031**	**5.0764**
Stddev	.401	.0055	.024	.00071	.00946	.0409	.00856	.01524	.01133	.00278	.00867	.01328	.0704
%RSD	.79643	.54356	.11545	.13544	1.9433	.78456	1.6946	1.5295	1.1339	14.094	.87434	1.3409	1.3871
#1	50.061	1.0156	20.697	.52172	.49351	5.1892	.51107	1.0071	1.0070	-.02166	.99752	.99970	5.0266
#2	50.628	1.0234	20.664	.52072	.48013	5.2471	.49897	.98558	.99100	-.01774	.98526	.98092	5.1261
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.863**	**.99312**	**.49831**	**.00292**	**.50804**	**1.0255**	**.00635**	**.51196**	**.52849**	**.50639**
Stddev	.151	.01820	.00226	.00171	.00040	.0201	.02544	.00442	.00095	.00596
%RSD	1.3871	1.8331	.45352	58.500	.07966	1.9584	400.50	.86242	.17977	1.1770
#1	10.757	1.0060	.49671	.00412	.50776	1.0398	-.01164	.50883	.52782	.50218
#2	10.970	.98025	.49991	.00171	.50833	1.0113	.02434	.51508	.52916	.51061
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2323.5**	**52833.**	**5091.7**
Stddev	.8	267.	51.5
%RSD	.03503	.50487	1.0121
#1	2322.9	52644.	5128.2
#2	2324.1	53022.	5055.3

Sample Name: CCB Acquired: 6/7/2017 10:54:44 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00058**	**.00197**	**-.00784**	**.00560**	**-.00003**	**-.00016**	**-.00690**	**.00253**	**.00030**	**-.00020**	**-.00024**	**.00070**	**.00266**
Stddev	.00016	.00073	.00566	.00019	.00015	.00007	.00090	.00075	.00007	.00005	.00004	.00011	.00014
%RSD	27.149	37.230	72.236	3.3353	598.63	43.335	13.052	29.716	22.498	23.026	17.517	16.366	5.4180
#1	.00046	.00249	-.00384	.00573	-.00013	-.00011	-.00627	.00200	.00035	-.00023	-.00027	.00062	.00276
#2	.00069	.00145	-.01184	.00547	.00008	-.00021	-.00754	.00306	.00025	-.00017	-.00021	.00078	.00256
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.06144**	**.00164**	**.03688**	**.00060**	**-.00071**	**-.00244**	**.00027**	**-.00028**	**.00027**	**-.02805**	**-.00309**	**-.00209**	**.02085**
Stddev	.01945	.00053	.04990	.00084	.00019	.00063	.00035	.00184	.00074	.00296	.00257	.00242	.01800
%RSD	31.653	32.283	135.33	140.06	27.110	26.003	127.37	648.83	278.45	10.538	83.317	115.72	86.294
#1	-.04769	.00127	.00159	.00001	-.00084	-.00199	.00052	-.00158	.00079	-.02596	-.00127	-.00380	.03358
#2	-.07519	.00202	.07217	.00119	-.00057	-.00288	.00003	.00102	-.00026	-.03014	-.00491	-.00038	.00813
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04463**	**.00014**	**.00013**	**.00416**	**.00071**	**-.00338**	**-.03411**	**-.00068**	**.00411**	**.00233**
Stddev	.03851	.00016	.00007	.00342	.00032	.00182	.00364	.00023	.00401	.00027
%RSD	86.294	109.72	53.527	82.327	45.428	53.737	10.680	33.720	97.464	11.468
#1	.07186	.00003	.00018	.00174	.00048	-.00210	-.03669	-.00085	.00128	.00214
#2	.01740	.00026	.00008	.00658	.00093	-.00467	-.03154	-.00052	.00695	.00251
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2312.7**	**52776.**	**5160.8**
Stddev	7.2	123.	45.0
%RSD	.31087	.23372	.87271
#1	2307.6	52689.	5128.9
#2	2317.7	52863.	5192.6

Sample Name: CCVL-4578237 Acquired: 6/7/2017 10:57:22 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01129**	**.11248**	**.01459**	**.10489**	**.01151**	**.00078**	**.10708**	F **.29614**	**.00542**	**.01048**	**.00996**	**.01693**
Stddev	.00013	.00175	.00365	.00325	.00023	.00026	.00012	.01208	.00028	.00105	.00049	.00024
%RSD	1.1380	1.5529	25.035	3.0961	2.0347	33.721	.11423	4.0776	5.2484	9.9761	4.9132	1.3954
#1	.01120	.11372	.01201	.10719	.01135	.00097	.10717	.30468	.00562	.01122	.01031	.01676
#2	.01138	.11125	.01717	.10259	.01168	.00059	.10700	.28760	.00522	.00974	.00962	.01710
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								.20000				
Range								30.000%				

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.40175**	**3.0222**	**.02375**	**.25094**	F **.02025**	**.01857**	**1.0765**	**.04283**	**2.8965**	**.00978**	F **.06967**	F **.01381**
Stddev	.00194	.0031	.00173	.00115	.00017	.00088	.0026	.00124	.0491	.00023	.00467	.00116
%RSD	.48227	.10083	7.2977	.45804	.85609	4.7287	.23851	2.8858	1.6964	2.3685	6.6998	8.3724
#1	.40038	3.0243	.02497	.25013	.02013	.01919	1.0747	.04370	2.9312	.00994	.07297	.01299
#2	.40312	3.0200	.02252	.25175	.02037	.01795	1.0783	.04196	2.8617	.00962	.06637	.01463
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail
Value	.10000				.01000						.10000	.02000
Range	30.000%				30.000%						-30.000%	-30.000%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01757**	**.51418**	**1.1004**	**.09893**	**.01092**	**.01485**	**.01048**	**.01579**	**.06428**	**.01055**	**.02284**	**.01681**
Stddev	.00214	.00074	.0016	.00341	.00016	.00232	.00039	.00092	.01933	.00069	.00080	.00134
%RSD	12.178	.14459	.14459	3.4438	1.4432	15.635	3.7612	5.8330	30.065	6.5556	3.5152	7.9970
#1	.01605	.51366	1.0992	.10134	.01080	.01321	.01020	.01644	.07795	.01104	.02227	.01776
#2	.01908	.51471	1.1015	.09652	.01103	.01649	.01075	.01514	.05062	.01007	.02340	.01586
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2284.7**	**54309.**	**5159.3**
Stddev	5.0	394.	14.3
%RSD	.22090	.72618	.27647
#1	2281.1	54588.	5149.2
#2	2288.2	54030.	5169.4

Sample Name: 280-97532-E-4-A Acquired: 6/7/2017 10:59:59 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00000**	**.04656**	**-.01106**	**.67163**	**.07199**	**-.00042**	**-.00917**	**54.286**	**.00093**
Stddev	.00048	.00079	.00132	.01747	.00060	.00010	.00187	.018	.00070
%RSD	12767.	1.6859	11.966	2.6009	.82866	22.817	20.441	.03238	76.049
#1	.00033	.04601	-.01200	.68399	.07241	-.00049	-.00784	54.274	.00143
#2	-.00034	.04712	-.01013	.65928	.07157	-.00035	-.01049	54.298	.00043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00036**	**.00093**	**.17440**	**.59754**	**11.936**	**.04262**	**2.8086**	**.02170**	**.19453**
Stddev	.00006	.00015	.00135	.00223	.037	.00015	.0188	.00003	.00495
%RSD	16.932	15.766	.77507	.37303	.30674	.35208	.66926	.11578	2.5466
#1	.00031	.00104	.17536	.59597	11.911	.04251	2.8219	.02168	.19803
#2	.00040	.00083	.17345	.59912	11.962	.04272	2.7953	.02172	.19102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **745.13**	**.02005**	**.20917**	**-.00585**	**96.098**	**-.00481**	**.00508**	**44.834**	**95.945**
Stddev	.93	.00008	.00268	.00051	2.608	.00217	.00419	.002	.004
%RSD	.12476	.41167	1.2814	8.7283	2.7138	45.034	82.490	.00412	.00412
#1	744.47	.02011	.20728	-.00621	97.942	-.00634	.00212	44.833	95.942
#2	745.78	.01999	.21107	-.00548	94.254	-.00328	.00804	44.835	95.947
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00201**	**.39093**	**-.00089**	**.00101**	**.00183**	**.05184**	**-.00077**	**.01988**	**-.00009**
Stddev	.00070	.00010	.00081	.00019	.00188	.00835	.00027	.00141	.00072
%RSD	34.866	.02610	90.330	19.199	102.53	16.112	35.559	7.0973	808.70
#1	.00250	.39100	-.00032	.00114	.00050	.04594	-.00096	.02088	.00042
#2	.00151	.39086	-.00147	.00087	.00316	.05775	-.00058	.01888	-.00060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2116.4**	**46828.**	**4798.3**
Stddev	1.5	132.	13.3
%RSD	.07153	.28086	.27791
#1	2117.5	46921.	4788.9
#2	2115.3	46735.	4807.7

Sample Name: 280-97532-C-5-A Acquired: 6/7/2017 11:02:39 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00044**	**5.3258**	**.00841**	**1.0314**	**.43819**	**.00017**	**-.00940**	**84.959**	**.12220**
Stddev	.00013	.0538	.00419	.0191	.00207	.00001	.00126	.348	.00246
%RSD	30.417	1.0108	49.817	1.8556	.47298	3.1424	13.416	.40950	2.0168
#1	.00054	5.2877	.00545	1.0449	.43672	.00017	-.01029	84.713	.12394
#2	.00035	5.3638	.01137	1.0179	.43966	.00018	-.00851	85.205	.12046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06054**	**.07743**	**.68766**	**70.533**	W **136.12**	**.05722**	**2.8624**	**.47020**	**.03079**
Stddev	.00147	.00162	.00400	.178	.40	.00216	.0008	.00153	.00115
%RSD	2.4264	2.0859	.58123	.25198	.29358	3.7802	.02732	.32589	3.7404
#1	.06158	.07857	.69049	70.658	135.84	.05569	2.8618	.47128	.03160
#2	.05951	.07629	.68483	70.407	136.40	.05875	2.8629	.46911	.02997
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**72.219**	**.04820**	**1.2838**	**.99582**	**46.682**	**.01145**	**-.01094**	**20.699**	**44.296**
Stddev	.282	.00132	.0221	.02189	.985	.00294	.00091	.054	.115
%RSD	.39097	2.7424	1.7177	2.1983	2.1090	25.650	8.3352	.26000	.26000
#1	72.419	.04913	1.2994	1.0113	47.378	.00937	-.01159	20.661	44.214
#2	72.019	.04726	1.2682	.98034	45.985	.01352	-.01030	20.737	44.377
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01138**	**1.5856**	**.00599**	**.14019**	**-.00416**	**.03191**	**.14044**	**3.5951**	**.01247**
Stddev	.00011	.0075	.00382	.00188	.00080	.00887	.00052	.0153	.00365
%RSD	.97234	.47209	63.782	1.3382	19.285	27.789	.36916	.42681	29.252
#1	.01146	1.5803	.00329	.14152	-.00359	.02564	.14081	3.6059	.00989
#2	.01130	1.5909	.00870	.13886	-.00473	.03818	.14007	3.5842	.01505
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2228.5**	**50349.**	**4881.0**
Stddev	4.8	38.	20.2
%RSD	.21387	.07580	.41447
#1	2225.1	50376.	4866.7
#2	2231.9	50322.	4895.3

Sample Name: 280-97532-E-6-A Acquired: 6/7/2017 11:05:09 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00012**	**.17574**	**-.00360**	**.97982**	**.04295**	**-.00027**	**-.00991**	**21.554**	**.00150**
Stddev	.00003	.00493	.00628	.01486	.00022	.00002	.00062	.114	.00006
%RSD	24.933	2.8064	174.72	1.5168	.51444	6.8462	6.2190	.52776	4.1551
#1	-.00014	.17922	-.00804	.99033	.04310	-.00029	-.00947	21.634	.00145
#2	-.00009	.17225	.00085	.96931	.04279	-.00026	-.01035	21.473	.00154
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00058**	**.00252**	**.01825**	**1.0664**	W **128.74**	**.04528**	**.63722**	**.00922**	**.04271**
Stddev	.00003	.00018	.00043	.0018	.91	.00043	.01145	.00001	.00120
%RSD	4.6434	7.0492	2.3657	.17226	.70796	.95913	1.7965	.12936	2.8174
#1	.00060	.00239	.01856	1.0677	129.39	.04559	.62913	.00923	.04356
#2	.00056	.00264	.01794	1.0651	128.10	.04498	.64532	.00921	.04186
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**70.184**	**.00247**	**.08491**	**.01271**	**46.713**	**.00635**	**-.00213**	**5.1873**	**11.101**
Stddev	.107	.00106	.00470	.00185	1.059	.00226	.00076	.0480	.103
%RSD	.15305	42.889	5.5335	14.517	2.2676	35.521	35.807	.92478	.92478
#1	70.260	.00172	.08824	.01141	47.462	.00476	-.00267	5.2212	11.173
#2	70.108	.00322	.08159	.01402	45.964	.00795	-.00159	5.1534	11.028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00056**	**.88645**	**.00183**	**.00523**	**.00069**	**-.01510**	**.00827**	**.04950**	**.00170**
Stddev	.00172	.00451	.00073	.00002	.00153	.00361	.00001	.00056	.00062
%RSD	309.51	.50892	40.130	.36862	221.26	23.912	.13753	1.1258	36.715
#1	-.00066	.88964	.00235	.00522	.00178	-.01254	.00827	.04989	.00126
#2	.00178	.88326	.00131	.00524	-.00039	-.01765	.00828	.04911	.00214
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2300.6**	**52197.**	**5174.0**
Stddev	.6	186.	58.6
%RSD	.02760	.35657	1.1318
#1	2300.1	52066.	5132.6
#2	2301.0	52329.	5215.4

Sample Name: 280-97532-D-7-A Acquired: 6/7/2017 11:07:44 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00344**	**50.040**	**-.00029**	**.50698**	**2.0964**	**.00660**	**-.01050**	W **785.17**	**.01096**
Stddev	.00022	.081	.00748	.01035	.0076	.00012	.00410	.86	.00013
%RSD	6.3350	.16239	2575.9	2.0409	.36073	1.8520	39.044	.10973	1.1805
#1	-.00328	49.982	-.00558	.51430	2.0910	.00651	-.00760	784.56	.01105
#2	-.00359	50.097	.00500	.49966	2.1017	.00669	-.01340	785.78	.01087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10239**	**.16970**	**.05568**	**159.64**	**51.582**	**1.1378**	**154.18**	**4.1615**	**.00448**
Stddev	.00250	.00527	.00031	.06	.278	.0028	.21	.0072	.00089
%RSD	2.4451	3.1067	.55475	.03722	.53934	.24597	.13688	.17237	19.970
#1	.10416	.17343	.05590	159.68	51.385	1.1359	154.33	4.1666	.00511
#2	.10062	.16597	.05546	159.60	51.779	1.1398	154.03	4.1564	.00385
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2199.5**	**.16201**	**6.5989**	**.08132**	**35.937**	**-.01093**	**-.00491**	W **51.891**	**111.05**
Stddev	3.0	.00326	.1871	.00169	.936	.00230	.00579	1.137	2.43
%RSD	.13668	2.0111	2.8359	2.0727	2.6039	21.071	117.89	2.1912	2.1912
#1	2197.3	.16431	6.7313	.08251	36.598	-.01256	-.00901	52.695	112.77
#2	2201.6	.15970	6.4666	.08013	35.275	-.00930	-.00082	51.087	109.33
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit	500.00							50.000	
Low Limit	11.000							-1.0000	

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00598**	**4.2722**	**.00812**	**.41250**	**-.00118**	**-.04034**	**.28578**	W **11.226**	**.02242**
Stddev	.00082	.0110	.00149	.00113	.00097	.00986	.00069	.029	.00250
%RSD	13.690	.25705	18.317	.27340	81.943	24.433	.24158	.25743	11.137
#1	.00540	4.2645	.00707	.41330	-.00187	-.03337	.28627	11.246	.02419
#2	.00655	4.2800	.00917	.41171	-.00050	-.04731	.28529	11.206	.02066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.04000	

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2258.1**	**49787.**	**5578.8**
Stddev	3.5	89.	6.6
%RSD	.15369	.17781	.11918
#1	2260.6	49850.	5574.1
#2	2255.7	49725.	5583.5

Sample Name: 280-97532-E-8-A Acquired: 6/7/2017 11:10:22 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**.06585**	**-.01259**	**.19811**	**.04683**	**-.00035**	**-.00358**	**23.083**	**.00094**
Stddev	.00082	.00153	.00672	.00516	.00026	.00003	.00073	.001	.00026
%RSD	5945.2	2.3217	53.347	2.6065	.55045	10.011	20.337	.00552	27.186
#1	.00059	.06693	-.01734	.20176	.04701	-.00037	-.00307	23.082	.00112
#2	-.00057	.06477	-.00784	.19446	.04665	-.00032	-.00410	23.084	.00076
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00111**	**.00339**	**.00923**	**.16661**	**23.534**	**.28446**	**12.205**	**.01103**	**.00765**
Stddev	.00037	.00010	.00063	.01778	.089	.00024	.018	.00023	.00017
%RSD	33.205	2.8267	6.8374	10.671	.37829	.08364	.14574	2.1201	2.2830
#1	-.00085	.00332	.00878	.17919	23.471	.28430	12.192	.01119	.00753
#2	-.00136	.00346	.00968	.15404	23.597	.28463	12.218	.01086	.00777
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **503.41**	**.00210**	**.06572**	**-.00123**	**11.078**	**-.00768**	**-.00635**	**4.1402**	**8.8600**
Stddev	2.05	.00058	.00511	.00188	.208	.00244	.01035	.0951	.2034
%RSD	.40744	27.519	7.7770	152.48	1.8803	31.796	163.07	2.2962	2.2962
#1	501.96	.00251	.06934	.00010	11.226	-.00595	-.01367	4.0730	8.7162
#2	504.86	.00169	.06211	-.00256	10.931	-.00940	.00097	4.2074	9.0039
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00104**	**.23426**	**.00062**	**.00143**	**.00119**	**-.01135**	**.00756**	**.02392**	**.00065**
Stddev	.00017	.00048	.00071	.00095	.00281	.00904	.00043	.00113	.00222
%RSD	15.892	.20359	114.98	65.980	236.55	79.639	5.6792	4.7120	340.14
#1	-.00116	.23392	.00112	.00210	.00317	-.01775	.00726	.02472	.00222
#2	-.00093	.23460	.00012	.00076	-.00080	-.00496	.00787	.02312	-.00092
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2239.3**	**50036.**	**5183.9**
Stddev	7.1	223.	54.4
%RSD	.31831	.44665	1.0500
#1	2234.2	50194.	5222.3
#2	2244.3	49878.	5145.4

Sample Name: 280-97532-E-10-A Acquired: 6/7/2017 11:13:05 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00038**	**.06882**	**-.00120**	**.02235**	**.02519**	**-.00036**	**-.00444**	**28.082**	**.00037**
Stddev	.00084	.00215	.00305	.00121	.00006	.00002	.00048	.162	.00012
%RSD	223.62	3.1235	253.91	5.4276	.25264	4.2246	10.764	.57836	31.835
#1	.00097	.07034	.00096	.02321	.02523	-.00037	-.00477	27.967	.00029
#2	-.00022	.06730	-.00336	.02149	.02514	-.00035	-.00410	28.197	.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00051**	**.00022**	**.01016**	**.23053**	**6.6293**	**.00391**	**2.3996**	**.03107**	**.00060**
Stddev	.00056	.00007	.00049	.00145	.0647	.00041	.0063	.00020	.00042
%RSD	110.95	33.202	4.8384	.62721	.97601	10.516	.26107	.64713	69.448
#1	-.00090	.00027	.01051	.23155	6.5836	.00420	2.4040	.03121	.00090
#2	-.00011	.00017	.00981	.22951	6.6751	.00362	2.3951	.03093	.00031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**16.645**	**.00159**	**.20394**	**.00153**	**8.5666**	**-.00282**	**.00580**	**4.6216**	**9.8901**
Stddev	.067	.00026	.00818	.00352	.1852	.00378	.00229	.0352	.0753
%RSD	.40330	16.114	4.0108	230.05	2.1614	134.35	39.533	.76124	.76124
#1	16.692	.00177	.20973	.00402	8.6976	-.00014	.00418	4.5967	9.8369
#2	16.597	.00141	.19816	-.00096	8.4357	-.00549	.00742	4.6464	9.9434
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00144**	**.17375**	**.00115**	**.00078**	**.00144**	**.01298**	**.00951**	**.01816**	**.00113**
Stddev	.00076	.00087	.00135	.00017	.00575	.02384	.00001	.00059	.00065
%RSD	52.563	.50143	116.77	22.370	399.49	183.61	.05612	3.2596	57.655
#1	-.00091	.17314	.00211	.00065	-.00263	-.00387	.00952	.01858	.00067
#2	-.00198	.17437	.00020	.00090	.00550	.02984	.00951	.01774	.00159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2332.9**	**53343.**	**5172.4**
Stddev	16.0	90.	8.0
%RSD	.68602	.16942	.15530
#1	2321.6	53279.	5166.7
#2	2344.2	53407.	5178.1

Sample Name: 280-97532-E-12-A Acquired: 6/7/2017 11:15:40 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00039**	**5.3131**	**-.00728**	**.09505**	**.17135**	**-.00001**	**-.01427**	**77.644**	**.00099**
Stddev	.00016	.0108	.00235	.00263	.00031	.00012	.00162	.044	.00035
%RSD	40.652	.20382	32.328	2.7682	.18348	1158.3	11.320	.05688	35.223
#1	.00050	5.3055	-.00895	.09691	.17113	-.00010	-.01541	77.612	.00074
#2	.00028	5.3208	-.00562	.09319	.17157	.00008	-.01313	77.675	.00124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00240**	**.00362**	**.02861**	**4.7619**	**9.3668**	**.03704**	**10.735**	**.32979**	**.00265**
Stddev	.00003	.00032	.00022	.0099	.0626	.00015	.009	.00021	.00003
%RSD	1.3688	8.8596	.77533	.20722	.66815	.41080	.08671	.06381	1.1862
#1	.00243	.00339	.02877	4.7549	9.3225	.03715	10.729	.32994	.00262
#2	.00238	.00384	.02846	4.7688	9.4110	.03693	10.742	.32964	.00267
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **744.48**	**.00774**	**.85711**	**-.00055**	**33.548**	**-.01111**	**-.00522**	**26.631**	**56.990**
Stddev	.42	.00032	.02336	.00121	.930	.00246	.00190	.063	.135
%RSD	.05590	4.1474	2.7256	219.25	2.7714	22.138	36.448	.23652	.23652
#1	744.19	.00797	.87363	.00030	34.205	-.01285	-.00387	26.586	56.895
#2	744.77	.00752	.84059	-.00141	32.890	-.00937	-.00656	26.675	57.085
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00303**	**.50551**	**.00263**	**.10187**	**.00025**	**-.00407**	**.01375**	**.07577**	**.00552**
Stddev	.00167	.00025	.00104	.00019	.00131	.03460	.00084	.00143	.00073
%RSD	54.923	.04965	39.708	.18674	531.79	849.37	6.1163	1.8811	13.170
#1	.00421	.50569	.00189	.10174	-.00068	.02039	.01315	.07476	.00604
#2	.00185	.50534	.00337	.10201	.00117	-.02854	.01434	.07678	.00501
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2178.9**	**48681.**	**5140.0**
Stddev	8.3	216.	33.7
%RSD	.37975	.44348	.65600
#1	2184.8	48833.	5163.9
#2	2173.1	48528.	5116.2

Sample Name: 280-97532-E-14-A Acquired: 6/7/2017 11:18:19 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375494 200.7 (As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00014**	**.37914**	**-.00310**	**.25451**	**.06912**	**-.00024**	**-.00971**	**53.669**	**.00094**
Stddev	.00023	.03276	.00201	.00420	.00014	.00006	.00317	.159	.00022
%RSD	158.77	8.6411	64.961	1.6505	.20724	26.790	32.692	.29601	23.107
#1	-.00002	.35598	-.00168	.25748	.06922	-.00029	-.01196	53.557	.00110
#2	.00030	.40231	-.00452	.25154	.06902	-.00019	-.00747	53.781	.00079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**.00272**	**.04814**	**.54344**	**6.6687**	**.01659**	**6.4805**	**.10838**	**.00089**
Stddev	.00028	.00009	.00028	.00249	.0075	.00185	.0119	.00001	.00068
%RSD	442.02	3.1445	.58946	.45738	.11298	11.131	.18362	.00782	76.602
#1	-.00013	.00266	.04794	.54169	6.6633	.01790	6.4721	.10838	.00137
#2	.00026	.00278	.04834	.54520	6.6740	.01529	6.4890	.10839	.00041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**75.862**	**.01192**	**.78962**	**-.00238**	**23.436**	**-.00298**	**.00277**	**15.895**	**34.015**
Stddev	.053	.00035	.01153	.00061	.366	.00075	.00290	.014	.030
%RSD	.06982	2.9541	1.4602	25.763	1.5625	25.093	104.64	.08848	.08848
#1	75.900	.01217	.79777	-.00282	23.695	-.00245	.00482	15.885	33.993
#2	75.825	.01167	.78147	-.00195	23.177	-.00350	.00072	15.905	34.036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00028**	**.33423**	**.00212**	**.00680**	**-.00070**	**-.01561**	**.00206**	**.05414**	**.00146**
Stddev	.00182	.00109	.00188	.00054	.00005	.02216	.00030	.00025	.00087
%RSD	658.39	.32511	88.993	7.9649	7.1159	141.98	14.409	.45409	59.437
#1	-.00156	.33347	.00345	.00642	-.00074	-.03128	.00185	.05432	.00085
#2	.00101	.33500	.00079	.00719	-.00067	.00006	.00227	.05397	.00208
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2320.4**	**52292.**	**5177.4**
Stddev	24.3	160.	8.9
%RSD	1.0454	.30561	.17256
#1	2303.3	52405.	5183.7
#2	2337.6	52179.	5171.1

Sample Name: CCVH-4569081 Acquired: 6/7/2017 11:20:54 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00686**	**49.657**	**-.00985**	**.00467**	**.00057**	**-.00016**	**1.0049**	**.00702**	**.00045**	**-.00147**	**-.00004**	**.02418**	**49.551**
Stddev	.00069	.019	.00911	.00055	.00003	.00003	.0241	.00068	.00002	.00011	.00009	.00153	.575
%RSD	10.041	.03923	92.506	11.755	5.3907	19.646	2.3957	9.6268	5.1758	7.3653	216.76	6.3279	1.1595
#1	-.00638	49.643	-.00341	.00428	.00060	-.00014	1.0219	.00749	.00043	-.00155	-.00010	.02526	49.958
#2	-.00735	49.671	-.01630	.00506	.00055	-.00019	.98785	.00654	.00046	-.00140	.00002	.02310	49.145
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10335**	**-.00245**	**.07947**	**-.00167**	**-.00196**	**252.54**	**.00099**	**.00672**	**.00034**	**4.9217**	**-.01717**	**-.01251**	**.02971**
Stddev	.04808	.00077	.00243	.00002	.00009	.09	.00049	.00398	.00057	.0775	.00157	.00872	.01267
%RSD	46.528	31.270	3.0548	1.0463	4.7374	.03589	49.186	59.235	167.68	1.5738	9.1182	69.706	42.650
#1	.13735	-.00191	.08118	-.00166	-.00190	252.47	.00064	.00954	-.00006	4.9764	-.01607	-.01867	.03867
#2	.06935	-.00300	.07775	-.00168	-.00203	252.60	.00133	.00391	.00074	4.8669	-.01828	-.00634	.02075
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06357**	**-.00258**	**.00034**	**5.0243**	**.01898**	**.00195**	**10.409**	**.01528**	**.00038**	**.11606**
Stddev	.02711	.00058	.00005	.0004	.00017	.00145	.036	.00034	.00094	.00207
%RSD	42.650	22.395	14.961	.00774	.89267	74.294	.34828	2.2034	250.97	1.7835
#1	.08275	-.00299	.00038	5.0240	.01910	.00092	10.435	.01552	-.00029	.11752
#2	.04440	-.00217	.00031	5.0246	.01886	.00297	10.384	.01504	.00104	.11460
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2320.9**	**52167.**	**5195.5**
Stddev	19.6	104.	21.8
%RSD	.84335	.20015	.42011
#1	2307.0	52093.	5180.1
#2	2334.7	52241.	5211.0

Sample Name: CCV-4567764 Acquired: 6/7/2017 11:23:29 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51658**	**.54026**	**.98799**	**.50420**	**.49975**	**.50225**	**-.00710**	**5.0446**	**.50045**	**.50439**	**.49159**	**.52633**	**2.5546**
Stddev	.00010	.03202	.01614	.00797	.00211	.00254	.00070	.0006	.01002	.01084	.01062	.00054	.0064
%RSD	.01948	5.9261	1.6335	1.5811	.42200	.50670	9.8870	.01110	2.0015	2.1486	2.1599	.10317	.25172
#1	.51665	.56290	.99940	.50984	.50124	.50405	-.00759	5.0450	.50753	.51205	.49910	.52671	2.5591
#2	.51651	.51762	.97658	.49857	.49826	.50045	-.00660	5.0442	.49336	.49672	.48408	.52595	2.5500
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.739**	**1.0217**	**20.726**	**.52132**	**.48820**	**5.4382**	**.50406**	**.99693**	**.99705**	**-.02811**	**.99008**	**.98705**	**5.0872**
Stddev	.397	.0006	.028	.00189	.00960	.0457	.01034	.02225	.01434	.00272	.01940	.02221	.0438
%RSD	.78250	.05595	.13288	.36313	1.9668	.84097	2.0523	2.2323	1.4384	9.6931	1.9599	2.2501	.86105
#1	51.020	1.0213	20.707	.52266	.49499	5.4705	.51137	1.0127	1.0072	-.02618	1.0038	1.0028	5.1181
#2	50.459	1.0221	20.746	.51999	.48141	5.4059	.49674	.98119	.98691	-.03004	.97636	.97135	5.0562
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.887**	**.99943**	**.50254**	**.00695**	**.50888**	**1.0265**	**-.01884**	**.51224**	**.52216**	**.51292**
Stddev	.094	.02301	.00246	.00040	.00089	.0186	.03132	.00462	.00316	.00449
%RSD	.86105	2.3023	.48982	5.7161	.17466	1.8100	166.27	.90231	.60584	.87552
#1	10.953	1.0157	.50428	.00723	.50951	1.0396	.00331	.51550	.52439	.51610
#2	10.820	.98316	.50080	.00667	.50825	1.0134	-.04098	.50897	.51992	.50974
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2283.6**	**53579.**	**5186.3**
Stddev	6.3	305.	72.9
%RSD	.27695	.56966	1.4057
#1	2288.1	53363.	5134.7
#2	2279.2	53794.	5237.8

Sample Name: CCB Acquired: 6/7/2017 11:25:58 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00065**	**.00285**	**-.00153**	**.00381**	**.00008**	**-.00029**	**-.01135**	**.00366**	**.00027**	**-.00068**	**.00003**	**.00071**	**-.00180**
Stddev	.00004	.00022	.00249	.00020	.00023	.00013	.00189	.00029	.00001	.00028	.00016	.00052	.00181
%RSD	6.5443	7.6242	162.79	5.1306	274.69	44.387	16.673	7.8758	4.9223	41.193	631.48	73.058	100.42
#1	.00062	.00300	-.00329	.00395	-.00008	-.00020	-.01269	.00387	.00026	-.00088	.00014	.00107	-.00308
#2	.00068	.00269	.00023	.00367	.00025	-.00039	-.01001	.00346	.00028	-.00048	-.00009	.00034	-.00052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00182**	**-.00180**	**.00164**	**-.00005**	**-.00092**	**.17969**	**.00030**	**.00404**	**-.00224**	**-.02728**	**-.00410**	**.00185**	**.02806**
Stddev	.00599	.00033	.00275	.00002	.00010	.00132	.00017	.00282	.00150	.00724	.00282	.00288	.01915
%RSD	329.54	18.580	167.40	30.894	10.558	.73205	57.472	69.832	66.787	26.522	68.860	155.82	68.236
#1	.00605	-.00203	.00359	-.00004	-.00085	.17876	.00018	.00604	-.00330	-.03240	-.00210	-.00019	.01452
#2	-.00242	-.00156	-.00030	-.00006	-.00099	.18062	.00042	.00205	-.00118	-.02217	-.00609	.00389	.04160
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06006**	**.00072**	**-.00006**	**-.00099**	**.00008**	**.00081**	**.02008**	**.00006**	**-.00028**	**.00188**
Stddev	.04098	.00025	.00005	.00011	.00079	.00124	.00176	.00034	.00095	.00013
%RSD	68.236	34.607	98.485	11.014	1030.7	153.46	8.7765	530.49	344.23	6.6799
#1	.03108	.00054	-.00002	-.00091	-.00048	.00168	.02133	.00031	.00040	.00196
#2	.08903	.00089	-.00009	-.00107	.00064	-.00007	.01884	-.00018	-.00095	.00179
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2252.0**	**52005.**	**4971.7**
Stddev	20.7	225.	65.2
%RSD	.91908	.43298	1.3117
#1	2266.6	51846.	5017.8
#2	2237.4	52164.	4925.5

Sample Name: CCVL-4578237 Acquired: 6/7/2017 11:28:37 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01045**	**.10895**	**.01285**	**.10218**	**.01036**	**.00074**	**.10886**	**.19999**	**.00538**	**.01027**	**.00996**	**.01684**	**.10354**	**3.1186**
Stddev	.00020	.00003	.00429	.00346	.00026	.00009	.00620	.00240	.00037	.00037	.00005	.00003	.00140	.0372
%RSD	1.9049	.02297	33.417	3.3862	2.4891	11.807	5.6934	1.2013	6.8584	3.6249	.47288	.20092	1.3511	1.1919
#1	.01059	.10897	.00981	.10463	.01054	.00068	.11325	.20169	.00564	.01053	.00993	.01687	.10453	3.1449
#2	.01031	.10893	.01589	.09974	.01017	.00080	.10448	.19829	.00512	.01001	.00999	.01682	.10255	3.0923
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02340**	**.22124**	**.01107**	**.01753**	**1.2249**	**.04202**	**2.8708**	**.01085**	**.07560**	**.01453**	**.01516**	**.52596**	**1.1256**	**.09904**
Stddev	.00097	.00205	.00006	.00003	.0057	.00016	.0573	.00126	.00451	.00611	.00030	.00003	.0001	.00205
%RSD	4.1412	.92741	.53593	.14486	.46964	.37666	1.9958	11.622	5.9653	42.039	1.9790	.00646	.00646	2.0654
#1	.02409	.22269	.01103	.01751	1.2290	.04213	2.9113	.00995	.07242	.01885	.01538	.52594	1.1255	.10049
#2	.02271	.21979	.01111	.01755	1.2208	.04191	2.8302	.01174	.07879	.01021	.01495	.52598	1.1256	.09760
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01015**	**.01609**	**.01011**	**.01417**	**.05729**	**.00959**	**.02235**	**.01658**
Stddev	.00013	.00158	.00070	.00072	.00108	.00046	.00022	.00127
%RSD	1.2585	9.8105	6.8794	5.0603	1.8939	4.7558	.99448	7.6641
#1	.01024	.01497	.01060	.01468	.05806	.00927	.02251	.01748
#2	.01006	.01720	.00962	.01367	.05652	.00991	.02219	.01569
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2281.4**	**53257.**	**4989.8**
Stddev	38.6	318.	5.1
%RSD	1.6909	.59764	.10290
#1	2308.7	53482.	4986.2
#2	2254.2	53032.	4993.4

Sample Name: MB 280-375859/1-A Acquired: 6/7/2017 11:31:57 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/5 Custom ID2: Custom ID3:
Comment: 375859 6010C Q5 (Al Li)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00082**	**.00446**	**-.00102**	**.00184**	**.00026**	**-.00034**	**-.00729**	**.00797**	**.00041**
Stddev	.00067	.00015	.00321	.00083	.00003	.00009	.00208	.00126	.00025
%RSD	81.794	3.4212	313.54	44.926	9.9488	26.171	28.526	15.767	59.684
#1	.00034	.00456	-.00329	.00242	.00024	-.00040	-.00582	.00709	.00024
#2	.00129	.00435	.00125	.00125	.00028	-.00028	-.00876	.00886	.00059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00044**	**.00005**	**.00081**	W **.07366**	**.03236**	**.00070**	**.01111**	**.00048**	**-.00036**
Stddev	.00018	.00050	.00145	.00094	.01300	.00103	.01486	.00038	.00055
%RSD	41.327	1066.2	178.80	1.2819	40.182	147.43	133.75	79.834	153.59
#1	-.00031	-.00031	-.00021	.07433	.02317	-.00003	.00060	.00021	-.00074
#2	-.00057	.00040	.00183	.07299	.04156	.00142	.02162	.00075	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.05000					
Low Limit				-.05000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.12379**	**-.00016**	**.00041**	**-.00125**	**-.02529**	**-.00480**	**.00423**	**.02231**	**.04775**
Stddev	.01103	.00022	.00458	.00232	.00346	.00203	.00563	.01448	.03099
%RSD	8.9112	141.83	1121.9	184.85	13.671	42.236	133.01	64.897	64.897
#1	.13159	.00000	.00365	.00039	-.02774	-.00337	.00025	.01207	.02584
#2	.11599	-.00032	-.00283	-.00289	-.02285	-.00623	.00821	.03255	.06966
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00091**	**.00013**	**.00490**	**.00019**	**-.00057**	F **-.07098**	**-.00035**	**.00109**	**.00117**
Stddev	.00048	.00006	.00245	.00090	.00558	.00198	.00004	.00034	.00012
%RSD	53.009	42.884	49.987	478.21	985.50	2.7931	11.228	30.850	9.9052
#1	-.00126	.00009	.00317	-.00045	.00338	-.07238	-.00032	.00132	.00108
#2	-.00057	.00017	.00663	.00083	-.00451	-.06958	-.00037	.00085	.00125
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.06000			
Low Limit						-.06000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2374.9**	**55087.**	**5185.6**
Stddev	3.4	308.	71.0
%RSD	.14399	.55867	1.3683
#1	2377.3	54870.	5235.8
#2	2372.5	55305.	5135.5

Sample Name: LCS 280-375859/2-A Acquired: 6/7/2017 11:34:35 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375859 6010C Q5 (Al Li)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05220**	**2.0264**	**1.0630**	**1.0544**	**2.0739**	**.05179**	**2.1806**	**50.740**	**.10860**
Stddev	.00000	.0385	.0122	.0126	.0090	.00024	.0240	.181	.00186
%RSD	.00788	1.9016	1.1473	1.1990	.43461	.46928	1.0993	.35689	1.7082
#1	.05220	2.0537	1.0716	1.0633	2.0675	.05162	2.1975	50.611	.10991
#2	.05221	1.9992	1.0544	1.0454	2.0803	.05196	2.1636	50.868	.10729
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51408**	**.20328**	F **.28215**	**1.0912**	**53.089**	**1.0547**	**53.287**	**.53797**	**.97766**
Stddev	.00807	.00276	.00061	.0003	.069	.0056	.055	.00011	.01586
%RSD	1.5693	1.3594	.21598	.02543	.13013	.53228	.10382	.02099	1.6223
#1	.51978	.20523	.28258	1.0910	53.040	1.0507	53.326	.53805	.98888
#2	.50838	.20133	.28172	1.0914	53.138	1.0586	53.248	.53789	.96644
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.28000						
Low Limit			.21500						

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**54.037**	**.51121**	**10.652**	**.50229**	**2.0822**	**.52591**	**2.0932**	**10.268**	**21.974**
Stddev	.027	.00985	.168	.00843	.0302	.00550	.0242	.019	.041
%RSD	.04940	1.9260	1.5812	1.6790	1.4522	1.0464	1.1567	.18871	.18871
#1	54.056	.51817	10.771	.50825	2.1036	.52981	2.1103	10.282	22.003
#2	54.018	.50425	10.533	.49632	2.0609	.52202	2.0761	10.254	21.945
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0279**	**1.0403**	**1.0712**	**1.0642**	**2.0443**	**2.1772**	**.53781**	**.54679**	**.54392**
Stddev	.0349	.0052	.0008	.0001	.0262	.0045	.00061	.00231	.00537
%RSD	1.7192	.49800	.07861	.00776	1.2833	.20806	.11328	.42279	.98800
#1	2.0526	1.0366	1.0706	1.0642	2.0629	2.1804	.53825	.54515	.54012
#2	2.0033	1.0440	1.0718	1.0643	2.0258	2.1740	.53738	.54842	.54772
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2320.5**	**52959.**	**5235.0**
Stddev	4.3	316.	40.7
%RSD	.18675	.59577	.77696
#1	2317.5	52736.	5206.3
#2	2323.6	53182.	5263.8

Sample Name: 280-97741-D-1-A Acquired: 6/7/2017 11:36:58 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375859 6010C Q5 (Al Li)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00064**	**.02078**	**-.00453**	**.04578**	**.17057**	**-.00031**	**-.00671**	**64.421**	**.00066**
Stddev	.00026	.00021	.00606	.00248	.00114	.00003	.00127	.362	.00002
%RSD	40.283	1.0201	133.81	5.4171	.66839	8.1646	18.905	.56116	2.4065
#1	.00046	.02093	-.00024	.04753	.16976	-.00029	-.00581	64.166	.00067
#2	.00082	.02063	-.00881	.04402	.17137	-.00032	-.00761	64.677	.00065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00081**	**.00124**	**.00166**	**.03475**	**3.0087**	**.02537**	**12.710**	**.00329**	**.00079**
Stddev	.00029	.00013	.00002	.00215	.0285	.00243	.008	.00006	.00027
%RSD	35.692	10.711	1.4710	6.1852	.94853	9.5680	.05944	1.9325	33.966
#1	-.00101	.00133	.00168	.03323	2.9885	.02365	12.716	.00324	.00060
#2	-.00060	.00115	.00165	.03627	3.0289	.02709	12.705	.00333	.00098
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**27.834**	**-.00024**	**.01130**	**-.00193**	**14.017**	**-.00653**	**.00681**	**12.554**	**26.866**
Stddev	.203	.00001	.00021	.00194	.153	.00003	.00014	.071	.152
%RSD	.73069	2.8769	1.8392	100.67	1.0899	.49126	2.0408	.56557	.56557
#1	27.977	-.00024	.01145	-.00330	14.125	-.00651	.00691	12.504	26.759
#2	27.690	-.00025	.01115	-.00055	13.909	-.00655	.00671	12.605	26.974
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00030**	**.59492**	**.00310**	**.00025**	**-.00032**	**-.03504**	**.00462**	**.00254**	**.00191**
Stddev	.00087	.00396	.00023	.00003	.00547	.01867	.00054	.00103	.00012
%RSD	288.93	.66572	7.3199	13.491	1719.4	53.274	11.759	40.539	6.3436
#1	.00092	.59212	.00294	.00023	.00355	-.02184	.00500	.00181	.00182
#2	-.00032	.59772	.00326	.00028	-.00418	-.04825	.00423	.00327	.00199
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2346.0**	**53272.**	**5306.2**
Stddev	10.8	427.	7.8
%RSD	.46079	.80209	.14621
#1	2338.3	53574.	5300.8
#2	2353.6	52970.	5311.7

Sample Name: 280-97741-D-1-A SD@5 Acquired: 6/7/2017 11:39:33 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375859 6010C Q5 (Al Li)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00029**	**.00540**	**-.00327**	**.01091**	**.03438**	**-.00027**	**-.00737**	**13.049**	**.00028**
Stddev	.00042	.00022	.00909	.00008	.00042	.00014	.00015	.136	.00018
%RSD	146.97	4.0653	278.21	.77623	1.2147	51.038	1.9891	1.0403	63.010
#1	-.00059	.00524	-.00969	.01085	.03408	-.00017	-.00748	12.953	.00041
#2	.00001	.00555	.00316	.01097	.03467	-.00036	-.00727	13.145	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00065**	**.00021**	**.00050**	**.00717**	**.60605**	**.00390**	**2.6008**	**.00063**	**-.00042**
Stddev	.00017	.00039	.00019	.00098	.06889	.00415	.0007	.00006	.00060
%RSD	26.277	188.37	38.382	13.667	11.367	106.48	.02532	10.298	143.00
#1	-.00078	-.00007	.00037	.00786	.65477	.00096	2.6012	.00067	-.00085
#2	-.00053	.00048	.00064	.00647	.55734	.00683	2.6003	.00058	.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.5371**	**.00022**	**.00645**	**-.00095**	**2.6796**	**-.00264**	**.00548**	**2.5180**	**5.3885**
Stddev	.0606	.00043	.00212	.00434	.0589	.00096	.00146	.0243	.0521
%RSD	1.0943	192.36	32.851	455.67	2.1996	36.224	26.637	.96641	.96641
#1	5.4942	-.00008	.00795	-.00402	2.7213	-.00196	.00445	2.5008	5.3516
#2	5.5799	.00052	.00495	.00212	2.6379	-.00332	.00651	2.5352	5.4253
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00263**	**.12073**	**.00186**	**.00034**	**.00214**	**.01087**	**.00123**	**-.00003**	**.00061**
Stddev	.00068	.00050	.00160	.00002	.00038	.03139	.00065	.00039	.00049
%RSD	25.835	.41717	86.106	6.2778	17.883	288.71	53.394	1409.2	81.714
#1	.00311	.12037	.00073	.00035	.00241	.03307	.00169	-.00030	.00026
#2	.00215	.12108	.00300	.00032	.00187	-.01132	.00076	.00025	.00096
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2302.7**	**53836.**	**5152.9**
Stddev	8.4	671.	55.4
%RSD	.36563	1.2458	1.0755
#1	2296.8	54310.	5192.0
#2	2308.7	53362.	5113.7

Sample Name: 280-97741-D-1-B MS Acquired: 6/7/2017 11:42:11 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375859 6010C Q5 (Al Li)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05221**	**2.0368**	**1.0593**	**1.0926**	**2.2417**	**.05218**	W **2.1527**	**114.67**	**.10845**
Stddev	.00038	.0332	.0363	.0138	.0040	.00008	.0437	.24	.00202
%RSD	.73299	1.6321	3.4257	1.2629	.17840	.14962	2.0311	.21179	1.8667
#1	.05248	2.0603	1.0849	1.1023	2.2389	.05213	2.1837	114.50	.10988
#2	.05194	2.0133	1.0336	1.0828	2.2445	.05224	2.1218	114.84	.10702
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50745**	**.20461**	**.27808**	**1.0863**	**56.180**	**1.0783**	**65.456**	**.53838**	**.98168**
Stddev	.00879	.00428	.00252	.0020	.104	.0031	.233	.00123	.02158
%RSD	1.7331	2.0899	.90717	.18603	.18444	.28782	.35606	.22852	2.1985
#1	.51367	.20763	.27986	1.0877	56.106	1.0761	65.621	.53925	.99694
#2	.50123	.20158	.27629	1.0848	56.253	1.0805	65.291	.53751	.96642
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**80.396**	**.50591**	**10.709**	**.49604**	**16.174**	**.52369**	**2.0941**	**22.930**	**49.070**
Stddev	.029	.00946	.175	.01001	.293	.01748	.0174	.078	.167
%RSD	.03601	1.8708	1.6309	2.0174	1.8139	3.3369	.83271	.34099	.34099
#1	80.375	.51260	10.832	.50311	16.382	.53605	2.1064	22.875	48.952
#2	80.416	.49922	10.585	.48896	15.967	.51134	2.0818	22.985	49.188
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2.0248**	**1.6311**	**1.0748**	**1.0672**	**2.0102**	**2.1563**	**.54498**	**.54347**	**.54509**
Stddev	.0439	.0053	.0041	.0048	.0406	.0486	.00115	.00125	.00003
%RSD	2.1654	.32177	.37730	.44890	2.0194	2.2560	.21040	.22953	.00543
#1	2.0558	1.6274	1.0777	1.0705	2.0389	2.1907	.54579	.54435	.54507
#2	1.9938	1.6348	1.0720	1.0638	1.9815	2.1219	.54417	.54259	.54511
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.20000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2246.2**	**50964.**	**5015.6**
Stddev	20.4	29.	69.7
%RSD	.90817	.05764	1.3896
#1	2231.8	50943.	4966.3
#2	2260.7	50985.	5064.9

Sample Name: 280-97741-D-1-C MSD Acquired: 6/7/2017 11:44:34 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375859 6010C Q5 (Al Li)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05081**	**2.0064**	**1.0498**	**1.0854**	**2.2032**	**.05105**	W **2.1152**	**113.10**	**.10720**
Stddev	.00035	.0315	.0131	.0128	.0121	.00012	.0343	.40	.00113
%RSD	.68852	1.5705	1.2428	1.1812	.54764	.24343	1.6237	.35483	1.0584
#1	.05105	2.0287	1.0591	1.0944	2.1946	.05114	2.1395	112.82	.10801
#2	.05056	1.9842	1.0406	1.0763	2.2117	.05096	2.0910	113.38	.10640
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50031**	**.20137**	**.27483**	**1.0714**	**55.548**	**1.0678**	**64.269**	**.52983**	**.96961**
Stddev	.00638	.00323	.00044	.0088	.277	.0008	.100	.00002	.01197
%RSD	1.2756	1.6027	.15912	.82514	.49781	.07084	.15607	.00425	1.2349
#1	.50482	.20365	.27514	1.0777	55.352	1.0673	64.340	.52984	.97807
#2	.49579	.19909	.27453	1.0652	55.744	1.0684	64.198	.52981	.96114
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**78.941**	**.49822**	**10.585**	**.48602**	**15.986**	**.51989**	**2.0619**	**22.816**	**48.826**
Stddev	.234	.00764	.174	.01063	.218	.00464	.0114	.041	.088
%RSD	.29597	1.5339	1.6416	2.1867	1.3636	.89312	.55077	.17973	.17973
#1	78.776	.50362	10.708	.49354	16.141	.52317	2.0699	22.787	48.764
#2	79.106	.49281	10.462	.47851	15.832	.51661	2.0538	22.845	48.888
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2.0027**	**1.6123**	**1.0580**	**1.0577**	**1.9636**	**2.1481**	**.53701**	**.53419**	**.53945**
Stddev	.0239	.0060	.0003	.0014	.0308	.0023	.00172	.00130	.00245
%RSD	1.1951	.37553	.02534	.13572	1.5683	.10636	.31999	.24407	.45455
#1	2.0196	1.6080	1.0578	1.0566	1.9854	2.1497	.53580	.53327	.53771
#2	1.9858	1.6166	1.0582	1.0587	1.9418	2.1465	.53823	.53511	.54118
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.20000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2243.6**	**50953.**	**5077.7**
Stddev	11.1	171.	12.1
%RSD	.49597	.33637	.23761
#1	2235.7	50832.	5069.2
#2	2251.5	51074.	5086.3

Sample Name: 280-97741-D-1-A PDS Acquired: 6/7/2017 11:46:58 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375859 6010C Q5 (Al Li)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01589**	**1.0271**	**.20014**	**.14841**	**.26869**	**.05117**	**-.00814**	**83.284**	**.05162**
Stddev	.00003	.0247	.01426	.00359	.00181	.00022	.00499	.363	.00155
%RSD	.20918	2.4009	7.1251	2.4200	.67198	.43265	61.336	.43578	3.0012
#1	.01586	1.0446	.21022	.15095	.26997	.05132	-.00461	83.540	.05271
#2	.01591	1.0097	.19005	.14587	.26742	.05101	-.01167	83.027	.05052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04872**	**.05073**	**.05661**	**1.0827**	**23.832**	**.12722**	**33.071**	**.05656**	**.04727**
Stddev	.00139	.00066	.00085	.0003	.164	.00206	.163	.00016	.00089
%RSD	2.8501	1.3105	1.5020	.02521	.68986	1.6215	.49250	.28725	1.8786
#1	.04970	.05120	.05601	1.0829	23.948	.12868	33.186	.05667	.04790
#2	.04774	.05026	.05721	1.0825	23.716	.12576	32.956	.05644	.04664
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.411**	**.05042**	**2.0791**	**.09302**	**13.618**	**.09508**	**.20331**	**17.563**	**37.586**
Stddev	.340	.00041	.0403	.00587	.285	.00084	.00733	.030	.064
%RSD	.70230	.82143	1.9378	6.3080	2.0963	.88252	3.6059	.17155	.17155
#1	48.652	.05071	2.1076	.09716	13.820	.09568	.20850	17.585	37.631
#2	48.171	.05013	2.0506	.08887	13.416	.09449	.19813	17.542	37.540
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09878**	**.63387**	**.20821**	**.05380**	**.20436**	**.54058**	**.05696**	**.21713**	**.05978**
Stddev	.00177	.00399	.00418	.00052	.00397	.01756	.00058	.00245	.00237
%RSD	1.7936	.62960	2.0060	.96896	1.9438	3.2484	1.0220	1.1280	3.9729
#1	.10004	.63669	.20525	.05343	.20716	.52816	.05655	.21887	.05810
#2	.09753	.63105	.21116	.05417	.20155	.55300	.05737	.21540	.06146
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2253.2**	**50806.**	**5074.6**
Stddev	3.1	973.	28.2
%RSD	.13723	1.9156	.55624
#1	2251.0	50118.	5094.6
#2	2255.4	51494.	5054.7

Sample Name: 280-97760-D-1-A Acquired: 6/7/2017 11:49:32 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375859 6010C Q5 (Al Li)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00119**	**.02454**	**-.00127**	**.02204**	**.02896**	**-.00027**	**-.00764**	**43.991**	**.00050**
Stddev	.00062	.00051	.00126	.00022	.00001	.00011	.00379	.098	.00004
%RSD	52.415	2.0656	99.227	.98429	.03543	41.701	49.618	.22344	8.4392
#1	.00075	.02418	-.00216	.02189	.02896	-.00019	-.01032	43.921	.00047
#2	.00163	.02490	-.00038	.02220	.02897	-.00035	-.00496	44.060	.00053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00017**	**.00041**	**.00163**	**.64345**	**2.9219**	**.00128**	**6.6811**	**.11856**	**-.00007**
Stddev	.00014	.00021	.00044	.00760	.0210	.00130	.0006	.00027	.00064
%RSD	82.855	49.724	27.134	1.1812	.71789	102.25	.00930	.23157	923.93
#1	-.00007	.00056	.00195	.63808	2.9071	.00035	6.6816	.11837	-.00052
#2	-.00027	.00027	.00132	.64883	2.9368	.00220	6.6807	.11875	.00038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.4670**	**.00010**	**.01419**	**-.00032**	**3.6151**	**-.00160**	**-.00224**	**3.2583**	**6.9728**
Stddev	.0420	.00033	.00683	.00186	.0656	.00051	.00006	.0127	.0272
%RSD	.65029	345.02	48.114	588.44	1.8150	31.836	2.5132	.38998	.38998
#1	6.4373	.00033	.01902	.00100	3.6615	-.00124	-.00228	3.2673	6.9920
#2	6.4968	-.00014	.00936	-.00163	3.5687	-.00197	-.00220	3.2493	6.9535
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00099**	**.15941**	**.00236**	**.00068**	**-.00224**	**-.04282**	**-.00033**	**.00309**	**-.00102**
Stddev	.00054	.00118	.00080	.00010	.00263	.00858	.00047	.00136	.00018
%RSD	54.455	.73751	33.795	14.675	117.21	20.040	143.06	43.915	17.191
#1	-.00061	.15858	.00292	.00061	-.00410	-.04888	-.00066	.00213	-.00114
#2	-.00136	.16024	.00179	.00075	-.00038	-.03675	.00000	.00405	-.00090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2330.7**	**53638.**	**5163.9**
Stddev	.5	226.	54.9
%RSD	.01962	.42226	1.0623
#1	2330.4	53478.	5202.7
#2	2331.0	53799.	5125.1

Sample Name: 280-97760-F-2-A Acquired: 6/7/2017 11:52:09 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375859 6010C Q5 (Al Li)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00009**	**.00551**	**-.00377**	**.03300**	**.00947**	**-.00027**	**-.00736**	**66.473**	**.00071**
Stddev	.00044	.00107	.00000	.00150	.00035	.00001	.00548	.004	.00008
%RSD	477.78	19.526	.06092	4.5345	3.6664	4.3008	74.568	.00526	11.632
#1	.00041	.00627	-.00376	.03405	.00972	-.00026	-.01123	66.470	.00077
#2	-.00022	.00475	-.00377	.03194	.00922	-.00027	-.00348	66.475	.00065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00060**	**.00084**	**.00226**	**.32763**	**1.6687**	**.00013**	**19.260**	**.12598**	**-.00094**
Stddev	.00018	.00031	.00025	.00053	.0328	.00035	.138	.00002	.00010
%RSD	29.314	36.638	10.909	.16169	1.9673	277.92	.71689	.01319	10.437
#1	-.00048	.00106	.00208	.32801	1.6455	.00037	19.358	.12597	-.00087
#2	-.00073	.00063	.00243	.32726	1.6919	-.00012	19.163	.12599	-.00101
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.027**	**.00019**	**.00683**	**-.00274**	**6.3711**	**-.00384**	**-.00075**	**6.4712**	**13.848**
Stddev	.004	.00050	.00098	.00150	.1137	.00439	.00652	.0206	.044
%RSD	.01850	256.24	14.349	54.796	1.7847	114.46	871.89	.31792	.31792
#1	22.024	.00055	.00753	-.00380	6.4515	-.00073	-.00536	6.4858	13.880
#2	22.030	-.00016	.00614	-.00168	6.2907	-.00694	.00386	6.4567	13.817
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**.21944**	**.00183**	**-.00032**	**-.00030**	**-.01493**	**-.00074**	**.00118**	**.00070**
Stddev	.00017	.00020	.00174	.00013	.00356	.02316	.00086	.00005	.00053
%RSD	336.33	.09063	94.713	39.609	1177.9	155.16	115.63	4.2135	75.413
#1	-.00007	.21930	.00306	-.00041	.00222	-.03131	-.00014	.00122	.00108
#2	.00017	.21958	.00061	-.00023	-.00282	.00145	-.00135	.00115	.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2278.8**	**50421.**	**4872.8**
Stddev	40.4	161.	40.3
%RSD	1.7710	.31865	.82746
#1	2250.2	50534.	4844.3
#2	2307.3	50307.	4901.4

Sample Name: CCVH-4569081 Acquired: 6/7/2017 11:54:45 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00584**	**50.351**	**-.00606**	**.00363**	**.00081**	**-.00023**	**.99385**	**.01335**	**.00027**	**-.00124**	**.00025**	**.02389**	**50.294**
Stddev	.00022	.317	.00192	.00017	.00008	.00009	.02674	.01377	.00033	.00000	.00026	.00082	.085
%RSD	3.7366	.62888	31.763	4.7623	10.081	38.429	2.6905	103.14	119.84	.26689	105.17	3.4407	.16832
#1	-.00569	50.127	-.00742	.00351	.00076	-.00030	1.0128	.02309	.00050	-.00124	.00043	.02447	50.353
#2	-.00600	50.574	-.00470	.00376	.00087	-.00017	.97494	.00361	.00004	-.00123	.00006	.02331	50.234
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01287**	**.00064**	**.07686**	**-.00170**	**-.00216**	**256.38**	**.00053**	**.00554**	**.00018**	**4.8517**	**-.00604**	**-.00204**	**-.00122**
Stddev	.01938	.00116	.00238	.00002	.00036	.73	.00011	.00025	.00151	.1230	.00142	.00385	.00152
%RSD	150.64	183.09	3.1018	1.2940	16.629	.28294	20.927	4.4360	834.71	2.5345	23.460	188.22	124.93
#1	.00084	.00146	.07855	-.00171	-.00190	255.86	.00045	.00537	.00124	4.9386	-.00504	.00068	-.00014
#2	-.02657	-.00019	.07518	-.00168	-.00241	256.89	.00061	.00572	-.00088	4.7647	-.00705	-.00476	-.00230
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00261**	**-.00040**	**.00042**	**5.0643**	**.01786**	**-.00001**	**10.360**	**.01501**	**-.00001**	**.11874**
Stddev	.00326	.00042	.00001	.0284	.00064	.00082	.008	.00067	.00067	.00266
%RSD	124.93	105.72	2.6611	.56070	3.5912	8157.4	.08194	4.4638	4973.9	2.2394
#1	-.00030	-.00010	.00041	5.0844	.01831	-.00059	10.354	.01548	-.00049	.11686
#2	-.00492	-.00070	.00043	5.0443	.01741	.00057	10.366	.01454	.00046	.12062
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2203.2**	**49542.**	**4831.0**
Stddev	5.0	157.	21.0
%RSD	.22614	.31639	.43569
#1	2206.7	49653.	4816.1
#2	2199.7	49431.	4845.9

Sample Name: CCV-4567764 Acquired: 6/7/2017 11:57:19 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51975**	**.53551**	**.99251**	**.50832**	**.49553**	**.49826**	**-.01038**	**5.0245**	**.50433**	**.50902**	**.49482**	**.53309**	**2.5443**
Stddev	.00098	.00538	.02179	.00771	.00891	.00797	.00438	.0690	.00517	.00765	.00866	.00195	.0328
%RSD	.18906	1.0039	2.1956	1.5177	1.7990	1.5991	42.178	1.3728	1.0248	1.5027	1.7508	.36591	1.2906
#1	.52044	.53931	1.0079	.51378	.48922	.49263	-.00728	4.9757	.50798	.51442	.50095	.53171	2.5211
#2	.51905	.53171	.97710	.50287	.50183	.50390	-.01347	5.0733	.50067	.50361	.48870	.53447	2.5675
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.624**	**1.0211**	**20.996**	**.52921**	**.48900**	**5.2903**	**.50876**	**1.0057**	**1.0024**	**-.02316**	**.99543**	**1.0034**	**5.0666**
Stddev	.939	.0181	.019	.00073	.00729	.0787	.00684	.0188	.0120	.00972	.01784	.0062	.0724
%RSD	1.8551	1.7730	.08852	.13764	1.4901	1.4869	1.3450	1.8698	1.1935	41.964	1.7923	.61681	1.4285
#1	49.960	1.0083	21.009	.52972	.49415	5.2346	.51360	1.0190	1.0109	-.01629	1.0080	1.0077	5.0154
#2	51.288	1.0339	20.983	.52869	.48385	5.3459	.50392	.99243	.99394	-.03003	.98281	.99898	5.1178
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.843**	**1.0011**	**.49885**	**.00656**	**.51649**	**1.0274**	**.01006**	**.52280**	**.53713**	**.50737**
Stddev	.155	.0123	.00899	.00075	.00019	.0182	.04861	.00151	.00035	.01226
%RSD	1.4285	1.2293	1.8025	11.481	.03757	1.7683	483.28	.28824	.06581	2.4159
#1	10.733	1.0098	.49249	.00603	.51663	1.0402	.04443	.52387	.53738	.49870
#2	10.952	.99240	.50521	.00709	.51635	1.0145	-.02431	.52174	.53688	.51604
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2258.5**	**51283.**	**4947.6**
Stddev	26.8	464.	20.7
%RSD	1.1877	.90410	.41783
#1	2277.5	50955.	4962.3
#2	2239.5	51611.	4933.0

Sample Name: CCB Acquired: 6/7/2017 11:59:48 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00026**	**.00402**	**-.00850**	**.00227**	**.00025**	**-.00010**	**-.00683**	**.00479**	**.00013**	**-.00039**	**-.00002**	**.00013**	**.00491**
Stddev	.00024	.00028	.00044	.00070	.00021	.00000	.00075	.00351	.00016	.00030	.00016	.00126	.00229
%RSD	91.090	6.9941	5.2053	31.049	82.275	4.5711	10.994	73.223	131.40	76.818	911.47	957.13	46.598
#1	.00043	.00422	-.00882	.00277	.00040	-.00009	-.00737	.00727	.00024	-.00018	-.00013	-.00076	.00330
#2	.00009	.00382	-.00819	.00177	.00011	-.00010	-.00630	.00231	.00001	-.00061	.00009	.00102	.00653
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01060**	**.00234**	**.00333**	**.00009**	**-.00037**	**.07686**	**.00015**	**.00636**	**.00061**	**-.02833**	**-.00417**	**-.00139**	**.01898**
Stddev	.05706	.00170	.00416	.00011	.00008	.00814	.00018	.00565	.00145	.00532	.00300	.00477	.00453
%RSD	538.28	72.875	125.05	125.96	22.270	10.593	122.55	88.839	238.24	18.764	71.970	342.26	23.861
#1	.02975	.00113	.00038	.00017	-.00031	.08262	.00028	.01035	-.00042	-.02457	-.00630	-.00477	.02218
#2	-.05095	.00354	.00627	.00001	-.00043	.07111	.00002	.00236	.00164	-.03208	-.00205	.00198	.01578
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04062**	**.00016**	**.00021**	**.00313**	**.00023**	**.00160**	**-.01599**	**-.00012**	**.00108**	**-.00115**
Stddev	.00969	.00057	.00005	.00131	.00013	.00198	.02489	.00003	.00114	.00272
%RSD	23.861	346.51	22.356	41.909	55.224	123.86	155.64	23.310	105.36	235.77
#1	.04747	.00057	.00018	.00405	.00032	.00020	-.03359	-.00010	.00028	.00077
#2	.03377	-.00024	.00024	.00220	.00014	.00299	.00161	-.00014	.00189	-.00308
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2259.3**	**52514.**	**4881.0**
Stddev	4.2	1512.	84.6
%RSD	.18562	2.8795	1.7333
#1	2262.3	53583.	4940.8
#2	2256.4	51444.	4821.2

Sample Name: CCVL-4578237 Acquired: 6/7/2017 12:02:27 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01041**	**.10597**	F **.00700**	**.10103**	**.01011**	**.00085**	**.10327**	**.20600**	**.00554**	**.00947**	**.00985**	**.01581**
Stddev	.00062	.00007	.00013	.00170	.00048	.00021	.00085	.00376	.00027	.00007	.00025	.00059
%RSD	5.9638	.06297	1.9102	1.6848	4.7320	25.020	.81964	1.8250	4.8326	.69327	2.4985	3.7087
#1	.00997	.10593	.00691	.10224	.01045	.00100	.10387	.20866	.00573	.00943	.00967	.01540
#2	.01085	.10602	.00710	.09983	.00977	.00070	.10268	.20334	.00535	.00952	.01002	.01623
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11331**	**3.0853**	**.02207**	**.21401**	**.01075**	**.01813**	**1.1045**	**.04098**	**2.8615**	**.01035**	F **.06806**	**.01824**
Stddev	.00272	.0605	.00091	.00032	.00038	.00038	.0377	.00129	.0180	.00055	.00004	.00170
%RSD	2.3961	1.9622	4.1208	.15115	3.4943	2.1046	3.4168	3.1434	.62780	5.3460	.05874	9.3095
#1	.11523	3.1281	.02142	.21424	.01048	.01786	1.1312	.04190	2.8742	.01074	.06809	.01944
#2	.11139	3.0425	.02271	.21378	.01101	.01840	1.0778	.04007	2.8488	.00996	.06803	.01704
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01517**	**.50552**	**1.0818**	**.09771**	**.01034**	**.01572**	**.00967**	**.01837**	**.06686**	**.01002**	**.02163**	**.01542**
Stddev	.00054	.00133	.0029	.00343	.00043	.00168	.00044	.00370	.02854	.00085	.00033	.00252
%RSD	3.5474	.26335	.26335	3.5084	4.1391	10.711	4.5982	20.145	42.681	8.5242	1.5457	16.319
#1	.01479	.50646	1.0838	.10013	.01064	.01453	.00936	.01575	.08704	.00941	.02139	.01720
#2	.01555	.50458	1.0798	.09528	.01003	.01691	.00999	.02098	.04668	.01062	.02187	.01364
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2343.7**	**53585.**	**4976.7**
Stddev	1.5	732.	81.8
%RSD	.06468	1.3663	1.6442
#1	2344.7	54103.	4918.9
#2	2342.6	53067.	5034.6

Sample Name: MB 280-375991/1-A Acquired: 6/7/2017 12:05:05 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/6 Custom ID2: Custom ID3:
Comment: 375991 SOIL 6010C (Al Na Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**.00642**	**-.00507**	**.01480**	**.00402**	**-.00017**	**-.00896**	W **.15183**	**.00016**
Stddev	.00007	.00070	.00181	.00096	.00019	.00018	.00011	.00260	.00005
%RSD	141.48	10.880	35.590	6.4531	4.7399	100.36	1.2187	1.7135	27.886
#1	.00009	.00691	-.00380	.01548	.00415	-.00030	-.00903	.15367	.00013
#2	-.00000	.00593	-.00635	.01413	.00388	-.00005	-.00888	.15000	.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								.10000	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**.00032**	**.00234**	**.04130**	**-.07751**	**.00004**	**.04905**	**.00033**	**-.00038**
Stddev	.00025	.00022	.00025	.00237	.11697	.00189	.00308	.00017	.00006
%RSD	1151.2	69.584	10.748	5.7342	150.90	4438.0	6.2750	51.763	15.075
#1	.00020	.00016	.00216	.03963	-.16022	.00138	.04687	.00045	-.00042
#2	-.00016	.00047	.00252	.04298	.00519	-.00130	.05123	.00021	-.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.31433**	**.00057**	**.01161**	**.00138**	**-.00943**	W **-.00766**	**.00397**	**.04842**	**.10363**
Stddev	.00392	.00005	.00119	.00059	.00893	.00100	.00179	.03745	.08014
%RSD	1.2462	9.6595	10.282	42.947	94.663	13.072	45.191	77.335	77.335
#1	.31709	.00053	.01245	.00096	-.01574	-.00696	.00270	.02194	.04696
#2	.31156	.00060	.01077	.00180	-.00312	-.00837	.00524	.07490	.16030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None
High Limit						.00500			
Low Limit						-.00500			

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00875**	**.00053**	**-.00040**	**.00023**	**-.00252**	**-.01600**	**.00011**	**.00171**	**.00101**
Stddev	.00221	.00012	.00026	.00011	.00212	.02915	.00065	.00019	.00107
%RSD	25.191	22.318	64.624	49.107	84.210	182.12	598.40	11.385	106.54
#1	.01031	.00045	-.00021	.00030	-.00401	.00461	.00057	.00185	.00177
#2	.00719	.00062	-.00058	.00015	-.00102	-.03661	-.00035	.00157	.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2294.7**	**54325.**	**5050.7**
Stddev	12.9	1039.	69.8
%RSD	.56041	1.9118	1.3817
#1	2285.7	53591.	5100.0
#2	2303.8	55059.	5001.3

Sample Name: LCS 280-375991/2-A Acquired: 6/7/2017 12:07:43 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 SOIL 6010C (Al Na Se) Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04883**	**1.9049**	**.96427**	**1.0326**	**1.9145**	**.04806**	**1.9944**	**47.095**	**.09961**
Stddev	.00112	.0325	.01901	.0116	.0175	.00035	.0355	.502	.00131
%RSD	2.3036	1.7038	1.9717	1.1227	.91407	.72571	1.7791	1.0666	1.3131
#1	.04962	1.9278	.97772	1.0408	1.9269	.04831	2.0195	47.451	.10053
#2	.04803	1.8819	.95083	1.0244	1.9021	.04781	1.9693	46.740	.09868
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47411**	W **.18741**	**.26449**	**1.0209**	**48.987**	**.97869**	**49.524**	**.50040**	**.90327**
Stddev	.00701	.00328	.00469	.0103	.581	.01700	.663	.00770	.01428
%RSD	1.4786	1.7476	1.7720	1.0129	1.1850	1.7367	1.3388	1.5392	1.5813
#1	.47907	.18973	.26781	1.0282	49.398	.99071	49.993	.50585	.91337
#2	.46916	.18510	.26118	1.0136	48.577	.96667	49.056	.49496	.89317
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.21000							
Low Limit		.19000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.192**	**.47101**	**9.8069**	**.46446**	**1.9159**	**.47983**	**1.8906**	**2.4737**	**5.2936**
Stddev	1.303	.00448	.1313	.00878	.0059	.00352	.0341	.0170	.0363
%RSD	2.5965	.95142	1.3389	1.8909	.30519	.73282	1.8026	.68640	.68640
#1	51.114	.47418	9.8997	.47067	1.9201	.48231	1.9147	2.4857	5.3193
#2	49.271	.46784	9.7140	.45825	1.9118	.47734	1.8665	2.4617	5.2680
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8714**	**.95913**	**.99416**	**.99511**	**1.8902**	**2.0342**	**.49850**	**.50818**	**.50126**
Stddev	.0251	.00856	.01519	.01214	.0340	.0009	.00687	.01179	.00248
%RSD	1.3402	.89225	1.5280	1.2200	1.8013	.04274	1.3787	2.3198	.49467
#1	1.8891	.96518	1.0049	1.0037	1.9143	2.0348	.50336	.51652	.50301
#2	1.8536	.95308	.98341	.98653	1.8661	2.0336	.49364	.49984	.49951
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2238.4**	**50512.**	**5066.0**
Stddev	2.1	369.	92.9
%RSD	.09490	.72965	1.8340
#1	2239.9	50251.	5000.3
#2	2236.9	50772.	5131.7

Sample Name: 280-97803-A-1-A Acquired: 6/7/2017 12:10:07 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 SOIL 6010C (Al Na Se) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00152**	**68.200**	**.03644**	**.03015**	**.29590**	**.00271**	**-.00467**	**91.526**	**.00178**
Stddev	.00026	.180	.00537	.00013	.00086	.00009	.00389	.141	.00005
%RSD	17.338	.26452	14.730	.42741	.29038	3.2655	83.389	.15403	2.8060
#1	-.00171	68.073	.04024	.03024	.29530	.00277	-.00742	91.426	.00182
#2	-.00134	68.328	.03265	.03006	.29651	.00265	-.00192	91.625	.00175
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04801**	**.08154**	**.21326**	**144.06**	**9.3666**	**.13859**	**44.611**	**5.8418**	**-.00096**
Stddev	.00139	.00220	.00157	.27	.0166	.00099	.174	.0445	.00029
%RSD	2.9027	2.6949	.73743	.18475	.17741	.71430	.38894	.76089	30.481
#1	.04900	.08310	.21437	143.87	9.3548	.13789	44.733	5.8103	-.00117
#2	.04703	.07999	.21215	144.25	9.3783	.13929	44.488	5.8732	-.00075
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.59744**	**.10636**	**5.0545**	**.08315**	**2.7631**	**-.00516**	**-.00049**	**2.3647**	**5.0604**
Stddev	.00096	.00332	.1455	.00189	.0629	.00560	.00290	.0416	.0889
%RSD	.16144	3.1251	2.8784	2.2700	2.2768	108.46	586.81	1.7577	1.7577
#1	.59812	.10871	5.1574	.08448	2.8076	-.00912	.00155	2.3353	4.9975
#2	.59676	.10401	4.9516	.08181	2.7187	-.00120	-.00254	2.3941	5.1233
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01021**	**.16893**	**.02939**	**.47305**	**.00279**	**-.04945**	**.12928**	**.40953**	**.02085**
Stddev	.00074	.00006	.00155	.00107	.00030	.02112	.00098	.00030	.00328
%RSD	7.2871	.03284	5.2763	.22569	10.730	42.716	.76139	.07286	15.716
#1	.01074	.16889	.03049	.47381	.00301	-.03452	.12997	.40974	.02316
#2	.00969	.16897	.02830	.47230	.00258	-.06439	.12858	.40932	.01853
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2479.7**	**55284.**	**5529.4**
Stddev	13.7	742.	9.9
%RSD	.55255	1.3425	.17846
#1	2489.4	55808.	5522.4
#2	2470.0	54759.	5536.4

Sample Name: 280-97803-A-1-A SD@5 Acquired: 6/7/2017 12:12:42 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 SOIL 6010C (Al Na Se) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00071**	**14.353**	**-.00246**	**.00753**	**.06189**	**.00031**	**-.00494**	**19.331**	**.00038**
Stddev	.00010	.046	.00324	.00014	.00062	.00004	.00277	.133	.00000
%RSD	13.537	.31856	131.85	1.8988	1.0021	11.722	55.970	.68664	1.2388
#1	-.00078	14.320	-.00017	.00763	.06145	.00034	-.00299	19.237	.00038
#2	-.00064	14.385	-.00475	.00743	.06233	.00029	-.00690	19.425	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00952**	**.01725**	**.04404**	**30.232**	**1.9466**	**.02762**	**9.3598**	**1.2366**	**-.00084**
Stddev	.00016	.00099	.00155	.124	.0618	.00292	.1176	.0174	.00019
%RSD	1.6724	5.7369	3.5299	.41091	3.1761	10.557	1.2561	1.4037	22.589
#1	.00941	.01795	.04294	30.144	1.9903	.02968	9.2767	1.2243	-.00071
#2	.00964	.01655	.04514	30.320	1.9029	.02556	9.4430	1.2488	-.00097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10007**	**.02216**	**1.0415**	**.01624**	**.53211**	**-.00404**	**.00498**	**.50036**	**1.0708**
Stddev	.00632	.00066	.0331	.00159	.01963	.00038	.00262	.03806	.0814
%RSD	6.3151	2.9566	3.1737	9.8153	3.6889	9.4605	52.648	7.6060	7.6060
#1	.10454	.02263	1.0649	.01511	.54599	-.00377	.00313	.52727	1.1284
#2	.09560	.02170	1.0181	.01737	.51823	-.00431	.00684	.47345	1.0132
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00090**	**.03560**	**.00800**	**.09782**	**.00264**	**-.01014**	**.02644**	**.08561**	**.00541**
Stddev	.00075	.00010	.00211	.00044	.00514	.00550	.00045	.00171	.00213
%RSD	83.578	.29224	26.387	.44570	194.66	54.267	1.7121	1.9996	39.375
#1	.00142	.03553	.00650	.09813	-.00099	-.01403	.02612	.08440	.00390
#2	.00037	.03568	.00949	.09751	.00628	-.00625	.02676	.08682	.00691
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2371.2**	**54284.**	**5243.7**
Stddev	6.3	795.	53.9
%RSD	.26696	1.4646	1.0272
#1	2366.7	54846.	5281.8
#2	2375.6	53722.	5205.6

Sample Name: 280-97803-A-1-B MS Acquired: 6/7/2017 12:15:16 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 SOIL 6010C (Al Na Se) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04540**	**111.20**	**.97285**	**.96174**	**2.2601**	**.04933**	**1.8882**	**125.55**	**.09628**
Stddev	.00014	.04	.01207	.01068	.0038	.00004	.0253	.01	.00123
%RSD	.30414	.03522	1.2405	1.1106	.16989	.08740	1.3422	.01069	1.2814
#1	.04530	111.17	.98138	.96930	2.2574	.04930	1.9061	125.54	.09715
#2	.04550	111.23	.96431	.95419	2.2628	.04936	1.8703	125.56	.09540
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49005**	**.29523**	**.47816**	**154.92**	**71.204**	**1.0761**	**93.033**	**6.9130**	**.83384**
Stddev	.00673	.00475	.00334	.49	.028	.0002	.060	.0187	.01429
%RSD	1.3736	1.6079	.69950	.31469	.03918	.01709	.06441	.26980	1.7140
#1	.49481	.29859	.48053	155.27	71.224	1.0760	93.075	6.8998	.84394
#2	.48529	.29188	.47580	154.58	71.185	1.0763	92.990	6.9262	.82373
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.614**	**.55005**	**13.370**	**.51670**	**4.8609**	**.26478**	**1.7956**	**7.5258**	**16.105**
Stddev	.040	.00660	.210	.01067	.0269	.00272	.0310	.0132	.028
%RSD	.08291	1.2002	1.5706	2.0659	.55316	1.0267	1.7285	.17485	.17485
#1	48.586	.55472	13.518	.52424	4.8800	.26670	1.8175	7.5351	16.125
#2	48.643	.54539	13.222	.50915	4.8419	.26286	1.7736	7.5165	16.085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.6733**	**1.0947**	**.91886**	**1.8026**	**1.7008**	**1.9329**	**.69493**	**.93895**	**.41563**
Stddev	.0376	.0004	.00135	.0073	.0316	.0328	.00427	.00013	.00178
%RSD	2.2471	.03915	.14710	.40454	1.8555	1.6968	.61464	.01343	.42785
#1	1.6999	1.0944	.91981	1.8077	1.7231	1.9561	.69795	.93886	.41689
#2	1.6467	1.0950	.91790	1.7974	1.6784	1.9098	.69191	.93904	.41437
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2409.9**	**54650.**	**5712.2**
Stddev	7.6	257.	1.4
%RSD	.31438	.46996	.02388
#1	2404.5	54832.	5713.2
#2	2415.2	54469.	5711.2

Sample Name: 280-97803-A-1-C MSD Acquired: 6/7/2017 12:17:42 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 SOIL 6010C (Al Na Se) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04613**	**111.42**	**.98249**	**.96069**	**2.2425**	**.04942**	**1.9019**	**122.38**	**.09767**
Stddev	.00051	1.23	.00376	.01576	.0216	.00020	.0188	1.21	.00161
%RSD	1.1144	1.1084	.38228	1.6406	.96414	.41051	.98693	.98666	1.6518
#1	.04650	112.29	.98515	.97183	2.2578	.04956	1.9152	123.24	.09881
#2	.04577	110.54	.97984	.94954	2.2272	.04927	1.8886	121.53	.09653
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49679**	**.29921**	**.48500**	**157.71**	**70.379**	**1.0950**	**96.542**	**6.6082**	**.83232**
Stddev	.00842	.00494	.00045	2.18	.573	.0106	.096	.2080	.01427
%RSD	1.6951	1.6515	.09312	1.3800	.81390	.96703	.09959	3.1477	1.7142
#1	.50275	.30271	.48468	159.25	70.784	1.1025	96.474	6.4611	.84241
#2	.49084	.29572	.48532	156.17	69.974	1.0875	96.610	6.7553	.82224
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.723**	**.56287**	**13.142**	**.51545**	**4.2770**	**.25196**	**1.8143**	**5.8394**	**12.496**
Stddev	.610	.01049	.186	.01141	.0605	.00371	.0110	.0254	.054
%RSD	1.2513	1.8644	1.4148	2.2133	1.4143	1.4727	.60780	.43446	.43446
#1	49.154	.57029	13.273	.52351	4.3198	.25459	1.8221	5.8573	12.535
#2	48.291	.55545	13.010	.50738	4.2342	.24934	1.8065	5.8215	12.458
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.6858**	**1.0607**	**.91788**	**1.7009**	**1.7053**	**1.9321**	**.68704**	**.96158**	**.41634**
Stddev	.0350	.0110	.00752	.0070	.0372	.0186	.00125	.00560	.00638
%RSD	2.0763	1.0391	.81929	.41372	2.1792	.96109	.18188	.58257	1.5331
#1	1.7106	1.0685	.91256	1.6959	1.7316	1.9453	.68616	.95762	.42086
#2	1.6611	1.0529	.92320	1.7058	1.6791	1.9190	.68793	.96554	.41183
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2452.1**	**54820.**	**5582.3**
Stddev	28.9	966.	2.9
%RSD	1.1793	1.7626	.05183
#1	2431.7	55504.	5584.3
#2	2472.6	54137.	5580.3

Sample Name: 280-97803-A-1-A PDS Acquired: 6/7/2017 12:20:10 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 SOIL 6010C (Al Na Se) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01368**	**67.540**	**.22706**	**.12268**	**.37994**	**.04845**	**-.00955**	**107.41**	**.04792**
Stddev	.00010	.127	.00131	.00119	.00114	.00019	.00141	.40	.00117
%RSD	.71476	.18753	.57902	.97060	.29948	.39288	14.739	.36956	2.4321
#1	.01361	67.450	.22799	.12352	.37913	.04832	-.01055	107.12	.04875
#2	.01375	67.629	.22613	.12183	.38074	.04859	-.00856	107.69	.04710
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09088**	**.12472**	**.25782**	**140.98**	**28.070**	**.22815**	**62.679**	**5.7958**	**.04272**
Stddev	.00221	.00260	.00116	.57	.209	.00045	.090	.0116	.00024
%RSD	2.4268	2.0856	.44862	.40705	.74526	.19792	.14411	.20016	.55811
#1	.09244	.12656	.25863	140.58	27.922	.22847	62.743	5.8040	.04289
#2	.08932	.12288	.25700	141.39	28.218	.22783	62.615	5.7875	.04255
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**21.217**	**.14907**	**6.8547**	**.16705**	**2.7777**	**.08554**	**.17972**	**7.0822**	**15.156**
Stddev	.238	.00304	.1364	.00076	.0522	.00453	.01134	.0220	.047
%RSD	1.1213	2.0424	1.9893	.45559	1.8793	5.3001	6.3087	.31079	.31079
#1	21.048	.15122	6.9511	.16759	2.8146	.08875	.18773	7.0667	15.123
#2	21.385	.14691	6.7583	.16651	2.7408	.08233	.17170	7.0978	15.189
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09782**	**.21150**	**.21842**	**.51553**	**.17666**	**.51660**	**.17608**	**.68055**	**.07321**
Stddev	.00287	.00090	.00187	.00102	.00465	.01678	.00019	.00264	.00150
%RSD	2.9350	.42527	.85569	.19701	2.6317	3.2473	.11004	.38735	2.0462
#1	.09985	.21086	.21974	.51482	.17337	.50474	.17594	.68241	.07427
#2	.09579	.21213	.21710	.51625	.17995	.52846	.17621	.67868	.07215
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2437.7**	**54871.**	**5634.3**
Stddev	10.3	203.	12.0
%RSD	.42448	.37010	.21322
#1	2445.0	54728.	5625.8
#2	2430.4	55015.	5642.8

Sample Name: 280-97803-A-4-A Acquired: 6/7/2017 12:22:39 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 SOIL 6010C (Al Na Se) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00145**	**67.055**	**.03207**	**.02417**	**.27168**	**.00260**	**-.00694**	**14.697**	**.00161**
Stddev	.00023	.269	.00857	.00007	.00071	.00013	.00106	.057	.00001
%RSD	15.791	.40159	26.733	.30818	.26261	4.8345	15.211	.39019	.51339
#1	-.00129	66.865	.02601	.02412	.27117	.00269	-.00768	14.656	.00160
#2	-.00161	67.246	.03813	.02422	.27218	.00251	-.00619	14.738	.00161
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04088**	**.06958**	**.16402**	**120.98**	**7.8832**	**.10343**	**20.061**	**5.7341**	**-.00056**
Stddev	.00066	.00089	.00179	.22	.0537	.00134	.045	.0330	.00048
%RSD	1.6081	1.2803	1.0884	.18228	.68182	1.2968	.22284	.57542	86.468
#1	.04134	.07021	.16528	120.83	7.8452	.10248	20.029	5.7574	-.00022
#2	.04041	.06895	.16276	121.14	7.9212	.10438	20.092	5.7108	-.00090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.43493**	**.08654**	**3.9848**	**.06730**	**1.1468**	**-.01022**	**-.00390**	**2.5811**	**5.5236**
Stddev	.00245	.00034	.0667	.00068	.0090	.00138	.00259	.0063	.0135
%RSD	.56284	.39671	1.6730	1.0051	.78699	13.504	66.345	.24396	.24396
#1	.43320	.08678	4.0319	.06778	1.1532	-.00925	-.00207	2.5767	5.5140
#2	.43667	.08630	3.9376	.06683	1.1404	-.01120	-.00573	2.5856	5.5331
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00981**	**.04259**	**.02511**	**.43375**	**-.00081**	**-.02167**	**.12021**	**.37752**	**.01234**
Stddev	.00048	.00046	.00105	.00201	.00120	.03032	.00164	.00159	.00186
%RSD	4.9263	1.0897	4.1952	.46360	149.38	139.92	1.3664	.42077	15.090
#1	.00947	.04226	.02586	.43233	.00005	-.04311	.12137	.37865	.01365
#2	.01015	.04292	.02437	.43518	-.00166	-.00023	.11905	.37640	.01102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2440.9**	**54278.**	**5432.5**
Stddev	15.8	195.	11.5
%RSD	.64755	.35998	.21143
#1	2452.0	54416.	5440.7
#2	2429.7	54140.	5424.4

Sample Name: 280-97803-A-5-A Acquired: 6/7/2017 12:25:15 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 SOIL 6010C (Al Na Se) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00096**	**38.325**	**.03004**	**.02574**	**.14055**	**.00138**	**-.00835**	**117.90**	**.00092**
Stddev	.00003	.001	.00431	.00006	.00068	.00015	.00315	.14	.00003
%RSD	2.7163	.00148	14.341	.21799	.48317	10.586	37.680	.11587	2.8436
#1	-.00098	38.325	.02699	.02570	.14103	.00128	-.01057	117.99	.00093
#2	-.00094	38.324	.03308	.02578	.14007	.00148	-.00612	117.80	.00090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03414**	**.04771**	**.12069**	**90.318**	**7.0861**	**.07701**	**40.568**	**3.5048**	**-.00204**
Stddev	.00075	.00047	.00117	.258	.0157	.00213	.175	.0197	.00039
%RSD	2.2078	.99507	.96909	.28521	.22095	2.7690	.43049	.56206	19.160
#1	.03468	.04805	.12152	90.501	7.0972	.07851	40.692	3.5187	-.00232
#2	.03361	.04738	.11987	90.136	7.0750	.07550	40.445	3.4909	-.00177
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.46207**	**.06894**	**3.7413**	**.03142**	**.29348**	**-.00813**	**-.00496**	**2.6186**	**5.6038**
Stddev	.00759	.00005	.0912	.00093	.00142	.00121	.00152	.0250	.0534
%RSD	1.6426	.07703	2.4369	2.9700	.48492	14.950	30.600	.95307	.95307
#1	.45670	.06898	3.8058	.03208	.29247	-.00898	-.00603	2.6362	5.6416
#2	.46744	.06890	3.6768	.03076	.29449	-.00727	-.00389	2.6009	5.5660
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00841**	**.14627**	**.02890**	**.30003**	**.00212**	**-.04267**	**.07341**	**.23493**	**.04251**
Stddev	.00256	.00022	.00080	.00147	.00074	.01202	.00165	.00392	.00194
%RSD	30.451	.15108	2.7713	.48906	35.079	28.162	2.2492	1.6684	4.5545
#1	.00660	.14643	.02947	.29899	.00264	-.03417	.07458	.23771	.04388
#2	.01022	.14612	.02834	.30107	.00159	-.05116	.07224	.23216	.04114
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2356.3**	**52899.**	**5196.4**
Stddev	9.1	363.	22.2
%RSD	.38448	.68598	.42741
#1	2349.8	52643.	5212.1
#2	2362.7	53156.	5180.7

Sample Name: 280-97803-A-6-A Acquired: 6/7/2017 12:27:48 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 SOIL 6010C (Al Na Se) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00294**	**94.768**	**.05332**	**.02441**	**.44141**	**.00396**	**-.00469**	**16.820**	**.00170**
Stddev	.00052	.047	.00003	.00008	.00023	.00005	.00267	.031	.00004
%RSD	17.521	.04932	.06094	.34694	.05246	1.3670	56.916	.18236	2.0942
#1	-.00258	94.735	.05329	.02435	.44158	.00392	-.00657	16.798	.00173
#2	-.00331	94.801	.05334	.02447	.44125	.00400	-.00280	16.841	.00168
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06457**	**.10110**	**.30811**	**192.46**	**9.4444**	**.17358**	**31.959**	W **11.456**	**.00012**
Stddev	.00043	.00220	.00154	.22	.0168	.00083	.135	.220	.00016
%RSD	.66167	2.1735	.49954	.11361	.17770	.47801	.42353	1.9210	125.96
#1	.06487	.10266	.30920	192.61	9.4325	.17299	31.863	11.300	.00023
#2	.06426	.09955	.30702	192.31	9.4563	.17416	32.055	11.612	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.37140**	**.14490**	**5.6961**	**.08558**	**1.1218**	**-.01264**	**-.00887**	**2.3320**	**4.9904**
Stddev	.00450	.00260	.1310	.00104	.0209	.00219	.00009	.0049	.0104
%RSD	1.2121	1.7964	2.2990	1.2189	1.8618	17.325	1.0025	.20928	.20928
#1	.36822	.14674	5.7886	.08632	1.1366	-.01419	-.00880	2.3285	4.9831
#2	.37458	.14306	5.6035	.08485	1.1071	-.01110	-.00893	2.3354	4.9978
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00871**	**.06103**	**.05235**	**.44064**	**.00076**	**-.00823**	**.17122**	**.58440**	**.01965**
Stddev	.00237	.00017	.00021	.00458	.00035	.01613	.00007	.00076	.00183
%RSD	27.209	.27830	.40125	1.0402	46.167	195.92	.04064	.13010	9.2966
#1	.01038	.06115	.05250	.43739	.00101	.00317	.17117	.58386	.02094
#2	.00703	.06091	.05220	.44388	.00051	-.01964	.17127	.58494	.01836
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2467.2**	**55488.**	**5433.4**
Stddev	4.3	1272.	36.0
%RSD	.17256	2.2928	.66208
#1	2470.3	56388.	5458.8
#2	2464.2	54588.	5408.0

Sample Name: CCVH-4569081 Acquired: 6/7/2017 12:30:25 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00651**	**50.317**	**-.00677**	**.00316**	**.00126**	**-.00035**	**.98510**	**.00282**	**.00059**	**-.00159**	**.00058**	**.02457**	**50.586**
Stddev	.00080	.126	.00333	.00149	.00008	.00004	.02081	.00255	.00025	.00086	.00071	.00078	.461
%RSD	12.318	.25105	49.251	47.143	6.1093	12.491	2.1130	90.484	43.104	54.352	122.33	3.1604	.91057
#1	-.00708	50.228	-.00913	.00211	.00132	-.00038	.99982	.00462	.00077	-.00220	.00108	.02512	50.260
#2	-.00595	50.407	-.00441	.00422	.00121	-.00032	.97038	.00101	.00041	-.00098	.00008	.02402	50.911
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.11990**	**.00222**	**.08089**	**.00010**	**-.00213**	**255.72**	**.00099**	**.00880**	**.00032**	**4.8105**	**-.01548**	**-.00595**	**-.01140**
Stddev	.04135	.00097	.00732	.00001	.00032	1.17	.00020	.00069	.00052	.0935	.00238	.00061	.03110
%RSD	34.486	43.419	9.0528	8.9148	14.991	.45838	20.356	7.8786	162.97	1.9439	15.345	10.220	272.81
#1	-.14913	.00154	.07571	.00011	-.00191	254.89	.00114	.00929	-.00005	4.8766	-.01716	-.00638	.01059
#2	-.09066	.00291	.08607	.00010	-.00236	256.55	.00085	.00831	.00069	4.7444	-.01380	-.00552	-.03339
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.02440**	**-.00215**	**.00025**	**5.0495**	**.01856**	**.00293**	**10.314**	**.01521**	**.00044**	**.11920**
Stddev	.06655	.00070	.00004	.0063	.00033	.00036	.051	.00060	.00155	.00640
%RSD	272.81	32.604	16.213	.12492	1.7628	12.372	.49874	3.9299	349.30	5.3691
#1	.02266	-.00165	.00028	5.0450	.01833	.00319	10.350	.01479	.00154	.11467
#2	-.07146	-.00264	.00022	5.0539	.01879	.00268	10.278	.01563	-.00065	.12372
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2168.2**	**47843.**	**4672.7**
Stddev	13.4	83.	33.7
%RSD	.61810	.17425	.72164
#1	2158.7	47784.	4696.5
#2	2177.7	47902.	4648.8

Sample Name: CCV-4567764 Acquired: 6/7/2017 12:33:00 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51938**	**.54109**	**.99577**	**.51209**	**.49809**	**.50116**	**-.00908**	**5.0599**	**.50680**	**.50893**	**.49498**	**.53322**	**2.6021**
Stddev	.00186	.01139	.02256	.00809	.00010	.00115	.00213	.0162	.00852	.00906	.00855	.00226	.0050
%RSD	.35784	2.1057	2.2655	1.5807	.02093	.22898	23.431	.32019	1.6810	1.7792	1.7277	.42418	.19190
#1	.52069	.54914	1.0117	.51781	.49816	.50197	-.00758	5.0714	.51283	.51534	.50103	.53162	2.6057
#2	.51806	.53303	.97982	.50636	.49801	.50034	-.01059	5.0484	.50078	.50253	.48894	.53482	2.5986
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.167**	**1.0316**	**21.115**	**.53196**	**.48991**	**5.2713**	**.50934**	**1.0161**	**1.0063**	**-.02432**	**1.0018**	**1.0096**	**5.0991**
Stddev	.008	.0059	.037	.00096	.00932	.0042	.00988	.0078	.0140	.01494	.0191	.0107	.0073
%RSD	.01508	.57117	.17527	.18101	1.9030	.07963	1.9405	.76358	1.3870	61.428	1.9023	1.0606	.14273
#1	51.162	1.0358	21.141	.53264	.49650	5.2683	.51633	1.0216	1.0161	-.01376	1.0153	1.0171	5.0940
#2	51.173	1.0275	21.088	.53128	.48332	5.2743	.50235	1.0106	.99639	-.03488	.98834	1.0020	5.1043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.912**	**1.0077**	**.50152**	**.00558**	**.51744**	**1.0344**	**.00042**	**.51967**	**.53751**	**.50921**
Stddev	.016	.0144	.00033	.00279	.00067	.0206	.00162	.00295	.00064	.00194
%RSD	.14273	1.4278	.06607	49.944	.12922	1.9874	381.12	.56793	.11880	.38112
#1	10.901	1.0179	.50176	.00755	.51792	1.0489	.00157	.52176	.53796	.50784
#2	10.923	.99752	.50129	.00361	.51697	1.0199	-.00072	.51759	.53706	.51059
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2273.2**	**51626.**	**4899.9**
Stddev	3.0	271.	6.1
%RSD	.13374	.52437	.12501
#1	2275.3	51435.	4904.2
#2	2271.0	51817.	4895.6

Sample Name: CCB Acquired: 6/7/2017 12:35:28 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00094**	**.00469**	**-.00591**	**.00159**	**.00018**	**-.00027**	**-.00894**	**.00131**	**.00041**	**-.00062**	**.00004**	**-.00006**	**.01421**
Stddev	.00026	.00052	.00182	.00107	.00006	.00000	.00431	.00715	.00005	.00015	.00021	.00060	.00530
%RSD	27.218	11.030	30.803	67.531	34.625	.89598	48.215	544.12	13.388	24.727	502.20	993.29	37.269
#1	.00112	.00505	-.00462	.00083	.00014	-.00027	-.01198	.00637	.00045	-.00051	-.00011	.00036	.01796
#2	.00076	.00432	-.00720	.00234	.00023	-.00027	-.00589	-.00374	.00037	-.00073	.00019	-.00048	.01047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.08447**	**.00150**	**.00964**	**.00032**	**-.00085**	**.01551**	**.00065**	**.00452**	**-.00207**	**-.02894**	**.00227**	**-.00417**	**.03288**
Stddev	.01863	.00359	.00181	.00006	.00047	.01411	.00064	.00049	.00309	.00343	.00234	.00083	.01854
%RSD	22.053	239.58	18.724	19.711	55.536	91.005	98.730	10.773	148.99	11.848	102.99	19.858	56.388
#1	-.09764	-.00104	.00836	.00027	-.00119	.02549	.00111	.00418	.00011	-.02651	.00392	-.00475	.01977
#2	-.07130	.00403	.01092	.00036	-.00052	.00553	.00020	.00486	-.00426	-.03136	.00062	-.00358	.04599
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07036**	**.00162**	**.00003**	**.00258**	**-.00006**	**.00202**	**.00483**	**.00008**	**.00098**	**.00199**
Stddev	.03968	.00167	.00001	.00028	.00017	.00039	.01571	.00084	.00040	.00176
%RSD	56.388	103.18	27.985	10.722	274.66	19.424	325.15	1003.3	40.410	88.054
#1	.04231	.00280	.00002	.00277	.00006	.00175	-.00628	-.00051	.00070	.00075
#2	.09842	.00044	.00003	.00238	-.00019	.00230	.01594	.00068	.00126	.00324
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2239.7**	**50440.**	**4655.3**
Stddev	9.9	204.	33.0
%RSD	.44060	.40502	.70811
#1	2232.7	50584.	4632.0
#2	2246.7	50295.	4678.6

Sample Name: CCVL-4578237 Acquired: 6/7/2017 12:38:06 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01120**	**.11410**	**.01376**	**.10137**	**.01021**	**.00071**	**.10759**	**.20681**	**.00516**	**.01010**	**.01006**	**.01667**	**.12652**	**3.0951**
Stddev	.00008	.00382	.00183	.00224	.00038	.00000	.00066	.00132	.00077	.00045	.00055	.00046	.00124	.0115
%RSD	.73895	3.3467	13.271	2.2111	3.6813	.18242	.61375	.63903	14.951	4.4740	5.4893	2.7580	.97808	.37142
#1	.01114	.11680	.01247	.10296	.00995	.00071	.10806	.20774	.00571	.01042	.01045	.01635	.12565	3.1032
#2	.01126	.11140	.01505	.09979	.01048	.00070	.10712	.20587	.00462	.00978	.00967	.01700	.12740	3.0870
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02027**	**.22339**	**.01158**	**.01819**	**1.0798**	**.04155**	**2.9143**	**.00891**	**.07873**	**.01812**	**.01749**	**.50991**	**1.0912**	**.10012**
Stddev	.00036	.00278	.00011	.00112	.0164	.00131	.0707	.00290	.00350	.00346	.00678	.01260	.0270	.00112
%RSD	1.7967	1.2448	.98676	6.1533	1.5193	3.1491	2.4265	32.540	4.4514	19.105	38.773	2.4707	2.4707	1.1196
#1	.02053	.22536	.01166	.01898	1.0682	.04247	2.9643	.01096	.07625	.02057	.02228	.51882	1.1103	.10091
#2	.02002	.22143	.01150	.01740	1.0914	.04062	2.8643	.00686	.08121	.01567	.01269	.50100	1.0721	.09933
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01036**	**.01761**	**.01034**	**.01625**	**.04732**	**.00988**	**.02214**	**.01587**
Stddev	.00019	.00082	.00011	.00524	.01927	.00044	.00033	.00010
%RSD	1.8299	4.6789	1.0586	32.277	40.720	4.4231	1.4755	.61220
#1	.01050	.01819	.01041	.01996	.03369	.01019	.02237	.01580
#2	.01023	.01703	.01026	.01254	.06094	.00957	.02191	.01594
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2271.2**	**52887.**	**4931.2**
Stddev	8.0	791.	10.6
%RSD	.35322	1.4955	.21497
#1	2276.8	52328.	4938.7
#2	2265.5	53446.	4923.8

Sample Name: 280-97803-A-7-A Acquired: 6/7/2017 12:40:48 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 SOIL 6010C (Al Na Se) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00108**	**32.314**	**.01788**	**.01490**	**.09867**	**.00109**	**-.01225**	**55.144**	**.00078**
Stddev	.00032	.104	.00549	.00144	.00011	.00011	.00133	.062	.00030
%RSD	30.189	.32096	30.736	9.6704	.11200	10.518	10.870	.11312	37.751
#1	-.00131	32.241	.02176	.01591	.09859	.00117	-.01319	55.100	.00057
#2	-.00085	32.387	.01399	.01388	.09875	.00101	-.01131	55.188	.00099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02324**	**.03428**	**.08059**	**66.624**	**5.1783**	**.05549**	**18.157**	**2.3802**	**-.00211**
Stddev	.00104	.00061	.00032	.118	.0846	.00117	.056	.0045	.00023
%RSD	4.4834	1.7789	.39469	.17725	1.6346	2.1059	.30704	.18739	10.668
#1	.02398	.03471	.08037	66.708	5.2381	.05632	18.118	2.3771	-.00227
#2	.02251	.03385	.08082	66.541	5.1184	.05466	18.197	2.3834	-.00195
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47228**	**.05261**	**2.2853**	**.01284**	**.01608**	**-.00781**	**-.00088**	**2.0653**	**4.4197**
Stddev	.01185	.00107	.0378	.00530	.00709	.00187	.00241	.0487	.1043
%RSD	2.5083	2.0298	1.6546	41.232	44.102	23.890	273.64	2.3601	2.3601
#1	.46390	.05336	2.3121	.01659	.02109	-.00913	.00082	2.0998	4.4935
#2	.48065	.05185	2.2586	.00910	.01106	-.00649	-.00259	2.0308	4.3460
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00732**	**.05316**	**.02636**	**.23329**	**-.00098**	**-.01735**	**.05565**	**.14262**	**.02695**
Stddev	.00274	.00033	.00113	.00392	.00026	.02039	.00037	.00308	.00131
%RSD	37.470	.61984	4.2762	1.6787	26.700	117.52	.66647	2.1568	4.8762
#1	.00538	.05340	.02556	.23605	-.00080	-.00293	.05539	.14479	.02787
#2	.00926	.05293	.02716	.23052	-.00117	-.03177	.05592	.14044	.02602
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2311.0**	**51821.**	**5094.5**
Stddev	9.6	329.	117.6
%RSD	.41618	.63582	2.3086
#1	2317.8	52053.	5177.6
#2	2304.2	51588.	5011.3

Sample Name: 280-97803-A-8-A Acquired: 6/7/2017 12:43:21 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 SOIL 6010C (Al Na Se) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00138**	**58.361**	**.02701**	**.02132**	**.22587**	**.00223**	**-.00865**	**12.204**	**.00131**
Stddev	.00009	.216	.00333	.00022	.00085	.00002	.00182	.080	.00003
%RSD	6.3469	.36926	12.318	1.0168	.37771	.83937	21.093	.65436	2.0948
#1	-.00132	58.209	.02936	.02116	.22527	.00222	-.00736	12.147	.00129
#2	-.00144	58.514	.02466	.02147	.22647	.00225	-.00994	12.260	.00133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03936**	**.06690**	**.19255**	**113.69**	**7.6698**	**.11226**	**23.290**	**4.5479**	**-.00085**
Stddev	.00087	.00024	.00148	.54	.0754	.00072	.015	.0111	.00112
%RSD	2.2163	.35725	.76962	.47463	.98264	.64032	.06401	.24335	131.94
#1	.03998	.06707	.19360	113.30	7.6165	.11175	23.300	4.5557	-.00164
#2	.03875	.06673	.19150	114.07	7.7231	.11277	23.279	4.5401	-.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.40611**	**.08784**	**3.0969**	**.05413**	**.66475**	**-.00353**	**-.00356**	**4.0236**	**8.6105**
Stddev	.01959	.00205	.0691	.00117	.00754	.00194	.00426	.0033	.0071
%RSD	4.8249	2.3336	2.2313	2.1524	1.1342	54.887	119.65	.08195	.08195
#1	.39226	.08929	3.1457	.05495	.67008	-.00490	-.00055	4.0213	8.6056
#2	.41997	.08639	3.0480	.05331	.65942	-.00216	-.00658	4.0260	8.6155
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00816**	**.04522**	**.02422**	**.45346**	**.00135**	**.01423**	**.10563**	**.34490**	**.02363**
Stddev	.00153	.00015	.00162	.00353	.00212	.01249	.00204	.00046	.00182
%RSD	18.701	.33033	6.6973	.77792	157.73	87.763	1.9299	.13369	7.6992
#1	.00708	.04511	.02537	.45596	-.00016	.02306	.10707	.34523	.02492
#2	.00923	.04533	.02308	.45097	.00285	.00540	.10418	.34458	.02235
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2412.3**	**53796.**	**5192.4**
Stddev	.8	167.	2.0
%RSD	.03290	.31024	.03881
#1	2411.8	53914.	5193.9
#2	2412.9	53678.	5191.0

Sample Name: 280-97803-A-9-A Acquired: 6/7/2017 12:45:53 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 SOIL 6010C (Al Na Se) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00077**	**51.170**	**.02156**	**.02268**	**.17539**	**.00207**	**-.00558**	**12.153**	**.00118**
Stddev	.00062	.280	.00358	.00107	.00086	.00006	.00068	.063	.00011
%RSD	81.218	.54672	16.612	4.7114	.49267	2.8495	12.170	.51830	9.5839
#1	-.00033	50.973	.02409	.02344	.17478	.00203	-.00606	12.108	.00126
#2	-.00121	51.368	.01902	.02193	.17600	.00211	-.00510	12.197	.00110
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03320**	**.05156**	**.11519**	**95.340**	**7.9626**	**.08044**	**20.410**	**3.1668**	**-.00135**
Stddev	.00104	.00075	.00007	.391	.1245	.00453	.041	.0081	.00029
%RSD	3.1371	1.4577	.05720	.41053	1.5636	5.6360	.19940	.25595	21.488
#1	.03393	.05209	.11523	95.063	7.8745	.07724	20.439	3.1725	-.00114
#2	.03246	.05103	.11514	95.616	8.0506	.08365	20.382	3.1610	-.00155
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51234**	**.07739**	**2.8373**	**.02136**	**.01787**	**-.00734**	**.00488**	**2.8456**	**6.0896**
Stddev	.02462	.00213	.0538	.00067	.00188	.00509	.00154	.0266	.0570
%RSD	4.8055	2.7570	1.8974	3.1355	10.531	69.353	31.580	.93608	.93608
#1	.49493	.07890	2.8753	.02089	.01920	-.00374	.00379	2.8644	6.1299
#2	.52975	.07588	2.7992	.02184	.01654	-.01094	.00597	2.8268	6.0493
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00707**	**.04408**	**.03354**	**.40142**	**.00126**	**-.00260**	**.08478**	**.20790**	**.04017**
Stddev	.00079	.00019	.00316	.00040	.00434	.00957	.00044	.00010	.00038
%RSD	11.122	.42826	9.4198	.09945	345.02	368.66	.51861	.04622	.95126
#1	.00763	.04395	.03131	.40114	.00432	.00417	.08509	.20783	.03990
#2	.00651	.04421	.03578	.40170	-.00181	-.00937	.08447	.20796	.04044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2389.1**	**54218.**	**5216.1**
Stddev	9.1	819.	23.0
%RSD	.38283	1.5099	.44080
#1	2382.6	53639.	5199.9
#2	2395.5	54797.	5232.4

Sample Name: 280-97803-A-10-A Acquired: 6/7/2017 12:48:26 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 SOIL 6010C (Al Na Se) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00121**	**64.000**	**.02395**	**.02001**	**.24443**	**.00238**	**-.00602**	**14.269**	**.00173**
Stddev	.00053	.026	.00597	.00074	.00039	.00011	.00218	.011	.00036
%RSD	44.061	.04060	24.919	3.7195	.15752	4.5851	36.152	.07980	20.944
#1	-.00083	64.018	.01973	.01948	.24470	.00246	-.00448	14.277	.00198
#2	-.00159	63.981	.02817	.02053	.24416	.00230	-.00756	14.261	.00147
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04296**	**.06483**	**.15299**	**120.32**	**7.1882**	**.10292**	**22.292**	**5.5393**	**-.00057**
Stddev	.00120	.00167	.00023	.20	.0539	.00174	.058	.0093	.00000
%RSD	2.7919	2.5835	.14989	.16907	.74989	1.6861	.25964	.16868	.38442
#1	.04381	.06602	.15283	120.47	7.2263	.10415	22.333	5.5460	-.00057
#2	.04211	.06365	.15315	120.18	7.1501	.10169	22.251	5.5327	-.00057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.33156**	**.08769**	**3.6889**	**.05610**	**.71004**	**-.00636**	**.00905**	**2.4729**	**5.2921**
Stddev	.01862	.00145	.0747	.00174	.01155	.00887	.00578	.0303	.0648
%RSD	5.6172	1.6574	2.0262	3.0982	1.6268	139.41	63.882	1.2252	1.2252
#1	.34473	.08872	3.7417	.05487	.71821	-.00009	.01314	2.4944	5.3379
#2	.31839	.08667	3.6360	.05733	.70187	-.01263	.00496	2.4515	5.2462
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00936**	**.03968**	**.02940**	**.35645**	**-.00136**	**-.01669**	**.10710**	**.34593**	**.01756**
Stddev	.00153	.00010	.00158	.00254	.00121	.03271	.00078	.00182	.00028
%RSD	16.350	.25374	5.3599	.71278	88.703	196.01	.72749	.52515	1.6208
#1	.01045	.03975	.03052	.35466	-.00051	.00644	.10655	.34465	.01776
#2	.00828	.03960	.02829	.35825	-.00222	-.03982	.10765	.34722	.01735
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2441.1**	**53556.**	**5239.8**
Stddev	21.3	48.	116.8
%RSD	.87449	.08950	2.2283
#1	2426.0	53590.	5157.2
#2	2456.2	53522.	5322.3

Sample Name: 280-97803-A-11-A Acquired: 6/7/2017 12:50:58 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 SOIL 6010C (Al Na Se) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00340**	**127.40**	**.04428**	**.02777**	**.57039**	**.00586**	**-.01255**	**37.716**	**.00276**
Stddev	.00036	.84	.01323	.00070	.00421	.00014	.00375	.237	.00031
%RSD	10.704	.65787	29.876	2.5202	.73877	2.4321	29.878	.62890	11.361
#1	-.00314	126.81	.05364	.02826	.56741	.00576	-.01520	37.548	.00298
#2	-.00366	128.00	.03493	.02727	.57337	.00596	-.00990	37.884	.00254
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11168**	**.14561**	**.23593**	**205.53**	**11.738**	**.23657**	**35.736**	**9.0022**	**.04052**
Stddev	.00209	.00213	.00141	.41	.092	.00217	.106	.2181	.00123
%RSD	1.8708	1.4617	.59791	.19766	.78011	.91560	.29799	2.4232	3.0285
#1	.11315	.14711	.23692	205.82	11.673	.23504	35.811	8.8480	.04139
#2	.11020	.14410	.23493	205.24	11.803	.23811	35.661	9.1564	.03965
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.53709**	**.14931**	**3.6091**	**.17187**	**.91442**	**-.00572**	**-.00221**	**2.5071**	**5.3651**
Stddev	.00777	.00238	.0559	.00009	.01377	.00554	.00617	.0155	.0332
%RSD	1.4470	1.5946	1.5480	.05471	1.5057	96.881	278.50	.61837	.61837
#1	.54259	.15099	3.6486	.17180	.92416	-.00964	.00215	2.4961	5.3417
#2	.53159	.14762	3.5695	.17193	.90468	-.00180	-.00658	2.5180	5.3886
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01419**	**.14843**	**.10011**	**1.4598**	**-.00116**	**-.01120**	**.23629**	**.66628**	**.05356**
Stddev	.00029	.00075	.00320	.0036	.00153	.01573	.00008	.00257	.00114
%RSD	2.0165	.50352	3.1968	.24302	132.01	140.45	.03302	.38530	2.1314
#1	.01399	.14790	.10238	1.4623	-.00224	-.02232	.23635	.66809	.05275
#2	.01439	.14896	.09785	1.4573	-.00008	-.00008	.23624	.66446	.05436
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2508.7**	**57019.**	**5633.8**
Stddev	.4	73.	149.7
%RSD	.01440	.12804	2.6574
#1	2508.5	57071.	5739.6
#2	2509.0	56968.	5527.9

Sample Name: 280-97803-A-12-A Acquired: 6/7/2017 12:53:32 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 SOIL 6010C (Al Na Se) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00246**	**97.985**	**.05583**	**.02060**	**.49743**	**.00410**	**-.00306**	**17.341**	**.00122**
Stddev	.00021	.323	.01069	.00115	.00115	.00002	.00389	.044	.00020
%RSD	8.3427	.32965	19.147	5.5766	.23032	.48935	127.01	.25321	16.341
#1	-.00261	97.757	.06339	.02141	.49662	.00411	-.00031	17.310	.00108
#2	-.00232	98.213	.04827	.01979	.49824	.00409	-.00581	17.372	.00136
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07340**	**.11424**	**.50285**	**258.83**	**9.9520**	**.21159**	**40.388**	**5.6044**	**.00113**
Stddev	.00167	.00252	.00354	.22	.0373	.00237	.179	.0994	.00096
%RSD	2.2764	2.2065	.70494	.08524	.37512	1.1224	.44363	1.7745	85.697
#1	.07458	.11602	.50536	258.67	9.9256	.20991	40.515	5.6747	.00044
#2	.07222	.11245	.50035	258.99	9.9784	.21327	40.262	5.5341	.00181
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.34932**	**.16363**	**6.1086**	**.04859**	**.36339**	**-.00944**	**.00831**	**1.8944**	**4.0541**
Stddev	.01410	.00368	.1012	.00190	.00436	.00157	.00025	.0138	.0294
%RSD	4.0372	2.2465	1.6561	3.9195	1.2003	16.625	3.0276	.72564	.72564
#1	.35929	.16623	6.1801	.04994	.36647	-.00833	.00813	1.9042	4.0749
#2	.33934	.16103	6.0371	.04724	.36031	-.01055	.00849	1.8847	4.0333
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01073**	**.05415**	**.04474**	**.69042**	**-.00091**	**-.00001**	**.17162**	**.61824**	**.06238**
Stddev	.00075	.00025	.00001	.00252	.00124	.00785	.00162	.00585	.00133
%RSD	7.0163	.46943	.02885	.36566	135.74	148790.	.94305	.94547	2.1289
#1	.01020	.05397	.04475	.69220	-.00179	-.00556	.17276	.62238	.06332
#2	.01126	.05433	.04473	.68863	-.00004	.00555	.17047	.61411	.06144
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2736.5**	**61729.**	**6043.8**
Stddev	34.1	406.	13.6
%RSD	1.2465	.65807	.22465
#1	2760.6	61442.	6053.4
#2	2712.3	62017.	6034.2

Sample Name: 280-97803-A-13-A Acquired: 6/7/2017 12:56:07 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 SOIL 6010C (Al Na Se) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00082**	**80.005**	**.03592**	**.01799**	**.33246**	**.00284**	**-.00620**	**13.747**	**.00172**
Stddev	.00015	.272	.00459	.00019	.00141	.00007	.00036	.052	.00001
%RSD	18.110	.34008	12.765	1.0607	.42381	2.4416	5.8568	.37889	.67796
#1	-.00092	79.812	.03268	.01813	.33147	.00279	-.00646	13.710	.00171
#2	-.00071	80.197	.03917	.01786	.33346	.00289	-.00594	13.784	.00173
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04512**	**.07686**	**.15750**	**137.63**	**7.0953**	**.12205**	**21.522**	**6.8047**	**-.00013**
Stddev	.00078	.00251	.00160	.57	.0556	.00142	.090	.0622	.00029
%RSD	1.7220	3.2649	1.0153	.41210	.78426	1.1644	.41805	.91462	231.79
#1	.04567	.07864	.15863	137.22	7.1346	.12104	21.586	6.8487	-.00033
#2	.04457	.07509	.15637	138.03	7.0559	.12305	21.459	6.7607	.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.53560**	**.10055**	**4.3618**	**.08071**	**.84211**	**-.00710**	**.00891**	**2.3669**	**5.0651**
Stddev	.00871	.00301	.0935	.00156	.01559	.00620	.00910	.0037	.0080
%RSD	1.6271	2.9924	2.1432	1.9290	1.8512	87.307	102.11	.15808	.15808
#1	.52944	.10268	4.4279	.08181	.85314	-.01148	.01535	2.3642	5.0594
#2	.54176	.09842	4.2957	.07961	.83109	-.00272	.00248	2.3695	5.0708
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00606**	**.04118**	**.02818**	**.35168**	**-.00347**	**-.04063**	**.13609**	**.41926**	**.01673**
Stddev	.00119	.00004	.00320	.00230	.00092	.00007	.00153	.00003	.00084
%RSD	19.566	.10598	11.347	.65349	26.465	.18147	1.1242	.00626	5.0096
#1	.00522	.04121	.03044	.35330	-.00282	-.04068	.13717	.41924	.01732
#2	.00690	.04115	.02592	.35005	-.00411	-.04058	.13501	.41928	.01614
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2437.7**	**54349.**	**5343.7**
Stddev	6.1	397.	1.2
%RSD	.24920	.73088	.02333
#1	2433.4	54068.	5344.6
#2	2441.9	54630.	5342.8

Sample Name: 280-97803-A-14-A Acquired: 6/7/2017 12:58:46 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375991 SOIL 6010C (Al Na Se) Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00056**	**71.516**	**.03652**	**.01899**	**.31865**	**.00253**	**-.00129**	**13.873**	**.00166**
Stddev	.00005	.058	.00078	.00090	.00028	.00007	.00324	.011	.00048
%RSD	8.7596	.08121	2.1431	4.7551	.08700	2.8557	252.23	.08051	28.693
#1	-.00060	71.557	.03708	.01963	.31845	.00258	-.00358	13.881	.00200
#2	-.00053	71.475	.03597	.01835	.31885	.00248	.00101	13.865	.00132
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04199**	**.07367**	**.14698**	**127.53**	**6.9028**	**.11301**	**20.373**	**6.2734**	**-.00024**
Stddev	.00102	.00232	.00174	.19	.0934	.00041	.065	.0279	.00051
%RSD	2.4356	3.1559	1.1836	.14685	1.3533	.36167	.31679	.44513	209.62
#1	.04271	.07531	.14821	127.67	6.8367	.11330	20.419	6.2931	.00012
#2	.04127	.07203	.14575	127.40	6.9688	.11272	20.327	6.2537	-.00061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.37166**	**.08938**	**4.0609**	**.07675**	**.87091**	**-.00819**	**-.00050**	**2.5114**	**5.3744**
Stddev	.00825	.00214	.0949	.00015	.01863	.00417	.00284	.0358	.0767
%RSD	2.2211	2.3918	2.3371	.19191	2.1393	50.869	565.70	1.4268	1.4268
#1	.36582	.09089	4.1280	.07685	.88409	-.01114	-.00251	2.4861	5.3202
#2	.37749	.08787	3.9938	.07665	.85774	-.00525	.00151	2.5368	5.4287
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01035**	**.04105**	**.02561**	**.42029**	**-.00160**	**-.00457**	**.12957**	**.37829**	**.01437**
Stddev	.00243	.00019	.00313	.00449	.00529	.00471	.00026	.00054	.00020
%RSD	23.459	.47091	12.229	1.0679	329.74	103.10	.20063	.14255	1.3956
#1	.01207	.04091	.02339	.42347	.00214	-.00790	.12975	.37867	.01451
#2	.00863	.04118	.02782	.41712	-.00534	-.00124	.12938	.37791	.01423
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2401.5**	**54333.**	**5401.7**
Stddev	24.2	301.	43.7
%RSD	1.0080	.55402	.80969
#1	2418.6	54120.	5370.8
#2	2384.4	54546.	5432.6

Sample Name: MB 280-375948/1-A Acquired: 6/7/2017 13:01:22 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/6 Custom ID2: Custom ID3:
Comment: 375948 6010C (Se)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00040**	**.02946**	W **-.00927**	**.00043**	**.00083**	**-.00040**	**-.00613**	**.01169**	**.00037**
Stddev	.00060	.01079	.00522	.00171	.00007	.00016	.00431	.00035	.00001
%RSD	149.05	36.634	56.310	397.84	8.8924	39.783	70.347	2.9820	2.1420
#1	.00082	.02183	-.01296	-.00078	.00088	-.00051	-.00308	.01145	.00037
#2	-.00002	.03710	-.00558	.00164	.00078	-.00029	-.00918	.01194	.00038
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00750						
Low Limit			-.00750						

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**-.00014**	**.00052**	W **.06827**	**-.11436**	**.00158**	**.00842**	**.00153**	**-.00059**
Stddev	.00068	.00015	.00047	.00769	.03140	.00309	.00449	.00025	.00104
%RSD	9540.2	110.36	91.097	11.263	27.457	195.34	53.339	16.511	174.70
#1	.00049	-.00003	.00085	.07371	-.09216	.00376	.01160	.00171	.00014
#2	-.00048	-.00024	.00018	.06283	-.13656	-.00060	.00524	.00135	-.00133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.05000					
Low Limit				-.05000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.02559**	**-.00004**	**.00351**	**.00051**	**-.01453**	W **-.00728**	**-.00037**	**.02318**	**.04960**
Stddev	.00373	.00040	.00341	.00092	.00058	.00250	.00045	.00743	.01590
%RSD	14.571	1111.7	97.070	181.08	3.9734	34.277	120.67	32.052	32.052
#1	-.02822	-.00032	.00110	-.00014	-.01494	-.00905	-.00069	.02843	.06085
#2	-.02295	.00024	.00592	.00116	-.01413	-.00552	-.00005	.01793	.03836
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None
High Limit						.00500			
Low Limit						-.00500			

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00265**	**.00008**	**.00109**	**-.00015**	**-.00064**	**-.00141**	**.00050**	**.00109**	**.00028**
Stddev	.00161	.00012	.00059	.00047	.00177	.00506	.00042	.00048	.00002
%RSD	60.634	143.63	54.320	302.87	275.53	359.11	84.224	43.946	7.7593
#1	.00379	.00016	.00067	-.00049	.00061	-.00499	.00080	.00075	.00026
#2	.00152	-.00000	.00151	.00018	-.00190	.00217	.00020	.00142	.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2262.7**	**51085.**	**4768.1**
Stddev	5.6	136.	18.1
%RSD	.24686	.26572	.37895
#1	2258.8	50989.	4755.3
#2	2266.7	51181.	4780.9

Sample Name: LCS 280-375948/2-A Acquired: 6/7/2017 13:04:01 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010C (Se)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05300**	**2.0930**	F **2.4205**	**1.0725**	**1.0594**	**2.0697**	**.05133**	**2.1524**	**51.141**
Stddev	.00093	.0409	.4255	.0152	.0091	.0207	.00087	.0261	.442
%RSD	1.7550	1.9544	17.580	1.4151	.85990	.99858	1.6973	1.2146	.86460
#1	.05234	2.1219	2.1196	1.0832	1.0658	2.0843	.05195	2.1709	51.453
#2	.05366	2.0640	2.7214	1.0617	1.0529	2.0551	.05071	2.1339	50.828
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit			2.2250						
Low Limit			1.7300						

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10879**	**.51460**	**.20537**	**.27728**	F **1.7462**	**53.247**	**1.0557**	**54.725**	**.54266**
Stddev	.00185	.00878	.00355	.00000	.9366	.466	.0094	.039	.00104
%RSD	1.6985	1.7059	1.7309	.00110	53.636	.87576	.88790	.07158	.19244
#1	.11010	.52081	.20788	.27728	1.0839	53.576	1.0624	54.753	.54339
#2	.10749	.50840	.20286	.27729	2.4084	52.917	1.0491	54.698	.54192
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					1.1500				
Low Limit					.89000				

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.98588**	**54.109**	**.51320**	**10.712**	**.51028**	**2.1064**	**.52699**	**2.0998**	**10.374**
Stddev	.01692	.806	.00572	.175	.01012	.0398	.00749	.0294	.093
%RSD	1.7158	1.4900	1.1148	1.6337	1.9838	1.8880	1.4217	1.3980	.89316
#1	.99784	54.679	.51724	10.835	.51744	2.1345	.53229	2.1205	10.439
#2	.97391	53.539	.50915	10.588	.50312	2.0783	.52169	2.0790	10.308
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.199**	**2.0621**	**1.0346**	**1.0685**	**1.0723**	**2.0649**	**2.1753**	**.53738**	F **.56166**
Stddev	.198	.0349	.0119	.0037	.0035	.0243	.0071	.00208	.00091
%RSD	.89316	1.6918	1.1527	.34124	.32686	1.1777	.32804	.38650	.16174
#1	22.340	2.0868	1.0430	1.0659	1.0747	2.0821	2.1702	.53885	.56102
#2	22.059	2.0375	1.0262	1.0711	1.0698	2.0477	2.1803	.53592	.56230
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit									.55500
Low Limit									.42500

Elem	Zr3391
Line	339.198 { 99}
Units	ppm
Avg	**.53862**
Stddev	.00575
%RSD	1.0682
#1	.54268
#2	.53455
Check ?	Chk Pass
High Limit	
Low Limit	

Sample Name: LCS 280-375948/2-A Acquired: 6/7/2017 13:04:01 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010C (Se)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2169.7**	**48754.**	**4785.3**
Stddev	7.6	108.	3.2
%RSD	.34852	.22050	.06757
#1	2164.3	48678.	4787.6
#2	2175.0	48830.	4783.0

Sample Name: CCVH-4579429 Acquired: 6/7/2017 13:06:25 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00664**	**50.632**	**-.00700**	**.00430**	**.00092**	**-.00040**	**.99756**	**.01150**	**.00029**	**-.00178**	**.00027**	**.02563**
Stddev	.00019	.101	.00718	.00117	.00009	.00002	.01381	.01231	.00031	.00030	.00025	.00066
%RSD	2.8623	.19910	102.63	27.173	10.332	5.8826	1.3844	107.08	104.31	16.619	91.782	2.5915
#1	-.00650	50.704	-.01207	.00513	.00098	-.00041	1.0073	.02021	.00008	-.00157	.00010	.02516
#2	-.00677	50.561	-.00192	.00347	.00085	-.00038	.98779	.00279	.00051	-.00198	.00045	.02610
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.425**	**-.03435**	**.00337**	**.08115**	**-.00128**	**-.00252**	**258.12**	**.00194**	**.01026**	**-.00278**	**4.8936**	**-.01395**
Stddev	.075	.02710	.00224	.00049	.00003	.00019	.66	.00045	.00389	.00201	.0724	.00407
%RSD	.14968	78.898	66.389	.60943	2.2773	7.4570	.25397	23.072	37.957	72.239	1.4803	29.199
#1	50.478	-.01519	.00496	.08080	-.00126	-.00239	258.58	.00163	.01301	-.00136	4.9448	-.01683
#2	50.371	-.05352	.00179	.08150	-.00130	-.00266	257.66	.00226	.00750	-.00420	4.8424	-.01107
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00195**	**.02779**	**.05947**	**-.00386**	**.00062**	**5.0894**	**.01829**	**-.00258**	W **10.501**	**.01598**	**.00110**	**.11950**
Stddev	.00484	.02437	.05216	.00273	.00001	.0052	.00038	.00062	.044	.00047	.00071	.00247
%RSD	247.92	87.703	87.703	70.787	1.2015	.10262	2.0537	24.079	.41654	2.9348	64.553	2.0681
#1	.00147	.04502	.09635	-.00193	.00062	5.0931	.01856	-.00214	10.532	.01565	.00160	.12125
#2	-.00537	.01056	.02259	-.00579	.00063	5.0857	.01803	-.00302	10.470	.01631	.00060	.11775
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Warn	None	None	None
Value									10.000			
Range									5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2161.8**	**48138.**	**4645.8**
Stddev	15.6	210.	30.9
%RSD	.71970	.43605	.66516
#1	2150.8	48286.	4624.0
#2	2172.8	47990.	4667.7

Sample Name: CCV-4567764 Acquired: 6/7/2017 13:08:59 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.52245**	F **.55398**	**.99376**	**.51083**	**.50494**	**.50532**	**-.01010**	**5.1379**	**.50637**	**.51105**	**.49968**	**.52650**
Stddev	.00101	.00313	.00951	.00466	.00185	.00106	.00769	.0237	.00721	.00844	.00850	.00167
%RSD	.19290	.56453	.95731	.91251	.36551	.21009	76.091	.46204	1.4245	1.6515	1.7002	.31763
#1	.52174	.55177	1.0005	.51413	.50625	.50607	-.00467	5.1547	.51147	.51702	.50568	.52768
#2	.52316	.55619	.98704	.50754	.50364	.50457	-.01554	5.1211	.50127	.50509	.49367	.52532
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5946**	**51.847**	**1.0384**	**21.337**	**.53196**	**.49462**	**5.3828**	**.51103**	**1.0173**	**1.0137**	**-.02687**	**1.0003**
Stddev	.0232	.017	.0040	.025	.00060	.00934	.0007	.00857	.0180	.0160	.00065	.0221
%RSD	.89393	.03359	.38919	.11665	.11359	1.8887	.01274	1.6776	1.7736	1.5744	2.4060	2.2087
#1	2.6110	51.860	1.0412	21.320	.53153	.50122	5.3833	.51709	1.0300	1.0250	-.02641	1.0159
#2	2.5782	51.835	1.0355	21.355	.53239	.48801	5.3823	.50497	1.0045	1.0024	-.02732	.98463
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0052**	**5.1565**	**11.035**	**1.0127**	**.50819**	**.00707**	**.51718**	**1.0346**	**-.00989**	**.52214**	**.54682**	**.50996**
Stddev	.0264	.0139	.030	.0142	.00072	.00389	.00012	.0101	.01724	.00343	.00211	.00131
%RSD	2.6228	.26953	.26953	1.4006	.14120	55.095	.02307	.97156	174.23	.65769	.38535	.25627
#1	1.0239	5.1663	11.056	1.0227	.50870	.00982	.51710	1.0417	-.02208	.52457	.54533	.51088
#2	.98660	5.1467	11.014	1.0027	.50768	.00432	.51726	1.0275	.00230	.51971	.54831	.50903
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2229.7**	**50410.**	**4776.0**
Stddev	12.1	345.	5.5
%RSD	.54194	.68516	.11523
#1	2238.3	50655.	4772.1
#2	2221.2	50166.	4779.9

Sample Name: CCB Acquired: 6/7/2017 13:11:28 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00123**	**.00757**	**-.00050**	**.00205**	**.00050**	**-.00030**	**-.00887**	**-.00051**	**.00049**	**-.00033**	**.00031**	**.00118**	**.00881**
Stddev	.00007	.00017	.00277	.00135	.00049	.00008	.00553	.00008	.00011	.00025	.00032	.00064	.00254
%RSD	5.7560	2.2614	552.51	65.574	97.771	25.379	62.400	15.794	21.350	75.626	105.67	54.201	28.773
#1	.00118	.00745	.00146	.00110	.00085	-.00024	-.01278	-.00057	.00042	-.00051	.00054	.00073	.01061
#2	.00129	.00769	-.00246	.00300	.00015	-.00035	-.00495	-.00045	.00057	-.00016	.00008	.00163	.00702
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02382**	**.00105**	**.00695**	**.00036**	**-.00026**	**.00712**	**.00005**	**.00531**	**.00132**	**-.02332**	**-.00260**	**.00738**	**.02053**
Stddev	.08118	.00001	.00139	.00004	.00035	.00942	.00016	.00482	.00002	.00054	.00055	.00043	.00370
%RSD	340.79	.55630	19.947	11.057	137.07	132.27	285.76	90.789	1.7788	2.3279	21.307	5.8468	18.030
#1	.08122	.00105	.00597	.00039	-.00050	.00046	.00017	.00190	.00131	-.02293	-.00221	.00768	.01791
#2	-.03358	.00105	.00793	.00033	-.00001	.01378	-.00006	.00872	.00134	-.02370	-.00299	.00707	.02314
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04393**	**.00037**	**.00024**	**.00172**	**.00007**	**.00195**	**-.00756**	**-.00067**	**.00123**	**.00227**
Stddev	.00792	.00005	.00001	.00013	.00017	.00247	.04670	.00049	.00040	.00217
%RSD	18.030	13.646	4.3027	7.4393	233.09	126.83	617.35	74.094	32.715	95.566
#1	.03833	.00040	.00025	.00181	.00020	.00020	-.04059	-.00102	.00094	.00074
#2	.04953	.00033	.00024	.00163	-.00005	.00370	.02546	-.00032	.00151	.00380
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2207.0**	**50440.**	**4763.8**
Stddev	22.6	7.	57.7
%RSD	1.0240	.01318	1.2106
#1	2222.9	50435.	4723.1
#2	2191.0	50445.	4804.6

Sample Name: CCVL-4578237 Acquired: 6/7/2017 13:14:07 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01159**	**.12566**	F **.01027**	**.10321**	**.01036**	F **.00065**	**.10594**	**.20821**	**.00554**	**.01044**	**.01028**	**.01719**
Stddev	.00011	.00916	.00010	.00024	.00002	.00005	.00170	.00272	.00008	.00017	.00029	.00071
%RSD	.97071	7.2859	.98978	.23623	.16182	7.6888	1.6007	1.3047	1.4597	1.6534	2.8271	4.1456
#1	.01151	.11919	.01020	.10338	.01037	.00061	.10714	.20629	.00548	.01031	.01008	.01769
#2	.01167	.13214	.01035	.10304	.01035	.00068	.10474	.21013	.00560	.01056	.01049	.01668
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500			.00100						
Range			-30.000%			-30.000%						

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11283**	**3.0856**	**.02069**	**.22811**	**.01141**	**.01792**	**1.0830**	**.04266**	**2.9481**	**.01015**	**.07435**	**.01683**
Stddev	.00117	.0133	.00145	.00005	.00007	.00043	.0132	.00105	.0595	.00080	.01486	.00026
%RSD	1.0350	.43042	7.0060	.02135	.63307	2.3951	1.2166	2.4598	2.0170	7.8416	19.987	1.5635
#1	.11200	3.0762	.02172	.22808	.01136	.01822	1.0923	.04340	2.9901	.01072	.08486	.01701
#2	.11365	3.0949	.01967	.22815	.01146	.01762	1.0737	.04192	2.9060	.00959	.06384	.01664
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02205**	**.51045**	**1.0924**	**.10251**	**.01027**	**.01691**	**.01020**	**.01850**	**.04856**	**.01023**	**.02256**	**.01672**
Stddev	.00663	.02314	.0495	.00076	.00014	.00314	.00060	.00651	.02588	.00018	.00030	.00059
%RSD	30.080	4.5335	4.5335	.73725	1.3741	18.565	5.8360	35.200	53.288	1.7652	1.3369	3.5406
#1	.01736	.49408	1.0573	.10305	.01017	.01469	.01062	.02310	.06686	.01036	.02277	.01630
#2	.02674	.52681	1.1274	.10198	.01037	.01913	.00978	.01389	.03026	.01010	.02235	.01714
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2248.3**	**50758.**	**4710.5**
Stddev	21.9	127.	1.7
%RSD	.97265	.25077	.03527
#1	2232.8	50848.	4709.3
#2	2263.8	50668.	4711.7

Sample Name: 280-97780-D-1-A Acquired: 6/7/2017 13:16:44 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010C (Se)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00042**	**.00955**	**-.00410**	**.17125**	**.12013**	**-.00033**	**-.01222**	**188.79**	**.00068**
Stddev	.00064	.00105	.00680	.00153	.00070	.00000	.00040	.53	.00033
%RSD	153.28	10.958	165.71	.89285	.58515	.89378	3.3151	.27896	48.187
#1	.00087	.01029	-.00891	.17233	.11963	-.00033	-.01250	189.17	.00045
#2	-.00003	.00881	.00070	.17017	.12063	-.00034	-.01193	188.42	.00091
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00096**	**.00116**	**.00476**	**.04139**	**8.8623**	**.16888**	**43.228**	**.00049**	**-.00113**
Stddev	.00047	.00008	.00025	.00128	.0285	.00339	.154	.00001	.00075
%RSD	49.288	7.1832	5.3543	3.1033	.32165	2.0088	.35633	2.1736	66.387
#1	-.00129	.00110	.00494	.04048	8.8422	.17128	43.337	.00050	-.00060
#2	-.00062	.00122	.00458	.04229	8.8825	.16648	43.119	.00048	-.00166
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**204.74**	**.00137**	**.00936**	**-.00476**	**68.522**	**-.00280**	**.00088**	**16.531**	**35.377**
Stddev	.29	.00002	.00204	.00232	.966	.00008	.00553	.010	.020
%RSD	.13952	1.4042	21.817	48.678	1.4101	2.7399	631.73	.05769	.05769
#1	204.94	.00135	.01081	-.00312	69.205	-.00275	-.00304	16.525	35.363
#2	204.54	.00138	.00792	-.00640	67.839	-.00286	.00479	16.538	35.392
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00025**	**1.7458**	**-.00150**	**-.00036**	**-.00168**	**-.00911**	**.00545**	**.00106**	**.00057**
Stddev	.00071	.0023	.00020	.00030	.00444	.03459	.00061	.00004	.00047
%RSD	287.82	.13377	13.417	85.043	264.87	379.52	11.146	3.7096	81.138
#1	-.00075	1.7474	-.00136	-.00057	.00146	-.03357	.00588	.00103	.00090
#2	.00026	1.7441	-.00164	-.00014	-.00481	.01534	.00502	.00109	.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2115.6**	**47598.**	**4717.7**
Stddev	12.0	224.	34.5
%RSD	.56792	.46990	.73167
#1	2107.1	47440.	4693.3
#2	2124.1	47756.	4742.1

Sample Name: 280-97780-D-1-A SD@5 Acquired: 6/7/2017 13:19:20 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010C (Se)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00014**	**.00386**	**-.00362**	**.03455**	**.02406**	**-.00029**	**-.00718**	**37.532**	**.00033**
Stddev	.00038	.00063	.00445	.00020	.00013	.00003	.00882	.149	.00029
%RSD	261.64	16.337	123.11	.57077	.53345	10.299	122.78	.39765	87.645
#1	.00041	.00342	-.00677	.03469	.02416	-.00027	-.00095	37.426	.00053
#2	-.00012	.00431	-.00047	.03441	.02397	-.00031	-.01341	37.637	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00058**	**.00015**	**.00192**	**.01161**	**1.6938**	**.03717**	**8.7103**	**.00019**	**-.00125**
Stddev	.00094	.00024	.00091	.00157	.0209	.00116	.0326	.00001	.00002
%RSD	161.84	167.03	47.224	13.551	1.2308	3.1224	.37396	3.1149	1.8505
#1	-.00125	-.00003	.00257	.01273	1.6790	.03799	8.7334	.00019	-.00123
#2	.00008	.00032	.00128	.01050	1.7085	.03635	8.6873	.00018	-.00127
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**41.730**	**-.00023**	**.00347**	**-.00175**	**12.881**	**-.00535**	**-.00043**	**3.2438**	**6.9417**
Stddev	.357	.00057	.00491	.00072	.230	.00251	.01220	.0009	.0019
%RSD	.85550	252.24	141.33	41.456	1.7836	46.952	2838.1	.02691	.02691
#1	41.982	-.00063	.00000	-.00226	13.044	-.00357	.00820	3.2432	6.9404
#2	41.477	.00018	.00695	-.00123	12.719	-.00712	-.00906	3.2444	6.9430
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00026**	**.34471**	**.00079**	**-.00013**	**-.00299**	**-.01084**	**.00075**	**.00208**	**-.00071**
Stddev	.00057	.00147	.00353	.00044	.00560	.05647	.00038	.00052	.00214
%RSD	215.94	.42756	447.96	327.71	187.05	521.10	50.285	25.070	302.79
#1	-.00014	.34367	-.00171	.00018	-.00695	.02909	.00101	.00245	.00081
#2	.00066	.34575	.00329	-.00045	.00097	-.05076	.00048	.00171	-.00222
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2204.4**	**50101.**	**4785.6**
Stddev	3.1	21.	6.2
%RSD	.14232	.04128	.12899
#1	2206.7	50115.	4789.9
#2	2202.2	50086.	4781.2

Sample Name: 280-97780-D-1-B MS Acquired: 6/7/2017 13:21:56 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010C (Se)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05329**	**1.9776**	**1.0871**	**1.2156**	**2.1657**	**.05130**	W **2.1215**	**233.54**	**.10963**
Stddev	.00004	.0396	.0220	.0179	.0003	.00017	.0384	.23	.00214
%RSD	.07195	2.0028	2.0190	1.4729	.01514	.32869	1.8091	.09916	1.9563
#1	.05331	2.0057	1.1026	1.2282	2.1655	.05118	2.1486	233.71	.11114
#2	.05326	1.9496	1.0715	1.2029	2.1660	.05142	2.0944	233.38	.10811
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49742**	**.20155**	**.28339**	**1.0647**	**62.477**	**1.2232**	**95.475**	**.53510**	**.96896**
Stddev	.00809	.00238	.00108	.0018	.086	.0002	.061	.00038	.01538
%RSD	1.6265	1.1810	.38215	.16425	.13820	.01701	.06376	.07184	1.5874
#1	.50314	.20323	.28262	1.0660	62.416	1.2233	95.432	.53483	.97983
#2	.49170	.19987	.28416	1.0635	62.538	1.2231	95.518	.53537	.95808
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**251.98**	**.49624**	**11.007**	**.47888**	**69.876**	**.52323**	**2.0920**	**26.533**	**56.780**
Stddev	.08	.00881	.212	.00547	.867	.01086	.0451	.020	.042
%RSD	.03363	1.7755	1.9293	1.1421	1.2413	2.0755	2.1568	.07454	.07454
#1	252.04	.50247	11.158	.48275	70.489	.53091	2.1240	26.547	56.810
#2	251.92	.49001	10.857	.47501	69.263	.51555	2.0601	26.519	56.750
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9964**	**2.7443**	**1.0775**	**1.0733**	**1.8981**	**2.1641**	**.54947**	**.55077**	**.54329**
Stddev	.0258	.0025	.0023	.0033	.0309	.0166	.00179	.00254	.00171
%RSD	1.2942	.09150	.21520	.30445	1.6286	.76692	.32521	.46107	.31530
#1	2.0147	2.7460	1.0759	1.0710	1.9199	2.1523	.55074	.55257	.54450
#2	1.9782	2.7425	1.0792	1.0756	1.8762	2.1758	.54821	.54898	.54207
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2135.6**	**47620.**	**4795.1**
Stddev	21.8	59.	16.8
%RSD	1.0204	.12477	.35072
#1	2120.2	47663.	4783.2
#2	2151.0	47578.	4807.0

Sample Name: 280-97780-D-1-C MSD Acquired: 6/7/2017 13:24:19 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010C (Se)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05356**	**2.0116**	**1.0891**	**1.2271**	**2.2220**	**.05220**	W **2.1366**	**240.46**	**.11076**
Stddev	.00031	.0353	.0333	.0229	.0011	.00004	.0511	.24	.00234
%RSD	.57309	1.7573	3.0583	1.8658	.04891	.07125	2.3896	.09977	2.1161
#1	.05378	2.0366	1.1126	1.2433	2.2227	.05222	2.1727	240.29	.11241
#2	.05334	1.9866	1.0655	1.2110	2.2212	.05217	2.1005	240.63	.10910
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50565**	**.20405**	**.28585**	**1.0807**	**64.025**	**1.2472**	**97.348**	**.54262**	**.97692**
Stddev	.01129	.00558	.00037	.0032	.098	.0017	.348	.00151	.01830
%RSD	2.2337	2.7341	.12809	.29696	.15308	.13432	.35715	.27833	1.8730
#1	.51363	.20799	.28559	1.0784	63.956	1.2461	97.594	.54369	.98986
#2	.49766	.20010	.28611	1.0829	64.094	1.2484	97.102	.54155	.96398
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**259.48**	**.50243**	**11.139**	**.48631**	**70.775**	**.52715**	**2.1104**	**27.075**	**57.941**
Stddev	.51	.00858	.236	.00954	1.061	.00915	.0424	.008	.016
%RSD	.19845	1.7084	2.1217	1.9609	1.4990	1.7350	2.0101	.02846	.02846
#1	259.11	.50850	11.306	.49306	71.525	.53362	2.1404	27.070	57.930
#2	259.84	.49636	10.972	.47957	70.025	.52069	2.0804	27.081	57.953
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2.0096**	**2.8193**	**1.0852**	**1.0839**	**1.9167**	**2.2172**	**.55637**	**.55823**	**.55112**
Stddev	.0463	.0009	.0011	.0037	.0377	.0303	.00165	.00180	.00167
%RSD	2.3024	.03323	.10226	.34067	1.9695	1.3682	.29568	.32195	.30337
#1	2.0423	2.8187	1.0844	1.0866	1.9434	2.2387	.55753	.55696	.55230
#2	1.9769	2.8200	1.0860	1.0813	1.8900	2.1958	.55520	.55950	.54993
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.20000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2112.3**	**46889.**	**4694.8**
Stddev	18.8	146.	26.3
%RSD	.88803	.31135	.55920
#1	2099.1	46992.	4713.3
#2	2125.6	46786.	4676.2

Sample Name: 280-97780-D-1-A PDS Acquired: 6/7/2017 13:26:41 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010C (Se)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01670**	**.99298**	**.20695**	**.27326**	**.21717**	**.05084**	**-.01109**	**202.22**	**.05275**
Stddev	.00023	.02144	.00475	.00578	.00080	.00005	.00134	.59	.00128
%RSD	1.3481	2.1592	2.2940	2.1145	.36810	.10411	12.075	.28977	2.4290
#1	.01654	1.0081	.20359	.27734	.21661	.05088	-.01203	201.80	.05365
#2	.01686	.97782	.21031	.26917	.21774	.05080	-.01014	202.63	.05184
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04819**	**.05039**	**.05981**	**1.0750**	**29.938**	**.27298**	**62.441**	**.05408**	**.04605**
Stddev	.00173	.00128	.00066	.0008	.028	.00290	.180	.00027	.00010
%RSD	3.5961	2.5396	1.0978	.07611	.09482	1.0635	.28840	.49542	.22343
#1	.04941	.05130	.05934	1.0756	29.958	.27092	62.568	.05427	.04613
#2	.04696	.04949	.06027	1.0744	29.918	.27503	62.313	.05390	.04598
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**220.58**	**.04999**	**2.1693**	**.09071**	**66.733**	**.09384**	**.20502**	**21.153**	**45.268**
Stddev	.24	.00263	.0502	.00562	1.352	.00031	.00124	.022	.046
%RSD	.10859	5.2531	2.3128	6.2002	2.0257	.33398	.60511	.10260	.10260
#1	220.75	.05185	2.2047	.09468	67.689	.09362	.20415	21.169	45.301
#2	220.41	.04813	2.1338	.08673	65.778	.09407	.20590	21.138	45.235
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09723**	**1.7507**	**.21201**	**.05376**	**.19111**	**.53871**	**.06064**	**.21888**	**.05865**
Stddev	.00424	.0016	.00096	.00012	.00329	.01951	.00002	.00079	.00257
%RSD	4.3602	.09312	.45296	.22491	1.7222	3.6225	.02588	.35879	4.3756
#1	.10023	1.7495	.21133	.05368	.19344	.55251	.06063	.21833	.06046
#2	.09423	1.7518	.21269	.05385	.18879	.52491	.06065	.21944	.05683
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2156.9**	**48816.**	**4879.5**
Stddev	8.5	91.	44.8
%RSD	.39632	.18631	.91790
#1	2150.8	48751.	4911.1
#2	2162.9	48880.	4847.8

Sample Name: 280-97780-D-2-A Acquired: 6/7/2017 13:29:15 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010C (Se)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00090**	**.01140**	**.00119**	**.17345**	**.11933**	**-.00025**	**-.00677**	**186.15**	**.00111**
Stddev	.00050	.00445	.00539	.00172	.00050	.00000	.00449	.44	.00018
%RSD	55.650	39.018	452.99	.98996	.41620	.46737	66.372	.23608	15.918
#1	.00054	.00826	.00500	.17466	.11969	-.00025	-.00995	185.84	.00099
#2	.00125	.01455	-.00262	.17223	.11898	-.00025	-.00359	186.46	.00124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00033**	**.00119**	**.00540**	**.03251**	**8.9311**	**.16727**	**42.397**	**.00036**	**.00038**
Stddev	.00057	.00039	.00020	.00143	.0374	.00085	.007	.00006	.00155
%RSD	174.46	33.012	3.7477	4.4008	.41872	.51067	.01628	15.440	411.51
#1	-.00073	.00091	.00554	.03352	8.9575	.16787	42.402	.00032	-.00072
#2	.00008	.00146	.00525	.03150	8.9047	.16667	42.392	.00040	.00147
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**203.06**	**.00112**	**.00945**	**-.00353**	**68.585**	**-.00160**	**.00451**	**16.247**	**34.768**
Stddev	.12	.00066	.01402	.00415	1.621	.00018	.00014	.052	.112
%RSD	.06117	59.269	148.43	117.48	2.3637	11.062	3.0629	.32317	.32317
#1	202.97	.00158	-.00047	-.00060	69.731	-.00148	.00442	16.210	34.688
#2	203.14	.00065	.01936	-.00647	67.439	-.00173	.00461	16.284	34.847
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00100**	**1.7327**	**-.00365**	**-.00006**	**-.00012**	**.03979**	**.00581**	**.00981**	**.00050**
Stddev	.00121	.0059	.00153	.00088	.00076	.02028	.00062	.00018	.00282
%RSD	121.69	.33865	41.990	1554.6	634.15	50.961	10.679	1.8535	560.11
#1	-.00186	1.7285	-.00257	.00057	.00042	.05413	.00625	.00968	-.00149
#2	-.00014	1.7368	-.00474	-.00068	-.00065	.02545	.00537	.00994	.00250
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2184.7**	**48928.**	**4977.4**
Stddev	28.1	164.	27.0
%RSD	1.2845	.33460	.54223
#1	2204.6	48812.	4996.5
#2	2164.9	49044.	4958.3

Sample Name: 280-97780-D-3-A Acquired: 6/7/2017 13:31:50 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010C (Se)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00078**	**.02328**	**.00161**	**.15796**	**.09516**	**-.00034**	**-.01027**	**164.85**	**.00097**
Stddev	.00055	.00063	.00674	.00335	.00028	.00007	.00260	.03	.00005
%RSD	69.973	2.7205	417.88	2.1215	.29151	21.553	25.276	.01557	4.7133
#1	.00039	.02373	-.00315	.16033	.09497	-.00039	-.01211	164.83	.00100
#2	.00117	.02284	.00638	.15559	.09536	-.00029	-.00844	164.87	.00094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00085**	**.00160**	**.00400**	**.03904**	**8.1672**	**.14985**	**38.215**	**.00060**	**-.00008**
Stddev	.00035	.00009	.00026	.00169	.0346	.00511	.088	.00009	.00100
%RSD	41.109	5.3755	6.6109	4.3274	.42335	3.4075	.22953	14.363	1188.6
#1	-.00110	.00154	.00382	.04024	8.1917	.14624	38.277	.00054	.00063
#2	-.00060	.00166	.00419	.03785	8.1428	.15346	38.153	.00066	-.00079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**178.13**	**.00110**	**.00245**	**-.00295**	**62.228**	**-.00890**	**-.00357**	**15.587**	**33.356**
Stddev	.82	.00008	.00507	.00125	1.279	.00223	.00425	.096	.206
%RSD	.45802	6.9588	206.75	42.449	2.0548	25.035	119.09	.61623	.61623
#1	178.71	.00116	-.00113	-.00384	63.133	-.01047	-.00658	15.655	33.501
#2	177.56	.00105	.00604	-.00207	61.324	-.00732	-.00056	15.519	33.210
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00143**	**1.5537**	**.00028**	**.00061**	**.00044**	**.00027**	**.00592**	**.00139**	**.00134**
Stddev	.00246	.0006	.00019	.00030	.00030	.00614	.00048	.00043	.00025
%RSD	171.59	.03697	67.132	49.399	67.654	2276.7	8.1374	30.527	18.720
#1	-.00031	1.5541	.00015	.00083	.00065	-.00407	.00626	.00109	.00116
#2	.00317	1.5533	.00042	.00040	.00023	.00461	.00558	.00170	.00152
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2181.0**	**49665.**	**4908.8**
Stddev	8.8	60.	5.5
%RSD	.40121	.12157	.11182
#1	2174.8	49622.	4904.9
#2	2187.1	49707.	4912.7

Sample Name: 280-97780-D-4-A Acquired: 6/7/2017 13:34:25 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010C (Se)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00059**	**8.6118**	**.00030**	**.37487**	**.18749**	**.00015**	**-.01129**	**255.65**	**.00116**
Stddev	.00041	.0810	.00227	.00612	.00049	.00018	.00797	.03	.00021
%RSD	70.187	.94062	751.94	1.6331	.26055	119.53	70.615	.01229	17.900
#1	.00030	8.5546	.00190	.37920	.18783	.00029	-.01693	255.63	.00102
#2	.00088	8.6691	-.00130	.37055	.18714	.00002	-.00565	255.67	.00131
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00185**	**.02065**	**.03099**	**12.911**	**11.435**	**.18898**	**62.286**	**.20732**	**.00045**
Stddev	.00003	.00064	.00041	.001	.040	.00265	.178	.00047	.00043
%RSD	1.8804	3.1227	1.3186	.00901	.35037	1.4037	.28588	.22654	96.679
#1	.00183	.02110	.03128	12.910	11.463	.18711	62.412	.20765	.00075
#2	.00188	.02019	.03070	12.911	11.407	.19086	62.160	.20699	.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**199.18**	**.01013**	**.21316**	**.00004**	**113.91**	**-.00597**	**.00129**	**36.579**	**78.278**
Stddev	1.62	.00006	.00879	.00074	2.37	.00151	.00047	.038	.082
%RSD	.81245	.63369	4.1222	1859.0	2.0848	25.293	36.436	.10495	.10495
#1	198.03	.01018	.21937	.00056	115.59	-.00704	.00162	36.606	78.336
#2	200.32	.01009	.20695	-.00048	112.23	-.00490	.00096	36.552	78.220
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00049**	**2.4795**	**.00599**	**.26150**	**-.00256**	**.02375**	**.02148**	**.03327**	**.00797**
Stddev	.00031	.0021	.00196	.00061	.00511	.00019	.00110	.00007	.00197
%RSD	63.169	.08491	32.712	.23359	199.29	.80566	5.1058	.21380	24.708
#1	-.00071	2.4780	.00738	.26194	.00105	.02388	.02225	.03322	.00658
#2	-.00027	2.4810	.00461	.26107	-.00618	.02361	.02070	.03332	.00937
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2153.0**	**48502.**	**5028.2**
Stddev	7.1	239.	8.5
%RSD	.32746	.49293	.16954
#1	2157.9	48333.	5022.2
#2	2148.0	48671.	5034.2

Sample Name: 280-97852-A-1-B Acquired: 6/7/2017 13:36:58 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375948 6010C (Se)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00064**	**.43279**	**-.00228**	**.02017**	**.01848**	**-.00030**	**-.00456**	**63.341**	**.00036**
Stddev	.00015	.01285	.00279	.00066	.00003	.00001	.00153	.501	.00038
%RSD	23.302	2.9695	122.47	3.2931	.16848	4.7077	33.621	.79050	106.69
#1	.00053	.44188	-.00030	.01970	.01846	-.00029	-.00564	62.987	.00009
#2	.00074	.42370	-.00425	.02064	.01850	-.00031	-.00348	63.695	.00063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00006**	**.00170**	**.00169**	**.36803**	**.84631**	**.00191**	**2.1586**	**.02475**	**.00686**
Stddev	.00036	.00019	.00014	.00111	.01841	.00201	.0062	.00009	.00000
%RSD	566.77	11.122	8.0600	.30109	2.1749	105.32	.28580	.35867	.02209
#1	-.00032	.00183	.00178	.36725	.83330	.00049	2.1542	.02469	.00685
#2	.00019	.00157	.00159	.36882	.85933	.00334	2.1629	.02481	.00686
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**12.922**	**.00141**	**.19842**	**-.00110**	**1.7987**	**-.00182**	**-.00550**	**4.8230**	**10.321**
Stddev	.671	.00014	.00608	.00285	.0290	.00364	.00299	.0156	.033
%RSD	5.1960	10.269	3.0631	259.97	1.6145	200.08	54.261	.32343	.32343
#1	12.448	.00151	.20272	.00092	1.8192	-.00440	-.00762	4.8120	10.298
#2	13.397	.00131	.19413	-.00311	1.7782	.00076	-.00339	4.8340	10.345
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00132**	**.12138**	**.00150**	**.01051**	**.00172**	**-.01975**	**.00176**	**.01319**	**.00114**
Stddev	.00156	.00025	.00163	.00213	.00170	.01540	.00061	.00035	.00067
%RSD	118.02	.20816	108.36	20.318	99.247	77.990	34.483	2.6395	58.561
#1	.00242	.12120	.00265	.01202	.00051	-.03064	.00219	.01344	.00067
#2	.00022	.12156	.00035	.00900	.00292	-.00886	.00133	.01295	.00161
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2264.8**	**52020.**	**4969.1**
Stddev	3.6	569.	1.8
%RSD	.15880	1.0932	.03615
#1	2267.4	52422.	4967.9
#2	2262.3	51618.	4970.4

Sample Name: CCVH-4579429 Acquired: 6/7/2017 13:40:55 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00686**	**50.173**	**-.01447**	**.00372**	**.00078**	**-.00025**	**1.0227**	**.01887**	**.00030**	**-.00144**	**.00011**	**.02537**
Stddev	.00014	.004	.00407	.00053	.00000	.00014	.0034	.00959	.00012	.00003	.00015	.00007
%RSD	2.0867	.00754	28.136	14.278	.63087	56.350	.33462	50.843	40.426	2.0809	141.06	.28623
#1	-.00696	50.170	-.01735	.00335	.00078	-.00035	1.0203	.01209	.00021	-.00142	.00021	.02542
#2	-.00676	50.176	-.01159	.00410	.00078	-.00015	1.0251	.02566	.00039	-.00146	.00000	.02532
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.195**	**.04017**	**.00098**	**.08162**	**-.00172**	**-.00197**	**257.86**	**.00172**	**.00520**	**-.00122**	**5.0090**	**-.00826**
Stddev	.132	.05191	.00024	.00283	.00003	.00085	.60	.00019	.00682	.00102	.0079	.00464
%RSD	.26227	129.22	24.158	3.4642	1.4556	43.360	.23163	11.104	131.05	83.218	.15819	56.144
#1	50.288	.07688	.00115	.08362	-.00170	-.00137	257.44	.00186	.01003	-.00195	5.0034	-.01154
#2	50.102	.00347	.00081	.07962	-.00174	-.00257	258.28	.00159	.00038	-.00050	5.0146	-.00498
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00523**	**-.00372**	**-.00796**	**-.00063**	**.00053**	**5.1023**	**.01850**	**-.00250**	W **10.581**	**.01495**	**-.00033**	**.11961**
Stddev	.00069	.00661	.01415	.00142	.00001	.0012	.00011	.00245	.016	.00115	.00078	.00198
%RSD	13.167	177.69	177.69	224.18	2.0264	.02283	.60921	97.989	.15173	7.6720	235.01	1.6556
#1	-.00475	.00095	.00204	.00037	.00053	5.1031	.01842	-.00424	10.569	.01414	-.00088	.11821
#2	-.00572	-.00840	-.01797	-.00163	.00054	5.1015	.01858	-.00077	10.592	.01576	.00022	.12101
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Warn	None	None	None
Value									10.000			
Range									5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2170.8**	**48420.**	**4716.3**
Stddev	6.0	363.	46.5
%RSD	.27441	.74866	.98559
#1	2166.6	48164.	4683.5
#2	2175.0	48677.	4749.2

Sample Name: CCV-4567764 Acquired: 6/7/2017 13:43:29 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.52140**	**.54701**	**1.0040**	**.51207**	**.50466**	**.50424**	**-.00576**	**5.1649**	**.50921**	**.51339**	**.50063**	**.52553**	**2.5774**
Stddev	.00007	.01017	.0118	.00509	.00088	.00087	.00130	.0165	.00767	.00920	.01022	.00082	.0006
%RSD	.01419	1.8595	1.1722	.99475	.17404	.17300	22.499	.31992	1.5059	1.7915	2.0410	.15676	.02426
#1	.52145	.55420	1.0123	.51567	.50404	.50486	-.00484	5.1532	.51464	.51990	.50786	.52611	2.5778
#2	.52135	.53982	.99565	.50847	.50528	.50363	-.00667	5.1766	.50379	.50689	.49341	.52495	2.5769
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**52.021**	**1.0375**	**21.332**	**.53326**	**.49487**	**5.4398**	**.51240**	**1.0205**	**1.0141**	**-.01397**	**.99829**	**1.0046**	**5.1861**
Stddev	.010	.0050	.057	.00257	.00956	.0303	.00746	.0234	.0181	.00658	.02488	.0089	.0282
%RSD	.02002	.48397	.26939	.48172	1.9317	.55755	1.4549	2.2933	1.7802	47.105	2.4923	.88526	.54298
#1	52.013	1.0410	21.373	.53508	.50163	5.4613	.51767	1.0371	1.0269	-.00932	1.0159	1.0109	5.2060
#2	52.028	1.0339	21.292	.53145	.48811	5.4184	.50713	1.0040	1.0014	-.01862	.98070	.99836	5.1661
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.098**	**1.0184**	**.50756**	**.00523**	**.51869**	**1.0336**	**.00542**	**.52612**	**.54314**	**.51058**
Stddev	.060	.0170	.00016	.00064	.00203	.0122	.02338	.00236	.00067	.00310
%RSD	.54298	1.6733	.03088	12.175	.39125	1.1790	431.60	.44802	.12357	.60741
#1	11.141	1.0305	.50744	.00478	.52013	1.0423	.02195	.52778	.54361	.50839
#2	11.056	1.0064	.50767	.00568	.51726	1.0250	-.01112	.52445	.54266	.51277
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2213.1**	**50236.**	**4723.0**
Stddev	8.6	455.	7.3
%RSD	.38730	.90556	.15402
#1	2219.2	49915.	4728.1
#2	2207.1	50558.	4717.8

Sample Name: CCB Acquired: 6/7/2017 13:45:57 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00043**	**.00405**	**-.00325**	**.00186**	**.00090**	**.00010**	**-.00652**	**.06108**	**.00041**	**-.00049**	**.00142**	**.00087**
Stddev	.00078	.00009	.00969	.00020	.00001	.00045	.00143	.07453	.00030	.00016	.00061	.00056
%RSD	181.95	2.2855	297.96	10.612	.56829	448.94	21.900	122.01	72.535	33.087	43.081	64.393
#1	.00098	.00412	-.01010	.00172	.00090	-.00022	-.00551	.00838	.00020	-.00061	.00185	.00126
#2	-.00012	.00399	.00360	.00200	.00089	.00042	-.00753	.11378	.00063	-.00038	.00099	.00047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.05756**	**.04364**	**.00128**	**.00903**	**.00048**	**-.00037**	**.15655**	**.00033**	**.00497**	**.00050**	**-.01376**	**-.00520**
Stddev	.02327	.04860	.00125	.00326	.00005	.00041	.14823	.00069	.00358	.00185	.00491	.00240
%RSD	40.420	111.35	97.581	36.151	9.9697	111.96	94.681	208.27	72.120	369.70	35.684	46.079
#1	.04111	.00928	.00040	.01134	.00045	-.00008	.05174	.00082	.00750	.00181	-.01723	-.00690
#2	.07402	.07801	.00217	.00672	.00052	-.00066	.26137	-.00016	.00243	-.00081	-.01029	-.00351
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.05000											
Low Limit	-.05000											

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00199**	**.03163**	**.06769**	**.00221**	**.00080**	**.00130**	**.00016**	**.00143**	**.02898**	**.00026**	**.00090**	**.00189**
Stddev	.00613	.00595	.01273	.00264	.00093	.00134	.00054	.00348	.08721	.00030	.00007	.00170
%RSD	307.27	18.801	18.801	119.22	116.73	103.16	334.43	242.79	300.97	111.85	8.0195	90.045
#1	-.00234	.02742	.05869	.00035	.00014	.00224	-.00022	.00389	-.03269	.00047	.00085	.00069
#2	.00633	.03583	.07668	.00407	.00146	.00035	.00054	-.00103	.09064	.00006	.00095	.00310
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2223.0**	**51533.**	**4795.0**
Stddev	4.0	15.	61.2
%RSD	.17999	.02968	1.2763
#1	2220.1	51522.	4751.8
#2	2225.8	51543.	4838.3

Sample Name: CCVL-4578237 Acquired: 6/7/2017 13:48:35 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01188**	**.11381**	**.01564**	**.10334**	**.01126**	**.00076**	**.10914**	**.23813**	**.00548**	**.01050**	F **.01388**	F **.02013**
Stddev	.00124	.00203	.00231	.00239	.00025	.00016	.00189	.00150	.00050	.00053	.00068	.00029
%RSD	10.430	1.7874	14.776	2.3114	2.1767	21.669	1.7342	.62860	9.0684	5.0087	4.8677	1.4458
#1	.01276	.11525	.01727	.10503	.01144	.00087	.11048	.23708	.00583	.01087	.01436	.02033
#2	.01101	.11237	.01400	.10165	.01109	.00064	.10781	.23919	.00513	.01012	.01340	.01992
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail
Value											.01000	.01500
Range											30.000%	30.000%

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.59815**	**3.2731**	**.02302**	F **.27355**	F **.01590**	**.01894**	**1.1184**	**.04314**	**2.9511**	**.00824**	**.08687**	**.01408**
Stddev	.00177	.0398	.00081	.07010	.00116	.00036	.0036	.00065	.0594	.00259	.00164	.00324
%RSD	.29532	1.2146	3.5155	25.627	7.3204	1.9170	.32345	1.4966	2.0115	31.464	1.8871	23.037
#1	.59690	3.2450	.02245	.32312	.01672	.01868	1.1159	.04359	2.9931	.00641	.08802	.01637
#2	.59940	3.3012	.02359	.22398	.01508	.01919	1.1210	.04268	2.9092	.01007	.08571	.01178
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.10000			.20000	.01000							
Range	30.000%			30.000%	30.000%							

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.02706**	**.54663**	**1.1698**	**.10191**	**.01056**	F **.02210**	**.01156**	**.01831**	F **.08270**	**.01146**	F **.02805**	**.01685**
Stddev	.00009	.01318	.0282	.00128	.00004	.01050	.00111	.00447	.01506	.00159	.00174	.00146
%RSD	.34216	2.4120	2.4120	1.2561	.33884	47.533	9.6033	24.397	18.208	13.878	6.2186	8.6687
#1	.02700	.53730	1.1498	.10281	.01059	.02953	.01235	.02147	.07205	.01259	.02928	.01582
#2	.02713	.55595	1.1897	.10100	.01054	.01467	.01078	.01515	.09334	.01034	.02681	.01788
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass
Value	.02000					.01500			.06000		.02000	
Range	30.000%					30.000%			30.000%		30.000%	

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2290.5**	**53050.**	**4931.3**
Stddev	4.7	134.	14.1
%RSD	.20712	.25189	.28550
#1	2293.8	53144.	4941.2
#2	2287.1	52955.	4921.3

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ICP Data Review Checklist

LIMS Batch Number(s): 376450	Filename(s): 05Z0608717.pdf	Instrument ID (circle one): ICP25 / ICP26
Analyst/1st Reviewer/Date: CR 6/7/17		Method (circle): 200.7 / 6010B / 6010C
		QC Type (circle): Standard / DoD QP / DoD Q5 / QAPP_____ / Other_____
Matrix (circle): Water / Solid / Leachate		Circle: Total / TR / PD / Dissolved

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
A. Calibration/Instrument Run QC					
1. Instrument calibrated per lab SOP?	✓			✓	
2. Reanalysis of Calibration Standards before samples: 95-105% recovery	✓			✓	
3. ICB/CCB: run before samples, 10% frequency, & closing Result < ½ RL (routine) Result < LOD/2x MDL (DoD or special project)	✓			✓	If no, list details:
4. ICV/CCV: frequency initial, 10%, & closing 90-110% recovery, 5% RSD (6010) 95-105% recovery, 3% RSD (200.7)	✓			✓	If no, listdetails:
5. ICVL/CCVL: 70-130% recovery (6010C)	✓			✓	If no, list details:
6. ICSA/ICSAB: run before samples ICSA detections for non-spiked < 2x RL (<LOD/2x MDL for DoD or special project) ICSAB for spiked elements 80-120% *If no, list analytes:*	✓			✓	☐ Results outside limits due to contamination. ☐ Concentration of affected analyte in sample is less than RL.
7. RL-level check standard (CRI): 50-150% (routine) 80-120% recovery (DoD or special projects)	✓			✓	If no, list details:
B. Client Sample and QC Sample Results					
1. Samples with target element concentrations > 90% linear range diluted and reanalyzed? (200.7)	✓			✓	Comments:
2. Were all hits reported from a run with interfering elements < linear range? (L Flags investigated?)	✓			✓	Comments:
3. Internal standard (IS) response ± 30% of ICB IS? *If no, list details:*	✓			✓	☐ High IS response. Sample(s) rerun at dilution. ☐ Low IS response. Sample(s) rerun at dilution.
C. Preparation/Matrix QC					
1. Method Blank: one per preparation batch result < ½ RL (routine)	✓			✓	☐ No analyte > RL in associated samples ☐ Sample results >10x blank ☐ Insufficient sample for reanalysis
2. LCS: one per preparation batch 80-120% recovery or historical (routine) 85-115% recovery or historical (200.7); project limits (other)	✓			✓	☐ Insufficient sample for reanalysis ☐ LCS %R > QC limits & samples < RL
3. MS/MSD or MS/Dup frequency: a pair per batch (routine) a pair per 10 samples (200.7)	✓			✓	☐ Insufficient sample – LCS/LCSD analyzed
C. Preparation/Matrix QC (cont.)					
4. MS/MSD recovery & RPD: 75-125% recovery or historical (routine) 70-130% recovery or historical (200.7) 20% RPD project limits (other)	✓			✓	☐ LCS acceptable – matrix effects ☐ Native analyte > 4x spike level ☐ Matrix effect and native analyte > 4xspike

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Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
5. If TCLP MS <50% and sample result 80-100% of toxicity characteristic limit, was MSA run?	✓			✓	Comments:
6. Serial dilution: present for each prep batch (routine) Required if MS/MSD fail (DoDVS) run at 5x dilution of parent sample ≤ 10% difference	✓			✓	☐ Sample result < 50 x MDL
7. Post digestion spike: Required if MS/MSD fail (DoD and 6010C) or by client request 75-125% recovery	✓			✓	
D. Raw Data & TALS Data Entry	✓				
1. TALS Sample List Tab	✓			✓	
a. LIMS Sample IDs / Containers are correct	✓			✓	
b. Method and matrix are correct	✓			✓	
c. Date and time are correct	✓			✓	
d. Dilutions are correct	✓			✓	
e. Correct suffix designated; e.g., DU, (where applicable)	✓			✓	
2. TALS Sample Results Tab	✓				
a. All reported analytes are marked Primary or Secondary	✓			✓	
b. All unused data are marked Rejected or Accepted. Unused data are clearly identified with reason not used	✓			✓	
c. Out of control QC is clearly identified	✓			✓	
d. Any data that has a qualifier is reviewed with appropriate action taken (NCM if needed)	✓			✓	
e. The attached data file includes the filename, instrument, and analyst initials	✓			✓	
3. TALS Worksheet Tab is complete and correct	✓			✓	
4. TALS Reagent Tab is complete and correct	✓			✓	
5. TALS QC Links Tab is correct	✓			✓	
6. TALS Batch Information Screen documentation is complete	✓			✓	
7. TALS Status set to appropriate review level	✓			✓	
E. Final Report and NCMs (2nd level review only)					
1. Were all job/project requirements met?				✓	
2. Results for samples and QC correct on final report?				✓	
3. Are all necessary scanned documents in TALS?				✓	
4. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?				✓	
5. Raw Data PDF attached as document				✓	

Comments: _____

2nd Reviewer: _____ Review Date: 6/7/17

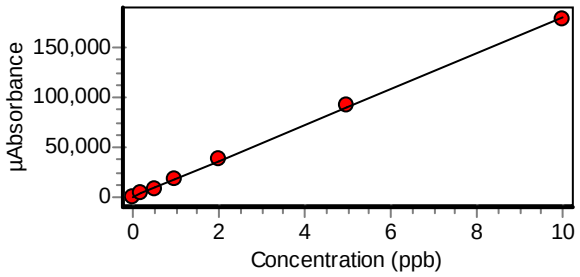
Report Generated By CETAC QuickTrace
Analyst: henningc
Worksheet file: C:\Program Files\QuickTrace\Worksheets\2017\6-Jun\170606aa.wsz
Date Started: 6/6/2017 12:15:33 PM
Comment:

Results

Sample Name	Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags	Wt.	Vol.	ODF
Std0	STD	06/06/17 01:42:47 pm	0.000	903	4.41		1.00	1.00	1.00
Std1 4576301	STD	06/06/17 01:44:59 pm	0.200	4391	0.59		1.00	1.00	1.00
Std2 4576302	STD	06/06/17 01:47:13 pm	0.500	9309	2.39		1.00	1.00	1.00
Std3 4576303	STD	06/06/17 01:49:26 pm	1.000	18106	1.56		1.00	1.00	1.00
Std4 4576304	STD	06/06/17 01:51:41 pm	2.000	37810	1.84		1.00	1.00	1.00
Std5 4576305	STD	06/06/17 01:53:56 pm	5.000	92804	1.96		1.00	1.00	1.00
Std6 4576306	STD	06/06/17 01:56:11 pm	10.000	178485	0.49		1.00	1.00	1.00

Calibration

Equation: A = 1109.851 + 17863.040C
R2: 0.99963
SEE: 1385.3960
Flags:



ICV 4576299		ICV	06/06/17 02:03:08 pm	3.981	72218	0.55	1.00	1.00	1.00
% Recovery	99.52								
ICB		ICB	06/06/17 02:05:20 pm	-0.008	961	3.28	1.00	1.00	1.00
CRA 4576300		CRDL	06/06/17 02:07:33 pm	0.189	4492	3.81	1.00	1.00	1.00
% Recovery	94.66								

Sample Name	Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags	Wt.	Vol.	ODF
CCV 4576298	CCV	06/06/17 02:09:48 pm	4.731	85619	3.30		1.00	1.00	1.00
% Recovery 94.62									
CCB	CCB	06/06/17 02:12:00 pm	-0.014	863	3.58		1.00	1.00	1.00
MB 280-376181/1-A	UNK	06/06/17 02:14:12 pm	-0.006	1010	2.89		1.00	1.00	1.00
280-97588-A-1-A MDLV	UNK	06/06/17 02:16:25 pm	0.145	3701	1.14		1.00	1.00	1.00
280-97588-A-2-A MDLV	UNK	06/06/17 02:18:37 pm	0.152	3822	0.44		1.00	1.00	1.00
280-97588-A-3-A LOQV	UNK	06/06/17 02:22:39 pm	0.166	4080	3.62		1.00	1.00	1.00
MB 280-376183/1-A	UNK	06/06/17 02:24:52 pm	-0.003	1062	3.76		1.00	1.00	1.00
LCS 280-376183/2-A	UNK	06/06/17 02:27:06 pm	3.678	66801	0.98		1.00	1.00	1.00
280-97775-D-1-A	UNK	06/06/17 02:29:20 pm	0.355	7454	0.05		1.00	1.00	1.00
280-97854-A-1-D	UNK	06/06/17 02:31:34 pm	1.779	32890	0.13		1.00	1.00	1.00
280-97803-C-1-B	UNK	06/06/17 02:33:48 pm	0.210	4866	0.38		1.00	1.00	1.00
280-97803-C-1-B SD@5	UNK	06/06/17 02:36:03 pm	0.039	1812	1.61		1.00	1.00	1.00
CCV 4576298	CCV	06/06/17 02:38:18 pm	5.463	98704	0.40		1.00	1.00	1.00
% Recovery 109.27									
CCB	CCB	06/06/17 02:40:30 pm	-0.008	966	0.21		1.00	1.00	1.00
280-97803-C-1-C MS	UNK	06/06/17 02:42:45 pm	4.545	82295	0.26		1.00	1.00	1.00
280-97803-C-1-D MSD	UNK	06/06/17 02:45:00 pm	4.518	81809	0.08		1.00	1.00	1.00
280-97803-C-1-B PDS	UNK	06/06/17 02:47:12 pm	3.482	63309	0.28		1.00	1.00	1.00

Sample Name	Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags	Wt.	Vol.	ODF
280-97803-C-4-B	UNK	06/06/17 02:49:24 pm	0.288	6258	0.17		1.00	1.00	1.00
280-97803-A-5-C	UNK	06/06/17 02:51:36 pm	0.196	4618	0.21		1.00	1.00	1.00
280-97803-A-6-C	UNK	06/06/17 02:53:49 pm	0.312	6682	0.28		1.00	1.00	1.00
280-97803-A-7-C	UNK	06/06/17 02:56:01 pm	0.064	2249	0.08		1.00	1.00	1.00
280-97803-A-8-C	UNK	06/06/17 02:58:15 pm	0.131	3456	0.11		1.00	1.00	1.00
280-97803-A-9-C	UNK	06/06/17 03:00:28 pm	0.053	2052	1.28		1.00	1.00	1.00
280-97803-A-10-C	UNK	06/06/17 03:02:42 pm	0.200	4684	0.30		1.00	1.00	1.00
CCV 4576298	CCV	06/06/17 03:04:57 pm	5.521	99723	0.07		1.00	1.00	1.00
% Recovery 110.41									
CCB	CCB	06/06/17 03:07:09 pm	-0.007	990	0.73		1.00	1.00	1.00
280-97803-A-11-C	UNK	06/06/17 03:09:23 pm	0.194	4574	0.21		1.00	1.00	1.00
280-97803-A-12-C	UNK	06/06/17 03:11:37 pm	0.253	5637	0.23		1.00	1.00	1.00
280-97803-A-13-C	UNK	06/06/17 03:13:52 pm	0.314	6722	0.13		1.00	1.00	1.00
280-97803-A-14-C	UNK	06/06/17 03:16:06 pm	0.288	6252	0.18		1.00	1.00	1.00
280-97829-C-1-D	UNK	06/06/17 03:18:18 pm	0.248	5546	0.50		1.00	1.00	1.00
280-97829-C-3-B	UNK	06/06/17 03:20:30 pm	0.068	2317	0.38		1.00	1.00	1.00
280-97829-C-4-B	UNK	06/06/17 03:22:43 pm	0.284	6186	0.13		1.00	1.00	1.00
280-97829-C-5-B	UNK	06/06/17 03:24:55 pm	0.367	7674	0.16		1.00	1.00	1.00

Sample Name	Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags	Wt.	Vol. ODF
280-97829-C-6-B	UNK	06/06/17 03:27:08 pm	0.213	4908	0.09		1.00	1.00 1.00
MB 280-376184/1-A	UNK	06/06/17 03:29:21 pm	0.001	1135	0.41		1.00	1.00 1.00
CCV 4576298	CCV	06/06/17 03:31:36 pm	5.502	99391	0.05		1.00	1.00 1.00
% Recovery 110.04								
CCB	CCB	06/06/17 03:33:48 pm	-0.003	1048	0.37		1.00	1.00 1.00
LCS 280-376184/2-A	UNK	06/06/17 03:36:02 pm	4.393	79588	0.88		1.00	1.00 1.00
280-97829-B-7-B	UNK	06/06/17 03:38:16 pm	0.149	3771	0.17		1.00	1.00 1.00
280-97829-B-7-B SD@5	UNK	06/06/17 03:40:30 pm	0.031	1661	0.38		1.00	1.00 1.00
280-97829-B-7-C MS	UNK	06/06/17 03:42:44 pm	4.635	83906	0.32		1.00	1.00 1.00
280-97829-B-7-D MSD	UNK	06/06/17 03:44:58 pm	4.608	83425	0.17		1.00	1.00 1.00
280-97829-B-7-B PDS	UNK	06/06/17 03:47:13 pm	3.394	61735	0.28		1.00	1.00 1.00
280-97829-A-8-B	UNK	06/06/17 03:49:26 pm	0.160	3975	0.11		1.00	1.00 1.00
280-97829-C-9-B	UNK	06/06/17 03:51:38 pm	0.146	3720	0.19		1.00	1.00 1.00
280-97829-A-10-B	UNK	06/06/17 03:53:50 pm	0.136	3539	0.78		1.00	1.00 1.00
280-97829-A-11-B	UNK	06/06/17 03:56:03 pm	0.049	1990	1.06		1.00	1.00 1.00
CCV 4576298	CCV	06/06/17 03:58:18 pm	5.494	99247	0.16		1.00	1.00 1.00
% Recovery 109.88								
CCB	CCB	06/06/17 04:00:30 pm	-0.007	981	0.90		1.00	1.00 1.00
280-97829-A-12-B	UNK	06/06/17 04:02:43 pm	0.037	1779	0.22		1.00	1.00 1.00

Sample Name	Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags	Wt.	Vol.	ODF
280-97829-A-13-B	UNK	06/06/17 04:04:56 pm	0.397	8200	0.28		1.00	1.00	1.00
280-97829-A-14-B	UNK	06/06/17 04:07:09 pm	0.324	6898	0.11		1.00	1.00	1.00
280-97829-B-15-B	UNK	06/06/17 04:09:23 pm	0.207	4815	0.03		1.00	1.00	1.00
280-97829-A-16-B	UNK	06/06/17 04:11:37 pm	0.214	4935	0.04		1.00	1.00	1.00
280-97829-A-17-B	UNK	06/06/17 04:13:51 pm	0.212	4899	0.12		1.00	1.00	1.00
280-97829-B-19-A	UNK	06/06/17 04:16:06 pm	0.231	5231	0.11		1.00	1.00	1.00
280-97829-A-20-B	UNK	06/06/17 04:18:21 pm	0.141	3620	0.23		1.00	1.00	1.00
280-97829-B-21-B	UNK	06/06/17 04:20:33 pm	0.082	2575	0.34		1.00	1.00	1.00
280-97829-A-22-B	UNK	06/06/17 04:22:46 pm	0.058	2148	0.10		1.00	1.00	1.00
CCV 4576298	CCV	06/06/17 04:25:01 pm	5.493	99228	0.06		1.00	1.00	1.00
% Recovery 109.86									
CCB	CCB	06/06/17 04:27:13 pm	-0.007	990	0.21		1.00	1.00	1.00
280-97829-A-23-D	UNK	06/06/17 04:29:25 pm	0.170	4144	0.88		1.00	1.00	1.00
280-97829-A-24-B	UNK	06/06/17 04:31:38 pm	0.096	2834	0.14		1.00	1.00	1.00
280-97829-C-25-B	UNK	06/06/17 04:33:51 pm	0.134	3510	0.57		1.00	1.00	1.00
280-97829-A-26-B	UNK	06/06/17 04:36:04 pm	0.213	4910	0.21		1.00	1.00	1.00
280-97829-A-27-B	UNK	06/06/17 04:40:39 pm	0.231	5239	0.25		1.00	1.00	1.00
CCV 4576298	CCV	06/06/17 04:42:54 pm	5.508	99492	0.15		1.00	1.00	1.00
% Recovery 110.15									

Sample Name	Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags	Wt.	Vol. ODF
CCB	CCB	06/06/17 04:45:06 pm	-0.007	992	0.60		1.00 1.00	1.00

Analysis Parameters

Instrument M-7500 Mercury Analyzer

Conditions

Gas flow (mL/min)	Sample Uptake (s)	Rinse (s)	Read delay (s)	Replicates (#)	Replicate time (s)	Pump speed (%)	Wavelength (nm)
100	35.00	90.00	56.00	4	1.50	50	253.65

ASX Pump Rate (%)
100

Instrumental Zero

Zero before first sample: No

Zero periodically: Yes

Before each calibration.

Baseline Correction

#1 Start time (s)	#1 End time (s)	#2 Start time (s)	#2 End time (s)
20.00	24.00		

Standby Mode

Enabled: Yes

Standby Options: pump off, gas off

Autodilution

Enabled: No

Condition:

Tube # range:

If no autodilution tubes remaining

Calibration

Settings

Algorithm	Through blank	Weighted fit	Cal. Type	Racalibration rate	Reslope rate	Reslope standard
Linear	No	No	Normal	0	0	N/A

Limits

Calibration slope		Reslope		Coeff. of Determination
Lower (%)	Upper (%)	Lower (%)	Upper (%)	
20	150	75	125	0.99500

Error action: Flag and continue

QC

GLP Override: Yes

QC Tests

CCB

Concentration (ppb)
0.1000

Failure flag: Q

Error action for manually inserted QC: Stop analysis

ICB

Concentration (ppb)
0.0500

Failure flag: Z

Error action for manually inserted QC: Stop analysis

CCV

Concentration (ppb)	Low Limit %	High Limit %
5.0000	80.0000	120.0000

Failure flag: Q

Error action for manually inserted QC: Stop analysis

ICV

Concentration (ppb)	Low Limit %	High Limit %
4.0000	94.6000	110.4000

Failure flag: Q

Error action for manually inserted QC: Stop analysis

CRDL

Concentration (ppb)	Low Limit %	High Limit %
0.2000	50.0000	150.0000

Failure flag: Y

Error action for manually inserted QC: Stop analysis

TestAmerica *Denver*

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Hg Data Review Checklist

LIMS Batch Number: 376375/376376	Filename: 170606 aa/a6	Instrument ID (circle one): (033) 034
Analyst/1st Reviewer/Date: Chris Henning 06/07/17	Method (circle): 245.1 7470A (7471A)	QC Type (circle): (Standard) DoD Q4 (DoD Q5) QAPP_____ Other_____
Matrix (circle): Water (Solid) Leachate		Circle: (Total) PD Dissolved

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
A Calibration/Instrument Run QC					
1. Calibrated with at least 5 standards and a blank	✓			✓	
2. Linearity and Intercept: r ≥ 0.995 |x-intercept| < RL or < ½ RL (special projects)	✓			✓	
4. ICV: run before samples 95-105% recovery (245.1) 90-110% recovery (7470A/7471A)	✓			✓	If no, list details:
5. CCV: run before samples, 10% frequency & closing 90-110% recovery (245.1 & 7470A) 80-120% recovery (7471A)	✓			✓	If no, list details:
6. ICB/CCB: run before samples, 10% frequency, & closing Result < ½ RL (routine) Result < LOD (DoD or special project)	✓			✓	If no, list details:
7. RL-level check standard 50-150% recovery (routine) 80-120% recovery (DoD)	✓			✓	If no, list details:
B Client Sample and QC Sample Results					
1. Samples with results > linear range diluted and reanalyzed?			✓	✓	Comments:
C Preparation/Matrix QC					
1. Method Blank: one per preparation batch result < ½ RL (routine)	✓			✓	□ No analyte > RL in associated samples □ Sample results >10x blank □ Insufficient sample for reanalysis
2. LCS one per preparation batch Historical (routine) 85-115% recovery (245.1) Other (DoD or client specific)	✓			✓	□ Insufficient sample for reanalysis □ LCS %R > QC limits & samples < RL
3. MS/MSD or MS/Dup frequency: a pair per batch (routine) a pair per 10 samples (245.1)	✓			✓	□ Insufficient sample
4. MS/MSD recovery & RPD: 75-125% or historical 70-130% (245.1) 20% RPD	✓			✓	□ LCS acceptable – matrix effects □ Native analyte > 4x spike level □ Matrix effect and native analyte > 4x spike
5. If TCLP MS <50% and sample result 80-100% of toxicity characteristic limit, was MSA run?			✓	✓	Comments:
6. Serial dilution: Required only for DoD and only if MS/MSD fail run at 5x dilution of parent sample ≤ 10% difference *If no, list details:*	✓			✓	□ Sample result < 50 x RL

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
C. Preparation/Matrix QC (continued)					
7. Post digestion spike: Required only for DoD and only if MS/MSD fail 80-120% recovery *If no, list details:*	✓			✓	
D. Raw Data & TALS Data Entry					
1. TALS Sample List Tab					
a. LIMS Sample IDs / Containers are correct	✓			✓	
b. Method and matrix are correct	✓			✓	
c. Date and time match raw data	✓			✓	
d. Dilutions are correct	✓			✓	
e. Correct suffix designated (where applicable)			✓	✓	
2. TALS Sample Results Tab					
a. All reported analytes are marked Primary or Secondary	✓			✓	
b. All unused data are marked Rejected or Accepted. Unused data are clearly identified with reason not used	✓			✓	
c. Out of control QC is clearly identified			✓	✓	
d. Any data that has a qualifier is commented on with appropriate action taken (NCM if needed)			✓	✓	
e. The attached data file includes the filename, instrument, and analyst initials	✓			✓	
3. TALS Worksheet Tab is complete and correct	✓			✓	
4. TALS Reagent Tab is complete and correct	✓			✓	
5. TALS QC Links Tab is correct	✓			✓	
6. TALS Batch Information Screen documentation is complete	✓			✓	
7. TALS Status set to appropriate review level	✓			✓	
E. Final Report and NCMs (2nd level review only)					
1. Were all job/project requirements met?				✓	
2. Results for samples and QC correct on final report?				✓	
3. Are all necessary scanned documents in TALS?				✓	
4. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?				✓	
5. Raw Data PDF attached as document				✓	

Comments: 2

2nd Reviewer: [signature] **Review Date:** ~~6/7/17~~ 06/7/17 6/7/17

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-97803-1

SDG No.:

Project: Griffiss AFB, NY - SS025

Client Sample ID	Lab Sample ID
SS025-SS01	280-97803-1
SS025-SS02	280-97803-4
SS025-SB02(0-2)	280-97803-5
SS025-SS03	280-97803-6
SS025-SB03(0-2)	280-97803-7
SS025-SS04	280-97803-8
SS025-SB04(0-2)	280-97803-9
SS025-SS05	280-97803-10
SS025-SB05(0-2)	280-97803-11
SS025-SB05(2-4)	280-97803-12
SS025-SS06	280-97803-13
SS025-SS06-a	280-97803-14

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-97803-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture LOQ Date: 11/01/2009 00:00

Analyte	Wavelength/ Mass	LOQ (%)	
Percent Moisture		0.1	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 06/02/2017 16:26 End Date: 06/02/2017 16:26

Lab Sample Id	D/F	Type	Time	Analytes																								
				Moist																								
ZZZZZZ			16:26																									
ZZZZZZ			16:26																									
ZZZZZZ			16:26																									
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280-97803-1	1	T	16:26	X																								
280-97803-4	1	T	16:26	X																								
280-97803-5	1	T	16:26	X																								
280-97803-6	1	T	16:26	X																								
280-97803-7	1	T	16:26	X																								
280-97803-8	1	T	16:26	X																								
280-97803-9	1	T	16:26	X																								
280-97803-10	1	T	16:26	X																								
280-97803-10 DU	1	T	16:26	X																								
280-97803-11	1	T	16:26	X																								
280-97803-12	1	T	16:26	X																								
280-97803-13	1	T	16:26	X																								
280-97803-14	1	T	16:26	X																								
ZZZZZZ			16:26																									
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 06/02/2017 16:26 End Date: 06/02/2017 16:26

Lab Sample Id	D/F	Type	Time	Analytes																								
				Moist																								
ZZZZZZ			16:26																									
ZZZZZZ			16:26																									
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Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 376001 Batch Start Date: 06/02/17 16:25 Batch Analyst: McElroy, John B

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry	AnalysisComment	
280-97803-C-1	SS025-SS01	Moisture	T	14	1.29 g	16.68 g	14.09 g		
280-97803-C-4	SS025-SS02	Moisture	T	15	1.28 g	16.99 g	14.60 g		
280-97803-A-5	SS025-SB02(0-2)	Moisture	T	16	1.31 g	16.36 g	13.71 g		
280-97803-A-6	SS025-SS03	Moisture	T	17	1.30 g	15.77 g	12.11 g		
280-97803-A-7	SS025-SB03(0-2)	Moisture	T	18	1.30 g	16.40 g	14.31 g		
280-97803-A-8	SS025-SS04	Moisture	T	19	1.28 g	16.71 g	15.17 g		
280-97803-A-9	SS025-SB04(0-2)	Moisture	T	20	1.32 g	15.76 g	13.19 g		
280-97803-A-10	SS025-SS05	Moisture	T	21	1.29 g	15.78 g	13.87 g		
280-97803-A-10 DU	SS025-SS05	Moisture	T	22	1.28 g	16.47 g	14.52 g		
280-97803-A-11	SS025-SB05(0-2)	Moisture	T	23	1.31 g	16.17 g	14.06 g		
280-97803-A-12	SS025-SB05(2-4)	Moisture	T	24	1.29 g	16.24 g	14.77 g	rocky	
280-97803-A-13	SS025-SS06	Moisture	T	25	1.28 g	16.05 g	14.14 g		
280-97803-A-14	SS025-SS06-a	Moisture	T	26	1.31 g	15.77 g	13.86 g		

Batch Notes	
Balance ID	24950432 No Unit
Batch Comment	JM trained by PH
Date and Time Samples in Desiccator	6/3/17 1305 JM
Date and Time Samples out of Desiccator	6/3/17 1409 JM
Date samples were placed in the oven	6/2/17 JM
Oven Temp In	103 Degrees C
Time samples were place in the oven	1740 JM
Date samples were removed from oven	6/3/17 JM
Oven Temp Out	103 Degrees C
Time Samples were removed from oven	1305 JM
Oven ID	F
Thermometer ID	227-694
Uncorrected In Temperature	103 Celsius
Uncorrected Out Temperature	103 Celsius

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97803-1

SDG No.:

Batch Number: 376001 Batch Start Date: 06/02/17 16:25 Batch Analyst: McElroy, John B

Batch Method: Moisture Batch End Date:

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

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Gravimetric-Solids Data Review Checklist

LIMS Batch Number: 376001		Instrument ID: Balance
Analyst/1st Reviewer/Date: J.B. McElroy 6-3-17	Method: % Moisture	QC Type (circle): Standard LCSD DOD Q4 DoDQ5 QAPP_____ Other_____
Method (circle): 2540B 2540C 2540D 160.4 1664A 1664B 9071 D5057 D1429 D2216		
Matrix (circle): Water Solid Waste		

Review Items	Yes	No	NA	2nd rev	If No, why is data reportable?
A. Balance, Oven and DI water Checks					
Was the balance calibration verified before and after processing samples and noted in the "Balance Calibration Log" for the date(s) the samples were processed?	✓			✓	
Was the daily conductivity check of the deionized water recorded in the "Conductivity Logbook"?			✓	✓	
Temps. within the required temperature of the method: % Moisture: 100°C ± 5°C % Vol. 103°C - 105°C % Solids, TS, TSS, TVSS, VSS 103°C - 105°C TDS 180°C ± 2°C %Vol, TVSS, VSS 550°C ± 50°C Other:_____ _____	✓			✓	
B. Method Requirements					
QC Batch contains no greater than 20 samples?	✓			✓	
If sample is visibly oily, was this noted on the benchsheet?			✓	✓	
Was final residue weight within minimum/maximum requirements?	✓			✓	
Were the initial and final drying dates and times recorded on the benchsheet/TALS and were all samples dried for at least one hour?	✓			✓	
C. Preparation/ Matrix QC					
Matrix Duplicate (RPD ± 5 %) (If > 5 %, determine corrective per SOP.) The RPD limit of 5% applies to TSS, TDS and TS, 20% RPD for all others	✓			✓	
Method blank < ½ RL or all reported samples > 10 X RL? - **(HEM, SGT HEM, and TDS the MB <RL)**			✓	✓	
LCS/LCSD run for batch and within QC limits?			✓	✓	
D. Preparation/ Matrix QC					
TDS/Conductivity ratio or historical data checked?			✓	✓	
For % Moisture, was the Final Dried Weight < the Initial Pan Weight or is the result greater than 100%?	✓			✓	
Were sample analyses done within holding time? **If no, create HTV NCM. NCM#**	✓			✓	
Were special client requirements met?			✓	✓	
Were data that were manually transcribed from instrument printouts into TALS verified 100% including dilution factors, significant figures and units?	✓			✓	
Do the prep and analysis dates in TALS reflect the actual dates?	✓			✓	
STD/True Value information is updated and included?	✓			✓	

TestAmerica Denver

Review Items	N/A	Yes	No	2nd rev	If No, why is data reportable?
F. Data and TALS review					
1. Raw Data					
a. Unused data is clearly identified with reason not used	✓			✓	
b. All cross outs are initialed and dated	✓			✓	
c. Raw data includes the method, date, and analyst initials/signature		✓		✓	
2. TALS Samples Tab				✓	
a. LIMS Sample IDs / Containers are correct		✓		✓	
b. Method and matrix are correct		✓		✓	
c. Date and time match raw data		✓		✓	
d. Dilutions are correct	✓	✓		✓	
e. Correct suffix (DU, MS, MSD) designated (where applicable)		✓		✓	
3. TALS Worksheet Tab is complete and correct (Initial Amount, Final Amount, pH, etc.)		✓		✓	
4. TALS Reagent Tab is complete and correct and properly associated with QC samples. Confirm that reagent amounts are correct. If reagents are new verify that the correct COA has been attached to the source standard	✓			✓	
5. TALS QC Links Tab is correct		✓		✓	
6. TALS Sample Results Tab					
a. All unused data are marked Rejected or Accepted	✓			✓	
b. Set status for samples based on QC and sample results info (i.e., set to primary analysis with passing QC or reject samples without passing QC or samples that are over-range.)		✓		✓	
c. Any data that has a qualifier is commented on with appropriate action taken	✓			✓	
7. TALS Batch Information Screen documentation is complete		✓		✓	
8. Historical Data Checker: Check historical data. Print charts for outliers. Take corrective action as is appropriate	✓			✓	
9. TALS Status set to appropriate review level		✓		✓	
E. Final Report and NCMs (2nd level review only)					
1. Were all job/project requirements met?				✓	
2. Results for samples and QC correct on final report?				✓	
3. Are all necessary scanned documents in TALS?				✓	
4. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?				✓	

Comments: Reviewed for 1st level accuracy by PB

2nd Reviewer: _____ Review Date: _____

Shipping and Receiving Documents

Revised COC
Received 6/2/17 NCB

0.6.1.6.3.4 IR# 7cc Transfer IRP 6-1-17

bhate ENVIRONMENT & INFRASTRUCTURE
1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

Chain of Custody and Analytical Request

Page 1 of 2

Project No: [illegible]

TDF Number: 05-31-2017-C1

EMS Number:

TA# 280:58823

Facility Base ID: Former Griffiss Air Force Base

Project Site Name: Site SS025 Supplemental Investigation

Client Name: Air Force Civil Engineer Center (AFCEC)

Collected by: Dustin McNeil Stephen Liberatore

Field Sample ID / Client Sample Name	Field Collection Information	Date Collected (Month/Day/Year)	Sample Depth (Interval in Feet)	Matrix	Sample Volume	Sample Type	Sample Analyses Requested: VOCs by 8260C	PAHs by 8270D SIM	Pb by 6010C/7000B SIM	Cr VI by 7196A SIM	Quality Assurance Samples	Comments
SS025-SS01	05/31/17	1100	2' - 3'	N	1	SO	6	X	X	X	X	
TB-01	5/31/17	1100		TB	1	WQ	2	X				
~~SS025-SB01(02)~~	~~5/31/17~~	~~1130~~	~~0' - 2'~~	~~N~~	~~1~~	~~SO~~	~~6~~	~~X~~	~~X~~	~~X~~	~~X~~	DM - not submitted (chain 5)
SS025-AB-053117	5/31/17	1240		AB	1	WQ	2		X			
SS025-SS02	5/31/17	1250	2' 3'	N	1	SO	6	X	X	X	X	
SS025-SB02(02)	5/31/17	1310	0' 2'	N	1	SO	5	X	X	X	X	
SS025-SS03	5/31/17	1325	2' 3'	N	1	SO	6	X	X	X	X	
SS025-SB03(02)	5/31/17	1340	0' 2'	N	1	SO	6	X	X	X	X	
SS025-SS04	5/31/17	1400	2' 3'	N	1	SO	6	X	X	X	X	
SS025-SB04(02)	5/31/17	1410	0' 2'	N	1	SO	6	X	X	X	X	
SS025-SS05	5/31/17	1430	2' 3'	N	1	SO	6	X	X	X	X	

280-97803 Chain of Custody

COMMENTS: 3 Cooler Shipment, VOCs - Trip Blank - Ambient blank in one cooler

Custody Transfers Prior to Receipt by Laboratory

Relinquished by	Date	Time	Received by	Date	Time
[signature]	05/31/17	1715	Paul Pitt	6-1-17	0855

Sample Delivery Details - Laboratory Receipt

Delivered By (Courier): Signature:

Method of Shipment: Airbill Number:

Shipped Date: Delivery Location:

Lab Receipt: Delivery Date, Time:

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bhate ENVIRONMENT & INFRASTRUCTURE
1616 14th Avenue South, Suite 400
Birmingham, Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

Chain of Custody and Analytical Request

Page 2 of 2

Project No.

Work Number: 055-311-3047-02

EDD Number:

TAT: 3 Weeks

Facility/Base Name	Former Griffiss Air Force Base
Project Site Name	Site SS025 Supplemental Investigation
Client Name	Air Force Civil Engineer Center (AFCEC)
Client Contact	Dustin McNeil / Stephen Liberatore

Sample Matrix Required | Analysis Requested

Field Sample ID / Laboratory Sample ID	Date Collected (mm/dd/yyyy)	Time Collected (military time)	Sample Depth (feet below ground surface)	Type	Grab/Composite	Sample Volume											
SS025-SB05(0-2)	05/31/2017	1440	0 - 2'	N	1	50	6	X	X	X	X						
SS025-SB03(2-4)	05/31/2017	1500	2 - 4'	N	1	50	6	X	X	X	X						
SS025-SB06	05/31/2017	1540	2' - 3'	N	1	50	6	X	X	X	X						
SS025-SB04-FD	05/31/2017	1540	2' - 3'	FD	1	50	6	X	X	X	X						

Comments: 3 Cooler Shipment, VOCs - Trip Blank - Ambient Blank in one cooler

Sample Relinquished by / Affiliation / Date / Time: [signature] 5/31/17 1645

Sample Received by / Affiliation / Date / Time: [signature] 6-1-17 0830

Sample Delivery Method / Airbill Number / Temperature Upon Receipt

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0.6, 1.6, 3.4 IRP 700 Transfer RP 6-1-17

bhate ENVIRONMENT & INFRASTRUCTURE

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

Chain of Custody and Analytical Request

Project No: AFCGSA3.0012.00AA.2020.0003

COC Number(1): 05-31-2017-01

LIMS Number:

TA# 28015823

Facility/Base I.D.: Former Griffiss Air Force Base

Project/Site Name: Site SS025 Supplemental Investigation

Client Name: Air Force Civil Engineer Center (AFCEC)

Collected by: Dustin McNeil / Stephen Liberatore

Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of Containers	VOC (8260B)	PAH (8270D SIM)	PCB/Pest (8082A/8081B)	TAL Metals (6010C/7471A)					Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
SS025-SS01	05/31/17	1100	2" - 3½"	N	1	SO	6	X	X	X	X								
TB-01	05/31/17	1100	-	TB	1	WQ	2	X											
~~SS025-SB01(02)~~	~~5/31/17~~	~~1130~~	~~0' - 2'~~	~~N~~	~~1~~	~~SO~~	~~6~~	~~X~~	~~X~~	~~X~~	~~X~~						DM - not submitted (utility fail)		
SS025-AB-053117	5/31/17	1240		AB	1	WQ	2		X										
SS025-SS02	5/31/17	1250	2" 3"	N	1	SO	6	X	X	X	X								
SS025-SB02(02)	5/31/17	1310	0' - 2'	N	1	SO	6	X	X	X	X								
SS025-SS03	5/31/17	1325	2" - 3"	N	1	SO	6	X	X	X	X								
SS025-SB03(02)	5/31/17	1340	0' - 2'	N	1	SO	6	X	X	X	X								
SS025-SS04	5/31/17	1400	2" - 3"	N	1	SO	6	X	X	X	X								
SS025-SB04(02)	5/31/17	1410	0' - 2'	N	1	SO	6	X	X	X	X								
SS025-SS05	5/31/17	1430	2" - 3"	N	1	SO	6	X	X	X	X								

280-97803 Chain of Custody

COMMENTS: 3 Cooler Shipment, VOCs - Trip Blank - Ambient blank in one cooler

Custody Transfers Prior to Receipt by Laboratory

	Relinquished by (Signed)	Date	Time	Received by (signed)	Date	Time
1.	[signature]	05/31/17	1715	1. [signature]	6-1-17	0850
2.				2.		
3.				3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped No.:

Method of Shipment: Airbill Number:

Analytical Lab: Delivery Location:

Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each

6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 101099001 in the Equipment Blank Lot Control

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Chain of Custody and Analytical Request

Project No: AFCGSA3.0012.00AA.2020.0003

COC Number(1): 05-31-2017-02

LIMS Number:

TA# 28015823

Facility/Base I.D.: Former Griffiss Air Force Base

Project/Site Name: Site SS025 Supplemental Investigation

Client Name: Air Force Civil Engineer Center (AFCEC)

Collected by: Dustin McNeil / Stephen Liberatore

Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	VOC (8260B)	PAH (8270D SIM)	PCB/Pest (8082A 8081B)	TAL Metals (6010C 7471A)					Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
SS025-SB05(02)	05/31/2017	1440	0' - 2'	N	1	SO	6	X	X	X	X								
SS025-SB05(24)	05/31/2017	1500	2' - 4'	N	1	SO	6	X	X	X	X								
SS025-SS06	05/31/2017	1540	2" - 3"	N	1	SO	6	X	X	X	X								
SS025-SS06-a	05/31/2017	1540	2" 3"	FD	1	SO	6	X	X	X	X								
			-																
			-																
			-																
			-																
			-																
			-																
			-																

Sample Analysis Requested (5) | Quality Assurance Samples (6)

COMMENTS: 3 Cooler Shipment, VOCs-Trip Blank-Ambient Blank in one cooler

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received By (Signed)	Date	Time
1.	[signature]	5/31/17	1715	[signature]	6-1-17	0850
2.						
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: _____ Shipped No.: _____

Method of Shipment: _____ Airbill Number: _____

Analytical Lab: _____ Delivery Location: _____

Lab Recipient: _____ Delivery Date Time: _____

1.) Chain of Custody Number = date collected + custody number (e.g. 090812-1009-01)

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc.), SQ = Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each

6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 101099-01 in the Equipment Blank Lot Control

Login Sample Receipt Checklist

Client: Bhate Environmental

Job Number: 280-97803-1

Login Number: 97803
List Number: 1
Creator: Pottruff, Reed W

List Source: TestAmerica Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 280-97928-1

Job Description: Griffiss AFB, NY - SS025

For:
Bhate Environmental
445 Union Blvd Ste.129
Lakewood, CO 80226

Attention: Marcia Olive

Approved for release.
Stephanie K Rothmeyer
Project Manager I
7/5/2017 10:12 AM

Stephanie K Rothmeyer, Project Manager I
4955 Yarrow Street, Arvada, CO, 80002
(303)736-0182
stephanie.rothmeyer@testamericainc.com
07/05/2017
Revision: 1

The test results in this report relate only to the samples in this report and meet all requirements of NELAC, with any exceptions noted. Pursuant to NELAP, this report shall not be reproduced except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Denver Project Manager.

The Lab Certification ID# is 4025.

Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.

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Raw QC Data 1700

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.
Q	One or more quality control criteria failed.
B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
M	Manual integrated compound.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Estimated: The analyte was positively identified; the quantitation is an estimation
M	Manual integrated compound.
U	Undetected at the Limit of Detection.
Q	One or more quality control criteria failed.
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
D	The reported value is from a dilution.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.

GC Semi VOA

Qualifier	Qualifier Description
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
D	The reported value is from a dilution.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.

Metals

Qualifier	Qualifier Description
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
D	The reported value is from a dilution.
Q	One or more quality control criteria failed.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: Bhate Environmental

Project: Griffiss AFB, NY - SS025

Report Number: 280-97928-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

REVISION 1 CHANGES
The report is revised to correct the sample ID for 280-97928-5.

RECEIPT
The samples were received on 6/6/2017 at 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.4º C, 1.0º C, 2.1º C and 2.8º C.

One of three 8 oz soil jars for the following sample was received with a cracked lid: SS025-SB09(2-4) (280-97928-15). The container was marked to be used last and the laboratory will proceed with all analyses unless instructed otherwise by the client. The client was notified on 6/6/17.

VOLATILE ORGANIC COMPOUNDS (GC/MS)
Samples SS025-SS07 (280-97928-1), SS025-TB02 (280-97928-2), SS025-SB06(0-2) (280-97928-3), SS025-SB06(2-4) (280-97928-4), SS025-SS08 (280-97928-5), SS025-SB07(0-2) (280-97928-6), SS025-SB07(2-4) (280-97928-7), SS025-SB01(0-2) (280-97928-8), SS025-SB01(0-2)-a (280-97928-9), SS025-SB08(0-2) (280-97928-10), SS025-SB08(2-4) (280-97928-11), SS025-SS09 (280-97928-12), SS025-SB09(0-2) (280-97928-14), SS025-SB09(2-4) (280-97928-15), SS025-SB09(4-6) (280-97928-16), SS025-SB09(6-8) (280-97928-17), SS025-SB10(0-2) (280-97928-18), SS025-SB10(2-4) (280-97928-19), SS025-SB10(4-6) (280-97928-20), SS025-SB10(2-4)-a (280-97928-21) and SS025-SS10 (280-97928-22) were analyzed for volatile organic compounds (GC/MS) in accordance with 8260B. The samples were prepared on 06/05/2017 and analyzed on 06/15/2017, 06/16/2017 and 06/19/2017.

Acetone was detected in method blank MB 280-377540/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged “J”. However, because the result concentration was less than ½ the reporting limit, no corrective action was necessary.

Acetone was detected in method blank MB 280-377664/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the DL and/or LOQ, the result has been flagged.

Acetone was detected in method blank MB 280-377666/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged “J”. However, because the result concentration was less than ½ the reporting limit, no corrective action was necessary.

Methylene Chloride was detected in method blank MB 280-377884/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the DL and/or LOQ, the result has been flagged.

Chloromethane, Dichlorodifluoromethane and Vinyl chloride failed the recovery criteria high for LCS 280-377884/2-A. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. Associated results are flagged "Q".

Elevated reporting limits are provided for the following samples due to insufficient sample; the low level terracores were broken upon arrival, and the client requested the methanol method be used for the analysis: SS025-SB10(4-6) (280-97928-20).

Internal standard, 1,4-Dichlorobenzene-d4, response was outside of acceptance limits for the following sample: SS025-SB08(2-4) (280-97928-11). The sample was re-analyzed showing similar results. Associated results are flagged "Q".

The following compounds were outside QSM 5 limits in the initial calibration verification (ICV) associated with batch 280-377520: Dichlorodifluoromethane, 2-Hexanone, Acetone. These analytes are known poor performers. Associated results are flagged "Q".

The following compounds were outside QSM 5 limits in the initial calibration verification (ICV) associated with batch 280-376989: Dichlorodifluoromethane, 2-Hexanone, Acetone. These analytes are known poor performers. Associated results are flagged "Q".

The following sample is reported without a Closing Continuing Calibration Verification (CCVC): SS025-SS07 (280-97928-1). The CCVC was not analyzed due to an instrument malfunction. The instrument did confirm DOD Q5 criteria the next day when it was restarted on the same tune parameters.

The following compound was outside control limits in the continuing calibration verification (CCV) associated with batch 280-377520: Bromomethane. This compound is not classified as a Calibration Check Compound (CCC) in the reference method. The associated samples were non-detect for the affected analytes. Associated results are flagged "Q".

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS - SELECTED ION MODE (SIM)

Samples SS025-SS07 (280-97928-1), SS025-SB06(0-2) (280-97928-3), SS025-SB06(2-4) (280-97928-4), SS025-SS08 (280-97928-5), SS025-SB07(0-2) (280-97928-6), SS025-SB07(2-4) (280-97928-7), SS025-SB01(0-2) (280-97928-8), SS025-SB01(0-2)-a (280-97928-9), SS025-SB08(0-2) (280-97928-10), SS025-SB08(2-4) (280-97928-11), SS025-SS09 (280-97928-12), SS025-SB09(0-2) (280-97928-14), SS025-SB09(2-4) (280-97928-15), SS025-SB09(4-6) (280-97928-16), SS025-SB09(6-8) (280-97928-17), SS025-SB10(0-2) (280-97928-18), SS025-SB10(2-4) (280-97928-19), SS025-SB10(4-6) (280-97928-20), SS025-SB10(2-4)-a (280-97928-21) and SS025-SS10 (280-97928-22) were analyzed for Semivolatile organic compounds - Selected Ion Mode (SIM) in accordance with EPA SW-846 Method 8270D SIM. The samples were prepared on 06/11/2017 and analyzed on 06/16/2017, 06/17/2017 and 06/20/2017.

Nitrobenzene-d5 (Surr) failed the surrogate recovery criteria low for SS025-SB06(2-4) (280-97928-4). Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for SS025-SB07(2-4) (280-97928-7). Evidence of matrix interferences is not obvious. At the client's request, the samples are reported, because any re-extraction would have been performed outside of holding time. Associated results are flagged "Q".

Nitrobenzene-d5 (Surr) failed the surrogate recovery criteria low for SS025-SB01(0-2) (280-97928-8) and 2-Fluorobiphenyl (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria high, and Nitrobenzene-d5 (Surr) failed the surrogate recovery criteria low for SS025-SB01(0-2)-a (280-97928-9) due to the required dilutions. Associated results are flagged "Q".

Samples SS025-SB01(0-2) (280-97928-8)[50X] and SS025-SB01(0-2)-a (280-97928-9)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUND (GC/MS SIM)

Sample SS025-AB-060517 (280-97928-13) was analyzed for Semivolatile Organic Compound (GC/MS SIM) in accordance with SW-846 8270D. The samples were prepared on 06/12/2017 and analyzed on 06/20/2017.

Benzo[a]anthracene, Fluoranthene, Phenanthrene and Pyrene were detected in method blank MB 280-376856/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged “J”. However, because the result concentration was less than ½ the reporting limit, no corrective action was necessary.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ORGANOCHLORINE PESTICIDES

Samples SS025-SS07 (280-97928-1), SS025-SB06(0-2) (280-97928-3), SS025-SB06(2-4) (280-97928-4), SS025-SS08 (280-97928-5), SS025-SB07(0-2) (280-97928-6), SS025-SB07(2-4) (280-97928-7), SS025-SB01(0-2) (280-97928-8), SS025-SB01(0-2)-a (280-97928-9), SS025-SB08(0-2) (280-97928-10), SS025-SB08(2-4) (280-97928-11), SS025-SS09 (280-97928-12), SS025-SB09(0-2) (280-97928-14), SS025-SB09(2-4) (280-97928-15), SS025-SB09(4-6) (280-97928-16), SS025-SB09(6-8) (280-97928-17), SS025-SB10(0-2) (280-97928-18), SS025-SB10(2-4) (280-97928-19), SS025-SB10(4-6) (280-97928-20), SS025-SB10(2-4)-a (280-97928-21) and SS025-SS10 (280-97928-22) were analyzed for organochlorine pesticides in accordance with SW 846 8081B. The samples were prepared on 06/16/2017 and analyzed on 06/25/2017 and 06/26/2017.

DCB Decachlorobiphenyl (Surr) failed the surrogate recovery criteria low for SS025-SB01(0-2) (280-97928-8). DCB Decachlorobiphenyl (Surr) failed the surrogate recovery criteria high for SS025-SB01(0-2)-a (280-97928-9). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. The samples had numerous non-target peaks and significant baseline rise that could be interfering with the identification and quantitation of target analytes. This inference could cause false positive and/or negative results. Associated results are flagged "Q".

DCB Decachlorobiphenyl (Surr) and Tetrachloro-m-xylene (Surr) failed the surrogate recovery criteria low for SS025-SB06(0-2)MS (280-97928-3MS). Associated results are flagged "Q".

The DCB Decachlorobiphenyl (Surr) surrogate recovery for the following samples was outside acceptance limits (low biased) on the front/primary column: SS025-SS07 (280-97928-1), SS025-SB07(2-4) (280-97928-7), SS025-SB09(2-4) (280-97928-15), SS025-SB09(6-8) (280-97928-17). The recovery is within acceptance limits on the other column. The samples had numerous non-target peaks and significant baseline rise that could be interfering with the identification and quantitation of target analytes. Associated results are flagged "Q".

Several analytes failed the recovery criteria low for the MS of sample SS025-SB06(0-2) (280-97928-3) in batch 280-378628. Several analytes exceeded the RPD limit for the MSD of sample SS025-SB06(0-2) (280-97928-3) in batch 280-378628. Refer to the QC report for details.

Samples SS025-SB01(0-2) (280-97928-8)[10X] and SS025-SB09(0-2) (280-97928-14)[10X] required dilution prior to analysis due to the nature of the sample matrix or to bring the concentration of target analytes within the calibration range. The reporting limits have been adjusted accordingly.

Samples SS025-SS09 (280-97928-12), SS025-SB09(0-2) (280-97928-14) and SS025-SB09(2-4) (280-97928-15) had numerous non-target peaks and significant baseline rise that could be interfering with the identification and quantitation of target analytes. This inference could cause false positive and/or negative results. The samples show possible signs of the presence of PCBs.

The following samples required a Florisil clean-up, via EPA Method 3620C, to reduce matrix interferences: SS025-SB06(0-2) (280-97928-3), SS025-SB01(0-2) (280-97928-8), SS025-SB01(0-2)-a (280-97928-9), SS025-SS09 (280-97928-12), SS025-SB09(0-2) (280-97928-14), SS025-SB09(2-4) (280-97928-15), SS025-SB09(4-6) (280-97928-16), SS025-SS10 (280-97928-22), (280-97928-C-3 MS), (280-97928-C-3 MSD).

Internal standard (ISTD) response for the following samples exceeded the control limit on the front/primary column: SS025-SB09(0-2) (280-97928-14). As such, the ND sample results associated with this ISTD were reported from the other column, which met ISTD acceptance criteria. The compounds that had detections are reported from a dilution with ISTD in control on both columns.

The continuing calibration verification (CCV) associated with analytical batch 280-378628 recovered below the lower control limit for Toxaphene. The samples associated with this CCV were non-detect for the affected analyte; therefore, the data have been reported. Associated results are flagged "Q".

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples SS025-SS07 (280-97928-1), SS025-SB06(0-2) (280-97928-3), SS025-SB06(2-4) (280-97928-4), SS025-SS08 (280-97928-5), SS025-SB07(0-2) (280-97928-6), SS025-SB07(2-4) (280-97928-7), SS025-SB01(0-2) (280-97928-8), SS025-SB01(0-2)-a (280-97928-9), SS025-SB08(0-2) (280-97928-10), SS025-SB08(2-4) (280-97928-11), SS025-SS09 (280-97928-12), SS025-SB09(0-2) (280-97928-14), SS025-SB09(2-4) (280-97928-15), SS025-SB09(4-6) (280-97928-16), SS025-SB09(6-8) (280-97928-17), SS025-SB10(0-2) (280-97928-18), SS025-SB10(2-4) (280-97928-19), SS025-SB10(4-6) (280-97928-20), SS025-SB10(2-4)-a (280-97928-21) and SS025-SS10 (280-97928-22) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The samples were prepared on 06/16/2017 and analyzed on 06/26/2017.

DCB Decachlorobiphenyl (Surr) failed the surrogate recovery criteria low for SS025-SB09(4-6) (280-97928-16). The MB and LCS were within control, and the non-target surrogate, TCX, which is present in the surrogate spike solution, was in control, indicating a successful extraction; therefore, matrix interference is suspected and re-extraction and/or re-analysis was not performed. Associated results are flagged "Q".

The following samples underwent a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: SS025-SS07 (280-97928-1), SS025-SB06(0-2) (280-97928-3), SS025-SB06(2-4) (280-97928-4), SS025-SS08 (280-97928-5), SS025-SB07(0-2) (280-97928-6), SS025-SB07(2-4) (280-97928-7), SS025-SB01(0-2) (280-97928-8), SS025-SB01(0-2)-a (280-97928-9), SS025-SB08(0-2) (280-97928-10), SS025-SB08(2-4) (280-97928-11), SS025-SS09 (280-97928-12), SS025-SB09(0-2) (280-97928-14), SS025-SB09(2-4) (280-97928-15), SS025-SB09(4-6) (280-97928-16), SS025-SB09(6-8) (280-97928-17), SS025-SB10(0-2) (280-97928-18), SS025-SB10(2-4) (280-97928-19), SS025-SB10(4-6) (280-97928-20), SS025-SB10(2-4)-a (280-97928-21), SS025-SS10 (280-97928-22), (LCS 280-377615/4-A), (MB 280-377615/1-A), (280-97928-B-4-E MS), (280-97928-B-4-F MSD).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

METALS (ICP)

Samples SS025-SS07 (280-97928-1), SS025-SB06(0-2) (280-97928-3), SS025-SB06(2-4) (280-97928-4), SS025-SS08 (280-97928-5), SS025-SB07(0-2) (280-97928-6), SS025-SB07(2-4) (280-97928-7), SS025-SB01(0-2) (280-97928-8), SS025-SB01(0-2)-a (280-97928-9), SS025-SB08(0-2) (280-97928-10), SS025-SB08(2-4) (280-97928-11), SS025-SS09 (280-97928-12), SS025-SB09(0-2) (280-97928-14), SS025-SB09(2-4) (280-97928-15), SS025-SB09(4-6) (280-97928-16), SS025-SB09(6-8) (280-97928-17), SS025-SB10(0-2) (280-97928-18), SS025-SB10(2-4) (280-97928-19), SS025-SB10(4-6) (280-97928-20), SS025-SB10(2-4)-a (280-97928-21) and SS025-SS10 (280-97928-22) were analyzed for Metals (ICP) in accordance with SW 846 6010C. The samples were prepared on 06/08/2017 and analyzed on 06/09/2017, 06/12/2017 and 06/13/2017.

Barium, Calcium, Chromium, Iron and Magnesium were detected in method blank MB 280-376380/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged “J”. However, because the result concentration was less than ½ the reporting limit, no corrective action was necessary.

Antimony, Iron, Manganese and Thallium failed the recovery criteria low for the MS of sample SS025-SS07 (280-97928-1) in batch 280-377162. Aluminum failed the recovery criteria high. Antimony, Iron and Manganese failed the recovery criteria low for the MSD of sample SS025-SS07 (280-97928-1) in batch 280-377044. Aluminum failed the recovery criteria high. The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount. Refer to the QC report for

details.

Sample SS025-SS09 (280-97928-12)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The low level continuing calibration verification (CCVL) associated with batch 280-376734 recovered above the upper control limit for Fe. The samples associated with this CCVL had Fe results greater than 10x the result found in the CCVL and are thus controlled to the CCV. Therefore, the data have been reported. Associated results are flagged "Q".

The continuing calibration verification (CCVL) associated with batch 377162 recovered above the upper control limit for Ca. The samples associated with this CCVL were 10x the CCVL concentration for the affected analyte; therefore, the data have been reported and controlled to the passing CCV. Associated results are flagged "Q".

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY (CVAA)

Samples SS025-SS07 (280-97928-1), SS025-SB06(0-2) (280-97928-3), SS025-SB06(2-4) (280-97928-4), SS025-SS08 (280-97928-5), SS025-SB07(0-2) (280-97928-6), SS025-SB07(2-4) (280-97928-7), SS025-SB01(0-2) (280-97928-8), SS025-SB01(0-2)-a (280-97928-9), SS025-SB08(0-2) (280-97928-10), SS025-SB08(2-4) (280-97928-11), SS025-SS09 (280-97928-12), SS025-SB09(0-2) (280-97928-14), SS025-SB09(2-4) (280-97928-15), SS025-SB09(4-6) (280-97928-16), SS025-SB09(6-8) (280-97928-17), SS025-SB10(0-2) (280-97928-18), SS025-SB10(2-4) (280-97928-19), SS025-SB10(4-6) (280-97928-20), SS025-SB10(2-4)-a (280-97928-21) and SS025-SS10 (280-97928-22) were analyzed for total mercury (CVAA) in accordance with EPA SW-846 Method 7471A. The samples were prepared and analyzed on 06/14/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS

Samples SS025-SS07 (280-97928-1), SS025-SB06(0-2) (280-97928-3), SS025-SB06(2-4) (280-97928-4), SS025-SS08 (280-97928-5), SS025-SB07(0-2) (280-97928-6), SS025-SB07(2-4) (280-97928-7), SS025-SB01(0-2) (280-97928-8), SS025-SB01(0-2)-a (280-97928-9), SS025-SB08(0-2) (280-97928-10), SS025-SB08(2-4) (280-97928-11), SS025-SS09 (280-97928-12), SS025-SB09(0-2) (280-97928-14), SS025-SB09(2-4) (280-97928-15), SS025-SB09(4-6) (280-97928-16), SS025-SB09(6-8) (280-97928-17), SS025-SB10(0-2) (280-97928-18), SS025-SB10(2-4) (280-97928-19), SS025-SB10(4-6) (280-97928-20), SS025-SB10(2-4)-a (280-97928-21) and SS025-SS10 (280-97928-22) were analyzed for percent solids in accordance with ASTM D2216-90. The samples were analyzed on 06/08/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97928-1

Client Sample ID: SS025-SS07 — Lab Sample ID: 280-97928-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	13	J B Q	20	5.4	ug/Kg	1	☼	8260B	Total/NA
1-Methylnaphthalene	0.38	J	5.6	0.29	ug/Kg	1	☼	8270D SIM	Total/NA
2-Methylnaphthalene	0.48	J	5.6	0.34	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthene	0.43	J	5.6	0.18	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthylene	1.7	J	5.6	0.19	ug/Kg	1	☼	8270D SIM	Total/NA
Anthracene	1.7	J	5.6	0.80	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]anthracene	6.4		5.6	1.0	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	7.6		5.6	0.83	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene	12		5.6	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene	5.1	J	5.6	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene	4.8	J	5.6	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	9.6		5.6	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Dibenz(a,h)anthracene	1.5	J	5.6	1.5	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	15		5.6	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Fluorene	0.98	J	5.6	0.52	ug/Kg	1	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	4.5	J	5.6	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Naphthalene	0.58	J	5.6	0.36	ug/Kg	1	☼	8270D SIM	Total/NA
Phenanthrene	6.8		5.6	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	13		5.6	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Aluminum	5100	J	56	1.7	mg/Kg	1	☼	6010C	Total/NA
Arsenic	2.3	J	2.8	0.74	mg/Kg	1	☼	6010C	Total/NA
Barium	18		2.2	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.23	J	0.56	0.037	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.080	J	0.56	0.046	mg/Kg	1	☼	6010C	Total/NA
Calcium	1500		110	16	mg/Kg	1	☼	6010C	Total/NA
Chromium	5.4		3.9	0.065	mg/Kg	1	☼	6010C	Total/NA
Cobalt	3.4		1.1	0.11	mg/Kg	1	☼	6010C	Total/NA
Copper	11		5.6	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	9800	J	89	4.2	mg/Kg	1	☼	6010C	Total/NA
Lead	4.2		1.0	0.35	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2000		33	4.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	430	J	5.0	0.11	mg/Kg	1	☼	6010C	Total/NA
Nickel	7.4		4.5	0.15	mg/Kg	1	☼	6010C	Total/NA
Potassium	660		330	46	mg/Kg	1	☼	6010C	Total/NA
Vanadium	9.8		2.2	0.10	mg/Kg	1	☼	6010C	Total/NA
Zinc	26		8.9	0.44	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: SS025-TB02 — Lab Sample ID: 280-97928-2

No Detections.

Client Sample ID: SS025-SB06(0-2) — Lab Sample ID: 280-97928-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	0.71	J	5.4	0.28	ug/Kg	1	☼	8270D SIM	Total/NA
2-Methylnaphthalene	0.77	J	5.4	0.34	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthene	5.0	J	5.4	0.17	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthylene	2.0	J	5.4	0.18	ug/Kg	1	☼	8270D SIM	Total/NA
Anthracene	11		5.4	0.78	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]anthracene	42		5.4	0.98	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	39		5.4	0.80	ug/Kg	1	☼	8270D SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SB06(0-2) (Continued) — Lab Sample ID: 280-97928-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	53		5.4	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene	21		5.4	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene	19		5.4	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	45		5.4	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Dibenz(a,h)anthracene	6.1		5.4	1.4	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	85		5.4	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Fluorene	4.6	J	5.4	0.51	ug/Kg	1	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	19		5.4	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Naphthalene	0.70	J	5.4	0.35	ug/Kg	1	☼	8270D SIM	Total/NA
Phenanthrene	52		5.4	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	69		5.4	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
4,4'-DDE	0.43	J	1.8	0.25	ug/Kg	1	☼	8081B	Total/NA
Aluminum	3500		55	1.7	mg/Kg	1	☼	6010C	Total/NA
Arsenic	2.1	J	2.8	0.73	mg/Kg	1	☼	6010C	Total/NA
Barium	11		2.2	0.11	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.17	J	0.55	0.036	mg/Kg	1	☼	6010C	Total/NA
Calcium	7500		110	16	mg/Kg	1	☼	6010C	Total/NA
Chromium	4.0		3.9	0.064	mg/Kg	1	☼	6010C	Total/NA
Cobalt	2.5		1.1	0.11	mg/Kg	1	☼	6010C	Total/NA
Copper	9.0		5.5	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	8000		88	4.2	mg/Kg	1	☼	6010C	Total/NA
Lead	1.8		0.99	0.34	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2800		33	4.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	250		5.0	0.11	mg/Kg	1	☼	6010C	Total/NA
Nickel	5.8		4.4	0.15	mg/Kg	1	☼	6010C	Total/NA
Potassium	550		330	45	mg/Kg	1	☼	6010C	Total/NA
Vanadium	7.1		2.2	0.10	mg/Kg	1	☼	6010C	Total/NA
Zinc	16		8.8	0.44	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: SS025-SB06(2-4) — Lab Sample ID: 280-97928-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	1.4	J	5.4	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Aluminum	2500		54	1.7	mg/Kg	1	☼	6010C	Total/NA
Arsenic	1.4	J	2.7	0.72	mg/Kg	1	☼	6010C	Total/NA
Barium	9.4		2.2	0.11	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.11	J	0.54	0.036	mg/Kg	1	☼	6010C	Total/NA
Calcium	12000		110	15	mg/Kg	1	☼	6010C	Total/NA
Chromium	2.9	J	3.8	0.063	mg/Kg	1	☼	6010C	Total/NA
Cobalt	2.0		1.1	0.11	mg/Kg	1	☼	6010C	Total/NA
Copper	6.3		5.4	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	5700		87	4.1	mg/Kg	1	☼	6010C	Total/NA
Lead	0.98		0.98	0.34	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2700		33	4.0	mg/Kg	1	☼	6010C	Total/NA
Manganese	200		4.9	0.11	mg/Kg	1	☼	6010C	Total/NA
Nickel	4.2	J	4.3	0.14	mg/Kg	1	☼	6010C	Total/NA
Potassium	480		330	45	mg/Kg	1	☼	6010C	Total/NA
Vanadium	5.6		2.2	0.10	mg/Kg	1	☼	6010C	Total/NA
Zinc	12		8.7	0.43	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97928-1

Client Sample ID: SS025-SS08 — Lab Sample ID: 280-97928-5

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
4-Isopropyltoluene	1.6	J	4.2	0.41	ug/Kg	1	☼	8260B	Total/NA
Acetone	7.8	J B Q	17	4.6	ug/Kg	1	☼	8260B	Total/NA
1-Methylnaphthalene	11		5.8	0.30	ug/Kg	1	☼	8270D SIM	Total/NA
2-Methylnaphthalene	29		5.8	0.36	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthene	1.0	J	5.8	0.18	ug/Kg	1	☼	8270D SIM	Total/NA
Anthracene	0.99	J	5.8	0.83	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]anthracene	3.4	J	5.8	1.0	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	4.2	J	5.8	0.85	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene	7.4		5.8	1.4	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene	3.1	J	5.8	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene	2.5	J	5.8	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	5.6	J	5.8	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	7.6		5.8	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Fluorene	3.3	J	5.8	0.54	ug/Kg	1	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	2.6	J	5.8	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Naphthalene	50		5.8	0.38	ug/Kg	1	☼	8270D SIM	Total/NA
Phenanthrene	4.9	J	5.8	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	6.7		5.8	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Aluminum	7500		54	1.7	mg/Kg	1	☼	6010C	Total/NA
Arsenic	5.1		2.7	0.71	mg/Kg	1	☼	6010C	Total/NA
Barium	24		2.1	0.11	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.30	J	0.54	0.035	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.079	J	0.54	0.044	mg/Kg	1	☼	6010C	Total/NA
Calcium	3600		110	15	mg/Kg	1	☼	6010C	Total/NA
Chromium	7.9		3.7	0.062	mg/Kg	1	☼	6010C	Total/NA
Cobalt	5.7		1.1	0.11	mg/Kg	1	☼	6010C	Total/NA
Copper	31		5.4	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	17000		86	4.1	mg/Kg	1	☼	6010C	Total/NA
Lead	4.2		0.96	0.33	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3700		32	4.0	mg/Kg	1	☼	6010C	Total/NA
Manganese	950		4.8	0.11	mg/Kg	1	☼	6010C	Total/NA
Nickel	12		4.3	0.14	mg/Kg	1	☼	6010C	Total/NA
Potassium	850		320	44	mg/Kg	1	☼	6010C	Total/NA
Vanadium	14		2.1	0.10	mg/Kg	1	☼	6010C	Total/NA
Zinc	41		8.6	0.43	mg/Kg	1	☼	6010C	Total/NA
Mercury	17	J	22	7.2	ug/Kg	1	☼	7471A	Total/NA

Client Sample ID: SS025-SB07(0-2) — Lab Sample ID: 280-97928-6

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	1.3	J	5.6	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Aluminum	3300		49	1.5	mg/Kg	1	☼	6010C	Total/NA
Arsenic	2.5		2.4	0.65	mg/Kg	1	☼	6010C	Total/NA
Barium	12		2.0	0.10	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.16	J	0.49	0.032	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.058	J	0.49	0.040	mg/Kg	1	☼	6010C	Total/NA
Calcium	5700		98	14	mg/Kg	1	☼	6010C	Total/NA
Chromium	3.8		3.4	0.057	mg/Kg	1	☼	6010C	Total/NA
Cobalt	2.7		0.98	0.098	mg/Kg	1	☼	6010C	Total/NA
Copper	9.6		4.9	0.21	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SB07(0-2) (Continued) — Lab Sample ID: 280-97928-6

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Iron	7700	Q	78	3.7	mg/Kg	1	☼	6010C	Total/NA
Lead	2.1		0.88	0.30	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2500		29	3.6	mg/Kg	1	☼	6010C	Total/NA
Manganese	310		4.4	0.098	mg/Kg	1	☼	6010C	Total/NA
Nickel	5.5		3.9	0.13	mg/Kg	1	☼	6010C	Total/NA
Potassium	560		290	40	mg/Kg	1	☼	6010C	Total/NA
Thallium	0.64	J	2.9	0.63	mg/Kg	1	☼	6010C	Total/NA
Vanadium	7.1		2.0	0.092	mg/Kg	1	☼	6010C	Total/NA
Zinc	17		7.8	0.39	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: SS025-SB07(2-4) — Lab Sample ID: 280-97928-7

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	3400		59	1.8	mg/Kg	1	☼	6010C	Total/NA
Arsenic	2.7	J	2.9	0.78	mg/Kg	1	☼	6010C	Total/NA
Barium	13		2.3	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.18	J	0.59	0.039	mg/Kg	1	☼	6010C	Total/NA
Calcium	2600		120	17	mg/Kg	1	☼	6010C	Total/NA
Chromium	3.9	J	4.1	0.068	mg/Kg	1	☼	6010C	Total/NA
Cobalt	2.9		1.2	0.12	mg/Kg	1	☼	6010C	Total/NA
Copper	10		5.9	0.25	mg/Kg	1	☼	6010C	Total/NA
Iron	8200	Q	94	4.5	mg/Kg	1	☼	6010C	Total/NA
Lead	2.0		1.1	0.36	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2000		35	4.3	mg/Kg	1	☼	6010C	Total/NA
Manganese	330		5.3	0.12	mg/Kg	1	☼	6010C	Total/NA
Nickel	6.1		4.7	0.16	mg/Kg	1	☼	6010C	Total/NA
Potassium	570		350	48	mg/Kg	1	☼	6010C	Total/NA
Vanadium	7.3		2.3	0.11	mg/Kg	1	☼	6010C	Total/NA
Zinc	19		9.4	0.47	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: SS025-SB01(0-2) — Lab Sample ID: 280-97928-8

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	12	J B Q	17	4.7	ug/Kg	1	☼	8260B	Total/NA
Naphthalene	4.5		4.4	0.55	ug/Kg	1	☼	8260B	Total/NA
1-Methylnaphthalene	100		5.2	0.27	ug/Kg	1	☼	8270D SIM	Total/NA
2-Methylnaphthalene	160		5.2	0.32	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthene	520	J	5.2	0.17	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthylene	220	J	5.2	0.18	ug/Kg	1	☼	8270D SIM	Total/NA
Anthracene	940	J	5.2	0.75	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]anthracene	2000	J	5.2	0.93	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	1600	J	5.2	0.77	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene	2300	J	5.2	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene	860	J	5.2	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene	850	J	5.2	1.0	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	2100	J	5.2	1.0	ug/Kg	1	☼	8270D SIM	Total/NA
Dibenz(a,h)anthracene	290	J	5.2	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	4000	J	5.2	1.0	ug/Kg	1	☼	8270D SIM	Total/NA
Fluorene	500	J	5.2	0.49	ug/Kg	1	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	820	J	5.2	1.1	ug/Kg	1	☼	8270D SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SB01(0-2) (Continued) — Lab Sample ID: 280-97928-8

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	400	J	5.2	0.34	ug/Kg	1	☼	8270D SIM	Total/NA
Phenanthrene	3200	J	5.2	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	3700	J	5.2	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
1-Methylnaphthalene - DL	94	J D Q	260	13	ug/Kg	50	☼	8270D SIM	Total/NA
2-Methylnaphthalene - DL	150	J D Q	260	16	ug/Kg	50	☼	8270D SIM	Total/NA
Acenaphthene - DL	600	D Q	260	8.3	ug/Kg	50	☼	8270D SIM	Total/NA
Acenaphthylene - DL	280	D Q	260	8.8	ug/Kg	50	☼	8270D SIM	Total/NA
Anthracene - DL	1100	D Q	260	37	ug/Kg	50	☼	8270D SIM	Total/NA
Benzo[a]anthracene - DL	2300	D Q	260	47	ug/Kg	50	☼	8270D SIM	Total/NA
Benzo[a]pyrene - DL	2000	D Q	260	38	ug/Kg	50	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene - DL	2800	D Q	260	62	ug/Kg	50	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene - DL	1100	D Q	260	57	ug/Kg	50	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene - DL	1100	D Q	260	52	ug/Kg	50	☼	8270D SIM	Total/NA
Chrysene - DL	2700	D Q	260	52	ug/Kg	50	☼	8270D SIM	Total/NA
Dibenz(a,h)anthracene - DL	350	D Q	260	67	ug/Kg	50	☼	8270D SIM	Total/NA
Fluoranthene - DL	5500	D Q	260	52	ug/Kg	50	☼	8270D SIM	Total/NA
Fluorene - DL	590	D Q	260	24	ug/Kg	50	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene - DL	1000	D Q	260	57	ug/Kg	50	☼	8270D SIM	Total/NA
Naphthalene - DL	410	D Q	260	17	ug/Kg	50	☼	8270D SIM	Total/NA
Phenanthrene - DL	4400	D Q	260	57	ug/Kg	50	☼	8270D SIM	Total/NA
Pyrene - DL	4700	D Q	260	57	ug/Kg	50	☼	8270D SIM	Total/NA
4,4'-DDE	15	Q	1.8	0.26	ug/Kg	1	☼	8081B	Total/NA
4,4'-DDT	47	J Q	2.2	0.64	ug/Kg	1	☼	8081B	Total/NA
Endosulfan II	0.33	J Q	1.8	0.31	ug/Kg	1	☼	8081B	Total/NA
Methoxychlor	1.9	J Q	3.6	0.49	ug/Kg	1	☼	8081B	Total/NA
4,4'-DDE - DL	16	J D Q	18	2.6	ug/Kg	10	☼	8081B	Total/NA
4,4'-DDT - DL	52	D Q	22	6.4	ug/Kg	10	☼	8081B	Total/NA
Arochlor 1260	17	J	36	2.9	ug/Kg	1	☼	8082A	Total/NA
Aluminum	6500		39	1.2	mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.5		2.0	0.52	mg/Kg	1	☼	6010C	Total/NA
Barium	27		1.6	0.081	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.32	J	0.39	0.026	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.13	J	0.39	0.032	mg/Kg	1	☼	6010C	Total/NA
Calcium	2600		78	11	mg/Kg	1	☼	6010C	Total/NA
Chromium	7.1		2.7	0.045	mg/Kg	1	☼	6010C	Total/NA
Cobalt	5.3		0.78	0.078	mg/Kg	1	☼	6010C	Total/NA
Copper	19		3.9	0.17	mg/Kg	1	☼	6010C	Total/NA
Iron	14000	Q	63	3.0	mg/Kg	1	☼	6010C	Total/NA
Lead	5.7		0.70	0.24	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2400		23	2.9	mg/Kg	1	☼	6010C	Total/NA
Manganese	860		3.5	0.078	mg/Kg	1	☼	6010C	Total/NA
Nickel	10		3.1	0.10	mg/Kg	1	☼	6010C	Total/NA
Potassium	640		230	32	mg/Kg	1	☼	6010C	Total/NA
Vanadium	12		1.6	0.074	mg/Kg	1	☼	6010C	Total/NA
Zinc	36		6.3	0.31	mg/Kg	1	☼	6010C	Total/NA
Mercury	22		21	6.8	ug/Kg	1	☼	7471A	Total/NA

Client Sample ID: SS025-SB01(0-2)-a — Lab Sample ID: 280-97928-9

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SB01(0-2)-a (Continued)

Lab Sample ID: 280-97928-9

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	16	B Q	15	4.1	ug/Kg	1	☼	8260B	Total/NA
1-Methylnaphthalene	30		5.3	0.27	ug/Kg	1	☼	8270D SIM	Total/NA
2-Methylnaphthalene	41		5.3	0.33	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthene	130		5.3	0.17	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthylene	76		5.3	0.18	ug/Kg	1	☼	8270D SIM	Total/NA
Anthracene	240	J	5.3	0.76	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]anthracene	530	J	5.3	0.95	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	460	J	5.3	0.78	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene	640	J	5.3	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene	250		5.3	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene	230	J	5.3	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	610	J	5.3	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Dibenz(a,h)anthracene	80		5.3	1.4	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	1100	J	5.3	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Fluorene	130		5.3	0.50	ug/Kg	1	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	230	J	5.3	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Naphthalene	99		5.3	0.34	ug/Kg	1	☼	8270D SIM	Total/NA
Phenanthrene	950	J	5.3	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	990	J	5.3	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
1-Methylnaphthalene - DL	22	J D Q	53	2.7	ug/Kg	10	☼	8270D SIM	Total/NA
2-Methylnaphthalene - DL	34	J D Q	53	3.3	ug/Kg	10	☼	8270D SIM	Total/NA
Acenaphthene - DL	110	D	53	1.7	ug/Kg	10	☼	8270D SIM	Total/NA
Acenaphthylene - DL	81	D	53	1.8	ug/Kg	10	☼	8270D SIM	Total/NA
Anthracene - DL	210	D	53	7.6	ug/Kg	10	☼	8270D SIM	Total/NA
Benzo[a]anthracene - DL	500	D	53	9.5	ug/Kg	10	☼	8270D SIM	Total/NA
Benzo[a]pyrene - DL	440	D	53	7.8	ug/Kg	10	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene - DL	620	D	53	13	ug/Kg	10	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene - DL	240	D	53	12	ug/Kg	10	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene - DL	220	D	53	11	ug/Kg	10	☼	8270D SIM	Total/NA
Chrysene - DL	580	D	53	11	ug/Kg	10	☼	8270D SIM	Total/NA
Dibenz(a,h)anthracene - DL	74	D	53	14	ug/Kg	10	☼	8270D SIM	Total/NA
Fluoranthene - DL	1100	D	53	11	ug/Kg	10	☼	8270D SIM	Total/NA
Fluorene - DL	110	D	53	5.0	ug/Kg	10	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene - DL	220	D	53	12	ug/Kg	10	☼	8270D SIM	Total/NA
Naphthalene - DL	82	D Q	53	3.4	ug/Kg	10	☼	8270D SIM	Total/NA
Phenanthrene - DL	860	D	53	12	ug/Kg	10	☼	8270D SIM	Total/NA
Pyrene - DL	1000	D	53	12	ug/Kg	10	☼	8270D SIM	Total/NA
4,4'-DDE	1.3	J Q	1.9	0.27	ug/Kg	1	☼	8081B	Total/NA
4,4'-DDT	4.6	Q	2.2	0.66	ug/Kg	1	☼	8081B	Total/NA
Aluminum	7000		45	1.4	mg/Kg	1	☼	6010C	Total/NA
Arsenic	5.0		2.2	0.59	mg/Kg	1	☼	6010C	Total/NA
Barium	45		1.8	0.093	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.33	J	0.45	0.029	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.11	J	0.45	0.037	mg/Kg	1	☼	6010C	Total/NA
Calcium	7000		89	13	mg/Kg	1	☼	6010C	Total/NA
Chromium	8.5		3.1	0.052	mg/Kg	1	☼	6010C	Total/NA
Cobalt	5.4		0.89	0.089	mg/Kg	1	☼	6010C	Total/NA
Copper	25		4.5	0.19	mg/Kg	1	☼	6010C	Total/NA
Iron	18000	Q	71	3.4	mg/Kg	1	☼	6010C	Total/NA
Lead	5.4		0.80	0.28	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SB01(0-2)-a (Continued) — Lab Sample ID: 280-97928-9

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	3700		27	3.3	mg/Kg	1	☼	6010C	Total/NA
Manganese	1200		4.0	0.089	mg/Kg	1	☼	6010C	Total/NA
Nickel	12		3.6	0.12	mg/Kg	1	☼	6010C	Total/NA
Potassium	870		270	37	mg/Kg	1	☼	6010C	Total/NA
Vanadium	14		1.8	0.084	mg/Kg	1	☼	6010C	Total/NA
Zinc	41		7.1	0.36	mg/Kg	1	☼	6010C	Total/NA
Mercury	11	J	22	7.3	ug/Kg	1	☼	7471A	Total/NA

Client Sample ID: SS025-SB08(0-2) — Lab Sample ID: 280-97928-10

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	0.50	J	5.2	0.27	ug/Kg	1	☼	8270D SIM	Total/NA
2-Methylnaphthalene	0.88	J	5.2	0.32	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthene	0.64	J	5.2	0.16	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthylene	2.9	J M	5.2	0.18	ug/Kg	1	☼	8270D SIM	Total/NA
Anthracene	1.5	J	5.2	0.74	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]anthracene	3.7	J	5.2	0.93	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	3.8	J	5.2	0.76	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene	6.6		5.2	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene	2.7	J	5.2	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene	1.6	J	5.2	1.0	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	5.3		5.2	1.0	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	7.4		5.2	1.0	ug/Kg	1	☼	8270D SIM	Total/NA
Fluorene	1.1	J	5.2	0.48	ug/Kg	1	☼	8270D SIM	Total/NA
Naphthalene	0.56	J	5.2	0.34	ug/Kg	1	☼	8270D SIM	Total/NA
Phenanthrene	4.1	J	5.2	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	7.0		5.2	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Aluminum	4000		40	1.2	mg/Kg	1	☼	6010C	Total/NA
Arsenic	2.8		2.0	0.53	mg/Kg	1	☼	6010C	Total/NA
Barium	13		1.6	0.083	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.20	J	0.40	0.026	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.050	J	0.40	0.033	mg/Kg	1	☼	6010C	Total/NA
Calcium	950		80	11	mg/Kg	1	☼	6010C	Total/NA
Chromium	4.2		2.8	0.046	mg/Kg	1	☼	6010C	Total/NA
Cobalt	2.9		0.80	0.080	mg/Kg	1	☼	6010C	Total/NA
Copper	9.8		4.0	0.17	mg/Kg	1	☼	6010C	Total/NA
Iron	8600	Q	64	3.0	mg/Kg	1	☼	6010C	Total/NA
Lead	1.9		0.72	0.25	mg/Kg	1	☼	6010C	Total/NA
Magnesium	1700		24	2.9	mg/Kg	1	☼	6010C	Total/NA
Manganese	300		3.6	0.080	mg/Kg	1	☼	6010C	Total/NA
Nickel	6.5		3.2	0.11	mg/Kg	1	☼	6010C	Total/NA
Potassium	600		240	33	mg/Kg	1	☼	6010C	Total/NA
Vanadium	7.6		1.6	0.075	mg/Kg	1	☼	6010C	Total/NA
Zinc	18		6.4	0.32	mg/Kg	1	☼	6010C	Total/NA
Mercury	6.4	J	20	6.4	ug/Kg	1	☼	7471A	Total/NA

Client Sample ID: SS025-SB08(2-4) — Lab Sample ID: 280-97928-11

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	2.3	J	5.7	0.19	ug/Kg	1	☼	8270D SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SB08(2-4) (Continued) — Lab Sample ID: 280-97928-11

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	1.3	J	5.7	1.0	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	1.3	J	5.7	0.85	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene	2.0	J	5.7	1.4	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	1.8	J	5.7	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	2.3	J	5.7	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Fluorene	0.82	J	5.7	0.54	ug/Kg	1	☼	8270D SIM	Total/NA
Phenanthrene	1.9	J	5.7	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	2.0	J	5.7	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Aluminum	8300		39	1.2	mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.7		2.0	0.52	mg/Kg	1	☼	6010C	Total/NA
Barium	31		1.6	0.082	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.53		0.39	0.026	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.12	J	0.39	0.032	mg/Kg	1	☼	6010C	Total/NA
Calcium	980		78	11	mg/Kg	1	☼	6010C	Total/NA
Chromium	9.6		2.7	0.046	mg/Kg	1	☼	6010C	Total/NA
Cobalt	4.9		0.78	0.078	mg/Kg	1	☼	6010C	Total/NA
Copper	18		3.9	0.17	mg/Kg	1	☼	6010C	Total/NA
Iron	17000		63	3.0	mg/Kg	1	☼	6010C	Total/NA
Lead	5.8		0.71	0.24	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2600		24	2.9	mg/Kg	1	☼	6010C	Total/NA
Manganese	340		3.5	0.078	mg/Kg	1	☼	6010C	Total/NA
Nickel	12		3.1	0.10	mg/Kg	1	☼	6010C	Total/NA
Potassium	970		240	32	mg/Kg	1	☼	6010C	Total/NA
Sodium	71	J	390	46	mg/Kg	1	☼	6010C	Total/NA
Vanadium	19		1.6	0.074	mg/Kg	1	☼	6010C	Total/NA
Zinc	37		6.3	0.31	mg/Kg	1	☼	6010C	Total/NA
Mercury	20		20	6.6	ug/Kg	1	☼	7471A	Total/NA

Client Sample ID: SS025-SS09 — Lab Sample ID: 280-97928-12

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	48	B Q	16	4.2	ug/Kg	1	☼	8260B	Total/NA
1-Methylnaphthalene	2.7	J	5.3	0.27	ug/Kg	1	☼	8270D SIM	Total/NA
2-Methylnaphthalene	4.2	J	5.3	0.33	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthene	1.4	J M	5.3	0.17	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthylene	4.7	J M	5.3	0.18	ug/Kg	1	☼	8270D SIM	Total/NA
Anthracene	7.1		5.3	0.76	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]anthracene	25		5.3	0.95	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	25		5.3	0.78	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene	49		5.3	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene	19		5.3	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene	16		5.3	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	46		5.3	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Dibenz(a,h)anthracene	5.5		5.3	1.4	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	40		5.3	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Fluorene	3.4	J	5.3	0.50	ug/Kg	1	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	16		5.3	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Naphthalene	3.1	J	5.3	0.34	ug/Kg	1	☼	8270D SIM	Total/NA
Phenanthrene	19		5.3	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	39		5.3	1.2	ug/Kg	1	☼	8270D SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SS09 (Continued) — Lab Sample ID: 280-97928-12

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDE	0.59	J	1.8	0.25	ug/Kg	1	☼	8081B	Total/NA
4,4'-DDT	1.3	J	2.1	0.63	ug/Kg	1	☼	8081B	Total/NA
Dieldrin	2.0		1.8	0.22	ug/Kg	1	☼	8081B	Total/NA
Arochlor 1260	95		35	2.8	ug/Kg	1	☼	8082A	Total/NA
Aluminum	3100		45	1.4	mg/Kg	1	☼	6010C	Total/NA
Arsenic	5.5	J D	11	3.0	mg/Kg	5	☼	6010C	Total/NA
Barium	17		1.8	0.094	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.17	J	0.45	0.030	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.045	J	0.45	0.037	mg/Kg	1	☼	6010C	Total/NA
Calcium	210000	Q D	450	64	mg/Kg	5	☼	6010C	Total/NA
Chromium	4.9		3.2	0.052	mg/Kg	1	☼	6010C	Total/NA
Cobalt	2.7		0.90	0.090	mg/Kg	1	☼	6010C	Total/NA
Copper	11		4.5	0.20	mg/Kg	1	☼	6010C	Total/NA
Iron	5700	Q	72	3.4	mg/Kg	1	☼	6010C	Total/NA
Lead	3.7	J D	4.1	1.4	mg/Kg	5	☼	6010C	Total/NA
Magnesium	5100		27	3.3	mg/Kg	1	☼	6010C	Total/NA
Manganese	270		4.1	0.090	mg/Kg	1	☼	6010C	Total/NA
Nickel	9.7	J D	18	0.60	mg/Kg	5	☼	6010C	Total/NA
Potassium	620		270	37	mg/Kg	1	☼	6010C	Total/NA
Sodium	110	J	450	53	mg/Kg	1	☼	6010C	Total/NA
Vanadium	8.7		1.8	0.085	mg/Kg	1	☼	6010C	Total/NA
Zinc	26		7.2	0.36	mg/Kg	1	☼	6010C	Total/NA
Mercury	15	J	21	6.8	ug/Kg	1	☼	7471A	Total/NA

Client Sample ID: SS025-AB-060517 — Lab Sample ID: 280-97928-13

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.015	J	0.095	0.0043	ug/L	1		8270D SIM	Total/NA
Phenanthrene	0.016	J	0.095	0.0093	ug/L	1		8270D SIM	Total/NA
Pyrene	0.0091	J	0.095	0.0077	ug/L	1		8270D SIM	Total/NA

Client Sample ID: SS025-SB09(0-2) — Lab Sample ID: 280-97928-14

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	20	Q	18	4.8	ug/Kg	1	☼	8260B	Total/NA
1-Methylnaphthalene	2.4	J	5.3	0.28	ug/Kg	1	☼	8270D SIM	Total/NA
2-Methylnaphthalene	3.7	J	5.3	0.33	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthene	2.0	J M	5.3	0.17	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthylene	5.2	J M	5.3	0.18	ug/Kg	1	☼	8270D SIM	Total/NA
Anthracene	9.1		5.3	0.77	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]anthracene	58		5.3	0.96	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	55		5.3	0.79	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene	81		5.3	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene	29		5.3	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene	28		5.3	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	69		5.3	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Dibenz(a,h)anthracene	8.2		5.3	1.4	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	75		5.3	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Fluorene	2.9	J	5.3	0.50	ug/Kg	1	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	26		5.3	1.2	ug/Kg	1	☼	8270D SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SB09(0-2) (Continued) — Lab Sample ID: 280-97928-14

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	2.6	J	5.3	0.35	ug/Kg	1	☼	8270D SIM	Total/NA
Phenanthrene	25		5.3	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	72		5.3	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
4,4'-DDE	0.72	J	1.9	0.26	ug/Kg	1	☼	8081B	Total/NA
4,4'-DDT	6.4	J	2.2	0.66	ug/Kg	1	☼	8081B	Total/NA
alpha-Chlordane	1.6	J	1.9	0.36	ug/Kg	1	☼	8081B	Total/NA
gamma-Chlordane	2.9	J	1.9	0.30	ug/Kg	1	☼	8081B	Total/NA
Heptachlor epoxide	1.7	J	1.9	0.47	ug/Kg	1	☼	8081B	Total/NA
4,4'-DDE - DL	3.0	J D	19	2.6	ug/Kg	10	☼	8081B	Total/NA
alpha-Chlordane - DL	4.9	J D	19	3.6	ug/Kg	10	☼	8081B	Total/NA
gamma-Chlordane - DL	3.1	J D	19	3.0	ug/Kg	10	☼	8081B	Total/NA
Arochlor 1260	81		37	2.9	ug/Kg	1	☼	8082A	Total/NA
Aluminum	7200		40	1.2	mg/Kg	1	☼	6010C	Total/NA
Arsenic	4.2		2.0	0.53	mg/Kg	1	☼	6010C	Total/NA
Barium	32		1.6	0.083	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.36	J	0.40	0.026	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.20	J	0.40	0.033	mg/Kg	1	☼	6010C	Total/NA
Calcium	48000		80	11	mg/Kg	1	☼	6010C	Total/NA
Chromium	8.0		2.8	0.046	mg/Kg	1	☼	6010C	Total/NA
Cobalt	4.9		0.80	0.080	mg/Kg	1	☼	6010C	Total/NA
Copper	22		4.0	0.17	mg/Kg	1	☼	6010C	Total/NA
Iron	13000	Q	64	3.0	mg/Kg	1	☼	6010C	Total/NA
Lead	7.4		0.72	0.25	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3200		24	2.9	mg/Kg	1	☼	6010C	Total/NA
Manganese	870		3.6	0.080	mg/Kg	1	☼	6010C	Total/NA
Nickel	10		3.2	0.10	mg/Kg	1	☼	6010C	Total/NA
Potassium	880		240	33	mg/Kg	1	☼	6010C	Total/NA
Sodium	59	J	400	47	mg/Kg	1	☼	6010C	Total/NA
Thallium	0.92	J	2.4	0.52	mg/Kg	1	☼	6010C	Total/NA
Vanadium	15		1.6	0.075	mg/Kg	1	☼	6010C	Total/NA
Zinc	39		6.4	0.32	mg/Kg	1	☼	6010C	Total/NA
Mercury	45		20	6.7	ug/Kg	1	☼	7471A	Total/NA

Client Sample ID: SS025-SB09(2-4) — Lab Sample ID: 280-97928-15

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	3.0	J	5.5	0.29	ug/Kg	1	☼	8270D SIM	Total/NA
2-Methylnaphthalene	3.8	J	5.5	0.34	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthene	1.2	J M	5.5	0.18	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthylene	6.5	M	5.5	0.19	ug/Kg	1	☼	8270D SIM	Total/NA
Anthracene	7.4		5.5	0.79	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]anthracene	22		5.5	0.99	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	24		5.5	0.81	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene	37		5.5	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene	18		5.5	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene	15	M	5.5	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	28		5.5	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Dibenz(a,h)anthracene	4.9	J	5.5	1.4	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	34		5.5	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Fluorene	2.5	J	5.5	0.52	ug/Kg	1	☼	8270D SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SB09(2-4) (Continued) — Lab Sample ID: 280-97928-15

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Indeno[1,2,3-cd]pyrene	15		5.5	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Naphthalene	2.6	J	5.5	0.36	ug/Kg	1	☼	8270D SIM	Total/NA
Phenanthrene	15		5.5	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	34		5.5	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
4,4'-DDE	1.1	J Q	1.9	0.26	ug/Kg	1	☼	8081B	Total/NA
4,4'-DDT	2.2	Q	2.2	0.65	ug/Kg	1	☼	8081B	Total/NA
Dieldrin	2.9	Q	1.9	0.23	ug/Kg	1	☼	8081B	Total/NA
Arochlor 1260	69		36	2.9	ug/Kg	1	☼	8082A	Total/NA
Aluminum	8000		42	1.3	mg/Kg	1	☼	6010C	Total/NA
Arsenic	4.4		2.1	0.56	mg/Kg	1	☼	6010C	Total/NA
Barium	47		1.7	0.088	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.39	J	0.42	0.028	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.22	J	0.42	0.035	mg/Kg	1	☼	6010C	Total/NA
Calcium	18000		84	12	mg/Kg	1	☼	6010C	Total/NA
Chromium	9.5		3.0	0.049	mg/Kg	1	☼	6010C	Total/NA
Cobalt	5.7		0.84	0.084	mg/Kg	1	☼	6010C	Total/NA
Copper	31		4.2	0.18	mg/Kg	1	☼	6010C	Total/NA
Iron	17000	Q	67	3.2	mg/Kg	1	☼	6010C	Total/NA
Lead	7.5		0.76	0.26	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3500		25	3.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	960		3.8	0.084	mg/Kg	1	☼	6010C	Total/NA
Nickel	14		3.4	0.11	mg/Kg	1	☼	6010C	Total/NA
Potassium	1000		250	35	mg/Kg	1	☼	6010C	Total/NA
Thallium	0.76	J	2.5	0.55	mg/Kg	1	☼	6010C	Total/NA
Vanadium	17		1.7	0.079	mg/Kg	1	☼	6010C	Total/NA
Zinc	52		6.7	0.34	mg/Kg	1	☼	6010C	Total/NA
Mercury	79		23	7.4	ug/Kg	1	☼	7471A	Total/NA

Client Sample ID: SS025-SB09(4-6) — Lab Sample ID: 280-97928-16

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	3.7	J	6.0	0.31	ug/Kg	1	☼	8270D SIM	Total/NA
2-Methylnaphthalene	5.9	J	6.0	0.37	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthene	3.1	J M	6.0	0.19	ug/Kg	1	☼	8270D SIM	Total/NA
Acenaphthylene	14		6.0	0.20	ug/Kg	1	☼	8270D SIM	Total/NA
Anthracene	15		6.0	0.86	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]anthracene	39		6.0	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	39		6.0	0.89	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene	64		6.0	1.4	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene	34		6.0	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene	22		6.0	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	51		6.0	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Dibenz(a,h)anthracene	8.6		6.0	1.6	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	75		6.0	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Fluorene	4.9	J	6.0	0.56	ug/Kg	1	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	26		6.0	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Naphthalene	5.2	J	6.0	0.39	ug/Kg	1	☼	8270D SIM	Total/NA
Phenanthrene	35		6.0	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	70		6.0	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
4,4'-DDE	2.4		1.9	0.27	ug/Kg	1	☼	8081B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SB09(4-6) (Continued) — Lab Sample ID: 280-97928-16

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
4,4'-DDT	5.1		2.3	0.67	ug/Kg	1	☼	8081B	Total/NA
Dieldrin	2.5		1.9	0.24	ug/Kg	1	☼	8081B	Total/NA
Arochlor 1260	14	J Q	38	3.0	ug/Kg	1	☼	8082A	Total/NA
Aluminum	15000		50	1.5	mg/Kg	1	☼	6010C	Total/NA
Arsenic	5.8		2.5	0.66	mg/Kg	1	☼	6010C	Total/NA
Barium	47		2.0	0.10	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.62		0.50	0.033	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.22	J	0.50	0.041	mg/Kg	1	☼	6010C	Total/NA
Calcium	3700		99	14	mg/Kg	1	☼	6010C	Total/NA
Chromium	15		3.5	0.058	mg/Kg	1	☼	6010C	Total/NA
Cobalt	9.3		0.99	0.099	mg/Kg	1	☼	6010C	Total/NA
Copper	25		5.0	0.22	mg/Kg	1	☼	6010C	Total/NA
Iron	23000	Q	79	3.8	mg/Kg	1	☼	6010C	Total/NA
Lead	19		0.89	0.31	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3500		30	3.7	mg/Kg	1	☼	6010C	Total/NA
Manganese	990		4.5	0.099	mg/Kg	1	☼	6010C	Total/NA
Nickel	15		4.0	0.13	mg/Kg	1	☼	6010C	Total/NA
Potassium	1400		300	41	mg/Kg	1	☼	6010C	Total/NA
Sodium	85	J	500	59	mg/Kg	1	☼	6010C	Total/NA
Vanadium	27		2.0	0.093	mg/Kg	1	☼	6010C	Total/NA
Zinc	67		7.9	0.40	mg/Kg	1	☼	6010C	Total/NA
Mercury	38		22	7.1	ug/Kg	1	☼	7471A	Total/NA

Client Sample ID: SS025-SB09(6-8) — Lab Sample ID: 280-97928-17

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	1.1	J	5.5	0.19	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	0.85	J	5.5	0.81	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene	1.7	J	5.5	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	1.4	J	5.5	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	1.3	J	5.5	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	1.3	J	5.5	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Aluminum	7800		44	1.4	mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.9		2.2	0.58	mg/Kg	1	☼	6010C	Total/NA
Barium	39		1.7	0.091	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.42	J	0.44	0.029	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.13	J	0.44	0.036	mg/Kg	1	☼	6010C	Total/NA
Calcium	1400		87	12	mg/Kg	1	☼	6010C	Total/NA
Chromium	9.6		3.0	0.051	mg/Kg	1	☼	6010C	Total/NA
Cobalt	6.1		0.87	0.087	mg/Kg	1	☼	6010C	Total/NA
Copper	19		4.4	0.19	mg/Kg	1	☼	6010C	Total/NA
Iron	17000		70	3.3	mg/Kg	1	☼	6010C	Total/NA
Lead	5.1		0.78	0.27	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2300		26	3.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	770		3.9	0.087	mg/Kg	1	☼	6010C	Total/NA
Nickel	12		3.5	0.12	mg/Kg	1	☼	6010C	Total/NA
Potassium	900		260	36	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.81	J	2.6	0.75	mg/Kg	1	☼	6010C	Total/NA
Sodium	75	J	440	51	mg/Kg	1	☼	6010C	Total/NA
Vanadium	19		1.7	0.082	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SB09(6-8) (Continued) — Lab Sample ID: 280-97928-17

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Zinc	36		7.0	0.35	mg/Kg	1	☼	6010C	Total/NA
Mercury	17	J	23	7.4	ug/Kg	1	☼	7471A	Total/NA

Client Sample ID: SS025-SB10(0-2) — Lab Sample ID: 280-97928-18

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	1.1	J	5.0	0.17	ug/Kg	1	☼	8270D SIM	Total/NA
Anthracene	0.84	J	5.0	0.72	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]anthracene	2.7	J	5.0	0.90	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	3.2	J	5.0	0.74	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene	4.8	J	5.0	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene	2.4	J	5.0	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene	1.7	J	5.0	1.0	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	3.6	J	5.0	1.0	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	5.1		5.0	1.0	ug/Kg	1	☼	8270D SIM	Total/NA
Fluorene	0.48	J	5.0	0.47	ug/Kg	1	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	2.2	J	5.0	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Phenanthrene	2.4	J	5.0	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	4.5	J	5.0	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Aluminum	3300		53	1.6	mg/Kg	1	☼	6010C	Total/NA
Arsenic	2.2	J	2.6	0.70	mg/Kg	1	☼	6010C	Total/NA
Barium	10		2.1	0.11	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.16	J	0.53	0.035	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.057	J	0.53	0.043	mg/Kg	1	☼	6010C	Total/NA
Calcium	1400		110	15	mg/Kg	1	☼	6010C	Total/NA
Chromium	3.6	J	3.7	0.061	mg/Kg	1	☼	6010C	Total/NA
Cobalt	2.5		1.1	0.11	mg/Kg	1	☼	6010C	Total/NA
Copper	8.2		5.3	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	7100	Q	85	4.0	mg/Kg	1	☼	6010C	Total/NA
Lead	1.5		0.95	0.33	mg/Kg	1	☼	6010C	Total/NA
Magnesium	1500		32	3.9	mg/Kg	1	☼	6010C	Total/NA
Manganese	270		4.8	0.11	mg/Kg	1	☼	6010C	Total/NA
Nickel	5.4		4.2	0.14	mg/Kg	1	☼	6010C	Total/NA
Potassium	590		320	43	mg/Kg	1	☼	6010C	Total/NA
Vanadium	6.5		2.1	0.10	mg/Kg	1	☼	6010C	Total/NA
Zinc	14		8.5	0.42	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: SS025-SB10(2-4) — Lab Sample ID: 280-97928-19

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.44	J	5.1	0.17	ug/Kg	1	☼	8270D SIM	Total/NA
Aluminum	2900		45	1.4	mg/Kg	1	☼	6010C	Total/NA
Arsenic	2.4		2.2	0.60	mg/Kg	1	☼	6010C	Total/NA
Barium	8.7		1.8	0.094	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.14	J	0.45	0.030	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.048	J	0.45	0.037	mg/Kg	1	☼	6010C	Total/NA
Calcium	970		90	13	mg/Kg	1	☼	6010C	Total/NA
Chromium	3.1		3.1	0.052	mg/Kg	1	☼	6010C	Total/NA
Cobalt	2.2		0.90	0.090	mg/Kg	1	☼	6010C	Total/NA
Copper	7.8		4.5	0.20	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SB10(2-4) (Continued) — Lab Sample ID: 280-97928-19

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Iron	6200	Q	72	3.4	mg/Kg	1	☼	6010C	Total/NA
Lead	1.3		0.81	0.28	mg/Kg	1	☼	6010C	Total/NA
Magnesium	1300		27	3.3	mg/Kg	1	☼	6010C	Total/NA
Manganese	260		4.0	0.090	mg/Kg	1	☼	6010C	Total/NA
Nickel	4.9		3.6	0.12	mg/Kg	1	☼	6010C	Total/NA
Potassium	480		270	37	mg/Kg	1	☼	6010C	Total/NA
Vanadium	5.7		1.8	0.085	mg/Kg	1	☼	6010C	Total/NA
Zinc	13		7.2	0.36	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: SS025-SB10(4-6) — Lab Sample ID: 280-97928-20

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Methyl iodide	22	J	250	21	ug/Kg	1	☼	8260B	Total/NA
Methylene Chloride	760	B	250	69	ug/Kg	1	☼	8260B	Total/NA
Acenaphthylene	0.43	J	5.0	0.17	ug/Kg	1	☼	8270D SIM	Total/NA
Aluminum	3400		43	1.3	mg/Kg	1	☼	6010C	Total/NA
Arsenic	2.8		2.1	0.57	mg/Kg	1	☼	6010C	Total/NA
Barium	9.8		1.7	0.089	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.16	J	0.43	0.028	mg/Kg	1	☼	6010C	Total/NA
Calcium	960		85	12	mg/Kg	1	☼	6010C	Total/NA
Chromium	3.7		3.0	0.049	mg/Kg	1	☼	6010C	Total/NA
Cobalt	2.5		0.85	0.085	mg/Kg	1	☼	6010C	Total/NA
Copper	8.4		4.3	0.18	mg/Kg	1	☼	6010C	Total/NA
Iron	7300	Q	68	3.2	mg/Kg	1	☼	6010C	Total/NA
Lead	1.5		0.77	0.26	mg/Kg	1	☼	6010C	Total/NA
Magnesium	1500		26	3.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	270		3.8	0.085	mg/Kg	1	☼	6010C	Total/NA
Nickel	5.6		3.4	0.11	mg/Kg	1	☼	6010C	Total/NA
Potassium	580		260	35	mg/Kg	1	☼	6010C	Total/NA
Vanadium	6.6		1.7	0.080	mg/Kg	1	☼	6010C	Total/NA
Zinc	14		6.8	0.34	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: SS025-SB10(2-4)-a — Lab Sample ID: 280-97928-21

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.37	J	5.2	0.18	ug/Kg	1	☼	8270D SIM	Total/NA
Aluminum	3100		49	1.5	mg/Kg	1	☼	6010C	Total/NA
Arsenic	2.4	J	2.5	0.66	mg/Kg	1	☼	6010C	Total/NA
Barium	9.1		2.0	0.10	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.14	J	0.49	0.033	mg/Kg	1	☼	6010C	Total/NA
Calcium	3000		99	14	mg/Kg	1	☼	6010C	Total/NA
Chromium	3.4		3.4	0.057	mg/Kg	1	☼	6010C	Total/NA
Cobalt	2.4		0.99	0.099	mg/Kg	1	☼	6010C	Total/NA
Copper	8.1		4.9	0.21	mg/Kg	1	☼	6010C	Total/NA
Iron	6900	Q	79	3.7	mg/Kg	1	☼	6010C	Total/NA
Lead	1.3		0.89	0.31	mg/Kg	1	☼	6010C	Total/NA
Magnesium	1700		30	3.6	mg/Kg	1	☼	6010C	Total/NA
Manganese	250		4.4	0.099	mg/Kg	1	☼	6010C	Total/NA
Nickel	5.2		3.9	0.13	mg/Kg	1	☼	6010C	Total/NA
Potassium	570		300	40	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SB10(2-4)-a (Continued) — Lab Sample ID: 280-97928-21

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	6.3		2.0	0.093	mg/Kg	1	☼	6010C	Total/NA
Zinc	14		7.9	0.39	mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: SS025-SS10 — Lab Sample ID: 280-97928-22

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Acetone	35	Q	19	5.1	ug/Kg	1	☼	8260B	Total/NA
Acenaphthylene	1.3	J	5.3	0.18	ug/Kg	1	☼	8270D SIM	Total/NA
Anthracene	1.4	J	5.3	0.76	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]anthracene	4.7	J	5.3	0.95	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[a]pyrene	5.4		5.3	0.78	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[b]fluoranthene	8.2		5.3	1.3	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[g,h,i]perylene	3.7	J	5.3	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Benzo[k]fluoranthene	3.0	J	5.3	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Chrysene	6.3		5.3	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Fluoranthene	9.0		5.3	1.1	ug/Kg	1	☼	8270D SIM	Total/NA
Fluorene	0.50	J	5.3	0.50	ug/Kg	1	☼	8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	3.2	J	5.3	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Naphthalene	0.34	J	5.3	0.34	ug/Kg	1	☼	8270D SIM	Total/NA
Phenanthrene	3.3	J	5.3	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Pyrene	8.4		5.3	1.2	ug/Kg	1	☼	8270D SIM	Total/NA
Aluminum	3500		47	1.4	mg/Kg	1	☼	6010C	Total/NA
Arsenic	1.8	J	2.3	0.62	mg/Kg	1	☼	6010C	Total/NA
Barium	11		1.9	0.097	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.16	J	0.47	0.031	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.064	J	0.47	0.038	mg/Kg	1	☼	6010C	Total/NA
Calcium	890		93	13	mg/Kg	1	☼	6010C	Total/NA
Chromium	3.6		3.3	0.054	mg/Kg	1	☼	6010C	Total/NA
Cobalt	2.5		0.93	0.093	mg/Kg	1	☼	6010C	Total/NA
Copper	8.5		4.7	0.20	mg/Kg	1	☼	6010C	Total/NA
Iron	7300	Q	75	3.5	mg/Kg	1	☼	6010C	Total/NA
Lead	1.9		0.84	0.29	mg/Kg	1	☼	6010C	Total/NA
Magnesium	1500		28	3.5	mg/Kg	1	☼	6010C	Total/NA
Manganese	290		4.2	0.093	mg/Kg	1	☼	6010C	Total/NA
Nickel	5.5		3.7	0.12	mg/Kg	1	☼	6010C	Total/NA
Potassium	560		280	38	mg/Kg	1	☼	6010C	Total/NA
Vanadium	6.8		1.9	0.088	mg/Kg	1	☼	6010C	Total/NA
Zinc	15		7.5	0.37	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS025-SS07

Date Collected: 06/05/17 08:15
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-1

Matrix: Solid
Percent Solids: 86.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.6	U	5.0	0.57	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
1,1,1-Trichloroethane	1.6	U	5.0	0.52	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
1,1,2,2-Tetrachloroethane	1.6	U	5.0	0.62	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
1,1,2-Trichloroethane	3.2	U	5.0	0.89	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
1,1-Dichloroethane	0.81	U	5.0	0.21	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
1,1-Dichloroethene	1.6	U	5.0	0.60	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
1,1-Dichloropropene	1.6	U	5.0	0.55	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
1,2,3-Trichlorobenzene	1.6	U	5.0	0.76	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
1,2,3-Trichloropropane	3.2	U	5.0	0.82	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
1,2,4-Trichlorobenzene	1.6	U	5.0	0.74	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
1,2,4-Trimethylbenzene	1.6	U	5.0	0.59	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
1,2-Dibromo-3-Chloropropane	1.6	U	10	0.61	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
1,2-Dibromoethane	1.6	U	5.0	0.52	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
1,2-Dichlorobenzene	1.6	U	5.0	0.45	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
1,2-Dichloroethane	1.6	U	5.0	0.71	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
1,2-Dichloroethene, Total	1.6	U	5.0	0.39	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
1,2-Dichloropropane	1.6	U	5.0	0.56	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
1,3,5-Trimethylbenzene	1.6	U	5.0	0.58	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
1,3-Dichlorobenzene	1.6	U	5.0	0.48	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
1,3-Dichloropropane	1.6	U	5.0	0.51	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
1,4-Dichlorobenzene	1.6	U	5.0	0.79	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
2,2-Dichloropropane	1.6	U	5.0	0.44	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
2-Butanone (MEK)	6.5	U	20	1.8	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
2-Chlorotoluene	1.6	U	5.0	0.51	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
2-Hexanone	13	U Q	20	4.9	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
4-Chlorotoluene	1.6	U	5.0	0.79	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
4-Isopropyltoluene	1.6	U	5.0	0.49	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
4-Methyl-2-pentanone (MIBK)	13	U	20	4.4	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Acetone	**13**	**J B Q**	20	5.4	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Benzene	1.6	U	5.0	0.47	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Bromobenzene	1.6	U	5.0	0.49	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Bromochloromethane	0.81	U	5.0	0.30	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Bromodichloromethane	0.81	U	5.0	0.22	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Bromoform	0.81	U	5.0	0.23	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Bromomethane	1.6	U Q	10	0.50	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Carbon disulfide	1.6	U	5.0	0.42	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Carbon tetrachloride	1.6	U	5.0	0.64	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Chlorobenzene	1.6	U	5.0	0.55	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Chloroethane	3.2	U	10	0.90	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Chloroform	0.81	U	10	0.29	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Chloromethane	1.6	U	10	0.78	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
cis-1,2-Dichloroethene	1.6	U	5.0	0.57	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
cis-1,3-Dichloropropene	3.2	U	5.0	1.3	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Dibromochloromethane	1.6	U	5.0	0.58	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Dibromomethane	3.2	U	5.0	0.85	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Dichlorodifluoromethane	1.6	U Q	10	0.52	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Ethylbenzene	1.6	U	5.0	0.68	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Hexachlorobutadiene	1.6	U	5.0	0.56	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Isopropyl ether	8.1	U	50	2.7	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1

Client Sample ID: SS025-SS07

Date Collected: 06/05/17 08:15
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-1

Matrix: Solid
Percent Solids: 86.7

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	1.6	U	5.0	0.60	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
m&p-Xylene	3.2	U	3.2	1.0	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Methyl iodide	1.6	U	5.0	0.44	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Methyl tert-butyl ether	0.81	U	20	0.34	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Methylene Chloride	3.2	U	5.0	1.6	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Naphthalene	1.6	U	5.0	0.64	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
n-Butylbenzene	1.6	U	5.0	0.57	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
N-Propylbenzene	1.6	U	5.0	0.59	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
o-Xylene	1.6	U	5.0	0.62	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
sec-Butylbenzene	1.6	U	5.0	0.78	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Styrene	1.6	U	5.0	0.64	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
tert-Butylbenzene	1.6	U	5.0	0.50	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Tetrachloroethene	1.6	U	5.0	0.60	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Toluene	1.6	U	5.0	0.70	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
trans-1,2-Dichloroethene	0.81	U	5.0	0.39	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
trans-1,3-Dichloropropene	1.6	U	5.0	0.68	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Trichloroethene	0.81	U	5.0	0.23	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Trichlorofluoromethane	3.2	U	10	1.0	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Vinyl acetate	3.2	U	10	1.1	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Vinyl chloride	3.2	U	5.0	1.4	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1
Xylenes (total)	1.0	U	10	0.62	ug/Kg	☼	06/05/17 08:15	06/15/17 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*71 - 136*	*06/05/17 08:15*	*06/15/17 22:02*	*1*
4-Bromofluorobenzene (Surr)	*94*		*79 - 119*	*06/05/17 08:15*	*06/15/17 22:02*	*1*
Dibromofluoromethane (Surr)	*104*		*78 - 119*	*06/05/17 08:15*	*06/15/17 22:02*	*1*
Toluene-d8 (Surr)	*93*		*85 - 116*	*06/05/17 08:15*	*06/15/17 22:02*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**0.38**	**J**	5.6	0.29	ug/Kg	☼	06/11/17 07:19	06/16/17 16:29	1
2-Methylnaphthalene	**0.48**	**J**	5.6	0.34	ug/Kg	☼	06/11/17 07:19	06/16/17 16:29	1
Acenaphthene	**0.43**	**J**	5.6	0.18	ug/Kg	☼	06/11/17 07:19	06/16/17 16:29	1
Acenaphthylene	**1.7**	**J**	5.6	0.19	ug/Kg	☼	06/11/17 07:19	06/16/17 16:29	1
Anthracene	**1.7**	**J**	5.6	0.80	ug/Kg	☼	06/11/17 07:19	06/16/17 16:29	1
Benzo[a]anthracene	**6.4**		5.6	1.0	ug/Kg	☼	06/11/17 07:19	06/16/17 16:29	1
Benzo[a]pyrene	**7.6**		5.6	0.83	ug/Kg	☼	06/11/17 07:19	06/16/17 16:29	1
Benzo[b]fluoranthene	**12**		5.6	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 16:29	1
Benzo[g,h,i]perylene	**5.1**	**J**	5.6	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 16:29	1
Benzo[k]fluoranthene	**4.8**	**J**	5.6	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 16:29	1
Chrysene	**9.6**		5.6	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 16:29	1
Dibenz(a,h)anthracene	**1.5**	**J**	5.6	1.5	ug/Kg	☼	06/11/17 07:19	06/16/17 16:29	1
Fluoranthene	**15**		5.6	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 16:29	1
Fluorene	**0.98**	**J**	5.6	0.52	ug/Kg	☼	06/11/17 07:19	06/16/17 16:29	1
Indeno[1,2,3-cd]pyrene	**4.5**	**J**	5.6	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 16:29	1
Naphthalene	**0.58**	**J**	5.6	0.36	ug/Kg	☼	06/11/17 07:19	06/16/17 16:29	1
Phenanthrene	**6.8**		5.6	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 16:29	1
Pyrene	**13**		5.6	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 16:29	1

Client Sample ID: SS025-SS07

Date Collected: 06/05/17 08:15
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-1

Matrix: Solid
Percent Solids: 86.7

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*46 - 115*	*06/11/17 07:19*	*06/16/17 16:29*	*1*
Nitrobenzene-d5 (Surr)	*81*		*44 - 125*	*06/11/17 07:19*	*06/16/17 16:29*	*1*
Terphenyl-d14 (Surr)	*62*		*58 - 133*	*06/11/17 07:19*	*06/16/17 16:29*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.8	U Q	1.9	0.60	ug/Kg	☼	06/16/17 13:00	06/25/17 16:49	1
4,4'-DDE	0.73	U Q	1.9	0.26	ug/Kg	☼	06/16/17 13:00	06/25/17 16:49	1
4,4'-DDT	1.8	U Q	2.2	0.65	ug/Kg	☼	06/16/17 13:00	06/25/17 16:49	1
Aldrin	0.73	U Q	1.9	0.27	ug/Kg	☼	06/16/17 13:00	06/25/17 16:49	1
alpha-BHC	0.73	U Q	1.9	0.23	ug/Kg	☼	06/16/17 13:00	06/25/17 16:49	1
alpha-Chlordane	0.73	U Q	1.9	0.35	ug/Kg	☼	06/16/17 13:00	06/25/17 16:49	1
beta-BHC	1.8	U Q	1.9	0.73	ug/Kg	☼	06/16/17 13:00	06/25/17 16:49	1
delta-BHC	1.1	U Q	1.9	0.44	ug/Kg	☼	06/16/17 13:00	06/25/17 16:49	1
Dieldrin	0.73	U	1.9	0.23	ug/Kg	☼	06/16/17 13:00	06/25/17 16:49	1
Endosulfan I	0.73	U Q	1.9	0.19	ug/Kg	☼	06/16/17 13:00	06/25/17 16:49	1
Endosulfan II	0.73	U Q	1.9	0.31	ug/Kg	☼	06/16/17 13:00	06/25/17 16:49	1
Endosulfan sulfate	0.73	U Q	1.9	0.30	ug/Kg	☼	06/16/17 13:00	06/25/17 16:49	1
Endrin	0.73	U Q	1.9	0.34	ug/Kg	☼	06/16/17 13:00	06/25/17 16:49	1
Endrin aldehyde	0.73	U Q	1.9	0.19	ug/Kg	☼	06/16/17 13:00	06/25/17 16:49	1
gamma-BHC (Lindane)	1.1	U Q	1.9	0.51	ug/Kg	☼	06/16/17 13:00	06/25/17 16:49	1
gamma-Chlordane	0.73	U Q	1.9	0.29	ug/Kg	☼	06/16/17 13:00	06/25/17 16:49	1
Heptachlor	0.73	U Q	1.9	0.23	ug/Kg	☼	06/16/17 13:00	06/25/17 16:49	1
Heptachlor epoxide	1.1	U Q	1.9	0.47	ug/Kg	☼	06/16/17 13:00	06/25/17 16:49	1
Methoxychlor	1.1	U Q	3.6	0.49	ug/Kg	☼	06/16/17 13:00	06/25/17 16:49	1
Toxaphene	36	U Q	190	17	ug/Kg	☼	06/16/17 13:00	06/25/17 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*79*		*63 - 121*	*06/16/17 13:00*	*06/25/17 16:49*	*1*
Tetrachloro-m-xylene (Surr)	*81*		*42 - 129*	*06/16/17 13:00*	*06/25/17 16:49*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	16	U	36	5.6	ug/Kg	☼	06/16/17 13:00	06/26/17 14:29	1
Arochlor 1221	19	U	51	17	ug/Kg	☼	06/16/17 13:00	06/26/17 14:29	1
Arochlor 1232	16	U	36	5.6	ug/Kg	☼	06/16/17 13:00	06/26/17 14:29	1
Arochlor 1242	36	U	36	10	ug/Kg	☼	06/16/17 13:00	06/26/17 14:29	1
Arochlor 1248	22	U	36	6.1	ug/Kg	☼	06/16/17 13:00	06/26/17 14:29	1
Arochlor 1254	19	U	36	6.0	ug/Kg	☼	06/16/17 13:00	06/26/17 14:29	1
Arochlor 1260	8.4	U	36	2.9	ug/Kg	☼	06/16/17 13:00	06/26/17 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*81*		*59 - 130*	*06/16/17 13:00*	*06/26/17 14:29*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5100**	**J**	56	1.7	mg/Kg	☼	06/08/17 14:00	06/09/17 09:09	1
Antimony	1.7	U J	2.2	0.82	mg/Kg	☼	06/08/17 14:00	06/09/17 09:09	1
Arsenic	**2.3**	**J**	2.8	0.74	mg/Kg	☼	06/08/17 14:00	06/12/17 23:27	1
Barium	**18**		2.2	0.12	mg/Kg	☼	06/08/17 14:00	06/09/17 09:09	1
Beryllium	**0.23**	**J**	0.56	0.037	mg/Kg	☼	06/08/17 14:00	06/09/17 09:09	1

Client Sample ID: SS025-SS07

Date Collected: 06/05/17 08:15
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-1

Matrix: Solid
Percent Solids: 86.7

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.080	J	0.56	0.046	mg/Kg	☼	06/08/17 14:00	06/09/17 09:09	1
Calcium	1500		110	16	mg/Kg	☼	06/08/17 14:00	06/09/17 09:09	1
Chromium	5.4		3.9	0.065	mg/Kg	☼	06/08/17 14:00	06/09/17 09:09	1
Cobalt	3.4		1.1	0.11	mg/Kg	☼	06/08/17 14:00	06/09/17 09:09	1
Copper	11		5.6	0.24	mg/Kg	☼	06/08/17 14:00	06/12/17 23:27	1
Iron	9800	J	89	4.2	mg/Kg	☼	06/08/17 14:00	06/09/17 09:09	1
Lead	4.2		1.0	0.35	mg/Kg	☼	06/08/17 14:00	06/09/17 09:09	1
Magnesium	2000		33	4.1	mg/Kg	☼	06/08/17 14:00	06/09/17 09:09	1
Manganese	430	J	5.0	0.11	mg/Kg	☼	06/08/17 14:00	06/12/17 15:25	1
Nickel	7.4		4.5	0.15	mg/Kg	☼	06/08/17 14:00	06/09/17 09:09	1
Potassium	660		330	46	mg/Kg	☼	06/08/17 14:00	06/09/17 09:09	1
Selenium	3.3	U	3.3	0.96	mg/Kg	☼	06/08/17 14:00	06/12/17 23:27	1
Silver	0.67	U	1.7	0.18	mg/Kg	☼	06/08/17 14:00	06/09/17 09:09	1
Sodium	220	U	560	66	mg/Kg	☼	06/08/17 14:00	06/09/17 09:09	1
Thallium	2.8	U J	3.3	0.72	mg/Kg	☼	06/08/17 14:00	06/13/17 10:25	1
Vanadium	9.8		2.2	0.10	mg/Kg	☼	06/08/17 14:00	06/09/17 09:09	1
Zinc	26		8.9	0.44	mg/Kg	☼	06/08/17 14:00	06/09/17 09:09	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	18	U	23	7.5	ug/Kg	☼	06/14/17 12:49	06/14/17 16:51	1

Client Sample ID: SS025-TB02

Date Collected: 06/05/17 08:15
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-2

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.6	U	5.0	0.56	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
1,1,1-Trichloroethane	1.6	U	5.0	0.52	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
1,1,2,2-Tetrachloroethane	1.6	U	5.0	0.61	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
1,1,2-Trichloroethane	3.2	U	5.0	0.88	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
1,1-Dichloroethane	0.80	U	5.0	0.21	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
1,1-Dichloroethene	1.6	U	5.0	0.59	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
1,1-Dichloropropene	1.6	U	5.0	0.54	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
1,2,3-Trichlorobenzene	1.6	U	5.0	0.75	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
1,2,3-Trichloropropane	3.2	U	5.0	0.81	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
1,2,4-Trichlorobenzene	1.6	U	5.0	0.73	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
1,2,4-Trimethylbenzene	1.6	U	5.0	0.58	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
1,2-Dibromo-3-Chloropropane	1.6	U	10	0.60	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
1,2-Dibromoethane	1.6	U	5.0	0.52	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
1,2-Dichlorobenzene	1.6	U	5.0	0.45	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
1,2-Dichloroethane	1.6	U	5.0	0.70	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
1,2-Dichloroethene, Total	1.6	U	5.0	0.39	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
1,2-Dichloropropane	1.6	U	5.0	0.55	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
1,3,5-Trimethylbenzene	1.6	U	5.0	0.57	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
1,3-Dichlorobenzene	1.6	U	5.0	0.48	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
1,3-Dichloropropane	1.6	U	5.0	0.51	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
1,4-Dichlorobenzene	1.6	U	5.0	0.78	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
2,2-Dichloropropane	1.6	U	5.0	0.44	ug/Kg		06/05/17 08:15	06/16/17 19:29	1

Client Sample ID: SS025-TB02

Date Collected: 06/05/17 08:15
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-2

Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	6.4	U	20	1.8	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
2-Chlorotoluene	1.6	U	5.0	0.51	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
2-Hexanone	13	U Q	20	4.9	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
4-Chlorotoluene	1.6	U	5.0	0.78	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
4-Isopropyltoluene	1.6	U	5.0	0.49	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
4-Methyl-2-pentanone (MIBK)	13	U	20	4.4	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Acetone	13	U Q	20	5.4	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Benzene	1.6	U	5.0	0.47	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Bromobenzene	1.6	U	5.0	0.49	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Bromochloromethane	0.80	U	5.0	0.30	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Bromodichloromethane	0.80	U	5.0	0.22	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Bromoform	0.80	U	5.0	0.23	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Bromomethane	1.6	U	10	0.50	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Carbon disulfide	1.6	U	5.0	0.42	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Carbon tetrachloride	1.6	U	5.0	0.63	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Chlorobenzene	1.6	U	5.0	0.54	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Chloroethane	3.2	U	10	0.89	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Chloroform	0.80	U	10	0.29	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Chloromethane	1.6	U	10	0.77	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
cis-1,2-Dichloroethene	1.6	U	5.0	0.56	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
cis-1,3-Dichloropropene	3.2	U	5.0	1.3	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Dibromochloromethane	1.6	U	5.0	0.57	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Dibromomethane	3.2	U	5.0	0.84	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Dichlorodifluoromethane	1.6	U Q	10	0.52	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Ethylbenzene	1.6	U	5.0	0.67	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Hexachlorobutadiene	1.6	U	5.0	0.55	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Isopropyl ether	8.0	U	50	2.7	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Isopropylbenzene	1.6	U	5.0	0.59	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
m&p-Xylene	3.2	U	3.2	1.0	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Methyl iodide	1.6	U	5.0	0.44	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Methyl tert-butyl ether	0.80	U	20	0.34	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Methylene Chloride	3.2	U	5.0	1.6	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Naphthalene	1.6	U	5.0	0.63	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
n-Butylbenzene	1.6	U	5.0	0.56	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
N-Propylbenzene	1.6	U	5.0	0.58	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
o-Xylene	1.6	U	5.0	0.61	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
sec-Butylbenzene	1.6	U	5.0	0.77	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Styrene	1.6	U	5.0	0.63	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
tert-Butylbenzene	1.6	U	5.0	0.50	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Tetrachloroethene	1.6	U	5.0	0.59	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Toluene	1.6	U	5.0	0.69	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
trans-1,2-Dichloroethene	0.80	U	5.0	0.39	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
trans-1,3-Dichloropropene	1.6	U	5.0	0.67	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Trichloroethene	0.80	U	5.0	0.23	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Trichlorofluoromethane	3.2	U	10	1.0	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Vinyl acetate	3.2	U	10	1.1	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Vinyl chloride	3.2	U	5.0	1.3	ug/Kg		06/05/17 08:15	06/16/17 19:29	1
Xylenes (total)	1.0	U	10	0.61	ug/Kg		06/05/17 08:15	06/16/17 19:29	1

Client Sample ID: SS025-TB02
Lab Sample ID: 280-97928-2
Date Collected: 06/05/17 08:15
Matrix: Solid
Date Received: 06/06/17 09:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*71 - 136*	*06/05/17 08:15*	*06/16/17 19:29*	*1*
4-Bromofluorobenzene (Surr)	*93*		*79 - 119*	*06/05/17 08:15*	*06/16/17 19:29*	*1*
Dibromofluoromethane (Surr)	*112*		*78 - 119*	*06/05/17 08:15*	*06/16/17 19:29*	*1*
Toluene-d8 (Surr)	*97*		*85 - 116*	*06/05/17 08:15*	*06/16/17 19:29*	*1*

Client Sample ID: SS025-SB06(0-2)
Lab Sample ID: 280-97928-3
Date Collected: 06/05/17 08:35
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 90.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.6	U	5.1	0.57	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
1,1,1-Trichloroethane	1.6	U	5.1	0.53	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
1,1,2,2-Tetrachloroethane	1.6	U	5.1	0.62	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
1,1,2-Trichloroethane	3.3	U	5.1	0.90	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
1,1-Dichloroethane	0.82	U	5.1	0.21	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
1,1-Dichloroethene	1.6	U	5.1	0.60	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
1,1-Dichloropropene	1.6	U	5.1	0.55	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
1,2,3-Trichlorobenzene	1.6	U	5.1	0.77	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
1,2,3-Trichloropropane	3.3	U	5.1	0.83	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
1,2,4-Trichlorobenzene	1.6	U	5.1	0.74	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
1,2,4-Trimethylbenzene	1.6	U	5.1	0.59	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
1,2-Dibromo-3-Chloropropane	1.6	U	10	0.61	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
1,2-Dibromoethane	1.6	U	5.1	0.53	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
1,2-Dichlorobenzene	1.6	U	5.1	0.46	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
1,2-Dichloroethane	1.6	U	5.1	0.71	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
1,2-Dichloroethene, Total	1.6	U	5.1	0.40	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
1,2-Dichloropropane	1.6	U	5.1	0.56	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
1,3,5-Trimethylbenzene	1.6	U	5.1	0.58	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
1,3-Dichlorobenzene	1.6	U	5.1	0.49	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
1,3-Dichloropropane	1.6	U	5.1	0.52	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
1,4-Dichlorobenzene	1.6	U	5.1	0.80	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
2,2-Dichloropropane	1.6	U	5.1	0.45	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
2-Butanone (MEK)	6.5	U	20	1.9	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
2-Chlorotoluene	1.6	U	5.1	0.52	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
2-Hexanone	13	U Q	20	5.0	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
4-Chlorotoluene	1.6	U	5.1	0.80	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
4-Isopropyltoluene	1.6	U	5.1	0.50	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
4-Methyl-2-pentanone (MIBK)	13	U	20	4.4	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Acetone	13	U Q	20	5.5	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Benzene	1.6	U	5.1	0.48	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Bromobenzene	1.6	U	5.1	0.50	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Bromochloromethane	0.82	U	5.1	0.31	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Bromodichloromethane	0.82	U	5.1	0.22	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Bromoform	0.82	U	5.1	0.23	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Bromomethane	1.6	U	10	0.51	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Carbon disulfide	1.6	U	5.1	0.43	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Carbon tetrachloride	1.6	U	5.1	0.64	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Chlorobenzene	1.6	U	5.1	0.55	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Chloroethane	3.3	U	10	0.91	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1

Client Sample ID: SS025-SB06(0-2)

Date Collected: 06/05/17 08:35
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-3

Matrix: Solid
Percent Solids: 90.3

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	0.82	U	10	0.30	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Chloromethane	1.6	U	10	0.79	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
cis-1,2-Dichloroethene	1.6	U	5.1	0.57	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
cis-1,3-Dichloropropene	3.3	U	5.1	1.3	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Dibromochloromethane	1.6	U	5.1	0.58	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Dibromomethane	3.3	U	5.1	0.86	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Dichlorodifluoromethane	1.6	U Q	10	0.53	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Ethylbenzene	1.6	U	5.1	0.68	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Hexachlorobutadiene	1.6	U	5.1	0.56	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Isopropyl ether	8.2	U	51	2.8	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Isopropylbenzene	1.6	U	5.1	0.60	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
m&p-Xylene	3.3	U	3.3	1.1	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Methyl iodide	1.6	U	5.1	0.45	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Methyl tert-butyl ether	0.82	U	20	0.35	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Methylene Chloride	3.3	U	5.1	1.6	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Naphthalene	1.6	U	5.1	0.64	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
n-Butylbenzene	1.6	U	5.1	0.57	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
N-Propylbenzene	1.6	U	5.1	0.59	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
o-Xylene	1.6	U	5.1	0.62	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
sec-Butylbenzene	1.6	U	5.1	0.79	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Styrene	1.6	U	5.1	0.64	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
tert-Butylbenzene	1.6	U	5.1	0.51	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Tetrachloroethene	1.6	U	5.1	0.60	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Toluene	1.6	U	5.1	0.70	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
trans-1,2-Dichloroethene	0.82	U	5.1	0.40	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
trans-1,3-Dichloropropene	1.6	U	5.1	0.68	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Trichloroethene	0.82	U	5.1	0.23	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Trichlorofluoromethane	3.3	U	10	1.1	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Vinyl acetate	3.3	U	10	1.1	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Vinyl chloride	3.3	U	5.1	1.4	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1
Xylenes (total)	1.0	U	10	0.62	ug/Kg	☼	06/05/17 08:35	06/16/17 19:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*71 - 136*	*06/05/17 08:35*	*06/16/17 19:50*	*1*
4-Bromofluorobenzene (Surr)	*96*		*79 - 119*	*06/05/17 08:35*	*06/16/17 19:50*	*1*
Dibromofluoromethane (Surr)	*103*		*78 - 119*	*06/05/17 08:35*	*06/16/17 19:50*	*1*
Toluene-d8 (Surr)	*93*		*85 - 116*	*06/05/17 08:35*	*06/16/17 19:50*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**0.71**	**J**	5.4	0.28	ug/Kg	☼	06/11/17 07:19	06/16/17 17:47	1
2-Methylnaphthalene	**0.77**	**J**	5.4	0.34	ug/Kg	☼	06/11/17 07:19	06/16/17 17:47	1
Acenaphthene	**5.0**	**J**	5.4	0.17	ug/Kg	☼	06/11/17 07:19	06/16/17 17:47	1
Acenaphthylene	**2.0**	**J**	5.4	0.18	ug/Kg	☼	06/11/17 07:19	06/16/17 17:47	1
Anthracene	**11**		5.4	0.78	ug/Kg	☼	06/11/17 07:19	06/16/17 17:47	1
Benzo[a]anthracene	**42**		5.4	0.98	ug/Kg	☼	06/11/17 07:19	06/16/17 17:47	1
Benzo[a]pyrene	**39**		5.4	0.80	ug/Kg	☼	06/11/17 07:19	06/16/17 17:47	1
Benzo[b]fluoranthene	**53**		5.4	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 17:47	1
Benzo[g,h,i]perylene	**21**		5.4	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 17:47	1
Benzo[k]fluoranthene	**19**		5.4	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 17:47	1

Client Sample ID: SS025-SB06(0-2)

Date Collected: 06/05/17 08:35
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-3

Matrix: Solid
Percent Solids: 90.3

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**45**		5.4	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 17:47	1
Dibenz(a,h)anthracene	**6.1**		5.4	1.4	ug/Kg	☼	06/11/17 07:19	06/16/17 17:47	1
Fluoranthene	**85**		5.4	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 17:47	1
Fluorene	**4.6**	**J**	5.4	0.51	ug/Kg	☼	06/11/17 07:19	06/16/17 17:47	1
Indeno[1,2,3-cd]pyrene	**19**		5.4	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 17:47	1
Naphthalene	**0.70**	**J**	5.4	0.35	ug/Kg	☼	06/11/17 07:19	06/16/17 17:47	1
Phenanthrene	**52**		5.4	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 17:47	1
Pyrene	**69**		5.4	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*68*		*46 - 115*	*06/11/17 07:19*	*06/16/17 17:47*	*1*
Nitrobenzene-d5 (Surr)	*65*		*44 - 125*	*06/11/17 07:19*	*06/16/17 17:47*	*1*
Terphenyl-d14 (Surr)	*62*		*58 - 133*	*06/11/17 07:19*	*06/16/17 17:47*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.8	U J	1.8	0.58	ug/Kg	☼	06/16/17 13:00	06/25/17 17:06	1
4,4'-DDE	**0.43**	**J**	1.8	0.25	ug/Kg	☼	06/16/17 13:00	06/25/17 17:06	1
4,4'-DDT	1.8	U M J	2.1	0.63	ug/Kg	☼	06/16/17 13:00	06/25/17 17:06	1
Aldrin	0.71	U J	1.8	0.27	ug/Kg	☼	06/16/17 13:00	06/25/17 17:06	1
alpha-BHC	0.71	U J	1.8	0.23	ug/Kg	☼	06/16/17 13:00	06/25/17 17:06	1
alpha-Chlordane	0.71	U J	1.8	0.34	ug/Kg	☼	06/16/17 13:00	06/25/17 17:06	1
beta-BHC	1.8	U J	1.8	0.70	ug/Kg	☼	06/16/17 13:00	06/25/17 17:06	1
delta-BHC	1.1	U J	1.8	0.43	ug/Kg	☼	06/16/17 13:00	06/25/17 17:06	1
Dieldrin	0.71	U J	1.8	0.22	ug/Kg	☼	06/16/17 13:00	06/25/17 17:06	1
Endosulfan I	0.71	U J	1.8	0.19	ug/Kg	☼	06/16/17 13:00	06/25/17 17:06	1
Endosulfan II	0.71	U J	1.8	0.30	ug/Kg	☼	06/16/17 13:00	06/25/17 17:06	1
Endosulfan sulfate	0.71	U J	1.8	0.29	ug/Kg	☼	06/16/17 13:00	06/25/17 17:06	1
Endrin	0.71	U J	1.8	0.32	ug/Kg	☼	06/16/17 13:00	06/25/17 17:06	1
Endrin aldehyde	0.71	U J	1.8	0.18	ug/Kg	☼	06/16/17 13:00	06/25/17 17:06	1
gamma-BHC (Lindane)	1.1	U J	1.8	0.49	ug/Kg	☼	06/16/17 13:00	06/25/17 17:06	1
gamma-Chlordane	0.71	U J	1.8	0.28	ug/Kg	☼	06/16/17 13:00	06/25/17 17:06	1
Heptachlor	0.71	U J	1.8	0.23	ug/Kg	☼	06/16/17 13:00	06/25/17 17:06	1
Heptachlor epoxide	1.1	U J	1.8	0.45	ug/Kg	☼	06/16/17 13:00	06/25/17 17:06	1
Methoxychlor	1.1	U J	3.5	0.48	ug/Kg	☼	06/16/17 13:00	06/25/17 17:06	1
Toxaphene	35	U	180	17	ug/Kg	☼	06/16/17 13:00	06/25/17 17:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*69*		*63 - 121*	*06/16/17 13:00*	*06/25/17 17:06*	*1*
Tetrachloro-m-xylene (Surr)	*64*		*42 - 129*	*06/16/17 13:00*	*06/25/17 17:06*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	16	U	35	5.4	ug/Kg	☼	06/16/17 13:00	06/26/17 14:51	1
Arochlor 1221	18	U	50	17	ug/Kg	☼	06/16/17 13:00	06/26/17 14:51	1
Arochlor 1232	16	U	35	5.4	ug/Kg	☼	06/16/17 13:00	06/26/17 14:51	1
Arochlor 1242	35	U	35	9.7	ug/Kg	☼	06/16/17 13:00	06/26/17 14:51	1
Arochlor 1248	21	U	35	6.0	ug/Kg	☼	06/16/17 13:00	06/26/17 14:51	1
Arochlor 1254	18	U	35	5.9	ug/Kg	☼	06/16/17 13:00	06/26/17 14:51	1
Arochlor 1260	8.2	U	35	2.8	ug/Kg	☼	06/16/17 13:00	06/26/17 14:51	1

Client Sample ID: SS025-SB06(0-2)

Date Collected: 06/05/17 08:35
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-3

Matrix: Solid
Percent Solids: 90.3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr)	87		59 - 130	06/16/17 13:00	06/26/17 14:51	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3500**		55	1.7	mg/Kg	☼	06/08/17 14:00	06/09/17 09:22	1
Antimony	1.7	U	2.2	0.81	mg/Kg	☼	06/08/17 14:00	06/09/17 09:22	1
Arsenic	**2.1**	**J**	2.8	0.73	mg/Kg	☼	06/08/17 14:00	06/12/17 23:40	1
Barium	**11**		2.2	0.11	mg/Kg	☼	06/08/17 14:00	06/09/17 09:22	1
Beryllium	**0.17**	**J**	0.55	0.036	mg/Kg	☼	06/08/17 14:00	06/09/17 09:22	1
Cadmium	0.17	U	0.55	0.045	mg/Kg	☼	06/08/17 14:00	06/09/17 09:22	1
Calcium	**7500**		110	16	mg/Kg	☼	06/08/17 14:00	06/09/17 09:22	1
Chromium	**4.0**		3.9	0.064	mg/Kg	☼	06/08/17 14:00	06/09/17 09:22	1
Cobalt	**2.5**		1.1	0.11	mg/Kg	☼	06/08/17 14:00	06/09/17 09:22	1
Copper	**9.0**		5.5	0.24	mg/Kg	☼	06/08/17 14:00	06/12/17 23:40	1
Iron	**8000**		88	4.2	mg/Kg	☼	06/08/17 14:00	06/09/17 09:22	1
Lead	**1.8**		0.99	0.34	mg/Kg	☼	06/08/17 14:00	06/09/17 09:22	1
Magnesium	**2800**		33	4.1	mg/Kg	☼	06/08/17 14:00	06/09/17 09:22	1
Manganese	**250**		5.0	0.11	mg/Kg	☼	06/08/17 14:00	06/12/17 15:38	1
Nickel	**5.8**		4.4	0.15	mg/Kg	☼	06/08/17 14:00	06/09/17 09:22	1
Potassium	**550**		330	45	mg/Kg	☼	06/08/17 14:00	06/09/17 09:22	1
Selenium	3.3	U	3.3	0.95	mg/Kg	☼	06/08/17 14:00	06/12/17 23:40	1
Silver	0.66	U	1.7	0.18	mg/Kg	☼	06/08/17 14:00	06/09/17 09:22	1
Sodium	220	U	550	65	mg/Kg	☼	06/08/17 14:00	06/09/17 09:22	1
Thallium	2.8	U	3.3	0.72	mg/Kg	☼	06/08/17 14:00	06/13/17 10:41	1
Vanadium	**7.1**		2.2	0.10	mg/Kg	☼	06/08/17 14:00	06/09/17 09:22	1
Zinc	**16**		8.8	0.44	mg/Kg	☼	06/08/17 14:00	06/09/17 09:22	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	16	U	20	6.6	ug/Kg	☼	06/14/17 12:49	06/14/17 17:06	1

Client Sample ID: SS025-SB06(2-4)

Date Collected: 06/05/17 08:50
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-4

Matrix: Solid
Percent Solids: 87.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.6	U	5.0	0.56	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
1,1,1-Trichloroethane	1.6	U	5.0	0.52	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
1,1,2,2-Tetrachloroethane	1.6	U	5.0	0.61	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
1,1,2-Trichloroethane	3.2	U	5.0	0.88	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
1,1-Dichloroethane	0.80	U	5.0	0.21	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
1,1-Dichloroethene	1.6	U	5.0	0.59	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
1,1-Dichloropropene	1.6	U	5.0	0.54	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
1,2,3-Trichlorobenzene	1.6	U	5.0	0.75	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
1,2,3-Trichloropropane	3.2	U	5.0	0.81	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
1,2,4-Trichlorobenzene	1.6	U	5.0	0.73	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
1,2,4-Trimethylbenzene	1.6	U	5.0	0.58	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
1,2-Dibromo-3-Chloropropane	1.6	U	10	0.60	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
1,2-Dibromoethane	1.6	U	5.0	0.52	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
1,2-Dichlorobenzene	1.6	U	5.0	0.45	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1

Client Sample ID: SS025-SB06(2-4)

Date Collected: 06/05/17 08:50
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-4

Matrix: Solid
Percent Solids: 87.8

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	1.6	U	5.0	0.70	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
1,2-Dichloroethene, Total	1.6	U	5.0	0.39	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
1,2-Dichloropropane	1.6	U	5.0	0.55	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
1,3,5-Trimethylbenzene	1.6	U	5.0	0.57	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
1,3-Dichlorobenzene	1.6	U	5.0	0.48	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
1,3-Dichloropropane	1.6	U	5.0	0.51	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
1,4-Dichlorobenzene	1.6	U	5.0	0.78	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
2,2-Dichloropropane	1.6	U	5.0	0.44	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
2-Butanone (MEK)	6.4	U	20	1.8	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
2-Chlorotoluene	1.6	U	5.0	0.51	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
2-Hexanone	13	U Q	20	4.9	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
4-Chlorotoluene	1.6	U	5.0	0.78	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
4-Isopropyltoluene	1.6	U	5.0	0.49	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
4-Methyl-2-pentanone (MIBK)	13	U	20	4.4	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Acetone	13	U Q	20	5.4	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Benzene	1.6	U	5.0	0.47	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Bromobenzene	1.6	U	5.0	0.49	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Bromochloromethane	0.80	U	5.0	0.30	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Bromodichloromethane	0.80	U	5.0	0.22	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Bromoform	0.80	U	5.0	0.23	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Bromomethane	1.6	U	10	0.50	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Carbon disulfide	1.6	U	5.0	0.42	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Carbon tetrachloride	1.6	U	5.0	0.63	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Chlorobenzene	1.6	U	5.0	0.54	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Chloroethane	3.2	U	10	0.89	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Chloroform	0.80	U	10	0.29	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Chloromethane	1.6	U	10	0.77	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
cis-1,2-Dichloroethene	1.6	U	5.0	0.56	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
cis-1,3-Dichloropropene	3.2	U	5.0	1.3	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Dibromochloromethane	1.6	U	5.0	0.57	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Dibromomethane	3.2	U	5.0	0.84	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Dichlorodifluoromethane	1.6	U Q	10	0.52	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Ethylbenzene	1.6	U	5.0	0.67	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Hexachlorobutadiene	1.6	U	5.0	0.55	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Isopropyl ether	8.0	U	50	2.7	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Isopropylbenzene	1.6	U	5.0	0.59	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
m&p-Xylene	3.2	U	3.2	1.0	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Methyl iodide	1.6	U	5.0	0.44	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Methyl tert-butyl ether	0.80	U	20	0.34	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Methylene Chloride	3.2	U	5.0	1.6	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Naphthalene	1.6	U	5.0	0.63	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
n-Butylbenzene	1.6	U	5.0	0.56	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
N-Propylbenzene	1.6	U	5.0	0.58	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
o-Xylene	1.6	U	5.0	0.61	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
sec-Butylbenzene	1.6	U	5.0	0.77	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Styrene	1.6	U	5.0	0.63	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
tert-Butylbenzene	1.6	U	5.0	0.50	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Tetrachloroethene	1.6	U	5.0	0.59	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Toluene	1.6	U	5.0	0.69	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1

Client Sample ID: SS025-SB06(2-4)

Date Collected: 06/05/17 08:50
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-4

Matrix: Solid
Percent Solids: 87.8

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.80	U	5.0	0.39	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
trans-1,3-Dichloropropene	1.6	U	5.0	0.67	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Trichloroethene	0.80	U	5.0	0.23	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Trichlorofluoromethane	3.2	U	10	1.0	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Vinyl acetate	3.2	U	10	1.1	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Vinyl chloride	3.2	U	5.0	1.3	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1
Xylenes (total)	1.0	U	10	0.61	ug/Kg	☼	06/05/17 08:50	06/16/17 20:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*71 - 136*	*06/05/17 08:50*	*06/16/17 20:11*	*1*
4-Bromofluorobenzene (Surr)	*89*		*79 - 119*	*06/05/17 08:50*	*06/16/17 20:11*	*1*
Dibromofluoromethane (Surr)	*105*		*78 - 119*	*06/05/17 08:50*	*06/16/17 20:11*	*1*
Toluene-d8 (Surr)	*93*		*85 - 116*	*06/05/17 08:50*	*06/16/17 20:11*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.54	U Q	5.4	0.28	ug/Kg	☼	06/11/17 07:19	06/16/17 18:13	1
2-Methylnaphthalene	0.72	U Q	5.4	0.33	ug/Kg	☼	06/11/17 07:19	06/16/17 18:13	1
Acenaphthene	0.29	U	5.4	0.17	ug/Kg	☼	06/11/17 07:19	06/16/17 18:13	1
Acenaphthylene	0.72	U	5.4	0.18	ug/Kg	☼	06/11/17 07:19	06/16/17 18:13	1
Anthracene	2.7	U	5.4	0.78	ug/Kg	☼	06/11/17 07:19	06/16/17 18:13	1
Benzo[a]anthracene	2.7	U	5.4	0.97	ug/Kg	☼	06/11/17 07:19	06/16/17 18:13	1
Benzo[a]pyrene	2.7	U	5.4	0.80	ug/Kg	☼	06/11/17 07:19	06/16/17 18:13	1
Benzo[b]fluoranthene	2.7	U	5.4	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 18:13	1
Benzo[g,h,i]perylene	2.7	U	5.4	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 18:13	1
Benzo[k]fluoranthene	2.7	U	5.4	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 18:13	1
Chrysene	2.7	U	5.4	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 18:13	1
Dibenz(a,h)anthracene	2.7	U	5.4	1.4	ug/Kg	☼	06/11/17 07:19	06/16/17 18:13	1
Fluoranthene	**1.4**	**J**	5.4	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 18:13	1
Fluorene	0.72	U	5.4	0.51	ug/Kg	☼	06/11/17 07:19	06/16/17 18:13	1
Indeno[1,2,3-cd]pyrene	2.7	U	5.4	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 18:13	1
Naphthalene	0.72	U Q	5.4	0.35	ug/Kg	☼	06/11/17 07:19	06/16/17 18:13	1
Phenanthrene	2.7	U	5.4	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 18:13	1
Pyrene	2.7	U	5.4	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 18:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*46*		*46 - 115*	*06/11/17 07:19*	*06/16/17 18:13*	*1*
Nitrobenzene-d5 (Surr)	*41*	*Q*	*44 - 125*	*06/11/17 07:19*	*06/16/17 18:13*	*1*
Terphenyl-d14 (Surr)	*66*		*58 - 133*	*06/11/17 07:19*	*06/16/17 18:13*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.8	U	1.8	0.59	ug/Kg	☼	06/16/17 13:00	06/25/17 18:30	1
4,4'-DDE	0.72	U	1.8	0.26	ug/Kg	☼	06/16/17 13:00	06/25/17 18:30	1
4,4'-DDT	1.8	U	2.2	0.64	ug/Kg	☼	06/16/17 13:00	06/25/17 18:30	1
Aldrin	0.72	U	1.8	0.27	ug/Kg	☼	06/16/17 13:00	06/25/17 18:30	1
alpha-BHC	0.72	U	1.8	0.23	ug/Kg	☼	06/16/17 13:00	06/25/17 18:30	1
alpha-Chlordane	0.72	U	1.8	0.35	ug/Kg	☼	06/16/17 13:00	06/25/17 18:30	1
beta-BHC	1.8	U	1.8	0.72	ug/Kg	☼	06/16/17 13:00	06/25/17 18:30	1
delta-BHC	1.1	U	1.8	0.43	ug/Kg	☼	06/16/17 13:00	06/25/17 18:30	1

Client Sample ID: SS025-SB06(2-4)

Date Collected: 06/05/17 08:50
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-4

Matrix: Solid
Percent Solids: 87.8

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	0.72	U	1.8	0.23	ug/Kg	☼	06/16/17 13:00	06/25/17 18:30	1
Endosulfan I	0.72	U	1.8	0.19	ug/Kg	☼	06/16/17 13:00	06/25/17 18:30	1
Endosulfan II	0.72	U	1.8	0.31	ug/Kg	☼	06/16/17 13:00	06/25/17 18:30	1
Endosulfan sulfate	0.72	U	1.8	0.30	ug/Kg	☼	06/16/17 13:00	06/25/17 18:30	1
Endrin	0.72	U	1.8	0.33	ug/Kg	☼	06/16/17 13:00	06/25/17 18:30	1
Endrin aldehyde	0.72	U	1.8	0.18	ug/Kg	☼	06/16/17 13:00	06/25/17 18:30	1
gamma-BHC (Lindane)	1.1	U	1.8	0.50	ug/Kg	☼	06/16/17 13:00	06/25/17 18:30	1
gamma-Chlordane	0.72	U	1.8	0.29	ug/Kg	☼	06/16/17 13:00	06/25/17 18:30	1
Heptachlor	0.72	U	1.8	0.23	ug/Kg	☼	06/16/17 13:00	06/25/17 18:30	1
Heptachlor epoxide	1.1	U	1.8	0.46	ug/Kg	☼	06/16/17 13:00	06/25/17 18:30	1
Methoxychlor	1.1	U	3.6	0.49	ug/Kg	☼	06/16/17 13:00	06/25/17 18:30	1
Toxaphene	36	U	180	17	ug/Kg	☼	06/16/17 13:00	06/25/17 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*76*		*63 - 121*	*06/16/17 13:00*	*06/25/17 18:30*	*1*
Tetrachloro-m-xylene (Surr)	*71*		*42 - 129*	*06/16/17 13:00*	*06/25/17 18:30*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	16	U	36	5.5	ug/Kg	☼	06/16/17 13:00	06/26/17 15:12	1
Arochlor 1221	18	U	51	17	ug/Kg	☼	06/16/17 13:00	06/26/17 15:12	1
Arochlor 1232	16	U	36	5.5	ug/Kg	☼	06/16/17 13:00	06/26/17 15:12	1
Arochlor 1242	36	U	36	9.8	ug/Kg	☼	06/16/17 13:00	06/26/17 15:12	1
Arochlor 1248	22	U	36	6.0	ug/Kg	☼	06/16/17 13:00	06/26/17 15:12	1
Arochlor 1254	18	U	36	6.0	ug/Kg	☼	06/16/17 13:00	06/26/17 15:12	1
Arochlor 1260	8.3	U	36	2.9	ug/Kg	☼	06/16/17 13:00	06/26/17 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*83*		*59 - 130*	*06/16/17 13:00*	*06/26/17 15:12*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**2500**		54	1.7	mg/Kg	☼	06/08/17 14:00	06/09/17 09:24	1
Antimony	1.6	U	2.2	0.80	mg/Kg	☼	06/08/17 14:00	06/09/17 09:24	1
Arsenic	**1.4**	**J**	2.7	0.72	mg/Kg	☼	06/08/17 14:00	06/12/17 23:42	1
Barium	**9.4**		2.2	0.11	mg/Kg	☼	06/08/17 14:00	06/09/17 09:24	1
Beryllium	**0.11**	**J**	0.54	0.036	mg/Kg	☼	06/08/17 14:00	06/09/17 09:24	1
Cadmium	0.16	U	0.54	0.045	mg/Kg	☼	06/08/17 14:00	06/09/17 09:24	1
Calcium	**12000**		110	15	mg/Kg	☼	06/08/17 14:00	06/09/17 09:24	1
Chromium	**2.9**	**J**	3.8	0.063	mg/Kg	☼	06/08/17 14:00	06/09/17 09:24	1
Cobalt	**2.0**		1.1	0.11	mg/Kg	☼	06/08/17 14:00	06/09/17 09:24	1
Copper	**6.3**		5.4	0.24	mg/Kg	☼	06/08/17 14:00	06/12/17 23:42	1
Iron	**5700**		87	4.1	mg/Kg	☼	06/08/17 14:00	06/09/17 09:24	1
Lead	**0.98**		0.98	0.34	mg/Kg	☼	06/08/17 14:00	06/09/17 09:24	1
Magnesium	**2700**		33	4.0	mg/Kg	☼	06/08/17 14:00	06/09/17 09:24	1
Manganese	**200**		4.9	0.11	mg/Kg	☼	06/08/17 14:00	06/12/17 15:40	1
Nickel	**4.2**	**J**	4.3	0.14	mg/Kg	☼	06/08/17 14:00	06/09/17 09:24	1
Potassium	**480**		330	45	mg/Kg	☼	06/08/17 14:00	06/09/17 09:24	1
Selenium	3.3	U	3.3	0.93	mg/Kg	☼	06/08/17 14:00	06/12/17 23:42	1
Silver	0.65	U	1.6	0.17	mg/Kg	☼	06/08/17 14:00	06/09/17 09:24	1

Client Sample ID: SS025-SB06(2-4)
Lab Sample ID: 280-97928-4
Date Collected: 06/05/17 08:50
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 87.8

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	220	U	540	64	mg/Kg	☼	06/08/17 14:00	06/09/17 09:24	1
Thallium	2.7	U	3.3	0.71	mg/Kg	☼	06/08/17 14:00	06/13/17 10:43	1
Vanadium	**5.6**		2.2	0.10	mg/Kg	☼	06/08/17 14:00	06/09/17 09:24	1
Zinc	**12**		8.7	0.43	mg/Kg	☼	06/08/17 14:00	06/09/17 09:24	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	18	U	23	7.6	ug/Kg	☼	06/14/17 12:49	06/14/17 17:09	1

Client Sample ID: SS025-SS08
Lab Sample ID: 280-97928-5
Date Collected: 06/05/17 09:35
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 86.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.4	U	4.2	0.47	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
1,1,1-Trichloroethane	1.4	U	4.2	0.44	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
1,1,2,2-Tetrachloroethane	1.4	U	4.2	0.52	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
1,1,2-Trichloroethane	2.7	U	4.2	0.74	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
1,1-Dichloroethane	0.68	U	4.2	0.18	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
1,1-Dichloroethene	1.4	U	4.2	0.50	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
1,1-Dichloropropene	1.4	U	4.2	0.46	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
1,2,3-Trichlorobenzene	1.4	U	4.2	0.63	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
1,2,3-Trichloropropane	2.7	U	4.2	0.69	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
1,2,4-Trichlorobenzene	1.4	U	4.2	0.62	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
1,2,4-Trimethylbenzene	1.4	U	4.2	0.49	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
1,2-Dibromo-3-Chloropropane	1.4	U	8.5	0.51	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
1,2-Dibromoethane	1.4	U	4.2	0.44	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
1,2-Dichlorobenzene	1.4	U	4.2	0.38	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
1,2-Dichloroethane	1.4	U	4.2	0.59	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
1,2-Dichloroethene, Total	1.4	U	4.2	0.33	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
1,2-Dichloropropane	1.4	U	4.2	0.47	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
1,3,5-Trimethylbenzene	1.4	U	4.2	0.48	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
1,3-Dichlorobenzene	1.4	U	4.2	0.41	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
1,3-Dichloropropane	1.4	U	4.2	0.43	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
1,4-Dichlorobenzene	1.4	U	4.2	0.66	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
2,2-Dichloropropane	1.4	U	4.2	0.37	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
2-Butanone (MEK)	5.4	U	17	1.5	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
2-Chlorotoluene	1.4	U	4.2	0.43	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
2-Hexanone	11	U Q	17	4.1	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
4-Chlorotoluene	1.4	U	4.2	0.66	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
4-Isopropyltoluene	**1.6**	**J**	4.2	0.41	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
4-Methyl-2-pentanone (MIBK)	11	U	17	3.7	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Acetone	**7.8**	**J B Q**	17	4.6	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Benzene	1.4	U	4.2	0.40	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Bromobenzene	1.4	U	4.2	0.41	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Bromochloromethane	0.68	U	4.2	0.25	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Bromodichloromethane	0.68	U	4.2	0.19	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Bromoform	0.68	U	4.2	0.19	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Bromomethane	1.4	U	8.5	0.42	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1

Client Sample ID: SS025-SS08

Date Collected: 06/05/17 09:35
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-5

Matrix: Solid
Percent Solids: 86.8

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	1.4	U	4.2	0.36	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Carbon tetrachloride	1.4	U	4.2	0.53	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Chlorobenzene	1.4	U	4.2	0.46	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Chloroethane	2.7	U	8.5	0.75	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Chloroform	0.68	U	8.5	0.25	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Chloromethane	1.4	U	8.5	0.65	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
cis-1,2-Dichloroethene	1.4	U	4.2	0.47	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
cis-1,3-Dichloropropene	2.7	U	4.2	1.1	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Dibromochloromethane	1.4	U	4.2	0.48	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Dibromomethane	2.7	U	4.2	0.71	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Dichlorodifluoromethane	1.4	U Q	8.5	0.44	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Ethylbenzene	1.4	U	4.2	0.57	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Hexachlorobutadiene	1.4	U	4.2	0.47	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Isopropyl ether	6.8	U	42	2.3	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Isopropylbenzene	1.4	U	4.2	0.50	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
m&p-Xylene	2.7	U	2.7	0.88	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Methyl iodide	1.4	U	4.2	0.37	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Methyl tert-butyl ether	0.68	U	17	0.29	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Methylene Chloride	2.7	U	4.2	1.4	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Naphthalene	1.4	U	4.2	0.53	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
n-Butylbenzene	1.4	U	4.2	0.47	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
N-Propylbenzene	1.4	U	4.2	0.49	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
o-Xylene	1.4	U	4.2	0.52	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
sec-Butylbenzene	1.4	U	4.2	0.65	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Styrene	1.4	U	4.2	0.53	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
tert-Butylbenzene	1.4	U	4.2	0.42	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Tetrachloroethene	1.4	U	4.2	0.50	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Toluene	1.4	U	4.2	0.58	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
trans-1,2-Dichloroethene	0.68	U	4.2	0.33	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
trans-1,3-Dichloropropene	1.4	U	4.2	0.57	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Trichloroethene	0.68	U	4.2	0.19	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Trichlorofluoromethane	2.7	U	8.5	0.88	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Vinyl acetate	2.7	U	8.5	0.91	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Vinyl chloride	2.7	U	4.2	1.1	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1
Xylenes (total)	0.85	U	8.5	0.52	ug/Kg	☼	06/05/17 09:35	06/16/17 20:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*71 - 136*	*06/05/17 09:35*	*06/16/17 20:32*	*1*
4-Bromofluorobenzene (Surr)	*98*		*79 - 119*	*06/05/17 09:35*	*06/16/17 20:32*	*1*
Dibromofluoromethane (Surr)	*113*		*78 - 119*	*06/05/17 09:35*	*06/16/17 20:32*	*1*
Toluene-d8 (Surr)	*98*		*85 - 116*	*06/05/17 09:35*	*06/16/17 20:32*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**11**		5.8	0.30	ug/Kg	☼	06/11/17 07:19	06/16/17 18:39	1
2-Methylnaphthalene	**29**		5.8	0.36	ug/Kg	☼	06/11/17 07:19	06/16/17 18:39	1
Acenaphthene	**1.0**	**J**	5.8	0.18	ug/Kg	☼	06/11/17 07:19	06/16/17 18:39	1
Acenaphthylene	0.77	U	5.8	0.20	ug/Kg	☼	06/11/17 07:19	06/16/17 18:39	1
Anthracene	**0.99**	**J**	5.8	0.83	ug/Kg	☼	06/11/17 07:19	06/16/17 18:39	1
Benzo[a]anthracene	**3.4**	**J**	5.8	1.0	ug/Kg	☼	06/11/17 07:19	06/16/17 18:39	1

Client Sample ID: SS025-SS08

Date Collected: 06/05/17 09:35
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-5

Matrix: Solid
Percent Solids: 86.8

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	**4.2**	**J**	5.8	0.85	ug/Kg	☼	06/11/17 07:19	06/16/17 18:39	1
Benzo[b]fluoranthene	**7.4**		5.8	1.4	ug/Kg	☼	06/11/17 07:19	06/16/17 18:39	1
Benzo[g,h,i]perylene	**3.1**	**J**	5.8	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 18:39	1
Benzo[k]fluoranthene	**2.5**	**J**	5.8	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 18:39	1
Chrysene	**5.6**	**J**	5.8	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 18:39	1
Dibenz(a,h)anthracene	2.9	U	5.8	1.5	ug/Kg	☼	06/11/17 07:19	06/16/17 18:39	1
Fluoranthene	**7.6**		5.8	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 18:39	1
Fluorene	**3.3**	**J**	5.8	0.54	ug/Kg	☼	06/11/17 07:19	06/16/17 18:39	1
Indeno[1,2,3-cd]pyrene	**2.6**	**J**	5.8	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 18:39	1
Naphthalene	**50**		5.8	0.38	ug/Kg	☼	06/11/17 07:19	06/16/17 18:39	1
Phenanthrene	**4.9**	**J**	5.8	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 18:39	1
Pyrene	**6.7**		5.8	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*61*		*46 - 115*	*06/11/17 07:19*	*06/16/17 18:39*	*1*
Nitrobenzene-d5 (Surr)	*50*		*44 - 125*	*06/11/17 07:19*	*06/16/17 18:39*	*1*
Terphenyl-d14 (Surr)	*66*		*58 - 133*	*06/11/17 07:19*	*06/16/17 18:39*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.9	U	1.9	0.62	ug/Kg	☼	06/16/17 13:00	06/25/17 18:47	1
4,4'-DDE	0.76	U	1.9	0.27	ug/Kg	☼	06/16/17 13:00	06/25/17 18:47	1
4,4'-DDT	1.9	U	2.3	0.67	ug/Kg	☼	06/16/17 13:00	06/25/17 18:47	1
Aldrin	0.76	U	1.9	0.28	ug/Kg	☼	06/16/17 13:00	06/25/17 18:47	1
alpha-BHC	0.76	U	1.9	0.24	ug/Kg	☼	06/16/17 13:00	06/25/17 18:47	1
alpha-Chlordane	0.76	U	1.9	0.37	ug/Kg	☼	06/16/17 13:00	06/25/17 18:47	1
beta-BHC	1.9	U	1.9	0.75	ug/Kg	☼	06/16/17 13:00	06/25/17 18:47	1
delta-BHC	1.1	U	1.9	0.45	ug/Kg	☼	06/16/17 13:00	06/25/17 18:47	1
Dieldrin	0.76	U	1.9	0.24	ug/Kg	☼	06/16/17 13:00	06/25/17 18:47	1
Endosulfan I	0.76	U	1.9	0.20	ug/Kg	☼	06/16/17 13:00	06/25/17 18:47	1
Endosulfan II	0.76	U	1.9	0.33	ug/Kg	☼	06/16/17 13:00	06/25/17 18:47	1
Endosulfan sulfate	0.76	U	1.9	0.31	ug/Kg	☼	06/16/17 13:00	06/25/17 18:47	1
Endrin	0.76	U	1.9	0.35	ug/Kg	☼	06/16/17 13:00	06/25/17 18:47	1
Endrin aldehyde	0.76	U	1.9	0.19	ug/Kg	☼	06/16/17 13:00	06/25/17 18:47	1
gamma-BHC (Lindane)	1.1	U	1.9	0.53	ug/Kg	☼	06/16/17 13:00	06/25/17 18:47	1
gamma-Chlordane	0.76	U	1.9	0.30	ug/Kg	☼	06/16/17 13:00	06/25/17 18:47	1
Heptachlor	0.76	U	1.9	0.24	ug/Kg	☼	06/16/17 13:00	06/25/17 18:47	1
Heptachlor epoxide	1.1	U	1.9	0.48	ug/Kg	☼	06/16/17 13:00	06/25/17 18:47	1
Methoxychlor	1.1	U	3.7	0.51	ug/Kg	☼	06/16/17 13:00	06/25/17 18:47	1
Toxaphene	37	U	190	18	ug/Kg	☼	06/16/17 13:00	06/25/17 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*71*		*63 - 121*	*06/16/17 13:00*	*06/25/17 18:47*	*1*
Tetrachloro-m-xylene (Surr)	*83*		*42 - 129*	*06/16/17 13:00*	*06/25/17 18:47*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	17	U	37	5.8	ug/Kg	☼	06/16/17 13:00	06/26/17 16:18	1
Arochlor 1221	19	U	53	18	ug/Kg	☼	06/16/17 13:00	06/26/17 16:18	1
Arochlor 1232	17	U	37	5.8	ug/Kg	☼	06/16/17 13:00	06/26/17 16:18	1

Client Sample ID: SS025-SS08

Lab Sample ID: 280-97928-5
Date Collected: 06/05/17 09:35
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 86.8

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1242	37	U	37	10	ug/Kg	☼	06/16/17 13:00	06/26/17 16:18	1
Arochlor 1248	23	U	37	6.4	ug/Kg	☼	06/16/17 13:00	06/26/17 16:18	1
Arochlor 1254	19	U	37	6.3	ug/Kg	☼	06/16/17 13:00	06/26/17 16:18	1
Arochlor 1260	8.7	U	37	3.0	ug/Kg	☼	06/16/17 13:00	06/26/17 16:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*82*		*59 - 130*	*06/16/17 13:00*	*06/26/17 16:18*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7500**		54	1.7	mg/Kg	☼	06/08/17 14:00	06/09/17 09:27	1
Antimony	1.6	U	2.1	0.78	mg/Kg	☼	06/08/17 14:00	06/09/17 09:27	1
Arsenic	**5.1**		2.7	0.71	mg/Kg	☼	06/08/17 14:00	06/12/17 23:45	1
Barium	**24**		2.1	0.11	mg/Kg	☼	06/08/17 14:00	06/09/17 09:27	1
Beryllium	**0.30**	**J**	0.54	0.035	mg/Kg	☼	06/08/17 14:00	06/09/17 09:27	1
Cadmium	**0.079**	**J**	0.54	0.044	mg/Kg	☼	06/08/17 14:00	06/09/17 09:27	1
Calcium	**3600**		110	15	mg/Kg	☼	06/08/17 14:00	06/09/17 09:27	1
Chromium	**7.9**		3.7	0.062	mg/Kg	☼	06/08/17 14:00	06/09/17 09:27	1
Cobalt	**5.7**		1.1	0.11	mg/Kg	☼	06/08/17 14:00	06/09/17 09:27	1
Copper	**31**		5.4	0.23	mg/Kg	☼	06/08/17 14:00	06/12/17 23:45	1
Iron	**17000**		86	4.1	mg/Kg	☼	06/08/17 14:00	06/09/17 09:27	1
Lead	**4.2**		0.96	0.33	mg/Kg	☼	06/08/17 14:00	06/09/17 09:27	1
Magnesium	**3700**		32	4.0	mg/Kg	☼	06/08/17 14:00	06/09/17 09:27	1
Manganese	**950**		4.8	0.11	mg/Kg	☼	06/08/17 14:00	06/12/17 15:43	1
Nickel	**12**		4.3	0.14	mg/Kg	☼	06/08/17 14:00	06/09/17 09:27	1
Potassium	**850**		320	44	mg/Kg	☼	06/08/17 14:00	06/09/17 09:27	1
Selenium	3.2	U	3.2	0.92	mg/Kg	☼	06/08/17 14:00	06/12/17 23:45	1
Silver	0.64	U	1.6	0.17	mg/Kg	☼	06/08/17 14:00	06/09/17 09:27	1
Sodium	210	U	540	63	mg/Kg	☼	06/08/17 14:00	06/09/17 09:27	1
Thallium	2.7	U	3.2	0.70	mg/Kg	☼	06/08/17 14:00	06/13/17 10:57	1
Vanadium	**14**		2.1	0.10	mg/Kg	☼	06/08/17 14:00	06/09/17 09:27	1
Zinc	**41**		8.6	0.43	mg/Kg	☼	06/08/17 14:00	06/09/17 09:27	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**17**	**J**	22	7.2	ug/Kg	☼	06/14/17 12:49	06/14/17 17:11	1

Client Sample ID: SS025-SB07(0-2)

Lab Sample ID: 280-97928-6
Date Collected: 06/05/17 09:45
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 87.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.7	U	5.3	0.59	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
1,1,1-Trichloroethane	1.7	U	5.3	0.55	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
1,1,2,2-Tetrachloroethane	1.7	U	5.3	0.64	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
1,1,2-Trichloroethane	3.4	U	5.3	0.93	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
1,1-Dichloroethane	0.84	U	5.3	0.22	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
1,1-Dichloroethene	1.7	U	5.3	0.62	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
1,1-Dichloropropene	1.7	U	5.3	0.57	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1

Client Sample ID: SS025-SB07(0-2)

Date Collected: 06/05/17 09:45
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-6

Matrix: Solid
Percent Solids: 87.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	1.7	U	5.3	0.79	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
1,2,3-Trichloropropane	3.4	U	5.3	0.85	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
1,2,4-Trichlorobenzene	1.7	U	5.3	0.77	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
1,2,4-Trimethylbenzene	1.7	U	5.3	0.61	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
1,2-Dibromo-3-Chloropropane	1.7	U	11	0.63	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
1,2-Dibromoethane	1.7	U	5.3	0.55	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
1,2-Dichlorobenzene	1.7	U	5.3	0.47	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
1,2-Dichloroethane	1.7	U	5.3	0.74	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
1,2-Dichloroethene, Total	1.7	U	5.3	0.41	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
1,2-Dichloropropane	1.7	U	5.3	0.58	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
1,3,5-Trimethylbenzene	1.7	U	5.3	0.60	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
1,3-Dichlorobenzene	1.7	U	5.3	0.51	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
1,3-Dichloropropane	1.7	U	5.3	0.54	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
1,4-Dichlorobenzene	1.7	U	5.3	0.82	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
2,2-Dichloropropane	1.7	U	5.3	0.46	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
2-Butanone (MEK)	6.7	U	21	1.9	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
2-Chlorotoluene	1.7	U	5.3	0.54	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
2-Hexanone	13	U Q	21	5.2	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
4-Chlorotoluene	1.7	U	5.3	0.82	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
4-Isopropyltoluene	1.7	U	5.3	0.52	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
4-Methyl-2-pentanone (MIBK)	13	U	21	4.6	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Acetone	13	U Q	21	5.7	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Benzene	1.7	U	5.3	0.50	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Bromobenzene	1.7	U	5.3	0.52	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Bromochloromethane	0.84	U	5.3	0.32	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Bromodichloromethane	0.84	U	5.3	0.23	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Bromoform	0.84	U	5.3	0.24	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Bromomethane	1.7	U	11	0.53	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Carbon disulfide	1.7	U	5.3	0.44	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Carbon tetrachloride	1.7	U	5.3	0.66	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Chlorobenzene	1.7	U	5.3	0.57	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Chloroethane	3.4	U	11	0.94	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Chloroform	0.84	U	11	0.31	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Chloromethane	1.7	U	11	0.81	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
cis-1,2-Dichloroethene	1.7	U	5.3	0.59	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
cis-1,3-Dichloropropene	3.4	U	5.3	1.4	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Dibromochloromethane	1.7	U	5.3	0.60	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Dibromomethane	3.4	U	5.3	0.89	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Dichlorodifluoromethane	1.7	U Q	11	0.55	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Ethylbenzene	1.7	U	5.3	0.71	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Hexachlorobutadiene	1.7	U	5.3	0.58	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Isopropyl ether	8.4	U	53	2.9	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Isopropylbenzene	1.7	U	5.3	0.62	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
m&p-Xylene	3.4	U	3.4	1.1	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Methyl iodide	1.7	U	5.3	0.46	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Methyl tert-butyl ether	0.84	U	21	0.36	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Methylene Chloride	3.4	U	5.3	1.7	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Naphthalene	1.7	U	5.3	0.66	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
n-Butylbenzene	1.7	U	5.3	0.59	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1

Client Sample ID: SS025-SB07(0-2)

Date Collected: 06/05/17 09:45
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-6

Matrix: Solid
Percent Solids: 87.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	1.7	U	5.3	0.61	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
o-Xylene	1.7	U	5.3	0.64	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
sec-Butylbenzene	1.7	U	5.3	0.81	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Styrene	1.7	U	5.3	0.66	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
tert-Butylbenzene	1.7	U	5.3	0.53	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Tetrachloroethene	1.7	U	5.3	0.62	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Toluene	1.7	U	5.3	0.73	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
trans-1,2-Dichloroethene	0.84	U	5.3	0.41	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
trans-1,3-Dichloropropene	1.7	U	5.3	0.71	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Trichloroethene	0.84	U	5.3	0.24	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Trichlorofluoromethane	3.4	U	11	1.1	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Vinyl acetate	3.4	U	11	1.1	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Vinyl chloride	3.4	U	5.3	1.4	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1
Xylenes (total)	1.1	U	11	0.64	ug/Kg	☼	06/05/17 09:45	06/16/17 20:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*71 - 136*	*06/05/17 09:45*	*06/16/17 20:53*	*1*
4-Bromofluorobenzene (Surr)	*89*		*79 - 119*	*06/05/17 09:45*	*06/16/17 20:53*	*1*
Dibromofluoromethane (Surr)	*101*		*78 - 119*	*06/05/17 09:45*	*06/16/17 20:53*	*1*
Toluene-d8 (Surr)	*91*		*85 - 116*	*06/05/17 09:45*	*06/16/17 20:53*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.56	U	5.6	0.29	ug/Kg	☼	06/11/17 07:19	06/16/17 19:05	1
2-Methylnaphthalene	0.75	U	5.6	0.35	ug/Kg	☼	06/11/17 07:19	06/16/17 19:05	1
Acenaphthene	0.30	U	5.6	0.18	ug/Kg	☼	06/11/17 07:19	06/16/17 19:05	1
Acenaphthylene	0.75	U	5.6	0.19	ug/Kg	☼	06/11/17 07:19	06/16/17 19:05	1
Anthracene	2.8	U	5.6	0.81	ug/Kg	☼	06/11/17 07:19	06/16/17 19:05	1
Benzo[a]anthracene	2.8	U	5.6	1.0	ug/Kg	☼	06/11/17 07:19	06/16/17 19:05	1
Benzo[a]pyrene	2.8	U	5.6	0.83	ug/Kg	☼	06/11/17 07:19	06/16/17 19:05	1
Benzo[b]fluoranthene	2.8	U	5.6	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 19:05	1
Benzo[g,h,i]perylene	2.8	U	5.6	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 19:05	1
Benzo[k]fluoranthene	2.8	U	5.6	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 19:05	1
Chrysene	2.8	U	5.6	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 19:05	1
Dibenz(a,h)anthracene	2.8	U	5.6	1.5	ug/Kg	☼	06/11/17 07:19	06/16/17 19:05	1
Fluoranthene	**1.3**	**J**	5.6	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 19:05	1
Fluorene	0.75	U	5.6	0.53	ug/Kg	☼	06/11/17 07:19	06/16/17 19:05	1
Indeno[1,2,3-cd]pyrene	2.8	U	5.6	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 19:05	1
Naphthalene	0.75	U	5.6	0.36	ug/Kg	☼	06/11/17 07:19	06/16/17 19:05	1
Phenanthrene	2.8	U	5.6	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 19:05	1
Pyrene	2.8	U	5.6	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 19:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*46 - 115*	*06/11/17 07:19*	*06/16/17 19:05*	*1*
Nitrobenzene-d5 (Surr)	*72*		*44 - 125*	*06/11/17 07:19*	*06/16/17 19:05*	*1*
Terphenyl-d14 (Surr)	*62*		*58 - 133*	*06/11/17 07:19*	*06/16/17 19:05*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.8	U	1.8	0.58	ug/Kg	☼	06/16/17 13:00	06/25/17 19:04	1

Client Sample ID: SS025-SB07(0-2)

Date Collected: 06/05/17 09:45
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-6

Matrix: Solid
Percent Solids: 87.1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDE	0.71	U	1.8	0.25	ug/Kg	☼	06/16/17 13:00	06/25/17 19:04	1
4,4'-DDT	1.8	U	2.1	0.62	ug/Kg	☼	06/16/17 13:00	06/25/17 19:04	1
Aldrin	0.71	U	1.8	0.26	ug/Kg	☼	06/16/17 13:00	06/25/17 19:04	1
alpha-BHC	0.71	U M	1.8	0.23	ug/Kg	☼	06/16/17 13:00	06/25/17 19:04	1
alpha-Chlordane	0.71	U	1.8	0.34	ug/Kg	☼	06/16/17 13:00	06/25/17 19:04	1
beta-BHC	1.8	U	1.8	0.70	ug/Kg	☼	06/16/17 13:00	06/25/17 19:04	1
delta-BHC	1.1	U	1.8	0.42	ug/Kg	☼	06/16/17 13:00	06/25/17 19:04	1
Dieldrin	0.71	U	1.8	0.22	ug/Kg	☼	06/16/17 13:00	06/25/17 19:04	1
Endosulfan I	0.71	U	1.8	0.19	ug/Kg	☼	06/16/17 13:00	06/25/17 19:04	1
Endosulfan II	0.71	U	1.8	0.30	ug/Kg	☼	06/16/17 13:00	06/25/17 19:04	1
Endosulfan sulfate	0.71	U	1.8	0.29	ug/Kg	☼	06/16/17 13:00	06/25/17 19:04	1
Endrin	0.71	U	1.8	0.32	ug/Kg	☼	06/16/17 13:00	06/25/17 19:04	1
Endrin aldehyde	0.71	U	1.8	0.18	ug/Kg	☼	06/16/17 13:00	06/25/17 19:04	1
gamma-BHC (Lindane)	1.1	U	1.8	0.49	ug/Kg	☼	06/16/17 13:00	06/25/17 19:04	1
gamma-Chlordane	0.71	U	1.8	0.28	ug/Kg	☼	06/16/17 13:00	06/25/17 19:04	1
Heptachlor	0.71	U	1.8	0.23	ug/Kg	☼	06/16/17 13:00	06/25/17 19:04	1
Heptachlor epoxide	1.1	U	1.8	0.45	ug/Kg	☼	06/16/17 13:00	06/25/17 19:04	1
Methoxychlor	1.1	U	3.5	0.47	ug/Kg	☼	06/16/17 13:00	06/25/17 19:04	1
Toxaphene	35	U	180	17	ug/Kg	☼	06/16/17 13:00	06/25/17 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*75*		*63 - 121*	*06/16/17 13:00*	*06/25/17 19:04*	*1*
Tetrachloro-m-xylene (Surr)	*81*		*42 - 129*	*06/16/17 13:00*	*06/25/17 19:04*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	16	U	35	5.4	ug/Kg	☼	06/16/17 13:00	06/26/17 16:39	1
Arochlor 1221	18	U	50	16	ug/Kg	☼	06/16/17 13:00	06/26/17 16:39	1
Arochlor 1232	16	U	35	5.4	ug/Kg	☼	06/16/17 13:00	06/26/17 16:39	1
Arochlor 1242	35	U	35	9.6	ug/Kg	☼	06/16/17 13:00	06/26/17 16:39	1
Arochlor 1248	21	U	35	5.9	ug/Kg	☼	06/16/17 13:00	06/26/17 16:39	1
Arochlor 1254	18	U	35	5.8	ug/Kg	☼	06/16/17 13:00	06/26/17 16:39	1
Arochlor 1260	8.1	U	35	2.8	ug/Kg	☼	06/16/17 13:00	06/26/17 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*84*		*59 - 130*	*06/16/17 13:00*	*06/26/17 16:39*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3300**		49	1.5	mg/Kg	☼	06/08/17 14:00	06/09/17 09:40	1
Antimony	1.5	U	2.0	0.72	mg/Kg	☼	06/08/17 14:00	06/09/17 09:40	1
Arsenic	**2.5**		2.4	0.65	mg/Kg	☼	06/08/17 14:00	06/12/17 23:58	1
Barium	**12**		2.0	0.10	mg/Kg	☼	06/08/17 14:00	06/09/17 09:40	1
Beryllium	**0.16**	**J**	0.49	0.032	mg/Kg	☼	06/08/17 14:00	06/09/17 09:40	1
Cadmium	**0.058**	**J**	0.49	0.040	mg/Kg	☼	06/08/17 14:00	06/09/17 09:40	1
Calcium	**5700**		98	14	mg/Kg	☼	06/08/17 14:00	06/09/17 09:40	1
Chromium	**3.8**		3.4	0.057	mg/Kg	☼	06/08/17 14:00	06/09/17 09:40	1
Cobalt	**2.7**		0.98	0.098	mg/Kg	☼	06/08/17 14:00	06/09/17 09:40	1
Copper	**9.6**		4.9	0.21	mg/Kg	☼	06/08/17 14:00	06/12/17 23:58	1
Iron	**7700**	**Q**	78	3.7	mg/Kg	☼	06/08/17 14:00	06/09/17 09:40	1

Client Sample ID: SS025-SB07(0-2)
Lab Sample ID: 280-97928-6

Date Collected: 06/05/17 09:45
Matrix: Solid

Date Received: 06/06/17 09:30
Percent Solids: 87.1

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**2.1**		0.88	0.30	mg/Kg	☼	06/08/17 14:00	06/09/17 09:40	1
Magnesium	**2500**		29	3.6	mg/Kg	☼	06/08/17 14:00	06/09/17 09:40	1
Manganese	**310**		4.4	0.098	mg/Kg	☼	06/08/17 14:00	06/12/17 15:56	1
Nickel	**5.5**		3.9	0.13	mg/Kg	☼	06/08/17 14:00	06/09/17 09:40	1
Potassium	**560**		290	40	mg/Kg	☼	06/08/17 14:00	06/09/17 09:40	1
Selenium	2.9	U	2.9	0.84	mg/Kg	☼	06/08/17 14:00	06/12/17 23:58	1
Silver	0.59	U	1.5	0.16	mg/Kg	☼	06/08/17 14:00	06/09/17 09:40	1
Sodium	200	U	490	58	mg/Kg	☼	06/08/17 14:00	06/09/17 09:40	1
Thallium	**0.64**	**J**	2.9	0.63	mg/Kg	☼	06/08/17 14:00	06/13/17 11:00	1
Vanadium	**7.1**		2.0	0.092	mg/Kg	☼	06/08/17 14:00	06/09/17 09:40	1
Zinc	**17**		7.8	0.39	mg/Kg	☼	06/08/17 14:00	06/09/17 09:40	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	17	U	22	7.2	ug/Kg	☼	06/14/17 12:49	06/14/17 17:13	1

Client Sample ID: SS025-SB07(2-4)
Lab Sample ID: 280-97928-7

Date Collected: 06/05/17 09:55
Matrix: Solid

Date Received: 06/06/17 09:30
Percent Solids: 84.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.6	U	4.9	0.55	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
1,1,1-Trichloroethane	1.6	U	4.9	0.51	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
1,1,2,2-Tetrachloroethane	1.6	U	4.9	0.60	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
1,1,2-Trichloroethane	3.1	U	4.9	0.86	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
1,1-Dichloroethane	0.79	U	4.9	0.21	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
1,1-Dichloroethene	1.6	U	4.9	0.58	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
1,1-Dichloropropene	1.6	U	4.9	0.53	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
1,2,3-Trichlorobenzene	1.6	U	4.9	0.74	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
1,2,3-Trichloropropane	3.1	U	4.9	0.80	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
1,2,4-Trichlorobenzene	1.6	U	4.9	0.72	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
1,2,4-Trimethylbenzene	1.6	U	4.9	0.57	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
1,2-Dibromo-3-Chloropropane	1.6	U	9.8	0.59	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
1,2-Dibromoethane	1.6	U	4.9	0.51	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
1,2-Dichlorobenzene	1.6	U	4.9	0.44	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
1,2-Dichloroethane	1.6	U	4.9	0.69	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
1,2-Dichloroethene, Total	1.6	U	4.9	0.38	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
1,2-Dichloropropane	1.6	U	4.9	0.54	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
1,3,5-Trimethylbenzene	1.6	U	4.9	0.56	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
1,3-Dichlorobenzene	1.6	U	4.9	0.47	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
1,3-Dichloropropane	1.6	U	4.9	0.50	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
1,4-Dichlorobenzene	1.6	U	4.9	0.77	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
2,2-Dichloropropane	1.6	U	4.9	0.43	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
2-Butanone (MEK)	6.3	U	20	1.8	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
2-Chlorotoluene	1.6	U	4.9	0.50	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
2-Hexanone	13	U Q	20	4.8	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
4-Chlorotoluene	1.6	U	4.9	0.77	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
4-Isopropyltoluene	1.6	U	4.9	0.48	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
4-Methyl-2-pentanone (MIBK)	13	U	20	4.3	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1

Client Sample ID: SS025-SB07(2-4)

Date Collected: 06/05/17 09:55
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-7

Matrix: Solid
Percent Solids: 84.8

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	13	U Q	20	5.3	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Benzene	1.6	U	4.9	0.46	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Bromobenzene	1.6	U	4.9	0.48	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Bromochloromethane	0.79	U	4.9	0.29	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Bromodichloromethane	0.79	U	4.9	0.22	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Bromoform	0.79	U	4.9	0.23	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Bromomethane	1.6	U	9.8	0.49	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Carbon disulfide	1.6	U	4.9	0.41	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Carbon tetrachloride	1.6	U	4.9	0.62	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Chlorobenzene	1.6	U	4.9	0.53	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Chloroethane	3.1	U	9.8	0.87	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Chloroform	0.79	U	9.8	0.28	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Chloromethane	1.6	U	9.8	0.76	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
cis-1,2-Dichloroethene	1.6	U	4.9	0.55	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
cis-1,3-Dichloropropene	3.1	U	4.9	1.3	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Dibromochloromethane	1.6	U	4.9	0.56	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Dibromomethane	3.1	U	4.9	0.83	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Dichlorodifluoromethane	1.6	U Q	9.8	0.51	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Ethylbenzene	1.6	U	4.9	0.66	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Hexachlorobutadiene	1.6	U	4.9	0.54	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Isopropyl ether	7.9	U	49	2.7	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Isopropylbenzene	1.6	U	4.9	0.58	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
m&p-Xylene	3.1	U	3.1	1.0	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Methyl iodide	1.6	U	4.9	0.43	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Methyl tert-butyl ether	0.79	U	20	0.33	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Methylene Chloride	3.1	U	4.9	1.6	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Naphthalene	1.6	U	4.9	0.62	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
n-Butylbenzene	1.6	U	4.9	0.55	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
N-Propylbenzene	1.6	U	4.9	0.57	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
o-Xylene	1.6	U	4.9	0.60	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
sec-Butylbenzene	1.6	U	4.9	0.76	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Styrene	1.6	U	4.9	0.62	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
tert-Butylbenzene	1.6	U	4.9	0.49	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Tetrachloroethene	1.6	U	4.9	0.58	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Toluene	1.6	U	4.9	0.68	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
trans-1,2-Dichloroethene	0.79	U	4.9	0.38	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
trans-1,3-Dichloropropene	1.6	U	4.9	0.66	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Trichloroethene	0.79	U	4.9	0.23	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Trichlorofluoromethane	3.1	U	9.8	1.0	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Vinyl acetate	3.1	U	9.8	1.1	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Vinyl chloride	3.1	U	4.9	1.3	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1
Xylenes (total)	0.98	U	9.8	0.60	ug/Kg	☼	06/05/17 09:55	06/16/17 21:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*71 - 136*	*06/05/17 09:55*	*06/16/17 21:14*	*1*
4-Bromofluorobenzene (Surr)	*89*		*79 - 119*	*06/05/17 09:55*	*06/16/17 21:14*	*1*
Dibromofluoromethane (Surr)	*101*		*78 - 119*	*06/05/17 09:55*	*06/16/17 21:14*	*1*
Toluene-d8 (Surr)	*91*		*85 - 116*	*06/05/17 09:55*	*06/16/17 21:14*	*1*

Client Sample ID: SS025-SB07(2-4)

Date Collected: 06/05/17 09:55
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-7

Matrix: Solid
Percent Solids: 84.8

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.56	U	5.6	0.29	ug/Kg	☼	06/11/17 07:19	06/16/17 19:30	1
2-Methylnaphthalene	0.75	U	5.6	0.35	ug/Kg	☼	06/11/17 07:19	06/16/17 19:30	1
Acenaphthene	0.30	U	5.6	0.18	ug/Kg	☼	06/11/17 07:19	06/16/17 19:30	1
Acenaphthylene	0.75	U	5.6	0.19	ug/Kg	☼	06/11/17 07:19	06/16/17 19:30	1
Anthracene	2.8	U	5.6	0.81	ug/Kg	☼	06/11/17 07:19	06/16/17 19:30	1
Benzo[a]anthracene	2.8	U Q	5.6	1.0	ug/Kg	☼	06/11/17 07:19	06/16/17 19:30	1
Benzo[a]pyrene	2.8	U Q	5.6	0.83	ug/Kg	☼	06/11/17 07:19	06/16/17 19:30	1
Benzo[b]fluoranthene	2.8	U Q	5.6	1.4	ug/Kg	☼	06/11/17 07:19	06/16/17 19:30	1
Benzo[g,h,i]perylene	2.8	U Q	5.6	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 19:30	1
Benzo[k]fluoranthene	2.8	U Q	5.6	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 19:30	1
Chrysene	2.8	U Q	5.6	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 19:30	1
Dibenz(a,h)anthracene	2.8	U Q	5.6	1.5	ug/Kg	☼	06/11/17 07:19	06/16/17 19:30	1
Fluoranthene	2.8	U	5.6	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 19:30	1
Fluorene	0.75	U	5.6	0.53	ug/Kg	☼	06/11/17 07:19	06/16/17 19:30	1
Indeno[1,2,3-cd]pyrene	2.8	U Q	5.6	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 19:30	1
Naphthalene	0.75	U	5.6	0.37	ug/Kg	☼	06/11/17 07:19	06/16/17 19:30	1
Phenanthrene	2.8	U	5.6	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 19:30	1
Pyrene	2.8	U	5.6	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 19:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*62*		*46 - 115*	*06/11/17 07:19*	*06/16/17 19:30*	*1*
Nitrobenzene-d5 (Surr)	*63*		*44 - 125*	*06/11/17 07:19*	*06/16/17 19:30*	*1*
Terphenyl-d14 (Surr)	*55*	*Q*	*58 - 133*	*06/11/17 07:19*	*06/16/17 19:30*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.9	U	2.0	0.63	ug/Kg	☼	06/16/17 13:00	06/25/17 19:21	1
4,4'-DDE	0.78	U	2.0	0.28	ug/Kg	☼	06/16/17 13:00	06/25/17 19:21	1
4,4'-DDT	1.9	U	2.3	0.68	ug/Kg	☼	06/16/17 13:00	06/25/17 19:21	1
Aldrin	0.78	U	2.0	0.29	ug/Kg	☼	06/16/17 13:00	06/25/17 19:21	1
alpha-BHC	0.78	U	2.0	0.25	ug/Kg	☼	06/16/17 13:00	06/25/17 19:21	1
alpha-Chlordane	0.78	U	2.0	0.37	ug/Kg	☼	06/16/17 13:00	06/25/17 19:21	1
beta-BHC	1.9	U	2.0	0.77	ug/Kg	☼	06/16/17 13:00	06/25/17 19:21	1
delta-BHC	1.2	U	2.0	0.47	ug/Kg	☼	06/16/17 13:00	06/25/17 19:21	1
Dieldrin	0.78	U	2.0	0.24	ug/Kg	☼	06/16/17 13:00	06/25/17 19:21	1
Endosulfan I	0.78	U	2.0	0.20	ug/Kg	☼	06/16/17 13:00	06/25/17 19:21	1
Endosulfan II	0.78	U	2.0	0.33	ug/Kg	☼	06/16/17 13:00	06/25/17 19:21	1
Endosulfan sulfate	0.78	U	2.0	0.32	ug/Kg	☼	06/16/17 13:00	06/25/17 19:21	1
Endrin	0.78	U	2.0	0.36	ug/Kg	☼	06/16/17 13:00	06/25/17 19:21	1
Endrin aldehyde	0.78	U	2.0	0.20	ug/Kg	☼	06/16/17 13:00	06/25/17 19:21	1
gamma-BHC (Lindane)	1.2	U	2.0	0.54	ug/Kg	☼	06/16/17 13:00	06/25/17 19:21	1
gamma-Chlordane	0.78	U	2.0	0.31	ug/Kg	☼	06/16/17 13:00	06/25/17 19:21	1
Heptachlor	0.78	U	2.0	0.25	ug/Kg	☼	06/16/17 13:00	06/25/17 19:21	1
Heptachlor epoxide	1.2	U	2.0	0.49	ug/Kg	☼	06/16/17 13:00	06/25/17 19:21	1
Methoxychlor	1.2	U	3.8	0.52	ug/Kg	☼	06/16/17 13:00	06/25/17 19:21	1
Toxaphene	38	U	200	18	ug/Kg	☼	06/16/17 13:00	06/25/17 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*64*		*63 - 121*	*06/16/17 13:00*	*06/25/17 19:21*	*1*
Tetrachloro-m-xylene (Surr)	*67*		*42 - 129*	*06/16/17 13:00*	*06/25/17 19:21*	*1*

Client Sample ID: SS025-SB07(2-4)

Lab Sample ID: 280-97928-7
Date Collected: 06/05/17 09:55
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 84.8

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	17	U	38	5.9	ug/Kg	☼	06/16/17 13:00	06/26/17 17:01	1
Arochlor 1221	20	U	55	18	ug/Kg	☼	06/16/17 13:00	06/26/17 17:01	1
Arochlor 1232	17	U	38	5.9	ug/Kg	☼	06/16/17 13:00	06/26/17 17:01	1
Arochlor 1242	38	U	38	11	ug/Kg	☼	06/16/17 13:00	06/26/17 17:01	1
Arochlor 1248	23	U	38	6.5	ug/Kg	☼	06/16/17 13:00	06/26/17 17:01	1
Arochlor 1254	20	U	38	6.4	ug/Kg	☼	06/16/17 13:00	06/26/17 17:01	1
Arochlor 1260	8.9	U	38	3.1	ug/Kg	☼	06/16/17 13:00	06/26/17 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*62*		*59 - 130*	*06/16/17 13:00*	*06/26/17 17:01*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3400**		59	1.8	mg/Kg	☼	06/08/17 14:00	06/09/17 09:43	1
Antimony	1.8	U	2.3	0.86	mg/Kg	☼	06/08/17 14:00	06/09/17 09:43	1
Arsenic	**2.7**	**J**	2.9	0.78	mg/Kg	☼	06/08/17 14:00	06/13/17 00:00	1
Barium	**13**		2.3	0.12	mg/Kg	☼	06/08/17 14:00	06/09/17 09:43	1
Beryllium	**0.18**	**J**	0.59	0.039	mg/Kg	☼	06/08/17 14:00	06/09/17 09:43	1
Cadmium	0.18	U	0.59	0.048	mg/Kg	☼	06/08/17 14:00	06/09/17 09:43	1
Calcium	**2600**		120	17	mg/Kg	☼	06/08/17 14:00	06/09/17 09:43	1
Chromium	**3.9**	**J**	4.1	0.068	mg/Kg	☼	06/08/17 14:00	06/09/17 09:43	1
Cobalt	**2.9**		1.2	0.12	mg/Kg	☼	06/08/17 14:00	06/09/17 09:43	1
Copper	**10**		5.9	0.25	mg/Kg	☼	06/08/17 14:00	06/13/17 00:00	1
Iron	**8200**	**Q**	94	4.5	mg/Kg	☼	06/08/17 14:00	06/09/17 09:43	1
Lead	**2.0**		1.1	0.36	mg/Kg	☼	06/08/17 14:00	06/09/17 09:43	1
Magnesium	**2000**		35	4.3	mg/Kg	☼	06/08/17 14:00	06/09/17 09:43	1
Manganese	**330**		5.3	0.12	mg/Kg	☼	06/08/17 14:00	06/12/17 15:58	1
Nickel	**6.1**		4.7	0.16	mg/Kg	☼	06/08/17 14:00	06/09/17 09:43	1
Potassium	**570**		350	48	mg/Kg	☼	06/08/17 14:00	06/09/17 09:43	1
Selenium	3.5	U	3.5	1.0	mg/Kg	☼	06/08/17 14:00	06/13/17 00:00	1
Silver	0.70	U	1.8	0.19	mg/Kg	☼	06/08/17 14:00	06/09/17 09:43	1
Sodium	230	U	590	69	mg/Kg	☼	06/08/17 14:00	06/09/17 09:43	1
Thallium	2.9	U	3.5	0.76	mg/Kg	☼	06/08/17 14:00	06/13/17 11:03	1
Vanadium	**7.3**		2.3	0.11	mg/Kg	☼	06/08/17 14:00	06/09/17 09:43	1
Zinc	**19**		9.4	0.47	mg/Kg	☼	06/08/17 14:00	06/09/17 09:43	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	19	U	24	7.8	ug/Kg	☼	06/14/17 12:49	06/14/17 17:15	1

Client Sample ID: SS025-SB01(0-2)

Lab Sample ID: 280-97928-8
Date Collected: 06/05/17 10:20
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 88.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.4	U	4.4	0.49	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
1,1,1-Trichloroethane	1.4	U	4.4	0.45	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
1,1,2,2-Tetrachloroethane	1.4	U	4.4	0.53	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
1,1,2-Trichloroethane	2.8	U	4.4	0.77	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1

Client Sample ID: SS025-SB01(0-2)

Date Collected: 06/05/17 10:20
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-8

Matrix: Solid
Percent Solids: 88.3

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.70	U	4.4	0.18	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
1,1-Dichloroethene	1.4	U	4.4	0.52	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
1,1-Dichloropropene	1.4	U	4.4	0.47	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
1,2,3-Trichlorobenzene	1.4	U	4.4	0.66	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
1,2,3-Trichloropropane	2.8	U	4.4	0.71	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
1,2,4-Trichlorobenzene	1.4	U	4.4	0.64	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
1,2,4-Trimethylbenzene	1.4	U	4.4	0.51	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
1,2-Dibromo-3-Chloropropane	1.4	U	8.7	0.52	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
1,2-Dibromoethane	1.4	U	4.4	0.45	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
1,2-Dichlorobenzene	1.4	U	4.4	0.39	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
1,2-Dichloroethane	1.4	U	4.4	0.61	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
1,2-Dichloroethene, Total	1.4	U	4.4	0.34	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
1,2-Dichloropropane	1.4	U	4.4	0.48	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
1,3,5-Trimethylbenzene	1.4	U	4.4	0.50	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
1,3-Dichlorobenzene	1.4	U	4.4	0.42	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
1,3-Dichloropropane	1.4	U	4.4	0.45	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
1,4-Dichlorobenzene	1.4	U	4.4	0.68	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
2,2-Dichloropropane	1.4	U	4.4	0.38	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
2-Butanone (MEK)	5.6	U	17	1.6	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
2-Chlorotoluene	1.4	U	4.4	0.45	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
2-Hexanone	11	U Q	17	4.3	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
4-Chlorotoluene	1.4	U	4.4	0.68	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
4-Isopropyltoluene	1.4	U	4.4	0.43	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
4-Methyl-2-pentanone (MIBK)	11	U	17	3.8	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Acetone	**12**	**J B Q**	17	4.7	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Benzene	1.4	U	4.4	0.41	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Bromobenzene	1.4	U	4.4	0.43	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Bromochloromethane	0.70	U	4.4	0.26	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Bromodichloromethane	0.70	U	4.4	0.19	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Bromoform	0.70	U	4.4	0.20	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Bromomethane	1.4	U	8.7	0.44	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Carbon disulfide	1.4	U	4.4	0.37	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Carbon tetrachloride	1.4	U	4.4	0.55	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Chlorobenzene	1.4	U	4.4	0.47	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Chloroethane	2.8	U	8.7	0.78	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Chloroform	0.70	U	8.7	0.25	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Chloromethane	1.4	U	8.7	0.67	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
cis-1,2-Dichloroethene	1.4	U	4.4	0.49	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
cis-1,3-Dichloropropene	2.8	U	4.4	1.1	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Dibromochloromethane	1.4	U	4.4	0.50	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Dibromomethane	2.8	U	4.4	0.73	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Dichlorodifluoromethane	1.4	U Q	8.7	0.45	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Ethylbenzene	1.4	U	4.4	0.59	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Hexachlorobutadiene	1.4	U	4.4	0.48	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Isopropyl ether	7.0	U	44	2.4	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Isopropylbenzene	1.4	U	4.4	0.52	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
m&p-Xylene	2.8	U	2.8	0.91	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Methyl iodide	1.4	U	4.4	0.38	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Methyl tert-butyl ether	0.70	U	17	0.30	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1

Client Sample ID: SS025-SB01(0-2)

Date Collected: 06/05/17 10:20
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-8

Matrix: Solid
Percent Solids: 88.3

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	2.8	U	4.4	1.4	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Naphthalene	**4.5**		4.4	0.55	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
n-Butylbenzene	1.4	U	4.4	0.49	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
N-Propylbenzene	1.4	U	4.4	0.51	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
o-Xylene	1.4	U	4.4	0.53	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
sec-Butylbenzene	1.4	U	4.4	0.67	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Styrene	1.4	U	4.4	0.55	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
tert-Butylbenzene	1.4	U	4.4	0.44	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Tetrachloroethene	1.4	U	4.4	0.52	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Toluene	1.4	U	4.4	0.60	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
trans-1,2-Dichloroethene	0.70	U	4.4	0.34	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
trans-1,3-Dichloropropene	1.4	U	4.4	0.59	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Trichloroethene	0.70	U	4.4	0.20	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Trichlorofluoromethane	2.8	U	8.7	0.91	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Vinyl acetate	2.8	U	8.7	0.94	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Vinyl chloride	2.8	U	4.4	1.2	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1
Xylenes (total)	0.87	U	8.7	0.53	ug/Kg	☼	06/05/17 10:20	06/16/17 21:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*71 - 136*	*06/05/17 10:20*	*06/16/17 21:35*	*1*
4-Bromofluorobenzene (Surr)	*98*		*79 - 119*	*06/05/17 10:20*	*06/16/17 21:35*	*1*
Dibromofluoromethane (Surr)	*106*		*78 - 119*	*06/05/17 10:20*	*06/16/17 21:35*	*1*
Toluene-d8 (Surr)	*101*		*85 - 116*	*06/05/17 10:20*	*06/16/17 21:35*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**100**		5.2	0.27	ug/Kg	☼	06/11/17 07:19	06/16/17 19:57	1
2-Methylnaphthalene	**160**		5.2	0.32	ug/Kg	☼	06/11/17 07:19	06/16/17 19:57	1
Acenaphthene	**520**	**J**	5.2	0.17	ug/Kg	☼	06/11/17 07:19	06/16/17 19:57	1
Acenaphthylene	**220**	**J**	5.2	0.18	ug/Kg	☼	06/11/17 07:19	06/16/17 19:57	1
Anthracene	**940**	**J**	5.2	0.75	ug/Kg	☼	06/11/17 07:19	06/16/17 19:57	1
Benzo[a]anthracene	**2000**	**J**	5.2	0.93	ug/Kg	☼	06/11/17 07:19	06/16/17 19:57	1
Benzo[a]pyrene	**1600**	**J**	5.2	0.77	ug/Kg	☼	06/11/17 07:19	06/16/17 19:57	1
Benzo[b]fluoranthene	**2300**	**J**	5.2	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 19:57	1
Benzo[g,h,i]perylene	**860**	**J**	5.2	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 19:57	1
Benzo[k]fluoranthene	**850**	**J**	5.2	1.0	ug/Kg	☼	06/11/17 07:19	06/16/17 19:57	1
Chrysene	**2100**	**J**	5.2	1.0	ug/Kg	☼	06/11/17 07:19	06/16/17 19:57	1
Dibenz(a,h)anthracene	**290**	**J**	5.2	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 19:57	1
Fluoranthene	**4000**	**J**	5.2	1.0	ug/Kg	☼	06/11/17 07:19	06/16/17 19:57	1
Fluorene	**500**	**J**	5.2	0.49	ug/Kg	☼	06/11/17 07:19	06/16/17 19:57	1
Indeno[1,2,3-cd]pyrene	**820**	**J**	5.2	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 19:57	1
Naphthalene	**400**	**J**	5.2	0.34	ug/Kg	☼	06/11/17 07:19	06/16/17 19:57	1
Phenanthrene	**3200**	**J**	5.2	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 19:57	1
Pyrene	**3700**	**J**	5.2	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*46 - 115*	*06/11/17 07:19*	*06/16/17 19:57*	*1*
Nitrobenzene-d5 (Surr)	*72*		*44 - 125*	*06/11/17 07:19*	*06/16/17 19:57*	*1*
Terphenyl-d14 (Surr)	*107*		*58 - 133*	*06/11/17 07:19*	*06/16/17 19:57*	*1*

Client Sample ID: SS025-SB01(0-2)

Date Collected: 06/05/17 10:20
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-8

Matrix: Solid
Percent Solids: 88.3

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	94	J D Q	260	13	ug/Kg	☼	06/11/17 07:19	06/20/17 20:26	50
2-Methylnaphthalene	150	J D Q	260	16	ug/Kg	☼	06/11/17 07:19	06/20/17 20:26	50
Acenaphthene	600	D Q	260	8.3	ug/Kg	☼	06/11/17 07:19	06/20/17 20:26	50
Acenaphthylene	280	D Q	260	8.8	ug/Kg	☼	06/11/17 07:19	06/20/17 20:26	50
Anthracene	1100	D Q	260	37	ug/Kg	☼	06/11/17 07:19	06/20/17 20:26	50
Benzo[a]anthracene	2300	D Q	260	47	ug/Kg	☼	06/11/17 07:19	06/20/17 20:26	50
Benzo[a]pyrene	2000	D Q	260	38	ug/Kg	☼	06/11/17 07:19	06/20/17 20:26	50
Benzo[b]fluoranthene	2800	D Q	260	62	ug/Kg	☼	06/11/17 07:19	06/20/17 20:26	50
Benzo[g,h,i]perylene	1100	D Q	260	57	ug/Kg	☼	06/11/17 07:19	06/20/17 20:26	50
Benzo[k]fluoranthene	1100	D Q	260	52	ug/Kg	☼	06/11/17 07:19	06/20/17 20:26	50
Chrysene	2700	D Q	260	52	ug/Kg	☼	06/11/17 07:19	06/20/17 20:26	50
Dibenz(a,h)anthracene	350	D Q	260	67	ug/Kg	☼	06/11/17 07:19	06/20/17 20:26	50
Fluoranthene	5500	D Q	260	52	ug/Kg	☼	06/11/17 07:19	06/20/17 20:26	50
Fluorene	590	D Q	260	24	ug/Kg	☼	06/11/17 07:19	06/20/17 20:26	50
Indeno[1,2,3-cd]pyrene	1000	D Q	260	57	ug/Kg	☼	06/11/17 07:19	06/20/17 20:26	50
Naphthalene	410	D Q	260	17	ug/Kg	☼	06/11/17 07:19	06/20/17 20:26	50
Phenanthrene	4400	D Q	260	57	ug/Kg	☼	06/11/17 07:19	06/20/17 20:26	50
Pyrene	4700	D Q	260	57	ug/Kg	☼	06/11/17 07:19	06/20/17 20:26	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*502*	*D Q*	*46 - 115*	*06/11/17 07:19*	*06/20/17 20:26*	*50*
Nitrobenzene-d5 (Surr)	*0*	*D Q*	*44 - 125*	*06/11/17 07:19*	*06/20/17 20:26*	*50*
Terphenyl-d14 (Surr)	*1746*	*D Q*	*58 - 133*	*06/11/17 07:19*	*06/20/17 20:26*	*50*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.8	U Q	1.8	0.59	ug/Kg	☼	06/16/17 13:00	06/26/17 01:32	1
4,4'-DDE	15	Q	1.8	0.26	ug/Kg	☼	06/16/17 13:00	06/26/17 01:32	1
4,4'-DDT	47	J Q	2.2	0.64	ug/Kg	☼	06/16/17 13:00	06/26/17 01:32	1
Aldrin	0.73	U Q	1.8	0.27	ug/Kg	☼	06/16/17 13:00	06/26/17 01:32	1
alpha-BHC	0.73	U Q	1.8	0.23	ug/Kg	☼	06/16/17 13:00	06/26/17 01:32	1
alpha-Chlordane	0.73	U Q	1.8	0.35	ug/Kg	☼	06/16/17 13:00	06/26/17 01:32	1
beta-BHC	1.8	U Q	1.8	0.72	ug/Kg	☼	06/16/17 13:00	06/26/17 01:32	1
delta-BHC	1.1	U Q	1.8	0.44	ug/Kg	☼	06/16/17 13:00	06/26/17 01:32	1
Dieldrin	0.73	U Q	1.8	0.23	ug/Kg	☼	06/16/17 13:00	06/26/17 01:32	1
Endosulfan I	0.73	U Q	1.8	0.19	ug/Kg	☼	06/16/17 13:00	06/26/17 01:32	1
Endosulfan II	0.33	J Q	1.8	0.31	ug/Kg	☼	06/16/17 13:00	06/26/17 01:32	1
Endosulfan sulfate	0.73	U Q	1.8	0.30	ug/Kg	☼	06/16/17 13:00	06/26/17 01:32	1
Endrin	0.73	U Q	1.8	0.33	ug/Kg	☼	06/16/17 13:00	06/26/17 01:32	1
Endrin aldehyde	0.73	U Q	1.8	0.19	ug/Kg	☼	06/16/17 13:00	06/26/17 01:32	1
gamma-BHC (Lindane)	1.1	U Q	1.8	0.50	ug/Kg	☼	06/16/17 13:00	06/26/17 01:32	1
gamma-Chlordane	0.73	U Q	1.8	0.29	ug/Kg	☼	06/16/17 13:00	06/26/17 01:32	1
Heptachlor	0.73	U Q	1.8	0.23	ug/Kg	☼	06/16/17 13:00	06/26/17 01:32	1
Heptachlor epoxide	1.1	U Q	1.8	0.46	ug/Kg	☼	06/16/17 13:00	06/26/17 01:32	1
Methoxychlor	1.9	J Q	3.6	0.49	ug/Kg	☼	06/16/17 13:00	06/26/17 01:32	1
Toxaphene	36	U Q	180	17	ug/Kg	☼	06/16/17 13:00	06/26/17 01:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*0*	*Q*	*63 - 121*	*06/16/17 13:00*	*06/26/17 01:32*	*1*
Tetrachloro-m-xylene (Surr)	*45*		*42 - 129*	*06/16/17 13:00*	*06/26/17 01:32*	*1*

Client Sample ID: SS025-SB01(0-2)

Date Collected: 06/05/17 10:20
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-8

Matrix: Solid
Percent Solids: 88.3

Method: 8081B - Organochlorine Pesticides (GC) - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	18	U Q	18	5.9	ug/Kg	☼	06/16/17 13:00	06/25/17 19:38	10
4,4'-DDE	**16**	**J D Q**	18	2.6	ug/Kg	☼	06/16/17 13:00	06/25/17 19:38	10
4,4'-DDT	**52**	**D Q**	22	6.4	ug/Kg	☼	06/16/17 13:00	06/25/17 19:38	10
Aldrin	7.3	U Q	18	2.7	ug/Kg	☼	06/16/17 13:00	06/25/17 19:38	10
alpha-BHC	7.3	U Q	18	2.3	ug/Kg	☼	06/16/17 13:00	06/25/17 19:38	10
alpha-Chlordane	7.3	U Q	18	3.5	ug/Kg	☼	06/16/17 13:00	06/25/17 19:38	10
beta-BHC	18	U Q	18	7.2	ug/Kg	☼	06/16/17 13:00	06/25/17 19:38	10
delta-BHC	11	U Q	18	4.4	ug/Kg	☼	06/16/17 13:00	06/25/17 19:38	10
Dieldrin	7.3	U Q	18	2.3	ug/Kg	☼	06/16/17 13:00	06/25/17 19:38	10
Endosulfan I	7.3	U Q	18	1.9	ug/Kg	☼	06/16/17 13:00	06/25/17 19:38	10
Endosulfan II	7.3	U Q	18	3.1	ug/Kg	☼	06/16/17 13:00	06/25/17 19:38	10
Endosulfan sulfate	7.3	U Q	18	3.0	ug/Kg	☼	06/16/17 13:00	06/25/17 19:38	10
Endrin	7.3	U Q	18	3.3	ug/Kg	☼	06/16/17 13:00	06/25/17 19:38	10
Endrin aldehyde	7.3	U Q	18	1.9	ug/Kg	☼	06/16/17 13:00	06/25/17 19:38	10
gamma-BHC (Lindane)	11	U Q	18	5.0	ug/Kg	☼	06/16/17 13:00	06/25/17 19:38	10
gamma-Chlordane	7.3	U Q	18	2.9	ug/Kg	☼	06/16/17 13:00	06/25/17 19:38	10
Heptachlor	7.3	U Q	18	2.3	ug/Kg	☼	06/16/17 13:00	06/25/17 19:38	10
Heptachlor epoxide	11	U Q	18	4.6	ug/Kg	☼	06/16/17 13:00	06/25/17 19:38	10
Methoxychlor	11	U Q	36	4.9	ug/Kg	☼	06/16/17 13:00	06/25/17 19:38	10
Toxaphene	360	U Q	1800	170	ug/Kg	☼	06/16/17 13:00	06/25/17 19:38	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*0*	*D Q*	*63 - 121*	*06/16/17 13:00*	*06/25/17 19:38*	*10*
Tetrachloro-m-xylene (Surr)	*69*	*D*	*42 - 129*	*06/16/17 13:00*	*06/25/17 19:38*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	16	U	36	5.5	ug/Kg	☼	06/16/17 13:00	06/26/17 17:23	1
Arochlor 1221	18	U	51	17	ug/Kg	☼	06/16/17 13:00	06/26/17 17:23	1
Arochlor 1232	16	U	36	5.6	ug/Kg	☼	06/16/17 13:00	06/26/17 17:23	1
Arochlor 1242	36	U	36	9.9	ug/Kg	☼	06/16/17 13:00	06/26/17 17:23	1
Arochlor 1248	22	U	36	6.1	ug/Kg	☼	06/16/17 13:00	06/26/17 17:23	1
Arochlor 1254	18	U	36	6.0	ug/Kg	☼	06/16/17 13:00	06/26/17 17:23	1
Arochlor 1260	**17**	**J**	36	2.9	ug/Kg	☼	06/16/17 13:00	06/26/17 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*74*		*59 - 130*	*06/16/17 13:00*	*06/26/17 17:23*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6500**		39	1.2	mg/Kg	☼	06/08/17 14:00	06/09/17 09:45	1
Antimony	1.2	U	1.6	0.57	mg/Kg	☼	06/08/17 14:00	06/09/17 09:45	1
Arsenic	**3.5**		2.0	0.52	mg/Kg	☼	06/08/17 14:00	06/13/17 00:03	1
Barium	**27**		1.6	0.081	mg/Kg	☼	06/08/17 14:00	06/09/17 09:45	1
Beryllium	**0.32**	**J**	0.39	0.026	mg/Kg	☼	06/08/17 14:00	06/09/17 09:45	1
Cadmium	**0.13**	**J**	0.39	0.032	mg/Kg	☼	06/08/17 14:00	06/09/17 09:45	1
Calcium	**2600**		78	11	mg/Kg	☼	06/08/17 14:00	06/09/17 09:45	1
Chromium	**7.1**		2.7	0.045	mg/Kg	☼	06/08/17 14:00	06/09/17 09:45	1
Cobalt	**5.3**		0.78	0.078	mg/Kg	☼	06/08/17 14:00	06/09/17 09:45	1
Copper	**19**		3.9	0.17	mg/Kg	☼	06/08/17 14:00	06/13/17 00:03	1

Client Sample ID: SS025-SB01(0-2)

Date Collected: 06/05/17 10:20
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-8

Matrix: Solid
Percent Solids: 88.3

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**14000**	**Q**	63	3.0	mg/Kg	☼	06/08/17 14:00	06/09/17 09:45	1
Lead	**5.7**		0.70	0.24	mg/Kg	☼	06/08/17 14:00	06/09/17 09:45	1
Magnesium	**2400**		23	2.9	mg/Kg	☼	06/08/17 14:00	06/09/17 09:45	1
Manganese	**860**		3.5	0.078	mg/Kg	☼	06/08/17 14:00	06/12/17 16:01	1
Nickel	**10**		3.1	0.10	mg/Kg	☼	06/08/17 14:00	06/09/17 09:45	1
Potassium	**640**		230	32	mg/Kg	☼	06/08/17 14:00	06/09/17 09:45	1
Selenium	2.3	U	2.3	0.67	mg/Kg	☼	06/08/17 14:00	06/13/17 00:03	1
Silver	0.47	U	1.2	0.13	mg/Kg	☼	06/08/17 14:00	06/09/17 09:45	1
Sodium	160	U	390	46	mg/Kg	☼	06/08/17 14:00	06/09/17 09:45	1
Thallium	2.0	U	2.3	0.51	mg/Kg	☼	06/08/17 14:00	06/13/17 11:05	1
Vanadium	**12**		1.6	0.074	mg/Kg	☼	06/08/17 14:00	06/09/17 09:45	1
Zinc	**36**		6.3	0.31	mg/Kg	☼	06/08/17 14:00	06/09/17 09:45	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**22**		21	6.8	ug/Kg	☼	06/14/17 12:49	06/14/17 17:18	1

Client Sample ID: SS025-SB01(0-2)-a

Date Collected: 06/05/17 10:20
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-9

Matrix: Solid
Percent Solids: 89.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.2	U	3.8	0.43	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
1,1,1-Trichloroethane	1.2	U	3.8	0.40	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
1,1,2,2-Tetrachloroethane	1.2	U	3.8	0.46	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
1,1,2-Trichloroethane	2.4	U	3.8	0.67	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
1,1-Dichloroethane	0.61	U	3.8	0.16	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
1,1-Dichloroethene	1.2	U	3.8	0.45	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
1,1-Dichloropropene	1.2	U	3.8	0.41	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
1,2,3-Trichlorobenzene	1.2	U	3.8	0.57	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
1,2,3-Trichloropropane	2.4	U	3.8	0.62	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
1,2,4-Trichlorobenzene	1.2	U	3.8	0.56	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
1,2,4-Trimethylbenzene	1.2	U	3.8	0.44	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
1,2-Dibromo-3-Chloropropane	1.2	U	7.6	0.46	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
1,2-Dibromoethane	1.2	U	3.8	0.40	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
1,2-Dichlorobenzene	1.2	U	3.8	0.34	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
1,2-Dichloroethane	1.2	U	3.8	0.53	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
1,2-Dichloroethene, Total	1.2	U	3.8	0.30	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
1,2-Dichloropropane	1.2	U	3.8	0.42	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
1,3,5-Trimethylbenzene	1.2	U	3.8	0.43	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
1,3-Dichlorobenzene	1.2	U	3.8	0.37	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
1,3-Dichloropropane	1.2	U	3.8	0.39	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
1,4-Dichlorobenzene	1.2	U	3.8	0.59	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
2,2-Dichloropropane	1.2	U	3.8	0.34	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
2-Butanone (MEK)	4.9	U	15	1.4	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
2-Chlorotoluene	1.2	U	3.8	0.39	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
2-Hexanone	9.7	U Q	15	3.7	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
4-Chlorotoluene	1.2	U	3.8	0.59	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
4-Isopropyltoluene	1.2	U	3.8	0.37	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1

Client Sample ID: SS025-SB01(0-2)-a

Date Collected: 06/05/17 10:20
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-9

Matrix: Solid
Percent Solids: 89.0

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	9.7	U	15	3.3	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Acetone	**16**	**B Q**	15	4.1	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Benzene	1.2	U	3.8	0.36	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Bromobenzene	1.2	U	3.8	0.37	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Bromochloromethane	0.61	U	3.8	0.23	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Bromodichloromethane	0.61	U	3.8	0.17	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Bromoform	0.61	U	3.8	0.18	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Bromomethane	1.2	U	7.6	0.38	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Carbon disulfide	1.2	U	3.8	0.32	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Carbon tetrachloride	1.2	U	3.8	0.48	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Chlorobenzene	1.2	U	3.8	0.41	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Chloroethane	2.4	U	7.6	0.68	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Chloroform	0.61	U	7.6	0.22	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Chloromethane	1.2	U	7.6	0.59	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
cis-1,2-Dichloroethene	1.2	U	3.8	0.43	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
cis-1,3-Dichloropropene	2.4	U	3.8	0.98	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Dibromochloromethane	1.2	U	3.8	0.43	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Dibromomethane	2.4	U	3.8	0.64	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Dichlorodifluoromethane	1.2	U Q	7.6	0.40	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Ethylbenzene	1.2	U	3.8	0.51	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Hexachlorobutadiene	1.2	U	3.8	0.42	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Isopropyl ether	6.1	U	38	2.1	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Isopropylbenzene	1.2	U	3.8	0.45	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
m&p-Xylene	2.4	U	2.4	0.79	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Methyl iodide	1.2	U	3.8	0.34	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Methyl tert-butyl ether	0.61	U	15	0.26	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Methylene Chloride	2.4	U	3.8	1.2	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Naphthalene	1.2	U	3.8	0.48	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
n-Butylbenzene	1.2	U	3.8	0.43	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
N-Propylbenzene	1.2	U	3.8	0.44	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
o-Xylene	1.2	U	3.8	0.46	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
sec-Butylbenzene	1.2	U	3.8	0.59	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Styrene	1.2	U	3.8	0.48	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
tert-Butylbenzene	1.2	U	3.8	0.38	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Tetrachloroethene	1.2	U	3.8	0.45	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Toluene	1.2	U	3.8	0.53	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
trans-1,2-Dichloroethene	0.61	U	3.8	0.30	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
trans-1,3-Dichloropropene	1.2	U	3.8	0.51	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Trichloroethene	0.61	U	3.8	0.18	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Trichlorofluoromethane	2.4	U	7.6	0.79	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Vinyl acetate	2.4	U	7.6	0.81	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Vinyl chloride	2.4	U	3.8	1.0	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1
Xylenes (total)	0.76	U	7.6	0.46	ug/Kg	☼	06/05/17 10:20	06/16/17 21:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*71 - 136*	*06/05/17 10:20*	*06/16/17 21:56*	*1*
4-Bromofluorobenzene (Surr)	*99*		*79 - 119*	*06/05/17 10:20*	*06/16/17 21:56*	*1*
Dibromofluoromethane (Surr)	*102*		*78 - 119*	*06/05/17 10:20*	*06/16/17 21:56*	*1*
Toluene-d8 (Surr)	*96*		*85 - 116*	*06/05/17 10:20*	*06/16/17 21:56*	*1*

Client Sample ID: SS025-SB01(0-2)-a

Date Collected: 06/05/17 10:20
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-9

Matrix: Solid
Percent Solids: 89.0

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	30		5.3	0.27	ug/Kg	☼	06/11/17 07:19	06/16/17 20:22	1
2-Methylnaphthalene	41		5.3	0.33	ug/Kg	☼	06/11/17 07:19	06/16/17 20:22	1
Acenaphthene	130		5.3	0.17	ug/Kg	☼	06/11/17 07:19	06/16/17 20:22	1
Acenaphthylene	76		5.3	0.18	ug/Kg	☼	06/11/17 07:19	06/16/17 20:22	1
Anthracene	240	J	5.3	0.76	ug/Kg	☼	06/11/17 07:19	06/16/17 20:22	1
Benzo[a]anthracene	530	J	5.3	0.95	ug/Kg	☼	06/11/17 07:19	06/16/17 20:22	1
Benzo[a]pyrene	460	J	5.3	0.78	ug/Kg	☼	06/11/17 07:19	06/16/17 20:22	1
Benzo[b]fluoranthene	640	J	5.3	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 20:22	1
Benzo[g,h,i]perylene	250		5.3	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 20:22	1
Benzo[k]fluoranthene	230	J	5.3	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 20:22	1
Chrysene	610	J	5.3	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 20:22	1
Dibenz(a,h)anthracene	80		5.3	1.4	ug/Kg	☼	06/11/17 07:19	06/16/17 20:22	1
Fluoranthene	1100	J	5.3	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 20:22	1
Fluorene	130		5.3	0.50	ug/Kg	☼	06/11/17 07:19	06/16/17 20:22	1
Indeno[1,2,3-cd]pyrene	230	J	5.3	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 20:22	1
Naphthalene	99		5.3	0.34	ug/Kg	☼	06/11/17 07:19	06/16/17 20:22	1
Phenanthrene	950	J	5.3	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 20:22	1
Pyrene	990	J	5.3	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*84*		*46 - 115*	*06/11/17 07:19*	*06/16/17 20:22*	*1*
Nitrobenzene-d5 (Surr)	*89*		*44 - 125*	*06/11/17 07:19*	*06/16/17 20:22*	*1*
Terphenyl-d14 (Surr)	*87*		*58 - 133*	*06/11/17 07:19*	*06/16/17 20:22*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	22	J D Q	53	2.7	ug/Kg	☼	06/11/17 07:19	06/20/17 20:52	10
2-Methylnaphthalene	34	J D Q	53	3.3	ug/Kg	☼	06/11/17 07:19	06/20/17 20:52	10
Acenaphthene	110	D	53	1.7	ug/Kg	☼	06/11/17 07:19	06/20/17 20:52	10
Acenaphthylene	81	D	53	1.8	ug/Kg	☼	06/11/17 07:19	06/20/17 20:52	10
Anthracene	210	D	53	7.6	ug/Kg	☼	06/11/17 07:19	06/20/17 20:52	10
Benzo[a]anthracene	500	D	53	9.5	ug/Kg	☼	06/11/17 07:19	06/20/17 20:52	10
Benzo[a]pyrene	440	D	53	7.8	ug/Kg	☼	06/11/17 07:19	06/20/17 20:52	10
Benzo[b]fluoranthene	620	D	53	13	ug/Kg	☼	06/11/17 07:19	06/20/17 20:52	10
Benzo[g,h,i]perylene	240	D	53	12	ug/Kg	☼	06/11/17 07:19	06/20/17 20:52	10
Benzo[k]fluoranthene	220	D	53	11	ug/Kg	☼	06/11/17 07:19	06/20/17 20:52	10
Chrysene	580	D	53	11	ug/Kg	☼	06/11/17 07:19	06/20/17 20:52	10
Dibenz(a,h)anthracene	74	D	53	14	ug/Kg	☼	06/11/17 07:19	06/20/17 20:52	10
Fluoranthene	1100	D	53	11	ug/Kg	☼	06/11/17 07:19	06/20/17 20:52	10
Fluorene	110	D	53	5.0	ug/Kg	☼	06/11/17 07:19	06/20/17 20:52	10
Indeno[1,2,3-cd]pyrene	220	D	53	12	ug/Kg	☼	06/11/17 07:19	06/20/17 20:52	10
Naphthalene	82	D Q	53	3.4	ug/Kg	☼	06/11/17 07:19	06/20/17 20:52	10
Phenanthrene	860	D	53	12	ug/Kg	☼	06/11/17 07:19	06/20/17 20:52	10
Pyrene	1000	D	53	12	ug/Kg	☼	06/11/17 07:19	06/20/17 20:52	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*94*	*D*	*46 - 115*	*06/11/17 07:19*	*06/20/17 20:52*	*10*
Nitrobenzene-d5 (Surr)	*0*	*D Q*	*44 - 125*	*06/11/17 07:19*	*06/20/17 20:52*	*10*
Terphenyl-d14 (Surr)	*118*	*D*	*58 - 133*	*06/11/17 07:19*	*06/20/17 20:52*	*10*

Client Sample ID: SS025-SB01(0-2)-a

Date Collected: 06/05/17 10:20
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-9

Matrix: Solid
Percent Solids: 89.0

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.9	U Q	1.9	0.61	ug/Kg	☼	06/16/17 13:00	06/26/17 01:49	1
4,4'-DDE	**1.3**	**J Q**	1.9	0.27	ug/Kg	☼	06/16/17 13:00	06/26/17 01:49	1
4,4'-DDT	**4.6**	**Q**	2.2	0.66	ug/Kg	☼	06/16/17 13:00	06/26/17 01:49	1
Aldrin	0.75	U Q	1.9	0.28	ug/Kg	☼	06/16/17 13:00	06/26/17 01:49	1
alpha-BHC	0.75	U Q	1.9	0.24	ug/Kg	☼	06/16/17 13:00	06/26/17 01:49	1
alpha-Chlordane	0.75	U Q	1.9	0.36	ug/Kg	☼	06/16/17 13:00	06/26/17 01:49	1
beta-BHC	1.9	U Q	1.9	0.74	ug/Kg	☼	06/16/17 13:00	06/26/17 01:49	1
delta-BHC	1.1	U Q	1.9	0.45	ug/Kg	☼	06/16/17 13:00	06/26/17 01:49	1
Dieldrin	0.75	U Q	1.9	0.23	ug/Kg	☼	06/16/17 13:00	06/26/17 01:49	1
Endosulfan I	0.75	U Q	1.9	0.20	ug/Kg	☼	06/16/17 13:00	06/26/17 01:49	1
Endosulfan II	0.75	U Q	1.9	0.32	ug/Kg	☼	06/16/17 13:00	06/26/17 01:49	1
Endosulfan sulfate	0.75	U Q	1.9	0.31	ug/Kg	☼	06/16/17 13:00	06/26/17 01:49	1
Endrin	0.75	U Q	1.9	0.34	ug/Kg	☼	06/16/17 13:00	06/26/17 01:49	1
Endrin aldehyde	0.75	U Q	1.9	0.19	ug/Kg	☼	06/16/17 13:00	06/26/17 01:49	1
gamma-BHC (Lindane)	1.1	U Q	1.9	0.52	ug/Kg	☼	06/16/17 13:00	06/26/17 01:49	1
gamma-Chlordane	0.75	U Q	1.9	0.30	ug/Kg	☼	06/16/17 13:00	06/26/17 01:49	1
Heptachlor	0.75	U Q	1.9	0.24	ug/Kg	☼	06/16/17 13:00	06/26/17 01:49	1
Heptachlor epoxide	1.1	U Q	1.9	0.48	ug/Kg	☼	06/16/17 13:00	06/26/17 01:49	1
Methoxychlor	1.1	U Q	3.7	0.50	ug/Kg	☼	06/16/17 13:00	06/26/17 01:49	1
Toxaphene	37	U Q	190	18	ug/Kg	☼	06/16/17 13:00	06/26/17 01:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*697*	*Q*	*63 - 121*	*06/16/17 13:00*	*06/26/17 01:49*	*1*
Tetrachloro-m-xylene (Surr)	*59*		*42 - 129*	*06/16/17 13:00*	*06/26/17 01:49*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	17	U	37	5.7	ug/Kg	☼	06/16/17 13:00	06/26/17 17:45	1
Arochlor 1221	19	U	52	17	ug/Kg	☼	06/16/17 13:00	06/26/17 17:45	1
Arochlor 1232	17	U	37	5.7	ug/Kg	☼	06/16/17 13:00	06/26/17 17:45	1
Arochlor 1242	37	U	37	10	ug/Kg	☼	06/16/17 13:00	06/26/17 17:45	1
Arochlor 1248	22	U	37	6.3	ug/Kg	☼	06/16/17 13:00	06/26/17 17:45	1
Arochlor 1254	19	U	37	6.2	ug/Kg	☼	06/16/17 13:00	06/26/17 17:45	1
Arochlor 1260	8.6	U	37	3.0	ug/Kg	☼	06/16/17 13:00	06/26/17 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*76*		*59 - 130*	*06/16/17 13:00*	*06/26/17 17:45*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7000**		45	1.4	mg/Kg	☼	06/08/17 14:00	06/09/17 09:48	1
Antimony	1.3	U	1.8	0.65	mg/Kg	☼	06/08/17 14:00	06/09/17 09:48	1
Arsenic	**5.0**		2.2	0.59	mg/Kg	☼	06/08/17 14:00	06/13/17 00:06	1
Barium	**45**		1.8	0.093	mg/Kg	☼	06/08/17 14:00	06/09/17 09:48	1
Beryllium	**0.33**	**J**	0.45	0.029	mg/Kg	☼	06/08/17 14:00	06/09/17 09:48	1
Cadmium	**0.11**	**J**	0.45	0.037	mg/Kg	☼	06/08/17 14:00	06/09/17 09:48	1
Calcium	**7000**		89	13	mg/Kg	☼	06/08/17 14:00	06/09/17 09:48	1
Chromium	**8.5**		3.1	0.052	mg/Kg	☼	06/08/17 14:00	06/09/17 09:48	1
Cobalt	**5.4**		0.89	0.089	mg/Kg	☼	06/08/17 14:00	06/09/17 09:48	1
Copper	**25**		4.5	0.19	mg/Kg	☼	06/08/17 14:00	06/13/17 00:06	1

Client Sample ID: SS025-SB01(0-2)-a

Lab Sample ID: 280-97928-9

Date Collected: 06/05/17 10:20
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 89.0

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**18000**	**Q**	71	3.4	mg/Kg	☼	06/08/17 14:00	06/09/17 09:48	1
Lead	**5.4**		0.80	0.28	mg/Kg	☼	06/08/17 14:00	06/09/17 09:48	1
Magnesium	**3700**		27	3.3	mg/Kg	☼	06/08/17 14:00	06/09/17 09:48	1
Manganese	**1200**		4.0	0.089	mg/Kg	☼	06/08/17 14:00	06/12/17 16:04	1
Nickel	**12**		3.6	0.12	mg/Kg	☼	06/08/17 14:00	06/09/17 09:48	1
Potassium	**870**		270	37	mg/Kg	☼	06/08/17 14:00	06/09/17 09:48	1
Selenium	2.7	U	2.7	0.77	mg/Kg	☼	06/08/17 14:00	06/13/17 00:06	1
Silver	0.54	U	1.3	0.14	mg/Kg	☼	06/08/17 14:00	06/09/17 09:48	1
Sodium	180	U	450	53	mg/Kg	☼	06/08/17 14:00	06/09/17 09:48	1
Thallium	2.2	U	2.7	0.58	mg/Kg	☼	06/08/17 14:00	06/13/17 11:08	1
Vanadium	**14**		1.8	0.084	mg/Kg	☼	06/08/17 14:00	06/09/17 09:48	1
Zinc	**41**		7.1	0.36	mg/Kg	☼	06/08/17 14:00	06/09/17 09:48	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**11**	**J**	22	7.3	ug/Kg	☼	06/14/17 12:49	06/14/17 17:24	1

Client Sample ID: SS025-SB08(0-2)

Lab Sample ID: 280-97928-10

Date Collected: 06/05/17 11:05
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 89.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.5	U	4.6	0.51	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
1,1,1-Trichloroethane	1.5	U	4.6	0.47	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
1,1,2,2-Tetrachloroethane	1.5	U	4.6	0.56	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
1,1,2-Trichloroethane	2.9	U	4.6	0.80	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
1,1-Dichloroethane	0.73	U	4.6	0.19	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
1,1-Dichloroethene	1.5	U	4.6	0.54	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
1,1-Dichloropropene	1.5	U	4.6	0.49	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
1,2,3-Trichlorobenzene	1.5	U	4.6	0.68	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
1,2,3-Trichloropropane	2.9	U	4.6	0.74	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
1,2,4-Trichlorobenzene	1.5	U	4.6	0.67	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
1,2,4-Trimethylbenzene	1.5	U	4.6	0.53	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
1,2-Dibromo-3-Chloropropane	1.5	U	9.1	0.55	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
1,2-Dibromoethane	1.5	U	4.6	0.47	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
1,2-Dichlorobenzene	1.5	U	4.6	0.41	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
1,2-Dichloroethane	1.5	U	4.6	0.64	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
1,2-Dichloroethene, Total	1.5	U	4.6	0.36	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
1,2-Dichloropropane	1.5	U	4.6	0.50	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
1,3,5-Trimethylbenzene	1.5	U	4.6	0.52	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
1,3-Dichlorobenzene	1.5	U	4.6	0.44	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
1,3-Dichloropropane	1.5	U	4.6	0.47	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
1,4-Dichlorobenzene	1.5	U	4.6	0.71	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
2,2-Dichloropropane	1.5	U	4.6	0.40	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
2-Butanone (MEK)	5.8	U	18	1.7	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
2-Chlorotoluene	1.5	U	4.6	0.47	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
2-Hexanone	12	U Q	18	4.5	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
4-Chlorotoluene	1.5	U	4.6	0.71	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
4-Isopropyltoluene	1.5	U	4.6	0.45	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1

Client Sample ID: SS025-SB08(0-2)
Date Collected: 06/05/17 11:05
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-10
Matrix: Solid
Percent Solids: 89.8

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	12	U	18	4.0	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Acetone	12	U Q	18	4.9	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Benzene	1.5	U	4.6	0.43	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Bromobenzene	1.5	U	4.6	0.45	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Bromochloromethane	0.73	U	4.6	0.27	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Bromodichloromethane	0.73	U	4.6	0.20	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Bromoform	0.73	U	4.6	0.21	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Bromomethane	1.5	U	9.1	0.46	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Carbon disulfide	1.5	U	4.6	0.38	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Carbon tetrachloride	1.5	U	4.6	0.58	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Chlorobenzene	1.5	U	4.6	0.49	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Chloroethane	2.9	U	9.1	0.81	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Chloroform	0.73	U	9.1	0.26	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Chloromethane	1.5	U	9.1	0.70	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
cis-1,2-Dichloroethene	1.5	U	4.6	0.51	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
cis-1,3-Dichloropropene	2.9	U	4.6	1.2	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Dibromochloromethane	1.5	U	4.6	0.52	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Dibromomethane	2.9	U	4.6	0.77	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Dichlorodifluoromethane	1.5	U Q	9.1	0.47	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Ethylbenzene	1.5	U	4.6	0.61	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Hexachlorobutadiene	1.5	U	4.6	0.50	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Isopropyl ether	7.3	U	46	2.5	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Isopropylbenzene	1.5	U	4.6	0.54	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
m&p-Xylene	2.9	U	2.9	0.95	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Methyl iodide	1.5	U	4.6	0.40	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Methyl tert-butyl ether	0.73	U	18	0.31	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Methylene Chloride	2.9	U	4.6	1.5	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Naphthalene	1.5	U	4.6	0.58	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
n-Butylbenzene	1.5	U	4.6	0.51	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
N-Propylbenzene	1.5	U	4.6	0.53	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
o-Xylene	1.5	U	4.6	0.56	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
sec-Butylbenzene	1.5	U	4.6	0.70	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Styrene	1.5	U	4.6	0.58	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
tert-Butylbenzene	1.5	U	4.6	0.46	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Tetrachloroethene	1.5	U	4.6	0.54	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Toluene	1.5	U	4.6	0.63	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
trans-1,2-Dichloroethene	0.73	U	4.6	0.36	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
trans-1,3-Dichloropropene	1.5	U	4.6	0.61	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Trichloroethene	0.73	U	4.6	0.21	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Trichlorofluoromethane	2.9	U	9.1	0.95	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Vinyl acetate	2.9	U	9.1	0.98	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Vinyl chloride	2.9	U	4.6	1.2	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1
Xylenes (total)	0.91	U	9.1	0.56	ug/Kg	☼	06/05/17 11:05	06/16/17 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*71 - 136*	*06/05/17 11:05*	*06/16/17 22:17*	*1*
4-Bromofluorobenzene (Surr)	*89*		*79 - 119*	*06/05/17 11:05*	*06/16/17 22:17*	*1*
Dibromofluoromethane (Surr)	*103*		*78 - 119*	*06/05/17 11:05*	*06/16/17 22:17*	*1*
Toluene-d8 (Surr)	*91*		*85 - 116*	*06/05/17 11:05*	*06/16/17 22:17*	*1*

Client Sample ID: SS025-SB08(0-2)

Date Collected: 06/05/17 11:05
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-10

Matrix: Solid
Percent Solids: 89.8

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.50	J	5.2	0.27	ug/Kg	☼	06/11/17 07:19	06/16/17 20:48	1
2-Methylnaphthalene	0.88	J	5.2	0.32	ug/Kg	☼	06/11/17 07:19	06/16/17 20:48	1
Acenaphthene	0.64	J	5.2	0.16	ug/Kg	☼	06/11/17 07:19	06/16/17 20:48	1
Acenaphthylene	2.9	J M	5.2	0.18	ug/Kg	☼	06/11/17 07:19	06/16/17 20:48	1
Anthracene	1.5	J	5.2	0.74	ug/Kg	☼	06/11/17 07:19	06/16/17 20:48	1
Benzo[a]anthracene	3.7	J	5.2	0.93	ug/Kg	☼	06/11/17 07:19	06/16/17 20:48	1
Benzo[a]pyrene	3.8	J	5.2	0.76	ug/Kg	☼	06/11/17 07:19	06/16/17 20:48	1
Benzo[b]fluoranthene	6.6		5.2	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 20:48	1
Benzo[g,h,i]perylene	2.7	J	5.2	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 20:48	1
Benzo[k]fluoranthene	1.6	J	5.2	1.0	ug/Kg	☼	06/11/17 07:19	06/16/17 20:48	1
Chrysene	5.3		5.2	1.0	ug/Kg	☼	06/11/17 07:19	06/16/17 20:48	1
Dibenz(a,h)anthracene	2.6	U	5.2	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 20:48	1
Fluoranthene	7.4		5.2	1.0	ug/Kg	☼	06/11/17 07:19	06/16/17 20:48	1
Fluorene	1.1	J	5.2	0.48	ug/Kg	☼	06/11/17 07:19	06/16/17 20:48	1
Indeno[1,2,3-cd]pyrene	2.6	U	5.2	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 20:48	1
Naphthalene	0.56	J	5.2	0.34	ug/Kg	☼	06/11/17 07:19	06/16/17 20:48	1
Phenanthrene	4.1	J	5.2	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 20:48	1
Pyrene	7.0		5.2	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*81*		*46 - 115*	*06/11/17 07:19*	*06/16/17 20:48*	*1*
Nitrobenzene-d5 (Surr)	*82*		*44 - 125*	*06/11/17 07:19*	*06/16/17 20:48*	*1*
Terphenyl-d14 (Surr)	*69*		*58 - 133*	*06/11/17 07:19*	*06/16/17 20:48*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.8	U	1.8	0.58	ug/Kg	☼	06/16/17 13:00	06/25/17 20:11	1
4,4'-DDE	0.71	U	1.8	0.25	ug/Kg	☼	06/16/17 13:00	06/25/17 20:11	1
4,4'-DDT	1.8	U	2.1	0.63	ug/Kg	☼	06/16/17 13:00	06/25/17 20:11	1
Aldrin	0.71	U	1.8	0.27	ug/Kg	☼	06/16/17 13:00	06/25/17 20:11	1
alpha-BHC	0.71	U	1.8	0.23	ug/Kg	☼	06/16/17 13:00	06/25/17 20:11	1
alpha-Chlordane	0.71	U	1.8	0.34	ug/Kg	☼	06/16/17 13:00	06/25/17 20:11	1
beta-BHC	1.8	U	1.8	0.71	ug/Kg	☼	06/16/17 13:00	06/25/17 20:11	1
delta-BHC	1.1	U	1.8	0.43	ug/Kg	☼	06/16/17 13:00	06/25/17 20:11	1
Dieldrin	0.71	U	1.8	0.22	ug/Kg	☼	06/16/17 13:00	06/25/17 20:11	1
Endosulfan I	0.71	U	1.8	0.19	ug/Kg	☼	06/16/17 13:00	06/25/17 20:11	1
Endosulfan II	0.71	U	1.8	0.31	ug/Kg	☼	06/16/17 13:00	06/25/17 20:11	1
Endosulfan sulfate	0.71	U	1.8	0.29	ug/Kg	☼	06/16/17 13:00	06/25/17 20:11	1
Endrin	0.71	U	1.8	0.33	ug/Kg	☼	06/16/17 13:00	06/25/17 20:11	1
Endrin aldehyde	0.71	U	1.8	0.18	ug/Kg	☼	06/16/17 13:00	06/25/17 20:11	1
gamma-BHC (Lindane)	1.1	U	1.8	0.49	ug/Kg	☼	06/16/17 13:00	06/25/17 20:11	1
gamma-Chlordane	0.71	U	1.8	0.28	ug/Kg	☼	06/16/17 13:00	06/25/17 20:11	1
Heptachlor	0.71	U	1.8	0.23	ug/Kg	☼	06/16/17 13:00	06/25/17 20:11	1
Heptachlor epoxide	1.1	U	1.8	0.45	ug/Kg	☼	06/16/17 13:00	06/25/17 20:11	1
Methoxychlor	1.1	U	3.5	0.48	ug/Kg	☼	06/16/17 13:00	06/25/17 20:11	1
Toxaphene	35	U	180	17	ug/Kg	☼	06/16/17 13:00	06/25/17 20:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*85*		*63 - 121*	*06/16/17 13:00*	*06/25/17 20:11*	*1*
Tetrachloro-m-xylene (Surr)	*84*		*42 - 129*	*06/16/17 13:00*	*06/25/17 20:11*	*1*

Client Sample ID: SS025-SB08(0-2)
Lab Sample ID: 280-97928-10
Date Collected: 06/05/17 11:05
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 89.8

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	16	U	35	5.4	ug/Kg	☼	06/16/17 13:00	06/26/17 18:06	1
Arochlor 1221	18	U	50	17	ug/Kg	☼	06/16/17 13:00	06/26/17 18:06	1
Arochlor 1232	16	U	35	5.4	ug/Kg	☼	06/16/17 13:00	06/26/17 18:06	1
Arochlor 1242	35	U	35	9.7	ug/Kg	☼	06/16/17 13:00	06/26/17 18:06	1
Arochlor 1248	21	U	35	6.0	ug/Kg	☼	06/16/17 13:00	06/26/17 18:06	1
Arochlor 1254	18	U	35	5.9	ug/Kg	☼	06/16/17 13:00	06/26/17 18:06	1
Arochlor 1260	8.2	U	35	2.8	ug/Kg	☼	06/16/17 13:00	06/26/17 18:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*84*		*59 - 130*	*06/16/17 13:00*	*06/26/17 18:06*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**4000**		40	1.2	mg/Kg	☼	06/08/17 14:00	06/09/17 09:50	1
Antimony	1.2	U	1.6	0.58	mg/Kg	☼	06/08/17 14:00	06/09/17 09:50	1
Arsenic	**2.8**		2.0	0.53	mg/Kg	☼	06/08/17 14:00	06/13/17 00:08	1
Barium	**13**		1.6	0.083	mg/Kg	☼	06/08/17 14:00	06/09/17 09:50	1
Beryllium	**0.20**	**J**	0.40	0.026	mg/Kg	☼	06/08/17 14:00	06/09/17 09:50	1
Cadmium	**0.050**	**J**	0.40	0.033	mg/Kg	☼	06/08/17 14:00	06/09/17 09:50	1
Calcium	**950**		80	11	mg/Kg	☼	06/08/17 14:00	06/09/17 09:50	1
Chromium	**4.2**		2.8	0.046	mg/Kg	☼	06/08/17 14:00	06/09/17 09:50	1
Cobalt	**2.9**		0.80	0.080	mg/Kg	☼	06/08/17 14:00	06/09/17 09:50	1
Copper	**9.8**		4.0	0.17	mg/Kg	☼	06/08/17 14:00	06/13/17 00:08	1
Iron	**8600**	**Q**	64	3.0	mg/Kg	☼	06/08/17 14:00	06/09/17 09:50	1
Lead	**1.9**		0.72	0.25	mg/Kg	☼	06/08/17 14:00	06/09/17 09:50	1
Magnesium	**1700**		24	2.9	mg/Kg	☼	06/08/17 14:00	06/09/17 09:50	1
Manganese	**300**		3.6	0.080	mg/Kg	☼	06/08/17 14:00	06/12/17 16:06	1
Nickel	**6.5**		3.2	0.11	mg/Kg	☼	06/08/17 14:00	06/09/17 09:50	1
Potassium	**600**		240	33	mg/Kg	☼	06/08/17 14:00	06/09/17 09:50	1
Selenium	2.4	U	2.4	0.69	mg/Kg	☼	06/08/17 14:00	06/13/17 00:08	1
Silver	0.48	U	1.2	0.13	mg/Kg	☼	06/08/17 14:00	06/09/17 09:50	1
Sodium	160	U	400	47	mg/Kg	☼	06/08/17 14:00	06/09/17 09:50	1
Thallium	2.0	U	2.4	0.52	mg/Kg	☼	06/08/17 14:00	06/13/17 11:11	1
Vanadium	**7.6**		1.6	0.075	mg/Kg	☼	06/08/17 14:00	06/09/17 09:50	1
Zinc	**18**		6.4	0.32	mg/Kg	☼	06/08/17 14:00	06/09/17 09:50	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**6.4**	**J**	20	6.4	ug/Kg	☼	06/14/17 12:49	06/14/17 17:26	1

Client Sample ID: SS025-SB08(2-4)
Lab Sample ID: 280-97928-11
Date Collected: 06/05/17 11:15
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 86.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.4	U	4.3	0.48	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
1,1,1-Trichloroethane	1.4	U	4.3	0.44	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
1,1,2,2-Tetrachloroethane	1.4	U Q	4.3	0.52	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
1,1,2-Trichloroethane	2.7	U	4.3	0.75	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1

Client Sample ID: SS025-SB08(2-4)

Date Collected: 06/05/17 11:15
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-11

Matrix: Solid
Percent Solids: 86.4

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.68	U	4.3	0.18	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
1,1-Dichloroethene	1.4	U	4.3	0.50	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
1,1-Dichloropropene	1.4	U	4.3	0.46	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
1,2,3-Trichlorobenzene	1.4	U Q	4.3	0.64	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
1,2,3-Trichloropropane	2.7	U Q	4.3	0.69	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
1,2,4-Trichlorobenzene	1.4	U Q	4.3	0.62	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
1,2,4-Trimethylbenzene	1.4	U Q	4.3	0.49	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
1,2-Dibromo-3-Chloropropane	1.4	U Q	8.5	0.51	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
1,2-Dibromoethane	1.4	U	4.3	0.44	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
1,2-Dichlorobenzene	1.4	U Q	4.3	0.38	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
1,2-Dichloroethane	1.4	U	4.3	0.60	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
1,2-Dichloroethene, Total	1.4	U	4.3	0.33	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
1,2-Dichloropropane	1.4	U	4.3	0.47	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
1,3,5-Trimethylbenzene	1.4	U Q	4.3	0.49	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
1,3-Dichlorobenzene	1.4	U Q	4.3	0.41	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
1,3-Dichloropropane	1.4	U	4.3	0.43	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
1,4-Dichlorobenzene	1.4	U Q	4.3	0.66	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
2,2-Dichloropropane	1.4	U	4.3	0.37	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
2-Butanone (MEK)	5.5	U	17	1.6	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
2-Chlorotoluene	1.4	U Q	4.3	0.43	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
2-Hexanone	11	U Q	17	4.2	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
4-Chlorotoluene	1.4	U Q	4.3	0.66	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
4-Isopropyltoluene	1.4	U Q	4.3	0.42	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
4-Methyl-2-pentanone (MIBK)	11	U	17	3.7	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Acetone	11	U Q	17	4.6	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Benzene	1.4	U	4.3	0.40	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Bromobenzene	1.4	U Q	4.3	0.42	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Bromochloromethane	0.68	U	4.3	0.26	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Bromodichloromethane	0.68	U	4.3	0.19	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Bromoform	0.68	U	4.3	0.20	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Bromomethane	1.4	U	8.5	0.43	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Carbon disulfide	1.4	U	4.3	0.36	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Carbon tetrachloride	1.4	U	4.3	0.54	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Chlorobenzene	1.4	U	4.3	0.46	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Chloroethane	2.7	U	8.5	0.76	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Chloroform	0.68	U	8.5	0.25	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Chloromethane	1.4	U	8.5	0.66	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
cis-1,2-Dichloroethene	1.4	U	4.3	0.48	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
cis-1,3-Dichloropropene	2.7	U	4.3	1.1	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Dibromochloromethane	1.4	U	4.3	0.49	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Dibromomethane	2.7	U	4.3	0.72	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Dichlorodifluoromethane	1.4	U Q	8.5	0.44	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Ethylbenzene	1.4	U	4.3	0.57	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Hexachlorobutadiene	1.4	U Q	4.3	0.47	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Isopropyl ether	6.8	U	43	2.3	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Isopropylbenzene	1.4	U Q	4.3	0.50	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
m&p-Xylene	2.7	U	2.7	0.89	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Methyl iodide	1.4	U	4.3	0.37	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Methyl tert-butyl ether	0.68	U	17	0.29	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1

Client Sample ID: SS025-SB08(2-4)

Date Collected: 06/05/17 11:15
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-11

Matrix: Solid
Percent Solids: 86.4

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	2.7	U	4.3	1.4	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Naphthalene	1.4	U Q	4.3	0.54	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
n-Butylbenzene	1.4	U Q	4.3	0.48	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
N-Propylbenzene	1.4	U Q	4.3	0.49	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
o-Xylene	1.4	U	4.3	0.52	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
sec-Butylbenzene	1.4	U Q	4.3	0.66	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Styrene	1.4	U	4.3	0.54	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
tert-Butylbenzene	1.4	U Q	4.3	0.43	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Tetrachloroethene	1.4	U	4.3	0.50	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Toluene	1.4	U	4.3	0.59	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
trans-1,2-Dichloroethene	0.68	U	4.3	0.33	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
trans-1,3-Dichloropropene	1.4	U	4.3	0.57	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Trichloroethene	0.68	U	4.3	0.20	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Trichlorofluoromethane	2.7	U	8.5	0.89	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Vinyl acetate	2.7	U	8.5	0.91	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Vinyl chloride	2.7	U	4.3	1.1	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1
Xylenes (total)	0.85	U	8.5	0.52	ug/Kg	☼	06/05/17 11:15	06/16/17 22:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*71 - 136*	*06/05/17 11:15*	*06/16/17 22:37*	*1*
4-Bromofluorobenzene (Surr)	*104*	*Q*	*79 - 119*	*06/05/17 11:15*	*06/16/17 22:37*	*1*
Dibromofluoromethane (Surr)	*104*		*78 - 119*	*06/05/17 11:15*	*06/16/17 22:37*	*1*
Toluene-d8 (Surr)	*102*		*85 - 116*	*06/05/17 11:15*	*06/16/17 22:37*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.57	U	5.7	0.30	ug/Kg	☼	06/11/17 07:19	06/16/17 21:14	1
2-Methylnaphthalene	0.76	U	5.7	0.35	ug/Kg	☼	06/11/17 07:19	06/16/17 21:14	1
Acenaphthene	0.31	U	5.7	0.18	ug/Kg	☼	06/11/17 07:19	06/16/17 21:14	1
Acenaphthylene	**2.3**	**J**	5.7	0.19	ug/Kg	☼	06/11/17 07:19	06/16/17 21:14	1
Anthracene	2.9	U	5.7	0.83	ug/Kg	☼	06/11/17 07:19	06/16/17 21:14	1
Benzo[a]anthracene	**1.3**	**J**	5.7	1.0	ug/Kg	☼	06/11/17 07:19	06/16/17 21:14	1
Benzo[a]pyrene	**1.3**	**J**	5.7	0.85	ug/Kg	☼	06/11/17 07:19	06/16/17 21:14	1
Benzo[b]fluoranthene	**2.0**	**J**	5.7	1.4	ug/Kg	☼	06/11/17 07:19	06/16/17 21:14	1
Benzo[g,h,i]perylene	2.9	U	5.7	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 21:14	1
Benzo[k]fluoranthene	2.9	U	5.7	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 21:14	1
Chrysene	**1.8**	**J**	5.7	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 21:14	1
Dibenz(a,h)anthracene	2.9	U	5.7	1.5	ug/Kg	☼	06/11/17 07:19	06/16/17 21:14	1
Fluoranthene	**2.3**	**J**	5.7	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 21:14	1
Fluorene	**0.82**	**J**	5.7	0.54	ug/Kg	☼	06/11/17 07:19	06/16/17 21:14	1
Indeno[1,2,3-cd]pyrene	2.9	U	5.7	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 21:14	1
Naphthalene	0.76	U	5.7	0.37	ug/Kg	☼	06/11/17 07:19	06/16/17 21:14	1
Phenanthrene	**1.9**	**J**	5.7	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 21:14	1
Pyrene	**2.0**	**J**	5.7	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 21:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*88*		*46 - 115*	*06/11/17 07:19*	*06/16/17 21:14*	*1*
Nitrobenzene-d5 (Surr)	*81*		*44 - 125*	*06/11/17 07:19*	*06/16/17 21:14*	*1*
Terphenyl-d14 (Surr)	*75*		*58 - 133*	*06/11/17 07:19*	*06/16/17 21:14*	*1*

Client Sample ID: SS025-SB08(2-4)

Date Collected: 06/05/17 11:15
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-11

Matrix: Solid
Percent Solids: 86.4

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.8	U	1.8	0.59	ug/Kg	☼	06/16/17 13:00	06/25/17 20:28	1
4,4'-DDE	0.73	U	1.8	0.26	ug/Kg	☼	06/16/17 13:00	06/25/17 20:28	1
4,4'-DDT	1.8	U	2.2	0.64	ug/Kg	☼	06/16/17 13:00	06/25/17 20:28	1
Aldrin	0.73	U	1.8	0.27	ug/Kg	☼	06/16/17 13:00	06/25/17 20:28	1
alpha-BHC	0.73	U	1.8	0.23	ug/Kg	☼	06/16/17 13:00	06/25/17 20:28	1
alpha-Chlordane	0.73	U	1.8	0.35	ug/Kg	☼	06/16/17 13:00	06/25/17 20:28	1
beta-BHC	1.8	U	1.8	0.72	ug/Kg	☼	06/16/17 13:00	06/25/17 20:28	1
delta-BHC	1.1	U	1.8	0.43	ug/Kg	☼	06/16/17 13:00	06/25/17 20:28	1
Dieldrin	0.73	U	1.8	0.23	ug/Kg	☼	06/16/17 13:00	06/25/17 20:28	1
Endosulfan I	0.73	U	1.8	0.19	ug/Kg	☼	06/16/17 13:00	06/25/17 20:28	1
Endosulfan II	0.73	U	1.8	0.31	ug/Kg	☼	06/16/17 13:00	06/25/17 20:28	1
Endosulfan sulfate	0.73	U	1.8	0.30	ug/Kg	☼	06/16/17 13:00	06/25/17 20:28	1
Endrin	0.73	U	1.8	0.33	ug/Kg	☼	06/16/17 13:00	06/25/17 20:28	1
Endrin aldehyde	0.73	U	1.8	0.19	ug/Kg	☼	06/16/17 13:00	06/25/17 20:28	1
gamma-BHC (Lindane)	1.1	U	1.8	0.50	ug/Kg	☼	06/16/17 13:00	06/25/17 20:28	1
gamma-Chlordane	0.73	U	1.8	0.29	ug/Kg	☼	06/16/17 13:00	06/25/17 20:28	1
Heptachlor	0.73	U	1.8	0.23	ug/Kg	☼	06/16/17 13:00	06/25/17 20:28	1
Heptachlor epoxide	1.1	U	1.8	0.46	ug/Kg	☼	06/16/17 13:00	06/25/17 20:28	1
Methoxychlor	1.1	U	3.6	0.49	ug/Kg	☼	06/16/17 13:00	06/25/17 20:28	1
Toxaphene	36	U	180	17	ug/Kg	☼	06/16/17 13:00	06/25/17 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*64*		*63 - 121*	*06/16/17 13:00*	*06/25/17 20:28*	*1*
Tetrachloro-m-xylene (Surr)	*64*		*42 - 129*	*06/16/17 13:00*	*06/25/17 20:28*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	16	U	36	5.5	ug/Kg	☼	06/16/17 13:00	06/26/17 18:28	1
Arochlor 1221	18	U	51	17	ug/Kg	☼	06/16/17 13:00	06/26/17 18:28	1
Arochlor 1232	16	U	36	5.5	ug/Kg	☼	06/16/17 13:00	06/26/17 18:28	1
Arochlor 1242	36	U	36	9.9	ug/Kg	☼	06/16/17 13:00	06/26/17 18:28	1
Arochlor 1248	22	U	36	6.1	ug/Kg	☼	06/16/17 13:00	06/26/17 18:28	1
Arochlor 1254	18	U	36	6.0	ug/Kg	☼	06/16/17 13:00	06/26/17 18:28	1
Arochlor 1260	8.3	U	36	2.9	ug/Kg	☼	06/16/17 13:00	06/26/17 18:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*82*		*59 - 130*	*06/16/17 13:00*	*06/26/17 18:28*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8300**		39	1.2	mg/Kg	☼	06/08/17 14:00	06/13/17 11:15	1
Antimony	1.2	U	1.6	0.58	mg/Kg	☼	06/08/17 14:00	06/09/17 09:53	1
Arsenic	**3.7**		2.0	0.52	mg/Kg	☼	06/08/17 14:00	06/13/17 00:11	1
Barium	**31**		1.6	0.082	mg/Kg	☼	06/08/17 14:00	06/13/17 00:11	1
Beryllium	**0.53**		0.39	0.026	mg/Kg	☼	06/08/17 14:00	06/13/17 00:11	1
Cadmium	**0.12**	**J**	0.39	0.032	mg/Kg	☼	06/08/17 14:00	06/09/17 09:53	1
Calcium	**980**		78	11	mg/Kg	☼	06/08/17 14:00	06/13/17 00:11	1
Chromium	**9.6**		2.7	0.046	mg/Kg	☼	06/08/17 14:00	06/09/17 09:53	1
Cobalt	**4.9**		0.78	0.078	mg/Kg	☼	06/08/17 14:00	06/09/17 09:53	1
Copper	**18**		3.9	0.17	mg/Kg	☼	06/08/17 14:00	06/13/17 00:11	1

Client Sample ID: SS025-SB08(2-4)
Lab Sample ID: 280-97928-11

Date Collected: 06/05/17 11:15
Matrix: Solid

Date Received: 06/06/17 09:30
Percent Solids: 86.4

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**17000**		63	3.0	mg/Kg	☼	06/08/17 14:00	06/13/17 00:11	1
Lead	**5.8**		0.71	0.24	mg/Kg	☼	06/08/17 14:00	06/09/17 09:53	1
Magnesium	**2600**		24	2.9	mg/Kg	☼	06/08/17 14:00	06/09/17 09:53	1
Manganese	**340**		3.5	0.078	mg/Kg	☼	06/08/17 14:00	06/12/17 16:09	1
Nickel	**12**		3.1	0.10	mg/Kg	☼	06/08/17 14:00	06/09/17 09:53	1
Potassium	**970**		240	32	mg/Kg	☼	06/08/17 14:00	06/13/17 00:11	1
Selenium	2.4	U	2.4	0.67	mg/Kg	☼	06/08/17 14:00	06/13/17 00:11	1
Silver	0.47	U	1.2	0.13	mg/Kg	☼	06/08/17 14:00	06/09/17 09:53	1
Sodium	**71**	**J**	390	46	mg/Kg	☼	06/08/17 14:00	06/13/17 00:11	1
Thallium	2.0	U	2.4	0.51	mg/Kg	☼	06/08/17 14:00	06/13/17 11:15	1
Vanadium	**19**		1.6	0.074	mg/Kg	☼	06/08/17 14:00	06/09/17 09:53	1
Zinc	**37**		6.3	0.31	mg/Kg	☼	06/08/17 14:00	06/09/17 09:53	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**20**		20	6.6	ug/Kg	☼	06/14/17 12:49	06/14/17 17:29	1

Client Sample ID: SS025-SS09
Lab Sample ID: 280-97928-12

Date Collected: 06/05/17 11:35
Matrix: Solid

Date Received: 06/06/17 09:30
Percent Solids: 88.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.2	U	3.9	0.44	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
1,1,1-Trichloroethane	1.2	U	3.9	0.40	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
1,1,2,2-Tetrachloroethane	1.2	U	3.9	0.47	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
1,1,2-Trichloroethane	2.5	U	3.9	0.68	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
1,1-Dichloroethane	0.62	U	3.9	0.16	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
1,1-Dichloroethene	1.2	U	3.9	0.46	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
1,1-Dichloropropene	1.2	U	3.9	0.42	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
1,2,3-Trichlorobenzene	1.2	U	3.9	0.58	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
1,2,3-Trichloropropane	2.5	U	3.9	0.63	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
1,2,4-Trichlorobenzene	1.2	U	3.9	0.57	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
1,2,4-Trimethylbenzene	1.2	U	3.9	0.45	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
1,2-Dibromo-3-Chloropropane	1.2	U	7.8	0.47	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
1,2-Dibromoethane	1.2	U	3.9	0.40	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
1,2-Dichlorobenzene	1.2	U	3.9	0.35	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
1,2-Dichloroethane	1.2	U	3.9	0.54	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
1,2-Dichloroethene, Total	1.2	U	3.9	0.30	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
1,2-Dichloropropane	1.2	U	3.9	0.43	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
1,3,5-Trimethylbenzene	1.2	U	3.9	0.44	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
1,3-Dichlorobenzene	1.2	U	3.9	0.37	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
1,3-Dichloropropane	1.2	U	3.9	0.40	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
1,4-Dichlorobenzene	1.2	U	3.9	0.61	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
2,2-Dichloropropane	1.2	U	3.9	0.34	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
2-Butanone (MEK)	5.0	U	16	1.4	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
2-Chlorotoluene	1.2	U	3.9	0.40	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
2-Hexanone	9.9	U Q	16	3.8	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
4-Chlorotoluene	1.2	U	3.9	0.61	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
4-Isopropyltoluene	1.2	U	3.9	0.38	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1

Client Sample ID: SS025-SS09
Date Collected: 06/05/17 11:35
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-12
Matrix: Solid
Percent Solids: 88.2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	9.9	U	16	3.4	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Acetone	**48**	**B Q**	16	4.2	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Benzene	1.2	U	3.9	0.37	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Bromobenzene	1.2	U	3.9	0.38	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Bromochloromethane	0.62	U	3.9	0.23	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Bromodichloromethane	0.62	U	3.9	0.17	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Bromoform	0.62	U	3.9	0.18	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Bromomethane	1.2	U	7.8	0.39	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Carbon disulfide	1.2	U	3.9	0.33	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Carbon tetrachloride	1.2	U	3.9	0.49	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Chlorobenzene	1.2	U	3.9	0.42	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Chloroethane	2.5	U	7.8	0.69	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Chloroform	0.62	U	7.8	0.23	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Chloromethane	1.2	U	7.8	0.60	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
cis-1,2-Dichloroethene	1.2	U	3.9	0.44	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
cis-1,3-Dichloropropene	2.5	U	3.9	1.0	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Dibromochloromethane	1.2	U	3.9	0.44	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Dibromomethane	2.5	U	3.9	0.65	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Dichlorodifluoromethane	1.2	U Q	7.8	0.40	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Ethylbenzene	1.2	U	3.9	0.52	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Hexachlorobutadiene	1.2	U	3.9	0.43	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Isopropyl ether	6.2	U	39	2.1	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Isopropylbenzene	1.2	U	3.9	0.46	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
m&p-Xylene	2.5	U	2.5	0.81	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Methyl iodide	1.2	U	3.9	0.34	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Methyl tert-butyl ether	0.62	U	16	0.26	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Methylene Chloride	2.5	U	3.9	1.2	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Naphthalene	1.2	U	3.9	0.49	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
n-Butylbenzene	1.2	U	3.9	0.44	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
N-Propylbenzene	1.2	U	3.9	0.45	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
o-Xylene	1.2	U	3.9	0.47	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
sec-Butylbenzene	1.2	U	3.9	0.60	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Styrene	1.2	U	3.9	0.49	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
tert-Butylbenzene	1.2	U	3.9	0.39	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Tetrachloroethene	1.2	U	3.9	0.46	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Toluene	1.2	U	3.9	0.54	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
trans-1,2-Dichloroethene	0.62	U	3.9	0.30	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
trans-1,3-Dichloropropene	1.2	U	3.9	0.52	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Trichloroethene	0.62	U	3.9	0.18	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Trichlorofluoromethane	2.5	U	7.8	0.81	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Vinyl acetate	2.5	U	7.8	0.83	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Vinyl chloride	2.5	U	3.9	1.0	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1
Xylenes (total)	0.78	U	7.8	0.47	ug/Kg	☼	06/05/17 11:35	06/16/17 22:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*71 - 136*	*06/05/17 11:35*	*06/16/17 22:58*	*1*
4-Bromofluorobenzene (Surr)	*102*		*79 - 119*	*06/05/17 11:35*	*06/16/17 22:58*	*1*
Dibromofluoromethane (Surr)	*105*		*78 - 119*	*06/05/17 11:35*	*06/16/17 22:58*	*1*
Toluene-d8 (Surr)	*94*		*85 - 116*	*06/05/17 11:35*	*06/16/17 22:58*	*1*

Client Sample ID: SS025-SS09

Date Collected: 06/05/17 11:35
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-12

Matrix: Solid
Percent Solids: 88.2

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**2.7**	**J**	5.3	0.27	ug/Kg	☼	06/11/17 07:19	06/16/17 21:40	1
2-Methylnaphthalene	**4.2**	**J**	5.3	0.33	ug/Kg	☼	06/11/17 07:19	06/16/17 21:40	1
Acenaphthene	**1.4**	**J M**	5.3	0.17	ug/Kg	☼	06/11/17 07:19	06/16/17 21:40	1
Acenaphthylene	**4.7**	**J M**	5.3	0.18	ug/Kg	☼	06/11/17 07:19	06/16/17 21:40	1
Anthracene	**7.1**		5.3	0.76	ug/Kg	☼	06/11/17 07:19	06/16/17 21:40	1
Benzo[a]anthracene	**25**		5.3	0.95	ug/Kg	☼	06/11/17 07:19	06/16/17 21:40	1
Benzo[a]pyrene	**25**		5.3	0.78	ug/Kg	☼	06/11/17 07:19	06/16/17 21:40	1
Benzo[b]fluoranthene	**49**		5.3	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 21:40	1
Benzo[g,h,i]perylene	**19**		5.3	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 21:40	1
Benzo[k]fluoranthene	**16**		5.3	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 21:40	1
Chrysene	**46**		5.3	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 21:40	1
Dibenz(a,h)anthracene	**5.5**		5.3	1.4	ug/Kg	☼	06/11/17 07:19	06/16/17 21:40	1
Fluoranthene	**40**		5.3	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 21:40	1
Fluorene	**3.4**	**J**	5.3	0.50	ug/Kg	☼	06/11/17 07:19	06/16/17 21:40	1
Indeno[1,2,3-cd]pyrene	**16**		5.3	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 21:40	1
Naphthalene	**3.1**	**J**	5.3	0.34	ug/Kg	☼	06/11/17 07:19	06/16/17 21:40	1
Phenanthrene	**19**		5.3	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 21:40	1
Pyrene	**39**		5.3	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 21:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*84*		*46 - 115*	*06/11/17 07:19*	*06/16/17 21:40*	*1*
Nitrobenzene-d5 (Surr)	*95*		*44 - 125*	*06/11/17 07:19*	*06/16/17 21:40*	*1*
Terphenyl-d14 (Surr)	*77*		*58 - 133*	*06/11/17 07:19*	*06/16/17 21:40*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.8	U	1.8	0.58	ug/Kg	☼	06/16/17 13:00	06/26/17 02:05	1
4,4'-DDE	**0.59**	**J**	1.8	0.25	ug/Kg	☼	06/16/17 13:00	06/26/17 02:05	1
4,4'-DDT	**1.3**	**J**	2.1	0.63	ug/Kg	☼	06/16/17 13:00	06/26/17 02:05	1
Aldrin	0.72	U	1.8	0.27	ug/Kg	☼	06/16/17 13:00	06/26/17 02:05	1
alpha-BHC	0.72	U	1.8	0.23	ug/Kg	☼	06/16/17 13:00	06/26/17 02:05	1
alpha-Chlordane	0.72	U	1.8	0.35	ug/Kg	☼	06/16/17 13:00	06/26/17 02:05	1
beta-BHC	1.8	U	1.8	0.71	ug/Kg	☼	06/16/17 13:00	06/26/17 02:05	1
delta-BHC	1.1	U	1.8	0.43	ug/Kg	☼	06/16/17 13:00	06/26/17 02:05	1
Dieldrin	**2.0**		1.8	0.22	ug/Kg	☼	06/16/17 13:00	06/26/17 02:05	1
Endosulfan I	0.72	U	1.8	0.19	ug/Kg	☼	06/16/17 13:00	06/26/17 02:05	1
Endosulfan II	0.72	U	1.8	0.31	ug/Kg	☼	06/16/17 13:00	06/26/17 02:05	1
Endosulfan sulfate	0.72	U	1.8	0.30	ug/Kg	☼	06/16/17 13:00	06/26/17 02:05	1
Endrin	0.72	U	1.8	0.33	ug/Kg	☼	06/16/17 13:00	06/26/17 02:05	1
Endrin aldehyde	0.72	U	1.8	0.18	ug/Kg	☼	06/16/17 13:00	06/26/17 02:05	1
gamma-BHC (Lindane)	1.1	U	1.8	0.50	ug/Kg	☼	06/16/17 13:00	06/26/17 02:05	1
gamma-Chlordane	0.72	U	1.8	0.28	ug/Kg	☼	06/16/17 13:00	06/26/17 02:05	1
Heptachlor	0.72	U	1.8	0.23	ug/Kg	☼	06/16/17 13:00	06/26/17 02:05	1
Heptachlor epoxide	1.1	U	1.8	0.46	ug/Kg	☼	06/16/17 13:00	06/26/17 02:05	1
Methoxychlor	1.1	U	3.5	0.48	ug/Kg	☼	06/16/17 13:00	06/26/17 02:05	1
Toxaphene	35	U Q	180	17	ug/Kg	☼	06/16/17 13:00	06/26/17 02:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*97*		*63 - 121*	*06/16/17 13:00*	*06/26/17 02:05*	*1*
Tetrachloro-m-xylene (Surr)	*50*		*42 - 129*	*06/16/17 13:00*	*06/26/17 02:05*	*1*

Client Sample ID: SS025-SS09

Date Collected: 06/05/17 11:35
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-12

Matrix: Solid
Percent Solids: 88.2

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	16	U	35	5.4	ug/Kg	☼	06/16/17 13:00	06/26/17 19:12	1
Arochlor 1221	18	U	50	17	ug/Kg	☼	06/16/17 13:00	06/26/17 19:12	1
Arochlor 1232	16	U	35	5.5	ug/Kg	☼	06/16/17 13:00	06/26/17 19:12	1
Arochlor 1242	35	U	35	9.8	ug/Kg	☼	06/16/17 13:00	06/26/17 19:12	1
Arochlor 1248	21	U	35	6.0	ug/Kg	☼	06/16/17 13:00	06/26/17 19:12	1
Arochlor 1254	18	U	35	5.9	ug/Kg	☼	06/16/17 13:00	06/26/17 19:12	1
Arochlor 1260	**95**		35	2.8	ug/Kg	☼	06/16/17 13:00	06/26/17 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*72*		*59 - 130*	*06/16/17 13:00*	*06/26/17 19:12*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3100**		45	1.4	mg/Kg	☼	06/08/17 14:00	06/09/17 09:55	1
Antimony	6.8	U	9.0	3.3	mg/Kg	☼	06/08/17 14:00	06/13/17 11:21	5
Arsenic	**5.5**	**J D**	11	3.0	mg/Kg	☼	06/08/17 14:00	06/13/17 11:21	5
Barium	**17**		1.8	0.094	mg/Kg	☼	06/08/17 14:00	06/09/17 09:55	1
Beryllium	**0.17**	**J**	0.45	0.030	mg/Kg	☼	06/08/17 14:00	06/09/17 09:55	1
Cadmium	**0.045**	**J**	0.45	0.037	mg/Kg	☼	06/08/17 14:00	06/09/17 09:55	1
Calcium	**210000**	**Q D**	450	64	mg/Kg	☼	06/08/17 14:00	06/13/17 11:21	5
Chromium	**4.9**		3.2	0.052	mg/Kg	☼	06/08/17 14:00	06/09/17 09:55	1
Cobalt	**2.7**		0.90	0.090	mg/Kg	☼	06/08/17 14:00	06/09/17 09:55	1
Copper	**11**		4.5	0.20	mg/Kg	☼	06/08/17 14:00	06/13/17 00:16	1
Iron	**5700**	**Q**	72	3.4	mg/Kg	☼	06/08/17 14:00	06/09/17 09:55	1
Lead	**3.7**	**J D**	4.1	1.4	mg/Kg	☼	06/08/17 14:00	06/13/17 11:21	5
Magnesium	**5100**		27	3.3	mg/Kg	☼	06/08/17 14:00	06/09/17 09:55	1
Manganese	**270**		4.1	0.090	mg/Kg	☼	06/08/17 14:00	06/12/17 16:14	1
Nickel	**9.7**	**J D**	18	0.60	mg/Kg	☼	06/08/17 14:00	06/13/17 11:21	5
Potassium	**620**		270	37	mg/Kg	☼	06/08/17 14:00	06/09/17 09:55	1
Selenium	14	U	14	3.9	mg/Kg	☼	06/08/17 14:00	06/13/17 11:21	5
Silver	0.54	U	1.4	0.14	mg/Kg	☼	06/08/17 14:00	06/09/17 09:55	1
Sodium	**110**	**J**	450	53	mg/Kg	☼	06/08/17 14:00	06/09/17 09:55	1
Thallium	11	U	14	2.9	mg/Kg	☼	06/08/17 14:00	06/13/17 11:21	5
Vanadium	**8.7**		1.8	0.085	mg/Kg	☼	06/08/17 14:00	06/09/17 09:55	1
Zinc	**26**		7.2	0.36	mg/Kg	☼	06/08/17 14:00	06/09/17 09:55	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**15**	**J**	21	6.8	ug/Kg	☼	06/14/17 12:49	06/14/17 17:31	1

Client Sample ID: SS025-AB-060517

Date Collected: 06/05/17 11:50
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-13

Matrix: Water

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.011	U	0.095	0.0054	ug/L		06/12/17 15:16	06/20/17 19:59	1
2-Methylnaphthalene	0.011	U	0.095	0.0049	ug/L		06/12/17 15:16	06/20/17 19:59	1
Acenaphthene	0.029	U	0.095	0.010	ug/L		06/12/17 15:16	06/20/17 19:59	1
Acenaphthylene	0.011	U	0.095	0.0095	ug/L		06/12/17 15:16	06/20/17 19:59	1

Client Sample ID: SS025-AB-060517
Lab Sample ID: 280-97928-13

Date Collected: 06/05/17 11:50
Matrix: Water
Date Received: 06/06/17 09:30

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	0.019	U	0.095	0.014	ug/L		06/12/17 15:16	06/20/17 19:59	1
Benzo[a]anthracene	0.011	U	0.095	0.0031	ug/L		06/12/17 15:16	06/20/17 19:59	1
Benzo[a]pyrene	0.011	U	0.095	0.0049	ug/L		06/12/17 15:16	06/20/17 19:59	1
Benzo[b]fluoranthene	0.011	U	0.095	0.0033	ug/L		06/12/17 15:16	06/20/17 19:59	1
Benzo[g,h,i]perylene	0.011	U	0.095	0.0034	ug/L		06/12/17 15:16	06/20/17 19:59	1
Benzo[k]fluoranthene	0.011	U	0.095	0.0048	ug/L		06/12/17 15:16	06/20/17 19:59	1
Chrysene	0.011	U	0.095	0.0030	ug/L		06/12/17 15:16	06/20/17 19:59	1
Dibenz(a,h)anthracene	0.011	U	0.095	0.0046	ug/L		06/12/17 15:16	06/20/17 19:59	1
Fluoranthene	**0.015**	**J**	0.095	0.0043	ug/L		06/12/17 15:16	06/20/17 19:59	1
Fluorene	0.019	U	0.095	0.018	ug/L		06/12/17 15:16	06/20/17 19:59	1
Indeno[1,2,3-cd]pyrene	0.019	U	0.095	0.014	ug/L		06/12/17 15:16	06/20/17 19:59	1
Naphthalene	0.011	U	0.095	0.0051	ug/L		06/12/17 15:16	06/20/17 19:59	1
Phenanthrene	**0.016**	**J**	0.095	0.0093	ug/L		06/12/17 15:16	06/20/17 19:59	1
Pyrene	**0.0091**	**J**	0.095	0.0077	ug/L		06/12/17 15:16	06/20/17 19:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*53 - 106*	*06/12/17 15:16*	*06/20/17 19:59*	*1*
Nitrobenzene-d5 (Surr)	*73*		*55 - 111*	*06/12/17 15:16*	*06/20/17 19:59*	*1*
Terphenyl-d14 (Surr)	*84*		*58 - 132*	*06/12/17 15:16*	*06/20/17 19:59*	*1*

Client Sample ID: SS025-SB09(0-2)
Lab Sample ID: 280-97928-14

Date Collected: 06/05/17 13:30
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 89.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.4	U	4.5	0.50	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
1,1,1-Trichloroethane	1.4	U	4.5	0.46	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
1,1,2,2-Tetrachloroethane	1.4	U	4.5	0.54	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
1,1,2-Trichloroethane	2.9	U	4.5	0.79	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
1,1-Dichloroethane	0.71	U	4.5	0.19	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
1,1-Dichloroethene	1.4	U	4.5	0.53	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
1,1-Dichloropropene	1.4	U	4.5	0.48	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
1,2,3-Trichlorobenzene	1.4	U	4.5	0.67	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
1,2,3-Trichloropropane	2.9	U	4.5	0.72	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
1,2,4-Trichlorobenzene	1.4	U	4.5	0.65	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
1,2,4-Trimethylbenzene	1.4	U	4.5	0.52	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
1,2-Dibromo-3-Chloropropane	1.4	U	8.9	0.54	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
1,2-Dibromoethane	1.4	U	4.5	0.46	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
1,2-Dichlorobenzene	1.4	U	4.5	0.40	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
1,2-Dichloroethane	1.4	U	4.5	0.63	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
1,2-Dichloroethene, Total	1.4	U	4.5	0.35	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
1,2-Dichloropropane	1.4	U	4.5	0.49	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
1,3,5-Trimethylbenzene	1.4	U	4.5	0.51	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
1,3-Dichlorobenzene	1.4	U	4.5	0.43	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
1,3-Dichloropropane	1.4	U	4.5	0.46	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
1,4-Dichlorobenzene	1.4	U	4.5	0.70	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
2,2-Dichloropropane	1.4	U	4.5	0.39	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
2-Butanone (MEK)	5.7	U	18	1.6	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
2-Chlorotoluene	1.4	U	4.5	0.46	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1

Client Sample ID: SS025-SB09(0-2)
Date Collected: 06/05/17 13:30
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-14
Matrix: Solid
Percent Solids: 89.0

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	11	U Q	18	4.4	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
4-Chlorotoluene	1.4	U	4.5	0.70	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
4-Isopropyltoluene	1.4	U	4.5	0.44	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
4-Methyl-2-pentanone (MIBK)	11	U	18	3.9	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Acetone	**20**	**Q**	18	4.8	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Benzene	1.4	U	4.5	0.42	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Bromobenzene	1.4	U	4.5	0.44	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Bromochloromethane	0.71	U	4.5	0.27	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Bromodichloromethane	0.71	U	4.5	0.20	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Bromoform	0.71	U	4.5	0.21	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Bromomethane	1.4	U	8.9	0.45	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Carbon disulfide	1.4	U	4.5	0.38	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Carbon tetrachloride	1.4	U	4.5	0.56	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Chlorobenzene	1.4	U	4.5	0.48	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Chloroethane	2.9	U	8.9	0.80	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Chloroform	0.71	U	8.9	0.26	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Chloromethane	1.4	U	8.9	0.69	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
cis-1,2-Dichloroethene	1.4	U	4.5	0.50	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
cis-1,3-Dichloropropene	2.9	U	4.5	1.2	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Dibromochloromethane	1.4	U	4.5	0.51	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Dibromomethane	2.9	U	4.5	0.75	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Dichlorodifluoromethane	1.4	U Q	8.9	0.46	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Ethylbenzene	1.4	U	4.5	0.60	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Hexachlorobutadiene	1.4	U	4.5	0.49	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Isopropyl ether	7.1	U	45	2.4	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Isopropylbenzene	1.4	U	4.5	0.53	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
m&p-Xylene	2.9	U	2.9	0.93	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Methyl iodide	1.4	U	4.5	0.39	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Methyl tert-butyl ether	0.71	U	18	0.30	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Methylene Chloride	2.9	U	4.5	1.4	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Naphthalene	1.4	U	4.5	0.56	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
n-Butylbenzene	1.4	U	4.5	0.50	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
N-Propylbenzene	1.4	U	4.5	0.52	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
o-Xylene	1.4	U	4.5	0.54	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
sec-Butylbenzene	1.4	U	4.5	0.69	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Styrene	1.4	U	4.5	0.56	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
tert-Butylbenzene	1.4	U	4.5	0.45	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Tetrachloroethene	1.4	U	4.5	0.53	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Toluene	1.4	U	4.5	0.62	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
trans-1,2-Dichloroethene	0.71	U	4.5	0.35	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
trans-1,3-Dichloropropene	1.4	U	4.5	0.60	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Trichloroethene	0.71	U	4.5	0.21	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Trichlorofluoromethane	2.9	U	8.9	0.93	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Vinyl acetate	2.9	U	8.9	0.96	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Vinyl chloride	2.9	U	4.5	1.2	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1
Xylenes (total)	0.89	U	8.9	0.54	ug/Kg	☼	06/05/17 13:30	06/16/17 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*71 - 136*	*06/05/17 13:30*	*06/16/17 15:16*	*1*
4-Bromofluorobenzene (Surr)	*112*		*79 - 119*	*06/05/17 13:30*	*06/16/17 15:16*	*1*

Client Sample ID: SS025-SB09(0-2)

Date Collected: 06/05/17 13:30
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-14

Matrix: Solid
Percent Solids: 89.0

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*102*		*78 - 119*	*06/05/17 13:30*	*06/16/17 15:16*	*1*
Toluene-d8 (Surr)	*100*		*85 - 116*	*06/05/17 13:30*	*06/16/17 15:16*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**2.4**	**J**	5.3	0.28	ug/Kg	☼	06/11/17 07:19	06/16/17 22:06	1
2-Methylnaphthalene	**3.7**	**J**	5.3	0.33	ug/Kg	☼	06/11/17 07:19	06/16/17 22:06	1
Acenaphthene	**2.0**	**J M**	5.3	0.17	ug/Kg	☼	06/11/17 07:19	06/16/17 22:06	1
Acenaphthylene	**5.2**	**J M**	5.3	0.18	ug/Kg	☼	06/11/17 07:19	06/16/17 22:06	1
Anthracene	**9.1**		5.3	0.77	ug/Kg	☼	06/11/17 07:19	06/16/17 22:06	1
Benzo[a]anthracene	**58**		5.3	0.96	ug/Kg	☼	06/11/17 07:19	06/16/17 22:06	1
Benzo[a]pyrene	**55**		5.3	0.79	ug/Kg	☼	06/11/17 07:19	06/16/17 22:06	1
Benzo[b]fluoranthene	**81**		5.3	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 22:06	1
Benzo[g,h,i]perylene	**29**		5.3	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 22:06	1
Benzo[k]fluoranthene	**28**		5.3	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 22:06	1
Chrysene	**69**		5.3	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 22:06	1
Dibenz(a,h)anthracene	**8.2**		5.3	1.4	ug/Kg	☼	06/11/17 07:19	06/16/17 22:06	1
Fluoranthene	**75**		5.3	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 22:06	1
Fluorene	**2.9**	**J**	5.3	0.50	ug/Kg	☼	06/11/17 07:19	06/16/17 22:06	1
Indeno[1,2,3-cd]pyrene	**26**		5.3	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 22:06	1
Naphthalene	**2.6**	**J**	5.3	0.35	ug/Kg	☼	06/11/17 07:19	06/16/17 22:06	1
Phenanthrene	**25**		5.3	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 22:06	1
Pyrene	**72**		5.3	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 22:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	*85*		*46 - 115*	*06/11/17 07:19*	*06/16/17 22:06*	*1*
Nitrobenzene-d5 (Surr)	*81*		*44 - 125*	*06/11/17 07:19*	*06/16/17 22:06*	*1*
Terphenyl-d14 (Surr)	*78*		*58 - 133*	*06/11/17 07:19*	*06/16/17 22:06*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.9	U	1.9	0.61	ug/Kg	☼	06/16/17 13:00	06/26/17 02:22	1
4,4'-DDE	**0.72**	**J**	1.9	0.26	ug/Kg	☼	06/16/17 13:00	06/26/17 02:22	1
4,4'-DDT	**6.4**	**J**	2.2	0.66	ug/Kg	☼	06/16/17 13:00	06/26/17 02:22	1
Aldrin	0.75	U	1.9	0.28	ug/Kg	☼	06/16/17 13:00	06/26/17 02:22	1
alpha-BHC	0.75	U	1.9	0.24	ug/Kg	☼	06/16/17 13:00	06/26/17 02:22	1
alpha-Chlordane	**1.6**	**J**	1.9	0.36	ug/Kg	☼	06/16/17 13:00	06/26/17 02:22	1
beta-BHC	1.9	U	1.9	0.74	ug/Kg	☼	06/16/17 13:00	06/26/17 02:22	1
delta-BHC	1.1	U	1.9	0.45	ug/Kg	☼	06/16/17 13:00	06/26/17 02:22	1
Dieldrin	0.75	U	1.9	0.23	ug/Kg	☼	06/16/17 13:00	06/26/17 02:22	1
Endosulfan I	0.75	U	1.9	0.20	ug/Kg	☼	06/16/17 13:00	06/26/17 02:22	1
Endosulfan II	0.75	U	1.9	0.32	ug/Kg	☼	06/16/17 13:00	06/26/17 02:22	1
Endosulfan sulfate	0.75	U	1.9	0.31	ug/Kg	☼	06/16/17 13:00	06/26/17 02:22	1
Endrin	0.75	U	1.9	0.34	ug/Kg	☼	06/16/17 13:00	06/26/17 02:22	1
Endrin aldehyde	0.75	U	1.9	0.19	ug/Kg	☼	06/16/17 13:00	06/26/17 02:22	1
gamma-BHC (Lindane)	1.1	U	1.9	0.52	ug/Kg	☼	06/16/17 13:00	06/26/17 02:22	1
gamma-Chlordane	**2.9**	**J**	1.9	0.30	ug/Kg	☼	06/16/17 13:00	06/26/17 02:22	1
Heptachlor	0.75	U	1.9	0.24	ug/Kg	☼	06/16/17 13:00	06/26/17 02:22	1
Heptachlor epoxide	**1.7**	**J**	1.9	0.47	ug/Kg	☼	06/16/17 13:00	06/26/17 02:22	1
Methoxychlor	1.1	U	3.7	0.50	ug/Kg	☼	06/16/17 13:00	06/26/17 02:22	1

Client Sample ID: SS025-SB09(0-2)

Date Collected: 06/05/17 13:30
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-14

Matrix: Solid
Percent Solids: 89.0

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Toxaphene	37	U Q	190	18	ug/Kg	☼	06/16/17 13:00	06/26/17 02:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*77*		*63 - 121*	*06/16/17 13:00*	*06/26/17 02:22*	*1*
Tetrachloro-m-xylene (Surr)	*77*		*42 - 129*	*06/16/17 13:00*	*06/26/17 02:22*	*1*

Method: 8081B - Organochlorine Pesticides (GC) - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	19	U	19	6.1	ug/Kg	☼	06/16/17 13:00	06/25/17 22:09	10
4,4'-DDE	**3.0**	**J D**	19	2.6	ug/Kg	☼	06/16/17 13:00	06/25/17 22:09	10
4,4'-DDT	19	U	22	6.6	ug/Kg	☼	06/16/17 13:00	06/25/17 22:09	10
Aldrin	7.5	U	19	2.8	ug/Kg	☼	06/16/17 13:00	06/25/17 22:09	10
alpha-BHC	7.5	U	19	2.4	ug/Kg	☼	06/16/17 13:00	06/25/17 22:09	10
alpha-Chlordane	**4.9**	**J D**	19	3.6	ug/Kg	☼	06/16/17 13:00	06/25/17 22:09	10
beta-BHC	19	U	19	7.4	ug/Kg	☼	06/16/17 13:00	06/25/17 22:09	10
delta-BHC	11	U	19	4.5	ug/Kg	☼	06/16/17 13:00	06/25/17 22:09	10
Dieldrin	7.5	U	19	2.3	ug/Kg	☼	06/16/17 13:00	06/25/17 22:09	10
Endosulfan I	7.5	U	19	2.0	ug/Kg	☼	06/16/17 13:00	06/25/17 22:09	10
Endosulfan II	7.5	U	19	3.2	ug/Kg	☼	06/16/17 13:00	06/25/17 22:09	10
Endosulfan sulfate	7.5	U	19	3.1	ug/Kg	☼	06/16/17 13:00	06/25/17 22:09	10
Endrin	7.5	U	19	3.4	ug/Kg	☼	06/16/17 13:00	06/25/17 22:09	10
Endrin aldehyde	7.5	U	19	1.9	ug/Kg	☼	06/16/17 13:00	06/25/17 22:09	10
gamma-BHC (Lindane)	11	U	19	5.2	ug/Kg	☼	06/16/17 13:00	06/25/17 22:09	10
gamma-Chlordane	**3.1**	**J D**	19	3.0	ug/Kg	☼	06/16/17 13:00	06/25/17 22:09	10
Heptachlor	7.5	U	19	2.4	ug/Kg	☼	06/16/17 13:00	06/25/17 22:09	10
Heptachlor epoxide	11	U	19	4.7	ug/Kg	☼	06/16/17 13:00	06/25/17 22:09	10
Methoxychlor	11	U	37	5.0	ug/Kg	☼	06/16/17 13:00	06/25/17 22:09	10
Toxaphene	370	U	1900	180	ug/Kg	☼	06/16/17 13:00	06/25/17 22:09	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*94*	*D*	*63 - 121*	*06/16/17 13:00*	*06/25/17 22:09*	*10*
Tetrachloro-m-xylene (Surr)	*81*	*D*	*42 - 129*	*06/16/17 13:00*	*06/25/17 22:09*	*10*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	17	U	37	5.7	ug/Kg	☼	06/16/17 13:00	06/26/17 19:33	1
Arochlor 1221	19	U	52	17	ug/Kg	☼	06/16/17 13:00	06/26/17 19:33	1
Arochlor 1232	17	U	37	5.7	ug/Kg	☼	06/16/17 13:00	06/26/17 19:33	1
Arochlor 1242	37	U	37	10	ug/Kg	☼	06/16/17 13:00	06/26/17 19:33	1
Arochlor 1248	22	U	37	6.2	ug/Kg	☼	06/16/17 13:00	06/26/17 19:33	1
Arochlor 1254	19	U	37	6.1	ug/Kg	☼	06/16/17 13:00	06/26/17 19:33	1
Arochlor 1260	**81**		37	2.9	ug/Kg	☼	06/16/17 13:00	06/26/17 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*78*		*59 - 130*	*06/16/17 13:00*	*06/26/17 19:33*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7200**		40	1.2	mg/Kg	☼	06/08/17 14:00	06/09/17 09:58	1
Antimony	1.2	U	1.6	0.58	mg/Kg	☼	06/08/17 14:00	06/09/17 09:58	1
Arsenic	**4.2**		2.0	0.53	mg/Kg	☼	06/08/17 14:00	06/13/17 00:21	1

Client Sample ID: SS025-SB09(0-2)
Lab Sample ID: 280-97928-14

Date Collected: 06/05/17 13:30
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 89.0

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**32**		1.6	0.083	mg/Kg	☼	06/08/17 14:00	06/09/17 09:58	1
Beryllium	**0.36**	**J**	0.40	0.026	mg/Kg	☼	06/08/17 14:00	06/09/17 09:58	1
Cadmium	**0.20**	**J**	0.40	0.033	mg/Kg	☼	06/08/17 14:00	06/09/17 09:58	1
Calcium	**48000**		80	11	mg/Kg	☼	06/08/17 14:00	06/09/17 09:58	1
Chromium	**8.0**		2.8	0.046	mg/Kg	☼	06/08/17 14:00	06/09/17 09:58	1
Cobalt	**4.9**		0.80	0.080	mg/Kg	☼	06/08/17 14:00	06/09/17 09:58	1
Copper	**22**		4.0	0.17	mg/Kg	☼	06/08/17 14:00	06/13/17 00:21	1
Iron	**13000**	**Q**	64	3.0	mg/Kg	☼	06/08/17 14:00	06/09/17 09:58	1
Lead	**7.4**		0.72	0.25	mg/Kg	☼	06/08/17 14:00	06/09/17 09:58	1
Magnesium	**3200**		24	2.9	mg/Kg	☼	06/08/17 14:00	06/09/17 09:58	1
Manganese	**870**		3.6	0.080	mg/Kg	☼	06/08/17 14:00	06/12/17 16:19	1
Nickel	**10**		3.2	0.10	mg/Kg	☼	06/08/17 14:00	06/09/17 09:58	1
Potassium	**880**		240	33	mg/Kg	☼	06/08/17 14:00	06/09/17 09:58	1
Selenium	2.4	U	2.4	0.68	mg/Kg	☼	06/08/17 14:00	06/13/17 00:21	1
Silver	0.48	U	1.2	0.13	mg/Kg	☼	06/08/17 14:00	06/09/17 09:58	1
Sodium	**59**	**J**	400	47	mg/Kg	☼	06/08/17 14:00	06/09/17 09:58	1
Thallium	**0.92**	**J**	2.4	0.52	mg/Kg	☼	06/08/17 14:00	06/13/17 11:34	1
Vanadium	**15**		1.6	0.075	mg/Kg	☼	06/08/17 14:00	06/09/17 09:58	1
Zinc	**39**		6.4	0.32	mg/Kg	☼	06/08/17 14:00	06/09/17 09:58	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**45**		20	6.7	ug/Kg	☼	06/14/17 12:49	06/14/17 17:33	1

Client Sample ID: SS025-SB09(2-4)
Lab Sample ID: 280-97928-15

Date Collected: 06/05/17 13:40
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 90.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.3	U	4.1	0.45	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
1,1,1-Trichloroethane	1.3	U	4.1	0.42	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
1,1,2,2-Tetrachloroethane	1.3	U	4.1	0.49	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
1,1,2-Trichloroethane	2.6	U	4.1	0.71	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
1,1-Dichloroethane	0.65	U	4.1	0.17	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
1,1-Dichloroethene	1.3	U	4.1	0.48	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
1,1-Dichloropropene	1.3	U	4.1	0.44	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
1,2,3-Trichlorobenzene	1.3	U	4.1	0.61	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
1,2,3-Trichloropropane	2.6	U	4.1	0.66	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
1,2,4-Trichlorobenzene	1.3	U	4.1	0.59	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
1,2,4-Trimethylbenzene	1.3	U	4.1	0.47	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
1,2-Dibromo-3-Chloropropane	1.3	U	8.1	0.49	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
1,2-Dibromoethane	1.3	U	4.1	0.42	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
1,2-Dichlorobenzene	1.3	U	4.1	0.36	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
1,2-Dichloroethane	1.3	U	4.1	0.57	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
1,2-Dichloroethene, Total	1.3	U	4.1	0.32	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
1,2-Dichloropropane	1.3	U	4.1	0.45	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
1,3,5-Trimethylbenzene	1.3	U	4.1	0.46	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
1,3-Dichlorobenzene	1.3	U	4.1	0.39	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
1,3-Dichloropropane	1.3	U	4.1	0.41	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1

Client Sample ID: SS025-SB09(2-4)

Date Collected: 06/05/17 13:40
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-15

Matrix: Solid
Percent Solids: 90.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	1.3	U	4.1	0.63	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
2,2-Dichloropropane	1.3	U	4.1	0.36	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
2-Butanone (MEK)	5.2	U	16	1.5	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
2-Chlorotoluene	1.3	U	4.1	0.41	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
2-Hexanone	10	U Q	16	4.0	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
4-Chlorotoluene	1.3	U	4.1	0.63	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
4-Isopropyltoluene	1.3	U	4.1	0.40	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
4-Methyl-2-pentanone (MIBK)	10	U	16	3.5	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Acetone	10	U Q	16	4.4	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Benzene	1.3	U	4.1	0.38	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Bromobenzene	1.3	U	4.1	0.40	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Bromochloromethane	0.65	U	4.1	0.24	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Bromodichloromethane	0.65	U	4.1	0.18	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Bromoform	0.65	U	4.1	0.19	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Bromomethane	1.3	U	8.1	0.41	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Carbon disulfide	1.3	U	4.1	0.34	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Carbon tetrachloride	1.3	U	4.1	0.51	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Chlorobenzene	1.3	U	4.1	0.44	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Chloroethane	2.6	U	8.1	0.72	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Chloroform	0.65	U	8.1	0.23	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Chloromethane	1.3	U	8.1	0.62	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
cis-1,2-Dichloroethene	1.3	U	4.1	0.45	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
cis-1,3-Dichloropropene	2.6	U	4.1	1.0	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Dibromochloromethane	1.3	U	4.1	0.46	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Dibromomethane	2.6	U	4.1	0.68	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Dichlorodifluoromethane	1.3	U Q	8.1	0.42	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Ethylbenzene	1.3	U	4.1	0.54	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Hexachlorobutadiene	1.3	U	4.1	0.45	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Isopropyl ether	6.5	U	41	2.2	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Isopropylbenzene	1.3	U	4.1	0.48	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
m&p-Xylene	2.6	U	2.6	0.84	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Methyl iodide	1.3	U	4.1	0.36	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Methyl tert-butyl ether	0.65	U	16	0.28	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Methylene Chloride	2.6	U	4.1	1.3	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Naphthalene	1.3	U	4.1	0.51	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
n-Butylbenzene	1.3	U	4.1	0.45	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
N-Propylbenzene	1.3	U	4.1	0.47	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
o-Xylene	1.3	U	4.1	0.49	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
sec-Butylbenzene	1.3	U	4.1	0.62	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Styrene	1.3	U	4.1	0.51	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
tert-Butylbenzene	1.3	U	4.1	0.41	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Tetrachloroethene	1.3	U	4.1	0.48	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Toluene	1.3	U	4.1	0.56	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
trans-1,2-Dichloroethene	0.65	U	4.1	0.32	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
trans-1,3-Dichloropropene	1.3	U	4.1	0.54	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Trichloroethene	0.65	U	4.1	0.19	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Trichlorofluoromethane	2.6	U	8.1	0.84	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Vinyl acetate	2.6	U	8.1	0.87	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1
Vinyl chloride	2.6	U	4.1	1.1	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1

Client Sample ID: SS025-SB09(2-4)

Date Collected: 06/05/17 13:40
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-15

Matrix: Solid
Percent Solids: 90.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes (total)	0.81	U	8.1	0.49	ug/Kg	☼	06/05/17 13:40	06/16/17 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*71 - 136*	*06/05/17 13:40*	*06/16/17 15:37*	*1*
4-Bromofluorobenzene (Surr)	*109*		*79 - 119*	*06/05/17 13:40*	*06/16/17 15:37*	*1*
Dibromofluoromethane (Surr)	*108*		*78 - 119*	*06/05/17 13:40*	*06/16/17 15:37*	*1*
Toluene-d8 (Surr)	*98*		*85 - 116*	*06/05/17 13:40*	*06/16/17 15:37*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**3.0**	**J**	5.5	0.29	ug/Kg	☼	06/11/17 07:19	06/16/17 22:32	1
2-Methylnaphthalene	**3.8**	**J**	5.5	0.34	ug/Kg	☼	06/11/17 07:19	06/16/17 22:32	1
Acenaphthene	**1.2**	**J M**	5.5	0.18	ug/Kg	☼	06/11/17 07:19	06/16/17 22:32	1
Acenaphthylene	**6.5**	**M**	5.5	0.19	ug/Kg	☼	06/11/17 07:19	06/16/17 22:32	1
Anthracene	**7.4**		5.5	0.79	ug/Kg	☼	06/11/17 07:19	06/16/17 22:32	1
Benzo[a]anthracene	**22**		5.5	0.99	ug/Kg	☼	06/11/17 07:19	06/16/17 22:32	1
Benzo[a]pyrene	**24**		5.5	0.81	ug/Kg	☼	06/11/17 07:19	06/16/17 22:32	1
Benzo[b]fluoranthene	**37**		5.5	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 22:32	1
Benzo[g,h,i]perylene	**18**		5.5	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 22:32	1
Benzo[k]fluoranthene	**15**	**M**	5.5	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 22:32	1
Chrysene	**28**		5.5	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 22:32	1
Dibenz(a,h)anthracene	**4.9**	**J**	5.5	1.4	ug/Kg	☼	06/11/17 07:19	06/16/17 22:32	1
Fluoranthene	**34**		5.5	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 22:32	1
Fluorene	**2.5**	**J**	5.5	0.52	ug/Kg	☼	06/11/17 07:19	06/16/17 22:32	1
Indeno[1,2,3-cd]pyrene	**15**		5.5	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 22:32	1
Naphthalene	**2.6**	**J**	5.5	0.36	ug/Kg	☼	06/11/17 07:19	06/16/17 22:32	1
Phenanthrene	**15**		5.5	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 22:32	1
Pyrene	**34**		5.5	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 22:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*88*		*46 - 115*	*06/11/17 07:19*	*06/16/17 22:32*	*1*
Nitrobenzene-d5 (Surr)	*90*		*44 - 125*	*06/11/17 07:19*	*06/16/17 22:32*	*1*
Terphenyl-d14 (Surr)	*75*		*58 - 133*	*06/11/17 07:19*	*06/16/17 22:32*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.8	U Q	1.9	0.60	ug/Kg	☼	06/16/17 13:00	06/26/17 02:39	1
4,4'-DDE	**1.1**	**J Q**	1.9	0.26	ug/Kg	☼	06/16/17 13:00	06/26/17 02:39	1
4,4'-DDT	**2.2**	**Q**	2.2	0.65	ug/Kg	☼	06/16/17 13:00	06/26/17 02:39	1
Aldrin	0.73	U Q	1.9	0.28	ug/Kg	☼	06/16/17 13:00	06/26/17 02:39	1
alpha-BHC	0.73	U Q	1.9	0.23	ug/Kg	☼	06/16/17 13:00	06/26/17 02:39	1
alpha-Chlordane	0.73	U Q	1.9	0.35	ug/Kg	☼	06/16/17 13:00	06/26/17 02:39	1
beta-BHC	1.8	U Q	1.9	0.73	ug/Kg	☼	06/16/17 13:00	06/26/17 02:39	1
delta-BHC	1.1	U Q	1.9	0.44	ug/Kg	☼	06/16/17 13:00	06/26/17 02:39	1
Dieldrin	**2.9**	**Q**	1.9	0.23	ug/Kg	☼	06/16/17 13:00	06/26/17 02:39	1
Endosulfan I	0.73	U Q	1.9	0.19	ug/Kg	☼	06/16/17 13:00	06/26/17 02:39	1
Endosulfan II	0.73	U Q	1.9	0.31	ug/Kg	☼	06/16/17 13:00	06/26/17 02:39	1
Endosulfan sulfate	0.73	U Q	1.9	0.30	ug/Kg	☼	06/16/17 13:00	06/26/17 02:39	1
Endrin	0.73	U Q	1.9	0.34	ug/Kg	☼	06/16/17 13:00	06/26/17 02:39	1
Endrin aldehyde	0.73	U Q	1.9	0.19	ug/Kg	☼	06/16/17 13:00	06/26/17 02:39	1

Client Sample ID: SS025-SB09(2-4)

Date Collected: 06/05/17 13:40
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-15

Matrix: Solid
Percent Solids: 90.1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	1.1	U Q	1.9	0.51	ug/Kg	☼	06/16/17 13:00	06/26/17 02:39	1
gamma-Chlordane	0.73	U Q	1.9	0.29	ug/Kg	☼	06/16/17 13:00	06/26/17 02:39	1
Heptachlor	0.73	U Q	1.9	0.23	ug/Kg	☼	06/16/17 13:00	06/26/17 02:39	1
Heptachlor epoxide	1.1	U Q	1.9	0.47	ug/Kg	☼	06/16/17 13:00	06/26/17 02:39	1
Methoxychlor	1.1	U Q	3.6	0.49	ug/Kg	☼	06/16/17 13:00	06/26/17 02:39	1
Toxaphene	36	U Q	190	17	ug/Kg	☼	06/16/17 13:00	06/26/17 02:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*74*		*63 - 121*	*06/16/17 13:00*	*06/26/17 02:39*	*1*
Tetrachloro-m-xylene (Surr)	*51*		*42 - 129*	*06/16/17 13:00*	*06/26/17 02:39*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	16	U	36	5.6	ug/Kg	☼	06/16/17 13:00	06/26/17 19:55	1
Arochlor 1221	19	U	51	17	ug/Kg	☼	06/16/17 13:00	06/26/17 19:55	1
Arochlor 1232	16	U	36	5.6	ug/Kg	☼	06/16/17 13:00	06/26/17 19:55	1
Arochlor 1242	36	U	36	10	ug/Kg	☼	06/16/17 13:00	06/26/17 19:55	1
Arochlor 1248	22	U	36	6.1	ug/Kg	☼	06/16/17 13:00	06/26/17 19:55	1
Arochlor 1254	19	U	36	6.0	ug/Kg	☼	06/16/17 13:00	06/26/17 19:55	1
Arochlor 1260	**69**		36	2.9	ug/Kg	☼	06/16/17 13:00	06/26/17 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*65*		*59 - 130*	*06/16/17 13:00*	*06/26/17 19:55*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8000**		42	1.3	mg/Kg	☼	06/08/17 14:00	06/09/17 10:01	1
Antimony	1.3	U	1.7	0.62	mg/Kg	☼	06/08/17 14:00	06/09/17 10:01	1
Arsenic	**4.4**		2.1	0.56	mg/Kg	☼	06/08/17 14:00	06/09/17 10:01	1
Barium	**47**		1.7	0.088	mg/Kg	☼	06/08/17 14:00	06/09/17 10:01	1
Beryllium	**0.39**	**J**	0.42	0.028	mg/Kg	☼	06/08/17 14:00	06/09/17 10:01	1
Cadmium	**0.22**	**J**	0.42	0.035	mg/Kg	☼	06/08/17 14:00	06/09/17 10:01	1
Calcium	**18000**		84	12	mg/Kg	☼	06/08/17 14:00	06/09/17 10:01	1
Chromium	**9.5**		3.0	0.049	mg/Kg	☼	06/08/17 14:00	06/09/17 10:01	1
Cobalt	**5.7**		0.84	0.084	mg/Kg	☼	06/08/17 14:00	06/09/17 10:01	1
Copper	**31**		4.2	0.18	mg/Kg	☼	06/08/17 14:00	06/13/17 00:34	1
Iron	**17000**	**Q**	67	3.2	mg/Kg	☼	06/08/17 14:00	06/09/17 10:01	1
Lead	**7.5**		0.76	0.26	mg/Kg	☼	06/08/17 14:00	06/09/17 10:01	1
Magnesium	**3500**		25	3.1	mg/Kg	☼	06/08/17 14:00	06/09/17 10:01	1
Manganese	**960**		3.8	0.084	mg/Kg	☼	06/08/17 14:00	06/12/17 16:32	1
Nickel	**14**		3.4	0.11	mg/Kg	☼	06/08/17 14:00	06/09/17 10:01	1
Potassium	**1000**		250	35	mg/Kg	☼	06/08/17 14:00	06/09/17 10:01	1
Selenium	2.5	U	2.5	0.73	mg/Kg	☼	06/08/17 14:00	06/13/17 00:34	1
Silver	0.51	U	1.3	0.13	mg/Kg	☼	06/08/17 14:00	06/09/17 10:01	1
Sodium	170	U	420	50	mg/Kg	☼	06/08/17 14:00	06/09/17 10:01	1
Thallium	**0.76**	**J**	2.5	0.55	mg/Kg	☼	06/08/17 14:00	06/13/17 11:36	1
Vanadium	**17**		1.7	0.079	mg/Kg	☼	06/08/17 14:00	06/09/17 10:01	1
Zinc	**52**		6.7	0.34	mg/Kg	☼	06/08/17 14:00	06/09/17 10:01	1

Client Sample ID: SS025-SB09(2-4)
Lab Sample ID: 280-97928-15
Date Collected: 06/05/17 13:40
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 90.1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	79		23	7.4	ug/Kg	☼	06/14/17 12:49	06/14/17 17:35	1

Client Sample ID: SS025-SB09(4-6)
Lab Sample ID: 280-97928-16
Date Collected: 06/05/17 13:50
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 83.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.5	U	4.6	0.51	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
1,1,1-Trichloroethane	1.5	U	4.6	0.47	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
1,1,2,2-Tetrachloroethane	1.5	U	4.6	0.56	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
1,1,2-Trichloroethane	2.9	U	4.6	0.80	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
1,1-Dichloroethane	0.73	U	4.6	0.19	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
1,1-Dichloroethene	1.5	U	4.6	0.54	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
1,1-Dichloropropene	1.5	U	4.6	0.49	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
1,2,3-Trichlorobenzene	1.5	U	4.6	0.68	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
1,2,3-Trichloropropane	2.9	U	4.6	0.74	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
1,2,4-Trichlorobenzene	1.5	U	4.6	0.67	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
1,2,4-Trimethylbenzene	1.5	U	4.6	0.53	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
1,2-Dibromo-3-Chloropropane	1.5	U	9.1	0.55	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
1,2-Dibromoethane	1.5	U	4.6	0.47	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
1,2-Dichlorobenzene	1.5	U	4.6	0.41	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
1,2-Dichloroethane	1.5	U	4.6	0.64	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
1,2-Dichloroethene, Total	1.5	U	4.6	0.36	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
1,2-Dichloropropane	1.5	U	4.6	0.50	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
1,3,5-Trimethylbenzene	1.5	U	4.6	0.52	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
1,3-Dichlorobenzene	1.5	U	4.6	0.44	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
1,3-Dichloropropane	1.5	U	4.6	0.46	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
1,4-Dichlorobenzene	1.5	U	4.6	0.71	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
2,2-Dichloropropane	1.5	U	4.6	0.40	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
2-Butanone (MEK)	5.8	U	18	1.7	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
2-Chlorotoluene	1.5	U	4.6	0.46	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
2-Hexanone	12	U Q	18	4.5	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
4-Chlorotoluene	1.5	U	4.6	0.71	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
4-Isopropyltoluene	1.5	U	4.6	0.45	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
4-Methyl-2-pentanone (MIBK)	12	U	18	4.0	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Acetone	12	U Q	18	4.9	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Benzene	1.5	U	4.6	0.43	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Bromobenzene	1.5	U	4.6	0.45	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Bromochloromethane	0.73	U	4.6	0.27	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Bromodichloromethane	0.73	U	4.6	0.20	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Bromoform	0.73	U	4.6	0.21	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Bromomethane	1.5	U	9.1	0.46	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Carbon disulfide	1.5	U	4.6	0.38	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Carbon tetrachloride	1.5	U	4.6	0.57	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Chlorobenzene	1.5	U	4.6	0.49	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Chloroethane	2.9	U	9.1	0.81	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Chloroform	0.73	U	9.1	0.26	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Chloromethane	1.5	U	9.1	0.70	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
cis-1,2-Dichloroethene	1.5	U	4.6	0.51	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1

Client Sample ID: SS025-SB09(4-6)

Date Collected: 06/05/17 13:50
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-16

Matrix: Solid
Percent Solids: 83.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	2.9	U	4.6	1.2	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Dibromochloromethane	1.5	U	4.6	0.52	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Dibromomethane	2.9	U	4.6	0.77	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Dichlorodifluoromethane	1.5	U Q	9.1	0.47	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Ethylbenzene	1.5	U	4.6	0.61	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Hexachlorobutadiene	1.5	U	4.6	0.50	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Isopropyl ether	7.3	U	46	2.5	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Isopropylbenzene	1.5	U	4.6	0.54	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
m&p-Xylene	2.9	U	2.9	0.95	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Methyl iodide	1.5	U	4.6	0.40	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Methyl tert-butyl ether	0.73	U	18	0.31	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Methylene Chloride	2.9	U	4.6	1.5	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Naphthalene	1.5	U	4.6	0.57	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
n-Butylbenzene	1.5	U	4.6	0.51	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
N-Propylbenzene	1.5	U	4.6	0.53	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
o-Xylene	1.5	U	4.6	0.56	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
sec-Butylbenzene	1.5	U	4.6	0.70	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Styrene	1.5	U	4.6	0.57	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
tert-Butylbenzene	1.5	U	4.6	0.46	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Tetrachloroethene	1.5	U	4.6	0.54	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Toluene	1.5	U	4.6	0.63	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
trans-1,2-Dichloroethene	0.73	U	4.6	0.36	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
trans-1,3-Dichloropropene	1.5	U	4.6	0.61	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Trichloroethene	0.73	U	4.6	0.21	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Trichlorofluoromethane	2.9	U	9.1	0.95	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Vinyl acetate	2.9	U	9.1	0.97	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Vinyl chloride	2.9	U	4.6	1.2	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1
Xylenes (total)	0.91	U	9.1	0.56	ug/Kg	☼	06/05/17 13:50	06/16/17 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*71 - 136*	*06/05/17 13:50*	*06/16/17 15:58*	*1*
4-Bromofluorobenzene (Surr)	*99*		*79 - 119*	*06/05/17 13:50*	*06/16/17 15:58*	*1*
Dibromofluoromethane (Surr)	*110*		*78 - 119*	*06/05/17 13:50*	*06/16/17 15:58*	*1*
Toluene-d8 (Surr)	*97*		*85 - 116*	*06/05/17 13:50*	*06/16/17 15:58*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**3.7**	**J**	6.0	0.31	ug/Kg	☼	06/11/17 07:19	06/16/17 22:57	1
2-Methylnaphthalene	**5.9**	**J**	6.0	0.37	ug/Kg	☼	06/11/17 07:19	06/16/17 22:57	1
Acenaphthene	**3.1**	**J M**	6.0	0.19	ug/Kg	☼	06/11/17 07:19	06/16/17 22:57	1
Acenaphthylene	**14**		6.0	0.20	ug/Kg	☼	06/11/17 07:19	06/16/17 22:57	1
Anthracene	**15**		6.0	0.86	ug/Kg	☼	06/11/17 07:19	06/16/17 22:57	1
Benzo[a]anthracene	**39**		6.0	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 22:57	1
Benzo[a]pyrene	**39**		6.0	0.89	ug/Kg	☼	06/11/17 07:19	06/16/17 22:57	1
Benzo[b]fluoranthene	**64**		6.0	1.4	ug/Kg	☼	06/11/17 07:19	06/16/17 22:57	1
Benzo[g,h,i]perylene	**34**		6.0	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 22:57	1
Benzo[k]fluoranthene	**22**		6.0	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 22:57	1
Chrysene	**51**		6.0	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 22:57	1
Dibenz(a,h)anthracene	**8.6**		6.0	1.6	ug/Kg	☼	06/11/17 07:19	06/16/17 22:57	1
Fluoranthene	**75**		6.0	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 22:57	1

Client Sample ID: SS025-SB09(4-6)

Date Collected: 06/05/17 13:50
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-16

Matrix: Solid
Percent Solids: 83.1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**4.9**	**J**	6.0	0.56	ug/Kg	☼	06/11/17 07:19	06/16/17 22:57	1
Indeno[1,2,3-cd]pyrene	**26**		6.0	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 22:57	1
Naphthalene	**5.2**	**J**	6.0	0.39	ug/Kg	☼	06/11/17 07:19	06/16/17 22:57	1
Phenanthrene	**35**		6.0	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 22:57	1
Pyrene	**70**		6.0	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 22:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*81*		*46 - 115*	*06/11/17 07:19*	*06/16/17 22:57*	*1*
Nitrobenzene-d5 (Surr)	*96*		*44 - 125*	*06/11/17 07:19*	*06/16/17 22:57*	*1*
Terphenyl-d14 (Surr)	*78*		*58 - 133*	*06/11/17 07:19*	*06/16/17 22:57*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.9	U	1.9	0.62	ug/Kg	☼	06/16/17 13:00	06/26/17 02:56	1
4,4'-DDE	**2.4**		1.9	0.27	ug/Kg	☼	06/16/17 13:00	06/26/17 02:56	1
4,4'-DDT	**5.1**		2.3	0.67	ug/Kg	☼	06/16/17 13:00	06/26/17 02:56	1
Aldrin	0.77	U	1.9	0.29	ug/Kg	☼	06/16/17 13:00	06/26/17 02:56	1
alpha-BHC	0.77	U	1.9	0.24	ug/Kg	☼	06/16/17 13:00	06/26/17 02:56	1
alpha-Chlordane	0.77	U	1.9	0.37	ug/Kg	☼	06/16/17 13:00	06/26/17 02:56	1
beta-BHC	1.9	U	1.9	0.76	ug/Kg	☼	06/16/17 13:00	06/26/17 02:56	1
delta-BHC	1.1	U	1.9	0.46	ug/Kg	☼	06/16/17 13:00	06/26/17 02:56	1
Dieldrin	**2.5**		1.9	0.24	ug/Kg	☼	06/16/17 13:00	06/26/17 02:56	1
Endosulfan I	0.77	U	1.9	0.20	ug/Kg	☼	06/16/17 13:00	06/26/17 02:56	1
Endosulfan II	0.77	U	1.9	0.33	ug/Kg	☼	06/16/17 13:00	06/26/17 02:56	1
Endosulfan sulfate	0.77	U	1.9	0.32	ug/Kg	☼	06/16/17 13:00	06/26/17 02:56	1
Endrin	0.77	U	1.9	0.35	ug/Kg	☼	06/16/17 13:00	06/26/17 02:56	1
Endrin aldehyde	0.77	U	1.9	0.20	ug/Kg	☼	06/16/17 13:00	06/26/17 02:56	1
gamma-BHC (Lindane)	1.1	U	1.9	0.53	ug/Kg	☼	06/16/17 13:00	06/26/17 02:56	1
gamma-Chlordane	0.77	U	1.9	0.30	ug/Kg	☼	06/16/17 13:00	06/26/17 02:56	1
Heptachlor	0.77	U	1.9	0.24	ug/Kg	☼	06/16/17 13:00	06/26/17 02:56	1
Heptachlor epoxide	1.1	U	1.9	0.49	ug/Kg	☼	06/16/17 13:00	06/26/17 02:56	1
Methoxychlor	1.1	U	3.8	0.51	ug/Kg	☼	06/16/17 13:00	06/26/17 02:56	1
Toxaphene	38	U Q	190	18	ug/Kg	☼	06/16/17 13:00	06/26/17 02:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*68*		*63 - 121*	*06/16/17 13:00*	*06/26/17 02:56*	*1*
Tetrachloro-m-xylene (Surr)	*56*		*42 - 129*	*06/16/17 13:00*	*06/26/17 02:56*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	17	U Q	38	5.8	ug/Kg	☼	06/16/17 13:00	06/26/17 20:17	1
Arochlor 1221	19	U Q	54	18	ug/Kg	☼	06/16/17 13:00	06/26/17 20:17	1
Arochlor 1232	17	U Q	38	5.8	ug/Kg	☼	06/16/17 13:00	06/26/17 20:17	1
Arochlor 1242	38	U Q	38	10	ug/Kg	☼	06/16/17 13:00	06/26/17 20:17	1
Arochlor 1248	23	U Q	38	6.4	ug/Kg	☼	06/16/17 13:00	06/26/17 20:17	1
Arochlor 1254	19	U Q	38	6.3	ug/Kg	☼	06/16/17 13:00	06/26/17 20:17	1
Arochlor 1260	**14**	**J Q**	38	3.0	ug/Kg	☼	06/16/17 13:00	06/26/17 20:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*54*	*Q*	*59 - 130*	*06/16/17 13:00*	*06/26/17 20:17*	*1*

Client Sample ID: SS025-SB09(4-6)
Lab Sample ID: 280-97928-16

Date Collected: 06/05/17 13:50
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 83.1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**15000**		50	1.5	mg/Kg	☼	06/08/17 14:00	06/09/17 10:03	1
Antimony	1.5	U	2.0	0.73	mg/Kg	☼	06/08/17 14:00	06/09/17 10:03	1
Arsenic	**5.8**		2.5	0.66	mg/Kg	☼	06/08/17 14:00	06/09/17 10:03	1
Barium	**47**		2.0	0.10	mg/Kg	☼	06/08/17 14:00	06/09/17 10:03	1
Beryllium	**0.62**		0.50	0.033	mg/Kg	☼	06/08/17 14:00	06/09/17 10:03	1
Cadmium	**0.22**	**J**	0.50	0.041	mg/Kg	☼	06/08/17 14:00	06/09/17 10:03	1
Calcium	**3700**		99	14	mg/Kg	☼	06/08/17 14:00	06/09/17 10:03	1
Chromium	**15**		3.5	0.058	mg/Kg	☼	06/08/17 14:00	06/09/17 10:03	1
Cobalt	**9.3**		0.99	0.099	mg/Kg	☼	06/08/17 14:00	06/09/17 10:03	1
Copper	**25**		5.0	0.22	mg/Kg	☼	06/08/17 14:00	06/13/17 00:37	1
Iron	**23000**	**Q**	79	3.8	mg/Kg	☼	06/08/17 14:00	06/09/17 10:03	1
Lead	**19**		0.89	0.31	mg/Kg	☼	06/08/17 14:00	06/09/17 10:03	1
Magnesium	**3500**		30	3.7	mg/Kg	☼	06/08/17 14:00	06/09/17 10:03	1
Manganese	**990**		4.5	0.099	mg/Kg	☼	06/08/17 14:00	06/12/17 16:35	1
Nickel	**15**		4.0	0.13	mg/Kg	☼	06/08/17 14:00	06/09/17 10:03	1
Potassium	**1400**		300	41	mg/Kg	☼	06/08/17 14:00	06/09/17 10:03	1
Selenium	3.0	U	3.0	0.85	mg/Kg	☼	06/08/17 14:00	06/13/17 00:37	1
Silver	0.60	U	1.5	0.16	mg/Kg	☼	06/08/17 14:00	06/09/17 10:03	1
Sodium	**85**	**J**	500	59	mg/Kg	☼	06/08/17 14:00	06/09/17 10:03	1
Thallium	2.5	U	3.0	0.65	mg/Kg	☼	06/08/17 14:00	06/13/17 11:39	1
Vanadium	**27**		2.0	0.093	mg/Kg	☼	06/08/17 14:00	06/09/17 10:03	1
Zinc	**67**		7.9	0.40	mg/Kg	☼	06/08/17 14:00	06/09/17 10:03	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**38**		22	7.1	ug/Kg	☼	06/14/17 12:49	06/14/17 17:38	1

Client Sample ID: SS025-SB09(6-8)
Lab Sample ID: 280-97928-17

Date Collected: 06/05/17 14:10
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 86.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.3	U	4.0	0.44	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
1,1,1-Trichloroethane	1.3	U	4.0	0.41	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
1,1,2,2-Tetrachloroethane	1.3	U	4.0	0.48	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
1,1,2-Trichloroethane	2.5	U	4.0	0.70	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
1,1-Dichloroethane	0.64	U	4.0	0.17	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
1,1-Dichloroethene	1.3	U	4.0	0.47	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
1,1-Dichloropropene	1.3	U	4.0	0.43	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
1,2,3-Trichlorobenzene	1.3	U	4.0	0.60	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
1,2,3-Trichloropropane	2.5	U	4.0	0.64	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
1,2,4-Trichlorobenzene	1.3	U	4.0	0.58	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
1,2,4-Trimethylbenzene	1.3	U	4.0	0.46	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
1,2-Dibromo-3-Chloropropane	1.3	U	7.9	0.48	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
1,2-Dibromoethane	1.3	U	4.0	0.41	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
1,2-Dichlorobenzene	1.3	U	4.0	0.36	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
1,2-Dichloroethane	1.3	U	4.0	0.56	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
1,2-Dichloroethene, Total	1.3	U	4.0	0.31	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
1,2-Dichloropropane	1.3	U	4.0	0.44	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1

Client Sample ID: SS025-SB09(6-8)
Date Collected: 06/05/17 14:10
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-17
Matrix: Solid
Percent Solids: 86.2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	1.3	U	4.0	0.45	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
1,3-Dichlorobenzene	1.3	U	4.0	0.38	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
1,3-Dichloropropane	1.3	U	4.0	0.41	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
1,4-Dichlorobenzene	1.3	U	4.0	0.62	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
2,2-Dichloropropane	1.3	U	4.0	0.35	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
2-Butanone (MEK)	5.1	U	16	1.5	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
2-Chlorotoluene	1.3	U	4.0	0.41	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
2-Hexanone	10	U Q	16	3.9	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
4-Chlorotoluene	1.3	U	4.0	0.62	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
4-Isopropyltoluene	1.3	U	4.0	0.39	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
4-Methyl-2-pentanone (MIBK)	10	U	16	3.5	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Acetone	10	U Q	16	4.3	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Benzene	1.3	U	4.0	0.37	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Bromobenzene	1.3	U	4.0	0.39	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Bromochloromethane	0.64	U	4.0	0.24	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Bromodichloromethane	0.64	U	4.0	0.17	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Bromoform	0.64	U	4.0	0.18	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Bromomethane	1.3	U	7.9	0.40	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Carbon disulfide	1.3	U	4.0	0.33	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Carbon tetrachloride	1.3	U	4.0	0.50	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Chlorobenzene	1.3	U	4.0	0.43	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Chloroethane	2.5	U	7.9	0.71	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Chloroform	0.64	U	7.9	0.23	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Chloromethane	1.3	U	7.9	0.61	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
cis-1,2-Dichloroethene	1.3	U	4.0	0.44	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
cis-1,3-Dichloropropene	2.5	U	4.0	1.0	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Dibromochloromethane	1.3	U	4.0	0.45	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Dibromomethane	2.5	U	4.0	0.67	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Dichlorodifluoromethane	1.3	U Q	7.9	0.41	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Ethylbenzene	1.3	U	4.0	0.53	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Hexachlorobutadiene	1.3	U	4.0	0.44	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Isopropyl ether	6.4	U	40	2.2	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Isopropylbenzene	1.3	U	4.0	0.47	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
m&p-Xylene	2.5	U	2.5	0.83	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Methyl iodide	1.3	U	4.0	0.35	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Methyl tert-butyl ether	0.64	U	16	0.27	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Methylene Chloride	2.5	U	4.0	1.3	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Naphthalene	1.3	U	4.0	0.50	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
n-Butylbenzene	1.3	U	4.0	0.44	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
N-Propylbenzene	1.3	U	4.0	0.46	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
o-Xylene	1.3	U	4.0	0.48	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
sec-Butylbenzene	1.3	U	4.0	0.61	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Styrene	1.3	U	4.0	0.50	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
tert-Butylbenzene	1.3	U	4.0	0.40	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Tetrachloroethene	1.3	U	4.0	0.47	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Toluene	1.3	U	4.0	0.55	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
trans-1,2-Dichloroethene	0.64	U	4.0	0.31	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
trans-1,3-Dichloropropene	1.3	U	4.0	0.53	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Trichloroethene	0.64	U	4.0	0.18	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1

Client Sample ID: SS025-SB09(6-8)
Date Collected: 06/05/17 14:10
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-17
Matrix: Solid
Percent Solids: 86.2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	2.5	U	7.9	0.83	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Vinyl acetate	2.5	U	7.9	0.85	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Vinyl chloride	2.5	U	4.0	1.1	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1
Xylenes (total)	0.79	U	7.9	0.48	ug/Kg	☼	06/05/17 14:10	06/16/17 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*71 - 136*	*06/05/17 14:10*	*06/16/17 16:19*	*1*
4-Bromofluorobenzene (Surr)	*94*		*79 - 119*	*06/05/17 14:10*	*06/16/17 16:19*	*1*
Dibromofluoromethane (Surr)	*117*		*78 - 119*	*06/05/17 14:10*	*06/16/17 16:19*	*1*
Toluene-d8 (Surr)	*92*		*85 - 116*	*06/05/17 14:10*	*06/16/17 16:19*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.55	U	5.5	0.29	ug/Kg	☼	06/11/17 07:19	06/16/17 23:23	1
2-Methylnaphthalene	0.73	U	5.5	0.34	ug/Kg	☼	06/11/17 07:19	06/16/17 23:23	1
Acenaphthene	0.29	U	5.5	0.18	ug/Kg	☼	06/11/17 07:19	06/16/17 23:23	1
Acenaphthylene	**1.1**	**J**	5.5	0.19	ug/Kg	☼	06/11/17 07:19	06/16/17 23:23	1
Anthracene	2.7	U	5.5	0.79	ug/Kg	☼	06/11/17 07:19	06/16/17 23:23	1
Benzo[a]anthracene	2.7	U	5.5	0.99	ug/Kg	☼	06/11/17 07:19	06/16/17 23:23	1
Benzo[a]pyrene	**0.85**	**J**	5.5	0.81	ug/Kg	☼	06/11/17 07:19	06/16/17 23:23	1
Benzo[b]fluoranthene	**1.7**	**J**	5.5	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 23:23	1
Benzo[g,h,i]perylene	2.7	U	5.5	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 23:23	1
Benzo[k]fluoranthene	2.7	U	5.5	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 23:23	1
Chrysene	**1.4**	**J**	5.5	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 23:23	1
Dibenz(a,h)anthracene	2.7	U	5.5	1.4	ug/Kg	☼	06/11/17 07:19	06/16/17 23:23	1
Fluoranthene	**1.3**	**J**	5.5	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 23:23	1
Fluorene	0.73	U	5.5	0.52	ug/Kg	☼	06/11/17 07:19	06/16/17 23:23	1
Indeno[1,2,3-cd]pyrene	2.7	U	5.5	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 23:23	1
Naphthalene	0.73	U	5.5	0.36	ug/Kg	☼	06/11/17 07:19	06/16/17 23:23	1
Phenanthrene	2.7	U	5.5	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 23:23	1
Pyrene	**1.3**	**J**	5.5	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 23:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*89*		*46 - 115*	*06/11/17 07:19*	*06/16/17 23:23*	*1*
Nitrobenzene-d5 (Surr)	*91*		*44 - 125*	*06/11/17 07:19*	*06/16/17 23:23*	*1*
Terphenyl-d14 (Surr)	*77*		*58 - 133*	*06/11/17 07:19*	*06/16/17 23:23*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.8	U Q	1.9	0.60	ug/Kg	☼	06/16/17 13:00	06/25/17 23:00	1
4,4'-DDE	0.74	U	1.9	0.26	ug/Kg	☼	06/16/17 13:00	06/25/17 23:00	1
4,4'-DDT	1.8	U Q	2.2	0.65	ug/Kg	☼	06/16/17 13:00	06/25/17 23:00	1
Aldrin	0.74	U Q	1.9	0.28	ug/Kg	☼	06/16/17 13:00	06/25/17 23:00	1
alpha-BHC	0.74	U Q	1.9	0.23	ug/Kg	☼	06/16/17 13:00	06/25/17 23:00	1
alpha-Chlordane	0.74	U Q	1.9	0.35	ug/Kg	☼	06/16/17 13:00	06/25/17 23:00	1
beta-BHC	1.8	U Q	1.9	0.73	ug/Kg	☼	06/16/17 13:00	06/25/17 23:00	1
delta-BHC	1.1	U Q	1.9	0.44	ug/Kg	☼	06/16/17 13:00	06/25/17 23:00	1
Dieldrin	0.74	U Q	1.9	0.23	ug/Kg	☼	06/16/17 13:00	06/25/17 23:00	1
Endosulfan I	0.74	U Q	1.9	0.19	ug/Kg	☼	06/16/17 13:00	06/25/17 23:00	1
Endosulfan II	0.74	U Q	1.9	0.31	ug/Kg	☼	06/16/17 13:00	06/25/17 23:00	1

Client Sample ID: SS025-SB09(6-8)

Date Collected: 06/05/17 14:10
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-17

Matrix: Solid
Percent Solids: 86.2

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan sulfate	0.74	U Q	1.9	0.30	ug/Kg	☼	06/16/17 13:00	06/25/17 23:00	1
Endrin	0.74	U Q	1.9	0.34	ug/Kg	☼	06/16/17 13:00	06/25/17 23:00	1
Endrin aldehyde	0.74	U Q	1.9	0.19	ug/Kg	☼	06/16/17 13:00	06/25/17 23:00	1
gamma-BHC (Lindane)	1.1	U Q	1.9	0.51	ug/Kg	☼	06/16/17 13:00	06/25/17 23:00	1
gamma-Chlordane	0.74	U Q	1.9	0.29	ug/Kg	☼	06/16/17 13:00	06/25/17 23:00	1
Heptachlor	0.74	U Q	1.9	0.23	ug/Kg	☼	06/16/17 13:00	06/25/17 23:00	1
Heptachlor epoxide	1.1	U Q	1.9	0.47	ug/Kg	☼	06/16/17 13:00	06/25/17 23:00	1
Methoxychlor	1.1	U Q	3.6	0.49	ug/Kg	☼	06/16/17 13:00	06/25/17 23:00	1
Toxaphene	36	U Q	190	17	ug/Kg	☼	06/16/17 13:00	06/25/17 23:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*66*		*63 - 121*	*06/16/17 13:00*	*06/25/17 23:00*	*1*
Tetrachloro-m-xylene (Surr)	*62*		*42 - 129*	*06/16/17 13:00*	*06/25/17 23:00*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	16	U	36	5.6	ug/Kg	☼	06/16/17 13:00	06/26/17 20:39	1
Arochlor 1221	19	U	52	17	ug/Kg	☼	06/16/17 13:00	06/26/17 20:39	1
Arochlor 1232	16	U	36	5.6	ug/Kg	☼	06/16/17 13:00	06/26/17 20:39	1
Arochlor 1242	36	U	36	10	ug/Kg	☼	06/16/17 13:00	06/26/17 20:39	1
Arochlor 1248	22	U	36	6.2	ug/Kg	☼	06/16/17 13:00	06/26/17 20:39	1
Arochlor 1254	19	U	36	6.1	ug/Kg	☼	06/16/17 13:00	06/26/17 20:39	1
Arochlor 1260	8.5	U	36	2.9	ug/Kg	☼	06/16/17 13:00	06/26/17 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*69*		*59 - 130*	*06/16/17 13:00*	*06/26/17 20:39*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7800**		44	1.4	mg/Kg	☼	06/08/17 14:00	06/13/17 11:41	1
Antimony	1.3	U	1.7	0.64	mg/Kg	☼	06/08/17 14:00	06/09/17 10:16	1
Arsenic	**3.9**		2.2	0.58	mg/Kg	☼	06/08/17 14:00	06/09/17 10:16	1
Barium	**39**		1.7	0.091	mg/Kg	☼	06/08/17 14:00	06/13/17 00:39	1
Beryllium	**0.42**	**J**	0.44	0.029	mg/Kg	☼	06/08/17 14:00	06/13/17 00:39	1
Cadmium	**0.13**	**J**	0.44	0.036	mg/Kg	☼	06/08/17 14:00	06/09/17 10:16	1
Calcium	**1400**		87	12	mg/Kg	☼	06/08/17 14:00	06/13/17 00:39	1
Chromium	**9.6**		3.0	0.051	mg/Kg	☼	06/08/17 14:00	06/09/17 10:16	1
Cobalt	**6.1**		0.87	0.087	mg/Kg	☼	06/08/17 14:00	06/09/17 10:16	1
Copper	**19**		4.4	0.19	mg/Kg	☼	06/08/17 14:00	06/13/17 00:39	1
Iron	**17000**		70	3.3	mg/Kg	☼	06/08/17 14:00	06/13/17 00:39	1
Lead	**5.1**		0.78	0.27	mg/Kg	☼	06/08/17 14:00	06/09/17 10:16	1
Magnesium	**2300**		26	3.2	mg/Kg	☼	06/08/17 14:00	06/09/17 10:16	1
Manganese	**770**		3.9	0.087	mg/Kg	☼	06/08/17 14:00	06/12/17 16:38	1
Nickel	**12**		3.5	0.12	mg/Kg	☼	06/08/17 14:00	06/09/17 10:16	1
Potassium	**900**		260	36	mg/Kg	☼	06/08/17 14:00	06/13/17 00:39	1
Selenium	**0.81**	**J**	2.6	0.75	mg/Kg	☼	06/08/17 14:00	06/13/17 00:39	1
Silver	0.52	U	1.3	0.14	mg/Kg	☼	06/08/17 14:00	06/09/17 10:16	1
Sodium	**75**	**J**	440	51	mg/Kg	☼	06/08/17 14:00	06/13/17 00:39	1
Thallium	2.2	U	2.6	0.57	mg/Kg	☼	06/08/17 14:00	06/13/17 11:41	1
Vanadium	**19**		1.7	0.082	mg/Kg	☼	06/08/17 14:00	06/09/17 10:16	1

Client Sample ID: SS025-SB09(6-8)
Lab Sample ID: 280-97928-17
Date Collected: 06/05/17 14:10
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 86.2

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	36		7.0	0.35	mg/Kg	☼	06/08/17 14:00	06/09/17 10:16	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	17	J	23	7.4	ug/Kg	☼	06/14/17 12:49	06/14/17 17:40	1

Client Sample ID: SS025-SB10(0-2)
Lab Sample ID: 280-97928-18
Date Collected: 06/05/17 14:35
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 91.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.7	U	5.3	0.60	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
1,1,1-Trichloroethane	1.7	U	5.3	0.55	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
1,1,2,2-Tetrachloroethane	1.7	U	5.3	0.65	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
1,1,2-Trichloroethane	3.4	U	5.3	0.94	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
1,1-Dichloroethane	0.85	U	5.3	0.22	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
1,1-Dichloroethene	1.7	U	5.3	0.63	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
1,1-Dichloropropene	1.7	U	5.3	0.58	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
1,2,3-Trichlorobenzene	1.7	U	5.3	0.80	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
1,2,3-Trichloropropane	3.4	U	5.3	0.86	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
1,2,4-Trichlorobenzene	1.7	U	5.3	0.78	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
1,2,4-Trimethylbenzene	1.7	U	5.3	0.62	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
1,2-Dibromo-3-Chloropropane	1.7	U	11	0.64	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
1,2-Dibromoethane	1.7	U	5.3	0.55	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
1,2-Dichlorobenzene	1.7	U	5.3	0.48	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
1,2-Dichloroethane	1.7	U	5.3	0.75	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
1,2-Dichloroethene, Total	1.7	U	5.3	0.42	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
1,2-Dichloropropane	1.7	U	5.3	0.59	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
1,3,5-Trimethylbenzene	1.7	U	5.3	0.61	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
1,3-Dichlorobenzene	1.7	U	5.3	0.51	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
1,3-Dichloropropane	1.7	U	5.3	0.54	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
1,4-Dichlorobenzene	1.7	U	5.3	0.83	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
2,2-Dichloropropane	1.7	U	5.3	0.47	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
2-Butanone (MEK)	6.8	U	21	2.0	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
2-Chlorotoluene	1.7	U	5.3	0.54	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
2-Hexanone	14	U Q	21	5.2	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
4-Chlorotoluene	1.7	U	5.3	0.83	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
4-Isopropyltoluene	1.7	U	5.3	0.52	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
4-Methyl-2-pentanone (MIBK)	14	U	21	4.7	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Acetone	14	U Q	21	5.7	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Benzene	1.7	U	5.3	0.50	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Bromobenzene	1.7	U	5.3	0.52	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Bromochloromethane	0.85	U	5.3	0.32	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Bromodichloromethane	0.85	U	5.3	0.23	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Bromoform	0.85	U	5.3	0.25	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Bromomethane	1.7	U	11	0.53	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Carbon disulfide	1.7	U	5.3	0.45	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Carbon tetrachloride	1.7	U	5.3	0.67	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Chlorobenzene	1.7	U	5.3	0.58	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1

Client Sample ID: SS025-SB10(0-2)

Date Collected: 06/05/17 14:35
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-18

Matrix: Solid
Percent Solids: 91.6

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	3.4	U	11	0.95	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Chloroform	0.85	U	11	0.31	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Chloromethane	1.7	U	11	0.82	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
cis-1,2-Dichloroethene	1.7	U	5.3	0.60	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
cis-1,3-Dichloropropene	3.4	U	5.3	1.4	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Dibromochloromethane	1.7	U	5.3	0.61	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Dibromomethane	3.4	U	5.3	0.90	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Dichlorodifluoromethane	1.7	U Q	11	0.55	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Ethylbenzene	1.7	U	5.3	0.71	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Hexachlorobutadiene	1.7	U	5.3	0.59	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Isopropyl ether	8.5	U	53	2.9	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Isopropylbenzene	1.7	U	5.3	0.63	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
m&p-Xylene	3.4	U	3.4	1.1	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Methyl iodide	1.7	U	5.3	0.47	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Methyl tert-butyl ether	0.85	U	21	0.36	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Methylene Chloride	3.4	U	5.3	1.7	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Naphthalene	1.7	U	5.3	0.67	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
n-Butylbenzene	1.7	U	5.3	0.60	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
N-Propylbenzene	1.7	U	5.3	0.62	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
o-Xylene	1.7	U	5.3	0.65	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
sec-Butylbenzene	1.7	U	5.3	0.82	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Styrene	1.7	U	5.3	0.67	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
tert-Butylbenzene	1.7	U	5.3	0.53	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Tetrachloroethene	1.7	U	5.3	0.63	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Toluene	1.7	U	5.3	0.74	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
trans-1,2-Dichloroethene	0.85	U	5.3	0.42	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
trans-1,3-Dichloropropene	1.7	U	5.3	0.71	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Trichloroethene	0.85	U	5.3	0.25	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Trichlorofluoromethane	3.4	U	11	1.1	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Vinyl acetate	3.4	U	11	1.1	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Vinyl chloride	3.4	U	5.3	1.4	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1
Xylenes (total)	1.1	U	11	0.65	ug/Kg	☼	06/05/17 14:35	06/16/17 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*71 - 136*	*06/05/17 14:35*	*06/16/17 16:40*	*1*
4-Bromofluorobenzene (Surr)	*90*		*79 - 119*	*06/05/17 14:35*	*06/16/17 16:40*	*1*
Dibromofluoromethane (Surr)	*114*		*78 - 119*	*06/05/17 14:35*	*06/16/17 16:40*	*1*
Toluene-d8 (Surr)	*91*		*85 - 116*	*06/05/17 14:35*	*06/16/17 16:40*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.50	U	5.0	0.26	ug/Kg	☼	06/11/17 07:19	06/16/17 23:49	1
2-Methylnaphthalene	0.67	U	5.0	0.31	ug/Kg	☼	06/11/17 07:19	06/16/17 23:49	1
Acenaphthene	0.27	U	5.0	0.16	ug/Kg	☼	06/11/17 07:19	06/16/17 23:49	1
Acenaphthylene	**1.1**	**J**	5.0	0.17	ug/Kg	☼	06/11/17 07:19	06/16/17 23:49	1
Anthracene	**0.84**	**J**	5.0	0.72	ug/Kg	☼	06/11/17 07:19	06/16/17 23:49	1
Benzo[a]anthracene	**2.7**	**J**	5.0	0.90	ug/Kg	☼	06/11/17 07:19	06/16/17 23:49	1
Benzo[a]pyrene	**3.2**	**J**	5.0	0.74	ug/Kg	☼	06/11/17 07:19	06/16/17 23:49	1
Benzo[b]fluoranthene	**4.8**	**J**	5.0	1.2	ug/Kg	☼	06/11/17 07:19	06/16/17 23:49	1
Benzo[g,h,i]perylene	**2.4**	**J**	5.0	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 23:49	1

Client Sample ID: SS025-SB10(0-2) — **Lab Sample ID: 280-97928-18**
Date Collected: 06/05/17 14:35 — **Matrix: Solid**
Date Received: 06/06/17 09:30 — **Percent Solids: 91.6**

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	**1.7**	**J**	5.0	1.0	ug/Kg	☼	06/11/17 07:19	06/16/17 23:49	1
Chrysene	**3.6**	**J**	5.0	1.0	ug/Kg	☼	06/11/17 07:19	06/16/17 23:49	1
Dibenz(a,h)anthracene	2.5	U	5.0	1.3	ug/Kg	☼	06/11/17 07:19	06/16/17 23:49	1
Fluoranthene	**5.1**		5.0	1.0	ug/Kg	☼	06/11/17 07:19	06/16/17 23:49	1
Fluorene	**0.48**	**J**	5.0	0.47	ug/Kg	☼	06/11/17 07:19	06/16/17 23:49	1
Indeno[1,2,3-cd]pyrene	**2.2**	**J**	5.0	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 23:49	1
Naphthalene	0.67	U	5.0	0.33	ug/Kg	☼	06/11/17 07:19	06/16/17 23:49	1
Phenanthrene	**2.4**	**J**	5.0	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 23:49	1
Pyrene	**4.5**	**J**	5.0	1.1	ug/Kg	☼	06/11/17 07:19	06/16/17 23:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*90*		*46 - 115*	*06/11/17 07:19*	*06/16/17 23:49*	*1*
Nitrobenzene-d5 (Surr)	*94*		*44 - 125*	*06/11/17 07:19*	*06/16/17 23:49*	*1*
Terphenyl-d14 (Surr)	*77*		*58 - 133*	*06/11/17 07:19*	*06/16/17 23:49*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.8	U	1.8	0.57	ug/Kg	☼	06/16/17 13:00	06/25/17 23:17	1
4,4'-DDE	0.70	U	1.8	0.25	ug/Kg	☼	06/16/17 13:00	06/25/17 23:17	1
4,4'-DDT	1.8	U	2.1	0.62	ug/Kg	☼	06/16/17 13:00	06/25/17 23:17	1
Aldrin	0.70	U	1.8	0.26	ug/Kg	☼	06/16/17 13:00	06/25/17 23:17	1
alpha-BHC	0.70	U	1.8	0.22	ug/Kg	☼	06/16/17 13:00	06/25/17 23:17	1
alpha-Chlordane	0.70	U	1.8	0.34	ug/Kg	☼	06/16/17 13:00	06/25/17 23:17	1
beta-BHC	1.8	U	1.8	0.70	ug/Kg	☼	06/16/17 13:00	06/25/17 23:17	1
delta-BHC	1.0	U	1.8	0.42	ug/Kg	☼	06/16/17 13:00	06/25/17 23:17	1
Dieldrin	0.70	U	1.8	0.22	ug/Kg	☼	06/16/17 13:00	06/25/17 23:17	1
Endosulfan I	0.70	U	1.8	0.18	ug/Kg	☼	06/16/17 13:00	06/25/17 23:17	1
Endosulfan II	0.70	U	1.8	0.30	ug/Kg	☼	06/16/17 13:00	06/25/17 23:17	1
Endosulfan sulfate	0.70	U	1.8	0.29	ug/Kg	☼	06/16/17 13:00	06/25/17 23:17	1
Endrin	0.70	U	1.8	0.32	ug/Kg	☼	06/16/17 13:00	06/25/17 23:17	1
Endrin aldehyde	0.70	U	1.8	0.18	ug/Kg	☼	06/16/17 13:00	06/25/17 23:17	1
gamma-BHC (Lindane)	1.0	U	1.8	0.49	ug/Kg	☼	06/16/17 13:00	06/25/17 23:17	1
gamma-Chlordane	0.70	U	1.8	0.28	ug/Kg	☼	06/16/17 13:00	06/25/17 23:17	1
Heptachlor	0.70	U	1.8	0.22	ug/Kg	☼	06/16/17 13:00	06/25/17 23:17	1
Heptachlor epoxide	1.0	U	1.8	0.45	ug/Kg	☼	06/16/17 13:00	06/25/17 23:17	1
Methoxychlor	1.0	U	3.5	0.47	ug/Kg	☼	06/16/17 13:00	06/25/17 23:17	1
Toxaphene	35	U	180	17	ug/Kg	☼	06/16/17 13:00	06/25/17 23:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*72*		*63 - 121*	*06/16/17 13:00*	*06/25/17 23:17*	*1*
Tetrachloro-m-xylene (Surr)	*78*		*42 - 129*	*06/16/17 13:00*	*06/25/17 23:17*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	16	U	35	5.3	ug/Kg	☼	06/16/17 13:00	06/26/17 21:00	1
Arochlor 1221	18	U	49	16	ug/Kg	☼	06/16/17 13:00	06/26/17 21:00	1
Arochlor 1232	16	U	35	5.4	ug/Kg	☼	06/16/17 13:00	06/26/17 21:00	1
Arochlor 1242	35	U	35	9.6	ug/Kg	☼	06/16/17 13:00	06/26/17 21:00	1
Arochlor 1248	21	U	35	5.9	ug/Kg	☼	06/16/17 13:00	06/26/17 21:00	1
Arochlor 1254	18	U	35	5.8	ug/Kg	☼	06/16/17 13:00	06/26/17 21:00	1

Client Sample ID: SS025-SB10(0-2)
Lab Sample ID: 280-97928-18
Date Collected: 06/05/17 14:35
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 91.6

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1260	8.1	U	35	2.8	ug/Kg	☼	06/16/17 13:00	06/26/17 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*81*		*59 - 130*	*06/16/17 13:00*	*06/26/17 21:00*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3300**		53	1.6	mg/Kg	☼	06/08/17 14:00	06/09/17 10:19	1
Antimony	1.6	U	2.1	0.78	mg/Kg	☼	06/08/17 14:00	06/09/17 10:19	1
Arsenic	**2.2**	**J**	2.6	0.70	mg/Kg	☼	06/08/17 14:00	06/09/17 10:19	1
Barium	**10**		2.1	0.11	mg/Kg	☼	06/08/17 14:00	06/09/17 10:19	1
Beryllium	**0.16**	**J**	0.53	0.035	mg/Kg	☼	06/08/17 14:00	06/09/17 10:19	1
Cadmium	**0.057**	**J**	0.53	0.043	mg/Kg	☼	06/08/17 14:00	06/09/17 10:19	1
Calcium	**1400**		110	15	mg/Kg	☼	06/08/17 14:00	06/09/17 10:19	1
Chromium	**3.6**	**J**	3.7	0.061	mg/Kg	☼	06/08/17 14:00	06/09/17 10:19	1
Cobalt	**2.5**		1.1	0.11	mg/Kg	☼	06/08/17 14:00	06/09/17 10:19	1
Copper	**8.2**		5.3	0.23	mg/Kg	☼	06/08/17 14:00	06/13/17 00:45	1
Iron	**7100**	**Q**	85	4.0	mg/Kg	☼	06/08/17 14:00	06/09/17 10:19	1
Lead	**1.5**		0.95	0.33	mg/Kg	☼	06/08/17 14:00	06/09/17 10:19	1
Magnesium	**1500**		32	3.9	mg/Kg	☼	06/08/17 14:00	06/09/17 10:19	1
Manganese	**270**		4.8	0.11	mg/Kg	☼	06/08/17 14:00	06/12/17 16:43	1
Nickel	**5.4**		4.2	0.14	mg/Kg	☼	06/08/17 14:00	06/09/17 10:19	1
Potassium	**590**		320	43	mg/Kg	☼	06/08/17 14:00	06/09/17 10:19	1
Selenium	3.2	U	3.2	0.91	mg/Kg	☼	06/08/17 14:00	06/13/17 00:45	1
Silver	0.64	U	1.6	0.17	mg/Kg	☼	06/08/17 14:00	06/09/17 10:19	1
Sodium	210	U	530	62	mg/Kg	☼	06/08/17 14:00	06/09/17 10:19	1
Thallium	2.6	U	3.2	0.69	mg/Kg	☼	06/08/17 14:00	06/13/17 11:44	1
Vanadium	**6.5**		2.1	0.10	mg/Kg	☼	06/08/17 14:00	06/09/17 10:19	1
Zinc	**14**		8.5	0.42	mg/Kg	☼	06/08/17 14:00	06/09/17 10:19	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	17	U	22	7.1	ug/Kg	☼	06/14/17 12:49	06/14/17 17:42	1

Client Sample ID: SS025-SB10(2-4)
Lab Sample ID: 280-97928-19
Date Collected: 06/05/17 14:45
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 92.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.8	U	5.7	0.64	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
1,1,1-Trichloroethane	1.8	U	5.7	0.59	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
1,1,2,2-Tetrachloroethane	1.8	U	5.7	0.69	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
1,1,2-Trichloroethane	3.6	U	5.7	1.0	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
1,1-Dichloroethane	0.91	U	5.7	0.24	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
1,1-Dichloroethene	1.8	U	5.7	0.67	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
1,1-Dichloropropene	1.8	U	5.7	0.62	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
1,2,3-Trichlorobenzene	1.8	U	5.7	0.85	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
1,2,3-Trichloropropane	3.6	U	5.7	0.92	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
1,2,4-Trichlorobenzene	1.8	U	5.7	0.83	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1

Client Sample ID: SS025-SB10(2-4)
Date Collected: 06/05/17 14:45
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-19
Matrix: Solid
Percent Solids: 92.9

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	1.8	U	5.7	0.66	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
1,2-Dibromo-3-Chloropropane	1.8	U	11	0.68	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
1,2-Dibromoethane	1.8	U	5.7	0.59	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
1,2-Dichlorobenzene	1.8	U	5.7	0.51	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
1,2-Dichloroethane	1.8	U	5.7	0.80	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
1,2-Dichloroethene, Total	1.8	U	5.7	0.44	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
1,2-Dichloropropane	1.8	U	5.7	0.63	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
1,3,5-Trimethylbenzene	1.8	U	5.7	0.65	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
1,3-Dichlorobenzene	1.8	U	5.7	0.55	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
1,3-Dichloropropane	1.8	U	5.7	0.58	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
1,4-Dichlorobenzene	1.8	U	5.7	0.89	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
2,2-Dichloropropane	1.8	U	5.7	0.50	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
2-Butanone (MEK)	7.3	U	23	2.1	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
2-Chlorotoluene	1.8	U	5.7	0.58	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
2-Hexanone	15	U Q	23	5.6	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
4-Chlorotoluene	1.8	U	5.7	0.89	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
4-Isopropyltoluene	1.8	U	5.7	0.56	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
4-Methyl-2-pentanone (MIBK)	15	U	23	5.0	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Acetone	15	U Q	23	6.1	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Benzene	1.8	U	5.7	0.54	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Bromobenzene	1.8	U	5.7	0.56	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Bromochloromethane	0.91	U	5.7	0.34	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Bromodichloromethane	0.91	U	5.7	0.25	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Bromoform	0.91	U	5.7	0.26	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Bromomethane	1.8	U	11	0.57	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Carbon disulfide	1.8	U	5.7	0.48	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Carbon tetrachloride	1.8	U	5.7	0.72	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Chlorobenzene	1.8	U	5.7	0.62	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Chloroethane	3.6	U	11	1.0	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Chloroform	0.91	U	11	0.33	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Chloromethane	1.8	U	11	0.88	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
cis-1,2-Dichloroethene	1.8	U	5.7	0.64	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
cis-1,3-Dichloropropene	3.6	U	5.7	1.5	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Dibromochloromethane	1.8	U	5.7	0.65	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Dibromomethane	3.6	U	5.7	0.96	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Dichlorodifluoromethane	1.8	U Q	11	0.59	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Ethylbenzene	1.8	U	5.7	0.76	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Hexachlorobutadiene	1.8	U	5.7	0.63	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Isopropyl ether	9.1	U	57	3.1	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Isopropylbenzene	1.8	U	5.7	0.67	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
m&p-Xylene	3.6	U	3.6	1.2	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Methyl iodide	1.8	U	5.7	0.50	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Methyl tert-butyl ether	0.91	U	23	0.39	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Methylene Chloride	3.6	U	5.7	1.8	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Naphthalene	1.8	U	5.7	0.72	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
n-Butylbenzene	1.8	U	5.7	0.64	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
N-Propylbenzene	1.8	U	5.7	0.66	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
o-Xylene	1.8	U	5.7	0.69	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
sec-Butylbenzene	1.8	U	5.7	0.88	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1

Client Sample ID: SS025-SB10(2-4)

Date Collected: 06/05/17 14:45
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-19

Matrix: Solid
Percent Solids: 92.9

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	1.8	U	5.7	0.72	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
tert-Butylbenzene	1.8	U	5.7	0.57	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Tetrachloroethene	1.8	U	5.7	0.67	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Toluene	1.8	U	5.7	0.79	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
trans-1,2-Dichloroethene	0.91	U	5.7	0.44	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
trans-1,3-Dichloropropene	1.8	U	5.7	0.76	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Trichloroethene	0.91	U	5.7	0.26	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Trichlorofluoromethane	3.6	U	11	1.2	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Vinyl acetate	3.6	U	11	1.2	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Vinyl chloride	3.6	U	5.7	1.5	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1
Xylenes (total)	1.1	U	11	0.69	ug/Kg	☼	06/05/17 14:45	06/16/17 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*71 - 136*	*06/05/17 14:45*	*06/16/17 17:01*	*1*
4-Bromofluorobenzene (Surr)	*91*		*79 - 119*	*06/05/17 14:45*	*06/16/17 17:01*	*1*
Dibromofluoromethane (Surr)	*116*		*78 - 119*	*06/05/17 14:45*	*06/16/17 17:01*	*1*
Toluene-d8 (Surr)	*93*		*85 - 116*	*06/05/17 14:45*	*06/16/17 17:01*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.51	U	5.1	0.26	ug/Kg	☼	06/11/17 07:19	06/17/17 00:15	1
2-Methylnaphthalene	0.68	U	5.1	0.31	ug/Kg	☼	06/11/17 07:19	06/17/17 00:15	1
Acenaphthene	0.27	U	5.1	0.16	ug/Kg	☼	06/11/17 07:19	06/17/17 00:15	1
Acenaphthylene	**0.44**	**J**	5.1	0.17	ug/Kg	☼	06/11/17 07:19	06/17/17 00:15	1
Anthracene	2.5	U	5.1	0.73	ug/Kg	☼	06/11/17 07:19	06/17/17 00:15	1
Benzo[a]anthracene	2.5	U	5.1	0.92	ug/Kg	☼	06/11/17 07:19	06/17/17 00:15	1
Benzo[a]pyrene	2.5	U	5.1	0.75	ug/Kg	☼	06/11/17 07:19	06/17/17 00:15	1
Benzo[b]fluoranthene	2.5	U	5.1	1.2	ug/Kg	☼	06/11/17 07:19	06/17/17 00:15	1
Benzo[g,h,i]perylene	2.5	U	5.1	1.1	ug/Kg	☼	06/11/17 07:19	06/17/17 00:15	1
Benzo[k]fluoranthene	2.5	U	5.1	1.0	ug/Kg	☼	06/11/17 07:19	06/17/17 00:15	1
Chrysene	2.5	U	5.1	1.0	ug/Kg	☼	06/11/17 07:19	06/17/17 00:15	1
Dibenz(a,h)anthracene	2.5	U	5.1	1.3	ug/Kg	☼	06/11/17 07:19	06/17/17 00:15	1
Fluoranthene	2.5	U	5.1	1.0	ug/Kg	☼	06/11/17 07:19	06/17/17 00:15	1
Fluorene	0.68	U	5.1	0.48	ug/Kg	☼	06/11/17 07:19	06/17/17 00:15	1
Indeno[1,2,3-cd]pyrene	2.5	U	5.1	1.1	ug/Kg	☼	06/11/17 07:19	06/17/17 00:15	1
Naphthalene	0.68	U	5.1	0.33	ug/Kg	☼	06/11/17 07:19	06/17/17 00:15	1
Phenanthrene	2.5	U	5.1	1.1	ug/Kg	☼	06/11/17 07:19	06/17/17 00:15	1
Pyrene	2.5	U	5.1	1.1	ug/Kg	☼	06/11/17 07:19	06/17/17 00:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*82*		*46 - 115*	*06/11/17 07:19*	*06/17/17 00:15*	*1*
Nitrobenzene-d5 (Surr)	*89*		*44 - 125*	*06/11/17 07:19*	*06/17/17 00:15*	*1*
Terphenyl-d14 (Surr)	*74*		*58 - 133*	*06/11/17 07:19*	*06/17/17 00:15*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.7	U	1.8	0.57	ug/Kg	☼	06/16/17 13:00	06/25/17 23:34	1
4,4'-DDE	0.70	U	1.8	0.25	ug/Kg	☼	06/16/17 13:00	06/25/17 23:34	1
4,4'-DDT	1.7	U	2.1	0.61	ug/Kg	☼	06/16/17 13:00	06/25/17 23:34	1
Aldrin	0.70	U	1.8	0.26	ug/Kg	☼	06/16/17 13:00	06/25/17 23:34	1

Client Sample ID: SS025-SB10(2-4)

Date Collected: 06/05/17 14:45
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-19

Matrix: Solid
Percent Solids: 92.9

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	0.70	U	1.8	0.22	ug/Kg	☼	06/16/17 13:00	06/25/17 23:34	1
alpha-Chlordane	0.70	U	1.8	0.34	ug/Kg	☼	06/16/17 13:00	06/25/17 23:34	1
beta-BHC	1.7	U	1.8	0.69	ug/Kg	☼	06/16/17 13:00	06/25/17 23:34	1
delta-BHC	1.0	U	1.8	0.42	ug/Kg	☼	06/16/17 13:00	06/25/17 23:34	1
Dieldrin	0.70	U	1.8	0.22	ug/Kg	☼	06/16/17 13:00	06/25/17 23:34	1
Endosulfan I	0.70	U	1.8	0.18	ug/Kg	☼	06/16/17 13:00	06/25/17 23:34	1
Endosulfan II	0.70	U	1.8	0.30	ug/Kg	☼	06/16/17 13:00	06/25/17 23:34	1
Endosulfan sulfate	0.70	U	1.8	0.29	ug/Kg	☼	06/16/17 13:00	06/25/17 23:34	1
Endrin	0.70	U	1.8	0.32	ug/Kg	☼	06/16/17 13:00	06/25/17 23:34	1
Endrin aldehyde	0.70	U	1.8	0.18	ug/Kg	☼	06/16/17 13:00	06/25/17 23:34	1
gamma-BHC (Lindane)	1.0	U	1.8	0.48	ug/Kg	☼	06/16/17 13:00	06/25/17 23:34	1
gamma-Chlordane	0.70	U	1.8	0.28	ug/Kg	☼	06/16/17 13:00	06/25/17 23:34	1
Heptachlor	0.70	U	1.8	0.22	ug/Kg	☼	06/16/17 13:00	06/25/17 23:34	1
Heptachlor epoxide	1.0	U	1.8	0.44	ug/Kg	☼	06/16/17 13:00	06/25/17 23:34	1
Methoxychlor	1.0	U	3.4	0.47	ug/Kg	☼	06/16/17 13:00	06/25/17 23:34	1
Toxaphene	34	U	180	16	ug/Kg	☼	06/16/17 13:00	06/25/17 23:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*79*		*63 - 121*	*06/16/17 13:00*	*06/25/17 23:34*	*1*
Tetrachloro-m-xylene (Surr)	*80*		*42 - 129*	*06/16/17 13:00*	*06/25/17 23:34*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	16	U	34	5.3	ug/Kg	☼	06/16/17 13:00	06/26/17 21:22	1
Arochlor 1221	18	U	49	16	ug/Kg	☼	06/16/17 13:00	06/26/17 21:22	1
Arochlor 1232	16	U	34	5.3	ug/Kg	☼	06/16/17 13:00	06/26/17 21:22	1
Arochlor 1242	34	U	34	9.5	ug/Kg	☼	06/16/17 13:00	06/26/17 21:22	1
Arochlor 1248	21	U	34	5.8	ug/Kg	☼	06/16/17 13:00	06/26/17 21:22	1
Arochlor 1254	18	U	34	5.7	ug/Kg	☼	06/16/17 13:00	06/26/17 21:22	1
Arochlor 1260	8.0	U	34	2.8	ug/Kg	☼	06/16/17 13:00	06/26/17 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*80*		*59 - 130*	*06/16/17 13:00*	*06/26/17 21:22*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**2900**		45	1.4	mg/Kg	☼	06/08/17 14:00	06/09/17 10:22	1
Antimony	1.3	U	1.8	0.66	mg/Kg	☼	06/08/17 14:00	06/09/17 10:22	1
Arsenic	**2.4**		2.2	0.60	mg/Kg	☼	06/08/17 14:00	06/09/17 10:22	1
Barium	**8.7**		1.8	0.094	mg/Kg	☼	06/08/17 14:00	06/09/17 10:22	1
Beryllium	**0.14**	**J**	0.45	0.030	mg/Kg	☼	06/08/17 14:00	06/09/17 10:22	1
Cadmium	**0.048**	**J**	0.45	0.037	mg/Kg	☼	06/08/17 14:00	06/09/17 10:22	1
Calcium	**970**		90	13	mg/Kg	☼	06/08/17 14:00	06/09/17 10:22	1
Chromium	**3.1**		3.1	0.052	mg/Kg	☼	06/08/17 14:00	06/09/17 10:22	1
Cobalt	**2.2**		0.90	0.090	mg/Kg	☼	06/08/17 14:00	06/09/17 10:22	1
Copper	**7.8**		4.5	0.20	mg/Kg	☼	06/08/17 14:00	06/13/17 00:47	1
Iron	**6200**	**Q**	72	3.4	mg/Kg	☼	06/08/17 14:00	06/09/17 10:22	1
Lead	**1.3**		0.81	0.28	mg/Kg	☼	06/08/17 14:00	06/09/17 10:22	1
Magnesium	**1300**		27	3.3	mg/Kg	☼	06/08/17 14:00	06/09/17 10:22	1
Manganese	**260**		4.0	0.090	mg/Kg	☼	06/08/17 14:00	06/12/17 16:45	1

Client Sample ID: SS025-SB10(2-4)
Lab Sample ID: 280-97928-19

Date Collected: 06/05/17 14:45
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 92.9

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**4.9**		3.6	0.12	mg/Kg	☼	06/08/17 14:00	06/09/17 10:22	1
Potassium	**480**		270	37	mg/Kg	☼	06/08/17 14:00	06/09/17 10:22	1
Selenium	2.7	U	2.7	0.77	mg/Kg	☼	06/08/17 14:00	06/13/17 00:47	1
Silver	0.54	U	1.3	0.14	mg/Kg	☼	06/08/17 14:00	06/09/17 10:22	1
Sodium	180	U	450	53	mg/Kg	☼	06/08/17 14:00	06/09/17 10:22	1
Thallium	2.2	U	2.7	0.58	mg/Kg	☼	06/08/17 14:00	06/13/17 11:47	1
Vanadium	**5.7**		1.8	0.085	mg/Kg	☼	06/08/17 14:00	06/09/17 10:22	1
Zinc	**13**		7.2	0.36	mg/Kg	☼	06/08/17 14:00	06/09/17 10:22	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	17	U	21	6.9	ug/Kg	☼	06/14/17 12:49	06/14/17 17:44	1

Client Sample ID: SS025-SB10(4-6)
Lab Sample ID: 280-97928-20

Date Collected: 06/05/17 14:55
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 93.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	80	U	250	21	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
1,1,1-Trichloroethane	40	U	250	20	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
1,1,2,2-Tetrachloroethane	80	U	250	29	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
1,1,2-Trichloroethane	80	U	250	27	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
1,1-Dichloroethane	160	U	250	51	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
1,1-Dichloroethene	160	U	250	51	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
1,1-Dichloropropene	160	U	250	48	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
1,2,3-Trichlorobenzene	80	U	250	35	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
1,2,3-Trichloropropane	160	U	250	47	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
1,2,4-Trichlorobenzene	160	U	250	47	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
1,2,4-Trimethylbenzene	80	U	250	31	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
1,2-Dibromo-3-Chloropropane	320	U	500	86	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
1,2-Dibromoethane	80	U	250	25	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
1,2-Dichlorobenzene	320	U	500	94	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
1,2-Dichloroethane	80	U	250	25	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
1,2-Dichloroethene, Total	80	U	130	22	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
1,2-Dichloropropane	160	U	250	46	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
1,3,5-Trimethylbenzene	80	U	250	39	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
1,3-Dichlorobenzene	160	U	250	41	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
1,3-Dichloropropane	80	U	250	28	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
1,4-Dichlorobenzene	80	U	250	25	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
2,2-Dichloropropane	80	U	250	27	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
2-Butanone (MEK)	640	U	1000	300	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
2-Chlorotoluene	80	U	250	26	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
2-Hexanone	640	U	1000	220	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
4-Chlorotoluene	80	U	250	23	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
4-Isopropyltoluene	80	U	250	32	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
4-Methyl-2-pentanone (MIBK)	640	U	1000	230	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Acetone	1300	U	1500	400	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Benzene	160	U	250	45	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Bromobenzene	40	U	250	19	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1

Client Sample ID: SS025-SB10(4-6)

Date Collected: 06/05/17 14:55
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-20

Matrix: Solid
Percent Solids: 93.6

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	160	U	250	47	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Bromodichloromethane	80	U	250	40	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Bromoform	160	U	250	160	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Bromomethane	160	U	500	44	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Carbon disulfide	160	U	250	64	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Carbon tetrachloride	40	U	250	17	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Chlorobenzene	80	U	250	30	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Chloroethane	160	U	500	44	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Chloroform	160	U	250	46	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Chloromethane	160	U Q	500	50	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
cis-1,2-Dichloroethene	80	U	130	22	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
cis-1,3-Dichloropropene	80	U	250	27	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Dibromochloromethane	80	U	250	33	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Dibromomethane	80	U	250	30	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Dichlorodifluoromethane	80	U Q	500	22	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Ethylbenzene	80	U	250	34	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Hexachlorobutadiene	160	U	250	49	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Isopropyl ether	800	U	2500	210	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Isopropylbenzene	80	U	250	29	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
m&p-Xylene	160	U	250	78	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Methyl iodide	**22**	**J**	250	21	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Methyl tert-butyl ether	160	U	250	50	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Methylene Chloride	**760**	**B**	250	69	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Naphthalene	80	U	500	38	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
n-Butylbenzene	80	U	250	32	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
N-Propylbenzene	160	U	250	41	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
o-Xylene	80	U	130	35	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
sec-Butylbenzene	80	U	250	38	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Styrene	80	U	250	26	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
tert-Butylbenzene	80	U	250	28	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Tetrachloroethene	80	U	250	27	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Toluene	80	U	250	39	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
trans-1,2-Dichloroethene	160	U	250	45	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
trans-1,3-Dichloropropene	160	U	250	41	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Trichloroethene	80	U	250	23	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Trichlorofluoromethane	160	U	500	50	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Vinyl acetate	160	U	500	70	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Vinyl chloride	80	U Q	500	27	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1
Xylenes (total)	80	U	130	35	ug/Kg	☼	06/05/17 14:55	06/19/17 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*71 - 136*	*06/05/17 14:55*	*06/19/17 18:43*	*1*
4-Bromofluorobenzene (Surr)	*112*		*79 - 119*	*06/05/17 14:55*	*06/19/17 18:43*	*1*
Dibromofluoromethane (Surr)	*106*		*78 - 119*	*06/05/17 14:55*	*06/19/17 18:43*	*1*
Toluene-d8 (Surr)	*116*		*85 - 116*	*06/05/17 14:55*	*06/19/17 18:43*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.50	U	5.0	0.26	ug/Kg	☼	06/11/17 07:19	06/17/17 00:40	1
2-Methylnaphthalene	0.67	U	5.0	0.31	ug/Kg	☼	06/11/17 07:19	06/17/17 00:40	1

Client Sample ID: SS025-SB10(4-6)

Date Collected: 06/05/17 14:55
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-20

Matrix: Solid
Percent Solids: 93.6

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.27	U	5.0	0.16	ug/Kg	☼	06/11/17 07:19	06/17/17 00:40	1
Acenaphthylene	**0.43**	**J**	5.0	0.17	ug/Kg	☼	06/11/17 07:19	06/17/17 00:40	1
Anthracene	2.5	U	5.0	0.73	ug/Kg	☼	06/11/17 07:19	06/17/17 00:40	1
Benzo[a]anthracene	2.5	U	5.0	0.91	ug/Kg	☼	06/11/17 07:19	06/17/17 00:40	1
Benzo[a]pyrene	2.5	U	5.0	0.75	ug/Kg	☼	06/11/17 07:19	06/17/17 00:40	1
Benzo[b]fluoranthene	2.5	U	5.0	1.2	ug/Kg	☼	06/11/17 07:19	06/17/17 00:40	1
Benzo[g,h,i]perylene	2.5	U	5.0	1.1	ug/Kg	☼	06/11/17 07:19	06/17/17 00:40	1
Benzo[k]fluoranthene	2.5	U	5.0	1.0	ug/Kg	☼	06/11/17 07:19	06/17/17 00:40	1
Chrysene	2.5	U	5.0	1.0	ug/Kg	☼	06/11/17 07:19	06/17/17 00:40	1
Dibenz(a,h)anthracene	2.5	U	5.0	1.3	ug/Kg	☼	06/11/17 07:19	06/17/17 00:40	1
Fluoranthene	2.5	U	5.0	1.0	ug/Kg	☼	06/11/17 07:19	06/17/17 00:40	1
Fluorene	0.67	U	5.0	0.47	ug/Kg	☼	06/11/17 07:19	06/17/17 00:40	1
Indeno[1,2,3-cd]pyrene	2.5	U	5.0	1.1	ug/Kg	☼	06/11/17 07:19	06/17/17 00:40	1
Naphthalene	0.67	U	5.0	0.33	ug/Kg	☼	06/11/17 07:19	06/17/17 00:40	1
Phenanthrene	2.5	U	5.0	1.1	ug/Kg	☼	06/11/17 07:19	06/17/17 00:40	1
Pyrene	2.5	U	5.0	1.1	ug/Kg	☼	06/11/17 07:19	06/17/17 00:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*88*		*46 - 115*	*06/11/17 07:19*	*06/17/17 00:40*	*1*
Nitrobenzene-d5 (Surr)	*90*		*44 - 125*	*06/11/17 07:19*	*06/17/17 00:40*	*1*
Terphenyl-d14 (Surr)	*75*		*58 - 133*	*06/11/17 07:19*	*06/17/17 00:40*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.7	U	1.7	0.55	ug/Kg	☼	06/16/17 13:00	06/25/17 23:51	1
4,4'-DDE	0.68	U	1.7	0.24	ug/Kg	☼	06/16/17 13:00	06/25/17 23:51	1
4,4'-DDT	1.7	U	2.0	0.59	ug/Kg	☼	06/16/17 13:00	06/25/17 23:51	1
Aldrin	0.68	U	1.7	0.25	ug/Kg	☼	06/16/17 13:00	06/25/17 23:51	1
alpha-BHC	0.68	U	1.7	0.22	ug/Kg	☼	06/16/17 13:00	06/25/17 23:51	1
alpha-Chlordane	0.68	U	1.7	0.33	ug/Kg	☼	06/16/17 13:00	06/25/17 23:51	1
beta-BHC	1.7	U	1.7	0.67	ug/Kg	☼	06/16/17 13:00	06/25/17 23:51	1
delta-BHC	1.0	U	1.7	0.40	ug/Kg	☼	06/16/17 13:00	06/25/17 23:51	1
Dieldrin	0.68	U	1.7	0.21	ug/Kg	☼	06/16/17 13:00	06/25/17 23:51	1
Endosulfan I	0.68	U	1.7	0.18	ug/Kg	☼	06/16/17 13:00	06/25/17 23:51	1
Endosulfan II	0.68	U	1.7	0.29	ug/Kg	☼	06/16/17 13:00	06/25/17 23:51	1
Endosulfan sulfate	0.68	U	1.7	0.28	ug/Kg	☼	06/16/17 13:00	06/25/17 23:51	1
Endrin	0.68	U	1.7	0.31	ug/Kg	☼	06/16/17 13:00	06/25/17 23:51	1
Endrin aldehyde	0.68	U	1.7	0.17	ug/Kg	☼	06/16/17 13:00	06/25/17 23:51	1
gamma-BHC (Lindane)	1.0	U	1.7	0.47	ug/Kg	☼	06/16/17 13:00	06/25/17 23:51	1
gamma-Chlordane	0.68	U	1.7	0.27	ug/Kg	☼	06/16/17 13:00	06/25/17 23:51	1
Heptachlor	0.68	U	1.7	0.22	ug/Kg	☼	06/16/17 13:00	06/25/17 23:51	1
Heptachlor epoxide	1.0	U	1.7	0.43	ug/Kg	☼	06/16/17 13:00	06/25/17 23:51	1
Methoxychlor	1.0	U	3.3	0.45	ug/Kg	☼	06/16/17 13:00	06/25/17 23:51	1
Toxaphene	33	U	170	16	ug/Kg	☼	06/16/17 13:00	06/25/17 23:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*68*		*63 - 121*	*06/16/17 13:00*	*06/25/17 23:51*	*1*
Tetrachloro-m-xylene (Surr)	*69*		*42 - 129*	*06/16/17 13:00*	*06/25/17 23:51*	*1*

Client Sample ID: SS025-SB10(4-6)
Lab Sample ID: 280-97928-20
Date Collected: 06/05/17 14:55
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 93.6

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	15	U	33	5.1	ug/Kg	☼	06/16/17 13:00	06/26/17 21:44	1
Arochlor 1221	17	U	47	16	ug/Kg	☼	06/16/17 13:00	06/26/17 21:44	1
Arochlor 1232	15	U	33	5.2	ug/Kg	☼	06/16/17 13:00	06/26/17 21:44	1
Arochlor 1242	33	U	33	9.2	ug/Kg	☼	06/16/17 13:00	06/26/17 21:44	1
Arochlor 1248	20	U	33	5.7	ug/Kg	☼	06/16/17 13:00	06/26/17 21:44	1
Arochlor 1254	17	U	33	5.6	ug/Kg	☼	06/16/17 13:00	06/26/17 21:44	1
Arochlor 1260	7.8	U	33	2.7	ug/Kg	☼	06/16/17 13:00	06/26/17 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*77*		*59 - 130*	*06/16/17 13:00*	*06/26/17 21:44*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3400**		43	1.3	mg/Kg	☼	06/08/17 14:00	06/09/17 10:24	1
Antimony	1.3	U	1.7	0.62	mg/Kg	☼	06/08/17 14:00	06/09/17 10:24	1
Arsenic	**2.8**		2.1	0.57	mg/Kg	☼	06/08/17 14:00	06/09/17 10:24	1
Barium	**9.8**		1.7	0.089	mg/Kg	☼	06/08/17 14:00	06/09/17 10:24	1
Beryllium	**0.16**	**J**	0.43	0.028	mg/Kg	☼	06/08/17 14:00	06/09/17 10:24	1
Cadmium	0.13	U	0.43	0.035	mg/Kg	☼	06/08/17 14:00	06/09/17 10:24	1
Calcium	**960**		85	12	mg/Kg	☼	06/08/17 14:00	06/09/17 10:24	1
Chromium	**3.7**		3.0	0.049	mg/Kg	☼	06/08/17 14:00	06/09/17 10:24	1
Cobalt	**2.5**		0.85	0.085	mg/Kg	☼	06/08/17 14:00	06/09/17 10:24	1
Copper	**8.4**		4.3	0.18	mg/Kg	☼	06/08/17 14:00	06/13/17 00:57	1
Iron	**7300**	**Q**	68	3.2	mg/Kg	☼	06/08/17 14:00	06/09/17 10:24	1
Lead	**1.5**		0.77	0.26	mg/Kg	☼	06/08/17 14:00	06/09/17 10:24	1
Magnesium	**1500**		26	3.2	mg/Kg	☼	06/08/17 14:00	06/09/17 10:24	1
Manganese	**270**		3.8	0.085	mg/Kg	☼	06/08/17 14:00	06/12/17 16:48	1
Nickel	**5.6**		3.4	0.11	mg/Kg	☼	06/08/17 14:00	06/09/17 10:24	1
Potassium	**580**		260	35	mg/Kg	☼	06/08/17 14:00	06/09/17 10:24	1
Selenium	2.6	U	2.6	0.73	mg/Kg	☼	06/08/17 14:00	06/13/17 00:57	1
Silver	0.51	U	1.3	0.14	mg/Kg	☼	06/08/17 14:00	06/09/17 10:24	1
Sodium	170	U	430	50	mg/Kg	☼	06/08/17 14:00	06/09/17 10:24	1
Thallium	2.1	U	2.6	0.55	mg/Kg	☼	06/08/17 14:00	06/13/17 11:49	1
Vanadium	**6.6**		1.7	0.080	mg/Kg	☼	06/08/17 14:00	06/09/17 10:24	1
Zinc	**14**		6.8	0.34	mg/Kg	☼	06/08/17 14:00	06/09/17 10:24	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	14	U	18	5.9	ug/Kg	☼	06/14/17 12:49	06/14/17 17:51	1

Client Sample ID: SS025-SB10(2-4)-a
Lab Sample ID: 280-97928-21
Date Collected: 06/05/17 14:45
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 94.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.6	U	4.9	0.54	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
1,1,1-Trichloroethane	1.6	U	4.9	0.50	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
1,1,2,2-Tetrachloroethane	1.6	U	4.9	0.59	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
1,1,2-Trichloroethane	3.1	U	4.9	0.85	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1

Client Sample ID: SS025-SB10(2-4)-a
Date Collected: 06/05/17 14:45
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-21
Matrix: Solid
Percent Solids: 94.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.78	U	4.9	0.20	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
1,1-Dichloroethene	1.6	U	4.9	0.57	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
1,1-Dichloropropene	1.6	U	4.9	0.52	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
1,2,3-Trichlorobenzene	1.6	U	4.9	0.73	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
1,2,3-Trichloropropane	3.1	U	4.9	0.79	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
1,2,4-Trichlorobenzene	1.6	U	4.9	0.71	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
1,2,4-Trimethylbenzene	1.6	U	4.9	0.56	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
1,2-Dibromo-3-Chloropropane	1.6	U	9.7	0.58	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
1,2-Dibromoethane	1.6	U	4.9	0.50	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
1,2-Dichlorobenzene	1.6	U	4.9	0.44	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
1,2-Dichloroethane	1.6	U	4.9	0.68	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
1,2-Dichloroethene, Total	1.6	U	4.9	0.38	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
1,2-Dichloropropane	1.6	U	4.9	0.53	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
1,3,5-Trimethylbenzene	1.6	U	4.9	0.55	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
1,3-Dichlorobenzene	1.6	U	4.9	0.47	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
1,3-Dichloropropane	1.6	U	4.9	0.49	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
1,4-Dichlorobenzene	1.6	U	4.9	0.76	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
2,2-Dichloropropane	1.6	U	4.9	0.43	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
2-Butanone (MEK)	6.2	U	19	1.8	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
2-Chlorotoluene	1.6	U	4.9	0.49	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
2-Hexanone	12	U Q	19	4.7	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
4-Chlorotoluene	1.6	U	4.9	0.76	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
4-Isopropyltoluene	1.6	U	4.9	0.48	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
4-Methyl-2-pentanone (MIBK)	12	U	19	4.2	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Acetone	12	U Q	19	5.2	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Benzene	1.6	U	4.9	0.46	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Bromobenzene	1.6	U	4.9	0.48	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Bromochloromethane	0.78	U	4.9	0.29	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Bromodichloromethane	0.78	U	4.9	0.21	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Bromoform	0.78	U	4.9	0.22	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Bromomethane	1.6	U	9.7	0.49	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Carbon disulfide	1.6	U	4.9	0.41	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Carbon tetrachloride	1.6	U	4.9	0.61	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Chlorobenzene	1.6	U	4.9	0.52	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Chloroethane	3.1	U	9.7	0.86	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Chloroform	0.78	U	9.7	0.28	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Chloromethane	1.6	U	9.7	0.75	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
cis-1,2-Dichloroethene	1.6	U	4.9	0.54	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
cis-1,3-Dichloropropene	3.1	U	4.9	1.3	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Dibromochloromethane	1.6	U	4.9	0.55	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Dibromomethane	3.1	U	4.9	0.81	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Dichlorodifluoromethane	1.6	U Q	9.7	0.50	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Ethylbenzene	1.6	U	4.9	0.65	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Hexachlorobutadiene	1.6	U	4.9	0.53	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Isopropyl ether	7.8	U	49	2.6	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Isopropylbenzene	1.6	U	4.9	0.57	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
m&p-Xylene	3.1	U	3.1	1.0	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Methyl iodide	1.6	U	4.9	0.43	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Methyl tert-butyl ether	0.78	U	19	0.33	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1

Client Sample ID: SS025-SB10(2-4)-a

Date Collected: 06/05/17 14:45
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-21

Matrix: Solid
Percent Solids: 94.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	3.1	U	4.9	1.6	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Naphthalene	1.6	U	4.9	0.61	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
n-Butylbenzene	1.6	U	4.9	0.54	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
N-Propylbenzene	1.6	U	4.9	0.56	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
o-Xylene	1.6	U	4.9	0.59	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
sec-Butylbenzene	1.6	U	4.9	0.75	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Styrene	1.6	U	4.9	0.61	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
tert-Butylbenzene	1.6	U	4.9	0.49	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Tetrachloroethene	1.6	U	4.9	0.57	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Toluene	1.6	U	4.9	0.67	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
trans-1,2-Dichloroethene	0.78	U	4.9	0.38	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
trans-1,3-Dichloropropene	1.6	U	4.9	0.65	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Trichloroethene	0.78	U	4.9	0.22	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Trichlorofluoromethane	3.1	U	9.7	1.0	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Vinyl acetate	3.1	U	9.7	1.0	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Vinyl chloride	3.1	U	4.9	1.3	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1
Xylenes (total)	0.97	U	9.7	0.59	ug/Kg	☼	06/05/17 14:45	06/16/17 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*71 - 136*	*06/05/17 14:45*	*06/16/17 17:22*	*1*
4-Bromofluorobenzene (Surr)	*93*		*79 - 119*	*06/05/17 14:45*	*06/16/17 17:22*	*1*
Dibromofluoromethane (Surr)	*117*		*78 - 119*	*06/05/17 14:45*	*06/16/17 17:22*	*1*
Toluene-d8 (Surr)	*94*		*85 - 116*	*06/05/17 14:45*	*06/16/17 17:22*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.52	U	5.2	0.27	ug/Kg	☼	06/11/17 07:19	06/17/17 01:06	1
2-Methylnaphthalene	0.70	U	5.2	0.32	ug/Kg	☼	06/11/17 07:19	06/17/17 01:06	1
Acenaphthene	0.28	U	5.2	0.17	ug/Kg	☼	06/11/17 07:19	06/17/17 01:06	1
Acenaphthylene	**0.37**	**J**	5.2	0.18	ug/Kg	☼	06/11/17 07:19	06/17/17 01:06	1
Anthracene	2.6	U	5.2	0.75	ug/Kg	☼	06/11/17 07:19	06/17/17 01:06	1
Benzo[a]anthracene	2.6	U	5.2	0.94	ug/Kg	☼	06/11/17 07:19	06/17/17 01:06	1
Benzo[a]pyrene	2.6	U	5.2	0.77	ug/Kg	☼	06/11/17 07:19	06/17/17 01:06	1
Benzo[b]fluoranthene	2.6	U	5.2	1.3	ug/Kg	☼	06/11/17 07:19	06/17/17 01:06	1
Benzo[g,h,i]perylene	2.6	U	5.2	1.1	ug/Kg	☼	06/11/17 07:19	06/17/17 01:06	1
Benzo[k]fluoranthene	2.6	U	5.2	1.0	ug/Kg	☼	06/11/17 07:19	06/17/17 01:06	1
Chrysene	2.6	U	5.2	1.0	ug/Kg	☼	06/11/17 07:19	06/17/17 01:06	1
Dibenz(a,h)anthracene	2.6	U	5.2	1.4	ug/Kg	☼	06/11/17 07:19	06/17/17 01:06	1
Fluoranthene	2.6	U	5.2	1.0	ug/Kg	☼	06/11/17 07:19	06/17/17 01:06	1
Fluorene	0.70	U	5.2	0.49	ug/Kg	☼	06/11/17 07:19	06/17/17 01:06	1
Indeno[1,2,3-cd]pyrene	2.6	U	5.2	1.1	ug/Kg	☼	06/11/17 07:19	06/17/17 01:06	1
Naphthalene	0.70	U	5.2	0.34	ug/Kg	☼	06/11/17 07:19	06/17/17 01:06	1
Phenanthrene	2.6	U	5.2	1.1	ug/Kg	☼	06/11/17 07:19	06/17/17 01:06	1
Pyrene	2.6	U	5.2	1.1	ug/Kg	☼	06/11/17 07:19	06/17/17 01:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*92*		*46 - 115*	*06/11/17 07:19*	*06/17/17 01:06*	*1*
Nitrobenzene-d5 (Surr)	*88*		*44 - 125*	*06/11/17 07:19*	*06/17/17 01:06*	*1*
Terphenyl-d14 (Surr)	*76*		*58 - 133*	*06/11/17 07:19*	*06/17/17 01:06*	*1*

Client Sample ID: SS025-SB10(2-4)-a

Date Collected: 06/05/17 14:45
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-21

Matrix: Solid
Percent Solids: 94.1

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.7	U	1.8	0.57	ug/Kg	☼	06/16/17 13:00	06/26/17 00:07	1
4,4'-DDE	0.70	U	1.8	0.25	ug/Kg	☼	06/16/17 13:00	06/26/17 00:07	1
4,4'-DDT	1.7	U	2.1	0.61	ug/Kg	☼	06/16/17 13:00	06/26/17 00:07	1
Aldrin	0.70	U	1.8	0.26	ug/Kg	☼	06/16/17 13:00	06/26/17 00:07	1
alpha-BHC	0.70	U	1.8	0.22	ug/Kg	☼	06/16/17 13:00	06/26/17 00:07	1
alpha-Chlordane	0.70	U	1.8	0.34	ug/Kg	☼	06/16/17 13:00	06/26/17 00:07	1
beta-BHC	1.7	U	1.8	0.69	ug/Kg	☼	06/16/17 13:00	06/26/17 00:07	1
delta-BHC	1.0	U	1.8	0.42	ug/Kg	☼	06/16/17 13:00	06/26/17 00:07	1
Dieldrin	0.70	U	1.8	0.22	ug/Kg	☼	06/16/17 13:00	06/26/17 00:07	1
Endosulfan I	0.70	U	1.8	0.18	ug/Kg	☼	06/16/17 13:00	06/26/17 00:07	1
Endosulfan II	0.70	U	1.8	0.30	ug/Kg	☼	06/16/17 13:00	06/26/17 00:07	1
Endosulfan sulfate	0.70	U	1.8	0.29	ug/Kg	☼	06/16/17 13:00	06/26/17 00:07	1
Endrin	0.70	U	1.8	0.32	ug/Kg	☼	06/16/17 13:00	06/26/17 00:07	1
Endrin aldehyde	0.70	U	1.8	0.18	ug/Kg	☼	06/16/17 13:00	06/26/17 00:07	1
gamma-BHC (Lindane)	1.0	U	1.8	0.48	ug/Kg	☼	06/16/17 13:00	06/26/17 00:07	1
gamma-Chlordane	0.70	U	1.8	0.28	ug/Kg	☼	06/16/17 13:00	06/26/17 00:07	1
Heptachlor	0.70	U	1.8	0.22	ug/Kg	☼	06/16/17 13:00	06/26/17 00:07	1
Heptachlor epoxide	1.0	U	1.8	0.44	ug/Kg	☼	06/16/17 13:00	06/26/17 00:07	1
Methoxychlor	1.0	U	3.4	0.47	ug/Kg	☼	06/16/17 13:00	06/26/17 00:07	1
Toxaphene	34	U	180	16	ug/Kg	☼	06/16/17 13:00	06/26/17 00:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*75*		*63 - 121*	*06/16/17 13:00*	*06/26/17 00:07*	*1*
Tetrachloro-m-xylene (Surr)	*79*		*42 - 129*	*06/16/17 13:00*	*06/26/17 00:07*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	16	U	34	5.3	ug/Kg	☼	06/16/17 13:00	06/26/17 22:05	1
Arochlor 1221	18	U	49	16	ug/Kg	☼	06/16/17 13:00	06/26/17 22:05	1
Arochlor 1232	16	U	34	5.3	ug/Kg	☼	06/16/17 13:00	06/26/17 22:05	1
Arochlor 1242	34	U	34	9.5	ug/Kg	☼	06/16/17 13:00	06/26/17 22:05	1
Arochlor 1248	21	U	34	5.8	ug/Kg	☼	06/16/17 13:00	06/26/17 22:05	1
Arochlor 1254	18	U	34	5.7	ug/Kg	☼	06/16/17 13:00	06/26/17 22:05	1
Arochlor 1260	8.0	U	34	2.8	ug/Kg	☼	06/16/17 13:00	06/26/17 22:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*85*		*59 - 130*	*06/16/17 13:00*	*06/26/17 22:05*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3100**		49	1.5	mg/Kg	☼	06/08/17 14:00	06/09/17 10:27	1
Antimony	1.5	U	2.0	0.72	mg/Kg	☼	06/08/17 14:00	06/09/17 10:27	1
Arsenic	**2.4**	**J**	2.5	0.66	mg/Kg	☼	06/08/17 14:00	06/09/17 10:27	1
Barium	**9.1**		2.0	0.10	mg/Kg	☼	06/08/17 14:00	06/09/17 10:27	1
Beryllium	**0.14**	**J**	0.49	0.033	mg/Kg	☼	06/08/17 14:00	06/09/17 10:27	1
Cadmium	0.15	U	0.49	0.040	mg/Kg	☼	06/08/17 14:00	06/09/17 10:27	1
Calcium	**3000**		99	14	mg/Kg	☼	06/08/17 14:00	06/09/17 10:27	1
Chromium	**3.4**		3.4	0.057	mg/Kg	☼	06/08/17 14:00	06/09/17 10:27	1
Cobalt	**2.4**		0.99	0.099	mg/Kg	☼	06/08/17 14:00	06/09/17 10:27	1
Copper	**8.1**		4.9	0.21	mg/Kg	☼	06/08/17 14:00	06/13/17 00:59	1

Client Sample ID: SS025-SB10(2-4)-a
Lab Sample ID: 280-97928-21
Date Collected: 06/05/17 14:45
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 94.1

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**6900**	**Q**	79	3.7	mg/Kg	☼	06/08/17 14:00	06/09/17 10:27	1
Lead	**1.3**		0.89	0.31	mg/Kg	☼	06/08/17 14:00	06/09/17 10:27	1
Magnesium	**1700**		30	3.6	mg/Kg	☼	06/08/17 14:00	06/09/17 10:27	1
Manganese	**250**		4.4	0.099	mg/Kg	☼	06/08/17 14:00	06/12/17 16:51	1
Nickel	**5.2**		3.9	0.13	mg/Kg	☼	06/08/17 14:00	06/09/17 10:27	1
Potassium	**570**		300	40	mg/Kg	☼	06/08/17 14:00	06/09/17 10:27	1
Selenium	3.0	U	3.0	0.85	mg/Kg	☼	06/08/17 14:00	06/13/17 00:59	1
Silver	0.59	U	1.5	0.16	mg/Kg	☼	06/08/17 14:00	06/09/17 10:27	1
Sodium	200	U	490	58	mg/Kg	☼	06/08/17 14:00	06/09/17 10:27	1
Thallium	2.5	U	3.0	0.64	mg/Kg	☼	06/08/17 14:00	06/13/17 11:52	1
Vanadium	**6.3**		2.0	0.093	mg/Kg	☼	06/08/17 14:00	06/09/17 10:27	1
Zinc	**14**		7.9	0.39	mg/Kg	☼	06/08/17 14:00	06/09/17 10:27	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	17	U	21	6.9	ug/Kg	☼	06/14/17 12:49	06/14/17 17:53	1

Client Sample ID: SS025-SS10
Lab Sample ID: 280-97928-22
Date Collected: 06/05/17 15:20
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 90.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.5	U	4.7	0.53	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
1,1,1-Trichloroethane	1.5	U	4.7	0.49	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
1,1,2,2-Tetrachloroethane	1.5	U	4.7	0.57	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
1,1,2-Trichloroethane	3.0	U	4.7	0.83	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
1,1-Dichloroethane	0.75	U	4.7	0.20	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
1,1-Dichloroethene	1.5	U	4.7	0.55	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
1,1-Dichloropropene	1.5	U	4.7	0.51	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
1,2,3-Trichlorobenzene	1.5	U	4.7	0.71	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
1,2,3-Trichloropropane	3.0	U	4.7	0.76	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
1,2,4-Trichlorobenzene	1.5	U	4.7	0.69	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
1,2,4-Trimethylbenzene	1.5	U	4.7	0.55	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
1,2-Dibromo-3-Chloropropane	1.5	U	9.4	0.56	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
1,2-Dibromoethane	1.5	U	4.7	0.49	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
1,2-Dichlorobenzene	1.5	U	4.7	0.42	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
1,2-Dichloroethane	1.5	U	4.7	0.66	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
1,2-Dichloroethene, Total	1.5	U	4.7	0.37	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
1,2-Dichloropropane	1.5	U	4.7	0.52	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
1,3,5-Trimethylbenzene	1.5	U	4.7	0.54	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
1,3-Dichlorobenzene	1.5	U	4.7	0.45	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
1,3-Dichloropropane	1.5	U	4.7	0.48	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
1,4-Dichlorobenzene	1.5	U	4.7	0.73	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
2,2-Dichloropropane	1.5	U	4.7	0.41	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
2-Butanone (MEK)	6.0	U	19	1.7	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
2-Chlorotoluene	1.5	U	4.7	0.48	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
2-Hexanone	12	U Q	19	4.6	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
4-Chlorotoluene	1.5	U	4.7	0.73	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
4-Isopropyltoluene	1.5	U	4.7	0.46	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1

Client Sample ID: SS025-SS10

Date Collected: 06/05/17 15:20
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-22

Matrix: Solid
Percent Solids: 90.9

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	12	U	19	4.1	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Acetone	**35**	**Q**	19	5.1	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Benzene	1.5	U	4.7	0.44	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Bromobenzene	1.5	U	4.7	0.46	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Bromochloromethane	0.75	U	4.7	0.28	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Bromodichloromethane	0.75	U	4.7	0.21	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Bromoform	0.75	U	4.7	0.22	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Bromomethane	1.5	U	9.4	0.47	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Carbon disulfide	1.5	U	4.7	0.39	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Carbon tetrachloride	1.5	U	4.7	0.59	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Chlorobenzene	1.5	U	4.7	0.51	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Chloroethane	3.0	U	9.4	0.84	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Chloroform	0.75	U	9.4	0.27	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Chloromethane	1.5	U	9.4	0.72	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
cis-1,2-Dichloroethene	1.5	U	4.7	0.53	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
cis-1,3-Dichloropropene	3.0	U	4.7	1.2	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Dibromochloromethane	1.5	U	4.7	0.54	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Dibromomethane	3.0	U	4.7	0.79	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Dichlorodifluoromethane	1.5	U Q	9.4	0.49	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Ethylbenzene	1.5	U	4.7	0.63	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Hexachlorobutadiene	1.5	U	4.7	0.52	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Isopropyl ether	7.5	U	47	2.6	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Isopropylbenzene	1.5	U	4.7	0.55	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
m&p-Xylene	3.0	U	3.0	0.98	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Methyl iodide	1.5	U	4.7	0.41	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Methyl tert-butyl ether	0.75	U	19	0.32	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Methylene Chloride	3.0	U	4.7	1.5	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Naphthalene	1.5	U	4.7	0.59	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
n-Butylbenzene	1.5	U	4.7	0.53	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
N-Propylbenzene	1.5	U	4.7	0.55	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
o-Xylene	1.5	U	4.7	0.57	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
sec-Butylbenzene	1.5	U	4.7	0.72	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Styrene	1.5	U	4.7	0.59	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
tert-Butylbenzene	1.5	U	4.7	0.47	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Tetrachloroethene	1.5	U	4.7	0.55	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Toluene	1.5	U	4.7	0.65	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
trans-1,2-Dichloroethene	0.75	U	4.7	0.37	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
trans-1,3-Dichloropropene	1.5	U	4.7	0.63	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Trichloroethene	0.75	U	4.7	0.22	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Trichlorofluoromethane	3.0	U	9.4	0.98	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Vinyl acetate	3.0	U	9.4	1.0	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Vinyl chloride	3.0	U	4.7	1.3	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1
Xylenes (total)	0.94	U	9.4	0.57	ug/Kg	☼	06/05/17 15:20	06/16/17 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*122*		*71 - 136*	*06/05/17 15:20*	*06/16/17 17:43*	*1*
4-Bromofluorobenzene (Surr)	*93*		*79 - 119*	*06/05/17 15:20*	*06/16/17 17:43*	*1*
Dibromofluoromethane (Surr)	*119*		*78 - 119*	*06/05/17 15:20*	*06/16/17 17:43*	*1*
Toluene-d8 (Surr)	*95*		*85 - 116*	*06/05/17 15:20*	*06/16/17 17:43*	*1*

Client Sample ID: SS025-SS10

Date Collected: 06/05/17 15:20
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-22

Matrix: Solid
Percent Solids: 90.9

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.53	U	5.3	0.27	ug/Kg	☼	06/11/17 07:19	06/17/17 01:32	1
2-Methylnaphthalene	0.70	U	5.3	0.33	ug/Kg	☼	06/11/17 07:19	06/17/17 01:32	1
Acenaphthene	0.28	U	5.3	0.17	ug/Kg	☼	06/11/17 07:19	06/17/17 01:32	1
Acenaphthylene	**1.3**	**J**	5.3	0.18	ug/Kg	☼	06/11/17 07:19	06/17/17 01:32	1
Anthracene	**1.4**	**J**	5.3	0.76	ug/Kg	☼	06/11/17 07:19	06/17/17 01:32	1
Benzo[a]anthracene	**4.7**	**J**	5.3	0.95	ug/Kg	☼	06/11/17 07:19	06/17/17 01:32	1
Benzo[a]pyrene	**5.4**		5.3	0.78	ug/Kg	☼	06/11/17 07:19	06/17/17 01:32	1
Benzo[b]fluoranthene	**8.2**		5.3	1.3	ug/Kg	☼	06/11/17 07:19	06/17/17 01:32	1
Benzo[g,h,i]perylene	**3.7**	**J**	5.3	1.2	ug/Kg	☼	06/11/17 07:19	06/17/17 01:32	1
Benzo[k]fluoranthene	**3.0**	**J**	5.3	1.1	ug/Kg	☼	06/11/17 07:19	06/17/17 01:32	1
Chrysene	**6.3**		5.3	1.1	ug/Kg	☼	06/11/17 07:19	06/17/17 01:32	1
Dibenz(a,h)anthracene	2.6	U	5.3	1.4	ug/Kg	☼	06/11/17 07:19	06/17/17 01:32	1
Fluoranthene	**9.0**		5.3	1.1	ug/Kg	☼	06/11/17 07:19	06/17/17 01:32	1
Fluorene	**0.50**	**J**	5.3	0.50	ug/Kg	☼	06/11/17 07:19	06/17/17 01:32	1
Indeno[1,2,3-cd]pyrene	**3.2**	**J**	5.3	1.2	ug/Kg	☼	06/11/17 07:19	06/17/17 01:32	1
Naphthalene	**0.34**	**J**	5.3	0.34	ug/Kg	☼	06/11/17 07:19	06/17/17 01:32	1
Phenanthrene	**3.3**	**J**	5.3	1.2	ug/Kg	☼	06/11/17 07:19	06/17/17 01:32	1
Pyrene	**8.4**		5.3	1.2	ug/Kg	☼	06/11/17 07:19	06/17/17 01:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*78*		*46 - 115*	*06/11/17 07:19*	*06/17/17 01:32*	*1*
Nitrobenzene-d5 (Surr)	*80*		*44 - 125*	*06/11/17 07:19*	*06/17/17 01:32*	*1*
Terphenyl-d14 (Surr)	*72*		*58 - 133*	*06/11/17 07:19*	*06/17/17 01:32*	*1*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.7	U	1.8	0.57	ug/Kg	☼	06/16/17 13:00	06/26/17 00:24	1
4,4'-DDE	0.70	U	1.8	0.25	ug/Kg	☼	06/16/17 13:00	06/26/17 00:24	1
4,4'-DDT	1.7	U	2.1	0.61	ug/Kg	☼	06/16/17 13:00	06/26/17 00:24	1
Aldrin	0.70	U	1.8	0.26	ug/Kg	☼	06/16/17 13:00	06/26/17 00:24	1
alpha-BHC	0.70	U	1.8	0.22	ug/Kg	☼	06/16/17 13:00	06/26/17 00:24	1
alpha-Chlordane	0.70	U	1.8	0.34	ug/Kg	☼	06/16/17 13:00	06/26/17 00:24	1
beta-BHC	1.7	U	1.8	0.69	ug/Kg	☼	06/16/17 13:00	06/26/17 00:24	1
delta-BHC	1.0	U	1.8	0.42	ug/Kg	☼	06/16/17 13:00	06/26/17 00:24	1
Dieldrin	0.70	U	1.8	0.22	ug/Kg	☼	06/16/17 13:00	06/26/17 00:24	1
Endosulfan I	0.70	U	1.8	0.18	ug/Kg	☼	06/16/17 13:00	06/26/17 00:24	1
Endosulfan II	0.70	U	1.8	0.30	ug/Kg	☼	06/16/17 13:00	06/26/17 00:24	1
Endosulfan sulfate	0.70	U	1.8	0.29	ug/Kg	☼	06/16/17 13:00	06/26/17 00:24	1
Endrin	0.70	U	1.8	0.32	ug/Kg	☼	06/16/17 13:00	06/26/17 00:24	1
Endrin aldehyde	0.70	U	1.8	0.18	ug/Kg	☼	06/16/17 13:00	06/26/17 00:24	1
gamma-BHC (Lindane)	1.0	U	1.8	0.48	ug/Kg	☼	06/16/17 13:00	06/26/17 00:24	1
gamma-Chlordane	0.70	U	1.8	0.28	ug/Kg	☼	06/16/17 13:00	06/26/17 00:24	1
Heptachlor	0.70	U	1.8	0.22	ug/Kg	☼	06/16/17 13:00	06/26/17 00:24	1
Heptachlor epoxide	1.0	U	1.8	0.44	ug/Kg	☼	06/16/17 13:00	06/26/17 00:24	1
Methoxychlor	1.0	U	3.4	0.47	ug/Kg	☼	06/16/17 13:00	06/26/17 00:24	1
Toxaphene	34	U	180	16	ug/Kg	☼	06/16/17 13:00	06/26/17 00:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*65*		*63 - 121*	*06/16/17 13:00*	*06/26/17 00:24*	*1*
Tetrachloro-m-xylene (Surr)	*65*		*42 - 129*	*06/16/17 13:00*	*06/26/17 00:24*	*1*

Client Sample ID: SS025-SS10

Date Collected: 06/05/17 15:20
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-22

Matrix: Solid
Percent Solids: 90.9

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	16	U	34	5.3	ug/Kg	☼	06/16/17 13:00	06/26/17 22:27	1
Arochlor 1221	18	U	49	16	ug/Kg	☼	06/16/17 13:00	06/26/17 22:27	1
Arochlor 1232	16	U	34	5.3	ug/Kg	☼	06/16/17 13:00	06/26/17 22:27	1
Arochlor 1242	34	U	34	9.5	ug/Kg	☼	06/16/17 13:00	06/26/17 22:27	1
Arochlor 1248	21	U	34	5.8	ug/Kg	☼	06/16/17 13:00	06/26/17 22:27	1
Arochlor 1254	18	U	34	5.7	ug/Kg	☼	06/16/17 13:00	06/26/17 22:27	1
Arochlor 1260	8.0	U	34	2.8	ug/Kg	☼	06/16/17 13:00	06/26/17 22:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*75*		*59 - 130*	*06/16/17 13:00*	*06/26/17 22:27*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3500**		47	1.4	mg/Kg	☼	06/08/17 14:00	06/09/17 10:29	1
Antimony	1.4	U	1.9	0.68	mg/Kg	☼	06/08/17 14:00	06/09/17 10:29	1
Arsenic	**1.8**	**J**	2.3	0.62	mg/Kg	☼	06/08/17 14:00	06/09/17 10:29	1
Barium	**11**		1.9	0.097	mg/Kg	☼	06/08/17 14:00	06/09/17 10:29	1
Beryllium	**0.16**	**J**	0.47	0.031	mg/Kg	☼	06/08/17 14:00	06/09/17 10:29	1
Cadmium	**0.064**	**J**	0.47	0.038	mg/Kg	☼	06/08/17 14:00	06/09/17 10:29	1
Calcium	**890**		93	13	mg/Kg	☼	06/08/17 14:00	06/09/17 10:29	1
Chromium	**3.6**		3.3	0.054	mg/Kg	☼	06/08/17 14:00	06/09/17 10:29	1
Cobalt	**2.5**		0.93	0.093	mg/Kg	☼	06/08/17 14:00	06/09/17 10:29	1
Copper	**8.5**		4.7	0.20	mg/Kg	☼	06/08/17 14:00	06/13/17 01:02	1
Iron	**7300**	**Q**	75	3.5	mg/Kg	☼	06/08/17 14:00	06/09/17 10:29	1
Lead	**1.9**		0.84	0.29	mg/Kg	☼	06/08/17 14:00	06/09/17 10:29	1
Magnesium	**1500**		28	3.5	mg/Kg	☼	06/08/17 14:00	06/09/17 10:29	1
Manganese	**290**		4.2	0.093	mg/Kg	☼	06/08/17 14:00	06/12/17 16:53	1
Nickel	**5.5**		3.7	0.12	mg/Kg	☼	06/08/17 14:00	06/09/17 10:29	1
Potassium	**560**		280	38	mg/Kg	☼	06/08/17 14:00	06/09/17 10:29	1
Selenium	2.8	U	2.8	0.80	mg/Kg	☼	06/08/17 14:00	06/13/17 01:02	1
Silver	0.56	U	1.4	0.15	mg/Kg	☼	06/08/17 14:00	06/09/17 10:29	1
Sodium	190	U	470	55	mg/Kg	☼	06/08/17 14:00	06/09/17 10:29	1
Thallium	2.3	U	2.8	0.61	mg/Kg	☼	06/08/17 14:00	06/13/17 11:54	1
Vanadium	**6.8**		1.9	0.088	mg/Kg	☼	06/08/17 14:00	06/09/17 10:29	1
Zinc	**15**		7.5	0.37	mg/Kg	☼	06/08/17 14:00	06/09/17 10:29	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	18	U	22	7.3	ug/Kg	☼	06/14/17 12:49	06/14/17 17:56	1

Default Detection Limits

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97928-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Prep: 5035

Analyte	LOQ	DL	Units	Method
1,1,1,2-Tetrachloroethane	5.0	0.56	ug/Kg	8260B
1,1,1,2-Tetrachloroethane	250	21	ug/Kg	8260B
1,1,1-Trichloroethane	5.0	0.52	ug/Kg	8260B
1,1,1-Trichloroethane	250	20	ug/Kg	8260B
1,1,2,2-Tetrachloroethane	5.0	0.61	ug/Kg	8260B
1,1,2,2-Tetrachloroethane	250	29	ug/Kg	8260B
1,1,2-Trichloroethane	5.0	0.88	ug/Kg	8260B
1,1,2-Trichloroethane	250	27	ug/Kg	8260B
1,1-Dichloroethane	5.0	0.21	ug/Kg	8260B
1,1-Dichloroethane	250	51	ug/Kg	8260B
1,1-Dichloroethene	5.0	0.59	ug/Kg	8260B
1,1-Dichloroethene	250	51	ug/Kg	8260B
1,1-Dichloropropene	5.0	0.54	ug/Kg	8260B
1,1-Dichloropropene	250	48	ug/Kg	8260B
1,2,3-Trichlorobenzene	5.0	0.75	ug/Kg	8260B
1,2,3-Trichlorobenzene	250	35	ug/Kg	8260B
1,2,3-Trichloropropane	5.0	0.81	ug/Kg	8260B
1,2,3-Trichloropropane	250	47	ug/Kg	8260B
1,2,4-Trichlorobenzene	5.0	0.73	ug/Kg	8260B
1,2,4-Trichlorobenzene	250	47	ug/Kg	8260B
1,2,4-Trimethylbenzene	5.0	0.58	ug/Kg	8260B
1,2,4-Trimethylbenzene	250	31	ug/Kg	8260B
1,2-Dibromo-3-Chloropropane	10	0.60	ug/Kg	8260B
1,2-Dibromo-3-Chloropropane	500	86	ug/Kg	8260B
1,2-Dibromoethane	5.0	0.52	ug/Kg	8260B
1,2-Dibromoethane	250	25	ug/Kg	8260B
1,2-Dichlorobenzene	5.0	0.45	ug/Kg	8260B
1,2-Dichlorobenzene	500	94	ug/Kg	8260B
1,2-Dichloroethane	5.0	0.70	ug/Kg	8260B
1,2-Dichloroethane	250	25	ug/Kg	8260B
1,2-Dichloroethene, Total	5.0	0.39	ug/Kg	8260B
1,2-Dichloroethene, Total	130	22	ug/Kg	8260B
1,2-Dichloropropane	5.0	0.55	ug/Kg	8260B
1,2-Dichloropropane	250	46	ug/Kg	8260B
1,3,5-Trimethylbenzene	5.0	0.57	ug/Kg	8260B
1,3,5-Trimethylbenzene	250	39	ug/Kg	8260B
1,3-Dichlorobenzene	5.0	0.48	ug/Kg	8260B
1,3-Dichlorobenzene	250	41	ug/Kg	8260B
1,3-Dichloropropane	5.0	0.51	ug/Kg	8260B
1,3-Dichloropropane	250	28	ug/Kg	8260B
1,4-Dichlorobenzene	5.0	0.78	ug/Kg	8260B
1,4-Dichlorobenzene	250	25	ug/Kg	8260B
2,2-Dichloropropane	5.0	0.44	ug/Kg	8260B
2,2-Dichloropropane	250	27	ug/Kg	8260B
2-Butanone (MEK)	20	1.8	ug/Kg	8260B
2-Butanone (MEK)	1000	300	ug/Kg	8260B
2-Chlorotoluene	5.0	0.51	ug/Kg	8260B
2-Chlorotoluene	250	26	ug/Kg	8260B
2-Hexanone	20	4.9	ug/Kg	8260B
2-Hexanone	1000	220	ug/Kg	8260B
4-Chlorotoluene	5.0	0.78	ug/Kg	8260B

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Prep: 5035

Analyte	LOQ	DL	Units	Method
4-Chlorotoluene	250	23	ug/Kg	8260B
4-Isopropyltoluene	5.0	0.49	ug/Kg	8260B
4-Isopropyltoluene	250	32	ug/Kg	8260B
4-Methyl-2-pentanone (MIBK)	20	4.4	ug/Kg	8260B
4-Methyl-2-pentanone (MIBK)	1000	230	ug/Kg	8260B
Acetone	20	5.4	ug/Kg	8260B
Acetone	1500	400	ug/Kg	8260B
Benzene	5.0	0.47	ug/Kg	8260B
Benzene	250	45	ug/Kg	8260B
Bromobenzene	5.0	0.49	ug/Kg	8260B
Bromobenzene	250	19	ug/Kg	8260B
Bromochloromethane	5.0	0.30	ug/Kg	8260B
Bromochloromethane	250	47	ug/Kg	8260B
Bromodichloromethane	5.0	0.22	ug/Kg	8260B
Bromodichloromethane	250	40	ug/Kg	8260B
Bromoform	5.0	0.23	ug/Kg	8260B
Bromoform	250	160	ug/Kg	8260B
Bromomethane	10	0.50	ug/Kg	8260B
Bromomethane	500	44	ug/Kg	8260B
Carbon disulfide	5.0	0.42	ug/Kg	8260B
Carbon disulfide	250	64	ug/Kg	8260B
Carbon tetrachloride	5.0	0.63	ug/Kg	8260B
Carbon tetrachloride	250	17	ug/Kg	8260B
Chlorobenzene	5.0	0.54	ug/Kg	8260B
Chlorobenzene	250	30	ug/Kg	8260B
Chloroethane	10	0.89	ug/Kg	8260B
Chloroethane	500	44	ug/Kg	8260B
Chloroform	10	0.29	ug/Kg	8260B
Chloroform	250	46	ug/Kg	8260B
Chloromethane	10	0.77	ug/Kg	8260B
Chloromethane	500	50	ug/Kg	8260B
cis-1,2-Dichloroethene	5.0	0.56	ug/Kg	8260B
cis-1,2-Dichloroethene	130	22	ug/Kg	8260B
cis-1,3-Dichloropropene	5.0	1.3	ug/Kg	8260B
cis-1,3-Dichloropropene	250	27	ug/Kg	8260B
Dibromochloromethane	5.0	0.57	ug/Kg	8260B
Dibromochloromethane	250	33	ug/Kg	8260B
Dibromomethane	5.0	0.84	ug/Kg	8260B
Dibromomethane	250	30	ug/Kg	8260B
Dichlorodifluoromethane	10	0.52	ug/Kg	8260B
Dichlorodifluoromethane	500	22	ug/Kg	8260B
Ethylbenzene	5.0	0.67	ug/Kg	8260B
Ethylbenzene	250	34	ug/Kg	8260B
Hexachlorobutadiene	5.0	0.55	ug/Kg	8260B
Hexachlorobutadiene	250	49	ug/Kg	8260B
Isopropyl ether	50	2.7	ug/Kg	8260B
Isopropyl ether	2500	210	ug/Kg	8260B
Isopropylbenzene	5.0	0.59	ug/Kg	8260B
Isopropylbenzene	250	29	ug/Kg	8260B
m&p-Xylene	3.2	1.0	ug/Kg	8260B
m&p-Xylene	250	78	ug/Kg	8260B

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Prep: 5035

Analyte	LOQ	DL	Units	Method
Methyl iodide	5.0	0.44	ug/Kg	8260B
Methyl iodide	250	21	ug/Kg	8260B
Methyl tert-butyl ether	20	0.34	ug/Kg	8260B
Methyl tert-butyl ether	250	50	ug/Kg	8260B
Methylene Chloride	5.0	1.6	ug/Kg	8260B
Methylene Chloride	250	69	ug/Kg	8260B
Naphthalene	5.0	0.63	ug/Kg	8260B
Naphthalene	500	38	ug/Kg	8260B
n-Butylbenzene	5.0	0.56	ug/Kg	8260B
n-Butylbenzene	250	32	ug/Kg	8260B
N-Propylbenzene	5.0	0.58	ug/Kg	8260B
N-Propylbenzene	250	41	ug/Kg	8260B
o-Xylene	5.0	0.61	ug/Kg	8260B
o-Xylene	130	35	ug/Kg	8260B
sec-Butylbenzene	5.0	0.77	ug/Kg	8260B
sec-Butylbenzene	250	38	ug/Kg	8260B
Styrene	5.0	0.63	ug/Kg	8260B
Styrene	250	26	ug/Kg	8260B
tert-Butylbenzene	5.0	0.50	ug/Kg	8260B
tert-Butylbenzene	250	28	ug/Kg	8260B
Tetrachloroethene	5.0	0.59	ug/Kg	8260B
Tetrachloroethene	250	27	ug/Kg	8260B
Toluene	5.0	0.69	ug/Kg	8260B
Toluene	250	39	ug/Kg	8260B
trans-1,2-Dichloroethene	5.0	0.39	ug/Kg	8260B
trans-1,2-Dichloroethene	250	45	ug/Kg	8260B
trans-1,3-Dichloropropene	5.0	0.67	ug/Kg	8260B
trans-1,3-Dichloropropene	250	41	ug/Kg	8260B
Trichloroethene	5.0	0.23	ug/Kg	8260B
Trichloroethene	250	23	ug/Kg	8260B
Trichlorofluoromethane	10	1.0	ug/Kg	8260B
Trichlorofluoromethane	500	50	ug/Kg	8260B
Vinyl acetate	10	1.1	ug/Kg	8260B
Vinyl acetate	500	70	ug/Kg	8260B
Vinyl chloride	5.0	1.3	ug/Kg	8260B
Vinyl chloride	500	27	ug/Kg	8260B
Xylenes (total)	10	0.61	ug/Kg	8260B
Xylenes (total)	130	35	ug/Kg	8260B

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Prep: 3510C

Analyte	LOQ	DL	Units	Method
1-Methylnaphthalene	0.10	0.0057	ug/L	8270D SIM
2-Methylnaphthalene	0.10	0.0052	ug/L	8270D SIM
Acenaphthene	0.10	0.011	ug/L	8270D SIM
Acenaphthylene	0.10	0.010	ug/L	8270D SIM
Anthracene	0.10	0.014	ug/L	8270D SIM
Benzo[a]anthracene	0.10	0.0032	ug/L	8270D SIM
Benzo[a]pyrene	0.10	0.0051	ug/L	8270D SIM
Benzo[b]fluoranthene	0.10	0.0034	ug/L	8270D SIM

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Prep: 3510C

Analyte	LOQ	DL	Units	Method
Benzo[g,h,i]perylene	0.10	0.0036	ug/L	8270D SIM
Benzo[k]fluoranthene	0.10	0.0051	ug/L	8270D SIM
Chrysene	0.10	0.0032	ug/L	8270D SIM
Dibenz(a,h)anthracene	0.10	0.0048	ug/L	8270D SIM
Fluoranthene	0.10	0.0045	ug/L	8270D SIM
Fluorene	0.10	0.019	ug/L	8270D SIM
Indeno[1,2,3-cd]pyrene	0.10	0.015	ug/L	8270D SIM
Naphthalene	0.10	0.0053	ug/L	8270D SIM
Phenanthrene	0.10	0.0098	ug/L	8270D SIM
Pyrene	0.10	0.0081	ug/L	8270D SIM

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Prep: 3546

Analyte	LOQ	DL	Units	Method
1-Methylnaphthalene	5.0	0.26	ug/Kg	8270D SIM
2-Methylnaphthalene	5.0	0.31	ug/Kg	8270D SIM
Acenaphthene	5.0	0.16	ug/Kg	8270D SIM
Acenaphthylene	5.0	0.17	ug/Kg	8270D SIM
Anthracene	5.0	0.72	ug/Kg	8270D SIM
Benzo[a]anthracene	5.0	0.90	ug/Kg	8270D SIM
Benzo[a]pyrene	5.0	0.74	ug/Kg	8270D SIM
Benzo[b]fluoranthene	5.0	1.2	ug/Kg	8270D SIM
Benzo[g,h,i]perylene	5.0	1.1	ug/Kg	8270D SIM
Benzo[k]fluoranthene	5.0	1.0	ug/Kg	8270D SIM
Chrysene	5.0	1.0	ug/Kg	8270D SIM
Dibenz(a,h)anthracene	5.0	1.3	ug/Kg	8270D SIM
Fluoranthene	5.0	1.0	ug/Kg	8270D SIM
Fluorene	5.0	0.47	ug/Kg	8270D SIM
Indeno[1,2,3-cd]pyrene	5.0	1.1	ug/Kg	8270D SIM
Naphthalene	5.0	0.33	ug/Kg	8270D SIM
Phenanthrene	5.0	1.1	ug/Kg	8270D SIM
Pyrene	5.0	1.1	ug/Kg	8270D SIM

Method: 8081B - Organochlorine Pesticides (GC)

Prep: 3546

Analyte	LOQ	DL	Units	Method
4,4'-DDD	1.7	0.55	ug/Kg	8081B
4,4'-DDE	1.7	0.24	ug/Kg	8081B
4,4'-DDT	2.0	0.59	ug/Kg	8081B
Aldrin	1.7	0.25	ug/Kg	8081B
alpha-BHC	1.7	0.21	ug/Kg	8081B
alpha-Chlordane	1.7	0.32	ug/Kg	8081B
beta-BHC	1.7	0.66	ug/Kg	8081B
delta-BHC	1.7	0.40	ug/Kg	8081B
Dieldrin	1.7	0.21	ug/Kg	8081B
Endosulfan I	1.7	0.18	ug/Kg	8081B
Endosulfan II	1.7	0.29	ug/Kg	8081B
Endosulfan sulfate	1.7	0.28	ug/Kg	8081B
Endrin	1.7	0.31	ug/Kg	8081B
Endrin aldehyde	1.7	0.17	ug/Kg	8081B

Default Detection Limits

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97928-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Prep: 3546

Analyte	LOQ	DL	Units	Method
gamma-BHC (Lindane)	1.7	0.46	ug/Kg	8081B
gamma-Chlordane	1.7	0.27	ug/Kg	8081B
Heptachlor	1.7	0.21	ug/Kg	8081B
Heptachlor epoxide	1.7	0.43	ug/Kg	8081B
Methoxychlor	3.3	0.45	ug/Kg	8081B
Toxaphene	170	16	ug/Kg	8081B

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Prep: 3546

Analyte	LOQ	DL	Units	Method
Arochlor 1016	33	5.1	ug/Kg	8082A
Arochlor 1221	47	16	ug/Kg	8082A
Arochlor 1232	33	5.1	ug/Kg	8082A
Arochlor 1242	33	9.1	ug/Kg	8082A
Arochlor 1248	33	5.6	ug/Kg	8082A
Arochlor 1254	33	5.5	ug/Kg	8082A
Arochlor 1260	33	2.7	ug/Kg	8082A

Method: 6010C - Metals (ICP)

Prep: 3050B

Analyte	LOQ	DL	Units	Method
Aluminum	50	1.6	mg/Kg	6010C
Antimony	2.0	0.73	mg/Kg	6010C
Arsenic	2.5	0.67	mg/Kg	6010C
Barium	2.0	0.10	mg/Kg	6010C
Beryllium	0.50	0.033	mg/Kg	6010C
Cadmium	0.50	0.041	mg/Kg	6010C
Calcium	100	14	mg/Kg	6010C
Chromium	3.5	0.058	mg/Kg	6010C
Cobalt	1.0	0.10	mg/Kg	6010C
Copper	5.0	0.22	mg/Kg	6010C
Iron	80	3.8	mg/Kg	6010C
Lead	0.90	0.31	mg/Kg	6010C
Magnesium	30	3.7	mg/Kg	6010C
Manganese	4.5	0.10	mg/Kg	6010C
Nickel	4.0	0.13	mg/Kg	6010C
Potassium	300	41	mg/Kg	6010C
Selenium	3.0	0.86	mg/Kg	6010C
Silver	1.5	0.16	mg/Kg	6010C
Sodium	500	59	mg/Kg	6010C
Thallium	3.0	0.65	mg/Kg	6010C
Vanadium	2.0	0.094	mg/Kg	6010C
Zinc	8.0	0.40	mg/Kg	6010C

Method: 7471A - Mercury (CVAA)

Prep: 7471A

Analyte	LOQ	DL	Units	Method
Mercury	17	5.5	ug/Kg	7471A

Surrogate Summary

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97928-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(71-136)	(79-119)	(78-119)	(85-116)
280-97928-1	SS025-SS07	101	94	104	93
280-97928-2	SS025-TB02	106	93	112	97
280-97928-3	SS025-SB06(0-2)	100	96	103	93
280-97928-4	SS025-SB06(2-4)	102	89	105	93
280-97928-5	SS025-SS08	115	98	113	98
280-97928-6	SS025-SB07(0-2)	97	89	101	91
280-97928-7	SS025-SB07(2-4)	103	89	101	91
280-97928-8	SS025-SB01(0-2)	101	98	106	101
280-97928-9	SS025-SB01(0-2)-a	102	99	102	96
280-97928-10	SS025-SB08(0-2)	101	89	103	91
280-97928-11	SS025-SB08(2-4)	98	104 Q	104	102
280-97928-12	SS025-SS09	104	102	105	94
280-97928-14	SS025-SB09(0-2)	98	112	102	100
280-97928-15	SS025-SB09(2-4)	104	109	108	98
280-97928-16	SS025-SB09(4-6)	111	99	110	97
280-97928-17	SS025-SB09(6-8)	121	94	117	92
280-97928-18	SS025-SB10(0-2)	109	90	114	91
280-97928-19	SS025-SB10(2-4)	117	91	116	93
280-97928-20	SS025-SB10(4-6)	102	112	106	116
280-97928-21	SS025-SB10(2-4)-a	117	93	117	94
280-97928-22	SS025-SS10	122	93	119	95
LCS 280-377540/3-A	Lab Control Sample	78	104	85	88
LCS 280-377664/2-A	Lab Control Sample	97	100	98	98
LCS 280-377664/3-A	Lab Control Sample	87	106	91	91
LCS 280-377666/2-A	Lab Control Sample	87	102	94	97
LCS 280-377666/3-A	Lab Control Sample	87	112	93	90
LCS 280-377884/2-A	Lab Control Sample	102	99	103	106
LCSD 280-377884/3-A	Lab Control Sample Dup	102	99	102	105
MB 280-377540/1-A	Method Blank	92	93	98	87
MB 280-377664/1-A	Method Blank	106	95	111	90
MB 280-377666/1-A	Method Blank	105	104	110	94
MB 280-377884/1-A	Method Blank	97	104	99	108

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPH
Lab Sample ID	Client Sample ID	(46-115)	(44-125)	(58-133)
280-97928-1	SS025-SS07	67	81	62
280-97928-1 MS	SS025-SS07	72	96	67
280-97928-1 MSD	SS025-SS07	73	98	68
280-97928-3	SS025-SB06(0-2)	68	65	62

Surrogate Summary

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97928-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPH
Lab Sample ID	Client Sample ID	(46-115)	(44-125)	(58-133)
280-97928-4	SS025-SB06(2-4)	46	41 Q	66
280-97928-5	SS025-SS08	61	50	66
280-97928-6	SS025-SB07(0-2)	74	72	62
280-97928-7	SS025-SB07(2-4)	62	63	55 Q
280-97928-8	SS025-SB01(0-2)	72	72	107
280-97928-8 - DL	SS025-SB01(0-2)	502 D Q	0 D Q	1746 D Q
280-97928-9	SS025-SB01(0-2)-a	84	89	87
280-97928-9 - DL	SS025-SB01(0-2)-a	94 D	0 D Q	118 D
280-97928-10	SS025-SB08(0-2)	81	82	69
280-97928-11	SS025-SB08(2-4)	88	81	75
280-97928-12	SS025-SS09	84	95	77
280-97928-14	SS025-SB09(0-2)	85	81	78
280-97928-15	SS025-SB09(2-4)	88	90	75
280-97928-16	SS025-SB09(4-6)	81	96	78
280-97928-17	SS025-SB09(6-8)	89	91	77
280-97928-18	SS025-SB10(0-2)	90	94	77
280-97928-19	SS025-SB10(2-4)	82	89	74
280-97928-20	SS025-SB10(4-6)	88	90	75
280-97928-21	SS025-SB10(2-4)-a	92	88	76
280-97928-22	SS025-SS10	78	80	72
LCS 280-376824/2-A	Lab Control Sample	90	92	85
MB 280-376824/1-A	Method Blank	86	86	97

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPH
Lab Sample ID	Client Sample ID	(53-106)	(55-111)	(58-132)
280-97928-13	SS025-AB-060517	74	73	84
LCS 280-376856/2-A	Lab Control Sample	81	83	107
LCSD 280-376856/3-A	Lab Control Sample Dup	86	88	83
MB 280-376856/1-A	Method Blank	78	84	85

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

Surrogate Summary

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97928-1

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCB2 (63-121)	TCX1 (42-129)
280-97928-1	SS025-SS07	79	81
280-97928-15	SS025-SB09(2-4)	74	51
280-97928-17	SS025-SB09(6-8)	66	62

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCB1 (63-121)	TCX1 (42-129)
280-97928-3	SS025-SB06(0-2)	69	64
280-97928-3 MS	SS025-SB06(0-2)	24 Q	22 Q
280-97928-3 MS	SS025-SB06(0-2)	82	79
280-97928-3 MSD	SS025-SB06(0-2)	72	78
280-97928-3 MSD	SS025-SB06(0-2)	89	69
280-97928-4	SS025-SB06(2-4)	76	71
280-97928-5	SS025-SS08	71	83
280-97928-6	SS025-SB07(0-2)	75	81
280-97928-8 - DL	SS025-SB01(0-2)	0 D Q	69 D
280-97928-8	SS025-SB01(0-2)	0 Q	45
280-97928-9	SS025-SB01(0-2)-a	697 Q	59
280-97928-10	SS025-SB08(0-2)	85	84
280-97928-11	SS025-SB08(2-4)	64	64
280-97928-12	SS025-SS09	97	50
280-97928-14 - DL	SS025-SB09(0-2)	94 D	81 D
280-97928-16	SS025-SB09(4-6)	68	56
280-97928-18	SS025-SB10(0-2)	72	78
280-97928-19	SS025-SB10(2-4)	79	80
280-97928-20	SS025-SB10(4-6)	68	69
280-97928-21	SS025-SB10(2-4)-a	75	79
280-97928-22	SS025-SS10	65	65
LCS 280-377615/2-A	Lab Control Sample	86	85
LCS 280-377615/3-A	Lab Control Sample	83	85
MB 280-377615/1-A	Method Blank	87	85

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene (Surr)

Method: 8081B - Organochlorine Pesticides (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DCB2 (63-121)	TCX2 (42-129)
280-97928-7	SS025-SB07(2-4)	64	67

Surrogate Summary

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97928-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	DCB2 (63-121)	TCX2 (42-129)								
280-97928-14	SS025-SB09(0-2)	77	77								

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)
TCX = Tetrachloro-m-xylene (Surr)

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	DCB2 (59-130)									
280-97928-1	SS025-SS07	81									
280-97928-3	SS025-SB06(0-2)	87									
280-97928-4	SS025-SB06(2-4)	83									
280-97928-4 MS	SS025-SB06(2-4)	86									
280-97928-4 MSD	SS025-SB06(2-4)	81									
280-97928-5	SS025-SS08	82									
280-97928-6	SS025-SB07(0-2)	84									
280-97928-7	SS025-SB07(2-4)	62									
280-97928-8	SS025-SB01(0-2)	74									
280-97928-9	SS025-SB01(0-2)-a	76									
280-97928-10	SS025-SB08(0-2)	84									
280-97928-11	SS025-SB08(2-4)	82									
280-97928-12	SS025-SS09	72									
280-97928-14	SS025-SB09(0-2)	78									
280-97928-15	SS025-SB09(2-4)	65									
280-97928-16	SS025-SB09(4-6)	54 Q									
280-97928-17	SS025-SB09(6-8)	69									
280-97928-18	SS025-SB10(0-2)	81									
280-97928-19	SS025-SB10(2-4)	80									
280-97928-20	SS025-SB10(4-6)	77									
280-97928-21	SS025-SB10(2-4)-a	85									
280-97928-22	SS025-SS10	75									
LCS 280-377615/4-A	Lab Control Sample	92									
MB 280-377615/1-A	Method Blank	90									

Surrogate Legend

DCB = DCB Decachlorobiphenyl (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-377540/1-A
Matrix: Solid
Analysis Batch: 377520

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377540

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.6	U	5.0	0.56	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
1,1,1-Trichloroethane	1.6	U	5.0	0.52	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
1,1,2,2-Tetrachloroethane	1.6	U	5.0	0.61	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
1,1,2-Trichloroethane	3.2	U	5.0	0.88	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
1,1-Dichloroethane	0.80	U	5.0	0.21	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
1,1-Dichloroethene	1.6	U	5.0	0.59	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
1,1-Dichloropropene	1.6	U	5.0	0.54	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
1,2,3-Trichlorobenzene	1.6	U	5.0	0.75	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
1,2,3-Trichloropropane	3.2	U	5.0	0.81	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
1,2,4-Trichlorobenzene	1.6	U	5.0	0.73	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
1,2,4-Trimethylbenzene	1.6	U	5.0	0.58	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
1,2-Dibromo-3-Chloropropane	1.6	U	10	0.60	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
1,2-Dibromoethane	1.6	U	5.0	0.52	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
1,2-Dichlorobenzene	1.6	U	5.0	0.45	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
1,2-Dichloroethane	1.6	U	5.0	0.70	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
1,2-Dichloroethene, Total	1.6	U	5.0	0.39	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
1,2-Dichloropropane	1.6	U	5.0	0.55	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
1,3,5-Trimethylbenzene	1.6	U	5.0	0.57	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
1,3-Dichlorobenzene	1.6	U	5.0	0.48	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
1,3-Dichloropropane	1.6	U	5.0	0.51	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
1,4-Dichlorobenzene	1.6	U	5.0	0.78	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
2,2-Dichloropropane	1.6	U	5.0	0.44	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
2-Butanone (MEK)	6.4	U	20	1.8	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
2-Chlorotoluene	1.6	U	5.0	0.51	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
2-Hexanone	13	U Q	20	4.9	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
4-Chlorotoluene	1.6	U	5.0	0.78	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
4-Isopropyltoluene	1.6	U	5.0	0.49	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
4-Methyl-2-pentanone (MIBK)	13	U	20	4.4	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Acetone	17.4	J Q	20	5.4	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Benzene	1.6	U	5.0	0.47	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Bromobenzene	1.6	U	5.0	0.49	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Bromochloromethane	0.80	U	5.0	0.30	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Bromodichloromethane	0.80	U	5.0	0.22	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Bromoform	0.80	U	5.0	0.23	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Bromomethane	1.6	U	10	0.50	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Carbon disulfide	1.6	U	5.0	0.42	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Carbon tetrachloride	1.6	U	5.0	0.63	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Chlorobenzene	1.6	U	5.0	0.54	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Chloroethane	3.2	U	10	0.89	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Chloroform	0.80	U	10	0.29	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Chloromethane	1.6	U	10	0.77	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
cis-1,2-Dichloroethene	1.6	U	5.0	0.56	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
cis-1,3-Dichloropropene	3.2	U	5.0	1.3	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Dibromochloromethane	1.6	U	5.0	0.57	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Dibromomethane	3.2	U	5.0	0.84	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Dichlorodifluoromethane	1.6	U Q	10	0.52	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Ethylbenzene	1.6	U	5.0	0.67	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Hexachlorobutadiene	1.6	U	5.0	0.55	ug/Kg		06/15/17 15:00	06/15/17 19:15	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-377540/1-A
Matrix: Solid
Analysis Batch: 377520

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377540

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	8.0	U	50	2.7	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Isopropylbenzene	1.6	U	5.0	0.59	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
m&p-Xylene	3.2	U	3.2	1.0	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Methyl iodide	1.6	U	5.0	0.44	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Methyl tert-butyl ether	0.80	U	20	0.34	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Methylene Chloride	3.2	U	5.0	1.6	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Naphthalene	1.6	U	5.0	0.63	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
n-Butylbenzene	1.6	U	5.0	0.56	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
N-Propylbenzene	1.6	U	5.0	0.58	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
o-Xylene	1.6	U	5.0	0.61	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
sec-Butylbenzene	1.6	U	5.0	0.77	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Styrene	1.6	U	5.0	0.63	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
tert-Butylbenzene	1.6	U	5.0	0.50	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Tetrachloroethene	1.6	U	5.0	0.59	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Toluene	1.6	U	5.0	0.69	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
trans-1,2-Dichloroethene	0.80	U	5.0	0.39	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
trans-1,3-Dichloropropene	1.6	U	5.0	0.67	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Trichloroethene	0.80	U	5.0	0.23	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Trichlorofluoromethane	3.2	U	10	1.0	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Vinyl acetate	3.2	U	10	1.1	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Vinyl chloride	3.2	U	5.0	1.3	ug/Kg		06/15/17 15:00	06/15/17 19:15	1
Xylenes (total)	1.0	U	10	0.61	ug/Kg		06/15/17 15:00	06/15/17 19:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*71 - 136*	*06/15/17 15:00*	*06/15/17 19:15*	*1*
4-Bromofluorobenzene (Surr)	*93*		*79 - 119*	*06/15/17 15:00*	*06/15/17 19:15*	*1*
Dibromofluoromethane (Surr)	*98*		*78 - 119*	*06/15/17 15:00*	*06/15/17 19:15*	*1*
Toluene-d8 (Surr)	*87*		*85 - 116*	*06/15/17 15:00*	*06/15/17 19:15*	*1*

Lab Sample ID: LCS 280-377540/3-A
Matrix: Solid
Analysis Batch: 377520

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377540

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Isopropyl ether			50.0	43.0	J	ug/Kg		86	69 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*71 - 136*
4-Bromofluorobenzene (Surr)	*104*		*79 - 119*
Dibromofluoromethane (Surr)	*85*		*78 - 119*
Toluene-d8 (Surr)	*88*		*85 - 116*

Lab Sample ID: MB 280-377664/1-A
Matrix: Solid
Analysis Batch: 377645

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377664

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.6	U	5.0	0.56	ug/Kg		06/16/17 12:00	06/16/17 13:09	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-377664/1-A
Matrix: Solid
Analysis Batch: 377645

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377664

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.6	U	5.0	0.52	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
1,1,2,2-Tetrachloroethane	1.6	U	5.0	0.61	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
1,1,2-Trichloroethane	3.2	U	5.0	0.88	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
1,1-Dichloroethane	0.80	U	5.0	0.21	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
1,1-Dichloroethene	1.6	U	5.0	0.59	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
1,1-Dichloropropene	1.6	U	5.0	0.54	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
1,2,3-Trichlorobenzene	1.6	U	5.0	0.75	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
1,2,3-Trichloropropane	3.2	U	5.0	0.81	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
1,2,4-Trichlorobenzene	1.6	U	5.0	0.73	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
1,2,4-Trimethylbenzene	1.6	U	5.0	0.58	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
1,2-Dibromo-3-Chloropropane	1.6	U	10	0.60	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
1,2-Dibromoethane	1.6	U	5.0	0.52	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
1,2-Dichlorobenzene	1.6	U	5.0	0.45	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
1,2-Dichloroethane	1.6	U	5.0	0.70	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
1,2-Dichloroethene, Total	1.6	U	5.0	0.39	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
1,2-Dichloropropane	1.6	U	5.0	0.55	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
1,3,5-Trimethylbenzene	1.6	U	5.0	0.57	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
1,3-Dichlorobenzene	1.6	U	5.0	0.48	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
1,3-Dichloropropane	1.6	U	5.0	0.51	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
1,4-Dichlorobenzene	1.6	U	5.0	0.78	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
2,2-Dichloropropane	1.6	U	5.0	0.44	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
2-Butanone (MEK)	6.4	U	20	1.8	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
2-Chlorotoluene	1.6	U	5.0	0.51	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
2-Hexanone	13	U	20	4.9	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
4-Chlorotoluene	1.6	U	5.0	0.78	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
4-Isopropyltoluene	1.6	U	5.0	0.49	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
4-Methyl-2-pentanone (MIBK)	13	U	20	4.4	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Acetone	9.66	J	20	5.4	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Benzene	1.6	U	5.0	0.47	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Bromobenzene	1.6	U	5.0	0.49	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Bromochloromethane	0.80	U	5.0	0.30	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Bromodichloromethane	0.80	U	5.0	0.22	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Bromoform	0.80	U	5.0	0.23	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Bromomethane	1.6	U	10	0.50	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Carbon disulfide	1.6	U	5.0	0.42	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Carbon tetrachloride	1.6	U	5.0	0.63	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Chlorobenzene	1.6	U	5.0	0.54	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Chloroethane	3.2	U	10	0.89	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Chloroform	0.80	U	10	0.29	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Chloromethane	1.6	U	10	0.77	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
cis-1,2-Dichloroethene	1.6	U	5.0	0.56	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
cis-1,3-Dichloropropene	3.2	U	5.0	1.3	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Dibromochloromethane	1.6	U	5.0	0.57	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Dibromomethane	3.2	U	5.0	0.84	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Dichlorodifluoromethane	1.6	U	10	0.52	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Ethylbenzene	1.6	U	5.0	0.67	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Hexachlorobutadiene	1.6	U	5.0	0.55	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Isopropyl ether	8.0	U	50	2.7	ug/Kg		06/16/17 12:00	06/16/17 13:09	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-377664/1-A
Matrix: Solid
Analysis Batch: 377645

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377664

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	1.6	U	5.0	0.59	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
m&p-Xylene	3.2	U	3.2	1.0	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Methyl iodide	1.6	U	5.0	0.44	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Methyl tert-butyl ether	0.80	U	20	0.34	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Methylene Chloride	3.2	U	5.0	1.6	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Naphthalene	1.6	U	5.0	0.63	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
n-Butylbenzene	1.6	U	5.0	0.56	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
N-Propylbenzene	1.6	U	5.0	0.58	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
o-Xylene	1.6	U	5.0	0.61	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
sec-Butylbenzene	1.6	U	5.0	0.77	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Styrene	1.6	U	5.0	0.63	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
tert-Butylbenzene	1.6	U	5.0	0.50	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Tetrachloroethene	1.6	U	5.0	0.59	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Toluene	1.6	U	5.0	0.69	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
trans-1,2-Dichloroethene	0.80	U	5.0	0.39	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
trans-1,3-Dichloropropene	1.6	U	5.0	0.67	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Trichloroethene	0.80	U	5.0	0.23	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Trichlorofluoromethane	3.2	U	10	1.0	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Vinyl acetate	3.2	U	10	1.1	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Vinyl chloride	3.2	U	5.0	1.3	ug/Kg		06/16/17 12:00	06/16/17 13:09	1
Xylenes (total)	1.0	U	10	0.61	ug/Kg		06/16/17 12:00	06/16/17 13:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*71 - 136*	*06/16/17 12:00*	*06/16/17 13:09*	*1*
4-Bromofluorobenzene (Surr)	*95*		*79 - 119*	*06/16/17 12:00*	*06/16/17 13:09*	*1*
Dibromofluoromethane (Surr)	*111*		*78 - 119*	*06/16/17 12:00*	*06/16/17 13:09*	*1*
Toluene-d8 (Surr)	*90*		*85 - 116*	*06/16/17 12:00*	*06/16/17 13:09*	*1*

Lab Sample ID: LCS 280-377664/2-A
Matrix: Solid
Analysis Batch: 377645

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377664

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	42.1		ug/Kg		84	78 - 125
1,1,1-Trichloroethane	50.0	45.4		ug/Kg		91	73 - 130
1,1,2,2-Tetrachloroethane	50.0	39.3		ug/Kg		79	70 - 124
1,1,2-Trichloroethane	50.0	47.1		ug/Kg		94	78 - 121
1,1-Dichloroethane	50.0	44.1		ug/Kg		88	76 - 125
1,1-Dichloroethene	50.0	46.4		ug/Kg		93	70 - 131
1,1-Dichloropropene	50.0	46.2		ug/Kg		92	76 - 125
1,2,3-Trichlorobenzene	50.0	42.3		ug/Kg		85	66 - 130
1,2,3-Trichloropropane	50.0	41.9		ug/Kg		84	73 - 125
1,2,4-Trichlorobenzene	50.0	43.1		ug/Kg		86	67 - 129
1,2,4-Trimethylbenzene	50.0	42.3		ug/Kg		85	75 - 123
1,2-Dibromo-3-Chloropropane	50.0	40.4		ug/Kg		81	61 - 132
1,2-Dibromoethane	50.0	41.7		ug/Kg		83	78 - 122
1,2-Dichlorobenzene	50.0	42.3		ug/Kg		85	78 - 121
1,2-Dichloroethane	50.0	43.6		ug/Kg		87	73 - 128

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-377664/2-A
Matrix: Solid
Analysis Batch: 377645

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377664

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethene, Total	100	94.1		ug/Kg		94	78 - 122
1,2-Dichloropropane	50.0	45.3		ug/Kg		91	76 - 123
1,3,5-Trimethylbenzene	50.0	42.4		ug/Kg		85	73 - 124
1,3-Dichlorobenzene	50.0	43.5		ug/Kg		87	77 - 121
1,3-Dichloropropane	50.0	41.0		ug/Kg		82	77 - 121
1,4-Dichlorobenzene	50.0	39.6		ug/Kg		79	75 - 120
2,2-Dichloropropane	50.0	45.8		ug/Kg		92	67 - 133
2-Butanone (MEK)	160	162		ug/Kg		102	51 - 148
2-Chlorotoluene	50.0	41.0		ug/Kg		82	75 - 122
2-Hexanone	160	135		ug/Kg		84	53 - 145
4-Chlorotoluene	50.0	43.0		ug/Kg		86	72 - 124
4-Isopropyltoluene	50.0	43.3		ug/Kg		87	73 - 127
4-Methyl-2-pentanone (MIBK)	160	169		ug/Kg		106	65 - 135
Acetone	160	174		ug/Kg		109	36 - 164
Benzene	50.0	46.6		ug/Kg		93	77 - 121
Bromobenzene	50.0	43.3		ug/Kg		87	78 - 121
Bromochloromethane	50.0	46.4		ug/Kg		93	78 - 125
Bromodichloromethane	50.0	45.7		ug/Kg		91	75 - 127
Bromoform	50.0	42.4		ug/Kg		85	67 - 132
Bromomethane	40.0	39.5		ug/Kg		99	53 - 143
Carbon disulfide	50.0	45.1		ug/Kg		90	63 - 132
Carbon tetrachloride	50.0	44.6		ug/Kg		89	70 - 135
Chlorobenzene	50.0	40.5		ug/Kg		81	79 - 120
Chloroethane	40.0	46.5		ug/Kg		116	59 - 139
Chloroform	50.0	43.4		ug/Kg		87	78 - 123
Chloromethane	40.0	47.7		ug/Kg		119	50 - 136
cis-1,2-Dichloroethene	50.0	45.3		ug/Kg		91	77 - 123
cis-1,3-Dichloropropene	50.0	38.7		ug/Kg		77	74 - 126
Dibromochloromethane	50.0	42.2		ug/Kg		84	74 - 126
Dibromomethane	50.0	45.1		ug/Kg		90	78 - 125
Dichlorodifluoromethane	40.0	52.5		ug/Kg		131	29 - 149
Ethylbenzene	50.0	45.8		ug/Kg		92	76 - 122
Hexachlorobutadiene	50.0	42.9		ug/Kg		86	61 - 135
Isopropylbenzene	50.0	42.1		ug/Kg		84	68 - 134
m&p-Xylene	50.0	42.3		ug/Kg		85	77 - 124
Methyl iodide	50.0	44.9		ug/Kg		90	71 - 131
Methyl tert-butyl ether	50.0	44.7		ug/Kg		89	73 - 125
Methylene Chloride	50.0	47.8		ug/Kg		96	70 - 128
Naphthalene	50.0	42.6		ug/Kg		85	62 - 129
n-Butylbenzene	50.0	44.6		ug/Kg		89	70 - 128
N-Propylbenzene	50.0	42.3		ug/Kg		85	73 - 125
o-Xylene	50.0	43.5		ug/Kg		87	77 - 123
sec-Butylbenzene	50.0	41.0		ug/Kg		82	73 - 126
Styrene	50.0	42.1		ug/Kg		84	76 - 124
tert-Butylbenzene	50.0	42.1		ug/Kg		84	73 - 125
Tetrachloroethene	50.0	41.7		ug/Kg		83	73 - 128
Toluene	50.0	48.8		ug/Kg		98	77 - 121
trans-1,2-Dichloroethene	50.0	48.8		ug/Kg		98	74 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-377664/2-A
Matrix: Solid
Analysis Batch: 377645

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377664

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	50.0	42.2		ug/Kg		84	71 - 130
Trichloroethene	50.0	45.7		ug/Kg		91	77 - 123
Trichlorofluoromethane	40.0	46.6		ug/Kg		117	62 - 140
Vinyl acetate	100	82.5		ug/Kg		82	50 - 151
Vinyl chloride	40.0	47.5		ug/Kg		119	56 - 135
Xylenes (total)	100	85.8		ug/Kg		86	78 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*71 - 136*
4-Bromofluorobenzene (Surr)	*100*		*79 - 119*
Dibromofluoromethane (Surr)	*98*		*78 - 119*
Toluene-d8 (Surr)	*98*		*85 - 116*

Lab Sample ID: LCS 280-377664/3-A
Matrix: Solid
Analysis Batch: 377645

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377664

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropyl ether	50.0	48.0	J	ug/Kg		96	69 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*71 - 136*
4-Bromofluorobenzene (Surr)	*106*		*79 - 119*
Dibromofluoromethane (Surr)	*91*		*78 - 119*
Toluene-d8 (Surr)	*91*		*85 - 116*

Lab Sample ID: MB 280-377666/1-A
Matrix: Solid
Analysis Batch: 377667

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377666

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	1.6	U	5.0	0.56	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
1,1,1-Trichloroethane	1.6	U	5.0	0.52	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
1,1,2,2-Tetrachloroethane	1.6	U	5.0	0.61	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
1,1,2-Trichloroethane	3.2	U	5.0	0.88	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
1,1-Dichloroethane	0.80	U	5.0	0.21	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
1,1-Dichloroethene	1.6	U	5.0	0.59	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
1,1-Dichloropropene	1.6	U	5.0	0.54	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
1,2,3-Trichlorobenzene	1.6	U	5.0	0.75	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
1,2,3-Trichloropropane	3.2	U	5.0	0.81	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
1,2,4-Trichlorobenzene	1.6	U	5.0	0.73	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
1,2,4-Trimethylbenzene	1.6	U	5.0	0.58	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
1,2-Dibromo-3-Chloropropane	1.6	U	10	0.60	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
1,2-Dibromoethane	1.6	U	5.0	0.52	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
1,2-Dichlorobenzene	1.6	U	5.0	0.45	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
1,2-Dichloroethane	1.6	U	5.0	0.70	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
1,2-Dichloroethene, Total	1.6	U	5.0	0.39	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
1,2-Dichloropropane	1.6	U	5.0	0.55	ug/Kg		06/16/17 12:00	06/16/17 14:55	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-377666/1-A
Matrix: Solid
Analysis Batch: 377667

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377666

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	1.6	U	5.0	0.57	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
1,3-Dichlorobenzene	1.6	U	5.0	0.48	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
1,3-Dichloropropane	1.6	U	5.0	0.51	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
1,4-Dichlorobenzene	1.6	U	5.0	0.78	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
2,2-Dichloropropane	1.6	U	5.0	0.44	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
2-Butanone (MEK)	6.4	U	20	1.8	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
2-Chlorotoluene	1.6	U	5.0	0.51	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
2-Hexanone	13	U	20	4.9	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
4-Chlorotoluene	1.6	U	5.0	0.78	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
4-Isopropyltoluene	1.6	U	5.0	0.49	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
4-Methyl-2-pentanone (MIBK)	13	U	20	4.4	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Acetone	16.4	J	20	5.4	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Benzene	1.6	U	5.0	0.47	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Bromobenzene	1.6	U	5.0	0.49	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Bromochloromethane	0.80	U	5.0	0.30	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Bromodichloromethane	0.80	U	5.0	0.22	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Bromoform	0.80	U	5.0	0.23	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Bromomethane	1.6	U	10	0.50	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Carbon disulfide	1.6	U	5.0	0.42	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Carbon tetrachloride	1.6	U	5.0	0.63	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Chlorobenzene	1.6	U	5.0	0.54	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Chloroethane	3.2	U	10	0.89	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Chloroform	0.80	U	10	0.29	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Chloromethane	1.6	U	10	0.77	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
cis-1,2-Dichloroethene	1.6	U	5.0	0.56	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
cis-1,3-Dichloropropene	3.2	U	5.0	1.3	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Dibromochloromethane	1.6	U	5.0	0.57	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Dibromomethane	3.2	U	5.0	0.84	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Dichlorodifluoromethane	1.6	U	10	0.52	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Ethylbenzene	1.6	U	5.0	0.67	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Hexachlorobutadiene	1.6	U	5.0	0.55	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Isopropyl ether	8.0	U	50	2.7	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Isopropylbenzene	1.6	U	5.0	0.59	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
m&p-Xylene	3.2	U	3.2	1.0	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Methyl iodide	1.6	U	5.0	0.44	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Methyl tert-butyl ether	0.80	U	20	0.34	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Methylene Chloride	3.2	U	5.0	1.6	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Naphthalene	1.6	U	5.0	0.63	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
n-Butylbenzene	1.6	U	5.0	0.56	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
N-Propylbenzene	1.6	U	5.0	0.58	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
o-Xylene	1.6	U	5.0	0.61	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
sec-Butylbenzene	1.6	U	5.0	0.77	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Styrene	1.6	U	5.0	0.63	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
tert-Butylbenzene	1.6	U	5.0	0.50	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Tetrachloroethene	1.6	U	5.0	0.59	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Toluene	1.6	U	5.0	0.69	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
trans-1,2-Dichloroethene	0.80	U	5.0	0.39	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
trans-1,3-Dichloropropene	1.6	U	5.0	0.67	ug/Kg		06/16/17 12:00	06/16/17 14:55	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-377666/1-A
Matrix: Solid
Analysis Batch: 377667

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377666

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.80	U	5.0	0.23	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Trichlorofluoromethane	3.2	U	10	1.0	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Vinyl acetate	3.2	U	10	1.1	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Vinyl chloride	3.2	U	5.0	1.3	ug/Kg		06/16/17 12:00	06/16/17 14:55	1
Xylenes (total)	1.0	U	10	0.61	ug/Kg		06/16/17 12:00	06/16/17 14:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*71 - 136*	*06/16/17 12:00*	*06/16/17 14:55*	*1*
4-Bromofluorobenzene (Surr)	*104*		*79 - 119*	*06/16/17 12:00*	*06/16/17 14:55*	*1*
Dibromofluoromethane (Surr)	*110*		*78 - 119*	*06/16/17 12:00*	*06/16/17 14:55*	*1*
Toluene-d8 (Surr)	*94*		*85 - 116*	*06/16/17 12:00*	*06/16/17 14:55*	*1*

Lab Sample ID: LCS 280-377666/2-A
Matrix: Solid
Analysis Batch: 377667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377666

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	48.2		ug/Kg		96	78 - 125
1,1,1-Trichloroethane	50.0	49.4		ug/Kg		99	73 - 130
1,1,2,2-Tetrachloroethane	50.0	44.8		ug/Kg		90	70 - 124
1,1,2-Trichloroethane	50.0	54.2		ug/Kg		108	78 - 121
1,1-Dichloroethane	50.0	50.2		ug/Kg		100	76 - 125
1,1-Dichloroethene	50.0	53.2		ug/Kg		106	70 - 131
1,1-Dichloropropene	50.0	53.2		ug/Kg		106	76 - 125
1,2,3-Trichlorobenzene	50.0	48.2		ug/Kg		96	66 - 130
1,2,3-Trichloropropane	50.0	47.1		ug/Kg		94	73 - 125
1,2,4-Trichlorobenzene	50.0	47.9		ug/Kg		96	67 - 129
1,2,4-Trimethylbenzene	50.0	47.7		ug/Kg		95	75 - 123
1,2-Dibromo-3-Chloropropane	50.0	49.0		ug/Kg		98	61 - 132
1,2-Dibromoethane	50.0	48.8		ug/Kg		98	78 - 122
1,2-Dichlorobenzene	50.0	47.8		ug/Kg		96	78 - 121
1,2-Dichloroethane	50.0	47.4		ug/Kg		95	73 - 128
1,2-Dichloroethene, Total	100	106		ug/Kg		106	78 - 122
1,2-Dichloropropane	50.0	50.9		ug/Kg		102	76 - 123
1,3,5-Trimethylbenzene	50.0	48.3		ug/Kg		97	73 - 124
1,3-Dichlorobenzene	50.0	48.9		ug/Kg		98	77 - 121
1,3-Dichloropropane	50.0	47.3		ug/Kg		95	77 - 121
1,4-Dichlorobenzene	50.0	44.9		ug/Kg		90	75 - 120
2,2-Dichloropropane	50.0	50.4		ug/Kg		101	67 - 133
2-Butanone (MEK)	160	173		ug/Kg		108	51 - 148
2-Chlorotoluene	50.0	47.1		ug/Kg		94	75 - 122
2-Hexanone	160	144		ug/Kg		90	53 - 145
4-Chlorotoluene	50.0	49.3		ug/Kg		99	72 - 124
4-Isopropyltoluene	50.0	49.5		ug/Kg		99	73 - 127
4-Methyl-2-pentanone (MIBK)	160	179		ug/Kg		112	65 - 135
Acetone	160	179		ug/Kg		112	36 - 164
Benzene	50.0	53.1		ug/Kg		106	77 - 121
Bromobenzene	50.0	49.8		ug/Kg		100	78 - 121

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-377666/2-A
Matrix: Solid
Analysis Batch: 377667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377666

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromochloromethane	50.0	51.8		ug/Kg		104	78 - 125
Bromodichloromethane	50.0	51.8		ug/Kg		104	75 - 127
Bromoform	50.0	48.2		ug/Kg		96	67 - 132
Bromomethane	40.0	39.0		ug/Kg		97	53 - 143
Carbon disulfide	50.0	51.2		ug/Kg		102	63 - 132
Carbon tetrachloride	50.0	48.8		ug/Kg		98	70 - 135
Chlorobenzene	50.0	46.4		ug/Kg		93	79 - 120
Chloroethane	40.0	43.7		ug/Kg		109	59 - 139
Chloroform	50.0	47.6		ug/Kg		95	78 - 123
Chloromethane	40.0	44.1		ug/Kg		110	50 - 136
cis-1,2-Dichloroethene	50.0	51.3		ug/Kg		103	77 - 123
cis-1,3-Dichloropropene	50.0	45.9		ug/Kg		92	74 - 126
Dibromochloromethane	50.0	47.8		ug/Kg		96	74 - 126
Dibromomethane	50.0	49.4		ug/Kg		99	78 - 125
Dichlorodifluoromethane	40.0	56.1		ug/Kg		140	29 - 149
Ethylbenzene	50.0	51.4		ug/Kg		103	76 - 122
Hexachlorobutadiene	50.0	48.2		ug/Kg		96	61 - 135
Isopropylbenzene	50.0	48.7		ug/Kg		97	68 - 134
m&p-Xylene	50.0	48.9		ug/Kg		98	77 - 124
Methyl iodide	50.0	51.7		ug/Kg		103	71 - 131
Methyl tert-butyl ether	50.0	51.4		ug/Kg		103	73 - 125
Methylene Chloride	50.0	53.3		ug/Kg		107	70 - 128
Naphthalene	50.0	49.6		ug/Kg		99	62 - 129
n-Butylbenzene	50.0	49.3		ug/Kg		99	70 - 128
N-Propylbenzene	50.0	48.3		ug/Kg		97	73 - 125
o-Xylene	50.0	49.6		ug/Kg		99	77 - 123
sec-Butylbenzene	50.0	47.9		ug/Kg		96	73 - 126
Styrene	50.0	48.1		ug/Kg		96	76 - 124
tert-Butylbenzene	50.0	48.0		ug/Kg		96	73 - 125
Tetrachloroethene	50.0	47.9		ug/Kg		96	73 - 128
Toluene	50.0	55.3		ug/Kg		111	77 - 121
trans-1,2-Dichloroethene	50.0	54.5		ug/Kg		109	74 - 125
trans-1,3-Dichloropropene	50.0	48.6		ug/Kg		97	71 - 130
Trichloroethene	50.0	53.7		ug/Kg		107	77 - 123
Trichlorofluoromethane	40.0	44.6		ug/Kg		112	62 - 140
Vinyl acetate	100	78.2		ug/Kg		78	50 - 151
Vinyl chloride	40.0	45.8		ug/Kg		114	56 - 135
Xylenes (total)	100	98.5		ug/Kg		99	78 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*71 - 136*
4-Bromofluorobenzene (Surr)	*102*		*79 - 119*
Dibromofluoromethane (Surr)	*94*		*78 - 119*
Toluene-d8 (Surr)	*97*		*85 - 116*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-377666/3-A
Matrix: Solid
Analysis Batch: 377667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377666

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Isopropyl ether			50.0	46.5	J	ug/Kg		93	69 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*71 - 136*
4-Bromofluorobenzene (Surr)	*112*		*79 - 119*
Dibromofluoromethane (Surr)	*93*		*78 - 119*
Toluene-d8 (Surr)	*90*		*85 - 116*

Lab Sample ID: MB 280-377884/1-A
Matrix: Solid
Analysis Batch: 377804

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377884

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	80	U	250	21	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
1,1,1-Trichloroethane	40	U	250	20	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
1,1,2,2-Tetrachloroethane	80	U	250	29	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
1,1,2-Trichloroethane	80	U	250	27	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
1,1-Dichloroethane	160	U	250	51	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
1,1-Dichloroethene	160	U	250	51	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
1,1-Dichloropropene	160	U	250	48	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
1,2,3-Trichlorobenzene	80	U	250	35	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
1,2,3-Trichloropropane	160	U	250	47	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
1,2,4-Trichlorobenzene	160	U	250	47	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
1,2,4-Trimethylbenzene	80	U	250	31	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
1,2-Dibromo-3-Chloropropane	320	U	500	86	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
1,2-Dibromoethane	80	U	250	25	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
1,2-Dichlorobenzene	320	U	500	94	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
1,2-Dichloroethane	80	U	250	25	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
1,2-Dichloroethene, Total	80	U	130	22	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
1,2-Dichloropropane	160	U	250	46	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
1,3,5-Trimethylbenzene	80	U	250	39	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
1,3-Dichlorobenzene	160	U	250	41	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
1,3-Dichloropropane	80	U	250	28	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
1,4-Dichlorobenzene	80	U	250	25	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
2,2-Dichloropropane	80	U	250	27	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
2-Butanone (MEK)	640	U	1000	300	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
2-Chlorotoluene	80	U	250	26	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
2-Hexanone	640	U	1000	220	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
4-Chlorotoluene	80	U	250	23	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
4-Isopropyltoluene	80	U	250	32	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
4-Methyl-2-pentanone (MIBK)	640	U	1000	230	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Acetone	1300	U	1500	400	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Benzene	160	U	250	45	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Bromobenzene	40	U	250	19	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Bromochloromethane	160	U	250	47	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Bromodichloromethane	80	U	250	40	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Bromoform	160	U	250	160	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Bromomethane	160	U	500	44	ug/Kg		06/19/17 14:29	06/19/17 17:44	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 280-377884/1-A
Matrix: Solid
Analysis Batch: 377804

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377884

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	160	U	250	64	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Carbon tetrachloride	40	U	250	17	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Chlorobenzene	80	U	250	30	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Chloroethane	160	U	500	44	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Chloroform	160	U	250	46	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Chloromethane	160	U	500	50	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
cis-1,2-Dichloroethene	80	U	130	22	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
cis-1,3-Dichloropropene	80	U	250	27	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Dibromochloromethane	80	U	250	33	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Dibromomethane	80	U	250	30	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Dichlorodifluoromethane	80	U	500	22	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Ethylbenzene	80	U	250	34	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Hexachlorobutadiene	160	U	250	49	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Isopropyl ether	800	U	2500	210	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Isopropylbenzene	80	U	250	29	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
m&p-Xylene	160	U	250	78	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Methyl iodide	80	U	250	21	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Methyl tert-butyl ether	160	U	250	50	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Methylene Chloride	812		250	69	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Naphthalene	80	U	500	38	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
n-Butylbenzene	80	U	250	32	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
N-Propylbenzene	160	U	250	41	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
o-Xylene	80	U	130	35	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
sec-Butylbenzene	80	U	250	38	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Styrene	80	U	250	26	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
tert-Butylbenzene	80	U	250	28	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Tetrachloroethene	80	U	250	27	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Toluene	80	U	250	39	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
trans-1,2-Dichloroethene	160	U	250	45	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
trans-1,3-Dichloropropene	160	U	250	42	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Trichloroethene	80	U	250	23	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Trichlorofluoromethane	160	U	500	50	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Vinyl acetate	160	U	500	70	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Vinyl chloride	80	U	500	27	ug/Kg		06/19/17 14:29	06/19/17 17:44	1
Xylenes (total)	80	U	130	35	ug/Kg		06/19/17 14:29	06/19/17 17:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*71 - 136*	*06/19/17 14:29*	*06/19/17 17:44*	*1*
4-Bromofluorobenzene (Surr)	*104*		*79 - 119*	*06/19/17 14:29*	*06/19/17 17:44*	*1*
Dibromofluoromethane (Surr)	*99*		*78 - 119*	*06/19/17 14:29*	*06/19/17 17:44*	*1*
Toluene-d8 (Surr)	*108*		*85 - 116*	*06/19/17 14:29*	*06/19/17 17:44*	*1*

Lab Sample ID: LCS 280-377884/2-A
Matrix: Solid
Analysis Batch: 378395

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377884

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1,1,2-Tetrachloroethane			2000	2190		ug/Kg		110	78 - 125		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-377884/2-A
Matrix: Solid
Analysis Batch: 378395

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377884

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	2000	2070		ug/Kg		103	73 - 130
1,1,2,2-Tetrachloroethane	2000	2150		ug/Kg		108	70 - 124
1,1,2-Trichloroethane	2000	2310		ug/Kg		115	78 - 121
1,1-Dichloroethane	2000	2050		ug/Kg		103	76 - 125
1,1-Dichloroethene	2000	2140		ug/Kg		107	70 - 131
1,1-Dichloropropene	2000	2290		ug/Kg		115	76 - 125
1,2,3-Trichlorobenzene	2000	2370		ug/Kg		119	66 - 130
1,2,3-Trichloropropane	2000	2090		ug/Kg		104	73 - 125
1,2,4-Trichlorobenzene	2000	2310		ug/Kg		115	67 - 129
1,2,4-Trimethylbenzene	2000	2310		ug/Kg		115	75 - 123
1,2-Dibromo-3-Chloropropane	2000	2040		ug/Kg		102	61 - 132
1,2-Dibromoethane	2000	2250		ug/Kg		113	78 - 122
1,2-Dichlorobenzene	2000	2170		ug/Kg		108	78 - 121
1,2-Dichloroethane	2000	2050		ug/Kg		102	73 - 128
1,2-Dichloroethene, Total	4000	4260		ug/Kg		107	78 - 122
1,2-Dichloropropane	2000	2190		ug/Kg		110	76 - 123
1,3,5-Trimethylbenzene	2000	2320		ug/Kg		116	73 - 124
1,3-Dichlorobenzene	2000	2210		ug/Kg		111	77 - 121
1,3-Dichloropropane	2000	2140		ug/Kg		107	77 - 121
1,4-Dichlorobenzene	2000	2230		ug/Kg		112	75 - 120
2,2-Dichloropropane	2000	2180		ug/Kg		109	67 - 133
2-Butanone (MEK)	8000	9070		ug/Kg		113	51 - 148
2-Chlorotoluene	2000	2240		ug/Kg		112	75 - 122
2-Hexanone	8000	7680		ug/Kg		96	53 - 145
4-Chlorotoluene	2000	2290		ug/Kg		114	72 - 124
4-Isopropyltoluene	2000	2410		ug/Kg		121	73 - 127
4-Methyl-2-pentanone (MIBK)	8000	8600		ug/Kg		108	65 - 135
Acetone	8000	8180		ug/Kg		102	36 - 164
Benzene	2000	2140		ug/Kg		107	77 - 121
Bromobenzene	2000	2180		ug/Kg		109	78 - 121
Bromochloromethane	2000	2120		ug/Kg		106	78 - 125
Bromodichloromethane	2000	2070		ug/Kg		104	75 - 127
Bromoform	2000	1890		ug/Kg		94	67 - 132
Bromomethane	2000	2350		ug/Kg		118	53 - 143
Carbon disulfide	2000	2180		ug/Kg		109	63 - 132
Carbon tetrachloride	2000	2150		ug/Kg		108	70 - 135
Chlorobenzene	2000	2140		ug/Kg		107	79 - 120
Chloroethane	2000	2370		ug/Kg		119	59 - 139
Chloroform	2000	2100		ug/Kg		105	78 - 123
Chloromethane	2000	2860	Q	ug/Kg		143	50 - 136
cis-1,2-Dichloroethene	2000	2090		ug/Kg		104	77 - 123
cis-1,3-Dichloropropene	2000	2000		ug/Kg		100	74 - 126
Dibromochloromethane	2000	1910		ug/Kg		96	74 - 126
Dibromomethane	2000	2120		ug/Kg		106	78 - 125
Dichlorodifluoromethane	2000	3000	Q	ug/Kg		150	29 - 149
Ethylbenzene	2000	2280		ug/Kg		114	76 - 122
Hexachlorobutadiene	2000	2440		ug/Kg		122	61 - 135
Isopropylbenzene	2000	2250		ug/Kg		113	68 - 134

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 280-377884/2-A
Matrix: Solid
Analysis Batch: 378395

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377884

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
m&p-Xylene			2000	2280		ug/Kg		114	77 - 124		
Methyl iodide			2000	2000		ug/Kg		100	71 - 131		
Methyl tert-butyl ether			2000	2160		ug/Kg		108	73 - 125		
Methylene Chloride			2000	1920		ug/Kg		96	70 - 128		
Naphthalene			2000	2350		ug/Kg		118	62 - 129		
n-Butylbenzene			2000	2480		ug/Kg		124	70 - 128		
N-Propylbenzene			2000	2340		ug/Kg		117	73 - 125		
o-Xylene			2000	2290		ug/Kg		115	77 - 123		
sec-Butylbenzene			2000	2430		ug/Kg		121	73 - 126		
Styrene			2000	2220		ug/Kg		111	76 - 124		
tert-Butylbenzene			2000	2330		ug/Kg		117	73 - 125		
Tetrachloroethene			2000	2210		ug/Kg		111	73 - 128		
Toluene			2000	2310		ug/Kg		116	77 - 121		
trans-1,2-Dichloroethene			2000	2170		ug/Kg		109	74 - 125		
trans-1,3-Dichloropropene			2000	1990		ug/Kg		100	71 - 130		
Trichloroethene			2000	2170		ug/Kg		108	77 - 123		
Trichlorofluoromethane			2000	2310	M	ug/Kg		115	62 - 140		
Vinyl acetate			2000	2080		ug/Kg		104	50 - 151		
Vinyl chloride			2000	2760	Q	ug/Kg		138	56 - 135		
Xylenes (total)			4000	4570		ug/Kg		114	78 - 124		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*71 - 136*
4-Bromofluorobenzene (Surr)	*99*		*79 - 119*
Dibromofluoromethane (Surr)	*103*		*78 - 119*
Toluene-d8 (Surr)	*106*		*85 - 116*

Lab Sample ID: LCSD 280-377884/3-A
Matrix: Solid
Analysis Batch: 378395

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 377884

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			2000	2190		ug/Kg		110	78 - 125	0	20
1,1,1-Trichloroethane			2000	1960		ug/Kg		98	73 - 130	5	20
1,1,2,2-Tetrachloroethane			2000	2220		ug/Kg		111	70 - 124	3	20
1,1,2-Trichloroethane			2000	2360		ug/Kg		118	78 - 121	2	20
1,1-Dichloroethane			2000	2040		ug/Kg		102	76 - 125	1	20
1,1-Dichloroethene			2000	2100		ug/Kg		105	70 - 131	2	20
1,1-Dichloropropene			2000	2200		ug/Kg		110	76 - 125	4	20
1,2,3-Trichlorobenzene			2000	2350		ug/Kg		117	66 - 130	1	20
1,2,3-Trichloropropane			2000	2150		ug/Kg		108	73 - 125	3	20
1,2,4-Trichlorobenzene			2000	2300		ug/Kg		115	67 - 129	0	20
1,2,4-Trimethylbenzene			2000	2240		ug/Kg		112	75 - 123	3	20
1,2-Dibromo-3-Chloropropane			2000	2120		ug/Kg		106	61 - 132	4	20
1,2-Dibromoethane			2000	2290		ug/Kg		114	78 - 122	2	20
1,2-Dichlorobenzene			2000	2210		ug/Kg		111	78 - 121	2	20
1,2-Dichloroethane			2000	2070		ug/Kg		103	73 - 128	1	20
1,2-Dichloroethene, Total			4000	4200		ug/Kg		105	78 - 122	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-377884/3-A
Matrix: Solid
Analysis Batch: 378395

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 377884

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloropropane	2000	2190		ug/Kg		110	76 - 123	0	20
1,3,5-Trimethylbenzene	2000	2290		ug/Kg		114	73 - 124	1	20
1,3-Dichlorobenzene	2000	2190		ug/Kg		109	77 - 121	1	20
1,3-Dichloropropane	2000	2130		ug/Kg		106	77 - 121	1	20
1,4-Dichlorobenzene	2000	2180		ug/Kg		109	75 - 120	2	20
2,2-Dichloropropane	2000	2140		ug/Kg		107	67 - 133	2	20
2-Butanone (MEK)	8000	9140		ug/Kg		114	51 - 148	1	20
2-Chlorotoluene	2000	2210		ug/Kg		111	75 - 122	1	20
2-Hexanone	8000	8020		ug/Kg		100	53 - 145	4	20
4-Chlorotoluene	2000	2280		ug/Kg		114	72 - 124	0	20
4-Isopropyltoluene	2000	2350		ug/Kg		118	73 - 127	3	20
4-Methyl-2-pentanone (MIBK)	8000	8910		ug/Kg		111	65 - 135	3	20
Acetone	8000	8100		ug/Kg		101	36 - 164	1	20
Benzene	2000	2100		ug/Kg		105	77 - 121	2	20
Bromobenzene	2000	2220		ug/Kg		111	78 - 121	2	20
Bromochloromethane	2000	2200		ug/Kg		110	78 - 125	4	20
Bromodichloromethane	2000	2030		ug/Kg		101	75 - 127	2	20
Bromoform	2000	1920		ug/Kg		96	67 - 132	2	20
Bromomethane	2000	2250		ug/Kg		113	53 - 143	4	20
Carbon disulfide	2000	2110		ug/Kg		105	63 - 132	4	20
Carbon tetrachloride	2000	2080		ug/Kg		104	70 - 135	3	20
Chlorobenzene	2000	2110		ug/Kg		106	79 - 120	1	20
Chloroethane	2000	2400		ug/Kg		120	59 - 139	1	20
Chloroform	2000	2090		ug/Kg		104	78 - 123	1	20
Chloromethane	2000	2730		ug/Kg		136	50 - 136	5	20
cis-1,2-Dichloroethene	2000	2060		ug/Kg		103	77 - 123	1	20
cis-1,3-Dichloropropene	2000	2010		ug/Kg		101	74 - 126	1	20
Dibromochloromethane	2000	1930		ug/Kg		97	74 - 126	1	20
Dibromomethane	2000	2130		ug/Kg		107	78 - 125	1	20
Dichlorodifluoromethane	2000	2770		ug/Kg		138	29 - 149	8	20
Ethylbenzene	2000	2230		ug/Kg		112	76 - 122	2	20
Hexachlorobutadiene	2000	2250		ug/Kg		113	61 - 135	8	20
Isopropylbenzene	2000	2260		ug/Kg		113	68 - 134	0	20
m&p-Xylene	2000	2190		ug/Kg		109	77 - 124	4	20
Methyl iodide	2000	2030		ug/Kg		101	71 - 131	1	20
Methyl tert-butyl ether	2000	2210		ug/Kg		111	73 - 125	2	20
Methylene Chloride	2000	1930		ug/Kg		96	70 - 128	0	20
Naphthalene	2000	2420		ug/Kg		121	62 - 129	3	20
n-Butylbenzene	2000	2380		ug/Kg		119	70 - 128	4	20
N-Propylbenzene	2000	2340		ug/Kg		117	73 - 125	0	20
o-Xylene	2000	2260		ug/Kg		113	77 - 123	1	20
sec-Butylbenzene	2000	2320		ug/Kg		116	73 - 126	4	20
Styrene	2000	2200		ug/Kg		110	76 - 124	1	20
tert-Butylbenzene	2000	2300		ug/Kg		115	73 - 125	2	20
Tetrachloroethene	2000	2130		ug/Kg		107	73 - 128	4	20
Toluene	2000	2270		ug/Kg		113	77 - 121	2	20
trans-1,2-Dichloroethene	2000	2140		ug/Kg		107	74 - 125	1	20
trans-1,3-Dichloropropene	2000	1980		ug/Kg		99	71 - 130	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 280-377884/3-A
Matrix: Solid
Analysis Batch: 378395

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 377884

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Trichloroethene	2000	2120		ug/Kg		106	77 - 123	2	20
Trichlorofluoromethane	2000	2210		ug/Kg		111	62 - 140	4	20
Vinyl acetate	2000	2240		ug/Kg		112	50 - 151	7	20
Vinyl chloride	2000	2620		ug/Kg		131	56 - 135	5	20
Xylenes (total)	4000	4450		ug/Kg		111	78 - 124	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*71 - 136*
4-Bromofluorobenzene (Surr)	*99*		*79 - 119*
Dibromofluoromethane (Surr)	*102*		*78 - 119*
Toluene-d8 (Surr)	*105*		*85 - 116*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 280-376824/1-A
Matrix: Solid
Analysis Batch: 377379

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376824

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.49	U	4.9	0.26	ug/Kg		06/11/17 07:19	06/15/17 07:39	1
2-Methylnaphthalene	0.66	U	4.9	0.30	ug/Kg		06/11/17 07:19	06/15/17 07:39	1
Acenaphthene	0.26	U	4.9	0.16	ug/Kg		06/11/17 07:19	06/15/17 07:39	1
Acenaphthylene	0.66	U	4.9	0.17	ug/Kg		06/11/17 07:19	06/15/17 07:39	1
Anthracene	2.5	U	4.9	0.71	ug/Kg		06/11/17 07:19	06/15/17 07:39	1
Benzo[a]anthracene	2.5	U	4.9	0.89	ug/Kg		06/11/17 07:19	06/15/17 07:39	1
Benzo[a]pyrene	2.5	U	4.9	0.73	ug/Kg		06/11/17 07:19	06/15/17 07:39	1
Benzo[b]fluoranthene	2.5	U	4.9	1.2	ug/Kg		06/11/17 07:19	06/15/17 07:39	1
Benzo[g,h,i]perylene	2.5	U	4.9	1.1	ug/Kg		06/11/17 07:19	06/15/17 07:39	1
Benzo[k]fluoranthene	2.5	U	4.9	0.99	ug/Kg		06/11/17 07:19	06/15/17 07:39	1
Chrysene	2.5	U	4.9	0.99	ug/Kg		06/11/17 07:19	06/15/17 07:39	1
Dibenz(a,h)anthracene	2.5	U	4.9	1.3	ug/Kg		06/11/17 07:19	06/15/17 07:39	1
Fluoranthene	2.5	U	4.9	0.99	ug/Kg		06/11/17 07:19	06/15/17 07:39	1
Fluorene	0.66	U	4.9	0.46	ug/Kg		06/11/17 07:19	06/15/17 07:39	1
Indeno[1,2,3-cd]pyrene	2.5	U	4.9	1.1	ug/Kg		06/11/17 07:19	06/15/17 07:39	1
Naphthalene	0.66	U	4.9	0.32	ug/Kg		06/11/17 07:19	06/15/17 07:39	1
Phenanthrene	2.5	U	4.9	1.1	ug/Kg		06/11/17 07:19	06/15/17 07:39	1
Pyrene	2.5	U	4.9	1.1	ug/Kg		06/11/17 07:19	06/15/17 07:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*86*		*46 - 115*	*06/11/17 07:19*	*06/15/17 07:39*	*1*
Nitrobenzene-d5 (Surr)	*86*		*44 - 125*	*06/11/17 07:19*	*06/15/17 07:39*	*1*
Terphenyl-d14 (Surr)	*97*		*58 - 133*	*06/11/17 07:19*	*06/15/17 07:39*	*1*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 280-376824/2-A
Matrix: Solid
Analysis Batch: 377379

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376824

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	28.2	22.0		ug/Kg		78	43 - 111
2-Methylnaphthalene	28.2	23.6		ug/Kg		84	39 - 114
Acenaphthene	28.2	23.3		ug/Kg		82	44 - 111
Acenaphthylene	28.2	21.9		ug/Kg		78	39 - 116
Anthracene	28.2	22.7		ug/Kg		81	50 - 114
Benzo[a]anthracene	28.2	23.9		ug/Kg		85	54 - 122
Benzo[a]pyrene	28.2	21.0		ug/Kg		74	50 - 125
Benzo[b]fluoranthene	28.2	22.5		ug/Kg		80	53 - 128
Benzo[g,h,i]perylene	28.2	18.1		ug/Kg		64	49 - 127
Benzo[k]fluoranthene	28.2	23.0		ug/Kg		81	56 - 123
Chrysene	28.2	26.1		ug/Kg		92	57 - 118
Dibenz(a,h)anthracene	28.2	18.5		ug/Kg		66	50 - 129
Fluoranthene	28.2	23.6		ug/Kg		84	55 - 119
Fluorene	28.2	24.2		ug/Kg		86	47 - 114
Indeno[1,2,3-cd]pyrene	28.2	18.6		ug/Kg		66	49 - 130
Naphthalene	28.2	22.1		ug/Kg		78	38 - 111
Phenanthrene	28.2	22.6		ug/Kg		80	49 - 113
Pyrene	28.2	24.0		ug/Kg		85	55 - 117

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*90*		*46 - 115*
Nitrobenzene-d5 (Surr)	*92*		*44 - 125*
Terphenyl-d14 (Surr)	*85*		*58 - 133*

Lab Sample ID: 280-97928-1 MS
Matrix: Solid
Analysis Batch: 377669

Client Sample ID: SS025-SS07
Prep Type: Total/NA
Prep Batch: 376824

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	0.38	J	33.9	22.7		ug/Kg	☼	66	43 - 111
2-Methylnaphthalene	0.48	J	33.9	24.7		ug/Kg	☼	71	39 - 114
Acenaphthene	0.43	J	33.9	23.9		ug/Kg	☼	69	44 - 111
Acenaphthylene	1.7	J	33.9	23.8		ug/Kg	☼	65	39 - 116
Anthracene	1.7	J	33.9	24.5		ug/Kg	☼	67	50 - 114
Benzo[a]anthracene	6.4		33.9	30.8		ug/Kg	☼	72	54 - 122
Benzo[a]pyrene	7.6		33.9	31.2		ug/Kg	☼	69	50 - 125
Benzo[b]fluoranthene	12		33.9	36.0		ug/Kg	☼	72	53 - 128
Benzo[g,h,i]perylene	5.1	J	33.9	25.2		ug/Kg	☼	59	49 - 127
Benzo[k]fluoranthene	4.8	J	33.9	30.7		ug/Kg	☼	76	56 - 123
Chrysene	9.6		33.9	35.6		ug/Kg	☼	77	57 - 118
Dibenz(a,h)anthracene	1.5	J	33.9	22.0		ug/Kg	☼	60	50 - 129
Fluoranthene	15		33.9	36.1		ug/Kg	☼	64	55 - 119
Fluorene	0.98	J	33.9	24.5		ug/Kg	☼	69	47 - 114
Indeno[1,2,3-cd]pyrene	4.5	J	33.9	25.5		ug/Kg	☼	62	49 - 130
Naphthalene	0.58	J	33.9	22.6		ug/Kg	☼	65	38 - 111
Phenanthrene	6.8		33.9	29.3		ug/Kg	☼	66	49 - 113
Pyrene	13		33.9	34.8		ug/Kg	☼	65	55 - 117

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 280-97928-1 MS
Matrix: Solid
Analysis Batch: 377669

Client Sample ID: SS025-SS07
Prep Type: Total/NA
Prep Batch: 376824

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*72*		*46 - 115*
Nitrobenzene-d5 (Surr)	*96*		*44 - 125*
Terphenyl-d14 (Surr)	*67*		*58 - 133*

Lab Sample ID: 280-97928-1 MSD
Matrix: Solid
Analysis Batch: 377669

Client Sample ID: SS025-SS07
Prep Type: Total/NA
Prep Batch: 376824

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1-Methylnaphthalene	0.38	J	33.3	22.2		ug/Kg	☼	65	43 - 111	2	20
2-Methylnaphthalene	0.48	J	33.3	23.6		ug/Kg	☼	70	39 - 114	4	20
Acenaphthene	0.43	J	33.3	24.5		ug/Kg	☼	72	44 - 111	3	20
Acenaphthylene	1.7	J	33.3	23.9		ug/Kg	☼	67	39 - 116	0	20
Anthracene	1.7	J	33.3	25.6		ug/Kg	☼	72	50 - 114	4	20
Benzo[a]anthracene	6.4		33.3	33.1		ug/Kg	☼	80	54 - 122	7	20
Benzo[a]pyrene	7.6		33.3	32.5		ug/Kg	☼	75	50 - 125	4	20
Benzo[b]fluoranthene	12		33.3	37.9		ug/Kg	☼	79	53 - 128	5	20
Benzo[g,h,i]perylene	5.1	J	33.3	26.2		ug/Kg	☼	63	49 - 127	4	20
Benzo[k]fluoranthene	4.8	J	33.3	31.6		ug/Kg	☼	81	56 - 123	3	20
Chrysene	9.6		33.3	37.8		ug/Kg	☼	85	57 - 118	6	20
Dibenz(a,h)anthracene	1.5	J	33.3	21.7		ug/Kg	☼	61	50 - 129	2	20
Fluoranthene	15		33.3	40.5		ug/Kg	☼	78	55 - 119	11	20
Fluorene	0.98	J	33.3	24.8		ug/Kg	☼	72	47 - 114	1	20
Indeno[1,2,3-cd]pyrene	4.5	J	33.3	25.9		ug/Kg	☼	64	49 - 130	2	20
Naphthalene	0.58	J	33.3	22.1		ug/Kg	☼	65	38 - 111	2	20
Phenanthrene	6.8		33.3	31.4		ug/Kg	☼	74	49 - 113	7	20
Pyrene	13		33.3	39.6		ug/Kg	☼	80	55 - 117	13	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*73*		*46 - 115*
Nitrobenzene-d5 (Surr)	*98*		*44 - 125*
Terphenyl-d14 (Surr)	*68*		*58 - 133*

Lab Sample ID: MB 280-376856/1-A
Matrix: Water
Analysis Batch: 378055

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376856

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.012	U	0.10	0.0057	ug/L		06/12/17 15:16	06/20/17 17:23	1
2-Methylnaphthalene	0.012	U	0.10	0.0052	ug/L		06/12/17 15:16	06/20/17 17:23	1
Acenaphthene	0.030	U	0.10	0.011	ug/L		06/12/17 15:16	06/20/17 17:23	1
Acenaphthylene	0.012	U	0.10	0.010	ug/L		06/12/17 15:16	06/20/17 17:23	1
Anthracene	0.020	U	0.10	0.014	ug/L		06/12/17 15:16	06/20/17 17:23	1
Benzo[a]anthracene	0.00650	J	0.10	0.0032	ug/L		06/12/17 15:16	06/20/17 17:23	1
Benzo[a]pyrene	0.012	U	0.10	0.0051	ug/L		06/12/17 15:16	06/20/17 17:23	1
Benzo[b]fluoranthene	0.012	U	0.10	0.0034	ug/L		06/12/17 15:16	06/20/17 17:23	1
Benzo[g,h,i]perylene	0.012	U	0.10	0.0036	ug/L		06/12/17 15:16	06/20/17 17:23	1
Benzo[k]fluoranthene	0.012	U	0.10	0.0051	ug/L		06/12/17 15:16	06/20/17 17:23	1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 280-376856/1-A
Matrix: Water
Analysis Batch: 378055

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376856

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.012	U	0.10	0.0032	ug/L		06/12/17 15:16	06/20/17 17:23	1
Dibenz(a,h)anthracene	0.012	U	0.10	0.0048	ug/L		06/12/17 15:16	06/20/17 17:23	1
Fluoranthene	0.0178	J	0.10	0.0045	ug/L		06/12/17 15:16	06/20/17 17:23	1
Fluorene	0.020	U	0.10	0.019	ug/L		06/12/17 15:16	06/20/17 17:23	1
Indeno[1,2,3-cd]pyrene	0.020	U	0.10	0.015	ug/L		06/12/17 15:16	06/20/17 17:23	1
Naphthalene	0.012	U	0.10	0.0053	ug/L		06/12/17 15:16	06/20/17 17:23	1
Phenanthrene	0.0231	J	0.10	0.0098	ug/L		06/12/17 15:16	06/20/17 17:23	1
Pyrene	0.0105	J	0.10	0.0081	ug/L		06/12/17 15:16	06/20/17 17:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*78*		*53 - 106*	*06/12/17 15:16*	*06/20/17 17:23*	*1*
Nitrobenzene-d5 (Surr)	*84*		*55 - 111*	*06/12/17 15:16*	*06/20/17 17:23*	*1*
Terphenyl-d14 (Surr)	*85*		*58 - 132*	*06/12/17 15:16*	*06/20/17 17:23*	*1*

Lab Sample ID: LCS 280-376856/2-A
Matrix: Water
Analysis Batch: 378055

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376856

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1-Methylnaphthalene	0.900	0.621		ug/L		69	41 - 115
2-Methylnaphthalene	0.900	0.657		ug/L		73	39 - 114
Acenaphthene	0.900	0.715		ug/L		79	48 - 114
Acenaphthylene	0.900	0.651		ug/L		72	35 - 121
Anthracene	0.900	0.721		ug/L		80	53 - 119
Benzo[a]anthracene	0.900	0.785		ug/L		87	59 - 120
Benzo[a]pyrene	0.900	0.761		ug/L		85	53 - 120
Benzo[b]fluoranthene	0.900	0.778		ug/L		86	53 - 126
Benzo[g,h,i]perylene	0.900	0.682		ug/L		76	44 - 128
Benzo[k]fluoranthene	0.900	0.810		ug/L		90	54 - 125
Chrysene	0.900	0.851		ug/L		95	57 - 120
Dibenz(a,h)anthracene	0.900	0.691		ug/L		77	44 - 131
Fluoranthene	0.900	0.748		ug/L		83	58 - 120
Fluorene	0.900	0.721		ug/L		80	50 - 118
Indeno[1,2,3-cd]pyrene	0.900	0.697		ug/L		77	48 - 130
Naphthalene	0.900	0.624		ug/L		69	43 - 114
Phenanthrene	0.900	0.694		ug/L		77	53 - 115
Pyrene	0.900	0.757		ug/L		84	53 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*81*		*53 - 106*
Nitrobenzene-d5 (Surr)	*83*		*55 - 111*
Terphenyl-d14 (Surr)	*107*		*58 - 132*

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 280-376856/3-A
Matrix: Water
Analysis Batch: 378055

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 376856

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1-Methylnaphthalene			0.900	0.669		ug/L		74	41 - 115	7	20
2-Methylnaphthalene			0.900	0.703		ug/L		78	39 - 114	7	20
Acenaphthene			0.900	0.761		ug/L		85	48 - 114	6	20
Acenaphthylene			0.900	0.706		ug/L		78	35 - 121	8	20
Anthracene			0.900	0.758		ug/L		84	53 - 119	5	20
Benzo[a]anthracene			0.900	0.784		ug/L		87	59 - 120	0	20
Benzo[a]pyrene			0.900	0.763		ug/L		85	53 - 120	0	20
Benzo[b]fluoranthene			0.900	0.770		ug/L		86	53 - 126	1	20
Benzo[g,h,i]perylene			0.900	0.667		ug/L		74	44 - 128	2	20
Benzo[k]fluoranthene			0.900	0.807		ug/L		90	54 - 125	0	20
Chrysene			0.900	0.848		ug/L		94	57 - 120	0	20
Dibenz(a,h)anthracene			0.900	0.677		ug/L		75	44 - 131	2	20
Fluoranthene			0.900	0.781		ug/L		87	58 - 120	4	20
Fluorene			0.900	0.764		ug/L		85	50 - 118	6	20
Indeno[1,2,3-cd]pyrene			0.900	0.682		ug/L		76	48 - 130	2	20
Naphthalene			0.900	0.644		ug/L		72	43 - 114	3	20
Phenanthrene			0.900	0.729		ug/L		81	53 - 115	5	20
Pyrene			0.900	0.775		ug/L		86	53 - 121	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*86*		*53 - 106*
Nitrobenzene-d5 (Surr)	*88*		*55 - 111*
Terphenyl-d14 (Surr)	*83*		*58 - 132*

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 280-377615/1-A
Matrix: Solid
Analysis Batch: 378628

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377615

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	1.6	U	1.6	0.53	ug/Kg		06/16/17 13:00	06/25/17 15:58	1
4,4'-DDE	0.64	U	1.6	0.23	ug/Kg		06/16/17 13:00	06/25/17 15:58	1
4,4'-DDT	1.6	U	1.9	0.57	ug/Kg		06/16/17 13:00	06/25/17 15:58	1
Aldrin	0.64	U	1.6	0.24	ug/Kg		06/16/17 13:00	06/25/17 15:58	1
alpha-BHC	0.64	U	1.6	0.21	ug/Kg		06/16/17 13:00	06/25/17 15:58	1
alpha-Chlordane	0.64	U	1.6	0.31	ug/Kg		06/16/17 13:00	06/25/17 15:58	1
beta-BHC	1.6	U	1.6	0.64	ug/Kg		06/16/17 13:00	06/25/17 15:58	1
delta-BHC	0.96	U	1.6	0.39	ug/Kg		06/16/17 13:00	06/25/17 15:58	1
Dieldrin	0.64	U	1.6	0.20	ug/Kg		06/16/17 13:00	06/25/17 15:58	1
Endosulfan I	0.64	U	1.6	0.17	ug/Kg		06/16/17 13:00	06/25/17 15:58	1
Endosulfan II	0.64	U	1.6	0.28	ug/Kg		06/16/17 13:00	06/25/17 15:58	1
Endosulfan sulfate	0.64	U	1.6	0.27	ug/Kg		06/16/17 13:00	06/25/17 15:58	1
Endrin	0.64	U	1.6	0.29	ug/Kg		06/16/17 13:00	06/25/17 15:58	1
Endrin aldehyde	0.64	U	1.6	0.16	ug/Kg		06/16/17 13:00	06/25/17 15:58	1
gamma-BHC (Lindane)	0.96	U	1.6	0.45	ug/Kg		06/16/17 13:00	06/25/17 15:58	1
gamma-Chlordane	0.64	U	1.6	0.26	ug/Kg		06/16/17 13:00	06/25/17 15:58	1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 280-377615/1-A
Matrix: Solid
Analysis Batch: 378628

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377615

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	0.64	U	1.6	0.21	ug/Kg		06/16/17 13:00	06/25/17 15:58	1
Heptachlor epoxide	0.96	U	1.6	0.41	ug/Kg		06/16/17 13:00	06/25/17 15:58	1
Methoxychlor	0.96	U	3.2	0.43	ug/Kg		06/16/17 13:00	06/25/17 15:58	1
Toxaphene	32	U	160	15	ug/Kg		06/16/17 13:00	06/25/17 15:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*87*		*63 - 121*	*06/16/17 13:00*	*06/25/17 15:58*	*1*
Tetrachloro-m-xylene (Surr)	*85*		*42 - 129*	*06/16/17 13:00*	*06/25/17 15:58*	*1*

Lab Sample ID: LCS 280-377615/2-A
Matrix: Solid
Analysis Batch: 378628

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	16.3	13.9		ug/Kg		85	56 - 139
4,4'-DDE	16.3	14.3		ug/Kg		87	56 - 134
4,4'-DDT	16.3	14.8		ug/Kg		91	50 - 141
Aldrin	16.3	13.5		ug/Kg		82	45 - 136
alpha-BHC	16.3	14.1		ug/Kg		86	45 - 137
alpha-Chlordane	16.3	14.2		ug/Kg		87	54 - 133
beta-BHC	16.3	13.8		ug/Kg		84	50 - 136
delta-BHC	16.3	14.0		ug/Kg		86	47 - 139
Dieldrin	16.3	14.7		ug/Kg		90	56 - 136
Endosulfan I	16.3	14.0		ug/Kg		86	53 - 132
Endosulfan II	16.3	13.6		ug/Kg		83	53 - 134
Endosulfan sulfate	16.3	13.6		ug/Kg		83	55 - 136
Endrin	16.3	15.9		ug/Kg		97	57 - 140
Endrin aldehyde	16.3	13.0		ug/Kg		79	35 - 137
gamma-BHC (Lindane)	16.3	14.1		ug/Kg		87	49 - 135
gamma-Chlordane	16.3	14.3		ug/Kg		87	53 - 135
Heptachlor	16.3	15.1		ug/Kg		92	47 - 136
Heptachlor epoxide	16.3	14.3		ug/Kg		88	52 - 136
Methoxychlor	16.3	14.3		ug/Kg		87	52 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*86*		*63 - 121*
Tetrachloro-m-xylene (Surr)	*85*		*42 - 129*

Lab Sample ID: LCS 280-377615/3-A
Matrix: Solid
Analysis Batch: 378628

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toxaphene	63.7	60.3	J	ug/Kg		95	33 - 141

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*83*		*63 - 121*

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 280-377615/3-A
Matrix: Solid
Analysis Batch: 378628

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377615

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene (Surr)	85		42 - 129

Lab Sample ID: 280-97928-3 MS
Matrix: Solid
Analysis Batch: 378628

Client Sample ID: SS025-SB06(0-2)
Prep Type: Total/NA
Prep Batch: 377615

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,4'-DDD	1.8	U J	16.9	2.86	Q J	ug/Kg	☼	17	56 - 139
4,4'-DDE	0.43	J J	16.9	3.14	Q J	ug/Kg	☼	16	56 - 134
4,4'-DDT	1.8	U M J	16.9	3.37	Q J	ug/Kg	☼	20	50 - 141
Aldrin	0.71	U J	16.9	3.10	Q J	ug/Kg	☼	18	45 - 136
alpha-BHC	0.71	U J	16.9	3.36	Q J	ug/Kg	☼	20	45 - 137
alpha-Chlordane	0.71	U J	16.9	3.08	Q J	ug/Kg	☼	18	54 - 133
beta-BHC	1.8	U J	16.9	3.42	Q J	ug/Kg	☼	20	50 - 136
delta-BHC	1.1	U J	16.9	3.22	Q J	ug/Kg	☼	19	47 - 139
Dieldrin	0.71	U J	16.9	3.25	Q J	ug/Kg	☼	19	56 - 136
Endosulfan I	0.71	U J	16.9	2.97	Q J	ug/Kg	☼	18	53 - 132
Endosulfan II	0.71	U J	16.9	2.91	Q J	ug/Kg	☼	17	53 - 134
Endosulfan sulfate	0.71	U J	16.9	3.08	Q J	ug/Kg	☼	18	55 - 136
Endrin	0.71	U J	16.9	3.54	Q J	ug/Kg	☼	21	57 - 140
Endrin aldehyde	0.71	U J	16.9	2.64	Q J	ug/Kg	☼	16	35 - 137
gamma-BHC (Lindane)	1.1	U J	16.9	3.36	Q J	ug/Kg	☼	20	49 - 135
gamma-Chlordane	0.71	U J	16.9	3.04	Q J	ug/Kg	☼	18	53 - 135
Heptachlor	0.71	U J	16.9	3.45	Q J	ug/Kg	☼	20	47 - 136
Heptachlor epoxide	1.1	U J	16.9	3.26	Q J	ug/Kg	☼	19	52 - 136
Methoxychlor	1.1	U J	16.9	3.33	Q J	ug/Kg	☼	20	52 - 143

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	24	Q	63 - 121
Tetrachloro-m-xylene (Surr)	22	Q	42 - 129

Lab Sample ID: 280-97928-3 MS
Matrix: Solid
Analysis Batch: 378628

Client Sample ID: SS025-SB06(0-2)
Prep Type: Total/NA
Prep Batch: 377615

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toxaphene	35	U	69.9	70.8	J	ug/Kg	☼	101	33 - 141

Surrogate	MS %Recovery	MS Qualifier	Limits
DCB Decachlorobiphenyl (Surr)	82		63 - 121
Tetrachloro-m-xylene (Surr)	79		42 - 129

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 280-97928-3 MSD — **Client Sample ID: SS025-SB06(0-2)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 378628 — **Prep Batch: 377615**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,4'-DDD	1.8	U J	17.2	12.3	J	ug/Kg	☼	72	56 - 139	125	30
4,4'-DDE	0.43	J J	17.2	12.4	J	ug/Kg	☼	69	56 - 134	119	30
4,4'-DDT	1.8	U M J	17.2	14.3	J	ug/Kg	☼	83	50 - 141	124	30
Aldrin	0.71	U J	17.2	12.0	J	ug/Kg	☼	70	45 - 136	118	30
alpha-BHC	0.71	U J	17.2	13.2	J	ug/Kg	☼	77	45 - 137	119	30
alpha-Chlordane	0.71	U J	17.2	12.2	J	ug/Kg	☼	71	54 - 133	120	30
beta-BHC	1.8	U J	17.2	12.4	J	ug/Kg	☼	72	50 - 136	113	30
delta-BHC	1.1	U J	17.2	13.0	J	ug/Kg	☼	76	47 - 139	121	30
Dieldrin	0.71	U J	17.2	13.0	J	ug/Kg	☼	76	56 - 136	120	30
Endosulfan I	0.71	U J	17.2	12.2	J	ug/Kg	☼	71	53 - 132	121	30
Endosulfan II	0.71	U J	17.2	11.9	J	ug/Kg	☼	69	53 - 134	121	30
Endosulfan sulfate	0.71	U J	17.2	12.5	J	ug/Kg	☼	73	55 - 136	121	30
Endrin	0.71	U J	17.2	14.5	J	ug/Kg	☼	84	57 - 140	121	30
Endrin aldehyde	0.71	U J	17.2	10.3	J	ug/Kg	☼	60	35 - 137	119	30
gamma-BHC (Lindane)	1.1	U J	17.2	13.0	J	ug/Kg	☼	76	49 - 135	118	30
gamma-Chlordane	0.71	U J	17.2	10.6	J	ug/Kg	☼	61	53 - 135	111	30
Heptachlor	0.71	U J	17.2	14.2	J	ug/Kg	☼	82	47 - 136	122	30
Heptachlor epoxide	1.1	U J	17.2	12.9	J	ug/Kg	☼	75	52 - 136	119	30
Methoxychlor	1.1	U J	17.2	13.9	J	ug/Kg	☼	81	52 - 143	123	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*72*		*63 - 121*
Tetrachloro-m-xylene (Surr)	*78*		*42 - 129*

Lab Sample ID: 280-97928-3 MSD — **Client Sample ID: SS025-SB06(0-2)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 378628 — **Prep Batch: 377615**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toxaphene	35	U	70.3	59.5	J	ug/Kg	☼	85	33 - 141	17	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*89*		*63 - 121*
Tetrachloro-m-xylene (Surr)	*69*		*42 - 129*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 280-377615/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 378729 — **Prep Batch: 377615**

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1016	14	U	32	4.9	ug/Kg		06/16/17 13:00	06/26/17 13:46	1
Arochlor 1221	16	U	45	15	ug/Kg		06/16/17 13:00	06/26/17 13:46	1
Arochlor 1232	14	U	32	4.9	ug/Kg		06/16/17 13:00	06/26/17 13:46	1
Arochlor 1242	32	U	32	8.8	ug/Kg		06/16/17 13:00	06/26/17 13:46	1
Arochlor 1248	19	U	32	5.4	ug/Kg		06/16/17 13:00	06/26/17 13:46	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 280-377615/1-A
Matrix: Solid
Analysis Batch: 378729

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 377615

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arochlor 1254	16	U	32	5.3	ug/Kg		06/16/17 13:00	06/26/17 13:46	1
Arochlor 1260	7.4	U	32	2.5	ug/Kg		06/16/17 13:00	06/26/17 13:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl (Surr)	*90*		*59 - 130*	*06/16/17 13:00*	*06/26/17 13:46*	*1*

Lab Sample ID: LCS 280-377615/4-A
Matrix: Solid
Analysis Batch: 378729

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 377615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arochlor 1016	61.7	61.6		ug/Kg		100	47 - 134
Arochlor 1260	61.7	60.3		ug/Kg		98	53 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*92*		*59 - 130*

Lab Sample ID: 280-97928-4 MS
Matrix: Solid
Analysis Batch: 378729

Client Sample ID: SS025-SB06(2-4)
Prep Type: Total/NA
Prep Batch: 377615

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arochlor 1016	16	U	73.5	65.9		ug/Kg	☼	90	47 - 134
Arochlor 1260	8.3	U	73.5	65.8		ug/Kg	☼	90	53 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*86*		*59 - 130*

Lab Sample ID: 280-97928-4 MSD
Matrix: Solid
Analysis Batch: 378729

Client Sample ID: SS025-SB06(2-4)
Prep Type: Total/NA
Prep Batch: 377615

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arochlor 1016	16	U	71.0	61.4		ug/Kg	☼	87	47 - 134	7	30
Arochlor 1260	8.3	U	71.0	61.4		ug/Kg	☼	87	53 - 140	7	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
DCB Decachlorobiphenyl (Surr)	*81*		*59 - 130*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 280-376380/1-A
Matrix: Solid
Analysis Batch: 376734

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376380

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6.0	U	50	1.6	mg/Kg		06/08/17 14:00	06/09/17 09:04	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 280-376380/1-A
Matrix: Solid
Analysis Batch: 376734

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376380

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.5	U	2.0	0.73	mg/Kg		06/08/17 14:00	06/09/17 09:04	1
Barium	0.143	J	2.0	0.10	mg/Kg		06/08/17 14:00	06/09/17 09:04	1
Beryllium	0.12	U	0.50	0.033	mg/Kg		06/08/17 14:00	06/09/17 09:04	1
Cadmium	0.15	U	0.50	0.041	mg/Kg		06/08/17 14:00	06/09/17 09:04	1
Calcium	28.5	J	100	14	mg/Kg		06/08/17 14:00	06/09/17 09:04	1
Chromium	0.0940	J	3.5	0.058	mg/Kg		06/08/17 14:00	06/09/17 09:04	1
Cobalt	0.40	U	1.0	0.10	mg/Kg		06/08/17 14:00	06/09/17 09:04	1
Iron	6.31	J	80	3.8	mg/Kg		06/08/17 14:00	06/09/17 09:04	1
Lead	0.80	U	0.90	0.31	mg/Kg		06/08/17 14:00	06/09/17 09:04	1
Magnesium	7.81	J	30	3.7	mg/Kg		06/08/17 14:00	06/09/17 09:04	1
Nickel	0.45	U	4.0	0.13	mg/Kg		06/08/17 14:00	06/09/17 09:04	1
Potassium	160	U	300	41	mg/Kg		06/08/17 14:00	06/09/17 09:04	1
Silver	0.60	U	1.5	0.16	mg/Kg		06/08/17 14:00	06/09/17 09:04	1
Sodium	200	U	500	59	mg/Kg		06/08/17 14:00	06/09/17 09:04	1
Vanadium	0.35	U	2.0	0.094	mg/Kg		06/08/17 14:00	06/09/17 09:04	1
Zinc	1.5	U	8.0	0.40	mg/Kg		06/08/17 14:00	06/09/17 09:04	1

Lab Sample ID: MB 280-376380/1-A
Matrix: Solid
Analysis Batch: 377044

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376380

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.40	U	4.5	0.10	mg/Kg		06/08/17 14:00	06/12/17 15:20	1

Lab Sample ID: MB 280-376380/1-A
Matrix: Solid
Analysis Batch: 377054

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376380

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.5	U	2.5	0.67	mg/Kg		06/08/17 14:00	06/12/17 23:22	1
Copper	0.80	U	5.0	0.22	mg/Kg		06/08/17 14:00	06/12/17 23:22	1
Selenium	3.0	U	3.0	0.86	mg/Kg		06/08/17 14:00	06/12/17 23:22	1

Lab Sample ID: MB 280-376380/1-A
Matrix: Solid
Analysis Batch: 377162

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376380

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	2.5	U	3.0	0.65	mg/Kg		06/08/17 14:00	06/13/17 10:20	1

Lab Sample ID: LCS 280-376380/2-A
Matrix: Solid
Analysis Batch: 376734

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376380

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	200	183		mg/Kg		91	74 - 119
Antimony	50.0	48.0		mg/Kg		96	79 - 114
Barium	200	186		mg/Kg		93	83 - 113
Beryllium	5.00	4.68		mg/Kg		94	83 - 113

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 280-376380/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 376734 — **Prep Batch: 376380**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	10.0	9.76		mg/Kg		98	82 - 113
Calcium	5000	4530		mg/Kg		91	81 - 116
Chromium	20.0	18.2		mg/Kg		91	85 - 113
Cobalt	50.0	46.8		mg/Kg		94	85 - 112
Iron	100	102		mg/Kg		102	81 - 118
Lead	50.0	44.9		mg/Kg		90	81 - 112
Magnesium	5000	4730		mg/Kg		95	78 - 115
Nickel	50.0	46.9		mg/Kg		94	83 - 113
Potassium	5000	4750		mg/Kg		95	81 - 116
Silver	5.00	4.59		mg/Kg		92	82 - 112
Sodium	5000	4920		mg/Kg		98	83 - 118
Vanadium	50.0	50.5		mg/Kg		101	82 - 114
Zinc	50.0	48.9		mg/Kg		98	82 - 113

Lab Sample ID: LCS 280-376380/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 377044 — **Prep Batch: 376380**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	50.0	48.7		mg/Kg		97	84 - 114

Lab Sample ID: LCS 280-376380/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 377054 — **Prep Batch: 376380**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	100	97.5		mg/Kg		98	82 - 111
Copper	25.0	24.4		mg/Kg		98	81 - 117
Selenium	200	191		mg/Kg		95	78 - 111

Lab Sample ID: LCS 280-376380/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 377162 — **Prep Batch: 376380**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	200	178		mg/Kg		89	83 - 111

Lab Sample ID: 280-97928-1 MS — **Client Sample ID: SS025-SS07**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 376734 — **Prep Batch: 376380**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5100	J	178	7610	4	mg/Kg	☼	1412	74 - 119
Antimony	1.7	U J	44.4	27.9	J	mg/Kg	☼	63	79 - 114
Barium	18		178	179		mg/Kg	☼	91	83 - 113
Beryllium	0.23	J	4.44	4.10		mg/Kg	☼	87	83 - 113
Cadmium	0.080	J	8.89	8.19		mg/Kg	☼	91	82 - 113
Calcium	1500		4440	5190		mg/Kg	☼	82	81 - 116
Chromium	5.4		17.8	22.0		mg/Kg	☼	93	85 - 113

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 280-97928-1 MS — **Client Sample ID: SS025-SS07**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 376734 — **Prep Batch: 376380**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	3.4		44.4	41.6		mg/Kg	☼	86	85 - 112
Iron	9800	J	88.9	9800	4	mg/Kg	☼	-16	81 - 118
Lead	4.2		44.4	40.1		mg/Kg	☼	81	81 - 112
Magnesium	2000		4440	6160		mg/Kg	☼	94	78 - 115
Nickel	7.4		44.4	45.2		mg/Kg	☼	85	83 - 113
Potassium	660		4440	5550		mg/Kg	☼	110	81 - 116
Silver	0.67	U	4.44	3.82		mg/Kg	☼	86	82 - 112
Sodium	220	U	4440	4080		mg/Kg	☼	92	83 - 118
Vanadium	9.8		44.4	56.1		mg/Kg	☼	104	82 - 114
Zinc	26		44.4	65.0		mg/Kg	☼	87	82 - 113

Lab Sample ID: 280-97928-1 MS — **Client Sample ID: SS025-SS07**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 377044 — **Prep Batch: 376380**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	430	J	44.4	452	4	mg/Kg	☼	59	84 - 114

Lab Sample ID: 280-97928-1 MS — **Client Sample ID: SS025-SS07**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 377054 — **Prep Batch: 376380**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2.3	J	88.9	86.6		mg/Kg	☼	95	82 - 111
Copper	11		22.2	31.6		mg/Kg	☼	91	81 - 117
Selenium	3.3	U	178	163		mg/Kg	☼	92	78 - 111

Lab Sample ID: 280-97928-1 MS — **Client Sample ID: SS025-SS07**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 377162 — **Prep Batch: 376380**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	2.8	U J	178	145	J	mg/Kg	☼	82	83 - 111

Lab Sample ID: 280-97928-1 MSD — **Client Sample ID: SS025-SS07**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 376734 — **Prep Batch: 376380**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	5100	J	188	7780	4	mg/Kg	☼	1425	74 - 119	2	20
Antimony	1.7	U J	47.1	32.0	J	mg/Kg	☼	68	79 - 114	14	20
Barium	18		188	197		mg/Kg	☼	95	83 - 113	9	20
Beryllium	0.23	J	4.71	4.51		mg/Kg	☼	91	83 - 113	10	20
Cadmium	0.080	J	9.42	9.14		mg/Kg	☼	96	82 - 113	11	20
Calcium	1500		4710	5670		mg/Kg	☼	88	81 - 116	9	20
Chromium	5.4		18.8	24.2		mg/Kg	☼	100	85 - 113	10	20
Cobalt	3.4		47.1	46.3		mg/Kg	☼	91	85 - 112	11	20
Iron	9800	J	94.2	9670	4	mg/Kg	☼	-157	81 - 118	1	20
Lead	4.2		47.1	44.3		mg/Kg	☼	85	81 - 112	10	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 280-97928-1 MSD — **Client Sample ID: SS025-SS07**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 376734 — **Prep Batch: 376380**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Magnesium	2000		4710	6660		mg/Kg	☼	99	78 - 115	8	20
Nickel	7.4		47.1	49.8		mg/Kg	☼	90	83 - 113	10	20
Potassium	660		4710	6050		mg/Kg	☼	115	81 - 116	9	20
Silver	0.67	U	4.71	4.21		mg/Kg	☼	89	82 - 112	10	20
Sodium	220	U	4710	4570		mg/Kg	☼	97	83 - 118	11	20
Vanadium	9.8		47.1	61.4		mg/Kg	☼	110	82 - 114	9	20
Zinc	26		47.1	69.2		mg/Kg	☼	91	82 - 113	6	20

Lab Sample ID: 280-97928-1 MSD — **Client Sample ID: SS025-SS07**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 377044 — **Prep Batch: 376380**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese	430	J	47.1	431	4	mg/Kg	☼	11	84 - 114	5	20

Lab Sample ID: 280-97928-1 MSD — **Client Sample ID: SS025-SS07**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 377054 — **Prep Batch: 376380**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	2.3	J	94.2	94.7		mg/Kg	☼	98	82 - 111	9	20
Copper	11		23.5	34.3		mg/Kg	☼	97	81 - 117	8	20
Selenium	3.3	U	188	179		mg/Kg	☼	95	78 - 111	9	20

Lab Sample ID: 280-97928-1 MSD — **Client Sample ID: SS025-SS07**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 377162 — **Prep Batch: 376380**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Thallium	2.8	U J	188	160		mg/Kg	☼	85	83 - 111	10	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 280-377156/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 377403 — **Prep Batch: 377156**

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	13	U	17	5.5	ug/Kg		06/14/17 12:49	06/14/17 16:46	1

Lab Sample ID: LCS 280-377156/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 377403 — **Prep Batch: 377156**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			333	330		ug/Kg		99	80 - 124		

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: 280-97928-1 MS
Matrix: Solid
Analysis Batch: 377403

Client Sample ID: SS025-SS07
Prep Type: Total/NA
Prep Batch: 377156

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	18	U	412	433		ug/Kg	☼	105	80 - 124

Lab Sample ID: 280-97928-1 MSD
Matrix: Solid
Analysis Batch: 377403

Client Sample ID: SS025-SS07
Prep Type: Total/NA
Prep Batch: 377156

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	18	U	444	466		ug/Kg	☼	105	80 - 124	7	20

QC Association Summary

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97928-1

GC/MS VOA

Analysis Batch: 377520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-1	SS025-SS07	Total/NA	Solid	8260B	377540
MB 280-377540/1-A	Method Blank	Total/NA	Solid	8260B	377540
LCS 280-377540/3-A	Lab Control Sample	Total/NA	Solid	8260B	377540

Prep Batch: 377540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-1	SS025-SS07	Total/NA	Solid	5035	
MB 280-377540/1-A	Method Blank	Total/NA	Solid	5035	
LCS 280-377540/3-A	Lab Control Sample	Total/NA	Solid	5035	

Analysis Batch: 377645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-14	SS025-SB09(0-2)	Total/NA	Solid	8260B	377664
280-97928-15	SS025-SB09(2-4)	Total/NA	Solid	8260B	377664
280-97928-16	SS025-SB09(4-6)	Total/NA	Solid	8260B	377664
280-97928-17	SS025-SB09(6-8)	Total/NA	Solid	8260B	377664
280-97928-18	SS025-SB10(0-2)	Total/NA	Solid	8260B	377664
280-97928-19	SS025-SB10(2-4)	Total/NA	Solid	8260B	377664
280-97928-21	SS025-SB10(2-4)-a	Total/NA	Solid	8260B	377664
280-97928-22	SS025-SS10	Total/NA	Solid	8260B	377664
MB 280-377664/1-A	Method Blank	Total/NA	Solid	8260B	377664
LCS 280-377664/2-A	Lab Control Sample	Total/NA	Solid	8260B	377664
LCS 280-377664/3-A	Lab Control Sample	Total/NA	Solid	8260B	377664

Prep Batch: 377664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-14	SS025-SB09(0-2)	Total/NA	Solid	5035	
280-97928-15	SS025-SB09(2-4)	Total/NA	Solid	5035	
280-97928-16	SS025-SB09(4-6)	Total/NA	Solid	5035	
280-97928-17	SS025-SB09(6-8)	Total/NA	Solid	5035	
280-97928-18	SS025-SB10(0-2)	Total/NA	Solid	5035	
280-97928-19	SS025-SB10(2-4)	Total/NA	Solid	5035	
280-97928-21	SS025-SB10(2-4)-a	Total/NA	Solid	5035	
280-97928-22	SS025-SS10	Total/NA	Solid	5035	
MB 280-377664/1-A	Method Blank	Total/NA	Solid	5035	
LCS 280-377664/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 280-377664/3-A	Lab Control Sample	Total/NA	Solid	5035	

Prep Batch: 377666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-2	SS025-TB02	Total/NA	Solid	5035	
280-97928-3	SS025-SB06(0-2)	Total/NA	Solid	5035	
280-97928-4	SS025-SB06(2-4)	Total/NA	Solid	5035	
280-97928-5	SS025-SS08	Total/NA	Solid	5035	
280-97928-6	SS025-SB07(0-2)	Total/NA	Solid	5035	
280-97928-7	SS025-SB07(2-4)	Total/NA	Solid	5035	
280-97928-8	SS025-SB01(0-2)	Total/NA	Solid	5035	
280-97928-9	SS025-SB01(0-2)-a	Total/NA	Solid	5035	
280-97928-10	SS025-SB08(0-2)	Total/NA	Solid	5035	
280-97928-11	SS025-SB08(2-4)	Total/NA	Solid	5035	
280-97928-12	SS025-SS09	Total/NA	Solid	5035	

GC/MS VOA (Continued)

Prep Batch: 377666 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-377666/1-A	Method Blank	Total/NA	Solid	5035	
LCS 280-377666/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 280-377666/3-A	Lab Control Sample	Total/NA	Solid	5035	

Analysis Batch: 377667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-2	SS025-TB02	Total/NA	Solid	8260B	377666
280-97928-3	SS025-SB06(0-2)	Total/NA	Solid	8260B	377666
280-97928-4	SS025-SB06(2-4)	Total/NA	Solid	8260B	377666
280-97928-5	SS025-SS08	Total/NA	Solid	8260B	377666
280-97928-6	SS025-SB07(0-2)	Total/NA	Solid	8260B	377666
280-97928-7	SS025-SB07(2-4)	Total/NA	Solid	8260B	377666
280-97928-8	SS025-SB01(0-2)	Total/NA	Solid	8260B	377666
280-97928-9	SS025-SB01(0-2)-a	Total/NA	Solid	8260B	377666
280-97928-10	SS025-SB08(0-2)	Total/NA	Solid	8260B	377666
280-97928-11	SS025-SB08(2-4)	Total/NA	Solid	8260B	377666
280-97928-12	SS025-SS09	Total/NA	Solid	8260B	377666
MB 280-377666/1-A	Method Blank	Total/NA	Solid	8260B	377666
LCS 280-377666/2-A	Lab Control Sample	Total/NA	Solid	8260B	377666
LCS 280-377666/3-A	Lab Control Sample	Total/NA	Solid	8260B	377666

Analysis Batch: 377804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-20	SS025-SB10(4-6)	Total/NA	Solid	8260B	377884
MB 280-377884/1-A	Method Blank	Total/NA	Solid	8260B	377884

Prep Batch: 377884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-20	SS025-SB10(4-6)	Total/NA	Solid	5035	
MB 280-377884/1-A	Method Blank	Total/NA	Solid	5035	
LCS 280-377884/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 280-377884/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 378395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 280-377884/2-A	Lab Control Sample	Total/NA	Solid	8260B	377884
LCSD 280-377884/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B	377884

GC/MS Semi VOA

Prep Batch: 376824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-1	SS025-SS07	Total/NA	Solid	3546	
280-97928-3	SS025-SB06(0-2)	Total/NA	Solid	3546	
280-97928-4	SS025-SB06(2-4)	Total/NA	Solid	3546	
280-97928-5	SS025-SS08	Total/NA	Solid	3546	
280-97928-6	SS025-SB07(0-2)	Total/NA	Solid	3546	
280-97928-7	SS025-SB07(2-4)	Total/NA	Solid	3546	
280-97928-8 - DL	SS025-SB01(0-2)	Total/NA	Solid	3546	
280-97928-8	SS025-SB01(0-2)	Total/NA	Solid	3546	

GC/MS Semi VOA (Continued)

Prep Batch: 376824 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-9 - DL	SS025-SB01(0-2)-a	Total/NA	Solid	3546	
280-97928-9	SS025-SB01(0-2)-a	Total/NA	Solid	3546	
280-97928-10	SS025-SB08(0-2)	Total/NA	Solid	3546	
280-97928-11	SS025-SB08(2-4)	Total/NA	Solid	3546	
280-97928-12	SS025-SS09	Total/NA	Solid	3546	
280-97928-14	SS025-SB09(0-2)	Total/NA	Solid	3546	
280-97928-15	SS025-SB09(2-4)	Total/NA	Solid	3546	
280-97928-16	SS025-SB09(4-6)	Total/NA	Solid	3546	
280-97928-17	SS025-SB09(6-8)	Total/NA	Solid	3546	
280-97928-18	SS025-SB10(0-2)	Total/NA	Solid	3546	
280-97928-19	SS025-SB10(2-4)	Total/NA	Solid	3546	
280-97928-20	SS025-SB10(4-6)	Total/NA	Solid	3546	
280-97928-21	SS025-SB10(2-4)-a	Total/NA	Solid	3546	
280-97928-22	SS025-SS10	Total/NA	Solid	3546	
MB 280-376824/1-A	Method Blank	Total/NA	Solid	3546	
LCS 280-376824/2-A	Lab Control Sample	Total/NA	Solid	3546	
280-97928-1 MS	SS025-SS07	Total/NA	Solid	3546	
280-97928-1 MSD	SS025-SS07	Total/NA	Solid	3546	

Prep Batch: 376856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-13	SS025-AB-060517	Total/NA	Water	3510C	
MB 280-376856/1-A	Method Blank	Total/NA	Water	3510C	
LCS 280-376856/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 280-376856/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 377379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 280-376824/1-A	Method Blank	Total/NA	Solid	8270D SIM	376824
LCS 280-376824/2-A	Lab Control Sample	Total/NA	Solid	8270D SIM	376824

Analysis Batch: 377669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-1	SS025-SS07	Total/NA	Solid	8270D SIM	376824
280-97928-3	SS025-SB06(0-2)	Total/NA	Solid	8270D SIM	376824
280-97928-4	SS025-SB06(2-4)	Total/NA	Solid	8270D SIM	376824
280-97928-5	SS025-SS08	Total/NA	Solid	8270D SIM	376824
280-97928-6	SS025-SB07(0-2)	Total/NA	Solid	8270D SIM	376824
280-97928-7	SS025-SB07(2-4)	Total/NA	Solid	8270D SIM	376824
280-97928-8	SS025-SB01(0-2)	Total/NA	Solid	8270D SIM	376824
280-97928-9	SS025-SB01(0-2)-a	Total/NA	Solid	8270D SIM	376824
280-97928-10	SS025-SB08(0-2)	Total/NA	Solid	8270D SIM	376824
280-97928-11	SS025-SB08(2-4)	Total/NA	Solid	8270D SIM	376824
280-97928-12	SS025-SS09	Total/NA	Solid	8270D SIM	376824
280-97928-14	SS025-SB09(0-2)	Total/NA	Solid	8270D SIM	376824
280-97928-15	SS025-SB09(2-4)	Total/NA	Solid	8270D SIM	376824
280-97928-16	SS025-SB09(4-6)	Total/NA	Solid	8270D SIM	376824
280-97928-17	SS025-SB09(6-8)	Total/NA	Solid	8270D SIM	376824
280-97928-18	SS025-SB10(0-2)	Total/NA	Solid	8270D SIM	376824
280-97928-19	SS025-SB10(2-4)	Total/NA	Solid	8270D SIM	376824
280-97928-20	SS025-SB10(4-6)	Total/NA	Solid	8270D SIM	376824

GC/MS Semi VOA (Continued)

Analysis Batch: 377669 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-21	SS025-SB10(2-4)-a	Total/NA	Solid	8270D SIM	376824
280-97928-22	SS025-SS10	Total/NA	Solid	8270D SIM	376824
280-97928-1 MS	SS025-SS07	Total/NA	Solid	8270D SIM	376824
280-97928-1 MSD	SS025-SS07	Total/NA	Solid	8270D SIM	376824

Analysis Batch: 378055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-8 - DL	SS025-SB01(0-2)	Total/NA	Solid	8270D SIM	376824
280-97928-9 - DL	SS025-SB01(0-2)-a	Total/NA	Solid	8270D SIM	376824
280-97928-13	SS025-AB-060517	Total/NA	Water	8270D SIM	376856
MB 280-376856/1-A	Method Blank	Total/NA	Water	8270D SIM	376856
LCS 280-376856/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	376856
LCSD 280-376856/3-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	376856

GC Semi VOA

Prep Batch: 377615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-1	SS025-SS07	Total/NA	Solid	3546	
280-97928-3	SS025-SB06(0-2)	Total/NA	Solid	3546	
280-97928-4	SS025-SB06(2-4)	Total/NA	Solid	3546	
280-97928-5	SS025-SS08	Total/NA	Solid	3546	
280-97928-6	SS025-SB07(0-2)	Total/NA	Solid	3546	
280-97928-7	SS025-SB07(2-4)	Total/NA	Solid	3546	
280-97928-8 - DL	SS025-SB01(0-2)	Total/NA	Solid	3546	
280-97928-8	SS025-SB01(0-2)	Total/NA	Solid	3546	
280-97928-9	SS025-SB01(0-2)-a	Total/NA	Solid	3546	
280-97928-10	SS025-SB08(0-2)	Total/NA	Solid	3546	
280-97928-11	SS025-SB08(2-4)	Total/NA	Solid	3546	
280-97928-12	SS025-SS09	Total/NA	Solid	3546	
280-97928-14	SS025-SB09(0-2)	Total/NA	Solid	3546	
280-97928-14 - DL	SS025-SB09(0-2)	Total/NA	Solid	3546	
280-97928-15	SS025-SB09(2-4)	Total/NA	Solid	3546	
280-97928-16	SS025-SB09(4-6)	Total/NA	Solid	3546	
280-97928-17	SS025-SB09(6-8)	Total/NA	Solid	3546	
280-97928-18	SS025-SB10(0-2)	Total/NA	Solid	3546	
280-97928-19	SS025-SB10(2-4)	Total/NA	Solid	3546	
280-97928-20	SS025-SB10(4-6)	Total/NA	Solid	3546	
280-97928-21	SS025-SB10(2-4)-a	Total/NA	Solid	3546	
280-97928-22	SS025-SS10	Total/NA	Solid	3546	
MB 280-377615/1-A	Method Blank	Total/NA	Solid	3546	
LCS 280-377615/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCS 280-377615/3-A	Lab Control Sample	Total/NA	Solid	3546	
LCS 280-377615/4-A	Lab Control Sample	Total/NA	Solid	3546	
280-97928-3 MS	SS025-SB06(0-2)	Total/NA	Solid	3546	
280-97928-3 MS	SS025-SB06(0-2)	Total/NA	Solid	3546	
280-97928-3 MSD	SS025-SB06(0-2)	Total/NA	Solid	3546	
280-97928-3 MSD	SS025-SB06(0-2)	Total/NA	Solid	3546	
280-97928-4 MS	SS025-SB06(2-4)	Total/NA	Solid	3546	
280-97928-4 MSD	SS025-SB06(2-4)	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Analysis Batch: 378628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-1	SS025-SS07	Total/NA	Solid	8081B	377615
280-97928-3	SS025-SB06(0-2)	Total/NA	Solid	8081B	377615
280-97928-4	SS025-SB06(2-4)	Total/NA	Solid	8081B	377615
280-97928-5	SS025-SS08	Total/NA	Solid	8081B	377615
280-97928-6	SS025-SB07(0-2)	Total/NA	Solid	8081B	377615
280-97928-7	SS025-SB07(2-4)	Total/NA	Solid	8081B	377615
280-97928-8 - DL	SS025-SB01(0-2)	Total/NA	Solid	8081B	377615
280-97928-8	SS025-SB01(0-2)	Total/NA	Solid	8081B	377615
280-97928-9	SS025-SB01(0-2)-a	Total/NA	Solid	8081B	377615
280-97928-10	SS025-SB08(0-2)	Total/NA	Solid	8081B	377615
280-97928-11	SS025-SB08(2-4)	Total/NA	Solid	8081B	377615
280-97928-12	SS025-SS09	Total/NA	Solid	8081B	377615
280-97928-14 - DL	SS025-SB09(0-2)	Total/NA	Solid	8081B	377615
280-97928-14	SS025-SB09(0-2)	Total/NA	Solid	8081B	377615
280-97928-15	SS025-SB09(2-4)	Total/NA	Solid	8081B	377615
280-97928-16	SS025-SB09(4-6)	Total/NA	Solid	8081B	377615
280-97928-17	SS025-SB09(6-8)	Total/NA	Solid	8081B	377615
280-97928-18	SS025-SB10(0-2)	Total/NA	Solid	8081B	377615
280-97928-19	SS025-SB10(2-4)	Total/NA	Solid	8081B	377615
280-97928-20	SS025-SB10(4-6)	Total/NA	Solid	8081B	377615
280-97928-21	SS025-SB10(2-4)-a	Total/NA	Solid	8081B	377615
280-97928-22	SS025-SS10	Total/NA	Solid	8081B	377615
MB 280-377615/1-A	Method Blank	Total/NA	Solid	8081B	377615
LCS 280-377615/2-A	Lab Control Sample	Total/NA	Solid	8081B	377615
LCS 280-377615/3-A	Lab Control Sample	Total/NA	Solid	8081B	377615
280-97928-3 MS	SS025-SB06(0-2)	Total/NA	Solid	8081B	377615
280-97928-3 MS	SS025-SB06(0-2)	Total/NA	Solid	8081B	377615
280-97928-3 MSD	SS025-SB06(0-2)	Total/NA	Solid	8081B	377615
280-97928-3 MSD	SS025-SB06(0-2)	Total/NA	Solid	8081B	377615

Analysis Batch: 378729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-1	SS025-SS07	Total/NA	Solid	8082A	377615
280-97928-3	SS025-SB06(0-2)	Total/NA	Solid	8082A	377615
280-97928-4	SS025-SB06(2-4)	Total/NA	Solid	8082A	377615
280-97928-5	SS025-SS08	Total/NA	Solid	8082A	377615
280-97928-6	SS025-SB07(0-2)	Total/NA	Solid	8082A	377615
280-97928-7	SS025-SB07(2-4)	Total/NA	Solid	8082A	377615
280-97928-8	SS025-SB01(0-2)	Total/NA	Solid	8082A	377615
280-97928-9	SS025-SB01(0-2)-a	Total/NA	Solid	8082A	377615
280-97928-10	SS025-SB08(0-2)	Total/NA	Solid	8082A	377615
280-97928-11	SS025-SB08(2-4)	Total/NA	Solid	8082A	377615
280-97928-12	SS025-SS09	Total/NA	Solid	8082A	377615
280-97928-14	SS025-SB09(0-2)	Total/NA	Solid	8082A	377615
280-97928-15	SS025-SB09(2-4)	Total/NA	Solid	8082A	377615
280-97928-16	SS025-SB09(4-6)	Total/NA	Solid	8082A	377615
280-97928-17	SS025-SB09(6-8)	Total/NA	Solid	8082A	377615
280-97928-18	SS025-SB10(0-2)	Total/NA	Solid	8082A	377615
280-97928-19	SS025-SB10(2-4)	Total/NA	Solid	8082A	377615
280-97928-20	SS025-SB10(4-6)	Total/NA	Solid	8082A	377615
280-97928-21	SS025-SB10(2-4)-a	Total/NA	Solid	8082A	377615

GC Semi VOA (Continued)

Analysis Batch: 378729 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-22	SS025-SS10	Total/NA	Solid	8082A	377615
MB 280-377615/1-A	Method Blank	Total/NA	Solid	8082A	377615
LCS 280-377615/4-A	Lab Control Sample	Total/NA	Solid	8082A	377615
280-97928-4 MS	SS025-SB06(2-4)	Total/NA	Solid	8082A	377615
280-97928-4 MSD	SS025-SB06(2-4)	Total/NA	Solid	8082A	377615

Metals

Prep Batch: 376380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-1	SS025-SS07	Total/NA	Solid	3050B	
280-97928-3	SS025-SB06(0-2)	Total/NA	Solid	3050B	
280-97928-4	SS025-SB06(2-4)	Total/NA	Solid	3050B	
280-97928-5	SS025-SS08	Total/NA	Solid	3050B	
280-97928-6	SS025-SB07(0-2)	Total/NA	Solid	3050B	
280-97928-7	SS025-SB07(2-4)	Total/NA	Solid	3050B	
280-97928-8	SS025-SB01(0-2)	Total/NA	Solid	3050B	
280-97928-9	SS025-SB01(0-2)-a	Total/NA	Solid	3050B	
280-97928-10	SS025-SB08(0-2)	Total/NA	Solid	3050B	
280-97928-11	SS025-SB08(2-4)	Total/NA	Solid	3050B	
280-97928-12	SS025-SS09	Total/NA	Solid	3050B	
280-97928-14	SS025-SB09(0-2)	Total/NA	Solid	3050B	
280-97928-15	SS025-SB09(2-4)	Total/NA	Solid	3050B	
280-97928-16	SS025-SB09(4-6)	Total/NA	Solid	3050B	
280-97928-17	SS025-SB09(6-8)	Total/NA	Solid	3050B	
280-97928-18	SS025-SB10(0-2)	Total/NA	Solid	3050B	
280-97928-19	SS025-SB10(2-4)	Total/NA	Solid	3050B	
280-97928-20	SS025-SB10(4-6)	Total/NA	Solid	3050B	
280-97928-21	SS025-SB10(2-4)-a	Total/NA	Solid	3050B	
280-97928-22	SS025-SS10	Total/NA	Solid	3050B	
MB 280-376380/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 280-376380/2-A	Lab Control Sample	Total/NA	Solid	3050B	
280-97928-1 MS	SS025-SS07	Total/NA	Solid	3050B	
280-97928-1 MSD	SS025-SS07	Total/NA	Solid	3050B	

Analysis Batch: 376734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-1	SS025-SS07	Total/NA	Solid	6010C	376380
280-97928-3	SS025-SB06(0-2)	Total/NA	Solid	6010C	376380
280-97928-4	SS025-SB06(2-4)	Total/NA	Solid	6010C	376380
280-97928-5	SS025-SS08	Total/NA	Solid	6010C	376380
280-97928-6	SS025-SB07(0-2)	Total/NA	Solid	6010C	376380
280-97928-7	SS025-SB07(2-4)	Total/NA	Solid	6010C	376380
280-97928-8	SS025-SB01(0-2)	Total/NA	Solid	6010C	376380
280-97928-9	SS025-SB01(0-2)-a	Total/NA	Solid	6010C	376380
280-97928-10	SS025-SB08(0-2)	Total/NA	Solid	6010C	376380
280-97928-11	SS025-SB08(2-4)	Total/NA	Solid	6010C	376380
280-97928-12	SS025-SS09	Total/NA	Solid	6010C	376380
280-97928-14	SS025-SB09(0-2)	Total/NA	Solid	6010C	376380
280-97928-15	SS025-SB09(2-4)	Total/NA	Solid	6010C	376380

Metals (Continued)

Analysis Batch: 376734 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-16	SS025-SB09(4-6)	Total/NA	Solid	6010C	376380
280-97928-17	SS025-SB09(6-8)	Total/NA	Solid	6010C	376380
280-97928-18	SS025-SB10(0-2)	Total/NA	Solid	6010C	376380
280-97928-19	SS025-SB10(2-4)	Total/NA	Solid	6010C	376380
280-97928-20	SS025-SB10(4-6)	Total/NA	Solid	6010C	376380
280-97928-21	SS025-SB10(2-4)-a	Total/NA	Solid	6010C	376380
280-97928-22	SS025-SS10	Total/NA	Solid	6010C	376380
MB 280-376380/1-A	Method Blank	Total/NA	Solid	6010C	376380
LCS 280-376380/2-A	Lab Control Sample	Total/NA	Solid	6010C	376380
280-97928-1 MS	SS025-SS07	Total/NA	Solid	6010C	376380
280-97928-1 MSD	SS025-SS07	Total/NA	Solid	6010C	376380

Analysis Batch: 377044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-1	SS025-SS07	Total/NA	Solid	6010C	376380
280-97928-3	SS025-SB06(0-2)	Total/NA	Solid	6010C	376380
280-97928-4	SS025-SB06(2-4)	Total/NA	Solid	6010C	376380
280-97928-5	SS025-SS08	Total/NA	Solid	6010C	376380
280-97928-6	SS025-SB07(0-2)	Total/NA	Solid	6010C	376380
280-97928-7	SS025-SB07(2-4)	Total/NA	Solid	6010C	376380
280-97928-8	SS025-SB01(0-2)	Total/NA	Solid	6010C	376380
280-97928-9	SS025-SB01(0-2)-a	Total/NA	Solid	6010C	376380
280-97928-10	SS025-SB08(0-2)	Total/NA	Solid	6010C	376380
280-97928-11	SS025-SB08(2-4)	Total/NA	Solid	6010C	376380
280-97928-12	SS025-SS09	Total/NA	Solid	6010C	376380
280-97928-14	SS025-SB09(0-2)	Total/NA	Solid	6010C	376380
280-97928-15	SS025-SB09(2-4)	Total/NA	Solid	6010C	376380
280-97928-16	SS025-SB09(4-6)	Total/NA	Solid	6010C	376380
280-97928-17	SS025-SB09(6-8)	Total/NA	Solid	6010C	376380
280-97928-18	SS025-SB10(0-2)	Total/NA	Solid	6010C	376380
280-97928-19	SS025-SB10(2-4)	Total/NA	Solid	6010C	376380
280-97928-20	SS025-SB10(4-6)	Total/NA	Solid	6010C	376380
280-97928-21	SS025-SB10(2-4)-a	Total/NA	Solid	6010C	376380
280-97928-22	SS025-SS10	Total/NA	Solid	6010C	376380
MB 280-376380/1-A	Method Blank	Total/NA	Solid	6010C	376380
LCS 280-376380/2-A	Lab Control Sample	Total/NA	Solid	6010C	376380
280-97928-1 MS	SS025-SS07	Total/NA	Solid	6010C	376380
280-97928-1 MSD	SS025-SS07	Total/NA	Solid	6010C	376380

Analysis Batch: 377054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-1	SS025-SS07	Total/NA	Solid	6010C	376380
280-97928-3	SS025-SB06(0-2)	Total/NA	Solid	6010C	376380
280-97928-4	SS025-SB06(2-4)	Total/NA	Solid	6010C	376380
280-97928-5	SS025-SS08	Total/NA	Solid	6010C	376380
280-97928-6	SS025-SB07(0-2)	Total/NA	Solid	6010C	376380
280-97928-7	SS025-SB07(2-4)	Total/NA	Solid	6010C	376380
280-97928-8	SS025-SB01(0-2)	Total/NA	Solid	6010C	376380
280-97928-9	SS025-SB01(0-2)-a	Total/NA	Solid	6010C	376380
280-97928-10	SS025-SB08(0-2)	Total/NA	Solid	6010C	376380
280-97928-11	SS025-SB08(2-4)	Total/NA	Solid	6010C	376380

Metals (Continued)

Analysis Batch: 377054 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-12	SS025-SS09	Total/NA	Solid	6010C	376380
280-97928-14	SS025-SB09(0-2)	Total/NA	Solid	6010C	376380
280-97928-15	SS025-SB09(2-4)	Total/NA	Solid	6010C	376380
280-97928-16	SS025-SB09(4-6)	Total/NA	Solid	6010C	376380
280-97928-17	SS025-SB09(6-8)	Total/NA	Solid	6010C	376380
280-97928-18	SS025-SB10(0-2)	Total/NA	Solid	6010C	376380
280-97928-19	SS025-SB10(2-4)	Total/NA	Solid	6010C	376380
280-97928-20	SS025-SB10(4-6)	Total/NA	Solid	6010C	376380
280-97928-21	SS025-SB10(2-4)-a	Total/NA	Solid	6010C	376380
280-97928-22	SS025-SS10	Total/NA	Solid	6010C	376380
MB 280-376380/1-A	Method Blank	Total/NA	Solid	6010C	376380
LCS 280-376380/2-A	Lab Control Sample	Total/NA	Solid	6010C	376380
280-97928-1 MS	SS025-SS07	Total/NA	Solid	6010C	376380
280-97928-1 MSD	SS025-SS07	Total/NA	Solid	6010C	376380

Prep Batch: 377156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-1	SS025-SS07	Total/NA	Solid	7471A	
280-97928-3	SS025-SB06(0-2)	Total/NA	Solid	7471A	
280-97928-4	SS025-SB06(2-4)	Total/NA	Solid	7471A	
280-97928-5	SS025-SS08	Total/NA	Solid	7471A	
280-97928-6	SS025-SB07(0-2)	Total/NA	Solid	7471A	
280-97928-7	SS025-SB07(2-4)	Total/NA	Solid	7471A	
280-97928-8	SS025-SB01(0-2)	Total/NA	Solid	7471A	
280-97928-9	SS025-SB01(0-2)-a	Total/NA	Solid	7471A	
280-97928-10	SS025-SB08(0-2)	Total/NA	Solid	7471A	
280-97928-11	SS025-SB08(2-4)	Total/NA	Solid	7471A	
280-97928-12	SS025-SS09	Total/NA	Solid	7471A	
280-97928-14	SS025-SB09(0-2)	Total/NA	Solid	7471A	
280-97928-15	SS025-SB09(2-4)	Total/NA	Solid	7471A	
280-97928-16	SS025-SB09(4-6)	Total/NA	Solid	7471A	
280-97928-17	SS025-SB09(6-8)	Total/NA	Solid	7471A	
280-97928-18	SS025-SB10(0-2)	Total/NA	Solid	7471A	
280-97928-19	SS025-SB10(2-4)	Total/NA	Solid	7471A	
280-97928-20	SS025-SB10(4-6)	Total/NA	Solid	7471A	
280-97928-21	SS025-SB10(2-4)-a	Total/NA	Solid	7471A	
280-97928-22	SS025-SS10	Total/NA	Solid	7471A	
MB 280-377156/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 280-377156/2-A	Lab Control Sample	Total/NA	Solid	7471A	
280-97928-1 MS	SS025-SS07	Total/NA	Solid	7471A	
280-97928-1 MSD	SS025-SS07	Total/NA	Solid	7471A	

Analysis Batch: 377162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-1	SS025-SS07	Total/NA	Solid	6010C	376380
280-97928-3	SS025-SB06(0-2)	Total/NA	Solid	6010C	376380
280-97928-4	SS025-SB06(2-4)	Total/NA	Solid	6010C	376380
280-97928-5	SS025-SS08	Total/NA	Solid	6010C	376380
280-97928-6	SS025-SB07(0-2)	Total/NA	Solid	6010C	376380
280-97928-7	SS025-SB07(2-4)	Total/NA	Solid	6010C	376380
280-97928-8	SS025-SB01(0-2)	Total/NA	Solid	6010C	376380

Metals (Continued)

Analysis Batch: 377162 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-9	SS025-SB01(0-2)-a	Total/NA	Solid	6010C	376380
280-97928-10	SS025-SB08(0-2)	Total/NA	Solid	6010C	376380
280-97928-11	SS025-SB08(2-4)	Total/NA	Solid	6010C	376380
280-97928-12	SS025-SS09	Total/NA	Solid	6010C	376380
280-97928-14	SS025-SB09(0-2)	Total/NA	Solid	6010C	376380
280-97928-15	SS025-SB09(2-4)	Total/NA	Solid	6010C	376380
280-97928-16	SS025-SB09(4-6)	Total/NA	Solid	6010C	376380
280-97928-17	SS025-SB09(6-8)	Total/NA	Solid	6010C	376380
280-97928-18	SS025-SB10(0-2)	Total/NA	Solid	6010C	376380
280-97928-19	SS025-SB10(2-4)	Total/NA	Solid	6010C	376380
280-97928-20	SS025-SB10(4-6)	Total/NA	Solid	6010C	376380
280-97928-21	SS025-SB10(2-4)-a	Total/NA	Solid	6010C	376380
280-97928-22	SS025-SS10	Total/NA	Solid	6010C	376380
MB 280-376380/1-A	Method Blank	Total/NA	Solid	6010C	376380
LCS 280-376380/2-A	Lab Control Sample	Total/NA	Solid	6010C	376380
280-97928-1 MS	SS025-SS07	Total/NA	Solid	6010C	376380
280-97928-1 MSD	SS025-SS07	Total/NA	Solid	6010C	376380

Analysis Batch: 377403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-1	SS025-SS07	Total/NA	Solid	7471A	377156
280-97928-3	SS025-SB06(0-2)	Total/NA	Solid	7471A	377156
280-97928-4	SS025-SB06(2-4)	Total/NA	Solid	7471A	377156
280-97928-5	SS025-SS08	Total/NA	Solid	7471A	377156
280-97928-6	SS025-SB07(0-2)	Total/NA	Solid	7471A	377156
280-97928-7	SS025-SB07(2-4)	Total/NA	Solid	7471A	377156
280-97928-8	SS025-SB01(0-2)	Total/NA	Solid	7471A	377156
280-97928-9	SS025-SB01(0-2)-a	Total/NA	Solid	7471A	377156
280-97928-10	SS025-SB08(0-2)	Total/NA	Solid	7471A	377156
280-97928-11	SS025-SB08(2-4)	Total/NA	Solid	7471A	377156
280-97928-12	SS025-SS09	Total/NA	Solid	7471A	377156
280-97928-14	SS025-SB09(0-2)	Total/NA	Solid	7471A	377156
280-97928-15	SS025-SB09(2-4)	Total/NA	Solid	7471A	377156
280-97928-16	SS025-SB09(4-6)	Total/NA	Solid	7471A	377156
280-97928-17	SS025-SB09(6-8)	Total/NA	Solid	7471A	377156
280-97928-18	SS025-SB10(0-2)	Total/NA	Solid	7471A	377156
280-97928-19	SS025-SB10(2-4)	Total/NA	Solid	7471A	377156
280-97928-20	SS025-SB10(4-6)	Total/NA	Solid	7471A	377156
280-97928-21	SS025-SB10(2-4)-a	Total/NA	Solid	7471A	377156
280-97928-22	SS025-SS10	Total/NA	Solid	7471A	377156
MB 280-377156/1-A	Method Blank	Total/NA	Solid	7471A	377156
LCS 280-377156/2-A	Lab Control Sample	Total/NA	Solid	7471A	377156
280-97928-1 MS	SS025-SS07	Total/NA	Solid	7471A	377156
280-97928-1 MSD	SS025-SS07	Total/NA	Solid	7471A	377156

General Chemistry

Analysis Batch: 376574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-1	SS025-SS07	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 376574 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-97928-3	SS025-SB06(0-2)	Total/NA	Solid	Moisture	
280-97928-4	SS025-SB06(2-4)	Total/NA	Solid	Moisture	
280-97928-5	SS025-SS08	Total/NA	Solid	Moisture	
280-97928-6	SS025-SB07(0-2)	Total/NA	Solid	Moisture	
280-97928-7	SS025-SB07(2-4)	Total/NA	Solid	Moisture	
280-97928-8	SS025-SB01(0-2)	Total/NA	Solid	Moisture	
280-97928-9	SS025-SB01(0-2)-a	Total/NA	Solid	Moisture	
280-97928-10	SS025-SB08(0-2)	Total/NA	Solid	Moisture	
280-97928-11	SS025-SB08(2-4)	Total/NA	Solid	Moisture	
280-97928-12	SS025-SS09	Total/NA	Solid	Moisture	
280-97928-14	SS025-SB09(0-2)	Total/NA	Solid	Moisture	
280-97928-15	SS025-SB09(2-4)	Total/NA	Solid	Moisture	
280-97928-16	SS025-SB09(4-6)	Total/NA	Solid	Moisture	
280-97928-17	SS025-SB09(6-8)	Total/NA	Solid	Moisture	
280-97928-18	SS025-SB10(0-2)	Total/NA	Solid	Moisture	
280-97928-19	SS025-SB10(2-4)	Total/NA	Solid	Moisture	
280-97928-20	SS025-SB10(4-6)	Total/NA	Solid	Moisture	
280-97928-21	SS025-SB10(2-4)-a	Total/NA	Solid	Moisture	
280-97928-22	SS025-SS10	Total/NA	Solid	Moisture	
280-97928-14 DU	SS025-SB09(0-2)	Total/NA	Solid	Moisture	

Client Sample ID: SS025-SS07
Date Collected: 06/05/17 08:15
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376574	06/08/17 11:05	JBM	TAL DEN

Client Sample ID: SS025-SS07
Date Collected: 06/05/17 08:15
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-1
Matrix: Solid
Percent Solids: 86.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.714 g	5 mL	377540	06/05/17 08:15	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	377520	06/15/17 22:02	ADD	TAL DEN
Total/NA	Prep	3546			31.0 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			377669	06/16/17 16:29	MKW	TAL DEN
Total/NA	Prep	3546			31.6 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8081B		1			378628	06/25/17 16:49	DAW	TAL DEN
Total/NA	Prep	3546			31.6 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8082A		1			378729	06/26/17 14:29	TDJ	TAL DEN
Total/NA	Prep	3050B			1.035 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			376734	06/09/17 09:09	CRR	TAL DEN
Total/NA	Prep	3050B			1.035 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377044	06/12/17 15:25	SJS	TAL DEN
Total/NA	Prep	3050B			1.035 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377054	06/12/17 23:27	LLB	TAL DEN
Total/NA	Prep	3050B			1.035 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377162	06/13/17 10:25	CRR	TAL DEN
Total/NA	Prep	7471A			0.51 g	50 mL	377156	06/14/17 12:49	CDH	TAL DEN
Total/NA	Analysis	7471A		1			377403	06/14/17 16:51	CDH	TAL DEN

Client Sample ID: SS025-TB02
Date Collected: 06/05/17 08:15
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5 g	5 mL	377666	06/05/17 08:15	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	377667	06/16/17 19:29	ADD	TAL DEN

Client Sample ID: SS025-SB06(0-2)
Date Collected: 06/05/17 08:35
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376574	06/08/17 11:05	JBM	TAL DEN

Client Sample ID: SS025-SB06(0-2)

Lab Sample ID: 280-97928-3
Date Collected: 06/05/17 08:35
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.427 g	5 mL	377666	06/05/17 08:35	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	377667	06/16/17 19:50	ADD	TAL DEN
Total/NA	Prep	3546			30.6 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			377669	06/16/17 17:47	MKW	TAL DEN
Total/NA	Prep	3546			31.3 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8081B		1			378628	06/25/17 17:06	DAW	TAL DEN
Total/NA	Prep	3546			31.3 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8082A		1			378729	06/26/17 14:51	TDJ	TAL DEN
Total/NA	Prep	3050B			1.003 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			376734	06/09/17 09:22	CRR	TAL DEN
Total/NA	Prep	3050B			1.003 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377044	06/12/17 15:38	SJS	TAL DEN
Total/NA	Prep	3050B			1.003 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377054	06/12/17 23:40	LLB	TAL DEN
Total/NA	Prep	3050B			1.003 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377162	06/13/17 10:41	CRR	TAL DEN
Total/NA	Prep	7471A			0.56 g	50 mL	377156	06/14/17 12:49	CDH	TAL DEN
Total/NA	Analysis	7471A		1			377403	06/14/17 17:06	CDH	TAL DEN

Client Sample ID: SS025-SB06(2-4)

Lab Sample ID: 280-97928-4
Date Collected: 06/05/17 08:50
Matrix: Solid
Date Received: 06/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376574	06/08/17 11:05	JBM	TAL DEN

Client Sample ID: SS025-SB06(2-4)

Lab Sample ID: 280-97928-4
Date Collected: 06/05/17 08:50
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.703 g	5 mL	377666	06/05/17 08:50	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	377667	06/16/17 20:11	ADD	TAL DEN
Total/NA	Prep	3546			31.6 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			377669	06/16/17 18:13	MKW	TAL DEN
Total/NA	Prep	3546			31.7 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8081B		1			378628	06/25/17 18:30	DAW	TAL DEN
Total/NA	Prep	3546			31.7 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8082A		1			378729	06/26/17 15:12	TDJ	TAL DEN
Total/NA	Prep	3050B			1.049 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			376734	06/09/17 09:24	CRR	TAL DEN
Total/NA	Prep	3050B			1.049 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377044	06/12/17 15:40	SJS	TAL DEN

Client Sample ID: SS025-SB06(2-4)

Lab Sample ID: 280-97928-4
Date Collected: 06/05/17 08:50
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.049 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377054	06/12/17 23:42	LLB	TAL DEN
Total/NA	Prep	3050B			1.049 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377162	06/13/17 10:43	CRR	TAL DEN
Total/NA	Prep	7471A			0.50 g	50 mL	377156	06/14/17 12:49	CDH	TAL DEN
Total/NA	Analysis	7471A		1			377403	06/14/17 17:09	CDH	TAL DEN

Client Sample ID: SS025-SS08

Lab Sample ID: 280-97928-5
Date Collected: 06/05/17 09:35
Matrix: Solid
Date Received: 06/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376574	06/08/17 11:05	JBM	TAL DEN

Client Sample ID: SS025-SS08

Lab Sample ID: 280-97928-5
Date Collected: 06/05/17 09:35
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.802 g	5 mL	377666	06/05/17 09:35	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	377667	06/16/17 20:32	ADD	TAL DEN
Total/NA	Prep	3546			30.0 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			377669	06/16/17 18:39	MKW	TAL DEN
Total/NA	Prep	3546			30.5 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8081B		1			378628	06/25/17 18:47	DAW	TAL DEN
Total/NA	Prep	3546			30.5 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8082A		1			378729	06/26/17 16:18	TDJ	TAL DEN
Total/NA	Prep	3050B			1.076 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			376734	06/09/17 09:27	CRR	TAL DEN
Total/NA	Prep	3050B			1.076 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377044	06/12/17 15:43	SJS	TAL DEN
Total/NA	Prep	3050B			1.076 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377054	06/12/17 23:45	LLB	TAL DEN
Total/NA	Prep	3050B			1.076 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377162	06/13/17 10:57	CRR	TAL DEN
Total/NA	Prep	7471A			0.53 g	50 mL	377156	06/14/17 12:49	CDH	TAL DEN
Total/NA	Analysis	7471A		1			377403	06/14/17 17:11	CDH	TAL DEN

Client Sample ID: SS025-SB07(0-2)
Date Collected: 06/05/17 09:45
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376574	06/08/17 11:05	JBM	TAL DEN

Client Sample ID: SS025-SB07(0-2)
Date Collected: 06/05/17 09:45
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-6
Matrix: Solid
Percent Solids: 87.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.449 g	5 mL	377666	06/05/17 09:45	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	377667	06/16/17 20:53	ADD	TAL DEN
Total/NA	Prep	3546			30.8 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			377669	06/16/17 19:05	MKW	TAL DEN
Total/NA	Prep	3546			32.7 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8081B		1			378628	06/25/17 19:04	DAW	TAL DEN
Total/NA	Prep	3546			32.7 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8082A		1			378729	06/26/17 16:39	TDJ	TAL DEN
Total/NA	Prep	3050B			1.177 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			376734	06/09/17 09:40	CRR	TAL DEN
Total/NA	Prep	3050B			1.177 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377044	06/12/17 15:56	SJS	TAL DEN
Total/NA	Prep	3050B			1.177 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377054	06/12/17 23:58	LLB	TAL DEN
Total/NA	Prep	3050B			1.177 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377162	06/13/17 11:00	CRR	TAL DEN
Total/NA	Prep	7471A			0.53 g	50 mL	377156	06/14/17 12:49	CDH	TAL DEN
Total/NA	Analysis	7471A		1			377403	06/14/17 17:13	CDH	TAL DEN

Client Sample ID: SS025-SB07(2-4)
Date Collected: 06/05/17 09:55
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376574	06/08/17 11:05	JBM	TAL DEN

Client Sample ID: SS025-SB07(2-4)
Date Collected: 06/05/17 09:55
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-7
Matrix: Solid
Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.004 g	5 mL	377666	06/05/17 09:55	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	377667	06/16/17 21:14	ADD	TAL DEN
Total/NA	Prep	3546			31.4 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			377669	06/16/17 19:30	MKW	TAL DEN
Total/NA	Prep	3546			30.5 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN

Client Sample ID: SS025-SB07(2-4)

Lab Sample ID: 280-97928-7
Date Collected: 06/05/17 09:55
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8081B		1			378628	06/25/17 19:21	DAW	TAL DEN
Total/NA	Prep	3546			30.5 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8082A		1			378729	06/26/17 17:01	TDJ	TAL DEN
Total/NA	Prep	3050B			1.004 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			376734	06/09/17 09:43	CRR	TAL DEN
Total/NA	Prep	3050B			1.004 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377044	06/12/17 15:58	SJS	TAL DEN
Total/NA	Prep	3050B			1.004 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377054	06/13/17 00:00	LLB	TAL DEN
Total/NA	Prep	3050B			1.004 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377162	06/13/17 11:03	CRR	TAL DEN
Total/NA	Prep	7471A			0.50 g	50 mL	377156	06/14/17 12:49	CDH	TAL DEN
Total/NA	Analysis	7471A		1			377403	06/14/17 17:15	CDH	TAL DEN

Client Sample ID: SS025-SB01(0-2)

Lab Sample ID: 280-97928-8
Date Collected: 06/05/17 10:20
Matrix: Solid
Date Received: 06/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376574	06/08/17 11:05	JBM	TAL DEN

Client Sample ID: SS025-SB01(0-2)

Lab Sample ID: 280-97928-8
Date Collected: 06/05/17 10:20
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.475 g	5 mL	377666	06/05/17 10:20	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	377667	06/16/17 21:35	ADD	TAL DEN
Total/NA	Prep	3546			32.8 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			377669	06/16/17 19:57	MKW	TAL DEN
Total/NA	Prep	3546	DL		32.8 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM	DL	50			378055	06/20/17 20:26	MKW	TAL DEN
Total/NA	Prep	3546	DL		31.3 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8081B	DL	10			378628	06/25/17 19:38	DAW	TAL DEN
Total/NA	Prep	3546			31.3 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8081B		1			378628	06/26/17 01:32	DAW	TAL DEN
Total/NA	Prep	3546			31.3 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8082A		1			378729	06/26/17 17:23	TDJ	TAL DEN
Total/NA	Prep	3050B			1.448 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			376734	06/09/17 09:45	CRR	TAL DEN
Total/NA	Prep	3050B			1.448 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377044	06/12/17 16:01	SJS	TAL DEN
Total/NA	Prep	3050B			1.448 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN

Client Sample ID: SS025-SB01(0-2)

Lab Sample ID: 280-97928-8
Date Collected: 06/05/17 10:20
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010C		1			377054	06/13/17 00:03	LLB	TAL DEN
Total/NA	Prep	3050B			1.448 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377162	06/13/17 11:05	CRR	TAL DEN
Total/NA	Prep	7471A			0.55 g	50 mL	377156	06/14/17 12:49	CDH	TAL DEN
Total/NA	Analysis	7471A		1			377403	06/14/17 17:18	CDH	TAL DEN

Client Sample ID: SS025-SB01(0-2)-a

Lab Sample ID: 280-97928-9
Date Collected: 06/05/17 10:20
Matrix: Solid
Date Received: 06/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376574	06/08/17 11:05	JBM	TAL DEN

Client Sample ID: SS025-SB01(0-2)-a

Lab Sample ID: 280-97928-9
Date Collected: 06/05/17 10:20
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.377 g	5 mL	377666	06/05/17 10:20	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	377667	06/16/17 21:56	ADD	TAL DEN
Total/NA	Prep	3546			32.0 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			377669	06/16/17 20:22	MKW	TAL DEN
Total/NA	Prep	3546	DL		32.0 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM	DL	10			378055	06/20/17 20:52	MKW	TAL DEN
Total/NA	Prep	3546			30.2 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8081B		1			378628	06/26/17 01:49	DAW	TAL DEN
Total/NA	Prep	3546			30.2 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8082A		1			378729	06/26/17 17:45	TDJ	TAL DEN
Total/NA	Prep	3050B			1.259 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			376734	06/09/17 09:48	CRR	TAL DEN
Total/NA	Prep	3050B			1.259 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377044	06/12/17 16:04	SJS	TAL DEN
Total/NA	Prep	3050B			1.259 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377054	06/13/17 00:06	LLB	TAL DEN
Total/NA	Prep	3050B			1.259 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377162	06/13/17 11:08	CRR	TAL DEN
Total/NA	Prep	7471A			0.51 g	50 mL	377156	06/14/17 12:49	CDH	TAL DEN
Total/NA	Analysis	7471A		1			377403	06/14/17 17:24	CDH	TAL DEN

Client Sample ID: SS025-SB08(0-2)
Date Collected: 06/05/17 11:05
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376574	06/08/17 11:05	JBM	TAL DEN

Client Sample ID: SS025-SB08(0-2)
Date Collected: 06/05/17 11:05
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-10
Matrix: Solid
Percent Solids: 89.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.096 g	5 mL	377666	06/05/17 11:05	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	377667	06/16/17 22:17	ADD	TAL DEN
Total/NA	Prep	3546			32.4 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			377669	06/16/17 20:48	MKW	TAL DEN
Total/NA	Prep	3546			31.4 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8081B		1			378628	06/25/17 20:11	DAW	TAL DEN
Total/NA	Prep	3546			31.4 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8082A		1			378729	06/26/17 18:06	TDJ	TAL DEN
Total/NA	Prep	3050B			1.397 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			376734	06/09/17 09:50	CRR	TAL DEN
Total/NA	Prep	3050B			1.397 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377044	06/12/17 16:06	SJS	TAL DEN
Total/NA	Prep	3050B			1.397 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377054	06/13/17 00:08	LLB	TAL DEN
Total/NA	Prep	3050B			1.397 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377162	06/13/17 11:11	CRR	TAL DEN
Total/NA	Prep	7471A			0.58 g	50 mL	377156	06/14/17 12:49	CDH	TAL DEN
Total/NA	Analysis	7471A		1			377403	06/14/17 17:26	CDH	TAL DEN

Client Sample ID: SS025-SB08(2-4)
Date Collected: 06/05/17 11:15
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376574	06/08/17 11:05	JBM	TAL DEN

Client Sample ID: SS025-SB08(2-4)
Date Collected: 06/05/17 11:15
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-11
Matrix: Solid
Percent Solids: 86.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.799 g	5 mL	377666	06/05/17 11:15	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	377667	06/16/17 22:37	ADD	TAL DEN
Total/NA	Prep	3546			30.3 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			377669	06/16/17 21:14	MKW	TAL DEN
Total/NA	Prep	3546			32.1 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN

Client Sample ID: SS025-SB08(2-4)

Lab Sample ID: 280-97928-11
Date Collected: 06/05/17 11:15
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 86.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8081B		1			378628	06/25/17 20:28	DAW	TAL DEN
Total/NA	Prep	3546			32.1 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8082A		1			378729	06/26/17 18:28	TDJ	TAL DEN
Total/NA	Prep	3050B			1.476 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			376734	06/09/17 09:53	CRR	TAL DEN
Total/NA	Prep	3050B			1.476 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377044	06/12/17 16:09	SJS	TAL DEN
Total/NA	Prep	3050B			1.476 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377054	06/13/17 00:11	LLB	TAL DEN
Total/NA	Prep	3050B			1.476 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377162	06/13/17 11:15	CRR	TAL DEN
Total/NA	Prep	7471A			0.58 g	50 mL	377156	06/14/17 12:49	CDH	TAL DEN
Total/NA	Analysis	7471A		1			377403	06/14/17 17:29	CDH	TAL DEN

Client Sample ID: SS025-SS09

Lab Sample ID: 280-97928-12
Date Collected: 06/05/17 11:35
Matrix: Solid
Date Received: 06/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376574	06/08/17 11:05	JBM	TAL DEN

Client Sample ID: SS025-SS09

Lab Sample ID: 280-97928-12
Date Collected: 06/05/17 11:35
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 88.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.297 g	5 mL	377666	06/05/17 11:35	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	377667	06/16/17 22:58	ADD	TAL DEN
Total/NA	Prep	3546			32.2 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			377669	06/16/17 21:40	MKW	TAL DEN
Total/NA	Prep	3546			31.8 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8081B		1			378628	06/26/17 02:05	DAW	TAL DEN
Total/NA	Prep	3546			31.8 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8082A		1			378729	06/26/17 19:12	TDJ	TAL DEN
Total/NA	Prep	3050B			1.257 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			376734	06/09/17 09:55	CRR	TAL DEN
Total/NA	Prep	3050B			1.257 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377044	06/12/17 16:14	SJS	TAL DEN
Total/NA	Prep	3050B			1.257 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377054	06/13/17 00:16	LLB	TAL DEN
Total/NA	Prep	3050B			1.257 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		5			377162	06/13/17 11:21	CRR	TAL DEN
Total/NA	Prep	7471A			0.55 g	50 mL	377156	06/14/17 12:49	CDH	TAL DEN

Client Sample ID: SS025-SS09
Date Collected: 06/05/17 11:35
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-12
Matrix: Solid
Percent Solids: 88.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1			377403	06/14/17 17:31	CDH	TAL DEN

Client Sample ID: SS025-AB-060517
Date Collected: 06/05/17 11:50
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1050.7 mL	1 mL	376856	06/12/17 15:16	RPC	TAL DEN
Total/NA	Analysis	8270D SIM		1			378055	06/20/17 19:59	MKW	TAL DEN

Client Sample ID: SS025-SB09(0-2)
Date Collected: 06/05/17 13:30
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376574	06/08/17 11:05	JBM	TAL DEN

Client Sample ID: SS025-SB09(0-2)
Date Collected: 06/05/17 13:30
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-14
Matrix: Solid
Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.286 g	5 mL	377664	06/05/17 13:30	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	377645	06/16/17 15:16	ADD	TAL DEN
Total/NA	Prep	3546			31.7 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			377669	06/16/17 22:06	MKW	TAL DEN
Total/NA	Prep	3546	DL		30.3 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8081B	DL	10			378628	06/25/17 22:09	DAW	TAL DEN
Total/NA	Prep	3546			30.3 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8081B		1			378628	06/26/17 02:22	DAW	TAL DEN
Total/NA	Prep	3546			30.3 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8082A		1			378729	06/26/17 19:33	TDJ	TAL DEN
Total/NA	Prep	3050B			1.412 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			376734	06/09/17 09:58	CRR	TAL DEN
Total/NA	Prep	3050B			1.412 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377044	06/12/17 16:19	SJS	TAL DEN
Total/NA	Prep	3050B			1.412 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377054	06/13/17 00:21	LLB	TAL DEN
Total/NA	Prep	3050B			1.412 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377162	06/13/17 11:34	CRR	TAL DEN
Total/NA	Prep	7471A			0.56 g	50 mL	377156	06/14/17 12:49	CDH	TAL DEN
Total/NA	Analysis	7471A		1			377403	06/14/17 17:33	CDH	TAL DEN

Client Sample ID: SS025-SB09(2-4)
Date Collected: 06/05/17 13:40
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376574	06/08/17 11:05	JBM	TAL DEN

Client Sample ID: SS025-SB09(2-4)
Date Collected: 06/05/17 13:40
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-15
Matrix: Solid
Percent Solids: 90.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.851 g	5 mL	377664	06/05/17 13:40	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	377645	06/16/17 15:37	ADD	TAL DEN
Total/NA	Prep	3546			30.3 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			377669	06/16/17 22:32	MKW	TAL DEN
Total/NA	Prep	3546			30.4 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8081B		1			378628	06/26/17 02:39	DAW	TAL DEN
Total/NA	Prep	3546			30.4 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8082A		1			378729	06/26/17 19:55	TDJ	TAL DEN
Total/NA	Prep	3050B			1.317 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			376734	06/09/17 10:01	CRR	TAL DEN
Total/NA	Prep	3050B			1.317 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377044	06/12/17 16:32	SJS	TAL DEN
Total/NA	Prep	3050B			1.317 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377054	06/13/17 00:34	LLB	TAL DEN
Total/NA	Prep	3050B			1.317 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377162	06/13/17 11:36	CRR	TAL DEN
Total/NA	Prep	7471A			0.50 g	50 mL	377156	06/14/17 12:49	CDH	TAL DEN
Total/NA	Analysis	7471A		1			377403	06/14/17 17:35	CDH	TAL DEN

Client Sample ID: SS025-SB09(4-6)
Date Collected: 06/05/17 13:50
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376574	06/08/17 11:05	JBM	TAL DEN

Client Sample ID: SS025-SB09(4-6)
Date Collected: 06/05/17 13:50
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-16
Matrix: Solid
Percent Solids: 83.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			6.604 g	5 mL	377664	06/05/17 13:50	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	377645	06/16/17 15:58	ADD	TAL DEN
Total/NA	Prep	3546			30.1 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			377669	06/16/17 22:57	MKW	TAL DEN
Total/NA	Prep	3546			31.6 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN

Client Sample ID: SS025-SB09(4-6)

Lab Sample ID: 280-97928-16

Date Collected: 06/05/17 13:50

Matrix: Solid

Date Received: 06/06/17 09:30

Percent Solids: 83.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8081B		1			378628	06/26/17 02:56	DAW	TAL DEN
Total/NA	Prep	3546			31.6 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8082A		1			378729	06/26/17 20:17	TDJ	TAL DEN
Total/NA	Prep	3050B			1.211 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			376734	06/09/17 10:03	CRR	TAL DEN
Total/NA	Prep	3050B			1.211 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377044	06/12/17 16:35	SJS	TAL DEN
Total/NA	Prep	3050B			1.211 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377054	06/13/17 00:37	LLB	TAL DEN
Total/NA	Prep	3050B			1.211 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377162	06/13/17 11:39	CRR	TAL DEN
Total/NA	Prep	7471A			0.56 g	50 mL	377156	06/14/17 12:49	CDH	TAL DEN
Total/NA	Analysis	7471A		1			377403	06/14/17 17:38	CDH	TAL DEN

Client Sample ID: SS025-SB09(6-8)

Lab Sample ID: 280-97928-17

Date Collected: 06/05/17 14:10

Matrix: Solid

Date Received: 06/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376574	06/08/17 11:05	JBM	TAL DEN

Client Sample ID: SS025-SB09(6-8)

Lab Sample ID: 280-97928-17

Date Collected: 06/05/17 14:10

Matrix: Solid

Date Received: 06/06/17 09:30

Percent Solids: 86.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			7.302 g	5 mL	377664	06/05/17 14:10	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	377645	06/16/17 16:19	ADD	TAL DEN
Total/NA	Prep	3546			31.7 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			377669	06/16/17 23:23	MKW	TAL DEN
Total/NA	Prep	3546			31.7 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8081B		1			378628	06/25/17 23:00	DAW	TAL DEN
Total/NA	Prep	3546			31.7 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8082A		1			378729	06/26/17 20:39	TDJ	TAL DEN
Total/NA	Prep	3050B			1.331 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			376734	06/09/17 10:16	CRR	TAL DEN
Total/NA	Prep	3050B			1.331 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377044	06/12/17 16:38	SJS	TAL DEN
Total/NA	Prep	3050B			1.331 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377054	06/13/17 00:39	LLB	TAL DEN
Total/NA	Prep	3050B			1.331 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377162	06/13/17 11:41	CRR	TAL DEN
Total/NA	Prep	7471A			0.52 g	50 mL	377156	06/14/17 12:49	CDH	TAL DEN

Client Sample ID: SS025-SB09(6-8)

Lab Sample ID: 280-97928-17
Date Collected: 06/05/17 14:10
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 86.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1			377403	06/14/17 17:40	CDH	TAL DEN

Client Sample ID: SS025-SB10(0-2)

Lab Sample ID: 280-97928-18
Date Collected: 06/05/17 14:35
Matrix: Solid
Date Received: 06/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376574	06/08/17 11:05	JBM	TAL DEN

Client Sample ID: SS025-SB10(0-2)

Lab Sample ID: 280-97928-18
Date Collected: 06/05/17 14:35
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.114 g	5 mL	377664	06/05/17 14:35	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	377645	06/16/17 16:40	ADD	TAL DEN
Total/NA	Prep	3546			32.6 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			377669	06/16/17 23:49	MKW	TAL DEN
Total/NA	Prep	3546			31.2 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8081B		1			378628	06/25/17 23:17	DAW	TAL DEN
Total/NA	Prep	3546			31.2 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8082A		1			378729	06/26/17 21:00	TDJ	TAL DEN
Total/NA	Prep	3050B			1.031 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			376734	06/09/17 10:19	CRR	TAL DEN
Total/NA	Prep	3050B			1.031 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377044	06/12/17 16:43	SJS	TAL DEN
Total/NA	Prep	3050B			1.031 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377054	06/13/17 00:45	LLB	TAL DEN
Total/NA	Prep	3050B			1.031 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377162	06/13/17 11:44	CRR	TAL DEN
Total/NA	Prep	7471A			0.51 g	50 mL	377156	06/14/17 12:49	CDH	TAL DEN
Total/NA	Analysis	7471A		1			377403	06/14/17 17:42	CDH	TAL DEN

Client Sample ID: SS025-SB10(2-4)

Lab Sample ID: 280-97928-19
Date Collected: 06/05/17 14:45
Matrix: Solid
Date Received: 06/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376574	06/08/17 11:05	JBM	TAL DEN

Client Sample ID: SS025-SB10(2-4)

Lab Sample ID: 280-97928-19
Date Collected: 06/05/17 14:45
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 92.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.724 g	5 mL	377664	06/05/17 14:45	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	377645	06/16/17 17:01	ADD	TAL DEN
Total/NA	Prep	3546			31.7 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			377669	06/17/17 00:15	MKW	TAL DEN
Total/NA	Prep	3546			31.0 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8081B		1			378628	06/25/17 23:34	DAW	TAL DEN
Total/NA	Prep	3546			31.0 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8082A		1			378729	06/26/17 21:22	TDJ	TAL DEN
Total/NA	Prep	3050B			1.196 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			376734	06/09/17 10:22	CRR	TAL DEN
Total/NA	Prep	3050B			1.196 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377044	06/12/17 16:45	SJS	TAL DEN
Total/NA	Prep	3050B			1.196 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377054	06/13/17 00:47	LLB	TAL DEN
Total/NA	Prep	3050B			1.196 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377162	06/13/17 11:47	CRR	TAL DEN
Total/NA	Prep	7471A			0.52 g	50 mL	377156	06/14/17 12:49	CDH	TAL DEN
Total/NA	Analysis	7471A		1			377403	06/14/17 17:44	CDH	TAL DEN

Client Sample ID: SS025-SB10(4-6)

Lab Sample ID: 280-97928-20
Date Collected: 06/05/17 14:55
Matrix: Solid
Date Received: 06/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376574	06/08/17 11:05	JBM	TAL DEN

Client Sample ID: SS025-SB10(4-6)

Lab Sample ID: 280-97928-20
Date Collected: 06/05/17 14:55
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.344 g	1000 mL	377884	06/05/17 14:55	JLS	TAL DEN
Total/NA	Analysis	8260B		1	20 mL	20 mL	377804	06/19/17 18:43	JLS	TAL DEN
Total/NA	Prep	3546			31.8 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			377669	06/17/17 00:40	MKW	TAL DEN
Total/NA	Prep	3546			31.8 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8081B		1			378628	06/25/17 23:51	DAW	TAL DEN
Total/NA	Prep	3546			31.8 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8082A		1			378729	06/26/17 21:44	TDJ	TAL DEN
Total/NA	Prep	3050B			1.255 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			376734	06/09/17 10:24	CRR	TAL DEN
Total/NA	Prep	3050B			1.255 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377044	06/12/17 16:48	SJS	TAL DEN

Client Sample ID: SS025-SB10(4-6)

Lab Sample ID: 280-97928-20
Date Collected: 06/05/17 14:55
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.255 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377054	06/13/17 00:57	LLB	TAL DEN
Total/NA	Prep	3050B			1.255 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377162	06/13/17 11:49	CRR	TAL DEN
Total/NA	Prep	7471A			0.60 g	50 mL	377156	06/14/17 12:49	CDH	TAL DEN
Total/NA	Analysis	7471A		1			377403	06/14/17 17:51	CDH	TAL DEN

Client Sample ID: SS025-SB10(2-4)-a

Lab Sample ID: 280-97928-21
Date Collected: 06/05/17 14:45
Matrix: Solid
Date Received: 06/06/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376574	06/08/17 11:05	JBM	TAL DEN

Client Sample ID: SS025-SB10(2-4)-a

Lab Sample ID: 280-97928-21
Date Collected: 06/05/17 14:45
Matrix: Solid
Date Received: 06/06/17 09:30
Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.478 g	5 mL	377664	06/05/17 14:45	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	377645	06/16/17 17:22	ADD	TAL DEN
Total/NA	Prep	3546			30.5 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			377669	06/17/17 01:06	MKW	TAL DEN
Total/NA	Prep	3546			30.7 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8081B		1			378628	06/26/17 00:07	DAW	TAL DEN
Total/NA	Prep	3546			30.7 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8082A		1			378729	06/26/17 22:05	TDJ	TAL DEN
Total/NA	Prep	3050B			1.079 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			376734	06/09/17 10:27	CRR	TAL DEN
Total/NA	Prep	3050B			1.079 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377044	06/12/17 16:51	SJS	TAL DEN
Total/NA	Prep	3050B			1.079 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377054	06/13/17 00:59	LLB	TAL DEN
Total/NA	Prep	3050B			1.079 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377162	06/13/17 11:52	CRR	TAL DEN
Total/NA	Prep	7471A			0.51 g	50 mL	377156	06/14/17 12:49	CDH	TAL DEN
Total/NA	Analysis	7471A		1			377403	06/14/17 17:53	CDH	TAL DEN

Lab Chronicle

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97928-1

Client Sample ID: SS025-SS10
Date Collected: 06/05/17 15:20
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-22
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			376574	06/08/17 11:05	JBM	TAL DEN

Client Sample ID: SS025-SS10
Date Collected: 06/05/17 15:20
Date Received: 06/06/17 09:30

Lab Sample ID: 280-97928-22
Matrix: Solid
Percent Solids: 90.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.849 g	5 mL	377664	06/05/17 15:20	ADD	TAL DEN
Total/NA	Analysis	8260B		1	5 g	5 mL	377645	06/16/17 17:43	ADD	TAL DEN
Total/NA	Prep	3546			31.3 g	1 mL	376824	06/11/17 07:19	JDW	TAL DEN
Total/NA	Analysis	8270D SIM		1			377669	06/17/17 01:32	MKW	TAL DEN
Total/NA	Prep	3546			31.7 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8081B		1			378628	06/26/17 00:24	DAW	TAL DEN
Total/NA	Prep	3546			31.7 g	10 mL	377615	06/16/17 13:00	DFB1	TAL DEN
Total/NA	Analysis	8082A		1			378729	06/26/17 22:27	TDJ	TAL DEN
Total/NA	Prep	3050B			1.179 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			376734	06/09/17 10:29	CRR	TAL DEN
Total/NA	Prep	3050B			1.179 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377044	06/12/17 16:53	SJS	TAL DEN
Total/NA	Prep	3050B			1.179 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377054	06/13/17 01:02	LLB	TAL DEN
Total/NA	Prep	3050B			1.179 g	100 mL	376380	06/08/17 14:00	SEJ	TAL DEN
Total/NA	Analysis	6010C		1			377162	06/13/17 11:54	CRR	TAL DEN
Total/NA	Prep	7471A			0.50 g	50 mL	377156	06/14/17 12:49	CDH	TAL DEN
Total/NA	Analysis	7471A		1			377403	06/14/17 17:56	CDH	TAL DEN

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Accreditation/Certification Summary

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97928-1

Laboratory: TestAmerica Denver

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-17

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte		
Moisture		Solid	Percent Moisture		
New York	NELAP		2	11964	04-01-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6010C	3050B	Solid	Aluminum
6010C	3050B	Solid	Antimony
6010C	3050B	Solid	Arsenic
6010C	3050B	Solid	Barium
6010C	3050B	Solid	Beryllium
6010C	3050B	Solid	Cadmium
6010C	3050B	Solid	Calcium
6010C	3050B	Solid	Chromium
6010C	3050B	Solid	Cobalt
6010C	3050B	Solid	Copper
6010C	3050B	Solid	Iron
6010C	3050B	Solid	Lead
6010C	3050B	Solid	Magnesium
6010C	3050B	Solid	Manganese
6010C	3050B	Solid	Nickel
6010C	3050B	Solid	Potassium
6010C	3050B	Solid	Selenium
6010C	3050B	Solid	Silver
6010C	3050B	Solid	Sodium
6010C	3050B	Solid	Thallium
6010C	3050B	Solid	Vanadium
6010C	3050B	Solid	Zinc
7471A	7471A	Solid	Mercury
8081B	3546	Solid	4,4'-DDD
8081B	3546	Solid	4,4'-DDE
8081B	3546	Solid	4,4'-DDT
8081B	3546	Solid	Aldrin
8081B	3546	Solid	alpha-BHC
8081B	3546	Solid	alpha-Chlordane
8081B	3546	Solid	beta-BHC
8081B	3546	Solid	delta-BHC
8081B	3546	Solid	Dieldrin
8081B	3546	Solid	Endosulfan I
8081B	3546	Solid	Endosulfan II
8081B	3546	Solid	Endosulfan sulfate
8081B	3546	Solid	Endrin
8081B	3546	Solid	Endrin aldehyde
8081B	3546	Solid	gamma-BHC (Lindane)
8081B	3546	Solid	gamma-Chlordane
8081B	3546	Solid	Heptachlor
8081B	3546	Solid	Heptachlor epoxide
8081B	3546	Solid	Methoxychlor

Laboratory: TestAmerica Denver (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11964	04-01-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8081B	3546	Solid	Toxaphene
8082A	3546	Solid	Arochlor 1016
8082A	3546	Solid	Arochlor 1221
8082A	3546	Solid	Arochlor 1232
8082A	3546	Solid	Arochlor 1242
8082A	3546	Solid	Arochlor 1248
8082A	3546	Solid	Arochlor 1254
8082A	3546	Solid	Arochlor 1260
8260B	5035	Solid	1,1,1,2-Tetrachloroethane
8260B	5035	Solid	1,1,1-Trichloroethane
8260B	5035	Solid	1,1,2,2-Tetrachloroethane
8260B	5035	Solid	1,1,2-Trichloroethane
8260B	5035	Solid	1,1-Dichloroethane
8260B	5035	Solid	1,1-Dichloroethene
8260B	5035	Solid	1,1-Dichloropropene
8260B	5035	Solid	1,2,3-Trichlorobenzene
8260B	5035	Solid	1,2,3-Trichloropropane
8260B	5035	Solid	1,2,4-Trichlorobenzene
8260B	5035	Solid	1,2,4-Trimethylbenzene
8260B	5035	Solid	1,2-Dibromo-3-Chloropropane
8260B	5035	Solid	1,2-Dibromoethane
8260B	5035	Solid	1,2-Dichlorobenzene
8260B	5035	Solid	1,2-Dichloroethane
8260B	5035	Solid	1,2-Dichloroethene, Total
8260B	5035	Solid	1,2-Dichloropropane
8260B	5035	Solid	1,3,5-Trimethylbenzene
8260B	5035	Solid	1,3-Dichlorobenzene
8260B	5035	Solid	1,3-Dichloropropane
8260B	5035	Solid	1,4-Dichlorobenzene
8260B	5035	Solid	2,2-Dichloropropane
8260B	5035	Solid	2-Butanone (MEK)
8260B	5035	Solid	2-Chlorotoluene
8260B	5035	Solid	2-Hexanone
8260B	5035	Solid	4-Chlorotoluene
8260B	5035	Solid	4-Isopropyltoluene
8260B	5035	Solid	4-Methyl-2-pentanone (MIBK)
8260B	5035	Solid	Acetone
8260B	5035	Solid	Benzene
8260B	5035	Solid	Bromobenzene
8260B	5035	Solid	Bromochloromethane
8260B	5035	Solid	Bromodichloromethane
8260B	5035	Solid	Bromoform
8260B	5035	Solid	Bromomethane
8260B	5035	Solid	Carbon disulfide
8260B	5035	Solid	Carbon tetrachloride
8260B	5035	Solid	Chlorobenzene

Laboratory: TestAmerica Denver (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11964	04-01-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260B	5035	Solid	Chloroethane
8260B	5035	Solid	Chloroform
8260B	5035	Solid	Chloromethane
8260B	5035	Solid	cis-1,2-Dichloroethene
8260B	5035	Solid	cis-1,3-Dichloropropene
8260B	5035	Solid	Dibromochloromethane
8260B	5035	Solid	Dibromomethane
8260B	5035	Solid	Dichlorodifluoromethane
8260B	5035	Solid	Ethylbenzene
8260B	5035	Solid	Hexachlorobutadiene
8260B	5035	Solid	Isopropyl ether
8260B	5035	Solid	Isopropylbenzene
8260B	5035	Solid	m&p-Xylene
8260B	5035	Solid	Methyl iodide
8260B	5035	Solid	Methyl tert-butyl ether
8260B	5035	Solid	Methylene Chloride
8260B	5035	Solid	Naphthalene
8260B	5035	Solid	n-Butylbenzene
8260B	5035	Solid	N-Propylbenzene
8260B	5035	Solid	o-Xylene
8260B	5035	Solid	sec-Butylbenzene
8260B	5035	Solid	Styrene
8260B	5035	Solid	tert-Butylbenzene
8260B	5035	Solid	Tetrachloroethene
8260B	5035	Solid	Toluene
8260B	5035	Solid	trans-1,2-Dichloroethene
8260B	5035	Solid	trans-1,3-Dichloropropene
8260B	5035	Solid	Trichloroethene
8260B	5035	Solid	Trichlorofluoromethane
8260B	5035	Solid	Vinyl acetate
8260B	5035	Solid	Vinyl chloride
8260B	5035	Solid	Xylenes (total)
8270D SIM	3510C	Water	1-Methylnaphthalene
8270D SIM	3510C	Water	2-Methylnaphthalene
8270D SIM	3510C	Water	Acenaphthene
8270D SIM	3510C	Water	Acenaphthylene
8270D SIM	3510C	Water	Anthracene
8270D SIM	3510C	Water	Benzo[a]anthracene
8270D SIM	3510C	Water	Benzo[a]pyrene
8270D SIM	3510C	Water	Benzo[b]fluoranthene
8270D SIM	3510C	Water	Benzo[g,h,i]perylene
8270D SIM	3510C	Water	Benzo[k]fluoranthene
8270D SIM	3510C	Water	Chrysene
8270D SIM	3510C	Water	Dibenz(a,h)anthracene
8270D SIM	3510C	Water	Fluoranthene
8270D SIM	3510C	Water	Fluorene

Laboratory: TestAmerica Denver (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11964	04-01-18

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8270D SIM	3510C	Water	Indeno[1,2,3-cd]pyrene
8270D SIM	3510C	Water	Naphthalene
8270D SIM	3510C	Water	Phenanthrene
8270D SIM	3510C	Water	Pyrene
8270D SIM	3546	Solid	1-Methylnaphthalene
8270D SIM	3546	Solid	2-Methylnaphthalene
8270D SIM	3546	Solid	Acenaphthene
8270D SIM	3546	Solid	Acenaphthylene
8270D SIM	3546	Solid	Anthracene
8270D SIM	3546	Solid	Benzo[a]anthracene
8270D SIM	3546	Solid	Benzo[a]pyrene
8270D SIM	3546	Solid	Benzo[b]fluoranthene
8270D SIM	3546	Solid	Benzo[g,h,i]perylene
8270D SIM	3546	Solid	Benzo[k]fluoranthene
8270D SIM	3546	Solid	Chrysene
8270D SIM	3546	Solid	Dibenz(a,h)anthracene
8270D SIM	3546	Solid	Fluoranthene
8270D SIM	3546	Solid	Fluorene
8270D SIM	3546	Solid	Indeno[1,2,3-cd]pyrene
8270D SIM	3546	Solid	Naphthalene
8270D SIM	3546	Solid	Phenanthrene
8270D SIM	3546	Solid	Pyrene
Moisture		Solid	Percent Moisture

Method Summary

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97928-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL DEN
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	TAL DEN
8081B	Organochlorine Pesticides (GC)	SW846	TAL DEN
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL DEN
6010C	Metals (ICP)	SW846	TAL DEN
7471A	Mercury (CVAA)	SW846	TAL DEN
Moisture	Percent Moisture	EPA	TAL DEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Bhate Environmental
Project/Site: Griffiss AFB, NY - SS025

TestAmerica Job ID: 280-97928-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-97928-1	SS025-SS07	Solid	06/05/17 08:15	06/06/17 09:30
280-97928-2	SS025-TB02	Solid	06/05/17 08:15	06/06/17 09:30
280-97928-3	SS025-SB06(0-2)	Solid	06/05/17 08:35	06/06/17 09:30
280-97928-4	SS025-SB06(2-4)	Solid	06/05/17 08:50	06/06/17 09:30
280-97928-5	SS025-SS08	Solid	06/05/17 09:35	06/06/17 09:30
280-97928-6	SS025-SB07(0-2)	Solid	06/05/17 09:45	06/06/17 09:30
280-97928-7	SS025-SB07(2-4)	Solid	06/05/17 09:55	06/06/17 09:30
280-97928-8	SS025-SB01(0-2)	Solid	06/05/17 10:20	06/06/17 09:30
280-97928-9	SS025-SB01(0-2)-a	Solid	06/05/17 10:20	06/06/17 09:30
280-97928-10	SS025-SB08(0-2)	Solid	06/05/17 11:05	06/06/17 09:30
280-97928-11	SS025-SB08(2-4)	Solid	06/05/17 11:15	06/06/17 09:30
280-97928-12	SS025-SS09	Solid	06/05/17 11:35	06/06/17 09:30
280-97928-13	SS025-AB-060517	Water	06/05/17 11:50	06/06/17 09:30
280-97928-14	SS025-SB09(0-2)	Solid	06/05/17 13:30	06/06/17 09:30
280-97928-15	SS025-SB09(2-4)	Solid	06/05/17 13:40	06/06/17 09:30
280-97928-16	SS025-SB09(4-6)	Solid	06/05/17 13:50	06/06/17 09:30
280-97928-17	SS025-SB09(6-8)	Solid	06/05/17 14:10	06/06/17 09:30
280-97928-18	SS025-SB10(0-2)	Solid	06/05/17 14:35	06/06/17 09:30
280-97928-19	SS025-SB10(2-4)	Solid	06/05/17 14:45	06/06/17 09:30
280-97928-20	SS025-SB10(4-6)	Solid	06/05/17 14:55	06/06/17 09:30
280-97928-21	SS025-SB10(2-4)-a	Solid	06/05/17 14:45	06/06/17 09:30
280-97928-22	SS025-SS10	Solid	06/05/17 15:20	06/06/17 09:30

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: VMS_G2 Analysis Batch Number: 376989

Lab Sample ID: STD020 280-376989/8 IC Client Sample ID:

Date Analyzed: 06/12/17 19:32 Lab File ID: G2_0898.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Bromomethane	2.28	Baseline	dukesa	06/12/17 22:10

Lab Sample ID: ICIS 280-376989/9 Client Sample ID:

Date Analyzed: 06/12/17 19:53 Lab File ID: G2_0899.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.71	Peak Tail	dukesa	06/12/17 22:11

Lab Sample ID: STD100 280-376989/10 IC Client Sample ID:

Date Analyzed: 06/12/17 20:14 Lab File ID: G2_0900.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.71	Peak Tail	dukesa	06/12/17 22:11

Lab Sample ID: STD200 280-376989/11 IC Client Sample ID:

Date Analyzed: 06/12/17 20:35 Lab File ID: G2_0901.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.69	Peak Tail	dukesa	06/12/17 22:12

Lab Sample ID: ICV 280-376989/12 Client Sample ID:

Date Analyzed: 06/12/17 21:19 Lab File ID: G2_0903.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.69	Peak Tail	dukesa	06/12/17 22:14

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: VMS_P Analysis Batch Number: 377804

Lab Sample ID: STD005 280-377804/27 IC Client Sample ID:

Date Analyzed: 06/19/17 11:16 Lab File ID: P0028.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	5.70	Split Peak	seifertj	06/20/17 10:01
1,2-Dichloroethane	7.42	assign peak		

Lab Sample ID: STD010 280-377804/28 IC Client Sample ID:

Date Analyzed: 06/19/17 11:36 Lab File ID: P0029.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	4.95	Split Peak	seifertj	06/19/17 12:28
Carbon disulfide	5.71	Split Peak	seifertj	06/20/17 10:01
Isobutyl alcohol	7.15	Wrong peak	seifertj	06/19/17 14:03
Bromoform	10.53	assign peak		

Lab Sample ID: STD020 280-377804/29 IC Client Sample ID:

Date Analyzed: 06/19/17 11:55 Lab File ID: P0030.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	4.95	Split Peak	seifertj	06/19/17 12:43
Carbon disulfide	5.69	Split Peak	seifertj	06/19/17 12:43

Lab Sample ID: STD050 280-377804/30 IC Client Sample ID:

Date Analyzed: 06/19/17 12:14 Lab File ID: P0031.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	4.96	Split Peak	seifertj	06/19/17 13:51
Carbon disulfide	5.69	Split Peak	seifertj	06/19/17 13:52

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: VMS_P Analysis Batch Number: 377804

Lab Sample ID: STD10 280-377804/31 IC Client Sample ID:

Date Analyzed: 06/19/17 12:34 Lab File ID: P0032.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon disulfide	5.69	Split Peak	seifertj	06/20/17 10:01

Lab Sample ID: STD30 280-377804/32 IC Client Sample ID:

Date Analyzed: 06/19/17 12:53 Lab File ID: P0033.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	4.96	Split Peak	seifertj	06/19/17 13:55
Carbon disulfide	5.70	Split Peak	seifertj	06/19/17 13:55

Lab Sample ID: STD60 280-377804/33 IC Client Sample ID:

Date Analyzed: 06/19/17 13:13 Lab File ID: P0034.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	4.95	Split Peak	seifertj	06/19/17 13:59
Carbon disulfide	5.70	Split Peak	seifertj	06/20/17 10:02

Lab Sample ID: ICV 280-377804/34 Client Sample ID:

Date Analyzed: 06/19/17 13:51 Lab File ID: P0036.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	4.96	Split Peak	seifertj	06/20/17 09:39

Lab Sample ID: STD010 280-377804/38 IC Client Sample ID:

Date Analyzed: 06/19/17 14:30 Lab File ID: P0038.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acetonitrile	5.63	Split Peak	seifertj	06/20/17 09:50

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: VMS_P Analysis Batch Number: 378395

Lab Sample ID: CCV 280-378395/2 Client Sample ID:

Date Analyzed: 06/22/17 08:32 Lab File ID: P0131.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	4.96	Split Peak	seifertj	06/22/17 10:29

Lab Sample ID: LCS 280-377884/2-A Client Sample ID:

Date Analyzed: 06/22/17 09:58 Lab File ID: P0135.D GC Column: DB-624 (60.25 ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	4.96	Split Peak	seifertj	06/23/17 12:52

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SMS_F Analysis Batch Number: 373158

Lab Sample ID: ICIS 280-373158/2 Client Sample ID:

Date Analyzed: 05/11/17 12:58 Lab File ID: F6544.D GC Column: Rxi-5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	18.65	Split Peak	vasquezk	05/11/17 15:25

Lab Sample ID: STD0020 280-373158/3 IC Client Sample ID:

Date Analyzed: 05/11/17 13:34 Lab File ID: F6545.D GC Column: Rxi-5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	18.65	Split Peak	vasquezk	05/11/17 15:26

Lab Sample ID: STD2500 280-373158/7 IC Client Sample ID:

Date Analyzed: 05/11/17 15:16 Lab File ID: F6549.D GC Column: Rxi-5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Indeno[1,2,3-cd]pyrene	18.64	Split Peak	vasquezk	05/12/17 05:49

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SMS_F Analysis Batch Number: 377669

Lab Sample ID: 280-97928-10 Client Sample ID: SS025-SB08(0-2)

Date Analyzed: 06/16/17 20:48 Lab File ID: F7281.D GC Column: Rxi-5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acenaphthylene	5.92	Baseline	wickhamm	06/19/17 15:22

Lab Sample ID: 280-97928-12 Client Sample ID: SS025-SS09

Date Analyzed: 06/16/17 21:40 Lab File ID: F7283.D GC Column: Rxi-5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acenaphthylene	5.91	Baseline	wickhamm	06/19/17 15:24
Acenaphthene	6.06	Baseline	wickhamm	06/19/17 15:24

Lab Sample ID: 280-97928-14 Client Sample ID: SS025-SB09(0-2)

Date Analyzed: 06/16/17 22:06 Lab File ID: F7284.D GC Column: Rxi-5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acenaphthylene	5.92	Baseline	wickhamm	06/19/17 15:25
Acenaphthene	6.06	Baseline	wickhamm	06/19/17 15:26

Lab Sample ID: 280-97928-15 Client Sample ID: SS025-SB09(2-4)

Date Analyzed: 06/16/17 22:32 Lab File ID: F7285.D GC Column: Rxi-5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acenaphthylene	5.92	Baseline	wickhamm	06/19/17 15:26
Acenaphthene	6.06	Baseline	wickhamm	06/19/17 15:27
Benzo[k]fluoranthene	14.57	Missed Peak	wickhamm	06/19/17 15:27

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SMS_F Analysis Batch Number: 377669

Lab Sample ID: 280-97928-16 Client Sample ID: SS025-SB09(4-6)

Date Analyzed: 06/16/17 22:57 Lab File ID: F7286.D GC Column: Rxi-5Sil MS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acenaphthene	6.06	Baseline	wickhamm	06/19/17 15:28

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 368670

Lab Sample ID: STD6 280-368670/13 IC Client Sample ID:

Date Analyzed: 04/10/17 14:16 Lab File ID: 04100013.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.23	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	7.28	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.42	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.71	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.23	Baseline Smoothing	wellsd	04/17/17 13:21

Lab Sample ID: STD5 280-368670/14 IC Client Sample ID:

Date Analyzed: 04/10/17 14:33 Lab File ID: 04100014.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.65	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	6.98	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.24	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.74	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.18	Baseline Smoothing	wellsd	04/17/17 13:21

Lab Sample ID: STD5 280-368670/14 IC Client Sample ID:

Date Analyzed: 04/10/17 14:33 Lab File ID: 04100014.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.23	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	7.27	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.42	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.70	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.23	Baseline Smoothing	wellsd	04/17/17 13:21

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 368670

Lab Sample ID: STD4 280-368670/15 IC Client Sample ID:

Date Analyzed: 04/10/17 14:50 Lab File ID: 04100015.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.65	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	6.97	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.24	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.74	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.18	Baseline Smoothing	wellsd	04/17/17 13:21

Lab Sample ID: STD4 280-368670/15 IC Client Sample ID:

Date Analyzed: 04/10/17 14:50 Lab File ID: 04100015.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.23	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	7.28	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.42	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.70	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.23	Baseline Smoothing	wellsd	04/17/17 13:21

Lab Sample ID: STD3 280-368670/16 IC Client Sample ID:

Date Analyzed: 04/10/17 15:06 Lab File ID: 04100016.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.65	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	6.98	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.24	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.74	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.18	Baseline Smoothing	wellsd	04/17/17 13:21

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 368670

Lab Sample ID: STD3 280-368670/16 IC Client Sample ID:

Date Analyzed: 04/10/17 15:06 Lab File ID: 04100016.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.23	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	7.28	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.42	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.70	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.23	Baseline Smoothing	wellsd	04/17/17 13:21

Lab Sample ID: STD2 280-368670/17 IC Client Sample ID:

Date Analyzed: 04/10/17 15:23 Lab File ID: 04100017.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.65	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	6.98	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.24	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.74	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.18	Baseline Smoothing	wellsd	04/17/17 13:21

Lab Sample ID: STD2 280-368670/17 IC Client Sample ID:

Date Analyzed: 04/10/17 15:23 Lab File ID: 04100017.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.23	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	7.28	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.42	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.71	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.23	Baseline Smoothing	wellsd	04/17/17 13:21

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 368670

Lab Sample ID: STD1 280-368670/18 IC Client Sample ID:

Date Analyzed: 04/10/17 15:40 Lab File ID: 04100018.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.65	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	6.97	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.24	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.74	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.18	Baseline Smoothing	wellsd	04/17/17 13:21

Lab Sample ID: STD1 280-368670/18 IC Client Sample ID:

Date Analyzed: 04/10/17 15:40 Lab File ID: 04100018.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.23	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 2	7.28	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 3	7.42	Incomplete Integration	wellsd	04/17/17 13:21
Toxaphene Peak 4	7.71	Baseline Smoothing	wellsd	04/17/17 13:21
Toxaphene Peak 5	8.23	Baseline Smoothing	wellsd	04/17/17 13:21

Lab Sample ID: STD4 280-368670/26 ICIS Client Sample ID:

Date Analyzed: 04/10/17 17:56 Lab File ID: 04100026.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Heptachlor	5.18	Incomplete Integration	wellsd	04/17/17 13:22

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 368670

Lab Sample ID: STD2 280-368670/28 IC Client Sample ID:

Date Analyzed: 04/10/17 18:29 Lab File ID: 04100028.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
gamma-Chlordane	6.14	Incomplete Integration	wellsd	04/17/17 13:22
Endrin aldehyde	7.70	Incomplete Integration	wellsd	04/17/17 13:22

Lab Sample ID: STD1 280-368670/29 IC Client Sample ID:

Date Analyzed: 04/10/17 18:46 Lab File ID: 04100029.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Aldrin	5.47	Incomplete Integration	wellsd	04/17/17 13:22

Lab Sample ID: ICV 280-368670/31 Client Sample ID:

Date Analyzed: 04/10/17 19:20 Lab File ID: 04100031.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.65	Baseline Smoothing	wellsd	04/17/17 13:22
Toxaphene Peak 2	6.97	Baseline Smoothing	wellsd	04/17/17 13:22
Toxaphene Peak 3	7.23	Baseline Smoothing	wellsd	04/17/17 13:22
Toxaphene Peak 4	7.74	Baseline Smoothing	wellsd	04/17/17 13:22
Toxaphene Peak 5	8.18	Baseline Smoothing	wellsd	04/17/17 13:22

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 368670

Lab Sample ID: ICV 280-368670/31 Client Sample ID:

Date Analyzed: 04/10/17 19:20 Lab File ID: 04100031.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.23	Baseline Smoothing	wellsd	04/17/17 13:22
Toxaphene Peak 2	7.27	Baseline Smoothing	wellsd	04/17/17 13:22
Toxaphene Peak 3	7.42	Baseline Smoothing	wellsd	04/17/17 13:22
Toxaphene Peak 4	7.70	Baseline Smoothing	wellsd	04/17/17 13:22
Toxaphene Peak 5	8.23	Baseline Smoothing	wellsd	04/17/17 13:22

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 378628

Lab Sample ID: CCV 280-378628/10 Client Sample ID:

Date Analyzed: 06/25/17 15:07 Lab File ID: 06250010.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.61	Baseline Smoothing	wellsd	06/25/17 15:41
Toxaphene Peak 2	6.93	Baseline Smoothing	wellsd	06/25/17 15:41
Toxaphene Peak 3	7.19	Baseline Smoothing	wellsd	06/25/17 15:41
Toxaphene Peak 4	7.69	Baseline Smoothing	wellsd	06/25/17 15:41
Toxaphene Peak 5	8.14	Baseline Smoothing	wellsd	06/25/17 15:41

Lab Sample ID: CCV 280-378628/10 Client Sample ID:

Date Analyzed: 06/25/17 15:07 Lab File ID: 06250010.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.11	Baseline Smoothing	wellsd	06/25/17 15:41
Toxaphene Peak 2	7.16	Baseline Smoothing	wellsd	06/25/17 15:41
Toxaphene Peak 3	7.30	Baseline Smoothing	wellsd	06/25/17 15:41
Toxaphene Peak 4	7.59	Baseline Smoothing	wellsd	06/25/17 15:41
Toxaphene Peak 5	8.11	Baseline Smoothing	wellsd	06/25/17 15:41

Lab Sample ID: LCS 280-377615/3-A Client Sample ID:

Date Analyzed: 06/25/17 16:32 Lab File ID: 06250015.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.60	Baseline Smoothing	wellsd	06/26/17 10:32
Toxaphene Peak 2	6.92	Baseline Smoothing	wellsd	06/26/17 10:32
Toxaphene Peak 3	7.19	Baseline Smoothing	wellsd	06/26/17 10:32
Toxaphene Peak 4	7.69	Baseline Smoothing	wellsd	06/26/17 10:32
Toxaphene Peak 5	8.13	Baseline Smoothing	wellsd	06/26/17 10:32

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 378628

Lab Sample ID: LCS 280-377615/3-A Client Sample ID:

Date Analyzed: 06/25/17 16:32 Lab File ID: 06250015.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.11	Baseline Smoothing	wellsd	06/26/17 10:32
Toxaphene Peak 2	7.15	Baseline Smoothing	wellsd	06/26/17 10:32
Toxaphene Peak 3	7.30	Baseline Smoothing	wellsd	06/26/17 10:32
Toxaphene Peak 4	7.59	Baseline Smoothing	wellsd	06/26/17 10:32
Toxaphene Peak 5	8.11	Baseline Smoothing	wellsd	06/26/17 10:32

Lab Sample ID: 280-97928-3 Client Sample ID: SS025-SB06(0-2)

Date Analyzed: 06/25/17 17:06 Lab File ID: 06250017.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4,4'-DDT	7.47	Baseline Smoothing	wellsd	06/26/17 10:33

Lab Sample ID: 280-97928-3 MS Client Sample ID: SS025-SB06(0-2) MS

Date Analyzed: 06/25/17 17:56 Lab File ID: 06250020.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.60	Baseline Smoothing	wellsd	06/26/17 10:33
Toxaphene Peak 2	6.94	Baseline Smoothing	wellsd	06/26/17 10:33
Toxaphene Peak 3	7.19	Baseline Smoothing	wellsd	06/26/17 10:33
Toxaphene Peak 4	7.69	Baseline Smoothing	wellsd	06/26/17 10:33
Toxaphene Peak 5	8.13	Baseline Smoothing	wellsd	06/26/17 10:33

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 378628

Lab Sample ID: 280-97928-3 MS Client Sample ID: SS025-SB06(0-2) MS

Date Analyzed: 06/25/17 17:56 Lab File ID: 06250020.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Tetrachloro-m-xylene (Surr)	3.68	Baseline Smoothing	wellsd	06/26/17 10:33
Toxaphene Peak 2	7.15	Baseline Smoothing	wellsd	06/26/17 10:33
Toxaphene Peak 3	7.30	Baseline Smoothing	wellsd	06/26/17 10:33
Toxaphene Peak 4	7.59	Baseline Smoothing	wellsd	06/26/17 10:33
Toxaphene Peak 5	8.11	Baseline Smoothing	wellsd	06/26/17 10:33
DCB Decachlorobiphenyl (Surr)	9.59	Baseline Smoothing	wellsd	06/26/17 10:33

Lab Sample ID: 280-97928-3 MSD Client Sample ID: SS025-SB06(0-2) MSD

Date Analyzed: 06/25/17 18:13 Lab File ID: 06250021.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.60	Baseline Smoothing	wellsd	06/26/17 10:34
Toxaphene Peak 2	6.93	Baseline Smoothing	wellsd	06/26/17 10:34
Toxaphene Peak 3	7.19	Baseline Smoothing	wellsd	06/26/17 10:34
Toxaphene Peak 4	7.69	Baseline Smoothing	wellsd	06/26/17 10:34
Toxaphene Peak 5	8.14	Baseline Smoothing	wellsd	06/26/17 10:34

Lab Sample ID: 280-97928-3 MSD Client Sample ID: SS025-SB06(0-2) MSD

Date Analyzed: 06/25/17 18:13 Lab File ID: 06250021.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 2	7.15	Baseline Smoothing	wellsd	06/26/17 10:34
Toxaphene Peak 3	7.30	Baseline Smoothing	wellsd	06/26/17 10:34
Toxaphene Peak 4	7.59	Baseline Smoothing	wellsd	06/26/17 10:34
Toxaphene Peak 5	8.12	Baseline Smoothing	wellsd	06/26/17 10:34

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 378628

Lab Sample ID: 280-97928-6 Client Sample ID: SS025-SB07(0-2)

Date Analyzed: 06/25/17 19:04 Lab File ID: 06250024.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
alpha-BHC	4.25	Baseline Smoothing	wellsd	06/26/17 10:34

Lab Sample ID: CCV 280-378628/30 Client Sample ID:

Date Analyzed: 06/25/17 20:45 Lab File ID: 06250030.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.60	Baseline Smoothing	wellsd	06/26/17 10:36
Toxaphene Peak 2	6.92	Baseline Smoothing	wellsd	06/26/17 10:36
Toxaphene Peak 3	7.19	Baseline Smoothing	wellsd	06/26/17 10:36
Toxaphene Peak 4	7.69	Baseline Smoothing	wellsd	06/26/17 10:36
Toxaphene Peak 5	8.13	Baseline Smoothing	wellsd	06/26/17 10:36

Lab Sample ID: CCV 280-378628/30 Client Sample ID:

Date Analyzed: 06/25/17 20:45 Lab File ID: 06250030.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.11	Baseline Smoothing	wellsd	06/26/17 10:36
Toxaphene Peak 2	7.16	Baseline Smoothing	wellsd	06/26/17 10:36
Toxaphene Peak 3	7.30	Baseline Smoothing	wellsd	06/26/17 10:36
Toxaphene Peak 4	7.59	Baseline Smoothing	wellsd	06/26/17 10:36
Toxaphene Peak 5	8.11	Baseline Smoothing	wellsd	06/26/17 10:36

Lab Sample ID: PEM 280-378628/33 Client Sample ID:

Date Analyzed: 06/25/17 21:36 Lab File ID: 06250033.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4,4'-DDD	7.11	Incomplete Integration	wellsd	06/26/17 10:36

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 378628

Lab Sample ID: CCV 280-378628/44 Client Sample ID:

Date Analyzed: 06/26/17 00:41 Lab File ID: 06250044.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.60	Baseline Smoothing	wellsd	06/26/17 10:39
Toxaphene Peak 2	6.92	Baseline Smoothing	wellsd	06/26/17 10:39
Toxaphene Peak 3	7.19	Baseline Smoothing	wellsd	06/26/17 10:39
Toxaphene Peak 4	7.69	Baseline Smoothing	wellsd	06/26/17 10:39
Toxaphene Peak 5	8.13	Baseline Smoothing	wellsd	06/26/17 10:39

Lab Sample ID: CCV 280-378628/44 Client Sample ID:

Date Analyzed: 06/26/17 00:41 Lab File ID: 06250044.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.11	Baseline Smoothing	wellsd	06/26/17 10:39
Toxaphene Peak 2	7.16	Baseline Smoothing	wellsd	06/26/17 10:39
Toxaphene Peak 3	7.30	Baseline Smoothing	wellsd	06/26/17 10:39
Toxaphene Peak 4	7.59	Baseline Smoothing	wellsd	06/26/17 10:39
Toxaphene Peak 5	8.11	Baseline Smoothing	wellsd	06/26/17 10:39

Lab Sample ID: CCV 280-378628/46 Client Sample ID:

Date Analyzed: 06/26/17 01:15 Lab File ID: 06250046.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
DCB Decachlorobiphenyl (Surr)	9.59	Incomplete Integration	wellsd	06/26/17 10:40

PESTICIDES MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P1 Analysis Batch Number: 378628

Lab Sample ID: CCV 280-378628/53 Client Sample ID:

Date Analyzed: 06/26/17 03:13 Lab File ID: 06250053.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	5.60	Baseline Smoothing	wellsd	06/26/17 10:42
Toxaphene Peak 2	6.92	Baseline Smoothing	wellsd	06/26/17 10:42
Toxaphene Peak 3	7.19	Baseline Smoothing	wellsd	06/26/17 10:42
Toxaphene Peak 4	7.69	Baseline Smoothing	wellsd	06/26/17 10:42
Toxaphene Peak 5	8.13	Baseline Smoothing	wellsd	06/26/17 10:42

Lab Sample ID: CCV 280-378628/53 Client Sample ID:

Date Analyzed: 06/26/17 03:13 Lab File ID: 06250053.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Toxaphene Peak 1	6.11	Baseline Smoothing	wellsd	06/26/17 10:42
Toxaphene Peak 2	7.15	Baseline Smoothing	wellsd	06/26/17 10:42
Toxaphene Peak 3	7.30	Baseline Smoothing	wellsd	06/26/17 10:42
Toxaphene Peak 4	7.59	Baseline Smoothing	wellsd	06/26/17 10:42
Toxaphene Peak 5	8.11	Baseline Smoothing	wellsd	06/26/17 10:42

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P3 Analysis Batch Number: 376236

Lab Sample ID: STDL71248 280-376236/1 Client Sample ID:

Date Analyzed: 06/06/17 13:49 Lab File ID: 06061701.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1248 Peak 1	3.95	Baseline Smoothing	jacksonto	06/06/17 14:59
PCB-1248 Peak 2	4.59	Baseline Smoothing	jacksonto	06/06/17 14:59
PCB-1248 Peak 3	4.72	Baseline Smoothing	jacksonto	06/06/17 14:59
PCB-1248 Peak 4	5.03	Baseline Smoothing	jacksonto	06/06/17 14:59
PCB-1248 Peak 5	5.07	Baseline Smoothing	jacksonto	06/06/17 14:59

Lab Sample ID: STDL61248 280-376236/2 Client Sample ID:

Date Analyzed: 06/06/17 14:10 Lab File ID: 06061702.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1248 Peak 1	3.95	Baseline Smoothing	jacksonto	06/06/17 14:58
PCB-1248 Peak 2	4.59	Baseline Smoothing	jacksonto	06/06/17 14:58
PCB-1248 Peak 3	4.72	Baseline Smoothing	jacksonto	06/06/17 14:58
PCB-1248 Peak 4	5.03	Baseline Smoothing	jacksonto	06/06/17 14:58
PCB-1248 Peak 5	5.07	Baseline Smoothing	jacksonto	06/06/17 14:58

Lab Sample ID: STDL51248 280-376236/3 Client Sample ID:

Date Analyzed: 06/06/17 14:32 Lab File ID: 06061703.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1248 Peak 1	3.95	Baseline Smoothing	jacksonto	06/06/17 14:59
PCB-1248 Peak 2	4.59	Baseline Smoothing	jacksonto	06/06/17 14:59
PCB-1248 Peak 3	4.72	Baseline Smoothing	jacksonto	06/06/17 14:59
PCB-1248 Peak 4	5.03	Baseline Smoothing	jacksonto	06/06/17 14:59
PCB-1248 Peak 5	5.07	Baseline Smoothing	jacksonto	06/06/17 14:59

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P3 Analysis Batch Number: 376236

Lab Sample ID: STDL51660 280-376236/17 Client Sample ID:

Date Analyzed: 06/06/17 19:36 Lab File ID: 06061717.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1260 Peak 1	6.01	Baseline Smoothing	jacksonto	06/07/17 06:44
PCB-1260 Peak 2	6.74	Baseline Smoothing	jacksonto	06/07/17 06:44
PCB-1260 Peak 3	7.23	Baseline Smoothing	jacksonto	06/07/17 06:44
PCB-1260 Peak 4	7.67	Baseline Smoothing	jacksonto	06/07/17 06:44
PCB-1260 Peak 5	8.05	Baseline Smoothing	jacksonto	06/07/17 06:44

Lab Sample ID: STDL41660 280-376236/18 Client Sample ID:

Date Analyzed: 06/06/17 19:58 Lab File ID: 06061718.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1260 Peak 1	6.01	Baseline Smoothing	jacksonto	06/07/17 06:44
PCB-1260 Peak 2	6.74	Baseline Smoothing	jacksonto	06/07/17 06:44
PCB-1260 Peak 3	7.23	Baseline Smoothing	jacksonto	06/07/17 06:44
PCB-1260 Peak 4	7.67	Baseline Smoothing	jacksonto	06/07/17 06:44
PCB-1260 Peak 5	8.05	Baseline Smoothing	jacksonto	06/07/17 06:44

Lab Sample ID: STDL31660 280-376236/19 Client Sample ID:

Date Analyzed: 06/06/17 20:19 Lab File ID: 06061719.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1260 Peak 1	6.01	Baseline Smoothing	jacksonto	06/07/17 06:45
PCB-1260 Peak 2	6.74	Baseline Smoothing	jacksonto	06/07/17 06:45
PCB-1260 Peak 3	7.23	Baseline Smoothing	jacksonto	06/07/17 06:45
PCB-1260 Peak 4	7.67	Baseline Smoothing	jacksonto	06/07/17 06:45
PCB-1260 Peak 5	8.05	Baseline Smoothing	jacksonto	06/07/17 06:45

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P3 Analysis Batch Number: 376236

Lab Sample ID: STDL21660 280-376236/20 Client Sample ID:

Date Analyzed: 06/06/17 20:41 Lab File ID: 06061720.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1016 Peak 1	3.49	Baseline Smoothing	jacksonto	06/07/17 06:45
PCB-1016 Peak 2	3.95	Baseline Smoothing	jacksonto	06/07/17 06:45
PCB-1016 Peak 3	4.09	Baseline Smoothing	jacksonto	06/07/17 06:45
PCB-1016 Peak 4	4.15	Baseline Smoothing	jacksonto	06/07/17 06:45
PCB-1016 Peak 5	4.54	Baseline Smoothing	jacksonto	06/07/17 06:45

Lab Sample ID: STDL73262 280-376236/22 Client Sample ID:

Date Analyzed: 06/06/17 21:25 Lab File ID: 06061722.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1232 Peak 1	3.14	Baseline Smoothing	jacksonto	06/07/17 06:41
PCB-1232 Peak 2	3.51	Baseline Smoothing	jacksonto	06/07/17 06:41
PCB-1232 Peak 3	3.95	Baseline Smoothing	jacksonto	06/07/17 06:41
PCB-1232 Peak 4	4.09	Baseline Smoothing	jacksonto	06/07/17 06:41
PCB-1232 Peak 5	4.72	Baseline Smoothing	jacksonto	06/07/17 06:41

Lab Sample ID: STDL63262 280-376236/23 Client Sample ID:

Date Analyzed: 06/06/17 21:46 Lab File ID: 06061723.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1232 Peak 1	3.14	Baseline Smoothing	jacksonto	06/07/17 06:42
PCB-1232 Peak 2	3.51	Baseline Smoothing	jacksonto	06/07/17 06:42
PCB-1232 Peak 3	3.95	Baseline Smoothing	jacksonto	06/07/17 06:42
PCB-1232 Peak 4	4.09	Baseline Smoothing	jacksonto	06/07/17 06:42
PCB-1232 Peak 5	4.72	Baseline Smoothing	jacksonto	06/07/17 06:42

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P3 Analysis Batch Number: 376236

Lab Sample ID: STDL53262 280-376236/24 Client Sample ID:

Date Analyzed: 06/06/17 22:08 Lab File ID: 06061724.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1232 Peak 1	3.14	Baseline Smoothing	jacksonto	06/07/17 06:43
PCB-1232 Peak 2	3.51	Baseline Smoothing	jacksonto	06/07/17 06:43
PCB-1232 Peak 3	3.95	Baseline Smoothing	jacksonto	06/07/17 06:43
PCB-1232 Peak 4	4.09	Baseline Smoothing	jacksonto	06/07/17 06:43
PCB-1232 Peak 5	4.72	Baseline Smoothing	jacksonto	06/07/17 06:43

Lab Sample ID: STDL54268 280-376236/31 Client Sample ID:

Date Analyzed: 06/07/17 00:39 Lab File ID: 06061731.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1242 Peak 1	3.51	Baseline Smoothing	jacksonto	06/07/17 06:40
PCB-1242 Peak 2	3.95	Baseline Smoothing	jacksonto	06/07/17 06:40
PCB-1242 Peak 3	4.09	Baseline Smoothing	jacksonto	06/07/17 06:40
PCB-1242 Peak 4	5.03	Baseline Smoothing	jacksonto	06/07/17 06:40
PCB-1242 Peak 5	5.07	Baseline Smoothing	jacksonto	06/07/17 06:40

Lab Sample ID: ICV 280-376236/38 Client Sample ID:

Date Analyzed: 06/07/17 03:11 Lab File ID: 06061738.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1260 Peak 1	6.01	Baseline Smoothing	jacksonto	06/07/17 06:48
PCB-1260 Peak 2	6.74	Baseline Smoothing	jacksonto	06/07/17 06:48
PCB-1260 Peak 3	7.23	Baseline Smoothing	jacksonto	06/07/17 06:48
PCB-1260 Peak 4	7.67	Baseline Smoothing	jacksonto	06/07/17 06:48
PCB-1260 Peak 5	8.05	Baseline Smoothing	jacksonto	06/07/17 06:48

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P3 Analysis Batch Number: 376236

Lab Sample ID: ICV 280-376236/40 Client Sample ID:

Date Analyzed: 06/07/17 03:54 Lab File ID: 06061740.D GC Column: CLP2 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1242 Peak 1	3.51	Baseline Smoothing	jacksonto	06/07/17 06:49
PCB-1242 Peak 2	3.95	Baseline Smoothing	jacksonto	06/07/17 06:49
PCB-1242 Peak 3	4.09	Baseline Smoothing	jacksonto	06/07/17 06:49
PCB-1242 Peak 4	5.03	Baseline Smoothing	jacksonto	06/07/17 06:49
PCB-1242 Peak 5	5.08	Baseline Smoothing	jacksonto	06/07/17 06:49

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P3 Analysis Batch Number: 378729

Lab Sample ID: 280-97928-8 Client Sample ID: SS025-SB01(0-2)

Date Analyzed: 06/26/17 17:23 Lab File ID: 06261714.D GC Column: CLP1 ID: 0.32(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
PCB-1260 Peak 1	6.01	Baseline Smoothing	jacksonto	06/27/17 07:20
PCB-1260 Peak 2	6.73	Baseline Smoothing	jacksonto	06/27/17 07:20
PCB-1260 Peak 3	7.23	Baseline Smoothing	jacksonto	06/27/17 07:20
PCB-1260 Peak 4	7.66	Baseline Smoothing	jacksonto	06/27/17 07:20
PCB-1260 Peak 5	8.05	Baseline Smoothing	jacksonto	06/27/17 07:20
DCB Decachlorobiphenyl (Surr)	9.62	Baseline Smoothing	jacksonto	06/27/17 07:20

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8081 LCS_00379	06/22/17	06/15/17	P&T Methanol, Lot MethanolP&T_00172	50 mL	8081LCSPrim_00036	0.5 mL	4,4'-DDD	0.5 ug/mL
							4,4'-DDE	0.5 ug/mL
							4,4'-DDT	0.5 ug/mL
							Aldrin	0.5 ug/mL
							alpha-BHC	0.5 ug/mL
							alpha-Chlordane	0.5 ug/mL
							beta-BHC	0.5 ug/mL
							delta-BHC	0.5 ug/mL
							Dieldrin	0.5 ug/mL
							Endosulfan I	0.5 ug/mL
							Endosulfan II	0.5 ug/mL
							Endosulfan sulfate	0.5 ug/mL
							Endrin	0.5 ug/mL
							Endrin aldehyde	0.5 ug/mL
							Endrin ketone	0.5 ug/mL
							gamma-BHC (Lindane)	0.5 ug/mL
							gamma-Chlordane	0.5 ug/mL
							Heptachlor	0.5 ug/mL
							Heptachlor epoxide	0.5 ug/mL
							Methoxychlor	0.5 ug/mL
.8081LCSPrim_00036	11/15/17	07/20/16	Hexane, Lot Hexane_Cycl_00044	10 mL	8081ABResPS_00016	0.25 mL	4,4'-DDD	50 ug/mL
							4,4'-DDE	50 ug/mL
							4,4'-DDT	50 ug/mL
							Aldrin	50 ug/mL
							alpha-BHC	50 ug/mL
							alpha-Chlordane	50 ug/mL
							beta-BHC	50 ug/mL
							delta-BHC	50 ug/mL
							Dieldrin	50 ug/mL
							Endosulfan I	50 ug/mL
							Endosulfan II	50 ug/mL
							Endosulfan sulfate	50 ug/mL
							Endrin	50 ug/mL
							Endrin aldehyde	50 ug/mL
							Endrin ketone	50 ug/mL
							gamma-BHC (Lindane)	50 ug/mL
							gamma-Chlordane	50 ug/mL
							Heptachlor	50 ug/mL
							Heptachlor epoxide	50 ug/mL
							Methoxychlor	50 ug/mL
..8081ABResPS_00016	03/15/18		Restek, Lot A0108399		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
8081/82 Surr_00094	12/06/17	06/06/17	ACETONE, Lot Acetone_00180	1000 mL	AR_SURR_RES_00057	1 mL	DCB Decachlorobiphenyl (Surr)	0.2 ug/mL
							Tetrachloro-m-xylene (Surr)	0.2 ug/mL
.AR_SURR_RES_00057	06/30/22		RESTEK, Lot A0118280		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
8081_EvalBPEM_00008	09/08/17	02/27/17	Hexane, Lot 135581	100 mL	8081EvalBStk2_00015	20 uL	4,4'-DDT	0.04 ug/mL
							Endrin	0.04 ug/mL
.8081EvalBStk2_00015	09/08/17		AccuStandard, Inc, Lot 214101838-03		(Purchased Reagent)		4,4'-DDT	200 ug/mL
							Endrin	200 ug/mL
8081_IS_00005	05/29/17	11/29/16	Hexane, Lot 135581	500 mL	BNB stock_00008	1 mL	1-Bromo-2-nitrobenzene	2 ug/mL
.BNB stock_00008	07/31/19		Restek, Lot A0118613		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
8081_IS_00006	11/30/17	05/30/17	Hexane, Lot 160062	500 mL	BNB stock_00010	1 mL	1-Bromo-2-nitrobenzene	2 ug/mL
.BNB stock_00010	07/31/19		Restek, Lot A0118613		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
8081ABICVL3_00028	09/30/17	04/04/17	Hexane, Lot 130362	100 mL	8081ABICVStk_00025	2.5 mL	4,4'-DDD	25 ng/mL
							4,4'-DDE	25 ng/mL
							4,4'-DDT	25 ng/mL
							Aldrin	25 ng/mL
							alpha-BHC	25 ng/mL
							alpha-Chlordane	25 ng/mL
							beta-BHC	25 ng/mL
							delta-BHC	25 ng/mL
							Dieldrin	25 ng/mL
							Endosulfan I	25 ng/mL
							Endosulfan II	25 ng/mL
							Endosulfan sulfate	25 ng/mL
							Endrin	25 ng/mL
							Endrin aldehyde	25 ng/mL
							gamma-BHC (Lindane)	25 ng/mL
							gamma-Chlordane	25 ng/mL
							Heptachlor	25 ng/mL
							Heptachlor epoxide	25 ng/mL
							Methoxychlor	25 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							DCB Decachlorobiphenyl (Surr)	25 ng/mL
							Tetrachloro-m-xylene (Surr)	25 ng/mL
.8081ABICVStk_00025	09/30/17	04/04/17	Hexane, Lot 130362	50 mL	8081ABResSS_00010	0.025 mL	4,4'-DDD	1000 ng/mL
							4,4'-DDE	1000 ng/mL
							4,4'-DDT	1000 ng/mL
							Aldrin	1000 ng/mL
							alpha-BHC	1000 ng/mL
							alpha-Chlordane	1000 ng/mL
							beta-BHC	1000 ng/mL
							delta-BHC	1000 ng/mL
							Dieldrin	1000 ng/mL
							Endosulfan I	1000 ng/mL
							Endosulfan II	1000 ng/mL
							Endosulfan sulfate	1000 ng/mL
							Endrin	1000 ng/mL
							Endrin aldehyde	1000 ng/mL
							gamma-BHC (Lindane)	1000 ng/mL
							gamma-Chlordane	1000 ng/mL
							Heptachlor	1000 ng/mL
							Heptachlor epoxide	1000 ng/mL
							Methoxychlor	1000 ng/mL
					AR_SURR_RES_00067	0.25 mL	DCB Decachlorobiphenyl (Surr)	1000 ng/mL
							Tetrachloro-m-xylene (Surr)	1000 ng/mL
..8081ABResSS_00010	02/28/19		Restek, Lot A0108854		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..AR_SURR_RES_00067	12/30/22		RESTEK, Lot A0121594		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
8081IcalL1_00021	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABCalStk_00028	0.4 mL	4,4'-DDD	4 ng/mL
							4,4'-DDE	4 ng/mL
							4,4'-DDT	4 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Aldrin	4 ng/mL
							alpha-BHC	4 ng/mL
							alpha-Chlordane	4 ng/mL
							beta-BHC	4 ng/mL
							delta-BHC	4 ng/mL
							Dieldrin	4 ng/mL
							Endosulfan I	4 ng/mL
							Endosulfan II	4 ng/mL
							Endosulfan sulfate	4 ng/mL
							Endrin	4 ng/mL
							Endrin aldehyde	4 ng/mL
							Endrin ketone	4 ng/mL
							gamma-BHC (Lindane)	4 ng/mL
							gamma-Chlordane	4 ng/mL
							Heptachlor	4 ng/mL
							Heptachlor epoxide	4 ng/mL
							Methoxychlor	4 ng/mL
							Hexachlorobenzene	4 ng/mL
							DCB Decachlorobiphenyl (Surr)	4 ng/mL
							Tetrachloro-m-xylene (Surr)	4 ng/mL
.8081ABCalStk_00028	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABResPS_00020	0.05 mL	4,4'-DDD	1000 ng/mL
							4,4'-DDE	1000 ng/mL
							4,4'-DDT	1000 ng/mL
							Aldrin	1000 ng/mL
							alpha-BHC	1000 ng/mL
							alpha-Chlordane	1000 ng/mL
							beta-BHC	1000 ng/mL
							delta-BHC	1000 ng/mL
							Dieldrin	1000 ng/mL
							Endosulfan I	1000 ng/mL
							Endosulfan II	1000 ng/mL
							Endosulfan sulfate	1000 ng/mL
							Endrin	1000 ng/mL
							Endrin aldehyde	1000 ng/mL
							Endrin ketone	1000 ng/mL
							gamma-BHC (Lindane)	1000 ng/mL
							gamma-Chlordane	1000 ng/mL
							Heptachlor	1000 ng/mL
							Heptachlor epoxide	1000 ng/mL
							Methoxychlor	1000 ng/mL
					8081HCBStkPS_00017	1 mL	Hexachlorobenzene	1000 ng/mL
					AR_SURR_RES_00050	0.5 mL	DCB Decachlorobiphenyl (Surr)	1000 ng/mL
							Tetrachloro-m-xylene (Surr)	1000 ng/mL
..8081ABResPS_00020	10/31/19		Restek, Lot A0114872		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..8081HCBStkPS_00017	06/16/25	Accustandard, Inc., Lot 215061299			(Purchased Reagent)		Hexachlorobenzene	100 ug/mL
..AR_SURR_RES_00050	06/30/22	RESTEK, Lot A0117947			(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
8081IcalL2_00021	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABCalStk_00028	1 mL	4,4'-DDD	10 ng/mL
							4,4'-DDE	10 ng/mL
							4,4'-DDT	10 ng/mL
							Aldrin	10 ng/mL
							alpha-BHC	10 ng/mL
							alpha-Chlordane	10 ng/mL
							beta-BHC	10 ng/mL
							delta-BHC	10 ng/mL
							Dieldrin	10 ng/mL
							Endosulfan I	10 ng/mL
							Endosulfan II	10 ng/mL
							Endosulfan sulfate	10 ng/mL
							Endrin	10 ng/mL
							Endrin aldehyde	10 ng/mL
							Endrin ketone	10 ng/mL
							gamma-BHC (Lindane)	10 ng/mL
							gamma-Chlordane	10 ng/mL
							Heptachlor	10 ng/mL
							Heptachlor epoxide	10 ng/mL
							Methoxychlor	10 ng/mL
							Hexachlorobenzene	10 ng/mL
							DCB Decachlorobiphenyl (Surr)	10 ng/mL
							Tetrachloro-m-xylene (Surr)	10 ng/mL
.8081ABCalStk_00028	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABResPS_00020	0.05 mL	4,4'-DDD	1000 ng/mL
							4,4'-DDE	1000 ng/mL
							4,4'-DDT	1000 ng/mL
							Aldrin	1000 ng/mL
							alpha-BHC	1000 ng/mL
							alpha-Chlordane	1000 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							beta-BHC	1000 ng/mL
							delta-BHC	1000 ng/mL
							Dieldrin	1000 ng/mL
							Endosulfan I	1000 ng/mL
							Endosulfan II	1000 ng/mL
							Endosulfan sulfate	1000 ng/mL
							Endrin	1000 ng/mL
							Endrin aldehyde	1000 ng/mL
							Endrin ketone	1000 ng/mL
							gamma-BHC (Lindane)	1000 ng/mL
							gamma-Chlordane	1000 ng/mL
							Heptachlor	1000 ng/mL
							Heptachlor epoxide	1000 ng/mL
							Methoxychlor	1000 ng/mL
					8081HCBStkPS_00017	1 mL	Hexachlorobenzene	1000 ng/mL
					AR_SURR_RES_00050	0.5 mL	DCB Decachlorobiphenyl (Surr)	1000 ng/mL
							Tetrachloro-m-xylene (Surr)	1000 ng/mL
..8081ABResPS_00020	10/31/19		Restek, Lot A0114872		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..8081HCBStkPS_00017	06/16/25		Accustandard, Inc., Lot 215061299		(Purchased Reagent)		Hexachlorobenzene	100 ug/mL
..AR_SURR_RES_00050	06/30/22		RESTEK, Lot A0117947		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
8081IcalL3_00022	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABCalStk_00028	2.5 mL	4,4'-DDD	25 ng/mL
							4,4'-DDE	25 ng/mL
							4,4'-DDT	25 ng/mL
							Aldrin	25 ng/mL
							alpha-BHC	25 ng/mL
							alpha-Chlordane	25 ng/mL
							beta-BHC	25 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							delta-BHC	25 ng/mL
							Dieldrin	25 ng/mL
							Endosulfan I	25 ng/mL
							Endosulfan II	25 ng/mL
							Endosulfan sulfate	25 ng/mL
							Endrin	25 ng/mL
							Endrin aldehyde	25 ng/mL
							Endrin ketone	25 ng/mL
							gamma-BHC (Lindane)	25 ng/mL
							gamma-Chlordane	25 ng/mL
							Heptachlor	25 ng/mL
							Heptachlor epoxide	25 ng/mL
							Methoxychlor	25 ng/mL
							Hexachlorobenzene	25 ng/mL
							DCB Decachlorobiphenyl (Surr)	25 ng/mL
							Tetrachloro-m-xylene (Surr)	25 ng/mL
.8081ABCalStk_00028	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABResPS_00020	0.05 mL	4,4'-DDD	1000 ng/mL
							4,4'-DDE	1000 ng/mL
							4,4'-DDT	1000 ng/mL
							Aldrin	1000 ng/mL
							alpha-BHC	1000 ng/mL
							alpha-Chlordane	1000 ng/mL
							beta-BHC	1000 ng/mL
							delta-BHC	1000 ng/mL
							Dieldrin	1000 ng/mL
							Endosulfan I	1000 ng/mL
							Endosulfan II	1000 ng/mL
							Endosulfan sulfate	1000 ng/mL
							Endrin	1000 ng/mL
							Endrin aldehyde	1000 ng/mL
							Endrin ketone	1000 ng/mL
							gamma-BHC (Lindane)	1000 ng/mL
							gamma-Chlordane	1000 ng/mL
							Heptachlor	1000 ng/mL
							Heptachlor epoxide	1000 ng/mL
							Methoxychlor	1000 ng/mL
					8081HCBStkPS_00017	1 mL	Hexachlorobenzene	1000 ng/mL
					AR_SURR_RES_00050	0.5 mL	DCB Decachlorobiphenyl (Surr)	1000 ng/mL
							Tetrachloro-m-xylene (Surr)	1000 ng/mL
..8081ABResPS_00020	10/31/19		Restek, Lot A0114872		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..8081HCBStkPS_00017	06/16/25	Accustandard, Inc., Lot 215061299			(Purchased Reagent)		Hexachlorobenzene	100 ug/mL
..AR_SURR_RES_00050	06/30/22	RESTEK, Lot A0117947			(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
8081IcalL4_00024	05/22/17	03/23/17	Hexane, Lot 130362	250 mL	8081ABCalStk_00028	12.5 mL	4,4'-DDD	50 ng/mL
							4,4'-DDE	50 ng/mL
							4,4'-DDT	50 ng/mL
							Aldrin	50 ng/mL
							alpha-BHC	50 ng/mL
							alpha-Chlordane	50 ng/mL
							beta-BHC	50 ng/mL
							delta-BHC	50 ng/mL
							Dieldrin	50 ng/mL
							Endosulfan I	50 ng/mL
							Endosulfan II	50 ng/mL
							Endosulfan sulfate	50 ng/mL
							Endrin	50 ng/mL
							Endrin aldehyde	50 ng/mL
							Endrin ketone	50 ng/mL
							gamma-BHC (Lindane)	50 ng/mL
							gamma-Chlordane	50 ng/mL
							Heptachlor	50 ng/mL
							Heptachlor epoxide	50 ng/mL
							Methoxychlor	50 ng/mL
							Hexachlorobenzene	50 ng/mL
							DCB Decachlorobiphenyl (Surr)	50 ng/mL
							Tetrachloro-m-xylene (Surr)	50 ng/mL
.8081ABCalStk_00028	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABResPS_00020	0.05 mL	4,4'-DDD	1000 ng/mL
							4,4'-DDE	1000 ng/mL
							4,4'-DDT	1000 ng/mL
							Aldrin	1000 ng/mL
							alpha-BHC	1000 ng/mL
							alpha-Chlordane	1000 ng/mL
							beta-BHC	1000 ng/mL
							delta-BHC	1000 ng/mL
							Dieldrin	1000 ng/mL
							Endosulfan I	1000 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Endosulfan II	1000 ng/mL
							Endosulfan sulfate	1000 ng/mL
							Endrin	1000 ng/mL
							Endrin aldehyde	1000 ng/mL
							Endrin ketone	1000 ng/mL
							gamma-BHC (Lindane)	1000 ng/mL
							gamma-Chlordane	1000 ng/mL
							Heptachlor	1000 ng/mL
							Heptachlor epoxide	1000 ng/mL
							Methoxychlor	1000 ng/mL
					8081HCBStkPS_00017	1 mL	Hexachlorobenzene	1000 ng/mL
					AR_SURR_RES_00050	0.5 mL	DCB Decachlorobiphenyl (Surr)	1000 ng/mL
							Tetrachloro-m-xylene (Surr)	1000 ng/mL
..8081ABResPS_00020	10/31/19		Restek, Lot A0114872		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..8081HCBStkPS_00017	06/16/25		Accustandard, Inc., Lot 215061299		(Purchased Reagent)		Hexachlorobenzene	100 ug/mL
..AR_SURR_RES_00050	06/30/22		RESTEK, Lot A0117947		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
8081IcalL4_00026	12/07/17	06/07/17	Hexane, Lot 160062	250 mL	8081ABCalStk_00030	12.5 mL	4,4'-DDD	50 ng/mL
							4,4'-DDE	50 ng/mL
							4,4'-DDT	50 ng/mL
							Aldrin	50 ng/mL
							alpha-BHC	50 ng/mL
							alpha-Chlordane	50 ng/mL
							beta-BHC	50 ng/mL
							delta-BHC	50 ng/mL
							Dieldrin	50 ng/mL
							Endosulfan I	50 ng/mL
							Endosulfan II	50 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Endosulfan sulfate	50 ng/mL
							Endrin	50 ng/mL
							Endrin aldehyde	50 ng/mL
							gamma-BHC (Lindane)	50 ng/mL
							gamma-Chlordane	50 ng/mL
							Heptachlor	50 ng/mL
							Heptachlor epoxide	50 ng/mL
							Methoxychlor	50 ng/mL
							DCB Decachlorobiphenyl (Surr)	50 ng/mL
							Tetrachloro-m-xylene (Surr)	50 ng/mL
.8081ABCalStk_00030	12/07/17	06/07/17	Hexane, Lot 160062	100 mL	8081ABResPS_00022	0.05 mL	4,4'-DDD	1000 ng/mL
							4,4'-DDE	1000 ng/mL
							4,4'-DDT	1000 ng/mL
							Aldrin	1000 ng/mL
							alpha-BHC	1000 ng/mL
							alpha-Chlordane	1000 ng/mL
							beta-BHC	1000 ng/mL
							delta-BHC	1000 ng/mL
							Dieldrin	1000 ng/mL
							Endosulfan I	1000 ng/mL
							Endosulfan II	1000 ng/mL
							Endosulfan sulfate	1000 ng/mL
							Endrin	1000 ng/mL
							Endrin aldehyde	1000 ng/mL
							gamma-BHC (Lindane)	1000 ng/mL
							gamma-Chlordane	1000 ng/mL
							Heptachlor	1000 ng/mL
							Heptachlor epoxide	1000 ng/mL
							Methoxychlor	1000 ng/mL
					AR_SURR_RES_00058	0.5 mL	DCB Decachlorobiphenyl (Surr)	1000 ng/mL
							Tetrachloro-m-xylene (Surr)	1000 ng/mL
..8081ABResPS_00022	09/30/20		Restek, Lot A0121765		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..AR_SURR_RES_00058	06/30/22		RESTEK, Lot A0118280		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
8081IcalL5_00022	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABCalStk_00028	7.5 mL	4,4'-DDD	75 ng/mL
							4,4'-DDE	75 ng/mL
							4,4'-DDT	75 ng/mL
							Aldrin	75 ng/mL
							alpha-BHC	75 ng/mL
							alpha-Chlordane	75 ng/mL
							beta-BHC	75 ng/mL
							delta-BHC	75 ng/mL
							Dieldrin	75 ng/mL
							Endosulfan I	75 ng/mL
							Endosulfan II	75 ng/mL
							Endosulfan sulfate	75 ng/mL
							Endrin	75 ng/mL
							Endrin aldehyde	75 ng/mL
							Endrin ketone	75 ng/mL
							gamma-BHC (Lindane)	75 ng/mL
							gamma-Chlordane	75 ng/mL
							Heptachlor	75 ng/mL
							Heptachlor epoxide	75 ng/mL
							Methoxychlor	75 ng/mL
							Hexachlorobenzene	75 ng/mL
							DCB Decachlorobiphenyl (Surr)	75 ng/mL
							Tetrachloro-m-xylene (Surr)	75 ng/mL
.8081ABCalStk_00028	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABResPS_00020	0.05 mL	4,4'-DDD	1000 ng/mL
							4,4'-DDE	1000 ng/mL
							4,4'-DDT	1000 ng/mL
							Aldrin	1000 ng/mL
							alpha-BHC	1000 ng/mL
							alpha-Chlordane	1000 ng/mL
							beta-BHC	1000 ng/mL
							delta-BHC	1000 ng/mL
							Dieldrin	1000 ng/mL
							Endosulfan I	1000 ng/mL
							Endosulfan II	1000 ng/mL
							Endosulfan sulfate	1000 ng/mL
							Endrin	1000 ng/mL
							Endrin aldehyde	1000 ng/mL
							Endrin ketone	1000 ng/mL
							gamma-BHC (Lindane)	1000 ng/mL
							gamma-Chlordane	1000 ng/mL
							Heptachlor	1000 ng/mL
							Heptachlor epoxide	1000 ng/mL
							Methoxychlor	1000 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					8081HCBStkPS_00017	1 mL	Hexachlorobenzene	1000 ng/mL
					AR_SURR_RES_00050	0.5 mL	DCB Decachlorobiphenyl (Surr)	1000 ng/mL
							Tetrachloro-m-xylene (Surr)	1000 ng/mL
..8081ABResPS_00020	10/31/19		Restek, Lot A0114872		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..8081HCBStkPS_00017	06/16/25		Accustandard, Inc., Lot 215061299		(Purchased Reagent)		Hexachlorobenzene	100 ug/mL
..AR_SURR_RES_00050	06/30/22		RESTEK, Lot A0117947		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
8081IcalL6_00021	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABCalStk_00028	10 mL	4,4'-DDD	100 ng/mL
							4,4'-DDE	100 ng/mL
							4,4'-DDT	100 ng/mL
							Aldrin	100 ng/mL
							alpha-BHC	100 ng/mL
							alpha-Chlordane	100 ng/mL
							beta-BHC	100 ng/mL
							delta-BHC	100 ng/mL
							Dieldrin	100 ng/mL
							Endosulfan I	100 ng/mL
							Endosulfan II	100 ng/mL
							Endosulfan sulfate	100 ng/mL
							Endrin	100 ng/mL
							Endrin aldehyde	100 ng/mL
							Endrin ketone	100 ng/mL
							gamma-BHC (Lindane)	100 ng/mL
							gamma-Chlordane	100 ng/mL
							Heptachlor	100 ng/mL
							Heptachlor epoxide	100 ng/mL
							Methoxychlor	100 ng/mL
							Hexachlorobenzene	100 ng/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							DCB Decachlorobiphenyl (Surr)	100 ng/mL
							Tetrachloro-m-xylene (Surr)	100 ng/mL
.8081ABCalStk_00028	05/22/17	03/23/17	Hexane, Lot 130362	100 mL	8081ABResPS_00020	0.05 mL	4,4'-DDD	1000 ng/mL
							4,4'-DDE	1000 ng/mL
							4,4'-DDT	1000 ng/mL
							Aldrin	1000 ng/mL
							alpha-BHC	1000 ng/mL
							alpha-Chlordane	1000 ng/mL
							beta-BHC	1000 ng/mL
							delta-BHC	1000 ng/mL
							Dieldrin	1000 ng/mL
							Endosulfan I	1000 ng/mL
							Endosulfan II	1000 ng/mL
							Endosulfan sulfate	1000 ng/mL
							Endrin	1000 ng/mL
							Endrin aldehyde	1000 ng/mL
							Endrin ketone	1000 ng/mL
							gamma-BHC (Lindane)	1000 ng/mL
							gamma-Chlordane	1000 ng/mL
							Heptachlor	1000 ng/mL
							Heptachlor epoxide	1000 ng/mL
							Methoxychlor	1000 ng/mL
					8081HCBStkPS_00017	1 mL	Hexachlorobenzene	1000 ng/mL
					AR_SURR_RES_00050	0.5 mL	DCB Decachlorobiphenyl (Surr)	1000 ng/mL
							Tetrachloro-m-xylene (Surr)	1000 ng/mL
..8081ABResPS_00020	10/31/19		Restek, Lot A0114872		(Purchased Reagent)		4,4'-DDD	2000 ug/mL
							4,4'-DDE	2000 ug/mL
							4,4'-DDT	2000 ug/mL
							Aldrin	2000 ug/mL
							alpha-BHC	2000 ug/mL
							alpha-Chlordane	2000 ug/mL
							beta-BHC	2000 ug/mL
							delta-BHC	2000 ug/mL
							Dieldrin	2000 ug/mL
							Endosulfan I	2000 ug/mL
							Endosulfan II	2000 ug/mL
							Endosulfan sulfate	2000 ug/mL
							Endrin	2000 ug/mL
							Endrin aldehyde	2000 ug/mL
							Endrin ketone	2000 ug/mL
							gamma-BHC (Lindane)	2000 ug/mL
							gamma-Chlordane	2000 ug/mL
							Heptachlor	2000 ug/mL
							Heptachlor epoxide	2000 ug/mL
							Methoxychlor	2000 ug/mL
..8081HCBStkPS_00017	06/16/25		Accustandard, Inc., Lot 215061299		(Purchased Reagent)		Hexachlorobenzene	100 ug/mL
..AR_SURR_RES_00050	06/30/22		RESTEK, Lot A0117947		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
8081Toxaphene_00027	11/03/17	05/03/17	ACETONE, Lot Acetone 00177	250 mL	8081 ToxStock_00014	0.5 mL	Toxaphene	2 ug/mL
.8081 ToxStock_00014	01/19/22	AccuStandard, Lot 212011251			(Purchased Reagent)		Toxaphene	1000 ug/mL
8081TOXCCVL4_00011	05/11/17	11/11/16	Hexane, Lot 135581	250 mL	8081ToxPS_00031	0.1 mL	Toxaphene Peak 1	2000 ng/mL
							Toxaphene Peak 2	2000 ng/mL
							Toxaphene Peak 3	2000 ng/mL
							Toxaphene Peak 4	2000 ng/mL
							Toxaphene Peak 5	2000 ng/mL
.8081ToxPS_00031	12/31/19	Restek, Lot A0113750			(Purchased Reagent)		Toxaphene Peak 1	5000 ug/mL
							Toxaphene Peak 2	5000 ug/mL
							Toxaphene Peak 3	5000 ug/mL
							Toxaphene Peak 4	5000 ug/mL
							Toxaphene Peak 5	5000 ug/mL
8081TOXCCVL4_00012	11/13/17	05/13/17	Hexane, Lot 162297	250 mL	8081ToxPS_00032	0.1 mL	Toxaphene	2000 ng/mL
.8081ToxPS_00032	12/31/19	Restek, Lot A0113750			(Purchased Reagent)		Toxaphene	5000 ug/mL
8081ToxICVL3_00010	08/22/17	02/22/17	Hexane, Lot 135581	100 mL	8081ToxSS_00016	0.1 mL	Toxaphene	1000 ng/mL
.8081ToxSS_00016	01/30/25	Accustandard, Inc., Lot 215011420			(Purchased Reagent)		Toxaphene	1000 ug/mL
8081ToxL1_00017	05/11/17	11/11/16	Hexane, Lot 135581	100 mL	8081ToxPS_00031	0.004 mL	Toxaphene Peak 1	200 ng/mL
							Toxaphene Peak 2	200 ng/mL
							Toxaphene Peak 3	200 ng/mL
							Toxaphene Peak 4	200 ng/mL
							Toxaphene Peak 5	200 ng/mL
.8081ToxPS_00031	12/31/19	Restek, Lot A0113750			(Purchased Reagent)		Toxaphene Peak 1	5000 ug/mL
							Toxaphene Peak 2	5000 ug/mL
							Toxaphene Peak 3	5000 ug/mL
							Toxaphene Peak 4	5000 ug/mL
							Toxaphene Peak 5	5000 ug/mL
8081ToxL2_00018	05/11/17	11/11/16	Hexane, Lot 135581	100 mL	8081ToxPS_00031	0.01 mL	Toxaphene Peak 1	500 ng/mL
							Toxaphene Peak 2	500 ng/mL
							Toxaphene Peak 3	500 ng/mL
							Toxaphene Peak 4	500 ng/mL
							Toxaphene Peak 5	500 ng/mL
.8081ToxPS_00031	12/31/19	Restek, Lot A0113750			(Purchased Reagent)		Toxaphene Peak 1	5000 ug/mL
							Toxaphene Peak 2	5000 ug/mL
							Toxaphene Peak 3	5000 ug/mL
							Toxaphene Peak 4	5000 ug/mL
							Toxaphene Peak 5	5000 ug/mL
8081ToxL3_00017	05/11/17	11/11/16	Hexane, Lot 135581	100 mL	8081ToxPS_00031	0.02 mL	Toxaphene Peak 1	1000 ng/mL
							Toxaphene Peak 2	1000 ng/mL
							Toxaphene Peak 3	1000 ng/mL
							Toxaphene Peak 4	1000 ng/mL
							Toxaphene Peak 5	1000 ng/mL
.8081ToxPS_00031	12/31/19	Restek, Lot A0113750			(Purchased Reagent)		Toxaphene Peak 1	5000 ug/mL
							Toxaphene Peak 2	5000 ug/mL
							Toxaphene Peak 3	5000 ug/mL
							Toxaphene Peak 4	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toxaphene Peak 5	5000 ug/mL
8081ToxL5_00018	05/11/17	11/11/16	Hexane, Lot 135581	100 mL	8081ToxPS_00031	0.1 mL	Toxaphene Peak 1	5000 ng/mL
							Toxaphene Peak 2	5000 ng/mL
							Toxaphene Peak 3	5000 ng/mL
							Toxaphene Peak 4	5000 ng/mL
							Toxaphene Peak 5	5000 ng/mL
.8081ToxPS_00031	12/31/19		Restek, Lot A0113750		(Purchased Reagent)		Toxaphene Peak 1	5000 ug/mL
							Toxaphene Peak 2	5000 ug/mL
							Toxaphene Peak 3	5000 ug/mL
							Toxaphene Peak 4	5000 ug/mL
							Toxaphene Peak 5	5000 ug/mL
8081ToxL6_00020	05/11/17	11/11/16	Hexane, Lot 135581	100 mL	8081ToxPS_00031	0.2 mL	Toxaphene Peak 1	10000 ng/mL
							Toxaphene Peak 2	10000 ng/mL
							Toxaphene Peak 3	10000 ng/mL
							Toxaphene Peak 4	10000 ng/mL
							Toxaphene Peak 5	10000 ng/mL
.8081ToxPS_00031	12/31/19		Restek, Lot A0113750		(Purchased Reagent)		Toxaphene Peak 1	5000 ug/mL
							Toxaphene Peak 2	5000 ug/mL
							Toxaphene Peak 3	5000 ug/mL
							Toxaphene Peak 4	5000 ug/mL
							Toxaphene Peak 5	5000 ug/mL
8082 LCS_00046	10/28/17	04/28/17	ACETONE, Lot Acetone_000177	500 mL	8082LCSSTOCK_00033	1 mL	Arochlor 1016	2 ug/mL
							Arochlor 1260	2 ug/mL
.8082LCSSTOCK_00033	04/25/18		RESTEK, Lot A0109664		(Purchased Reagent)		Arochlor 1016	1000 ug/mL
							Arochlor 1260	1000 ug/mL
8270 SIM Surr_00068	01/06/18	01/06/17	ACETONE, Lot Acetone_00163/4	1000 mL	8270SurStkHL_00205	100 uL	2,4,6 - Tribromophenol	0.5 ug/mL
							2,4,6-Tribromophenol	0.5 ug/mL
							2-Fluorobiphenyl (Surr)	0.5 ug/mL
							2-Fluorophenol	0.5 ug/mL
							Nitrobenzene-d5 (Surr)	0.5 ug/mL
							Phenol-d5	0.5 ug/mL
							Phenol-d6	0.5 ug/mL
							Terphenyl-d14 (Surr)	0.5 ug/mL
.8270SurStkHL_00205	01/06/18		Restek, Lot A0120521		(Purchased Reagent)		2,4,6 - Tribromophenol	5000 ug/mL
							2,4,6-Tribromophenol	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5	5000 ug/mL
							Phenol-d6	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
8270 SIM Surr_00070	05/15/18	05/15/17	ACETONE, Lot Acetone_00180	1000 mL	8270SurStkHL_00228	100 uL	2,4,6 - Tribromophenol	0.5 ug/mL
							2,4,6-Tribromophenol	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Fluorobiphenyl (Surr)	0.5 ug/mL
							2-Fluorophenol	0.5 ug/mL
							Nitrobenzene-d5 (Surr)	0.5 ug/mL
							Phenol-d5	0.5 ug/mL
							Phenol-d6	0.5 ug/mL
							Terphenyl-d14 (Surr)	0.5 ug/mL
.8270SurStkHL_00228	12/31/21		Restek, Lot A0123269		(Purchased Reagent)		2,4,6 - Tribromophenol	5000 ug/mL
							2,4,6-Tribromophenol	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5	5000 ug/mL
							Phenol-d6	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
8270BO-SIMLCS_00022	03/14/18	03/14/17	P&T Methanol, Lot MethanolP&T_00164	250 mL	570666_00052	225 uL	1,1'-Biphenyl	0.9 ug/mL
							1,2,4,5-Tetrachlorobenzene	0.9 ug/mL
							1,2,4-Trichlorobenzene	0.9 ug/mL
							1,2-Dichlorobenzene	0.9 ug/mL
							1,2-Diphenylhydrazine	0.909877 ug/mL
							1,3-Dichlorobenzene	0.9 ug/mL
							1,3-Dinitrobenzene	0.9 ug/mL
							1,4-Dichlorobenzene	0.9 ug/mL
							1,4-Dioxane	0.9 ug/mL
							1-Methylnaphthalene	0.9 ug/mL
							2,2'-oxybis[1-chloropropane]	0.9 ug/mL
							2,3,4,6-Tetrachlorophenol	0.9 ug/mL
							2,4,5-Trichlorophenol	0.9 ug/mL
							2,4,6-Trichlorophenol	0.9 ug/mL
							2,4-Dichlorophenol	0.9 ug/mL
							2,4-Dimethylphenol	0.9 ug/mL
							2,4-Dinitrophenol	1.8 ug/mL
							2,4-Dinitrotoluene	0.9 ug/mL
							2,6-Dichlorophenol	0.9 ug/mL
							2,6-Dinitrotoluene	0.9 ug/mL
							2-Chloronaphthalene	0.9 ug/mL
							2-Chlorophenol	0.9 ug/mL
							2-Methylnaphthalene	0.9 ug/mL
							2-Methylphenol	0.9 ug/mL
							2-Nitroaniline	0.9 ug/mL
							2-Nitrophenol	0.9 ug/mL
							3 & 4 Methylphenol	0.9 ug/mL
							3-Methylphenol	0.9 ug/mL
							3-Nitroaniline	0.9 ug/mL
							4,6-Dinitro-2-methylphenol	1.8 ug/mL
							4-Bromophenyl phenyl ether	0.9 ug/mL
							4-Chloro-3-methylphenol	0.9 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chloroaniline	0.9 ug/mL
							4-Chlorophenyl phenyl ether	0.9 ug/mL
							4-Methylphenol	0.9 ug/mL
							4-Nitroaniline	0.9 ug/mL
							4-Nitrophenol	1.8 ug/mL
							Acenaphthene	0.9 ug/mL
							Acenaphthylene	0.9 ug/mL
							Acetophenone	0.9 ug/mL
							Aniline	0.9 ug/mL
							Anthracene	0.9 ug/mL
							Azobenzene	0.9 ug/mL
							Benzo[a]anthracene	0.9 ug/mL
							Benzo[a]pyrene	0.9 ug/mL
							Benzo[b]fluoranthene	0.9 ug/mL
							Benzo[g,h,i]perylene	0.9 ug/mL
							Benzo[k]fluoranthene	0.9 ug/mL
							Benzyl alcohol	0.9 ug/mL
							Bis(2-chloroethoxy)methane	0.9 ug/mL
							Bis(2-chloroethyl)ether	0.9 ug/mL
							Bis(2-ethylhexyl) phthalate	0.9 ug/mL
							Butyl benzyl phthalate	0.9 ug/mL
							Carbazole	0.9 ug/mL
							Chrysene	0.9 ug/mL
							Di-n-butyl phthalate	0.9 ug/mL
							Di-n-octyl phthalate	0.9 ug/mL
							Dibenz(a,h)anthracene	0.9 ug/mL
							Dibenzofuran	0.9 ug/mL
							Diethyl phthalate	0.9 ug/mL
							Dimethyl phthalate	0.9 ug/mL
							Diphenylamine	0.765 ug/mL
							Fluoranthene	0.9 ug/mL
							Fluorene	0.9 ug/mL
							Hexachlorobenzene	0.9 ug/mL
							Hexachlorobutadiene	0.9 ug/mL
							Hexachlorocyclopentadiene	0.9 ug/mL
							Hexachloroethane	0.9 ug/mL
							Hexadecane	0.9 ug/mL
							Indeno[1,2,3-cd]pyrene	0.9 ug/mL
							Isophorone	0.9 ug/mL
							n-Decane	0.9 ug/mL
							N-Nitrosodi-n-propylamine	0.9 ug/mL
							N-Nitrosodimethylamine	0.9 ug/mL
							N-Nitrosodiphenylamine	0.9 ug/mL
							n-Octadecane	0.9 ug/mL
							Naphthalene	0.9 ug/mL
							Nitrobenzene	0.9 ug/mL
							Pentachlorophenol	1.8 ug/mL
							Phenanthrene	0.9 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol	0.9 ug/mL
							Pyrene	0.9 ug/mL
							Pyridine	0.9 ug/mL
.570666_00052	03/14/18		Restek, Lot A0121722		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1010.97 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	1000 ug/mL
							4-Nitroaniline	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Diphenylamine	850 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	1000 ug/mL
Alt As Se*_00005	06/14/17	06/13/17	5%5%HNO3HCL, Lot See Reagent Log	100 mL	10 ppm As_00013	0.15 mL	Arsenic	0.015 ppm
					10 ppm Se_00009	0.15 mL	Selenium	0.015 ppm
.10 ppm As_00013	03/21/18	04/27/17	5%HNO3/5% HCl, Lot See logbook	100 mL	1000 As_00017	1 mL	Arsenic	10 mg/L
..1000 As_00017	03/21/18	Inorganic Venture, Lot J2-AS02122			(Purchased Reagent)		Arsenic	1000 mg/L
.10 ppm Se_00009	08/31/17	09/06/16	2%HNO3/0.5% HCl, Lot see log books	100 mL	1000 Se_00016	1 mL	Selenium	10 mg/L
..1000 Se_00016	08/31/17	Inorganic Ventures, Lot K2-SE02067			(Purchased Reagent)		Selenium	1000 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
Alt AsFePb Se_00001	06/13/17	06/12/17	5%5%HNO3HCL, Lot See Reagent Log	100 mL	10 ppm As_00012	0.15 mL	Arsenic	0.015 ppm
					10 ppm Pb_00009	0.09 mL	Lead	0.009 ppm
.10 ppm As_00012	11/07/17	11/18/16	5%HNO3/5% HCl, Lot See logbook	100 mL	1000 As_00018	1 mL	Arsenic	10 mg/L
..1000 As_00018	11/07/17	Inorganic Venture, Lot J2-AS02122			(Purchased Reagent)		Arsenic	1000 mg/L
.10 ppm Pb_00009	07/19/17	08/15/16	5%HNO3/5% HCl, Lot see log book	100 mL	1000 Pb_00019	1 mL	Lead	10 mg/L
..1000 Pb_00019	07/19/17	Inorganic Ventures, Lot K2-PB03074			(Purchased Reagent)		Lead	1000 mg/L
Alt CRI_00083	06/14/17	06/13/17	5%5%HNO3HCL, Lot See Reagent Log	100 mL	10 ppm Pb_00009	0.09 mL	Lead	0.009 ppm
					10 ppm Sb_00009	0.1 mL	Antimony	0.01 ppm
					10 ppm Tl_00007	0.1 mL	Thallium	0.01 ppm
.10 ppm Pb_00009	07/19/17	08/15/16	5%HNO3/5% HCl, Lot see log book	100 mL	1000 Pb_00019	1 mL	Lead	10 mg/L
..1000 Pb_00019	07/19/17	Inorganic Ventures, Lot K2-PB03074			(Purchased Reagent)		Lead	1000 mg/L
.10 ppm Sb_00009	07/19/17	12/09/16	5%HNO3/5% HCl, Lot see log book	100 mL	1000 Sb_00015	1 mL	Antimony	10 mg/L
..1000 Sb_00015	07/19/17	Inorganic Ventures, Lot J2-SB03037			(Purchased Reagent)		Antimony	1000 mg/L
.10 ppm Tl_00007	08/17/17	09/06/16	5%HNO3/5% HCl, Lot See Reagent log	100 mL	1000 Tl_00015	1 mL	Thallium	10 ppm
..1000 Tl_00015	08/17/17	Inorganic Ventures, Lot J2-TL02025			(Purchased Reagent)		Thallium	1000 mg/L
Alt Fe Se Tl_00002	06/13/17	06/12/17	5%5%HNO3HCL, Lot See Reagent Log	100 mL	10 ppm Fe_00009	1 mL	Iron	0.1 ppm
					10 ppm Se_00009	0.2 mL	Selenium	0.02 ppm
.10 ppm Fe_00009	02/13/18	04/05/17	5%HNO3/5% HCl, Lot see log book	100 mL	10000 Fe_00018	0.1 mL	Iron	10 mg/L
..10000 Fe_00018	02/13/18	Inorganic Ventures, Lot K2-FE04047			(Purchased Reagent)		Iron	10000 mg/L
.10 ppm Se_00009	08/31/17	09/06/16	2%HNO3/0.5% HCl, Lot see log books	100 mL	1000 Se_00016	1 mL	Selenium	10 mg/L
..1000 Se_00016	08/31/17	Inorganic Ventures, Lot K2-SE02067			(Purchased Reagent)		Selenium	1000 mg/L
AltAgAsFePbTl_00001	06/11/17	06/09/17	5%5%HNO3HCL, Lot See Reagent Log	100 mL	10 ppm As_00013	0.1 mL	Arsenic	0.01 ppm
					10 ppm Fe_00009	1 mL	Iron	0.1 ppm
					10 ppm Pb_00009	0.09 mL	Lead	0.009 ppm
					2.5 ppm Ag_00007	0.4 mL	Silver	0.01 ppm
.10 ppm As_00013	03/21/18	04/27/17	5%HNO3/5% HCl, Lot See logbook	100 mL	1000 As_00017	1 mL	Arsenic	10 mg/L
..1000 As_00017	03/21/18	Inorganic Venture, Lot J2-AS02122			(Purchased Reagent)		Arsenic	1000 mg/L
.10 ppm Fe_00009	02/13/18	04/05/17	5%HNO3/5% HCl, Lot see log book	100 mL	10000 Fe_00018	0.1 mL	Iron	10 mg/L
..10000 Fe_00018	02/13/18	Inorganic Ventures, Lot K2-FE04047			(Purchased Reagent)		Iron	10000 mg/L
.10 ppm Pb_00009	07/19/17	08/15/16	5%HNO3/5% HCl, Lot see log book	100 mL	1000 Pb_00019	1 mL	Lead	10 mg/L
..1000 Pb_00019	07/19/17	Inorganic Ventures, Lot K2-PB03074			(Purchased Reagent)		Lead	1000 mg/L
.2.5 ppm Ag_00007	08/27/17	02/27/17	5%HNO3/5% HCl, Lot see logbook	100 mL	1000 Ag_00010	0.25 mL	Silver	2.5 mg/L
..1000 Ag_00010	01/20/18	Inorganic Ventures, Lot K2-ag03062			(Purchased Reagent)		Silver	1000 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
AR_1248_ICV_00011	11/20/17	05/20/17	Hexane, Lot 135581	100 mL	AR_1248_RESss_00008	25 uL	Arochlor 1248	250 ng/mL
.AR_1248_RESss_00008	05/20/18	RESTEK, Lot A0116431			(Purchased Reagent)		Arochlor 1248	1000 ug/mL
AR_1248_L1_00019	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_1248_L7_00014	0.25 mL	PCB-1248 Peak 1	0.025 ug/mL
							PCB-1248 Peak 2	0.025 ug/mL
							PCB-1248 Peak 3	0.025 ug/mL
							PCB-1248 Peak 4	0.025 ug/mL
							PCB-1248 Peak 5	0.025 ug/mL
.AR_1248_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1248_RES_00009	100 uL	PCB-1248 Peak 1	1 ug/mL
							PCB-1248 Peak 2	1 ug/mL
							PCB-1248 Peak 3	1 ug/mL
							PCB-1248 Peak 4	1 ug/mL
							PCB-1248 Peak 5	1 ug/mL
..AR_1248_RES_00009	04/30/18	RESTEK, Lot A0118166			(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
AR_1248_L2_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_1248_L7_00014	0.5 mL	PCB-1248 Peak 1	0.05 ug/mL
							PCB-1248 Peak 2	0.05 ug/mL
							PCB-1248 Peak 3	0.05 ug/mL
							PCB-1248 Peak 4	0.05 ug/mL
							PCB-1248 Peak 5	0.05 ug/mL
.AR_1248_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1248_RES_00009	100 uL	PCB-1248 Peak 1	1 ug/mL
							PCB-1248 Peak 2	1 ug/mL
							PCB-1248 Peak 3	1 ug/mL
							PCB-1248 Peak 4	1 ug/mL
							PCB-1248 Peak 5	1 ug/mL
..AR_1248_RES_00009	04/30/18	RESTEK, Lot A0118166			(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
AR_1248_L3_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_1248_L7_00014	1 mL	PCB-1248 Peak 1	0.1 ug/mL
							PCB-1248 Peak 2	0.1 ug/mL
							PCB-1248 Peak 3	0.1 ug/mL
							PCB-1248 Peak 4	0.1 ug/mL
							PCB-1248 Peak 5	0.1 ug/mL
.AR_1248_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1248_RES_00009	100 uL	PCB-1248 Peak 1	1 ug/mL
							PCB-1248 Peak 2	1 ug/mL
							PCB-1248 Peak 3	1 ug/mL
							PCB-1248 Peak 4	1 ug/mL
							PCB-1248 Peak 5	1 ug/mL
..AR_1248_RES_00009	04/30/18	RESTEK, Lot A0118166			(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
AR_1248_L4_00019	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_1248_L7_00014	2.5 mL	PCB-1248 Peak 1	0.25 ug/mL
							PCB-1248 Peak 2	0.25 ug/mL
							PCB-1248 Peak 3	0.25 ug/mL
							PCB-1248 Peak 4	0.25 ug/mL
							PCB-1248 Peak 5	0.25 ug/mL
.AR_1248_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1248_RES_00009	100 uL	PCB-1248 Peak 1	1 ug/mL
							PCB-1248 Peak 2	1 ug/mL
							PCB-1248 Peak 3	1 ug/mL
							PCB-1248 Peak 4	1 ug/mL
							PCB-1248 Peak 5	1 ug/mL
..AR_1248_RES_00009	04/30/18		RESTEK, Lot A0118166		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
AR_1248_L5_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_1248_L7_00014	5 mL	PCB-1248 Peak 1	0.5 ug/mL
							PCB-1248 Peak 2	0.5 ug/mL
							PCB-1248 Peak 3	0.5 ug/mL
							PCB-1248 Peak 4	0.5 ug/mL
							PCB-1248 Peak 5	0.5 ug/mL
.AR_1248_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1248_RES_00009	100 uL	PCB-1248 Peak 1	1 ug/mL
							PCB-1248 Peak 2	1 ug/mL
							PCB-1248 Peak 3	1 ug/mL
							PCB-1248 Peak 4	1 ug/mL
							PCB-1248 Peak 5	1 ug/mL
..AR_1248_RES_00009	04/30/18		RESTEK, Lot A0118166		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
AR_1248_L6_00016	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_1248_L7_00014	7.5 mL	PCB-1248 Peak 1	0.75 ug/mL
							PCB-1248 Peak 2	0.75 ug/mL
							PCB-1248 Peak 3	0.75 ug/mL
							PCB-1248 Peak 4	0.75 ug/mL
							PCB-1248 Peak 5	0.75 ug/mL
.AR_1248_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1248_RES_00009	100 uL	PCB-1248 Peak 1	1 ug/mL
							PCB-1248 Peak 2	1 ug/mL
							PCB-1248 Peak 3	1 ug/mL
							PCB-1248 Peak 4	1 ug/mL
							PCB-1248 Peak 5	1 ug/mL
..AR_1248_RES_00009	04/30/18		RESTEK, Lot A0118166		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
AR_1248_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1248_RES_00009	100 uL	PCB-1248 Peak 1	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1248 Peak 2	1 ug/mL
							PCB-1248 Peak 3	1 ug/mL
							PCB-1248 Peak 4	1 ug/mL
							PCB-1248 Peak 5	1 ug/mL
.AR_1248_RES_00009	04/30/18		RESTEK, Lot A0118166		(Purchased Reagent)		PCB-1248 Peak 1	1000 ug/mL
							PCB-1248 Peak 2	1000 ug/mL
							PCB-1248 Peak 3	1000 ug/mL
							PCB-1248 Peak 4	1000 ug/mL
							PCB-1248 Peak 5	1000 ug/mL
AR_1660_ICV_00011	11/20/17	05/20/17	Hexane, Lot 135581	100 mL	AR_1660_RESss_00008	25 uL	Arochlor 1016	250 ng/mL
							Arochlor 1260	250 ng/mL
					AR_SURR_RES_00056	6.25 uL	DCB Decachlorobiphenyl (Surr)	12.5 ng/mL
.AR_1660_RESss_00008	05/20/18		RESTEK, Lot A0114674		(Purchased Reagent)		Arochlor 1016	1000 ug/mL
							Arochlor 1260	1000 ug/mL
.AR_SURR_RES_00056	04/30/18		RESTEK, Lot A0117949		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
AR_1660_L1_00028	11/01/17	05/01/17	hexane, Lot 135581	10 mL	AR_1660_L7_00022	0.25 mL	PCB-1016 Peak 1	0.025 ug/mL
							PCB-1016 Peak 2	0.025 ug/mL
							PCB-1016 Peak 3	0.025 ug/mL
							PCB-1016 Peak 4	0.025 ug/mL
							PCB-1016 Peak 5	0.025 ug/mL
							PCB-1260 Peak 1	0.025 ug/mL
							PCB-1260 Peak 2	0.025 ug/mL
							PCB-1260 Peak 3	0.025 ug/mL
							PCB-1260 Peak 4	0.025 ug/mL
							PCB-1260 Peak 5	0.025 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.00125 ug/mL
							Tetrachloro-m-xylene (Surr)	0.00125 ug/mL
.AR_1660_L7_00022	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1016_RES_00010	100 uL	PCB-1016 Peak 1	1 ug/mL
							PCB-1016 Peak 2	1 ug/mL
							PCB-1016 Peak 3	1 ug/mL
							PCB-1016 Peak 4	1 ug/mL
							PCB-1016 Peak 5	1 ug/mL
					AR_1260_RES_00012	100 uL	PCB-1260 Peak 1	1 ug/mL
							PCB-1260 Peak 2	1 ug/mL
							PCB-1260 Peak 3	1 ug/mL
							PCB-1260 Peak 4	1 ug/mL
							PCB-1260 Peak 5	1 ug/mL
					AR_SURR_RES_00056	25 uL	DCB Decachlorobiphenyl (Surr)	0.05 ug/mL
							Tetrachloro-m-xylene (Surr)	0.05 ug/mL
..AR_1016_RES_00010	04/30/18		RESTEK, Lot A0117379		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
..AR_1260_RES_00012	04/30/18		RESTEK, Lot A0116299		(Purchased Reagent)		PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..AR_SURR_RES_00056	04/30/18		RESTEK, Lot A0117949		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
AR_1660_L2_00027	11/01/17	05/01/17	hexane, Lot 135581	10 mL	AR_1660_L7_00022	0.5 mL	PCB-1016 Peak 1	0.05 ug/mL
							PCB-1016 Peak 2	0.05 ug/mL
							PCB-1016 Peak 3	0.05 ug/mL
							PCB-1016 Peak 4	0.05 ug/mL
							PCB-1016 Peak 5	0.05 ug/mL
							PCB-1260 Peak 1	0.05 ug/mL
							PCB-1260 Peak 2	0.05 ug/mL
							PCB-1260 Peak 3	0.05 ug/mL
							PCB-1260 Peak 4	0.05 ug/mL
							PCB-1260 Peak 5	0.05 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.0025 ug/mL
							Tetrachloro-m-xylene (Surr)	0.0025 ug/mL
.AR_1660_L7_00022	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1016_RES_00010	100 uL	PCB-1016 Peak 1	1 ug/mL
							PCB-1016 Peak 2	1 ug/mL
							PCB-1016 Peak 3	1 ug/mL
							PCB-1016 Peak 4	1 ug/mL
							PCB-1016 Peak 5	1 ug/mL
					AR_1260_RES_00012	100 uL	PCB-1260 Peak 1	1 ug/mL
							PCB-1260 Peak 2	1 ug/mL
							PCB-1260 Peak 3	1 ug/mL
							PCB-1260 Peak 4	1 ug/mL
							PCB-1260 Peak 5	1 ug/mL
					AR_SURR_RES_00056	25 uL	DCB Decachlorobiphenyl (Surr)	0.05 ug/mL
							Tetrachloro-m-xylene (Surr)	0.05 ug/mL
..AR_1016_RES_00010	04/30/18		RESTEK, Lot A0117379		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
..AR_1260_RES_00012	04/30/18		RESTEK, Lot A0116299		(Purchased Reagent)		PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..AR_SURR_RES_00056	04/30/18		RESTEK, Lot A0117949		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
AR_1660_L3_00028	11/01/17	05/01/17	hexane, Lot 135581	10 mL	AR_1660_L7_00022	1 mL	PCB-1016 Peak 1	0.1 ug/mL
							PCB-1016 Peak 2	0.1 ug/mL
							PCB-1016 Peak 3	0.1 ug/mL
							PCB-1016 Peak 4	0.1 ug/mL
							PCB-1016 Peak 5	0.1 ug/mL
							PCB-1260 Peak 1	0.1 ug/mL
							PCB-1260 Peak 2	0.1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1260 Peak 3	0.1 ug/mL
							PCB-1260 Peak 4	0.1 ug/mL
							PCB-1260 Peak 5	0.1 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.005 ug/mL
							Tetrachloro-m-xylene (Surr)	0.005 ug/mL
.AR_1660_L7_00022	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1016_RES_00010	100 uL	PCB-1016 Peak 1	1 ug/mL
							PCB-1016 Peak 2	1 ug/mL
							PCB-1016 Peak 3	1 ug/mL
							PCB-1016 Peak 4	1 ug/mL
							PCB-1016 Peak 5	1 ug/mL
					AR_1260_RES_00012	100 uL	PCB-1260 Peak 1	1 ug/mL
							PCB-1260 Peak 2	1 ug/mL
							PCB-1260 Peak 3	1 ug/mL
							PCB-1260 Peak 4	1 ug/mL
							PCB-1260 Peak 5	1 ug/mL
					AR_SURR_RES_00056	25 uL	DCB Decachlorobiphenyl (Surr)	0.05 ug/mL
							Tetrachloro-m-xylene (Surr)	0.05 ug/mL
..AR_1016_RES_00010	04/30/18		RESTEK, Lot A0117379		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
..AR_1260_RES_00012	04/30/18		RESTEK, Lot A0116299		(Purchased Reagent)		PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..AR_SURR_RES_00056	04/30/18		RESTEK, Lot A0117949		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
AR_1660_L4_00065	11/01/17	05/01/17	hexane, Lot 135581	10 mL	AR_1660_L7_00022	2.5 mL	PCB-1016 Peak 1	0.25 ug/mL
							PCB-1016 Peak 2	0.25 ug/mL
							PCB-1016 Peak 3	0.25 ug/mL
							PCB-1016 Peak 4	0.25 ug/mL
							PCB-1016 Peak 5	0.25 ug/mL
							PCB-1260 Peak 1	0.25 ug/mL
							PCB-1260 Peak 2	0.25 ug/mL
							PCB-1260 Peak 3	0.25 ug/mL
							PCB-1260 Peak 4	0.25 ug/mL
							PCB-1260 Peak 5	0.25 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.0125 ug/mL
							Tetrachloro-m-xylene (Surr)	0.0125 ug/mL
.AR_1660_L7_00022	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1016_RES_00010	100 uL	PCB-1016 Peak 1	1 ug/mL
							PCB-1016 Peak 2	1 ug/mL
							PCB-1016 Peak 3	1 ug/mL
							PCB-1016 Peak 4	1 ug/mL
							PCB-1016 Peak 5	1 ug/mL
					AR_1260_RES_00012	100 uL	PCB-1260 Peak 1	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1260 Peak 2	1 ug/mL
							PCB-1260 Peak 3	1 ug/mL
							PCB-1260 Peak 4	1 ug/mL
							PCB-1260 Peak 5	1 ug/mL
					AR_SURR_RES_00056	25 uL	DCB Decachlorobiphenyl (Surr)	0.05 ug/mL
							Tetrachloro-m-xylene (Surr)	0.05 ug/mL
..AR_1016_RES_00010	04/30/18		RESTEK, Lot A0117379		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
..AR_1260_RES_00012	04/30/18		RESTEK, Lot A0116299		(Purchased Reagent)		PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..AR_SURR_RES_00056	04/30/18		RESTEK, Lot A0117949		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
AR_1660_L5_00062	11/01/17	05/01/17	hexane, Lot 135581	25 mL	AR_1660_L7_00022	12.5 mL	PCB-1016 Peak 1	0.5 ug/mL
							PCB-1016 Peak 2	0.5 ug/mL
							PCB-1016 Peak 3	0.5 ug/mL
							PCB-1016 Peak 4	0.5 ug/mL
							PCB-1016 Peak 5	0.5 ug/mL
							PCB-1260 Peak 1	0.5 ug/mL
							PCB-1260 Peak 2	0.5 ug/mL
							PCB-1260 Peak 3	0.5 ug/mL
							PCB-1260 Peak 4	0.5 ug/mL
							PCB-1260 Peak 5	0.5 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.025 ug/mL
							Tetrachloro-m-xylene (Surr)	0.025 ug/mL
.AR_1660_L7_00022	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1016_RES_00010	100 uL	PCB-1016 Peak 1	1 ug/mL
							PCB-1016 Peak 2	1 ug/mL
							PCB-1016 Peak 3	1 ug/mL
							PCB-1016 Peak 4	1 ug/mL
							PCB-1016 Peak 5	1 ug/mL
					AR_1260_RES_00012	100 uL	PCB-1260 Peak 1	1 ug/mL
							PCB-1260 Peak 2	1 ug/mL
							PCB-1260 Peak 3	1 ug/mL
							PCB-1260 Peak 4	1 ug/mL
							PCB-1260 Peak 5	1 ug/mL
					AR_SURR_RES_00056	25 uL	DCB Decachlorobiphenyl (Surr)	0.05 ug/mL
							Tetrachloro-m-xylene (Surr)	0.05 ug/mL
..AR_1016_RES_00010	04/30/18		RESTEK, Lot A0117379		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..AR_1260_RES_00012	04/30/18		RESTEK, Lot A0116299		(Purchased Reagent)		PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
..AR_SURR_RES_00056	04/30/18		RESTEK, Lot A0117949		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
AR_1660_L5_00062	11/01/17	05/01/17	hexane, Lot 135581	25 mL	AR_1660_L7_00022	12.5 mL	Arochlor 1016	0.5 ug/mL
							Arochlor 1260	0.5 ug/mL
.AR_1660_L7_00022	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1016_RES_00010	100 uL	Arochlor 1016	1 ug/mL
					AR_1260_RES_00012	100 uL	Arochlor 1260	1 ug/mL
..AR_1016_RES_00010	04/30/18		RESTEK, Lot A0117379		(Purchased Reagent)		Arochlor 1016	1000 ug/mL
..AR_1260_RES_00012	04/30/18		RESTEK, Lot A0116299		(Purchased Reagent)		Arochlor 1260	1000 ug/mL
AR_1660_L6_00029	11/01/17	05/01/17	hexane, Lot 135581	10 mL	AR_1660_L7_00022	7.5 mL	PCB-1016 Peak 1	0.75 ug/mL
							PCB-1016 Peak 2	0.75 ug/mL
							PCB-1016 Peak 3	0.75 ug/mL
							PCB-1016 Peak 4	0.75 ug/mL
							PCB-1016 Peak 5	0.75 ug/mL
							PCB-1260 Peak 1	0.75 ug/mL
							PCB-1260 Peak 2	0.75 ug/mL
							PCB-1260 Peak 3	0.75 ug/mL
							PCB-1260 Peak 4	0.75 ug/mL
							PCB-1260 Peak 5	0.75 ug/mL
							DCB Decachlorobiphenyl (Surr)	0.0375 ug/mL
							Tetrachloro-m-xylene (Surr)	0.0375 ug/mL
.AR_1660_L7_00022	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1016_RES_00010	100 uL	PCB-1016 Peak 1	1 ug/mL
							PCB-1016 Peak 2	1 ug/mL
							PCB-1016 Peak 3	1 ug/mL
							PCB-1016 Peak 4	1 ug/mL
							PCB-1016 Peak 5	1 ug/mL
					AR_1260_RES_00012	100 uL	PCB-1260 Peak 1	1 ug/mL
							PCB-1260 Peak 2	1 ug/mL
							PCB-1260 Peak 3	1 ug/mL
							PCB-1260 Peak 4	1 ug/mL
							PCB-1260 Peak 5	1 ug/mL
					AR_SURR_RES_00056	25 uL	DCB Decachlorobiphenyl (Surr)	0.05 ug/mL
							Tetrachloro-m-xylene (Surr)	0.05 ug/mL
..AR_1016_RES_00010	04/30/18		RESTEK, Lot A0117379		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
..AR_1260_RES_00012	04/30/18		RESTEK, Lot A0116299		(Purchased Reagent)		PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..AR_SURR_RES_00056	04/30/18		RESTEK, Lot A0117949		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
AR_1660_L7_00022	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1016_RES_00010	100 uL	PCB-1016 Peak 1	1 ug/mL
							PCB-1016 Peak 2	1 ug/mL
							PCB-1016 Peak 3	1 ug/mL
							PCB-1016 Peak 4	1 ug/mL
							PCB-1016 Peak 5	1 ug/mL
					AR_1260_RES_00012	100 uL	PCB-1260 Peak 1	1 ug/mL
							PCB-1260 Peak 2	1 ug/mL
							PCB-1260 Peak 3	1 ug/mL
							PCB-1260 Peak 4	1 ug/mL
							PCB-1260 Peak 5	1 ug/mL
					AR_SURR_RES_00056	25 uL	DCB Decachlorobiphenyl (Surr)	0.05 ug/mL
							Tetrachloro-m-xylene (Surr)	0.05 ug/mL
.AR_1016_RES_00010	04/30/18		RESTEK, Lot A0117379		(Purchased Reagent)		PCB-1016 Peak 1	1000 ug/mL
							PCB-1016 Peak 2	1000 ug/mL
							PCB-1016 Peak 3	1000 ug/mL
							PCB-1016 Peak 4	1000 ug/mL
							PCB-1016 Peak 5	1000 ug/mL
.AR_1260_RES_00012	04/30/18		RESTEK, Lot A0116299		(Purchased Reagent)		PCB-1260 Peak 1	1000 ug/mL
							PCB-1260 Peak 2	1000 ug/mL
							PCB-1260 Peak 3	1000 ug/mL
							PCB-1260 Peak 4	1000 ug/mL
							PCB-1260 Peak 5	1000 ug/mL
.AR_SURR_RES_00056	04/30/18		RESTEK, Lot A0117949		(Purchased Reagent)		DCB Decachlorobiphenyl (Surr)	200 ug/mL
							Tetrachloro-m-xylene (Surr)	200 ug/mL
AR_2154_ICV_00011	11/20/17	05/20/17	Hexane, Lot 135581	100 mL	AR_1221_RESss_00008	25 uL	Arochlor 1221	250 ng/mL
					AR_1254_RESss_00008	25 uL	Arochlor 1254	250 ng/mL
.AR_1221_RESss_00008	05/20/18		RESTEK, Lot A0117382		(Purchased Reagent)		Arochlor 1221	1000 ug/mL
.AR_1254_RESss_00008	05/20/18		RESTEK, Lot A0105373		(Purchased Reagent)		Arochlor 1254	1000 ug/mL
AR_2154_L1_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_2154_L7_00014	0.25 mL	PCB-1221 Peak 1	0.025 ug/mL
							PCB-1221 Peak 2	0.025 ug/mL
							PCB-1221 Peak 3	0.025 ug/mL
							PCB-1254 Peak 1	0.025 ug/mL
							PCB-1254 Peak 2	0.025 ug/mL
							PCB-1254 Peak 3	0.025 ug/mL
							PCB-1254 Peak 4	0.025 ug/mL
							PCB-1254 Peak 5	0.025 ug/mL
.AR_2154_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1221_RES_00009	100 uL	PCB-1221 Peak 1	1 ug/mL
							PCB-1221 Peak 2	1 ug/mL
							PCB-1221 Peak 3	1 ug/mL
					AR_1254_RES_00009	100 uL	PCB-1254 Peak 1	1 ug/mL
							PCB-1254 Peak 2	1 ug/mL
							PCB-1254 Peak 3	1 ug/mL
							PCB-1254 Peak 4	1 ug/mL
							PCB-1254 Peak 5	1 ug/mL
..AR_1221_RES_00009	04/30/18		RESTEK, Lot A0118480		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
..AR_1254_RES_00009	04/30/18		RESTEK, Lot A0118645		(Purchased Reagent)		PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
AR_2154_L2_00019	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_2154_L7_00014	0.5 mL	PCB-1221 Peak 1	0.05 ug/mL
							PCB-1221 Peak 2	0.05 ug/mL
							PCB-1221 Peak 3	0.05 ug/mL
							PCB-1254 Peak 1	0.05 ug/mL
							PCB-1254 Peak 2	0.05 ug/mL
							PCB-1254 Peak 3	0.05 ug/mL
							PCB-1254 Peak 4	0.05 ug/mL
							PCB-1254 Peak 5	0.05 ug/mL
.AR_2154_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1221_RES_00009	100 uL	PCB-1221 Peak 1	1 ug/mL
							PCB-1221 Peak 2	1 ug/mL
							PCB-1221 Peak 3	1 ug/mL
					AR_1254_RES_00009	100 uL	PCB-1254 Peak 1	1 ug/mL
							PCB-1254 Peak 2	1 ug/mL
							PCB-1254 Peak 3	1 ug/mL
							PCB-1254 Peak 4	1 ug/mL
							PCB-1254 Peak 5	1 ug/mL
..AR_1221_RES_00009	04/30/18		RESTEK, Lot A0118480		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
..AR_1254_RES_00009	04/30/18		RESTEK, Lot A0118645		(Purchased Reagent)		PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
AR_2154_L3_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_2154_L7_00014	1 mL	PCB-1221 Peak 1	0.1 ug/mL
							PCB-1221 Peak 2	0.1 ug/mL
							PCB-1221 Peak 3	0.1 ug/mL
							PCB-1254 Peak 1	0.1 ug/mL
							PCB-1254 Peak 2	0.1 ug/mL
							PCB-1254 Peak 3	0.1 ug/mL
							PCB-1254 Peak 4	0.1 ug/mL
							PCB-1254 Peak 5	0.1 ug/mL
.AR_2154_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1221_RES_00009	100 uL	PCB-1221 Peak 1	1 ug/mL
							PCB-1221 Peak 2	1 ug/mL
							PCB-1221 Peak 3	1 ug/mL
					AR_1254_RES_00009	100 uL	PCB-1254 Peak 1	1 ug/mL
							PCB-1254 Peak 2	1 ug/mL
							PCB-1254 Peak 3	1 ug/mL
							PCB-1254 Peak 4	1 ug/mL
							PCB-1254 Peak 5	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..AR_1221_RES_00009	04/30/18		RESTEK, Lot A0118480		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
..AR_1254_RES_00009	04/30/18		RESTEK, Lot A0118645		(Purchased Reagent)		PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
AR_2154_L4_00019	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_2154_L7_00014	2.5 mL	PCB-1221 Peak 1	0.25 ug/mL
							PCB-1221 Peak 2	0.25 ug/mL
							PCB-1221 Peak 3	0.25 ug/mL
							PCB-1254 Peak 1	0.25 ug/mL
							PCB-1254 Peak 2	0.25 ug/mL
							PCB-1254 Peak 3	0.25 ug/mL
							PCB-1254 Peak 4	0.25 ug/mL
							PCB-1254 Peak 5	0.25 ug/mL
.AR_2154_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1221_RES_00009	100 uL	PCB-1221 Peak 1	1 ug/mL
							PCB-1221 Peak 2	1 ug/mL
							PCB-1221 Peak 3	1 ug/mL
					AR_1254_RES_00009	100 uL	PCB-1254 Peak 1	1 ug/mL
							PCB-1254 Peak 2	1 ug/mL
							PCB-1254 Peak 3	1 ug/mL
							PCB-1254 Peak 4	1 ug/mL
							PCB-1254 Peak 5	1 ug/mL
..AR_1221_RES_00009	04/30/18		RESTEK, Lot A0118480		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
..AR_1254_RES_00009	04/30/18		RESTEK, Lot A0118645		(Purchased Reagent)		PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
AR_2154_L5_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_2154_L7_00014	5 mL	PCB-1221 Peak 1	0.5 ug/mL
							PCB-1221 Peak 2	0.5 ug/mL
							PCB-1221 Peak 3	0.5 ug/mL
							PCB-1254 Peak 1	0.5 ug/mL
							PCB-1254 Peak 2	0.5 ug/mL
							PCB-1254 Peak 3	0.5 ug/mL
							PCB-1254 Peak 4	0.5 ug/mL
							PCB-1254 Peak 5	0.5 ug/mL
.AR_2154_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1221_RES_00009	100 uL	PCB-1221 Peak 1	1 ug/mL
							PCB-1221 Peak 2	1 ug/mL
							PCB-1221 Peak 3	1 ug/mL
					AR_1254_RES_00009	100 uL	PCB-1254 Peak 1	1 ug/mL
							PCB-1254 Peak 2	1 ug/mL
							PCB-1254 Peak 3	1 ug/mL
							PCB-1254 Peak 4	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1254 Peak 5	1 ug/mL
..AR_1221_RES_00009	04/30/18		RESTEK, Lot A0118480		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
..AR_1254_RES_00009	04/30/18		RESTEK, Lot A0118645		(Purchased Reagent)		PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
AR_2154_L6_00016	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_2154_L7_00014	7.5 mL	PCB-1221 Peak 1	0.75 ug/mL
							PCB-1221 Peak 2	0.75 ug/mL
							PCB-1221 Peak 3	0.75 ug/mL
							PCB-1254 Peak 1	0.75 ug/mL
							PCB-1254 Peak 2	0.75 ug/mL
							PCB-1254 Peak 3	0.75 ug/mL
							PCB-1254 Peak 4	0.75 ug/mL
							PCB-1254 Peak 5	0.75 ug/mL
.AR_2154_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1221_RES_00009	100 uL	PCB-1221 Peak 1	1 ug/mL
							PCB-1221 Peak 2	1 ug/mL
							PCB-1221 Peak 3	1 ug/mL
					AR_1254_RES_00009	100 uL	PCB-1254 Peak 1	1 ug/mL
							PCB-1254 Peak 2	1 ug/mL
							PCB-1254 Peak 3	1 ug/mL
							PCB-1254 Peak 4	1 ug/mL
							PCB-1254 Peak 5	1 ug/mL
..AR_1221_RES_00009	04/30/18		RESTEK, Lot A0118480		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
..AR_1254_RES_00009	04/30/18		RESTEK, Lot A0118645		(Purchased Reagent)		PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
AR_2154_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1221_RES_00009	100 uL	PCB-1221 Peak 1	1 ug/mL
							PCB-1221 Peak 2	1 ug/mL
							PCB-1221 Peak 3	1 ug/mL
					AR_1254_RES_00009	100 uL	PCB-1254 Peak 1	1 ug/mL
							PCB-1254 Peak 2	1 ug/mL
							PCB-1254 Peak 3	1 ug/mL
							PCB-1254 Peak 4	1 ug/mL
							PCB-1254 Peak 5	1 ug/mL
.AR_1221_RES_00009	04/30/18		RESTEK, Lot A0118480		(Purchased Reagent)		PCB-1221 Peak 1	1000 ug/mL
							PCB-1221 Peak 2	1000 ug/mL
							PCB-1221 Peak 3	1000 ug/mL
.AR_1254_RES_00009	04/30/18		RESTEK, Lot A0118645		(Purchased Reagent)		PCB-1254 Peak 1	1000 ug/mL
							PCB-1254 Peak 2	1000 ug/mL
							PCB-1254 Peak 3	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1254 Peak 4	1000 ug/mL
							PCB-1254 Peak 5	1000 ug/mL
AR_3262_ICV_00011	11/20/17	05/20/17	Hexane, Lot 135581	100 mL	AR_1232_RESss_00008	25 uL	Arochlor 1232	250 ng/mL
.AR_1232_RESss_00008	05/20/18		RESTEK, Lot A095877		(Purchased Reagent)		Arochlor 1232	1000 ug/mL
AR_3262_L1_00019	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_3262_L7_00014	0.25 mL	PCB-1232 Peak 1	0.025 ug/mL
							PCB-1232 Peak 2	0.025 ug/mL
							PCB-1232 Peak 3	0.025 ug/mL
							PCB-1232 Peak 4	0.025 ug/mL
							PCB-1232 Peak 5	0.025 ug/mL
							PCB-1262 Peak 1	0.025 ug/mL
							PCB-1262 Peak 2	0.025 ug/mL
							PCB-1262 Peak 3	0.025 ug/mL
							PCB-1262 Peak 4	0.025 ug/mL
							PCB-1262 Peak 5	0.025 ug/mL
.AR_3262_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1232_RES_00010	100 uL	PCB-1232 Peak 1	1 ug/mL
							PCB-1232 Peak 2	1 ug/mL
							PCB-1232 Peak 3	1 ug/mL
							PCB-1232 Peak 4	1 ug/mL
							PCB-1232 Peak 5	1 ug/mL
					AR_1262_RES_00010	100 uL	PCB-1262 Peak 1	1 ug/mL
							PCB-1262 Peak 2	1 ug/mL
							PCB-1262 Peak 3	1 ug/mL
							PCB-1262 Peak 4	1 ug/mL
							PCB-1262 Peak 5	1 ug/mL
..AR_1232_RES_00010	04/30/18		RESTEK, Lot A0117033		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
..AR_1262_RES_00010	04/30/18		RESTEK, Lot A0117769		(Purchased Reagent)		PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
AR_3262_L2_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_3262_L7_00014	0.5 mL	PCB-1232 Peak 1	0.05 ug/mL
							PCB-1232 Peak 2	0.05 ug/mL
							PCB-1232 Peak 3	0.05 ug/mL
							PCB-1232 Peak 4	0.05 ug/mL
							PCB-1232 Peak 5	0.05 ug/mL
							PCB-1262 Peak 1	0.05 ug/mL
							PCB-1262 Peak 2	0.05 ug/mL
							PCB-1262 Peak 3	0.05 ug/mL
							PCB-1262 Peak 4	0.05 ug/mL
							PCB-1262 Peak 5	0.05 ug/mL
.AR_3262_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1232_RES_00010	100 uL	PCB-1232 Peak 1	1 ug/mL
							PCB-1232 Peak 2	1 ug/mL
							PCB-1232 Peak 3	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1232 Peak 4	1 ug/mL
							PCB-1232 Peak 5	1 ug/mL
					AR_1262_RES_00010	100 uL	PCB-1262 Peak 1	1 ug/mL
							PCB-1262 Peak 2	1 ug/mL
							PCB-1262 Peak 3	1 ug/mL
							PCB-1262 Peak 4	1 ug/mL
							PCB-1262 Peak 5	1 ug/mL
..AR_1232_RES_00010	04/30/18		RESTEK, Lot A0117033		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
..AR_1262_RES_00010	04/30/18		RESTEK, Lot A0117769		(Purchased Reagent)		PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
AR_3262_L3_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_3262_L7_00014	1 mL	PCB-1232 Peak 1	0.1 ug/mL
							PCB-1232 Peak 2	0.1 ug/mL
							PCB-1232 Peak 3	0.1 ug/mL
							PCB-1232 Peak 4	0.1 ug/mL
							PCB-1232 Peak 5	0.1 ug/mL
							PCB-1262 Peak 1	0.1 ug/mL
							PCB-1262 Peak 2	0.1 ug/mL
							PCB-1262 Peak 3	0.1 ug/mL
							PCB-1262 Peak 4	0.1 ug/mL
							PCB-1262 Peak 5	0.1 ug/mL
.AR_3262_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1232_RES_00010	100 uL	PCB-1232 Peak 1	1 ug/mL
							PCB-1232 Peak 2	1 ug/mL
							PCB-1232 Peak 3	1 ug/mL
							PCB-1232 Peak 4	1 ug/mL
							PCB-1232 Peak 5	1 ug/mL
					AR_1262_RES_00010	100 uL	PCB-1262 Peak 1	1 ug/mL
							PCB-1262 Peak 2	1 ug/mL
							PCB-1262 Peak 3	1 ug/mL
							PCB-1262 Peak 4	1 ug/mL
							PCB-1262 Peak 5	1 ug/mL
..AR_1232_RES_00010	04/30/18		RESTEK, Lot A0117033		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
..AR_1262_RES_00010	04/30/18		RESTEK, Lot A0117769		(Purchased Reagent)		PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
AR_3262_L4_00019	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_3262_L7_00014	2.5 mL	PCB-1232 Peak 1	0.25 ug/mL
							PCB-1232 Peak 2	0.25 ug/mL
							PCB-1232 Peak 3	0.25 ug/mL
							PCB-1232 Peak 4	0.25 ug/mL
							PCB-1232 Peak 5	0.25 ug/mL
							PCB-1262 Peak 1	0.25 ug/mL
							PCB-1262 Peak 2	0.25 ug/mL
							PCB-1262 Peak 3	0.25 ug/mL
							PCB-1262 Peak 4	0.25 ug/mL
							PCB-1262 Peak 5	0.25 ug/mL
.AR_3262_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1232_RES_00010	100 uL	PCB-1232 Peak 1	1 ug/mL
							PCB-1232 Peak 2	1 ug/mL
							PCB-1232 Peak 3	1 ug/mL
							PCB-1232 Peak 4	1 ug/mL
							PCB-1232 Peak 5	1 ug/mL
					AR_1262_RES_00010	100 uL	PCB-1262 Peak 1	1 ug/mL
							PCB-1262 Peak 2	1 ug/mL
							PCB-1262 Peak 3	1 ug/mL
							PCB-1262 Peak 4	1 ug/mL
							PCB-1262 Peak 5	1 ug/mL
..AR_1232_RES_00010	04/30/18		RESTEK, Lot A0117033		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
..AR_1262_RES_00010	04/30/18		RESTEK, Lot A0117769		(Purchased Reagent)		PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
AR_3262_L5_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_3262_L7_00014	5 mL	PCB-1232 Peak 1	0.5 ug/mL
							PCB-1232 Peak 2	0.5 ug/mL
							PCB-1232 Peak 3	0.5 ug/mL
							PCB-1232 Peak 4	0.5 ug/mL
							PCB-1232 Peak 5	0.5 ug/mL
							PCB-1262 Peak 1	0.5 ug/mL
							PCB-1262 Peak 2	0.5 ug/mL
							PCB-1262 Peak 3	0.5 ug/mL
							PCB-1262 Peak 4	0.5 ug/mL
							PCB-1262 Peak 5	0.5 ug/mL
.AR_3262_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1232_RES_00010	100 uL	PCB-1232 Peak 1	1 ug/mL
							PCB-1232 Peak 2	1 ug/mL
							PCB-1232 Peak 3	1 ug/mL
							PCB-1232 Peak 4	1 ug/mL
							PCB-1232 Peak 5	1 ug/mL
					AR_1262_RES_00010	100 uL	PCB-1262 Peak 1	1 ug/mL
							PCB-1262 Peak 2	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1262 Peak 3	1 ug/mL
							PCB-1262 Peak 4	1 ug/mL
							PCB-1262 Peak 5	1 ug/mL
..AR_1232_RES_00010	04/30/18		RESTEK, Lot A0117033		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
..AR_1262_RES_00010	04/30/18		RESTEK, Lot A0117769		(Purchased Reagent)		PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
AR_3262_L6_00016	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_3262_L7_00014	7.5 mL	PCB-1232 Peak 1	0.75 ug/mL
							PCB-1232 Peak 2	0.75 ug/mL
							PCB-1232 Peak 3	0.75 ug/mL
							PCB-1232 Peak 4	0.75 ug/mL
							PCB-1232 Peak 5	0.75 ug/mL
							PCB-1262 Peak 1	0.75 ug/mL
							PCB-1262 Peak 2	0.75 ug/mL
							PCB-1262 Peak 3	0.75 ug/mL
							PCB-1262 Peak 4	0.75 ug/mL
							PCB-1262 Peak 5	0.75 ug/mL
.AR_3262_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1232_RES_00010	100 uL	PCB-1232 Peak 1	1 ug/mL
							PCB-1232 Peak 2	1 ug/mL
							PCB-1232 Peak 3	1 ug/mL
							PCB-1232 Peak 4	1 ug/mL
							PCB-1232 Peak 5	1 ug/mL
					AR_1262_RES_00010	100 uL	PCB-1262 Peak 1	1 ug/mL
							PCB-1262 Peak 2	1 ug/mL
							PCB-1262 Peak 3	1 ug/mL
							PCB-1262 Peak 4	1 ug/mL
							PCB-1262 Peak 5	1 ug/mL
..AR_1232_RES_00010	04/30/18		RESTEK, Lot A0117033		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
..AR_1262_RES_00010	04/30/18		RESTEK, Lot A0117769		(Purchased Reagent)		PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
AR_3262_L7_00014	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1232_RES_00010	100 uL	PCB-1232 Peak 1	1 ug/mL
							PCB-1232 Peak 2	1 ug/mL
							PCB-1232 Peak 3	1 ug/mL
							PCB-1232 Peak 4	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1232 Peak 5	1 ug/mL
					AR_1262_RES_00010	100 uL	PCB-1262 Peak 1	1 ug/mL
							PCB-1262 Peak 2	1 ug/mL
							PCB-1262 Peak 3	1 ug/mL
							PCB-1262 Peak 4	1 ug/mL
							PCB-1262 Peak 5	1 ug/mL
.AR_1232_RES_00010	04/30/18		RESTEK, Lot A0117033		(Purchased Reagent)		PCB-1232 Peak 1	1000 ug/mL
							PCB-1232 Peak 2	1000 ug/mL
							PCB-1232 Peak 3	1000 ug/mL
							PCB-1232 Peak 4	1000 ug/mL
							PCB-1232 Peak 5	1000 ug/mL
.AR_1262_RES_00010	04/30/18		RESTEK, Lot A0117769		(Purchased Reagent)		PCB-1262 Peak 1	1000 ug/mL
							PCB-1262 Peak 2	1000 ug/mL
							PCB-1262 Peak 3	1000 ug/mL
							PCB-1262 Peak 4	1000 ug/mL
							PCB-1262 Peak 5	1000 ug/mL
AR_4268_ICV_00011	11/20/17	05/20/17	Hexane, Lot 135581	100 mL	AR_1242_RESss_00008	25 uL	Arochlor 1242	250 ng/mL
.AR_1242_RESss_00008	05/20/18		RESTEK, Lot A0105175		(Purchased Reagent)		Arochlor 1242	1000 ug/mL
AR_4268_L1_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_4268_L7_00013	0.25 mL	PCB-1242 Peak 1	0.025 ug/mL
							PCB-1242 Peak 2	0.025 ug/mL
							PCB-1242 Peak 3	0.025 ug/mL
							PCB-1242 Peak 4	0.025 ug/mL
							PCB-1242 Peak 5	0.025 ug/mL
							PCB-1268 Peak 1	0.025 ug/mL
							PCB-1268 Peak 2	0.025 ug/mL
							PCB-1268 Peak 3	0.025 ug/mL
							PCB-1268 Peak 4	0.025 ug/mL
							PCB-1268 Peak 5	0.025 ug/mL
.AR_4268_L7_00013	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1242_RES_00009	100 uL	PCB-1242 Peak 1	1 ug/mL
							PCB-1242 Peak 2	1 ug/mL
							PCB-1242 Peak 3	1 ug/mL
							PCB-1242 Peak 4	1 ug/mL
							PCB-1242 Peak 5	1 ug/mL
					AR_1268_RES_00009	100 uL	PCB-1268 Peak 1	1 ug/mL
							PCB-1268 Peak 2	1 ug/mL
							PCB-1268 Peak 3	1 ug/mL
							PCB-1268 Peak 4	1 ug/mL
							PCB-1268 Peak 5	1 ug/mL
..AR_1242_RES_00009	04/30/18		RESTEK, Lot A0117779		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
..AR_1268_RES_00009	04/30/18		RESTEK, Lot A0114508		(Purchased Reagent)		PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1268 Peak 5	1000 ug/mL
AR_4268_L2_00017	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_4268_L7_00013	0.5 mL	PCB-1242 Peak 1	0.05 ug/mL
							PCB-1242 Peak 2	0.05 ug/mL
							PCB-1242 Peak 3	0.05 ug/mL
							PCB-1242 Peak 4	0.05 ug/mL
							PCB-1242 Peak 5	0.05 ug/mL
							PCB-1268 Peak 1	0.05 ug/mL
							PCB-1268 Peak 2	0.05 ug/mL
							PCB-1268 Peak 3	0.05 ug/mL
							PCB-1268 Peak 4	0.05 ug/mL
							PCB-1268 Peak 5	0.05 ug/mL
.AR_4268_L7_00013	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1242_RES_00009	100 uL	PCB-1242 Peak 1	1 ug/mL
							PCB-1242 Peak 2	1 ug/mL
							PCB-1242 Peak 3	1 ug/mL
							PCB-1242 Peak 4	1 ug/mL
							PCB-1242 Peak 5	1 ug/mL
					AR_1268_RES_00009	100 uL	PCB-1268 Peak 1	1 ug/mL
							PCB-1268 Peak 2	1 ug/mL
							PCB-1268 Peak 3	1 ug/mL
							PCB-1268 Peak 4	1 ug/mL
							PCB-1268 Peak 5	1 ug/mL
..AR_1242_RES_00009	04/30/18		RESTEK, Lot A0117779		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
..AR_1268_RES_00009	04/30/18		RESTEK, Lot A0114508		(Purchased Reagent)		PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
AR_4268_L3_00017	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_4268_L7_00013	1 mL	PCB-1242 Peak 1	0.1 ug/mL
							PCB-1242 Peak 2	0.1 ug/mL
							PCB-1242 Peak 3	0.1 ug/mL
							PCB-1242 Peak 4	0.1 ug/mL
							PCB-1242 Peak 5	0.1 ug/mL
							PCB-1268 Peak 1	0.1 ug/mL
							PCB-1268 Peak 2	0.1 ug/mL
							PCB-1268 Peak 3	0.1 ug/mL
							PCB-1268 Peak 4	0.1 ug/mL
							PCB-1268 Peak 5	0.1 ug/mL
.AR_4268_L7_00013	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1242_RES_00009	100 uL	PCB-1242 Peak 1	1 ug/mL
							PCB-1242 Peak 2	1 ug/mL
							PCB-1242 Peak 3	1 ug/mL
							PCB-1242 Peak 4	1 ug/mL
							PCB-1242 Peak 5	1 ug/mL
					AR_1268_RES_00009	100 uL	PCB-1268 Peak 1	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1268 Peak 2	1 ug/mL
							PCB-1268 Peak 3	1 ug/mL
							PCB-1268 Peak 4	1 ug/mL
							PCB-1268 Peak 5	1 ug/mL
..AR_1242_RES_00009	04/30/18		RESTEK, Lot A0117779		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
..AR_1268_RES_00009	04/30/18		RESTEK, Lot A0114508		(Purchased Reagent)		PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
AR_4268_L4_00020	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_4268_L7_00013	2.5 mL	PCB-1242 Peak 1	0.25 ug/mL
							PCB-1242 Peak 2	0.25 ug/mL
							PCB-1242 Peak 3	0.25 ug/mL
							PCB-1242 Peak 4	0.25 ug/mL
							PCB-1242 Peak 5	0.25 ug/mL
							PCB-1268 Peak 1	0.25 ug/mL
							PCB-1268 Peak 2	0.25 ug/mL
							PCB-1268 Peak 3	0.25 ug/mL
							PCB-1268 Peak 4	0.25 ug/mL
							PCB-1268 Peak 5	0.25 ug/mL
.AR_4268_L7_00013	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1242_RES_00009	100 uL	PCB-1242 Peak 1	1 ug/mL
							PCB-1242 Peak 2	1 ug/mL
							PCB-1242 Peak 3	1 ug/mL
							PCB-1242 Peak 4	1 ug/mL
							PCB-1242 Peak 5	1 ug/mL
					AR_1268_RES_00009	100 uL	PCB-1268 Peak 1	1 ug/mL
							PCB-1268 Peak 2	1 ug/mL
							PCB-1268 Peak 3	1 ug/mL
							PCB-1268 Peak 4	1 ug/mL
							PCB-1268 Peak 5	1 ug/mL
..AR_1242_RES_00009	04/30/18		RESTEK, Lot A0117779		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
..AR_1268_RES_00009	04/30/18		RESTEK, Lot A0114508		(Purchased Reagent)		PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
AR_4268_L5_00018	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_4268_L7_00013	5 mL	PCB-1242 Peak 1	0.5 ug/mL
							PCB-1242 Peak 2	0.5 ug/mL
							PCB-1242 Peak 3	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							PCB-1242 Peak 4	0.5 ug/mL
							PCB-1242 Peak 5	0.5 ug/mL
							PCB-1268 Peak 1	0.5 ug/mL
							PCB-1268 Peak 2	0.5 ug/mL
							PCB-1268 Peak 3	0.5 ug/mL
							PCB-1268 Peak 4	0.5 ug/mL
							PCB-1268 Peak 5	0.5 ug/mL
.AR_4268_L7_00013	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1242_RES_00009	100 uL	PCB-1242 Peak 1	1 ug/mL
							PCB-1242 Peak 2	1 ug/mL
							PCB-1242 Peak 3	1 ug/mL
							PCB-1242 Peak 4	1 ug/mL
							PCB-1242 Peak 5	1 ug/mL
					AR_1268_RES_00009	100 uL	PCB-1268 Peak 1	1 ug/mL
							PCB-1268 Peak 2	1 ug/mL
							PCB-1268 Peak 3	1 ug/mL
							PCB-1268 Peak 4	1 ug/mL
							PCB-1268 Peak 5	1 ug/mL
..AR_1242_RES_00009	04/30/18		RESTEK, Lot A0117779		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
..AR_1268_RES_00009	04/30/18		RESTEK, Lot A0114508		(Purchased Reagent)		PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
AR_4268_L6_00015	11/01/17	05/01/17	Hexane, Lot 135581	10 mL	AR_4268_L7_00013	7.5 mL	PCB-1242 Peak 1	0.75 ug/mL
							PCB-1242 Peak 2	0.75 ug/mL
							PCB-1242 Peak 3	0.75 ug/mL
							PCB-1242 Peak 4	0.75 ug/mL
							PCB-1242 Peak 5	0.75 ug/mL
							PCB-1268 Peak 1	0.75 ug/mL
							PCB-1268 Peak 2	0.75 ug/mL
							PCB-1268 Peak 3	0.75 ug/mL
							PCB-1268 Peak 4	0.75 ug/mL
							PCB-1268 Peak 5	0.75 ug/mL
.AR_4268_L7_00013	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1242_RES_00009	100 uL	PCB-1242 Peak 1	1 ug/mL
							PCB-1242 Peak 2	1 ug/mL
							PCB-1242 Peak 3	1 ug/mL
							PCB-1242 Peak 4	1 ug/mL
							PCB-1242 Peak 5	1 ug/mL
					AR_1268_RES_00009	100 uL	PCB-1268 Peak 1	1 ug/mL
							PCB-1268 Peak 2	1 ug/mL
							PCB-1268 Peak 3	1 ug/mL
							PCB-1268 Peak 4	1 ug/mL
							PCB-1268 Peak 5	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..AR_1242_RES_00009	04/30/18		RESTEK, Lot A0117779		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
..AR_1268_RES_00009	04/30/18		RESTEK, Lot A0114508		(Purchased Reagent)		PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
AR_4268_L7_00013	11/01/17	05/01/17	Hexane, Lot 135581	100 mL	AR_1242_RES_00009	100 uL	PCB-1242 Peak 1	1 ug/mL
							PCB-1242 Peak 2	1 ug/mL
							PCB-1242 Peak 3	1 ug/mL
							PCB-1242 Peak 4	1 ug/mL
							PCB-1242 Peak 5	1 ug/mL
					AR_1268_RES_00009	100 uL	PCB-1268 Peak 1	1 ug/mL
							PCB-1268 Peak 2	1 ug/mL
							PCB-1268 Peak 3	1 ug/mL
							PCB-1268 Peak 4	1 ug/mL
							PCB-1268 Peak 5	1 ug/mL
.AR_1242_RES_00009	04/30/18		RESTEK, Lot A0117779		(Purchased Reagent)		PCB-1242 Peak 1	1000 ug/mL
							PCB-1242 Peak 2	1000 ug/mL
							PCB-1242 Peak 3	1000 ug/mL
							PCB-1242 Peak 4	1000 ug/mL
							PCB-1242 Peak 5	1000 ug/mL
.AR_1268_RES_00009	04/30/18		RESTEK, Lot A0114508		(Purchased Reagent)		PCB-1268 Peak 1	1000 ug/mL
							PCB-1268 Peak 2	1000 ug/mL
							PCB-1268 Peak 3	1000 ug/mL
							PCB-1268 Peak 4	1000 ug/mL
							PCB-1268 Peak 5	1000 ug/mL
BNB IS_00009	08/20/17	02/20/17	Hexane, Lot 135581	100 mL	BNB 10000ppb_00005	10 mL	1-Bromo-2-nitrobenzene	1000 ng/mL
.BNB 10000ppb_00005	08/20/17	02/20/17	Hexane, Lot 135581	100 mL	BNB stock_00009	1 mL	1-Bromo-2-nitrobenzene	10000 ng/mL
..BNB stock_00009	02/20/18		Restek, Lot A0118613		(Purchased Reagent)		1-Bromo-2-nitrobenzene	1000 ug/mL
Hg Daily Spk_01942	06/15/17	06/14/17	1% HNO3, Lot K23022	100 mL	Hg Mnth Spike_00116	1 mL	Mercury	0.1 mg/L
.Hg Mnth Spike_00116	07/08/17	06/08/17	1% HNO3, Lot K23022	100 mL	Hg Ultra Prim_00011	1 mL	Mercury	10 mg/L
..Hg Ultra Prim_00011	03/08/18		Ultra Scientific, Lot T00602		(Purchased Reagent)		Mercury	1000 mg/L
Hg Soil CCV_00914	06/15/17	06/14/17	1% HNO3, Lot K14036	50 mL	Hg Daily Spk_01942	2.5 mL	Mercury	0.005 mg/L
.Hg Daily Spk_01942	06/15/17	06/14/17	1% HNO3, Lot K23022	100 mL	Hg Mnth Spike_00116	1 mL	Mercury	0.1 mg/L
..Hg Mnth Spike_00116	07/08/17	06/08/17	1% HNO3, Lot K23022	100 mL	Hg Ultra Prim_00011	1 mL	Mercury	10 mg/L
...Hg Ultra Prim_00011	03/08/18		Ultra Scientific, Lot T00602		(Purchased Reagent)		Mercury	1000 mg/L
Hg Soil ICV_00517	06/15/17	06/14/17	1% HNO3, Lot K23022	50 mL	Hg Biwk ICV_00223	0.5 mL	Mercury	0.004 mg/L
.Hg Biwk ICV_00223	06/23/17	06/09/17	1% HNO3, Lot K23022	100 mL	Hg ICV Stock_00009	0.4 mL	Mercury	0.4 mg/L
..Hg ICV Stock_00009	06/24/20		Inorganic Ventures, Lot H2-HG02113R		(Purchased Reagent)		Mercury	100 mg/L
ICP CCV_00270	12/12/17	05/31/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	ICP ICAL1A_00734	250 mL	Arsenic	1 mg/L
							Lead	1 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Antimony	1 mg/L
							Selenium	1 mg/L
							Thallium	1 mg/L
							Aluminum	0.5 mg/L
							Barium	0.5 mg/L
							Beryllium	0.5 mg/L
							Cadmium	0.5 mg/L
							Calcium	5 mg/L
							Chromium	0.5 mg/L
							Cobalt	0.5 mg/L
							Copper	0.5 mg/L
							Iron	2.5 mg/L
							Magnesium	20 mg/L
							Manganese	0.5 mg/L
							Nickel	0.5 mg/L
							Potassium	50 mg/L
							Silver	0.5 mg/L
							Sodium	5 mg/L
							Vanadium	0.5 mg/L
							Zinc	0.5 mg/L
.ICP ICAL1A_00734	12/12/17	05/30/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	1000 mL	1000 As_00017	2 mL	Arsenic	2 mg/L
					1000 Pb_00020	2 mL	Lead	2 mg/L
					1000 Sb_00016	2 mL	Antimony	2 mg/L
					1000 Se_00015	2 mL	Selenium	2 mg/L
					1000 Tl_00016	2 mL	Thallium	2 mg/L
					Icp cal std 3_00016	10 mL	Aluminum	1 mg/L
							Barium	1 mg/L
							Beryllium	1 mg/L
							Cadmium	1 mg/L
							Calcium	10 mg/L
							Chromium	1 mg/L
							Cobalt	1 mg/L
							Copper	1 mg/L
							Iron	5 mg/L
							Magnesium	40 mg/L
							Manganese	1 mg/L
							Nickel	1 mg/L
							Potassium	100 mg/L
							Silver	1 mg/L
							Sodium	10 mg/L
							Vanadium	1 mg/L
							Zinc	1 mg/L
..1000 As_00017	03/21/18	Inorganic Venture, Lot J2-AS02122			(Purchased Reagent)		Arsenic	1000 mg/L
..1000 Pb_00020	12/12/17	Inorganic Ventures, Lot K2-PB03074			(Purchased Reagent)		Lead	1000 mg/L
..1000 Sb_00016	02/27/18	Inorganic Ventures, Lot J2-SB03037			(Purchased Reagent)		Antimony	1000 mg/L
..1000 Se_00015	02/16/18	Inorganic Ventures, Lot J2-SE02058			(Purchased Reagent)		Selenium	1000 mg/L
..1000 Tl_00016	02/13/18	Inorganic Ventures, Lot J2-TL02025			(Purchased Reagent)		Thallium	1000 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..Icp cal std 3_00016	02/22/18	Inorganic Ventures, Lot K2-MEB652538			(Purchased Reagent)		Aluminum	100 mg/L
							Barium	100 mg/L
							Beryllium	100 mg/L
							Cadmium	100 mg/L
							Calcium	1000 mg/L
							Chromium	100 mg/L
							Cobalt	100 mg/L
							Copper	100 mg/L
							Iron	500 mg/L
							Magnesium	4000 mg/L
							Manganese	100 mg/L
							Nickel	100 mg/L
							Potassium	10000 mg/L
							Silver	100 mg/L
							Sodium	1000 mg/L
							Vanadium	100 mg/L
							Zinc	100 mg/L
ICP CCV_00271	12/12/17	06/06/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	ICP ICAL1A_00735	250 mL	Arsenic	1 mg/L
							Lead	1 mg/L
							Antimony	1 mg/L
							Selenium	1 mg/L
							Thallium	1 mg/L
							Aluminum	0.5 mg/L
							Barium	0.5 mg/L
							Beryllium	0.5 mg/L
							Cadmium	0.5 mg/L
							Calcium	5 mg/L
							Chromium	0.5 mg/L
							Cobalt	0.5 mg/L
							Copper	0.5 mg/L
							Iron	2.5 mg/L
							Magnesium	20 mg/L
							Manganese	0.5 mg/L
							Nickel	0.5 mg/L
							Potassium	50 mg/L
							Silver	0.5 mg/L
							Sodium	5 mg/L
							Vanadium	0.5 mg/L
							Zinc	0.5 mg/L
.ICP ICAL1A_00735	12/12/17	06/06/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	1000 mL	1000 As_00017	2 mL	Arsenic	2 mg/L
					1000 Pb_00020	2 mL	Lead	2 mg/L
					1000 Sb_00016	2 mL	Antimony	2 mg/L
					1000 Se_00015	2 mL	Selenium	2 mg/L
					1000 Tl_00016	2 mL	Thallium	2 mg/L
					Icp cal std 3_00016	10 mL	Aluminum	1 mg/L
							Barium	1 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Beryllium	1 mg/L
							Cadmium	1 mg/L
							Calcium	10 mg/L
							Chromium	1 mg/L
							Cobalt	1 mg/L
							Copper	1 mg/L
							Iron	5 mg/L
							Magnesium	40 mg/L
							Manganese	1 mg/L
							Nickel	1 mg/L
							Potassium	100 mg/L
							Silver	1 mg/L
							Sodium	10 mg/L
							Vanadium	1 mg/L
							Zinc	1 mg/L
..1000 As_00017	03/21/18	Inorganic Venture, Lot J2-AS02122			(Purchased Reagent)		Arsenic	1000 mg/L
..1000 Pb_00020	12/12/17	Inorganic Ventures, Lot K2-PB03074			(Purchased Reagent)		Lead	1000 mg/L
..1000 Sb_00016	02/27/18	Inorganic Ventures, Lot J2-SB03037			(Purchased Reagent)		Antimony	1000 mg/L
..1000 Se_00015	02/16/18	Inorganic Ventures, Lot J2-SE02058			(Purchased Reagent)		Selenium	1000 mg/L
..1000 Tl_00016	02/13/18	Inorganic Ventures, Lot J2-TL02025			(Purchased Reagent)		Thallium	1000 mg/L
..Icp cal std 3_00016	02/22/18	Inorganic Ventures, Lot K2-MEB652538			(Purchased Reagent)		Aluminum	100 mg/L
							Barium	100 mg/L
							Beryllium	100 mg/L
							Cadmium	100 mg/L
							Calcium	1000 mg/L
							Chromium	100 mg/L
							Cobalt	100 mg/L
							Copper	100 mg/L
							Iron	500 mg/L
							Magnesium	4000 mg/L
							Manganese	100 mg/L
							Nickel	100 mg/L
							Potassium	10000 mg/L
							Silver	100 mg/L
							Sodium	1000 mg/L
							Vanadium	100 mg/L
							Zinc	100 mg/L
ICP CCVH_00540	01/02/18	06/07/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	500 mL	ICP ICAL2A_00439	250 mL	Aluminum	50 mg/L
							Iron	50 mg/L
							Sodium	250 mg/L
.ICP ICAL2A_00439	01/02/18	06/07/17	5%HCl/5% HNO3, Lot see reagent log	1000 mL	10000 Al_00016	10 mL	Aluminum	100 mg/L
					10000 Fe_00018	10 mL	Iron	100 mg/L
					10000 Na_00057	50 mL	Sodium	500 mg/L
..10000 Al_00016	01/13/18	Inorganic Ventures, Lot J2-AL05009			(Purchased Reagent)		Aluminum	10000 mg/L
..10000 Fe_00018	02/13/18	Inorganic Ventures, Lot K2-FE04047			(Purchased Reagent)		Iron	10000 mg/L
..10000 Na_00057	04/19/18	Inorganic Ventures, Lot K2-NA651997			(Purchased Reagent)		Sodium	10000 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
ICP CRI_00715	06/10/17	06/09/17	5:HNO3/5%HCl, Lot see reagent log	100 mL	ICP RL STD3A_00011	0.1 mL	Aluminum	0.1 mg/L
							Barium	0.005 mg/L
							Beryllium	0.001 mg/L
							Cadmium	0.005 mg/L
							Calcium	0.2 mg/L
							Chromium	0.01 mg/L
							Cobalt	0.005 mg/L
							Copper	0.01 mg/L
							Magnesium	0.2 mg/L
							Manganese	0.003 mg/L
							Nickel	0.01 mg/L
							Potassium	1 mg/L
							Sodium	1 mg/L
							Vanadium	0.01 mg/L
							Zinc	0.01 mg/L
					ICP RLSTD 1A_00012	0.1 mL	Antimony	0.01 mg/L
							Selenium	0.01 mg/L
.ICP RL STD3A_00011	08/31/17	Inorganic Ventures, Lot k2-MEB651193			(Purchased Reagent)		Aluminum	100 mg/L
							Barium	5 mg/L
							Beryllium	1 mg/L
							Cadmium	5 mg/L
							Calcium	200 mg/L
							Chromium	10 mg/L
							Cobalt	5 mg/L
							Copper	10 mg/L
							Magnesium	200 mg/L
							Manganese	3 mg/L
							Nickel	10 mg/L
							Potassium	1000 mg/L
							Sodium	1000 mg/L
							Vanadium	10 mg/L
							Zinc	10 mg/L
.ICP RLSTD 1A_00012	03/01/18	Inorganic Ventures, Lot K2-MEB651561			(Purchased Reagent)		Antimony	10 mg/L
							Selenium	10 mg/L
ICP CRI_00716	06/13/17	06/12/17	5:HNO3/5%HCl, Lot see reagent log	100 mL	ICP RL STD3A_00011	0.1 mL	Aluminum	0.1 mg/L
							Barium	0.005 mg/L
							Beryllium	0.001 mg/L
							Cadmium	0.005 mg/L
							Calcium	0.2 mg/L
							Chromium	0.01 mg/L
							Cobalt	0.005 mg/L
							Copper	0.01 mg/L
							Iron	0.03 mg/L
							Magnesium	0.2 mg/L
							Manganese	0.003 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nickel	0.01 mg/L
							Potassium	1 mg/L
							Silver	0.01 mg/L
							Sodium	1 mg/L
							Vanadium	0.01 mg/L
							Zinc	0.01 mg/L
					ICP RLSTD 1A_00012	0.1 mL	Antimony	0.01 mg/L
.ICP RL STD3A_00011	08/31/17	Inorganic Ventures, Lot k2-MEB651193			(Purchased Reagent)		Aluminum	100 mg/L
							Barium	5 mg/L
							Beryllium	1 mg/L
							Cadmium	5 mg/L
							Calcium	200 mg/L
							Chromium	10 mg/L
							Cobalt	5 mg/L
							Copper	10 mg/L
							Iron	30 mg/L
							Magnesium	200 mg/L
							Manganese	3 mg/L
							Nickel	10 mg/L
							Potassium	1000 mg/L
							Silver	10 mg/L
							Sodium	1000 mg/L
							Vanadium	10 mg/L
							Zinc	10 mg/L
.ICP RLSTD 1A_00012	03/01/18	Inorganic Ventures, Lot K2-MEB651561			(Purchased Reagent)		Antimony	10 mg/L
ICP CRI_00717	06/14/17	06/13/17	5:HNO3/5%HCl, Lot see reagent log	100 mL	ICP RL STD3A_00011	0.1 mL	Aluminum	0.1 mg/L
							Barium	0.005 mg/L
							Beryllium	0.001 mg/L
							Cadmium	0.005 mg/L
							Calcium	0.2 mg/L
							Chromium	0.01 mg/L
							Cobalt	0.005 mg/L
							Copper	0.01 mg/L
							Iron	0.03 mg/L
							Magnesium	0.2 mg/L
							Manganese	0.003 mg/L
							Nickel	0.01 mg/L
							Potassium	1 mg/L
							Silver	0.01 mg/L
							Sodium	1 mg/L
							Vanadium	0.01 mg/L
							Zinc	0.01 mg/L
.ICP RL STD3A_00011	08/31/17	Inorganic Ventures, Lot k2-MEB651193			(Purchased Reagent)		Aluminum	100 mg/L
							Barium	5 mg/L
							Beryllium	1 mg/L
							Cadmium	5 mg/L
							Calcium	200 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chromium	10 mg/L
							Cobalt	5 mg/L
							Copper	10 mg/L
							Iron	30 mg/L
							Magnesium	200 mg/L
							Manganese	3 mg/L
							Nickel	10 mg/L
							Potassium	1000 mg/L
							Silver	10 mg/L
							Sodium	1000 mg/L
							Vanadium	10 mg/L
							Zinc	10 mg/L
ICP ICSA_00147	08/12/17	06/06/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	250 mL	Icp stk ICSA_00020	25 mL	Aluminum	500 mg/L
							Calcium	500 mg/L
							Iron	200 mg/L
							Magnesium	500 mg/L
.Icp stk ICSA_00020	08/12/17	Inorganic Ventures, Lot K2-MEB643109			(Purchased Reagent)		Aluminum	5000 mg/L
							Calcium	5000 mg/L
							Iron	2000 mg/L
							Magnesium	5000 mg/L
ICP ICSAB_00163	07/27/17	06/07/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	250 mL	10000 Si_00013	0.25 mL	Si	10 mg/L
							SiO2	21.4 mg/L
					ANALYTES B_00012	2.5 mL	Barium	0.5 mg/L
							Beryllium	0.5 mg/L
							Cadmium	1 mg/L
							Chromium	0.5 mg/L
							Cobalt	0.5 mg/L
							Copper	0.5 mg/L
							Lead	1 mg/L
							Manganese	0.5 mg/L
							Nickel	1 mg/L
							Silver	1 mg/L
							Vanadium	0.5 mg/L
							Zinc	1 mg/L
					ICP ISAB 1B_00010	2.5 mL	Thallium	10 mg/L
					ICP ISAB STD1_00009	2.5 mL	Antimony	1 mg/L
							Arsenic	2 mg/L
							B	2 mg/L
							Li	1 mg/L
							Mo	1 mg/L
							P	2 mg/L
							Potassium	50 mg/L
							Selenium	5 mg/L
							Sodium	50 mg/L
							Sr	1 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					ICP ISAB STD2_00009	2.5 mL	Sn	10 mg/L
							Ti	1 mg/L
					Icp stk ICSA_00020	25 mL	Aluminum	500 mg/L
							Calcium	500 mg/L
							Iron	200 mg/L
							Magnesium	500 mg/L
.10000 Si_00013	12/05/17	Inorganic ventures, Lot J2-SI03056			(Purchased Reagent)		Si	10000 mg/L
							SiO2	21400 mg/L
.ANALYTES B_00012	04/30/18	SPEX, Lot 3-98MKBY			(Purchased Reagent)		Barium	50 mg/L
							Beryllium	50 mg/L
							Cadmium	100 mg/L
							Chromium	50 mg/L
							Cobalt	50 mg/L
							Copper	50 mg/L
							Lead	100 mg/L
							Manganese	50 mg/L
							Nickel	100 mg/L
							Silver	100 mg/L
							Vanadium	50 mg/L
							Zinc	100 mg/L
.ICP ISAB 1B_00010	01/11/18	High Purity, Lot 1700955			(Purchased Reagent)		Thallium	1000 mg/L
.ICP ISAB STD1_00009	01/11/18	High Purity, Lot 1700954			(Purchased Reagent)		Antimony	100 mg/L
							Arsenic	200 mg/L
							B	200 mg/L
							Li	100 mg/L
							Mo	100 mg/L
							P	200 mg/L
							Potassium	5000 mg/L
							Selenium	500 mg/L
							Sodium	5000 mg/L
							Sr	100 mg/L
.ICP ISAB STD2_00009	07/27/17	High Purity, Lot 1620836			(Purchased Reagent)		Sn	1000 mg/L
							Ti	100 mg/L
.Icp stk ICSA_00020	08/12/17	Inorganic Ventures, Lot K2-MEB643109			(Purchased Reagent)		Aluminum	5000 mg/L
							Calcium	5000 mg/L
							Iron	2000 mg/L
							Magnesium	5000 mg/L
ICP ICV_00298	11/16/17	06/06/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	Icp ICVL A_00011	1 mL	Aluminum	0.25 mg/L
							Arsenic	0.25 mg/L
							Barium	0.25 mg/L
							Beryllium	0.25 mg/L
							Cadmium	0.25 mg/L
							Calcium	2 mg/L
							Chromium	0.25 mg/L
							Cobalt	0.25 mg/L
							Copper	0.25 mg/L
							Iron	0.25 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Lead	0.25 mg/L
							Magnesium	10 mg/L
							Manganese	0.25 mg/L
							Nickel	0.25 mg/L
							Potassium	20 mg/L
							Selenium	0.5 mg/L
							Sodium	2 mg/L
							Thallium	0.5 mg/L
							Vanadium	0.25 mg/L
							Zinc	0.25 mg/L
					Icp ICVL B_00011	1 mL	Antimony	0.25 mg/L
							Silver	0.25 mg/L
.Icp ICVL A_00011	11/16/17		High Purity, Lot 1631905		(Purchased Reagent)		Aluminum	25 mg/L
							Arsenic	25 mg/L
							Barium	25 mg/L
							Beryllium	25 mg/L
							Cadmium	25 mg/L
							Calcium	200 mg/L
							Chromium	25 mg/L
							Cobalt	25 mg/L
							Copper	25 mg/L
							Iron	25 mg/L
							Lead	25 mg/L
							Magnesium	1000 mg/L
							Manganese	25 mg/L
							Nickel	25 mg/L
							Potassium	2000 mg/L
							Selenium	50 mg/L
							Sodium	200 mg/L
							Thallium	50 mg/L
							Vanadium	25 mg/L
							Zinc	25 mg/L
.Icp ICVL B_00011	11/16/17		HIGH PURITY, Lot 1631906		(Purchased Reagent)		Antimony	25 mg/L
							Silver	25 mg/L
ICP ICV_00301	11/16/17	06/12/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	Icp ICVL A_00011	1 mL	Aluminum	0.25 mg/L
							Arsenic	0.25 mg/L
							Barium	0.25 mg/L
							Beryllium	0.25 mg/L
							Cadmium	0.25 mg/L
							Calcium	2 mg/L
							Chromium	0.25 mg/L
							Cobalt	0.25 mg/L
							Copper	0.25 mg/L
							Iron	0.25 mg/L
							Lead	0.25 mg/L
							Magnesium	10 mg/L
							Manganese	0.25 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nickel	0.25 mg/L
							Potassium	20 mg/L
							Selenium	0.5 mg/L
							Sodium	2 mg/L
							Thallium	0.5 mg/L
							Vanadium	0.25 mg/L
							Zinc	0.25 mg/L
					Icp ICVL B_00011	1 mL	Antimony	0.25 mg/L
							Silver	0.25 mg/L
.Icp ICVL A_00011	11/16/17		High Purity, Lot 1631905		(Purchased Reagent)		Aluminum	25 mg/L
							Arsenic	25 mg/L
							Barium	25 mg/L
							Beryllium	25 mg/L
							Cadmium	25 mg/L
							Calcium	200 mg/L
							Chromium	25 mg/L
							Cobalt	25 mg/L
							Copper	25 mg/L
							Iron	25 mg/L
							Lead	25 mg/L
							Magnesium	1000 mg/L
							Manganese	25 mg/L
							Nickel	25 mg/L
							Potassium	2000 mg/L
							Selenium	50 mg/L
							Sodium	200 mg/L
							Thallium	50 mg/L
							Vanadium	25 mg/L
							Zinc	25 mg/L
.Icp ICVL B_00011	11/16/17		HIGH PURITY, Lot 1631906		(Purchased Reagent)		Antimony	25 mg/L
							Silver	25 mg/L
ICP ICVH_00414	06/14/17	06/01/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	Icp ICVH_00372	1 mL	Aluminum	40 mg/L
							Iron	80 mg/L
							Sodium	40 mg/L
.Icp ICVH_00372	12/15/17		High Purity, Lot 1634736		(Purchased Reagent)		Aluminum	4000 mg/L
							Iron	8000 mg/L
							Sodium	4000 mg/L
ICP ICVH_00416	07/06/17	06/12/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	Icp ICVH_00372	1 mL	Aluminum	40 mg/L
							Iron	80 mg/L
							Sodium	40 mg/L
.Icp ICVH_00372	12/15/17		High Purity, Lot 1634736		(Purchased Reagent)		Aluminum	4000 mg/L
							Iron	8000 mg/L
							Sodium	4000 mg/L
ICP LLCCV_01983	06/10/17	06/09/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	10 ppm Se_00009	0.05 mL	Selenium	0.02 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
					ICP LLCCV-2a_00002	1 mL	Antimony	0.02 mg/L
					ICP LLCCV-3_00006	1 mL	Aluminum	0.1 mg/L
							Arsenic	0.015 mg/L
							Barium	0.01 mg/L
							Beryllium	0.001 mg/L
							Cadmium	0.005 mg/L
							Calcium	0.2 mg/L
							Chromium	0.01 mg/L
							Cobalt	0.01 mg/L
							Copper	0.015 mg/L
							Iron	0.1 mg/L
							Lead	0.009 mg/L
							Magnesium	0.2 mg/L
							Manganese	0.01 mg/L
							Nickel	0.04 mg/L
							Potassium	3 mg/L
							Selenium	0.02 mg/L
							Silver	0.01 mg/L
							Sodium	1 mg/L
							Vanadium	0.01 mg/L
							Zinc	0.02 mg/L
.10 ppm Se_00009	08/31/17	09/06/16	2%HNO3/0.5% HCl, Lot see log books	100 mL	1000 Se_00016	1 mL	Selenium	10 mg/L
..1000 Se_00016	08/31/17		Inorganic Ventures, Lot K2-SE02067		(Purchased Reagent)		Selenium	1000 mg/L
.ICP LLCCV-2a_00002	08/22/17		Inorganic Ventures, Lot K2-MEB638041		(Purchased Reagent)		Antimony	2 mg/L
.ICP LLCCV-3_00006	05/12/18		Inorganic Ventures, Lot K2-MEB653967		(Purchased Reagent)		Aluminum	10 mg/L
							Arsenic	1.5 mg/L
							Barium	1 mg/L
							Beryllium	0.1 mg/L
							Cadmium	0.5 mg/L
							Calcium	20 mg/L
							Chromium	1 mg/L
							Cobalt	1 mg/L
							Copper	1.5 mg/L
							Iron	10 mg/L
							Lead	0.9 mg/L
							Magnesium	20 mg/L
							Manganese	1 mg/L
							Nickel	4 mg/L
							Potassium	300 mg/L
							Selenium	1.5 mg/L
							Silver	1 mg/L
							Sodium	100 mg/L
							Vanadium	1 mg/L
							Zinc	2 mg/L
ICP LLCCV_01984	06/13/17	06/12/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	10 ppm Se_00009	0.05 mL	Selenium	0.02 mg/L
					ICP LLCCV-2a_00002	1 mL	Antimony	0.02 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
					ICP LLCCV-3_00006	1 mL	Aluminum	0.1 mg/L
							Arsenic	0.015 mg/L
							Barium	0.01 mg/L
							Beryllium	0.001 mg/L
							Cadmium	0.005 mg/L
							Calcium	0.2 mg/L
							Chromium	0.01 mg/L
							Cobalt	0.01 mg/L
							Copper	0.015 mg/L
							Iron	0.1 mg/L
							Lead	0.009 mg/L
							Magnesium	0.2 mg/L
							Manganese	0.01 mg/L
							Nickel	0.04 mg/L
							Potassium	3 mg/L
							Selenium	0.02 mg/L
							Silver	0.01 mg/L
							Sodium	1 mg/L
							Thallium	0.015 mg/L
							Vanadium	0.01 mg/L
							Zinc	0.02 mg/L
.10 ppm Se_00009	08/31/17	09/06/16	2%HNO3/0.5% HCl, Lot see log books	100 mL	1000 Se_00016	1 mL	Selenium	10 mg/L
..1000 Se_00016	08/31/17		Inorganic Ventures, Lot K2-SE02067		(Purchased Reagent)		Selenium	1000 mg/L
.ICP LLCCV-2a_00002	08/22/17		Inorganic Ventures, Lot K2-MEB638041		(Purchased Reagent)		Antimony	2 mg/L
.ICP LLCCV-3_00006	05/12/18		Inorganic Ventures, Lot K2-MEB653967		(Purchased Reagent)		Aluminum	10 mg/L
							Arsenic	1.5 mg/L
							Barium	1 mg/L
							Beryllium	0.1 mg/L
							Cadmium	0.5 mg/L
							Calcium	20 mg/L
							Chromium	1 mg/L
							Cobalt	1 mg/L
							Copper	1.5 mg/L
							Iron	10 mg/L
							Lead	0.9 mg/L
							Magnesium	20 mg/L
							Manganese	1 mg/L
							Nickel	4 mg/L
							Potassium	300 mg/L
							Selenium	1.5 mg/L
							Silver	1 mg/L
							Sodium	100 mg/L
							Thallium	1.5 mg/L
							Vanadium	1 mg/L
							Zinc	2 mg/L
ICP LLCCV_01985	06/14/17	06/13/17	5%/5% HCL/HNO3, Lot SEE LOGBOOK	100 mL	10 ppm Se_00009	0.05 mL	Selenium	0.02 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
					ICP LLCCV-2a_00002	1 mL	Antimony	0.02 mg/L
					ICP LLCCV-3_00006	1 mL	Aluminum	0.1 mg/L
							Arsenic	0.015 mg/L
							Barium	0.01 mg/L
							Beryllium	0.001 mg/L
							Cadmium	0.005 mg/L
							Calcium	0.2 mg/L
							Chromium	0.01 mg/L
							Cobalt	0.01 mg/L
							Copper	0.015 mg/L
							Iron	0.1 mg/L
							Lead	0.009 mg/L
							Magnesium	0.2 mg/L
							Manganese	0.01 mg/L
							Nickel	0.04 mg/L
							Potassium	3 mg/L
							Selenium	0.02 mg/L
							Silver	0.01 mg/L
							Sodium	1 mg/L
							Thallium	0.015 mg/L
							Vanadium	0.01 mg/L
							Zinc	0.02 mg/L
.10 ppm Se_00009	08/31/17	09/06/16	2%HNO3/0.5% HCl, Lot see log books	100 mL	1000 Se_00016	1 mL	Selenium	10 mg/L
..1000 Se_00016	08/31/17		Inorganic Ventures, Lot K2-SE02067		(Purchased Reagent)		Selenium	1000 mg/L
.ICP LLCCV-2a_00002	08/22/17		Inorganic Ventures, Lot K2-MEB638041		(Purchased Reagent)		Antimony	2 mg/L
.ICP LLCCV-3_00006	05/12/18		Inorganic Ventures, Lot K2-MEB653967		(Purchased Reagent)		Aluminum	10 mg/L
							Arsenic	1.5 mg/L
							Barium	1 mg/L
							Beryllium	0.1 mg/L
							Cadmium	0.5 mg/L
							Calcium	20 mg/L
							Chromium	1 mg/L
							Cobalt	1 mg/L
							Copper	1.5 mg/L
							Iron	10 mg/L
							Lead	0.9 mg/L
							Magnesium	20 mg/L
							Manganese	1 mg/L
							Nickel	4 mg/L
							Potassium	300 mg/L
							Selenium	1.5 mg/L
							Silver	1 mg/L
							Sodium	100 mg/L
							Thallium	1.5 mg/L
							Vanadium	1 mg/L
							Zinc	2 mg/L
ICP PDS 1_00020	04/07/18		Inorganic Ventures, Lot M2-MEB655824		(Purchased Reagent)		Aluminum	100 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							Arsenic	20 mg/L
							Barium	10 mg/L
							Beryllium	5 mg/L
							Cadmium	5 mg/L
							Calcium	2000 mg/L
							Chromium	5 mg/L
							Cobalt	5 mg/L
							Copper	5 mg/L
							Iron	100 mg/L
							Lead	10 mg/L
							Magnesium	2000 mg/L
							Manganese	5 mg/L
							Nickel	5 mg/L
							Potassium	2000 mg/L
							Selenium	20 mg/L
							Silver	5 mg/L
							Sodium	2000 mg/L
							Thallium	20 mg/L
							Vanadium	5 mg/L
							Zinc	20 mg/L
ICP PDS 2_00014	12/01/17	Inorganic Ventures, Lot H2-MEB546063			(Purchased Reagent)		Antimony	10 mg/L
ICP SPK 2B_00062	05/17/18	Inorganic Ventures, Lot K2-MEB654055			(Purchased Reagent)		Antimony	50 mg/L
							B	100 mg/L
							Mo	100 mg/L
							Si	1000 mg/L
							SiO2	2140 mg/L
							Sn	200 mg/L
							Sulfur	200 mg/L
							Ti	100 mg/L
							Zr	50 mg/L
ICP SPK 3A_00133	05/17/18	Inorganic Ventures, Lot M2-MEB656518			(Purchased Reagent)		Aluminum	200 mg/L
							Arsenic	100 mg/L
							Barium	200 mg/L
							Beryllium	5 mg/L
							Bi	200 mg/L
							Cadmium	10 mg/L
							Calcium	5000 mg/L
							Chromium	20 mg/L
							Cobalt	50 mg/L
							Copper	25 mg/L
							Iron	100 mg/L
							Lead	50 mg/L
							Li	100 mg/L
							Magnesium	5000 mg/L
							Manganese	50 mg/L
							Nickel	50 mg/L
							P	1000 mg/L

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent: Reagent ID	Parent Reagent: Volume Added	Analyte	Concentration
							Potassium	5000 mg/L
							Selenium	200 mg/L
							Silver	5 mg/L
							Sodium	5000 mg/L
							Sr	100 mg/L
							Th	100 mg/L
							Thallium	200 mg/L
							U	200 mg/L
							Vanadium	50 mg/L
							Zinc	50 mg/L
MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL
.MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
..MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
MS-SIM SSV_00116	06/30/17	03/29/17	Methylene Chloride, Lot 138764	500 uL	MS-SIM IS_00029	50 uL	Acenaphthene-d10	0.6 ug/mL
							Chrysene-d12	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
.MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
...MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
MS-SIM SSV_00116	06/30/17	03/29/17	Methylene Chloride, Lot 138764	500 uL	MS-SIM SSV_00113	30 uL	1-Methylnaphthalene	1.2 ug/mL
							2-Methylnaphthalene	1.2 ug/mL
							Acenaphthene	1.2 ug/mL
							Acenaphthylene	1.2 ug/mL
							Anthracene	1.2 ug/mL
							Benzo[a]anthracene	1.2 ug/mL
							Benzo[a]pyrene	1.2 ug/mL
							Benzo[b]fluoranthene	1.2 ug/mL
							Benzo[g,h,i]perylene	1.2 ug/mL
							Benzo[k]fluoranthene	1.2 ug/mL
							Chrysene	1.2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							Dibenz(a,h)anthracene	1.2 ug/mL
							Fluoranthene	1.2 ug/mL
							Fluorene	1.2 ug/mL
							Indeno[1,2,3-cd]pyrene	1.2 ug/mL
							Naphthalene	1.2 ug/mL
							Phenanthrene	1.2 ug/mL
							Pyrene	1.2 ug/mL
.MS-SIM SSV_00113	06/30/17	09/13/16	Methylene Chloride, Lot 131181	10 mL	MS-HSLB1_STK_00008	1 mL	1-Methylnaphthalene	20 ug/mL
							2-Methylnaphthalene	20 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Chrysene	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL
							Pyrene	20 ug/mL
..MS-HSLB1_STK_00008	06/30/17	06/30/16	Methylene Chloride, Lot 123631	10 mL	MS-570666.SEC_00001	2 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	200 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
...MS-570666.SEC_00001	06/30/17		Restek, Lot A0115803		(Purchased Reagent)		1-Methylnaphthalene	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							Acenaphthene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Chrysene	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Naphthalene	1000 ug/mL
							Phenanthrene	1000 ug/mL
							Pyrene	1000 ug/mL
MS-SIMSL 0.02_00067	08/31/17	03/29/17	Methylene Chloride, Lot 138764	500 uL	MS-SIM IS_00029	50 uL	Acenaphthene-d10	0.6 ug/mL
							Chrysene-d12	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-SIMSL Int._00020	5 uL	2-Fluorobiphenyl (Surr)	0.02 ug/mL
							Nitrobenzene-d5 (Surr)	0.02002 ug/mL
							Terphenyl-d14 (Surr)	0.02002 ug/mL
							2-Methylnaphthalene	0.04 ug/mL
							1-Methylnaphthalene	0.02 ug/mL
							Acenaphthene	0.02 ug/mL
							Acenaphthylene	0.02 ug/mL
							Anthracene	0.02 ug/mL
							Benzo[a]anthracene	0.02 ug/mL
							Benzo[a]pyrene	0.02 ug/mL
							Benzo[b]fluoranthene	0.02 ug/mL
							Benzo[g,h,i]perylene	0.02 ug/mL
							Benzo[k]fluoranthene	0.02 ug/mL
							Chrysene	0.02 ug/mL
							Dibenz(a,h)anthracene	0.02 ug/mL
							Fluoranthene	0.02 ug/mL
							Fluorene	0.02 ug/mL
							Indeno[1,2,3-cd]pyrene	0.02 ug/mL
							Naphthalene	0.02 ug/mL
							Phenanthrene	0.02 ug/mL
							Pyrene	0.02 ug/mL
.MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent: Reagent ID	Parent Reagent: Volume Added	Analyte	Concentration
...MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.MS-SIMSL Int._00020	08/31/17	03/29/17	Methylene Chloride, Lot 138764	10 mL	MS-SIMSL_00020	1 mL	2-Fluorobiphenyl (Surr)	2 ug/mL
							Nitrobenzene-d5 (Surr)	2.002 ug/mL
							Terphenyl-d14 (Surr)	2.002 ug/mL
							2-Methylnaphthalene	4 ug/mL
							1-Methylnaphthalene	2 ug/mL
							Acenaphthene	2 ug/mL
							Acenaphthylene	2 ug/mL
							Anthracene	2 ug/mL
							Benzo[a]anthracene	2 ug/mL
							Benzo[a]pyrene	2 ug/mL
							Benzo[b]fluoranthene	2 ug/mL
							Benzo[g,h,i]perylene	2 ug/mL
							Benzo[k]fluoranthene	2 ug/mL
							Chrysene	2 ug/mL
							Dibenz(a,h)anthracene	2 ug/mL
							Fluoranthene	2 ug/mL
							Fluorene	2 ug/mL
							Indeno[1,2,3-cd]pyrene	2 ug/mL
							Naphthalene	2 ug/mL
							Phenanthrene	2 ug/mL
							Pyrene	2 ug/mL
..MS-SIMSL_00020	08/31/17	03/24/17	Methylene Chloride, Lot 138764	10 mL	MS-48925_00014	0.2 mL	2-Fluorobiphenyl (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20.02 ug/mL
							Terphenyl-d14 (Surr)	20.02 ug/mL
					MS-SIM SL_Stk_00017	1 mL	2-Methylnaphthalene	40 ug/mL
							1-Methylnaphthalene	20 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Chrysene	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL
							Pyrene	20 ug/mL
...MS-48925_00014	08/31/17		Supelco, Lot LC08783V		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Nitrobenzene-d5 (Surr)	1001 ug/mL
							Terphenyl-d14 (Surr)	1001 ug/mL
...MS-SIM SL_Stk_00017	11/15/17	11/15/16	Methylene Chloride, Lot 138764	5 mL	MS-31010_00011	0.5 mL	2-Methylnaphthalene	400 ug/mL
					MS-31995_00004	0.5 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
....MS-31010_00011	03/31/19		Restek, Lot A0116027		(Purchased Reagent)		2-Methylnaphthalene	2000 ug/mL
....MS-31995_00004	10/31/18		Restek, Lot A092153		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
MS-SIMSL 0.1_00063	08/31/17	03/29/17	Methylene Chloride, Lot 138764	500 uL	MS-SIM IS_00029	50 uL	Acenaphthene-d10	0.6 ug/mL
							Chrysene-d12	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-SIMSL Int._00020	25 uL	2-Fluorobiphenyl (Surr)	0.1 ug/mL
							Nitrobenzene-d5 (Surr)	0.1001 ug/mL
							Terphenyl-d14 (Surr)	0.1001 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							2-Methylnaphthalene	0.2 ug/mL
							1-Methylnaphthalene	0.1 ug/mL
							Acenaphthene	0.1 ug/mL
							Acenaphthylene	0.1 ug/mL
							Anthracene	0.1 ug/mL
							Benzo[a]anthracene	0.1 ug/mL
							Benzo[a]pyrene	0.1 ug/mL
							Benzo[b]fluoranthene	0.1 ug/mL
							Benzo[g,h,i]perylene	0.1 ug/mL
							Benzo[k]fluoranthene	0.1 ug/mL
							Chrysene	0.1 ug/mL
							Dibenz(a,h)anthracene	0.1 ug/mL
							Fluoranthene	0.1 ug/mL
							Fluorene	0.1 ug/mL
							Indeno[1,2,3-cd]pyrene	0.1 ug/mL
							Naphthalene	0.1 ug/mL
							Phenanthrene	0.1 ug/mL
							Pyrene	0.1 ug/mL
.MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
...MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.MS-SIMSL Int._00020	08/31/17	03/29/17	Methylene Chloride, Lot 138764	10 mL	MS-SIMSL_00020	1 mL	2-Fluorobiphenyl (Surr)	2 ug/mL
							Nitrobenzene-d5 (Surr)	2.002 ug/mL
							Terphenyl-d14 (Surr)	2.002 ug/mL
							2-Methylnaphthalene	4 ug/mL
							1-Methylnaphthalene	2 ug/mL
							Acenaphthene	2 ug/mL
							Acenaphthylene	2 ug/mL
							Anthracene	2 ug/mL
							Benzo[a]anthracene	2 ug/mL
							Benzo[a]pyrene	2 ug/mL
							Benzo[b]fluoranthene	2 ug/mL
							Benzo[g,h,i]perylene	2 ug/mL
							Benzo[k]fluoranthene	2 ug/mL
							Chrysene	2 ug/mL
							Dibenz(a,h)anthracene	2 ug/mL
							Fluoranthene	2 ug/mL
							Fluorene	2 ug/mL
							Indeno[1,2,3-cd]pyrene	2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Naphthalene	2 ug/mL
							Phenanthrene	2 ug/mL
							Pyrene	2 ug/mL
..MS-SIMSL_00020	08/31/17	03/24/17	Methylene Chloride, Lot 138764	10 mL	MS-48925_00014	0.2 mL	2-Fluorobiphenyl (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20.02 ug/mL
							Terphenyl-d14 (Surr)	20.02 ug/mL
					MS-SIM SL_Stk_00017	1 mL	2-Methylnaphthalene	40 ug/mL
							1-Methylnaphthalene	20 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Chrysene	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL
							Pyrene	20 ug/mL
...MS-48925_00014	08/31/17		Supelco, Lot LC08783V		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ug/mL
							Nitrobenzene-d5 (Surr)	1001 ug/mL
							Terphenyl-d14 (Surr)	1001 ug/mL
...MS-SIM SL_Stk_00017	11/15/17	11/15/16	Methylene Chloride, Lot 138764	5 mL	MS-31010_00011	0.5 mL	2-Methylnaphthalene	400 ug/mL
					MS-31995_00004	0.5 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
....MS-31010_00011	03/31/19		Restek, Lot A0116027		(Purchased Reagent)		2-Methylnaphthalene	2000 ug/mL
....MS-31995_00004	10/31/18		Restek, Lot A092153		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
MS-SIMSL 0.3_00061	08/31/17	03/29/17	Methylene Chloride, Lot 138764	500 uL	MS-SIM IS_00029	50 uL	Acenaphthene-d10	0.6 ug/mL
							Chrysene-d12	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-SIMSL Int._00020	75 uL	2-Fluorobiphenyl (Surr)	0.3 ug/mL
							Nitrobenzene-d5 (Surr)	0.3003 ug/mL
							Terphenyl-d14 (Surr)	0.3003 ug/mL
							2-Methylnaphthalene	0.6 ug/mL
							1-Methylnaphthalene	0.3 ug/mL
							Acenaphthene	0.3 ug/mL
							Acenaphthylene	0.3 ug/mL
							Anthracene	0.3 ug/mL
							Benzo[a]anthracene	0.3 ug/mL
							Benzo[a]pyrene	0.3 ug/mL
							Benzo[b]fluoranthene	0.3 ug/mL
							Benzo[g,h,i]perylene	0.3 ug/mL
							Benzo[k]fluoranthene	0.3 ug/mL
							Chrysene	0.3 ug/mL
							Dibenz(a,h)anthracene	0.3 ug/mL
							Fluoranthene	0.3 ug/mL
							Fluorene	0.3 ug/mL
							Indeno[1,2,3-cd]pyrene	0.3 ug/mL
							Naphthalene	0.3 ug/mL
							Phenanthrene	0.3 ug/mL
							Pyrene	0.3 ug/mL
.MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent: Reagent ID	Parent Reagent: Volume Added	Analyte	Concentration
..MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
...MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.MS-SIMSL Int._00020	08/31/17	03/29/17	Methylene Chloride, Lot 138764	10 mL	MS-SIMSL_00020	1 mL	2-Fluorobiphenyl (Surr)	2 ug/mL
							Nitrobenzene-d5 (Surr)	2.002 ug/mL
							Terphenyl-d14 (Surr)	2.002 ug/mL
							2-Methylnaphthalene	4 ug/mL
							1-Methylnaphthalene	2 ug/mL
							Acenaphthene	2 ug/mL
							Acenaphthylene	2 ug/mL
							Anthracene	2 ug/mL
							Benzo[a]anthracene	2 ug/mL
							Benzo[a]pyrene	2 ug/mL
							Benzo[b]fluoranthene	2 ug/mL
							Benzo[g,h,i]perylene	2 ug/mL
							Benzo[k]fluoranthene	2 ug/mL
							Chrysene	2 ug/mL
							Dibenz(a,h)anthracene	2 ug/mL
							Fluoranthene	2 ug/mL
							Fluorene	2 ug/mL
							Indeno[1,2,3-cd]pyrene	2 ug/mL
							Naphthalene	2 ug/mL
							Phenanthrene	2 ug/mL
							Pyrene	2 ug/mL
..MS-SIMSL_00020	08/31/17	03/24/17	Methylene Chloride, Lot 138764	10 mL	MS-48925_00014	0.2 mL	2-Fluorobiphenyl (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20.02 ug/mL
							Terphenyl-d14 (Surr)	20.02 ug/mL
					MS-SIM SL_Stk_00017	1 mL	2-Methylnaphthalene	40 ug/mL
							1-Methylnaphthalene	20 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Chrysene	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent: Reagent ID	Parent Reagent: Volume Added	Analyte	Concentration
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL
							Pyrene	20 ug/mL
...MS-48925_00014	08/31/17		Supelco, Lot LC08783V		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ug/mL
							Nitrobenzene-d5 (Surr)	1001 ug/mL
							Terphenyl-d14 (Surr)	1001 ug/mL
...MS-SIM SL_Stk_00017	11/15/17	11/15/16	Methylene Chloride, Lot 138764	5 mL	MS-31010_00011	0.5 mL	2-Methylnaphthalene	400 ug/mL
					MS-31995_00004	0.5 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
....MS-31010_00011	03/31/19		Restek, Lot A0116027		(Purchased Reagent)		2-Methylnaphthalene	2000 ug/mL
....MS-31995_00004	10/31/18		Restek, Lot A092153		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
MS-SIMSL 0.6_00122	08/31/17	03/24/17	Methylene Chloride, Lot 138764	500 uL	MS-SIM IS_00029	50 uL	Acenaphthene-d10	0.6 ug/mL
							Chrysene-d12	0.6 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Parent Reagent Volume Added	Analyte	Concentration
							Phenanthrene-d10	0.6 ug/mL
					MS-SIMSL_00020	15 uL	2-Fluorobiphenyl (Surr)	0.6 ug/mL
							Nitrobenzene-d5 (Surr)	0.6006 ug/mL
							Terphenyl-d14 (Surr)	0.6006 ug/mL
							2-Methylnaphthalene	1.2 ug/mL
							1-Methylnaphthalene	0.6 ug/mL
							Acenaphthene	0.6 ug/mL
							Acenaphthylene	0.6 ug/mL
							Anthracene	0.6 ug/mL
							Benzo[a]anthracene	0.6 ug/mL
							Benzo[a]pyrene	0.6 ug/mL
							Benzo[b]fluoranthene	0.6 ug/mL
							Benzo[g,h,i]perylene	0.6 ug/mL
							Benzo[k]fluoranthene	0.6 ug/mL
							Chrysene	0.6 ug/mL
							Dibenz(a,h)anthracene	0.6 ug/mL
							Fluoranthene	0.6 ug/mL
							Fluorene	0.6 ug/mL
							Indeno[1,2,3-cd]pyrene	0.6 ug/mL
							Naphthalene	0.6 ug/mL
							Phenanthrene	0.6 ug/mL
							Pyrene	0.6 ug/mL
.MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
...MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.MS-SIMSL_00020	08/31/17	03/24/17	Methylene Chloride, Lot 138764	10 mL	MS-48925_00014	0.2 mL	2-Fluorobiphenyl (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20.02 ug/mL
							Terphenyl-d14 (Surr)	20.02 ug/mL
					MS-SIM SL_Stk_00017	1 mL	2-Methylnaphthalene	40 ug/mL
							1-Methylnaphthalene	20 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Chrysene	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL
							Pyrene	20 ug/mL
..MS-48925_00014	08/31/17		Supelco, Lot LC08783V		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ug/mL
							Nitrobenzene-d5 (Surr)	1001 ug/mL
							Terphenyl-d14 (Surr)	1001 ug/mL
..MS-SIM SL_Stk_00017	11/15/17	11/15/16	Methylene Chloride, Lot 138764	5 mL	MS-31010_00011	0.5 mL	2-Methylnaphthalene	400 ug/mL
					MS-31995_00004	0.5 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
...MS-31010_00011	03/31/19		Restek, Lot A0116027		(Purchased Reagent)		2-Methylnaphthalene	2000 ug/mL
...MS-31995_00004	10/31/18		Restek, Lot A092153		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent	Volume Added	Analyte	Concentration
							Pyrene	2000 ug/mL
MS-SIMSL 0.6_00125	08/31/17	05/22/17	Methylene Chloride, Lot 157164	500 uL	MS-SIM IS_00029	50 uL	Acenaphthene-d10	0.6 ug/mL
							Chrysene-d12	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
.MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
...MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
MS-SIMSL 0.6_00125	08/31/17	05/22/17	Methylene Chloride, Lot 157164	500 uL	MS-SIMSL_00020	15 uL	2-Fluorobiphenyl (Surr)	0.6 ug/mL
							Nitrobenzene-d5 (Surr)	0.6006 ug/mL
							Terphenyl-d14 (Surr)	0.6006 ug/mL
							2-Methylnaphthalene	1.2 ug/mL
							1-Methylnaphthalene	0.6 ug/mL
							Acenaphthene	0.6 ug/mL
							Acenaphthylene	0.6 ug/mL
							Anthracene	0.6 ug/mL
							Benzo[a]anthracene	0.6 ug/mL
							Benzo[a]pyrene	0.6 ug/mL
							Benzo[b]fluoranthene	0.6 ug/mL
							Benzo[g,h,i]perylene	0.6 ug/mL
							Benzo[k]fluoranthene	0.6 ug/mL
							Chrysene	0.6 ug/mL
							Dibenz(a,h)anthracene	0.6 ug/mL
							Fluoranthene	0.6 ug/mL
							Fluorene	0.6 ug/mL
							Indeno[1,2,3-cd]pyrene	0.6 ug/mL
							Naphthalene	0.6 ug/mL
							Phenanthrene	0.6 ug/mL
							Pyrene	0.6 ug/mL
.MS-SIMSL_00020	08/31/17	03/24/17	Methylene Chloride, Lot 138764	10 mL	MS-48925_00014	0.2 mL	2-Fluorobiphenyl (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20.02 ug/mL
							Terphenyl-d14 (Surr)	20.02 ug/mL
					MS-SIM SL_Stk_00017	1 mL	2-Methylnaphthalene	40 ug/mL
							1-Methylnaphthalene	20 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Chrysene	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL
							Pyrene	20 ug/mL
..MS-48925_00014	08/31/17		Supelco, Lot LC08783V		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ug/mL
							Nitrobenzene-d5 (Surr)	1001 ug/mL
							Terphenyl-d14 (Surr)	1001 ug/mL
..MS-SIM SL_Stk_00017	11/15/17	11/15/16	Methylene Chloride, Lot 138764	5 mL	MS-31010_00011	0.5 mL	2-Methylnaphthalene	400 ug/mL
					MS-31995_00004	0.5 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
...MS-31010_00011	03/31/19		Restek, Lot A0116027		(Purchased Reagent)		2-Methylnaphthalene	2000 ug/mL
...MS-31995_00004	10/31/18		Restek, Lot A092153		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
MS-SIMSL 1.2_00064	08/31/17	05/03/17	Methylene Chloride, Lot 138764	500 uL	MS-SIM IS_00029	50 uL	Acenaphthene-d10	0.6 ug/mL
							Chrysene-d12	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-SIMSL_00020	30 uL	2-Fluorobiphenyl (Surr)	1.2 ug/mL
							Nitrobenzene-d5 (Surr)	1.2012 ug/mL
							Terphenyl-d14 (Surr)	1.2012 ug/mL
							2-Methylnaphthalene	2.4 ug/mL
							1-Methylnaphthalene	1.2 ug/mL
							Acenaphthene	1.2 ug/mL
							Acenaphthylene	1.2 ug/mL
							Anthracene	1.2 ug/mL
							Benzo[a]anthracene	1.2 ug/mL
							Benzo[a]pyrene	1.2 ug/mL
							Benzo[b]fluoranthene	1.2 ug/mL
							Benzo[g,h,i]perylene	1.2 ug/mL
							Benzo[k]fluoranthene	1.2 ug/mL
							Chrysene	1.2 ug/mL
							Dibenz(a,h)anthracene	1.2 ug/mL
							Fluoranthene	1.2 ug/mL
							Fluorene	1.2 ug/mL
							Indeno[1,2,3-cd]pyrene	1.2 ug/mL
							Naphthalene	1.2 ug/mL
							Phenanthrene	1.2 ug/mL
							Pyrene	1.2 ug/mL
.MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
...MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.MS-SIMSL_00020	08/31/17	03/24/17	Methylene Chloride, Lot 138764	10 mL	MS-48925_00014	0.2 mL	2-Fluorobiphenyl (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20.02 ug/mL
							Terphenyl-d14 (Surr)	20.02 ug/mL
					MS-SIM SL_Stk_00017	1 mL	2-Methylnaphthalene	40 ug/mL
							1-Methylnaphthalene	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Chrysene	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL
							Pyrene	20 ug/mL
..MS-48925_00014	08/31/17		Supelco, Lot LC08783V		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ug/mL
							Nitrobenzene-d5 (Surr)	1001 ug/mL
							Terphenyl-d14 (Surr)	1001 ug/mL
..MS-SIM SL_Stk_00017	11/15/17	11/15/16	Methylene Chloride, Lot 138764	5 mL	MS-31010_00011	0.5 mL	2-Methylnaphthalene	400 ug/mL
					MS-31995_00004	0.5 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
...MS-31010_00011	03/31/19		Restek, Lot A0116027		(Purchased Reagent)		2-Methylnaphthalene	2000 ug/mL
...MS-31995_00004	10/31/18		Restek, Lot A092153		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
MS-SIMSL 2.5_00062	08/31/17	03/29/17	Methylene Chloride, Lot 138764	500 uL	MS-SIM IS_00029	50 uL	Acenaphthene-d10	0.6 ug/mL
							Chrysene-d12	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-SIMSL_00020	62.5 uL	2-Fluorobiphenyl (Surr)	2.5 ug/mL
							Nitrobenzene-d5 (Surr)	2.5025 ug/mL
							Terphenyl-d14 (Surr)	2.5025 ug/mL
							2-Methylnaphthalene	5 ug/mL
							1-Methylnaphthalene	2.5 ug/mL
							Acenaphthene	2.5 ug/mL
							Acenaphthylene	2.5 ug/mL
							Anthracene	2.5 ug/mL
							Benzo[a]anthracene	2.5 ug/mL
							Benzo[a]pyrene	2.5 ug/mL
							Benzo[b]fluoranthene	2.5 ug/mL
							Benzo[g,h,i]perylene	2.5 ug/mL
							Benzo[k]fluoranthene	2.5 ug/mL
							Chrysene	2.5 ug/mL
							Dibenz(a,h)anthracene	2.5 ug/mL
							Fluoranthene	2.5 ug/mL
							Fluorene	2.5 ug/mL
							Indeno[1,2,3-cd]pyrene	2.5 ug/mL
							Naphthalene	2.5 ug/mL
							Phenanthrene	2.5 ug/mL
							Pyrene	2.5 ug/mL
.MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
...MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.MS-SIMSL_00020	08/31/17	03/24/17	Methylene Chloride, Lot 138764	10 mL	MS-48925_00014	0.2 mL	2-Fluorobiphenyl (Surr)	20 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent	Volume Added	Analyte	Concentration
							Nitrobenzene-d5 (Surr)	20.02 ug/mL
							Terphenyl-d14 (Surr)	20.02 ug/mL
					MS-SIM SL_Stk_00017	1 mL	2-Methylnaphthalene	40 ug/mL
							1-Methylnaphthalene	20 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Chrysene	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL
							Pyrene	20 ug/mL
..MS-48925_00014	08/31/17		Supelco, Lot LC08783V		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ug/mL
							Nitrobenzene-d5 (Surr)	1001 ug/mL
							Terphenyl-d14 (Surr)	1001 ug/mL
..MS-SIM SL_Stk_00017	11/15/17	11/15/16	Methylene Chloride, Lot 138764	5 mL	MS-31010_00011	0.5 mL	2-Methylnaphthalene	400 ug/mL
					MS-31995_00004	0.5 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
...MS-31010_00011	03/31/19		Restek, Lot A0116027		(Purchased Reagent)		2-Methylnaphthalene	2000 ug/mL
...MS-31995_00004	10/31/18		Restek, Lot A092153		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
MS-SIMSL 5_00063	08/31/17	03/29/17	Methylene Chloride, Lot 138764	500 uL	MS-SIM IS_00029	50 uL	Acenaphthene-d10	0.6 ug/mL
							Chrysene-d12	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-SIMSL_00020	125 uL	2-Fluorobiphenyl (Surr)	5 ug/mL
							Nitrobenzene-d5 (Surr)	5.005 ug/mL
							Terphenyl-d14 (Surr)	5.005 ug/mL
							2-Methylnaphthalene	10 ug/mL
							1-Methylnaphthalene	5 ug/mL
							Acenaphthene	5 ug/mL
							Acenaphthylene	5 ug/mL
							Anthracene	5 ug/mL
							Benzo[a]anthracene	5 ug/mL
							Benzo[a]pyrene	5 ug/mL
							Benzo[b]fluoranthene	5 ug/mL
							Benzo[g,h,i]perylene	5 ug/mL
							Benzo[k]fluoranthene	5 ug/mL
							Chrysene	5 ug/mL
							Dibenz(a,h)anthracene	5 ug/mL
							Fluoranthene	5 ug/mL
							Fluorene	5 ug/mL
							Indeno[1,2,3-cd]pyrene	5 ug/mL
							Naphthalene	5 ug/mL
							Phenanthrene	5 ug/mL
							Pyrene	5 ug/mL
.MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL
..MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
...MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.MS-SIMSL_00020	08/31/17	03/24/17	Methylene Chloride, Lot 138764	10 mL	MS-48925_00014	0.2 mL	2-Fluorobiphenyl (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20.02 ug/mL
							Terphenyl-d14 (Surr)	20.02 ug/mL
					MS-SIM SL_Stk_00017	1 mL	2-Methylnaphthalene	40 ug/mL
							1-Methylnaphthalene	20 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Chrysene	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL
							Pyrene	20 ug/mL
..MS-48925_00014	08/31/17		Supelco, Lot LC08783V		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ug/mL
							Nitrobenzene-d5 (Surr)	1001 ug/mL
							Terphenyl-d14 (Surr)	1001 ug/mL
..MS-SIM SL_Stk_00017	11/15/17	11/15/16	Methylene Chloride, Lot 138764	5 mL	MS-31010_00011	0.5 mL	2-Methylnaphthalene	400 ug/mL
					MS-31995_00004	0.5 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
...MS-31010_00011	03/31/19		Restek, Lot A0116027		(Purchased Reagent)		2-Methylnaphthalene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
...MS-31995_00004	10/31/18		Restek, Lot A092153		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
MS-SIMX 10_00055	08/31/17	03/29/17	Methylene Chloride, Lot 138764	500 uL	MS-SIM IS_00029	50 uL	Acenaphthene-d10	0.6 ug/mL
							Chrysene-d12	0.6 ug/mL
							Phenanthrene-d10	0.6 ug/mL
					MS-SIMSL_00020	250 uL	2-Fluorobiphenyl (Surr)	10 ug/mL
							Nitrobenzene-d5 (Surr)	10.01 ug/mL
							Terphenyl-d14 (Surr)	10.01 ug/mL
							2-Methylnaphthalene	20 ug/mL
							1-Methylnaphthalene	10 ug/mL
							Acenaphthene	10 ug/mL
							Acenaphthylene	10 ug/mL
							Anthracene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	10 ug/mL
							Benzo[g,h,i]perylene	10 ug/mL
							Benzo[k]fluoranthene	10 ug/mL
							Chrysene	10 ug/mL
							Dibenz(a,h)anthracene	10 ug/mL
							Fluoranthene	10 ug/mL
							Fluorene	10 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Naphthalene	10 ug/mL
							Phenanthrene	10 ug/mL
							Pyrene	10 ug/mL
.MS-SIM IS_00029	11/11/17	01/18/17	Methylene Chloride, Lot 138764	100 mL	MS-IS_00012	1500 uL	Acenaphthene-d10	6 ug/mL
							Chrysene-d12	6 ug/mL
							Phenanthrene-d10	6 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent	Volume Added	Analyte	Concentration
..MS-IS_00012	11/11/17	11/11/16	Methylene Chloride, Lot 138764	250 mL	MS-567684_00019	50 mL	Acenaphthene-d10	400 ug/mL
							Chrysene-d12	400 ug/mL
							Phenanthrene-d10	400 ug/mL
...MS-567684_00019	07/31/20		Restek, Lot A0112833		(Purchased Reagent)		Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.MS-SIMSL_00020	08/31/17	03/24/17	Methylene Chloride, Lot 138764	10 mL	MS-48925_00014	0.2 mL	2-Fluorobiphenyl (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20.02 ug/mL
							Terphenyl-d14 (Surr)	20.02 ug/mL
					MS-SIM SL_Stk_00017	1 mL	2-Methylnaphthalene	40 ug/mL
							1-Methylnaphthalene	20 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Chrysene	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	20 ug/mL
							Pyrene	20 ug/mL
..MS-48925_00014	08/31/17		Supelco, Lot LC08783V		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ug/mL
							Nitrobenzene-d5 (Surr)	1001 ug/mL
							Terphenyl-d14 (Surr)	1001 ug/mL
..MS-SIM SL_Stk_00017	11/15/17	11/15/16	Methylene Chloride, Lot 138764	5 mL	MS-31010_00011	0.5 mL	2-Methylnaphthalene	400 ug/mL
					MS-31995_00004	0.5 mL	1-Methylnaphthalene	200 ug/mL
							2-Methylnaphthalene	400 ug/mL
							Acenaphthene	200 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	200 ug/mL
							Benzo[a]anthracene	200 ug/mL
							Benzo[a]pyrene	200 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	200 ug/mL
							Chrysene	200 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent: Reagent ID	Parent Reagent: Volume Added	Analyte	Concentration
							Indeno[1,2,3-cd]pyrene	200 ug/mL
							Naphthalene	200 ug/mL
							Phenanthrene	200 ug/mL
							Pyrene	200 ug/mL
...MS-31010_00011	03/31/19		Restek, Lot A0116027		(Purchased Reagent)		2-Methylnaphthalene	2000 ug/mL
...MS-31995_00004	10/31/18		Restek, Lot A092153		(Purchased Reagent)		1-Methylnaphthalene	2000 ug/mL
							2-Methylnaphthalene	2000 ug/mL
							Acenaphthene	2000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	2000 ug/mL
							Benzo[a]anthracene	2000 ug/mL
							Benzo[a]pyrene	2000 ug/mL
							Benzo[b]fluoranthene	2000 ug/mL
							Benzo[g,h,i]perylene	2000 ug/mL
							Benzo[k]fluoranthene	2000 ug/mL
							Chrysene	2000 ug/mL
							Dibenz(a,h)anthracene	2000 ug/mL
							Fluoranthene	2000 ug/mL
							Fluorene	2000 ug/mL
							Indeno[1,2,3-cd]pyrene	2000 ug/mL
							Naphthalene	2000 ug/mL
							Phenanthrene	2000 ug/mL
							Pyrene	2000 ug/mL
MV- MLE Gas_00022	11/30/17	05/31/17	P&T Methanol, Lot 127999	10 mL	MV-569722.sec_00003	0.8 mL	Bromomethane	200 ug/mL
							Butadiene	200 ug/mL
							Chloroethane	200 ug/mL
							Chloromethane	200 ug/mL
							Dichlorodifluoromethane	200 ug/mL
							Dichlorofluoromethane	200 ug/mL
							Trichlorofluoromethane	200 ug/mL
							Vinyl chloride	200 ug/mL
.MV-569722.sec_00003	11/30/18		RESTEK, Lot A0115484		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
MV-2cleve+AVA_00025	07/31/17	05/02/17	P&T Methanol, Lot 127999	10 mL	MV-568720_00016	202.5 uL	Acrolein	399.938 ug/mL
					MV-569723_00002	160 uL	2-Chloroethyl vinyl ether	40 ug/mL
					MV-569724_00008	160 uL	Vinyl acetate	80 ug/mL
.MV-568720_00016	09/30/17		RESTEK, Lot A0125560		(Purchased Reagent)		Acrolein	19750 ug/mL
.MV-569723_00002	11/30/18		RESTEK, Lot A0115628		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
.MV-569724_00008	07/31/17		RESTEK, Lot A0124520		(Purchased Reagent)		Vinyl acetate	5000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Parent Reagent Volume Added	Analyte	Concentration
MV-567649-D_00001	02/28/18		RESTEK, Lot A093504		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
MV-568718-D_00003	01/31/19		RESTEK, Lot A0100746		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
MV-AFC MLE_00051	10/17/17	04/17/17	P&T Methanol, Lot 147462	5 mL	MV-569720.sec_00002	500 uL	1,1,1,2-Tetrachloroethane	250 ug/mL
							1,1,1-Trichloroethane	250 ug/mL
							1,1,2,2-Tetrachloroethane	250 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	250 ug/mL
							1,1,2-Trichloroethane	250 ug/mL
							1,1-Dichloroethane	250 ug/mL
							1,1-Dichloroethene	250 ug/mL
							1,1-Dichloropropene	250 ug/mL
							1,2,3-Trichlorobenzene	250 ug/mL
							1,2,3-Trichloropropane	250 ug/mL
							1,2,4-Trichlorobenzene	250 ug/mL
							1,2,4-Trimethylbenzene	250 ug/mL
							1,2-Dibromo-3-Chloropropane	250 ug/mL
							1,2-Dibromoethane	250 ug/mL
							1,2-Dichlorobenzene	250 ug/mL
							1,2-Dichloroethane	250 ug/mL
							1,2-Dichloroethene, Total	250 ug/mL
							1,2-Dichloroethene, Total (URS)	500 ug/mL
							1,2-Dichloropropane	250 ug/mL
							1,3,5-Trimethylbenzene	250 ug/mL
							1,3-Dichlorobenzene	250 ug/mL
							1,3-Dichloropropane	250 ug/mL
							1,3-Dichloropropene, Total	500 ug/mL
							1,4-Dichlorobenzene	250 ug/mL
							1,4-Dioxane	5000 ug/mL
							2,2-Dichloropropane	250 ug/mL
							2-Chlorotoluene	250 ug/mL
							2-Methyl-2-propanol	2500 ug/mL
							3-Chloro-1-propene	250 ug/mL
							4-Chlorotoluene	250 ug/mL
							4-Isopropyltoluene	250 ug/mL
							Acrylonitrile	2500 ug/mL
							Benzene	250 ug/mL
							Bromobenzene	250 ug/mL
							Bromochloromethane	250 ug/mL
							Bromodichloromethane	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Bromoform	250 ug/mL
							Carbon disulfide	250 ug/mL
							Carbon tetrachloride	250 ug/mL
							Chlorobenzene	250 ug/mL
							Chloroform	250 ug/mL
							cis-1,2-Dichloroethene	250 ug/mL
							cis-1,3-Dichloropropene	250 ug/mL
							Cyclohexane	250 ug/mL
							Dibromochloromethane	250 ug/mL
							Dibromomethane	250 ug/mL
							Ethyl ether	250 ug/mL
							Ethyl methacrylate	250 ug/mL
							Ethylbenzene	250 ug/mL
							Hexachlorobutadiene	250 ug/mL
							Hexane	250 ug/mL
							Isobutyl alcohol	6250 ug/mL
							Isopropylbenzene	250 ug/mL
							m&p-Xylene	250 ug/mL
							m-Xylene	125 ug/mL
							Methyl acetate	1250 ug/mL
							Methyl iodide	250 ug/mL
							Methyl tert-butyl ether	250 ug/mL
							Methylcyclohexane	250 ug/mL
							Methylene Chloride	250 ug/mL
							n-Butylbenzene	250 ug/mL
							n-Heptane	250 ug/mL
							N-Propylbenzene	250 ug/mL
							Naphthalene	250 ug/mL
							o-Xylene	250 ug/mL
							p-Xylene	125 ug/mL
							sec-Butylbenzene	250 ug/mL
							Styrene	250 ug/mL
							tert-Butylbenzene	250 ug/mL
							Tetrachloroethene	250 ug/mL
							Tetrahydrofuran	500 ug/mL
							Toluene	250 ug/mL
							trans-1,2-Dichloroethene	250 ug/mL
							trans-1,3-Dichloropropene	250 ug/mL
							trans-1,4-Dichloro-2-butene	250 ug/mL
							Trichloroethene	250 ug/mL
							Trihalomethanes, Total	1000 ug/mL
							Xylenes (total)	500 ug/mL
							Xylenes, Total (URS)	500 ug/mL
					MV-CUS22195.s_00001	1250 uL	1-Chlorohexane	250 ug/mL
							2-Pentanone	1000 ug/mL
							sec-Butyl Alcohol	7500 ug/mL
.MV-569720.sec_00002	07/31/18		RESTEK, Lot A0120604		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloroethene, Total	2500 ug/mL
							1,2-Dichloroethene, Total (URS)	5000 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,3-Dichloropropene, Total	5000 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m&p-Xylene	2500 ug/mL
							m-Xylene	1250 ug/mL
							Methyl acetate	12500 ug/mL
							Methyl iodide	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							p-Xylene	1250 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Trihalomethanes, Total	10000 ug/mL
							Xylenes (total)	5000 ug/mL
							Xylenes, Total (URS)	5000 ug/mL
.MV-CUS22195.s_00001	09/30/18		Ultra, Lot CP-4303		(Purchased Reagent)		1-Chlorohexane	1000 ug/mL
							2-Pentanone	4000 ug/mL
							sec-Butyl Alcohol	30000 ug/mL
MV-ARCH SS A_00081	10/24/17	04/25/17	P&T Methanol, Lot 127999	50 mL	MV-567650_00025	5 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL
							Toluene-d8 (Surr)	250 ug/mL
.MV-567650_00025	07/31/21		Restek, Lot A0120212		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
MV-ARCH SS A_00082	12/05/17	06/05/17	P&T Methanol, Lot 127999	50 mL	MV-567650_00025	5 mL	1,2-Dichloroethane-d4 (Surr)	250 ug/mL
							4-Bromofluorobenzene (Surr)	250 ug/mL
							Dibromofluoromethane (Surr)	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Toluene-d8 (Surr)	250 ug/mL
.MV-567650_00025	07/31/21		Restek, Lot A0120212		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
MV-Gas/Ket A_00060	10/25/17	04/25/17	P&T Methanol, Lot 127999	10 mL	MV-569721_00003	128 uL	2-Butanone (MEK)	160 ug/mL
							2-Hexanone	160 ug/mL
							4-Methyl-2-pentanone (MIBK)	160 ug/mL
							Acetone	160 ug/mL
					MV-569722_00005	160 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Dichlorodifluoromethane	40 ug/mL
							Dichlorofluoromethane	40 ug/mL
							Trichlorofluoromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
					MV-569727_00006	640 uL	Cyclohexanone	1600 ug/mL
.MV-569721_00003	11/30/18		RESTEK, Lot A0115554		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MV-569722_00005	11/30/19		RESTEK, Lot A0122964		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.MV-569727_00006	03/31/19		RESTEK, Lot A0118487		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
MV-Gas/Ket B_00034	10/25/17	04/25/17	P&T Methanol, Lot 127999	10 mL	MV-569721.sec_00004	128 uL	2-Butanone (MEK)	160 ug/mL
							2-Hexanone	160 ug/mL
							4-Methyl-2-pentanone (MIBK)	160 ug/mL
							Acetone	160 ug/mL
					MV-569722.sec_00003	160 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Dichlorodifluoromethane	40 ug/mL
							Trichlorofluoromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MV-569721.sec_00004	03/31/19		RESTEK, Lot A0118013		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MV-569722.sec_00003	11/30/18		RESTEK, Lot A0115484		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
MV-Gas/Ket B_00035	12/14/17	06/14/17	P&T Methanol, Lot 127999	10 mL	MV-569721.sec_00004	128 uL	2-Butanone (MEK)	160 ug/mL
							2-Hexanone	160 ug/mL
							4-Methyl-2-pentanone (MIBK)	160 ug/mL
							Acetone	160 ug/mL
					MV-569722.sec_00003	160 uL	Bromomethane	40 ug/mL
							Chloroethane	40 ug/mL
							Chloromethane	40 ug/mL
							Dichlorodifluoromethane	40 ug/mL
							Trichlorofluoromethane	40 ug/mL
							Vinyl chloride	40 ug/mL
.MV-569721.sec_00004	03/31/19		RESTEK, Lot A0118013		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MV-569722.sec_00003	11/30/18		RESTEK, Lot A0115484		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
MV-Main A_00030	10/02/17	04/02/17	P&T Methanol, Lot 147462	20 mL	MV-569720_00003	320 uL	1,1,1,2-Tetrachloroethane	40 ug/mL
							1,1,1-Trichloroethane	40 ug/mL
							1,1,2,2-Tetrachloroethane	40 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	40 ug/mL
							1,1,2-Trichloroethane	40 ug/mL
							1,1-Dichloroethane	40 ug/mL
							1,1-Dichloroethene	40 ug/mL
							1,1-Dichloropropene	40 ug/mL
							1,2,3-Trichlorobenzene	40 ug/mL
							1,2,3-Trichloropropane	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2,4-Trimethylbenzene	40 ug/mL
							1,2-Dibromo-3-Chloropropane	40 ug/mL
							1,2-Dibromoethane	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Dichloroethane	40 ug/mL
							1,2-Dichloropropane	40 ug/mL
							1,3,5-Trimethylbenzene	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dichloropropane	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							1,4-Dioxane	800 ug/mL
							2,2-Dichloropropane	40 ug/mL
							2-Chlorotoluene	40 ug/mL
							2-Methyl-2-propanol	400 ug/mL
							3-Chloro-1-propene	40 ug/mL
							4-Chlorotoluene	40 ug/mL
							4-Isopropyltoluene	40 ug/mL
							Acrylonitrile	400 ug/mL
							Benzene	40 ug/mL
							Bromobenzene	40 ug/mL
							Bromochloromethane	40 ug/mL
							Bromodichloromethane	40 ug/mL
							Bromoform	40 ug/mL
							Carbon disulfide	40 ug/mL
							Carbon tetrachloride	40 ug/mL
							Chlorobenzene	40 ug/mL
							Chloroform	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL
							cis-1,3-Dichloropropene	40 ug/mL
							Cyclohexane	40 ug/mL
							Dibromochloromethane	40 ug/mL
							Dibromomethane	40 ug/mL
							Ethyl ether	40 ug/mL
							Ethyl methacrylate	40 ug/mL
							Ethylbenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Hexane	40 ug/mL
							Isobutyl alcohol	1000 ug/mL
							Isopropylbenzene	40 ug/mL
							m&p-Xylene	40 ug/mL
							Methyl acetate	200 ug/mL
							Methyl iodide	40 ug/mL
							Methyl tert-butyl ether	40 ug/mL
							Methylcyclohexane	40 ug/mL
							Methylene Chloride	40 ug/mL
							n-Butylbenzene	40 ug/mL
							N-Propylbenzene	40 ug/mL
							Naphthalene	40 ug/mL
							o-Xylene	40 ug/mL
							sec-Butylbenzene	40 ug/mL
							Styrene	40 ug/mL
							tert-Butylbenzene	40 ug/mL
							Tetrachloroethene	40 ug/mL
							Tetrahydrofuran	80 ug/mL
							Toluene	40 ug/mL
							trans-1,2-Dichloroethene	40 ug/mL
							trans-1,3-Dichloropropene	40 ug/mL
							trans-1,4-Dichloro-2-butene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent: Reagent ID	Parent Reagent: Volume Added	Analyte	Concentration
							Trichloroethene	40 ug/mL
					MV-CUS22195_00001	400 uL	1-Chlorohexane	20 ug/mL
							2-Pentanone	80 ug/mL
							sec-Butyl Alcohol	600 ug/mL
.MV-569720_00003	03/31/18		RESTEK, Lot A0118177		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent: Reagent ID	Parent Reagent: Volume Added	Analyte	Concentration
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m&p-Xylene	2500 ug/mL
							Methyl acetate	12500 ug/mL
							Methyl iodide	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
.MV-CUS22195_00001	09/30/18		Ultra, Lot CP-4302		(Purchased Reagent)		1-Chlorohexane	1000 ug/mL
							2-Pentanone	4000 ug/mL
							sec-Butyl Alcohol	30000 ug/mL
MV-Main A_00030	10/02/17	04/02/17	P&T Methanol, Lot 147462	20 mL	MV-569720_00003	320 uL	1,2-Dichloroethene, Total	80 ug/mL
							Xylenes (total)	80 ug/mL
.MV-569720_00003	03/31/18		RESTEK, Lot A0118177		(Purchased Reagent)		1,2-Dichloroethene, Total	5000 ug/mL
							Xylenes (total)	5000 ug/mL
MV-Main A_00031	12/21/17	06/21/17	P&T Methanol, Lot 127999	20 mL	MV-569720_00003	320 uL	1,1,1,2-Tetrachloroethane	40 ug/mL
							1,1,1-Trichloroethane	40 ug/mL
							1,1,2,2-Tetrachloroethane	40 ug/mL
							1,1,2-Trichloroethane	40 ug/mL
							1,1-Dichloroethane	40 ug/mL
							1,1-Dichloroethene	40 ug/mL
							1,1-Dichloropropene	40 ug/mL
							1,2,3-Trichlorobenzene	40 ug/mL
							1,2,3-Trichloropropane	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2,4-Trimethylbenzene	40 ug/mL
							1,2-Dibromo-3-Chloropropane	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							1,2-Dibromoethane	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Dichloroethane	40 ug/mL
							1,2-Dichloroethene, Total	80 ug/mL
							1,2-Dichloropropane	40 ug/mL
							1,3,5-Trimethylbenzene	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dichloropropane	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							2,2-Dichloropropane	40 ug/mL
							2-Chlorotoluene	40 ug/mL
							4-Chlorotoluene	40 ug/mL
							4-Isopropyltoluene	40 ug/mL
							Benzene	40 ug/mL
							Bromobenzene	40 ug/mL
							Bromochloromethane	40 ug/mL
							Bromodichloromethane	40 ug/mL
							Bromoform	40 ug/mL
							Carbon disulfide	40 ug/mL
							Carbon tetrachloride	40 ug/mL
							Chlorobenzene	40 ug/mL
							Chloroform	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL
							cis-1,3-Dichloropropene	40 ug/mL
							Dibromochloromethane	40 ug/mL
							Dibromomethane	40 ug/mL
							Ethylbenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Isopropylbenzene	40 ug/mL
							m&p-Xylene	40 ug/mL
							Methyl iodide	40 ug/mL
							Methyl tert-butyl ether	40 ug/mL
							Methylene Chloride	40 ug/mL
							n-Butylbenzene	40 ug/mL
							N-Propylbenzene	40 ug/mL
							Naphthalene	40 ug/mL
							o-Xylene	40 ug/mL
							sec-Butylbenzene	40 ug/mL
							Styrene	40 ug/mL
							tert-Butylbenzene	40 ug/mL
							Tetrachloroethene	40 ug/mL
							Toluene	40 ug/mL
							trans-1,2-Dichloroethene	40 ug/mL
							trans-1,3-Dichloropropene	40 ug/mL
							Trichloroethene	40 ug/mL
							Xylenes (total)	80 ug/mL
.MV-569720_00003	03/31/18		RESTEK, Lot A0118177		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloroethene, Total	5000 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m&p-Xylene	2500 ug/mL
							Methyl iodide	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes (total)	5000 ug/mL
MV-Main B_00017	07/23/17	01/23/17	P&T Methanol, Lot 127999	20 mL	MV-569720.sec_00002	320 uL	1,1,1,2-Tetrachloroethane	40 ug/mL
							1,1,1-Trichloroethane	40 ug/mL
							1,1,2,2-Tetrachloroethane	40 ug/mL
							1,1,2-Trichloroethane	40 ug/mL
							1,1-Dichloroethane	40 ug/mL
							1,1-Dichloroethene	40 ug/mL
							1,1-Dichloropropene	40 ug/mL
							1,2,3-Trichlorobenzene	40 ug/mL
							1,2,3-Trichloropropane	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2,4-Trimethylbenzene	40 ug/mL
							1,2-Dibromo-3-Chloropropane	40 ug/mL
							1,2-Dibromoethane	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Dichloroethane	40 ug/mL
							1,2-Dichloroethene, Total	40 ug/mL
							1,2-Dichloropropane	40 ug/mL
							1,3,5-Trimethylbenzene	40 ug/mL
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dichloropropane	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							2,2-Dichloropropane	40 ug/mL
							2-Chlorotoluene	40 ug/mL
							4-Chlorotoluene	40 ug/mL
							4-Isopropyltoluene	40 ug/mL
							Benzene	40 ug/mL
							Bromobenzene	40 ug/mL
							Bromochloromethane	40 ug/mL
							Bromodichloromethane	40 ug/mL
							Bromoform	40 ug/mL
							Carbon disulfide	40 ug/mL
							Carbon tetrachloride	40 ug/mL
							Chlorobenzene	40 ug/mL
							Chloroform	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL
							cis-1,3-Dichloropropene	40 ug/mL
							Dibromochloromethane	40 ug/mL
							Dibromomethane	40 ug/mL
							Ethylbenzene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Parent Reagent Volume Added	Analyte	Concentration
							Hexachlorobutadiene	40 ug/mL
							Isopropylbenzene	40 ug/mL
							m&p-Xylene	40 ug/mL
							Methyl iodide	40 ug/mL
							Methyl tert-butyl ether	40 ug/mL
							Methylene Chloride	40 ug/mL
							n-Butylbenzene	40 ug/mL
							N-Propylbenzene	40 ug/mL
							Naphthalene	40 ug/mL
							o-Xylene	40 ug/mL
							sec-Butylbenzene	40 ug/mL
							Styrene	40 ug/mL
							tert-Butylbenzene	40 ug/mL
							Tetrachloroethene	40 ug/mL
							Toluene	40 ug/mL
							trans-1,2-Dichloroethene	40 ug/mL
							trans-1,3-Dichloropropene	40 ug/mL
							Trichloroethene	40 ug/mL
							Xylenes (total)	80 ug/mL
.MV-569720.sec_00002	07/31/18		RESTEK, Lot A0120604		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloroethene, Total	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m&p-Xylene	2500 ug/mL
							Methyl iodide	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes (total)	5000 ug/mL
MV-Main B_00018	11/28/17	05/28/17	P&T Methanol, Lot 127999	20 mL	MV-569720.sec_00002	320 uL	1,1,1,2-Tetrachloroethane	40 ug/mL
							1,1,1-Trichloroethane	40 ug/mL
							1,1,2,2-Tetrachloroethane	40 ug/mL
							1,1,2-Trichloroethane	40 ug/mL
							1,1-Dichloroethane	40 ug/mL
							1,1-Dichloroethene	40 ug/mL
							1,1-Dichloropropene	40 ug/mL
							1,2,3-Trichlorobenzene	40 ug/mL
							1,2,3-Trichloropropane	40 ug/mL
							1,2,4-Trichlorobenzene	40 ug/mL
							1,2,4-Trimethylbenzene	40 ug/mL
							1,2-Dibromo-3-Chloropropane	40 ug/mL
							1,2-Dibromoethane	40 ug/mL
							1,2-Dichlorobenzene	40 ug/mL
							1,2-Dichloroethane	40 ug/mL
							1,2-Dichloroethene, Total	40 ug/mL
							1,2-Dichloropropane	40 ug/mL
							1,3,5-Trimethylbenzene	40 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							1,3-Dichlorobenzene	40 ug/mL
							1,3-Dichloropropane	40 ug/mL
							1,4-Dichlorobenzene	40 ug/mL
							2,2-Dichloropropane	40 ug/mL
							2-Chlorotoluene	40 ug/mL
							4-Chlorotoluene	40 ug/mL
							4-Isopropyltoluene	40 ug/mL
							Benzene	40 ug/mL
							Bromobenzene	40 ug/mL
							Bromochloromethane	40 ug/mL
							Bromodichloromethane	40 ug/mL
							Bromoform	40 ug/mL
							Carbon disulfide	40 ug/mL
							Carbon tetrachloride	40 ug/mL
							Chlorobenzene	40 ug/mL
							Chloroform	40 ug/mL
							cis-1,2-Dichloroethene	40 ug/mL
							cis-1,3-Dichloropropene	40 ug/mL
							Dibromochloromethane	40 ug/mL
							Dibromomethane	40 ug/mL
							Ethylbenzene	40 ug/mL
							Hexachlorobutadiene	40 ug/mL
							Isopropylbenzene	40 ug/mL
							m&p-Xylene	40 ug/mL
							Methyl iodide	40 ug/mL
							Methyl tert-butyl ether	40 ug/mL
							Methylene Chloride	40 ug/mL
							n-Butylbenzene	40 ug/mL
							N-Propylbenzene	40 ug/mL
							Naphthalene	40 ug/mL
							o-Xylene	40 ug/mL
							sec-Butylbenzene	40 ug/mL
							Styrene	40 ug/mL
							tert-Butylbenzene	40 ug/mL
							Tetrachloroethene	40 ug/mL
							Toluene	40 ug/mL
							trans-1,2-Dichloroethene	40 ug/mL
							trans-1,3-Dichloropropene	40 ug/mL
							Trichloroethene	40 ug/mL
							Xylenes (total)	80 ug/mL
.MV-569720.sec_00002	07/31/18		RESTEK, Lot A0120604		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloroethene, Total	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Dibromochloromethane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m&p-Xylene	2500 ug/mL
							Methyl iodide	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent ID	Volume Added	Analyte	Concentration
							Trichloroethene	2500 ug/mL
							Xylenes (total)	5000 ug/mL
MV-MLE KETONE_00036	06/30/17	02/20/17	P&T Methanol, Lot 147462	10 mL	MV-569721.sec_00003	0.8 mL	2-Butanone (MEK)	1000 ug/mL
							2-Hexanone	1000 ug/mL
							4-Methyl-2-pentanone (MIBK)	1000 ug/mL
							Acetone	1000 ug/mL
					MV-569724.sec_00010	0.5 mL	Vinyl acetate	250 ug/mL
.MV-569721.sec_00003	07/31/18		RESTEK, Lot A0112937		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
.MV-569724.sec_00010	06/30/17		RESTEK, Lot A0123671		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
MV-SS 2-Cleve_00035	07/31/17	05/02/17	P&T Methanol, Lot 127999	10 mL	MV-569724.sec_00011	160 uL	Vinyl acetate	80 ug/mL
.MV-569724.sec_00011	07/31/17		RESTEK, Lot A0122475		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
MV-Supp A_00023	05/31/17	01/26/17	P&T Methanol, Lot 12799	10 mL	mv-569728_00002	160 uL	Acetonitrile	400 ug/mL
							Ethanol	1600 ug/mL
							Isopropyl ether	40 ug/mL
							Propionitrile	400 ug/mL
							Tert-amyl methyl ether	40 ug/mL
							Tert-butyl ethyl ether	40 ug/mL
					mv-570808_00001	160 uL	1,2,3-Trimethylbenzene	40 ug/mL
							2-Chloro-1,3-butadiene	40 ug/mL
							2-Nitropropane	80 ug/mL
							Isopropyl alcohol	400 ug/mL
							Methacrylonitrile	400 ug/mL
							n-Butanol	1000 ug/mL
					mv-570809_00001	160 uL	Ethyl acetate	80 ug/mL
							Methyl methacrylate	80 ug/mL
					mv-VO-TAOH-5_00001	800 uL	cis-1,4-Dichloro-2-butene	80 ug/mL
.mv-569728_00002	10/31/17		RESTEK, Lot A0114666		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Ethanol	100000 ug/mL
							Isopropyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
							Tert-butyl ethyl ether	2500 ug/mL
.mv-570808_00001	06/30/17		Restek, Lot A0116135		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							2-Chloro-1,3-butadiene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Isopropyl alcohol	25000 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
.mv-570809_00001	06/30/17		Restek, Lot A0116080		(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
.mv-VO-TAOH-5_00001	05/31/17		SPEX, Lot BW160504027		(Purchased Reagent)		cis-1,4-Dichloro-2-butene	1000 ug/mL
MV-Supp A_00024	08/15/17	05/26/17	P&T Methanol, Lot 12799	10 mL	mv-569728_00002	240 uL	Acetonitrile	600 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent Reagent ID	Volume Added	Analyte	Concentration
							Ethanol	2400 ug/mL
							Isopropyl ether	60 ug/mL
							Propionitrile	600 ug/mL
							Tert-amyl methyl ether	60 ug/mL
							Tert-butyl ethyl ether	60 ug/mL
					mv-570808_00002	160 uL	1,2,3-Trimethylbenzene	40 ug/mL
							2-Chloro-1,3-butadiene	40 ug/mL
							2-Nitropropane	80 ug/mL
							Isopropyl alcohol	400 ug/mL
							Methacrylonitrile	400 ug/mL
							n-Butanol	1000 ug/mL
					mv-570809_00002	160 uL	Ethyl acetate	80 ug/mL
							Methyl methacrylate	80 ug/mL
					mv-VO-TAOH-5_00002	800 uL	cis-1,4-Dichloro-2-butene	80 ug/mL
.mv-569728_00002	10/31/17		RESTEK, Lot A0114666		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Ethanol	100000 ug/mL
							Isopropyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
							Tert-butyl ethyl ether	2500 ug/mL
.mv-570808_00002	08/31/18		Restek, Lot A0123685		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							2-Chloro-1,3-butadiene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Isopropyl alcohol	25000 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
.mv-570809_00002	01/31/18		Restek, Lot A0120639		(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
.mv-VO-TAOH-5_00002	08/15/17		SPEX, Lot BW170216009		(Purchased Reagent)		cis-1,4-Dichloro-2-butene	1000 ug/mL
MV-Supp B_00015	05/31/17	01/31/17	P&T Methanol, Lot 127999	10 mL	mv-569728.sec_00002	160 uL	Isopropyl ether	40 ug/mL
.mv-569728.sec_00002	05/31/17		RESTEK, Lot A0108248		(Purchased Reagent)		Isopropyl ether	2500 ug/mL
MV-Supp B_00016	06/30/17	05/31/17	P&T Methanol, Lot 127999	10 mL	mv-571993.sec_00001	160 uL	Isopropyl ether	40 ug/mL
.mv-571993.sec_00001	12/31/18		RESTEK, Lot A0123771		(Purchased Reagent)		Isopropyl ether	2500 ug/mL

Reagent

1000 Ag_00010

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures 300 Technology Drive Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 11, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- May 11, 2020

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

James King Jr
Product Documentation Supervisor

Certificate Approved By:

Michael Booth
QC Supervisor

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAG1
Lot Number:	K2AG03062
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Silver
Starting Material:	Ag shot
Starting Material Lot#:	2042
Starting Material Purity:	99.9993%

4318902
ID: 1000 Ag_00010
Exp: 05/11/20 Prpd: SJS
1000 Ag IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1000 ± 6 µg/mL

Certified Density: 1.026 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1	**1000 ± 4 µg/mL** ICP Assay NIST SRM 3151 Lot Number: 992212
Assay Method #2	**1000 ± 3 µg/mL** Volhard NIST SRM 999c Lot Number: 999c

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\ (u_{char\ a})^2 + (w_b)^2\ (u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the tenn 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

s	Ag	<		M	Eu	<	0.000247	O	Na		0.001171	M	Se	<	0.006432	O	Zn		0.000694
O	Al		0.000170	O	Fe		0.000383	M	Nb	<	0.001484	O	Si		0.001631	M	Zr	<	0.000247
M	As	<	0.000989	M	Ga	<	0.000247	M	Nd	<	0.000247	M	Sm	<	0.000247				
M	Au	<	0.002212	M	Gd	<	0.000247	O	Ni		0.000198	M	Sn		0.000270				
O	B		0.000330	M	Ge	<	0.000247	M	Os	<	0.000245	M	Sr	<	0.000247				
M	Ba	<	0.000247	M	Hf	<	0.000247	O	P	<	0.016678	M	Ta	<	0.000247				
O	Be	<	0.000211	M	Hg	<	0.001966	M	Pb		0.000343	M	Tb	<	0.000247				
M	Bi	<	0.004948	M	Ho	<	0.000247	M	Pd	<	0.000737	M	Te	<	0.002721				
O	Ca		0.000751	M	In		0.000072	M	Pr	<	0.000247	M	Th	<	0.000247				
M	Cd	<	0.000247	M	Ir	<	0.000245	M	Pt	<	0.002474	O	Ti	<	0.000626				
M	Ce	<	0.000247	O	K		0.000369	M	Rb	<	0.000247	M	Tl	<	0.002969				
M	Co	<	0.000247	M	La	<	0.000247	M	Re	<	0.000247	M	Tm	<	0.000247				
M	Cr	<	0.000989	O	Li		0.000013	M	Rh	<	0.000247	M	U	<	0.000247				
M	Cs	<	0.000247	M	Lu	<	0.000247	M	Ru	<	0.000737	M	V	<	0.000494				
O	Cu		0.000488	O	Mg		0.000102	O	S	<	0.021140	M	W	<	0.004948				
M	Dy	<	0.000247	M	Mn	<	0.000494	M	Sb	<	0.009896	M	Y	<	0.000247				
M	Er	<	0.000247	O	Mo	<	0.001099	O	Sc	<	0.000127	M	Yb	<	0.000247				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 107.87 +1 6 Ag(H2O)6+
Chemical Compatibility -Stable in HNO3, and HF. Avoid basic media. Ag forms more insoluble salts than any other metal. It also is subject to photochemical reduction to the metal in HCl media although 10 µg/mL solutions in 10% HCl [AgClx1-x] are commonly used in the analytical laboratory. The most common solubility problems exist with arsenate, arsenite , bromide, chloride, iodide, carbonate , chromate, cyanide, iodate, oxalate, oxide, sulfate, sulfide, tartrate, and thiocyanate in aqueous media. The addition of nitric acid renders many of these salts soluble.
Stability - 2-100 ppb levels stable for 75+ days when mixed with equivalent levels of all other elements including the precious metals (where chloride is present) when in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
Ag Containing Samples (Preparation and Solution) -Metal (Soluble in HNO3); Oxides (Soluble in HNO3); Ores (Digestion with conc. HNO3).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 107 amu	1 ppt	N/A	91Zr16O
ICP-OES 243.779 nm	0.12/0.01 µg/mL	1	Mn, Th, Ni, Rh
ICP-OES 328.068 nm	0.007/0.0007 µg/mL	1	Ce, Rh, V
ICP-OES 338.289 nm	0.013/0.001 µg/mL	1	Ce, Cr, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

Reagent

1000 As_00017

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also a n ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAS1
Lot Number:	K2-AS650402
Matrix:	2% (v/v) HNO_3
Value / Analyte(s):	1 000 µg/mL ea: Arsenic
Starting Material:	As Pieces
Starting Material Lot#:	1851
Starting Material Purity:	99.9992%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1000 ± 6 µg/mL

Certified Density: 1.010 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1 **1000 ± 4 µg/mL**
ICP Assay NIST SRM 3103a Lot Number: 100818

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\ (u_{char\ a})^2 + (w_b)^2\ (u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.004098	M	Eu	<	0.000512	O	Na		0.001457	O	Se	<	0.032610	O	Zn		0.000102
O	Al		0.000296	O	Fe		0.000227	O	Nb	<	0.007609	O	Si		0.003552	M	Zr	<	0.002049
s	As	<		M	Ga	<	0.000512	M	Nd	<	0.000512	M	Sm	<	0.000512				
M	Au	<	0.000509	M	Gd	<	0.000512	O	Ni	<	0.003261	O	Sn	<	0.004348				
O	B	<	0.003261	M	Ge	<	0.003073	M	Os	<	0.000509	O	Sr	<	0.000326				
M	Ba	<	0.001024	M	Hf	<	0.000512	O	P	<	0.020653	M	Ta	<	0.000512				
O	Be	<	0.000086	M	Hg	<	0.000509	M	Pb	<	0.000512	M	Tb	<	0.000512				
M	Bi	<	0.000512	M	Ho	<	0.000512	M	Pd	<	0.002049	M	Te	<	0.004098				
O	Ca		0.001981	M	In	<	0.009220	M	Pr	<	0.000512	M	Th	<	0.000512				
M	Cd	<	0.000512	M	Ir	<	0.000509	M	Pt	<	0.000512	O	Ti		0.000045				
M	Ce	<	0.001024	O	K		0.000273	M	Rb	<	0.000512	M	Tl	<	0.000512				
M	Co	<	0.001024	M	La	<	0.000512	M	Re	<	0.001024	M	Tm	<	0.000512				
M	Cr		0.000042	O	Li		0.000004	M	Rh	<	0.000512	M	U	<	0.000512				
M	Cs	<	0.001024	M	Lu	<	0.000512	M	Ru	<	0.000509	M	V	<	0.001024				
M	Cu	<	0.001024	O	Mg		0.000227	O	S	<	0.217400	M	W	<	0.002049				
M	Dy	<	0.000512	O	Mn		0.000036	M	Sb	<	0.001024	M	Y	<	0.000512				
M	Er	<	0.000512	O	Mo	<	0.003261	O	Sc	<	0.000434	M	Yb	<	0.000512				

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.8739; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 12, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 12, 2020**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Brenda Francis
Product Documentation Technician

Certificate Approved By:

Michael Booth
Supervisor, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 74.92 ; mix of +3 and +5 ; 6 ; H3AsO4 and HAsO2

Chemical Compatibility - Arsenic has no cationic chemistry. It is soluble in HCl, HNO3,H3PO4, H2SO4 and HF aqueous matrices water and NH4OH . It is stable with most inorganic anions (forms arsenate when boiled with chromate) but many cationic metals form the insoluble arsenates under pH neutral conditions. When fluorinated and / or under acidic conditions arsenate formation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO3 / LDPE container.

As Containing Samples (Preparation and Solution) - Metal (soluble in 1:1 H2O / HNO3); Oxides (the oxide exists in crystalline and amorphous forms where the amorphic form is more water soluble. The oxides typically dissolve in dilute acidic solutions when boiled); Minerals (one gram of powered sample is fused in a Ni crucible with 10 grams of a 1:1 mix of K2CO3 and KNO3 and the melt extracted with hot water); Organic Matrices (0.2 to 0.5 grams of sample are fused with 15 grams of a 1:1 Na2CO3 / Na2O2 mix in a Ni crucible. The fuseate is extracted with water and acidified with HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 75 amu	20 ppt	N/A	40Ar35Cl, 59Co16O, 36Ar38Ar1H,8Ar37Cl,Ar39K, 150Nd2+,150Sm2+
ICP-OES 189.042 nm	0.05/0.005 µg/mL	1	Cr
ICP-OES 193.696 nm	0.1/0.01 µg/mL	1	V, Ge
ICP-OES 228.812 nm	0.1/0.01 µg/mL	1	Cd, Pt, Ir, Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

Reagent

1000 Pb_00019

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 19, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- April 19, 2020

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Certificate Approved By:

Michael Booth
QC Supervisor

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

ACCREDITED ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution	
Catalog Number:	CGPB1	
Lot Number:	K2-PB03074	
Matrix:	0.5% (v/v) HNO3	4005150
Value / Analyte(s):	1 000 µg/mL ea: Lead	ID: 1000 Pb_00019 Exp:07/19/17 Prpd:SJS Opn:07/19/16 1000 Pb IV
Starting Material:	Lead nitrate	
Starting Material Lot#:	1840 and 1908	
Starting Material Purity:	99.9994%	

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1003 ± 4 µg/mL

Certified Density: 1.002 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1 **1003 ± 3 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #2 **1003 ± 4 µg/mL**
ICP Assay NIST SRM 3128 Lot Number: 101026

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-FIlter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000304	M	Eu	<	0.000304	O	Na		0.000155	M	Se	<	0.006074	O	Zn	0.000324
O	Al		0.003025	O	Fe		0.000360	M	Nb	<	0.000304	O	Si		0.001008	M	Zr	< 0.000911
M	As	<	0.000607	M	Ga	<	0.000304	M	Nd	<	0.000304	M	Sm	<	0.000304			
M	Au	<	0.000611	M	Gd	<	0.000304	M	Ni	<	0.000607	M	Sn	<	0.000304			
O	B	<	0.000624	M	Ge	<	0.000304	M	Os	<	0.000306	O	Sr		0.000012			
O	Ba		0.000648	M	Hf	<	0.000304	O	P	<	0.020800	M	Ta	<	0.000304			
O	Be	<	0.000031	O	Hg	<	0.002080	s	Pb	<		M	Tb	<	0.000304			
O	Bi		0.002593	M	Ho	<	0.000304	M	Pd	<	0.000304	M	Te	<	0.003037			
O	Ca		0.000360	M	In	<	0.000304	M	Pr	<	0.000304	M	Th	<	0.004555			
O	Cd	<	0.000208	M	Ir	<	0.000306	M	Pt	<	0.000304	O	Ti		0.000115			
M	Ce	<	0.000304	O	K		0.000576	M	Rb	<	0.000304	M	Tl	<	0.003037			
M	Co	<	0.000304	M	La	<	0.000304	M	Re	<	0.000304	M	Tm	<	0.000304			
O	Cr	<	0.000520	O	Li	<	0.000416	O	Rh	<	0.010400	M	U	<	0.000304			
M	Cs		0.000168	M	Lu	<	0.000304	M	Ru	<	0.000306	M	V	<	0.000304			
M	Cu	<	0.000304	O	Mg		0.000043	O	S	<	0.010400	M	W	<	0.000304			
M	Dy	<	0.000304	M	Mn	<	0.000607	M	Sb	<	0.000304	M	Y	<	0.000304			
M	Er	<	0.000304	M	Mo	<	0.000304	M	Sc	<	0.000304	M	Yb	<	0.000304			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.20 +2 6 Pb(H2O)6+2
Chemical Compatibility - Soluble in HCl, HF and HNO3. Avoid H2SO4. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, sulfide, phosphate, oxalate, chromate, tannate, iodate, and cyanide in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Pb Containing Samples (Preparation and Solution) -Metal (Best dissolved in 1:1 H2O / HNO3); Oxides (The many different Pb oxides are soluble in HNO3 with the exception of PbO2 which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H2O / HNO3); Organic Matrices (Dry ash and dissolve in dilute HCl).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 208 amu	5 ppt	n/a	192Pt16O, 192Os16O
ICP-OES 168.215 nm	0.03 / 0.003 µg/mL	1	Co
ICP-OES 217.000 nm	0.09 / 0.03 µg/mL	1	W, Ir, Hf, Sb, Th
ICP-OES 220.353 nm	0.04 / 0.006 µg/mL	1	Bi, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

Reagent

1000 Pb_00020

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030; Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 19, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- April 19, 2020

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Certificate Approved By:

Michael Booth
QC Supervisor

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAi Global File Number 010105).

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGPB1
Lot Number:	K2-PB03074
Matrix:	0.5% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Lead
Starting Material:	Lead nitrate
Starting Material Lot#:	1840 and 1908
Starting Material Purity:	99.9994%

4158242
ID: 1000 Pb_00020
Exp. 04/19/20 Prpd: SJS
1000 Pb IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1003 ± 4 µg/mL

Certified Density: 1.002 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1 **1003 ± 3 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #2 **1003 ± 4 µg/mL**
ICP Assay NIST SRM 3128 Lot Number: 101026

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(x_a) + (w_b)(x_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000304	M	Eu	<	0.000304	O	Na		0.000155	M	Se	<	0.006074	O	Zn		0.000324
O	Al		0.003025	O	Fe		0.000360	M	Nb	<	0.000304	O	Si		0.001008	M	Zr	<	0.000911
M	As	<	0.000607	M	Ga	<	0.000304	M	Nd	<	0.000304	M	Sm	<	0.000304				
M	Au	<	0.000611	M	Gd	<	0.000304	M	Ni	<	0.000607	M	Sn	<	0.000304				
O	B	<	0.000624	M	Ge	<	0.000304	M	Os	<	0.000306	O	Sr		0.000012				
O	Ba		0.000648	M	Hf	<	0.000304	O	P	<	0.020800	M	Ta	<	0.000304				
O	Be	<	0.000031	O	Hg	<	0.002080	s	Pb	<		M	Tb	<	0.000304				
O	Bi		0.002593	M	Ho	<	0.000304	M	Pd	<	0.000304	M	Te	<	0.003037				
O	Ca		0.000360	M	In	<	0.000304	M	Pr	<	0.000304	M	Th	<	0.004555				
O	Cd	<	0.000208	M	Ir	<	0.000306	M	Pt	<	0.000304	O	Ti		0.000115				
M	Ce	<	0.000304	O	K		0.000576	M	Rb	<	0.000304	M	Tl	<	0.003037				
M	Co	<	0.000304	M	La	<	0.000304	M	Re	<	0.000304	M	Tm	<	0.000304				
O	Cr	<	0.000520	O	Li	<	0.000416	O	Rh	<	0.010400	M	U	<	0.000304				
M	Cs		0.000168	M	Lu	<	0.000304	M	Ru	<	0.000306	M	V	<	0.000304				
M	Cu	<	0.000304	O	Mg		0.000043	O	S	<	0.010400	M	W	<	0.000304				
M	Dy	<	0.000304	M	Mn	<	0.000607	M	Sb	<	0.000304	M	Y	<	0.000304				
M	Er	<	0.000304	M	Mo	<	0.000304	M	Sc	<	0.000304	M	Yb	<	0.000304				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.20 +2 6 $Pb(H_2O)_6^{+2}$

Chemical Compatibility - Soluble in HCl, HF and HNO_3. Avoid H_2SO_4. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, sulfide, phosphate, oxalate, chromate, tannate, iodate, and cyanide in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5 % HNO_3 / LDPE container.

Pb Containing Samples (Preparation and Solution) -Metal (Best dissolved in 1:1 H_2O / HNO_3); Oxides (The many different Pb oxides are soluble in HNO_3 with the exception of PbO_2 which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H_2O / HNO_3); Organic Matrices (Dry ash and dissolve in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 208 amu	5 ppt	n/a	$^{192}Pt^{16}O$, $^{192}Os^{16}O$
ICP-OES 168.215 nm	0.03 / 0.003 µg/mL	1	Co
ICP-OES 217.000 nm	0.09 / 0.03 µg/mL	1	W, Ir, Hf, Sb, Th
ICP-OES 220.353 nm	0.04 / 0.006 µg/mL	1	Bi, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAi Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

Reagent

1000 Sb_00015

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 21, 2015

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- July 21, 2018

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

Testing Laboratory Certificate 883.01 — Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSB1
Lot Number:	J2-SB03037
Matrix:	1% (v/v) HNO3 3% Tartaric Acid
Value / Analyte(s):	1 000 µg/mL ea: Sb
Starting Material:	Sb Metal
Starting Material Lot#:	1857
Starting Material Purity:	99.9898%

4005196
ID: 1000 Sb_00015
Exp:07/19/17 Prpd:SJS Opn:07/19/16
1000 Sb IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 7 µg/mL

Certified Density: 1.022 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1 — **996 ± 5 µg/mL**
ICP Assay NIST SRM 3102A Lot Number: 061229

Assay Method #2 — **1002 ± 5 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000101	M	Eu	<	0.000101	O	Na		0.007416	M	Se	<	0.003733	M	Zn		0.000243
O	Al		0.000971	O	Fe		0.002142	O	Nb	<	0.001814	O	Si		0.019082	M	Zr	<	0.001211
M	As	<	0.003228	M	Ga	<	0.000101	M	Nd	<	0.000101	M	Sm	<	0.000101				
M	Au	<	0.001994	M	Gd	<	0.000101	O	Ni		0.000525	M	Sn	<	0.001816				
O	B		0.003127	M	Ge	<	0.000807	M	Os	<	0.000100	O	Sr	<	0.000085				
O	Ba	<	0.001067	M	Hf	<	0.000101	O	P		0.006812	O	Ta	<	0.001014				
O	Be	<	0.000028	M	Hg	<	0.000299	M	Pb	<	0.000605	M	Tb	<	0.000101				
M	Bi	<	0.000101	M	Ho	<	0.000101	M	Pd	<	0.000202	M	Te	<	0.001110				
O	Ca		0.001111	M	In	<	0.000101	M	Pr	<	0.001009	M	Th	<	0.000101				
M	Cd	<	0.000101	M	Ir	<	0.000399	M	Pt	<	0.000101	O	Ti		0.001104				
O	Ce	<	0.007469	O	K		0.052182	M	Rb	<	0.002825	M	Tl	<	0.000101				
M	Co	<	0.000101	O	La	<	0.000760	M	Re	<	0.000101	M	Tm	<	0.000101				
O	Cr		0.010294	O	Li	<	0.000053	M	Rh	<	0.000101	M	U	<	0.000101				
M	Cs	<	0.002018	M	Lu	<	0.000101	M	Ru	<	0.000100	M	V	<	0.000101				
O	Cu	<	0.000598	O	Mg		0.000486	n	S	<		M	W	<	0.001009				
M	Dy	<	0.000404	O	Mn		0.000172	s	Sb	<		M	Y	<	0.000101				
M	Er	<	0.000101	M	Mo		0.000317	O	Sc	<	0.000049	O	Yb	<	0.000064				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference

n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 121.75 +3 6 Sb(O)C4H4O6-1

Chemical Compatibility -Stable in conc. HCl, dilute or conc. HF. Stable in dilute HNO3 as the fluoride or tartrate complex. Avoid basic media. Stable with most metals and inorganic anions in acidic media as the tartrate provided the acidity is not too high or the acid is oxidizing causing loss of the stabilizing tartrate ion. The fluoride complex of antimony is stable in strong acid but you should only mix with other metals that are fluorinated.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-2% HNO3 / LDPE container.

Sb Containing Samples (Preparation and Solution) -Metal and alloys (Soluble in H2O / HF / HNO3 mixture); Oxides (Soluble in HCl and tartaric acid or H2O / HF / HNO3 mixtures); Ores (fusion with Na2CO3 in Pt0 followed by dissolving the fuseate in a H2O / HF / HNO3 mixture); Organic based (sulfuric acid / hydrogen peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 121 amu	5 ppt	N/A	105Pd16O, 89Y16O2
ICP-OES 206.833 nm	0.03/0.003 µg/mL	1	Ta, Cr, Ge, Hf
ICP-OES 217.581 nm	0.05/0.005 µg/mL	1	Nb, W, Re, Fe
ICP-OES 231.147 nm	0.06/0.006 µg/mL	1	Ni, Co, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

Reagent

1000 Sb_00016

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA: Telephone: 800.669.6799, 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 01, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- July 01, 2020

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Joseph Burns
TSG Technician

Certificate Approved By:

Michael Booth
QC Supervisor

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01 — ACCREDITED ReferenceMaterial Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSB1
Lot Number:	K2-SB03048
Matrix:	1% (v/v) HNO_3 3% Tartaric Acid
Value / Analyte(s):	1 000 µg/mL ea: Antimony
Starting Material:	Sb Pieces
Starting Material Lot#:	1857/1647
Starting Material Purity:	99.9835%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1000 ± 8 µg/mL

Certified Density: 1.020 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1 **1000 ± 5 µg/mL**
ICP Assay NIST SRM 3102a Lot Number: 061229 Sb

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods **Characterization of CRM by one method**

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$
X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$
w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$
$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty
u_{lts} = long term stability standard uncertainty (storage)
u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty
u_{lts} = longterm stability standard uncertainty (storage)
u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000303	M	Eu	<	0.000404	O	Na		0.007895	M	Se	<	0.002022	O	Zn		0.000398
O	Al		0.001425	O	Fe		0.002492	M	Nb	<	0.001011	O	Si		0.035346	O	Zr	<	0.003088
M	As	<	0.003842	M	Ga	<	0.000101	M	Nd	<	0.000101	M	Sm	<	0.000202				
M	Au	<	0.001961	M	Gd	<	0.000101	O	Ni	<	0.011715	M	Sn	<	0.002629				
M	B		0.005849	M	Ge	<	0.000303	M	Os	<	0.000103	O	Sr	<	0.000198				
O	Ba	<	0.001065	M	Hf	<	0.000202	O	P		0.061438	M	Ta	<	0.002224				
M	Be	<	0.000404	M	Hg	<	0.000103	M	Pb	<	0.001618	M	Tb	<	0.000101				
M	Bi		0.000704	M	Ho	<	0.000101	M	Pd	<	0.000202	M	Te	<	0.001213				
O	Ca		0.001146	M	In	<	0.000101	M	Pr	<	0.001415	M	Th	<	0.000101				
M	Cd	<	0.000101	M	Ir	<	0.000103	M	Pt	<	0.000101	M	Ti		0.000652				
O	Ce	<	0.010490	O	K		0.047431	M	Rb	<	0.002831	M	Tl	<	0.000404				
O	Co	<	0.001160	O	La	<	0.002587	M	Re	<	0.000101	M	Tm	<	0.000101				
O	Cr		0.008875	O	Li		0.000016	M	Rh	<	0.000101	M	U	<	0.000101				
M	Cs	<	0.001011	M	Lu	<	0.000404	M	Ru	<	0.000103	M	V	<	0.000404				
M	Cu		0.000441	O	Mg		0.000330	n	S	<		M	W	<	0.000202				
M	Dy	<	0.003438	O	Mn		0.000152	s	Sb	<		M	Y	<	0.000101				
M	Er	<	0.000101	M	Mo	<	0.006269	O	Sc	<	0.000711	M	Yb	<	0.000101				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 121.75 +3 6 Sb(O)C4H4O6-1

Chemical Compatibility -Stable in conc. HCl, dilute or conc. HF. Stable in dilute HNO3 as the fluoride or tartrate complex. Avoid basic media. Stable with most metals and inorganic anions in acidic media as the tartrate provided the acidity is not too high or the acid is oxidizing causing loss of the stabilizing tartrate ion. The fluoride complex of antimony is stable in strong acid but you should only mix with other metals that are fluorinated.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-2% HNO3 / LDPE container.

Sb Containing Samples (Preparation and Solution) -Metal and alloys (Soluble in H2O / HF / HNO3 mixture); Oxides (Soluble in HCl and tartaric acid or H2O / HF / HNO3 mixtures); Ores (fusion with Na2CO3 in Pt0 followed by dissolving the fuseate in a H2O / HF / HNO3 mixture); Organic based (sulfuric acid / hydrogen peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 121 amu	5 ppt	N/A	105Pd16O, 89Y16O2
ICP-OES 206.833 nm	0.03/0.003 µg/mL	1	Ta, Cr, Ge, Hf
ICP-OES 217.581 nm	0.05/0.005 µg/mL	1	Nb, W, Re, Fe
ICP-OES 231.147 nm	0.06/0.006 µg/mL	1	Ni, Co, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

Reagent

1000 Se_00015

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 09, 2015

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 09, 2018

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Zach Saunders
Product Documentation Technician

Certificate Approved By:

Michael Booth
QC Supervisor

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSE(4)1
Lot Number:	J2-SE02058
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Se
Starting Material:	Se Shot
Starting Material Lot#:	1616
Starting Material Purity:	99.9995%

3895977
ID: 1000 Se_00015
Exp: 06/09/15 Prpd: SJS
1000 Se IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1002 ± 4 µg/mL - weighted mean

Certified Density: 1.011 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1	**1004 ± 4 µg/mL** ICP Assay NIST SRM 3149 Lot Number: 100901
Assay Method #2	**1000 ± 5 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag		0.000353	M	Eu	<	0.000370	O	Na		0.002152	s	Se	<		O	Zn		0.000073
O	Al	<	0.005555	O	Fe		0.000209	O	Nb	<	0.001667	O	Si		0.000530	O	Zr	<	0.001111
O	As	<	0.005555	M	Ga	<	0.000370	M	Nd	<	0.000370	M	Sm	<	0.000370				
M	Au	<	0.000370	M	Gd	<	0.000370	O	Ni	<	0.003333	O	Sn	<	0.003333				
M	B	<	0.007405	M	Ge	<	0.001851	n	Os	<		O	Sr	<	0.000078				
O	Ba	<	0.000333	M	Hf	<	0.001851	O	P	<	0.002222	M	Ta	<	0.001851				
O	Be	<	0.000100	O	Hg	<	0.002222	M	Pb	<	0.007405	M	Tb	<	0.000370				
O	Bi	<	0.006666	M	Ho	<	0.000370	M	Pd	<	0.003703	M	Te	<	0.037027				
O	Ca		0.000497	M	In	<	0.003703	M	Pr	<	0.000370	M	Th	<	0.003703				
O	Cd	<	0.000444	M	Ir	<	0.003703	M	Pt	<	0.007405	O	Ti	<	0.000444				
M	Ce	<	0.000370	O	K		0.000397	M	Rb	<	0.001111	M	Tl	<	0.000370				
O	Co	<	0.000889	M	La	<	0.000370	M	Re	<	0.000370	M	Tm	<	0.000370				
O	Cr	<	0.001667	O	Li	<	0.000067	M	Rh	<	0.000370	M	U	<	0.000370				
M	Cs	<	0.000370	M	Lu	<	0.000370	M	Ru	<	0.001851	M	V	<	0.000370				
O	Cu		0.000927	O	Mg		0.000073	O	S	<	0.007777	O	W	<	0.003333				
M	Dy	<	0.000370	O	Mn	<	0.000222	M	Sb	<	0.011108	M	Y	<	0.000370				
M	Er	<	0.000370	O	Mo	<	0.000556	O	Sc	<	0.000333	M	Yb	<	0.000370				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 78.96 +4 6 H2SeO3

Chemical Compatibility -Soluble in HCl, HNO3,H3PO4, H2SO4 and HF aqueous matrices and water. It is stable with most inorganic anions but many cationic metals form the insoluble selenites under pH neutral conditions. When fluorinated and/or under acidic conditions precipitation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Se Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (readily soluble in water); Minerals and alloys (acid digestion with HNO3or HNO3 / HF); Organic Matrices (acid digestion with hot concentrated H2SO4 accompanied by the careful dropwise addition of H2O2 until clear).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 82 amu	200 ppt	N/A	12C35Cl2
ICP-OES 196.026 nm	0.08/0.006 µg/mL	1	Fe
ICP-OES 203.985 nm	0.2/0.05 µg/mL	1	Sb, Ir, Cr, Ta
ICP-OES 206.279 nm	0.3/0.16 µg/mL	1	Cr, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

Reagent

1000 Se_00016

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 01, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 01, 2020**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Brenda Francis
Product Documentation Technician

Certificate Approved By:

Michael Booth
QC Supervisor

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSE(4)1
Lot Number:	K2-SE02067
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Selenium
Starting Material:	Se shot
Starting Material Lot#:	1616
Starting Material Purity:	99.9996%

4060891
ID: 1000 Se_00016
Exp: 06/01/20 Prpd: SJS
1000 Se IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1006 ± 6 µg/mL

Certified Density: 1.011 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1 **1006 ± 5 µg/mL**
ICP Assay NIST SRM 3149 Lot Number: 100901

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(x_a) + (w_b)(x_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM by one method

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.007579	M	Eu	<	0.011369	O	Na		0.002654	s	Se	<		O	Zn	<	0.000200
O	Al		0.000169	O	Fe		0.000199	O	Nb	<	0.004000	O	Si	<	0.003000	O	Zr	<	0.000400
O	As	<	0.005000	M	Ga	<	0.003789	M	Nd	<	0.007579	M	Sm	<	0.003789				
M	Au	<	0.011369	M	Gd	<	0.003789	O	Ni	<	0.000900	M	Sn	<	0.018949				
O	B		0.000690	M	Ge	<	0.022739	n	Os	<		M	Sr	<	0.001894				
M	Ba	<	0.037899	M	Hf	<	0.007579	O	P	<	0.003000	M	Ta	<	0.026529				
O	Be	<	0.000090	O	Hg	<	0.014000	M	Pb	<	0.011369	M	Tb	<	0.001136				
M	Bi	<	0.001515	M	Ho	<	0.001894	M	Pd	<	0.018949	M	Te	<	0.113699				
O	Ca		0.000437	M	In	<	0.037899	M	Pr	<	0.001136	M	Th	<	0.003789				
M	Cd	<	0.011369	M	Ir	<	0.018949	M	Pt	<	0.007579	M	Ti	<	0.189499				
M	Ce	<	0.018949	O	K		0.000212	M	Rb	<	0.003789	M	Tl	<	0.003789				
M	Co	<	0.011369	M	La	<	0.001894	O	Re	<	0.009000	M	Tm	<	0.001515				
M	Cr	<	0.018949	O	Li	<	0.000030	M	Rh	<	0.003789	M	U	<	0.007579				
M	Cs	<	0.001136	M	Lu	<	0.001515	O	Ru	<	0.007000	M	V	<	0.007579				
M	Cu	<	0.022739	O	Mg		0.000066	O	S	<	0.040000	M	W	<	0.037899				
M	Dy	<	0.022739	M	Mn	<	0.015159	M	Sb	<	0.001894	M	Y	<	0.151599				
M	Er	<	0.018949	O	Mo	<	0.004000	M	Sc	<	0.037899	M	Yb	<	0.003789				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 78.96 +4 6 H2SeO3

Chemical Compatibility -Soluble in HCl, HNO3,H3PO4, H2SO4 and HF aqueous matrices and water. It is stable with most inorganic anions but many cationic metals form the insoluble selenites under pH neutral conditions. When fluorinated and/or under acidic conditions precipitation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Se Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (readily soluble in water); Minerals and alloys (acid digestion with HNO3or HNO3 / HF); Organic Matrices (acid digestion with hot concentrated H2SO4 accompanied by the careful dropwise addition of H2O2 until clear).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 82 amu	200 ppt	N/A	12C35Cl2
ICP-OES 196.026 nm	0.08/0.006 µg/mL	1	Fe
ICP-OES 203.985 nm	0.2/0.05 µg/mL	1	Sb, Ir, Cr, Ta
ICP-OES 206.279 nm	0.3/0.16 µg/mL	1	Cr, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

Reagent

1000 T1_00015

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 24, 2015

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 24, 2018

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Zach Saunders
Product Documentation Technician

Certificate Approved By:

Michael Booth
QC Supervisor

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

INORGANIC VENTURES

Christiansburg, VA 24073 - USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

ACCREDITED ACCREDITED Reference Material Producer Certificate883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTL1
Lot Number:	J2-TL02025
Matrix:	0.7% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: TI
Starting Material:	TINO3
Starting Material Lot#:	1741 and 1793
Starting Material Purity:	99.9988%

3896978
ID: 1000 TI_00015
Exp: 06/24/16 Prpd: SJS
1000 TI

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 998 ± 6 µg/mL

Certified Density: 1.003 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1 **998 ± 5 µg/mL**
ICP Assay NIST SRM 3158 Lot Number: 993012

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM by one method

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-FIlter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag		0.000267	M	Eu	<	0.001195	O	Na		0.000939	M	Se	<	0.002988	O	Zn		0.000917
M	Al	<	0.007170	O	Fe		0.000345	M	Nb	<	0.000199	O	Si		0.000755	M	Zr	<	0.000199
M	As	<	0.002390	M	Ga	<	0.000199	M	Nd	<	0.000199	M	Sm	<	0.000199				
M	Au	<	0.001395	M	Gd	<	0.000199	O	Ni	<	0.000628	M	Sn	<	0.000398				
O	B	<	0.000647	M	Ge	<	0.000996	M	Os	<	0.000797	O	Sr		0.000016				
O	Ba	<	0.002092	M	Hf	<	0.000199	O	P	<	0.031380	M	Ta	<	0.000199				
O	Be	<	0.000084	O	Hg	<	0.003138	M	Pb		0.003339	M	Tb	<	0.000199				
M	Bi		0.000134	M	Ho	<	0.000199	M	Pd	<	0.001195	M	Te	<	0.001593				
O	Ca		0.001873	M	In	<	0.000199	M	Pr	<	0.000199	M	Th	<	0.000199				
M	Cd		0.000709	M	Ir	<	0.003188	M	Pt	<	0.000398	O	Ti	<	0.000209				
M	Ce	<	0.004780	O	K		0.002374	M	Rb	<	0.011950	s	Tl	<					
M	Co	<	0.000797	M	La	<	0.000797	M	Re	.	0.003843	M	Tm	<	0.000199				
M	Cr	<	0.000598	O	Li	<	0.000066	M	Rh	<	0.000199	M	U	<	0.000199				
M	Cs	<	0.005975	M	Lu	<	0.000199	M	Ru	<	0.000199	M	V	<	0.000199				
M	Cu		0.000370	O	Mg		0.000305	O	S	<	0.047818	M	W		0.000092				
M	Dy	<	0.000199	M	Mn	<	0.000199	M	Sb	<	0.000199	M	Y	<	0.000199				
M	Er	<	0.000199	M	Mo		0.000277	O	Sc	<	0.000146	M	Yb	<	0.000199				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 204.38 +1 6 Tl(H2O)61+
Chemical Compatibility - Soluble in HCl, HNO3, and H2SO4. Stable with most metals and inorganic anions. The sulfite, thiocyanate and oxalate are moderately soluble; the phosphate and arsenite are slightly soluble and the sulfide is insoluble.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Tl Containing Samples (Preparation and Solution) -Metal (Best dissolved in HNO3 which forms chiefly the Tl1+ ion.); Oxide (The thallous oxide is readily soluble in water. The thallic oxide requires high levels of acid); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in HCl).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 205 amu	2 ppt	N/A	189Os16O
ICP-OES 190.864 nm	0.04 / 0.004 µg/mL	1	V, Ti
ICP-OES 276.787 nm	0.1 / 0.01 µg/mL	1	Ta, V, Fe, Cr
ICP-OES 351.924 nm	0.2 / 0.02 µg/mL	1	Th, Ce, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

Reagent

1000 T1_00016

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 20, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- July 20, 2020

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Brenda Francis
Product Documentation Technician

Certificate Approved By:

Michael Booth
Supervisor, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 - USA
tel: 800.669.6799 - 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 886.01 — ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTL1
Lot Number:	K2-TL650335
Matrix:	1% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Thallium
Starting Material:	TlNO3
Starting Material Lot#:	1741 and 1793
Starting Material Purity:	99.9988%

4158240
ID: 1000 TL_00016
Exp: 07/20/20 Prod: SJS
1000 Tl

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value:	1003 ± 6 µg/mL
Certified Density:	1.004 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1	**1006 ± 6 µg/mL** ICP Assay NIST SRM 3158 Lot Number: 993012
Assay Method #2	**999 ± 7 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM by one method

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = longterm stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag		0.000268	M	Eu	<	0.001195	O	Na		0.000943	M	Se	<	0.002987	O	Zn		0.000920
M	Al	<	0.007170	O	Fe		0.000346	M	Nb	<	0.000199	O	Si		0.000758	M	Zr	<	0.000199
M	As	<	0.002390	M	Ga	<	0.000199	M	Nd	<	0.000199	M	Sm	<	0.000199				
M	Au	<	0.001394	M	Gd	<	0.000199	O	Ni	<	0.000627	M	Sn	<	0.000398				
O	B	<	0.000647	M	Ge	<	0.000995	M	Cs	<	0.000797	O	Sr		0.000016				
O	Ba	<	0.002092	M	Hf	<	0.000199	O	P	<	0.031380	M	Ta	<	0.000199				
O	Be	<	0.000083	O	Hg	<	0.003138	M	Pb		0.003352	M	Tb	<	0.000199				
M	Bi		0.000134	M	Ho	<	0.000199	M	Pd	<	0.001195	M	Te	<	0.001593				
O	Ca		0.001880	M	In	<	0.000199	M	Pr	<	0.000199	M	Th	<	0.000199				
M	Cd		0.000711	M	Ir	<	0.003188	M	Pt	<	0.000398	O	Ti	<	0.000209				
M	Ce	<	0.004780	O	K		0.002383	M	Rb	<	0.011950	s	Tl	<					
M	Co	<	0.000796	M	La	<	0.000796	M	Re		0.003857	M	Tm	<	0.000199				
M	Cr	<	0.000597	O	Li	<	0.000066	M	Rh	<	0.000199	M	U	<	0.000199				
M	Cs	<	0.005975	M	Lu	<	0.000199	M	Ru	<	0.000199	M	V	<	0.000199				
M	Cu		0.000371	O	Mg		0.000306	O	S	<	0.047817	M	W		0.000092				
M	Dy	<	0.000199	M	Mn	<	0.000199	M	Sb	<	0.000199	M	Y	<	0.000199				
M	Er	<	0.000199	M	Mo		0.000278	O	Sc	<	0.000146	M	Yb	<	0.000199				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 204.38 +1 6 Tl(H2O)61+

Chemical Compatibility - Soluble in HCl, HNO3, and H2SO4. Stable with most metals and inorganic anions. The sulfite, thiocyanate and oxalate are moderately soluble; the phosphate and arsenite are slightly soluble and the sulfide is insoluble.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.

Tl Containing Samples (Preparation and Solution) -Metal (Best dissolved in HNO3 which forms chiefly the Tl1+ ion.); Oxide (The thallous oxide is readily soluble in water. The thallic oxide requires high levels of acid); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 205 amu	2 ppt	N/A	189Os16O
ICP-OES 190.864 nm	0.04 / 0.004 µg/mL	1	V, Ti
ICP-OES 276.787 nm	0.1 / 0.01 µg/mL	1	Ta, V, Fe, Cr
ICP-OES 351.924 nm	0.2 / 0.02 µg/mL	1	Th, Ce, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

Reagent

10000 Al_00016

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAL10
Lot Number:	J2-AL05009
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Al
Starting Material:	Al Shot
Starting Material Lot#:	1834
Starting Material Purity:	99.9950%

4011053
ID: 10000 Al_00016
Exp: 07/13/18 Prpd: LLB
10000 Al IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9960 ± 34 µg/mL - weighted mean

Certified Density: 1.082 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1 **9964 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #2 **9939 ± 56 µg/mL**
ICP Assay NIST SRM 3101a Lot Number: 060502

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

280-4011053

Characterization of CRM by two independent methods | **Characterization of CRM by one method**

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000541	M	Eu	<	0.000541	O	Na		0.085913	M	Se	<	0.008117	M	Zn	0.084547
s	Al	<		O	Fe		0.029418	M	Nb	<	0.000541	O	Si		0.255986	O	Zr	0.000495
M	As	<	0.007576	M	Ga		0.003548	M	Nd		0.004527	M	Sm	<	0.001082			
M	Au	<	0.001083	M	Gd	<	0.003247	O	Ni	<	0.002062	M	Sn	<	0.000541			
O	B		0.016996	M	Ge	<	0.001623	M	Os	<	0.000541	O	Sr		0.000180			
O	Ba	<	0.001934	M	Hf	<	0.000541	n	P	<		M	Ta	<	0.000541			
O	Be	<	0.000103	M	Hg	<	0.001083	O	Pb			M	Tb	<	0.000541			
M	Bi	<	0.000541	M	Ho	<	0.000541	M	Pd	<	0.000541	M	Te	<	0.003788			
O	Ca		0.028541	M	In	<	0.000541	M	Pr	<	0.008658	M	Th	<	0.006493			
M	Cd	<	0.006493	M	Ir	<	0.000541	M	Pt	<	0.000541	O	Ti		0.001519			
O	Ce		0.007287	O	K		0.033683	M	Rb	<	0.000541	M	Tl		0.003548			
M	Co	<	0.000541	O	La		0.005699	M	Re	<	0.000541	M	Tm	<	0.000541			
O	Cr	<	0.007734	O	Li	<	0.000258	M	Rh	<	0.000541	M	U	<	0.005411			
M	Cs	<	0.000541	M	Lu	<	0.000541	M	Ru	<	0.000541	M	V		0.001468			
O	Cu		0.032061	O	Mg		0.016763	n	S	<		M	W	<	0.003247			
M	Dy	<	0.005411	O	Mn		0.000670	M	Sb	<	0.004329	M	Y	<	0.005411			
M	Er	<	0.002164	O	Mo	<	0.001289	O	Sc		0.000330	O	Yb	<	0.000047			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 26.98 +3 6 Al(H2O)6+3
Chemical Compatibility -Soluble in HCl, HNO3, HF and H2SO4. Avoid neutral media. Soluble in strongly basic NaOH forming the Al(OH)4(H2O)21- species. Stable with most metals and inorganic anions. The phosphate is insoluble in water and only slightly soluble in acid.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Al Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); a- Al2O3 (Na2CO3 fusion in Pt0);
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 27 amu	30 ppt	N/A	12C15N, 13C14N, 1H12C14N, 11B16O, 54Cr2+, 54Fe2+
ICP-OES 167.078 nm	0.1/0.009 µg/mL	1	Fe
ICP-OES 394.401 nm	0.05/0.006 µg/mL	1	U, Ce
ICP-OES 396.152 nm	0.03/0.006 µg/mL	1	Mo, Zr, Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 13, 2015

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- July 13, 2018

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

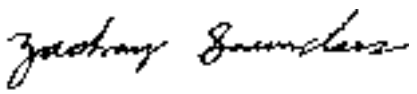
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

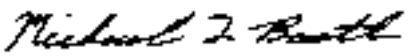
Certificate Prepared By:

Zach Saunders
Product Documentation Technician



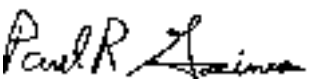
Certificate Approved By:

Michael Booth
QC Supervisor



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

10000 Fe_00018

neral Requirements for the Competence of Testing and Calibration Laboratories"

edited / A2LA Certificate Number 883.01

equirements for the Competence of Reference Material Producers"

ucer - Accredited / A2LA Certificate Number 883.02

ansburg, Va. 24073, USA; Telephone: 800.669.6799, 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

IRATION AND PERIOD OF VALIDITY

within the measurement uncertainty specified provided the CRM/RM is stored and
h instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1
:RM/RM is damaged, contaminated, or otherwise modified.

: CRM/RM should not be used.

eflects the period of time that the stability of a CRM/RM can be supported by long term
l on properly stored and handled CRM/RMs. Lot expiration is limited primarily by
r from the solution) and infrequently by chemical stability.

Date: _____

it be used longer than one year from the date of removal from the aluminized bag or
c. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled
with the instructions given in Sec 7.1.

S OF CERTIFYING OFFICERS

visor

or

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAi Global File Number 010105).

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGFE10
Lot Number:	K2-FE04057
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Iron
Starting Material:	Iron Metal
Starting Material Lot#:	2031
Starting Material Purity:	99.997 0%

4204670
ID: 10000 Fe_00018
Exp: 02/27/20 Prpd: SJS
10000 Fe IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10.003 ± 26 µg/mL

Certified Density: 1.041 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1	**9998 ± 26 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #2	**10038 ± 66 µg/mL** ICP Assay NIST SRM 3126a Lot Number: 140812

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density NIST SRM uncertainty weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001204	M	Eu	<	0.000602	O	Na		0.014010	M	Se	<	0.003000	M	Zn	<	0.021079
O	Al		0.005094	s	Fe	<		M	Nb	<	0.001204	O	Si		0.056296	M	Zr	<	0.002409
M	As	<	0.063841	M	Ga	<	0.018068	M	Nd	<	0.000602	M	Sm	<	0.000602				
M	Au	<	0.000600	M	Gd	<	0.000602	M	Ni		0.029566	M	Sn	<	0.006022				
O	B	<	0.037050	i	Ge	<		M	Os	<	0.000600	M	Sr	<	0.000602				
O	Ba	<	0.001852	M	Hf	<	0.000602	i	P	<		M	Ta	<	0.000602				
O	Be	<	0.000617	M	Hg	<	0.003000	M	Pb	<	0.004818	M	Tb	<	0.000602				
M	Bi	<	0.000602	M	Ho	<	0.000602	M	Pd	<	0.001204	M	Te	<	0.008431				
O	Ca		0.011717	M	In	<	0.000602	M	Pr	<	0.000602	M	Th	<	0.000602				
M	Cd	<	0.000602	M	Ir	<	0.000600	M	Pt	<	0.000602	M	Ti	<	0.001806				
M	Ce	<	0.000602	O	K		0.005604	M	Rb	<	0.001204	M	Tl	<	0.000602				
M	Co		0.038013	M	La	<	0.000602	M	Re	<	0.000602	M	Tm	<	0.000602				
O	Cr		0.030058	O	Li	<	0.000123	M	Rh	<	0.000602	M	U	<	0.000602				
M	Cs	<	0.000602	M	Lu	<	0.000602	M	Ru	<	0.000600	M	V	<	0.004818				
M	Cu		0.023230	O	Mg		0.001783	O	S		0.020124	M	W	<	0.001204				
M	Dy	<	0.000602	O	Mn		0.076420	M	Sb		0.035404	M	Y	<	0.000602				
M	Er	<	0.000602	M	Mo		0.005838	M	Sc	<	0.001204	M	Yb	<	0.000602				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 55.85 +3 6 Fe(H2O)63+

Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF and H3PO4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Fe Containing Samples (Preparation and Solution) - Metal (Soluble in HCl); Oxides (If the oxide has been at a high temperature then Na2CO3 fusion in Pt0 followed by HCl dissolution otherwise dissolve in dilute HCl); Ores (See Oxides above using only the fusion approach).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 56 amu	970 ppt	N/A	40Ar15N1H, 40Ar16O, 36Ar17O1H , 38Ar18O, 37Cl18O1H, 40Ca16O
ICP-OES 238.204 nm	0.005/0.001 µg/mL	1	Ru, Co
ICP-OES 239.562 nm	0.005/0.001 µg/mL	1	Co, W, Cr
ICP-OES 259.940 nm	0.006/0.001 µg/mL	1	Hf, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

Reagent

10000 Na_00057

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 28, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- October 28, 2020

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Donna Senn

Certificate Approved By:

Michael Booth
Supervisor, Quality Control

Michael L. Booth

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

Paul R Gaines

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

4447794
ID: 10000 Na_00057
Exp: 10/28/20 Prpd: SJS
10000 Na IV

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNA10
Lot Number:	K2-NA651997
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Sodium
Starting Material:	Na2CO3
Starting Material Lot#:	1870
Starting Material Purity:	99.9989%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10036 ± 19 µg/mL

Certified Density: 1.034 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1	**10013 ± 76 µg/mL** ICP Assay NIST SRM 3152a Lot Number: 120715
Assay Method #2	**10037 ± 18 µg/mL** Gravimetric NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty u_{charb}

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\ (u_{char\ a})^2 + (w_b)^2\ (u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characteization which include instrumental measurement, density NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000911	M	Eu	<	0.000911	s	Na	<		M	Se	<	0.008202	O	Zn	0.001574
O	Al	<	0.000497	O	Fe		0.000230	M	Nb	<	0.000911	O	Si		0.001566	O	Zr	< 0.000686
M	As	<	0.002734	M	Ga	<	0.000911	M	Nd	<	0.000911	M	Sm	<	0.000911			
O	Au	<	0.004172	M	Gd	<	0.000911	O	Ni	<	0.002364	M	Sn	<	0.000911			
O	B	<	0.006380	M	Ge	<	0.000911	M	Os	<	0.000876	O	Sr		0.000363			
O	Ba		0.000264	M	Hf	<	0.000911	O	P	<	0.010344	M	Ta	<	0.000911			
O	Be	<	0.000393	M	Hg	<	0.001753	M	Pb	<	0.000911	M	Tb	<	0.000911			
M	Bi	<	0.000911	M	Ho	<	0.000911	M	Pd	<	0.000911	M	Te	<	0.018227			
O	Ca		0.018140	M	In	<	0.000911	M	Pr	<	0.000911	M	Th	<	0.000911			
M	Cd	<	0.000911	M	Ir	<	0.000876	M	Pt	<	0.000911	O	Ti	<	0.000729			
M	Ce	<	0.000911	O	K		0.269850	M	Rb	<	0.000911	M	Tl	<	0.000911			
O	Co	<	0.000469	M	La	<	0.000911	M	Re	<	0.000911	M	Tm	<	0.000911			
O	Cr	<	0.000881	O	Li	<	0.000098	M	Rh	<	0.000911	M	U	<	0.000911			
M	Cs	<	0.001823	M	Lu	<	0.000911	M	Ru	<	0.000876	M	V	<	0.000911			
O	Cu	<	0.001595	O	Mg		0.000365	O	S	<	0.024540	M	W	<	0.002734			
M	Dy	<	0.000911	M	Mn	<	0.000911	M	Sb	<	0.000911	M	Y	<	0.001823			
M	Er	<	0.000911	M	Mo	<	0.000911	O	Sc	<	0.000279	M	Yb	<	0.000911			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 22.99 +1 (6) Na+(aq) largely ionic in nature

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Na Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Lithium carbonate fusion in graphite crucible followed by HCl dissolution - blank levels of Na in lithium carbonate critical); Organic Matrices (Sulfuric / peroxide digestion or nitric/sulfuric/perchloric acid decomposition).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 23 amu	310 ppt	n/a	46Ti+2 , 46Ca+2
ICP-OES 330.237 nm	2.0 / 0.09 µg/mL	1	Pd, Zn
ICP-OES 588.995 nm	0.03 / 0.006 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 589.595 nm	0.07 / 0.00009 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

Reagent

10000 Si_00013

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (SAI Global File Number 010105).

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

3781817
ID: 10000 Si_00013
Exp: 06/26/18 Prpd: SJS
10000 Si IV

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSI10
Lot Number:	J2-SI03056
Matrix:	1% (v/v) HNO3 1.4% (v/v) HF
Value / Analyte(s):	10 000 µg/mL ea: Silicon
Starting Material:	Fumed Silica
Starting Material Lot#:	1771
Starting Material Purity:	99.9931%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 53 µg/mL

Certified Density: 1.046 g/mL (measured at 20 ± 1 °C)

Assay Information:

Assay Method #1	**9990 ± 60 µg/mL** ICP Assay NIST SRM 3150 Lot Number: 071204
Assay Method #2	**9994 ± 66 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

Characterization of CRM by one method

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{sts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{sts} = short term stability standard uncertainty (transportation)

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000504	M	Eu	<	0.000252	O	Na		0.009659	M	Se	<	0.025180	O	Zn	<	0.022280
O	Al		0.067136	i	Fe	<		M	Nb	<	0.001007	s	Si	<		O	Zr	<	0.001114
O	As	<	0.222800	M	Ga	<	0.000252	M	Nd	<	0.002014	M	Sm	<	0.000252				
M	Au	<	0.000252	M	Gd	<	0.000252	O	Ni	<	0.005570	M	Sn	<	0.003777				
O	B		0.123710	O	Ge	<		n	Os	<		O	Sr	<	0.000334				
O	Ba		0.000719	M	Hf	<	0.001259	O	P	<	0.111400	M	Ta	<	0.005036				
O	Be	<	0.000045	i	Hg	<		M	Pb	<	0.000252	M	Tb	<	0.000252				
M	Bi	<	0.000252	M	Ho	<	0.000252	M	Pd	<	0.000252	M	Te	<	0.003777				
O	Ca		0.017415	M	In	<	0.000252	M	Pr	<	0.000252	M	Th	<	0.002518				
M	Cd	<	0.000252	M	Ir	<	0.000252	M	Pt	<	0.000252	O	Ti		0.002199				
M	Ce	<	0.001259	O	K		0.045202	M	Rb	<	0.050360	M	Tl	<	0.000252				
M	Co	<	0.000755	M	La	<	0.000252	M	Re	<	0.000252	M	Tm	<	0.000252				
M	Cr	<	0.003777	O	Li	<	0.000111	M	Rh	<	0.000252	M	U	<	0.000252				
M	Cs	<	0.002014	M	Lu	<	0.000252	M	Ru	<	0.000252	O	V	<	0.001114				
O	Cu	<	0.001114	O	Mg		0.001727	O	S		1.317984	M	W	<	0.000252				
M	Dy	<	0.000252	M	Mn	<	0.007554	M	Sb	<	0.000252	M	Y	<	0.000252				
M	Er	<	0.000252	M	Mo	<	0.001259	O	Sc	<	0.000111	M	Yb	<	0.000252				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 28.09 +4 6 Si(OH)x(F)y2-
Chemical Compatibility -Soluble in HCl, HF, H3PO4 H2SO4 and HNO3 as the Si(OH)x(F)y2-. Avoid neutral to basic media. Unstable at ppm levels with metals that would pull F- away (i.e. Do not mix with Alkaline or Rare Earths, or high levels of transition elements unless they are fluorinated. Stable with most inorganic anions with a tendency to hydrolyze forming silicic acid (silicic acid is soluble up to ∼100 ppm in water) in all dilute acids except HF.
Stability - 2-100 ppb levels - stability unknown - (alone or mixed with all other metals) as the Si(OH)x(F)y2-. 1-10,000 ppm single element solutions as the Si(OH)x(F)y2- chemically stable for years in 2-5 % HNO3 / trace HF in a LDPE container.
Si Containing Samples (Preparation and Solution) -Metal (Soluble in 1:1:1 H2O / HF / HNO3); Oxide - SiO2, amorphic (dissolve by heating in 1:1:1 H2O / HF / HNO3); Oxide - quartz (fuse in Pt0 with Na2CO3); Geological Samples(fuse in Pt0with Na2CO3 followed by HCl solution of the fuseate); Organic Matrices containing silicates and non volatile silicon compounds (dry ash at 4500C in Pt0 and dissolve by gently warming with 1:1:1 H2O / HF / H2SO4 or fuse / ash with Na2CO3 and dissolve fuseate with HCl / H2O); Silicone Oils - dimethyl silicones depolymerize to form volatile monomer units when heated (Measure directly in alcoholic KOH / xylene mixture where sample is treated first with the KOH at 60-1000C to "unzip" the Si-O-Si polymeric structure or digest with conc. H2SO4 / H2O2 followed by cooling and dissolution of the dehydrated silica with HF.) Note that the direct analysis of silicone oils in an organic solvent will result in false high results due to high vapor pressure of volatile monomer units like hexamethylcyclotrisiloxane. The KOH forms the K2+Si(CH3)2O= salt which is not volatile at room temperature.
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 28 amu	4000 - 8000 ppt	N/A	N2, 12C16O
ICP-OES 212.412 nm	0.02/0.01 µg/mL	1	Hf, Os, Mo, Ta
ICP-OES 251.611 nm	0.012/0.003 µg/mL	1	Ta, U, Zn, Th
ICP-OES 288.158 nm	0.03/0.004 µg/mL	1	Ta, Ce, Cr, Cd, Th

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- SAI Global File Number 010105

10.4 ISO/IEC Guide 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 26, 2015

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- June 26, 2018

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Brenda Francis
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

Reagent

570666_00052

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CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570666 **Lot No.:** A0114832

Description : 8270 List 1 / Std #1 MegaMix (2016)

8270 List 1 / Std #1 MegaMix (2016) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : April 30, 2017 **Storage:** 10°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dioxane	1,000.9 µg/mL	+/- 5.8193 µg/mL	Gravimetric
	CAS # 123-91-1 (Lot SHBG1461V)		+/- 11.9648 µg/mL	Unstressed
	Purity 99%		+/- 19.0418 µg/mL	Stressed
2	Pyridine	1,004.7 µg/mL	+/- 5.8416 µg/mL	Gravimetric
	CAS # 110-86-1 (Lot SHBC7174V)		+/- 12.0106 µg/mL	Unstressed
	Purity 99%		+/- 19.1148 µg/mL	Stressed
3	N-Nitrosodimethylamine	1,002.6 µg/mL	+/- 5.8294 µg/mL	Gravimetric
	CAS # 62-75-9 (Lot 4370100)		+/- 11.9855 µg/mL	Unstressed
	Purity 99%		+/- 19.0748 µg/mL	Stressed
4	Aniline	1,001.8 µg/mL	+/- 5.8246 µg/mL	Gravimetric
	CAS # 62-53-3 (Lot K22Z462)		+/- 11.9756 µg/mL	Unstressed
	Purity 99%		+/- 19.0590 µg/mL	Stressed
5	Bis(2-chloroethyl)ether	1,000.2 µg/mL	+/- 5.8152 µg/mL	Gravimetric
	CAS # 111-44-4 (Lot SHBD4430V)		+/- 11.9565 µg/mL	Unstressed
	Purity 99%		+/- 19.0285 µg/mL	Stressed
6	2-Chlorophenol	1,001.6 µg/mL	+/- 5.8236 µg/mL	Gravimetric
	CAS # 95-57-8 (Lot STBF2690V)		+/- 11.9736 µg/mL	Unstressed
	Purity 99%		+/- 19.0558 µg/mL	Stressed
7	Phenol	1,000.6 µg/mL	+/- 5.8176 µg/mL	Gravimetric
	CAS # 108-95-2 (Lot SHBF1351V)		+/- 11.9612 µg/mL	Unstressed
	Purity 99%		+/- 19.0361 µg/mL	Stressed

24	Bis(2-chloroethoxy)methane **CAS #** 111-91-1 **Purity** 99%	(Lot 3299900)	1,000.2	µg/mL	+/- 5.8151 +/- 11.9561 +/- 19.0279	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	2,4-Dichlorophenol **CAS #** 120-83-2 **Purity** 99%	(Lot BCBH1617V)	1,002.2	µg/mL	+/- 5.8271 +/- 11.9808 +/- 19.0672	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	1,2,4-Trichlorobenzene **CAS #** 120-82-1 **Purity** 98%	(Lot SHBC5541V)	1,000.1	µg/mL	+/- 5.8144 +/- 11.9547 +/- 19.0258	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	Naphthalene **CAS #** 91-20-3 **Purity** 99%	(Lot MKBH4351V)	1,000.4	µg/mL	+/- 5.8164 +/- 11.9588 +/- 19.0323	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	2,6-Dichlorophenol **CAS #** 87-65-0 **Purity** 99%	(Lot MKBN2776V)	1,001.1	µg/mL	+/- 5.8205 +/- 11.9672 +/- 19.0456	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	4-Chloroaniline **CAS #** 106-47-8 **Purity** 99%	(Lot 12528PH)	1,000.7	µg/mL	+/- 5.8182 +/- 11.9624 +/- 19.0380	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	Hexachlorobutadiene **CAS #** 87-68-3 **Purity** 98%	(Lot J31X013)	1,000.7	µg/mL	+/- 5.8182 +/- 11.9626 +/- 19.0382	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	2-Methylnaphthalene **CAS #** 91-57-6 **Purity** 99%	(Lot 19399MJV)	1,001.3	µg/mL	+/- 5.8216 +/- 11.9696 +/- 19.0494	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	4-Chloro-3-methylphenol **CAS #** 59-50-7 **Purity** 99%	(Lot STBC0769V)	1,000.2	µg/mL	+/- 5.8151 +/- 11.9561 +/- 19.0279	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	1-Methylnaphthalene **CAS #** 90-12-0 **Purity** 99%	(Lot 525000-10)	1,001.1	µg/mL	+/- 5.8203 +/- 11.9668 +/- 19.0450	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	1,2,4,5-Tetrachlorobenzene **CAS #** 95-94-3 **Purity** 99%	(Lot 06024AIV)	1,000.1	µg/mL	+/- 5.8145 +/- 11.9549 +/- 19.0260	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	Hexachlorocyclopentadiene **CAS #** 77-47-4 **Purity** 97%	(Lot 150909)	999.7	µg/mL	+/- 5.8126 +/- 11.9510 +/- 19.0199	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	2,4,6-Trichlorophenol **CAS #** 88-06-2 **Purity** 99%	(Lot MKBH7393V)	1,001.4	µg/mL	+/- 5.8220 +/- 11.9704 +/- 19.0507	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	2,4,5-Trichlorophenol **CAS #** 95-95-4 **Purity** 99%	(Lot 150806JLM)	1,000.1	µg/mL	+/- 5.8145 +/- 11.9549 +/- 19.0260	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	2-Chloronaphthalene **CAS #** 91-58-7 **Purity** 99%	(Lot AJ2UI-TE)	1,000.9	µg/mL	+/- 5.8193 +/- 11.9648 +/- 19.0418	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	Biphenyl **CAS #** 92-52-4 **Purity** 99%	(Lot 1277976)	1,000.6	µg/mL	+/- 5.8178 +/- 11.9616 +/- 19.0368	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Azobenzene **CAS #** 103-33-3 **Purity** 99%	(Lot MKBS2559V)	1,001.2	µg/mL	+/- 5.8213 +/- 11.9688 +/- 19.0482	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	Diphenylamine **CAS #** 122-39-4 **Purity** 99%	(Lot MKBN8295V)	850.7	µg/mL	+/- 4.9460 +/- 10.1693 +/- 16.1843	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	2-Nitroaniline **CAS #** 88-74-4 **Purity** 99%	(Lot MKBK7597V)	1,000.2	µg/mL	+/- 5.8151 +/- 11.9561 +/- 19.0279	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol) **CAS #** 534-52-1 **Purity** 99%	(Lot LC12394V)	2,000.9	µg/mL	+/- 11.6336 +/- 23.9193 +/- 38.0672	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	4-Bromophenyl phenyl ether **CAS #** 101-55-3 **Purity** 98%	(Lot STBB9729V)	999.8	µg/mL	+/- 5.8131 +/- 11.9520 +/- 19.0215	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	Hexachlorobenzene **CAS #** 118-74-1 **Purity** 99%	(Lot LC10604V)	1,001.6	µg/mL	+/- 5.8234 +/- 11.9732 +/- 19.0551	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	Pentachlorophenol **CAS #** 87-86-5 **Purity** 98%	(Lot 150902JLM)	2,000.5	µg/mL	+/- 11.6311 +/- 23.9142 +/- 38.0591	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	Phenanthrene **CAS #** 85-01-8 **Purity** 99%	(Lot MKBT8628V)	1,001.9	µg/mL	+/- 5.8249 +/- 11.9764 +/- 19.0602	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	n-Octadecane (C18) **CAS #** 593-45-3 **Purity** 99%	(Lot 27SOF)	1,000.8	µg/mL	+/- 5.8187 +/- 11.9636 +/- 19.0399	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	Anthracene **CAS #** 120-12-7 **Purity** 99%	(Lot MKBK5208V)	1,001.4	µg/mL	+/- 5.8224 +/- 11.9712 +/- 19.0520	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	Carbazole **CAS #** 86-74-8 **Purity** 98%	(Lot 4017900)	1,000.4	µg/mL	+/- 5.8161 +/- 11.9583 +/- 19.0314	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	Di-n-butylphthalate **CAS #** 84-74-2 **Purity** 99%	(Lot MKBL8501V)	1,003.6	µg/mL	+/- 5.8348 +/- 11.9967 +/- 19.0926	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	Fluoranthene **CAS #** 206-44-0 **Purity** 98%	(Lot MKBQ6360V)	1,000.7	µg/mL	+/- 5.8184 +/- 11.9629 +/- 19.0389	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	Pyrene **CAS #** 129-00-0 **Purity** 99%	(Lot BCBL6786V)	1,000.2	µg/mL	+/- 5.8151 +/- 11.9561 +/- 19.0279	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Benzyl butyl phthalate **CAS #** 85-68-7 **Purity** 99%	(Lot 03027HV)	1,000.3	µg/mL	+/- 5.8158 +/- 11.9576 +/- 19.0304	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Benz(a)anthracene **CAS #** 56-55-3 **Purity** 99%	(Lot ER031412-01)	1,000.1	µg/mL	+/- 5.8147 +/- 11.9553 +/- 19.0266	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	n-Decane (C10) **CAS #** 124-18-5 **Purity** 99%	(Lot SHBG1119V)	1,001.4	µg/mL	+/- 5.8224 +/- 11.9712 +/- 19.0520	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,4-Dichlorobenzene **CAS #** 106-46-7 **Purity** 99%	(Lot MKBS1350V)	1,000.5	µg/mL	+/- 5.8170 +/- 11.9600 +/- 19.0342	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,3-Dichlorobenzene **CAS #** 541-73-1 **Purity** 99%	(Lot BCBM5751V)	1,000.1	µg/mL	+/- 5.8145 +/- 11.9549 +/- 19.0260	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	1,2-Dichlorobenzene **CAS #** 95-50-1 **Purity** 99%	(Lot SHBD7331V)	1,000.6	µg/mL	+/- 5.8178 +/- 11.9616 +/- 19.0368	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Benzyl alcohol **CAS #** 100-51-6 **Purity** 99%	(Lot SHBC1850V)	1,000.5	µg/mL	+/- 5.8170 +/- 11.9600 +/- 19.0342	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	2,2'-oxybis(1-chloropropane) **CAS #** 108-60-1 **Purity** 99%	(Lot 2-KMW-57-8)	1,001.3	µg/mL	+/- 5.8215 +/- 11.9692 +/- 19.0488	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	2-Methylphenol (o-cresol) **CAS #** 95-48-7 **Purity** 99%	(Lot SHBC1479V)	1,001.2	µg/mL	+/- 5.8211 +/- 11.9684 +/- 19.0475	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Hexachloroethane **CAS #** 67-72-1 **Purity** 99%	(Lot 4H3SF)	1,001.7	µg/mL	+/- 5.8238 +/- 11.9740 +/- 19.0564	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Acetophenone **CAS #** 98-86-2 **Purity** 99%	(Lot MKBR7156V)	1,000.1	µg/mL	+/- 5.8149 +/- 11.9557 +/- 19.0272	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	N-Nitroso-di-n-propylamine **CAS #** 621-64-7 **Purity** 99%	(Lot OPAGF)	1,001.5	µg/mL	+/- 5.8226 +/- 11.9716 +/- 19.0526	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	4-Methylphenol (p-cresol) **CAS #** 106-44-5 **Purity** 99%	(Lot 49396APV)	500.4	µg/mL	+/- 2.9096 +/- 5.9822 +/- 9.5206	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	3-Methylphenol (m-cresol) **CAS #** 108-39-4 **Purity** 99%	(Lot SHBD0627V)	501.7	µg/mL	+/- 2.9167 +/- 5.9970 +/- 9.5441	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Nitrobenzene **CAS #** 98-95-3 **Purity** 99%	(Lot SHBF2348V)	1,002.1	µg/mL	+/- 5.8265 +/- 11.9796 +/- 19.0653	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	Isophorone **CAS #** 78-59-1 **Purity** 99%	(Lot MKBG2442V)	1,002.2	µg/mL	+/- 5.8271 +/- 11.9808 +/- 19.0672	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	2-Nitrophenol **CAS #** 88-75-5 **Purity** 99%	(Lot BCBH7602V)	1,000.1	µg/mL	+/- 5.8149 +/- 11.9557 +/- 19.0272	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	2,4-Dimethylphenol **CAS #** 105-67-9 **Purity** 99%	(Lot 10165155)	1,000.3	µg/mL	+/- 5.8160 +/- 11.9580 +/- 19.0311	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	4-Nitroaniline		1,000.5	µg/mL	+/- 5.8172	µg/mL	Gravimetric
	CAS # 100-01-6	(Lot BCBG4702V)			+/- 11.9604	µg/mL	Unstressed
	Purity 99%				+/- 19.0349	µg/mL	Stressed
41	Acenaphthylene		999.8	µg/mL	+/- 5.8127	µg/mL	Gravimetric
	CAS # 208-96-8	(Lot W01O)			+/- 11.9512	µg/mL	Unstressed
	Purity 98%				+/- 19.0202	µg/mL	Stressed
42	1,3-Dinitrobenzene		1,000.5	µg/mL	+/- 5.8168	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBB1436V)			+/- 11.9596	µg/mL	Unstressed
	Purity 99%				+/- 19.0336	µg/mL	Stressed
43	Dimethylphthalate		1,001.5	µg/mL	+/- 5.8228	µg/mL	Gravimetric
	CAS # 131-11-3	(Lot 10117699)			+/- 11.9720	µg/mL	Unstressed
	Purity 99%				+/- 19.0532	µg/mL	Stressed
44	2,6-Dinitrotoluene		1,000.2	µg/mL	+/- 5.8152	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot 1437483V)			+/- 11.9565	µg/mL	Unstressed
	Purity 99%				+/- 19.0285	µg/mL	Stressed
45	Acenaphthene		1,001.8	µg/mL	+/- 5.8246	µg/mL	Gravimetric
	CAS # 83-32-9	(Lot MKBP0384V)			+/- 11.9756	µg/mL	Unstressed
	Purity 99%				+/- 19.0590	µg/mL	Stressed
46	2,4-Dinitrophenol		1,999.8	µg/mL	+/- 11.6272	µg/mL	Gravimetric
	CAS # 51-28-5	(Lot STBF1268V)			+/- 23.9061	µg/mL	Unstressed
	Purity 99%				+/- 38.0462	µg/mL	Stressed
47	Dibenzofuran		1,000.7	µg/mL	+/- 5.8180	µg/mL	Gravimetric
	CAS # 132-64-9	(Lot MKBH8392V)			+/- 11.9620	µg/mL	Unstressed
	Purity 99%				+/- 19.0374	µg/mL	Stressed
48	3-Nitroaniline		1,000.8	µg/mL	+/- 5.8185	µg/mL	Gravimetric
	CAS # 99-09-2	(Lot MKBQ6338V)			+/- 11.9632	µg/mL	Unstressed
	Purity 99%				+/- 19.0393	µg/mL	Stressed
49	2,4-Dinitrotoluene		1,001.5	µg/mL	+/- 5.8230	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)			+/- 11.9724	µg/mL	Unstressed
	Purity 99%				+/- 19.0539	µg/mL	Stressed
50	4-Nitrophenol		2,000.3	µg/mL	+/- 11.6297	µg/mL	Gravimetric
	CAS # 100-02-7	(Lot MKBP6945V)			+/- 23.9113	µg/mL	Unstressed
	Purity 99%				+/- 38.0545	µg/mL	Stressed
51	2,3,4,6-Tetrachlorophenol		1,000.0	µg/mL	+/- 5.8141	µg/mL	Gravimetric
	CAS # 58-90-2	(Lot B15W0912)			+/- 11.9541	µg/mL	Unstressed
	Purity 99%				+/- 19.0247	µg/mL	Stressed
52	Fluorene		1,000.4	µg/mL	+/- 5.8163	µg/mL	Gravimetric
	CAS # 86-73-7	(Lot 10174662)			+/- 11.9587	µg/mL	Unstressed
	Purity 98%				+/- 19.0320	µg/mL	Stressed
53	4-Chlorophenyl phenyl ether		1,001.0	µg/mL	+/- 5.8201	µg/mL	Gravimetric
	CAS # 7005-72-3	(Lot MKBS2248V)			+/- 11.9664	µg/mL	Unstressed
	Purity 99%				+/- 19.0444	µg/mL	Stressed
54	n-Hexadecane (C16)		1,000.7	µg/mL	+/- 5.8180	µg/mL	Gravimetric
	CAS # 544-76-3	(Lot SHBF6942V)			+/- 11.9620	µg/mL	Unstressed
	Purity 99%				+/- 19.0374	µg/mL	Stressed
55	Diethylphthalate		1,000.9	µg/mL	+/- 5.8193	µg/mL	Gravimetric
	CAS # 84-66-2	(Lot MKBJ3578V)			+/- 11.9648	µg/mL	Unstressed
	Purity 99%				+/- 19.0418	µg/mL	Stressed

72	Chrysene		1,000.0	µg/mL	+/-	5.8143	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot PR121912-01)			+/-	11.9545	µg/mL	Unstressed
	Purity 99%				+/-	19.0253	µg/mL	Stressed
73	Bis(2-ethylhexyl)phthalate		1,000.4	µg/mL	+/-	5.8164	µg/mL	Gravimetric
	CAS # 117-81-7	(Lot MKBK2695V)			+/-	11.9588	µg/mL	Unstressed
	Purity 99%				+/-	19.0323	µg/mL	Stressed
74	Di-n-octyl phthalate		1,004.1	µg/mL	+/-	5.8379	µg/mL	Gravimetric
	CAS # 117-84-0	(Lot 3998900)			+/-	12.0031	µg/mL	Unstressed
	Purity 99%				+/-	19.1027	µg/mL	Stressed
75	Benzo(b)fluoranthene		1,002.0	µg/mL	+/-	5.8257	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot ER03101401)			+/-	11.9780	µg/mL	Unstressed
	Purity 99%				+/-	19.0628	µg/mL	Stressed
76	Benzo(k)fluoranthene		1,000.1	µg/mL	+/-	5.8149	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot 012012K)			+/-	11.9557	µg/mL	Unstressed
	Purity 99%				+/-	19.0272	µg/mL	Stressed
77	Benzo(a)pyrene		1,000.3	µg/mL	+/-	5.8160	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot ER071309-02)			+/-	11.9580	µg/mL	Unstressed
	Purity 99%				+/-	19.0311	µg/mL	Stressed
78	Indeno(1,2,3-cd)pyrene		1,000.8	µg/mL	+/-	5.8189	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot ER082107-02)			+/-	11.9640	µg/mL	Unstressed
	Purity 99%				+/-	19.0406	µg/mL	Stressed
79	Dibenz(a,h)anthracene		1,001.9	µg/mL	+/-	5.8251	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	11.9768	µg/mL	Unstressed
	Purity 99%				+/-	19.0609	µg/mL	Stressed
80	Benzo(g,h,i)perylene		1,000.8	µg/mL	+/-	5.8185	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot ER05121401)			+/-	11.9632	µg/mL	Unstressed
	Purity 99%				+/-	19.0393	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Specific Reference Material Notes:
N-nitrosodiphenylamine 1000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 855 ug/mL.
N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine.
N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.

Reagent

8081 ToxStock_00014

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: P-093S-H-10X
Description: Toxaphene

Lot: 212011251
Solvent: Hexane

8-28

Date Certified: Jan 19, 2012
Expiration: Jan 19, 2022
Sample Size: 1 mL
Storage Condition: Ambient
Hazards: HIGHLY FLAMMABLE

[X] Included on ISO/IEC 17025 Scope of Accreditation
[X] Included on ISO Guide 34 Scope of Accreditation

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
Toxaphene	8001-35-2	Tech Mix	1000	1000

AccuStandard follows U.S. conventions in reporting numerical values on both certificates and labels:

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

1. All weights are traceable through NIST, Test No.822-275872-11
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.
3. A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot# has had its expiration date extended and is identical to the same lot# without the suffix.

For use in routine laboratory analysis.

See reverse side for additional information
Refer to the MSDS for additional safety information

Certified by: R. Cooper
Russ Cooper, QC Manager

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001

OR-ORG/NO-001
Rev. 7/11

Reagent

8081/82 Surr_00094

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

8081/82 Surr_00094

Reagent ID: 8081/82 Surr_00094

Description:	0.2ug/mL 8081/82 Surrogate	Expiration Date:	12/06/2017
No. of Bottles:	4	Laboratory:	TestAmerica Denver
Storage Location:	North Prep	Prepared By:	Vehonsky, Michael A
Reagent Volume:	1000.000 mL	Solvent:	ACETONE
Creation Date:	06/06/2017	Solvent Lot:	Acetone_00180
Open Date:			
Container(s):	4576127, 4576128, 4576129, 4576130		
Comment:	Take 1 mL of AR_SURR_RES (Restek Cat# 32000) or 8081 SurStock and dilute to 1000 mL in Acetone. Expires after 6 months.		

OAV 07-JUNE 2017

Reagent Analyte Information

Analyte	%R	%D	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
DCB Decachlorobiphenyl	96.8	3.0	AR_SURR_RES_00057	06/30/2022	200.00000	ug/mL	0.20000	ug/mL
Tetrachloro-m-xylene	93.9	1.0	AR_SURR_RES_00057	06/30/2022	200.00000	ug/mL	0.20000	ug/mL

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot#	Vendor Cat Lot #	Volume Used	Volume Units
AR_SURR_RES_00057	Pesticide Surrogate Mix 200ppm	ASTD	06/30/22	RESTEK	A0118280	32000	1.00000	mL

Preliminary Report

TestAmerica Denver

Recovery Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\0606I742.D
Lims ID: 8091782-Surr_000094
Client ID:
Sample Type: Client
Inject. Date: 07-Jun-2017 04:37:59 ALS Bottle#: 42 Worklist Smp#: 42
Injection Vol: 1.0 ul Dil. Factor: 1.000000
Sample Info: 8091782-Surr_000
Misc. Info.: 280-0059455-042
Operator ID: jax Instrument ID: SGC_P3
Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV_-_8082_-_IS
Last Update: 07-Jun-2017 07:09:35 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\0606I735.D
Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	200.0	19.8	98.91
$ 15 DCB Decachlorobiphenyl	200.0	19.4	96.83

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	200.0	21.3	106.58
$ 15 DCB Decachlorobiphenyl	200.0	19.5	97.34

Reagent

8081ABResPS_00016

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32415 **Lot No.:** A0108399

Description : Organochlorine Pesticide Mix AB #3

Organochlorine Pesticide Mix AB #3 2,000 µg/mL, Hexane/Toluene (50:50), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2019 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	alpha-BHC **CAS #** 319-84-6 **Purity** 99%	(Lot 0911942)	2,000.0 µg/mL	+/- 11.7371 µg/mL +/- 78.2355 µg/mL +/- 124.1521 µg/mL	Gravimetric Unstressed Stressed
2	gamma-BHC (Lindane) **CAS #** 58-89-9 **Purity** 99%	(Lot 2951000)	2,000.5 µg/mL	+/- 11.7401 µg/mL +/- 78.2551 µg/mL +/- 124.1832 µg/mL	Gravimetric Unstressed Stressed
3	beta-BHC **CAS #** 319-85-7 **Purity** 98%	(Lot SZBD116XV)	2,001.2 µg/mL	+/- 11.7439 µg/mL +/- 78.2809 µg/mL +/- 124.2241 µg/mL	Gravimetric Unstressed Stressed
4	delta-BHC **CAS #** 319-86-8 **Purity** 98%	(Lot ER02101401)	2,000.7 µg/mL	+/- 11.7411 µg/mL +/- 78.2617 µg/mL +/- 124.1937 µg/mL	Gravimetric Unstressed Stressed
5	Heptachlor **CAS #** 76-44-8 **Purity** 98%	(Lot RM03111)	2,001.2 µg/mL	+/- 11.7439 µg/mL +/- 78.2809 µg/mL +/- 124.2241 µg/mL	Gravimetric Unstressed Stressed
6	Aldrin **CAS #** 309-00-2 **Purity** 99%	(Lot 3094500)	2,001.5 µg/mL	+/- 11.7459 µg/mL +/- 78.2942 µg/mL +/- 124.2453 µg/mL	Gravimetric Unstressed Stressed
7	Heptachlor epoxide (isomer B) **CAS #** 1024-57-3 **Purity** 99%	(Lot ER121511-01)	2,000.0 µg/mL	+/- 11.7371 µg/mL +/- 78.2355 µg/mL +/- 124.1521 µg/mL	Gravimetric Unstressed Stressed

8	trans-Chlordane		2,000.5	µg/mL	+/- 111.7401	µg/mL	Gravimetric
	CAS # 5103-74-2	(Lot ER061906-04)			+/- 78.2551	µg/mL	Unstressed
	Purity 99%				+/- 124.1832	µg/mL	Stressed
9	cis-Chlordane		2,000.0	µg/mL	+/- 111.7371	µg/mL	Gravimetric
	CAS # 5103-71-9	(Lot ER062410-01)			+/- 78.2355	µg/mL	Unstressed
	Purity 99%				+/- 124.1521	µg/mL	Stressed
10	Endosulfan I		2,000.7	µg/mL	+/- 111.7411	µg/mL	Gravimetric
	CAS # 959-98-8	(Lot ER012105-02)			+/- 78.2617	µg/mL	Unstressed
	Purity 98%				+/- 124.1937	µg/mL	Stressed
11	4,4'-DDE		2,000.5	µg/mL	+/- 111.7401	µg/mL	Gravimetric
	CAS # 72-55-9	(Lot ER011106-01)			+/- 78.2551	µg/mL	Unstressed
	Purity 99%				+/- 124.1832	µg/mL	Stressed
12	Dieldrin		2,000.7	µg/mL	+/- 111.7411	µg/mL	Gravimetric
	CAS # 60-57-1	(Lot ER030105-03)			+/- 78.2617	µg/mL	Unstressed
	Purity 98%				+/- 124.1937	µg/mL	Stressed
13	Endrin		2,001.0	µg/mL	+/- 111.7430	µg/mL	Gravimetric
	CAS # 72-20-8	(Lot LC06045V)			+/- 78.2746	µg/mL	Unstressed
	Purity 99%				+/- 124.2142	µg/mL	Stressed
14	4,4'-DDD		2,000.1	µg/mL	+/- 111.7379	µg/mL	Gravimetric
	CAS # 72-54-8	(Lot ER061207-01)			+/- 78.2410	µg/mL	Unstressed
	Purity 97%				+/- 124.1608	µg/mL	Stressed
15	Endosulfan II		2,000.5	µg/mL	+/- 111.7401	µg/mL	Gravimetric
	CAS # 33213-65-9	(Lot ER102407-02)			+/- 78.2551	µg/mL	Unstressed
	Purity 99%				+/- 124.1832	µg/mL	Stressed
16	4,4'-DDT		2,000.5	µg/mL	+/- 111.7401	µg/mL	Gravimetric
	CAS # 50-29-3	(Lot S37912V)			+/- 78.2551	µg/mL	Unstressed
	Purity 99%				+/- 124.1832	µg/mL	Stressed
17	Endrin aldehyde		2,000.1	µg/mL	+/- 111.7376	µg/mL	Gravimetric
	CAS # 7421-93-4	(Lot ER082306-01)			+/- 78.2387	µg/mL	Unstressed
	Purity 98%				+/- 124.1572	µg/mL	Stressed
18	Endosulfan sulfate		2,000.5	µg/mL	+/- 111.7401	µg/mL	Gravimetric
	CAS # 1031-07-8	(Lot 30918)			+/- 78.2551	µg/mL	Unstressed
	Purity 99%				+/- 124.1832	µg/mL	Stressed
19	Methoxychlor		2,000.0	µg/mL	+/- 111.7371	µg/mL	Gravimetric
	CAS # 72-43-5	(Lot 3296700)			+/- 78.2355	µg/mL	Unstressed
	Purity 99%				+/- 124.1521	µg/mL	Stressed
20	Endrin ketone		2,000.5	µg/mL	+/- 111.7401	µg/mL	Gravimetric
	CAS # 53494-70-5	(Lot 3169200)			+/- 78.2551	µg/mL	Unstressed
	Purity 99%				+/- 124.1832	µg/mL	Stressed
Solvent:	Hexane/Toluene (50:50)						
	CAS # 110-54-3/108-88-3						
	Purity 99%						

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

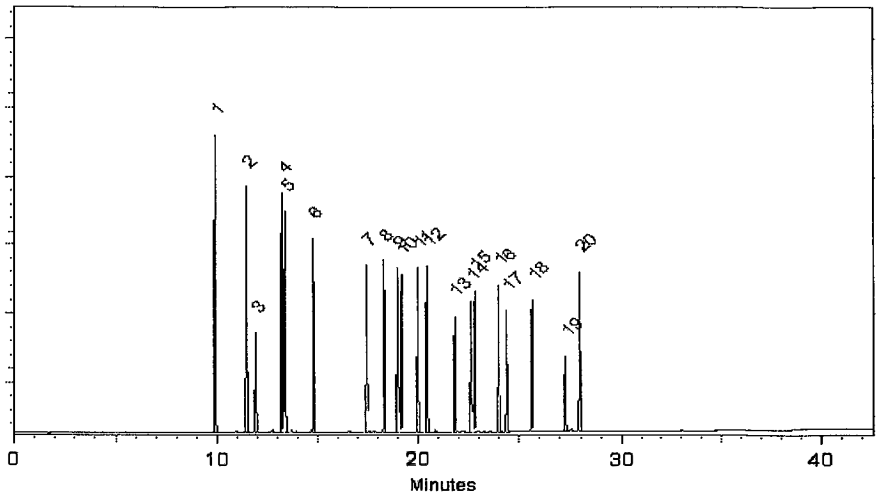
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Connor Flannery - Mix Technician

Date Mixed: 19-Jan-2015 **Balance:** 1128360905

Jennifer L. Pollino - QC Analyst

Date Passed: 21-Jan-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, IR, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8081ABResPS_00020

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309
www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY. READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 32415 **Lot No.:** A0114872

Description: Organochlorine Pesticide Mix A/B #3

Organochlorine Pesticide Mix A/B #3 2,000 µg/mL, Hexane/Toluene (50:50), 1 mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: October 31, 2019 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Position Number	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	alpha-BHC CAS # 319-84-6 Purity 99% (Lot 0911942)	2,001.5 µg/mL	+/- 11.7459 +/- 91.1668 +/- 131.6325	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	gamma-BHC (Lindane) CAS # 58-89-9 Purity 99% (Lot 3895100)	2,002.5 µg/mL	+/- 11.7518 +/- 91.2123 +/- 131.6982	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	beta-BHC CAS # 319-85-7 Purity 98% (Lot SZBD116XV)	2,011.0 µg/mL	+/- 11.8014 +/- 91.5977 +/- 132.2546	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	delta-BHC CAS # 319-86-8 Purity 98% (Lot ER021014001)	2,011.9 µg/mL	+/- 11.8072 +/- 91.6423 +/- 132.3191	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Heptachlor CAS # 76-44-8 Purity 99% (Lot NT0512444)	2,007.5 µg/mL	+/- 11.7811 +/- 91.4401 +/- 132.0271	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Aldrin CAS # 309-00-2 Purity 99% (Lot 4240100)	2,006.5 µg/mL	+/- 11.7753 +/- 91.3945 +/- 131.9613	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Heptachlor epoxide (isomer B) CAS # 1024-57-3 Purity 99% (Lot ER121511101)	2,006.55 µg/mL	+/- 11.7694 +/- 91.3490 +/- 131.8955	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	trans-Chlordane		2,011.5	µg/mL	+/-	11.8046	µg/mL	Gravimetric
	CAS # 5103-74-2	(Lot ER061906-04)			+/-	91.6223	µg/mL	Unstressed
	Purity 99%				+/-	132.2901	µg/mL	Stressed
9	cis-Chlordane		2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS # 5103-71-9	(Lot ER062410-01)			+/-	91.5539	µg/mL	Unstressed
	Purity 99%				+/-	132.1915	µg/mL	Stressed
10	Endosulfan I		2,012.4	µg/mL	+/-	11.8101	µg/mL	Gravimetric
	CAS # 959-98-8	(Lot ER012105-02)			+/-	91.6646	µg/mL	Unstressed
	Purity 98%				+/-	132.3513	µg/mL	Stressed
11	4,4'-DDE		2,004.5	µg/mL	+/-	11.7635	µg/mL	Gravimetric
	CAS # 72-55-9	(Lot ER011106-01)			+/-	91.3034	µg/mL	Unstressed
	Purity 99%				+/-	131.8298	µg/mL	Stressed
12	Dieldrin		2,002.6	µg/mL	+/-	11.7526	µg/mL	Gravimetric
	CAS # 60-57-1	(Lot ER030105-03)			+/-	91.2182	µg/mL	Unstressed
	Purity 98%				+/-	131.7068	µg/mL	Stressed
13	Endrin		2,012.0	µg/mL	+/-	11.8075	µg/mL	Gravimetric
	CAS # 72-20-8	(Lot LC06045V)			+/-	91.6450	µg/mL	Unstressed
	Purity 99%				+/-	132.3230	µg/mL	Stressed
14	4,4'-DDD		2,003.1	µg/mL	+/-	11.7550	µg/mL	Gravimetric
	CAS # 72-54-8	(Lot ER061207-01)			+/-	91.2374	µg/mL	Unstressed
	Purity 97%				+/-	131.7344	µg/mL	Stressed
15	Endosulfan II		2,005.5	µg/mL	+/-	11.7694	µg/mL	Gravimetric
	CAS # 33213-65-9	(Lot ER102407-02)			+/-	91.3490	µg/mL	Unstressed
	Purity 99%				+/-	131.8955	µg/mL	Stressed
16	4,4'-DDT		2,003.5	µg/mL	+/-	11.7577	µg/mL	Gravimetric
	CAS # 50-29-3	(Lot S37912V)			+/-	91.2579	µg/mL	Unstressed
	Purity 99%				+/-	131.7640	µg/mL	Stressed
17	Endrin aldehyde		2,008.5	µg/mL	+/-	11.7871	µg/mL	Gravimetric
	CAS # 7421-93-4	(Lot ER082306-01)			+/-	91.4861	µg/mL	Unstressed
	Purity 98%				+/-	132.0935	µg/mL	Stressed
18	Methoxychlor		2,002.5	µg/mL	+/-	11.7518	µg/mL	Gravimetric
	CAS # 72-43-5	(Lot 3296700)			+/-	91.2123	µg/mL	Unstressed
	Purity 99%				+/-	131.6982	µg/mL	Stressed
19	Endosulfan sulfate		2,005.0	µg/mL	+/-	11.7662	µg/mL	Gravimetric
	CAS # 1031-07-8	(Lot SZBC213XV)			+/-	91.3244	µg/mL	Unstressed
	Purity 96%				+/-	131.8600	µg/mL	Stressed
20	Endrin ketone		2,001.0	µg/mL	+/-	11.7430	µg/mL	Gravimetric
	CAS # 53494-70-5	(Lot 4405100)			+/-	91.1440	µg/mL	Unstressed
	Purity 99%				+/-	131.5996	µg/mL	Stressed

Solvent: Hexane/Toluene (50:50)
CAS # 110-54-3/108-88-3
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11923)

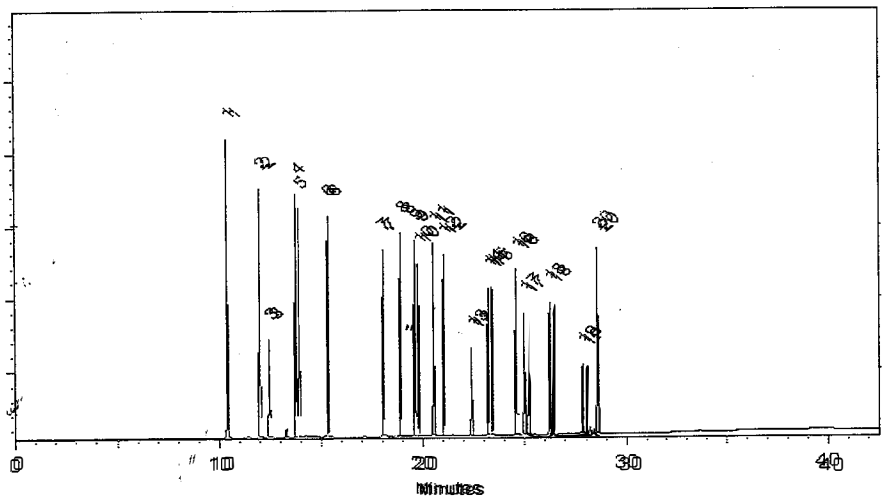
Carrier Gas:
helium constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Connor Flannery - Mix Technician

Date Mixed: 21-Oct-2015 **Balance:** B442140311

Jennifer L. Polling - QC Analyst

Date Passed: 23-Oct-2015

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8081ABResPS_00022

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309
www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY. READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 32415 **Lot No.:** A0114872

Description: Organochlorine Pesticide Mix AB #3

Organochlorine Pesticide Mix AB #3 2,000 µg/mL, Hexane/Toluene (50:50), 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: October 31, 2019 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Position Number	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	alpha-BHC CAS # 319-84-6 Purity 99% (Lot 0911942)	2,001.5 µg/mL	+/- 11.7459 µg/mL +/- 91.1668 µg/mL +/- 131.6325 µg/mL		Gravimetric Unstressed Stressed
2	gamma-BHC (Lindane) CAS # 58-89-9 Purity 99% (Lot 3895100)	2,002.5 µg/mL	+/- 11.7518 µg/mL +/- 91.2123 µg/mL +/- 131.6982 µg/mL		Gravimetric Unstressed Stressed
3	beta-BHC CAS # 319-85-7 Purity 98% (Lot SZBD116XV)	2,011.0 µg/mL	+/- 11.8014 µg/mL +/- 91.5977 µg/mL +/- 132.2546 µg/mL		Gravimetric Unstressed Stressed
4	delta-BHC CAS # 319-86-8 Purity 98% (Lot ER0210014001)	2,011.9 µg/mL	+/- 11.8072 µg/mL +/- 91.6423 µg/mL +/- 132.3191 µg/mL		Gravimetric Unstressed Stressed
5	Heptachlor CAS # 76-44-8 Purity 99% (Lot NT0512444)	2,007.5 µg/mL	+/- 11.7811 µg/mL +/- 91.4401 µg/mL +/- 132.0271 µg/mL		Gravimetric Unstressed Stressed
6	Aldrin CAS # 309-00-2 Purity 99% (Lot 42401100)	2,006.5 µg/mL	+/- 11.7753 µg/mL +/- 91.3945 µg/mL +/- 131.9613 µg/mL		Gravimetric Unstressed Stressed
7	Heptachlor epoxide (isomer B) CAS # 1024-57-3 Purity 99% (Lot ER1211511001)	2,006.55 µg/mL	+/- 11.7694 µg/mL +/- 91.3490 µg/mL +/- 131.8955 µg/mL		Gravimetric Unstressed Stressed

8	trans-Chlordane		2,011.5	µg/mL	+/-	11.8046	µg/mL	Gravimetric
	CAS # 5103-74-2	(Lot ER061906-04)			+/-	91.6223	µg/mL	Unstressed
	Purity 99%				+/-	132.2901	µg/mL	Stressed
9	cis-Chlordane		2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS # 5103-71-9	(Lot ER062410-01)			+/-	91.5539	µg/mL	Unstressed
	Purity 99%				+/-	132.1915	µg/mL	Stressed
10	Endosulfan I		2,012.4	µg/mL	+/-	11.8101	µg/mL	Gravimetric
	CAS # 959-98-8	(Lot ER012105-02)			+/-	91.6646	µg/mL	Unstressed
	Purity 98%				+/-	132.3513	µg/mL	Stressed
11	4,4'-DDE		2,004.5	µg/mL	+/-	11.7635	µg/mL	Gravimetric
	CAS # 72-55-9	(Lot ER011106-01)			+/-	91.3034	µg/mL	Unstressed
	Purity 99%				+/-	131.8298	µg/mL	Stressed
12	Dieldrin		2,002.6	µg/mL	+/-	11.7526	µg/mL	Gravimetric
	CAS # 60-57-1	(Lot ER030105-03)			+/-	91.2182	µg/mL	Unstressed
	Purity 98%				+/-	131.7068	µg/mL	Stressed
13	Endrin		2,012.0	µg/mL	+/-	11.8075	µg/mL	Gravimetric
	CAS # 72-20-8	(Lot LC06045V)			+/-	91.6450	µg/mL	Unstressed
	Purity 99%				+/-	132.3230	µg/mL	Stressed
14	4,4'-DDD		2,003.1	µg/mL	+/-	11.7550	µg/mL	Gravimetric
	CAS # 72-54-8	(Lot ER061207-01)			+/-	91.2374	µg/mL	Unstressed
	Purity 97%				+/-	131.7344	µg/mL	Stressed
15	Endosulfan II		2,005.5	µg/mL	+/-	11.7694	µg/mL	Gravimetric
	CAS # 33213-65-9	(Lot ER102407-02)			+/-	91.3490	µg/mL	Unstressed
	Purity 99%				+/-	131.8955	µg/mL	Stressed
16	4,4'-DDT		2,003.5	µg/mL	+/-	11.7577	µg/mL	Gravimetric
	CAS # 50-29-3	(Lot S37912V)			+/-	91.2579	µg/mL	Unstressed
	Purity 99%				+/-	131.7640	µg/mL	Stressed
17	Endrin aldehyde		2,008.5	µg/mL	+/-	11.7871	µg/mL	Gravimetric
	CAS # 7421-93-4	(Lot ER082306-01)			+/-	91.4861	µg/mL	Unstressed
	Purity 98%				+/-	132.0935	µg/mL	Stressed
18	Methoxychlor		2,002.5	µg/mL	+/-	11.7518	µg/mL	Gravimetric
	CAS # 72-43-5	(Lot 3296700)			+/-	91.2123	µg/mL	Unstressed
	Purity 99%				+/-	131.6982	µg/mL	Stressed
19	Endosulfan sulfate		2,005.0	µg/mL	+/-	11.7662	µg/mL	Gravimetric
	CAS # 1031-07-8	(Lot SZBC213XV)			+/-	91.3244	µg/mL	Unstressed
	Purity 96%				+/-	131.8600	µg/mL	Stressed
20	Endrin ketone		2,001.0	µg/mL	+/-	11.7430	µg/mL	Gravimetric
	CAS # 53494-70-5	(Lot 4405100)			+/-	91.1440	µg/mL	Unstressed
	Purity 99%				+/-	131.5996	µg/mL	Stressed

Solvent: Hexane/Toluene (50:50)
CAS # 110-54-3/108-88-3
Purity 99%

Column:
30m x 25mm x 2um
Rtx-CLP II (cat.# 11923)

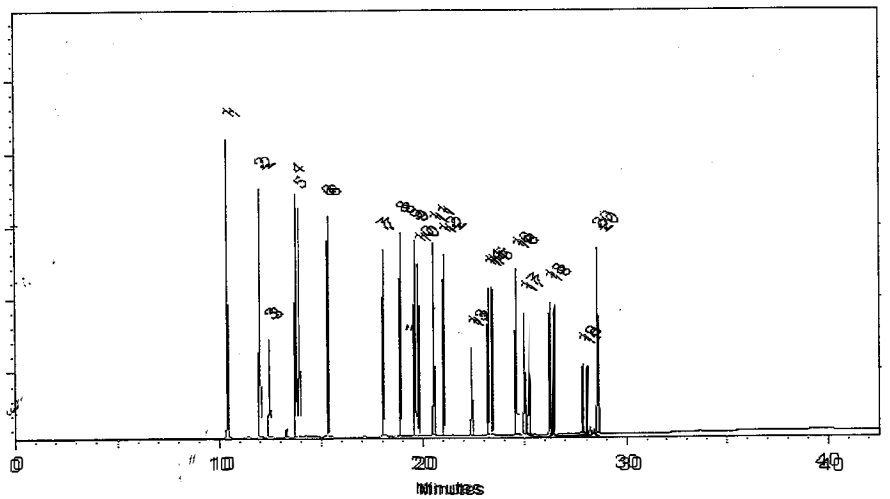
Carrier Gas:
helium constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Connor Flannery - Mix Technician

Date Mixed: 21-Oct-2015 **Balance:** B442140311

Jennifer L. Polling - QC Analyst

Date Passed: 23-Oct-2015

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8081ABResSS_00010

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited Reference Material Producer Certificate #3332.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited Testing Laboratory Certificate #3332.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32415.sec **Lot No.:** A0108854

Description : Organochlorine Pesticide Mix AB #3

Organochlorine Pesticide Mix AB #3 2,000 µg/mL, Hexane/Toluene (50:50), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2019 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	alpha-BHC		2,009.5 µg/mL	+/-	11.7929	µg/mL	Gravimetric
	CAS # 319-84-6.SEC	(Lot 1623900)		+/-	78.6071	µg/mL	Unstressed
	Purity 99%			+/-	124.7419	µg/mL	Stressed
2	gamma-BHC (Lindane)		2,010.0 µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS # 58-89-9.SEC	(Lot LC00563V)		+/-	78.6267	µg/mL	Unstressed
	Purity 99%			+/-	124.7729	µg/mL	Stressed
3	beta-BHC		2,003.1 µg/mL	+/-	11.7554	µg/mL	Gravimetric
	CAS # 319-85-7.SEC	(Lot 1808700)		+/-	78.3575	µg/mL	Unstressed
	Purity 98%			+/-	124.3458	µg/mL	Stressed
4	delta-BHC		2,003.5 µg/mL	+/-	11.7577	µg/mL	Gravimetric
	CAS # 319-86-8.SEC	(Lot 1912200)		+/-	78.3724	µg/mL	Unstressed
	Purity 99%			+/-	124.3694	µg/mL	Stressed
5	Heptachlor		2,000.5 µg/mL	+/-	11.7401	µg/mL	Gravimetric
	CAS # 76-44-8.SEC	(Lot 1745400)		+/-	78.2551	µg/mL	Unstressed
	Purity 99%			+/-	124.1832	µg/mL	Stressed
6	Aldrin		2,004.1 µg/mL	+/-	11.7612	µg/mL	Gravimetric
	CAS # 309-00-2.SEC	(Lot ER062311-01)		+/-	78.3959	µg/mL	Unstressed
	Purity 98%			+/-	124.4067	µg/mL	Stressed
7	Heptachlor epoxide (isomer B)		2,006.0 µg/mL	+/-	11.77723	µg/mL	Gravimetric
	CAS # 1024-57-3.SEC	(Lot 33525000)		+/-	78.47702	µg/mL	Unstressed
	Purity 99%			+/-	124.52446	µg/mL	Stressed

8	trans-Chlordane			2,006.0	µg/mL	+/-	11.7723	µg/mL	Gravimetric
	CAS #	5103-74-2.SEC	(Lot LC06193V)			+/-	78.4702	µg/mL	Unstressed
	Purity	99%				+/-	124.5246	µg/mL	Stressed
9	cis-Chlordane			2,009.0	µg/mL	+/-	11.7899	µg/mL	Gravimetric
	CAS #	5103-71-9.SEC	(Lot 24407)			+/-	78.5876	µg/mL	Unstressed
	Purity	99%				+/-	124.7108	µg/mL	Stressed
10	4,4'-DDE			2,001.5	µg/mL	+/-	11.7459	µg/mL	Gravimetric
	CAS #	72-55-9.SEC	(Lot 1833500)			+/-	78.2942	µg/mL	Unstressed
	Purity	99%				+/-	124.2453	µg/mL	Stressed
11	Endosulfan I			2,002.1	µg/mL	+/-	11.7497	µg/mL	Gravimetric
	CAS #	959-98-8.SEC	(Lot 1710200)			+/-	78.3192	µg/mL	Unstressed
	Purity	98%				+/-	124.2850	µg/mL	Stressed
12	Dieldrin			1,995.3	µg/mL	+/-	11.7094	µg/mL	Gravimetric
	CAS #	60-57-1.SEC	(Lot 1274700)			+/-	78.0509	µg/mL	Unstressed
	Purity	98%				+/-	123.8591	µg/mL	Stressed
13	Endrin			2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS #	72-20-8 *	(Lot LC06045V)			+/-	78.2355	µg/mL	Unstressed
	Purity	99%				+/-	124.1521	µg/mL	Stressed
14	4,4'-DDD			2,009.0	µg/mL	+/-	11.7899	µg/mL	Gravimetric
	CAS #	72-54-8.SEC	(Lot 1141700)			+/-	78.5876	µg/mL	Unstressed
	Purity	98%				+/-	124.7108	µg/mL	Stressed
15	Endosulfan II			2,010.0	µg/mL	+/-	11.7958	µg/mL	Gravimetric
	CAS #	33213-65-9.SEC	(Lot 3437500)			+/-	78.6267	µg/mL	Unstressed
	Purity	99%				+/-	124.7729	µg/mL	Stressed
16	4,4'-DDT			2,016.5	µg/mL	+/-	11.8340	µg/mL	Gravimetric
	CAS #	50-29-3.SEC	(Lot 3478000)			+/-	78.8809	µg/mL	Unstressed
	Purity	99%				+/-	125.1764	µg/mL	Stressed
17	Endrin aldehyde			2,016.4	µg/mL	+/-	11.8331	µg/mL	Gravimetric
	CAS #	7421-93-4.SEC	(Lot 21752)			+/-	78.8751	µg/mL	Unstressed
	Purity	98%				+/-	125.1671	µg/mL	Stressed
18	Methoxychlor			2,007.0	µg/mL	+/-	11.7782	µg/mL	Gravimetric
	CAS #	72-43-5.SEC	(Lot LC09014V)			+/-	78.5093	µg/mL	Unstressed
	Purity	99%				+/-	124.5867	µg/mL	Stressed
19	Endosulfan sulfate			2,007.5	µg/mL	+/-	11.7813	µg/mL	Gravimetric
	CAS #	1031-07-8.SEC	(Lot 1888900)			+/-	78.5301	µg/mL	Unstressed
	Purity	98%				+/-	124.6196	µg/mL	Stressed
20	Endrin ketone			2,007.5	µg/mL	+/-	11.7813	µg/mL	Gravimetric
	CAS #	53494-70-5.SEC	(Lot 091307RD)			+/-	78.5301	µg/mL	Unstressed
	Purity	98%				+/-	124.6196	µg/mL	Stressed

Solvent: Hexane/Toluene (50:50)
CAS # 110-54-3/108-88-3
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

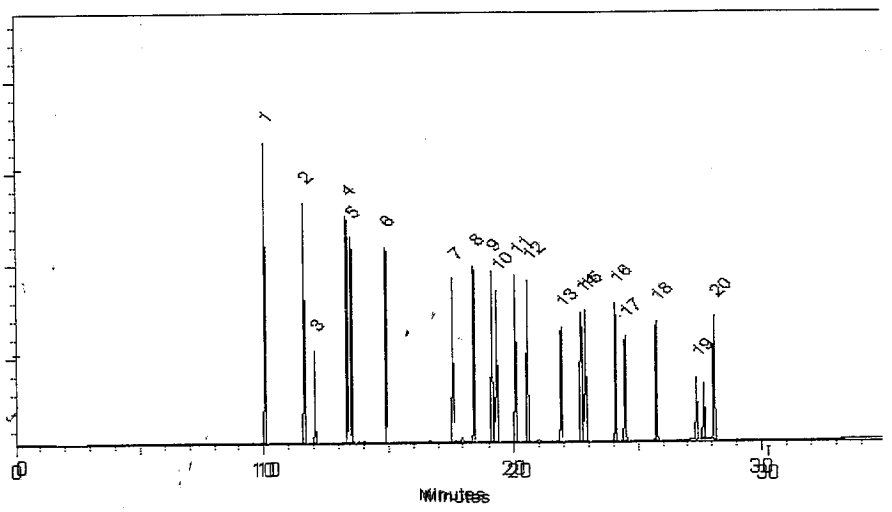
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Lane Kibe - Mix Technician

Date Mixed: 04-Feb-2015 **Balance:** B345965662

Diane Shaffer - QA Analyst

Date Passed: 12-Feb-2015

Manufactured under Restek's ISO 9001:2008
Registered Quality System
Certificate #EM 88387

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8081EvalBStk2_00015

125 Market Street
New Haven, CT 06513
USA

AccuStandard,® Inc.

Tel: (203)786-5290
Fax: (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-8081-DS
Description: 4,4'-DDT & Endrin
Lot: 214101383-03
Solvent: Hexane
Hazards: *Refer to SDS for complete safety information*



Signal Word: Danger

Date Certified: Sep 8, 2016
Expiration: Sep 8,, 2017
Sample Size: 1 mL
Components: 2
Storage Condition: Ambient (>5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: Yes

Included on ISO Guide 34 Scope of Accreditation: Yes

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
4,4'-DDT	50-29-3	99.7	202.5	201.9
Endrin	72-20-8	99.0	202.4	200.4

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] All weights are traceable through NIST, Test No. 822-275872-11

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

See reverse side for additional information

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001

Reagent

8081HCBStkPS_00017

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: APP-9-112
Description: Hexachlorobenzene Standard
Lot: 215061299
Solvent: Methanol
Hazards: HIGHLY FLAMMABLE - *Refer to SDS for safety info*



Danger 2

Date Certified: Jun 16, 2015
Expiration: Jun 16, 2025
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)
Included on ISO/IEC 17025 Scope of Accreditation: Yes
Included on ISO Guide 34 Scope of Accreditation: Yes

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
Hexachlorobenzene	118-74-1	100.0	100.3	100.3

Sample

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] All weights are traceable through NIST, Test No. 822-275872-11

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values:
A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

See reverse side for additional information

Certified By:
Larry Decker, Organic QC Manager

Page 1 of 1

For use in routine laboratory analysis.

Reagent

8081LCSPrim_00036

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING



Reagent ID: 8081LCSPrim_00036

Description:	8081 Pesticides Prime 50ug/mL	Expiration Date:	11/15/2017
No. of Bottles:	1	Laboratory:	TestAmerica Denver
Storage Location:	North Prep	Prepared By:	Isberg, Kyle
Reagent Volume:	10.000 mL	Solvent:	Hexane
Creation Date:	07/20/2016	Solvent Lot:	Hexane_Cycl_00044
Open Date:			
Container(s):	4539365		
Comment:	0.25mL 8081ABResPS (Restek Cat# 32415) diluted to 10mL hexane, 6 month Exp. Stock has 1 yr expiration date from date opened. STOCK IS VERY HIGH LEVEL. AFTER MAKING STANDARD RINSE SYRINGE 3X WITH MECL2. TAKE SYRINGE APART & RINSE OUTSIDE OF BARREL & PLUNGER. REASSEMBLE & RINSE 3x WITH MECL2 AGAIN.		

Reagent Analyte Information

Analyte	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
4,4'-DDD	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
4,4'-DDE	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
4,4'-DDT	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
Aldrin	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
alpha-BHC	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
alpha-Chlordane	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
beta-BHC	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
delta-BHC	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
Dieldrin	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
Endosulfan I	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
Endosulfan II	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
Endosulfan sulfate	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
Endrin	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
Endrin aldehyde	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
Endrin ketone	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
gamma-BHC (Lindane)	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL
gamma-Chlordane	8081ABResPS_00016	03/15/2018	2000.00000	ug/mL	50.00000	ug/mL

Preliminary Report

TestAmerica Denver

LCS, Lab Control Sample Report

Sample Path: \\ChromNA\Denver\ChromData\SGC_PT1\20170516-58762-010.D
Lims ID: 8081LCSPrim_00036 Inj Date: 16-May-2017 14:16:20
Worklist ID: 280-0058762-010 Instrument: SGC_PT1
Method: PT1_8081_IS

Detector 1: GC ECD1A

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 608_Prep	Limits 2 35100C
8 alpha-BHC	50.0	45.8	91.6	66-115	73-133
9 gamma-BHC (Lindane)	50.0	45.8	91.6	68-142	71-132
10 beta-BHC	50.0	45.0	89.9	69-119	67-133
12 delta-BHC	50.0	45.5	90.9	75-124	72-135
15 Heptachlor	50.0	48.5	97.0	59-143	52-129
16 Aldrin	50.0	45.6	91.2	42-118	44-127
21 Heptachlor epoxide	50.0	46.0	92.1	37-142	77-132
22 gamma-Chlordane	50.0	45.7	91.5	64-120	73-131
23 alpha-Chlordane	50.0	45.7	91.5	66-120	75-128
24 4,4'-DDE	50.0	45.4	90.8	61-119	74-124
25 Endosulfan I	50.0	45.8	91.7	61-116	73-128
27 Dieldrin	50.0	46.4	92.9	68-119	78-132
30 Endrin	50.0	49.8	99.6	66-143	74-171
32 4,4'-DDD	50.0	45.2	90.4	63-127	78-138
34 Endosulfan II	50.0	44.6	89.3	63-117	75-132
35 4,4'-DDT	50.0	46.6	93.2	53-128	72-139
36 Endrin aldehyde	50.0	43.5	87.0	55-119	59-136
37 Methoxychlor	50.0	44.4	88.8	30-150	67-150
39 Endosulfan sulfate	50.0	44.0	88.0	70-119	77-135
40 Endrin ketone	50.0	40.8	81.6		75-137

Detector 2: GC ECD2B

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 608_Prep	Limits 2 35100C
8 alpha-BHC	50.0	46.1	92.2	66-115	73-133
9 gamma-BHC (Lindane)	50.0	45.8	91.6	68-142	71-132
10 beta-BHC	50.0	45.4	90.8	69-119	67-133
12 delta-BHC	50.0	45.0	90.0	75-124	72-135
15 Heptachlor	50.0	46.3	92.6	59-143	52-129
16 Aldrin	50.0	45.1	90.2	42-118	44-127
21 Heptachlor epoxide	50.0	45.1	90.1	37-142	77-132
22 gamma-Chlordane	50.0	44.4	88.8	64-120	73-131
23 alpha-Chlordane	50.0	44.3	88.7	66-120	75-128
24 4,4'-DDE	50.0	44.7	89.4	61-119	74-124
25 Endosulfan I	50.0	44.2	88.5	61-116	73-128
27 Dieldrin	50.0	45.1	90.2	68-119	78-132
30 Endrin	50.0	48.3	96.5	66-143	74-171
32 4,4'-DDD	50.0	44.0	87.9	63-127	78-138
34 Endosulfan II	50.0	43.6	87.2	63-117	75-132
35 4,4'-DDT	50.0	41.1	82.3	53-128	72-139
36 Endrin aldehyde	50.0	42.4	84.8	55-119	59-136

Preliminary Report

Sample Path: \\ChromNA\Denver\ChromData\GC_F\20170516-87621.b\001_001.D

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 608_Prep	Limits 2 3510C
37 Methoxychlor	50.0	40.3	80.5	30-150	67-150
39 Endosulfan sulfate	50.0	42.8	85.7	70-199	77-135
40 Endrin ketone	50.0	40.0	79.9		75-137

Samples for Limit Group: 1, Limits Prep Method: 608_Prep

280-96455-D-1-K

Samples for Limit Group: 2, Limits Prep Method: 3510C

280-96568-M-1-A
280-96572-H-2-A
280-96572-A-3-A
280-96606-K-1-A
280-96606-F-2-A
280-96606-D-3-A
280-96606-I-4-A
280-96606-K-5-A

Reagent

8081Toxaphene_00027

Preliminary Report

TestAmerica Denver

LCS, Lab Control Sample Report

Sample Path: \\ChromNA\Denver\ChromData\SGC_P1\20170531-59302.b\05310016.D

Lims ID: LCS 280-374659/3-A Inj. Date: 31-May-2017 15:37:48

Worklist ID: 280-0059302-016 Instrument: SGC_P1

Method: P1 8081 IS

Detector 1: GC ECD1A

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3546
$ 4 Tetrachloro-m-xylene	20.0	19.6	97.9	0-0
28 Toxaphene	200.0	207.0	103.5	33-141
28 Toxaphene-1	200.0	158.5	79.3	33-141
28 Toxaphene-2	200.0	268.1	134.0	33-141
28 Toxaphene-3	200.0	220.8	110.4	33-141
28 Toxaphene-4	200.0	171.7	85.9	33-141
28 Toxaphene-5	200.0	215.8	107.9	33-141
$ 41 DCB Decachlorobiphenyl	20.0	21.4	106.9	63-121

Detector 2: GC ECD2B

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3546
$ 4 Tetrachloro-m-xylene	20.0	21.0	105.0	0-0
28 Toxaphene	200.0	147.7	73.9	33-141
28 Toxaphene-1	200.0	108.8	54.4	33-141
28 Toxaphene-2	200.0	107.1	53.6	33-141
28 Toxaphene-3	200.0	139.3	69.6	33-141
28 Toxaphene-4	200.0	176.7	88.4	33-141
28 Toxaphene-5	200.0	206.7	103.3	33-141
$ 41 DCB Decachlorobiphenyl	20.0	22.7	113.7	63-121

Samples for Limit Group: 1, Lims Prep Method: 3546

280-97393-B-1-B 280-97393-B-2-B 280-97393-B-3-B

280-97393-A-4-D 280-97393-A-5-D 280-97393-C-6-H

Reagent

8081ToxPS_00031

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY–READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 32071 **Lot No.:** A0113750

Description: Toxaphene Standard

Toxaphene Standard 5,000 µg/mL, Isooctane, 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: December 31, 2019 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Toxaphene	5,018.0 µg/mL	+/- 29.4484	µg/mL	Gravimetric
	CAS # 8001-35-2 (Lot NT052041)		+/- 156.1719	µg/mL	Unstressed
	Purity ----%		+/- 207.7410	µg/mL	Stressed

Solvent: Isooctane
CAS # 540-84-1
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

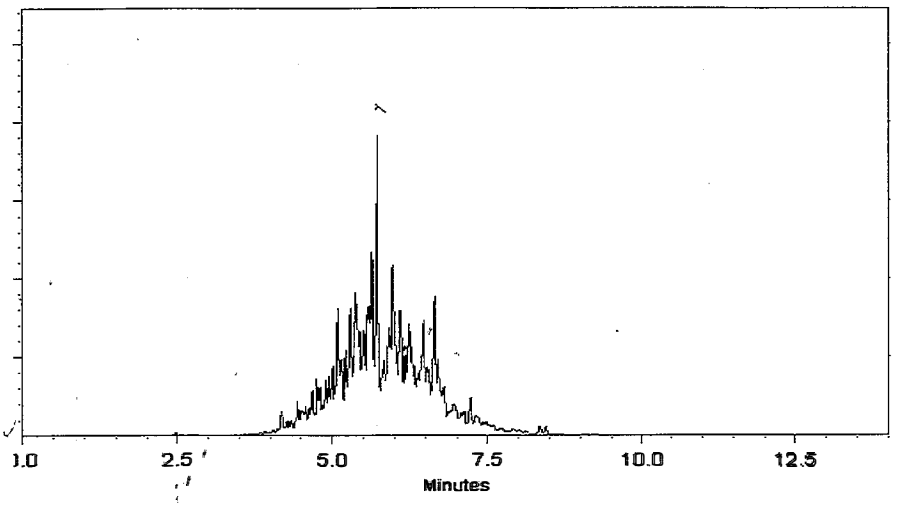
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Rebecca Sawyer

Date Mixed: 03-Sep-2015 **Balance:** 1125113331

Jennifer L Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 09-Sep-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8081ToxPS_00032

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY–READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 32071 **Lot No.:** A0113750

Description: Toxaphene Standard

Toxaphene Standard 5,000 µg/mL, Isooctane, 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: December 31, 2019 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Toxaphene	5,018.0 µg/mL	+/- 29.4484	µg/mL	Gravimetric
	CAS # 8001-35-2 (Lot NT052041)		+/- 156.1719	µg/mL	Unstressed
	Purity ----%		+/- 207.7410	µg/mL	Stressed

Solvent: Isooctane
CAS # 540-84-1
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

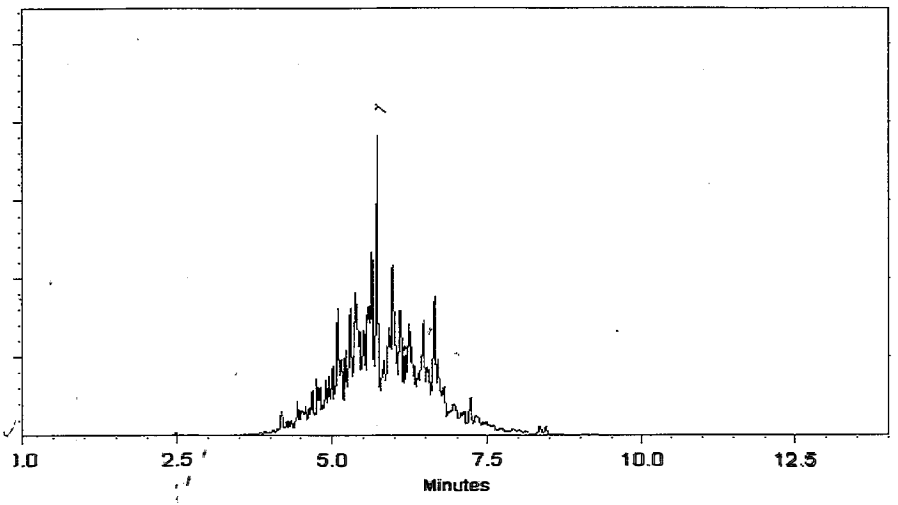
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Rebecca Sawyer

Date Mixed: 03-Sep-2015 **Balance:** 1125113331

Jennifer L Pollino

Jennifer L. Pollino - QC Analyst

Date Passed: 09-Sep-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8081ToxSS_00016

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: P-093S-H-10X
Description: Toxaphene Standard
Lot: 215011420
Solvent: Hexane
Hazards: **HIGHLY FLAMMABLE** - *Refer to SDS for safety info*



Danger 2

Date Certified: Jan 30, 2015
Expiration: Jan 30, 2025
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Included on ISO/IEC 17025 Scope of Accreditation: Yes

Included on ISO Guide 34 Scope of Accreditation: Yes

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1] (µg/mL)	Certified Analyte Concentration[2] (µg/mL)
Toxaphene	8001-35-2	Tech Mix	1001	1001

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] All weights are traceable through NIST, Test No. 822-275872-11

[2] Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty associated with the gravimetric values reported on this certificate is ±0.24%. The CRM Uncertainty calculated for this product is ±5%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values:
A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

See reverse side for additional information

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO Guide 34, ISO/IEC 17025 and certified to ISO 9001

OR-ORG/INO-001
Rev. 5/16

Reagent

8082 LCS_00046

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING



Reagent ID: 8082 LCS_00046

Description:	2 ug/mL	Expiration Date:	10/28/2017
No. of Bottles:	2	Laboratory:	TestAmerica Denver
Storage Location:	North Prep	Prepared By:	Bourgery, David F
Reagent Volume:	500.000 mL	Solvent:	ACETONE
Creation Date:	04/28/2017	Solvent Lot:	Acetone_000177
Open Date:			
Container(s):	4504519, 4504520		
Comment:	Take 1mL 8082LCSStock and dilute to 500mL in Acetone. 6 Month epxiration date. Divide into 2 bottles.		

Reagent Analyte Information

Analyte	%R	%D	Source ID	Source Exp. Date	Source Conc.	Source Conc. Units	Final Conc.	Final Conc. Units
PCB-1016	95.9	-4.2	8082LCSSTOCK_00033	04/25/2018	1000.00000	ug/mL	2.00000	ug/mL
PCB-1260	103.2	+3.2	8082LCSSTOCK_00033	04/25/2018	1000.00000	ug/mL	2.00000	ug/mL

QAO 02 MAY 2017

Source Reagents

Reagent	Description	Type	Expiration	Vendor	Vendor Lot #	Vendor Cat Lot #	Volume Used	Volume Units
8082LCSSTOCK_00033	Aroclor 1016/1260 1000UG/ML	ASTD	04/25/18	RESTEK	A0109664	32039	1.00000	mL

Preliminary Report

TestAmerica Denver

Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170501-58156.b\050117004.D
Lims ID: 8082-LCS_000046
Client ID:
Sample Type: Client
Inject. Date: 01-May-2017 14:17:05 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.000000
Sample Info: 8082-LCS_000046
Misc. Info.: 280-0058156-004
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170501-58156.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 01-May-2017 21:07:49 Calib Date: 27-Apr-2017 01:30:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last Cal File: \\ChromNA\Denver\ChromData\SGC_P3\20170426-57988.b\042617035.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK032

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
# 17 1-Bromo-2-nitrobenzene						
1	1.840	1.839	0.001	387609084	1000.0	
2	1.662	1.660	0.002	244245650	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						c
1		2.789			ND	
2		2.717				
3 PCB-1221						U
1		3.005			ND	
1		3.149				
1		3.189				
2		3.037				
2		3.167				
2		3.217				
7 PCB-1232						U
1		3.187			ND	
1		3.540				
1		4.013				
1		4.157				
1		4.613				
2		3.218				
2		3.601				
2		4.051				
2		4.191				
2		4.845				

Preliminary Report

Data File: \\ChromNA\Denver\ChromData\SGC_F3220170501-583166b0501170404.D

Col	RT (min)	Exp RT (min)	Dlt RT (min)	Response	Conc Amt ng/ml	Flags
10 PCB-1242						U
1	3.539				ND	
1	4.012					
1	4.156					
1	5.109					
1	5.182					
2	3.600					
2	4.050					
2	4.194					
2	5.157					
2	5.204					
4 PCB-1248						U
1	3.540				ND	
1	4.010					
1	4.370					
1	4.613					
1	5.373					
2	4.048					
2	4.708					
2	4.845					
2	5.155					
2	5.201					
1 PCB-1016						C
1	3.540	3.542	-0.002	31712546	196.7	
1	4.014	4.016	-0.002	69246134	194.4	
1	4.157	4.156	0.001	30845852	192.0	
1	4.224	4.222	0.002	19684887	194.0	
1	4.614	4.612	0.002	31292920	190.8	
		Average of Peak Amounts =			193.6	
2	3.602	3.600	0.002	23662904	193.7	
2	4.052	4.050	0.002	50858818	200.2	
2	4.192	4.194	-0.002	21250137	191.4	
2	4.422	4.420	0.002	11425576	179.8	
2	4.708	4.707	0.001	16832040	193.2	
		Average of Peak Amounts =			191.7	
					RPD = 0.99	

Preliminary Report

Data File: \\ChromNAS\Denver\ChromData\SSCC_P3\20170501_58_156.b\05011704.D

Col	RT (min.)	ExpRT (min.)	DltRT (min.)	Response	Conc/Amt ng/ml	Flags
9 PCB-1254						U
1	5.375				ND	
1	5.709					
1	5.862					
1	6.469					
1	6.839					
2	5.443					
2	5.857					
2	6.007					
2	6.310					
2	7.017					
12 PCB-1260						dM
1	6.104	6.102	0.002	45616151	192.1	M
1	6.837	6.836	0.001	81059617	178.5	M
1	7.330	7.332	-0.002	44203167	206.8	M
1	7.767	7.766	0.001	96454426	205.8	M
1	8.154	8.152	0.002	50461976	194.6	M
		Average of Peak Amounts =			195.6	
2	6.552	6.550	0.002	40270602	196.9	M
2	7.015	7.014	0.001	57116909	184.0	M
2	7.538	7.537	0.001	31475569	218.7	M
2	7.905	7.907	-0.002	69861172	218.5	M
2	8.405	8.407	-0.002	50192528	213.7	
		Average of Peak Amounts =			206.4	
					RPD = 5.37	
5 PCB-1262						U
1	6.470				ND	
1	7.000					
1	7.330					
1	7.767					
1	8.153					
2	6.551					
2	7.145					
2	7.538					
2	7.908					
2	8.405					

Reagent

8082LCSSTOCK_00033

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32039 **Lot No.:** A0109664

Description : Aroclor® 1016/1260 Mix

Aroclor® 1016/1260 Mix 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2021 **Storage:** 25°C nominal

Handling: This product contains PCB's

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Aroclor 1016	1,007.4 µg/mL	+/- 5.8705 µg/mL	Gravimetric
	CAS # 12674-11-2 (Lot W-125-01)		+/- 31.3443 µg/mL	Unstressed
	Purity ----%		+/- 41.6988 µg/mL	Stressed
2	Aroclor 1260	1,009.8 µg/mL	+/- 5.8846 µg/mL	Gravimetric
	CAS # 11096-82-5 (Lot W-129-06)		+/- 31.4196 µg/mL	Unstressed
	Purity ----%		+/- 41.7990 µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

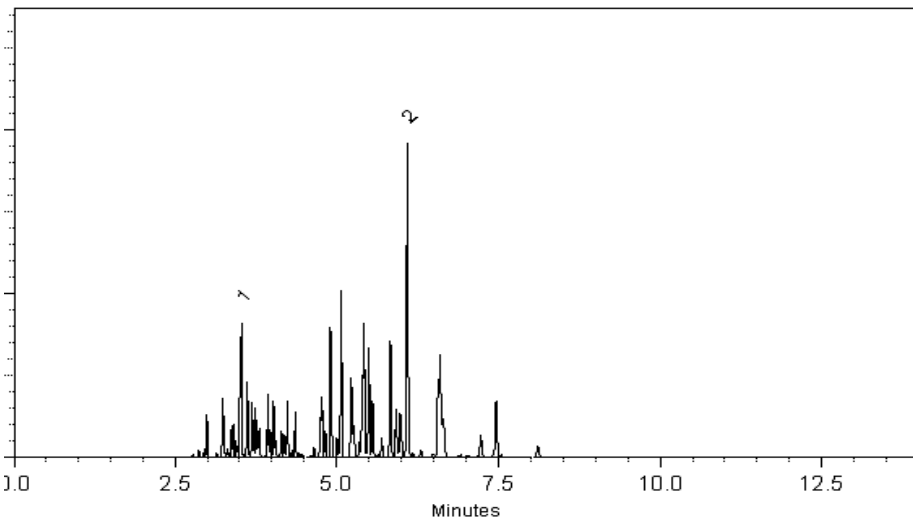
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
200°C to 300°C
@ 25°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Cheryl Graham - Mix Technician

Date Mixed: 14-Mar-2015 **Balance:** B442140311

Diane Shaffer - QAAnalyst

Date Passed: 16-Mar-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

8270 SIM Surr_00068

Preliminary Report

TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_X4\20170127-55298.b\X4_9343.D
Lims ID: 8270 SIM Surr_00068
Client ID:
Sample Type: Client
Inject. Date: 27-Jan-2017 14:58:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 8270 SIM Surr_00068
Operator ID: VASQUEZK Instrument ID: SMS_X4

Method: \\ChromNA\Denver\ChromData\SMS_X4\20170127-55298.b\SMSX4_SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 27-Jan-2017 15:51:00 Calib Date: 26-Jan-2017 17:29:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_X4\20170123-55149.b\X4_9339.D

Column 1 : Det: MS SCAN
Process Host: XAWRK021

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	490.1	98.03
$ 5 2-Fluorobiphenyl	500.0	455.8	91.17
$ 6 Terphenyl-d14	500.0	451.3	90.26

Reagent

8270 SIM Surr_00070

Preliminary Report

TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170524-59091.b\F6794.D
Lims ID: 8270SIM Surr_00070
Client ID:
Sample Type: Client
Inject. Date: 24-May-2017 16:09:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 8270 SIM Surr_00070
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170524-59091.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 25-May-2017 09:13:31 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK023

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	488.2	97.64
$ 5 2-Fluorobiphenyl	500.0	480.7	96.14
$ 6 Terphenyl-d14	500.0	430.9	86.17

Reagent

8270BO-SIMLCS_00022

Preliminary Report

TestAmerica Denver

LCS, Lab Control Sample Report

Sample Path: \\ChromNA\Denver\ChromData\SMS_F\20170524-59091.b\F6793.D

Lims ID: 8270BO-SIMLCS_00022 Inj. Date: 24-May-2017 15:43:30

Worklist ID: 280-0059091-007 Instrument: SMS_F

Method: SMSF_8270SIMX

Compound	Amount Added	Amount Recovered	%Rec	Limits 1 3546
9 1,4-Dioxane	900.0	842.5	93.6	
10 N-Nitrosodimethylamine	900.0	838.4	93.2	
14 Naphthalene	900.0	855.2	95.0	38-111
16 2-Methylnaphthalene	900.0	880.0	97.8	39-114
17 1-Methylnaphthalene	900.0	821.2	91.2	43-111
20 Dimethyl phthalate	900.0	887.1	98.6	
22 Acenaphthylene	900.0	795.7	88.4	39-116
23 Acenaphthene	900.0	848.4	94.3	44-111
32 Dibenzofuran	900.0	870.8	96.8	
24 Diethyl phthalate	900.0	888.5	98.7	
25 Fluorene	900.0	865.6	96.2	47-114
26 N-Nitrosodiphenylamine	900.0	857.6	95.3	
27 Phenanthrene	900.0	806.2	89.6	49-113
28 Anthracene	900.0	853.4	94.8	50-114
29 Di-n-butyl phthalate	900.0	818.1	90.9	
30 Fluoranthene	900.0	846.9	94.1	55-119
31 Pyrene	900.0	852.3	94.7	55-117
33 Butyl benzyl phthalate	900.0	801.2	89.0	
34 Bis(2-ethylhexyl) phtha	900.0	777.0	86.3	
35 Benzo[a]anthracene	900.0	849.5	94.4	54-122
36 Chrysene	900.0	895.2	99.5	57-118
37 Di-n-octyl phthalate	900.0	760.5	84.5	
38 Benzo[b]fluoranthene	900.0	859.3	95.5	53-128
39 Benzo[k]fluoranthene	900.0	869.0	96.6	56-123
40 Benzo[a]pyrene	900.0	847.0	94.1	50-125
41 Indeno[1,2,3-cd]pyrene	900.0	836.7	93.0	49-130
42 Dibenz(a,h)anthracene	900.0	838.3	93.1	50-129
43 Benzo[g,h,i]perylene	900.0	835.2	92.8	49-127

Samples for Limit Group: 1, Lims Prep Method: 3546

280-96516-B-6-H
280-96828-B-1-D
280-96828-B-2-B
280-96828-C-3-B
280-96828-B-4-B
280-96828-C-5-B
280-96828-B-6-B
280-96828-B-7-B
280-96828-B-8-B
280-96828-B-9-B
280-96828-B-10-B
280-96828-C-11-B
280-96828-B-12-B
280-96828-C-13-B

Reagent

8270SurStkHL_00205

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309
www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 567685 **Lot No.:** A01120521

Description: 8270 Surrogate Standard

8270 Surrogate Standard 5,000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size: 5 mL **Pkg Amt:** > 5 mL

Expiration Date: July 31, 2021 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L., K=2)		
1	2-Fluorophenol CAS # 367-12-4 Purity 99%	(Lot STBC5591V)	5,024.7 µg/mL	+/- 29.2140 +/- 146.6376 +/- 177.9391	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Phenol-d5 CAS # 4165-62-2 Purity 99%	(Lot X479P8)	5,000.1 µg/mL	+/- 29.0710 +/- 145.9197 +/- 177.0679	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Nitrobenzene-d5 CAS # 4165-60-0 Purity 99%	(Lot PR-24042)	5,035.3 µg/mL	+/- 29.2757 +/- 146.9469 +/- 178.3144	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	2-Fluorobiphenyl CAS # 321-60-8 Purity 99%	(Lot S26B003)	5,034.1 µg/mL	+/- 29.2687 +/- 146.9119 +/- 178.2719	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	2,4,6-Tribromophenol CAS # 118-79-6 Purity 99%	(Lot 29699MJW)	5,034.1 µg/mL	+/- 29.2687 +/- 146.9119 +/- 178.2719	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	p-Terphenyl-d14 CAS # 1718-51-0 Purity 99%	(Lot PR-210837)	5,025.9 µg/mL	+/- 29.2210 +/- 146.6726 +/- 177.9816	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Reagent

8270SurStkHL_00228

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY. READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 567685 **Lot No.:** A0012352869

Description: 8270 Surrogate Standard

8270 Surrogate Standard 5,000 µg/mL, Methylene Chloride, 5 mL/ampul

Container Size: 5 mL **Pkg Amt:** > 5 mL

Expiration Date: December 31, 2021 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; k=2)		
1	2-Fluorophenol CAS # 367-12-4 Purity 99%	(Lot STBD7945V)	5,017.0 µg/mL	+/- 29.1677	µg/mL	Gravimetric
				+/- 146.4126	µg/mL	Unstressed
				+/- 177.6661	µg/mL	Stressed
2	Phenol-d5 CAS # 4165-62-2 Purity 99%	(Lot X-479)	4,965.4 µg/mL	+/- 28.8690	µg/mL	Gravimetric
				+/- 144.9056	µg/mL	Unstressed
				+/- 175.8373	µg/mL	Stressed
3	Nitrobenzene-d5 CAS # 4165-60-0 Purity 99%	(Lot PR-25462)	5,019.4 µg/mL	+/- 29.1814	µg/mL	Gravimetric
				+/- 146.4812	µg/mL	Unstressed
				+/- 177.7494	µg/mL	Stressed
4	2-Fluorobiphenyl CAS # 321-60-8 Purity 99%	(Lot 101948342)	5,031.5 µg/mL	+/- 29.2518	µg/mL	Gravimetric
				+/- 146.8343	µg/mL	Unstressed
				+/- 178.1779	µg/mL	Stressed
5	2,4,6-Tribromophenol CAS # 118-79-6 Purity 99%	(Lot 29699MJW)	5,002.7 µg/mL	+/- 29.2238	µg/mL	Gravimetric
				+/- 146.6942	µg/mL	Unstressed
				+/- 178.0079	µg/mL	Stressed
6	p-Terphenyl-d14 CAS # 1718-51-0 Purity 99%	(Lot PR-21037)	5,002.2 µg/mL	+/- 29.2387	µg/mL	Gravimetric
				+/- 146.7686	µg/mL	Unstressed
				+/- 178.0982	µg/mL	Stressed

Reagent

ANALYTES B_00012

4470428
4470428
ID: ANALYTES B 09012
ID: ANALYTES B 09012
Exp: 04/14/18 Prod: SJS
Exp: 04/14/18 Prod: SJS
ICP ANALYTES B SPEX
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Catalog Number: INT-BB1 **Lot No.** 3-98MKBY

Description: Analytes BB

Matrix: 5% HNO_3

This **ASSURANCE**® Certified Reference Material (CRM) is intended primarily for use as a calibration standard or quality control standard for inorganic spectroscopic instrumentation such as ICP-OES, DCP, AA, ICP-MS, and XRF. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

The CRM is prepared from high purity single element concentrates of individual elements using Class A laboratory ware to give precise concentrations. See slide 2 for details of certification.

Instrumental Analysis by ICP Spectrometer:

Analyte	Labeled	Certified	Uncertainty	SRM	Analyte	Labeled	Certified	Uncertainty	SRM
Ag	100 µg/mL	99.1 µg/mL	±0.5 µg/mL	3151*	Ba	50 µg/mL	49.6 µg/mL	±0.3 µg/mL	3105a*
Cd	100 µg/mL	98.9 µg/mL	±0.5 µg/mL	3108*	Co	50 µg/mL	49.4 µg/mL	±0.3 µg/mL	3113*
Ni	100 µg/mL	98.9 µg/mL	±0.5 µg/mL	3136*	Cr	50 µg/mL	49.6 µg/mL	±0.3 µg/mL	3112a*
Pb	100 µg/mL	99.1 µg/mL	±0.5 µg/mL	3128*	Cu	50 µg/mL	49.8 µg/mL	±0.3 µg/mL	3114*
Zn	100 µg/mL	98.9 µg/mL	±0.5 µg/mL	3168a*	Mn	50 µg/mL	49.3 µg/mL	±0.3 µg/mL	3132*
Ba	50 µg/mL	49.3 µg/mL	±0.3 µg/mL	3104a*	V	50 µg/mL	49.8 µg/mL	±0.3 µg/mL	3165*

*- indicates NIST SRM
†- indicates SPEX CertiPrep CRM (when NIST SRM is not available)

SPEX CertiPrep Reference Multi: Lot# 9-164YP, 12-03YP

Balances are calibrated regularly with weight sets traceable to NIST SRD #822, 826, 2826, 2827 and others. This CRM is guaranteed stable and accurate to ±0.5% of the certified (measured) value. This includes uncertainty components due to preparation, measurement, homogeneity, and short-term and long-term stability. No measured concentration of any individual component exceeds ±2% of the labeled value. This guarantee is valid for a period of one year from the date of certification only when the material is unopened and stored under ambient laboratory conditions.

Date of Certification: APR - 2017 Certifying Officer:

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Reagent

AR_1016_RES_00010

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 32006 **Lot No.:** A0117379

Description: Aroclor® 1016 Standard

Aroclor 1016 1000µg/mL, Hexane, 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: May 31, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Aroclor 1016	1,003.0 µg/mL	+/- 5.8862 µg/mL	Gravimetric
	CAS # 12674-11-2 (Lot W-125-01)		+/- 31.7890 µg/mL	Unstressed
	Purity 99%		+/- 41.5271 µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1221_RES_00009

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Catalog No.: 32007 **Lot No.:** A0113480

Description: Aroclor® 1221 Standard

Aroclor® 1221 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: June 30, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

[illegible]	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Aroclor 1221 CAS # 11104-28-2 Purity ----% (Lot 2781200)	1,002.7 µg/mL	+/- 5.9555 µg/mL +/- 31.7918 µg/mL +/- 41.5234 µg/mL	Gravimetric Unstressed Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1221_RESss_00008

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Catalog No. : 32007.sec **Lot No.:** A0117382

Description : Aroclor® 1221 Standard

Aroclor® 1221 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1221	1,000.0 µg/mL	+/- 10.0737	µg/mL	Gravimetric
	CAS # 11104-28-2.SEC (Lot W-126-07)		+/- 32.7345	µg/mL	Unstressed
	Purity ----%		+/- 42.2047	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1232_RES_00010

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Catalog No. : 32008 **Lot No.:** A0117033

Description : Aroclor® 1232 Standard

Aroclor® 1232 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1232	1,003.0 µg/mL	+/- 5.8862	µg/mL	Gravimetric
	CAS # 11141-16-5 (Lot W-107-05)		+/- 31.7890	µg/mL	Unstressed
	Purity ----%		+/- 41.5271	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1232_RESss_00008

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Catalog No.: 32008.sec **Lot No.:** A095877

Description: Aroclor® 1232 Standard

Aroclor® 1232 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: September 30, 2019 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1232	1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 11141-16-5.SEC (Lot 130604JLM)		+/- 20.8959	µg/mL	Unstressed
	Purity ----%		+/- 34.3792	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1242_RES_00009

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Catalog No. : 32009 **Lot No.:** A0117779

Description : Aroclor® 1242 Standard

Aroclor® 1242 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1242	1,000.0 µg/mL	+/- 5.8686	µg/mL	Gravimetric
	CAS # 53469-21-9 (Lot 01141-A)		+/- 31.6940	µg/mL	Unstressed
	Purity ----%		+/- 41.4029	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1242_RESss_00008

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Catalog No. : 32009.SEC **Lot No.:** A0105175

Description : Aroclor® 1242 Standard

Aroclor® 1242 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2020 **Storage:** 25°C nominal

Handling: This product contains PCB's

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1242	1,000.0 µg/mL	+/- 10.0737	µg/mL	Gravimetric
	CAS # 53469-21-9.SEC (Lot NTO1020)		+/- 32.1814	µg/mL	Unstressed
	Purity ----%		+/- 42.2011	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1248_RES_00009

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32010 **Lot No.:** A0118166

Description : Aroclor® 1248 Standard

Aroclor® 1248 Standard 1,000µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1248	1,000.3 µg/mL	+/- 5.8704	µg/mL	Gravimetric
	CAS # 12672-29-6 (Lot W-108-07)		+/- 31.7041	µg/mL	Unstressed
	Purity ----%		+/- 41.4161	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1248_RESss_00008

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Catalog No. : 32010.sec **Lot No.:** A0116431

Description : Aroclor® 1248 Standard

Aroclor® 1248 Standard 1,000µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1248	1,002.0 µg/mL	+/- 5.9516	µg/mL	Gravimetric
	CAS # 12672-29-6.SEC (Lot 106-248)		+/- 31.7706	µg/mL	Unstressed
	Purity ----%		+/- 41.4958	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1254_RES_00009

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32011 **Lot No.:** A0118645

Description : Aroclor® 1254 Standard

Aroclor® 1254 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1254	1,004.8 µg/mL	+/- 5.8967	µg/mL	Gravimetric
	CAS # 11097-69-1 (Lot 124-191-B)		+/- 31.8461	µg/mL	Unstressed
	Purity ----%		+/- 41.6016	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1254_RESss_00008

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 32011.SEC **Lot No.:** A0105373

Description: Aroclor® 1254 Standard

Aroclor® 1254 Standard 1,000 µg/mL, Hexane, 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: November 30, 2020 **Storage:** 25°C nominal

Handling: This product contains PCB's

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1254	1,004.0 µg/mL	+/- 10.1140	µg/mL	Gravimetric
	CAS # 11097-69-1.SEC (Lot RM00922)		+/- 32.3101	µg/mL	Unstressed
	Purity ----%		+/- 42.3699	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1260_RES_00012

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32012 **Lot No.:** A0116299

Description : Aroclor® 1260 Standard

Aroclor 1260 1000µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1260	1,006.5 µg/mL	+/- 5.9067	µg/mL	Gravimetric
	CAS # 11096-82-5 (Lot W-129-06)		+/- 31.9000	µg/mL	Unstressed
	Purity ----%		+/- 41.6720	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1262_RES_00010

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Catalog No. : 32409 **Lot No.:** A0117769

Description : Aroclor® 1262 Standard

Aroclor® 1262 Standard 1,000 µg/mL, 1mL/ampul, Hexane

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2022 **Storage:** 25°C nominal

Handling: This product contains PCBs.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1262	1,005.0 µg/mL	+/- 5.9694	µg/mL	Gravimetric
	CAS # 37324-23-5 (Lot 3067100)		+/- 31.8658	µg/mL	Unstressed
	Purity ----%		+/- 41.6201	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1268_RES_00009

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32410 **Lot No.:** A0114508

Description : Aroclor® 1268 Standard

Aroclor® 1268 Standard 1,000 µg/mL, 1mL/ampul, Hexane

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2022 **Storage:** 25°C nominal

Handling: This product contains PCB's

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1268	1,006.0 µg/mL	+/- 5.9753	µg/mL	Gravimetric
	CAS # 11100-14-4 (Lot 2743900)		+/- 31.8975	µg/mL	Unstressed
	Purity ----%		+/- 41.6615	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_1660_RESss_00008

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32039.SEC **Lot No.:** A0114674

Description : Aroclor® 1016/1260 Mix

Aroclor® 1016/1260 Mix 1,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2022 **Storage:** 25°C nominal

Handling: This product contains PCB's

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Aroclor 1016	1,000.7 µg/mL	+/- 5.9437	µg/mL	Gravimetric
	CAS # 12674-11-2.SEC (Lot 129)		+/- 31.7284	µg/mL	Unstressed
	Purity ----%		+/- 41.4406	µg/mL	Stressed
2	Aroclor 1260	1,000.0 µg/mL	+/- 5.9397	µg/mL	Gravimetric
	CAS # 11096-82-5.SEC (Lot NTO1023)		+/- 31.7072	µg/mL	Unstressed
	Purity ----%		+/- 41.4130	µg/mL	Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Reagent

AR_SURR_RES_00050

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32000 **Lot No.:** A0117947

Description : Pesticide Surrogate Mix

Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2022 **Storage:** 10°C or colder

Handling: Contains PCBs - sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4,5,6-Tetrachloro-m-xylene	200.4 µg/mL	+/- 1.1679	µg/mL	Gravimetric
	CAS # 877-09-8 (Lot 0052481)		+/- 6.3503	µg/mL	Unstressed
	Purity 98%		+/- 8.2964	µg/mL	Stressed
2	Decachlorobiphenyl (BZ# 209)	200.4 µg/mL	+/- 1.1678	µg/mL	Gravimetric
	CAS # 2051-24-3 (Lot ER071509-01)		+/- 6.3500	µg/mL	Unstressed
	Purity 99%		+/- 8.2960	µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Reagent

AR_SURR_RES_00056

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
ISO 17025 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.02

FOR LABORATORY USE ONLY. READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 32000 **Lot No.:** A0117947

Description: Pesticide Surrogate Mix

Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: June 30, 2022 **Storage:** 10°C or colder

Handling: Contains PCBs - sonicate prior to use.

CERTIFIED VALUES

	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2,4,5,6-Tetrachloro-m-xylene CAS # 877-09-8 Purity 98% (Lot 0052481)	200.4 µg/mL	+/- 1.1679 µg/mL +/- 6.3503 µg/mL +/- 8.2964 µg/mL	Gravimetric Unstressed Stressed
2	Decachlorobiphenyl (BZ# 209) CAS # 2051-24-3 Purity 99% (Lot ER071509-01)	200.4 µg/mL	+/- 1.1678 µg/mL +/- 6.3500 µg/mL +/- 8.2960 µg/mL	Gravimetric Unstressed Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Reagent

AR_SURR_RES_00057

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32000 **Lot No.:** A0118280

Description : Pesticide Surrogate Mix

Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2022 **Storage:** 10°C or colder

Handling: Contains PCBs - sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2,4,5,6-Tetrachloro-m-xylene	199.9 µg/mL	+/- 1.4176 µg/mL	Gravimetric
	CAS # 877-09-8 (Lot 0052481)		+/- 6.3860 µg/mL	Unstressed
	Purity 98%		+/- 8.3154 µg/mL	Stressed
2	Decachlorobiphenyl (BZ# 209)	200.0 µg/mL	+/- 1.4182 µg/mL	Gravimetric
	CAS # 2051-24-3 (Lot ER071509-01)		+/- 6.3886 µg/mL	Unstressed
	Purity 99%		+/- 8.3187 µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Reagent

AR_SURR_RES_00058

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Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

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Reference Material Producer
Certificate #3222.01

Certificate of Analysis

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32000 **Lot No.:** A0118280

Description : Pesticide Surrogate Mix

Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2022 **Storage:** 10°C or colder

Handling: Contains PCBs - sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4,5,6-Tetrachloro-m-xylene		199.9 µg/mL	+/- 1.4176	µg/mL	Gravimetric
	CAS # 877-09-8	(Lot 0052481)		+/- 6.3860	µg/mL	Unstressed
	Purity 98%			+/- 8.3154	µg/mL	Stressed
2	Decachlorobiphenyl (BZ# 209)		200.0 µg/mL	+/- 1.4182	µg/mL	Gravimetric
	CAS # 2051-24-3	(Lot ER071509-01)		+/- 6.3886	µg/mL	Unstressed
	Purity 99%			+/- 8.3187	µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Reagent

AR_SURR_RES_00067

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Bellefonte, PA 16823-8812
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Fax: (814)353-1309

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Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

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ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32000 **Lot No.:** A0121594

Description : Pesticide Surrogate Mix

Pesticide Surrogate Mix 200 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2022 **Storage:** 10°C or colder

Handling: Contains PCBs - sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4,5,6-Tetrachloro-m-xylene		200.0 µg/mL	+/- 1.1656	µg/mL	Gravimetric
	CAS # 877-09-8	(Lot 0052481)		+/- 6.3378	µg/mL	Unstressed
	Purity 98%			+/- 8.2802	µg/mL	Stressed
2	Decachlorobiphenyl (BZ# 209)		201.2 µg/mL	+/- 1.1725	µg/mL	Gravimetric
	CAS # 2051-24-3	(Lot ER071509-01)		+/- 6.3753	µg/mL	Unstressed
	Purity 99%			+/- 8.3291	µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Reagent

BNB stock_00008

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CERTIFIED REFERENCE MATERIAL

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32279 **Lot No.:** A0118613

Description : 1-Bromo-2-nitrobenzene Standard

1-Bromo-2-nitrobenzene Standard 1000 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2019 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-2-nitrobenzene		1,002.0 µg/mL		+/- 5.9516	µg/mL	Gravimetric
	CAS # 577-19-5	(Lot 643872/1)			+/- 56.1943	µg/mL	Unstressed
	Purity 99%				+/- 57.5086	µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

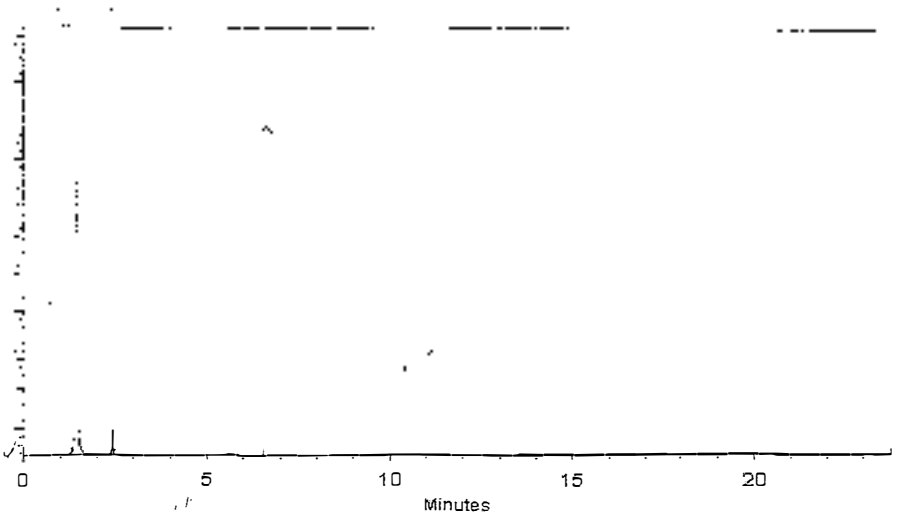
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Cook - Mix Technician

Date Mixed: 06-Apr-2016 **Balance:** 1127510105

Jodi E. Breon - QA Analyst

Date Passed: 08-Apr-2016

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

BNB stock_00009

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Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32279 **Lot No.:** A0118613

Description : 1-Bromo-2-nitrobenzene Standard

1-Bromo-2-nitrobenzene Standard 1000 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2019 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-2-nitrobenzene		1,002.0 µg/mL		+/- 5.9516	µg/mL	Gravimetric
	CAS # 577-19-5	(Lot 643872/1)			+/- 56.1943	µg/mL	Unstressed
	Purity 99%				+/- 57.5086	µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

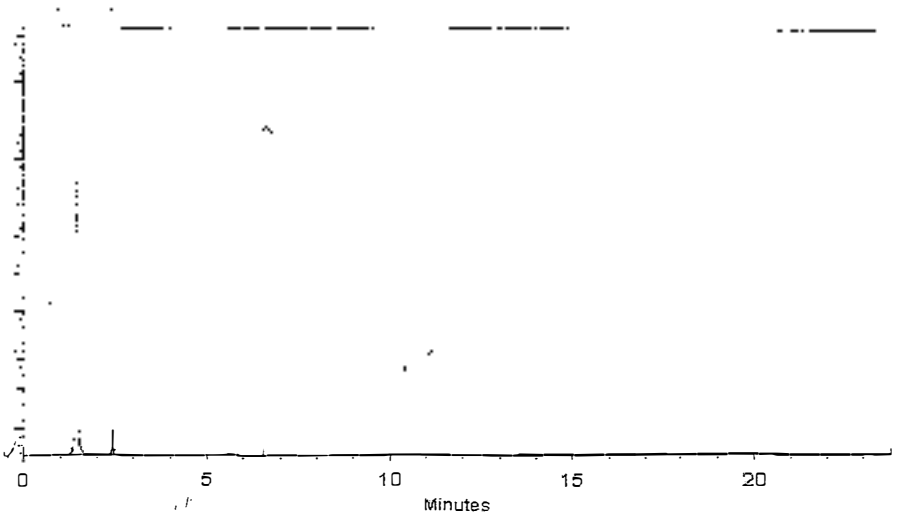
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Cook - Mix Technician

Date Mixed: 06-Apr-2016 **Balance:** 1127510105

Jodi E. Breon - QA Analyst

Date Passed: 08-Apr-2016

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

BNB stock_00010

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32279 **Lot No.:** A0118613

Description : 1-Bromo-2-nitrobenzene Standard

1-Bromo-2-nitrobenzene Standard 1000 µg/mL, Acetone, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2019 **Storage:** 10°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	1-Bromo-2-nitrobenzene		1,002.0 µg/mL		+/- 5.9516	µg/mL	Gravimetric
	CAS # 577-19-5	(Lot 643872/1)			+/- 56.1943	µg/mL	Unstressed
	Purity 99%				+/- 57.5086	µg/mL	Stressed

Solvent: Acetone
CAS # 67-64-1
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

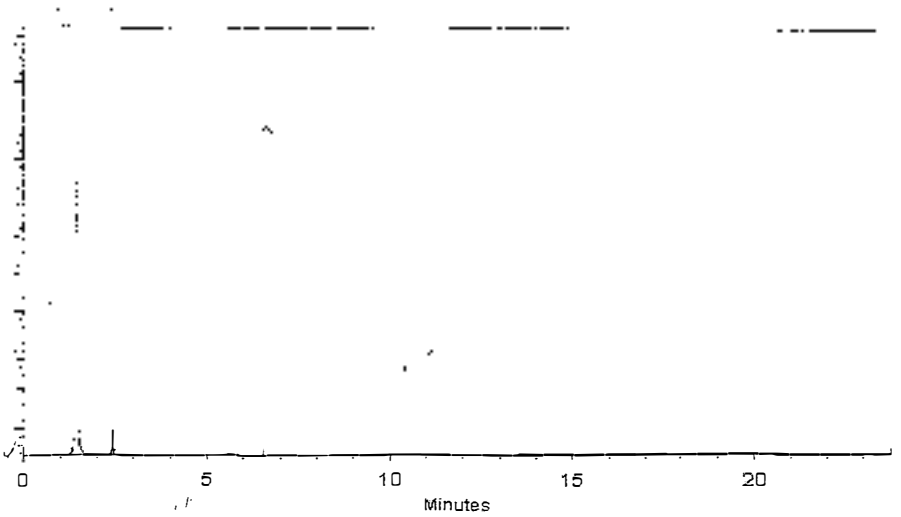
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Cook - Mix Technician

Date Mixed: 06-Apr-2016 **Balance:** 1127510105

Jodi E. Breon - QA Analyst

Date Passed: 08-Apr-2016

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

Hg ICV Stock_00009

4389839
ID: Hg ICV Stock_00009
Exp: 06/24/20 Prpd: CDH
Hg ICV Stock Inorganic Ve

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Mass Spec Solution
Catalog Number:	MSHG-100PPM
Lot Number:	K2-HG02145
Matrix:	10% (v/v) HCl
Value / Analyte(s):	100 µg/mL ea: Mercury
Starting Material:	Hg Metal
Starting Material Lot#:	R307HGA1, 1780
Starting Material Purity:	99.9987%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value:	99.94 ± 0.43 µg/mL
Certified Density:	1.020 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	061204
Hg	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods **Characterization of CRM by one method**

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	0.000024	M	Eu	< 0.000100	O	Na	0.000118	M	Se	< 0.002204	O	Zn	< 0.001349					
O	Al	0.000042	O	Fe	0.000031	M	Nb	< 0.000100	O	Si	< 0.010380	M	Zr	< 0.000200					
M	As	< 0.000801	M	Ga	< 0.000100	M	Nd	< 0.000100	M	Sm	< 0.000100								
O	Au	< 0.001038	M	Gd	< 0.000100	M	Ni	< 0.000701	M	Sn	< 0.000100								
M	B	< 0.004810	M	Ge	< 0.000300	M	Os	< 0.000100	O	Sr	< 0.000046								
M	Ba	< 0.000300	M	Hf	< 0.000100	O	P	< 0.010380	M	Ta	< 0.000100								
O	Be	< 0.000103	s	Hg	<	M	Pb	< 0.000100	M	Tb	< 0.000100								
M	Bi	< 0.001002	M	Ho	< 0.000100	M	Pd	< 0.000400	M	Te	< 0.000801								
O	Ca	0.000435	M	In	< 0.000100	M	Pr	< 0.000100	M	Th	< 0.000100								
M	Cd	< 0.000100	M	Ir	< 0.000100	M	Pt	< 0.000100	O	Ti	< 0.000207								
M	Ce	< 0.000100	O	K	0.000063	M	Rb	< 0.000400	O	Tl	< 0.005013								
M	Co	0.000015	M	La	< 0.000100	M	Re	< 0.000100	M	Tm	< 0.000100								
O	Cr	< 0.000603	O	Li	< 0.000038	M	Rh	< 0.000100	M	U	< 0.000100								
M	Cs	< 0.000100	O	Lu	< 0.000063	M	Ru	< 0.000100	M	V	< 0.000300								
O	Cu	< 0.000666	O	Mg	0.000142	O	S	0.000384	M	W	< 0.000100								
M	Dy	< 0.000100	O	Mn	0.000019	M	Sb	< 0.000400	M	Y	< 0.000100								
M	Er	< 0.000100	O	Mo	0.000074	O	Sc	< 0.000124	M	Yb	< 0.000100								

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+
Chemical Compatibility - Stable in HNO3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.
Stability - 2-100 ppb levels not stable in 1% HNO3 / LDPE container, stable in 10% HNO3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO3 / LDPE container.
Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO3); Oxide (Soluble in HNO3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 24, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 24, 2020**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

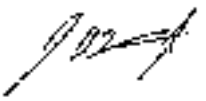
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

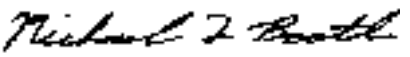
Certificate Prepared By:

James King Jr
Product Documentation Supervisor



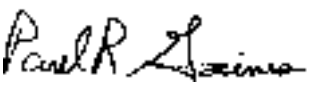
Certificate Approved By:

Michael Booth
QC Supervisor



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

Hg Ultra Prim_00011

Certificate of Analysis

ISO Guide 34 Reference Material

Product Number: ICP-080
Lot Number: CP-5666

Lot Issue Date: 16-Nov 2016
Expiration Date: 31-Dec 2023

Product Name: Mercury ICP Standard

Description:
This Reference Material (RM) was gravimetrically prepared in accordance with ISO Guide 34 and under ULTRA Scientific's ISO 9001 registered quality system. The neat materials used for this product have been verified by ULTRA's ISO 17025 laboratory and under ULTRA's ISO Guide 34 accreditation. The analyte concentrations were verified by ULTRA's ISO 17025 accredited laboratory. For each analyte, the true value, with its uncertainty value calculated at the 95% confidence level, is reported below.

Analyte	Starting Material	Lot Number	Purity (%)	Calculated Value	Traceability & Method
mercury	mercuric nitrate	RM11214	99.999%	1002 ± 2 µg/mL	NIST SRM 3133; ICP-OES

Solvent: 2% nitric acid in low TOC water (< 50 ppb)

4397620
ID: Hg Ultra Prim_00011
Exp: 12/31/23 Prpd: CDH
Ultra 1000 ppm Hg primar

Non-Certified Values:

Density: 1.0099 g/mL @ 20.00 ± 0.05°C

Trace Metallic Impurities in Solution Standard in µg/mL

*	Al	<0.005 ND	*	Ga	<0.005 ND	n	Nb		n	S	
*	Sb	<0.005 ND	n	Ge		n	Os		n	Ta	
*	As	<0.005 ND	n	Au		*	Pd	<0.005 ND	n	Te	
*	Ba	<0.005 ND	n	Hf		*	P	<0.005 ND	n	Tb	
*	Be	<0.005 ND	n	Ho		*	Pt	<0.005 ND	n	Tl	
*	Bi	<0.005 ND	*	In	<0.005 ND	*	K	<0.005 ND	*	Th	<0.005 ND
*	B	<0.005 ND	n	Ir		n	Pr		n	Tm	
*	Cd	<0.005 ND	*	Fe	<0.005 ND	n	Re		*	Sn	<0.005 ND
*	Cs	<0.005 ND	*	La	<0.005 ND	n	Rh		*	Ti	<0.005 ND
*	Ca	<0.005 ND	*	Pb	<0.005 ND	n	Rb		n	W	
n	Ce		*	Li	<0.005 ND	n	Ru		n	U	
*	Cr	<0.005 ND	n	Lu		n	Sm		*	V	<0.005 ND
*	Co	<0.005 ND	*	Mg	<0.005 ND	n	Sc		n	Yb	
*	Cu	<0.005 ND	*	Mn	<0.005 ND	*	Se	<0.005 ND	n	Y	
n	Dy		s	Hg		*	Si	<0.005 ND	*	Zn	<0.005 ND
*	Er	<0.005 ND	*	Mo	<0.005 ND	*	Ag	<0.005 ND	n	Zr	
*	Eu	<0.005 ND	n	Nd		*	Na	<0.005 ND			
*	Gd	<0.005 ND	*	Ni	<0.005 ND	*	Sr	<0.005 ND			

* - element checked; i - spectral interference; n – element not checked; D – element detected; ND – element not detected; s - standard element

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER
ANAB ACCREDITED ISO 17025 TESTING LABORATORY

Certificate of Analysis

ISO Guide 34 Reference Material

Product Number: ICP-080
Lot Number: CP-5666

Lot Issue Date: 16-Nov 2016
Expiration Date: 31-Dec 2023

Storage: Store at Room Temperature (15° to 30°C).

Traceability:
Traceability has been established through an unbroken chain of comparisons, each having stated uncertainties. Comparisons are based on appropriate physical or chemical measurements, including gravimetric or volumetric dilution, where the mass or volume of a solution before and after dilution is measured. The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1, ISO 9001, ISO 17025, and ISO Guide 34. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 819.

Estimation of Uncertainties:
The true value is reported, with its uncertainty value calculated at the 95% confidence level.

Homogeneity:
This RM was formulated and unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening and should be processed without delay for the true value to be valid within the stated uncertainties. Do not pipet from the bottle. Do not return any material removed for pipetting to the bottle. Tightly cap the bottle after removing any material and store according to the instructions noted above.

Hazards:
Refer to the Safety Data Sheet for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid, within the measurement uncertainty specified, until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
The real-time, long term stability of the RM may be monitored over the lifetime of the certification. If substantive changes occur that affect the certification before the expiration of this certificate, ULTRA Scientific will notify the purchaser.

John Russo
President

Monica Bourgeois
Director of QA/RA

Reagent

Icp cal std 3_00016

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	STLDEN-STD-3B
Lot Number:	K2-MEB652538
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Potassium, 4 000 µg/mL ea: Magnesium, 1 000 µg/mL ea: Calcium, Sodium, 500 µg/mL ea: Iron, 200 µg/mL ea: Lithium, Phosphorus, 100 µg/mL ea: Silver, Aluminum, Beryllium, Boron, Barium, Cadmium, Cobalt, Chromium+3, Copper, Manganese, Nickel, Strontium, Vanadium, Zinc

4179774
ID: icp cal std 3_00016
Exp: 10/12/19 Prpd: SJS
ICP CAL STD 3B IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	100.0± 0.6 µg/mL	Barium, Ba	100.0 ± 0.5 µg/mL
Beryllium, Be	100.0 ± 0.6 µg/mL	Boron, B	100.0 ± 0.6 µg/mL
Cadmium, Cd	100.0 ± 0.5 µg/mL	Calcium, Ca	1 000 ± 4 µg/mL
Chromium+3, Cr3	100.0 ± 0.6 µg/mL	Cobalt, Co	100.0 ± 0.5 µg/mL
Copper, Cu	100.0 ± 0.4 µg/mL	Iron, Fe	499.9 ± 2.0 µg/mL
Lithium, Li	200.0± 0.7µg/mL	Magnesium, Mg	4 000 ± 16 µg/mL
Manganese, Mn	100.0± 0.4µg/mL	Nickel, Ni	100.0 ± 0.4 µg/mL
Phosphorus, P	200.0 ± 0.9 µg/mL	Potassium, K	10 000.0 ± 40.0 µg/mL
Silver, Ag	100.0 ± 0.4 µg/mL	Sodium, Na	1 000 ± 4 µg/mL
Strontium, Sr	100.0± 0.4µg/mL	Vanadium, V	100.0 ± 0.4µg/mL
Zinc, Zn	100.0 ± 0.4 µg/mL		

Certified Density: 1.076 g/mL (measured at 20 ± 1 °C)

Assay Information:

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty(±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 12, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- October 12, 2019

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Certificate Approved By:

Michael Booth
Supervisor, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
B	ICP Assay	3107	110830
Ba	ICP Assay	3104a	070222
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Cd	ICP Assay	3108	060531
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr3	ICP Assay	3112a	030730Cr3
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec 4.2
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Sr	EDTA	928	928
Sr	ICP Assay	3153a	990906
V	EDTA	928	928
V	ICP Assay	3165	992706
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Reagent

Icp ICVH_00372

HIGH PURITY STANDARDS
www.highpuritystandards.com

4318899
ID: Icp ICVH_00372
Exp 12/15/17 Prpd SJS
ICP ICVH HP

P.O. Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

ISO/IEC 17025:2005 Accreditation
Certificate Number AT 1529

Product Description:

Name:	ICVH
Part Number:	**SM-606-125**
Lot Number:	**1634736**
Matrix:	5% HNO_3
Purity:	99.98% - 99.999%

Certified Values:

Element	(µg/mL)	SRM ID	SRM Lot#	Element	(µg/mL)	SRM ID	SRM Lot#
Al	4000 ± 20	3101a	140903	Th	300.0 ± 1.8	*	
Fe	8000 ± 40	3126a	140812	U	500.0 ± 2.5	3164	080521
Na	4000 ± 20	3152a	120715				

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2.

* Refer to Traceability Information, Section d

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	December 12, 2016
Shipped Date:	**December 15, 2016**
Expiration Date:	**December 15, 2017**
Certificate Issue Date:	December 14, 2016

Moven Mututuvari

Moven Mututuvari PhD., Laboratory Manager

Reagent

Icp ICVL A_00011

HIGH-PURITY STANDARDS
www.high-purity-standards.com

P.O.Box 41727
Charleston, SC 29423
Phone (843) 767-7900
Fax (843) 767-7906

Certificate of Analysis

Product Description:

Name:	Intrepid ICVL
Part Number:	**SM-606-062**
	Solution A
Lot Number:	**1631905**
Matrix:	5% HNO_3
Purity:	99.98% - 99.9999%

4269090
ID: Icp ICVL A_00011
Exp: 11/16/17 Prpd: SJS
ICP ICVL SOLUTION A H

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Certified Values:

Element	(mg/L)	SRM ID	SRM Lot#	Element	(mg/L)	SRM ID	SRM Lot#
Al	25.0 ± 0.1	3101a	140903	Li	25.0 ± 0.2	3129a	100714
As	25.0 ± 0.3	3103a	100818	Mg	1000 ± 5	3131a	140110
Ba	25.0 ± 0.2	3104a	140909	Mn	25.0 ± 0.3	3132	050429
Be	25.0 ± 0.3	3105a	090514	Ni	25.0 ± 0.1	3136	120619
B	25.0 ± 0.1	3107	110830	K	2000 ± 10	3141a	140813
Cd	25.0 ± 0.1	3108	130116	Se	50.0 ± 0.5	3149	100901
Ca	200 ± 1	3109a	130213	Na	200 ± 1	3152a	120715
Cr	25.0 ± 0.1	3112a	030730	Sr	25.0 ± 0.1	3153a	990906
Co	25.0 ± 0.1	3113	000630	Tl	25.0 ± 0.3	3158	993012
Cu	25.0 ± 0.1	3114	121207	V	25.0 ± 0.2	*	
Fe	25.0 ± 0.1	3126a	140812	Zn	25.0 ± 0.1	3168a	120629
Pb	25.0 ± 0.2	3128	101026				

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2.

* Refer to Traceability Information, Section d

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	November 14, 2016
Shipped Date:	**November 16, 2016**
Expiration Date:	**November 16, 2017**
Certificate Issue Date:	November 14, 2016

Moven Mututuvari

Moven Mututuvari PhD., Laboratory Manager

Reagent

Icp ICVL B_00011

HIGH-PURITY STANDARDS
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P.O. Box 41727
Charleston, SC 29423
Phone: (843) 767-7000
Fax: (843) 767-7005

Certificate of Analysis

4269091
ID: Icp ICVL B_00011
Exp: 11/16/17P/pd: SJS
ICP ICVL SOLUTION B HP

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Product Description:

Name:	Intrepid ICVL
Part Number:	**SM-606-062 Solution B**
Lot Number:	**1631906**
Matrix:	2% HNO_3 + Tr HF
Purity:	99.92% - 99.9999%

Certified Values:

Element	(mg/L)	SRM ID	SRM Lot#	Element	(mg/L)	SRM ID	SRM Lot#
Sb	25.0 ± 0.2	3102a	140911	Ag	25.0 ± 0.2	3151	992212
Mo	25.0 ± 0.2	3134	130418	Sn	50.0 ± 0.3	3161a	140917
P	200 ± 1	3139a	060717	Ti	25.0 ± 0.2	3162a	130925
Si	200 ± 2	3150	130912	Zr	25.0 ± 0.2	3169	130920

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2.

* Refer to Traceability Information, Section d

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	November 14, 2016
Shipped Date:	**November 16, 2016**
Expiration Date:	**November 16, 2017**
Certificate Issue Date:	November 14, 2016

Moven Mutuvari

Moven Mutuvari PhD., Laboratory Manager

Reagent

ICP ISAB 1B_00010

HIGH PURITY STANDARDS
www.highpuritystandards.com
PO Box 41320
Charleston, SC 29423
Phone (843) 767-7530
Fax (843) 767-1336

Certificate of Analysis

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Product Description:

Name:	ICS-AB STD #1
Part Number:	**SM-606-037**
	Solution B
Lot Number:	**1700955**
Matrix:	2% HNO_3
Purity:	99.99%

4336979
ID: ICP ISAB 1B_00010
Exp:01/11/16Prpd:SJS
ICP ICSAB STD 1 SOL B H

Certified Values:

Element	(mg/L)	SRM ID	SRM Lot#
Tl	1000 ± 5	3158	993012

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor k is about 2.
* Refer to Traceability Information, Section d

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	January 9, 2017
Shipped Date:	**January 11, 2017**
Expiration Date:	**January 11, 2018**
Certificate Issue Date:	January 10, 2017

Moven Mutuvari

Moven Mutuvari PhD., Laboratory Manager

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Intended Use:

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not available, a second source standard or independent lot is used.

Refer to Safety Datasheet (SDS) for hazardous information.

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

ICP ISAB STD1_00009

HIGH PURITY STANDARDS
www.highpuritystandards.com
PO Box 41727
Charleston SC 29423
Phone (843) 767-7800
Fax (843) 767-7801

Certificate of Analysis

Product Description:

Name:	ICS-AB STD#1
Part Number:	**SM-606-037**
	Solution A
Lot Number:	**1700954**
Matrix:	20% HCl
Purity:	99.999% - 99.9999%

4336964
ID: ICP ISAB STD1_00009
Exp: 01/11/18 Prpd: SJS
ICAP ICSAB STD 1 SOL A

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Certified Values:

Element	(mg/L)	SRM ID	SRM Lot#	Element	(mg/L)	SRM ID	SRM Lot#
Sb	100.0 ± 0.6	3102a	140911	P	200.0 ± 1.2	3139a	060717
As	200 ± 2	3103a	100818	K	5000 ± 25	3141a	140813
B	200.0 ± 1.2	3107	110830	Se	500 ± 5	3149	100901
Li	100.0 ± 0.6	3129a	100714	Na	5000 ± 25	3152a	120715
Mo	100.0 ± 0.6	3134	891307	Sr	100.0 ± 0.5	3153a	990906

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.
* Refer to Traceability Information, Section d

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	January 9, 2017
Shipped Date:	**January 11, 2017**
Expiration Date:	**January 11, 2018**
Certificate Issue Date:	January 10, 2017

Moven Mututuvari

Moven Mututuvari PhD., Laboratory Manager

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Intended Use:

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not available, a second source standard or independent lot is used.

Refer to Safety Datasheet (SDS) for hazardous information.

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

ICP ISAB STD2_00009

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www.highpuritystandards.com
P.O. Box 41[illegible]
Charleston SC [illegible]
Phone (843) [illegible]
Fax (843) [illegible]

4026784
ID: ICP ISAB STD2_00009
Exp:07/27/17 Prpd:SJS Opn:07/29/16
ICP ICSAB STD 2 HP

Certificate of Analysis

ISO/IEC 17025:2005 Accreditation
Certificate Number AT-1529

Product Description:

Name:	ICS-AB STD #2
Part Number:	**SM-606-038**
Lot Number:	**1620836**
Matrix:	20% HCl
Purity:	99.98% - 99.999%

Certified Values:

Element	(mg/L)	SRM ID	SRM Lot#	Element	(mg/L)	SRM ID	SRM Lot#
Sn	1000 ± 6	3161a	140917	Ti	100.0 ± 0.6	3162a	130925

Certified values are based on gravimetric and volumetric preparation, and verified against NIST SRM 3100 series when available via inductively coupled plasma optical emission spectrometry (ICP-OES) and/or inductively coupled plasma mass spectrometry (ICP-MS) using an internal laboratory-developed method. The uncertainty in the certified value is calculated for a 95% confidence interval and coverage factor *k* is about 2.
* Refer to Traceability Information, Section d

Packaging and Storage Conditions:

The standard is packaged in a pre-cleaned polyethylene bottle. To maintain the integrity of this product, the solution should be kept tightly capped and stored under normal laboratory conditions.

Expiration Information:

The expiry date is guaranteed to be valid for twelve months from the shipping date provided. For this reason, standards from the same lot may have different expiration dates.

Preparation Date:	July 26, 2016
Shipped Date:	**July 27, 2016**
Expiration Date:	**July 27, 2017**
Certificate Issue Date:	July 26, 2016

Moven Mututuvari

Moven Mututuvari PhD., Laboratory Manager

Preparation Information:

The standard is generally prepared from single element standard solutions that are ISO Guide 34 certified reference materials and manufactured under appropriate laboratory conditions using the methods developed at NIST for SRM Spectrometric Standard Solutions. Sub-boiling distilled high-purity acid has been used to place the materials in solution and to stabilize the standard. The matrix is as noted above in 18 megaohm deionized water.

Intended Use:

This product is intended for use as a calibration standard, quality control standard, and/or for the validation of analytical methods.

Traceability Information:

The traceability of this standard is maintained through an unbroken chain of comparisons to appropriate standards with suitable procedure and measurement uncertainties. The maintenance of the base and derived units of International System of Units (SI) with traceability of measurement results (contemporary metrology) to SI ensures their comparability over time as follows.

a. **Standard Weight and Analytical Balance**
The standard weights (NBS weights Inventory No 20231A) are calibrated every two years by South Carolina Metrology Laboratory that is a participant in "NIST Weights and Measures Measurement Assurance Program" with a certificate of measurement traceability to NIST primary standards.
The balances are calibrated yearly by the ISO 17025 accredited metrology service, and are verified weekly by an in-house method using standard weights.

b. **Volumetric Device**
The calibration of volumetric vessels is checked annually using the ASTM method E542.

c. **Thermometer**
The standard thermometers are calibrated every year by the ISO 17025 accredited metrology service. The thermometers used in-house are verified against the standard thermometers yearly.

d. **Calibration Standards**
The Calibration Standard is traceable to SRM 3100 Series Spectrometric Standard Solutions. If a SRM is not availabe, a second source standard or independent lot is used.

Refer to Safety Datasheet (SDS) for hazardous information.

NOTICE: HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The data and information as stated was furnished by the manufacturer of the product. The information provided in this certificate pertains only to the lot number specified. None of the information provided in this certificate may be used, reproduced or transmitted in any form or by any means without written approval from High Purity Standards.

Reagent

ICP LLCCV-3_00006

4470428
ID: ANALYTES B_00012
Exp: 04/14/18 Prpd: SJS
ICP ANALYTES B SPEX

Reference Materials Producer
Cert #2485.01

SPEXertificate®

Certificate of Reference Material

Catalog Number: INT-B1 **Lot No.** 3-98MKBY

Description: Analytes B

Matrix: 5% HNO_3

This **ASSURANCE®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for inorganic spectroscopic instrumentation such as ICP-OES, DCP, AA, ICP-MS, and XRF. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

The CRM is prepared from high purity single element concentrates of individual elements using Class A laboratory ware to give precise concentrations. See side 2 for details of certification.

Instrumental Analysis by ICP Spectrometer:

Analyte	Labeled	Certified	Uncertainty	SRM	Analyte	Labeled	Certified	Uncertainty	SRM
Ag	100 µg/mL	99.1 µg/mL	±0.5 µg/mL	3151*	Be	50 µg/mL	49.6 µg/mL	±0.3 µg/mL	3105a*
Cd	100 µg/mL	98.9 µg/mL	±0.5 µg/mL	3108*	Co	50 µg/mL	49.4 µg/mL	±0.3 µg/mL	3113*
Ni	100 µg/mL	98.9 µg/mL	±0.5 µg/mL	3136*	Cr	50 µg/mL	49.6 µg/mL	±0.3 µg/mL	3112a*
Pb	100 µg/mL	99.1 µg/mL	±0.5 µg/mL	3128*	Cu	50 µg/mL	49.8 µg/mL	±0.3 µg/mL	3114*
Zn	100 µg/mL	98.9 µg/mL	±0.5 µg/mL	3168a*	Mn	50 µg/mL	49.3 µg/mL	±0.3 µg/mL	3132*
Ba	50 µg/mL	49.3 µg/mL	±0.3 µg/mL	3104a*	V	50 µg/mL	49.8 µg/mL	±0.3 µg/mL	3165*

* - indicates NIST SRM

† - indicates SPEX CertiPrep CRM (when NIST SRM is not available)

SPEX CertiPrep Reference Multi: Lot# 9-164YP, 12-03YP

Balances are calibrated regularly with weight sets traceable to NIST#s 32856, 32867 and others. This CRM is guaranteed stable and accurate to ±0.5% of the certified (measured) value. This includes uncertainty components due to preparation, measurement, homogeneity, and short-term and long-term stability. No measured concentration of any individual component exceeds ±2% of the labeled value. This guarantee is valid for a period of one year from the date of certification only when the material is unopened and stored under ambient laboratory conditions.

Date of Certification: APR - - 2017

Certifying Officer:

©2016 SPEX Cert Prep, LLC

Reagent

ICP PDS 1_00020

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 860.01

ACCREDITED Reference Material Producer Certificate 860.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	STLDEN-PDS-1
Lot Number:	M2-MEB655824
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	2 000 µg/mL ea:

Calcium,	Potassium,	Magnesium,
Sodium,		
200 µg/mL ea:		
Phosphorus,		
100 µg/mL ea:		
Iron,	Aluminum,	
50 µg/mL ea:		
Uranium,		
20 µg/mL ea:		
Thorium,	Thallium,	Selenium,
Zinc,	Arsenic,	
10 µg/mL ea:		
Barium,	Lithium,	Lead,
5 µg/mL ea:		
Strontium,	Vanadium,	Silver,
Nickel,	Manganese,	Beryllium,
Cadmium,	Cobalt,	Chromium,
Copper		

4337005
ID: ICP PDS 1_00019
Exp: 02/16/20 Prpd: SJS
ICP PDS 1 IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	100.0 ± 0.5 µg/mL	Arsenic, As	20.00 ± 0.14 µg/mL
Barium, Ba	10.00 ± 0.05 µg/mL	Beryllium, Be	5.000 ± 0.029 µg/mL
Cadmium, Cd	5.000 ± 0.030 µg/mL	Calcium, Ca	2 000 ± 8 µg/mL
Chromium, Cr	5.000 ± 0.025 µg/mL	Cobalt, Co	5.000 ± 0.022 µg/mL
Copper, Cu	5.000 ± 0.030 µg/mL	Iron, Fe	100.0 ± 0.4 µg/mL
Lead, Pb	10.00 ± 0.05 µg/mL	Lithium, Li	10.00 ± 0.04 µg/mL
Magnesium, Mg	2 000 ± 8 µg/mL	Manganese, Mn	5.001 ± 0.026 µg/mL
Nickel, Ni	5.000 ± 0.030 µg/mL	Phosphorus, P	200.0 ± 0.9 µg/mL
Potassium, K	2 000 ± 7 µg/mL	Selenium, Se	20.00 ± 0.10 µg/mL
Silver, Ag	5.000 ± 0.034 µg/mL	Sodium, Na	2 000 ± 7 µg/mL
Strontium, Sr	5.000 ± 0.029 µg/mL	Thallium, Tl	20.00 ± 0.14 µg/mL
Thorium, Th	20.00 ± 0.10 µg/mL	Uranium, U	50.00 ± 0.25 µg/mL
Vanadium, V	5.001 ± 0.030 µg/mL	Zinc, Zn	20.00 ± 0.12 µg/mL

Certified Density: 1.042 g/mL (measured at 20 ± 1 °C)

Assay Information:

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance	
Isotope	**Atom %**
Uranium 238U	99.6 ± 0.1
Uranium 235U	0.37 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 16, 2017

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- February 16, 2020

-The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Donna Senn
Product Documentation Technician

Donna Senn

Certificate Approved By:

Michael Booth
Supervisor, Quality Control

Michael J Booth

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

Paul R Gaines

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr	ICP Assay	3112a	030730Cr3
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Sr	EDTA	928	928
Sr	ICP Assay	3153a	990906
Th	EDTA	928	928
Tl	ICP Assay	3158	993012
Tl	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2
V	EDTA	928	928
V	ICP Assay	3165	992706
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

Reagent

ICP PDS 2_00014

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Zach Saunders
Product Documentation Technician

Certificate Approved By:

Brian Alexander
PhD., Technical Process Director

Certifying Officer:

Paul Gaines
PhD., Senior Technical Director

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR 1034).

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	STLDEN-PDS-2A
Lot Number:	H2-MEB546063
Matrix:	3% (v/v) HNO3 tr. HF
Value / Analyte(s):	500 µg/mL ea: Silicon, 10 µg/mL ea: Boron, Antimony, Tin, 5 µg/mL ea: Molybdenum, Titanium, Zirconium

42659162
ID: ICP PDS 2_00014
Exp: 12/01/17 Prpd: S/S
ICP PDS 2A IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	10.00 ± 0.07 µg/mL	Boron, B	10.00 ± 0.06 µg/mL
Molybdenum, Mo	5.000 ± 0.032 µg/mL	Silicon, Si	500.0 ± 3.8 µg/mL
Tin, Sn	10.00 ± 0.06 µg/mL	Titanium, Ti	5.000 ± 0.028 µg/mL
Zirconium, Zr	5.001 ± 0.032 µg/mL		

Certified Density: 1.017 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	070514
B	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229
Sb	Calculated		See Sec. 4.2
Si	ICP Assay	3150	071204
Si	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330
Sn	Calculated		See Sec. 4.2
Ti	ICP Assay	3162a	060808
Ti	Calculated		See Sec. 4.2
Zr	ICP Assay	3169	071226
Zr	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Certified Value $(\bar{x}) = \frac{\sum x_i}{n}$ ($\bar{x}$) = mean

x_i = individual results

n = number of measurements

Uncertainty $(\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$ 2 = the coverage factor

$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Keep cap tightly sealed when not in use. Store and use at 20 ± 4° C. Do not pipette from the container. Do not return removed aliquots to container.

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 22, 2014

11.2 Expiration Date

EXPIRES:
01 DEC 2017

11.3 Period of Validity

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is handled and stored in accordance with instructions given in Sec 7.0 and used prior to the date given in Sec 11.2. This certification is nullified if the CRM/RM is damaged, contaminated, or otherwise modified.

Reagent

ICP RL STD3A_00011

INORGANIC VENTURES
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	STLDEN-RL-3A
Lot Number:	K2-MEB651193
Matrix:	1.4% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Potassium, Sodium, Phosphorus, 200 µg/mL ea: Calcium, Magnesium, 100 µg/mL ea: Aluminum, Boron, 60 µg/mL ea: Uranium, 30 µg/mL ea: Iron, 10 µg/mL ea: Silver, Chromium+3, Copper, Lithium, Nickel, Thorium, Vanadium, Zinc, 5 µg/mL ea: Barium, Cadmium, Cobalt, Strontium, 3 µg/mL ea: Manganese, 1 µg/mL ea: Beryllium

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	100.0 ± 0.5 µg/mL	Barium, Ba	4.999 ± 0.030 µg/mL
Beryllium, Be	1.000 ± 0.006 µg/mL	Boron, B	100.0 ± 0.6 µg/mL
Cadmium, Cd	5.000 ± 0.030 µg/mL	Calcium, Ca	200.0 ± 0.8 µg/mL
Chromium+3, Cr3	10.00 ± 0.05 µg/mL	Cobalt, Co	5.000 ± 0.022 µg/mL
Copper, Cu	10.00 ± 0.06 µg/mL	Iron, Fe	30.00 ± 0.13 µg/mL
Lithium, Li	10.00 ± 0.04 µg/mL	Magnesium, Mg	200.0 ± 0.8 µg/mL
Manganese, Mn	3.000 ± 0.015 µg/mL	Nickel, Ni	10.00 ± 0.06 µg/mL
Phosphorus, P	1 000 ± 4 µg/mL	Potassium, K	1 000 ± 4 µg/mL
Silver, Ag	10.00 ± 0.07 µg/mL	Sodium, Na	1 000 ± 4 µg/mL
Strontium, Sr	5.000 ± 0.030 µg/mL	Thorium, Th	10.00 ± 0.05 µg/mL
Uranium, U	60.00 ± 0.39 µg/mL	Vanadium, V	10.00 ± 0.06 µg/mL
Zinc, Zn	10.00 ± 0.06 µg/mL		

Certified Density: 1.017 g/mL (measured at 20 ± 1 °C)

Assay Information:

11.1 Certification Issue Date

August 17, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- August 17, 2019

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Maurice Harris
Product Documentation Technician

Certificate Approved By:

Michael Booth
Supervisor, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

ANALYTE	METHOD	NISTSRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
B	ICP Assay	3107	110830
Ba	ICP Assay	3104a	070222
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr3	ICP Assay	3112a	030730Cr3
Cr3	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
Sr	EDTA	928	928
Sr	ICP Assay	3153a	990906
Th	EDTA	928	928
U	ICP Assay	3164	080521
V	EDTA	928	928
V	ICP Assay	3165	992706
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.7 ± 0.1
Uranium 235U	0.28 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

Reagent

ICP RLSTD 1A_00012

OF CERTIFYING OFFICERS

ian

Donna Senn

Michael J Bottle

Paul R Laine

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01

ACCREDITED Reference Material Producer Certificate 863.02

2.0 PRODUCT DESCRIPTION

4097744

ID: ICP RLSTD 1A_00012

Exp: 09/02/15 Prod: SJS

ICP RLSTD 1A

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	STLDEN-RL-1A
Lot Number:	K2-MEB651561
Matrix:	2% (v/v) HNO_3 tr. HF
Value / Analyte(s):	10 mg/L ea: Arsenic, Antimony, Selenium, Thallium, 3 mg/L ea: Lead

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	10.00 ± 0.07 mg/L	Arsenic, As	10.00 ± 0.06 mg/L
Lead, Pb	3.000 ± 0.015 mg/L	Selenium, Se	10.00 ± 0.05 mg/L
Thallium, Tl	10.00 ± 0.07 mg/L		

Certified Density: 1.007 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
As	ICP Assay	3103a	100818
As	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Sb	ICP Assay	3102a	061229 Sb
Sb	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012

Characterization of CRM by two independent methods

Characterization of CRM by one method

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±)= $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\,(u_{char\ a})^2 + (w_b)^2\,(u_{char\ b})^2]^{2½}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density NIST SRM uncertainty weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer- Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.8799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

September 02, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **September 02, 2019**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

Reagent

ICP SPK 2B_00062

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	TA-ICP-SPK-2B
Lot Number:	K2-MEB654055
Matrix:	5% (v/v) HNO3 0.5% (v/v) HF
Value / Analyte(s):	1 000 µg/mL ea: Silicon, 200 µg/mL ea: Sulfur, Tin, 100 µg/mL ea: Boron, Molybdenum, Titanium, 50 µg/mL ea: Antimony, Zirconium

4545906
ID: ICP SPK 2B_00062
Exp:05/17/18 Prpd:LMT Opn:05/17/17
ICP PREP SPIKE 2B

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	50.00 ± 0.35 µg/mL	Boron, B	100.0 ± 0.6 µg/mL
Molybdenum, Mo	100.0 ± 0.5 µg/mL	Silicon, Si	1 000 ± 6 µg/mL
Sulfur, S	200.0 ± 1.0 µg/mL	Tin, Sn	200.0 ± 0.7 µg/mL
Titanium, Ti	100.0 ± 0.6 µg/mL	Zirconium, Zr	50.00 ± 0.34 µg/mL

Certified Density: 1.029 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	110830
Mo	ICP Assay	3134	130418
S	Acidimetric	84L	84L
S	ICP Assay	3154	892205
Sb	ICP Assay	3102A	061229
Si	ICP Assay	3150	130912
Sn	ICP Assay	3161a	070330
Sn	Calculated		See Sec. 4.2
Ti	ICP Assay	3162a	130925
Zr	ICP Assay	3169	130920

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods **Characterization of CRM by one method**

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2\ (u_{char\ a})^2 + (w_b)^2\ (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit www.inorganicventures.com/TCT

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 09, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- December 09, 2019

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: 5/17/17

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Maurice Harris
Product Documentation Technician

Certificate Approved By:

Michael Booth
Supervisor, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

Reagent

ICP SPK 3A_00133

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	STLDEN-SPK-3A
Lot Number:	M2-MEB656518
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	5 000 µg/mL ea:

Calcium, Potassium, Magnesium,
Sodium,

1 000 µg/mL ea:
Phosphorus,

200 µg/mL ea:
Thallium, Uranium, Selenium,
Bismuth, Aluminum, Barium,

100 µg/mL ea:
Arsenic, Lithium, Iron,
Strontium, Thorium,

50 µg/mL ea:
Vanadium, Zinc, Lead,
Nickel, Cobalt, Manganese,

25 µg/mL ea:
Copper,

20 µg/mL ea:
Chromium,

10 µg/mL ea:
Cadmium,

5 µg/mL ea:
Silver, Beryllium

4545907
ID: ICP SPK 3A 00133
Exp:05/17/18 Prpd:LMT Opnr:05/17/17
ICP PREP SPIKE 3A IV

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	200.0 ± 0.9 µg/mL	Arsenic, As	100.0 ± 0.8 µg/mL
Barium, Ba	200.1 ± 0.8µg/mL	Beryllium, Be	5.001 ± 0.029 µg/mL
Bismuth, Bi	200.0 ± 1.1 µg/mL	Cadmium, Cd	10.00 ± 0.06 µg/mL
Calcium, Ca	5 000 ± 19 µg/mL	Chromium, Cr	20.01 ± 0.12 µg/mL
Cobalt, Co	50.01 ± 0.23 µg/mL	Copper, Cu	25.01 ± 0.09 µg/mL
Iron, Fe	100.1 ± 0.4 µg/mL	Lead, Pb	50.02 ± 0.22 µg/mL
Lithium, Li	100.0 ± 0.3 µg/mL	Magnesium, Mg	5 000 ± 20 µg/mL
Manganese, Mn	50.02 ± 0.19 µg/mL	Nickel, Ni	50.02 ± 0.21 µg/mL
Phosphorus, P	1 000 ± 4 µg/mL	Potassium, K	5 000 ± 18 µg/mL
Selenium, Se	200.0 ± 1.2 µg/mL	Silver, Ag	5.001 ± 0.034 µg/mL
Sodium, Na	5 000 ± 18 µg/mL	Strontium, Sr	100.0 ± 0.4 µg/mL
Thallium, Tl	200.0 ± 1.3 µg/mL	Thorium, Th	100.0 ± 0.5 µg/mL
Uranium, U	200.0 ± 1.1 µg/mL	Vanadium, V	50.00 ± 0.21 µg/mL
Zinc, Zn	50.02 ± 0.21 µg/mL		

Certified Density: 1.091 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Ag	Volhard	999c	999c
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	070222
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Bi	ICP Assay	3106	991212
Bi	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Co	ICP Assay	3113	000630 Co
Co	EDTA	928	928
Cr	ICP Assay	3112a	030730Cr3
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Li	ICP Assay	3129a	100714
Li	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Na	Gravimetric		
Na	ICP Assay	3152a	120715
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
P	ICP Assay	3139a	060717
P	Acidimetric		traceable to 84L
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Se	ICP Assay	3149	100901
Sr	EDTA	928	928
Sr	ICP Assay	3153a	990906
Th	EDTA	928	928
Th	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	993012
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2
V	EDTA	928	928
V	ICP Assay	3165	992706
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods | **Characterization of CRM by one method**

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.7 ± 0.1
Uranium 235U	0.28 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 13, 2017

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- March 13, 2020

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: 5/17/17

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

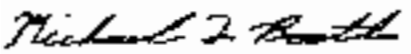
Certificate Prepared By:

Maurice Harris
Product Documentation Technician



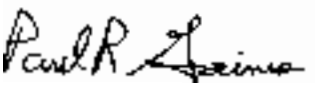
Certificate Approved By:

Michael Booth
Supervisor, Quality Control



Certifying Officer:

Paul Gaines
CEO, Senior Technical Director



Reagent

Icp stk ICSA_00020

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO Guide 34, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	CLPP-ICS-A
Lot Number:	K2-MEB643109
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	5 000 µg/mL ea: Aluminum, Calcium, Magnesium, 2 000 µg/mL ea: Iron

ICSA-00020

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	5 000 ± 22 µg/mL	Calcium, Ca	5 000 ± 20 µg/mL
Iron, Fe	2 000 ± 8 µg/mL	Magnesium, Mg	5 000 ± 20 µg/mL

Certified Density: 1.085 g/mL (measured at 20 ± 1 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502
Al	EDTA	928	928
Ca	ICP Assay	3109a	050825
Ca	EDTA	928	928
Fe	ICP Assay	3126a	051031
Fe	EDTA	928	928
Mg	ICP Assay	3131a	050302
Mg	EDTA	928	928

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM by two independent methods **Characterization of CRM by one method**

Characterization of CRM/RM by Two Methods

Certified Value, $X_{CRM/RM}$, where two methods of characterization are used is the weighted mean of the two results:

$X_{CRM/RM} = [(w_a)(X_a) + (w_b)(X_b)]$

X_a = mean of Assay Method A with standard uncertainty $u_{char\ a}$

X_b = mean of Assay Method B with standard uncertainty $u_{char\ b}$

w_a and w_b = the weighting factors for each method calculated using the inverse square of the variance:

$w_a = (1/u_{char\ a})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

$w_b = (1/u_{char\ b})^2 / ((1/u_{char\ a})^2 + (1/u_{char\ b})^2))$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k(u^2_{char\ a\&b} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a\&b} = [(w_a)^2 (u_{char\ a})^2 + (w_b)^2 (u_{char\ b})^2]^{1/2}$ where $u_{char\ a}$ and $u_{char\ b}$ are the square root of the sum of the squares of errors from characterization which include instrument measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM}$ = mean of Assay Method A with standard uncertainty $u_{char\ a}$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$

k = coverage factor = 2 in all cases at Inorganic Ventures

$u_{char\ a}$ = square root of the sum of the squares of the errors from characterization which include instrumental measurement, density, NIST SRM uncertainty, weighing, and volume

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag keep cap tightly sealed when not in use. Store and use at 20° ± 4° C. Do not pippette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 10CFR50 Appendix B - Nuclear Regulatory Commission

- Domestic Licensing of Production and Utilization Facilities

10.2 10CFR21 - Nuclear Regulatory Commission

- Reporting defects and Non-Compliance

10.3 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.4 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.5 ISO Guide 34 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 01, 2016

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- July 01, 2020

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

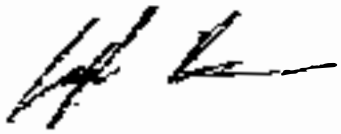
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year from the date of removal from the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being handled and stored in accordance with the instructions given in Sec 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

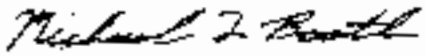
Certificate Prepared By:

Joseph Burns
TSG Technician



Certificate Approved By:

Michael Booth
QC Supervisor



Certifying Officer:

Paul Gaines
PhD., Senior Technical Director



Reagent

MS-31010_00011

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31010 **Lot No.:** A0116027

Description : SV Calibration Mix #4

SV Calibration Mix #4 2000 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2019 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	Hexachloroethane		2,002.0	µg/mL	+/- 11.8913	µg/mL	Gravimetric
	CAS # 67-72-1	(Lot 4H3SF)			+/- 60.6057	µg/mL	Unstressed
	Purity 99%				+/- 60.6057	µg/mL	Stressed
2	Nitrobenzene		2,014.0	µg/mL	+/- 11.9625	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot 65096APV)			+/- 60.9690	µg/mL	Unstressed
	Purity 99%				+/- 60.9690	µg/mL	Stressed
3	Isophorone		2,002.0	µg/mL	+/- 11.8913	µg/mL	Gravimetric
	CAS # 78-59-1	(Lot MKBG2442V)			+/- 60.6057	µg/mL	Unstressed
	Purity 99%				+/- 60.6057	µg/mL	Stressed
4	1,2,4-Trichlorobenzene		2,014.0	µg/mL	+/- 11.9625	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot 26896BM)			+/- 60.9690	µg/mL	Unstressed
	Purity 99%				+/- 60.9690	µg/mL	Stressed
5	Hexachlorobutadiene		2,007.0	µg/mL	+/- 11.9212	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/- 60.7583	µg/mL	Unstressed
	Purity 98%				+/- 60.7583	µg/mL	Stressed
6	2-Methylnaphthalene		2,000.0	µg/mL	+/- 11.8794	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot 19399MJV)			+/- 60.5452	µg/mL	Unstressed
	Purity 99%				+/- 60.5452	µg/mL	Stressed
7	Hexachlorocyclopentadiene		2,007.9	µg/mL	+/- 11.9263	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 150909)			+/- 60.7843	µg/mL	Unstressed
	Purity 97%				+/- 60.7843	µg/mL	Stressed

8	2,6-Dinitrotoluene		2,010.0	µg/mL	+/-	11.9388	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot 1437483V)			+/-	60.8479	µg/mL	Unstressed
	Purity 99%				+/-	60.8479	µg/mL	Stressed
9	Dibenzofuran		2,002.0	µg/mL	+/-	11.8913	µg/mL	Gravimetric
	CAS # 132-64-9	(Lot MKBH8392V)			+/-	60.6057	µg/mL	Unstressed
	Purity 99%				+/-	60.6057	µg/mL	Stressed
10	2,4-Dinitrotoluene		2,000.0	µg/mL	+/-	11.8794	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)			+/-	60.5452	µg/mL	Unstressed
	Purity 99%				+/-	60.5452	µg/mL	Stressed
11	Diethylphthalate		2,016.0	µg/mL	+/-	11.9744	µg/mL	Gravimetric
	CAS # 84-66-2	(Lot MKBJ3578V)			+/-	61.0295	µg/mL	Unstressed
	Purity 99%				+/-	61.0295	µg/mL	Stressed
12	Hexachlorobenzene		2,018.0	µg/mL	+/-	11.9863	µg/mL	Gravimetric
	CAS # 118-74-1	(Lot LB98981V)			+/-	61.0901	µg/mL	Unstressed
	Purity 99%				+/-	61.0901	µg/mL	Stressed
13	Carbazole		1,999.2	µg/mL	+/-	11.8746	µg/mL	Gravimetric
	CAS # 86-74-8	(Lot 3715800)			+/-	60.5210	µg/mL	Unstressed
	Purity 98%				+/-	60.5210	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

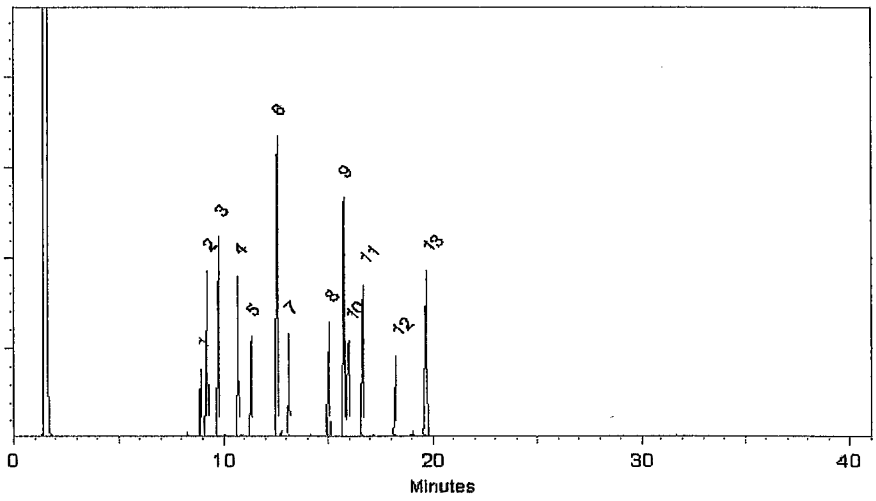
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brandon Reish - Mix Technician

Date Mixed: 17-Dec-2015 **Balance:** B345965662

Jennifer L. Pollino - QC Analyst

Date Passed: 21-Dec-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MS-31995_00004

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CERTIFIED REFERENCE MATERIAL

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

Certificate of Analysis

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31995 **Lot No.:** A092153

Description : 8270 Calibration Mix #5, Revised

8270 Calibration Mix #5, Revised 2,000µg/ml, Methylene Chloride, 1ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2018 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Naphthalene **CAS #** 91-20-3 (Lot MKBF8633V) **Purity** 99%	2,000.0 µg/mL	+/- 11.7371 µg/mL +/- 92.7295 µg/mL +/- 101.3892 µg/mL	Gravimetric Unstressed Stressed
2	2-Methylnaphthalene **CAS #** 91-57-6 (Lot 19399MJV) **Purity** 96%	1,999.7 µg/mL	+/- 11.7352 µg/mL +/- 92.7147 µg/mL +/- 101.3729 µg/mL	Gravimetric Unstressed Stressed
3	1-Methylnaphthalene **CAS #** 90-12-0 (Lot 5250.00-10) **Purity** 99%	2,000.0 µg/mL	+/- 11.7371 µg/mL +/- 92.7295 µg/mL +/- 101.3892 µg/mL	Gravimetric Unstressed Stressed
4	Acenaphthylene **CAS #** 208-96-8 (Lot ER030707-01) **Purity** 99%	2,000.0 µg/mL	+/- 11.7371 µg/mL +/- 92.7295 µg/mL +/- 101.3892 µg/mL	Gravimetric Unstressed Stressed
5	Acenaphthene **CAS #** 83-32-9 (Lot MKBH3748V) **Purity** 99%	2,000.5 µg/mL	+/- 11.7401 µg/mL +/- 92.7527 µg/mL +/- 101.4145 µg/mL	Gravimetric Unstressed Stressed
6	Fluorene **CAS #** 86-73-7 (Lot 1326187) **Purity** 99%	2,000.0 µg/mL	+/- 11.7371 µg/mL +/- 92.7295 µg/mL +/- 101.3892 µg/mL	Gravimetric Unstressed Stressed
7	Phenanthrene **CAS #** 85-01-8 (Lot MKBJ4205V) **Purity** 99%	2,001.0 µg/mL	+/- 11.7430 µg/mL +/- 92.7759 µg/mL +/- 101.4398 µg/mL	Gravimetric Unstressed Stressed
8	Anthracene **CAS #** 120-12-7 (Lot MKBK5208V) **Purity** 99%	2,000.5 µg/mL	+/- 11.7401 µg/mL +/- 92.7527 µg/mL +/- 101.4145 µg/mL	Gravimetric Unstressed Stressed

9	Fluoranthene		2,000.2	µg/mL	+/-	11.7382	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot 00828AJ)			+/-	92.7378	µg/mL	Unstressed
	Purity 98%				+/-	101.3983	µg/mL	Stressed
10	Pyrene		2,001.5	µg/mL	+/-	11.7459	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot S22012V)			+/-	92.7990	µg/mL	Unstressed
	Purity 99%				+/-	101.4652	µg/mL	Stressed
11	Benz(a)anthracene		2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot ER121707-01)			+/-	92.7295	µg/mL	Unstressed
	Purity 99%				+/-	101.3892	µg/mL	Stressed
12	Chrysene		2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot ER120810-02)			+/-	92.7295	µg/mL	Unstressed
	Purity 99%				+/-	101.3892	µg/mL	Stressed
13	Benzo(b)fluoranthene		2,000.5	µg/mL	+/-	11.7401	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot ER022008-02)			+/-	92.7527	µg/mL	Unstressed
	Purity 99%				+/-	101.4145	µg/mL	Stressed
14	Benzo(k)fluoranthene		2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot ER061608-02)			+/-	92.7295	µg/mL	Unstressed
	Purity 99%				+/-	101.3892	µg/mL	Stressed
15	Benzo(a)pyrene		2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot ER071309-02)			+/-	92.7295	µg/mL	Unstressed
	Purity 99%				+/-	101.3892	µg/mL	Stressed
16	Indeno(1,2,3-cd)pyrene		2,000.5	µg/mL	+/-	11.7401	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot ER082107-02)			+/-	92.7527	µg/mL	Unstressed
	Purity 99%				+/-	101.4145	µg/mL	Stressed
17	Dibenz(a,h)anthracene		2,000.5	µg/mL	+/-	11.7401	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	92.7527	µg/mL	Unstressed
	Purity 99%				+/-	101.4145	µg/mL	Stressed
18	Benzo(g,h,i)perylene		2,000.0	µg/mL	+/-	11.7371	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot ER020708-08)			+/-	92.7295	µg/mL	Unstressed
	Purity 99%				+/-	101.3892	µg/mL	Stressed

Solvent: Methylene Chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25um
Rtx-5 (cat.#10223)

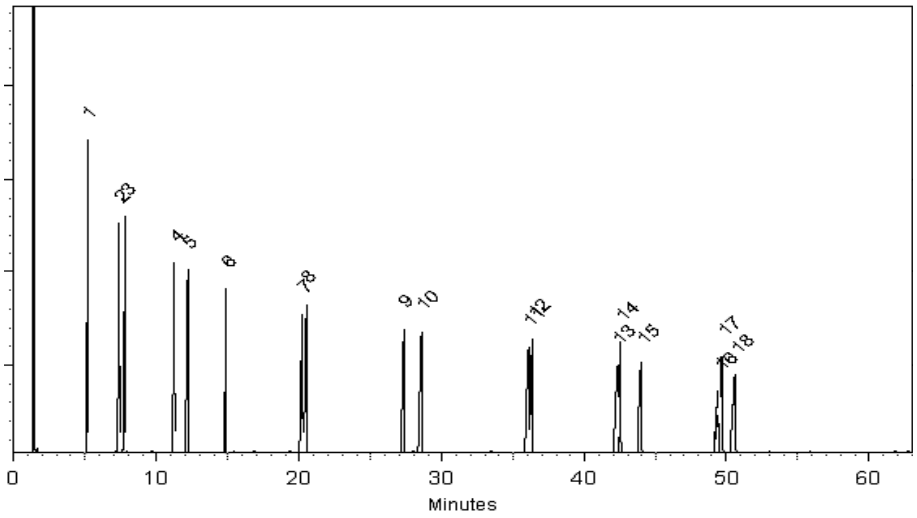
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
100°C (hold 1 min.) to 330°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen to guarantee product quality. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Rebecca Sauver

Date Mixed: 28-Nov-2012 **Balance:** 1128360905

Jodi E. Breon

Jodi E. Breon - QA Analyst

Date Passed: 03-Dec-2012

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MS-48925_00014

Certificate of Analysis

DESCRIPTION: Base-Neutral Surrogate Spike Mix

CATALOG NO.: 48925_00014 MFG DATE: Aug-2014

LOT NO.: LC08783V EXPIRATION DATE: Aug-2017

SOLVENT: METHYLENE CHLORIDE

3308099
ID: MS-48925_00014
Exp: 08/31/17 Prpd: NRC
SUP Base-Neutral Surrogat

ANALYTE (1)	CAS NUMBER	PERCENT PURITY(2)	WEIGHT(3) CONCENTRATION	ANALYTICAL(4) CONCENTRATION		STD DEV	SUPELCO LOT NO
NITROBENZENE-D5	4165-60-0	99.9	1000	1014	+/-	45.1	LB83753
P-TERPHENYL-D14	1718-51-0	99.9	1000	1001	+/-	23.2	LC01817
2-FLUOROBIPHENYL	321-60-8	99.9	1001	1001	+/-	7.2	LB99948

(1) Listed in alphabetical order.
(2) Determined by capillary GC-FID, unless otherwise noted.
(3) NIST traceable weights are used to verify balance calibration with the preparation of each lot. Concentration of analyte in solution is ug/ml +/- 0.5%, based upon balance and Class A volumetric glassware tolerances. Weights are corrected for analytes less than 98% pure.
(4) Determined by chromatographic analysis against an independently prepared reference lot. Mean of replicate injections.

Duane Funk

Duane Funk
Quality Manager

Supelco warrants that its products conform to the information contained in this publication. Purchaser must determine the suitability of the product for its particular use. Please see the latest catalog or order invoice and packing slip for additional terms and conditions of sale.
Supelco is a Sigma-Aldrich Company.

SUPELCO
Solutions within.™
595 North Harrison Road
Bellefonte, PA 16823-0048 USA
Phone (814) 359-3441

Certificate of Analysis

DESCRIPTION: Base-Neutral Surrogate Spike Mix

CATALOG NO.: 48925_00014 MFG DATE: Aug-2014

LOT NO.: LC08783V EXPIRATION DATE: Aug-2017

SOLVENT: METHYLENE CHLORIDE

3308100
ID: MS-48925_00014
Exp: 08/31/17 Prpd: NRC
SUP Base-Neutral Surrogat

ANALYTE (1)	CAS NUMBER	PERCENT PURITY(2)	WEIGHT(3) CONCENTRATION	ANALYTICAL(4) CONCENTRATION		STD DEV	SUPELCO LOT NO
NITROBENZENE-D5	4165-60-0	99.9	1000	1014	+/-	45.1	LB83753
P-TERPHENYL-D14	1718-51-0	99.9	1000	1001	+/-	23.2	LC01817
2-FLUOROBIPHENYL	321-60-8	99.9	1001	1001	+/-	7.2	LB99948

(1) Listed in alphabetical order.

(2) Determined by capillary GC-FID, unless otherwise noted.

(3) NIST traceable weights are used to verify balance calibration with the preparation of each lot. Concentration of analyte in solution is ug/ml +/- 0.5%, based upon balance and Class A volumetric glassware tolerances. Weights are corrected for analytes less than 98% pure.

(4) Determined by chromatographic analysis against an independently prepared reference lot. Mean of replicate injections.

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Reagent

MS-567684_00019

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www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

41011728
ID: MS-567684_00019
Exp: 07/31/20 Prod: DCK
RES 8270 Internal Std Mix

Catalog No. : 567684 **Lot No.:** A0112833

Description : 8270 Internal Standard

8270 Internal Standard 2,000µg/mL, Methylene Chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2020 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 Purity 99%	(Lot PR-18488)	2,014.8 µg/mL	+/- 11.7142 µg/mL +/- 89.5186 µg/mL +/- 98.3528 µg/mL		Gravimetric Unstressed Stressed
2	Naphthalene-d8 CAS # 1146-65-2 Purity 99%	(Lot M-1452)	2,015.8 µg/mL	+/- 11.7202 µg/mL +/- 89.5645 µg/mL +/- 98.4032 µg/mL		Gravimetric Unstressed Stressed
3	Acenaphthene-d10 CAS # 15067-26-2 Purity 97%	(Lot PR-21070)	2,002.0 µg/mL	+/- 11.6397 µg/mL +/- 88.9491 µg/mL +/- 97.7271 µg/mL		Gravimetric Unstressed Stressed
4	Phenanthrene-d10 CAS # 1517-22-2 Purity 99%	(Lot PR-23065)	2,007.1 µg/mL	+/- 11.6693 µg/mL +/- 89.1750 µg/mL +/- 97.9753 µg/mL		Gravimetric Unstressed Stressed
5	Chrysene-d12 CAS # 1719-03-5 Purity 99%	(Lot PR-25081)	2,013.2 µg/mL	+/- 11.7047 µg/mL +/- 89.4460 µg/mL +/- 98.2730 µg/mL		Gravimetric Unstressed Stressed
6	Perylene-d12 CAS # 1520-96-3 Purity 99%	(Lot PR-241113)	2,005.4 µg/mL	+/- 11.6598 µg/mL +/- 89.1024 µg/mL +/- 97.8955 µg/mL		Gravimetric Unstressed Stressed

Reagent

MS-570666.SEC_00001

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110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 570666.sec **Lot No.:** A0115803

3708708
ID: MS-570666.SEC_00001
Exp: 06/30/17 Pqd: DCK
RES HSLB Mega Mix (2016)

Description: 8270 List 1 / Std #1 MegaMix (2016)

8270 List 1 / Std #1 MegaMix (2016) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

Container Size: 10 mL **Pkg Amt:** > 5 mL

Expiration Date: June 30, 2017 **Storage:** 10°C or colder

Handling: Carcinogen/reproductive toxin, Photosensitive, Sonicate.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dioxane CAS # 123-91-1,SEC (Lot CHA4A) Purity 99%	1,001.0 µg/mL	+/- 5.8333 µg/mL +/- 11.9726 µg/mL +/- 19.0478 µg/mL	Gravimetric Unstressed Stressed
2	Pyridine CAS # 110-86-1,SEC (Lot QN8DK) Purity 99%	1,000.3 µg/mL	+/- 5.8290 µg/mL +/- 11.9636 µg/mL +/- 19.0336 µg/mL	Gravimetric Unstressed Stressed
3	N-Nitrosodimethylamine CAS # 62-75-9,SEC (Lot 41B67) Purity 98%	1,001.4 µg/mL	+/- 5.8359 µg/mL +/- 11.9778 µg/mL +/- 19.0562 µg/mL	Gravimetric Unstressed Stressed
4	Aniline CAS # 62-53-3,SEC (Lot ZCD3N) Purity 99%	1,000.3 µg/mL	+/- 5.8290 µg/mL +/- 11.9636 µg/mL +/- 19.0336 µg/mL	Gravimetric Unstressed Stressed
5	Bis(2-chloroethyl)ether CAS # 111-44-4,SEC (Lot FA010143) Purity 99%	1,000.3 µg/mL	+/- 5.8290 µg/mL +/- 11.9636 µg/mL +/- 19.0336 µg/mL	Gravimetric Unstressed Stressed
6	2-Chlorophenol CAS # 95-57-8,SEC (Lot GJ01) Purity 99%	1,000.6 µg/mL	+/- 5.8312 µg/mL +/- 11.9681 µg/mL +/- 19.0407 µg/mL	Gravimetric Unstressed Stressed
7	Phenol CAS # 108-95-2,SEC (Lot EDPYN) Purity 99%	1,000.1 µg/mL	+/- 5.8282 µg/mL +/- 11.9621 µg/mL +/- 19.0312 µg/mL	Gravimetric Unstressed Stressed

8	n-Decane (C10) CAS # 124-18-5.SEC Purity 99%	(Lot UCWNN)	1,000.1	µg/mL	+/- 5.8282 +/- 11.9621 +/- 19.0312	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	1,4-Dichlorobenzene CAS # 106-46-7.SEC Purity 99%	(Lot YWKDC-MK)	1,000.3	µg/mL	+/- 5.8290 +/- 11.9636 +/- 19.0336	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,3-Dichlorobenzene CAS # 541-73-1.SEC Purity 99%	(Lot FMDFD-KA)	1,000.0	µg/mL	+/- 5.8275 +/- 11.9606 +/- 19.0288	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	1,2-Dichlorobenzene CAS # 95-50-1.SEC Purity 99%	(Lot 4NRGF-OI)	1,000.0	µg/mL	+/- 5.8275 +/- 11.9606 +/- 19.0288	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	Benzyl alcohol CAS # 100-51-6.SEC Purity 99%	(Lot QZBUO)	1,000.4	µg/mL	+/- 5.8297 +/- 11.9651 +/- 19.0360	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	2,2'-oxybis(1-chloropropane) CAS # 108-60-1 * Purity 99%	(Lot 2-KMW-57-8)	1,000.4	µg/mL	+/- 5.8297 +/- 11.9651 +/- 19.0360	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	2-Methylphenol (o-cresol) CAS # 95-48-7.SEC Purity 98%	(Lot NC7HL)	1,000.3	µg/mL	+/- 5.8295 +/- 11.9646 +/- 19.0352	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	Hexachloroethane CAS # 67-72-1.SEC Purity 98%	(Lot 10173016)	1,000.6	µg/mL	+/- 5.8309 +/- 11.9675 +/- 19.0399	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Acetophenone CAS # 98-86-2.SEC Purity 99%	(Lot NSGTI)	1,000.3	µg/mL	+/- 5.8290 +/- 11.9636 +/- 19.0336	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	N-Nitroso-di-n-propylamine CAS # 621-64-7.SEC Purity 99%	(Lot 1528900)	1,000.6	µg/mL	+/- 5.8312 +/- 11.9681 +/- 19.0407	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	4-Methylphenol (p-cresol) CAS # 106-44-5.SEC Purity 99%	(Lot 65S2E)	500.1	µg/mL	+/- 2.9145 +/- 5.9818 +/- 9.5168	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	3-Methylphenol (m-cresol) CAS # 108-39-4.SEC Purity 99%	(Lot 6LHTM)	500.1	µg/mL	+/- 2.9145 +/- 5.9818 +/- 9.5168	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	Nitrobenzene CAS # 98-95-3.SEC Purity 99%	(Lot FLYIG)	1,000.4	µg/mL	+/- 5.8297 +/- 11.9651 +/- 19.0360	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	Isophorone CAS # 78-59-1.SEC Purity 99%	(Lot XHGJI)	1,000.4	µg/mL	+/- 5.8297 +/- 11.9651 +/- 19.0360	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	2-Nitrophenol CAS # 88-75-5.SEC Purity 99%	(Lot GXJ7J)	1,000.3	µg/mL	+/- 5.8290 +/- 11.9636 +/- 19.0336	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	2,4-Dimethylphenol CAS # 105-67-9.SEC Purity 99%	(Lot MKBL3650V)	1,000.4	µg/mL	+/- 5.8297 +/- 11.9651 +/- 19.0360	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Bis(2-chloroethoxy)methane		1,000.6	µg/mL	+/- 5.8312	µg/mL	Gravimetric
	CAS # 111-91-1 *	(Lot 3299900)			+/- 11.9681	µg/mL	Unstressed
	Purity 99%				+/- 19.0407	µg/mL	Stressed
25	2,4-Dichlorophenol		1,000.8	µg/mL	+/- 5.8319	µg/mL	Gravimetric
	CAS # 120-83-2.SEC	(Lot FHM01)			+/- 11.9696	µg/mL	Unstressed
	Purity 99%				+/- 19.0431	µg/mL	Stressed
26	1,2,4-Trichlorobenzene		1,000.0	µg/mL	+/- 5.8275	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/- 11.9606	µg/mL	Unstressed
	Purity 99%				+/- 19.0288	µg/mL	Stressed
27	Naphthalene		1,001.1	µg/mL	+/- 5.8341	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot 4KW3H-OO)			+/- 11.9741	µg/mL	Unstressed
	Purity 99%				+/- 19.0502	µg/mL	Stressed
28	2,6-Dichlorophenol		1,000.6	µg/mL	+/- 5.8312	µg/mL	Gravimetric
	CAS # 87-65-0.SEC	(Lot SIDBB)			+/- 11.9681	µg/mL	Unstressed
	Purity 99%				+/- 19.0407	µg/mL	Stressed
29	4-Chloroaniline		1,000.8	µg/mL	+/- 5.8319	µg/mL	Gravimetric
	CAS # 106-47-8.SEC	(Lot 10171860)			+/- 11.9696	µg/mL	Unstressed
	Purity 99%				+/- 19.0431	µg/mL	Stressed
30	Hexachlorobutadiene		1,000.8	µg/mL	+/- 5.8323	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 3265500)			+/- 11.9705	µg/mL	Unstressed
	Purity 98%				+/- 19.0445	µg/mL	Stressed
31	2-Methylnaphthalene		1,000.8	µg/mL	+/- 5.8319	µg/mL	Gravimetric
	CAS # 91-57-6.SEC	(Lot 76023-1)			+/- 11.9696	µg/mL	Unstressed
	Purity 99%				+/- 19.0431	µg/mL	Stressed
32	4-Chloro-3-methylphenol		1,000.1	µg/mL	+/- 5.8282	µg/mL	Gravimetric
	CAS # 59-50-7.SEC	(Lot FDO02)			+/- 11.9621	µg/mL	Unstressed
	Purity 99%				+/- 19.0312	µg/mL	Stressed
33	1-Methylnaphthalene		1,000.9	µg/mL	+/- 5.8326	µg/mL	Gravimetric
	CAS # 90-12-0.SEC	(Lot UATSA)			+/- 11.9711	µg/mL	Unstressed
	Purity 99%				+/- 19.0455	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,000.8	µg/mL	+/- 5.8319	µg/mL	Gravimetric
	CAS # 95-94-3.SEC	(Lot AF02)			+/- 11.9696	µg/mL	Unstressed
	Purity 99%				+/- 19.0431	µg/mL	Stressed
35	Hexachlorocyclopentadiene		1,001.1	µg/mL	+/- 5.8341	µg/mL	Gravimetric
	CAS # 77-47-4.SEC	(Lot 0012013)			+/- 11.9741	µg/mL	Unstressed
	Purity 99%				+/- 19.0502	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,000.9	µg/mL	+/- 5.8330	µg/mL	Gravimetric
	CAS # 88-06-2.SEC	(Lot UUMYM)			+/- 11.9719	µg/mL	Unstressed
	Purity 98%				+/- 19.0469	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,000.9	µg/mL	+/- 5.8329	µg/mL	Gravimetric
	CAS # 95-95-4.SEC	(Lot MKBQ9937V)			+/- 11.9716	µg/mL	Unstressed
	Purity 97%				+/- 19.0463	µg/mL	Stressed
38	2-Chloronaphthalene		1,000.3	µg/mL	+/- 5.8290	µg/mL	Gravimetric
	CAS # 91-58-7.SEC	(Lot LC03928V)			+/- 11.9636	µg/mL	Unstressed
	Purity 99%				+/- 19.0336	µg/mL	Stressed
39	Biphenyl		1,000.1	µg/mL	+/- 5.8282	µg/mL	Gravimetric
	CAS # 92-52-4.SEC	(Lot 330QE)			+/- 11.9621	µg/mL	Unstressed
	Purity 99%				+/- 19.0312	µg/mL	Stressed

40	4-Nitroaniline CAS# 100-01-6,SEC Purity 99%	(Lot 5TTRC)	1,000.44	µg/mL	+/- 5.82297 +/- 11.96651 +/- 19.03360	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	Acenaphthylene CAS# 208-96-8,SEC Purity 98%	(Lot 0620133)	1,000.11	µg/mL	+/- 5.82280 +/- 11.96617 +/- 19.03305	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	1,3-Dinitrobenzene CAS # 99-65-0,SEC Purity 99%	(Lot 3XXLB)	1,000.44	µg/mL	+/- 5.82297 +/- 11.96651 +/- 19.03360	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	Dimethylphthalate CAS # 131-11-3,SEC Purity 99%	(Lot 483WC)	1,000.3	µg/mL	+/- 5.82290 +/- 11.96636 +/- 19.03336	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	2,6-Dinitrotoluene CAS # 606-20-2,SEC Purity 99%	(Lot GE01)	1,000.11	µg/mL	+/- 5.82282 +/- 11.96621 +/- 19.03312	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	Acenaphthene CAS # 83-32-9,SEC Purity 99%	(Lot BWZJE)	1,000.6	µg/mL	+/- 5.8312 +/- 11.9681 +/- 19.0407	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	2,4-Dinitrophenol CAS # 51-28-5,SEC Purity 99%	(Lot 2TXXH)	2,000.4	µg/mL	+/- 11.6304 +/- 23.9126 +/- 38.0566	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	Dibenzofuran CAS # 132-64-9,SEC Purity 99%	(Lot 27ZGC)	1,000.5	µg/mL	+/- 5.8304 +/- 11.9666 +/- 19.0383	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	3-Nitroaniline CAS # 99-09-2,SEC Purity 99%	(Lot FGN03)	1,000.1	µg/mL	+/- 5.8282 +/- 11.9621 +/- 19.0312	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	2,4-Dinitrotoluene CAS # 121-14-2,SEC Purity 99%	(Lot SHRSA)	1,000.5	µg/mL	+/- 5.8304 +/- 11.9666 +/- 19.0383	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	4-Nitrophenol CAS # 100-02-7,SEC Purity 99%	(Lot 2J5LB)	2,000.3	µg/mL	+/- 11.6296 +/- 23.9111 +/- 38.0542	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	2,3,4,6-Tetrachlorophenol CAS # 58-90-2,SEC Purity 98%	(Lot LC10202V)	1,001.1	µg/mL	+/- 5.8338 +/- 11.9734 +/- 19.0492	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	Fluorene CAS # 86-73-7,SEC Purity 99%	(Lot 1361600)	1,000.4	µg/mL	+/- 5.82297 +/- 11.96651 +/- 19.03360	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	4-Chlorophenyl phenyl ether CAS # 7005-72-3,SEC Purity 99%	(Lot P31G)	1,000.6	µg/mL	+/- 5.83312 +/- 11.96681 +/- 19.04007	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	n-Hexadecane (C16) CAS # 544-76-3,SEC Purity 99%	(Lot A0328141)	1,000.8	µg/mL	+/- 5.83319 +/- 11.96696 +/- 19.04031	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	Diethylphthalate CAS # 84-66-2,SEC Purity 99%	(Lot UWBLC)	1,001.00	µg/mL	+/- 5.83333 +/- 11.97026 +/- 19.04478	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	Azobenzene		1,000.8	µg/mL	+/-	5.8319	µg/mL	Gravimetric
	CAS # 103-33-3.SEC	(Lot JUWAG)			+/-	11.9696	µg/mL	Unstressed
	Purity 99%				+/-	19.0431	µg/mL	Stressed
57	Diphenylamine		850.5	µg/mL	+/-	4.9563	µg/mL	Gravimetric
	CAS # 122-39-4.SEC	(Lot 10164691)			+/-	10.1725	µg/mL	Unstressed
	Purity 99%				+/-	16.1840	µg/mL	Stressed
58	2-Nitroaniline		1,000.5	µg/mL	+/-	5.8304	µg/mL	Gravimetric
	CAS # 88-74-4.SEC	(Lot T6E7B)			+/-	11.9666	µg/mL	Unstressed
	Purity 99%				+/-	19.0383	µg/mL	Stressed
59	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		2,000.8	µg/mL	+/-	11.6325	µg/mL	Gravimetric
	CAS # 534-52-1.SEC	(Lot 3256700)			+/-	23.9171	µg/mL	Unstressed
	Purity 99%				+/-	38.0637	µg/mL	Stressed
60	4-Bromophenyl phenyl ether		1,000.9	µg/mL	+/-	5.8326	µg/mL	Gravimetric
	CAS # 101-55-3.SEC	(Lot 84C6D)			+/-	11.9711	µg/mL	Unstressed
	Purity 99%				+/-	19.0455	µg/mL	Stressed
61	Hexachlorobenzene		1,000.4	µg/mL	+/-	5.8297	µg/mL	Gravimetric
	CAS # 118-74-1.SEC	(Lot 20622)			+/-	11.9651	µg/mL	Unstressed
	Purity 99%				+/-	19.0360	µg/mL	Stressed
62	Pentachlorophenol		2,001.1	µg/mL	+/-	11.6347	µg/mL	Gravimetric
	CAS # 87-86-5.SEC	(Lot 2357600)			+/-	23.9216	µg/mL	Unstressed
	Purity 99%				+/-	38.0708	µg/mL	Stressed
63	Phenanthrene		1,000.2	µg/mL	+/-	5.8288	µg/mL	Gravimetric
	CAS # 85-01-8.SEC	(Lot 1777100)			+/-	11.9631	µg/mL	Unstressed
	Purity 98%				+/-	19.0329	µg/mL	Stressed
64	n-Octadecane (C18)		1,000.9	µg/mL	+/-	5.8326	µg/mL	Gravimetric
	CAS # 593-45-3.SEC	(Lot G14U045)			+/-	11.9711	µg/mL	Unstressed
	Purity 99%				+/-	19.0455	µg/mL	Stressed
65	Anthracene		1,000.8	µg/mL	+/-	5.8319	µg/mL	Gravimetric
	CAS # 120-12-7.SEC	(Lot WDFNJ)			+/-	11.9696	µg/mL	Unstressed
	Purity 99%				+/-	19.0431	µg/mL	Stressed
66	Carbazole		1,000.4	µg/mL	+/-	5.8297	µg/mL	Gravimetric
	CAS # 86-74-8.SEC	(Lot LMIZB)			+/-	11.9651	µg/mL	Unstressed
	Purity 99%				+/-	19.0360	µg/mL	Stressed
67	Di-n-butylphthalate		1,000.1	µg/mL	+/-	5.8282	µg/mL	Gravimetric
	CAS # 84-74-2.SEC	(Lot 42FSG)			+/-	11.9621	µg/mL	Unstressed
	Purity 99%				+/-	19.0312	µg/mL	Stressed
68	Fluoranthene		1,000.6	µg/mL	+/-	5.8312	µg/mL	Gravimetric
	CAS # 206-44-0.SEC	(Lot FREGF)			+/-	11.9681	µg/mL	Unstressed
	Purity 99%				+/-	19.0407	µg/mL	Stressed
69	Pyrene		1,000.9	µg/mL	+/-	5.8326	µg/mL	Gravimetric
	CAS # 129-00-0.SEC	(Lot ROVJC)			+/-	11.9711	µg/mL	Unstressed
	Purity 99%				+/-	19.0455	µg/mL	Stressed
70	Benzyl butyl phthalate		1,001.6	µg/mL	+/-	5.8366	µg/mL	Gravimetric
	CAS # 85-68-7.SEC	(Lot GX3GL)			+/-	11.9793	µg/mL	Unstressed
	Purity 98%				+/-	19.0585	µg/mL	Stressed
71	Benz(a)anthracene		1,000.2	µg/mL	+/-	5.8286	µg/mL	Gravimetric
	CAS # 56-55-3.SEC	(Lot MIIENF)			+/-	11.9629	µg/mL	Unstressed
	Purity 97%				+/-	19.0325	µg/mL	Stressed

72	chrysene		1,000.4	µg/mL	+/- 5.8297	µg/mL	Gravimetric
	CAS # 218-01-9.SEC	(Lot KQ4SE)			+/- 11.9651	µg/mL	Unstressed
	Purity 99%				+/- 19.0360	µg/mL	Stressed
73	Bis(2-ethylhexyl)phthalate		1,000.8	µg/mL	+/- 5.8319	µg/mL	Gravimetric
	CAS # 117-81-7.SEC	(Lot MI8AG)			+/- 11.9696	µg/mL	Unstressed
	Purity 99%				+/- 19.0431	µg/mL	Stressed
74	Di-n-octyl phthalate		1,000.9	µg/mL	+/- 5.8330	µg/mL	Gravimetric
	CAS # 117-84-0.SEC	(Lot O8DLD)			+/- 11.9719	µg/mL	Unstressed
	Purity 98%				+/- 19.0469	µg/mL	Stressed
75	Benzo(b)fluoranthene		1,000.4	µg/mL	+/- 5.8297	µg/mL	Gravimetric
	CAS # 205-99-2.SEC	(Lot 022011)			+/- 11.9651	µg/mL	Unstressed
	Purity 99%				+/- 19.0360	µg/mL	Stressed
76	Benzo(k)fluoranthene		1,000.9	µg/mL	+/- 5.8326	µg/mL	Gravimetric
	CAS # 207-08-9.SEC	(Lot ER061608-02)			+/- 11.9711	µg/mL	Unstressed
	Purity 99%				+/- 19.0455	µg/mL	Stressed
77	Benzo(a)pyrene		1,000.0	µg/mL	+/- 5.8275	µg/mL	Gravimetric
	CAS # 50-32-8.SEC	(Lot NPEZF)			+/- 11.9606	µg/mL	Unstressed
	Purity 99%				+/- 19.0288	µg/mL	Stressed
78	Indeno(1,2,3-cd)pyrene		1,000.1	µg/mL	+/- 5.8282	µg/mL	Gravimetric
	CAS # 193-39-5.SEC	(Lot 022013)			+/- 11.9621	µg/mL	Unstressed
	Purity 99%				+/- 19.0312	µg/mL	Stressed
79	Dibenz(a,h)anthracene		1,000.8	µg/mL	+/- 5.8319	µg/mL	Gravimetric
	CAS # 53-70-3.SEC	(Lot 0012012)			+/- 11.9696	µg/mL	Unstressed
	Purity 99%				+/- 19.0431	µg/mL	Stressed
80	Benzo(g,h,i)perylene		1,000.6	µg/mL	+/- 5.8308	µg/mL	Gravimetric
	CAS # 191-24-2.SEC	(Lot 0022012)			+/- 11.9673	µg/mL	Unstressed
	Purity 96%				+/- 19.0395	µg/mL	Stressed
Solvent:	Methylene Chloride						
	CAS # 75-09-2						
	Purity 99%						

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Reagent

MV-567649-D_00001

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Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567649 **Lot No.:** A093504

Description : 8260 Internal Standard

8260 Internal Standard 250-5,000 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : February 2018 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 25725-11-5		+/- 110.6323	µg/mL	Unstressed
	Purity 99%		+/- 111.0833	µg/mL	Stressed
2	Fluorobenzene	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 462-06-6		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	Stressed
3	1,4-Dioxane-d8	5,000.0 µg/mL	+/- 29.0689	µg/mL	Gravimetric
	CAS # 17647-74-4		+/- 110.6323	µg/mL	Unstressed
	Purity 99%		+/- 111.0833	µg/mL	Stressed
4	Chlorobenzene-d5	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 3114-55-4		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	Stressed
5	1,4-Dichlorobenzene-d4	250.0 µg/mL	+/- 1.4535	µg/mL	Gravimetric
	CAS # 3855-82-1		+/- 5.5316	µg/mL	Unstressed
	Purity 99%		+/- 5.5542	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x .53mm x 3.0um
Rtx-502.2 (cat.#10910)

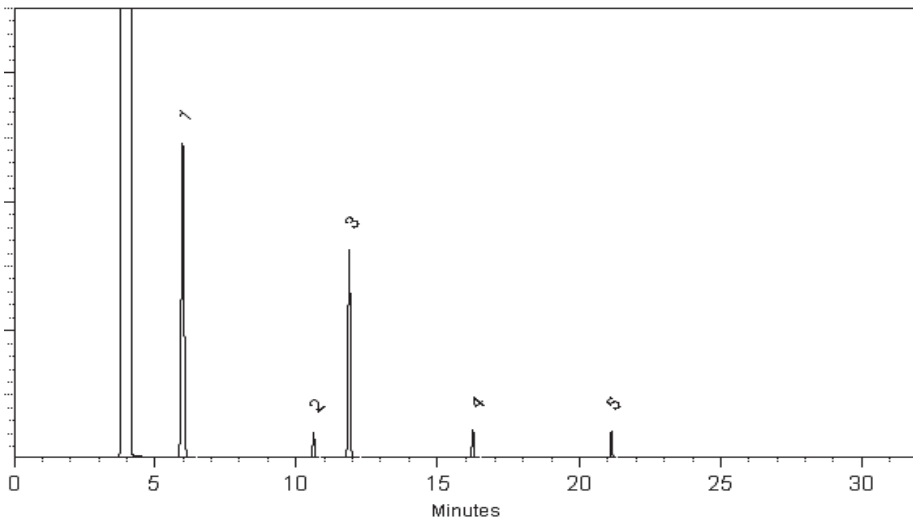
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



Diane Shaffer - QA Analyst

Date Passed: 14-Feb-2013 **Balance:** B251644995

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date of the unopened ampul stored at the recommended storage condition is the last day of the month listed in the expiration date field.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MV-567650_00025

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567650 **Lot No.:** A0120212

Description : 8260 Surrogate Standard

8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : July 31, 2021 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dibromofluoromethane	2,521.3 µg/mL	+/- 14.6591 µg/mL	Gravimetric
	CAS # 1868-53-7 (Lot 032015)		+/- 141.3668 µg/mL	Unstressed
	Purity 99%		+/- 144.6746 µg/mL	Stressed
2	1,2-Dichloroethane-d4	2,523.7 µg/mL	+/- 14.6730 µg/mL	Gravimetric
	CAS # 17060-07-0 (Lot 14C-191)		+/- 141.5014 µg/mL	Unstressed
	Purity 99%		+/- 144.8123 µg/mL	Stressed
3	Toluene-d8	2,523.6 µg/mL	+/- 14.6724 µg/mL	Gravimetric
	CAS # 2037-26-5 (Lot PR-26623)		+/- 141.4957 µg/mL	Unstressed
	Purity 99%		+/- 144.8066 µg/mL	Stressed
4	1-Bromo-4-fluorobenzene (BFB)	2,510.9 µg/mL	+/- 14.5986 µg/mL	Gravimetric
	CAS # 460-00-4 (Lot 20401KOV)		+/- 140.7837 µg/mL	Unstressed
	Purity 99%		+/- 144.0778 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

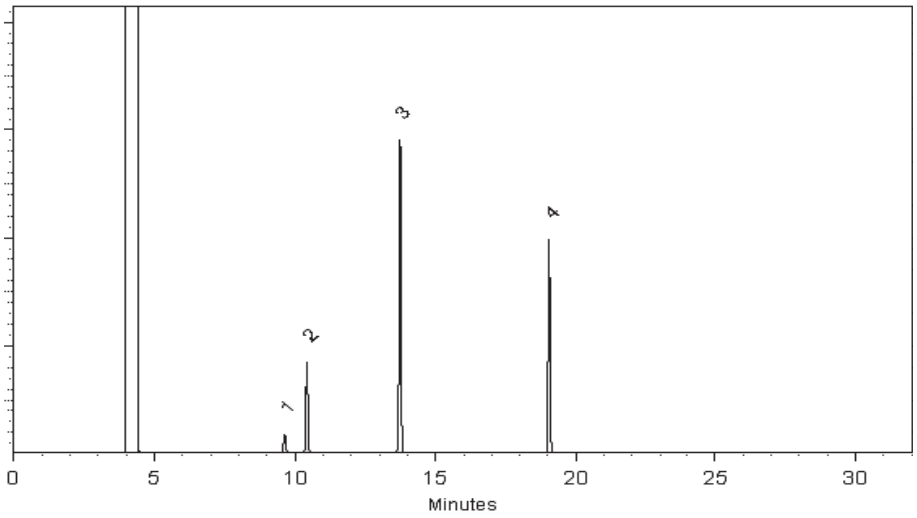
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dawn Brownson - Mix Technician

Date Mixed: 06-Jul-2016 **Balance:** 1125113331

Jennifer L. Pollino - QC Analyst

Date Passed: 11-Jul-2016

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

MV-568718-D_00003

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 568718 – 00003 **Lot No.:** A0100746

Description : 8260 Internal Standard 2014

8260 Internal Standard 2014 250-5,000 ug/ml, P&T Methanol, 5 ml/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : January 31, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	tert-Butyl-d9-alcohol		5,001.8 µg/mL	+/- 29.0809	µg/mL	Gravimetric
	CAS # 25725-11-5	(Lot C158P15)		+/- 106.0751	µg/mL	Unstressed
	Purity 99%			+/- 106.5458	µg/mL	Stressed
2	2-Butanone-d5		1,250.8 µg/mL	+/- 7.2891	µg/mL	Gravimetric
	CAS # 24313-50-6	(Lot M276P11)		+/- 26.5308	µg/mL	Unstressed
	Purity 99%			+/- 26.6485	µg/mL	Stressed
3	Fluorobenzene		250.4 µg/mL	+/- 1.4771	µg/mL	Gravimetric
	CAS # 462-06-6	(Lot 1380033)		+/- 5.3162	µg/mL	Unstressed
	Purity 99%			+/- 5.3397	µg/mL	Stressed
4	1,4-Dioxane-d8		5,002.4 µg/mL	+/- 29.0844	µg/mL	Gravimetric
	CAS # 17647-74-4	(Lot 11C-596)		+/- 106.0878	µg/mL	Unstressed
	Purity 99%			+/- 106.5585	µg/mL	Stressed
5	Chlorobenzene-d5		251.2 µg/mL	+/- 1.4819	µg/mL	Gravimetric
	CAS # 3114-55-4	(Lot PR-22736)		+/- 5.3332	µg/mL	Unstressed
	Purity 99%			+/- 5.3568	µg/mL	Stressed
6	1,4-Dichlorobenzene-d4		250.2 µg/mL	+/- 1.4760	µg/mL	Gravimetric
	CAS # 3855-82-1	(Lot PR-18488)		+/- 5.3120	µg/mL	Unstressed
	Purity 99%			+/- 5.3355	µg/mL	Stressed

Reagent

MV-569720.sec_00002

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569720.sec **Lot No.:** A0120604

Description : 8260 List 1 / Std #1 MegaMix (2015)

8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Diethyl ether (ethyl ether) **CAS #** 60-29-7.SEC (Lot F23X068) **Purity** 98%	2,501.1 µg/mL	+/- 14.5415 µg/mL +/- 150.9014 µg/mL +/- 151.2597 µg/mL	Gravimetric Unstressed Stressed
2	1,1,2-Trichlorotrifluoroethane (CFC-113) **CAS #** 76-13-1.SEC (Lot 18342) **Purity** 99%	2,501.1 µg/mL	+/- 14.5418 µg/mL +/- 150.9040 µg/mL +/- 151.2622 µg/mL	Gravimetric Unstressed Stressed
3	1,1-Dichloroethene **CAS #** 75-35-4.SEC (Lot 2767000) **Purity** 99%	2,500.8 µg/mL	+/- 14.5396 µg/mL +/- 150.8813 µg/mL +/- 151.2395 µg/mL	Gravimetric Unstressed Stressed
4	tert-Butanol (TBA) **CAS #** 75-65-0.SEC (Lot XYXDO) **Purity** 98%	25,004.1 µg/mL	+/- 145.3683 µg/mL +/- 1,508.6067 µg/mL +/- 1,512.1884 µg/mL	Gravimetric Unstressed Stressed
5	Iodomethane (methyl iodide) **CAS #** 74-88-4.SEC (Lot Y25A027) **Purity** 99%	2,501.0 µg/mL	+/- 14.5410 µg/mL +/- 150.8964 µg/mL +/- 151.2547 µg/mL	Gravimetric Unstressed Stressed
6	Methyl acetate **CAS #** 79-20-9.SEC (Lot 6WOXM) **Purity** 99%	12,501.6 µg/mL	+/- 72.6817 µg/mL +/- 754.2781 µg/mL +/- 756.0689 µg/mL	Gravimetric Unstressed Stressed
7	Allyl chloride (3-chloropropene) **CAS #** 107-05-1.SEC (Lot VEBOC) **Purity** 98%	2,501.0 µg/mL	+/- 14.5408 µg/mL +/- 150.8940 µg/mL +/- 151.2522 µg/mL	Gravimetric Unstressed Stressed

8	Methylene chloride (dichloromethane)		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-09-2.SEC	(Lot FGM02)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
9	Carbon disulfide		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 75-15-0.SEC	(Lot MKBL1376V)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
10	Acrylonitrile		25,020.0	µg/mL	+/-	145.4608	µg/mL	Gravimetric
	CAS # 107-13-1.SEC	(Lot UERIL-DA)			+/-	1,509.5667	µg/mL	Unstressed
	Purity 99%				+/-	1,513.1507	µg/mL	Stressed
11	cis-1,2-Dichloroethene		2,500.8	µg/mL	+/-	14.5401	µg/mL	Gravimetric
	CAS # 156-59-2.SEC	(Lot HGC01-BLKT)			+/-	150.8866	µg/mL	Unstressed
	Purity 98%				+/-	151.2448	µg/mL	Stressed
12	n-Hexane (C6)		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 110-54-3.SEC	(Lot 10188491)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
13	1,1-Dichloroethane		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 75-34-3.SEC	(Lot 5035700)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
14	2,2-Dichloropropane		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 594-20-7.SEC	(Lot GI01)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed
15	trans-1,2-Dichloroethene		2,501.3	µg/mL	+/-	14.5426	µg/mL	Gravimetric
	CAS # 156-60-5.SEC	(Lot TS5UB)			+/-	150.9125	µg/mL	Unstressed
	Purity 97%				+/-	151.2708	µg/mL	Stressed
16	Isobutanol (2-Methyl-1-propanol)		62,503.0	µg/mL	+/-	363.3788	µg/mL	Gravimetric
	CAS # 78-83-1.SEC	(Lot 83NHH)			+/-	3,771.0811	µg/mL	Unstressed
	Purity 99%				+/-	3,780.0343	µg/mL	Stressed
17	Methyl-tert-butyl ether (MTBE)		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 1634-04-4.SEC	(Lot ZAQTA-MS)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
18	Bromochloromethane		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 74-97-5.SEC	(Lot 1775400)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
19	Tetrahydrofuran		5,000.3	µg/mL	+/-	29.0719	µg/mL	Gravimetric
	CAS # 109-99-9.SEC	(Lot K3V7J-SJ)			+/-	301.6872	µg/mL	Unstressed
	Purity 99%				+/-	302.4035	µg/mL	Stressed
20	1,1,1-Trichloroethane		2,501.3	µg/mL	+/-	14.5429	µg/mL	Gravimetric
	CAS # 71-55-6.SEC	(Lot CS160712)			+/-	150.9162	µg/mL	Unstressed
	Purity 98%				+/-	151.2745	µg/mL	Stressed
21	Cyclohexane		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 110-82-7.SEC	(Lot YADRA)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
22	1,1-Dichloropropene		2,500.4	µg/mL	+/-	14.5378	µg/mL	Gravimetric
	CAS # 563-58-6.SEC	(Lot 4672600)			+/-	150.8626	µg/mL	Unstressed
	Purity 96%				+/-	151.2208	µg/mL	Stressed
23	Carbon tetrachloride		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 56-23-5.SEC	(Lot 11466)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed

24	n-Heptane (C7)		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 142-82-5.SEC	(Lot OGM01)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
25	1,2-Dichloroethane		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 107-06-2.SEC	(Lot FO6PK)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
26	Benzene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 71-43-2.SEC	(Lot B28Y008)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed
27	Trichloroethene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 79-01-6.SEC	(Lot H04X050)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
28	Methylcyclohexane		2,501.9	µg/mL	+/-	14.5461	µg/mL	Gravimetric
	CAS # 108-87-2.SEC	(Lot 24MSD-CD)			+/-	150.9492	µg/mL	Unstressed
	Purity 99%				+/-	151.3076	µg/mL	Stressed
29	1,2-Dichloropropane		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 78-87-5.SEC	(Lot OGG01)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
30	Bromodichloromethane		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 75-27-4.SEC	(Lot 10171168)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
31	1,4-Dioxane		50,014.8	µg/mL	+/-	290.7749	µg/mL	Gravimetric
	CAS # 123-91-1.SEC	(Lot CHA4A)			+/-	3,017.6100	µg/mL	Unstressed
	Purity 99%				+/-	3,024.7743	µg/mL	Stressed
32	Dibromomethane		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 74-95-3.SEC	(Lot FGI01-OICH)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
33	cis-1,3-Dichloropropene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 10061-01-5.SEC	(Lot 7ZLXJ-TJ)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
34	Toluene		2,501.3	µg/mL	+/-	14.5425	µg/mL	Gravimetric
	CAS # 108-88-3.SEC	(Lot YND2B-BD)			+/-	150.9115	µg/mL	Unstressed
	Purity 99%				+/-	151.2698	µg/mL	Stressed
35	Ethyl methacrylate		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 97-63-2.SEC	(Lot MLWYK-LS)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
36	trans-1,3-Dichloropropene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 10061-02-6.SEC	(Lot 2ECIC)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
37	1,1,2-Trichloroethane		2,500.5	µg/mL	+/-	14.5379	µg/mL	Gravimetric
	CAS # 79-00-5.SEC	(Lot 3440900)			+/-	150.8644	µg/mL	Unstressed
	Purity 98%				+/-	151.2226	µg/mL	Stressed
38	1,3-Dichloropropane		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 142-28-9.SEC	(Lot AGN01-EFPC)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
39	Tetrachloroethene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 127-18-4.SEC	(Lot F09W014)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed

40	Dibromochloromethane		2,501.9	µg/mL	+/-	14.5461	µg/mL	Gravimetric
	CAS # 124-48-1.SEC	(Lot 10181507)			+/-	150.9491	µg/mL	Unstressed
	Purity 97%				+/-	151.3074	µg/mL	Stressed
41	1,2-Dibromoethane (EDB)		2,500.1	µg/mL	+/-	14.5359	µg/mL	Gravimetric
	CAS # 106-93-4.SEC	(Lot 3505900)			+/-	150.8436	µg/mL	Unstressed
	Purity 99%				+/-	151.2017	µg/mL	Stressed
42	Chlorobenzene		2,501.5	µg/mL	+/-	14.5439	µg/mL	Gravimetric
	CAS # 108-90-7.SEC	(Lot 1161936)			+/-	150.9266	µg/mL	Unstressed
	Purity 99%				+/-	151.2849	µg/mL	Stressed
43	1,1,1,2-Tetrachloroethane		2,501.0	µg/mL	+/-	14.5408	µg/mL	Gravimetric
	CAS # 630-20-6.SEC	(Lot GC01)			+/-	150.8940	µg/mL	Unstressed
	Purity 98%				+/-	151.2522	µg/mL	Stressed
44	Ethylbenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 100-41-4.SEC	(Lot PI4SE)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
45	m-Xylene		1,250.9	µg/mL	+/-	7.2727	µg/mL	Gravimetric
	CAS # 108-38-3.SEC	(Lot OUKMG-GB)			+/-	75.4708	µg/mL	Unstressed
	Purity 99%				+/-	75.6500	µg/mL	Stressed
46	p-Xylene		1,250.8	µg/mL	+/-	7.2720	µg/mL	Gravimetric
	CAS # 106-42-3.SEC	(Lot GM01)			+/-	75.4633	µg/mL	Unstressed
	Purity 99%				+/-	75.6425	µg/mL	Stressed
47	o-Xylene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 95-47-6.SEC	(Lot FGL01-KTPK)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
48	Styrene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 100-42-5.SEC	(Lot OFIOL-IA)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
49	Isopropylbenzene (cumene)		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 98-82-8.SEC	(Lot 2PHXG-IH)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
50	Bromoform		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 75-25-2.SEC	(Lot 5139000)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
51	1,1,2,2-Tetrachloroethane		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 79-34-5.SEC	(Lot CFA4D-AQ)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
52	Chloroform		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 67-66-3.SEC	(Lot 1297547)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed
53	1,2,3-Trichloropropane		2,501.5	µg/mL	+/-	14.5436	µg/mL	Gravimetric
	CAS # 96-18-4.SEC	(Lot OGI01)			+/-	150.9236	µg/mL	Unstressed
	Purity 98%				+/-	151.2819	µg/mL	Stressed
54	trans-1,4-Dichloro-2-butene		2,500.5	µg/mL	+/-	14.5379	µg/mL	Gravimetric
	CAS # 110-57-6.SEC	(Lot 100700-3)			+/-	150.8644	µg/mL	Unstressed
	Purity 98%				+/-	151.2226	µg/mL	Stressed
55	n-Propylbenzene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 103-65-1.SEC	(Lot T2HFC-IT)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed

56	Bromobenzene		2,501.0	µg/mL	+/-	14.5410	µg/mL	Gravimetric
	CAS # 108-86-1.SEC	(Lot 2FUHG-EM)			+/-	150.8964	µg/mL	Unstressed
	Purity 99%				+/-	151.2547	µg/mL	Stressed
57	1,2,4-Trimethylbenzene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 95-63-6.SEC	(Lot SC7LO-QA)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed
58	2-Chlorotoluene		2,500.6	µg/mL	+/-	14.5388	µg/mL	Gravimetric
	CAS # 95-49-8.SEC	(Lot SW8QG-AO)			+/-	150.8738	µg/mL	Unstressed
	Purity 99%				+/-	151.2320	µg/mL	Stressed
59	4-Chlorotoluene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 106-43-4.SEC	(Lot P4XHJ-AO)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
60	tert-Butylbenzene		2,500.5	µg/mL	+/-	14.5381	µg/mL	Gravimetric
	CAS # 98-06-6.SEC	(Lot OGN01-CAI)			+/-	150.8662	µg/mL	Unstressed
	Purity 99%				+/-	151.2244	µg/mL	Stressed
61	1,3,5-Trimethylbenzene		2,500.8	µg/mL	+/-	14.5396	µg/mL	Gravimetric
	CAS # 108-67-8.SEC	(Lot FGH02-CMLN)			+/-	150.8813	µg/mL	Unstressed
	Purity 99%				+/-	151.2395	µg/mL	Stressed
62	sec-Butylbenzene		2,500.9	µg/mL	+/-	14.5403	µg/mL	Gravimetric
	CAS # 135-98-8.SEC	(Lot OGN01-IMA)			+/-	150.8889	µg/mL	Unstressed
	Purity 99%				+/-	151.2471	µg/mL	Stressed
63	4-Isopropyltoluene (p-cymene)		2,501.5	µg/mL	+/-	14.5441	µg/mL	Gravimetric
	CAS # 99-87-6.SEC	(Lot 1195000)			+/-	150.9278	µg/mL	Unstressed
	Purity 96%				+/-	151.2861	µg/mL	Stressed
64	1,3-Dichlorobenzene		2,501.6	µg/mL	+/-	14.5447	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD)			+/-	150.9341	µg/mL	Unstressed
	Purity 99%				+/-	151.2925	µg/mL	Stressed
65	1,4-Dichlorobenzene		2,501.1	µg/mL	+/-	14.5418	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	150.9040	µg/mL	Unstressed
	Purity 99%				+/-	151.2622	µg/mL	Stressed
66	n-Butylbenzene		2,501.4	µg/mL	+/-	14.5432	µg/mL	Gravimetric
	CAS # 104-51-8.SEC	(Lot OGN01-PNP)			+/-	150.9190	µg/mL	Unstressed
	Purity 99%				+/-	151.2773	µg/mL	Stressed
67	1,2-Dichlorobenzene		2,500.3	µg/mL	+/-	14.5367	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot 4NRGF-OT)			+/-	150.8512	µg/mL	Unstressed
	Purity 99%				+/-	151.2093	µg/mL	Stressed
68	1,2-Dibromo-3-chloropropane		2,500.3	µg/mL	+/-	14.5369	µg/mL	Gravimetric
	CAS # 96-12-8.SEC	(Lot LC00408V)			+/-	150.8539	µg/mL	Unstressed
	Purity 97%				+/-	151.2121	µg/mL	Stressed
69	1,2,4-Trichlorobenzene		2,500.4	µg/mL	+/-	14.5374	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	150.8587	µg/mL	Unstressed
	Purity 99%				+/-	151.2169	µg/mL	Stressed
70	Hexachlorobutadiene		2,500.7	µg/mL	+/-	14.5394	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 497470099			+/-	150.8792	µg/mL	Unstressed
	Purity 98%				+/-	151.2374	µg/mL	Stressed
71	Naphthalene		2,500.0	µg/mL	+/-	14.5352	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot SKZ5N)			+/-	150.8361	µg/mL	Unstressed
	Purity 99%				+/-	151.1942	µg/mL	Stressed

72	1,2,3-Trichlorobenzene		2,501.6 µg/mL	+/-	14.5444	µg/mL	Gravimetric
	CAS # 87-61-6.SEC	(Lot A0043055)		+/-	150.9310	µg/mL	Unstressed
	Purity 98%			+/-	151.2893	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
60m x 0.25mm x 1.4µm
Rtx-502.2 (cat.#10916)

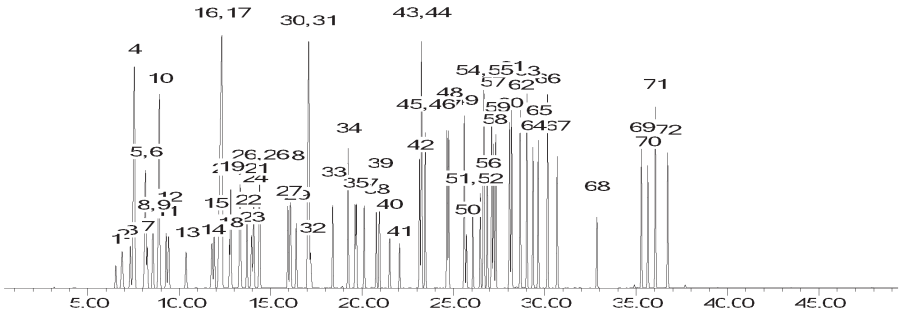
Carrier Gas:
helium-constant pressure 30 psi

Temp. Program:
40°C (hold 6 min.) to 240°C
@ 6°C/min. (hold 10 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael J Maye

Jennifer L. Pollino - QC Analyst

Date Mixed: 25-Jul-2016 **Balance:** 1127510105

Date Passed: 28-Jul-2016

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569721.sec **Lot No.:** A0112937

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone	12,501.5 µg/mL	+/- 73.1990 µg/mL	Gravimetric
	CAS # 67-64-1.SEC (Lot P14A572)		+/- 665.3586 µg/mL	Unstressed
	Purity 99%		+/- 666.0923 µg/mL	Stressed
2	2-Butanone (MEK)	12,506.0 µg/mL	+/- 73.2254 µg/mL	Gravimetric
	CAS # 78-93-3.SEC (Lot RA58J)		+/- 665.5981 µg/mL	Unstressed
	Purity 99%		+/- 666.3320 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,525.0 µg/mL	+/- 73.3366 µg/mL	Gravimetric
	CAS # 108-10-1.SEC (Lot E29T040)		+/- 666.6094 µg/mL	Unstressed
	Purity 99%		+/- 667.3444 µg/mL	Stressed
4	2-Hexanone	12,513.5 µg/mL	+/- 73.2693 µg/mL	Gravimetric
	CAS # 591-78-6.SEC (Lot ZSVCD-FF)		+/- 665.9973 µg/mL	Unstressed
	Purity 99%		+/- 666.7316 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

MV-569721.sec_00004

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Catalog No. : 569721.sec **Lot No.:** A0118013

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2019 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Acetone	12,550.0 µg/mL	+/- 73.4830 µg/mL	Gravimetric
	CAS # 67-64-1.SEC (Lot P14A572)		+/- 757.2470 µg/mL	Unstressed
	Purity 99%		+/- 759.0446 µg/mL	Stressed
2	2-Butanone (MEK)	12,603.0 µg/mL	+/- 73.7933 µg/mL	Gravimetric
	CAS # 78-93-3.SEC (Lot RA58J)		+/- 760.4450 µg/mL	Unstressed
	Purity 99%		+/- 762.2502 µg/mL	Stressed
3	4-Methyl-2-pentanone (MIBK)	12,591.5 µg/mL	+/- 73.7260 µg/mL	Gravimetric
	CAS # 108-10-1.SEC (Lot E29T040)		+/- 759.7511 µg/mL	Unstressed
	Purity 99%		+/- 761.5546 µg/mL	Stressed
4	2-Hexanone	12,588.0 µg/mL	+/- 73.7055 µg/mL	Gravimetric
	CAS # 591-78-6.SEC (Lot V3NRA)		+/- 759.5399 µg/mL	Unstressed
	Purity 99%		+/- 761.3429 µg/mL	Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

MV-569721_00003

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Catalog No. : 569721 **Lot No.:** A0115554

Description : 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Acetone		12,501.8 µg/mL	+/- 72.6865 µg/mL		Gravimetric
	CAS # 67-64-1	(Lot 07196AK)		+/- 754.2890 µg/mL		Unstressed
	Purity 99%			+/- 756.0798 µg/mL		Stressed
2	2-Butanone (MEK)		12,499.7 µg/mL	+/- 72.6744 µg/mL		Gravimetric
	CAS # 78-93-3	(Lot SHBG0444V)		+/- 754.1625 µg/mL		Unstressed
	Purity 98%			+/- 755.9530 µg/mL		Stressed
3	4-Methyl-2-pentanone (MIBK)		12,500.6 µg/mL	+/- 72.6796 µg/mL		Gravimetric
	CAS # 108-10-1	(Lot SHBF9556V)		+/- 754.2166 µg/mL		Unstressed
	Purity 99%			+/- 756.0072 µg/mL		Stressed
4	2-Hexanone		12,502.4 µg/mL	+/- 72.6900 µg/mL		Gravimetric
	CAS # 591-78-6	(Lot MKBT3158V)		+/- 754.3252 µg/mL		Unstressed
	Purity 99%			+/- 756.1161 µg/mL		Stressed

Solvent: P&T Methanol/Water (90:10)
CAS # 67-56-1/7732-18-5
Purity 99%

Reagent

MV-569722.sec_00003

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Catalog No.: 569722.sec **Lot No.:** A0115484

Description: 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size: 2 mL **Pkg Amt:** > 1 mL

Expiration Date: November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Dichlorodifluoromethane (CFC-12) **CAS #** 75-71-8.SEC (Lot 22274) **Purity** 99%	2,505.6 µg/mL	+/- 16.6251 +/- 140.7169 +/- 143.9990	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Chloromethane (methyl chloride) **CAS #** 74-87-3.SEC (Lot 18343) **Purity** 99%	2,517.3 µg/mL	+/- 17.3796 +/- 141.4522 +/- 144.7477	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Vinyl chloride **CAS #** 75-01-4.SEC (Lot MKBK6872V) **Purity** 99%	2,510.2 µg/mL	+/- 16.6342 +/- 140.9727 +/- 144.2609	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	1,3-Butadiene **CAS #** 106-99-0.SEC (Lot 22331) **Purity** 99%	2,516.5 µg/mL	+/- 17.4874 +/- 141.4240 +/- 144.7182	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bromomethane (methyl bromide) **CAS #** 74-83-9.SEC (Lot Q119-46) **Purity** 99%	2,511.5 µg/mL	+/- 16.8310 +/- 141.0664 +/- 144.3557	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Chloroethane (ethyl chloride) **CAS #** 75-00-3.SEC (Lot 00004202) **Purity** 99%	2,504.8 µg/mL	+/- 16.4341 +/- 140.6469 +/- 143.9283	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
7	Dichlorofluoromethane (CFC-21) **CAS #** 75-43-4.SEC (Lot SHBC0858V) **Purity** 99%	2,500.5 µg/mL	+/- 16.1659 +/- 140.3776 +/- 143.6540	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Reagent

MV-569722_00005

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Catalog No. : 569722 **Lot No.:** A0122964

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2019 **Storage:** 0°C or colder

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Dichlorodifluoromethane (CFC-12)	2,491.5 µg/mL	+/- 31.7005 µg/mL	Gravimetric
	CAS # 75-71-8 (Lot Q167-08)		+/- 142.5149 µg/mL	Unstressed
	Purity 99%		+/- 145.7205 µg/mL	Stressed
2	Chloromethane (methyl chloride)	2,515.8 µg/mL	+/- 34.3475 µg/mL	Gravimetric
	CAS # 74-87-3 (Lot SHBG7976V)		+/- 144.4391 µg/mL	Unstressed
	Purity 99%		+/- 147.6640 µg/mL	Stressed
3	Vinyl chloride	2,486.4 µg/mL	+/- 25.8864 µg/mL	Gravimetric
	CAS # 75-01-4 (Lot 1026101231B1)		+/- 141.0541 µg/mL	Unstressed
	Purity 99%		+/- 144.2790 µg/mL	Stressed
4	1,3-Butadiene	2,492.0 µg/mL	+/- 23.1233 µg/mL	Gravimetric
	CAS # 106-99-0 (Lot SHBF3387V)		+/- 140.8813 µg/mL	Unstressed
	Purity 99%		+/- 144.1245 µg/mL	Stressed
5	Bromomethane (methyl bromide)	2,515.4 µg/mL	+/- 22.6959 µg/mL	Gravimetric
	CAS # 74-83-9 (Lot 101604)		+/- 142.0993 µg/mL	Unstressed
	Purity 99%		+/- 145.3752 µg/mL	Stressed
6	Chloroethane (ethyl chloride)	2,494.8 µg/mL	+/- 25.9739 µg/mL	Gravimetric
	CAS # 75-00-3 (Lot SHBD1717V)		+/- 141.5307 µg/mL	Unstressed
	Purity 99%		+/- 144.7664 µg/mL	Stressed
7	Dichlorofluoromethane (CFC-21)	2,500.0 µg/mL	+/- 81.3528 µg/mL	Gravimetric
	CAS # 75-43-4 (Lot 4938100)		+/- 161.4167 µg/mL	Unstressed
	Purity 99%		+/- 164.2729 µg/mL	Stressed

Reagent

MV-569723_00002

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569723 **Lot No.:** A0115628

Description : 8260 List 1 / Std #4 2-CEVE (2015)

8260 List 1 / Std #4 2-CEVE (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2018 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Chloroethyl vinyl ether	2,509.2 µg/mL	+/- 14.5887 µg/mL	Gravimetric
	CAS # 110-75-8 (Lot MKBK2735V)		+/- 53.7223 µg/mL	Unstressed
	Purity 99%		+/- 55.2841 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:
Degradation of tetrachloroethylene to pentachloroethane may occur if solutions containing 2-chloroethyl vinyl ether are combined with solutions that contain tetrachloroethylene.

Reagent

MV-569724.sec_00010

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569724.SEC **Lot No.:** A0123671

Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)

8260 List 1 / Std #6 Vinyl Acetate (2015) 5000 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2017 **Storage:** 0°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Vinyl acetate	5,032.0 µg/mL	+/- 29.5306 µg/mL	Gravimetric
	CAS # 108-05-4.SEC (Lot F3Z5C)		+/- 303.6294 µg/mL	Unstressed
	Purity 99%		+/- 304.3501 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Tech Tips:

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

mv-569728.sec_00002

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569728.sec **Lot No.:** A0108248

Description : 8260 List 3/ Std#1 Polar Additions (2015)

8260 List 3/ Std#1 Polar Additions (2015) 2500-100,000 µg/ml, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : January 31, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Ethanol	100,040.0 µg/mL	+/- 585.7260 µg/mL	Gravimetric
	CAS # 64-17-5 * (Lot PG0219)		+/- 3,486.0604 µg/mL	Unstressed
	Purity 99%		+/- 3,605.5089 µg/mL	Stressed
2	Acetonitrile	25,022.0 µg/mL	+/- 146.5093 µg/mL	Gravimetric
	CAS # 75-05-8.SEC (Lot 7KGDA)		+/- 871.9345 µg/mL	Unstressed
	Purity 99%		+/- 901.8109 µg/mL	Stressed
3	Diisopropyl ether (DIPE)	2,512.7 µg/mL	+/- 14.7460 µg/mL	Gravimetric
	CAS # 108-20-3.SEC (Lot LL7TN-SH)		+/- 87.5657 µg/mL	Unstressed
	Purity 98%		+/- 90.5657 µg/mL	Stressed
4	Ethyl-tert-butyl ether (ETBE)	2,512.7 µg/mL	+/- 14.7457 µg/mL	Gravimetric
	CAS # 637-92-3.SEC (Lot MHBJG-QK)		+/- 87.5638 µg/mL	Unstressed
	Purity 99%		+/- 90.5638 µg/mL	Stressed
5	Propionitrile	25,034.7 µg/mL	+/- 146.5835 µg/mL	Gravimetric
	CAS # 107-12-0.SEC (Lot RTXQL)		+/- 872.3759 µg/mL	Unstressed
	Purity 99%		+/- 902.2674 µg/mL	Stressed
6	tert-Amyl alcohol	25,010.0 µg/mL	+/- 146.4390 µg/mL	Gravimetric
	CAS # 75-85-4.SEC (Lot REJPI)		+/- 871.5164 µg/mL	Unstressed
	Purity 99%		+/- 901.3784 µg/mL	Stressed
7	tert-Amyl methyl ether (TAME)	2,514.0 µg/mL	+/- 14.7536 µg/mL	Gravimetric
	CAS # 994-05-8.SEC (Lot 1195200)		+/- 87.6103 µg/mL	Unstressed
	Purity 99%		+/- 90.6118 µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

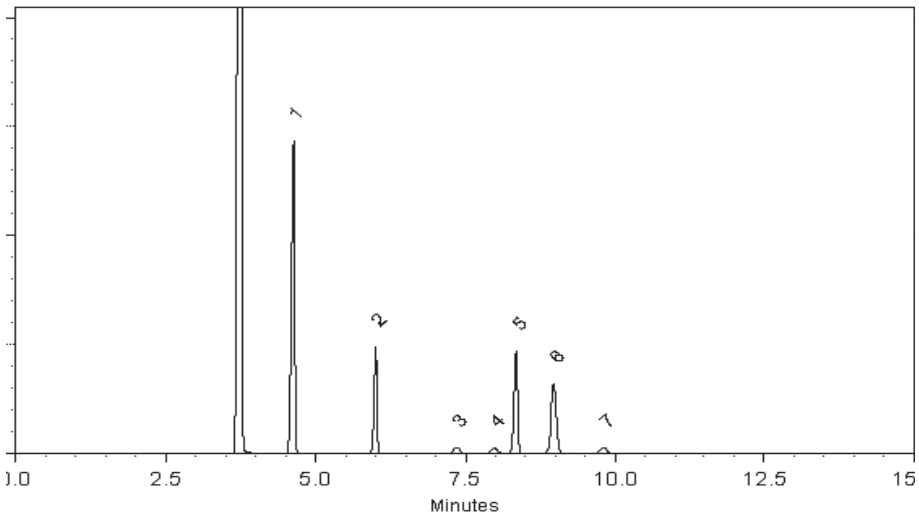
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Lane Kibe - Mix Technician

Date Mixed: 12-Jan-2015 **Balance:** 1127510105

Jennifer L. Pollino - QC Analyst

Date Passed: 14-Jan-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

mv-569728_00002

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569728 **Lot No.:** A0114666

Description : 8260 List 3/ Std#1 Polar Additions (2015)

8260 List 3/ Std#1 Polar Additions (2015) 2500-100,000 µg/ml, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Ethanol		100,005.8 µg/mL	+/- 581.4117 µg/mL		Gravimetric
	CAS # 64-17-5	(Lot PG0219)		+/- 4,947.0657 µg/mL		Unstressed
	Purity 99%			+/- 5,070.0789 µg/mL		Stressed
2	Acetonitrile		25,001.0 µg/mL	+/- 145.3505 µg/mL		Gravimetric
	CAS # 75-05-8	(Lot SHBB3177V)		+/- 1,236.7460 µg/mL		Unstressed
	Purity 98%			+/- 1,267.4988 µg/mL		Stressed
3	Diisopropyl ether (DIPE)		2,500.8 µg/mL	+/- 14.5396 µg/mL		Gravimetric
	CAS # 108-20-3	(Lot SHBB6268V)		+/- 123.7067 µg/mL		Unstressed
	Purity 99%			+/- 126.7828 µg/mL		Stressed
4	Ethyl-tert-butyl ether (ETBE)		2,505.0 µg/mL	+/- 14.5643 µg/mL		Gravimetric
	CAS # 637-92-3	(Lot MKBR1623V)		+/- 123.9170 µg/mL		Unstressed
	Purity 99%			+/- 126.9983 µg/mL		Stressed
5	Propionitrile		25,001.5 µg/mL	+/- 145.3533 µg/mL		Gravimetric
	CAS # 107-12-0	(Lot BCBM6569V)		+/- 1,236.7695 µg/mL		Unstressed
	Purity 99%			+/- 1,267.5229 µg/mL		Stressed
6	tert-Amyl alcohol		25,012.3 µg/mL	+/- 145.4158 µg/mL		Gravimetric
	CAS # 75-85-4	(Lot STBB1898V)		+/- 1,237.3013 µg/mL		Unstressed
	Purity 99%			+/- 1,268.0679 µg/mL		Stressed
7	tert-Amyl methyl ether (TAME)		2,503.5 µg/mL	+/- 14.5556 µg/mL		Gravimetric
	CAS # 994-05-8	(Lot HMBC8037V)		+/- 123.8428 µg/mL		Unstressed
	Purity 99%			+/- 126.9222 µg/mL		Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

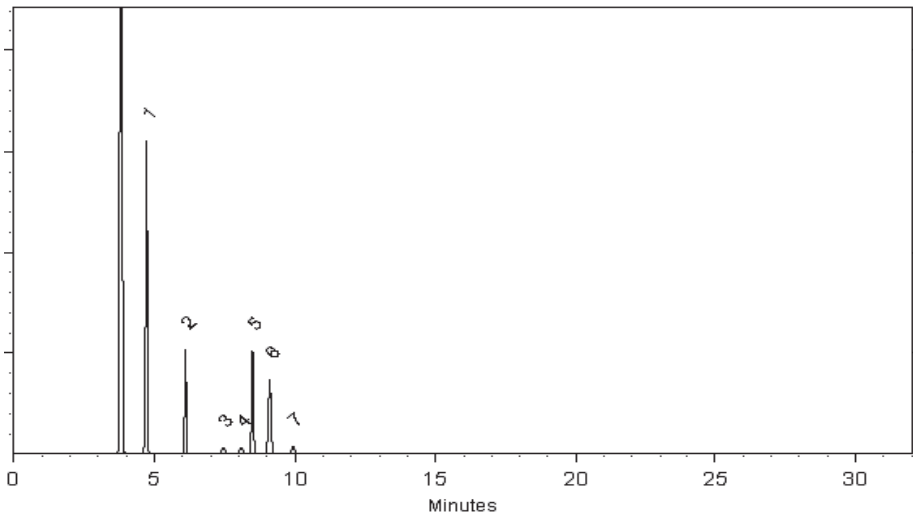
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Fallon - Mix Technician

Date Mixed: 12-Oct-2015 **Balance:** B251644995

Jennifer L. Pollino - QC Analyst

Date Passed: 14-Oct-2015

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

Reagent

mv-570808_00001

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570808.sec **Lot No.:** A0116135

Description : 8260 List 2 / Std #6

8260 List 2 / Std #6 2500-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Propanol (isopropanol) **CAS #** 67-63-0.SEC (Lot NWVYK) **Purity** 98%	25,004.1 µg/mL	+/- 146.4046 µg/mL +/- 1,237.0209 µg/mL +/- 1,267.7746 µg/mL	Gravimetric Unstressed Stressed
2	Chloroprene **CAS #** 126-99-8.A * (Lot 151210JLM) **Purity** 99%	2,502.4 µg/mL	+/- 14.6855 µg/mL +/- 123.8044 µg/mL +/- 126.8822 µg/mL	Gravimetric Unstressed Stressed
3	Methacrylonitrile **CAS #** 126-98-7 * (Lot 1012014) **Purity** 99%	25,001.6 µg/mL	+/- 146.3899 µg/mL +/- 1,236.8966 µg/mL +/- 1,267.6472 µg/mL	Gravimetric Unstressed Stressed
4	2,2,4-Trimethylpentane (Isooctane) **CAS #** 540-84-1.SEC (Lot 1894700) **Purity** 99%	2,500.8 µg/mL	+/- 14.6761 µg/mL +/- 123.7253 µg/mL +/- 126.8010 µg/mL	Gravimetric Unstressed Stressed
5	1-Butanol **CAS #** 71-36-3.SEC (Lot QBO2D) **Purity** 99%	62,500.0 µg/mL	+/- 365.9324 µg/mL +/- 3,092.0415 µg/mL +/- 3,168.9130 µg/mL	Gravimetric Unstressed Stressed
6	2-Nitropropane **CAS #** 79-46-9.SEC (Lot KW38H-RN) **Purity** 98%	5,000.4 µg/mL	+/- 29.2782 µg/mL +/- 247.3809 µg/mL +/- 253.5311 µg/mL	Gravimetric Unstressed Stressed
7	1-Chlorohexane **CAS #** 544-10-5.SEC (Lot 3890000) **Purity** 98%	2,500.2 µg/mL	+/- 14.6724 µg/mL +/- 123.6944 µg/mL +/- 126.7694 µg/mL	Gravimetric Unstressed Stressed

Reagent

mv-570809_00001

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 570809.sec **Lot No.:** A0116080

Description : 8260 List 2 / Std #7

8260 List 2 / Std #7 2500-5000 µg/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : June 30, 2017 **Storage:** 0°C or colder

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)		Expanded Uncertainty (95% C.L.; K=2)		
1	Ethyl acetate		5,000.4	µg/mL	+/- 29.2784	µg/mL	Gravimetric
	CAS # 141-78-6.SEC	(Lot C386A-GG)			+/- 301.7162	µg/mL	Unstressed
	Purity 99%				+/- 302.4324	µg/mL	Stressed
2	Ethyl acrylate		2,501.2	µg/mL	+/- 14.6784	µg/mL	Gravimetric
	CAS # 140-88-5.SEC	(Lot YIFAM-TG)			+/- 150.9217	µg/mL	Unstressed
	Purity 99%				+/- 151.2799	µg/mL	Stressed
3	Methyl methacrylate		5,002.0	µg/mL	+/- 29.2878	µg/mL	Gravimetric
	CAS # 80-62-6.SEC	(Lot G01X021)			+/- 301.8127	µg/mL	Unstressed
	Purity 99%				+/- 302.5292	µg/mL	Stressed
4	Butyl acetate		2,501.6	µg/mL	+/- 14.6808	µg/mL	Gravimetric
	CAS # 123-86-4.SEC	(Lot V2L2G-GT)			+/- 150.9458	µg/mL	Unstressed
	Purity 99%				+/- 151.3041	µg/mL	Stressed

Solvent: P&T Methanol
CAS # 67-56-1
Purity 99%

Reagent

MV-CUS22195.s_00001

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Custom Standard

Product Number: CUS-22195 **Page:** 1 of 1

Lot Number: CP-4303 **Lot Issue Date:** 22-Aug-2016 **Expiration Date:** 30-Sep-2018

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA Scientific's ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1-chlorohexane	000544-10-5	RM11012	1003 ± 5 µg/mL
2-pentanone	000107-87-9	RM03775	4012 ± 20 µg/mL
sec-butanol	000078-92-2	RM01299	30112 ± 151 µg/mL

Matrix: methanol (purge & trap grade)

Storage: Store Frozen (-25° to -10°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

John Russo
President

Vincent Wang, Ph.D.
Director of QA/RA

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Reagent

MV-CUS22195_00001

Certificate of Analysis

Custom Standard

Product Number: CUS-22195 **Page:** 1 of 1

Lot Number: CP-4302 **Lot Issue Date:** 22-Aug-2016 **Expiration Date:** 30-Sep-2018

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA Scientific's ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
1-chlorohexane	000544-10-5	RM11012	1004 ± 5 µg/mL
2-pentanone	000107-87-9	RM03775	4016 ± 20 µg/mL
sec-butanol	000078-92-2	RM01299	30062 ± 150 µg/mL

Matrix: methanol (purge & trap grade)

Storage: Store Frozen (-25° to -10°C).

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

John Russo
President

Vincent Wang, Ph.D.
Director of QA/RA

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Reagent

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mv-VO-TAOH-5_00001

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Catalog Number: VO-TAOH-5 **Lot No.** BW160504027

Description: Custom Organic Standard

Matrix: Methanol (Purge & Trap Grade)

Manufactured Date: 5-4-2016
Expiration Date: 5-4-2017

This **SPEXOrganics®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
Propylene oxide	75-56-9	50000 µg/mL	99%	49963 µg/mL	± 1749 µg/mL
Ethylene oxide	75-21-8	50000 µg/mL	99.8%	50892 µg/mL	± 1781 µg/mL
cis-1,4-Dichloro-2-butene	1476-11-5	1000 µg/mL	95%	999 µg/mL	± 35 µg/mL
Tetrahydrothiophene	110-01-0	1000 µg/mL	99%	994 µg/mL	± 35 µg/mL

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 5-4-2016 Certifying Officer: Julian Burton

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Method 8260B

Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): DB-624 (60. ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #	
SS025-SS07	280-97928-1	104	101	93	94	
SS025-TB02	280-97928-2	112	106	97	93	
SS025-SB06(0-2)	280-97928-3	103	100	93	96	
SS025-SB06(2-4)	280-97928-4	105	102	93	89	
SS025-SS08	280-97928-5	113	115	98	98	
SS025-SB07(0-2)	280-97928-6	101	97	91	89	
SS025-SB07(2-4)	280-97928-7	101	103	91	89	
SS025-SB01(0-2)	280-97928-8	106	101	101	98	
SS025-SB01(0-2)-a	280-97928-9	102	102	96	99	
SS025-SB08(0-2)	280-97928-10	103	101	91	89	
SS025-SB08(2-4)	280-97928-11	104	98	102	104	Q
SS025-SS09	280-97928-12	105	104	94	102	
SS025-SB09(0-2)	280-97928-14	102	98	100	112	
SS025-SB09(2-4)	280-97928-15	108	104	98	109	
SS025-SB09(4-6)	280-97928-16	110	111	97	99	
SS025-SB09(6-8)	280-97928-17	117	121	92	94	
SS025-SB10(0-2)	280-97928-18	114	109	91	90	
SS025-SB10(2-4)	280-97928-19	116	117	93	91	
SS025-SB10(2-4)-a	280-97928-21	117	117	94	93	
SS025-SS10	280-97928-22	119	122	95	93	
	MB 280-377540/1-A	98	92	87	93	
	MB 280-377664/1-A	111	106	90	95	
	MB 280-377666/1-A	110	105	94	104	
	LCS 280-377540/3-A	85	78	88	104	
	LCS 280-377664/2-A	98	97	98	100	
	LCS 280-377664/3-A	91	87	91	106	
	LCS 280-377666/2-A	94	87	97	102	
	LCS 280-377666/3-A	93	87	90	112	

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	78-119
DCA = 1,2-Dichloroethane-d4 (Surr)	71-136
TOL = Toluene-d8 (Surr)	85-116
BFB = 4-Bromofluorobenzene (Surr)	79-119

Column to be used to flag recovery values

FORM II 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Medium

GC Column (1): DB-624 (60. ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
SS025-SB10(4-6)	280-97928-20	106	102	116	112
	MB 280-377884/1-A	99	97	108	104
	LCS 280-377884/2-A	103	102	106	99
	LCSD 280-377884/3-A	102	102	105	99

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	78-119
DCA = 1,2-Dichloroethane-d4 (Surr)	71-136
TOL = Toluene-d8 (Surr)	85-116
BFB = 4-Bromofluorobenzene (Surr)	79-119

Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: G2_1079.D

Lab ID: LCS 280-377540/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Isopropyl ether	50.0	43.0 J	86	69-127	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: G2_1119.D

Lab ID: LCS 280-377664/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	50.0	42.1	84	78-125	
1,1,1-Trichloroethane	50.0	45.4	91	73-130	
1,1,2,2-Tetrachloroethane	50.0	39.3	79	70-124	
1,1,2-Trichloroethane	50.0	47.1	94	78-121	
1,1-Dichloroethane	50.0	44.1	88	76-125	
1,1-Dichloroethene	50.0	46.4	93	70-131	
1,1-Dichloropropene	50.0	46.2	92	76-125	
1,2,3-Trichlorobenzene	50.0	42.3	85	66-130	
1,2,3-Trichloropropane	50.0	41.9	84	73-125	
1,2,4-Trichlorobenzene	50.0	43.1	86	67-129	
1,2,4-Trimethylbenzene	50.0	42.3	85	75-123	
1,2-Dibromo-3-Chloropropane	50.0	40.4	81	61-132	
1,2-Dibromoethane	50.0	41.7	83	78-122	
1,2-Dichlorobenzene	50.0	42.3	85	78-121	
1,2-Dichloroethane	50.0	43.6	87	73-128	
1,2-Dichloroethene, Total	100	94.1	94	78-122	
1,2-Dichloropropane	50.0	45.3	91	76-123	
1,3,5-Trimethylbenzene	50.0	42.4	85	73-124	
1,3-Dichlorobenzene	50.0	43.5	87	77-121	
1,3-Dichloropropane	50.0	41.0	82	77-121	
1,4-Dichlorobenzene	50.0	39.6	79	75-120	
2,2-Dichloropropane	50.0	45.8	92	67-133	
2-Butanone (MEK)	160	162	102	51-148	
2-Chlorotoluene	50.0	41.0	82	75-122	
2-Hexanone	160	135	84	53-145	
4-Chlorotoluene	50.0	43.0	86	72-124	
4-Isopropyltoluene	50.0	43.3	87	73-127	
4-Methyl-2-pentanone (MIBK)	160	169	106	65-135	
Acetone	160	174	109	36-164	
Benzene	50.0	46.6	93	77-121	
Bromobenzene	50.0	43.3	87	78-121	
Bromochloromethane	50.0	46.4	93	78-125	
Bromodichloromethane	50.0	45.7	91	75-127	
Bromoform	50.0	42.4	85	67-132	
Bromomethane	40.0	39.5	99	53-143	
Carbon disulfide	50.0	45.1	90	63-132	
Carbon tetrachloride	50.0	44.6	89	70-135	
Chlorobenzene	50.0	40.5	81	79-120	
Chloroethane	40.0	46.5	116	59-139	
Chloroform	50.0	43.4	87	78-123	
Chloromethane	40.0	47.7	119	50-136	
cis-1,2-Dichloroethene	50.0	45.3	91	77-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: G2_1119.D

Lab ID: LCS 280-377664/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
cis-1,3-Dichloropropene	50.0	38.7	77	74-126	
Dibromochloromethane	50.0	42.2	84	74-126	
Dibromomethane	50.0	45.1	90	78-125	
Dichlorodifluoromethane	40.0	52.5	131	29-149	
Ethylbenzene	50.0	45.8	92	76-122	
Hexachlorobutadiene	50.0	42.9	86	61-135	
Isopropylbenzene	50.0	42.1	84	68-134	
m&p-Xylene	50.0	42.3	85	77-124	
Methyl iodide	50.0	44.9	90	71-131	
Methyl tert-butyl ether	50.0	44.7	89	73-125	
Methylene Chloride	50.0	47.8	96	70-128	
Naphthalene	50.0	42.6	85	62-129	
n-Butylbenzene	50.0	44.6	89	70-128	
N-Propylbenzene	50.0	42.3	85	73-125	
o-Xylene	50.0	43.5	87	77-123	
sec-Butylbenzene	50.0	41.0	82	73-126	
Styrene	50.0	42.1	84	76-124	
tert-Butylbenzene	50.0	42.1	84	73-125	
Tetrachloroethene	50.0	41.7	83	73-128	
Toluene	50.0	48.8	98	77-121	
trans-1,2-Dichloroethene	50.0	48.8	98	74-125	
trans-1,3-Dichloropropene	50.0	42.2	84	71-130	
Trichloroethene	50.0	45.7	91	77-123	
Trichlorofluoromethane	40.0	46.6	117	62-140	
Vinyl acetate	100	82.5	82	50-151	
Vinyl chloride	40.0	47.5	119	56-135	
Xylenes (total)	100	85.8	86	78-124	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: G2_1120.D

Lab ID: LCS 280-377664/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Isopropyl ether	50.0	48.0 J	96	69-127	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: G2_1121.D

Lab ID: LCS 280-377666/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	50.0	48.2	96	78-125	
1,1,1-Trichloroethane	50.0	49.4	99	73-130	
1,1,2,2-Tetrachloroethane	50.0	44.8	90	70-124	
1,1,2-Trichloroethane	50.0	54.2	108	78-121	
1,1-Dichloroethane	50.0	50.2	100	76-125	
1,1-Dichloroethene	50.0	53.2	106	70-131	
1,1-Dichloropropene	50.0	53.2	106	76-125	
1,2,3-Trichlorobenzene	50.0	48.2	96	66-130	
1,2,3-Trichloropropane	50.0	47.1	94	73-125	
1,2,4-Trichlorobenzene	50.0	47.9	96	67-129	
1,2,4-Trimethylbenzene	50.0	47.7	95	75-123	
1,2-Dibromo-3-Chloropropane	50.0	49.0	98	61-132	
1,2-Dibromoethane	50.0	48.8	98	78-122	
1,2-Dichlorobenzene	50.0	47.8	96	78-121	
1,2-Dichloroethane	50.0	47.4	95	73-128	
1,2-Dichloroethene, Total	100	106	106	78-122	
1,2-Dichloropropane	50.0	50.9	102	76-123	
1,3,5-Trimethylbenzene	50.0	48.3	97	73-124	
1,3-Dichlorobenzene	50.0	48.9	98	77-121	
1,3-Dichloropropane	50.0	47.3	95	77-121	
1,4-Dichlorobenzene	50.0	44.9	90	75-120	
2,2-Dichloropropane	50.0	50.4	101	67-133	
2-Butanone (MEK)	160	173	108	51-148	
2-Chlorotoluene	50.0	47.1	94	75-122	
2-Hexanone	160	144	90	53-145	
4-Chlorotoluene	50.0	49.3	99	72-124	
4-Isopropyltoluene	50.0	49.5	99	73-127	
4-Methyl-2-pentanone (MIBK)	160	179	112	65-135	
Acetone	160	179	112	36-164	
Benzene	50.0	53.1	106	77-121	
Bromobenzene	50.0	49.8	100	78-121	
Bromochloromethane	50.0	51.8	104	78-125	
Bromodichloromethane	50.0	51.8	104	75-127	
Bromoform	50.0	48.2	96	67-132	
Bromomethane	40.0	39.0	97	53-143	
Carbon disulfide	50.0	51.2	102	63-132	
Carbon tetrachloride	50.0	48.8	98	70-135	
Chlorobenzene	50.0	46.4	93	79-120	
Chloroethane	40.0	43.7	109	59-139	
Chloroform	50.0	47.6	95	78-123	
Chloromethane	40.0	44.1	110	50-136	
cis-1,2-Dichloroethene	50.0	51.3	103	77-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: G2_1121.D

Lab ID: LCS 280-377666/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
cis-1,3-Dichloropropene	50.0	45.9	92	74-126	
Dibromochloromethane	50.0	47.8	96	74-126	
Dibromomethane	50.0	49.4	99	78-125	
Dichlorodifluoromethane	40.0	56.1	140	29-149	
Ethylbenzene	50.0	51.4	103	76-122	
Hexachlorobutadiene	50.0	48.2	96	61-135	
Isopropylbenzene	50.0	48.7	97	68-134	
m&p-Xylene	50.0	48.9	98	77-124	
Methyl iodide	50.0	51.7	103	71-131	
Methyl tert-butyl ether	50.0	51.4	103	73-125	
Methylene Chloride	50.0	53.3	107	70-128	
Naphthalene	50.0	49.6	99	62-129	
n-Butylbenzene	50.0	49.3	99	70-128	
N-Propylbenzene	50.0	48.3	97	73-125	
o-Xylene	50.0	49.6	99	77-123	
sec-Butylbenzene	50.0	47.9	96	73-126	
Styrene	50.0	48.1	96	76-124	
tert-Butylbenzene	50.0	48.0	96	73-125	
Tetrachloroethene	50.0	47.9	96	73-128	
Toluene	50.0	55.3	111	77-121	
trans-1,2-Dichloroethene	50.0	54.5	109	74-125	
trans-1,3-Dichloropropene	50.0	48.6	97	71-130	
Trichloroethene	50.0	53.7	107	77-123	
Trichlorofluoromethane	40.0	44.6	112	62-140	
Vinyl acetate	100	78.2	78	50-151	
Vinyl chloride	40.0	45.8	114	56-135	
Xylenes (total)	100	98.5	99	78-124	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: G2_1122.D

Lab ID: LCS 280-377666/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Isopropyl ether	50.0	46.5 J	93	69-127	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Medium Lab File ID: P0135.D

Lab ID: LCS 280-377884/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	2000	2190	110	78-125	
1,1,1-Trichloroethane	2000	2070	103	73-130	
1,1,2,2-Tetrachloroethane	2000	2150	108	70-124	
1,1,2-Trichloroethane	2000	2310	115	78-121	
1,1-Dichloroethane	2000	2050	103	76-125	
1,1-Dichloroethene	2000	2140	107	70-131	
1,1-Dichloropropene	2000	2290	115	76-125	
1,2,3-Trichlorobenzene	2000	2370	119	66-130	
1,2,3-Trichloropropane	2000	2090	104	73-125	
1,2,4-Trichlorobenzene	2000	2310	115	67-129	
1,2,4-Trimethylbenzene	2000	2310	115	75-123	
1,2-Dibromo-3-Chloropropane	2000	2040	102	61-132	
1,2-Dibromoethane	2000	2250	113	78-122	
1,2-Dichlorobenzene	2000	2170	108	78-121	
1,2-Dichloroethane	2000	2050	102	73-128	
1,2-Dichloroethene, Total	4000	4260	107	78-122	
1,2-Dichloropropane	2000	2190	110	76-123	
1,3,5-Trimethylbenzene	2000	2320	116	73-124	
1,3-Dichlorobenzene	2000	2210	111	77-121	
1,3-Dichloropropane	2000	2140	107	77-121	
1,4-Dichlorobenzene	2000	2230	112	75-120	
2,2-Dichloropropane	2000	2180	109	67-133	
2-Butanone (MEK)	8000	9070	113	51-148	
2-Chlorotoluene	2000	2240	112	75-122	
2-Hexanone	8000	7680	96	53-145	
4-Chlorotoluene	2000	2290	114	72-124	
4-Isopropyltoluene	2000	2410	121	73-127	
4-Methyl-2-pentanone (MIBK)	8000	8600	108	65-135	
Acetone	8000	8180	102	36-164	
Benzene	2000	2140	107	77-121	
Bromobenzene	2000	2180	109	78-121	
Bromochloromethane	2000	2120	106	78-125	
Bromodichloromethane	2000	2070	104	75-127	
Bromoform	2000	1890	94	67-132	
Bromomethane	2000	2350	118	53-143	
Carbon disulfide	2000	2180	109	63-132	
Carbon tetrachloride	2000	2150	108	70-135	
Chlorobenzene	2000	2140	107	79-120	
Chloroethane	2000	2370	119	59-139	
Chloroform	2000	2100	105	78-123	
Chloromethane	2000	2860	143	50-136	Q
cis-1,2-Dichloroethene	2000	2090	104	77-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Medium Lab File ID: P0135.D

Lab ID: LCS 280-377884/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
cis-1,3-Dichloropropene	2000	2000	100	74-126	
Dibromochloromethane	2000	1910	96	74-126	
Dibromomethane	2000	2120	106	78-125	
Dichlorodifluoromethane	2000	3000	150	29-149	Q
Ethylbenzene	2000	2280	114	76-122	
Hexachlorobutadiene	2000	2440	122	61-135	
Isopropylbenzene	2000	2250	113	68-134	
m&p-Xylene	2000	2280	114	77-124	
Methyl iodide	2000	2000	100	71-131	
Methyl tert-butyl ether	2000	2160	108	73-125	
Methylene Chloride	2000	1920	96	70-128	
Naphthalene	2000	2350	118	62-129	
n-Butylbenzene	2000	2480	124	70-128	
N-Propylbenzene	2000	2340	117	73-125	
o-Xylene	2000	2290	115	77-123	
sec-Butylbenzene	2000	2430	121	73-126	
Styrene	2000	2220	111	76-124	
tert-Butylbenzene	2000	2330	117	73-125	
Tetrachloroethene	2000	2210	111	73-128	
Toluene	2000	2310	116	77-121	
trans-1,2-Dichloroethene	2000	2170	109	74-125	
trans-1,3-Dichloropropene	2000	1990	100	71-130	
Trichloroethene	2000	2170	108	77-123	
Trichlorofluoromethane	2000	2310	115	62-140	M
Vinyl acetate	2000	2080	104	50-151	
Vinyl chloride	2000	2760	138	56-135	Q
Xylenes (total)	4000	4570	114	78-124	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Medium Lab File ID: P0136.D

Lab ID: LCSD 280-377884/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	2000	2190	110	0	20	78-125	
1,1,1-Trichloroethane	2000	1960	98	5	20	73-130	
1,1,2,2-Tetrachloroethane	2000	2220	111	3	20	70-124	
1,1,2-Trichloroethane	2000	2360	118	2	20	78-121	
1,1-Dichloroethane	2000	2040	102	1	20	76-125	
1,1-Dichloroethene	2000	2100	105	2	20	70-131	
1,1-Dichloropropene	2000	2200	110	4	20	76-125	
1,2,3-Trichlorobenzene	2000	2350	117	1	20	66-130	
1,2,3-Trichloropropane	2000	2150	108	3	20	73-125	
1,2,4-Trichlorobenzene	2000	2300	115	0	20	67-129	
1,2,4-Trimethylbenzene	2000	2240	112	3	20	75-123	
1,2-Dibromo-3-Chloropropane	2000	2120	106	4	20	61-132	
1,2-Dibromoethane	2000	2290	114	2	20	78-122	
1,2-Dichlorobenzene	2000	2210	111	2	20	78-121	
1,2-Dichloroethane	2000	2070	103	1	20	73-128	
1,2-Dichloroethene, Total	4000	4200	105	1	20	78-122	
1,2-Dichloropropane	2000	2190	110	0	20	76-123	
1,3,5-Trimethylbenzene	2000	2290	114	1	20	73-124	
1,3-Dichlorobenzene	2000	2190	109	1	20	77-121	
1,3-Dichloropropane	2000	2130	106	1	20	77-121	
1,4-Dichlorobenzene	2000	2180	109	2	20	75-120	
2,2-Dichloropropane	2000	2140	107	2	20	67-133	
2-Butanone (MEK)	8000	9140	114	1	20	51-148	
2-Chlorotoluene	2000	2210	111	1	20	75-122	
2-Hexanone	8000	8020	100	4	20	53-145	
4-Chlorotoluene	2000	2280	114	0	20	72-124	
4-Isopropyltoluene	2000	2350	118	3	20	73-127	
4-Methyl-2-pentanone (MIBK)	8000	8910	111	3	20	65-135	
Acetone	8000	8100	101	1	20	36-164	
Benzene	2000	2100	105	2	20	77-121	
Bromobenzene	2000	2220	111	2	20	78-121	
Bromochloromethane	2000	2200	110	4	20	78-125	
Bromodichloromethane	2000	2030	101	2	20	75-127	
Bromoform	2000	1920	96	2	20	67-132	
Bromomethane	2000	2250	113	4	20	53-143	
Carbon disulfide	2000	2110	105	4	20	63-132	
Carbon tetrachloride	2000	2080	104	3	20	70-135	
Chlorobenzene	2000	2110	106	1	20	79-120	
Chloroethane	2000	2400	120	1	20	59-139	
Chloroform	2000	2090	104	1	20	78-123	
Chloromethane	2000	2730	136	5	20	50-136	
cis-1,2-Dichloroethene	2000	2060	103	1	20	77-123	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Medium Lab File ID: P0136.D

Lab ID: LCSD 280-377884/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
cis-1,3-Dichloropropene	2000	2010	101	1	20	74-126	
Dibromochloromethane	2000	1930	97	1	20	74-126	
Dibromomethane	2000	2130	107	1	20	78-125	
Dichlorodifluoromethane	2000	2770	138	8	20	29-149	
Ethylbenzene	2000	2230	112	2	20	76-122	
Hexachlorobutadiene	2000	2250	113	8	20	61-135	
Isopropylbenzene	2000	2260	113	0	20	68-134	
m&p-Xylene	2000	2190	109	4	20	77-124	
Methyl iodide	2000	2030	101	1	20	71-131	
Methyl tert-butyl ether	2000	2210	111	2	20	73-125	
Methylene Chloride	2000	1930	96	0	20	70-128	
Naphthalene	2000	2420	121	3	20	62-129	
n-Butylbenzene	2000	2380	119	4	20	70-128	
N-Propylbenzene	2000	2340	117	0	20	73-125	
o-Xylene	2000	2260	113	1	20	77-123	
sec-Butylbenzene	2000	2320	116	4	20	73-126	
Styrene	2000	2200	110	1	20	76-124	
tert-Butylbenzene	2000	2300	115	2	20	73-125	
Tetrachloroethene	2000	2130	107	4	20	73-128	
Toluene	2000	2270	113	2	20	77-121	
trans-1,2-Dichloroethene	2000	2140	107	1	20	74-125	
trans-1,3-Dichloropropene	2000	1980	99	1	20	71-130	
Trichloroethene	2000	2120	106	2	20	77-123	
Trichlorofluoromethane	2000	2210	111	4	20	62-140	
Vinyl acetate	2000	2240	112	7	20	50-151	
Vinyl chloride	2000	2620	131	5	20	56-135	
Xylenes (total)	4000	4450	111	3	20	78-124	

Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab File ID: G2_1077.D Lab Sample ID: MB 280-377540/1-A

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: VMS_G2 Date Analyzed: 06/15/2017 19:15

GC Column: DB-624 (60.25) ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-377540/3-A	G2_1079.D	06/15/2017 19:57
SS025-SS07	280-97928-1	G2_1085.D	06/15/2017 22:02

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab File ID: G2_1118.D Lab Sample ID: MB 280-377664/1-A

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: VMS_G2 Date Analyzed: 06/16/2017 13:09

GC Column: DB-624 (60.25) ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-377664/2-A	G2_1119.D	06/16/2017 13:30
	LCS 280-377664/3-A	G2_1120.D	06/16/2017 13:51
SS025-SB09(0-2)	280-97928-14	G2_1124.D	06/16/2017 15:16
SS025-SB09(2-4)	280-97928-15	G2_1125.D	06/16/2017 15:37
SS025-SB09(4-6)	280-97928-16	G2_1126.D	06/16/2017 15:58
SS025-SB09(6-8)	280-97928-17	G2_1127.D	06/16/2017 16:19
SS025-SB10(0-2)	280-97928-18	G2_1128.D	06/16/2017 16:40
SS025-SB10(2-4)	280-97928-19	G2_1129.D	06/16/2017 17:01
SS025-SB10(2-4)-a	280-97928-21	G2_1130.D	06/16/2017 17:22
SS025-SS10	280-97928-22	G2_1131.D	06/16/2017 17:43

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab File ID: G2_1123.D Lab Sample ID: MB 280-377666/1-A

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: VMS_G2 Date Analyzed: 06/16/2017 14:55

GC Column: DB-624 (60.25) ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-377666/2-A	G2_1121.D	06/16/2017 14:12
	LCS 280-377666/3-A	G2_1122.D	06/16/2017 14:34
SS025-TB02	280-97928-2	G2_1136.D	06/16/2017 19:29
SS025-SB06(0-2)	280-97928-3	G2_1137.D	06/16/2017 19:50
SS025-SB06(2-4)	280-97928-4	G2_1138.D	06/16/2017 20:11
SS025-SS08	280-97928-5	G2_1139.D	06/16/2017 20:32
SS025-SB07(0-2)	280-97928-6	G2_1140.D	06/16/2017 20:53
SS025-SB07(2-4)	280-97928-7	G2_1141.D	06/16/2017 21:14
SS025-SB01(0-2)	280-97928-8	G2_1142.D	06/16/2017 21:35
SS025-SB01(0-2)-a	280-97928-9	G2_1143.D	06/16/2017 21:56
SS025-SB08(0-2)	280-97928-10	G2_1144.D	06/16/2017 22:17
SS025-SB08(2-4)	280-97928-11	G2_1145.D	06/16/2017 22:37
SS025-SS09	280-97928-12	G2_1146.D	06/16/2017 22:58

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab File ID: P0048.D Lab Sample ID: MB 280-377884/1-A

Matrix: Solid Heated Purge:(Y/N) N

Instrument ID: VMS_P Date Analyzed: 06/19/2017 17:44

GC Column: DB-624 (60.25) ID: 0.25(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
SS025-SB10(4-6)	280-97928-20	P0051.D	06/19/2017 18:43
	LCS 280-377884/2-A	P0135.D	06/22/2017 09:58
	LCSD 280-377884/3-A	P0136.D	06/22/2017 10:17

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab File ID: G2_9102.D BFB Injection Date: 04/26/2017

Instrument ID: VMS_G2 BFB Injection Time: 20:42

Analysis Batch No.: 371118

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.1	
75	30.0 - 60.0 % of mass 95	49.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.7	
173	Less than 2.0 % of mass 174	0.7	(0.7) 1
174	50.0 - 120.00 % of mass 95	101.7	
175	5.0 - 9.0 % of mass 174	7.5	(7.4) 1
176	95.0 - 101.0 % of mass 174	100.7	(99.0) 1
177	5.0 - 9.0 % of mass 176	6.1	(6.1) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD001 280-371118/20	G2_9103.D	04/26/2017	21:24
	STD002 280-371118/21	G2_9104.D	04/26/2017	21:44
	STD005 280-371118/22	G2_9105.D	04/26/2017	22:05
	STD010 280-371118/23	G2_9106.D	04/26/2017	22:25
	STD020 280-371118/24	G2_9107.D	04/26/2017	22:45
	ICIS 280-371118/25	G2_9108.D	04/26/2017	23:06
	STD100 280-371118/26	G2_9109.D	04/26/2017	23:27
	STD200 280-371118/27	G2_9110.D	04/26/2017	23:47
	ICV 280-371118/28	G2_9111.D	04/27/2017	00:08

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab File ID: G2_0892.D BFB Injection Date: 06/12/2017

Instrument ID: VMS_G2 BFB Injection Time: 17:19

Analysis Batch No.: 376989

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	22.1	
75	30.0 - 60.0 % of mass 95	52.4	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.9	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	94.7	
175	5.0 - 9.0 % of mass 174	7.4	(7.8) 1
176	95.0 - 101.0 % of mass 174	90.6	(95.7) 1
177	5.0 - 9.0 % of mass 176	6.1	(6.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD001 280-376989/4	G2_0894.D	06/12/2017	18:07
	STD002 280-376989/5	G2_0895.D	06/12/2017	18:28
	STD005 280-376989/6	G2_0896.D	06/12/2017	18:50
	STD010 280-376989/7	G2_0897.D	06/12/2017	19:11
	STD020 280-376989/8	G2_0898.D	06/12/2017	19:32
	ICIS 280-376989/9	G2_0899.D	06/12/2017	19:53
	STD100 280-376989/10	G2_0900.D	06/12/2017	20:14
	STD200 280-376989/11	G2_0901.D	06/12/2017	20:35
	ICV 280-376989/12	G2_0903.D	06/12/2017	21:19

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab File ID: G2_1074.D BFB Injection Date: 06/15/2017

Instrument ID: VMS_G2 BFB Injection Time: 18:11

Analysis Batch No.: 377520

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.7	
75	30.0 - 60.0 % of mass 95	53.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.5	
173	Less than 2.0 % of mass 174	0.4	(0.4) 1
174	50.0 - 120.00 % of mass 95	90.2	
175	5.0 - 9.0 % of mass 174	5.8	(6.4) 1
176	95.0 - 101.0 % of mass 174	88.5	(98.1) 1
177	5.0 - 9.0 % of mass 176	5.3	(6.0) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-377520/2	G2_1075.D	06/15/2017	18:33
	CCV 280-377520/3	G2_1076.D	06/15/2017	18:54
	MB 280-377540/1-A	G2_1077.D	06/15/2017	19:15
	LCS 280-377540/2-A	G2_1078.D	06/15/2017	19:36
	LCS 280-377540/3-A	G2_1079.D	06/15/2017	19:57
SS025-SS07	280-97928-1	G2_1085.D	06/15/2017	22:02

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab File ID: G2_1114.D BFB Injection Date: 06/16/2017

Instrument ID: VMS_G2 BFB Injection Time: 11:42

Analysis Batch No.: 377645

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	24.2	
75	30.0 - 60.0 % of mass 95	54.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.6	
173	Less than 2.0 % of mass 174	0.8	(1.0) 1
174	50.0 - 120.00 % of mass 95	81.9	
175	5.0 - 9.0 % of mass 174	5.8	(7.1) 1
176	95.0 - 101.0 % of mass 174	80.0	(97.7) 1
177	5.0 - 9.0 % of mass 176	5.3	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-377645/2	G2_1116.D	06/16/2017	12:27
	CCV 280-377645/3	G2_1117.D	06/16/2017	12:48
	MB 280-377664/1-A	G2_1118.D	06/16/2017	13:09
	LCS 280-377664/2-A	G2_1119.D	06/16/2017	13:30
	LCS 280-377664/3-A	G2_1120.D	06/16/2017	13:51
SS025-SB09(0-2)	280-97928-14	G2_1124.D	06/16/2017	15:16
SS025-SB09(2-4)	280-97928-15	G2_1125.D	06/16/2017	15:37
SS025-SB09(4-6)	280-97928-16	G2_1126.D	06/16/2017	15:58
SS025-SB09(6-8)	280-97928-17	G2_1127.D	06/16/2017	16:19
SS025-SB10(0-2)	280-97928-18	G2_1128.D	06/16/2017	16:40
SS025-SB10(2-4)	280-97928-19	G2_1129.D	06/16/2017	17:01
SS025-SB10(2-4)-a	280-97928-21	G2_1130.D	06/16/2017	17:22
SS025-SS10	280-97928-22	G2_1131.D	06/16/2017	17:43
	CCVC 280-377645/40	G2_1148.D	06/16/2017	23:40
	CCVC 280-377645/41	G2_1149.D	06/17/2017	00:00

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab File ID: G2_1114.D BFB Injection Date: 06/16/2017

Instrument ID: VMS_G2 BFB Injection Time: 11:42

Analysis Batch No.: 377667

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	24.2	
75	30.0 - 60.0 % of mass 95	54.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.6	
173	Less than 2.0 % of mass 174	0.8	(1.0) 1
174	50.0 - 120.00 % of mass 95	81.9	
175	5.0 - 9.0 % of mass 174	5.8	(7.1) 1
176	95.0 - 101.0 % of mass 174	80.0	(97.7) 1
177	5.0 - 9.0 % of mass 176	5.3	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-377667/2	G2_1116.D	06/16/2017	12:27
	CCV 280-377667/3	G2_1117.D	06/16/2017	12:48
	LCS 280-377666/2-A	G2_1121.D	06/16/2017	14:12
	LCS 280-377666/3-A	G2_1122.D	06/16/2017	14:34
	MB 280-377666/1-A	G2_1123.D	06/16/2017	14:55
SS025-TB02	280-97928-2	G2_1136.D	06/16/2017	19:29
SS025-SB06(0-2)	280-97928-3	G2_1137.D	06/16/2017	19:50
SS025-SB06(2-4)	280-97928-4	G2_1138.D	06/16/2017	20:11
SS025-SS08	280-97928-5	G2_1139.D	06/16/2017	20:32
SS025-SB07(0-2)	280-97928-6	G2_1140.D	06/16/2017	20:53
SS025-SB07(2-4)	280-97928-7	G2_1141.D	06/16/2017	21:14
SS025-SB01(0-2)	280-97928-8	G2_1142.D	06/16/2017	21:35
SS025-SB01(0-2)-a	280-97928-9	G2_1143.D	06/16/2017	21:56
SS025-SB08(0-2)	280-97928-10	G2_1144.D	06/16/2017	22:17
SS025-SB08(2-4)	280-97928-11	G2_1145.D	06/16/2017	22:37
SS025-SS09	280-97928-12	G2_1146.D	06/16/2017	22:58
	CCVC 280-377667/40	G2_1148.D	06/16/2017	23:40
	CCVC 280-377667/41	G2_1149.D	06/17/2017	00:00

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab File ID: P0027.D BFB Injection Date: 06/19/2017

Instrument ID: VMS_P BFB Injection Time: 10:40

Analysis Batch No.: 377804

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	25.1	
75	30.0 - 60.0 % of mass 95	58.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.9	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	65.5	
175	5.0 - 9.0 % of mass 174	4.7	(7.1) 1
176	95.0 - 101.0 % of mass 174	63.4	(96.7) 1
177	5.0 - 9.0 % of mass 176	4.9	(7.7) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD005 280-377804/27	P0028.D	06/19/2017	11:16
	STD010 280-377804/28	P0029.D	06/19/2017	11:36
	STD020 280-377804/29	P0030.D	06/19/2017	11:55
	STD050 280-377804/30	P0031.D	06/19/2017	12:14
	STD10 280-377804/31	P0032.D	06/19/2017	12:34
	STD30 280-377804/32	P0033.D	06/19/2017	12:53
	STD60 280-377804/33	P0034.D	06/19/2017	13:13
	ICV 280-377804/34	P0036.D	06/19/2017	13:51
	STD005 280-377804/37	P0037.D	06/19/2017	14:11
	STD010 280-377804/38	P0038.D	06/19/2017	14:30
	ICV 280-377804/35	P0039.D	06/19/2017	14:50
	STD050 280-377804/40	P0040.D	06/19/2017	15:09
	ICIS 280-377804/41	P0041.D	06/19/2017	15:28
	STD30 280-377804/42	P0042.D	06/19/2017	15:48
	STD60 280-377804/43	P0043.D	06/19/2017	16:07
	STD020 280-377804/39	P0044.D	06/19/2017	16:26
	ICV 280-377804/44	P0046.D	06/19/2017	17:05
	MB 280-377884/1-A	P0048.D	06/19/2017	17:44
SS025-SB10(4-6)	280-97928-20	P0051.D	06/19/2017	18:43
	CCVC 280-377804/55	P0054.D	06/19/2017	19:41

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab File ID: P0130.D BFB Injection Date: 06/22/2017

Instrument ID: VMS_P BFB Injection Time: 08:09

Analysis Batch No.: 378395

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	25.3	
75	30.0 - 60.0 % of mass 95	56.9	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	8.1	
173	Less than 2.0 % of mass 174	0.4	(0.7) 1
174	50.0 - 120.00 % of mass 95	65.5	
175	5.0 - 9.0 % of mass 174	4.9	(7.5) 1
176	95.0 - 101.0 % of mass 174	63.3	(96.5) 1
177	5.0 - 9.0 % of mass 176	4.4	(7.0) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-378395/2	P0131.D	06/22/2017	08:32
	CCV 280-378395/3	P0132.D	06/22/2017	08:51
	LCS 280-377884/2-A	P0135.D	06/22/2017	09:58
	LCSD 280-377884/3-A	P0136.D	06/22/2017	10:17

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Sample No.: ICIS 280-371118/25 Date Analyzed: 04/26/2017 23:06

Instrument ID: VMS_G2 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): G2_9108.D Heated Purge: (Y/N) Y

Calibration ID: 28915

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		464934	4.07	921971	7.64	237497	10.78
UPPER LIMIT		929868	4.57	1843942	8.14	474994	11.28
LOWER LIMIT		232467	3.57	460986	7.14	118749	10.28
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-371118/28		543420	4.08	1010405	7.64	259337	10.78

TBAd9 = TBA-d9 (IS)
FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Sample No.: ICIS 280-371118/25 Date Analyzed: 04/26/2017 23:06

Instrument ID: VMS_G2 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): G2_9108.D Heated Purge: (Y/N) Y

Calibration ID: 28915

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		386534	12.84				
UPPER LIMIT		773068	13.34				
LOWER LIMIT		193267	12.34				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-371118/28		422767	12.84				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Sample No.: ICIS 280-376989/9 Date Analyzed: 06/12/2017 19:53

Instrument ID: VMS_G2 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): G2_0899.D Heated Purge: (Y/N) Y

Calibration ID: 29460

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		368622	4.08	626638	7.63	148066	10.76
UPPER LIMIT		737244	4.58	1253276	8.13	296132	11.26
LOWER LIMIT		184311	3.58	313319	7.13	74033	10.26
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-376989/12		403339	4.05	738813	7.62	173619	10.76
CCV 280-377520/2		611806	4.05	822474	7.62	205360	10.76
CCV 280-377520/3		547208	4.07	869770	7.63	211704	10.76
MB 280-377540/1-A		454333	4.07	723952	7.63	188276	10.76
LCS 280-377540/3-A		636376	4.07	933719	7.63	232292	10.76
280-97928-1	SS025-SS07	370620	4.07	733224	7.63	177188	10.76
CCV 280-377645/2		403144	4.07	677200	7.63	172570	10.76
CCV 280-377667/2		403144	4.07	677200	7.63	172570	10.76
CCV 280-377667/3		496553	4.08	711140	7.63	176586	10.76
CCV 280-377645/3		496553	4.08	711140	7.63	176586	10.76
MB 280-377664/1-A		428704	4.07	587203	7.63	154620	10.76
LCS 280-377664/2-A		453077	4.08	743041	7.63	193856	10.76
LCS 280-377664/3-A		560468	4.07	795145	7.63	200469	10.76
LCS 280-377666/2-A		519745	4.07	819336	7.63	210039	10.76
LCS 280-377666/3-A		697527	4.07	853404	7.63	217474	10.76
MB 280-377666/1-A		479883	4.07	667277	7.63	178682	10.76
280-97928-14	SS025-SB09(0-2)	450742	4.07	698667	7.63	155726	10.76
280-97928-15	SS025-SB09(2-4)	426254	4.07	633188	7.64	143329	10.76
280-97928-16	SS025-SB09(4-6)	487173	4.07	585529	7.63	139927	10.76
280-97928-17	SS025-SB09(6-8)	402843	4.07	574255	7.63	146984	10.76
280-97928-18	SS025-SB10(0-2)	441054	4.07	605803	7.63	157868	10.76
280-97928-19	SS025-SB10(2-4)	453027	4.07	566510	7.64	145894	10.76
280-97928-21	SS025-SB10(2-4)-a	374248	4.08	551059	7.64	139621	10.76
280-97928-22	SS025-SS10	385427	4.07	548752	7.63	138539	10.76
280-97928-2	SS025-TB02	364683	4.07	562605	7.64	131838	10.76
280-97928-3	SS025-SB06(0-2)	347002	4.07	604105	7.63	134427	10.76
280-97928-4	SS025-SB06(2-4)	426210	4.08	623673	7.64	143026	10.76
280-97928-5	SS025-SS08	383533	4.08	573273	7.64	130247	10.76

TBAd9 = TBA-d9 (IS)
FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Sample No.: ICIS 280-376989/9 Date Analyzed: 06/12/2017 19:53

Instrument ID: VMS_G2 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): G2_0899.D Heated Purge: (Y/N) Y

Calibration ID: 29460

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		368622	4.08	626638	7.63	148066	10.76
UPPER LIMIT		737244	4.58	1253276	8.13	296132	11.26
LOWER LIMIT		184311	3.58	313319	7.13	74033	10.26
LAB SAMPLE ID	CLIENT SAMPLE ID						
280-97928-6	SS025-SB07(0-2)	324227	4.07	626839	7.63	142744	10.76
280-97928-7	SS025-SB07(2-4)	414686	4.07	612439	7.63	140899	10.76
280-97928-8	SS025-SB01(0-2)	379360	4.07	566328	7.63	119702	10.76
280-97928-9	SS025-SB01(0-2)-a	334039	4.07	583484	7.63	123417	10.76
280-97928-10	SS025-SB08(0-2)	294303	4.07	586923	7.63	133424	10.76
280-97928-11	SS025-SB08(2-4)	325100	4.07	555206	7.64	103741	10.76
280-97928-12	SS025-SS09	387738	4.07	606457	7.63	136097	10.76
CCVC 280-377667/40		386052	4.07	763642	7.63	181144	10.76
CCVC 280-377645/40		386052	4.07	763642	7.63	181144	10.76
CCVC 280-377645/41		411919	4.07	760416	7.63	174124	10.76
CCVC 280-377667/41		411919	4.07	760416	7.63	174124	10.76

TBAd9 = TBA-d9 (IS)
FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Sample No.: ICIS 280-376989/9 Date Analyzed: 06/12/2017 19:53

Instrument ID: VMS_G2 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): G2_0899.D Heated Purge: (Y/N) Y

Calibration ID: 29460

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		284324	12.82				
UPPER LIMIT		568648	13.32				
LOWER LIMIT		142162	12.32				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-376989/12		327045	12.82				
CCV 280-377520/2		399091	12.82				
CCV 280-377520/3		335694	12.82				
MB 280-377540/1-A		356416	12.82				
LCS 280-377540/3-A		414719	12.82				
280-97928-1	SS025-SS07	286967	12.82				
CCV 280-377645/2		347851	12.82				
CCV 280-377667/2		347851	12.82				
CCV 280-377667/3		267427	12.82				
CCV 280-377645/3		267427	12.82				
MB 280-377664/1-A		291403	12.82				
LCS 280-377664/2-A		378794	12.82				
LCS 280-377664/3-A		363164	12.82				
LCS 280-377666/2-A		403914	12.82				
LCS 280-377666/3-A		370899	12.82				
MB 280-377666/1-A		336384	12.82				
280-97928-14	SS025-SB09(0-2)	184618	12.83				
280-97928-15	SS025-SB09(2-4)	176972	12.82				
280-97928-16	SS025-SB09(4-6)	201822	12.82				
280-97928-17	SS025-SB09(6-8)	249583	12.82				
280-97928-18	SS025-SB10(0-2)	265007	12.82				
280-97928-19	SS025-SB10(2-4)	247829	12.82				
280-97928-21	SS025-SB10(2-4)-a	231828	12.82				
280-97928-22	SS025-SS10	228628	12.82				
280-97928-2	SS025-TB02	213768	12.82				
280-97928-3	SS025-SB06(0-2)	194160	12.82				
280-97928-4	SS025-SB06(2-4)	242225	12.82				
280-97928-5	SS025-SS08	300981	12.82				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Sample No.: ICIS 280-376989/9 Date Analyzed: 06/12/2017 19:53

Instrument ID: VMS_G2 GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): G2_0899.D Heated Purge: (Y/N) Y

Calibration ID: 29460

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		284324	12.82				
UPPER LIMIT		568648	13.32				
LOWER LIMIT		142162	12.32				
LAB SAMPLE ID	CLIENT SAMPLE ID						
280-97928-6	SS025-SB07(0-2)	233844	12.82				
280-97928-7	SS025-SB07(2-4)	229206	12.82				
280-97928-8	SS025-SB01(0-2)	165251	12.82				
280-97928-9	SS025-SB01(0-2)-a	168177	12.82				
280-97928-10	SS025-SB08(0-2)	217037	12.82				
280-97928-11	SS025-SB08(2-4)	107181Q	12.82				
280-97928-12	SS025-SS09	209804	12.82				
CCVC 280-377667/40		360904	12.82				
CCVC 280-377645/40		360904	12.82				
CCVC 280-377645/41		262779	12.82				
CCVC 280-377667/41		262779	12.82				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Sample No.: ICIS 280-377804/41 Date Analyzed: 06/19/2017 15:28

Instrument ID: VMS_P GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): P0041.D Heated Purge: (Y/N) N

Calibration ID: 29520

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		172833	5.65	1811039	7.61	346716	9.87
UPPER LIMIT		345666	6.15	3622078	8.11	693432	10.37
LOWER LIMIT		86417	5.15	905520	7.11	173358	9.37
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-377804/34		175605	5.65	1804919	7.61	348770	9.87
ICV 280-377804/44		176685	5.64	1806390	7.60	340712	9.87
MB 280-377884/1-A		176374	5.65	1850610	7.61	348013	9.87
280-97928-20	SS025-SB10(4-6)	193322	5.64	1899010	7.61	357540	9.87
CCVC 280-377804/55		192354	5.65	1891725	7.61	366745	9.87
CCV 280-378395/2		145071	5.66	1605646	7.61	310043	9.88
CCV 280-378395/3		157360	5.65	1658151	7.61	310413	9.88
LCS 280-377884/2-A		180079	5.65	1782068	7.61	349609	9.88
LCSD 280-377884/3-A		186659	5.65	1821019	7.61	357227	9.88

TBAd9 = TBA-d9 (IS)
FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Sample No.: ICIS 280-377804/41 Date Analyzed: 06/19/2017 15:28

Instrument ID: VMS_P GC Column: DB-624 (60.25) ID: 0.25(mm)

Lab File ID (Standard): P0041.D Heated Purge: (Y/N) N

Calibration ID: 29520

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		450593	11.70				
UPPER LIMIT		901186	12.20				
LOWER LIMIT		225297	11.20				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-377804/34		466270	11.69				
ICV 280-377804/44		451433	11.70				
MB 280-377884/1-A		459364	11.70				
280-97928-20	SS025-SB10(4-6)	475377	11.70				
CCVC 280-377804/55		511997	11.70				
CCV 280-378395/2		438484	11.71				
CCV 280-378395/3		405390	11.70				
LCS 280-377884/2-A		493466	11.70				
LCSD 280-377884/3-A		495460	11.70				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS07 | Lab Sample ID: 280-97928-1

Matrix: Solid | Lab File ID: G2_1085.D

Analysis Method: 8260B | Date Collected: 06/05/2017 08:15

Sample wt/vol: 5.714(g) | Date Analyzed: 06/15/2017 22:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.3 | Level: (low/med) Low

Analysis Batch No.: 377520 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.6	U	5.0	1.6	0.57
71-55-6	1,1,1-Trichloroethane	1.6	U	5.0	1.6	0.52
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U	5.0	1.6	0.62
79-00-5	1,1,2-Trichloroethane	3.2	U	5.0	3.2	0.89
75-34-3	1,1-Dichloroethane	0.81	U	5.0	0.81	0.21
75-35-4	1,1-Dichloroethene	1.6	U	5.0	1.6	0.60
563-58-6	1,1-Dichloropropene	1.6	U	5.0	1.6	0.55
87-61-6	1,2,3-Trichlorobenzene	1.6	U	5.0	1.6	0.76
96-18-4	1,2,3-Trichloropropane	3.2	U	5.0	3.2	0.82
120-82-1	1,2,4-Trichlorobenzene	1.6	U	5.0	1.6	0.74
95-63-6	1,2,4-Trimethylbenzene	1.6	U	5.0	1.6	0.59
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	10	1.6	0.61
106-93-4	1,2-Dibromoethane	1.6	U	5.0	1.6	0.52
95-50-1	1,2-Dichlorobenzene	1.6	U	5.0	1.6	0.45
107-06-2	1,2-Dichloroethane	1.6	U	5.0	1.6	0.71
540-59-0	1,2-Dichloroethene, Total	1.6	U	5.0	1.6	0.39
78-87-5	1,2-Dichloropropane	1.6	U	5.0	1.6	0.56
108-67-8	1,3,5-Trimethylbenzene	1.6	U	5.0	1.6	0.58
541-73-1	1,3-Dichlorobenzene	1.6	U	5.0	1.6	0.48
142-28-9	1,3-Dichloropropane	1.6	U	5.0	1.6	0.51
106-46-7	1,4-Dichlorobenzene	1.6	U	5.0	1.6	0.79
594-20-7	2,2-Dichloropropane	1.6	U	5.0	1.6	0.44
78-93-3	2-Butanone (MEK)	6.5	U	20	6.5	1.8
95-49-8	2-Chlorotoluene	1.6	U	5.0	1.6	0.51
591-78-6	2-Hexanone	13	U Q	20	13	4.9
106-43-4	4-Chlorotoluene	1.6	U	5.0	1.6	0.79
99-87-6	4-Isopropyltoluene	1.6	U	5.0	1.6	0.49
108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	20	13	4.4
67-64-1	Acetone	13	J B Q	20	13	5.4
71-43-2	Benzene	1.6	U	5.0	1.6	0.47
108-86-1	Bromobenzene	1.6	U	5.0	1.6	0.49
74-97-5	Bromochloromethane	0.81	U	5.0	0.81	0.30
75-27-4	Bromodichloromethane	0.81	U	5.0	0.81	0.22
75-25-2	Bromoform	0.81	U	5.0	0.81	0.23
74-83-9	Bromomethane	1.6	U Q	10	1.6	0.50
75-15-0	Carbon disulfide	1.6	U	5.0	1.6	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS07 | Lab Sample ID: 280-97928-1

Matrix: Solid | Lab File ID: G2_1085.D

Analysis Method: 8260B | Date Collected: 06/05/2017 08:15

Sample wt/vol: 5.714(g) | Date Analyzed: 06/15/2017 22:02

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.3 | Level: (low/med) Low

Analysis Batch No.: 377520 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.6	U	5.0	1.6	0.64
108-90-7	Chlorobenzene	1.6	U	5.0	1.6	0.55
75-00-3	Chloroethane	3.2	U	10	3.2	0.90
67-66-3	Chloroform	0.81	U	10	0.81	0.29
74-87-3	Chloromethane	1.6	U	10	1.6	0.78
156-59-2	cis-1,2-Dichloroethene	1.6	U	5.0	1.6	0.57
10061-01-5	cis-1,3-Dichloropropene	3.2	U	5.0	3.2	1.3
124-48-1	Dibromochloromethane	1.6	U	5.0	1.6	0.58
74-95-3	Dibromomethane	3.2	U	5.0	3.2	0.85
75-71-8	Dichlorodifluoromethane	1.6	U Q	10	1.6	0.52
100-41-4	Ethylbenzene	1.6	U	5.0	1.6	0.68
87-68-3	Hexachlorobutadiene	1.6	U	5.0	1.6	0.56
108-20-3	Isopropyl ether	8.1	U	50	8.1	2.7
98-82-8	Isopropylbenzene	1.6	U	5.0	1.6	0.60
179601-23-1	m&p-Xylene	3.2	U	3.2	3.2	1.0
74-88-4	Methyl iodide	1.6	U	5.0	1.6	0.44
1634-04-4	Methyl tert-butyl ether	0.81	U	20	0.81	0.34
75-09-2	Methylene Chloride	3.2	U	5.0	3.2	1.6
91-20-3	Naphthalene	1.6	U	5.0	1.6	0.64
104-51-8	n-Butylbenzene	1.6	U	5.0	1.6	0.57
103-65-1	N-Propylbenzene	1.6	U	5.0	1.6	0.59
95-47-6	o-Xylene	1.6	U	5.0	1.6	0.62
135-98-8	sec-Butylbenzene	1.6	U	5.0	1.6	0.78
100-42-5	Styrene	1.6	U	5.0	1.6	0.64
98-06-6	tert-Butylbenzene	1.6	U	5.0	1.6	0.50
127-18-4	Tetrachloroethene	1.6	U	5.0	1.6	0.60
108-88-3	Toluene	1.6	U	5.0	1.6	0.70
156-60-5	trans-1,2-Dichloroethene	0.81	U	5.0	0.81	0.39
10061-02-6	trans-1,3-Dichloropropene	1.6	U	5.0	1.6	0.68
79-01-6	Trichloroethene	0.81	U	5.0	0.81	0.23
75-69-4	Trichlorofluoromethane	3.2	U	10	3.2	1.0
108-05-4	Vinyl acetate	3.2	U	10	3.2	1.1
75-01-4	Vinyl chloride	3.2	U	5.0	3.2	1.4
1330-20-7	Xylenes (total)	1.0	U	10	1.0	0.62

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS07 Lab Sample ID: 280-97928-1

Matrix: Solid Lab File ID: G2_1085.D

Analysis Method: 8260B Date Collected: 06/05/2017 08:15

Sample wt/vol: 5.714(g) Date Analyzed: 06/15/2017 22:02

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.3 Level: (low/med) Low

Analysis Batch No.: 377520 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		71-136
460-00-4	4-Bromofluorobenzene (Surr)	94		79-119
1868-53-7	Dibromofluoromethane (Surr)	104		78-119
2037-26-5	Toluene-d8 (Surr)	93		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\G2_1085.D
Lims ID: 280-97928-E-1-A
Client ID: SS025-SS07
Sample Type: Client
Inject. Date: 15-Jun-2017 22:02:30 ALS Bottle#: 20 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-1-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 16-Jun-2017 12:18:14 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: dukesa Date: 15-Jun-2017 22:28:31

	Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
*	1 TBA-d9 (IS)	65	4.065	4.065	0.000	92	370620	1000.0	
*	3 Fluorobenzene	96	7.629	7.629	0.000	98	733224	50.0	
*	4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	177188	50.0	
*	5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	286967	50.0	
*	2 1,4-Dioxane-d8	96		0.000				ND	
$	8 Dibromofluoromethane (Surr	111	6.828	6.821	0.007	93	193203	44.1	
$	9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.236	0.007	97	257113	43.0	
$	10 Toluene-d8 (Surr)	98	9.345	9.338	0.007	95	600618	39.6	
$	11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	92	187776	40.1	
$	6 Trifluorotoluene (Surr)	1		0.000				ND	
$	7 BFB	95		2.270				ND	
	32 Dichlorodifluoromethane	85		1.691				ND	
	109 Tetrahydrothiophene	60		1.718				ND	
	34 Chloromethane	50		1.830				ND	
	37 Vinyl chloride	62		1.956				ND	
	22 Butadiene	54		1.984				ND	
	38 Ethylene oxide	43		2.263				ND	
	39 Bromomethane	94		2.277				ND	
	40 Chloroethane	64		2.389				ND	
	41 Dichlorofluoromethane	67		2.654				ND	
	43 Trichlorofluoromethane	101		2.696				ND	
	42 Ethanol	45		2.892				ND	
	45 Ethyl ether	59		2.989				ND	
	47 Propene oxide	58		3.059				ND	
	48 Acrolein	56		3.171				ND	
	53 1,1-Dichloroethene	96		3.297				ND	
	52 1,1,2-Trichloro-1,2,2-trif	151		3.325				ND	
	50 Acetone	43	3.353	3.352	0.001	98	25456	12.7	
	55 Iodomethane	142		3.478				ND	
	58 Carbon disulfide	76		3.562				ND	
	51 Isopropyl alcohol	45		3.562				ND	
	54 Acetonitrile	41		3.744				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
57 3-Chloro-1-propene	41		3.785				ND	
56 Methyl acetate	43		3.785				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
60 Methylene Chloride	84		3.995				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
59 2-Methyl-2-propanol	59		4.190				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.358				ND	
62 Methyl tert-butyl ether	73		4.414				ND	
63 trans-1,2-Dichloroethene	96		4.414				ND	
64 Hexane	57		4.903				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.196				ND	
65 Vinyl acetate	43		5.224				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.895				ND	
74 cis-1,2-Dichloroethene	96		6.113				ND	
71 2-Butanone (MEK)	43		6.113				ND	
75 2,2-Dichloropropane	77		6.120				ND	
70 Ethyl acetate	43		6.207				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.428				ND	
72 sec-Butyl Alcohol	45		6.442				ND	
77 Chlorobromomethane	128		6.449				ND	
79 Tetrahydrofuran	42		6.449				ND	
78 Chloroform	83		6.614				ND	
81 1,1,1-Trichloroethane	97		6.800				ND	
82 Cyclohexane	56		6.878				ND	
84 Carbon tetrachloride	117		6.993				ND	
83 1,1-Dichloropropene	75		7.007				ND	
87 Benzene	78		7.250				ND	
85 1,2-Dichloroethane	62		7.329				ND	
86 Tert-amyl methyl ether	73		7.451				ND	
80 Isobutyl alcohol	41		7.643				ND	
35 n-Heptane	43		7.643				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.037				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.251				ND	
93 Methylcyclohexane	55		8.287				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.409				ND	
95 Dibromomethane	93		8.416				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.931				ND	
99 cis-1,3-Dichloropropene	75		9.074				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.231				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.653				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.910				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.210				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.782				ND	
113 1,1,1,2-Tetrachloroethane	131		10.875				ND	
114 Ethylbenzene	106		10.875				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.177				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.835				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.063				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.585				ND	
140 1,3,5-Trichlorobenzene	180		13.693				ND	
141 1,2,4-Trichlorobenzene	180		14.114				ND	
142 Hexachlorobutadiene	225		14.207				ND	
143 Naphthalene	128		14.308				ND	
144 1,2,3-Trichlorobenzene	180		14.458				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
26 3-Methylhexane	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
13 2-Butoxyethanol TIC	1		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
12 2-Methylhexane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

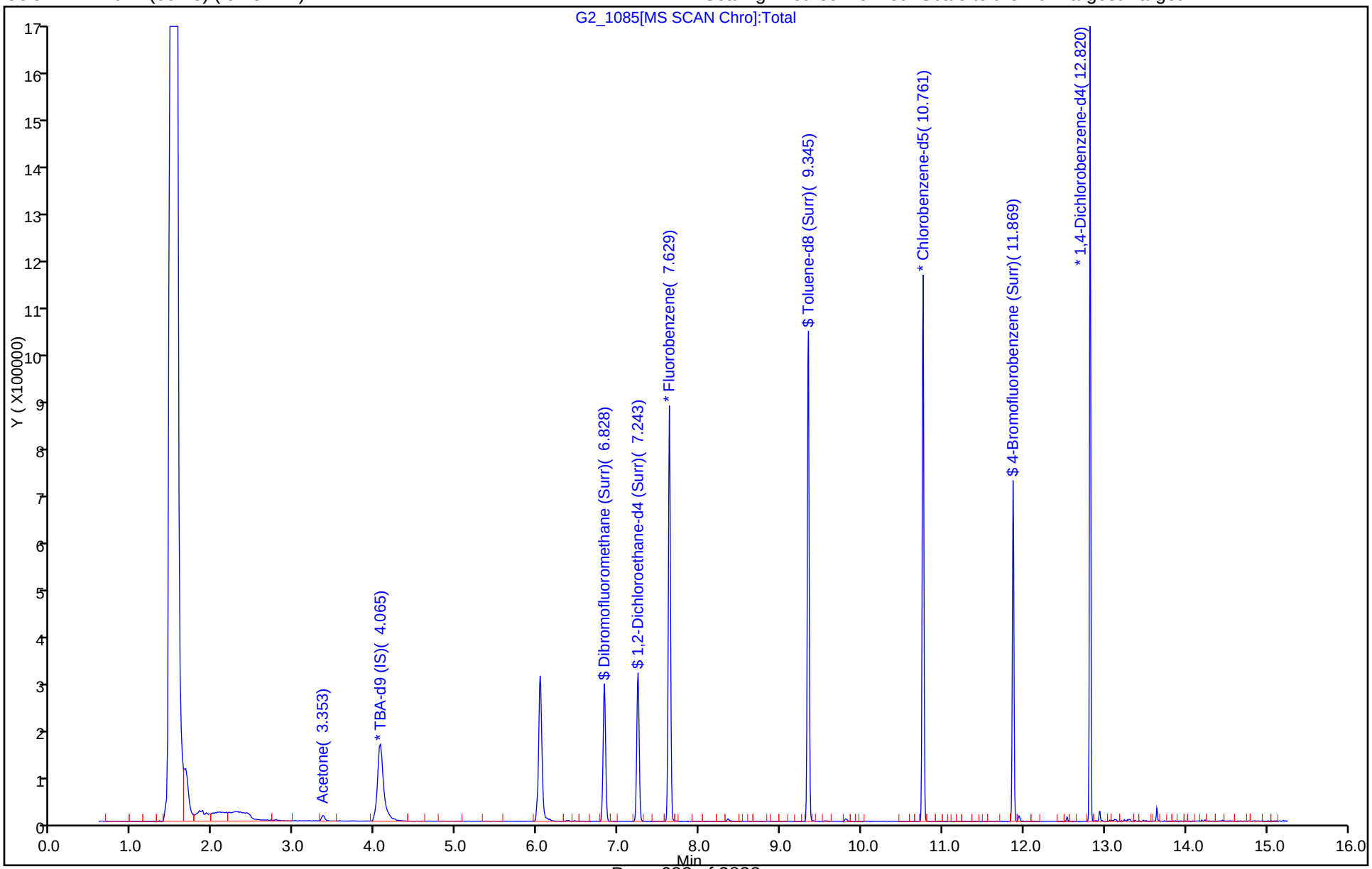
Report Date: 16-Jun-2017 12:18:37 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\G2_1085.D

Injection Date:	15-Jun-2017 22:02:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97928-E-1-A	Lab Sample ID:	280-97928-1	Worklist Smp#:	15
Client ID:	SS025-SS07				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\G2_1085.D
Lims ID: 280-97928-E-1-A
Client ID: SS025-SS07
Sample Type: Client
Inject. Date: 15-Jun-2017 22:02:30 ALS Bottle#: 20 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-1-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 16-Jun-2017 12:18:14 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: dukesa Date: 15-Jun-2017 22:28:31

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	44.1	103.65
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	43.0	101.20
$ 10 Toluene-d8 (Surr)	42.5	39.6	93.26
$ 11 4-Bromofluorobenzene (Surr)	42.5	40.1	94.39

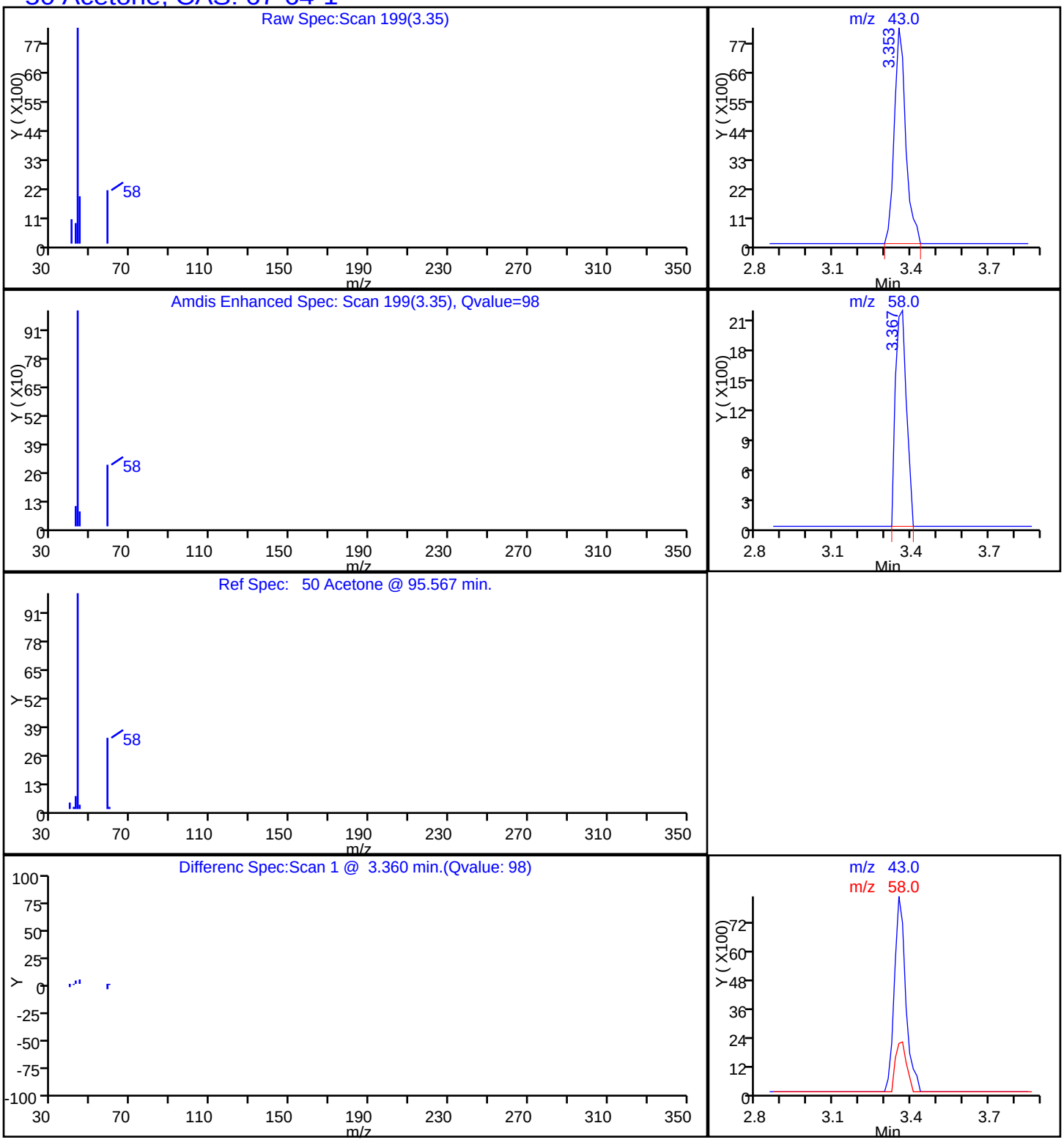
Report Date: 16-Jun-2017 12:18:37 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\G2_1085.D

Injection Date:	15-Jun-2017 22:02:30	Instrument ID:	VMS_G2		
Lims ID:	280-97928-E-1-A	Lab Sample ID:	280-97928-1		
Client ID:	SS025-SS07				
Operator ID:	DUKESA	ALS Bottle#:	20	Worklist Smp#:	15
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

50 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-TB02 | Lab Sample ID: 280-97928-2

Matrix: Solid | Lab File ID: G2_1136.D

Analysis Method: 8260B | Date Collected: 06/05/2017 08:15

Sample wt/vol: 5(g) | Date Analyzed: 06/16/2017 19:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.6	U	5.0	1.6	0.56
71-55-6	1,1,1-Trichloroethane	1.6	U	5.0	1.6	0.52
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U	5.0	1.6	0.61
79-00-5	1,1,2-Trichloroethane	3.2	U	5.0	3.2	0.88
75-34-3	1,1-Dichloroethane	0.80	U	5.0	0.80	0.21
75-35-4	1,1-Dichloroethene	1.6	U	5.0	1.6	0.59
563-58-6	1,1-Dichloropropene	1.6	U	5.0	1.6	0.54
87-61-6	1,2,3-Trichlorobenzene	1.6	U	5.0	1.6	0.75
96-18-4	1,2,3-Trichloropropane	3.2	U	5.0	3.2	0.81
120-82-1	1,2,4-Trichlorobenzene	1.6	U	5.0	1.6	0.73
95-63-6	1,2,4-Trimethylbenzene	1.6	U	5.0	1.6	0.58
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	10	1.6	0.60
106-93-4	1,2-Dibromoethane	1.6	U	5.0	1.6	0.52
95-50-1	1,2-Dichlorobenzene	1.6	U	5.0	1.6	0.45
107-06-2	1,2-Dichloroethane	1.6	U	5.0	1.6	0.70
540-59-0	1,2-Dichloroethene, Total	1.6	U	5.0	1.6	0.39
78-87-5	1,2-Dichloropropane	1.6	U	5.0	1.6	0.55
108-67-8	1,3,5-Trimethylbenzene	1.6	U	5.0	1.6	0.57
541-73-1	1,3-Dichlorobenzene	1.6	U	5.0	1.6	0.48
142-28-9	1,3-Dichloropropane	1.6	U	5.0	1.6	0.51
106-46-7	1,4-Dichlorobenzene	1.6	U	5.0	1.6	0.78
594-20-7	2,2-Dichloropropane	1.6	U	5.0	1.6	0.44
78-93-3	2-Butanone (MEK)	6.4	U	20	6.4	1.8
95-49-8	2-Chlorotoluene	1.6	U	5.0	1.6	0.51
591-78-6	2-Hexanone	13	U Q	20	13	4.9
106-43-4	4-Chlorotoluene	1.6	U	5.0	1.6	0.78
99-87-6	4-Isopropyltoluene	1.6	U	5.0	1.6	0.49
108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	20	13	4.4
67-64-1	Acetone	13	U Q	20	13	5.4
71-43-2	Benzene	1.6	U	5.0	1.6	0.47
108-86-1	Bromobenzene	1.6	U	5.0	1.6	0.49
74-97-5	Bromochloromethane	0.80	U	5.0	0.80	0.30
75-27-4	Bromodichloromethane	0.80	U	5.0	0.80	0.22
75-25-2	Bromoform	0.80	U	5.0	0.80	0.23
74-83-9	Bromomethane	1.6	U	10	1.6	0.50
75-15-0	Carbon disulfide	1.6	U	5.0	1.6	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-TB02 | Lab Sample ID: 280-97928-2

Matrix: Solid | Lab File ID: G2_1136.D

Analysis Method: 8260B | Date Collected: 06/05/2017 08:15

Sample wt/vol: 5(g) | Date Analyzed: 06/16/2017 19:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.6	U	5.0	1.6	0.63
108-90-7	Chlorobenzene	1.6	U	5.0	1.6	0.54
75-00-3	Chloroethane	3.2	U	10	3.2	0.89
67-66-3	Chloroform	0.80	U	10	0.80	0.29
74-87-3	Chloromethane	1.6	U	10	1.6	0.77
156-59-2	cis-1,2-Dichloroethene	1.6	U	5.0	1.6	0.56
10061-01-5	cis-1,3-Dichloropropene	3.2	U	5.0	3.2	1.3
124-48-1	Dibromochloromethane	1.6	U	5.0	1.6	0.57
74-95-3	Dibromomethane	3.2	U	5.0	3.2	0.84
75-71-8	Dichlorodifluoromethane	1.6	U Q	10	1.6	0.52
100-41-4	Ethylbenzene	1.6	U	5.0	1.6	0.67
87-68-3	Hexachlorobutadiene	1.6	U	5.0	1.6	0.55
108-20-3	Isopropyl ether	8.0	U	50	8.0	2.7
98-82-8	Isopropylbenzene	1.6	U	5.0	1.6	0.59
179601-23-1	m&p-Xylene	3.2	U	3.2	3.2	1.0
74-88-4	Methyl iodide	1.6	U	5.0	1.6	0.44
1634-04-4	Methyl tert-butyl ether	0.80	U	20	0.80	0.34
75-09-2	Methylene Chloride	3.2	U	5.0	3.2	1.6
91-20-3	Naphthalene	1.6	U	5.0	1.6	0.63
104-51-8	n-Butylbenzene	1.6	U	5.0	1.6	0.56
103-65-1	N-Propylbenzene	1.6	U	5.0	1.6	0.58
95-47-6	o-Xylene	1.6	U	5.0	1.6	0.61
135-98-8	sec-Butylbenzene	1.6	U	5.0	1.6	0.77
100-42-5	Styrene	1.6	U	5.0	1.6	0.63
98-06-6	tert-Butylbenzene	1.6	U	5.0	1.6	0.50
127-18-4	Tetrachloroethene	1.6	U	5.0	1.6	0.59
108-88-3	Toluene	1.6	U	5.0	1.6	0.69
156-60-5	trans-1,2-Dichloroethene	0.80	U	5.0	0.80	0.39
10061-02-6	trans-1,3-Dichloropropene	1.6	U	5.0	1.6	0.67
79-01-6	Trichloroethene	0.80	U	5.0	0.80	0.23
75-69-4	Trichlorofluoromethane	3.2	U	10	3.2	1.0
108-05-4	Vinyl acetate	3.2	U	10	3.2	1.1
75-01-4	Vinyl chloride	3.2	U	5.0	3.2	1.3
1330-20-7	Xylenes (total)	1.0	U	10	1.0	0.61

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-TB02 | Lab Sample ID: 280-97928-2

Matrix: Solid | Lab File ID: G2_1136.D

Analysis Method: 8260B | Date Collected: 06/05/2017 08:15

Sample wt/vol: 5(g) | Date Analyzed: 06/16/2017 19:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		71-136
460-00-4	4-Bromofluorobenzene (Surr)	93		79-119
1868-53-7	Dibromofluoromethane (Surr)	112		78-119
2037-26-5	Toluene-d8 (Surr)	97		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1136.D
Lims ID: 280-97928-B-2-A
Client ID: SS025-TB02
Sample Type: Client
Inject. Date: 16-Jun-2017 19:29:30 ALS Bottle#: 31 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-b-2-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:28:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	90	364683	1000.0	
* 3 Fluorobenzene	96	7.636	7.629	0.007	98	562605	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	131838	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	213768	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.836	6.829	0.007	93	159381	47.6	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	206472	45.2	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	464701	41.2	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	92	137522	39.4	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.705				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.668				ND	
43 Trichlorofluoromethane	101		2.710				ND	
42 Ethanol	45		2.906				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353				ND	
50 Acetone	43		3.353				ND	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.894				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.213				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.457				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
78 Chloroform	83		6.621				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.014				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.450				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
95 Dibromomethane	93		8.423				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.842				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.071				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593				ND	
140 1,3,5-Trichlorobenzene	180		13.707				ND	
141 1,2,4-Trichlorobenzene	180		14.129				ND	
142 Hexachlorobutadiene	225		14.215				ND	
143 Naphthalene	128		14.315				ND	
144 1,2,3-Trichlorobenzene	180		14.472				ND	
26 3-Methylhexane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

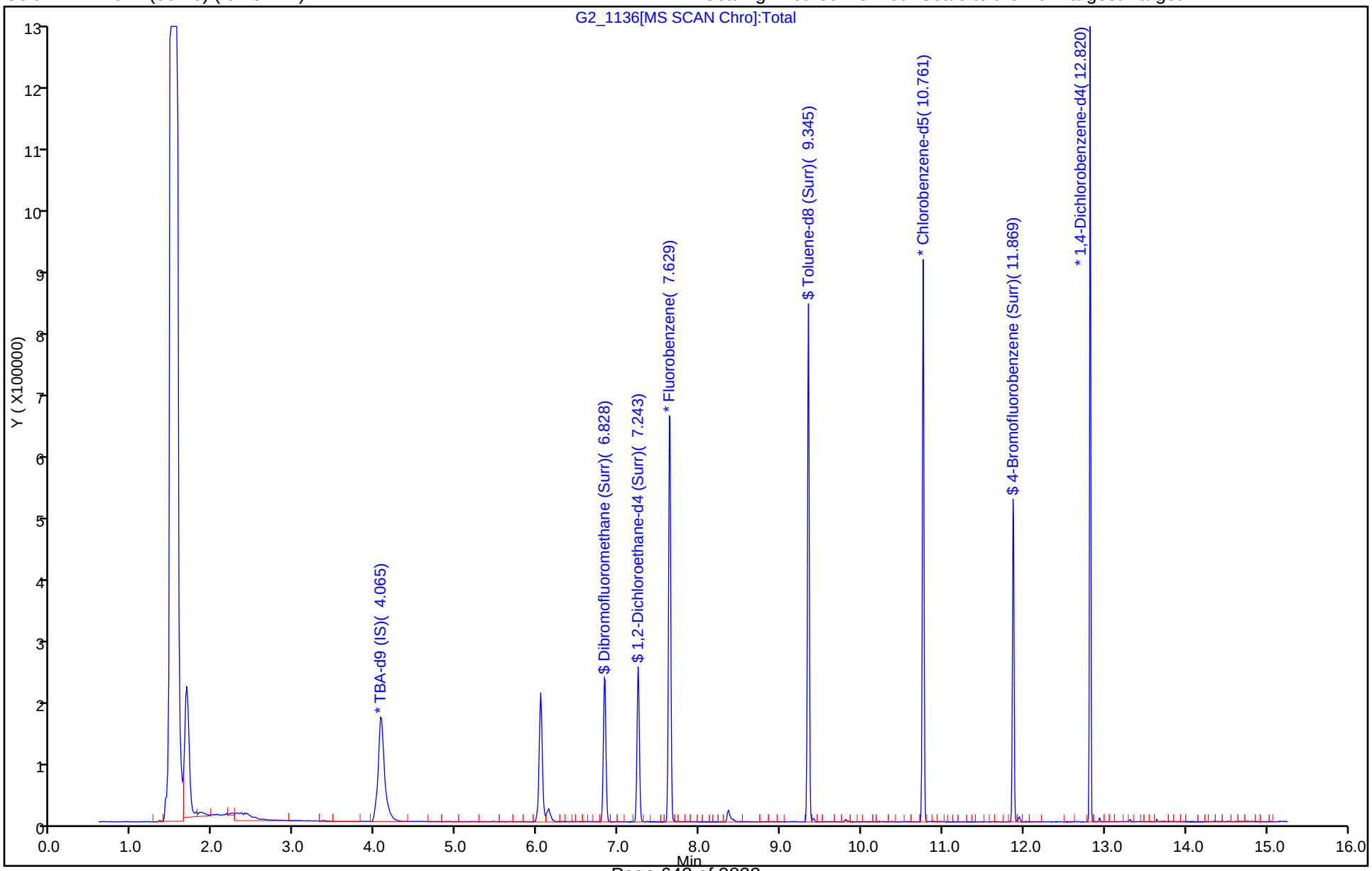
Report Date: 18-Jun-2017 12:35:42 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1136.D

Injection Date:	16-Jun-2017 19:29:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97928-B-2-A	Lab Sample ID:	280-97928-2	Worklist Smp#:	28
Client ID:	SS025-TB02				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1136.D
Lims ID: 280-97928-B-2-A
Client ID: SS025-TB02
Sample Type: Client
Inject. Date: 16-Jun-2017 19:29:30 ALS Bottle#: 31 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-b-2-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:28:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	47.6	112.10
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	45.2	106.37
$ 10 Toluene-d8 (Surr)	42.5	41.2	96.98
$ 11 4-Bromofluorobenzene (Surr)	42.5	39.4	92.80

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(0-2) | Lab Sample ID: 280-97928-3

Matrix: Solid | Lab File ID: G2_1137.D

Analysis Method: 8260B | Date Collected: 06/05/2017 08:35

Sample wt/vol: 5.427(g) | Date Analyzed: 06/16/2017 19:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 9.7 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.6	U	5.1	1.6	0.57
71-55-6	1,1,1-Trichloroethane	1.6	U	5.1	1.6	0.53
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U	5.1	1.6	0.62
79-00-5	1,1,2-Trichloroethane	3.3	U	5.1	3.3	0.90
75-34-3	1,1-Dichloroethane	0.82	U	5.1	0.82	0.21
75-35-4	1,1-Dichloroethene	1.6	U	5.1	1.6	0.60
563-58-6	1,1-Dichloropropene	1.6	U	5.1	1.6	0.55
87-61-6	1,2,3-Trichlorobenzene	1.6	U	5.1	1.6	0.77
96-18-4	1,2,3-Trichloropropane	3.3	U	5.1	3.3	0.83
120-82-1	1,2,4-Trichlorobenzene	1.6	U	5.1	1.6	0.74
95-63-6	1,2,4-Trimethylbenzene	1.6	U	5.1	1.6	0.59
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	10	1.6	0.61
106-93-4	1,2-Dibromoethane	1.6	U	5.1	1.6	0.53
95-50-1	1,2-Dichlorobenzene	1.6	U	5.1	1.6	0.46
107-06-2	1,2-Dichloroethane	1.6	U	5.1	1.6	0.71
540-59-0	1,2-Dichloroethene, Total	1.6	U	5.1	1.6	0.40
78-87-5	1,2-Dichloropropane	1.6	U	5.1	1.6	0.56
108-67-8	1,3,5-Trimethylbenzene	1.6	U	5.1	1.6	0.58
541-73-1	1,3-Dichlorobenzene	1.6	U	5.1	1.6	0.49
142-28-9	1,3-Dichloropropane	1.6	U	5.1	1.6	0.52
106-46-7	1,4-Dichlorobenzene	1.6	U	5.1	1.6	0.80
594-20-7	2,2-Dichloropropane	1.6	U	5.1	1.6	0.45
78-93-3	2-Butanone (MEK)	6.5	U	20	6.5	1.9
95-49-8	2-Chlorotoluene	1.6	U	5.1	1.6	0.52
591-78-6	2-Hexanone	13	U Q	20	13	5.0
106-43-4	4-Chlorotoluene	1.6	U	5.1	1.6	0.80
99-87-6	4-Isopropyltoluene	1.6	U	5.1	1.6	0.50
108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	20	13	4.4
67-64-1	Acetone	13	U Q	20	13	5.5
71-43-2	Benzene	1.6	U	5.1	1.6	0.48
108-86-1	Bromobenzene	1.6	U	5.1	1.6	0.50
74-97-5	Bromochloromethane	0.82	U	5.1	0.82	0.31
75-27-4	Bromodichloromethane	0.82	U	5.1	0.82	0.22
75-25-2	Bromoform	0.82	U	5.1	0.82	0.23
74-83-9	Bromomethane	1.6	U	10	1.6	0.51
75-15-0	Carbon disulfide	1.6	U	5.1	1.6	0.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(0-2) | Lab Sample ID: 280-97928-3

Matrix: Solid | Lab File ID: G2_1137.D

Analysis Method: 8260B | Date Collected: 06/05/2017 08:35

Sample wt/vol: 5.427(g) | Date Analyzed: 06/16/2017 19:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 9.7 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.6	U	5.1	1.6	0.64
108-90-7	Chlorobenzene	1.6	U	5.1	1.6	0.55
75-00-3	Chloroethane	3.3	U	10	3.3	0.91
67-66-3	Chloroform	0.82	U	10	0.82	0.30
74-87-3	Chloromethane	1.6	U	10	1.6	0.79
156-59-2	cis-1,2-Dichloroethene	1.6	U	5.1	1.6	0.57
10061-01-5	cis-1,3-Dichloropropene	3.3	U	5.1	3.3	1.3
124-48-1	Dibromochloromethane	1.6	U	5.1	1.6	0.58
74-95-3	Dibromomethane	3.3	U	5.1	3.3	0.86
75-71-8	Dichlorodifluoromethane	1.6	U Q	10	1.6	0.53
100-41-4	Ethylbenzene	1.6	U	5.1	1.6	0.68
87-68-3	Hexachlorobutadiene	1.6	U	5.1	1.6	0.56
108-20-3	Isopropyl ether	8.2	U	51	8.2	2.8
98-82-8	Isopropylbenzene	1.6	U	5.1	1.6	0.60
179601-23-1	m&p-Xylene	3.3	U	3.3	3.3	1.1
74-88-4	Methyl iodide	1.6	U	5.1	1.6	0.45
1634-04-4	Methyl tert-butyl ether	0.82	U	20	0.82	0.35
75-09-2	Methylene Chloride	3.3	U	5.1	3.3	1.6
91-20-3	Naphthalene	1.6	U	5.1	1.6	0.64
104-51-8	n-Butylbenzene	1.6	U	5.1	1.6	0.57
103-65-1	N-Propylbenzene	1.6	U	5.1	1.6	0.59
95-47-6	o-Xylene	1.6	U	5.1	1.6	0.62
135-98-8	sec-Butylbenzene	1.6	U	5.1	1.6	0.79
100-42-5	Styrene	1.6	U	5.1	1.6	0.64
98-06-6	tert-Butylbenzene	1.6	U	5.1	1.6	0.51
127-18-4	Tetrachloroethene	1.6	U	5.1	1.6	0.60
108-88-3	Toluene	1.6	U	5.1	1.6	0.70
156-60-5	trans-1,2-Dichloroethene	0.82	U	5.1	0.82	0.40
10061-02-6	trans-1,3-Dichloropropene	1.6	U	5.1	1.6	0.68
79-01-6	Trichloroethene	0.82	U	5.1	0.82	0.23
75-69-4	Trichlorofluoromethane	3.3	U	10	3.3	1.1
108-05-4	Vinyl acetate	3.3	U	10	3.3	1.1
75-01-4	Vinyl chloride	3.3	U	5.1	3.3	1.4
1330-20-7	Xylenes (total)	1.0	U	10	1.0	0.62

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(0-2) | Lab Sample ID: 280-97928-3

Matrix: Solid | Lab File ID: G2_1137.D

Analysis Method: 8260B | Date Collected: 06/05/2017 08:35

Sample wt/vol: 5.427(g) | Date Analyzed: 06/16/2017 19:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 9.7 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		71-136
460-00-4	4-Bromofluorobenzene (Surr)	96		79-119
1868-53-7	Dibromofluoromethane (Surr)	103		78-119
2037-26-5	Toluene-d8 (Surr)	93		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1137.D
Lims ID: 280-97928-E-3-A
Client ID: SS025-SB06(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 19:50:30 ALS Bottle#: 32 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-3-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:28:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	91	347002	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	604105	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	134427	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	194160	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.829	6.829	0.000	93	157755	43.6	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	208604	42.3	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	456372	39.7	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	129199	40.8	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.705				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.668				ND	
43 Trichlorofluoromethane	101		2.710				ND	
42 Ethanol	45		2.906				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353				ND	
50 Acetone	43		3.353				ND	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.894				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.213				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.457				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
78 Chloroform	83		6.621				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.014				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.450				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
95 Dibromomethane	93		8.423				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.842				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.071				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593				ND	
140 1,3,5-Trichlorobenzene	180		13.707				ND	
141 1,2,4-Trichlorobenzene	180		14.129				ND	
142 Hexachlorobutadiene	225		14.215				ND	
143 Naphthalene	128		14.315				ND	
144 1,2,3-Trichlorobenzene	180		14.472				ND	
26 3-Methylhexane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

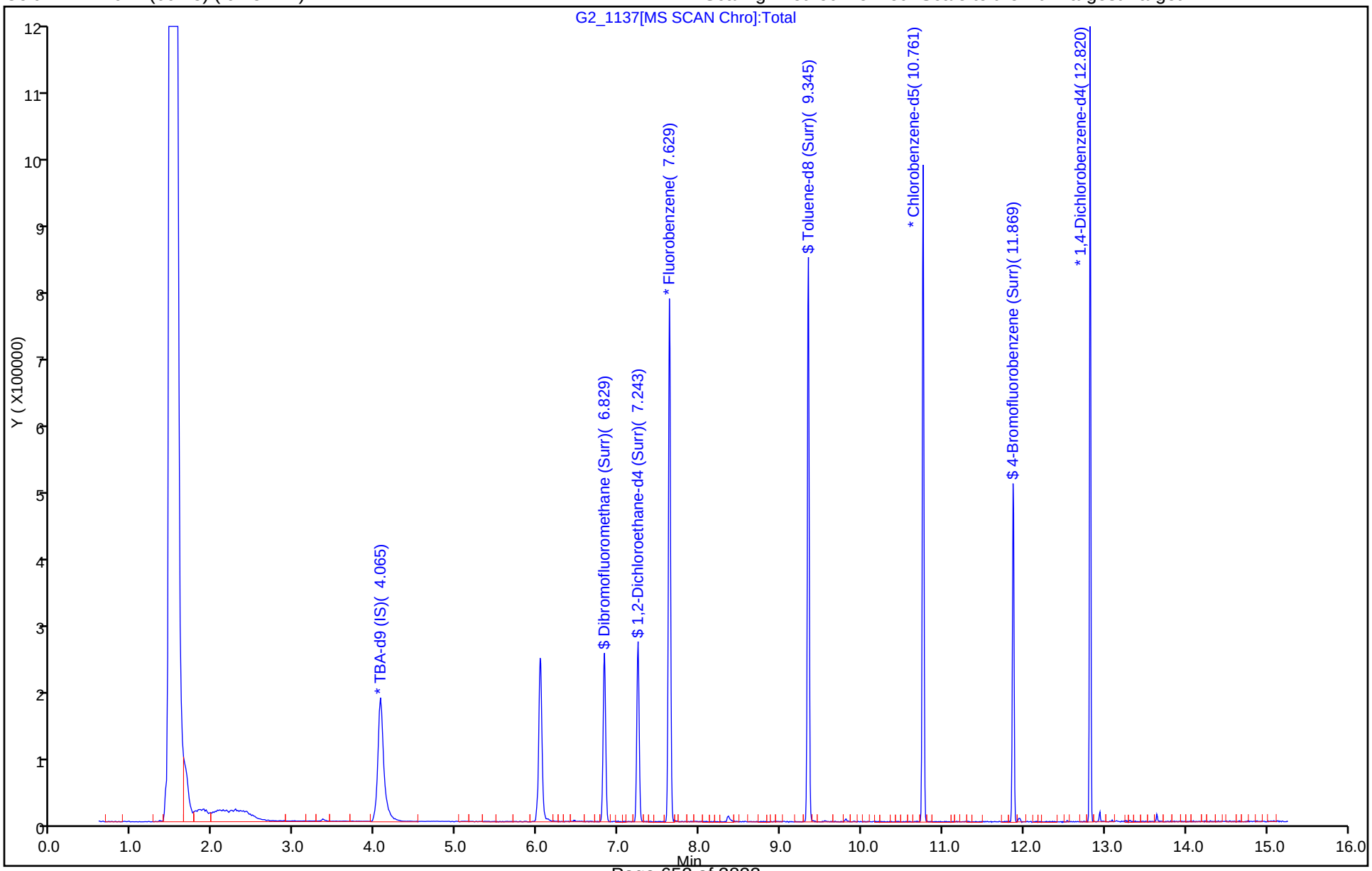
Report Date: 18-Jun-2017 12:35:44 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1137.D

Injection Date:	16-Jun-2017 19:50:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97928-E-3-A	Lab Sample ID:	280-97928-3	Worklist Smp#:	29
Client ID:	SS025-SB06(0-2)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1137.D
Lims ID: 280-97928-E-3-A
Client ID: SS025-SB06(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 19:50:30 ALS Bottle#: 32 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-3-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:28:37

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	43.6	102.65
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	42.3	99.50
$ 10 Toluene-d8 (Surr)	42.5	39.7	93.40
$ 11 4-Bromofluorobenzene (Surr)	42.5	40.8	95.99

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(2-4) | Lab Sample ID: 280-97928-4

Matrix: Solid | Lab File ID: G2_1138.D

Analysis Method: 8260B | Date Collected: 06/05/2017 08:50

Sample wt/vol: 5.703(g) | Date Analyzed: 06/16/2017 20:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 12.2 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.6	U	5.0	1.6	0.56
71-55-6	1,1,1-Trichloroethane	1.6	U	5.0	1.6	0.52
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U	5.0	1.6	0.61
79-00-5	1,1,2-Trichloroethane	3.2	U	5.0	3.2	0.88
75-34-3	1,1-Dichloroethane	0.80	U	5.0	0.80	0.21
75-35-4	1,1-Dichloroethene	1.6	U	5.0	1.6	0.59
563-58-6	1,1-Dichloropropene	1.6	U	5.0	1.6	0.54
87-61-6	1,2,3-Trichlorobenzene	1.6	U	5.0	1.6	0.75
96-18-4	1,2,3-Trichloropropane	3.2	U	5.0	3.2	0.81
120-82-1	1,2,4-Trichlorobenzene	1.6	U	5.0	1.6	0.73
95-63-6	1,2,4-Trimethylbenzene	1.6	U	5.0	1.6	0.58
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	10	1.6	0.60
106-93-4	1,2-Dibromoethane	1.6	U	5.0	1.6	0.52
95-50-1	1,2-Dichlorobenzene	1.6	U	5.0	1.6	0.45
107-06-2	1,2-Dichloroethane	1.6	U	5.0	1.6	0.70
540-59-0	1,2-Dichloroethene, Total	1.6	U	5.0	1.6	0.39
78-87-5	1,2-Dichloropropane	1.6	U	5.0	1.6	0.55
108-67-8	1,3,5-Trimethylbenzene	1.6	U	5.0	1.6	0.57
541-73-1	1,3-Dichlorobenzene	1.6	U	5.0	1.6	0.48
142-28-9	1,3-Dichloropropane	1.6	U	5.0	1.6	0.51
106-46-7	1,4-Dichlorobenzene	1.6	U	5.0	1.6	0.78
594-20-7	2,2-Dichloropropane	1.6	U	5.0	1.6	0.44
78-93-3	2-Butanone (MEK)	6.4	U	20	6.4	1.8
95-49-8	2-Chlorotoluene	1.6	U	5.0	1.6	0.51
591-78-6	2-Hexanone	13	U Q	20	13	4.9
106-43-4	4-Chlorotoluene	1.6	U	5.0	1.6	0.78
99-87-6	4-Isopropyltoluene	1.6	U	5.0	1.6	0.49
108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	20	13	4.4
67-64-1	Acetone	13	U Q	20	13	5.4
71-43-2	Benzene	1.6	U	5.0	1.6	0.47
108-86-1	Bromobenzene	1.6	U	5.0	1.6	0.49
74-97-5	Bromochloromethane	0.80	U	5.0	0.80	0.30
75-27-4	Bromodichloromethane	0.80	U	5.0	0.80	0.22
75-25-2	Bromoform	0.80	U	5.0	0.80	0.23
74-83-9	Bromomethane	1.6	U	10	1.6	0.50
75-15-0	Carbon disulfide	1.6	U	5.0	1.6	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(2-4) | Lab Sample ID: 280-97928-4

Matrix: Solid | Lab File ID: G2_1138.D

Analysis Method: 8260B | Date Collected: 06/05/2017 08:50

Sample wt/vol: 5.703(g) | Date Analyzed: 06/16/2017 20:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 12.2 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.6	U	5.0	1.6	0.63
108-90-7	Chlorobenzene	1.6	U	5.0	1.6	0.54
75-00-3	Chloroethane	3.2	U	10	3.2	0.89
67-66-3	Chloroform	0.80	U	10	0.80	0.29
74-87-3	Chloromethane	1.6	U	10	1.6	0.77
156-59-2	cis-1,2-Dichloroethene	1.6	U	5.0	1.6	0.56
10061-01-5	cis-1,3-Dichloropropene	3.2	U	5.0	3.2	1.3
124-48-1	Dibromochloromethane	1.6	U	5.0	1.6	0.57
74-95-3	Dibromomethane	3.2	U	5.0	3.2	0.84
75-71-8	Dichlorodifluoromethane	1.6	U Q	10	1.6	0.52
100-41-4	Ethylbenzene	1.6	U	5.0	1.6	0.67
87-68-3	Hexachlorobutadiene	1.6	U	5.0	1.6	0.55
108-20-3	Isopropyl ether	8.0	U	50	8.0	2.7
98-82-8	Isopropylbenzene	1.6	U	5.0	1.6	0.59
179601-23-1	m&p-Xylene	3.2	U	3.2	3.2	1.0
74-88-4	Methyl iodide	1.6	U	5.0	1.6	0.44
1634-04-4	Methyl tert-butyl ether	0.80	U	20	0.80	0.34
75-09-2	Methylene Chloride	3.2	U	5.0	3.2	1.6
91-20-3	Naphthalene	1.6	U	5.0	1.6	0.63
104-51-8	n-Butylbenzene	1.6	U	5.0	1.6	0.56
103-65-1	N-Propylbenzene	1.6	U	5.0	1.6	0.58
95-47-6	o-Xylene	1.6	U	5.0	1.6	0.61
135-98-8	sec-Butylbenzene	1.6	U	5.0	1.6	0.77
100-42-5	Styrene	1.6	U	5.0	1.6	0.63
98-06-6	tert-Butylbenzene	1.6	U	5.0	1.6	0.50
127-18-4	Tetrachloroethene	1.6	U	5.0	1.6	0.59
108-88-3	Toluene	1.6	U	5.0	1.6	0.69
156-60-5	trans-1,2-Dichloroethene	0.80	U	5.0	0.80	0.39
10061-02-6	trans-1,3-Dichloropropene	1.6	U	5.0	1.6	0.67
79-01-6	Trichloroethene	0.80	U	5.0	0.80	0.23
75-69-4	Trichlorofluoromethane	3.2	U	10	3.2	1.0
108-05-4	Vinyl acetate	3.2	U	10	3.2	1.1
75-01-4	Vinyl chloride	3.2	U	5.0	3.2	1.3
1330-20-7	Xylenes (total)	1.0	U	10	1.0	0.61

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(2-4) | Lab Sample ID: 280-97928-4

Matrix: Solid | Lab File ID: G2_1138.D

Analysis Method: 8260B | Date Collected: 06/05/2017 08:50

Sample wt/vol: 5.703(g) | Date Analyzed: 06/16/2017 20:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 12.2 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		71-136
460-00-4	4-Bromofluorobenzene (Surr)	89		79-119
1868-53-7	Dibromofluoromethane (Surr)	105		78-119
2037-26-5	Toluene-d8 (Surr)	93		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1138.D
Lims ID: 280-97928-E-4-A
Client ID: SS025-SB06(2-4)
Sample Type: Client
Inject. Date: 16-Jun-2017 20:11:30 ALS Bottle#: 33 Worklist Smp#: 30
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-4-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:28:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	91	426210	1000.0	
* 3 Fluorobenzene	96	7.636	7.629	0.007	98	623673	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	143026	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	242225	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.829	6.829	-0.001	93	166688	44.7	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	220387	43.4	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	481714	39.4	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	92	149299	37.8	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.705				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.668				ND	
43 Trichlorofluoromethane	101		2.710				ND	
42 Ethanol	45		2.906				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353				ND	
50 Acetone	43		3.353				ND	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.894				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.213				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.457				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
78 Chloroform	83		6.621				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.014				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.450				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
95 Dibromomethane	93		8.423				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.842				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.071				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593				ND	
140 1,3,5-Trichlorobenzene	180		13.707				ND	
141 1,2,4-Trichlorobenzene	180		14.129				ND	
142 Hexachlorobutadiene	225		14.215				ND	
143 Naphthalene	128		14.315				ND	
144 1,2,3-Trichlorobenzene	180		14.472				ND	
26 3-Methylhexane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

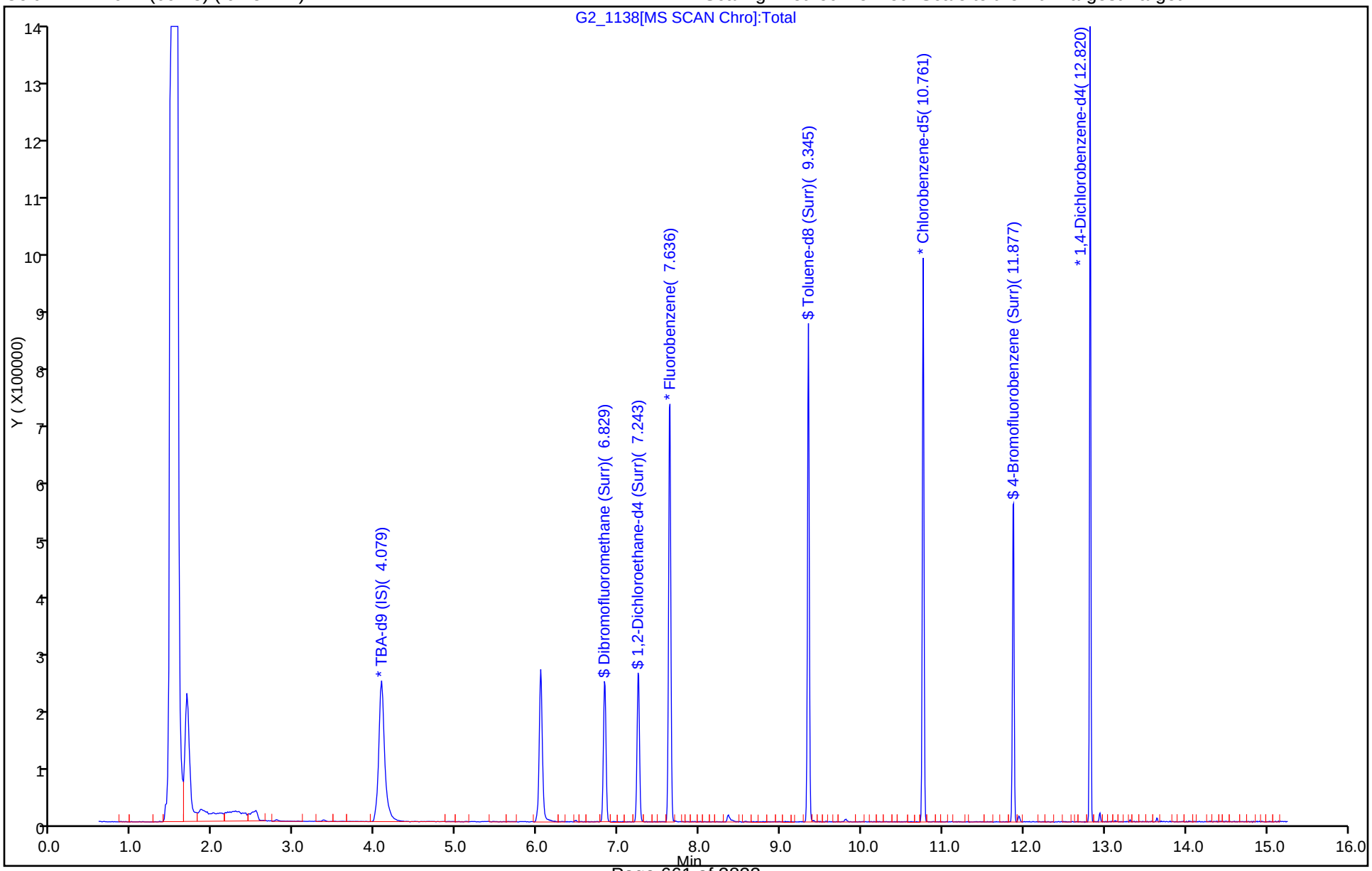
Report Date: 18-Jun-2017 12:35:46 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1138.D

Injection Date:	16-Jun-2017 20:11:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97928-E-4-A	Lab Sample ID:	280-97928-4	Worklist Smp#:	30
Client ID:	SS025-SB06(2-4)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1138.D
Lims ID: 280-97928-E-4-A
Client ID: SS025-SB06(2-4)
Sample Type: Client
Inject. Date: 16-Jun-2017 20:11:30 ALS Bottle#: 33 Worklist Smp#: 30
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-4-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:28:49

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	44.7	105.26
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	43.4	102.05
$ 10 Toluene-d8 (Surr)	42.5	39.4	92.66
$ 11 4-Bromofluorobenzene (Surr)	42.5	37.8	88.91

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS08 | Lab Sample ID: 280-97928-5

Matrix: Solid | Lab File ID: G2_1139.D

Analysis Method: 8260B | Date Collected: 06/05/2017 09:35

Sample wt/vol: 6.802(g) | Date Analyzed: 06/16/2017 20:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.2 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.4	U	4.2	1.4	0.47
71-55-6	1,1,1-Trichloroethane	1.4	U	4.2	1.4	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.4	U	4.2	1.4	0.52
79-00-5	1,1,2-Trichloroethane	2.7	U	4.2	2.7	0.74
75-34-3	1,1-Dichloroethane	0.68	U	4.2	0.68	0.18
75-35-4	1,1-Dichloroethene	1.4	U	4.2	1.4	0.50
563-58-6	1,1-Dichloropropene	1.4	U	4.2	1.4	0.46
87-61-6	1,2,3-Trichlorobenzene	1.4	U	4.2	1.4	0.63
96-18-4	1,2,3-Trichloropropane	2.7	U	4.2	2.7	0.69
120-82-1	1,2,4-Trichlorobenzene	1.4	U	4.2	1.4	0.62
95-63-6	1,2,4-Trimethylbenzene	1.4	U	4.2	1.4	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	1.4	U	8.5	1.4	0.51
106-93-4	1,2-Dibromoethane	1.4	U	4.2	1.4	0.44
95-50-1	1,2-Dichlorobenzene	1.4	U	4.2	1.4	0.38
107-06-2	1,2-Dichloroethane	1.4	U	4.2	1.4	0.59
540-59-0	1,2-Dichloroethene, Total	1.4	U	4.2	1.4	0.33
78-87-5	1,2-Dichloropropane	1.4	U	4.2	1.4	0.47
108-67-8	1,3,5-Trimethylbenzene	1.4	U	4.2	1.4	0.48
541-73-1	1,3-Dichlorobenzene	1.4	U	4.2	1.4	0.41
142-28-9	1,3-Dichloropropane	1.4	U	4.2	1.4	0.43
106-46-7	1,4-Dichlorobenzene	1.4	U	4.2	1.4	0.66
594-20-7	2,2-Dichloropropane	1.4	U	4.2	1.4	0.37
78-93-3	2-Butanone (MEK)	5.4	U	17	5.4	1.5
95-49-8	2-Chlorotoluene	1.4	U	4.2	1.4	0.43
591-78-6	2-Hexanone	11	U Q	17	11	4.1
106-43-4	4-Chlorotoluene	1.4	U	4.2	1.4	0.66
99-87-6	4-Isopropyltoluene	1.6	J	4.2	1.4	0.41
108-10-1	4-Methyl-2-pentanone (MIBK)	11	U	17	11	3.7
67-64-1	Acetone	7.8	J B Q	17	11	4.6
71-43-2	Benzene	1.4	U	4.2	1.4	0.40
108-86-1	Bromobenzene	1.4	U	4.2	1.4	0.41
74-97-5	Bromochloromethane	0.68	U	4.2	0.68	0.25
75-27-4	Bromodichloromethane	0.68	U	4.2	0.68	0.19
75-25-2	Bromoform	0.68	U	4.2	0.68	0.19
74-83-9	Bromomethane	1.4	U	8.5	1.4	0.42
75-15-0	Carbon disulfide	1.4	U	4.2	1.4	0.36

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS08 | Lab Sample ID: 280-97928-5

Matrix: Solid | Lab File ID: G2_1139.D

Analysis Method: 8260B | Date Collected: 06/05/2017 09:35

Sample wt/vol: 6.802(g) | Date Analyzed: 06/16/2017 20:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.2 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.4	U	4.2	1.4	0.53
108-90-7	Chlorobenzene	1.4	U	4.2	1.4	0.46
75-00-3	Chloroethane	2.7	U	8.5	2.7	0.75
67-66-3	Chloroform	0.68	U	8.5	0.68	0.25
74-87-3	Chloromethane	1.4	U	8.5	1.4	0.65
156-59-2	cis-1,2-Dichloroethene	1.4	U	4.2	1.4	0.47
10061-01-5	cis-1,3-Dichloropropene	2.7	U	4.2	2.7	1.1
124-48-1	Dibromochloromethane	1.4	U	4.2	1.4	0.48
74-95-3	Dibromomethane	2.7	U	4.2	2.7	0.71
75-71-8	Dichlorodifluoromethane	1.4	U Q	8.5	1.4	0.44
100-41-4	Ethylbenzene	1.4	U	4.2	1.4	0.57
87-68-3	Hexachlorobutadiene	1.4	U	4.2	1.4	0.47
108-20-3	Isopropyl ether	6.8	U	42	6.8	2.3
98-82-8	Isopropylbenzene	1.4	U	4.2	1.4	0.50
179601-23-1	m&p-Xylene	2.7	U	2.7	2.7	0.88
74-88-4	Methyl iodide	1.4	U	4.2	1.4	0.37
1634-04-4	Methyl tert-butyl ether	0.68	U	17	0.68	0.29
75-09-2	Methylene Chloride	2.7	U	4.2	2.7	1.4
91-20-3	Naphthalene	1.4	U	4.2	1.4	0.53
104-51-8	n-Butylbenzene	1.4	U	4.2	1.4	0.47
103-65-1	N-Propylbenzene	1.4	U	4.2	1.4	0.49
95-47-6	o-Xylene	1.4	U	4.2	1.4	0.52
135-98-8	sec-Butylbenzene	1.4	U	4.2	1.4	0.65
100-42-5	Styrene	1.4	U	4.2	1.4	0.53
98-06-6	tert-Butylbenzene	1.4	U	4.2	1.4	0.42
127-18-4	Tetrachloroethene	1.4	U	4.2	1.4	0.50
108-88-3	Toluene	1.4	U	4.2	1.4	0.58
156-60-5	trans-1,2-Dichloroethene	0.68	U	4.2	0.68	0.33
10061-02-6	trans-1,3-Dichloropropene	1.4	U	4.2	1.4	0.57
79-01-6	Trichloroethene	0.68	U	4.2	0.68	0.19
75-69-4	Trichlorofluoromethane	2.7	U	8.5	2.7	0.88
108-05-4	Vinyl acetate	2.7	U	8.5	2.7	0.91
75-01-4	Vinyl chloride	2.7	U	4.2	2.7	1.1
1330-20-7	Xylenes (total)	0.85	U	8.5	0.85	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS08 | Lab Sample ID: 280-97928-5

Matrix: Solid | Lab File ID: G2_1139.D

Analysis Method: 8260B | Date Collected: 06/05/2017 09:35

Sample wt/vol: 6.802(g) | Date Analyzed: 06/16/2017 20:32

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.2 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		71-136
460-00-4	4-Bromofluorobenzene (Surr)	98		79-119
1868-53-7	Dibromofluoromethane (Surr)	113		78-119
2037-26-5	Toluene-d8 (Surr)	98		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1139.D
Lims ID: 280-97928-E-5-A
Client ID: SS025-SB08
Sample Type: Client
Inject. Date: 16-Jun-2017 20:32:30 ALS Bottle#: 34 Worklist Smp#: 31
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-5-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:29:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	90	383533	1000.0	
* 3 Fluorobenzene	96	7.637	7.629	0.007	98	573273	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	89	130247	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	300981	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.829	6.829	0.000	92	163340	47.9	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	225179	48.7	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	463249	41.6	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	205450	41.8	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.705				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.668				ND	
43 Trichlorofluoromethane	101		2.710				ND	
42 Ethanol	45		2.906				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353				ND	
50 Acetone	43	3.367	3.353	0.014	98	14978	9.16	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.894				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.213				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.457				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
78 Chloroform	83		6.621				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.014				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.450				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
95 Dibromomethane	93		8.423				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	9804	1.84	
136 1,4-Dichlorobenzene	146		12.842				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.071				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593				ND	
140 1,3,5-Trichlorobenzene	180		13.707				ND	
141 1,2,4-Trichlorobenzene	180		14.129				ND	
142 Hexachlorobutadiene	225		14.215				ND	
143 Naphthalene	128		14.315				ND	
144 1,2,3-Trichlorobenzene	180		14.472				ND	
26 3-Methylhexane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

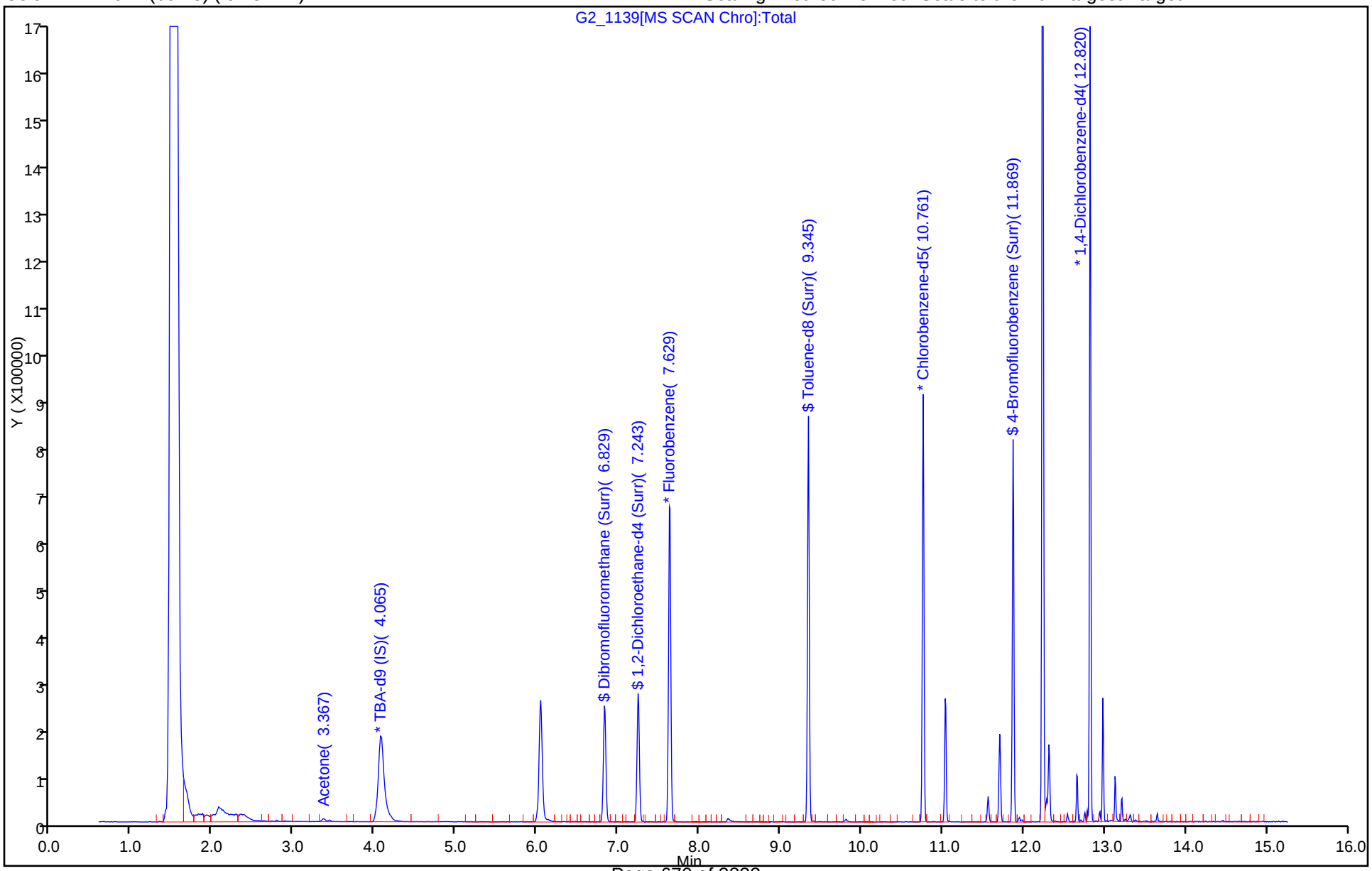
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1139.D

Injection Date:	16-Jun-2017 20:32:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97928-E-5-A	Lab Sample ID:	280-97928-5	Worklist Smp#:	31
Client ID:	SS025-SB08				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1139.D
Lims ID: 280-97928-E-5-A
Client ID: SS025-SB08
Sample Type: Client
Inject. Date: 16-Jun-2017 20:32:30 ALS Bottle#: 34 Worklist Smp#: 31
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-5-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:29:31

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	47.9	112.80
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	48.7	114.53
$ 10 Toluene-d8 (Surr)	42.5	41.6	97.85
$ 11 4-Bromofluorobenzene (Surr)	42.5	41.8	98.47

Report Date: 18-Jun-2017 12:35:48 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1139.D

Injection Date: 16-Jun-2017 20:32:30 Instrument ID: VMS_G2

Lims ID: 280-97928-E-5-A Lab Sample ID: 280-97928-5

Client ID: SS025-SB08

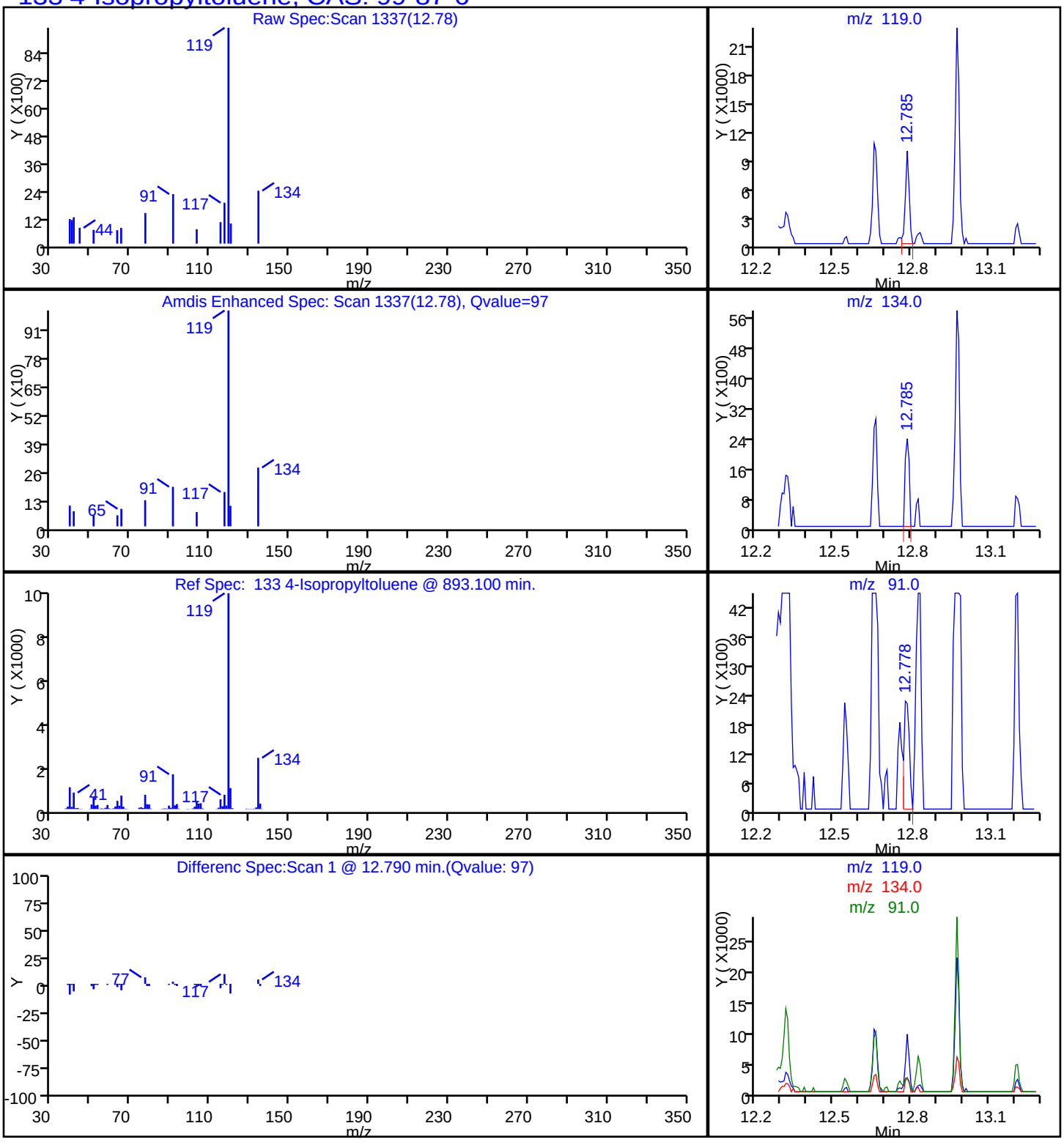
Operator ID: DUKESA ALS Bottle#: 34 Worklist Smp#: 31

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

133 4-Isopropyltoluene, CAS: 99-87-6



Report Date: 18-Jun-2017 12:35:48 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1139.D

Injection Date: 16-Jun-2017 20:32:30 Instrument ID: VMS_G2

Lims ID: 280-97928-E-5-A Lab Sample ID: 280-97928-5

Client ID: SS025-SB08

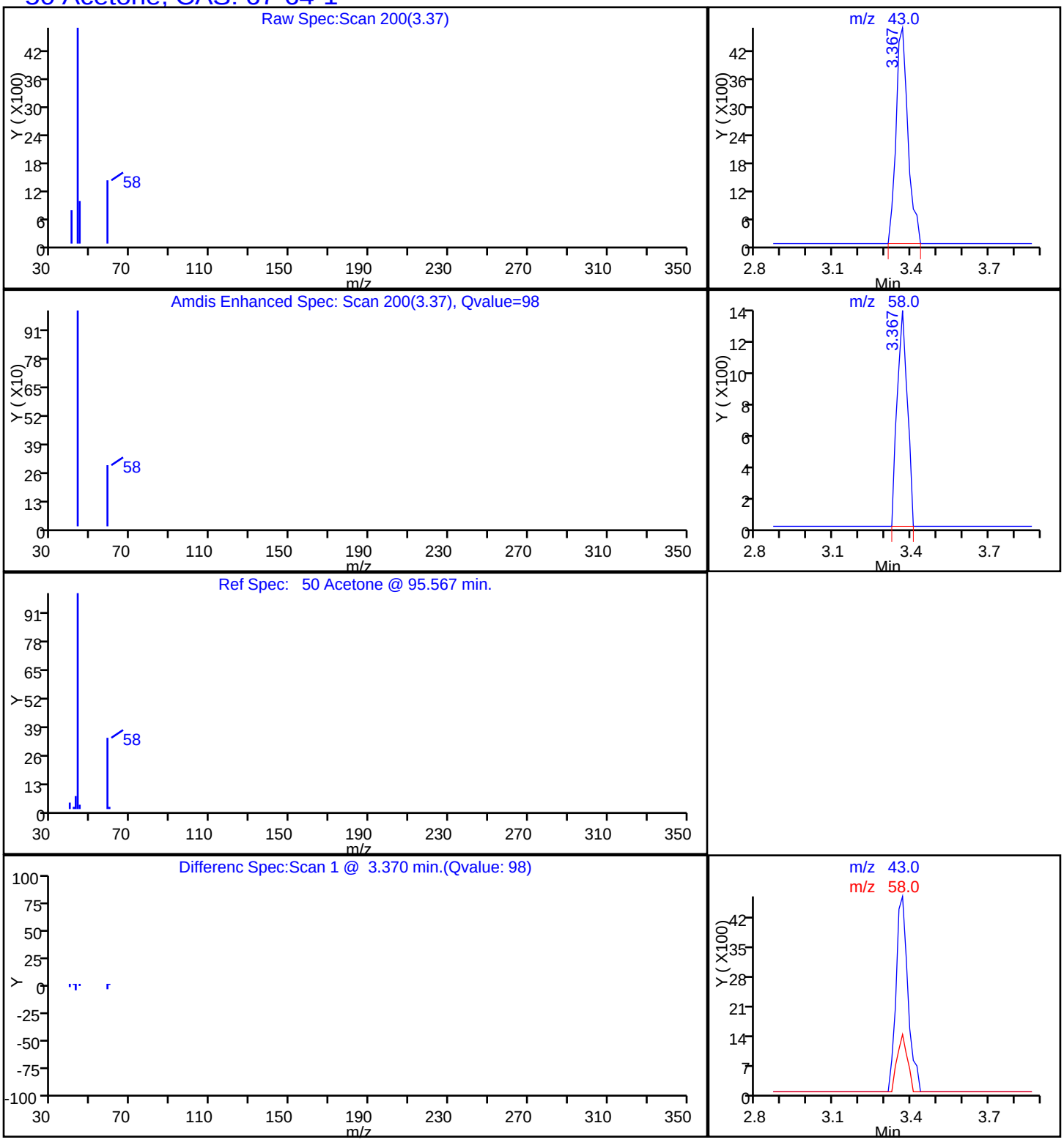
Operator ID: DUKESA ALS Bottle#: 34 Worklist Smp#: 31

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

50 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB07(0-2) | Lab Sample ID: 280-97928-6

Matrix: Solid | Lab File ID: G2_1140.D

Analysis Method: 8260B | Date Collected: 06/05/2017 09:45

Sample wt/vol: 5.449(g) | Date Analyzed: 06/16/2017 20:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 12.9 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.7	U	5.3	1.7	0.59
71-55-6	1,1,1-Trichloroethane	1.7	U	5.3	1.7	0.55
79-34-5	1,1,2,2-Tetrachloroethane	1.7	U	5.3	1.7	0.64
79-00-5	1,1,2-Trichloroethane	3.4	U	5.3	3.4	0.93
75-34-3	1,1-Dichloroethane	0.84	U	5.3	0.84	0.22
75-35-4	1,1-Dichloroethene	1.7	U	5.3	1.7	0.62
563-58-6	1,1-Dichloropropene	1.7	U	5.3	1.7	0.57
87-61-6	1,2,3-Trichlorobenzene	1.7	U	5.3	1.7	0.79
96-18-4	1,2,3-Trichloropropane	3.4	U	5.3	3.4	0.85
120-82-1	1,2,4-Trichlorobenzene	1.7	U	5.3	1.7	0.77
95-63-6	1,2,4-Trimethylbenzene	1.7	U	5.3	1.7	0.61
96-12-8	1,2-Dibromo-3-Chloropropane	1.7	U	11	1.7	0.63
106-93-4	1,2-Dibromoethane	1.7	U	5.3	1.7	0.55
95-50-1	1,2-Dichlorobenzene	1.7	U	5.3	1.7	0.47
107-06-2	1,2-Dichloroethane	1.7	U	5.3	1.7	0.74
540-59-0	1,2-Dichloroethene, Total	1.7	U	5.3	1.7	0.41
78-87-5	1,2-Dichloropropane	1.7	U	5.3	1.7	0.58
108-67-8	1,3,5-Trimethylbenzene	1.7	U	5.3	1.7	0.60
541-73-1	1,3-Dichlorobenzene	1.7	U	5.3	1.7	0.51
142-28-9	1,3-Dichloropropane	1.7	U	5.3	1.7	0.54
106-46-7	1,4-Dichlorobenzene	1.7	U	5.3	1.7	0.82
594-20-7	2,2-Dichloropropane	1.7	U	5.3	1.7	0.46
78-93-3	2-Butanone (MEK)	6.7	U	21	6.7	1.9
95-49-8	2-Chlorotoluene	1.7	U	5.3	1.7	0.54
591-78-6	2-Hexanone	13	U Q	21	13	5.2
106-43-4	4-Chlorotoluene	1.7	U	5.3	1.7	0.82
99-87-6	4-Isopropyltoluene	1.7	U	5.3	1.7	0.52
108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	21	13	4.6
67-64-1	Acetone	13	U Q	21	13	5.7
71-43-2	Benzene	1.7	U	5.3	1.7	0.50
108-86-1	Bromobenzene	1.7	U	5.3	1.7	0.52
74-97-5	Bromochloromethane	0.84	U	5.3	0.84	0.32
75-27-4	Bromodichloromethane	0.84	U	5.3	0.84	0.23
75-25-2	Bromoform	0.84	U	5.3	0.84	0.24
74-83-9	Bromomethane	1.7	U	11	1.7	0.53
75-15-0	Carbon disulfide	1.7	U	5.3	1.7	0.44

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB07(0-2) | Lab Sample ID: 280-97928-6

Matrix: Solid | Lab File ID: G2_1140.D

Analysis Method: 8260B | Date Collected: 06/05/2017 09:45

Sample wt/vol: 5.449(g) | Date Analyzed: 06/16/2017 20:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 12.9 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.7	U	5.3	1.7	0.66
108-90-7	Chlorobenzene	1.7	U	5.3	1.7	0.57
75-00-3	Chloroethane	3.4	U	11	3.4	0.94
67-66-3	Chloroform	0.84	U	11	0.84	0.31
74-87-3	Chloromethane	1.7	U	11	1.7	0.81
156-59-2	cis-1,2-Dichloroethene	1.7	U	5.3	1.7	0.59
10061-01-5	cis-1,3-Dichloropropene	3.4	U	5.3	3.4	1.4
124-48-1	Dibromochloromethane	1.7	U	5.3	1.7	0.60
74-95-3	Dibromomethane	3.4	U	5.3	3.4	0.89
75-71-8	Dichlorodifluoromethane	1.7	U Q	11	1.7	0.55
100-41-4	Ethylbenzene	1.7	U	5.3	1.7	0.71
87-68-3	Hexachlorobutadiene	1.7	U	5.3	1.7	0.58
108-20-3	Isopropyl ether	8.4	U	53	8.4	2.9
98-82-8	Isopropylbenzene	1.7	U	5.3	1.7	0.62
179601-23-1	m&p-Xylene	3.4	U	3.4	3.4	1.1
74-88-4	Methyl iodide	1.7	U	5.3	1.7	0.46
1634-04-4	Methyl tert-butyl ether	0.84	U	21	0.84	0.36
75-09-2	Methylene Chloride	3.4	U	5.3	3.4	1.7
91-20-3	Naphthalene	1.7	U	5.3	1.7	0.66
104-51-8	n-Butylbenzene	1.7	U	5.3	1.7	0.59
103-65-1	N-Propylbenzene	1.7	U	5.3	1.7	0.61
95-47-6	o-Xylene	1.7	U	5.3	1.7	0.64
135-98-8	sec-Butylbenzene	1.7	U	5.3	1.7	0.81
100-42-5	Styrene	1.7	U	5.3	1.7	0.66
98-06-6	tert-Butylbenzene	1.7	U	5.3	1.7	0.53
127-18-4	Tetrachloroethene	1.7	U	5.3	1.7	0.62
108-88-3	Toluene	1.7	U	5.3	1.7	0.73
156-60-5	trans-1,2-Dichloroethene	0.84	U	5.3	0.84	0.41
10061-02-6	trans-1,3-Dichloropropene	1.7	U	5.3	1.7	0.71
79-01-6	Trichloroethene	0.84	U	5.3	0.84	0.24
75-69-4	Trichlorofluoromethane	3.4	U	11	3.4	1.1
108-05-4	Vinyl acetate	3.4	U	11	3.4	1.1
75-01-4	Vinyl chloride	3.4	U	5.3	3.4	1.4
1330-20-7	Xylenes (total)	1.1	U	11	1.1	0.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB07(0-2) | Lab Sample ID: 280-97928-6

Matrix: Solid | Lab File ID: G2_1140.D

Analysis Method: 8260B | Date Collected: 06/05/2017 09:45

Sample wt/vol: 5.449(g) | Date Analyzed: 06/16/2017 20:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 12.9 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		71-136
460-00-4	4-Bromofluorobenzene (Surr)	89		79-119
1868-53-7	Dibromofluoromethane (Surr)	101		78-119
2037-26-5	Toluene-d8 (Surr)	91		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1140.D
Lims ID: 280-97928-E-6-A
Client ID: SS025-SB07(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 20:53:30 ALS Bottle#: 35 Worklist Smp#: 32
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-6-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:29:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	90	324227	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	626839	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	142744	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	233844	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	93	161941	43.1	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	212455	41.4	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	473949	38.8	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	92	144702	37.9	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.705				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.668				ND	
43 Trichlorofluoromethane	101		2.710				ND	
42 Ethanol	45		2.906				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353				ND	
50 Acetone	43		3.353				ND	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.894				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.213				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.457				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
78 Chloroform	83		6.621				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.014				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.450				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
95 Dibromomethane	93		8.423				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.842				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.071				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593				ND	
140 1,3,5-Trichlorobenzene	180		13.707				ND	
141 1,2,4-Trichlorobenzene	180		14.129				ND	
142 Hexachlorobutadiene	225		14.215				ND	
143 Naphthalene	128		14.315				ND	
144 1,2,3-Trichlorobenzene	180		14.472				ND	
26 3-Methylhexane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

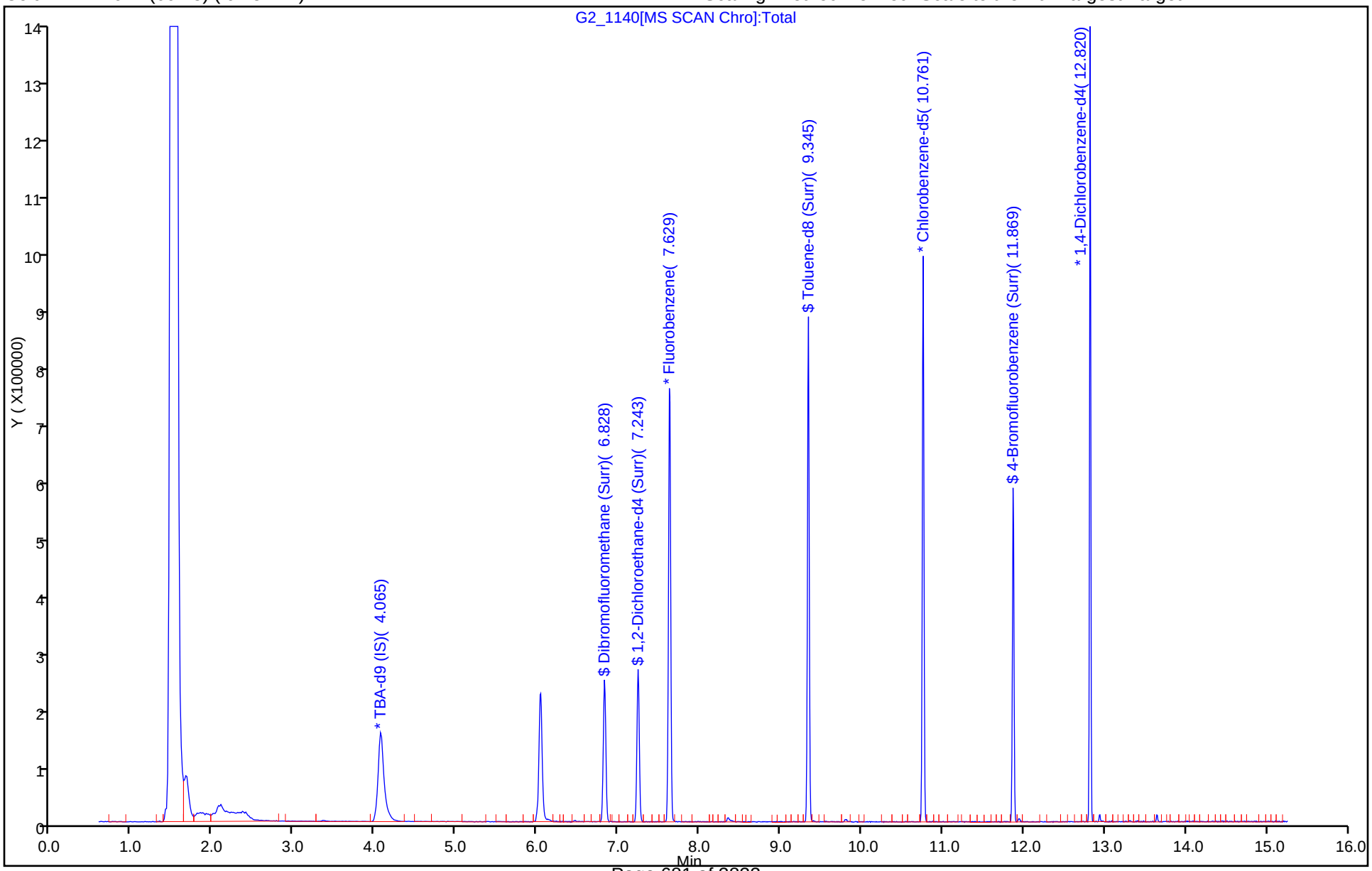
Report Date: 18-Jun-2017 12:35:51 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1140.D

Injection Date:	16-Jun-2017 20:53:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97928-E-6-A	Lab Sample ID:	280-97928-6	Worklist Smp#:	32
Client ID:	SS025-SB07(0-2)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1140.D
Lims ID: 280-97928-E-6-A
Client ID: SS025-SB07(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 20:53:30 ALS Bottle#: 35 Worklist Smp#: 32
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-6-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:29:45

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	43.1	101.45
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	41.4	97.48
$ 10 Toluene-d8 (Surr)	42.5	38.8	91.35
$ 11 4-Bromofluorobenzene (Surr)	42.5	37.9	89.26

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB07(2-4) | Lab Sample ID: 280-97928-7

Matrix: Solid | Lab File ID: G2_1141.D

Analysis Method: 8260B | Date Collected: 06/05/2017 09:55

Sample wt/vol: 6.004(g) | Date Analyzed: 06/16/2017 21:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 15.2 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.6	U	4.9	1.6	0.55
71-55-6	1,1,1-Trichloroethane	1.6	U	4.9	1.6	0.51
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U	4.9	1.6	0.60
79-00-5	1,1,2-Trichloroethane	3.1	U	4.9	3.1	0.86
75-34-3	1,1-Dichloroethane	0.79	U	4.9	0.79	0.21
75-35-4	1,1-Dichloroethene	1.6	U	4.9	1.6	0.58
563-58-6	1,1-Dichloropropene	1.6	U	4.9	1.6	0.53
87-61-6	1,2,3-Trichlorobenzene	1.6	U	4.9	1.6	0.74
96-18-4	1,2,3-Trichloropropane	3.1	U	4.9	3.1	0.80
120-82-1	1,2,4-Trichlorobenzene	1.6	U	4.9	1.6	0.72
95-63-6	1,2,4-Trimethylbenzene	1.6	U	4.9	1.6	0.57
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	9.8	1.6	0.59
106-93-4	1,2-Dibromoethane	1.6	U	4.9	1.6	0.51
95-50-1	1,2-Dichlorobenzene	1.6	U	4.9	1.6	0.44
107-06-2	1,2-Dichloroethane	1.6	U	4.9	1.6	0.69
540-59-0	1,2-Dichloroethene, Total	1.6	U	4.9	1.6	0.38
78-87-5	1,2-Dichloropropane	1.6	U	4.9	1.6	0.54
108-67-8	1,3,5-Trimethylbenzene	1.6	U	4.9	1.6	0.56
541-73-1	1,3-Dichlorobenzene	1.6	U	4.9	1.6	0.47
142-28-9	1,3-Dichloropropane	1.6	U	4.9	1.6	0.50
106-46-7	1,4-Dichlorobenzene	1.6	U	4.9	1.6	0.77
594-20-7	2,2-Dichloropropane	1.6	U	4.9	1.6	0.43
78-93-3	2-Butanone (MEK)	6.3	U	20	6.3	1.8
95-49-8	2-Chlorotoluene	1.6	U	4.9	1.6	0.50
591-78-6	2-Hexanone	13	U Q	20	13	4.8
106-43-4	4-Chlorotoluene	1.6	U	4.9	1.6	0.77
99-87-6	4-Isopropyltoluene	1.6	U	4.9	1.6	0.48
108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	20	13	4.3
67-64-1	Acetone	13	U Q	20	13	5.3
71-43-2	Benzene	1.6	U	4.9	1.6	0.46
108-86-1	Bromobenzene	1.6	U	4.9	1.6	0.48
74-97-5	Bromochloromethane	0.79	U	4.9	0.79	0.29
75-27-4	Bromodichloromethane	0.79	U	4.9	0.79	0.22
75-25-2	Bromoform	0.79	U	4.9	0.79	0.23
74-83-9	Bromomethane	1.6	U	9.8	1.6	0.49
75-15-0	Carbon disulfide	1.6	U	4.9	1.6	0.41

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB07(2-4) | Lab Sample ID: 280-97928-7

Matrix: Solid | Lab File ID: G2_1141.D

Analysis Method: 8260B | Date Collected: 06/05/2017 09:55

Sample wt/vol: 6.004(g) | Date Analyzed: 06/16/2017 21:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 15.2 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.6	U	4.9	1.6	0.62
108-90-7	Chlorobenzene	1.6	U	4.9	1.6	0.53
75-00-3	Chloroethane	3.1	U	9.8	3.1	0.87
67-66-3	Chloroform	0.79	U	9.8	0.79	0.28
74-87-3	Chloromethane	1.6	U	9.8	1.6	0.76
156-59-2	cis-1,2-Dichloroethene	1.6	U	4.9	1.6	0.55
10061-01-5	cis-1,3-Dichloropropene	3.1	U	4.9	3.1	1.3
124-48-1	Dibromochloromethane	1.6	U	4.9	1.6	0.56
74-95-3	Dibromomethane	3.1	U	4.9	3.1	0.83
75-71-8	Dichlorodifluoromethane	1.6	U Q	9.8	1.6	0.51
100-41-4	Ethylbenzene	1.6	U	4.9	1.6	0.66
87-68-3	Hexachlorobutadiene	1.6	U	4.9	1.6	0.54
108-20-3	Isopropyl ether	7.9	U	49	7.9	2.7
98-82-8	Isopropylbenzene	1.6	U	4.9	1.6	0.58
179601-23-1	m&p-Xylene	3.1	U	3.1	3.1	1.0
74-88-4	Methyl iodide	1.6	U	4.9	1.6	0.43
1634-04-4	Methyl tert-butyl ether	0.79	U	20	0.79	0.33
75-09-2	Methylene Chloride	3.1	U	4.9	3.1	1.6
91-20-3	Naphthalene	1.6	U	4.9	1.6	0.62
104-51-8	n-Butylbenzene	1.6	U	4.9	1.6	0.55
103-65-1	N-Propylbenzene	1.6	U	4.9	1.6	0.57
95-47-6	o-Xylene	1.6	U	4.9	1.6	0.60
135-98-8	sec-Butylbenzene	1.6	U	4.9	1.6	0.76
100-42-5	Styrene	1.6	U	4.9	1.6	0.62
98-06-6	tert-Butylbenzene	1.6	U	4.9	1.6	0.49
127-18-4	Tetrachloroethene	1.6	U	4.9	1.6	0.58
108-88-3	Toluene	1.6	U	4.9	1.6	0.68
156-60-5	trans-1,2-Dichloroethene	0.79	U	4.9	0.79	0.38
10061-02-6	trans-1,3-Dichloropropene	1.6	U	4.9	1.6	0.66
79-01-6	Trichloroethene	0.79	U	4.9	0.79	0.23
75-69-4	Trichlorofluoromethane	3.1	U	9.8	3.1	1.0
108-05-4	Vinyl acetate	3.1	U	9.8	3.1	1.1
75-01-4	Vinyl chloride	3.1	U	4.9	3.1	1.3
1330-20-7	Xylenes (total)	0.98	U	9.8	0.98	0.60

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB07(2-4) | Lab Sample ID: 280-97928-7

Matrix: Solid | Lab File ID: G2_1141.D

Analysis Method: 8260B | Date Collected: 06/05/2017 09:55

Sample wt/vol: 6.004(g) | Date Analyzed: 06/16/2017 21:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 15.2 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		71-136
460-00-4	4-Bromofluorobenzene (Surr)	89		79-119
1868-53-7	Dibromofluoromethane (Surr)	101		78-119
2037-26-5	Toluene-d8 (Surr)	91		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1141.D
Lims ID: 280-97928-E-7-A
Client ID: SS025-SB07(2-4)
Sample Type: Client
Inject. Date: 16-Jun-2017 21:14:30 ALS Bottle#: 36 Worklist Smp#: 33
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-7-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:30:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	90	414686	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	612439	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	140899	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	229206	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.829	6.829	0.000	91	157769	43.0	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	219062	44.0	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	464793	38.6	
$ 11 4-Bromofluorobenzene (Surr	95	11.870	11.869	0.001	92	141192	37.8	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.705				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.668				ND	
43 Trichlorofluoromethane	101		2.710				ND	
42 Ethanol	45		2.906				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353				ND	
50 Acetone	43		3.353				ND	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.894				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.213				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.457				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
78 Chloroform	83		6.621				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.014				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.450				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
95 Dibromomethane	93		8.423				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.842				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.071				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593				ND	
140 1,3,5-Trichlorobenzene	180		13.707				ND	
141 1,2,4-Trichlorobenzene	180		14.129				ND	
142 Hexachlorobutadiene	225		14.215				ND	
143 Naphthalene	128		14.315				ND	
144 1,2,3-Trichlorobenzene	180		14.472				ND	
26 3-Methylhexane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

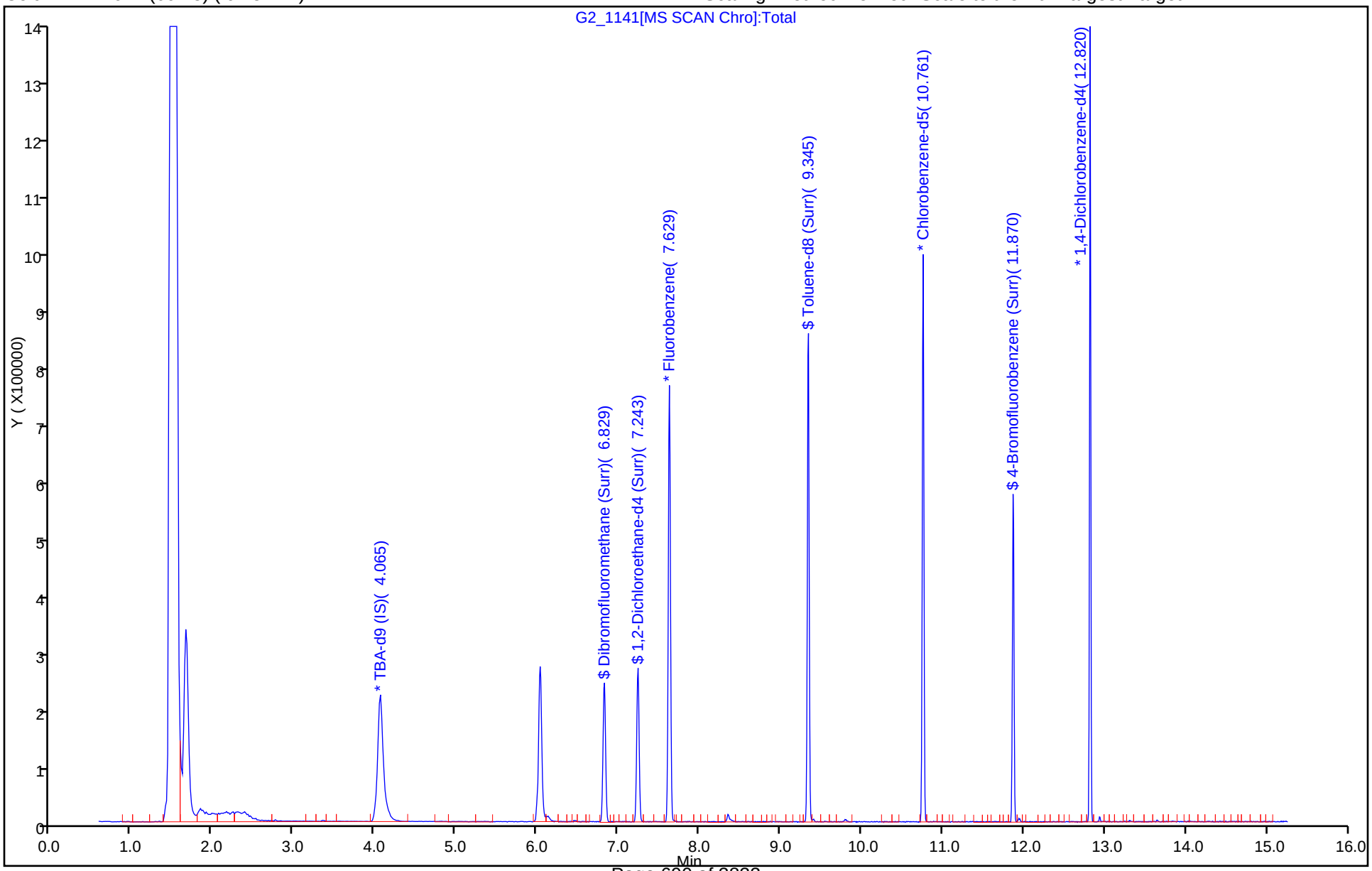
Report Date: 18-Jun-2017 12:35:53 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1141.D

Injection Date:	16-Jun-2017 21:14:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97928-E-7-A	Lab Sample ID:	280-97928-7	Worklist Smp#:	33
Client ID:	SS025-SB07(2-4)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1141.D
Lims ID: 280-97928-E-7-A
Client ID: SS025-SB07(2-4)
Sample Type: Client
Inject. Date: 16-Jun-2017 21:14:30 ALS Bottle#: 36 Worklist Smp#: 33
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-7-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:30:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	43.0	101.14
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	44.0	103.42
$ 10 Toluene-d8 (Surr)	42.5	38.6	90.76
$ 11 4-Bromofluorobenzene (Surr)	42.5	37.8	88.86

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB01(0-2) | Lab Sample ID: 280-97928-8

Matrix: Solid | Lab File ID: G2_1142.D

Analysis Method: 8260B | Date Collected: 06/05/2017 10:20

Sample wt/vol: 6.475(g) | Date Analyzed: 06/16/2017 21:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 11.7 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.4	U	4.4	1.4	0.49
71-55-6	1,1,1-Trichloroethane	1.4	U	4.4	1.4	0.45
79-34-5	1,1,2,2-Tetrachloroethane	1.4	U	4.4	1.4	0.53
79-00-5	1,1,2-Trichloroethane	2.8	U	4.4	2.8	0.77
75-34-3	1,1-Dichloroethane	0.70	U	4.4	0.70	0.18
75-35-4	1,1-Dichloroethene	1.4	U	4.4	1.4	0.52
563-58-6	1,1-Dichloropropene	1.4	U	4.4	1.4	0.47
87-61-6	1,2,3-Trichlorobenzene	1.4	U	4.4	1.4	0.66
96-18-4	1,2,3-Trichloropropane	2.8	U	4.4	2.8	0.71
120-82-1	1,2,4-Trichlorobenzene	1.4	U	4.4	1.4	0.64
95-63-6	1,2,4-Trimethylbenzene	1.4	U	4.4	1.4	0.51
96-12-8	1,2-Dibromo-3-Chloropropane	1.4	U	8.7	1.4	0.52
106-93-4	1,2-Dibromoethane	1.4	U	4.4	1.4	0.45
95-50-1	1,2-Dichlorobenzene	1.4	U	4.4	1.4	0.39
107-06-2	1,2-Dichloroethane	1.4	U	4.4	1.4	0.61
540-59-0	1,2-Dichloroethene, Total	1.4	U	4.4	1.4	0.34
78-87-5	1,2-Dichloropropane	1.4	U	4.4	1.4	0.48
108-67-8	1,3,5-Trimethylbenzene	1.4	U	4.4	1.4	0.50
541-73-1	1,3-Dichlorobenzene	1.4	U	4.4	1.4	0.42
142-28-9	1,3-Dichloropropane	1.4	U	4.4	1.4	0.45
106-46-7	1,4-Dichlorobenzene	1.4	U	4.4	1.4	0.68
594-20-7	2,2-Dichloropropane	1.4	U	4.4	1.4	0.38
78-93-3	2-Butanone (MEK)	5.6	U	17	5.6	1.6
95-49-8	2-Chlorotoluene	1.4	U	4.4	1.4	0.45
591-78-6	2-Hexanone	11	U Q	17	11	4.3
106-43-4	4-Chlorotoluene	1.4	U	4.4	1.4	0.68
99-87-6	4-Isopropyltoluene	1.4	U	4.4	1.4	0.43
108-10-1	4-Methyl-2-pentanone (MIBK)	11	U	17	11	3.8
67-64-1	Acetone	12	J B Q	17	11	4.7
71-43-2	Benzene	1.4	U	4.4	1.4	0.41
108-86-1	Bromobenzene	1.4	U	4.4	1.4	0.43
74-97-5	Bromochloromethane	0.70	U	4.4	0.70	0.26
75-27-4	Bromodichloromethane	0.70	U	4.4	0.70	0.19
75-25-2	Bromoform	0.70	U	4.4	0.70	0.20
74-83-9	Bromomethane	1.4	U	8.7	1.4	0.44
75-15-0	Carbon disulfide	1.4	U	4.4	1.4	0.37

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB01(0-2) | Lab Sample ID: 280-97928-8

Matrix: Solid | Lab File ID: G2_1142.D

Analysis Method: 8260B | Date Collected: 06/05/2017 10:20

Sample wt/vol: 6.475(g) | Date Analyzed: 06/16/2017 21:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 11.7 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.4	U	4.4	1.4	0.55
108-90-7	Chlorobenzene	1.4	U	4.4	1.4	0.47
75-00-3	Chloroethane	2.8	U	8.7	2.8	0.78
67-66-3	Chloroform	0.70	U	8.7	0.70	0.25
74-87-3	Chloromethane	1.4	U	8.7	1.4	0.67
156-59-2	cis-1,2-Dichloroethene	1.4	U	4.4	1.4	0.49
10061-01-5	cis-1,3-Dichloropropene	2.8	U	4.4	2.8	1.1
124-48-1	Dibromochloromethane	1.4	U	4.4	1.4	0.50
74-95-3	Dibromomethane	2.8	U	4.4	2.8	0.73
75-71-8	Dichlorodifluoromethane	1.4	U Q	8.7	1.4	0.45
100-41-4	Ethylbenzene	1.4	U	4.4	1.4	0.59
87-68-3	Hexachlorobutadiene	1.4	U	4.4	1.4	0.48
108-20-3	Isopropyl ether	7.0	U	44	7.0	2.4
98-82-8	Isopropylbenzene	1.4	U	4.4	1.4	0.52
179601-23-1	m&p-Xylene	2.8	U	2.8	2.8	0.91
74-88-4	Methyl iodide	1.4	U	4.4	1.4	0.38
1634-04-4	Methyl tert-butyl ether	0.70	U	17	0.70	0.30
75-09-2	Methylene Chloride	2.8	U	4.4	2.8	1.4
91-20-3	Naphthalene	4.5		4.4	1.4	0.55
104-51-8	n-Butylbenzene	1.4	U	4.4	1.4	0.49
103-65-1	N-Propylbenzene	1.4	U	4.4	1.4	0.51
95-47-6	o-Xylene	1.4	U	4.4	1.4	0.53
135-98-8	sec-Butylbenzene	1.4	U	4.4	1.4	0.67
100-42-5	Styrene	1.4	U	4.4	1.4	0.55
98-06-6	tert-Butylbenzene	1.4	U	4.4	1.4	0.44
127-18-4	Tetrachloroethene	1.4	U	4.4	1.4	0.52
108-88-3	Toluene	1.4	U	4.4	1.4	0.60
156-60-5	trans-1,2-Dichloroethene	0.70	U	4.4	0.70	0.34
10061-02-6	trans-1,3-Dichloropropene	1.4	U	4.4	1.4	0.59
79-01-6	Trichloroethene	0.70	U	4.4	0.70	0.20
75-69-4	Trichlorofluoromethane	2.8	U	8.7	2.8	0.91
108-05-4	Vinyl acetate	2.8	U	8.7	2.8	0.94
75-01-4	Vinyl chloride	2.8	U	4.4	2.8	1.2
1330-20-7	Xylenes (total)	0.87	U	8.7	0.87	0.53

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB01(0-2) | Lab Sample ID: 280-97928-8

Matrix: Solid | Lab File ID: G2_1142.D

Analysis Method: 8260B | Date Collected: 06/05/2017 10:20

Sample wt/vol: 6.475(g) | Date Analyzed: 06/16/2017 21:35

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 11.7 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		71-136
460-00-4	4-Bromofluorobenzene (Surr)	98		79-119
1868-53-7	Dibromofluoromethane (Surr)	106		78-119
2037-26-5	Toluene-d8 (Surr)	101		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1142.D
Lims ID: 280-97928-E-8-A
Client ID: SS025-SB01(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 21:35:30 ALS Bottle#: 37 Worklist Smp#: 34
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-8-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:30:30

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	90	379360	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	566328	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	119702	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	165251	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	93	152324	45.0	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	198366	43.0	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	439076	42.9	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	112801	41.8	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.705				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.668				ND	
43 Trichlorofluoromethane	101		2.710				ND	
42 Ethanol	45		2.906				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353				ND	
50 Acetone	43	3.367	3.353	0.014	98	21888	14.3	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.894				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.213				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.457				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
78 Chloroform	83		6.621				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.014				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.450				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
95 Dibromomethane	93		8.423				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164	9.917	9.917	0.000	86	1343	0.5394	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.842				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.071				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593				ND	
140 1,3,5-Trichlorobenzene	180		13.707				ND	
141 1,2,4-Trichlorobenzene	180		14.129				ND	
142 Hexachlorobutadiene	225		14.215				ND	
143 Naphthalene	128	14.300	14.315	-0.015	94	13285	5.18	
144 1,2,3-Trichlorobenzene	180		14.472				ND	
26 3-Methylhexane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

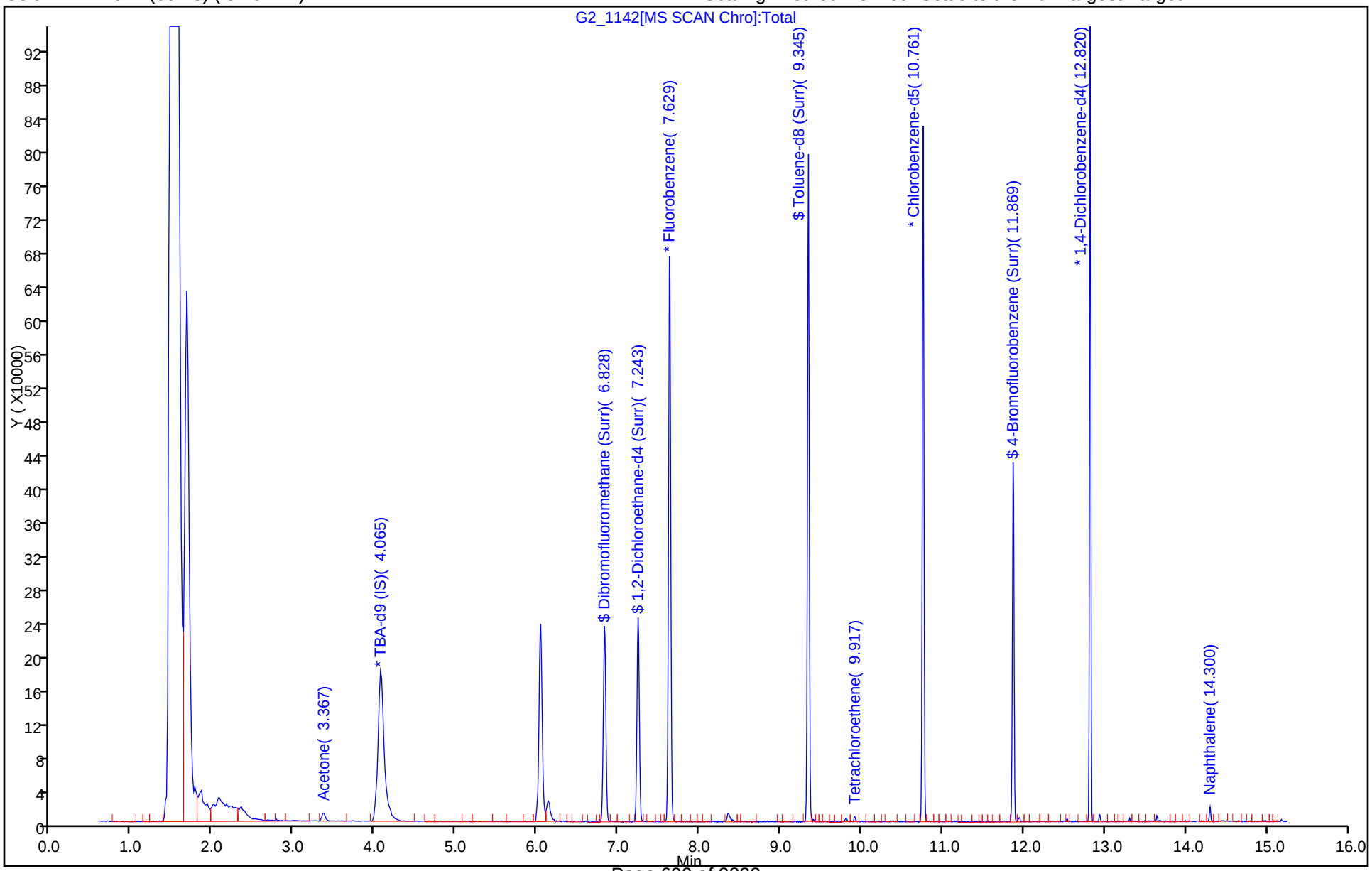
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1142.D

Injection Date:	16-Jun-2017 21:35:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97928-E-8-A	Lab Sample ID:	280-97928-8	Worklist Smp#:	34
Client ID:	SS025-SB01(0-2)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1142.D
Lims ID: 280-97928-E-8-A
Client ID: SS025-SB01(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 21:35:30 ALS Bottle#: 37 Worklist Smp#: 34
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-8-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:30:30

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	45.0	105.99
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	43.0	101.07
$ 10 Toluene-d8 (Surr)	42.5	42.9	100.92
$ 11 4-Bromofluorobenzene (Surr)	42.5	41.8	98.47

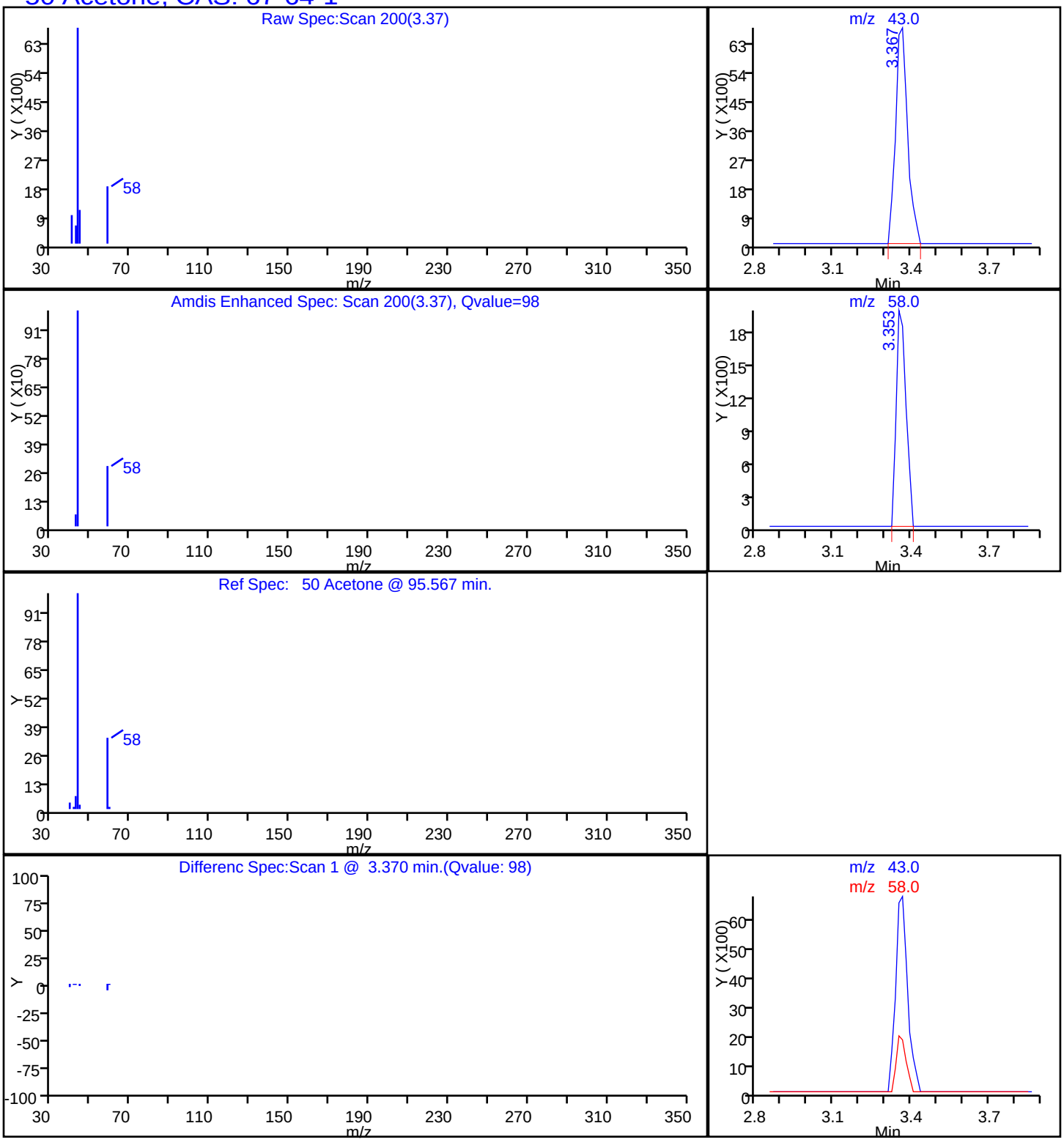
Report Date: 18-Jun-2017 12:35:55 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1142.D

Injection Date:	16-Jun-2017 21:35:30	Instrument ID:	VMS_G2		
Lims ID:	280-97928-E-8-A	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	DUKESA	ALS Bottle#:	37	Worklist Smp#:	34
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

50 Acetone, CAS: 67-64-1



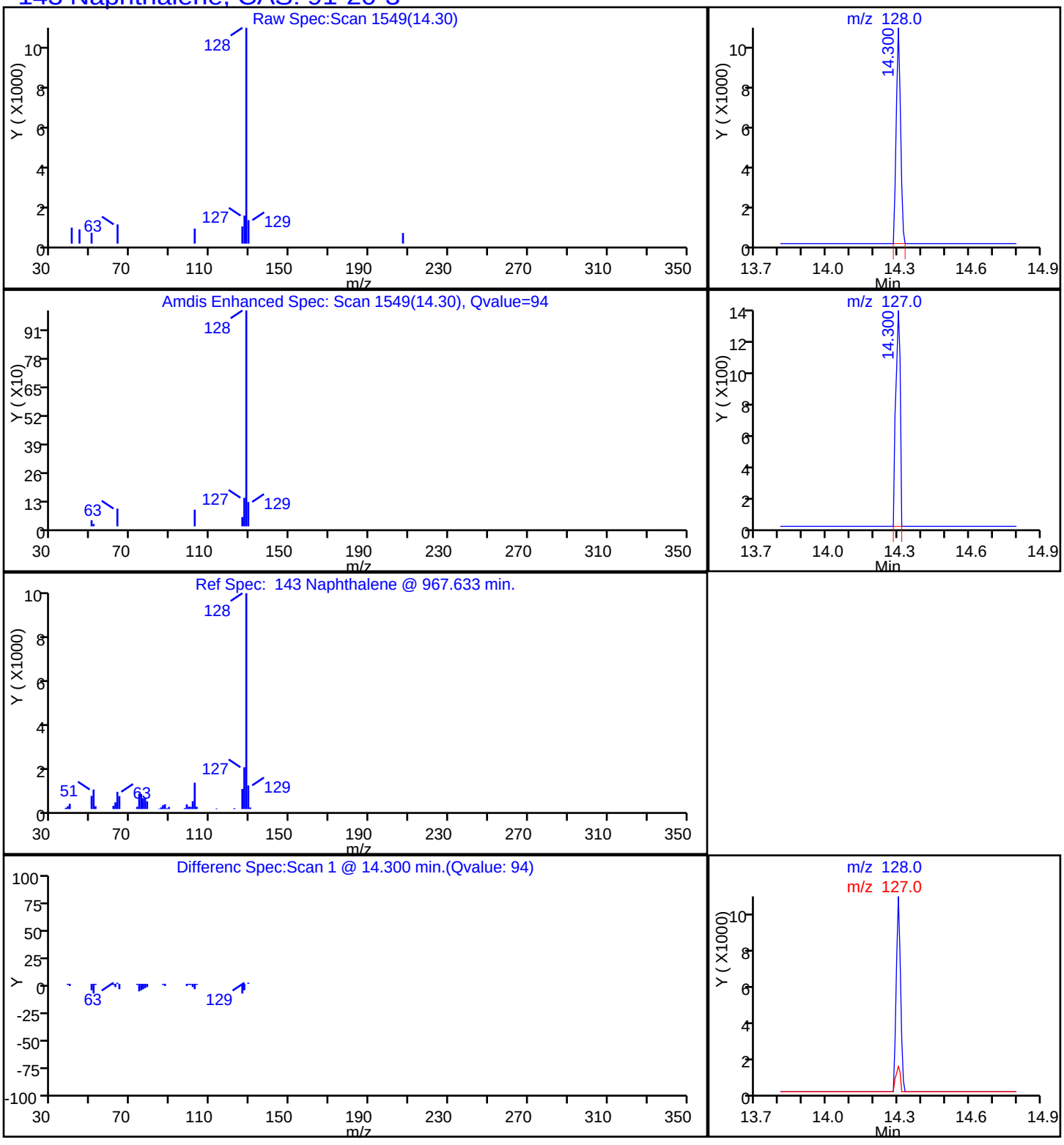
Report Date: 18-Jun-2017 12:35:55 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1142.D

Injection Date:	16-Jun-2017 21:35:30	Instrument ID:	VMS_G2		
Lims ID:	280-97928-E-8-A	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	DUKESA	ALS Bottle#:	37	Worklist Smp#:	34
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

143 Naphthalene, CAS: 91-20-3



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB01(0-2)-a | Lab Sample ID: 280-97928-9

Matrix: Solid | Lab File ID: G2_1143.D

Analysis Method: 8260B | Date Collected: 06/05/2017 10:20

Sample wt/vol: 7.377(g) | Date Analyzed: 06/16/2017 21:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 11.0 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.2	U	3.8	1.2	0.43
71-55-6	1,1,1-Trichloroethane	1.2	U	3.8	1.2	0.40
79-34-5	1,1,2,2-Tetrachloroethane	1.2	U	3.8	1.2	0.46
79-00-5	1,1,2-Trichloroethane	2.4	U	3.8	2.4	0.67
75-34-3	1,1-Dichloroethane	0.61	U	3.8	0.61	0.16
75-35-4	1,1-Dichloroethene	1.2	U	3.8	1.2	0.45
563-58-6	1,1-Dichloropropene	1.2	U	3.8	1.2	0.41
87-61-6	1,2,3-Trichlorobenzene	1.2	U	3.8	1.2	0.57
96-18-4	1,2,3-Trichloropropane	2.4	U	3.8	2.4	0.62
120-82-1	1,2,4-Trichlorobenzene	1.2	U	3.8	1.2	0.56
95-63-6	1,2,4-Trimethylbenzene	1.2	U	3.8	1.2	0.44
96-12-8	1,2-Dibromo-3-Chloropropane	1.2	U	7.6	1.2	0.46
106-93-4	1,2-Dibromoethane	1.2	U	3.8	1.2	0.40
95-50-1	1,2-Dichlorobenzene	1.2	U	3.8	1.2	0.34
107-06-2	1,2-Dichloroethane	1.2	U	3.8	1.2	0.53
540-59-0	1,2-Dichloroethene, Total	1.2	U	3.8	1.2	0.30
78-87-5	1,2-Dichloropropane	1.2	U	3.8	1.2	0.42
108-67-8	1,3,5-Trimethylbenzene	1.2	U	3.8	1.2	0.43
541-73-1	1,3-Dichlorobenzene	1.2	U	3.8	1.2	0.37
142-28-9	1,3-Dichloropropane	1.2	U	3.8	1.2	0.39
106-46-7	1,4-Dichlorobenzene	1.2	U	3.8	1.2	0.59
594-20-7	2,2-Dichloropropane	1.2	U	3.8	1.2	0.34
78-93-3	2-Butanone (MEK)	4.9	U	15	4.9	1.4
95-49-8	2-Chlorotoluene	1.2	U	3.8	1.2	0.39
591-78-6	2-Hexanone	9.7	U Q	15	9.7	3.7
106-43-4	4-Chlorotoluene	1.2	U	3.8	1.2	0.59
99-87-6	4-Isopropyltoluene	1.2	U	3.8	1.2	0.37
108-10-1	4-Methyl-2-pentanone (MIBK)	9.7	U	15	9.7	3.3
67-64-1	Acetone	16	B Q	15	9.7	4.1
71-43-2	Benzene	1.2	U	3.8	1.2	0.36
108-86-1	Bromobenzene	1.2	U	3.8	1.2	0.37
74-97-5	Bromochloromethane	0.61	U	3.8	0.61	0.23
75-27-4	Bromodichloromethane	0.61	U	3.8	0.61	0.17
75-25-2	Bromoform	0.61	U	3.8	0.61	0.18
74-83-9	Bromomethane	1.2	U	7.6	1.2	0.38
75-15-0	Carbon disulfide	1.2	U	3.8	1.2	0.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB01(0-2)-a | Lab Sample ID: 280-97928-9

Matrix: Solid | Lab File ID: G2_1143.D

Analysis Method: 8260B | Date Collected: 06/05/2017 10:20

Sample wt/vol: 7.377(g) | Date Analyzed: 06/16/2017 21:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 11.0 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.2	U	3.8	1.2	0.48
108-90-7	Chlorobenzene	1.2	U	3.8	1.2	0.41
75-00-3	Chloroethane	2.4	U	7.6	2.4	0.68
67-66-3	Chloroform	0.61	U	7.6	0.61	0.22
74-87-3	Chloromethane	1.2	U	7.6	1.2	0.59
156-59-2	cis-1,2-Dichloroethene	1.2	U	3.8	1.2	0.43
10061-01-5	cis-1,3-Dichloropropene	2.4	U	3.8	2.4	0.98
124-48-1	Dibromochloromethane	1.2	U	3.8	1.2	0.43
74-95-3	Dibromomethane	2.4	U	3.8	2.4	0.64
75-71-8	Dichlorodifluoromethane	1.2	U Q	7.6	1.2	0.40
100-41-4	Ethylbenzene	1.2	U	3.8	1.2	0.51
87-68-3	Hexachlorobutadiene	1.2	U	3.8	1.2	0.42
108-20-3	Isopropyl ether	6.1	U	38	6.1	2.1
98-82-8	Isopropylbenzene	1.2	U	3.8	1.2	0.45
179601-23-1	m&p-Xylene	2.4	U	2.4	2.4	0.79
74-88-4	Methyl iodide	1.2	U	3.8	1.2	0.34
1634-04-4	Methyl tert-butyl ether	0.61	U	15	0.61	0.26
75-09-2	Methylene Chloride	2.4	U	3.8	2.4	1.2
91-20-3	Naphthalene	1.2	U	3.8	1.2	0.48
104-51-8	n-Butylbenzene	1.2	U	3.8	1.2	0.43
103-65-1	N-Propylbenzene	1.2	U	3.8	1.2	0.44
95-47-6	o-Xylene	1.2	U	3.8	1.2	0.46
135-98-8	sec-Butylbenzene	1.2	U	3.8	1.2	0.59
100-42-5	Styrene	1.2	U	3.8	1.2	0.48
98-06-6	tert-Butylbenzene	1.2	U	3.8	1.2	0.38
127-18-4	Tetrachloroethene	1.2	U	3.8	1.2	0.45
108-88-3	Toluene	1.2	U	3.8	1.2	0.53
156-60-5	trans-1,2-Dichloroethene	0.61	U	3.8	0.61	0.30
10061-02-6	trans-1,3-Dichloropropene	1.2	U	3.8	1.2	0.51
79-01-6	Trichloroethene	0.61	U	3.8	0.61	0.18
75-69-4	Trichlorofluoromethane	2.4	U	7.6	2.4	0.79
108-05-4	Vinyl acetate	2.4	U	7.6	2.4	0.81
75-01-4	Vinyl chloride	2.4	U	3.8	2.4	1.0
1330-20-7	Xylenes (total)	0.76	U	7.6	0.76	0.46

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB01(0-2)-a Lab Sample ID: 280-97928-9

Matrix: Solid Lab File ID: G2_1143.D

Analysis Method: 8260B Date Collected: 06/05/2017 10:20

Sample wt/vol: 7.377(g) Date Analyzed: 06/16/2017 21:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 11.0 Level: (low/med) Low

Analysis Batch No.: 377667 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		71-136
460-00-4	4-Bromofluorobenzene (Surr)	99		79-119
1868-53-7	Dibromofluoromethane (Surr)	102		78-119
2037-26-5	Toluene-d8 (Surr)	96		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1143.D
Lims ID: 280-97928-E-9-A
Client ID: SS025-SB01(0-2)-a
Sample Type: Client
Inject. Date: 16-Jun-2017 21:56:30 ALS Bottle#: 38 Worklist Smp#: 35
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-9-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:30:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	90	334039	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	583484	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	123417	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	168177	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	93	151526	43.4	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	206899	43.5	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	430736	40.8	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	115504	42.1	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.705				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.668				ND	
43 Trichlorofluoromethane	101		2.710				ND	
42 Ethanol	45		2.906				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353				ND	
50 Acetone	43	3.367	3.353	0.013	97	31891	20.8	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.894				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.213				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.457				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
78 Chloroform	83		6.621				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.014				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.450				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
95 Dibromomethane	93		8.423				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164	9.917	9.917	0.000	88	1410	0.5493	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.842				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.071				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593				ND	
140 1,3,5-Trichlorobenzene	180		13.707				ND	
141 1,2,4-Trichlorobenzene	180		14.129				ND	
142 Hexachlorobutadiene	225		14.215				ND	
143 Naphthalene	128		14.315				ND	
144 1,2,3-Trichlorobenzene	180		14.472				ND	
26 3-Methylhexane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

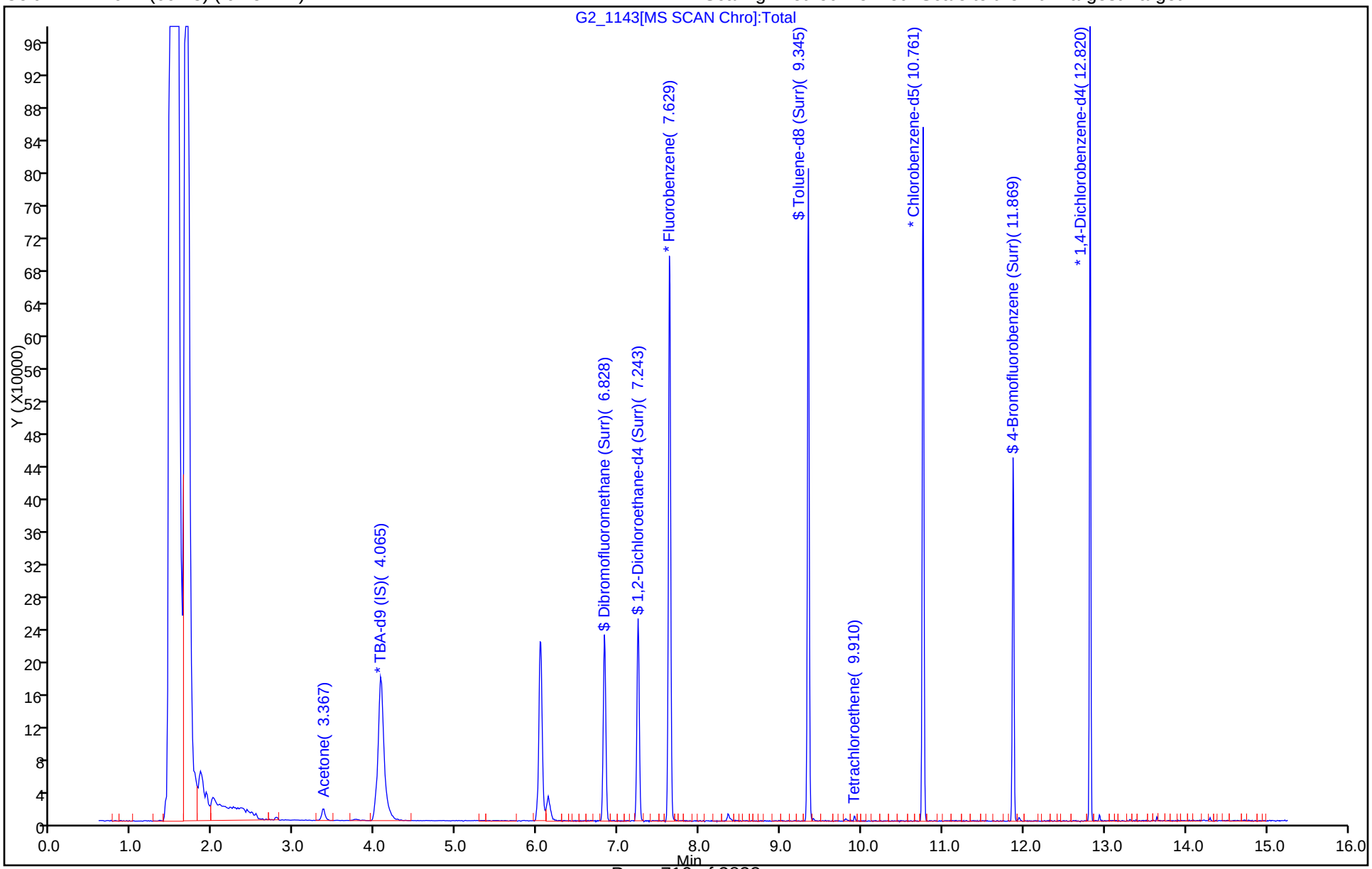
Report Date: 18-Jun-2017 12:35:57 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1143.D

Injection Date:	16-Jun-2017 21:56:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97928-E-9-A	Lab Sample ID:	280-97928-9	Worklist Smp#:	35
Client ID:	SS025-SB01(0-2)-a				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1143.D
Lims ID: 280-97928-E-9-A
Client ID: SS025-SB01(0-2)-a
Sample Type: Client
Inject. Date: 16-Jun-2017 21:56:30 ALS Bottle#: 38 Worklist Smp#: 35
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-9-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:30:58

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	43.4	102.03
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	43.5	102.44
$ 10 Toluene-d8 (Surr)	42.5	40.8	96.02
$ 11 4-Bromofluorobenzene (Surr)	42.5	42.1	99.07

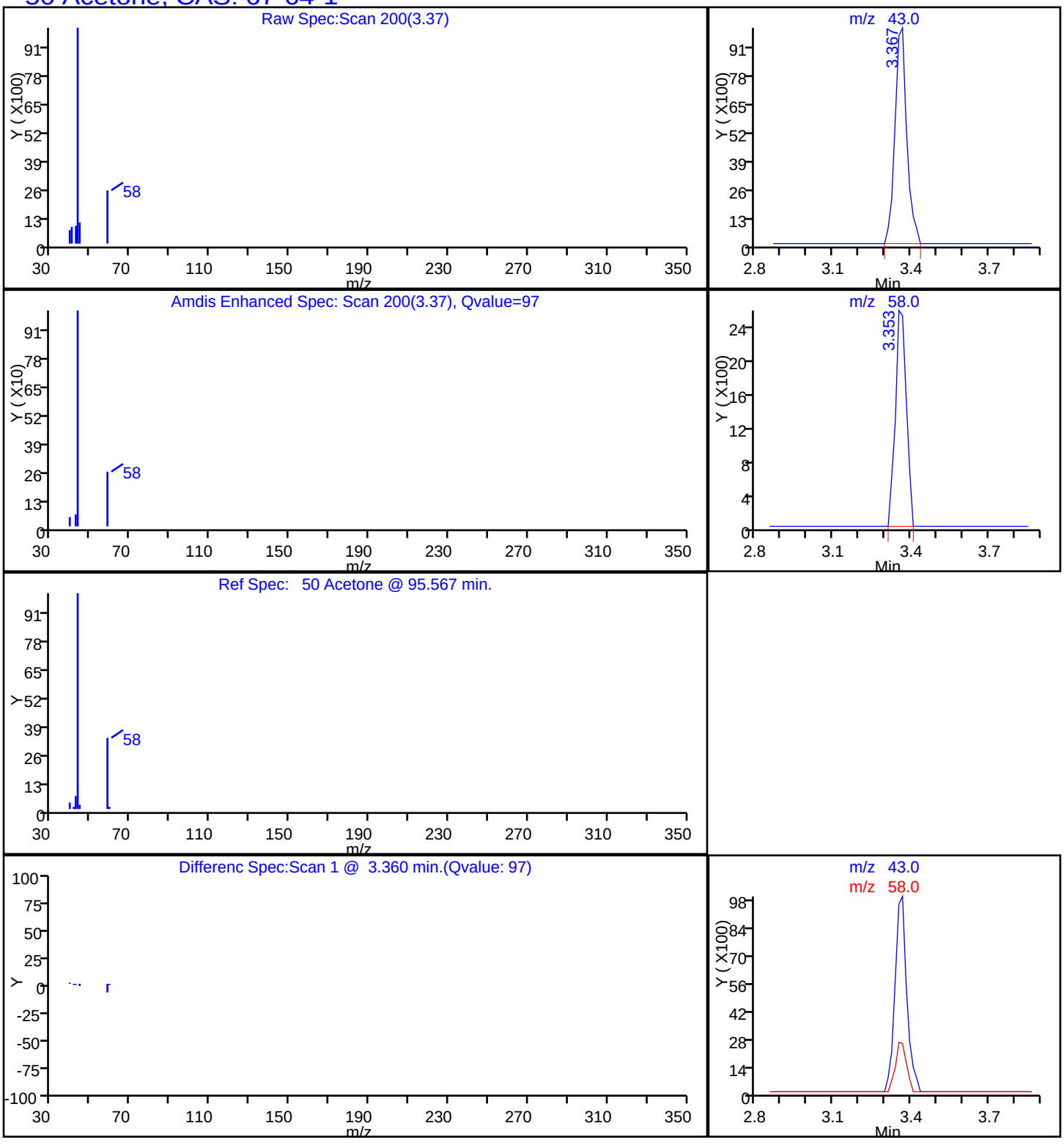
Report Date: 18-Jun-2017 12:35:57 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1143.D

Injection Date:	16-Jun-2017 21:56:30	Instrument ID:	VMS_G2		
Lims ID:	280-97928-E-9-A	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	DUKESA	ALS Bottle#:	38	Worklist Smp#:	35
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

50 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB08(0-2) | Lab Sample ID: 280-97928-10

Matrix: Solid | Lab File ID: G2_1144.D

Analysis Method: 8260B | Date Collected: 06/05/2017 11:05

Sample wt/vol: 6.096(g) | Date Analyzed: 06/16/2017 22:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 10.2 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.5	U	4.6	1.5	0.51
71-55-6	1,1,1-Trichloroethane	1.5	U	4.6	1.5	0.47
79-34-5	1,1,2,2-Tetrachloroethane	1.5	U	4.6	1.5	0.56
79-00-5	1,1,2-Trichloroethane	2.9	U	4.6	2.9	0.80
75-34-3	1,1-Dichloroethane	0.73	U	4.6	0.73	0.19
75-35-4	1,1-Dichloroethene	1.5	U	4.6	1.5	0.54
563-58-6	1,1-Dichloropropene	1.5	U	4.6	1.5	0.49
87-61-6	1,2,3-Trichlorobenzene	1.5	U	4.6	1.5	0.68
96-18-4	1,2,3-Trichloropropane	2.9	U	4.6	2.9	0.74
120-82-1	1,2,4-Trichlorobenzene	1.5	U	4.6	1.5	0.67
95-63-6	1,2,4-Trimethylbenzene	1.5	U	4.6	1.5	0.53
96-12-8	1,2-Dibromo-3-Chloropropane	1.5	U	9.1	1.5	0.55
106-93-4	1,2-Dibromoethane	1.5	U	4.6	1.5	0.47
95-50-1	1,2-Dichlorobenzene	1.5	U	4.6	1.5	0.41
107-06-2	1,2-Dichloroethane	1.5	U	4.6	1.5	0.64
540-59-0	1,2-Dichloroethene, Total	1.5	U	4.6	1.5	0.36
78-87-5	1,2-Dichloropropane	1.5	U	4.6	1.5	0.50
108-67-8	1,3,5-Trimethylbenzene	1.5	U	4.6	1.5	0.52
541-73-1	1,3-Dichlorobenzene	1.5	U	4.6	1.5	0.44
142-28-9	1,3-Dichloropropane	1.5	U	4.6	1.5	0.47
106-46-7	1,4-Dichlorobenzene	1.5	U	4.6	1.5	0.71
594-20-7	2,2-Dichloropropane	1.5	U	4.6	1.5	0.40
78-93-3	2-Butanone (MEK)	5.8	U	18	5.8	1.7
95-49-8	2-Chlorotoluene	1.5	U	4.6	1.5	0.47
591-78-6	2-Hexanone	12	U Q	18	12	4.5
106-43-4	4-Chlorotoluene	1.5	U	4.6	1.5	0.71
99-87-6	4-Isopropyltoluene	1.5	U	4.6	1.5	0.45
108-10-1	4-Methyl-2-pentanone (MIBK)	12	U	18	12	4.0
67-64-1	Acetone	12	U Q	18	12	4.9
71-43-2	Benzene	1.5	U	4.6	1.5	0.43
108-86-1	Bromobenzene	1.5	U	4.6	1.5	0.45
74-97-5	Bromochloromethane	0.73	U	4.6	0.73	0.27
75-27-4	Bromodichloromethane	0.73	U	4.6	0.73	0.20
75-25-2	Bromoform	0.73	U	4.6	0.73	0.21
74-83-9	Bromomethane	1.5	U	9.1	1.5	0.46
75-15-0	Carbon disulfide	1.5	U	4.6	1.5	0.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB08(0-2) | Lab Sample ID: 280-97928-10

Matrix: Solid | Lab File ID: G2_1144.D

Analysis Method: 8260B | Date Collected: 06/05/2017 11:05

Sample wt/vol: 6.096(g) | Date Analyzed: 06/16/2017 22:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 10.2 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.5	U	4.6	1.5	0.58
108-90-7	Chlorobenzene	1.5	U	4.6	1.5	0.49
75-00-3	Chloroethane	2.9	U	9.1	2.9	0.81
67-66-3	Chloroform	0.73	U	9.1	0.73	0.26
74-87-3	Chloromethane	1.5	U	9.1	1.5	0.70
156-59-2	cis-1,2-Dichloroethene	1.5	U	4.6	1.5	0.51
10061-01-5	cis-1,3-Dichloropropene	2.9	U	4.6	2.9	1.2
124-48-1	Dibromochloromethane	1.5	U	4.6	1.5	0.52
74-95-3	Dibromomethane	2.9	U	4.6	2.9	0.77
75-71-8	Dichlorodifluoromethane	1.5	U Q	9.1	1.5	0.47
100-41-4	Ethylbenzene	1.5	U	4.6	1.5	0.61
87-68-3	Hexachlorobutadiene	1.5	U	4.6	1.5	0.50
108-20-3	Isopropyl ether	7.3	U	46	7.3	2.5
98-82-8	Isopropylbenzene	1.5	U	4.6	1.5	0.54
179601-23-1	m&p-Xylene	2.9	U	2.9	2.9	0.95
74-88-4	Methyl iodide	1.5	U	4.6	1.5	0.40
1634-04-4	Methyl tert-butyl ether	0.73	U	18	0.73	0.31
75-09-2	Methylene Chloride	2.9	U	4.6	2.9	1.5
91-20-3	Naphthalene	1.5	U	4.6	1.5	0.58
104-51-8	n-Butylbenzene	1.5	U	4.6	1.5	0.51
103-65-1	N-Propylbenzene	1.5	U	4.6	1.5	0.53
95-47-6	o-Xylene	1.5	U	4.6	1.5	0.56
135-98-8	sec-Butylbenzene	1.5	U	4.6	1.5	0.70
100-42-5	Styrene	1.5	U	4.6	1.5	0.58
98-06-6	tert-Butylbenzene	1.5	U	4.6	1.5	0.46
127-18-4	Tetrachloroethene	1.5	U	4.6	1.5	0.54
108-88-3	Toluene	1.5	U	4.6	1.5	0.63
156-60-5	trans-1,2-Dichloroethene	0.73	U	4.6	0.73	0.36
10061-02-6	trans-1,3-Dichloropropene	1.5	U	4.6	1.5	0.61
79-01-6	Trichloroethene	0.73	U	4.6	0.73	0.21
75-69-4	Trichlorofluoromethane	2.9	U	9.1	2.9	0.95
108-05-4	Vinyl acetate	2.9	U	9.1	2.9	0.98
75-01-4	Vinyl chloride	2.9	U	4.6	2.9	1.2
1330-20-7	Xylenes (total)	0.91	U	9.1	0.91	0.56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB08(0-2) Lab Sample ID: 280-97928-10

Matrix: Solid Lab File ID: G2_1144.D

Analysis Method: 8260B Date Collected: 06/05/2017 11:05

Sample wt/vol: 6.096(g) Date Analyzed: 06/16/2017 22:17

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 10.2 Level: (low/med) Low

Analysis Batch No.: 377667 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		71-136
460-00-4	4-Bromofluorobenzene (Surr)	89		79-119
1868-53-7	Dibromofluoromethane (Surr)	103		78-119
2037-26-5	Toluene-d8 (Surr)	91		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1144.D
Lims ID: 280-97928-E-10-A
Client ID: SS025-SB08(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 22:17:30 ALS Bottle#: 39 Worklist Smp#: 36
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-10-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:31:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	89	294303	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	586923	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	133424	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	217037	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.829	6.829	0.000	92	153283	43.6	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	205854	43.0	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	441745	38.7	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	90	133592	37.7	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.705				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.668				ND	
43 Trichlorofluoromethane	101		2.710				ND	
42 Ethanol	45		2.906				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353				ND	
50 Acetone	43		3.353				ND	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.894				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.213				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.457				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
78 Chloroform	83		6.621				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.014				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.450				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
95 Dibromomethane	93		8.423				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.842				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.071				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593				ND	
140 1,3,5-Trichlorobenzene	180		13.707				ND	
141 1,2,4-Trichlorobenzene	180		14.129				ND	
142 Hexachlorobutadiene	225		14.215				ND	
143 Naphthalene	128		14.315				ND	
144 1,2,3-Trichlorobenzene	180		14.472				ND	
26 3-Methylhexane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

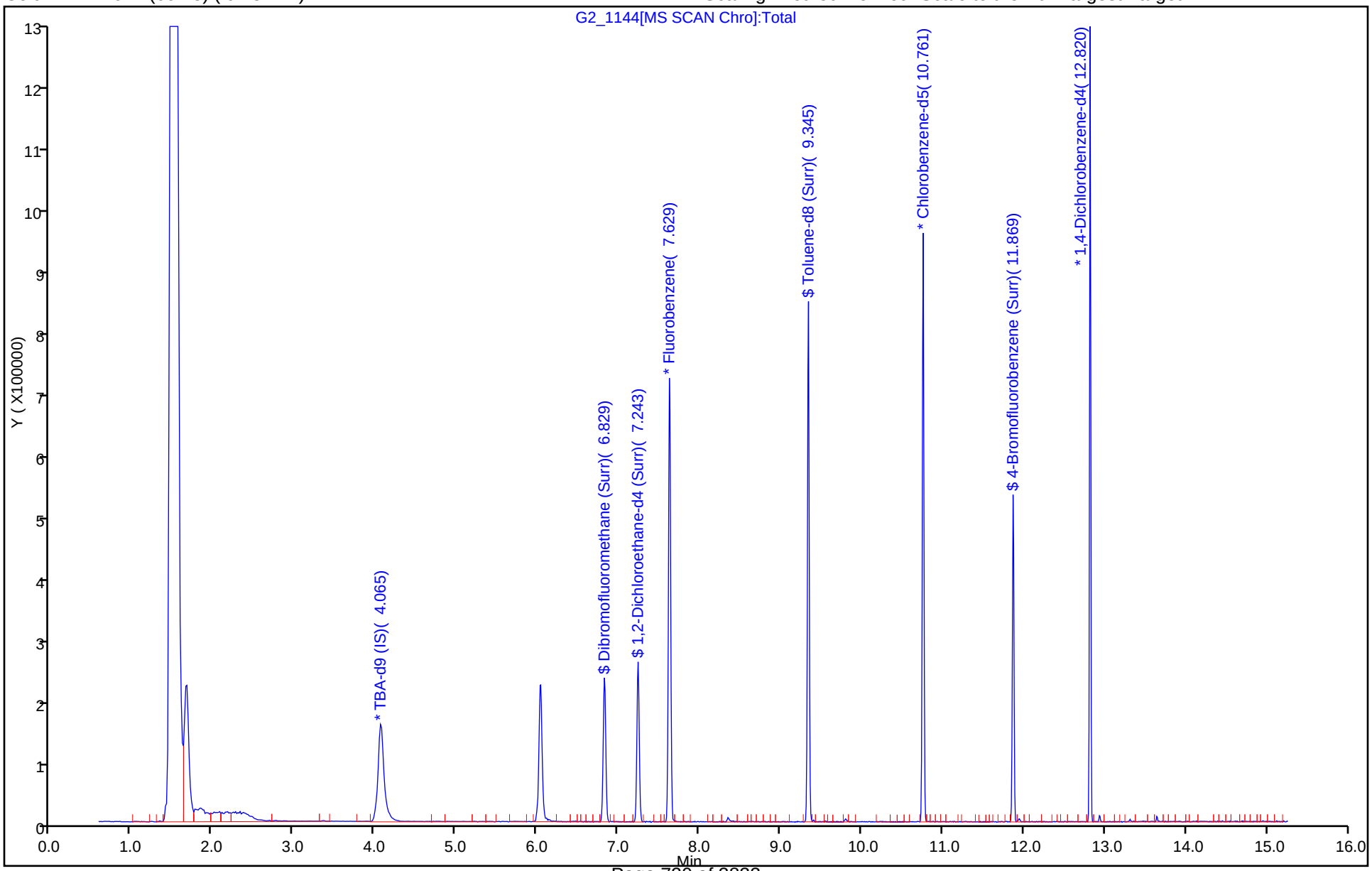
Report Date: 18-Jun-2017 12:35:59 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1144.D

Injection Date:	16-Jun-2017 22:17:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97928-E-10-A	Lab Sample ID:	280-97928-10	Worklist Smp#:	36
Client ID:	SS025-SB08(0-2)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1144.D
Lims ID: 280-97928-E-10-A
Client ID: SS025-SB08(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 22:17:30 ALS Bottle#: 39 Worklist Smp#: 36
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-10-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:31:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	43.6	102.66
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	43.0	101.22
$ 10 Toluene-d8 (Surr)	42.5	38.7	91.09
$ 11 4-Bromofluorobenzene (Surr)	42.5	37.7	88.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB08(2-4) | Lab Sample ID: 280-97928-11

Matrix: Solid | Lab File ID: G2_1145.D

Analysis Method: 8260B | Date Collected: 06/05/2017 11:15

Sample wt/vol: 6.799(g) | Date Analyzed: 06/16/2017 22:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.6 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.4	U	4.3	1.4	0.48
71-55-6	1,1,1-Trichloroethane	1.4	U	4.3	1.4	0.44
79-34-5	1,1,2,2-Tetrachloroethane	1.4	U Q	4.3	1.4	0.52
79-00-5	1,1,2-Trichloroethane	2.7	U	4.3	2.7	0.75
75-34-3	1,1-Dichloroethane	0.68	U	4.3	0.68	0.18
75-35-4	1,1-Dichloroethene	1.4	U	4.3	1.4	0.50
563-58-6	1,1-Dichloropropene	1.4	U	4.3	1.4	0.46
87-61-6	1,2,3-Trichlorobenzene	1.4	U Q	4.3	1.4	0.64
96-18-4	1,2,3-Trichloropropane	2.7	U Q	4.3	2.7	0.69
120-82-1	1,2,4-Trichlorobenzene	1.4	U Q	4.3	1.4	0.62
95-63-6	1,2,4-Trimethylbenzene	1.4	U Q	4.3	1.4	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	1.4	U Q	8.5	1.4	0.51
106-93-4	1,2-Dibromoethane	1.4	U	4.3	1.4	0.44
95-50-1	1,2-Dichlorobenzene	1.4	U Q	4.3	1.4	0.38
107-06-2	1,2-Dichloroethane	1.4	U	4.3	1.4	0.60
540-59-0	1,2-Dichloroethene, Total	1.4	U	4.3	1.4	0.33
78-87-5	1,2-Dichloropropane	1.4	U	4.3	1.4	0.47
108-67-8	1,3,5-Trimethylbenzene	1.4	U Q	4.3	1.4	0.49
541-73-1	1,3-Dichlorobenzene	1.4	U Q	4.3	1.4	0.41
142-28-9	1,3-Dichloropropane	1.4	U	4.3	1.4	0.43
106-46-7	1,4-Dichlorobenzene	1.4	U Q	4.3	1.4	0.66
594-20-7	2,2-Dichloropropane	1.4	U	4.3	1.4	0.37
78-93-3	2-Butanone (MEK)	5.5	U	17	5.5	1.6
95-49-8	2-Chlorotoluene	1.4	U Q	4.3	1.4	0.43
591-78-6	2-Hexanone	11	U Q	17	11	4.2
106-43-4	4-Chlorotoluene	1.4	U Q	4.3	1.4	0.66
99-87-6	4-Isopropyltoluene	1.4	U Q	4.3	1.4	0.42
108-10-1	4-Methyl-2-pentanone (MIBK)	11	U	17	11	3.7
67-64-1	Acetone	11	U Q	17	11	4.6
71-43-2	Benzene	1.4	U	4.3	1.4	0.40
108-86-1	Bromobenzene	1.4	U Q	4.3	1.4	0.42
74-97-5	Bromochloromethane	0.68	U	4.3	0.68	0.26
75-27-4	Bromodichloromethane	0.68	U	4.3	0.68	0.19
75-25-2	Bromoform	0.68	U	4.3	0.68	0.20
74-83-9	Bromomethane	1.4	U	8.5	1.4	0.43
75-15-0	Carbon disulfide	1.4	U	4.3	1.4	0.36

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB08(2-4) | Lab Sample ID: 280-97928-11

Matrix: Solid | Lab File ID: G2_1145.D

Analysis Method: 8260B | Date Collected: 06/05/2017 11:15

Sample wt/vol: 6.799(g) | Date Analyzed: 06/16/2017 22:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.6 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.4	U	4.3	1.4	0.54
108-90-7	Chlorobenzene	1.4	U	4.3	1.4	0.46
75-00-3	Chloroethane	2.7	U	8.5	2.7	0.76
67-66-3	Chloroform	0.68	U	8.5	0.68	0.25
74-87-3	Chloromethane	1.4	U	8.5	1.4	0.66
156-59-2	cis-1,2-Dichloroethene	1.4	U	4.3	1.4	0.48
10061-01-5	cis-1,3-Dichloropropene	2.7	U	4.3	2.7	1.1
124-48-1	Dibromochloromethane	1.4	U	4.3	1.4	0.49
74-95-3	Dibromomethane	2.7	U	4.3	2.7	0.72
75-71-8	Dichlorodifluoromethane	1.4	U Q	8.5	1.4	0.44
100-41-4	Ethylbenzene	1.4	U	4.3	1.4	0.57
87-68-3	Hexachlorobutadiene	1.4	U Q	4.3	1.4	0.47
108-20-3	Isopropyl ether	6.8	U	43	6.8	2.3
98-82-8	Isopropylbenzene	1.4	U Q	4.3	1.4	0.50
179601-23-1	m&p-Xylene	2.7	U	2.7	2.7	0.89
74-88-4	Methyl iodide	1.4	U	4.3	1.4	0.37
1634-04-4	Methyl tert-butyl ether	0.68	U	17	0.68	0.29
75-09-2	Methylene Chloride	2.7	U	4.3	2.7	1.4
91-20-3	Naphthalene	1.4	U Q	4.3	1.4	0.54
104-51-8	n-Butylbenzene	1.4	U Q	4.3	1.4	0.48
103-65-1	N-Propylbenzene	1.4	U Q	4.3	1.4	0.49
95-47-6	o-Xylene	1.4	U	4.3	1.4	0.52
135-98-8	sec-Butylbenzene	1.4	U Q	4.3	1.4	0.66
100-42-5	Styrene	1.4	U	4.3	1.4	0.54
98-06-6	tert-Butylbenzene	1.4	U Q	4.3	1.4	0.43
127-18-4	Tetrachloroethene	1.4	U	4.3	1.4	0.50
108-88-3	Toluene	1.4	U	4.3	1.4	0.59
156-60-5	trans-1,2-Dichloroethene	0.68	U	4.3	0.68	0.33
10061-02-6	trans-1,3-Dichloropropene	1.4	U	4.3	1.4	0.57
79-01-6	Trichloroethene	0.68	U	4.3	0.68	0.20
75-69-4	Trichlorofluoromethane	2.7	U	8.5	2.7	0.89
108-05-4	Vinyl acetate	2.7	U	8.5	2.7	0.91
75-01-4	Vinyl chloride	2.7	U	4.3	2.7	1.1
1330-20-7	Xylenes (total)	0.85	U	8.5	0.85	0.52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB08(2-4) | Lab Sample ID: 280-97928-11

Matrix: Solid | Lab File ID: G2_1145.D

Analysis Method: 8260B | Date Collected: 06/05/2017 11:15

Sample wt/vol: 6.799(g) | Date Analyzed: 06/16/2017 22:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.6 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		71-136
460-00-4	4-Bromofluorobenzene (Surr)	104	Q	79-119
1868-53-7	Dibromofluoromethane (Surr)	104		78-119
2037-26-5	Toluene-d8 (Surr)	102		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1145.D
Lims ID: 280-97928-E-11-A
Client ID: SS025-SB08(2-4)
Sample Type: Client
Inject. Date: 16-Jun-2017 22:37:30 ALS Bottle#: 40 Worklist Smp#: 37
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-11-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:31:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	89	325100	1000.0	
* 3 Fluorobenzene	96	7.637	7.629	0.008	98	555206	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	103741	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	97	107181	50.0	s
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.829	6.829	0.000	93	146724	44.2	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	189245	41.7	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	385254	43.4	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	94	76975	44.0	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.705				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.668				ND	
43 Trichlorofluoromethane	101		2.710				ND	
42 Ethanol	45		2.906				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353				ND	
50 Acetone	43		3.353				ND	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.894				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.213				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.457				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
78 Chloroform	83		6.621				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.014				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.450				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
95 Dibromomethane	93		8.423				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.842				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.071				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593				ND	
140 1,3,5-Trichlorobenzene	180		13.707				ND	
141 1,2,4-Trichlorobenzene	180		14.129				ND	
142 Hexachlorobutadiene	225		14.215				ND	
143 Naphthalene	128		14.315				ND	
144 1,2,3-Trichlorobenzene	180		14.472				ND	
26 3-Methylhexane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	

QC Flag Legend

Processing Flags

s - Failed ISTD Recovery Test

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

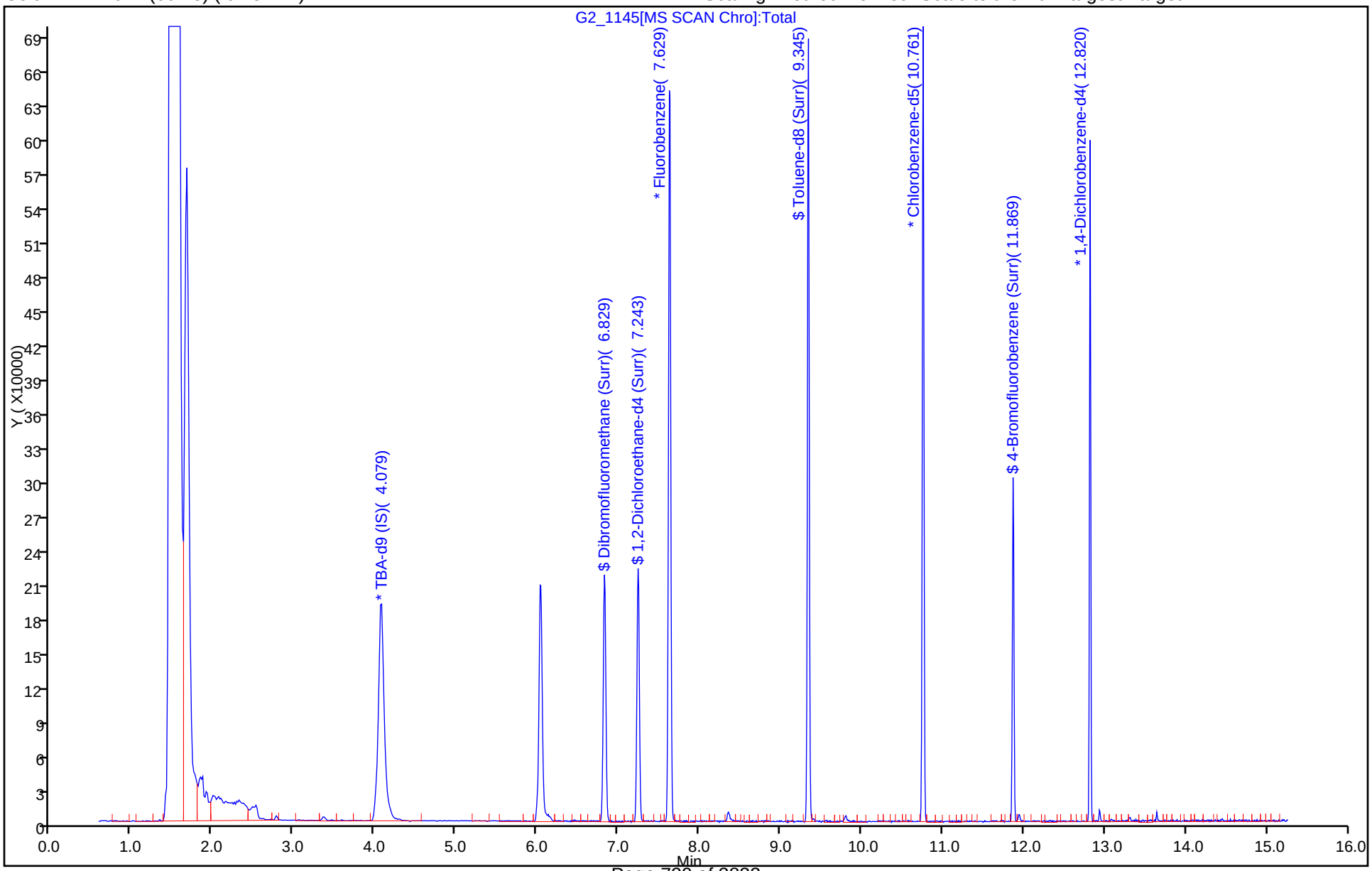
Report Date: 18-Jun-2017 12:36:01 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1145.D

Injection Date:	16-Jun-2017 22:37:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97928-E-11-A	Lab Sample ID:	280-97928-11	Worklist Smp#:	37
Client ID:	SS025-SB08(2-4)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1145.D
Lims ID: 280-97928-E-11-A
Client ID: SS025-SB08(2-4)
Sample Type: Client
Inject. Date: 16-Jun-2017 22:37:30 ALS Bottle#: 40 Worklist Smp#: 37
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-11-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:31:26

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	44.2	103.98
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	41.7	98.09
$ 10 Toluene-d8 (Surr)	42.5	43.4	102.17
$ 11 4-Bromofluorobenzene (Surr)	42.5	44.0	103.60

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS09 | Lab Sample ID: 280-97928-12

Matrix: Solid | Lab File ID: G2_1146.D

Analysis Method: 8260B | Date Collected: 06/05/2017 11:35

Sample wt/vol: 7.297(g) | Date Analyzed: 06/16/2017 22:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 11.8 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.2	U	3.9	1.2	0.44
71-55-6	1,1,1-Trichloroethane	1.2	U	3.9	1.2	0.40
79-34-5	1,1,2,2-Tetrachloroethane	1.2	U	3.9	1.2	0.47
79-00-5	1,1,2-Trichloroethane	2.5	U	3.9	2.5	0.68
75-34-3	1,1-Dichloroethane	0.62	U	3.9	0.62	0.16
75-35-4	1,1-Dichloroethene	1.2	U	3.9	1.2	0.46
563-58-6	1,1-Dichloropropene	1.2	U	3.9	1.2	0.42
87-61-6	1,2,3-Trichlorobenzene	1.2	U	3.9	1.2	0.58
96-18-4	1,2,3-Trichloropropane	2.5	U	3.9	2.5	0.63
120-82-1	1,2,4-Trichlorobenzene	1.2	U	3.9	1.2	0.57
95-63-6	1,2,4-Trimethylbenzene	1.2	U	3.9	1.2	0.45
96-12-8	1,2-Dibromo-3-Chloropropane	1.2	U	7.8	1.2	0.47
106-93-4	1,2-Dibromoethane	1.2	U	3.9	1.2	0.40
95-50-1	1,2-Dichlorobenzene	1.2	U	3.9	1.2	0.35
107-06-2	1,2-Dichloroethane	1.2	U	3.9	1.2	0.54
540-59-0	1,2-Dichloroethene, Total	1.2	U	3.9	1.2	0.30
78-87-5	1,2-Dichloropropane	1.2	U	3.9	1.2	0.43
108-67-8	1,3,5-Trimethylbenzene	1.2	U	3.9	1.2	0.44
541-73-1	1,3-Dichlorobenzene	1.2	U	3.9	1.2	0.37
142-28-9	1,3-Dichloropropane	1.2	U	3.9	1.2	0.40
106-46-7	1,4-Dichlorobenzene	1.2	U	3.9	1.2	0.61
594-20-7	2,2-Dichloropropane	1.2	U	3.9	1.2	0.34
78-93-3	2-Butanone (MEK)	5.0	U	16	5.0	1.4
95-49-8	2-Chlorotoluene	1.2	U	3.9	1.2	0.40
591-78-6	2-Hexanone	9.9	U Q	16	9.9	3.8
106-43-4	4-Chlorotoluene	1.2	U	3.9	1.2	0.61
99-87-6	4-Isopropyltoluene	1.2	U	3.9	1.2	0.38
108-10-1	4-Methyl-2-pentanone (MIBK)	9.9	U	16	9.9	3.4
67-64-1	Acetone	48	B Q	16	9.9	4.2
71-43-2	Benzene	1.2	U	3.9	1.2	0.37
108-86-1	Bromobenzene	1.2	U	3.9	1.2	0.38
74-97-5	Bromochloromethane	0.62	U	3.9	0.62	0.23
75-27-4	Bromodichloromethane	0.62	U	3.9	0.62	0.17
75-25-2	Bromoform	0.62	U	3.9	0.62	0.18
74-83-9	Bromomethane	1.2	U	7.8	1.2	0.39
75-15-0	Carbon disulfide	1.2	U	3.9	1.2	0.33

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS09 | Lab Sample ID: 280-97928-12

Matrix: Solid | Lab File ID: G2_1146.D

Analysis Method: 8260B | Date Collected: 06/05/2017 11:35

Sample wt/vol: 7.297(g) | Date Analyzed: 06/16/2017 22:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 11.8 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.2	U	3.9	1.2	0.49
108-90-7	Chlorobenzene	1.2	U	3.9	1.2	0.42
75-00-3	Chloroethane	2.5	U	7.8	2.5	0.69
67-66-3	Chloroform	0.62	U	7.8	0.62	0.23
74-87-3	Chloromethane	1.2	U	7.8	1.2	0.60
156-59-2	cis-1,2-Dichloroethene	1.2	U	3.9	1.2	0.44
10061-01-5	cis-1,3-Dichloropropene	2.5	U	3.9	2.5	1.0
124-48-1	Dibromochloromethane	1.2	U	3.9	1.2	0.44
74-95-3	Dibromomethane	2.5	U	3.9	2.5	0.65
75-71-8	Dichlorodifluoromethane	1.2	U Q	7.8	1.2	0.40
100-41-4	Ethylbenzene	1.2	U	3.9	1.2	0.52
87-68-3	Hexachlorobutadiene	1.2	U	3.9	1.2	0.43
108-20-3	Isopropyl ether	6.2	U	39	6.2	2.1
98-82-8	Isopropylbenzene	1.2	U	3.9	1.2	0.46
179601-23-1	m&p-Xylene	2.5	U	2.5	2.5	0.81
74-88-4	Methyl iodide	1.2	U	3.9	1.2	0.34
1634-04-4	Methyl tert-butyl ether	0.62	U	16	0.62	0.26
75-09-2	Methylene Chloride	2.5	U	3.9	2.5	1.2
91-20-3	Naphthalene	1.2	U	3.9	1.2	0.49
104-51-8	n-Butylbenzene	1.2	U	3.9	1.2	0.44
103-65-1	N-Propylbenzene	1.2	U	3.9	1.2	0.45
95-47-6	o-Xylene	1.2	U	3.9	1.2	0.47
135-98-8	sec-Butylbenzene	1.2	U	3.9	1.2	0.60
100-42-5	Styrene	1.2	U	3.9	1.2	0.49
98-06-6	tert-Butylbenzene	1.2	U	3.9	1.2	0.39
127-18-4	Tetrachloroethene	1.2	U	3.9	1.2	0.46
108-88-3	Toluene	1.2	U	3.9	1.2	0.54
156-60-5	trans-1,2-Dichloroethene	0.62	U	3.9	0.62	0.30
10061-02-6	trans-1,3-Dichloropropene	1.2	U	3.9	1.2	0.52
79-01-6	Trichloroethene	0.62	U	3.9	0.62	0.18
75-69-4	Trichlorofluoromethane	2.5	U	7.8	2.5	0.81
108-05-4	Vinyl acetate	2.5	U	7.8	2.5	0.83
75-01-4	Vinyl chloride	2.5	U	3.9	2.5	1.0
1330-20-7	Xylenes (total)	0.78	U	7.8	0.78	0.47

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS09 | Lab Sample ID: 280-97928-12

Matrix: Solid | Lab File ID: G2_1146.D

Analysis Method: 8260B | Date Collected: 06/05/2017 11:35

Sample wt/vol: 7.297(g) | Date Analyzed: 06/16/2017 22:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 11.8 | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		71-136
460-00-4	4-Bromofluorobenzene (Surr)	102		79-119
1868-53-7	Dibromofluoromethane (Surr)	105		78-119
2037-26-5	Toluene-d8 (Surr)	94		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1146.D
Lims ID: 280-97928-E-12-A
Client ID: SS025-SS09
Sample Type: Client
Inject. Date: 16-Jun-2017 22:58:30 ALS Bottle#: 41 Worklist Smp#: 38
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-12-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:32:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	91	387738	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	606457	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	136097	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	209804	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	93	161196	44.5	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	217966	44.2	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	465023	40.0	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	148346	43.3	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.705				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.668				ND	
43 Trichlorofluoromethane	101		2.710				ND	
42 Ethanol	45	2.878	2.906	-0.028	95	21814	517.2	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353				ND	
50 Acetone	43	3.353	3.353	0.000	97	93122	62.1	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.894				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.213				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.457				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
78 Chloroform	83		6.621				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.014				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.450				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
95 Dibromomethane	93		8.423				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.842				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.071				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593				ND	
140 1,3,5-Trichlorobenzene	180		13.707				ND	
141 1,2,4-Trichlorobenzene	180		14.129				ND	
142 Hexachlorobutadiene	225		14.215				ND	
143 Naphthalene	128		14.315				ND	
144 1,2,3-Trichlorobenzene	180		14.472				ND	
26 3-Methylhexane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

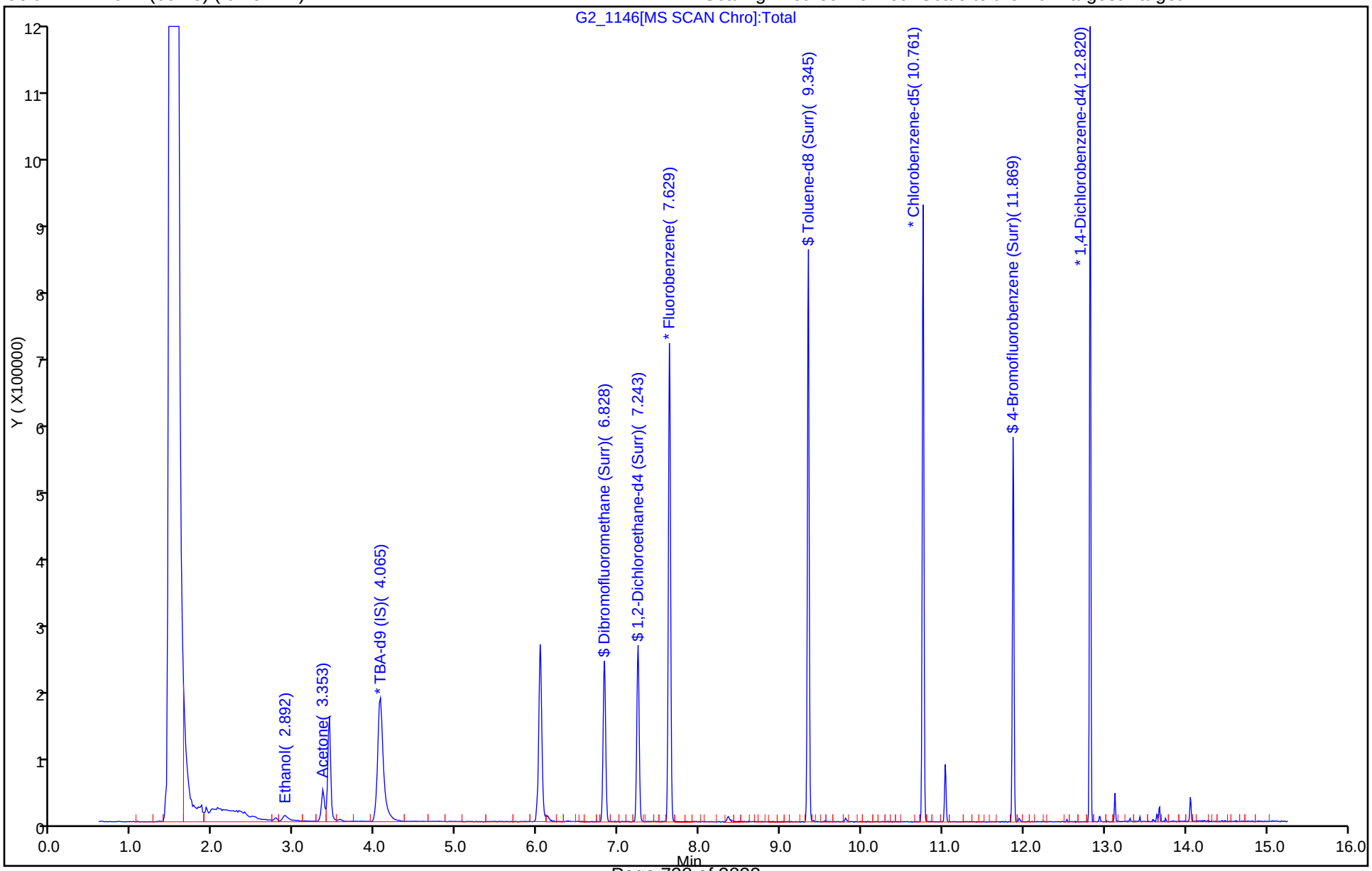
Report Date: 18-Jun-2017 12:36:03 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1146.D

Injection Date:	16-Jun-2017 22:58:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97928-E-12-A	Lab Sample ID:	280-97928-12	Worklist Smp#:	38
Client ID:	SS025-SS09				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1146.D
Lims ID: 280-97928-E-12-A
Client ID: SS025-SS09
Sample Type: Client
Inject. Date: 16-Jun-2017 22:58:30 ALS Bottle#: 41 Worklist Smp#: 38
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-12-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 18-Jun-2017 12:32:04

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	44.5	104.64
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	44.2	103.96
$ 10 Toluene-d8 (Surr)	42.5	40.0	94.01
$ 11 4-Bromofluorobenzene (Surr)	42.5	43.3	102.00

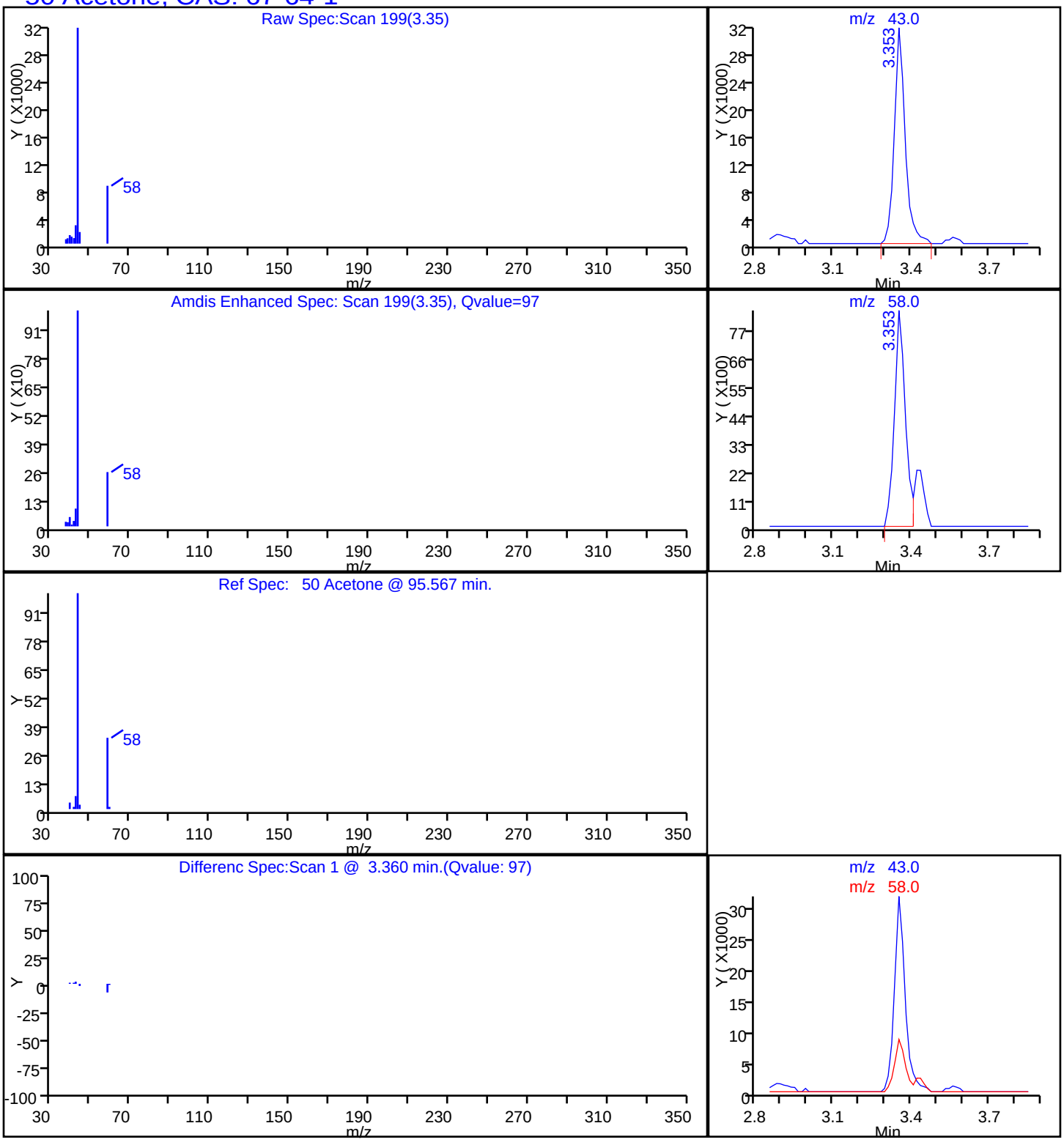
Report Date: 18-Jun-2017 12:36:03 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1146.D

Injection Date:	16-Jun-2017 22:58:30	Instrument ID:	VMS_G2		
Lims ID:	280-97928-E-12-A	Lab Sample ID:	280-97928-12		
Client ID:	SS025-SS09				
Operator ID:	DUKESA	ALS Bottle#:	41	Worklist Smp#:	38
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

50 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(0-2) | Lab Sample ID: 280-97928-14

Matrix: Solid | Lab File ID: G2_1124.D

Analysis Method: 8260B | Date Collected: 06/05/2017 13:30

Sample wt/vol: 6.286(g) | Date Analyzed: 06/16/2017 15:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 11.0 | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.4	U	4.5	1.4	0.50
71-55-6	1,1,1-Trichloroethane	1.4	U	4.5	1.4	0.46
79-34-5	1,1,2,2-Tetrachloroethane	1.4	U	4.5	1.4	0.54
79-00-5	1,1,2-Trichloroethane	2.9	U	4.5	2.9	0.79
75-34-3	1,1-Dichloroethane	0.71	U	4.5	0.71	0.19
75-35-4	1,1-Dichloroethene	1.4	U	4.5	1.4	0.53
563-58-6	1,1-Dichloropropene	1.4	U	4.5	1.4	0.48
87-61-6	1,2,3-Trichlorobenzene	1.4	U	4.5	1.4	0.67
96-18-4	1,2,3-Trichloropropane	2.9	U	4.5	2.9	0.72
120-82-1	1,2,4-Trichlorobenzene	1.4	U	4.5	1.4	0.65
95-63-6	1,2,4-Trimethylbenzene	1.4	U	4.5	1.4	0.52
96-12-8	1,2-Dibromo-3-Chloropropane	1.4	U	8.9	1.4	0.54
106-93-4	1,2-Dibromoethane	1.4	U	4.5	1.4	0.46
95-50-1	1,2-Dichlorobenzene	1.4	U	4.5	1.4	0.40
107-06-2	1,2-Dichloroethane	1.4	U	4.5	1.4	0.63
540-59-0	1,2-Dichloroethene, Total	1.4	U	4.5	1.4	0.35
78-87-5	1,2-Dichloropropane	1.4	U	4.5	1.4	0.49
108-67-8	1,3,5-Trimethylbenzene	1.4	U	4.5	1.4	0.51
541-73-1	1,3-Dichlorobenzene	1.4	U	4.5	1.4	0.43
142-28-9	1,3-Dichloropropane	1.4	U	4.5	1.4	0.46
106-46-7	1,4-Dichlorobenzene	1.4	U	4.5	1.4	0.70
594-20-7	2,2-Dichloropropane	1.4	U	4.5	1.4	0.39
78-93-3	2-Butanone (MEK)	5.7	U	18	5.7	1.6
95-49-8	2-Chlorotoluene	1.4	U	4.5	1.4	0.46
591-78-6	2-Hexanone	11	U Q	18	11	4.4
106-43-4	4-Chlorotoluene	1.4	U	4.5	1.4	0.70
99-87-6	4-Isopropyltoluene	1.4	U	4.5	1.4	0.44
108-10-1	4-Methyl-2-pentanone (MIBK)	11	U	18	11	3.9
67-64-1	Acetone	20	Q	18	11	4.8
71-43-2	Benzene	1.4	U	4.5	1.4	0.42
108-86-1	Bromobenzene	1.4	U	4.5	1.4	0.44
74-97-5	Bromochloromethane	0.71	U	4.5	0.71	0.27
75-27-4	Bromodichloromethane	0.71	U	4.5	0.71	0.20
75-25-2	Bromoform	0.71	U	4.5	0.71	0.21
74-83-9	Bromomethane	1.4	U	8.9	1.4	0.45
75-15-0	Carbon disulfide	1.4	U	4.5	1.4	0.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(0-2) | Lab Sample ID: 280-97928-14

Matrix: Solid | Lab File ID: G2_1124.D

Analysis Method: 8260B | Date Collected: 06/05/2017 13:30

Sample wt/vol: 6.286(g) | Date Analyzed: 06/16/2017 15:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 11.0 | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.4	U	4.5	1.4	0.56
108-90-7	Chlorobenzene	1.4	U	4.5	1.4	0.48
75-00-3	Chloroethane	2.9	U	8.9	2.9	0.80
67-66-3	Chloroform	0.71	U	8.9	0.71	0.26
74-87-3	Chloromethane	1.4	U	8.9	1.4	0.69
156-59-2	cis-1,2-Dichloroethene	1.4	U	4.5	1.4	0.50
10061-01-5	cis-1,3-Dichloropropene	2.9	U	4.5	2.9	1.2
124-48-1	Dibromochloromethane	1.4	U	4.5	1.4	0.51
74-95-3	Dibromomethane	2.9	U	4.5	2.9	0.75
75-71-8	Dichlorodifluoromethane	1.4	U Q	8.9	1.4	0.46
100-41-4	Ethylbenzene	1.4	U	4.5	1.4	0.60
87-68-3	Hexachlorobutadiene	1.4	U	4.5	1.4	0.49
108-20-3	Isopropyl ether	7.1	U	45	7.1	2.4
98-82-8	Isopropylbenzene	1.4	U	4.5	1.4	0.53
179601-23-1	m&p-Xylene	2.9	U	2.9	2.9	0.93
74-88-4	Methyl iodide	1.4	U	4.5	1.4	0.39
1634-04-4	Methyl tert-butyl ether	0.71	U	18	0.71	0.30
75-09-2	Methylene Chloride	2.9	U	4.5	2.9	1.4
91-20-3	Naphthalene	1.4	U	4.5	1.4	0.56
104-51-8	n-Butylbenzene	1.4	U	4.5	1.4	0.50
103-65-1	N-Propylbenzene	1.4	U	4.5	1.4	0.52
95-47-6	o-Xylene	1.4	U	4.5	1.4	0.54
135-98-8	sec-Butylbenzene	1.4	U	4.5	1.4	0.69
100-42-5	Styrene	1.4	U	4.5	1.4	0.56
98-06-6	tert-Butylbenzene	1.4	U	4.5	1.4	0.45
127-18-4	Tetrachloroethene	1.4	U	4.5	1.4	0.53
108-88-3	Toluene	1.4	U	4.5	1.4	0.62
156-60-5	trans-1,2-Dichloroethene	0.71	U	4.5	0.71	0.35
10061-02-6	trans-1,3-Dichloropropene	1.4	U	4.5	1.4	0.60
79-01-6	Trichloroethene	0.71	U	4.5	0.71	0.21
75-69-4	Trichlorofluoromethane	2.9	U	8.9	2.9	0.93
108-05-4	Vinyl acetate	2.9	U	8.9	2.9	0.96
75-01-4	Vinyl chloride	2.9	U	4.5	2.9	1.2
1330-20-7	Xylenes (total)	0.89	U	8.9	0.89	0.54

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(0-2) | Lab Sample ID: 280-97928-14

Matrix: Solid | Lab File ID: G2_1124.D

Analysis Method: 8260B | Date Collected: 06/05/2017 13:30

Sample wt/vol: 6.286(g) | Date Analyzed: 06/16/2017 15:16

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 11.0 | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		71-136
460-00-4	4-Bromofluorobenzene (Surr)	112		79-119
1868-53-7	Dibromofluoromethane (Surr)	102		78-119
2037-26-5	Toluene-d8 (Surr)	100		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1124.D
Lims ID: 280-97928-E-14-A
Client ID: SS025-SB09(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 15:16:30 ALS Bottle#: 19 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-14-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 16:13:06

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	93	450742	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	698667	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	155726	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.828	12.820	0.008	96	184618	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.829	6.829	0.000	93	181758	43.4	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	237840	41.6	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	567623	42.6	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	92	142900	47.5	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.705				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54	1.928	1.998	-0.070	2	882	NC	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.668				ND	
43 Trichlorofluoromethane	101		2.710				ND	
42 Ethanol	45		2.906				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353				ND	
50 Acetone	43	3.367	3.353	0.014	97	41674	22.9	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57	4.917	4.917	0.000	90	2504	1.31	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.894				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.213				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.457				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
78 Chloroform	83		6.621				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.014				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.450				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55	8.287	8.294	-0.007	87	2265	0.9359	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
95 Dibromomethane	93		8.423				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91	9.410	9.410	0.000	96	8709	0.5763	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.842				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.071				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593				ND	
140 1,3,5-Trichlorobenzene	180		13.707				ND	
141 1,2,4-Trichlorobenzene	180		14.129				ND	
142 Hexachlorobutadiene	225		14.215				ND	
143 Naphthalene	128		14.315				ND	
144 1,2,3-Trichlorobenzene	180		14.472				ND	
26 3-Methylhexane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 147 Total BTEX	1				0		0.5763	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

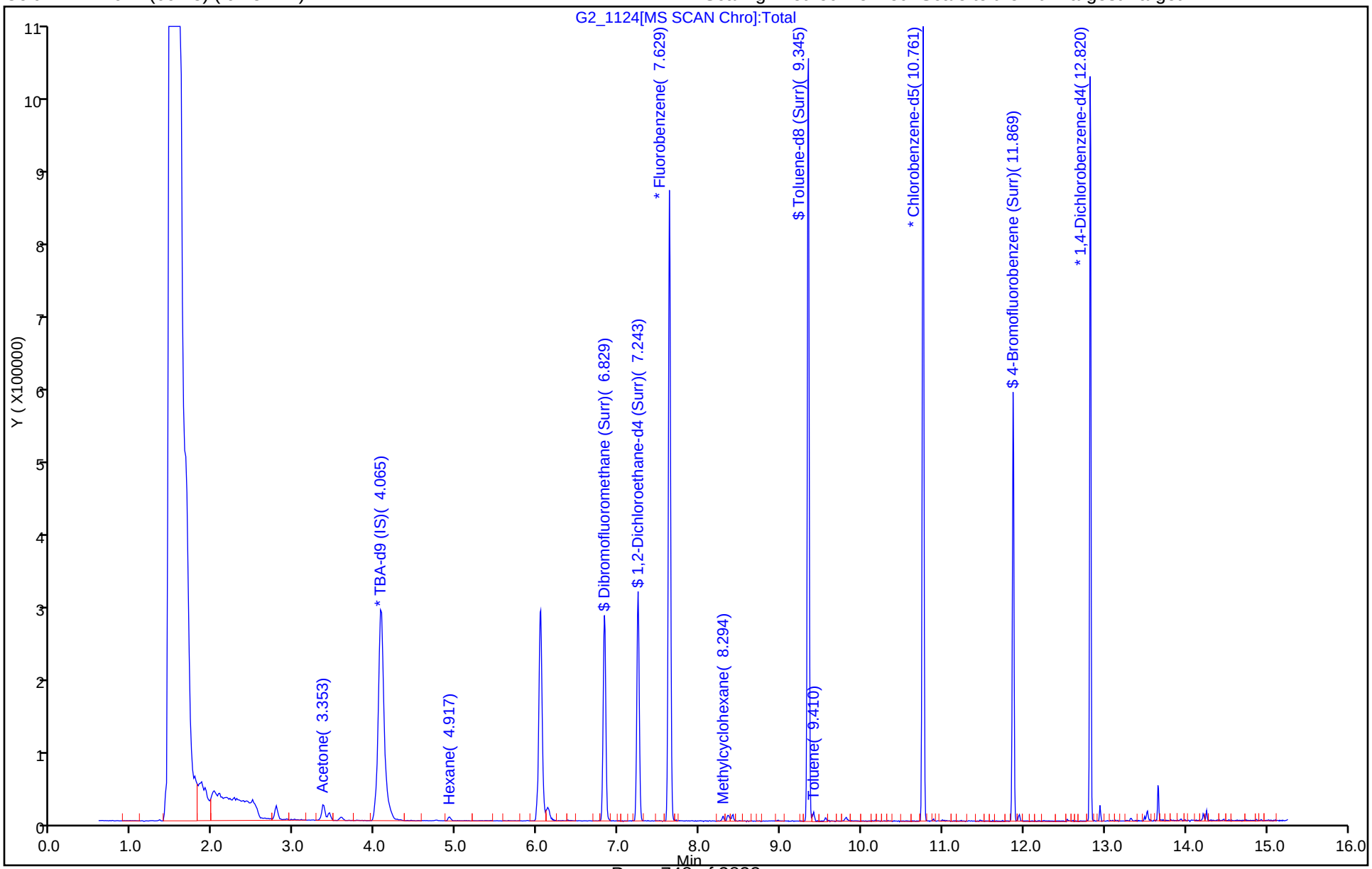
Report Date: 18-Jun-2017 12:35:08 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1124.D

Injection Date:	16-Jun-2017 15:16:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97928-E-14-A	Lab Sample ID:	280-97928-14	Worklist Smp#:	13
Client ID:	SS025-SB09(0-2)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1124.D
Lims ID: 280-97928-E-14-A
Client ID: SS025-SB09(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 15:16:30 ALS Bottle#: 19 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-14-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 16:13:06

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	43.4	102.23
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	41.6	97.95
$ 10 Toluene-d8 (Surr)	42.5	42.6	100.28
$ 11 4-Bromofluorobenzene (Surr)	42.5	47.5	111.65

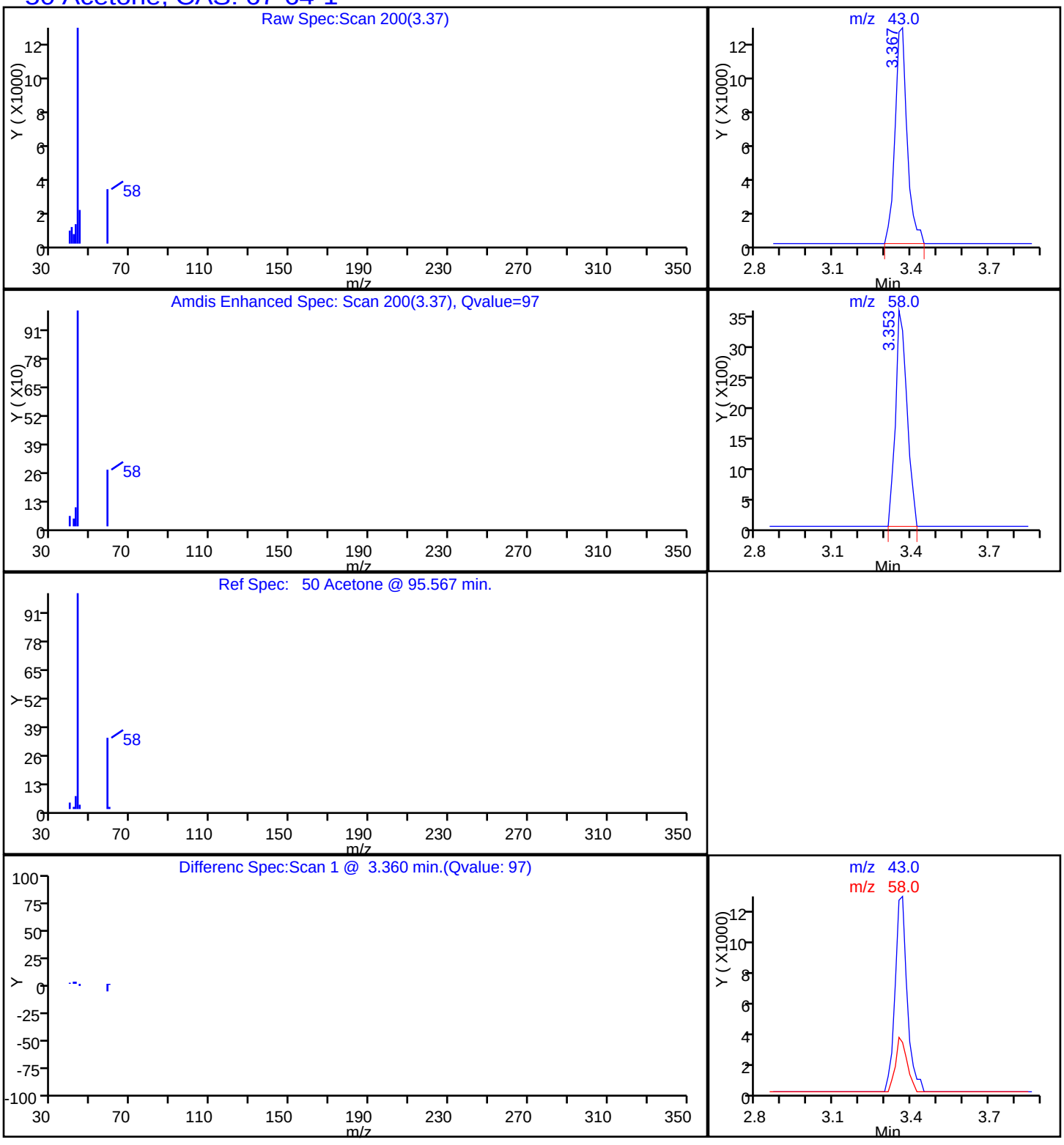
Report Date: 18-Jun-2017 12:35:08 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1124.D

Injection Date:	16-Jun-2017 15:16:30	Instrument ID:	VMS_G2		
Lims ID:	280-97928-E-14-A	Lab Sample ID:	280-97928-14		
Client ID:	SS025-SB09(0-2)				
Operator ID:	DUKESA	ALS Bottle#:	19	Worklist Smp#:	13
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

50 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(2-4) | Lab Sample ID: 280-97928-15

Matrix: Solid | Lab File ID: G2_1125.D

Analysis Method: 8260B | Date Collected: 06/05/2017 13:40

Sample wt/vol: 6.851(g) | Date Analyzed: 06/16/2017 15:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 9.9 | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.3	U	4.1	1.3	0.45
71-55-6	1,1,1-Trichloroethane	1.3	U	4.1	1.3	0.42
79-34-5	1,1,2,2-Tetrachloroethane	1.3	U	4.1	1.3	0.49
79-00-5	1,1,2-Trichloroethane	2.6	U	4.1	2.6	0.71
75-34-3	1,1-Dichloroethane	0.65	U	4.1	0.65	0.17
75-35-4	1,1-Dichloroethene	1.3	U	4.1	1.3	0.48
563-58-6	1,1-Dichloropropene	1.3	U	4.1	1.3	0.44
87-61-6	1,2,3-Trichlorobenzene	1.3	U	4.1	1.3	0.61
96-18-4	1,2,3-Trichloropropane	2.6	U	4.1	2.6	0.66
120-82-1	1,2,4-Trichlorobenzene	1.3	U	4.1	1.3	0.59
95-63-6	1,2,4-Trimethylbenzene	1.3	U	4.1	1.3	0.47
96-12-8	1,2-Dibromo-3-Chloropropane	1.3	U	8.1	1.3	0.49
106-93-4	1,2-Dibromoethane	1.3	U	4.1	1.3	0.42
95-50-1	1,2-Dichlorobenzene	1.3	U	4.1	1.3	0.36
107-06-2	1,2-Dichloroethane	1.3	U	4.1	1.3	0.57
540-59-0	1,2-Dichloroethene, Total	1.3	U	4.1	1.3	0.32
78-87-5	1,2-Dichloropropane	1.3	U	4.1	1.3	0.45
108-67-8	1,3,5-Trimethylbenzene	1.3	U	4.1	1.3	0.46
541-73-1	1,3-Dichlorobenzene	1.3	U	4.1	1.3	0.39
142-28-9	1,3-Dichloropropane	1.3	U	4.1	1.3	0.41
106-46-7	1,4-Dichlorobenzene	1.3	U	4.1	1.3	0.63
594-20-7	2,2-Dichloropropane	1.3	U	4.1	1.3	0.36
78-93-3	2-Butanone (MEK)	5.2	U	16	5.2	1.5
95-49-8	2-Chlorotoluene	1.3	U	4.1	1.3	0.41
591-78-6	2-Hexanone	10	U Q	16	10	4.0
106-43-4	4-Chlorotoluene	1.3	U	4.1	1.3	0.63
99-87-6	4-Isopropyltoluene	1.3	U	4.1	1.3	0.40
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	16	10	3.5
67-64-1	Acetone	10	U Q	16	10	4.4
71-43-2	Benzene	1.3	U	4.1	1.3	0.38
108-86-1	Bromobenzene	1.3	U	4.1	1.3	0.40
74-97-5	Bromochloromethane	0.65	U	4.1	0.65	0.24
75-27-4	Bromodichloromethane	0.65	U	4.1	0.65	0.18
75-25-2	Bromoform	0.65	U	4.1	0.65	0.19
74-83-9	Bromomethane	1.3	U	8.1	1.3	0.41
75-15-0	Carbon disulfide	1.3	U	4.1	1.3	0.34

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(2-4) | Lab Sample ID: 280-97928-15

Matrix: Solid | Lab File ID: G2_1125.D

Analysis Method: 8260B | Date Collected: 06/05/2017 13:40

Sample wt/vol: 6.851(g) | Date Analyzed: 06/16/2017 15:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 9.9 | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.3	U	4.1	1.3	0.51
108-90-7	Chlorobenzene	1.3	U	4.1	1.3	0.44
75-00-3	Chloroethane	2.6	U	8.1	2.6	0.72
67-66-3	Chloroform	0.65	U	8.1	0.65	0.23
74-87-3	Chloromethane	1.3	U	8.1	1.3	0.62
156-59-2	cis-1,2-Dichloroethene	1.3	U	4.1	1.3	0.45
10061-01-5	cis-1,3-Dichloropropene	2.6	U	4.1	2.6	1.0
124-48-1	Dibromochloromethane	1.3	U	4.1	1.3	0.46
74-95-3	Dibromomethane	2.6	U	4.1	2.6	0.68
75-71-8	Dichlorodifluoromethane	1.3	U Q	8.1	1.3	0.42
100-41-4	Ethylbenzene	1.3	U	4.1	1.3	0.54
87-68-3	Hexachlorobutadiene	1.3	U	4.1	1.3	0.45
108-20-3	Isopropyl ether	6.5	U	41	6.5	2.2
98-82-8	Isopropylbenzene	1.3	U	4.1	1.3	0.48
179601-23-1	m&p-Xylene	2.6	U	2.6	2.6	0.84
74-88-4	Methyl iodide	1.3	U	4.1	1.3	0.36
1634-04-4	Methyl tert-butyl ether	0.65	U	16	0.65	0.28
75-09-2	Methylene Chloride	2.6	U	4.1	2.6	1.3
91-20-3	Naphthalene	1.3	U	4.1	1.3	0.51
104-51-8	n-Butylbenzene	1.3	U	4.1	1.3	0.45
103-65-1	N-Propylbenzene	1.3	U	4.1	1.3	0.47
95-47-6	o-Xylene	1.3	U	4.1	1.3	0.49
135-98-8	sec-Butylbenzene	1.3	U	4.1	1.3	0.62
100-42-5	Styrene	1.3	U	4.1	1.3	0.51
98-06-6	tert-Butylbenzene	1.3	U	4.1	1.3	0.41
127-18-4	Tetrachloroethene	1.3	U	4.1	1.3	0.48
108-88-3	Toluene	1.3	U	4.1	1.3	0.56
156-60-5	trans-1,2-Dichloroethene	0.65	U	4.1	0.65	0.32
10061-02-6	trans-1,3-Dichloropropene	1.3	U	4.1	1.3	0.54
79-01-6	Trichloroethene	0.65	U	4.1	0.65	0.19
75-69-4	Trichlorofluoromethane	2.6	U	8.1	2.6	0.84
108-05-4	Vinyl acetate	2.6	U	8.1	2.6	0.87
75-01-4	Vinyl chloride	2.6	U	4.1	2.6	1.1
1330-20-7	Xylenes (total)	0.81	U	8.1	0.81	0.49

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(2-4) | Lab Sample ID: 280-97928-15

Matrix: Solid | Lab File ID: G2_1125.D

Analysis Method: 8260B | Date Collected: 06/05/2017 13:40

Sample wt/vol: 6.851(g) | Date Analyzed: 06/16/2017 15:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 9.9 | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		71-136
460-00-4	4-Bromofluorobenzene (Surr)	109		79-119
1868-53-7	Dibromofluoromethane (Surr)	108		78-119
2037-26-5	Toluene-d8 (Surr)	98		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1125.D
Lims ID: 280-97928-E-15-A
Client ID: SS025-SB09(2-4)
Sample Type: Client
Inject. Date: 16-Jun-2017 15:37:30 ALS Bottle#: 20 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-15-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 16:50:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	92	426254	1000.0	
* 3 Fluorobenzene	96	7.636	7.629	0.007	98	633188	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	143329	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	176972	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	93	173105	45.8	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	228061	44.3	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	509353	41.6	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	133304	46.2	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.705				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.668				ND	
43 Trichlorofluoromethane	101		2.710				ND	
42 Ethanol	45		2.906				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353				ND	
50 Acetone	43	3.367	3.353	0.014	95	8626	4.07	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.894				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.213				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.457				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
78 Chloroform	83		6.621				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.014				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.450				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
95 Dibromomethane	93		8.423				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.842				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.071				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593				ND	
140 1,3,5-Trichlorobenzene	180		13.707				ND	
141 1,2,4-Trichlorobenzene	180		14.129				ND	
142 Hexachlorobutadiene	225		14.215				ND	
143 Naphthalene	128		14.315				ND	
144 1,2,3-Trichlorobenzene	180		14.472				ND	
26 3-Methylhexane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

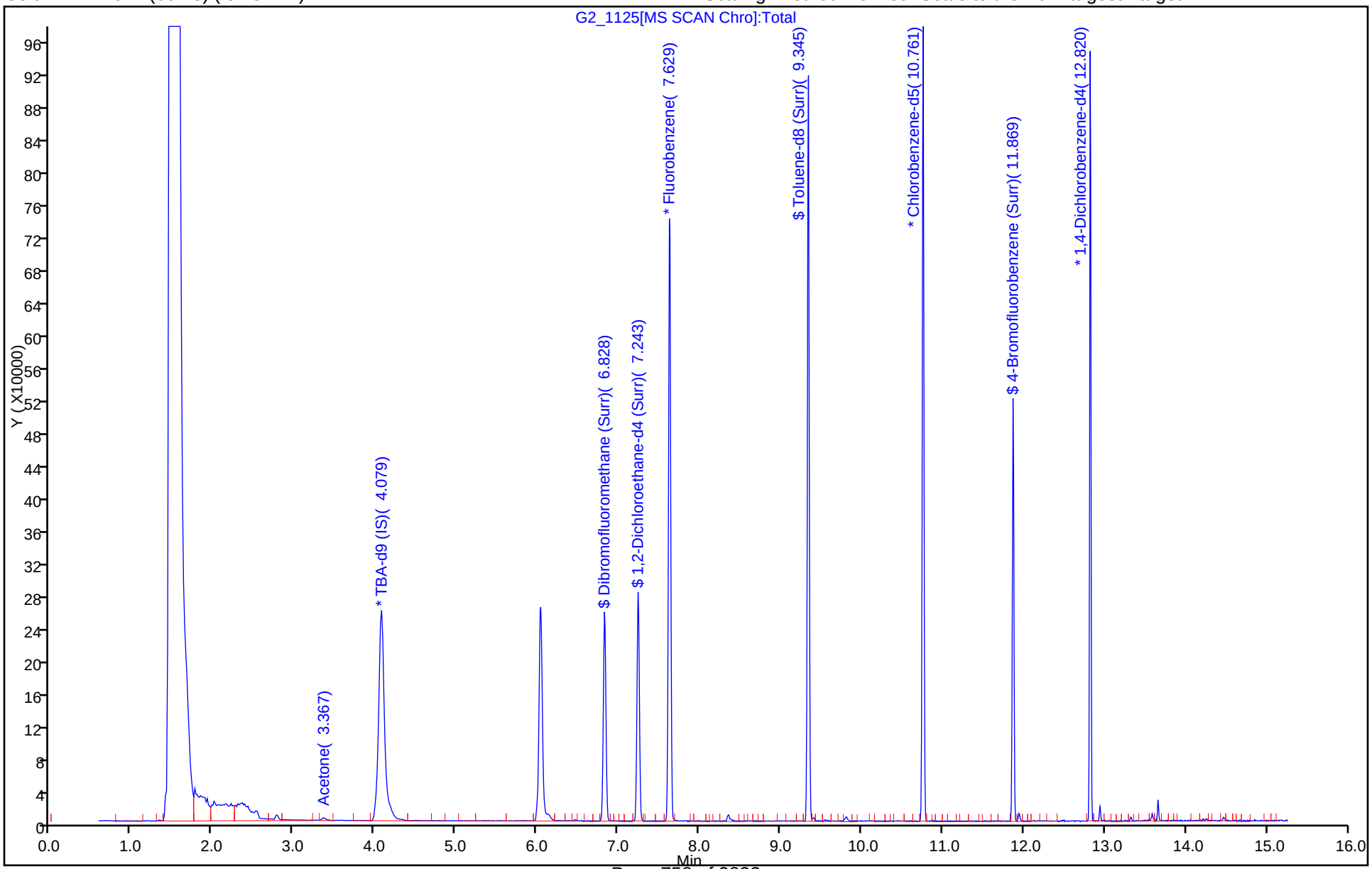
Report Date: 18-Jun-2017 12:35:10 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1125.D

Injection Date:	16-Jun-2017 15:37:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97928-E-15-A	Lab Sample ID:	280-97928-15	Worklist Smp#:	14
Client ID:	SS025-SB09(2-4)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1125.D
Lims ID: 280-97928-E-15-A
Client ID: SS025-SB09(2-4)
Sample Type: Client
Inject. Date: 16-Jun-2017 15:37:30 ALS Bottle#: 20 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-15-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 16:50:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	45.8	107.88
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	44.3	104.21
$ 10 Toluene-d8 (Surr)	42.5	41.6	97.77
$ 11 4-Bromofluorobenzene (Surr)	42.5	46.2	108.66

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(4-6) | Lab Sample ID: 280-97928-16

Matrix: Solid | Lab File ID: G2_1126.D

Analysis Method: 8260B | Date Collected: 06/05/2017 13:50

Sample wt/vol: 6.604(g) | Date Analyzed: 06/16/2017 15:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 16.9 | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.5	U	4.6	1.5	0.51
71-55-6	1,1,1-Trichloroethane	1.5	U	4.6	1.5	0.47
79-34-5	1,1,2,2-Tetrachloroethane	1.5	U	4.6	1.5	0.56
79-00-5	1,1,2-Trichloroethane	2.9	U	4.6	2.9	0.80
75-34-3	1,1-Dichloroethane	0.73	U	4.6	0.73	0.19
75-35-4	1,1-Dichloroethene	1.5	U	4.6	1.5	0.54
563-58-6	1,1-Dichloropropene	1.5	U	4.6	1.5	0.49
87-61-6	1,2,3-Trichlorobenzene	1.5	U	4.6	1.5	0.68
96-18-4	1,2,3-Trichloropropane	2.9	U	4.6	2.9	0.74
120-82-1	1,2,4-Trichlorobenzene	1.5	U	4.6	1.5	0.67
95-63-6	1,2,4-Trimethylbenzene	1.5	U	4.6	1.5	0.53
96-12-8	1,2-Dibromo-3-Chloropropane	1.5	U	9.1	1.5	0.55
106-93-4	1,2-Dibromoethane	1.5	U	4.6	1.5	0.47
95-50-1	1,2-Dichlorobenzene	1.5	U	4.6	1.5	0.41
107-06-2	1,2-Dichloroethane	1.5	U	4.6	1.5	0.64
540-59-0	1,2-Dichloroethene, Total	1.5	U	4.6	1.5	0.36
78-87-5	1,2-Dichloropropane	1.5	U	4.6	1.5	0.50
108-67-8	1,3,5-Trimethylbenzene	1.5	U	4.6	1.5	0.52
541-73-1	1,3-Dichlorobenzene	1.5	U	4.6	1.5	0.44
142-28-9	1,3-Dichloropropane	1.5	U	4.6	1.5	0.46
106-46-7	1,4-Dichlorobenzene	1.5	U	4.6	1.5	0.71
594-20-7	2,2-Dichloropropane	1.5	U	4.6	1.5	0.40
78-93-3	2-Butanone (MEK)	5.8	U	18	5.8	1.7
95-49-8	2-Chlorotoluene	1.5	U	4.6	1.5	0.46
591-78-6	2-Hexanone	12	U Q	18	12	4.5
106-43-4	4-Chlorotoluene	1.5	U	4.6	1.5	0.71
99-87-6	4-Isopropyltoluene	1.5	U	4.6	1.5	0.45
108-10-1	4-Methyl-2-pentanone (MIBK)	12	U	18	12	4.0
67-64-1	Acetone	12	U Q	18	12	4.9
71-43-2	Benzene	1.5	U	4.6	1.5	0.43
108-86-1	Bromobenzene	1.5	U	4.6	1.5	0.45
74-97-5	Bromochloromethane	0.73	U	4.6	0.73	0.27
75-27-4	Bromodichloromethane	0.73	U	4.6	0.73	0.20
75-25-2	Bromoform	0.73	U	4.6	0.73	0.21
74-83-9	Bromomethane	1.5	U	9.1	1.5	0.46
75-15-0	Carbon disulfide	1.5	U	4.6	1.5	0.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(4-6) | Lab Sample ID: 280-97928-16

Matrix: Solid | Lab File ID: G2_1126.D

Analysis Method: 8260B | Date Collected: 06/05/2017 13:50

Sample wt/vol: 6.604(g) | Date Analyzed: 06/16/2017 15:58

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 16.9 | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.5	U	4.6	1.5	0.57
108-90-7	Chlorobenzene	1.5	U	4.6	1.5	0.49
75-00-3	Chloroethane	2.9	U	9.1	2.9	0.81
67-66-3	Chloroform	0.73	U	9.1	0.73	0.26
74-87-3	Chloromethane	1.5	U	9.1	1.5	0.70
156-59-2	cis-1,2-Dichloroethene	1.5	U	4.6	1.5	0.51
10061-01-5	cis-1,3-Dichloropropene	2.9	U	4.6	2.9	1.2
124-48-1	Dibromochloromethane	1.5	U	4.6	1.5	0.52
74-95-3	Dibromomethane	2.9	U	4.6	2.9	0.77
75-71-8	Dichlorodifluoromethane	1.5	U Q	9.1	1.5	0.47
100-41-4	Ethylbenzene	1.5	U	4.6	1.5	0.61
87-68-3	Hexachlorobutadiene	1.5	U	4.6	1.5	0.50
108-20-3	Isopropyl ether	7.3	U	46	7.3	2.5
98-82-8	Isopropylbenzene	1.5	U	4.6	1.5	0.54
179601-23-1	m&p-Xylene	2.9	U	2.9	2.9	0.95
74-88-4	Methyl iodide	1.5	U	4.6	1.5	0.40
1634-04-4	Methyl tert-butyl ether	0.73	U	18	0.73	0.31
75-09-2	Methylene Chloride	2.9	U	4.6	2.9	1.5
91-20-3	Naphthalene	1.5	U	4.6	1.5	0.57
104-51-8	n-Butylbenzene	1.5	U	4.6	1.5	0.51
103-65-1	N-Propylbenzene	1.5	U	4.6	1.5	0.53
95-47-6	o-Xylene	1.5	U	4.6	1.5	0.56
135-98-8	sec-Butylbenzene	1.5	U	4.6	1.5	0.70
100-42-5	Styrene	1.5	U	4.6	1.5	0.57
98-06-6	tert-Butylbenzene	1.5	U	4.6	1.5	0.46
127-18-4	Tetrachloroethene	1.5	U	4.6	1.5	0.54
108-88-3	Toluene	1.5	U	4.6	1.5	0.63
156-60-5	trans-1,2-Dichloroethene	0.73	U	4.6	0.73	0.36
10061-02-6	trans-1,3-Dichloropropene	1.5	U	4.6	1.5	0.61
79-01-6	Trichloroethene	0.73	U	4.6	0.73	0.21
75-69-4	Trichlorofluoromethane	2.9	U	9.1	2.9	0.95
108-05-4	Vinyl acetate	2.9	U	9.1	2.9	0.97
75-01-4	Vinyl chloride	2.9	U	4.6	2.9	1.2
1330-20-7	Xylenes (total)	0.91	U	9.1	0.91	0.56

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(4-6) Lab Sample ID: 280-97928-16

Matrix: Solid Lab File ID: G2_1126.D

Analysis Method: 8260B Date Collected: 06/05/2017 13:50

Sample wt/vol: 6.604(g) Date Analyzed: 06/16/2017 15:58

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 16.9 Level: (low/med) Low

Analysis Batch No.: 377645 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		71-136
460-00-4	4-Bromofluorobenzene (Surr)	99		79-119
1868-53-7	Dibromofluoromethane (Surr)	110		78-119
2037-26-5	Toluene-d8 (Surr)	97		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1126.D
Lims ID: 280-97928-E-16-A
Client ID: SS025-SB09(4-6)
Sample Type: Client
Inject. Date: 16-Jun-2017 15:58:30 ALS Bottle#: 21 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-16-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 16:50:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	91	487173	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	585529	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	139927	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	201822	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.829	6.829	0.000	93	162823	46.7	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	222816	47.0	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	491558	41.1	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	138680	42.1	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.705				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.668				ND	
43 Trichlorofluoromethane	101		2.710				ND	
42 Ethanol	45		2.906				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353				ND	
50 Acetone	43		3.353				ND	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.894				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.213				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.457				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
78 Chloroform	83		6.621				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.014				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.450				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
95 Dibromomethane	93		8.423				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.842				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.071				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593				ND	
140 1,3,5-Trichlorobenzene	180		13.707				ND	
141 1,2,4-Trichlorobenzene	180		14.129				ND	
142 Hexachlorobutadiene	225		14.215				ND	
143 Naphthalene	128		14.315				ND	
144 1,2,3-Trichlorobenzene	180		14.472				ND	
26 3-Methylhexane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

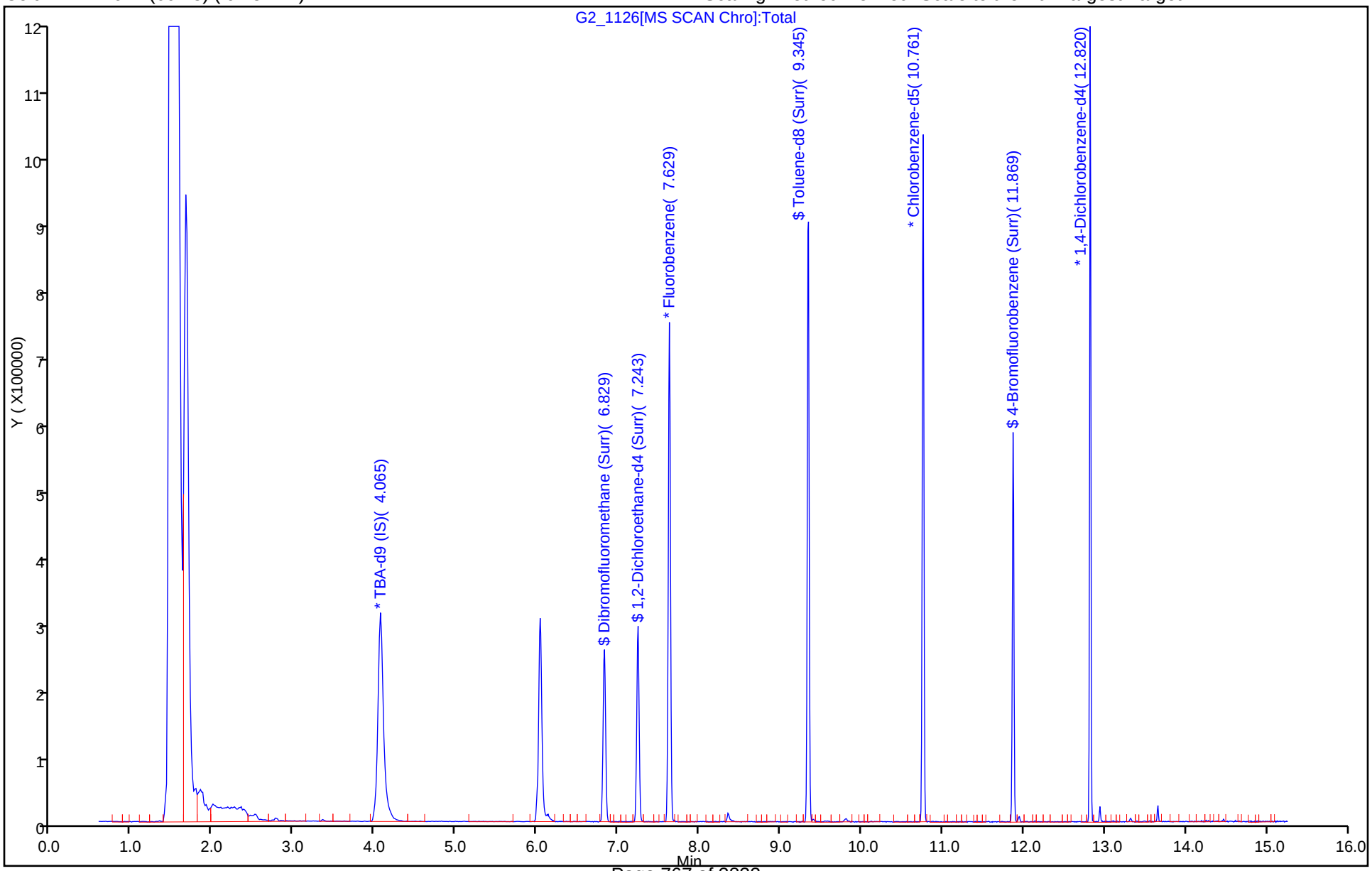
Report Date: 18-Jun-2017 12:35:13 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1126.D

Injection Date:	16-Jun-2017 15:58:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97928-E-16-A	Lab Sample ID:	280-97928-16	Worklist Smp#:	15
Client ID:	SS025-SB09(4-6)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1126.D
Lims ID: 280-97928-E-16-A
Client ID: SS025-SB09(4-6)
Sample Type: Client
Inject. Date: 16-Jun-2017 15:58:30 ALS Bottle#: 21 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-e-16-a
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 16:50:23

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	46.7	109.88
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	47.0	110.65
$ 10 Toluene-d8 (Surr)	42.5	41.1	96.65
$ 11 4-Bromofluorobenzene (Surr)	42.5	42.1	99.12

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(6-8) | Lab Sample ID: 280-97928-17

Matrix: Solid | Lab File ID: G2_1127.D

Analysis Method: 8260B | Date Collected: 06/05/2017 14:10

Sample wt/vol: 7.302(g) | Date Analyzed: 06/16/2017 16:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.8 | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.3	U	4.0	1.3	0.44
71-55-6	1,1,1-Trichloroethane	1.3	U	4.0	1.3	0.41
79-34-5	1,1,2,2-Tetrachloroethane	1.3	U	4.0	1.3	0.48
79-00-5	1,1,2-Trichloroethane	2.5	U	4.0	2.5	0.70
75-34-3	1,1-Dichloroethane	0.64	U	4.0	0.64	0.17
75-35-4	1,1-Dichloroethene	1.3	U	4.0	1.3	0.47
563-58-6	1,1-Dichloropropene	1.3	U	4.0	1.3	0.43
87-61-6	1,2,3-Trichlorobenzene	1.3	U	4.0	1.3	0.60
96-18-4	1,2,3-Trichloropropane	2.5	U	4.0	2.5	0.64
120-82-1	1,2,4-Trichlorobenzene	1.3	U	4.0	1.3	0.58
95-63-6	1,2,4-Trimethylbenzene	1.3	U	4.0	1.3	0.46
96-12-8	1,2-Dibromo-3-Chloropropane	1.3	U	7.9	1.3	0.48
106-93-4	1,2-Dibromoethane	1.3	U	4.0	1.3	0.41
95-50-1	1,2-Dichlorobenzene	1.3	U	4.0	1.3	0.36
107-06-2	1,2-Dichloroethane	1.3	U	4.0	1.3	0.56
540-59-0	1,2-Dichloroethene, Total	1.3	U	4.0	1.3	0.31
78-87-5	1,2-Dichloropropane	1.3	U	4.0	1.3	0.44
108-67-8	1,3,5-Trimethylbenzene	1.3	U	4.0	1.3	0.45
541-73-1	1,3-Dichlorobenzene	1.3	U	4.0	1.3	0.38
142-28-9	1,3-Dichloropropane	1.3	U	4.0	1.3	0.41
106-46-7	1,4-Dichlorobenzene	1.3	U	4.0	1.3	0.62
594-20-7	2,2-Dichloropropane	1.3	U	4.0	1.3	0.35
78-93-3	2-Butanone (MEK)	5.1	U	16	5.1	1.5
95-49-8	2-Chlorotoluene	1.3	U	4.0	1.3	0.41
591-78-6	2-Hexanone	10	U Q	16	10	3.9
106-43-4	4-Chlorotoluene	1.3	U	4.0	1.3	0.62
99-87-6	4-Isopropyltoluene	1.3	U	4.0	1.3	0.39
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	16	10	3.5
67-64-1	Acetone	10	U Q	16	10	4.3
71-43-2	Benzene	1.3	U	4.0	1.3	0.37
108-86-1	Bromobenzene	1.3	U	4.0	1.3	0.39
74-97-5	Bromochloromethane	0.64	U	4.0	0.64	0.24
75-27-4	Bromodichloromethane	0.64	U	4.0	0.64	0.17
75-25-2	Bromoform	0.64	U	4.0	0.64	0.18
74-83-9	Bromomethane	1.3	U	7.9	1.3	0.40
75-15-0	Carbon disulfide	1.3	U	4.0	1.3	0.33

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(6-8) | Lab Sample ID: 280-97928-17

Matrix: Solid | Lab File ID: G2_1127.D

Analysis Method: 8260B | Date Collected: 06/05/2017 14:10

Sample wt/vol: 7.302(g) | Date Analyzed: 06/16/2017 16:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.8 | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.3	U	4.0	1.3	0.50
108-90-7	Chlorobenzene	1.3	U	4.0	1.3	0.43
75-00-3	Chloroethane	2.5	U	7.9	2.5	0.71
67-66-3	Chloroform	0.64	U	7.9	0.64	0.23
74-87-3	Chloromethane	1.3	U	7.9	1.3	0.61
156-59-2	cis-1,2-Dichloroethene	1.3	U	4.0	1.3	0.44
10061-01-5	cis-1,3-Dichloropropene	2.5	U	4.0	2.5	1.0
124-48-1	Dibromochloromethane	1.3	U	4.0	1.3	0.45
74-95-3	Dibromomethane	2.5	U	4.0	2.5	0.67
75-71-8	Dichlorodifluoromethane	1.3	U Q	7.9	1.3	0.41
100-41-4	Ethylbenzene	1.3	U	4.0	1.3	0.53
87-68-3	Hexachlorobutadiene	1.3	U	4.0	1.3	0.44
108-20-3	Isopropyl ether	6.4	U	40	6.4	2.2
98-82-8	Isopropylbenzene	1.3	U	4.0	1.3	0.47
179601-23-1	m&p-Xylene	2.5	U	2.5	2.5	0.83
74-88-4	Methyl iodide	1.3	U	4.0	1.3	0.35
1634-04-4	Methyl tert-butyl ether	0.64	U	16	0.64	0.27
75-09-2	Methylene Chloride	2.5	U	4.0	2.5	1.3
91-20-3	Naphthalene	1.3	U	4.0	1.3	0.50
104-51-8	n-Butylbenzene	1.3	U	4.0	1.3	0.44
103-65-1	N-Propylbenzene	1.3	U	4.0	1.3	0.46
95-47-6	o-Xylene	1.3	U	4.0	1.3	0.48
135-98-8	sec-Butylbenzene	1.3	U	4.0	1.3	0.61
100-42-5	Styrene	1.3	U	4.0	1.3	0.50
98-06-6	tert-Butylbenzene	1.3	U	4.0	1.3	0.40
127-18-4	Tetrachloroethene	1.3	U	4.0	1.3	0.47
108-88-3	Toluene	1.3	U	4.0	1.3	0.55
156-60-5	trans-1,2-Dichloroethene	0.64	U	4.0	0.64	0.31
10061-02-6	trans-1,3-Dichloropropene	1.3	U	4.0	1.3	0.53
79-01-6	Trichloroethene	0.64	U	4.0	0.64	0.18
75-69-4	Trichlorofluoromethane	2.5	U	7.9	2.5	0.83
108-05-4	Vinyl acetate	2.5	U	7.9	2.5	0.85
75-01-4	Vinyl chloride	2.5	U	4.0	2.5	1.1
1330-20-7	Xylenes (total)	0.79	U	7.9	0.79	0.48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(6-8) | Lab Sample ID: 280-97928-17

Matrix: Solid | Lab File ID: G2_1127.D

Analysis Method: 8260B | Date Collected: 06/05/2017 14:10

Sample wt/vol: 7.302(g) | Date Analyzed: 06/16/2017 16:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 13.8 | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	121		71-136
460-00-4	4-Bromofluorobenzene (Surr)	94		79-119
1868-53-7	Dibromofluoromethane (Surr)	117		78-119
2037-26-5	Toluene-d8 (Surr)	92		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1127.D
Lims ID: 280-97928-D-17-B
Client ID: SS025-SB09(6-8)
Sample Type: Client
Inject. Date: 16-Jun-2017 16:19:30 ALS Bottle#: 22 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-d-17-b
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 16:50:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	92	402843	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	574255	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	146984	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	249583	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	92	169089	49.7	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	237314	51.4	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	488978	38.9	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	162132	39.8	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.705				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.668				ND	
43 Trichlorofluoromethane	101		2.710				ND	
42 Ethanol	45		2.906				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353				ND	
50 Acetone	43	3.367	3.353	0.014	97	8768	4.74	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.894				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.213				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.457				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
78 Chloroform	83		6.621				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.014				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.450				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
95 Dibromomethane	93		8.423				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.842				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.071				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593				ND	
140 1,3,5-Trichlorobenzene	180		13.707				ND	
141 1,2,4-Trichlorobenzene	180		14.129				ND	
142 Hexachlorobutadiene	225		14.215				ND	
143 Naphthalene	128		14.315				ND	
144 1,2,3-Trichlorobenzene	180		14.472				ND	
26 3-Methylhexane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

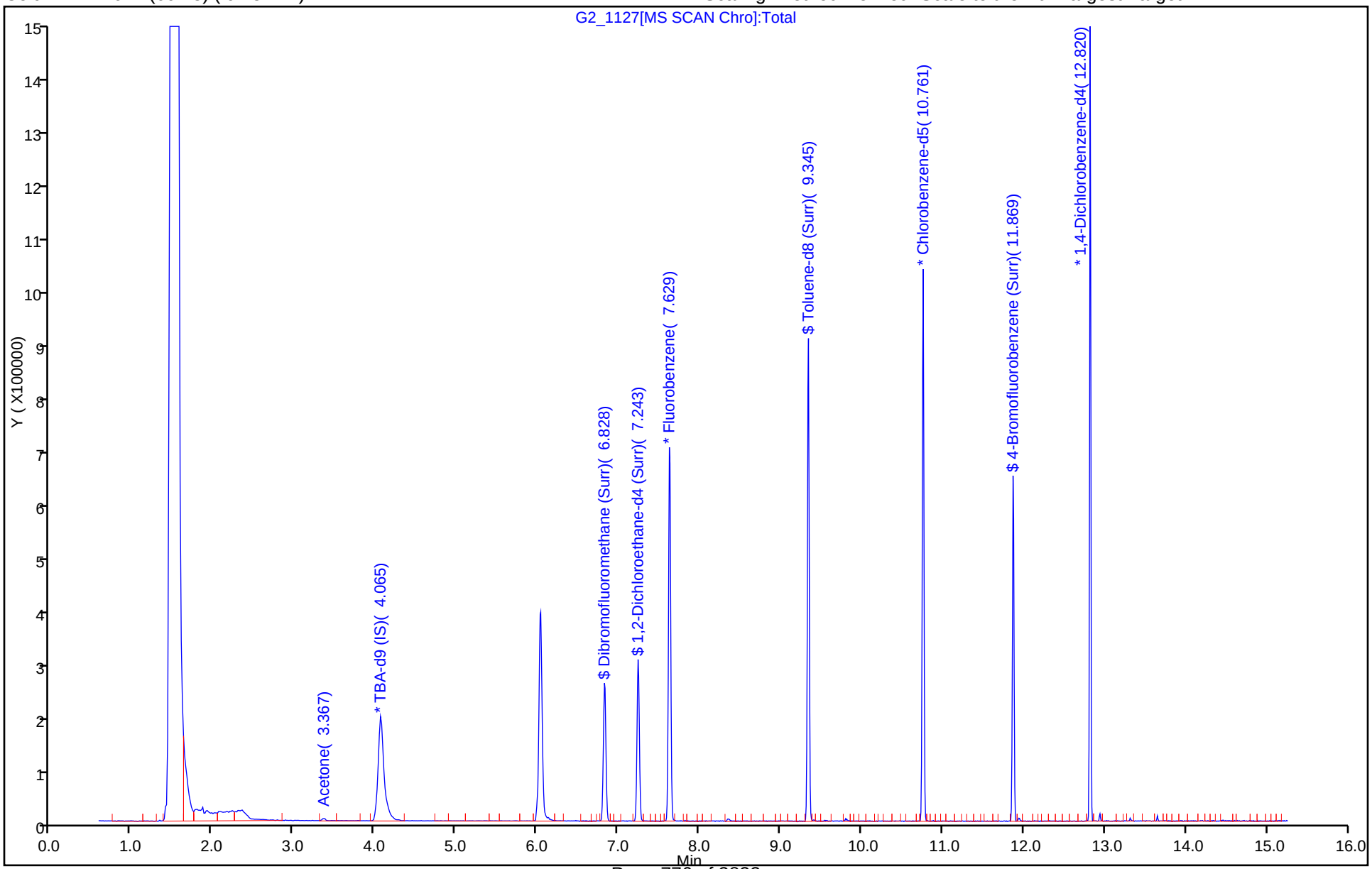
Report Date: 18-Jun-2017 12:35:15 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1127.D

Injection Date:	16-Jun-2017 16:19:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97928-D-17-B	Lab Sample ID:	280-97928-17	Worklist Smp#:	16
Client ID:	SS025-SB09(6-8)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1127.D
Lims ID: 280-97928-D-17-B
Client ID: SS025-SB09(6-8)
Sample Type: Client
Inject. Date: 16-Jun-2017 16:19:30 ALS Bottle#: 22 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-d-17-b
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 16:50:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	49.7	116.87
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	51.4	121.01
$ 10 Toluene-d8 (Surr)	42.5	38.9	91.53
$ 11 4-Bromofluorobenzene (Surr)	42.5	39.8	93.71

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(0-2) | Lab Sample ID: 280-97928-18

Matrix: Solid | Lab File ID: G2_1128.D

Analysis Method: 8260B | Date Collected: 06/05/2017 14:35

Sample wt/vol: 5.114(g) | Date Analyzed: 06/16/2017 16:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 8.4 | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.7	U	5.3	1.7	0.60
71-55-6	1,1,1-Trichloroethane	1.7	U	5.3	1.7	0.55
79-34-5	1,1,2,2-Tetrachloroethane	1.7	U	5.3	1.7	0.65
79-00-5	1,1,2-Trichloroethane	3.4	U	5.3	3.4	0.94
75-34-3	1,1-Dichloroethane	0.85	U	5.3	0.85	0.22
75-35-4	1,1-Dichloroethene	1.7	U	5.3	1.7	0.63
563-58-6	1,1-Dichloropropene	1.7	U	5.3	1.7	0.58
87-61-6	1,2,3-Trichlorobenzene	1.7	U	5.3	1.7	0.80
96-18-4	1,2,3-Trichloropropane	3.4	U	5.3	3.4	0.86
120-82-1	1,2,4-Trichlorobenzene	1.7	U	5.3	1.7	0.78
95-63-6	1,2,4-Trimethylbenzene	1.7	U	5.3	1.7	0.62
96-12-8	1,2-Dibromo-3-Chloropropane	1.7	U	11	1.7	0.64
106-93-4	1,2-Dibromoethane	1.7	U	5.3	1.7	0.55
95-50-1	1,2-Dichlorobenzene	1.7	U	5.3	1.7	0.48
107-06-2	1,2-Dichloroethane	1.7	U	5.3	1.7	0.75
540-59-0	1,2-Dichloroethene, Total	1.7	U	5.3	1.7	0.42
78-87-5	1,2-Dichloropropane	1.7	U	5.3	1.7	0.59
108-67-8	1,3,5-Trimethylbenzene	1.7	U	5.3	1.7	0.61
541-73-1	1,3-Dichlorobenzene	1.7	U	5.3	1.7	0.51
142-28-9	1,3-Dichloropropane	1.7	U	5.3	1.7	0.54
106-46-7	1,4-Dichlorobenzene	1.7	U	5.3	1.7	0.83
594-20-7	2,2-Dichloropropane	1.7	U	5.3	1.7	0.47
78-93-3	2-Butanone (MEK)	6.8	U	21	6.8	2.0
95-49-8	2-Chlorotoluene	1.7	U	5.3	1.7	0.54
591-78-6	2-Hexanone	14	U Q	21	14	5.2
106-43-4	4-Chlorotoluene	1.7	U	5.3	1.7	0.83
99-87-6	4-Isopropyltoluene	1.7	U	5.3	1.7	0.52
108-10-1	4-Methyl-2-pentanone (MIBK)	14	U	21	14	4.7
67-64-1	Acetone	14	U Q	21	14	5.7
71-43-2	Benzene	1.7	U	5.3	1.7	0.50
108-86-1	Bromobenzene	1.7	U	5.3	1.7	0.52
74-97-5	Bromochloromethane	0.85	U	5.3	0.85	0.32
75-27-4	Bromodichloromethane	0.85	U	5.3	0.85	0.23
75-25-2	Bromoform	0.85	U	5.3	0.85	0.25
74-83-9	Bromomethane	1.7	U	11	1.7	0.53
75-15-0	Carbon disulfide	1.7	U	5.3	1.7	0.45

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(0-2) | Lab Sample ID: 280-97928-18

Matrix: Solid | Lab File ID: G2_1128.D

Analysis Method: 8260B | Date Collected: 06/05/2017 14:35

Sample wt/vol: 5.114(g) | Date Analyzed: 06/16/2017 16:40

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 8.4 | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.7	U	5.3	1.7	0.67
108-90-7	Chlorobenzene	1.7	U	5.3	1.7	0.58
75-00-3	Chloroethane	3.4	U	11	3.4	0.95
67-66-3	Chloroform	0.85	U	11	0.85	0.31
74-87-3	Chloromethane	1.7	U	11	1.7	0.82
156-59-2	cis-1,2-Dichloroethene	1.7	U	5.3	1.7	0.60
10061-01-5	cis-1,3-Dichloropropene	3.4	U	5.3	3.4	1.4
124-48-1	Dibromochloromethane	1.7	U	5.3	1.7	0.61
74-95-3	Dibromomethane	3.4	U	5.3	3.4	0.90
75-71-8	Dichlorodifluoromethane	1.7	U Q	11	1.7	0.55
100-41-4	Ethylbenzene	1.7	U	5.3	1.7	0.71
87-68-3	Hexachlorobutadiene	1.7	U	5.3	1.7	0.59
108-20-3	Isopropyl ether	8.5	U	53	8.5	2.9
98-82-8	Isopropylbenzene	1.7	U	5.3	1.7	0.63
179601-23-1	m&p-Xylene	3.4	U	3.4	3.4	1.1
74-88-4	Methyl iodide	1.7	U	5.3	1.7	0.47
1634-04-4	Methyl tert-butyl ether	0.85	U	21	0.85	0.36
75-09-2	Methylene Chloride	3.4	U	5.3	3.4	1.7
91-20-3	Naphthalene	1.7	U	5.3	1.7	0.67
104-51-8	n-Butylbenzene	1.7	U	5.3	1.7	0.60
103-65-1	N-Propylbenzene	1.7	U	5.3	1.7	0.62
95-47-6	o-Xylene	1.7	U	5.3	1.7	0.65
135-98-8	sec-Butylbenzene	1.7	U	5.3	1.7	0.82
100-42-5	Styrene	1.7	U	5.3	1.7	0.67
98-06-6	tert-Butylbenzene	1.7	U	5.3	1.7	0.53
127-18-4	Tetrachloroethene	1.7	U	5.3	1.7	0.63
108-88-3	Toluene	1.7	U	5.3	1.7	0.74
156-60-5	trans-1,2-Dichloroethene	0.85	U	5.3	0.85	0.42
10061-02-6	trans-1,3-Dichloropropene	1.7	U	5.3	1.7	0.71
79-01-6	Trichloroethene	0.85	U	5.3	0.85	0.25
75-69-4	Trichlorofluoromethane	3.4	U	11	3.4	1.1
108-05-4	Vinyl acetate	3.4	U	11	3.4	1.1
75-01-4	Vinyl chloride	3.4	U	5.3	3.4	1.4
1330-20-7	Xylenes (total)	1.1	U	11	1.1	0.65

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(0-2) Lab Sample ID: 280-97928-18

Matrix: Solid Lab File ID: G2_1128.D

Analysis Method: 8260B Date Collected: 06/05/2017 14:35

Sample wt/vol: 5.114(g) Date Analyzed: 06/16/2017 16:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 8.4 Level: (low/med) Low

Analysis Batch No.: 377645 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		71-136
460-00-4	4-Bromofluorobenzene (Surr)	90		79-119
1868-53-7	Dibromofluoromethane (Surr)	114		78-119
2037-26-5	Toluene-d8 (Surr)	91		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1128.D
Lims ID: 280-97928-D-18-B
Client ID: SS025-SB10(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 16:40:30 ALS Bottle#: 23 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-d-18-b
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 17:20:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	92	441054	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	605803	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	157868	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	265007	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	93	174484	48.5	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	226932	46.2	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	522427	38.7	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	92	165048	38.2	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.705				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.668				ND	
43 Trichlorofluoromethane	101		2.710				ND	
42 Ethanol	45		2.906				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353				ND	
50 Acetone	43	3.367	3.353	0.013	95	9857	5.14	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.894				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.213				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.457				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
78 Chloroform	83		6.621				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.014				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.450				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
95 Dibromomethane	93		8.423				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.842				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.071				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593				ND	
140 1,3,5-Trichlorobenzene	180		13.707				ND	
141 1,2,4-Trichlorobenzene	180		14.129				ND	
142 Hexachlorobutadiene	225		14.215				ND	
143 Naphthalene	128		14.315				ND	
144 1,2,3-Trichlorobenzene	180		14.472				ND	
26 3-Methylhexane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

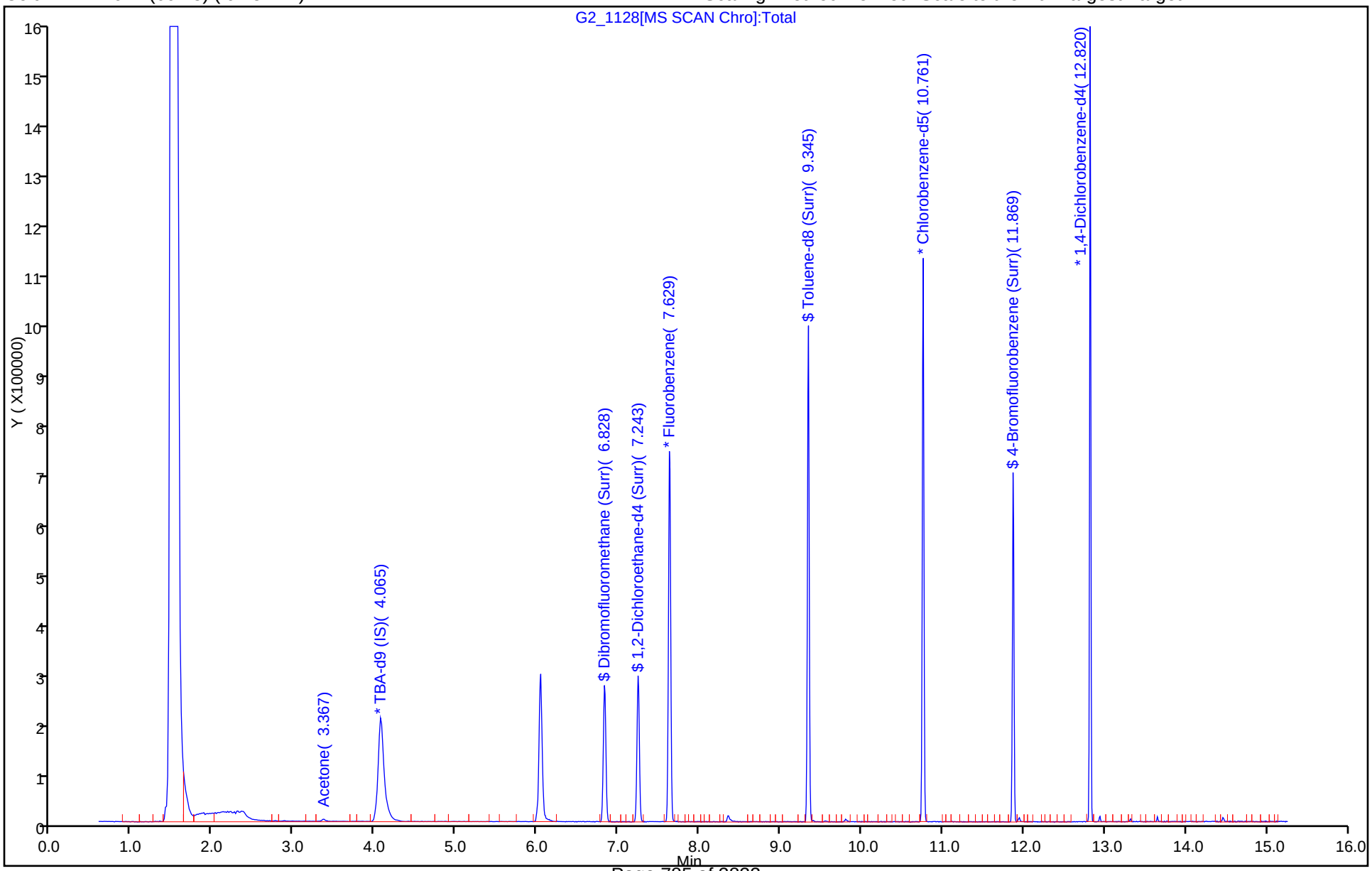
Report Date: 18-Jun-2017 12:35:18 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1128.D

Injection Date:	16-Jun-2017 16:40:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97928-D-18-B	Lab Sample ID:	280-97928-18	Worklist Smp#:	17
Client ID:	SS025-SB10(0-2)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1128.D
Lims ID: 280-97928-D-18-B
Client ID: SS025-SB10(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 16:40:30 ALS Bottle#: 23 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-d-18-b
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 17:20:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	48.5	114.12
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	46.2	108.77
$ 10 Toluene-d8 (Surr)	42.5	38.7	91.05
$ 11 4-Bromofluorobenzene (Surr)	42.5	38.2	89.84

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(2-4) | Lab Sample ID: 280-97928-19

Matrix: Solid | Lab File ID: G2_1129.D

Analysis Method: 8260B | Date Collected: 06/05/2017 14:45

Sample wt/vol: 4.724(g) | Date Analyzed: 06/16/2017 17:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 7.1 | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.8	U	5.7	1.8	0.64
71-55-6	1,1,1-Trichloroethane	1.8	U	5.7	1.8	0.59
79-34-5	1,1,2,2-Tetrachloroethane	1.8	U	5.7	1.8	0.69
79-00-5	1,1,2-Trichloroethane	3.6	U	5.7	3.6	1.0
75-34-3	1,1-Dichloroethane	0.91	U	5.7	0.91	0.24
75-35-4	1,1-Dichloroethene	1.8	U	5.7	1.8	0.67
563-58-6	1,1-Dichloropropene	1.8	U	5.7	1.8	0.62
87-61-6	1,2,3-Trichlorobenzene	1.8	U	5.7	1.8	0.85
96-18-4	1,2,3-Trichloropropane	3.6	U	5.7	3.6	0.92
120-82-1	1,2,4-Trichlorobenzene	1.8	U	5.7	1.8	0.83
95-63-6	1,2,4-Trimethylbenzene	1.8	U	5.7	1.8	0.66
96-12-8	1,2-Dibromo-3-Chloropropane	1.8	U	11	1.8	0.68
106-93-4	1,2-Dibromoethane	1.8	U	5.7	1.8	0.59
95-50-1	1,2-Dichlorobenzene	1.8	U	5.7	1.8	0.51
107-06-2	1,2-Dichloroethane	1.8	U	5.7	1.8	0.80
540-59-0	1,2-Dichloroethene, Total	1.8	U	5.7	1.8	0.44
78-87-5	1,2-Dichloropropane	1.8	U	5.7	1.8	0.63
108-67-8	1,3,5-Trimethylbenzene	1.8	U	5.7	1.8	0.65
541-73-1	1,3-Dichlorobenzene	1.8	U	5.7	1.8	0.55
142-28-9	1,3-Dichloropropane	1.8	U	5.7	1.8	0.58
106-46-7	1,4-Dichlorobenzene	1.8	U	5.7	1.8	0.89
594-20-7	2,2-Dichloropropane	1.8	U	5.7	1.8	0.50
78-93-3	2-Butanone (MEK)	7.3	U	23	7.3	2.1
95-49-8	2-Chlorotoluene	1.8	U	5.7	1.8	0.58
591-78-6	2-Hexanone	15	U Q	23	15	5.6
106-43-4	4-Chlorotoluene	1.8	U	5.7	1.8	0.89
99-87-6	4-Isopropyltoluene	1.8	U	5.7	1.8	0.56
108-10-1	4-Methyl-2-pentanone (MIBK)	15	U	23	15	5.0
67-64-1	Acetone	15	U Q	23	15	6.1
71-43-2	Benzene	1.8	U	5.7	1.8	0.54
108-86-1	Bromobenzene	1.8	U	5.7	1.8	0.56
74-97-5	Bromochloromethane	0.91	U	5.7	0.91	0.34
75-27-4	Bromodichloromethane	0.91	U	5.7	0.91	0.25
75-25-2	Bromoform	0.91	U	5.7	0.91	0.26
74-83-9	Bromomethane	1.8	U	11	1.8	0.57
75-15-0	Carbon disulfide	1.8	U	5.7	1.8	0.48

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(2-4) | Lab Sample ID: 280-97928-19

Matrix: Solid | Lab File ID: G2_1129.D

Analysis Method: 8260B | Date Collected: 06/05/2017 14:45

Sample wt/vol: 4.724(g) | Date Analyzed: 06/16/2017 17:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 7.1 | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.8	U	5.7	1.8	0.72
108-90-7	Chlorobenzene	1.8	U	5.7	1.8	0.62
75-00-3	Chloroethane	3.6	U	11	3.6	1.0
67-66-3	Chloroform	0.91	U	11	0.91	0.33
74-87-3	Chloromethane	1.8	U	11	1.8	0.88
156-59-2	cis-1,2-Dichloroethene	1.8	U	5.7	1.8	0.64
10061-01-5	cis-1,3-Dichloropropene	3.6	U	5.7	3.6	1.5
124-48-1	Dibromochloromethane	1.8	U	5.7	1.8	0.65
74-95-3	Dibromomethane	3.6	U	5.7	3.6	0.96
75-71-8	Dichlorodifluoromethane	1.8	U Q	11	1.8	0.59
100-41-4	Ethylbenzene	1.8	U	5.7	1.8	0.76
87-68-3	Hexachlorobutadiene	1.8	U	5.7	1.8	0.63
108-20-3	Isopropyl ether	9.1	U	57	9.1	3.1
98-82-8	Isopropylbenzene	1.8	U	5.7	1.8	0.67
179601-23-1	m&p-Xylene	3.6	U	3.6	3.6	1.2
74-88-4	Methyl iodide	1.8	U	5.7	1.8	0.50
1634-04-4	Methyl tert-butyl ether	0.91	U	23	0.91	0.39
75-09-2	Methylene Chloride	3.6	U	5.7	3.6	1.8
91-20-3	Naphthalene	1.8	U	5.7	1.8	0.72
104-51-8	n-Butylbenzene	1.8	U	5.7	1.8	0.64
103-65-1	N-Propylbenzene	1.8	U	5.7	1.8	0.66
95-47-6	o-Xylene	1.8	U	5.7	1.8	0.69
135-98-8	sec-Butylbenzene	1.8	U	5.7	1.8	0.88
100-42-5	Styrene	1.8	U	5.7	1.8	0.72
98-06-6	tert-Butylbenzene	1.8	U	5.7	1.8	0.57
127-18-4	Tetrachloroethene	1.8	U	5.7	1.8	0.67
108-88-3	Toluene	1.8	U	5.7	1.8	0.79
156-60-5	trans-1,2-Dichloroethene	0.91	U	5.7	0.91	0.44
10061-02-6	trans-1,3-Dichloropropene	1.8	U	5.7	1.8	0.76
79-01-6	Trichloroethene	0.91	U	5.7	0.91	0.26
75-69-4	Trichlorofluoromethane	3.6	U	11	3.6	1.2
108-05-4	Vinyl acetate	3.6	U	11	3.6	1.2
75-01-4	Vinyl chloride	3.6	U	5.7	3.6	1.5
1330-20-7	Xylenes (total)	1.1	U	11	1.1	0.69

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(2-4) | Lab Sample ID: 280-97928-19

Matrix: Solid | Lab File ID: G2_1129.D

Analysis Method: 8260B | Date Collected: 06/05/2017 14:45

Sample wt/vol: 4.724(g) | Date Analyzed: 06/16/2017 17:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 7.1 | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		71-136
460-00-4	4-Bromofluorobenzene (Surr)	91		79-119
1868-53-7	Dibromofluoromethane (Surr)	116		78-119
2037-26-5	Toluene-d8 (Surr)	93		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1129.D
Lims ID: 280-97928-D-19-B
Client ID: SS025-SB10(2-4)
Sample Type: Client
Inject. Date: 16-Jun-2017 17:01:30 ALS Bottle#: 24 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-d-19-b
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 17:21:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	91	453027	1000.0	
* 3 Fluorobenzene	96	7.636	7.629	0.007	97	566510	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	145894	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	97	247829	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	92	165429	49.2	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	226442	49.6	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	494784	39.7	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	155909	38.6	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.705				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.668				ND	
43 Trichlorofluoromethane	101		2.710				ND	
42 Ethanol	45		2.906				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353				ND	
50 Acetone	43		3.353				ND	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.894				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.213				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.457				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
78 Chloroform	83		6.621				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.014				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.450				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
95 Dibromomethane	93		8.423				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.842				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.071				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593				ND	
140 1,3,5-Trichlorobenzene	180		13.707				ND	
141 1,2,4-Trichlorobenzene	180		14.129				ND	
142 Hexachlorobutadiene	225		14.215				ND	
143 Naphthalene	128		14.315				ND	
144 1,2,3-Trichlorobenzene	180		14.472				ND	
26 3-Methylhexane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

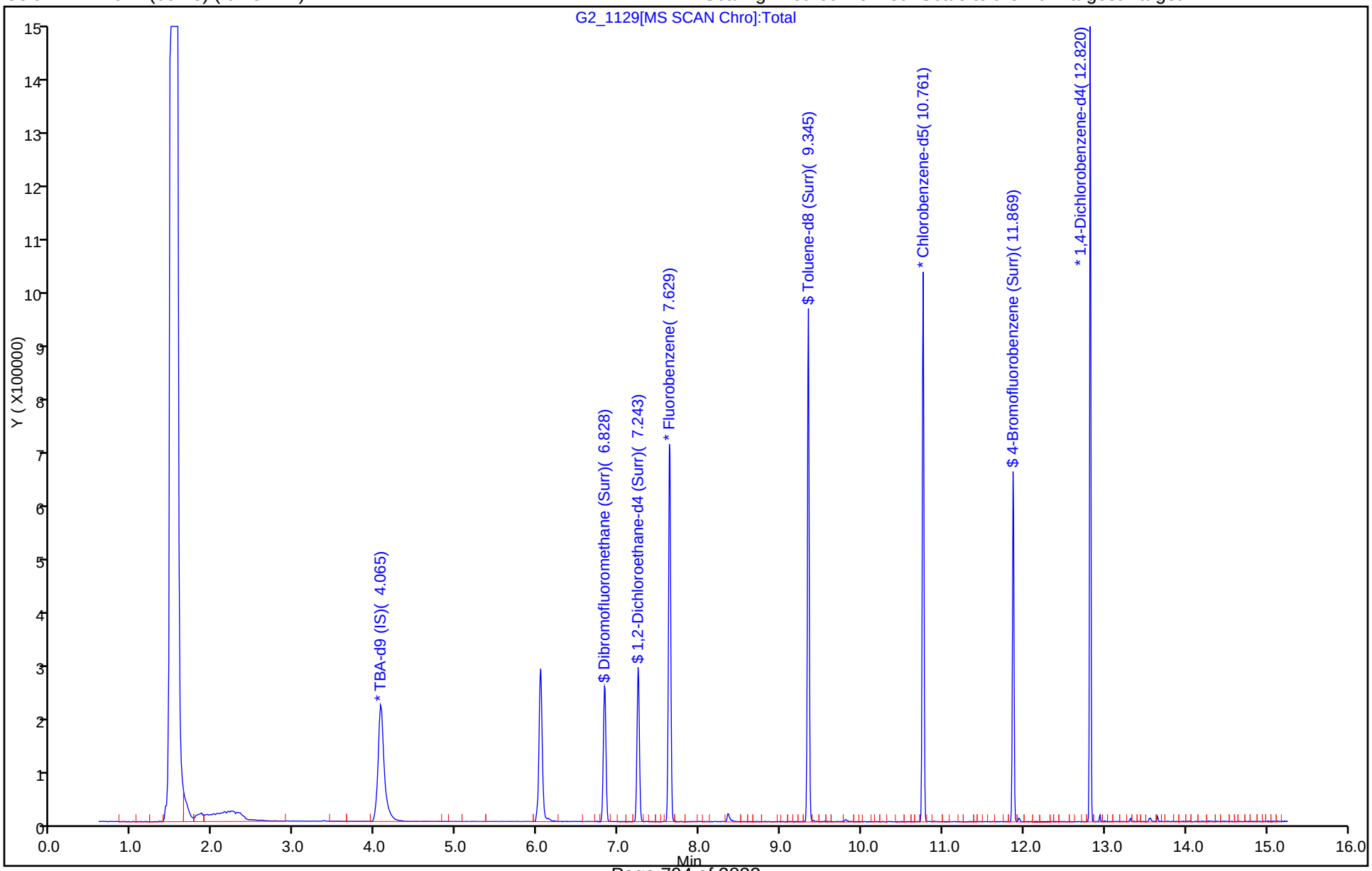
Report Date: 18-Jun-2017 12:35:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1129.D

Injection Date:	16-Jun-2017 17:01:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97928-D-19-B	Lab Sample ID:	280-97928-19	Worklist Smp#:	18
Client ID:	SS025-SB10(2-4)				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1129.D
Lims ID: 280-97928-D-19-B
Client ID: SS025-SB10(2-4)
Sample Type: Client
Inject. Date: 16-Jun-2017 17:01:30 ALS Bottle#: 24 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-d-19-b
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 17:21:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	49.2	115.83
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	49.6	116.72
$ 10 Toluene-d8 (Surr)	42.5	39.7	93.31
$ 11 4-Bromofluorobenzene (Surr)	42.5	38.6	90.75

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(4-6) | Lab Sample ID: 280-97928-20

Matrix: Solid | Lab File ID: P0051.D

Analysis Method: 8260B | Date Collected: 06/05/2017 14:55

Sample wt/vol: 5.344(g) | Date Analyzed: 06/19/2017 18:43

Soil Aliquot Vol: 20 (mL) | Dilution Factor: 1

Soil Extract Vol.: 1000(mL) | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 6.4 | Level: (low/med) Medium

Analysis Batch No.: 377804 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	80	U	250	80	21
71-55-6	1,1,1-Trichloroethane	40	U	250	40	20
79-34-5	1,1,2,2-Tetrachloroethane	80	U	250	80	29
79-00-5	1,1,2-Trichloroethane	80	U	250	80	27
75-34-3	1,1-Dichloroethane	160	U	250	160	51
75-35-4	1,1-Dichloroethene	160	U	250	160	51
563-58-6	1,1-Dichloropropene	160	U	250	160	48
87-61-6	1,2,3-Trichlorobenzene	80	U	250	80	35
96-18-4	1,2,3-Trichloropropane	160	U	250	160	47
120-82-1	1,2,4-Trichlorobenzene	160	U	250	160	47
95-63-6	1,2,4-Trimethylbenzene	80	U	250	80	31
96-12-8	1,2-Dibromo-3-Chloropropane	320	U	500	320	86
106-93-4	1,2-Dibromoethane	80	U	250	80	25
95-50-1	1,2-Dichlorobenzene	320	U	500	320	94
107-06-2	1,2-Dichloroethane	80	U	250	80	25
540-59-0	1,2-Dichloroethene, Total	80	U	130	80	22
78-87-5	1,2-Dichloropropane	160	U	250	160	46
108-67-8	1,3,5-Trimethylbenzene	80	U	250	80	39
541-73-1	1,3-Dichlorobenzene	160	U	250	160	41
142-28-9	1,3-Dichloropropane	80	U	250	80	28
106-46-7	1,4-Dichlorobenzene	80	U	250	80	25
594-20-7	2,2-Dichloropropane	80	U	250	80	27
78-93-3	2-Butanone (MEK)	640	U	1000	640	300
95-49-8	2-Chlorotoluene	80	U	250	80	26
591-78-6	2-Hexanone	640	U	1000	640	220
106-43-4	4-Chlorotoluene	80	U	250	80	23
99-87-6	4-Isopropyltoluene	80	U	250	80	32
108-10-1	4-Methyl-2-pentanone (MIBK)	640	U	1000	640	230
67-64-1	Acetone	1300	U	1500	1300	400
71-43-2	Benzene	160	U	250	160	45
108-86-1	Bromobenzene	40	U	250	40	19
74-97-5	Bromochloromethane	160	U	250	160	47
75-27-4	Bromodichloromethane	80	U	250	80	40
75-25-2	Bromoform	160	U	250	160	160
74-83-9	Bromomethane	160	U	500	160	44
75-15-0	Carbon disulfide	160	U	250	160	64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(4-6) | Lab Sample ID: 280-97928-20

Matrix: Solid | Lab File ID: P0051.D

Analysis Method: 8260B | Date Collected: 06/05/2017 14:55

Sample wt/vol: 5.344(g) | Date Analyzed: 06/19/2017 18:43

Soil Aliquot Vol: 20 (mL) | Dilution Factor: 1

Soil Extract Vol.: 1000(mL) | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 6.4 | Level: (low/med) Medium

Analysis Batch No.: 377804 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	40	U	250	40	17
108-90-7	Chlorobenzene	80	U	250	80	30
75-00-3	Chloroethane	160	U	500	160	44
67-66-3	Chloroform	160	U	250	160	46
74-87-3	Chloromethane	160	U Q	500	160	50
156-59-2	cis-1,2-Dichloroethene	80	U	130	80	22
10061-01-5	cis-1,3-Dichloropropene	80	U	250	80	27
124-48-1	Dibromochloromethane	80	U	250	80	33
74-95-3	Dibromomethane	80	U	250	80	30
75-71-8	Dichlorodifluoromethane	80	U Q	500	80	22
100-41-4	Ethylbenzene	80	U	250	80	34
87-68-3	Hexachlorobutadiene	160	U	250	160	49
108-20-3	Isopropyl ether	800	U	2500	800	210
98-82-8	Isopropylbenzene	80	U	250	80	29
179601-23-1	m&p-Xylene	160	U	250	160	78
74-88-4	Methyl iodide	22	J	250	80	21
1634-04-4	Methyl tert-butyl ether	160	U	250	160	50
75-09-2	Methylene Chloride	760	B	250	160	69
91-20-3	Naphthalene	80	U	500	80	38
104-51-8	n-Butylbenzene	80	U	250	80	32
103-65-1	N-Propylbenzene	160	U	250	160	41
95-47-6	o-Xylene	80	U	130	80	35
135-98-8	sec-Butylbenzene	80	U	250	80	38
100-42-5	Styrene	80	U	250	80	26
98-06-6	tert-Butylbenzene	80	U	250	80	28
127-18-4	Tetrachloroethene	80	U	250	80	27
108-88-3	Toluene	80	U	250	80	39
156-60-5	trans-1,2-Dichloroethene	160	U	250	160	45
10061-02-6	trans-1,3-Dichloropropene	160	U	250	160	41
79-01-6	Trichloroethene	80	U	250	80	23
75-69-4	Trichlorofluoromethane	160	U	500	160	50
108-05-4	Vinyl acetate	160	U	500	160	70
75-01-4	Vinyl chloride	80	U Q	500	80	27
1330-20-7	Xylenes (total)	80	U	130	80	35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(4-6) | Lab Sample ID: 280-97928-20

Matrix: Solid | Lab File ID: P0051.D

Analysis Method: 8260B | Date Collected: 06/05/2017 14:55

Sample wt/vol: 5.344(g) | Date Analyzed: 06/19/2017 18:43

Soil Aliquot Vol: 20 (mL) | Dilution Factor: 1

Soil Extract Vol.: 1000(mL) | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 6.4 | Level: (low/med) Medium

Analysis Batch No.: 377804 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		71-136
460-00-4	4-Bromofluorobenzene (Surr)	112		79-119
1868-53-7	Dibromofluoromethane (Surr)	106		78-119
2037-26-5	Toluene-d8 (Surr)	116		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0051.D
Lims ID: 280-97928-F-20-A
Client ID: SS025-SB10(4-6)
Sample Type: Client
Inject. Date: 19-Jun-2017 18:43:30 ALS Bottle#: 33 Worklist Smp#: 48
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-f-20-a
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 16:11:05 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: dukesa Date: 19-Jun-2017 20:21:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.644	5.644	0.000	0	193322	250.0	
* 1 Fluorobenzene	96	7.610	7.603	0.007	98	1899010	12.5	
* 2 Chlorobenzene-d5	119	9.870	9.870	0.000	89	357540	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.700	11.700	0.000	98	475377	12.5	
* 149 1,4-Dioxane-d8	96		0.000				ND	
$ 5 Dibromofluoromethane (Surr	111	7.067	7.067	0.000	92	324997	10.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.360	7.360	0.000	0	332470	10.2	
$ 7 Toluene-d8 (Surr)	98	8.797	8.797	0.000	94	1530905	11.6	
$ 8 4-Bromofluorobenzene (Surr	95	10.735	10.735	0.000	82	485236	11.2	
$ 151 Trifluorotoluene (Surr)	1		0.000				ND	
$ 4 BFB	95		4.956				ND	
23 Dichlorodifluoromethane	85		3.876				ND	
22 Chlorotrifluoroethene	116		3.959				ND	
26 Chloromethane	50		4.099				ND	
24 1,2-Dichloro-1,1,2,2-tetra	85		4.182				ND	
27 Vinyl chloride	62		4.253				ND	
25 2-Chloro-1,1,1-Trifluoroet	118		4.461				ND	
28 Ethylene oxide	43		4.558				ND	
29 Bromomethane	94		4.616				ND	
30 Chloroethane	64		4.686				ND	
31 Dichlorofluoromethane	67		4.854				ND	
32 Trichlorofluoromethane	101		4.951				ND	
33 Ethanol	45		4.977				ND	
35 Ethyl ether	59	5.103	5.105	-0.002	95	4934	0.2112	
38 Propene oxide	58		5.200				ND	
39 Acrolein	56		5.259				ND	
36 1,2-Dichloro-1,1,2-trifluo	117		5.271				ND	
37 1,1,1-Trifluoro-2,2-dichlo	83		5.313				ND	
40 1,1,2-Trichloro-1,2,2-trif	151		5.356				ND	
41 Acetone	43		5.370				ND	
42 Isopropyl alcohol	45		5.382				ND	
43 1,1-Dichloroethene	96		5.412				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
44 Iodomethane	142	5.551	5.580	-0.029	88	5469	0.1100	
45 Methyl acetate	43		5.601				ND	
46 Acetonitrile	41		5.623				ND	
47 3-Chloro-1-propene	41		5.651				ND	
48 Carbon disulfide	76		5.694				ND	
49 2-Methyl-2-propanol	59		5.716				ND	
50 Methylene Chloride	84	5.751	5.759	-0.007	98	179436	3.79	
51 Methyl tert-butyl ether	73		5.916				ND	
52 Acrylonitrile	53		5.916				ND	
53 trans-1,2-Dichloroethene	96		5.966				ND	
54 Hexane	57		6.116				ND	
55 Vinyl acetate	43		6.230				ND	
56 Isopropyl ether	87		6.231				ND	
57 1,1-Dichloroethane	63		6.288				ND	
58 2-Chloro-1,3-butadiene	53		6.352				ND	
59 Tert-butyl ethyl ether	59		6.509				ND	
60 Ethyl acetate	43		6.660				ND	
61 2-Butanone (MEK)	43		6.681				ND	
62 sec-Butyl Alcohol	45		6.724				ND	
63 cis-1,2-Dichloroethene	96		6.724				ND	
64 2,2-Dichloropropane	77		6.745				ND	
65 Propionitrile	54		6.745				ND	
66 Methacrylonitrile	41		6.867				ND	
67 Chlorobromomethane	128		6.924				ND	
68 Chloroform	83		6.931				ND	
69 Tetrahydrofuran	42		6.953				ND	
70 Isobutyl alcohol	41		7.138				ND	
71 1,1,1-Trichloroethane	97		7.146				ND	
72 Cyclohexane	56		7.210				ND	
73 1,1-Dichloropropene	75		7.246				ND	
74 Carbon tetrachloride	117		7.281				ND	
75 Tert-amyl methyl ether	73		7.410				ND	
76 1,2-Dichloroethane	62		7.417				ND	
77 Benzene	78		7.432				ND	
14 n-Heptane	43		7.489				ND	
78 n-Butanol	56		7.646				ND	
79 Trichloroethene	95		7.896				ND	
80 2-Pentanone	43		7.946				ND	
81 Methyl methacrylate	100		8.032				ND	
82 Methylcyclohexane	55		8.075				ND	
83 1,2-Dichloropropane	63		8.082				ND	
84 1,4-Dioxane	88		8.147				ND	
85 Dibromomethane	93		8.190				ND	
86 Dichlorobromomethane	83		8.261				ND	
87 2-Chloroethyl vinyl ether	63		8.404				ND	
88 2-Nitropropane	41		8.411				ND	
89 cis-1,3-Dichloropropene	75		8.576				ND	
90 4-Methyl-2-pentanone (MIBK	43		8.633				ND	
91 Toluene	91	8.854	8.847	0.007	95	2499	0.0162	
92 Ethyl methacrylate	69		8.933				ND	
93 trans-1,3-Dichloropropene	75		8.955				ND	
94 1,1,2-Trichloroethane	97		9.112				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
95 2-Hexanone	43		9.219				ND	
96 1,3-Dichloropropane	76		9.248				ND	
97 Tetrachloroethene	164		9.255				ND	
98 Chlorodibromomethane	129		9.441				ND	
99 Tetrahydrothiophene	60		9.475				ND	
100 Ethylene Dibromide	107		9.562				ND	
101 1-Chlorohexane	91		9.777				ND	
102 Chlorobenzene	112		9.891				ND	
104 1,1,1,2-Tetrachloroethane	131		9.927				ND	
103 Ethylbenzene	106		9.927				ND	
105 m-Xylene & p-Xylene	106		9.999				ND	
106 Styrene	104		10.320				ND	
107 o-Xylene	106		10.320				ND	
108 Bromoform	173		10.535				ND	
109 Isopropylbenzene	105		10.578				ND	
110 cis-1,4-Dichloro-2-butene	53		10.621				ND	
111 Cyclohexanone	55		10.721				ND	
112 1,1,2,2-Tetrachloroethane	83		10.792				ND	
113 trans-1,4-Dichloro-2-buten	53		10.828				ND	
114 1,2,3-Trichloropropane	110		10.864				ND	
115 N-Propylbenzene	120		10.892				ND	
116 Bromobenzene	156		10.899				ND	
117 1,3,5-Trimethylbenzene	105		11.007				ND	
118 2-Chlorotoluene	126		11.021				ND	
119 4-Chlorotoluene	126		11.100				ND	
120 tert-Butylbenzene	119		11.300				ND	
121 1,2,4-Trimethylbenzene	105	11.335	11.328	0.007	89	2912	0.0236	
122 sec-Butylbenzene	134		11.479				ND	
123 4-Isopropyltoluene	119		11.572				ND	
124 1,3-Dichlorobenzene	146		11.650				ND	
126 1,4-Dichlorobenzene	146	11.714	11.722	-0.008	1	1566	0.0265	
125 1,2,3-Trimethylbenzene	105		11.722				ND	
127 n-Butylbenzene	91	11.943	11.936	0.007	96	8460	0.0638	
128 1,2-Dichlorobenzene	146		12.079				ND	
129 1,2-Dibromo-3-Chloropropan	157		12.837				ND	
16 1,3,5-Trichlorobenzene	180		13.038				ND	
130 1,2,4-Trichlorobenzene	180	13.795	13.781	0.014	83	2614	0.0866	
131 Hexachlorobutadiene	225		13.917				ND	
132 Naphthalene	128		14.160				ND	
133 1,2,3-Trichlorobenzene	180	14.489	14.482	0.007	85	3386	0.1467	
18 3,3-Dimethylpentane	1		0.000				ND	
10 n-Nonyl Aldehyde	1		0.000				ND	
12 2,2,3-Trimethylbutane	1		0.000				ND	
13 2,2-Dimethylpentane	1		0.000				ND	
20 2-Methylhexane	1		0.000				ND	
143 Pentachloroethane	167		0.000				ND	
9 2,4-Dimethylpentane	1		0.000				ND	
11 2,3-Dimethylpentane	1		0.000				ND	
15 Dimethyl disulfide	1		0.000				ND	
17 3-Ethylpentane	1		0.000				ND	
19 3-Methylhexane	1		0.000				ND	
S 140 1,2-Dichloroethene, Total	96				0		0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
S 137 1,3-Dichloropropene, Total	1				0		0	
S 139 Xylenes, Total	106				0		0	
S 134 Trihalomethanes, Total	1				0		0	
S 136 Total BTEX	1				0		0.0162	
S 135 Xylenes, Total (URS)	1				0		0	
S 152 TAH	1				0		0	
S 138 1,2-Dichloroethene, Total	1				0		0	
T 156 1,3-Butadiene TIC	1		0.000				ND	
T 157 n-Nonane TIC	1		0.000				ND	
T 21 2-Butoxyethanol TIC	1		0.000				ND	
T 141 Dichloroacetonitrile TIC	74		0.000				ND	
T 34 Propene oxide TIC	58		0.000				ND	
T 153 Propene TIC	1		0.000				ND	
T 155 4-Ethyltoluene TIC	1		0.000				ND	
T 154 Dicyclopentadiene TIC	1		0.000				ND	
T 142 2,3-dichloro-1-propene TIC	75		0.000				ND	

Reagents:

MV-567649-D_00001 Amount Added: 1.00 Units: uL Run Reagent

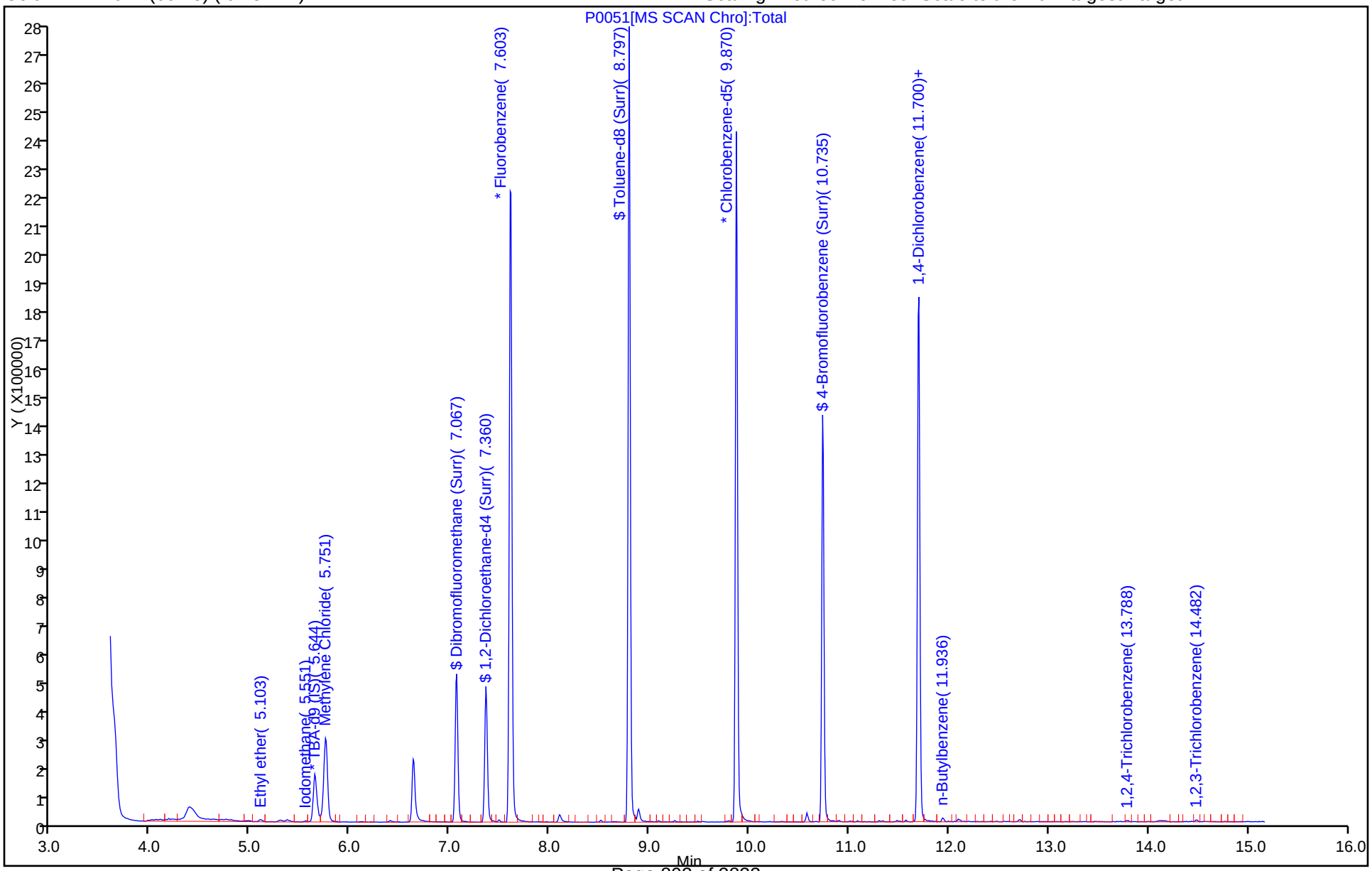
Report Date: 20-Jun-2017 16:15:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0051.D

Injection Date:	19-Jun-2017 18:43:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	280-97928-F-20-A	Lab Sample ID:	280-97928-20	Worklist Smp#:	48
Client ID:	SS025-SB10(4-6)				
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0051.D				
Lims ID:	280-97928-F-20-A				
Client ID:	SS025-SB10(4-6)				
Sample Type:	Client				
Inject. Date:	19-Jun-2017 18:43:30	ALS Bottle#:	33	Worklist Smp#:	48
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Sample Info:	280-97928-f-20-a				
Operator ID:	SEIFERTJ	Instrument ID:	VMS_P		
Method:	\\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	20-Jun-2017 16:11:05	Calib Date:	19-Jun-2017 16:26:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK017				

First Level Reviewer: dukesa Date: 19-Jun-2017 20:21:57

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	10.0	10.6	106.40
$ 6 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.18
$ 7 Toluene-d8 (Surr)	10.0	11.6	116.43
$ 8 4-Bromofluorobenzene (Surr)	10.0	11.2	112.16

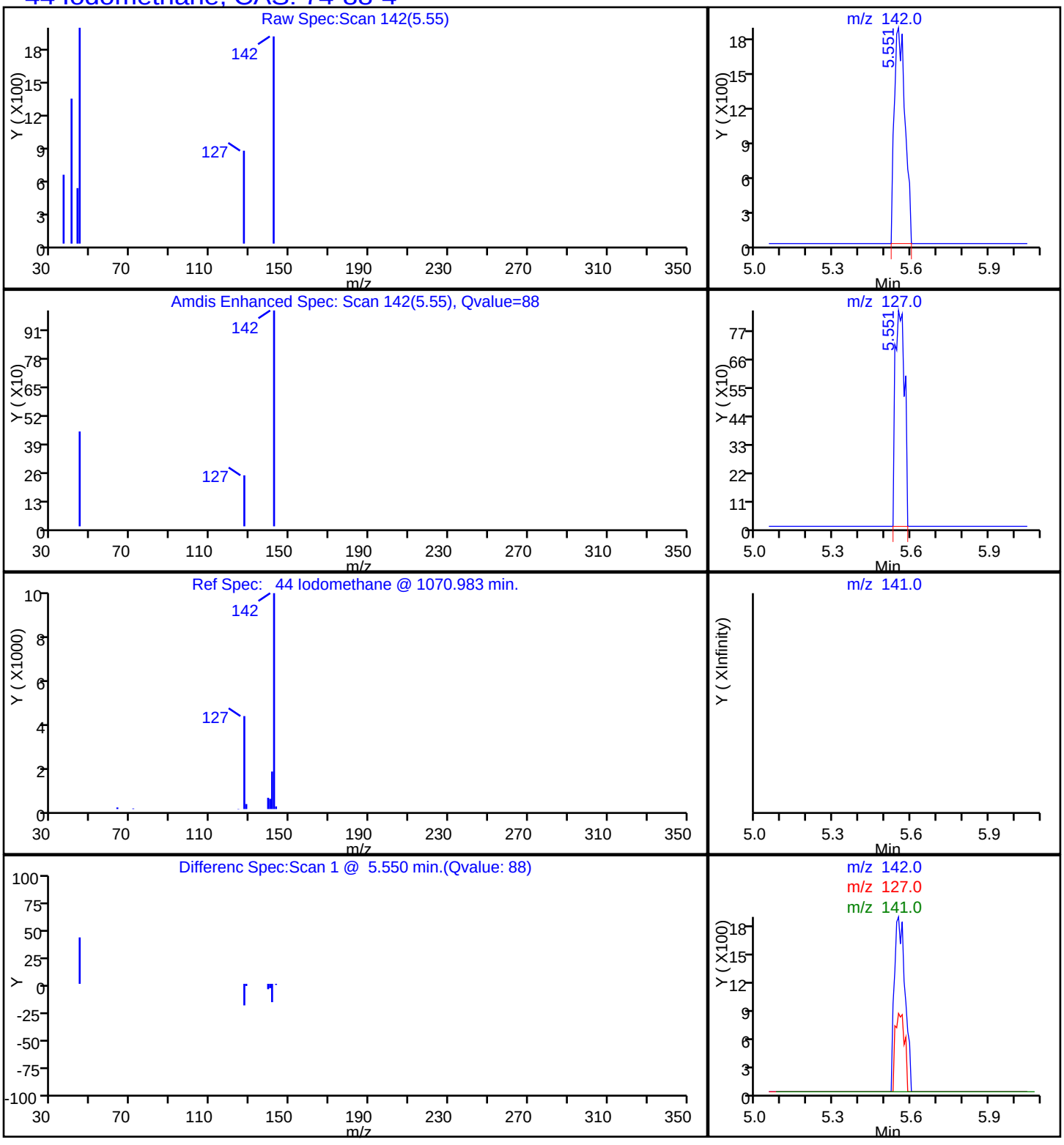
Report Date: 20-Jun-2017 16:15:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0051.D

Injection Date:	19-Jun-2017 18:43:30	Instrument ID:	VMS_P		
Lims ID:	280-97928-F-20-A	Lab Sample ID:	280-97928-20		
Client ID:	SS025-SB10(4-6)				
Operator ID:	SEIFERTJ	ALS Bottle#:	33	Worklist Smp#:	48
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

44 Iodomethane, CAS: 74-88-4



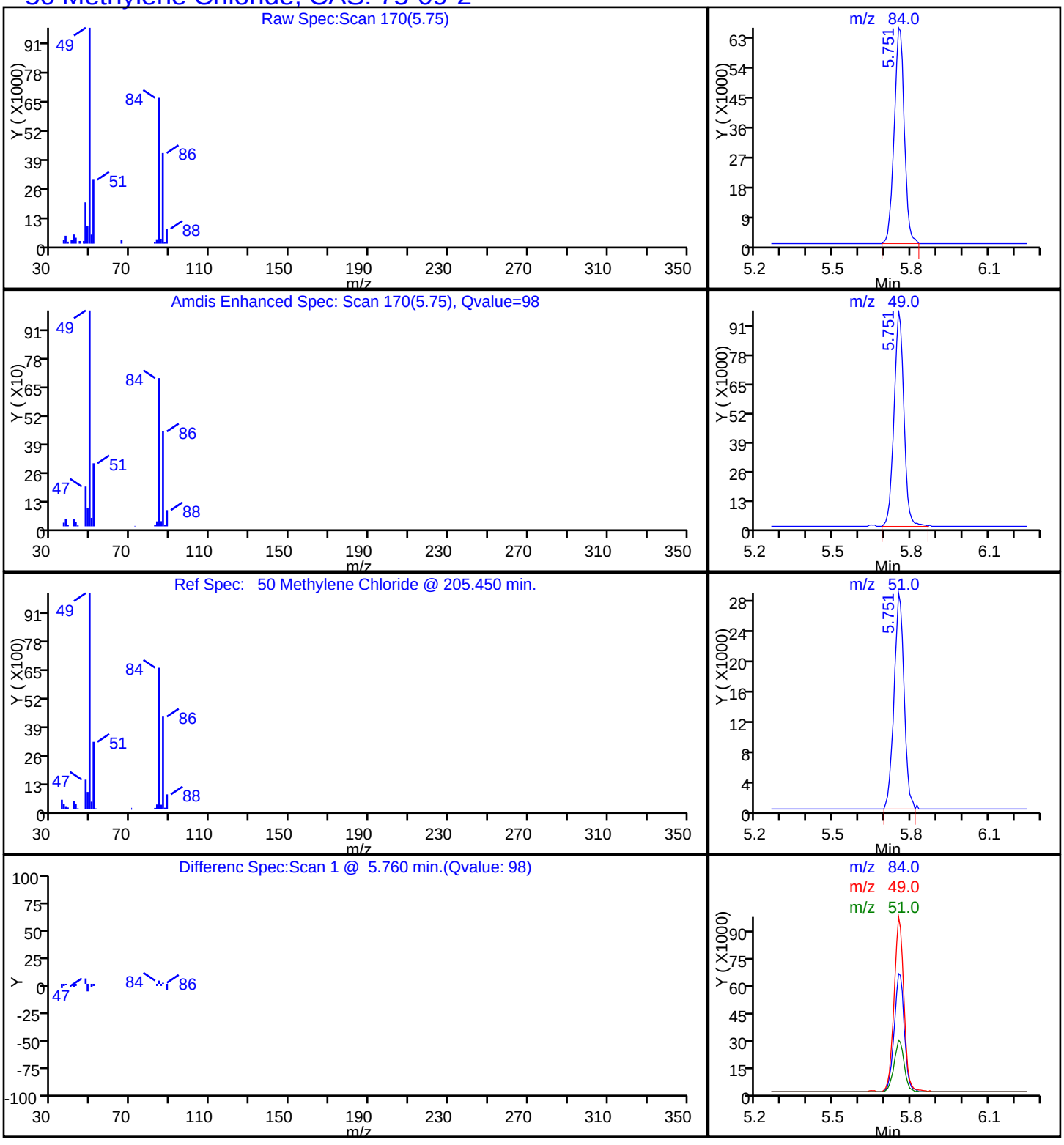
Report Date: 20-Jun-2017 16:15:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0051.D

Injection Date:	19-Jun-2017 18:43:30	Instrument ID:	VMS_P		
Lims ID:	280-97928-F-20-A	Lab Sample ID:	280-97928-20		
Client ID:	SS025-SB10(4-6)				
Operator ID:	SEIFERTJ	ALS Bottle#:	33	Worklist Smp#:	48
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

50 Methylene Chloride, CAS: 75-09-2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(2-4)-a | Lab Sample ID: 280-97928-21

Matrix: Solid | Lab File ID: G2_1130.D

Analysis Method: 8260B | Date Collected: 06/05/2017 14:45

Sample wt/vol: 5.478(g) | Date Analyzed: 06/16/2017 17:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 5.9 | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.6	U	4.9	1.6	0.54
71-55-6	1,1,1-Trichloroethane	1.6	U	4.9	1.6	0.50
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U	4.9	1.6	0.59
79-00-5	1,1,2-Trichloroethane	3.1	U	4.9	3.1	0.85
75-34-3	1,1-Dichloroethane	0.78	U	4.9	0.78	0.20
75-35-4	1,1-Dichloroethene	1.6	U	4.9	1.6	0.57
563-58-6	1,1-Dichloropropene	1.6	U	4.9	1.6	0.52
87-61-6	1,2,3-Trichlorobenzene	1.6	U	4.9	1.6	0.73
96-18-4	1,2,3-Trichloropropane	3.1	U	4.9	3.1	0.79
120-82-1	1,2,4-Trichlorobenzene	1.6	U	4.9	1.6	0.71
95-63-6	1,2,4-Trimethylbenzene	1.6	U	4.9	1.6	0.56
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	9.7	1.6	0.58
106-93-4	1,2-Dibromoethane	1.6	U	4.9	1.6	0.50
95-50-1	1,2-Dichlorobenzene	1.6	U	4.9	1.6	0.44
107-06-2	1,2-Dichloroethane	1.6	U	4.9	1.6	0.68
540-59-0	1,2-Dichloroethene, Total	1.6	U	4.9	1.6	0.38
78-87-5	1,2-Dichloropropane	1.6	U	4.9	1.6	0.53
108-67-8	1,3,5-Trimethylbenzene	1.6	U	4.9	1.6	0.55
541-73-1	1,3-Dichlorobenzene	1.6	U	4.9	1.6	0.47
142-28-9	1,3-Dichloropropane	1.6	U	4.9	1.6	0.49
106-46-7	1,4-Dichlorobenzene	1.6	U	4.9	1.6	0.76
594-20-7	2,2-Dichloropropane	1.6	U	4.9	1.6	0.43
78-93-3	2-Butanone (MEK)	6.2	U	19	6.2	1.8
95-49-8	2-Chlorotoluene	1.6	U	4.9	1.6	0.49
591-78-6	2-Hexanone	12	U Q	19	12	4.7
106-43-4	4-Chlorotoluene	1.6	U	4.9	1.6	0.76
99-87-6	4-Isopropyltoluene	1.6	U	4.9	1.6	0.48
108-10-1	4-Methyl-2-pentanone (MIBK)	12	U	19	12	4.2
67-64-1	Acetone	12	U Q	19	12	5.2
71-43-2	Benzene	1.6	U	4.9	1.6	0.46
108-86-1	Bromobenzene	1.6	U	4.9	1.6	0.48
74-97-5	Bromochloromethane	0.78	U	4.9	0.78	0.29
75-27-4	Bromodichloromethane	0.78	U	4.9	0.78	0.21
75-25-2	Bromoform	0.78	U	4.9	0.78	0.22
74-83-9	Bromomethane	1.6	U	9.7	1.6	0.49
75-15-0	Carbon disulfide	1.6	U	4.9	1.6	0.41

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(2-4)-a | Lab Sample ID: 280-97928-21

Matrix: Solid | Lab File ID: G2_1130.D

Analysis Method: 8260B | Date Collected: 06/05/2017 14:45

Sample wt/vol: 5.478(g) | Date Analyzed: 06/16/2017 17:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 5.9 | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.6	U	4.9	1.6	0.61
108-90-7	Chlorobenzene	1.6	U	4.9	1.6	0.52
75-00-3	Chloroethane	3.1	U	9.7	3.1	0.86
67-66-3	Chloroform	0.78	U	9.7	0.78	0.28
74-87-3	Chloromethane	1.6	U	9.7	1.6	0.75
156-59-2	cis-1,2-Dichloroethene	1.6	U	4.9	1.6	0.54
10061-01-5	cis-1,3-Dichloropropene	3.1	U	4.9	3.1	1.3
124-48-1	Dibromochloromethane	1.6	U	4.9	1.6	0.55
74-95-3	Dibromomethane	3.1	U	4.9	3.1	0.81
75-71-8	Dichlorodifluoromethane	1.6	U Q	9.7	1.6	0.50
100-41-4	Ethylbenzene	1.6	U	4.9	1.6	0.65
87-68-3	Hexachlorobutadiene	1.6	U	4.9	1.6	0.53
108-20-3	Isopropyl ether	7.8	U	49	7.8	2.6
98-82-8	Isopropylbenzene	1.6	U	4.9	1.6	0.57
179601-23-1	m&p-Xylene	3.1	U	3.1	3.1	1.0
74-88-4	Methyl iodide	1.6	U	4.9	1.6	0.43
1634-04-4	Methyl tert-butyl ether	0.78	U	19	0.78	0.33
75-09-2	Methylene Chloride	3.1	U	4.9	3.1	1.6
91-20-3	Naphthalene	1.6	U	4.9	1.6	0.61
104-51-8	n-Butylbenzene	1.6	U	4.9	1.6	0.54
103-65-1	N-Propylbenzene	1.6	U	4.9	1.6	0.56
95-47-6	o-Xylene	1.6	U	4.9	1.6	0.59
135-98-8	sec-Butylbenzene	1.6	U	4.9	1.6	0.75
100-42-5	Styrene	1.6	U	4.9	1.6	0.61
98-06-6	tert-Butylbenzene	1.6	U	4.9	1.6	0.49
127-18-4	Tetrachloroethene	1.6	U	4.9	1.6	0.57
108-88-3	Toluene	1.6	U	4.9	1.6	0.67
156-60-5	trans-1,2-Dichloroethene	0.78	U	4.9	0.78	0.38
10061-02-6	trans-1,3-Dichloropropene	1.6	U	4.9	1.6	0.65
79-01-6	Trichloroethene	0.78	U	4.9	0.78	0.22
75-69-4	Trichlorofluoromethane	3.1	U	9.7	3.1	1.0
108-05-4	Vinyl acetate	3.1	U	9.7	3.1	1.0
75-01-4	Vinyl chloride	3.1	U	4.9	3.1	1.3
1330-20-7	Xylenes (total)	0.97	U	9.7	0.97	0.59

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(2-4)-a Lab Sample ID: 280-97928-21

Matrix: Solid Lab File ID: G2_1130.D

Analysis Method: 8260B Date Collected: 06/05/2017 14:45

Sample wt/vol: 5.478(g) Date Analyzed: 06/16/2017 17:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 5.9 Level: (low/med) Low

Analysis Batch No.: 377645 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	117		71-136
460-00-4	4-Bromofluorobenzene (Surr)	93		79-119
1868-53-7	Dibromofluoromethane (Surr)	117		78-119
2037-26-5	Toluene-d8 (Surr)	94		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1130.D
Lims ID: 280-97928-D-21-B
Client ID: SS025-SB10(2-4)-a
Sample Type: Client
Inject. Date: 16-Jun-2017 17:22:30 ALS Bottle#: 25 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-d-21-b
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 18:02:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	90	374248	1000.0	
* 3 Fluorobenzene	96	7.636	7.629	0.007	98	551059	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	139621	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	97	231828	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.836	6.829	0.007	93	162594	49.8	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	221204	49.8	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	479059	40.1	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	149947	39.7	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.705				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.668				ND	
43 Trichlorofluoromethane	101		2.710				ND	
42 Ethanol	45		2.906				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353				ND	
50 Acetone	43		3.353				ND	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.894				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.213				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.457				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
78 Chloroform	83		6.621				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.014				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.450				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
95 Dibromomethane	93		8.423				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.842				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.071				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593				ND	
140 1,3,5-Trichlorobenzene	180		13.707				ND	
141 1,2,4-Trichlorobenzene	180		14.129				ND	
142 Hexachlorobutadiene	225		14.215				ND	
143 Naphthalene	128		14.315				ND	
144 1,2,3-Trichlorobenzene	180		14.472				ND	
26 3-Methylhexane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

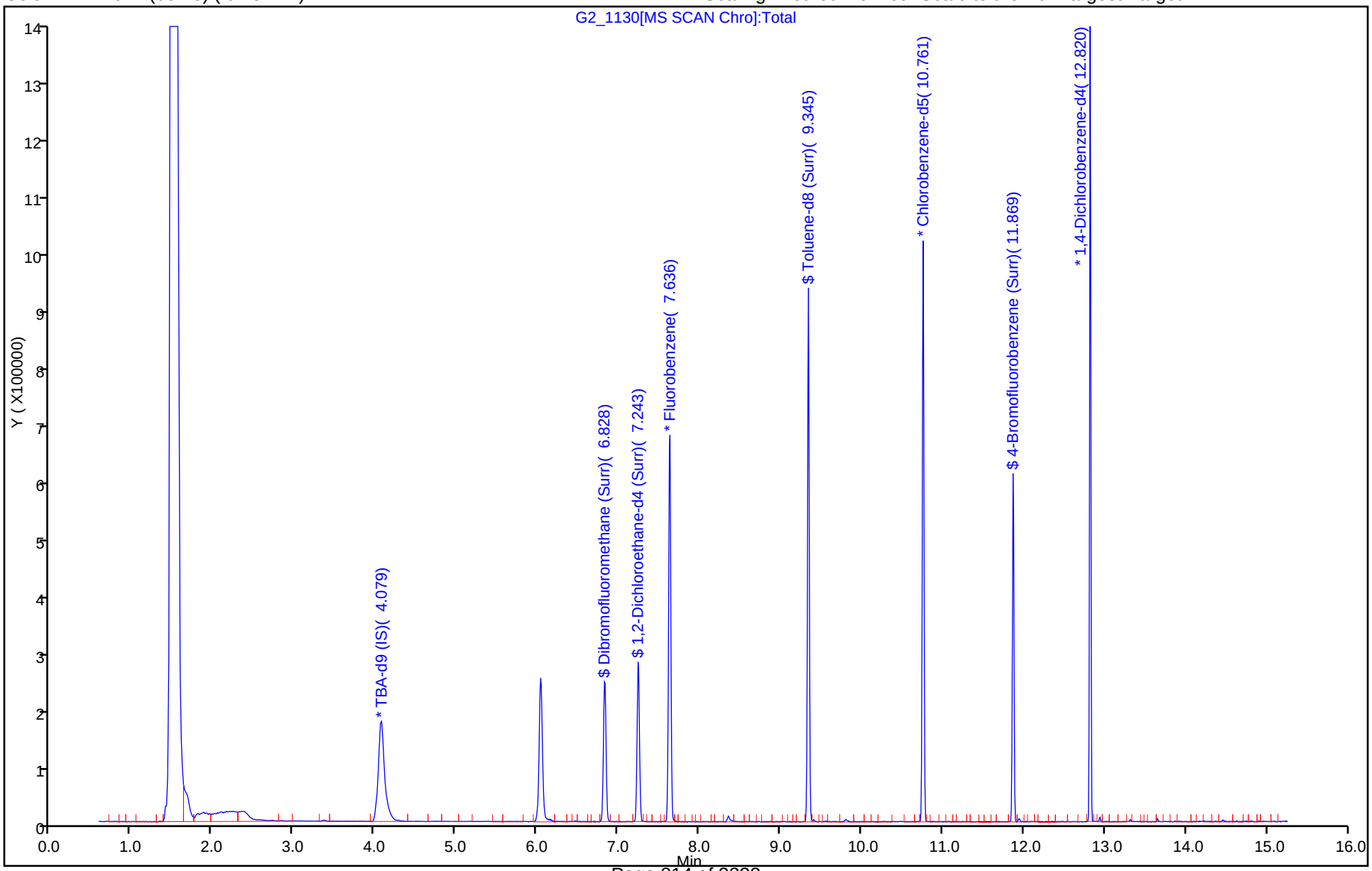
Report Date: 18-Jun-2017 12:35:22 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1130.D

Injection Date:	16-Jun-2017 17:22:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97928-D-21-B	Lab Sample ID:	280-97928-21	Worklist Smp#:	19
Client ID:	SS025-SB10(2-4)-a				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1130.D
Lims ID: 280-97928-D-21-B
Client ID: SS025-SB10(2-4)-a
Sample Type: Client
Inject. Date: 16-Jun-2017 17:22:30 ALS Bottle#: 25 Worklist Smp#: 19
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-d-21-b
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 18:02:09

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	49.8	117.13
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	49.8	117.26
$ 10 Toluene-d8 (Surr)	42.5	40.1	94.40
$ 11 4-Bromofluorobenzene (Surr)	42.5	39.7	93.30

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS10 | Lab Sample ID: 280-97928-22

Matrix: Solid | Lab File ID: G2_1131.D

Analysis Method: 8260B | Date Collected: 06/05/2017 15:20

Sample wt/vol: 5.849(g) | Date Analyzed: 06/16/2017 17:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 9.1 | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.5	U	4.7	1.5	0.53
71-55-6	1,1,1-Trichloroethane	1.5	U	4.7	1.5	0.49
79-34-5	1,1,2,2-Tetrachloroethane	1.5	U	4.7	1.5	0.57
79-00-5	1,1,2-Trichloroethane	3.0	U	4.7	3.0	0.83
75-34-3	1,1-Dichloroethane	0.75	U	4.7	0.75	0.20
75-35-4	1,1-Dichloroethene	1.5	U	4.7	1.5	0.55
563-58-6	1,1-Dichloropropene	1.5	U	4.7	1.5	0.51
87-61-6	1,2,3-Trichlorobenzene	1.5	U	4.7	1.5	0.71
96-18-4	1,2,3-Trichloropropane	3.0	U	4.7	3.0	0.76
120-82-1	1,2,4-Trichlorobenzene	1.5	U	4.7	1.5	0.69
95-63-6	1,2,4-Trimethylbenzene	1.5	U	4.7	1.5	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	1.5	U	9.4	1.5	0.56
106-93-4	1,2-Dibromoethane	1.5	U	4.7	1.5	0.49
95-50-1	1,2-Dichlorobenzene	1.5	U	4.7	1.5	0.42
107-06-2	1,2-Dichloroethane	1.5	U	4.7	1.5	0.66
540-59-0	1,2-Dichloroethene, Total	1.5	U	4.7	1.5	0.37
78-87-5	1,2-Dichloropropane	1.5	U	4.7	1.5	0.52
108-67-8	1,3,5-Trimethylbenzene	1.5	U	4.7	1.5	0.54
541-73-1	1,3-Dichlorobenzene	1.5	U	4.7	1.5	0.45
142-28-9	1,3-Dichloropropane	1.5	U	4.7	1.5	0.48
106-46-7	1,4-Dichlorobenzene	1.5	U	4.7	1.5	0.73
594-20-7	2,2-Dichloropropane	1.5	U	4.7	1.5	0.41
78-93-3	2-Butanone (MEK)	6.0	U	19	6.0	1.7
95-49-8	2-Chlorotoluene	1.5	U	4.7	1.5	0.48
591-78-6	2-Hexanone	12	U Q	19	12	4.6
106-43-4	4-Chlorotoluene	1.5	U	4.7	1.5	0.73
99-87-6	4-Isopropyltoluene	1.5	U	4.7	1.5	0.46
108-10-1	4-Methyl-2-pentanone (MIBK)	12	U	19	12	4.1
67-64-1	Acetone	35	Q	19	12	5.1
71-43-2	Benzene	1.5	U	4.7	1.5	0.44
108-86-1	Bromobenzene	1.5	U	4.7	1.5	0.46
74-97-5	Bromochloromethane	0.75	U	4.7	0.75	0.28
75-27-4	Bromodichloromethane	0.75	U	4.7	0.75	0.21
75-25-2	Bromoform	0.75	U	4.7	0.75	0.22
74-83-9	Bromomethane	1.5	U	9.4	1.5	0.47
75-15-0	Carbon disulfide	1.5	U	4.7	1.5	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS10 | Lab Sample ID: 280-97928-22

Matrix: Solid | Lab File ID: G2_1131.D

Analysis Method: 8260B | Date Collected: 06/05/2017 15:20

Sample wt/vol: 5.849(g) | Date Analyzed: 06/16/2017 17:43

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 9.1 | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.5	U	4.7	1.5	0.59
108-90-7	Chlorobenzene	1.5	U	4.7	1.5	0.51
75-00-3	Chloroethane	3.0	U	9.4	3.0	0.84
67-66-3	Chloroform	0.75	U	9.4	0.75	0.27
74-87-3	Chloromethane	1.5	U	9.4	1.5	0.72
156-59-2	cis-1,2-Dichloroethene	1.5	U	4.7	1.5	0.53
10061-01-5	cis-1,3-Dichloropropene	3.0	U	4.7	3.0	1.2
124-48-1	Dibromochloromethane	1.5	U	4.7	1.5	0.54
74-95-3	Dibromomethane	3.0	U	4.7	3.0	0.79
75-71-8	Dichlorodifluoromethane	1.5	U Q	9.4	1.5	0.49
100-41-4	Ethylbenzene	1.5	U	4.7	1.5	0.63
87-68-3	Hexachlorobutadiene	1.5	U	4.7	1.5	0.52
108-20-3	Isopropyl ether	7.5	U	47	7.5	2.6
98-82-8	Isopropylbenzene	1.5	U	4.7	1.5	0.55
179601-23-1	m&p-Xylene	3.0	U	3.0	3.0	0.98
74-88-4	Methyl iodide	1.5	U	4.7	1.5	0.41
1634-04-4	Methyl tert-butyl ether	0.75	U	19	0.75	0.32
75-09-2	Methylene Chloride	3.0	U	4.7	3.0	1.5
91-20-3	Naphthalene	1.5	U	4.7	1.5	0.59
104-51-8	n-Butylbenzene	1.5	U	4.7	1.5	0.53
103-65-1	N-Propylbenzene	1.5	U	4.7	1.5	0.55
95-47-6	o-Xylene	1.5	U	4.7	1.5	0.57
135-98-8	sec-Butylbenzene	1.5	U	4.7	1.5	0.72
100-42-5	Styrene	1.5	U	4.7	1.5	0.59
98-06-6	tert-Butylbenzene	1.5	U	4.7	1.5	0.47
127-18-4	Tetrachloroethene	1.5	U	4.7	1.5	0.55
108-88-3	Toluene	1.5	U	4.7	1.5	0.65
156-60-5	trans-1,2-Dichloroethene	0.75	U	4.7	0.75	0.37
10061-02-6	trans-1,3-Dichloropropene	1.5	U	4.7	1.5	0.63
79-01-6	Trichloroethene	0.75	U	4.7	0.75	0.22
75-69-4	Trichlorofluoromethane	3.0	U	9.4	3.0	0.98
108-05-4	Vinyl acetate	3.0	U	9.4	3.0	1.0
75-01-4	Vinyl chloride	3.0	U	4.7	3.0	1.3
1330-20-7	Xylenes (total)	0.94	U	9.4	0.94	0.57

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS10 Lab Sample ID: 280-97928-22

Matrix: Solid Lab File ID: G2_1131.D

Analysis Method: 8260B Date Collected: 06/05/2017 15:20

Sample wt/vol: 5.849(g) Date Analyzed: 06/16/2017 17:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: 9.1 Level: (low/med) Low

Analysis Batch No.: 377645 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	122		71-136
460-00-4	4-Bromofluorobenzene (Surr)	93		79-119
1868-53-7	Dibromofluoromethane (Surr)	119		78-119
2037-26-5	Toluene-d8 (Surr)	95		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1131.D
Lims ID: 280-97928-D-22-B
Client ID: SS025-SS10
Sample Type: Client
Inject. Date: 16-Jun-2017 17:43:30 ALS Bottle#: 26 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-d-22-b
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 18:02:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	91	385427	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	548752	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	89	138539	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	97	228628	50.0	
* 2 1,4-Dioxane-d8	96		0.000				ND	
$ 8 Dibromofluoromethane (Surr	111	6.829	6.829	0.000	92	163789	50.4	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	228093	51.8	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	476601	40.2	
$ 11 4-Bromofluorobenzene (Surr	95	11.870	11.869	0.001	91	146818	39.4	
$ 6 Trifluorotoluene (Surr)	1		0.000				ND	
$ 7 BFB	95		2.270				ND	
32 Dichlorodifluoromethane	85		1.705				ND	
109 Tetrahydrothiophene	60		1.718				ND	
34 Chloromethane	50		1.830				ND	
37 Vinyl chloride	62		1.970				ND	
22 Butadiene	54		1.998				ND	
38 Ethylene oxide	43		2.277				ND	
39 Bromomethane	94		2.291				ND	
40 Chloroethane	64		2.403				ND	
41 Dichlorofluoromethane	67		2.668				ND	
43 Trichlorofluoromethane	101		2.710				ND	
42 Ethanol	45		2.906				ND	
45 Ethyl ether	59		3.004				ND	
47 Propene oxide	58		3.073				ND	
48 Acrolein	56		3.185				ND	
53 1,1-Dichloroethene	96		3.311				ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353				ND	
50 Acetone	43	3.353	3.353	0.000	99	51832	37.3	
55 Iodomethane	142		3.492				ND	
51 Isopropyl alcohol	45		3.576				ND	
58 Carbon disulfide	76		3.576				ND	
54 Acetonitrile	41		3.758				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800				ND	
57 3-Chloro-1-propene	41		3.800				ND	
31 Chlorotrifluoroethene	116		3.825				ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009				ND	
60 Methylene Chloride	84		4.009				ND	
59 2-Methyl-2-propanol	59		4.205				ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286				ND	
61 Acrylonitrile	53		4.372				ND	
62 Methyl tert-butyl ether	73		4.428				ND	
63 trans-1,2-Dichloroethene	96		4.428				ND	
64 Hexane	57		4.917				ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040				ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068				ND	
67 1,1-Dichloroethane	63		5.210				ND	
65 Vinyl acetate	43		5.252				ND	
66 Isopropyl ether	87		5.308				ND	
68 2-Chloro-1,3-butadiene	53		5.322				ND	
69 Tert-butyl ethyl ether	59		5.894				ND	
74 cis-1,2-Dichloroethene	96		6.128				ND	
71 2-Butanone (MEK)	43		6.128				ND	
75 2,2-Dichloropropane	77		6.128				ND	
70 Ethyl acetate	43		6.213				ND	
73 Propionitrile	54		6.221				ND	
76 Methacrylonitrile	41		6.435				ND	
72 sec-Butyl Alcohol	45		6.457				ND	
77 Chlorobromomethane	128		6.457				ND	
79 Tetrahydrofuran	42		6.464				ND	
78 Chloroform	83		6.621				ND	
81 1,1,1-Trichloroethane	97		6.807				ND	
82 Cyclohexane	56		6.893				ND	
84 Carbon tetrachloride	117		7.000				ND	
83 1,1-Dichloropropene	75		7.014				ND	
87 Benzene	78		7.258				ND	
85 1,2-Dichloroethane	62		7.336				ND	
86 Tert-amyl methyl ether	73		7.450				ND	
80 Isobutyl alcohol	41		7.651				ND	
35 n-Heptane	43		7.651				ND	
88 n-Butanol	56		8.001				ND	
89 Trichloroethene	95		8.044				ND	
16 Ethyl acrylate	55		8.173				ND	
90 2-Pentanone	43		8.259				ND	
93 Methylcyclohexane	55		8.294				ND	
92 1,2-Dichloropropane	63		8.330				ND	
94 1,4-Dioxane	88		8.416				ND	
95 Dibromomethane	93		8.423				ND	
91 Methyl methacrylate	100		8.423				ND	
96 Dichlorobromomethane	83		8.623				ND	
97 2-Nitropropane	41		8.859				ND	
98 2-Chloroethyl vinyl ether	63		8.938				ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	
24 n-Butyl acetate	43		9.214				ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
101 Toluene	91		9.410				ND	
103 trans-1,3-Dichloropropene	75		9.660				ND	
102 Ethyl methacrylate	69		9.717				ND	
104 1,1,2-Trichloroethane	97		9.846				ND	
107 Tetrachloroethene	164		9.917				ND	
106 1,3-Dichloropropane	76		10.003				ND	
105 2-Hexanone	43		10.060				ND	
108 Chlorodibromomethane	129		10.211				ND	
110 Ethylene Dibromide	107		10.318				ND	
111 1-Chlorohexane	91		10.775				ND	
112 Chlorobenzene	112		10.790				ND	
113 1,1,1,2-Tetrachloroethane	131		10.876				ND	
114 Ethylbenzene	106		10.883				ND	
115 m-Xylene & p-Xylene	106		11.004				ND	
117 o-Xylene	106		11.362				ND	
116 Styrene	104		11.383				ND	
118 Bromoform	173		11.555				ND	
119 Isopropylbenzene	105		11.705				ND	
23 Benzyl chloride	126		11.759				ND	
120 cis-1,4-Dichloro-2-butene	53		11.769				ND	
121 Cyclohexanone	55		11.791				ND	
122 1,1,2,2-Tetrachloroethane	83		11.998				ND	
125 Bromobenzene	156		11.998				ND	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	
124 1,2,3-Trichloropropane	110		12.048				ND	
126 N-Propylbenzene	120		12.091				ND	
128 2-Chlorotoluene	126		12.170				ND	
127 1,3,5-Trimethylbenzene	105		12.248				ND	
129 4-Chlorotoluene	126		12.277				ND	
130 tert-Butylbenzene	119		12.506				ND	
131 1,2,4-Trimethylbenzene	105		12.549				ND	
132 sec-Butylbenzene	134		12.677				ND	
134 1,3-Dichlorobenzene	146		12.763				ND	
133 4-Isopropyltoluene	119		12.785				ND	
136 1,4-Dichlorobenzene	146		12.842				ND	
135 1,2,3-Trimethylbenzene	105		12.856				ND	
137 n-Butylbenzene	91		13.071				ND	
138 1,2-Dichlorobenzene	146		13.085				ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593				ND	
140 1,3,5-Trichlorobenzene	180		13.707				ND	
141 1,2,4-Trichlorobenzene	180		14.129				ND	
142 Hexachlorobutadiene	225		14.215				ND	
143 Naphthalene	128		14.315				ND	
144 1,2,3-Trichlorobenzene	180		14.472				ND	
26 3-Methylhexane	1		0.000				ND	
17 2-Methylnaphthalene	142		0.000				ND	
15 3,3-Dimethylpentane	1		0.000				ND	
14 2,4-Dimethylpentane	1		0.000				ND	
28 Dimethyl disulfide	1		0.000				ND	
21 Pentachloroethane	167		0.000				ND	
25 n-Nonyl Aldehyde	1		0.000				ND	
20 2,2-Dimethylpentane	1		0.000				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000				ND	
19 2,3-Dimethylpentane	1		0.000				ND	
18 2,2,3-Trimethylbutane	1		0.000				ND	
13 2-Butoxyethanol TIC	1		0.000				ND	
27 3-Ethylpentane	1		0.000				ND	
29 Dichloroacetonitrile TIC	74		1.000				ND	
30 2,3-dichloro-1-propene TIC	75		1.000				ND	
49 Propene oxide TIC	58		5.292				ND	
S 151 1,2-Dichloroethene, Total	96		2.000				ND	
S 145 Trihalomethanes, Total	1		0.000				ND	
S 149 1,2-Dichloroethene, Total	1		0.000				ND	
S 150 Xylenes, Total	106		0.000				ND	
S 148 1,3-Dichloropropene, Total	1		0.000				ND	
S 146 Xylenes, Total (URS)	1		0.000				ND	
S 147 Total BTEX	1		0.000				ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

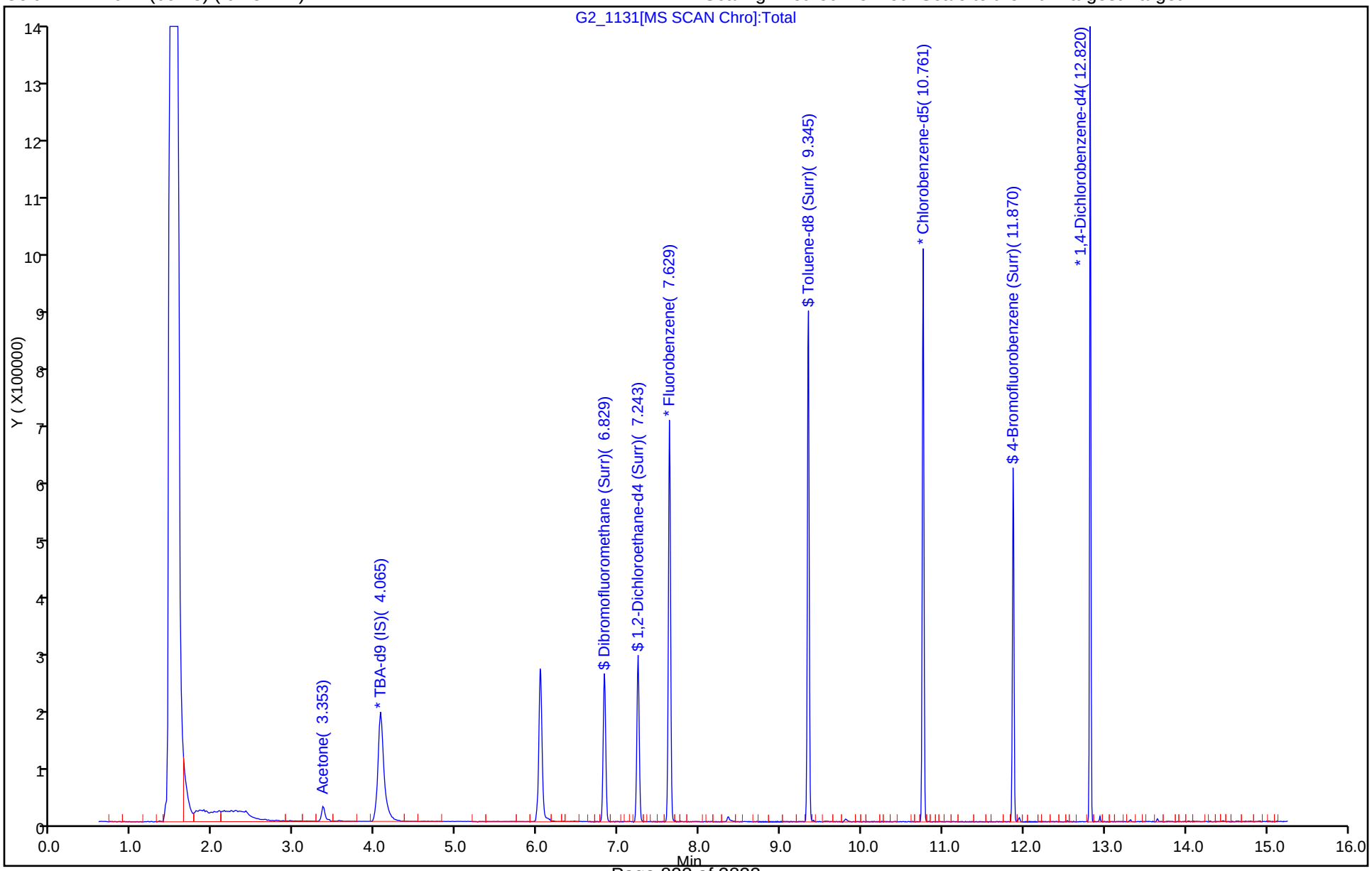
Report Date: 18-Jun-2017 12:35:24 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1131.D

Injection Date:	16-Jun-2017 17:43:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	280-97928-D-22-B	Lab Sample ID:	280-97928-22	Worklist Smp#:	20
Client ID:	SS025-SS10				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1131.D
Lims ID: 280-97928-D-22-B
Client ID: SS025-SS10
Sample Type: Client
Inject. Date: 16-Jun-2017 17:43:30 ALS Bottle#: 26 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 280-97928-d-22-b
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 18:02:29

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	50.4	118.59
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	51.8	121.77
$ 10 Toluene-d8 (Surr)	42.5	40.2	94.65
$ 11 4-Bromofluorobenzene (Surr)	42.5	39.4	92.63

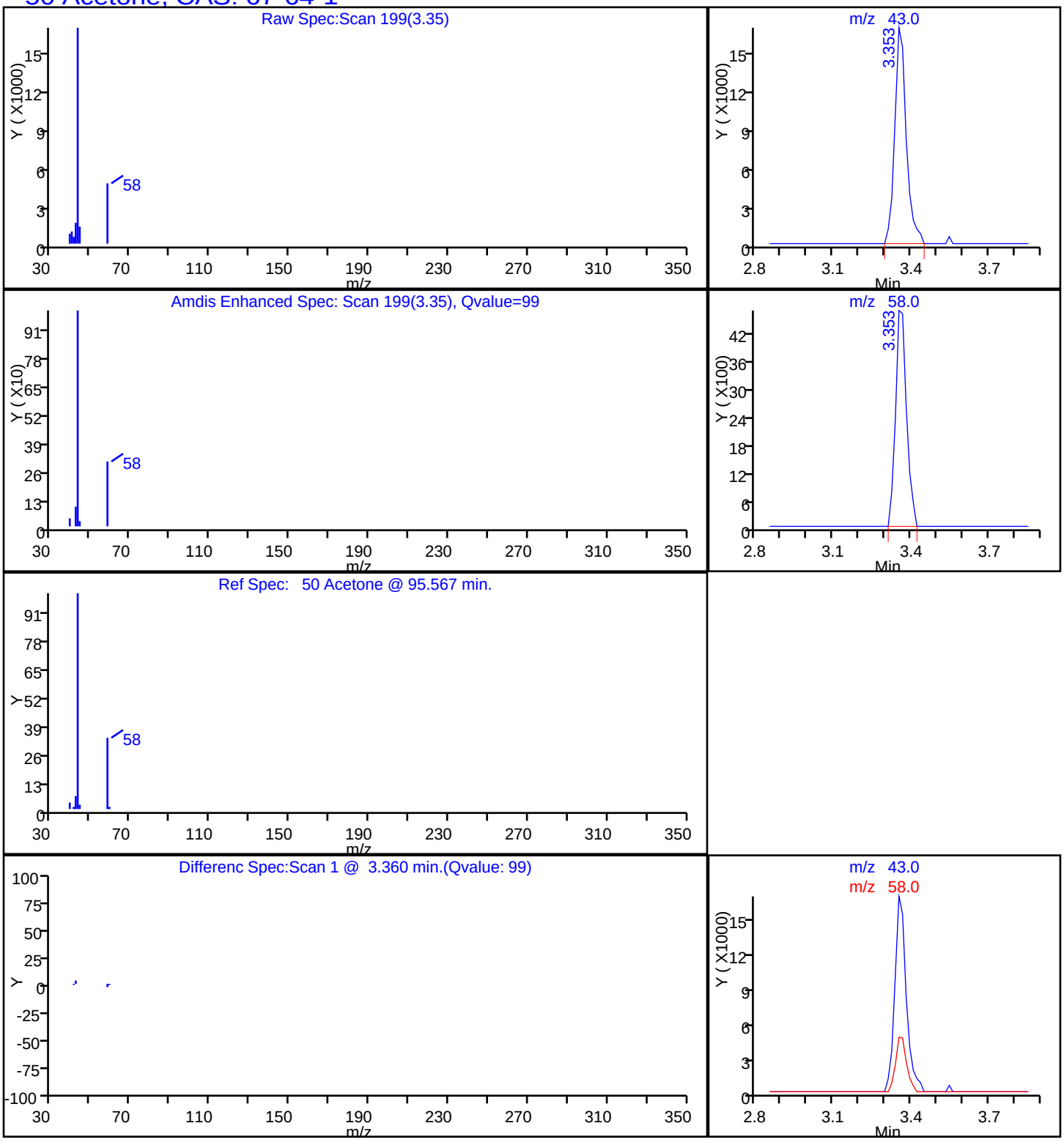
Report Date: 18-Jun-2017 12:35:24 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1131.D

Injection Date:	16-Jun-2017 17:43:30	Instrument ID:	VMS_G2		
Lims ID:	280-97928-D-22-B	Lab Sample ID:	280-97928-22		
Client ID:	SS025-SS10				
Operator ID:	DUKESA	ALS Bottle#:	26	Worklist Smp#:	20
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

50 Acetone, CAS: 67-64-1



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 371118

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/26/2017 21:24 Calibration End Date: 04/26/2017 23:47 Calibration ID: 28915

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-371118/20	G2_9103.D
Level 2	STD002 280-371118/21	G2_9104.D
Level 3	STD005 280-371118/22	G2_9105.D
Level 4	STD010 280-371118/23	G2_9106.D
Level 5	STD020 280-371118/24	G2_9107.D
Level 6	ICIS 280-371118/25	G2_9108.D
Level 7	STD100 280-371118/26	G2_9109.D
Level 8	STD200 280-371118/27	G2_9110.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Ethanol	+++++ 0.1320	+++++ 0.1303	0.0763 0.1272	0.1035	0.1052	Lin2	-11.06	0.1302							0.9960		0.9900
Isopropyl alcohol	+++++ 0.7426	+++++ 0.7473	0.5107 0.7532	0.5464	0.5813	Lin2	-13.11	0.7310							0.9910		0.9900
Acetonitrile	+++++ 0.0357	+++++ 0.0377	0.0292 0.0364	0.0323	0.0326	Ave		0.0340				9.3		15.0			
Isopropyl ether	+++++ 0.2658	+++++ 0.2787	0.1461 0.2876	0.1589	0.1884	Lin1	-1.054	0.2885							0.9970		0.9900
2-Chloro-1,3-butadiene	+++++ 0.5608	+++++ 0.5571	0.2938 0.5499	0.3298	0.3945	Lin1	-1.820	0.5644							0.9970		0.9900
Tert-butyl ethyl ether	+++++ 0.8027	0.5287 0.8449	0.4578 0.8737	0.4775	0.5655	Lin1	-1.603	0.8528							0.9920		0.9900
Ethyl acetate	+++++ 0.2436	0.2206 0.2590	0.1743 0.2460	0.1859	0.2047	Ave		0.2191				14.7		15.0			
Propionitrile	0.0393 0.0399	0.0359 0.0410	0.0300 0.0392	0.0320	0.0352	Ave		0.0366				10.9		15.0			
Methacrylonitrile	0.1366 0.1656	0.1260 0.1655	0.1120 0.1531	0.1250	0.1405	Ave		0.1405				14.0		15.0			
Tert-amyl methyl ether	+++++ 0.7992	0.4837 0.7994	0.4364 0.8185	0.5098	0.6054	Lin1	-1.378	0.8103							0.9950		0.9900
n-Butanol	+++++ 0.3438	+++++ 0.3682	0.1737 0.3652	0.1913	0.2081	Lin1	-37.56	0.3715							0.9940		0.9900
Methyl methacrylate	+++++ 0.0795	+++++ 0.0865	0.0463 0.0856	0.0510	0.0595	Lin1	-0.586	0.0868							0.9970		0.9900
2-Nitropropane	+++++ 0.0762	+++++ 0.0819	0.0526 0.0801	0.0537	0.0598	Lin1	-0.436	0.0814							0.9980		0.9900
cis-1,4-Dichloro-2-butene	+++++ 0.2585	+++++ 0.2749	0.1576 0.2612	0.1559	0.1874	Lin1	-1.671	0.2696							0.9960		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 371118

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/26/2017 21:24 Calibration End Date: 04/26/2017 23:47 Calibration ID: 28915

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,3-Trimethylbenzene	+++++ 3.4519	+++++ 3.3230	2.3329 3.0319	2.4512	2.8086	Lin2	-5.187	3.2328							0.9920		0.9900
Dibromofluoromethane (Surr)	+++++ 0.3095	+++++ 0.3033	0.2903 0.2967	0.2880	0.2922	Ave		0.2967				2.8		15.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.3625	+++++ 0.3587	0.3597 0.3440	0.3280	0.3416	Ave		0.3491				3.9		15.0			
Toluene-d8 (Surr)	+++++ 4.5111	4.1228 4.5648	3.2663 4.3866	3.5867	3.9451	Ave		4.0548				12.1		15.0			
4-Bromofluorobenzene (Surr)	+++++ 1.0204	+++++ 1.0257	0.6803 0.9628	0.7151	0.8832	Lin2	-1.839	0.9992							0.9940		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 371118

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/26/2017 21:24 Calibration End Date: 04/26/2017 23:47 Calibration ID: 28915

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-371118/20	G2_9103.D
Level 2	STD002 280-371118/21	G2_9104.D
Level 3	STD005 280-371118/22	G2_9105.D
Level 4	STD010 280-371118/23	G2_9106.D
Level 5	STD020 280-371118/24	G2_9107.D
Level 6	ICIS 280-371118/25	G2_9108.D
Level 7	STD100 280-371118/26	G2_9109.D
Level 8	STD200 280-371118/27	G2_9110.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethanol	TBAd9	Lin2	+++++ 122781	+++++ 283622	7276 573614	20171	41345	+++++ 2000	+++++ 4000	200 8000	400	800
Isopropyl alcohol	TBAd9	Lin2	+++++ 172630	+++++ 406709	12177 849140	26611	57099	+++++ 500	+++++ 1000	50.0 2000	100	200
Acetonitrile	FB	Ave	+++++ 329217	+++++ 734663	26441 1481604	57118	112546	+++++ 500	+++++ 1000	50.0 2000	100	200
Isopropyl ether	FB	Lin1	+++++ 245024	+++++ 543678	13234 1170578	28081	65060	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
2-Chloro-1,3-butadiene	FB	Lin1	+++++ 516999	+++++ 1086636	26621 2238320	58295	136212	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Tert-butyl ethyl ether	FB	Lin1	+++++ 740026	19370 1648041	41478 3556496	84392	195271	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Ethyl acetate	FB	Ave	+++++ 449116	16162 1010347	31579 2002470	65714	141346	+++++ 100	4.00 200	10.0 400	20.0	40.0
Propionitrile	FB	Ave	8076 368245	13153 799862	27173 1595234	56592	121445	10.0 500	20.0 1000	50.0 2000	100	200
Methacrylonitrile	FB	Ave	28072 1526789	46147 3228599	101430 6231562	220951	485255	10.0 500	20.0 1000	50.0 2000	100	200
Tert-amyl methyl ether	FB	Lin1	+++++ 736869	17719 1559265	39541 3331592	90109	209044	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
n-Butanol	TBAd9	Lin1	+++++ 199829	+++++ 500903	10355 1029447	23296	51108	+++++ 1250	+++++ 2500	125 5000	250	500
Methyl methacrylate	FB	Lin1	+++++ 146545	+++++ 337342	8391 697047	18014	41080	+++++ 100	+++++ 200	10.0 400	20.0	40.0
2-Nitropropane	FB	Lin1	+++++ 140567	+++++ 319469	9526 652312	18997	41285	+++++ 100	+++++ 200	10.0 400	20.0	40.0
cis-1,4-Dichloro-2-butene	DCBd4	Lin1	+++++ 199872	+++++ 475453	11849 979420	21713	52773	+++++ 100	+++++ 200	10.0 400	20.0	40.0
1,2,3-Trimethylbenzene	DCBd4	Lin2	+++++ 1334271	+++++ 2873226	87682 5683286	170709	395414	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 371118

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 04/26/2017 21:24 Calibration End Date: 04/26/2017 23:47 Calibration ID: 28915

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dibromofluoromethane (Surr)	FB	Ave	+++++ 285345	+++++ 591609	26300 1207841	50907	100882	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 334208	+++++ 699623	32586 1400342	57978	117949	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	+++++ 1071370	37867 2375251	73621 4806099	152095	348590	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
4-Bromofluorobenzene (Surr)	DCBd 4	Lin2	+++++ 394437	+++++ 886909	25571 1804706	49798	124341	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9103.D
Lims ID: STD001
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 26-Apr-2017 21:24:30 ALS Bottle#: 10 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD001
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub102

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2017 16:49:59 Calib Date: 26-Apr-2017 23:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	96	635071	1000.0	1000.0	
* 3 Fluorobenzene	96	7.636	7.644	-0.008	99	1027637	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.775	10.775	0.000	85	266935	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	94	445571	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.836	6.836	0.000	89	8471	1.00	1.39	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.250	7.258	-0.008	97	9452	1.00	1.32	
$ 10 Toluene-d8 (Surr)	98	9.352	9.353	-0.001	92	24716	1.00	1.14	
$ 11 4-Bromofluorobenzene (Surr	95	11.884	11.884	0.000	93	7592	1.00	2.69	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.263	2.263	0.000	100	33554	100.0	135.9	
42 Ethanol	45		2.892				ND	ND	
47 Propene oxide	58	3.059	3.073	-0.014	96	155067	100.0	123.4	
51 Isopropyl alcohol	45	3.562	3.576	-0.014	92	4611	10.0	27.9	
54 Acetonitrile	41	3.744	3.814	-0.070	97	9685	10.0	13.9	
68 2-Chloro-1,3-butadiene	53	5.322	5.322	0.000	63	6605	1.00	3.79	
66 Isopropyl ether	87		5.322				ND	ND	
69 Tert-butyl ethyl ether	59	5.894	5.908	-0.014	90	12458	1.00	2.59	
70 Ethyl acetate	43	6.221	6.142	0.079	95	10568	2.00	2.35	
73 Propionitrile	54	6.228	6.228	0.000	59	8076	10.0	10.7	
76 Methacrylonitrile	41	6.442	6.471	-0.029	89	28072	10.0	9.72	
86 Tert-amyl methyl ether	73	7.443	7.458	-0.015	65	10466	1.00	2.33	
88 n-Butanol	56	8.015	8.015	0.000	82	3030	25.0	113.9	
16 Ethyl acrylate	55		8.187				ND	ND	
91 Methyl methacrylate	100	8.437	8.437	0.000	88	2460	2.00	8.12	
97 2-Nitropropane	41	8.866	8.873	-0.007	76	2421	2.00	6.80	
120 cis-1,4-Dichloro-2-butene	53	11.776	11.784	-0.008	89	3473	2.00	7.64	
135 1,2,3-Trimethylbenzene	105	12.863	12.863	0.000	96	23708	1.00	2.43	
140 1,3,5-Trichlorobenzene	180	13.707	13.707	0.000	94	13373	1.00	1.04	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00023	Amount Added:	0.13	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.02	Units: uL

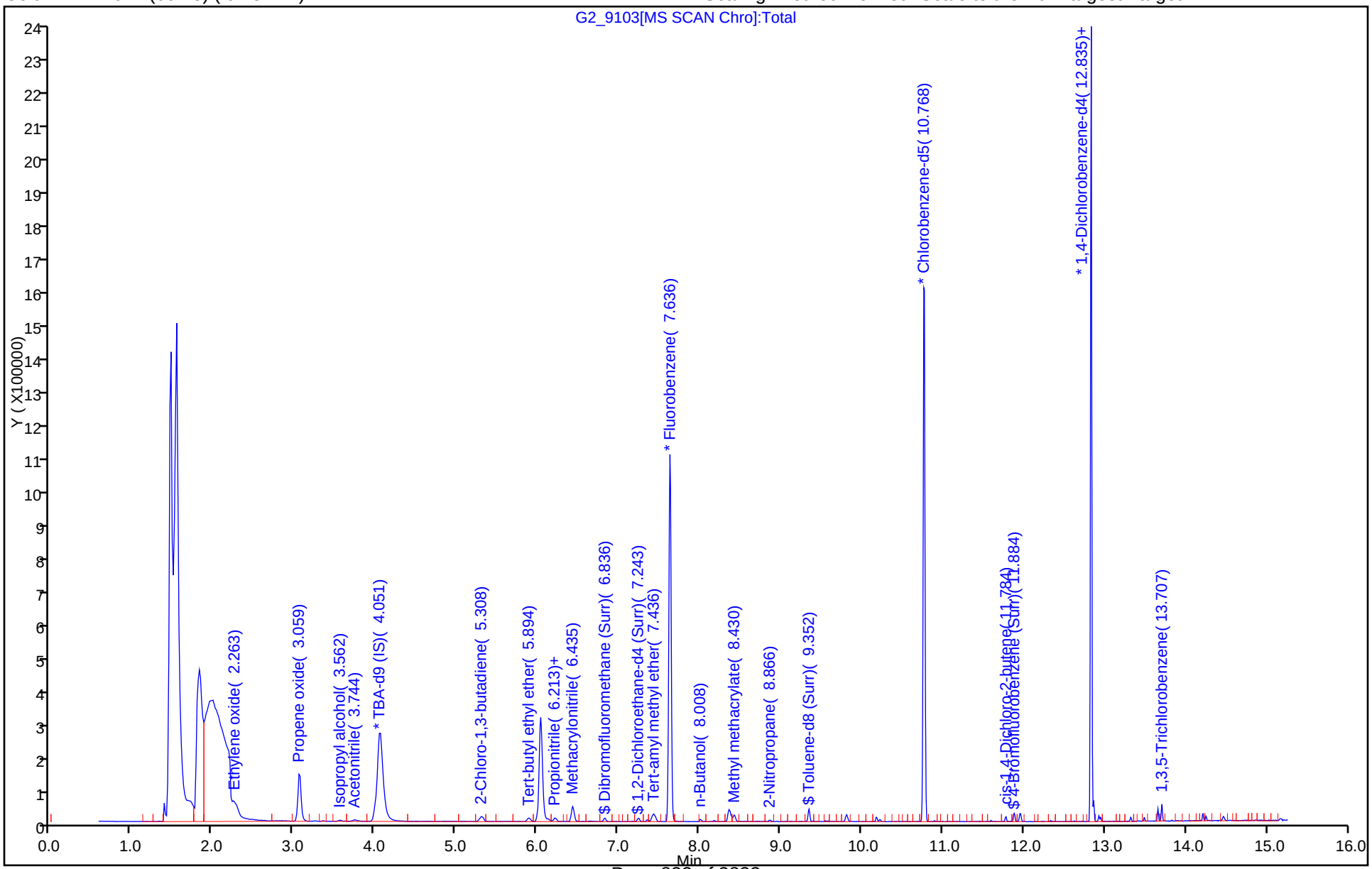
Report Date: 27-Apr-2017 16:50:00 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9103.D

Injection Date:	26-Apr-2017 21:24:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD001			Worklist Smp#:	20
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9104.D
Lims ID: STD002
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 26-Apr-2017 21:44:30 ALS Bottle#: 11 Worklist Smp#: 21
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD002
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub102

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2017 16:50:01 Calib Date: 26-Apr-2017 23:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: dukesa Date: 27-Apr-2017 00:13:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.065	0.014	95	492497	1000.0	1000.0	
* 3 Fluorobenzene	96	7.644	7.644	0.000	99	915851	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.776	10.775	0.001	85	229619	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	94	385898	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.843	6.836	0.007	92	13850	2.00	2.55	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.258	7.258	0.000	98	16019	2.00	2.51	
$ 10 Toluene-d8 (Surr)	98	9.353	9.353	0.000	94	37867	2.00	2.03	
$ 11 4-Bromofluorobenzene (Surr	95	11.884	11.884	0.000	94	13227	2.00	3.56	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.263	2.263	0.000	100	51599	200.0	234.6	
42 Ethanol	45		2.892				ND	ND	
47 Propene oxide	58	3.073	3.073	0.000	96	249535	200.0	222.9	
51 Isopropyl alcohol	45	3.562	3.576	-0.014	93	7351	20.0	38.3	
54 Acetonitrile	41	3.758	3.814	-0.056	99	14574	20.0	23.4	
66 Isopropyl ether	87	5.336	5.322	0.014	84	6072	2.00	4.80	
68 2-Chloro-1,3-butadiene	53	5.336	5.322	0.014	76	12171	2.00	4.40	
69 Tert-butyl ethyl ether	59	5.909	5.908	0.001	89	19370	2.00	3.12	
70 Ethyl acetate	43	6.221	6.142	0.079	98	16162	4.00	4.03	
73 Propionitrile	54	6.228	6.228	0.000	88	13153	20.0	19.6	
76 Methacrylonitrile	41	6.442	6.471	-0.029	88	46147	20.0	17.9	
86 Tert-amyl methyl ether	73	7.465	7.458	0.007	89	17719	2.00	2.89	
88 n-Butanol	56	8.008	8.015	-0.007	91	5551	50.0	131.4	
16 Ethyl acrylate	55	8.187	8.187	0.000	96	7182	2.00	4.82	
91 Methyl methacrylate	100	8.430	8.437	-0.007	88	4473	4.00	9.55	
97 2-Nitropropane	41	8.874	8.873	0.001	91	4912	4.00	8.65	
120 cis-1,4-Dichloro-2-butene	53	11.777	11.784	-0.007	89	5389	4.00	8.79	
135 1,2,3-Trimethylbenzene	105	12.863	12.863	0.000	98	41309	2.00	3.26	
140 1,3,5-Trichlorobenzene	180	13.707	13.707	0.000	96	22103	2.00	1.98	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00023	Amount Added:	0.25	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.04	Units: uL

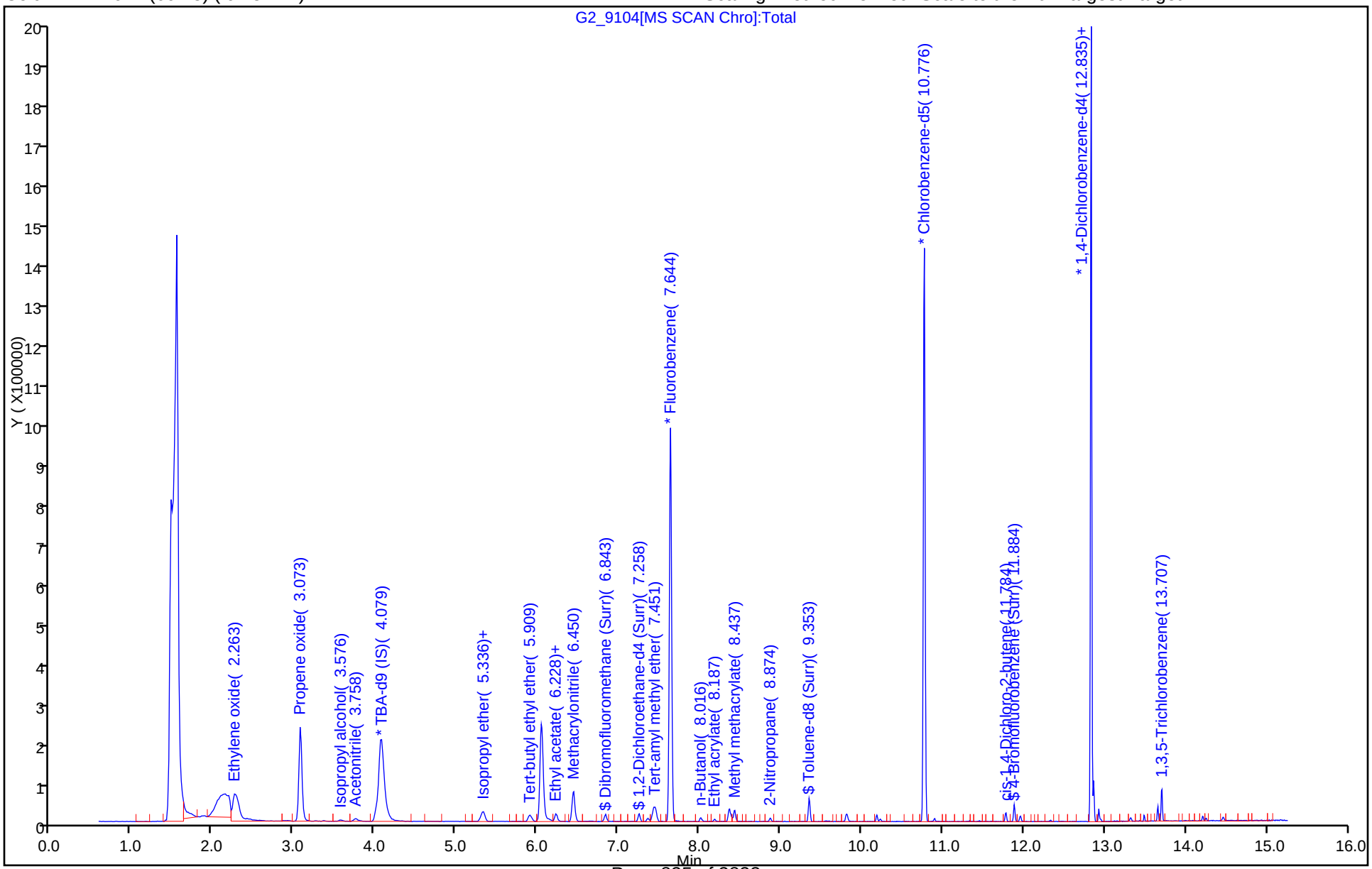
Report Date: 27-Apr-2017 16:50:01 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9104.D

Injection Date:	26-Apr-2017 21:44:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD002			Worklist Smp#:	21
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9105.D
Lims ID: STD005
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 26-Apr-2017 22:05:30 ALS Bottle#: 12 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD005
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub102

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2017 16:50:03 Calib Date: 26-Apr-2017 23:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: dukesa Date: 26-Apr-2017 22:51:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.065	0.014	94	476839	1000.0	1000.0	
* 3 Fluorobenzene	96	7.644	7.644	0.000	99	905969	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.775	10.775	0.000	86	225399	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	95	375851	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.836	6.836	0.000	93	26300	5.00	4.89	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.257	7.258	-0.001	97	32586	5.00	5.15	
$ 10 Toluene-d8 (Surr)	98	9.352	9.353	-0.001	94	73621	5.00	4.03	
$ 11 4-Bromofluorobenzene (Surr	95	11.884	11.884	0.000	94	25571	5.00	5.24	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.263	2.263	0.000	100	100037	500.0	459.7	
42 Ethanol	45	2.906	2.892	0.014	93	7276	200.0	202.2	
47 Propene oxide	58	3.073	3.073	0.000	96	512360	500.0	462.6	
51 Isopropyl alcohol	45	3.562	3.576	-0.014	92	12177	50.0	52.9	
54 Acetonitrile	41	3.758	3.814	-0.056	97	26441	50.0	42.9	
68 2-Chloro-1,3-butadiene	53	5.336	5.322	0.014	91	26621	5.00	5.83	
66 Isopropyl ether	87	5.322	5.322	0.000	85	13234	5.00	6.18	
69 Tert-butyl ethyl ether	59	5.908	5.908	0.000	91	41478	5.00	4.56	
70 Ethyl acetate	43	6.228	6.142	0.086	98	31579	10.0	7.95	
73 Propionitrile	54	6.242	6.228	0.014	98	27173	50.0	41.0	
76 Methacrylonitrile	41	6.442	6.471	-0.029	91	101430	50.0	39.8	
86 Tert-amyl methyl ether	73	7.465	7.458	0.007	92	39541	5.00	4.39	
88 n-Butanol	56	8.015	8.015	0.000	93	10355	125.0	159.6	
16 Ethyl acrylate	55	8.187	8.187	0.000	99	16019	5.00	6.22	
91 Methyl methacrylate	100	8.430	8.437	-0.007	90	8391	10.0	12.1	
97 2-Nitropropane	41	8.873	8.873	0.000	93	9526	10.0	11.8	
120 cis-1,4-Dichloro-2-butene	53	11.776	11.784	-0.008	91	11849	10.0	12.0	
135 1,2,3-Trimethylbenzene	105	12.863	12.863	0.000	98	87682	5.00	5.21	
140 1,3,5-Trichlorobenzene	180	13.707	13.707	0.000	97	53473	5.00	4.92	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00023	Amount Added:	0.63	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.10	Units: uL

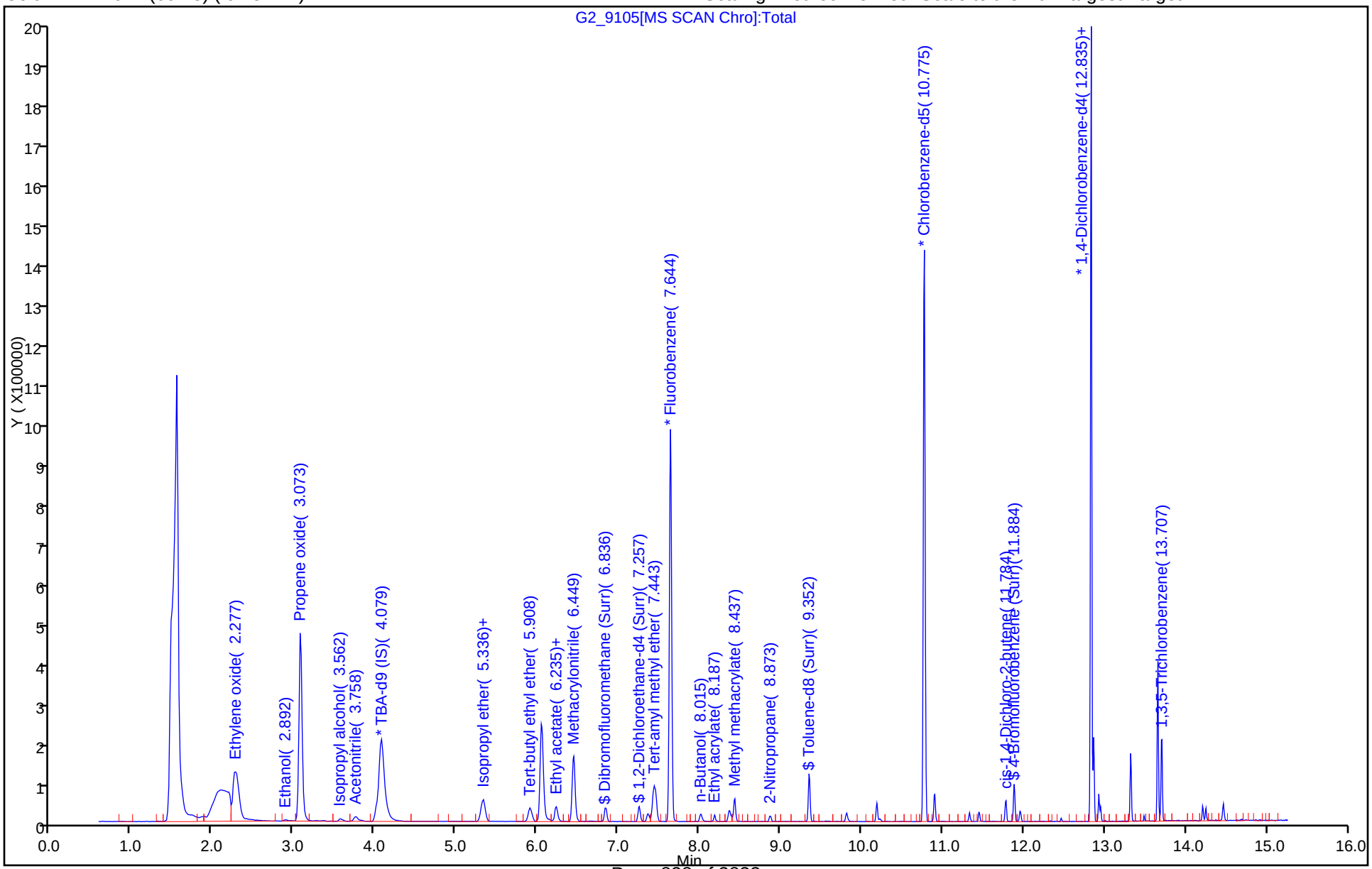
Report Date: 27-Apr-2017 16:50:03 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9105.D

Injection Date:	26-Apr-2017 22:05:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD005			Worklist Smp#:	22
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9106.D
Lims ID: STD010
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 26-Apr-2017 22:25:30 ALS Bottle#: 13 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD010
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub102

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2017 16:50:04 Calib Date: 26-Apr-2017 23:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.065	0.014	94	487039	1000.0	1000.0	
* 3 Fluorobenzene	96	7.644	7.644	0.000	99	883731	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.775	10.775	0.000	86	212024	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	94	348210	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.843	6.836	0.007	93	50907	10.0	9.71	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.258	7.258	0.000	99	57978	10.0	9.40	
$ 10 Toluene-d8 (Surr)	98	9.353	9.353	0.000	94	152095	10.0	8.85	
$ 11 4-Bromofluorobenzene (Surr	95	11.884	11.884	0.000	96	49798	10.0	9.00	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.277	2.263	0.014	100	195328	1000.0	920.2	
42 Ethanol	45	2.892	2.892	0.000	96	20171	400.0	403.1	
47 Propene oxide	58	3.073	3.073	0.000	96	1041088	1000.0	963.6	
51 Isopropyl alcohol	45	3.562	3.576	-0.014	92	26611	100.0	92.7	
54 Acetonitrile	41	3.758	3.814	-0.056	98	57118	100.0	95.1	
66 Isopropyl ether	87	5.322	5.322	0.000	86	28081	10.0	9.16	
68 2-Chloro-1,3-butadiene	53	5.336	5.322	0.014	93	58295	10.0	9.07	
69 Tert-butyl ethyl ether	59	5.909	5.908	0.000	93	84392	10.0	7.48	
70 Ethyl acetate	43	6.228	6.142	0.086	99	65714	20.0	17.0	
73 Propionitrile	54	6.235	6.228	0.007	98	56592	100.0	87.6	
76 Methacrylonitrile	41	6.442	6.471	-0.029	91	220951	100.0	89.0	
86 Tert-amyl methyl ether	73	7.458	7.458	0.000	95	90109	10.0	7.99	
88 n-Butanol	56	8.015	8.015	0.000	93	23296	250.0	229.9	
16 Ethyl acrylate	55	8.187	8.187	0.000	99	34920	10.0	9.31	
91 Methyl methacrylate	100	8.437	8.437	0.000	91	18014	20.0	18.5	
97 2-Nitropropane	41	8.874	8.873	0.001	94	18997	20.0	18.6	
120 cis-1,4-Dichloro-2-butene	53	11.784	11.784	0.000	90	21713	20.0	17.8	
135 1,2,3-Trimethylbenzene	105	12.863	12.863	0.000	98	170709	10.0	9.19	
140 1,3,5-Trichlorobenzene	180	13.707	13.707	0.000	98	83115	10.0	8.25	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00023	Amount Added:	1.25	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.20	Units: uL

Report Date: 27-Apr-2017 16:50:05 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9106.D

Injection Date: 26-Apr-2017 22:25:30 Instrument ID: VMS_G2 Operator ID: DUKESA

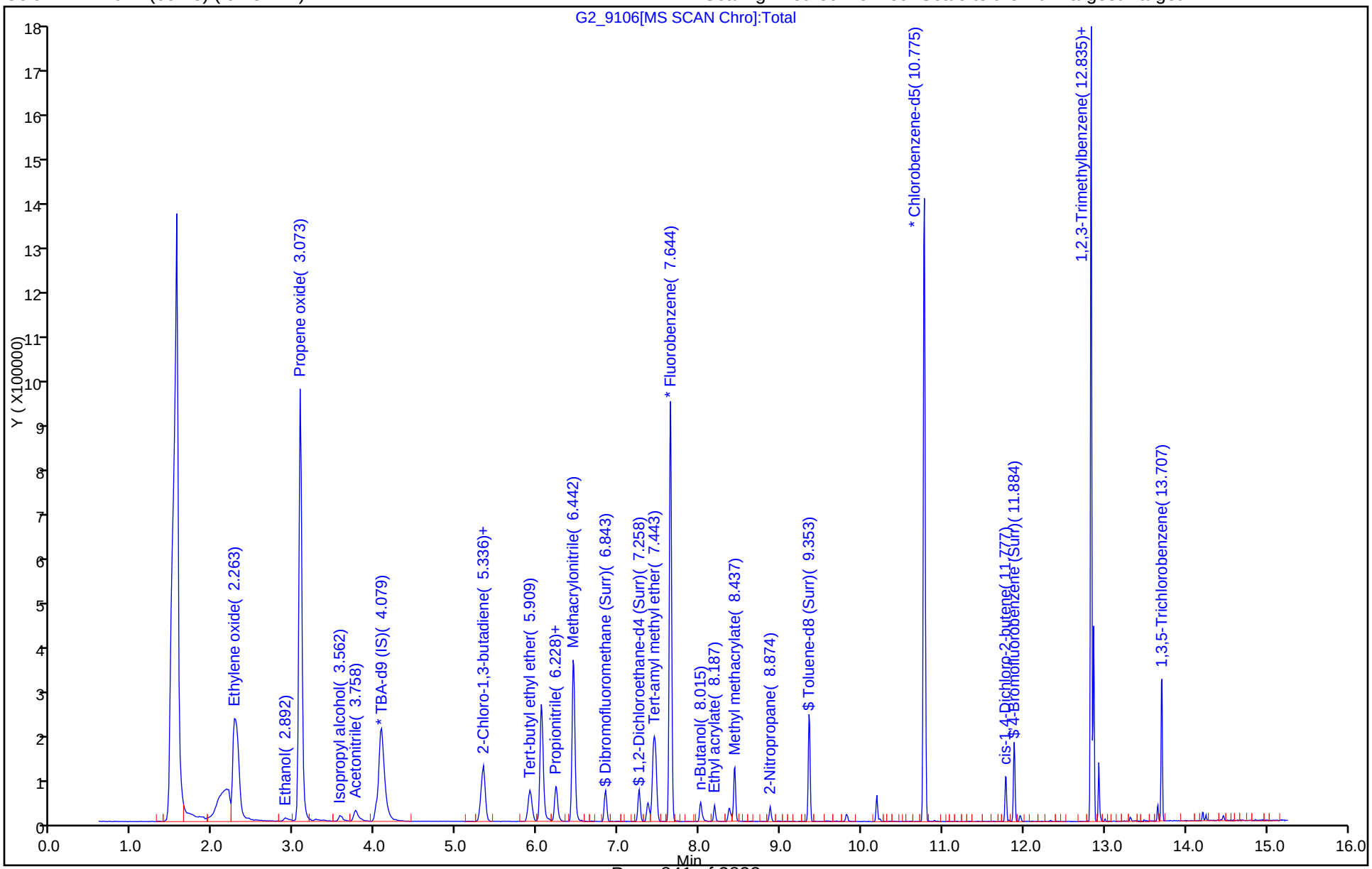
Lims ID: STD010 Worklist Smp#: 23

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 13

Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9107.D
Lims ID: STD020
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 26-Apr-2017 22:45:30 ALS Bottle#: 14 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD020
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub102

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2017 16:50:06 Calib Date: 26-Apr-2017 23:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: dukesa Date: 26-Apr-2017 23:50:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	94	491112	1000.0	1000.0	
* 3 Fluorobenzene	96	7.644	7.644	0.000	99	863229	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.775	10.775	0.000	87	220901	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	94	351972	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.836	6.836	0.000	93	100882	20.0	19.7	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.250	7.258	-0.008	98	117949	20.0	19.6	
$ 10 Toluene-d8 (Surr)	98	9.353	9.353	0.000	93	348590	20.0	19.5	
$ 11 4-Bromofluorobenzene (Surr	95	11.884	11.884	0.000	94	124341	20.0	19.5	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.249	2.263	-0.014	100	384826	2000.0	1856.0	
42 Ethanol	45	2.892	2.892	0.000	97	41345	800.0	731.7	
47 Propene oxide	58	3.073	3.073	0.000	96	2114174	2000.0	2003.3	
51 Isopropyl alcohol	45	3.562	3.576	-0.014	93	57099	200.0	177.0	
54 Acetonitrile	41	3.744	3.814	-0.070	97	112546	200.0	191.9	
68 2-Chloro-1,3-butadiene	53	5.336	5.322	0.014	92	136212	20.0	17.2	
66 Isopropyl ether	87	5.322	5.322	0.000	87	65060	20.0	16.7	
69 Tert-butyl ethyl ether	59	5.908	5.908	0.000	94	195271	20.0	15.1	
70 Ethyl acetate	43	6.228	6.142	0.086	99	141346	40.0	37.4	
73 Propionitrile	54	6.235	6.228	0.007	98	121445	200.0	192.4	
76 Methacrylonitrile	41	6.442	6.471	-0.029	91	485255	200.0	200.0	
86 Tert-amyl methyl ether	73	7.458	7.458	0.000	96	209044	20.0	16.6	
88 n-Butanol	56	8.015	8.015	0.000	93	51108	500.0	381.3	
16 Ethyl acrylate	55	8.187	8.187	0.000	99	77634	20.0	16.4	
91 Methyl methacrylate	100	8.430	8.437	-0.007	91	41080	40.0	34.1	
97 2-Nitropropane	41	8.873	8.873	0.000	99	41285	40.0	34.7	
120 cis-1,4-Dichloro-2-butene	53	11.784	11.784	0.000	91	52773	40.0	34.0	
135 1,2,3-Trimethylbenzene	105	12.863	12.863	0.000	98	395414	20.0	19.0	
140 1,3,5-Trichlorobenzene	180	13.707	13.707	0.000	98	181305	20.0	17.8	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00023	Amount Added:	2.50	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.40	Units: uL

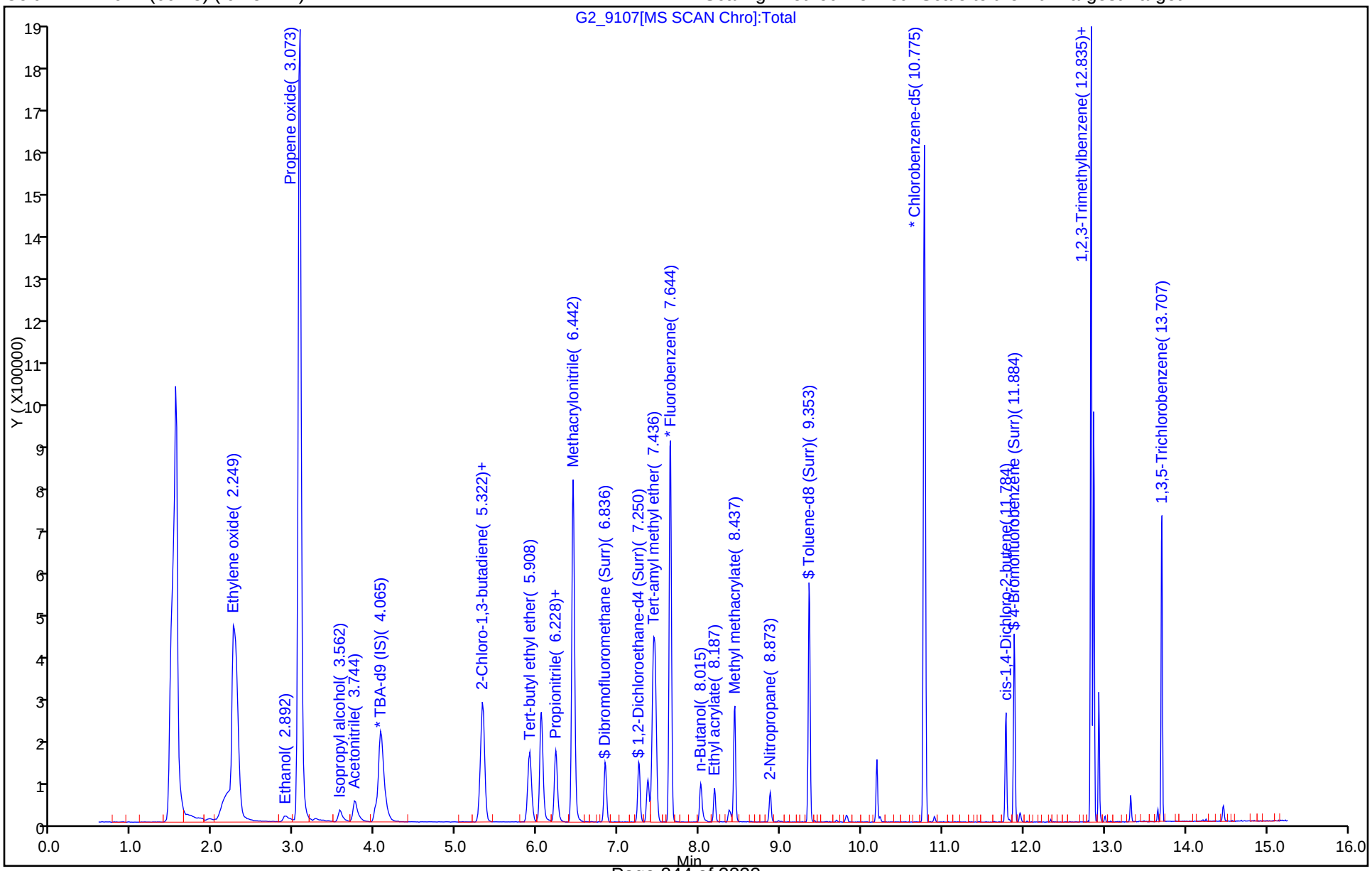
Report Date: 27-Apr-2017 16:50:06 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9107.D

Injection Date:	26-Apr-2017 22:45:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD020			Worklist Smp#:	24
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9108.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 26-Apr-2017 23:06:30 ALS Bottle#: 15 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub102

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2017 16:50:07 Calib Date: 26-Apr-2017 23:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: dukesa Date: 26-Apr-2017 23:57:09

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	94	464934	1000.0	1000.0	
* 3 Fluorobenzene	96	7.644	7.644	0.000	99	921971	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.775	10.775	0.000	88	237497	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	94	386534	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.836	6.836	0.000	94	285345	50.0	52.2	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.250	7.250	0.000	98	334208	50.0	51.9	
$ 10 Toluene-d8 (Surr)	98	9.352	9.352	0.000	93	1071370	50.0	55.6	
$ 11 4-Bromofluorobenzene (Surr	95	11.884	11.884	0.000	94	394437	50.0	52.9	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.263	2.263	0.000	100	1173254	5000.0	5298.1	
42 Ethanol	45	2.892	2.892	0.000	97	122781	2000.0	2113.6	
47 Propene oxide	58	3.073	3.073	0.000	96	6157641	5000.0	5463.0	
51 Isopropyl alcohol	45	3.562	3.562	0.000	95	172630	500.0	525.8	
54 Acetonitrile	41	3.744	3.744	0.000	100	329217	500.0	525.5	
66 Isopropyl ether	87	5.322	5.322	0.000	90	245024	50.0	49.7	
68 2-Chloro-1,3-butadiene	53	5.322	5.322	0.000	93	516999	50.0	52.9	
69 Tert-butyl ethyl ether	59	5.908	5.908	0.000	95	740026	50.0	48.9	
70 Ethyl acetate	43	6.221	6.221	0.000	99	449116	100.0	111.1	
73 Propionitrile	54	6.228	6.228	0.000	98	368245	500.0	546.2	
76 Methacrylonitrile	41	6.442	6.442	0.000	91	1526789	500.0	589.2	
86 Tert-amyl methyl ether	73	7.458	7.458	0.000	97	736869	50.0	51.0	
88 n-Butanol	56	8.015	8.015	0.000	89	199829	1250.0	1258.1	
16 Ethyl acrylate	55	8.187	8.187	0.000	100	288953	50.0	48.1	
91 Methyl methacrylate	100	8.430	8.430	0.000	91	146545	100.0	98.3	
97 2-Nitropropane	41	8.873	8.873	0.000	99	140567	100.0	99.0	
120 cis-1,4-Dichloro-2-butene	53	11.784	11.784	0.000	91	199872	100.0	102.1	
135 1,2,3-Trimethylbenzene	105	12.863	12.863	0.000	98	1334271	50.0	55.0	
140 1,3,5-Trichlorobenzene	180	13.707	13.707	0.000	98	656131	50.0	58.7	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00023	Amount Added:	6.25	Units: uL
MV-ARCH SS A_00081	Amount Added:	1.00	Units: uL

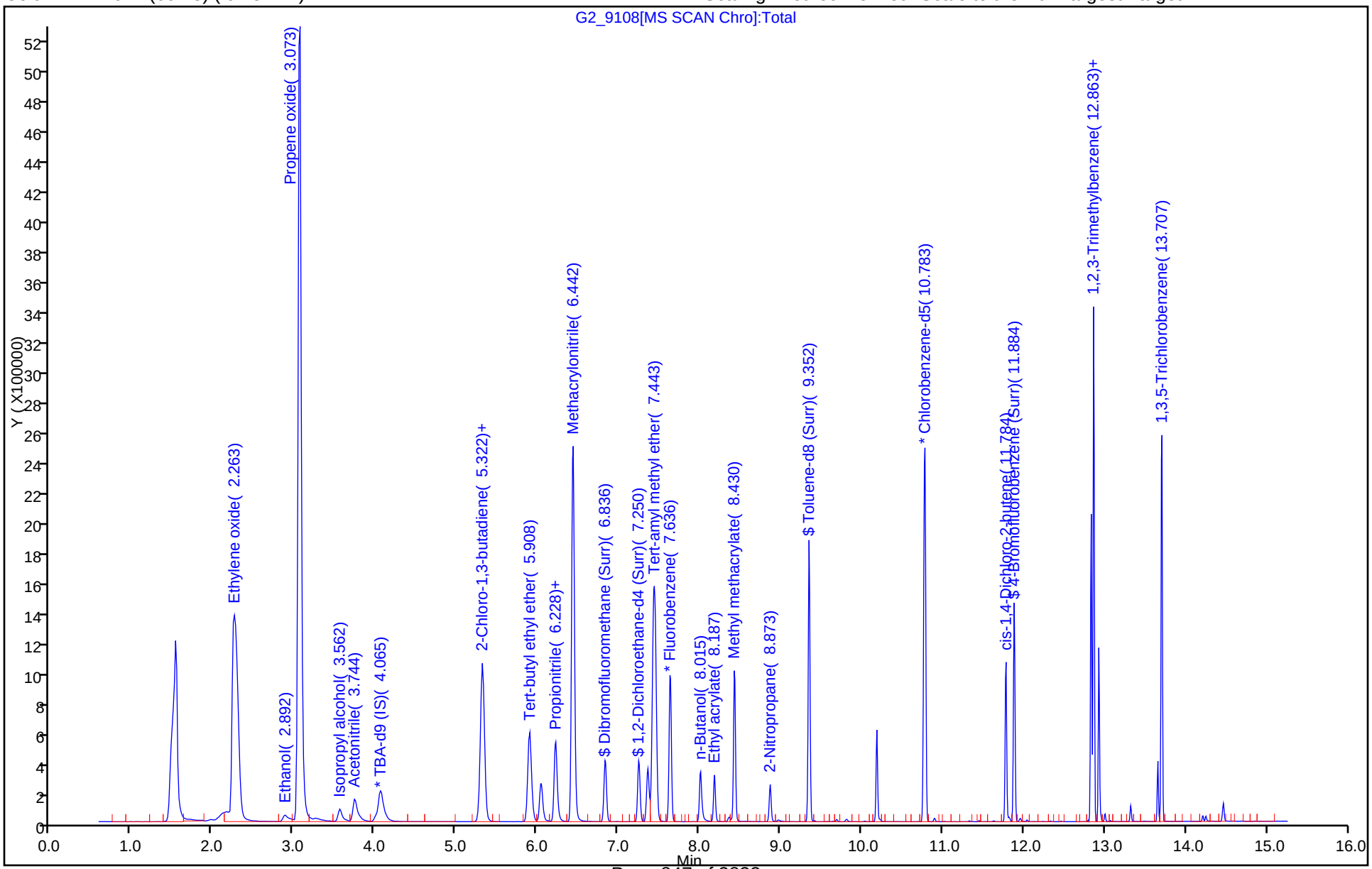
Report Date: 27-Apr-2017 16:50:08 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9108.D

Injection Date:	26-Apr-2017 23:06:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	ICIS			Worklist Smp#:	25
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9109.D
Lims ID: STD100
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 26-Apr-2017 23:27:30 ALS Bottle#: 16 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD100
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub102

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2017 16:50:09 Calib Date: 26-Apr-2017 23:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: dukesa Date: 26-Apr-2017 23:57:26

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.065	0.014	95	544220	1000.0	1000.0	
* 3 Fluorobenzene	96	7.644	7.644	0.000	99	975268	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.775	10.775	0.000	87	260168	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	93	432323	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.843	6.836	0.007	94	591609	100.0	102.2	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.258	7.250	0.008	98	699623	100.0	102.7	
$ 10 Toluene-d8 (Surr)	98	9.353	9.352	0.001	93	2375251	100.0	112.6	
$ 11 4-Bromofluorobenzene (Surr	95	11.884	11.884	0.000	94	886909	100.0	104.5	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.277	2.263	0.014	100	2393394	10000	10217	
42 Ethanol	45	2.892	2.892	0.000	99	283622	4000.0	4088.4	
47 Propene oxide	58	3.073	3.073	0.000	96	12248551	10000	10273	
51 Isopropyl alcohol	45	3.576	3.562	0.014	96	406709	1000.0	1040.2	
54 Acetonitrile	41	3.758	3.744	0.014	99	734663	1000.0	1108.5	
68 2-Chloro-1,3-butadiene	53	5.336	5.322	0.014	92	1086636	100.0	101.9	
66 Isopropyl ether	87	5.322	5.322	0.000	92	543678	100.0	100.3	
69 Tert-butyl ethyl ether	59	5.908	5.908	0.000	96	1648041	100.0	101.0	
70 Ethyl acetate	43	6.228	6.221	0.007	99	1010347	200.0	236.4	
73 Propionitrile	54	6.235	6.228	0.007	99	799862	1000.0	1121.5	
76 Methacrylonitrile	41	6.442	6.442	0.000	90	3228599	1000.0	1177.8	
86 Tert-amyl methyl ether	73	7.458	7.458	0.000	97	1559265	100.0	100.4	
88 n-Butanol	56	8.015	8.015	0.000	88	500903	2500.0	2578.9	
16 Ethyl acrylate	55	8.187	8.187	0.000	100	686227	100.0	103.4	
91 Methyl methacrylate	100	8.437	8.430	0.007	91	337342	200.0	205.9	
97 2-Nitropropane	41	8.873	8.873	0.000	98	319469	200.0	206.6	
120 cis-1,4-Dichloro-2-butene	53	11.784	11.784	0.000	91	475453	200.0	210.2	
135 1,2,3-Trimethylbenzene	105	12.863	12.863	0.000	98	2873226	100.0	104.4	
140 1,3,5-Trichlorobenzene	180	13.707	13.707	0.000	98	1374676	100.0	109.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00023	Amount Added:	12.50	Units: uL
MV-ARCH SS A_00081	Amount Added:	2.00	Units: uL

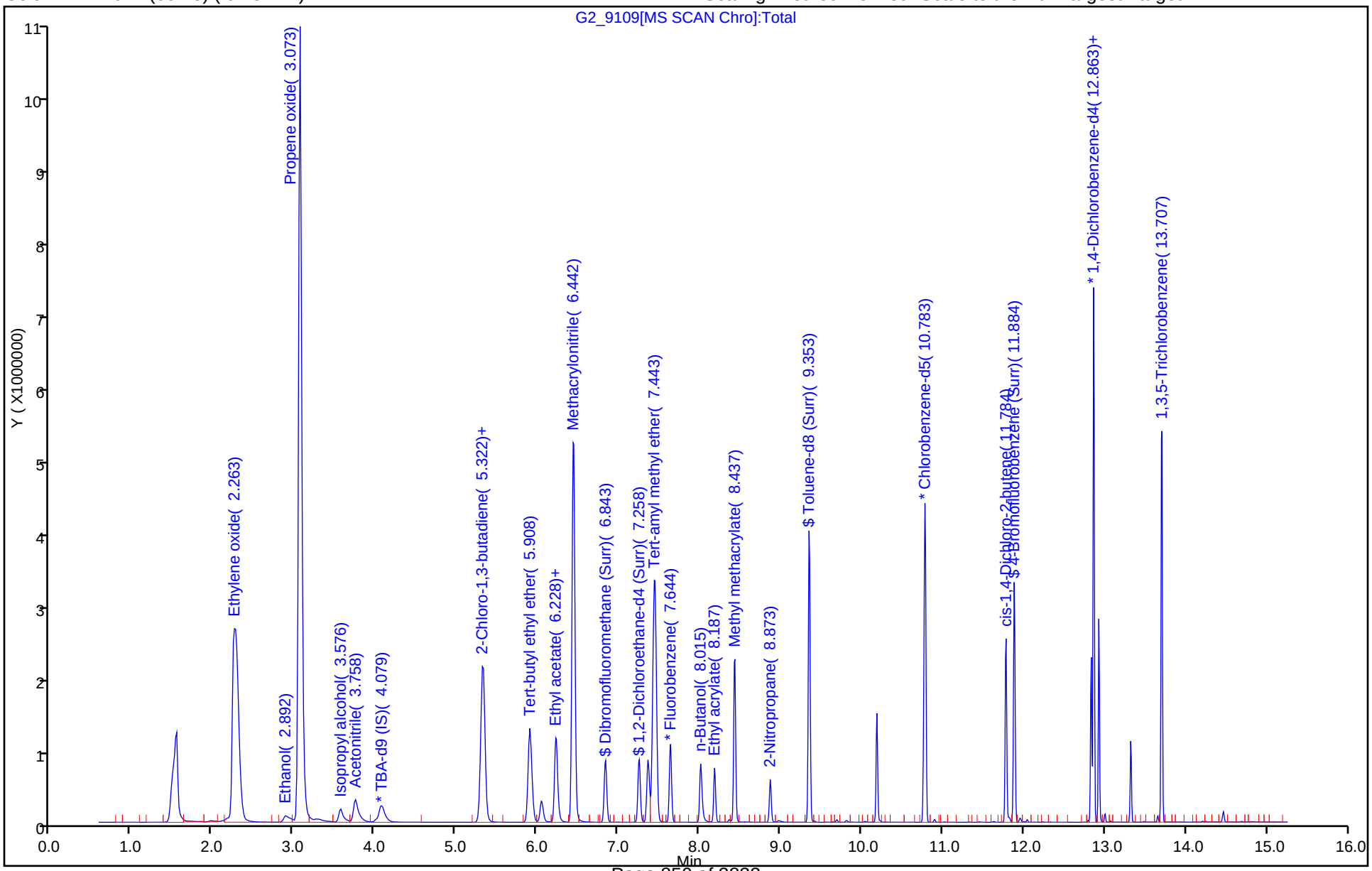
Report Date: 27-Apr-2017 16:50:09 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9109.D

Injection Date:	26-Apr-2017 23:27:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD100			Worklist Smp#:	26
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 26-Apr-2017 23:47:30 ALS Bottle#: 17 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub102

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2017 16:50:10 Calib Date: 26-Apr-2017 23:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: dukesa Date: 27-Apr-2017 00:12:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.065	0.014	96	563706	1000.0	1000.0	
* 3 Fluorobenzene	96	7.643	7.644	-0.001	99	1017607	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.775	10.775	0.000	87	273911	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	94	468623	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.843	6.836	0.007	94	1207841	200.0	200.0	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.257	7.250	0.007	98	1400342	200.0	197.1	
$ 10 Toluene-d8 (Surr)	98	9.352	9.352	0.000	93	4806099	200.0	216.4	
$ 11 4-Bromofluorobenzene (Surr	95	11.884	11.884	0.000	95	1804706	200.0	194.5	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.277	2.263	0.014	100	4781717	20000	19564	
42 Ethanol	45	2.906	2.892	0.014	99	573614	8000.0	7901.8	
47 Propene oxide	58	3.073	3.073	0.000	96	21779352	20000	17507	
51 Isopropyl alcohol	45	3.576	3.562	0.014	97	849140	2000.0	2078.5	
54 Acetonitrile	41	3.758	3.744	0.014	99	1481604	2000.0	2142.5	
66 Isopropyl ether	87	5.322	5.322	0.000	92	1170578	200.0	203.0	
68 2-Chloro-1,3-butadiene	53	5.336	5.322	0.014	92	2238320	200.0	198.1	
69 Tert-butyl ethyl ether	59	5.908	5.908	0.000	97	3556496	200.0	206.8	
70 Ethyl acetate	43	6.228	6.221	0.007	99	2002470	400.0	449.0	
73 Propionitrile	54	6.235	6.228	0.007	99	1595234	2000.0	2143.6	
76 Methacrylonitrile	41	6.449	6.442	0.007	90	6231562	2000.0	2178.7	
86 Tert-amyl methyl ether	73	7.465	7.458	0.007	95	3331592	200.0	203.7	
88 n-Butanol	56	8.015	8.015	0.000	88	1029447	5000.0	5017.3	
16 Ethyl acrylate	55	8.187	8.187	0.000	100	1421457	200.0	201.6	
91 Methyl methacrylate	100	8.437	8.430	0.007	90	697047	400.0	401.1	
97 2-Nitropropane	41	8.873	8.873	0.000	98	652312	400.0	399.2	
120 cis-1,4-Dichloro-2-butene	53	11.783	11.784	-0.001	90	979420	400.0	393.9	
135 1,2,3-Trimethylbenzene	105	12.863	12.863	0.000	98	5683286	200.0	189.2	
140 1,3,5-Trichlorobenzene	180	13.707	13.707	0.000	97	2792982	200.0	206.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00023	Amount Added:	25.00	Units: uL
MV-ARCH SS A_00081	Amount Added:	4.00	Units: uL

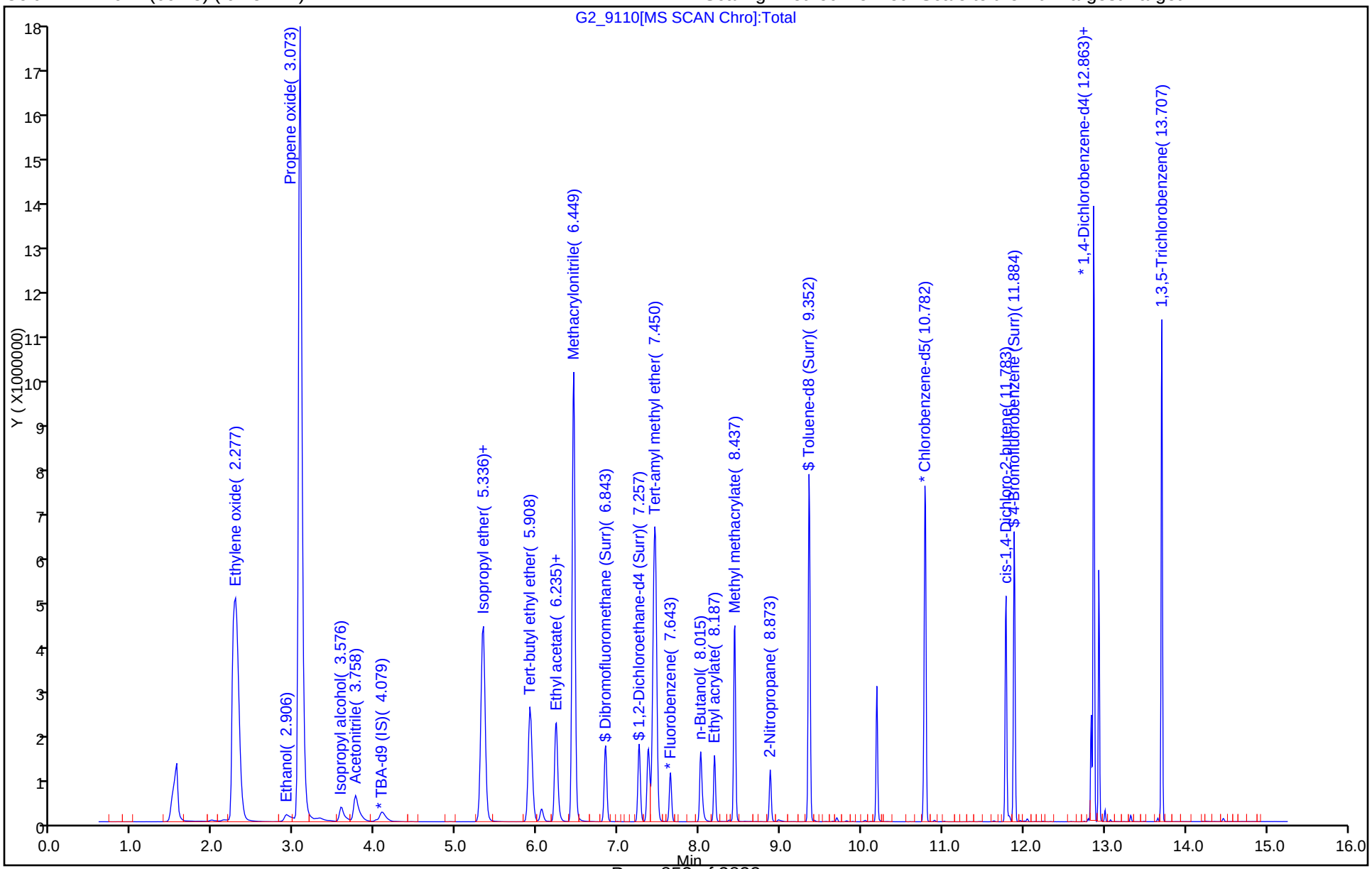
Report Date: 27-Apr-2017 16:50:10 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Injection Date:	26-Apr-2017 23:47:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD200			Worklist Smp#:	27
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376989

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/12/2017 18:07 Calibration End Date: 06/12/2017 20:35 Calibration ID: 29460

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-376989/4	G2_0894.D
Level 2	STD002 280-376989/5	G2_0895.D
Level 3	STD005 280-376989/6	G2_0896.D
Level 4	STD010 280-376989/7	G2_0897.D
Level 5	STD020 280-376989/8	G2_0898.D
Level 6	ICIS 280-376989/9	G2_0899.D
Level 7	STD100 280-376989/10	G2_0900.D
Level 8	STD200 280-376989/11	G2_0901.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	+++++ 0.3328	+++++ 0.2907	0.2428 0.2539	0.2826	0.2392	Qua	-0.822	0.3497	-0.000460						0.9980		0.9900
Chloromethane	+++++ 0.4647	0.4259 0.4344	0.3966 0.3582	0.4543	0.3822	Qua	-0.807	0.5157	-0.000765		0.1000				0.9990		0.9900
Vinyl chloride	0.5450 0.5347	0.5238 0.5071	0.4891 0.4134	0.5307	0.4563	Ave		0.5000				9.0		30.0			
Bromomethane	+++++ 0.4056	0.4543 +++++	0.4277 +++++	0.4438	0.3756	Ave		0.4214				7.5		15.0			
Chloroethane	+++++ 0.3146	+++++ 0.2592	0.3597 +++++	0.3357	0.2952	Ave		0.3129				12.3		15.0			
Dichlorofluoromethane	0.7216 0.6636	0.6753 0.6068	0.6313 0.5338	0.6935	0.6166	Ave		0.6428				9.2		15.0			
Trichlorofluoromethane	0.5585 0.5462	0.5137 0.4842	0.5161 0.4282	0.5592	0.4794	Ave		0.5107				8.9		15.0			
Ethyl ether	0.2006 0.2704	0.1747 0.2665	0.1950 0.2475	0.2292	0.2323	Lin1	-0.121	0.2554							0.9970		0.9900
Acrolein	0.0336 0.0565	0.0333 0.0502	0.0344 0.0452	0.0475	0.0451	Lin1	-0.211	0.0482							0.9920		0.9900
1,1-Dichloroethene	0.2336 0.2964	0.2276 0.2765	0.2368 0.2585	0.2780	0.2527	Ave		0.2575				9.5		30.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2403 0.2821	0.2578 0.2526	0.2650 0.2328	0.2891	0.2494	Ave		0.2586				7.5		15.0			
Acetone	0.2115 0.1217	0.1465 0.1040	0.1176 0.0875	0.1300	0.1129	Qua	0.1795	0.1235	-0.000045						0.9990		0.9900
Methyl iodide	0.3970 0.5156	0.4314 0.4910	0.4265 0.4688	0.4915	0.4511	Ave		0.4591				8.7		15.0			
Carbon disulfide	1.0205 1.0551	0.9633 0.9676	0.9259 0.9131	1.0412	0.9195	Ave		0.9758				5.8		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376989

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/12/2017 18:07 Calibration End Date: 06/12/2017 20:35 Calibration ID: 29460

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Methyl acetate	0.2425 0.2602	0.2169 0.2298	0.2113 0.2068	0.2539	0.2336	Ave		0.2319				8.4		15.0			
3-Chloro-1-propene	0.4853 0.5518	0.3693 0.5175	0.3977 0.4798	0.4685	0.4526	Ave		0.4653				12.8		15.0			
Methylene Chloride	1.3466 0.3483	0.8100 0.3171	0.5120 0.2941	0.4434	0.3592	Lin2	1.0292	0.3113							0.9960		0.9900
t-Butyl alcohol	0.0169 0.0386	0.0258 0.0343	0.0269 0.0308	0.0345	0.0328	Lin2	-0.176	0.0342							0.9920		0.9900
Acrylonitrile	0.0984 0.1247	0.0995 0.1100	0.0973 0.1009	0.1194	0.1106	Ave		0.1076				9.6		15.0			
trans-1,2-Dichloroethene	0.2105 0.3217	0.2658 0.2958	0.2821 0.2795	0.3260	0.2894	Ave		0.2838				12.7		15.0			
Methyl tert-butyl ether	0.5356 0.8928	0.6073 0.8719	0.6723 0.8352	0.7975	0.7795	Lin2	-0.336	0.8282							0.9940		0.9900
Hexane	0.8276 2.0779	1.0991 1.9901	1.2242 1.9158	1.5571	1.5936	Lin1	-1.760	1.9503							0.9960		0.9900
1,1-Dichloroethane	+++++ 0.6126	0.5522 0.5640	0.5577 0.5257	0.5977	0.5470	Ave		0.5653			0.1000	5.3		15.0			
Vinyl acetate	0.2801 0.6032	0.2787 0.5789	0.2983 0.5353	0.3971	0.4279	Lin1	-1.081	0.5523							0.9930		0.9900
cis-1,2-Dichloroethene	0.3039 0.3340	0.2727 0.3178	0.2957 0.3033	0.3245	0.3004	Ave		0.3065				6.2		15.0			
2-Butanone (MEK)	+++++ 0.1693	0.1458 0.1487	0.1339 0.1313	0.1616	0.1469	Ave		0.1482				9.2		15.0			
2,2-Dichloropropane	+++++ 0.5004	+++++ 0.4601	0.4875 0.4293	0.5086	0.4526	Ave		0.4731				6.5		15.0			
sec-Butyl Alcohol	+++++ 0.0268	+++++ 0.0256	0.0149 0.0249	0.0190	0.0196	Lin2	-0.859	0.0255							0.9920		0.9900
Bromochloromethane	+++++ 0.1581	0.1208 0.1521	0.1445 0.1427	0.1539	0.1447	Ave		0.1453				8.4		15.0			
Tetrahydrofuran	+++++ 0.1103	+++++ 0.0981	0.0663 0.0896	0.0885	0.0884	Lin2	-0.323	0.1006							0.9910		0.9900
Chloroform	0.6319 0.5862	0.5706 0.5420	0.5741 0.4969	0.6204	0.5355	Ave		0.5697				7.8		30.0			
1,1,1-Trichloroethane	0.4781 0.5173	0.4950 0.4710	0.4849 0.4373	0.5372	0.4691	Ave		0.4862				6.3		15.0			
Cyclohexane	+++++ 0.5412	0.2501 0.5158	0.3143 0.4940	0.3981	0.4326	Lin1	-0.698	0.5091							0.9970		0.9900
Carbon tetrachloride	0.4544 0.4823	0.5060 0.4354	0.4677 0.4028	0.4940	0.4311	Ave		0.4592				7.6		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376989

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/12/2017 18:07 Calibration End Date: 06/12/2017 20:35 Calibration ID: 29460

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	+++++ 0.4299	0.2638 0.4039	0.3022 0.3839	0.3773	0.3509	Lin2	-0.290	0.3955							0.9940		0.9900
Benzene	1.1356 1.2305	0.9469 1.1365	1.0143 1.0790	1.2093	1.1275	Ave		1.1099				8.5		15.0			
1,2-Dichloroethane	+++++ 0.4759	+++++ 0.4456	0.4758 0.4051	0.5021	0.4561	Ave		0.4601				7.2		15.0			
Isobutyl alcohol	0.0135 0.0144	0.0143 0.0126	0.0138 0.0116	0.0155	0.0132	Ave		0.0136				8.7		15.0			
Trichloroethene	0.2384 0.3008	0.2539 0.2803	0.2405 0.2699	0.2622	0.2531	Ave		0.2624				8.0		15.0			
2-Pentanone	+++++ 0.3288	+++++ 0.2678	0.2029 0.2516	0.2511	0.2690	Lin	1.8478	0.2517							0.9930		0.9900
Methylcyclohexane	0.2150 0.4782	0.2730 0.4335	0.3152 0.4046	0.4044	0.4052	Lin2	-0.232	0.4207							0.9900		0.9900
1,2-Dichloropropane	+++++ 0.3184	0.3024 0.3005	0.2782 0.2879	0.3181	0.2944	Ave		0.3000				5.0		30.0			
1,4-Dioxane	+++++ 0.0028	+++++ 0.0028	0.0019 0.0025	0.0023	0.0028	Ave		0.0025				14.6		15.0			
Dibromomethane	0.1627 0.1957	0.1612 0.1821	0.1752 0.1702	0.2021	0.1805	Ave		0.1787				8.2		15.0			
Bromodichloromethane	0.3604 0.4093	0.3857 0.3889	0.3664 0.3631	0.3936	0.3660	Ave		0.3792				4.7		15.0			
2-Chloroethyl vinyl ether	+++++ 0.1470	0.0572 0.1593	0.0536 0.1572	0.0792	0.0892	Lin	-0.682	0.1614							0.9990		0.9900
cis-1,3-Dichloropropene	+++++ 1.9147	1.0846 1.9418	1.1625 1.8968	1.4453	1.5589	Lin1	-2.731	1.9173							0.9980		0.9900
4-Methyl-2-pentanone (MIBK)	0.1507 0.3477	0.1537 0.3150	0.1834 0.2743	0.2639	0.2812	Lin1	-0.856	0.2967							0.9900		0.9900
Toluene	1.2050 1.2529	0.7912 1.1609	0.9148 1.0990	1.1184	1.1091	Ave		1.0814				14.2		30.0			
trans-1,3-Dichloropropene	+++++ 0.4313	0.2667 0.4306	0.2733 0.4131	0.3398	0.3478	Lin1	-0.504	0.4212							0.9980		0.9900
Ethyl methacrylate	+++++ 1.5006	0.5541 1.5178	0.6691 1.4670	0.9614	1.1172	Lin1	-3.007	1.4927							0.9960		0.9900
1,1,2-Trichloroethane	0.1913 0.2522	0.2019 0.2385	0.2056 0.2233	0.2498	0.2311	Ave		0.2242				10.1		15.0			
Tetrachloroethene	1.0651 1.1413	0.9186 1.0321	1.0174 0.9898	1.1276	1.0275	Ave		1.0399				7.0		15.0			
1,3-Dichloropropane	1.6777 1.9426	1.5244 1.8694	1.5409 1.7518	1.8013	1.7347	Ave		1.7303				8.5		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376989

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/12/2017 18:07 Calibration End Date: 06/12/2017 20:35 Calibration ID: 29460

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.4962 1.0842	0.4441 0.9652	0.5494 0.8255	0.8206	0.8637	Qua	-9.213	1.1560	-0.000399						0.9990		0.9900
Dibromochloromethane	1.0151 1.2665	1.0670 1.2410	1.0624 1.1704	1.2386	1.1066	Ave		1.1459				8.4		15.0			
1,2-Dibromoethane	0.7496 1.0671	0.8677 1.0342	0.8509 0.9690	1.0542	0.9631	Ave		0.9445				11.9		15.0			
1-Chlorohexane	2.0263 1.7004	1.6280 1.6246	1.2314 1.5457	1.4214	1.3976	Lin1	-0.002	1.5728							0.9970		0.9900
Chlorobenzene	3.7030 3.6137	3.5041 3.3468	3.2649 3.1312	3.6551	3.3479	Ave		3.4458			0.3000	5.9		15.0			
1,1,1,2-Tetrachloroethane	1.3617 1.3612	1.2199 1.3131	1.2303 1.2566	1.3417	1.2175	Ave		1.2878				4.9		15.0			
Ethylbenzene	+++++ 1.8700	+++++ 1.7687	1.2445 1.7176	1.6023	1.5837	Ave		1.6311				13.3		30.0			
m&p-Xylene	+++++ 2.2498	1.0643 2.0991	1.4149 2.0055	1.7659	1.8895	Lin2	-2.180	2.0598							0.9940		0.9900
o-Xylene	0.9081 2.1774	0.9921 2.0919	1.0761 2.0251	1.5515	1.6886	Lin1	-2.084	2.0549							0.9960		0.9900
Styrene	1.5132 3.8806	1.5103 3.6279	1.9690 3.4807	2.9242	3.3189	Lin1	-3.417	3.5833							0.9960		0.9900
Bromoform	+++++ 0.8244	0.6687 0.8195	0.6699 0.7913	0.7297	0.6894	Ave		0.7418			0.1000	9.3		15.0			
Isopropylbenzene	1.2787 3.1057	1.1522 2.9647	1.5068 2.8048	2.0789	2.3711	Lin1	-3.054	2.8775							0.9940		0.9900
Cyclohexanone	0.0166 0.0530	0.0190 0.0490	0.0257 0.0399	0.0405	0.0444	Qua	-5.461	0.0597	-0.000002						0.9990		0.9900
1,1,2,2-Tetrachloroethane	0.8368 0.8079	0.7313 0.7655	0.6861 0.7196	0.7414	0.7093	Ave		0.7497			0.3000	6.8		15.0			
Bromobenzene	0.7471 0.8497	0.5694 0.8094	0.6200 0.7753	0.7240	0.7260	Ave		0.7276				12.8		15.0			
trans-1,4-Dichloro-2-butene	+++++ 0.2639	0.1629 0.2505	0.1627 0.2265	0.2104	0.2133	Lin1	-0.207	0.2390							0.9950		0.9900
1,2,3-Trichloropropane	+++++ 0.2581	0.1836 0.2383	0.2113 0.2184	0.2504	0.2378	Ave		0.2283				11.2		15.0			
N-Propylbenzene	+++++ 0.8996	0.4047 0.8348	0.4943 0.8016	0.7014	0.7623	Lin1	-1.037	0.8310							0.9970		0.9900
2-Chlorotoluene	0.4535 0.7766	0.4013 0.7325	0.4881 0.7054	0.6456	0.6559	Lin1	-0.489	0.7226							0.9970		0.9900
1,3,5-Trimethylbenzene	1.1940 2.7271	1.1630 2.5146	1.4513 2.3876	2.0959	2.2745	Lin1	-2.108	2.4728							0.9960		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376989

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/12/2017 18:07 Calibration End Date: 06/12/2017 20:35 Calibration ID: 29460

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Chlorotoluene	0.4107 0.8163	0.4646 0.7509	0.5809 0.7246	0.7209	0.7291	Lin2	-0.384	0.7402							0.9920		0.9900
tert-Butylbenzene	+++++ 2.3990	0.9697 2.2677	1.1836 2.1557	1.5585	1.8773	Lin1	-3.641	2.2334							0.9960		0.9900
1,2,4-Trimethylbenzene	1.1714 2.8538	1.1367 2.6098	1.5470 2.4629	2.2957	2.4423	Lin1	-2.134	2.5678							0.9960		0.9900
sec-Butylbenzene	+++++ 0.7673	0.3008 0.7129	0.4309 0.6856	0.6140	0.6309	Lin2	-0.881	0.7031							0.9920		0.9900
1,3-Dichlorobenzene	1.3642 1.6355	1.2179 1.5271	1.3243 1.4596	1.5306	1.4500	Ave		1.4386				9.2		15.0			
4-Isopropyltoluene	+++++ 3.2693	1.2202 2.9583	1.7750 2.8079	2.4569	2.6770	Lin2	-3.748	2.9260							0.9900		0.9900
1,4-Dichlorobenzene	1.7671 1.6986	1.7492 1.5504	1.5182 1.4822	1.6730	1.5197	Ave		1.6198				7.1		15.0			
n-Butylbenzene	1.7422 3.0156	1.4555 2.6564	1.6775 2.4731	2.2416	2.4172	Lin1	-1.647	2.5980							0.9930		0.9900
1,2-Dichlorobenzene	1.3258 1.6093	1.3147 1.5061	1.3670 1.4362	1.5541	1.4613	Ave		1.4468				7.4		15.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.1704	+++++ 0.1625	0.0914 0.1642	0.1330	0.1378	Lin2	-0.382	0.1677							0.9970		0.9900
1,2,4-Trichlorobenzene	0.8291 1.1461	0.6573 1.1010	0.6429 1.1284	0.8268	0.8373	Lin1	-0.908	1.1101							0.9940		0.9900
Hexachlorobutadiene	0.7411 0.7622	0.7104 0.6671	0.6077 0.6404	0.6942	0.6570	Ave		0.6850				7.6		15.0			
Naphthalene	+++++ 2.6391	+++++ 2.5346	0.9704 2.4536	1.4143	1.8051	Lin1	-9.248	2.5629							0.9960		0.9900
1,2,3-Trichlorobenzene	0.8529 1.1917	0.6770 1.0754	0.7309 1.0452	0.9221	1.0110	Lin1	-0.568	1.0722							0.9960		0.9900
Dibromofluoromethane (Surr)	+++++ 0.3025	+++++ 0.2883	0.4725 0.2669	0.4027	0.3190	Lin2	1.0353	0.2756							0.9960		0.9900
1,2-Dichloroethane-d4 (Surr)	+++++ 0.4192	+++++ 0.3807	0.6564 0.3432	0.5738	0.4530	Lin2	1.5487	0.3717							0.9900		0.9900
Toluene-d8 (Surr)	+++++ 4.4129	+++++ 4.2894	4.0891 4.0283	4.6067	4.2301	Ave		4.2761				5.0		15.0			
4-Bromofluorobenzene (Surr)	+++++ 0.8787	+++++ 0.8622	0.6807 0.8122	0.8455	0.8142	Ave		0.8156				8.7		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376989

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/12/2017 18:07 Calibration End Date: 06/12/2017 20:35 Calibration ID: 29460

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD001 280-376989/4	G2_0894.D
Level 2	STD002 280-376989/5	G2_0895.D
Level 3	STD005 280-376989/6	G2_0896.D
Level 4	STD010 280-376989/7	G2_0897.D
Level 5	STD020 280-376989/8	G2_0898.D
Level 6	ICIS 280-376989/9	G2_0899.D
Level 7	STD100 280-376989/10	G2_0900.D
Level 8	STD200 280-376989/11	G2_0901.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Qua	+++++ 208527	+++++ 404939	12630 811168	27461	55056	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Chloromethane	FB	Qua	+++++ 291215	8445 605106	20632 1144457	44151	87970	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Vinyl chloride	FB	Ave	4868 335040	10385 706467	25443 1320957	51569	105016	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromomethane	FB	Ave	+++++ 254176	9007 +++++	22252 +++++	43129	86447	+++++ 50.0	2.00 +++++	5.00 +++++	10.0	20.0
Chloroethane	FB	Ave	+++++ 197142	+++++ 361039	18715 +++++	32627	67939	+++++ 50.0	+++++ 100	5.00 +++++	10.0	20.0
Dichlorofluoromethane	FB	Ave	6446 415813	13390 845315	32845 1705737	67396	141924	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Trichlorofluoromethane	FB	Ave	4989 342255	10185 674582	26851 1368265	54345	110343	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethyl ether	FB	Lin1	1792 169430	3463 371306	10145 790914	22274	53463	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Acrolein	FB	Lin1	3002 353831	6600 699267	17901 1443299	46116	103821	10.00 500	20.0 1000	50.0 2000	100.0	200
1,1-Dichloroethene	FB	Ave	2087 185734	4513 385237	12320 825953	27014	58161	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	2147 176788	5112 351842	13788 744001	28093	57394	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Acetone	FB	Qua	7558 305091	11621 579651	24470 1118702	50538	103900	4.00 200	8.00 400	20.0 800	40.0	80.0
Methyl iodide	FB	Ave	3546 323076	8554 683975	22189 1498007	47760	103827	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Carbon disulfide	FB	Ave	9116 661153	19099 1347886	48168 2917642	101179	211634	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methyl acetate	FB	Ave	10833 815337	21501 1600499	54963 3303950	123364	268859	5.00 250	10.0 500	25.0 1000	50.0	100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376989

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/12/2017 18:07 Calibration End Date: 06/12/2017 20:35 Calibration ID: 29460

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
3-Chloro-1-propene	FB	Ave	4335 345764	7322 720873	20691 1533009	45528	104165	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methylene Chloride	FB	Lin2	12029 218233	16059 441681	26638 939726	43087	82668	1.00 50.0	2.00 100	5.00 200	10.0	20.0
t-Butyl alcohol	FB	Lin2	1510 241704	5110 478304	14000 983513	33542	75394	10.0 500	20.0 1000	50.0 2000	100	200
Acrylonitrile	FB	Ave	8791 781674	19735 1533027	50606 3223872	115989	254517	10.0 500	20.0 1000	50.0 2000	100	200
trans-1,2-Dichloroethene	FB	Ave	1880 201601	5269 412042	14675 893043	31676	66611	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Methyl tert-butyl ether	FB	Lin2	4784 559489	12041 1214609	34975 2668721	77500	179408	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Hexane	CBNZ d5	Lin1	1655 307663	4931 653058	14631 1445795	35160	85246	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1-Dichloroethane	FB	Ave	+++++ 383869	10949 785707	29012 1679793	58084	125907	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Vinyl acetate	FB	Lin1	5004 756016	11053 1612927	31034 3421216	77183	196961	2.00 100	4.00 200	10.0 400	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	2715 209293	5406 442776	15383 969256	31531	69145	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Butanone (MEK)	FB	Ave	+++++ 424354	11560 828602	27856 1678449	62828	135227	+++++ 200	8.00 400	20.0 800	40.0	80.0
2,2-Dichloropropane	FB	Ave	+++++ 313562	+++++ 640885	25364 1371906	49422	104179	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
sec-Butyl Alcohol	FB	Lin2	+++++ 251811	+++++ 535074	11611 1194444	27666	67674	+++++ 750	+++++ 1500	75.0 3000	150	300
Bromochloromethane	FB	Ave	+++++ 99089	2396 211925	7520 455934	14956	33300	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Tetrahydrofuran	FB	Lin2	+++++ 138206	+++++ 273438	6896 572674	17205	40707	+++++ 100	+++++ 200	10.0 400	20.0	40.0
Chloroform	FB	Ave	5645 367357	11313 755029	29865 1587669	60287	123242	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	4271 324131	9815 656121	25227 1397272	52208	107967	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Cyclohexane	FB	Lin1	+++++ 339151	4959 718604	16350 1578365	38688	99564	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Carbon tetrachloride	FB	Ave	4059 302240	10033 606526	24331 1287207	48007	99217	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1-Dichloropropene	FB	Lin2	+++++ 269377	5231 562717	15723 1226686	36660	80759	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Benzene	FB	Ave	10144 771062	18773 1583249	52771 3447816	117512	259504	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376989

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/12/2017 18:07 Calibration End Date: 06/12/2017 20:35 Calibration ID: 29460

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2-Dichloroethane	FB	Ave	+++++ 298201	+++++ 620718	24753 1294567	48791	104965	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Isobutyl alcohol	FB	Ave	3022 226170	7090 440472	17889 927700	37734	76138	25.0 1250	50.0 2500	125 5000	250	500
Trichloroethene	FB	Ave	2130 188484	5034 390463	12510 862356	25476	58257	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Pentanone	FB	Lin	+++++ 412124	+++++ 746236	21112 1608016	48795	123821	+++++ 100	+++++ 200	10.0 400	20.0	40.0
Methylcyclohexane	FB	Lin2	1921 299655	5413 603850	16397 1292863	39299	93267	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichloropropane	FB	Ave	+++++ 199513	5995 418670	14472 919781	30916	67758	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,4-Dioxane	FB	Ave	+++++ 35661	+++++ 76784	1943 161015	4540	12664	+++++ 1000	+++++ 2000	100 4000	200	400
Dibromomethane	FB	Ave	1453 122647	3196 253712	9116 543971	19644	41546	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromodichloromethane	FB	Ave	3219 256502	7648 541719	19063 1160347	38251	84241	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Chloroethyl vinyl ether	FB	Lin	+++++ 92119	1135 221896	2786 502373	7697	20536	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
cis-1,3-Dichloropropene	CBNZ d5	Lin1	+++++ 283502	4866 637222	13893 1431465	32635	83387	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Lin1	5385 871552	12191 1755226	38163 3506366	102584	258900	4.00 200	8.00 400	20.0 800	40.0	80.0
Toluene	FB	Ave	10764 785137	15686 1617191	47594 3511604	108682	255277	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,3-Dichloropropene	FB	Lin1	+++++ 270250	5288 599835	14216 1319931	33016	80053	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Ethyl methacrylate	CBNZ d5	Lin1	+++++ 222192	2486 498077	7997 1107082	21708	59759	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,1,2-Trichloroethane	FB	Ave	1709 158059	4004 332291	10698 713397	24270	53182	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Tetrachloroethene	CBNZ d5	Ave	2130 168984	4121 338677	12159 746976	25462	54962	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3-Dichloropropane	CBNZ d5	Ave	3355 287632	6839 613463	18415 1322035	40673	92791	1.00 50.0	2.00 100	5.00 200	10.0	20.0
2-Hexanone	CBNZ d5	Qua	3969 642134	7969 1266989	26262 2492035	74115	184807	4.00 200	8.00 400	20.0 800	40.0	80.0
Dibromochloromethane	CBNZ d5	Ave	2030 187521	4787 407246	12697 883265	27967	59193	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dibromoethane	CBNZ d5	Ave	1499 158002	3893 339370	10169 731286	23803	51520	1.00 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376989

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/12/2017 18:07 Calibration End Date: 06/12/2017 20:35 Calibration ID: 29460

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1-Chlorohexane	CBNZ d5	Lin1	2026 125887	3652 266556	7358 583233	16048	37380	0.500 25.0	1.00 50.0	2.50 100	5.00	10.0
Chlorobenzene	CBNZ d5	Ave	7405 535062	15721 1098280	39019 2362991	82531	179087	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	2723 201542	5473 430912	14704 948319	30296	65126	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	+++++ 276889	+++++ 580402	14873 1296218	36179	84716	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
m&p-Xylene	CBNZ d5	Lin2	+++++ 333120	4775 688844	16910 1513520	39873	101072	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
o-Xylene	CBNZ d5	Lin1	1816 322399	4451 686460	12861 1528285	35033	90326	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Styrene	CBNZ d5	Lin1	3026 574580	6776 1190526	23532 2626798	66028	177534	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromoform	CBNZ d5	Ave	+++++ 122070	3000 268935	8006 597141	16476	36876	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
Isopropylbenzene	DCBd 4	Lin1	4621 883031	9788 1830845	35755 3945510	95322	249633	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Cyclohexanone	CBNZ d5	Qua	1329 314131	3408 643090	12281 1203995	36589	94898	40.0 2000	80.0 4000	200 8000	400	800
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	3024 229715	6213 472706	16279 1012235	33994	74678	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Bromobenzene	DCBd 4	Ave	2700 241582	4837 499866	14712 1090578	33196	76436	1.00 50.0	2.00 100	5.00 200	10.0	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Lin1	+++++ 75035	1384 154721	3861 318578	9646	22454	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	+++++ 73376	1560 147189	5014 307242	11481	25037	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
N-Propylbenzene	DCBd 4	Lin1	+++++ 255771	3438 515507	11729 1127692	32162	80250	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
2-Chlorotoluene	DCBd 4	Lin1	1639 220813	3409 452374	11582 992366	29603	69053	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,3,5-Trimethylbenzene	DCBd 4	Lin1	4315 775378	9880 1552880	34436 3358753	96103	239463	1.00 50.0	2.00 100	5.00 200	10.0	20.0
4-Chlorotoluene	DCBd 4	Lin2	1484 232086	3947 463749	13784 1019247	33057	76758	1.00 50.0	2.00 100	5.00 200	10.0	20.0
tert-Butylbenzene	DCBd 4	Lin1	+++++ 682105	8238 1400449	28084 3032460	71462	197647	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,2,4-Trimethylbenzene	DCBd 4	Lin1	4233 811409	9657 1611691	36709 3464574	105265	257128	1.00 50.0	2.00 100	5.00 200	10.0	20.0
sec-Butylbenzene	DCBd 4	Lin2	+++++ 218168	2555 440269	10225 964506	28151	66417	+++++ 50.0	2.00 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376989

SDG No.:

Instrument ID: VMS_G2 GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 06/12/2017 18:07 Calibration End Date: 06/12/2017 20:35 Calibration ID: 29460

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,3-Dichlorobenzene	DCBd 4	Ave	4930 465016	10346 943059	31423 2053214	70180	152654	1.00 50.0	2.00 100	5.00 200	10.0	20.0
4-Isopropyltoluene	DCBd 4	Lin2	+++++ 929536	10366 1826869	42117 3949898	112653	281831	+++++ 50.0	2.00 100	5.00 200	10.0	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	6386 482948	14860 957434	36024 2085081	76711	159996	1.00 50.0	2.00 100	5.00 200	10.0	20.0
n-Butylbenzene	DCBd 4	Lin1	6296 857408	12365 1640454	39804 3479015	102780	254478	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	4791 457557	11169 930070	32436 2020388	71260	153841	1.00 50.0	2.00 100	5.00 200	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Lin2	+++++ 48449	+++++ 100369	2168 230925	6100	14505	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Lin1	2996 325853	5584 679926	15255 1587307	37909	88147	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Hexachlorobutadiene	DCBd 4	Ave	2678 216711	6035 411944	14420 900884	31832	69170	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Naphthalene	DCBd 4	Lin1	+++++ 750350	+++++ 1565268	23025 3451511	64848	190036	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2,3-Trichlorobenzene	DCBd 4	Lin1	3082 338832	5751 664094	17342 1470281	42281	106439	1.00 50.0	2.00 100	5.00 200	10.0	20.0
Dibromofluoromethane (Surr)	FB	Lin2	+++++ 189573	+++++ 401659	24581 852825	39137	73425	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Lin2	+++++ 262702	+++++ 530272	34147 1096520	55758	104267	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	+++++ 653404	+++++ 1407586	48869 3040001	104019	226278	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	+++++ 249830	+++++ 532450	16152 1142487	38769	85718	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin = Linear ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua = Quadratic ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0894.D
Lims ID: STD001
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 12-Jun-2017 18:07:30 ALS Bottle#: 11 Worklist Smp#: 4
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD001
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 13-Jun-2017 15:51:14 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: dukesa Date: 12-Jun-2017 19:03:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.051	0.014	91	265742	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.622	0.007	98	446643	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	99987	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	180688	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111		6.828				ND	ND	
$ 9 1,2-Dichloroethane-d4 (Sur	65		7.243				ND	ND	
$ 10 Toluene-d8 (Surr)	98		9.338				ND	ND	
$ 11 4-Bromofluorobenzene (Surr	95		11.869				ND	ND	
32 Dichlorodifluoromethane	85		1.691				ND	ND	
34 Chloromethane	50	1.816	1.830	-0.014	93	4982	1.00	2.66	
37 Vinyl chloride	62	1.956	1.956	0.000	92	4868	1.00	1.09	
22 Butadiene	54	1.984	1.984	0.000	82	4944	NC	NC	
39 Bromomethane	94	2.291	2.291	0.000	89	4269	1.00	1.13	
40 Chloroethane	64		2.403				ND	ND	
41 Dichlorofluoromethane	67	2.654	2.654	0.000	93	6446	1.00	1.12	
43 Trichlorofluoromethane	101	2.682	2.696	-0.014	94	4989	1.00	1.09	
45 Ethyl ether	59	3.003	3.003	0.000	66	1792	1.00	1.26	
48 Acrolein	56	3.171	3.171	0.000	97	3002	10.0	11.4	
53 1,1-Dichloroethene	96	3.297	3.297	0.000	83	2087	1.00	0.9072	
52 1,1,2-Trichloro-1,2,2-trif	151	3.325	3.339	-0.014	36	2147	1.00	0.9292	
50 Acetone	43	3.353	3.353	0.000	96	7558	4.00	5.41	
55 Iodomethane	142	3.492	3.492	0.000	93	3546	1.00	0.8646	
58 Carbon disulfide	76	3.576	3.576	0.000	97	9116	1.00	1.05	
56 Methyl acetate	43	3.786	3.786	0.000	95	10833	5.00	5.23	
57 3-Chloro-1-propene	41	3.800	3.799	0.001	61	4335	1.00	1.04	
60 Methylene Chloride	84	3.995	3.995	0.000	96	12029	1.00	1.02	
59 2-Methyl-2-propanol	59	4.205	4.191	0.014	7	1510	10.0	10.1	
61 Acrylonitrile	53	4.372	4.372	0.000	95	8791	10.0	9.15	
63 trans-1,2-Dichloroethene	96	4.414	4.428	-0.014	84	1880	1.00	0.7415	
62 Methyl tert-butyl ether	73	4.414	4.428	-0.014	71	4784	1.00	1.05	
64 Hexane	57	4.917	4.917	0.000	42	1655	1.00	1.33	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 1,1-Dichloroethane	63		5.196				ND	ND	
65 Vinyl acetate	43	5.238	5.238	0.000	92	5004	2.00	2.97	
74 cis-1,2-Dichloroethene	96	6.113	6.128	-0.015	77	2715	1.00	0.99	
71 2-Butanone (MEK)	43		6.128				ND	ND	
75 2,2-Dichloropropane	77		6.128				ND	ND	
77 Chlorobromomethane	128		6.457				ND	ND	
72 sec-Butyl Alcohol	45		6.457				ND	ND	
79 Tetrahydrofuran	42		6.464				ND	ND	
78 Chloroform	83	6.614	6.621	-0.007	90	5645	1.00	1.11	
81 1,1,1-Trichloroethane	97	6.800	6.807	-0.007	85	4271	1.00	0.9833	
82 Cyclohexane	56		6.886				ND	ND	
84 Carbon tetrachloride	117	6.986	7.000	-0.014	80	4059	1.00	0.9895	
83 1,1-Dichloropropene	75		7.014				ND	ND	
87 Benzene	78	7.257	7.257	0.000	91	10144	1.00	1.02	
85 1,2-Dichloroethane	62		7.336				ND	ND	
80 Isobutyl alcohol	41	7.651	7.651	0.000	30	3022	25.0	24.8	
35 n-Heptane	43		7.651				ND	ND	
89 Trichloroethene	95	8.044	8.044	0.000	84	2130	1.00	0.9088	
90 2-Pentanone	43		8.258				ND	ND	
93 Methylcyclohexane	55	8.280	8.294	-0.014	73	1921	1.00	1.06	
92 1,2-Dichloropropane	63		8.330				ND	ND	
94 1,4-Dioxane	88		8.416				ND	ND	
95 Dibromomethane	93	8.416	8.423	-0.007	89	1453	1.00	0.9101	
96 Dichlorobromomethane	83	8.616	8.623	-0.007	91	3219	1.00	0.9503	
98 2-Chloroethyl vinyl ether	63		8.938				ND	ND	
99 cis-1,3-Dichloropropene	75		9.081				ND	ND	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	93	5385	4.00	4.92	
101 Toluene	91	9.410	9.410	0.000	97	10764	1.00	1.11	
103 trans-1,3-Dichloropropene	75		9.660				ND	ND	
102 Ethyl methacrylate	69		9.717				ND	ND	
104 1,1,2-Trichloroethane	97	9.846	9.846	0.000	81	1709	1.00	0.8533	
107 Tetrachloroethene	164	9.910	9.917	-0.007	92	2130	1.00	1.02	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	90	3355	1.00	0.9696	
105 2-Hexanone	43	10.060	10.060	0.000	90	3969	4.00	9.72	
108 Chlorodibromomethane	129	10.211	10.210	0.000	81	2030	1.00	0.8858	
110 Ethylene Dibromide	107	10.311	10.318	-0.007	86	1499	1.00	0.7937	
111 1-Chlorohexane	91	10.768	10.775	-0.007	33	2026	0.5000	0.6453	
112 Chlorobenzene	112	10.783	10.790	-0.007	94	7405	1.00	1.07	
113 1,1,1,2-Tetrachloroethane	131	10.875	10.875	0.000	51	2723	1.00	1.06	
114 Ethylbenzene	106	10.883	10.883	0.000	90	1974	1.00	0.6052	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	93	2337	1.00	1.63	
117 o-Xylene	106	11.362	11.362	0.000	90	1816	1.00	1.46	
116 Styrene	104	11.383	11.383	0.000	65	3026	1.00	1.38	
118 Bromoform	173		11.555				ND	ND	
119 Isopropylbenzene	105	11.705	11.705	0.000	90	4621	1.00	1.51	
121 Cyclohexanone	55	11.798	11.791	0.007	77	1329	40.0	103.1	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	73	3024	1.00	1.12	
125 Bromobenzene	156	11.998	11.998	0.000	90	2700	1.00	1.03	
123 trans-1,4-Dichloro-2-buten	53		12.027				ND	ND	
124 1,2,3-Trichloropropane	110		12.048				ND	ND	
126 N-Propylbenzene	120		12.091				ND	ND	
128 2-Chlorotoluene	126	12.170	12.170	0.000	91	1639	1.00	1.30	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	93	4315	1.00	1.34	
129 4-Chlorotoluene	126	12.277	12.277	0.000	94	1484	1.00	1.07	
130 tert-Butylbenzene	119		12.506				ND	ND	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	92	4233	1.00	1.29	
132 sec-Butylbenzene	134		12.677				ND	ND	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	94	4930	1.00	0.9483	
133 4-Isopropyltoluene	119		12.785				ND	ND	
136 1,4-Dichlorobenzene	146	12.835	12.835	0.000	92	6386	1.00	1.09	
137 n-Butylbenzene	91	13.063	13.063	0.000	94	6296	1.00	1.30	
138 1,2-Dichlorobenzene	146	13.085	13.078	0.007	92	4791	1.00	0.9163	
139 1,2-Dibromo-3-Chloropropan	157		13.578				ND	ND	
141 1,2,4-Trichlorobenzene	180	14.115	14.107	0.008	88	2996	1.00	1.56	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	83	2678	1.00	1.08	
143 Naphthalene	128		14.293				ND	ND	
144 1,2,3-Trichlorobenzene	180	14.458	14.451	0.007	51	3082	1.00	1.33	
S 151 1,2-Dichloroethene, Total	96				0		2.00	1.73	
S 148 1,3-Dichloropropene, Total	1				0		2.00	0	
S 146 Xylenes, Total (URS)	1				0		2.00	3.08	
S 147 Total BTEX	1				0			5.82	
S 145 Trihalomethanes, Total	1				0		4.00	2.95	
S 149 1,2-Dichloroethene, Total	1				0		2.00	1.73	
S 150 Xylenes, Total	106				0		2.00	3.08	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-2cleve+AVA_00025	Amount Added:	0.13	Units: uL
MV-Gas/Ket A_00060	Amount Added:	0.13	Units: uL
MV-Main A_00030	Amount Added:	0.13	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.02	Units: uL

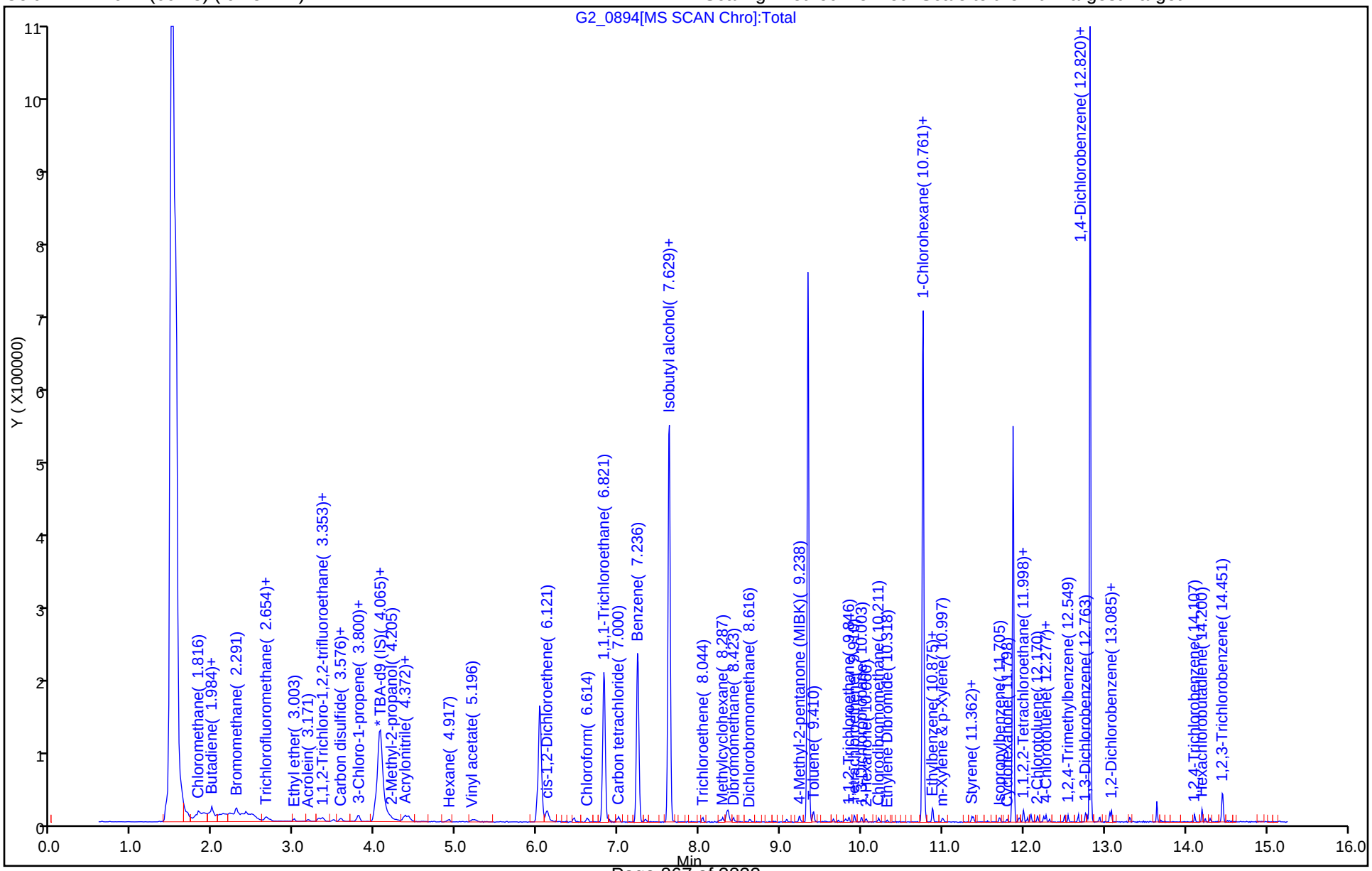
Report Date: 13-Jun-2017 15:51:14 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0894.D

Injection Date:	12-Jun-2017 18:07:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD001			Worklist Smp#:	4
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0895.D
Lims ID: STD002
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 12-Jun-2017 18:28:30 ALS Bottle#: 12 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD002
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 13-Jun-2017 15:51:15 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: dukesa Date: 12-Jun-2017 19:04:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.051	0.014	55	268633	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.622	0.007	97	495669	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	86	112160	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	212382	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.829	6.828	0.001	40	16393	2.00	2.24	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	87	20706	2.00	1.45	
$ 10 Toluene-d8 (Surr)	98	9.338	9.338	0.000	44	20756	2.00	2.16	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	44	6625	2.00	1.91	
32 Dichlorodifluoromethane	85		1.691				ND	ND	
34 Chloromethane	50	1.830	1.830	0.000	58	8445	2.00	3.23	
37 Vinyl chloride	62	1.956	1.956	0.000	33	10385	2.00	2.10	
22 Butadiene	54	1.998	1.984	0.014	50	9014	NC	NC	
39 Bromomethane	94	2.291	2.291	0.000	79	9007	2.00	2.16	
40 Chloroethane	64	2.417	2.403	0.014	54	6804	2.00	2.19	
41 Dichlorofluoromethane	67	2.654	2.654	0.000	21	13390	2.00	2.10	
43 Trichlorofluoromethane	101	2.710	2.696	0.014	18	10185	2.00	2.01	
45 Ethyl ether	59	3.004	3.003	0.001	54	3463	2.00	1.84	
48 Acrolein	56	3.185	3.171	0.014	43	6600	20.0	18.2	
53 1,1-Dichloroethene	96	3.311	3.297	0.014	48	4513	2.00	1.77	
52 1,1,2-Trichloro-1,2,2-trif	151	3.353	3.339	0.014	1	5112	2.00	1.99	
50 Acetone	43	3.367	3.353	0.014	75	11621	8.00	8.06	
55 Iodomethane	142	3.492	3.492	0.000	73	8554	2.00	1.88	
58 Carbon disulfide	76	3.590	3.576	0.014	78	19099	2.00	1.97	
56 Methyl acetate	43	3.800	3.786	0.014	93	21501	10.0	9.35	
57 3-Chloro-1-propene	41	3.800	3.799	0.001	22	7322	2.00	1.59	
60 Methylene Chloride	84	4.009	3.995	0.014	73	16059	2.00	1.90	
59 2-Methyl-2-propanol	59	4.191	4.191	0.000	26	5110	20.0	20.2	
61 Acrylonitrile	53	4.372	4.372	0.000	79	19735	20.0	18.5	
62 Methyl tert-butyl ether	73	4.428	4.428	0.000	45	12041	2.00	1.87	
63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	51	5269	2.00	1.87	
64 Hexane	57	4.917	4.917	0.000	66	4931	2.00	2.03	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 1,1-Dichloroethane	63	5.210	5.196	0.014	1	10949	2.00	1.95	
65 Vinyl acetate	43	5.252	5.238	0.014	70	11053	4.00	3.98	
75 2,2-Dichloropropane	77		6.128				ND	ND	
71 2-Butanone (MEK)	43	6.128	6.128	0.000	66	11560	8.00	7.87	
74 cis-1,2-Dichloroethene	96	6.135	6.128	0.007	17	5406	2.00	1.78	
72 sec-Butyl Alcohol	45		6.457				ND	ND	
77 Chlorobromomethane	128	6.457	6.457	0.000	37	2396	2.00	1.66	
79 Tetrahydrofuran	42		6.464				ND	ND	
78 Chloroform	83	6.628	6.621	0.007	43	11313	2.00	2.00	
81 1,1,1-Trichloroethane	97	6.807	6.807	0.000	22	9815	2.00	2.04	
82 Cyclohexane	56	6.886	6.886	0.000	45	4959	2.00	2.35	
84 Carbon tetrachloride	117	7.007	7.000	0.007	59	10033	2.00	2.20	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	2	5231	2.00	2.07	
87 Benzene	78	7.258	7.257	0.001	60	18773	2.00	1.71	
85 1,2-Dichloroethane	62		7.336				ND	ND	
35 n-Heptane	43	7.651	7.651	0.000	40	8840	2.00	1.86	
80 Isobutyl alcohol	41	7.651	7.651	0.000	23	7090	50.0	52.5	
89 Trichloroethene	95	8.044	8.044	0.000	42	5034	2.00	1.94	
90 2-Pentanone	43		8.258				ND	ND	
93 Methylcyclohexane	55	8.294	8.294	0.000	48	5413	2.00	1.85	
92 1,2-Dichloropropane	63	8.337	8.330	0.007	51	5995	2.00	2.02	
94 1,4-Dioxane	88		8.416				ND	ND	
95 Dibromomethane	93	8.416	8.423	-0.007	56	3196	2.00	1.80	
96 Dichlorobromomethane	83	8.623	8.623	0.000	14	7648	2.00	2.03	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	1	1135	2.00	4.94	
99 cis-1,3-Dichloropropene	75	9.074	9.081	-0.007	7	4866	2.00	2.56	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	83	12191	8.00	7.03	
101 Toluene	91	9.410	9.410	0.000	59	15686	2.00	1.46	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	30	5288	2.00	2.46	
102 Ethyl methacrylate	69	9.717	9.717	0.000	13	2486	2.00	2.76	
104 1,1,2-Trichloroethane	97	9.846	9.846	0.000	41	4004	2.00	1.80	
107 Tetrachloroethene	164	9.917	9.917	0.000	64	4121	2.00	1.77	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	41	6839	2.00	1.76	
105 2-Hexanone	43	10.060	10.060	0.000	67	7969	8.00	11.1	
108 Chlorodibromomethane	129	10.211	10.210	0.001	14	4787	2.00	1.86	
110 Ethylene Dibromide	107	10.318	10.318	0.000	34	3893	2.00	1.84	
111 1-Chlorohexane	91	10.775	10.775	0.000	23	3652	1.00	1.04	
112 Chlorobenzene	112	10.790	10.790	0.000	38	15721	2.00	2.03	
113 1,1,1,2-Tetrachloroethane	131	10.876	10.875	0.001	20	5473	2.00	1.89	
114 Ethylbenzene	106	10.883	10.883	0.000	70	5244	2.00	1.43	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	34	4775	2.00	2.09	
117 o-Xylene	106	11.369	11.362	0.007	63	4451	2.00	1.98	
116 Styrene	104	11.383	11.383	0.000	24	6776	2.00	1.80	
118 Bromoform	173	11.555	11.555	0.000	25	3000	2.00	1.80	
119 Isopropylbenzene	105	11.705	11.705	0.000	55	9788	2.00	1.86	
121 Cyclohexanone	55	11.791	11.791	0.000	39	3408	80.0	117.5	
125 Bromobenzene	156	12.005	11.998	0.007	42	4837	2.00	1.57	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	1	6213	2.00	1.95	
123 trans-1,4-Dichloro-2-buten	53	12.034	12.027	0.007	1	1384	2.00	2.23	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	10	1560	2.00	1.61	
126 N-Propylbenzene	120	12.091	12.091	0.000	58	3438	2.00	2.22	
128 2-Chlorotoluene	126	12.177	12.170	0.007	46	3409	2.00	1.79	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	37	9880	2.00	1.79	
129 4-Chlorotoluene	126	12.277	12.277	0.000	40	3947	2.00	1.77	
130 tert-Butylbenzene	119	12.506	12.506	0.000	57	8238	2.00	2.50	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	53	9657	2.00	1.72	
132 sec-Butylbenzene	134	12.677	12.677	0.000	47	2555	2.00	2.11	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	53	10346	2.00	1.69	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	10	10366	2.00	2.12	
136 1,4-Dichlorobenzene	146	12.835	12.835	0.000	43	14860	2.00	2.16	
137 n-Butylbenzene	91	13.064	13.063	0.001	73	12365	2.00	1.75	
138 1,2-Dichlorobenzene	146	13.085	13.078	0.007	59	11169	2.00	1.82	
139 1,2-Dibromo-3-Chloropropan	157		13.578				ND	ND	
141 1,2,4-Trichlorobenzene	180	14.115	14.107	0.008	12	5584	2.00	2.00	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	45	6035	2.00	2.07	
143 Naphthalene	128		14.293				ND	ND	
144 1,2,3-Trichlorobenzene	180	14.458	14.451	0.007	28	5751	2.00	1.79	
S 151 1,2-Dichloroethene, Total	96				0		4.00	3.65	
S 145 Trihalomethanes, Total	1				0		8.00	7.70	
S 149 1,2-Dichloroethene, Total	1				0		4.00	3.65	
S 150 Xylenes, Total	106				0		4.00	4.07	
S 148 1,3-Dichloropropene, Total	1				0		4.00	5.02	
S 146 Xylenes, Total (URS)	1				0		4.00	4.07	
S 147 Total BTEX	1				0			8.67	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-2cleve+AVA_00025	Amount Added:	0.25	Units: uL
MV-Main A_00030	Amount Added:	0.25	Units: uL
MV-Gas/Ket A_00060	Amount Added:	0.25	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.04	Units: uL

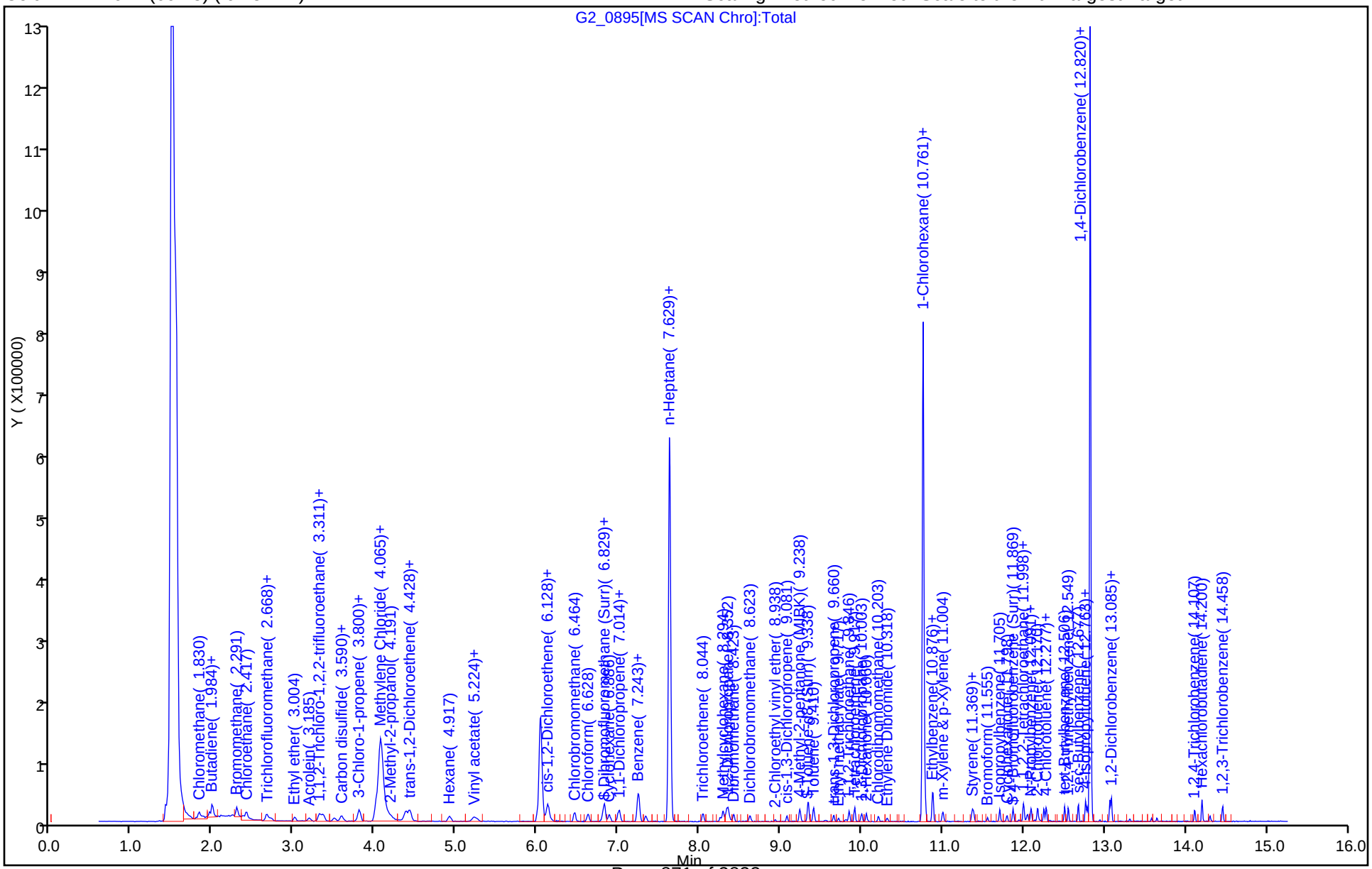
Report Date: 13-Jun-2017 15:51:16 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0895.D

Injection Date:	12-Jun-2017 18:28:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD002			Worklist Smp#:	5
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0896.D
Lims ID: STD005
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 12-Jun-2017 18:50:30 ALS Bottle#: 13 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD005
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 13-Jun-2017 15:51:17 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: dukesa Date: 12-Jun-2017 19:25:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.051	0.014	91	276437	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.622	0.007	98	520250	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	119511	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	237285	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.828	0.000	93	24581	5.00	4.82	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	34147	5.00	4.66	
$ 10 Toluene-d8 (Surr)	98	9.345	9.338	0.007	94	48869	5.00	4.78	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	16152	5.00	4.17	
32 Dichlorodifluoromethane	85	1.705	1.691	0.014	95	12630	5.00	5.87	
34 Chloromethane	50	1.830	1.830	0.000	97	20632	5.00	5.45	
37 Vinyl chloride	62	1.956	1.956	0.000	96	25443	5.00	4.89	
22 Butadiene	54	1.984	1.984	0.000	89	22646	NC	NC	
39 Bromomethane	94	2.291	2.291	0.000	92	22252	5.00	5.07	
40 Chloroethane	64	2.403	2.403	0.000	98	18715	5.00	5.75	
41 Dichlorofluoromethane	67	2.654	2.654	0.000	97	32845	5.00	4.91	
43 Trichlorofluoromethane	101	2.710	2.696	0.014	96	26851	5.00	5.05	
45 Ethyl ether	59	3.017	3.003	0.014	90	10145	5.00	4.29	
48 Acrolein	56	3.185	3.171	0.014	99	17901	50.0	40.1	
53 1,1-Dichloroethene	96	3.311	3.297	0.014	93	12320	5.00	4.60	
52 1,1,2-Trichloro-1,2,2-trif	151	3.353	3.339	0.014	93	13788	5.00	5.12	
50 Acetone	43	3.367	3.353	0.014	98	24470	20.0	17.7	
55 Iodomethane	142	3.492	3.492	0.000	97	22189	5.00	4.64	
58 Carbon disulfide	76	3.590	3.576	0.014	100	48168	5.00	4.74	
56 Methyl acetate	43	3.800	3.786	0.014	98	54963	25.0	22.8	
57 3-Chloro-1-propene	41	3.814	3.799	0.015	85	20691	5.00	4.27	
60 Methylene Chloride	84	4.009	3.995	0.014	97	26638	5.00	4.92	
59 2-Methyl-2-propanol	59	4.205	4.191	0.014	89	14000	50.0	44.5	
61 Acrylonitrile	53	4.386	4.372	0.014	97	50606	50.0	45.2	
63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	96	14675	5.00	4.97	
62 Methyl tert-butyl ether	73	4.428	4.428	0.000	78	34975	5.00	4.46	
64 Hexane	57	4.917	4.917	0.000	90	14631	5.00	4.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 1,1-Dichloroethane	63	5.210	5.196	0.014	96	29012	5.00	4.93	
65 Vinyl acetate	43	5.252	5.238	0.014	97	31034	10.0	7.36	
74 cis-1,2-Dichloroethene	96	6.128	6.128	0.000	85	15383	5.00	4.82	
71 2-Butanone (MEK)	43	6.135	6.128	0.007	95	27856	20.0	18.1	
75 2,2-Dichloropropane	77	6.128	6.128	0.000	62	25364	5.00	5.15	
77 Chlorobromomethane	128	6.457	6.457	0.000	93	7520	5.00	4.97	
72 sec-Butyl Alcohol	45	6.457	6.457	0.000	67	11611	75.0	77.5	
79 Tetrahydrofuran	42	6.471	6.464	0.007	64	6896	10.0	9.80	
78 Chloroform	83	6.628	6.621	0.007	94	29865	5.00	5.04	
81 1,1,1-Trichloroethane	97	6.807	6.807	0.000	97	25227	5.00	4.99	
82 Cyclohexane	56	6.886	6.886	0.000	89	16350	5.00	4.46	
84 Carbon tetrachloride	117	7.007	7.000	0.007	96	24331	5.00	5.09	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	92	15723	5.00	4.55	
87 Benzene	78	7.257	7.257	0.000	97	52771	5.00	4.57	
85 1,2-Dichloroethane	62	7.336	7.336	0.000	98	24753	5.00	5.17	
80 Isobutyl alcohol	41	7.651	7.651	0.000	77	17889	125.0	126.1	
35 n-Heptane	43	7.644	7.651	-0.007	80	22861	5.00	4.58	
89 Trichloroethene	95	8.044	8.044	0.000	93	12510	5.00	4.58	
90 2-Pentanone	43	8.259	8.258	0.001	97	21112	10.0	0.7199	
93 Methylcyclohexane	55	8.294	8.294	0.000	89	16397	5.00	4.30	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	92	14472	5.00	4.64	
94 1,4-Dioxane	88	8.409	8.416	-0.007	35	1943	100.0	74.3	
95 Dibromomethane	93	8.423	8.423	0.000	94	9116	5.00	4.90	
96 Dichlorobromomethane	83	8.623	8.623	0.000	98	19063	5.00	4.83	
98 2-Chloroethyl vinyl ether	63	8.931	8.938	-0.007	83	2786	5.00	5.89	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	89	13893	5.00	4.46	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	98	38163	20.0	15.2	
101 Toluene	91	9.410	9.410	0.000	96	47594	5.00	4.23	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	97	14216	5.00	4.44	
102 Ethyl methacrylate	69	9.717	9.717	0.000	89	7997	5.00	4.26	
104 1,1,2-Trichloroethane	97	9.846	9.846	0.000	93	10698	5.00	4.59	
107 Tetrachloroethene	164	9.910	9.917	-0.007	94	12159	5.00	4.89	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	94	18415	5.00	4.45	
105 2-Hexanone	43	10.060	10.060	0.000	96	26262	20.0	17.6	
108 Chlorodibromomethane	129	10.211	10.210	0.001	90	12697	5.00	4.64	
110 Ethylene Dibromide	107	10.318	10.318	0.000	98	10169	5.00	4.50	
111 1-Chlorohexane	91	10.775	10.775	0.000	82	7358	2.50	1.96	
112 Chlorobenzene	112	10.790	10.790	0.000	94	39019	5.00	4.74	
113 1,1,1,2-Tetrachloroethane	131	10.876	10.875	0.001	90	14704	5.00	4.78	
114 Ethylbenzene	106	10.883	10.883	0.000	95	14873	5.00	3.81	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	16910	5.00	4.49	
117 o-Xylene	106	11.369	11.362	0.007	96	12861	5.00	3.63	
116 Styrene	104	11.383	11.383	0.000	95	23532	5.00	3.70	
118 Bromoform	173	11.555	11.555	0.000	90	8006	5.00	4.52	
119 Isopropylbenzene	105	11.705	11.705	0.000	97	35755	5.00	3.68	
121 Cyclohexanone	55	11.798	11.791	0.007	94	12281	200.0	178.9	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	96	16279	5.00	4.58	
125 Bromobenzene	156	12.005	11.998	0.007	94	14712	5.00	4.26	
123 trans-1,4-Dichloro-2-buten	53	12.027	12.027	0.000	64	3861	5.00	4.27	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	88	5014	5.00	4.63	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	11729	5.00	4.22	
128 2-Chlorotoluene	126	12.170	12.170	0.000	95	11582	5.00	4.05	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	94	34436	5.00	3.79	
129 4-Chlorotoluene	126	12.277	12.277	0.000	98	13784	5.00	4.44	
130 tert-Butylbenzene	119	12.506	12.506	0.000	96	28084	5.00	4.28	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	36709	5.00	3.84	
132 sec-Butylbenzene	134	12.677	12.677	0.000	96	10225	5.00	4.32	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	95	31423	5.00	4.60	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	96	42117	5.00	4.31	
136 1,4-Dichlorobenzene	146	12.835	12.835	0.000	92	36024	5.00	4.69	
137 n-Butylbenzene	91	13.063	13.063	0.000	97	39804	5.00	3.86	
138 1,2-Dichlorobenzene	146	13.085	13.078	0.007	96	32436	5.00	4.72	
139 1,2-Dibromo-3-Chloropropan	157	13.578	13.578	0.000	71	2168	5.00	5.00	
141 1,2,4-Trichlorobenzene	180	14.107	14.107	0.000	93	15255	5.00	3.71	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	97	14420	5.00	4.44	
143 Naphthalene	128	14.300	14.293	0.007	97	23025	5.00	5.50	
144 1,2,3-Trichlorobenzene	180	14.458	14.451	0.007	94	17342	5.00	3.94	
S 151 1,2-Dichloroethene, Total	96				0		10.0	9.79	
S 148 1,3-Dichloropropene, Total	1				0		10.0	8.90	
S 146 Xylenes, Total (URS)	1				0		10.0	8.13	
S 147 Total BTEX	1				0			20.7	
S 145 Trihalomethanes, Total	1				0		20.0	19.0	
S 149 1,2-Dichloroethene, Total	1				0		10.0	9.79	
S 150 Xylenes, Total	106				0		10.0	8.13	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-2cleve+AVA_00025	Amount Added:	0.63	Units: uL
MV-Gas/Ket A_00060	Amount Added:	0.63	Units: uL
MV-Main A_00030	Amount Added:	0.63	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.10	Units: uL

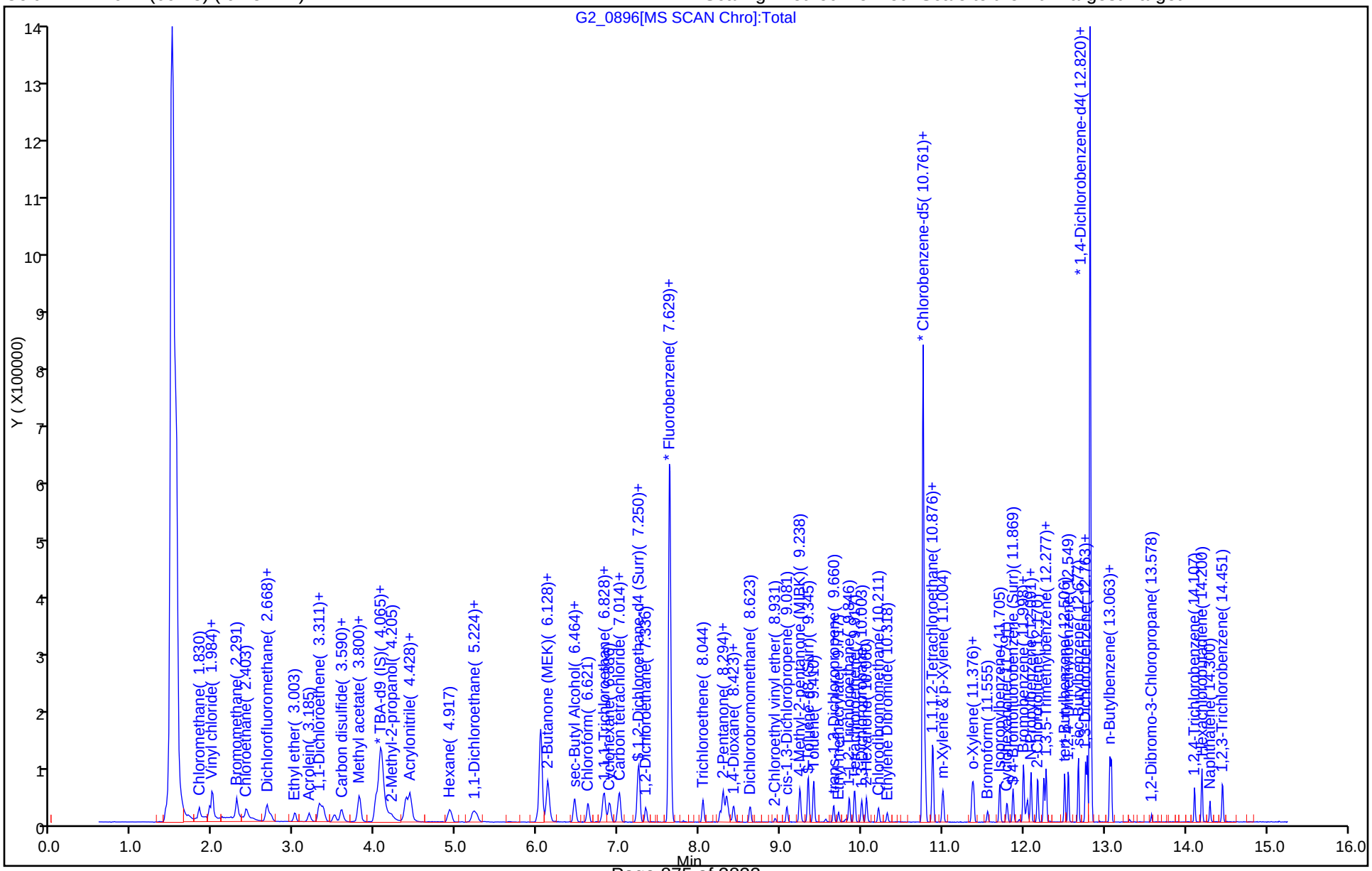
Report Date: 13-Jun-2017 15:51:17 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0896.D

Injection Date:	12-Jun-2017 18:50:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD005			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0897.D
Lims ID: STD010
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 12-Jun-2017 19:11:30 ALS Bottle#: 14 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD010
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 13-Jun-2017 15:51:18 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: dukesa Date: 12-Jun-2017 19:57:34

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.051	0.014	91	285027	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.622	0.007	98	485883	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	112899	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	229261	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.828	0.000	93	39137	10.0	10.9	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	55758	10.0	11.3	
$ 10 Toluene-d8 (Surr)	98	9.338	9.338	0.000	95	104019	10.0	10.8	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	90	38769	10.0	10.4	
32 Dichlorodifluoromethane	85	1.691	1.691	0.000	98	27461	10.0	10.6	
34 Chloromethane	50	1.816	1.830	-0.014	98	44151	10.0	10.5	
37 Vinyl chloride	62	1.956	1.956	0.000	98	51569	10.0	10.6	
22 Butadiene	54	1.984	1.984	0.000	89	43285	NC	NC	
39 Bromomethane	94	2.277	2.291	-0.014	92	43129	10.0	10.5	
40 Chloroethane	64	2.403	2.403	0.000	99	32627	10.0	10.7	
41 Dichlorofluoromethane	67	2.654	2.654	0.000	97	67396	10.0	10.8	
43 Trichlorofluoromethane	101	2.696	2.696	0.000	97	54345	10.0	11.0	
45 Ethyl ether	59	3.003	3.003	0.000	91	22274	10.0	9.45	
48 Acrolein	56	3.171	3.171	0.000	98	46116	100.0	102.9	
53 1,1-Dichloroethene	96	3.297	3.297	0.000	94	27014	10.0	10.8	
52 1,1,2-Trichloro-1,2,2-trif	151	3.339	3.339	0.000	93	28093	10.0	11.2	
50 Acetone	43	3.353	3.353	-0.001	99	50538	40.0	41.3	
55 Iodomethane	142	3.492	3.492	0.000	99	47760	10.0	10.7	
58 Carbon disulfide	76	3.576	3.576	0.000	100	101179	10.0	10.7	
56 Methyl acetate	43	3.785	3.786	-0.001	99	123364	50.0	54.7	
57 3-Chloro-1-propene	41	3.799	3.799	0.000	86	45528	10.0	10.1	
60 Methylene Chloride	84	3.995	3.995	0.000	97	43087	10.0	10.9	
59 2-Methyl-2-propanol	59	4.190	4.191	-0.001	91	33542	100.0	106.0	
61 Acrylonitrile	53	4.372	4.372	0.000	98	115989	100.0	110.9	
62 Methyl tert-butyl ether	73	4.428	4.428	0.000	89	77500	10.0	10.0	
63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	96	31676	10.0	11.5	
64 Hexane	57	4.917	4.917	0.000	89	35160	10.0	8.89	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 1,1-Dichloroethane	63	5.196	5.196	0.000	97	58084	10.0	10.6	
65 Vinyl acetate	43	5.238	5.238	0.000	97	77183	20.0	16.3	
75 2,2-Dichloropropane	77	6.128	6.128	0.000	61	49422	10.0	10.8	
71 2-Butanone (MEK)	43	6.121	6.128	-0.008	98	62828	40.0	43.6	
74 cis-1,2-Dichloroethene	96	6.128	6.128	0.000	84	31531	10.0	10.6	
72 sec-Butyl Alcohol	45	6.457	6.457	0.000	71	27666	150.0	145.5	
77 Chlorobromomethane	128	6.457	6.457	0.000	95	14956	10.0	10.6	
79 Tetrahydrofuran	42	6.457	6.464	-0.007	68	17205	20.0	20.8	
78 Chloroform	83	6.621	6.621	0.000	95	60287	10.0	10.9	
81 1,1,1-Trichloroethane	97	6.807	6.807	0.000	97	52208	10.0	11.0	
82 Cyclohexane	56	6.893	6.886	0.007	92	38688	10.0	9.19	
84 Carbon tetrachloride	117	7.000	7.000	0.000	95	48007	10.0	10.8	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	93	36660	10.0	10.3	
87 Benzene	78	7.250	7.257	-0.007	98	117512	10.0	10.9	
85 1,2-Dichloroethane	62	7.336	7.336	0.000	98	48791	10.0	10.9	
35 n-Heptane	43	7.644	7.651	-0.007	92	50492	10.0	10.8	
80 Isobutyl alcohol	41	7.644	7.651	-0.007	82	37734	250.0	284.9	
89 Trichloroethene	95	8.044	8.044	0.000	94	25476	10.0	10.0	
90 2-Pentanone	43	8.258	8.258	0.000	97	48795	20.0	12.6	
93 Methylcyclohexane	55	8.294	8.294	0.000	93	39299	10.0	10.2	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	91	30916	10.0	10.6	
94 1,4-Dioxane	88	8.409	8.416	-0.007	36	4540	200.0	185.9	
95 Dibromomethane	93	8.423	8.423	0.000	94	19644	10.0	11.3	
96 Dichlorobromomethane	83	8.623	8.623	0.000	98	38251	10.0	10.4	
98 2-Chloroethyl vinyl ether	63	8.931	8.938	-0.007	91	7697	10.0	9.14	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	92	32635	10.0	8.96	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	98	102584	40.0	38.5	
101 Toluene	91	9.410	9.410	0.000	98	108682	10.0	10.3	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	97	33016	10.0	9.26	
102 Ethyl methacrylate	69	9.717	9.717	0.000	89	21708	10.0	8.46	
104 1,1,2-Trichloroethane	97	9.846	9.846	0.000	95	24270	10.0	11.1	
107 Tetrachloroethene	164	9.910	9.917	-0.007	96	25462	10.0	10.8	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	94	40673	10.0	10.4	
105 2-Hexanone	43	10.060	10.060	0.000	97	74115	40.0	36.8	
108 Chlorodibromomethane	129	10.210	10.210	0.000	89	27967	10.0	10.8	
110 Ethylene Dibromide	107	10.318	10.318	0.000	96	23803	10.0	11.2	
111 1-Chlorohexane	91	10.775	10.775	0.000	88	16048	5.00	4.52	
112 Chlorobenzene	112	10.790	10.790	0.000	93	82531	10.0	10.6	
113 1,1,1,2-Tetrachloroethane	131	10.875	10.875	0.000	90	30296	10.0	10.4	
114 Ethylbenzene	106	10.883	10.883	0.000	97	36179	10.0	9.82	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	39873	10.0	9.63	
117 o-Xylene	106	11.369	11.362	0.007	97	35033	10.0	8.56	
116 Styrene	104	11.383	11.383	0.000	98	66028	10.0	9.11	
118 Bromoform	173	11.555	11.555	0.000	94	16476	10.0	9.84	
119 Isopropylbenzene	105	11.705	11.705	0.000	97	95322	10.0	8.29	
121 Cyclohexanone	55	11.798	11.791	0.007	94	36589	400.0	368.5	
125 Bromobenzene	156	12.005	11.998	0.007	93	33196	10.0	9.95	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	96	33994	10.0	9.89	
123 trans-1,4-Dichloro-2-buten	53	12.027	12.027	0.000	77	9646	10.0	9.67	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	86	11481	10.0	11.0	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	32162	10.0	9.69	
128 2-Chlorotoluene	126	12.177	12.170	0.007	95	29603	10.0	9.61	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	95	96103	10.0	9.33	
129 4-Chlorotoluene	126	12.277	12.277	0.000	98	33057	10.0	10.3	
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	71462	10.0	8.61	
131 1,2,4-Trimethylbenzene	105	12.556	12.549	0.007	99	105265	10.0	9.77	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	28151	10.0	9.98	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	98	70180	10.0	10.6	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	112653	10.0	9.68	
136 1,4-Dichlorobenzene	146	12.835	12.835	0.000	95	76711	10.0	10.3	
137 n-Butylbenzene	91	13.063	13.063	0.000	97	102780	10.0	9.26	
138 1,2-Dichlorobenzene	146	13.085	13.078	0.007	97	71260	10.0	10.7	
139 1,2-Dibromo-3-Chloropropan	157	13.578	13.578	0.000	74	6100	10.0	10.2	
141 1,2,4-Trichlorobenzene	180	14.114	14.107	0.007	93	37909	10.0	8.27	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	97	31832	10.0	10.1	
143 Naphthalene	128	14.300	14.293	0.007	97	64848	10.0	9.13	
144 1,2,3-Trichlorobenzene	180	14.458	14.451	0.007	95	42281	10.0	9.13	
S 151 1,2-Dichloroethene, Total	96				0		20.0	22.1	
S 145 Trihalomethanes, Total	1				0		40.0	41.9	
S 149 1,2-Dichloroethene, Total	1				0		20.0	22.1	
S 150 Xylenes, Total	106				0		20.0	18.2	
S 148 1,3-Dichloropropene, Total	1				0		20.0	18.2	
S 146 Xylenes, Total (URS)	1				0		20.0	18.2	
S 147 Total BTEX	1				0			49.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-2cleve+AVA_00025	Amount Added:	1.25	Units: uL
MV-Gas/Ket A_00060	Amount Added:	1.25	Units: uL
MV-Main A_00030	Amount Added:	1.25	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.20	Units: uL

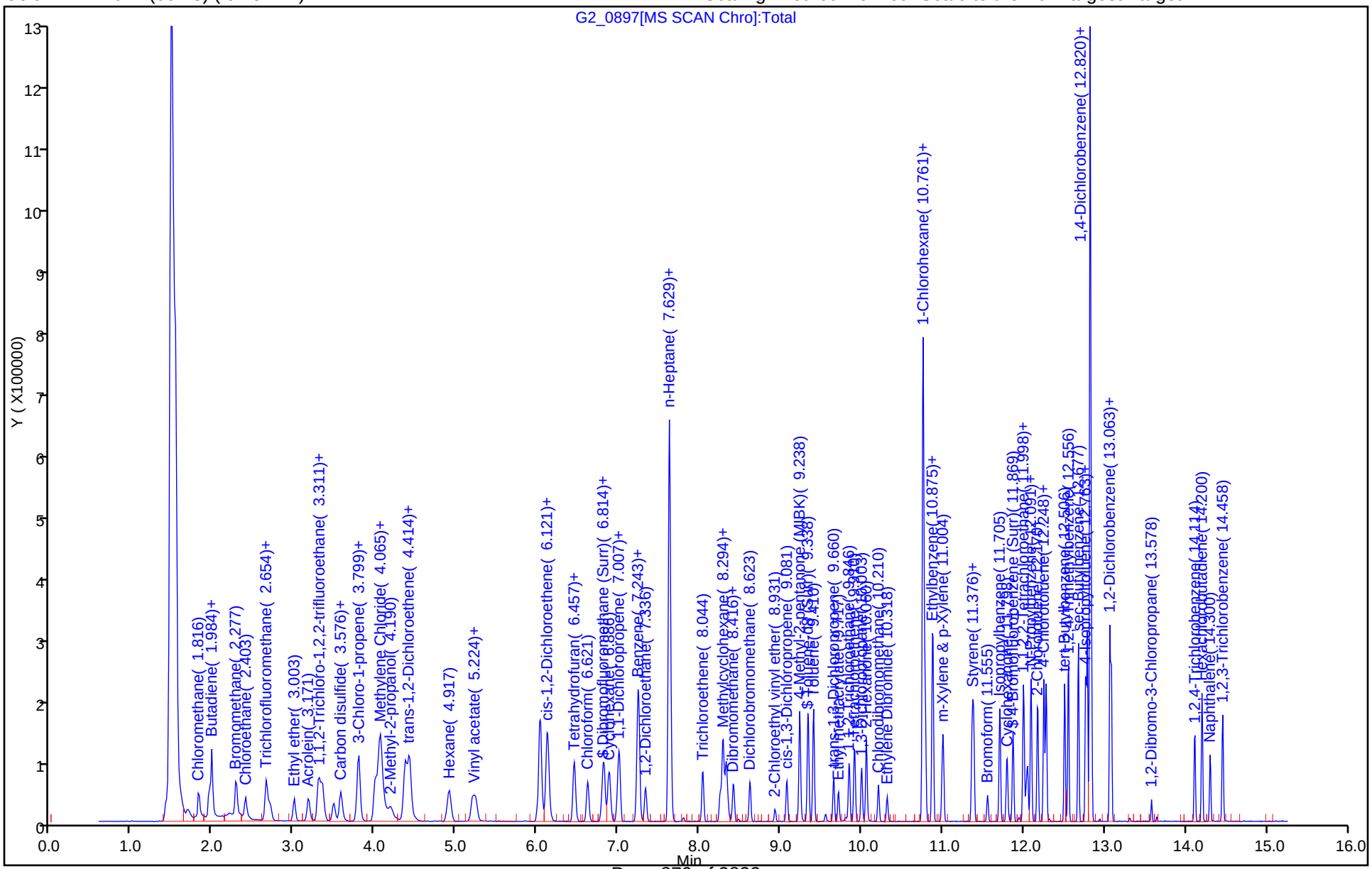
Report Date: 13-Jun-2017 15:51:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0897.D

Injection Date:	12-Jun-2017 19:11:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD010			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0898.D
Lims ID: STD020
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 12-Jun-2017 19:32:30 ALS Bottle#: 15 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD020
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 13-Jun-2017 15:51:20 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: dukesa Date: 12-Jun-2017 22:10:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.051	0.014	92	326519	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.622	0.007	98	575395	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	133730	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	263200	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.829	6.828	0.001	92	73425	20.0	19.4	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.236	7.243	-0.007	96	104267	20.0	20.2	
$ 10 Toluene-d8 (Surr)	98	9.338	9.338	0.000	94	226278	20.0	19.8	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	85718	20.0	20.0	
32 Dichlorodifluoromethane	85	1.691	1.691	0.000	99	55056	20.0	16.4	
34 Chloromethane	50	1.816	1.830	-0.014	99	87970	20.0	16.8	
37 Vinyl chloride	62	1.956	1.956	0.000	97	105016	20.0	18.3	
22 Butadiene	54	1.984	1.984	0.000	90	91845	NC	NC	
39 Bromomethane	94	2.277	2.291	-0.014	91	86447	20.0	17.8	M
40 Chloroethane	64	2.403	2.403	0.000	99	67939	20.0	18.9	
41 Dichlorofluoromethane	67	2.654	2.654	0.000	98	141924	20.0	19.2	
43 Trichlorofluoromethane	101	2.696	2.696	0.000	97	110343	20.0	18.8	
45 Ethyl ether	59	3.004	3.003	0.001	93	53463	20.0	18.7	
48 Acrolein	56	3.171	3.171	0.000	99	103821	200.0	191.6	
53 1,1-Dichloroethene	96	3.297	3.297	0.000	94	58161	20.0	19.6	
52 1,1,2-Trichloro-1,2,2-trif	151	3.339	3.339	0.000	94	57394	20.0	19.3	
50 Acetone	43	3.353	3.353	0.000	98	103900	80.0	73.7	
55 Iodomethane	142	3.492	3.492	0.000	98	103827	20.0	19.7	
58 Carbon disulfide	76	3.576	3.576	0.000	100	211634	20.0	18.8	
56 Methyl acetate	43	3.786	3.786	0.000	98	268859	100.0	100.8	
57 3-Chloro-1-propene	41	3.800	3.799	0.001	88	104165	20.0	19.5	
60 Methylene Chloride	84	3.995	3.995	0.000	98	82668	20.0	19.8	
59 2-Methyl-2-propanol	59	4.191	4.191	0.000	92	75394	200.0	196.6	
61 Acrylonitrile	53	4.372	4.372	0.000	98	254517	200.0	205.5	
63 trans-1,2-Dichloroethene	96	4.414	4.428	-0.014	95	66611	20.0	20.4	
62 Methyl tert-butyl ether	73	4.428	4.428	0.000	97	179408	20.0	19.2	
64 Hexane	57	4.917	4.917	0.000	93	85246	20.0	17.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 1,1-Dichloroethane	63	5.196	5.196	0.000	97	125907	20.0	19.4	
65 Vinyl acetate	43	5.238	5.238	0.000	98	196961	40.0	32.9	
74 cis-1,2-Dichloroethene	96	6.121	6.128	-0.007	81	69145	20.0	19.6	
71 2-Butanone (MEK)	43	6.121	6.128	-0.007	99	135227	80.0	79.3	
75 2,2-Dichloropropane	77	6.121	6.128	-0.007	58	104179	20.0	19.1	
77 Chlorobromomethane	128	6.450	6.457	-0.007	97	33300	20.0	19.9	
72 sec-Butyl Alcohol	45	6.450	6.457	-0.007	79	67674	300.0	264.6	
79 Tetrahydrofuran	42	6.457	6.464	-0.007	72	40707	40.0	38.4	
78 Chloroform	83	6.621	6.621	0.000	95	123242	20.0	18.8	
81 1,1,1-Trichloroethane	97	6.807	6.807	0.000	98	107967	20.0	19.3	
82 Cyclohexane	56	6.886	6.886	0.000	94	99564	20.0	18.4	
84 Carbon tetrachloride	117	7.000	7.000	0.000	98	99217	20.0	18.8	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	94	80759	20.0	18.5	
87 Benzene	78	7.250	7.257	-0.007	97	259504	20.0	20.3	
85 1,2-Dichloroethane	62	7.336	7.336	0.000	98	104965	20.0	19.8	
80 Isobutyl alcohol	41	7.644	7.651	-0.007	83	76138	500.0	485.4	
35 n-Heptane	43	7.644	7.651	-0.007	92	105372	20.0	19.1	
89 Trichloroethene	95	8.037	8.044	-0.007	95	58257	20.0	19.3	
90 2-Pentanone	43	8.251	8.258	-0.007	98	123821	40.0	35.4	
93 Methylcyclohexane	55	8.287	8.294	-0.007	93	93267	20.0	19.8	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	93	67758	20.0	19.6	
94 1,4-Dioxane	88	8.409	8.416	-0.007	39	12664	400.0	438.0	
95 Dibromomethane	93	8.423	8.423	0.000	94	41546	20.0	20.2	
96 Dichlorobromomethane	83	8.623	8.623	0.000	99	84241	20.0	19.3	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	93	20536	20.0	15.3	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	92	83387	20.0	17.7	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	98	258900	80.0	78.7	
101 Toluene	91	9.410	9.410	0.000	97	255277	20.0	20.5	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	97	80053	20.0	17.7	
102 Ethyl methacrylate	69	9.717	9.717	0.000	90	59759	20.0	17.0	
104 1,1,2-Trichloroethane	97	9.846	9.846	0.000	95	53182	20.0	20.6	
107 Tetrachloroethene	164	9.917	9.917	0.000	97	54962	20.0	19.8	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	95	92791	20.0	20.0	
105 2-Hexanone	43	10.060	10.060	0.000	98	184807	80.0	69.4	
108 Chlorodibromomethane	129	10.211	10.210	0.001	90	59193	20.0	19.3	
110 Ethylene Dibromide	107	10.318	10.318	0.000	99	51520	20.0	20.4	
111 1-Chlorohexane	91	10.775	10.775	0.000	86	37380	10.0	8.89	
112 Chlorobenzene	112	10.783	10.790	-0.007	94	179087	20.0	19.4	
113 1,1,1,2-Tetrachloroethane	131	10.876	10.875	0.001	88	65126	20.0	18.9	
114 Ethylbenzene	106	10.883	10.883	0.000	98	84716	20.0	19.4	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	101072	20.0	19.4	
117 o-Xylene	106	11.369	11.362	0.007	97	90326	20.0	17.4	
116 Styrene	104	11.383	11.383	0.000	99	177534	20.0	19.5	
118 Bromoform	173	11.555	11.555	0.000	94	36876	20.0	18.6	
119 Isopropylbenzene	105	11.705	11.705	0.000	97	249633	20.0	17.5	
121 Cyclohexanone	55	11.798	11.791	0.007	95	94898	800.0	706.1	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	97	74678	20.0	18.9	
125 Bromobenzene	156	11.998	11.998	0.000	93	76436	20.0	20.0	
123 trans-1,4-Dichloro-2-buten	53	12.027	12.027	0.000	82	22454	20.0	18.7	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	89	25037	20.0	20.8	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	80250	20.0	19.6	
128 2-Chlorotoluene	126	12.177	12.170	0.007	95	69053	20.0	18.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	94	239463	20.0	19.2	
129 4-Chlorotoluene	126	12.277	12.277	0.000	98	76758	20.0	20.2	
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	197647	20.0	18.4	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	257128	20.0	19.9	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	66417	20.0	19.2	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	98	152654	20.0	20.2	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	281831	20.0	19.6	
136 1,4-Dichlorobenzene	146	12.842	12.835	0.007	94	159996	20.0	18.8	
137 n-Butylbenzene	91	13.064	13.063	0.001	98	254478	20.0	19.2	
138 1,2-Dichlorobenzene	146	13.085	13.078	0.007	97	153841	20.0	20.2	
139 1,2-Dibromo-3-Chloropropan	157	13.586	13.578	0.008	77	14505	20.0	18.7	
141 1,2,4-Trichlorobenzene	180	14.115	14.107	0.008	93	88147	20.0	15.9	
142 Hexachlorobutadiene	225	14.208	14.200	0.008	97	69170	20.0	19.2	
143 Naphthalene	128	14.308	14.293	0.015	98	190036	20.0	17.7	
144 1,2,3-Trichlorobenzene	180	14.458	14.451	0.007	94	106439	20.0	19.4	
S 151 1,2-Dichloroethene, Total	96				0		40.0	40.0	
S 148 1,3-Dichloropropene, Total	1				0		40.0	35.4	
S 146 Xylenes, Total (URS)	1				0		40.0	36.9	
S 147 Total BTEX	1				0			97.1	
S 145 Trihalomethanes, Total	1				0		80.0	76.0	
S 149 1,2-Dichloroethene, Total	1				0		40.0	40.0	
S 150 Xylenes, Total	106				0		40.0	36.9	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-2cleve+AVA_00025	Amount Added:	2.50	Units: uL
MV-Gas/Ket A_00060	Amount Added:	2.50	Units: uL
MV-Main A_00030	Amount Added:	2.50	Units: uL
MV-ARCH SS A_00081	Amount Added:	0.40	Units: uL

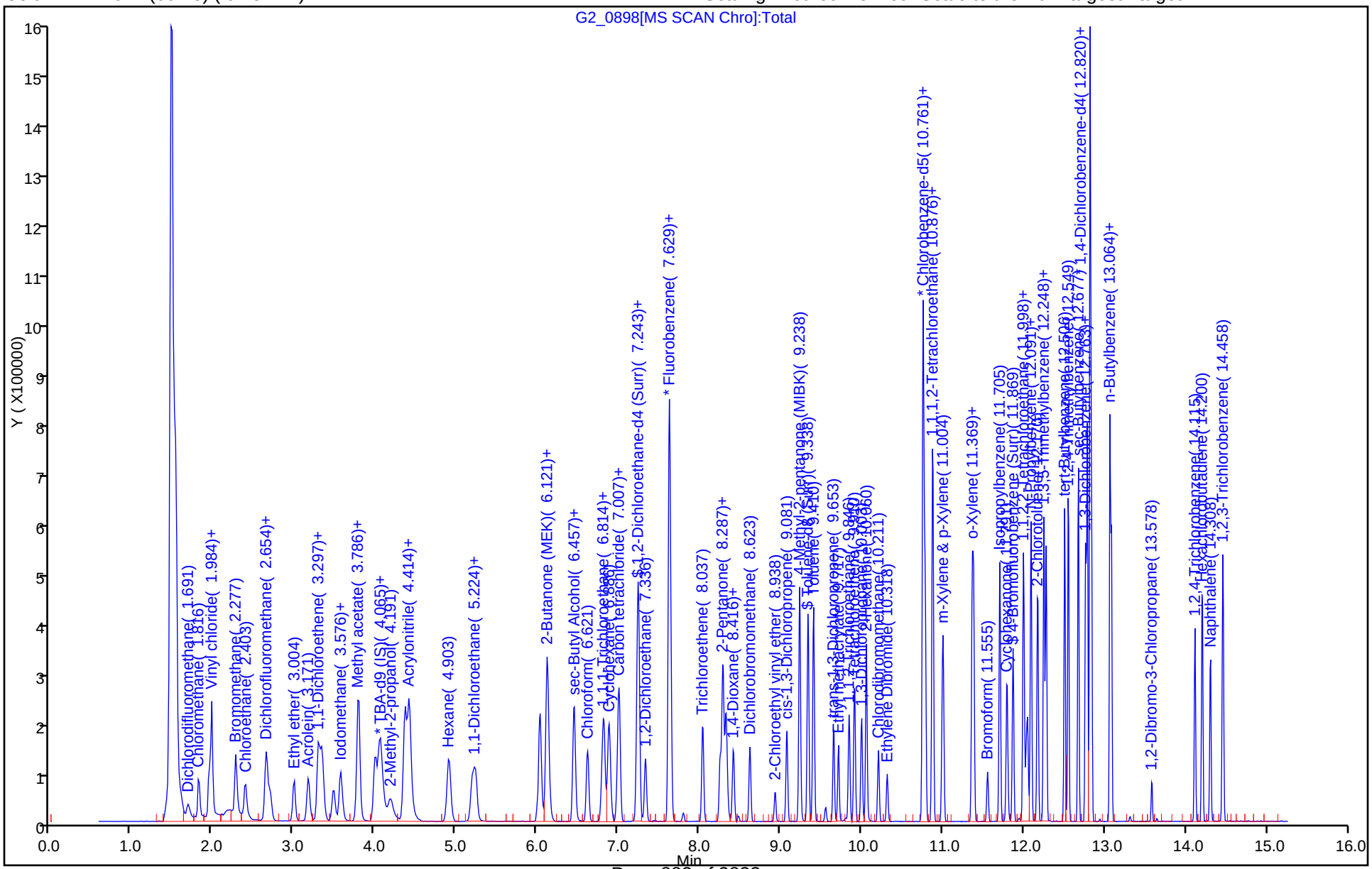
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0898.D

Injection Date:	12-Jun-2017 19:32:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD020			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Denver

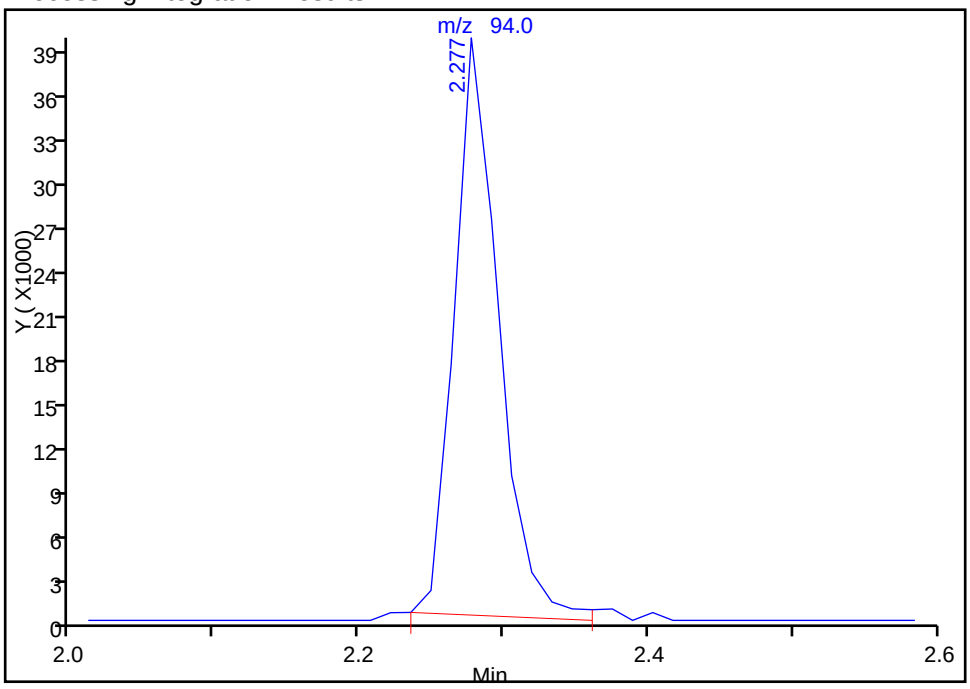
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Injection Date: 12-Jun-2017 19:32:30 Instrument ID: VMS_G2
Lims ID: STD020
Client ID:
Operator ID: DUKESA ALS Bottle#: 15 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

39 Bromomethane, CAS: 74-83-9

Signal: 1

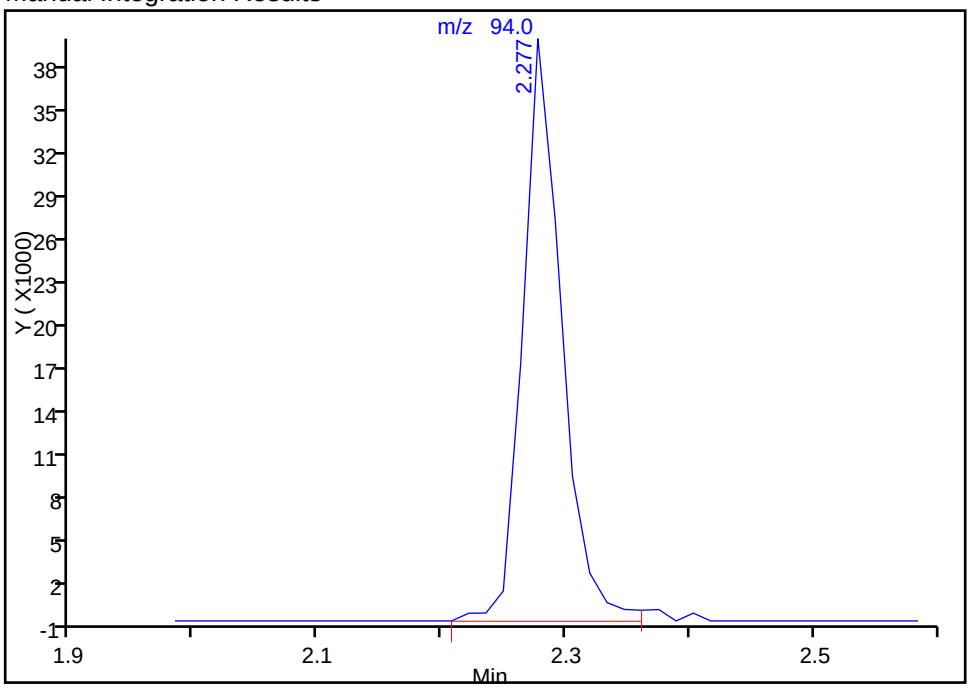
Processing Integration Results

RT: 2.28
Area: 83543
Amount: 17.330840
Amount Units: ug/l



Manual Integration Results

RT: 2.28
Area: 86447
Amount: 17.825881
Amount Units: ug/l



Reviewer: dukesa, 12-Jun-2017 22:10:29
Audit Action: Manually Integrated Audit Reason: Baseline

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0899.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 12-Jun-2017 19:53:30 ALS Bottle#: 16 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 13-Jun-2017 15:51:22 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: dukesa Date: 12-Jun-2017 21:07:48

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	94	368622	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	626638	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	86	148066	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	284324	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.828	0.000	93	189573	50.0	51.1	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	95	262702	50.0	52.2	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	653404	50.0	51.6	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	249830	50.0	53.9	
32 Dichlorodifluoromethane	85	1.705	1.705	0.000	99	208527	50.0	53.7	M
34 Chloromethane	50	1.844	1.844	0.000	99	291215	50.0	50.4	
37 Vinyl chloride	62	1.970	1.970	0.000	98	335040	50.0	53.5	
22 Butadiene	54	1.998	1.998	0.000	89	297146	NC	NC	
39 Bromomethane	94	2.291	2.291	0.000	90	254176	50.0	48.1	
40 Chloroethane	64	2.403	2.403	0.000	99	197142	50.0	50.3	
41 Dichlorofluoromethane	67	2.668	2.668	0.000	98	415813	50.0	51.6	
43 Trichlorofluoromethane	101	2.710	2.710	0.000	99	342255	50.0	53.5	
45 Ethyl ether	59	3.003	3.003	0.000	94	169430	50.0	53.4	
48 Acrolein	56	3.185	3.185	0.000	99	353831	499.9	590.2	
53 1,1-Dichloroethene	96	3.311	3.311	0.000	94	185734	50.0	57.5	
52 1,1,2-Trichloro-1,2,2-trif	151	3.353	3.353	0.000	95	176788	50.0	54.5	
50 Acetone	43	3.367	3.367	0.000	98	305091	200.0	212.2	
55 Iodomethane	142	3.492	3.492	0.000	99	323076	50.0	56.1	
58 Carbon disulfide	76	3.590	3.590	0.000	100	661153	50.0	54.1	
56 Methyl acetate	43	3.800	3.800	0.000	98	815337	250.0	280.6	
57 3-Chloro-1-propene	41	3.814	3.814	0.000	88	345764	50.0	59.3	
60 Methylene Chloride	84	4.009	4.009	0.000	97	218233	50.0	52.6	
59 2-Methyl-2-propanol	59	4.205	4.205	0.000	94	241704	500.0	568.7	
61 Acrylonitrile	53	4.386	4.386	0.000	98	781674	500.0	579.6	
62 Methyl tert-butyl ether	73	4.428	4.428	0.000	98	559489	50.0	54.3	
63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	95	201601	50.0	56.7	
64 Hexane	57	4.917	4.917	0.000	95	307663	50.0	54.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 1,1-Dichloroethane	63	5.210	5.210	0.000	97	383869	50.0	54.2	
65 Vinyl acetate	43	5.252	5.252	0.000	97	756016	100.0	111.2	
75 2,2-Dichloropropane	77	6.135	6.135	0.000	90	313562	50.0	52.9	
71 2-Butanone (MEK)	43	6.128	6.128	0.000	98	424354	200.0	228.5	
74 cis-1,2-Dichloroethene	96	6.128	6.128	0.000	84	209293	50.0	54.5	
72 sec-Butyl Alcohol	45	6.457	6.457	0.000	97	251811	750.0	822.6	
77 Chlorobromomethane	128	6.457	6.457	0.000	97	99089	50.0	54.4	
79 Tetrahydrofuran	42	6.464	6.464	0.000	93	138206	100.0	112.9	
78 Chloroform	83	6.628	6.628	0.000	95	367357	50.0	51.5	
81 1,1,1-Trichloroethane	97	6.814	6.814	0.000	98	324131	50.0	53.2	
82 Cyclohexane	56	6.893	6.893	0.000	94	339151	50.0	54.5	
84 Carbon tetrachloride	117	7.007	7.007	0.000	96	302240	50.0	52.5	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	93	269377	50.0	55.1	
87 Benzene	78	7.258	7.258	0.000	97	771062	50.0	55.4	
85 1,2-Dichloroethane	62	7.336	7.336	0.000	98	298201	50.0	51.7	
35 n-Heptane	43	7.651	7.651	0.000	94	339155	50.0	56.4	
80 Isobutyl alcohol	41	7.651	7.651	0.000	86	226170	1250.0	1323.9	
89 Trichloroethene	95	8.044	8.044	0.000	97	188484	50.0	57.3	
90 2-Pentanone	43	8.259	8.259	0.000	98	412124	100.0	123.3	
93 Methylcyclohexane	55	8.294	8.294	0.000	93	299655	50.0	57.4	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	93	199513	50.0	53.1	
94 1,4-Dioxane	88	8.416	8.416	0.000	97	35661	1000.0	1132.5	
95 Dibromomethane	93	8.423	8.423	0.000	96	122647	50.0	54.8	
96 Dichlorobromomethane	83	8.623	8.623	0.000	98	256502	50.0	54.0	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	94	92119	50.0	49.8	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	93	283502	50.0	51.4	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	98	871552	200.0	237.3	
101 Toluene	91	9.410	9.410	0.000	97	785137	50.0	57.9	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	96	270250	50.0	52.4	
102 Ethyl methacrylate	69	9.717	9.717	0.000	91	222192	50.0	52.3	
104 1,1,2-Trichloroethane	97	9.846	9.846	0.000	95	158059	50.0	56.2	
107 Tetrachloroethene	164	9.917	9.917	0.000	97	168984	50.0	54.9	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	94	287632	50.0	56.1	
105 2-Hexanone	43	10.060	10.060	0.000	97	642134	200.0	210.9	
108 Chlorodibromomethane	129	10.211	10.211	0.000	90	187521	50.0	55.3	
110 Ethylene Dibromide	107	10.318	10.318	0.000	98	158002	50.0	56.5	
111 1-Chlorohexane	91	10.775	10.775	0.000	94	125887	25.0	27.0	
112 Chlorobenzene	112	10.790	10.790	0.000	93	535062	50.0	52.4	
113 1,1,1,2-Tetrachloroethane	131	10.876	10.876	0.000	91	201542	50.0	52.9	
114 Ethylbenzene	106	10.883	10.883	0.000	98	276889	50.0	57.3	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	333120	50.0	55.7	
117 o-Xylene	106	11.369	11.369	0.000	97	322399	50.0	54.0	
116 Styrene	104	11.383	11.383	0.000	99	574580	50.0	55.1	
118 Bromoform	173	11.555	11.555	0.000	96	122070	50.0	55.6	
119 Isopropylbenzene	105	11.705	11.705	0.000	97	883031	50.0	55.0	
121 Cyclohexanone	55	11.791	11.791	0.000	95	314131	2000.0	2034.7	
125 Bromobenzene	156	11.998	11.998	0.000	93	241582	50.0	58.4	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	96	229715	50.0	53.9	
123 trans-1,4-Dichloro-2-buten	53	12.027	12.027	0.000	83	75035	50.0	56.1	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	85	73376	50.0	56.5	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	255771	50.0	55.4	
128 2-Chlorotoluene	126	12.177	12.177	0.000	96	220813	50.0	54.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	94	775378	50.0	56.0	
129 4-Chlorotoluene	126	12.277	12.277	0.000	98	232086	50.0	55.7	
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	682105	50.0	55.3	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	811409	50.0	56.4	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	218168	50.0	55.8	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	97	465016	50.0	56.8	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	929536	50.0	57.1	
136 1,4-Dichlorobenzene	146	12.842	12.842	0.000	98	482948	50.0	52.4	
137 n-Butylbenzene	91	13.064	13.064	0.000	98	857408	50.0	58.7	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	97	457557	50.0	55.6	
139 1,2-Dibromo-3-Chloropropan	157	13.578	13.578	0.000	79	48449	50.0	53.1	
141 1,2,4-Trichlorobenzene	180	14.115	14.115	0.000	93	325853	50.0	52.4	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	97	216711	50.0	55.6	
143 Naphthalene	128	14.300	14.300	0.000	97	750350	50.0	55.1	
144 1,2,3-Trichlorobenzene	180	14.458	14.458	0.000	94	338832	50.0	56.1	
S 151 1,2-Dichloroethene, Total	96				0		100.0	111.2	
S 145 Trihalomethanes, Total	1				0		200.0	216.3	
S 149 1,2-Dichloroethene, Total	1				0		100.0	111.2	
S 150 Xylenes, Total	106				0		100.0	109.7	
S 148 1,3-Dichloropropene, Total	1				0		100.0	103.7	
S 146 Xylenes, Total (URS)	1				0		100.0	109.7	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-2cleve+AVA_00025	Amount Added:	6.25	Units: uL
MV-Gas/Ket A_00060	Amount Added:	6.25	Units: uL
MV-Main A_00030	Amount Added:	6.25	Units: uL
MV-ARCH SS A_00081	Amount Added:	1.00	Units: uL

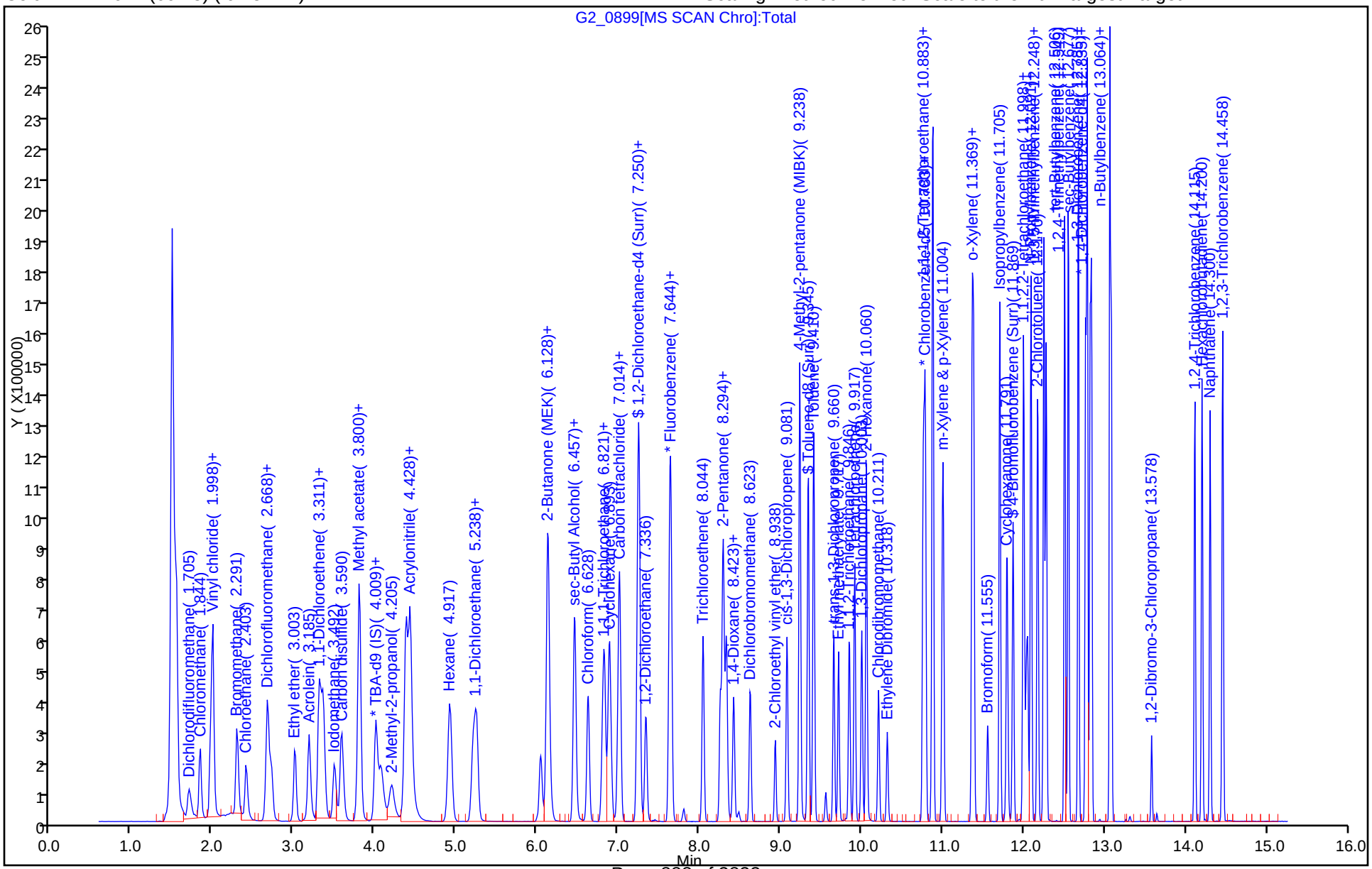
Report Date: 13-Jun-2017 15:51:23 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0899.D

Injection Date:	12-Jun-2017 19:53:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	ICIS			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Denver

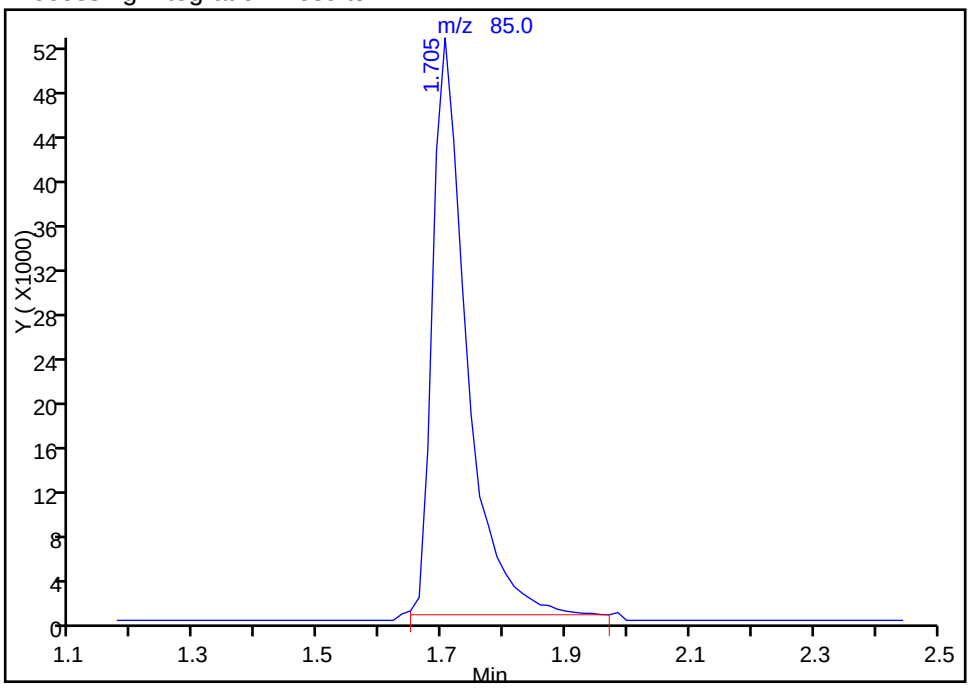
Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0899.D
Injection Date: 12-Jun-2017 19:53:30 Instrument ID: VMS_G2
Lims ID: ICIS
Client ID:
Operator ID: DUKESA ALS Bottle#: 16 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

32 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

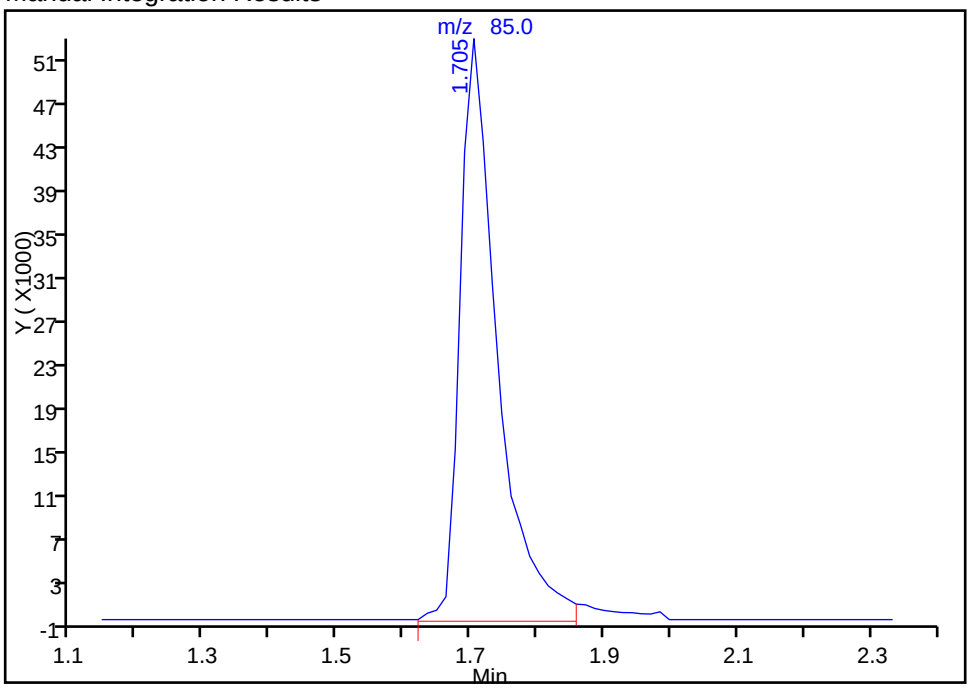
Processing Integration Results

RT: 1.70
Area: 200810
Amount: 59.199709
Amount Units: ug/l



Manual Integration Results

RT: 1.70
Area: 208527
Amount: 53.729349
Amount Units: ug/l



Reviewer: dukesa, 12-Jun-2017 22:11:08
Audit Action: Manually Integrated Audit Reason: Peak Tail

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0900.D
Lims ID: STD100
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 12-Jun-2017 20:14:30 ALS Bottle#: 17 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD100
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 13-Jun-2017 15:51:24 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: dukesa Date: 12-Jun-2017 22:09:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	94	365581	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	696530	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	86	164078	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	308775	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.829	6.828	0.001	93	401659	100.0	100.9	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	530272	100.0	98.3	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	1407586	100.0	100.3	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	532450	100.0	105.7	
32 Dichlorodifluoromethane	85	1.705	1.705	0.000	99	404939	100.0	98.2	M
34 Chloromethane	50	1.844	1.844	0.000	99	605106	100.0	100.9	
37 Vinyl chloride	62	1.970	1.970	0.000	98	706467	100.0	101.4	
22 Butadiene	54	1.998	1.998	0.000	90	638067	NC	NC	
39 Bromomethane	94	2.291	2.291	0.000	89	403791	100.0	68.8	
40 Chloroethane	64	2.403	2.403	0.000	99	361039	100.0	82.8	
41 Dichlorofluoromethane	67	2.668	2.668	0.000	98	845315	100.0	94.4	
43 Trichlorofluoromethane	101	2.710	2.710	0.000	99	674582	100.0	94.8	
45 Ethyl ether	59	3.004	3.003	0.001	95	371306	100.0	104.8	
48 Acrolein	56	3.185	3.185	0.000	99	699267	999.8	1046.0	
53 1,1-Dichloroethene	96	3.311	3.311	0.000	94	385237	100.0	107.4	
52 1,1,2-Trichloro-1,2,2-trif	151	3.339	3.353	-0.014	94	351842	100.0	97.6	
50 Acetone	43	3.367	3.367	0.000	98	579651	400.0	392.0	
55 Iodomethane	142	3.492	3.492	0.000	99	683975	100.0	106.9	
58 Carbon disulfide	76	3.576	3.590	-0.014	100	1347886	100.0	99.2	
56 Methyl acetate	43	3.800	3.800	0.000	98	1600499	500.0	495.5	
57 3-Chloro-1-propene	41	3.800	3.814	-0.014	89	720873	100.0	111.2	
60 Methylene Chloride	84	4.009	4.009	0.000	97	441681	100.0	98.5	
59 2-Methyl-2-propanol	59	4.205	4.205	0.000	95	478304	1000.0	1008.4	
61 Acrylonitrile	53	4.372	4.386	-0.014	98	1533027	1000.0	1022.7	
63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	96	412042	100.0	104.2	
62 Methyl tert-butyl ether	73	4.428	4.428	0.000	97	1214609	100.0	105.7	
64 Hexane	57	4.917	4.917	0.000	95	653058	100.0	102.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 1,1-Dichloroethane	63	5.210	5.210	0.000	97	785707	100.0	99.8	
65 Vinyl acetate	43	5.252	5.252	0.000	97	1612927	200.0	211.6	
74 cis-1,2-Dichloroethene	96	6.128	6.128	0.000	83	442776	100.0	103.7	
71 2-Butanone (MEK)	43	6.128	6.128	0.000	99	828602	400.0	401.3	
75 2,2-Dichloropropane	77	6.135	6.135	0.000	82	640885	100.0	97.2	
77 Chlorobromomethane	128	6.457	6.457	0.000	96	211925	100.0	104.7	
72 sec-Butyl Alcohol	45	6.457	6.457	0.000	98	535074	1500.0	1541.8	
79 Tetrahydrofuran	42	6.464	6.464	0.000	90	273438	200.0	198.4	
78 Chloroform	83	6.628	6.628	0.000	94	755029	100.0	95.1	
81 1,1,1-Trichloroethane	97	6.814	6.814	0.000	98	656121	100.0	96.9	
82 Cyclohexane	56	6.886	6.893	-0.007	93	718604	100.0	102.7	
84 Carbon tetrachloride	117	7.000	7.007	-0.007	96	606526	100.0	94.8	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	95	562717	100.0	102.9	
87 Benzene	78	7.258	7.258	0.000	98	1583249	100.0	102.4	
85 1,2-Dichloroethane	62	7.336	7.336	0.000	98	620718	100.0	96.8	
80 Isobutyl alcohol	41	7.651	7.651	0.000	85	440472	2500.0	2319.5	
35 n-Heptane	43	7.651	7.651	0.000	93	680006	100.0	101.8	
89 Trichloroethene	95	8.044	8.044	0.000	97	390463	100.0	106.8	
90 2-Pentanone	43	8.259	8.259	0.000	98	746236	200.0	205.5	
93 Methylcyclohexane	55	8.294	8.294	0.000	92	603850	100.0	103.6	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	93	418670	100.0	100.2	
94 1,4-Dioxane	88	8.416	8.416	0.000	97	76784	2000.0	2193.7	
95 Dibromomethane	93	8.423	8.423	0.000	96	253712	100.0	101.9	
96 Dichlorobromomethane	83	8.623	8.623	0.000	99	541719	100.0	102.6	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	92	221896	100.0	102.9	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	93	637222	100.0	102.7	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	97	1755226	400.0	427.6	
101 Toluene	91	9.410	9.410	0.000	98	1617191	100.0	107.3	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	96	599835	100.0	103.4	
102 Ethyl methacrylate	69	9.717	9.717	0.000	91	498077	100.0	103.7	
104 1,1,2-Trichloroethane	97	9.846	9.846	0.000	94	332291	100.0	106.4	
107 Tetrachloroethene	164	9.917	9.917	0.000	97	338677	100.0	99.2	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	94	613463	100.0	108.0	
105 2-Hexanone	43	10.060	10.060	0.000	97	1266989	400.0	396.1	
108 Chlorodibromomethane	129	10.211	10.211	0.000	90	407246	100.0	108.3	
110 Ethylene Dibromide	107	10.318	10.318	0.000	99	339370	100.0	109.5	
111 1-Chlorohexane	91	10.775	10.775	0.000	96	266556	50.0	51.6	
112 Chlorobenzene	112	10.790	10.790	0.000	95	1098280	100.0	97.1	
113 1,1,1,2-Tetrachloroethane	131	10.876	10.876	0.000	93	430912	100.0	102.0	
114 Ethylbenzene	106	10.883	10.883	0.000	98	580402	100.0	108.4	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	688844	100.0	103.0	
117 o-Xylene	106	11.362	11.369	-0.007	97	686460	100.0	102.8	
116 Styrene	104	11.383	11.383	0.000	99	1190526	100.0	102.2	
118 Bromoform	173	11.555	11.555	0.000	96	268935	100.0	110.5	
119 Isopropylbenzene	105	11.705	11.705	0.000	96	1830845	100.0	104.1	
121 Cyclohexanone	55	11.798	11.791	0.007	95	643090	4000.0	4022.1	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	96	472706	100.0	102.1	
125 Bromobenzene	156	11.998	11.998	0.000	93	499866	100.0	111.2	
123 trans-1,4-Dichloro-2-buten	53	12.034	12.027	0.007	87	154721	100.0	105.7	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	86	147189	100.0	104.4	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	515507	100.0	101.7	
128 2-Chlorotoluene	126	12.177	12.177	0.000	96	452374	100.0	102.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	96	1552880	100.0	102.5	
129 4-Chlorotoluene	126	12.277	12.277	0.000	98	463749	100.0	102.0	
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	1400449	100.0	103.2	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	1611691	100.0	102.5	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	440269	100.0	102.7	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	98	943059	100.0	106.1	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	1826869	100.0	102.4	
136 1,4-Dichlorobenzene	146	12.842	12.842	0.000	95	957434	100.0	95.7	
137 n-Butylbenzene	91	13.064	13.064	0.000	98	1640454	100.0	102.9	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	98	930070	100.0	104.1	
139 1,2-Dibromo-3-Chloropropan	157	13.578	13.578	0.000	82	100369	100.0	99.2	
141 1,2,4-Trichlorobenzene	180	14.115	14.115	0.000	94	679926	100.0	100.0	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	97	411944	100.0	97.4	
143 Naphthalene	128	14.301	14.300	0.001	97	1565268	100.0	102.5	
144 1,2,3-Trichlorobenzene	180	14.458	14.458	0.000	95	664094	100.0	100.8	
S 151 1,2-Dichloroethene, Total	96				0		200.0	207.9	
S 148 1,3-Dichloropropene, Total	1				0		200.0	206.1	
S 146 Xylenes, Total (URS)	1				0		200.0	205.8	
S 147 Total BTEX	1				0			524.0	
S 145 Trihalomethanes, Total	1				0		400.0	416.5	
S 149 1,2-Dichloroethene, Total	1				0		200.0	207.9	
S 150 Xylenes, Total	106				0		200.0	205.8	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-2cleve+AVA_00025	Amount Added:	12.50	Units: uL
MV-Gas/Ket A_00060	Amount Added:	12.50	Units: uL
MV-Main A_00030	Amount Added:	12.50	Units: uL
MV-ARCH SS A_00081	Amount Added:	2.00	Units: uL

Report Date: 13-Jun-2017 15:51:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0900.D

Injection Date: 12-Jun-2017 20:14:30 Instrument ID: VMS_G2 Operator ID: DUKESA

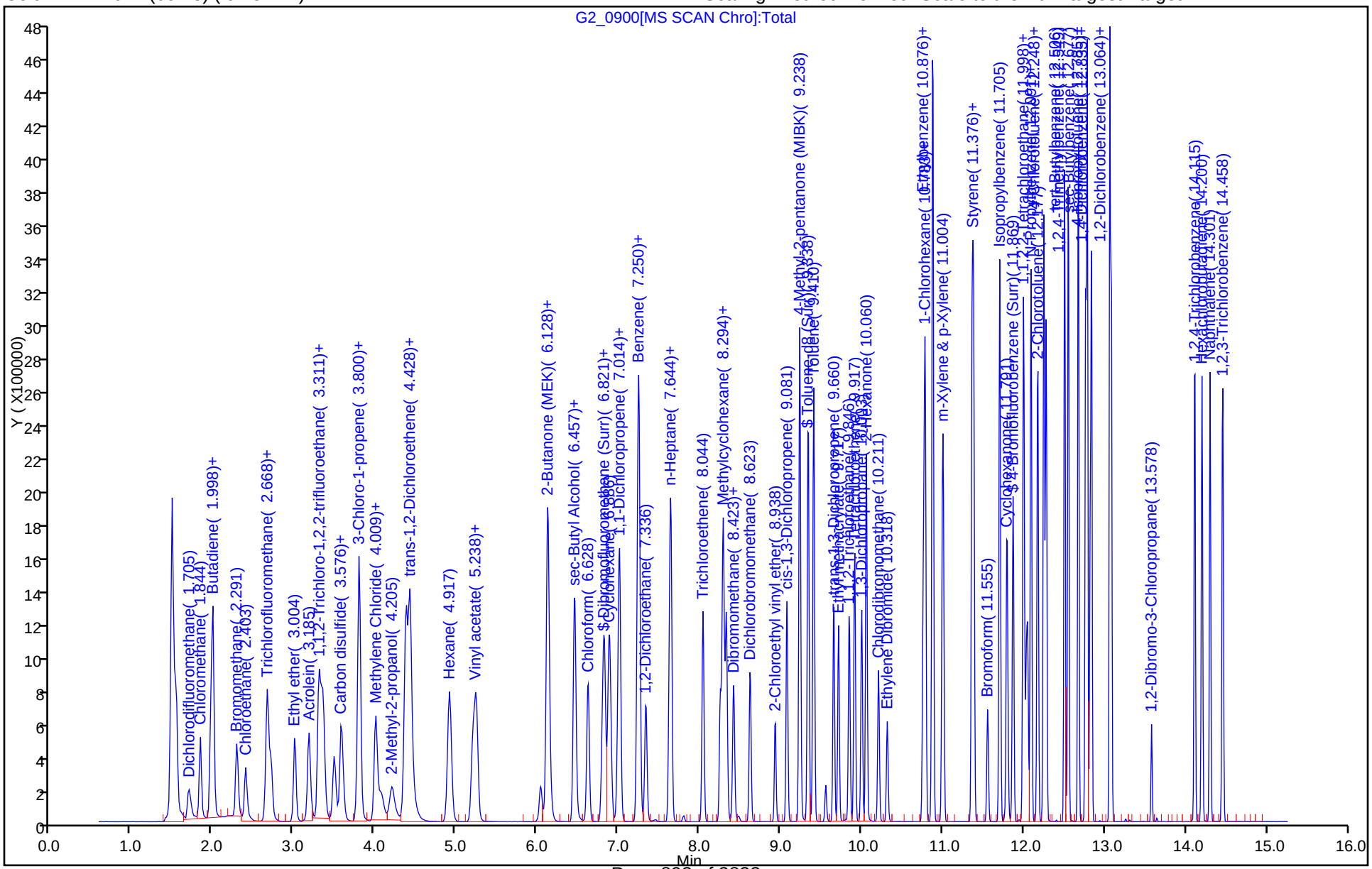
Lims ID: STD100 Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 17

Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver

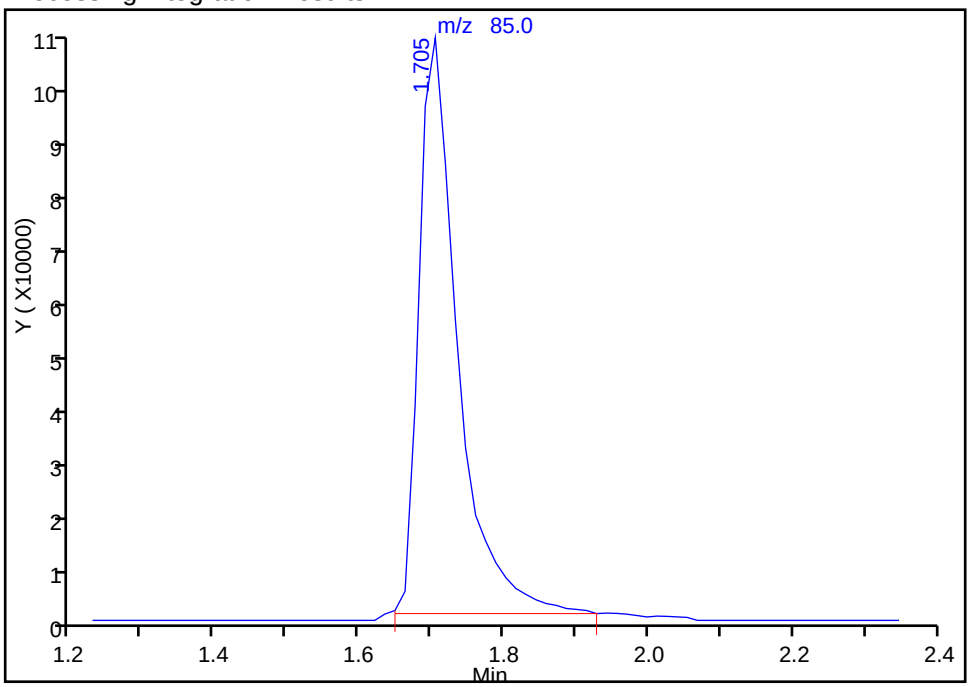
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Injection Date: 12-Jun-2017 20:14:30 Instrument ID: VMS_G2
Lims ID: STD100
Client ID:
Operator ID: DUKESA ALS Bottle#: 17 Worklist Smp#: 10
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

32 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

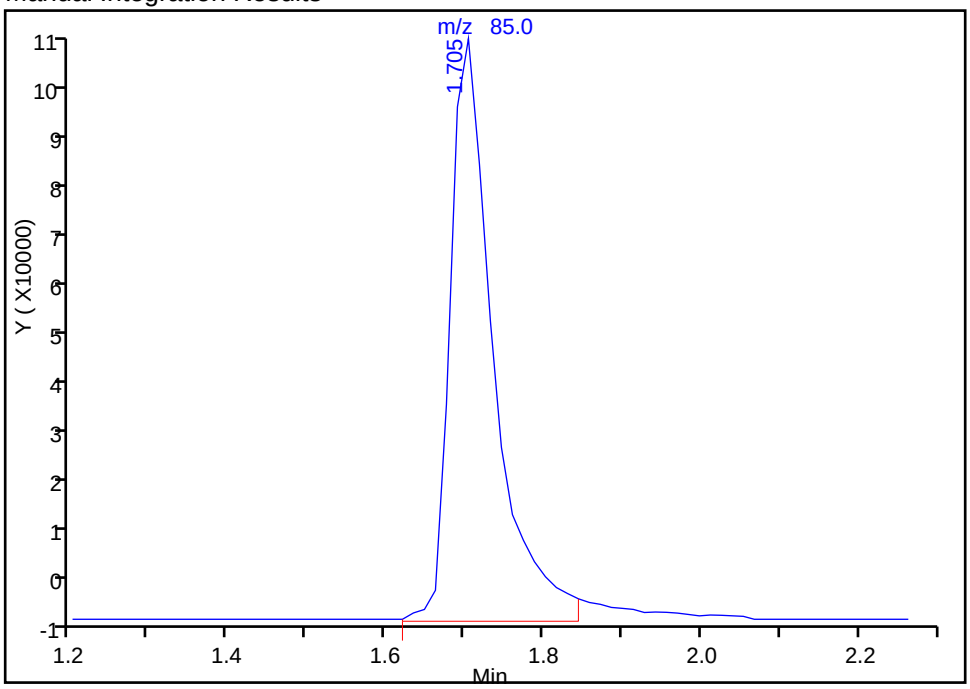
Processing Integration Results

RT: 1.70
Area: 388105
Amount: 101.9885
Amount Units: ug/l



Manual Integration Results

RT: 1.70
Area: 404939
Amount: 98.152437
Amount Units: ug/l



Reviewer: dukesa, 12-Jun-2017 22:11:37
Audit Action: Manually Integrated Audit Reason: Peak Tail

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D
Lims ID: STD200
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 12-Jun-2017 20:35:30 ALS Bottle#: 18 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: STD200
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 13-Jun-2017 15:51:26 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: dukesa Date: 12-Jun-2017 22:10:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	94	401237	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	798837	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	188667	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	94	351680	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.828	0.000	93	852825	200.0	189.9	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	98	1096520	200.0	180.5	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	3040001	200.0	188.4	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	92	1142487	200.0	199.2	
32 Dichlorodifluoromethane	85	1.691	1.705	-0.014	99	811168	200.0	200.4	M
34 Chloromethane	50	1.844	1.844	0.000	99	1144457	200.0	199.6	
37 Vinyl chloride	62	1.970	1.970	0.000	98	1320957	200.0	165.4	
22 Butadiene	54	1.998	1.998	0.000	90	1208688	NC	NC	
39 Bromomethane	94	2.277	2.291	-0.014	90	519314	200.0	77.1	
40 Chloroethane	64	2.389	2.403	-0.014	100	608343	200.0	121.7	
41 Dichlorofluoromethane	67	2.654	2.668	-0.014	97	1705737	200.0	166.1	
43 Trichlorofluoromethane	101	2.696	2.710	-0.014	98	1368265	200.0	167.7	
45 Ethyl ether	59	3.003	3.003	0.000	94	790914	200.0	194.3	
48 Acrolein	56	3.185	3.185	0.000	99	1443299	1999.7	1879.0	
53 1,1-Dichloroethene	96	3.297	3.311	-0.014	96	825953	200.0	200.7	
52 1,1,2-Trichloro-1,2,2-trif	151	3.339	3.353	-0.014	94	744001	200.0	180.0	
50 Acetone	43	3.366	3.367	-0.001	99	1118702	800.0	802.0	
55 Iodomethane	142	3.492	3.492	0.000	100	1498007	200.0	204.2	
58 Carbon disulfide	76	3.576	3.590	-0.014	100	2917642	200.0	187.2	
56 Methyl acetate	43	3.799	3.800	-0.001	98	3303950	1000.0	891.8	
57 3-Chloro-1-propene	41	3.799	3.814	-0.015	90	1533009	200.0	206.2	
60 Methylene Chloride	84	3.995	4.009	-0.014	96	939726	200.0	185.6	
59 2-Methyl-2-propanol	59	4.204	4.205	-0.001	96	983513	2000.0	1803.9	
61 Acrylonitrile	53	4.372	4.386	-0.014	98	3223872	2000.0	1875.2	
62 Methyl tert-butyl ether	73	4.428	4.428	0.000	96	2668721	200.0	202.1	
63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	96	893043	200.0	196.9	
64 Hexane	57	4.917	4.917	0.000	94	1445795	200.0	197.4	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 1,1-Dichloroethane	63	5.196	5.210	-0.014	96	1679793	200.0	186.0	
65 Vinyl acetate	43	5.252	5.252	0.000	97	3421216	400.0	389.7	
71 2-Butanone (MEK)	43	6.128	6.128	0.000	99	1678449	800.0	708.8	
74 cis-1,2-Dichloroethene	96	6.128	6.128	0.000	83	969256	200.0	197.9	
75 2,2-Dichloropropane	77	6.128	6.135	-0.007	72	1371906	200.0	181.5	
72 sec-Butyl Alcohol	45	6.457	6.457	0.000	98	1194444	3000.0	2969.0	
77 Chlorobromomethane	128	6.457	6.457	0.000	97	455934	200.0	196.4	
79 Tetrahydrofuran	42	6.464	6.464	0.000	90	572674	400.0	359.7	
78 Chloroform	83	6.621	6.628	-0.007	94	1587669	200.0	174.4	
81 1,1,1-Trichloroethane	97	6.807	6.814	-0.007	98	1397272	200.0	179.9	
82 Cyclohexane	56	6.886	6.893	-0.007	93	1578365	200.0	195.4	
84 Carbon tetrachloride	117	7.000	7.007	-0.007	96	1287207	200.0	175.4	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	95	1226686	200.0	194.9	
87 Benzene	78	7.257	7.258	-0.001	98	3447816	200.0	194.4	
85 1,2-Dichloroethane	62	7.336	7.336	0.000	98	1294567	200.0	176.1	
35 n-Heptane	43	7.651	7.651	0.000	93	1483249	200.0	193.6	
80 Isobutyl alcohol	41	7.651	7.651	0.000	85	927700	5000.0	4259.7	
89 Trichloroethene	95	8.044	8.044	0.000	97	862356	200.0	205.7	
90 2-Pentanone	43	8.258	8.259	-0.001	98	1608016	400.0	392.5	
93 Methylcyclohexane	55	8.294	8.294	0.000	92	1292863	200.0	192.9	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	95	919781	200.0	191.9	
94 1,4-Dioxane	88	8.416	8.416	0.000	98	161015	4000.0	4011.1	
95 Dibromomethane	93	8.423	8.423	0.000	96	543971	200.0	190.5	
96 Dichlorobromomethane	83	8.623	8.623	0.000	99	1160347	200.0	191.5	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	93	502373	200.0	199.1	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	94	1431465	200.0	199.3	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	97	3506366	800.0	742.7	
101 Toluene	91	9.410	9.410	0.000	98	3511604	200.0	203.2	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	95	1319931	200.0	197.3	
102 Ethyl methacrylate	69	9.717	9.717	0.000	90	1107082	200.0	198.6	
104 1,1,2-Trichloroethane	97	9.853	9.846	0.007	93	713397	200.0	199.1	
107 Tetrachloroethene	164	9.917	9.917	0.000	98	746976	200.0	190.4	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	93	1322035	200.0	202.5	
105 2-Hexanone	43	10.060	10.060	0.000	96	2492035	800.0	800.5	
108 Chlorodibromomethane	129	10.210	10.211	-0.001	90	883265	200.0	204.3	
110 Ethylene Dibromide	107	10.318	10.318	0.000	98	731286	200.0	205.2	
111 1-Chlorohexane	91	10.775	10.775	0.000	97	583233	100.0	98.3	
112 Chlorobenzene	112	10.790	10.790	0.000	94	2362991	200.0	181.7	
113 1,1,1,2-Tetrachloroethane	131	10.875	10.876	-0.001	94	948319	200.0	195.2	
114 Ethylbenzene	106	10.883	10.883	0.000	97	1296218	200.0	210.6	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	1513520	200.0	195.8	
117 o-Xylene	106	11.369	11.369	0.000	97	1528285	200.0	198.1	
116 Styrene	104	11.383	11.383	0.000	99	2626798	200.0	195.2	
118 Bromoform	173	11.555	11.555	0.000	97	597141	200.0	213.3	
119 Isopropylbenzene	105	11.705	11.705	0.000	96	3945510	200.0	196.0	
121 Cyclohexanone	55	11.798	11.791	0.007	95	1203995	8000.0	7987.3	
125 Bromobenzene	156	12.005	11.998	0.007	92	1090578	200.0	213.1	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	96	1012235	200.0	192.0	
123 trans-1,4-Dichloro-2-buten	53	12.034	12.027	0.007	76	318578	200.0	190.4	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	85	307242	200.0	191.4	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	1127692	200.0	194.2	
128 2-Chlorotoluene	126	12.177	12.177	0.000	97	992366	200.0	195.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	95	3358753	200.0	194.0	
129 4-Chlorotoluene	126	12.277	12.277	0.000	98	1019247	200.0	196.3	
130 tert-Butylbenzene	119	12.506	12.506	0.000	93	3032460	200.0	194.7	
131 1,2,4-Trimethylbenzene	105	12.556	12.549	0.007	97	3464574	200.0	192.7	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	964506	200.0	196.3	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	98	2053214	200.0	202.9	
133 4-Isopropyltoluene	119	12.785	12.785	-0.001	97	3949898	200.0	193.2	
136 1,4-Dichlorobenzene	146	12.842	12.842	0.000	95	2085081	200.0	183.0	
137 n-Butylbenzene	91	13.063	13.064	-0.001	97	3479015	200.0	191.0	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	98	2020388	200.0	198.5	
139 1,2-Dibromo-3-Chloropropan	157	13.578	13.578	0.000	85	230925	200.0	198.0	
141 1,2,4-Trichlorobenzene	180	14.114	14.115	-0.001	94	1587307	200.0	204.1	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	96	900884	200.0	187.0	
143 Naphthalene	128	14.300	14.300	0.000	97	3451511	200.0	195.1	
144 1,2,3-Trichlorobenzene	180	14.458	14.458	0.000	95	1470281	200.0	195.5	
S 151 1,2-Dichloroethene, Total	96				0		400.0	394.8	
S 145 Trihalomethanes, Total	1				0		800.0	783.6	
S 149 1,2-Dichloroethene, Total	1				0		400.0	394.8	
S 150 Xylenes, Total	106				0		400.0	393.9	
S 148 1,3-Dichloropropene, Total	1				0		400.0	396.6	
S 146 Xylenes, Total (URS)	1				0		400.0	393.9	
S 147 Total BTEX	1				0			1002.2	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

M - Manually Integrated

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-2cleve+AVA_00025	Amount Added:	25.00	Units: uL
MV-Gas/Ket A_00060	Amount Added:	25.00	Units: uL
MV-Main A_00030	Amount Added:	25.00	Units: uL
MV-ARCH SS A_00081	Amount Added:	4.00	Units: uL

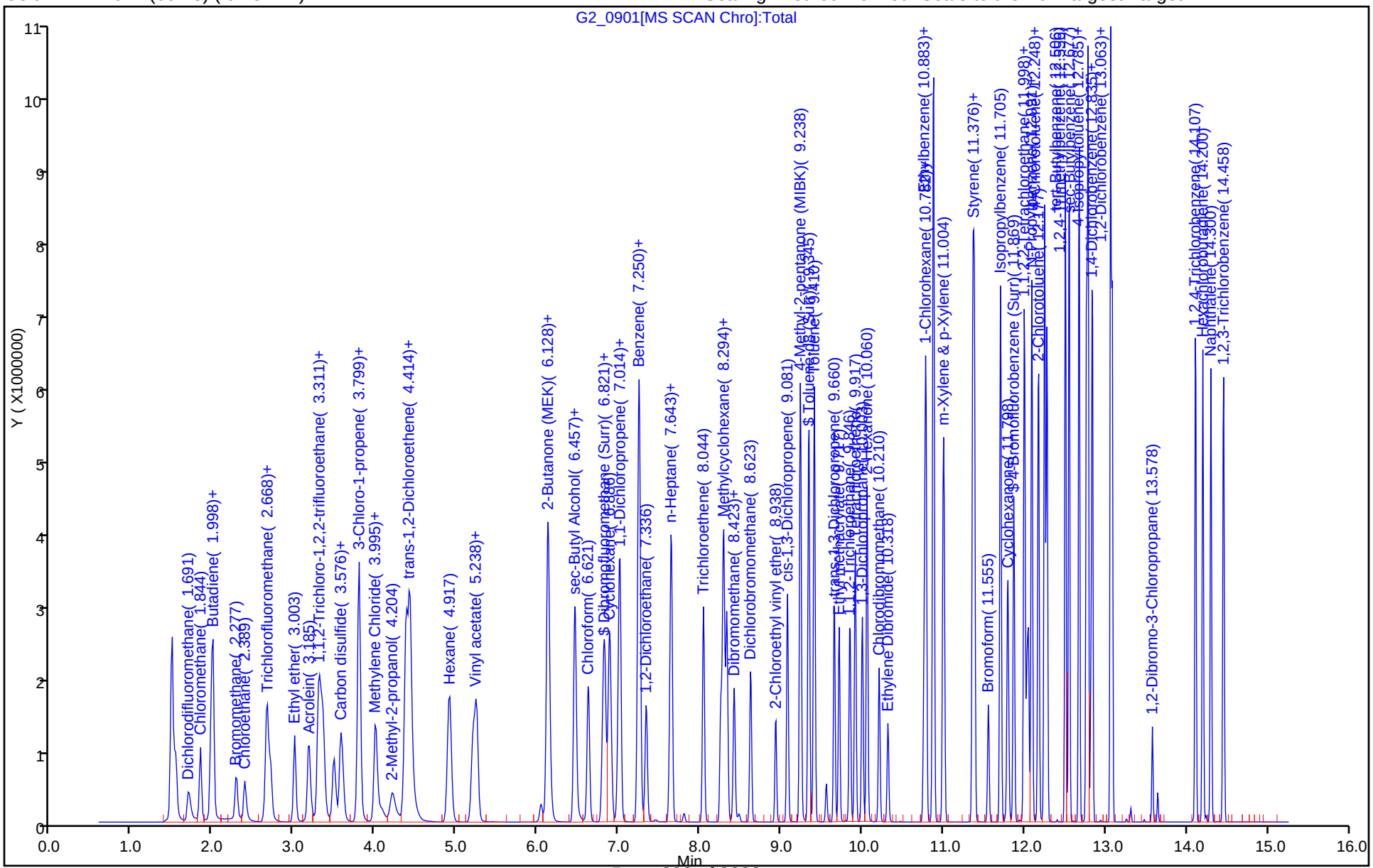
Report Date: 13-Jun-2017 15:51:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Injection Date:	12-Jun-2017 20:35:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	STD200			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Denver

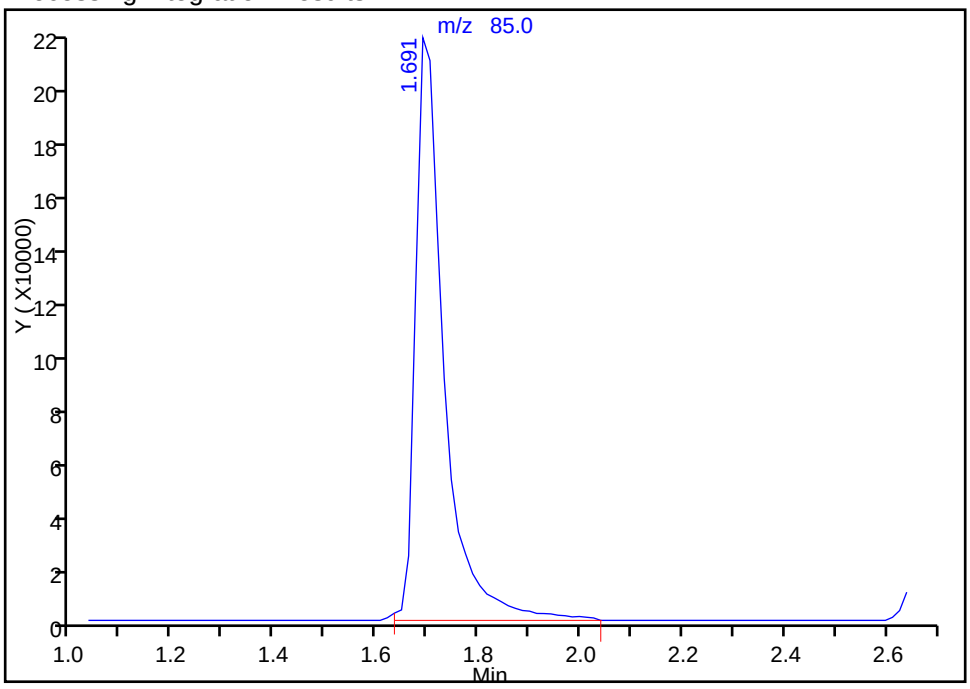
Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D
Injection Date: 12-Jun-2017 20:35:30 Instrument ID: VMS_G2
Lims ID: STD200
Client ID:
Operator ID: DUKESA ALS Bottle#: 18 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

32 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

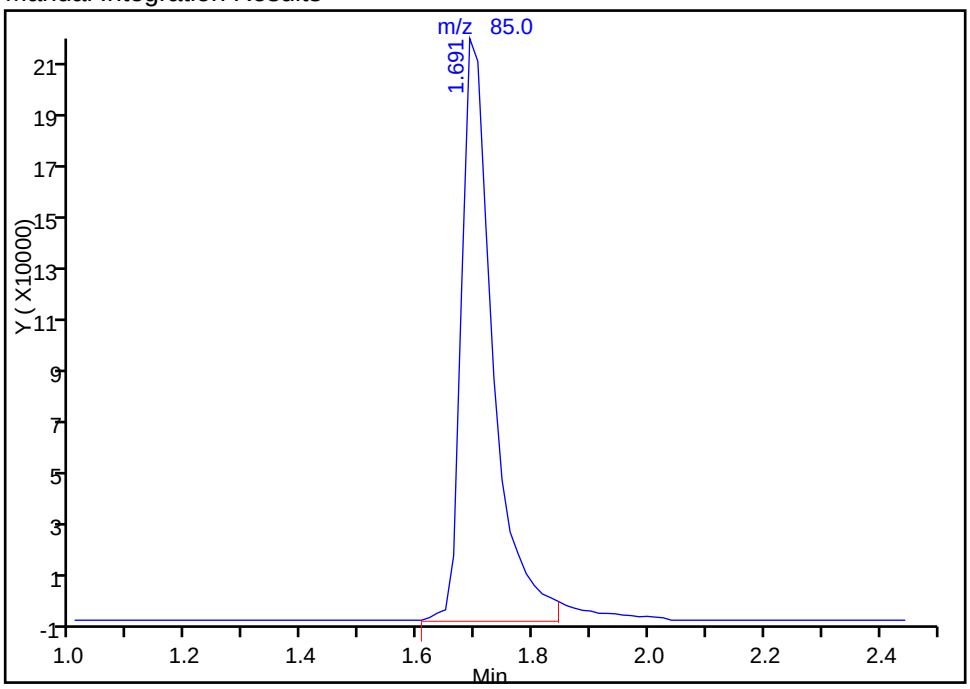
Processing Integration Results

RT: 1.69
Area: 831813
Amount: 188.8148
Amount Units: ug/l



Manual Integration Results

RT: 1.69
Area: 811168
Amount: 200.3649
Amount Units: ug/l



Reviewer: dukesa, 12-Jun-2017 22:12:04
Audit Action: Manually Integrated Audit Reason: Peak Tail

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 377804

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 11:16 Calibration End Date: 06/19/2017 13:13 Calibration ID: 29519

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-377804/27	P0028.D
Level 2	STD010 280-377804/28	P0029.D
Level 3	STD020 280-377804/29	P0030.D
Level 4	STD050 280-377804/30	P0031.D
Level 5	STD10 280-377804/31	P0032.D
Level 6	STD30 280-377804/32	P0033.D
Level 7	STD60 280-377804/33	P0034.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	+++++ 0.1990	0.1414 0.1769	0.1310	0.1532	0.2019	Lin1	-0.063	0.1866							0.9940		0.9900
Chloromethane	0.1790 0.1636	0.1508 0.1487	0.1387	0.1530	0.1686	Ave		0.1575			0.1000	8.7		15.0			
Vinyl chloride	0.1537 0.1735	0.1440 0.1546	0.1405	0.1387	0.1767	Ave		0.1545				9.9		30.0			
Bromomethane	0.1313 0.1134	0.1077 0.1022	0.0988	0.1087	0.1169	Ave		0.1113				9.7		15.0			
Chloroethane	0.1059 0.1060	0.0963 0.0950	0.0898	0.0943	0.1078	Ave		0.0993				7.2		15.0			
Dichlorofluoromethane	0.3571 0.3634	0.3996 0.4005	0.4241	0.3055	0.3554	Ave		0.3722				10.6		15.0			
Trichlorofluoromethane	0.3098 0.3847	0.3215 0.3414	0.3095	0.2704	0.3810	Ave		0.3312				12.4		15.0			
Ethyl ether	+++++ 0.1471	0.1768 0.1437	0.1457	0.1607	0.1486	Ave		0.1538				8.3		15.0			
Acrolein	0.0108 0.0141	0.0110 0.0146	0.0103	0.0125	0.0136	Ave		0.0124				13.9		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1566 0.1740	0.1495 0.1614	0.1469	0.2000	0.1493	Ave		0.1625				11.7		15.0			
Acetone	+++++ 0.0288	0.0315 0.0287	0.0291	0.0308	0.0278	Ave		0.0295				4.8		15.0			
1,1-Dichloroethene	0.2559 0.2572	0.2192 0.2395	0.2234	0.2881	0.2362	Ave		0.2456				9.6		30.0			
Methyl iodide	0.3222 0.3446	0.2981 0.3377	0.2901	0.3658	0.3320	Ave		0.3272				8.1		15.0			
Methyl acetate	0.0633 0.0654	0.0588 0.0655	0.0579	0.0673	0.0651	Ave		0.0633				5.7		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 377804

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 11:16 Calibration End Date: 06/19/2017 13:13 Calibration ID: 29519

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	0.4383 0.4947	0.3773 0.4705	0.3652	0.5003	0.4614	Ave		0.4440				12.1		15.0			
Carbon disulfide	0.7503 0.9003	0.6637 0.8467	0.7041	0.9607	0.8061	Ave		0.8046				13.2		15.0			
t-Butyl alcohol	+++++ 1.2413	1.5131 1.2012	1.1775	1.4286	1.2755	Ave		1.3062				10.3		15.0			
Methylene Chloride	+++++ 0.2346	0.5585 0.2225	0.3798	0.3040	0.2594	Lin2	0.3320	0.2241							0.9980		0.9900
Acrylonitrile	0.0245 0.0315	0.0241 0.0313	0.0255	0.0302	0.0303	Ave		0.0282				11.8		15.0			
Methyl tert-butyl ether	0.3217 0.3633	0.3021 0.3657	0.2985	0.3607	0.3502	Ave		0.3375				8.7		15.0			
trans-1,2-Dichloroethene	0.2403 0.2580	0.2258 0.2402	0.2248	0.2826	0.2401	Ave		0.2445				8.2		15.0			
Hexane	2.3836 2.3293	2.1925 1.9940	2.1176	2.8221	2.0213	Ave		2.2658				12.6		15.0			
Vinyl acetate	+++++ 0.2428	0.1694 0.2527	0.1698	0.1993	0.2280	Lin2	-0.164	0.2356							0.9910		0.9900
1,1-Dichloroethane	0.4656 0.4901	0.4579 0.4573	0.4381	0.5346	0.4736	Ave		0.4739			0.1000	6.6		15.0			
2-Butanone (MEK)	0.0479 0.0494	0.0525 0.0486	0.0391	0.0515	0.0489	Ave		0.0483				9.1		15.0			
sec-Butyl Alcohol	1.0906 0.9997	1.0882 1.1197	0.8381	1.0068	0.8753	Ave		1.0026				10.9		15.0			
cis-1,2-Dichloroethene	0.2692 0.2754	0.2448 0.2603	0.2332	0.2830	0.2586	Ave		0.2606				6.6		15.0			
2,2-Dichloropropane	0.2361 0.2857	0.2149 0.2737	0.2261	0.2823	0.2360	Ave		0.2507				11.6		15.0			
Bromochloromethane	0.0738 0.0852	0.0737 0.0851	0.0729	0.0853	0.0826	Ave		0.0798				7.5		15.0			
Chloroform	0.4212 0.4424	0.4059 0.4151	0.3839	0.4675	0.4239	Ave		0.4228				6.3		30.0			
Tetrahydrofuran	+++++ 0.0257	0.0219 0.0265	0.0219	0.0237	0.0252	Ave		0.0242				8.1		15.0			
Isobutyl alcohol	+++++ 0.4412	0.4367 0.4668	0.3629	0.4142	0.4004	Ave		0.4204				8.6		15.0			
1,1,1-Trichloroethane	0.2476 0.3339	0.2255 0.3193	0.2469	0.3261	0.2754	Lin1	-0.072	0.3217							0.9970		0.9900
Cyclohexane	0.4703 0.5054	0.4262 0.4494	0.4494	0.5713	0.4271	Ave		0.4713				11.0		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 377804

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 11:16 Calibration End Date: 06/19/2017 13:13 Calibration ID: 29519

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	0.3278 0.3799	0.3169 0.3412	0.3374	0.4151	0.3309	Ave		0.3499				10.0		15.0			
Carbon tetrachloride	+++++ 0.2847	0.1557 0.2781	0.1770	0.2443	0.2070	Lin1	-0.175	0.2785							0.9950		0.9900
1,2-Dichloroethane	0.2606 0.2500	0.2483 0.2395	0.2342	0.2730	0.2478	Ave		0.2505				5.2		15.0			
Benzene	1.0326 1.0496	0.9863 0.9578	0.9452	1.1347	1.0076	Ave		1.0162				6.3		15.0			
Trichloroethene	0.2485 0.2700	0.2280 0.2511	0.2392	0.2829	0.2384	Ave		0.2512				7.7		15.0			
2-Pentanone	+++++ 0.1079	+++++ 0.1280	0.0858	0.1178	0.0647	Lin	-0.632	0.1299							0.9900		0.9900
Methylcyclohexane	0.3795 0.4194	0.3666 0.3606	0.3756	0.4758	0.3423	Ave		0.3886				11.6		15.0			
1,2-Dichloropropane	0.2413 0.2557	0.2318 0.2386	0.2311	0.2624	0.2497	Ave		0.2444				4.9		30.0			
1,4-Dioxane	+++++ 0.0008	+++++ 0.0009	0.0007	0.0008	0.0008	Ave		0.0008				10.7		15.0			
Dibromomethane	0.0796 0.0889	0.0820 0.0880	0.0734	0.0906	0.0855	Ave		0.0840				7.2		15.0			
Bromodichloromethane	0.1709 0.2622	0.1807 0.2627	0.1762	0.2320	0.2308	Lin1	-0.080	0.2606							0.9980		0.9900
2-Chloroethyl vinyl ether	+++++ 0.0509	+++++ 0.0551	0.0307	0.0385	0.0428	Lin2	-0.045	0.0513							0.9920		0.9900
cis-1,3-Dichloropropene	+++++ 1.6253	1.0573 1.6155	1.0768	1.4453	1.4726	Lin2	-0.607	1.5693							0.9930		0.9900
4-Methyl-2-pentanone (MIBK)	0.0739 0.1004	0.0764 0.1017	0.0775	0.0888	0.0939	Ave		0.0875				13.4		15.0			
Toluene	1.0097 1.0952	0.9553 0.9884	0.9442	1.1443	0.9919	Ave		1.0184				7.3		30.0			
Ethyl methacrylate	+++++ 0.7498	0.3687 0.7914	0.3987	0.5945	0.6517	Lin1	-0.610	0.7805							0.9970		0.9900
trans-1,3-Dichloropropene	+++++ 0.2303	0.1214 0.2357	0.1326	0.1859	0.1985	Lin1	-0.164	0.2346							0.9980		0.9900
1,1,2-Trichloroethane	0.0987 0.1196	0.1039 0.1208	0.1023	0.1187	0.1140	Ave		0.1111				8.3		15.0			
2-Hexanone	0.2099 0.3466	0.2378 0.3465	0.2474	0.3033	0.3206	Lin2	-0.271	0.3246							0.9910		0.9900
1,3-Dichloropropane	1.0958 1.2399	1.1002 1.1736	1.0789	1.2850	1.2187	Ave		1.1703				6.9		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 377804

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 11:16 Calibration End Date: 06/19/2017 13:13 Calibration ID: 29519

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Tetrachloroethene	0.8919 1.0192	0.8713 0.9007	0.8982	1.0794	0.8112	Ave		0.9245				10.0		15.0			
Dibromochloromethane	+++++ 0.6562	0.3595 0.6836	0.3682	0.5143	0.5359	Lin1	-0.499	0.6733							0.9960		0.9900
1,2-Dibromoethane	0.4179 0.5459	0.4032 0.5574	0.4292	0.5398	0.5279	Ave		0.4888				14.0		15.0			
1-Chlorohexane	1.6397 1.9645	1.4002 1.7633	1.5928	2.0157	1.4104	Ave		1.6838				14.6		15.0			
Chlorobenzene	3.1447 3.1765	2.9213 2.8992	3.0109	3.3287	2.8699	Ave		3.0502			0.3000	5.6		15.0			
1,1,1,2-Tetrachloroethane	+++++ 0.9282	0.5109 0.8752	0.5656	0.7524	0.7452	Lin2	-0.391	0.8500							0.9900		0.9900
Ethylbenzene	1.8242 2.0245	1.7129 1.7443	1.7848	2.0852	1.6764	Ave		1.8360				8.6		30.0			
m&p-Xylene	2.2133 2.3850	2.0351 2.1386	2.0865	2.5110	2.0102	Ave		2.1971				8.5		15.0			
o-Xylene	1.9278 2.2781	1.8038 1.9439	1.9209	2.3007	1.9511	Ave		2.0180				9.5		15.0			
Styrene	2.1355 3.4029	2.2683 2.9984	2.4762	3.1240	2.8663	Lin2	-0.549	3.0549							0.9910		0.9900
Bromoform	+++++ 0.2603	0.0966 0.2841	0.1251	0.1770	0.1928	Lin1	-0.277	0.2748			0.1000				0.9910		0.9900
Isopropylbenzene	4.2464 4.3030	3.7450 3.7403	4.0222	4.5606	3.5056	Ave		4.0176				9.3		15.0			
Cyclohexanone	0.0043 0.0148	0.0094 0.0151	0.0090	0.0121	0.0129	Lin1	-0.277	0.0149							0.9980		0.9900
1,1,2,2-Tetrachloroethane	0.3836 0.4299	0.3907 0.4345	0.3695	0.4423	0.4353	Ave		0.4122			0.3000	7.2		15.0			
trans-1,4-Dichloro-2-butene	+++++ 0.1101	0.0688 0.1176	0.0695	0.0946	0.0968	Lin1	-0.072	0.1152							0.9970		0.9900
1,2,3-Trichloropropane	0.1224 0.1181	0.1111 0.1182	0.1070	0.1249	0.1148	Ave		0.1167				5.3		15.0			
N-Propylbenzene	1.0948 1.1937	0.9684 1.0207	1.0721	1.2442	0.9013	Ave		1.0707				11.3		15.0			
Bromobenzene	0.7217 0.8062	0.7167 0.7476	0.7154	0.8239	0.7373	Ave		0.7527				5.9		15.0			
1,3,5-Trimethylbenzene	3.2456 3.4803	2.9712 2.9889	3.2351	3.6323	2.8221	Ave		3.1965				9.1		15.0			
2-Chlorotoluene	0.9312 0.9494	0.8172 0.8464	0.8862	0.9803	0.7980	Ave		0.8870				7.8		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 377804

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 11:16 Calibration End Date: 06/19/2017 13:13 Calibration ID: 29519

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
4-Chlorotoluene	0.8249 0.9351	0.7697 0.8652	0.8474	0.9691	0.8017	Ave		0.8590				8.3		15.0			
tert-Butylbenzene	3.0550 3.3859	2.8822 2.9523	3.0789	3.5597	2.6551	Ave		3.0813				9.9		15.0			
1,2,4-Trimethylbenzene	3.2717 3.4807	2.9956 3.0520	3.3093	3.6705	2.9018	Ave		3.2402				8.5		15.0			
sec-Butylbenzene	0.7941 0.9211	0.7643 0.7980	0.8372	0.9628	0.6665	Ave		0.8206				12.1		15.0			
4-Isopropyltoluene	3.4049 3.7269	3.0753 3.1441	3.4825	3.9308	2.7443	Ave		3.3584				12.1		15.0			
1,3-Dichlorobenzene	1.5984 1.6321	1.4717 1.4978	1.5273	1.6689	1.4229	Ave		1.5456				5.8		15.0			
1,4-Dichlorobenzene	1.6495 1.5773	1.5517 1.4614	1.5429	1.6647	1.4307	Ave		1.5540				5.6		15.0			
n-Butylbenzene	3.5958 3.8369	3.2383 3.1459	3.6781	4.1307	2.7670	Ave		3.4847				13.3		15.0			
1,2-Dichlorobenzene	1.3684 1.3161	1.2206 1.2430	1.2561	1.3406	1.2013	Ave		1.2780				5.0		15.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.0462	+++++ 0.0522	0.0184	0.0307	0.0377	Lin1	-0.085	0.0515							0.9950		0.9900
1,2,4-Trichlorobenzene	0.7866 0.8472	0.7512 0.8078	0.7865	0.8311	0.7480	Ave		0.7941				4.7		15.0			
Hexachlorobutadiene	0.5504 0.5444	0.5227 0.4555	0.5313	0.5724	0.3653	Ave		0.5060				14.2		15.0			
Naphthalene	1.0310 1.1951	1.0026 1.2194	0.9617	1.1331	1.1342	Ave		1.0967				9.0		15.0			
1,2,3-Trichlorobenzene	+++++ 0.6441	0.5504 0.6197	0.5964	0.6451	0.5849	Ave		0.6068				6.1		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 377804

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 11:16 Calibration End Date: 06/19/2017 13:13 Calibration ID: 29519

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-377804/27	P0028.D
Level 2	STD010 280-377804/28	P0029.D
Level 3	STD020 280-377804/29	P0030.D
Level 4	STD050 280-377804/30	P0031.D
Level 5	STD10 280-377804/31	P0032.D
Level 6	STD30 280-377804/32	P0033.D
Level 7	STD60 280-377804/33	P0034.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Lin1	+++++ 774385	16583 1475694	31029	92441	251650	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Chloromethane	FB	Ave	9934 636485	17683 1240074	32855	92340	210154	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Vinyl chloride	FB	Ave	8532 675120	16878 1289236	33274	83700	220243	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Bromomethane	FB	Ave	7289 441400	12626 852563	23394	65614	145726	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Chloroethane	FB	Ave	5877 412400	11293 792181	21275	56904	134331	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Dichlorofluoromethane	FB	Ave	19826 1413798	46855 3339845	100455	184381	442907	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Trichlorofluoromethane	FB	Ave	17197 1496933	37700 2847278	73316	163171	474860	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Ethyl ether	FB	Ave	+++++ 572373	20735 1198789	34515	96989	185195	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Acrolein	FB	Ave	5984 549232	12916 1213509	24487	75602	169599	5.00 300	10.00 600	20.0	50.0	100.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	8692 676835	17523 1345870	34803	120711	186099	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Acetone	FB	Ave	+++++ 448466	14794 958055	27561	74338	138557	+++++ 120	4.00 240	8.00	20.0	40.0
1,1-Dichloroethene	FB	Ave	14207 1000679	25702 1997105	52916	173832	294323	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Methyl iodide	FB	Ave	17887 1340725	34953 2815956	68710	220711	413716	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Methyl acetate	FB	Ave	17567 1271549	34470 2729921	68606	203144	405796	2.50 150	5.00 300	10.0	25.0	50.0
3-Chloro-1-propene	FB	Ave	24331 1924923	44239 3924047	86503	301927	574986	0.500 30.0	1.00 60.0	2.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 377804

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 11:16 Calibration End Date: 06/19/2017 13:13 Calibration ID: 29519

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Carbon disulfide	FB	Ave	41653 3503032	77818 7060839	166794	579697	1004574	0.500 30.0	1.00 60.0	2.00	5.00	10.0
t-Butyl alcohol	TBAd9	Ave	+++++ 238255	5699 529096	10911	35559	71917	+++++ 300	10.0 600	20.0	50.0	100
Methylene Chloride	FB	Lin2	+++++ 912880	65481 1855635	89958	183443	323289	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Acrylonitrile	FB	Ave	13589 1224919	28268 2612946	60424	182180	378200	5.00 300	10.0 600	20.0	50.0	100
Methyl tert-butyl ether	FB	Ave	17857 1413639	35425 3049655	70702	217638	436479	0.500 30.0	1.00 60.0	2.00	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	13340 1003750	26480 2003184	53242	170553	299177	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Hexane	CBNZ d5	Ave	23965 1745842	47663 3276120	92295	316998	475632	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Vinyl acetate	FB	Lin2	+++++ 1889676	39727 4215060	80458	240565	568238	+++++ 60.0	2.00 120	4.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	25846 1906926	53682 3813891	103768	322572	590253	0.500 30.0	1.00 60.0	2.00	5.00	10.0
2-Butanone (MEK)	FB	Ave	10625 768895	24643 1620000	37019	124366	243790	2.00 120	4.00 240	8.00	20.0	40.0
sec-Butyl Alcohol	TBAd9	Ave	2800 287837	6148 739777	11649	37589	74033	7.50 450	15.0 900	30.0	75.0	150
cis-1,2-Dichloroethene	FB	Ave	14946 1071552	28697 2170660	55249	170744	322301	0.500 30.0	1.00 60.0	2.00	5.00	10.0
2,2-Dichloropropane	FB	Ave	13106 1111618	25196 2282386	53567	170347	294123	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Bromochloromethane	FB	Ave	4096 331637	8641 709327	17278	51491	102899	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Chloroform	FB	Ave	23380 1721171	47595 3461799	90945	282098	528241	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Tetrahydrofuran	FB	Ave	+++++ 200088	5140 442149	10378	28611	62832	+++++ 60.0	2.00 120	4.00	10.0	20.0
Isobutyl alcohol	TBAd9	Ave	+++++ 211697	4112 514048	8408	25777	56443	+++++ 750	25.0 1500	50.0	125	250
1,1,1-Trichloroethane	FB	Lin1	13746 1299094	26439 2663083	58481	196753	343175	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Cyclohexane	FB	Ave	26106 1966334	49969 3747710	106460	344738	532266	0.500 30.0	1.00 60.0	2.00	5.00	10.0
1,1-Dichloropropene	FB	Ave	18195 1478282	37152 2845877	79927	250510	412440	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Carbon tetrachloride	FB	Lin1	+++++ 1107753	18261 2319534	41918	147403	257924	+++++ 30.0	1.00 60.0	2.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 377804

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 11:16 Calibration End Date: 06/19/2017 13:13 Calibration ID: 29519

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,2-Dichloroethane	FB	Ave	14468 972653	29109 1997677	55468	164760	308794	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Benzene	FB	Ave	57323 4083865	115636 7987462	223904	684704	1255719	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Trichloroethene	FB	Ave	13797 1050729	26728 2094038	56668	170725	297046	0.500 30.0	1.00 60.0	2.00	5.00	10.0
2-Pentanone	FB	Lin	+++++ 839291	+++++ 2134983	40632	142161	161184	+++++ 60.0	+++++ 120	4.00	10.0	20.0
Methylcyclohexane	FB	Ave	21069 1631897	42986 3007100	88971	287140	426557	0.500 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dichloropropane	FB	Ave	13394 994929	27177 1990043	54734	158341	311186	0.500 30.0	1.00 60.0	2.00	5.00	10.0
1,4-Dioxane	FB	Ave	+++++ 65654	+++++ 147765	3121	9568	20164	+++++ 600	+++++ 1200	40.0	100	200
Dibromomethane	FB	Ave	4419 346031	9616 733545	17381	54646	106541	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Bromodichloromethane	FB	Lin1	9488 1020063	21183 2190579	41740	139996	287617	0.500 30.0	1.00 60.0	2.00	5.00	10.0
2-Chloroethyl vinyl ether	FB	Lin2	+++++ 198200	+++++ 459556	7274	23241	53339	+++++ 30.0	+++++ 60.0	2.00	5.00	10.0
cis-1,3-Dichloropropene	CBNZ d5	Lin2	+++++ 1218149	22984 2654167	46934	162342	346513	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	16410 1563326	35818 3393296	73447	214411	468264	2.00 120	4.00 240	8.00	20.0	40.0
Toluene	FB	Ave	56053 4261344	112010 8242680	223671	690530	1236175	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Ethyl methacrylate	CBNZ d5	Lin1	+++++ 561960	8015 1300160	17379	66783	153358	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
trans-1,3-Dichloropropene	FB	Lin1	+++++ 896151	14235 1965318	31417	112175	247322	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,1,2-Trichloroethane	FB	Ave	5478 465255	12181 1007249	24228	71646	142104	0.500 30.0	1.00 60.0	2.00	5.00	10.0
2-Hexanone	CBNZ d5	Lin2	8440 1039110	20681 2276892	43124	136266	301800	2.00 120	4.00 240	8.00	20.0	40.0
1,3-Dichloropropane	CBNZ d5	Ave	11017 929310	23917 1928197	47023	144334	286778	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Tetrachloroethene	CBNZ d5	Ave	8967 763867	18941 1479772	39149	121247	190883	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Dibromochloromethane	CBNZ d5	Lin1	+++++ 491791	7815 1123101	16048	57767	126097	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dibromoethane	CBNZ d5	Ave	4202 409184	8765 915812	18707	60631	124218	0.500 30.0	1.00 60.0	2.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 377804

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 11:16 Calibration End Date: 06/19/2017 13:13 Calibration ID: 29519

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1-Chlorohexane	CBNZ d5	Ave	8243 736196	15220 1448472	34712	113210	165934	0.250 15.0	0.500 30.0	1.00	2.50	5.00
Chlorobenzene	CBNZ d5	Ave	31617 2380808	63506 4763236	131232	373900	675295	0.500 30.0	1.00 60.0	2.00	5.00	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Lin2	+++++ 695677	11107 1437889	24653	84516	175352	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Ethylbenzene	CBNZ d5	Ave	18341 1517373	37237 2865804	77790	234219	394466	0.500 30.0	1.00 60.0	2.00	5.00	10.0
m&p-Xylene	CBNZ d5	Ave	22253 1787537	44242 3513554	90942	282045	473005	0.500 30.0	1.00 60.0	2.00	5.00	10.0
o-Xylene	CBNZ d5	Ave	19382 1707427	39214 3193745	83724	258427	459109	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Styrene	CBNZ d5	Lin2	21470 2550507	49311 4926270	107926	350904	674459	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Bromoform	CBNZ d5	Lin1	+++++ 195120	2101 466701	5453	19884	45371	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Isopropylbenzene	DCBd 4	Ave	55849 4572820	104406 8458678	235331	709405	1139932	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Cyclohexanone	CBNZ d5	Lin1	1719 443378	8215 990797	15607	54413	121576	20.0 1200	40.0 2400	80.0	200	400
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	5045 456827	10891 982589	21619	68796	141566	0.500 30.0	1.00 60.0	2.00	5.00	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Lin1	+++++ 116998	1917 265895	4068	14709	31493	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	1610 125535	3098 267318	6263	19430	37316	0.500 30.0	1.00 60.0	2.00	5.00	10.0
N-Propylbenzene	DCBd 4	Ave	14399 1268516	26997 2308237	62727	193543	293097	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Bromobenzene	DCBd 4	Ave	9492 856700	19981 1690764	41855	128159	239763	0.500 30.0	1.00 60.0	2.00	5.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	42686 3698526	82833 6759408	189281	565012	917696	0.500 30.0	1.00 60.0	2.00	5.00	10.0
2-Chlorotoluene	DCBd 4	Ave	12247 1008947	22782 1914119	51849	152485	259506	0.500 30.0	1.00 60.0	2.00	5.00	10.0
4-Chlorotoluene	DCBd 4	Ave	10849 993764	21457 1956621	49581	150752	260706	0.500 30.0	1.00 60.0	2.00	5.00	10.0
tert-Butylbenzene	DCBd 4	Ave	40180 3598234	80352 6676645	180145	553710	863395	0.500 30.0	1.00 60.0	2.00	5.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	43030 3698939	83514 6902286	193623	570952	943598	0.500 30.0	1.00 60.0	2.00	5.00	10.0
sec-Butylbenzene	DCBd 4	Ave	10444 978822	21307 1804628	48985	149763	216724	0.500 30.0	1.00 60.0	2.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 377804

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 11:16 Calibration End Date: 06/19/2017 13:13 Calibration ID: 29519

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
4-Isopropyltoluene	DCBd 4	Ave	44782 3960570	85735 7110529	203755	611441	892374	0.500 30.0	1.00 60.0	2.00	5.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	21023 1734451	41029 3387314	89361	259600	462688	0.500 30.0	1.00 60.0	2.00	5.00	10.0
1,4-Dichlorobenzene	DCBd 4	Ave	21694 1676205	43259 3305092	90271	258951	465229	0.500 30.0	1.00 60.0	2.00	5.00	10.0
n-Butylbenzene	DCBd 4	Ave	47293 4077464	90278 7114581	215202	642537	899781	0.500 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	17998 1398626	34028 2810980	73491	208527	390632	0.500 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Lin1	+++++ 49139	+++++ 118054	1076	4780	12260	+++++ 30.0	+++++ 60.0	2.00	5.00	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	10345 900304	20943 1826941	46017	129280	243249	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Hexachlorobutadiene	DCBd 4	Ave	7239 578486	14571 1030213	31084	89045	118783	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Naphthalene	DCBd 4	Ave	13560 1270028	27951 2757702	56268	176255	368808	0.500 30.0	1.00 60.0	2.00	5.00	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	+++++ 684449	15344 1401465	34897	100349	190200	+++++ 30.0	1.00 60.0	2.00	5.00	10.0

Curve Type Legend:

Ave = Average ISTD
Lin = Linear ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0028.D
Lims ID: STD005
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 19-Jun-2017 11:16:30 ALS Bottle#: 10 Worklist Smp#: 27
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: STD005
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-MLE_VMSP_8260*sub43

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 10:29:09 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: seifertj Date: 19-Jun-2017 11:45:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.651	5.650	0.001	0	85578	250.0	250.0	
* 1 Fluorobenzene	96	7.610	7.609	0.001	97	1387797	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.877	9.869	0.008	91	251351	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.707	11.699	0.008	97	328804	12.5	12.5	
23 Dichlorodifluoromethane	85	3.887	3.876	0.011	96	8732	0.5000	0.7578	
26 Chloromethane	50	4.096	4.099	-0.003	93	9934	0.5000	0.5682	
27 Vinyl chloride	62	4.250	4.253	-0.003	76	8532	0.5000	0.4973	
29 Bromomethane	94	4.613	4.616	-0.003	87	7289	0.5000	0.5899	
30 Chloroethane	64	4.669	4.686	-0.017	94	5877	0.5000	0.5331	
31 Dichlorofluoromethane	67	4.851	4.854	-0.003	97	19826	0.5000	0.4797	
32 Trichlorofluoromethane	101	4.948	4.951	-0.003	96	17197	0.5000	0.4677	
35 Ethyl ether	59	5.102	5.105	-0.003	94	11802	0.5000	0.6912	
39 Acrolein	56	5.256	5.259	-0.003	95	5984	5.00	4.34	
40 1,1,2-Trichloro-1,2,2-trif	151	5.353	5.356	-0.003	91	8692	0.5000	0.4817	
41 Acetone	43	5.367	5.370	-0.003	79	9697	2.00	2.96	
43 1,1-Dichloroethene	96	5.409	5.412	-0.003	93	14207	0.5000	0.5210	
44 Iodomethane	142	5.579	5.580	-0.001	96	17887	0.5000	0.4924	
45 Methyl acetate	43	5.601	5.601	0.000	97	17567	2.50	2.50	
47 3-Chloro-1-propene	41	5.658	5.651	0.007	50	24331	0.5000	0.4936	
48 Carbon disulfide	76	5.701	5.694	0.007	96	41653	0.5000	0.4663	M
49 2-Methyl-2-propanol	59		5.716				ND	ND	
50 Methylene Chloride	84	5.758	5.759	0.000	98	52827	0.5000	0.6418	
51 Methyl tert-butyl ether	73	5.915	5.916	-0.001	94	17857	0.5000	0.4766	
52 Acrylonitrile	53	5.915	5.916	-0.001	73	13589	5.00	4.34	
53 trans-1,2-Dichloroethene	96	5.965	5.966	-0.001	95	13340	0.5000	0.4913	
54 Hexane	57	6.116	6.116	0.000	93	23965	0.5000	0.5260	
55 Vinyl acetate	43	6.230	6.230	0.000	98	18679	1.00	1.41	
57 1,1-Dichloroethane	63	6.287	6.288	-0.001	95	25846	0.5000	0.4913	
61 2-Butanone (MEK)	43	6.680	6.681	-0.001	99	10625	2.00	1.98	
62 sec-Butyl Alcohol	45	6.731	6.724	0.007	36	2800	7.50	8.16	
63 cis-1,2-Dichloroethene	96	6.723	6.724	-0.001	85	14946	0.5000	0.5165	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
64 2,2-Dichloropropane	77	6.745	6.745	0.000	51	13106	0.5000	0.4709	
67 Chlorobromomethane	128	6.931	6.924	0.007	89	4096	0.5000	0.4623	
68 Chloroform	83	6.938	6.931	0.007	96	23380	0.5000	0.4980	
69 Tetrahydrofuran	42		6.953				ND	ND	
70 Isobutyl alcohol	41		7.138				ND	ND	
71 1,1,1-Trichloroethane	97	7.145	7.146	-0.001	96	13746	0.5000	0.6088	
72 Cyclohexane	56	7.210	7.210	0.000	92	26106	0.5000	0.4989	
73 1,1-Dichloropropene	75	7.245	7.246	-0.001	93	18195	0.5000	0.4684	
74 Carbon tetrachloride	117	7.288	7.281	0.007	94	9484	0.5000	0.9363	
76 1,2-Dichloroethane	62	7.424	7.417	0.007	21	14468	0.5000	0.5202	a
77 Benzene	78	7.438	7.432	0.006	98	57323	0.5000	0.5081	
14 n-Heptane	43	7.496	7.489	0.007	91	29174	0.5000	0.5237	
79 Trichloroethene	95	7.896	7.896	0.000	93	13797	0.5000	0.4948	
80 2-Pentanone	43		7.946				ND	ND	
82 Methylcyclohexane	55	8.082	8.075	0.007	92	21069	0.5000	0.4884	
83 1,2-Dichloropropane	63	8.089	8.082	0.007	80	13394	0.5000	0.4937	
84 1,4-Dioxane	88		8.147				ND	ND	
85 Dibromomethane	93	8.196	8.190	0.006	89	4419	0.5000	0.4739	
86 Dichlorobromomethane	83	8.268	8.261	0.007	96	9488	0.5000	0.6356	
87 2-Chloroethyl vinyl ether	63		8.404				ND	ND	
89 cis-1,3-Dichloropropene	75	8.582	8.576	0.006	90	10674	0.5000	0.7252	
90 4-Methyl-2-pentanone (MIBK	43	8.640	8.633	0.007	99	16410	2.00	1.69	
91 Toluene	91	8.854	8.847	0.007	96	56053	0.5000	0.4957	
92 Ethyl methacrylate	69	8.940	8.933	0.007	82	3634	0.5000	1.01	
93 trans-1,3-Dichloropropene	75	8.961	8.955	0.006	96	6057	0.5000	0.9308	
94 1,1,2-Trichloroethane	97	9.112	9.112	0.000	82	5478	0.5000	0.4440	
95 2-Hexanone	43	9.233	9.219	0.014	94	8440	2.00	2.13	
96 1,3-Dichloropropane	76	9.255	9.248	0.007	93	11017	0.5000	0.4682	
97 Tetrachloroethene	164	9.262	9.255	0.007	91	8967	0.5000	0.4823	
98 Chlorodibromomethane	129	9.440	9.441	-0.001	88	3694	0.5000	1.01	
100 Ethylene Dibromide	107	9.576	9.562	0.014	90	4202	0.5000	0.4275	
101 1-Chlorohexane	91	9.784	9.777	0.007	85	8243	0.2500	0.2435	
102 Chlorobenzene	112	9.898	9.891	0.007	95	31617	0.5000	0.5155	
104 1,1,1,2-Tetrachloroethane	131	9.934	9.927	0.007	37	4932	0.5000	0.7480	
103 Ethylbenzene	106	9.934	9.927	0.007	97	18341	0.5000	0.4968	
105 m-Xylene & p-Xylene	106	10.005	9.999	0.006	0	22253	0.5000	0.5037	
106 Styrene	104	10.327	10.320	0.007	77	21470	0.5000	0.5291	
107 o-Xylene	106	10.327	10.320	0.007	91	19382	0.5000	0.4776	
108 Bromoform	173		10.535				ND	ND	
109 Isopropylbenzene	105	10.584	10.578	0.006	97	55849	0.5000	0.5285	
111 Cyclohexanone	55	10.720	10.721	-0.001	16	1719	20.0	24.4	
112 1,1,2,2-Tetrachloroethane	83	10.799	10.792	0.007	89	5045	0.5000	0.4652	
113 trans-1,4-Dichloro-2-buten	53		10.828				ND	ND	
114 1,2,3-Trichloropropane	110	10.878	10.864	0.014	75	1610	0.5000	0.5247	
115 N-Propylbenzene	120	10.899	10.892	0.007	99	14399	0.5000	0.5112	
116 Bromobenzene	156	10.913	10.899	0.014	96	9492	0.5000	0.4794	
117 1,3,5-Trimethylbenzene	105	11.013	11.007	0.006	94	42686	0.5000	0.5077	
118 2-Chlorotoluene	126	11.028	11.021	0.007	94	12247	0.5000	0.5249	
119 4-Chlorotoluene	126	11.106	11.100	0.006	99	10849	0.5000	0.4801	
120 tert-Butylbenzene	119	11.307	11.300	0.007	92	40180	0.5000	0.4957	
121 1,2,4-Trimethylbenzene	105	11.342	11.328	0.014	94	43030	0.5000	0.5049	
122 sec-Butylbenzene	134	11.485	11.479	0.006	96	10444	0.5000	0.4839	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 4-Isopropyltoluene	119	11.578	11.572	0.006	96	44782	0.5000	0.5069	
124 1,3-Dichlorobenzene	146	11.657	11.650	0.007	95	21023	0.5000	0.5171	
126 1,4-Dichlorobenzene	146	11.728	11.722	0.006	89	21694	0.5000	0.5307	
127 n-Butylbenzene	91	11.943	11.936	0.007	99	47293	0.5000	0.5159	
128 1,2-Dichlorobenzene	146	12.093	12.079	0.014	92	17998	0.5000	0.5354	
129 1,2-Dibromo-3-Chloropropan	157		12.837				ND	ND	
130 1,2,4-Trichlorobenzene	180	13.795	13.781	0.014	92	10345	0.5000	0.4953	
131 Hexachlorobutadiene	225	13.931	13.917	0.014	82	7239	0.5000	0.5439	
132 Naphthalene	128	14.174	14.160	0.014	94	13560	0.5000	0.4700	
133 1,2,3-Trichlorobenzene	180	14.496	14.482	0.014	91	8006	0.5000	0.5016	
S 140 1,2-Dichloroethene, Total	96				0		1.00	1.01	
S 137 1,3-Dichloropropene, Total	1				0		1.00	1.66	
S 139 Xylenes, Total	106				0		1.00	0.9813	
S 134 Trihalomethanes, Total	1				0		2.00	2.15	
S 136 Total BTEX	1				0			2.48	
S 135 Xylenes, Total (URS)	1				0		1.00	0.9813	
S 138 1,2-Dichloroethene, Total	1				0		1.00	1.01	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-Main A_00030	Amount Added:	0.25	Units: uL	
MV-Gas/Ket A_00060	Amount Added:	0.25	Units: uL	
MV-2cleve+AVA_00025	Amount Added:	0.25	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent

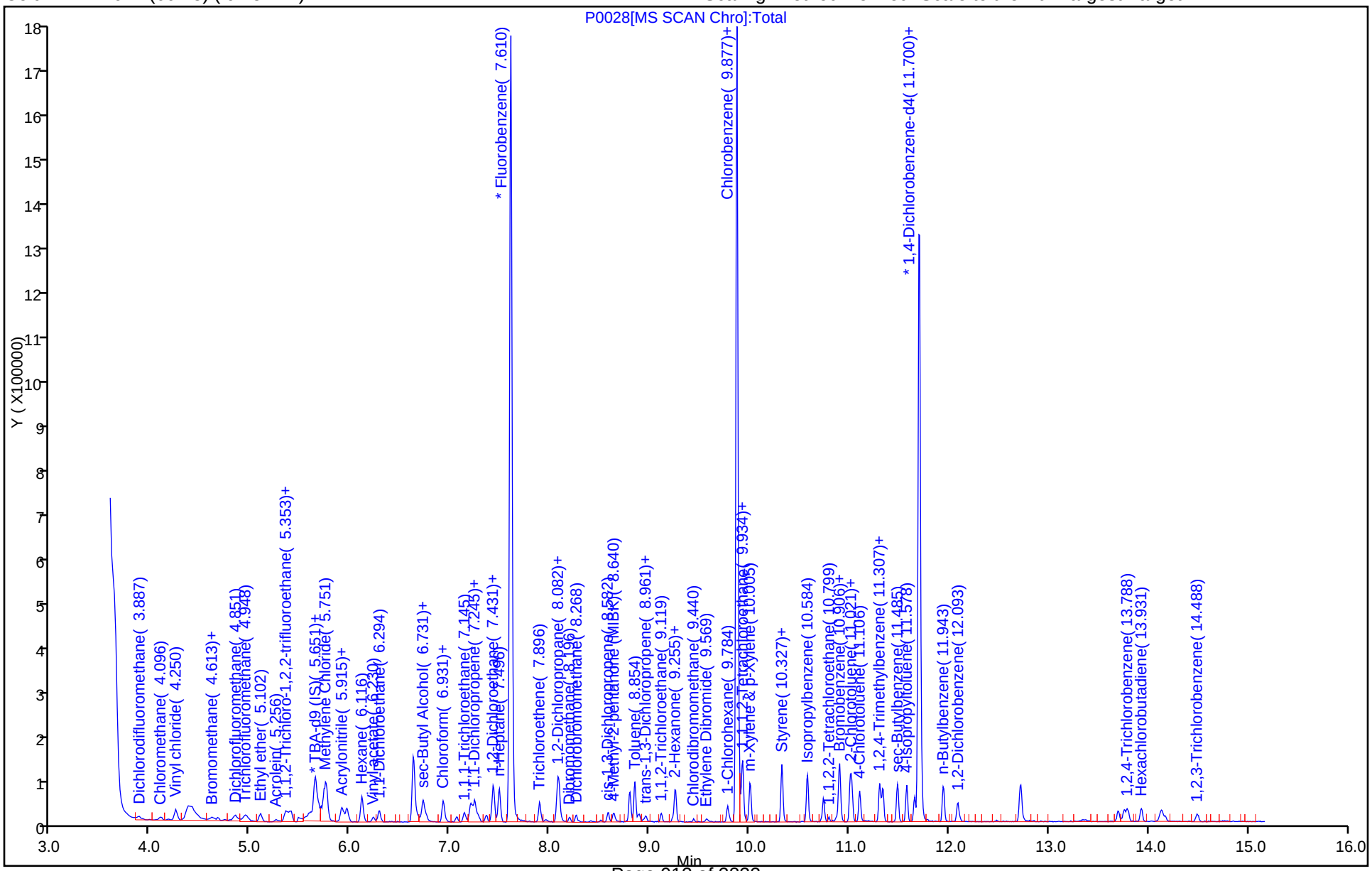
Report Date: 20-Jun-2017 10:29:10 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0028.D

Injection Date:	19-Jun-2017 11:16:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD005			Worklist Smp#:	27
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Denver

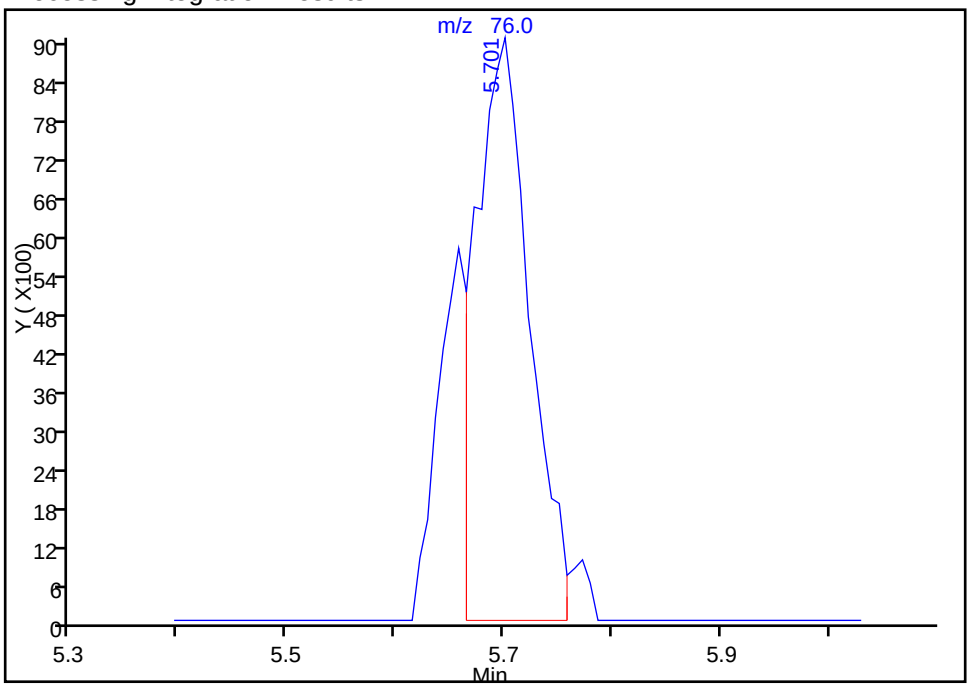
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Injection Date: 19-Jun-2017 11:16:30 Instrument ID: VMS_P
Lims ID: STD005
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 10 Worklist Smp#: 27
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MLE_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

48 Carbon disulfide, CAS: 75-15-0

Signal: 1

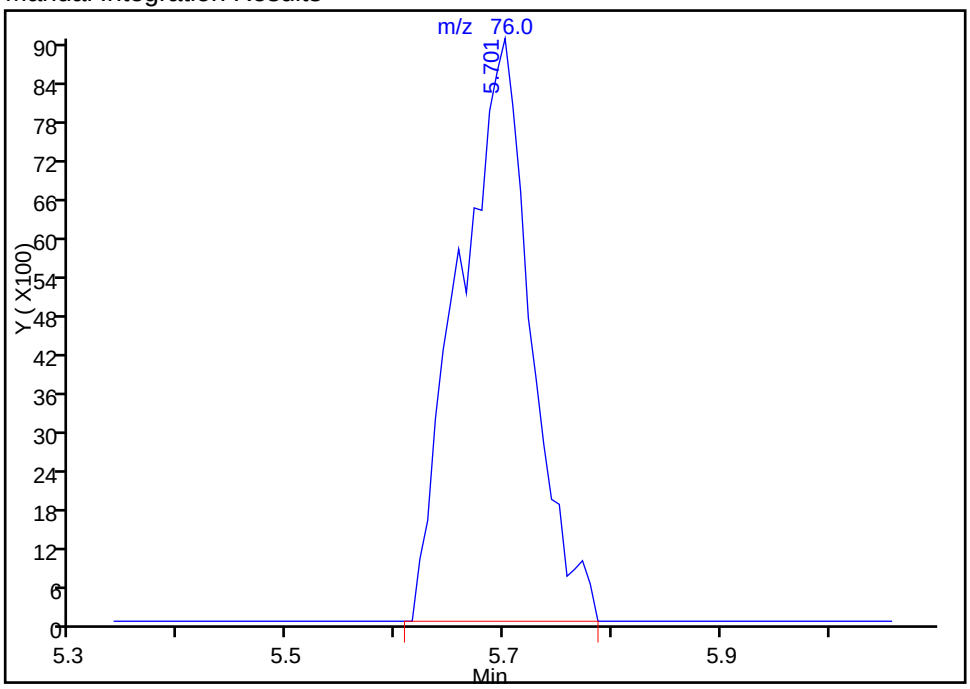
Processing Integration Results

RT: 5.70
Area: 31756
Amount: 0.386517
Amount Units: ug/l



Manual Integration Results

RT: 5.70
Area: 41653
Amount: 0.466310
Amount Units: ug/l



Reviewer: seifertj, 20-Jun-2017 10:01:20
Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Denver

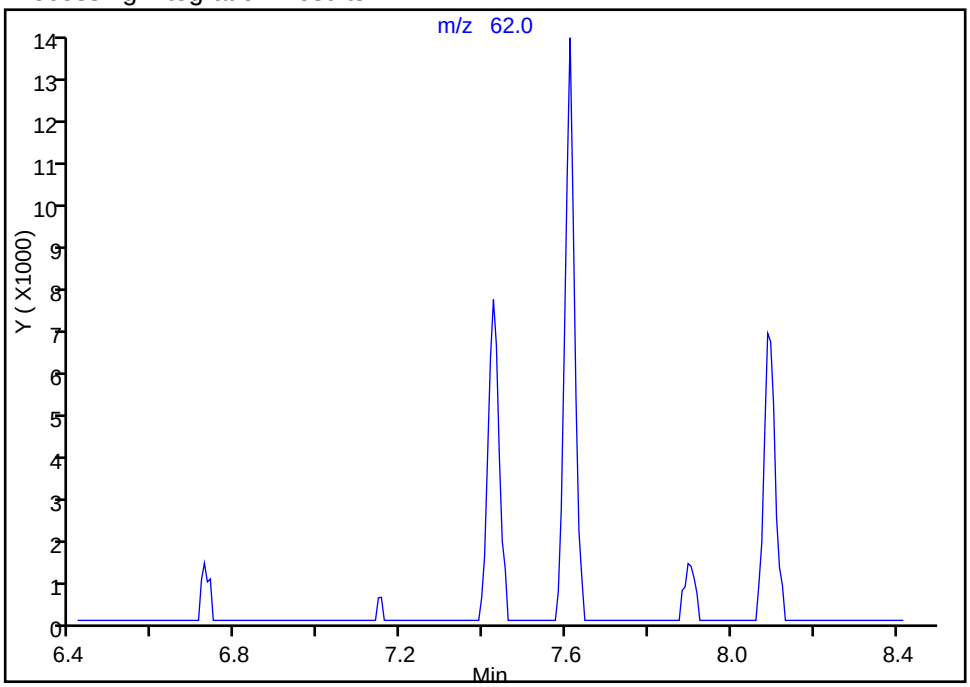
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Injection Date:	19-Jun-2017 11:16:30	Instrument ID:	VMS_P		
Lims ID:	STD005				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	10	Worklist Smp#:	27
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

76 1,2-Dichloroethane, CAS: 107-06-2

Signal: 1

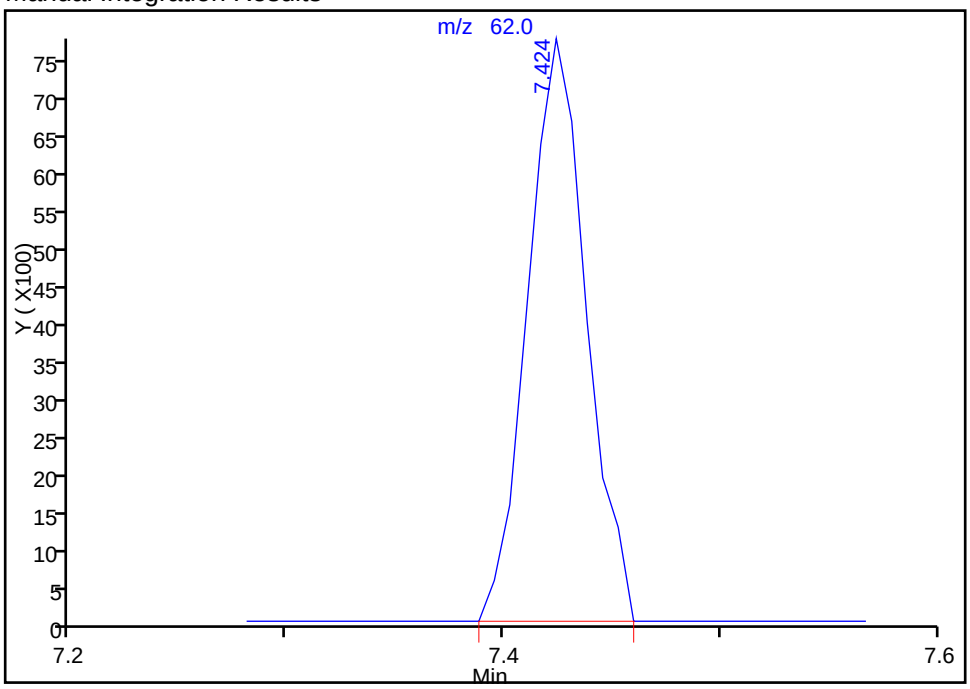
Not Detected
Expected RT: 7.42

Processing Integration Results



Manual Integration Results

RT: 7.42
Area: 14468
Amount: 0.520249
Amount Units: ug/l



Reviewer: seifertj, 20-Jun-2017 08:08:26
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0029.D
Lims ID: STD010
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 19-Jun-2017 11:36:30 ALS Bottle#: 11 Worklist Smp#: 28
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: STD010
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-MLE_VMSP_8260*sub43

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 10:29:11 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: seifertj Date: 19-Jun-2017 12:30:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.643	5.650	-0.007	0	94164	250.0	250.0	
* 1 Fluorobenzene	96	7.609	7.609	0.000	98	1465585	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.869	9.869	0.000	91	271741	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.692	11.699	-0.007	98	348481	12.5	12.5	
23 Dichlorodifluoromethane	85	3.886	3.876	0.010	98	16583	1.00	1.09	
26 Chloromethane	50	4.109	4.099	0.010	98	17683	1.00	0.9577	
27 Vinyl chloride	62	4.249	4.253	-0.004	85	16878	1.00	0.9316	
29 Bromomethane	94	4.612	4.616	-0.004	95	12626	1.00	0.9676	
30 Chloroethane	64	4.682	4.686	-0.004	96	11293	1.00	0.9700	
31 Dichlorofluoromethane	67	4.850	4.854	-0.004	98	46855	1.00	1.07	
32 Trichlorofluoromethane	101	4.947	4.951	-0.004	97	37700	1.00	0.9708	M
35 Ethyl ether	59	5.101	5.105	-0.004	95	20735	1.00	1.15	
39 Acrolein	56	5.269	5.259	0.010	98	12916	10.0	8.87	
40 1,1,2-Trichloro-1,2,2-trif	151	5.352	5.356	-0.004	93	17523	1.00	0.9196	
41 Acetone	43	5.366	5.370	-0.004	54	14794	4.00	4.28	
43 1,1-Dichloroethene	96	5.408	5.412	-0.004	94	25702	1.00	0.8924	
44 Iodomethane	142	5.586	5.580	0.006	98	34953	1.00	0.9111	
45 Methyl acetate	43	5.600	5.601	-0.001	99	34470	5.00	4.64	
47 3-Chloro-1-propene	41	5.650	5.651	-0.001	66	44239	1.00	0.8499	
48 Carbon disulfide	76	5.707	5.694	0.013	99	77818	1.00	0.8249	M
49 2-Methyl-2-propanol	59	5.722	5.716	0.006	36	5699	10.0	11.6	
50 Methylene Chloride	84	5.757	5.759	-0.001	98	65481	1.00	1.01	
52 Acrylonitrile	53	5.915	5.916	-0.001	73	28268	10.0	8.55	
51 Methyl tert-butyl ether	73	5.915	5.916	-0.001	96	35425	1.00	0.8954	
53 trans-1,2-Dichloroethene	96	5.965	5.966	-0.001	96	26480	1.00	0.9236	
54 Hexane	57	6.115	6.116	-0.001	94	47663	1.00	0.9676	
55 Vinyl acetate	43	6.229	6.230	-0.001	97	39727	2.00	2.13	
57 1,1-Dichloroethane	63	6.287	6.288	-0.001	96	53682	1.00	0.9662	
61 2-Butanone (MEK)	43	6.680	6.681	-0.001	98	24643	4.00	4.35	
63 cis-1,2-Dichloroethene	96	6.723	6.724	-0.001	83	28697	1.00	0.9391	
62 sec-Butyl Alcohol	45	6.723	6.724	-0.001	34	6148	15.0	16.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
64 2,2-Dichloropropane	77	6.744	6.745	-0.001	79	25196	1.00	0.8572	
67 Chlorobromomethane	128	6.930	6.924	0.006	88	8641	1.00	0.9235	
68 Chloroform	83	6.937	6.931	0.006	93	47595	1.00	0.9600	
69 Tetrahydrofuran	42	6.959	6.953	0.006	69	5140	2.00	1.81	
70 Isobutyl alcohol	41	7.145	7.138	0.007	51	4112	25.0	26.0	M
71 1,1,1-Trichloroethane	97	7.145	7.146	-0.001	95	26439	1.00	0.9249	
72 Cyclohexane	56	7.209	7.210	-0.001	94	49969	1.00	0.9043	
73 1,1-Dichloropropene	75	7.252	7.246	0.006	94	37152	1.00	0.9056	
74 Carbon tetrachloride	117	7.273	7.281	-0.008	94	18261	1.00	1.19	
76 1,2-Dichloroethane	62	7.423	7.417	0.006	96	29109	1.00	0.99	
77 Benzene	78	7.431	7.432	-0.001	97	115636	1.00	0.9705	
14 n-Heptane	43	7.488	7.489	-0.001	92	54772	1.00	0.9310	
79 Trichloroethene	95	7.895	7.896	-0.001	93	26728	1.00	0.9076	
80 2-Pentanone	43	7.960	7.946	0.014	96	16112	2.00	5.92	
82 Methylcyclohexane	55	8.074	8.075	-0.001	94	42986	1.00	0.9436	
83 1,2-Dichloropropane	63	8.088	8.082	0.006	88	27177	1.00	0.9485	
84 1,4-Dioxane	88		8.147				ND	ND	
85 Dibromomethane	93	8.196	8.190	0.006	87	9616	1.00	0.9765	
86 Dichlorobromomethane	83	8.260	8.261	-0.001	96	21183	1.00	1.00	
87 2-Chloroethyl vinyl ether	63	8.410	8.404	0.006	83	3656	1.00	1.49	
89 cis-1,3-Dichloropropene	75	8.575	8.576	-0.001	90	22984	1.00	1.06	
90 4-Methyl-2-pentanone (MIBK	43	8.632	8.633	-0.001	98	35818	4.00	3.49	
91 Toluene	91	8.846	8.847	-0.001	96	112010	1.00	0.9380	
92 Ethyl methacrylate	69	8.932	8.933	-0.001	90	8015	1.00	1.25	
93 trans-1,3-Dichloropropene	75	8.954	8.955	-0.001	96	14235	1.00	1.22	
94 1,1,2-Trichloroethane	97	9.111	9.112	-0.001	91	12181	1.00	0.9348	
95 2-Hexanone	43	9.225	9.219	0.006	99	20681	4.00	3.76	
96 1,3-Dichloropropane	76	9.247	9.248	-0.001	96	23917	1.00	0.9401	
97 Tetrachloroethene	164	9.254	9.255	-0.001	93	18941	1.00	0.9424	
98 Chlorodibromomethane	129	9.440	9.441	-0.001	86	7815	1.00	1.27	
100 Ethylene Dibromide	107	9.561	9.562	-0.001	94	8765	1.00	0.8249	
101 1-Chlorohexane	91	9.776	9.777	-0.001	85	15220	0.5000	0.4158	
102 Chlorobenzene	112	9.890	9.891	-0.001	96	63506	1.00	0.9577	
103 Ethylbenzene	106	9.926	9.927	-0.001	99	37237	1.00	0.9329	
104 1,1,1,2-Tetrachloroethane	131	9.926	9.927	-0.001	40	11107	1.00	1.06	
105 m-Xylene & p-Xylene	106	10.005	9.999	0.006	0	44242	1.00	0.9263	
107 o-Xylene	106	10.319	10.320	-0.001	97	39214	1.00	0.8939	
106 Styrene	104	10.319	10.320	-0.001	89	49311	1.00	0.9221	
108 Bromoform	173	10.527	10.535	-0.008	10	2101	1.00	1.36	a
109 Isopropylbenzene	105	10.577	10.578	-0.001	97	104406	1.00	0.9322	
111 Cyclohexanone	55	10.720	10.721	-0.001	95	8215	40.0	44.0	
112 1,1,2,2-Tetrachloroethane	83	10.791	10.792	-0.001	92	10891	1.00	0.9476	
113 trans-1,4-Dichloro-2-buten	53	10.827	10.828	-0.001	45	1917	1.00	1.22	
114 1,2,3-Trichloropropane	110	10.863	10.864	-0.001	76	3098	1.00	0.9526	
115 N-Propylbenzene	120	10.891	10.892	-0.001	99	26997	1.00	0.9044	
116 Bromobenzene	156	10.906	10.899	0.007	97	19981	1.00	0.9522	
117 1,3,5-Trimethylbenzene	105	11.006	11.007	-0.001	94	82833	1.00	0.9295	
118 2-Chlorotoluene	126	11.020	11.021	-0.001	93	22782	1.00	0.9213	
119 4-Chlorotoluene	126	11.099	11.100	-0.001	99	21457	1.00	0.8960	
120 tert-Butylbenzene	119	11.299	11.300	-0.001	93	80352	1.00	0.9354	
121 1,2,4-Trimethylbenzene	105	11.327	11.328	-0.001	96	83514	1.00	0.9245	
122 sec-Butylbenzene	134	11.478	11.479	-0.001	96	21307	1.00	0.9314	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 4-Isopropyltoluene	119	11.571	11.572	-0.001	97	85735	1.00	0.9157	
124 1,3-Dichlorobenzene	146	11.649	11.650	-0.001	92	41029	1.00	0.9522	
126 1,4-Dichlorobenzene	146	11.714	11.722	-0.008	90	43259	1.00	1.00	
127 n-Butylbenzene	91	11.935	11.936	-0.001	99	90278	1.00	0.9293	
128 1,2-Dichlorobenzene	146	12.078	12.079	-0.001	93	34028	1.00	0.9551	
129 1,2-Dibromo-3-Chloropropan	157		12.837				ND	ND	
130 1,2,4-Trichlorobenzene	180	13.773	13.781	-0.008	92	20943	1.00	0.9460	
131 Hexachlorobutadiene	225	13.916	13.917	-0.001	93	14571	1.00	1.03	
132 Naphthalene	128	14.159	14.160	-0.001	96	27951	1.00	0.9142	
133 1,2,3-Trichlorobenzene	180	14.481	14.482	-0.001	90	15344	1.00	0.9071	
S 140 1,2-Dichloroethene, Total	96				0		2.00	1.86	
S 135 Xylenes, Total (URS)	1				0		2.00	1.82	
S 138 1,2-Dichloroethene, Total	1				0		2.00	1.86	
S 136 Total BTEX	1				0			4.66	
S 137 1,3-Dichloropropene, Total	1				0		2.00	2.28	
S 139 Xylenes, Total	106				0		2.00	1.82	
S 134 Trihalomethanes, Total	1				0		4.00	4.60	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MV-Main A_00030	Amount Added:	0.50	Units: uL	
MV-Gas/Ket A_00060	Amount Added:	0.50	Units: uL	
MV-2cleve+AVA_00025	Amount Added:	0.50	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent

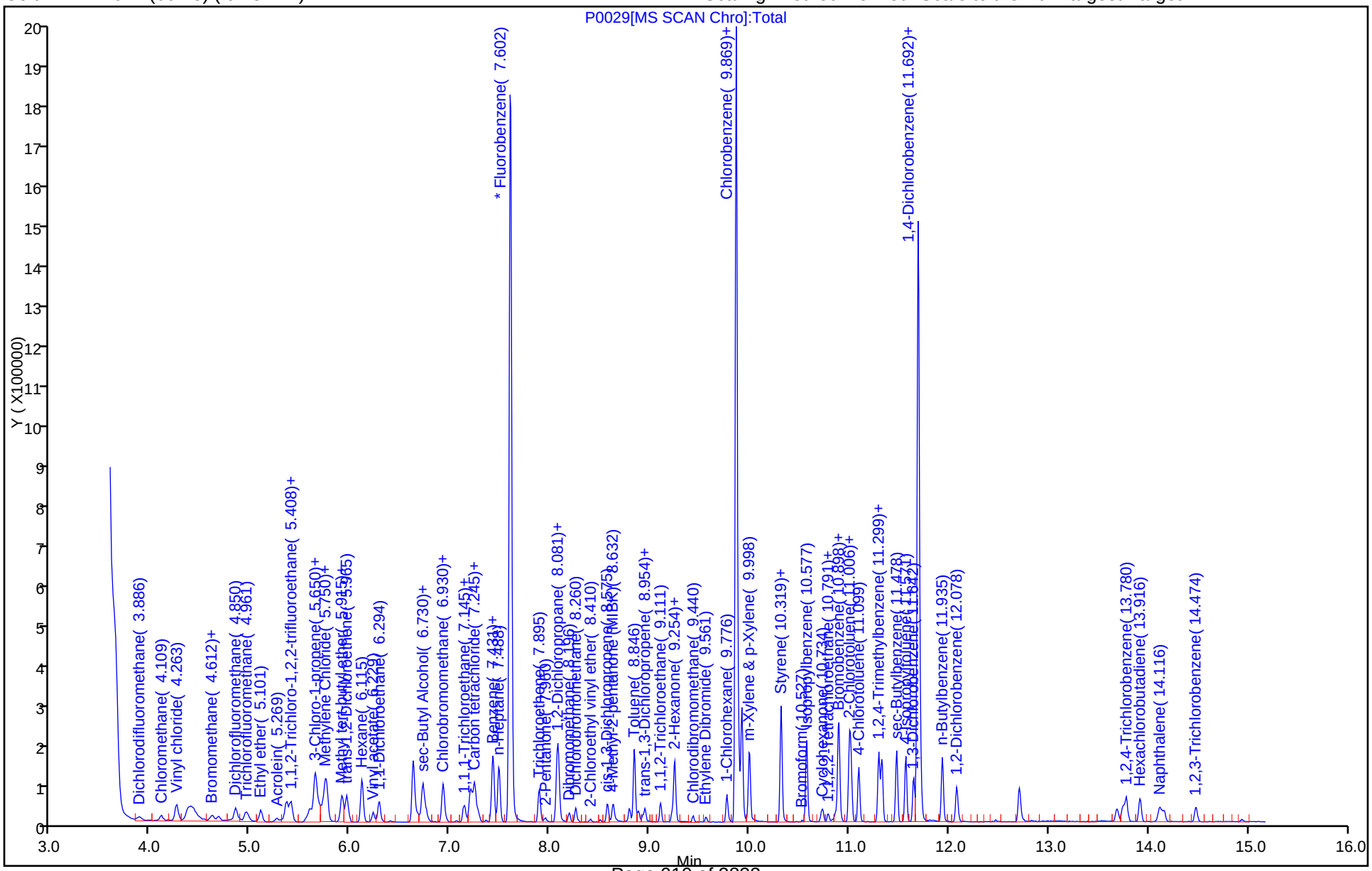
Report Date: 20-Jun-2017 10:29:12 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0029.D

Injection Date:	19-Jun-2017 11:36:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD010			Worklist Smp#:	28
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Denver

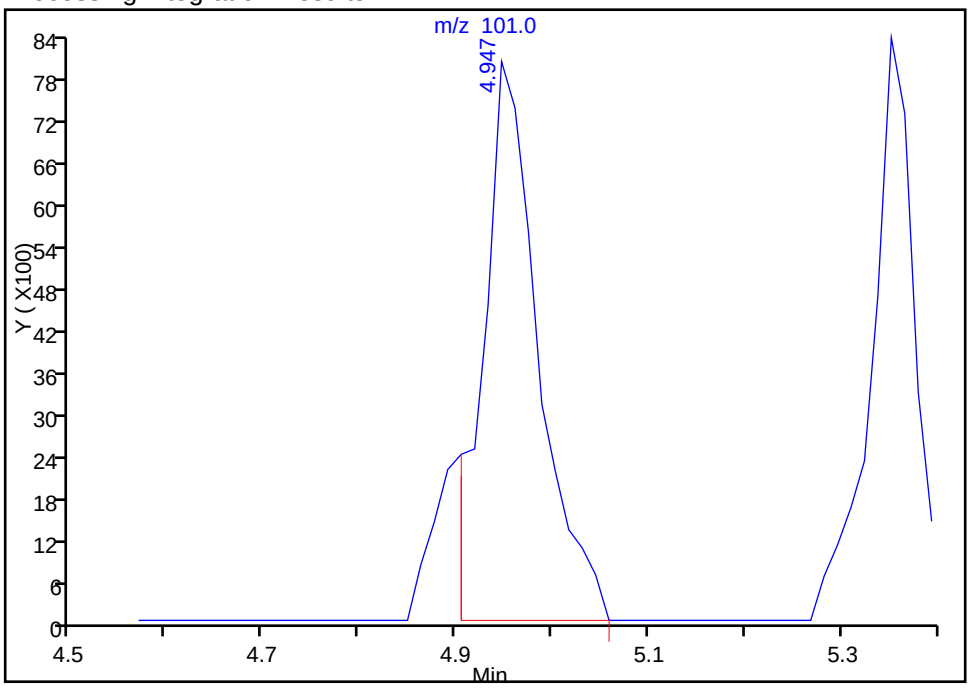
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Injection Date: 19-Jun-2017 11:36:30 Instrument ID: VMS_P
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 11 Worklist Smp#: 28
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MLE_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

32 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

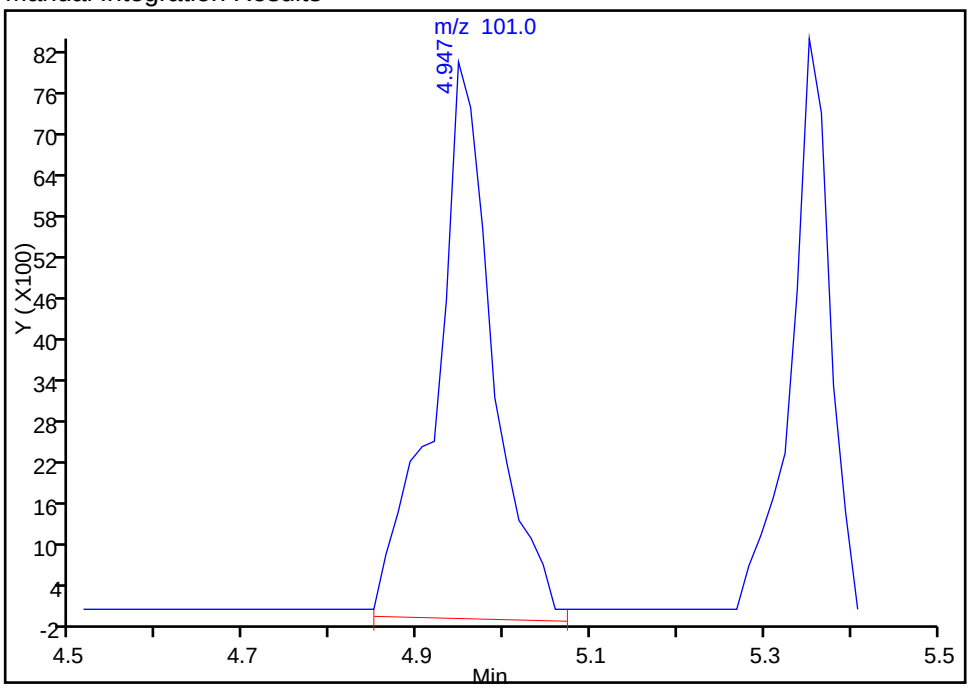
Processing Integration Results

RT: 4.95
Area: 32081
Amount: 0.951054
Amount Units: ug/l



Manual Integration Results

RT: 4.95
Area: 37700
Amount: 0.970841
Amount Units: ug/l



Reviewer: seifertj, 19-Jun-2017 12:28:09
Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Denver

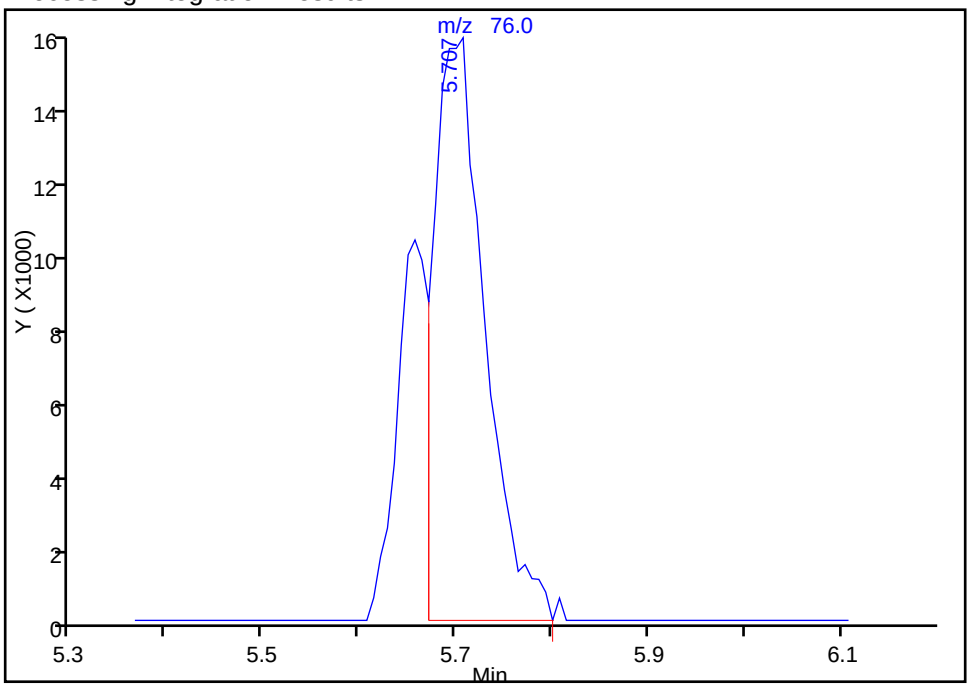
Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0029.D
Injection Date: 19-Jun-2017 11:36:30 Instrument ID: VMS_P
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 11 Worklist Smp#: 28
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MLE_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

48 Carbon disulfide, CAS: 75-15-0

Signal: 1

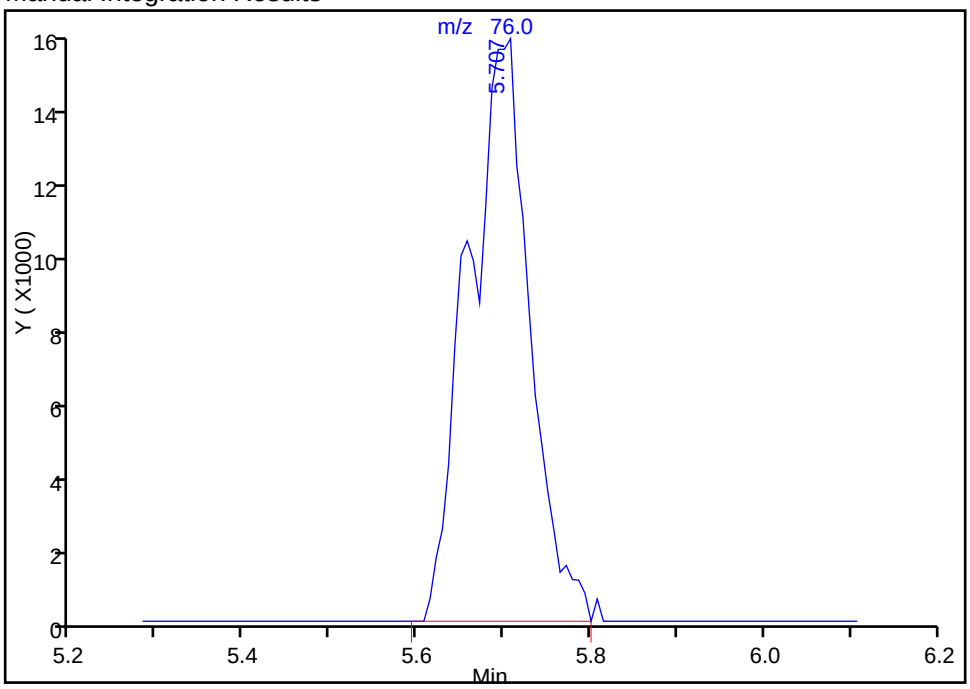
Processing Integration Results

RT: 5.71
Area: 57942
Amount: 1.161439
Amount Units: ug/l



Manual Integration Results

RT: 5.71
Area: 77818
Amount: 0.824943
Amount Units: ug/l



Reviewer: seifertj, 20-Jun-2017 10:01:04
Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Denver

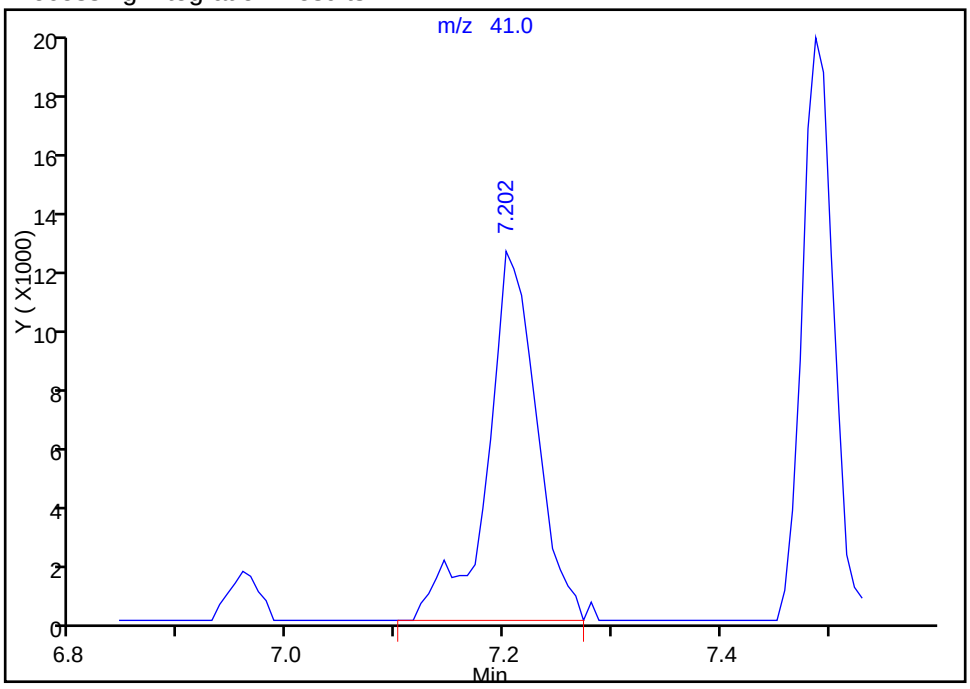
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Injection Date: 19-Jun-2017 11:36:30 Instrument ID: VMS_P
Lims ID: STD010
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 11 Worklist Smp#: 28
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MLE_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

70 Isobutyl alcohol, CAS: 78-83-1

Signal: 1

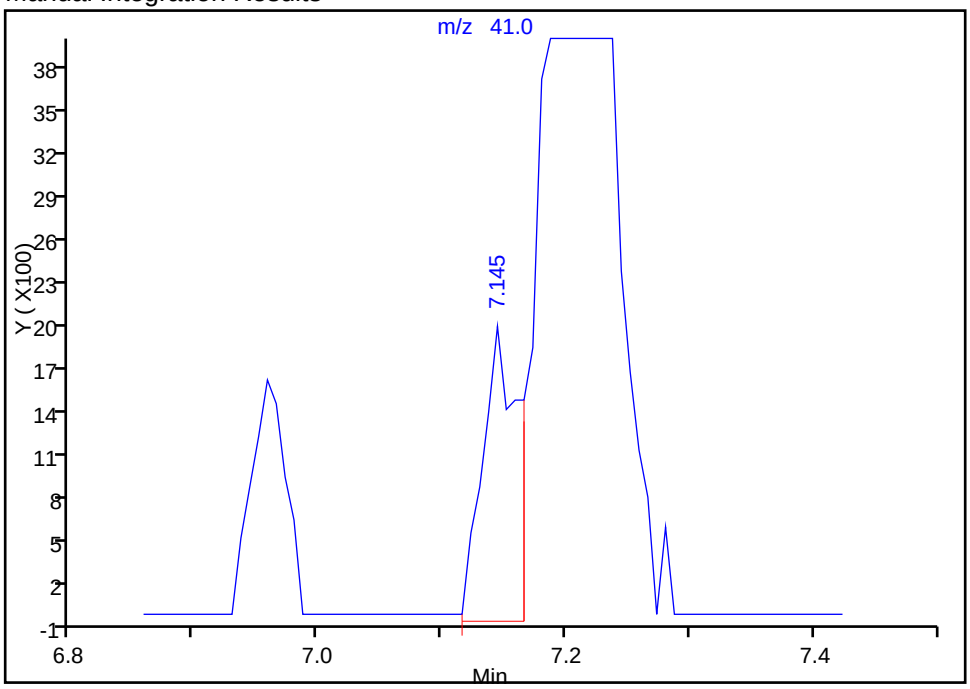
Processing Integration Results

RT: 7.20
Area: 38598
Amount: 67.520664
Amount Units: ug/l



Manual Integration Results

RT: 7.14
Area: 4112
Amount: 25.969711
Amount Units: ug/l



Reviewer: seifertj, 19-Jun-2017 14:03:07
Audit Action: Manually Integrated Audit Reason: Wrong peak

Manual Integration/User Assign Peak Report

TestAmerica Denver

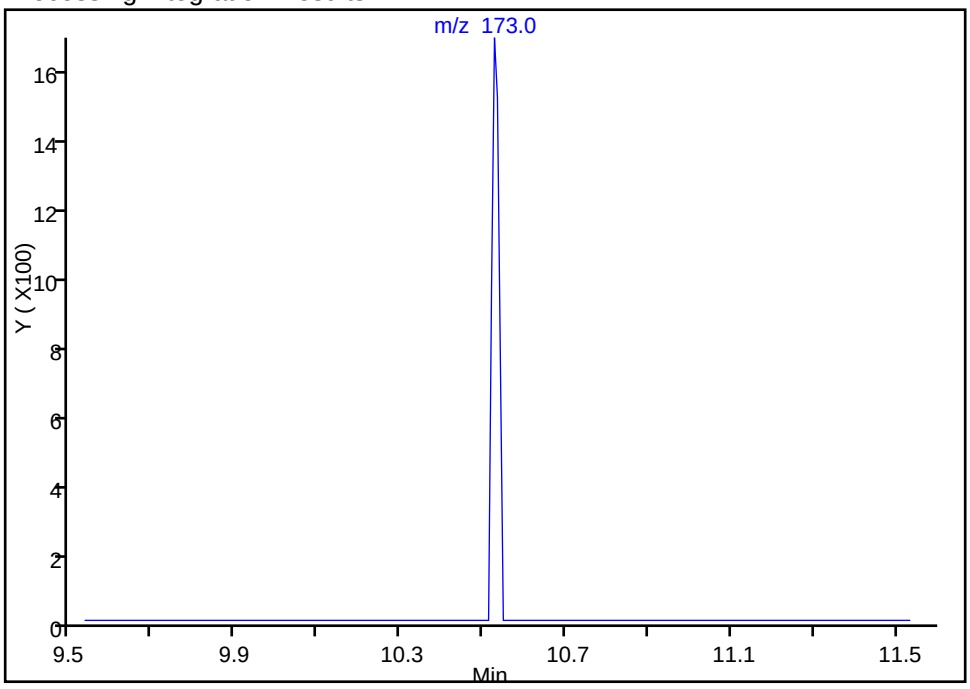
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Injection Date:	19-Jun-2017 11:36:30	Instrument ID:	VMS_P		
Lims ID:	STD010				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	11	Worklist Smp#:	28
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

108 Bromoform, CAS: 75-25-2

Signal: 1

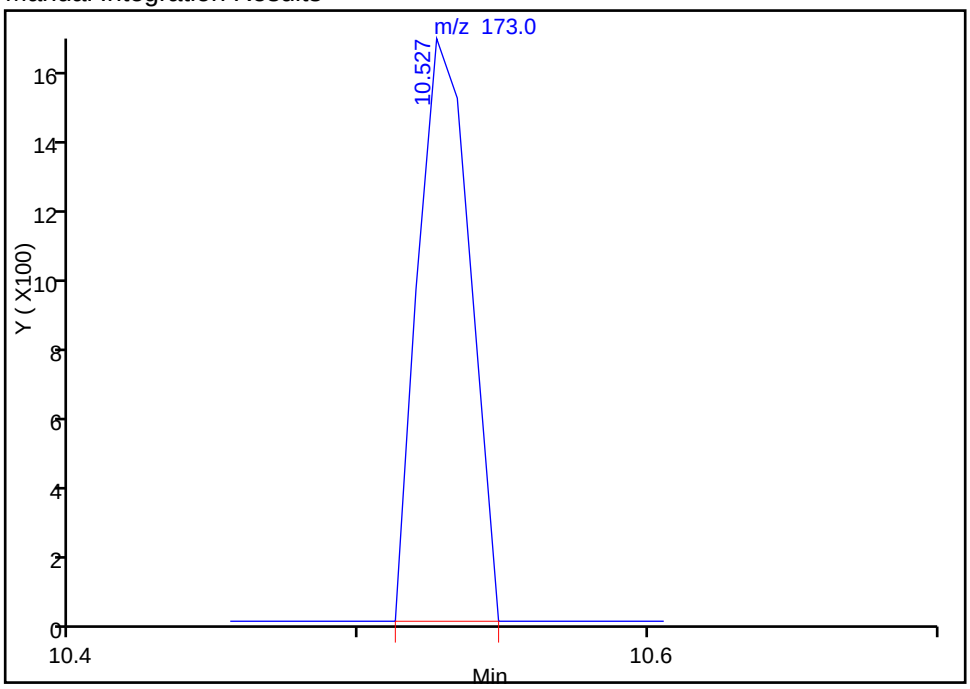
Not Detected
Expected RT: 10.53

Processing Integration Results



Manual Integration Results

RT: 10.53
Area: 2101
Amount: 1.360303
Amount Units: ug/l



Reviewer: seifertj, 19-Jun-2017 12:30:17
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0030.D
Lims ID: STD020
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 19-Jun-2017 11:55:30 ALS Bottle#: 12 Worklist Smp#: 29
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: STD020
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-MLE_VMSP_8260*sub43

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 10:29:13 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: seifertj Date: 19-Jun-2017 12:45:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.651	5.650	0.001	0	115831	250.0	250.0	
* 1 Fluorobenzene	96	7.603	7.609	-0.006	97	1480521	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.869	9.869	0.000	90	272410	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.693	11.699	-0.006	97	365679	12.5	12.5	
23 Dichlorodifluoromethane	85	3.886	3.876	0.010	99	31029	2.00	1.74	
26 Chloromethane	50	4.096	4.099	-0.003	98	32855	2.00	1.76	
27 Vinyl chloride	62	4.250	4.253	-0.003	72	33274	2.00	1.82	
29 Bromomethane	94	4.613	4.616	-0.003	91	23394	2.00	1.77	
30 Chloroethane	64	4.682	4.686	-0.004	96	21275	2.00	1.81	
31 Dichlorofluoromethane	67	4.850	4.854	-0.004	97	100455	2.00	2.28	
32 Trichlorofluoromethane	101	4.948	4.951	-0.003	97	73316	2.00	1.87	M
35 Ethyl ether	59	5.101	5.105	-0.004	94	34515	2.00	1.89	
39 Acrolein	56	5.269	5.259	0.010	98	24487	20.0	16.6	
40 1,1,2-Trichloro-1,2,2-trif	151	5.353	5.356	-0.003	95	34803	2.00	1.81	
41 Acetone	43	5.367	5.370	-0.003	65	27561	8.00	7.90	
43 1,1-Dichloroethene	96	5.409	5.412	-0.003	95	52916	2.00	1.82	
44 Iodomethane	142	5.579	5.580	-0.001	99	68710	2.00	1.77	
45 Methyl acetate	43	5.601	5.601	0.000	97	68606	10.0	9.15	
47 3-Chloro-1-propene	41	5.651	5.651	0.000	83	86503	2.00	1.65	
48 Carbon disulfide	76	5.694	5.694	0.000	99	166794	2.00	1.75	M
49 2-Methyl-2-propanol	59	5.708	5.716	-0.008	92	10911	20.0	18.0	
50 Methylene Chloride	84	5.758	5.759	0.000	97	89958	2.00	1.91	
51 Methyl tert-butyl ether	73	5.915	5.916	-0.001	94	70702	2.00	1.77	
52 Acrylonitrile	53	5.915	5.916	-0.001	98	60424	20.0	18.1	
53 trans-1,2-Dichloroethene	96	5.965	5.966	-0.001	94	53242	2.00	1.84	
54 Hexane	57	6.115	6.116	-0.001	95	92295	2.00	1.87	
55 Vinyl acetate	43	6.230	6.230	0.000	97	80458	4.00	3.58	
57 1,1-Dichloroethane	63	6.287	6.288	-0.001	97	103768	2.00	1.85	
61 2-Butanone (MEK)	43	6.680	6.681	-0.001	100	37019	8.00	6.48	
62 sec-Butyl Alcohol	45	6.716	6.724	-0.008	35	11649	30.0	25.1	
63 cis-1,2-Dichloroethene	96	6.723	6.724	-0.001	84	55249	2.00	1.79	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
64 2,2-Dichloropropane	77	6.745	6.745	0.000	82	53567	2.00	1.80	
67 Chlorobromomethane	128	6.931	6.924	0.007	90	17278	2.00	1.83	
68 Chloroform	83	6.931	6.931	0.000	93	90945	2.00	1.82	
69 Tetrahydrofuran	42	6.959	6.953	0.006	83	10378	4.00	3.63	
70 Isobutyl alcohol	41	7.145	7.138	0.007	38	8408	50.0	43.2	
71 1,1,1-Trichloroethane	97	7.145	7.146	-0.001	97	58481	2.00	1.76	
72 Cyclohexane	56	7.209	7.210	-0.001	94	106460	2.00	1.91	
73 1,1-Dichloropropene	75	7.245	7.246	-0.001	93	79927	2.00	1.93	
74 Carbon tetrachloride	117	7.281	7.281	0.000	95	41918	2.00	1.90	
76 1,2-Dichloroethane	62	7.424	7.417	0.007	97	55468	2.00	1.87	
77 Benzene	78	7.431	7.432	-0.001	98	223904	2.00	1.86	
14 n-Heptane	43	7.488	7.489	-0.001	95	117044	2.00	1.97	
79 Trichloroethene	95	7.896	7.896	0.000	93	56668	2.00	1.90	
80 2-Pentanone	43	7.953	7.946	0.007	98	40632	4.00	7.50	
82 Methylcyclohexane	55	8.075	8.075	0.000	95	88971	2.00	1.93	
83 1,2-Dichloropropane	63	8.089	8.082	0.007	91	54734	2.00	1.89	
84 1,4-Dioxane	88	8.146	8.147	-0.001	90	3121	40.0	33.0	
85 Dibromomethane	93	8.196	8.190	0.006	85	17381	2.00	1.75	
86 Dichlorobromomethane	83	8.261	8.261	0.000	97	41740	2.00	1.66	
87 2-Chloroethyl vinyl ether	63	8.404	8.404	0.000	87	7274	2.00	2.08	
89 cis-1,3-Dichloropropene	75	8.575	8.576	-0.001	91	46934	2.00	1.76	
90 4-Methyl-2-pentanone (MIBK	43	8.632	8.633	-0.001	98	73447	8.00	7.08	
91 Toluene	91	8.847	8.847	0.000	98	223671	2.00	1.85	
92 Ethyl methacrylate	69	8.933	8.933	0.000	94	17379	2.00	1.80	
93 trans-1,3-Dichloropropene	75	8.954	8.955	-0.001	99	31417	2.00	1.83	
94 1,1,2-Trichloroethane	97	9.111	9.112	-0.001	93	24228	2.00	1.84	
95 2-Hexanone	43	9.226	9.219	0.007	99	43124	8.00	6.93	
96 1,3-Dichloropropane	76	9.247	9.248	-0.001	98	47023	2.00	1.84	
97 Tetrachloroethene	164	9.254	9.255	-0.001	94	39149	2.00	1.94	
98 Chlorodibromomethane	129	9.433	9.441	-0.008	90	16048	2.00	1.83	
100 Ethylene Dibromide	107	9.562	9.562	0.000	96	18707	2.00	1.76	
101 1-Chlorohexane	91	9.776	9.777	-0.001	88	34712	1.00	0.9460	
102 Chlorobenzene	112	9.891	9.891	0.000	95	131232	2.00	1.97	
104 1,1,1,2-Tetrachloroethane	131	9.927	9.927	-0.001	39	24653	2.00	1.79	
103 Ethylbenzene	106	9.927	9.927	-0.001	98	77790	2.00	1.94	
105 m-Xylene & p-Xylene	106	9.998	9.999	-0.001	0	90942	2.00	1.90	
106 Styrene	104	10.320	10.320	0.000	89	107926	2.00	1.80	
107 o-Xylene	106	10.320	10.320	0.000	98	83724	2.00	1.90	
108 Bromoform	173	10.534	10.535	-0.001	88	5453	2.00	1.92	
109 Isopropylbenzene	105	10.577	10.578	-0.001	97	235331	2.00	2.00	
111 Cyclohexanone	55	10.720	10.721	-0.001	93	15607	80.0	66.7	
112 1,1,2,2-Tetrachloroethane	83	10.792	10.792	0.000	95	21619	2.00	1.79	
113 trans-1,4-Dichloro-2-buten	53	10.827	10.828	-0.001	53	4068	2.00	1.83	
114 1,2,3-Trichloropropane	110	10.863	10.864	-0.001	76	6263	2.00	1.84	
115 N-Propylbenzene	120	10.892	10.892	0.000	99	62727	2.00	2.00	
116 Bromobenzene	156	10.906	10.899	0.007	96	41855	2.00	1.90	
117 1,3,5-Trimethylbenzene	105	11.006	11.007	-0.001	93	189281	2.00	2.02	
118 2-Chlorotoluene	126	11.020	11.021	-0.001	93	51849	2.00	2.00	
119 4-Chlorotoluene	126	11.099	11.100	-0.001	99	49581	2.00	1.97	
120 tert-Butylbenzene	119	11.299	11.300	-0.001	93	180145	2.00	2.00	
121 1,2,4-Trimethylbenzene	105	11.328	11.328	0.000	94	193623	2.00	2.04	
122 sec-Butylbenzene	134	11.478	11.479	-0.001	96	48985	2.00	2.04	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 4-Isopropyltoluene	119	11.571	11.572	-0.001	97	203755	2.00	2.07	
124 1,3-Dichlorobenzene	146	11.650	11.650	0.000	95	89361	2.00	1.98	
126 1,4-Dichlorobenzene	146	11.721	11.722	-0.001	93	90271	2.00	1.99	
127 n-Butylbenzene	91	11.936	11.936	0.000	99	215202	2.00	2.11	
128 1,2-Dichlorobenzene	146	12.079	12.079	0.000	94	73491	2.00	1.97	
129 1,2-Dibromo-3-Chloropropan	157	12.844	12.837	0.007	62	1076	2.00	2.37	
130 1,2,4-Trichlorobenzene	180	13.780	13.781	-0.001	92	46017	2.00	1.98	
131 Hexachlorobutadiene	225	13.923	13.917	0.006	93	31084	2.00	2.10	
132 Naphthalene	128	14.159	14.160	-0.001	98	56268	2.00	1.75	
133 1,2,3-Trichlorobenzene	180	14.474	14.482	-0.008	92	34897	2.00	1.97	
S 140 1,2-Dichloroethene, Total	96				0		4.00	3.63	
S 137 1,3-Dichloropropene, Total	1				0		4.00	3.59	
S 139 Xylenes, Total	106				0		4.00	3.80	
S 134 Trihalomethanes, Total	1				0		8.00	7.23	
S 136 Total BTEX	1				0			9.46	
S 135 Xylenes, Total (URS)	1				0		4.00	3.80	
S 138 1,2-Dichloroethene, Total	1				0		4.00	3.63	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MV-Main A_00030	Amount Added:	1.00	Units: uL	
MV-Gas/Ket A_00060	Amount Added:	1.00	Units: uL	
MV-2cleve+AVA_00025	Amount Added:	1.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent

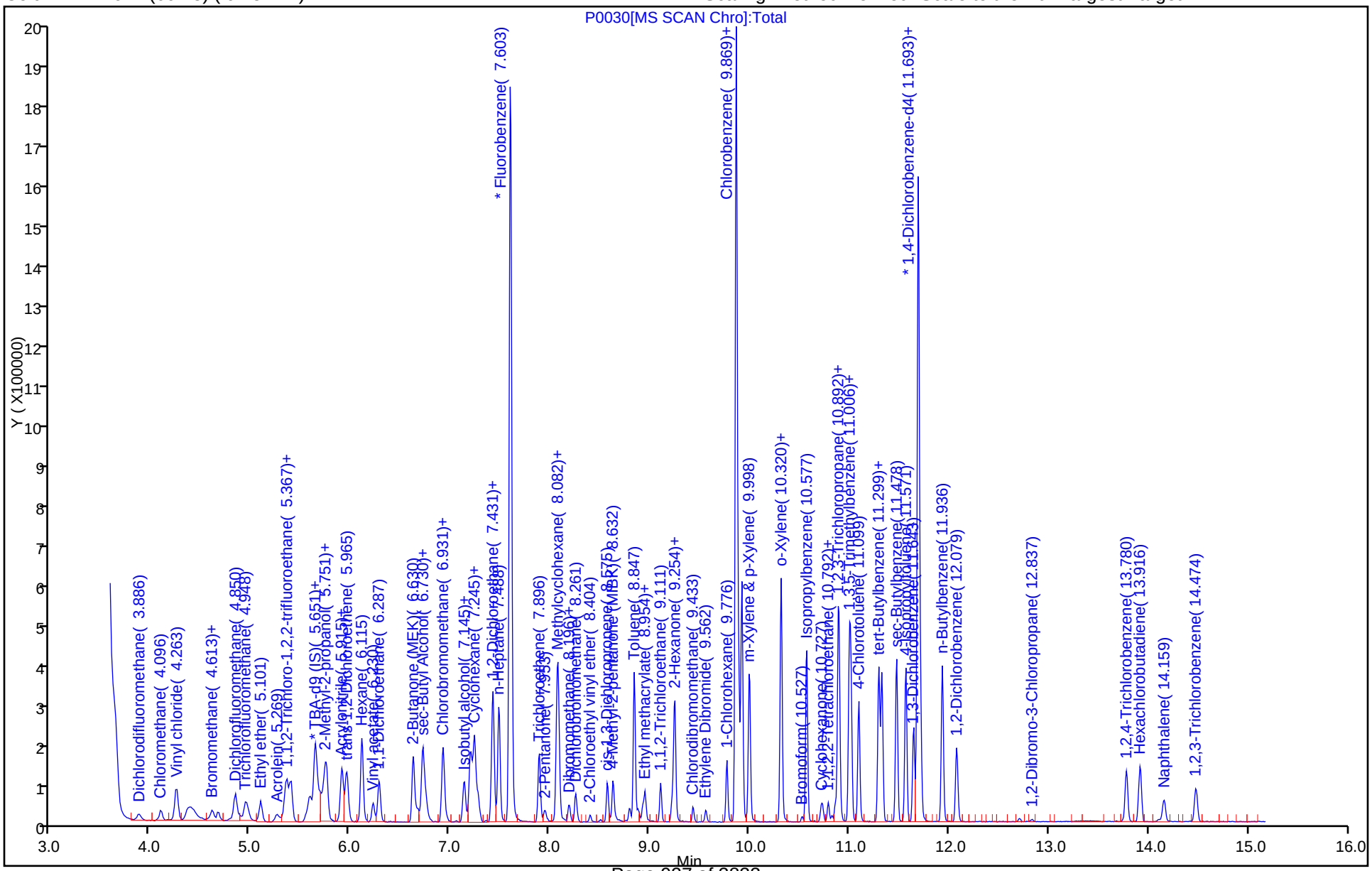
Report Date: 20-Jun-2017 10:29:13 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0030.D

Injection Date:	19-Jun-2017 11:55:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD020			Worklist Smp#:	29
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Denver

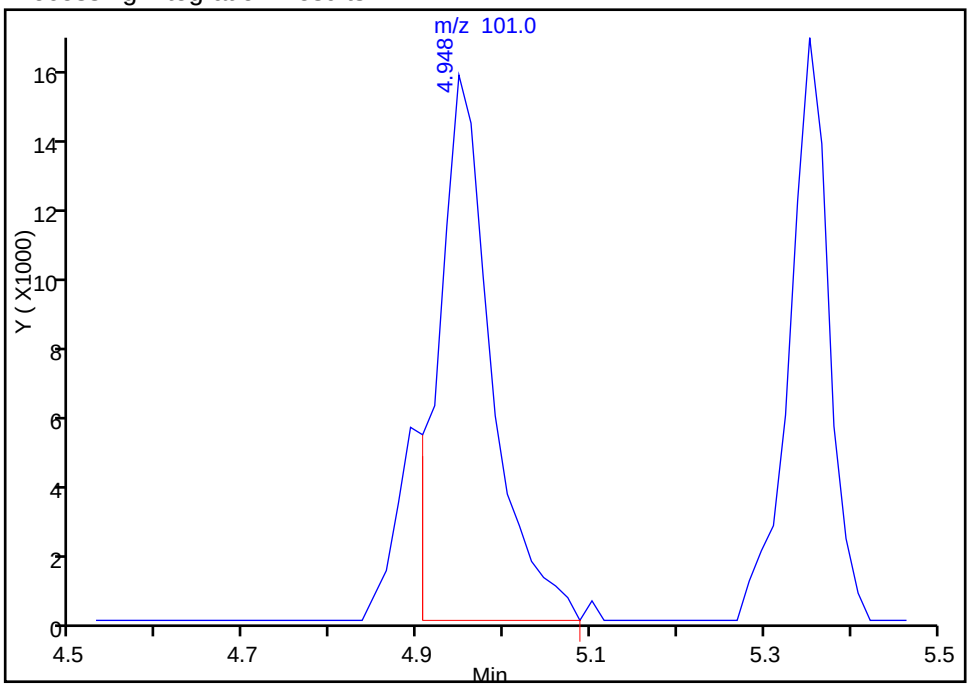
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Injection Date: 19-Jun-2017 11:55:30 Instrument ID: VMS_P
Lims ID: STD020
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 12 Worklist Smp#: 29
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MLE_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

32 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

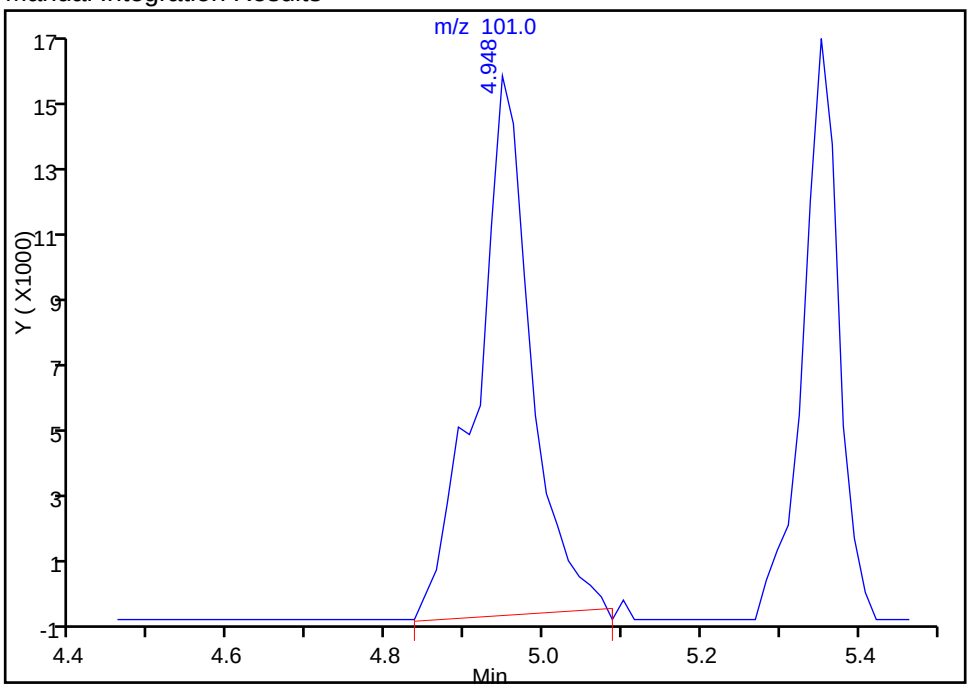
Processing Integration Results

RT: 4.95
Area: 66255
Amount: 1.842059
Amount Units: ug/l



Manual Integration Results

RT: 4.95
Area: 73316
Amount: 1.868968
Amount Units: ug/l



Reviewer: seifertj, 19-Jun-2017 12:43:36
Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Denver

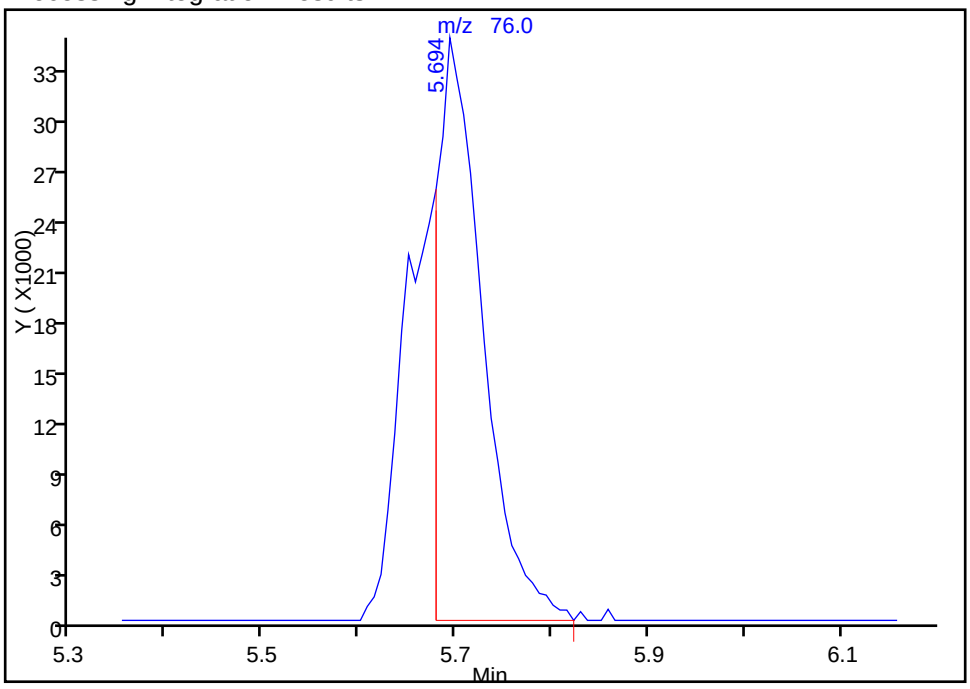
Data File:	\\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0030.D				
Injection Date:	19-Jun-2017 11:55:30	Instrument ID:	VMS_P		
Lims ID:	STD020				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	12	Worklist Smp#:	29
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

48 Carbon disulfide, CAS: 75-15-0

Signal: 1

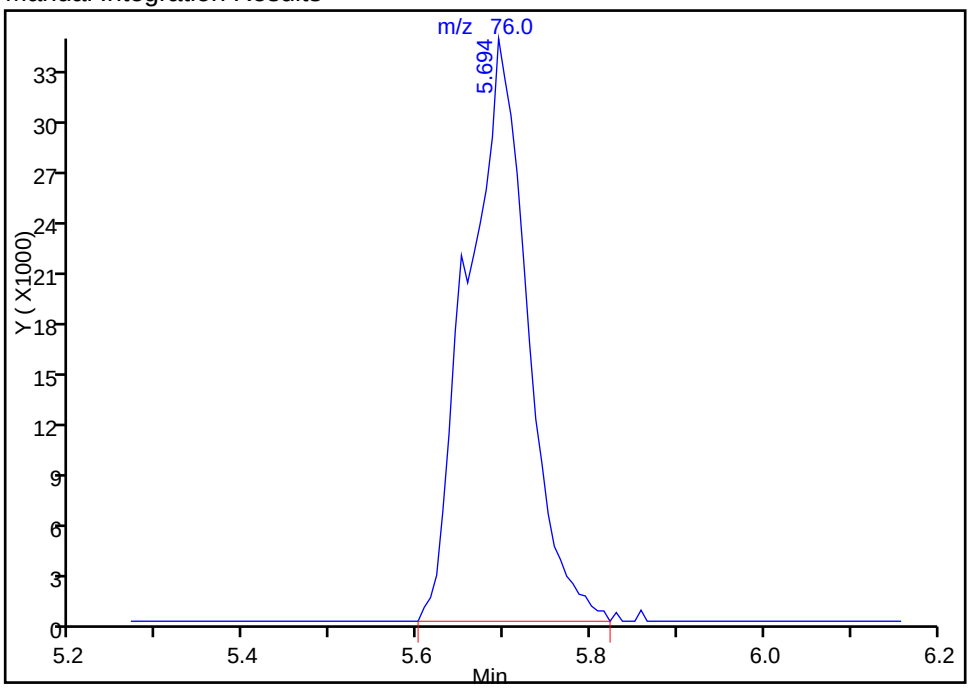
Processing Integration Results

RT: 5.69
Area: 112334
Amount: 1.847042
Amount Units: ug/l



Manual Integration Results

RT: 5.69
Area: 166794
Amount: 1.750333
Amount Units: ug/l



Reviewer: seifertj, 19-Jun-2017 12:43:51
Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0031.D
Lims ID: STD050
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 19-Jun-2017 12:14:30 ALS Bottle#: 13 Worklist Smp#: 30
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: STD050
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-MLE_VMSP_8260*sub43

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 10:29:14 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: seifertj Date: 19-Jun-2017 13:53:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.643	5.650	-0.007	0	124455	250.0	250.0	
* 1 Fluorobenzene	96	7.610	7.609	0.001	98	1508603	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.869	9.869	0.000	89	280814	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.693	11.699	-0.007	97	388878	12.5	12.5	
23 Dichlorodifluoromethane	85	3.887	3.876	0.011	100	92441	5.00	4.44	
26 Chloromethane	50	4.110	4.099	0.011	98	92340	5.00	4.86	
27 Vinyl chloride	62	4.264	4.253	0.011	98	83700	5.00	4.49	
29 Bromomethane	94	4.627	4.616	0.011	94	65614	5.00	4.88	
30 Chloroethane	64	4.683	4.686	-0.003	97	56904	5.00	4.75	
31 Dichlorofluoromethane	67	4.850	4.854	-0.004	98	184381	5.00	4.10	
32 Trichlorofluoromethane	101	4.962	4.951	0.011	98	163171	5.00	4.08	M
35 Ethyl ether	59	5.102	5.105	-0.003	95	96989	5.00	5.23	
39 Acrolein	56	5.269	5.259	0.010	99	75602	50.0	50.4	
40 1,1,2-Trichloro-1,2,2-trif	151	5.353	5.356	-0.003	96	120711	5.00	6.15	
41 Acetone	43	5.367	5.370	-0.003	98	74338	20.0	20.9	
43 1,1-Dichloroethene	96	5.409	5.412	-0.003	96	173832	5.00	5.86	
44 Iodomethane	142	5.586	5.580	0.006	99	220711	5.00	5.59	
45 Methyl acetate	43	5.601	5.601	0.000	99	203144	25.0	26.6	
47 3-Chloro-1-propene	41	5.651	5.651	0.000	89	301927	5.00	5.63	
48 Carbon disulfide	76	5.694	5.694	0.000	99	579697	5.00	5.97	M
49 2-Methyl-2-propanol	59	5.715	5.716	-0.001	93	35559	50.0	54.7	
50 Methylene Chloride	84	5.758	5.759	0.000	99	183443	5.00	5.30	
52 Acrylonitrile	53	5.915	5.916	-0.001	86	182180	50.0	53.5	
51 Methyl tert-butyl ether	73	5.915	5.916	-0.001	96	217638	5.00	5.34	
53 trans-1,2-Dichloroethene	96	5.965	5.966	-0.001	95	170553	5.00	5.78	
54 Hexane	57	6.115	6.116	-0.001	95	316998	5.00	6.23	
55 Vinyl acetate	43	6.230	6.230	0.000	97	240565	10.0	9.16	
57 1,1-Dichloroethane	63	6.287	6.288	-0.001	97	322572	5.00	5.64	
61 2-Butanone (MEK)	43	6.680	6.681	-0.001	99	124366	20.0	21.4	
63 cis-1,2-Dichloroethene	96	6.723	6.724	-0.001	85	170744	5.00	5.43	
62 sec-Butyl Alcohol	45	6.723	6.724	-0.001	37	37589	75.0	75.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
64 2,2-Dichloropropane	77	6.745	6.745	0.000	85	170347	5.00	5.63	
67 Chlorobromomethane	128	6.923	6.924	-0.001	90	51491	5.00	5.35	
68 Chloroform	83	6.931	6.931	0.000	94	282098	5.00	5.53	
69 Tetrahydrofuran	42	6.959	6.953	0.006	85	28611	10.0	9.81	
70 Isobutyl alcohol	41	7.145	7.138	0.007	38	25777	125.0	123.2	
71 1,1,1-Trichloroethane	97	7.145	7.146	-0.001	97	196753	5.00	5.29	
72 Cyclohexane	56	7.209	7.210	-0.001	95	344738	5.00	6.06	
73 1,1-Dichloropropene	75	7.245	7.246	-0.001	95	250510	5.00	5.93	
74 Carbon tetrachloride	117	7.281	7.281	0.000	95	147403	5.00	5.01	
76 1,2-Dichloroethane	62	7.417	7.417	0.000	97	164760	5.00	5.45	
77 Benzene	78	7.431	7.432	-0.001	98	684704	5.00	5.58	
14 n-Heptane	43	7.488	7.489	-0.001	96	373556	5.00	6.17	
79 Trichloroethene	95	7.896	7.896	0.000	95	170725	5.00	5.63	
80 2-Pentanone	43	7.946	7.946	0.000	98	142161	10.0	13.9	
82 Methylcyclohexane	55	8.075	8.075	0.000	96	287140	5.00	6.12	
83 1,2-Dichloropropane	63	8.089	8.082	0.007	91	158341	5.00	5.37	
84 1,4-Dioxane	88	8.146	8.147	-0.001	91	9568	100.0	99.3	
85 Dibromomethane	93	8.196	8.190	0.006	89	54646	5.00	5.39	
86 Dichlorobromomethane	83	8.260	8.261	-0.001	97	139996	5.00	4.76	
87 2-Chloroethyl vinyl ether	63	8.403	8.404	-0.001	91	23241	5.00	4.64	
89 cis-1,3-Dichloropropene	75	8.575	8.576	-0.001	91	162342	5.00	4.99	
90 4-Methyl-2-pentanone (MIBK	43	8.632	8.633	-0.001	99	214411	20.0	20.3	
91 Toluene	91	8.847	8.847	0.000	97	690530	5.00	5.62	
92 Ethyl methacrylate	69	8.933	8.933	0.000	94	66783	5.00	4.59	
93 trans-1,3-Dichloropropene	75	8.954	8.955	-0.001	99	112175	5.00	4.66	
94 1,1,2-Trichloroethane	97	9.111	9.112	-0.001	93	71646	5.00	5.34	
95 2-Hexanone	43	9.226	9.219	0.007	97	136266	20.0	19.5	
96 1,3-Dichloropropane	76	9.247	9.248	-0.001	98	144334	5.00	5.49	
97 Tetrachloroethene	164	9.254	9.255	-0.001	91	121247	5.00	5.84	
98 Chlorodibromomethane	129	9.440	9.441	-0.001	89	57767	5.00	4.56	
100 Ethylene Dibromide	107	9.562	9.562	0.000	96	60631	5.00	5.52	
101 1-Chlorohexane	91	9.776	9.777	-0.001	90	113210	2.50	2.99	
102 Chlorobenzene	112	9.891	9.891	0.000	94	373900	5.00	5.46	
103 Ethylbenzene	106	9.926	9.927	-0.001	98	234219	5.00	5.68	
104 1,1,1,2-Tetrachloroethane	131	9.926	9.927	-0.001	92	84516	5.00	4.89	
105 m-Xylene & p-Xylene	106	9.998	9.999	-0.001	0	282045	5.00	5.71	
107 o-Xylene	106	10.320	10.320	0.000	90	258427	5.00	5.70	
106 Styrene	104	10.320	10.320	0.000	82	350904	5.00	5.29	
108 Bromoform	173	10.527	10.535	-0.008	91	19884	5.00	4.23	
109 Isopropylbenzene	105	10.577	10.578	-0.001	97	709405	5.00	5.68	
111 Cyclohexanone	55	10.720	10.721	-0.001	96	54413	200.0	181.2	
112 1,1,2,2-Tetrachloroethane	83	10.792	10.792	0.000	96	68796	5.00	5.36	
113 trans-1,4-Dichloro-2-buten	53	10.827	10.828	-0.001	71	14709	5.00	4.73	
114 1,2,3-Trichloropropane	110	10.863	10.864	-0.001	81	19430	5.00	5.35	
115 N-Propylbenzene	120	10.892	10.892	0.000	99	193543	5.00	5.81	
116 Bromobenzene	156	10.899	10.899	0.000	96	128159	5.00	5.47	
117 1,3,5-Trimethylbenzene	105	11.006	11.007	-0.001	93	565012	5.00	5.68	
118 2-Chlorotoluene	126	11.020	11.021	-0.001	94	152485	5.00	5.53	
119 4-Chlorotoluene	126	11.099	11.100	-0.001	99	150752	5.00	5.64	
120 tert-Butylbenzene	119	11.299	11.300	-0.001	92	553710	5.00	5.78	
121 1,2,4-Trimethylbenzene	105	11.328	11.328	0.000	96	570952	5.00	5.66	
122 sec-Butylbenzene	134	11.478	11.479	-0.001	96	149763	5.00	5.87	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 4-Isopropyltoluene	119	11.571	11.572	-0.001	97	611441	5.00	5.85	
124 1,3-Dichlorobenzene	146	11.650	11.650	0.000	95	259600	5.00	5.40	
126 1,4-Dichlorobenzene	146	11.714	11.722	-0.008	94	258951	5.00	5.36	
127 n-Butylbenzene	91	11.936	11.936	0.000	99	642537	5.00	5.93	
128 1,2-Dichlorobenzene	146	12.079	12.079	0.000	94	208527	5.00	5.24	
129 1,2-Dibromo-3-Chloropropan	157	12.837	12.837	0.000	65	4780	5.00	4.63	
130 1,2,4-Trichlorobenzene	180	13.780	13.781	-0.001	93	129280	5.00	5.23	
131 Hexachlorobutadiene	225	13.916	13.917	-0.001	94	89045	5.00	5.66	
132 Naphthalene	128	14.159	14.160	-0.001	98	176255	5.00	5.17	
133 1,2,3-Trichlorobenzene	180	14.481	14.482	-0.001	94	100349	5.00	5.32	
S 140 1,2-Dichloroethene, Total	96				0		10.0	11.2	
S 135 Xylenes, Total (URS)	1				0		10.0	11.4	
S 138 1,2-Dichloroethene, Total	1				0		10.0	11.2	
S 136 Total BTEX	1				0			28.3	
S 137 1,3-Dichloropropene, Total	1				0		10.0	9.65	
S 139 Xylenes, Total	106				0		10.0	11.4	
S 134 Trihalomethanes, Total	1				0		20.0	19.1	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MV-Main A_00030	Amount Added:	2.50	Units: uL	
MV-Gas/Ket A_00060	Amount Added:	2.50	Units: uL	
MV-2cleve+AVA_00025	Amount Added:	2.50	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent

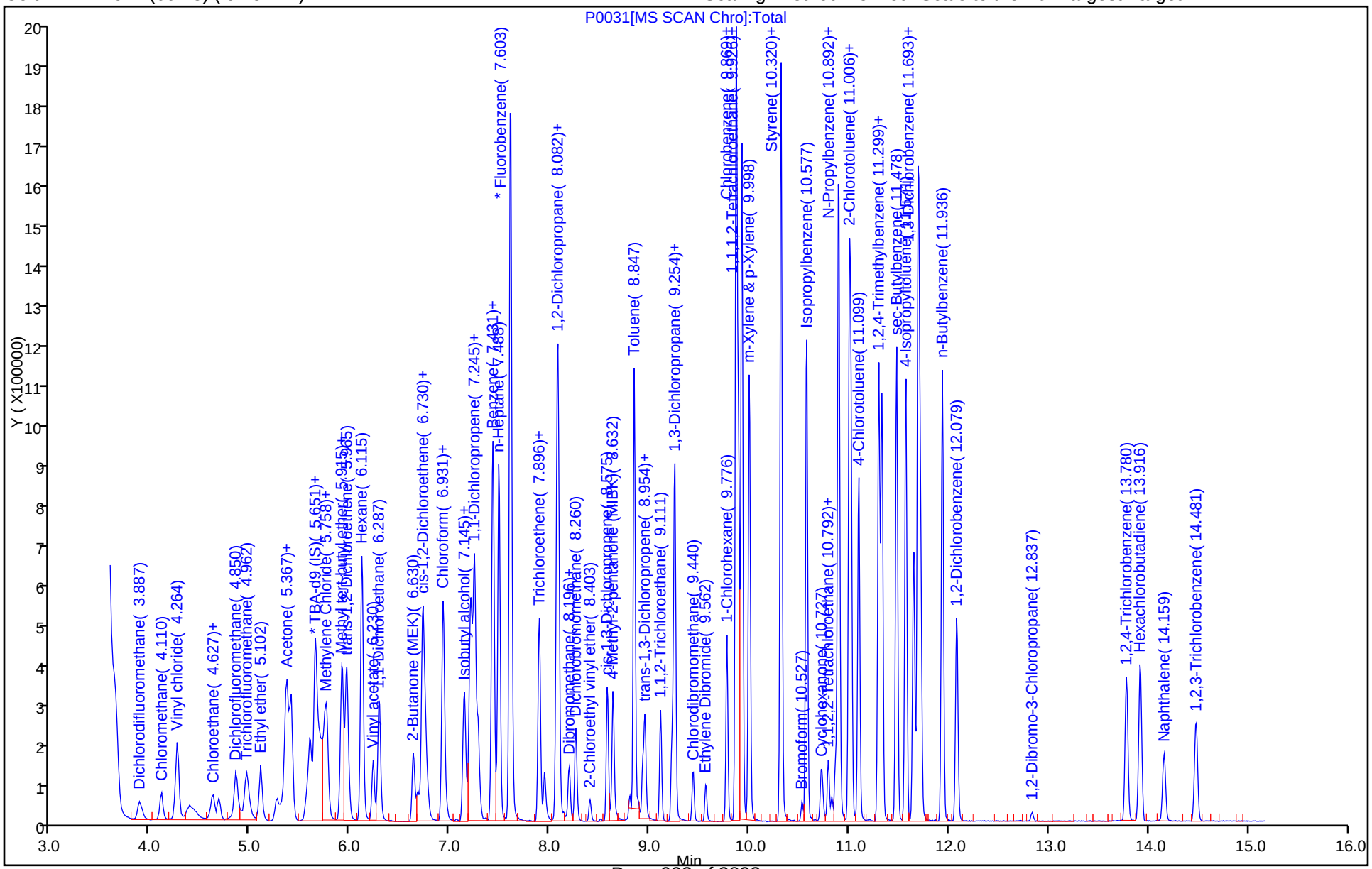
Report Date: 20-Jun-2017 10:29:15 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0031.D

Injection Date:	19-Jun-2017 12:14:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD050			Worklist Smp#:	30
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Denver

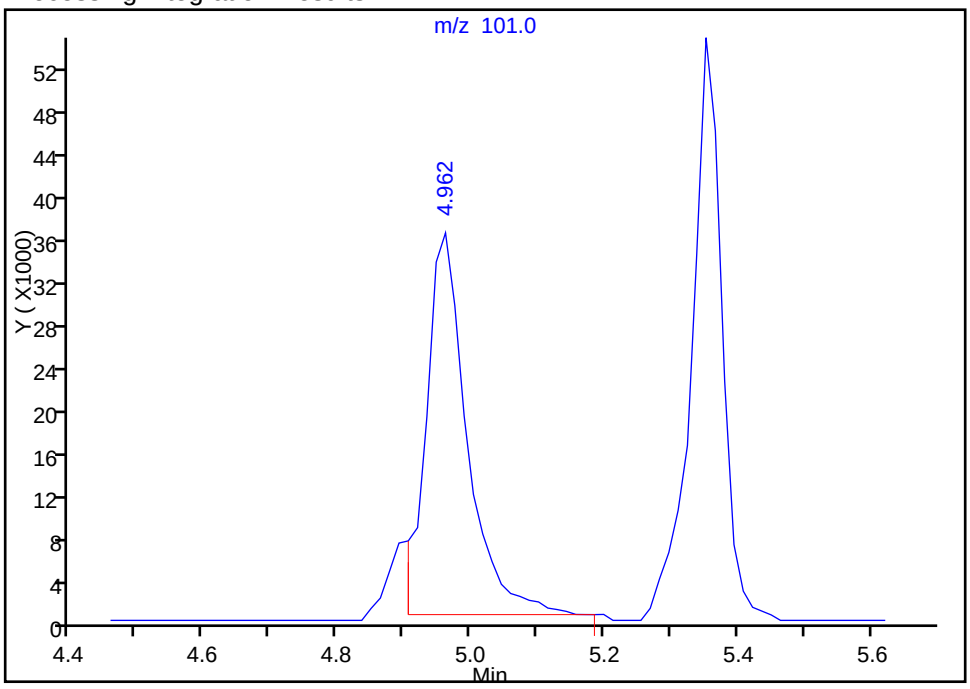
Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0031.D
Injection Date: 19-Jun-2017 12:14:30 Instrument ID: VMS_P
Lims ID: STD050
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 13 Worklist Smp#: 30
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MLE_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

32 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

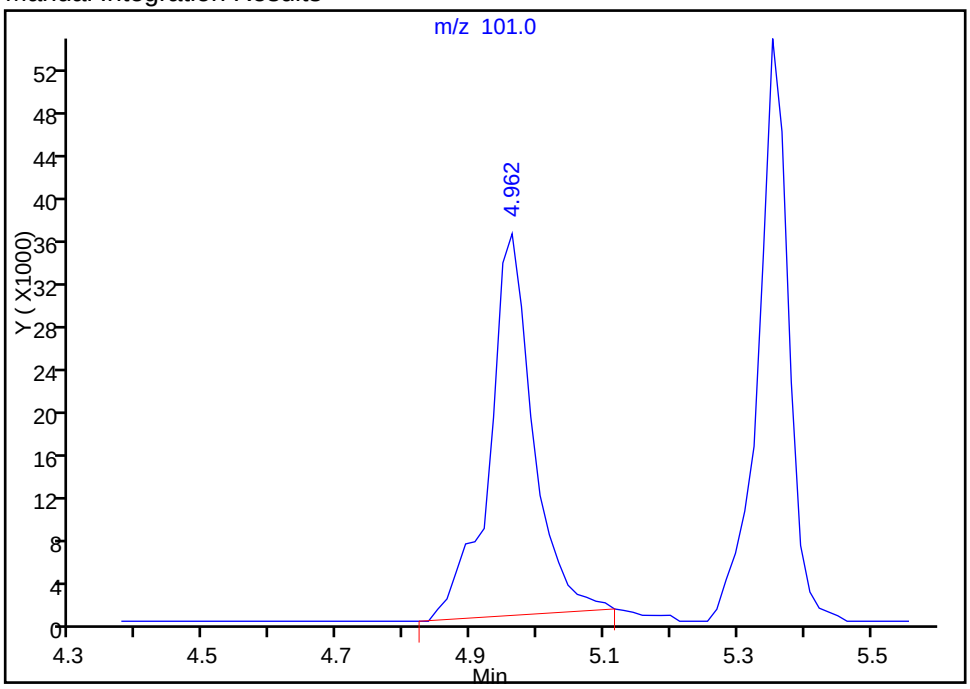
Processing Integration Results

RT: 4.96
Area: 154563
Amount: 3.972708
Amount Units: ug/l



Manual Integration Results

RT: 4.96
Area: 163171
Amount: 4.082119
Amount Units: ug/l



Reviewer: seifertj, 19-Jun-2017 13:51:57
Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Denver

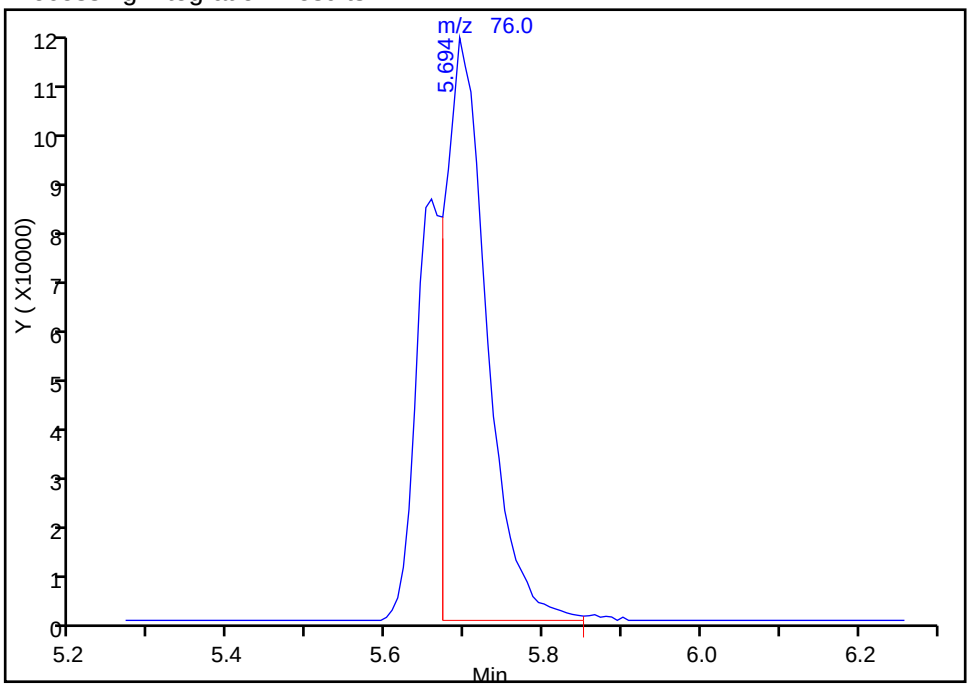
Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0031.D
Injection Date: 19-Jun-2017 12:14:30 Instrument ID: VMS_P
Lims ID: STD050
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 13 Worklist Smp#: 30
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MLE_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

48 Carbon disulfide, CAS: 75-15-0

Signal: 1

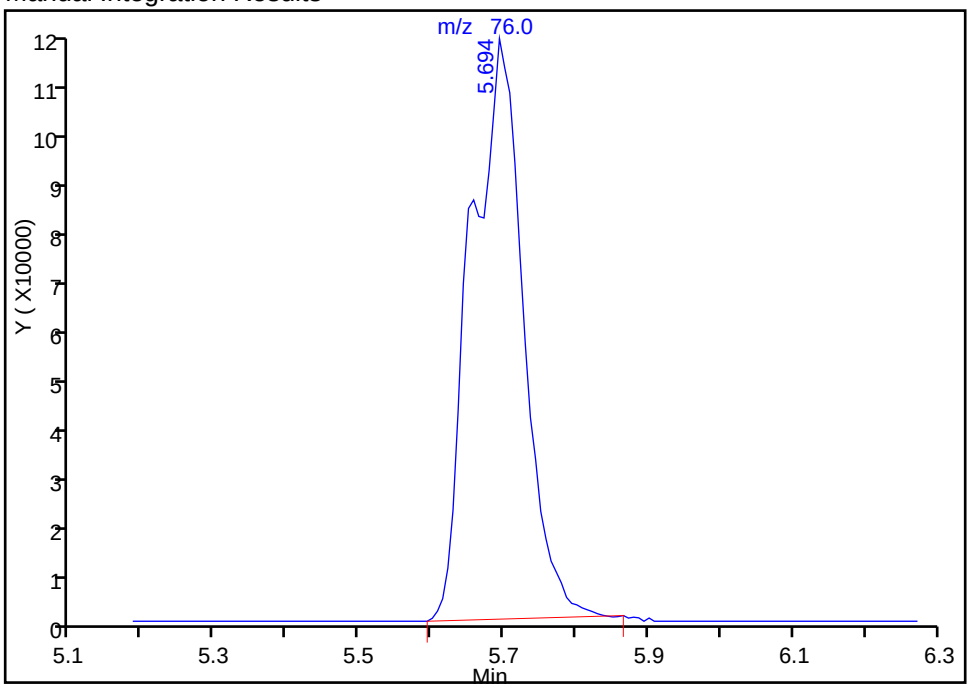
Processing Integration Results

RT: 5.69
Area: 419863
Amount: 5.522981
Amount Units: ug/l



Manual Integration Results

RT: 5.69
Area: 579697
Amount: 5.970089
Amount Units: ug/l



Reviewer: seifertj, 19-Jun-2017 13:52:14
Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0032.D
Lims ID: STD10
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 19-Jun-2017 12:34:30 ALS Bottle#: 14 Worklist Smp#: 31
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: STD10
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-MLE_VMSP_8260*sub43

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 10:29:16 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: seifertj Date: 19-Jun-2017 13:54:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.644	5.644	0.000	0	140962	250.0	250.0	
* 1 Fluorobenzene	96	7.603	7.603	0.000	98	1557794	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.870	9.870	0.000	89	294132	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.693	11.693	0.000	97	406472	12.5	12.5	
23 Dichlorodifluoromethane	85	3.876	3.876	0.000	99	251650	10.0	11.2	
26 Chloromethane	50	4.099	4.099	0.000	99	210154	10.0	10.7	
27 Vinyl chloride	62	4.253	4.253	0.000	99	220243	10.0	11.4	
29 Bromomethane	94	4.616	4.616	0.000	93	145726	10.0	10.5	
30 Chloroethane	64	4.686	4.686	0.000	98	134331	10.0	10.9	
31 Dichlorofluoromethane	67	4.854	4.854	0.000	97	442907	10.0	9.55	
32 Trichlorofluoromethane	101	4.951	4.951	0.000	99	474860	10.0	11.5	
35 Ethyl ether	59	5.105	5.105	0.000	95	185195	10.0	9.66	
39 Acrolein	56	5.259	5.259	0.000	99	169599	100.0	109.6	
40 1,1,2-Trichloro-1,2,2-trif	151	5.356	5.356	0.000	96	186099	10.0	9.19	
41 Acetone	43	5.370	5.370	0.000	99	138557	40.0	37.7	
43 1,1-Dichloroethene	96	5.412	5.412	0.000	96	294323	10.0	9.61	
44 Iodomethane	142	5.580	5.580	0.000	99	413716	10.0	10.1	
45 Methyl acetate	43	5.601	5.601	0.000	99	405796	50.0	51.4	
47 3-Chloro-1-propene	41	5.651	5.651	0.000	86	574986	10.0	10.4	
48 Carbon disulfide	76	5.694	5.694	0.000	99	1004574	10.0	10.0	M
49 2-Methyl-2-propanol	59	5.716	5.716	0.000	93	71917	100.0	97.6	
50 Methylene Chloride	84	5.759	5.759	0.000	98	323289	10.0	10.1	
51 Methyl tert-butyl ether	73	5.916	5.916	0.000	96	436479	10.0	10.4	
52 Acrylonitrile	53	5.916	5.916	0.000	90	378200	100.0	107.6	
53 trans-1,2-Dichloroethene	96	5.966	5.966	0.000	95	299177	10.0	9.82	
54 Hexane	57	6.116	6.116	0.000	95	475632	10.0	8.92	
55 Vinyl acetate	43	6.230	6.230	0.000	97	568238	20.0	20.0	
57 1,1-Dichloroethane	63	6.288	6.288	0.000	97	590253	10.0	10.0	
61 2-Butanone (MEK)	43	6.681	6.681	0.000	99	243790	40.0	40.5	
62 sec-Butyl Alcohol	45	6.724	6.724	0.000	39	74033	150.0	131.0	
63 cis-1,2-Dichloroethene	96	6.724	6.724	0.000	84	322301	10.0	9.92	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
64 2,2-Dichloropropane	77	6.745	6.745	0.000	86	294123	10.0	9.41	
67 Chlorobromomethane	128	6.924	6.924	0.000	91	102899	10.0	10.3	
68 Chloroform	83	6.931	6.931	0.000	94	528241	10.0	10.0	
69 Tetrahydrofuran	42	6.953	6.953	0.000	91	62832	20.0	20.9	
70 Isobutyl alcohol	41	7.138	7.138	0.000	44	56443	250.0	238.1	
71 1,1,1-Trichloroethane	97	7.146	7.146	0.000	97	343175	10.0	8.78	
72 Cyclohexane	56	7.210	7.210	0.000	93	532266	10.0	9.06	
73 1,1-Dichloropropene	75	7.246	7.246	0.000	95	412440	10.0	9.46	
74 Carbon tetrachloride	117	7.281	7.281	0.000	95	257924	10.0	8.06	
76 1,2-Dichloroethane	62	7.417	7.417	0.000	97	308794	10.0	9.89	
77 Benzene	78	7.432	7.432	0.000	98	1255719	10.0	9.92	
14 n-Heptane	43	7.489	7.489	0.000	95	537601	10.0	8.60	
79 Trichloroethene	95	7.896	7.896	0.000	95	297046	10.0	9.49	
80 2-Pentanone	43	7.946	7.946	0.000	98	161184	20.0	14.8	
82 Methylcyclohexane	55	8.075	8.075	0.000	95	426557	10.0	8.81	
83 1,2-Dichloropropane	63	8.082	8.082	0.000	93	311186	10.0	10.2	
84 1,4-Dioxane	88	8.147	8.147	0.000	97	20164	200.0	202.7	
85 Dibromomethane	93	8.190	8.190	0.000	91	106541	10.0	10.2	
86 Dichlorobromomethane	83	8.261	8.261	0.000	98	287617	10.0	9.16	
87 2-Chloroethyl vinyl ether	63	8.404	8.404	0.000	92	53339	10.0	9.22	
89 cis-1,3-Dichloropropene	75	8.576	8.576	0.000	91	346513	10.0	9.77	
90 4-Methyl-2-pentanone (MIBK	43	8.633	8.633	0.000	99	468264	40.0	42.9	
91 Toluene	91	8.847	8.847	0.000	97	1236175	10.0	9.74	
92 Ethyl methacrylate	69	8.933	8.933	0.000	91	153358	10.0	9.13	
93 trans-1,3-Dichloropropene	75	8.955	8.955	0.000	97	247322	10.0	9.16	
94 1,1,2-Trichloroethane	97	9.112	9.112	0.000	93	142104	10.0	10.3	
95 2-Hexanone	43	9.219	9.219	0.000	98	301800	40.0	40.3	
96 1,3-Dichloropropane	76	9.248	9.248	0.000	98	286778	10.0	10.4	
97 Tetrachloroethene	164	9.255	9.255	0.000	93	190883	10.0	8.77	
98 Chlorodibromomethane	129	9.441	9.441	0.000	91	126097	10.0	8.70	
100 Ethylene Dibromide	107	9.562	9.562	0.000	97	124218	10.0	10.8	
101 1-Chlorohexane	91	9.777	9.777	0.000	90	165934	5.00	4.19	
102 Chlorobenzene	112	9.891	9.891	0.000	94	675295	10.0	9.41	
104 1,1,1,2-Tetrachloroethane	131	9.927	9.927	0.000	92	175352	10.0	9.23	
103 Ethylbenzene	106	9.927	9.927	0.000	97	394466	10.0	9.13	
105 m-Xylene & p-Xylene	106	9.999	9.999	0.000	0	473005	10.0	9.15	
106 Styrene	104	10.320	10.320	0.000	84	674459	10.0	9.56	
107 o-Xylene	106	10.320	10.320	0.000	89	459109	10.0	9.67	
108 Bromoform	173	10.535	10.535	0.000	91	45371	10.0	8.03	
109 Isopropylbenzene	105	10.578	10.578	0.000	97	1139932	10.0	8.73	
111 Cyclohexanone	55	10.721	10.721	0.000	96	121576	400.0	365.5	
112 1,1,2,2-Tetrachloroethane	83	10.792	10.792	0.000	95	141566	10.0	10.6	
113 trans-1,4-Dichloro-2-buten	53	10.828	10.828	0.000	71	31493	10.0	9.04	
114 1,2,3-Trichloropropane	110	10.864	10.864	0.000	87	37316	10.0	9.84	
115 N-Propylbenzene	120	10.892	10.892	0.000	99	293097	10.0	8.42	
116 Bromobenzene	156	10.899	10.899	0.000	96	239763	10.0	9.80	
117 1,3,5-Trimethylbenzene	105	11.007	11.007	0.000	94	917696	10.0	8.83	
118 2-Chlorotoluene	126	11.021	11.021	0.000	95	259506	10.0	9.00	
119 4-Chlorotoluene	126	11.100	11.100	0.000	99	260706	10.0	9.33	
120 tert-Butylbenzene	119	11.300	11.300	0.000	92	863395	10.0	8.62	
121 1,2,4-Trimethylbenzene	105	11.328	11.328	0.000	96	943598	10.0	8.96	
122 sec-Butylbenzene	134	11.479	11.479	0.000	95	216724	10.0	8.12	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 4-Isopropyltoluene	119	11.572	11.572	0.000	97	892374	10.0	8.17	
124 1,3-Dichlorobenzene	146	11.650	11.650	0.000	96	462688	10.0	9.21	
126 1,4-Dichlorobenzene	146	11.722	11.722	0.000	92	465229	10.0	9.21	
127 n-Butylbenzene	91	11.936	11.936	0.000	99	899781	10.0	7.94	
128 1,2-Dichlorobenzene	146	12.079	12.079	0.000	94	390632	10.0	9.40	
129 1,2-Dibromo-3-Chloropropan	157	12.837	12.837	0.000	68	12260	10.0	8.97	
130 1,2,4-Trichlorobenzene	180	13.781	13.781	0.000	92	243249	10.0	9.42	
131 Hexachlorobutadiene	225	13.917	13.917	0.000	94	118783	10.0	7.22	
132 Naphthalene	128	14.160	14.160	0.000	98	368808	10.0	10.3	
133 1,2,3-Trichlorobenzene	180	14.482	14.482	0.000	93	190200	10.0	9.64	
S 140 1,2-Dichloroethene, Total	96				0		20.0	19.7	
S 137 1,3-Dichloropropene, Total	1				0		20.0	18.9	
S 139 Xylenes, Total	106				0		20.0	18.8	
S 134 Trihalomethanes, Total	1				0		40.0	35.9	
S 136 Total BTEX	1				0			47.6	
S 135 Xylenes, Total (URS)	1				0		20.0	18.8	
S 138 1,2-Dichloroethene, Total	1				0		20.0	19.7	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MV-Main A_00030	Amount Added:	5.00	Units: uL		
MV-Gas/Ket A_00060	Amount Added:	5.00	Units: uL		
MV-2cleve+AVA_00025	Amount Added:	5.00	Units: uL		
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent	

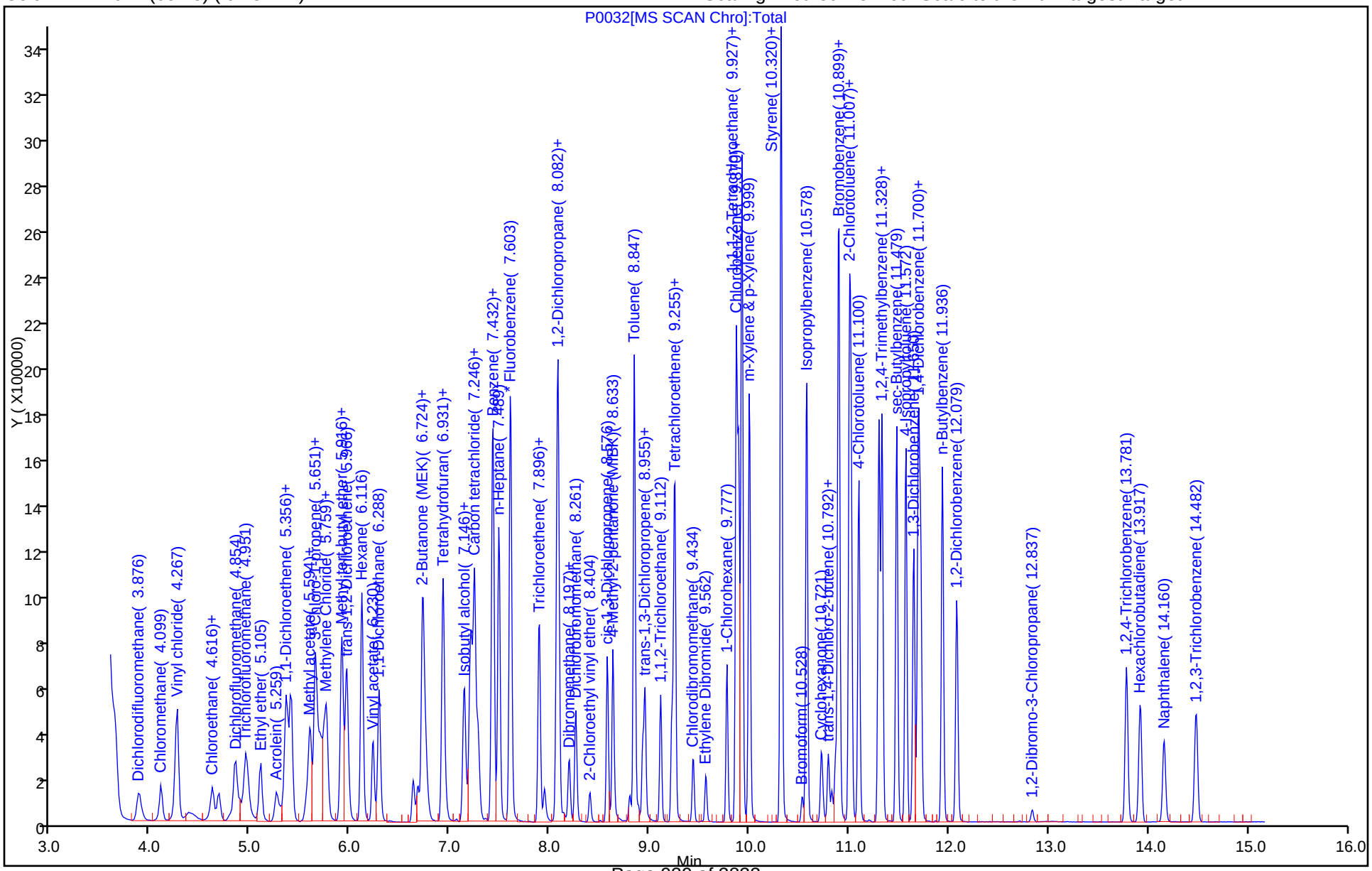
Report Date: 20-Jun-2017 10:29:16 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0032.D

Injection Date:	19-Jun-2017 12:34:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD10			Worklist Smp#:	31
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Denver

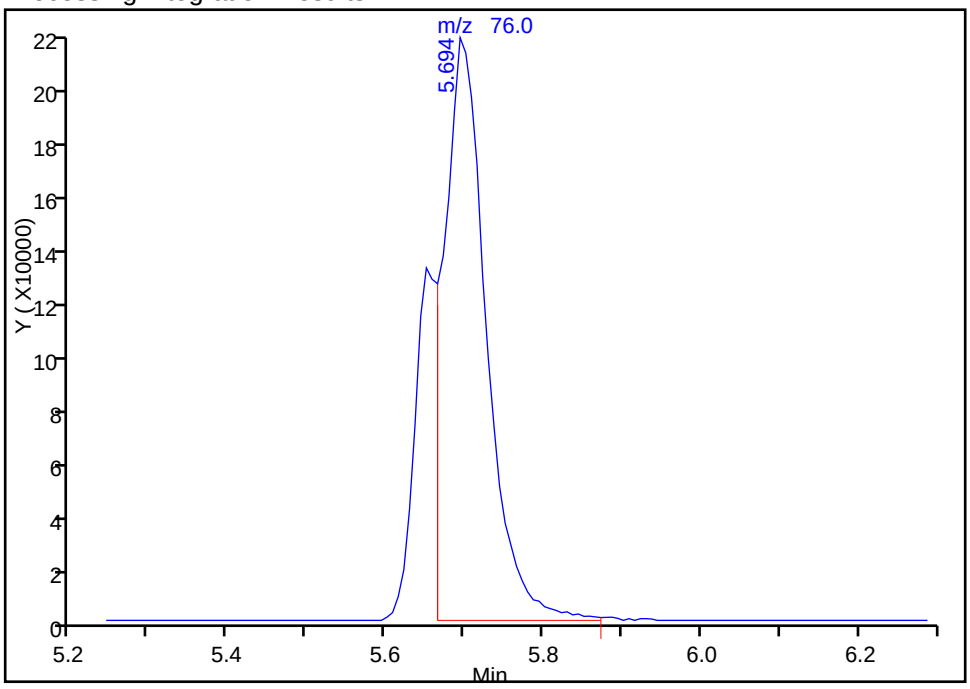
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Injection Date: 19-Jun-2017 12:34:30 Instrument ID: VMS_P
Lims ID: STD10
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 14 Worklist Smp#: 31
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MLE_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

48 Carbon disulfide, CAS: 75-15-0

Signal: 1

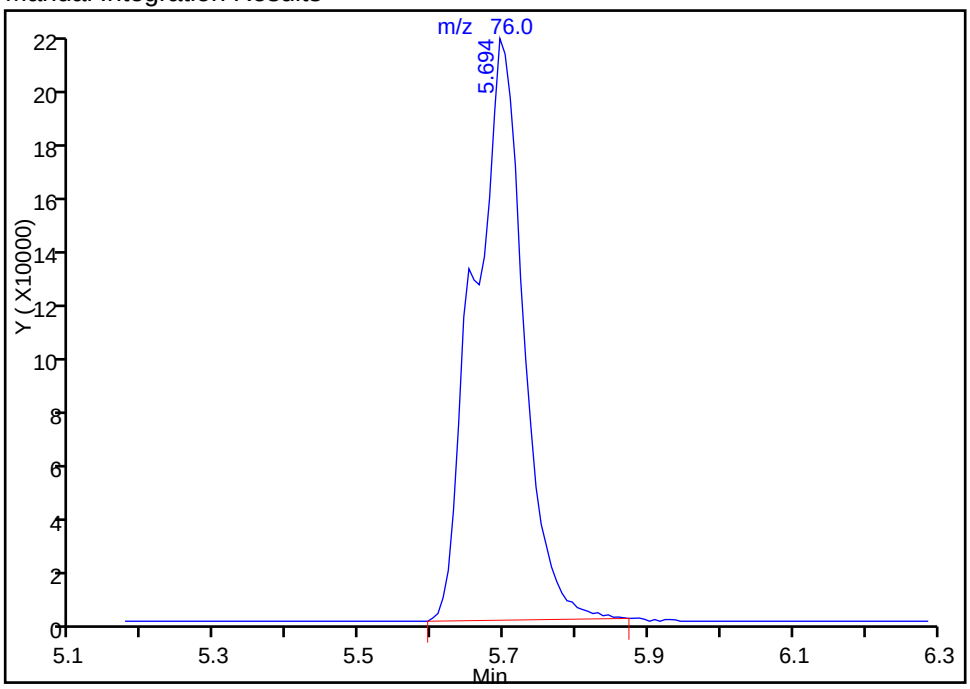
Processing Integration Results

RT: 5.69
Area: 796659
Amount: 9.043720
Amount Units: ug/l



Manual Integration Results

RT: 5.69
Area: 1004574
Amount: 10.019052
Amount Units: ug/l



Reviewer: seifertj, 20-Jun-2017 10:01:56
Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0033.D
Lims ID: STD30
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 19-Jun-2017 12:53:30 ALS Bottle#: 15 Worklist Smp#: 32
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: STD30
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-MLE_VMSP_8260*sub43

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 10:29:17 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: seifertj Date: 19-Jun-2017 13:59:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.651	5.644	0.007	0	159952	250.0	250.0	
* 1 Fluorobenzene	96	7.610	7.603	0.007	98	1621226	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.870	9.870	0.000	90	312294	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.693	11.693	0.000	98	442791	12.5	12.5	
23 Dichlorodifluoromethane	85	3.887	3.876	0.011	99	774385	30.0	32.3	
26 Chloromethane	50	4.110	4.099	0.011	98	636485	30.0	31.2	
27 Vinyl chloride	62	4.250	4.253	-0.003	98	675120	30.0	33.7	
29 Bromomethane	94	4.627	4.616	0.011	94	441400	30.0	30.6	
30 Chloroethane	64	4.683	4.686	-0.003	98	412400	30.0	32.0	
31 Dichlorofluoromethane	67	4.850	4.854	-0.004	97	1413798	30.0	29.3	
32 Trichlorofluoromethane	101	4.962	4.951	0.011	100	1496933	30.0	34.8	M
35 Ethyl ether	59	5.102	5.105	-0.003	95	572373	30.0	28.7	
39 Acrolein	56	5.269	5.259	0.010	99	549232	300.0	340.9	
40 1,1,2-Trichloro-1,2,2-trif	151	5.367	5.356	0.011	97	676835	30.0	32.1	
41 Acetone	43	5.367	5.370	-0.003	100	448466	120.0	117.4	
43 1,1-Dichloroethene	96	5.409	5.412	-0.003	94	1000679	30.0	31.4	
44 Iodomethane	142	5.594	5.580	0.014	99	1340725	30.0	31.6	
45 Methyl acetate	43	5.601	5.601	0.000	98	1271549	150.0	154.8	
47 3-Chloro-1-propene	41	5.651	5.651	0.000	87	1924923	30.0	33.4	
48 Carbon disulfide	76	5.701	5.694	0.007	100	3503032	30.0	33.6	M
49 2-Methyl-2-propanol	59	5.716	5.716	0.000	94	238255	300.0	285.1	
50 Methylene Chloride	84	5.766	5.759	0.008	97	912880	30.0	29.9	
52 Acrylonitrile	53	5.916	5.916	0.000	88	1224919	300.0	334.8	
51 Methyl tert-butyl ether	73	5.916	5.916	0.000	97	1413639	30.0	32.3	
53 trans-1,2-Dichloroethene	96	5.966	5.966	0.000	95	1003750	30.0	31.6	
54 Hexane	57	6.116	6.116	0.000	96	1745842	30.0	30.8	
55 Vinyl acetate	43	6.230	6.230	0.000	97	1889676	60.0	62.5	
57 1,1-Dichloroethane	63	6.288	6.288	0.000	96	1906926	30.0	31.0	
61 2-Butanone (MEK)	43	6.681	6.681	0.000	100	768895	120.0	122.8	
63 cis-1,2-Dichloroethene	96	6.724	6.724	0.000	83	1071552	30.0	31.7	
62 sec-Butyl Alcohol	45	6.724	6.724	0.000	41	287837	450.0	448.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
64 2,2-Dichloropropane	77	6.745	6.745	0.000	89	1111618	30.0	34.2	
67 Chlorobromomethane	128	6.924	6.924	0.000	93	331637	30.0	32.0	
68 Chloroform	83	6.931	6.931	0.000	94	1721171	30.0	31.4	
69 Tetrahydrofuran	42	6.960	6.953	0.007	89	200088	60.0	63.9	
70 Isobutyl alcohol	41	7.139	7.138	0.001	46	211697	750.0	787.1	
71 1,1,1-Trichloroethane	97	7.146	7.146	0.000	98	1299094	30.0	31.4	
72 Cyclohexane	56	7.210	7.210	0.000	94	1966334	30.0	32.2	
73 1,1-Dichloropropene	75	7.246	7.246	0.000	95	1478282	30.0	32.6	
74 Carbon tetrachloride	117	7.282	7.281	0.001	95	1107753	30.0	31.3	
76 1,2-Dichloroethane	62	7.417	7.417	0.000	97	972653	30.0	29.9	
77 Benzene	78	7.432	7.432	0.000	98	4083865	30.0	31.0	
14 n-Heptane	43	7.489	7.489	0.000	95	2046631	30.0	31.4	
79 Trichloroethene	95	7.896	7.896	0.000	95	1050729	30.0	32.3	
80 2-Pentanone	43	7.947	7.946	0.000	98	839291	60.0	54.7	
82 Methylcyclohexane	55	8.075	8.075	0.000	94	1631897	30.0	32.4	
83 1,2-Dichloropropane	63	8.090	8.082	0.007	94	994929	30.0	31.4	
84 1,4-Dioxane	88	8.140	8.147	-0.007	97	65654	600.0	634.3	
85 Dibromomethane	93	8.197	8.190	0.007	90	346031	30.0	31.8	
86 Dichlorobromomethane	83	8.261	8.261	0.000	99	1020063	30.0	30.5	
87 2-Chloroethyl vinyl ether	63	8.397	8.404	-0.007	92	198200	30.0	30.7	
89 cis-1,3-Dichloropropene	75	8.576	8.576	0.000	92	1218149	30.0	31.5	
90 4-Methyl-2-pentanone (MIBK	43	8.633	8.633	0.000	99	1563326	120.0	137.7	
91 Toluene	91	8.847	8.847	0.000	98	4261344	30.0	32.3	
92 Ethyl methacrylate	69	8.933	8.933	0.000	91	561960	30.0	29.6	
93 trans-1,3-Dichloropropene	75	8.955	8.955	0.000	98	896151	30.0	30.2	
94 1,1,2-Trichloroethane	97	9.112	9.112	0.000	92	465255	30.0	32.3	
95 2-Hexanone	43	9.219	9.219	0.000	99	1039110	120.0	129.0	
96 1,3-Dichloropropane	76	9.248	9.248	0.000	96	929310	30.0	31.8	
97 Tetrachloroethene	164	9.255	9.255	0.000	95	763867	30.0	33.1	
98 Chlorodibromomethane	129	9.441	9.441	0.000	90	491791	30.0	30.0	
100 Ethylene Dibromide	107	9.562	9.562	0.000	99	409184	30.0	33.5	
101 1-Chlorohexane	91	9.777	9.777	0.000	93	736196	15.0	17.5	
102 Chlorobenzene	112	9.891	9.891	0.000	93	2380808	30.0	31.2	
103 Ethylbenzene	106	9.927	9.927	0.000	97	1517373	30.0	33.1	
104 1,1,1,2-Tetrachloroethane	131	9.927	9.927	0.000	94	695677	30.0	33.2	
105 m-Xylene & p-Xylene	106	9.999	9.999	0.000	0	1787537	30.0	32.6	
107 o-Xylene	106	10.320	10.320	0.000	88	1707427	30.0	33.9	
106 Styrene	104	10.320	10.320	0.000	85	2550507	30.0	33.6	
108 Bromoform	173	10.535	10.535	0.000	94	195120	30.0	29.4	
109 Isopropylbenzene	105	10.578	10.578	0.000	97	4572820	30.0	32.1	
111 Cyclohexanone	55	10.721	10.721	0.000	95	443378	1200.0	1210.2	
112 1,1,2,2-Tetrachloroethane	83	10.792	10.792	0.000	95	456827	30.0	31.3	
113 trans-1,4-Dichloro-2-buten	53	10.828	10.828	0.000	86	116998	30.0	29.3	
114 1,2,3-Trichloropropane	110	10.864	10.864	0.000	86	125535	30.0	30.4	
115 N-Propylbenzene	120	10.892	10.892	0.000	98	1268516	30.0	33.4	
116 Bromobenzene	156	10.907	10.899	0.008	96	856700	30.0	32.1	
117 1,3,5-Trimethylbenzene	105	11.007	11.007	0.000	95	3698526	30.0	32.7	
118 2-Chlorotoluene	126	11.021	11.021	0.000	95	1008947	30.0	32.1	
119 4-Chlorotoluene	126	11.100	11.100	0.000	99	993764	30.0	32.7	
120 tert-Butylbenzene	119	11.300	11.300	0.000	92	3598234	30.0	33.0	
121 1,2,4-Trimethylbenzene	105	11.329	11.328	0.000	96	3698939	30.0	32.2	
122 sec-Butylbenzene	134	11.479	11.479	0.000	95	978822	30.0	33.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 4-Isopropyltoluene	119	11.572	11.572	0.000	96	3960570	30.0	33.3	
124 1,3-Dichlorobenzene	146	11.650	11.650	0.000	96	1734451	30.0	31.7	
126 1,4-Dichlorobenzene	146	11.722	11.722	0.000	93	1676205	30.0	30.4	
127 n-Butylbenzene	91	11.936	11.936	0.000	99	4077464	30.0	33.0	
128 1,2-Dichlorobenzene	146	12.079	12.079	0.000	95	1398626	30.0	30.9	
129 1,2-Dibromo-3-Chloropropan	157	12.837	12.837	0.000	71	49139	30.0	28.6	
130 1,2,4-Trichlorobenzene	180	13.781	13.781	0.000	93	900304	30.0	32.0	
131 Hexachlorobutadiene	225	13.924	13.917	0.007	95	578486	30.0	32.3	
132 Naphthalene	128	14.160	14.160	0.000	98	1270028	30.0	32.7	
133 1,2,3-Trichlorobenzene	180	14.482	14.482	0.000	94	684449	30.0	31.8	
S 140 1,2-Dichloroethene, Total	96				0		60.0	63.3	
S 135 Xylenes, Total (URS)	1				0		60.0	66.4	
S 138 1,2-Dichloroethene, Total	1				0		60.0	63.3	
S 136 Total BTEX	1				0			162.8	
S 137 1,3-Dichloropropene, Total	1				0		60.0	61.6	
S 139 Xylenes, Total	106				0		60.0	66.4	
S 134 Trihalomethanes, Total	1				0		120.0	121.3	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MV-Main A_00030	Amount Added:	15.00	Units: uL	
MV-Gas/Ket A_00060	Amount Added:	15.00	Units: uL	
MV-2cleve+AVA_00025	Amount Added:	15.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent

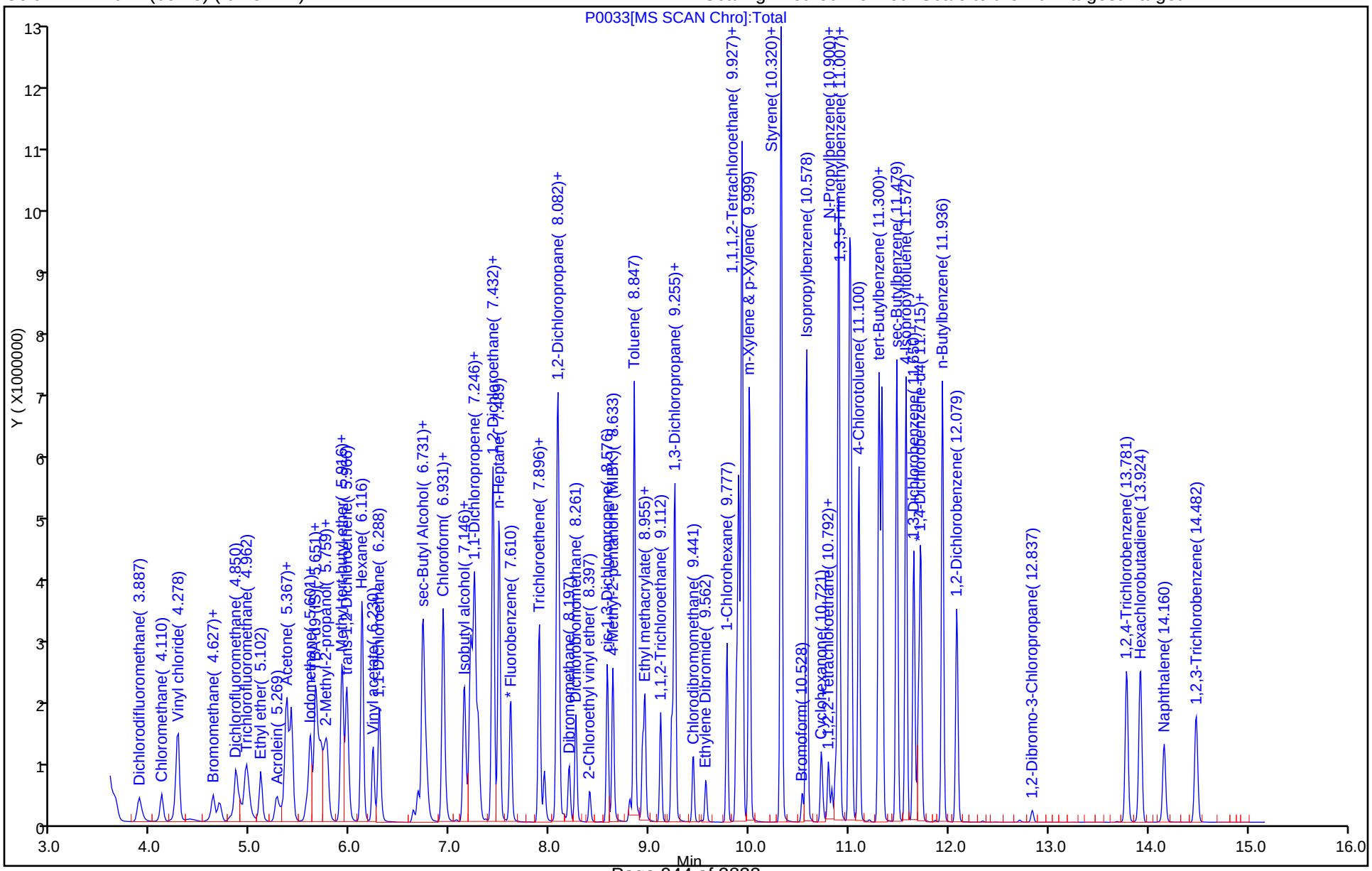
Report Date: 20-Jun-2017 10:29:18 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0033.D

Injection Date:	19-Jun-2017 12:53:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD30			Worklist Smp#:	32
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Denver

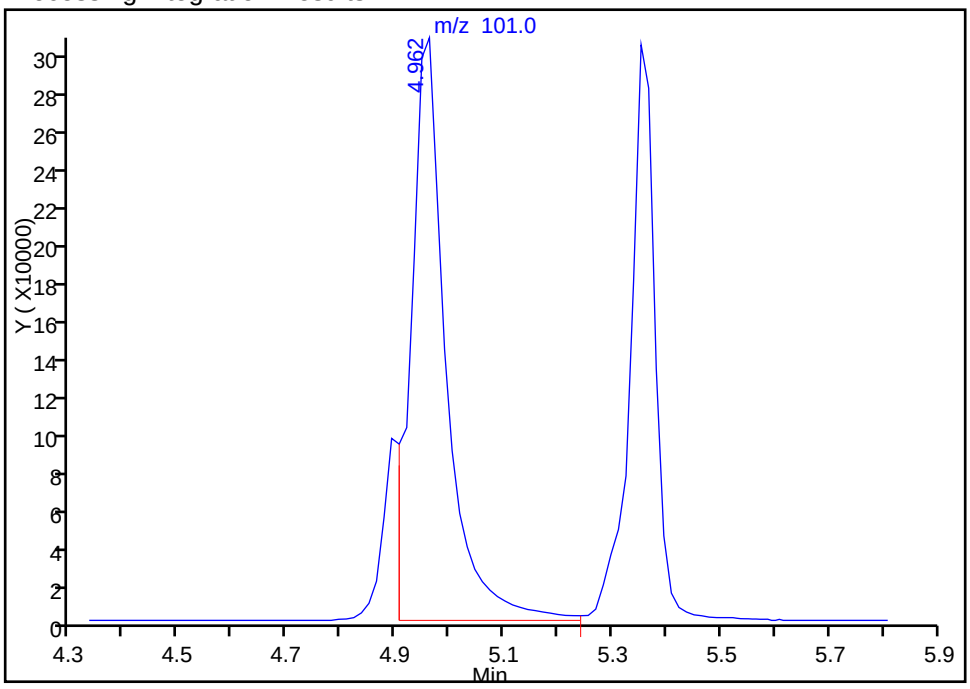
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Injection Date:	19-Jun-2017 12:53:30	Instrument ID:	VMS_P		
Lims ID:	STD30				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	15	Worklist Smp#:	32
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

32 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

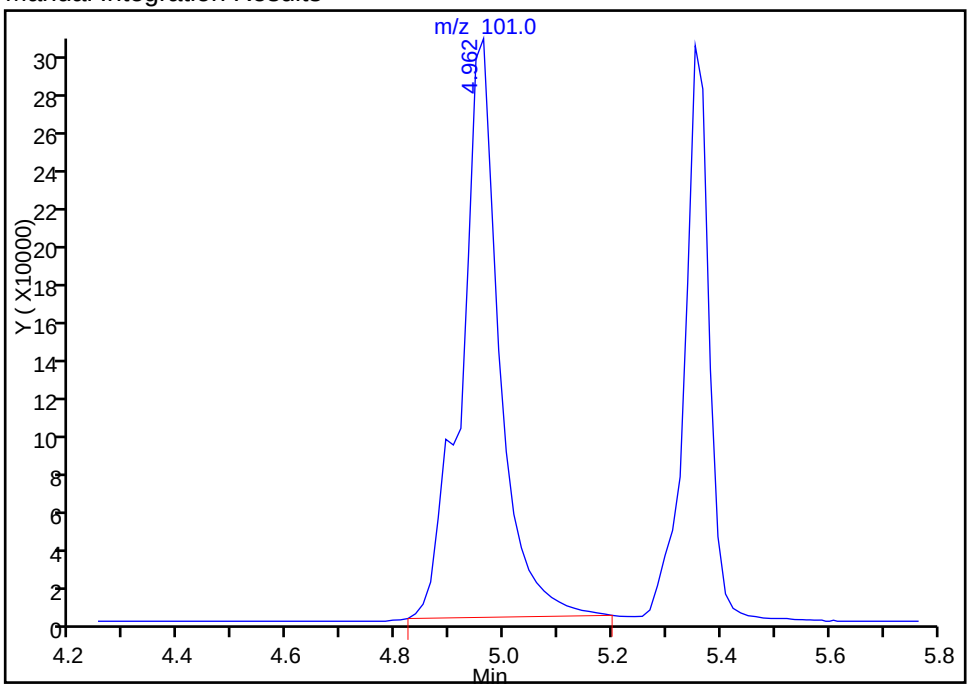
Processing Integration Results

RT: 4.96
Area: 1401223
Amount: 33.302977
Amount Units: ug/l



Manual Integration Results

RT: 4.96
Area: 1496933
Amount: 34.847886
Amount Units: ug/l



Reviewer: seifertj, 19-Jun-2017 13:55:13
Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Denver

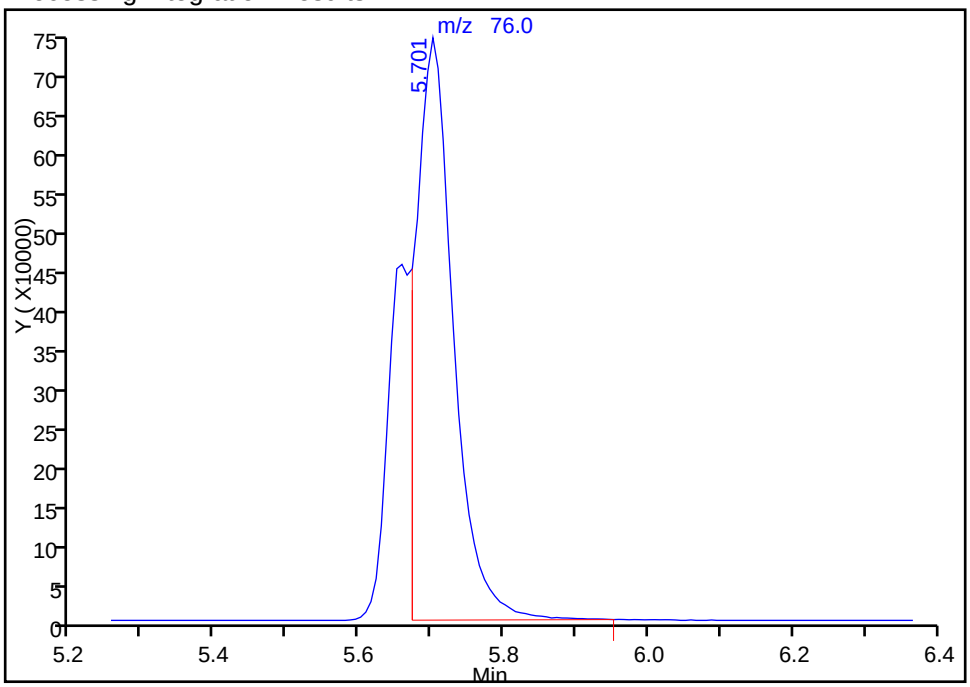
Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0033.D
Injection Date: 19-Jun-2017 12:53:30 Instrument ID: VMS_P
Lims ID: STD30
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 15 Worklist Smp#: 32
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MLE_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

48 Carbon disulfide, CAS: 75-15-0

Signal: 1

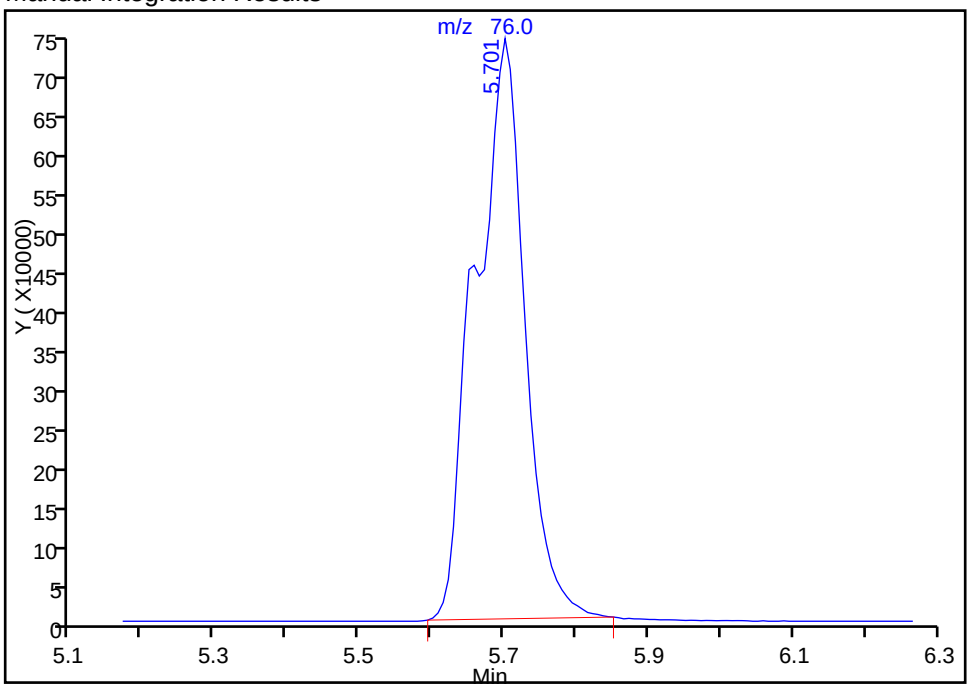
Processing Integration Results

RT: 5.70
Area: 2643257
Amount: 30.146980
Amount Units: ug/l



Manual Integration Results

RT: 5.70
Area: 3503032
Amount: 33.570303
Amount Units: ug/l



Reviewer: seifertj, 19-Jun-2017 13:55:23
Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0034.D
Lims ID: STD60
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 19-Jun-2017 13:13:30 ALS Bottle#: 16 Worklist Smp#: 33
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: STD60
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-MLE_VMSP_8260*sub43

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 10:29:19 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: seifertj Date: 19-Jun-2017 14:01:15

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.643	5.644	-0.001	0	183525	250.0	250.0	
* 1 Fluorobenzene	96	7.602	7.603	-0.001	98	1737420	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.869	9.870	-0.001	87	342282	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.699	11.693	0.006	98	471151	12.5	12.5	
23 Dichlorodifluoromethane	85	3.874	3.876	-0.002	99	1475694	60.0	57.2	
26 Chloromethane	50	4.111	4.099	0.012	99	1240074	60.0	56.7	
27 Vinyl chloride	62	4.251	4.253	-0.002	98	1289236	60.0	60.0	
29 Bromomethane	94	4.628	4.616	0.012	93	852563	60.0	55.1	
30 Chloroethane	64	4.684	4.686	-0.002	98	792181	60.0	57.4	
31 Dichlorofluoromethane	67	4.851	4.854	-0.003	98	3339845	60.0	64.6	
32 Trichlorofluoromethane	101	4.949	4.951	-0.002	100	2847278	60.0	61.9	M
35 Ethyl ether	59	5.103	5.105	-0.002	94	1198789	60.0	56.1	
39 Acrolein	56	5.256	5.259	-0.003	99	1213509	599.9	702.9	
40 1,1,2-Trichloro-1,2,2-trif	151	5.354	5.356	-0.002	97	1345870	60.0	59.6	
41 Acetone	43	5.368	5.370	-0.002	100	958055	240.0	234.0	
43 1,1-Dichloroethene	96	5.410	5.412	-0.002	96	1997105	60.0	58.5	
44 Iodomethane	142	5.586	5.580	0.006	100	2815956	60.0	61.9	
45 Methyl acetate	43	5.600	5.601	-0.001	98	2729921	300.0	310.1	
47 3-Chloro-1-propene	41	5.650	5.651	-0.001	83	3924047	60.0	63.6	
48 Carbon disulfide	76	5.701	5.694	0.006	100	7060839	60.0	63.1	M
49 2-Methyl-2-propanol	59	5.708	5.716	-0.008	94	529096	600.0	551.8	
50 Methylene Chloride	84	5.758	5.759	0.000	97	1855635	60.0	58.1	
51 Methyl tert-butyl ether	73	5.915	5.916	-0.001	97	3049655	60.0	65.0	
52 Acrylonitrile	53	5.915	5.916	-0.001	88	2612946	600.0	666.5	
53 trans-1,2-Dichloroethene	96	5.965	5.966	-0.001	96	2003184	60.0	58.9	
54 Hexane	57	6.115	6.116	-0.001	95	3276120	60.0	52.8	
55 Vinyl acetate	43	6.222	6.230	-0.008	97	4215060	120.0	129.4	
57 1,1-Dichloroethane	63	6.287	6.288	-0.001	96	3813891	60.0	57.9	
61 2-Butanone (MEK)	43	6.673	6.681	-0.008	99	1620000	240.0	241.5	
62 sec-Butyl Alcohol	45	6.716	6.724	-0.008	94	739777	900.0	1005.1	
63 cis-1,2-Dichloroethene	96	6.723	6.724	-0.001	83	2170660	60.0	59.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
64 2,2-Dichloropropane	77	6.744	6.745	-0.001	91	2282386	60.0	65.5	
67 Chlorobromomethane	128	6.923	6.924	-0.001	93	709327	60.0	64.0	
68 Chloroform	83	6.930	6.931	-0.001	94	3461799	60.0	58.9	
69 Tetrahydrofuran	42	6.952	6.953	-0.001	90	442149	120.0	131.7	
70 Isobutyl alcohol	41	7.138	7.138	0.000	90	514048	1500.0	1665.7	
71 1,1,1-Trichloroethane	97	7.138	7.146	-0.008	98	2663083	60.0	59.8	
72 Cyclohexane	56	7.209	7.210	-0.001	92	3747710	60.0	57.2	
73 1,1-Dichloropropene	75	7.245	7.246	-0.001	95	2845877	60.0	58.5	
74 Carbon tetrachloride	117	7.281	7.281	0.000	95	2319534	60.0	60.5	
76 1,2-Dichloroethane	62	7.417	7.417	0.000	97	1997677	60.0	57.4	
77 Benzene	78	7.431	7.432	-0.001	99	7987462	60.0	56.5	
14 n-Heptane	43	7.488	7.489	-0.001	94	3745872	60.0	53.7	
79 Trichloroethene	95	7.888	7.896	-0.008	96	2094038	60.0	60.0	
80 2-Pentanone	43	7.946	7.946	0.000	98	2134983	120.0	123.1	
82 Methylcyclohexane	55	8.074	8.075	-0.001	95	3007100	60.0	55.7	
83 1,2-Dichloropropane	63	8.089	8.082	0.007	93	1990043	60.0	58.6	
84 1,4-Dioxane	88	8.139	8.147	-0.008	97	147765	1200.0	1332.2	
85 Dibromomethane	93	8.189	8.190	-0.001	92	733545	60.0	62.8	
86 Dichlorobromomethane	83	8.260	8.261	-0.001	99	2190579	60.0	60.8	
87 2-Chloroethyl vinyl ether	63	8.396	8.404	-0.008	92	459556	60.0	65.3	
89 cis-1,3-Dichloropropene	75	8.575	8.576	-0.001	93	2654167	60.0	62.2	
90 4-Methyl-2-pentanone (MIBK	43	8.632	8.633	-0.001	98	3393296	240.0	278.9	
91 Toluene	91	8.847	8.847	0.000	98	8242680	60.0	58.2	
92 Ethyl methacrylate	69	8.925	8.933	-0.008	91	1300160	60.0	61.6	
93 trans-1,3-Dichloropropene	75	8.954	8.955	-0.001	98	1965318	60.0	61.0	
94 1,1,2-Trichloroethane	97	9.111	9.112	-0.001	92	1007249	60.0	65.2	
95 2-Hexanone	43	9.218	9.219	-0.001	99	2276892	240.0	257.0	
96 1,3-Dichloropropane	76	9.247	9.248	-0.001	95	1928197	60.0	60.2	
97 Tetrachloroethene	164	9.254	9.255	-0.001	94	1479772	60.0	58.5	
98 Chlorodibromomethane	129	9.440	9.441	-0.001	91	1123101	60.0	61.7	
100 Ethylene Dibromide	107	9.562	9.562	0.000	98	915812	60.0	68.4	
101 1-Chlorohexane	91	9.776	9.777	-0.001	95	1448472	30.0	31.4	
102 Chlorobenzene	112	9.890	9.891	-0.001	93	4763236	60.0	57.0	
104 1,1,1,2-Tetrachloroethane	131	9.926	9.927	-0.001	94	1437889	60.0	62.2	
103 Ethylbenzene	106	9.926	9.927	-0.001	98	2865804	60.0	57.0	
105 m-Xylene & p-Xylene	106	9.998	9.999	-0.001	0	3513554	60.0	58.4	
106 Styrene	104	10.320	10.320	0.000	85	4926270	60.0	59.1	
107 o-Xylene	106	10.320	10.320	0.000	87	3193745	60.0	57.8	
108 Bromoform	173	10.534	10.535	-0.001	95	466701	60.0	63.0	
109 Isopropylbenzene	105	10.577	10.578	-0.001	97	8458678	60.0	55.9	
111 Cyclohexanone	55	10.720	10.721	-0.001	96	990797	2400.0	2448.0	
112 1,1,2,2-Tetrachloroethane	83	10.791	10.792	-0.001	95	982589	60.0	63.2	
113 trans-1,4-Dichloro-2-buten	53	10.827	10.828	-0.001	88	265895	60.0	61.9	
114 1,2,3-Trichloropropane	110	10.863	10.864	-0.001	86	267318	60.0	60.8	
115 N-Propylbenzene	120	10.892	10.892	0.000	98	2308237	60.0	57.2	
116 Bromobenzene	156	10.906	10.899	0.007	95	1690764	60.0	59.6	
117 1,3,5-Trimethylbenzene	105	11.006	11.007	-0.001	95	6759408	60.0	56.1	
118 2-Chlorotoluene	126	11.020	11.021	-0.001	95	1914119	60.0	57.3	
119 4-Chlorotoluene	126	11.099	11.100	-0.001	99	1956621	60.0	60.4	
120 tert-Butylbenzene	119	11.299	11.300	-0.001	92	6676645	60.0	57.5	
121 1,2,4-Trimethylbenzene	105	11.328	11.328	0.000	96	6902286	60.0	56.5	
122 sec-Butylbenzene	134	11.478	11.479	-0.001	96	1804628	60.0	58.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 4-Isopropyltoluene	119	11.571	11.572	-0.001	96	7110529	60.0	56.2	
124 1,3-Dichlorobenzene	146	11.649	11.650	-0.001	97	3387314	60.0	58.1	
126 1,4-Dichlorobenzene	146	11.721	11.722	-0.001	92	3305092	60.0	56.4	
127 n-Butylbenzene	91	11.935	11.936	-0.001	98	7114581	60.0	54.2	
128 1,2-Dichlorobenzene	146	12.078	12.079	-0.001	95	2810980	60.0	58.4	
129 1,2-Dibromo-3-Chloropropan	157	12.836	12.837	-0.001	74	118054	60.0	62.5	
130 1,2,4-Trichlorobenzene	180	13.780	13.781	-0.001	93	1826941	60.0	61.0	
131 Hexachlorobutadiene	225	13.923	13.917	0.006	95	1030213	60.0	54.0	
132 Naphthalene	128	14.159	14.160	-0.001	98	2757702	60.0	66.7	
133 1,2,3-Trichlorobenzene	180	14.481	14.482	-0.001	94	1401465	60.0	61.3	
S 140 1,2-Dichloroethene, Total	96				0		120.0	118.9	
S 137 1,3-Dichloropropene, Total	1				0		120.0	123.1	
S 139 Xylenes, Total	106				0		120.0	116.2	
S 134 Trihalomethanes, Total	1				0		240.0	244.4	
S 136 Total BTEX	1				0			288.0	
S 135 Xylenes, Total (URS)	1				0		120.0	116.2	
S 138 1,2-Dichloroethene, Total	1				0		120.0	118.9	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MV-Main A_00030	Amount Added:	30.00	Units: uL	
MV-Gas/Ket A_00060	Amount Added:	30.00	Units: uL	
MV-2cleve+AVA_00025	Amount Added:	30.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent

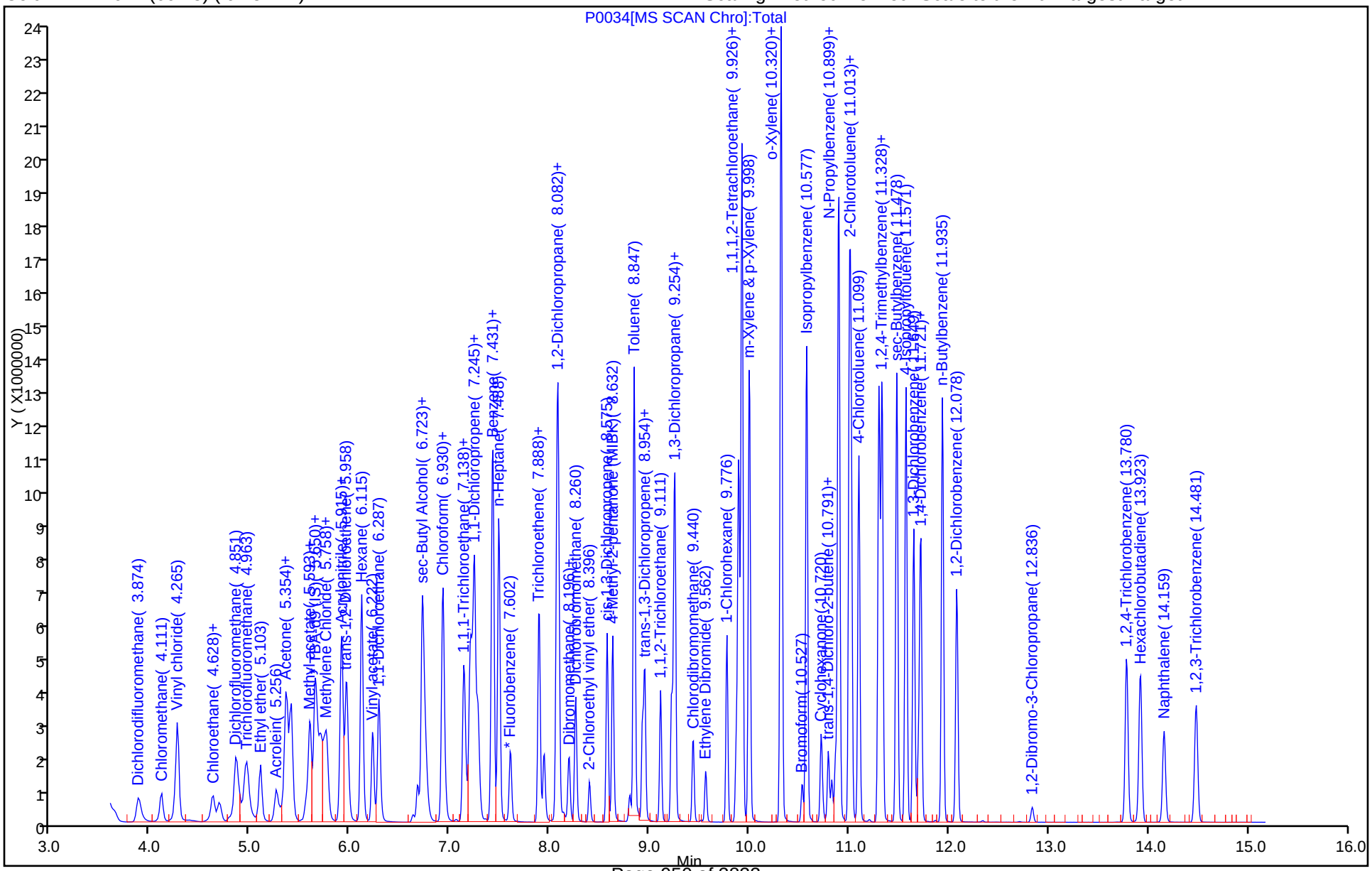
Report Date: 20-Jun-2017 10:29:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0034.D

Injection Date:	19-Jun-2017 13:13:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD60			Worklist Smp#:	33
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Denver

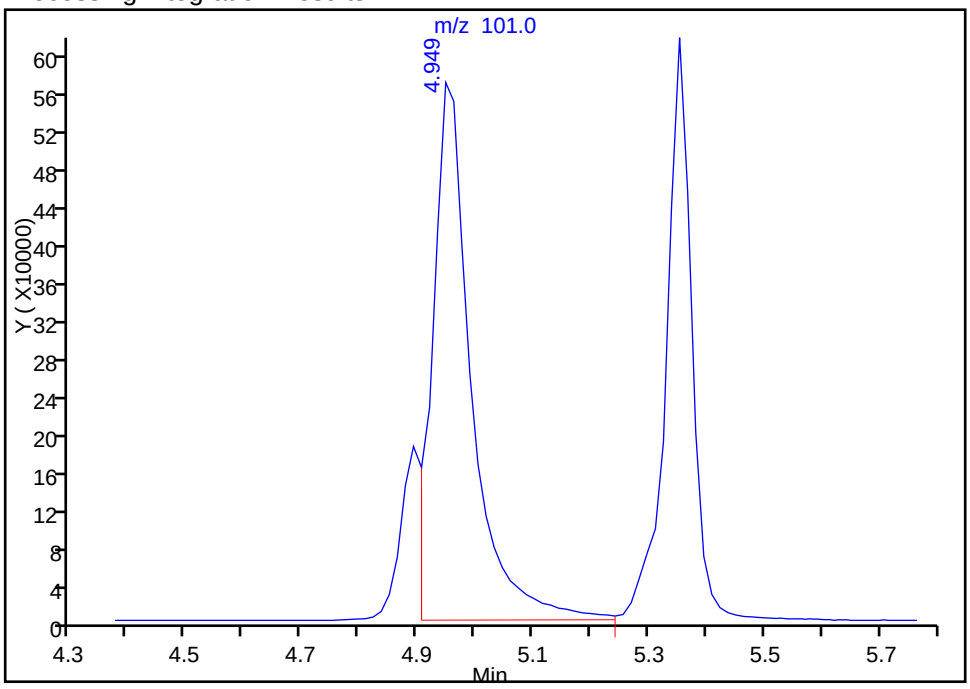
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Injection Date: 19-Jun-2017 13:13:30 Instrument ID: VMS_P
Lims ID: STD60
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 16 Worklist Smp#: 33
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MLE_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

32 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

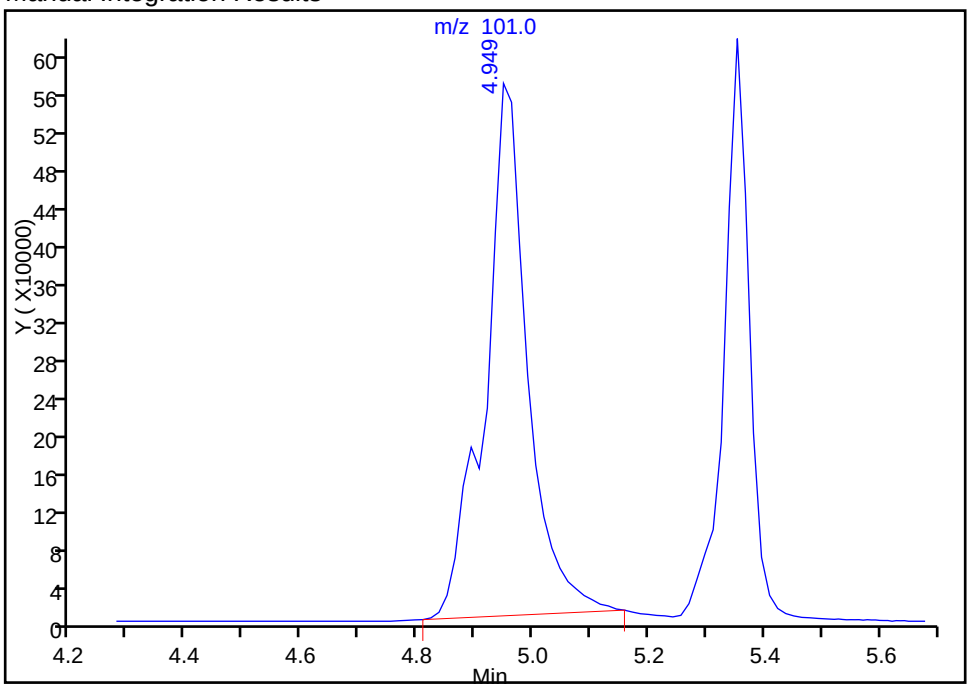
Processing Integration Results

RT: 4.95
Area: 2655788
Amount: 58.267839
Amount Units: ug/l



Manual Integration Results

RT: 4.95
Area: 2847278
Amount: 61.850426
Amount Units: ug/l



Reviewer: seifertj, 19-Jun-2017 13:59:34
Audit Action: Manually Integrated Audit Reason: Split Peak

Manual Integration/User Assign Peak Report

TestAmerica Denver

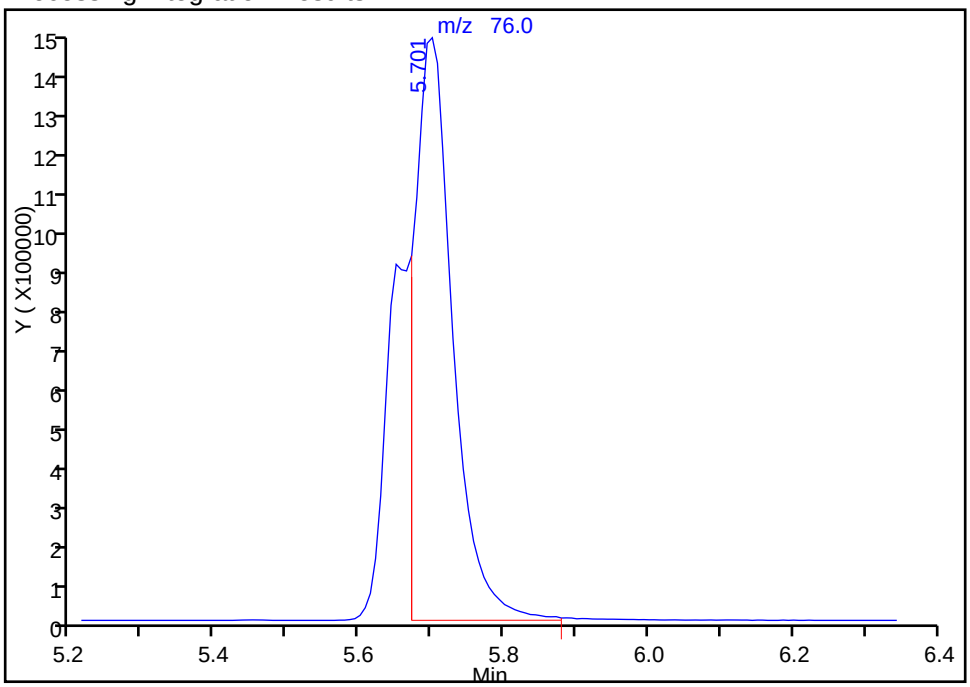
Data File:	\\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0034.D				
Injection Date:	19-Jun-2017 13:13:30	Instrument ID:	VMS_P		
Lims ID:	STD60				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	16	Worklist Smp#:	33
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

48 Carbon disulfide, CAS: 75-15-0

Signal: 1

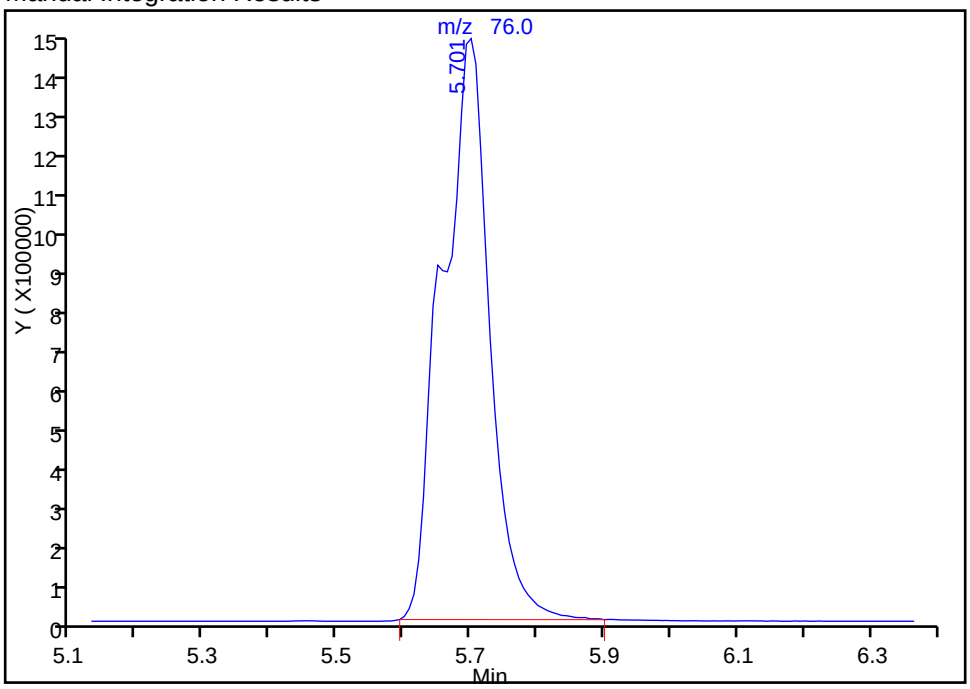
Processing Integration Results

RT: 5.70
Area: 5208426
Amount: 46.985225
Amount Units: ug/l



Manual Integration Results

RT: 5.70
Area: 7060839
Amount: 63.140237
Amount Units: ug/l



Reviewer: seifertj, 20-Jun-2017 10:02:20
Audit Action: Manually Integrated Audit Reason: Split Peak

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 377804

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:11 Calibration End Date: 06/19/2017 16:26 Calibration ID: 29520

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-377804/37	P0037.D
Level 2	STD010 280-377804/38	P0038.D
Level 3	STD020 280-377804/39	P0044.D
Level 4	STD050 280-377804/40	P0040.D
Level 5	ICIS 280-377804/41	P0041.D
Level 6	STD30 280-377804/42	P0042.D
Level 7	STD60 280-377804/43	P0043.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Ethanol	0.3937 0.2231	0.3306 0.2278	0.2853	0.2209	0.2444	Lin2	5.3008	0.2265							0.9940		0.9900
Isopropyl alcohol	1.8508 0.9962	1.5333 1.0958	1.2260	1.1007	1.0537	Lin2	4.2523	1.0313							0.9970		0.9900
Acetonitrile	+++++ 0.0110	0.0111 0.0116	0.0107	0.0107	0.0112	Ave		0.0111				3.0		15.0			
Isopropyl ether	0.1667 0.1794	0.1649 0.1811	0.1733	0.1873	0.1802	Ave		0.1761				4.6		15.0			
2-Chloro-1,3-butadiene	0.3726 0.4602	0.4151 0.4587	0.3830	0.4247	0.4047	Ave		0.4170				8.2		15.0			
Tert-butyl ethyl ether	0.5103 0.5380	0.5037 0.5509	0.5090	0.5657	0.5350	Ave		0.5304				4.4		15.0			
Ethyl acetate	0.1181 0.0878	0.1029 0.0924	0.0946	0.0958	0.0859	Ave		0.0968				11.3		15.0			
Propionitrile	0.0086 0.0108	0.0091 0.0119	0.0107	0.0110	0.0114	Ave		0.0105				11.6		15.0			
Methacrylonitrile	0.0562 0.0629	0.0585 0.0640	0.0638	0.0664	0.0642	Ave		0.0623				5.8		15.0			
Tert-amyl methyl ether	0.3324 0.3764	0.3317 0.3931	0.3498	0.3900	0.3720	Ave		0.3636				7.1		15.0			
n-Butanol	+++++ 0.3088	+++++ 0.3392	0.0846	0.2132	0.2707	Lin2	-12.56	0.3288							0.9980		0.9900
Methyl methacrylate	0.0125 0.0238	0.0159 0.0253	0.0178	0.0218	0.0213	Lin2	-0.012	0.0230							0.9930		0.9900
2-Nitropropane	+++++ 0.0082	0.0071 +++++	0.0104	0.0095	0.0066	Lin	-0.001	0.0081							0.9910		0.9900
cis-1,4-Dichloro-2-butene	0.0783 0.1111	0.0860 0.1253	0.0923	0.1021	0.0963	Lin2	-0.035	0.1084							0.9900		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 377804

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:11 Calibration End Date: 06/19/2017 16:26 Calibration ID: 29520

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,2,3-Trimethylbenzene	2.7496 3.2642	3.2457 3.1649	3.2588	3.0860	2.7134	Ave		3.0689				7.8		15.0			
Dibromofluoromethane (Surr)	+++++ 0.2049	0.2087 0.2000	0.1947	0.2007	0.1973	Ave		0.2011				2.5		15.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2102	0.2325 0.2076	0.2127	0.2119	0.2103	Ave		0.2142				4.3		15.0			
Toluene-d8 (Surr)	+++++ 4.7337	5.1100 4.3206	4.6473	4.5061	4.2632	Ave		4.5968				6.7		15.0			
4-Bromofluorobenzene (Surr)	+++++ 1.1693	1.2396 1.1231	1.1828	1.0913	1.0196	Ave		1.1376				6.8		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 377804

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:11 Calibration End Date: 06/19/2017 16:26 Calibration ID: 29520

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 280-377804/37	P0037.D
Level 2	STD010 280-377804/38	P0038.D
Level 3	STD020 280-377804/39	P0044.D
Level 4	STD050 280-377804/40	P0040.D
Level 5	ICIS 280-377804/41	P0041.D
Level 6	STD30 280-377804/42	P0042.D
Level 7	STD60 280-377804/43	P0043.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Ethanol	TBAd9	Lin2	8349 289373	12701 598941	24900	47237	101395	30.0 1800	60.0 3600	120	300	600
Isopropyl alcohol	TBAd9	Lin2	6542 215389	9817 480116	17833	39233	72844	5.00 300	10.0 600	20.0	50.0	100
Acetonitrile	FB	Ave	+++++ 722675	23768 1506366	46326	114005	244131	+++++ 450	15.0 900	30.0	75.0	150
Isopropyl ether	FB	Ave	18360 1175457	35424 2351092	74970	199202	391599	0.750 45.0	1.50 90.0	3.00	7.50	15.0
2-Chloro-1,3-butadiene	FB	Ave	27359 2010275	59434 3969290	110461	301037	586354	0.500 30.0	1.00 60.0	2.00	5.00	10.0
Tert-butyl ethyl ether	FB	Ave	56207 3525174	108176 7150564	220198	601542	1162652	0.750 45.0	1.50 90.0	3.00	7.50	15.0
Ethyl acetate	FB	Ave	17338 767226	29471 1598845	54554	135807	248881	1.00 60.0	2.00 120	4.00	10.0	20.0
Propionitrile	FB	Ave	9452 709744	19474 1544034	46362	117465	246666	7.50 450	15.0 900	30.0	75.0	150
Methacrylonitrile	FB	Ave	41247 2745527	83791 5539243	183921	470338	930694	5.00 300	10.0 600	20.0	50.0	100
Tert-amyl methyl ether	FB	Ave	36606 2466255	71242 5102457	151317	414701	808442	0.750 45.0	1.50 90.0	3.00	7.50	15.0
n-Butanol	TBAd9	Lin2	+++++ 166928	+++++ 371556	3078	18998	46792	+++++ 750	+++++ 1500	50.0	125	250
Methyl methacrylate	FB	Lin2	1839 207656	4567 438425	10291	30931	61609	1.00 60.0	2.00 120	4.00	10.0	20.0
2-Nitropropane	FB	Lin	+++++ 71836	2030 +++++	5998	13509	19027	+++++ 60.0	2.00 +++++	4.00	10.0	20.0
cis-1,4-Dichloro-2-butene	DCBd4	Lin2	2827 249331	6032 571447	13225	35664	69417	1.00 60.0	2.00 120	4.00	10.0	20.0
1,2,3-Trimethylbenzene	DCBd4	Ave	49631 3662043	113870 7219768	233398	539018	978107	0.500 30.0	1.00 60.0	2.00	5.00	10.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 377804

SDG No.:

Instrument ID: VMS_P GC Column: DB-624 (60. ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/19/2017 14:11 Calibration End Date: 06/19/2017 16:26 Calibration ID: 29520

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Dibromofluoromethane (Surr)	FB	Ave	+++++ 895071	29876 1730921	56148	142274	285920	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 918006	33289 1796239	61335	150175	304659	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
Toluene-d8 (Surr)	CBNZ d5	Ave	+++++ 4054169	137848 7328726	257221	610521	1182503	+++++ 30.0	1.00 60.0	2.00	5.00	10.0
4-Bromofluorobenzene (Surr)	DCBd 4	Ave	+++++ 1311808	43490 2562101	84713	190614	367536	+++++ 30.0	1.00 60.0	2.00	5.00	10.0

Curve Type Legend:

Ave = Average ISTD
Lin = Linear ISTD
Lin2 = Linear 1/conc^2 ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0037.D
Lims ID: STD005
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 19-Jun-2017 14:11:30 ALS Bottle#: 19 Worklist Smp#: 37
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: STD005
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-MLE_VMSP_8260*sub80

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 10:29:25 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: seifertj Date: 20-Jun-2017 07:56:37

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.650	5.644	0.006	0	176730	250.0	250.0	
* 1 Fluorobenzene	96	7.609	7.603	0.006	98	1835576	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.869	9.870	-0.001	90	340230	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.699	11.693	0.006	98	451250	12.5	12.5	
$ 5 Dibromofluoromethane (Surr	111	7.066	7.066	0.000	91	15253	0.5000	0.5166	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.359	7.359	0.000	0	17292	0.5000	0.5498	
$ 7 Toluene-d8 (Surr)	98	8.796	8.796	0.000	95	69547	0.5000	0.5559	
$ 8 4-Bromofluorobenzene (Surr	95	10.734	10.734	0.000	82	22289	0.5000	0.5427	
28 Ethylene oxide	43	4.570	4.560	0.010	100	27206	50.0	53.0	
33 Ethanol	45	4.989	4.979	0.010	77	8349	30.0	28.7	
38 Propene oxide	58	5.212	5.217	-0.005	96	128300	50.0	50.6	
42 Isopropyl alcohol	45	5.394	5.384	0.010	51	6542	5.00	4.85	
46 Acetonitrile	41		5.621				ND	ND	
56 Isopropyl ether	87	6.229	6.229	0.000	96	18360	0.7500	0.7098	
58 2-Chloro-1,3-butadiene	53	6.358	6.358	0.000	94	27359	0.5000	0.4468	
59 Tert-butyl ethyl ether	59	6.508	6.508	0.000	97	56207	0.7500	0.7217	
60 Ethyl acetate	43	6.666	6.665	0.001	93	17338	1.00	1.22	
65 Propionitrile	54	6.758	6.751	0.007	91	9452	7.50	6.13	
66 Methacrylonitrile	41	6.880	6.866	0.014	94	41247	5.00	4.51	
75 Tert-amyl methyl ether	73	7.416	7.409	0.007	77	36606	0.7500	0.6856	
78 n-Butanol	56		7.652				ND	ND	
81 Methyl methacrylate	100	8.031	8.031	0.000	93	1839	1.00	1.05	
88 2-Nitropropane	41		8.417				1.00	ND	
99 Tetrahydrothiophene	60		9.475				ND	ND	
110 cis-1,4-Dichloro-2-butene	53	10.620	10.619	0.001	0	2827	1.00	1.05	
125 1,2,3-Trimethylbenzene	105	11.721	11.713	0.008	98	49631	0.5000	0.4480	
16 1,3,5-Trichlorobenzene	180	13.036	13.036	0.000	93	17489	0.5000	0.4440	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00024	Amount Added:	0.25	Units: uL	
MV-ARCH SS A_00082	Amount Added:	0.04	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent

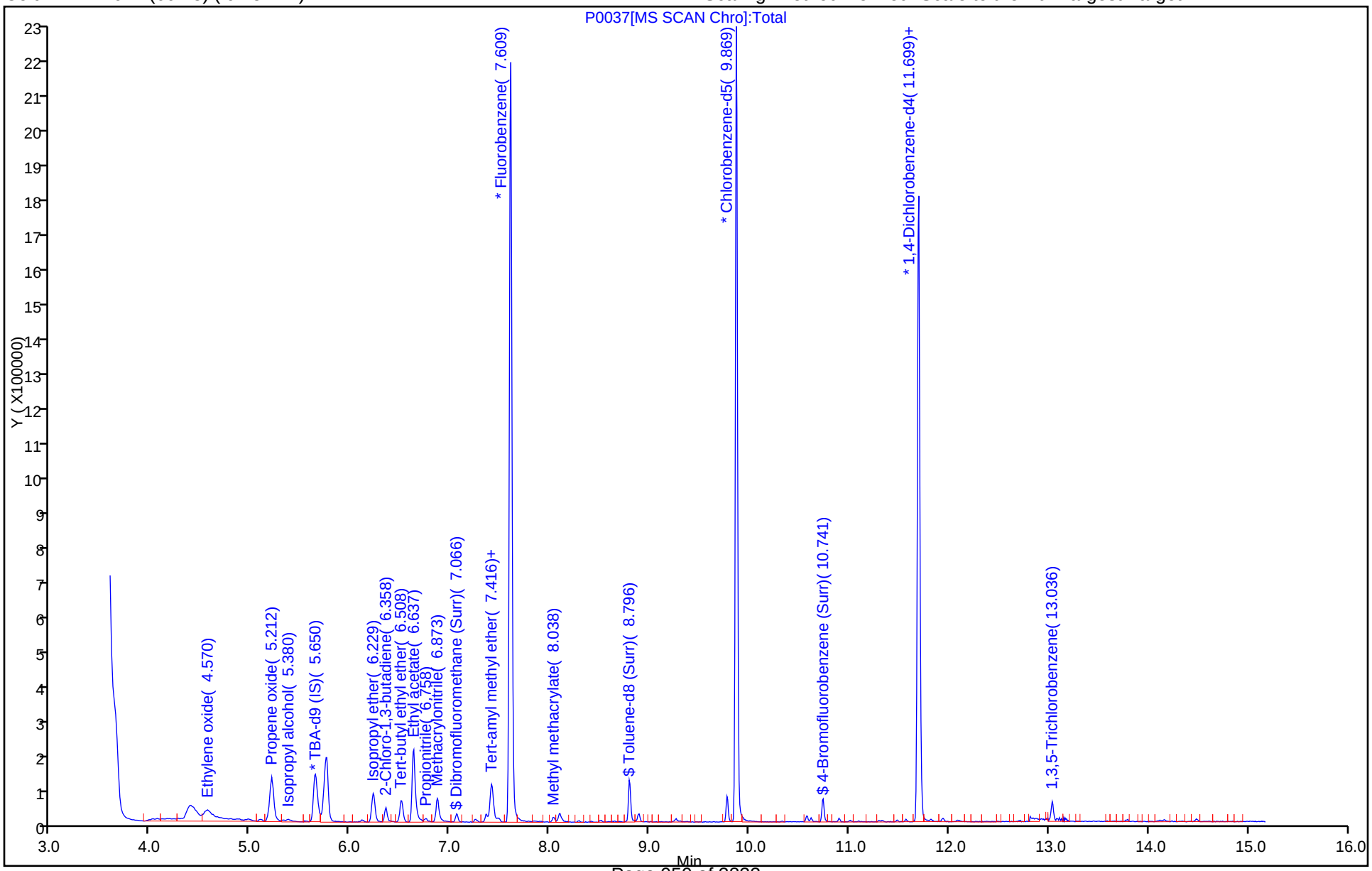
Report Date: 20-Jun-2017 10:29:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0037.D

Injection Date:	19-Jun-2017 14:11:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD005			Worklist Smp#:	37
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0038.D
Lims ID: STD010
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 19-Jun-2017 14:30:30 ALS Bottle#: 20 Worklist Smp#: 38
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: STD010
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-MLE_VMSP_8260*sub80

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 10:29:26 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: seifertj Date: 20-Jun-2017 07:57:29

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.643	5.644	-0.001	0	160060	250.0	250.0	
* 1 Fluorobenzene	96	7.609	7.603	0.006	98	1789644	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.869	9.870	-0.001	90	337203	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.699	11.693	0.006	98	438538	12.5	12.5	
$ 5 Dibromofluoromethane (Surr	111	7.066	7.066	0.000	90	29876	1.00	1.04	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.359	7.359	0.000	0	33289	1.00	1.09	
$ 7 Toluene-d8 (Surr)	98	8.796	8.796	0.000	95	137848	1.00	1.11	
$ 8 4-Bromofluorobenzene (Surr	95	10.734	10.734	0.000	83	43490	1.00	1.09	
28 Ethylene oxide	43	4.558	4.560	-0.002	100	60239	100.0	120.5	
33 Ethanol	45	4.963	4.979	-0.016	95	12701	60.0	64.2	
38 Propene oxide	58	5.200	5.217	-0.017	96	252399	100.0	102.1	
42 Isopropyl alcohol	45	5.382	5.384	-0.002	88	9817	10.0	10.7	
46 Acetonitrile	41	5.629	5.621	0.008	89	23768	15.0	15.0	M
56 Isopropyl ether	87	6.229	6.229	0.000	95	35424	1.50	1.40	
58 2-Chloro-1,3-butadiene	53	6.351	6.358	-0.007	93	59434	1.00	1.00	
59 Tert-butyl ethyl ether	59	6.508	6.508	0.000	96	108176	1.50	1.42	
60 Ethyl acetate	43	6.665	6.665	0.000	95	29471	2.00	2.13	
65 Propionitrile	54	6.751	6.751	0.000	96	19474	15.0	13.0	
66 Methacrylonitrile	41	6.873	6.866	0.007	95	83791	10.0	9.40	
75 Tert-amyl methyl ether	73	7.409	7.409	0.000	80	71242	1.50	1.37	
78 n-Butanol	56		7.652				ND	ND	
81 Methyl methacrylate	100	8.031	8.031	0.000	91	4567	2.00	1.89	
88 2-Nitropropane	41	8.417	8.417	0.000	85	2030	2.00	1.83	
99 Tetrahydrothiophene	60		9.475				ND	ND	
110 cis-1,4-Dichloro-2-butene	53	10.619	10.619	0.000	0	6032	2.00	1.91	
125 1,2,3-Trimethylbenzene	105	11.720	11.713	0.007	98	113870	1.00	1.06	
16 1,3,5-Trichlorobenzene	180	13.036	13.036	0.000	94	41670	1.00	1.09	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MV-Supp A_00024	Amount Added:	0.50	Units: uL	
MV-ARCH SS A_00082	Amount Added:	0.08	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent

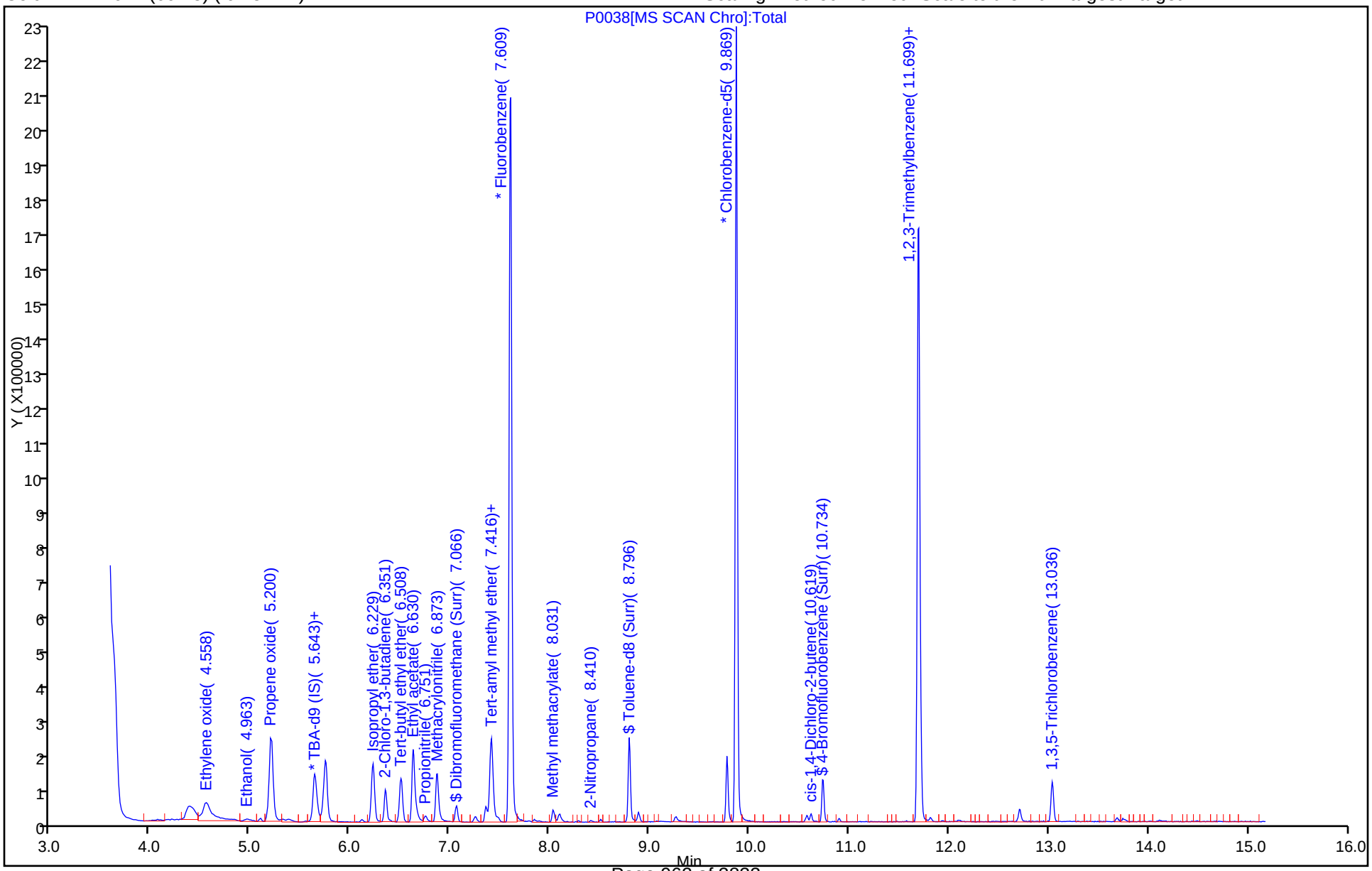
Report Date: 20-Jun-2017 10:29:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0038.D

Injection Date:	19-Jun-2017 14:30:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD010			Worklist Smp#:	38
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Denver

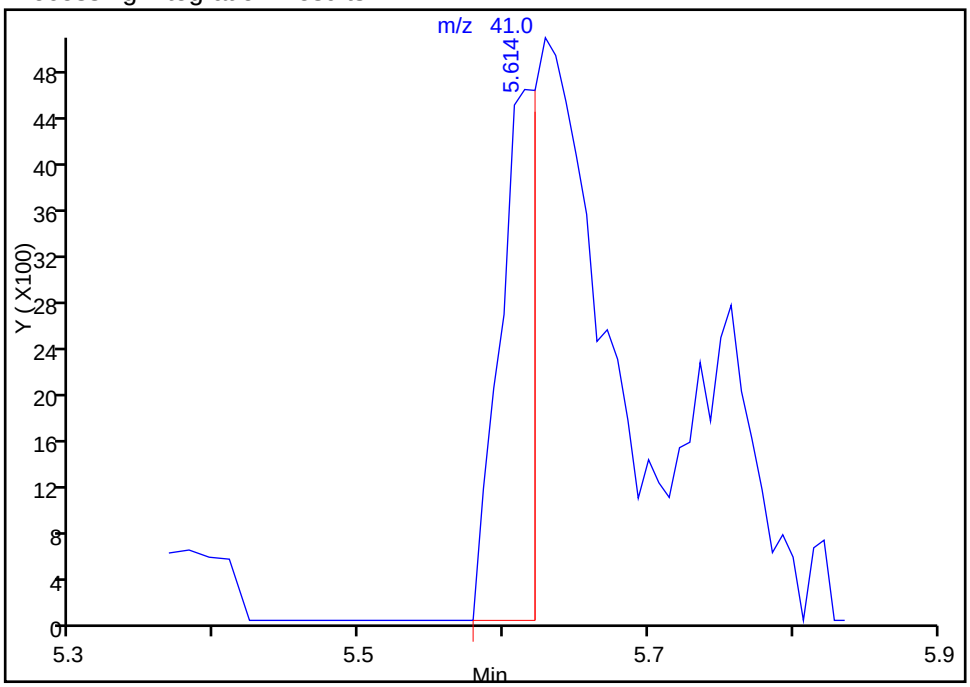
Data File:	\\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0038.D				
Injection Date:	19-Jun-2017 14:30:30	Instrument ID:	VMS_P		
Lims ID:	STD010				
Client ID:					
Operator ID:	SEIFERTJ	ALS Bottle#:	20	Worklist Smp#:	38
Purge Vol:	20.000 mL	Dil. Factor:	1.0000		
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		
Column:	DB-624 (60.25) (0.25 mm)	Detector	MS SCAN		

46 Acetonitrile, CAS: 75-05-8

Signal: 1

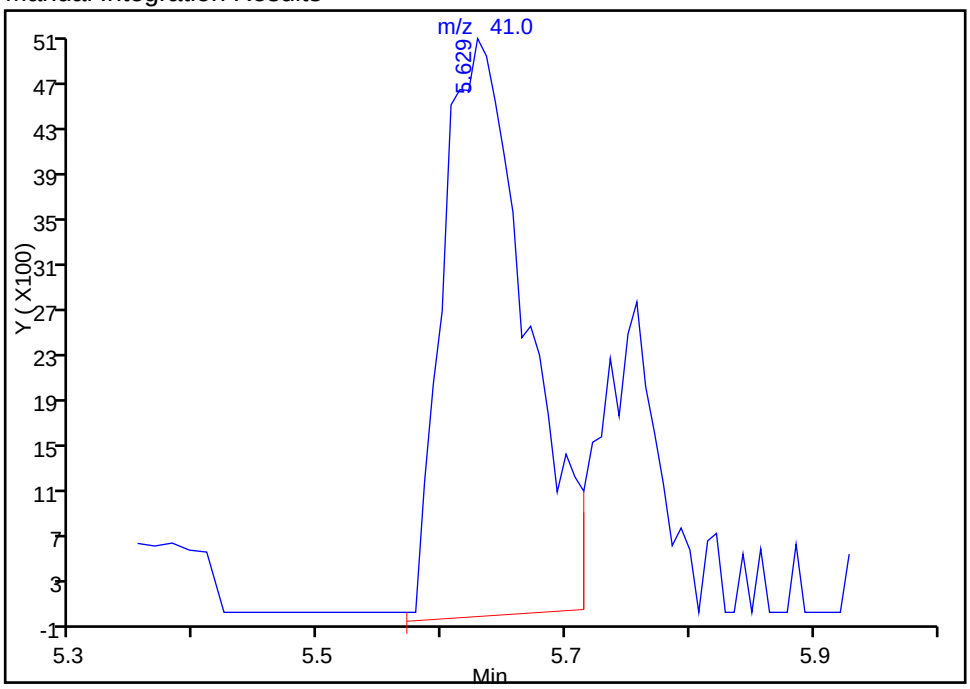
Processing Integration Results

RT: 5.61
Area: 8313
Amount: 12.276292
Amount Units: ug/l



Manual Integration Results

RT: 5.63
Area: 23768
Amount: 15.009020
Amount Units: ug/l



Reviewer: seifertj, 20-Jun-2017 09:50:25

Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D
Lims ID: STD020
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 19-Jun-2017 16:26:30 ALS Bottle#: 26 Worklist Smp#: 39
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: STD020
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-MLE_VMSP_8260*sub80

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 10:29:27 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: seifertj Date: 20-Jun-2017 07:57:56

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.644	5.644	0.000	0	181824	250.0	250.0	
* 1 Fluorobenzene	96	7.610	7.603	0.007	98	1802626	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.869	9.870	-0.001	90	345931	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.700	11.693	0.007	98	447628	12.5	12.5	
$ 5 Dibromofluoromethane (Surr	111	7.067	7.066	0.001	92	56148	2.00	1.94	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.360	7.359	0.001	0	61335	2.00	1.99	
$ 7 Toluene-d8 (Surr)	98	8.797	8.796	0.001	95	257221	2.00	2.02	
$ 8 4-Bromofluorobenzene (Surr	95	10.742	10.734	0.008	82	84713	2.00	2.08	
28 Ethylene oxide	43	4.560	4.560	0.000	100	87132	200.0	173.0	
33 Ethanol	45	4.979	4.979	0.000	98	24900	120.0	127.7	
38 Propene oxide	58	5.216	5.217	-0.001	96	509790	200.0	204.7	
42 Isopropyl alcohol	45	5.384	5.384	0.000	81	17833	20.0	19.7	
46 Acetonitrile	41	5.622	5.621	0.001	98	46326	30.0	29.0	
56 Isopropyl ether	87	6.230	6.229	0.001	95	74970	3.00	2.95	
58 2-Chloro-1,3-butadiene	53	6.359	6.358	0.001	93	110461	2.00	1.84	
59 Tert-butyl ethyl ether	59	6.509	6.508	0.001	97	220198	3.00	2.88	
60 Ethyl acetate	43	6.666	6.665	0.001	96	54554	4.00	3.91	
65 Propionitrile	54	6.752	6.751	0.001	100	46362	30.0	30.6	
66 Methacrylonitrile	41	6.866	6.866	0.000	95	183921	20.0	20.5	
75 Tert-amyl methyl ether	73	7.410	7.409	0.001	90	151317	3.00	2.89	
78 n-Butanol	56	7.660	7.652	0.008	89	3078	50.0	51.1	
81 Methyl methacrylate	100	8.039	8.031	0.008	94	10291	4.00	3.61	
88 2-Nitropropane	41	8.411	8.417	-0.006	90	5998	4.00	5.21	
99 Tetrahydrothiophene	60		9.475				ND	ND	
110 cis-1,4-Dichloro-2-butene	53	10.620	10.619	0.001	0	13225	4.00	3.73	
125 1,2,3-Trimethylbenzene	105	11.714	11.713	0.001	99	233398	2.00	2.12	
16 1,3,5-Trichlorobenzene	180	13.037	13.036	0.001	95	84882	2.00	2.17	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00024	Amount Added:	1.00	Units: uL	
MV-ARCH SS A_00082	Amount Added:	0.16	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent

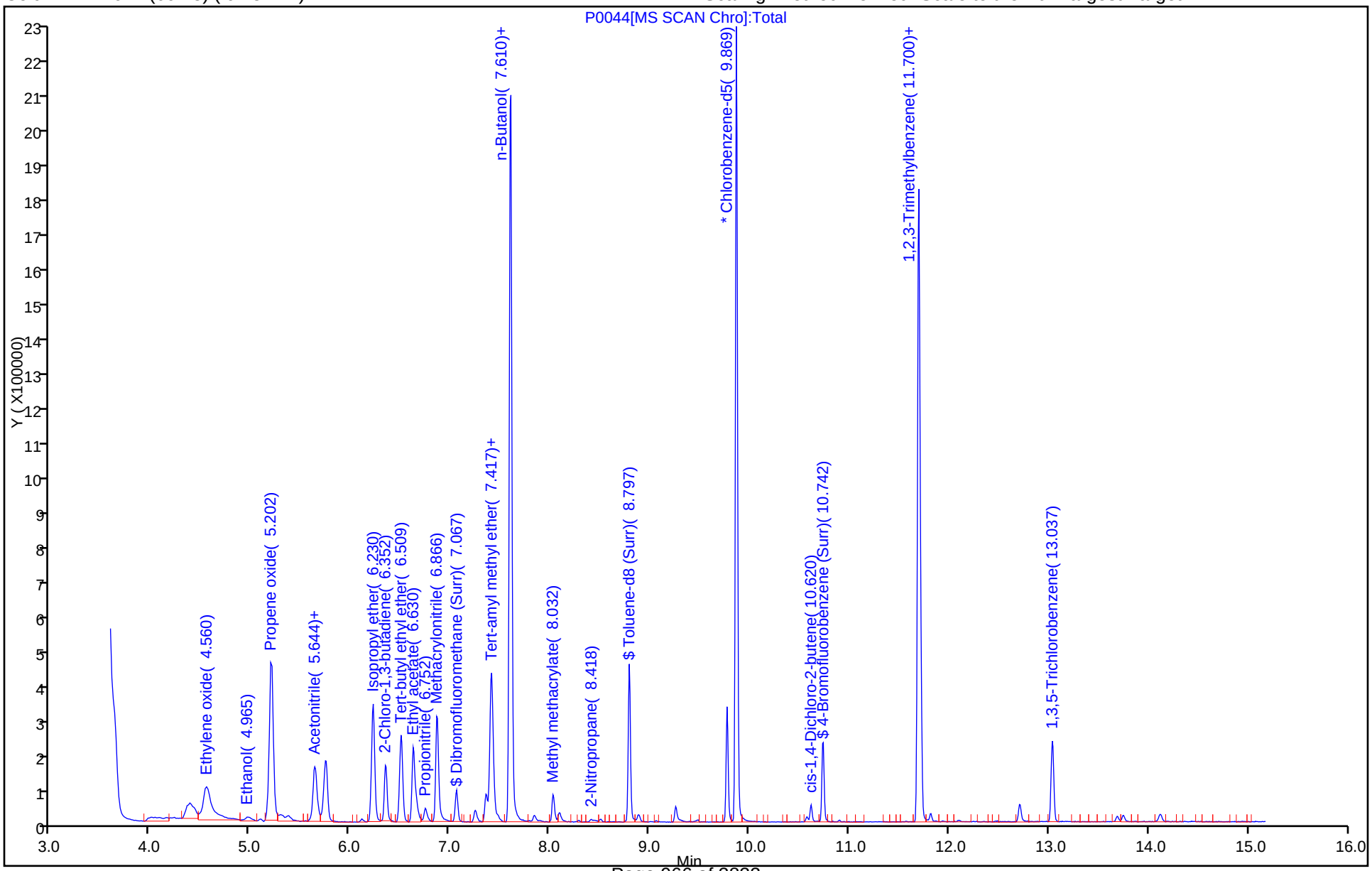
Report Date: 20-Jun-2017 10:29:27 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Injection Date:	19-Jun-2017 16:26:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD020			Worklist Smp#:	39
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0040.D
Lims ID: STD050
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 19-Jun-2017 15:09:30 ALS Bottle#: 22 Worklist Smp#: 40
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: STD050
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-MLE_VMSP_8260*sub80

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 10:29:28 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: seifertj Date: 20-Jun-2017 07:58:20

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.644	5.644	0.000	0	178211	250.0	250.0	
* 1 Fluorobenzene	96	7.610	7.603	0.007	98	1772156	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.870	9.870	0.000	90	338718	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.700	11.693	0.007	98	436667	12.5	12.5	
$ 5 Dibromofluoromethane (Surr	111	7.067	7.066	0.001	91	142274	5.00	4.99	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.360	7.359	0.001	0	150175	5.00	4.95	
$ 7 Toluene-d8 (Surr)	98	8.797	8.796	0.001	95	610521	5.00	4.90	
$ 8 4-Bromofluorobenzene (Surr	95	10.735	10.734	0.001	81	190614	5.00	4.80	
28 Ethylene oxide	43	4.571	4.560	0.011	100	259934	500.0	524.9	
33 Ethanol	45	4.962	4.979	-0.017	99	47237	300.0	269.1	
38 Propene oxide	58	5.214	5.217	-0.003	96	1371359	500.0	560.0	
42 Isopropyl alcohol	45	5.381	5.384	-0.003	93	39233	50.0	49.2	
46 Acetonitrile	41	5.615	5.621	-0.006	99	114005	75.0	72.7	
56 Isopropyl ether	87	6.230	6.229	0.001	95	199202	7.50	7.98	
58 2-Chloro-1,3-butadiene	53	6.352	6.358	-0.006	94	301037	5.00	5.09	
59 Tert-butyl ethyl ether	59	6.509	6.508	0.001	97	601542	7.50	8.00	
60 Ethyl acetate	43	6.659	6.665	-0.006	98	135807	10.0	9.90	
65 Propionitrile	54	6.752	6.751	0.001	99	117465	75.0	78.9	
66 Methacrylonitrile	41	6.867	6.866	0.000	95	470338	50.0	53.3	
75 Tert-amyl methyl ether	73	7.410	7.409	0.001	93	414701	7.50	8.04	
78 n-Butanol	56	7.653	7.652	0.001	94	18998	125.0	119.3	
81 Methyl methacrylate	100	8.032	8.031	0.001	92	30931	10.0	10.0	
88 2-Nitropropane	41	8.411	8.417	-0.006	91	13509	10.0	11.8	
99 Tetrahydrothiophene	60		9.475				ND	ND	
110 cis-1,4-Dichloro-2-butene	53	10.620	10.619	0.001	0	35664	10.0	9.74	
125 1,2,3-Trimethylbenzene	105	11.714	11.713	0.001	99	539018	5.00	5.03	
16 1,3,5-Trichlorobenzene	180	13.037	13.036	0.001	95	180306	5.00	4.73	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00024	Amount Added:	2.50	Units: uL	
MV-ARCH SS A_00082	Amount Added:	0.40	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent

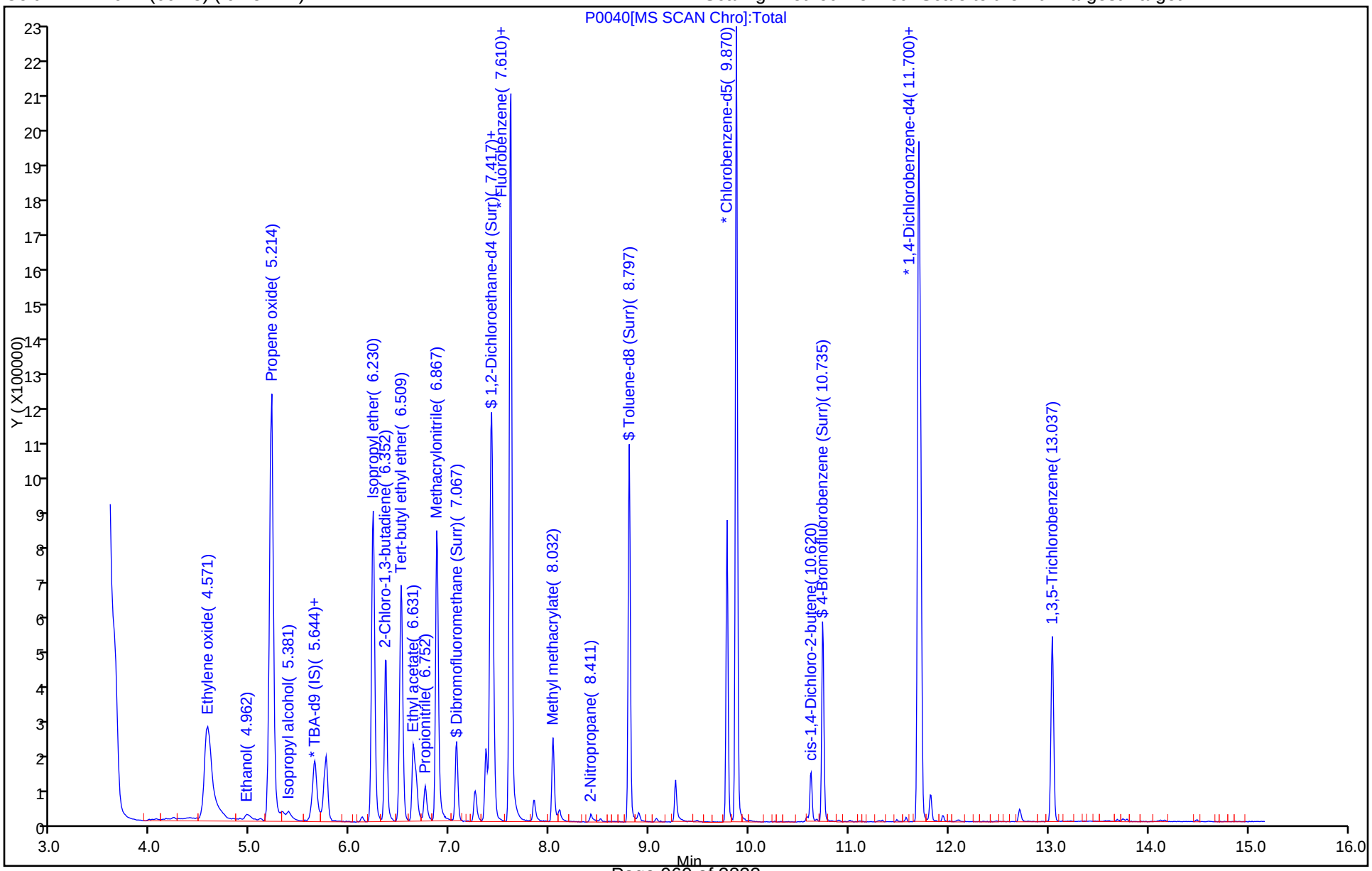
Report Date: 20-Jun-2017 10:29:29 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0040.D

Injection Date:	19-Jun-2017 15:09:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD050			Worklist Smp#:	40
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0041.D
Lims ID: ICIS
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 19-Jun-2017 15:28:30 ALS Bottle#: 23 Worklist Smp#: 41
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ICIS
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-MLE_VMSP_8260*sub80

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 10:29:30 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: seifertj Date: 19-Jun-2017 16:28:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.650	5.650	0.000	0	172833	250.0	250.0	
* 1 Fluorobenzene	96	7.609	7.609	0.000	98	1811039	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.869	9.869	0.000	90	346716	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.699	11.699	0.000	98	450593	12.5	12.5	
$ 5 Dibromofluoromethane (Surr	111	7.066	7.066	0.000	92	285920	10.0	9.82	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.359	7.359	0.000	0	304659	10.0	9.82	
$ 7 Toluene-d8 (Surr)	98	8.796	8.796	0.000	94	1182503	10.0	9.27	
$ 8 4-Bromofluorobenzene (Surr	95	10.734	10.734	0.000	82	367536	10.0	8.96	
28 Ethylene oxide	43	4.560	4.560	0.000	100	490784	1000.0	969.8	
33 Ethanol	45	4.979	4.979	0.000	99	101395	600.0	624.0	
38 Propene oxide	58	5.217	5.217	0.000	96	2620908	1000.0	1047.3	
42 Isopropyl alcohol	45	5.384	5.384	0.000	95	72844	100.0	98.0	
46 Acetonitrile	41	5.621	5.621	0.000	99	244131	150.0	152.3	
56 Isopropyl ether	87	6.229	6.229	0.000	96	391599	15.0	15.3	
58 2-Chloro-1,3-butadiene	53	6.358	6.358	0.000	94	586354	10.0	9.71	
59 Tert-butyl ethyl ether	59	6.508	6.508	0.000	98	1162652	15.0	15.1	
60 Ethyl acetate	43	6.665	6.665	0.000	99	248881	20.0	17.8	
65 Propionitrile	54	6.751	6.751	0.000	99	246666	150.0	162.2	
66 Methacrylonitrile	41	6.866	6.866	0.000	95	930694	100.0	103.2	
75 Tert-amyl methyl ether	73	7.409	7.409	0.000	94	808442	15.0	15.3	
78 n-Butanol	56	7.652	7.652	0.000	95	46792	250.0	244.1	
81 Methyl methacrylate	100	8.031	8.031	0.000	93	61609	20.0	19.0	
88 2-Nitropropane	41	8.417	8.417	0.000	96	19027	20.0	16.3	
99 Tetrahydrothiophene	60		9.475				ND	ND	
110 cis-1,4-Dichloro-2-butene	53	10.619	10.619	0.000	0	69417	20.0	18.1	
125 1,2,3-Trimethylbenzene	105	11.713	11.713	0.000	99	978107	10.0	8.84	
16 1,3,5-Trichlorobenzene	180	13.036	13.036	0.000	95	330088	10.0	8.39	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00024	Amount Added:	5.00	Units: uL	
MV-ARCH SS A_00082	Amount Added:	0.80	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent

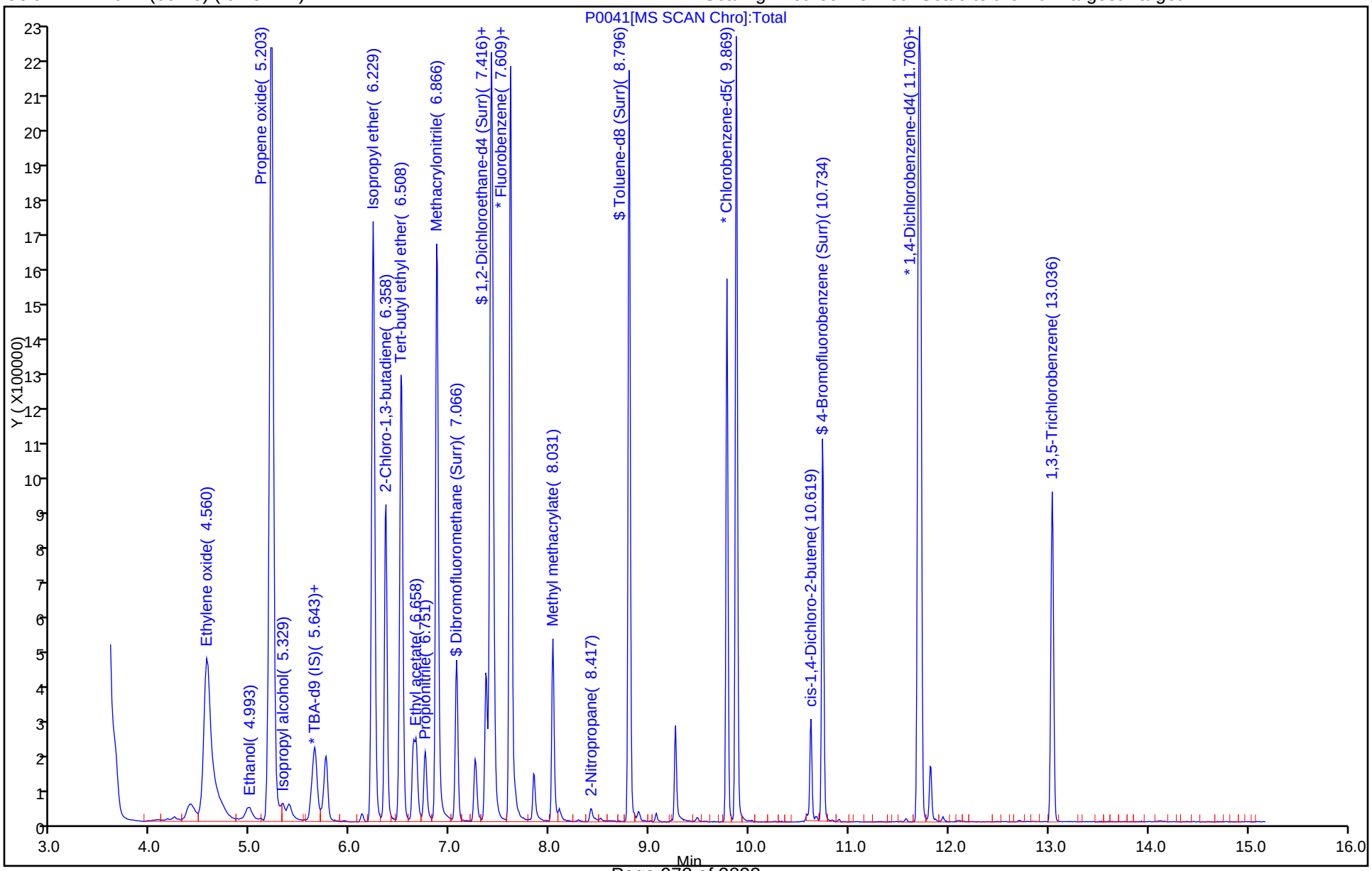
Report Date: 20-Jun-2017 10:29:30 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0041.D

Injection Date:	19-Jun-2017 15:28:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	ICIS			Worklist Smp#:	41
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0042.D
Lims ID: STD30
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 19-Jun-2017 15:48:30 ALS Bottle#: 24 Worklist Smp#: 42
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: STD30
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-MLE_VMSP_8260*sub80

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 10:29:31 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: seifertj Date: 20-Jun-2017 07:59:02

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.650	5.650	0.000	0	180171	250.0	250.0	
* 1 Fluorobenzene	96	7.610	7.609	0.001	98	1820107	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.869	9.869	0.000	90	356851	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.699	11.699	0.000	98	467456	12.5	12.5	
$ 5 Dibromofluoromethane (Surr	111	7.066	7.066	0.000	92	895071	30.0	30.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.359	7.359	0.000	0	918006	30.0	29.4	
$ 7 Toluene-d8 (Surr)	98	8.796	8.796	0.000	94	4054169	30.0	30.9	
$ 8 4-Bromofluorobenzene (Surr	95	10.734	10.734	0.000	83	1311808	30.0	30.8	
28 Ethylene oxide	43	4.570	4.560	0.010	100	1389467	3000.0	2732.0	
33 Ethanol	45	4.975	4.979	-0.004	99	289373	1800.0	1749.1	
38 Propene oxide	58	5.213	5.217	-0.004	96	7136812	3000.0	2837.6	
42 Isopropyl alcohol	45	5.394	5.384	0.010	96	215389	300.0	285.7	
46 Acetonitrile	41	5.622	5.621	0.001	99	722675	450.0	448.7	
56 Isopropyl ether	87	6.230	6.229	0.001	95	1175457	45.0	45.8	
58 2-Chloro-1,3-butadiene	53	6.358	6.358	0.000	94	2010275	30.0	33.1	
59 Tert-butyl ethyl ether	59	6.516	6.508	0.008	98	3525174	45.0	45.6	
60 Ethyl acetate	43	6.659	6.665	-0.006	99	767226	60.0	54.4	
65 Propionitrile	54	6.751	6.751	0.000	99	709744	450.0	464.3	
66 Methacrylonitrile	41	6.866	6.866	0.000	95	2745527	300.0	302.8	
75 Tert-amyl methyl ether	73	7.409	7.409	0.000	94	2466255	45.0	46.6	
78 n-Butanol	56	7.645	7.652	-0.007	92	166928	750.0	742.8	
81 Methyl methacrylate	100	8.031	8.031	0.000	93	207656	60.0	62.5	
88 2-Nitropropane	41	8.410	8.417	-0.007	97	71836	60.0	60.9	
99 Tetrahydrothiophene	60		9.475				ND	ND	
110 cis-1,4-Dichloro-2-butene	53	10.620	10.619	0.001	0	249331	60.0	61.8	
125 1,2,3-Trimethylbenzene	105	11.714	11.713	0.001	99	3662043	30.0	31.9	
16 1,3,5-Trichlorobenzene	180	13.036	13.036	0.000	96	1315016	30.0	32.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00024	Amount Added:	15.00	Units: uL	
MV-ARCH SS A_00082	Amount Added:	2.40	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent

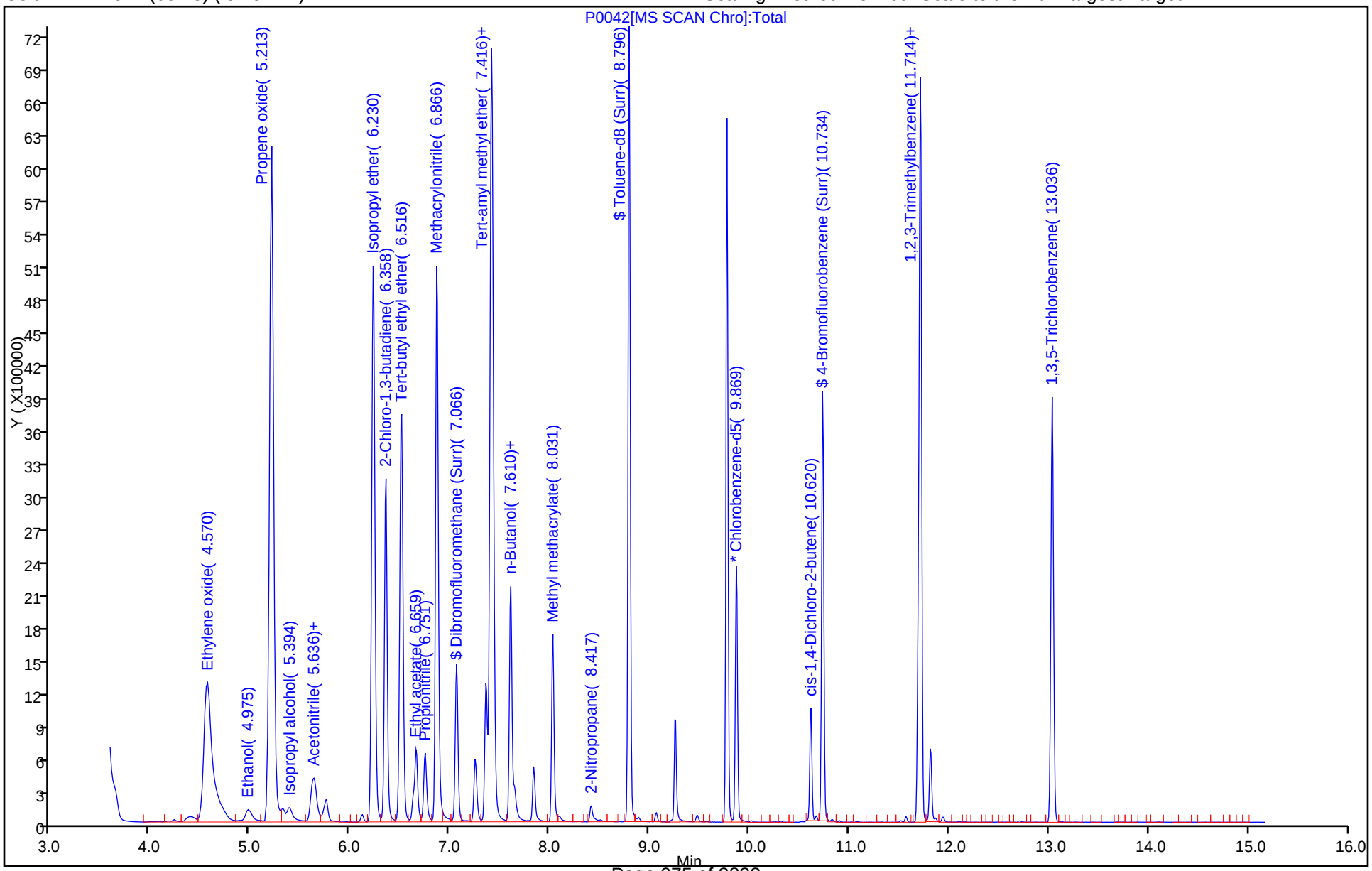
Report Date: 20-Jun-2017 10:29:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0042.D

Injection Date:	19-Jun-2017 15:48:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD30			Worklist Smp#:	42
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0043.D
Lims ID: STD60
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 19-Jun-2017 16:07:30 ALS Bottle#: 25 Worklist Smp#: 43
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: STD60
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-MLE_VMSP_8260*sub80

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 10:29:32 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: seifertj Date: 20-Jun-2017 07:59:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.651	5.650	0.001	0	182564	250.0	250.0	
* 1 Fluorobenzene	96	7.610	7.609	0.001	98	1802906	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.870	9.869	0.001	89	353385	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.700	11.699	0.001	98	475252	12.5	12.5	
$ 5 Dibromofluoromethane (Surr	111	7.067	7.066	0.001	92	1730921	60.0	59.7	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.360	7.359	0.001	0	1796239	60.0	58.1	
$ 7 Toluene-d8 (Surr)	98	8.797	8.796	0.001	94	7328726	60.0	56.4	
$ 8 4-Bromofluorobenzene (Surr	95	10.735	10.734	0.001	83	2562101	60.0	59.2	
28 Ethylene oxide	43	4.557	4.560	-0.003	100	2839626	6000.0	5636.5	
33 Ethanol	45	4.976	4.979	-0.003	100	598941	3600.0	3597.2	
38 Propene oxide	58	5.214	5.217	-0.003	95	12425687	6000.0	4987.6	
42 Isopropyl alcohol	45	5.395	5.384	0.011	97	480116	600.0	633.4	
46 Acetonitrile	41	5.623	5.621	0.002	99	1506366	900.0	944.2	
56 Isopropyl ether	87	6.231	6.229	0.002	94	2351092	90.0	92.5	
58 2-Chloro-1,3-butadiene	53	6.352	6.358	-0.006	94	3969290	60.0	66.0	
59 Tert-butyl ethyl ether	59	6.509	6.508	0.001	97	7150564	90.0	93.5	
60 Ethyl acetate	43	6.660	6.665	-0.005	99	1598845	120.0	114.5	
65 Propionitrile	54	6.752	6.751	0.001	99	1544034	900.0	1019.7	
66 Methacrylonitrile	41	6.867	6.866	0.001	95	5539243	600.0	616.7	
75 Tert-amyl methyl ether	73	7.410	7.409	0.001	95	5102457	90.0	97.3	
78 n-Butanol	56	7.646	7.652	-0.006	92	371556	1500.0	1585.9	
81 Methyl methacrylate	100	8.032	8.031	0.001	93	438425	120.0	132.7	
88 2-Nitropropane	41	8.411	8.417	-0.006	98	185861	120.0	158.8	
99 Tetrahydrothiophene	60		9.475				ND	ND	
110 cis-1,4-Dichloro-2-butene	53	10.614	10.619	-0.005	0	571447	120.0	139.0	
125 1,2,3-Trimethylbenzene	105	11.715	11.713	0.002	99	7219768	60.0	61.9	
16 1,3,5-Trichlorobenzene	180	13.037	13.036	0.001	96	2681195	60.0	64.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00024	Amount Added:	30.00	Units: uL	
MV-ARCH SS A_00082	Amount Added:	4.80	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent

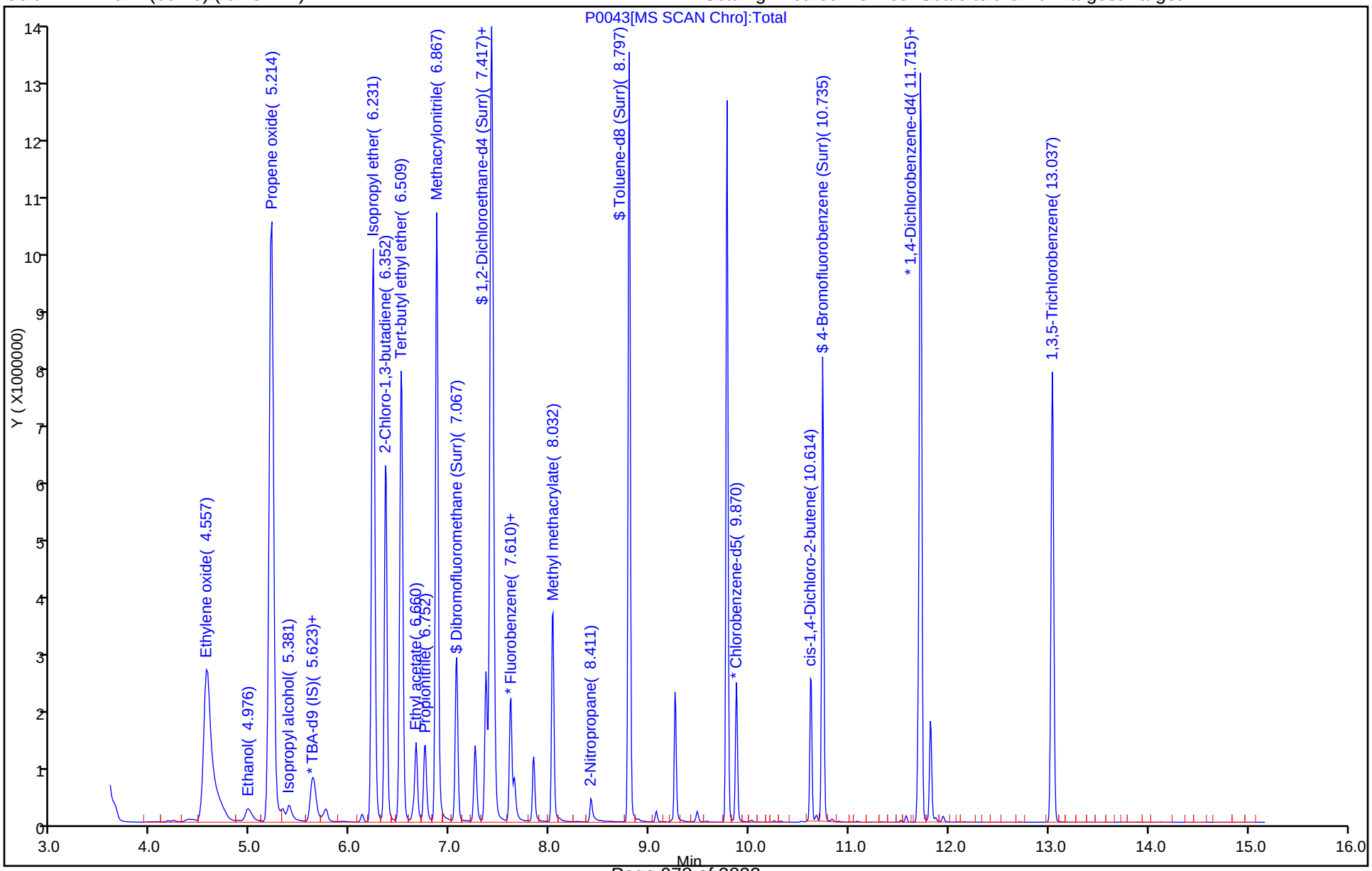
Report Date: 20-Jun-2017 10:29:33 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0043.D

Injection Date:	19-Jun-2017 16:07:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	STD60			Worklist Smp#:	43
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-371118/28 Calibration Date: 04/27/2017 00:08

Instrument ID: VMS_G2 Calib Start Date: 04/26/2017 21:24

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/26/2017 23:47

Lab File ID: G2_9111.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.1246		2000	2000	-0.0	20.0
Isopropyl alcohol	Lin2		0.7207		511	500	2.2	20.0
Acetonitrile	Ave	0.0340	0.0344		507	500	1.3	20.0
Isopropyl ether	Lin1		0.2681		50.1	50.0	0.2	20.0
2-Chloro-1,3-butadiene	Lin1		0.5292		50.1	50.0	0.2	20.0
Tert-butyl ethyl ether	Lin1		0.7848		47.9	50.0	-4.2	20.0
Ethyl acetate	Ave	0.2191	0.2352		107	100	7.3	20.0
Propionitrile	Ave	0.0366	0.0384		525	500	4.9	20.0
Methacrylonitrile	Ave	0.1405	0.1553		552	500	10.5	20.0
Tert-amyl methyl ether	Lin1		0.7573		48.4	50.0	-3.1	20.0
n-Butanol	Lin1		0.3130		1150	1250	-7.6	20.0
Methyl methacrylate	Lin1		0.0788		97.5	100	-2.5	20.0
2-Nitropropane	Lin1		0.0692		90.4	100	-9.6	20.0
cis-1,4-Dichloro-2-butene	Lin1		0.2540		100	100	0.4	20.0
1,2,3-Trimethylbenzene	Lin2		3.271		52.2	50.0	4.4	20.0
Dibromofluoromethane (Surr)	Ave	0.2967	0.3091		52.1	50.0	4.2	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3491	0.3574		51.2	50.0	2.4	20.0
Toluene-d8 (Surr)	Ave	4.055	4.576		56.4	50.0	12.9	20.0
4-Bromofluorobenzene (Surr)	Lin2		1.043		54.1	50.0	8.1	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9111.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 27-Apr-2017 00:08:30 ALS Bottle#: 18 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist:

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 27-Apr-2017 16:50:10 Calib Date: 26-Apr-2017 23:47:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.065	0.014	96	543420	1000.0	1000.0	
* 3 Fluorobenzene	96	7.644	7.644	0.000	99	1010405	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.775	10.775	0.000	86	259337	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.835	12.835	0.000	94	422767	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.843	6.836	0.007	94	312317	50.0	52.1	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.257	7.250	0.007	98	361076	50.0	51.2	
$ 10 Toluene-d8 (Surr)	98	9.352	9.352	0.000	93	1186761	50.0	56.4	
$ 11 4-Bromofluorobenzene (Surr	95	11.884	11.884	0.000	94	441142	50.0	54.1	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.277	2.263	0.014	100	1111944	5000.0	4581.8	
42 Ethanol	45	2.892	2.892	0.000	99	135452	2000.0	1999.7	
47 Propene oxide	58	3.073	3.073	0.000	96	6399890	5000.0	5181.0	
51 Isopropyl alcohol	45	3.576	3.562	0.014	96	195831	500.0	510.9	
54 Acetonitrile	41	3.758	3.744	0.014	99	347796	500.0	506.5	
68 2-Chloro-1,3-butadiene	53	5.336	5.322	0.014	91	534750	50.0	50.1	
66 Isopropyl ether	87	5.322	5.322	0.000	91	270860	50.0	50.1	
69 Tert-butyl ethyl ether	59	5.908	5.908	0.000	97	792920	50.0	47.9	
70 Ethyl acetate	43	6.228	6.221	0.007	99	475209	100.0	107.3	
73 Propionitrile	54	6.235	6.228	0.007	99	387598	500.0	524.6	
76 Methacrylonitrile	41	6.442	6.442	0.000	91	1568874	500.0	552.4	
86 Tert-amyl methyl ether	73	7.465	7.458	0.007	97	765220	50.0	48.4	
88 n-Butanol	56	8.015	8.015	0.000	90	212642	1250.0	1154.5	
16 Ethyl acrylate	55	8.187	8.187	0.000	100	306857	50.0	46.7	
91 Methyl methacrylate	100	8.437	8.430	0.007	91	159298	100.0	97.5	
97 2-Nitropropane	41	8.873	8.873	0.000	99	139813	100.0	90.4	
120 cis-1,4-Dichloro-2-butene	53	11.783	11.784	-0.001	91	214794	100.0	100.4	
135 1,2,3-Trimethylbenzene	105	12.863	12.863	0.000	98	1382988	50.0	52.2	
140 1,3,5-Trichlorobenzene	180	13.707	13.707	0.000	98	677662	50.0	55.4	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp B_00015	Amount Added:	6.25	Units: uL
MV-ARCH SS A_00081	Amount Added:	1.00	Units: uL

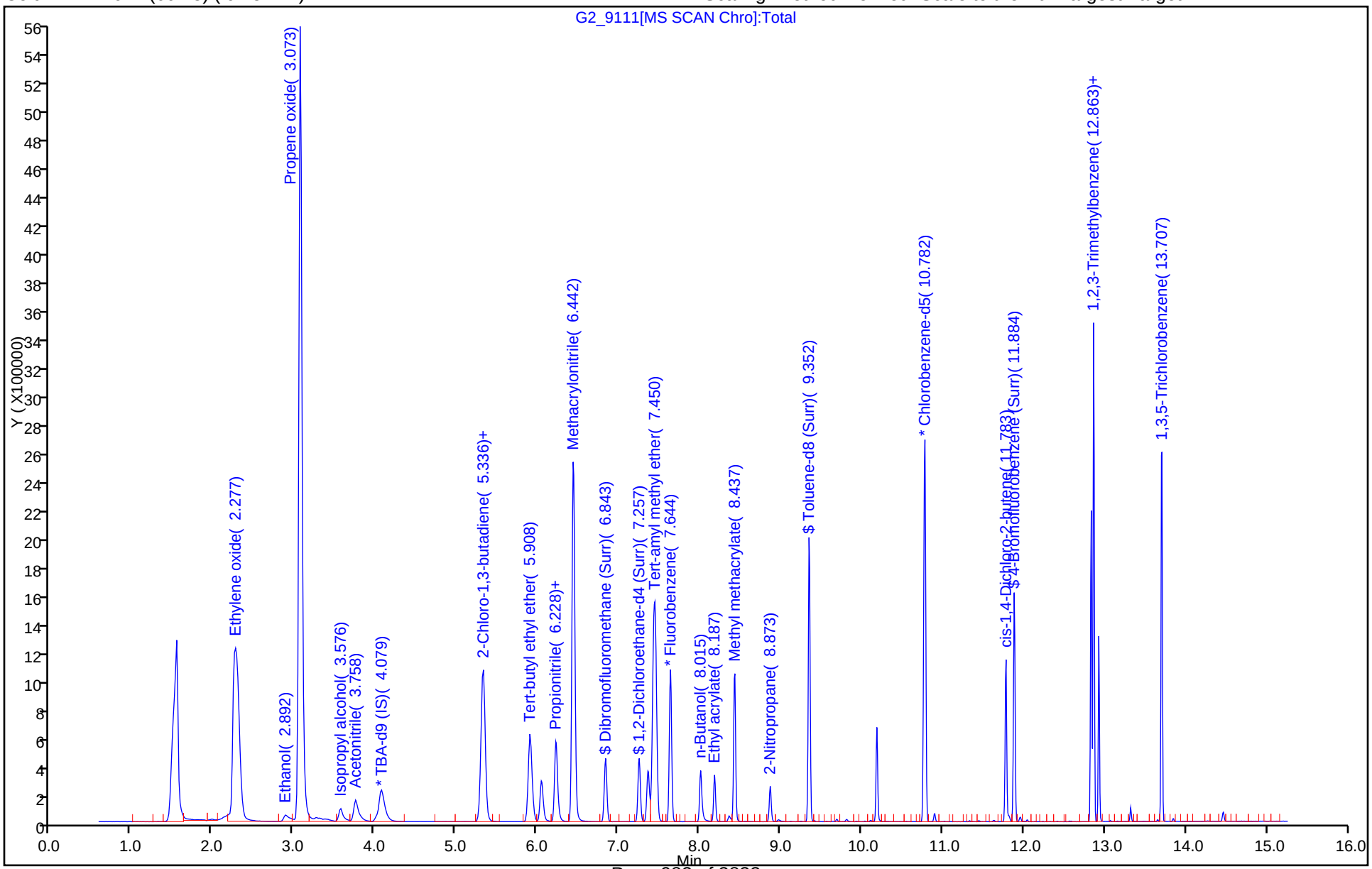
Report Date: 27-Apr-2017 16:50:11 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9111.D

Injection Date:	27-Apr-2017 00:08:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	ICV			Worklist Smp#:	28
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376989/12 Calibration Date: 06/12/2017 21:19

Instrument ID: VMS_G2 Calib Start Date: 06/12/2017 18:07

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/12/2017 20:35

Lab File ID: G2_0903.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Qua		0.3959		64.4	50.0	28.8*	20.0
Chloromethane	Qua		0.5386	0.1000	58.9	50.0	17.9	20.0
Vinyl chloride	Ave	0.5000	0.5524		55.2	50.0	10.5	20.0
Bromomethane	Ave	0.4214	0.3601		42.7	50.0	-14.5	20.0
Chloroethane	Ave	0.3129	0.3135		50.1	50.0	0.2	20.0
Dichlorofluoromethane	Ave	0.6428	0.6128		47.7	50.0	-4.7	20.0
Trichlorofluoromethane	Ave	0.5107	0.5084		49.8	50.0	-0.5	20.0
Ethyl ether	Lin1		0.2673		52.8	50.0	5.6	20.0
Acrolein	Lin1		0.0478		501	500	0.2	20.0
1,1-Dichloroethene	Ave	0.2575	0.2875		55.8	50.0	11.6	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2586	0.2681		51.8	50.0	3.6	20.0
Acetone	Qua		0.0932		159	200	-20.6*	20.0
Methyl iodide	Ave	0.4591	0.4997		54.4	50.0	8.8	20.0
Carbon disulfide	Ave	0.9758	1.048		53.7	50.0	7.4	20.0
Methyl acetate	Ave	0.2319	0.2403		259	250	3.6	20.0
3-Chloro-1-propene	Ave	0.4653	0.5296		56.9	50.0	13.8	20.0
Methylene Chloride	Lin2		0.3374		50.9	50.0	1.8	20.0
t-Butyl alcohol	Lin2		0.0352		519	500	3.9	20.0
Acrylonitrile	Ave	0.1076	0.1125		523	500	4.5	20.0
Methyl tert-butyl ether	Lin2		0.8785		53.4	50.0	6.9	20.0
trans-1,2-Dichloroethene	Ave	0.2838	0.3202		56.4	50.0	12.8	20.0
Hexane	Lin1		2.142		55.8	50.0	11.6	20.0
1,1-Dichloroethane	Ave	0.5653	0.5829	0.1000	51.6	50.0	3.1	20.0
Vinyl acetate	Lin1		0.4467		82.8	100	-17.2	20.0
2,2-Dichloropropane	Ave	0.4731	0.4806		50.8	50.0	1.6	20.0
2-Butanone (MEK)	Ave	0.1482	0.1280		173	200	-13.7	20.0
cis-1,2-Dichloroethene	Ave	0.3065	0.3231		52.7	50.0	5.4	20.0
Bromochloromethane	Ave	0.1453	0.1513		52.1	50.0	4.1	20.0
sec-Butyl Alcohol	Lin2		0.0262		1570	1500	5.0	20.0
Tetrahydrofuran	Lin2		0.1066		109	100	9.3	20.0
Chloroform	Ave	0.5697	0.5472		48.0	50.0	-4.0	20.0
1,1,1-Trichloroethane	Ave	0.4862	0.4832		49.7	50.0	-0.6	20.0
Cyclohexane	Lin1		0.5491		55.3	50.0	10.6	20.0
Carbon tetrachloride	Ave	0.4592	0.4504		49.0	50.0	-1.9	20.0
1,1-Dichloropropene	Lin2		0.4319		55.3	50.0	10.7	20.0
Benzene	Ave	1.110	1.205		54.3	50.0	8.6	20.0
1,2-Dichloroethane	Ave	0.4601	0.4308		46.8	50.0	-6.4	20.0
Isobutyl alcohol	Ave	0.0136	0.0138		1270	1250	1.4	20.0
Trichloroethene	Ave	0.2624	0.2873		54.8	50.0	9.5	20.0
2-Pentanone	Lin		0.3508		271	200	35.7*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376989/12 Calibration Date: 06/12/2017 21:19

Instrument ID: VMS_G2 Calib Start Date: 06/12/2017 18:07

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/12/2017 20:35

Lab File ID: G2_0903.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Lin2		0.4756		57.1	50.0	14.1	20.0
1,2-Dichloropropane	Ave	0.3000	0.3149		52.5	50.0	5.0	20.0
1,4-Dioxane	Ave	0.0025	0.0027		1060	1000	5.6	20.0
Dibromomethane	Ave	0.1787	0.1790		50.1	50.0	0.1	20.0
Bromodichloromethane	Ave	0.3792	0.3868		51.0	50.0	2.0	20.0
2-Chloroethyl vinyl ether	Lin		0.1300		44.5	50.0	-11.0	20.0
cis-1,3-Dichloropropene	Lin1		1.917		51.4	50.0	2.8	20.0
4-Methyl-2-pentanone (MIBK)	Lin1		0.2688		184	200	-7.9	20.0
Toluene	Ave	1.081	1.217		56.3	50.0	12.6	20.0
trans-1,3-Dichloropropene	Lin1		0.4083		49.7	50.0	-0.7	20.0
Ethyl methacrylate	Lin1		1.475		51.4	50.0	2.8	20.0
1,1,2-Trichloroethane	Ave	0.2242	0.2443		54.5	50.0	9.0	20.0
Tetrachloroethene	Ave	1.040	1.111		53.4	50.0	6.9	20.0
1,3-Dichloropropane	Ave	1.730	1.803		52.1	50.0	4.2	20.0
2-Hexanone	Qua		0.8220		159	200	-20.6*	20.0
Dibromochloromethane	Ave	1.146	1.168		51.0	50.0	2.0	20.0
1,2-Dibromoethane	Ave	0.9445	1.007		53.3	50.0	6.6	20.0
1-Chlorohexane	Lin1		1.779		56.5	50.0	13.1	20.0
Chlorobenzene	Ave	3.446	3.541	0.3000	51.4	50.0	2.8	20.0
1,1,1,2-Tetrachloroethane	Ave	1.288	1.308		50.8	50.0	1.6	20.0
Ethylbenzene	Ave	1.631	1.849		56.7	50.0	13.4	20.0
m&p-Xylene	Lin2		2.199		54.4	50.0	8.9	20.0
o-Xylene	Lin1		2.105		52.2	50.0	4.5	20.0
Styrene	Lin1		3.719		52.8	50.0	5.7	20.0
Bromoform	Ave	0.7418	0.7548	0.1000	50.9	50.0	1.7	20.0
Isopropylbenzene	Lin1		3.088		54.7	50.0	9.4	20.0
Cyclohexanone	Qua		0.0429		1640	2000	-18.1	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7497	0.7786	0.3000	51.9	50.0	3.8	20.0
Bromobenzene	Ave	0.7276	0.8153		56.0	50.0	12.1	20.0
trans-1,4-Dichloro-2-butene	Lin1		0.2520		53.6	50.0	7.2	20.0
1,2,3-Trichloropropane	Ave	0.2283	0.2429		53.2	50.0	6.4	20.0
N-Propylbenzene	Lin1		0.9004		55.4	50.0	10.8	20.0
2-Chlorotoluene	Lin1		0.7575		53.1	50.0	6.2	20.0
1,3,5-Trimethylbenzene	Lin1		2.661		54.7	50.0	9.3	20.0
4-Chlorotoluene	Lin2		0.8064		55.0	50.0	10.0	20.0
tert-Butylbenzene	Lin1		2.348		54.2	50.0	8.4	20.0
1,2,4-Trimethylbenzene	Lin1		2.730		54.0	50.0	8.0	20.0
sec-Butylbenzene	Lin2		0.7562		55.0	50.0	10.1	20.0
1,3-Dichlorobenzene	Ave	1.439	1.598		55.5	50.0	11.1	20.0
4-Isopropyltoluene	Lin2		3.178		55.6	50.0	11.2	20.0
1,4-Dichlorobenzene	Ave	1.620	1.645		50.8	50.0	1.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376989/12 Calibration Date: 06/12/2017 21:19

Instrument ID: VMS_G2 Calib Start Date: 06/12/2017 18:07

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/12/2017 20:35

Lab File ID: G2_0903.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Lin1		2.984		58.1	50.0	16.1	20.0
1,2-Dichlorobenzene	Ave	1.447	1.569		54.2	50.0	8.4	20.0
1,2-Dibromo-3-Chloropropane	Lin2		0.1537		48.1	50.0	-3.8	20.0
1,2,4-Trichlorobenzene	Lin1		1.190		54.4	50.0	8.8	20.0
Hexachlorobutadiene	Ave	0.6850	0.7561		55.2	50.0	10.4	20.0
Naphthalene	Lin1		2.571		53.8	50.0	7.5	20.0
1,2,3-Trichlorobenzene	Lin1		1.194		56.2	50.0	12.4	20.0
Dibromofluoromethane (Surr)	Lin2		0.3068		51.9	50.0	3.8	20.0
1,2-Dichloroethane-d4 (Surr)	Lin2		0.3979		49.4	50.0	-1.3	20.0
Toluene-d8 (Surr)	Ave	4.276	4.682		54.7	50.0	9.5	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8156	0.9376		57.5	50.0	15.0	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0903.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 12-Jun-2017 21:19:30 ALS Bottle#: 20 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist:

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 13-Jun-2017 15:51:26 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: dukesa Date: 12-Jun-2017 21:53:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.051	4.079	-0.028	95	403339	1000.0	1000.0	
* 3 Fluorobenzene	96	7.622	7.629	-0.007	98	738813	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	86	173619	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	327045	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.821	6.828	-0.007	93	226640	50.0	51.9	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.236	7.243	-0.007	96	293975	50.0	49.4	
$ 10 Toluene-d8 (Surr)	98	9.338	9.345	-0.007	93	812887	50.0	54.7	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	306625	50.0	57.5	
32 Dichlorodifluoromethane	85	1.691	1.705	-0.014	99	292477	50.0	64.4	M
34 Chloromethane	50	1.830	1.844	-0.014	99	397950	50.0	58.9	
37 Vinyl chloride	62	1.956	1.970	-0.014	98	408151	50.0	55.2	
22 Butadiene	54	1.984	1.998	-0.014	92	332149	NC	NC	
39 Bromomethane	94	2.291	2.291	0.000	90	266071	50.0	42.7	
40 Chloroethane	64	2.403	2.403	0.000	99	231578	50.0	50.1	
41 Dichlorofluoromethane	67	2.654	2.668	-0.014	98	452716	50.0	47.7	
43 Trichlorofluoromethane	101	2.696	2.710	-0.014	98	375595	50.0	49.8	
45 Ethyl ether	59	3.004	3.003	0.001	94	197494	50.0	52.8	
48 Acrolein	56	3.171	3.185	-0.014	99	353396	499.9	500.7	
53 1,1-Dichloroethene	96	3.297	3.311	-0.014	94	212398	50.0	55.8	
52 1,1,2-Trichloro-1,2,2-trif	151	3.339	3.353	-0.014	95	198066	50.0	51.8	
50 Acetone	43	3.353	3.367	-0.014	99	275399	200.0	158.7	
55 Iodomethane	142	3.478	3.492	-0.014	99	369158	50.0	54.4	
58 Carbon disulfide	76	3.576	3.590	-0.014	100	774327	50.0	53.7	
56 Methyl acetate	43	3.786	3.800	-0.014	99	887583	250.0	259.0	
57 3-Chloro-1-propene	41	3.800	3.814	-0.014	90	391306	50.0	56.9	
60 Methylene Chloride	84	3.995	4.009	-0.014	96	249307	50.0	50.9	
59 2-Methyl-2-propanol	59	4.191	4.205	-0.014	95	260093	500.0	519.5	
61 Acrylonitrile	53	4.358	4.386	-0.028	98	830913	500.0	522.6	
63 trans-1,2-Dichloroethene	96	4.414	4.428	-0.014	96	236592	50.0	56.4	
62 Methyl tert-butyl ether	73	4.414	4.428	-0.014	97	649057	50.0	53.4	
64 Hexane	57	4.903	4.917	-0.014	95	371913	50.0	55.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 1,1-Dichloroethane	63	5.196	5.210	-0.014	97	430636	50.0	51.6	
65 Vinyl acetate	43	5.238	5.252	-0.014	97	659981	100.0	82.8	
74 cis-1,2-Dichloroethene	96	6.121	6.128	-0.007	85	238693	50.0	52.7	
71 2-Butanone (MEK)	43	6.121	6.128	-0.007	95	378203	200.0	172.7	
75 2,2-Dichloropropane	77	6.121	6.135	-0.014	90	355080	50.0	50.8	
77 Chlorobromomethane	128	6.450	6.457	-0.007	62	111766	50.0	52.1	
72 sec-Butyl Alcohol	45	6.450	6.457	-0.007	95	579822	1500.0	1574.4	
79 Tetrahydrofuran	42	6.457	6.464	-0.007	92	157576	100.0	109.3	
78 Chloroform	83	6.621	6.628	-0.007	94	404264	50.0	48.0	
81 1,1,1-Trichloroethane	97	6.800	6.814	-0.014	98	356967	50.0	49.7	
82 Cyclohexane	56	6.879	6.893	-0.014	93	405695	50.0	55.3	
84 Carbon tetrachloride	117	6.993	7.007	-0.014	95	332727	50.0	49.0	
83 1,1-Dichloropropene	75	7.007	7.014	-0.007	94	319093	50.0	55.3	
87 Benzene	78	7.250	7.258	-0.008	97	890277	50.0	54.3	
85 1,2-Dichloroethane	62	7.329	7.336	-0.007	98	318271	50.0	46.8	
80 Isobutyl alcohol	41	7.644	7.651	-0.007	85	255313	1250.0	1267.5	
35 n-Heptane	43	7.644	7.651	-0.007	94	399787	50.0	56.4	
89 Trichloroethene	95	8.037	8.044	-0.007	97	212286	50.0	54.8	
90 2-Pentanone	43	8.251	8.259	-0.008	99	1036715	200.0	271.4	
93 Methylcyclohexane	55	8.287	8.294	-0.007	92	351352	50.0	57.1	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	93	232667	50.0	52.5	
94 1,4-Dioxane	88	8.409	8.416	-0.007	98	39187	1000.0	1055.5	
95 Dibromomethane	93	8.416	8.423	-0.007	96	132222	50.0	50.1	
96 Dichlorobromomethane	83	8.623	8.623	0.000	98	285763	50.0	51.0	
98 2-Chloroethyl vinyl ether	63	8.931	8.938	-0.007	93	96068	50.0	44.5	
99 cis-1,3-Dichloropropene	75	9.074	9.081	-0.007	93	332798	50.0	51.4	
100 4-Methyl-2-pentanone (MIBK	43	9.231	9.238	-0.007	97	794396	200.0	184.1	
101 Toluene	91	9.410	9.410	0.000	98	899324	50.0	56.3	
103 trans-1,3-Dichloropropene	75	9.653	9.660	-0.007	96	301690	50.0	49.7	
102 Ethyl methacrylate	69	9.710	9.717	-0.007	91	256051	50.0	51.4	
104 1,1,2-Trichloroethane	97	9.846	9.846	0.000	94	180496	50.0	54.5	
107 Tetrachloroethene	164	9.910	9.917	-0.007	98	192976	50.0	53.4	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	94	313056	50.0	52.1	
105 2-Hexanone	43	10.053	10.060	-0.007	97	570825	200.0	158.9	
108 Chlorodibromomethane	129	10.211	10.211	0.000	90	202847	50.0	51.0	
110 Ethylene Dibromide	107	10.318	10.318	0.000	98	174796	50.0	53.3	
111 1-Chlorohexane	91	10.775	10.775	0.000	97	308797	50.0	56.5	
112 Chlorobenzene	112	10.783	10.790	-0.007	93	614754	50.0	51.4	
113 1,1,1,2-Tetrachloroethane	131	10.876	10.876	0.000	94	227133	50.0	50.8	
114 Ethylbenzene	106	10.883	10.883	0.000	98	321100	50.0	56.7	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	381744	50.0	54.4	
117 o-Xylene	106	11.362	11.369	-0.007	97	365511	50.0	52.2	
116 Styrene	104	11.383	11.383	0.000	99	645615	50.0	52.8	
118 Bromoform	173	11.555	11.555	0.000	96	131047	50.0	50.9	
119 Isopropylbenzene	105	11.705	11.705	0.000	96	1009870	50.0	54.7	
121 Cyclohexanone	55	11.791	11.791	0.000	95	298054	2000.0	1637.2	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	96	254634	50.0	51.9	
125 Bromobenzene	156	11.998	11.998	0.000	93	266650	50.0	56.0	
123 trans-1,4-Dichloro-2-buten	53	12.027	12.027	0.000	84	82416	50.0	53.6	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	86	79426	50.0	53.2	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	294464	50.0	55.4	
128 2-Chlorotoluene	126	12.177	12.177	0.000	96	247734	50.0	53.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	94	870203	50.0	54.7	
129 4-Chlorotoluene	126	12.277	12.277	0.000	97	263716	50.0	55.0	
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	768029	50.0	54.2	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	892937	50.0	54.0	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	247314	50.0	55.0	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	98	522617	50.0	55.5	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	1039245	50.0	55.6	
136 1,4-Dichlorobenzene	146	12.835	12.842	-0.007	97	538120	50.0	50.8	
137 n-Butylbenzene	91	13.064	13.064	0.000	97	975860	50.0	58.1	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	97	513035	50.0	54.2	
139 1,2-Dibromo-3-Chloropropan	157	13.578	13.578	0.000	81	50255	50.0	48.1	
141 1,2,4-Trichlorobenzene	180	14.115	14.115	0.000	94	389145	50.0	54.4	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	97	247261	50.0	55.2	
143 Naphthalene	128	14.301	14.300	0.001	97	840897	50.0	53.8	
144 1,2,3-Trichlorobenzene	180	14.458	14.458	0.000	95	390560	50.0	56.2	
S 151 1,2-Dichloroethene, Total	96				0		100.0	109.1	
S 148 1,3-Dichloropropene, Total	1				0		100.0	101.1	
S 146 Xylenes, Total (URS)	1				0		100.0	106.7	
S 145 Trihalomethanes, Total	1				0		200.0	200.9	
S 149 1,2-Dichloroethene, Total	1				0		50.0	109.1	
S 150 Xylenes, Total	106				0		100.0	106.7	

QC Flag Legend

Processing Flags
NC - Not Calibrated
Review Flags
M - Manually Integrated

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Main B_00017	Amount Added:	6.25	Units: uL
MV-SS 2-Cleve_00035	Amount Added:	6.25	Units: uL
MV-ARCH SS A_00081	Amount Added:	1.00	Units: uL
MV-Gas/Ket B_00034	Amount Added:	6.25	Units: uL

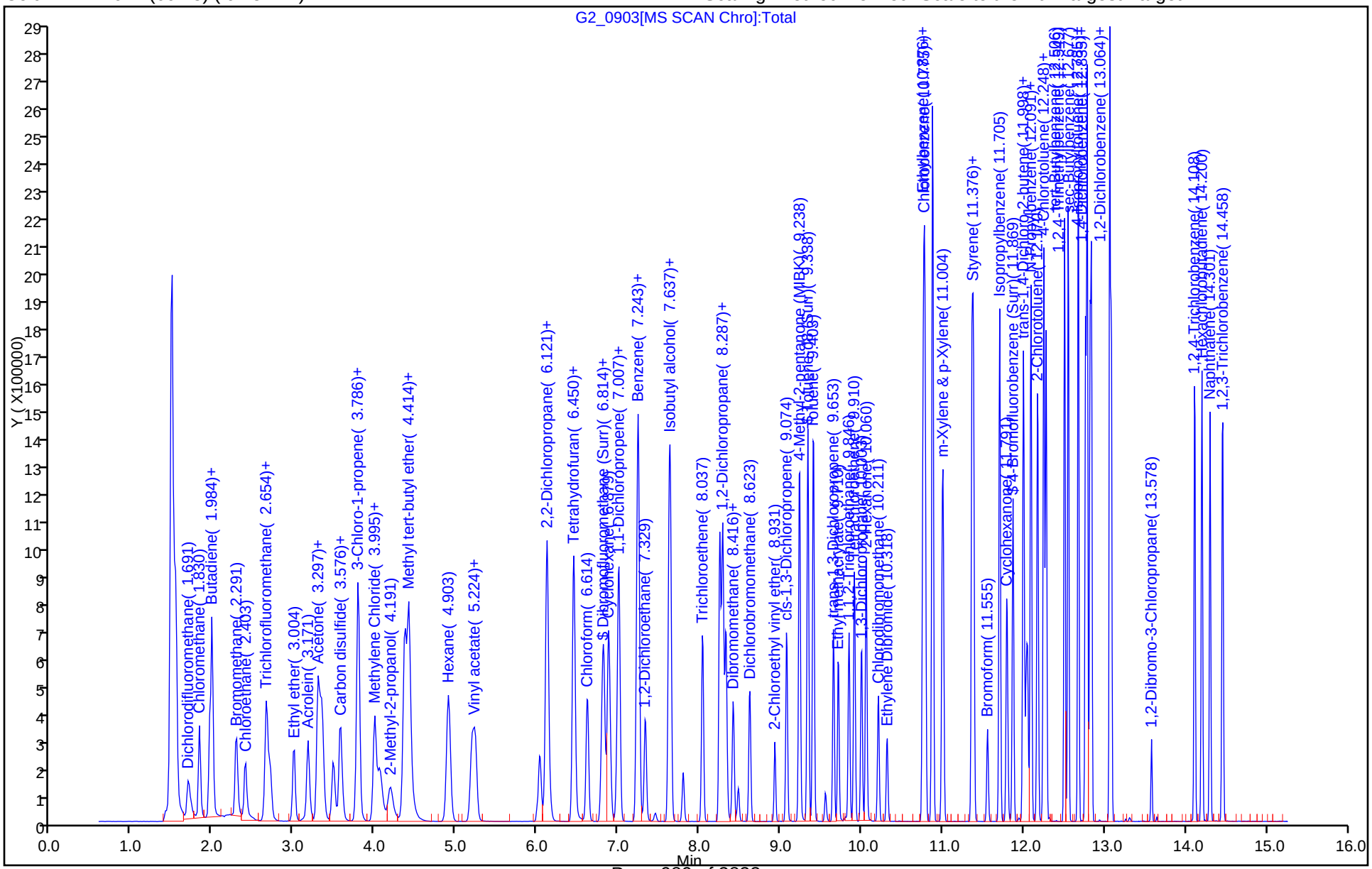
Report Date: 13-Jun-2017 15:51:28 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0903.D

Injection Date:	12-Jun-2017 21:19:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	ICV			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Denver

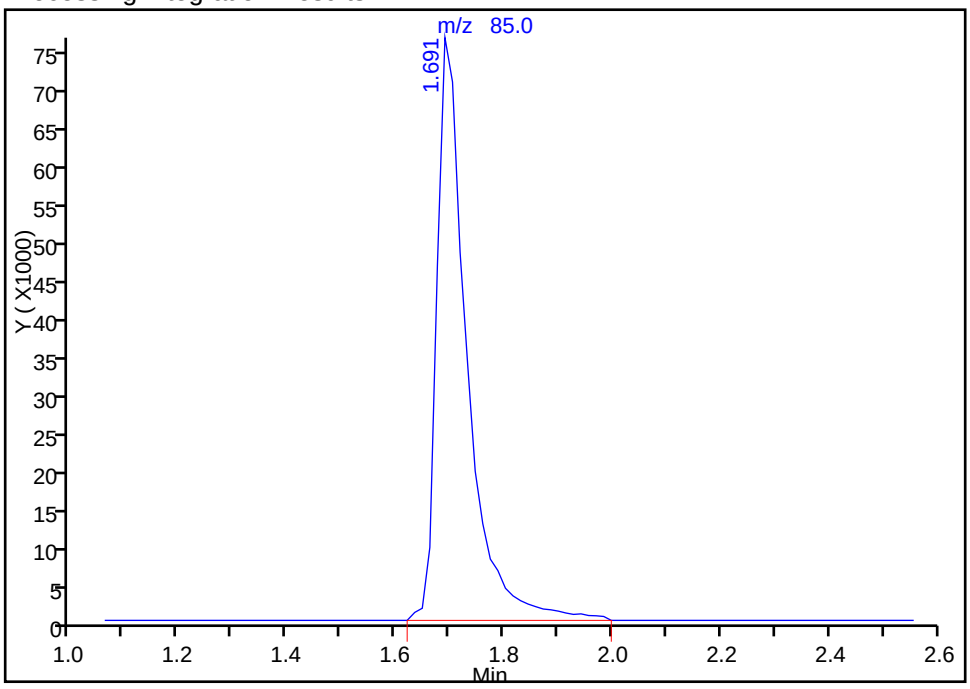
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Injection Date: 12-Jun-2017 21:19:30 Instrument ID: VMS_G2
Lims ID: ICV
Client ID:
Operator ID: DUKESA ALS Bottle#: 20 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

32 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

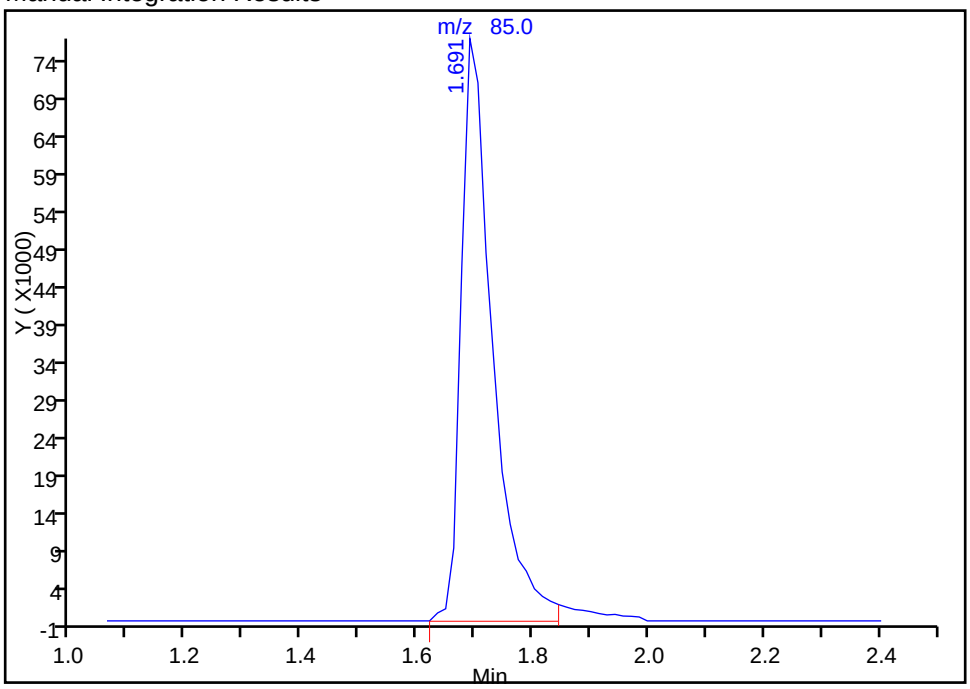
Processing Integration Results

RT: 1.69
Area: 300438
Amount: 74.301975
Amount Units: ug/l



Manual Integration Results

RT: 1.69
Area: 292477
Amount: 64.412933
Amount Units: ug/l



Reviewer: dukesa, 12-Jun-2017 22:14:26
Audit Action: Manually Integrated Audit Reason: Peak Tail

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-377520/2 Calibration Date: 06/15/2017 18:33

Instrument ID: VMS_G2 Calib Start Date: 06/12/2017 18:07

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/12/2017 20:35

Lab File ID: G2_1075.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Qua		0.2952		38.0	40.0	-5.0	20.0
Chloromethane	Qua		0.3922	0.1000	33.7	40.0	-15.8	20.0
Vinyl chloride	Ave	0.5000	0.4433		35.5	40.0	-11.3	20.0
Bromomethane	Ave	0.4214	0.3316		31.5	40.0	-21.3*	20.0
Chloroethane	Ave	0.3129	0.2831		36.2	40.0	-9.5	20.0
Dichlorofluoromethane	Ave	0.6428	0.5810		36.2	40.0	-9.6	20.0
Trichlorofluoromethane	Ave	0.5107	0.4640		36.3	40.0	-9.1	20.0
Ethyl ether	Lin1		0.2707		53.5	50.0	6.9	20.0
Acrolein	Lin1		0.0513		536	500	7.3	20.0
1,1-Dichloroethene	Ave	0.2575	0.3050		59.2	50.0	18.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2586	0.2985		57.7	50.0	15.4	20.0
Acetone	Qua		0.1158		158	160	-1.4	20.0
Methyl iodide	Ave	0.4591	0.5271		57.4	50.0	14.8	20.0
Carbon disulfide	Ave	0.9758	1.065		54.6	50.0	9.1	20.0
3-Chloro-1-propene	Ave	0.4653	0.5237		56.3	50.0	12.6	20.0
Methyl acetate	Ave	0.2319	0.2595		280	250	11.9	20.0
Methylene Chloride	Lin2		0.3603		54.6	50.0	9.1	20.0
t-Butyl alcohol	Lin2		0.0455		669	500	33.8*	20.0
Acrylonitrile	Ave	0.1076	0.1260		586	500	17.1	20.0
Methyl tert-butyl ether	Lin2		0.8891		54.1	50.0	8.2	20.0
trans-1,2-Dichloroethene	Ave	0.2838	0.3287		57.9	50.0	15.8	20.0
Hexane	Lin1		1.910		49.9	50.0	-0.2	20.0
1,1-Dichloroethane	Ave	0.5653	0.5901	0.1000	52.2	50.0	4.4	20.0
Vinyl acetate	Lin1		0.5083		94.0	100	-6.0	20.0
2-Butanone (MEK)	Ave	0.1482	0.1525		165	160	2.9	20.0
cis-1,2-Dichloroethene	Ave	0.3065	0.3409		55.6	50.0	11.2	20.0
2,2-Dichloropropane	Ave	0.4731	0.5131		54.2	50.0	8.5	20.0
sec-Butyl Alcohol	Lin2		0.0290		887	750	18.3	20.0
Bromochloromethane	Ave	0.1453	0.1671		57.5	50.0	15.0	20.0
Tetrahydrofuran	Lin2		0.1121		115	100	14.7	20.0
Chloroform	Ave	0.5697	0.5787		50.8	50.0	1.6	20.0
1,1,1-Trichloroethane	Ave	0.4862	0.5172		53.2	50.0	6.4	20.0
Cyclohexane	Lin1		0.5361		54.0	50.0	8.0	20.0
Carbon tetrachloride	Ave	0.4592	0.4844		52.7	50.0	5.5	20.0
1,1-Dichloropropene	Lin2		0.4258		54.6	50.0	9.1	20.0
Benzene	Ave	1.110	1.238		55.8	50.0	11.6	20.0
1,2-Dichloroethane	Ave	0.4601	0.4672		50.8	50.0	1.5	20.0
Isobutyl alcohol	Ave	0.0136	0.0139		1270	1250	1.6	20.0
Trichloroethene	Ave	0.2624	0.2940		56.0	50.0	12.1	20.0
2-Pentanone	Lin		0.4462		170	100	69.9*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-377520/2 Calibration Date: 06/15/2017 18:33

Instrument ID: VMS_G2 Calib Start Date: 06/12/2017 18:07

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/12/2017 20:35

Lab File ID: G2_1075.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Lin2		0.4796		57.5	50.0	15.1	20.0
1,2-Dichloropropane	Ave	0.3000	0.3142		52.4	50.0	4.7	20.0
1,4-Dioxane	Ave	0.0025	0.0039		1540	1000	53.9*	20.0
Dibromomethane	Ave	0.1787	0.1980		55.4	50.0	10.8	20.0
Bromodichloromethane	Ave	0.3792	0.3989		52.6	50.0	5.2	20.0
2-Chloroethyl vinyl ether	Lin		0.1155		40.0	50.0	-20.0	20.0
cis-1,3-Dichloropropene	Lin1		1.797		48.3	50.0	-3.4	20.0
4-Methyl-2-pentanone (MIBK)	Lin1		0.2997		165	160	2.8	20.0
Toluene	Ave	1.081	1.269		58.7	50.0	17.3	20.0
trans-1,3-Dichloropropene	Lin1		0.4263		51.8	50.0	3.6	20.0
Ethyl methacrylate	Lin1		1.408		49.2	50.0	-1.6	20.0
1,1,2-Trichloroethane	Ave	0.2242	0.2525		56.3	50.0	12.6	20.0
Tetrachloroethene	Ave	1.040	1.124		54.0	50.0	8.1	20.0
1,3-Dichloropropane	Ave	1.730	1.842		53.2	50.0	6.5	20.0
2-Hexanone	Qua		0.8994		139	160	-13.0	20.0
Dibromochloromethane	Ave	1.146	1.196		52.2	50.0	4.4	20.0
1,2-Dibromoethane	Ave	0.9445	1.020		54.0	50.0	8.0	20.0
1-Chlorohexane	Lin1		1.646		26.2	25.0	4.7	20.0
Chlorobenzene	Ave	3.446	3.492	0.3000	50.7	50.0	1.3	20.0
1,1,1,2-Tetrachloroethane	Ave	1.288	1.300		50.5	50.0	0.9	20.0
Ethylbenzene	Ave	1.631	1.816		55.7	50.0	11.3	20.0
m&p-Xylene	Lin2		2.165		53.6	50.0	7.2	20.0
o-Xylene	Lin1		2.071		51.4	50.0	2.8	20.0
Styrene	Lin1		3.673		52.2	50.0	4.4	20.0
Bromoform	Ave	0.7418	0.8069	0.1000	54.4	50.0	8.8	20.0
Isopropylbenzene	Lin1		2.960		52.5	50.0	5.0	20.0
Cyclohexanone	Qua		0.0498		1520	1600	-5.1	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7497	0.7687	0.3000	51.3	50.0	2.5	20.0
Bromobenzene	Ave	0.7276	0.7947		54.6	50.0	9.2	20.0
trans-1,4-Dichloro-2-butene	Lin1		0.2510		53.4	50.0	6.7	20.0
1,2,3-Trichloropropane	Ave	0.2283	0.2497		54.7	50.0	9.4	20.0
N-Propylbenzene	Lin1		0.8606		53.0	50.0	6.1	20.0
2-Chlorotoluene	Lin1		0.7399		51.9	50.0	3.8	20.0
1,3,5-Trimethylbenzene	Lin1		2.667		54.8	50.0	9.5	20.0
4-Chlorotoluene	Lin2		0.7859		53.6	50.0	7.2	20.0
tert-Butylbenzene	Lin1		2.261		52.2	50.0	4.5	20.0
1,2,4-Trimethylbenzene	Lin1		2.693		53.3	50.0	6.6	20.0
sec-Butylbenzene	Lin2		0.7530		54.8	50.0	9.6	20.0
1,3-Dichlorobenzene	Ave	1.439	1.574		54.7	50.0	9.4	20.0
4-Isopropyltoluene	Lin2		3.094		54.2	50.0	8.3	20.0
1,4-Dichlorobenzene	Ave	1.620	1.605		49.5	50.0	-0.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-377520/2 Calibration Date: 06/15/2017 18:33

Instrument ID: VMS_G2 Calib Start Date: 06/12/2017 18:07

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/12/2017 20:35

Lab File ID: G2_1075.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Lin1		2.816		54.8	50.0	9.7	20.0
1,2-Dichlorobenzene	Ave	1.447	1.538		53.1	50.0	6.3	20.0
1,2-Dibromo-3-Chloropropane	Lin2		0.1612		50.3	50.0	0.7	20.0
1,2,4-Trichlorobenzene	Lin1		1.094		50.1	50.0	0.2	20.0
Hexachlorobutadiene	Ave	0.6850	0.7299		53.3	50.0	6.6	20.0
Naphthalene	Lin1		2.480		52.0	50.0	4.0	20.0
1,2,3-Trichlorobenzene	Lin1		1.086		51.2	50.0	2.3	20.0
Dibromofluoromethane (Surr)	Lin2		0.2776		39.1	42.5	-8.1	20.0
1,2-Dichloroethane-d4 (Surr)	Lin2		0.3511		36.0	42.5	-15.3	20.0
Toluene-d8 (Surr)	Ave	4.276	4.038		40.1	42.5	-5.6	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8156	0.7925		41.3	42.5	-2.8	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\G2_1075.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2017 18:33:30 ALS Bottle#: 10 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 16-Jun-2017 16:14:25 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: dukesa Date: 15-Jun-2017 19:18:49

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.051	4.051	0.000	94	611806	1000.0	1000.0	
* 3 Fluorobenzene	96	7.622	7.622	0.000	98	822474	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	86	205360	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	399091	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.821	6.821	0.000	93	194049	42.5	39.1	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.236	7.236	0.000	95	245478	42.5	36.0	
$ 10 Toluene-d8 (Surr)	98	9.338	9.338	0.000	94	704830	42.5	40.1	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	93	268849	42.5	41.3	
32 Dichlorodifluoromethane	85	1.691	1.691	0.000	99	194232	40.0	38.0	
34 Chloromethane	50	1.830	1.830	0.000	99	258059	40.0	33.7	
37 Vinyl chloride	62	1.956	1.956	0.000	98	291664	40.0	35.5	
22 Butadiene	54	1.984	1.984	0.000	89	258083	NC	NC	
39 Bromomethane	94	2.277	2.277	0.000	90	218194	40.0	31.5	
40 Chloroethane	64	2.389	2.389	0.000	100	186285	40.0	36.2	
41 Dichlorofluoromethane	67	2.654	2.654	0.000	97	382315	40.0	36.2	
43 Trichlorofluoromethane	101	2.696	2.696	0.000	97	305308	40.0	36.3	
45 Ethyl ether	59	2.989	2.989	0.000	93	222638	50.0	53.5	
48 Acrolein	56	3.171	3.171	0.000	99	421582	499.9	536.2	
53 1,1-Dichloroethene	96	3.297	3.297	0.000	95	250830	50.0	59.2	
52 1,1,2-Trichloro-1,2,2-trif	151	3.325	3.325	0.000	94	245482	50.0	57.7	
50 Acetone	43	3.352	3.352	0.000	99	304786	160.0	157.7	
55 Iodomethane	142	3.478	3.478	0.000	99	433490	50.0	57.4	
58 Carbon disulfide	76	3.562	3.562	0.000	100	875722	50.0	54.6	
56 Methyl acetate	43	3.785	3.785	0.000	98	1067102	250.0	279.8	
57 3-Chloro-1-propene	41	3.785	3.785	0.000	89	430728	50.0	56.3	
60 Methylene Chloride	84	3.995	3.995	0.000	96	296331	50.0	54.6	
59 2-Methyl-2-propanol	59	4.190	4.190	0.000	95	373848	500.0	669.2	
61 Acrylonitrile	53	4.358	4.358	0.000	98	1036634	500.0	585.7	
63 trans-1,2-Dichloroethene	96	4.414	4.414	0.000	97	270343	50.0	57.9	
62 Methyl tert-butyl ether	73	4.414	4.414	0.000	97	731280	50.0	54.1	
64 Hexane	57	4.903	4.903	0.000	95	392301	50.0	49.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 1,1-Dichloroethane	63	5.196	5.196	0.000	97	485298	50.0	52.2	
65 Vinyl acetate	43	5.224	5.224	0.000	98	836200	100.0	94.0	
74 cis-1,2-Dichloroethene	96	6.113	6.113	0.000	84	280396	50.0	55.6	
71 2-Butanone (MEK)	43	6.113	6.113	0.000	91	401271	160.0	164.6	
75 2,2-Dichloropropane	77	6.120	6.120	0.000	90	422015	50.0	54.2	
72 sec-Butyl Alcohol	45	6.442	6.442	0.000	96	357516	750.0	887.1	
77 Chlorobromomethane	128	6.449	6.449	0.000	91	137461	50.0	57.5	
79 Tetrahydrofuran	42	6.449	6.449	0.000	84	184425	100.0	114.7	
78 Chloroform	83	6.614	6.614	0.000	94	475983	50.0	50.8	
81 1,1,1-Trichloroethane	97	6.800	6.800	0.000	98	425416	50.0	53.2	
82 Cyclohexane	56	6.878	6.878	0.000	92	440944	50.0	54.0	
84 Carbon tetrachloride	117	6.993	6.993	0.000	96	398402	50.0	52.7	
83 1,1-Dichloropropene	75	7.007	7.007	0.000	95	350200	50.0	54.6	
87 Benzene	78	7.250	7.250	0.000	98	1018545	50.0	55.8	
85 1,2-Dichloroethane	62	7.329	7.329	0.000	98	384263	50.0	50.8	
80 Isobutyl alcohol	41	7.643	7.643	0.000	85	284797	1250.0	1270.1	
35 n-Heptane	43	7.643	7.643	0.000	92	427371	50.0	54.2	
89 Trichloroethene	95	8.037	8.037	0.000	97	241839	50.0	56.0	
90 2-Pentanone	43	8.251	8.251	0.000	99	734031	100.0	169.9	
93 Methylcyclohexane	55	8.287	8.287	0.000	92	394445	50.0	57.5	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	93	258409	50.0	52.4	
94 1,4-Dioxane	88	8.409	8.409	0.000	94	63626	1000.0	1539.5	
95 Dibromomethane	93	8.416	8.416	0.000	95	162844	50.0	55.4	
96 Dichlorobromomethane	83	8.623	8.623	0.000	99	328118	50.0	52.6	
98 2-Chloroethyl vinyl ether	63	8.931	8.931	0.000	93	94988	50.0	40.0	
99 cis-1,3-Dichloropropene	75	9.074	9.074	0.000	94	368970	50.0	48.3	
100 4-Methyl-2-pentanone (MIBK	43	9.231	9.231	0.000	97	788888	160.0	164.5	
101 Toluene	91	9.410	9.410	0.000	98	1043491	50.0	58.7	
103 trans-1,3-Dichloropropene	75	9.653	9.653	0.000	95	350644	50.0	51.8	
102 Ethyl methacrylate	69	9.717	9.717	0.000	90	289233	50.0	49.2	
104 1,1,2-Trichloroethane	97	9.846	9.846	0.000	94	207696	50.0	56.3	
107 Tetrachloroethene	164	9.910	9.910	0.000	97	230835	50.0	54.0	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	93	378374	50.0	53.2	
105 2-Hexanone	43	10.060	10.060	0.000	97	591013	160.0	139.1	
108 Chlorodibromomethane	129	10.210	10.210	0.000	90	245675	50.0	52.2	
110 Ethylene Dibromide	107	10.318	10.318	0.000	99	209525	50.0	54.0	
111 1-Chlorohexane	91	10.775	10.775	0.000	96	169007	25.0	26.2	
112 Chlorobenzene	112	10.782	10.782	0.000	94	717067	50.0	50.7	
114 Ethylbenzene	106	10.875	10.875	0.000	98	372908	50.0	55.7	
113 1,1,1,2-Tetrachloroethane	131	10.875	10.875	0.000	92	266904	50.0	50.5	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	444519	50.0	53.6	
117 o-Xylene	106	11.362	11.362	0.000	97	425367	50.0	51.4	
116 Styrene	104	11.383	11.383	0.000	100	754211	50.0	52.2	
118 Bromoform	173	11.555	11.555	0.000	97	165709	50.0	54.4	
119 Isopropylbenzene	105	11.705	11.705	0.000	96	1181302	50.0	52.5	
121 Cyclohexanone	55	11.791	11.791	0.000	94	327152	1600.0	1518.6	
125 Bromobenzene	156	11.998	11.998	0.000	92	317137	50.0	54.6	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	97	306784	50.0	51.3	
123 trans-1,4-Dichloro-2-buten	53	12.027	12.027	0.000	83	100169	50.0	53.4	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	85	99662	50.0	54.7	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	343446	50.0	53.0	
128 2-Chlorotoluene	126	12.177	12.177	0.000	96	295286	50.0	51.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	94	1064177	50.0	54.8	
129 4-Chlorotoluene	126	12.277	12.277	0.000	98	313636	50.0	53.6	
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	902305	50.0	52.2	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	1074879	50.0	53.3	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	300511	50.0	54.8	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	97	627986	50.0	54.7	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	1234842	50.0	54.2	
136 1,4-Dichlorobenzene	146	12.835	12.835	0.000	96	640494	50.0	49.5	
137 n-Butylbenzene	91	13.063	13.063	0.000	97	1123936	50.0	54.8	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	98	613650	50.0	53.1	
139 1,2-Dibromo-3-Chloropropan	157	13.585	13.585	0.000	83	64335	50.0	50.3	
141 1,2,4-Trichlorobenzene	180	14.114	14.114	0.000	93	436451	50.0	50.1	
142 Hexachlorobutadiene	225	14.207	14.207	0.000	96	291300	50.0	53.3	
143 Naphthalene	128	14.308	14.308	0.000	97	989630	50.0	52.0	
144 1,2,3-Trichlorobenzene	180	14.458	14.458	0.000	95	433378	50.0	51.2	
S 151 1,2-Dichloroethene, Total	96				0		100.0	113.5	
S 148 1,3-Dichloropropene, Total	1				0		100.0	100.1	
S 146 Xylenes, Total (URS)	1				0		100.0	105.0	
S 145 Trihalomethanes, Total	1				0		200.0	210.0	
S 149 1,2-Dichloroethene, Total	1				0		100.0	113.5	
S 150 Xylenes, Total	106				0		100.0	105.0	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MV-2cleve+AVA_00025	Amount Added:	6.25	Units: uL	
MV-Gas/Ket A_00060	Amount Added:	5.00	Units: uL	
MV-Main A_00030	Amount Added:	6.25	Units: uL	
MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

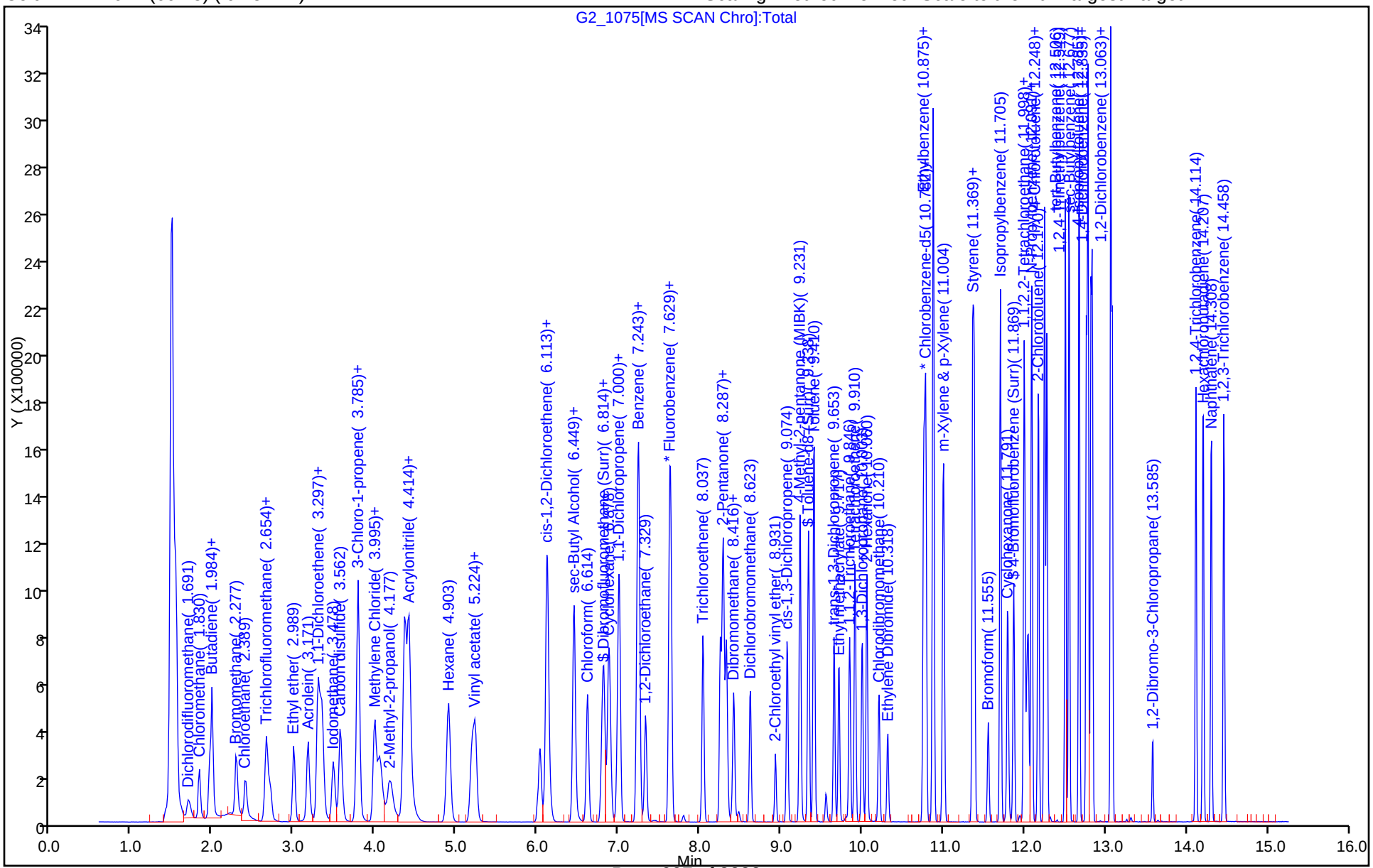
Report Date: 16-Jun-2017 16:14:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\G2_1075.D

Injection Date:	15-Jun-2017 18:33:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-377520/3 Calibration Date: 06/15/2017 18:54

Instrument ID: VMS_G2 Calib Start Date: 04/26/2017 21:24

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/26/2017 23:47

Lab File ID: G2_1076.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.1720		4050	3000	35.0*	20.0
Isopropyl alcohol	Lin2		0.7128		505	500	1.1	20.0
Acetonitrile	Ave	0.0340	0.0441		974	750	29.9*	20.0
Isopropyl ether	Lin1		0.2406		66.2	75.0	-11.8	20.0
2-Chloro-1,3-butadiene	Lin1		0.5141		48.8	50.0	-2.5	20.0
Tert-butyl ethyl ether	Lin1		0.8448		76.2	75.0	1.6	20.0
Ethyl acetate	Ave	0.2191	0.2799		128	100	27.7*	20.0
Propionitrile	Ave	0.0366	0.0443		908	750	21.1*	20.0
Methacrylonitrile	Ave	0.1405	0.1861		662	500	32.4*	20.0
Tert-amyl methyl ether	Lin1		0.8005		75.8	75.0	1.0	20.0
n-Butanol	Lin1		0.2958		1100	1250	-12.3	20.0
Methyl methacrylate	Lin1		0.0797		98.5	100	-1.5	20.0
2-Nitropropane	Lin1		0.0754		98.0	100	-2.0	20.0
cis-1,4-Dichloro-2-butene	Lin1		0.2618		103	100	3.3	20.0
1,2,3-Trimethylbenzene	Lin2		3.134		50.1	50.0	0.1	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\G2_1076.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2017 18:54:30 ALS Bottle#: 11 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub99

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 16-Jun-2017 16:15:31 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: dukesa Date: 15-Jun-2017 19:31:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	94	547208	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	869770	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	211704	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	335694	50.0	50.0	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.263	2.263	0.000	100	2611326	5000.0	12500	
42 Ethanol	45	2.892	2.892	0.000	100	282392	3000.0	4049.2	
47 Propene oxide	58	3.059	3.059	0.000	96	5888272	5000.0	5537.6	
51 Isopropyl alcohol	45	3.562	3.562	0.000	95	195031	500.0	505.5	
54 Acetonitrile	41	3.744	3.744	0.000	99	575621	750.0	973.9	
66 Isopropyl ether	87	5.308	5.308	0.000	93	313853	75.0	66.2	
68 2-Chloro-1,3-butadiene	53	5.322	5.322	0.000	93	447126	50.0	48.8	
69 Tert-butyl ethyl ether	59	5.895	5.895	0.000	96	1102138	75.0	76.2	
70 Ethyl acetate	43	6.207	6.207	0.000	100	486957	100.0	127.7	
73 Propionitrile	54	6.221	6.221	0.000	98	577816	750.0	908.4	
76 Methacrylonitrile	41	6.428	6.428	0.000	93	1618167	500.0	661.9	
86 Tert-amyl methyl ether	73	7.451	7.451	0.000	97	1044333	75.0	75.8	
88 n-Butanol	56	8.001	8.001	0.000	93	202337	1250.0	1096.5	
16 Ethyl acrylate	55	8.173	8.173	0.000	100	294812	NC	NC	
91 Methyl methacrylate	100	8.423	8.423	0.000	92	138566	100.0	98.5	
97 2-Nitropropane	41	8.859	8.859	0.000	100	131106	100.0	98.0	
120 cis-1,4-Dichloro-2-butene	53	11.769	11.769	0.000	91	175798	100.0	103.3	
135 1,2,3-Trimethylbenzene	105	12.856	12.856	0.000	99	1051993	50.0	50.1	
140 1,3,5-Trichlorobenzene	180	13.693	13.693	0.000	97	504005	50.0	51.9	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00024	Amount Added:	6.25	Units: uL

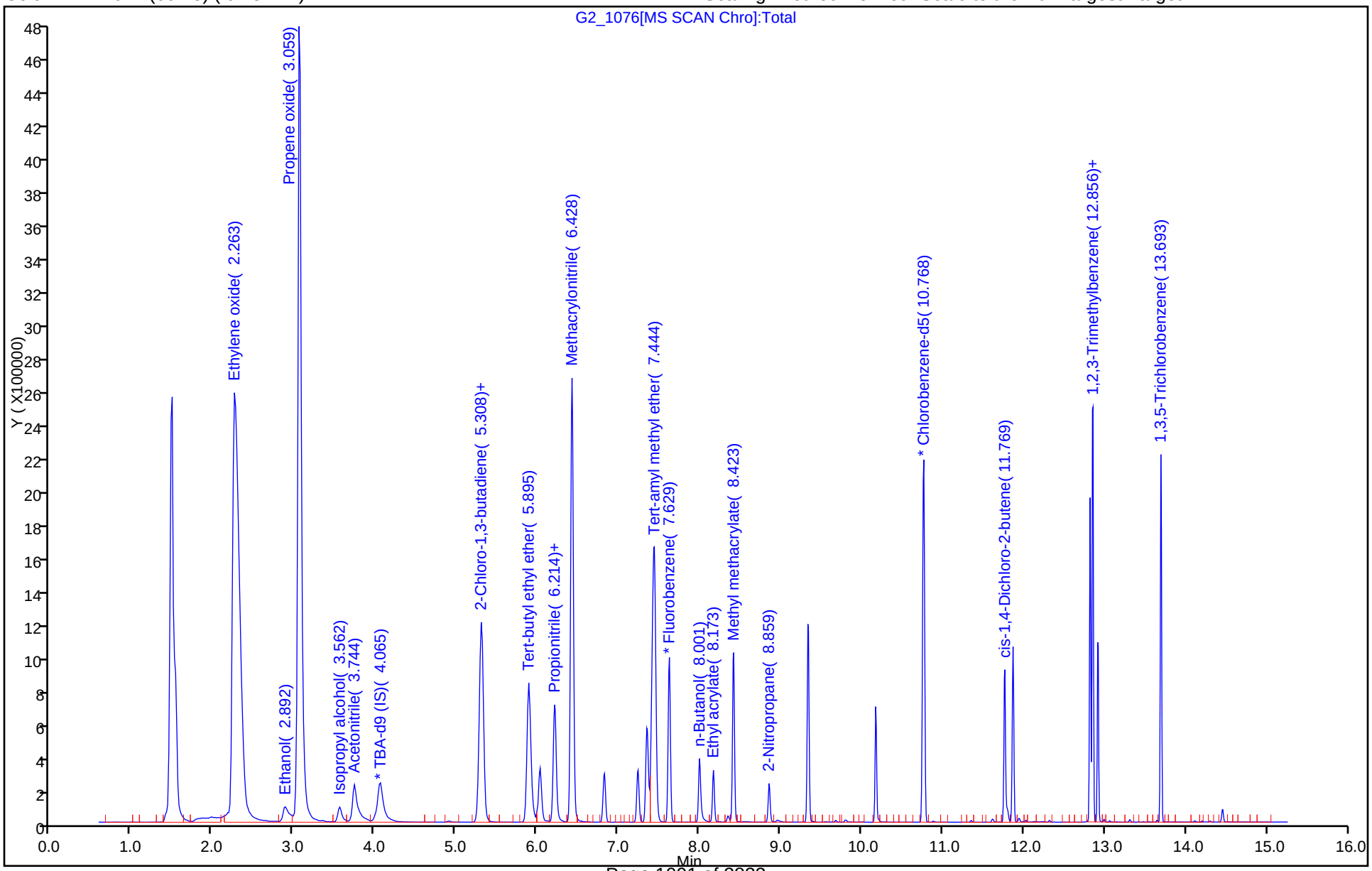
Report Date: 16-Jun-2017 16:15:33 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\G2_1076.D

Injection Date:	15-Jun-2017 18:54:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	CCV			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-377645/2 Calibration Date: 06/16/2017 12:27

Instrument ID: VMS_G2 Calib Start Date: 06/12/2017 18:07

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/12/2017 20:35

Lab File ID: G2_1116.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Qua		0.3420		44.0	40.0	10.1	20.0
Chloromethane	Qua		0.4138	0.1000	35.5	40.0	-11.2	20.0
Vinyl chloride	Ave	0.5000	0.4921		39.4	40.0	-1.6	20.0
Bromomethane	Ave	0.4214	0.4261		40.4	40.0	1.1	20.0
Chloroethane	Ave	0.3129	0.3475		44.4	40.0	11.1	20.0
Dichlorofluoromethane	Ave	0.6428	0.7393		46.0	40.0	15.0	20.0
Trichlorofluoromethane	Ave	0.5107	0.5833		45.7	40.0	14.2	20.0
Ethyl ether	Lin1		0.2425		47.9	50.0	-4.1	20.0
Acrolein	Lin1		0.0525		549	500	9.9	20.0
1,1-Dichloroethene	Ave	0.2575	0.2859		55.5	50.0	11.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2586	0.2859		55.3	50.0	10.5	20.0
Acetone	Qua		0.1242		170	160	6.3	20.0
Methyl iodide	Ave	0.4591	0.4980		54.2	50.0	8.5	20.0
Carbon disulfide	Ave	0.9758	1.031		52.8	50.0	5.6	20.0
3-Chloro-1-propene	Ave	0.4653	0.4940		53.1	50.0	6.2	20.0
Methyl acetate	Ave	0.2319	0.2228		240	250	-3.9	20.0
Methylene Chloride	Lin2		0.3568		54.0	50.0	8.0	20.0
t-Butyl alcohol	Lin2		0.0331		489	500	-2.1	20.0
Acrylonitrile	Ave	0.1076	0.1083		503	500	0.6	20.0
Methyl tert-butyl ether	Lin2		0.8071		49.1	50.0	-1.7	20.0
trans-1,2-Dichloroethene	Ave	0.2838	0.3177		56.0	50.0	11.9	20.0
Hexane	Lin1		1.741		45.5	50.0	-8.9	20.0
1,1-Dichloroethane	Ave	0.5653	0.5729	0.1000	50.7	50.0	1.4	20.0
Vinyl acetate	Lin1		0.5465		101	100	0.9	20.0
2,2-Dichloropropane	Ave	0.4731	0.5174		54.7	50.0	9.4	20.0
2-Butanone (MEK)	Ave	0.1482	0.1638		177	160	10.5	20.0
cis-1,2-Dichloroethene	Ave	0.3065	0.3292		53.7	50.0	7.4	20.0
Bromochloromethane	Ave	0.1453	0.1586		54.6	50.0	9.2	20.0
sec-Butyl Alcohol	Lin2		0.0209		649	750	-13.5	20.0
Tetrahydrofuran	Lin2		0.0891		91.8	100	-8.2	20.0
Chloroform	Ave	0.5697	0.5806		51.0	50.0	1.9	20.0
1,1,1-Trichloroethane	Ave	0.4862	0.5175		53.2	50.0	6.4	20.0
Cyclohexane	Lin1		0.5035		50.8	50.0	1.6	20.0
Carbon tetrachloride	Ave	0.4592	0.4999		54.4	50.0	8.9	20.0
1,1-Dichloropropene	Lin2		0.4125		52.9	50.0	5.8	20.0
Benzene	Ave	1.110	1.207		54.4	50.0	8.7	20.0
1,2-Dichloroethane	Ave	0.4601	0.4728		51.4	50.0	2.8	20.0
Isobutyl alcohol	Ave	0.0136	0.0140		1290	1250	2.9	20.0
Trichloroethene	Ave	0.2624	0.2796		53.3	50.0	6.5	20.0
2-Pentanone	Lin		0.3142		117	100	17.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-377645/2 Calibration Date: 06/16/2017 12:27

Instrument ID: VMS_G2 Calib Start Date: 06/12/2017 18:07

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/12/2017 20:35

Lab File ID: G2_1116.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Lin2		0.4660		55.9	50.0	11.9	20.0
1,2-Dichloropropane	Ave	0.3000	0.3117		52.0	50.0	3.9	20.0
1,4-Dioxane	Ave	0.0025	0.0030		1190	1000	19.1	20.0
Dibromomethane	Ave	0.1787	0.1914		53.6	50.0	7.1	20.0
Bromodichloromethane	Ave	0.3792	0.4036		53.2	50.0	6.4	20.0
2-Chloroethyl vinyl ether	Lin		0.1213		41.8	50.0	-16.4	20.0
cis-1,3-Dichloropropene	Lin1		1.694		45.6	50.0	-8.8	20.0
4-Methyl-2-pentanone (MIBK)	Lin1		0.3372		185	160	15.5	20.0
Toluene	Ave	1.081	1.255		58.0	50.0	16.1	20.0
trans-1,3-Dichloropropene	Lin1		0.4090		49.7	50.0	-0.5	20.0
Ethyl methacrylate	Lin1		1.234		43.3	50.0	-13.3	20.0
1,1,2-Trichloroethane	Ave	0.2242	0.2478		55.2	50.0	10.5	20.0
Tetrachloroethene	Ave	1.040	1.087		52.3	50.0	4.5	20.0
1,3-Dichloropropane	Ave	1.730	1.703		49.2	50.0	-1.6	20.0
2-Hexanone	Qua		0.9625		149	160	-7.0	20.0
Dibromochloromethane	Ave	1.146	1.153		50.3	50.0	0.6	20.0
1,2-Dibromoethane	Ave	0.9445	0.9354		49.5	50.0	-1.0	20.0
1-Chlorohexane	Lin1		1.494		23.8	25.0	-5.0	20.0
Chlorobenzene	Ave	3.446	3.374	0.3000	49.0	50.0	-2.1	20.0
1,1,1,2-Tetrachloroethane	Ave	1.288	1.290		50.1	50.0	0.2	20.0
Ethylbenzene	Ave	1.631	1.730		53.0	50.0	6.1	20.0
m&p-Xylene	Lin2		2.077		51.5	50.0	3.0	20.0
o-Xylene	Lin1		1.972		49.0	50.0	-2.0	20.0
Styrene	Lin1		3.541		50.4	50.0	0.7	20.0
Bromoform	Ave	0.7418	0.7690	0.1000	51.8	50.0	3.7	20.0
Isopropylbenzene	Lin1		2.717		48.3	50.0	-3.5	20.0
Cyclohexanone	Qua		0.0521		1590	1600	-0.7	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7497	0.6800	0.3000	45.4	50.0	-9.3	20.0
Bromobenzene	Ave	0.7276	0.7502		51.6	50.0	3.1	20.0
trans-1,4-Dichloro-2-butene	Lin1		0.2208		47.1	50.0	-5.9	20.0
1,2,3-Trichloropropane	Ave	0.2283	0.2191		48.0	50.0	-4.0	20.0
N-Propylbenzene	Lin1		0.8109		50.0	50.0	0.0	20.0
2-Chlorotoluene	Lin1		0.6938		48.7	50.0	-2.6	20.0
1,3,5-Trimethylbenzene	Lin1		2.399		49.4	50.0	-1.3	20.0
4-Chlorotoluene	Lin2		0.7357		50.2	50.0	0.4	20.0
tert-Butylbenzene	Lin1		2.099		48.6	50.0	-2.8	20.0
1,2,4-Trimethylbenzene	Lin1		2.544		50.4	50.0	0.7	20.0
sec-Butylbenzene	Lin2		0.6900		50.3	50.0	0.6	20.0
1,3-Dichlorobenzene	Ave	1.439	1.466		50.9	50.0	1.9	20.0
4-Isopropyltoluene	Lin2		2.918		51.1	50.0	2.3	20.0
1,4-Dichlorobenzene	Ave	1.620	1.506		46.5	50.0	-7.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-377645/2 Calibration Date: 06/16/2017 12:27

Instrument ID: VMS_G2 Calib Start Date: 06/12/2017 18:07

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/12/2017 20:35

Lab File ID: G2_1116.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Lin1		2.608		50.8	50.0	1.7	20.0
1,2-Dichlorobenzene	Ave	1.447	1.438		49.7	50.0	-0.6	20.0
1,2-Dibromo-3-Chloropropane	Lin2		0.1299		41.0	50.0	-18.0	20.0
1,2,4-Trichlorobenzene	Lin1		0.9191		42.2	50.0	-15.6	20.0
Hexachlorobutadiene	Ave	0.6850	0.6642		48.5	50.0	-3.0	20.0
Naphthalene	Lin1		1.985		42.3	50.0	-15.3	20.0
1,2,3-Trichlorobenzene	Lin1		0.9433		44.5	50.0	-11.0	20.0
Dibromofluoromethane (Surr)	Lin2		0.2978		42.2	42.5	-0.8	20.0
1,2-Dichloroethane-d4 (Surr)	Lin2		0.3939		40.9	42.5	-3.8	20.0
Toluene-d8 (Surr)	Ave	4.276	4.335		43.1	42.5	1.4	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8156	0.8243		43.0	42.5	1.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-377667/2 Calibration Date: 06/16/2017 12:27

Instrument ID: VMS_G2 Calib Start Date: 06/12/2017 18:07

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/12/2017 20:35

Lab File ID: G2_1116.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Qua		0.3420		44.0	40.0	10.1	20.0
Chloromethane	Qua		0.4138	0.1000	35.5	40.0	-11.2	20.0
Vinyl chloride	Ave	0.5000	0.4921		39.4	40.0	-1.6	20.0
Bromomethane	Ave	0.4214	0.4261		40.4	40.0	1.1	20.0
Chloroethane	Ave	0.3129	0.3475		44.4	40.0	11.1	20.0
Dichlorofluoromethane	Ave	0.6428	0.7393		46.0	40.0	15.0	20.0
Trichlorofluoromethane	Ave	0.5107	0.5833		45.7	40.0	14.2	20.0
Ethyl ether	Lin1		0.2425		47.9	50.0	-4.1	20.0
Acrolein	Lin1		0.0525		549	500	9.9	20.0
1,1-Dichloroethene	Ave	0.2575	0.2859		55.5	50.0	11.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2586	0.2859		55.3	50.0	10.5	20.0
Acetone	Qua		0.1242		170	160	6.3	20.0
Methyl iodide	Ave	0.4591	0.4980		54.2	50.0	8.5	20.0
Carbon disulfide	Ave	0.9758	1.031		52.8	50.0	5.6	20.0
3-Chloro-1-propene	Ave	0.4653	0.4940		53.1	50.0	6.2	20.0
Methyl acetate	Ave	0.2319	0.2228		240	250	-3.9	20.0
Methylene Chloride	Lin2		0.3568		54.0	50.0	8.0	20.0
t-Butyl alcohol	Lin2		0.0331		489	500	-2.1	20.0
Acrylonitrile	Ave	0.1076	0.1083		503	500	0.6	20.0
Methyl tert-butyl ether	Lin2		0.8071		49.1	50.0	-1.7	20.0
trans-1,2-Dichloroethene	Ave	0.2838	0.3177		56.0	50.0	11.9	20.0
Hexane	Lin1		1.741		45.5	50.0	-8.9	20.0
1,1-Dichloroethane	Ave	0.5653	0.5729	0.1000	50.7	50.0	1.4	20.0
Vinyl acetate	Lin1		0.5465		101	100	0.9	20.0
2,2-Dichloropropane	Ave	0.4731	0.5174		54.7	50.0	9.4	20.0
2-Butanone (MEK)	Ave	0.1482	0.1638		177	160	10.5	20.0
cis-1,2-Dichloroethene	Ave	0.3065	0.3292		53.7	50.0	7.4	20.0
Bromochloromethane	Ave	0.1453	0.1586		54.6	50.0	9.2	20.0
sec-Butyl Alcohol	Lin2		0.0209		649	750	-13.5	20.0
Tetrahydrofuran	Lin2		0.0891		91.8	100	-8.2	20.0
Chloroform	Ave	0.5697	0.5806		51.0	50.0	1.9	20.0
1,1,1-Trichloroethane	Ave	0.4862	0.5175		53.2	50.0	6.4	20.0
Cyclohexane	Lin1		0.5035		50.8	50.0	1.6	20.0
Carbon tetrachloride	Ave	0.4592	0.4999		54.4	50.0	8.9	20.0
1,1-Dichloropropene	Lin2		0.4125		52.9	50.0	5.8	20.0
Benzene	Ave	1.110	1.207		54.4	50.0	8.7	20.0
1,2-Dichloroethane	Ave	0.4601	0.4728		51.4	50.0	2.8	20.0
Isobutyl alcohol	Ave	0.0136	0.0140		1290	1250	2.9	20.0
Trichloroethene	Ave	0.2624	0.2796		53.3	50.0	6.5	20.0
2-Pentanone	Lin		0.3142		117	100	17.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-377667/2 Calibration Date: 06/16/2017 12:27

Instrument ID: VMS_G2 Calib Start Date: 06/12/2017 18:07

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/12/2017 20:35

Lab File ID: G2_1116.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Lin2		0.4660		55.9	50.0	11.9	20.0
1,2-Dichloropropane	Ave	0.3000	0.3117		52.0	50.0	3.9	20.0
1,4-Dioxane	Ave	0.0025	0.0030		1190	1000	19.1	20.0
Dibromomethane	Ave	0.1787	0.1914		53.6	50.0	7.1	20.0
Bromodichloromethane	Ave	0.3792	0.4036		53.2	50.0	6.4	20.0
2-Chloroethyl vinyl ether	Lin		0.1213		41.8	50.0	-16.4	20.0
cis-1,3-Dichloropropene	Lin1		1.694		45.6	50.0	-8.8	20.0
4-Methyl-2-pentanone (MIBK)	Lin1		0.3372		185	160	15.5	20.0
Toluene	Ave	1.081	1.255		58.0	50.0	16.1	20.0
trans-1,3-Dichloropropene	Lin1		0.4090		49.7	50.0	-0.5	20.0
Ethyl methacrylate	Lin1		1.234		43.3	50.0	-13.3	20.0
1,1,2-Trichloroethane	Ave	0.2242	0.2478		55.2	50.0	10.5	20.0
Tetrachloroethene	Ave	1.040	1.087		52.3	50.0	4.5	20.0
1,3-Dichloropropane	Ave	1.730	1.703		49.2	50.0	-1.6	20.0
2-Hexanone	Qua		0.9625		149	160	-7.0	20.0
Dibromochloromethane	Ave	1.146	1.153		50.3	50.0	0.6	20.0
1,2-Dibromoethane	Ave	0.9445	0.9354		49.5	50.0	-1.0	20.0
1-Chlorohexane	Lin1		1.494		23.8	25.0	-5.0	20.0
Chlorobenzene	Ave	3.446	3.374	0.3000	49.0	50.0	-2.1	20.0
1,1,1,2-Tetrachloroethane	Ave	1.288	1.290		50.1	50.0	0.2	20.0
Ethylbenzene	Ave	1.631	1.730		53.0	50.0	6.1	20.0
m&p-Xylene	Lin2		2.077		51.5	50.0	3.0	20.0
o-Xylene	Lin1		1.972		49.0	50.0	-2.0	20.0
Styrene	Lin1		3.541		50.4	50.0	0.7	20.0
Bromoform	Ave	0.7418	0.7690	0.1000	51.8	50.0	3.7	20.0
Isopropylbenzene	Lin1		2.717		48.3	50.0	-3.5	20.0
Cyclohexanone	Qua		0.0521		1590	1600	-0.7	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7497	0.6800	0.3000	45.4	50.0	-9.3	20.0
Bromobenzene	Ave	0.7276	0.7502		51.6	50.0	3.1	20.0
trans-1,4-Dichloro-2-butene	Lin1		0.2208		47.1	50.0	-5.9	20.0
1,2,3-Trichloropropane	Ave	0.2283	0.2191		48.0	50.0	-4.0	20.0
N-Propylbenzene	Lin1		0.8109		50.0	50.0	0.0	20.0
2-Chlorotoluene	Lin1		0.6938		48.7	50.0	-2.6	20.0
1,3,5-Trimethylbenzene	Lin1		2.399		49.4	50.0	-1.3	20.0
4-Chlorotoluene	Lin2		0.7357		50.2	50.0	0.4	20.0
tert-Butylbenzene	Lin1		2.099		48.6	50.0	-2.8	20.0
1,2,4-Trimethylbenzene	Lin1		2.544		50.4	50.0	0.7	20.0
sec-Butylbenzene	Lin2		0.6900		50.3	50.0	0.6	20.0
1,3-Dichlorobenzene	Ave	1.439	1.466		50.9	50.0	1.9	20.0
4-Isopropyltoluene	Lin2		2.918		51.1	50.0	2.3	20.0
1,4-Dichlorobenzene	Ave	1.620	1.506		46.5	50.0	-7.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-377667/2 Calibration Date: 06/16/2017 12:27

Instrument ID: VMS_G2 Calib Start Date: 06/12/2017 18:07

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/12/2017 20:35

Lab File ID: G2_1116.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Lin1		2.608		50.8	50.0	1.7	20.0
1,2-Dichlorobenzene	Ave	1.447	1.438		49.7	50.0	-0.6	20.0
1,2-Dibromo-3-Chloropropane	Lin2		0.1299		41.0	50.0	-18.0	20.0
1,2,4-Trichlorobenzene	Lin1		0.9191		42.2	50.0	-15.6	20.0
Hexachlorobutadiene	Ave	0.6850	0.6642		48.5	50.0	-3.0	20.0
Naphthalene	Lin1		1.985		42.3	50.0	-15.3	20.0
1,2,3-Trichlorobenzene	Lin1		0.9433		44.5	50.0	-11.0	20.0
Dibromofluoromethane (Surr)	Lin2		0.2978		42.2	42.5	-0.8	20.0
1,2-Dichloroethane-d4 (Surr)	Lin2		0.3939		40.9	42.5	-3.8	20.0
Toluene-d8 (Surr)	Ave	4.276	4.335		43.1	42.5	1.4	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8156	0.8243		43.0	42.5	1.1	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1116.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 16-Jun-2017 12:27:30 ALS Bottle#: 11 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:50 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 13:23:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	92	403144	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	99	677200	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	86	172570	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	94	347851	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.829	6.829	0.000	93	171412	42.5	42.2	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	226747	42.5	40.9	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	635925	42.5	43.1	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	92	243724	42.5	43.0	
32 Dichlorodifluoromethane	85	1.705	1.705	0.000	99	185283	40.0	44.0	
34 Chloromethane	50	1.830	1.830	0.000	99	224191	40.0	35.5	
37 Vinyl chloride	62	1.970	1.970	0.000	98	266606	40.0	39.4	
22 Butadiene	54	1.998	1.998	0.000	89	233803	NC	NC	
39 Bromomethane	94	2.291	2.291	0.000	90	230862	40.0	40.4	
40 Chloroethane	64	2.403	2.403	0.000	99	188249	40.0	44.4	
41 Dichlorofluoromethane	67	2.668	2.668	0.000	98	400521	40.0	46.0	
43 Trichlorofluoromethane	101	2.710	2.710	0.000	98	316016	40.0	45.7	
45 Ethyl ether	59	3.004	3.004	0.000	93	164194	50.0	47.9	
48 Acrolein	56	3.185	3.185	0.000	99	355723	499.9	549.4	
53 1,1-Dichloroethene	96	3.311	3.311	0.000	94	193622	50.0	55.5	
52 1,1,2-Trichloro-1,2,2-trif	151	3.353	3.353	0.000	94	193588	50.0	55.3	
50 Acetone	43	3.353	3.353	0.000	98	269052	160.0	170.0	
55 Iodomethane	142	3.492	3.492	0.000	99	337238	50.0	54.2	
58 Carbon disulfide	76	3.576	3.576	0.000	100	698051	50.0	52.8	
56 Methyl acetate	43	3.800	3.800	0.000	98	754355	250.0	240.2	
57 3-Chloro-1-propene	41	3.800	3.800	0.000	88	334519	50.0	53.1	
60 Methylene Chloride	84	4.009	4.009	0.000	96	241589	50.0	54.0	
59 2-Methyl-2-propanol	59	4.205	4.205	0.000	93	224445	500.0	489.4	
61 Acrylonitrile	53	4.372	4.372	0.000	97	733385	500.0	503.2	
62 Methyl tert-butyl ether	73	4.428	4.428	0.000	98	546554	50.0	49.1	
63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	95	215111	50.0	56.0	
64 Hexane	57	4.917	4.917	0.000	94	300516	50.0	45.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 1,1-Dichloroethane	63	5.210	5.210	0.000	97	387991	50.0	50.7	
65 Vinyl acetate	43	5.252	5.252	0.000	98	740204	100.0	100.9	
74 cis-1,2-Dichloroethene	96	6.128	6.128	0.000	85	222910	50.0	53.7	
71 2-Butanone (MEK)	43	6.128	6.128	0.000	97	354997	160.0	176.8	
75 2,2-Dichloropropane	77	6.128	6.128	0.000	90	350351	50.0	54.7	
72 sec-Butyl Alcohol	45	6.457	6.457	0.000	95	212270	750.0	649.1	
77 Chlorobromomethane	128	6.457	6.457	0.000	98	107401	50.0	54.6	
79 Tetrahydrofuran	42	6.464	6.464	0.000	93	120603	100.0	91.8	
78 Chloroform	83	6.621	6.621	0.000	94	393182	50.0	51.0	
81 1,1,1-Trichloroethane	97	6.807	6.807	0.000	98	350474	50.0	53.2	
82 Cyclohexane	56	6.893	6.893	0.000	93	340989	50.0	50.8	
84 Carbon tetrachloride	117	7.000	7.000	0.000	96	338541	50.0	54.4	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	93	279371	50.0	52.9	
87 Benzene	78	7.258	7.258	0.000	98	817282	50.0	54.4	
85 1,2-Dichloroethane	62	7.336	7.336	0.000	98	320203	50.0	51.4	
80 Isobutyl alcohol	41	7.651	7.651	0.000	84	237579	1250.0	1286.8	
35 n-Heptane	43	7.651	7.651	0.000	93	341325	50.0	52.6	
89 Trichloroethene	95	8.044	8.044	0.000	97	189310	50.0	53.3	
90 2-Pentanone	43	8.259	8.259	0.000	98	425565	100.0	117.5	
93 Methylcyclohexane	55	8.294	8.294	0.000	92	315573	50.0	55.9	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	93	211083	50.0	52.0	
94 1,4-Dioxane	88	8.416	8.416	0.000	97	40544	1000.0	1191.4	
95 Dibromomethane	93	8.423	8.423	0.000	94	129639	50.0	53.6	
96 Dichlorobromomethane	83	8.623	8.623	0.000	99	273316	50.0	53.2	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	94	82111	50.0	41.8	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	93	292410	50.0	45.6	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	98	730769	160.0	184.8	
101 Toluene	91	9.410	9.410	0.000	98	850048	50.0	58.0	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	97	276969	50.0	49.7	
102 Ethyl methacrylate	69	9.717	9.717	0.000	90	212879	50.0	43.3	
104 1,1,2-Trichloroethane	97	9.846	9.846	0.000	95	167775	50.0	55.2	
107 Tetrachloroethene	164	9.917	9.917	0.000	97	187588	50.0	52.3	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	94	293948	50.0	49.2	
105 2-Hexanone	43	10.060	10.060	0.000	97	531524	160.0	148.8	
108 Chlorodibromomethane	129	10.211	10.211	0.000	91	198924	50.0	50.3	
110 Ethylene Dibromide	107	10.318	10.318	0.000	98	161425	50.0	49.5	
111 1-Chlorohexane	91	10.775	10.775	0.000	93	128934	25.0	23.8	
112 Chlorobenzene	112	10.790	10.790	0.000	93	582213	50.0	49.0	
113 1,1,1,2-Tetrachloroethane	131	10.876	10.876	0.000	91	222642	50.0	50.1	
114 Ethylbenzene	106	10.883	10.883	0.000	98	298521	50.0	53.0	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	358455	50.0	51.5	
117 o-Xylene	106	11.362	11.362	0.000	97	340389	50.0	49.0	
116 Styrene	104	11.383	11.383	0.000	99	611050	50.0	50.4	
118 Bromoform	173	11.555	11.555	0.000	96	132697	50.0	51.8	
119 Isopropylbenzene	105	11.705	11.705	0.000	97	945046	50.0	48.3	
121 Cyclohexanone	55	11.791	11.791	0.000	94	287621	1600.0	1589.1	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	97	236554	50.0	45.4	
125 Bromobenzene	156	11.998	11.998	0.000	93	260973	50.0	51.6	
123 trans-1,4-Dichloro-2-buten	53	12.027	12.027	0.000	84	76806	50.0	47.1	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	85	76209	50.0	48.0	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	282068	50.0	50.0	
128 2-Chlorotoluene	126	12.170	12.170	0.000	96	241323	50.0	48.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	94	834586	50.0	49.4	
129 4-Chlorotoluene	126	12.277	12.277	0.000	97	255899	50.0	50.2	
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	730203	50.0	48.6	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	884797	50.0	50.4	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	240000	50.0	50.3	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	98	509836	50.0	50.9	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	1014937	50.0	51.1	
136 1,4-Dichlorobenzene	146	12.842	12.842	0.000	95	523847	50.0	46.5	
137 n-Butylbenzene	91	13.071	13.071	0.000	98	907367	50.0	50.8	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	97	500152	50.0	49.7	
139 1,2-Dibromo-3-Chloropropan	157	13.593	13.593	0.000	81	45199	50.0	41.0	
141 1,2,4-Trichlorobenzene	180	14.129	14.129	0.000	94	319708	50.0	42.2	
142 Hexachlorobutadiene	225	14.215	14.215	0.000	97	231057	50.0	48.5	
143 Naphthalene	128	14.315	14.315	0.000	97	690548	50.0	42.3	
144 1,2,3-Trichlorobenzene	180	14.472	14.472	0.000	95	328130	50.0	44.5	
S 151 1,2-Dichloroethene, Total	96				0		100.0	109.6	
S 145 Trihalomethanes, Total	1				0		200.0	206.3	
S 149 1,2-Dichloroethene, Total	1				0		100.0	109.6	
S 150 Xylenes, Total	106				0		100.0	100.5	
S 148 1,3-Dichloropropene, Total	1				0		100.0	95.4	
S 146 Xylenes, Total (URS)	1				0		100.0	100.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MV-2cleve+AVA_00025	Amount Added:	6.25	Units: uL	
MV-Gas/Ket A_00060	Amount Added:	5.00	Units: uL	
MV-Main A_00030	Amount Added:	6.25	Units: uL	
MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1116.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 16-Jun-2017 12:27:30 ALS Bottle#: 11 Worklist Smp#: 2
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:50 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 13:23:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	92	403144	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	99	677200	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	86	172570	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	94	347851	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.829	6.829	0.000	93	171412	42.5	42.2	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	226747	42.5	40.9	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	635925	42.5	43.1	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	92	243724	42.5	43.0	
32 Dichlorodifluoromethane	85	1.705	1.705	0.000	99	185283	40.0	44.0	
34 Chloromethane	50	1.830	1.830	0.000	99	224191	40.0	35.5	
37 Vinyl chloride	62	1.970	1.970	0.000	98	266606	40.0	39.4	
22 Butadiene	54	1.998	1.998	0.000	89	233803	NC	NC	
39 Bromomethane	94	2.291	2.291	0.000	90	230862	40.0	40.4	
40 Chloroethane	64	2.403	2.403	0.000	99	188249	40.0	44.4	
41 Dichlorofluoromethane	67	2.668	2.668	0.000	98	400521	40.0	46.0	
43 Trichlorofluoromethane	101	2.710	2.710	0.000	98	316016	40.0	45.7	
45 Ethyl ether	59	3.004	3.004	0.000	93	164194	50.0	47.9	
48 Acrolein	56	3.185	3.185	0.000	99	355723	499.9	549.4	
53 1,1-Dichloroethene	96	3.311	3.311	0.000	94	193622	50.0	55.5	
52 1,1,2-Trichloro-1,2,2-trif	151	3.353	3.353	0.000	94	193588	50.0	55.3	
50 Acetone	43	3.353	3.353	0.000	98	269052	160.0	170.0	
55 Iodomethane	142	3.492	3.492	0.000	99	337238	50.0	54.2	
58 Carbon disulfide	76	3.576	3.576	0.000	100	698051	50.0	52.8	
56 Methyl acetate	43	3.800	3.800	0.000	98	754355	250.0	240.2	
57 3-Chloro-1-propene	41	3.800	3.800	0.000	88	334519	50.0	53.1	
60 Methylene Chloride	84	4.009	4.009	0.000	96	241589	50.0	54.0	
59 2-Methyl-2-propanol	59	4.205	4.205	0.000	93	224445	500.0	489.4	
61 Acrylonitrile	53	4.372	4.372	0.000	97	733385	500.0	503.2	
62 Methyl tert-butyl ether	73	4.428	4.428	0.000	98	546554	50.0	49.1	
63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	95	215111	50.0	56.0	
64 Hexane	57	4.917	4.917	0.000	94	300516	50.0	45.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 1,1-Dichloroethane	63	5.210	5.210	0.000	97	387991	50.0	50.7	
65 Vinyl acetate	43	5.252	5.252	0.000	98	740204	100.0	100.9	
74 cis-1,2-Dichloroethene	96	6.128	6.128	0.000	85	222910	50.0	53.7	
71 2-Butanone (MEK)	43	6.128	6.128	0.000	97	354997	160.0	176.8	
75 2,2-Dichloropropane	77	6.128	6.128	0.000	90	350351	50.0	54.7	
72 sec-Butyl Alcohol	45	6.457	6.457	0.000	95	212270	750.0	649.1	
77 Chlorobromomethane	128	6.457	6.457	0.000	98	107401	50.0	54.6	
79 Tetrahydrofuran	42	6.464	6.464	0.000	93	120603	100.0	91.8	
78 Chloroform	83	6.621	6.621	0.000	94	393182	50.0	51.0	
81 1,1,1-Trichloroethane	97	6.807	6.807	0.000	98	350474	50.0	53.2	
82 Cyclohexane	56	6.893	6.893	0.000	93	340989	50.0	50.8	
84 Carbon tetrachloride	117	7.000	7.000	0.000	96	338541	50.0	54.4	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	93	279371	50.0	52.9	
87 Benzene	78	7.258	7.258	0.000	98	817282	50.0	54.4	
85 1,2-Dichloroethane	62	7.336	7.336	0.000	98	320203	50.0	51.4	
80 Isobutyl alcohol	41	7.651	7.651	0.000	84	237579	1250.0	1286.8	
35 n-Heptane	43	7.651	7.651	0.000	93	341325	50.0	52.6	
89 Trichloroethene	95	8.044	8.044	0.000	97	189310	50.0	53.3	
90 2-Pentanone	43	8.259	8.259	0.000	98	425565	100.0	117.5	
93 Methylcyclohexane	55	8.294	8.294	0.000	92	315573	50.0	55.9	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	93	211083	50.0	52.0	
94 1,4-Dioxane	88	8.416	8.416	0.000	97	40544	1000.0	1191.4	
95 Dibromomethane	93	8.423	8.423	0.000	94	129639	50.0	53.6	
96 Dichlorobromomethane	83	8.623	8.623	0.000	99	273316	50.0	53.2	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	94	82111	50.0	41.8	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	93	292410	50.0	45.6	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	98	730769	160.0	184.8	
101 Toluene	91	9.410	9.410	0.000	98	850048	50.0	58.0	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	97	276969	50.0	49.7	
102 Ethyl methacrylate	69	9.717	9.717	0.000	90	212879	50.0	43.3	
104 1,1,2-Trichloroethane	97	9.846	9.846	0.000	95	167775	50.0	55.2	
107 Tetrachloroethene	164	9.917	9.917	0.000	97	187588	50.0	52.3	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	94	293948	50.0	49.2	
105 2-Hexanone	43	10.060	10.060	0.000	97	531524	160.0	148.8	
108 Chlorodibromomethane	129	10.211	10.211	0.000	91	198924	50.0	50.3	
110 Ethylene Dibromide	107	10.318	10.318	0.000	98	161425	50.0	49.5	
111 1-Chlorohexane	91	10.775	10.775	0.000	93	128934	25.0	23.8	
112 Chlorobenzene	112	10.790	10.790	0.000	93	582213	50.0	49.0	
113 1,1,1,2-Tetrachloroethane	131	10.876	10.876	0.000	91	222642	50.0	50.1	
114 Ethylbenzene	106	10.883	10.883	0.000	98	298521	50.0	53.0	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	358455	50.0	51.5	
117 o-Xylene	106	11.362	11.362	0.000	97	340389	50.0	49.0	
116 Styrene	104	11.383	11.383	0.000	99	611050	50.0	50.4	
118 Bromoform	173	11.555	11.555	0.000	96	132697	50.0	51.8	
119 Isopropylbenzene	105	11.705	11.705	0.000	97	945046	50.0	48.3	
121 Cyclohexanone	55	11.791	11.791	0.000	94	287621	1600.0	1589.1	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	97	236554	50.0	45.4	
125 Bromobenzene	156	11.998	11.998	0.000	93	260973	50.0	51.6	
123 trans-1,4-Dichloro-2-buten	53	12.027	12.027	0.000	84	76806	50.0	47.1	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	85	76209	50.0	48.0	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	282068	50.0	50.0	
128 2-Chlorotoluene	126	12.170	12.170	0.000	96	241323	50.0	48.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	94	834586	50.0	49.4	
129 4-Chlorotoluene	126	12.277	12.277	0.000	97	255899	50.0	50.2	
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	730203	50.0	48.6	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	884797	50.0	50.4	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	240000	50.0	50.3	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	98	509836	50.0	50.9	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	1014937	50.0	51.1	
136 1,4-Dichlorobenzene	146	12.842	12.842	0.000	95	523847	50.0	46.5	
137 n-Butylbenzene	91	13.071	13.071	0.000	98	907367	50.0	50.8	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	97	500152	50.0	49.7	
139 1,2-Dibromo-3-Chloropropan	157	13.593	13.593	0.000	81	45199	50.0	41.0	
141 1,2,4-Trichlorobenzene	180	14.129	14.129	0.000	94	319708	50.0	42.2	
142 Hexachlorobutadiene	225	14.215	14.215	0.000	97	231057	50.0	48.5	
143 Naphthalene	128	14.315	14.315	0.000	97	690548	50.0	42.3	
144 1,2,3-Trichlorobenzene	180	14.472	14.472	0.000	95	328130	50.0	44.5	
S 151 1,2-Dichloroethene, Total	96				0		100.0	109.6	
S 145 Trihalomethanes, Total	1				0		200.0	206.3	
S 149 1,2-Dichloroethene, Total	1				0		100.0	109.6	
S 150 Xylenes, Total	106				0		100.0	100.5	
S 148 1,3-Dichloropropene, Total	1				0		100.0	95.4	
S 146 Xylenes, Total (URS)	1				0		100.0	100.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MV-2cleve+AVA_00025	Amount Added:	6.25	Units: uL	
MV-Gas/Ket A_00060	Amount Added:	5.00	Units: uL	
MV-Main A_00030	Amount Added:	6.25	Units: uL	
MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

Report Date: 18-Jun-2017 12:34:52 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1116.D

Injection Date: 16-Jun-2017 12:27:30 Instrument ID: VMS_G2 Operator ID: DUKESA

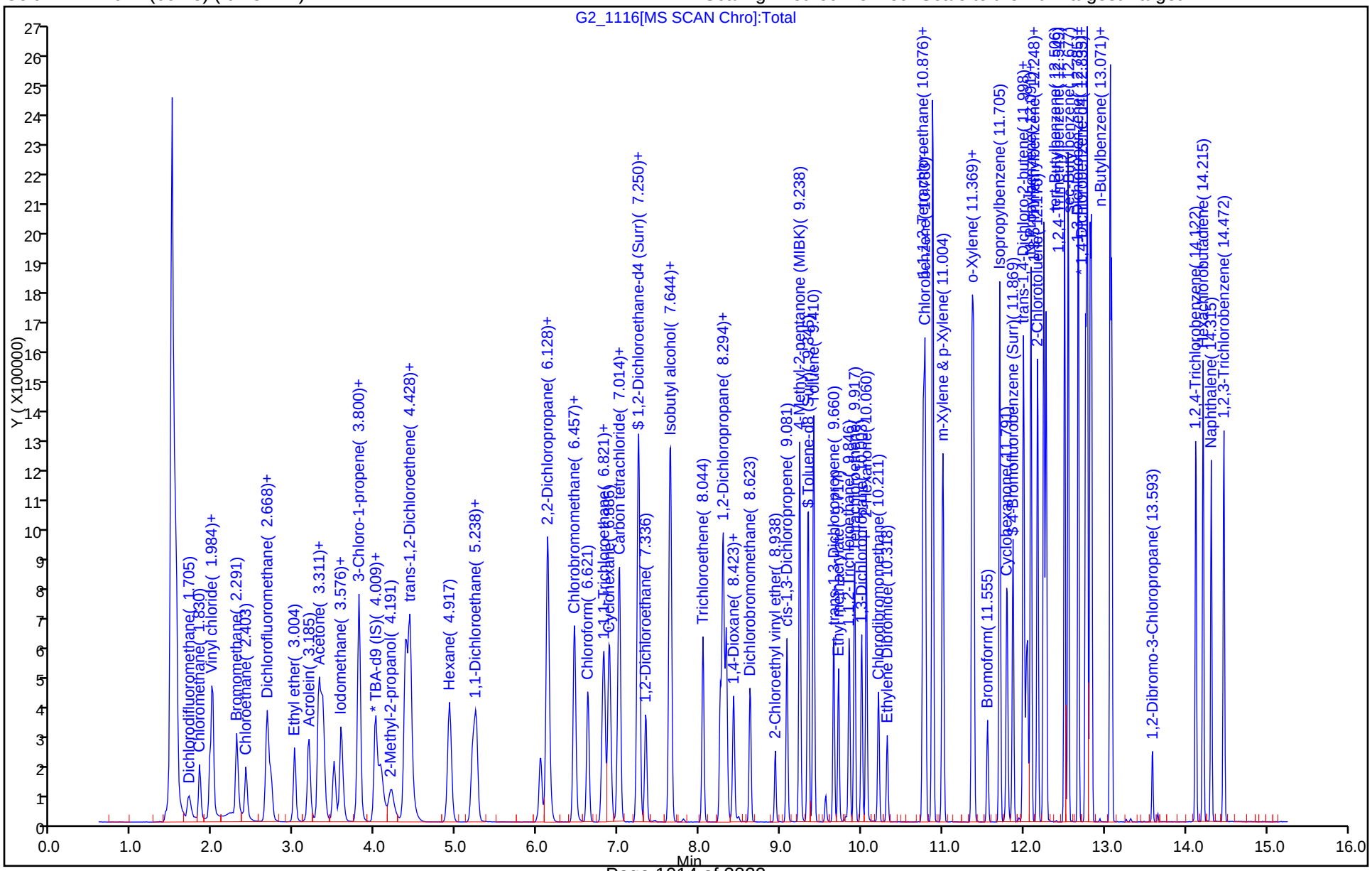
Lims ID: CCV Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 11

Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Report Date: 18-Jun-2017 12:34:53 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1116.D

Injection Date: 16-Jun-2017 12:27:30 Instrument ID: VMS_G2 Operator ID: DUKESA

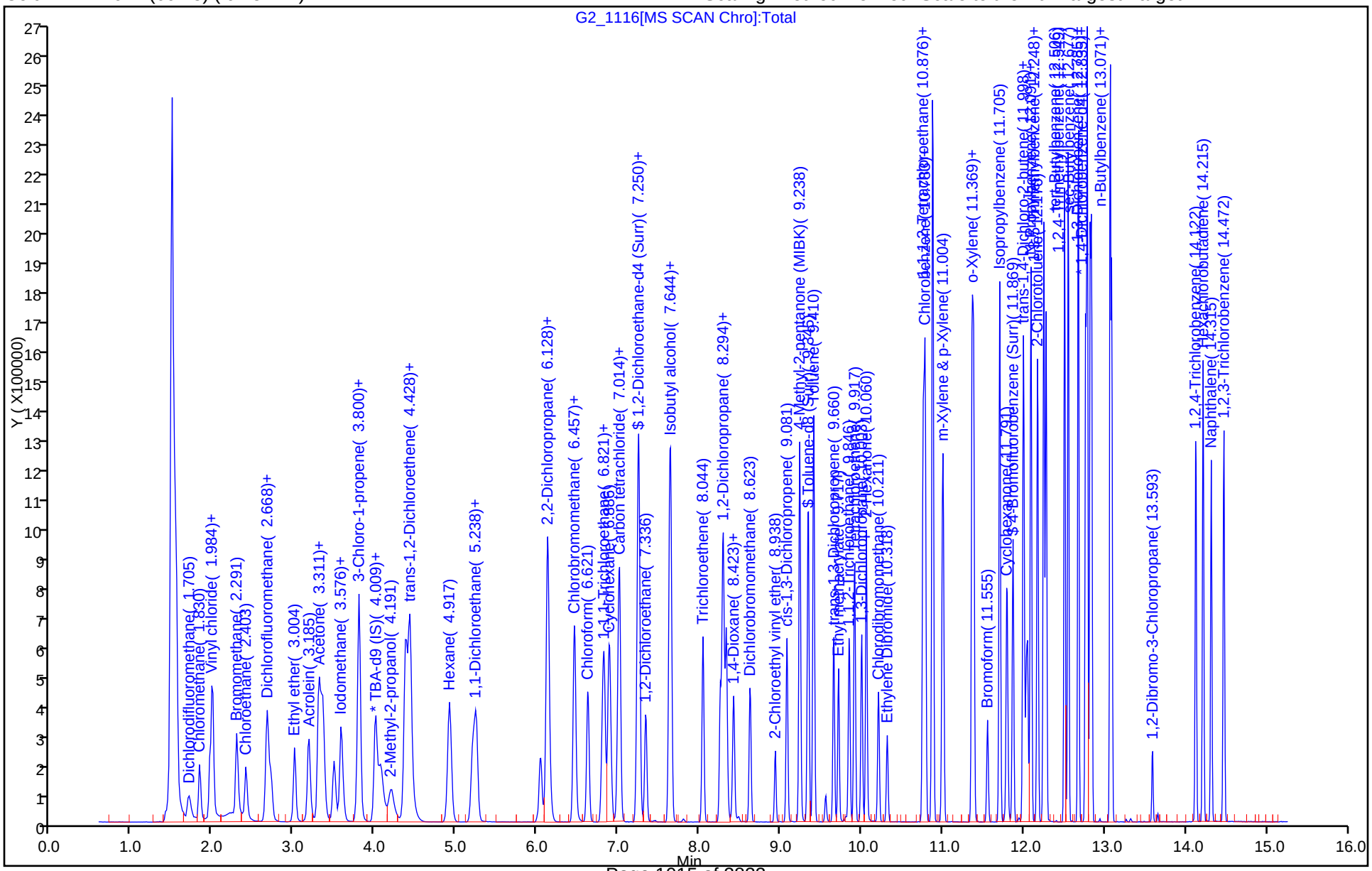
Lims ID: CCV Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 11

Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-377645/3 Calibration Date: 06/16/2017 12:48

Instrument ID: VMS_G2 Calib Start Date: 04/26/2017 21:24

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/26/2017 23:47

Lab File ID: G2_1117.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.1388		3280	3000	9.5	20.0
Isopropyl alcohol	Lin2		0.7222		512	500	2.4	20.0
Acetonitrile	Ave	0.0340	0.0486		1070	750	43.0*	20.0
Isopropyl ether	Lin1		0.2493		68.4	75.0	-8.7	20.0
2-Chloro-1,3-butadiene	Lin1		0.5749		54.1	50.0	8.3	20.0
Tert-butyl ethyl ether	Lin1		0.8898		80.1	75.0	6.8	20.0
Ethyl acetate	Ave	0.2191	0.3145		143	100	43.5*	20.0
Propionitrile	Ave	0.0366	0.0498		1020	750	36.2*	20.0
Methacrylonitrile	Ave	0.1405	0.2117		753	500	50.7*	20.0
Tert-amyl methyl ether	Lin1		0.8466		80.1	75.0	6.7	20.0
n-Butanol	Lin1		0.2864		1060	1250	-14.8	20.0
Methyl methacrylate	Lin1		0.0818		101	100	0.9	20.0
2-Nitropropane	Lin1		0.0893		115	100	15.1	20.0
cis-1,4-Dichloro-2-butene	Lin1		0.3001		118	100	17.5	20.0
1,2,3-Trimethylbenzene	Lin2		3.334		53.2	50.0	6.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-377667/3 Calibration Date: 06/16/2017 12:48

Instrument ID: VMS_G2 Calib Start Date: 04/26/2017 21:24

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/26/2017 23:47

Lab File ID: G2_1117.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.1388		3280	3000	9.5	20.0
Isopropyl alcohol	Lin2		0.7222		512	500	2.4	20.0
Acetonitrile	Ave	0.0340	0.0486		1070	750	43.0*	20.0
Isopropyl ether	Lin1		0.2493		68.4	75.0	-8.7	20.0
2-Chloro-1,3-butadiene	Lin1		0.5749		54.1	50.0	8.3	20.0
Tert-butyl ethyl ether	Lin1		0.8898		80.1	75.0	6.8	20.0
Ethyl acetate	Ave	0.2191	0.3145		143	100	43.5*	20.0
Propionitrile	Ave	0.0366	0.0498		1020	750	36.2*	20.0
Methacrylonitrile	Ave	0.1405	0.2117		753	500	50.7*	20.0
Tert-amyl methyl ether	Lin1		0.8466		80.1	75.0	6.7	20.0
n-Butanol	Lin1		0.2864		1060	1250	-14.8	20.0
Methyl methacrylate	Lin1		0.0818		101	100	0.9	20.0
2-Nitropropane	Lin1		0.0893		115	100	15.1	20.0
cis-1,4-Dichloro-2-butene	Lin1		0.3001		118	100	17.5	20.0
1,2,3-Trimethylbenzene	Lin2		3.334		53.2	50.0	6.3	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1117.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 16-Jun-2017 12:48:30 ALS Bottle#: 12 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub99

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 13:24:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	93	496553	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	711140	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	176586	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	267427	50.0	50.0	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.277	2.277	0.000	100	2229728	5000.0	13054	
42 Ethanol	45	2.906	2.906	0.000	99	206777	3000.0	3283.9	
47 Propene oxide	58	3.073	3.073	0.000	96	5554925	5000.0	6389.4	
51 Isopropyl alcohol	45	3.576	3.576	0.000	94	179314	500.0	511.9	
54 Acetonitrile	41	3.758	3.758	0.000	99	518187	750.0	1072.3	
66 Isopropyl ether	87	5.308	5.308	0.000	93	265877	75.0	68.4	
68 2-Chloro-1,3-butadiene	53	5.322	5.322	0.000	94	408806	50.0	54.1	
69 Tert-butyl ethyl ether	59	5.894	5.894	0.000	97	949156	75.0	80.1	
70 Ethyl acetate	43	6.213	6.213	0.000	99	447250	100.0	143.5	
73 Propionitrile	54	6.221	6.221	0.000	98	531226	750.0	1021.5	
76 Methacrylonitrile	41	6.435	6.435	0.000	94	1505688	500.0	753.3	
86 Tert-amyl methyl ether	73	7.450	7.450	0.000	95	903078	75.0	80.1	
88 n-Butanol	56	8.001	8.001	0.000	94	177742	1250.0	1064.7	
16 Ethyl acrylate	55	8.173	8.173	0.000	100	250332	NC	NC	
91 Methyl methacrylate	100	8.423	8.423	0.000	92	116333	100.0	100.9	
97 2-Nitropropane	41	8.859	8.859	0.000	99	126987	100.0	115.1	
120 cis-1,4-Dichloro-2-butene	53	11.769	11.769	0.000	90	160533	100.0	117.5	
135 1,2,3-Trimethylbenzene	105	12.856	12.856	0.000	99	891596	50.0	53.2	
140 1,3,5-Trichlorobenzene	180	13.707	13.707	0.000	97	429326	50.0	55.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00024	Amount Added:	6.25	Units: uL

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1117.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 16-Jun-2017 12:48:30 ALS Bottle#: 12 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub99

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 13:24:38

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	93	496553	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	711140	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	176586	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	267427	50.0	50.0	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.277	2.277	0.000	100	2229728	5000.0	13054	
42 Ethanol	45	2.906	2.906	0.000	99	206777	3000.0	3283.9	
47 Propene oxide	58	3.073	3.073	0.000	96	5554925	5000.0	6389.4	
51 Isopropyl alcohol	45	3.576	3.576	0.000	94	179314	500.0	511.9	
54 Acetonitrile	41	3.758	3.758	0.000	99	518187	750.0	1072.3	
66 Isopropyl ether	87	5.308	5.308	0.000	93	265877	75.0	68.4	
68 2-Chloro-1,3-butadiene	53	5.322	5.322	0.000	94	408806	50.0	54.1	
69 Tert-butyl ethyl ether	59	5.894	5.894	0.000	97	949156	75.0	80.1	
70 Ethyl acetate	43	6.213	6.213	0.000	99	447250	100.0	143.5	
73 Propionitrile	54	6.221	6.221	0.000	98	531226	750.0	1021.5	
76 Methacrylonitrile	41	6.435	6.435	0.000	94	1505688	500.0	753.3	
86 Tert-amyl methyl ether	73	7.450	7.450	0.000	95	903078	75.0	80.1	
88 n-Butanol	56	8.001	8.001	0.000	94	177742	1250.0	1064.7	
16 Ethyl acrylate	55	8.173	8.173	0.000	100	250332	NC	NC	
91 Methyl methacrylate	100	8.423	8.423	0.000	92	116333	100.0	100.9	
97 2-Nitropropane	41	8.859	8.859	0.000	99	126987	100.0	115.1	
120 cis-1,4-Dichloro-2-butene	53	11.769	11.769	0.000	90	160533	100.0	117.5	
135 1,2,3-Trimethylbenzene	105	12.856	12.856	0.000	99	891596	50.0	53.2	
140 1,3,5-Trichlorobenzene	180	13.707	13.707	0.000	97	429326	50.0	55.5	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL
MV-Supp A_00024	Amount Added:	6.25	Units: uL

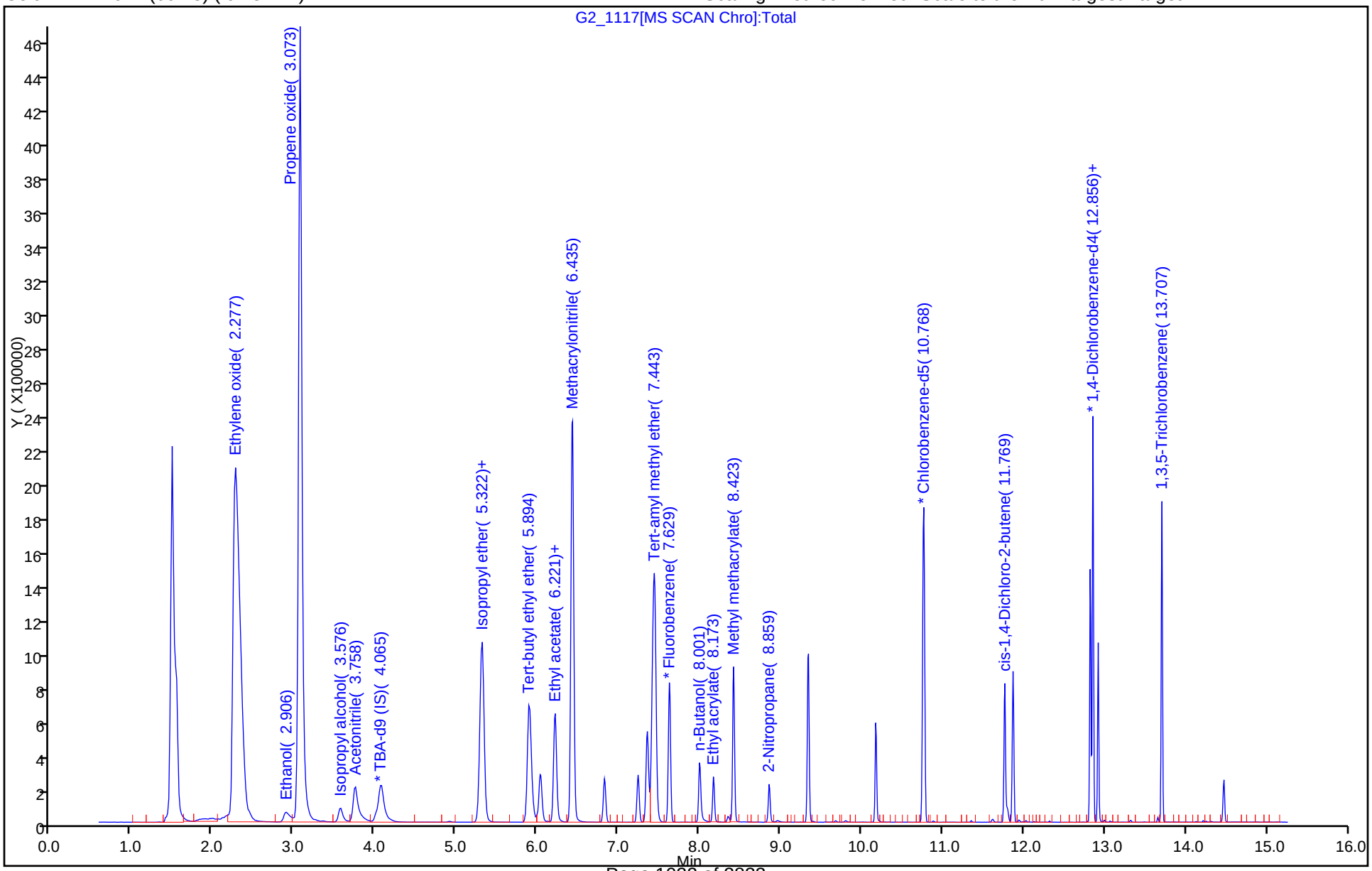
Report Date: 18-Jun-2017 12:34:57 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1117.D

Injection Date:	16-Jun-2017 12:48:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	CCV			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



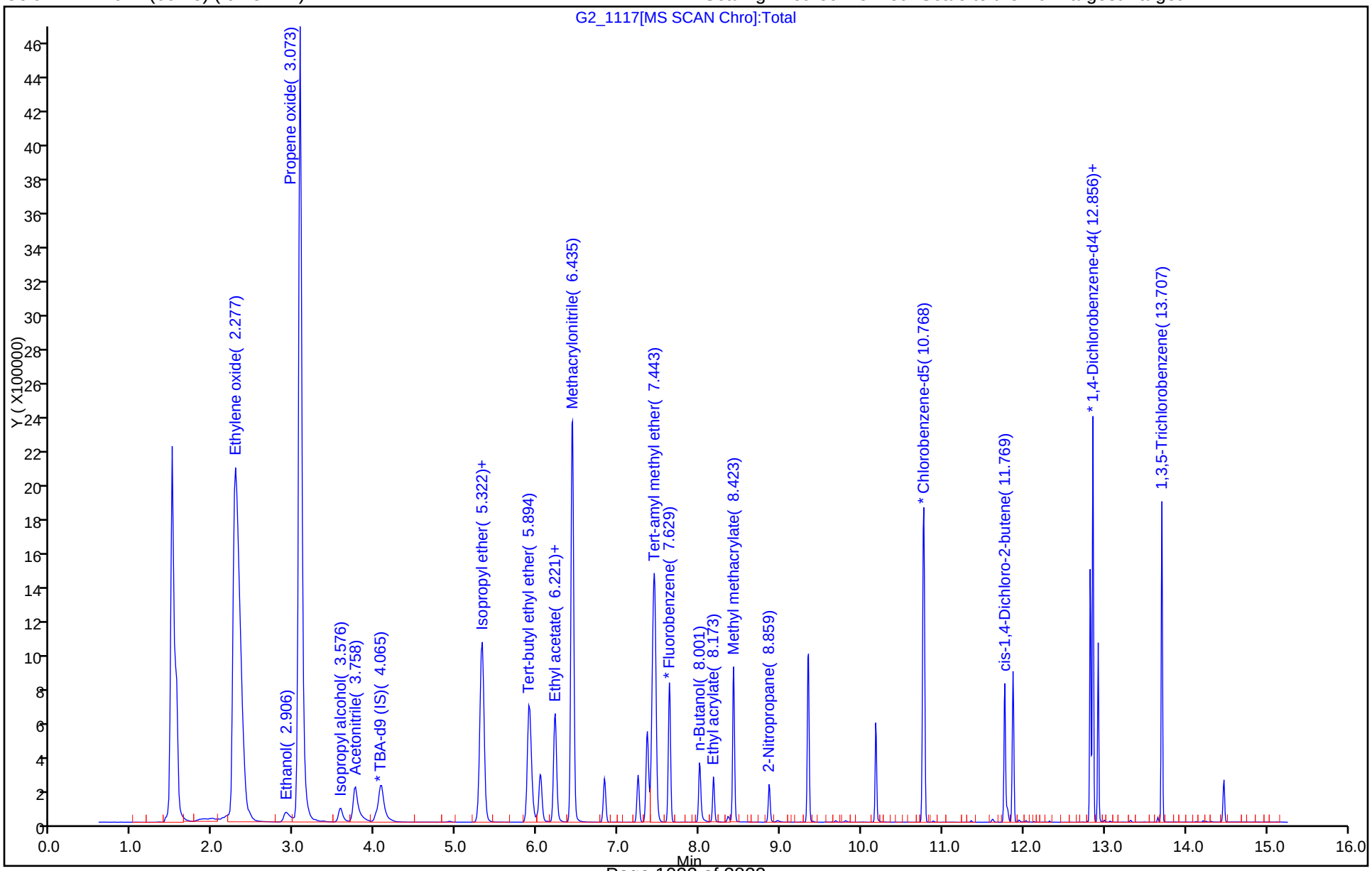
Report Date: 18-Jun-2017 12:34:57 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1117.D

Injection Date:	16-Jun-2017 12:48:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	CCV			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVC 280-377645/40 Calibration Date: 06/16/2017 23:40

Instrument ID: VMS_G2 Calib Start Date: 06/12/2017 18:07

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/12/2017 20:35

Lab File ID: G2_1148.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Qua		0.2192		28.5	40.0	-28.8	50.0
Chloromethane	Qua		0.2879	0.1000	24.8	40.0	-38.0	50.0
Vinyl chloride	Ave	0.5000	0.3311		26.5	40.0	-33.8	50.0
Bromomethane	Ave	0.4214	0.3123		29.6	40.0	-25.9	50.0
Chloroethane	Ave	0.3129	0.2525		32.3	40.0	-19.3	50.0
Dichlorofluoromethane	Ave	0.6428	0.5065		31.5	40.0	-21.2	50.0
Trichlorofluoromethane	Ave	0.5107	0.3805		29.8	40.0	-25.5	50.0
Ethyl ether	Lin1		0.2176		43.1	50.0	-13.9	50.0
Acrolein	Lin1		0.0457		479	500	-4.3	50.0
1,1-Dichloroethene	Ave	0.2575	0.2376		46.1	50.0	-7.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2586	0.2427		46.9	50.0	-6.2	50.0
Acetone	Qua		0.0863		115	160	-28.0	50.0
Methyl iodide	Ave	0.4591	0.4182		45.5	50.0	-8.9	50.0
Carbon disulfide	Ave	0.9758	0.8675		44.5	50.0	-11.1	50.0
Methyl acetate	Ave	0.2319	0.1947		210	250	-16.0	50.0
3-Chloro-1-propene	Ave	0.4653	0.4072		43.8	50.0	-12.5	50.0
Methylene Chloride	Lin2		0.3115		46.7	50.0	-6.6	50.0
t-Butyl alcohol	Lin2		0.0289		428	500	-14.4	50.0
Acrylonitrile	Ave	0.1076	0.0950		441	500	-11.7	50.0
Methyl tert-butyl ether	Lin2		0.7134		43.5	50.0	-13.1	50.0
trans-1,2-Dichloroethene	Ave	0.2838	0.2586		45.5	50.0	-8.9	50.0
Hexane	Lin1		1.511		39.6	50.0	-20.7	50.0
1,1-Dichloroethane	Ave	0.5653	0.4893	0.1000	43.3	50.0	-13.4	50.0
Vinyl acetate	Lin1		0.4886		90.4	100	-9.6	50.0
2-Butanone (MEK)	Ave	0.1482	0.1158		125	160	-21.9	50.0
cis-1,2-Dichloroethene	Ave	0.3065	0.2755		44.9	50.0	-10.1	50.0
2,2-Dichloropropane	Ave	0.4731	0.4013		42.4	50.0	-15.2	50.0
sec-Butyl Alcohol	Lin2		0.0186		582	750	-22.4	50.0
Bromochloromethane	Ave	0.1453	0.1383		47.6	50.0	-4.8	50.0
Tetrahydrofuran	Lin2		0.0780		80.7	100	-19.3	50.0
Chloroform	Ave	0.5697	0.5014		44.0	50.0	-12.0	50.0
1,1,1-Trichloroethane	Ave	0.4862	0.4358		44.8	50.0	-10.4	50.0
Cyclohexane	Lin1		0.4143		42.1	50.0	-15.9	50.0
Carbon tetrachloride	Ave	0.4592	0.4156		45.3	50.0	-9.5	50.0
1,1-Dichloropropene	Lin2		0.3372		43.4	50.0	-13.3	50.0
Benzene	Ave	1.110	1.034		46.6	50.0	-6.8	50.0
1,2-Dichloroethane	Ave	0.4601	0.4164		45.3	50.0	-9.5	50.0
Isobutyl alcohol	Ave	0.0136	0.0117		1070	1250	-14.5	50.0
Trichloroethene	Ave	0.2624	0.2312		44.1	50.0	-11.9	50.0
2-Pentanone	Lin		0.1894		67.9	100	-32.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVC 280-377645/40 Calibration Date: 06/16/2017 23:40

Instrument ID: VMS_G2 Calib Start Date: 06/12/2017 18:07

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/12/2017 20:35

Lab File ID: G2_1148.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Lin2		0.3799		45.7	50.0	-8.6	50.0
1,2-Dichloropropane	Ave	0.3000	0.2690		44.8	50.0	-10.3	50.0
1,4-Dioxane	Ave	0.0025	0.0025		1010	1000	0.7	50.0
Dibromomethane	Ave	0.1787	0.1712		47.9	50.0	-4.2	50.0
Bromodichloromethane	Ave	0.3792	0.3509		46.3	50.0	-7.5	50.0
2-Chloroethyl vinyl ether	Lin		0.1148		39.8	50.0	-20.4	50.0
cis-1,3-Dichloropropene	Lin1		1.531		41.3	50.0	-17.3	50.0
4-Methyl-2-pentanone (MIBK)	Lin1		0.2367		131	160	-18.4	50.0
Toluene	Ave	1.081	1.069		49.4	50.0	-1.2	50.0
trans-1,3-Dichloropropene	Lin1		0.3454		42.2	50.0	-15.6	50.0
Ethyl methacrylate	Lin1		1.198		42.1	50.0	-15.7	50.0
1,1,2-Trichloroethane	Ave	0.2242	0.2196		49.0	50.0	-2.1	50.0
Tetrachloroethene	Ave	1.040	0.9476		45.6	50.0	-8.9	50.0
1,3-Dichloropropane	Ave	1.730	1.644		47.5	50.0	-5.0	50.0
2-Hexanone	Qua		0.7162		111	160	-30.4	50.0
Dibromochloromethane	Ave	1.146	1.104		48.2	50.0	-3.6	50.0
1,2-Dibromoethane	Ave	0.9445	0.8902		47.1	50.0	-5.7	50.0
1-Chlorohexane	Lin1		1.303		20.7	25.0	-17.1	50.0
Chlorobenzene	Ave	3.446	3.093	0.3000	44.9	50.0	-10.2	50.0
1,1,1,2-Tetrachloroethane	Ave	1.288	1.185		46.0	50.0	-8.0	50.0
Ethylbenzene	Ave	1.631	1.559		47.8	50.0	-4.4	50.0
m&p-Xylene	Lin2		1.848		45.9	50.0	-8.1	50.0
o-Xylene	Lin1		1.777		44.3	50.0	-11.5	50.0
Styrene	Lin1		3.296		46.9	50.0	-6.1	50.0
Bromoform	Ave	0.7418	0.7333	0.1000	49.4	50.0	-1.2	50.0
Isopropylbenzene	Lin1		2.429		43.3	50.0	-13.5	50.0
Cyclohexanone	Qua		0.0399		1220	1600	-23.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7497	0.6600	0.3000	44.0	50.0	-12.0	50.0
Bromobenzene	Ave	0.7276	0.6980		48.0	50.0	-4.1	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1948		41.6	50.0	-16.8	50.0
1,2,3-Trichloropropane	Ave	0.2283	0.2074		45.4	50.0	-9.1	50.0
N-Propylbenzene	Lin1		0.7215		44.7	50.0	-10.7	50.0
2-Chlorotoluene	Lin1		0.6271		44.1	50.0	-11.9	50.0
1,3,5-Trimethylbenzene	Lin1		2.171		44.7	50.0	-10.5	50.0
4-Chlorotoluene	Lin2		0.6608		45.2	50.0	-9.7	50.0
tert-Butylbenzene	Lin1		1.892		44.0	50.0	-12.0	50.0
1,2,4-Trimethylbenzene	Lin1		2.298		45.6	50.0	-8.8	50.0
sec-Butylbenzene	Lin2		0.6122		44.8	50.0	-10.4	50.0
1,3-Dichlorobenzene	Ave	1.439	1.317		45.8	50.0	-8.5	50.0
4-Isopropyltoluene	Lin2		2.554		44.9	50.0	-10.2	50.0
1,4-Dichlorobenzene	Ave	1.620	1.360		42.0	50.0	-16.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVC 280-377645/40 Calibration Date: 06/16/2017 23:40

Instrument ID: VMS_G2 Calib Start Date: 06/12/2017 18:07

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/12/2017 20:35

Lab File ID: G2_1148.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Lin1		2.246		43.9	50.0	-12.3	50.0
1,2-Dichlorobenzene	Ave	1.447	1.330		46.0	50.0	-8.1	50.0
1,2-Dibromo-3-Chloropropane	Lin2		0.1290		40.7	50.0	-18.5	50.0
1,2,4-Trichlorobenzene	Lin1		0.8058		37.1	50.0	-25.8	50.0
Hexachlorobutadiene	Ave	0.6850	0.6111		44.6	50.0	-10.8	50.0
Naphthalene	Lin1		2.061		43.8	50.0	-12.4	50.0
1,2,3-Trichlorobenzene	Lin1		0.9319		44.0	50.0	-12.0	50.0
Dibromofluoromethane (Surr)	Lin2		0.2597		36.3	42.5	-14.6	50.0
1,2-Dichloroethane-d4 (Surr)	Lin2		0.3462		35.4	42.5	-16.7	50.0
Toluene-d8 (Surr)	Ave	4.276	4.148		41.2	42.5	-3.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.8156	0.7971		41.5	42.5	-2.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVC 280-377667/40 Calibration Date: 06/16/2017 23:40

Instrument ID: VMS_G2 Calib Start Date: 06/12/2017 18:07

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/12/2017 20:35

Lab File ID: G2_1148.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Qua		0.2192		28.5	40.0	-28.8	50.0
Chloromethane	Qua		0.2879	0.1000	24.8	40.0	-38.0	50.0
Vinyl chloride	Ave	0.5000	0.3311		26.5	40.0	-33.8	50.0
Bromomethane	Ave	0.4214	0.3123		29.6	40.0	-25.9	50.0
Chloroethane	Ave	0.3129	0.2525		32.3	40.0	-19.3	50.0
Dichlorofluoromethane	Ave	0.6428	0.5065		31.5	40.0	-21.2	50.0
Trichlorofluoromethane	Ave	0.5107	0.3805		29.8	40.0	-25.5	50.0
Ethyl ether	Lin1		0.2176		43.1	50.0	-13.9	50.0
Acrolein	Lin1		0.0457		479	500	-4.3	50.0
1,1-Dichloroethene	Ave	0.2575	0.2376		46.1	50.0	-7.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2586	0.2427		46.9	50.0	-6.2	50.0
Acetone	Qua		0.0863		115	160	-28.0	50.0
Methyl iodide	Ave	0.4591	0.4182		45.5	50.0	-8.9	50.0
Carbon disulfide	Ave	0.9758	0.8675		44.5	50.0	-11.1	50.0
Methyl acetate	Ave	0.2319	0.1947		210	250	-16.0	50.0
3-Chloro-1-propene	Ave	0.4653	0.4072		43.8	50.0	-12.5	50.0
Methylene Chloride	Lin2		0.3115		46.7	50.0	-6.6	50.0
t-Butyl alcohol	Lin2		0.0289		428	500	-14.4	50.0
Acrylonitrile	Ave	0.1076	0.0950		441	500	-11.7	50.0
Methyl tert-butyl ether	Lin2		0.7134		43.5	50.0	-13.1	50.0
trans-1,2-Dichloroethene	Ave	0.2838	0.2586		45.5	50.0	-8.9	50.0
Hexane	Lin1		1.511		39.6	50.0	-20.7	50.0
1,1-Dichloroethane	Ave	0.5653	0.4893	0.1000	43.3	50.0	-13.4	50.0
Vinyl acetate	Lin1		0.4886		90.4	100	-9.6	50.0
2-Butanone (MEK)	Ave	0.1482	0.1158		125	160	-21.9	50.0
cis-1,2-Dichloroethene	Ave	0.3065	0.2755		44.9	50.0	-10.1	50.0
2,2-Dichloropropane	Ave	0.4731	0.4013		42.4	50.0	-15.2	50.0
sec-Butyl Alcohol	Lin2		0.0186		582	750	-22.4	50.0
Bromochloromethane	Ave	0.1453	0.1383		47.6	50.0	-4.8	50.0
Tetrahydrofuran	Lin2		0.0780		80.7	100	-19.3	50.0
Chloroform	Ave	0.5697	0.5014		44.0	50.0	-12.0	50.0
1,1,1-Trichloroethane	Ave	0.4862	0.4358		44.8	50.0	-10.4	50.0
Cyclohexane	Lin1		0.4143		42.1	50.0	-15.9	50.0
Carbon tetrachloride	Ave	0.4592	0.4156		45.3	50.0	-9.5	50.0
1,1-Dichloropropene	Lin2		0.3372		43.4	50.0	-13.3	50.0
Benzene	Ave	1.110	1.034		46.6	50.0	-6.8	50.0
1,2-Dichloroethane	Ave	0.4601	0.4164		45.3	50.0	-9.5	50.0
Isobutyl alcohol	Ave	0.0136	0.0117		1070	1250	-14.5	50.0
Trichloroethene	Ave	0.2624	0.2312		44.1	50.0	-11.9	50.0
2-Pentanone	Lin		0.1894		67.9	100	-32.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVC 280-377667/40 Calibration Date: 06/16/2017 23:40

Instrument ID: VMS_G2 Calib Start Date: 06/12/2017 18:07

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/12/2017 20:35

Lab File ID: G2_1148.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Lin2		0.3799		45.7	50.0	-8.6	50.0
1,2-Dichloropropane	Ave	0.3000	0.2690		44.8	50.0	-10.3	50.0
1,4-Dioxane	Ave	0.0025	0.0025		1010	1000	0.7	50.0
Dibromomethane	Ave	0.1787	0.1712		47.9	50.0	-4.2	50.0
Bromodichloromethane	Ave	0.3792	0.3509		46.3	50.0	-7.5	50.0
2-Chloroethyl vinyl ether	Lin		0.1148		39.8	50.0	-20.4	50.0
cis-1,3-Dichloropropene	Lin1		1.531		41.3	50.0	-17.3	50.0
4-Methyl-2-pentanone (MIBK)	Lin1		0.2367		131	160	-18.4	50.0
Toluene	Ave	1.081	1.069		49.4	50.0	-1.2	50.0
trans-1,3-Dichloropropene	Lin1		0.3454		42.2	50.0	-15.6	50.0
Ethyl methacrylate	Lin1		1.198		42.1	50.0	-15.7	50.0
1,1,2-Trichloroethane	Ave	0.2242	0.2196		49.0	50.0	-2.1	50.0
Tetrachloroethene	Ave	1.040	0.9476		45.6	50.0	-8.9	50.0
1,3-Dichloropropane	Ave	1.730	1.644		47.5	50.0	-5.0	50.0
2-Hexanone	Qua		0.7162		111	160	-30.4	50.0
Dibromochloromethane	Ave	1.146	1.104		48.2	50.0	-3.6	50.0
1,2-Dibromoethane	Ave	0.9445	0.8902		47.1	50.0	-5.7	50.0
1-Chlorohexane	Lin1		1.303		20.7	25.0	-17.1	50.0
Chlorobenzene	Ave	3.446	3.093	0.3000	44.9	50.0	-10.2	50.0
1,1,1,2-Tetrachloroethane	Ave	1.288	1.185		46.0	50.0	-8.0	50.0
Ethylbenzene	Ave	1.631	1.559		47.8	50.0	-4.4	50.0
m&p-Xylene	Lin2		1.848		45.9	50.0	-8.1	50.0
o-Xylene	Lin1		1.777		44.3	50.0	-11.5	50.0
Styrene	Lin1		3.296		46.9	50.0	-6.1	50.0
Bromoform	Ave	0.7418	0.7333	0.1000	49.4	50.0	-1.2	50.0
Isopropylbenzene	Lin1		2.429		43.3	50.0	-13.5	50.0
Cyclohexanone	Qua		0.0399		1220	1600	-23.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7497	0.6600	0.3000	44.0	50.0	-12.0	50.0
Bromobenzene	Ave	0.7276	0.6980		48.0	50.0	-4.1	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.1948		41.6	50.0	-16.8	50.0
1,2,3-Trichloropropane	Ave	0.2283	0.2074		45.4	50.0	-9.1	50.0
N-Propylbenzene	Lin1		0.7215		44.7	50.0	-10.7	50.0
2-Chlorotoluene	Lin1		0.6271		44.1	50.0	-11.9	50.0
1,3,5-Trimethylbenzene	Lin1		2.171		44.7	50.0	-10.5	50.0
4-Chlorotoluene	Lin2		0.6608		45.2	50.0	-9.7	50.0
tert-Butylbenzene	Lin1		1.892		44.0	50.0	-12.0	50.0
1,2,4-Trimethylbenzene	Lin1		2.298		45.6	50.0	-8.8	50.0
sec-Butylbenzene	Lin2		0.6122		44.8	50.0	-10.4	50.0
1,3-Dichlorobenzene	Ave	1.439	1.317		45.8	50.0	-8.5	50.0
4-Isopropyltoluene	Lin2		2.554		44.9	50.0	-10.2	50.0
1,4-Dichlorobenzene	Ave	1.620	1.360		42.0	50.0	-16.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVC 280-377667/40 Calibration Date: 06/16/2017 23:40

Instrument ID: VMS_G2 Calib Start Date: 06/12/2017 18:07

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/12/2017 20:35

Lab File ID: G2_1148.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
n-Butylbenzene	Lin1		2.246		43.9	50.0	-12.3	50.0
1,2-Dichlorobenzene	Ave	1.447	1.330		46.0	50.0	-8.1	50.0
1,2-Dibromo-3-Chloropropane	Lin2		0.1290		40.7	50.0	-18.5	50.0
1,2,4-Trichlorobenzene	Lin1		0.8058		37.1	50.0	-25.8	50.0
Hexachlorobutadiene	Ave	0.6850	0.6111		44.6	50.0	-10.8	50.0
Naphthalene	Lin1		2.061		43.8	50.0	-12.4	50.0
1,2,3-Trichlorobenzene	Lin1		0.9319		44.0	50.0	-12.0	50.0
Dibromofluoromethane (Surr)	Lin2		0.2597		36.3	42.5	-14.6	50.0
1,2-Dichloroethane-d4 (Surr)	Lin2		0.3462		35.4	42.5	-16.7	50.0
Toluene-d8 (Surr)	Ave	4.276	4.148		41.2	42.5	-3.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.8156	0.7971		41.5	42.5	-2.3	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1148.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 16-Jun-2017 23:40:30 ALS Bottle#: 43 Worklist Smp#: 40
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVC
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:36:06 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: newcomer Date: 17-Jun-2017 00:30:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	92	386052	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	763642	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	86	181144	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	360904	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.821	6.821	0.000	93	168549	42.5	36.3	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.236	7.236	0.000	96	224714	42.5	35.4	
$ 10 Toluene-d8 (Surr)	98	9.338	9.338	0.000	94	638690	42.5	41.2	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	93	244533	42.5	41.5	
32 Dichlorodifluoromethane	85	1.691	1.691	0.000	99	133883	40.0	28.5	
34 Chloromethane	50	1.830	1.830	0.000	99	175896	40.0	24.8	
37 Vinyl chloride	62	1.956	1.956	0.000	98	202276	40.0	26.5	
22 Butadiene	54	1.984	1.984	0.000	91	176185	NC	NC	
39 Bromomethane	94	2.291	2.291	0.000	90	190779	40.0	29.6	
40 Chloroethane	64	2.403	2.403	0.000	100	154242	40.0	32.3	
41 Dichlorofluoromethane	67	2.654	2.654	0.000	97	309416	40.0	31.5	
43 Trichlorofluoromethane	101	2.696	2.696	0.000	98	232427	40.0	29.8	
45 Ethyl ether	59	3.003	3.003	0.000	93	166131	50.0	43.1	
48 Acrolein	56	3.171	3.171	0.000	98	348976	499.9	478.5	
53 1,1-Dichloroethene	96	3.297	3.297	0.000	95	181440	50.0	46.1	
52 1,1,2-Trichloro-1,2,2-trif	151	3.339	3.339	0.000	95	185343	50.0	46.9	
50 Acetone	43	3.353	3.353	0.000	98	210871	160.0	115.2	
55 Iodomethane	142	3.492	3.492	0.000	99	319340	50.0	45.5	
58 Carbon disulfide	76	3.576	3.576	0.000	100	662481	50.0	44.5	
56 Methyl acetate	43	3.786	3.786	0.000	98	743318	250.0	209.9	
57 3-Chloro-1-propene	41	3.800	3.800	0.000	87	310938	50.0	43.8	
60 Methylene Chloride	84	3.995	3.995	0.000	95	237882	50.0	46.7	
59 2-Methyl-2-propanol	59	4.191	4.191	0.000	93	220937	500.0	427.8	
61 Acrylonitrile	53	4.372	4.372	0.000	98	725366	500.0	441.4	
62 Methyl tert-butyl ether	73	4.428	4.428	0.000	98	544744	50.0	43.5	
63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	96	197439	50.0	45.5	
64 Hexane	57	4.917	4.917	0.000	94	273747	50.0	39.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 1,1-Dichloroethane	63	5.196	5.196	0.000	97	373618	50.0	43.3	
65 Vinyl acetate	43	5.238	5.238	0.000	98	746172	100.0	90.4	
74 cis-1,2-Dichloroethene	96	6.121	6.121	0.000	85	210368	50.0	44.9	
71 2-Butanone (MEK)	43	6.121	6.121	0.000	98	282989	160.0	125.0	
75 2,2-Dichloropropane	77	6.128	6.128	0.000	91	306449	50.0	42.4	
72 sec-Butyl Alcohol	45	6.450	6.450	0.000	92	213140	750.0	581.6	
77 Chlorobromomethane	128	6.457	6.457	0.000	97	105577	50.0	47.6	
79 Tetrahydrofuran	42	6.457	6.457	0.000	91	119074	100.0	80.7	
78 Chloroform	83	6.621	6.621	0.000	95	382876	50.0	44.0	
81 1,1,1-Trichloroethane	97	6.807	6.807	0.000	97	332797	50.0	44.8	
82 Cyclohexane	56	6.886	6.886	0.000	93	316357	50.0	42.1	
84 Carbon tetrachloride	117	7.000	7.000	0.000	95	317378	50.0	45.3	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	93	257476	50.0	43.4	
87 Benzene	78	7.250	7.250	0.000	98	789886	50.0	46.6	
85 1,2-Dichloroethane	62	7.336	7.336	0.000	99	317996	50.0	45.3	
80 Isobutyl alcohol	41	7.644	7.644	0.000	84	222559	1250.0	1069.0	
35 n-Heptane	43	7.644	7.644	0.000	93	314075	50.0	42.9	
89 Trichloroethene	95	8.044	8.044	0.000	97	176552	50.0	44.1	
90 2-Pentanone	43	8.259	8.259	0.000	97	289227	100.0	67.9	
93 Methylcyclohexane	55	8.287	8.287	0.000	93	290076	50.0	45.7	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	93	205379	50.0	44.8	
94 1,4-Dioxane	88	8.409	8.409	0.000	95	38637	1000.0	1006.9	
95 Dibromomethane	93	8.423	8.423	0.000	95	130763	50.0	47.9	
96 Dichlorobromomethane	83	8.623	8.623	0.000	98	267965	50.0	46.3	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	93	87651	50.0	39.8	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	93	277263	50.0	41.3	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	98	578506	160.0	130.6	
101 Toluene	91	9.410	9.410	0.000	98	816201	50.0	49.4	
103 trans-1,3-Dichloropropene	75	9.653	9.653	0.000	96	263723	50.0	42.2	
102 Ethyl methacrylate	69	9.717	9.717	0.000	90	216978	50.0	42.1	
104 1,1,2-Trichloroethane	97	9.846	9.846	0.000	95	167684	50.0	49.0	
107 Tetrachloroethene	164	9.917	9.917	0.000	97	171646	50.0	45.6	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	94	297760	50.0	47.5	
105 2-Hexanone	43	10.060	10.060	0.000	98	415143	160.0	111.4	
108 Chlorodibromomethane	129	10.211	10.211	0.000	90	200054	50.0	48.2	
110 Ethylene Dibromide	107	10.318	10.318	0.000	98	161249	50.0	47.1	
111 1-Chlorohexane	91	10.775	10.775	0.000	93	118059	25.0	20.7	
112 Chlorobenzene	112	10.783	10.783	0.000	93	560304	50.0	44.9	
113 1,1,1,2-Tetrachloroethane	131	10.876	10.876	0.000	92	214666	50.0	46.0	
114 Ethylbenzene	106	10.883	10.883	0.000	98	282366	50.0	47.8	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	334841	50.0	45.9	
117 o-Xylene	106	11.362	11.362	0.000	97	321904	50.0	44.3	
116 Styrene	104	11.383	11.383	0.000	99	597102	50.0	46.9	
118 Bromoform	173	11.555	11.555	0.000	96	132826	50.0	49.4	
119 Isopropylbenzene	105	11.705	11.705	0.000	97	876675	50.0	43.3	
121 Cyclohexanone	55	11.791	11.791	0.000	95	231482	1600.0	1222.0	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	96	238186	50.0	44.0	
125 Bromobenzene	156	11.998	11.998	0.000	93	251903	50.0	48.0	
123 trans-1,4-Dichloro-2-buten	53	12.034	12.034	0.000	88	70314	50.0	41.6	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	86	74856	50.0	45.4	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	260403	50.0	44.7	
128 2-Chlorotoluene	126	12.170	12.170	0.000	96	226320	50.0	44.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	94	783456	50.0	44.7	
129 4-Chlorotoluene	126	12.277	12.277	0.000	98	238487	50.0	45.2	
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	682738	50.0	44.0	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	829370	50.0	45.6	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	220945	50.0	44.8	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	98	475173	50.0	45.8	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	921593	50.0	44.9	
136 1,4-Dichlorobenzene	146	12.835	12.835	0.000	94	490899	50.0	42.0	
137 n-Butylbenzene	91	13.063	13.063	0.000	97	810526	50.0	43.9	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	98	479948	50.0	46.0	
139 1,2-Dibromo-3-Chloropropan	157	13.578	13.578	0.000	81	46549	50.0	40.7	
141 1,2,4-Trichlorobenzene	180	14.115	14.115	0.000	94	290801	50.0	37.1	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	97	220543	50.0	44.6	
143 Naphthalene	128	14.300	14.300	0.000	97	743705	50.0	43.8	
144 1,2,3-Trichlorobenzene	180	14.458	14.458	0.000	95	336342	50.0	44.0	
S 151 1,2-Dichloroethene, Total	96				0		100.0	90.5	
S 145 Trihalomethanes, Total	1				0		200.0	187.9	
S 149 1,2-Dichloroethene, Total	1				0		100.0	90.5	
S 150 Xylenes, Total	106				0		100.0	90.2	
S 148 1,3-Dichloropropene, Total	1				0		100.0	83.5	
S 146 Xylenes, Total (URS)	1				0		100.0	90.2	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MV-2cleve+AVA_00025	Amount Added:	6.25	Units: uL		
MV-Main A_00030	Amount Added:	6.25	Units: uL		
MV-Gas/Ket A_00060	Amount Added:	5.00	Units: uL		
MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent	
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent	

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1148.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 16-Jun-2017 23:40:30 ALS Bottle#: 43 Worklist Smp#: 40
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVC
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub75

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:36:06 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: newcomer Date: 17-Jun-2017 00:30:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	92	386052	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	763642	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	86	181144	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	360904	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.821	6.821	0.000	93	168549	42.5	36.3	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.236	7.236	0.000	96	224714	42.5	35.4	
$ 10 Toluene-d8 (Surr)	98	9.338	9.338	0.000	94	638690	42.5	41.2	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	93	244533	42.5	41.5	
32 Dichlorodifluoromethane	85	1.691	1.691	0.000	99	133883	40.0	28.5	
34 Chloromethane	50	1.830	1.830	0.000	99	175896	40.0	24.8	
37 Vinyl chloride	62	1.956	1.956	0.000	98	202276	40.0	26.5	
22 Butadiene	54	1.984	1.984	0.000	91	176185	NC	NC	
39 Bromomethane	94	2.291	2.291	0.000	90	190779	40.0	29.6	
40 Chloroethane	64	2.403	2.403	0.000	100	154242	40.0	32.3	
41 Dichlorofluoromethane	67	2.654	2.654	0.000	97	309416	40.0	31.5	
43 Trichlorofluoromethane	101	2.696	2.696	0.000	98	232427	40.0	29.8	
45 Ethyl ether	59	3.003	3.003	0.000	93	166131	50.0	43.1	
48 Acrolein	56	3.171	3.171	0.000	98	348976	499.9	478.5	
53 1,1-Dichloroethene	96	3.297	3.297	0.000	95	181440	50.0	46.1	
52 1,1,2-Trichloro-1,2,2-trif	151	3.339	3.339	0.000	95	185343	50.0	46.9	
50 Acetone	43	3.353	3.353	0.000	98	210871	160.0	115.2	
55 Iodomethane	142	3.492	3.492	0.000	99	319340	50.0	45.5	
58 Carbon disulfide	76	3.576	3.576	0.000	100	662481	50.0	44.5	
56 Methyl acetate	43	3.786	3.786	0.000	98	743318	250.0	209.9	
57 3-Chloro-1-propene	41	3.800	3.800	0.000	87	310938	50.0	43.8	
60 Methylene Chloride	84	3.995	3.995	0.000	95	237882	50.0	46.7	
59 2-Methyl-2-propanol	59	4.191	4.191	0.000	93	220937	500.0	427.8	
61 Acrylonitrile	53	4.372	4.372	0.000	98	725366	500.0	441.4	
62 Methyl tert-butyl ether	73	4.428	4.428	0.000	98	544744	50.0	43.5	
63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	96	197439	50.0	45.5	
64 Hexane	57	4.917	4.917	0.000	94	273747	50.0	39.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
67 1,1-Dichloroethane	63	5.196	5.196	0.000	97	373618	50.0	43.3	
65 Vinyl acetate	43	5.238	5.238	0.000	98	746172	100.0	90.4	
74 cis-1,2-Dichloroethene	96	6.121	6.121	0.000	85	210368	50.0	44.9	
71 2-Butanone (MEK)	43	6.121	6.121	0.000	98	282989	160.0	125.0	
75 2,2-Dichloropropane	77	6.128	6.128	0.000	91	306449	50.0	42.4	
72 sec-Butyl Alcohol	45	6.450	6.450	0.000	92	213140	750.0	581.6	
77 Chlorobromomethane	128	6.457	6.457	0.000	97	105577	50.0	47.6	
79 Tetrahydrofuran	42	6.457	6.457	0.000	91	119074	100.0	80.7	
78 Chloroform	83	6.621	6.621	0.000	95	382876	50.0	44.0	
81 1,1,1-Trichloroethane	97	6.807	6.807	0.000	97	332797	50.0	44.8	
82 Cyclohexane	56	6.886	6.886	0.000	93	316357	50.0	42.1	
84 Carbon tetrachloride	117	7.000	7.000	0.000	95	317378	50.0	45.3	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	93	257476	50.0	43.4	
87 Benzene	78	7.250	7.250	0.000	98	789886	50.0	46.6	
85 1,2-Dichloroethane	62	7.336	7.336	0.000	99	317996	50.0	45.3	
80 Isobutyl alcohol	41	7.644	7.644	0.000	84	222559	1250.0	1069.0	
35 n-Heptane	43	7.644	7.644	0.000	93	314075	50.0	42.9	
89 Trichloroethene	95	8.044	8.044	0.000	97	176552	50.0	44.1	
90 2-Pentanone	43	8.259	8.259	0.000	97	289227	100.0	67.9	
93 Methylcyclohexane	55	8.287	8.287	0.000	93	290076	50.0	45.7	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	93	205379	50.0	44.8	
94 1,4-Dioxane	88	8.409	8.409	0.000	95	38637	1000.0	1006.9	
95 Dibromomethane	93	8.423	8.423	0.000	95	130763	50.0	47.9	
96 Dichlorobromomethane	83	8.623	8.623	0.000	98	267965	50.0	46.3	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	93	87651	50.0	39.8	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	93	277263	50.0	41.3	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	98	578506	160.0	130.6	
101 Toluene	91	9.410	9.410	0.000	98	816201	50.0	49.4	
103 trans-1,3-Dichloropropene	75	9.653	9.653	0.000	96	263723	50.0	42.2	
102 Ethyl methacrylate	69	9.717	9.717	0.000	90	216978	50.0	42.1	
104 1,1,2-Trichloroethane	97	9.846	9.846	0.000	95	167684	50.0	49.0	
107 Tetrachloroethene	164	9.917	9.917	0.000	97	171646	50.0	45.6	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	94	297760	50.0	47.5	
105 2-Hexanone	43	10.060	10.060	0.000	98	415143	160.0	111.4	
108 Chlorodibromomethane	129	10.211	10.211	0.000	90	200054	50.0	48.2	
110 Ethylene Dibromide	107	10.318	10.318	0.000	98	161249	50.0	47.1	
111 1-Chlorohexane	91	10.775	10.775	0.000	93	118059	25.0	20.7	
112 Chlorobenzene	112	10.783	10.783	0.000	93	560304	50.0	44.9	
113 1,1,1,2-Tetrachloroethane	131	10.876	10.876	0.000	92	214666	50.0	46.0	
114 Ethylbenzene	106	10.883	10.883	0.000	98	282366	50.0	47.8	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	334841	50.0	45.9	
117 o-Xylene	106	11.362	11.362	0.000	97	321904	50.0	44.3	
116 Styrene	104	11.383	11.383	0.000	99	597102	50.0	46.9	
118 Bromoform	173	11.555	11.555	0.000	96	132826	50.0	49.4	
119 Isopropylbenzene	105	11.705	11.705	0.000	97	876675	50.0	43.3	
121 Cyclohexanone	55	11.791	11.791	0.000	95	231482	1600.0	1222.0	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	96	238186	50.0	44.0	
125 Bromobenzene	156	11.998	11.998	0.000	93	251903	50.0	48.0	
123 trans-1,4-Dichloro-2-buten	53	12.034	12.034	0.000	88	70314	50.0	41.6	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	86	74856	50.0	45.4	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	260403	50.0	44.7	
128 2-Chlorotoluene	126	12.170	12.170	0.000	96	226320	50.0	44.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	94	783456	50.0	44.7	
129 4-Chlorotoluene	126	12.277	12.277	0.000	98	238487	50.0	45.2	
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	682738	50.0	44.0	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	829370	50.0	45.6	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	220945	50.0	44.8	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	98	475173	50.0	45.8	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	921593	50.0	44.9	
136 1,4-Dichlorobenzene	146	12.835	12.835	0.000	94	490899	50.0	42.0	
137 n-Butylbenzene	91	13.063	13.063	0.000	97	810526	50.0	43.9	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	98	479948	50.0	46.0	
139 1,2-Dibromo-3-Chloropropan	157	13.578	13.578	0.000	81	46549	50.0	40.7	
141 1,2,4-Trichlorobenzene	180	14.115	14.115	0.000	94	290801	50.0	37.1	
142 Hexachlorobutadiene	225	14.200	14.200	0.000	97	220543	50.0	44.6	
143 Naphthalene	128	14.300	14.300	0.000	97	743705	50.0	43.8	
144 1,2,3-Trichlorobenzene	180	14.458	14.458	0.000	95	336342	50.0	44.0	
S 151 1,2-Dichloroethene, Total	96				0		100.0	90.5	
S 145 Trihalomethanes, Total	1				0		200.0	187.9	
S 149 1,2-Dichloroethene, Total	1				0		100.0	90.5	
S 150 Xylenes, Total	106				0		100.0	90.2	
S 148 1,3-Dichloropropene, Total	1				0		100.0	83.5	
S 146 Xylenes, Total (URS)	1				0		100.0	90.2	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MV-2cleve+AVA_00025	Amount Added:	6.25	Units: uL		
MV-Main A_00030	Amount Added:	6.25	Units: uL		
MV-Gas/Ket A_00060	Amount Added:	5.00	Units: uL		
MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent	
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent	

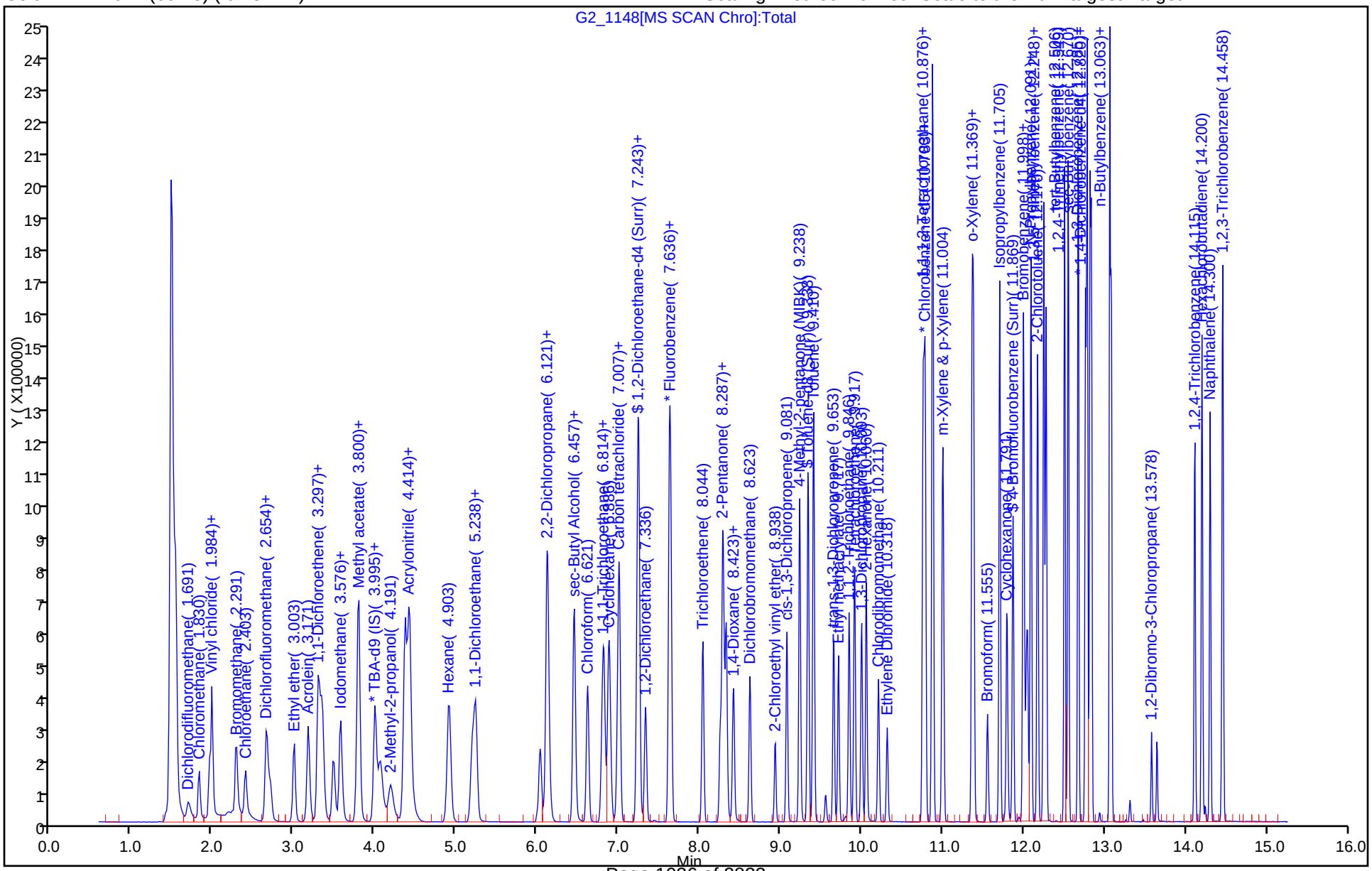
Report Date: 18-Jun-2017 12:36:07 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1148.D

Injection Date:	16-Jun-2017 23:40:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	CCVC			Worklist Smp#:	40
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



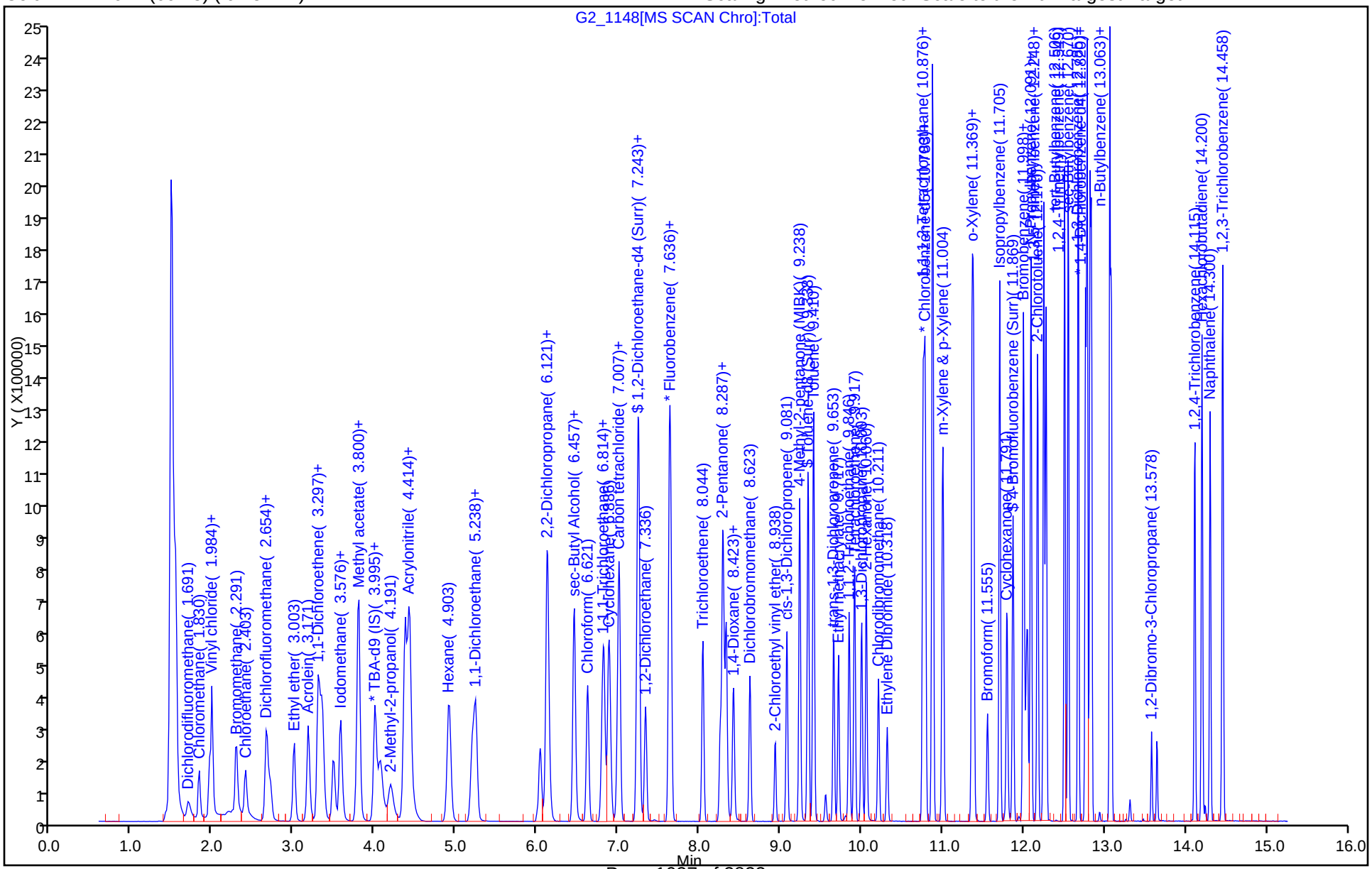
Report Date: 18-Jun-2017 12:36:07 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1148.D

Injection Date:	16-Jun-2017 23:40:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	CCVC			Worklist Smp#:	40
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVC 280-377645/41 Calibration Date: 06/17/2017 00:00

Instrument ID: VMS_G2 Calib Start Date: 04/26/2017 21:24

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/26/2017 23:47

Lab File ID: G2_1149.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.1507		3560	3000	18.6	50.0
Isopropyl alcohol	Lin2		0.7693		544	500	8.8	50.0
Acetonitrile	Ave	0.0340	0.0426		940	750	25.4	50.0
Isopropyl ether	Lin1		0.2312		63.8	75.0	-15.0	50.0
2-Chloro-1,3-butadiene	Lin1		0.5165		49.0	50.0	-2.0	50.0
Tert-butyl ethyl ether	Lin1		0.8057		72.7	75.0	-3.0	50.0
Ethyl acetate	Ave	0.2191	0.2654		121	100	21.1	50.0
Propionitrile	Ave	0.0366	0.0424		869	750	15.8	50.0
Methacrylonitrile	Ave	0.1405	0.1848		657	500	31.5	50.0
Tert-amyl methyl ether	Lin1		0.7695		72.9	75.0	-2.8	50.0
n-Butanol	Lin1		0.3177		1170	1250	-6.4	50.0
Methyl methacrylate	Lin1		0.0740		92.0	100	-8.0	50.0
2-Nitropropane	Lin1		0.0758		98.5	100	-1.5	50.0
cis-1,4-Dichloro-2-butene	Lin1		0.2576		102	100	1.8	50.0
1,2,3-Trimethylbenzene	Lin2		3.370		53.7	50.0	7.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVC 280-377667/41 Calibration Date: 06/17/2017 00:00

Instrument ID: VMS_G2 Calib Start Date: 04/26/2017 21:24

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 04/26/2017 23:47

Lab File ID: G2_1149.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.1507		3560	3000	18.6	50.0
Isopropyl alcohol	Lin2		0.7693		544	500	8.8	50.0
Acetonitrile	Ave	0.0340	0.0426		940	750	25.4	50.0
Isopropyl ether	Lin1		0.2312		63.8	75.0	-15.0	50.0
2-Chloro-1,3-butadiene	Lin1		0.5165		49.0	50.0	-2.0	50.0
Tert-butyl ethyl ether	Lin1		0.8057		72.7	75.0	-3.0	50.0
Ethyl acetate	Ave	0.2191	0.2654		121	100	21.1	50.0
Propionitrile	Ave	0.0366	0.0424		869	750	15.8	50.0
Methacrylonitrile	Ave	0.1405	0.1848		657	500	31.5	50.0
Tert-amyl methyl ether	Lin1		0.7695		72.9	75.0	-2.8	50.0
n-Butanol	Lin1		0.3177		1170	1250	-6.4	50.0
Methyl methacrylate	Lin1		0.0740		92.0	100	-8.0	50.0
2-Nitropropane	Lin1		0.0758		98.5	100	-1.5	50.0
cis-1,4-Dichloro-2-butene	Lin1		0.2576		102	100	1.8	50.0
1,2,3-Trimethylbenzene	Lin2		3.370		53.7	50.0	7.5	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1149.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 17-Jun-2017 00:00:30 ALS Bottle#: 44 Worklist Smp#: 41
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVC
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub99

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:36:10 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	93	411919	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	760416	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	174124	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	262779	50.0	50.0	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.277	2.277	0.000	100	2454415	5000.0	13438	
42 Ethanol	45	2.892	2.892	0.000	98	186222	3000.0	3557.8	
47 Propene oxide	58	3.073	3.073	0.000	96	5078402	5000.0	5462.7	
51 Isopropyl alcohol	45	3.562	3.562	0.000	94	158446	500.0	544.1	
54 Acetonitrile	41	3.758	3.758	0.000	99	485909	750.0	940.3	
66 Isopropyl ether	87	5.308	5.308	0.000	93	263743	75.0	63.8	
68 2-Chloro-1,3-butadiene	53	5.322	5.322	0.000	94	392728	50.0	49.0	
69 Tert-butyl ethyl ether	59	5.895	5.895	0.000	96	918965	75.0	72.7	
70 Ethyl acetate	43	6.214	6.214	0.000	99	403659	100.0	121.1	
73 Propionitrile	54	6.221	6.221	0.000	98	483009	750.0	868.6	
76 Methacrylonitrile	41	6.428	6.428	0.000	93	1405114	500.0	657.4	
86 Tert-amyl methyl ether	73	7.451	7.451	0.000	96	877716	75.0	72.9	
88 n-Butanol	56	8.001	8.001	0.000	92	163587	1250.0	1170.2	
16 Ethyl acrylate	55	8.173	8.173	0.000	100	231769	NC	NC	
91 Methyl methacrylate	100	8.423	8.423	0.000	92	112597	100.0	92.0	
97 2-Nitropropane	41	8.859	8.859	0.000	99	115304	100.0	98.5	
120 cis-1,4-Dichloro-2-butene	53	11.769	11.769	0.000	90	135378	100.0	101.8	
135 1,2,3-Trimethylbenzene	105	12.856	12.856	0.000	98	885545	50.0	53.7	
140 1,3,5-Trichlorobenzene	180	13.693	13.693	0.000	96	431468	50.0	56.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00024	Amount Added:	6.25	Units: uL
MV-568718-D_00003	Amount Added:	1.00	Units: uL

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1149.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 17-Jun-2017 00:00:30 ALS Bottle#: 44 Worklist Smp#: 41
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVC
Operator ID: DUKESA Instrument ID: VMS_G2
Sublist: chrom-SO_VMSG2_8260*sub99

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:36:10 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	93	411919	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	760416	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	174124	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	262779	50.0	50.0	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.277	2.277	0.000	100	2454415	5000.0	13438	
42 Ethanol	45	2.892	2.892	0.000	98	186222	3000.0	3557.8	
47 Propene oxide	58	3.073	3.073	0.000	96	5078402	5000.0	5462.7	
51 Isopropyl alcohol	45	3.562	3.562	0.000	94	158446	500.0	544.1	
54 Acetonitrile	41	3.758	3.758	0.000	99	485909	750.0	940.3	
66 Isopropyl ether	87	5.308	5.308	0.000	93	263743	75.0	63.8	
68 2-Chloro-1,3-butadiene	53	5.322	5.322	0.000	94	392728	50.0	49.0	
69 Tert-butyl ethyl ether	59	5.895	5.895	0.000	96	918965	75.0	72.7	
70 Ethyl acetate	43	6.214	6.214	0.000	99	403659	100.0	121.1	
73 Propionitrile	54	6.221	6.221	0.000	98	483009	750.0	868.6	
76 Methacrylonitrile	41	6.428	6.428	0.000	93	1405114	500.0	657.4	
86 Tert-amyl methyl ether	73	7.451	7.451	0.000	96	877716	75.0	72.9	
88 n-Butanol	56	8.001	8.001	0.000	92	163587	1250.0	1170.2	
16 Ethyl acrylate	55	8.173	8.173	0.000	100	231769	NC	NC	
91 Methyl methacrylate	100	8.423	8.423	0.000	92	112597	100.0	92.0	
97 2-Nitropropane	41	8.859	8.859	0.000	99	115304	100.0	98.5	
120 cis-1,4-Dichloro-2-butene	53	11.769	11.769	0.000	90	135378	100.0	101.8	
135 1,2,3-Trimethylbenzene	105	12.856	12.856	0.000	98	885545	50.0	53.7	
140 1,3,5-Trichlorobenzene	180	13.693	13.693	0.000	96	431468	50.0	56.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

MV-Supp A_00024	Amount Added:	6.25	Units: uL
MV-568718-D_00003	Amount Added:	1.00	Units: uL

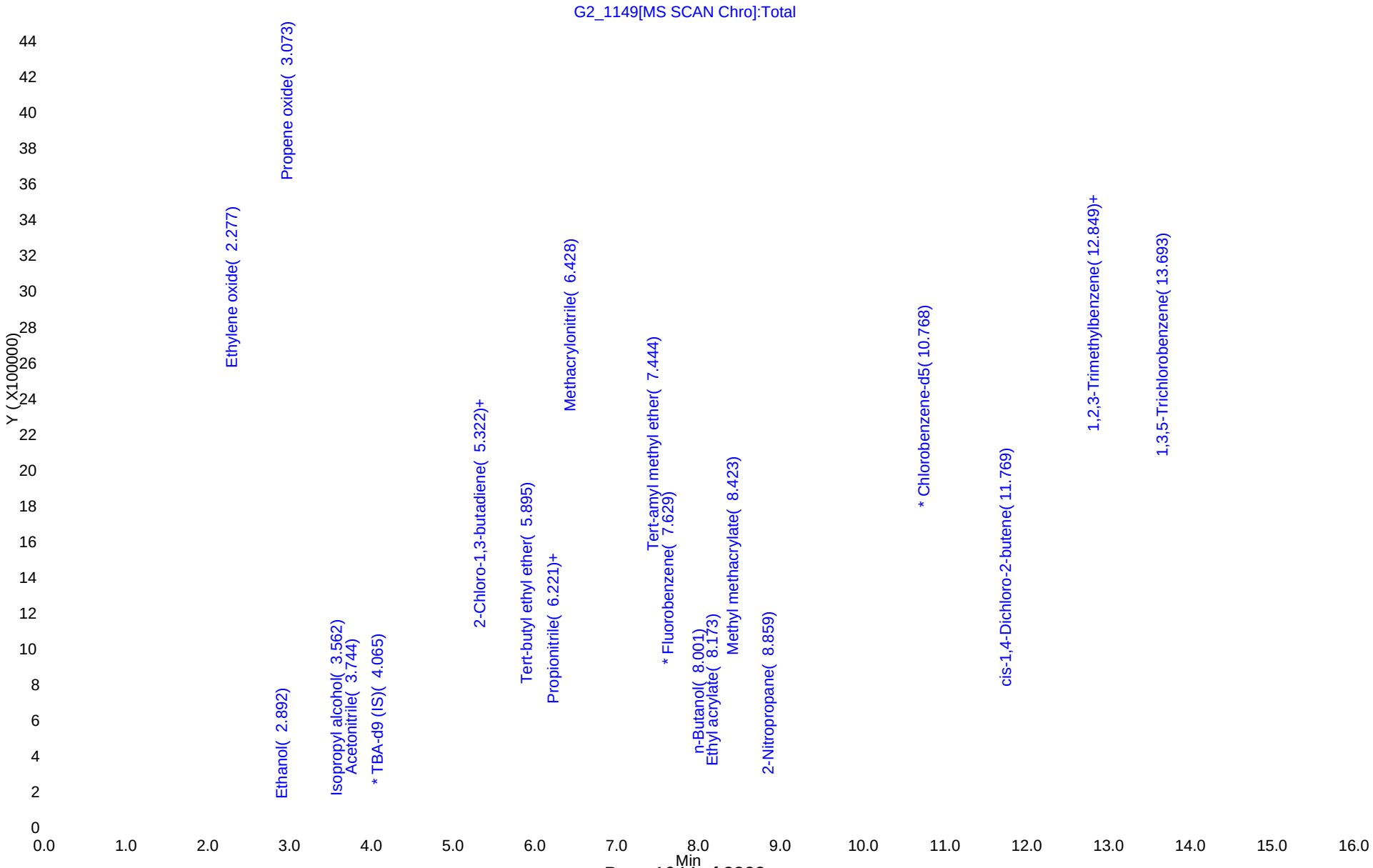
Report Date: 18-Jun-2017 12:36:11 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1149.D

Injection Date:	17-Jun-2017 00:00:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	CCVC			Worklist Smp#:	41
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	44
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



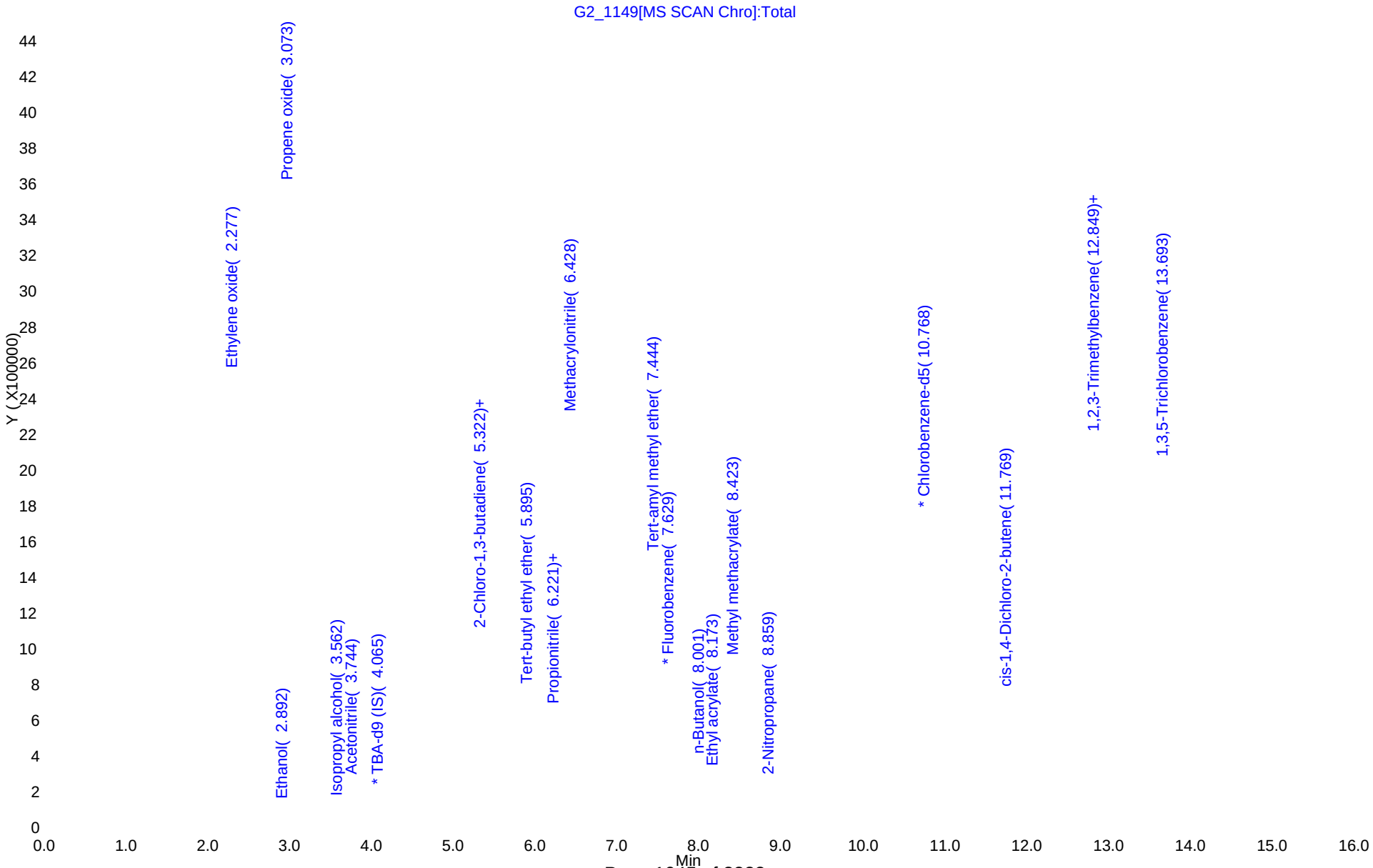
Report Date: 18-Jun-2017 12:36:10 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1149.D

Injection Date:	17-Jun-2017 00:00:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	CCVC			Worklist Smp#:	41
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	44
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-377804/34 Calibration Date: 06/19/2017 13:51

Instrument ID: VMS_P Calib Start Date: 06/19/2017 11:16

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/19/2017 13:13

Lab File ID: P0036.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin1		0.1968		10.9	10.0	8.8	20.0
Chloromethane	Ave	0.1575	0.1729	0.1000	11.0	10.0	9.8	20.0
Vinyl chloride	Ave	0.1545	0.1565		10.1	10.0	1.3	20.0
Bromomethane	Ave	0.1113	0.1037		9.31	10.0	-6.9	20.0
Chloroethane	Ave	0.0993	0.0955		9.62	10.0	-3.8	20.0
Dichlorofluoromethane	Ave	0.3722	0.3254		8.74	10.0	-12.6	20.0
Trichlorofluoromethane	Ave	0.3312	0.3244		9.80	10.0	-2.0	20.0
Acrolein	Ave	0.0124	0.0134		108	100	7.8	20.0
Acetone	Ave	0.0295	0.0298		40.5	40.0	1.2	20.0
Methylene Chloride	Lin2		0.2422		9.32	10.0	-6.8	20.0
Vinyl acetate	Lin2		0.1891		16.7	20.0	-16.3	20.0
2-Butanone (MEK)	Ave	0.0483	0.0522		43.3	40.0	8.1	20.0
2-Chloroethyl vinyl ether	Lin2		0.0430		9.26	10.0	-7.4	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.0875	0.0995		45.5	40.0	13.6	20.0
2-Hexanone	Lin2		0.3152		39.7	40.0	-0.8	20.0
Cyclohexanone	Lin1		0.0135		381	400	-4.8	20.0
1,2,3-Trichlorobenzene	Ave	0.6068	0.5911		9.74	10.0	-2.6	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0036.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 19-Jun-2017 13:51:30 ALS Bottle#: 18 Worklist Smp#: 34
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist:

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 10:29:19 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: seifertj Date: 19-Jun-2017 15:18:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.651	5.644	0.007	0	175605	250.0	250.0	
* 1 Fluorobenzene	96	7.610	7.603	0.007	98	1804919	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.869	9.870	-0.001	89	348770	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.693	11.693	0.000	97	466270	12.5	12.5	
23 Dichlorodifluoromethane	85	3.887	3.876	0.011	99	284147	10.0	10.9	
26 Chloromethane	50	4.110	4.099	0.011	98	249586	10.0	11.0	
27 Vinyl chloride	62	4.250	4.253	-0.003	98	225908	10.0	10.1	
29 Bromomethane	94	4.627	4.616	0.011	94	149687	10.0	9.31	
30 Chloroethane	64	4.683	4.686	-0.003	98	137863	10.0	9.62	
31 Dichlorofluoromethane	67	4.850	4.854	-0.004	99	469883	10.0	8.74	
32 Trichlorofluoromethane	101	4.962	4.951	0.011	98	468457	10.0	9.80	M
35 Ethyl ether	59		5.105				ND	ND	
39 Acrolein	56	5.269	5.259	0.010	98	193350	100.0	107.8	
40 1,1,2-Trichloro-1,2,2-trif	151		5.356				ND	ND	
41 Acetone	43	5.367	5.370	-0.003	99	172245	40.0	40.5	
43 1,1-Dichloroethene	96		5.412				ND	ND	
44 Iodomethane	142		5.580				ND	ND	
45 Methyl acetate	43		5.601				ND	ND	
47 3-Chloro-1-propene	41		5.651				ND	ND	
48 Carbon disulfide	76		5.694				ND	ND	M
49 2-Methyl-2-propanol	59		5.716				ND	ND	
50 Methylene Chloride	84	5.758	5.759	0.000	99	349656	10.0	9.32	
52 Acrylonitrile	53		5.916				ND	ND	
51 Methyl tert-butyl ether	73		5.916				ND	ND	
53 trans-1,2-Dichloroethene	96		5.966				ND	ND	
54 Hexane	57		6.116				ND	ND	
55 Vinyl acetate	43	6.230	6.230	0.000	97	546014	20.0	16.7	
57 1,1-Dichloroethane	63		6.288				ND	ND	
61 2-Butanone (MEK)	43	6.680	6.681	-0.001	100	301479	40.0	43.3	
63 cis-1,2-Dichloroethene	96		6.724				ND	ND	
62 sec-Butyl Alcohol	45		6.724				ND	ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
64 2,2-Dichloropropane	77		6.745				ND	ND	
67 Chlorobromomethane	128		6.924				ND	ND	
68 Chloroform	83		6.931				ND	ND	
69 Tetrahydrofuran	42		6.953				ND	ND	
70 Isobutyl alcohol	41		7.138				ND	ND	
71 1,1,1-Trichloroethane	97		7.146				ND	ND	
72 Cyclohexane	56		7.210				ND	ND	
73 1,1-Dichloropropene	75		7.246				ND	ND	
74 Carbon tetrachloride	117		7.281				ND	ND	
76 1,2-Dichloroethane	62		7.417				ND	ND	
77 Benzene	78		7.432				ND	ND	
14 n-Heptane	43		7.489				ND	ND	
79 Trichloroethene	95		7.896				ND	ND	
80 2-Pentanone	43		7.946				ND	ND	
82 Methylcyclohexane	55		8.075				ND	ND	
83 1,2-Dichloropropane	63		8.082				ND	ND	
84 1,4-Dioxane	88		8.147				ND	ND	
85 Dibromomethane	93		8.190				ND	ND	
86 Dichlorobromomethane	83		8.261				ND	ND	
87 2-Chloroethyl vinyl ether	63	8.404	8.404	0.000	92	62103	10.0	9.26	
89 cis-1,3-Dichloropropene	75		8.576				ND	ND	
90 4-Methyl-2-pentanone (MIBK	43	8.632	8.633	-0.001	99	574456	40.0	45.5	
91 Toluene	91		8.847				ND	ND	
92 Ethyl methacrylate	69		8.933				ND	ND	
93 trans-1,3-Dichloropropene	75		8.955				ND	ND	
94 1,1,2-Trichloroethane	97		9.112				ND	ND	
95 2-Hexanone	43	9.226	9.219	0.007	97	351743	40.0	39.7	
96 1,3-Dichloropropane	76		9.248				ND	ND	
97 Tetrachloroethene	164		9.255				ND	ND	
98 Chlorodibromomethane	129		9.441				ND	ND	
100 Ethylene Dibromide	107		9.562				ND	ND	
101 1-Chlorohexane	91		9.777				ND	ND	
102 Chlorobenzene	112		9.891				ND	ND	
103 Ethylbenzene	106		9.927				ND	ND	
104 1,1,1,2-Tetrachloroethane	131		9.927				ND	ND	
105 m-Xylene & p-Xylene	106		9.999				ND	ND	
107 o-Xylene	106		10.320				ND	ND	
106 Styrene	104		10.320				ND	ND	
108 Bromoform	173		10.535				ND	ND	
109 Isopropylbenzene	105		10.578				ND	ND	
111 Cyclohexanone	55	10.720	10.721	-0.001	96	150574	400.0	381.0	
112 1,1,2,2-Tetrachloroethane	83		10.792				ND	ND	
113 trans-1,4-Dichloro-2-buten	53		10.828				ND	ND	
114 1,2,3-Trichloropropane	110		10.864				ND	ND	
115 N-Propylbenzene	120		10.892				ND	ND	
116 Bromobenzene	156		10.899				ND	ND	
117 1,3,5-Trimethylbenzene	105		11.007				ND	ND	
118 2-Chlorotoluene	126		11.021				ND	ND	
119 4-Chlorotoluene	126		11.100				ND	ND	
120 tert-Butylbenzene	119		11.300				ND	ND	
121 1,2,4-Trimethylbenzene	105		11.328				ND	ND	
122 sec-Butylbenzene	134		11.479				ND	ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 4-Isopropyltoluene	119		11.572				ND	ND	
124 1,3-Dichlorobenzene	146		11.650				ND	ND	
126 1,4-Dichlorobenzene	146		11.722				ND	ND	
127 n-Butylbenzene	91		11.936				ND	ND	
128 1,2-Dichlorobenzene	146		12.079				ND	ND	
129 1,2-Dibromo-3-Chloropropan	157		12.837				ND	ND	
130 1,2,4-Trichlorobenzene	180		13.781				ND	ND	
131 Hexachlorobutadiene	225		13.917				ND	ND	
132 Naphthalene	128		14.160				ND	ND	
133 1,2,3-Trichlorobenzene	180	14.481	14.482	-0.001	93	220501	10.0	9.74	
S 140 1,2-Dichloroethene, Total	96				0		20.0	0	
S 135 Xylenes, Total (URS)	1				0		20.0	0	
S 138 1,2-Dichloroethene, Total	1				0		10.0	0	
S 137 1,3-Dichloropropene, Total	1				0		20.0	0	
S 139 Xylenes, Total	106				0		20.0	0	
S 134 Trihalomethanes, Total	1				0		40.0	0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

MV-SS 2-Cleve_00035	Amount Added:	5.00	Units: uL	
MV-Main B_00018	Amount Added:	5.00	Units: uL	
MV-Gas/Ket B_00035	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent

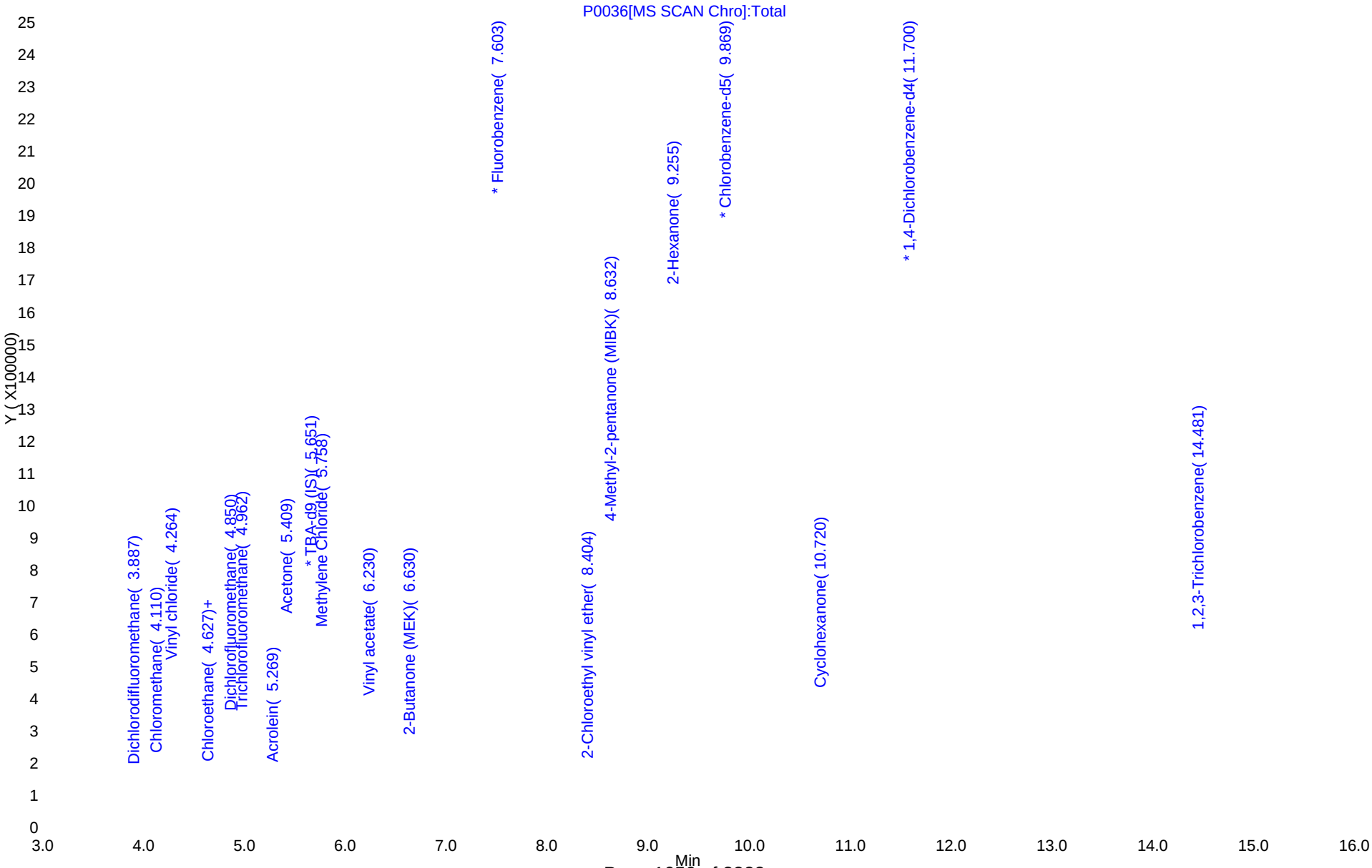
Report Date: 20-Jun-2017 10:29:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0036.D

Injection Date:	19-Jun-2017 13:51:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	ICV			Worklist Smp#:	34
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Denver

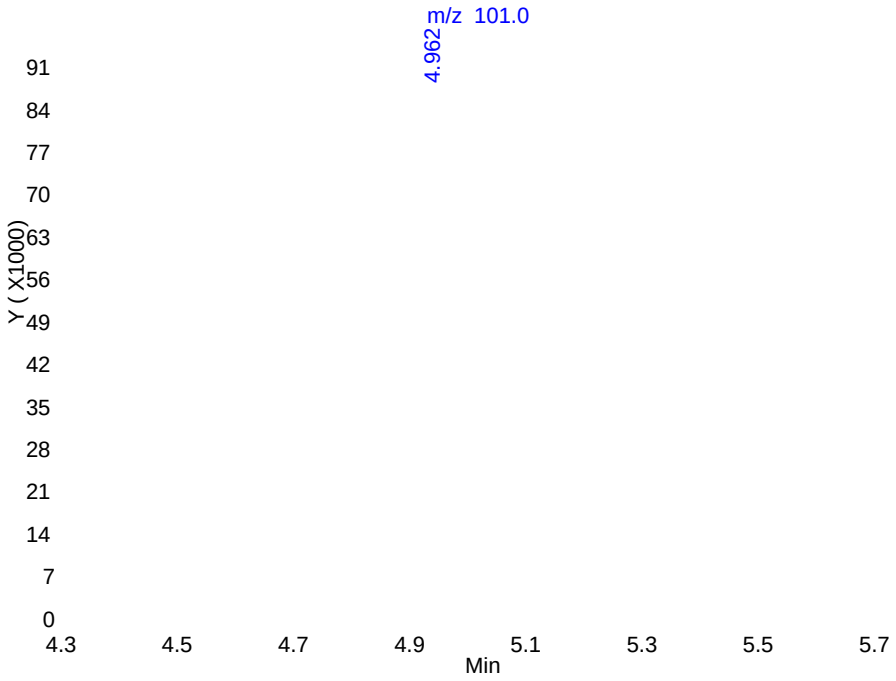
Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0036.D
Injection Date: 19-Jun-2017 13:51:30 Instrument ID: VMS_P
Lims ID: ICV
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 18 Worklist Smp#: 34
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MLE_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

32 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

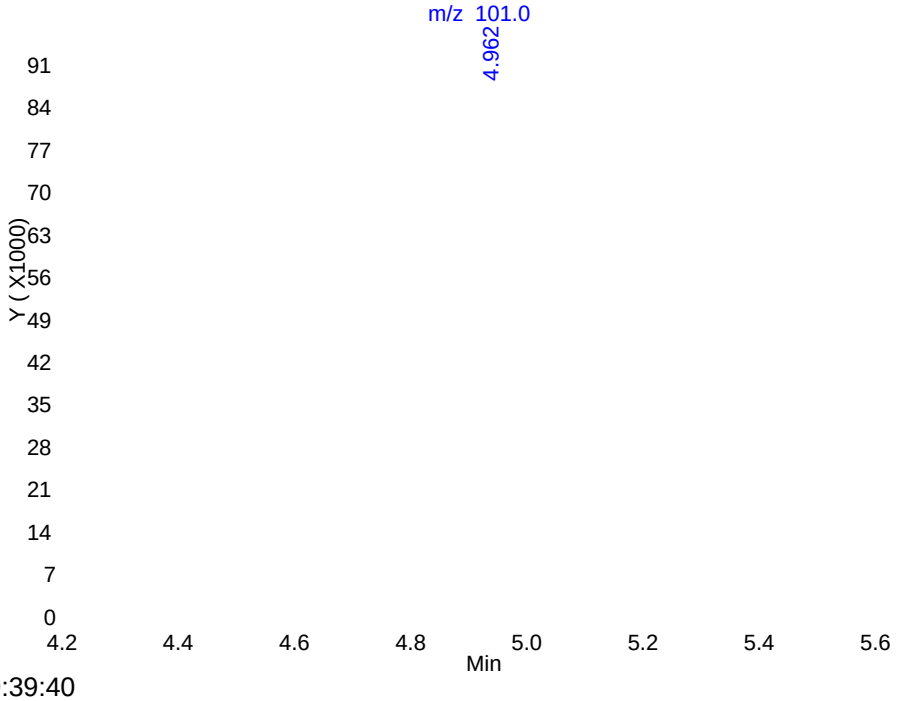
Processing Integration Results

RT: 4.96
Area: 443237
Amount: 9.268211
Amount Units: ug/l



Manual Integration Results

RT: 4.96
Area: 468457
Amount: 9.795569
Amount Units: ug/l



Reviewer: seifertj, 20-Jun-2017 09:39:40
Audit Action: Manually Integrated Audit Reason: Split Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-377804/35 Calibration Date: 06/19/2017 14:50

Instrument ID: VMS_P Calib Start Date: 06/19/2017 11:16

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/19/2017 13:13

Lab File ID: P0039.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethyl ether	Ave	0.1538	0.1678		10.9	10.0	9.1	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1625	0.1687		10.4	10.0	3.8	20.0
1,1-Dichloroethene	Ave	0.2456	0.2632		10.7	10.0	7.2	20.0
Methyl iodide	Ave	0.3272	0.3604		11.0	10.0	10.1	20.0
Methyl acetate	Ave	0.0633	0.0706		55.8	50.0	11.5	20.0
3-Chloro-1-propene	Ave	0.4440	0.4949		11.1	10.0	11.5	20.0
Carbon disulfide	Ave	0.8046	0.9360		11.6	10.0	16.3	20.0
Acrylonitrile	Ave	0.0282	0.0335		119	100	18.8	20.0
Methyl tert-butyl ether	Ave	0.3375	0.3929		11.6	10.0	16.4	20.0
trans-1,2-Dichloroethene	Ave	0.2445	0.2721		11.1	10.0	11.3	20.0
Hexane	Ave	2.266	2.327		10.3	10.0	2.7	20.0
1,1-Dichloroethane	Ave	0.4739	0.5007	0.1000	10.6	10.0	5.7	20.0
cis-1,2-Dichloroethene	Ave	0.2606	0.2859		11.0	10.0	9.7	20.0
sec-Butyl Alcohol	Ave	1.003	1.007		301	300	0.4	20.0
2,2-Dichloropropane	Ave	0.2507	0.2522		10.1	10.0	0.6	20.0
Bromochloromethane	Ave	0.0798	0.0902		11.3	10.0	13.0	20.0
Chloroform	Ave	0.4228	0.4479		10.6	10.0	5.9	20.0
Tetrahydrofuran	Ave	0.0242	0.0279		23.1	20.0	15.6	20.0
Isobutyl alcohol	Ave	0.4204	0.4303		256	250	2.3	20.0
1,1,1-Trichloroethane	Lin1		0.2927		9.32	10.0	-6.8	20.0
Cyclohexane	Ave	0.4713	0.4992		10.6	10.0	5.9	20.0
1,1-Dichloropropene	Ave	0.3499	0.3789		10.8	10.0	8.3	20.0
Carbon tetrachloride	Lin1		0.2348		9.06	10.0	-9.4	20.0
1,2-Dichloroethane	Ave	0.2505	0.2555		10.2	10.0	2.0	20.0
Benzene	Ave	1.016	1.112		10.9	10.0	9.4	20.0
Trichloroethene	Ave	0.2512	0.2667		10.6	10.0	6.2	20.0
2-Pentanone	Lin		0.1004		35.8	40.0	-10.6	20.0
Methylcyclohexane	Ave	0.3886	0.4008		10.3	10.0	3.2	20.0
1,2-Dichloropropane	Ave	0.2444	0.2751		11.3	10.0	12.6	20.0
1,4-Dioxane	Ave	0.0008	0.0009		230	200	15.1	20.0
Dibromomethane	Ave	0.0840	0.0902		10.7	10.0	7.3	20.0
Bromodichloromethane	Lin1		0.2546		10.1	10.0	0.8	20.0
cis-1,3-Dichloropropene	Lin2		1.591		10.5	10.0	5.2	20.0
Toluene	Ave	1.018	1.147		11.3	10.0	12.6	20.0
Ethyl methacrylate	Lin1		0.7338		10.2	10.0	1.8	20.0
trans-1,3-Dichloropropene	Lin1		0.2105		9.67	10.0	-3.3	20.0
1,1,2-Trichloroethane	Ave	0.1111	0.1305		11.7	10.0	17.4	20.0
1,3-Dichloropropane	Ave	1.170	1.268		10.8	10.0	8.3	20.0
Tetrachloroethene	Ave	0.9245	0.9679		10.5	10.0	4.7	20.0
Dibromochloromethane	Lin1		0.5825		9.39	10.0	-6.1	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-377804/35 Calibration Date: 06/19/2017 14:50

Instrument ID: VMS_P Calib Start Date: 06/19/2017 11:16

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/19/2017 13:13

Lab File ID: P0039.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromoethane	Ave	0.4888	0.5658		11.6	10.0	15.8	20.0
1-Chlorohexane	Ave	1.684	1.917		11.4	10.0	13.9	20.0
Chlorobenzene	Ave	3.050	3.317	0.3000	10.9	10.0	8.7	20.0
1,1,1,2-Tetrachloroethane	Lin2		0.8743		10.7	10.0	7.5	20.0
Ethylbenzene	Ave	1.836	2.041		11.1	10.0	11.1	20.0
m&p-Xylene	Ave	2.197	2.463		11.2	10.0	12.1	20.0
o-Xylene	Ave	2.018	2.356		11.7	10.0	16.7	20.0
Styrene	Lin2		3.442		11.4	10.0	14.5	20.0
Bromoform	Lin1		0.2152	0.1000	8.84	10.0	-11.6	20.0
Isopropylbenzene	Ave	4.018	4.484		11.2	10.0	11.6	20.0
1,1,2,2-Tetrachloroethane	Ave	0.4122	0.4664	0.3000	11.3	10.0	13.1	20.0
trans-1,4-Dichloro-2-butene	Lin1		0.1075		9.96	10.0	-0.4	20.0
1,2,3-Trichloropropane	Ave	0.1167	0.1297		11.1	10.0	11.1	20.0
N-Propylbenzene	Ave	1.071	1.241		11.6	10.0	15.9	20.0
Bromobenzene	Ave	0.7527	0.8518		11.3	10.0	13.2	20.0
1,3,5-Trimethylbenzene	Ave	3.197	3.690		11.5	10.0	15.4	20.0
2-Chlorotoluene	Ave	0.8870	1.007		11.3	10.0	13.5	20.0
4-Chlorotoluene	Ave	0.8590	1.018		11.8	10.0	18.5	20.0
tert-Butylbenzene	Ave	3.081	3.494		11.3	10.0	13.4	20.0
1,2,4-Trimethylbenzene	Ave	3.240	3.722		11.5	10.0	14.9	20.0
sec-Butylbenzene	Ave	0.8206	0.9406		11.5	10.0	14.6	20.0
4-Isopropyltoluene	Ave	3.358	3.844		11.4	10.0	14.5	20.0
1,3-Dichlorobenzene	Ave	1.546	1.758		11.4	10.0	13.7	20.0
1,4-Dichlorobenzene	Ave	1.554	1.773		11.4	10.0	14.1	20.0
n-Butylbenzene	Ave	3.485	4.089		11.7	10.0	17.3	20.0
1,2-Dichlorobenzene	Ave	1.278	1.455		11.4	10.0	13.9	20.0
1,2-Dibromo-3-Chloropropane	Lin1		0.0442		10.2	10.0	2.2	20.0
1,2,4-Trichlorobenzene	Ave	0.7941	0.9436		11.9	10.0	18.8	20.0
Hexachlorobutadiene	Ave	0.5060	0.5714		11.3	10.0	12.9	20.0
Naphthalene	Ave	1.097	1.297		11.8	10.0	18.3	20.0
1,2,3-Trichlorobenzene	Ave	0.6068			0.800	10.0		

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0039.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 19-Jun-2017 14:50:30 ALS Bottle#: 21 Worklist Smp#: 35
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ICV RR
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist:

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 12:39:30 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: seifertj Date: 19-Jun-2017 15:16:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.650	5.644	0.006	0	174415	250.0	250.0	
* 1 Fluorobenzene	96	7.609	7.603	0.006	98	1781605	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.869	9.870	-0.001	89	342839	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.692	11.700	-0.008	97	469597	12.5	12.5	
35 Ethyl ether	59	5.103	5.105	-0.002	95	239221	10.0	10.9	
40 1,1,2-Trichloro-1,2,2-trif	151	5.355	5.356	-0.001	97	240473	10.0	10.4	
43 1,1-Dichloroethene	96	5.411	5.412	-0.001	97	375172	10.0	10.7	
44 Iodomethane	142	5.579	5.580	-0.001	99	513608	10.0	11.0	
45 Methyl acetate	43	5.600	5.601	-0.001	98	503279	50.0	55.8	
47 3-Chloro-1-propene	41	5.650	5.651	-0.001	84	705389	10.0	11.1	
48 Carbon disulfide	76	5.700	5.694	0.006	99	1334054	10.0	11.6	
49 2-Methyl-2-propanol	59	5.715	5.716	-0.001	94	93241	100.0	102.3	
50 Methylene Chloride	84		5.759				ND	ND	
52 Acrylonitrile	53	5.915	5.916	-0.001	87	477590	100.0	118.8	
51 Methyl tert-butyl ether	73	5.915	5.916	-0.001	97	560000	10.0	11.6	
53 trans-1,2-Dichloroethene	96	5.965	5.966	-0.001	95	387825	10.0	11.1	
54 Hexane	57	6.115	6.116	-0.001	96	638156	10.0	10.3	
57 1,1-Dichloroethane	63	6.287	6.288	-0.001	96	713615	10.0	10.6	
62 sec-Butyl Alcohol	45	6.723	6.724	-0.001	52	210709	300.0	301.2	
63 cis-1,2-Dichloroethene	96	6.723	6.724	-0.001	83	407450	10.0	11.0	
64 2,2-Dichloropropane	77	6.751	6.745	0.006	88	359447	10.0	10.1	
67 Chlorobromomethane	128	6.923	6.924	-0.001	92	128562	10.0	11.3	
68 Chloroform	83	6.930	6.931	-0.001	93	638383	10.0	10.6	
69 Tetrahydrofuran	42	6.959	6.953	0.006	90	79647	20.0	23.1	
70 Isobutyl alcohol	41	7.138	7.138	0.000	47	75042	250.0	255.9	
71 1,1,1-Trichloroethane	97	7.145	7.146	-0.001	98	417157	10.0	9.32	
72 Cyclohexane	56	7.209	7.210	-0.001	93	711556	10.0	10.6	
73 1,1-Dichloropropene	75	7.245	7.246	-0.001	95	540046	10.0	10.8	
74 Carbon tetrachloride	117	7.281	7.281	0.000	95	334667	10.0	9.06	
76 1,2-Dichloroethane	62	7.416	7.417	-0.001	97	364123	10.0	10.2	
77 Benzene	78	7.431	7.432	-0.001	98	1585209	10.0	10.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
14 n-Heptane	43	7.488	7.489	-0.001	95	736217	10.0	10.3	
79 Trichloroethene	95	7.895	7.896	-0.001	96	380129	10.0	10.6	
80 2-Pentanone	43	7.946	7.946	0.000	98	572539	40.0	35.8	
82 Methylcyclohexane	55	8.074	8.075	-0.001	94	571288	10.0	10.3	
83 1,2-Dichloropropane	63	8.089	8.082	0.007	95	392055	10.0	11.3	
84 1,4-Dioxane	88	8.146	8.147	-0.001	97	26187	200.0	230.2	
85 Dibromomethane	93	8.196	8.190	0.006	91	128486	10.0	10.7	
86 Dichlorobromomethane	83	8.260	8.261	-0.001	99	362807	10.0	10.1	
89 cis-1,3-Dichloropropene	75	8.575	8.576	-0.001	92	436285	10.0	10.5	
91 Toluene	91	8.846	8.847	-0.001	97	1634953	10.0	11.3	
92 Ethyl methacrylate	69	8.932	8.933	-0.001	91	201251	10.0	10.2	
93 trans-1,3-Dichloropropene	75	8.954	8.955	-0.001	97	299989	10.0	9.67	
94 1,1,2-Trichloroethane	97	9.111	9.112	-0.001	92	186013	10.0	11.7	
96 1,3-Dichloropropane	76	9.247	9.248	-0.001	96	347699	10.0	10.8	
97 Tetrachloroethene	164	9.254	9.255	-0.001	93	265472	10.0	10.5	
98 Chlorodibromomethane	129	9.440	9.441	-0.001	90	159757	10.0	9.39	
100 Ethylene Dibromide	107	9.561	9.562	-0.001	98	155177	10.0	11.6	
101 1-Chlorohexane	91	9.776	9.777	-0.001	92	525872	10.0	11.4	
102 Chlorobenzene	112	9.890	9.891	-0.001	95	909652	10.0	10.9	
103 Ethylbenzene	106	9.926	9.927	-0.001	98	559652	10.0	11.1	
104 1,1,1,2-Tetrachloroethane	131	9.926	9.927	-0.001	94	239790	10.0	10.7	
105 m-Xylene & p-Xylene	106	9.998	9.999	-0.001	0	675529	10.0	11.2	
107 o-Xylene	106	10.319	10.320	-0.001	88	646114	10.0	11.7	
106 Styrene	104	10.319	10.320	-0.001	84	944129	10.0	11.4	
108 Bromoform	173	10.534	10.535	-0.001	93	59033	10.0	8.84	
109 Isopropylbenzene	105	10.577	10.578	-0.001	97	1684448	10.0	11.2	
112 1,1,2,2-Tetrachloroethane	83	10.791	10.792	-0.001	95	175216	10.0	11.3	
113 trans-1,4-Dichloro-2-buten	53	10.827	10.828	-0.001	77	40380	10.0	9.96	
114 1,2,3-Trichloropropane	110	10.863	10.864	-0.001	87	48708	10.0	11.1	
115 N-Propylbenzene	120	10.891	10.892	-0.001	98	466344	10.0	11.6	
116 Bromobenzene	156	10.906	10.899	0.007	94	320002	10.0	11.3	
117 1,3,5-Trimethylbenzene	105	11.006	11.007	-0.001	95	1386182	10.0	11.5	
118 2-Chlorotoluene	126	11.020	11.021	-0.001	94	378146	10.0	11.3	
119 4-Chlorotoluene	126	11.099	11.100	-0.001	99	382324	10.0	11.8	
120 tert-Butylbenzene	119	11.299	11.300	-0.001	92	1312483	10.0	11.3	
121 1,2,4-Trimethylbenzene	105	11.328	11.328	0.000	99	1398117	10.0	11.5	
122 sec-Butylbenzene	134	11.478	11.479	-0.001	95	353352	10.0	11.5	
123 4-Isopropyltoluene	119	11.571	11.572	-0.001	97	1444193	10.0	11.4	
124 1,3-Dichlorobenzene	146	11.649	11.650	-0.001	96	660262	10.0	11.4	
126 1,4-Dichlorobenzene	146	11.721	11.722	-0.001	92	666145	10.0	11.4	
127 n-Butylbenzene	91	11.935	11.936	-0.001	99	1536156	10.0	11.7	
128 1,2-Dichlorobenzene	146	12.078	12.079	-0.001	95	546729	10.0	11.4	
129 1,2-Dibromo-3-Chloropropan	157	12.836	12.837	-0.001	70	16590	10.0	10.2	
130 1,2,4-Trichlorobenzene	180	13.787	13.781	0.006	93	354499	10.0	11.9	
131 Hexachlorobutadiene	225	13.923	13.917	0.006	94	214663	10.0	11.3	
132 Naphthalene	128	14.159	14.160	-0.001	98	487247	10.0	11.8	
133 1,2,3-Trichlorobenzene	180		14.482				ND	ND	
S 140 1,2-Dichloroethene, Total	96				0		20.0	22.1	
S 135 Xylenes, Total (URS)	1				0		20.0	22.9	
S 138 1,2-Dichloroethene, Total	1				0		10.0	22.1	
S 137 1,3-Dichloropropene, Total	1				0		20.0	20.2	
S 139 Xylenes, Total	106				0		20.0	22.9	

Report Date: 20-Jun-2017 12:42:40 Chrom Revision: 2.2 25-Apr-2017 13:27:22
Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0039.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 134 Trihalomethanes, Total	1				0		40.0	38.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Main B_00018	Amount Added:	5.00	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent

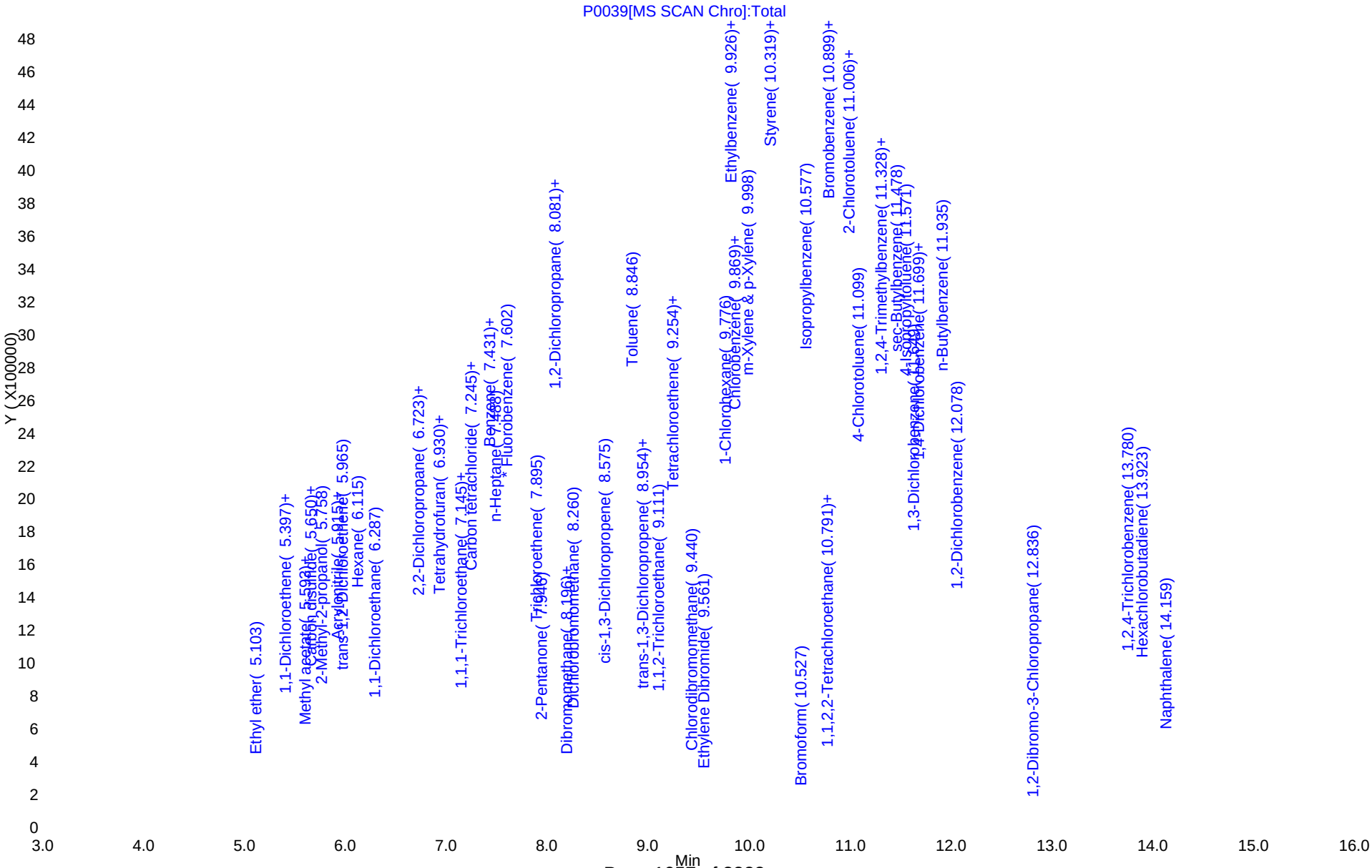
Report Date: 20-Jun-2017 12:42:40 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0039.D

Injection Date:	19-Jun-2017 14:50:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	ICV			Worklist Smp#:	35
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-377804/44 Calibration Date: 06/19/2017 17:05

Instrument ID: VMS_P Calib Start Date: 06/19/2017 14:11

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/19/2017 16:26

Lab File ID: P0046.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.2434		621	600	3.5	20.0
Isopropyl alcohol	Lin2		1.093		102	100	1.8	20.0
Acetonitrile	Ave	0.0111	0.0108		97.4	100	-2.6	20.0
Isopropyl ether	Ave	0.1761	0.1952		11.1	10.0	10.8	20.0
2-Chloro-1,3-butadiene	Ave	0.4170	0.4495		10.8	10.0	7.8	20.0
Tert-butyl ethyl ether	Ave	0.5304	0.5560		10.5	10.0	4.8	20.0
Ethyl acetate	Ave	0.0968	0.0884		18.3	20.0	-8.7	20.0
Propionitrile	Ave	0.0105	0.0111		106	100	5.8	20.0
Methacrylonitrile	Ave	0.0623	0.0682		110	100	9.5	20.0
Tert-amyl methyl ether	Ave	0.3636	0.3873		10.7	10.0	6.5	20.0
n-Butanol	Lin2		0.2729		246	250	-1.7	20.0
Methyl methacrylate	Lin2		0.0226		20.2	20.0	0.8	20.0
2-Nitropropane	Lin		0.0060		14.8	20.0	-25.9*	20.0
cis-1,4-Dichloro-2-butene	Lin2		0.1103		20.7	20.0	3.4	20.0
1,2,3-Trimethylbenzene	Ave	3.069	3.587		11.7	10.0	16.9	20.0
Dibromofluoromethane (Surr)	Ave	0.2011	0.2012		10.0	10.0	0.0	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2142	0.2110		9.85	10.0	-1.5	20.0
Toluene-d8 (Surr)	Ave	4.597	4.973		10.8	10.0	8.2	20.0
4-Bromofluorobenzene (Surr)	Ave	1.138	1.171		10.3	10.0	2.9	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0046.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 19-Jun-2017 17:05:30 ALS Bottle#: 28 Worklist Smp#: 44
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist:

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 12:43:24 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: seifertj Date: 20-Jun-2017 08:00:24

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.644	5.644	0.000	0	176685	250.0	250.0	
* 1 Fluorobenzene	96	7.603	7.603	0.000	98	1806390	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.870	9.870	0.000	90	340712	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.700	11.700	0.000	97	451433	12.5	12.5	
$ 5 Dibromofluoromethane (Surr	111	7.067	7.067	0.000	92	290686	10.0	10.0	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.360	7.360	0.000	0	304911	10.0	9.85	
$ 7 Toluene-d8 (Surr)	98	8.797	8.797	0.000	94	1355410	10.0	10.8	
$ 8 4-Bromofluorobenzene (Surr	95	10.735	10.735	0.000	83	422868	10.0	10.3	
28 Ethylene oxide	43	4.558	4.558	0.000	100	425638	1000.0	843.2	
33 Ethanol	45	4.977	4.977	0.000	99	103211	600.0	621.3	
38 Propene oxide	58	5.200	5.200	0.000	96	2868081	1000.0	1149.0	
42 Isopropyl alcohol	45	5.382	5.382	0.000	94	77239	100.0	101.8	
46 Acetonitrile	41	5.623	5.623	0.000	99	155730	100.0	97.4	
56 Isopropyl ether	87	6.231	6.231	0.000	95	282068	10.0	11.1	
58 2-Chloro-1,3-butadiene	53	6.352	6.352	0.000	94	649594	10.0	10.8	
59 Tert-butyl ethyl ether	59	6.509	6.509	0.000	97	803409	10.0	10.5	
60 Ethyl acetate	43	6.660	6.660	0.000	99	255419	20.0	18.3	
65 Propionitrile	54	6.745	6.745	0.000	99	160501	100.0	105.8	
66 Methacrylonitrile	41	6.867	6.867	0.000	95	985827	100.0	109.5	
75 Tert-amyl methyl ether	73	7.410	7.410	0.000	92	559666	10.0	10.7	
78 n-Butanol	56	7.646	7.646	0.000	90	48210	250.0	245.7	
81 Methyl methacrylate	100	8.032	8.032	0.000	94	65315	20.0	20.2	
88 2-Nitropropane	41	8.411	8.411	0.000	98	17276	20.0	14.8	
99 Tetrahydrothiophene	60		9.475				ND	ND	
110 cis-1,4-Dichloro-2-butene	53	10.621	10.621	0.000	0	79687	20.0	20.7	
125 1,2,3-Trimethylbenzene	105	11.722	11.722	0.000	99	1295417	10.0	11.7	
16 1,3,5-Trichlorobenzene	180	13.038	13.038	0.000	95	431934	10.0	11.0	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

MV-Supp B_00016	Amount Added:	5.00	Units: uL	
MV-ARCH SS A_00082	Amount Added:	0.80	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent

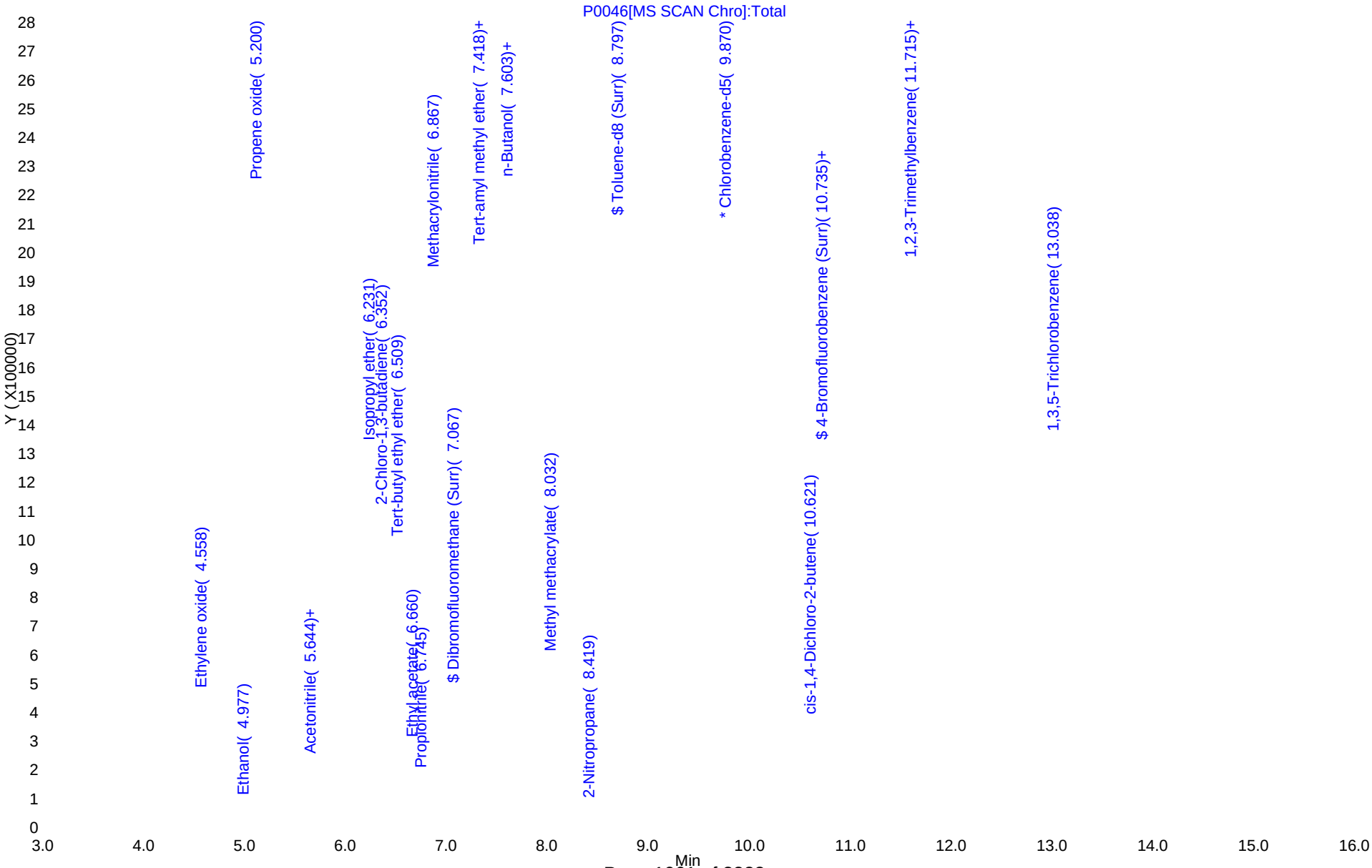
Report Date: 20-Jun-2017 12:43:24 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0046.D

Injection Date:	19-Jun-2017 17:05:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	ICV			Worklist Smp#:	44
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVC 280-377804/55 Calibration Date: 06/19/2017 19:41

Instrument ID: VMS_P Calib Start Date: 06/19/2017 11:16

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/19/2017 13:13

Lab File ID: P0054.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin1		0.1484		8.29	10.0	-17.1	50.0
Chloromethane	Ave	0.1575	0.1452	0.1000	9.22	10.0	-7.8	50.0
Vinyl chloride	Ave	0.1545	0.1311		8.48	10.0	-15.2	50.0
Bromomethane	Ave	0.1113	0.0979		8.79	10.0	-12.1	50.0
Chloroethane	Ave	0.0993	0.0857		8.63	10.0	-13.7	50.0
Dichlorofluoromethane	Ave	0.3722	0.3024		8.12	10.0	-18.8	50.0
Trichlorofluoromethane	Ave	0.3312	0.2690		8.12	10.0	-18.8	50.0
Ethyl ether	Ave	0.1538	0.1585		10.3	10.0	3.1	50.0
Acrolein	Ave	0.0124	0.0146		117	100	17.1	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1625	0.1546		9.51	10.0	-4.9	50.0
Acetone	Ave	0.0295	0.0320		43.5	40.0	8.6	50.0
1,1-Dichloroethene	Ave	0.2456	0.2498		10.2	10.0	1.7	50.0
Methyl iodide	Ave	0.3272	0.3534		10.8	10.0	8.0	50.0
Methyl acetate	Ave	0.0633	0.0698		55.1	50.0	10.3	50.0
3-Chloro-1-propene	Ave	0.4440	0.4758		10.7	10.0	7.2	50.0
Carbon disulfide	Ave	0.8046	0.6544		8.13	10.0	-18.7	50.0
Methylene Chloride	Lin2		0.3522		14.2	10.0	42.4	50.0
Acrylonitrile	Ave	0.0282	0.0322		114	100	14.3	50.0
Methyl tert-butyl ether	Ave	0.3375	0.3662		10.9	10.0	8.5	50.0
trans-1,2-Dichloroethene	Ave	0.2445	0.2552		10.4	10.0	4.4	50.0
Hexane	Ave	2.266	2.064		9.11	10.0	-8.9	50.0
Vinyl acetate	Lin2		0.2134		18.8	20.0	-5.9	50.0
1,1-Dichloroethane	Ave	0.4739	0.4883	0.1000	10.3	10.0	3.0	50.0
2-Butanone (MEK)	Ave	0.0483	0.0523		43.4	40.0	8.4	50.0
sec-Butyl Alcohol	Ave	1.003	0.9470		142	150	-5.6	50.0
cis-1,2-Dichloroethene	Ave	0.2606	0.2747		10.5	10.0	5.4	50.0
2,2-Dichloropropane	Ave	0.2507	0.2293		9.15	10.0	-8.5	50.0
Bromochloromethane	Ave	0.0798	0.0855		10.7	10.0	7.1	50.0
Chloroform	Ave	0.4228	0.4297		10.2	10.0	1.6	50.0
Tetrahydrofuran	Ave	0.0242	0.0289		23.9	20.0	19.4	50.0
1,1,1-Trichloroethane	Lin1		0.2765		8.82	10.0	-11.8	50.0
Isobutyl alcohol	Ave	0.4204	0.4327		257	250	2.9	50.0
Cyclohexane	Ave	0.4713	0.4550		9.65	10.0	-3.5	50.0
1,1-Dichloropropene	Ave	0.3499	0.3471		9.92	10.0	-0.8	50.0
Carbon tetrachloride	Lin1		0.2229		8.63	10.0	-13.7	50.0
1,2-Dichloroethane	Ave	0.2505	0.2410		9.62	10.0	-3.8	50.0
Benzene	Ave	1.016	1.063		10.5	10.0	4.6	50.0
Trichloroethene	Ave	0.2512	0.2595		10.3	10.0	3.3	50.0
2-Pentanone	Lin		0.1206		23.4	20.0	17.1	50.0
Methylcyclohexane	Ave	0.3886	0.3733		9.61	10.0	-3.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVC 280-377804/55 Calibration Date: 06/19/2017 19:41

Instrument ID: VMS_P Calib Start Date: 06/19/2017 11:16

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/19/2017 13:13

Lab File ID: P0054.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.2444	0.2586		10.6	10.0	5.8	50.0
1,4-Dioxane	Ave	0.0008	0.0008		207	200	3.4	50.0
Dibromomethane	Ave	0.0840	0.0870		10.4	10.0	3.6	50.0
Bromodichloromethane	Lin1		0.2379		9.44	10.0	-5.6	50.0
2-Chloroethyl vinyl ether	Lin2		0.0519		11.0	10.0	10.0	50.0
cis-1,3-Dichloropropene	Lin2		1.466		9.73	10.0	-2.7	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.0875	0.1018		46.5	40.0	16.3	50.0
Toluene	Ave	1.018	1.108		10.9	10.0	8.8	50.0
Ethyl methacrylate	Lin1		0.7380		10.2	10.0	2.4	50.0
trans-1,3-Dichloropropene	Lin1		0.1977		9.13	10.0	-8.7	50.0
1,1,2-Trichloroethane	Ave	0.1111	0.1203		10.8	10.0	8.3	50.0
2-Hexanone	Lin2		0.3460		43.5	40.0	8.7	50.0
1,3-Dichloropropane	Ave	1.170	1.213		10.4	10.0	3.7	50.0
Tetrachloroethene	Ave	0.9245	0.9186		9.94	10.0	-0.6	50.0
Dibromochloromethane	Lin1		0.5476		8.87	10.0	-11.3	50.0
1,2-Dibromoethane	Ave	0.4888	0.5337		10.9	10.0	9.2	50.0
1-Chlorohexane	Ave	1.684	1.758		5.22	5.00	4.4	50.0
Chlorobenzene	Ave	3.050	3.154	0.3000	10.3	10.0	3.4	50.0
Ethylbenzene	Ave	1.836	1.918		10.4	10.0	4.5	50.0
1,1,1,2-Tetrachloroethane	Lin2		0.8127		10.0	10.0	0.2	50.0
m&p-Xylene	Ave	2.197	2.341		10.7	10.0	6.5	50.0
o-Xylene	Ave	2.018	2.241		11.1	10.0	11.0	50.0
Styrene	Lin2		3.376		11.2	10.0	12.3	50.0
Bromoform	Lin1		0.1992	0.1000	8.26	10.0	-17.4	50.0
Isopropylbenzene	Ave	4.018	4.193		10.4	10.0	4.4	50.0
Cyclohexanone	Lin1		0.0144		407	400	1.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.4122	0.4266	0.3000	10.3	10.0	3.5	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.0986		9.19	10.0	-8.1	50.0
1,2,3-Trichloropropane	Ave	0.1167	0.1174		10.1	10.0	0.6	50.0
N-Propylbenzene	Ave	1.071	1.150		10.7	10.0	7.4	50.0
Bromobenzene	Ave	0.7527	0.8046		10.7	10.0	6.9	50.0
1,3,5-Trimethylbenzene	Ave	3.197	3.442		10.8	10.0	7.7	50.0
2-Chlorotoluene	Ave	0.8870	0.9333		10.5	10.0	5.2	50.0
4-Chlorotoluene	Ave	0.8590	0.9230		10.7	10.0	7.5	50.0
tert-Butylbenzene	Ave	3.081	3.308		10.7	10.0	7.3	50.0
1,2,4-Trimethylbenzene	Ave	3.240	3.542		10.9	10.0	9.3	50.0
sec-Butylbenzene	Ave	0.8206	0.8823		10.8	10.0	7.5	50.0
4-Isopropyltoluene	Ave	3.358	3.683		11.0	10.0	9.7	50.0
1,3-Dichlorobenzene	Ave	1.546	1.660		10.7	10.0	7.4	50.0
1,4-Dichlorobenzene	Ave	1.554	1.624		10.4	10.0	4.5	50.0
n-Butylbenzene	Ave	3.485	3.776		10.8	10.0	8.4	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVC 280-377804/55 Calibration Date: 06/19/2017 19:41

Instrument ID: VMS_P Calib Start Date: 06/19/2017 11:16

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/19/2017 13:13

Lab File ID: P0054.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichlorobenzene	Ave	1.278	1.337		10.5	10.0	4.6	50.0
1,2-Dibromo-3-Chloropropane	Lin1		0.0400		9.41	10.0	-5.9	50.0
1,2,4-Trichlorobenzene	Ave	0.7941	0.8609		10.8	10.0	8.4	50.0
Hexachlorobutadiene	Ave	0.5060	0.5280		10.4	10.0	4.3	50.0
Naphthalene	Ave	1.097	1.208		11.0	10.0	10.1	50.0
1,2,3-Trichlorobenzene	Ave	0.6068	0.6596		10.9	10.0	8.7	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0054.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 19-Jun-2017 19:41:30 ALS Bottle#: 36 Worklist Smp#: 55
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: CCVC
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-MLE_VMSP_8260*sub57

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 16:15:45 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.651	5.651	0.000	0	192354	250.0	250.0	
* 1 Fluorobenzene	96	7.610	7.610	0.000	98	1891725	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.869	9.869	0.000	89	366745	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.700	11.700	0.000	97	511997	12.5	12.5	
$ 5 Dibromofluoromethane (Surr	111	7.067	7.067	0.000	92	322022	10.0	10.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.360	7.360	0.000	0	316303	10.0	9.76	
$ 7 Toluene-d8 (Surr)	98	8.797	8.797	0.000	94	1518672	10.0	11.3	
$ 8 4-Bromofluorobenzene (Surr	95	10.735	10.735	0.000	83	484790	10.0	10.4	
23 Dichlorodifluoromethane	85	3.886	3.886	0.000	100	224628	10.0	8.29	
26 Chloromethane	50	4.110	4.110	0.000	99	219721	10.0	9.22	
27 Vinyl chloride	62	4.249	4.249	0.000	98	198393	10.0	8.48	
29 Bromomethane	94	4.626	4.626	0.000	93	148088	10.0	8.79	
30 Chloroethane	64	4.682	4.682	0.000	98	129706	10.0	8.63	
31 Dichlorofluoromethane	67	4.850	4.850	0.000	99	457609	10.0	8.12	
32 Trichlorofluoromethane	101	4.962	4.962	0.000	100	407020	10.0	8.12	
35 Ethyl ether	59	5.101	5.101	0.000	95	239924	10.0	10.3	
39 Acrolein	56	5.269	5.269	0.000	99	220107	100.0	117.1	
40 1,1,2-Trichloro-1,2,2-trif	151	5.367	5.367	0.000	96	233940	10.0	9.51	
41 Acetone	43	5.367	5.367	0.000	98	193732	40.0	43.5	
43 1,1-Dichloroethene	96	5.409	5.409	0.000	95	377978	10.0	10.2	
44 Iodomethane	142	5.587	5.587	0.000	100	534774	10.0	10.8	
45 Methyl acetate	43	5.608	5.608	0.000	98	528386	50.0	55.1	
47 3-Chloro-1-propene	41	5.658	5.658	0.000	90	720085	10.0	10.7	
48 Carbon disulfide	76	5.701	5.701	0.000	99	990363	10.0	8.13	
49 2-Methyl-2-propanol	59	5.715	5.715	0.000	93	102550	100.0	102.0	
50 Methylene Chloride	84	5.758	5.758	0.000	97	533059	10.0	14.2	
51 Methyl tert-butyl ether	73	5.915	5.915	0.000	96	554120	10.0	10.9	
52 Acrylonitrile	53	5.915	5.915	0.000	98	487771	100.0	114.3	
53 trans-1,2-Dichloroethene	96	5.965	5.965	0.000	96	386217	10.0	10.4	
54 Hexane	57	6.123	6.123	0.000	96	605442	10.0	9.11	
55 Vinyl acetate	43	6.230	6.230	0.000	97	645965	20.0	18.8	
57 1,1-Dichloroethane	63	6.294	6.294	0.000	96	738972	10.0	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
61 2-Butanone (MEK)	43	6.680	6.680	0.000	99	316776	40.0	43.4	
62 sec-Butyl Alcohol	45	6.723	6.723	0.000	40	109291	150.0	141.7	
63 cis-1,2-Dichloroethene	96	6.731	6.731	0.000	83	415725	10.0	10.5	
64 2,2-Dichloropropane	77	6.752	6.752	0.000	88	347059	10.0	9.15	
67 Chlorobromomethane	128	6.931	6.931	0.000	92	129327	10.0	10.7	
68 Chloroform	83	6.938	6.938	0.000	94	650323	10.0	10.2	
69 Tetrahydrofuran	42	6.959	6.959	0.000	92	87346	20.0	23.9	
70 Isobutyl alcohol	41	7.145	7.145	0.000	48	83238	250.0	257.3	
71 1,1,1-Trichloroethane	97	7.145	7.145	0.000	98	418450	10.0	8.82	
72 Cyclohexane	56	7.210	7.210	0.000	93	688553	10.0	9.65	
73 1,1-Dichloropropene	75	7.253	7.253	0.000	95	525299	10.0	9.92	
74 Carbon tetrachloride	117	7.281	7.281	0.000	94	337373	10.0	8.63	
76 1,2-Dichloroethane	62	7.424	7.424	0.000	97	364787	10.0	9.62	
77 Benzene	78	7.431	7.431	0.000	97	1609359	10.0	10.5	
14 n-Heptane	43	7.496	7.496	0.000	96	720997	10.0	9.49	
79 Trichloroethene	95	7.896	7.896	0.000	96	392668	10.0	10.3	
80 2-Pentanone	43	7.946	7.946	0.000	98	365026	20.0	23.4	
82 Methylcyclohexane	55	8.075	8.075	0.000	95	564940	10.0	9.61	
83 1,2-Dichloropropane	63	8.089	8.089	0.000	95	391401	10.0	10.6	
84 1,4-Dioxane	88	8.139	8.139	0.000	98	24985	200.0	206.9	
85 Dibromomethane	93	8.196	8.196	0.000	91	131698	10.0	10.4	
86 Dichlorobromomethane	83	8.261	8.261	0.000	98	360055	10.0	9.44	
87 2-Chloroethyl vinyl ether	63	8.404	8.404	0.000	93	78599	10.0	11.0	
89 cis-1,3-Dichloropropene	75	8.582	8.582	0.000	92	430203	10.0	9.73	
90 4-Methyl-2-pentanone (MIBK	43	8.632	8.632	0.000	98	616050	40.0	46.5	
91 Toluene	91	8.847	8.847	0.000	97	1676626	10.0	10.9	
92 Ethyl methacrylate	69	8.933	8.933	0.000	92	216533	10.0	10.2	
93 trans-1,3-Dichloropropene	75	8.954	8.954	0.000	97	299163	10.0	9.13	
94 1,1,2-Trichloroethane	97	9.112	9.112	0.000	92	182088	10.0	10.8	
95 2-Hexanone	43	9.226	9.226	0.000	97	406064	40.0	43.5	
96 1,3-Dichloropropane	76	9.247	9.247	0.000	98	355999	10.0	10.4	
97 Tetrachloroethene	164	9.255	9.255	0.000	93	269503	10.0	9.94	
98 Chlorodibromomethane	129	9.440	9.440	0.000	91	160670	10.0	8.87	
100 Ethylene Dibromide	107	9.562	9.562	0.000	98	156580	10.0	10.9	
101 1-Chlorohexane	91	9.777	9.777	0.000	92	257932	5.00	5.22	
102 Chlorobenzene	112	9.898	9.898	0.000	93	925245	10.0	10.3	
104 1,1,1,2-Tetrachloroethane	131	9.934	9.934	0.000	94	238456	10.0	10.0	
103 Ethylbenzene	106	9.927	9.927	0.000	98	562855	10.0	10.4	
105 m-Xylene & p-Xylene	106	10.005	10.005	0.000	0	686693	10.0	10.7	
106 Styrene	104	10.320	10.320	0.000	85	990577	10.0	11.2	
107 o-Xylene	106	10.320	10.320	0.000	88	657409	10.0	11.1	
108 Bromoform	173	10.534	10.534	0.000	93	58452	10.0	8.26	
109 Isopropylbenzene	105	10.577	10.577	0.000	97	1717593	10.0	10.4	
111 Cyclohexanone	55	10.720	10.720	0.000	95	169515	400.0	406.5	
112 1,1,2,2-Tetrachloroethane	83	10.792	10.792	0.000	95	174733	10.0	10.3	
113 trans-1,4-Dichloro-2-buten	53	10.828	10.828	0.000	78	40380	10.0	9.19	
114 1,2,3-Trichloropropane	110	10.863	10.863	0.000	87	48073	10.0	10.1	
115 N-Propylbenzene	120	10.892	10.892	0.000	98	470958	10.0	10.7	
116 Bromobenzene	156	10.906	10.906	0.000	94	329577	10.0	10.7	
117 1,3,5-Trimethylbenzene	105	11.006	11.006	0.000	94	1409723	10.0	10.8	
118 2-Chlorotoluene	126	11.021	11.021	0.000	95	382266	10.0	10.5	
119 4-Chlorotoluene	126	11.099	11.099	0.000	99	378073	10.0	10.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
120 tert-Butylbenzene	119	11.299	11.299	0.000	92	1354830	10.0	10.7	
121 1,2,4-Trimethylbenzene	105	11.335	11.335	0.000	98	1450908	10.0	10.9	
122 sec-Butylbenzene	134	11.478	11.478	0.000	95	361370	10.0	10.8	
123 4-Isopropyltoluene	119	11.571	11.571	0.000	97	1508529	10.0	11.0	
124 1,3-Dichlorobenzene	146	11.650	11.650	0.000	96	679883	10.0	10.7	
126 1,4-Dichlorobenzene	146	11.721	11.721	0.000	92	665121	10.0	10.4	
127 n-Butylbenzene	91	11.936	11.936	0.000	99	1546612	10.0	10.8	
128 1,2-Dichlorobenzene	146	12.079	12.079	0.000	95	547640	10.0	10.5	
129 1,2-Dibromo-3-Chloropropan	157	12.837	12.837	0.000	72	16372	10.0	9.41	
130 1,2,4-Trichlorobenzene	180	13.788	13.788	0.000	93	352608	10.0	10.8	
131 Hexachlorobutadiene	225	13.924	13.924	0.000	95	216251	10.0	10.4	
132 Naphthalene	128	14.160	14.160	0.000	98	494776	10.0	11.0	
133 1,2,3-Trichlorobenzene	180	14.481	14.481	0.000	94	270178	10.0	10.9	
S 140 1,2-Dichloroethene, Total	96				0		20.0	21.0	
S 137 1,3-Dichloropropene, Total	1				0		20.0	18.9	
S 139 Xylenes, Total	106				0		20.0	21.8	
S 134 Trihalomethanes, Total	1				0		40.0	36.7	
S 136 Total BTEX	1				0			53.5	
S 135 Xylenes, Total (URS)	1				0		20.0	21.8	
S 138 1,2-Dichloroethene, Total	1				0		20.0	21.0	

Reagents:

MV-ARCH SS A_00081	Amount Added:	0.80	Units: uL		
MV-Main A_00030	Amount Added:	5.00	Units: uL		
MV-Gas/Ket A_00060	Amount Added:	5.00	Units: uL		
MV-2cleve+AVA_00025	Amount Added:	5.00	Units: uL		
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent	

Report Date: 20-Jun-2017 16:15:46 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0054.D

Injection Date: 19-Jun-2017 19:41:30 Instrument ID: VMS_P Operator ID: SEIFERTJ

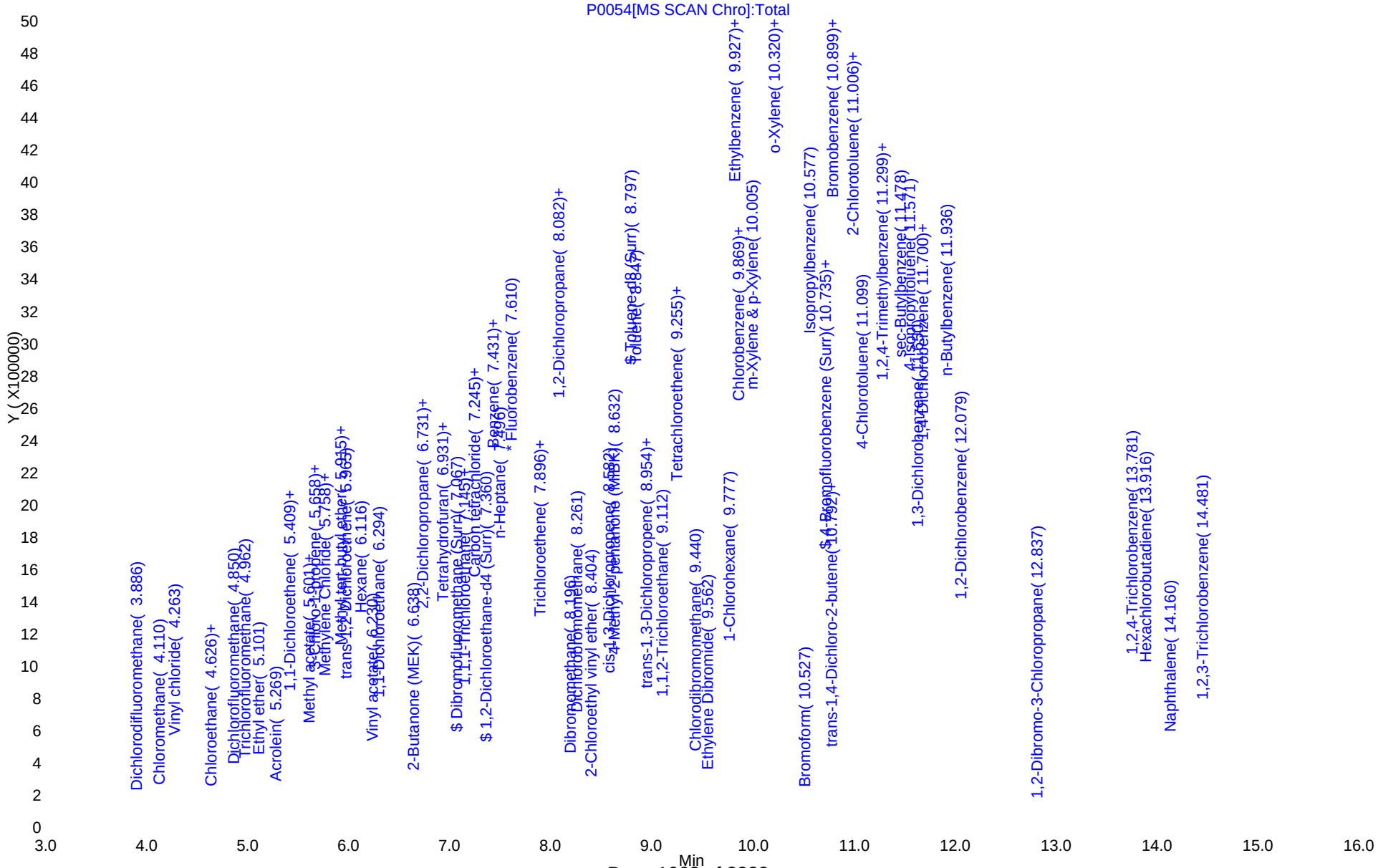
Lims ID: CCVC Worklist Smp#: 55

Client ID:

Purge Vol: 20.000 mL Dil. Factor: 1.0000 ALS Bottle#: 36

Method: MLE_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVC 280-377804/55 Calibration Date: 06/19/2017 19:41

Instrument ID: VMS_P Calib Start Date: 06/19/2017 14:11

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/19/2017 16:26

Lab File ID: P0054.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2011	0.2128		10.6	10.0	5.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2142	0.2090		9.76	10.0	-2.4	50.0
Toluene-d8 (Surr)	Ave	4.597	5.176		11.3	10.0	12.6	50.0
4-Bromofluorobenzene (Surr)	Ave	1.138	1.184		10.4	10.0	4.0	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0054.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 19-Jun-2017 19:41:30 ALS Bottle#: 36 Worklist Smp#: 55
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: CCVC
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-MLE_VMSP_8260*sub57

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 16:15:45 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.651	5.651	0.000	0	192354	250.0	250.0	
* 1 Fluorobenzene	96	7.610	7.610	0.000	98	1891725	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.869	9.869	0.000	89	366745	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.700	11.700	0.000	97	511997	12.5	12.5	
$ 5 Dibromofluoromethane (Surr	111	7.067	7.067	0.000	92	322022	10.0	10.6	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.360	7.360	0.000	0	316303	10.0	9.76	
$ 7 Toluene-d8 (Surr)	98	8.797	8.797	0.000	94	1518672	10.0	11.3	
$ 8 4-Bromofluorobenzene (Surr	95	10.735	10.735	0.000	83	484790	10.0	10.4	
23 Dichlorodifluoromethane	85	3.886	3.886	0.000	100	224628	10.0	8.29	
26 Chloromethane	50	4.110	4.110	0.000	99	219721	10.0	9.22	
27 Vinyl chloride	62	4.249	4.249	0.000	98	198393	10.0	8.48	
29 Bromomethane	94	4.626	4.626	0.000	93	148088	10.0	8.79	
30 Chloroethane	64	4.682	4.682	0.000	98	129706	10.0	8.63	
31 Dichlorofluoromethane	67	4.850	4.850	0.000	99	457609	10.0	8.12	
32 Trichlorofluoromethane	101	4.962	4.962	0.000	100	407020	10.0	8.12	
35 Ethyl ether	59	5.101	5.101	0.000	95	239924	10.0	10.3	
39 Acrolein	56	5.269	5.269	0.000	99	220107	100.0	117.1	
40 1,1,2-Trichloro-1,2,2-trif	151	5.367	5.367	0.000	96	233940	10.0	9.51	
41 Acetone	43	5.367	5.367	0.000	98	193732	40.0	43.5	
43 1,1-Dichloroethene	96	5.409	5.409	0.000	95	377978	10.0	10.2	
44 Iodomethane	142	5.587	5.587	0.000	100	534774	10.0	10.8	
45 Methyl acetate	43	5.608	5.608	0.000	98	528386	50.0	55.1	
47 3-Chloro-1-propene	41	5.658	5.658	0.000	90	720085	10.0	10.7	
48 Carbon disulfide	76	5.701	5.701	0.000	99	990363	10.0	8.13	
49 2-Methyl-2-propanol	59	5.715	5.715	0.000	93	102550	100.0	102.0	
50 Methylene Chloride	84	5.758	5.758	0.000	97	533059	10.0	14.2	
51 Methyl tert-butyl ether	73	5.915	5.915	0.000	96	554120	10.0	10.9	
52 Acrylonitrile	53	5.915	5.915	0.000	98	487771	100.0	114.3	
53 trans-1,2-Dichloroethene	96	5.965	5.965	0.000	96	386217	10.0	10.4	
54 Hexane	57	6.123	6.123	0.000	96	605442	10.0	9.11	
55 Vinyl acetate	43	6.230	6.230	0.000	97	645965	20.0	18.8	
57 1,1-Dichloroethane	63	6.294	6.294	0.000	96	738972	10.0	10.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
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62 sec-Butyl Alcohol	45	6.723	6.723	0.000	40	109291	150.0	141.7	
63 cis-1,2-Dichloroethene	96	6.731	6.731	0.000	83	415725	10.0	10.5	
64 2,2-Dichloropropane	77	6.752	6.752	0.000	88	347059	10.0	9.15	
67 Chlorobromomethane	128	6.931	6.931	0.000	92	129327	10.0	10.7	
68 Chloroform	83	6.938	6.938	0.000	94	650323	10.0	10.2	
69 Tetrahydrofuran	42	6.959	6.959	0.000	92	87346	20.0	23.9	
70 Isobutyl alcohol	41	7.145	7.145	0.000	48	83238	250.0	257.3	
71 1,1,1-Trichloroethane	97	7.145	7.145	0.000	98	418450	10.0	8.82	
72 Cyclohexane	56	7.210	7.210	0.000	93	688553	10.0	9.65	
73 1,1-Dichloropropene	75	7.253	7.253	0.000	95	525299	10.0	9.92	
74 Carbon tetrachloride	117	7.281	7.281	0.000	94	337373	10.0	8.63	
76 1,2-Dichloroethane	62	7.424	7.424	0.000	97	364787	10.0	9.62	
77 Benzene	78	7.431	7.431	0.000	97	1609359	10.0	10.5	
14 n-Heptane	43	7.496	7.496	0.000	96	720997	10.0	9.49	
79 Trichloroethene	95	7.896	7.896	0.000	96	392668	10.0	10.3	
80 2-Pentanone	43	7.946	7.946	0.000	98	365026	20.0	23.4	
82 Methylcyclohexane	55	8.075	8.075	0.000	95	564940	10.0	9.61	
83 1,2-Dichloropropane	63	8.089	8.089	0.000	95	391401	10.0	10.6	
84 1,4-Dioxane	88	8.139	8.139	0.000	98	24985	200.0	206.9	
85 Dibromomethane	93	8.196	8.196	0.000	91	131698	10.0	10.4	
86 Dichlorobromomethane	83	8.261	8.261	0.000	98	360055	10.0	9.44	
87 2-Chloroethyl vinyl ether	63	8.404	8.404	0.000	93	78599	10.0	11.0	
89 cis-1,3-Dichloropropene	75	8.582	8.582	0.000	92	430203	10.0	9.73	
90 4-Methyl-2-pentanone (MIBK	43	8.632	8.632	0.000	98	616050	40.0	46.5	
91 Toluene	91	8.847	8.847	0.000	97	1676626	10.0	10.9	
92 Ethyl methacrylate	69	8.933	8.933	0.000	92	216533	10.0	10.2	
93 trans-1,3-Dichloropropene	75	8.954	8.954	0.000	97	299163	10.0	9.13	
94 1,1,2-Trichloroethane	97	9.112	9.112	0.000	92	182088	10.0	10.8	
95 2-Hexanone	43	9.226	9.226	0.000	97	406064	40.0	43.5	
96 1,3-Dichloropropane	76	9.247	9.247	0.000	98	355999	10.0	10.4	
97 Tetrachloroethene	164	9.255	9.255	0.000	93	269503	10.0	9.94	
98 Chlorodibromomethane	129	9.440	9.440	0.000	91	160670	10.0	8.87	
100 Ethylene Dibromide	107	9.562	9.562	0.000	98	156580	10.0	10.9	
101 1-Chlorohexane	91	9.777	9.777	0.000	92	257932	5.00	5.22	
102 Chlorobenzene	112	9.898	9.898	0.000	93	925245	10.0	10.3	
104 1,1,1,2-Tetrachloroethane	131	9.934	9.934	0.000	94	238456	10.0	10.0	
103 Ethylbenzene	106	9.927	9.927	0.000	98	562855	10.0	10.4	
105 m-Xylene & p-Xylene	106	10.005	10.005	0.000	0	686693	10.0	10.7	
106 Styrene	104	10.320	10.320	0.000	85	990577	10.0	11.2	
107 o-Xylene	106	10.320	10.320	0.000	88	657409	10.0	11.1	
108 Bromoform	173	10.534	10.534	0.000	93	58452	10.0	8.26	
109 Isopropylbenzene	105	10.577	10.577	0.000	97	1717593	10.0	10.4	
111 Cyclohexanone	55	10.720	10.720	0.000	95	169515	400.0	406.5	
112 1,1,2,2-Tetrachloroethane	83	10.792	10.792	0.000	95	174733	10.0	10.3	
113 trans-1,4-Dichloro-2-buten	53	10.828	10.828	0.000	78	40380	10.0	9.19	
114 1,2,3-Trichloropropane	110	10.863	10.863	0.000	87	48073	10.0	10.1	
115 N-Propylbenzene	120	10.892	10.892	0.000	98	470958	10.0	10.7	
116 Bromobenzene	156	10.906	10.906	0.000	94	329577	10.0	10.7	
117 1,3,5-Trimethylbenzene	105	11.006	11.006	0.000	94	1409723	10.0	10.8	
118 2-Chlorotoluene	126	11.021	11.021	0.000	95	382266	10.0	10.5	
119 4-Chlorotoluene	126	11.099	11.099	0.000	99	378073	10.0	10.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
120 tert-Butylbenzene	119	11.299	11.299	0.000	92	1354830	10.0	10.7	
121 1,2,4-Trimethylbenzene	105	11.335	11.335	0.000	98	1450908	10.0	10.9	
122 sec-Butylbenzene	134	11.478	11.478	0.000	95	361370	10.0	10.8	
123 4-Isopropyltoluene	119	11.571	11.571	0.000	97	1508529	10.0	11.0	
124 1,3-Dichlorobenzene	146	11.650	11.650	0.000	96	679883	10.0	10.7	
126 1,4-Dichlorobenzene	146	11.721	11.721	0.000	92	665121	10.0	10.4	
127 n-Butylbenzene	91	11.936	11.936	0.000	99	1546612	10.0	10.8	
128 1,2-Dichlorobenzene	146	12.079	12.079	0.000	95	547640	10.0	10.5	
129 1,2-Dibromo-3-Chloropropan	157	12.837	12.837	0.000	72	16372	10.0	9.41	
130 1,2,4-Trichlorobenzene	180	13.788	13.788	0.000	93	352608	10.0	10.8	
131 Hexachlorobutadiene	225	13.924	13.924	0.000	95	216251	10.0	10.4	
132 Naphthalene	128	14.160	14.160	0.000	98	494776	10.0	11.0	
133 1,2,3-Trichlorobenzene	180	14.481	14.481	0.000	94	270178	10.0	10.9	
S 140 1,2-Dichloroethene, Total	96				0		20.0	21.0	
S 137 1,3-Dichloropropene, Total	1				0		20.0	18.9	
S 139 Xylenes, Total	106				0		20.0	21.8	
S 134 Trihalomethanes, Total	1				0		40.0	36.7	
S 136 Total BTEX	1				0			53.5	
S 135 Xylenes, Total (URS)	1				0		20.0	21.8	
S 138 1,2-Dichloroethene, Total	1				0		20.0	21.0	

Reagents:

MV-ARCH SS A_00081	Amount Added:	0.80	Units: uL		
MV-Main A_00030	Amount Added:	5.00	Units: uL		
MV-Gas/Ket A_00060	Amount Added:	5.00	Units: uL		
MV-2cleve+AVA_00025	Amount Added:	5.00	Units: uL		
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent	

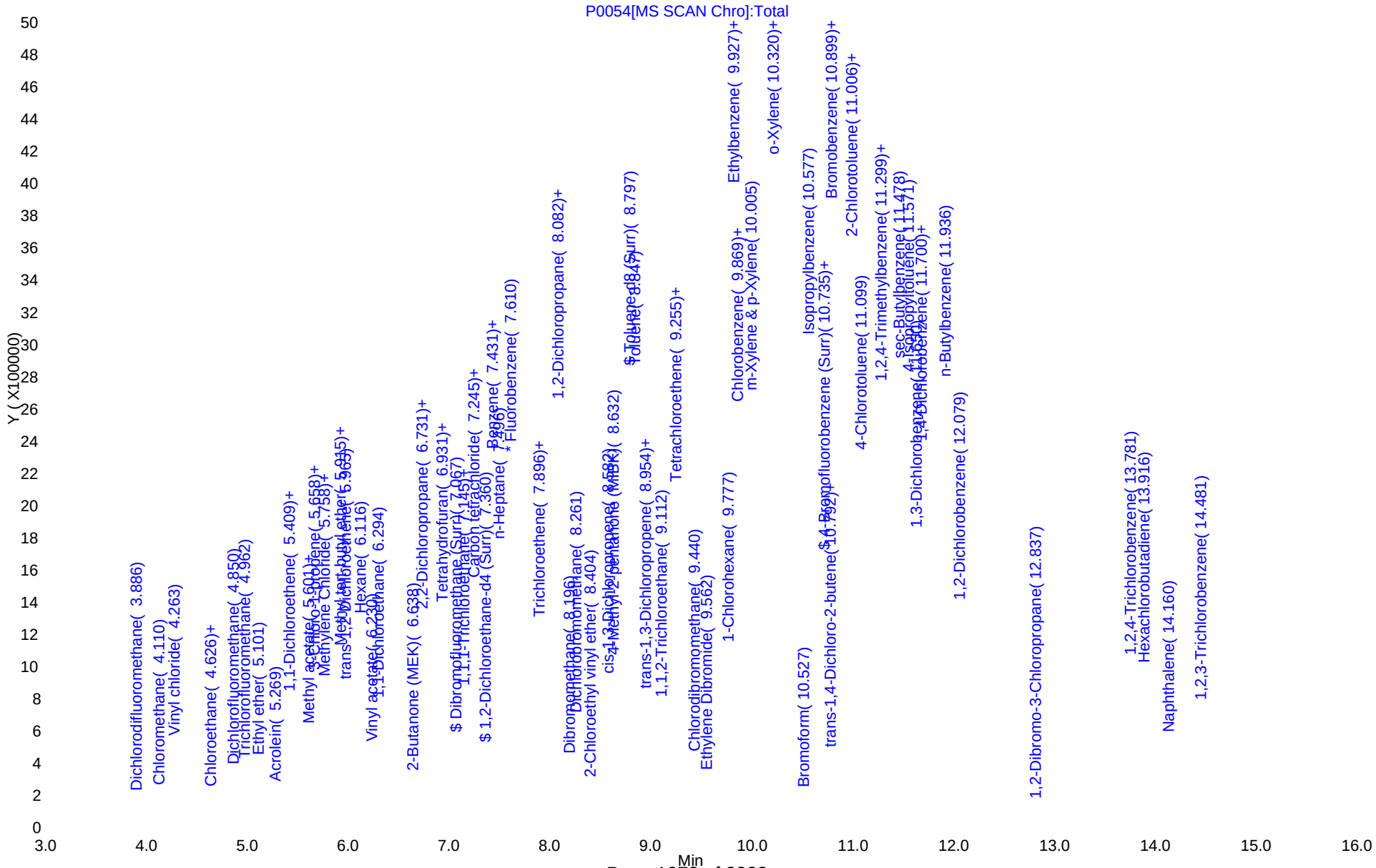
Report Date: 20-Jun-2017 16:15:46 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0054.D

Injection Date:	19-Jun-2017 19:41:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	CCVC			Worklist Smp#:	55
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378395/2 Calibration Date: 06/22/2017 08:32

Instrument ID: VMS_P Calib Start Date: 06/19/2017 11:16

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/19/2017 13:13

Lab File ID: P0131.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Lin1		0.1799		9.98	10.0	-0.2	20.0
Chloromethane	Ave	0.1575	0.1854	0.1000	11.8	10.0	17.7	20.0
Vinyl chloride	Ave	0.1545	0.1797		11.6	10.0	16.3	20.0
Bromomethane	Ave	0.1113	0.1345		12.1	10.0	20.8*	20.0
Chloroethane	Ave	0.0993	0.1142		11.5	10.0	15.0	20.0
Dichlorofluoromethane	Ave	0.3722	0.4826		13.0	10.0	29.6*	20.0
Trichlorofluoromethane	Ave	0.3312	0.3165		9.56	10.0	-4.4	20.0
Ethyl ether	Ave	0.1538	0.1573		10.2	10.0	2.3	20.0
Acrolein	Ave	0.0124	0.0156		125	100	25.5*	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1625	0.1928		11.9	10.0	18.6	20.0
Acetone	Ave	0.0295	0.0314		42.6	40.0	6.5	20.0
1,1-Dichloroethene	Ave	0.2456	0.2871		11.7	10.0	16.9	20.0
Methyl iodide	Ave	0.3272	0.3726		11.4	10.0	13.9	20.0
Methyl acetate	Ave	0.0633	0.0731		57.7	50.0	15.5	20.0
3-Chloro-1-propene	Ave	0.4440	0.5000		11.3	10.0	12.6	20.0
Carbon disulfide	Ave	0.8046	1.001		12.4	10.0	24.4*	20.0
Methylene Chloride	Lin2		0.2614		10.2	10.0	1.8	20.0
Acrylonitrile	Ave	0.0282	0.0328		116	100	16.2	20.0
Methyl tert-butyl ether	Ave	0.3375	0.3733		11.1	10.0	10.6	20.0
trans-1,2-Dichloroethene	Ave	0.2445	0.2788		11.4	10.0	14.0	20.0
Hexane	Ave	2.266	2.543		11.2	10.0	12.2	20.0
Vinyl acetate	Lin2		0.2588		22.7	20.0	13.3	20.0
1,1-Dichloroethane	Ave	0.4739	0.5315	0.1000	11.2	10.0	12.2	20.0
2-Butanone (MEK)	Ave	0.0483	0.0547		45.3	40.0	13.3	20.0
cis-1,2-Dichloroethene	Ave	0.2606	0.2894		11.1	10.0	11.0	20.0
sec-Butyl Alcohol	Ave	1.003	1.068		320	300	6.5	20.0
2,2-Dichloropropane	Ave	0.2507	0.2858		11.4	10.0	14.0	20.0
Bromochloromethane	Ave	0.0798	0.0901		11.3	10.0	12.9	20.0
Chloroform	Ave	0.4228	0.4768		11.3	10.0	12.8	20.0
Tetrahydrofuran	Ave	0.0242	0.0251		20.7	20.0	3.7	20.0
Isobutyl alcohol	Ave	0.4204	0.4790		285	250	13.9	20.0
1,1,1-Trichloroethane	Lin1		0.3301		10.5	10.0	4.8	20.0
Cyclohexane	Ave	0.4713	0.5416		11.5	10.0	14.9	20.0
1,1-Dichloropropene	Ave	0.3499	0.4000		11.4	10.0	14.3	20.0
Carbon tetrachloride	Lin1		0.2850		10.9	10.0	8.6	20.0
1,2-Dichloroethane	Ave	0.2505	0.2829		11.3	10.0	12.9	20.0
Benzene	Ave	1.016	1.126		11.1	10.0	10.8	20.0
Trichloroethene	Ave	0.2512	0.2806		11.2	10.0	11.7	20.0
2-Pentanone	Lin		0.0745		27.8	40.0	-30.5*	20.0
Methylcyclohexane	Ave	0.3886	0.4359		11.2	10.0	12.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378395/2 Calibration Date: 06/22/2017 08:32

Instrument ID: VMS_P Calib Start Date: 06/19/2017 11:16

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/19/2017 13:13

Lab File ID: P0131.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.2444	0.2730		11.2	10.0	11.7	20.0
1,4-Dioxane	Ave	0.0008	0.0009		223	200	11.5	20.0
Dibromomethane	Ave	0.0840	0.0935		11.1	10.0	11.3	20.0
Bromodichloromethane	Lin1		0.2643		10.5	10.0	4.5	20.0
2-Chloroethyl vinyl ether	Lin2		0.0453		9.71	10.0	-2.9	20.0
cis-1,3-Dichloropropene	Lin2		1.583		10.5	10.0	4.7	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.0875	0.0966		44.2	40.0	10.4	20.0
Toluene	Ave	1.018	1.192		11.7	10.0	17.0	20.0
Ethyl methacrylate	Lin1		0.7008		9.76	10.0	-2.4	20.0
trans-1,3-Dichloropropene	Lin1		0.2176		9.97	10.0	-0.3	20.0
1,1,2-Trichloroethane	Ave	0.1111	0.1294		11.6	10.0	16.4	20.0
2-Hexanone	Lin2		0.3094		39.0	40.0	-2.6	20.0
1,3-Dichloropropane	Ave	1.170	1.307		11.2	10.0	11.7	20.0
Tetrachloroethene	Ave	0.9245	1.056		11.4	10.0	14.2	20.0
Dibromochloromethane	Lin1		0.6326		10.1	10.0	1.4	20.0
1,2-Dibromoethane	Ave	0.4888	0.5574		11.4	10.0	14.0	20.0
1-Chlorohexane	Ave	1.684	1.922		11.4	10.0	14.1	20.0
Chlorobenzene	Ave	3.050	3.392	0.3000	11.1	10.0	11.2	20.0
1,1,1,2-Tetrachloroethane	Lin2		0.9059		11.1	10.0	11.2	20.0
Ethylbenzene	Ave	1.836	2.123		11.6	10.0	15.7	20.0
m&p-Xylene	Ave	2.197	2.512		11.4	10.0	14.3	20.0
o-Xylene	Ave	2.018	2.391		11.8	10.0	18.5	20.0
Styrene	Lin2		3.456		11.5	10.0	14.9	20.0
Bromoform	Lin1		0.2353	0.1000	9.57	10.0	-4.3	20.0
Isopropylbenzene	Ave	4.018	4.546		11.3	10.0	13.2	20.0
Cyclohexanone	Lin1		0.0137		388	400	-3.1	20.0
1,1,2,2-Tetrachloroethane	Ave	0.4122	0.4523	0.3000	11.0	10.0	9.7	20.0
trans-1,4-Dichloro-2-butene	Lin1		0.1108		10.2	10.0	2.4	20.0
1,2,3-Trichloropropane	Ave	0.1167	0.1259		10.8	10.0	7.9	20.0
N-Propylbenzene	Ave	1.071	1.228		11.5	10.0	14.7	20.0
Bromobenzene	Ave	0.7527	0.8563		11.4	10.0	13.8	20.0
1,3,5-Trimethylbenzene	Ave	3.197	3.679		11.5	10.0	15.1	20.0
2-Chlorotoluene	Ave	0.8870	0.9933		11.2	10.0	12.0	20.0
4-Chlorotoluene	Ave	0.8590	0.9847		11.5	10.0	14.6	20.0
tert-Butylbenzene	Ave	3.081	3.552		11.5	10.0	15.3	20.0
1,2,4-Trimethylbenzene	Ave	3.240	3.767		11.6	10.0	16.2	20.0
sec-Butylbenzene	Ave	0.8206	0.9405		11.5	10.0	14.6	20.0
4-Isopropyltoluene	Ave	3.358	3.954		11.8	10.0	17.7	20.0
1,3-Dichlorobenzene	Ave	1.546	1.719		11.1	10.0	11.2	20.0
1,4-Dichlorobenzene	Ave	1.554	1.700		10.9	10.0	9.4	20.0
n-Butylbenzene	Ave	3.485	4.120		11.8	10.0	18.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378395/2 Calibration Date: 06/22/2017 08:32

Instrument ID: VMS_P Calib Start Date: 06/19/2017 11:16

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/19/2017 13:13

Lab File ID: P0131.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichlorobenzene	Ave	1.278	1.389		10.9	10.0	8.7	20.0
1,2-Dibromo-3-Chloropropane	Lin1		0.0436		10.1	10.0	1.1	20.0
1,2,4-Trichlorobenzene	Ave	0.7941	0.8923		11.2	10.0	12.4	20.0
Hexachlorobutadiene	Ave	0.5060	0.5779		11.4	10.0	14.2	20.0
Naphthalene	Ave	1.097	1.239		11.3	10.0	13.0	20.0
1,2,3-Trichlorobenzene	Ave	0.6068	0.6897		11.4	10.0	13.7	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\P0131.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 22-Jun-2017 08:32:30 ALS Bottle#: 10 Worklist Smp#: 2
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-MLE_VMSP_8260*sub43

Method: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 23-Jun-2017 12:59:34 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: seifertj Date: 22-Jun-2017 10:31:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.658	5.658	0.000	0	145071	250.0	250.0	
* 1 Fluorobenzene	96	7.610	7.610	0.000	98	1605646	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.877	9.877	0.000	89	310043	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.707	11.707	0.000	96	438484	12.5	12.5	
23 Dichlorodifluoromethane	85	3.887	3.887	0.000	99	231084	10.0	9.98	
26 Chloromethane	50	4.110	4.110	0.000	99	238116	10.0	11.8	
27 Vinyl chloride	62	4.264	4.264	0.000	97	230791	10.0	11.6	
29 Bromomethane	94	4.627	4.627	0.000	93	172722	10.0	12.1	
30 Chloroethane	64	4.683	4.683	0.000	98	146653	10.0	11.5	
31 Dichlorofluoromethane	67	4.865	4.865	0.000	98	619857	10.0	13.0	
32 Trichlorofluoromethane	101	4.962	4.962	0.000	98	406586	10.0	9.56	M
35 Ethyl ether	59	5.116	5.116	0.000	95	202111	10.0	10.2	
39 Acrolein	56	5.270	5.270	0.000	99	200172	100.0	125.5	
40 1,1,2-Trichloro-1,2,2-trif	151	5.367	5.367	0.000	96	247625	10.0	11.9	
41 Acetone	43	5.381	5.381	0.000	98	161143	40.0	42.6	
43 1,1-Dichloroethene	96	5.409	5.409	0.000	95	368839	10.0	11.7	
44 Iodomethane	142	5.594	5.594	0.000	98	478615	10.0	11.4	
45 Methyl acetate	43	5.608	5.608	0.000	98	469725	50.0	57.7	
47 3-Chloro-1-propene	41	5.658	5.658	0.000	83	642206	10.0	11.3	
48 Carbon disulfide	76	5.708	5.708	0.000	100	1285361	10.0	12.4	
49 2-Methyl-2-propanol	59	5.715	5.715	0.000	35	80379	100.0	106.0	
50 Methylene Chloride	84	5.765	5.765	0.000	98	335762	10.0	10.2	
52 Acrylonitrile	53	5.923	5.923	0.000	98	421063	100.0	116.2	
51 Methyl tert-butyl ether	73	5.923	5.923	0.000	96	479462	10.0	11.1	
53 trans-1,2-Dichloroethene	96	5.973	5.973	0.000	94	358106	10.0	11.4	
54 Hexane	57	6.123	6.123	0.000	95	630682	10.0	11.2	
55 Vinyl acetate	43	6.237	6.237	0.000	97	664891	20.0	22.7	
57 1,1-Dichloroethane	63	6.295	6.295	0.000	97	682748	10.0	11.2	
61 2-Butanone (MEK)	43	6.688	6.688	0.000	99	281038	40.0	45.3	
62 sec-Butyl Alcohol	45	6.731	6.731	0.000	49	185951	300.0	319.6	
63 cis-1,2-Dichloroethene	96	6.731	6.731	0.000	84	371739	10.0	11.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
64 2,2-Dichloropropane	77	6.759	6.759	0.000	86	367120	10.0	11.4	
67 Chlorobromomethane	128	6.938	6.938	0.000	91	115773	10.0	11.3	
68 Chloroform	83	6.938	6.938	0.000	94	612425	10.0	11.3	
69 Tetrahydrofuran	42	6.967	6.967	0.000	87	64359	20.0	20.7	
70 Isobutyl alcohol	41	7.145	7.145	0.000	45	69489	250.0	284.9	
71 1,1,1-Trichloroethane	97	7.153	7.153	0.000	97	423997	10.0	10.5	
72 Cyclohexane	56	7.217	7.217	0.000	94	695712	10.0	11.5	
73 1,1-Dichloropropene	75	7.253	7.253	0.000	94	513806	10.0	11.4	
74 Carbon tetrachloride	117	7.288	7.288	0.000	95	366061	10.0	10.9	
76 1,2-Dichloroethane	62	7.424	7.424	0.000	97	363327	10.0	11.3	
77 Benzene	78	7.439	7.439	0.000	98	1446165	10.0	11.1	
14 n-Heptane	43	7.496	7.496	0.000	95	724271	10.0	11.2	
79 Trichloroethene	95	7.903	7.903	0.000	94	360473	10.0	11.2	
80 2-Pentanone	43	7.953	7.953	0.000	98	382889	40.0	27.8	
82 Methylcyclohexane	55	8.082	8.082	0.000	95	559857	10.0	11.2	
83 1,2-Dichloropropane	63	8.096	8.096	0.000	92	350656	10.0	11.2	
84 1,4-Dioxane	88	8.146	8.146	0.000	96	22854	200.0	222.9	
85 Dibromomethane	93	8.204	8.204	0.000	90	120092	10.0	11.1	
86 Dichlorobromomethane	83	8.268	8.268	0.000	98	339513	10.0	10.5	
87 2-Chloroethyl vinyl ether	63	8.411	8.411	0.000	93	58218	10.0	9.71	
89 cis-1,3-Dichloropropene	75	8.583	8.583	0.000	91	392659	10.0	10.5	
90 4-Methyl-2-pentanone (MIBK	43	8.640	8.640	0.000	99	496504	40.0	44.2	
91 Toluene	91	8.854	8.854	0.000	97	1531144	10.0	11.7	
92 Ethyl methacrylate	69	8.940	8.940	0.000	91	173809	10.0	9.76	
93 trans-1,3-Dichloropropene	75	8.962	8.962	0.000	97	279488	10.0	9.97	
94 1,1,2-Trichloroethane	97	9.119	9.119	0.000	93	166226	10.0	11.6	
95 2-Hexanone	43	9.233	9.233	0.000	99	306925	40.0	39.0	
96 1,3-Dichloropropane	76	9.255	9.255	0.000	97	324266	10.0	11.2	
97 Tetrachloroethene	164	9.262	9.262	0.000	92	261904	10.0	11.4	
98 Chlorodibromomethane	129	9.448	9.448	0.000	89	156896	10.0	10.1	
100 Ethylene Dibromide	107	9.576	9.576	0.000	98	138241	10.0	11.4	
101 1-Chlorohexane	91	9.784	9.784	0.000	90	476622	10.0	11.4	
102 Chlorobenzene	112	9.898	9.898	0.000	92	841340	10.0	11.1	
104 1,1,1,2-Tetrachloroethane	131	9.934	9.934	0.000	94	224691	10.0	11.1	
103 Ethylbenzene	106	9.934	9.934	0.000	98	526691	10.0	11.6	
105 m-Xylene & p-Xylene	106	10.005	10.005	0.000	0	623007	10.0	11.4	
107 o-Xylene	106	10.327	10.327	0.000	89	593060	10.0	11.8	
106 Styrene	104	10.327	10.327	0.000	82	857218	10.0	11.5	
108 Bromoform	173	10.542	10.542	0.000	92	58355	10.0	9.57	
109 Isopropylbenzene	105	10.585	10.585	0.000	97	1594756	10.0	11.3	
111 Cyclohexanone	55	10.735	10.735	0.000	96	136306	400.0	387.6	
112 1,1,2,2-Tetrachloroethane	83	10.799	10.799	0.000	95	158665	10.0	11.0	
113 trans-1,4-Dichloro-2-buten	53	10.835	10.835	0.000	73	38858	10.0	10.2	
114 1,2,3-Trichloropropane	110	10.871	10.871	0.000	86	44160	10.0	10.8	
115 N-Propylbenzene	120	10.906	10.906	0.000	99	430901	10.0	11.5	
116 Bromobenzene	156	10.914	10.914	0.000	97	300387	10.0	11.4	
117 1,3,5-Trimethylbenzene	105	11.014	11.014	0.000	94	1290705	10.0	11.5	
118 2-Chlorotoluene	126	11.028	11.028	0.000	94	348441	10.0	11.2	
119 4-Chlorotoluene	126	11.107	11.107	0.000	99	345425	10.0	11.5	
120 tert-Butylbenzene	119	11.307	11.307	0.000	92	1245949	10.0	11.5	
121 1,2,4-Trimethylbenzene	105	11.343	11.343	0.000	99	1321276	10.0	11.6	
122 sec-Butylbenzene	134	11.486	11.486	0.000	96	329899	10.0	11.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 4-Isopropyltoluene	119	11.578	11.578	0.000	97	1386893	10.0	11.8	
124 1,3-Dichlorobenzene	146	11.657	11.657	0.000	95	602914	10.0	11.1	
126 1,4-Dichlorobenzene	146	11.729	11.729	0.000	92	596346	10.0	10.9	
127 n-Butylbenzene	91	11.950	11.950	0.000	98	1445075	10.0	11.8	
128 1,2-Dichlorobenzene	146	12.093	12.093	0.000	94	487329	10.0	10.9	
129 1,2-Dibromo-3-Chloropropan	157	12.851	12.851	0.000	67	15279	10.0	10.1	
130 1,2,4-Trichlorobenzene	180	13.795	13.795	0.000	93	313002	10.0	11.2	
131 Hexachlorobutadiene	225	13.938	13.938	0.000	94	202702	10.0	11.4	
132 Naphthalene	128	14.174	14.174	0.000	98	434572	10.0	11.3	
133 1,2,3-Trichlorobenzene	180	14.496	14.496	0.000	94	241949	10.0	11.4	
S 140 1,2-Dichloroethene, Total	96				0		20.0	22.5	
S 135 Xylenes, Total (URS)	1				0		20.0	23.3	
S 138 1,2-Dichloroethene, Total	1				0		20.0	22.5	
S 137 1,3-Dichloropropene, Total	1				0		20.0	20.4	
S 139 Xylenes, Total	106				0		20.0	23.3	
S 134 Trihalomethanes, Total	1				0		40.0	41.4	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MV-2cleve+AVA_00025	Amount Added:	5.00	Units: uL		
MV-Gas/Ket A_00060	Amount Added:	5.00	Units: uL		
MV-Main A_00031	Amount Added:	5.00	Units: uL		
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent	

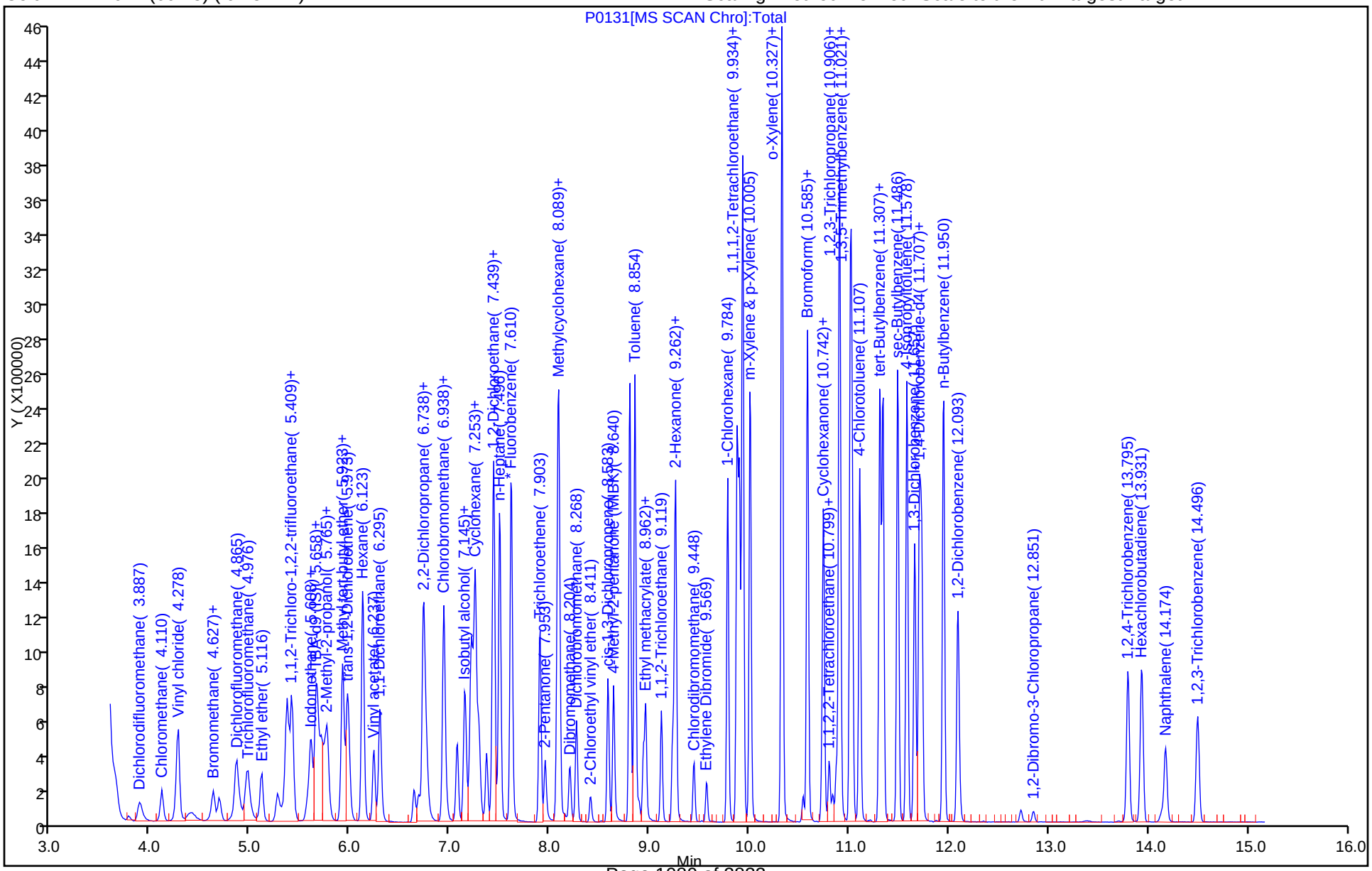
Report Date: 23-Jun-2017 12:59:36 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\P0131.D

Injection Date:	22-Jun-2017 08:32:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

TestAmerica Denver

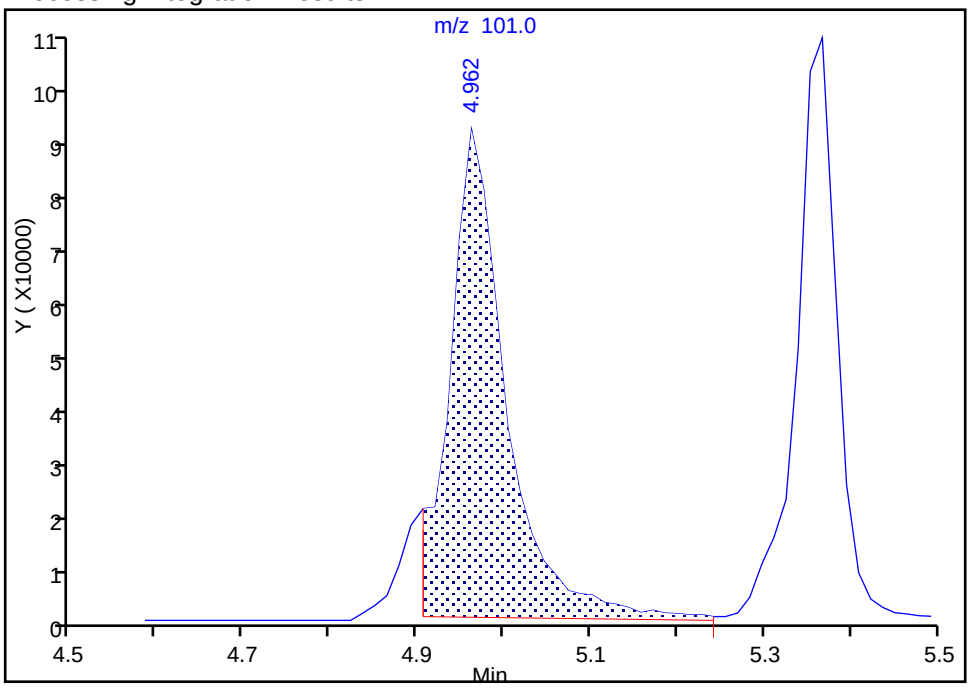
Data File: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\P0131.D
Injection Date: 22-Jun-2017 08:32:30 Instrument ID: VMS_P
Lims ID: CCV
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 10 Worklist Smp#: 2
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MLE_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

32 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

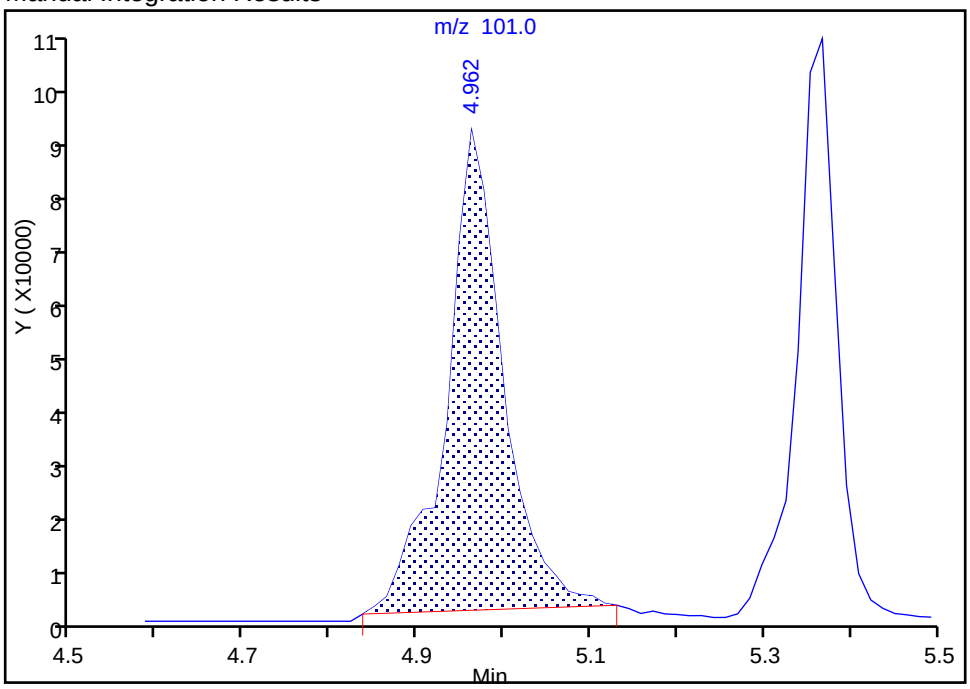
Processing Integration Results

RT: 4.96
Area: 417557
Amount: 9.814849
Amount Units: ug/l



Manual Integration Results

RT: 4.96
Area: 406586
Amount: 9.556971
Amount Units: ug/l



Reviewer: seifertj, 22-Jun-2017 10:29:38
Audit Action: Manually Integrated Audit Reason: Split Peak

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378395/3 Calibration Date: 06/22/2017 08:51

Instrument ID: VMS_P Calib Start Date: 06/19/2017 14:11

GC Column: DB-624 (60.25) ID: 0.25(mm) Calib End Date: 06/19/2017 16:26

Lab File ID: P0132.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Ethanol	Lin2		0.2603		666	600	11.0	20.0
Isopropyl alcohol	Lin2		1.121		105	100	4.6	20.0
Acetonitrile	Ave	0.0111	0.0108		147	150	-2.0	20.0
Isopropyl ether	Ave	0.1761	0.1706		14.5	15.0	-3.2	20.0
2-Chloro-1,3-butadiene	Ave	0.4170	0.4180		10.0	10.0	0.2	20.0
Tert-butyl ethyl ether	Ave	0.5304	0.5147		14.6	15.0	-3.0	20.0
Ethyl acetate	Ave	0.0968	0.0840		17.3	20.0	-13.3	20.0
Propionitrile	Ave	0.0105	0.0106		151	150	1.0	20.0
Methacrylonitrile	Ave	0.0623	0.0638		103	100	2.5	20.0
Tert-amyl methyl ether	Ave	0.3636	0.3617		14.9	15.0	-0.5	20.0
n-Butanol	Lin2		0.3035		269	250	7.6	20.0
Methyl methacrylate	Lin2		0.0203		18.1	20.0	-9.3	20.0
2-Nitropropane	Lin		0.0094		23.3	20.0	16.4	20.0
cis-1,4-Dichloro-2-butene	Lin2		0.0997		18.7	20.0	-6.4	20.0
1,2,3-Trimethylbenzene	Ave	3.069	3.070		10.0	10.0	0.0	20.0
Dibromofluoromethane (Surr)	Ave	0.2011	0.1772		8.81	10.0	-11.9	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2142	0.1807		8.43	10.0	-15.7	20.0
Toluene-d8 (Surr)	Ave	4.597	4.659		10.1	10.0	1.4	20.0
4-Bromofluorobenzene (Surr)	Ave	1.138	1.216		10.7	10.0	6.9	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\P0132.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 22-Jun-2017 08:51:30 ALS Bottle#: 11 Worklist Smp#: 3
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: SEIFERTJ Instrument ID: VMS_P
Sublist: chrom-MLE_VMSP_8260*sub80

Method: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 23-Jun-2017 12:59:37 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: seifertj Date: 22-Jun-2017 10:31:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.651	5.651	0.000	0	157360	250.0	250.0	
* 1 Fluorobenzene	96	7.610	7.610	0.000	98	1658151	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.876	9.876	0.000	90	310413	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.700	11.700	0.000	97	405390	12.5	12.5	
$ 5 Dibromofluoromethane (Surr	111	7.066	7.066	0.000	91	235069	10.0	8.81	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.360	7.360	0.000	0	239631	10.0	8.43	
$ 7 Toluene-d8 (Surr)	98	8.797	8.797	0.000	95	1156966	10.0	10.1	
$ 8 4-Bromofluorobenzene (Surr	95	10.742	10.742	0.000	83	394272	10.0	10.7	
28 Ethylene oxide	43	4.556	4.556	0.000	100	566286	1000.0	1222.2	
33 Ethanol	45	4.975	4.975	0.000	99	98293	600.0	666.0	
38 Propene oxide	58	5.212	5.212	0.000	96	2494648	1000.0	1088.8	
42 Isopropyl alcohol	45	5.380	5.380	0.000	93	70549	100.0	104.6	
46 Acetonitrile	41	5.622	5.622	0.000	100	215574	150.0	146.9	
56 Isopropyl ether	87	6.230	6.230	0.000	94	339399	15.0	14.5	
58 2-Chloro-1,3-butadiene	53	6.358	6.358	0.000	95	554436	10.0	10.0	
59 Tert-butyl ethyl ether	59	6.509	6.509	0.000	97	1024071	15.0	14.6	
60 Ethyl acetate	43	6.659	6.659	0.000	99	222721	20.0	17.3	
65 Propionitrile	54	6.752	6.752	0.000	99	210949	150.0	151.5	
66 Methacrylonitrile	41	6.866	6.866	0.000	95	846837	100.0	102.5	
75 Tert-amyl methyl ether	73	7.410	7.410	0.000	93	719721	15.0	14.9	
78 n-Butanol	56	7.653	7.653	0.000	94	47759	250.0	269.0	
81 Methyl methacrylate	100	8.032	8.032	0.000	93	53801	20.0	18.1	
88 2-Nitropropane	41	8.418	8.418	0.000	99	24978	20.0	23.3	
99 Tetrahydrothiophene	60	9.476	9.476	0.000	84	2615	NC	NC	
110 cis-1,4-Dichloro-2-butene	53	10.620	10.620	0.000	0	64682	20.0	18.7	
125 1,2,3-Trimethylbenzene	105	11.721	11.721	0.000	99	995637	10.0	10.0	
16 1,3,5-Trichlorobenzene	180	13.044	13.044	0.000	95	348864	10.0	9.86	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MV-Supp A_00024	Amount Added:	5.00	Units: uL	
MV-ARCH SS A_00081	Amount Added:	0.80	Units: uL	
MV-567649-D_00001	Amount Added:	1.00	Units: uL	Run Reagent

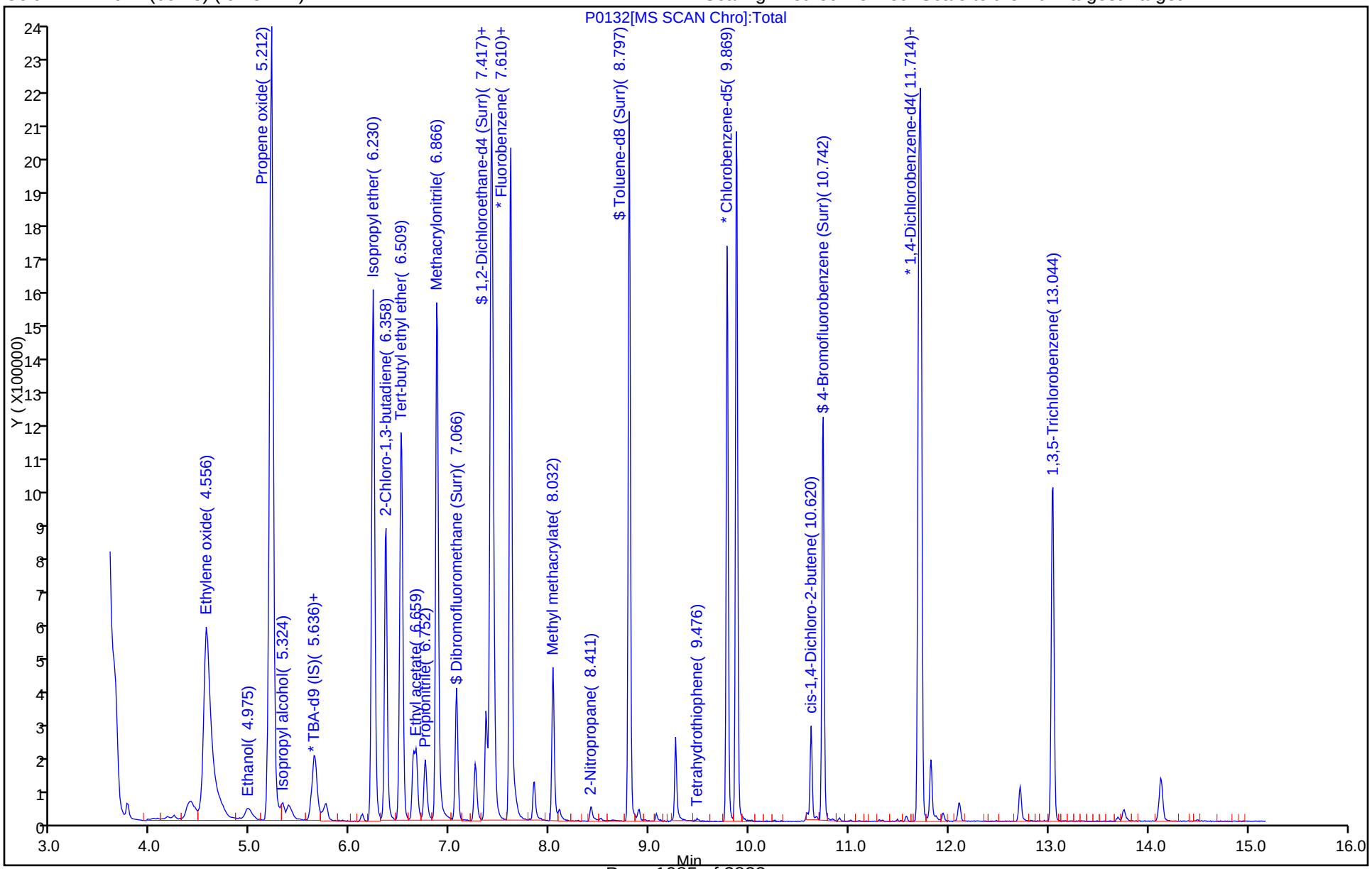
Report Date: 23-Jun-2017 12:59:38 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\P0132.D

Injection Date:	22-Jun-2017 08:51:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	CCV			Worklist Smp#:	3
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9102.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	26-Apr-2017 20:42:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Operator ID:	DUKESA	Instrument ID:	VMS_G2		
Method:	\\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\SO_VMSG2_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	27-Apr-2017 16:49:58	Calib Date:	26-Apr-2017 23:47:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9110.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK017				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 7 BFB	95	2.282	2.282	0.000	88	44239	NR	NR	7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

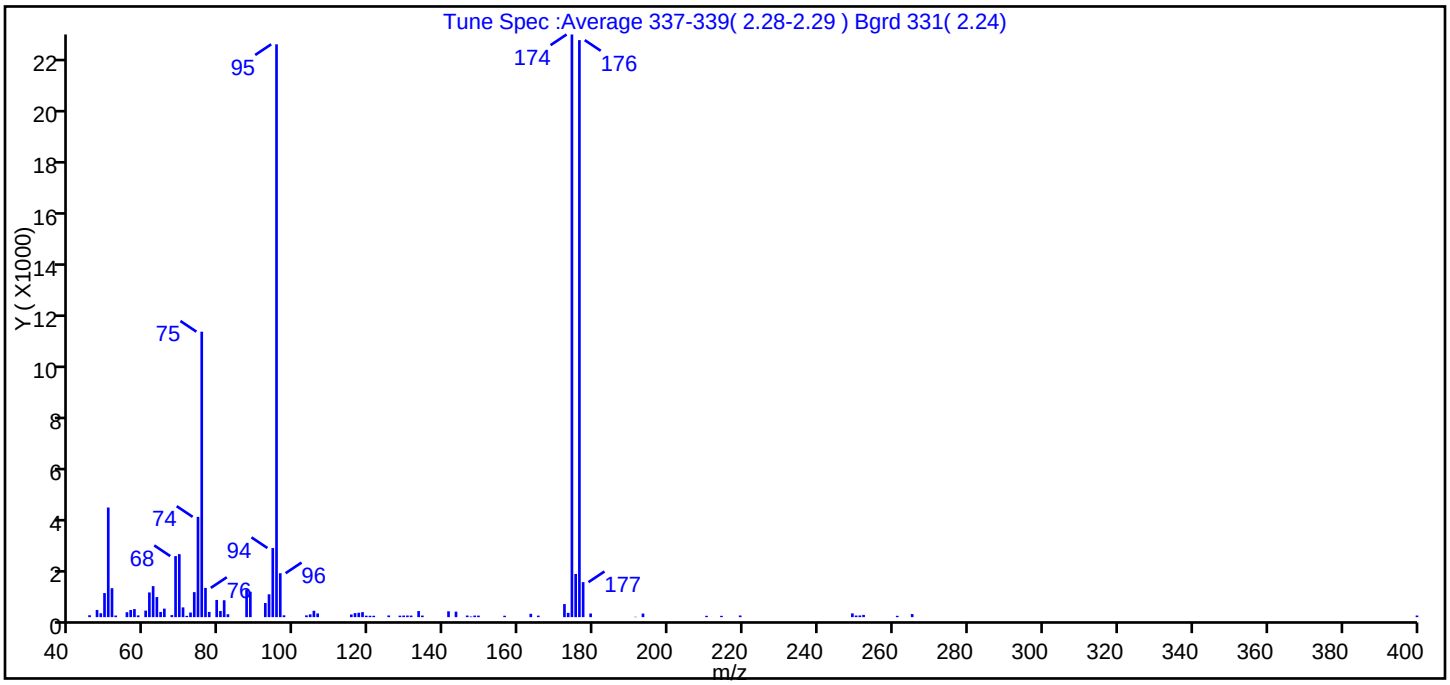
MV-BFB_00022 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9102.D
Injection Date: 26-Apr-2017 20:42:30 Instrument ID: VMS_G2
Lims ID: BFB
Client ID:
Operator ID: DUKESA ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 7 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.1
75	30 to 60% of m/z 95	49.8
96	5 to 9% of m/z 95	7.7
173	Less than 2% of m/z 174	0.7 (0.7)
174	50 to 120% of m/z 95	101.7
175	5 to 9% of m/z 174	7.5 (7.4)
176	Greater than 95% but less than 101% of m/z 174	100.7 (99.0)
177	5 to 9% of m/z 176	6.1 (6.1)

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9102.D\SO_VMSG2_8260.rslt\spectra.d
Injection Date: 26-Apr-2017 20:42:30
Spectrum: Tune Spec :Average 337-339(2.28-2.29) Bgrd 331(2.24)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 86

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	73	72.00	176	115.00	101	165.00	58
47.00	276	73.00	956	116.00	154	172.00	500
48.00	149	74.00	3835	117.00	168	173.00	163
49.00	921	75.00	10916	118.00	192	174.00	22280
50.00	4191	76.00	1118	119.00	56	175.00	1651
51.00	1108	77.00	199	120.00	53	176.00	22064
52.00	61	79.00	658	121.00	53	177.00	1339
55.00	189	80.00	234	125.00	64	179.00	139
56.00	273	81.00	646	128.00	57	191.00	13
57.00	308	82.00	111	129.00	61	193.00	137
58.00	68	87.00	1048	130.00	62	210.00	51
60.00	250	88.00	971	131.00	60	214.00	51
61.00	945	92.00	540	133.00	232	219.00	63
62.00	1186	93.00	874	134.00	60	249.00	143
63.00	768	94.00	2643	141.00	224	250.00	62
64.00	198	95.00	21904	143.00	211	251.00	64
65.00	326	96.00	1680	146.00	62	252.00	85
67.00	78	97.00	70	147.00	23	261.00	51
68.00	2335	103.00	68	148.00	60	265.00	117
69.00	2409	104.00	106	149.00	58	400.00	62
70.00	373	105.00	244	156.00	54		
71.00	50	106.00	141	163.00	128		

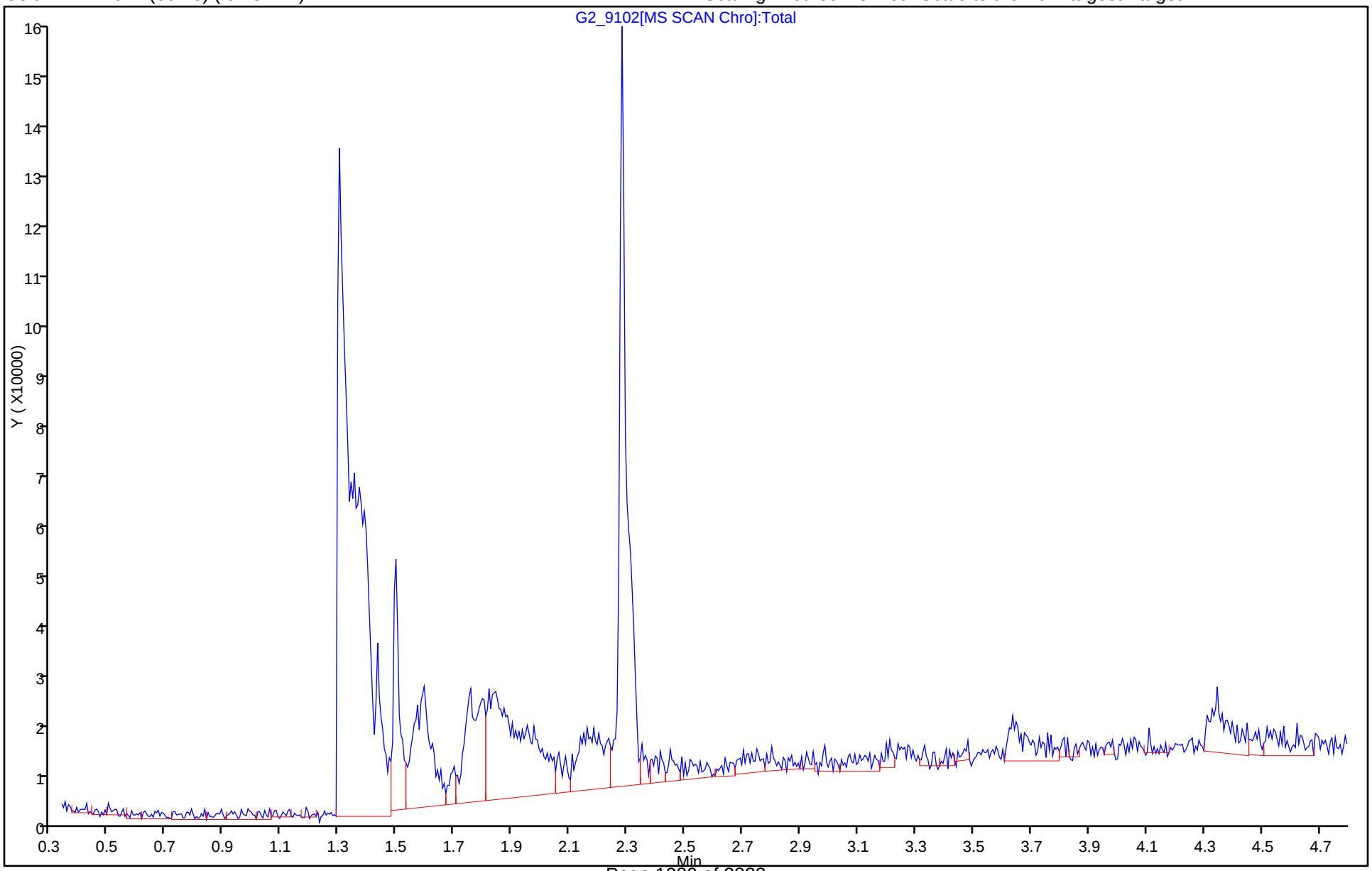
Report Date: 27-Apr-2017 16:49:58 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011.b\G2_9102.D

Injection Date:	26-Apr-2017 20:42:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0892.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	12-Jun-2017 17:19:30	ALS Bottle#:	100	Worklist Smp#:	1
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Operator ID:	DUKESA	Instrument ID:	VMS_G2		
Method:	\\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\SO_VMSG2_8260.m				
Limit Group:	MSV - 8260B Water and Solid				
Last Update:	13-Jun-2017 15:51:10	Calib Date:	12-Jun-2017 20:35:30		
Integrator:	RTE	ID Type:	Deconvolution ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D				
Column 1 :	DB-624 (60.25) (0.25 mm)		Det: MS SCAN		
Process Host:	XAWRK008				

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 7 BFB	95	2.276	2.276	0.000	87	108728	NR	NR	7

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

7 - Failed Limit of Detection

Reagents:

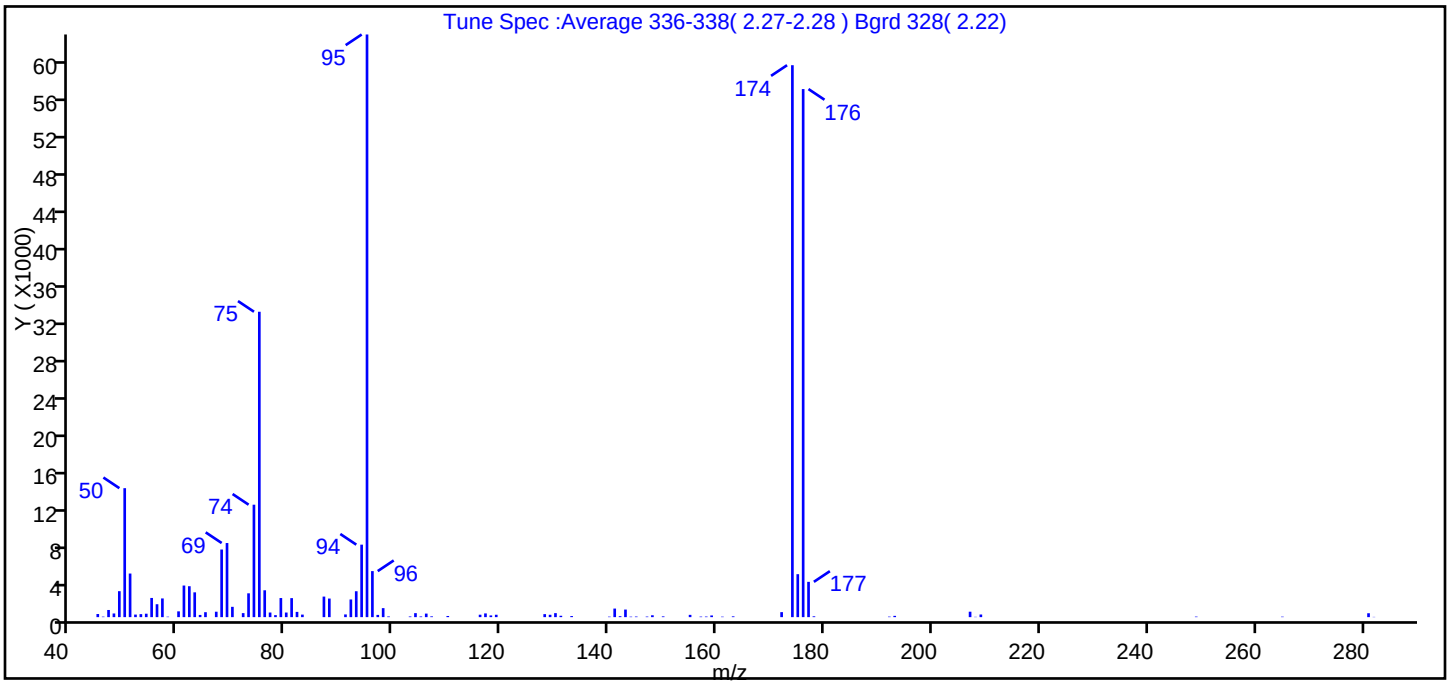
MV-BFB_00023 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0892.D
Injection Date: 12-Jun-2017 17:19:30 Instrument ID: VMS_G2
Lims ID: BFB
Client ID:
Operator ID: DUKESA ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 7 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	22.1
75	30 to 60% of m/z 95	52.4
96	5 to 9% of m/z 95	7.9
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	94.7
175	5 to 9% of m/z 174	7.4 (7.8)
176	Greater than 95% but less than 101% of m/z 174	90.6 (95.7)
177	5 to 9% of m/z 176	6.1 (6.7)

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0892.D\SO_VMSG2_8260.rslt\spectra.d
Injection Date: 12-Jun-2017 17:19:30
Spectrum: Tune Spec :Average 336-338(2.27-2.28) Bgrd 328(2.22)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 92

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	336	70.00	1109	99.00	72	148.00	202
46.00	54	72.00	433	103.00	72	150.00	81
47.00	770	73.00	2562	104.00	430	155.00	246
48.00	395	74.00	12092	105.00	73	157.00	59
49.00	2792	75.00	32840	106.00	382	158.00	64
50.00	13868	76.00	2889	107.00	83	159.00	181
51.00	4689	77.00	497	110.00	124	161.00	51
52.00	276	78.00	216	116.00	261	163.00	84
53.00	323	79.00	2054	117.00	401	172.00	539
54.00	369	80.00	496	118.00	184	174.00	59352
55.00	2064	81.00	2045	119.00	257	175.00	4620
56.00	1389	82.00	565	128.00	324	176.00	56784
57.00	2012	83.00	274	129.00	254	177.00	3796
58.00	50	87.00	2210	130.00	431	178.00	88
60.00	623	88.00	1999	131.00	148	192.00	56
61.00	3399	91.00	292	133.00	116	193.00	138
62.00	3326	92.00	1901	140.00	53	207.00	585
63.00	2667	93.00	2786	141.00	922	208.00	32
64.00	237	94.00	7795	142.00	100	209.00	284
65.00	532	95.00	62656	143.00	816	249.00	58
67.00	584	96.00	4950	144.00	52	265.00	51
68.00	7273	97.00	241	145.00	65	281.00	419
69.00	7970	98.00	968	147.00	62	282.00	26

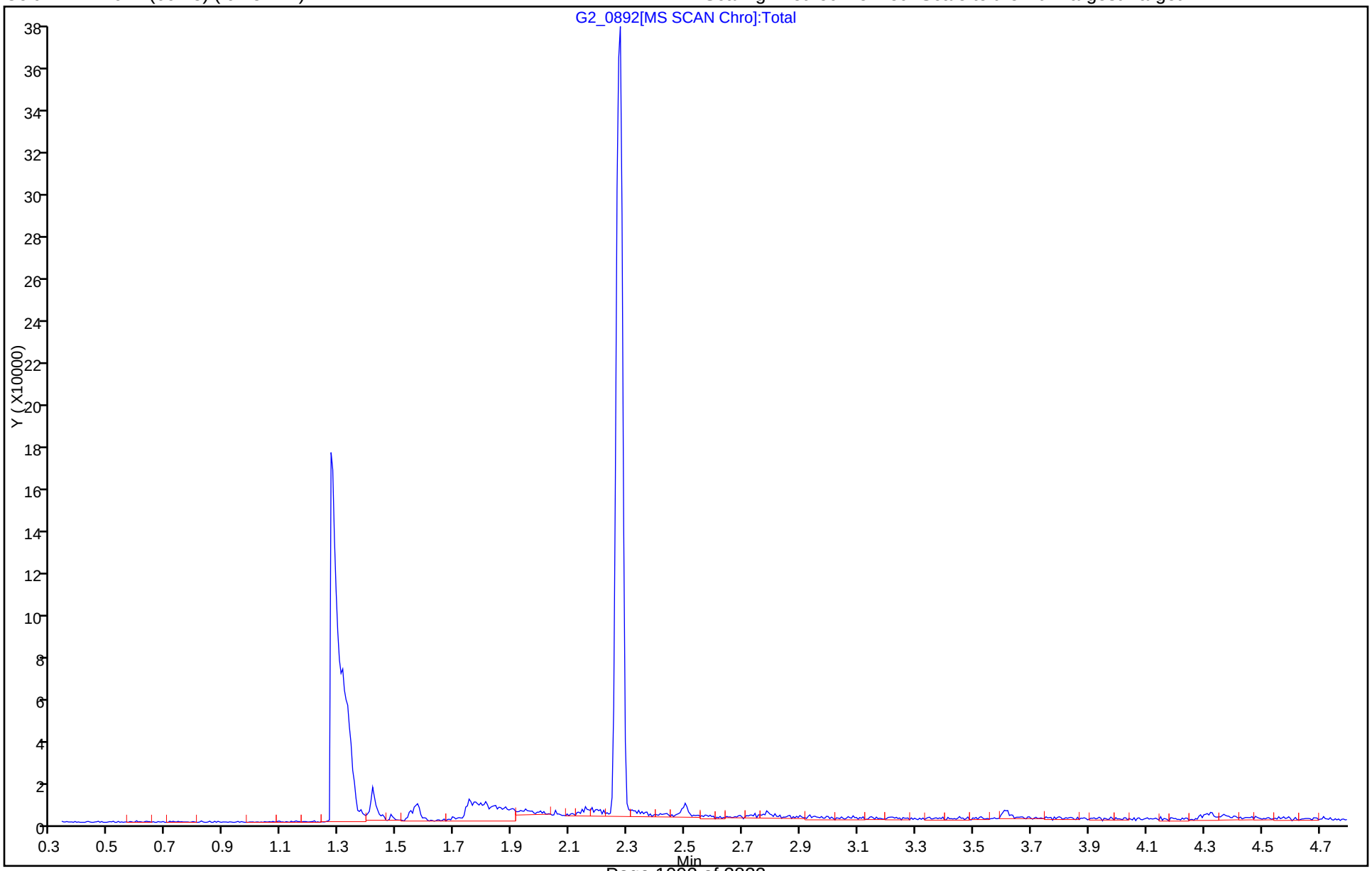
Report Date: 13-Jun-2017 15:51:10 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0892.D

Injection Date:	12-Jun-2017 17:19:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\G2_1074.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 15-Jun-2017 18:11:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 16-Jun-2017 16:12:58 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: newcomer Date: 16-Jun-2017 16:12:58

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 7 BFB	95	2.270	2.270	0.000	83	57562	NR	NR	7

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
7 - Failed Limit of Detection

Reagents:

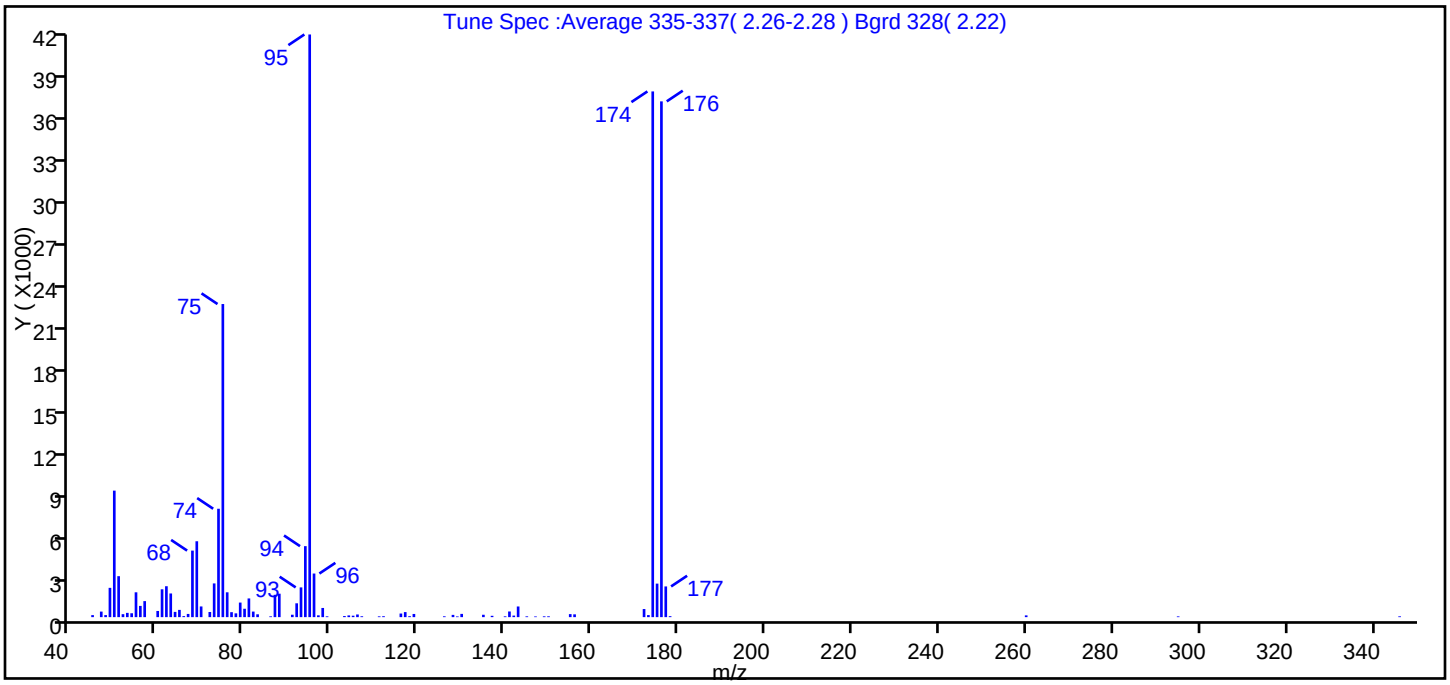
MV-BFB_00023 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\G2_1074.D
Injection Date: 15-Jun-2017 18:11:30 Instrument ID: VMS_G2
Lims ID: BFB
Client ID:
Operator ID: DUKESA ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 7 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.7
75	30 to 60% of m/z 95	53.7
96	5 to 9% of m/z 95	7.5
173	Less than 2% of m/z 174	0.4 (0.4)
174	50 to 120% of m/z 95	90.2
175	5 to 9% of m/z 174	5.8 (6.4)
176	Greater than 95% but less than 101% of m/z 174	88.5 (98.1)
177	5 to 9% of m/z 176	5.3 (6.0)

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\G2_1074.D\SO_VMSG2_8260.rslt\spectra.d
Injection Date: 15-Jun-2017 18:11:30
Spectrum: Tune Spec :Average 335-337(2.26-2.28) Bgrd 328(2.22)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 84

m/z	Y	m/z	Y	m/z	Y	m/z	Y
45.00	145	69.00	5437	95.00	41744	137.00	96
47.00	398	70.00	766	96.00	3124	140.00	57
48.00	147	72.00	368	97.00	130	141.00	406
49.00	2099	73.00	2416	98.00	658	142.00	111
50.00	9064	74.00	7766	99.00	57	143.00	764
51.00	2935	75.00	22432	103.00	78	145.00	58
52.00	213	76.00	1780	104.00	123	147.00	50
53.00	306	77.00	356	105.00	103	149.00	57
54.00	279	78.00	272	106.00	191	150.00	59
55.00	1780	79.00	1044	107.00	62	155.00	217
56.00	805	80.00	601	111.00	56	156.00	201
57.00	1148	81.00	1340	112.00	65	172.00	581
60.00	442	82.00	399	116.00	259	173.00	148
61.00	1995	83.00	203	117.00	362	174.00	37664
62.00	2215	86.00	57	118.00	66	175.00	2402
63.00	1696	87.00	1600	119.00	228	176.00	36952
64.00	376	88.00	1680	126.00	59	177.00	2200
65.00	520	91.00	173	128.00	162	178.00	68
66.00	74	92.00	991	129.00	50	260.00	126
67.00	230	93.00	2131	130.00	233	295.00	53
68.00	4767	94.00	5086	135.00	171	346.00	58

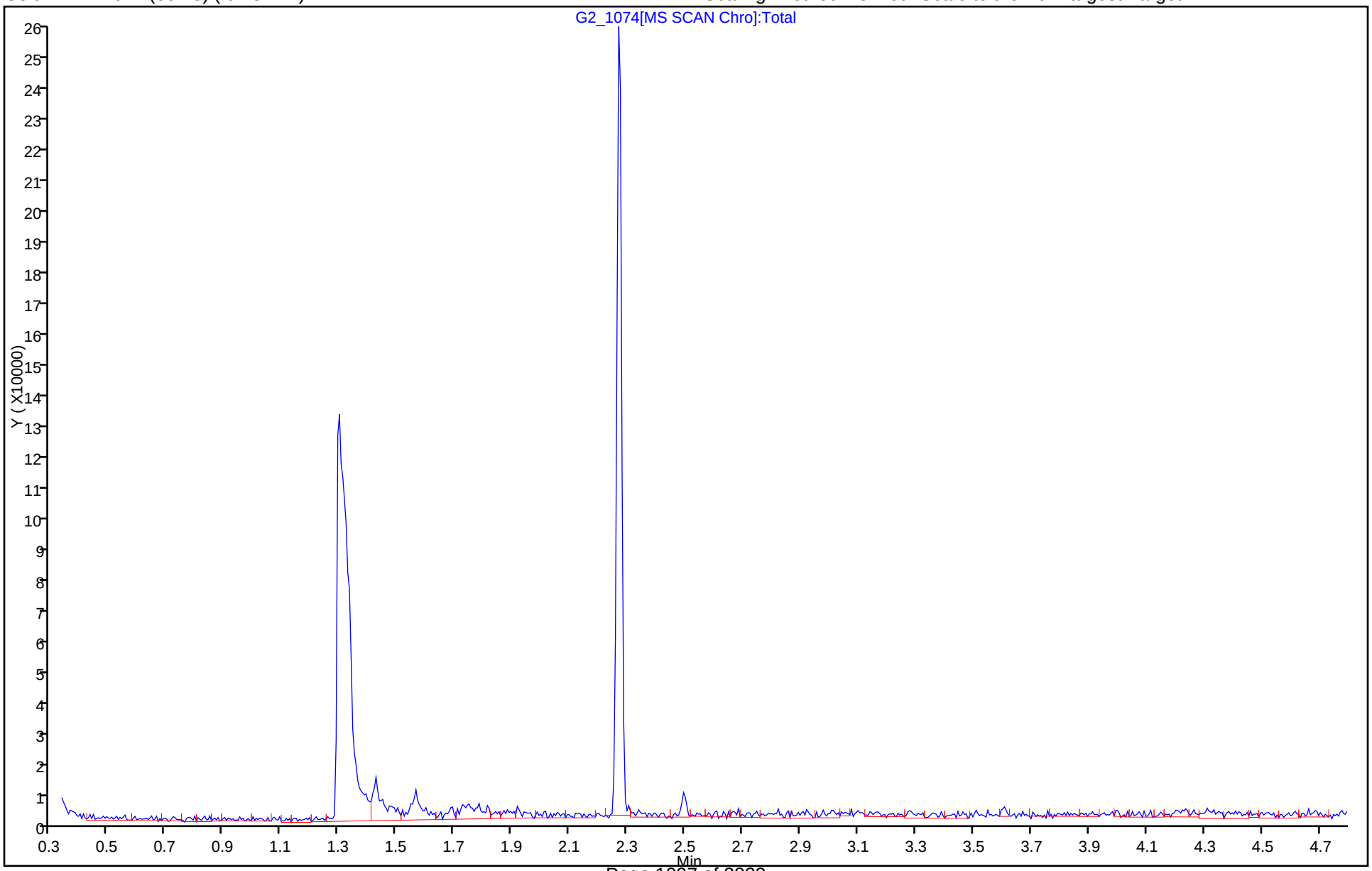
Report Date: 16-Jun-2017 16:12:59 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\G2_1074.D

Injection Date:	15-Jun-2017 18:11:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1114.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 16-Jun-2017 11:42:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:46 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 12:09:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 7 BFB	95	2.270	2.270	0.000	80	46525	NR	NR	7

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
7 - Failed Limit of Detection

Reagents:

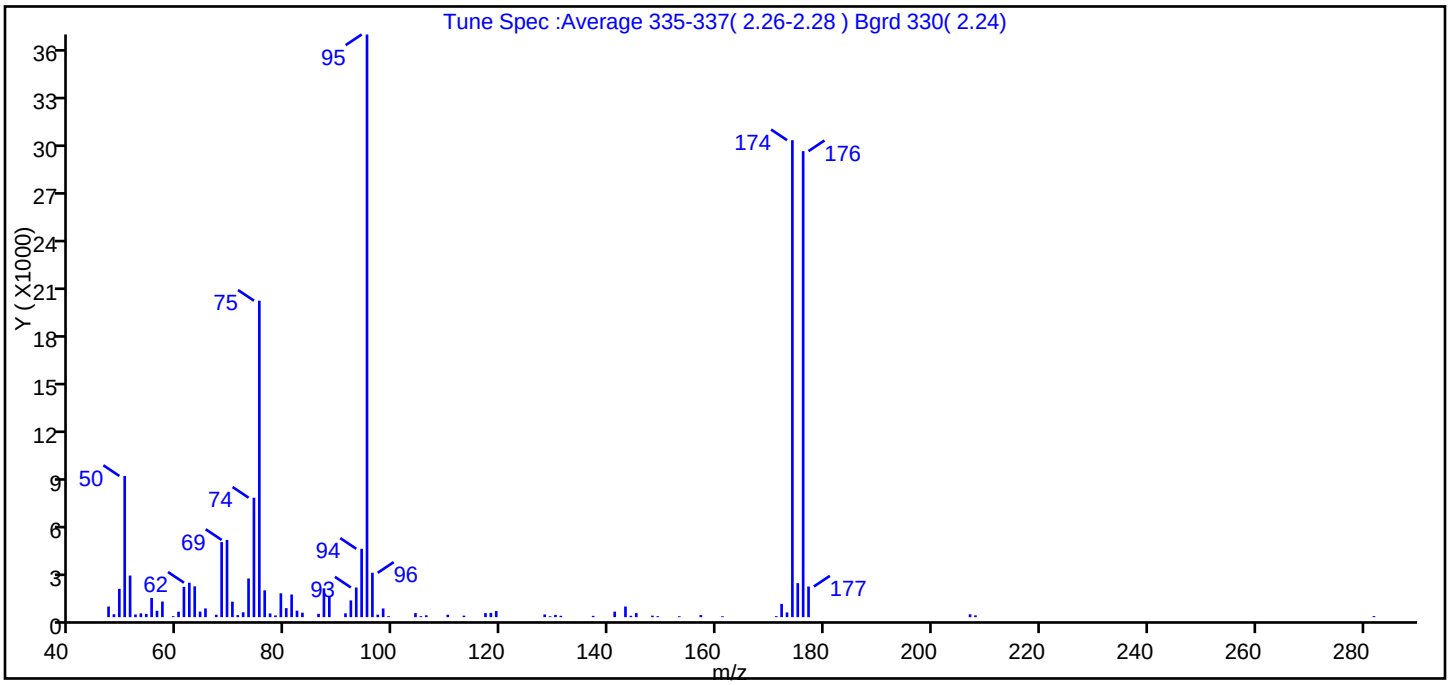
MV-BFB_00023 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1114.D
Injection Date: 16-Jun-2017 11:42:30 Instrument ID: VMS_G2
Lims ID: BFB
Client ID:
Operator ID: DUKESA ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 7 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	24.2
75	30 to 60% of m/z 95	54.3
96	5 to 9% of m/z 95	7.6
173	Less than 2% of m/z 174	0.8 (1.0)
174	50 to 120% of m/z 95	81.9
175	5 to 9% of m/z 174	5.8 (7.1)
176	Greater than 95% but less than 101% of m/z 174	80.0 (97.7)
177	5 to 9% of m/z 176	5.3 (6.6)

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1114.D\SO_VMSG2_8260.rslt\spectra.d
Injection Date: 16-Jun-2017 11:42:30
Spectrum: Tune Spec :Average 335-337(2.26-2.28) Bgrd 330(2.24)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 79

m/z	Y	m/z	Y	m/z	Y	m/z	Y
47.00	667	69.00	4844	93.00	1859	141.00	346
48.00	181	70.00	973	94.00	4288	143.00	666
49.00	1777	71.00	126	95.00	36560	144.00	86
50.00	8858	72.00	309	96.00	2783	145.00	254
51.00	2610	73.00	2424	97.00	156	148.00	93
52.00	167	74.00	7495	98.00	545	149.00	61
53.00	237	75.00	19856	99.00	58	153.00	55
54.00	204	76.00	1683	104.00	256	157.00	130
55.00	1206	77.00	234	105.00	62	161.00	54
56.00	401	78.00	108	106.00	117	171.00	63
57.00	981	79.00	1495	110.00	150	172.00	829
59.00	59	80.00	566	113.00	94	173.00	296
60.00	341	81.00	1421	117.00	254	174.00	29928
61.00	1904	82.00	407	118.00	267	175.00	2132
62.00	2161	83.00	280	119.00	383	176.00	29240
63.00	1933	86.00	210	128.00	169	177.00	1922
64.00	347	87.00	1808	129.00	55	207.00	178
65.00	548	88.00	1293	130.00	140	208.00	113
67.00	150	91.00	239	131.00	85	282.00	66
68.00	4712	92.00	1051	137.00	82		

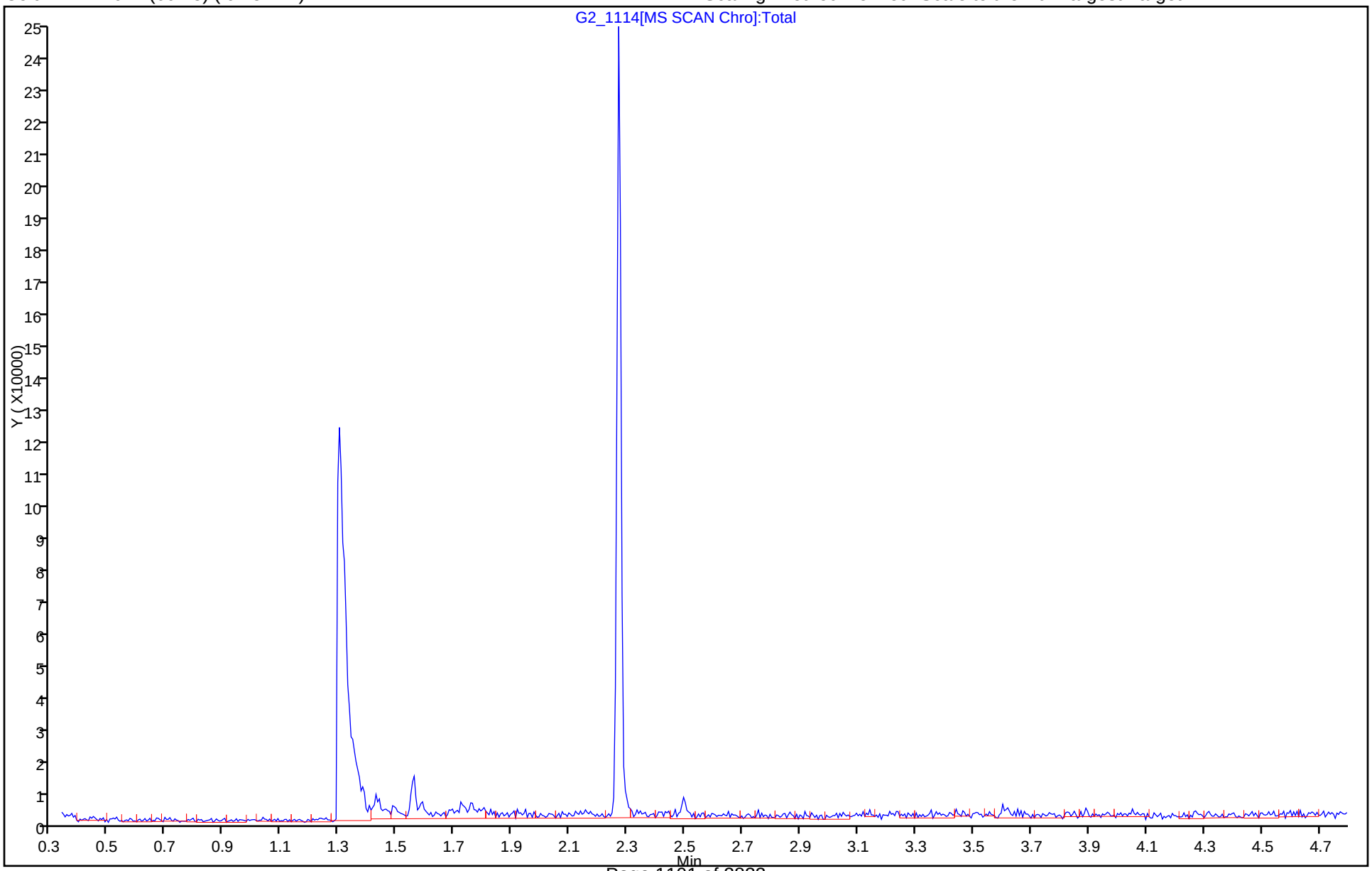
Report Date: 18-Jun-2017 12:34:47 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1114.D

Injection Date:	16-Jun-2017 11:42:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1114.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 16-Jun-2017 11:42:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:46 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 12:09:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 7 BFB	95	2.270	2.270	0.000	80	46525	NR	NR	7

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
7 - Failed Limit of Detection

Reagents:

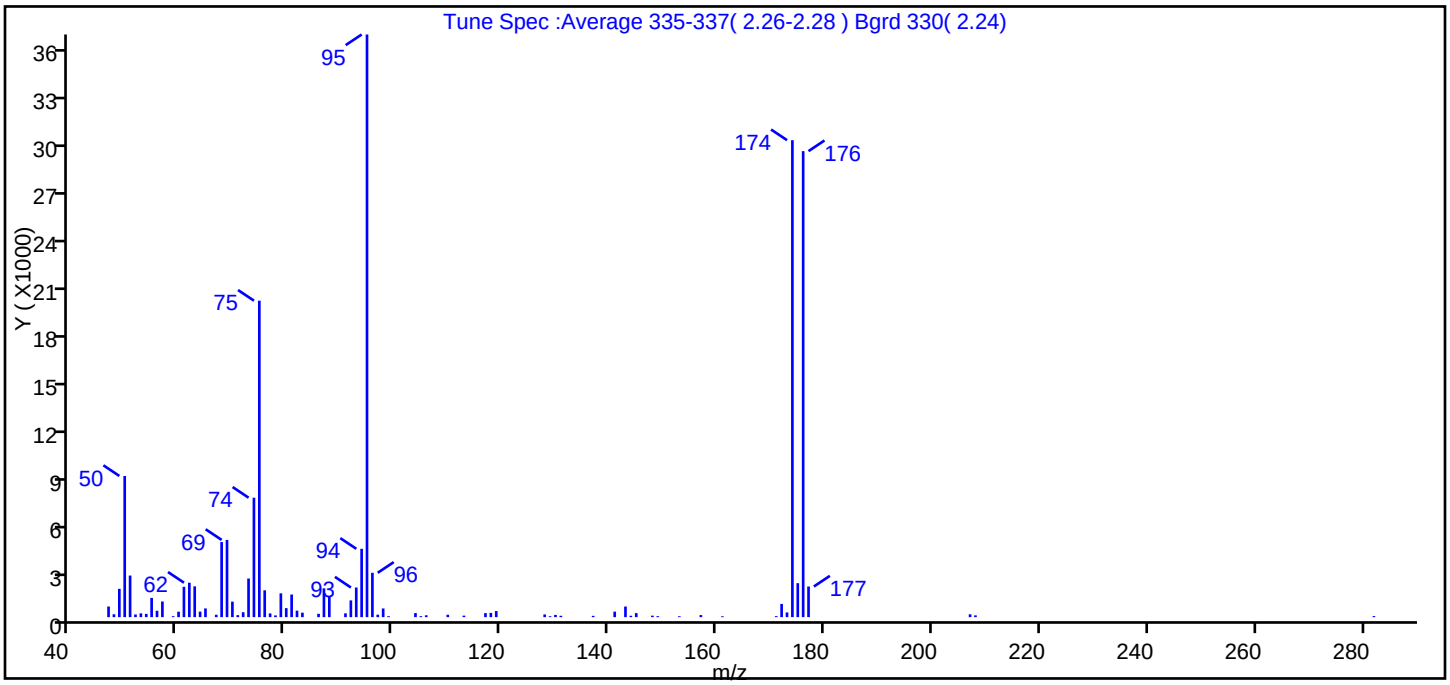
MV-BFB_00023 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1114.D
Injection Date: 16-Jun-2017 11:42:30 Instrument ID: VMS_G2
Lims ID: BFB
Client ID:
Operator ID: DUKESA ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 7 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	24.2
75	30 to 60% of m/z 95	54.3
96	5 to 9% of m/z 95	7.6
173	Less than 2% of m/z 174	0.8 (1.0)
174	50 to 120% of m/z 95	81.9
175	5 to 9% of m/z 174	5.8 (7.1)
176	Greater than 95% but less than 101% of m/z 174	80.0 (97.7)
177	5 to 9% of m/z 176	5.3 (6.6)

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1114.D\SO_VMSG2_8260.rslt\spectra.d
Injection Date: 16-Jun-2017 11:42:30
Spectrum: Tune Spec :Average 335-337(2.26-2.28) Bgrd 330(2.24)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 79

m/z	Y	m/z	Y	m/z	Y	m/z	Y
47.00	667	69.00	4844	93.00	1859	141.00	346
48.00	181	70.00	973	94.00	4288	143.00	666
49.00	1777	71.00	126	95.00	36560	144.00	86
50.00	8858	72.00	309	96.00	2783	145.00	254
51.00	2610	73.00	2424	97.00	156	148.00	93
52.00	167	74.00	7495	98.00	545	149.00	61
53.00	237	75.00	19856	99.00	58	153.00	55
54.00	204	76.00	1683	104.00	256	157.00	130
55.00	1206	77.00	234	105.00	62	161.00	54
56.00	401	78.00	108	106.00	117	171.00	63
57.00	981	79.00	1495	110.00	150	172.00	829
59.00	59	80.00	566	113.00	94	173.00	296
60.00	341	81.00	1421	117.00	254	174.00	29928
61.00	1904	82.00	407	118.00	267	175.00	2132
62.00	2161	83.00	280	119.00	383	176.00	29240
63.00	1933	86.00	210	128.00	169	177.00	1922
64.00	347	87.00	1808	129.00	55	207.00	178
65.00	548	88.00	1293	130.00	140	208.00	113
67.00	150	91.00	239	131.00	85	282.00	66
68.00	4712	92.00	1051	137.00	82		

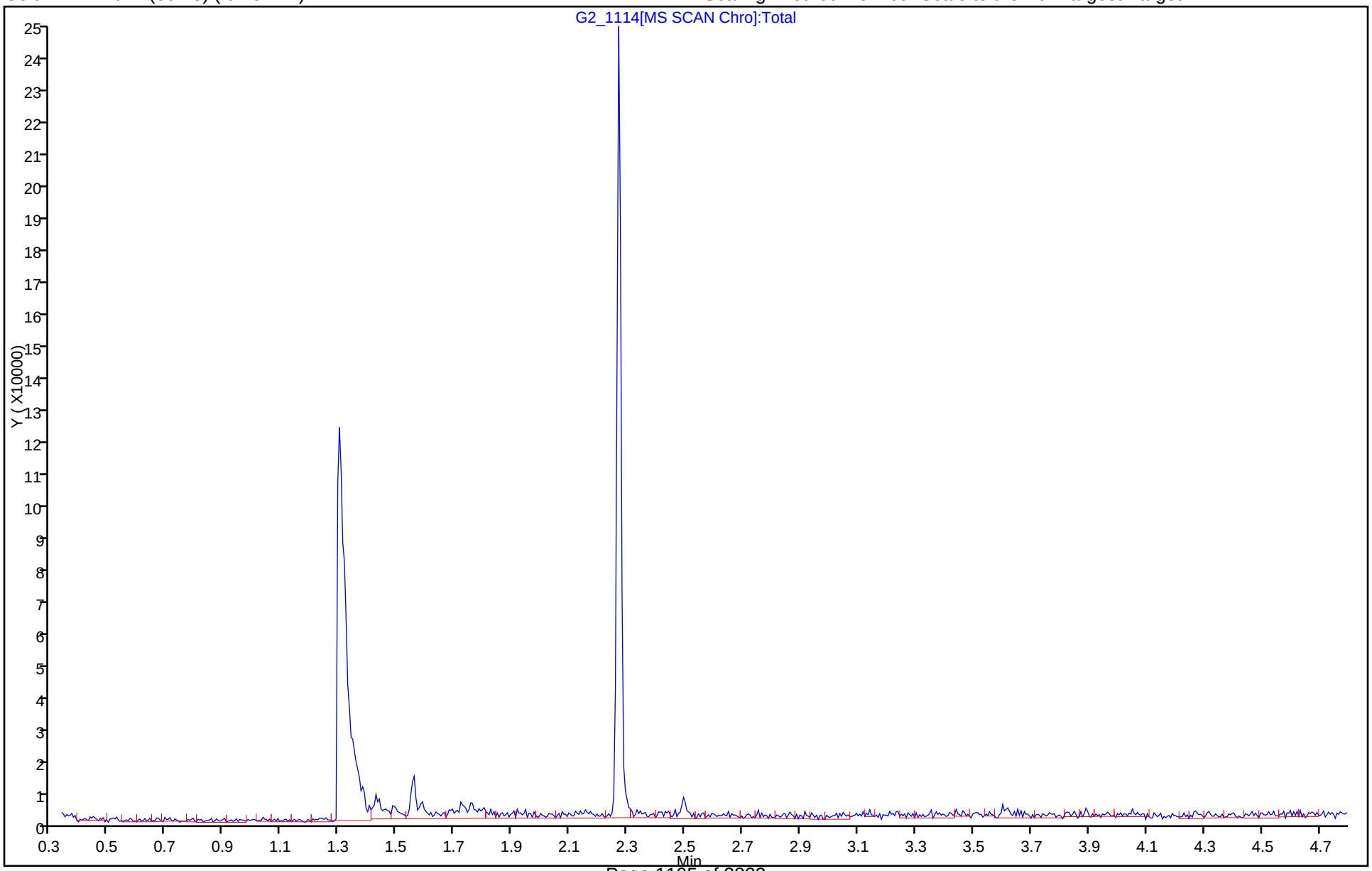
Report Date: 18-Jun-2017 12:34:47 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1114.D

Injection Date:	16-Jun-2017 11:42:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0027.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 19-Jun-2017 10:40:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 10:29:35 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 4 BFB	95	4.956	4.956	0.000	0	121487	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

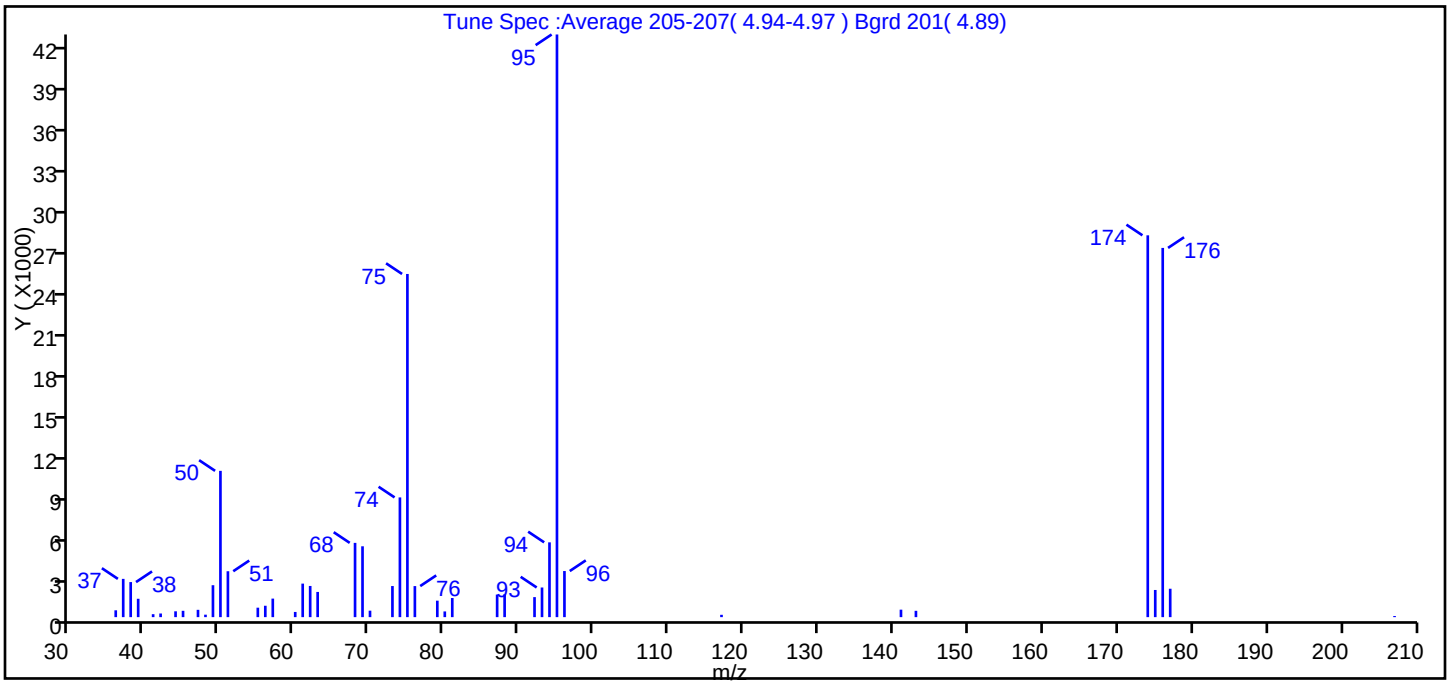
MV-BFB_00023 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0027.D
Injection Date: 19-Jun-2017 10:40:30 Instrument ID: VMS_P
Lims ID: BFB
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: MLE_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 4 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	25.1
75	30 to 60% of m/z 95	58.9
96	5 to 9% of m/z 95	7.9
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	65.5
175	5 to 9% of m/z 174	4.7 (7.1)
176	Greater than 95% but less than 101% of m/z 174	63.4 (96.7)
177	5 to 9% of m/z 176	4.9 (7.7)

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0027.D\MLE_VMSP_8260.rslt\spectra.d
Injection Date: 19-Jun-2017 10:40:30
Spectrum: Tune Spec :Average 205-207(4.94-4.97) Bgrd 201(4.89)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 45

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	504	51.00	3383	74.00	8823	96.00	3397
37.00	2820	55.00	697	75.00	25288	117.00	173
38.00	2584	56.00	839	76.00	2289	141.00	551
39.00	1354	57.00	1366	79.00	1213	143.00	466
41.00	218	60.00	383	80.00	421	174.00	28136
42.00	269	61.00	2471	81.00	1409	175.00	2002
44.00	430	62.00	2298	87.00	1664	176.00	27208
45.00	467	63.00	1857	88.00	1682	177.00	2093
47.00	539	68.00	5473	92.00	1476	207.00	81
48.00	182	69.00	5221	93.00	2185		
49.00	2353	70.00	477	94.00	5512		
50.00	10780	73.00	2292	95.00	42936		

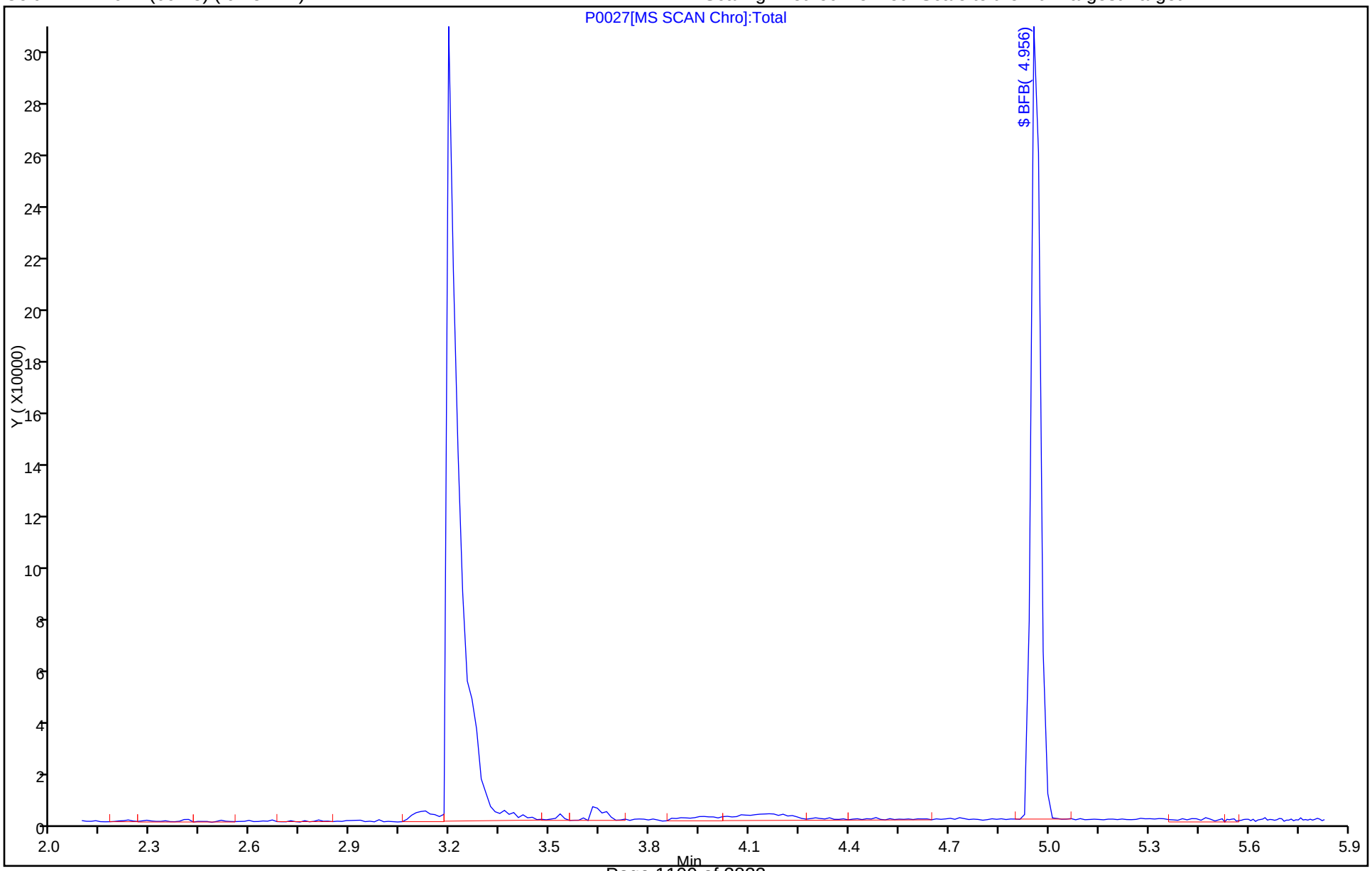
Report Date: 20-Jun-2017 10:29:35 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0027.D

Injection Date:	19-Jun-2017 10:40:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\P0130.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 22-Jun-2017 08:09:30 ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 23-Jun-2017 12:59:32 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK018

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
$ 4 BFB	95	4.957	4.957	0.000	0	274083	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

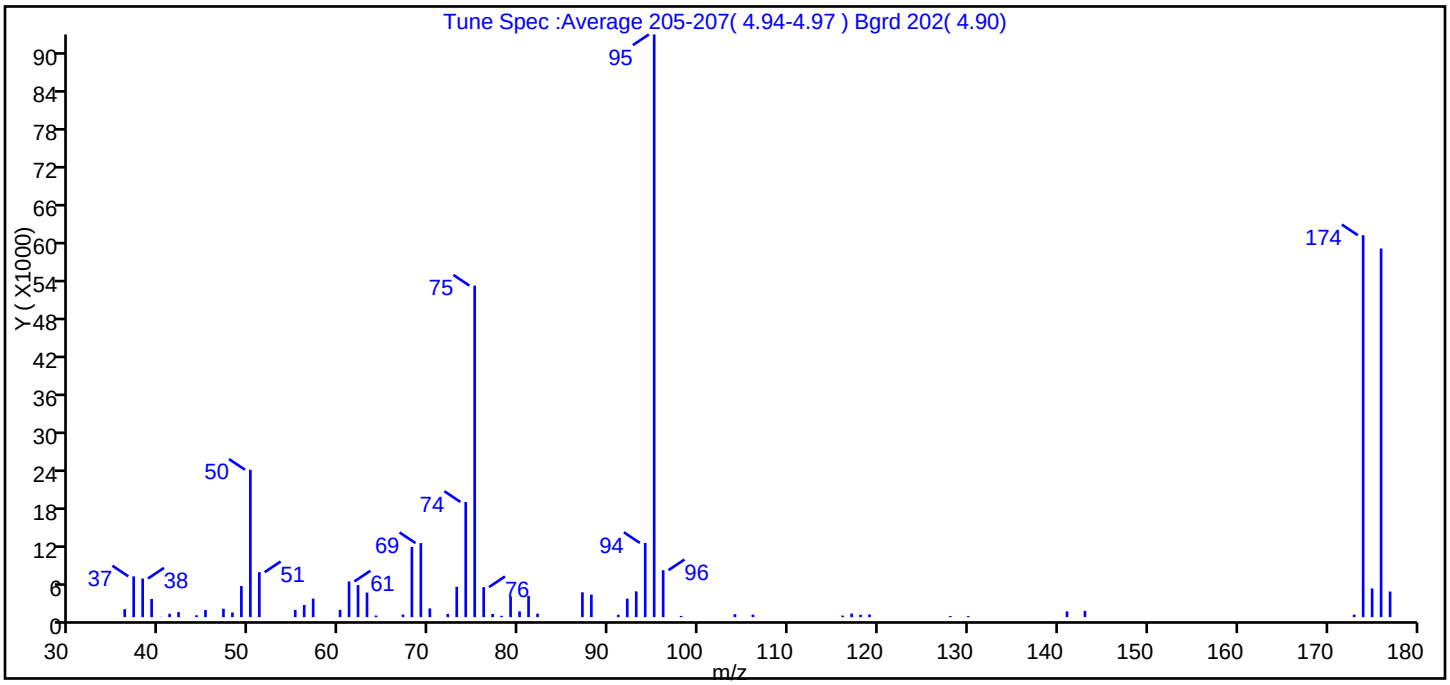
MV-BFB_00023 Amount Added: 1.00 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\P0130.D
Injection Date: 22-Jun-2017 08:09:30 Instrument ID: VMS_P
Lims ID: BFB
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 100 Worklist Smp#: 1
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: MLE_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Tune Method: BFB Method 8260

$ 4 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	25.3
75	30 to 60% of m/z 95	56.9
96	5 to 9% of m/z 95	8.1
173	Less than 2% of m/z 174	0.4 (0.7)
174	50 to 120% of m/z 95	65.5
175	5 to 9% of m/z 174	4.9 (7.5)
176	Greater than 95% but less than 101% of m/z 174	63.3 (96.5)
177	5 to 9% of m/z 176	4.4 (7.0)

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\P0130.D\MLE_VMSP_8260.rslt\spectra.d
Injection Date: 22-Jun-2017 08:09:30
Spectrum: Tune Spec :Average 205-207(4.94-4.97) Bgrd 202(4.90)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 61

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1272	57.00	2952	78.00	207	116.00	251
37.00	6502	60.00	1170	79.00	3268	117.00	571
38.00	6153	61.00	5692	80.00	920	118.00	367
39.00	2900	62.00	5116	81.00	3384	119.00	432
40.00	42	63.00	3919	82.00	561	128.00	173
41.00	540	64.00	258	87.00	3959	130.00	172
42.00	803	67.00	416	88.00	3595	141.00	919
44.00	298	68.00	11204	91.00	383	143.00	1000
45.00	1144	69.00	11801	92.00	2951	173.00	402
47.00	1336	70.00	1392	93.00	4111	174.00	60888
48.00	744	72.00	509	94.00	11827	175.00	4576
49.00	4957	73.00	4835	95.00	92888	176.00	58768
50.00	23496	74.00	18368	96.00	7486	177.00	4087
51.00	7168	75.00	52856	98.00	197		
55.00	1160	76.00	4787	104.00	475		
56.00	1928	77.00	504	106.00	403		

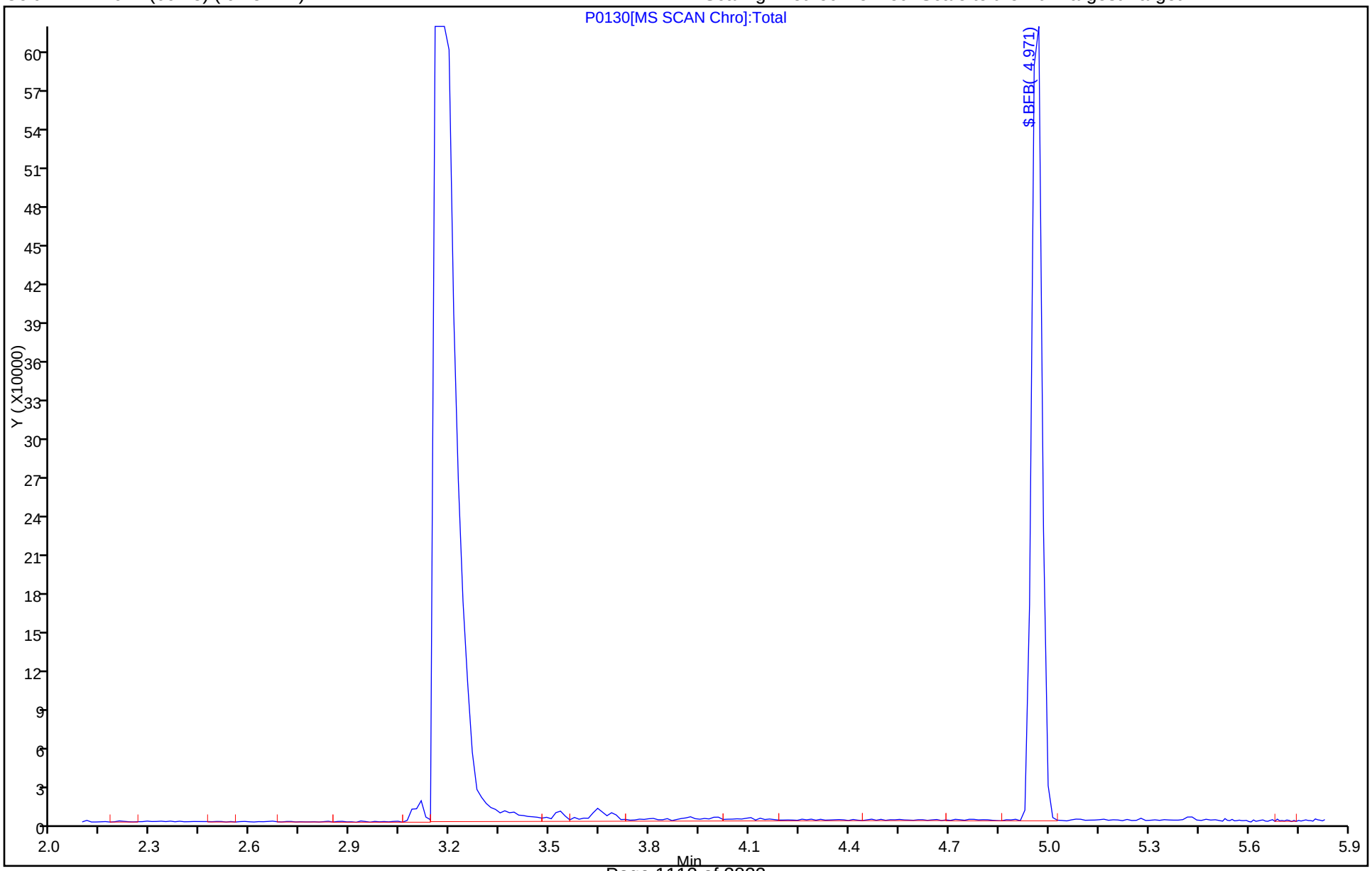
Report Date: 23-Jun-2017 12:59:33 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\P0130.D

Injection Date:	22-Jun-2017 08:09:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	BFB			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 uL	Dil. Factor:	1.0000	ALS Bottle#:	100
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-377540/1-A

Matrix: Solid | Lab File ID: G2_1077.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/15/2017 19:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 377520 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.6	U	5.0	1.6	0.56
71-55-6	1,1,1-Trichloroethane	1.6	U	5.0	1.6	0.52
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U	5.0	1.6	0.61
79-00-5	1,1,2-Trichloroethane	3.2	U	5.0	3.2	0.88
75-34-3	1,1-Dichloroethane	0.80	U	5.0	0.80	0.21
75-35-4	1,1-Dichloroethene	1.6	U	5.0	1.6	0.59
563-58-6	1,1-Dichloropropene	1.6	U	5.0	1.6	0.54
87-61-6	1,2,3-Trichlorobenzene	1.6	U	5.0	1.6	0.75
96-18-4	1,2,3-Trichloropropane	3.2	U	5.0	3.2	0.81
120-82-1	1,2,4-Trichlorobenzene	1.6	U	5.0	1.6	0.73
95-63-6	1,2,4-Trimethylbenzene	1.6	U	5.0	1.6	0.58
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	10	1.6	0.60
106-93-4	1,2-Dibromoethane	1.6	U	5.0	1.6	0.52
95-50-1	1,2-Dichlorobenzene	1.6	U	5.0	1.6	0.45
107-06-2	1,2-Dichloroethane	1.6	U	5.0	1.6	0.70
540-59-0	1,2-Dichloroethene, Total	1.6	U	5.0	1.6	0.39
78-87-5	1,2-Dichloropropane	1.6	U	5.0	1.6	0.55
108-67-8	1,3,5-Trimethylbenzene	1.6	U	5.0	1.6	0.57
541-73-1	1,3-Dichlorobenzene	1.6	U	5.0	1.6	0.48
142-28-9	1,3-Dichloropropane	1.6	U	5.0	1.6	0.51
106-46-7	1,4-Dichlorobenzene	1.6	U	5.0	1.6	0.78
594-20-7	2,2-Dichloropropane	1.6	U	5.0	1.6	0.44
78-93-3	2-Butanone (MEK)	6.4	U	20	6.4	1.8
95-49-8	2-Chlorotoluene	1.6	U	5.0	1.6	0.51
591-78-6	2-Hexanone	13	U Q	20	13	4.9
106-43-4	4-Chlorotoluene	1.6	U	5.0	1.6	0.78
99-87-6	4-Isopropyltoluene	1.6	U	5.0	1.6	0.49
108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	20	13	4.4
67-64-1	Acetone	17.4	J Q	20	13	5.4
71-43-2	Benzene	1.6	U	5.0	1.6	0.47
108-86-1	Bromobenzene	1.6	U	5.0	1.6	0.49
74-97-5	Bromochloromethane	0.80	U	5.0	0.80	0.30
75-27-4	Bromodichloromethane	0.80	U	5.0	0.80	0.22
75-25-2	Bromoform	0.80	U	5.0	0.80	0.23
74-83-9	Bromomethane	1.6	U	10	1.6	0.50
75-15-0	Carbon disulfide	1.6	U	5.0	1.6	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-377540/1-A

Matrix: Solid | Lab File ID: G2_1077.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/15/2017 19:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 377520 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.6	U	5.0	1.6	0.63
108-90-7	Chlorobenzene	1.6	U	5.0	1.6	0.54
75-00-3	Chloroethane	3.2	U	10	3.2	0.89
67-66-3	Chloroform	0.80	U	10	0.80	0.29
74-87-3	Chloromethane	1.6	U	10	1.6	0.77
156-59-2	cis-1,2-Dichloroethene	1.6	U	5.0	1.6	0.56
10061-01-5	cis-1,3-Dichloropropene	3.2	U	5.0	3.2	1.3
124-48-1	Dibromochloromethane	1.6	U	5.0	1.6	0.57
74-95-3	Dibromomethane	3.2	U	5.0	3.2	0.84
75-71-8	Dichlorodifluoromethane	1.6	U Q	10	1.6	0.52
100-41-4	Ethylbenzene	1.6	U	5.0	1.6	0.67
87-68-3	Hexachlorobutadiene	1.6	U	5.0	1.6	0.55
108-20-3	Isopropyl ether	8.0	U	50	8.0	2.7
98-82-8	Isopropylbenzene	1.6	U	5.0	1.6	0.59
179601-23-1	m&p-Xylene	3.2	U	3.2	3.2	1.0
74-88-4	Methyl iodide	1.6	U	5.0	1.6	0.44
1634-04-4	Methyl tert-butyl ether	0.80	U	20	0.80	0.34
75-09-2	Methylene Chloride	3.2	U	5.0	3.2	1.6
91-20-3	Naphthalene	1.6	U	5.0	1.6	0.63
104-51-8	n-Butylbenzene	1.6	U	5.0	1.6	0.56
103-65-1	N-Propylbenzene	1.6	U	5.0	1.6	0.58
95-47-6	o-Xylene	1.6	U	5.0	1.6	0.61
135-98-8	sec-Butylbenzene	1.6	U	5.0	1.6	0.77
100-42-5	Styrene	1.6	U	5.0	1.6	0.63
98-06-6	tert-Butylbenzene	1.6	U	5.0	1.6	0.50
127-18-4	Tetrachloroethene	1.6	U	5.0	1.6	0.59
108-88-3	Toluene	1.6	U	5.0	1.6	0.69
156-60-5	trans-1,2-Dichloroethene	0.80	U	5.0	0.80	0.39
10061-02-6	trans-1,3-Dichloropropene	1.6	U	5.0	1.6	0.67
79-01-6	Trichloroethene	0.80	U	5.0	0.80	0.23
75-69-4	Trichlorofluoromethane	3.2	U	10	3.2	1.0
108-05-4	Vinyl acetate	3.2	U	10	3.2	1.1
75-01-4	Vinyl chloride	3.2	U	5.0	3.2	1.3
1330-20-7	Xylenes (total)	1.0	U	10	1.0	0.61

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-377540/1-A

Matrix: Solid Lab File ID: G2_1077.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 06/15/2017 19:15

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 377520 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		71-136
460-00-4	4-Bromofluorobenzene (Surr)	93		79-119
1868-53-7	Dibromofluoromethane (Surr)	98		78-119
2037-26-5	Toluene-d8 (Surr)	87		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\G2_1077.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 15-Jun-2017 19:15:30 ALS Bottle#: 12 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 16-Jun-2017 12:18:14 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: dukesa Date: 15-Jun-2017 19:39:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	93	454333	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	723952	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	188276	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	356416	50.0	50.0	
* 2 1,4-Dioxane-d8	96		0.000					ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.821	0.007	93	181857	42.5	41.8	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.236	0.007	97	231891	42.5	38.9	
$ 10 Toluene-d8 (Surr)	98	9.345	9.338	0.007	94	594195	42.5	36.9	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	92	229153	42.5	39.4	
$ 6 Trifluorotoluene (Surr)	1		0.000					ND	
$ 7 BFB	95		2.270					ND	
32 Dichlorodifluoromethane	85		1.691					ND	
109 Tetrahydrothiophene	60		1.718					ND	
34 Chloromethane	50		1.830					ND	
37 Vinyl chloride	62		1.956					ND	
22 Butadiene	54		1.984					ND	
38 Ethylene oxide	43		2.263					ND	
39 Bromomethane	94		2.277					ND	
40 Chloroethane	64		2.389					ND	
41 Dichlorofluoromethane	67		2.654					ND	
43 Trichlorofluoromethane	101		2.696					ND	
42 Ethanol	45		2.892					ND	
45 Ethyl ether	59		2.989					ND	
47 Propene oxide	58		3.059					ND	
48 Acrolein	56		3.171					ND	
53 1,1-Dichloroethene	96		3.297					ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.325					ND	
50 Acetone	43	3.367	3.352	0.015	98	33565		17.4	
55 Iodomethane	142		3.478					ND	
58 Carbon disulfide	76		3.562					ND	
51 Isopropyl alcohol	45		3.562					ND	
54 Acetonitrile	41		3.744					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
57 3-Chloro-1-propene	41		3.785					ND	
56 Methyl acetate	43		3.785					ND	
31 Chlorotrifluoroethene	116		3.825					ND	
60 Methylene Chloride	84		3.995					ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009					ND	
59 2-Methyl-2-propanol	59		4.190					ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286					ND	
61 Acrylonitrile	53		4.358					ND	
62 Methyl tert-butyl ether	73		4.414					ND	
63 trans-1,2-Dichloroethene	96		4.414					ND	
64 Hexane	57		4.903					ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040					ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068					ND	
67 1,1-Dichloroethane	63		5.196					ND	
65 Vinyl acetate	43		5.224					ND	
66 Isopropyl ether	87		5.308					ND	
68 2-Chloro-1,3-butadiene	53		5.322					ND	
69 Tert-butyl ethyl ether	59		5.895					ND	
74 cis-1,2-Dichloroethene	96		6.113					ND	
71 2-Butanone (MEK)	43		6.113					ND	
75 2,2-Dichloropropane	77		6.120					ND	
70 Ethyl acetate	43		6.207					ND	
73 Propionitrile	54		6.221					ND	
76 Methacrylonitrile	41		6.428					ND	
72 sec-Butyl Alcohol	45		6.442					ND	
77 Chlorobromomethane	128		6.449					ND	
79 Tetrahydrofuran	42		6.449					ND	
78 Chloroform	83		6.614					ND	
81 1,1,1-Trichloroethane	97		6.800					ND	
82 Cyclohexane	56		6.878					ND	
84 Carbon tetrachloride	117		6.993					ND	
83 1,1-Dichloropropene	75		7.007					ND	
87 Benzene	78		7.250					ND	
85 1,2-Dichloroethane	62		7.329					ND	
86 Tert-amyl methyl ether	73		7.451					ND	
80 Isobutyl alcohol	41		7.643					ND	
35 n-Heptane	43		7.643					ND	
88 n-Butanol	56		8.001					ND	
89 Trichloroethene	95		8.037					ND	
16 Ethyl acrylate	55		8.173					ND	
90 2-Pentanone	43		8.251					ND	
93 Methylcyclohexane	55		8.287					ND	
92 1,2-Dichloropropane	63		8.330					ND	
94 1,4-Dioxane	88		8.409					ND	
95 Dibromomethane	93		8.416					ND	
91 Methyl methacrylate	100		8.423					ND	
96 Dichlorobromomethane	83		8.623					ND	
97 2-Nitropropane	41		8.859					ND	
98 2-Chloroethyl vinyl ether	63		8.931					ND	
99 cis-1,3-Dichloropropene	75		9.074					ND	
24 n-Butyl acetate	43		9.214					ND	
100 4-Methyl-2-pentanone (MIBK	43		9.231					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 Toluene	91		9.410					ND	
103 trans-1,3-Dichloropropene	75		9.653					ND	
102 Ethyl methacrylate	69		9.717					ND	
104 1,1,2-Trichloroethane	97		9.846					ND	
107 Tetrachloroethene	164		9.910					ND	
106 1,3-Dichloropropane	76		10.003					ND	
105 2-Hexanone	43		10.060					ND	
108 Chlorodibromomethane	129		10.210					ND	
110 Ethylene Dibromide	107		10.318					ND	
111 1-Chlorohexane	91		10.775					ND	
112 Chlorobenzene	112		10.782					ND	
113 1,1,1,2-Tetrachloroethane	131		10.875					ND	
114 Ethylbenzene	106		10.875					ND	
115 m-Xylene & p-Xylene	106		11.004					ND	
117 o-Xylene	106		11.362					ND	
116 Styrene	104		11.383					ND	
118 Bromoform	173		11.555					ND	
119 Isopropylbenzene	105		11.705					ND	
23 Benzyl chloride	126		11.759					ND	
120 cis-1,4-Dichloro-2-butene	53		11.769					ND	
121 Cyclohexanone	55		11.791					ND	
122 1,1,2,2-Tetrachloroethane	83		11.998					ND	
125 Bromobenzene	156		11.998					ND	
123 trans-1,4-Dichloro-2-buten	53		12.027					ND	
124 1,2,3-Trichloropropane	110		12.048					ND	
126 N-Propylbenzene	120		12.091					ND	
128 2-Chlorotoluene	126		12.177					ND	
127 1,3,5-Trimethylbenzene	105		12.248					ND	
129 4-Chlorotoluene	126		12.277					ND	
130 tert-Butylbenzene	119		12.506					ND	
131 1,2,4-Trimethylbenzene	105		12.549					ND	
132 sec-Butylbenzene	134		12.677					ND	
134 1,3-Dichlorobenzene	146		12.763					ND	
133 4-Isopropyltoluene	119		12.785					ND	
136 1,4-Dichlorobenzene	146		12.835					ND	
135 1,2,3-Trimethylbenzene	105		12.856					ND	
137 n-Butylbenzene	91		13.063					ND	
138 1,2-Dichlorobenzene	146		13.085					ND	
139 1,2-Dibromo-3-Chloropropan	157		13.585					ND	
140 1,3,5-Trichlorobenzene	180		13.693					ND	
141 1,2,4-Trichlorobenzene	180		14.114					ND	
142 Hexachlorobutadiene	225		14.207					ND	
143 Naphthalene	128		14.308					ND	
144 1,2,3-Trichlorobenzene	180		14.458					ND	
25 n-Nonyl Aldehyde	1		0.000					ND	
19 2,3-Dimethylpentane	1		0.000					ND	
14 2,4-Dimethylpentane	1		0.000					ND	
26 3-Methylhexane	1		0.000					ND	
21 Pentachloroethane	167		0.000					ND	
27 3-Ethylpentane	1		0.000					ND	
28 Dimethyl disulfide	1		0.000					ND	
18 2,2,3-Trimethylbutane	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
13 2-Butoxyethanol TIC	1		0.000					ND	
15 3,3-Dimethylpentane	1		0.000					ND	
12 2-Methylhexane	1		0.000					ND	
17 2-Methylnaphthalene	142		0.000					ND	
20 2,2-Dimethylpentane	1		0.000					ND	
29 Dichloroacetonitrile TIC	74		1.000					ND	
30 2,3-dichloro-1-propene TIC	75		1.000					ND	
49 Propene oxide TIC	58		5.292					ND	
S 151 1,2-Dichloroethene, Total	96		2.000					ND	
S 145 Trihalomethanes, Total	1		0.000					ND	
S 149 1,2-Dichloroethene, Total	1		0.000					ND	
S 150 Xylenes, Total	106		0.000					ND	
S 148 1,3-Dichloropropene, Total	1		0.000					ND	
S 146 Xylenes, Total (URS)	1		0.000					ND	
S 147 Total BTEX	1		0.000					ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

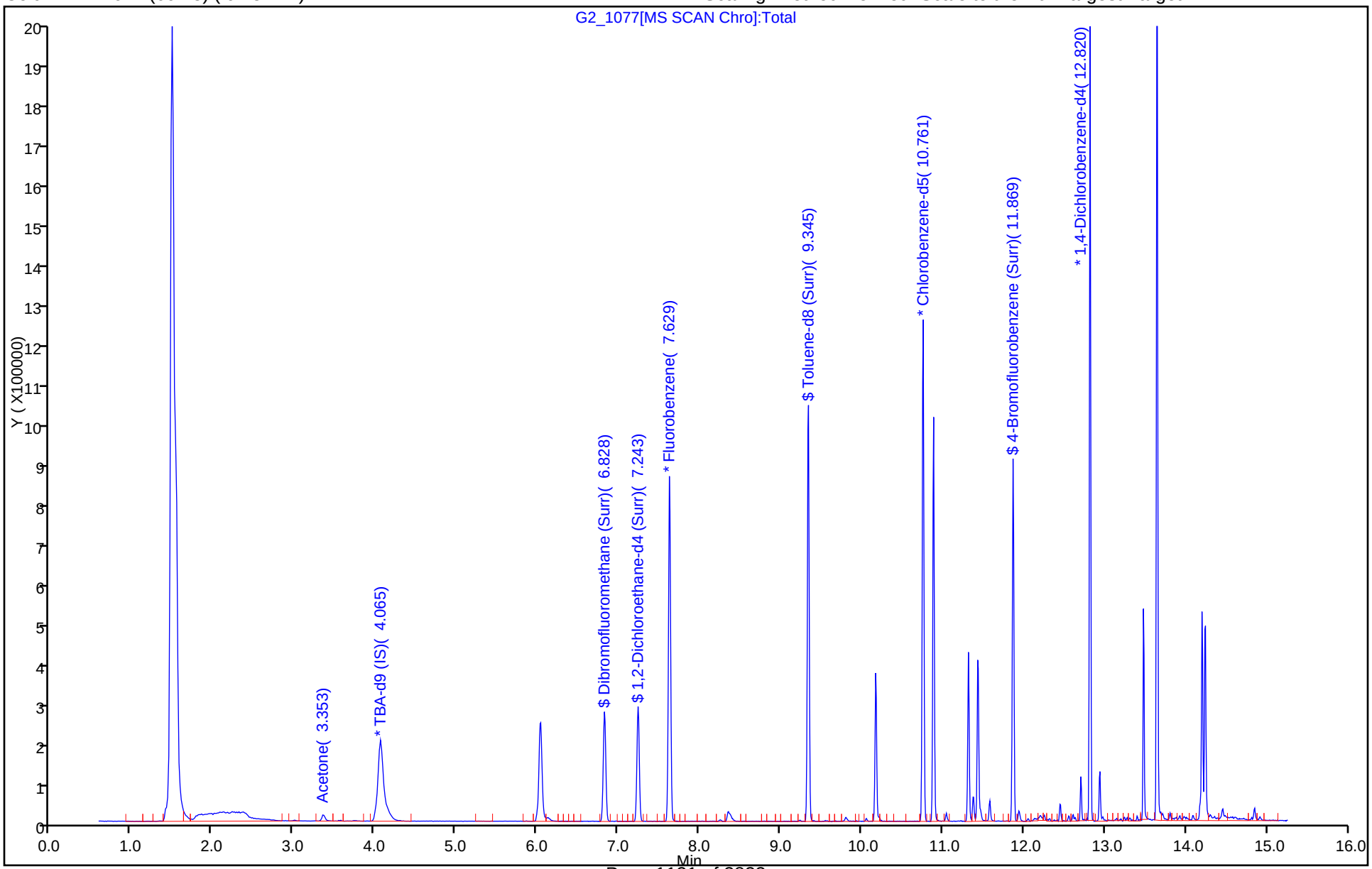
Report Date: 16-Jun-2017 12:18:23 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\G2_1077.D

Injection Date:	15-Jun-2017 19:15:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	MB			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\G2_1077.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 15-Jun-2017 19:15:30 ALS Bottle#: 12 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 16-Jun-2017 12:18:14 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

First Level Reviewer: dukesa Date: 15-Jun-2017 19:39:45

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	41.8	98.40
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	38.9	91.59
$ 10 Toluene-d8 (Surr)	42.5	36.9	86.83
$ 11 4-Bromofluorobenzene (Surr)	42.5	39.4	92.74

Report Date: 16-Jun-2017 12:18:23 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\G2_1077.D

Injection Date: 15-Jun-2017 19:15:30 Instrument ID: VMS_G2

Lims ID: MB

Client ID:

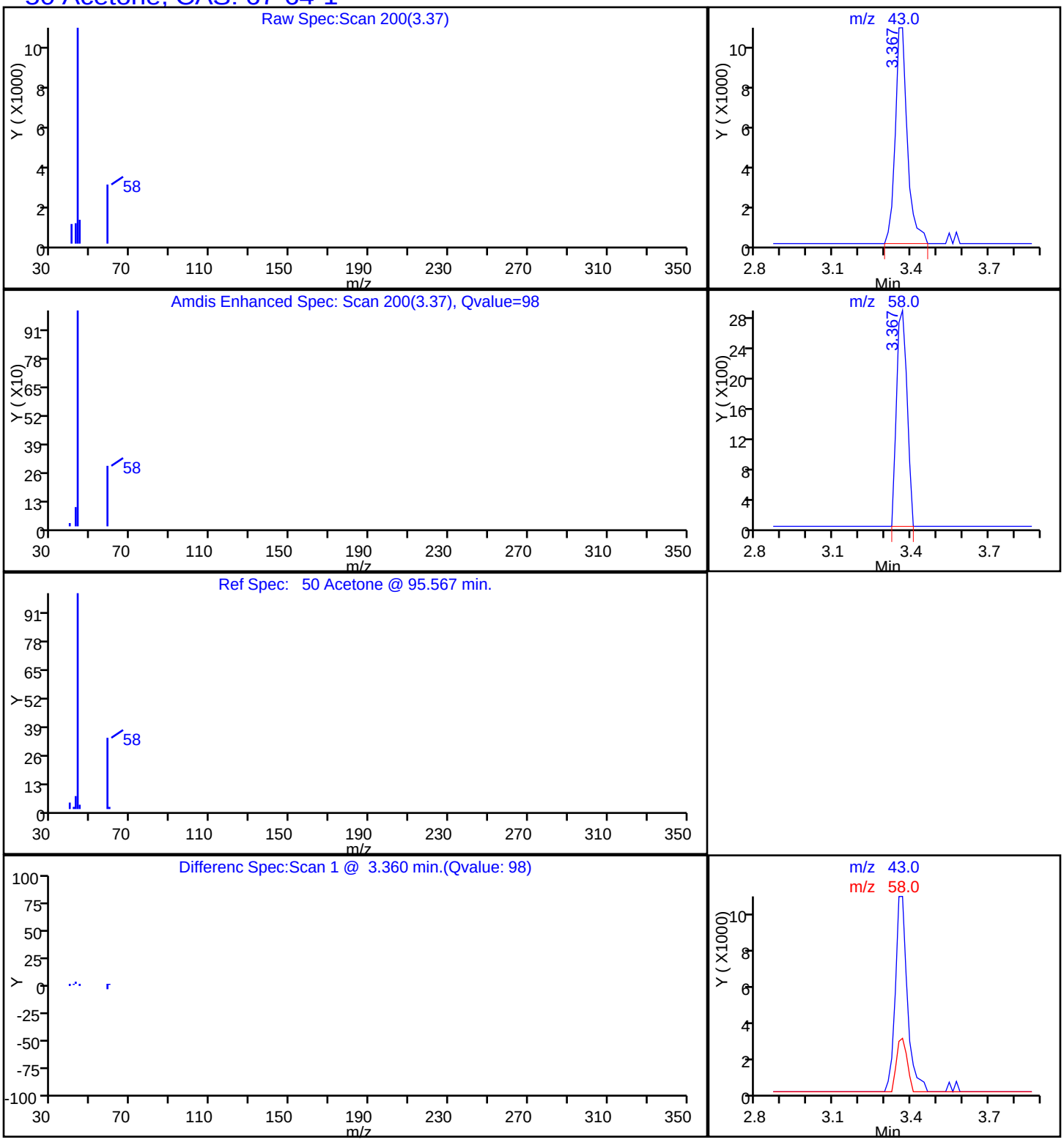
Operator ID: DUKESA ALS Bottle#: 12 Worklist Smp#: 9

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

50 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-377664/1-A

Matrix: Solid | Lab File ID: G2_1118.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/16/2017 13:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.6	U	5.0	1.6	0.56
71-55-6	1,1,1-Trichloroethane	1.6	U	5.0	1.6	0.52
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U	5.0	1.6	0.61
79-00-5	1,1,2-Trichloroethane	3.2	U	5.0	3.2	0.88
75-34-3	1,1-Dichloroethane	0.80	U	5.0	0.80	0.21
75-35-4	1,1-Dichloroethene	1.6	U	5.0	1.6	0.59
563-58-6	1,1-Dichloropropene	1.6	U	5.0	1.6	0.54
87-61-6	1,2,3-Trichlorobenzene	1.6	U	5.0	1.6	0.75
96-18-4	1,2,3-Trichloropropane	3.2	U	5.0	3.2	0.81
120-82-1	1,2,4-Trichlorobenzene	1.6	U	5.0	1.6	0.73
95-63-6	1,2,4-Trimethylbenzene	1.6	U	5.0	1.6	0.58
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	10	1.6	0.60
106-93-4	1,2-Dibromoethane	1.6	U	5.0	1.6	0.52
95-50-1	1,2-Dichlorobenzene	1.6	U	5.0	1.6	0.45
107-06-2	1,2-Dichloroethane	1.6	U	5.0	1.6	0.70
540-59-0	1,2-Dichloroethene, Total	1.6	U	5.0	1.6	0.39
78-87-5	1,2-Dichloropropane	1.6	U	5.0	1.6	0.55
108-67-8	1,3,5-Trimethylbenzene	1.6	U	5.0	1.6	0.57
541-73-1	1,3-Dichlorobenzene	1.6	U	5.0	1.6	0.48
142-28-9	1,3-Dichloropropane	1.6	U	5.0	1.6	0.51
106-46-7	1,4-Dichlorobenzene	1.6	U	5.0	1.6	0.78
594-20-7	2,2-Dichloropropane	1.6	U	5.0	1.6	0.44
78-93-3	2-Butanone (MEK)	6.4	U	20	6.4	1.8
95-49-8	2-Chlorotoluene	1.6	U	5.0	1.6	0.51
591-78-6	2-Hexanone	13	U	20	13	4.9
106-43-4	4-Chlorotoluene	1.6	U	5.0	1.6	0.78
99-87-6	4-Isopropyltoluene	1.6	U	5.0	1.6	0.49
108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	20	13	4.4
67-64-1	Acetone	9.66	J	20	13	5.4
71-43-2	Benzene	1.6	U	5.0	1.6	0.47
108-86-1	Bromobenzene	1.6	U	5.0	1.6	0.49
74-97-5	Bromochloromethane	0.80	U	5.0	0.80	0.30
75-27-4	Bromodichloromethane	0.80	U	5.0	0.80	0.22
75-25-2	Bromoform	0.80	U	5.0	0.80	0.23
74-83-9	Bromomethane	1.6	U	10	1.6	0.50
75-15-0	Carbon disulfide	1.6	U	5.0	1.6	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-377664/1-A

Matrix: Solid | Lab File ID: G2_1118.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/16/2017 13:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.6	U	5.0	1.6	0.63
108-90-7	Chlorobenzene	1.6	U	5.0	1.6	0.54
75-00-3	Chloroethane	3.2	U	10	3.2	0.89
67-66-3	Chloroform	0.80	U	10	0.80	0.29
74-87-3	Chloromethane	1.6	U	10	1.6	0.77
156-59-2	cis-1,2-Dichloroethene	1.6	U	5.0	1.6	0.56
10061-01-5	cis-1,3-Dichloropropene	3.2	U	5.0	3.2	1.3
124-48-1	Dibromochloromethane	1.6	U	5.0	1.6	0.57
74-95-3	Dibromomethane	3.2	U	5.0	3.2	0.84
75-71-8	Dichlorodifluoromethane	1.6	U	10	1.6	0.52
100-41-4	Ethylbenzene	1.6	U	5.0	1.6	0.67
87-68-3	Hexachlorobutadiene	1.6	U	5.0	1.6	0.55
108-20-3	Isopropyl ether	8.0	U	50	8.0	2.7
98-82-8	Isopropylbenzene	1.6	U	5.0	1.6	0.59
179601-23-1	m&p-Xylene	3.2	U	3.2	3.2	1.0
74-88-4	Methyl iodide	1.6	U	5.0	1.6	0.44
1634-04-4	Methyl tert-butyl ether	0.80	U	20	0.80	0.34
75-09-2	Methylene Chloride	3.2	U	5.0	3.2	1.6
91-20-3	Naphthalene	1.6	U	5.0	1.6	0.63
104-51-8	n-Butylbenzene	1.6	U	5.0	1.6	0.56
103-65-1	N-Propylbenzene	1.6	U	5.0	1.6	0.58
95-47-6	o-Xylene	1.6	U	5.0	1.6	0.61
135-98-8	sec-Butylbenzene	1.6	U	5.0	1.6	0.77
100-42-5	Styrene	1.6	U	5.0	1.6	0.63
98-06-6	tert-Butylbenzene	1.6	U	5.0	1.6	0.50
127-18-4	Tetrachloroethene	1.6	U	5.0	1.6	0.59
108-88-3	Toluene	1.6	U	5.0	1.6	0.69
156-60-5	trans-1,2-Dichloroethene	0.80	U	5.0	0.80	0.39
10061-02-6	trans-1,3-Dichloropropene	1.6	U	5.0	1.6	0.67
79-01-6	Trichloroethene	0.80	U	5.0	0.80	0.23
75-69-4	Trichlorofluoromethane	3.2	U	10	3.2	1.0
108-05-4	Vinyl acetate	3.2	U	10	3.2	1.1
75-01-4	Vinyl chloride	3.2	U	5.0	3.2	1.3
1330-20-7	Xylenes (total)	1.0	U	10	1.0	0.61

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-377664/1-A

Matrix: Solid Lab File ID: G2_1118.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 06/16/2017 13:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 377645 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		71-136
460-00-4	4-Bromofluorobenzene (Surr)	95		79-119
1868-53-7	Dibromofluoromethane (Surr)	111		78-119
2037-26-5	Toluene-d8 (Surr)	90		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1118.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 16-Jun-2017 13:09:30 ALS Bottle#: 13 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 13:53:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	92	428704	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	587203	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	154620	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	97	291403	50.0	50.0	
* 2 1,4-Dioxane-d8	96		0.000					ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	93	164143	42.5	47.0	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	215270	42.5	45.2	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	95	506320	42.5	38.3	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	192810	42.5	40.6	
$ 6 Trifluorotoluene (Surr)	1		0.000					ND	
$ 7 BFB	95		2.270					ND	
32 Dichlorodifluoromethane	85		1.705					ND	
109 Tetrahydrothiophene	60		1.718					ND	
34 Chloromethane	50		1.830					ND	
37 Vinyl chloride	62		1.970					ND	
22 Butadiene	54		1.998					ND	
38 Ethylene oxide	43		2.277					ND	
39 Bromomethane	94		2.291					ND	
40 Chloroethane	64		2.403					ND	
41 Dichlorofluoromethane	67		2.668					ND	
43 Trichlorofluoromethane	101		2.710					ND	
42 Ethanol	45		2.906					ND	
45 Ethyl ether	59		3.004					ND	
47 Propene oxide	58		3.073					ND	
48 Acrolein	56		3.185					ND	
53 1,1-Dichloroethene	96		3.311					ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353					ND	
50 Acetone	43	3.353	3.353	0.000	97	16075		9.66	
55 Iodomethane	142		3.492					ND	
51 Isopropyl alcohol	45		3.576					ND	
58 Carbon disulfide	76		3.576					ND	
54 Acetonitrile	41		3.758					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800					ND	
57 3-Chloro-1-propene	41		3.800					ND	
31 Chlorotrifluoroethene	116		3.825					ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009					ND	
60 Methylene Chloride	84		4.009					ND	
59 2-Methyl-2-propanol	59		4.205					ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286					ND	
61 Acrylonitrile	53		4.372					ND	
62 Methyl tert-butyl ether	73		4.428					ND	
63 trans-1,2-Dichloroethene	96		4.428					ND	
64 Hexane	57		4.917					ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040					ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068					ND	
67 1,1-Dichloroethane	63		5.210					ND	
65 Vinyl acetate	43		5.252					ND	
66 Isopropyl ether	87		5.308					ND	
68 2-Chloro-1,3-butadiene	53		5.322					ND	
69 Tert-butyl ethyl ether	59		5.894					ND	
74 cis-1,2-Dichloroethene	96		6.128					ND	
71 2-Butanone (MEK)	43		6.128					ND	
75 2,2-Dichloropropane	77		6.128					ND	
70 Ethyl acetate	43		6.213					ND	
73 Propionitrile	54		6.221					ND	
76 Methacrylonitrile	41		6.435					ND	
72 sec-Butyl Alcohol	45		6.457					ND	
77 Chlorobromomethane	128		6.457					ND	
79 Tetrahydrofuran	42		6.464					ND	
78 Chloroform	83		6.621					ND	
81 1,1,1-Trichloroethane	97		6.807					ND	
82 Cyclohexane	56		6.893					ND	
84 Carbon tetrachloride	117		7.000					ND	
83 1,1-Dichloropropene	75		7.014					ND	
87 Benzene	78		7.258					ND	
85 1,2-Dichloroethane	62		7.336					ND	
86 Tert-amyl methyl ether	73		7.450					ND	
80 Isobutyl alcohol	41		7.651					ND	
35 n-Heptane	43		7.651					ND	
88 n-Butanol	56		8.001					ND	
89 Trichloroethene	95		8.044					ND	
16 Ethyl acrylate	55		8.173					ND	
90 2-Pentanone	43		8.259					ND	
93 Methylcyclohexane	55		8.294					ND	
92 1,2-Dichloropropane	63		8.330					ND	
94 1,4-Dioxane	88		8.416					ND	
95 Dibromomethane	93		8.423					ND	
91 Methyl methacrylate	100		8.423					ND	
96 Dichlorobromomethane	83		8.623					ND	
97 2-Nitropropane	41		8.859					ND	
98 2-Chloroethyl vinyl ether	63		8.938					ND	
99 cis-1,3-Dichloropropene	75		9.081					ND	
24 n-Butyl acetate	43		9.214					ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 Toluene	91		9.410					ND	
103 trans-1,3-Dichloropropene	75		9.660					ND	
102 Ethyl methacrylate	69		9.717					ND	
104 1,1,2-Trichloroethane	97		9.846					ND	
107 Tetrachloroethene	164		9.917					ND	
106 1,3-Dichloropropane	76		10.003					ND	
105 2-Hexanone	43		10.060					ND	
108 Chlorodibromomethane	129		10.211					ND	
110 Ethylene Dibromide	107		10.318					ND	
111 1-Chlorohexane	91		10.775					ND	
112 Chlorobenzene	112		10.790					ND	
113 1,1,1,2-Tetrachloroethane	131		10.876					ND	
114 Ethylbenzene	106		10.883					ND	
115 m-Xylene & p-Xylene	106		11.004					ND	
117 o-Xylene	106		11.362					ND	
116 Styrene	104		11.383					ND	
118 Bromoform	173		11.555					ND	
119 Isopropylbenzene	105		11.705					ND	
23 Benzyl chloride	126		11.759					ND	
120 cis-1,4-Dichloro-2-butene	53		11.769					ND	
121 Cyclohexanone	55		11.791					ND	
122 1,1,2,2-Tetrachloroethane	83		11.998					ND	
125 Bromobenzene	156		11.998					ND	
123 trans-1,4-Dichloro-2-buten	53		12.027					ND	
124 1,2,3-Trichloropropane	110		12.048					ND	
126 N-Propylbenzene	120		12.091					ND	
128 2-Chlorotoluene	126		12.170					ND	
127 1,3,5-Trimethylbenzene	105		12.248					ND	
129 4-Chlorotoluene	126		12.277					ND	
130 tert-Butylbenzene	119		12.506					ND	
131 1,2,4-Trimethylbenzene	105		12.549					ND	
132 sec-Butylbenzene	134		12.677					ND	
134 1,3-Dichlorobenzene	146		12.763					ND	
133 4-Isopropyltoluene	119		12.785					ND	
136 1,4-Dichlorobenzene	146		12.842					ND	
135 1,2,3-Trimethylbenzene	105		12.856					ND	
137 n-Butylbenzene	91		13.071					ND	
138 1,2-Dichlorobenzene	146		13.085					ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593					ND	
140 1,3,5-Trichlorobenzene	180		13.707					ND	
141 1,2,4-Trichlorobenzene	180		14.129					ND	
142 Hexachlorobutadiene	225		14.215					ND	
143 Naphthalene	128		14.315					ND	
144 1,2,3-Trichlorobenzene	180		14.472					ND	
26 3-Methylhexane	1		0.000					ND	
17 2-Methylnaphthalene	142		0.000					ND	
15 3,3-Dimethylpentane	1		0.000					ND	
14 2,4-Dimethylpentane	1		0.000					ND	
28 Dimethyl disulfide	1		0.000					ND	
21 Pentachloroethane	167		0.000					ND	
25 n-Nonyl Aldehyde	1		0.000					ND	
20 2,2-Dimethylpentane	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000					ND	
19 2,3-Dimethylpentane	1		0.000					ND	
18 2,2,3-Trimethylbutane	1		0.000					ND	
13 2-Butoxyethanol TIC	1		0.000					ND	
27 3-Ethylpentane	1		0.000					ND	
29 Dichloroacetonitrile TIC	74		1.000					ND	
30 2,3-dichloro-1-propene TIC	75		1.000					ND	
49 Propene oxide TIC	58		5.292					ND	
S 151 1,2-Dichloroethene, Total	96		2.000					ND	
S 145 Trihalomethanes, Total	1		0.000					ND	
S 149 1,2-Dichloroethene, Total	1		0.000					ND	
S 150 Xylenes, Total	106		0.000					ND	
S 148 1,3-Dichloropropene, Total	1		0.000					ND	
S 146 Xylenes, Total (URS)	1		0.000					ND	
S 147 Total BTEX	1		0.000					ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

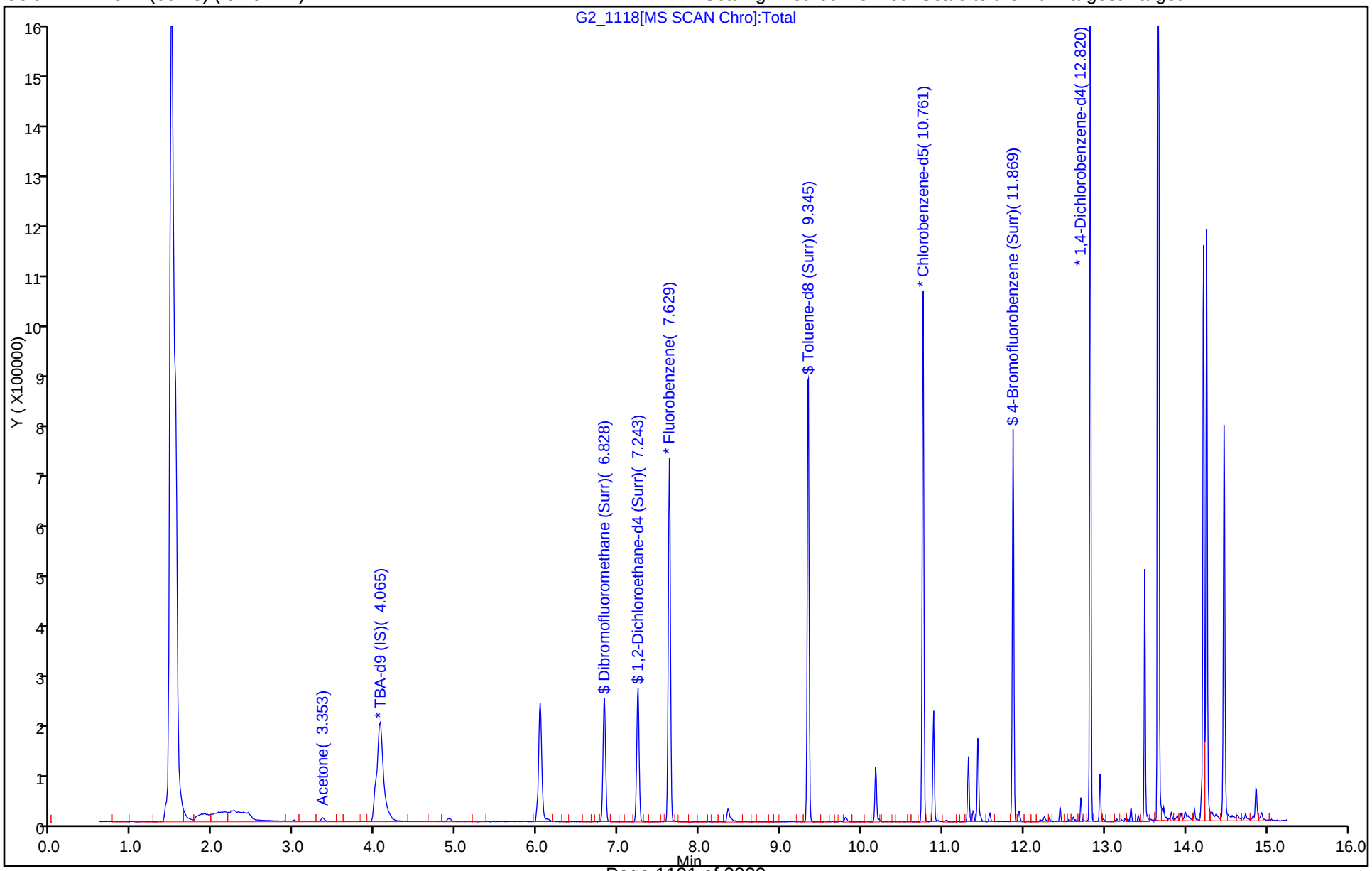
Report Date: 18-Jun-2017 12:35:05 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1118.D

Injection Date:	16-Jun-2017 13:09:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	MB			Worklist Smp#:	9
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1118.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 16-Jun-2017 13:09:30 ALS Bottle#: 13 Worklist Smp#: 9
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 13:53:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	47.0	110.50
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	45.2	106.24
$ 10 Toluene-d8 (Surr)	42.5	38.3	90.09
$ 11 4-Bromofluorobenzene (Surr)	42.5	40.6	95.44

Report Date: 18-Jun-2017 12:35:05 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1118.D

Injection Date: 16-Jun-2017 13:09:30 Instrument ID: VMS_G2

Lims ID: MB

Client ID:

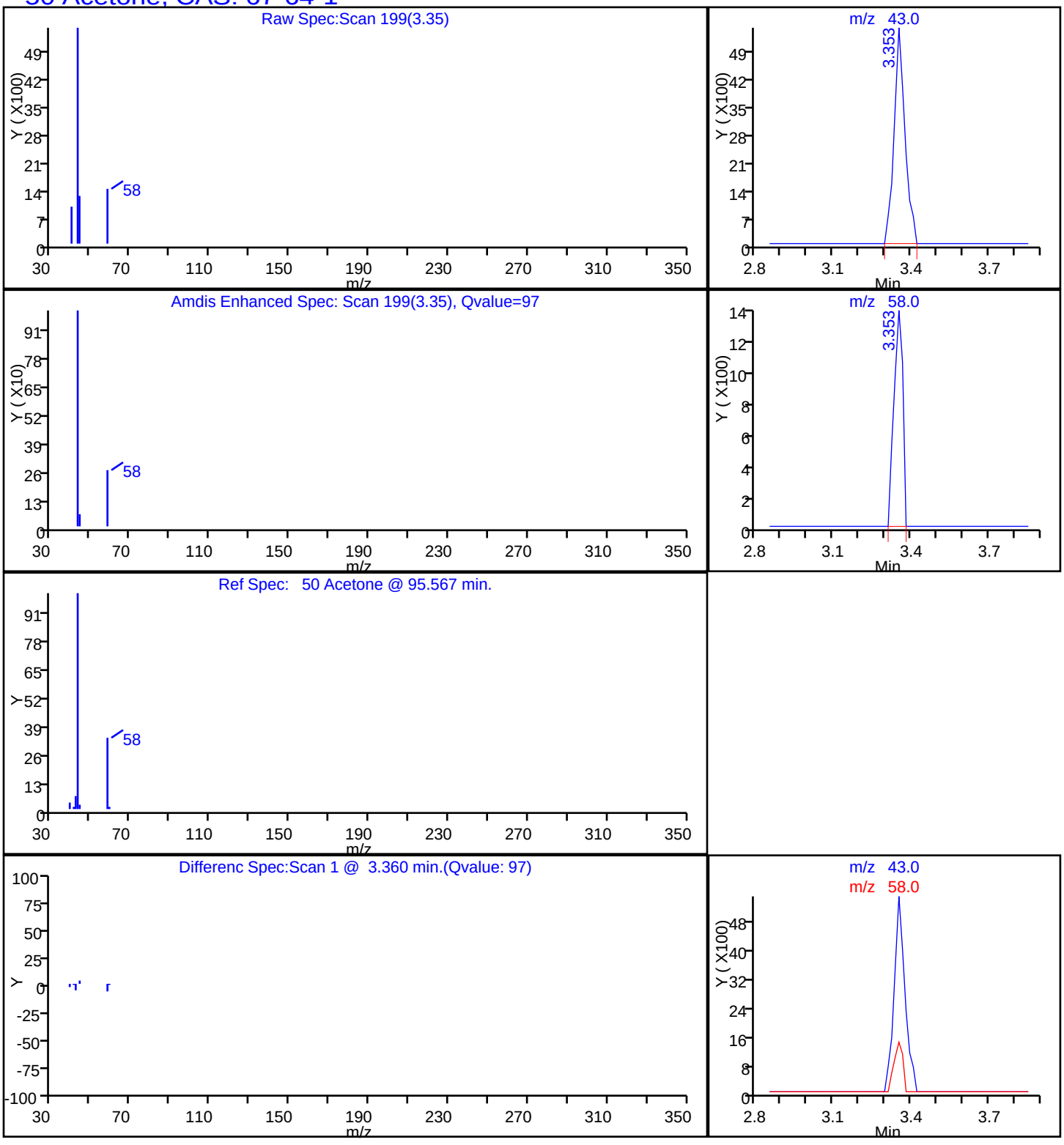
Operator ID: DUKESA ALS Bottle#: 13 Worklist Smp#: 9

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

50 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-377666/1-A

Matrix: Solid | Lab File ID: G2_1123.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/16/2017 14:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	1.6	U	5.0	1.6	0.56
71-55-6	1,1,1-Trichloroethane	1.6	U	5.0	1.6	0.52
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U	5.0	1.6	0.61
79-00-5	1,1,2-Trichloroethane	3.2	U	5.0	3.2	0.88
75-34-3	1,1-Dichloroethane	0.80	U	5.0	0.80	0.21
75-35-4	1,1-Dichloroethene	1.6	U	5.0	1.6	0.59
563-58-6	1,1-Dichloropropene	1.6	U	5.0	1.6	0.54
87-61-6	1,2,3-Trichlorobenzene	1.6	U	5.0	1.6	0.75
96-18-4	1,2,3-Trichloropropane	3.2	U	5.0	3.2	0.81
120-82-1	1,2,4-Trichlorobenzene	1.6	U	5.0	1.6	0.73
95-63-6	1,2,4-Trimethylbenzene	1.6	U	5.0	1.6	0.58
96-12-8	1,2-Dibromo-3-Chloropropane	1.6	U	10	1.6	0.60
106-93-4	1,2-Dibromoethane	1.6	U	5.0	1.6	0.52
95-50-1	1,2-Dichlorobenzene	1.6	U	5.0	1.6	0.45
107-06-2	1,2-Dichloroethane	1.6	U	5.0	1.6	0.70
540-59-0	1,2-Dichloroethene, Total	1.6	U	5.0	1.6	0.39
78-87-5	1,2-Dichloropropane	1.6	U	5.0	1.6	0.55
108-67-8	1,3,5-Trimethylbenzene	1.6	U	5.0	1.6	0.57
541-73-1	1,3-Dichlorobenzene	1.6	U	5.0	1.6	0.48
142-28-9	1,3-Dichloropropane	1.6	U	5.0	1.6	0.51
106-46-7	1,4-Dichlorobenzene	1.6	U	5.0	1.6	0.78
594-20-7	2,2-Dichloropropane	1.6	U	5.0	1.6	0.44
78-93-3	2-Butanone (MEK)	6.4	U	20	6.4	1.8
95-49-8	2-Chlorotoluene	1.6	U	5.0	1.6	0.51
591-78-6	2-Hexanone	13	U	20	13	4.9
106-43-4	4-Chlorotoluene	1.6	U	5.0	1.6	0.78
99-87-6	4-Isopropyltoluene	1.6	U	5.0	1.6	0.49
108-10-1	4-Methyl-2-pentanone (MIBK)	13	U	20	13	4.4
67-64-1	Acetone	16.4	J	20	13	5.4
71-43-2	Benzene	1.6	U	5.0	1.6	0.47
108-86-1	Bromobenzene	1.6	U	5.0	1.6	0.49
74-97-5	Bromochloromethane	0.80	U	5.0	0.80	0.30
75-27-4	Bromodichloromethane	0.80	U	5.0	0.80	0.22
75-25-2	Bromoform	0.80	U	5.0	0.80	0.23
74-83-9	Bromomethane	1.6	U	10	1.6	0.50
75-15-0	Carbon disulfide	1.6	U	5.0	1.6	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-377666/1-A

Matrix: Solid | Lab File ID: G2_1123.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/16/2017 14:55

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	1.6	U	5.0	1.6	0.63
108-90-7	Chlorobenzene	1.6	U	5.0	1.6	0.54
75-00-3	Chloroethane	3.2	U	10	3.2	0.89
67-66-3	Chloroform	0.80	U	10	0.80	0.29
74-87-3	Chloromethane	1.6	U	10	1.6	0.77
156-59-2	cis-1,2-Dichloroethene	1.6	U	5.0	1.6	0.56
10061-01-5	cis-1,3-Dichloropropene	3.2	U	5.0	3.2	1.3
124-48-1	Dibromochloromethane	1.6	U	5.0	1.6	0.57
74-95-3	Dibromomethane	3.2	U	5.0	3.2	0.84
75-71-8	Dichlorodifluoromethane	1.6	U	10	1.6	0.52
100-41-4	Ethylbenzene	1.6	U	5.0	1.6	0.67
87-68-3	Hexachlorobutadiene	1.6	U	5.0	1.6	0.55
108-20-3	Isopropyl ether	8.0	U	50	8.0	2.7
98-82-8	Isopropylbenzene	1.6	U	5.0	1.6	0.59
179601-23-1	m&p-Xylene	3.2	U	3.2	3.2	1.0
74-88-4	Methyl iodide	1.6	U	5.0	1.6	0.44
1634-04-4	Methyl tert-butyl ether	0.80	U	20	0.80	0.34
75-09-2	Methylene Chloride	3.2	U	5.0	3.2	1.6
91-20-3	Naphthalene	1.6	U	5.0	1.6	0.63
104-51-8	n-Butylbenzene	1.6	U	5.0	1.6	0.56
103-65-1	N-Propylbenzene	1.6	U	5.0	1.6	0.58
95-47-6	o-Xylene	1.6	U	5.0	1.6	0.61
135-98-8	sec-Butylbenzene	1.6	U	5.0	1.6	0.77
100-42-5	Styrene	1.6	U	5.0	1.6	0.63
98-06-6	tert-Butylbenzene	1.6	U	5.0	1.6	0.50
127-18-4	Tetrachloroethene	1.6	U	5.0	1.6	0.59
108-88-3	Toluene	1.6	U	5.0	1.6	0.69
156-60-5	trans-1,2-Dichloroethene	0.80	U	5.0	0.80	0.39
10061-02-6	trans-1,3-Dichloropropene	1.6	U	5.0	1.6	0.67
79-01-6	Trichloroethene	0.80	U	5.0	0.80	0.23
75-69-4	Trichlorofluoromethane	3.2	U	10	3.2	1.0
108-05-4	Vinyl acetate	3.2	U	10	3.2	1.1
75-01-4	Vinyl chloride	3.2	U	5.0	3.2	1.3
1330-20-7	Xylenes (total)	1.0	U	10	1.0	0.61

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-377666/1-A

Matrix: Solid Lab File ID: G2_1123.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 06/16/2017 14:55

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 377667 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		71-136
460-00-4	4-Bromofluorobenzene (Surr)	104		79-119
1868-53-7	Dibromofluoromethane (Surr)	110		78-119
2037-26-5	Toluene-d8 (Surr)	94		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1123.D
Lims ID: MB 280-377666/1-A
Client ID:
Sample Type: MB
Inject. Date: 16-Jun-2017 14:55:30 ALS Bottle#: 18 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB (2)
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 16:12:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	93	479883	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	667277	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	88	178682	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	336384	50.0	50.0	
* 2 1,4-Dioxane-d8	96		0.000					ND	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	93	185482	42.5	46.7	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	242931	42.5	44.8	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	611991	42.5	40.0	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	242494	42.5	44.2	
$ 6 Trifluorotoluene (Surr)	1		0.000					ND	
$ 7 BFB	95		2.270					ND	
32 Dichlorodifluoromethane	85		1.705					ND	
109 Tetrahydrothiophene	60		1.718					ND	
34 Chloromethane	50		1.830					ND	
37 Vinyl chloride	62		1.970					ND	
22 Butadiene	54		1.998					ND	
38 Ethylene oxide	43		2.277					ND	
39 Bromomethane	94		2.291					ND	
40 Chloroethane	64		2.403					ND	
41 Dichlorofluoromethane	67		2.668					ND	
43 Trichlorofluoromethane	101		2.710					ND	
42 Ethanol	45		2.906					ND	
45 Ethyl ether	59		3.004					ND	
47 Propene oxide	58		3.073					ND	
48 Acrolein	56		3.185					ND	
53 1,1-Dichloroethene	96		3.311					ND	
52 1,1,2-Trichloro-1,2,2-trif	151		3.353					ND	
50 Acetone	43	3.353	3.353	0.000	100	29261		16.4	
55 Iodomethane	142		3.492					ND	
51 Isopropyl alcohol	45		3.576					ND	
58 Carbon disulfide	76		3.576					ND	
54 Acetonitrile	41		3.758					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
56 Methyl acetate	43		3.800					ND	
57 3-Chloro-1-propene	41		3.800					ND	
31 Chlorotrifluoroethene	116		3.825					ND	
33 1,2-Dichloro-1,1,2,2-tetra	85		4.009					ND	
60 Methylene Chloride	84		4.009					ND	
59 2-Methyl-2-propanol	59		4.205					ND	
36 2-Chloro-1,1,1-Trifluoroet	118		4.286					ND	
61 Acrylonitrile	53		4.372					ND	
62 Methyl tert-butyl ether	73		4.428					ND	
63 trans-1,2-Dichloroethene	96		4.428					ND	
64 Hexane	57		4.917					ND	
44 1,2-Dichloro-1,1,2-trifluo	117		5.040					ND	
46 1,1,1-Trifluoro-2,2-dichlo	83		5.068					ND	
67 1,1-Dichloroethane	63		5.210					ND	
65 Vinyl acetate	43		5.252					ND	
66 Isopropyl ether	87		5.308					ND	
68 2-Chloro-1,3-butadiene	53		5.322					ND	
69 Tert-butyl ethyl ether	59		5.894					ND	
74 cis-1,2-Dichloroethene	96		6.128					ND	
71 2-Butanone (MEK)	43		6.128					ND	
75 2,2-Dichloropropane	77		6.128					ND	
70 Ethyl acetate	43		6.213					ND	
73 Propionitrile	54		6.221					ND	
76 Methacrylonitrile	41		6.435					ND	
72 sec-Butyl Alcohol	45		6.457					ND	
77 Chlorobromomethane	128		6.457					ND	
79 Tetrahydrofuran	42		6.464					ND	
78 Chloroform	83		6.621					ND	
81 1,1,1-Trichloroethane	97		6.807					ND	
82 Cyclohexane	56		6.893					ND	
84 Carbon tetrachloride	117		7.000					ND	
83 1,1-Dichloropropene	75		7.014					ND	
87 Benzene	78		7.258					ND	
85 1,2-Dichloroethane	62		7.336					ND	
86 Tert-amyl methyl ether	73		7.450					ND	
80 Isobutyl alcohol	41		7.651					ND	
35 n-Heptane	43		7.651					ND	
88 n-Butanol	56		8.001					ND	
89 Trichloroethene	95		8.044					ND	
16 Ethyl acrylate	55		8.173					ND	
90 2-Pentanone	43		8.259					ND	
93 Methylcyclohexane	55		8.294					ND	
92 1,2-Dichloropropane	63		8.330					ND	
94 1,4-Dioxane	88		8.416					ND	
95 Dibromomethane	93		8.423					ND	
91 Methyl methacrylate	100		8.423					ND	
96 Dichlorobromomethane	83		8.623					ND	
97 2-Nitropropane	41		8.859					ND	
98 2-Chloroethyl vinyl ether	63		8.938					ND	
99 cis-1,3-Dichloropropene	75		9.081					ND	
24 n-Butyl acetate	43		9.214					ND	
100 4-Methyl-2-pentanone (MIBK	43		9.238					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
101 Toluene	91		9.410					ND	
103 trans-1,3-Dichloropropene	75		9.660					ND	
102 Ethyl methacrylate	69		9.717					ND	
104 1,1,2-Trichloroethane	97		9.846					ND	
107 Tetrachloroethene	164		9.917					ND	
106 1,3-Dichloropropane	76		10.003					ND	
105 2-Hexanone	43		10.060					ND	
108 Chlorodibromomethane	129		10.211					ND	
110 Ethylene Dibromide	107		10.318					ND	
111 1-Chlorohexane	91		10.775					ND	
112 Chlorobenzene	112		10.790					ND	
113 1,1,1,2-Tetrachloroethane	131		10.876					ND	
114 Ethylbenzene	106		10.883					ND	
115 m-Xylene & p-Xylene	106		11.004					ND	
117 o-Xylene	106		11.362					ND	
116 Styrene	104		11.383					ND	
118 Bromoform	173		11.555					ND	
119 Isopropylbenzene	105		11.705					ND	
23 Benzyl chloride	126		11.759					ND	
120 cis-1,4-Dichloro-2-butene	53		11.769					ND	
121 Cyclohexanone	55		11.791					ND	
122 1,1,2,2-Tetrachloroethane	83		11.998					ND	
125 Bromobenzene	156		11.998					ND	
123 trans-1,4-Dichloro-2-buten	53		12.027					ND	
124 1,2,3-Trichloropropane	110		12.048					ND	
126 N-Propylbenzene	120		12.091					ND	
128 2-Chlorotoluene	126		12.170					ND	
127 1,3,5-Trimethylbenzene	105		12.248					ND	
129 4-Chlorotoluene	126		12.277					ND	
130 tert-Butylbenzene	119		12.506					ND	
131 1,2,4-Trimethylbenzene	105		12.549					ND	
132 sec-Butylbenzene	134		12.677					ND	
134 1,3-Dichlorobenzene	146		12.763					ND	
133 4-Isopropyltoluene	119		12.785					ND	
136 1,4-Dichlorobenzene	146		12.842					ND	
135 1,2,3-Trimethylbenzene	105		12.856					ND	
137 n-Butylbenzene	91		13.071					ND	
138 1,2-Dichlorobenzene	146		13.085					ND	
139 1,2-Dibromo-3-Chloropropan	157		13.593					ND	
140 1,3,5-Trichlorobenzene	180		13.707					ND	
141 1,2,4-Trichlorobenzene	180		14.129					ND	
142 Hexachlorobutadiene	225		14.215					ND	
143 Naphthalene	128		14.315					ND	
144 1,2,3-Trichlorobenzene	180		14.472					ND	
26 3-Methylhexane	1		0.000					ND	
17 2-Methylnaphthalene	142		0.000					ND	
15 3,3-Dimethylpentane	1		0.000					ND	
14 2,4-Dimethylpentane	1		0.000					ND	
28 Dimethyl disulfide	1		0.000					ND	
21 Pentachloroethane	167		0.000					ND	
25 n-Nonyl Aldehyde	1		0.000					ND	
20 2,2-Dimethylpentane	1		0.000					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
12 2-Methylhexane	1		0.000					ND	
19 2,3-Dimethylpentane	1		0.000					ND	
18 2,2,3-Trimethylbutane	1		0.000					ND	
13 2-Butoxyethanol TIC	1		0.000					ND	
27 3-Ethylpentane	1		0.000					ND	
29 Dichloroacetonitrile TIC	74		1.000					ND	
30 2,3-dichloro-1-propene TIC	75		1.000					ND	
49 Propene oxide TIC	58		5.292					ND	
S 151 1,2-Dichloroethene, Total	96		2.000					ND	
S 145 Trihalomethanes, Total	1		0.000					ND	
S 149 1,2-Dichloroethene, Total	1		0.000					ND	
S 150 Xylenes, Total	106		0.000					ND	
S 148 1,3-Dichloropropene, Total	1		0.000					ND	
S 146 Xylenes, Total (URS)	1		0.000					ND	
S 147 Total BTEX	1		0.000					ND	

Reagents:

MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

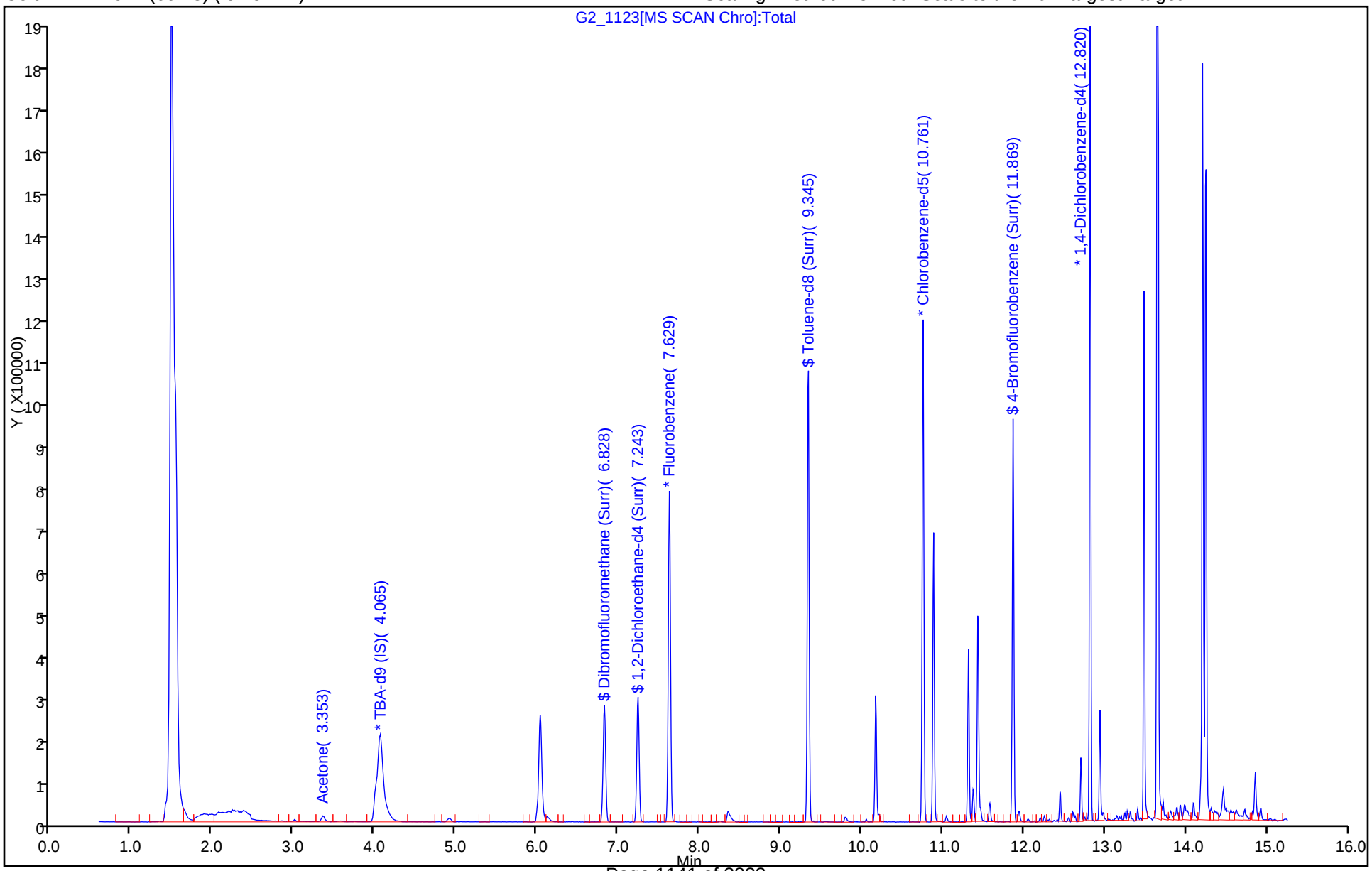
Report Date: 18-Jun-2017 12:35:40 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1123.D

Injection Date:	16-Jun-2017 14:55:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	MB 280-377666/1-A			Worklist Smp#:	27
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1123.D
Lims ID: MB 280-377666/1-A
Client ID:
Sample Type: MB
Inject. Date: 16-Jun-2017 14:55:30 ALS Bottle#: 18 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB (2)
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 16:12:41

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	46.7	109.83
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	44.8	105.44
$ 10 Toluene-d8 (Surr)	42.5	40.0	94.23
$ 11 4-Bromofluorobenzene (Surr)	42.5	44.2	103.99

Report Date: 18-Jun-2017 12:35:40 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1123.D

Injection Date: 16-Jun-2017 14:55:30 Instrument ID: VMS_G2

Lims ID: MB 280-377666/1-A

Client ID:

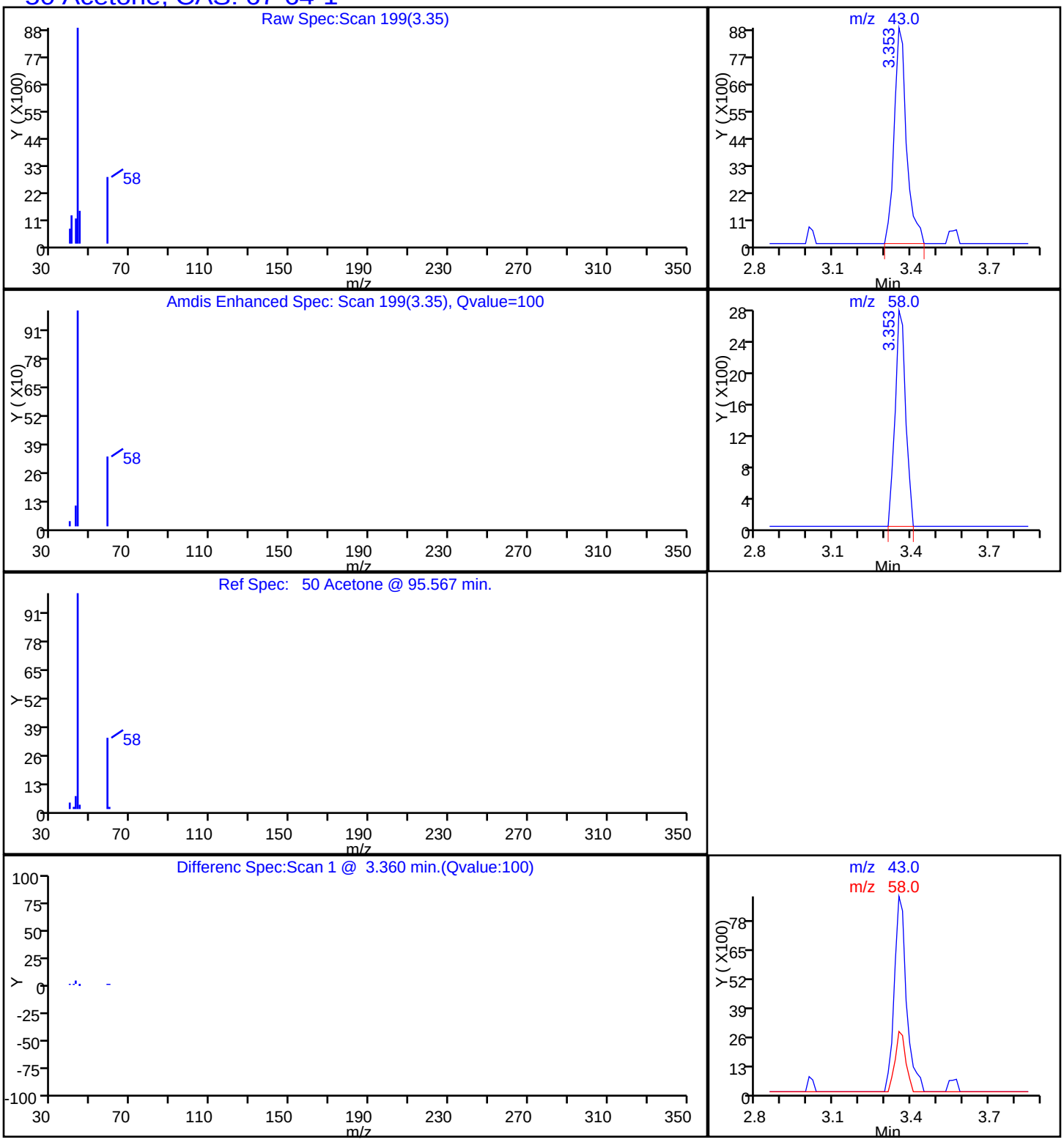
Operator ID: DUKESA ALS Bottle#: 18 Worklist Smp#: 27

Purge Vol: 5.000 mL Dil. Factor: 1.0000

Method: SO_VMSG2_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

50 Acetone, CAS: 67-64-1



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-377884/1-A

Matrix: Solid | Lab File ID: P0048.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 4.983(g) | Date Analyzed: 06/19/2017 17:44

Soil Aliquot Vol: 20 (mL) | Dilution Factor: 1

Soil Extract Vol.: 1000(mL) | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Medium

Analysis Batch No.: 377804 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	80	U	250	80	21
71-55-6	1,1,1-Trichloroethane	40	U	250	40	20
79-34-5	1,1,2,2-Tetrachloroethane	80	U	250	80	29
79-00-5	1,1,2-Trichloroethane	80	U	250	80	27
75-34-3	1,1-Dichloroethane	160	U	250	160	51
75-35-4	1,1-Dichloroethene	160	U	250	160	51
563-58-6	1,1-Dichloropropene	160	U	250	160	48
87-61-6	1,2,3-Trichlorobenzene	80	U	250	80	35
96-18-4	1,2,3-Trichloropropane	160	U	250	160	47
120-82-1	1,2,4-Trichlorobenzene	160	U	250	160	47
95-63-6	1,2,4-Trimethylbenzene	80	U	250	80	31
96-12-8	1,2-Dibromo-3-Chloropropane	320	U	500	320	86
106-93-4	1,2-Dibromoethane	80	U	250	80	25
95-50-1	1,2-Dichlorobenzene	320	U	500	320	94
107-06-2	1,2-Dichloroethane	80	U	250	80	25
540-59-0	1,2-Dichloroethene, Total	80	U	130	80	22
78-87-5	1,2-Dichloropropane	160	U	250	160	46
108-67-8	1,3,5-Trimethylbenzene	80	U	250	80	39
541-73-1	1,3-Dichlorobenzene	160	U	250	160	41
142-28-9	1,3-Dichloropropane	80	U	250	80	28
106-46-7	1,4-Dichlorobenzene	80	U	250	80	25
594-20-7	2,2-Dichloropropane	80	U	250	80	27
78-93-3	2-Butanone (MEK)	640	U	1000	640	300
95-49-8	2-Chlorotoluene	80	U	250	80	26
591-78-6	2-Hexanone	640	U	1000	640	220
106-43-4	4-Chlorotoluene	80	U	250	80	23
99-87-6	4-Isopropyltoluene	80	U	250	80	32
108-10-1	4-Methyl-2-pentanone (MIBK)	640	U	1000	640	230
67-64-1	Acetone	1300	U	1500	1300	400
71-43-2	Benzene	160	U	250	160	45
108-86-1	Bromobenzene	40	U	250	40	19
74-97-5	Bromochloromethane	160	U	250	160	47
75-27-4	Bromodichloromethane	80	U	250	80	40
75-25-2	Bromoform	160	U	250	160	160
74-83-9	Bromomethane	160	U	500	160	44
75-15-0	Carbon disulfide	160	U	250	160	64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-377884/1-A

Matrix: Solid | Lab File ID: P0048.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 4.983(g) | Date Analyzed: 06/19/2017 17:44

Soil Aliquot Vol: 20 (mL) | Dilution Factor: 1

Soil Extract Vol.: 1000(mL) | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Medium

Analysis Batch No.: 377804 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	40	U	250	40	17
108-90-7	Chlorobenzene	80	U	250	80	30
75-00-3	Chloroethane	160	U	500	160	44
67-66-3	Chloroform	160	U	250	160	46
74-87-3	Chloromethane	160	U	500	160	50
156-59-2	cis-1,2-Dichloroethene	80	U	130	80	22
10061-01-5	cis-1,3-Dichloropropene	80	U	250	80	27
124-48-1	Dibromochloromethane	80	U	250	80	33
74-95-3	Dibromomethane	80	U	250	80	30
75-71-8	Dichlorodifluoromethane	80	U	500	80	22
100-41-4	Ethylbenzene	80	U	250	80	34
87-68-3	Hexachlorobutadiene	160	U	250	160	49
108-20-3	Isopropyl ether	800	U	2500	800	210
98-82-8	Isopropylbenzene	80	U	250	80	29
179601-23-1	m&p-Xylene	160	U	250	160	78
74-88-4	Methyl iodide	80	U	250	80	21
1634-04-4	Methyl tert-butyl ether	160	U	250	160	50
75-09-2	Methylene Chloride	812		250	160	69
91-20-3	Naphthalene	80	U	500	80	38
104-51-8	n-Butylbenzene	80	U	250	80	32
103-65-1	N-Propylbenzene	160	U	250	160	41
95-47-6	o-Xylene	80	U	130	80	35
135-98-8	sec-Butylbenzene	80	U	250	80	38
100-42-5	Styrene	80	U	250	80	26
98-06-6	tert-Butylbenzene	80	U	250	80	28
127-18-4	Tetrachloroethene	80	U	250	80	27
108-88-3	Toluene	80	U	250	80	39
156-60-5	trans-1,2-Dichloroethene	160	U	250	160	45
10061-02-6	trans-1,3-Dichloropropene	160	U	250	160	42
79-01-6	Trichloroethene	80	U	250	80	23
75-69-4	Trichlorofluoromethane	160	U	500	160	50
108-05-4	Vinyl acetate	160	U	500	160	70
75-01-4	Vinyl chloride	80	U	500	80	27
1330-20-7	Xylenes (total)	80	U	130	80	35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 280-377884/1-A

Matrix: Solid Lab File ID: P0048.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 4.983(g) Date Analyzed: 06/19/2017 17:44

Soil Aliquot Vol: 20 (mL) Dilution Factor: 1

Soil Extract Vol.: 1000(mL) GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Medium

Analysis Batch No.: 377804 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		71-136
460-00-4	4-Bromofluorobenzene (Surr)	104		79-119
1868-53-7	Dibromofluoromethane (Surr)	99		78-119
2037-26-5	Toluene-d8 (Surr)	108		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0048.D
Lims ID: MB 280-377884/1-A
Client ID:
Sample Type: MB
Inject. Date: 19-Jun-2017 17:44:30 ALS Bottle#: 30 Worklist Smp#: 45
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: mb 280-377884/1-a
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 16:11:05 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: seifertj Date: 20-Jun-2017 15:47:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.651	5.644	0.007	0	176374	250.0	250.0	
* 1 Fluorobenzene	96	7.610	7.603	0.007	98	1850610	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.869	9.870	-0.001	90	348013	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.700	11.700	0.000	98	459364	12.5	12.5	
* 149 1,4-Dioxane-d8	96		0.000					ND	
$ 5 Dibromofluoromethane (Surr	111	7.067	7.067	0.000	92	295714	10.0	9.93	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.360	7.360	0.000	0	308537	10.0	9.73	
$ 7 Toluene-d8 (Surr)	98	8.797	8.797	0.000	95	1384729	10.0	10.8	
$ 8 4-Bromofluorobenzene (Surr	95	10.735	10.735	0.000	82	435335	10.0	10.4	
$ 151 Trifluorotoluene (Surr)	1		0.000					ND	
$ 4 BFB	95		4.956					ND	
23 Dichlorodifluoromethane	85		3.876					ND	
22 Chlorotrifluoroethene	116		3.959					ND	
26 Chloromethane	50		4.099					ND	
24 1,2-Dichloro-1,1,2,2-tetra	85		4.182					ND	
27 Vinyl chloride	62		4.253					ND	
25 2-Chloro-1,1,1-Trifluoroet	118		4.461					ND	
28 Ethylene oxide	43		4.558					ND	
29 Bromomethane	94		4.616					ND	
30 Chloroethane	64		4.686					ND	
31 Dichlorofluoromethane	67		4.854					ND	
32 Trichlorofluoromethane	101		4.951					ND	
33 Ethanol	45		4.977					ND	
35 Ethyl ether	59	5.102	5.105	-0.003	82	4873		0.2140	
38 Propene oxide	58		5.200					ND	
39 Acrolein	56		5.259					ND	
36 1,2-Dichloro-1,1,2-trifluo	117		5.271					ND	
37 1,1,1-Trifluoro-2,2-dichlo	83		5.313					ND	
40 1,1,2-Trichloro-1,2,2-trif	151		5.356					ND	
41 Acetone	43		5.370					ND	
42 Isopropyl alcohol	45		5.382					ND	
43 1,1-Dichloroethene	96		5.412					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
44 Iodomethane	142		5.580					ND	
45 Methyl acetate	43		5.601					ND	
46 Acetonitrile	41		5.623					ND	
47 3-Chloro-1-propene	41		5.651					ND	
48 Carbon disulfide	76		5.694					ND	
49 2-Methyl-2-propanol	59		5.716					ND	
50 Methylene Chloride	84	5.758	5.759	0.000	98	183449		4.05	
51 Methyl tert-butyl ether	73		5.916					ND	
52 Acrylonitrile	53		5.916					ND	
53 trans-1,2-Dichloroethene	96		5.966					ND	
54 Hexane	57		6.116					ND	
55 Vinyl acetate	43		6.230					ND	
56 Isopropyl ether	87		6.231					ND	
57 1,1-Dichloroethane	63		6.288					ND	
58 2-Chloro-1,3-butadiene	53		6.352					ND	
59 Tert-butyl ethyl ether	59		6.509					ND	
60 Ethyl acetate	43		6.660					ND	
61 2-Butanone (MEK)	43		6.681					ND	
62 sec-Butyl Alcohol	45		6.724					ND	
63 cis-1,2-Dichloroethene	96		6.724					ND	
64 2,2-Dichloropropane	77		6.745					ND	
65 Propionitrile	54		6.745					ND	
66 Methacrylonitrile	41		6.867					ND	
67 Chlorobromomethane	128		6.924					ND	
68 Chloroform	83		6.931					ND	
69 Tetrahydrofuran	42		6.953					ND	
70 Isobutyl alcohol	41		7.138					ND	
71 1,1,1-Trichloroethane	97		7.146					ND	
72 Cyclohexane	56		7.210					ND	
73 1,1-Dichloropropene	75		7.246					ND	
74 Carbon tetrachloride	117		7.281					ND	
75 Tert-amyl methyl ether	73		7.410					ND	
76 1,2-Dichloroethane	62		7.417					ND	
77 Benzene	78		7.432					ND	
14 n-Heptane	43		7.489					ND	
78 n-Butanol	56		7.646					ND	
79 Trichloroethene	95		7.896					ND	
80 2-Pentanone	43		7.946					ND	
81 Methyl methacrylate	100		8.032					ND	
82 Methylcyclohexane	55		8.075					ND	
83 1,2-Dichloropropane	63		8.082					ND	
84 1,4-Dioxane	88		8.147					ND	
85 Dibromomethane	93		8.190					ND	
86 Dichlorobromomethane	83		8.261					ND	
87 2-Chloroethyl vinyl ether	63		8.404					ND	
88 2-Nitropropane	41		8.411					ND	
89 cis-1,3-Dichloropropene	75		8.576					ND	
90 4-Methyl-2-pentanone (MIBK	43		8.633					ND	
91 Toluene	91		8.847					ND	
92 Ethyl methacrylate	69		8.933					ND	
93 trans-1,3-Dichloropropene	75		8.955					ND	
94 1,1,2-Trichloroethane	97		9.112					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
95 2-Hexanone	43		9.219					ND	
96 1,3-Dichloropropane	76		9.248					ND	
97 Tetrachloroethene	164		9.255					ND	
98 Chlorodibromomethane	129		9.441					ND	
99 Tetrahydrothiophene	60		9.475					ND	
100 Ethylene Dibromide	107		9.562					ND	
101 1-Chlorohexane	91		9.777					ND	
102 Chlorobenzene	112		9.891					ND	
104 1,1,1,2-Tetrachloroethane	131		9.927					ND	
103 Ethylbenzene	106		9.927					ND	
105 m-Xylene & p-Xylene	106		9.999					ND	
106 Styrene	104		10.320					ND	
107 o-Xylene	106		10.320					ND	
108 Bromoform	173		10.535					ND	
109 Isopropylbenzene	105		10.578					ND	
110 cis-1,4-Dichloro-2-butene	53		10.621					ND	
111 Cyclohexanone	55		10.721					ND	
112 1,1,2,2-Tetrachloroethane	83		10.792					ND	
113 trans-1,4-Dichloro-2-buten	53		10.828					ND	
114 1,2,3-Trichloropropane	110		10.864					ND	
115 N-Propylbenzene	120		10.892					ND	
116 Bromobenzene	156		10.899					ND	
117 1,3,5-Trimethylbenzene	105		11.007					ND	
118 2-Chlorotoluene	126		11.021					ND	
119 4-Chlorotoluene	126		11.100					ND	
120 tert-Butylbenzene	119		11.300					ND	
121 1,2,4-Trimethylbenzene	105	11.328	11.328	0.000	87	2826		0.0237	
122 sec-Butylbenzene	134		11.479					ND	
123 4-Isopropyltoluene	119		11.572					ND	
124 1,3-Dichlorobenzene	146		11.650					ND	
126 1,4-Dichlorobenzene	146		11.722					ND	
125 1,2,3-Trimethylbenzene	105		11.722					ND	
127 n-Butylbenzene	91	11.943	11.936	0.007	95	7746		0.0605	
128 1,2-Dichlorobenzene	146		12.079					ND	
129 1,2-Dibromo-3-Chloropropan	157		12.837					ND	
16 1,3,5-Trichlorobenzene	180		13.038					ND	
130 1,2,4-Trichlorobenzene	180	13.795	13.781	0.014	73	2556		0.0876	
131 Hexachlorobutadiene	225		13.917					ND	
132 Naphthalene	128		14.160					ND	
133 1,2,3-Trichlorobenzene	180	14.488	14.482	0.006	84	2497		0.1120	
18 3,3-Dimethylpentane	1		0.000					ND	
10 n-Nonyl Aldehyde	1		0.000					ND	
12 2,2,3-Trimethylbutane	1		0.000					ND	
13 2,2-Dimethylpentane	1		0.000					ND	
20 2-Methylhexane	1		0.000					ND	
143 Pentachloroethane	167		0.000					ND	
9 2,4-Dimethylpentane	1		0.000					ND	
11 2,3-Dimethylpentane	1		0.000					ND	
15 Dimethyl disulfide	1		0.000					ND	
17 3-Ethylpentane	1		0.000					ND	
19 3-Methylhexane	1		0.000					ND	
S 140 1,2-Dichloroethene, Total	96				0			0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
S 137 1,3-Dichloropropene, Total	1				0			0	
S 139 Xylenes, Total	106				0			0	
S 134 Trihalomethanes, Total	1				0			0	
S 136 Total BTEX	1		0.000					ND	
S 135 Xylenes, Total (URS)	1				0			0	
S 152 TAH	1				0			0	
S 138 1,2-Dichloroethene, Total	1				0			0	
T 156 1,3-Butadiene TIC	1		0.000					ND	
T 157 n-Nonane TIC	1		0.000					ND	
T 21 2-Butoxyethanol TIC	1		0.000					ND	
T 141 Dichloroacetonitrile TIC	74		0.000					ND	
T 34 Propene oxide TIC	58		0.000					ND	
T 153 Propene TIC	1		0.000					ND	
T 155 4-Ethyltoluene TIC	1		0.000					ND	
T 154 Dicyclopentadiene TIC	1		0.000					ND	
T 142 2,3-dichloro-1-propene TIC	75		0.000					ND	

Reagents:

MV-567649-D_00001 Amount Added: 1.00 Units: uL Run Reagent

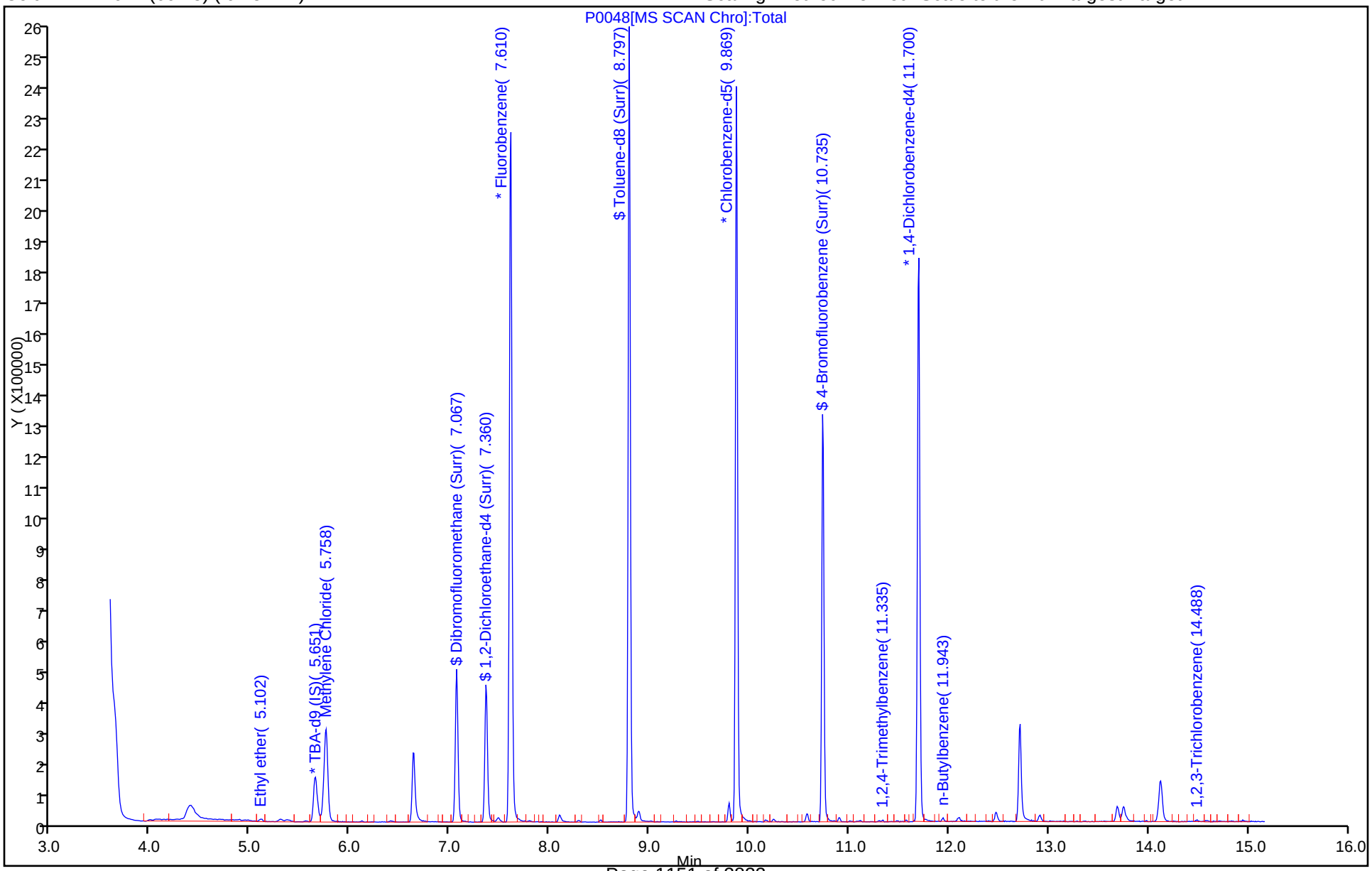
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0048.D

Injection Date:	19-Jun-2017 17:44:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	MB 280-377884/1-A			Worklist Smp#:	45
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0048.D
Lims ID: MB 280-377884/1-A
Client ID:
Sample Type: MB
Inject. Date: 19-Jun-2017 17:44:30 ALS Bottle#: 30 Worklist Smp#: 45
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: mb 280-377884/1-a
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 20-Jun-2017 16:11:05 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK017

First Level Reviewer: seifertj Date: 20-Jun-2017 15:47:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	10.0	9.93	99.35
$ 6 1,2-Dichloroethane-d4 (Surr)	10.0	9.73	97.31
$ 7 Toluene-d8 (Surr)	10.0	10.8	108.20
$ 8 4-Bromofluorobenzene (Surr)	10.0	10.4	104.13

Report Date: 20-Jun-2017 16:15:11 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0048.D

Injection Date: 19-Jun-2017 17:44:30 Instrument ID: VMS_P

Lims ID: MB 280-377884/1-A

Client ID:

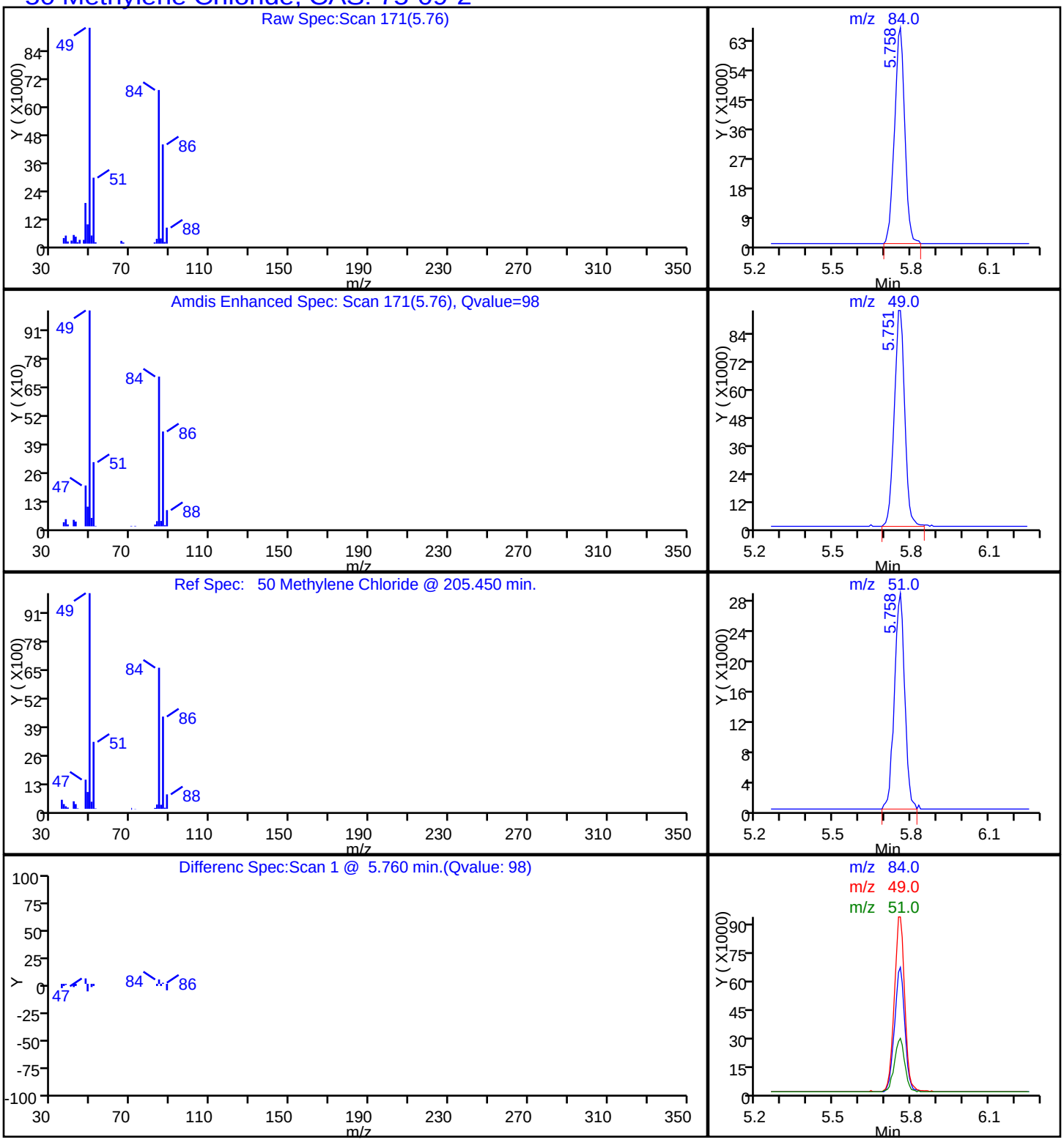
Operator ID: SEIFERTJ ALS Bottle#: 30 Worklist Smp#: 45

Purge Vol: 20.000 mL Dil. Factor: 1.0000

Method: MLE_VMSP_8260 Limit Group: MSV - 8260B Water and Solid

Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

50 Methylene Chloride, CAS: 75-09-2



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-377540/3-A

Matrix: Solid | Lab File ID: G2_1079.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/15/2017 19:57

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 377520 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
108-20-3	Isopropyl ether	43.0	J	50	8.0	2.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	78		71-136
460-00-4	4-Bromofluorobenzene (Surr)	104		79-119
1868-53-7	Dibromofluoromethane (Surr)	85		78-119
2037-26-5	Toluene-d8 (Surr)	88		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\G2_1079.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 15-Jun-2017 19:57:30 ALS Bottle#: 14 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS S
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 16-Jun-2017 12:18:14 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.065	0.000	95	636376	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	933719	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	232292	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	414719	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.821	0.007	93	205724	42.5	36.2	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.236	0.007	98	259651	42.5	33.2	
$ 10 Toluene-d8 (Surr)	98	9.345	9.338	0.007	94	742971	42.5	37.4	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	92	298181	42.5	44.1	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.277	2.263	0.014	100	2234970	5000.0	9965.5	
42 Ethanol	45	2.892	2.892	0.000	100	229081	3000.0	2850.3	
47 Propene oxide	58	3.073	3.059	0.014	96	6444538	5000.0	5645.6	
51 Isopropyl alcohol	45	3.562	3.562	0.000	96	226151	500.0	504.1	
54 Acetonitrile	41	3.744	3.744	0.000	99	406053	500.0	639.9	
66 Isopropyl ether	87	5.308	5.308	0.000	92	212241	50.0	43.0	
68 2-Chloro-1,3-butadiene	53	5.322	5.322	0.000	93	451279	50.0	46.0	
69 Tert-butyl ethyl ether	59	5.894	5.895	-0.001	97	723445	50.0	47.3	
70 Ethyl acetate	43	6.214	6.207	0.007	99	498510	100.0	121.8	
73 Propionitrile	54	6.221	6.221	0.000	99	410222	500.0	600.8	
76 Methacrylonitrile	41	6.435	6.428	0.007	93	1687329	500.0	642.9	
86 Tert-amyl methyl ether	73	7.450	7.451	-0.001	96	703654	50.0	48.2	
88 n-Butanol	56	8.001	8.001	0.000	92	217667	1250.0	1021.9	
16 Ethyl acrylate	55	8.173	8.173	0.000	100	296529	NC	NC	
91 Methyl methacrylate	100	8.423	8.423	0.000	92	143531	100.0	95.3	
97 2-Nitropropane	41	8.859	8.859	0.000	99	112323	100.0	79.3	
120 cis-1,4-Dichloro-2-butene	53	11.762	11.769	-0.007	92	219074	100.0	104.2	
135 1,2,3-Trimethylbenzene	105	12.849	12.856	-0.007	98	1122671	50.0	43.5	
140 1,3,5-Trichlorobenzene	180	13.693	13.693	0.000	97	565115	50.0	47.1	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

MV-Supp B_00016	Amount Added:	6.25	Units: uL	
MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

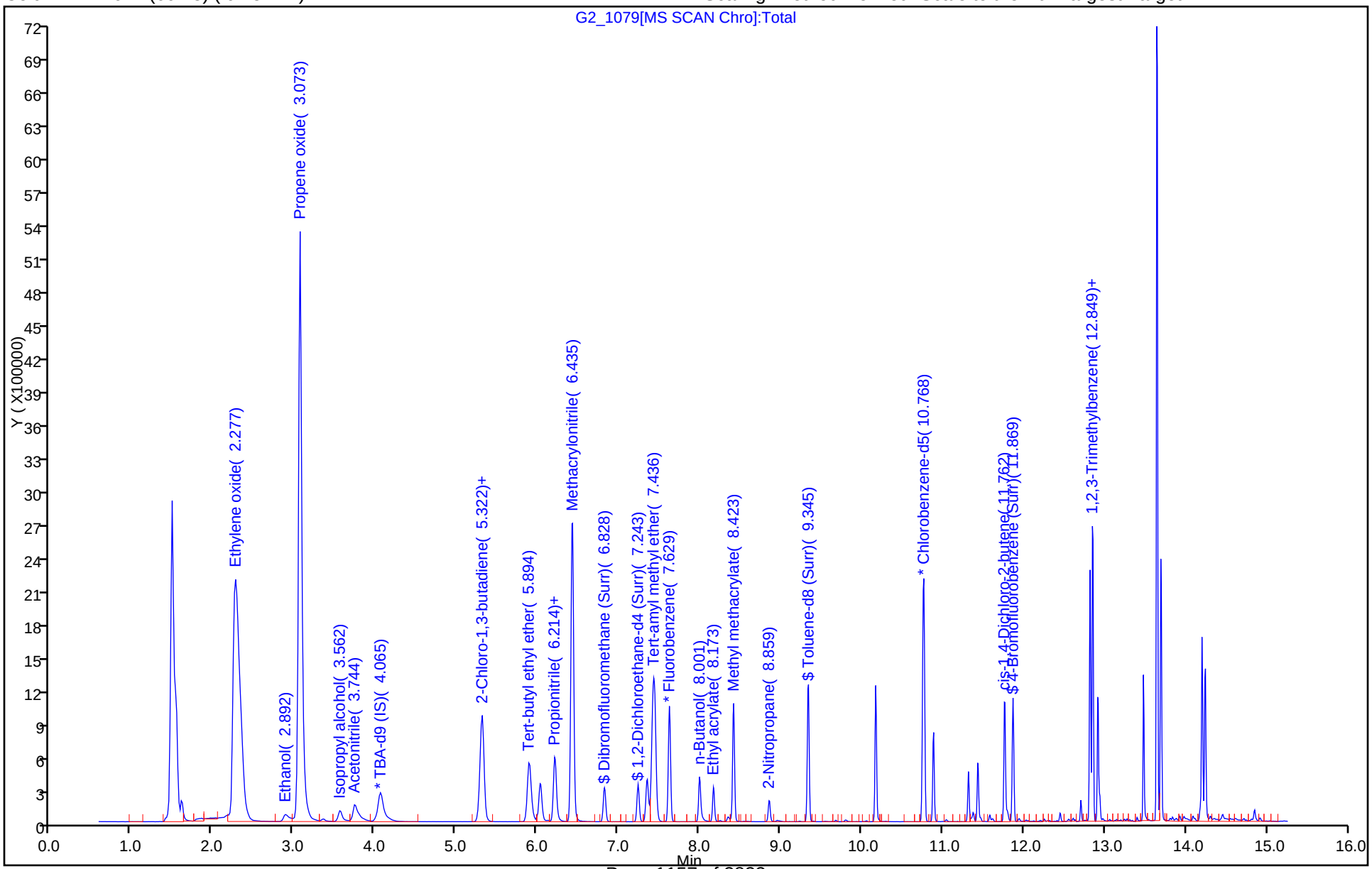
Report Date: 16-Jun-2017 12:18:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\G2_1079.D

Injection Date:	15-Jun-2017 19:57:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	LCS			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\G2_1079.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 15-Jun-2017 19:57:30 ALS Bottle#: 14 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS S
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 16-Jun-2017 12:18:14 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK014

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	36.2	85.22
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	33.2	78.22
$ 10 Toluene-d8 (Surr)	42.5	37.4	88.00
$ 11 4-Bromofluorobenzene (Surr)	42.5	44.1	103.72

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-377664/2-A

Matrix: Solid | Lab File ID: G2_1119.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/16/2017 13:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	42.1		5.0	1.6	0.56
71-55-6	1,1,1-Trichloroethane	45.4		5.0	1.6	0.52
79-34-5	1,1,2,2-Tetrachloroethane	39.3		5.0	1.6	0.61
79-00-5	1,1,2-Trichloroethane	47.1		5.0	3.2	0.88
75-34-3	1,1-Dichloroethane	44.1		5.0	0.80	0.21
75-35-4	1,1-Dichloroethene	46.4		5.0	1.6	0.59
563-58-6	1,1-Dichloropropene	46.2		5.0	1.6	0.54
87-61-6	1,2,3-Trichlorobenzene	42.3		5.0	1.6	0.75
96-18-4	1,2,3-Trichloropropane	41.9		5.0	3.2	0.81
120-82-1	1,2,4-Trichlorobenzene	43.1		5.0	1.6	0.73
95-63-6	1,2,4-Trimethylbenzene	42.3		5.0	1.6	0.58
96-12-8	1,2-Dibromo-3-Chloropropane	40.4		10	1.6	0.60
106-93-4	1,2-Dibromoethane	41.7		5.0	1.6	0.52
95-50-1	1,2-Dichlorobenzene	42.3		5.0	1.6	0.45
107-06-2	1,2-Dichloroethane	43.6		5.0	1.6	0.70
540-59-0	1,2-Dichloroethene, Total	94.1		5.0	1.6	0.39
78-87-5	1,2-Dichloropropane	45.3		5.0	1.6	0.55
108-67-8	1,3,5-Trimethylbenzene	42.4		5.0	1.6	0.57
541-73-1	1,3-Dichlorobenzene	43.5		5.0	1.6	0.48
142-28-9	1,3-Dichloropropane	41.0		5.0	1.6	0.51
106-46-7	1,4-Dichlorobenzene	39.6		5.0	1.6	0.78
594-20-7	2,2-Dichloropropane	45.8		5.0	1.6	0.44
78-93-3	2-Butanone (MEK)	162		20	6.4	1.8
95-49-8	2-Chlorotoluene	41.0		5.0	1.6	0.51
591-78-6	2-Hexanone	135		20	13	4.9
106-43-4	4-Chlorotoluene	43.0		5.0	1.6	0.78
99-87-6	4-Isopropyltoluene	43.3		5.0	1.6	0.49
108-10-1	4-Methyl-2-pentanone (MIBK)	169		20	13	4.4
67-64-1	Acetone	174		20	13	5.4
71-43-2	Benzene	46.6		5.0	1.6	0.47
108-86-1	Bromobenzene	43.3		5.0	1.6	0.49
74-97-5	Bromochloromethane	46.4		5.0	0.80	0.30
75-27-4	Bromodichloromethane	45.7		5.0	0.80	0.22
75-25-2	Bromoform	42.4		5.0	0.80	0.23
74-83-9	Bromomethane	39.5		10	1.6	0.50
75-15-0	Carbon disulfide	45.1		5.0	1.6	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-377664/2-A

Matrix: Solid | Lab File ID: G2_1119.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/16/2017 13:30

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	44.6		5.0	1.6	0.63
108-90-7	Chlorobenzene	40.5		5.0	1.6	0.54
75-00-3	Chloroethane	46.5		10	3.2	0.89
67-66-3	Chloroform	43.4		10	0.80	0.29
74-87-3	Chloromethane	47.7		10	1.6	0.77
156-59-2	cis-1,2-Dichloroethene	45.3		5.0	1.6	0.56
10061-01-5	cis-1,3-Dichloropropene	38.7		5.0	3.2	1.3
124-48-1	Dibromochloromethane	42.2		5.0	1.6	0.57
74-95-3	Dibromomethane	45.1		5.0	3.2	0.84
75-71-8	Dichlorodifluoromethane	52.5		10	1.6	0.52
100-41-4	Ethylbenzene	45.8		5.0	1.6	0.67
87-68-3	Hexachlorobutadiene	42.9		5.0	1.6	0.55
98-82-8	Isopropylbenzene	42.1		5.0	1.6	0.59
179601-23-1	m&p-Xylene	42.3		3.2	3.2	1.0
74-88-4	Methyl iodide	44.9		5.0	1.6	0.44
1634-04-4	Methyl tert-butyl ether	44.7		20	0.80	0.34
75-09-2	Methylene Chloride	47.8		5.0	3.2	1.6
91-20-3	Naphthalene	42.6		5.0	1.6	0.63
104-51-8	n-Butylbenzene	44.6		5.0	1.6	0.56
103-65-1	N-Propylbenzene	42.3		5.0	1.6	0.58
95-47-6	o-Xylene	43.5		5.0	1.6	0.61
135-98-8	sec-Butylbenzene	41.0		5.0	1.6	0.77
100-42-5	Styrene	42.1		5.0	1.6	0.63
98-06-6	tert-Butylbenzene	42.1		5.0	1.6	0.50
127-18-4	Tetrachloroethene	41.7		5.0	1.6	0.59
108-88-3	Toluene	48.8		5.0	1.6	0.69
156-60-5	trans-1,2-Dichloroethene	48.8		5.0	0.80	0.39
10061-02-6	trans-1,3-Dichloropropene	42.2		5.0	1.6	0.67
79-01-6	Trichloroethene	45.7		5.0	0.80	0.23
75-69-4	Trichlorofluoromethane	46.6		10	3.2	1.0
108-05-4	Vinyl acetate	82.5		10	3.2	1.1
75-01-4	Vinyl chloride	47.5		5.0	3.2	1.3
1330-20-7	Xylenes (total)	85.8		10	1.0	0.61

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-377664/2-A

Matrix: Solid Lab File ID: G2_1119.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 06/16/2017 13:30

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 377645 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		71-136
460-00-4	4-Bromofluorobenzene (Surr)	100		79-119
1868-53-7	Dibromofluoromethane (Surr)	98		78-119
2037-26-5	Toluene-d8 (Surr)	98		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1119.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 16-Jun-2017 13:30:30 ALS Bottle#: 14 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.079	4.079	0.000	93	453077	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	743041	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	193856	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	378794	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.829	6.829	0.000	93	185725	42.5	41.6	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	95	249569	42.5	41.0	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	691662	42.5	41.7	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	92	263630	42.5	42.7	
32 Dichlorodifluoromethane	85	1.705	1.705	0.000	99	241675	40.0	52.5	
34 Chloromethane	50	1.844	1.830	0.014	99	327861	40.0	47.7	
37 Vinyl chloride	62	1.970	1.970	0.000	98	352781	40.0	47.5	
22 Butadiene	54	1.998	1.998	0.000	91	273849	NC	NC	
39 Bromomethane	94	2.291	2.291	0.000	91	247245	40.0	39.5	
40 Chloroethane	64	2.403	2.403	0.000	99	216114	40.0	46.5	
41 Dichlorofluoromethane	67	2.668	2.668	0.000	98	437708	40.0	45.8	
43 Trichlorofluoromethane	101	2.710	2.710	0.000	98	353888	40.0	46.6	
45 Ethyl ether	59	3.004	3.004	0.000	94	166283	50.0	44.3	
48 Acrolein	56	3.185	3.185	0.000	98	367935	499.9	518.2	
53 1,1-Dichloroethene	96	3.311	3.311	0.000	94	177675	50.0	46.4	
52 1,1,2-Trichloro-1,2,2-trif	151	3.353	3.353	0.000	94	176516	50.0	45.9	
50 Acetone	43	3.367	3.353	0.014	98	301543	160.0	174.0	
55 Iodomethane	142	3.492	3.492	0.000	99	306323	50.0	44.9	
58 Carbon disulfide	76	3.576	3.576	0.000	100	653319	50.0	45.1	
56 Methyl acetate	43	3.800	3.800	0.000	99	762662	250.0	221.3	
57 3-Chloro-1-propene	41	3.800	3.800	0.000	88	324668	50.0	47.0	
60 Methylene Chloride	84	4.009	4.009	0.000	98	236410	50.0	47.8	
59 2-Methyl-2-propanol	59	4.205	4.205	0.000	94	221235	500.0	440.1	
61 Acrylonitrile	53	4.372	4.372	0.000	97	698601	500.0	436.9	
62 Methyl tert-butyl ether	73	4.428	4.428	0.000	97	544674	50.0	44.7	
63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	95	205763	50.0	48.8	
64 Hexane	57	4.917	4.917	0.000	94	286005	50.0	38.7	
67 1,1-Dichloroethane	63	5.210	5.210	0.000	97	370251	50.0	44.1	
65 Vinyl acetate	43	5.252	5.252	0.000	98	660734	100.0	82.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
74 cis-1,2-Dichloroethene	96	6.128	6.128	0.000	84	206395	50.0	45.3	
71 2-Butanone (MEK)	43	6.128	6.128	0.000	98	357883	160.0	162.5	
75 2,2-Dichloropropane	77	6.128	6.128	0.000	62	322235	50.0	45.8	
72 sec-Butyl Alcohol	45	6.457	6.457	0.000	95	451686	1500.0	1227.1	
77 Chlorobromomethane	128	6.457	6.457	0.000	68	100105	50.0	46.4	
79 Tetrahydrofuran	42	6.464	6.464	0.000	67	126679	100.0	88.0	
78 Chloroform	83	6.621	6.621	0.000	95	367261	50.0	43.4	
81 1,1,1-Trichloroethane	97	6.814	6.807	0.007	98	328285	50.0	45.4	
82 Cyclohexane	56	6.893	6.893	0.000	94	328789	50.0	44.8	
84 Carbon tetrachloride	117	7.000	7.000	0.000	96	304054	50.0	44.6	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	92	267188	50.0	46.2	
87 Benzene	78	7.258	7.258	0.000	97	769127	50.0	46.6	
85 1,2-Dichloroethane	62	7.336	7.336	0.000	98	298149	50.0	43.6	
80 Isobutyl alcohol	41	7.651	7.651	0.000	83	222134	1250.0	1096.5	
35 n-Heptane	43	7.651	7.651	0.000	92	318560	50.0	44.7	
89 Trichloroethene	95	8.044	8.044	0.000	96	178202	50.0	45.7	
90 2-Pentanone	43	8.259	8.259	0.000	99	873490	200.0	226.2	
93 Methylcyclohexane	55	8.294	8.294	0.000	93	302493	50.0	48.9	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	93	201872	50.0	45.3	
94 1,4-Dioxane	88	8.416	8.416	0.000	45	40501	1000.0	1084.7	
95 Dibromomethane	93	8.423	8.423	0.000	96	119898	50.0	45.1	
96 Dichlorobromomethane	83	8.623	8.623	0.000	98	257483	50.0	45.7	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	93	88855	50.0	41.3	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	93	277098	50.0	38.7	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	98	732181	160.0	169.0	
101 Toluene	91	9.410	9.410	0.000	98	783573	50.0	48.8	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	96	256630	50.0	42.2	
102 Ethyl methacrylate	69	9.717	9.717	0.000	91	203017	50.0	37.1	
104 1,1,2-Trichloroethane	97	9.846	9.846	0.000	96	156899	50.0	47.1	
107 Tetrachloroethene	164	9.917	9.917	0.000	97	168279	50.0	41.7	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	95	275041	50.0	41.0	
105 2-Hexanone	43	10.060	10.060	0.000	98	539869	160.0	134.7	
108 Chlorodibromomethane	129	10.211	10.211	0.000	91	187445	50.0	42.2	
110 Ethylene Dibromide	107	10.318	10.318	0.000	99	152778	50.0	41.7	
111 1-Chlorohexane	91	10.775	10.775	0.000	94	257538	50.0	42.2	
112 Chlorobenzene	112	10.790	10.790	0.000	92	541197	50.0	40.5	
113 1,1,1,2-Tetrachloroethane	131	10.876	10.876	0.000	92	209983	50.0	42.1	
114 Ethylbenzene	106	10.883	10.883	0.000	98	289647	50.0	45.8	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	329125	50.0	42.3	
117 o-Xylene	106	11.362	11.362	0.000	97	338107	50.0	43.5	
116 Styrene	104	11.383	11.383	0.000	99	572080	50.0	42.1	
118 Bromoform	173	11.555	11.555	0.000	96	121886	50.0	42.4	
119 Isopropylbenzene	105	11.705	11.705	0.000	97	895245	50.0	42.1	
121 Cyclohexanone	55	11.791	11.791	0.000	95	306431	1600.0	1506.8	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	96	223223	50.0	39.3	
125 Bromobenzene	156	11.998	11.998	0.000	94	238442	50.0	43.3	
123 trans-1,4-Dichloro-2-buten	53	12.034	12.027	0.007	81	74694	50.0	42.1	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	86	72437	50.0	41.9	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	258554	50.0	42.3	
128 2-Chlorotoluene	126	12.177	12.170	0.007	96	220884	50.0	41.0	
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	94	779050	50.0	42.4	
129 4-Chlorotoluene	126	12.277	12.277	0.000	97	238165	50.0	43.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	684397	50.0	42.1	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	806043	50.0	42.3	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	211904	50.0	41.0	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	98	474203	50.0	43.5	
133 4-Isopropyltoluene	119	12.785	12.785	0.000	97	932383	50.0	43.3	
136 1,4-Dichlorobenzene	146	12.842	12.842	0.000	94	486509	50.0	39.6	
137 n-Butylbenzene	91	13.064	13.071	-0.007	97	865405	50.0	44.6	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	97	463991	50.0	42.3	
139 1,2-Dibromo-3-Chloropropan	157	13.586	13.593	-0.007	82	48408	50.0	40.4	
141 1,2,4-Trichlorobenzene	180	14.122	14.129	-0.007	94	355855	50.0	43.1	
142 Hexachlorobutadiene	225	14.208	14.215	-0.007	95	222849	50.0	42.9	
143 Naphthalene	128	14.308	14.315	-0.007	97	756944	50.0	42.6	
144 1,2,3-Trichlorobenzene	180	14.465	14.472	-0.007	94	339401	50.0	42.3	
S 151 1,2-Dichloroethene, Total	96				0		100.0	94.1	
S 145 Trihalomethanes, Total	1				0		200.0	173.6	
S 149 1,2-Dichloroethene, Total	1				0		50.0	94.1	
S 150 Xylenes, Total	106				0		100.0	85.7	
S 148 1,3-Dichloropropene, Total	1				0		100.0	80.9	
S 146 Xylenes, Total (URS)	1				0		100.0	85.7	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MV-Main B_00017	Amount Added:	6.25	Units: uL		
MV-SS 2-Cleve_00035	Amount Added:	6.25	Units: uL		
MV-Gas/Ket B_00034	Amount Added:	5.00	Units: uL		
MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent	
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent	

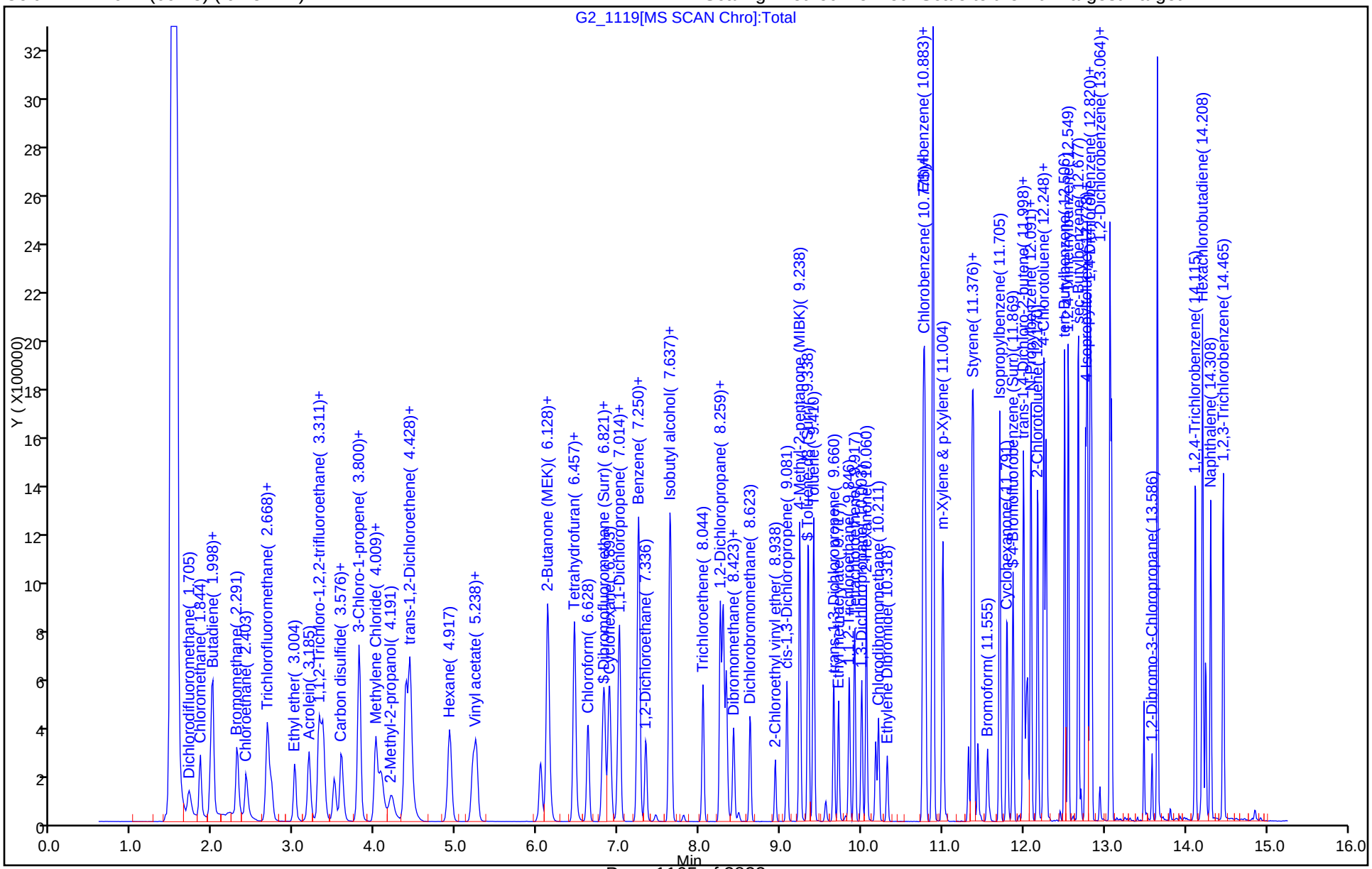
Report Date: 18-Jun-2017 12:34:59 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1119.D

Injection Date:	16-Jun-2017 13:30:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	LCS			Worklist Smp#:	6
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1119.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 16-Jun-2017 13:30:30 ALS Bottle#: 14 Worklist Smp#: 6
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	41.6	97.87
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	41.0	96.52
$ 10 Toluene-d8 (Surr)	42.5	41.7	98.16
$ 11 4-Bromofluorobenzene (Surr)	42.5	42.7	100.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-377664/3-A

Matrix: Solid | Lab File ID: G2_1120.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/16/2017 13:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 377645 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
108-20-3	Isopropyl ether	48.0	J	50	8.0	2.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		71-136
460-00-4	4-Bromofluorobenzene (Surr)	106		79-119
1868-53-7	Dibromofluoromethane (Surr)	91		78-119
2037-26-5	Toluene-d8 (Surr)	91		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1120.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 16-Jun-2017 13:51:30 ALS Bottle#: 15 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS S
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 15:05:08

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	94	560468	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	795145	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	91	200469	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	96	363164	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	93	186814	42.5	38.9	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	242064	42.5	36.8	
$ 10 Toluene-d8 (Surr)	98	9.345	9.345	0.000	94	662137	42.5	38.6	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	267671	42.5	45.2	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.277	2.277	0.000	100	2420796	5000.0	12675	
42 Ethanol	45	2.892	2.906	-0.014	98	283875	3000.0	3975.8	
47 Propene oxide	58	3.073	3.073	0.000	96	6451515	5000.0	6636.7	
51 Isopropyl alcohol	45	3.562	3.576	-0.014	95	216135	500.0	545.4	
54 Acetonitrile	41	3.744	3.758	-0.014	99	374938	500.0	693.9	
66 Isopropyl ether	87	5.308	5.308	0.000	92	203644	50.0	48.0	
68 2-Chloro-1,3-butadiene	53	5.322	5.322	0.000	94	453986	50.0	53.8	
69 Tert-butyl ethyl ether	59	5.894	5.894	0.000	96	706581	50.0	54.0	
70 Ethyl acetate	43	6.214	6.213	0.001	99	493746	100.0	141.7	
73 Propionitrile	54	6.221	6.221	0.000	98	401546	500.0	690.5	
76 Methacrylonitrile	41	6.428	6.435	-0.007	94	1713601	500.0	766.7	
86 Tert-amyl methyl ether	73	7.451	7.450	0.001	96	689821	50.0	55.2	
88 n-Butanol	56	8.001	8.001	0.000	93	208041	1250.0	1100.4	
16 Ethyl acrylate	55	8.173	8.173	0.000	100	284081	NC	NC	
91 Methyl methacrylate	100	8.423	8.423	0.000	92	139786	100.0	108.0	
97 2-Nitropropane	41	8.859	8.859	0.000	100	119009	100.0	97.3	
120 cis-1,4-Dichloro-2-butene	53	11.762	11.769	-0.007	91	220327	100.0	118.7	
135 1,2,3-Trimethylbenzene	105	12.856	12.856	0.000	98	1075852	50.0	47.4	
140 1,3,5-Trichlorobenzene	180	13.700	13.707	-0.007	97	539573	50.0	51.3	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

MV-Supp B_00016	Amount Added:	6.25	Units: uL	
MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

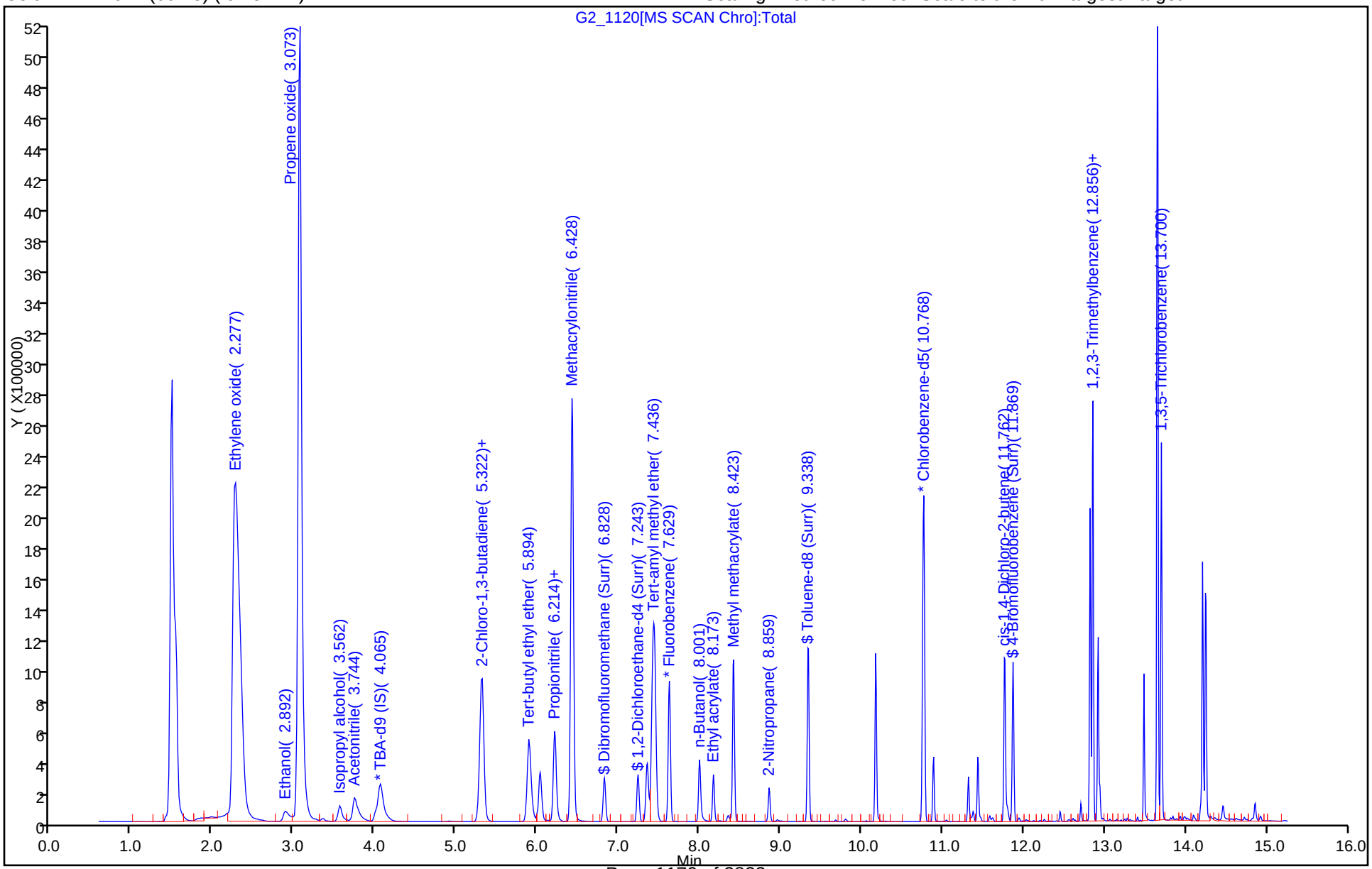
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1120.D

Injection Date:	16-Jun-2017 13:51:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	LCS			Worklist Smp#:	8
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1120.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 16-Jun-2017 13:51:30 ALS Bottle#: 15 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS S
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 15:05:08

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	38.9	91.46
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	36.8	86.56
$ 10 Toluene-d8 (Surr)	42.5	38.6	90.87
$ 11 4-Bromofluorobenzene (Surr)	42.5	45.2	106.32

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-377666/2-A

Matrix: Solid | Lab File ID: G2_1121.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/16/2017 14:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	48.2		5.0	1.6	0.56
71-55-6	1,1,1-Trichloroethane	49.4		5.0	1.6	0.52
79-34-5	1,1,2,2-Tetrachloroethane	44.8		5.0	1.6	0.61
79-00-5	1,1,2-Trichloroethane	54.2		5.0	3.2	0.88
75-34-3	1,1-Dichloroethane	50.2		5.0	0.80	0.21
75-35-4	1,1-Dichloroethene	53.2		5.0	1.6	0.59
563-58-6	1,1-Dichloropropene	53.2		5.0	1.6	0.54
87-61-6	1,2,3-Trichlorobenzene	48.2		5.0	1.6	0.75
96-18-4	1,2,3-Trichloropropane	47.1		5.0	3.2	0.81
120-82-1	1,2,4-Trichlorobenzene	47.9		5.0	1.6	0.73
95-63-6	1,2,4-Trimethylbenzene	47.7		5.0	1.6	0.58
96-12-8	1,2-Dibromo-3-Chloropropane	49.0		10	1.6	0.60
106-93-4	1,2-Dibromoethane	48.8		5.0	1.6	0.52
95-50-1	1,2-Dichlorobenzene	47.8		5.0	1.6	0.45
107-06-2	1,2-Dichloroethane	47.4		5.0	1.6	0.70
540-59-0	1,2-Dichloroethene, Total	106		5.0	1.6	0.39
78-87-5	1,2-Dichloropropane	50.9		5.0	1.6	0.55
108-67-8	1,3,5-Trimethylbenzene	48.3		5.0	1.6	0.57
541-73-1	1,3-Dichlorobenzene	48.9		5.0	1.6	0.48
142-28-9	1,3-Dichloropropane	47.3		5.0	1.6	0.51
106-46-7	1,4-Dichlorobenzene	44.9		5.0	1.6	0.78
594-20-7	2,2-Dichloropropane	50.4		5.0	1.6	0.44
78-93-3	2-Butanone (MEK)	173		20	6.4	1.8
95-49-8	2-Chlorotoluene	47.1		5.0	1.6	0.51
591-78-6	2-Hexanone	144		20	13	4.9
106-43-4	4-Chlorotoluene	49.3		5.0	1.6	0.78
99-87-6	4-Isopropyltoluene	49.5		5.0	1.6	0.49
108-10-1	4-Methyl-2-pentanone (MIBK)	179		20	13	4.4
67-64-1	Acetone	179		20	13	5.4
71-43-2	Benzene	53.1		5.0	1.6	0.47
108-86-1	Bromobenzene	49.8		5.0	1.6	0.49
74-97-5	Bromochloromethane	51.8		5.0	0.80	0.30
75-27-4	Bromodichloromethane	51.8		5.0	0.80	0.22
75-25-2	Bromoform	48.2		5.0	0.80	0.23
74-83-9	Bromomethane	39.0		10	1.6	0.50
75-15-0	Carbon disulfide	51.2		5.0	1.6	0.42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-377666/2-A

Matrix: Solid | Lab File ID: G2_1121.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/16/2017 14:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	48.8		5.0	1.6	0.63
108-90-7	Chlorobenzene	46.4		5.0	1.6	0.54
75-00-3	Chloroethane	43.7		10	3.2	0.89
67-66-3	Chloroform	47.6		10	0.80	0.29
74-87-3	Chloromethane	44.1		10	1.6	0.77
156-59-2	cis-1,2-Dichloroethene	51.3		5.0	1.6	0.56
10061-01-5	cis-1,3-Dichloropropene	45.9		5.0	3.2	1.3
124-48-1	Dibromochloromethane	47.8		5.0	1.6	0.57
74-95-3	Dibromomethane	49.4		5.0	3.2	0.84
75-71-8	Dichlorodifluoromethane	56.1		10	1.6	0.52
100-41-4	Ethylbenzene	51.4		5.0	1.6	0.67
87-68-3	Hexachlorobutadiene	48.2		5.0	1.6	0.55
98-82-8	Isopropylbenzene	48.7		5.0	1.6	0.59
179601-23-1	m&p-Xylene	48.9		3.2	3.2	1.0
74-88-4	Methyl iodide	51.7		5.0	1.6	0.44
1634-04-4	Methyl tert-butyl ether	51.4		20	0.80	0.34
75-09-2	Methylene Chloride	53.3		5.0	3.2	1.6
91-20-3	Naphthalene	49.6		5.0	1.6	0.63
104-51-8	n-Butylbenzene	49.3		5.0	1.6	0.56
103-65-1	N-Propylbenzene	48.3		5.0	1.6	0.58
95-47-6	o-Xylene	49.6		5.0	1.6	0.61
135-98-8	sec-Butylbenzene	47.9		5.0	1.6	0.77
100-42-5	Styrene	48.1		5.0	1.6	0.63
98-06-6	tert-Butylbenzene	48.0		5.0	1.6	0.50
127-18-4	Tetrachloroethene	47.9		5.0	1.6	0.59
108-88-3	Toluene	55.3		5.0	1.6	0.69
156-60-5	trans-1,2-Dichloroethene	54.5		5.0	0.80	0.39
10061-02-6	trans-1,3-Dichloropropene	48.6		5.0	1.6	0.67
79-01-6	Trichloroethene	53.7		5.0	0.80	0.23
75-69-4	Trichlorofluoromethane	44.6		10	3.2	1.0
108-05-4	Vinyl acetate	78.2		10	3.2	1.1
75-01-4	Vinyl chloride	45.8		5.0	3.2	1.3
1330-20-7	Xylenes (total)	98.5		10	1.0	0.61

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-377666/2-A

Matrix: Solid Lab File ID: G2_1121.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 06/16/2017 14:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 377667 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		71-136
460-00-4	4-Bromofluorobenzene (Surr)	102		79-119
1868-53-7	Dibromofluoromethane (Surr)	94		78-119
2037-26-5	Toluene-d8 (Surr)	97		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1121.D
Lims ID: LCS 280-377666/2-A
Client ID:
Sample Type: LCS
Inject. Date: 16-Jun-2017 14:12:30 ALS Bottle#: 16 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS (2)
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 15:05:31

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	94	519745	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	819336	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	86	210039	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	403914	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	93	196772	42.5	39.8	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	96	251572	42.5	37.1	
$ 10 Toluene-d8 (Surr)	98	9.338	9.345	-0.007	94	742560	42.5	41.3	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	284671	42.5	43.2	
32 Dichlorodifluoromethane	85	1.704	1.705	-0.001	99	284354	40.0	56.1	
34 Chloromethane	50	1.830	1.830	0.000	99	334714	40.0	44.1	
37 Vinyl chloride	62	1.956	1.970	-0.014	98	375106	40.0	45.8	
22 Butadiene	54	1.984	1.998	-0.014	93	290867	NC	NC	
39 Bromomethane	94	2.291	2.291	0.000	90	269135	40.0	39.0	
40 Chloroethane	64	2.403	2.403	0.000	100	223988	40.0	43.7	
41 Dichlorofluoromethane	67	2.654	2.668	-0.014	98	478212	40.0	45.4	
43 Trichlorofluoromethane	101	2.710	2.710	0.000	99	373306	40.0	44.6	
45 Ethyl ether	59	3.003	3.004	-0.001	94	214730	50.0	51.8	
48 Acrolein	56	3.171	3.185	-0.014	99	427115	499.9	545.3	
53 1,1-Dichloroethene	96	3.297	3.311	-0.014	94	224467	50.0	53.2	
52 1,1,2-Trichloro-1,2,2-trif	151	3.339	3.353	-0.015	95	214779	50.0	50.7	
50 Acetone	43	3.352	3.353	-0.001	98	340476	160.0	178.5	
55 Iodomethane	142	3.492	3.492	0.000	99	389052	50.0	51.7	
58 Carbon disulfide	76	3.576	3.576	0.000	100	818841	50.0	51.2	
56 Methyl acetate	43	3.785	3.800	-0.015	98	964474	250.0	253.8	
57 3-Chloro-1-propene	41	3.799	3.800	-0.001	90	415217	50.0	54.5	
60 Methylene Chloride	84	3.995	4.009	-0.014	97	288664	50.0	53.3	
59 2-Methyl-2-propanol	59	4.190	4.205	-0.015	94	293645	500.0	528.8	
61 Acrylonitrile	53	4.372	4.372	0.000	98	894603	500.0	507.3	
62 Methyl tert-butyl ether	73	4.428	4.428	0.000	97	692424	50.0	51.4	
63 trans-1,2-Dichloroethene	96	4.428	4.428	0.000	96	253466	50.0	54.5	
64 Hexane	57	4.917	4.917	0.000	95	363786	50.0	45.3	
67 1,1-Dichloroethane	63	5.196	5.210	-0.014	97	465406	50.0	50.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
65 Vinyl acetate	43	5.238	5.252	-0.014	98	690039	100.0	78.2	
74 cis-1,2-Dichloroethene	96	6.128	6.128	0.000	84	257477	50.0	51.3	
71 2-Butanone (MEK)	43	6.128	6.128	0.000	96	419962	160.0	172.9	
75 2,2-Dichloropropane	77	6.128	6.128	0.000	62	390890	50.0	50.4	
72 sec-Butyl Alcohol	45	6.457	6.457	0.000	96	622303	1500.0	1524.8	
77 Chlorobromomethane	128	6.457	6.457	0.000	62	123306	50.0	51.8	
79 Tetrahydrofuran	42	6.464	6.464	0.000	92	169540	100.0	106.1	
78 Chloroform	83	6.621	6.621	0.000	95	444082	50.0	47.6	
81 1,1,1-Trichloroethane	97	6.814	6.807	0.007	97	393338	50.0	49.4	
82 Cyclohexane	56	6.886	6.893	-0.007	93	421195	50.0	51.9	
84 Carbon tetrachloride	117	7.000	7.000	0.000	95	367069	50.0	48.8	
83 1,1-Dichloropropene	75	7.014	7.014	0.000	93	340072	50.0	53.2	
87 Benzene	78	7.250	7.258	-0.008	98	965875	50.0	53.1	
85 1,2-Dichloroethane	62	7.336	7.336	0.000	98	357333	50.0	47.4	
80 Isobutyl alcohol	41	7.643	7.651	-0.008	84	261033	1250.0	1168.6	
35 n-Heptane	43	7.643	7.651	-0.008	92	392371	50.0	49.9	
89 Trichloroethene	95	8.044	8.044	0.000	97	230754	50.0	53.7	
90 2-Pentanone	43	8.258	8.259	-0.001	99	1289881	200.0	305.4	
93 Methylcyclohexane	55	8.294	8.294	0.000	93	374923	50.0	54.9	
92 1,2-Dichloropropane	63	8.330	8.330	0.000	94	250186	50.0	50.9	
94 1,4-Dioxane	88	8.416	8.416	0.000	96	52492	1000.0	1274.9	
95 Dibromomethane	93	8.423	8.423	0.000	96	144670	50.0	49.4	
96 Dichlorobromomethane	83	8.623	8.623	0.000	99	322085	50.0	51.8	
98 2-Chloroethyl vinyl ether	63	8.938	8.938	0.000	92	112039	50.0	46.6	
99 cis-1,3-Dichloropropene	75	9.081	9.081	0.000	93	358424	50.0	45.9	
100 4-Methyl-2-pentanone (MIBK	43	9.238	9.238	0.000	98	857091	160.0	179.2	
101 Toluene	91	9.410	9.410	0.000	98	980780	50.0	55.3	
103 trans-1,3-Dichloropropene	75	9.660	9.660	0.000	96	327086	50.0	48.6	
102 Ethyl methacrylate	69	9.717	9.717	0.000	91	268378	50.0	44.8	
104 1,1,2-Trichloroethane	97	9.846	9.846	0.000	94	199036	50.0	54.2	
107 Tetrachloroethene	164	9.917	9.917	0.000	97	209340	50.0	47.9	
106 1,3-Dichloropropane	76	10.003	10.003	0.000	94	343519	50.0	47.3	
105 2-Hexanone	43	10.060	10.060	0.000	97	624175	160.0	143.6	
108 Chlorodibromomethane	129	10.210	10.211	-0.001	90	229865	50.0	47.8	
110 Ethylene Dibromide	107	10.318	10.318	0.000	99	193454	50.0	48.8	
111 1-Chlorohexane	91	10.775	10.775	0.000	95	327095	50.0	49.5	
112 Chlorobenzene	112	10.790	10.790	0.000	94	672219	50.0	46.4	
113 1,1,1,2-Tetrachloroethane	131	10.875	10.876	-0.001	92	260749	50.0	48.2	
114 Ethylbenzene	106	10.883	10.883	0.000	98	352348	50.0	51.4	
115 m-Xylene & p-Xylene	106	11.004	11.004	0.000	99	413749	50.0	48.9	
117 o-Xylene	106	11.362	11.362	0.000	97	419033	50.0	49.6	
116 Styrene	104	11.383	11.383	0.000	99	710348	50.0	48.1	
118 Bromoform	173	11.555	11.555	0.000	96	150339	50.0	48.2	
119 Isopropylbenzene	105	11.705	11.705	0.000	97	1107167	50.0	48.7	
121 Cyclohexanone	55	11.791	11.791	0.000	95	356713	1600.0	1619.5	
122 1,1,2,2-Tetrachloroethane	83	11.998	11.998	0.000	95	271614	50.0	44.8	
125 Bromobenzene	156	11.998	11.998	0.000	93	292607	50.0	49.8	
123 trans-1,4-Dichloro-2-buten	53	12.027	12.027	0.000	79	91138	50.0	48.1	
124 1,2,3-Trichloropropane	110	12.048	12.048	0.000	85	86872	50.0	47.1	
126 N-Propylbenzene	120	12.091	12.091	0.000	99	316169	50.0	48.3	
128 2-Chlorotoluene	126	12.177	12.170	0.007	96	271173	50.0	47.1	
127 1,3,5-Trimethylbenzene	105	12.248	12.248	0.000	94	947116	50.0	48.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
129 4-Chlorotoluene	126	12.277	12.277	0.000	97	291847	50.0	49.3	
130 tert-Butylbenzene	119	12.506	12.506	0.000	94	835978	50.0	48.0	
131 1,2,4-Trimethylbenzene	105	12.549	12.549	0.000	98	971992	50.0	47.7	
132 sec-Butylbenzene	134	12.677	12.677	0.000	95	264907	50.0	47.9	
134 1,3-Dichlorobenzene	146	12.763	12.763	0.000	98	568013	50.0	48.9	
133 4-Isopropyltoluene	119	12.784	12.785	-0.001	97	1139055	50.0	49.5	
136 1,4-Dichlorobenzene	146	12.842	12.842	0.000	94	588026	50.0	44.9	
137 n-Butylbenzene	91	13.063	13.071	-0.008	97	1021708	50.0	49.3	
138 1,2-Dichlorobenzene	146	13.085	13.085	0.000	97	558090	50.0	47.8	
139 1,2-Dibromo-3-Chloropropan	157	13.585	13.593	-0.008	83	63319	50.0	49.0	
141 1,2,4-Trichlorobenzene	180	14.122	14.129	-0.007	94	421825	50.0	47.9	
142 Hexachlorobutadiene	225	14.207	14.215	-0.008	97	266775	50.0	48.2	
143 Naphthalene	128	14.307	14.315	-0.008	98	951504	50.0	49.6	
144 1,2,3-Trichlorobenzene	180	14.465	14.472	-0.007	95	413146	50.0	48.2	
S 151 1,2-Dichloroethene, Total	96				0		100.0	105.8	
S 145 Trihalomethanes, Total	1				0		200.0	195.4	
S 149 1,2-Dichloroethene, Total	1				0		50.0	105.8	
S 150 Xylenes, Total	106				0		100.0	98.4	
S 148 1,3-Dichloropropene, Total	1				0		100.0	94.5	
S 146 Xylenes, Total (URS)	1				0		100.0	98.4	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MV-Main B_00017	Amount Added:	6.25	Units: uL	
MV-SS 2-Cleve_00035	Amount Added:	6.25	Units: uL	
MV-Gas/Ket B_00034	Amount Added:	5.00	Units: uL	
MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

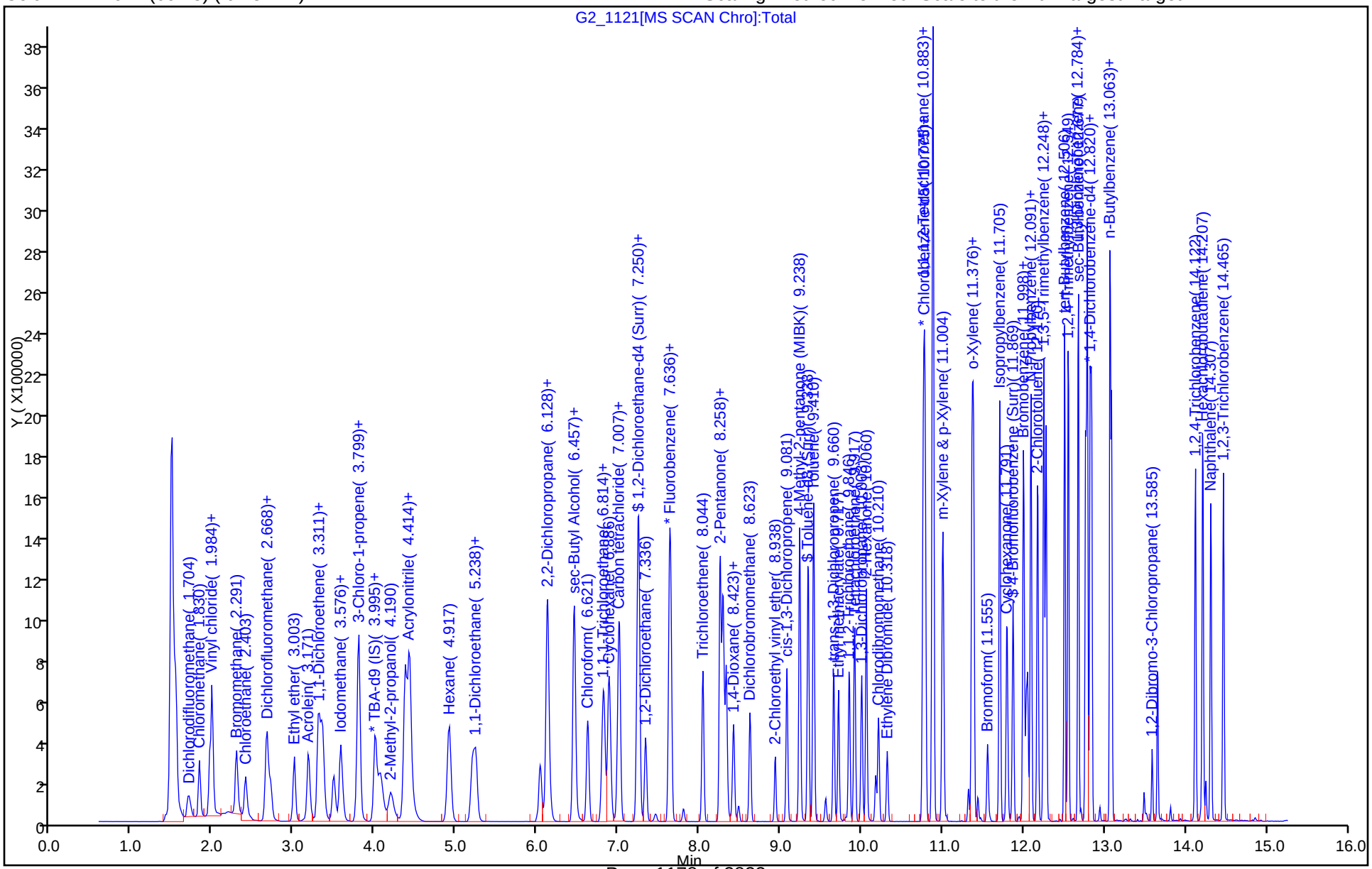
Report Date: 18-Jun-2017 12:35:35 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1121.D

Injection Date:	16-Jun-2017 14:12:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	LCS 280-377666/2-A			Worklist Smp#:	25
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1121.D
Lims ID: LCS 280-377666/2-A
Client ID:
Sample Type: LCS
Inject. Date: 16-Jun-2017 14:12:30 ALS Bottle#: 16 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS (2)
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

First Level Reviewer: dukesa Date: 16-Jun-2017 15:05:31

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	39.8	93.69
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	37.1	87.39
$ 10 Toluene-d8 (Surr)	42.5	41.3	97.27
$ 11 4-Bromofluorobenzene (Surr)	42.5	43.2	101.66

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-377666/3-A

Matrix: Solid | Lab File ID: G2_1122.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/16/2017 14:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 377667 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
108-20-3	Isopropyl ether	46.5	J	50	8.0	2.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		71-136
460-00-4	4-Bromofluorobenzene (Surr)	112		79-119
1868-53-7	Dibromofluoromethane (Surr)	93		78-119
2037-26-5	Toluene-d8 (Surr)	90		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1122.D
Lims ID: LCS 280-377666/3-A
Client ID:
Sample Type: LCS
Inject. Date: 16-Jun-2017 14:34:30 ALS Bottle#: 17 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS S (2)
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 1 TBA-d9 (IS)	65	4.065	4.079	-0.014	95	697527	1000.0	1000.0	
* 3 Fluorobenzene	96	7.629	7.629	0.000	98	853404	50.0	50.0	
* 4 Chlorobenzene-d5	119	10.761	10.761	0.000	87	217474	50.0	50.0	
* 5 1,4-Dichlorobenzene-d4	152	12.820	12.820	0.000	95	370899	50.0	50.0	
$ 8 Dibromofluoromethane (Surr	111	6.828	6.829	-0.001	93	203897	42.5	39.6	
$ 9 1,2-Dichloroethane-d4 (Sur	65	7.243	7.243	0.000	97	261284	42.5	37.0	
$ 10 Toluene-d8 (Surr)	98	9.338	9.345	-0.007	94	714853	42.5	38.4	
$ 11 4-Bromofluorobenzene (Surr	95	11.869	11.869	0.000	91	289127	42.5	47.8	
109 Tetrahydrothiophene	60		1.718				ND	ND	
38 Ethylene oxide	43	2.263	2.277	-0.014	100	2417158	5000.0	11792	
42 Ethanol	45	2.892	2.906	-0.014	99	255717	3000.0	2901.2	
47 Propene oxide	58	3.073	3.073	0.000	96	6834670	5000.0	6550.9	
51 Isopropyl alcohol	45	3.562	3.576	-0.014	96	250806	500.0	509.8	
54 Acetonitrile	41	3.744	3.758	-0.014	99	421418	500.0	726.7	
66 Isopropyl ether	87	5.308	5.308	0.000	93	210899	50.0	46.5	
68 2-Chloro-1,3-butadiene	53	5.322	5.322	0.000	94	448226	50.0	49.8	
69 Tert-butyl ethyl ether	59	5.894	5.894	0.000	97	736520	50.0	52.5	
70 Ethyl acetate	43	6.213	6.213	0.000	99	542505	100.0	145.0	
73 Propionitrile	54	6.221	6.221	0.000	99	436686	500.0	699.7	
76 Methacrylonitrile	41	6.428	6.435	-0.007	93	1817827	500.0	757.9	
86 Tert-amyl methyl ether	73	7.450	7.450	0.000	96	715538	50.0	53.4	
88 n-Butanol	56	8.001	8.001	0.000	93	238211	1250.0	1020.5	
16 Ethyl acrylate	55	8.173	8.173	0.000	100	312684	NC	NC	
91 Methyl methacrylate	100	8.423	8.423	0.000	93	151215	100.0	108.8	
97 2-Nitropropane	41	8.859	8.859	0.000	99	128436	100.0	97.8	
120 cis-1,4-Dichloro-2-butene	53	11.769	11.769	0.000	92	222162	100.0	117.3	
135 1,2,3-Trimethylbenzene	105	12.856	12.856	0.000	98	1046696	50.0	45.3	
140 1,3,5-Trichlorobenzene	180	13.700	13.707	-0.007	97	515140	50.0	48.0	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

MV-Supp B_00016	Amount Added:	6.25	Units: uL	
MV-568718-D_00003	Amount Added:	1.00	Units: uL	Run Reagent
MV-ARCH SS A_00081	Amount Added:	0.85	Units: uL	Run Reagent

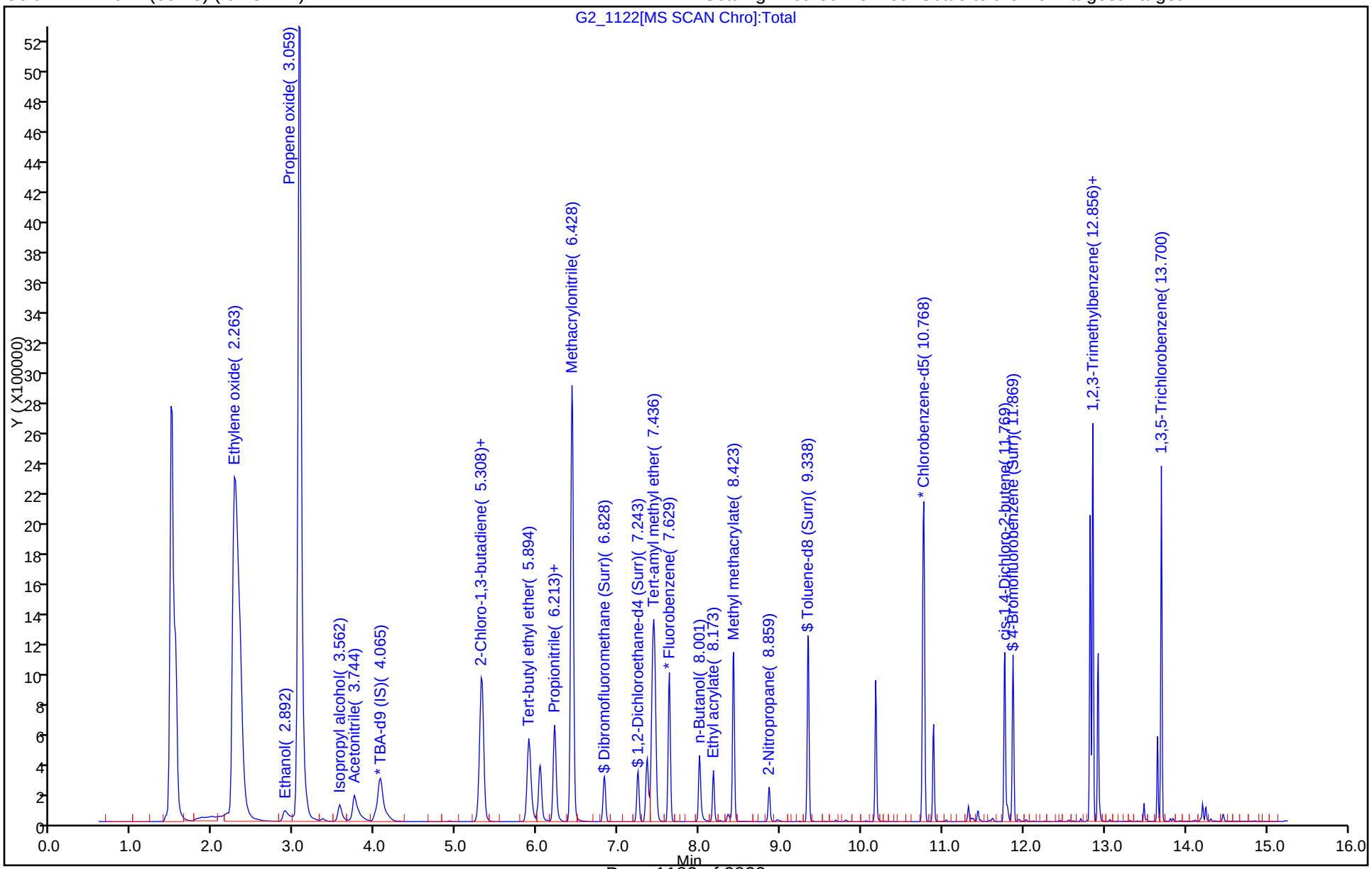
Report Date: 18-Jun-2017 12:35:37 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1122.D

Injection Date:	16-Jun-2017 14:34:30	Instrument ID:	VMS_G2	Operator ID:	DUKESA
Lims ID:	LCS 280-377666/3-A			Worklist Smp#:	26
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	SO_VMSG2_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\G2_1122.D
Lims ID: LCS 280-377666/3-A
Client ID:
Sample Type: LCS
Inject. Date: 16-Jun-2017 14:34:30 ALS Bottle#: 17 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS S (2)
Operator ID: DUKESA Instrument ID: VMS_G2

Method: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b\SO_VMSG2_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 18-Jun-2017 12:34:56 Calib Date: 12-Jun-2017 20:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b\G2_0901.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK001

Compound	Amount Added	Amount Recovered	% Rec.
$ 8 Dibromofluoromethane (Surr)	42.5	39.6	93.16
$ 9 1,2-Dichloroethane-d4 (Surr)	42.5	37.0	87.11
$ 10 Toluene-d8 (Surr)	42.5	38.4	90.44
$ 11 4-Bromofluorobenzene (Surr)	42.5	47.8	112.45

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-377884/2-A

Matrix: Solid | Lab File ID: P0135.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/22/2017 09:58

Soil Aliquot Vol: 20 (mL) | Dilution Factor: 1

Soil Extract Vol.: 1000(mL) | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Medium

Analysis Batch No.: 378395 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	2190		250	80	21
71-55-6	1,1,1-Trichloroethane	2070		250	40	20
79-34-5	1,1,2,2-Tetrachloroethane	2150		250	80	29
79-00-5	1,1,2-Trichloroethane	2310		250	80	27
75-34-3	1,1-Dichloroethane	2050		250	160	51
75-35-4	1,1-Dichloroethene	2140		250	160	51
563-58-6	1,1-Dichloropropene	2290		250	160	48
87-61-6	1,2,3-Trichlorobenzene	2370		250	80	35
96-18-4	1,2,3-Trichloropropane	2090		250	160	47
120-82-1	1,2,4-Trichlorobenzene	2310		250	160	47
95-63-6	1,2,4-Trimethylbenzene	2310		250	80	31
96-12-8	1,2-Dibromo-3-Chloropropane	2040		500	320	86
106-93-4	1,2-Dibromoethane	2250		250	80	25
95-50-1	1,2-Dichlorobenzene	2170		500	320	94
107-06-2	1,2-Dichloroethane	2050		250	80	25
540-59-0	1,2-Dichloroethene, Total	4260		130	80	22
78-87-5	1,2-Dichloropropane	2190		250	160	46
108-67-8	1,3,5-Trimethylbenzene	2320		250	80	39
541-73-1	1,3-Dichlorobenzene	2210		250	160	41
142-28-9	1,3-Dichloropropane	2140		250	80	28
106-46-7	1,4-Dichlorobenzene	2230		250	80	25
594-20-7	2,2-Dichloropropane	2180		250	80	27
78-93-3	2-Butanone (MEK)	9070		1000	640	300
95-49-8	2-Chlorotoluene	2240		250	80	26
591-78-6	2-Hexanone	7680		1000	640	220
106-43-4	4-Chlorotoluene	2290		250	80	23
99-87-6	4-Isopropyltoluene	2410		250	80	32
108-10-1	4-Methyl-2-pentanone (MIBK)	8600		1000	640	230
67-64-1	Acetone	8180		1500	1300	400
71-43-2	Benzene	2140		250	160	45
108-86-1	Bromobenzene	2180		250	40	19
74-97-5	Bromochloromethane	2120		250	160	47
75-27-4	Bromodichloromethane	2070		250	80	40
75-25-2	Bromoform	1890		250	160	160
74-83-9	Bromomethane	2350		500	160	44
75-15-0	Carbon disulfide	2180		250	160	64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-377884/2-A

Matrix: Solid | Lab File ID: P0135.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/22/2017 09:58

Soil Aliquot Vol: 20 (mL) | Dilution Factor: 1

Soil Extract Vol.: 1000(mL) | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Medium

Analysis Batch No.: 378395 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	2150		250	40	17
108-90-7	Chlorobenzene	2140		250	80	30
75-00-3	Chloroethane	2370		500	160	44
67-66-3	Chloroform	2100		250	160	46
74-87-3	Chloromethane	2860	Q	500	160	50
156-59-2	cis-1,2-Dichloroethene	2090		130	80	22
10061-01-5	cis-1,3-Dichloropropene	2000		250	80	27
124-48-1	Dibromochloromethane	1910		250	80	33
74-95-3	Dibromomethane	2120		250	80	30
75-71-8	Dichlorodifluoromethane	3000	Q	500	80	22
100-41-4	Ethylbenzene	2280		250	80	34
87-68-3	Hexachlorobutadiene	2440		250	160	49
98-82-8	Isopropylbenzene	2250		250	80	29
179601-23-1	m&p-Xylene	2280		250	160	78
74-88-4	Methyl iodide	2000		250	80	21
1634-04-4	Methyl tert-butyl ether	2160		250	160	50
75-09-2	Methylene Chloride	1920		250	160	69
91-20-3	Naphthalene	2350		500	80	38
104-51-8	n-Butylbenzene	2480		250	80	32
103-65-1	N-Propylbenzene	2340		250	160	41
95-47-6	o-Xylene	2290		130	80	35
135-98-8	sec-Butylbenzene	2430		250	80	38
100-42-5	Styrene	2220		250	80	26
98-06-6	tert-Butylbenzene	2330		250	80	28
127-18-4	Tetrachloroethene	2210		250	80	27
108-88-3	Toluene	2310		250	80	39
156-60-5	trans-1,2-Dichloroethene	2170		250	160	45
10061-02-6	trans-1,3-Dichloropropene	1990		250	160	41
79-01-6	Trichloroethene	2170		250	80	23
75-69-4	Trichlorofluoromethane	2310	M	500	160	50
108-05-4	Vinyl acetate	2080		500	160	70
75-01-4	Vinyl chloride	2760	Q	500	80	27
1330-20-7	Xylenes (total)	4570		130	80	35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-377884/2-A

Matrix: Solid | Lab File ID: P0135.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/22/2017 09:58

Soil Aliquot Vol: 20 (mL) | Dilution Factor: 1

Soil Extract Vol.: 1000(mL) | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Medium

Analysis Batch No.: 378395 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		71-136
460-00-4	4-Bromofluorobenzene (Surr)	99		79-119
1868-53-7	Dibromofluoromethane (Surr)	103		78-119
2037-26-5	Toluene-d8 (Surr)	106		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\P0135.D
Lims ID: LCS 280-377884/2-A
Client ID:
Sample Type: LCS
Inject. Date: 22-Jun-2017 09:58:30 ALS Bottle#: 14 Worklist Smp#: 9
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: lcs 280-377884/2-a
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 23-Jun-2017 12:59:37 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: seifertj Date: 22-Jun-2017 10:19:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.650	5.651	-0.001	0	180079	250.0	250.0	
* 1 Fluorobenzene	96	7.609	7.610	-0.001	98	1782068	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.875	9.876	-0.001	89	349609	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.699	11.700	-0.001	96	493466	12.5	12.5	
$ 5 Dibromofluoromethane (Surr	111	7.065	7.066	-0.001	92	296615	10.0	10.3	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.366	7.360	0.006	0	311254	10.0	10.2	
$ 7 Toluene-d8 (Surr)	98	8.796	8.797	-0.001	94	1358744	10.0	10.6	
$ 8 4-Bromofluorobenzene (Surr	95	10.741	10.742	-0.001	83	444862	10.0	9.91	
23 Dichlorodifluoromethane	85	3.887	3.887	0.000	100	390588	10.0	15.0	
26 Chloromethane	50	4.111	4.110	0.001	98	320531	10.0	14.3	
27 Vinyl chloride	62	4.264	4.264	0.000	98	304307	10.0	13.8	
29 Bromomethane	94	4.627	4.627	0.000	94	186834	10.0	11.8	
30 Chloroethane	64	4.683	4.683	0.000	98	168072	10.0	11.9	
31 Dichlorofluoromethane	67	4.865	4.865	0.000	97	709419	10.0	13.4	
32 Trichlorofluoromethane	101	4.962	4.962	0.000	99	544879	10.0	11.5	M
35 Ethyl ether	59	5.116	5.116	0.000	96	222221	10.0	10.1	
40 1,1,2-Trichloro-1,2,2-trif	151	5.367	5.367	0.000	95	257071	10.0	11.1	
41 Acetone	43	5.367	5.381	-0.014	99	171795	40.0	40.9	
43 1,1-Dichloroethene	96	5.409	5.409	0.000	95	375211	10.0	10.7	
44 Iodomethane	142	5.593	5.594	-0.001	99	466808	10.0	10.0	
45 Methyl acetate	43	5.607	5.608	-0.001	99	487161	50.0	54.0	
47 3-Chloro-1-propene	41	5.664	5.658	0.006	88	656993	10.0	10.4	
48 Carbon disulfide	76	5.707	5.708	-0.001	99	1252107	10.0	10.9	
49 2-Methyl-2-propanol	59	5.721	5.715	0.006	92	94890	100.0	100.9	
50 Methylene Chloride	84	5.764	5.765	-0.001	98	354137	10.0	9.60	
52 Acrylonitrile	53	5.921	5.923	-0.002	99	459375	100.0	114.2	
51 Methyl tert-butyl ether	73	5.921	5.923	-0.002	97	520650	10.0	10.8	
53 trans-1,2-Dichloroethene	96	5.971	5.973	-0.002	96	378564	10.0	10.9	
54 Hexane	57	6.122	6.123	-0.001	96	677625	10.0	10.7	
55 Vinyl acetate	43	6.236	6.237	-0.001	97	325338	10.0	10.4	
57 1,1-Dichloroethane	63	6.293	6.295	-0.002	96	692665	10.0	10.3	
61 2-Butanone (MEK)	43	6.686	6.688	-0.002	99	312030	40.0	45.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
62 sec-Butyl Alcohol	45	6.729	6.731	-0.002	50	205979	300.0	285.2	
63 cis-1,2-Dichloroethene	96	6.729	6.731	-0.002	84	387568	10.0	10.4	
64 2,2-Dichloropropane	77	6.751	6.759	-0.008	86	388801	10.0	10.9	
67 Chlorobromomethane	128	6.930	6.938	-0.008	91	120783	10.0	10.6	
68 Chloroform	83	6.937	6.938	-0.001	94	634374	10.0	10.5	
69 Tetrahydrofuran	42	6.965	6.967	-0.002	90	74631	20.0	21.7	
70 Isobutyl alcohol	41	7.144	7.145	-0.001	46	80308	250.0	265.2	
71 1,1,1-Trichloroethane	97	7.144	7.153	-0.009	97	463777	10.0	10.3	
72 Cyclohexane	56	7.216	7.217	-0.001	93	753596	10.0	11.2	
73 1,1-Dichloropropene	75	7.251	7.253	-0.002	95	571724	10.0	11.5	
74 Carbon tetrachloride	117	7.287	7.288	-0.001	96	402319	10.0	10.8	
76 1,2-Dichloroethane	62	7.423	7.424	-0.001	94	365448	10.0	10.2	
77 Benzene	78	7.437	7.439	-0.002	98	1547785	10.0	10.7	
14 n-Heptane	43	7.494	7.496	-0.002	95	813076	10.0	11.4	
79 Trichloroethene	95	7.895	7.903	-0.008	95	388318	10.0	10.8	
80 2-Pentanone	43	7.952	7.953	-0.001	98	777900	40.0	46.9	
82 Methylcyclohexane	55	8.081	8.082	-0.001	95	626594	10.0	11.3	
83 1,2-Dichloropropane	63	8.088	8.096	-0.008	93	381903	10.0	11.0	
84 1,4-Dioxane	88	8.145	8.146	-0.001	95	25541	200.0	224.5	
85 Dibromomethane	93	8.195	8.204	-0.009	90	126889	10.0	10.6	
86 Dichlorobromomethane	83	8.267	8.268	-0.001	98	373097	10.0	10.4	
89 cis-1,3-Dichloropropene	75	8.581	8.583	-0.002	92	421134	10.0	9.98	
90 4-Methyl-2-pentanone (MIBK	43	8.638	8.640	-0.002	99	536908	40.0	43.0	
91 Toluene	91	8.853	8.854	-0.001	97	1677692	10.0	11.6	
92 Ethyl methacrylate	69	8.932	8.940	-0.008	93	202394	10.0	10.1	
93 trans-1,3-Dichloropropene	75	8.953	8.962	-0.009	97	309558	10.0	9.96	
94 1,1,2-Trichloroethane	97	9.118	9.119	-0.001	93	182850	10.0	11.5	
95 2-Hexanone	43	9.225	9.233	-0.008	99	341293	40.0	38.4	
96 1,3-Dichloropropane	76	9.246	9.255	-0.009	96	350188	10.0	10.7	
97 Tetrachloroethene	164	9.261	9.262	-0.001	94	286149	10.0	11.1	
98 Chlorodibromomethane	129	9.439	9.448	-0.009	90	166344	10.0	9.57	
100 Ethylene Dibromide	107	9.568	9.576	-0.008	97	153932	10.0	11.3	
101 1-Chlorohexane	91	9.775	9.784	-0.009	92	571305	10.0	12.1	
102 Chlorobenzene	112	9.897	9.898	-0.001	92	913032	10.0	10.7	
104 1,1,1,2-Tetrachloroethane	131	9.933	9.934	-0.001	93	249448	10.0	11.0	
103 Ethylbenzene	106	9.926	9.934	-0.008	98	584702	10.0	11.4	
105 m-Xylene & p-Xylene	106	10.004	10.005	-0.001	0	700341	10.0	11.4	
107 o-Xylene	106	10.319	10.327	-0.008	89	646275	10.0	11.5	
106 Styrene	104	10.326	10.327	-0.001	85	931629	10.0	11.1	
108 Bromoform	173	10.533	10.542	-0.009	93	64760	10.0	9.43	
109 Isopropylbenzene	105	10.576	10.585	-0.009	97	1786861	10.0	11.3	
112 1,1,2,2-Tetrachloroethane	83	10.798	10.799	-0.001	95	175008	10.0	10.8	
113 trans-1,4-Dichloro-2-buten	53	10.826	10.835	-0.009	73	41182	10.0	9.68	
114 1,2,3-Trichloropropane	110	10.869	10.871	-0.002	87	48061	10.0	10.4	
115 N-Propylbenzene	120	10.898	10.906	-0.008	99	495084	10.0	11.7	
116 Bromobenzene	156	10.905	10.914	-0.009	95	324504	10.0	10.9	
117 1,3,5-Trimethylbenzene	105	11.005	11.014	-0.009	94	1462477	10.0	11.6	
118 2-Chlorotoluene	126	11.027	11.028	-0.001	96	392155	10.0	11.2	
119 4-Chlorotoluene	126	11.098	11.107	-0.009	99	387939	10.0	11.4	
120 tert-Butylbenzene	119	11.305	11.307	-0.002	91	1418491	10.0	11.7	
121 1,2,4-Trimethylbenzene	105	11.334	11.343	-0.009	96	1474497	10.0	11.5	
122 sec-Butylbenzene	134	11.484	11.486	-0.002	95	393245	10.0	12.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 4-Isopropyltoluene	119	11.570	11.578	-0.008	97	1599583	10.0	12.1	
124 1,3-Dichlorobenzene	146	11.649	11.657	-0.008	95	674611	10.0	11.1	
126 1,4-Dichlorobenzene	146	11.720	11.729	-0.009	91	684269	10.0	11.2	
127 n-Butylbenzene	91	11.942	11.950	-0.008	99	1705463	10.0	12.4	
128 1,2-Dichlorobenzene	146	12.085	12.093	-0.008	94	547270	10.0	10.8	
129 1,2-Dibromo-3-Chloropropan	157	12.836	12.851	-0.015	72	17341	10.0	10.2	
130 1,2,4-Trichlorobenzene	180	13.787	13.795	-0.008	93	361794	10.0	11.5	
131 Hexachlorobutadiene	225	13.922	13.938	-0.016	94	243872	10.0	12.2	
132 Naphthalene	128	14.166	14.174	-0.008	98	509100	10.0	11.8	
133 1,2,3-Trichlorobenzene	180	14.480	14.496	-0.016	93	283881	10.0	11.9	
S 140 1,2-Dichloroethene, Total	96				0		20.0	21.3	
S 135 Xylenes, Total (URS)	1				0		20.0	22.8	
S 138 1,2-Dichloroethene, Total	1				0		10.0	21.3	
S 137 1,3-Dichloropropene, Total	1				0		20.0	19.9	
S 139 Xylenes, Total	106				0		20.0	22.8	
S 134 Trihalomethanes, Total	1				0		40.0	39.9	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MV-567649-D_00001 Amount Added: 1.00 Units: uL Run Reagent

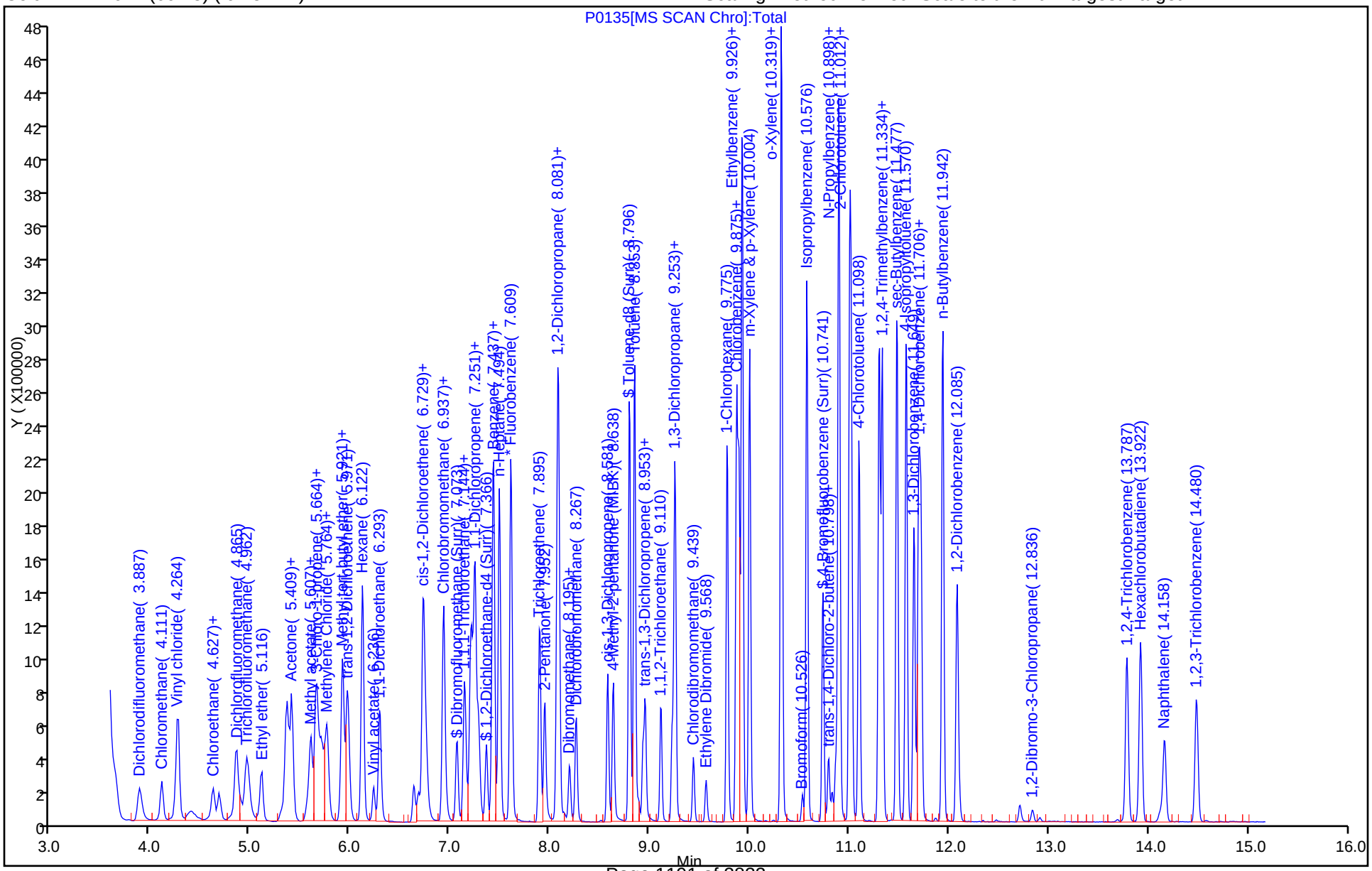
Report Date: 23-Jun-2017 12:59:48 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\P0135.D

Injection Date:	22-Jun-2017 09:58:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	LCS 280-377884/2-A			Worklist Smp#:	9
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\P0135.D
Lims ID: LCS 280-377884/2-A
Client ID:
Sample Type: LCS
Inject. Date: 22-Jun-2017 09:58:30 ALS Bottle#: 14 Worklist Smp#: 9
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: lcs 280-377884/2-a
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 23-Jun-2017 12:59:37 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: seifertj Date: 22-Jun-2017 10:19:11

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	10.0	10.3	103.48
$ 6 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	101.94
$ 7 Toluene-d8 (Surr)	10.0	10.6	105.68
$ 8 4-Bromofluorobenzene (Surr)	10.0	9.91	99.06

Manual Integration/User Assign Peak Report

TestAmerica Denver

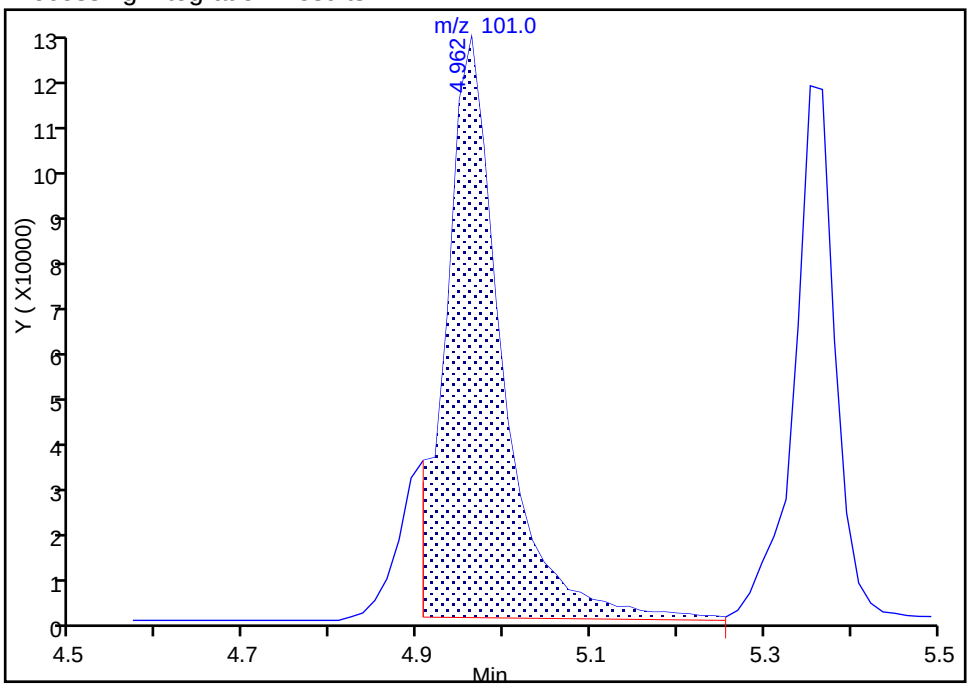
Data File: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\P0135.D
Injection Date: 22-Jun-2017 09:58:30 Instrument ID: VMS_P
Lims ID: LCS 280-377884/2-A
Client ID:
Operator ID: SEIFERTJ ALS Bottle#: 14 Worklist Smp#: 9
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Method: MLE_VMSP_8260 Limit Group: MSV - 8260B Water and Solid
Column: DB-624 (60.25) (0.25 mm) Detector MS SCAN

32 Trichlorofluoromethane, CAS: 75-69-4

Signal: 1

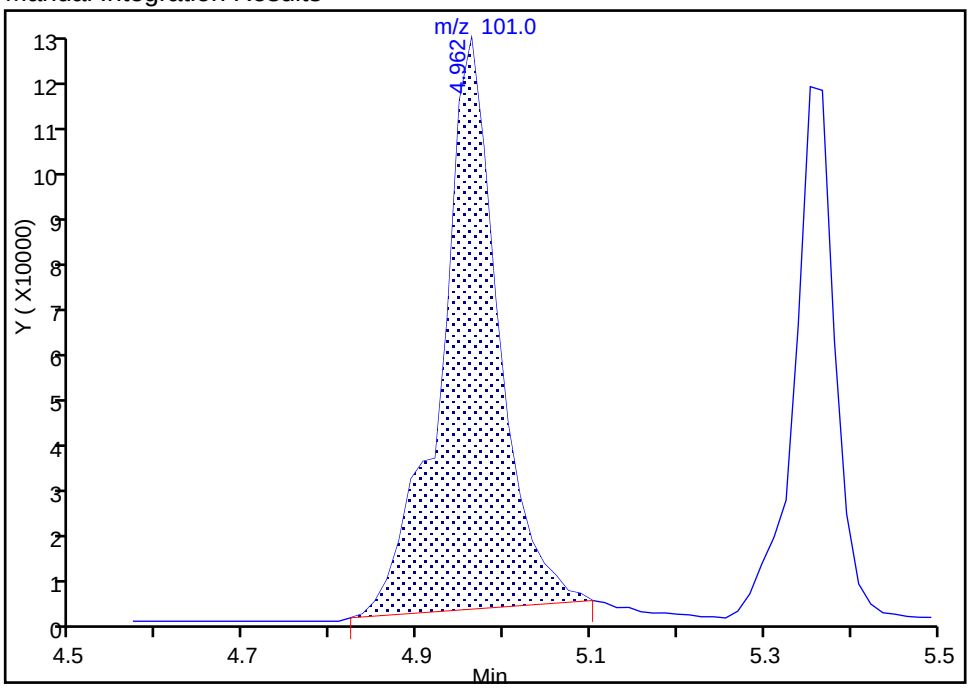
Processing Integration Results

RT: 4.96
Area: 547276
Amount: 11.590436
Amount Units: ug/l



Manual Integration Results

RT: 4.96
Area: 544879
Amount: 11.539671
Amount Units: ug/l



Reviewer: seifertj, 23-Jun-2017 12:52:08
Audit Action: Manually Integrated Audit Reason: Split Peak

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-377884/3-A

Matrix: Solid | Lab File ID: P0136.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/22/2017 10:17

Soil Aliquot Vol: 20 (mL) | Dilution Factor: 1

Soil Extract Vol.: 1000(mL) | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Medium

Analysis Batch No.: 378395 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
630-20-6	1,1,1,2-Tetrachloroethane	2190		250	80	21
71-55-6	1,1,1-Trichloroethane	1960		250	40	20
79-34-5	1,1,2,2-Tetrachloroethane	2220		250	80	29
79-00-5	1,1,2-Trichloroethane	2360		250	80	27
75-34-3	1,1-Dichloroethane	2040		250	160	51
75-35-4	1,1-Dichloroethene	2100		250	160	51
563-58-6	1,1-Dichloropropene	2200		250	160	48
87-61-6	1,2,3-Trichlorobenzene	2350		250	80	35
96-18-4	1,2,3-Trichloropropane	2150		250	160	47
120-82-1	1,2,4-Trichlorobenzene	2300		250	160	47
95-63-6	1,2,4-Trimethylbenzene	2240		250	80	31
96-12-8	1,2-Dibromo-3-Chloropropane	2120		500	320	86
106-93-4	1,2-Dibromoethane	2290		250	80	25
95-50-1	1,2-Dichlorobenzene	2210		500	320	94
107-06-2	1,2-Dichloroethane	2070		250	80	25
540-59-0	1,2-Dichloroethene, Total	4200		130	80	22
78-87-5	1,2-Dichloropropane	2190		250	160	46
108-67-8	1,3,5-Trimethylbenzene	2290		250	80	39
541-73-1	1,3-Dichlorobenzene	2190		250	160	41
142-28-9	1,3-Dichloropropane	2130		250	80	28
106-46-7	1,4-Dichlorobenzene	2180		250	80	25
594-20-7	2,2-Dichloropropane	2140		250	80	27
78-93-3	2-Butanone (MEK)	9140		1000	640	300
95-49-8	2-Chlorotoluene	2210		250	80	26
591-78-6	2-Hexanone	8020		1000	640	220
106-43-4	4-Chlorotoluene	2280		250	80	23
99-87-6	4-Isopropyltoluene	2350		250	80	32
108-10-1	4-Methyl-2-pentanone (MIBK)	8910		1000	640	230
67-64-1	Acetone	8100		1500	1300	400
71-43-2	Benzene	2100		250	160	45
108-86-1	Bromobenzene	2220		250	40	19
74-97-5	Bromochloromethane	2200		250	160	47
75-27-4	Bromodichloromethane	2030		250	80	40
75-25-2	Bromoform	1920		250	160	160
74-83-9	Bromomethane	2250		500	160	44
75-15-0	Carbon disulfide	2110		250	160	64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-377884/3-A

Matrix: Solid | Lab File ID: P0136.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 06/22/2017 10:17

Soil Aliquot Vol: 20 (mL) | Dilution Factor: 1

Soil Extract Vol.: 1000(mL) | GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: | Level: (low/med) Medium

Analysis Batch No.: 378395 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
56-23-5	Carbon tetrachloride	2080		250	40	17
108-90-7	Chlorobenzene	2110		250	80	30
75-00-3	Chloroethane	2400		500	160	44
67-66-3	Chloroform	2090		250	160	46
74-87-3	Chloromethane	2730		500	160	50
156-59-2	cis-1,2-Dichloroethene	2060		130	80	22
10061-01-5	cis-1,3-Dichloropropene	2010		250	80	27
124-48-1	Dibromochloromethane	1930		250	80	33
74-95-3	Dibromomethane	2130		250	80	30
75-71-8	Dichlorodifluoromethane	2770		500	80	22
100-41-4	Ethylbenzene	2230		250	80	34
87-68-3	Hexachlorobutadiene	2250		250	160	49
98-82-8	Isopropylbenzene	2260		250	80	29
179601-23-1	m&p-Xylene	2190		250	160	78
74-88-4	Methyl iodide	2030		250	80	21
1634-04-4	Methyl tert-butyl ether	2210		250	160	50
75-09-2	Methylene Chloride	1930		250	160	69
91-20-3	Naphthalene	2420		500	80	38
104-51-8	n-Butylbenzene	2380		250	80	32
103-65-1	N-Propylbenzene	2340		250	160	41
95-47-6	o-Xylene	2260		130	80	35
135-98-8	sec-Butylbenzene	2320		250	80	38
100-42-5	Styrene	2200		250	80	26
98-06-6	tert-Butylbenzene	2300		250	80	28
127-18-4	Tetrachloroethene	2130		250	80	27
108-88-3	Toluene	2270		250	80	39
156-60-5	trans-1,2-Dichloroethene	2140		250	160	45
10061-02-6	trans-1,3-Dichloropropene	1980		250	160	41
79-01-6	Trichloroethene	2120		250	80	23
75-69-4	Trichlorofluoromethane	2210		500	160	50
108-05-4	Vinyl acetate	2240		500	160	70
75-01-4	Vinyl chloride	2620		500	80	27
1330-20-7	Xylenes (total)	4450		130	80	35

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 280-377884/3-A

Matrix: Solid Lab File ID: P0136.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 06/22/2017 10:17

Soil Aliquot Vol: 20 (mL) Dilution Factor: 1

Soil Extract Vol.: 1000(mL) GC Column: DB-624 (60.25) ID: 0.25(mm)

% Moisture: Level: (low/med) Medium

Analysis Batch No.: 378395 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		71-136
460-00-4	4-Bromofluorobenzene (Surr)	99		79-119
1868-53-7	Dibromofluoromethane (Surr)	102		78-119
2037-26-5	Toluene-d8 (Surr)	105		85-116

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\P0136.D
Lims ID: LCSD 280-377884/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 22-Jun-2017 10:17:30 ALS Bottle#: 15 Worklist Smp#: 10
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: lcsd 280-377884/3-a
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 23-Jun-2017 12:59:37 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: seifertj Date: 23-Jun-2017 12:54:54

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
* 150 TBA-d9 (IS)	65	5.650	5.651	-0.001	0	186659	250.0	250.0	
* 1 Fluorobenzene	96	7.609	7.610	-0.001	98	1821019	12.5	12.5	
* 2 Chlorobenzene-d5	119	9.876	9.876	0.000	89	357227	12.5	12.5	
* 3 1,4-Dichlorobenzene-d4	152	11.699	11.700	-0.001	97	495460	12.5	12.5	
$ 5 Dibromofluoromethane (Surr	111	7.066	7.066	0.000	92	299586	10.0	10.2	
$ 6 1,2-Dichloroethane-d4 (Sur	65	7.366	7.360	0.006	0	319562	10.0	10.2	
$ 7 Toluene-d8 (Surr)	98	8.796	8.797	-0.001	94	1379734	10.0	10.5	
$ 8 4-Bromofluorobenzene (Surr	95	10.741	10.742	-0.001	82	446029	10.0	9.89	
23 Dichlorodifluoromethane	85	3.888	3.887	0.001	99	366886	10.0	13.8	
26 Chloromethane	50	4.111	4.110	0.001	99	312749	10.0	13.6	
27 Vinyl chloride	62	4.251	4.264	-0.013	98	294424	10.0	13.1	
29 Bromomethane	94	4.628	4.627	0.001	93	182767	10.0	11.3	
30 Chloroethane	64	4.684	4.683	0.001	98	173267	10.0	12.0	
31 Dichlorofluoromethane	67	4.851	4.865	-0.014	98	749372	10.0	13.8	
32 Trichlorofluoromethane	101	4.963	4.962	0.001	99	534162	10.0	11.1	
35 Ethyl ether	59	5.103	5.116	-0.013	94	228304	10.0	10.2	
40 1,1,2-Trichloro-1,2,2-trif	151	5.368	5.367	0.001	96	253979	10.0	10.7	
41 Acetone	43	5.368	5.381	-0.013	99	173914	40.0	40.5	
43 1,1-Dichloroethene	96	5.410	5.409	0.001	95	376546	10.0	10.5	
44 Iodomethane	142	5.593	5.594	-0.001	99	483689	10.0	10.1	
45 Methyl acetate	43	5.607	5.608	-0.001	99	519231	50.0	56.3	
47 3-Chloro-1-propene	41	5.657	5.658	-0.001	83	664242	10.0	10.3	
48 Carbon disulfide	76	5.707	5.708	-0.001	100	1235233	10.0	10.5	
49 2-Methyl-2-propanol	59	5.721	5.715	0.006	93	100469	100.0	103.0	
50 Methylene Chloride	84	5.764	5.765	-0.001	98	363406	10.0	9.65	
52 Acrylonitrile	53	5.922	5.923	-0.001	98	475055	100.0	115.6	
51 Methyl tert-butyl ether	73	5.922	5.923	-0.001	96	543955	10.0	11.1	
53 trans-1,2-Dichloroethene	96	5.972	5.973	-0.001	96	381129	10.0	10.7	
54 Hexane	57	6.122	6.123	-0.001	96	665678	10.0	10.3	
55 Vinyl acetate	43	6.236	6.237	-0.001	97	360171	10.0	11.2	
57 1,1-Dichloroethane	63	6.293	6.295	-0.002	97	703371	10.0	10.2	
61 2-Butanone (MEK)	43	6.687	6.688	-0.001	99	321325	40.0	45.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
62 sec-Butyl Alcohol	45	6.730	6.731	-0.001	53	227392	300.0	303.8	
63 cis-1,2-Dichloroethene	96	6.730	6.731	-0.001	84	391532	10.0	10.3	
64 2,2-Dichloropropane	77	6.751	6.759	-0.008	87	390819	10.0	10.7	
67 Chlorobromomethane	128	6.930	6.938	-0.008	92	127944	10.0	11.0	
68 Chloroform	83	6.937	6.938	-0.001	94	643282	10.0	10.4	
69 Tetrahydrofuran	42	6.966	6.967	-0.001	90	80271	20.0	22.8	
70 Isobutyl alcohol	41	7.144	7.145	-0.001	47	85763	250.0	273.2	
71 1,1,1-Trichloroethane	97	7.144	7.153	-0.009	97	449759	10.0	9.82	
72 Cyclohexane	56	7.209	7.217	-0.008	94	740398	10.0	10.8	
73 1,1-Dichloropropene	75	7.252	7.253	-0.001	94	561520	10.0	11.0	
74 Carbon tetrachloride	117	7.287	7.288	-0.001	95	396113	10.0	10.4	
76 1,2-Dichloroethane	62	7.423	7.424	-0.001	97	376961	10.0	10.3	
77 Benzene	78	7.437	7.439	-0.002	98	1553898	10.0	10.5	
14 n-Heptane	43	7.495	7.496	-0.001	95	790489	10.0	10.8	
79 Trichloroethene	95	7.895	7.903	-0.008	95	388683	10.0	10.6	
80 2-Pentanone	43	7.952	7.953	-0.001	98	490393	40.0	30.8	
82 Methylcyclohexane	55	8.081	8.082	-0.001	95	610813	10.0	10.8	
83 1,2-Dichloropropane	63	8.088	8.096	-0.008	93	389827	10.0	11.0	
84 1,4-Dioxane	88	8.145	8.146	-0.001	97	25203	200.0	216.8	
85 Dibromomethane	93	8.195	8.204	-0.009	91	130613	10.0	10.7	
86 Dichlorobromomethane	83	8.267	8.268	-0.001	98	373049	10.0	10.1	
89 cis-1,3-Dichloropropene	75	8.582	8.583	-0.001	91	433570	10.0	10.1	
90 4-Methyl-2-pentanone (MIBK	43	8.639	8.640	-0.001	99	568125	40.0	44.6	
91 Toluene	91	8.853	8.854	-0.001	97	1681734	10.0	11.3	
92 Ethyl methacrylate	69	8.932	8.940	-0.008	91	210131	10.0	10.2	
93 trans-1,3-Dichloropropene	75	8.953	8.962	-0.009	98	314382	10.0	9.90	
94 1,1,2-Trichloroethane	97	9.118	9.119	-0.001	93	191074	10.0	11.8	
95 2-Hexanone	43	9.225	9.233	-0.008	98	364452	40.0	40.1	
96 1,3-Dichloropropane	76	9.246	9.255	-0.009	98	355395	10.0	10.6	
97 Tetrachloroethene	164	9.261	9.262	-0.001	94	281865	10.0	10.7	
98 Chlorodibromomethane	129	9.440	9.448	-0.008	90	171910	10.0	9.67	
100 Ethylene Dibromide	107	9.568	9.576	-0.008	98	159815	10.0	11.4	
101 1-Chlorohexane	91	9.783	9.784	-0.001	93	563739	10.0	11.7	
102 Chlorobenzene	112	9.897	9.898	-0.001	95	920309	10.0	10.6	
104 1,1,1,2-Tetrachloroethane	131	9.933	9.934	-0.001	93	255400	10.0	11.0	
103 Ethylbenzene	106	9.926	9.934	-0.008	99	585866	10.0	11.2	
105 m-Xylene & p-Xylene	106	10.004	10.005	-0.001	0	687166	10.0	10.9	
107 o-Xylene	106	10.319	10.327	-0.008	93	652799	10.0	11.3	
106 Styrene	104	10.326	10.327	-0.001	85	943150	10.0	11.0	
108 Bromoform	173	10.534	10.542	-0.008	92	67307	10.0	9.58	
109 Isopropylbenzene	105	10.576	10.585	-0.009	97	1799035	10.0	11.3	
112 1,1,2,2-Tetrachloroethane	83	10.798	10.799	-0.001	95	181402	10.0	11.1	
113 trans-1,4-Dichloro-2-buten	53	10.834	10.835	-0.001	78	43237	10.0	10.1	
114 1,2,3-Trichloropropane	110	10.870	10.871	-0.001	86	49779	10.0	10.8	
115 N-Propylbenzene	120	10.898	10.906	-0.008	98	495698	10.0	11.7	
116 Bromobenzene	156	10.905	10.914	-0.009	94	331101	10.0	11.1	
117 1,3,5-Trimethylbenzene	105	11.005	11.014	-0.009	94	1448807	10.0	11.4	
118 2-Chlorotoluene	126	11.027	11.028	-0.001	94	388910	10.0	11.1	
119 4-Chlorotoluene	126	11.106	11.107	-0.001	99	387758	10.0	11.4	
120 tert-Butylbenzene	119	11.306	11.307	-0.001	92	1401546	10.0	11.5	
121 1,2,4-Trimethylbenzene	105	11.334	11.343	-0.009	99	1437599	10.0	11.2	
122 sec-Butylbenzene	134	11.484	11.486	-0.002	95	377647	10.0	11.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
123 4-Isopropyltoluene	119	11.577	11.578	-0.001	97	1566241	10.0	11.8	
124 1,3-Dichlorobenzene	146	11.656	11.657	-0.001	96	669800	10.0	10.9	
126 1,4-Dichlorobenzene	146	11.720	11.729	-0.009	92	672595	10.0	10.9	
127 n-Butylbenzene	91	11.942	11.950	-0.008	99	1641464	10.0	11.9	
128 1,2-Dichlorobenzene	146	12.085	12.093	-0.008	94	560241	10.0	11.1	
129 1,2-Dibromo-3-Chloropropan	157	12.843	12.851	-0.008	70	18262	10.0	10.6	
130 1,2,4-Trichlorobenzene	180	13.787	13.795	-0.008	93	361906	10.0	11.5	
131 Hexachlorobutadiene	225	13.923	13.938	-0.015	93	226085	10.0	11.3	
132 Naphthalene	128	14.166	14.174	-0.008	98	526492	10.0	12.1	
133 1,2,3-Trichlorobenzene	180	14.488	14.496	-0.008	93	282385	10.0	11.7	
S 140 1,2-Dichloroethene, Total	96				0		20.0	21.0	
S 135 Xylenes, Total (URS)	1				0		20.0	22.3	
S 138 1,2-Dichloroethene, Total	1				0		10.0	21.0	
S 137 1,3-Dichloropropene, Total	1				0		20.0	20.0	
S 139 Xylenes, Total	106				0		20.0	22.3	
S 134 Trihalomethanes, Total	1				0		40.0	39.8	

Reagents:

MV-567649-D_00001 Amount Added: 1.00 Units: uL Run Reagent

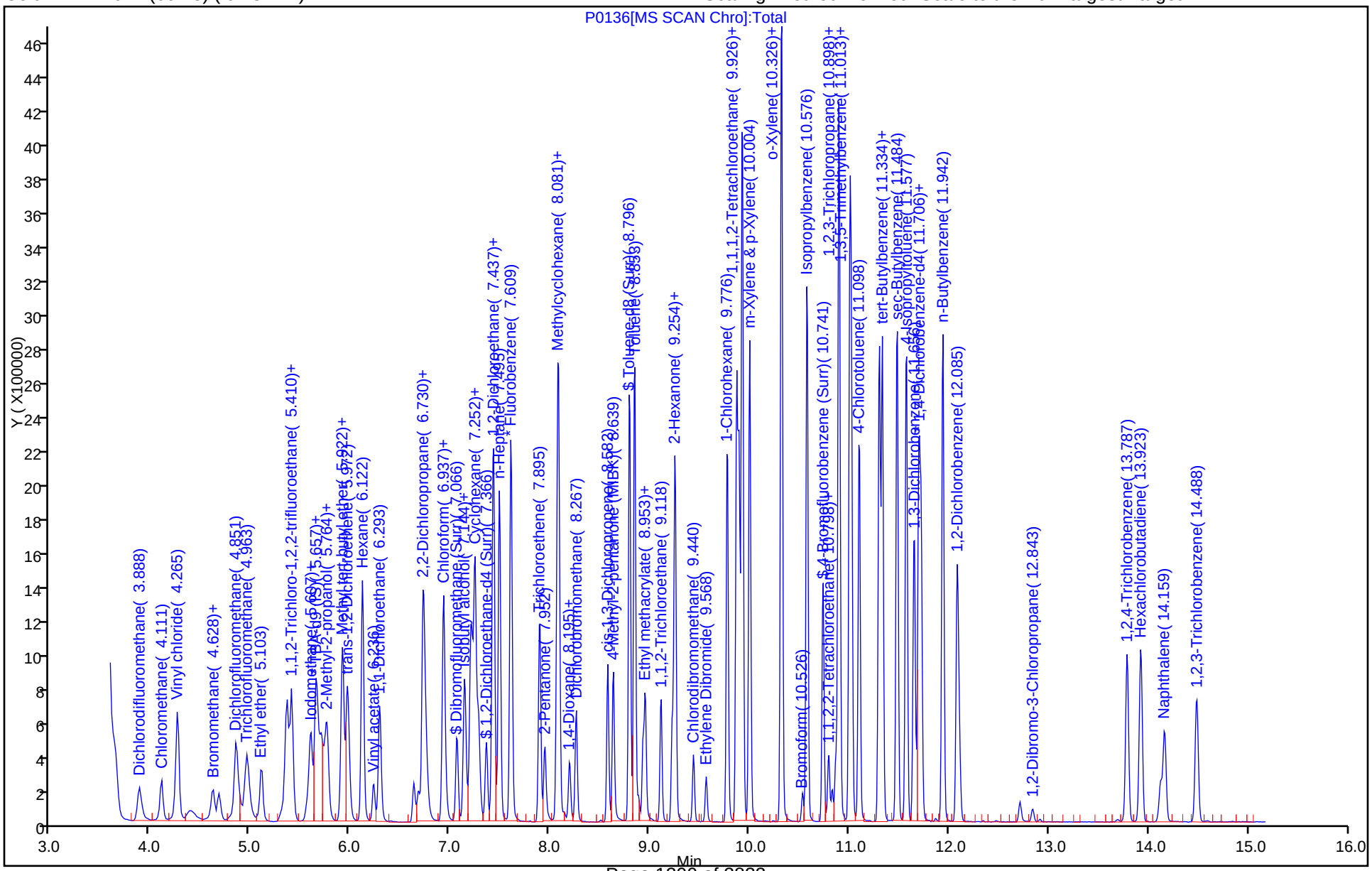
Report Date: 23-Jun-2017 12:59:49 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\P0136.D

Injection Date:	22-Jun-2017 10:17:30	Instrument ID:	VMS_P	Operator ID:	SEIFERTJ
Lims ID:	LCSD 280-377884/3-A			Worklist Smp#:	10
Client ID:					
Purge Vol:	20.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	MLE_VMSP_8260	Limit Group:	MSV - 8260B Water and Solid		

Column: DB-624 (60.25) (0.25 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\P0136.D
Lims ID: LCSD 280-377884/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 22-Jun-2017 10:17:30 ALS Bottle#: 15 Worklist Smp#: 10
Purge Vol: 20.000 mL Dil. Factor: 1.0000
Sample Info: lcsd 280-377884/3-a
Operator ID: SEIFERTJ Instrument ID: VMS_P

Method: \\ChromNA\Denver\ChromData\VMS_P\20170622-60021.b\MLE_VMSP_8260.m
Limit Group: MSV - 8260B Water and Solid
Last Update: 23-Jun-2017 12:59:37 Calib Date: 19-Jun-2017 16:26:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b\P0044.D

Column 1 : DB-624 (60.25) (0.25 mm) Det: MS SCAN
Process Host: XAWRK018

First Level Reviewer: seifertj Date: 23-Jun-2017 12:54:54

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 Dibromofluoromethane (Surr)	10.0	10.2	102.28
$ 6 1,2-Dichloroethane-d4 (Surr)	10.0	10.2	102.42
$ 7 Toluene-d8 (Surr)	10.0	10.5	105.03
$ 8 4-Bromofluorobenzene (Surr)	10.0	9.89	98.92

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: VMS_G2 Start Date: 04/26/2017 20:42

Analysis Batch Number: 371118 End Date: 04/27/2017 05:29

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-371118/1		04/26/2017 20:42	1	G2_9102.D	DB-624 (60.25) 0.25(mm)
STD001 280-371118/20 IC		04/26/2017 21:24	1	G2_9103.D	DB-624 (60.25) 0.25(mm)
STD002 280-371118/21 IC		04/26/2017 21:44	1	G2_9104.D	DB-624 (60.25) 0.25(mm)
STD005 280-371118/22 IC		04/26/2017 22:05	1	G2_9105.D	DB-624 (60.25) 0.25(mm)
STD010 280-371118/23 IC		04/26/2017 22:25	1	G2_9106.D	DB-624 (60.25) 0.25(mm)
STD020 280-371118/24 IC		04/26/2017 22:45	1	G2_9107.D	DB-624 (60.25) 0.25(mm)
ICIS 280-371118/25		04/26/2017 23:06	1	G2_9108.D	DB-624 (60.25) 0.25(mm)
STD100 280-371118/26 IC		04/26/2017 23:27	1	G2_9109.D	DB-624 (60.25) 0.25(mm)
STD200 280-371118/27 IC		04/26/2017 23:47	1	G2_9110.D	DB-624 (60.25) 0.25(mm)
ICV 280-371118/28		04/27/2017 00:08	1	G2_9111.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		04/27/2017 01:02	1		DB-624 (60.25) 0.25(mm)
280-94107-A-7-B MDLV		04/27/2017 01:22	1		DB-624 (60.25) 0.25(mm)
280-94107-A-8-B MDLV		04/27/2017 01:43	1		DB-624 (60.25) 0.25(mm)
280-94107-A-9-B MDLV		04/27/2017 02:03	1		DB-624 (60.25) 0.25(mm)
280-94107-A-10-B MDLV		04/27/2017 02:24	1		DB-624 (60.25) 0.25(mm)
280-94107-A-11-C MDLV		04/27/2017 02:44	1		DB-624 (60.25) 0.25(mm)
280-94107-A-11-D MDLV		04/27/2017 03:05	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/27/2017 03:25	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/27/2017 03:46	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/27/2017 04:06	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/27/2017 04:27	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/27/2017 04:48	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/27/2017 05:08	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		04/27/2017 05:29	1		DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: VMS_G2 Start Date: 06/12/2017 17:19

Analysis Batch Number: 376989 End Date: 06/13/2017 05:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-376989/1		06/12/2017 17:19	1	G2_0892.D	DB-624 (60.25) 0.25(mm)
CCV 280-376989/3		06/12/2017 17:43	1		DB-624 (60.25) 0.25(mm)
STD001 280-376989/4 IC		06/12/2017 18:07	1	G2_0894.D	DB-624 (60.25) 0.25(mm)
STD002 280-376989/5 IC		06/12/2017 18:28	1	G2_0895.D	DB-624 (60.25) 0.25(mm)
STD005 280-376989/6 IC		06/12/2017 18:50	1	G2_0896.D	DB-624 (60.25) 0.25(mm)
STD010 280-376989/7 IC		06/12/2017 19:11	1	G2_0897.D	DB-624 (60.25) 0.25(mm)
STD020 280-376989/8 IC		06/12/2017 19:32	1	G2_0898.D	DB-624 (60.25) 0.25(mm)
ICIS 280-376989/9		06/12/2017 19:53	1	G2_0899.D	DB-624 (60.25) 0.25(mm)
STD100 280-376989/10 IC		06/12/2017 20:14	1	G2_0900.D	DB-624 (60.25) 0.25(mm)
STD200 280-376989/11 IC		06/12/2017 20:35	1	G2_0901.D	DB-624 (60.25) 0.25(mm)
ICV 280-376989/12		06/12/2017 21:19	1	G2_0903.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/12/2017 21:40	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/12/2017 22:42	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/12/2017 23:03	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/12/2017 23:24	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/12/2017 23:44	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/13/2017 00:05	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/13/2017 00:26	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/13/2017 00:46	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/13/2017 01:07	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/13/2017 01:27	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/13/2017 01:48	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/13/2017 02:08	1		DB-624 (60.25) 0.25(mm)
CCVC 280-376989/38		06/13/2017 05:11	1		DB-624 (60.25) 0.25(mm)
CCVC 280-376989/39		06/13/2017 05:32	1		DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: VMS_G2 Start Date: 06/15/2017 18:11

Analysis Batch Number: 377520 End Date: 06/16/2017 01:48

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-377520/1		06/15/2017 18:11	1	G2_1074.D	DB-624 (60.25) 0.25(mm)
CCV 280-377520/2		06/15/2017 18:33	1	G2_1075.D	DB-624 (60.25) 0.25(mm)
CCV 280-377520/3		06/15/2017 18:54	1	G2_1076.D	DB-624 (60.25) 0.25(mm)
MB 280-377540/1-A		06/15/2017 19:15	1	G2_1077.D	DB-624 (60.25) 0.25(mm)
LCS 280-377540/2-A		06/15/2017 19:36	1	G2_1078.D	DB-624 (60.25) 0.25(mm)
LCS 280-377540/3-A		06/15/2017 19:57	1	G2_1079.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/15/2017 21:20	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/15/2017 21:41	1		DB-624 (60.25) 0.25(mm)
280-97928-1		06/15/2017 22:02	1	G2_1085.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/15/2017 22:23	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/15/2017 22:43	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/15/2017 23:04	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/15/2017 23:25	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/15/2017 23:45	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/16/2017 00:06	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/16/2017 00:26	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/16/2017 00:47	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/16/2017 01:07	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/16/2017 01:28	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/16/2017 01:48	1		DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: VMS_G2 Start Date: 06/16/2017 11:42

Analysis Batch Number: 377645 End Date: 06/17/2017 00:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-377645/1		06/16/2017 11:42	1	G2_1114.D	DB-624 (60.25) 0.25(mm)
CCV 280-377645/2		06/16/2017 12:27	1	G2_1116.D	DB-624 (60.25) 0.25(mm)
CCV 280-377645/3		06/16/2017 12:48	1	G2_1117.D	DB-624 (60.25) 0.25(mm)
MB 280-377664/1-A		06/16/2017 13:09	1	G2_1118.D	DB-624 (60.25) 0.25(mm)
LCS 280-377664/2-A		06/16/2017 13:30	1	G2_1119.D	DB-624 (60.25) 0.25(mm)
LCS 280-377664/3-A		06/16/2017 13:51	1	G2_1120.D	DB-624 (60.25) 0.25(mm)
280-97928-14		06/16/2017 15:16	1	G2_1124.D	DB-624 (60.25) 0.25(mm)
280-97928-15		06/16/2017 15:37	1	G2_1125.D	DB-624 (60.25) 0.25(mm)
280-97928-16		06/16/2017 15:58	1	G2_1126.D	DB-624 (60.25) 0.25(mm)
280-97928-17		06/16/2017 16:19	1	G2_1127.D	DB-624 (60.25) 0.25(mm)
280-97928-18		06/16/2017 16:40	1	G2_1128.D	DB-624 (60.25) 0.25(mm)
280-97928-19		06/16/2017 17:01	1	G2_1129.D	DB-624 (60.25) 0.25(mm)
280-97928-21		06/16/2017 17:22	1	G2_1130.D	DB-624 (60.25) 0.25(mm)
280-97928-22		06/16/2017 17:43	1	G2_1131.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/16/2017 18:04	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/16/2017 18:26	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/16/2017 18:47	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/16/2017 19:08	1		DB-624 (60.25) 0.25(mm)
CCVC 280-377645/40		06/16/2017 23:40	1	G2_1148.D	DB-624 (60.25) 0.25(mm)
CCVC 280-377645/41		06/17/2017 00:00	1	G2_1149.D	DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: VMS_G2 Start Date: 06/16/2017 11:42

Analysis Batch Number: 377667 End Date: 06/17/2017 00:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-377667/1		06/16/2017 11:42	1	G2_1114.D	DB-624 (60.25) 0.25(mm)
CCV 280-377667/2		06/16/2017 12:27	1	G2_1116.D	DB-624 (60.25) 0.25(mm)
CCV 280-377667/3		06/16/2017 12:48	1	G2_1117.D	DB-624 (60.25) 0.25(mm)
LCS 280-377666/2-A		06/16/2017 14:12	1	G2_1121.D	DB-624 (60.25) 0.25(mm)
LCS 280-377666/3-A		06/16/2017 14:34	1	G2_1122.D	DB-624 (60.25) 0.25(mm)
MB 280-377666/1-A		06/16/2017 14:55	1	G2_1123.D	DB-624 (60.25) 0.25(mm)
280-97928-2		06/16/2017 19:29	1	G2_1136.D	DB-624 (60.25) 0.25(mm)
280-97928-3		06/16/2017 19:50	1	G2_1137.D	DB-624 (60.25) 0.25(mm)
280-97928-4		06/16/2017 20:11	1	G2_1138.D	DB-624 (60.25) 0.25(mm)
280-97928-5		06/16/2017 20:32	1	G2_1139.D	DB-624 (60.25) 0.25(mm)
280-97928-6		06/16/2017 20:53	1	G2_1140.D	DB-624 (60.25) 0.25(mm)
280-97928-7		06/16/2017 21:14	1	G2_1141.D	DB-624 (60.25) 0.25(mm)
280-97928-8		06/16/2017 21:35	1	G2_1142.D	DB-624 (60.25) 0.25(mm)
280-97928-9		06/16/2017 21:56	1	G2_1143.D	DB-624 (60.25) 0.25(mm)
280-97928-10		06/16/2017 22:17	1	G2_1144.D	DB-624 (60.25) 0.25(mm)
280-97928-11		06/16/2017 22:37	1	G2_1145.D	DB-624 (60.25) 0.25(mm)
280-97928-12		06/16/2017 22:58	1	G2_1146.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/16/2017 23:19	1		DB-624 (60.25) 0.25(mm)
CCVC 280-377667/40		06/16/2017 23:40	1	G2_1148.D	DB-624 (60.25) 0.25(mm)
CCVC 280-377667/41		06/17/2017 00:00	1	G2_1149.D	DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: VMS_P Start Date: 06/19/2017 10:40

Analysis Batch Number: 377804 End Date: 06/19/2017 20:59

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-377804/1		06/19/2017 10:40	1	P0027.D	DB-624 (60.25) 0.25(mm)
STD005 280-377804/27 IC		06/19/2017 11:16	1	P0028.D	DB-624 (60.25) 0.25(mm)
STD010 280-377804/28 IC		06/19/2017 11:36	1	P0029.D	DB-624 (60.25) 0.25(mm)
STD020 280-377804/29 IC		06/19/2017 11:55	1	P0030.D	DB-624 (60.25) 0.25(mm)
STD050 280-377804/30 IC		06/19/2017 12:14	1	P0031.D	DB-624 (60.25) 0.25(mm)
STD10 280-377804/31 IC		06/19/2017 12:34	1	P0032.D	DB-624 (60.25) 0.25(mm)
STD30 280-377804/32 IC		06/19/2017 12:53	1	P0033.D	DB-624 (60.25) 0.25(mm)
STD60 280-377804/33 IC		06/19/2017 13:13	1	P0034.D	DB-624 (60.25) 0.25(mm)
ICV 280-377804/34		06/19/2017 13:51	1	P0036.D	DB-624 (60.25) 0.25(mm)
STD005 280-377804/37 IC		06/19/2017 14:11	1	P0037.D	DB-624 (60.25) 0.25(mm)
STD010 280-377804/38 IC		06/19/2017 14:30	1	P0038.D	DB-624 (60.25) 0.25(mm)
ICV 280-377804/35		06/19/2017 14:50	1	P0039.D	DB-624 (60.25) 0.25(mm)
STD050 280-377804/40 IC		06/19/2017 15:09	1	P0040.D	DB-624 (60.25) 0.25(mm)
ICIS 280-377804/41		06/19/2017 15:28	1	P0041.D	DB-624 (60.25) 0.25(mm)
STD30 280-377804/42 IC		06/19/2017 15:48	1	P0042.D	DB-624 (60.25) 0.25(mm)
STD60 280-377804/43 IC		06/19/2017 16:07	1	P0043.D	DB-624 (60.25) 0.25(mm)
STD020 280-377804/39 IC		06/19/2017 16:26	1	P0044.D	DB-624 (60.25) 0.25(mm)
ICV 280-377804/44		06/19/2017 17:05	1	P0046.D	DB-624 (60.25) 0.25(mm)
MB 280-377884/1-A		06/19/2017 17:44	1	P0048.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/19/2017 18:04	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/19/2017 18:23	1		DB-624 (60.25) 0.25(mm)
280-97928-20		06/19/2017 18:43	1	P0051.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/19/2017 19:02	10		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/19/2017 19:22	10		DB-624 (60.25) 0.25(mm)
CCVC 280-377804/55		06/19/2017 19:41	1	P0054.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/19/2017 20:01	10		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/19/2017 20:20	10		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/19/2017 20:39	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/19/2017 20:59	10		DB-624 (60.25) 0.25(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: VMS_P Start Date: 06/22/2017 08:09

Analysis Batch Number: 378395 End Date: 06/22/2017 12:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 280-378395/1		06/22/2017 08:09	1	P0130.D	DB-624 (60.25) 0.25(mm)
CCV 280-378395/2		06/22/2017 08:32	1	P0131.D	DB-624 (60.25) 0.25(mm)
CCV 280-378395/3		06/22/2017 08:51	1	P0132.D	DB-624 (60.25) 0.25(mm)
LCS 280-377884/2-A		06/22/2017 09:58	1	P0135.D	DB-624 (60.25) 0.25(mm)
LCSD 280-377884/3-A		06/22/2017 10:17	1	P0136.D	DB-624 (60.25) 0.25(mm)
ZZZZZ		06/22/2017 10:36	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/22/2017 10:56	1		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/22/2017 11:35	100		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/22/2017 11:55	100		DB-624 (60.25) 0.25(mm)
ZZZZZ		06/22/2017 12:14	1		DB-624 (60.25) 0.25(mm)

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GCMS Volatile CCV & Batch Data Review Checklist

LIMS Batch Number:	**Worklist #:** 59810	**Instrument ID:** G2
Analyst/1st Reviewer: ADD **Date:** 6/15/17		**Analytical Method (circle):** 624 (8260B) 8260 SIM Other____
QC Type (circle): Standard DOD Q4 DoD Q5 QAPP_____ Other_____		
Matrix (circle one): Water (Solid)		**Circle:** 5-mL 20-mL Meth Ext (5 g)

Review Items	NA	Yes	No	2nd Rev	Comments (List NCM #)
A. Tune & Continuing Calibration					
1. Did BFB meet tune criteria? If CFCs, did autotune meet SOP criteria?		/		X	Time of injection: 1811
2. Was the correct ICAL used for quantitation? Date and instrument ID of ICAL verified? (Check in both Chrom/Target and TALS)		/		X	
3. Is ICAL locked in TALS and Chrom?		/		X	
4. Do RFs meet minimum criteria? (624 – not method defined) (8260B-SPCCs = Chloromethane, 1,1-Dichloroethane, Bromoform ≥0.1; Chlorobenzene, 1,1,2,2-Tetrachloroethane ≥0.3)		/		X	
5. Does %Difference/%Drift meet criteria? (624: cmpd specific-Table 5 Q value) (8260B: ≤20% for CCCs; ≤20% for all cmpds/surrogates if CCCs not on list); (DOD ± 20%)		/		X	(8260B: %D high, samples ND? List NCM) NCM STD VAR: BROMOMETHANE -21.3 %D
6. Are the Internal Standard area responses within method limits? (624 – not method defined) (8260B -- 50% - 200% of ICAL mid pt)		/		X	
7. Are the internal standard retention times within method limits? (624, ±30 sec of ICAL mid pt) (8260B, ±30 sec of ICAL mid pt)		/		X	
8. Isomeric pairs checked for elution order and correct peak assignment? • Vinyl Acetate / Isopropyl Ether • 1,2- & 1,3-& 1,4-Dichlorobenzene • Ethylbenzene / m- & p-Xylenes • o-Xylene / Styrene • 1,3,5- & 1,2,4-Trimethylbenzene / Isopropylbenzene / sec-butylbenzene • 2- & 4-Chlorotoluene / n-Propylbenzene • MIBK / 2-Hexanone • Methyl Methacrylate / Ethyl Methacrylate • 1,1-Dichloroethene / cis-1,2- & trans-1,2-Dichloroethene • 1,2,3- & 1,2,4-Trichlorobenzene • 1,1-Dichloropropene / cis-1,3- & trans-1,3-Dichloropropene / 1,2,3-Trichloropropane • Chlorobenzene-d5 / 1,1,1,2-Tetrachloroethane • Trichlorofluoromethane / Freon 113 • Hexane / Vinyl Acetate (Chrom: View/Documents/Methods/Isomers)		/		X	
Were manual integrations performed correctly and properly documented?(dated, initialed and reason given) 2nd review of all MIs required	/			X	

Comments: _____

2nd Reviewer: RL Mercer **Review Date:** 6/15/17

Sequence Name: C:\msdchem\1\sequence\061517LL.s
Comment:
Operator: DUKESA
Data Path: C:\msdchem\1\DATA\061517LL\
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

Sequence Barcode Options
(X) On Mismatch, Inject Anyway
( ) On Mismatch, Don't Inject
( ) Barcode Disabled

Line				Sample Name/Misc Info
1)	Sample	100	G2_1069	BFBS BFB
2)	Sample	100	G2_1070	BFBS BFB
3)	Sample	10	G2_1071	8260S BLK
4)	Sample	11	G2_1072	8260S CCV
5)	Sample	12	G2_1073	8260S CCV
6)	Sample	100	G2_1074	BFBS BFB
7)	Sample	10	G2_1075	8260S CCV
8)	Sample	11	G2_1076	8260S CCV
9)	Sample	12	G2_1077	8260S MB
10)	Sample	13	G2_1078	8260S LCS
11)	Sample	14	G2_1079	8260S LCS S
12)	Sample	15	G2_1080	8260S LCS (2)
13)	Sample	16	G2_1081	8260S LCS S (2)
14)	Sample	17	G2_1082	8260S MB (2)
15)	Sample	18	G2_1083	8260S 280-97872-e-19-a
16)	Sample	19	G2_1084	8260S 280-97872-e-21-a
17)	Sample	20	G2_1085	8260S 280-97928-e-1-a
18)	Sample	21	G2_1086	8260S 280-97928-a-2-a
19)	Sample	22	G2_1087	8260S 280-97928-d-3-a
20)	Sample	23	G2_1088	8260S 280-97928-d-4-a
21)	Sample	24	G2_1089	8260S 280-97928-d-5-a
22)	Sample	25	G2_1090	8260S 280-97928-d-6-a
23)	Sample	26	G2_1091	8260S 280-97928-d-7-a
24)	Sample	27	G2_1092	8260S 280-97928-d-8-a
25)	Sample	28	G2_1093	8260S 280-97928-d-9-a
26)	Sample	29	G2_1094	8260S 280-97928-d-10-a
27)	Sample	30	G2_1095	8260S 280-97928-d-11-a
28)	Sample	31	G2_1096	8260S 280-97928-d-12-a
29)	Sample	32	G2_1097	8260S 280-97928-d-14-a
30)	Sample	33	G2_1098	8260S 280-97928-d-15-a
31)	Sample	34	G2_1099	8260S 280-97928-d-16-a
32)	Sample	35	G2_1100	8260S 280-97928-d-17-a
33)	Sample	36	G2_1101	8260S 280-97928-d-18-a
34)	Sample	37	G2_1102	8260S 280-97928-d-19-a
35)	Sample	38	G2_1103	8260S 280-97928-d-21-a
36)	Sample	39	G2_1104	8260S 280-97928-d-22-a
37)	Sample	40	G2_1105	8260S 280-97958-i-1-a
38)	Sample	41	G2_1106	8260S 280-97958-i-3-a
39)	Sample	42	G2_1107	8260S 280-97958-i-5-a
40)	Sample	43	G2_1108	8260S CCVC
41)	Sample	44	G2_1109	8260S CCVC
42)	Sample	45	G2_1110	8260S pr
43)	Sample	46	G2_1111	8260S pr

Test America Denver
Instrument: GC2
DV-MS-0010 (8260B/624) (Circle)
Purge Volume: (20mL/5mL/5g) (Circle)
Tune Time: 1811 - 0249
Lims Batch: 377520
377546

Argon error did not run

7/16/17

TestAmerica Laboratories
Worklist Report

Worklist Name: 061517LL
Worklist Number: 59810
Instrument Name: VMS_G2
Chrom Method: SO_VMSG2_8260
Purge Volume: 5.000
Units: mL
Analysis Type: VOA
Batch Directory: \\ChromNA\Denver\ChromData\VMS_G2\20170615-59810.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_G2
Run Reagent: MV-568718-D_00003 Amount Added: 1.000, Units: uL
Run Reagent: MV-ARCH SS A_00081 Amount Added: 0.850, Units: uL

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059810-001	# 1 BFB	MV-BFB_00023	BFB	voaSoilLL	1.000	uL	1.000
280-0059810-002	# 2 CCV	MV-2cleve+AVA_00025 MV-Gas/Ket A_00060 MV-Main A_00030	CCV	voaSoilLL	5.000	g	1.000
280-0059810-003	# 3 CCV	MV-568718-D_00003 MV-Supp A_00024	CCV	voaSoilLL	5.000	g	1.000
280-0059810-004	# 4 CCV	MV-568718-D_00003 MV-Main A_00030	CCV	voaSoilLL	5.000	g	1.000
280-0059810-005	# 5 CCV	MV-568718-D_00003 MV-Main A_00030	CCV	voaSoilLL	5.000	g	1.000
280-0059810-006	# 6 LCS	MV-Main B_00017 MV-SS 2-Cleve_00035 MV-Gas/Ket B_00034	LCS	voaSoilLL	5.000	g	1.000
280-0059810-007	# 7 LCSD	MV-Main B_00017 MV-SS 2-Cleve_00035 MV-Gas/Ket B_00034	LCSD	voaSoilLL	5.000	g	1.000
280-0059810-008	# 8 LCS	MV-Supp B_00016	LCS	voaSoilLL	5.000	g	1.000
280-0059810-009	# 9 MB		MB	voaSoilLL	5.000	g	1.000
280-0059810-010	#10 280-62974-A-4		Client	voaSoilLL	5.000	g	1.000
280-0059810-011	#11 280-62935-A-1-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-012	#12 280-62974-A-6		Client	voaSoilLL	5.000	g	1.000
280-0059810-013	#13 280-97872-E-19-A		Client	voaSoilLL	5.000	g	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059810-014	#14 280-97872-E-21-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-015	#15 280-97928-E-1-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-016	#16 280-97928-A-2-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-017	#17 280-97928-D-3-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-018	#18 280-97928-D-4-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-019	#19 280-97928-D-5-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-020	#20 280-97928-D-6-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-021	#21 280-97928-D-7-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-022	#22 280-97928-D-8-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-023	#23 280-97928-D-9-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-024	#24 280-97928-D-10-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-025	#25 280-97928-D-11-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-026	#26 280-97928-D-12-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-027	#27 LCS 280-377545/2-A	MV-SS 2-Cleve_00035 MV-Main B_00017 MV-Gas/Ket B_00034	LCS	voaSoilLL	5.000	g	1.000
280-0059810-028	#28 LCS 280-377545/3-A	MV-Supp B_00016	LCS	voaSoilLL	5.000	g	1.000
280-0059810-029	#29 MB 280-377545/1-A		MB	voaSoilLL	5.000	g	1.000
280-0059810-030	#30 280-97928-D-14-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-031	#31 280-97928-D-15-A		Client	voaSoilLL	5.000	g	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059810-032	#32 280-97928-D-16-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-033	#33 280-97928-D-17-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-034	#34 280-97928-D-18-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-035	#35 280-97928-D-19-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-036	#36 280-97928-D-21-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-037	#37 280-97928-D-22-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-038	#38 280-97958-I-1-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-039	#39 280-97958-I-3-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-040	#40 280-97958-I-5-A		Client	voaSoilLL	5.000	g	1.000
280-0059810-041	#41 CCVC	MV-2cleve+AVA_00025 MV-Main A_00030 MV-Gas/Ket A_00060	CCVC	voaSoilLL	5.000	g	1.000
280-0059810-042	#42 CCVC	MV-Supp A_00024 MV-568718-D_00003	CCVC	voaSoilLL	5.000	g	1.000

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GCMS Volatile CCV & Batch Data Review Checklist

LIMS Batch Number:	**Worklist #:** 59839	**Instrument ID:** Q2
Analyst/1st Reviewer: AOD **Date:** 6/16/17		**Analytical Method (circle):** 624 8260B 8260 SIM Other____
QC Type (circle): Standard DOD Q4 DoD Q5 QAPP_____ Other_____		
Matrix (circle one): Water Solid		**Circle:** 5-mL 20-mL Meth Ext (5 g)

Review Items	NA	Yes	No	2nd Rev	Comments (List NCM #)
A. Tune & Continuing Calibration					
1. Did BFB meet tune criteria? If CFCs, did autotune meet SOP criteria?		✓		X	Time of injection: 1142
2. Was the correct ICAL used for quantitation? Date and instrument ID of ICAL verified? (Check in both Chrom/Target and TALS)		✓ ✓		X	
3. Is ICAL locked in TALS and Chrom?		✓		X	
4. Do RFs meet minimum criteria? (624 – not method defined) (8260B-SPCCs = Chloromethane, 1,1-Dichloroethane, Bromoform ≥0.1; Chlorobenzene, 1,1,2,2-Tetrachloroethane ≥0.3)		✓		X	
5. Does %Difference/%Drift meet criteria? (624: cmpd specific-Table 5 Q value) (8260B: ≤20% for CCCs; ≤20% for all cmpds/surrogates if CCCs not on list); (DOD ± 20%)		✓		X	(8260B: %D high, samples ND? List NCM)
6. Are the Internal Standard area responses within method limits? (624 – not method defined) (8260B -- 50% - 200% of ICAL mid pt)		✓		X	
7. Are the internal standard retention times within method limits? (624, ±30 sec of ICAL mid pt) (8260B, ±30 sec of ICAL mid pt)		✓		X	
8. Isomeric pairs checked for elution order and correct peak assignment? • Vinyl Acetate / Isopropyl Ether • 1,2- & 1,3-& 1,4-Dichlorobenzene • Ethylbenzene / m- & p-Xylenes • o-Xylene / Styrene • 1,3,5- & 1,2,4-Trimethylbenzene / Isopropylbenzene / sec-butylbenzene • 2- & 4-Chlorotoluene / n-Propylbenzene • MIBK / 2-Hexanone • Methyl Methacrylate / Ethyl Methacrylate • 1,1-Dichloroethene / cis-1,2- & trans-1,2-Dichloroethene • 1,2,3- & 1,2,4-Trichlorobenzene • 1,1-Dichloropropene / cis-1,3- & trans-1,3-Dichloropropene / 1,2,3-Trichloropropane • Chlorobenzene-d5 / 1,1,1,2-Tetrachloroethane • Trichlorofluoromethane / Freon 113 • Hexane / Vinyl Acetate (Chrom: View/Documents/Methods/Isomers)		✓		X	
Were manual integrations performed correctly and properly documented?(dated, initialed and reason given) 2nd review of all MIs required	✓			X	

Comments: _____

2nd Reviewer: RC & Newton Review Date: 6/19/17

Sequence Name: C:\msdchem\1\sequence\061617LL.s
Comment:
Operator: DUKESA
Data Path: C:\msdchem\1\DATA\061517LL\
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Test America Denver
Instrument: G2
DV-MS-0010 (8260B/624) (Circle)
Purge Volume: (20mL/5mL) (Circle)
Tune Time: 1142 - 2340
Lims Batch: 377645
377667

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

Sequence Barcode Options
(X) On Mismatch, Inject Anyway
( ) On Mismatch, Don't Inject
( ) Barcode Disabled

Line			Sample Name/Misc Info		
1)	Sample	100	G2_1114	BFBS	BFB
2)	Sample	10	G2_1115	8260S	BLK
3)	Sample	11	G2_1116	8260S	CCV
4)	Sample	12	G2_1117	8260S	CCV
5)	Sample	13	G2_1118	8260S	MB
6)	Sample	14	G2_1119	8260S	LCS
7)	Sample	15	G2_1120	8260S	LCS S
8)	Sample	16	G2_1121	8260S	LCS (2)
9)	Sample	17	G2_1122	8260S	LCS S (2)
10)	Sample	18	G2_1123	8260S	MB (2)
11)	Sample	19	G2_1124	8260S	280-97928-e-14-a
12)	Sample	20	G2_1125	8260S	280-97928-e-15-a
13)	Sample	21	G2_1126	8260S	280-97928-e-16-a
14)	Sample	22	G2_1127	8260S	280-97928-d-17-b
15)	Sample	23	G2_1128	8260S	280-97928-d-18-b
16)	Sample	24	G2_1129	8260S	280-97928-d-19-b
17)	Sample	25	G2_1130	8260S	280-97928-d-21-b
18)	Sample	26	G2_1131	8260S	280-97928-d-22-b
19)	Sample	27	G2_1132	8260S	280-97958-i-1-b
20)	Sample	28	G2_1133	8260S	280-97958-d-2-a
21)	Sample	29	G2_1134	8260S	280-97958-i-3-b
22)	Sample	30	G2_1135	8260S	280-97958-i-5-b
23)	Sample	31	G2_1136	8260S	280-97928-b-2-a
24)	Sample	32	G2_1137	8260S	280-97928-e-3-a
25)	Sample	33	G2_1138	8260S	280-97928-e-4-a
26)	Sample	34	G2_1139	8260S	280-97928-e-5-a
27)	Sample	35	G2_1140	8260S	280-97928-e-6-a
28)	Sample	36	G2_1141	8260S	280-97928-e-7-a
29)	Sample	37	G2_1142	8260S	280-97928-e-8-a
30)	Sample	38	G2_1143	8260S	280-97928-e-9-a
31)	Sample	39	G2_1144	8260S	280-97928-e-10-a
32)	Sample	40	G2_1145	8260S	280-97928-e-11-a
33)	Sample	41	G2_1146	8260S	280-97928-e-12-a
34)	Sample	42	G2_1147	8260S	280-98030-e-1-a
35)	Sample	43	G2_1148	8260S	CCVC
36)	Sample	44	G2_1149	8260S	CCVC
37)	Sample	45	G2_1150	8260S	PRIMER
38)	Sample	46	G2_1151	8260S	PRIMER

ACO 6/18/17

BAD PURGER

Last Modified: Sun Jun 18 11:55:17 2017 Page: 1

TestAmerica Laboratories
Worklist Report

Worklist Name: 061617LL
Worklist Number: 59839
Instrument Name: VMS_G2
Chrom Method: SO_VMSG2_8260
Purge Volume: 5.000
Units: mL
Analysis Type: VOA
Batch Directory: \\ChromNA\Denver\ChromData\VMS_G2\20170616-59839.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_G2
Run Reagent: MV-568718-D_00003 Amount Added: 1.000, Units: uL
Run Reagent: MV-ARCH SS A_00081 Amount Added: 0.850, Units: uL

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059839-001	# 1 BFB	MV-BFB_00023	BFB	voaSoilLL	1.000	uL	1.000
280-0059839-002	# 2 CCV	MV-2cleve+AVA_00025 MV-Gas/Ket A_00060 MV-Main A_00030	CCV	voaSoilLL	5.000	g	1.000
280-0059839-003	# 3 CCV	MV-568718-D_00003 MV-Supp A_00024	CCV	voaSoilLL	5.000	g	1.000
280-0059839-004	# 4 CCV	MV-568718-D_00003 MV-Main A_00030	CCV	voaSoilLL	5.000	g	1.000
280-0059839-005	# 5 CCV	MV-568718-D_00003 MV-Main A_00030	CCV	voaSoilLL	5.000	g	1.000
280-0059839-006	# 6 LCS	MV-Main B_00017 MV-SS 2-Cleve_00035 MV-Gas/Ket B_00034	LCS	voaSoilLL	5.000	g	1.000
280-0059839-007	# 7 LCSD	MV-Main B_00017 MV-SS 2-Cleve_00035 MV-Gas/Ket B_00034	LCSD	voaSoilLL	5.000	g	1.000
280-0059839-008	# 8 LCS	MV-Supp B_00016	LCS	voaSoilLL	5.000	g	1.000
280-0059839-009	# 9 MB		MB	voaSoilLL	5.000	g	1.000
280-0059839-010	#10 280-62974-A-4		Client	voaSoilLL	5.000	g	1.000
280-0059839-011	#11 280-62935-A-1-A		Client	voaSoilLL	5.000	g	1.000
280-0059839-012	#12 280-62974-A-6		Client	voaSoilLL	5.000	g	1.000
280-0059839-013	#13 280-97928-E-14-A		Client	voaSoilLL	5.000	g	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059839-014	#14 280-97928-E-15-A		Client	voaSoilLL	5.000	g	1.000
280-0059839-015	#15 280-97928-E-16-A		Client	voaSoilLL	5.000	g	1.000
280-0059839-016	#16 280-97928-D-17-B		Client	voaSoilLL	5.000	g	1.000
280-0059839-017	#17 280-97928-D-18-B		Client	voaSoilLL	5.000	g	1.000
280-0059839-018	#18 280-97928-D-19-B		Client	voaSoilLL	5.000	g	1.000
280-0059839-019	#19 280-97928-D-21-B		Client	voaSoilLL	5.000	g	1.000
280-0059839-020	#20 280-97928-D-22-B		Client	voaSoilLL	5.000	g	1.000
280-0059839-021	#21 280-97958-I-1-B		Client	voaSoilLL	5.000	g	1.000
280-0059839-022	#22 280-97958-D-2-A		Client	voaSoilLL	5.000	g	1.000
280-0059839-023	#23 280-97958-I-3-B		Client	voaSoilLL	5.000	g	1.000
280-0059839-024	#24 280-97958-I-5-B		Client	voaSoilLL	5.000	g	1.000
280-0059839-025	#25 LCS 280-377666/2-A	MV-Main B_00017 MV-SS 2-Cleve_00035 MV-Gas/Ket B_00034	LCS	voaSoilLL	5.000	g	1.000
280-0059839-026	#26 LCS 280-377666/3-A	MV-Supp B_00016	LCS	voaSoilLL	5.000	g	1.000
280-0059839-027	#27 MB 280-377666/1-A		MB	voaSoilLL	5.000	g	1.000
280-0059839-028	#28 280-97928-B-2-A		Client	voaSoilLL	5.000	g	1.000
280-0059839-029	#29 280-97928-E-3-A		Client	voaSoilLL	5.000	g	1.000
280-0059839-030	#30 280-97928-E-4-A		Client	voaSoilLL	5.000	g	1.000
280-0059839-031	#31 280-97928-E-5-A		Client	voaSoilLL	5.000	g	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059839-032	#32 280-97928-E-6-A		Client	voaSoilLL	5.000	g	1.000
280-0059839-033	#33 280-97928-E-7-A		Client	voaSoilLL	5.000	g	1.000
280-0059839-034	#34 280-97928-E-8-A		Client	voaSoilLL	5.000	g	1.000
280-0059839-035	#35 280-97928-E-9-A		Client	voaSoilLL	5.000	g	1.000
280-0059839-036	#36 280-97928-E-10-A		Client	voaSoilLL	5.000	g	1.000
280-0059839-037	#37 280-97928-E-11-A		Client	voaSoilLL	5.000	g	1.000
280-0059839-038	#38 280-97928-E-12-A		Client	voaSoilLL	5.000	g	1.000
280-0059839-039	#39 280-98030-E-1-A		Client	voaSoilLL	5.000	g	1.000
280-0059839-040	#40 CCVC	MV-2cleve+AVA_00025 MV-Main A_00030 MV-Gas/Ket A_00060	CCVC	voaSoilLL	5.000	g	1.000
280-0059839-041	#41 CCVC	MV-Supp A_00024 MV-568718-D_00003	CCVC	voaSoilLL	5.000	g	1.000

Main - MLE

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GCMS Volatile ICAL Data Review Checklist

LIMS Batch Number: 377804	Worklist #: 59880	ICAL Event #: 29519	ICIS/ICV Line #s: - 34,35	2nd Day ICV Line# N/A	Instrument ID: P
2nd Day Batch/ICV Lines: N/A					
Analyst/1st Reviewer: MK Date: 061917 MK	**Prep Method (circle):** 5030 5035-L 5035-H		Analytical Method (circle): 624 (8260B) SIM Other_____		
QC Type (circle): (Standard) DOD Q4 DoD Q5		QAPP_____		Other_____	
Matrix (circle one): Water (Solid)			**Circle:** 5-mL 20-mL (Meth Ext) 5 g		

Review Items	NA	Yes	No	2nd Rev	Comments
A. Tune / Calibration					
1. Did BFB meet tune criteria? If CFCs, did autotune meet SOP criteria?		/		/	
2. Were all standards injected within 12 hours of the BFB? (or 24 hours for 624?)		/		/	
3. Were ≥ 5 levels of each compound and surrogate analyzed? (624 has minimum of four standards)		/		/	
4. Was low level standard at or below RL?		/		/	
5. If calibration points removed, were reasons for removal documented? Did sufficient calibration points remain? (removal from middle of curve not allowed)		/		/	(Other than those stated in SOP)
6. Do the average RFs meet minimum RF requirements? (624 – not method defined) (8260B-SPCCs = Chloromethane, 1,1-Dichloroethane, Bromoform ≥0.1; Chlorobenzene, 1,1,2,2-Tetrachloroethane ≥0.3)		/		/	
7. Did the calibration %RSD meet method requirements? (624: ≤35% all cmpds) (8260B: ≤30% for CCCs & ≤15% for all other cmpds/surrogates)		/		/	
8. Was a linear or quadratic regression fit used for analytes that exceeded the %RSD requirements?		/		/	
9. If regression fit used, is r^2 ≥0.990?		/		/	
10. At least 6 consecutive points used for quadratic curves?	/			/	
11. For quadratic – examine plot: Is a tangent's slope to the curve entirely positive or negative and continuous? (does not flatten or recurve within the range of calibration)	/			/	
12. For quadratic – evaluate curve fitting errors: Does each point fall within criteria when 'read-back' against the curve? (TA requirement – CA-Q-S-005);(recommended limits ±30% low point & ±20% all other points) (Chrom Report = Details of Calibration per Analyte)	/			/	
13. Is the concentration intercept <|RL| for each cmpd? ("X" intercept in Chrom)		/		/	
Were manual integrations performed correctly and properly documented?(dated, initialed and reason given) 2nd review of all MIs required		/		/	mi- 1, 2, 3, 4, 5, 6, 7, ICV
14. Was the high point checked for detector saturation?		/			

Review Items	NA	Yes	No	2nd Rev	Comments
15.Isomeric pairs(checked for elution order/correct peak assignment? • Vinyl Acetate / Isopropyl Ether • 1,2- & 1,3-& 1,4-Dichlorobenzene • Ethylbenzene / m- & p-Xylenes • o-Xylene / Styrene • 1,3,5- & 1,2,4-Trimethylbenzene / Isopropylbenzene / sec-butylbenzene • 2-nitropropane between bromodichloromethane & MIBK • 2- & 4-Chlorotoluene / n-Propylbenzene • MIBK / 2-Hexanone • Methyl Methacrylate / Ethyl Methacrylate • 1,1-Dichloroethene / cis-1,2- & trans-1,2-Dichloroethene • 1,2,3- & 1,2,4-Trichlorobenzene • 1,1-Dichloropropene / cis-1,3- & trans-1,3-Dichloropropene / 1,2,3-Trichloropropane • Chlorobenzene-d5 / 1,1,1,2-Tetrachloroethane • Trichlorofluoromethane / Freon 113 • Hexane / Vinyl Acetate (Chrom: View/Documents/Methods/Isomers)		/		/	
16. Was the 2nd source initial calibration verification standard (ICV) within required criteria? (624 = QCS method defined/Table5) (8260B = SOP defined) (DoD = ±20%) QAPP specific_____		/		/	
17. Was the ICV Target report printed and elution order of all analytes verified? (attach at L1 Review)		/		/	**If No, immediate corrective action required**
18. If any criteria from items 1-17 were not met, was a NCM generated and supervisor copied?		/		/	
19. Are all files and QC linked and processed correctly?		/		/	□ Files linked properly to calibration levels? □ All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed] □ Runs linked to BFB? [QC links] □ Checklist & run log scanned, attached & assigned properly?
20. Is the ICAL locked in TALS and Chrom?		/		/	
21. ICAL Date and Instrument ID verified?		/		/	

Comments: _____

6/20/17

2nd Reviewer: _____ **Review Date:** 6/20/17

Supp - MLE

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GCMS Volatile ICAL Data Review Checklist

LIMS Batch Number: 377604	Worklist #: 54080	ICAL Event #: 29520	ICIS/ICV Line #s: 41 / 44	2nd Day ICV Line# N/A	Instrument ID: P
2nd Day Batch/ICV Lines: N/A					
Analyst/1st Reviewer: DA Date: 8/6/17 DA	Prep Method (circle): 5030 5035-L 5035-H		Analytical Method (circle): 624 **8260B** SIM **Other**_____		
QC Type (circle): Standard DOD Q4 DoD Q5	**QAPP**_____		Other_____		
Matrix (circle one): Water Solid			**Circle:** 5-mL 20-mL Meth Ext **5 g**		

Review Items	NA	Yes	No	2nd Rev	Comments
A. Tune / Calibration					
1. Did BFB meet tune criteria? If CFCs, did autotune meet SOP criteria?		✓		✓	
2. Were all standards injected within 12 hours of the BFB? (or 24 hours for 624?)		✓		✓	
3. Were ≥ 5 levels of each compound and surrogate analyzed? (624 has minimum of four standards)		✓		✓	
4. Was low level standard at or below RL?		✓		✓	
5. If calibration points removed, were reasons for removal documented? Did sufficient calibration points remain? (removal from middle of curve not allowed)		✓		✓	(Other than those stated in SOP)
6. Do the average RFs meet minimum RF requirements? (624 – not method defined) (8260B-SPCCs = Chloromethane, 1,1-Dichloroethane, Bromoform ≥0.1; Chlorobenzene, 1,1,2,2-Tetrachloroethane ≥0.3)		✓		✓	
7. Did the calibration %RSD meet method requirements? (624: ≤35% all cmpds) (8260B: ≤30% for CCCs & ≤15% for all other cmpds/surrogates)		✓		✓	
8. Was a linear or quadratic regression fit used for analytes that exceeded the %RSD requirements?		✓		✓	
9. If regression fit used, is r^2 ≥0.990?		✓		✓	
10. At least 6 consecutive points used for quadratic curves?	✓			✓	
11. For quadratic – examine plot: Is a tangent's slope to the curve entirely positive or negative and continuous? (does not flatten or recurve within the range of calibration)	✓				
12. For quadratic – evaluate curve fitting errors: Does each point fall within criteria when 'read-back' against the curve? (TA requirement – CA-Q-S-005);(recommended limits ±30% low point & ±20% all other points) (Chrom Report = Details of Calibration per Analyte)	✓			✓	
13. Is the concentration intercept ≤|RL| for each cmpd? ("X" intercept in Chrom)		✓		✓	
Were manual integrations performed correctly and properly documented?(dated, initialed and reason given) 2nd review of all MIs required		✓		✓	Lul - 2
14. Was the high point checked for detector saturation?		✓		✓	

Review Items	NA	Yes	No	2nd Rev	Comments
15.Isomeric pairs(checked for elution order/correct peak assignment? • Vinyl Acetate / Isopropyl Ether • 1,2- & 1,3-& 1,4-Dichlorobenzene • Ethylbenzene / m- & p-Xylenes • o-Xylene / Styrene • 1,3,5- & 1,2,4-Trimethylbenzene / Isopropylbenzene / sec-butylbenzene • 2-nitropropane between bromodichloromethane & MIBK • 2- & 4-Chlorotoluene / n-Propylbenzene • MIBK / 2-Hexanone • Methyl Methacrylate / Ethyl Methacrylate • 1,1-Dichloroethene / cis-1,2- & trans-1,2-Dichloroethene • 1,2,3- & 1,2,4-Trichlorobenzene • 1,1-Dichloropropene / cis-1,3- & trans-1,3-Dichloropropene / 1,2,3-Trichloropropane • Chlorobenzene-d5 / 1,1,1,2-Tetrachloroethane • Trichlorofluoromethane / Freon 113 • Hexane / Vinyl Acetate (Chrom: View/Documents/Methods/Isomers)		✓		✓	
16. Was the 2nd source initial calibration verification standard (ICV) within required criteria? (624 = QCS method defined/Table5) (8260B = SOP defined) (DoD = ±20%) QAPP specific_____		✓		✓	
17. Was the ICV Target report printed and elution order of all analytes verified? (attach at L1 Review)		✓		✓	**If No, immediate corrective action required**
18. If any criteria from items 1-17 were not met, was a NCM generated and supervisor copied?		✓		✓	
19. Are all files and QC linked and processed correctly?		✓		✓	□ Files linked properly to calibration levels? □ All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed] □ Runs linked to BFB? [QC links] □ Checklist & run log scanned, attached & assigned properly?
20. Is the ICAL locked in TALS and Chrom?		✓		✓	
21. ICAL Date and Instrument ID verified?		✓		✓	

Comments: _____

6/20/17

2nd Reviewer: _____ **Review Date:** 6/20/17

Sequence Name: C:\HPCHEM\1\SEQUENCE\061917.S
Comment:
Operator: SEIFERTJ
Data Path: C:\HPCHEM\1\DATA\061917MI\
Pre-Seq Cmd:
Post-Seq Cmd:

Test America Denver
Instrument: B
DV-MS-0010 (8260B/624) (Circle)
Purge Volume: (20mL/5mL/5g)
(Circle)
Tune Time: 10:40 - 20:59
Lims Batch: 377104

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	P0021	BFB	BFB
2	Sample	100	P0022	BFB	BFB
3	Sample	10	P0023	8260MLE	PRIMER
4	Sample	100	P0024	BFBMLE	BFB
5	Sample	100	P0025	BFBMLE	BFB
6	Sample	100	P0026	BFBMLE	BFB
7	Sample	100	P0027	BFBMLE	BFB
8	Sample	10	P0028	8260MLE	STD005
9	Sample	11	P0029	8260MLE	STD010
10	Sample	12	P0030	8260MLE	STD020
11	Sample	13	P0031	8260MLE	STD050
12	Sample	14	P0032	8260MLE	STD10
13	Sample	15	P0033	8260MLE	STD30
14	Sample	16	P0034	8260MLE	STD60
15	Sample	17	P0035	8260MLE	BLK
16	Sample	18	P0036	8260MLE	ICV
17	Sample	19	P0037	8260MLE	STD005
18	Sample	20	P0038	8260MLE	STD010
19	Sample	21	P0039	8260MLE	ICV RR
20	Sample	22	P0040	8260MLE	STD050
21	Sample	23	P0041	8260MLE	ICIS
22	Sample	24	P0042	8260MLE	STD30
23	Sample	25	P0043	8260MLE	STD60
24	Sample	26	P0044	8260MLE	STD020
25	Sample	27	P0045	8260MLE	BLK
26	Sample	28	P0046	8260MLE	ICV
27	Sample	29	P0047	8260MLE	ICV
28	Sample	30	P0048	8260MLE	mb 280-377884/1-a
29	Sample	31	P0049	8260MLE	lcs 280-377884/2-a
30	Sample	32	P0050	8260MLE	lcsd 280-377884/3-a
31	Sample	33	P0051	8260MLE	280-97928-f-20-a
32	Sample	34	P0052	8260MLE	280-98172-d-5-a 10X
33	Sample	35	P0053	8260MLE	280-98172-d-6-a 10X
34	Sample	36	P0054	8260MLE	CCVC
35	Sample	37	P0055	8260MLE	280-98172-d-11-a 10X
36	Sample	38	P0056	8260MLE	280-98172-d-13-a 10X
37	Sample	39	P0057	8260MLE	280-98187-g-17-a ~~10X~~
38	Sample	40	P0058	8260MLE	280-98172-d-9-a 10X

Re-shut MLE

10:40

6/20/17

ERR 100X

ERR 100X
400 Dilute
1X on 6/20/17
20:59

TestAmerica Laboratories
Worklist Report

Worklist Name: 061917M **Worklist Number:** 59880
Instrument Name: VMS_P **Chrom Method:** MLE_VMSP_8260
Purge Volume: 20.00 **Units:** mL
Analysis Type: VOA
Batch Directory: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_P
Run Reagent: MV-567649-D_00001 **Amount Added:** 1.000, Units: uL

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059880-001	# 1 BFB	MV-BFB_00023	BFB		/oaSoilML	1.000	uL	1.000
280-0059880-002	# 2 CCV	MV-2cleve+AVA_00025 MV-Gas/Ket A_00060 MV-Main A_00030 MV-ARCH SS A_00081	CCV		/oaSoilML	20.00	mL	1.000
280-0059880-003	# 3 CCV	MV-Supp A_00024	CCV		/oaSoilML	20.00	mL	1.000
280-0059880-027	#27 STD005	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	1	/oaSoilML	20.00	mL	1.000
280-0059880-028	#28 STD010	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	2	/oaSoilML	20.00	mL	1.000
280-0059880-029	#29 STD020	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	3	/oaSoilML	20.00	mL	1.000
280-0059880-030	#30 STD050	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	4	/oaSoilML	20.00	mL	1.000
280-0059880-031	#31 STD10	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	5	/oaSoilML	20.00	mL	1.000
280-0059880-032	#32 STD30	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	6	/oaSoilML	20.00	mL	1.000
280-0059880-033	#33 STD60	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	7	/oaSoilML	20.00	mL	1.000
280-0059880-034	#34 ICV	MV-SS 2-Cleve_00035 MV-Main B_00018 MV-Gas/Ket B_00035	ICV		/oaSoilML	20.00	mL	1.000
280-0059880-035	#35 ICV	MV-Main B_00018	ICV		/oaSoilML	20.00	mL	1.000
280-0059880-037	#37 STD005	MV-Supp A_00024 MV-ARCH SS A_00082	IC	1	/oaSoilML	20.00	mL	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059880-038	#38 STD010	MV-Supp A_00024 MV-ARCH SS A_00082	IC	2	SoilML	20.00	mL	1.000
280-0059880-039	#39 STD020	MV-Supp A_00024 MV-ARCH SS A_00082	IC	3	SoilML	20.00	mL	1.000
280-0059880-040	#40 STD050	MV-Supp A_00024 MV-ARCH SS A_00082	IC	4	SoilML	20.00	mL	1.000
280-0059880-041	#41 ICIS	MV-Supp A_00024 MV-ARCH SS A_00082	ICIS	5	SoilML	20.00	mL	1.000
280-0059880-042	#42 STD30	MV-Supp A_00024 MV-ARCH SS A_00082	IC	6	SoilML	20.00	mL	1.000
280-0059880-043	#43 STD60	MV-Supp A_00024 MV-ARCH SS A_00082	IC	7	SoilML	20.00	mL	1.000
280-0059880-044	#44 ICV	MV-Supp B_00016 MV-ARCH SS A_00082	ICV		SoilML	20.00	mL	1.000
280-0059880-045	#45 MB 280-377884/1-A		MB		SoilML	20.00	mL	1.000
280-0059880-046	#46 LCS 280-377884/2-A		LCS		SoilML	20.00	mL	1.000
280-0059880-047	#47 LCSD 280-377884/3-A		LCSD		SoilML	20.00	mL	1.000
280-0059880-048	#48 280-97928-F-20-A		Client		SoilML	20.00	mL	1.000
280-0059880-049	#49 280-98172-D-5-A		Client		SoilML	20.00	mL	10.00
280-0059880-050	#50 280-98172-D-6-A		Client		SoilML	20.00	mL	10.00
280-0059880-051	#51 280-98172-D-9-A		Client		SoilML	20.00	mL	10.00
280-0059880-052	#52 280-98172-D-11-A		Client		SoilML	20.00	mL	10.00
280-0059880-053	#53 280-98172-D-13-A		Client		SoilML	20.00	mL	10.00
280-0059880-054	#54 280-98187-G-17-A		Client		SoilML	20.00	mL	1.000
280-0059880-055	#55 CCVC	MV-ARCH SS A_00081 MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	CCVC		SoilML	20.00	mL	1.000

GCMS Volatile ICAL Data Review Checklist

Supp / surr

LIMS Batch Number:	Worklist #:	ICAL Event #:	ICIS/ICV Line #s:	2nd Day ICV Line#	Instrument ID:
371118	58011	28915	25/28		GC2
2nd Day Batch/ICV Lines:					
Analyst/1st Reviewer: AOO	Prep Method (circle):		Analytical Method (circle):		
Date: 5/2/17	5030 5035-L 5035-H		624 8260B SIM Other_____		
QC Type (circle): Standard DoD Q4 DoD Q5	QAPP_____		Other_____		
Matrix (circle one): Water Solid	Circle: 5-mL 20-mL Meth Ext (5 g)				

Review Items	NA	Yes	No	2nd Rev	Comments
A. Tune / Calibration					
1. Did BFB meet tune criteria? If CFCs, did autotune meet SOP criteria?		/		+	
2. Were all standards injected within 12 hours of the BFB? (or 24 hours for 624?)		/		+	
3. Were ≥ 5 levels of each compound and surrogate analyzed? (624 has minimum of four standards)		/		+	
4. Was low level standard at or below RL?		/		+	
5. If calibration points removed, were reasons for removal documented? Did sufficient calibration points remain? (removal from middle of curve not allowed)		/		+	(Other than those stated in SOP)
6. Do the average RFs meet minimum RF requirements? (624 – not method defined) (8260B-SPCCs = Chloromethane, 1,1-Dichloroethane, Bromoform ≥0.1; Chlorobenzene, 1,1,2,2-Tetrachloroethane ≥0.3)		/		+	
7. Did the calibration %RSD meet method requirements? (624: ≤35% all cmpds) (8260B: ≤30% for CCCs & ≤15% for all other cmpds/surrogates)		/		+	Not CAL FOR: TETRAHYDROTHIOPHENE
8. Was a linear or quadratic regression fit used for analytes that exceeded the %RSD requirements?		/		+	
9. If regression fit used, is r^2 ≥0.990?		/		+	
10. At least 6 consecutive points used for quadratic curves?		/		+	
11. For quadratic – examine plot: Is a tangent's slope to the curve entirely positive or negative and continuous? (does not flatten or recurve within the range of calibration)		/		+	
12. For quadratic – evaluate curve fitting errors: Does each point fall within criteria when 'read-back' against the curve? (TA requirement – CA-Q-S-005); (recommended limits ±30% low point & ±20% all other points) (Chrom Report = Details of Calibration per Analyte)		/		+	
13. Is the concentration intercept <|RL| for each cmpd? ("X" intercept in Chrom)		/		+	
Were manual integrations performed correctly and properly documented?(dated, initialed and reason given) 2nd review of all MIs required		/		+	
14. Was the high point checked for detector saturation?		/		+	

Review Items	NA	Yes	No	2nd Rev	Comments
15. Isomeric pairs(checked for elution order/correct peak assignment? • Vinyl Acetate / Isopropyl Ether • 1,2- & 1,3-& 1,4-Dichlorobenzene • Ethylbenzene / m- & p-Xylenes • o-Xylene / Styrene • 1,3,5- & 1,2,4-Trimethylbenzene / Isopropylbenzene / sec-butylbenzene • 2-nitropropane between bromodichloromethane & MIBK • 2- & 4-Chlorotoluene / n-Propylbenzene • MIBK / 2-Hexanone • Methyl Methacrylate / Ethyl Methacrylate • 1,1-Dichloroethene / cis-1,2- & trans-1,2-Dichloroethene • 1,2,3- & 1,2,4-Trichlorobenzene • 1,1-Dichloropropene / cis-1,3- & trans-1,3-Dichloropropene / 1,2,3-Trichloropropane • Chlorobenzene-d5 / 1,1,1,2-Tetrachloroethane • Trichlorofluoromethane / Freon 113 • Hexane / Vinyl Acetate (Chrom: View/Documents/Methods/Isomers)		/		+	
16. Was the 2nd source initial calibration verification standard (ICV) within required criteria? (624 = QCS method defined/Table5) (8260B = SOP defined) (DoD = ±20%) QAPP specific_____		/		+	
17. Was the ICV Target report printed and elution order of all analytes verified? (attach at L1 Review)		/		+	If No, immediate corrective action required
18. If any criteria from items 1-17 were not met, was a NCM generated and supervisor copied?		/		+	
19. Are all files and QC linked and processed correctly?		/		+	□ Files linked properly to calibration levels? □ All points are in the most recent active calibration event? [Calibration Events→'Fix ICAL linkage' if needed] □ Runs linked to BFB? [QC links] □ Checklist & run log scanned, attached & assigned properly?
20. Is the ICAL locked in TALS and Chrom?		/		+	
21. ICAL Date and Instrument ID verified?		/		+	

Comments: _____

MDD 5/2/17

2nd Reviewer: _____ Review Date: 5-3-17

Sequence Name: C:\msdchem\1\sequence\042617LL.s
Comment:
Operator: DUKESA
Data Path: C:\msdchem\1\DATA\042617LL\
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

Sequence Barcode Options
(X) On Mismatch, Inject Anyway
( ) On Mismatch, Don't Inject
( ) Barcode Disabled

Line			Sample Name/Misc Info		
1)	Sample	100	G2_9094	BFBS	BFB
2)	Sample	100	G2_9096	BFBS	BFB
3)	Sample	100	G2_9097	BFBS	BFB-WORK
4)	Sample	100	G2_9098	BFBS	BFB
5)	Sample	100	G2_9099	BFBS	BFB-WORK
6)	Sample	100	G2_9100	BFBS	BFB
7)	Sample	100	G2_9101	BFBS	BFB-WORK
8)	Sample	100	G2_9102	BFBS	BFB -WORK
9)	Sample	10	G2_9103	8260S	STD001
10)	Sample	11	G2_9104	8260S	STD002
11)	Sample	12	G2_9105	8260S	STD005
12)	Sample	13	G2_9106	8260S	STD010
13)	Sample	14	G2_9107	8260S	STD020
14)	Sample	15	G2_9108	8260S	ICIS
15)	Sample	16	G2_9109	8260S	STD100
16)	Sample	17	G2_9110	8260S	STD200
17)	Sample	18	G2_9111	8260S	ICV
18)	Sample	19	G2_9112	8260S	BLK
19)	Sample	20	G2_9113	8260S	mb 280-371155/1-a
20)	Sample	21	G2_9114	8260S	280-94107-a-7-b mdlv
21)	Sample	22	G2_9115	8260S	280-94107-a-8-b mdlv
22)	Sample	23	G2_9116	8260S	280-94107-a-9-b mdlv
23)	Sample	24	G2_9117	8260S	280-94107-a-10-b mdlv
24)	Sample	25	G2_9118	8260S	280-94107-a-11-c mdlv
25)	Sample	26	G2_9119	8260S	280-94107-a-11-d mdlv
26)	Sample	27	G2_9120	8260S	280-94107-a-12-h loqv
27)	Sample	28	G2_9121	8260S	280-94107-a-12-i loqv
28)	Sample	29	G2_9122	8260S	280-94107-a-12-j loqv
29)	Sample	30	G2_9123	8260S	280-94107-a-12-k loqv
30)	Sample	31	G2_9124	8260S	280-94107-a-12-l loqv
31)	Sample	32	G2_9125	8260S	280-94107-a-12-m loqv
32)	Sample	33	G2_9126	8260S	280-94107-a-12-n loqv
33)	Sample	34	G2_9127	8260S	RT TEST MAIN
34)	Sample	35	G2_9128	8260S	bl

Test America Denver
Instrument: 2042 GC2
DV-MS-0010 (8260B/624) (Circle)
Purge Volume: (20mL/5mL/5g) (Circle)
Tune Time: 2042 - 0529
Lims Batch: 371118

CE 28915
AMD 4/27/17

Q2 MDLV/LOQV

TestAmerica Laboratories
Worklist Report

Worklist Name: 042617LL Worklist Number: 580111
Instrument Name: VMS_G2 Chrom Method: SO_VMSG2_8260
Purge Volume: 5.000 Units: mL
Analysis Type: VOA
Batch Directory: \\ChromNA\Denver\ChromData\VMS_G2\20170426-58011b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_G2
Run Reagent: MV-568718-D_00003 Amount Added: 1.000, Units: uL
Run Reagent: MV-ARCH SS A_00081 Amount Added: 0.850, Units: uL

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0058011-001	# 1 BFB	MV-BFB_00022	BFB		voaSoilLL	1.000	uL	1.000
280-0058011-007	# 7 MB		MB		voaSoilLL	5.000	g	1.000
280-0058011-020	#20 STD001	MV-568718-D_00003 MV-Supp A_00023 MV-ARCH SS A_00081	IC	1	voaSoilLL	5.000	g	1.000
280-0058011-021	#21 STD002	MV-568718-D_00003 MV-Supp A_00023 MV-ARCH SS A_00081	IC	2	voaSoilLL	5.000	g	1.000
280-0058011-022	#22 STD005	MV-568718-D_00003 MV-Supp A_00023 MV-ARCH SS A_00081	IC	3	voaSoilLL	5.000	g	1.000
280-0058011-023	#23 STD010	MV-568718-D_00003 MV-Supp A_00023 MV-ARCH SS A_00081	IC	4	voaSoilLL	5.000	g	1.000
280-0058011-024	#24 STD020	MV-568718-D_00003 MV-Supp A_00023 MV-ARCH SS A_00081	IC	5	voaSoilLL	5.000	g	1.000
280-0058011-025	#25 ICIS	MV-568718-D_00003 MV-Supp A_00023 MV-ARCH SS A_00081	ICIS	6	voaSoilLL	5.000	g	1.000
280-0058011-026	#26 STD100	MV-568718-D_00003 MV-Supp A_00023 MV-ARCH SS A_00081	IC	7	voaSoilLL	5.000	g	1.000
280-0058011-027	#27 STD200	MV-568718-D_00003 MV-Supp A_00023 MV-ARCH SS A_00081	IC	8	voaSoilLL	5.000	g	1.000
280-0058011-028	#28 ICV	MV-568718-D_00003 MV-Supp B_00015 MV-ARCH SS A_00081	ICV		voaSoilLL	5.000	g	1.000
280-0058011-029	#29 MB 280-371155/1-A		MB		voaSoilLL	5.000	g	1.000
280-0058011-030	#30 280-94107-A-7-B MDLV	MV-Supp A_00023	MDLV		voaSoilLL	5.000	g	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0058011-031	#31 280-94107-A-8-B MDLV	MV-Supp A_00023	MDLV		voaSoilLL	5.000	g	1.000
280-0058011-032	#32 280-94107-A-9-B MDLV	MV-Supp A_00023	MDLV		voaSoilLL	5.000	g	1.000
280-0058011-033	#33 280-94107-A-10-B MDLV	MV-Supp A_00023	MDLV		voaSoilLL	5.000	g	1.000
280-0058011-034	#34 280-94107-A-11-C MDLV	MV-Supp A_00023	MDLV		voaSoilLL	5.000	g	1.000
280-0058011-035	#35 280-94107-A-11-D MDLV	MV-Supp A_00023	MDLV		voaSoilLL	5.000	g	1.000
280-0058011-036	#36 280-94107-A-12-H LOQV	MV-Supp A_00023	LOQV		voaSoilLL	5.000	g	1.000
280-0058011-037	#37 280-94107-A-12-I LOQV	MV-Supp A_00023	LOQV		voaSoilLL	5.000	g	1.000
280-0058011-038	#38 280-94107-A-12-J LOQV	MV-Supp A_00023	LOQV		voaSoilLL	5.000	g	1.000
280-0058011-039	#39 280-94107-A-12-K LOQV	MV-Supp A_00023	LOQV		voaSoilLL	5.000	g	1.000
280-0058011-040	#40 280-94107-A-12-L LOQV	MV-Supp A_00023	LOQV		voaSoilLL	5.000	g	1.000
280-0058011-041	#41 280-94107-A-12-M LOQV	MV-Supp A_00023	LOQV		voaSoilLL	5.000	g	1.000
280-0058011-042	#42 280-94107-A-12-N LOQV	MV-Supp A_00023	LOQV		voaSoilLL	5.000	g	1.000
280-0058011-043	#43 TEST	MV-Main A_00030	Client		voaSoilLL	5.000	g	1.000

TestAmerica-*Denver*

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GCMS Volatile ICAL Data Review Checklist MAIN/GAS/SURROGATE

LIMS Batch Number: 376989	Worklist #: 59667	ICAL Event #: 29460	ICIS/ICV Line #s: 9/12	2nd Day ICV Line#	Instrument ID: G2
2nd Day Batch/ICV Lines:					
Analyst/1st Reviewer: ASD	Prep Method (circle):		Analytical Method (circle):		
Date: 6/13/17	5030	5035-L 5035-H	624	8260B SIM	Other_____
QC Type (circle): Standard	DOD Q4	DoD Q5	QAPP_____		Other_____
Matrix (circle one): Water	Solid		Circle: 5-mL	20-mL Meth Ext	5 g

Review Items	NA	Yes	No	2nd Rev	Comments
A. Tune / Calibration					
1. Did BFB meet tune criteria? If CFCs, did autotune meet SOP criteria?		/		+	
2. Were all standards injected within 12 hours of the BFB? (or 24 hours for 624?)		/		+	
3. Were ≥ 5 levels of each compound and surrogate analyzed? (624 has minimum of four standards)		/		+	
4. Was low level standard at or below RL?		/		+	
5. If calibration points removed, were reasons for removal documented? Did sufficient calibration points remain? (removal from middle of curve not allowed)		/		+	(Other than those stated in SOP)
6. Do the average RFs meet minimum RF requirements? (624 – not method defined) (8260B-SPCCs = Chloromethane, 1,1-Dichloroethane, Bromoform ≥0.1; Chlorobenzene, 1,1,2,2-Tetrachloroethane ≥0.3)		/		+	
7. Did the calibration %RSD meet method requirements? (624: ≤35% all cmpds) (8260B: ≤30% for CCCs & ≤15% for all other cmpds/surrogates)		/		+	DCDFM @ 28.8% Acetone @ 20.6% 2-Hexanone @ 20.6%
8. Was a linear or quadratic regression fit used for analytes that exceeded the %RSD requirements?		/		+	
9. If regression fit used, is r^2 ≥0.990?		/		+	
10. At least 6 consecutive points used for quadratic curves?		/		+	
11. For quadratic – examine plot: Is a tangent's slope to the curve entirely positive or negative and continuous? (does not flatten or recurve within the range of calibration)		/		+	
12. For quadratic – evaluate curve fitting errors: Does each point fall within criteria when 'read-back' against the curve? (TA requirement – CA-Q-S-005);(recommended limits ±30% low point & ±20% all other points) (Chrom Report = Details of Calibration per Analyte)		/		+	
13. Is the concentration intercept <|RL| for each cmpd? ("X" intercept in Chrom)		/		+	
Were manual integrations performed correctly and properly documented?(dated, initialed and reason given) 2nd review of all MIs required		/		+	
14. Was the high point checked for detector saturation?		/		+	

Review Items	NA	Yes	No	2nd Rev	Comments
15. Isomeric pairs(checked for elution order/correct peak assignment? • Vinyl Acetate / Isopropyl Ether • 1,2- & 1,3-& 1,4-Dichlorobenzene • Ethylbenzene / m- & p-Xylenes • o-Xylene / Styrene • 1,3,5- & 1,2,4-Trimethylbenzene / Isopropylbenzene / sec-butylbenzene • 2-nitropropane between bromodichloromethane & MIBK • 2- & 4-Chlorotoluene / n-Propylbenzene • MIBK / 2-Hexanone • Methyl Methacrylate / Ethyl Methacrylate • 1,1-Dichloroethene / cis-1,2- & trans-1,2-Dichloroethene • 1,2,3- & 1,2,4-Trichlorobenzene • 1,1-Dichloropropene / cis-1,3- & trans-1,3-Dichloropropene / 1,2,3-Trichloropropane • Chlorobenzene-d5 / 1,1,1,2-Tetrachloroethane • Trichlorofluoromethane / Freon 113 • Hexane / Vinyl Acetate (Chrom: View/Documents/Methods/Isomers)			/	+	
16. Was the 2nd source initial calibration verification standard (ICV) within required criteria? (624 = QCS method defined/Table5) (8260B = SOP defined) (DoD = ±20%) QAPP specific_____		/	/	+	NCM: 2-HEXANONE -20.6 %D ACETONE - 20.6 %D DICHLORODIFLUOROMETHANE +28.8 %D
17. Was the ICV Target report printed and elution order of all analytes verified? (attach at L1 Review)		/		+	If No, immediate corrective action required
18. If any criteria from items 1-17 were not met, was a NCM generated and supervisor copied?		/		+	
19. Are all files and QC linked and processed correctly?		/		+	□ Files linked properly to calibration levels? □ All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed] □ Runs linked to BFB? [QC links] □ Checklist & run log scanned, attached & assigned properly?
20. Is the ICAL locked in TALS and Chrom?		/		+	
21. ICAL Date and Instrument ID verified?		/		+	

Comments: Z Hoo 6/13/17

2nd Reviewer: MM **Review Date:** 6-14-17

Sequence Name: C:\msdchem\1\sequence\061221711.sq
Comment:
Operator: DUKESA
Data Path: C:\msdchem\1\DATA\061221711\

Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

Sequence Barcode Options
(X) On Mismatch, Inject Anyway
( ) On Mismatch, Don't Inject
( ) Barcode Disabled

Line			Sample Name/Misc Info	
1)	Sample	100	G2_0891	BTBS BTB
2)	Sample	100	G2_0892	BTBS BTB
3)	Sample	10	G2_0893	8260S CCW
4)	Sample	11	G2_0894	8260S STD001
5)	Sample	12	G2_0895	8260S STD002
6)	Sample	13	G2_0896	8260S STD005
7)	Sample	14	G2_0897	8260S STD010
8)	Sample	15	G2_0898	8260S STD020
9)	Sample	16	G2_0899	8260S ICIS
10)	Sample	17	G2_0900	8260S STD100
11)	Sample	18	G2_0901	8260S STD200
12)	Sample	19	G2_0902	8260S BLK
13)	Sample	20	G2_0903	8260S ICV
14)	Sample	21	G2_0904	8260S MB
15)	Sample	22	G2_0905	8260S LCS S
16)	Sample	23	G2_0906	8260S ICV
17)	Sample	24	G2_0907	8260S LCS
18)	Sample	25	G2_0908	8260S 280-97377-e-1-a
19)	Sample	26	G2_0909	8260S 280-97377-e-1-b ms
20)	Sample	27	G2_0910	8260S 280-97377-e-1-c msd
21)	Sample	28	G2_0911	8260S 280-97832-c-1-a
22)	Sample	29	G2_0912	8260S 280-97832-c-2-a
23)	Sample	30	G2_0913	8260S 280-97832-c-3-a
24)	Sample	31	G2_0914	8260S 280-97791-a-1-d
25)	Sample	32	G2_0915	8260S 280-97791-a-2-b
26)	Sample	33	G2_0916	8260S 280-97791-a-3-b
27)	Sample	34	G2_0917	8260S 280-97791-a-4-b
28)	Sample	35	G2_0918	8260S 280-97829-b-2-a
29)	Sample	36	G2_0919	8260S 280-97829-e-3-a
30)	Sample	37	G2_0920	8260S 280-97829-e-4-a
31)	Sample	38	G2_0921	8260S 280-97829-e-5-a ISA, CONFIRM
32)	Sample	39	G2_0922	8260S 280-97829-e-6-a +
33)	Sample	40	G2_0923	8260S 280-97829-e-7-a
34)	Sample	41	G2_0924	8260S 280-97829-e-8-a ISA CONFIRM
35)	Sample	42	G2_0925	8260S 280-97829-e-9-a
36)	Sample	43	G2_0926	8260S CCWC
37)	Sample	44	G2_0927	8260S CCWC
38)	Sample	45	G2_0928	8260S blk

Test America Denver
Instrument: G2
DV-MS-0010 (8260/624) (Circle)
Purge Volume: (20mL/5mL) (Circle)
Tune Time: 1719 - 0532
Lims Data: 376989
377029
ACQ 6/13/17

Last Modified: Tue Jun 13 06:39:15 2017

TestAmerica Laboratories
Worklist Report

Worklist Name: 061217LL Worklist Number: 596667
Instrument Name: VMS_G2 Chrom Method: SO_VMSG2_8260
Purge Volume: 5.000 Units: mL
Analysis Type: VOA
Batch Directory: \\ChromNA\Denver\ChromData\VMS_G2\20170612-59667.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_G2
Run Reagent: MV-568718-D_00003 Amount Added: 1.000, Units: uL
Run Reagent: MV-ARCH SS A_00081 Amount Added: 0.900, Units: uL

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059667-001	# 1 BFB	MV-BFB_00023	BFB		voaSoilLL	1.000	uL	1.000
280-0059667-002	# 2 CCV	MV-2cleve+AVA_00025 MV-Gas/Ket A_00060 MV-Main A_00030	CCV		voaSoilLL	5.000	g	1.000
280-0059667-003	# 3 CCV	MV-568718-D_00003 MV-Supp A_00024	CCV		voaSoilLL	5.000	g	1.000
280-0059667-004	# 4 STD001	MV-568718-D_00003 MV-2cleve+AVA_00025 MV-Gas/Ket A_00060 MV-Main A_00030 MV-ARCH SS A_00081	IC	1	voaSoilLL	5.000	g	1.000
280-0059667-005	# 5 STD002	MV-568718-D_00003 MV-2cleve+AVA_00025 MV-Main A_00030 MV-Gas/Ket A_00060 MV-ARCH SS A_00081	IC	2	voaSoilLL	5.000	g	1.000
280-0059667-006	# 6 STD005	MV-568718-D_00003 MV-2cleve+AVA_00025 MV-Gas/Ket A_00060 MV-Main A_00030 MV-ARCH SS A_00081	IC	3	voaSoilLL	5.000	g	1.000
280-0059667-007	# 7 STD010	MV-568718-D_00003 MV-2cleve+AVA_00025 MV-Gas/Ket A_00060 MV-Main A_00030 MV-ARCH SS A_00081	IC	4	voaSoilLL	5.000	g	1.000
280-0059667-008	# 8 STD020	MV-568718-D_00003 MV-2cleve+AVA_00025 MV-Gas/Ket A_00060 MV-Main A_00030 MV-ARCH SS A_00081	IC	5	voaSoilLL	5.000	g	1.000
280-0059667-009	# 9 ICIS	MV-568718-D_00003 MV-2cleve+AVA_00025 MV-Gas/Ket A_00060 MV-Main A_00030 MV-ARCH SS A_00081	ICIS	6	voaSoilLL	5.000	g	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059667-010	#10 STD100	MV-568718-D_00003 MV-2cleve+AVA_00025 MV-Gas/Ket A_00060 MV-Main A_00030 MV-ARCH SS A_00081	IC	7	voaSoilLL	5.000	g	1.000
280-0059667-011	#11 STD200	MV-568718-D_00003 MV-2cleve+AVA_00025 MV-Gas/Ket A_00060 MV-Main A_00030 MV-ARCH SS A_00081	IC	8	voaSoilLL	5.000	g	1.000
280-0059667-012	#12 ICV	MV-568718-D_00003 MV-Main B_00017 MV-SS 2-Cleve_00035 MV-ARCH SS A_00081 MV-Gas/Ket B_00034	ICV		voaSoilLL	5.000	g	1.000
280-0059667-014	#14 LCS	MV-Main B_00017 MV-SS 2-Cleve_00035 MV-Gas/Ket B_00034	LCS		voaSoilLL	5.000	g	1.000
280-0059667-015	#15 LCS	MV-Supp B_00016	LCS		voaSoilLL	5.000	g	1.000
280-0059667-016	#16 MB		MB		voaSoilLL	5.000	g	1.000
280-0059667-017	#17 280-62974-A-4		Client		voaSoilLL	5.000	g	1.000
280-0059667-018	#18 280-62935-A-1-A		Client		voaSoilLL	5.000	g	1.000
280-0059667-019	#19 280-62974-A-6		Client		voaSoilLL	5.000	g	1.000
280-0059667-020	#20 280-97377-E-1-A		Client		voaSoilLL	5.000	g	1.000
280-0059667-021	#21 280-97377-E-1-B MS	MV-Main B_00017 MV-SS 2-Cleve_00035 MV-Gas/Ket B_00034	MS		voaSoilLL	5.000	g	1.000
280-0059667-022	#22 280-97377-E-1-C MSD	MV-Main B_00017 MV-SS 2-Cleve_00035 MV-Gas/Ket B_00034	MSD		voaSoilLL	5.000	g	1.000
280-0059667-023	#23 280-97832-C-1-A		Client		voaSoilLL	5.000	g	1.000
280-0059667-024	#24 280-97832-C-2-A		Client		voaSoilLL	5.000	g	1.000
280-0059667-025	#25 280-97832-C-3-A		Client		voaSoilLL	5.000	g	1.000
280-0059667-026	#26 280-97791-A-1-D		Client		voaSoilLL	5.000	g	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059667-027	#27 280-97791-A-2-B		Client		voaSoilLL	5.000	g	1.000
280-0059667-028	#28 280-97791-A-3-B		Client		voaSoilLL	5.000	g	1.000
280-0059667-029	#29 280-97791-A-4-B		Client		voaSoilLL	5.000	g	1.000
280-0059667-030	#30 280-97829-B-2-A		Client		voaSoilLL	5.000	g	1.000
280-0059667-031	#31 280-97829-E-3-A		Client		voaSoilLL	5.000	g	1.000
280-0059667-032	#32 280-97829-E-4-A		Client		voaSoilLL	5.000	g	1.000
280-0059667-033	#33 280-97829-E-5-A		Client		voaSoilLL	5.000	g	1.000
280-0059667-034	#34 280-97829-E-6-A		Client		voaSoilLL	5.000	g	1.000
280-0059667-035	#35 280-97829-E-7-A		Client		voaSoilLL	5.000	g	1.000
280-0059667-036	#36 280-97829-E-8-A		Client		voaSoilLL	5.000	g	1.000
280-0059667-037	#37 280-97829-E-9-A		Client		voaSoilLL	5.000	g	1.000
280-0059667-038	#38 CCVC	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	CCVC		voaSoilLL	5.000	g	1.000
280-0059667-039	#39 CCVC	MV-Supp A_00024 MV-568718-D_00003	CCVC		voaSoilLL	5.000	g	1.000

Main - MLE

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GCMS Volatile ICAL Data Review Checklist

LIMS Batch Number: 377804	Worklist #: 59880	ICAL Event #: 29519	ICIS/ICV Line #s: - 34,35	2nd Day ICV Line# N/A	Instrument ID: P
2nd Day Batch/ICV Lines: N/A					
Analyst/1st Reviewer: MK Date: 061917 MK	**Prep Method (circle):** 5030 5035-L 5035-H		**Analytical Method (circle):** 624 (8260B) SIM Other_____		
QC Type (circle): (Standard) DOD Q4 DoD Q5	**QAPP**_____		Other_____		
Matrix (circle one): Water (Solid)			**Circle:** 5-mL 20-mL (Meth Ext) 5 g		

Review Items	**NA**	**Yes**	**No**	**2nd Rev**	**Comments**
A. Tune / Calibration					
1. Did BFB meet tune criteria? If CFCs, did autotune meet SOP criteria?		✓		✓	
2. Were all standards injected within 12 hours of the BFB? (or 24 hours for 624?)		✓		✓	
3. Were ≥ 5 levels of each compound and surrogate analyzed? (624 has minimum of four standards)		✓		✓	
4. Was low level standard at or below RL?		✓		✓	
5. If calibration points removed, were reasons for removal documented? Did sufficient calibration points remain? (removal from middle of curve not allowed)		✓		✓	(Other than those stated in SOP)
6. Do the average RFs meet minimum RF requirements? (624 – not method defined) (8260B-SPCCs = Chloromethane, 1,1-Dichloroethane, Bromoform ≥0.1; Chlorobenzene, 1,1,2,2-Tetrachloroethane ≥0.3)		✓		✓	
7. Did the calibration %RSD meet method requirements? (624: ≤35% all cmpds) (8260B: ≤30% for CCCs & ≤15% for all other cmpds/surrogates)		✓		✓	
8. Was a linear or quadratic regression fit used for analytes that exceeded the %RSD requirements?		✓		✓	
9. If regression fit used, is r^2 ≥0.990?		✓		✓	
10. At least 6 consecutive points used for quadratic curves?	✓			✓	
11. For quadratic – examine plot: Is a tangent's slope to the curve entirely positive or negative and continuous? (does not flatten or recurve within the range of calibration)	✓			✓	
12. For quadratic – evaluate curve fitting errors: Does each point fall within criteria when 'read-back' against the curve? (TA requirement – CA-Q-S-005);(recommended limits ±30% low point & ±20% all other points) (Chrom Report = Details of Calibration per Analyte)	✓			✓	
13. Is the concentration intercept <|RL| for each cmpd? ("X" intercept in Chrom)		✓		✓	
Were manual integrations performed correctly and properly documented?(dated, initialed and reason given) 2nd review of all MIs required		✓		✓	ini - 1,2,3,4,5,6,7, ICV
14. Was the high point checked for detector saturation?		✓			

Review Items	NA	Yes	No	2nd Rev	Comments
15.Isomeric pairs(checked for elution order/correct peak assignment? • Vinyl Acetate / Isopropyl Ether • 1,2- & 1,3-& 1,4-Dichlorobenzene • Ethylbenzene / m- & p-Xylenes • o-Xylene / Styrene • 1,3,5- & 1,2,4-Trimethylbenzene / Isopropylbenzene / sec-butylbenzene • 2-nitropropane between bromodichloromethane & MIBK • 2- & 4-Chlorotoluene / n-Propylbenzene • MIBK / 2-Hexanone • Methyl Methacrylate / Ethyl Methacrylate • 1,1-Dichloroethene / cis-1,2- & trans-1,2-Dichloroethene • 1,2,3- & 1,2,4-Trichlorobenzene • 1,1-Dichloropropene / cis-1,3- & trans-1,3-Dichloropropene / 1,2,3-Trichloropropane • Chlorobenzene-d5 / 1,1,1,2-Tetrachloroethane • Trichlorofluoromethane / Freon 113 • Hexane / Vinyl Acetate (Chrom: View/Documents/Methods/Isomers)		✓		✓	
16. Was the 2nd source initial calibration verification standard (ICV) within required criteria? (624 = QCS method defined/Table5) (8260B = SOP defined) (DoD = ±20%) QAPP specific_____		✓		✓	
17. Was the ICV Target report printed and elution order of all analytes verified? (attach at L1 Review)		✓		✓	**If No, immediate corrective action required**
18. If any criteria from items 1-17 were not met, was a NCM generated and supervisor copied?		✓		✓	
19. Are all files and QC linked and processed correctly?		✓		✓	□ Files linked properly to calibration levels? □ All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed] □ Runs linked to BFB? [QC links] □ Checklist & run log scanned, attached & assigned properly?
20. Is the ICAL locked in TALS and Chrom?		✓		✓	
21. ICAL Date and Instrument ID verified?		✓		✓	

Comments: _____

6/20/17

2nd Reviewer: AOO **Review Date:** 6/20/17

Sequence Name: C:\HPCHEM\1\SEQUENCE\061917.S
Comment:
Operator: SEIFERTJ
Data Path: C:\HPCHEM\1\DATA\061917MI\
Pre-Seq Cmd:
Post-Seq Cmd:

Test America Denver
Instrument: 5
DV-MS-0010 (8260B/624) (Circle)
Purge Volume: (20mL/5mL/5g)
(Circle)
Tune Time: 1040 - 2059
Lims Batch: 377804

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	P0021	BFB	BFB
2	Sample	100	P0022	BFB	BFB
3	Sample	10	P0023	8260MLE	PRIMER
4	Sample	100	P0024	BFBMLE	BFB
5	Sample	100	P0025	BFBMLE	BFB
6	Sample	100	P0026	BFBMLE	BFB
7	Sample	100	P0027	BFBMLE	BFB
8	Sample	10	P0028	8260MLE	STD005
9	Sample	11	P0029	8260MLE	STD010
10	Sample	12	P0030	8260MLE	STD020
11	Sample	13	P0031	8260MLE	STD050
12	Sample	14	P0032	8260MLE	STD10
13	Sample	15	P0033	8260MLE	STD30
14	Sample	16	P0034	8260MLE	STD60
15	Sample	17	P0035	8260MLE	BLK
16	Sample	18	P0036	8260MLE	ICV
17	Sample	19	P0037	8260MLE	STD005
18	Sample	20	P0038	8260MLE	STD010
19	Sample	21	P0039	8260MLE	ICV RR
20	Sample	22	P0040	8260MLE	STD050
21	Sample	23	P0041	8260MLE	ICIS
22	Sample	24	P0042	8260MLE	STD30
23	Sample	25	P0043	8260MLE	STD60
24	Sample	26	P0044	8260MLE	STD020
25	Sample	27	P0045	8260MLE	BLK
26	Sample	28	P0046	8260MLE	ICV
27	Sample	29	P0047	8260MLE	ICV
28	Sample	30	P0048	8260MLE	mb 280-377884/1-a
29	Sample	31	P0049	8260MLE	lcs 280-377884/2-a
30	Sample	32	P0050	8260MLE	lcsd 280-377884/3-a
31	Sample	33	P0051	8260MLE	280-97928-f-20-a
32	Sample	34	P0052	8260MLE	280-98172-d-5-a 10X
33	Sample	35	P0053	8260MLE	280-98172-d-6-a 10X
34	Sample	36	P0054	8260MLE	CCVC
35	Sample	37	P0055	8260MLE	280-98172-d-11-a 10X
36	Sample	38	P0056	8260MLE	280-98172-d-13-a 10X
37	Sample	39	P0057	8260MLE	280-98187-g-17-a 10X
38	Sample	40	P0058	8260MLE	280-98172-d-9-a 10X

switch to MLE

10:40

6/20/17

20:59

TestAmerica Laboratories
Worklist QC Batch Report

Worklist Name: 061917M Worklist Number: 59880
Instrument Name: VMS_P Chrom Method: MLE_VMSP_8260
Data Directory: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b
QC Batching: Disabled Limit Group Batching: Enabled

QC Batch: 1	MSV - 8260B Water and Solid Raw Batch: 377804
# 1 BFB	# 1 BFB
# 2 CCV	# 2 CCV
# 3 CCV	# 3 CCV
#27 STD005	#27 STD005
#28 STD010	#28 STD010
#29 STD020	#29 STD020
#30 STD050	#30 STD050
#31 STD10	#31 STD10
#32 STD30	#32 STD30
#33 STD60	#33 STD60
#34 ICV	#34 ICV
#35 ICV	#35 ICV
#37 STD005	#37 STD005
#38 STD010	#38 STD010
#39 STD020	#39 STD020
#40 STD050	#40 STD050
#41 ICIS	#41 ICIS
#42 STD30	#42 STD30
#43 STD60	#43 STD60
#44 ICV	#44 ICV
#45 MB 280-377884/1-A	#45 MB 280-377884/1-A
#46 LCS 280-377884/2-A	#46 LCS 280-377884/2-A
#47 LCSD 280-377884/3-A	#47 LCSD 280-377884/3-A
#48 280-97928-F-20-A	#48 280-97928-F-20-A
#49 280-98172-D-5-A	#49 280-98172-D-5-A
#50 280-98172-D-6-A	#50 280-98172-D-6-A
#51 280-98172-D-9-A	#51 280-98172-D-9-A
#52 280-98172-D-11-A	#52 280-98172-D-11-A
#53 280-98172-D-13-A	#53 280-98172-D-13-A
#54 280-98187-G-17-A	#54 280-98187-G-17-A
#55 CCVC	#55 CCVC

TestAmerica Laboratories
Worklist Report

Worklist Name: 061917M **Worklist Number:** 59880
Instrument Name: VMS_P **Chrom Method:** MLE_VMSP_8260
Purge Volume: 20.00 **Units:** mL
Analysis Type: VOA
Batch Directory: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_P
Run Reagent: MV-567649-D_00001 **Amount Added:** 1.000, Units: uL

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059880-001	# 1 BFB	MV-BFB_00023	BFB		VoaSoilML	1.000	uL	1.000
280-0059880-002	# 2 CCV	MV-2cleve+AVA_00025 MV-Gas/Ket A_00060 MV-Main A_00030 MV-ARCH SS A_00081	CCV		VoaSoilML	20.00	mL	1.000
280-0059880-003	# 3 CCV	MV-Supp A_00024	CCV		VoaSoilML	20.00	mL	1.000
280-0059880-027	#27 STD005	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	1	VoaSoilML	20.00	mL	1.000
280-0059880-028	#28 STD010	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	2	VoaSoilML	20.00	mL	1.000
280-0059880-029	#29 STD020	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	3	VoaSoilML	20.00	mL	1.000
280-0059880-030	#30 STD050	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	4	VoaSoilML	20.00	mL	1.000
280-0059880-031	#31 STD10	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	5	VoaSoilML	20.00	mL	1.000
280-0059880-032	#32 STD30	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	6	VoaSoilML	20.00	mL	1.000
280-0059880-033	#33 STD60	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	7	VoaSoilML	20.00	mL	1.000
280-0059880-034	#34 ICV	MV-SS 2-Cleve_00035 MV-Main B_00018 MV-Gas/Ket B_00035	ICV		VoaSoilML	20.00	mL	1.000
280-0059880-035	#35 ICV	MV-Main B_00018	ICV		VoaSoilML	20.00	mL	1.000
280-0059880-037	#37 STD005	MV-Supp A_00024 MV-ARCH SS A_00082	IC	1	VoaSoilML	20.00	mL	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059880-038	#38 STD010	MV-Supp A_00024 MV-ARCH SS A_00082	IC	2	SoilML	20.00	mL	1.000
280-0059880-039	#39 STD020	MV-Supp A_00024 MV-ARCH SS A_00082	IC	3	SoilML	20.00	mL	1.000
280-0059880-040	#40 STD050	MV-Supp A_00024 MV-ARCH SS A_00082	IC	4	SoilML	20.00	mL	1.000
280-0059880-041	#41 ICIS	MV-Supp A_00024 MV-ARCH SS A_00082	ICIS	5	SoilML	20.00	mL	1.000
280-0059880-042	#42 STD30	MV-Supp A_00024 MV-ARCH SS A_00082	IC	6	SoilML	20.00	mL	1.000
280-0059880-043	#43 STD60	MV-Supp A_00024 MV-ARCH SS A_00082	IC	7	SoilML	20.00	mL	1.000
280-0059880-044	#44 ICV	MV-Supp B_00016 MV-ARCH SS A_00082	ICV		SoilML	20.00	mL	1.000
280-0059880-045	#45 MB 280-377884/1-A		MB		SoilML	20.00	mL	1.000
280-0059880-046	#46 LCS 280-377884/2-A		LCS		SoilML	20.00	mL	1.000
280-0059880-047	#47 LCSD 280-377884/3-A		LCSD		SoilML	20.00	mL	1.000
280-0059880-048	#48 280-97928-F-20-A		Client		SoilML	20.00	mL	1.000
280-0059880-049	#49 280-98172-D-5-A		Client		SoilML	20.00	mL	10.00
280-0059880-050	#50 280-98172-D-6-A		Client		SoilML	20.00	mL	10.00
280-0059880-051	#51 280-98172-D-9-A		Client		SoilML	20.00	mL	10.00
280-0059880-052	#52 280-98172-D-11-A		Client		SoilML	20.00	mL	10.00
280-0059880-053	#53 280-98172-D-13-A		Client		SoilML	20.00	mL	10.00
280-0059880-054	#54 280-98187-G-17-A		Client		SoilML	20.00	mL	1.000
280-0059880-055	#55 CCVC	MV-ARCH SS A_00081 MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	CCVC		SoilML	20.00	mL	1.000

Supp - MLE

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GCMS Volatile ICAL Data Review Checklist

LIMS Batch Number: 377604	Worklist #: 59080	ICAL Event #: 29520	ICIS/ICV Line #s: 41 / 44	2nd Day ICV Line# N/A	Instrument ID: P
2nd Day Batch/ICV Lines: N/A					
Analyst/1st Reviewer: N/A Date: 8/6/17	Prep Method (circle): 5030 5035-L 5035-H		Analytical Method (circle): 624 (8260B) SIM Other_____		
QC Type (circle): Standard (DOD Q4) (DoD Q5)	QAPP_____		Other_____		
Matrix (circle one): Water (Solid)			Circle: 5-mL 20-mL (Meth Ext) 5 g		

Review Items	NA	Yes	No	2nd Rev	Comments
A. Tune / Calibration					
1. Did BFB meet tune criteria? If CFCs, did autotune meet SOP criteria?		✓		✓	
2. Were all standards injected within 12 hours of the BFB? (or 24 hours for 624?)		✓		✓	
3. Were ≥ 5 levels of each compound and surrogate analyzed? (624 has minimum of four standards)		✓		✓	
4. Was low level standard at or below RL?		✓		✓	
5. If calibration points removed, were reasons for removal documented? Did sufficient calibration points remain? (removal from middle of curve not allowed)		✓		✓	(Other than those stated in SOP)
6. Do the average RFs meet minimum RF requirements? (624 – not method defined) (8260B-SPCCs = Chloromethane, 1,1-Dichloroethane, Bromoform ≥0.1; Chlorobenzene, 1,1,2,2-Tetrachloroethane ≥0.3)		✓		✓	
7. Did the calibration %RSD meet method requirements? (624: ≤35% all cmpds) (8260B: ≤30% for CCCs & ≤15% for all other cmpds/surrogates)		✓		✓	
8. Was a linear or quadratic regression fit used for analytes that exceeded the %RSD requirements?		✓		✓	
9. If regression fit used, is r^2 ≥0.990?		✓		✓	
10. At least 6 consecutive points used for quadratic curves?	✓			✓	
11. For quadratic – examine plot: Is a tangent's slope to the curve entirely positive or negative and continuous? (does not flatten or recurve within the range of calibration)	✓				
12. For quadratic – evaluate curve fitting errors: Does each point fall within criteria when 'read-back' against the curve? (TA requirement – CA-Q-S-005);(recommended limits ±30% low point & ±20% all other points) (Chrom Report = Details of Calibration per Analyte)	✓			✓	
13. Is the concentration intercept <|RL| for each cmpd? ("X" intercept in Chrom)		✓		✓	
Were manual integrations performed correctly and properly documented?(dated, initialed and reason given) 2nd review of all MIs required		✓		✓	Cal - 2
14. Was the high point checked for detector saturation?		✓		✓	

Review Items	NA	Yes	No	2nd Rev	Comments
15. Isomeric pairs(checked for elution order/correct peak assignment? • Vinyl Acetate / Isopropyl Ether • 1,2- & 1,3-& 1,4-Dichlorobenzene • Ethylbenzene / m- & p-Xylenes • o-Xylene / Styrene • 1,3,5- & 1,2,4-Trimethylbenzene / Isopropylbenzene / sec-butylbenzene • 2-nitropropane between bromodichloromethane & MIBK • 2- & 4-Chlorotoluene / n-Propylbenzene • MIBK / 2-Hexanone • Methyl Methacrylate / Ethyl Methacrylate • 1,1-Dichloroethene / cis-1,2- & trans-1,2-Dichloroethene • 1,2,3- & 1,2,4-Trichlorobenzene • 1,1-Dichloropropene / cis-1,3- & trans-1,3-Dichloropropene / 1,2,3-Trichloropropane • Chlorobenzene-d5 / 1,1,1,2-Tetrachloroethane • Trichlorofluoromethane / Freon 113 • Hexane / Vinyl Acetate (Chrom: View/Documents/Methods/Isomers)			✓	✓	
16. Was the 2nd source initial calibration verification standard (ICV) within required criteria? (624 = QCS method defined/Table5) (8260B = SOP defined) (DoD = ±20%) QAPP specific_____		✓		✓	
17. Was the ICV Target report printed and elution order of all analytes verified? (attach at L1 Review)		✓		✓	**If No, immediate corrective action required**
18. If any criteria from items 1-17 were not met, was a NCM generated and supervisor copied?		✓		✓	
19. Are all files and QC linked and processed correctly?		✓		✓	□ Files linked properly to calibration levels? □ All points are in the most recent active calibration event? [Calibration Events –'Fix ICAL linkage' if needed] □ Runs linked to BFB? [QC links] □ Checklist & run log scanned, attached & assigned properly?
20. Is the ICAL locked in TALS and Chrom?		✓		✓	
21. ICAL Date and Instrument ID verified?		✓		✓	

Comments: _____

4/20/17

2nd Reviewer: _____ **Review Date:** 4/20/17

Sequence Name: C:\HPCHEM\1\SEQUENCE\061917.S
Comment:
Operator: SEIFERTJ
Data Path: C:\HPCHEM\1\DATA\061917MI\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Test America Denver
Instrument: 3
DV-MS-0010 (8260B/624) (Circle)
Purge Volume: (20mL/5mL/5g)
(Circle)
Tune Time: 1040 - 2059
Lims Batch: 377804

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	P0021	BFB	BFB
2	Sample	100	P0022	BFB	BFB
3	Sample	10	P0023	8260MLE	PRIMER
4	Sample	100	P0024	BFBMLE	BFB
5	Sample	100	P0025	BFBMLE	BFB
6	Sample	100	P0026	BFBMLE	BFB
7	Sample	100	P0027	BFBMLE	BFB
8	Sample	10	P0028	8260MLE	STD005
9	Sample	11	P0029	8260MLE	STD010
10	Sample	12	P0030	8260MLE	STD020
11	Sample	13	P0031	8260MLE	STD050
12	Sample	14	P0032	8260MLE	STD10
13	Sample	15	P0033	8260MLE	STD30
14	Sample	16	P0034	8260MLE	STD60
15	Sample	17	P0035	8260MLE	BLK
16	Sample	18	P0036	8260MLE	ICV
17	Sample	19	P0037	8260MLE	STD005
18	Sample	20	P0038	8260MLE	STD010
19	Sample	21	P0039	8260MLE	ICV RR
20	Sample	22	P0040	8260MLE	STD050
21	Sample	23	P0041	8260MLE	ICIS
22	Sample	24	P0042	8260MLE	STD30
23	Sample	25	P0043	8260MLE	STD60
24	Sample	26	P0044	8260MLE	STD020
25	Sample	27	P0045	8260MLE	BLK
26	Sample	28	P0046	8260MLE	ICV
27	Sample	29	P0047	8260MLE	ICV
28	Sample	30	P0048	8260MLE	mb 280-377884/1-a
29	Sample	31	P0049	8260MLE	lcs 280-377884/2-a
30	Sample	32	P0050	8260MLE	lcsd 280-377884/3-a
31	Sample	33	P0051	8260MLE	280-97928-f-20-a
32	Sample	34	P0052	8260MLE	280-98172-d-5-a 10X
33	Sample	35	P0053	8260MLE	280-98172-d-6-a 10X
34	Sample	36	P0054	8260MLE	CCVC
35	Sample	37	P0055	8260MLE	280-98172-d-11-a 10X
36	Sample	38	P0056	8260MLE	280-98172-d-13-a 10X
37	Sample	39	P0057	8260MLE	280-98187-g-17-a 10X
38	Sample	40	P0058	8260MLE	280-98172-d-9-a 10X

Switch to MLE
10:40
6/20/17
20:59

TestAmerica Laboratories
Worklist QC Batch Report

Worklist Name: 061917M Worklist Number: 59880
Instrument Name: VMS_P Chrom Method: MLE_VMSP_8260
Data Directory: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b
QC Batching: Disabled Limit Group Batching: Enabled

QC Batch: 1 MSV - 8260B Water and Solid
Raw Batch: 377804

# 1 BFB	# 1 BFB
# 2 CCV	# 2 CCV
# 3 CCV	# 3 CCV
#27 STD005	#27 STD005
#28 STD010	#28 STD010
#29 STD020	#29 STD020
#30 STD050	#30 STD050
#31 STD10	#31 STD10
#32 STD30	#32 STD30
#33 STD60	#33 STD60
#34 ICV	#34 ICV
#35 ICV	#35 ICV
#37 STD005	#37 STD005
#38 STD010	#38 STD010
#39 STD020	#39 STD020
#40 STD050	#40 STD050
#41 ICIS	#41 ICIS
#42 STD30	#42 STD30
#43 STD60	#43 STD60
#44 ICV	#44 ICV
#45 MB 280-377884/1-A	#45 MB 280-377884/1-A
#46 LCS 280-377884/2-A	#46 LCS 280-377884/2-A
#47 LCSD 280-377884/3-A	#47 LCSD 280-377884/3-A
#48 280-97928-F-20-A	#48 280-97928-F-20-A
#49 280-98172-D-5-A	#49 280-98172-D-5-A
#50 280-98172-D-6-A	#50 280-98172-D-6-A
#51 280-98172-D-9-A	#51 280-98172-D-9-A
#52 280-98172-D-11-A	#52 280-98172-D-11-A
#53 280-98172-D-13-A	#53 280-98172-D-13-A
#54 280-98187-G-17-A	#54 280-98187-G-17-A
#55 CCVC	#55 CCVC

TestAmerica Laboratories
Worklist Report

Worklist Name: 061917M Worklist Number: 59880
Instrument Name: VMS_P Chrom Method: MLE_VMSP_8260
Purge Volume: 20.00 Units: mL
Analysis Type: VOA
Batch Directory: \\ChromNA\Denver\ChromData\VMS_P\20170619-59880.b
Upload Directory: \\CorpTALSAPP16\280-DN-RawData\Organics\MS\VMS_P
Run Reagent: MV-567649-D_00001 Amount Added: 1.000, Units: uL

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059880-001	# 1 BFB	MV-BFB_00023	BFB		SoilML	1.000	uL	1.000
280-0059880-002	# 2 CCV	MV-2cleve+AVA_00025 MV-Gas/Ket A_00060 MV-Main A_00030 MV-ARCH SS A_00081	CCV		SoilML	20.00	mL	1.000
280-0059880-003	# 3 CCV	MV-Supp A_00024	CCV		SoilML	20.00	mL	1.000
280-0059880-027	#27 STD005	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	1	SoilML	20.00	mL	1.000
280-0059880-028	#28 STD010	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	2	SoilML	20.00	mL	1.000
280-0059880-029	#29 STD020	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	3	SoilML	20.00	mL	1.000
280-0059880-030	#30 STD050	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	4	SoilML	20.00	mL	1.000
280-0059880-031	#31 STD10	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	5	SoilML	20.00	mL	1.000
280-0059880-032	#32 STD30	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	6	SoilML	20.00	mL	1.000
280-0059880-033	#33 STD60	MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	IC	7	SoilML	20.00	mL	1.000
280-0059880-034	#34 ICV	MV-SS 2-Cleve_00035 MV-Main B_00018 MV-Gas/Ket B_00035	ICV		SoilML	20.00	mL	1.000
280-0059880-035	#35 ICV	MV-Main B_00018	ICV		SoilML	20.00	mL	1.000
280-0059880-037	#37 STD005	MV-Supp A_00024 MV-ARCH SS A_00082	IC	1	SoilML	20.00	mL	1.000

Worklist ID	Lims ID	Sample Reagents	Smp Type	Cal Lvl	Fract	Initial Vol/Wt	Vol/Wt Units	Dil Fact
280-0059880-038	#38 STD010	MV-Supp A_00024 MV-ARCH SS A_00082	IC	2	oaSoilML	20.00	mL	1.000
280-0059880-039	#39 STD020	MV-Supp A_00024 MV-ARCH SS A_00082	IC	3	oaSoilML	20.00	mL	1.000
280-0059880-040	#40 STD050	MV-Supp A_00024 MV-ARCH SS A_00082	IC	4	oaSoilML	20.00	mL	1.000
280-0059880-041	#41 ICIS	MV-Supp A_00024 MV-ARCH SS A_00082	ICIS	5	oaSoilML	20.00	mL	1.000
280-0059880-042	#42 STD30	MV-Supp A_00024 MV-ARCH SS A_00082	IC	6	oaSoilML	20.00	mL	1.000
280-0059880-043	#43 STD60	MV-Supp A_00024 MV-ARCH SS A_00082	IC	7	oaSoilML	20.00	mL	1.000
280-0059880-044	#44 ICV	MV-Supp B_00016 MV-ARCH SS A_00082	ICV		oaSoilML	20.00	mL	1.000
280-0059880-045	#45 MB 280-377884/1-A		MB		oaSoilML	20.00	mL	1.000
280-0059880-046	#46 LCS 280-377884/2-A		LCS		oaSoilML	20.00	mL	1.000
280-0059880-047	#47 LCSD 280-377884/3-A		LCSD		oaSoilML	20.00	mL	1.000
280-0059880-048	#48 280-97928-F-20-A		Client		oaSoilML	20.00	mL	1.000
280-0059880-049	#49 280-98172-D-5-A		Client		oaSoilML	20.00	mL	10.00
280-0059880-050	#50 280-98172-D-6-A		Client		oaSoilML	20.00	mL	10.00
280-0059880-051	#51 280-98172-D-9-A		Client		oaSoilML	20.00	mL	10.00
280-0059880-052	#52 280-98172-D-11-A		Client		oaSoilML	20.00	mL	10.00
280-0059880-053	#53 280-98172-D-13-A		Client		oaSoilML	20.00	mL	10.00
280-0059880-054	#54 280-98187-G-17-A		Client		oaSoilML	20.00	mL	1.000
280-0059880-055	#55 CCVC	MV-ARCH SS A_00081 MV-Main A_00030 MV-Gas/Ket A_00060 MV-2cleve+AVA_00025	CCVC		oaSoilML	20.00	mL	1.000

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Batch Number: 377540 Batch Start Date: 06/15/17 15:00 Batch Analyst: Dukes, Aaron D

Batch Method: 5035 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
MB 280-377540/1		5035, 8260B		30 g	35 g	5 g	5 mL		
LCS 280-377540/2		5035, 8260B		30 g	35 g	5 g	5 mL		
LCS 280-377540/3		5035, 8260B		30 g	35 g	5 g	5 mL		
280-97928-E-1	SS025-SS07	5035, 8260B	T	+030.483 g	36.197 g	5.714 g	5 mL		

Batch Notes	
Balance ID	24850252
Blank Sand Lot #	170485

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Batch Number: 377664 Batch Start Date: 06/16/17 12:00 Batch Analyst: Dukes, Aaron D

Batch Method: 5035 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
MB 280-377664/1		5035, 8260B		30 g	35 g	5 g	5 mL		
LCS 280-377664/2		5035, 8260B		30 g	35 g	5 g	5 mL		
LCS 280-377664/3		5035, 8260B		30 g	35 g	5 g	5 mL		
280-97928-E-14	SS025-SB09(0-2)	5035, 8260B	T	+031.186 g	37.472 g	6.286 g	5 mL		
280-97928-E-15	SS025-SB09(2-4)	5035, 8260B	T	+030.468 g	37.319 g	6.851 g	5 mL		
280-97928-E-16	SS025-SB09(4-6)	5035, 8260B	T	+030.508 g	37.112 g	6.604 g	5 mL		
280-97928-D-17	SS025-SB09(6-8)	5035, 8260B	T	+030.843 g	38.145 g	7.302 g	5 mL		
280-97928-D-18	SS025-SB10(0-2)	5035, 8260B	T	+031.155 g	36.269 g	5.114 g	5 mL		
280-97928-D-19	SS025-SB10(2-4)	5035, 8260B	T	+031.162 g	35.886 g	4.724 g	5 mL		
280-97928-D-21	SS025-SB10(2-4)-a	5035, 8260B	T	+030.856 g	36.334 g	5.478 g	5 mL		
280-97928-D-22	SS025-SS10	5035, 8260B	T	+030.418 g	36.267 g	5.849 g	5 mL		

Batch Notes	
Balance ID	24850252
Blank Sand Lot #	170485

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Batch Number: 377666 Batch Start Date: 06/16/17 12:00 Batch Analyst: Dukes, Aaron D

Batch Method: 5035 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount		
MB 280-377666/1		5035, 8260B		30 g	35 g	5 g	5 mL		
LCS 280-377666/2		5035, 8260B		30 g	35 g	5 g	5 mL		
LCS 280-377666/3		5035, 8260B		30 g	35 g	5 g	5 mL		
280-97928-B-2	SS025-TB02	5035, 8260B	T	+030.364 g	35.364 g	5 g	5 mL		
280-97928-E-3	SS025-SB06(0-2)	5035, 8260B	T	+030.529 g	35.956 g	5.427 g	5 mL		
280-97928-E-4	SS025-SB06(2-4)	5035, 8260B	T	+030.645 g	36.348 g	5.703 g	5 mL		
280-97928-E-5	SS025-SS08	5035, 8260B	T	+030.557 g	37.359 g	6.802 g	5 mL		
280-97928-E-6	SS025-SB07(0-2)	5035, 8260B	T	+030.631 g	36.080 g	5.449 g	5 mL		
280-97928-E-7	SS025-SB07(2-4)	5035, 8260B	T	+030.584 g	36.588 g	6.004 g	5 mL		
280-97928-E-8	SS025-SB01(0-2)	5035, 8260B	T	+030.405 g	36.880 g	6.475 g	5 mL		
280-97928-E-9	SS025-SB01(0-2) -a	5035, 8260B	T	+030.563 g	37.940 g	7.377 g	5 mL		
280-97928-E-10	SS025-SB08(0-2)	5035, 8260B	T	+030.519 g	36.615 g	6.096 g	5 mL		
280-97928-E-11	SS025-SB08(2-4)	5035, 8260B	T	+030.540 g	37.339 g	6.799 g	5 mL		
280-97928-E-12	SS025-SS09	5035, 8260B	T	+031.224 g	38.521 g	7.297 g	5 mL		

Batch Notes	
Balance ID	24850252
Blank Soil Lot Number	170485

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Batch Number: 377884 Batch Start Date: 06/19/17 14:29 Batch Analyst: Seifert, Judy L

Batch Method: 5035 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	TareWeight	Vial&SampleWt	InitialAmount	FinalAmount	MV- MLE Gas 00022	MV-AFC MLE 00051
MB 280-377884/1		5035, 8260B		0 g	4.983 g	4.983 g	1000 mL		
LCS 280-377884/2		5035, 8260B		0 g	5.0 g	5 g	1000 mL	50 uL	40 uL
LCSD 280-377884/3		5035, 8260B		0 g	5.0 g	5 g	1000 mL	50 uL	40 uL
280-97928-F-20	SS025-SB10(4-6)	5035, 8260B	T	+028.209 g	33.553 g	5.344 g	1000 mL		

Lab Sample ID	Client Sample ID	Method Chain	Basis	MV-ARCH SS A 00082	MV-MLE KETONE 00036				
MB 280-377884/1		5035, 8260B		40 uL					
LCS 280-377884/2		5035, 8260B		40 uL	40 uL				
LCSD 280-377884/3		5035, 8260B		40 uL	40 uL				
280-97928-F-20	SS025-SB10(4-6)	5035, 8260B	T	40 uL					

Batch Notes	
Balance ID	24850252
Pipette ID	msv-mp-002
Blank Sand Lot #	170485

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8270D_SIM_DOD5

Semivolatile Organic Compounds (GC/MS SIM)

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Rxi-5Sil MS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	NBZ #	FBP #	TPHL #
SS025-SS07	280-97928-1	81	67	62
SS025-SB06(0-2)	280-97928-3	65	68	62
SS025-SB06(2-4)	280-97928-4	41 Q	46	66
SS025-SS08	280-97928-5	50	61	66
SS025-SB07(0-2)	280-97928-6	72	74	62
SS025-SB07(2-4)	280-97928-7	63	62	55 Q
SS025-SB01(0-2)	280-97928-8	72	72	107
SS025-SB01(0-2) DL	280-97928-8 DL	0 D Q	502 D Q	1746 D Q
SS025-SB01(0-2)-a	280-97928-9	89	84	87
SS025-SB01(0-2)-a DL	280-97928-9 DL	0 D Q	94 D	118 D
SS025-SB08(0-2)	280-97928-10	82	81	69
SS025-SB08(2-4)	280-97928-11	81	88	75
SS025-SS09	280-97928-12	95	84	77
SS025-SB09(0-2)	280-97928-14	81	85	78
SS025-SB09(2-4)	280-97928-15	90	88	75
SS025-SB09(4-6)	280-97928-16	96	81	78
SS025-SB09(6-8)	280-97928-17	91	89	77
SS025-SB10(0-2)	280-97928-18	94	90	77
SS025-SB10(2-4)	280-97928-19	89	82	74
SS025-SB10(4-6)	280-97928-20	90	88	75
SS025-SB10(2-4)-a	280-97928-21	88	92	76
SS025-SS10	280-97928-22	80	78	72
	MB 280-376824/1-A	86	86	97
	LCS 280-376824/2-A	92	90	85
SS025-SS07 MS	280-97928-1 MS	96	72	67
SS025-SS07 MSD	280-97928-1 MSD	98	73	68

	QC LIMITS
NBZ = Nitrobenzene-d5 (Surr)	44-125
FBP = 2-Fluorobiphenyl (Surr)	46-115
TPHL = Terphenyl-d14 (Surr)	58-133

Column to be used to flag recovery values

FORM II 8270D SIM

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rxi-5Sil MS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	NBZ #	FBP #	TPHL #
SS025-AB-060517	280-97928-13	73	74	84
	MB 280-376856/1-A	84	78	85
	LCS 280-376856/2-A	83	81	107
	LCSD 280-376856/3-A	88	86	83

	QC LIMITS
NBZ = Nitrobenzene-d5 (Surr)	55-111
FBP = 2-Fluorobiphenyl (Surr)	53-106
TPHL = Terphenyl-d14 (Surr)	58-132

Column to be used to flag recovery values

FORM II 8270D SIM

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F7226.D

Lab ID: LCS 280-376824/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1-Methylnaphthalene	28.2	22.0	78	43-111	
2-Methylnaphthalene	28.2	23.6	84	39-114	
Acenaphthene	28.2	23.3	82	44-111	
Acenaphthylene	28.2	21.9	78	39-116	
Anthracene	28.2	22.7	81	50-114	
Benzo[a]anthracene	28.2	23.9	85	54-122	
Benzo[a]pyrene	28.2	21.0	74	50-125	
Benzo[b]fluoranthene	28.2	22.5	80	53-128	
Benzo[g,h,i]perylene	28.2	18.1	64	49-127	
Benzo[k]fluoranthene	28.2	23.0	81	56-123	
Chrysene	28.2	26.1	92	57-118	
Dibenz(a,h)anthracene	28.2	18.5	66	50-129	
Fluoranthene	28.2	23.6	84	55-119	
Fluorene	28.2	24.2	86	47-114	
Indeno[1,2,3-cd]pyrene	28.2	18.6	66	49-130	
Naphthalene	28.2	22.1	78	38-111	
Phenanthrene	28.2	22.6	80	49-113	
Pyrene	28.2	24.0	85	55-117	

Column to be used to flag recovery and RPD values

FORM III 8270D SIM

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Water Level: Low Lab File ID: F7309.D

Lab ID: LCS 280-376856/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1-Methylnaphthalene	0.900	0.621	69	41-115	
2-Methylnaphthalene	0.900	0.657	73	39-114	
Acenaphthene	0.900	0.715	79	48-114	
Acenaphthylene	0.900	0.651	72	35-121	
Anthracene	0.900	0.721	80	53-119	
Benzo[a]anthracene	0.900	0.785	87	59-120	
Benzo[a]pyrene	0.900	0.761	85	53-120	
Benzo[b]fluoranthene	0.900	0.778	86	53-126	
Benzo[g,h,i]perylene	0.900	0.682	76	44-128	
Benzo[k]fluoranthene	0.900	0.810	90	54-125	
Chrysene	0.900	0.851	95	57-120	
Dibenz(a,h)anthracene	0.900	0.691	77	44-131	
Fluoranthene	0.900	0.748	83	58-120	
Fluorene	0.900	0.721	80	50-118	
Indeno[1,2,3-cd]pyrene	0.900	0.697	77	48-130	
Naphthalene	0.900	0.624	69	43-114	
Phenanthrene	0.900	0.694	77	53-115	
Pyrene	0.900	0.757	84	53-121	

Column to be used to flag recovery and RPD values

FORM III 8270D SIM

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Water Level: Low Lab File ID: F7310.D

Lab ID: LCSD 280-376856/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1-Methylnaphthalene	0.900	0.669	74	7	20	41-115	
2-Methylnaphthalene	0.900	0.703	78	7	20	39-114	
Acenaphthene	0.900	0.761	85	6	20	48-114	
Acenaphthylene	0.900	0.706	78	8	20	35-121	
Anthracene	0.900	0.758	84	5	20	53-119	
Benzo[a]anthracene	0.900	0.784	87	0	20	59-120	
Benzo[a]pyrene	0.900	0.763	85	0	20	53-120	
Benzo[b]fluoranthene	0.900	0.770	86	1	20	53-126	
Benzo[g,h,i]perylene	0.900	0.667	74	2	20	44-128	
Benzo[k]fluoranthene	0.900	0.807	90	0	20	54-125	
Chrysene	0.900	0.848	94	0	20	57-120	
Dibenz(a,h)anthracene	0.900	0.677	75	2	20	44-131	
Fluoranthene	0.900	0.781	87	4	20	58-120	
Fluorene	0.900	0.764	85	6	20	50-118	
Indeno[1,2,3-cd]pyrene	0.900	0.682	76	2	20	48-130	
Naphthalene	0.900	0.644	72	3	20	43-114	
Phenanthrene	0.900	0.729	81	5	20	53-115	
Pyrene	0.900	0.775	86	2	20	53-121	

Column to be used to flag recovery and RPD values

FORM III 8270D SIM

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F7272.D

Lab ID: 280-97928-1 MS Client ID: SS025-SS07 MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1-Methylnaphthalene	33.9	0.38 J	22.7	66	43-111	
2-Methylnaphthalene	33.9	0.48 J	24.7	71	39-114	
Acenaphthene	33.9	0.43 J	23.9	69	44-111	
Acenaphthylene	33.9	1.7 J	23.8	65	39-116	
Anthracene	33.9	1.7 J	24.5	67	50-114	
Benzo[a]anthracene	33.9	6.4	30.8	72	54-122	
Benzo[a]pyrene	33.9	7.6	31.2	69	50-125	
Benzo[b]fluoranthene	33.9	12	36.0	72	53-128	
Benzo[g,h,i]perylene	33.9	5.1 J	25.2	59	49-127	
Benzo[k]fluoranthene	33.9	4.8 J	30.7	76	56-123	
Chrysene	33.9	9.6	35.6	77	57-118	
Dibenz(a,h)anthracene	33.9	1.5 J	22.0	60	50-129	
Fluoranthene	33.9	15	36.1	64	55-119	
Fluorene	33.9	0.98 J	24.5	69	47-114	
Indeno[1,2,3-cd]pyrene	33.9	4.5 J	25.5	62	49-130	
Naphthalene	33.9	0.58 J	22.6	65	38-111	
Phenanthrene	33.9	6.8	29.3	66	49-113	
Pyrene	33.9	13	34.8	65	55-117	

Column to be used to flag recovery and RPD values

FORM III 8270D SIM

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: F7273.D

Lab ID: 280-97928-1 MSD Client ID: SS025-SS07 MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1-Methylnaphthalene	33.3	22.2	65	2	20	43-111	
2-Methylnaphthalene	33.3	23.6	70	4	20	39-114	
Acenaphthene	33.3	24.5	72	3	20	44-111	
Acenaphthylene	33.3	23.9	67	0	20	39-116	
Anthracene	33.3	25.6	72	4	20	50-114	
Benzo[a]anthracene	33.3	33.1	80	7	20	54-122	
Benzo[a]pyrene	33.3	32.5	75	4	20	50-125	
Benzo[b]fluoranthene	33.3	37.9	79	5	20	53-128	
Benzo[g,h,i]perylene	33.3	26.2	63	4	20	49-127	
Benzo[k]fluoranthene	33.3	31.6	81	3	20	56-123	
Chrysene	33.3	37.8	85	6	20	57-118	
Dibenz(a,h)anthracene	33.3	21.7	61	2	20	50-129	
Fluoranthene	33.3	40.5	78	11	20	55-119	
Fluorene	33.3	24.8	72	1	20	47-114	
Indeno[1,2,3-cd]pyrene	33.3	25.9	64	2	20	49-130	
Naphthalene	33.3	22.1	65	2	20	38-111	
Phenanthrene	33.3	31.4	74	7	20	49-113	
Pyrene	33.3	39.6	80	13	20	55-117	

Column to be used to flag recovery and RPD values

FORM III 8270D SIM

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab File ID: F7225.D Lab Sample ID: MB 280-376824/1-A

Matrix: Solid Date Extracted: 06/11/2017 07:19

Instrument ID: SMS_F Date Analyzed: 06/15/2017 07:39

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-376824/2-A	F7226.D	06/15/2017 08:04
SS025-SS07	280-97928-1	F7271.D	06/16/2017 16:29
SS025-SS07 MS	280-97928-1 MS	F7272.D	06/16/2017 16:55
SS025-SS07 MSD	280-97928-1 MSD	F7273.D	06/16/2017 17:21
SS025-SB06(0-2)	280-97928-3	F7274.D	06/16/2017 17:47
SS025-SB06(2-4)	280-97928-4	F7275.D	06/16/2017 18:13
SS025-SS08	280-97928-5	F7276.D	06/16/2017 18:39
SS025-SB07(0-2)	280-97928-6	F7277.D	06/16/2017 19:05
SS025-SB07(2-4)	280-97928-7	F7278.D	06/16/2017 19:30
SS025-SB01(0-2)	280-97928-8	F7279.D	06/16/2017 19:57
SS025-SB01(0-2)-a	280-97928-9	F7280.D	06/16/2017 20:22
SS025-SB08(0-2)	280-97928-10	F7281.D	06/16/2017 20:48
SS025-SB08(2-4)	280-97928-11	F7282.D	06/16/2017 21:14
SS025-SS09	280-97928-12	F7283.D	06/16/2017 21:40
SS025-SB09(0-2)	280-97928-14	F7284.D	06/16/2017 22:06
SS025-SB09(2-4)	280-97928-15	F7285.D	06/16/2017 22:32
SS025-SB09(4-6)	280-97928-16	F7286.D	06/16/2017 22:57
SS025-SB09(6-8)	280-97928-17	F7287.D	06/16/2017 23:23
SS025-SB10(0-2)	280-97928-18	F7288.D	06/16/2017 23:49
SS025-SB10(2-4)	280-97928-19	F7289.D	06/17/2017 00:15
SS025-SB10(4-6)	280-97928-20	F7290.D	06/17/2017 00:40
SS025-SB10(2-4)-a	280-97928-21	F7291.D	06/17/2017 01:06
SS025-SS10	280-97928-22	F7292.D	06/17/2017 01:32
SS025-SB01(0-2) DL	280-97928-8 DL	F7315.D	06/20/2017 20:26
SS025-SB01(0-2)-a DL	280-97928-9 DL	F7316.D	06/20/2017 20:52

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab File ID: F7308.D Lab Sample ID: MB 280-376856/1-A

Matrix: Water Date Extracted: 06/12/2017 15:16

Instrument ID: SMS_F Date Analyzed: 06/20/2017 17:23

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 280-376856/2-A	F7309.D	06/20/2017 17:49
	LCSD 280-376856/3-A	F7310.D	06/20/2017 18:15
SS025-AB-060517	280-97928-13	F7314.D	06/20/2017 19:59

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab File ID: F6543.D DFTPP Injection Date: 05/11/2017

Instrument ID: SMS_F DFTPP Injection Time: 12:39

Analysis Batch No.: 373158

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	53.8	
68	Less than 2.0 % of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	60.2	
70	Less than 2.0 % of mass 69	0.2	(0.4) 1
127	40.0 - 60.0 % of mass 198	53.5	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.7	
275	10.0 - 30.0 % of mass 198	25.6	
365	Greater than 1.0 % of mass 198	4.0	
441	Present but less than mass 443	12.4	(78.3) 3
442	Greater than 40.0 % of mass 198	80.0	
443	17.0 - 23.0 % of mass 442	15.8	(19.7) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICIS 280-373158/2	F6544.D	05/11/2017	12:58
	STD0020 280-373158/3	F6545.D	05/11/2017	13:34
	STD0100 280-373158/4	F6546.D	05/11/2017	13:59
	STD0300 280-373158/5	F6547.D	05/11/2017	14:25
	STD1200 280-373158/6	F6548.D	05/11/2017	14:50
	STD2500 280-373158/7	F6549.D	05/11/2017	15:16
	STD5000 280-373158/8	F6550.D	05/11/2017	15:42
	STD10000 280-373158/9	F6551.D	05/11/2017	16:07
	ICV 280-373158/10	F6552.D	05/11/2017	16:33

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab File ID: F7223.D DFTPP Injection Date: 06/15/2017

Instrument ID: SMS_F DFTPP Injection Time: 06:49

Analysis Batch No.: 377379

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	56.3	
68	Less than 2.0 % of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	68.9	
70	Less than 2.0 % of mass 69	0.3	(0.5) 1
127	40.0 - 60.0 % of mass 198	55.6	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	7.4	
275	10.0 - 30.0 % of mass 198	25.3	
365	Greater than 1.0 % of mass 198	3.6	
441	Present but less than mass 443	9.2	(93.5) 3
442	Greater than 40.0 % of mass 198	50.9	
443	17.0 - 23.0 % of mass 442	9.8	(19.3) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-377379/2	F7224.D	06/15/2017	07:01
	MB 280-376824/1-A	F7225.D	06/15/2017	07:39
	LCS 280-376824/2-A	F7226.D	06/15/2017	08:04
	CCVC 280-377379/7	F7229.D	06/15/2017	09:27

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab File ID: F7267.D DFTPP Injection Date: 06/16/2017

Instrument ID: SMS_F DFTPP Injection Time: 14:53

Analysis Batch No.: 377669

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	53.1	
68	Less than 2.0 % of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	65.2	
70	Less than 2.0 % of mass 69	0.4	(0.7) 1
127	40.0 - 60.0 % of mass 198	52.4	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	7.2	
275	10.0 - 30.0 % of mass 198	24.0	
365	Greater than 1.0 % of mass 198	4.0	
441	Present but less than mass 443	5.2	(48.4) 3
442	Greater than 40.0 % of mass 198	54.4	
443	17.0 - 23.0 % of mass 442	10.7	(19.8) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-377669/2	F7268.D	06/16/2017	15:08
SS025-SS07	280-97928-1	F7271.D	06/16/2017	16:29
SS025-SS07 MS	280-97928-1 MS	F7272.D	06/16/2017	16:55
SS025-SS07 MSD	280-97928-1 MSD	F7273.D	06/16/2017	17:21
SS025-SB06(0-2)	280-97928-3	F7274.D	06/16/2017	17:47
SS025-SB06(2-4)	280-97928-4	F7275.D	06/16/2017	18:13
SS025-SS08	280-97928-5	F7276.D	06/16/2017	18:39
SS025-SB07(0-2)	280-97928-6	F7277.D	06/16/2017	19:05
SS025-SB07(2-4)	280-97928-7	F7278.D	06/16/2017	19:30
SS025-SB01(0-2)	280-97928-8	F7279.D	06/16/2017	19:57
SS025-SB01(0-2)-a	280-97928-9	F7280.D	06/16/2017	20:22
SS025-SB08(0-2)	280-97928-10	F7281.D	06/16/2017	20:48
SS025-SB08(2-4)	280-97928-11	F7282.D	06/16/2017	21:14
SS025-SS09	280-97928-12	F7283.D	06/16/2017	21:40
SS025-SB09(0-2)	280-97928-14	F7284.D	06/16/2017	22:06
SS025-SB09(2-4)	280-97928-15	F7285.D	06/16/2017	22:32
SS025-SB09(4-6)	280-97928-16	F7286.D	06/16/2017	22:57
SS025-SB09(6-8)	280-97928-17	F7287.D	06/16/2017	23:23
SS025-SB10(0-2)	280-97928-18	F7288.D	06/16/2017	23:49
SS025-SB10(2-4)	280-97928-19	F7289.D	06/17/2017	00:15
SS025-SB10(4-6)	280-97928-20	F7290.D	06/17/2017	00:40
SS025-SB10(2-4)-a	280-97928-21	F7291.D	06/17/2017	01:06
SS025-SS10	280-97928-22	F7292.D	06/17/2017	01:32
	CCVC 280-377669/27	F7293.D	06/17/2017	01:57

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab File ID: F7306.D DFTPP Injection Date: 06/20/2017

Instrument ID: SMS_F DFTPP Injection Time: 16:43

Analysis Batch No.: 378055

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % of mass 198	52.3	
68	Less than 2.0 % of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	64.0	
70	Less than 2.0 % of mass 69	0.3	(0.4) 1
127	40.0 - 60.0 % of mass 198	51.7	
197	Less than 1.0 % of mass 198	0.0	
198	Base Peak, 100 % relative abundance	100.0	
199	5.0- 9.0 % of mass 198	6.5	
275	10.0 - 30.0 % of mass 198	24.3	
365	Greater than 1.0 % of mass 198	4.8	
441	Present but less than mass 443	8.7	(94.2) 3
442	Greater than 40.0 % of mass 198	49.7	
443	17.0 - 23.0 % of mass 442	9.2	(18.6) 2

1-Value is % mass 69 2-Value is % mass 442 3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCV 280-378055/2	F7307.D	06/20/2017	16:55
	MB 280-376856/1-A	F7308.D	06/20/2017	17:23
	LCS 280-376856/2-A	F7309.D	06/20/2017	17:49
	LCSD 280-376856/3-A	F7310.D	06/20/2017	18:15
SS025-AB-060517	280-97928-13	F7314.D	06/20/2017	19:59
SS025-SB01(0-2) DL	280-97928-8 DL	F7315.D	06/20/2017	20:26
SS025-SB01(0-2)-a DL	280-97928-9 DL	F7316.D	06/20/2017	20:52
	CCVC 280-378055/27	F7332.D	06/21/2017	03:45

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Sample No.: ICIS 280-373158/2 Date Analyzed: 05/11/2017 12:58

Instrument ID: SMS_F GC Column: Rxi-5Sil MS ID: 0.25(mm)

Lab File ID (Standard): F6544.D Heated Purge: (Y/N) N

Calibration ID: 29139

		ANT		PHN		CRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		26826	6.04	49006	7.31	41978	11.38
UPPER LIMIT		53652	6.54	98012	7.81	83956	11.88
LOWER LIMIT		13413	5.54	24503	6.81	20989	10.88
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-373158/10		28386	6.03	52370	7.30	47349	11.36
CCV 280-377379/2		39710	6.03	79184	7.30	67433	11.38
MB 280-376824/1-A		19921	6.04	39503	7.31	33101	11.39
LCS 280-376824/2-A		20314	6.03	41204	7.30	34702	11.37
CCVC 280-377379/7		41089	6.03	77300	7.30	69184	11.37
CCV 280-377669/2		27983	6.03	52312	7.30	44750	11.38
280-97928-1	SS025-SS07	28640	6.03	51650	7.30	40724	11.36
280-97928-1 MS	SS025-SS07 MS	27375	6.03	48365	7.30	38601	11.36
280-97928-1 MSD	SS025-SS07 MSD	26104	6.03	47187	7.30	40875	11.36
280-97928-3	SS025-SB06(0-2)	27464	6.03	49870	7.30	41849	11.37
280-97928-4	SS025-SB06(2-4)	27035	6.03	51690	7.30	42705	11.37
280-97928-5	SS025-SS08	27484	6.03	48510	7.30	43401	11.36
280-97928-6	SS025-SB07(0-2)	26402	6.03	49968	7.30	40710	11.37
280-97928-7	SS025-SB07(2-4)	27894	6.03	50380	7.30	41870	11.37
280-97928-8	SS025-SB01(0-2)	26028	6.03	43924	7.30	44844	11.37
280-97928-9	SS025-SB01(0-2)-a	25398	6.03	42303	7.30	37468	11.36
280-97928-10	SS025-SB08(0-2)	24555	6.03	44540	7.30	37017	11.36
280-97928-11	SS025-SB08(2-4)	24142	6.03	44084	7.30	37553	11.36
280-97928-12	SS025-SS09	25362	6.03	41806	7.30	37202	11.36
280-97928-14	SS025-SB09(0-2)	21797	6.03	37819	7.30	34058	11.36
280-97928-15	SS025-SB09(2-4)	21740	6.03	38323	7.30	33485	11.36
280-97928-16	SS025-SB09(4-6)	21712	6.03	38491	7.30	34483	11.37
280-97928-17	SS025-SB09(6-8)	20964	6.03	35764	7.30	31716	11.37
280-97928-18	SS025-SB10(0-2)	22031	6.03	38515	7.30	34428	11.37
280-97928-19	SS025-SB10(2-4)	20736	6.03	38398	7.30	35709	11.38
280-97928-20	SS025-SB10(4-6)	21828	6.03	38959	7.30	35240	11.38
280-97928-21	SS025-SB10(2-4)-a	21584	6.03	38673	7.30	35486	11.38
280-97928-22	SS025-SS10	23912	6.03	42724	7.30	40009	11.37

ANT = Acenaphthene-d10
PHN = Phenanthrene-d10
CRY = Chrysene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D SIM

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Sample No.: ICIS 280-373158/2 Date Analyzed: 05/11/2017 12:58

Instrument ID: SMS_F GC Column: Rxi-5Sil MS ID: 0.25(mm)

Lab File ID (Standard): F6544.D Heated Purge: (Y/N) N

Calibration ID: 29139

		ANT		PHN		CRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		26826	6.04	49006	7.31	41978	11.38
UPPER LIMIT		53652	6.54	98012	7.81	83956	11.88
LOWER LIMIT		13413	5.54	24503	6.81	20989	10.88
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVC 280-377669/27		30972	6.03	59163	7.30	49910	11.37
CCV 280-378055/2		16335	6.03	31312	7.31	28868	11.38
MB 280-376856/1-A		16728	6.04	32352	7.31	29900	11.39
LCS 280-376856/2-A		18458	6.03	37336	7.30	31783	11.38
LCSD 280-376856/3-A		17170	6.03	34962	7.30	31173	11.38
280-97928-13	SS025-AB-060517	16295	6.04	33372	7.31	31042	11.39
280-97928-8 DL	SS025-SB01(0-2) DL	17448	6.03	34708	7.30	33027	11.37
280-97928-9 DL	SS025-SB01(0-2)-a DL	19001	6.03	36954	7.30	33749	11.37
CCVC 280-378055/27		18016	6.03	36341	7.31	34685	11.38

ANT = Acenaphthene-d10
PHN = Phenanthrene-d10
CRY = Chrysene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D SIM

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS07 | Lab Sample ID: 280-97928-1

Matrix: Solid | Lab File ID: F7271.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 08:15

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 31.0(g) | Date Analyzed: 06/16/2017 16:29

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 13.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.38	J	5.6	0.56	0.29
91-57-6	2-Methylnaphthalene	0.48	J	5.6	0.74	0.34
83-32-9	Acenaphthene	0.43	J	5.6	0.30	0.18
208-96-8	Acenaphthylene	1.7	J	5.6	0.74	0.19
120-12-7	Anthracene	1.7	J	5.6	2.8	0.80
56-55-3	Benzo[a]anthracene	6.4		5.6	2.8	1.0
50-32-8	Benzo[a]pyrene	7.6		5.6	2.8	0.83
205-99-2	Benzo[b]fluoranthene	12		5.6	2.8	1.3
191-24-2	Benzo[g,h,i]perylene	5.1	J	5.6	2.8	1.2
207-08-9	Benzo[k]fluoranthene	4.8	J	5.6	2.8	1.1
218-01-9	Chrysene	9.6		5.6	2.8	1.1
53-70-3	Dibenz(a,h)anthracene	1.5	J	5.6	2.8	1.5
206-44-0	Fluoranthene	15		5.6	2.8	1.1
86-73-7	Fluorene	0.98	J	5.6	0.74	0.52
193-39-5	Indeno[1,2,3-cd]pyrene	4.5	J	5.6	2.8	1.2
91-20-3	Naphthalene	0.58	J	5.6	0.74	0.36
85-01-8	Phenanthrene	6.8		5.6	2.8	1.2
129-00-0	Pyrene	13		5.6	2.8	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	67		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	81		44-125
1718-51-0	Terphenyl-d14 (Surr)	62		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7271.D
Lims ID: 280-97928-C-1-D
Client ID: SS025-SS07
Sample Type: Client
Inject. Date: 16-Jun-2017 16:29:30 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-1-d
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:11:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	100	28640	600.0	
* 2 Phenanthrene-d10	188	7.295	7.301	-0.006	100	51650	600.0	
* 3 Chrysene-d12	240	11.359	11.371	-0.012	96	40724	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	18141	404.4	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	99	25042	337.2	
$ 6 Terphenyl-d14	244	9.124	9.130	-0.006	96	16177	308.5	
9 1,4-Dioxane	88		1.903				ND	
11 Morpholine	87	1.850	1.916	-0.066	1	96	NC	
10 N-Nitrosodimethylamine	74		2.033				ND	
14 Naphthalene	128	4.589	4.589	0.000	97	1452	15.6	
16 2-Methylnaphthalene	142	5.143	5.147	-0.004	93	768	12.9	
17 1-Methylnaphthalene	142	5.230	5.235	-0.005	94	610	10.2	
20 Dimethyl phthalate	163		5.753				ND	
22 Acenaphthylene	152	5.908	5.917	-0.009	98	4462	45.2	
23 Acenaphthene	153	6.055	6.055	0.000	70	700	11.6	
32 Dibenzofuran	168	6.206	6.199	0.007	97	6463	68.5	
24 Diethyl phthalate	149	6.320	6.320	0.000	98	828	9.87	
25 Fluorene	166	6.487	6.494	-0.007	97	1949	26.3	
26 N-Nitrosodiphenylamine	169		6.570				ND	
27 Phenanthrene	178	7.314	7.321	-0.007	99	20132	183.8	
28 Anthracene	178	7.360	7.366	-0.006	95	5046	45.6	
29 Di-n-butyl phthalate	149	7.731	7.731	0.000	97	2358	16.8	
30 Fluoranthene	202	8.623	8.629	-0.006	100	49286	391.7	
31 Pyrene	202	8.961	8.968	-0.007	100	45122	345.8	
33 Butyl benzyl phthalate	149	9.905	9.957	-0.052	71	863	13.3	
34 Bis(2-ethylhexyl) phthalat	149	11.224	11.227	-0.003	100	24313	254.6	
35 Benzo[a]anthracene	228	11.332	11.344	-0.012	96	18582	171.6	
36 Chrysene	228	11.432	11.443	-0.011	99	25797	257.5	
37 Di-n-octyl phthalate	149		13.160				ND	
38 Benzo[b]fluoranthene	252	14.487	14.503	-0.016	98	30524	310.4	
39 Benzo[k]fluoranthene	252	14.566	14.586	-0.020	96	12704	128.5	
40 Benzo[a]pyrene	252	15.567	15.587	-0.020	97	19895	205.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.660	18.676	-0.016	76	13391	121.7	
42 Dibenz(a,h)anthracene	278	18.686	18.702	-0.016	55	3570	41.6	
43 Benzo[g,h,i]perylene	276	19.097	19.109	-0.012	90	12905	138.2	
7 Pentachlorophenol	266		0.000				ND	
8 Benzidine	184		0.000				ND	
12 Pentachlorophenol_T	266		4.254				ND	
15 Benzidine_T	184		5.412				ND	
19 4,4'-DDE	246		5.523				ND	
18 4,4'-DDD	235		5.848				ND	
21 4,4'-DDT	235		6.174				ND	
S 52 TPAH	1		0.000				ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

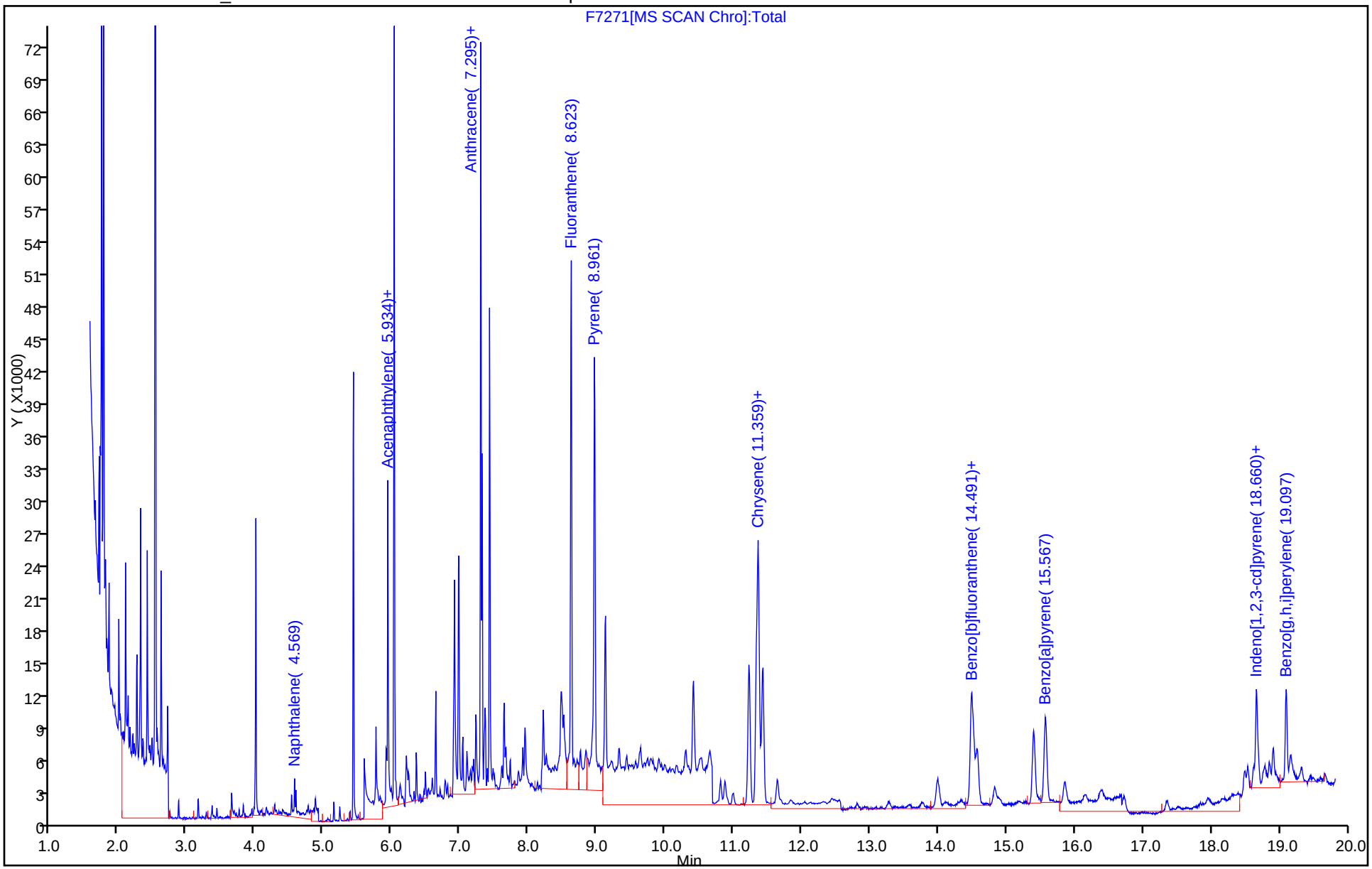
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:06 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7271.D

Injection Date:	16-Jun-2017 16:29:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-C-1-D	Lab Sample ID:	280-97928-1	Worklist Smp#:	5
Client ID:	SS025-SS07				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7271.D
Lims ID: 280-97928-C-1-D
Client ID: SS025-SS07
Sample Type: Client
Inject. Date: 16-Jun-2017 16:29:30 ALS Bottle#: 4 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-1-d
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:11:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	404.4	80.87
$ 5 2-Fluorobiphenyl	500.0	337.2	67.44
$ 6 Terphenyl-d14	500.0	308.5	61.69

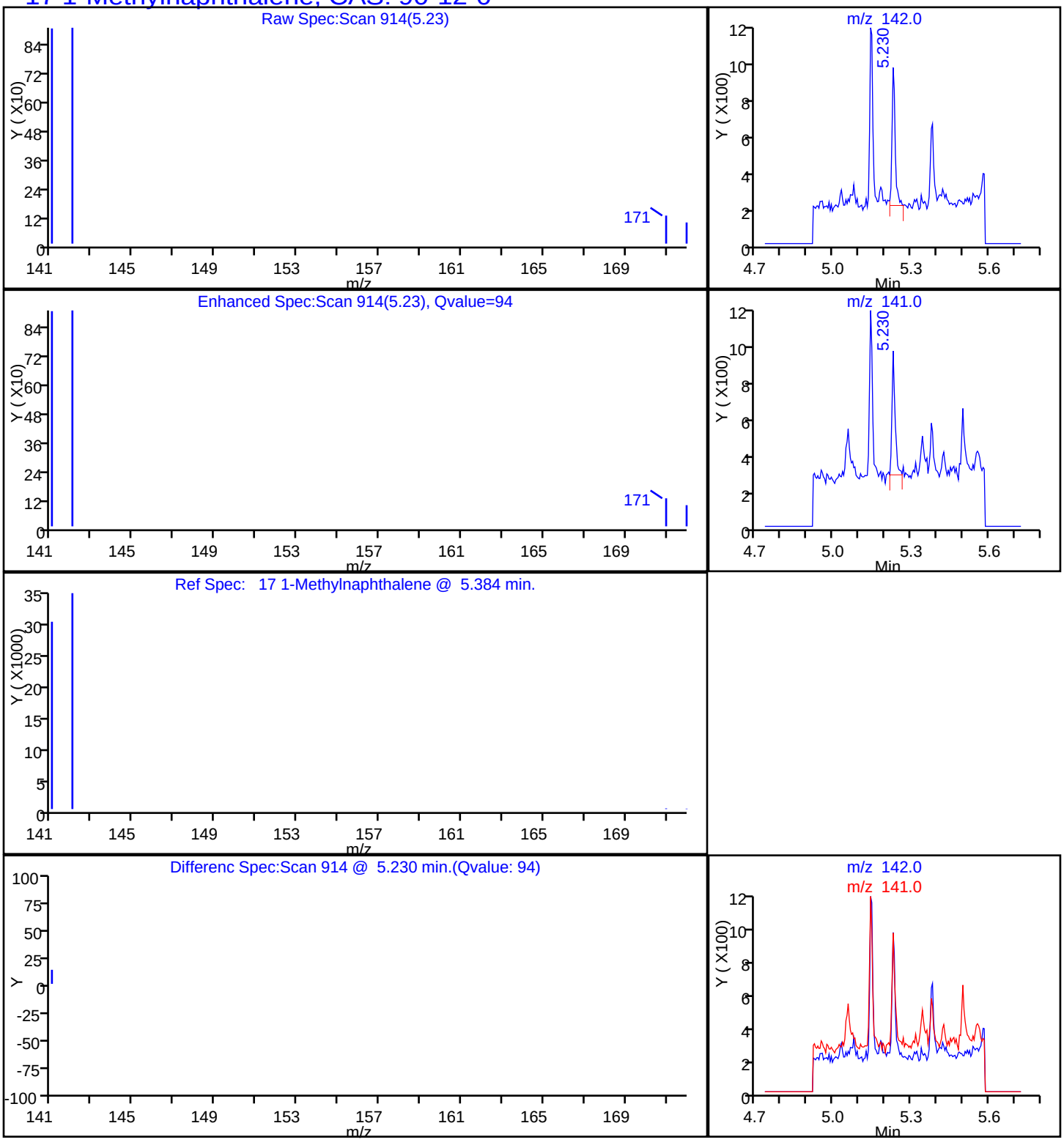
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7271.D

Injection Date:	16-Jun-2017 16:29:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-1-D	Lab Sample ID:	280-97928-1		
Client ID:	SS025-SS07				
Operator ID:	WICKHAMM	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0



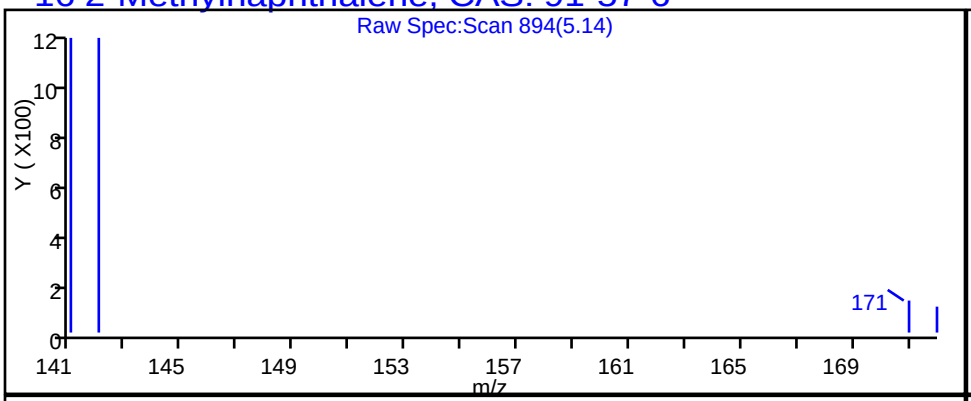
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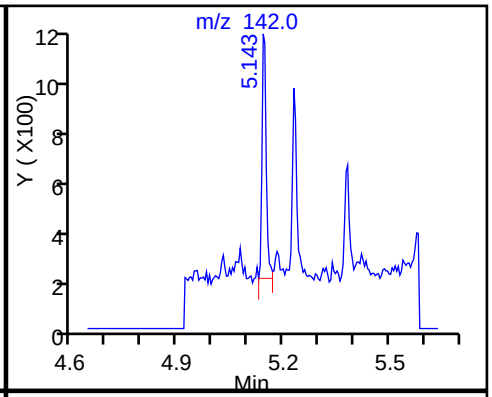
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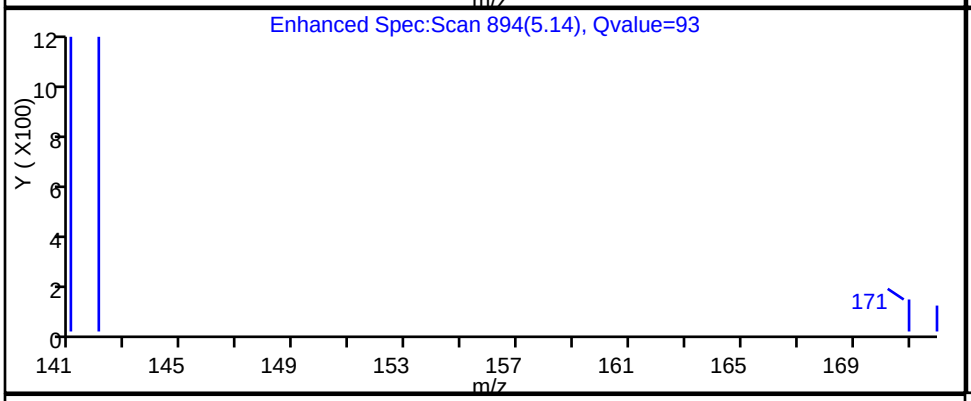
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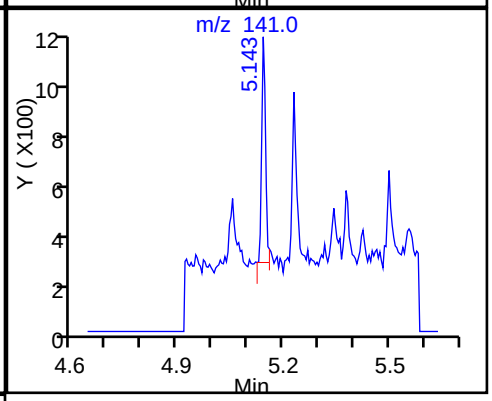
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Lims ID:	280-97928-C-1-D	Lab Sample ID:	280-97928-1		
Client ID:	SS025-SS07				
Operator ID:	WICKHAMM	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

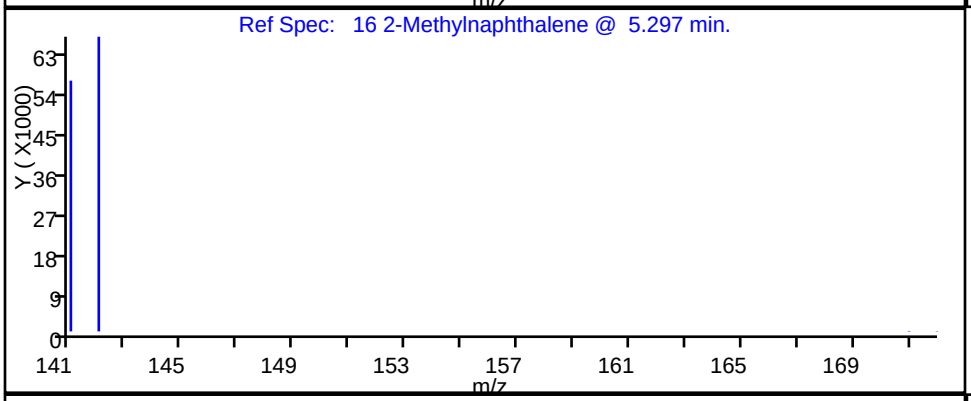
16 2-Methylnaphthalene, CAS: 91-57-6

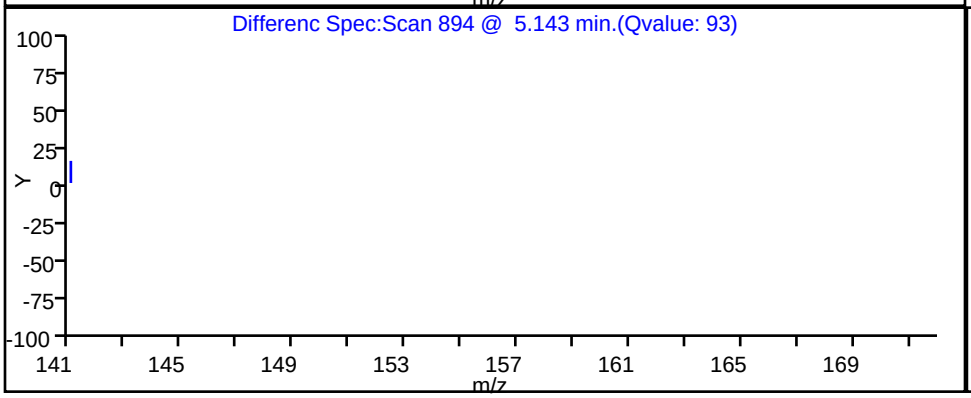


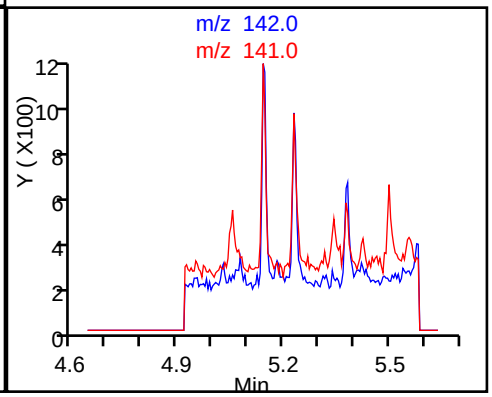












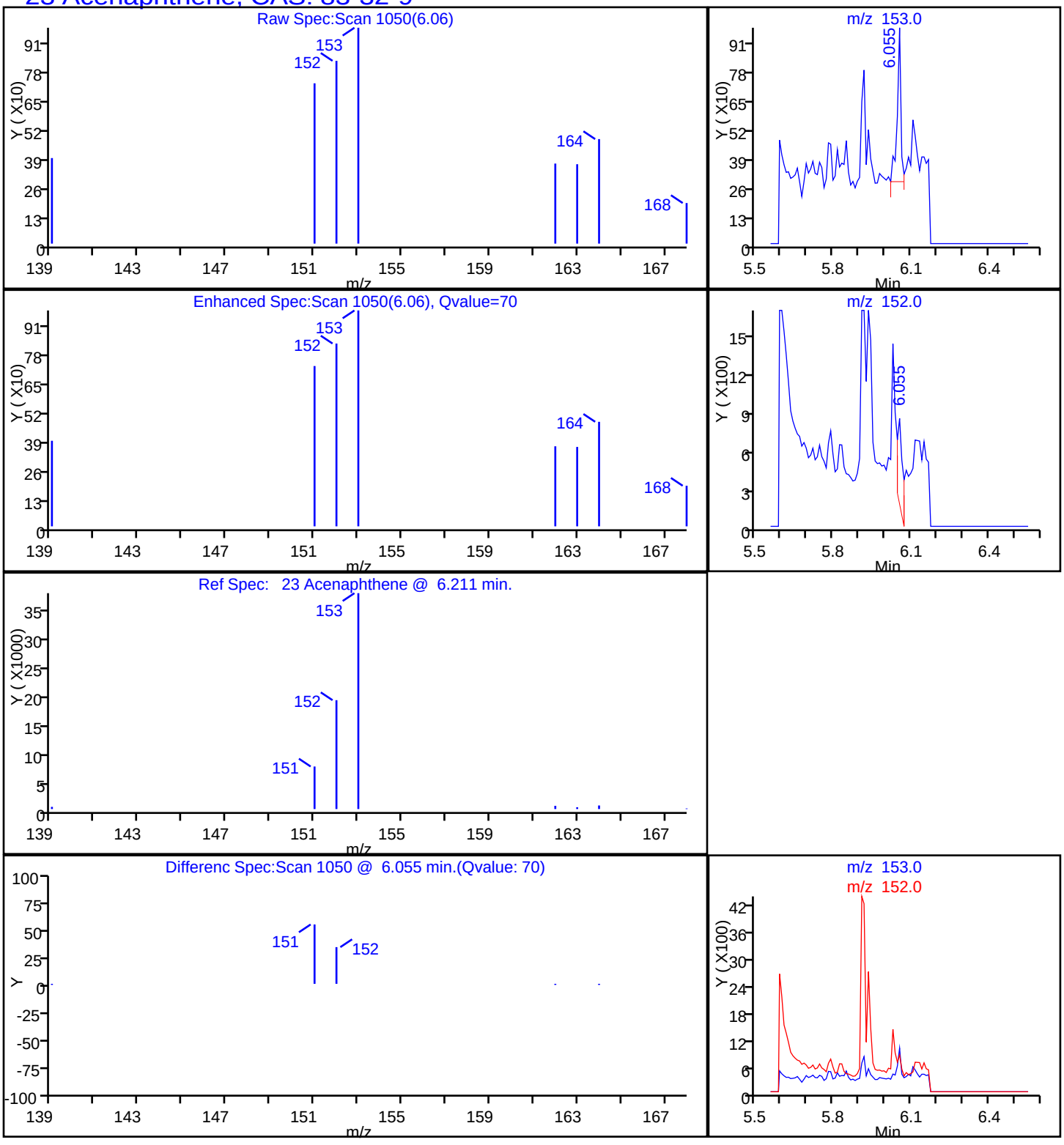
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7271.D

Injection Date:	16-Jun-2017 16:29:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-1-D	Lab Sample ID:	280-97928-1		
Client ID:	SS025-SS07				
Operator ID:	WICKHAMM	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9



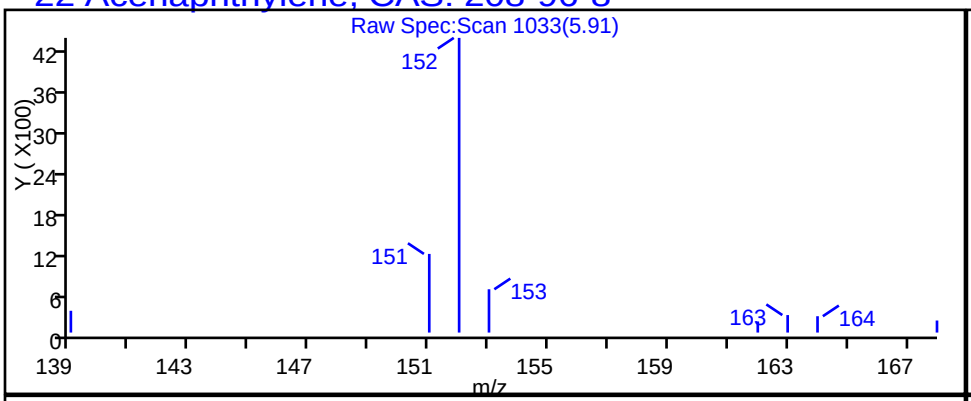
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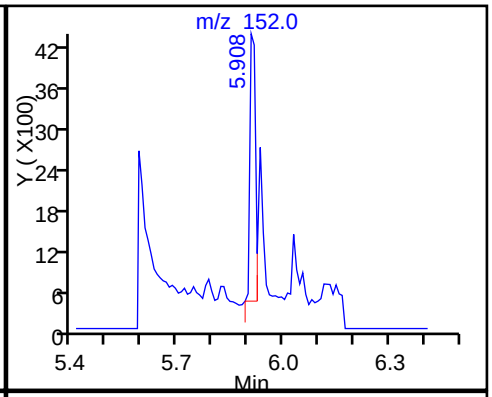
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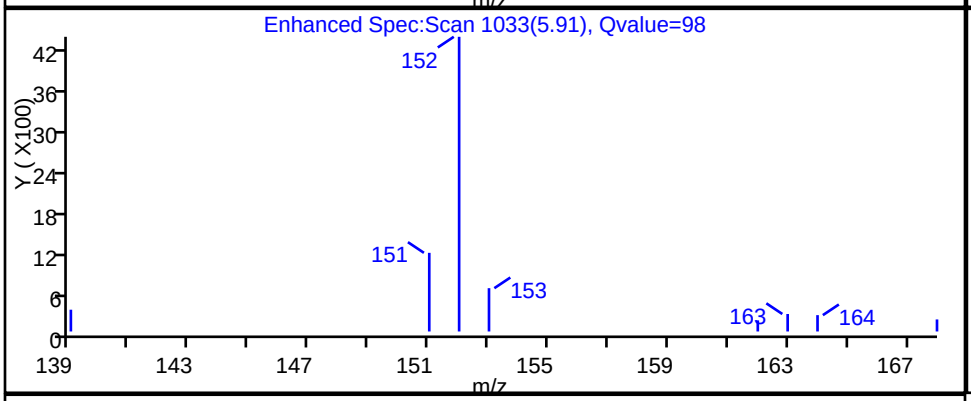
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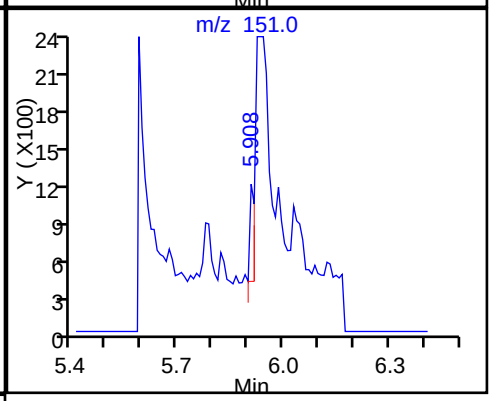
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Lims ID:	280-97928-C-1-D	Lab Sample ID:	280-97928-1		
Client ID:	SS025-SS07				
Operator ID:	WICKHAMM	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

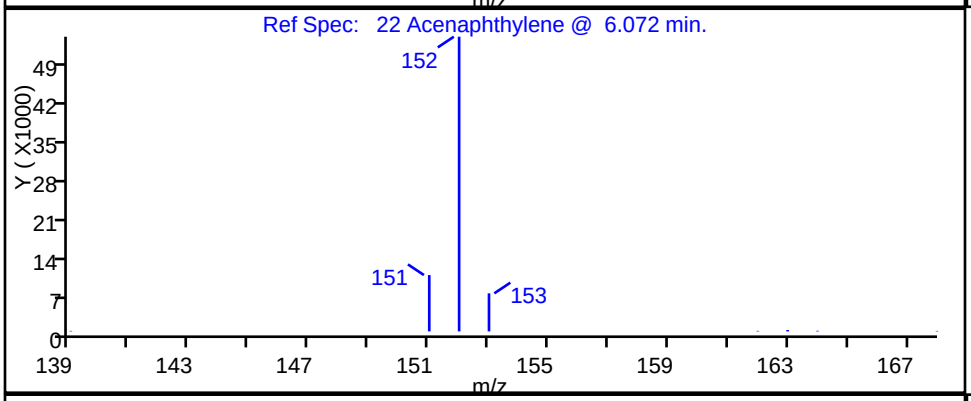
22 Acenaphthylene, CAS: 208-96-8

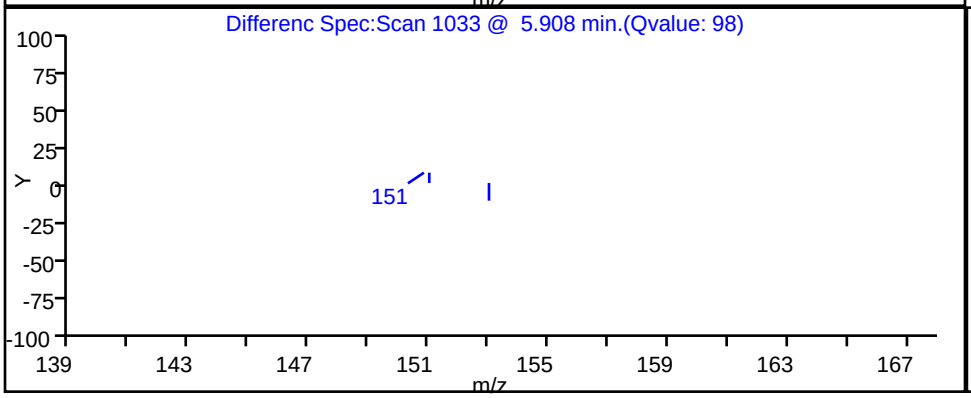


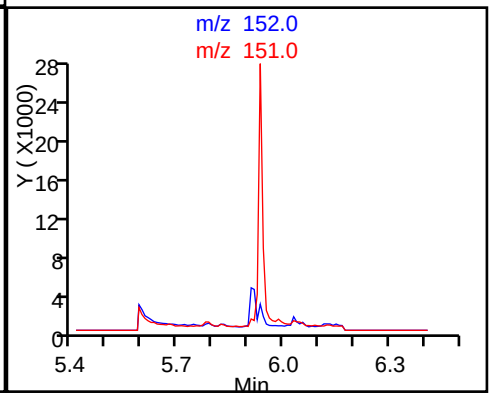












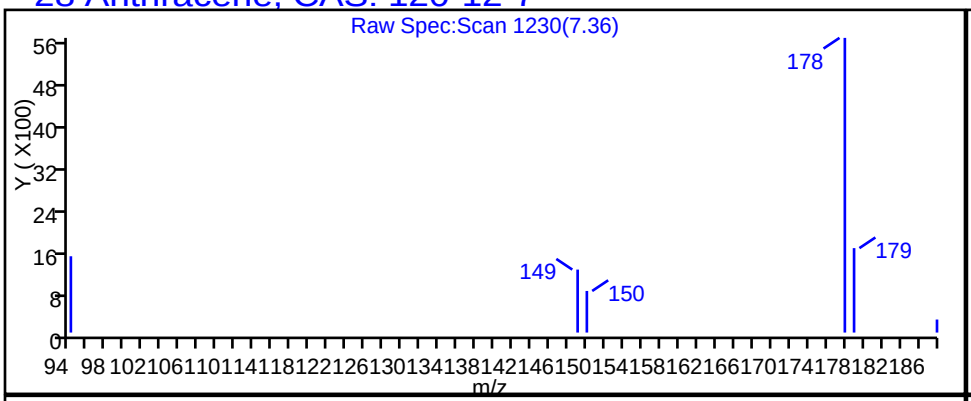
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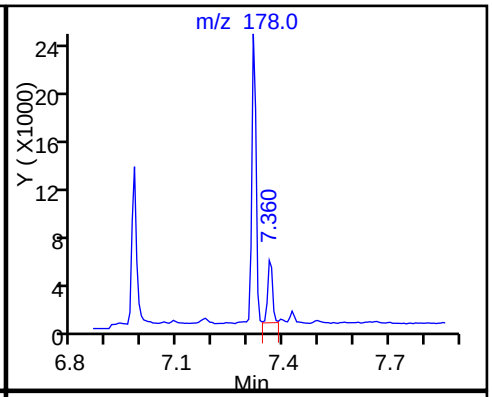
TestAmerica Denver

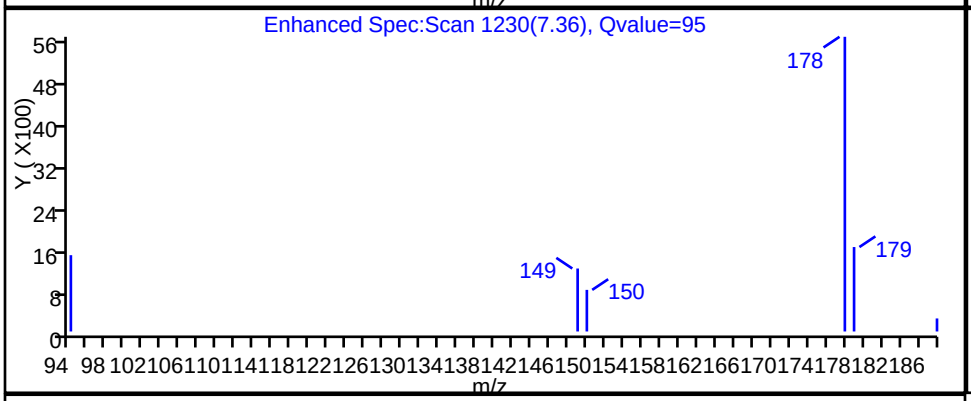
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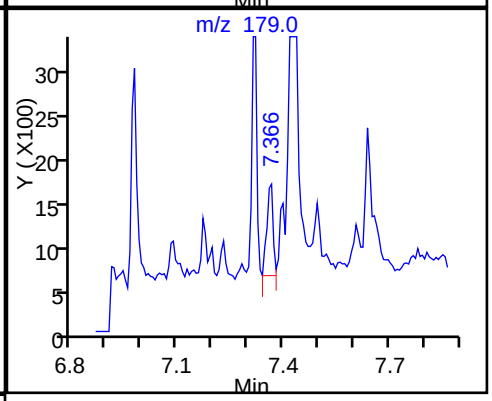
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Lims ID:	280-97928-C-1-D	Lab Sample ID:	280-97928-1		
Client ID:	SS025-SS07				
Operator ID:	WICKHAMM	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

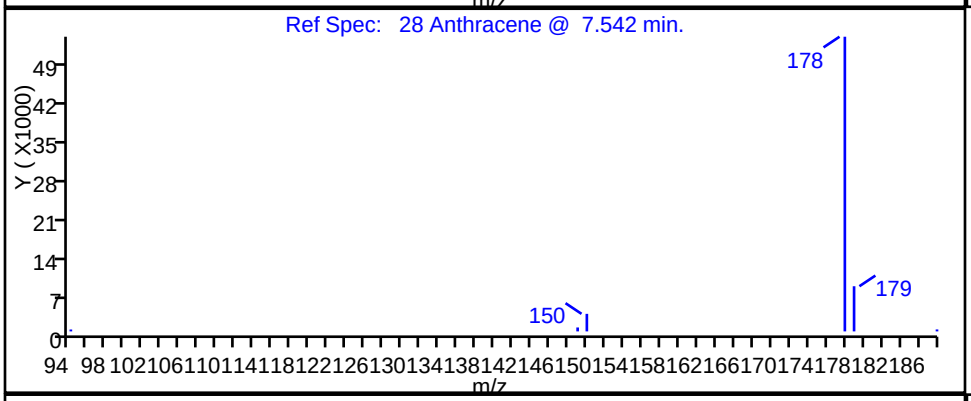
28 Anthracene, CAS: 120-12-7

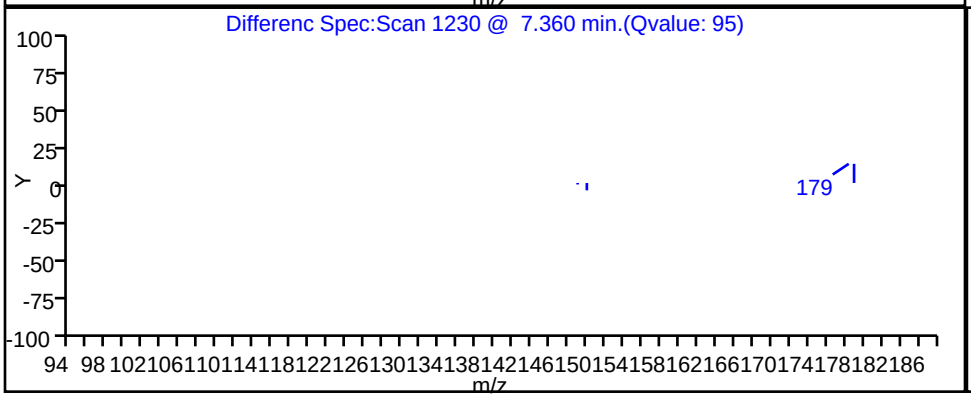


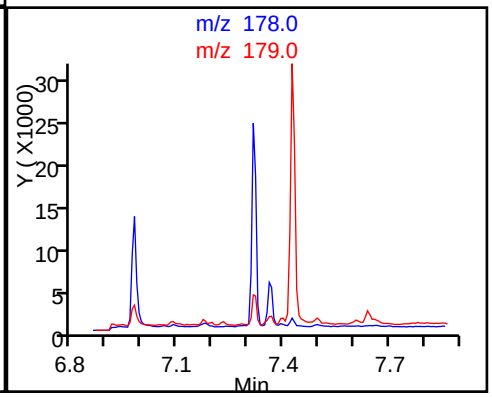












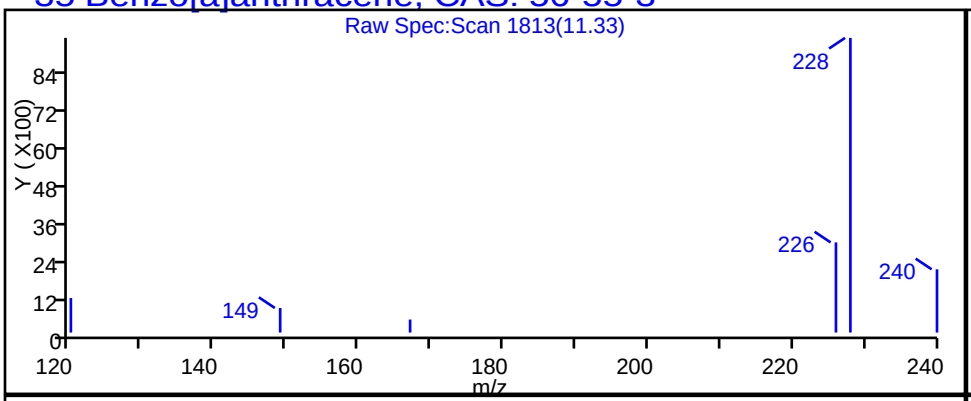
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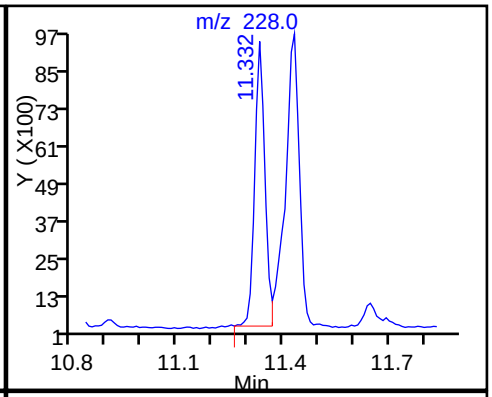
TestAmerica Denver

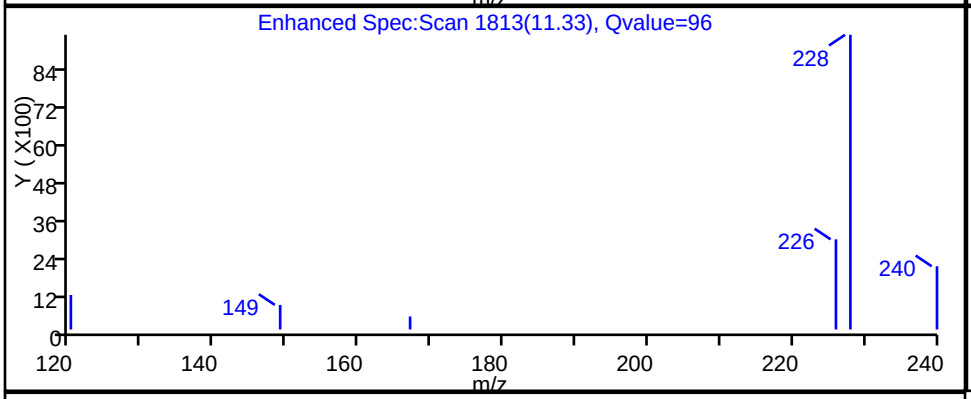
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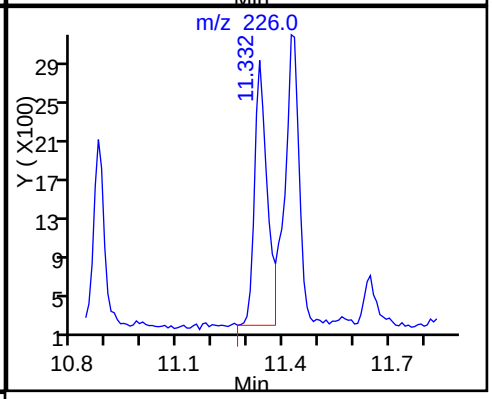
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Operator ID:	WICKHAMM	ALS Bottle#:	4	Worklist Smp#:	5
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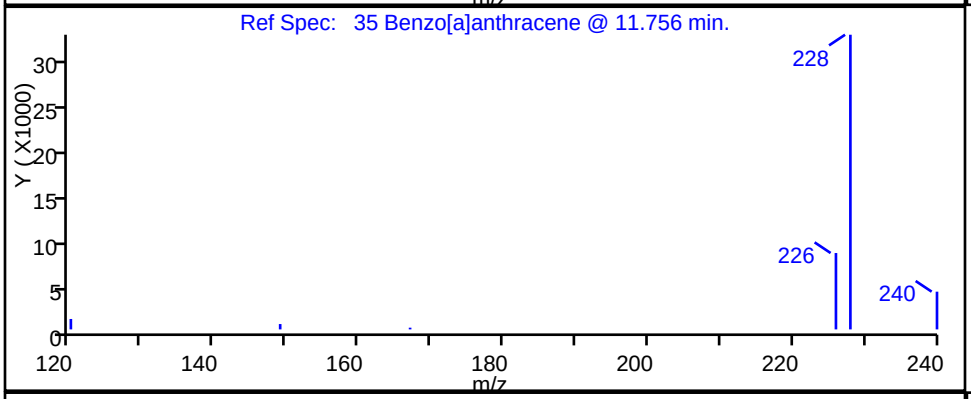
35 Benzo[a]anthracene, CAS: 56-55-3

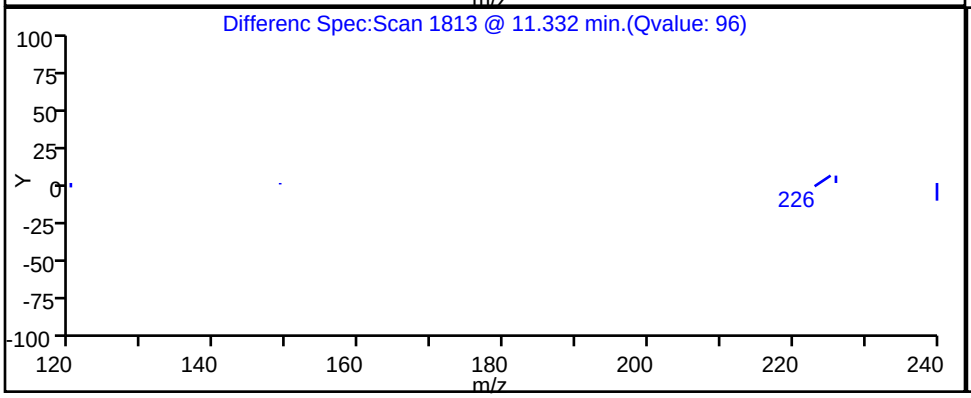


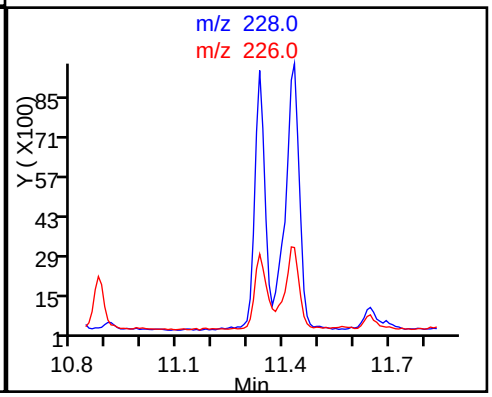










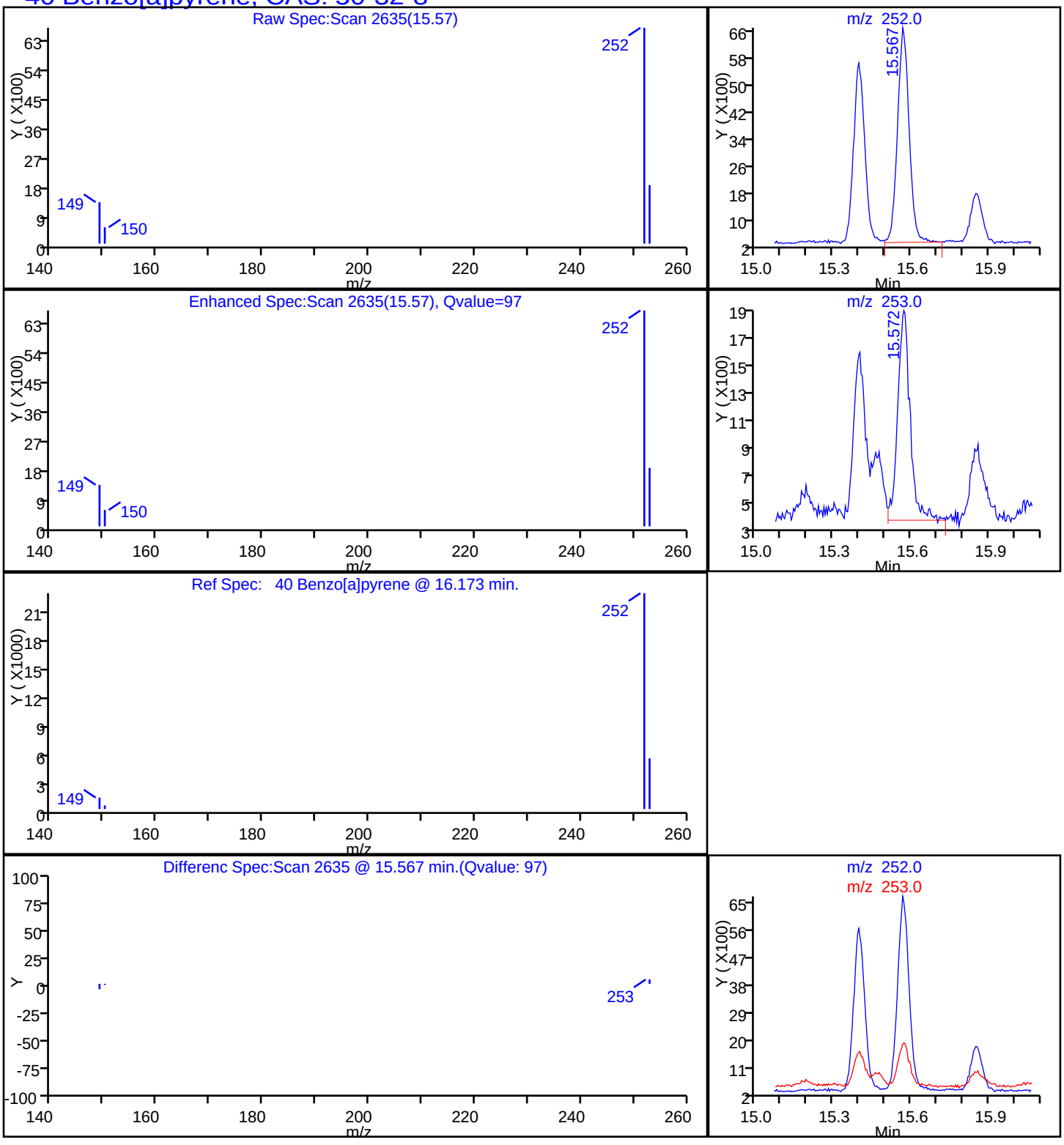


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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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Column:		Detector	MS SCAN		

40 Benzo[a]pyrene, CAS: 50-32-8



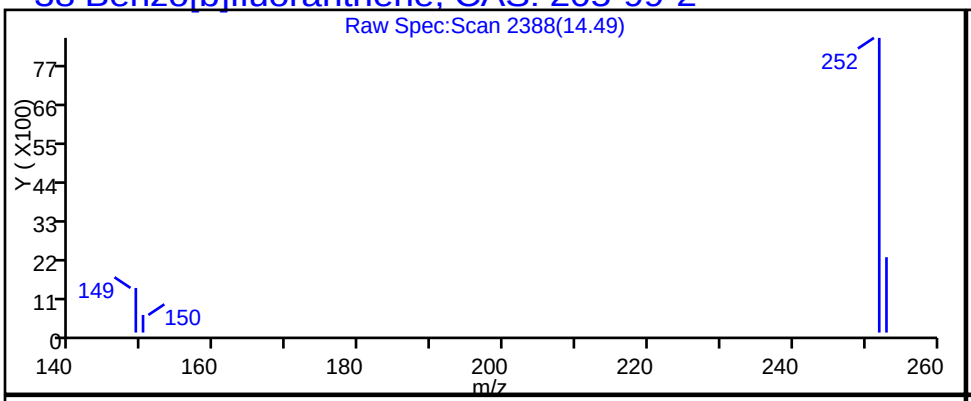
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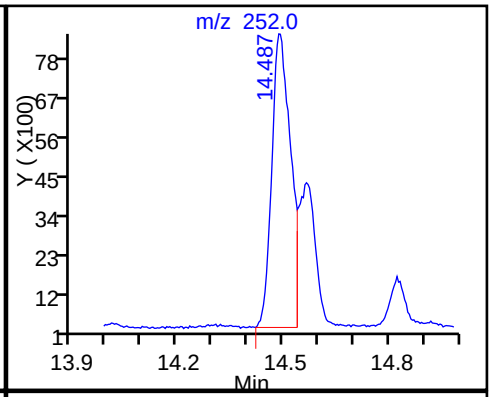
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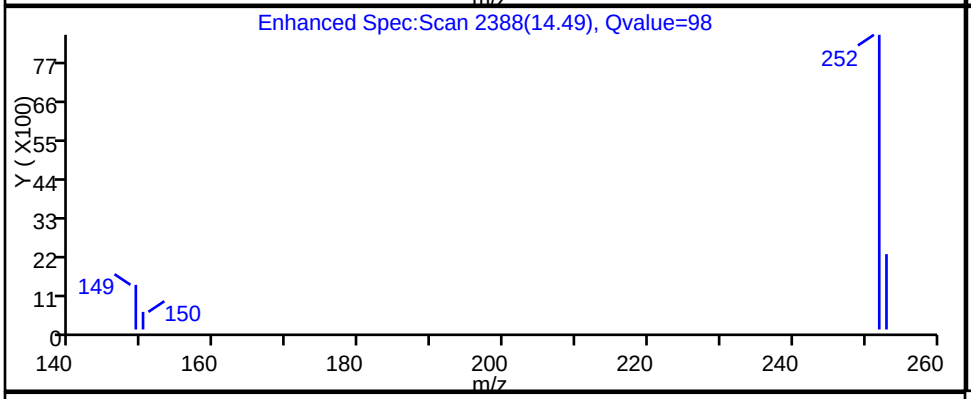
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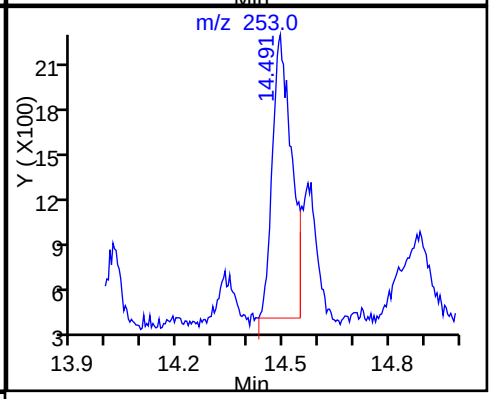
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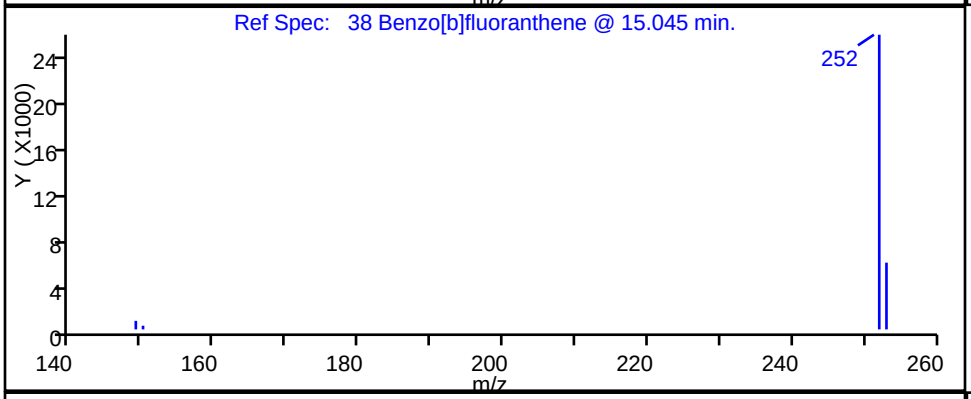
38 Benzo[b]fluoranthene, CAS: 205-99-2

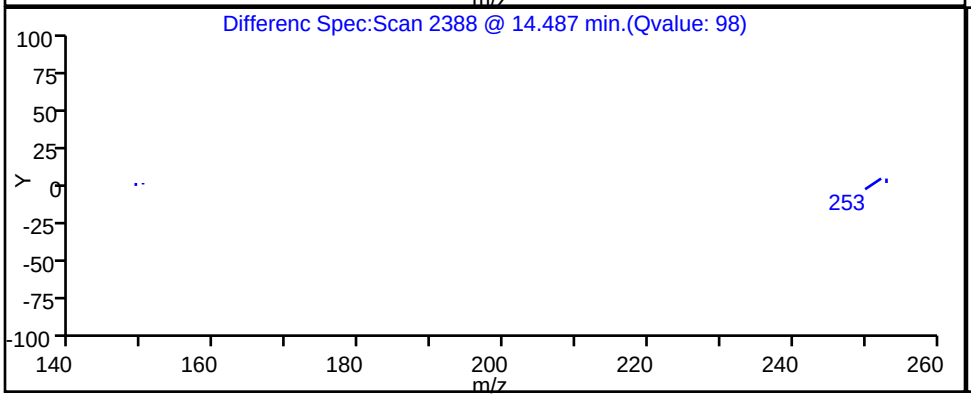


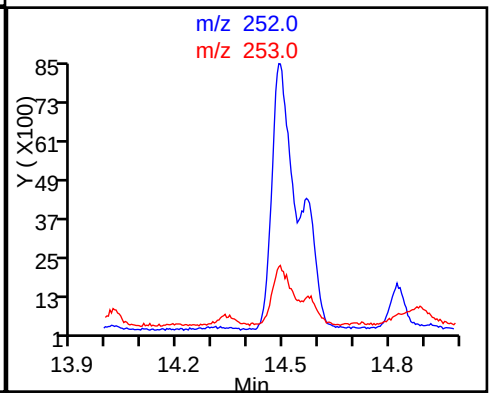










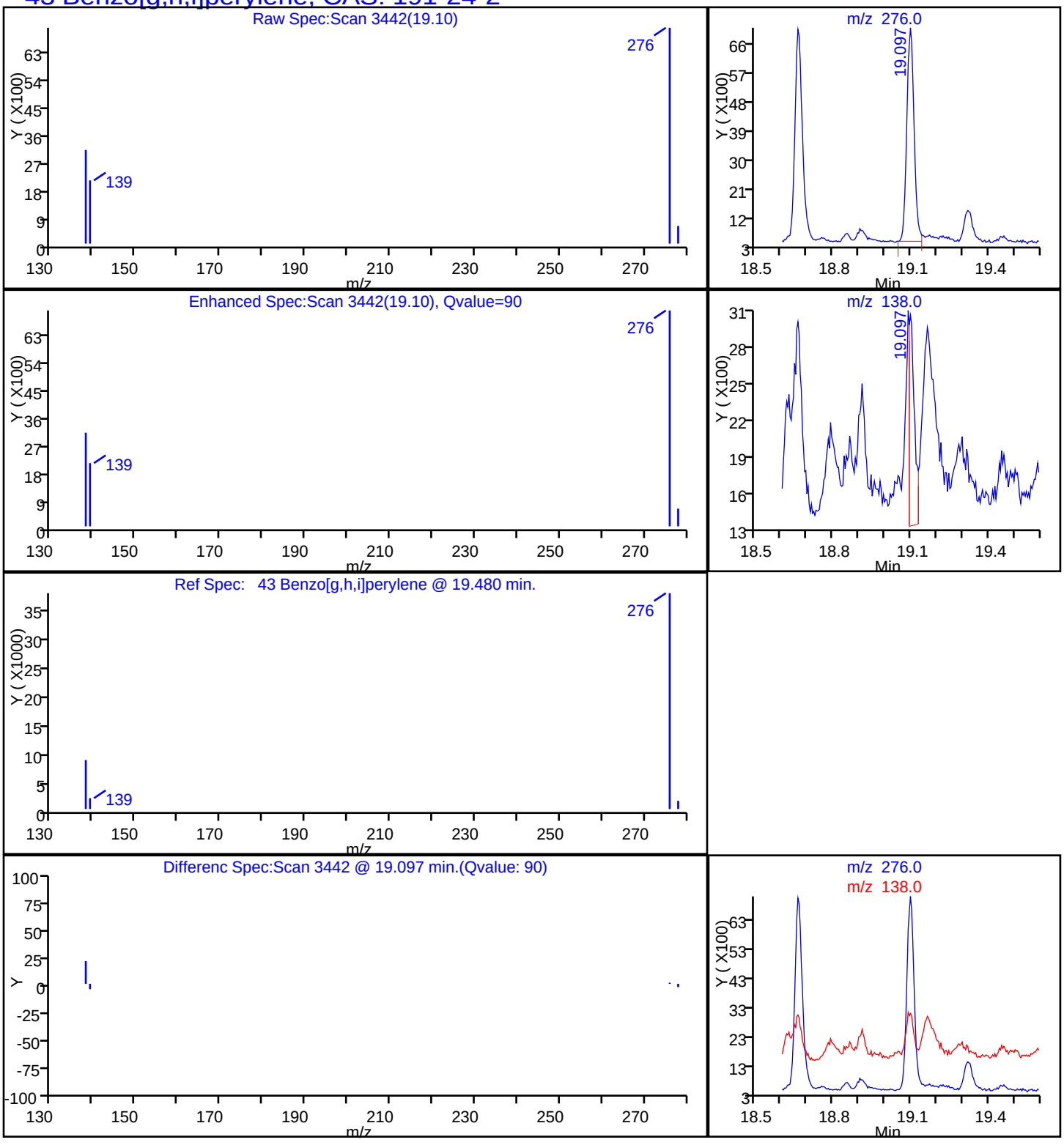


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TestAmerica Denver

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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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43 Benzo[g,h,i]perylene, CAS: 191-24-2

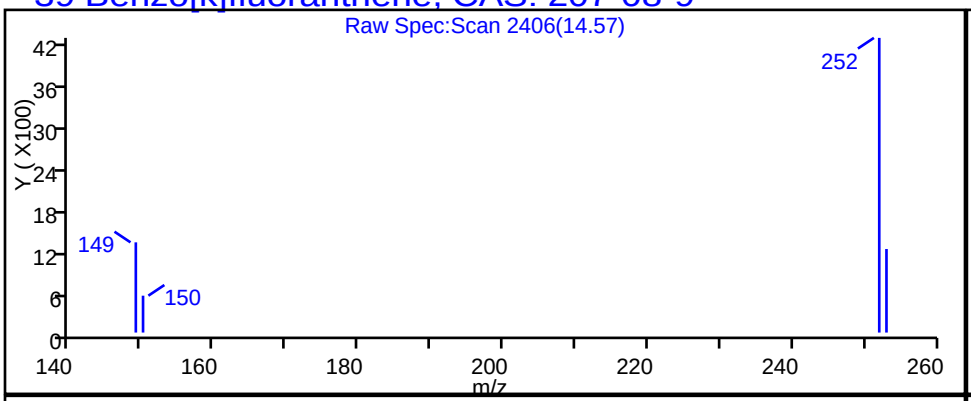


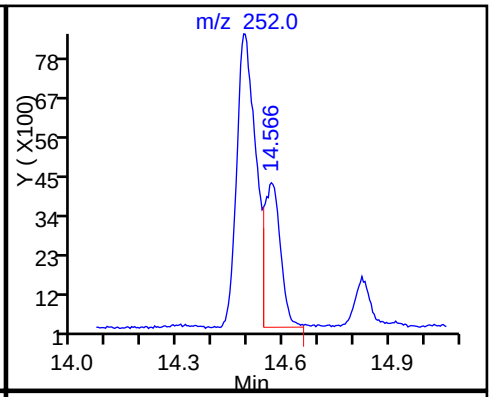
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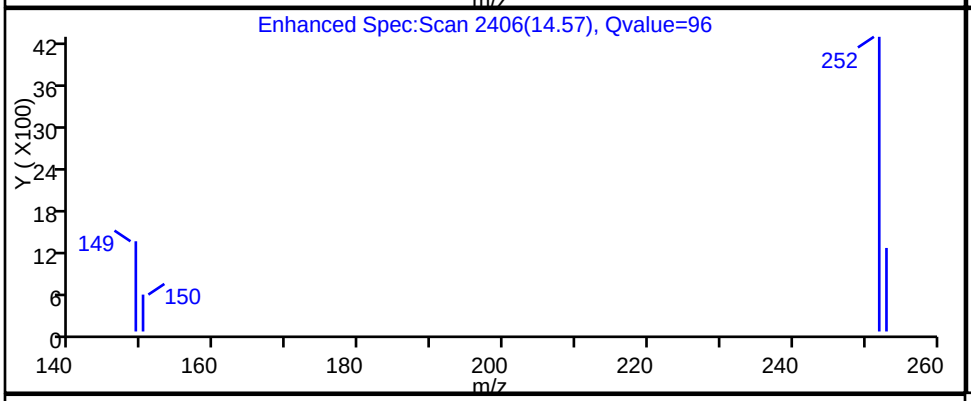
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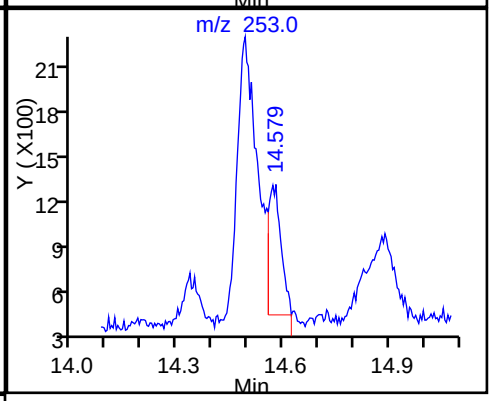
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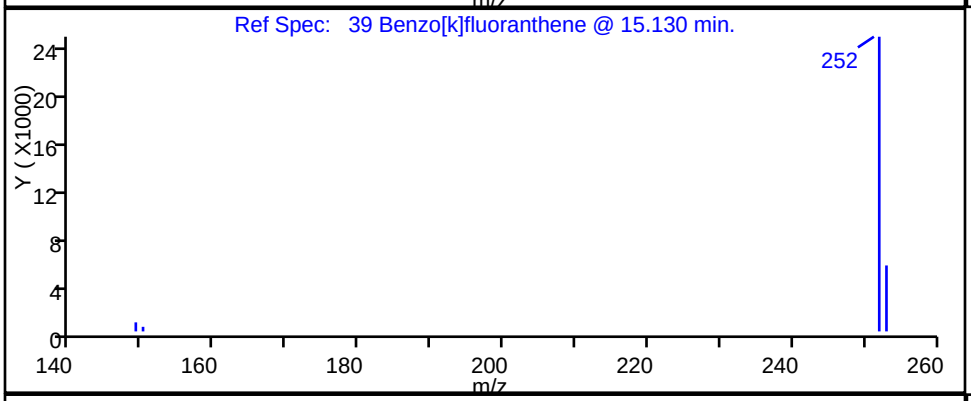
39 Benzo[k]fluoranthene, CAS: 207-08-9

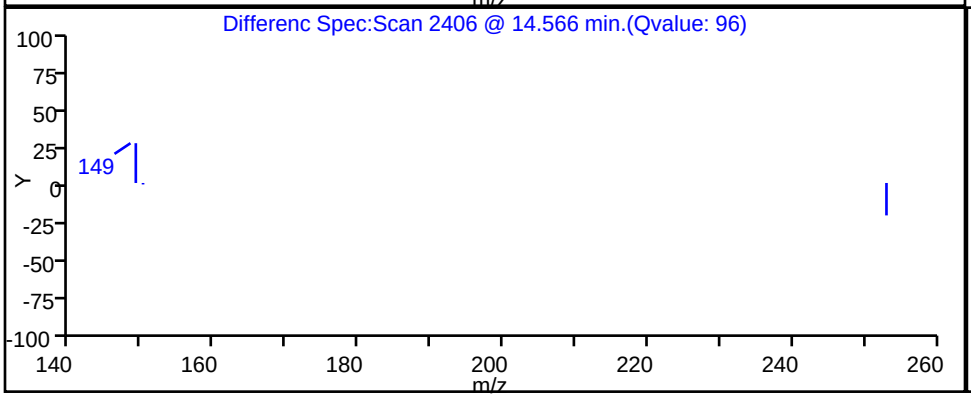


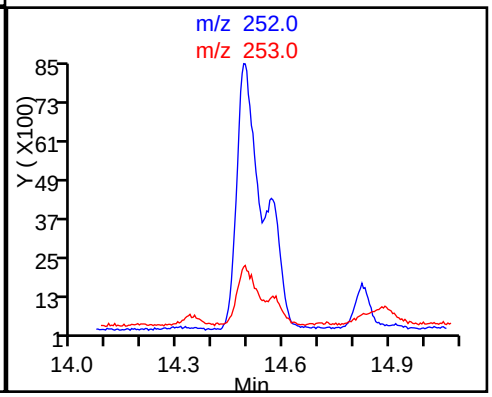












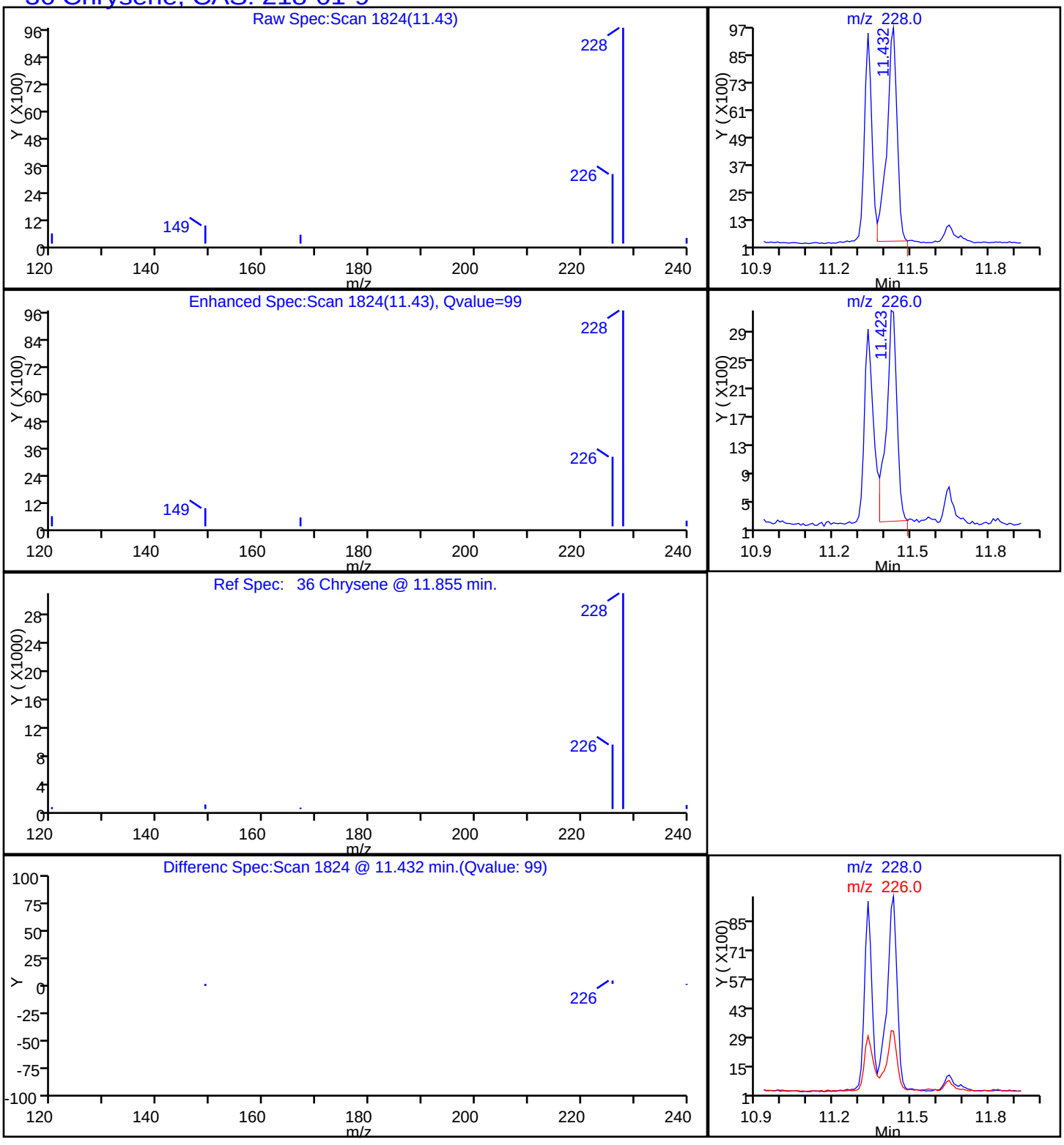
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Column:		Detector	MS SCAN		

36 Chrysene, CAS: 218-01-9

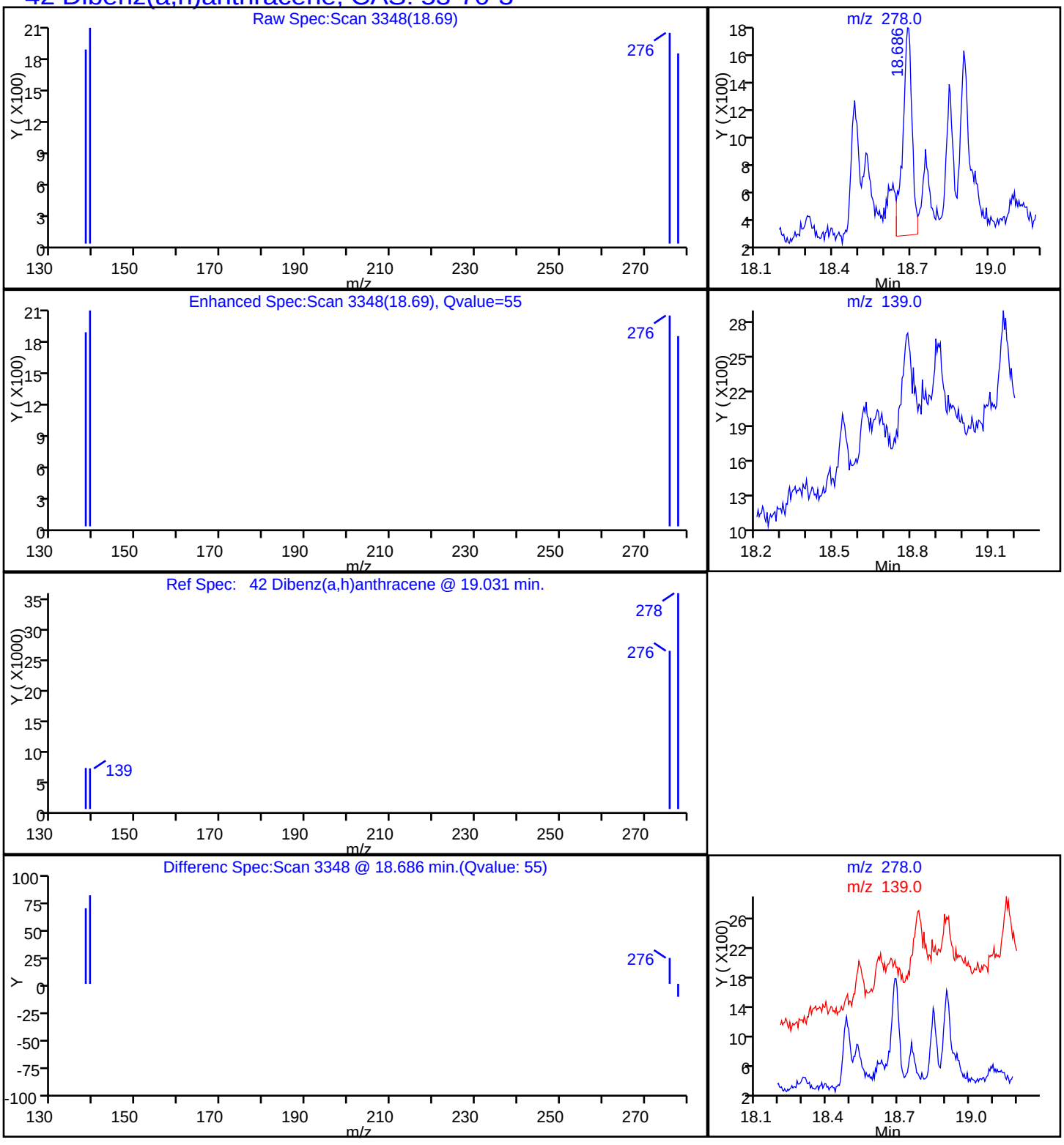


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42 Dibenz(a,h)anthracene, CAS: 53-70-3



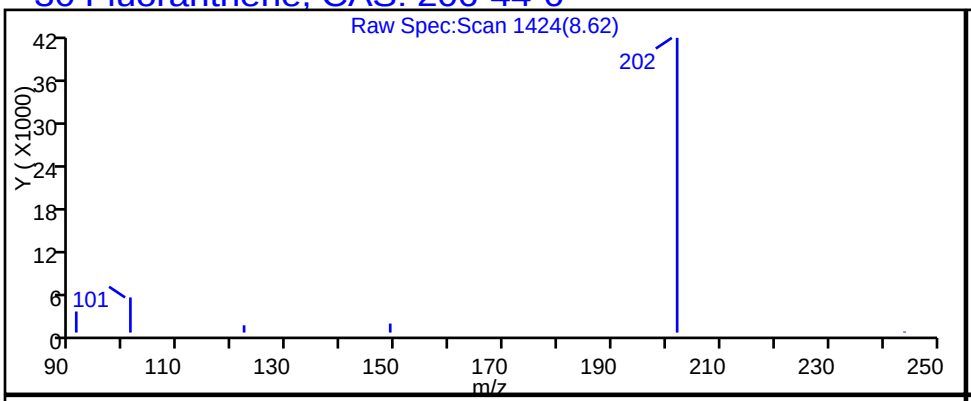
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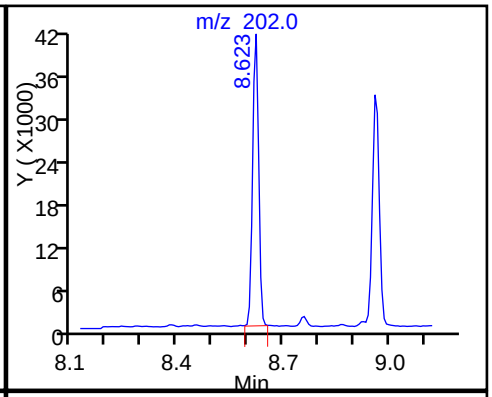
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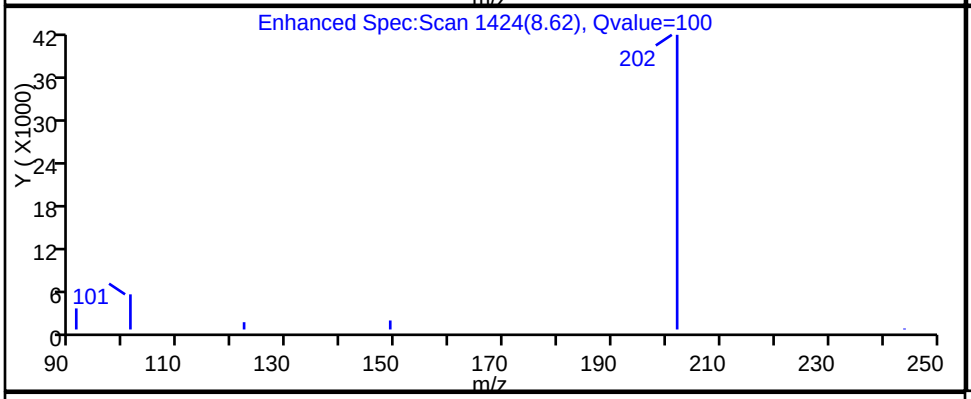
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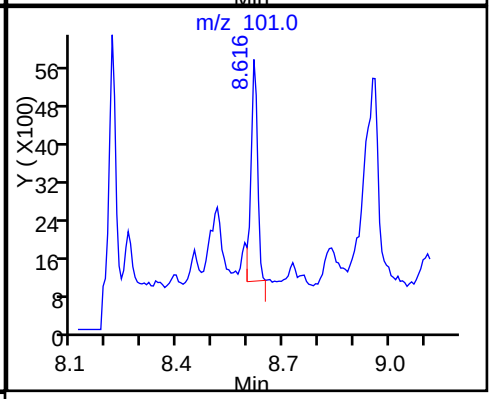
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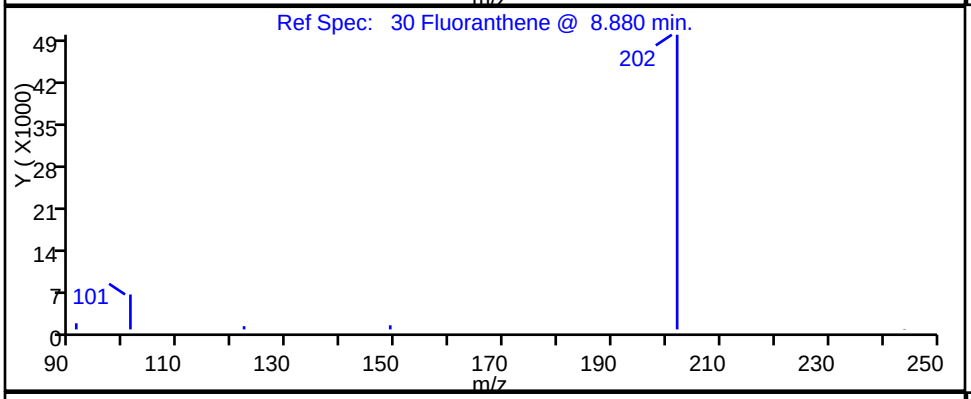
30 Fluoranthene, CAS: 206-44-0

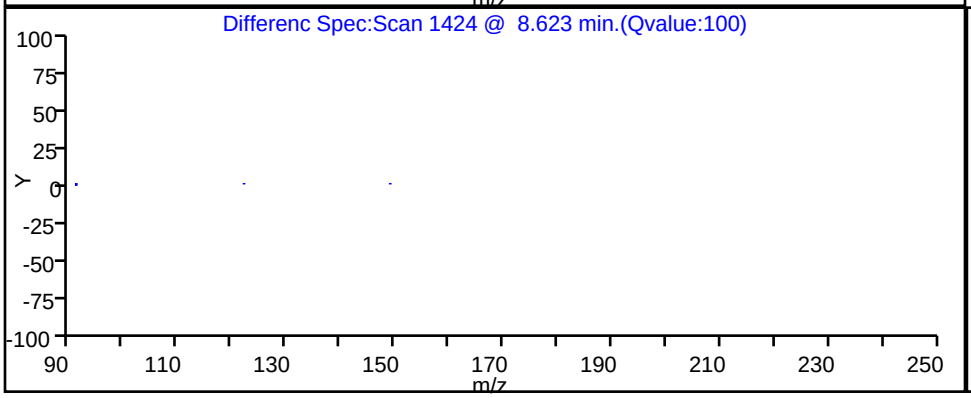


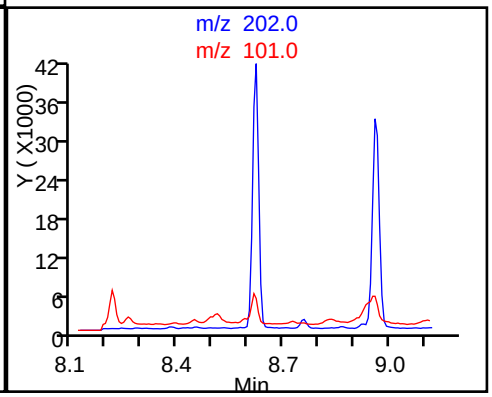












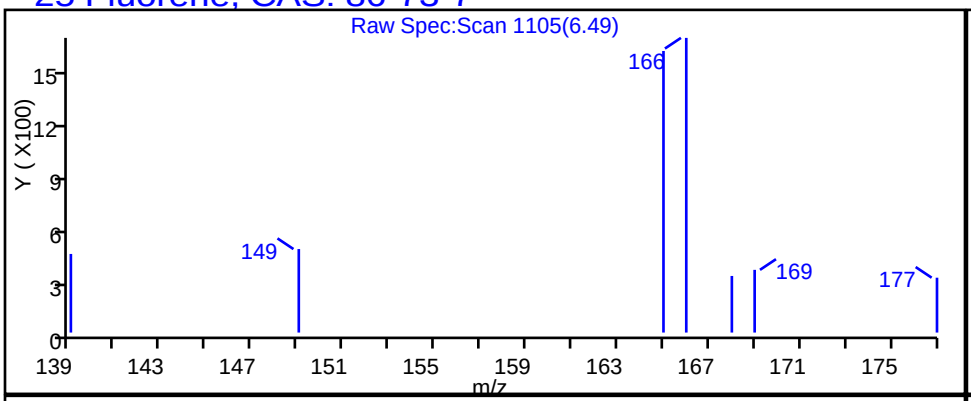
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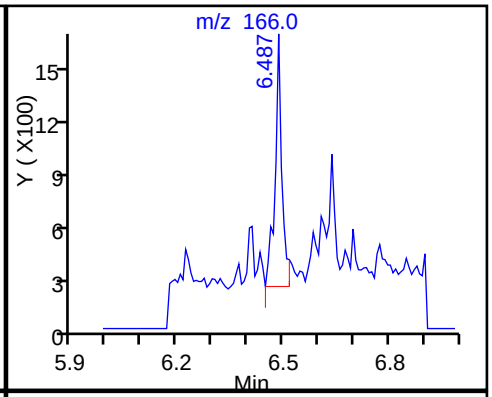
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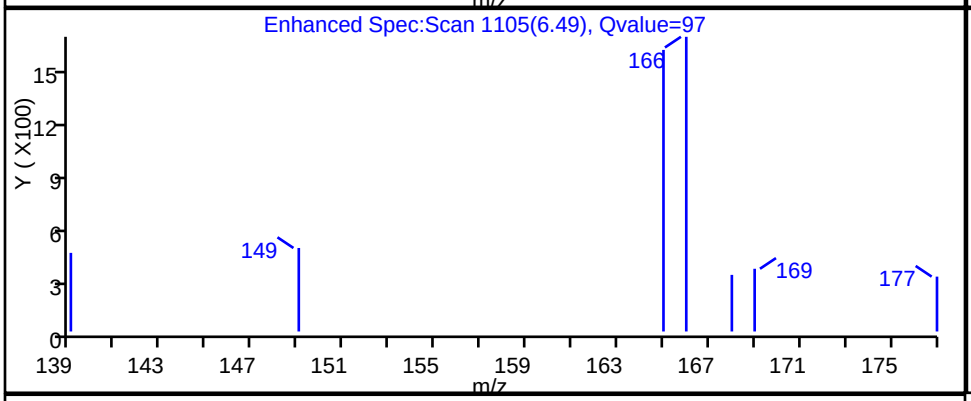
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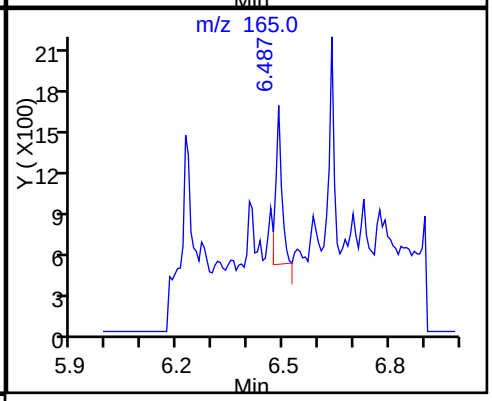
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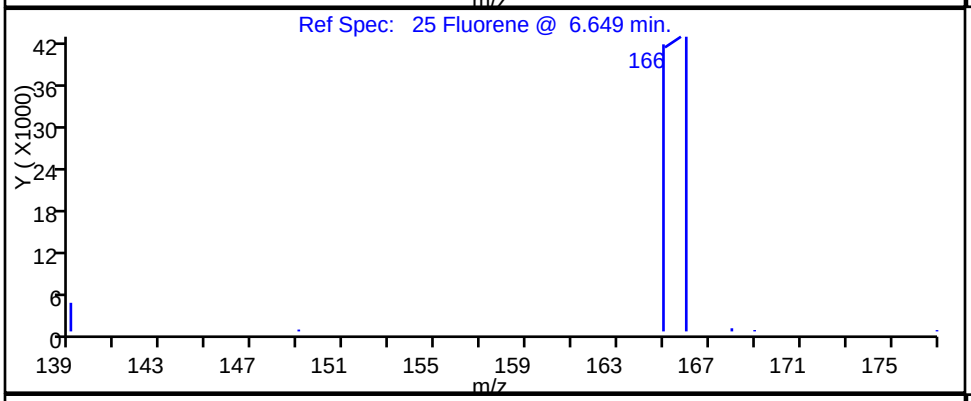
25 Fluorene, CAS: 86-73-7

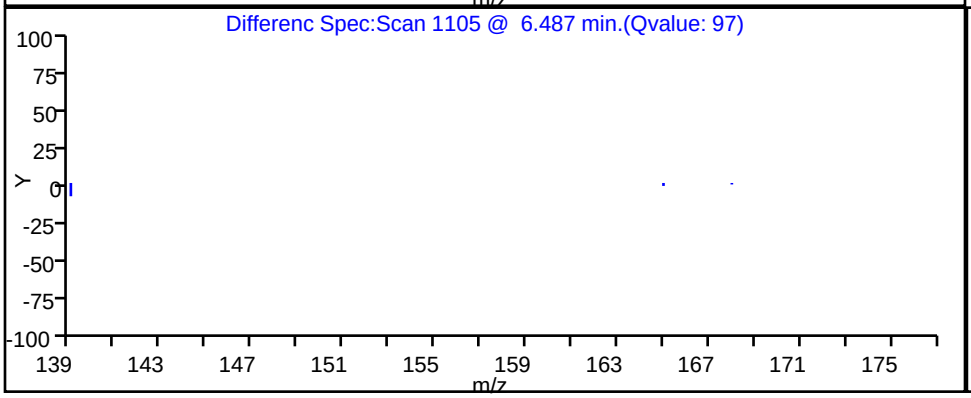


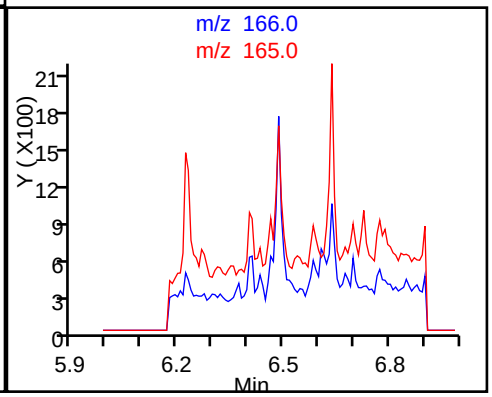










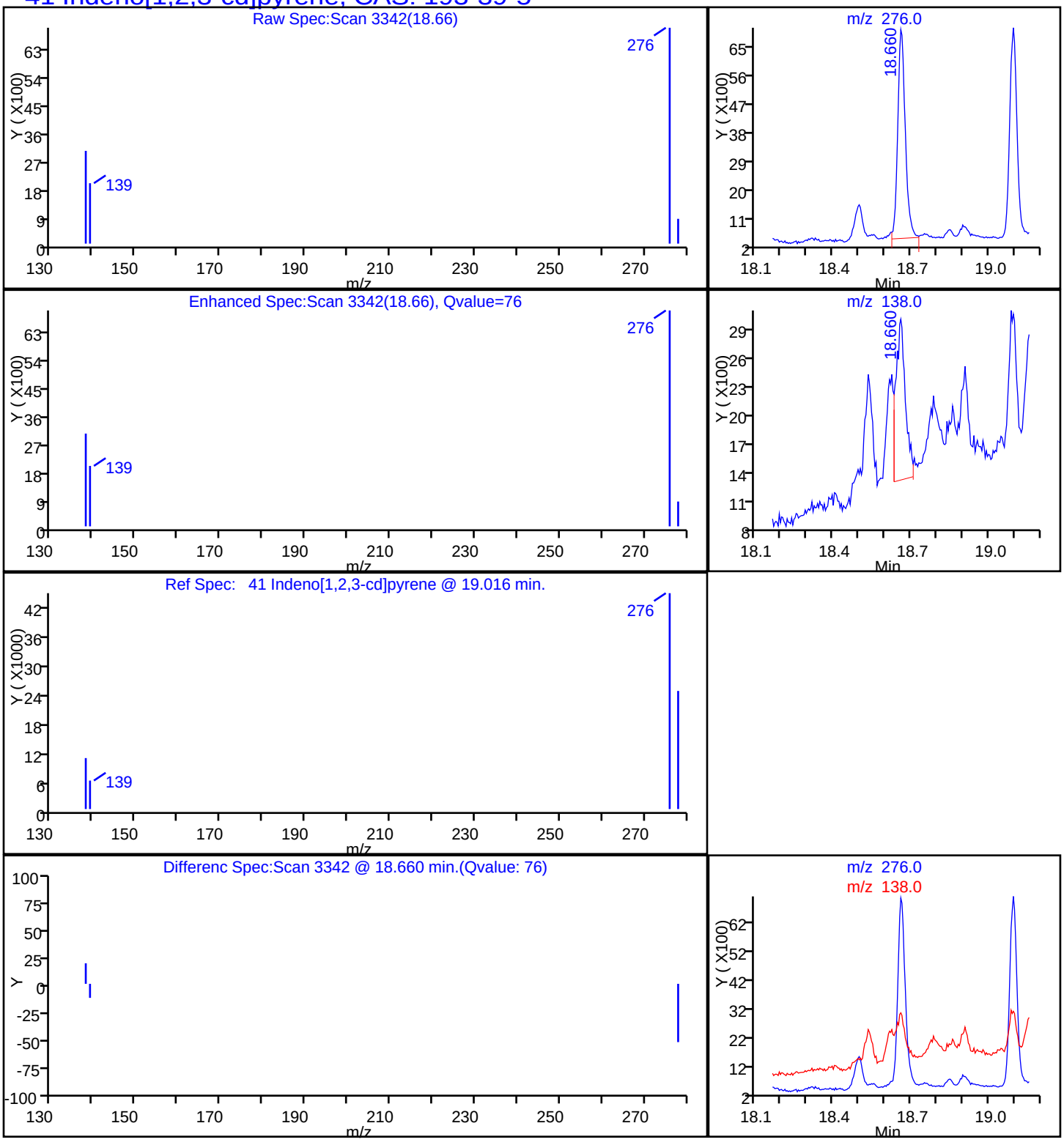


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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



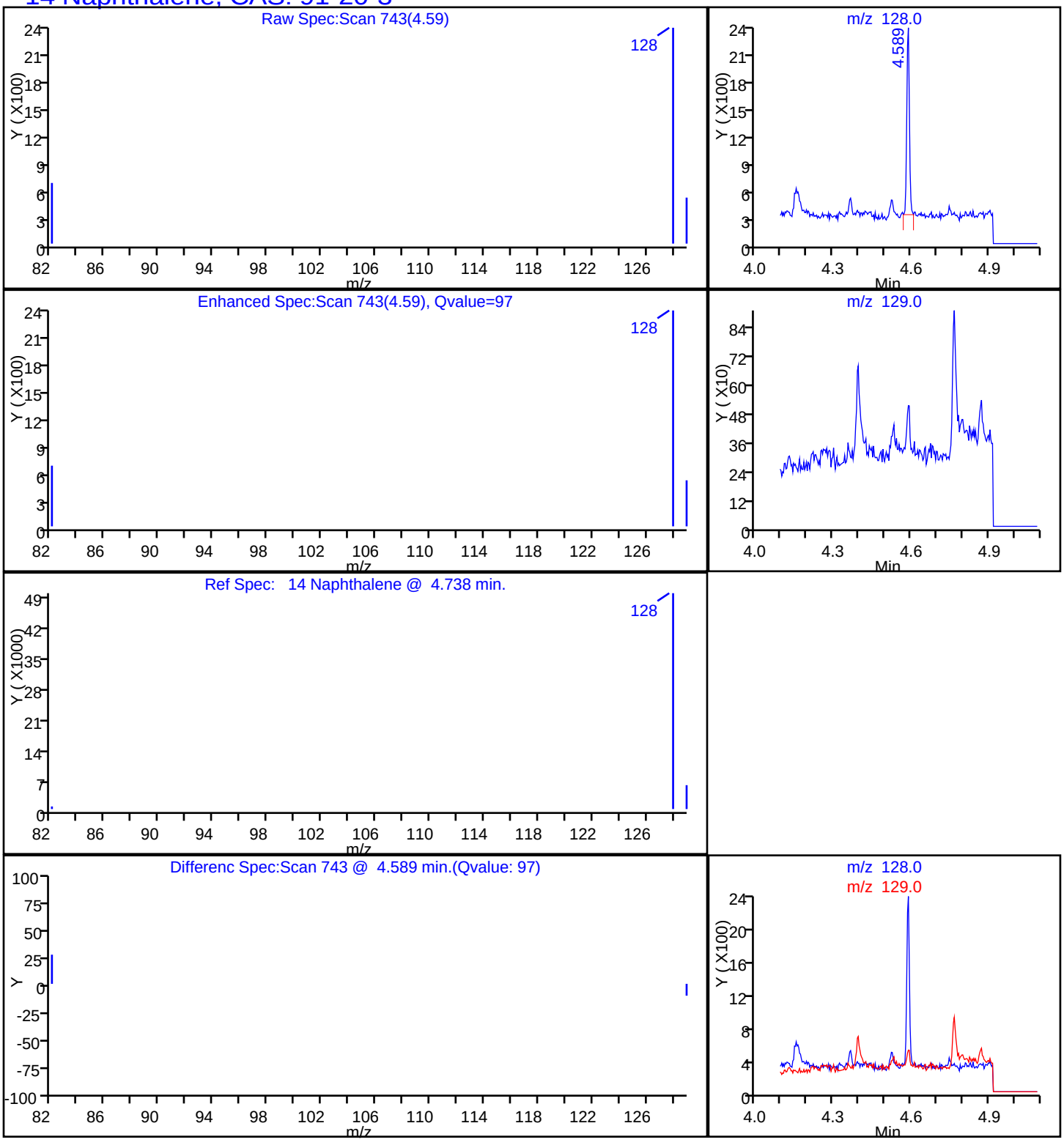
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Operator ID:	WICKHAMM	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3

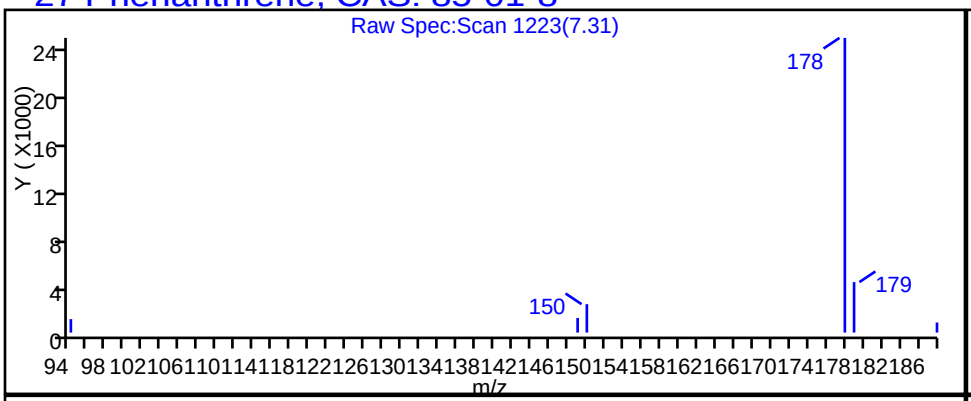


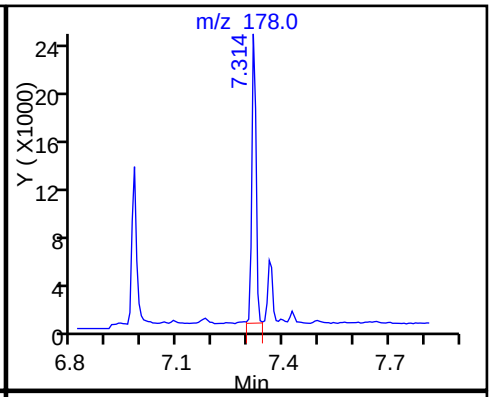
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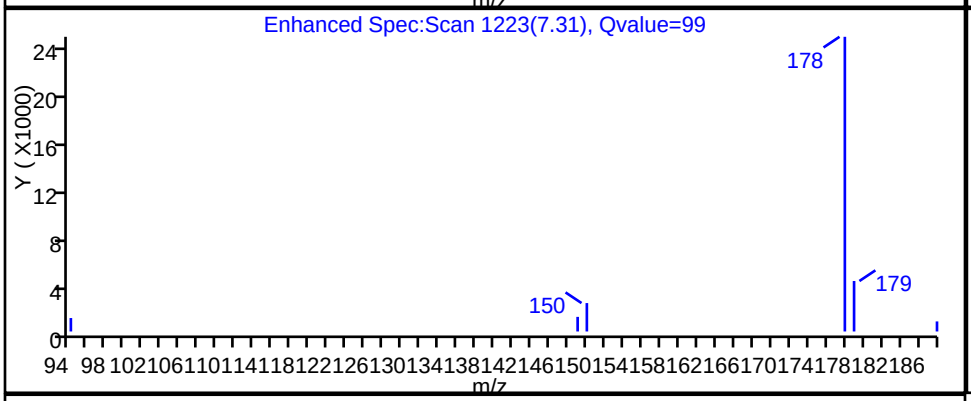
TestAmerica Denver

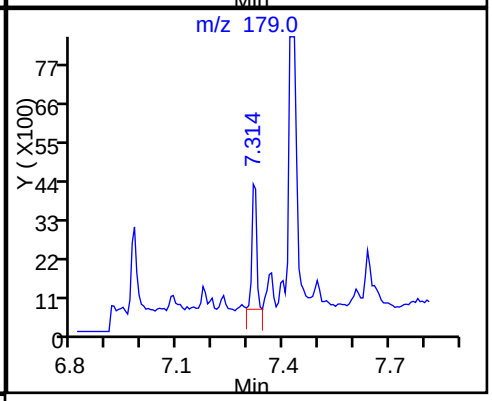
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Injection Date:	16-Jun-2017 16:29:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-1-D	Lab Sample ID:	280-97928-1		
Client ID:	SS025-SS07				
Operator ID:	WICKHAMM	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

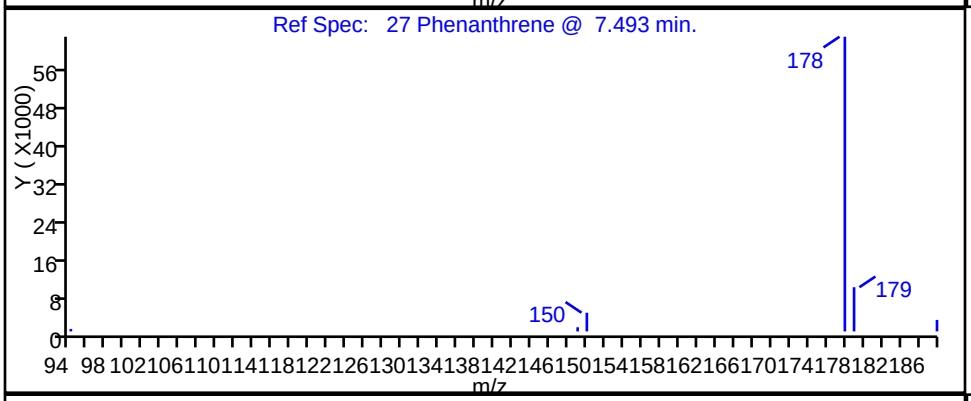
27 Phenanthrene, CAS: 85-01-8

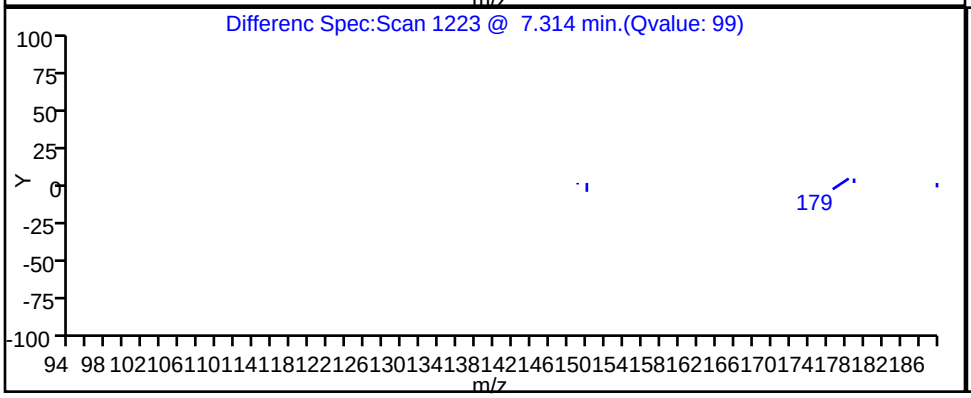


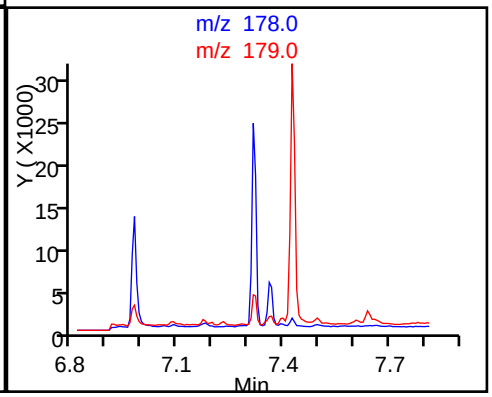












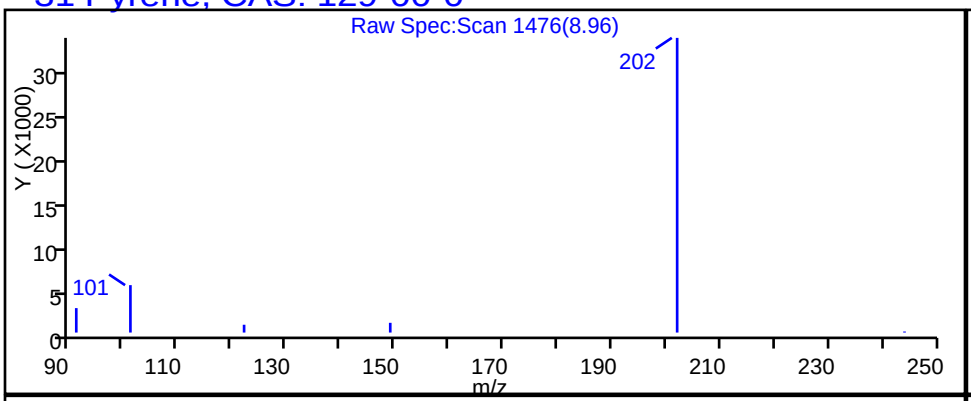
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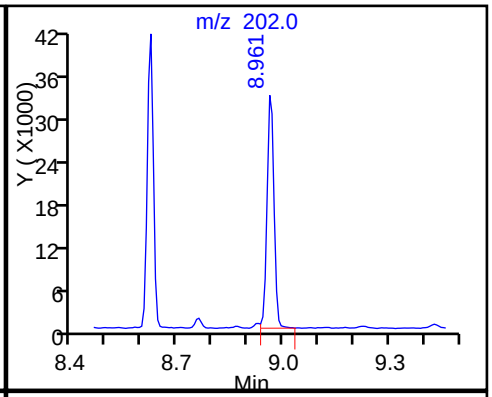
TestAmerica Denver

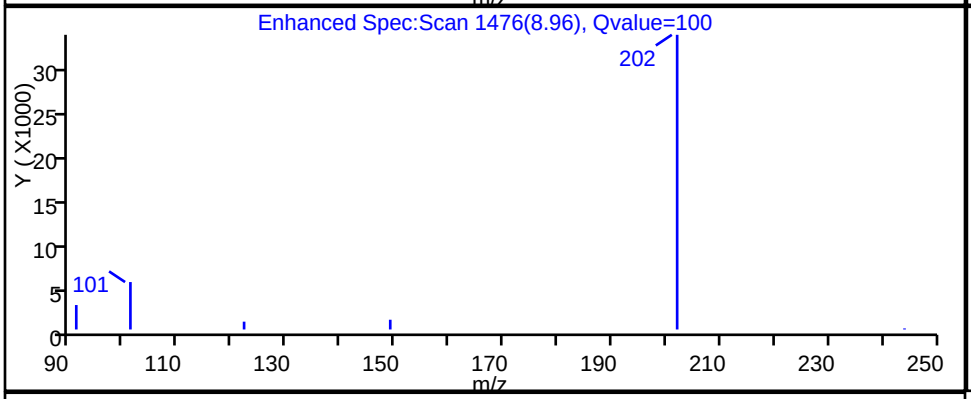
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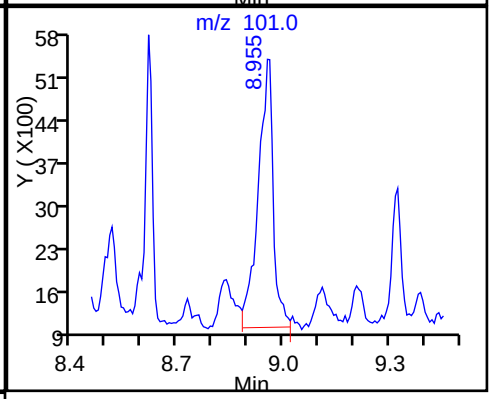
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Lims ID:	280-97928-C-1-D	Lab Sample ID:	280-97928-1		
Client ID:	SS025-SS07				
Operator ID:	WICKHAMM	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

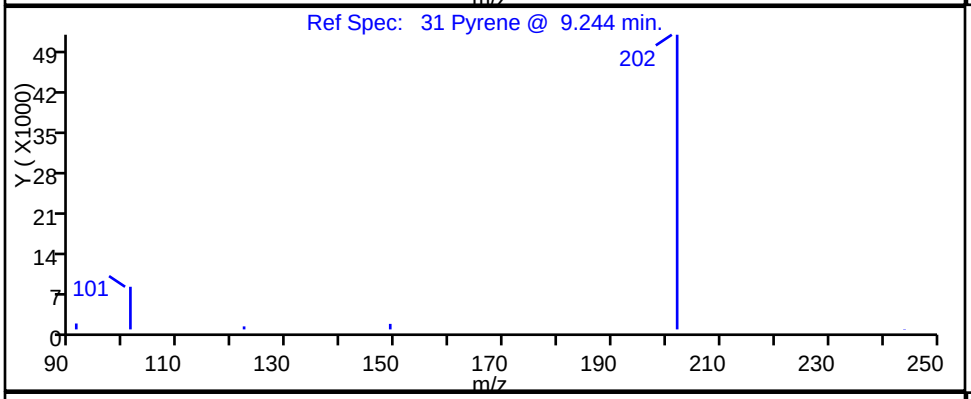
31 Pyrene, CAS: 129-00-0

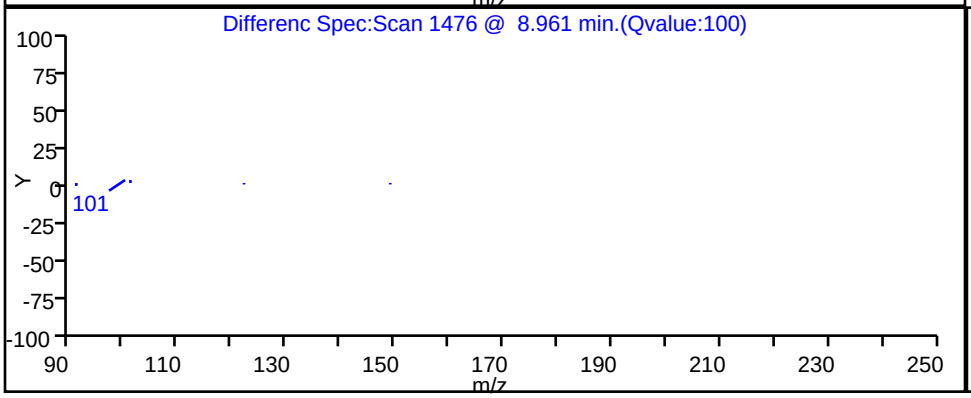


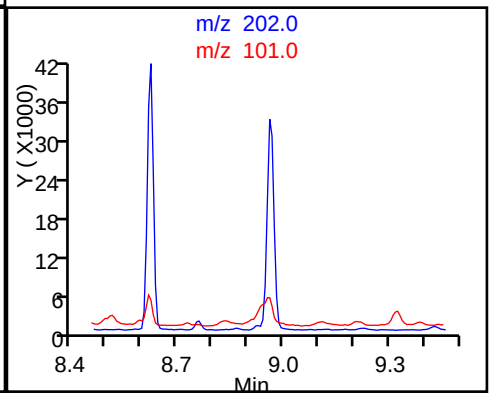












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(0-2) | Lab Sample ID: 280-97928-3

Matrix: Solid | Lab File ID: F7274.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 08:35

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 30.6(g) | Date Analyzed: 06/16/2017 17:47

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 9.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.71	J	5.4	0.54	0.28
91-57-6	2-Methylnaphthalene	0.77	J	5.4	0.72	0.34
83-32-9	Acenaphthene	5.0	J	5.4	0.29	0.17
208-96-8	Acenaphthylene	2.0	J	5.4	0.72	0.18
120-12-7	Anthracene	11		5.4	2.7	0.78
56-55-3	Benzo[a]anthracene	42		5.4	2.7	0.98
50-32-8	Benzo[a]pyrene	39		5.4	2.7	0.80
205-99-2	Benzo[b]fluoranthene	53		5.4	2.7	1.3
191-24-2	Benzo[g,h,i]perylene	21		5.4	2.7	1.2
207-08-9	Benzo[k]fluoranthene	19		5.4	2.7	1.1
218-01-9	Chrysene	45		5.4	2.7	1.1
53-70-3	Dibenz(a,h)anthracene	6.1		5.4	2.7	1.4
206-44-0	Fluoranthene	85		5.4	2.7	1.1
86-73-7	Fluorene	4.6	J	5.4	0.72	0.51
193-39-5	Indeno[1,2,3-cd]pyrene	19		5.4	2.7	1.2
91-20-3	Naphthalene	0.70	J	5.4	0.72	0.35
85-01-8	Phenanthrene	52		5.4	2.7	1.2
129-00-0	Pyrene	69		5.4	2.7	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	68		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	65		44-125
1718-51-0	Terphenyl-d14 (Surr)	62		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7274.D
Lims ID: 280-97928-C-3-B
Client ID: SS025-SB06(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 17:47:30 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-3-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:15:45

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	98	27464	600.0	
* 2 Phenanthrene-d10	188	7.295	7.301	-0.006	100	49870	600.0	
* 3 Chrysene-d12	240	11.371	11.371	0.000	97	41849	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	13947	324.2	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	100	24125	338.8	
$ 6 Terphenyl-d14	244	9.124	9.130	-0.006	96	15808	312.2	
14 Naphthalene	128	4.589	4.589	0.000	97	1722	19.3	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	100	1221	21.3	
17 1-Methylnaphthalene	142	5.235	5.235	0.000	99	1129	19.7	
22 Acenaphthylene	152	5.917	5.917	0.000	98	5296	55.9	
23 Acenaphthene	153	6.055	6.055	0.000	99	7953	137.3	
25 Fluorene	166	6.487	6.494	-0.007	97	9020	126.9	
27 Phenanthrene	178	7.314	7.321	-0.007	100	151151	1429.1	
28 Anthracene	178	7.366	7.366	0.000	99	31409	294.1	
30 Fluoranthene	202	8.623	8.629	-0.006	100	285297	2348.5	
31 Pyrene	202	8.968	8.968	0.000	99	241226	1914.7	
35 Benzo[a]anthracene	228	11.335	11.344	-0.009	97	127856	1148.8	
36 Chrysene	228	11.434	11.443	-0.009	100	126866	1232.2	
38 Benzo[b]fluoranthene	252	14.503	14.503	0.000	100	148202	1466.7	
39 Benzo[k]fluoranthene	252	14.573	14.586	-0.013	100	54138	532.7	
40 Benzo[a]pyrene	252	15.574	15.587	-0.013	100	107172	1074.8	
41 Indeno[1,2,3-cd]pyrene	276	18.663	18.676	-0.013	80	60502	534.9	
42 Dibenz(a,h)anthracene	278	18.693	18.702	-0.009	93	14874	168.5	
43 Benzo[g,h,i]perylene	276	19.100	19.109	-0.009	100	54589	568.9	

Reagents:

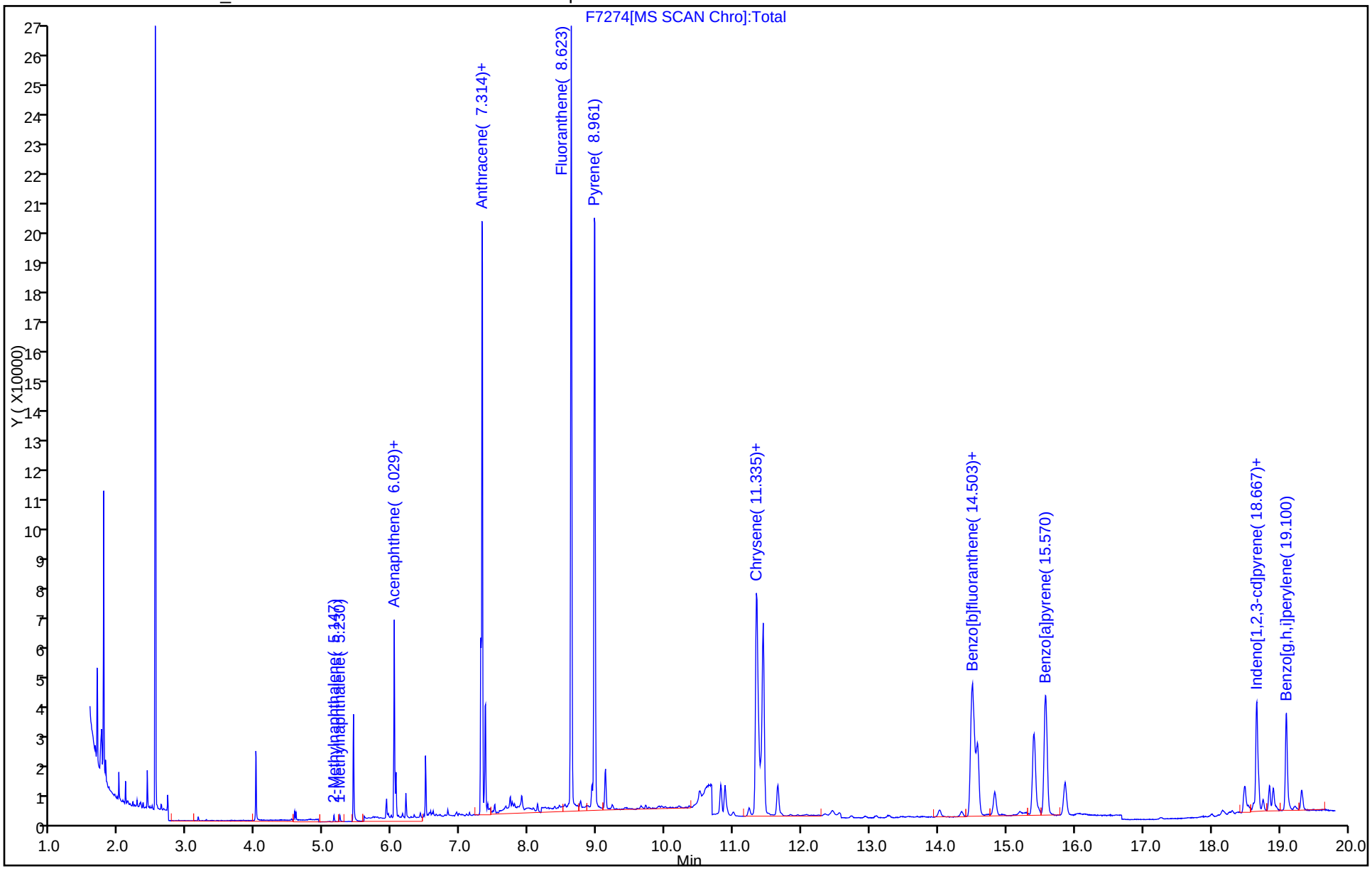
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:09 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7274.D

Injection Date:	16-Jun-2017 17:47:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-C-3-B	Lab Sample ID:	280-97928-3	Worklist Smp#:	8
Client ID:	SS025-SB06(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7274.D
Lims ID: 280-97928-C-3-B
Client ID: SS025-SB06(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 17:47:30 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-3-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:15:45

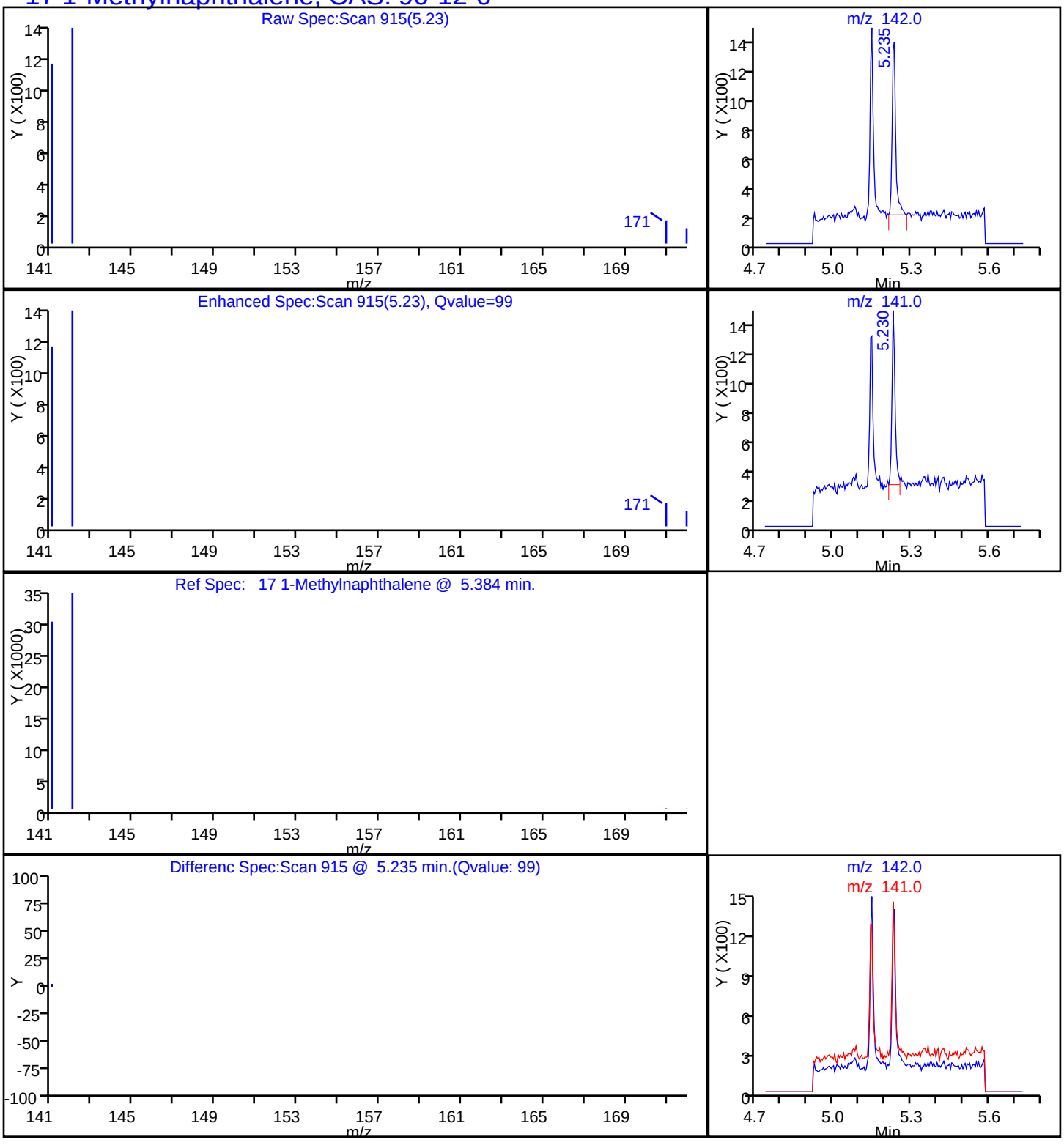
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	324.2	64.84
$ 5 2-Fluorobiphenyl	500.0	338.8	67.76
$ 6 Terphenyl-d14	500.0	312.2	62.44

Report Date: 19-Jun-2017 15:44:09 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7274.D				
Injection Date:	16-Jun-2017 17:47:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-3-B	Lab Sample ID:	280-97928-3		
Client ID:	SS025-SB06(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0

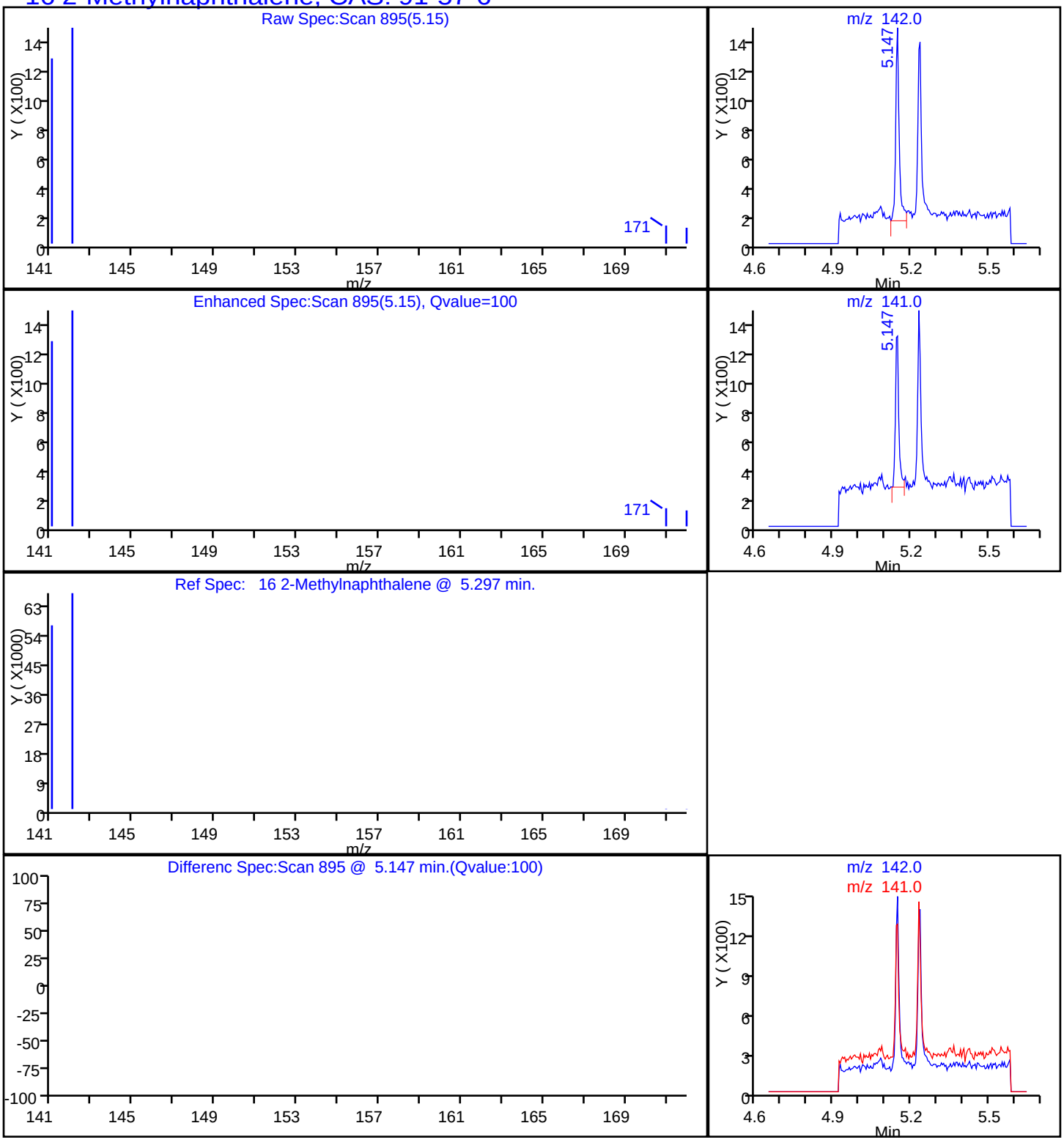


Report Date: 19-Jun-2017 15:44:09 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

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Lims ID:	280-97928-C-3-B	Lab Sample ID:	280-97928-3		
Client ID:	SS025-SB06(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



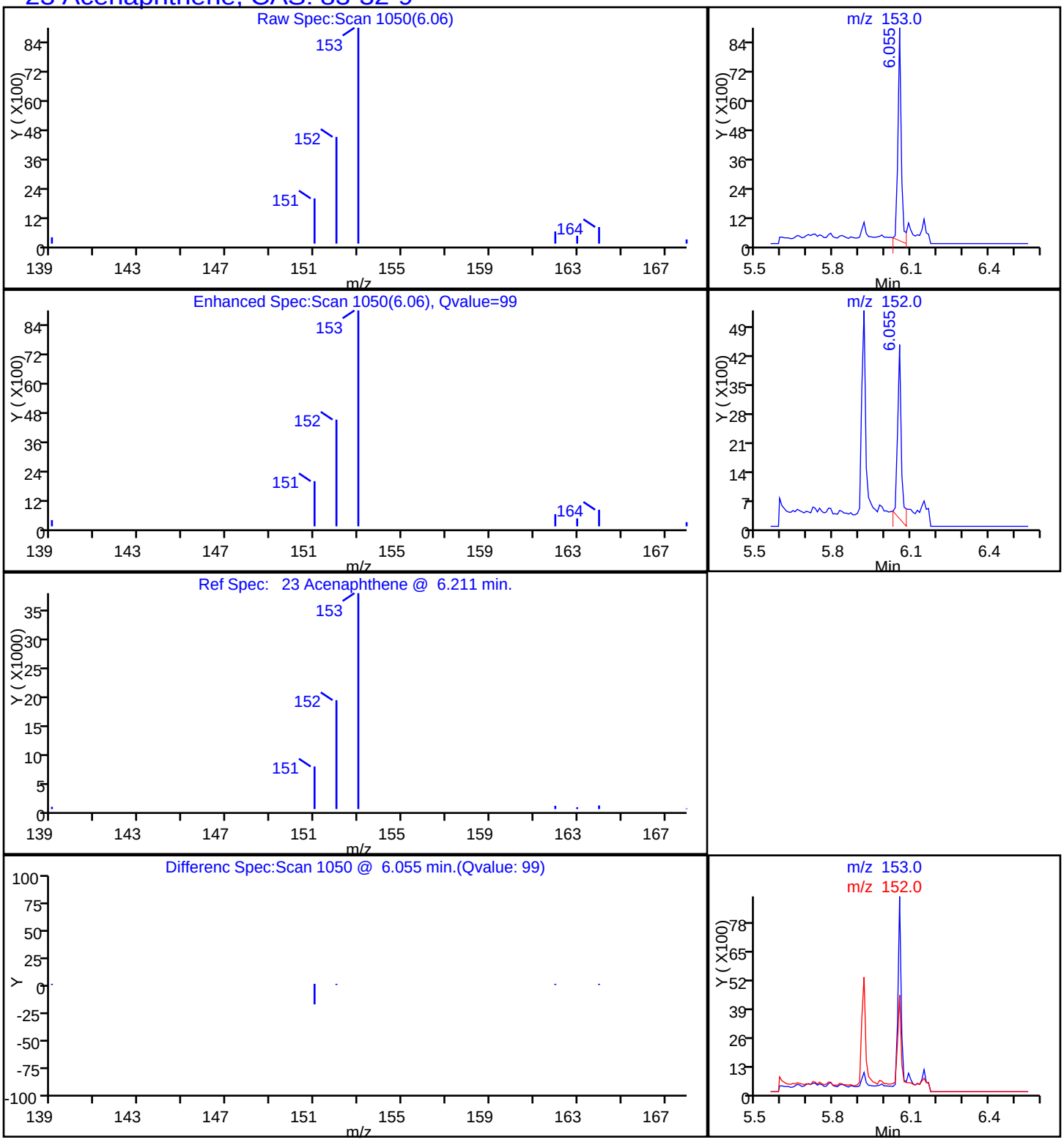
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7274.D

Injection Date:	16-Jun-2017 17:47:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-3-B	Lab Sample ID:	280-97928-3		
Client ID:	SS025-SB06(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9



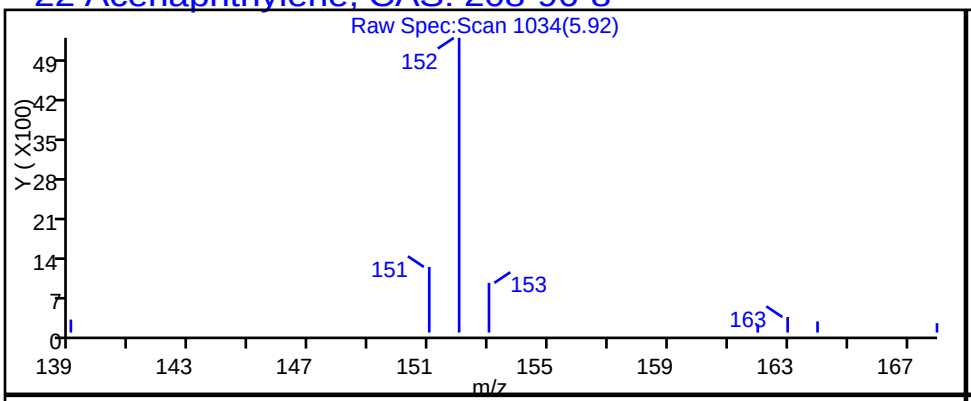
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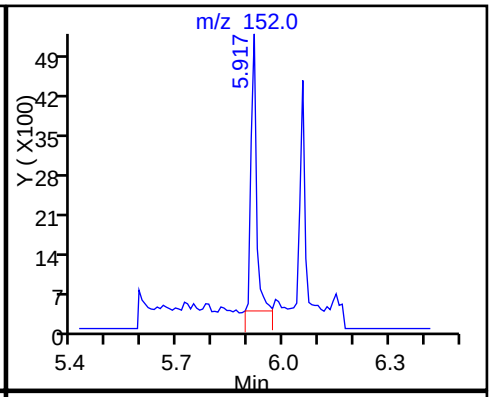
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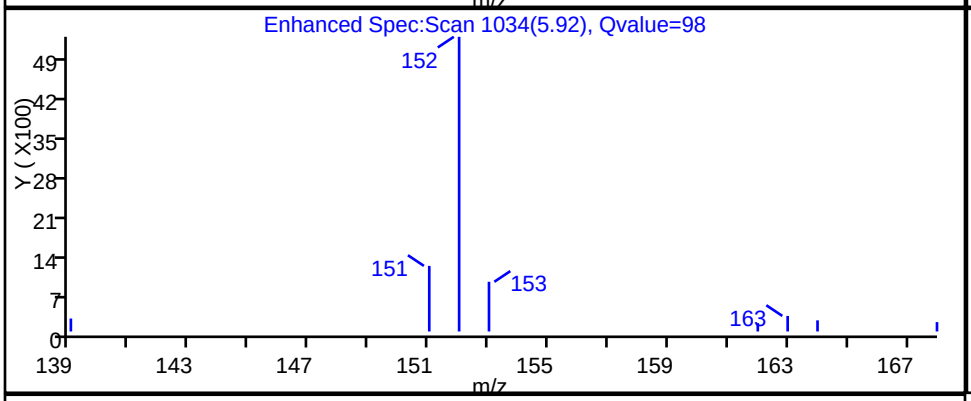
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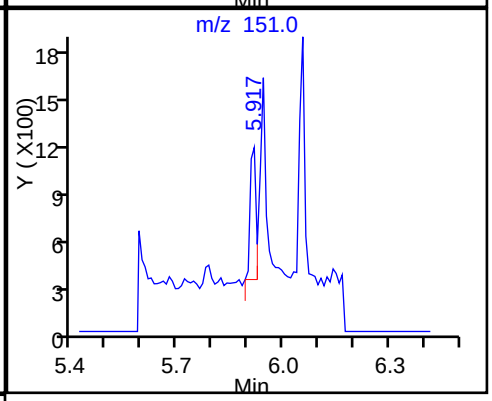
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Lims ID:	280-97928-C-3-B	Lab Sample ID:	280-97928-3		
Client ID:	SS025-SB06(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

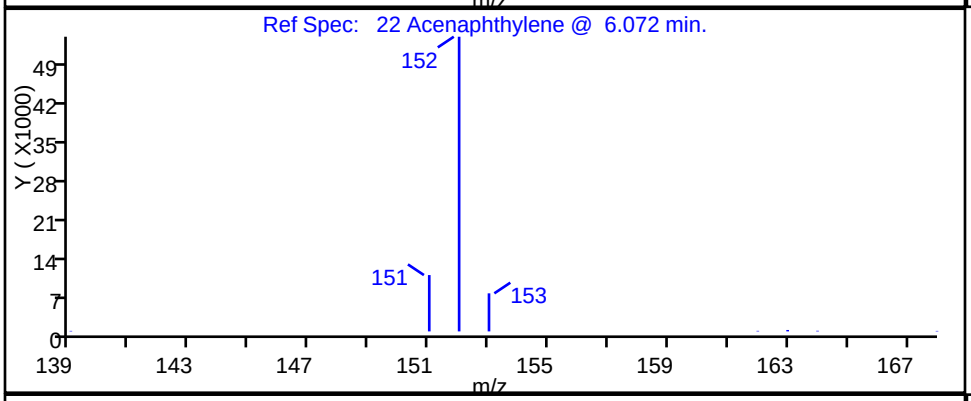
22 Acenaphthylene, CAS: 208-96-8

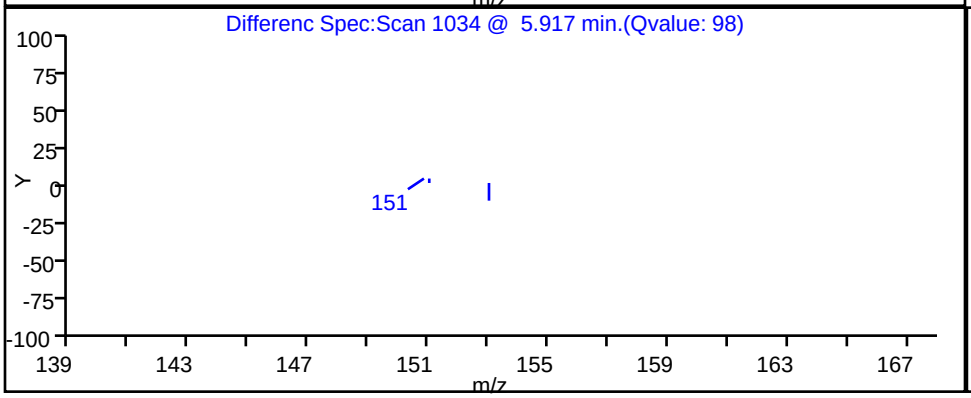


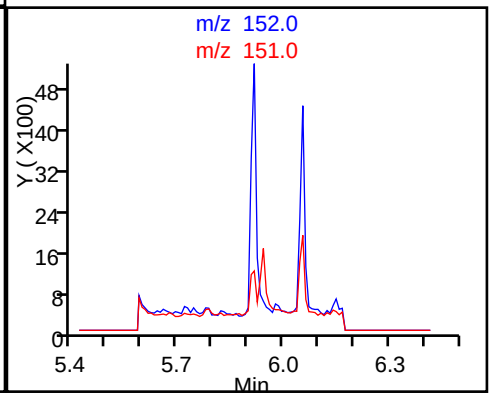












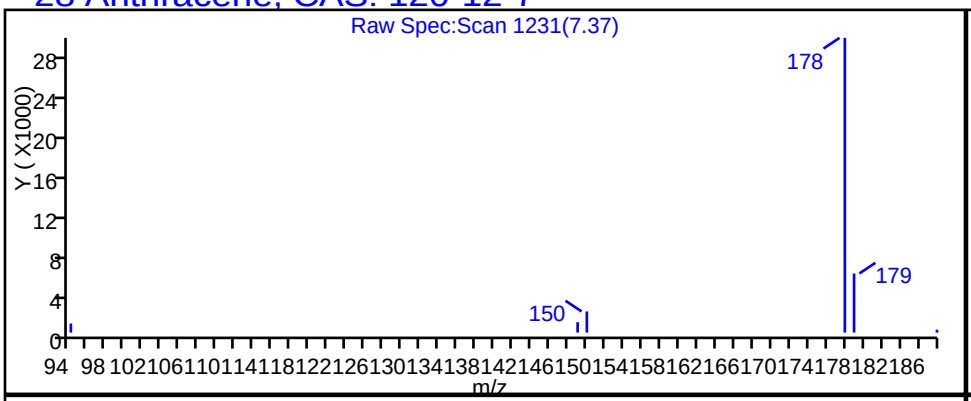
Report Date: 19-Jun-2017 15:44:09 Chrom Revision: 2.2 25-Apr-2017 13:27:22

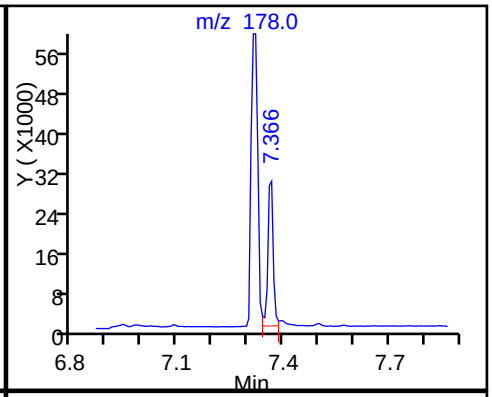
TestAmerica Denver

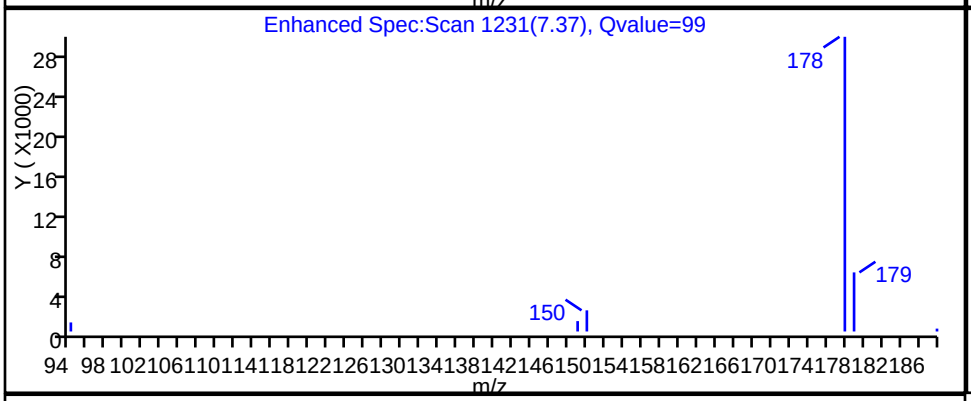
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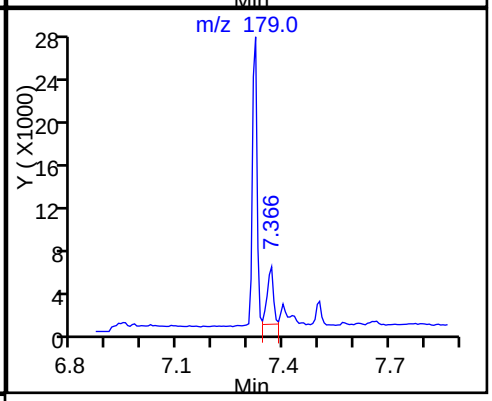
Injection Date:	16-Jun-2017 17:47:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-3-B	Lab Sample ID:	280-97928-3		
Client ID:	SS025-SB06(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
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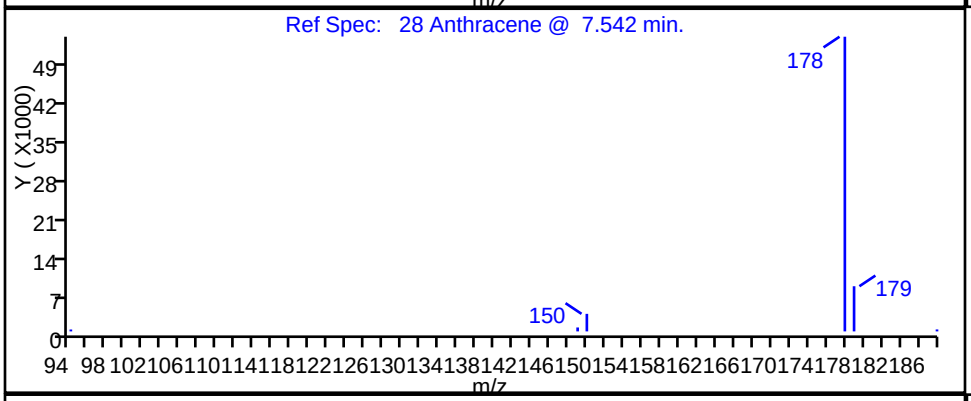
28 Anthracene, CAS: 120-12-7

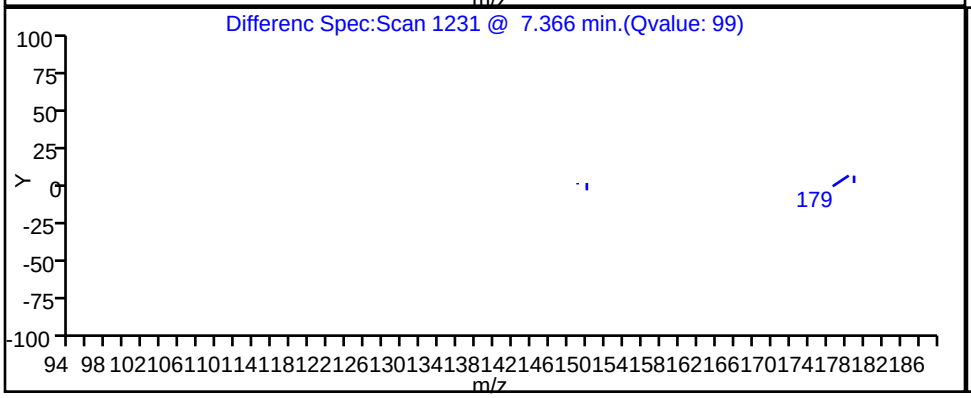


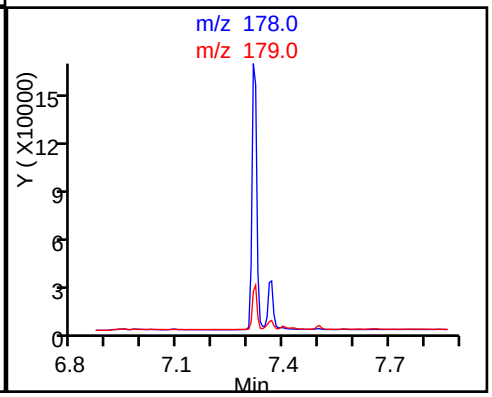












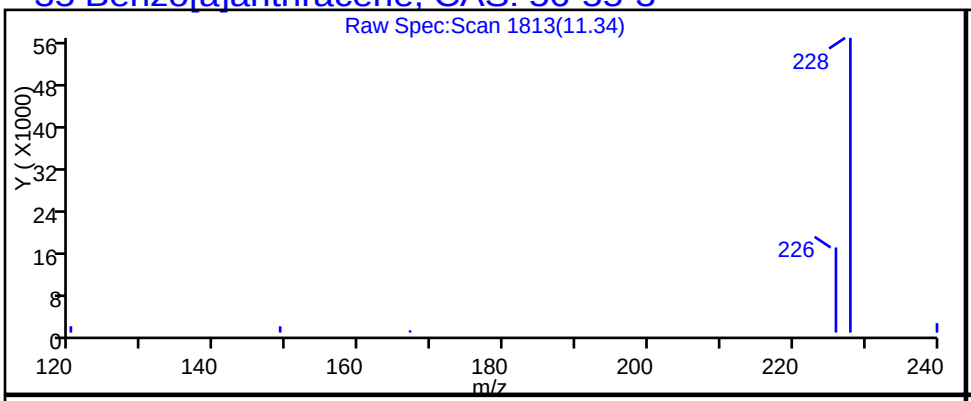
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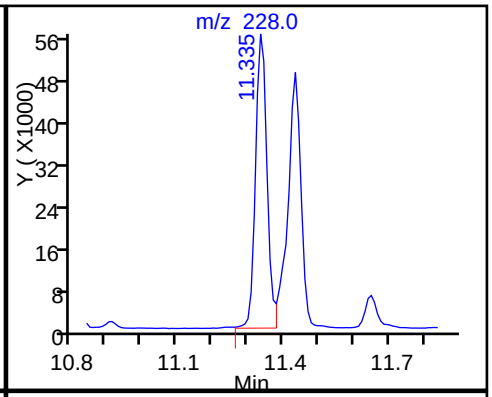
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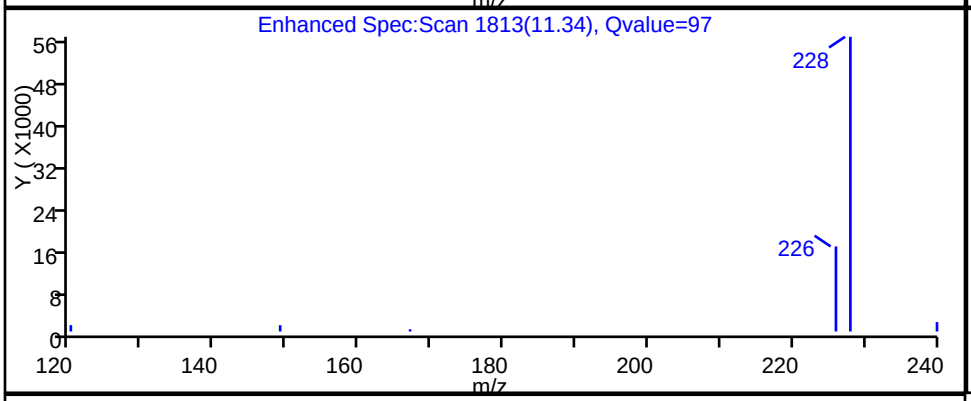
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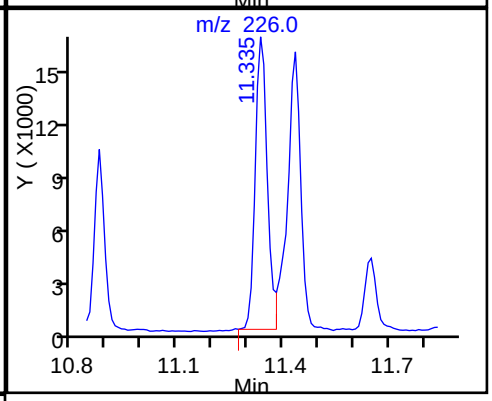
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Client ID:	SS025-SB06(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	7	Worklist Smp#:	8
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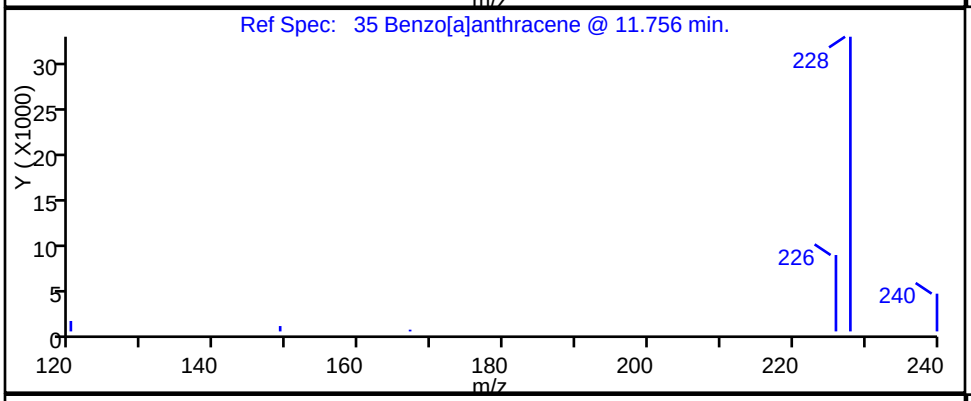
35 Benzo[a]anthracene, CAS: 56-55-3

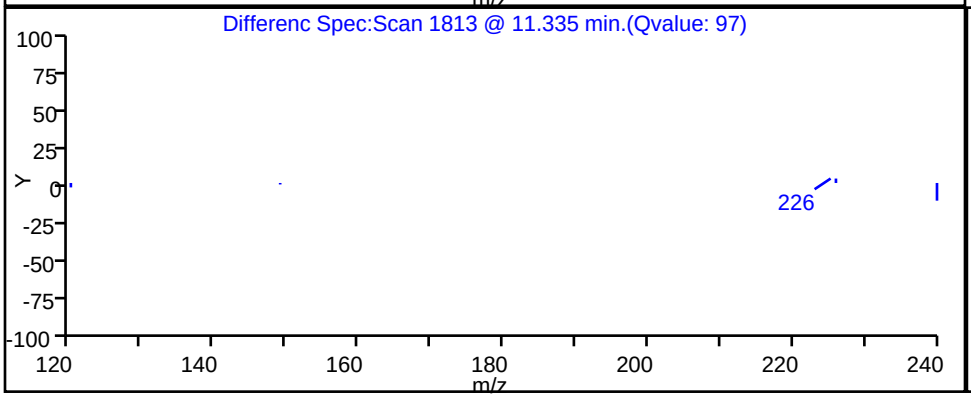


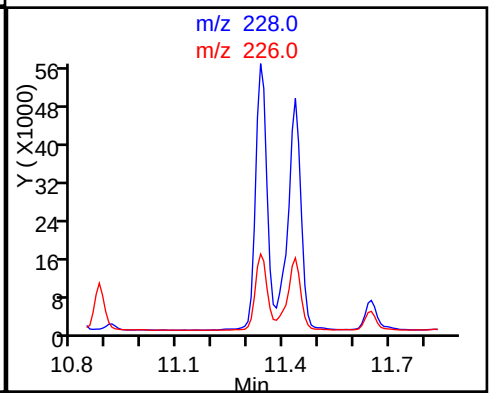












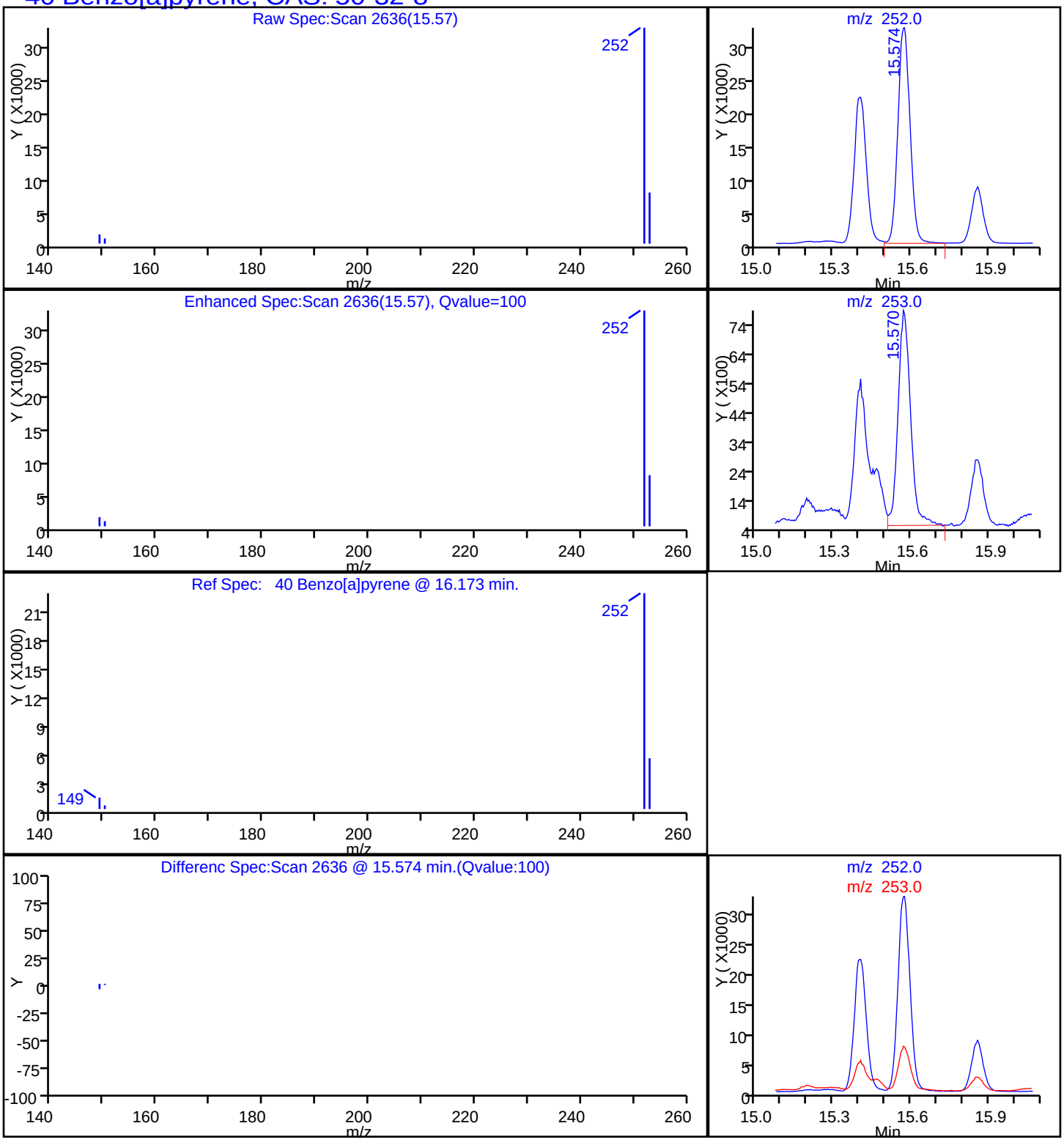
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Client ID:	SS025-SB06(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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Column:		Detector	MS SCAN		

40 Benzo[a]pyrene, CAS: 50-32-8



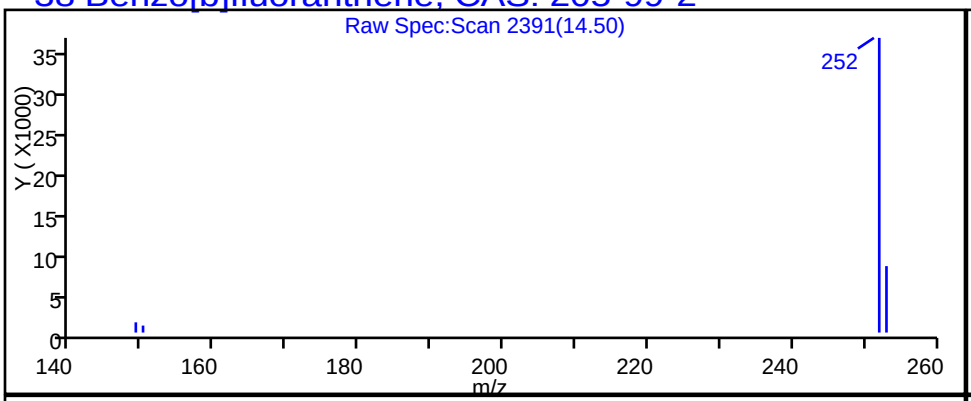
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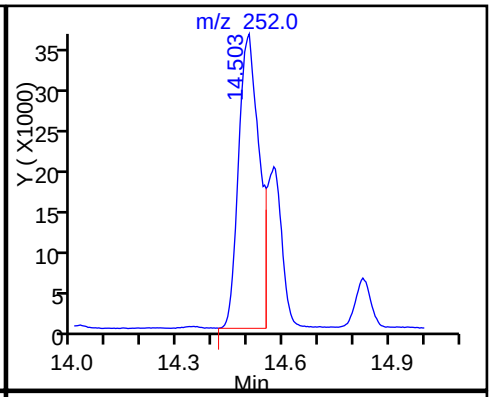
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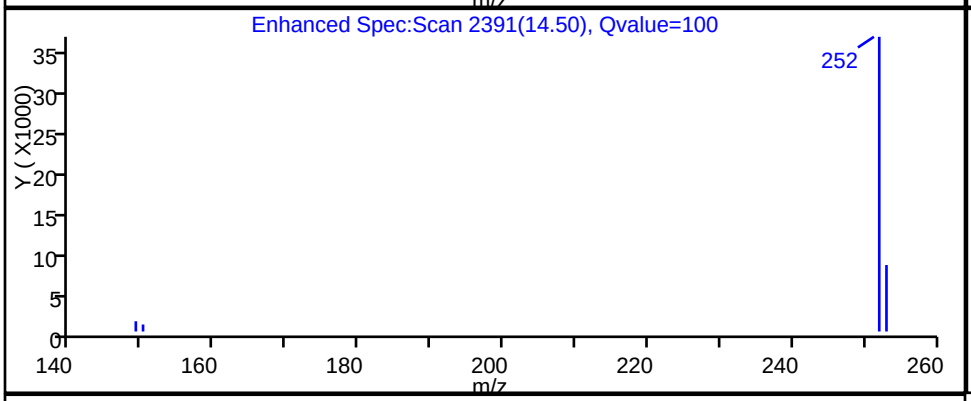
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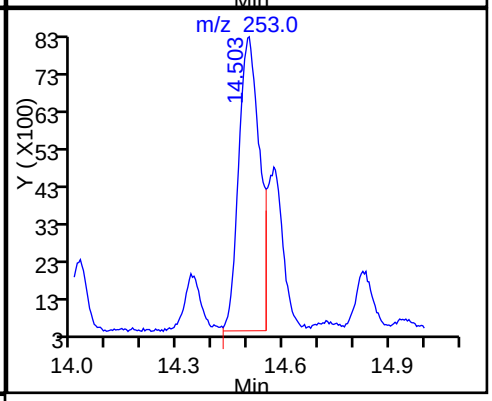
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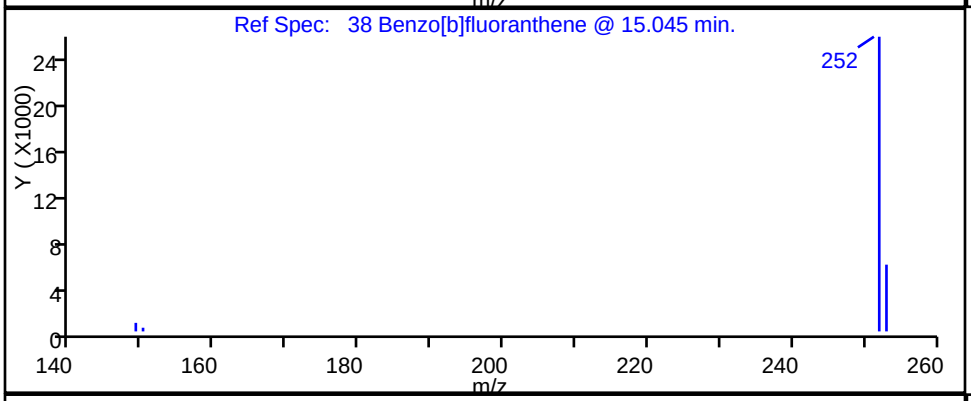
38 Benzo[b]fluoranthene, CAS: 205-99-2

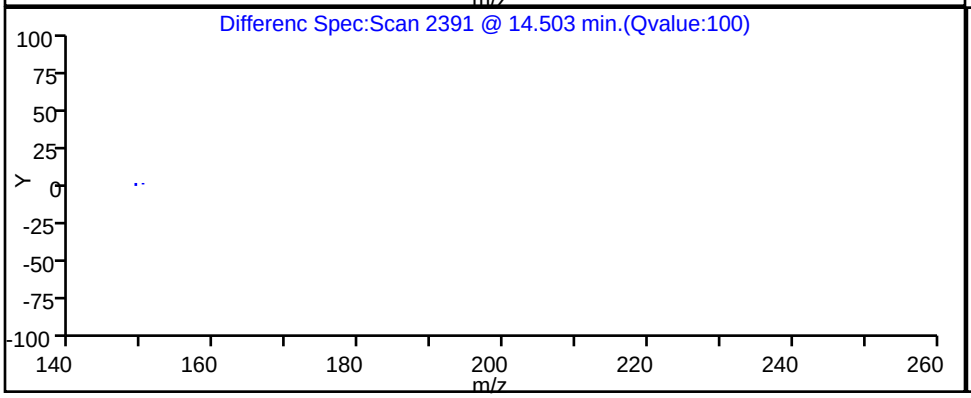


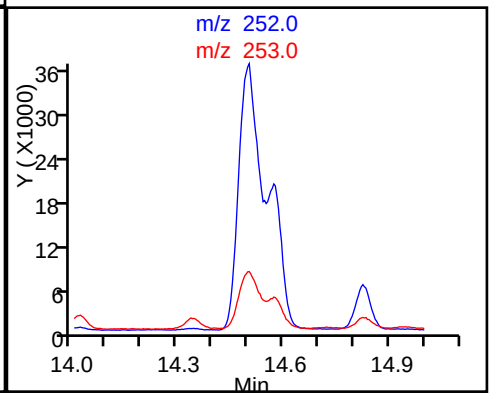










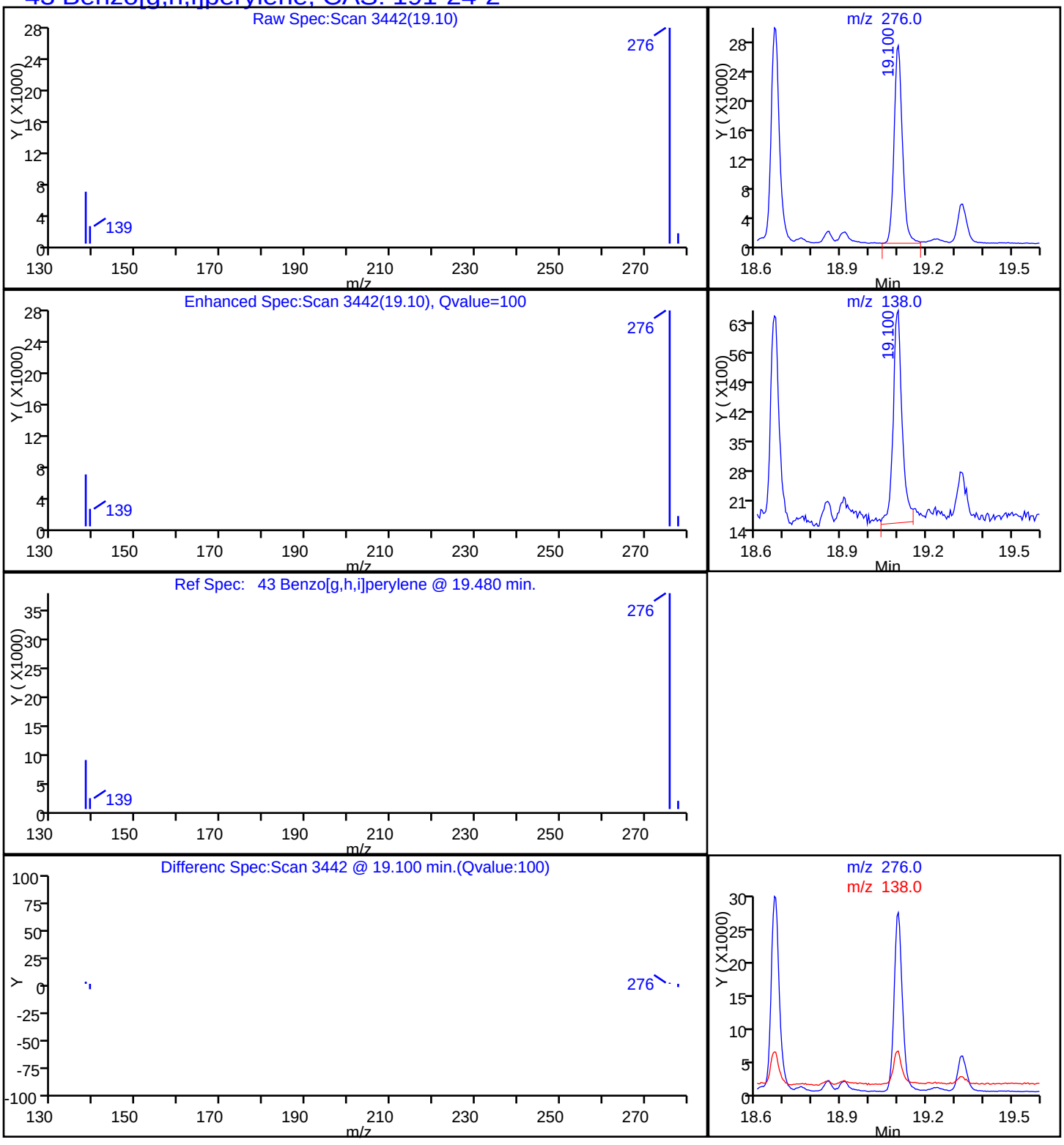


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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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Column:		Detector	MS SCAN		

43 Benzo[g,h,i]perylene, CAS: 191-24-2

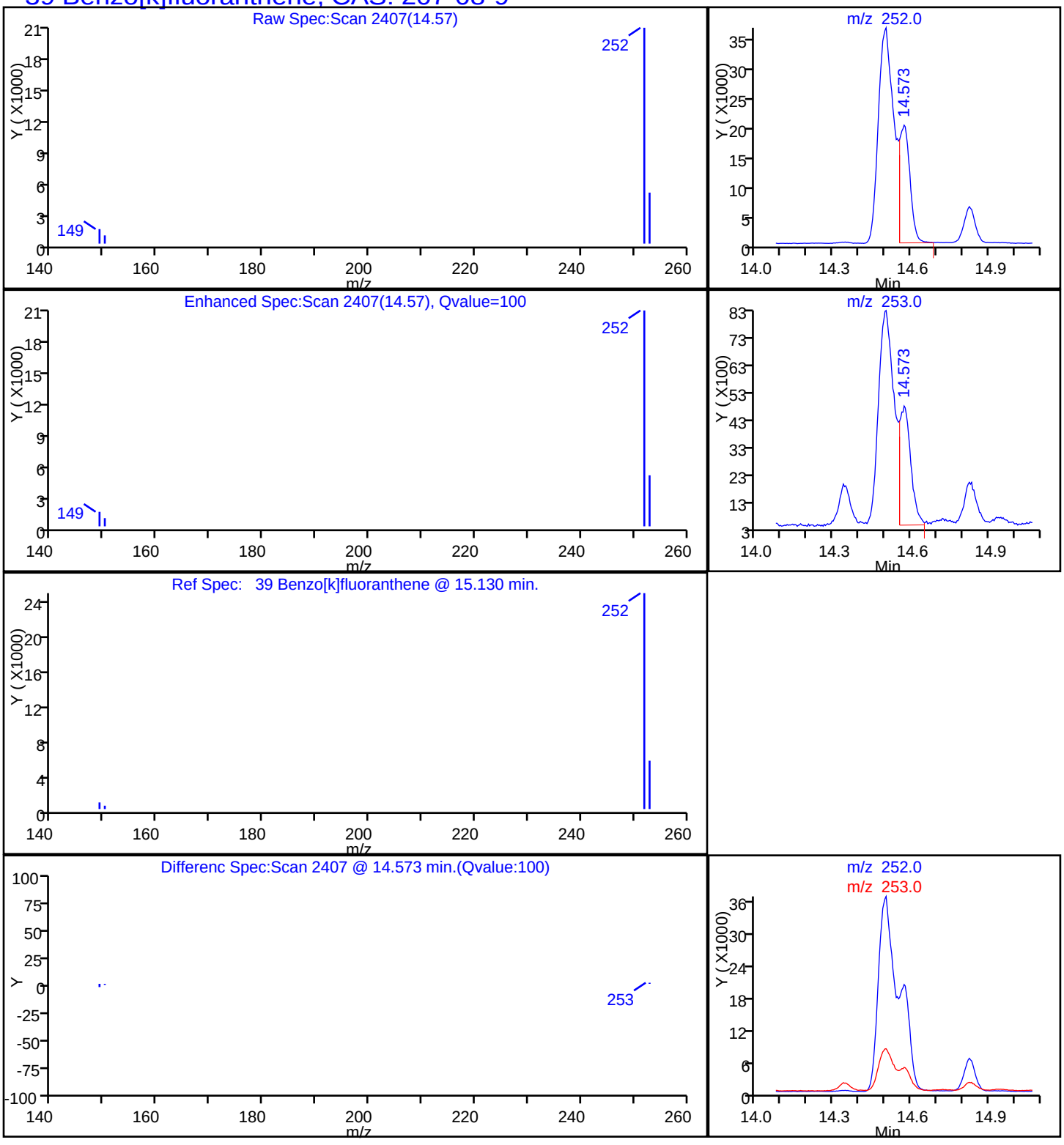


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TestAmerica Denver

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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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Column:		Detector	MS SCAN		

39 Benzo[k]fluoranthene, CAS: 207-08-9



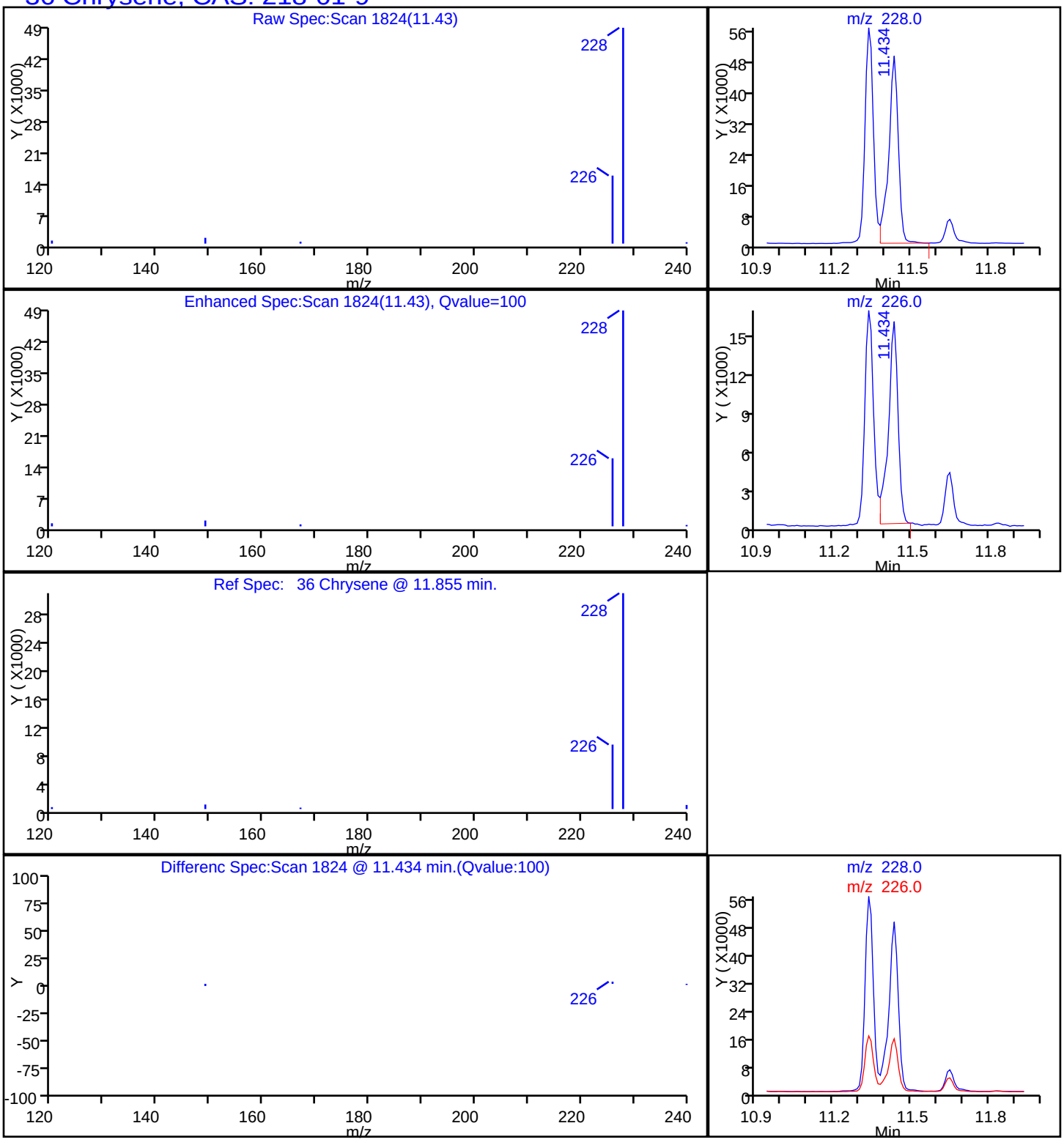
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36 Chrysene, CAS: 218-01-9



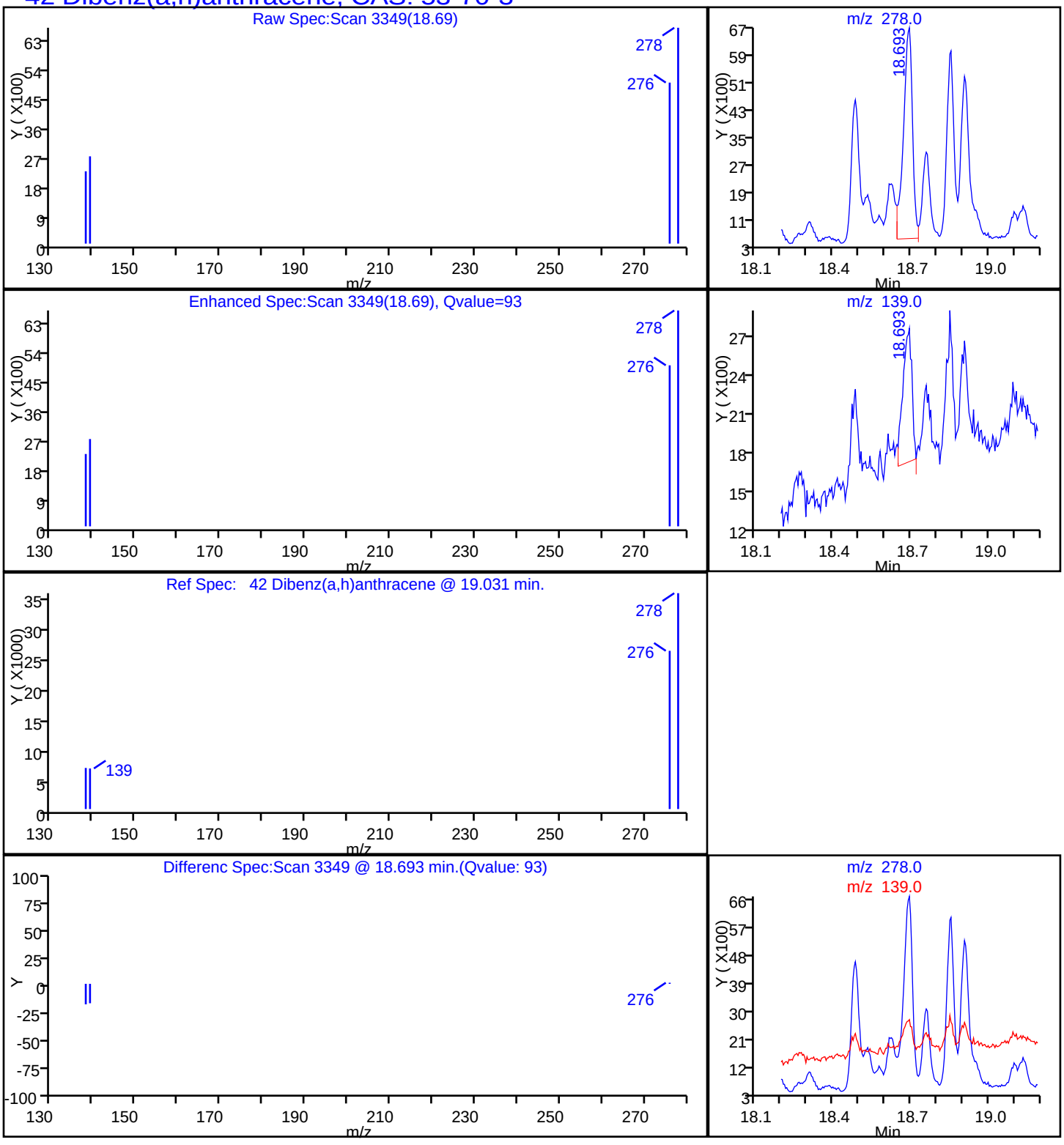
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TestAmerica Denver

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42 Dibenz(a,h)anthracene, CAS: 53-70-3



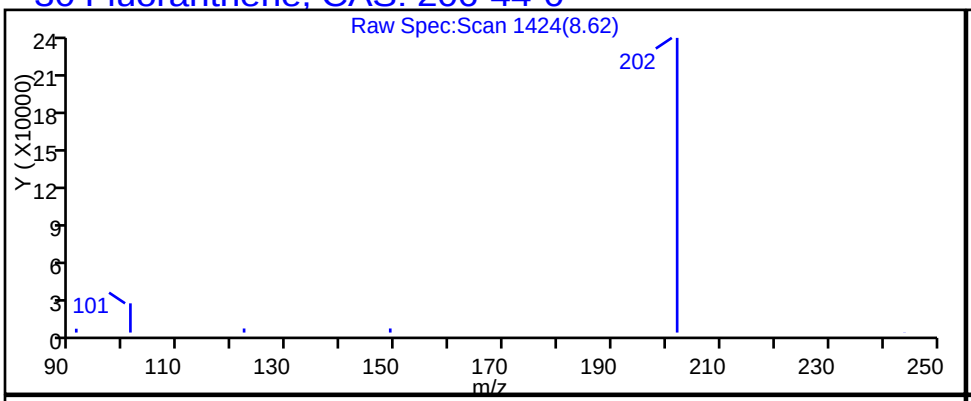
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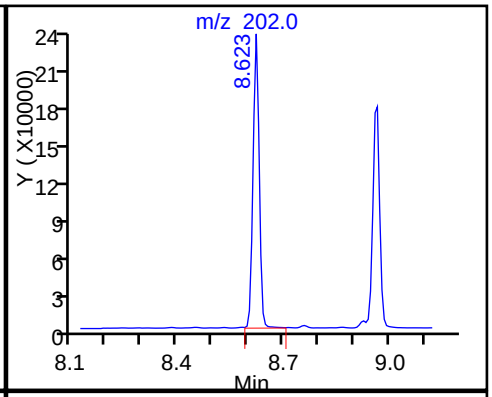
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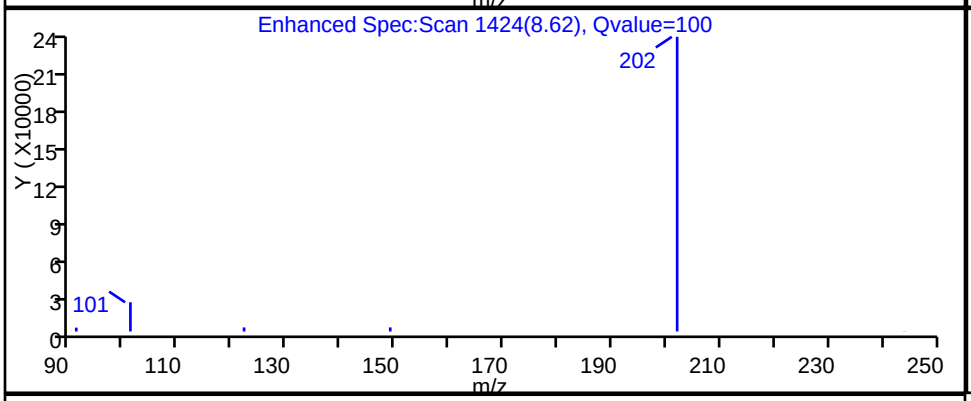
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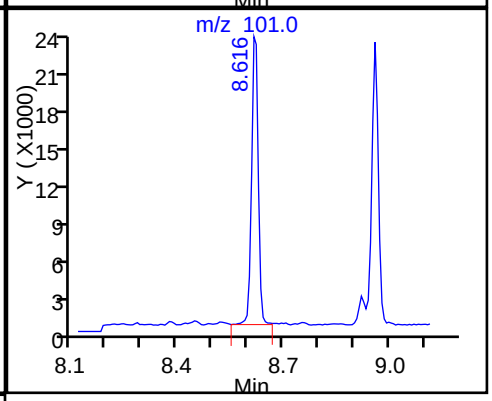
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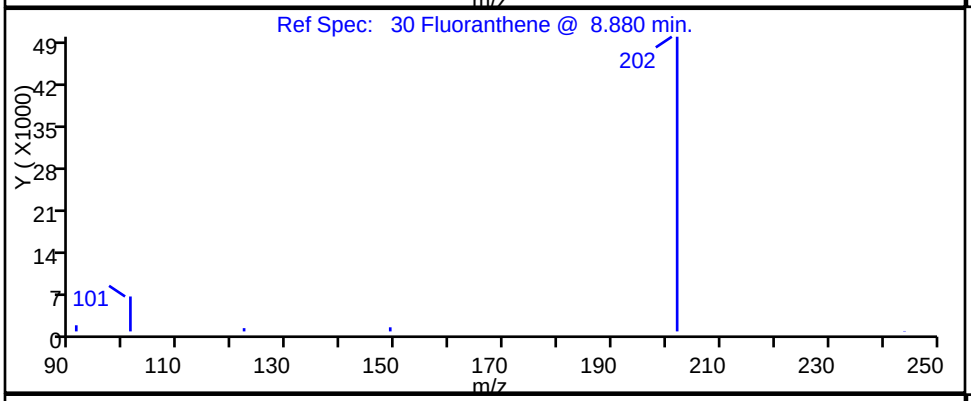
30 Fluoranthene, CAS: 206-44-0

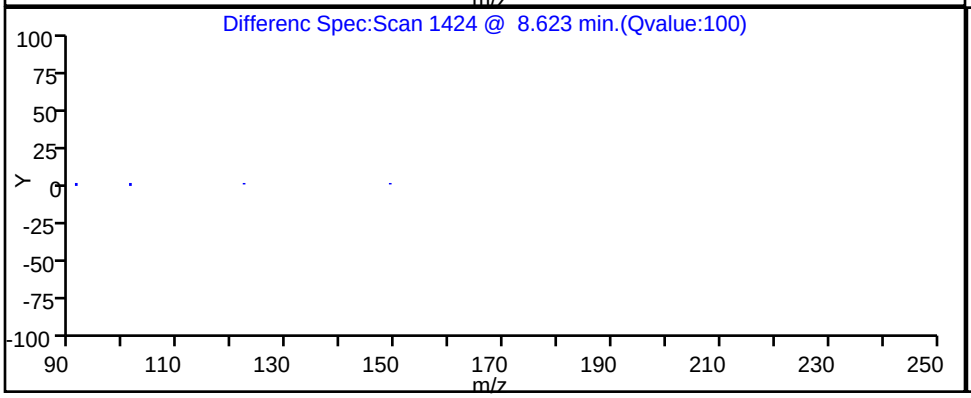


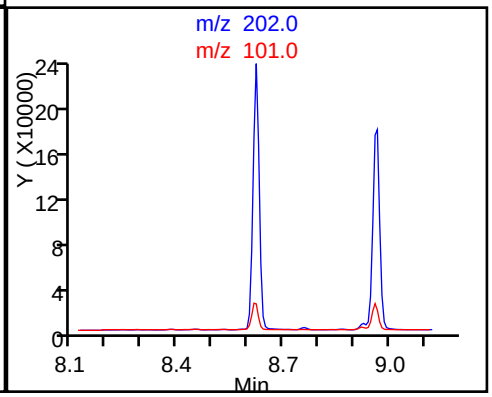












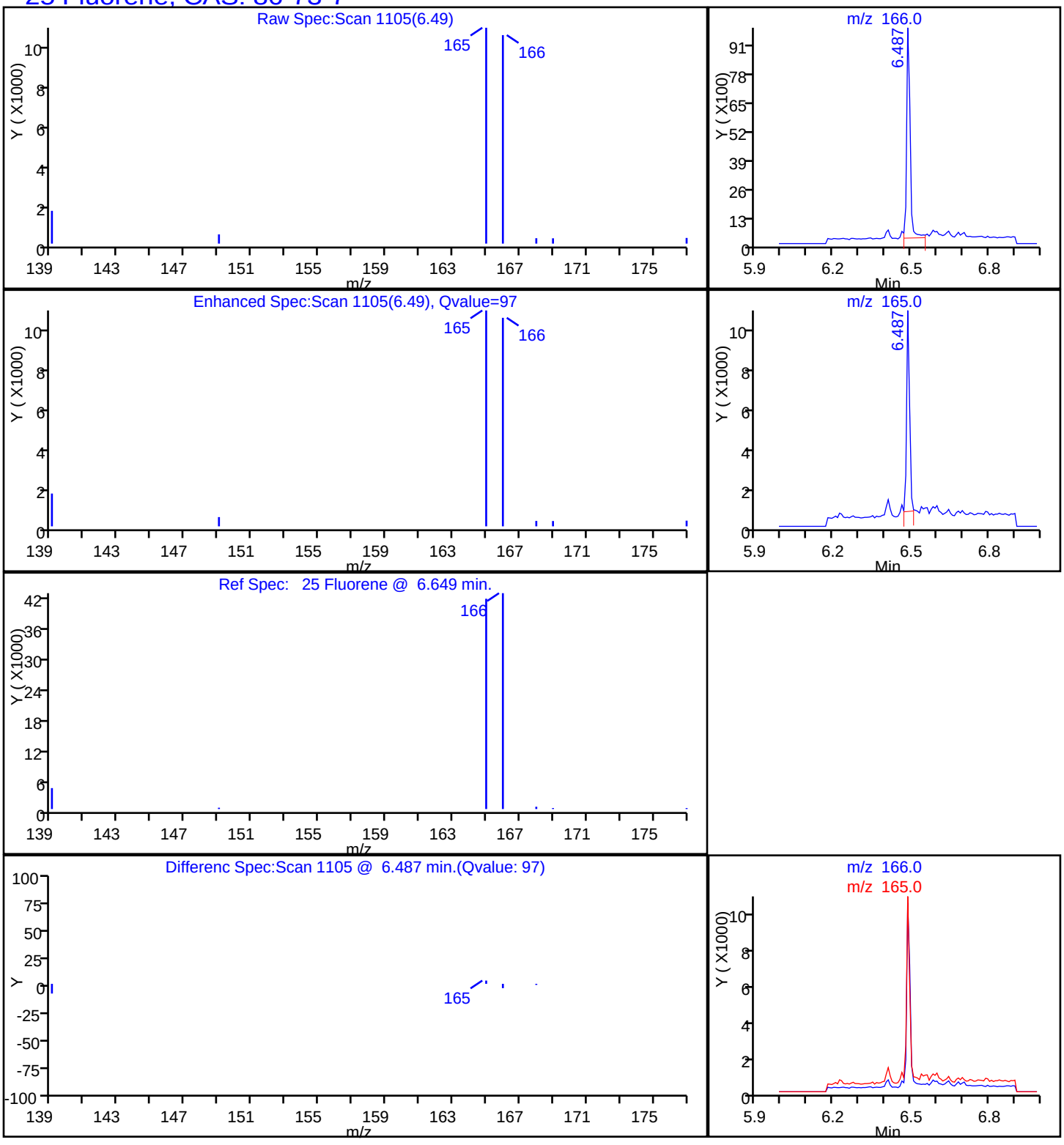
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25 Fluorene, CAS: 86-73-7

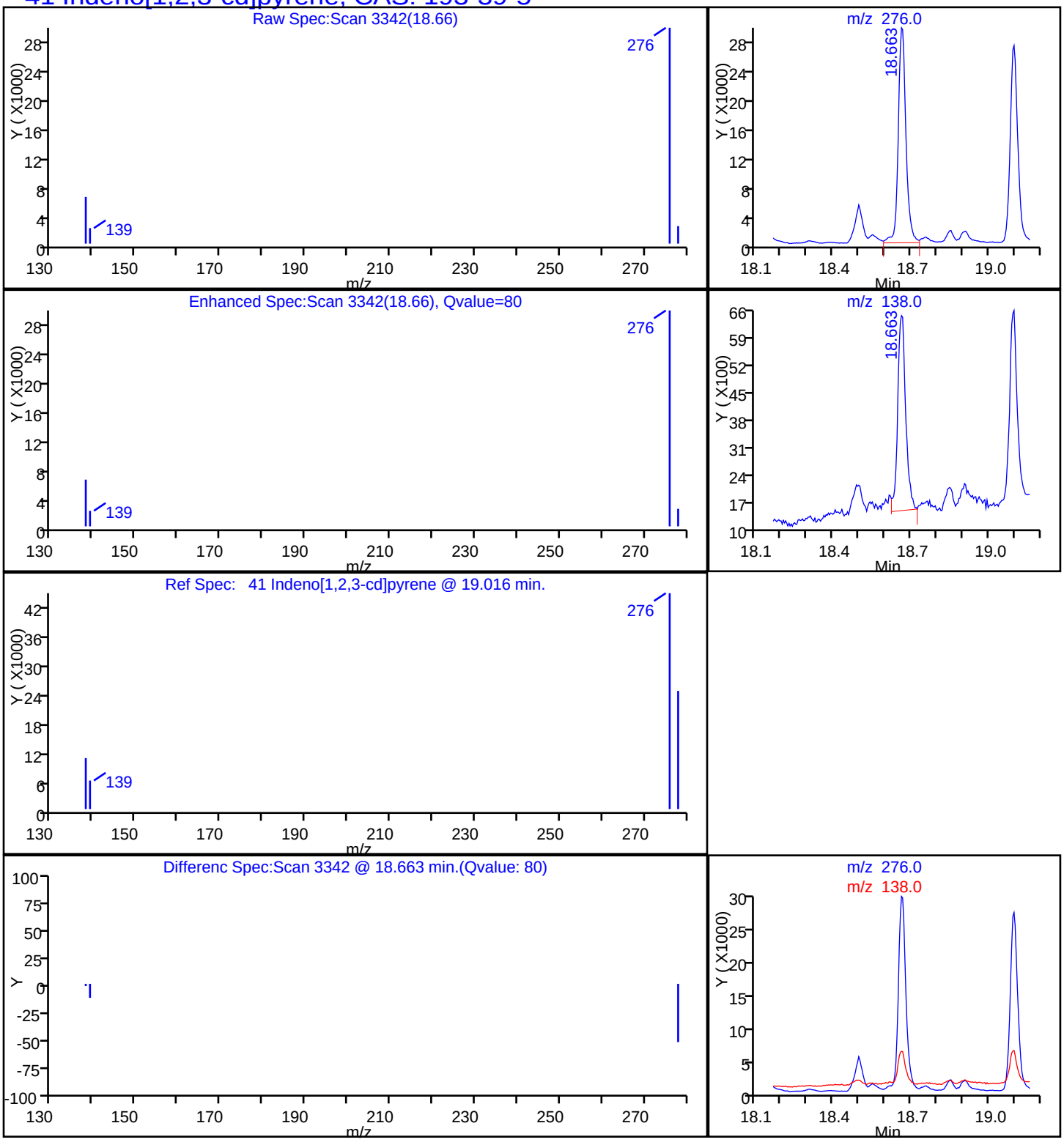


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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



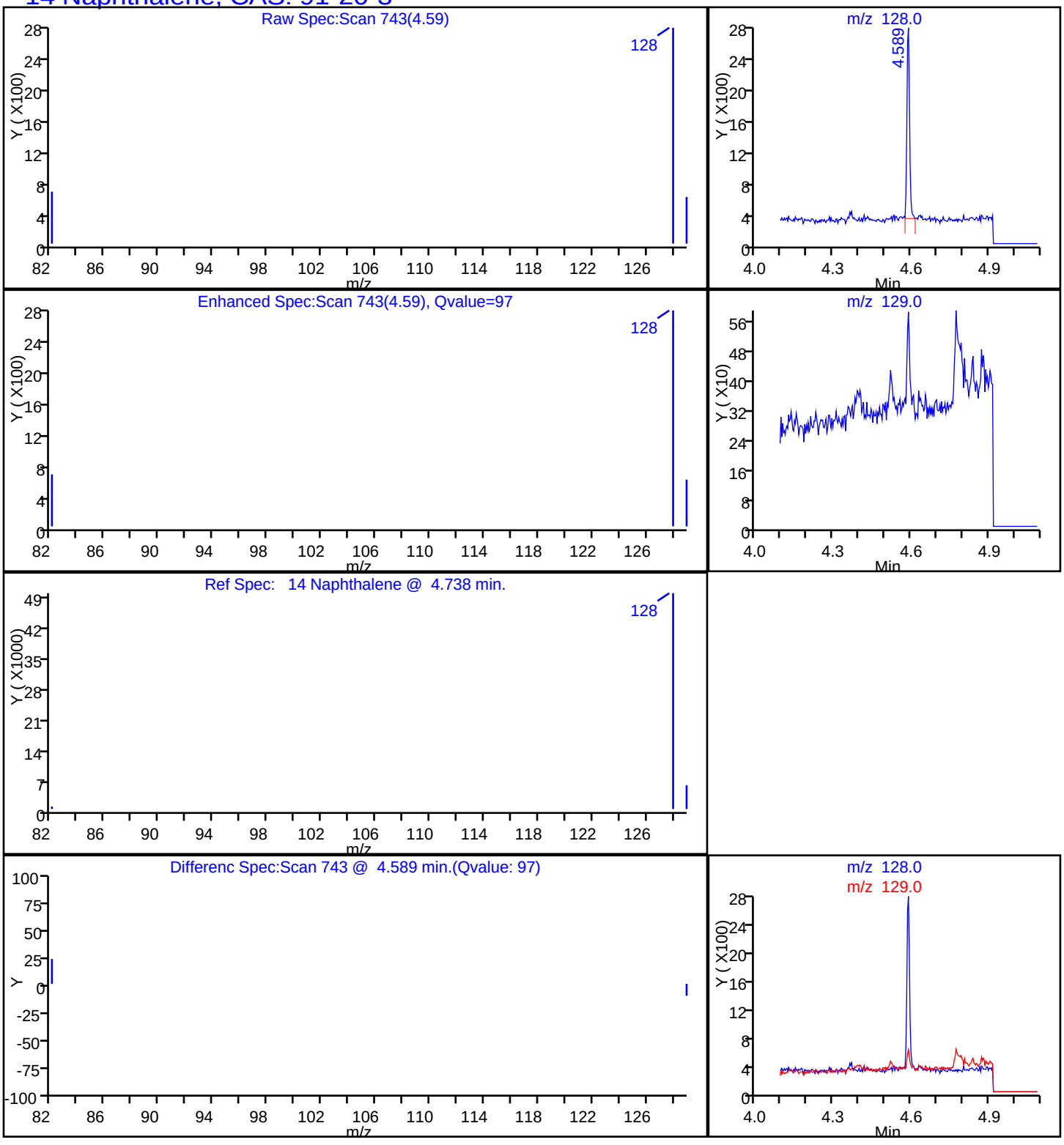
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14 Naphthalene, CAS: 91-20-3

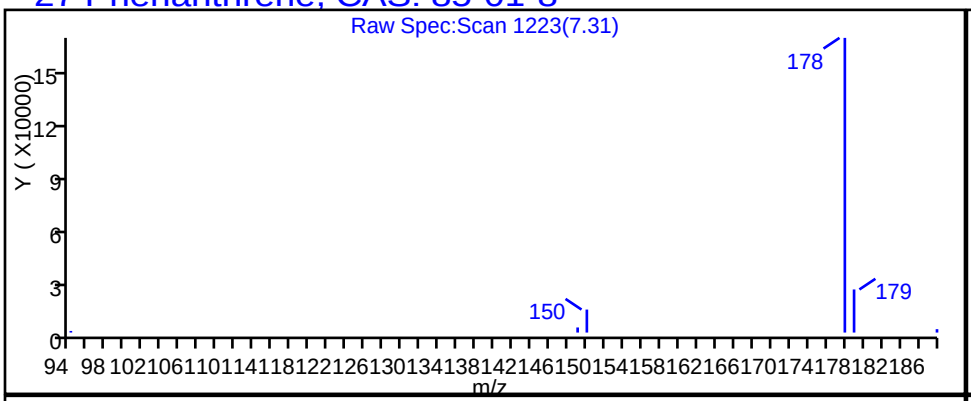


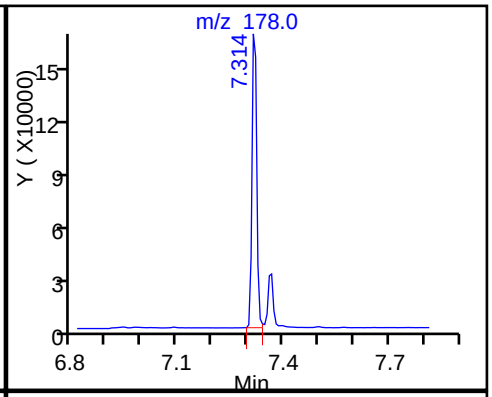
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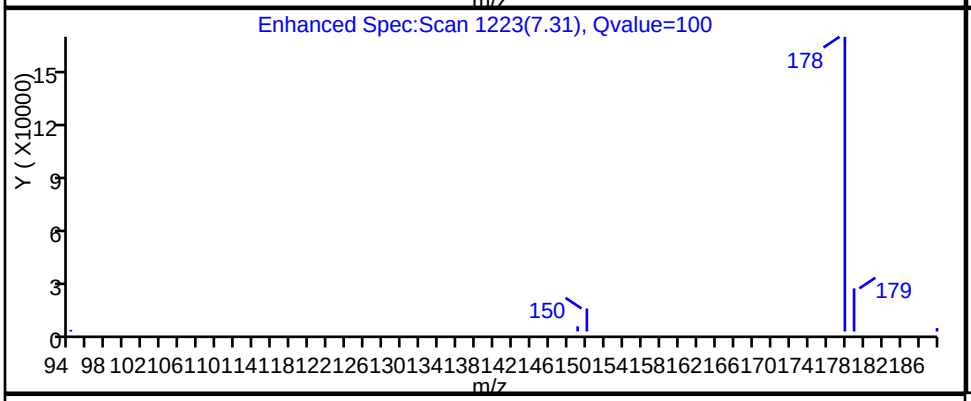
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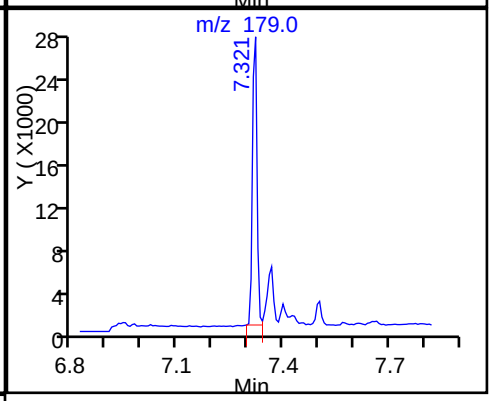
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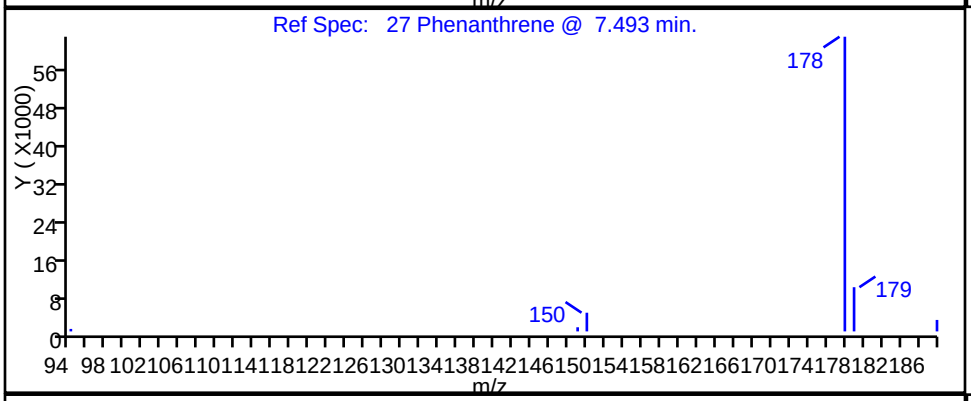
27 Phenanthrene, CAS: 85-01-8

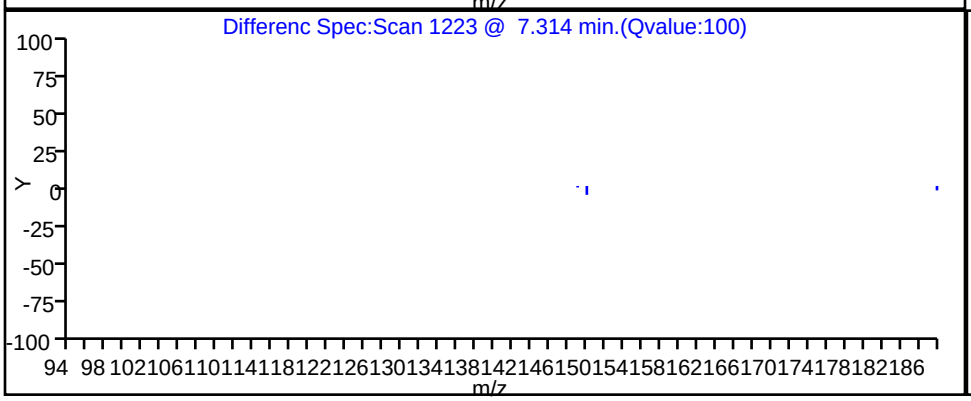


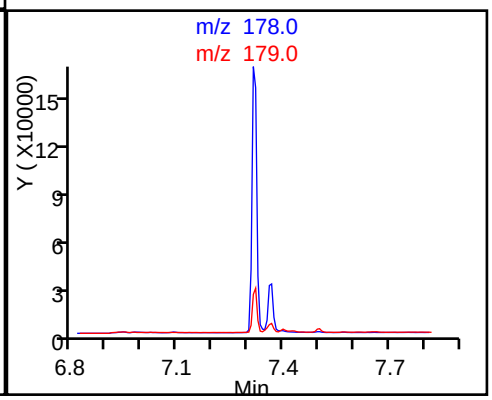












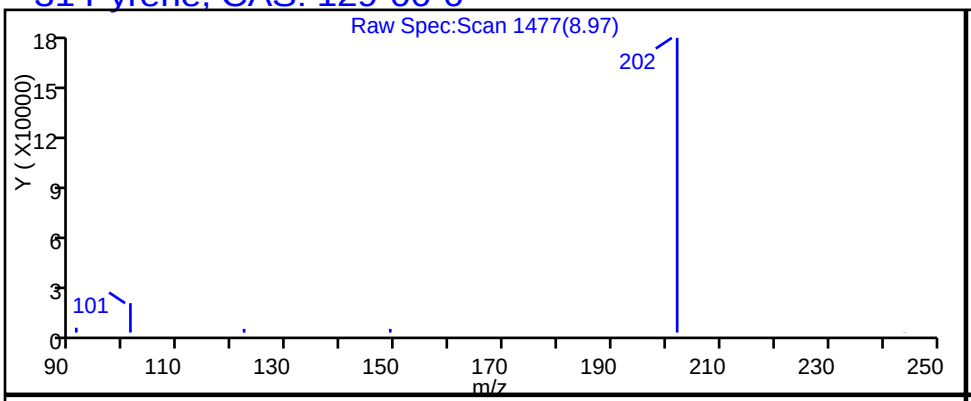
Report Date: 19-Jun-2017 15:44:09 Chrom Revision: 2.2 25-Apr-2017 13:27:22

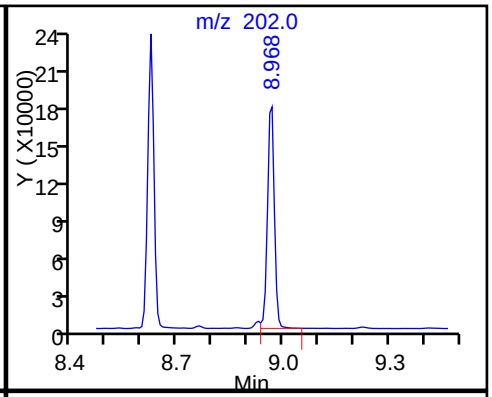
TestAmerica Denver

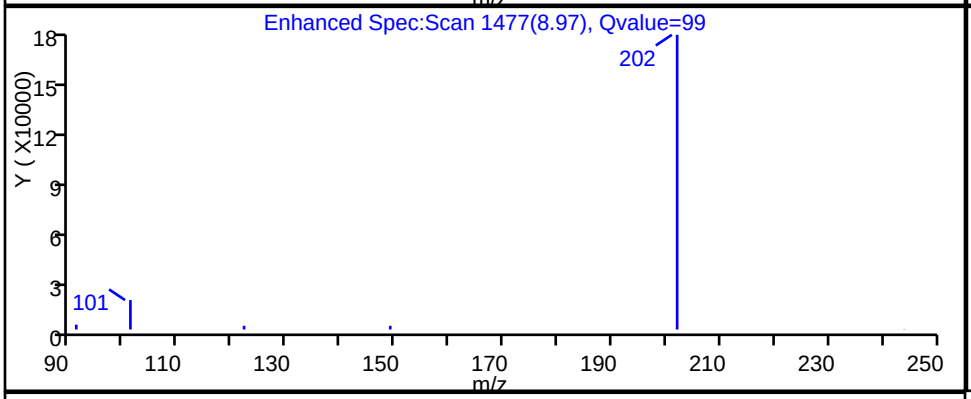
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7274.D

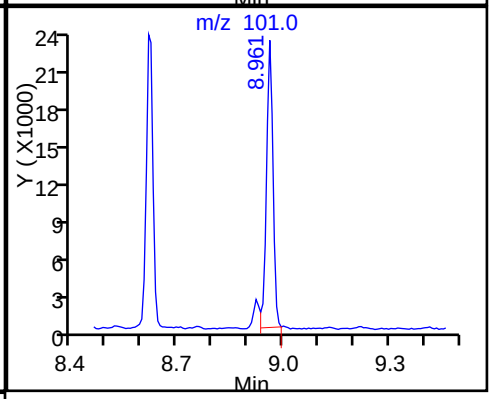
Injection Date:	16-Jun-2017 17:47:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-3-B	Lab Sample ID:	280-97928-3		
Client ID:	SS025-SB06(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

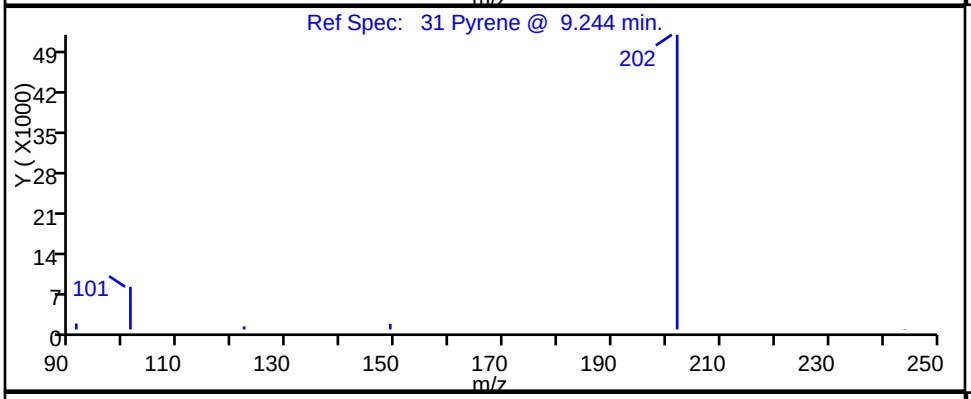
31 Pyrene, CAS: 129-00-0

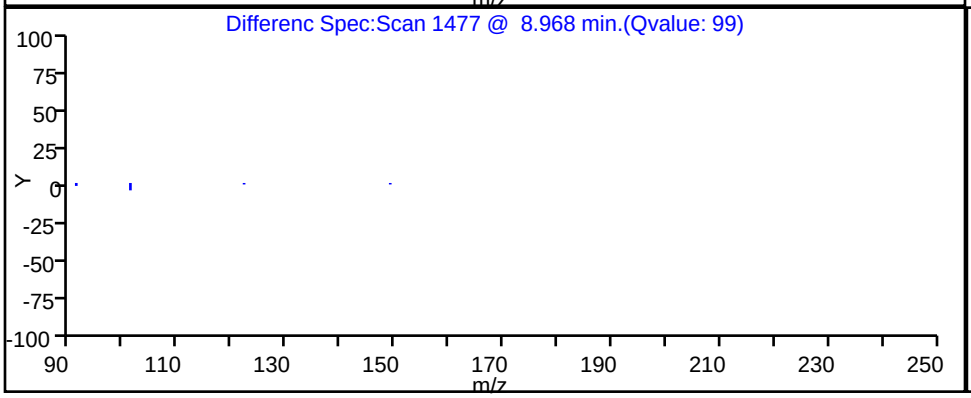


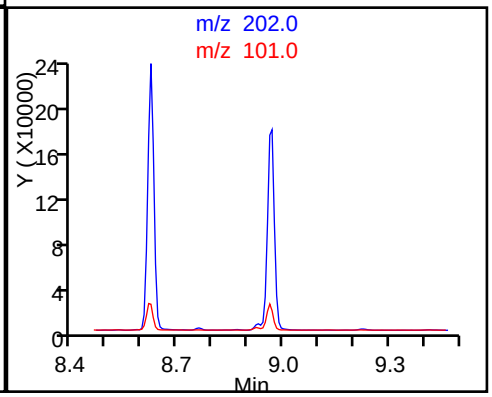












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(2-4) | Lab Sample ID: 280-97928-4

Matrix: Solid | Lab File ID: F7275.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 08:50

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 31.6(g) | Date Analyzed: 06/16/2017 18:13

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 12.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.54	U Q	5.4	0.54	0.28
91-57-6	2-Methylnaphthalene	0.72	U Q	5.4	0.72	0.33
83-32-9	Acenaphthene	0.29	U	5.4	0.29	0.17
208-96-8	Acenaphthylene	0.72	U	5.4	0.72	0.18
120-12-7	Anthracene	2.7	U	5.4	2.7	0.78
56-55-3	Benzo[a]anthracene	2.7	U	5.4	2.7	0.97
50-32-8	Benzo[a]pyrene	2.7	U	5.4	2.7	0.80
205-99-2	Benzo[b]fluoranthene	2.7	U	5.4	2.7	1.3
191-24-2	Benzo[g,h,i]perylene	2.7	U	5.4	2.7	1.2
207-08-9	Benzo[k]fluoranthene	2.7	U	5.4	2.7	1.1
218-01-9	Chrysene	2.7	U	5.4	2.7	1.1
53-70-3	Dibenz(a,h)anthracene	2.7	U	5.4	2.7	1.4
206-44-0	Fluoranthene	1.4	J	5.4	2.7	1.1
86-73-7	Fluorene	0.72	U	5.4	0.72	0.51
193-39-5	Indeno[1,2,3-cd]pyrene	2.7	U	5.4	2.7	1.2
91-20-3	Naphthalene	0.72	U Q	5.4	0.72	0.35
85-01-8	Phenanthrene	2.7	U	5.4	2.7	1.2
129-00-0	Pyrene	2.7	U	5.4	2.7	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	46		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	41	Q	44-125
1718-51-0	Terphenyl-d14 (Surr)	66		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7275.D
Lims ID: 280-97928-B-4-B
Client ID: SS025-SB06(2-4)
Sample Type: Client
Inject. Date: 16-Jun-2017 18:13:30 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-b-4-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:16:18

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	95	27035	600.0	
* 2 Phenanthrene-d10	188	7.301	7.301	0.000	99	51690	600.0	
* 3 Chrysene-d12	240	11.369	11.371	-0.002	93	42705	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	8717	205.8	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	100	16123	230.0	
$ 6 Terphenyl-d14	244	9.124	9.130	-0.006	97	17332	330.2	
14 Naphthalene	128		4.589				ND	
16 2-Methylnaphthalene	142		5.147				ND	
17 1-Methylnaphthalene	142		5.235				ND	
22 Acenaphthylene	152		5.917				ND	
23 Acenaphthene	153		6.055				ND	
25 Fluorene	166		6.494				ND	
27 Phenanthrene	178	7.321	7.321	0.000	92	2588	23.6	
28 Anthracene	178	7.366	7.366	0.000	88	903	8.16	
30 Fluoranthene	202	8.623	8.629	-0.006	93	4833	38.4	
31 Pyrene	202	8.968	8.968	0.000	94	4075	31.2	
35 Benzo[a]anthracene	228	11.342	11.344	-0.002	35	2301	20.3	
36 Chrysene	228	11.441	11.443	-0.002	92	2921	27.8	
38 Benzo[b]fluoranthene	252	14.500	14.503	-0.003	86	3376	32.7	
39 Benzo[k]fluoranthene	252		14.586				ND	
40 Benzo[a]pyrene	252	15.580	15.587	-0.007	56	1940	19.1	
41 Indeno[1,2,3-cd]pyrene	276	18.673	18.676	-0.003	43	1383	12.0	
42 Dibenz(a,h)anthracene	278	18.695	18.702	-0.007	28	309	3.43	
43 Benzo[g,h,i]perylene	276	19.106	19.109	-0.003	33	1372	14.0	

Reagents:

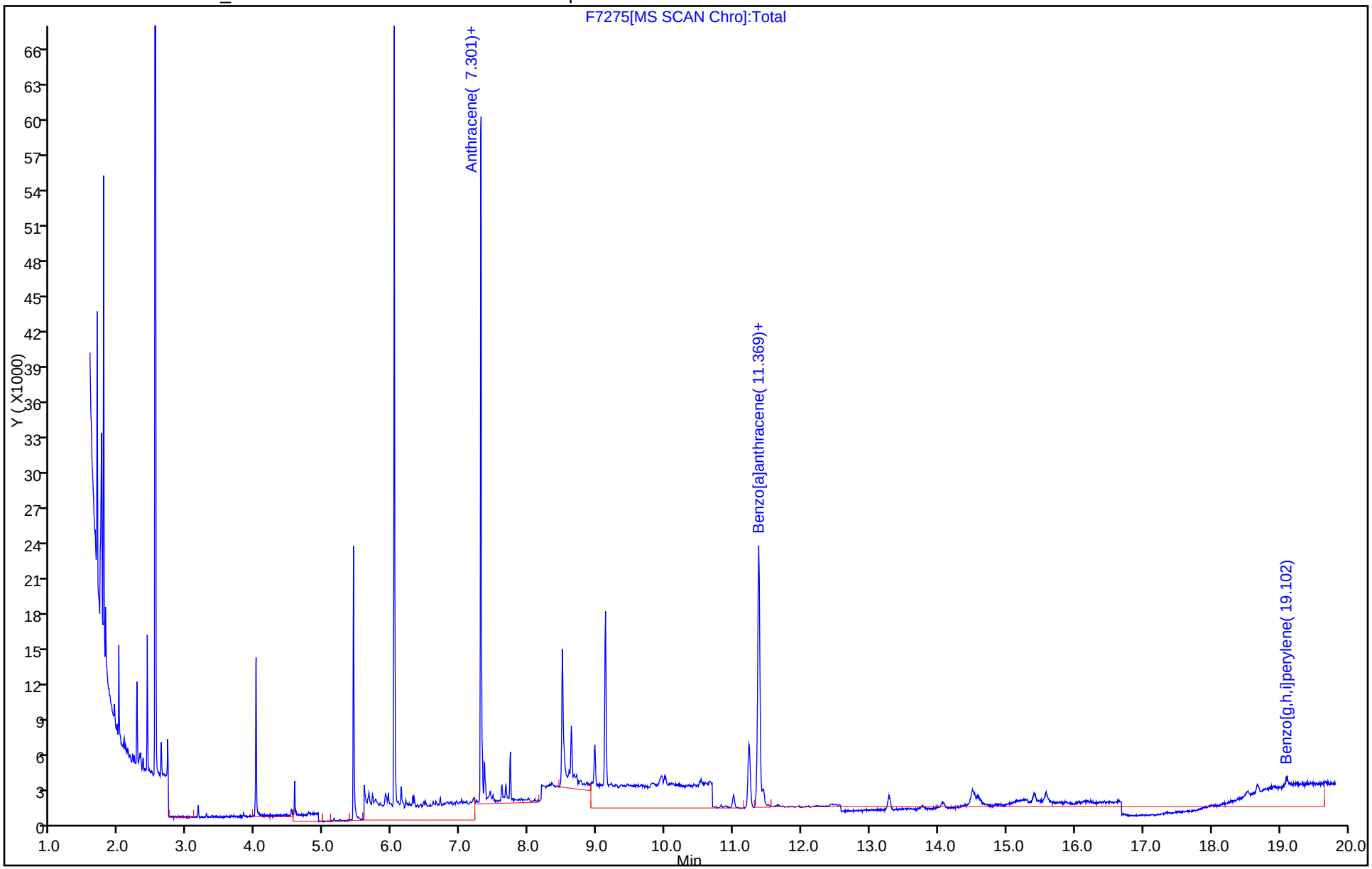
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:11 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7275.D

Injection Date:	16-Jun-2017 18:13:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-B-4-B	Lab Sample ID:	280-97928-4	Worklist Smp#:	9
Client ID:	SS025-SB06(2-4)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7275.D
Lims ID: 280-97928-B-4-B
Client ID: SS025-SB06(2-4)
Sample Type: Client
Inject. Date: 16-Jun-2017 18:13:30 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-b-4-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:16:18

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	205.8	41.17
$ 5 2-Fluorobiphenyl	500.0	230.0	46.00
$ 6 Terphenyl-d14	500.0	330.2	66.05

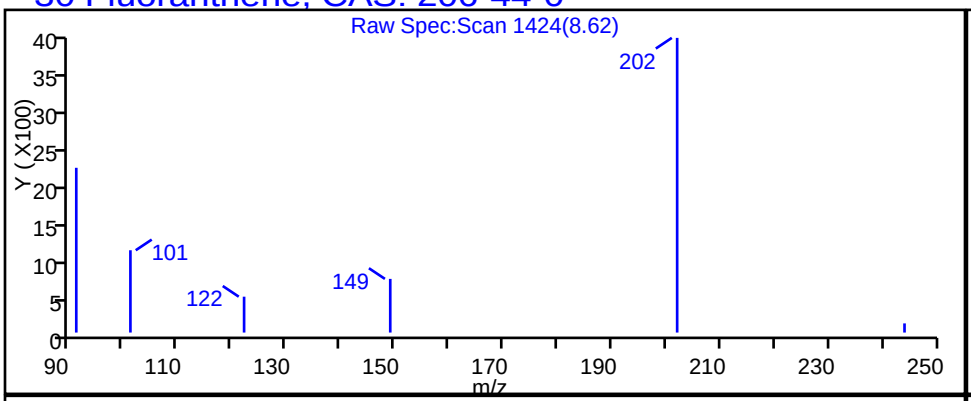
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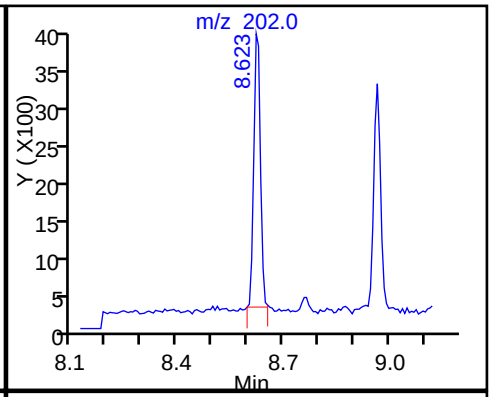
TestAmerica Denver

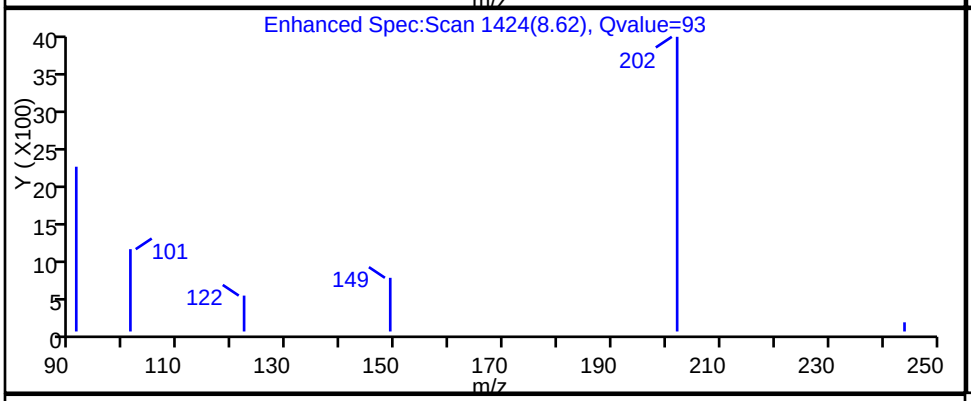
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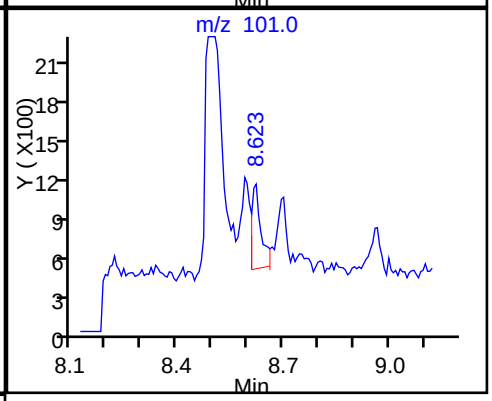
Injection Date:	16-Jun-2017 18:13:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-4-B	Lab Sample ID:	280-97928-4		
Client ID:	SS025-SB06(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	8	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

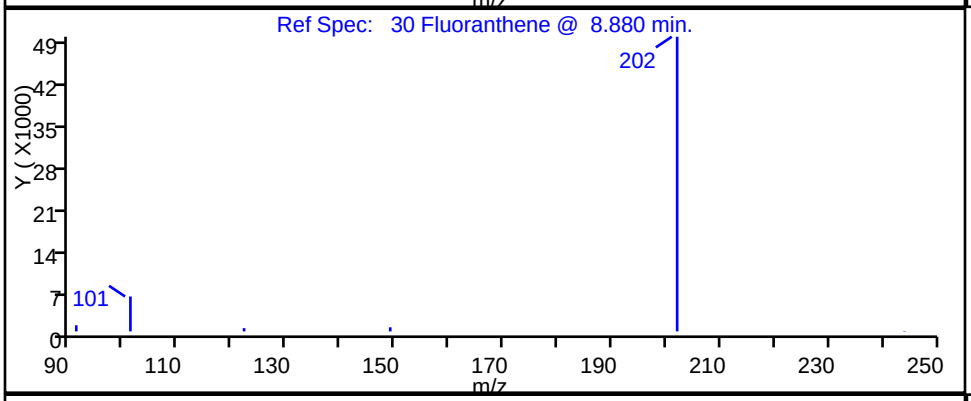
30 Fluoranthene, CAS: 206-44-0

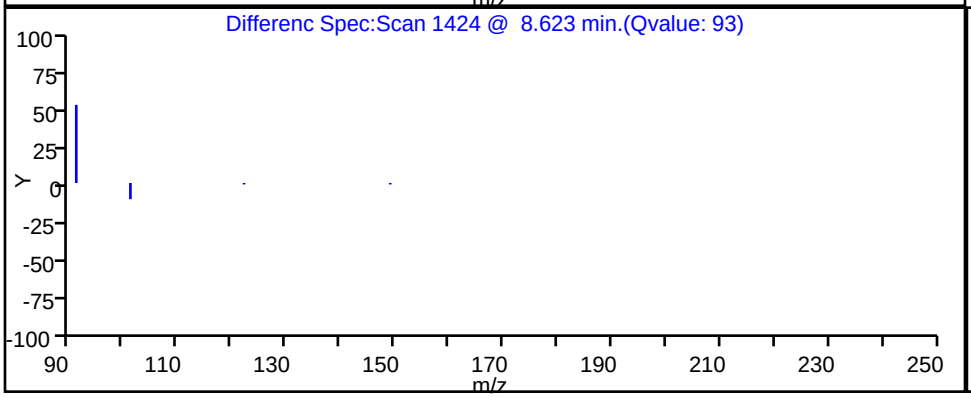


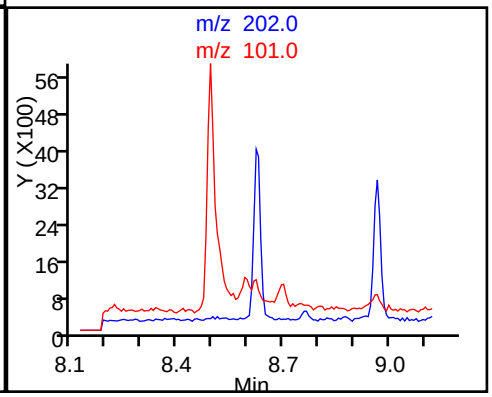












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS08 | Lab Sample ID: 280-97928-5

Matrix: Solid | Lab File ID: F7276.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 09:35

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 30.0(g) | Date Analyzed: 06/16/2017 18:39

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 13.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	11		5.8	0.58	0.30
91-57-6	2-Methylnaphthalene	29		5.8	0.77	0.36
83-32-9	Acenaphthene	1.0	J	5.8	0.31	0.18
208-96-8	Acenaphthylene	0.77	U	5.8	0.77	0.20
120-12-7	Anthracene	0.99	J	5.8	2.9	0.83
56-55-3	Benzo[a]anthracene	3.4	J	5.8	2.9	1.0
50-32-8	Benzo[a]pyrene	4.2	J	5.8	2.9	0.85
205-99-2	Benzo[b]fluoranthene	7.4		5.8	2.9	1.4
191-24-2	Benzo[g,h,i]perylene	3.1	J	5.8	2.9	1.3
207-08-9	Benzo[k]fluoranthene	2.5	J	5.8	2.9	1.2
218-01-9	Chrysene	5.6	J	5.8	2.9	1.2
53-70-3	Dibenz(a,h)anthracene	2.9	U	5.8	2.9	1.5
206-44-0	Fluoranthene	7.6		5.8	2.9	1.2
86-73-7	Fluorene	3.3	J	5.8	0.77	0.54
193-39-5	Indeno[1,2,3-cd]pyrene	2.6	J	5.8	2.9	1.3
91-20-3	Naphthalene	50		5.8	0.77	0.38
85-01-8	Phenanthrene	4.9	J	5.8	2.9	1.3
129-00-0	Pyrene	6.7		5.8	2.9	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	61		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	50		44-125
1718-51-0	Terphenyl-d14 (Surr)	66		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7276.D
Lims ID: 280-97928-C-5-B
Client ID: SS025-SB08
Sample Type: Client
Inject. Date: 16-Jun-2017 18:39:30 ALS Bottle#: 9 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-5-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:16:51

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	96	27484	600.0	
* 2 Phenanthrene-d10	188	7.295	7.301	-0.006	100	48510	600.0	
* 3 Chrysene-d12	240	11.362	11.371	-0.009	94	43401	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	100	10784	250.5	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	99	21828	306.3	
$ 6 Terphenyl-d14	244	9.117	9.130	-0.013	94	16203	329.0	
14 Naphthalene	128	4.589	4.589	0.000	100	115872	1300.5	
16 2-Methylnaphthalene	142	5.143	5.147	-0.004	99	43953	767.3	
17 1-Methylnaphthalene	142	5.230	5.235	-0.005	100	17083	297.8	
22 Acenaphthylene	152		5.917				ND	
23 Acenaphthene	153	6.055	6.055	0.000	87	1576	27.2	
25 Fluorene	166	6.487	6.494	-0.007	98	6179	86.9	
27 Phenanthrene	178	7.314	7.321	-0.007	98	13132	127.6	
28 Anthracene	178	7.360	7.366	-0.006	85	2677	25.8	
30 Fluoranthene	202	8.623	8.629	-0.006	99	23355	197.6	
31 Pyrene	202	8.961	8.968	-0.007	98	21318	174.0	
35 Benzo[a]anthracene	228	11.335	11.344	-0.009	89	10304	89.3	
36 Chrysene	228	11.434	11.443	-0.009	99	15522	145.4	
38 Benzo[b]fluoranthene	252	14.494	14.503	-0.009	97	20085	191.7	
39 Benzo[k]fluoranthene	252	14.577	14.586	-0.009	93	6795	64.5	
40 Benzo[a]pyrene	252	15.570	15.587	-0.017	95	11312	109.4	
41 Indeno[1,2,3-cd]pyrene	276	18.667	18.676	-0.009	73	7990	68.1	
42 Dibenz(a,h)anthracene	278	18.693	18.702	-0.009	49	1897	20.7	
43 Benzo[g,h,i]perylene	276	19.100	19.109	-0.009	81	8047	80.9	

Reagents:

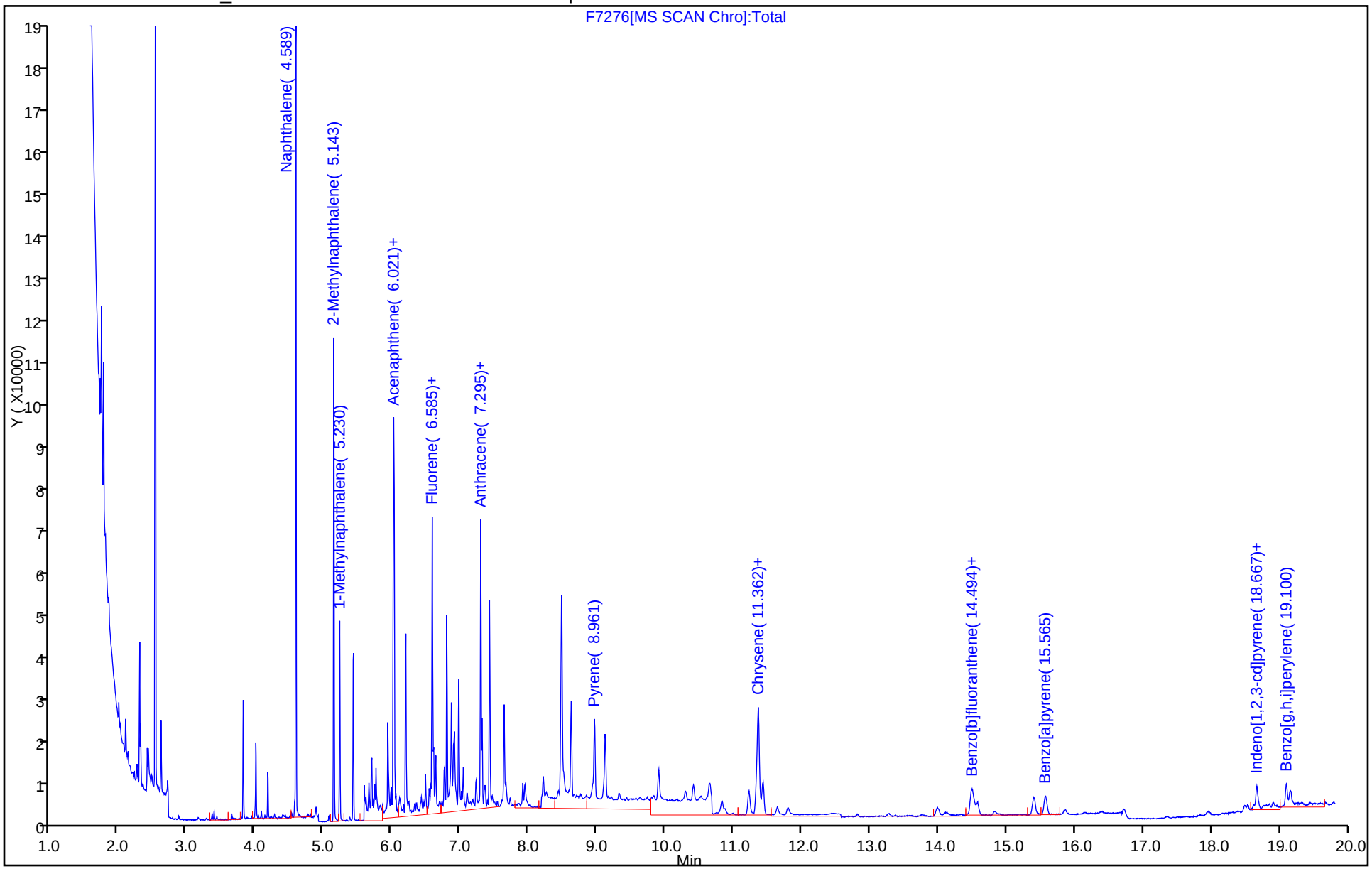
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:12 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7276.D

Injection Date:	16-Jun-2017 18:39:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-C-5-B	Lab Sample ID:	280-97928-5	Worklist Smp#:	10
Client ID:	SS025-SB08				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7276.D				
Lims ID:	280-97928-C-5-B				
Client ID:	SS025-SB08				
Sample Type:	Client				
Inject. Date:	16-Jun-2017 18:39:30	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-c-5-b				
Operator ID:	WICKHAMM	Instrument ID:	SMS_F		
Method:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m				
Limit Group:	MSSV - 8270C-SIM				
Last Update:	19-Jun-2017 15:40:04	Calib Date:	11-May-2017 16:07:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK012				

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:16:51

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	250.5	50.10
$ 5 2-Fluorobiphenyl	500.0	306.3	61.26
$ 6 Terphenyl-d14	500.0	329.0	65.79

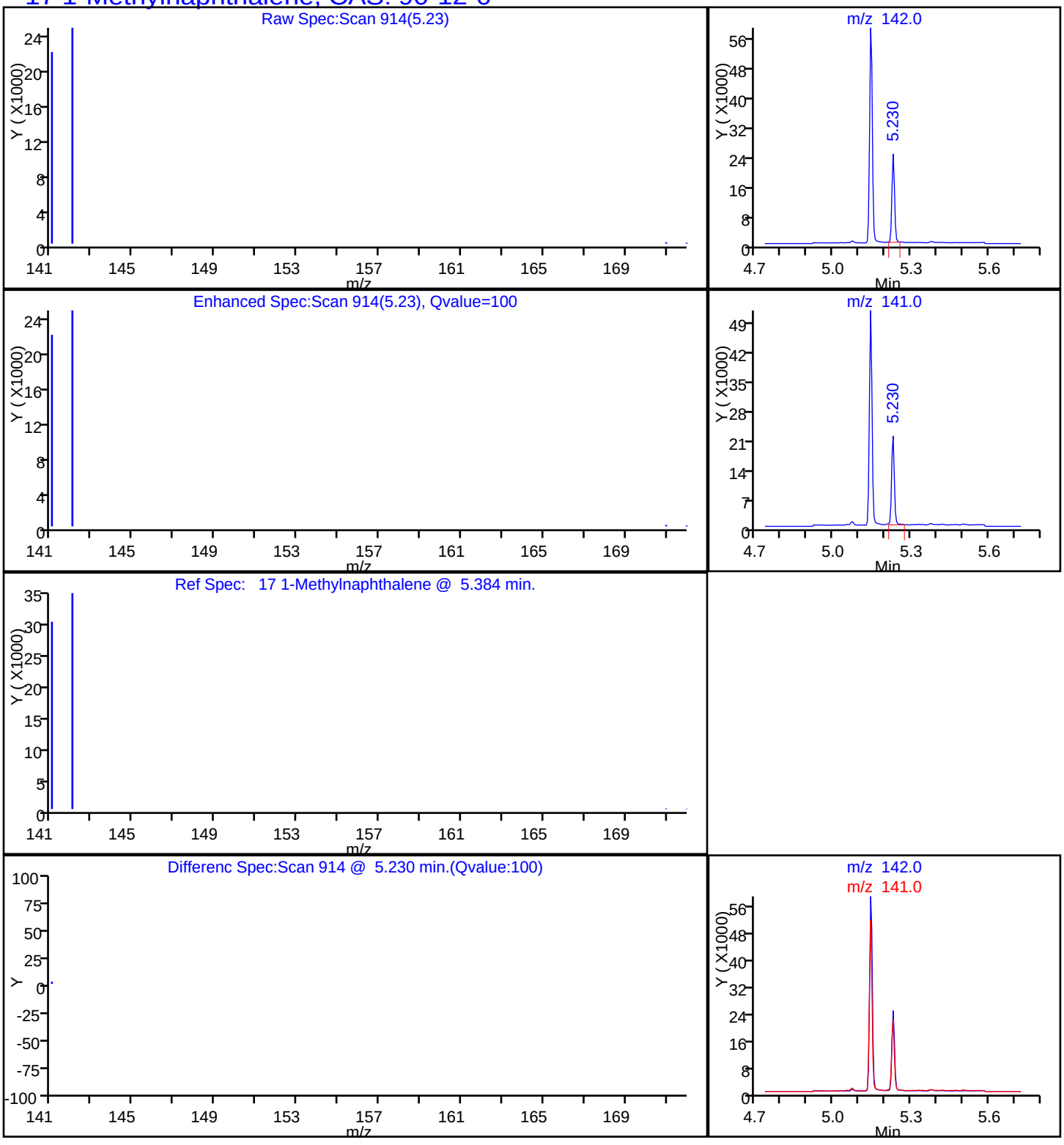
Report Date: 19-Jun-2017 15:44:12 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7276.D

Injection Date:	16-Jun-2017 18:39:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-5-B	Lab Sample ID:	280-97928-5		
Client ID:	SS025-SB08				
Operator ID:	WICKHAMM	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0

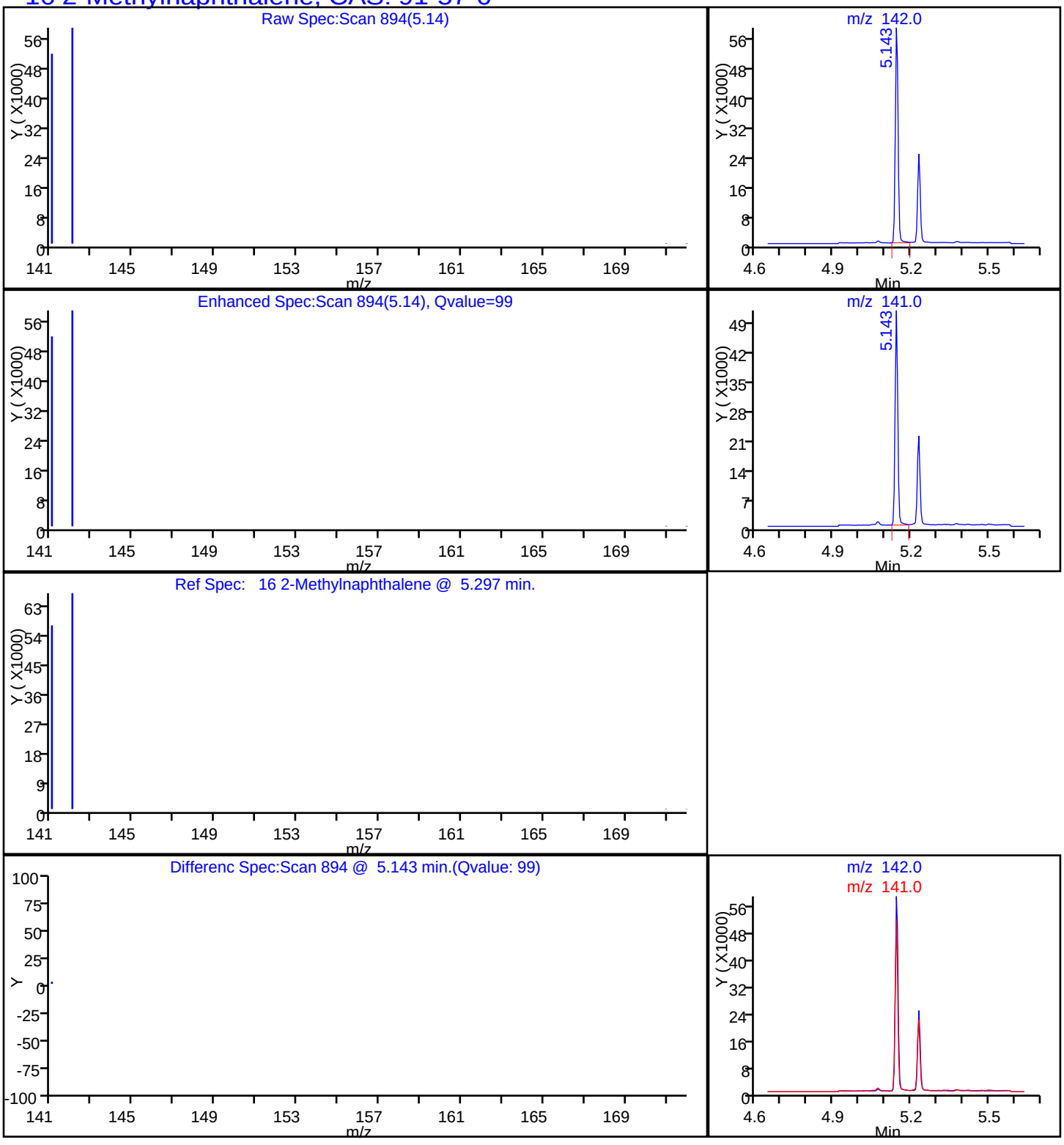


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TestAmerica Denver

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Lims ID:	280-97928-C-5-B	Lab Sample ID:	280-97928-5		
Client ID:	SS025-SB08				
Operator ID:	WICKHAMM	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



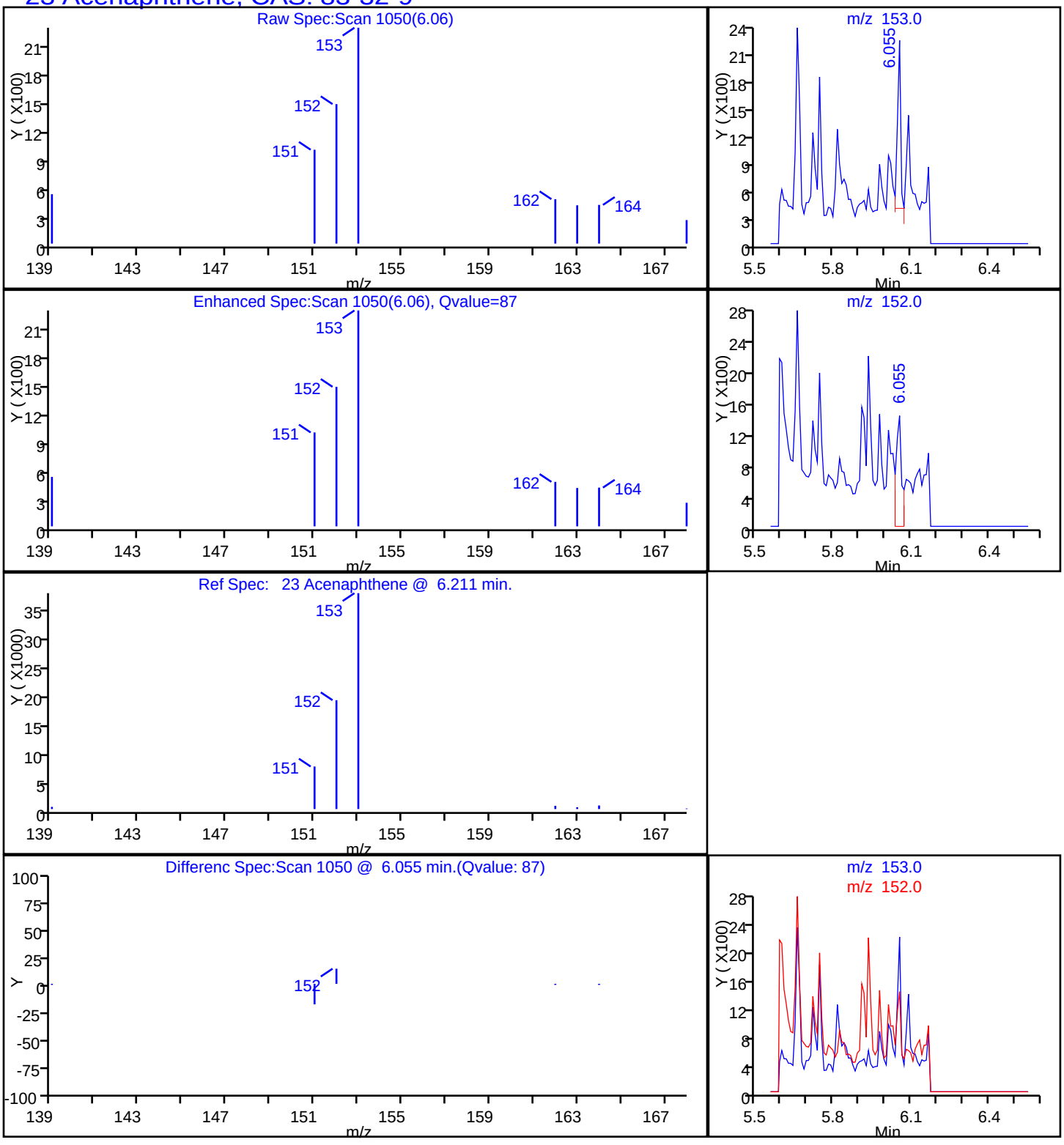
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TestAmerica Denver

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Lims ID:	280-97928-C-5-B	Lab Sample ID:	280-97928-5		
Client ID:	SS025-SB08				
Operator ID:	WICKHAMM	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9



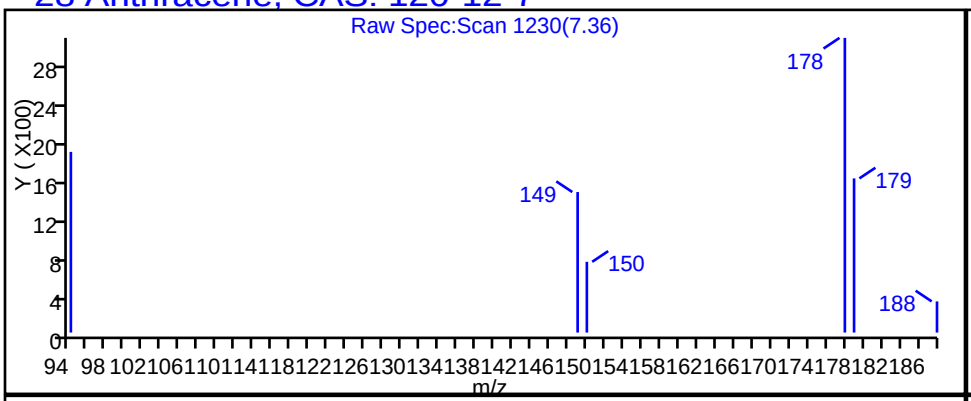
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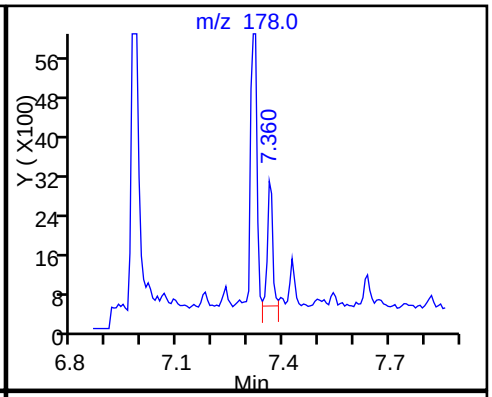
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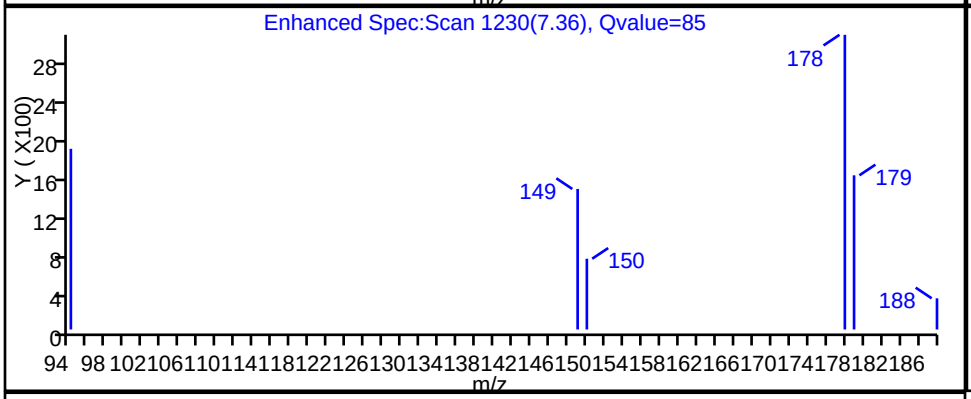
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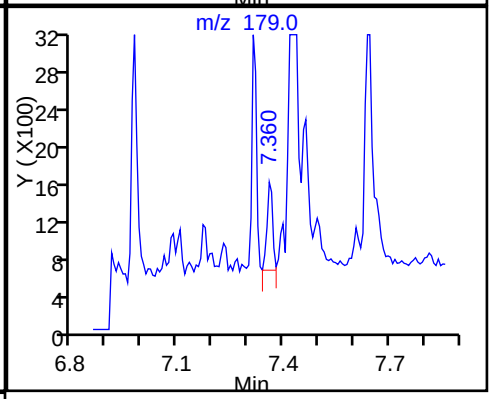
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Client ID:	SS025-SB08				
Operator ID:	WICKHAMM	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

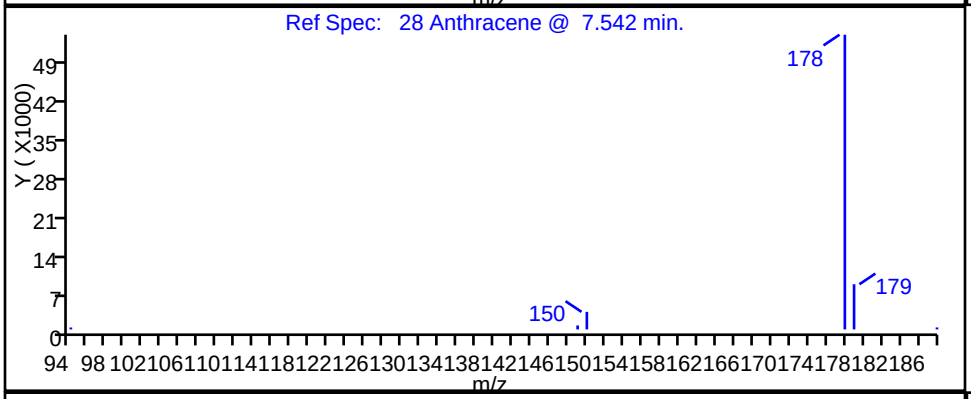
28 Anthracene, CAS: 120-12-7

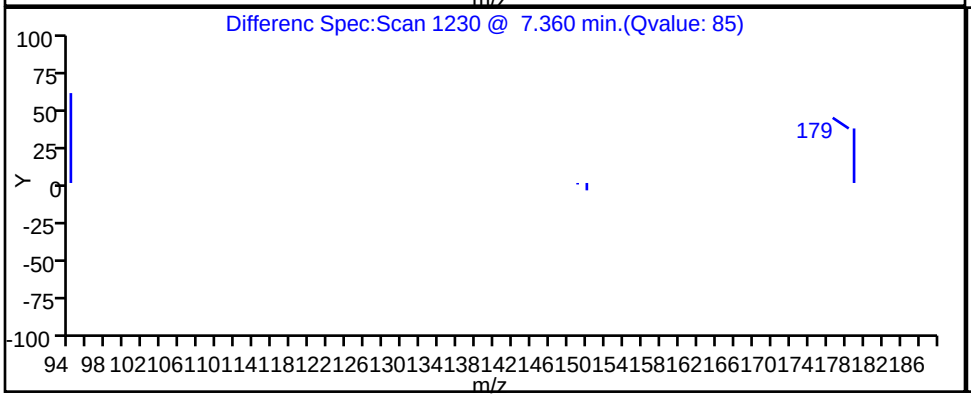


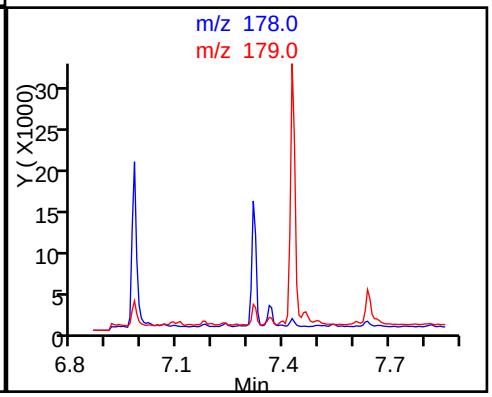












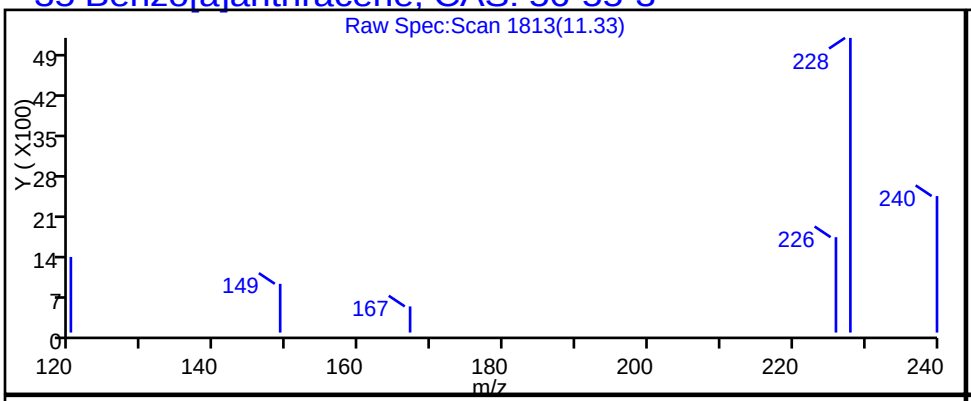
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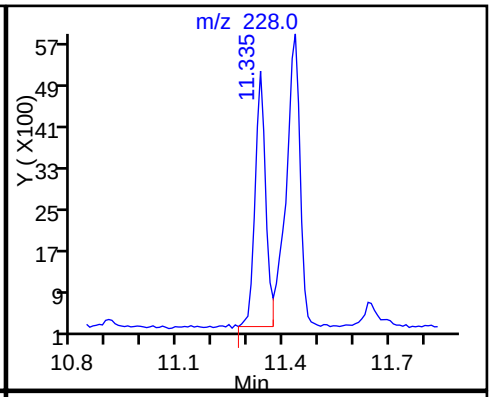
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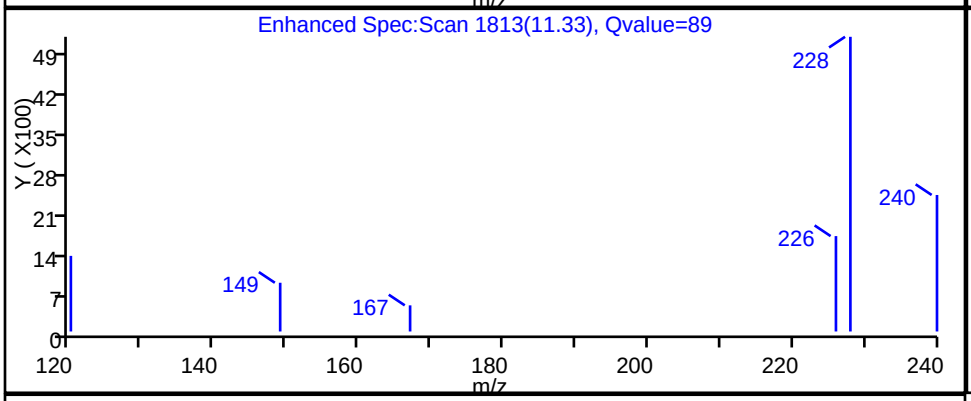
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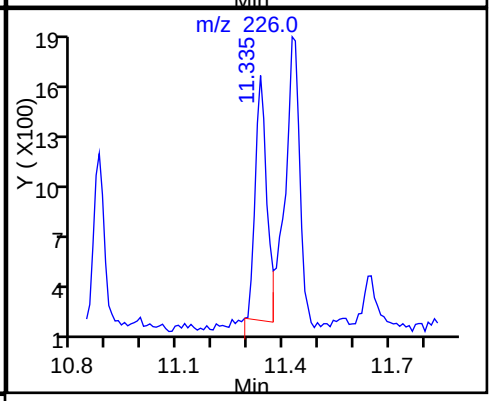
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Lims ID:	280-97928-C-5-B	Lab Sample ID:	280-97928-5		
Client ID:	SS025-SB08				
Operator ID:	WICKHAMM	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

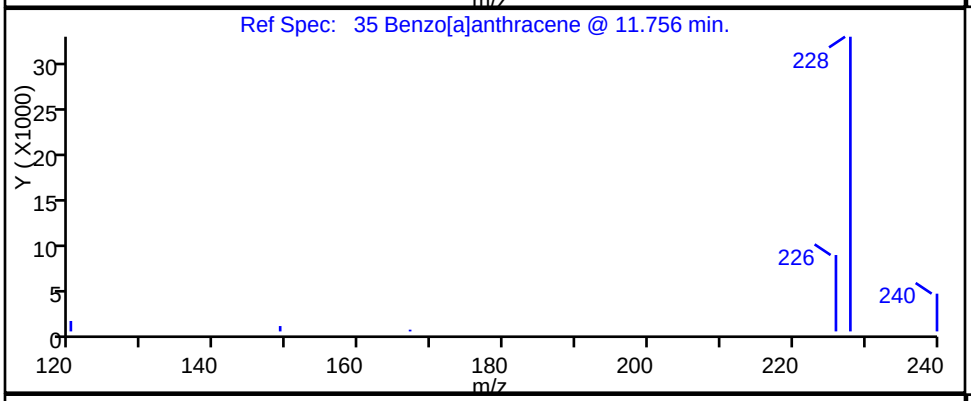
35 Benzo[a]anthracene, CAS: 56-55-3

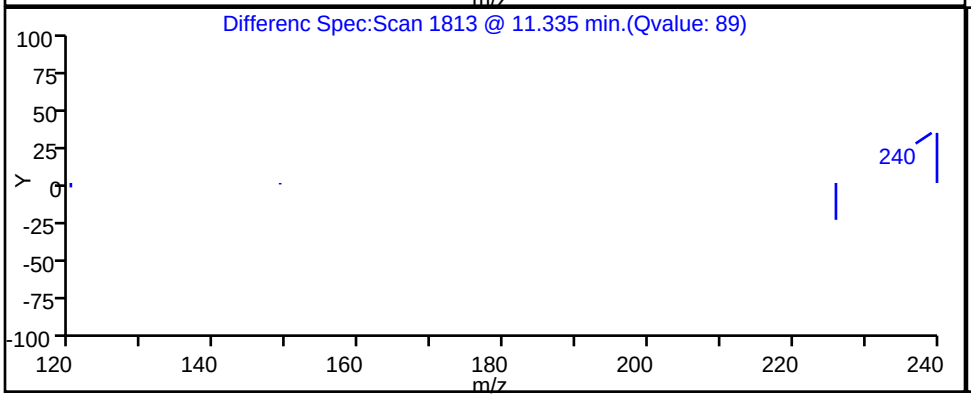


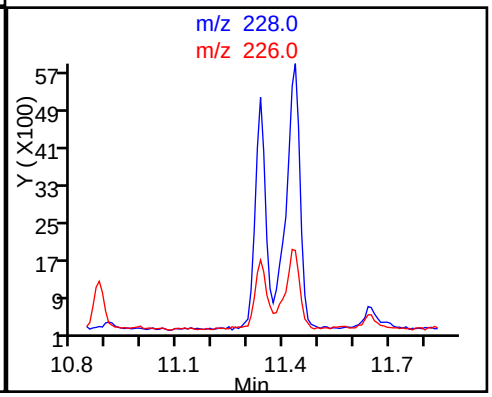












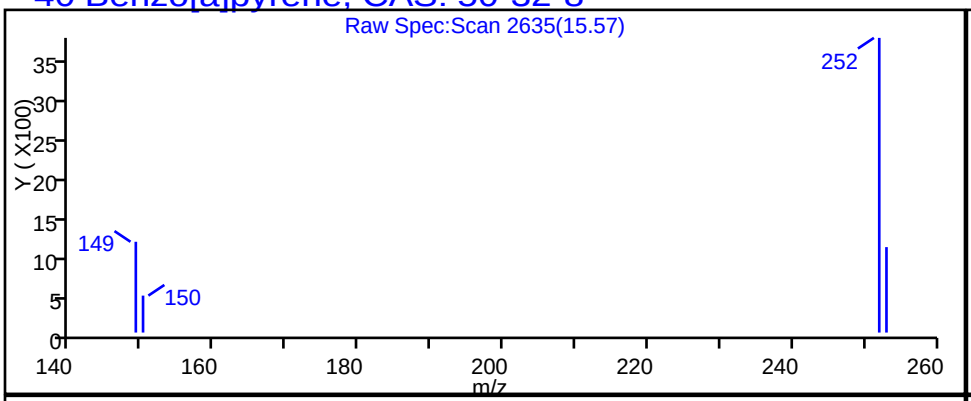
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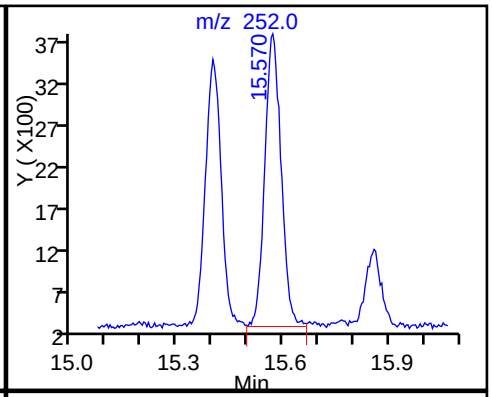
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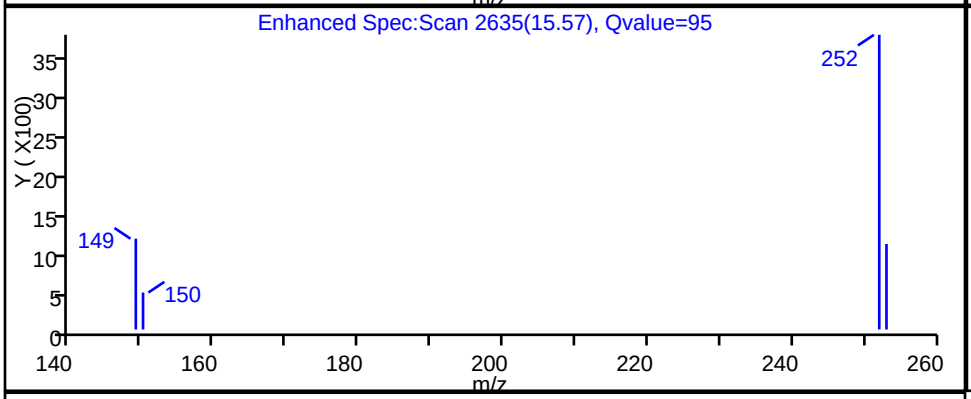
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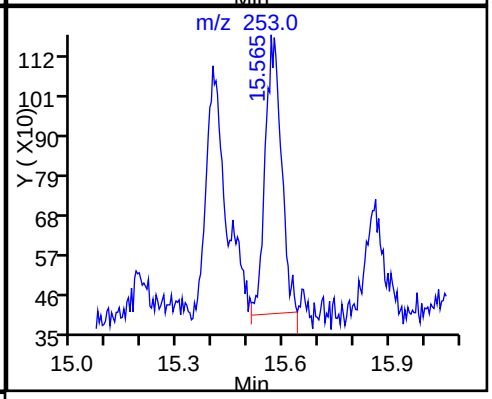
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Client ID:	SS025-SB08				
Operator ID:	WICKHAMM	ALS Bottle#:	9	Worklist Smp#:	10
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Column:		Detector	MS SCAN		

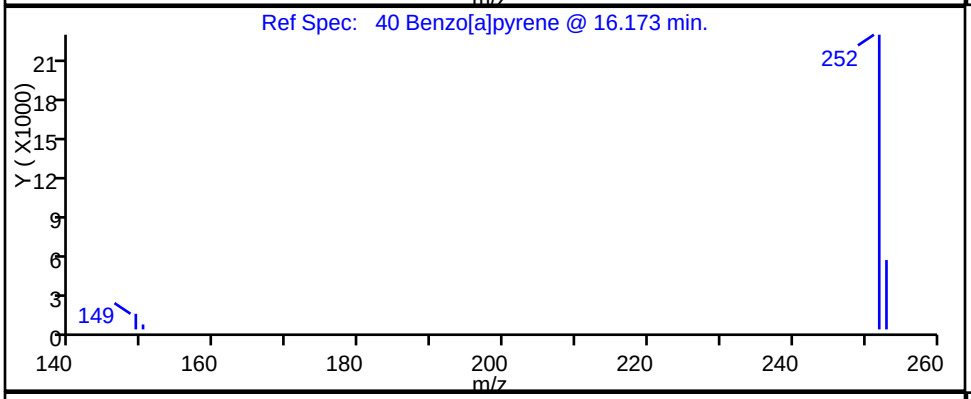
40 Benzo[a]pyrene, CAS: 50-32-8

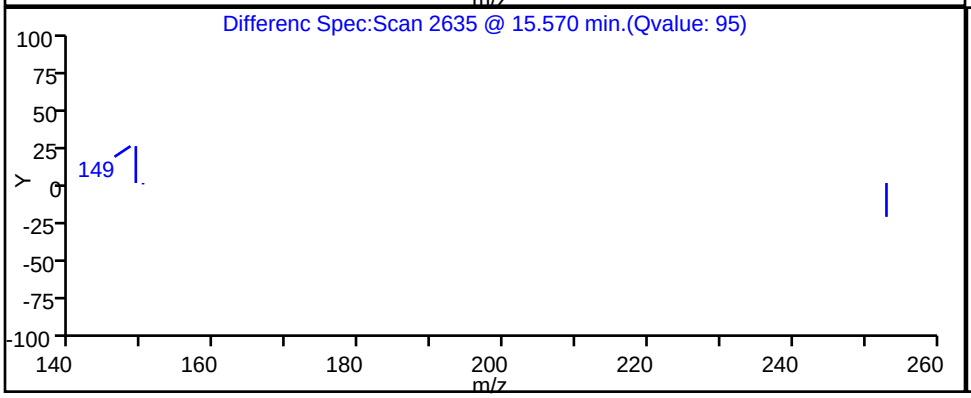


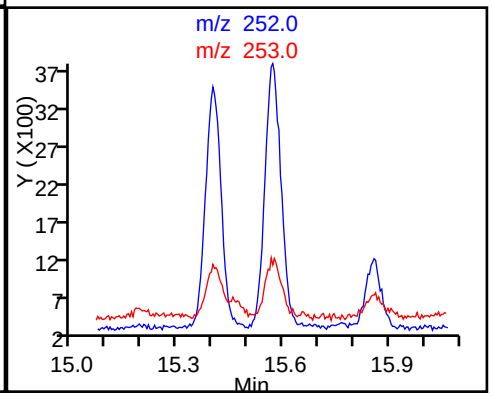










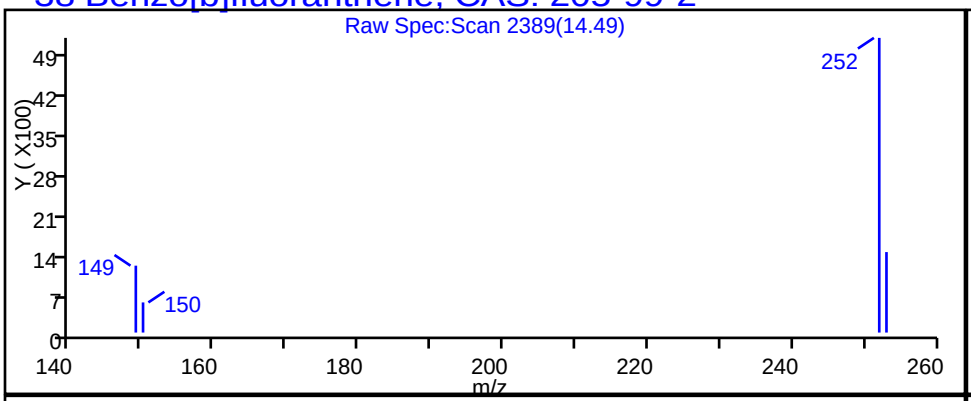


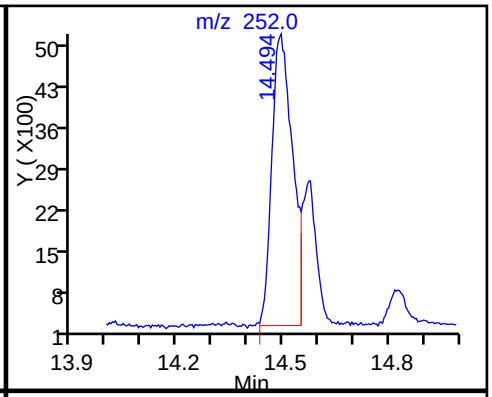
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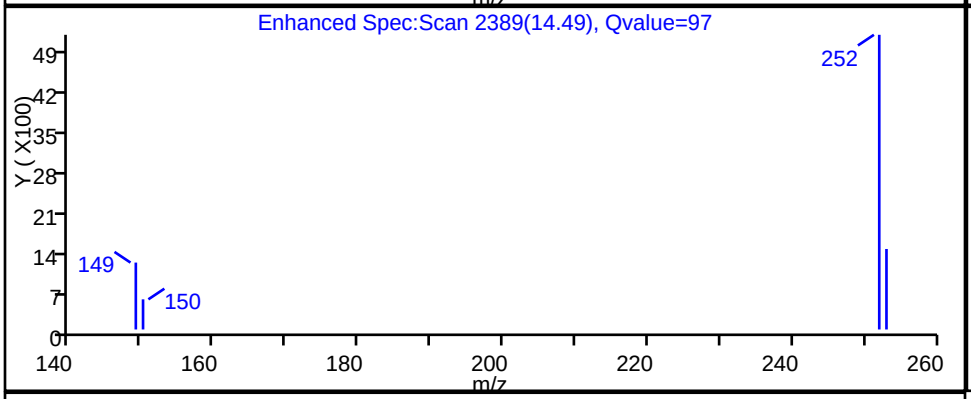
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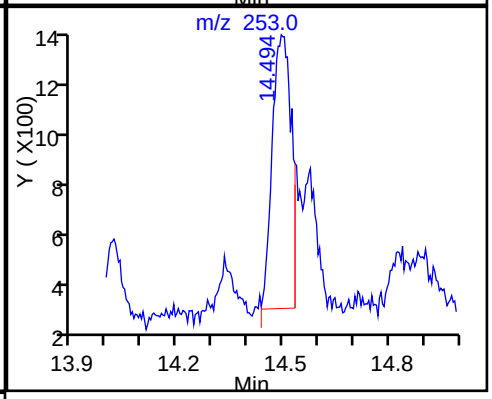
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Client ID:	SS025-SB08				
Operator ID:	WICKHAMM	ALS Bottle#:	9	Worklist Smp#:	10
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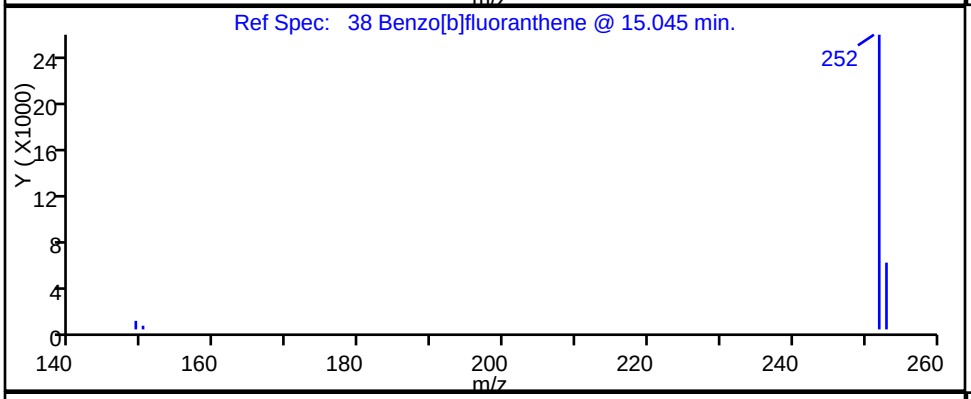
38 Benzo[b]fluoranthene, CAS: 205-99-2

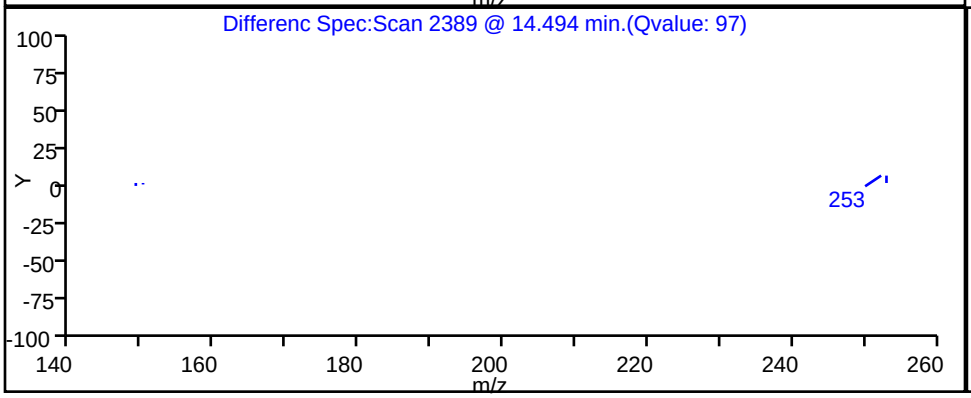


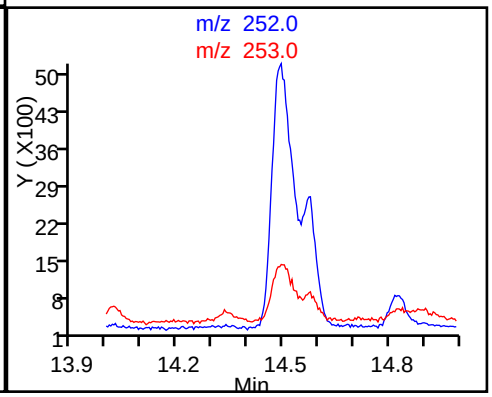










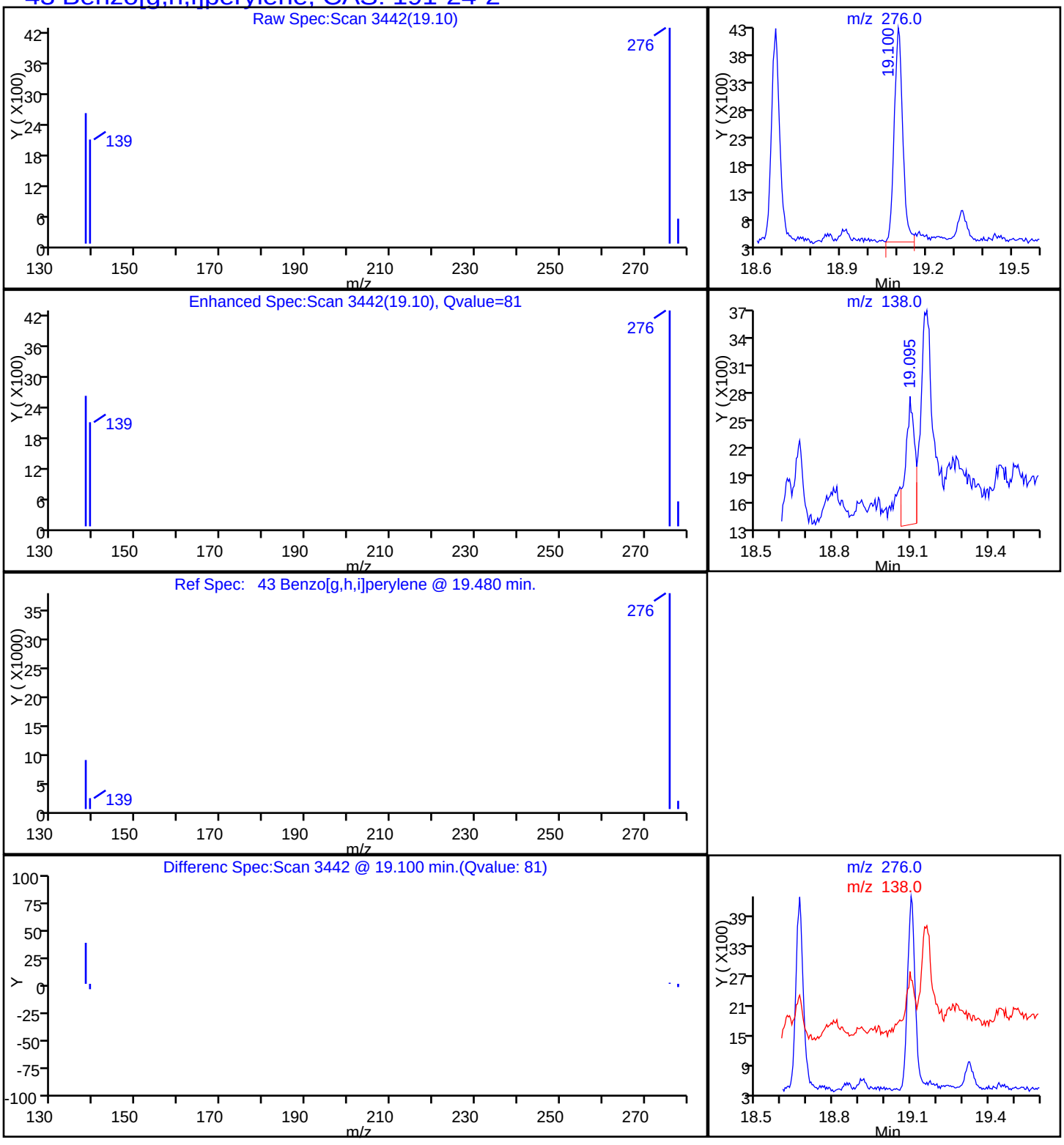


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TestAmerica Denver

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Client ID:	SS025-SB08				
Operator ID:	WICKHAMM	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

43 Benzo[g,h,i]perylene, CAS: 191-24-2



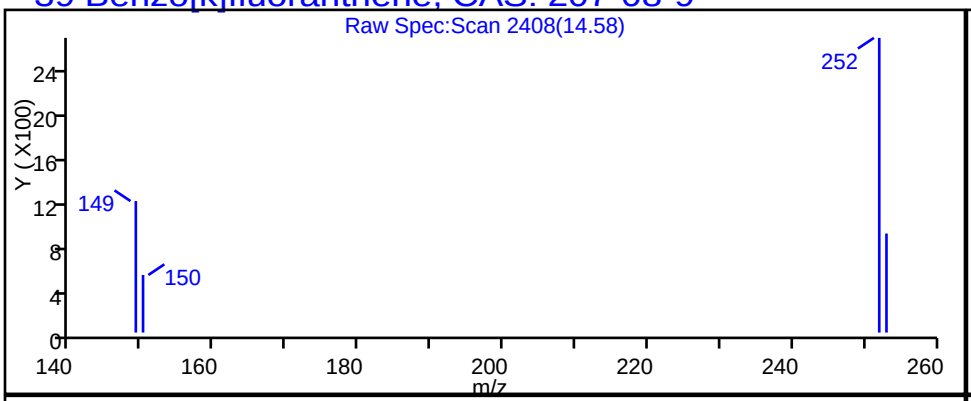
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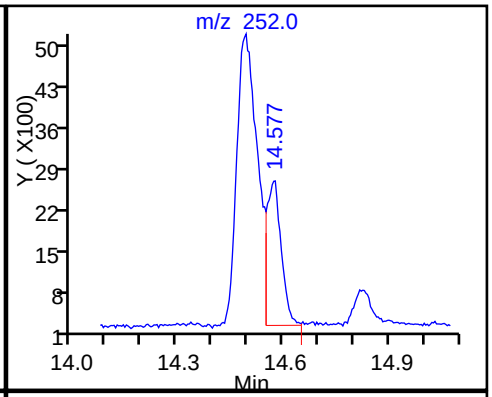
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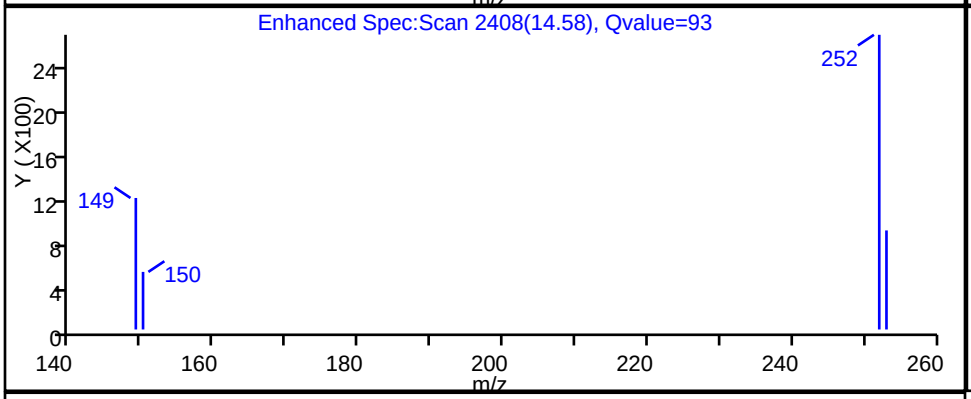
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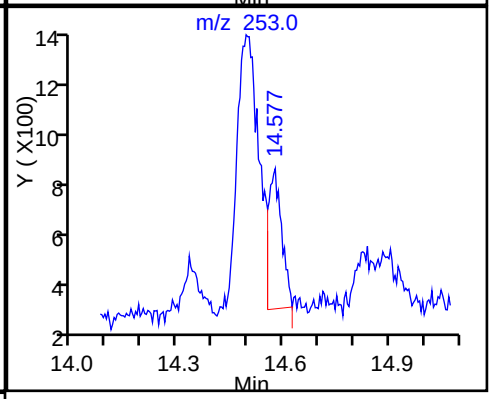
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Operator ID:	WICKHAMM	ALS Bottle#:	9	Worklist Smp#:	10
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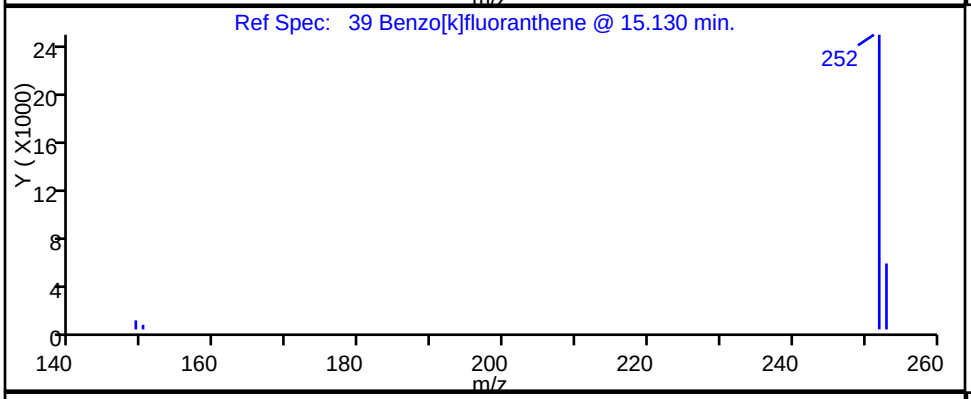
39 Benzo[k]fluoranthene, CAS: 207-08-9

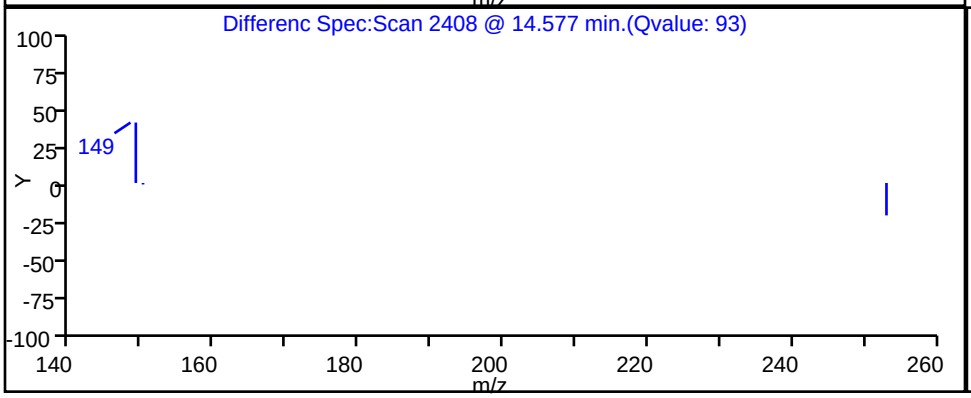


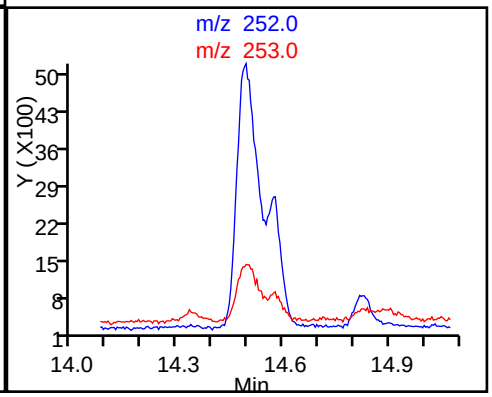












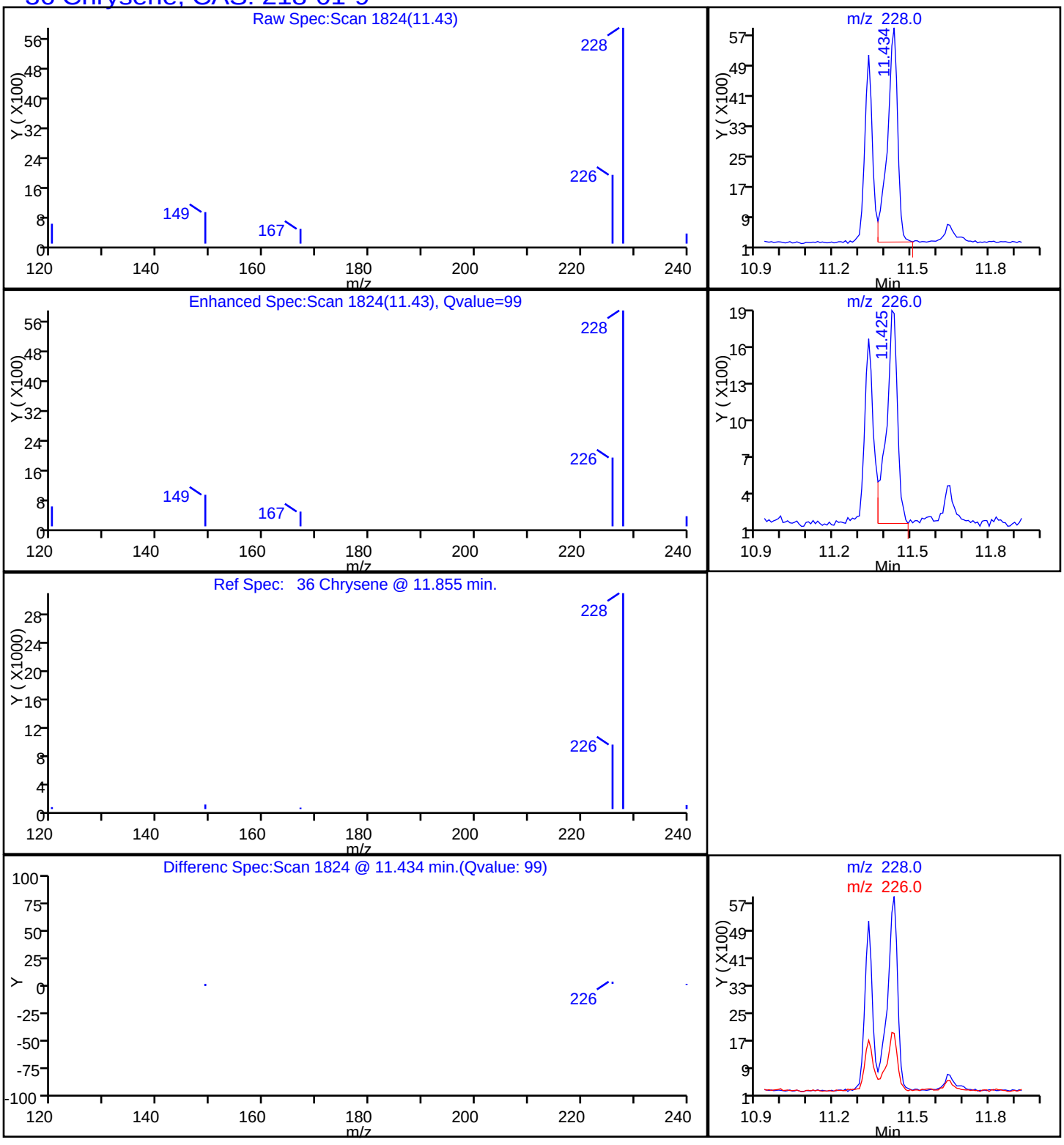
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7276.D

Injection Date:	16-Jun-2017 18:39:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-5-B	Lab Sample ID:	280-97928-5		
Client ID:	SS025-SB08				
Operator ID:	WICKHAMM	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Chrysene, CAS: 218-01-9



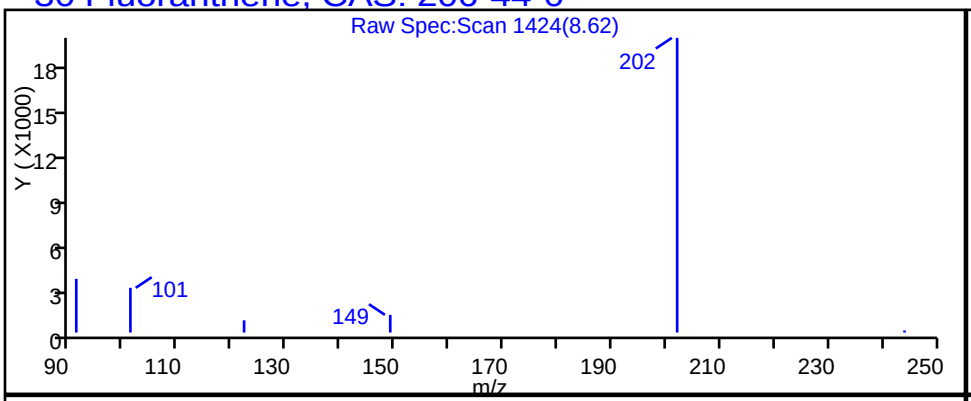
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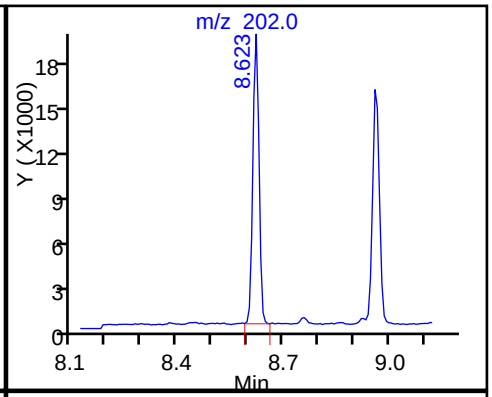
TestAmerica Denver

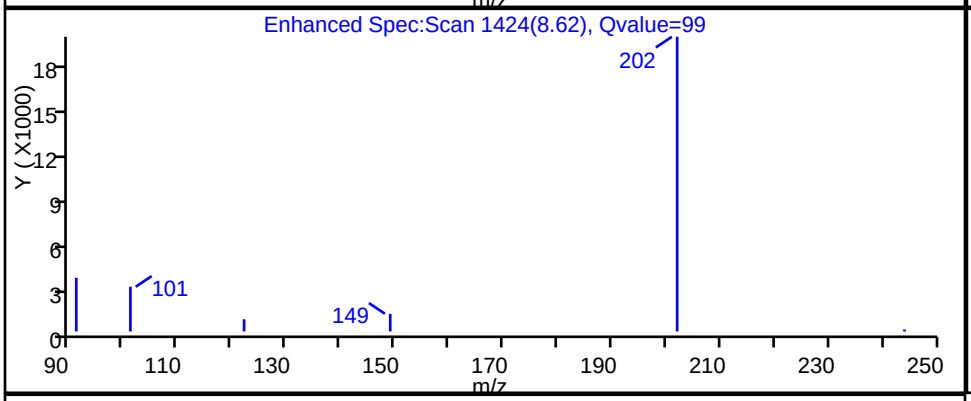
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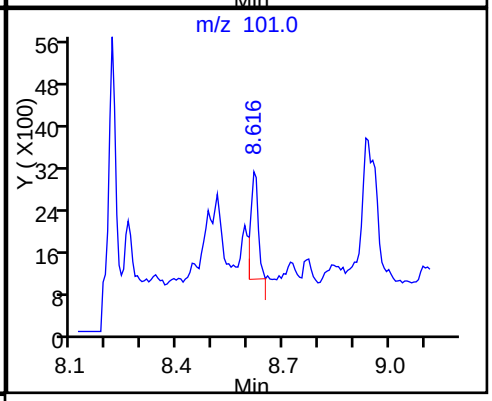
Injection Date:	16-Jun-2017 18:39:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-5-B	Lab Sample ID:	280-97928-5		
Client ID:	SS025-SB08				
Operator ID:	WICKHAMM	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

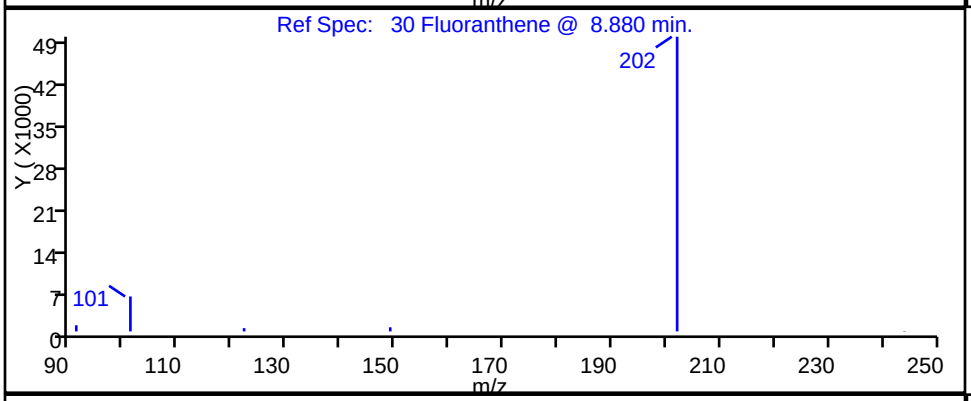
30 Fluoranthene, CAS: 206-44-0

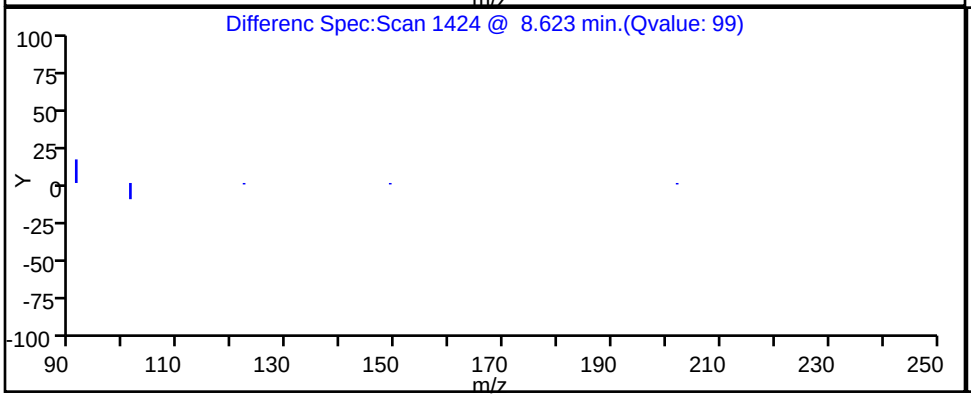


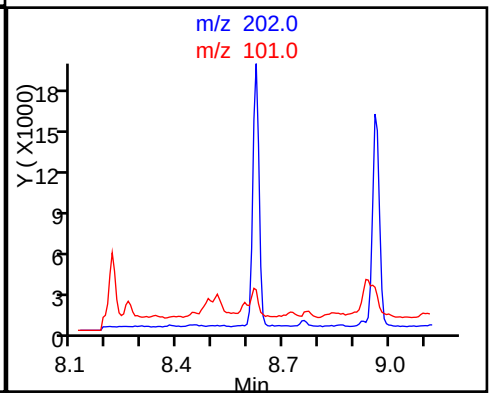












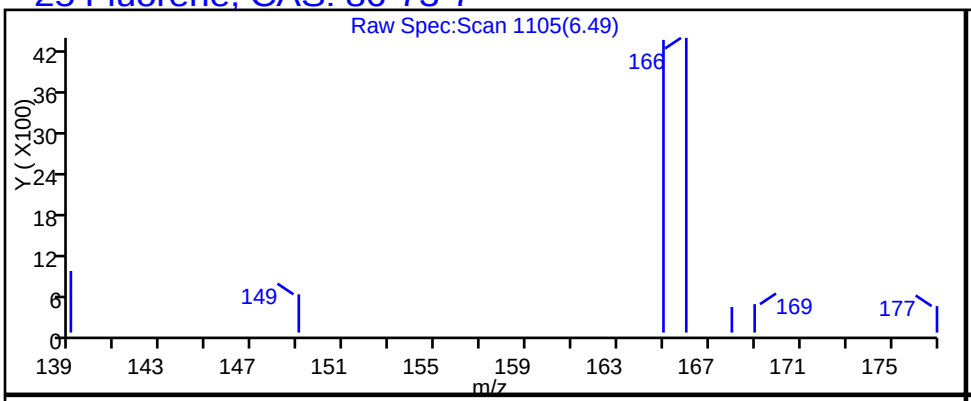
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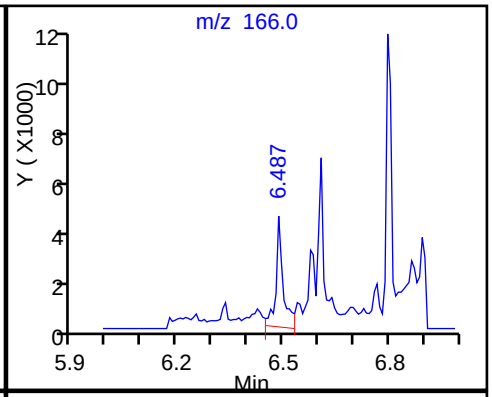
TestAmerica Denver

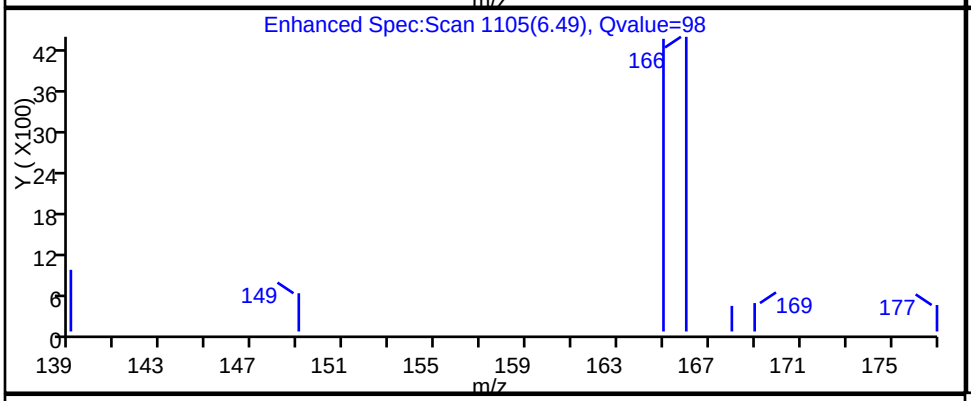
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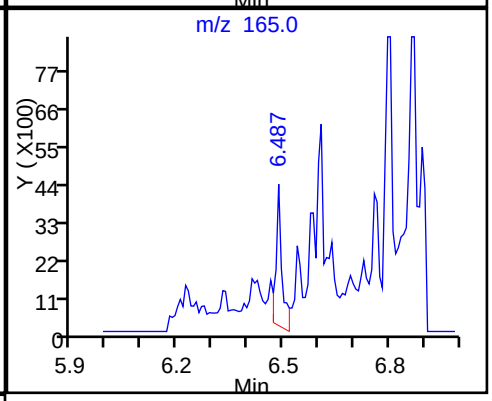
Injection Date:	16-Jun-2017 18:39:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-5-B	Lab Sample ID:	280-97928-5		
Client ID:	SS025-SB08				
Operator ID:	WICKHAMM	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

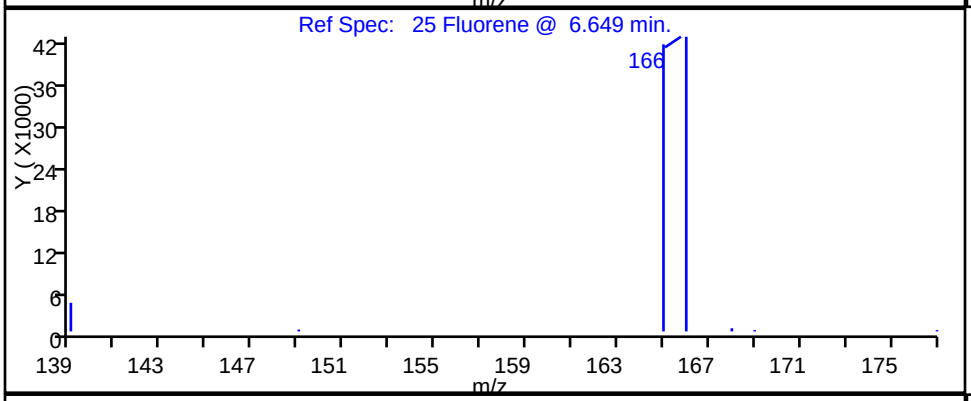
25 Fluorene, CAS: 86-73-7

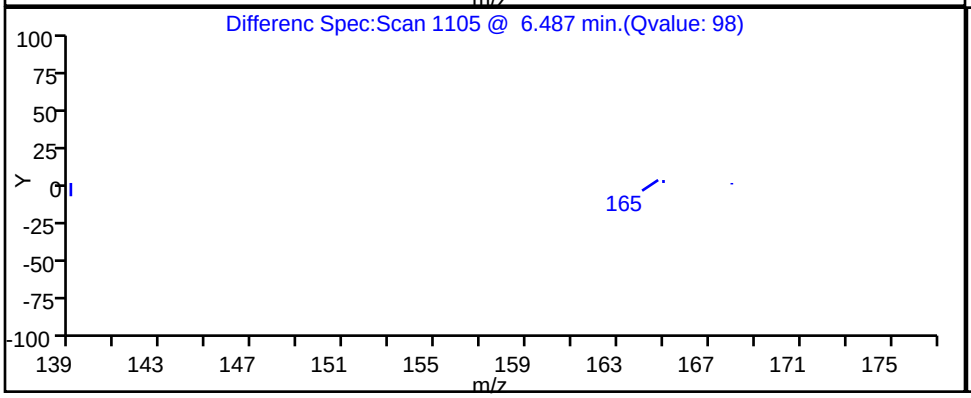


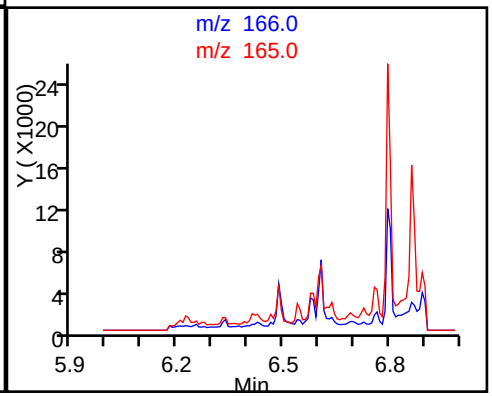












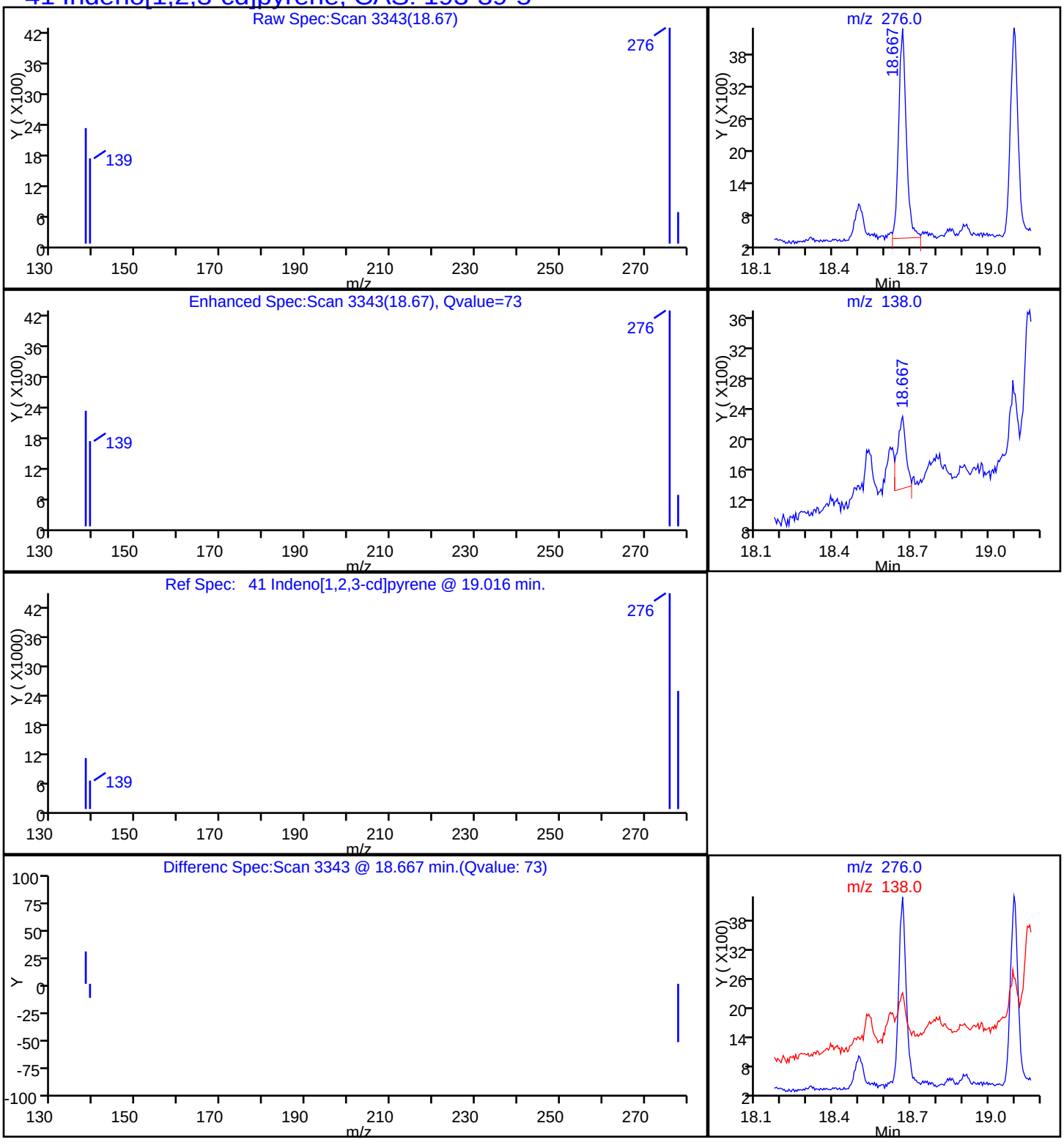
Report Date: 19-Jun-2017 15:44:12 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7276.D

Injection Date:	16-Jun-2017 18:39:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-5-B	Lab Sample ID:	280-97928-5		
Client ID:	SS025-SB08				
Operator ID:	WICKHAMM	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



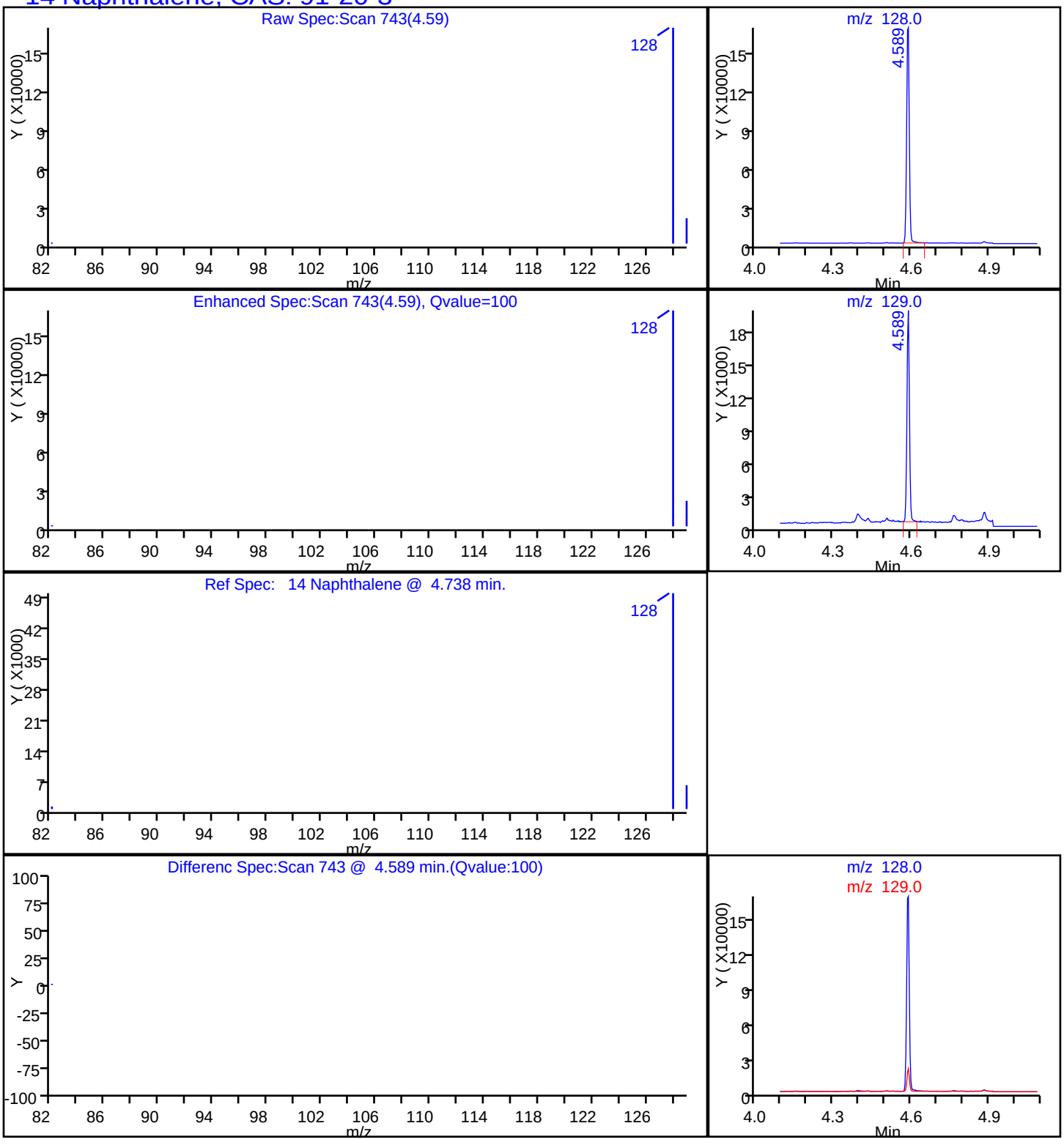
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7276.D

Injection Date:	16-Jun-2017 18:39:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-5-B	Lab Sample ID:	280-97928-5		
Client ID:	SS025-SB08				
Operator ID:	WICKHAMM	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3

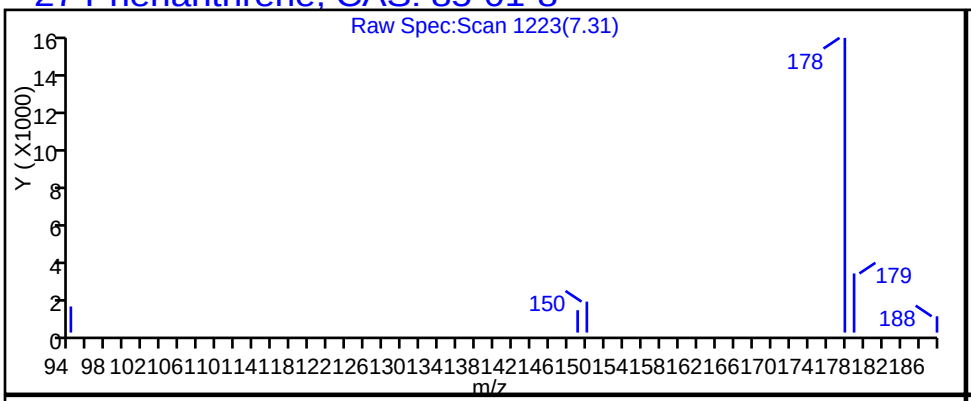


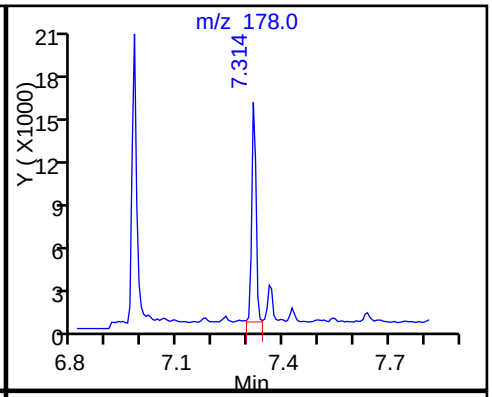
Report Date: 19-Jun-2017 15:44:12 Chrom Revision: 2.2 25-Apr-2017 13:27:22

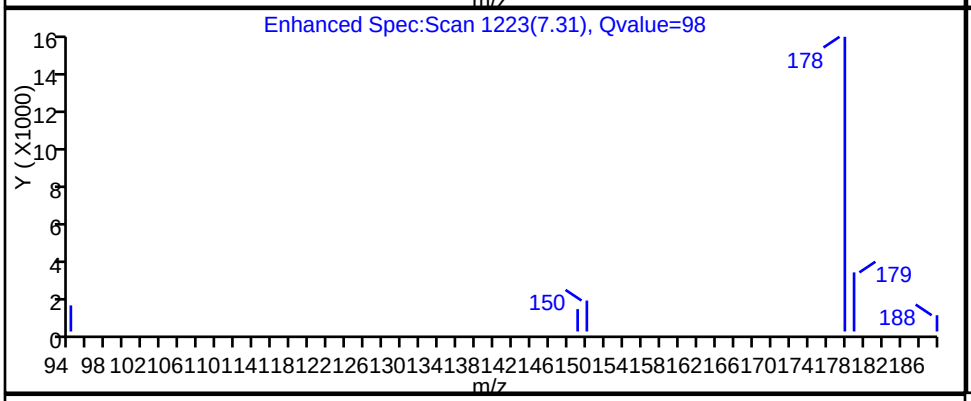
TestAmerica Denver

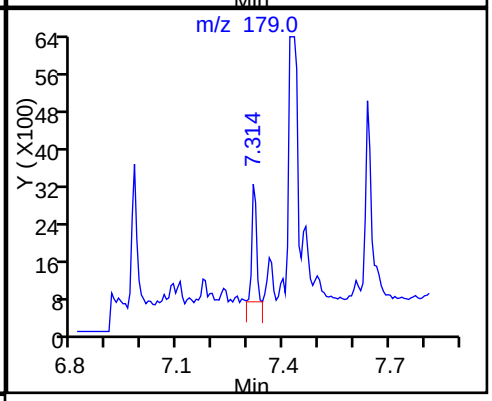
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Injection Date:	16-Jun-2017 18:39:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-5-B	Lab Sample ID:	280-97928-5		
Client ID:	SS025-SB08				
Operator ID:	WICKHAMM	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

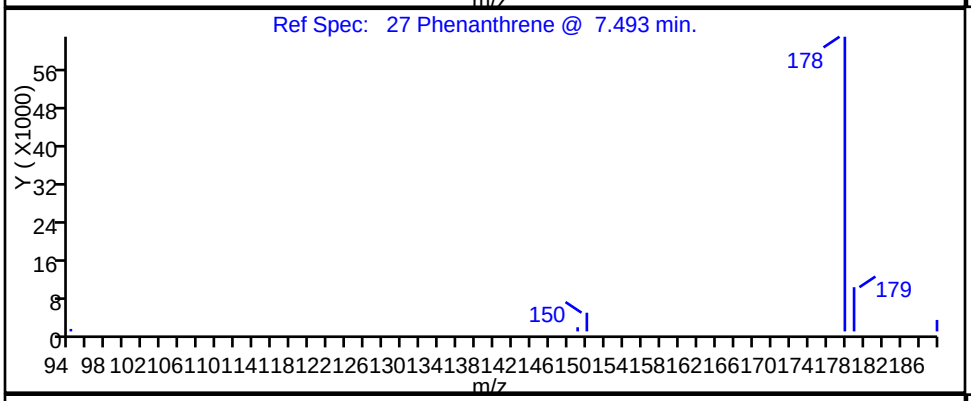
27 Phenanthrene, CAS: 85-01-8

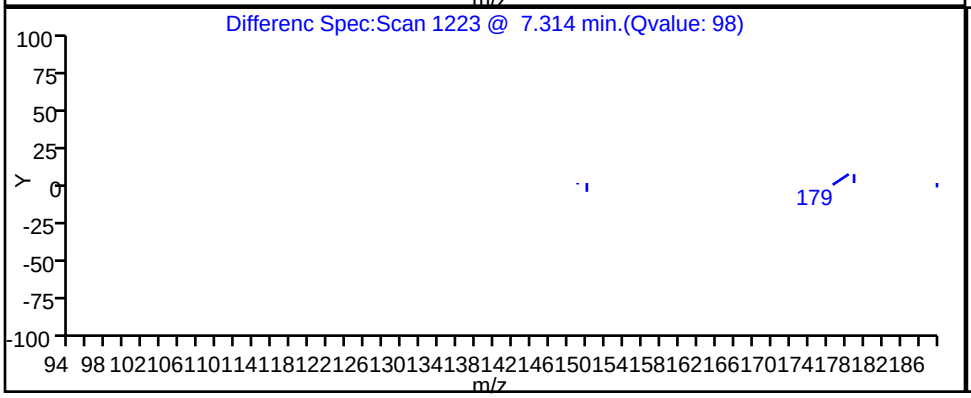


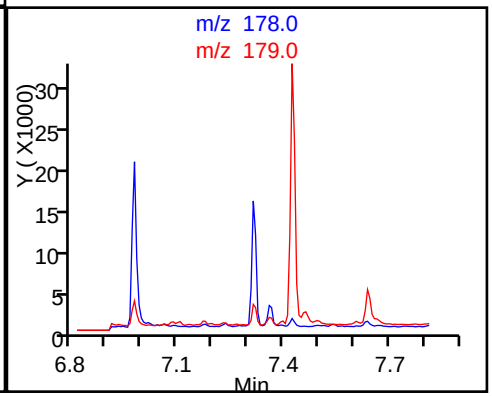












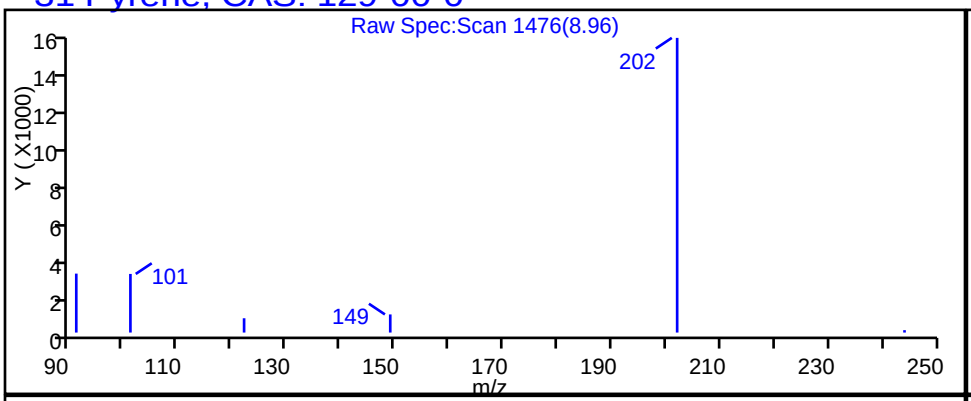
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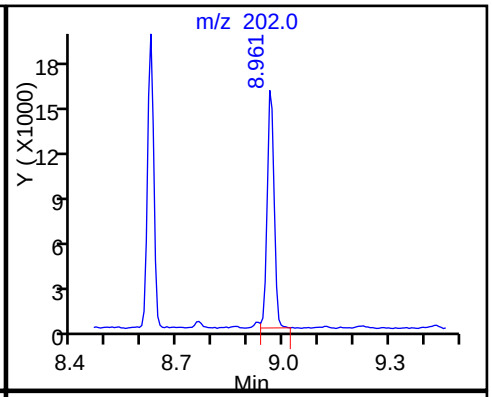
TestAmerica Denver

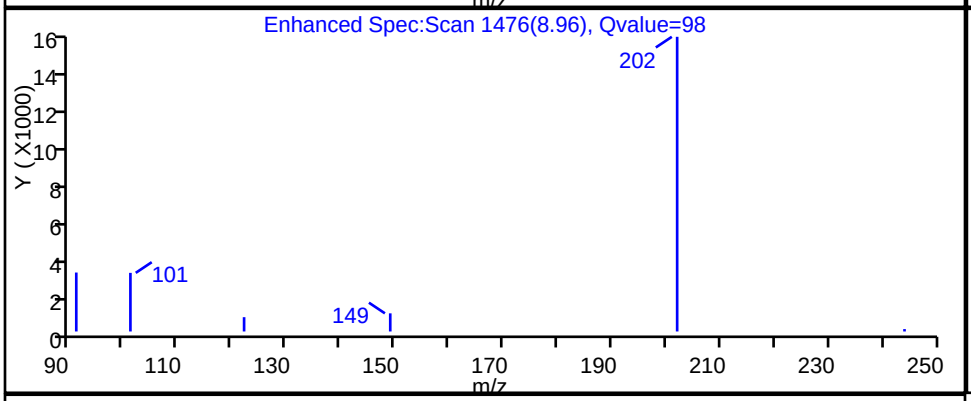
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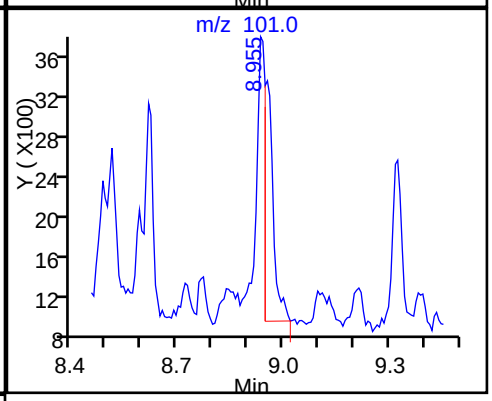
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Lims ID:	280-97928-C-5-B	Lab Sample ID:	280-97928-5		
Client ID:	SS025-SB08				
Operator ID:	WICKHAMM	ALS Bottle#:	9	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

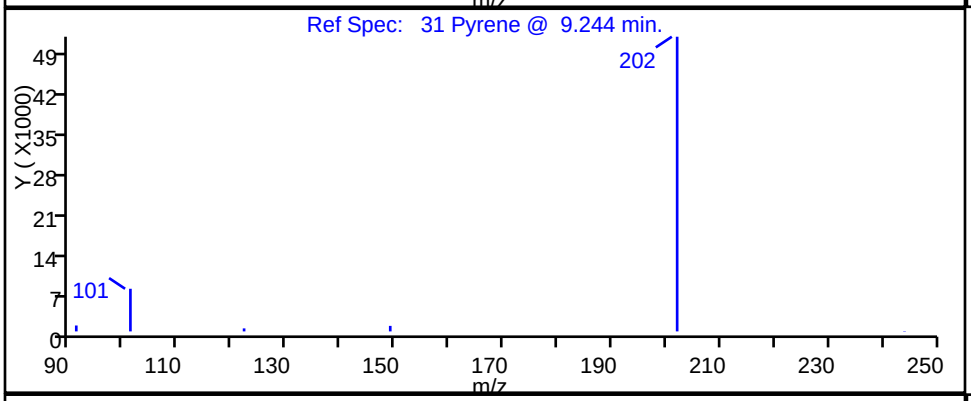
31 Pyrene, CAS: 129-00-0

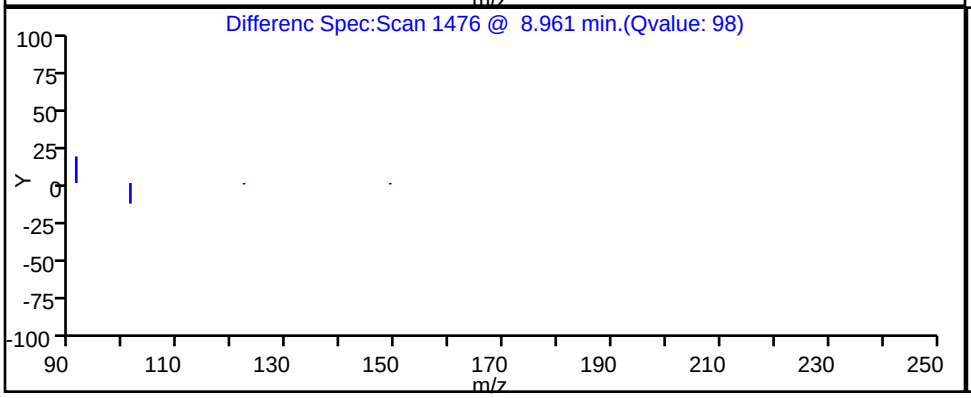


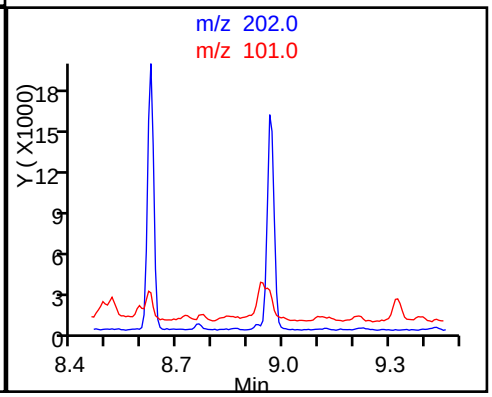












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB07(0-2) | Lab Sample ID: 280-97928-6

Matrix: Solid | Lab File ID: F7277.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 09:45

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 30.8(g) | Date Analyzed: 06/16/2017 19:05

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 12.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.56	U	5.6	0.56	0.29
91-57-6	2-Methylnaphthalene	0.75	U	5.6	0.75	0.35
83-32-9	Acenaphthene	0.30	U	5.6	0.30	0.18
208-96-8	Acenaphthylene	0.75	U	5.6	0.75	0.19
120-12-7	Anthracene	2.8	U	5.6	2.8	0.81
56-55-3	Benzo[a]anthracene	2.8	U	5.6	2.8	1.0
50-32-8	Benzo[a]pyrene	2.8	U	5.6	2.8	0.83
205-99-2	Benzo[b]fluoranthene	2.8	U	5.6	2.8	1.3
191-24-2	Benzo[g,h,i]perylene	2.8	U	5.6	2.8	1.2
207-08-9	Benzo[k]fluoranthene	2.8	U	5.6	2.8	1.1
218-01-9	Chrysene	2.8	U	5.6	2.8	1.1
53-70-3	Dibenz(a,h)anthracene	2.8	U	5.6	2.8	1.5
206-44-0	Fluoranthene	1.3	J	5.6	2.8	1.1
86-73-7	Fluorene	0.75	U	5.6	0.75	0.53
193-39-5	Indeno[1,2,3-cd]pyrene	2.8	U	5.6	2.8	1.2
91-20-3	Naphthalene	0.75	U	5.6	0.75	0.36
85-01-8	Phenanthrene	2.8	U	5.6	2.8	1.2
129-00-0	Pyrene	2.8	U	5.6	2.8	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	74		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	72		44-125
1718-51-0	Terphenyl-d14 (Surr)	62		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7277.D
Lims ID: 280-97928-C-6-B
Client ID: SS025-SB07(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 19:05:30 ALS Bottle#: 10 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-6-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:17:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	95	26402	600.0	
* 2 Phenanthrene-d10	188	7.301	7.301	0.000	99	49968	600.0	
* 3 Chrysene-d12	240	11.371	11.371	0.000	93	40710	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	100	14960	361.7	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	100	25369	370.6	
$ 6 Terphenyl-d14	244	9.124	9.130	-0.006	97	15621	307.9	
14 Naphthalene	128	4.589	4.589	0.000	94	627	7.33	
16 2-Methylnaphthalene	142		5.147				ND	
17 1-Methylnaphthalene	142		5.235				ND	
22 Acenaphthylene	152		5.917				ND	
23 Acenaphthene	153		6.055				ND	
25 Fluorene	166		6.494				ND	
27 Phenanthrene	178	7.321	7.321	0.000	92	2305	21.8	
28 Anthracene	178	7.367	7.366	0.000	82	537	5.02	
30 Fluoranthene	202	8.623	8.629	-0.006	92	4238	34.8	
31 Pyrene	202	8.968	8.968	0.000	92	3488	27.6	
35 Benzo[a]anthracene	228	11.335	11.344	-0.009	54	1846	17.1	
36 Chrysene	228	11.443	11.443	0.000	90	2323	23.2	
38 Benzo[b]fluoranthene	252	14.498	14.503	-0.005	69	2711	27.6	
39 Benzo[k]fluoranthene	252	14.560	14.586	-0.026	40	384	3.88	
40 Benzo[a]pyrene	252	15.583	15.587	-0.004	39	1922	19.8	
41 Indeno[1,2,3-cd]pyrene	276	18.676	18.676	0.000	42	1175	10.7	
42 Dibenz(a,h)anthracene	278	18.698	18.702	-0.004	25	414	4.82	
43 Benzo[g,h,i]perylene	276	19.104	19.109	-0.005	29	1223	13.1	

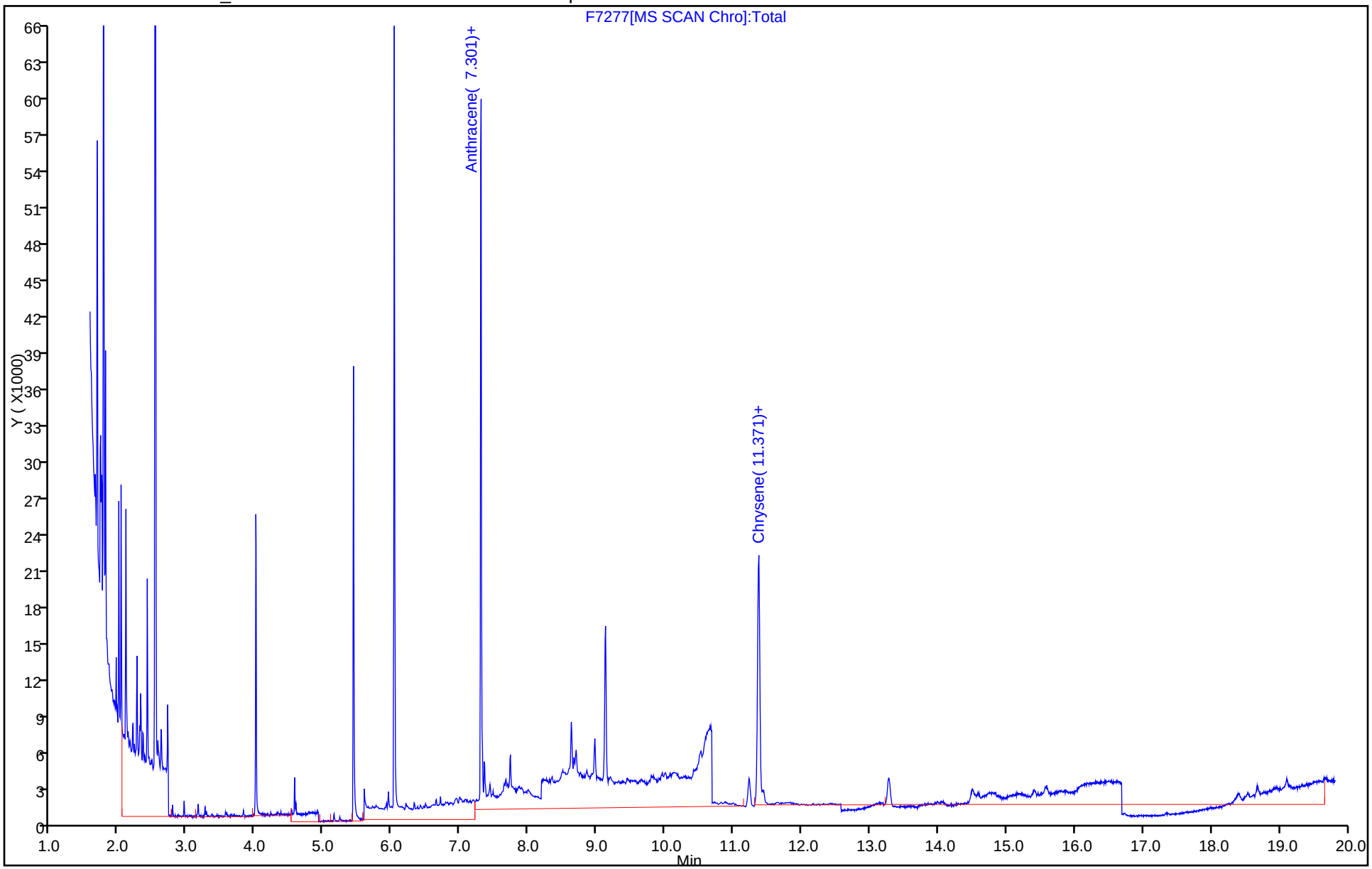
Reagents:

MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:13 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7277.D				
Injection Date:	16-Jun-2017 19:05:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-C-6-B	Lab Sample ID:	280-97928-6	Worklist Smp#:	11
Client ID:	SS025-SB07(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7277.D
Lims ID: 280-97928-C-6-B
Client ID: SS025-SB07(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 19:05:30 ALS Bottle#: 10 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-6-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:17:35

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	361.7	72.34
$ 5 2-Fluorobiphenyl	500.0	370.6	74.12
$ 6 Terphenyl-d14	500.0	307.9	61.58

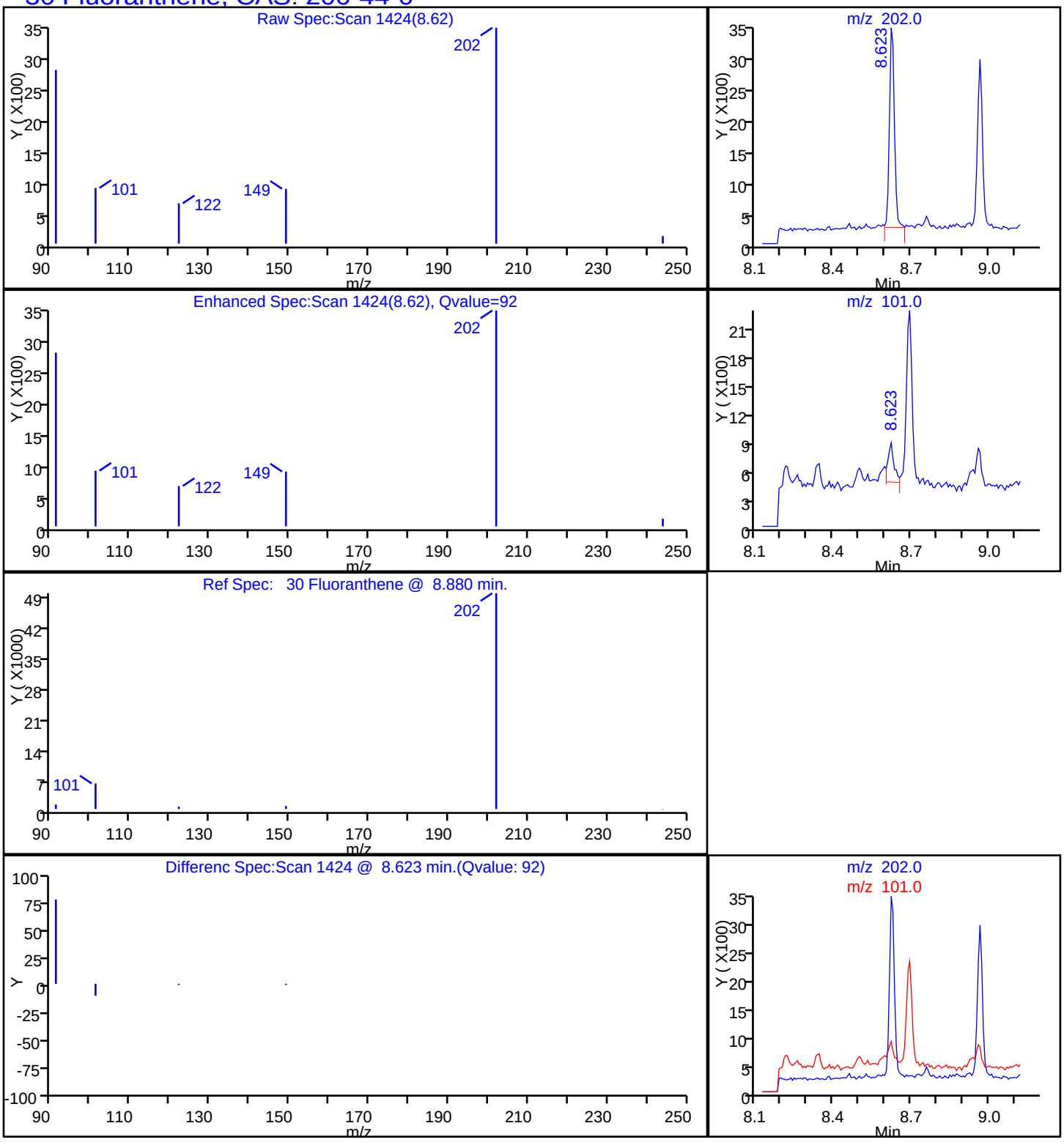
Report Date: 19-Jun-2017 15:44:13 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7277.D

Injection Date:	16-Jun-2017 19:05:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-6-B	Lab Sample ID:	280-97928-6		
Client ID:	SS025-SB07(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

30 Fluoranthene, CAS: 206-44-0



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB07(2-4) | Lab Sample ID: 280-97928-7

Matrix: Solid | Lab File ID: F7278.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 09:55

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 31.4(g) | Date Analyzed: 06/16/2017 19:30

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.56	U	5.6	0.56	0.29
91-57-6	2-Methylnaphthalene	0.75	U	5.6	0.75	0.35
83-32-9	Acenaphthene	0.30	U	5.6	0.30	0.18
208-96-8	Acenaphthylene	0.75	U	5.6	0.75	0.19
120-12-7	Anthracene	2.8	U	5.6	2.8	0.81
56-55-3	Benzo[a]anthracene	2.8	U Q	5.6	2.8	1.0
50-32-8	Benzo[a]pyrene	2.8	U Q	5.6	2.8	0.83
205-99-2	Benzo[b]fluoranthene	2.8	U Q	5.6	2.8	1.4
191-24-2	Benzo[g,h,i]perylene	2.8	U Q	5.6	2.8	1.2
207-08-9	Benzo[k]fluoranthene	2.8	U Q	5.6	2.8	1.1
218-01-9	Chrysene	2.8	U Q	5.6	2.8	1.1
53-70-3	Dibenz(a,h)anthracene	2.8	U Q	5.6	2.8	1.5
206-44-0	Fluoranthene	2.8	U	5.6	2.8	1.1
86-73-7	Fluorene	0.75	U	5.6	0.75	0.53
193-39-5	Indeno[1,2,3-cd]pyrene	2.8	U Q	5.6	2.8	1.2
91-20-3	Naphthalene	0.75	U	5.6	0.75	0.37
85-01-8	Phenanthrene	2.8	U	5.6	2.8	1.2
129-00-0	Pyrene	2.8	U	5.6	2.8	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	62		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	63		44-125
1718-51-0	Terphenyl-d14 (Surr)	55	Q	58-133

Report Date: 19-Jun-2017 15:44:14 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7278.D
Lims ID: 280-97928-C-7-B
Client ID: SS025-SB07(2-4)
Sample Type: Client
Inject. Date: 16-Jun-2017 19:30:30 ALS Bottle#: 11 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-7-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:18:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	91	27894	600.0	
* 2 Phenanthrene-d10	188	7.301	7.301	0.000	100	50380	600.0	
* 3 Chrysene-d12	240	11.371	11.371	0.000	93	41870	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	13757	314.8	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	100	22357	309.1	
$ 6 Terphenyl-d14	244	9.124	9.130	-0.006	97	13971	273.1	
14 Naphthalene	128		4.589				ND	
16 2-Methylnaphthalene	142		5.147				ND	
17 1-Methylnaphthalene	142		5.235				ND	
22 Acenaphthylene	152		5.917				ND	
23 Acenaphthene	153		6.055				ND	
25 Fluorene	166		6.494				ND	
27 Phenanthrene	178	7.321	7.321	0.000	85	1959	18.3	
28 Anthracene	178		7.366				ND	
30 Fluoranthene	202	8.629	8.629	0.000	94	3283	26.8	
31 Pyrene	202	8.968	8.968	0.000	93	2748	21.6	
35 Benzo[a]anthracene	228	11.344	11.344	0.000	17	1121	10.1	
36 Chrysene	228	11.443	11.443	0.000	91	1947	18.9	
38 Benzo[b]fluoranthene	252	14.507	14.503	0.004	78	1914	18.9	
39 Benzo[k]fluoranthene	252	14.581	14.586	-0.005	46	412	4.05	
40 Benzo[a]pyrene	252	15.583	15.587	-0.004	50	995	9.97	
41 Indeno[1,2,3-cd]pyrene	276	18.680	18.676	0.004	34	748	6.61	
42 Dibenz(a,h)anthracene	278		18.702				ND	
43 Benzo[g,h,i]perylene	276	19.109	19.109	0.000	23	685	7.13	

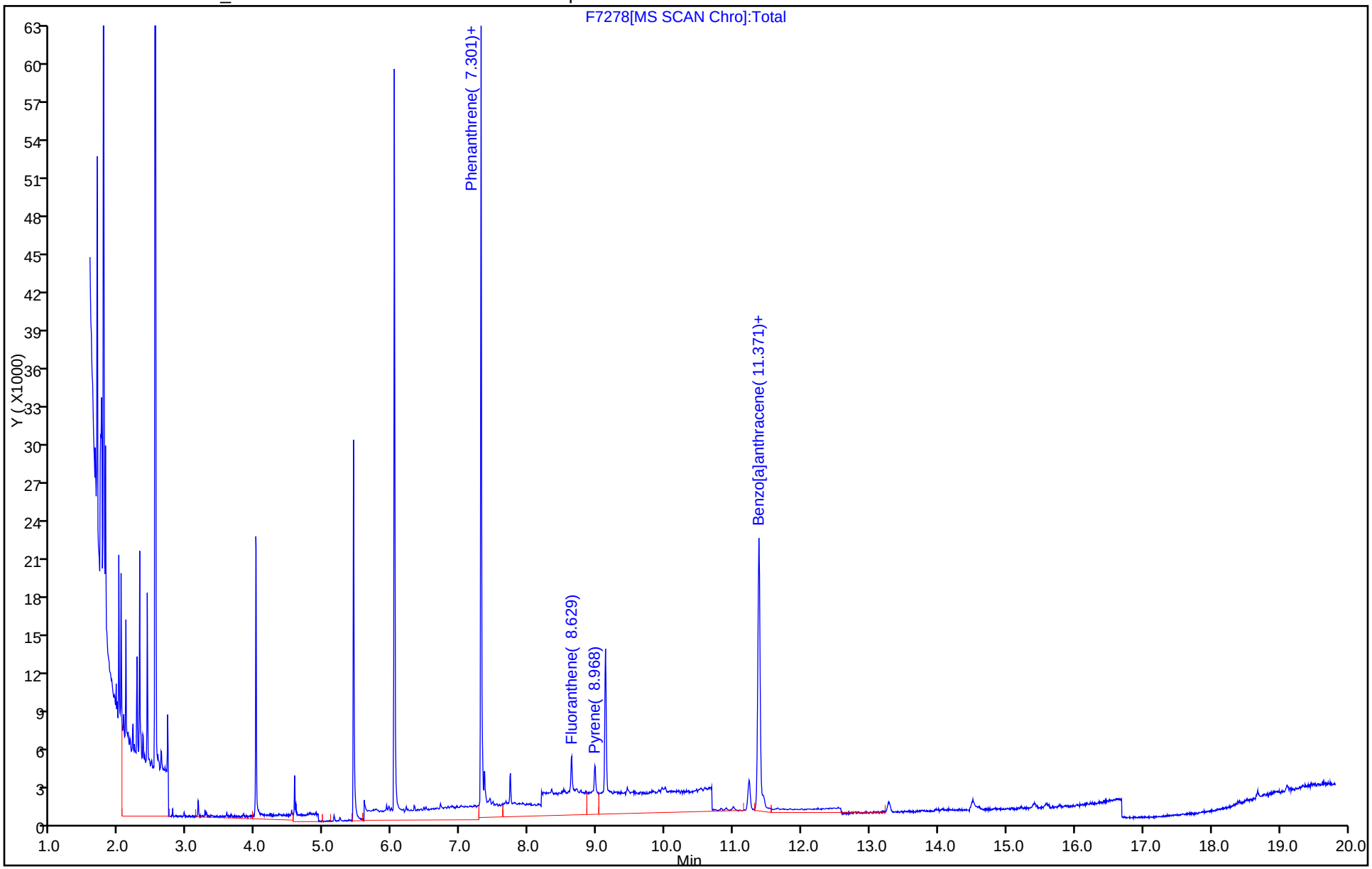
Reagents:

MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:14 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7278.D				
Injection Date:	16-Jun-2017 19:30:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-C-7-B	Lab Sample ID:	280-97928-7	Worklist Smp#:	12
Client ID:	SS025-SB07(2-4)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7278.D
Lims ID: 280-97928-C-7-B
Client ID: SS025-SB07(2-4)
Sample Type: Client
Inject. Date: 16-Jun-2017 19:30:30 ALS Bottle#: 11 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-7-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:18:07

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	314.8	62.97
$ 5 2-Fluorobiphenyl	500.0	309.1	61.82
$ 6 Terphenyl-d14	500.0	273.1	54.62

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB01(0-2) | Lab Sample ID: 280-97928-8

Matrix: Solid | Lab File ID: F7279.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 10:20

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 32.8(g) | Date Analyzed: 06/16/2017 19:57

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 11.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	100		5.2	0.52	0.27
91-57-6	2-Methylnaphthalene	160		5.2	0.69	0.32
83-32-9	*Acenaphthene*	*520*	*J*	*5.2*	0.28	*0.17*
208-96-8	*Acenaphthylene*	*220*	*J*	*5.2*	0.69	*0.18*
120-12-7	*Anthracene*	*940*	*J*	*5.2*	2.6	*0.75*
56-55-3	*Benzo[a]anthracene*	*2000*	*J*	*5.2*	2.6	*0.93*
50-32-8	*Benzo[a]pyrene*	*1600*	*J*	*5.2*	2.6	*0.77*
205-99-2	*Benzo[b]fluoranthene*	*2300*	*J*	*5.2*	2.6	*1.2*
191-24-2	*Benzo[g,h,i]perylene*	*860*	*J*	*5.2*	2.6	*1.1*
207-08-9	*Benzo[k]fluoranthene*	*850*	*J*	*5.2*	2.6	*1.0*
218-01-9	*Chrysene*	*2100*	*J*	*5.2*	2.6	*1.0*
53-70-3	*Dibenz(a,h)anthracene*	*290*	*J*	*5.2*	2.6	*1.3*
206-44-0	*Fluoranthene*	*4000*	*J*	*5.2*	2.6	*1.0*
86-73-7	*Fluorene*	*500*	*J*	*5.2*	0.69	*0.49*
193-39-5	*Indeno[1,2,3-cd]pyrene*	*820*	*J*	*5.2*	2.6	*1.1*
91-20-3	*Naphthalene*	*400*	*J*	*5.2*	0.69	*0.34*
85-01-8	*Phenanthrene*	*3200*	*J*	*5.2*	2.6	*1.1*
129-00-0	*Pyrene*	*3700*	*J*	*5.2*	2.6	*1.1*

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	72		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	72		44-125
1718-51-0	Terphenyl-d14 (Surr)	107		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7279.D
Lims ID: 280-97928-C-8-B
Client ID: SS025-SB01(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 19:57:30 ALS Bottle#: 12 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-8-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:20:01

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	93	26028	600.0	
* 2 Phenanthrene-d10	188	7.295	7.301	-0.006	99	43924	600.0	
* 3 Chrysene-d12	240	11.371	11.371	0.000	1	44844	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	100	14694	360.4	
$ 5 2-Fluorobiphenyl	172	5.427	5.431	-0.004	99	24334	360.6	
$ 6 Terphenyl-d14	244	9.117	9.130	-0.013	70	23952	537.1	
14 Naphthalene	128	4.586	4.589	-0.003	100	975980	11567	E
16 2-Methylnaphthalene	142	5.143	5.147	-0.004	99	250814	4623.5	
17 1-Methylnaphthalene	142	5.230	5.235	-0.005	99	157624	2901.3	
22 Acenaphthylene	152	5.908	5.917	-0.009	99	571049	6360.2	E
23 Acenaphthene	153	6.055	6.055	0.000	95	833146	15181	E
25 Fluorene	166	6.487	6.494	-0.007	96	970929	14416	E
27 Phenanthrene	178	7.314	7.321	-0.007	99	8521376	91473	Ee
28 Anthracene	178	7.360	7.366	-0.006	100	2560665	27221	E
30 Fluoranthene	202	8.629	8.629	0.000	98	12468769	116535	Ee
31 Pyrene	202	8.974	8.968	0.006	100	12039367	108499	E
35 Benzo[a]anthracene	228	11.344	11.344	0.000	96	6885305	57733	E
36 Chrysene	228	11.443	11.443	0.000	99	6817993	61797	E
38 Benzo[b]fluoranthene	252	14.516	14.503	0.013	100	7270670	67151	E
39 Benzo[k]fluoranthene	252	14.590	14.586	0.004	100	2694409	24742	E
40 Benzo[a]pyrene	252	15.592	15.587	0.005	100	5102408	47752	E
41 Indeno[1,2,3-cd]pyrene	276	18.676	18.676	0.000	81	2880685	23767	E
42 Dibenz(a,h)anthracene	278	18.693	18.702	-0.009	88	782720	8274.6	E
43 Benzo[g,h,i]perylene	276	19.109	19.109	0.000	99	2571982	25013	E

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

e - Potential Peak Saturated

Reagents:

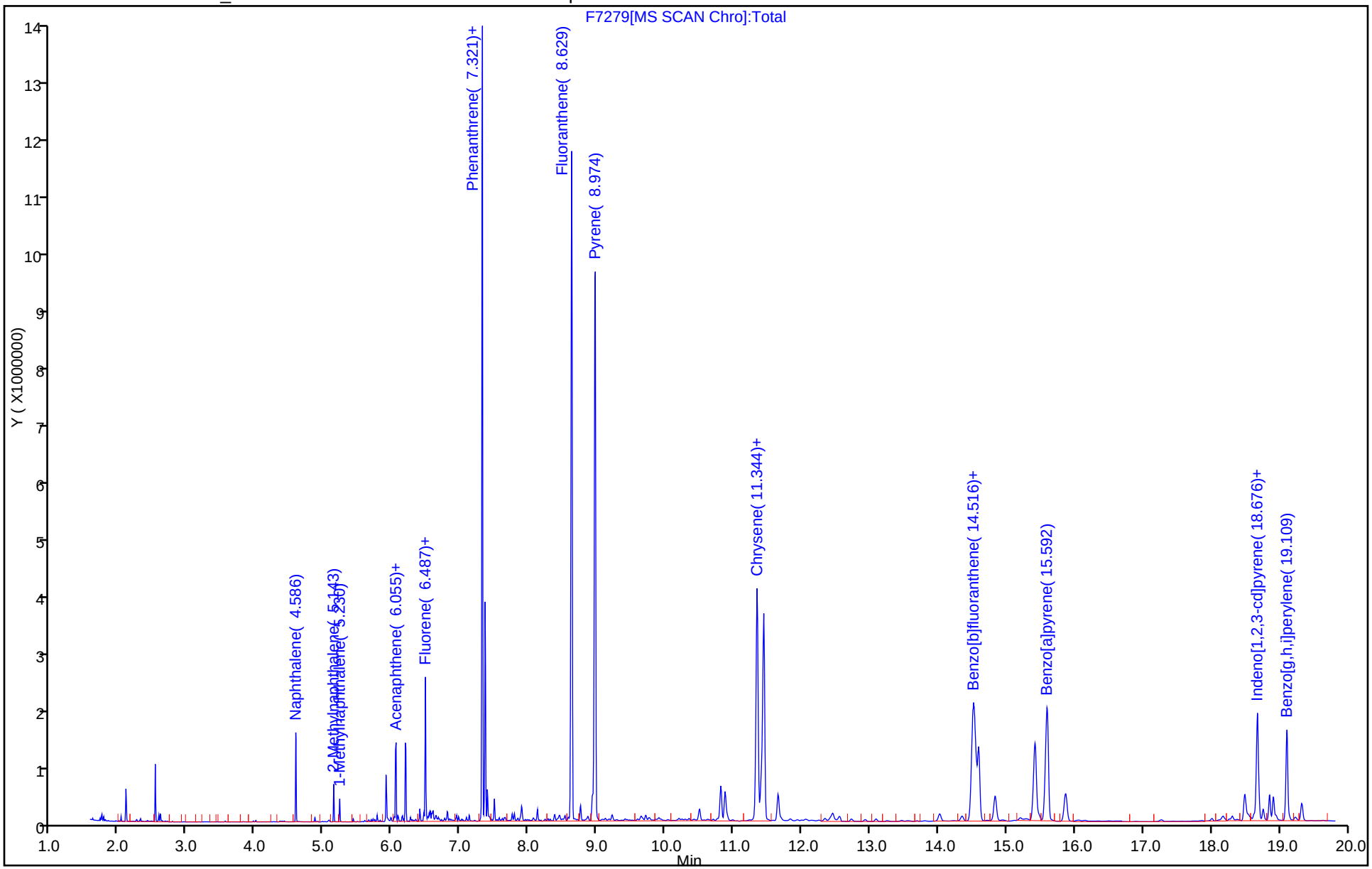
MS-SIM IS_00029	Amount Added:	20.00	Units: uL	Run Reagent

Report Date: 19-Jun-2017 15:44:15 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7279.D

Injection Date:	16-Jun-2017 19:57:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8	Worklist Smp#:	13
Client ID:	SS025-SB01(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7279.D
Lims ID: 280-97928-C-8-B
Client ID: SS025-SB01(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 19:57:30 ALS Bottle#: 12 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-8-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:20:01

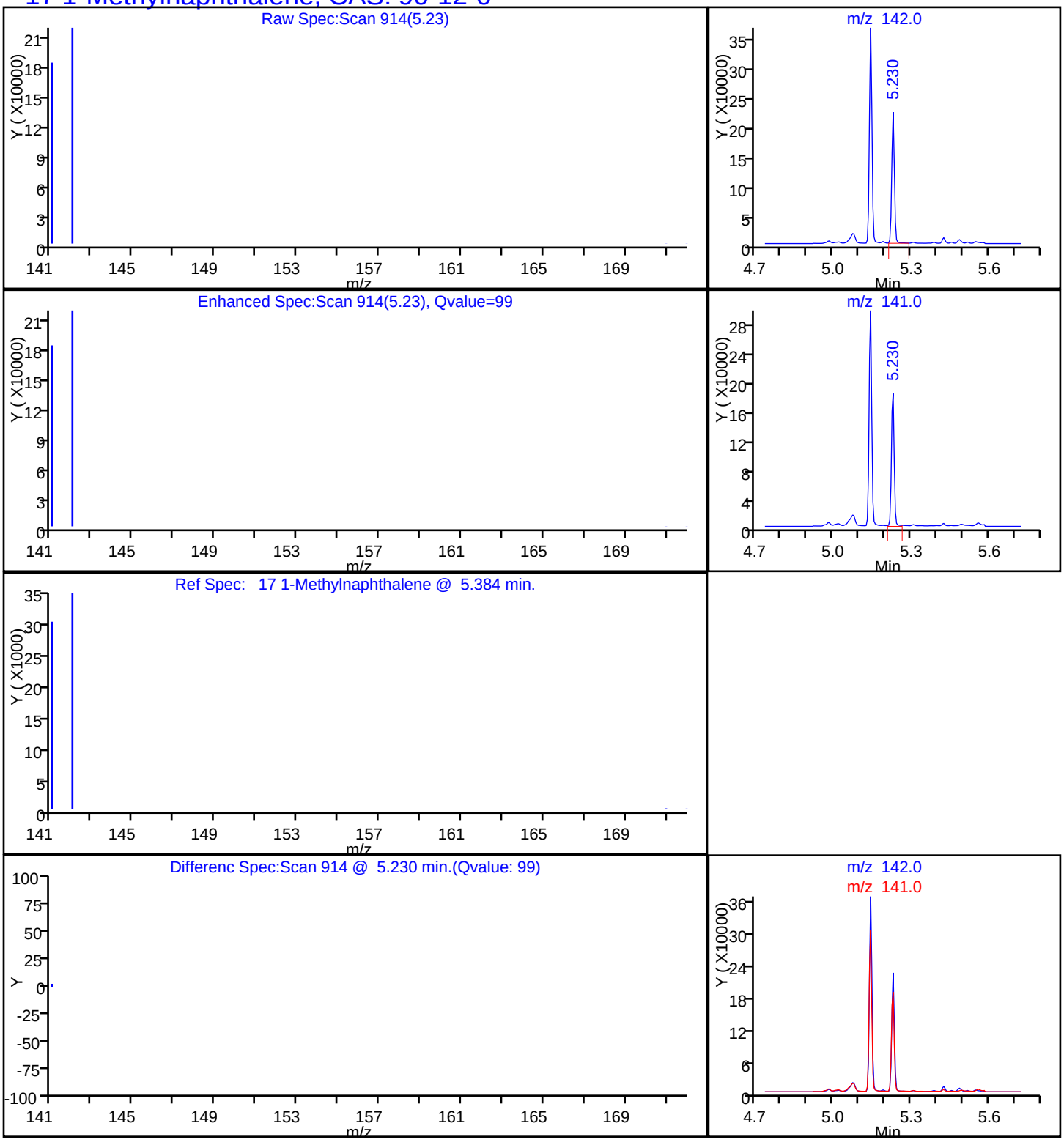
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	360.4	72.08
$ 5 2-Fluorobiphenyl	500.0	360.6	72.11
$ 6 Terphenyl-d14	500.0	537.1	107.41

Report Date: 19-Jun-2017 15:44:15 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7279.D				
Injection Date:	16-Jun-2017 19:57:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	12	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0



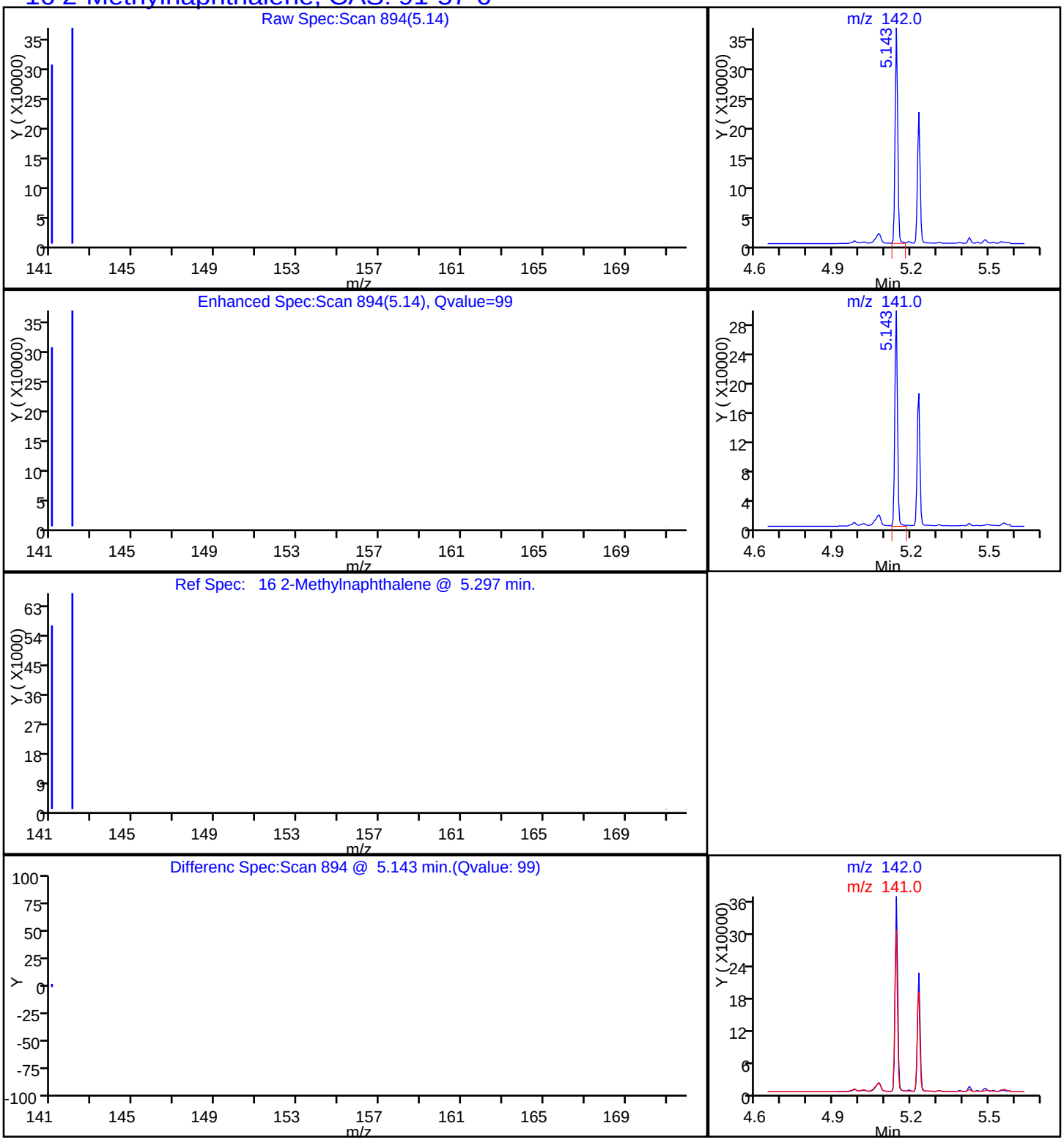
Report Date: 19-Jun-2017 15:44:15 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7279.D

Injection Date:	16-Jun-2017 19:57:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	12	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



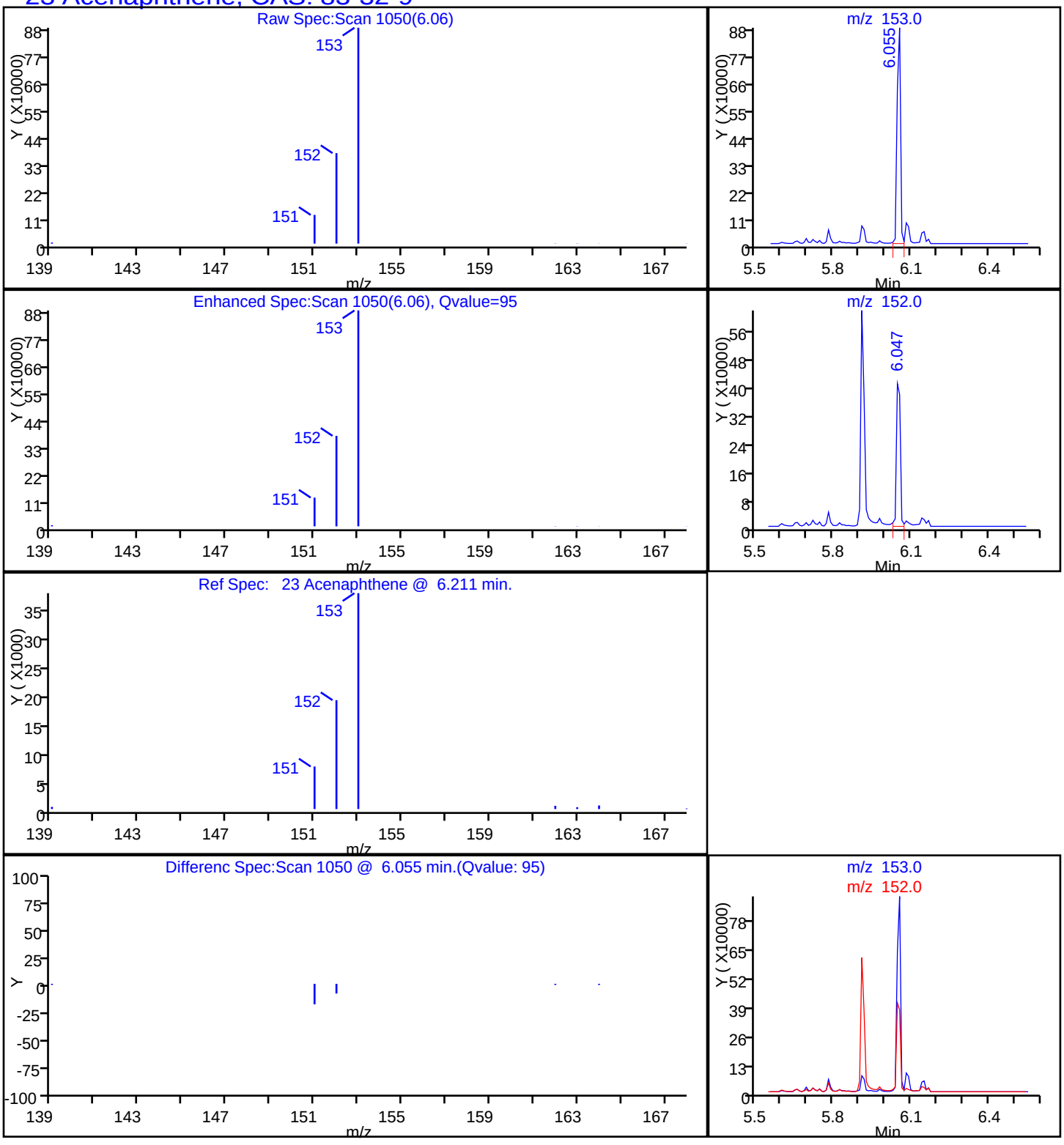
Report Date: 19-Jun-2017 15:44:15 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7279.D

Injection Date:	16-Jun-2017 19:57:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	12	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9



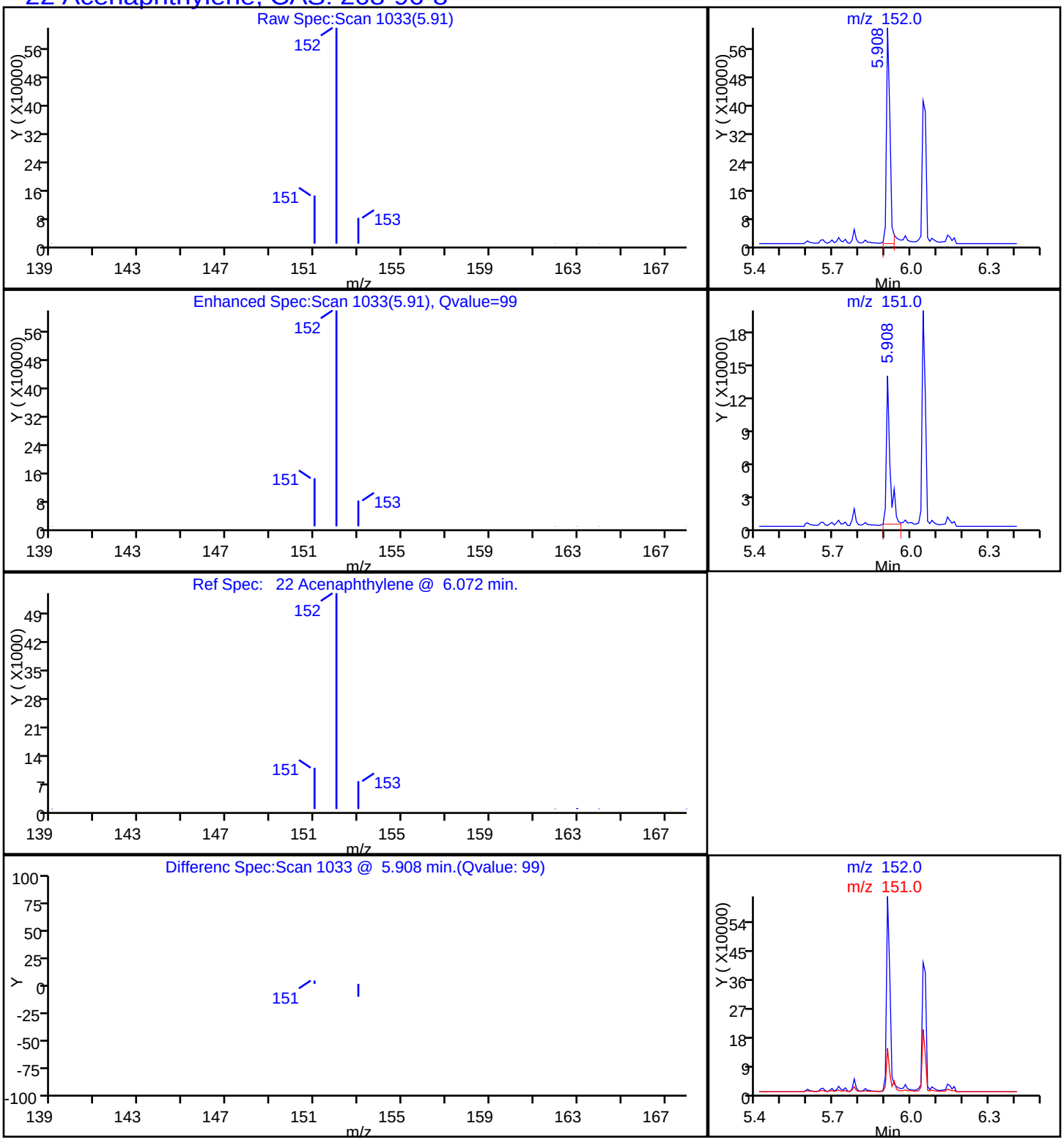
Report Date: 19-Jun-2017 15:44:15 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7279.D

Injection Date:	16-Jun-2017 19:57:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	12	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Acenaphthylene, CAS: 208-96-8



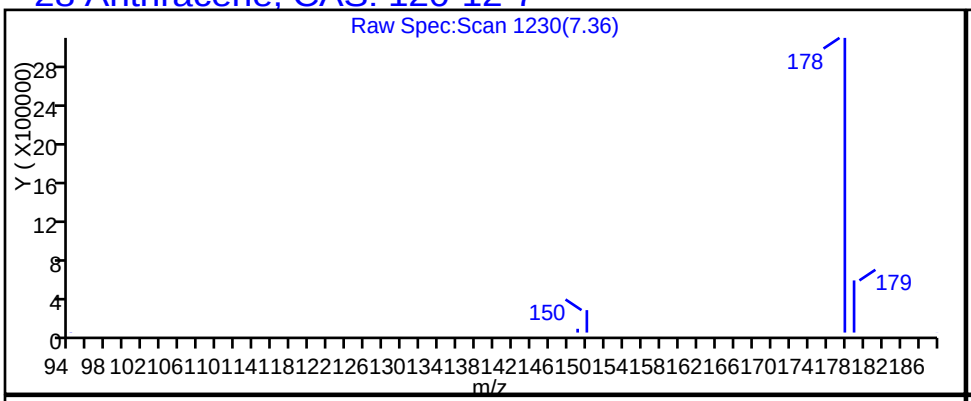
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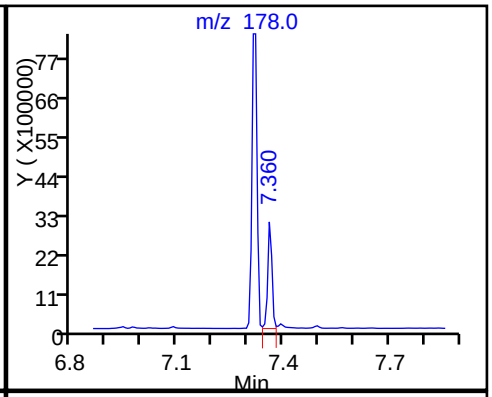
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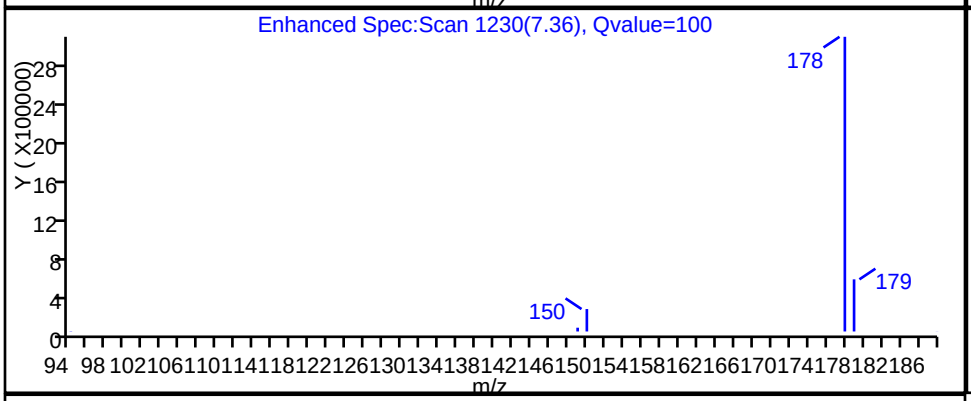
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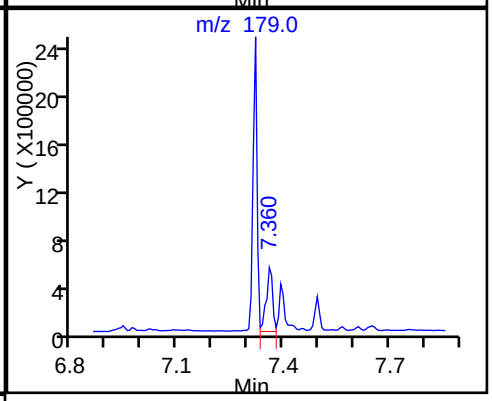
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Client ID:	SS025-SB01(0-2)				
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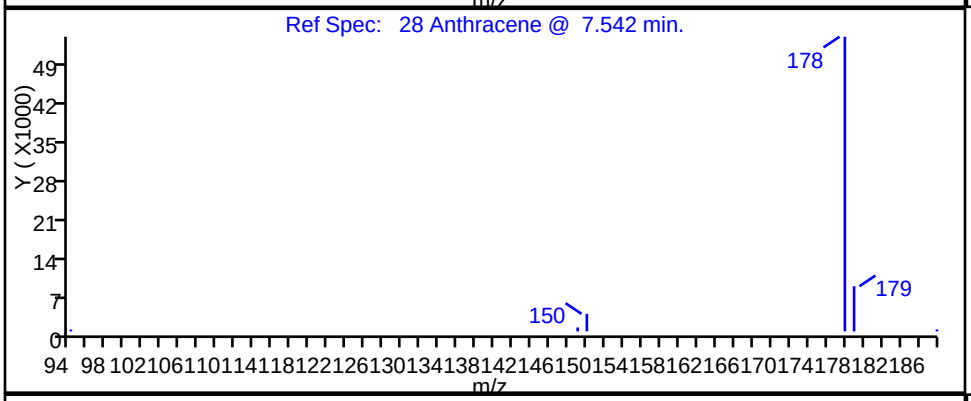
28 Anthracene, CAS: 120-12-7

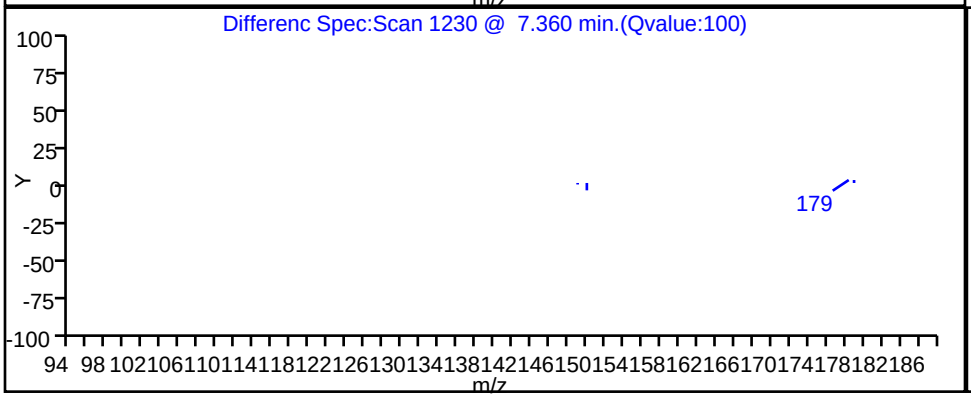


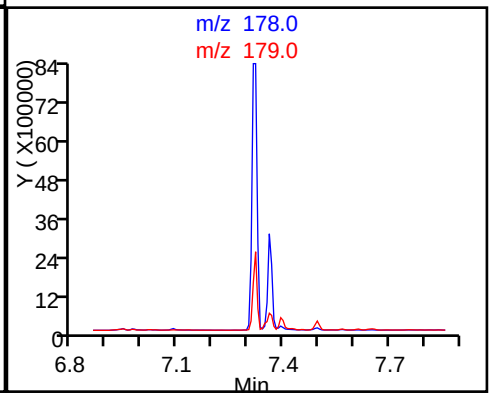












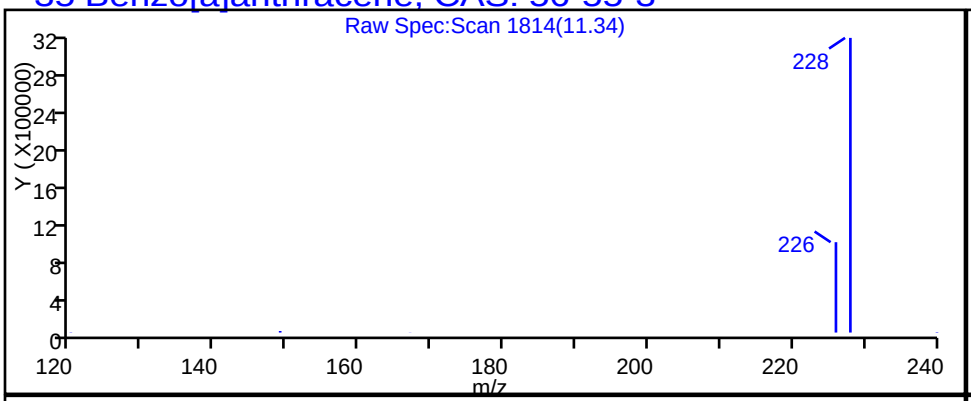
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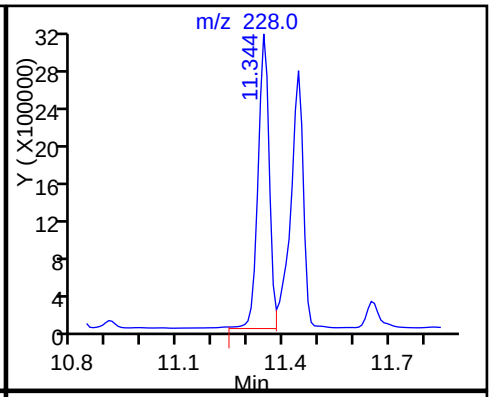
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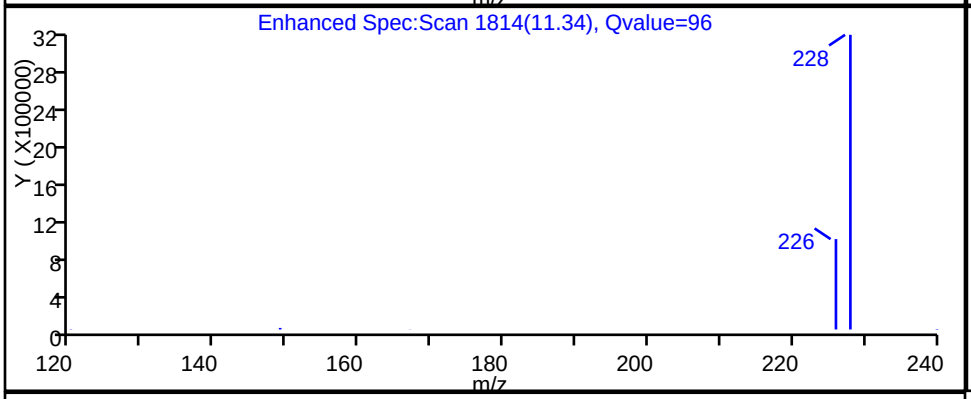
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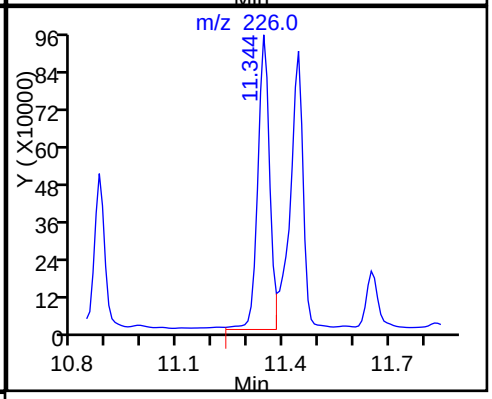
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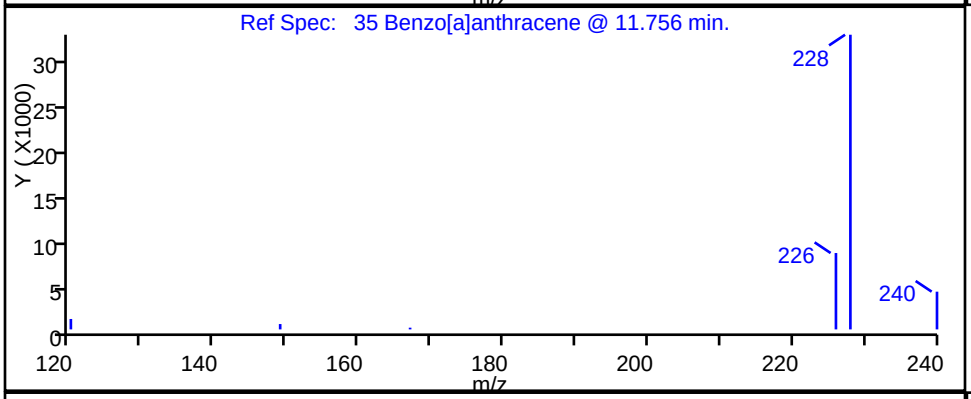
35 Benzo[a]anthracene, CAS: 56-55-3

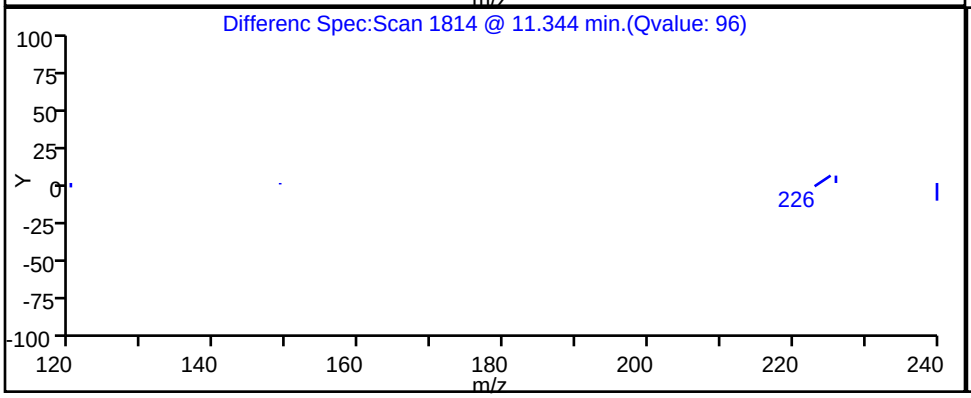


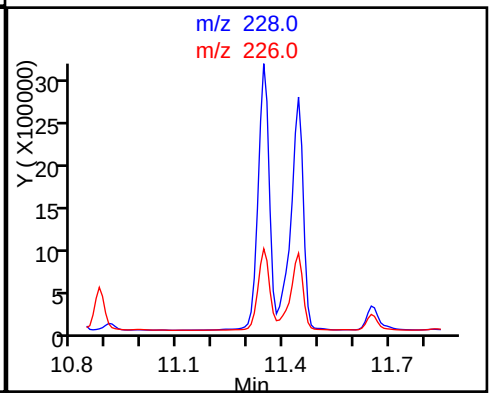












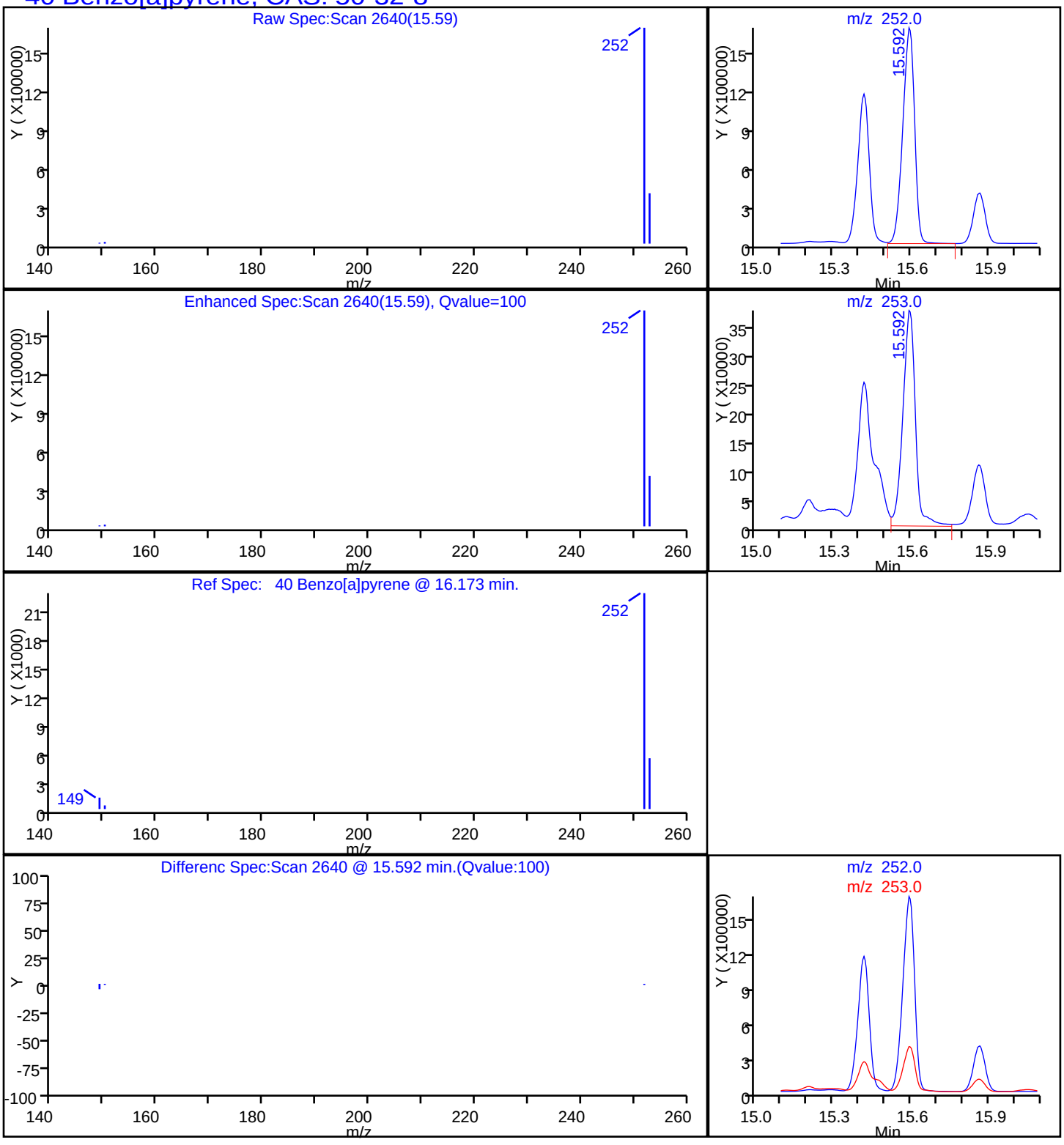
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Column:		Detector	MS SCAN		

40 Benzo[a]pyrene, CAS: 50-32-8



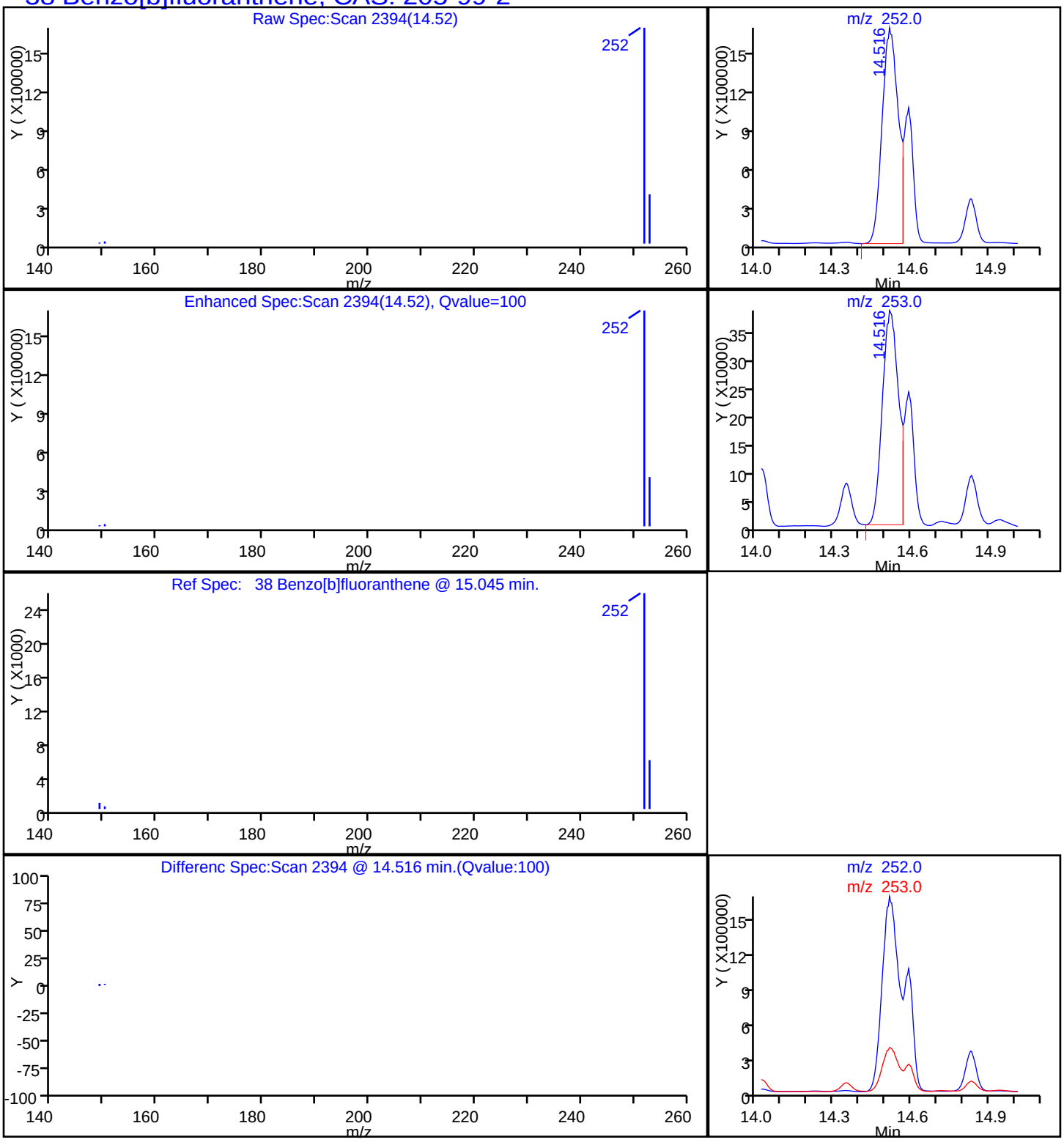
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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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Column:		Detector	MS SCAN		

38 Benzo[b]fluoranthene, CAS: 205-99-2

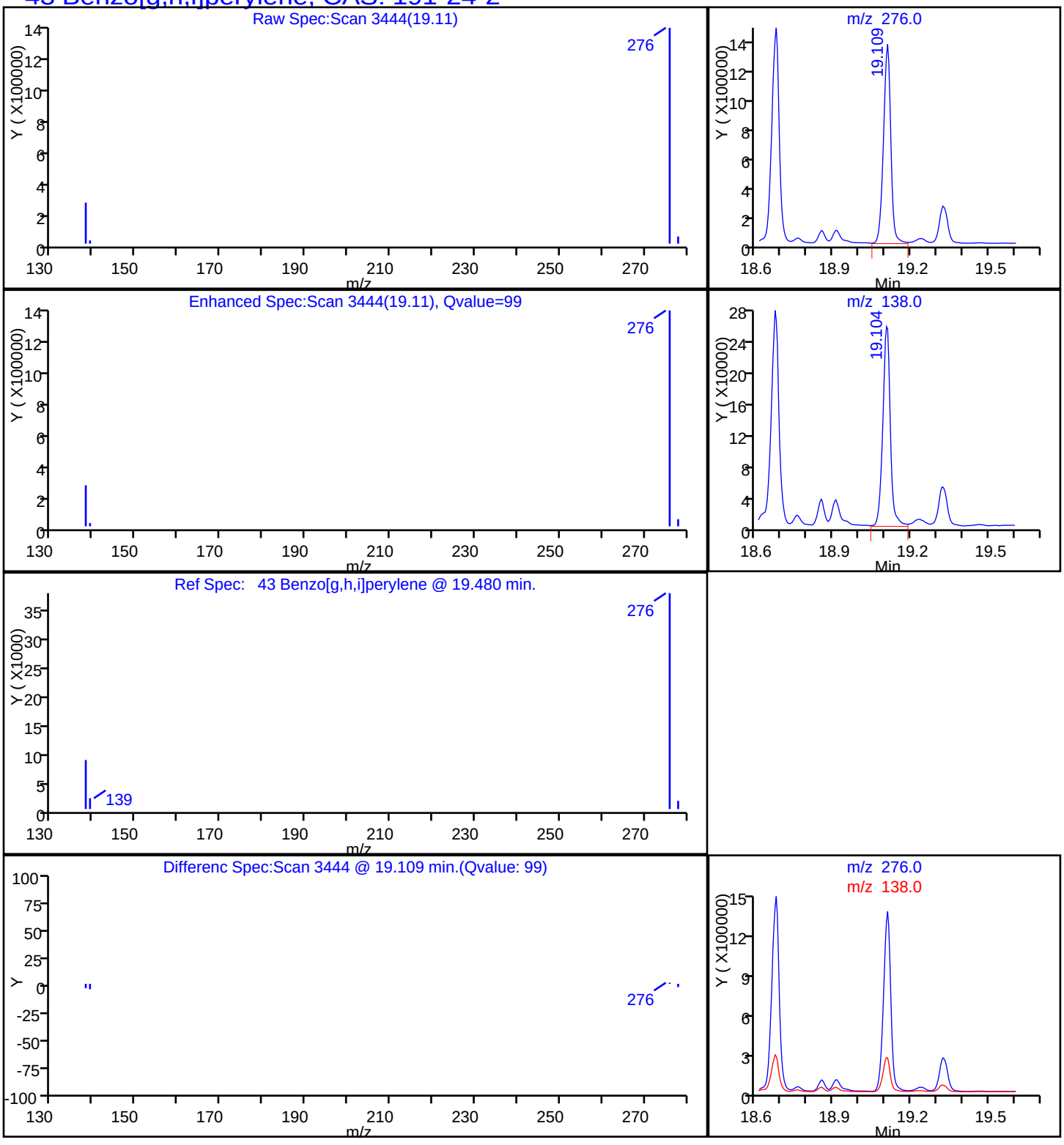


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TestAmerica Denver

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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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43 Benzo[g,h,i]perylene, CAS: 191-24-2

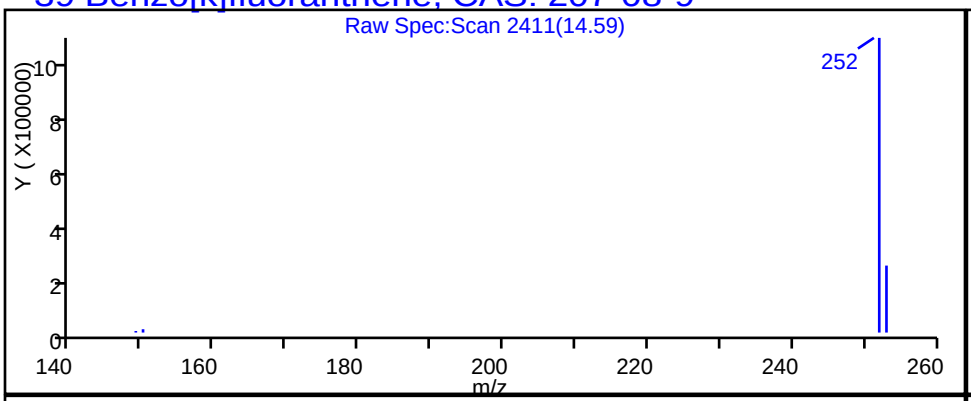


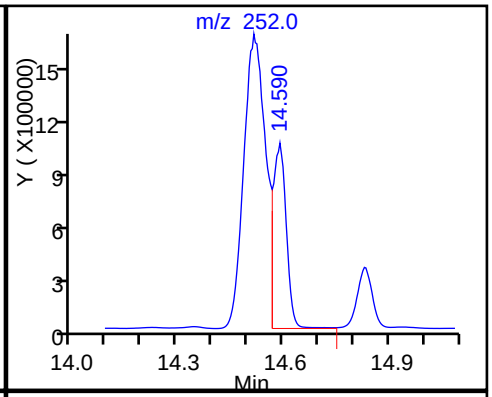
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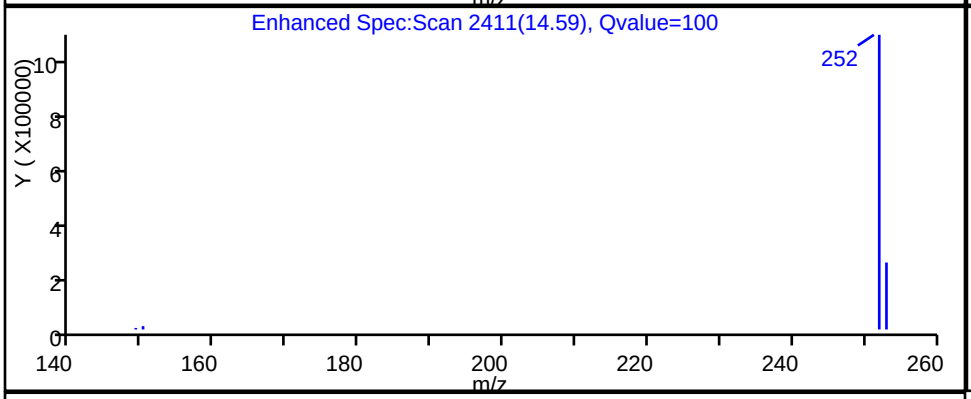
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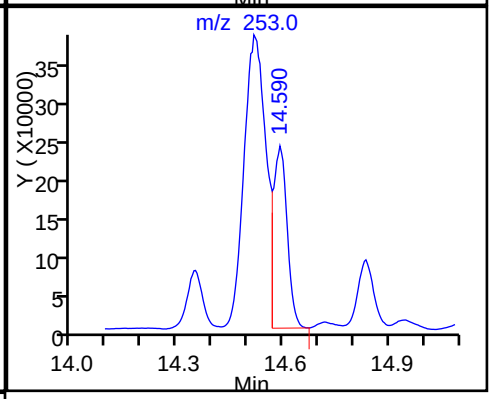
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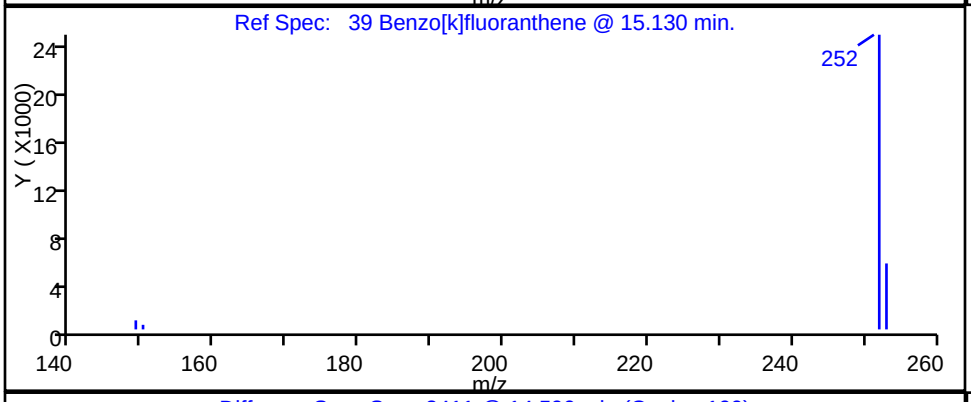
39 Benzo[k]fluoranthene, CAS: 207-08-9

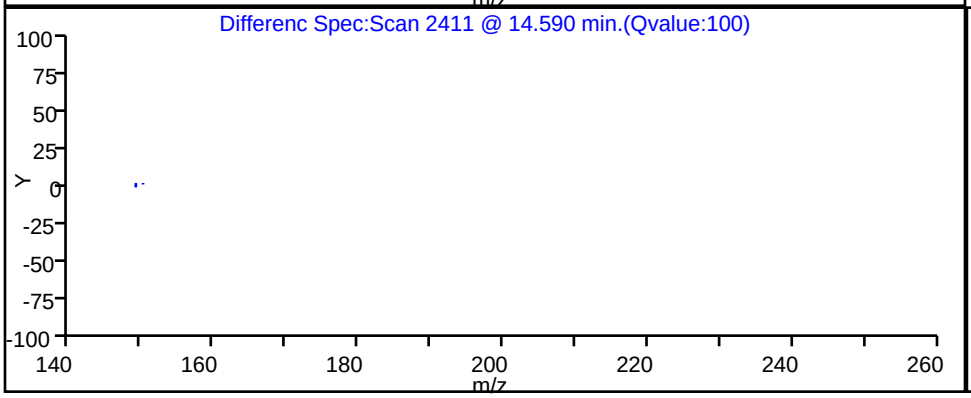


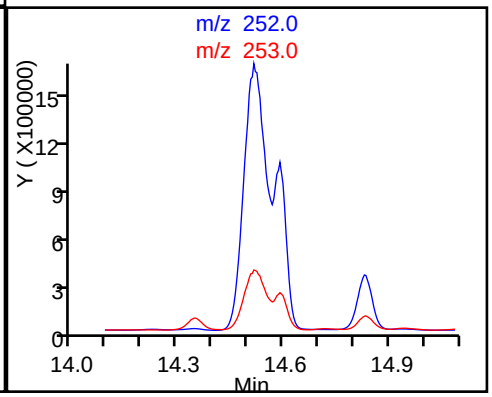












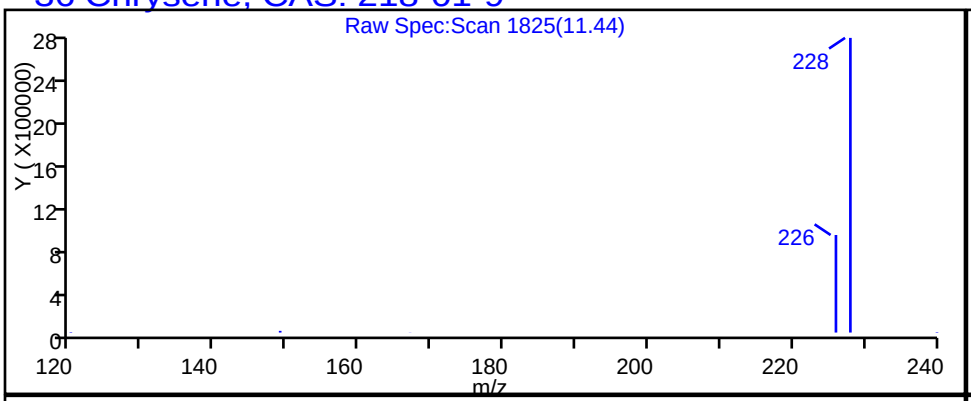
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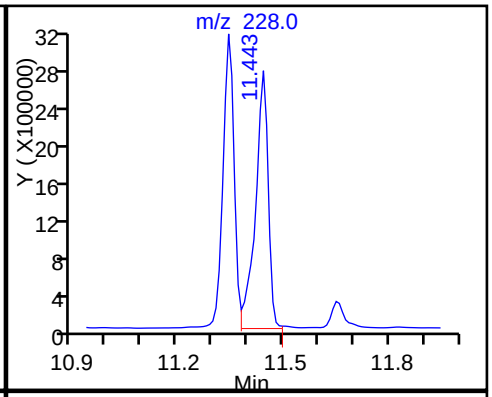
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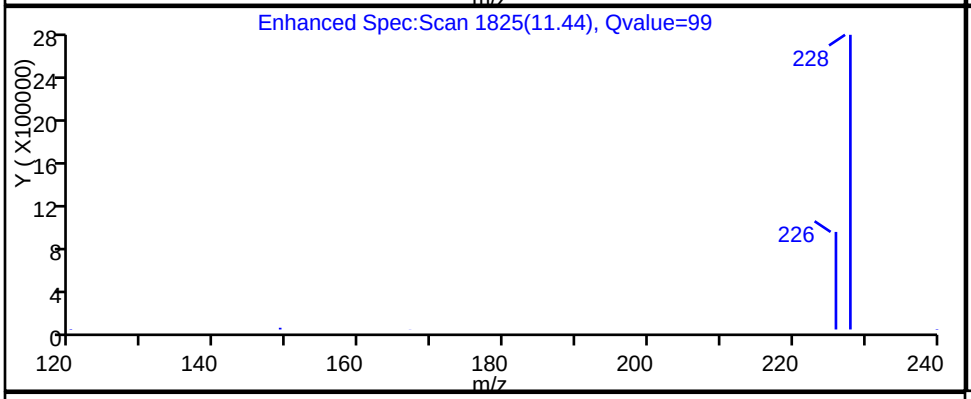
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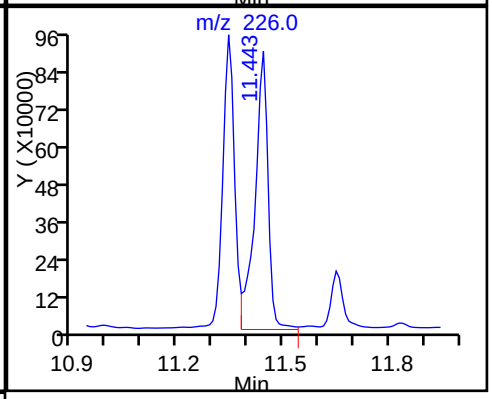
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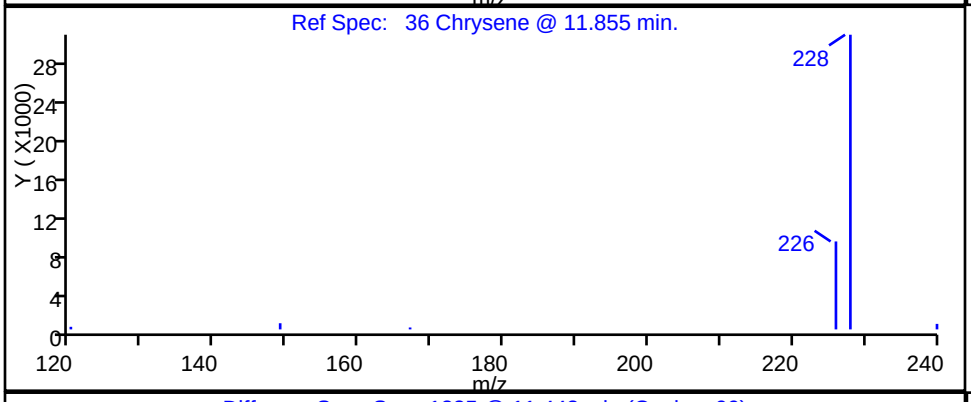
36 Chrysene, CAS: 218-01-9

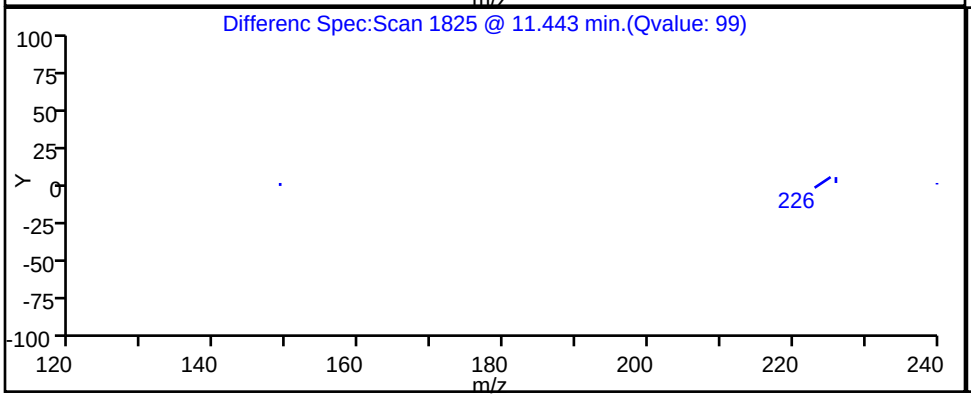


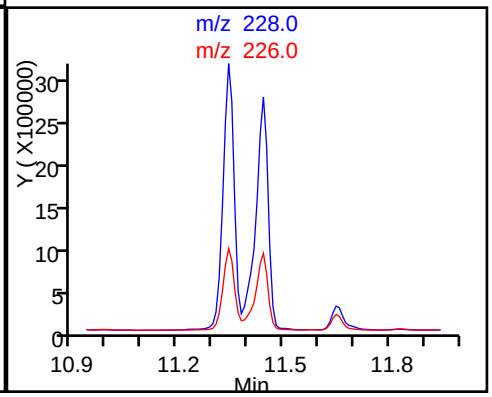












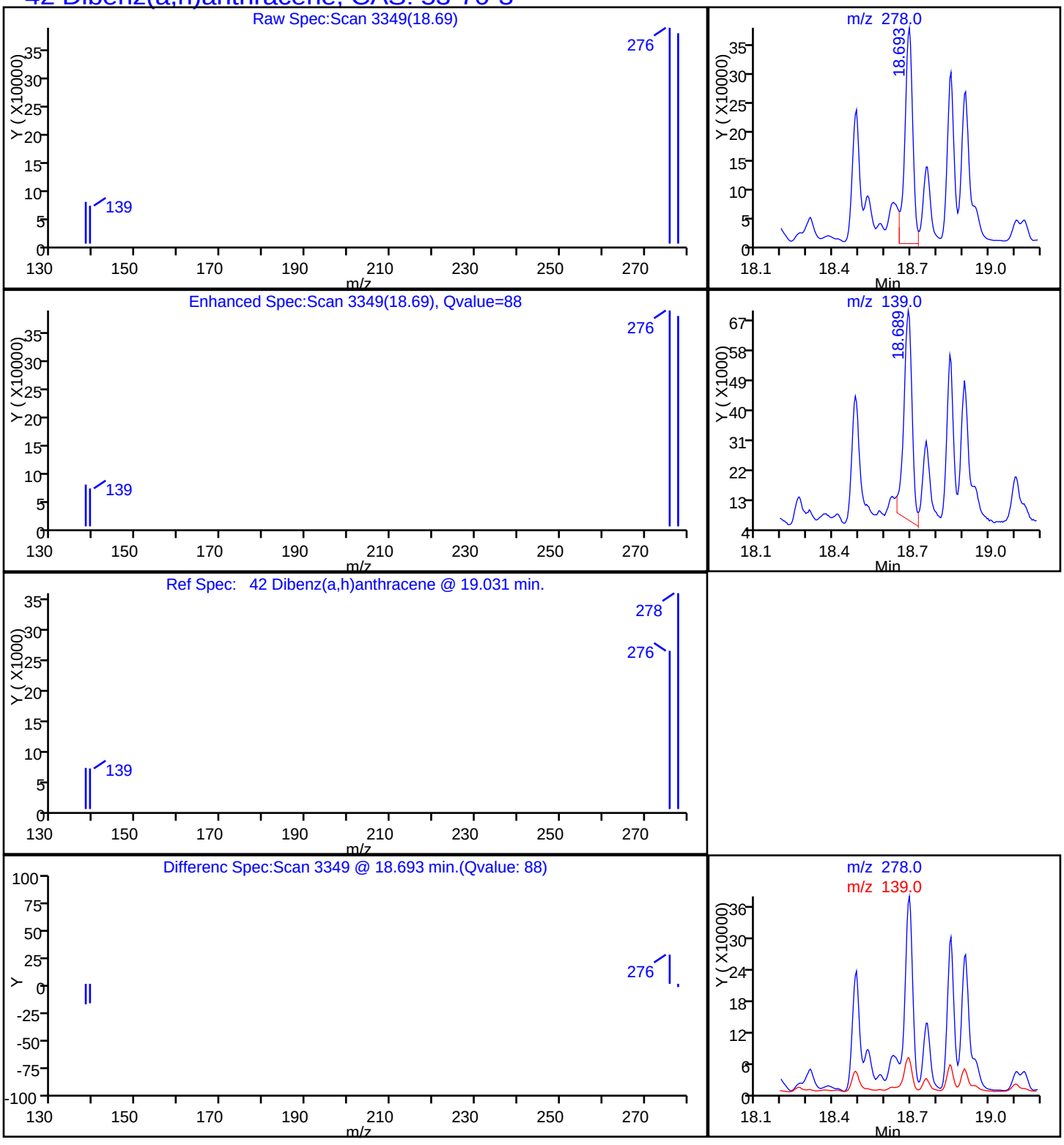
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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

42 Dibenz(a,h)anthracene, CAS: 53-70-3



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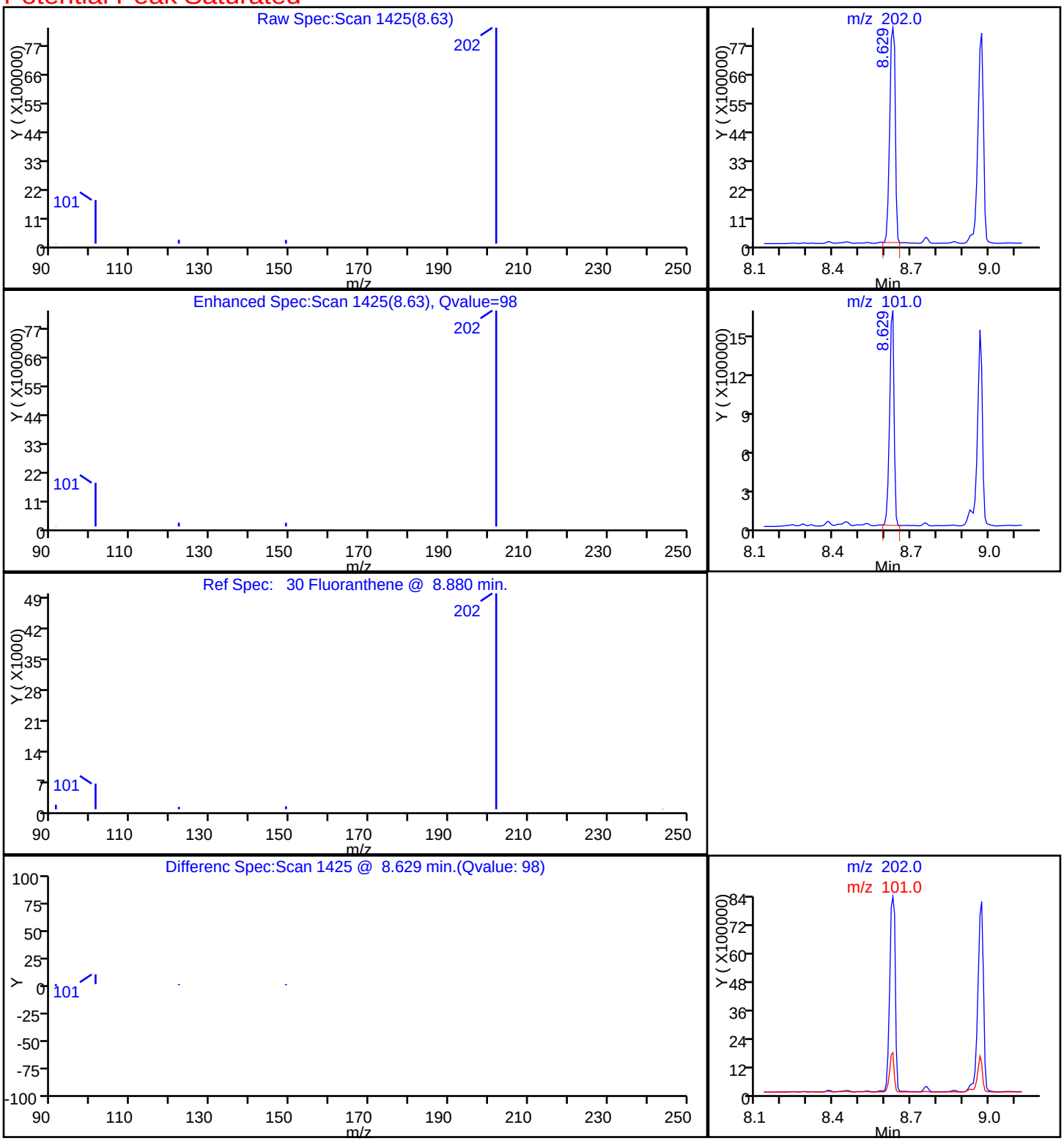
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Column:		Detector	MS SCAN		

30 Fluoranthene, CAS: 206-44-0

Potential Peak Saturated



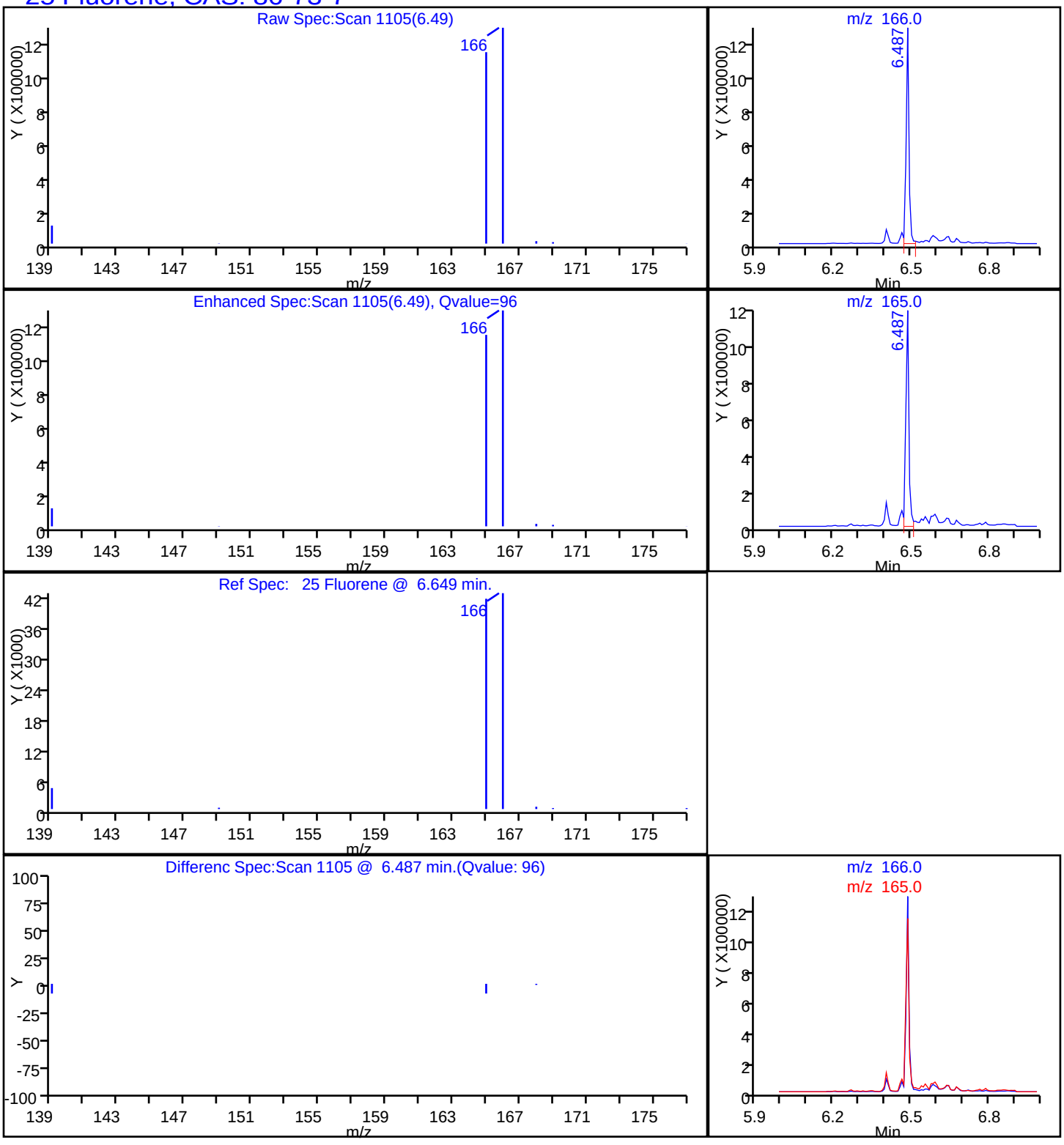
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25 Fluorene, CAS: 86-73-7



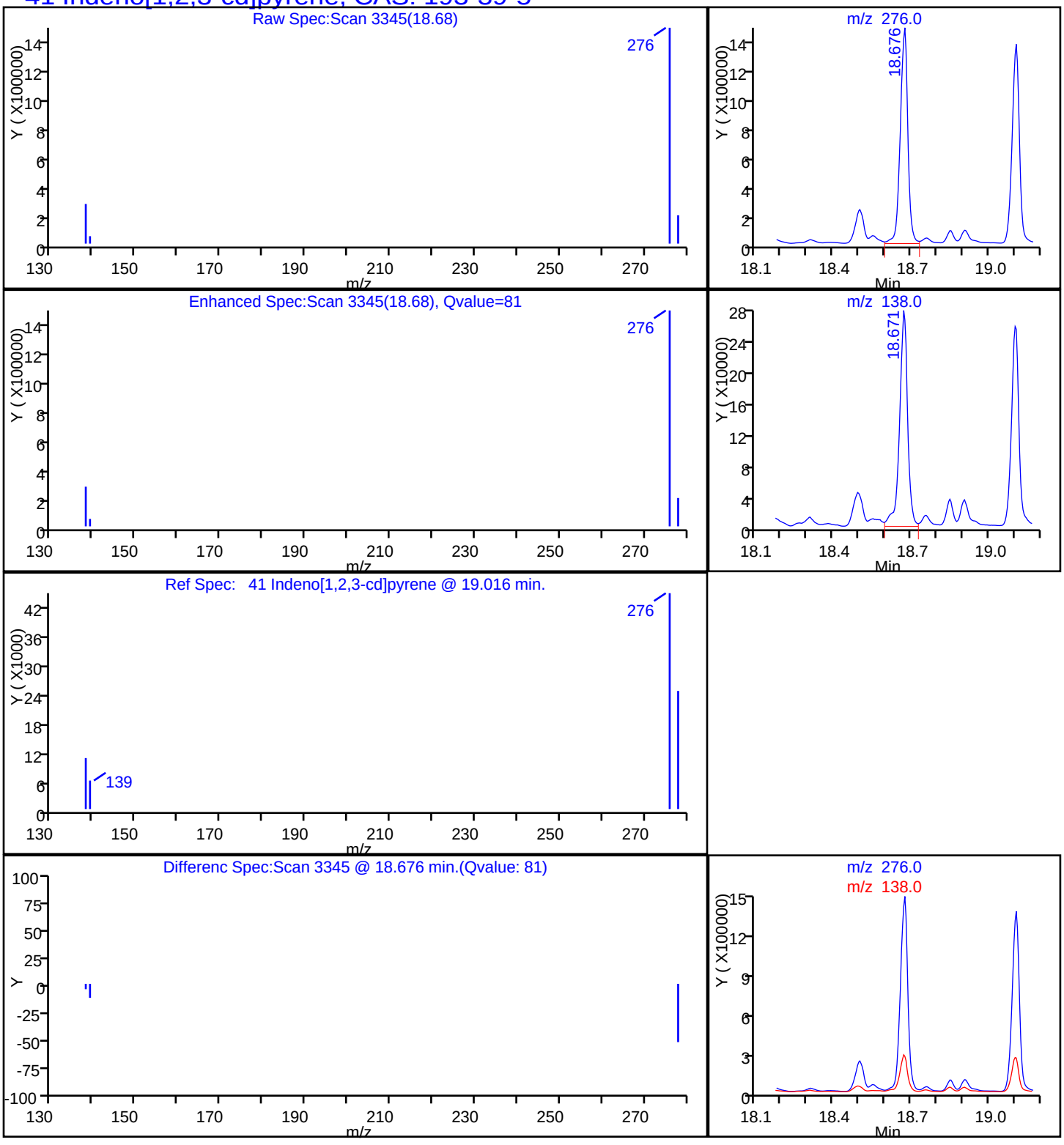
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41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



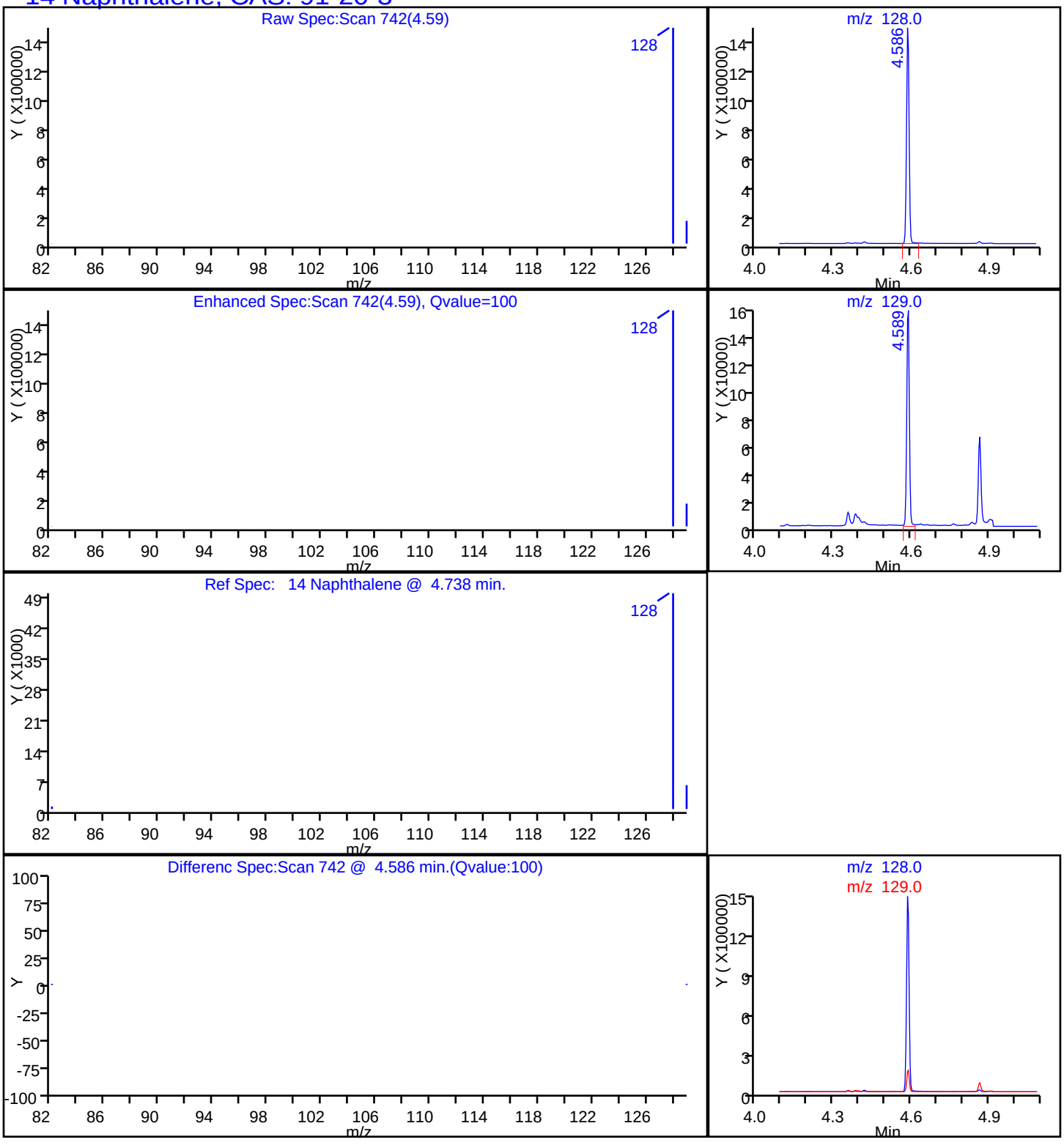
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14 Naphthalene, CAS: 91-20-3



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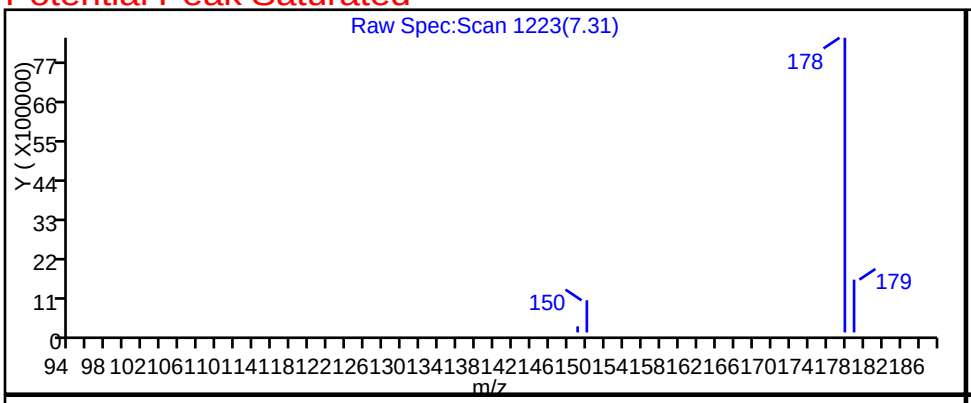
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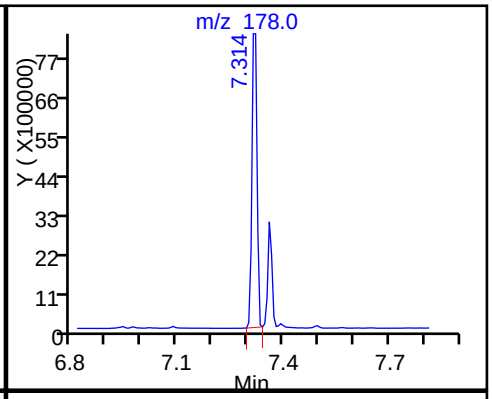
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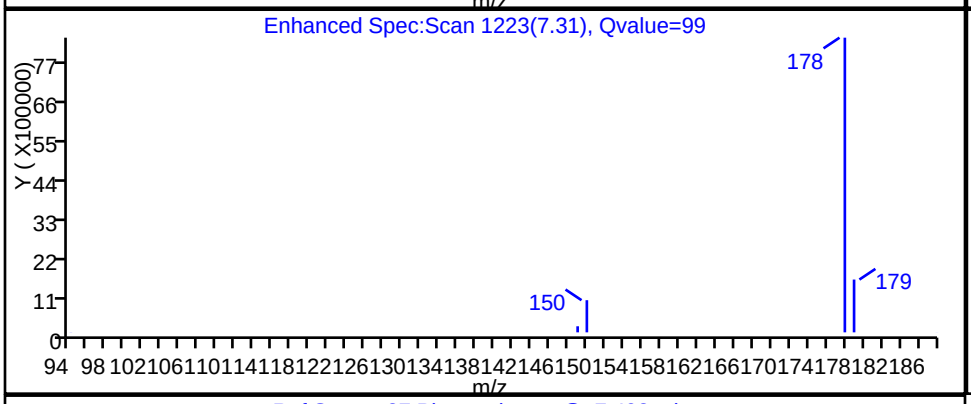
Injection Date:	16-Jun-2017 19:57:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	12	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

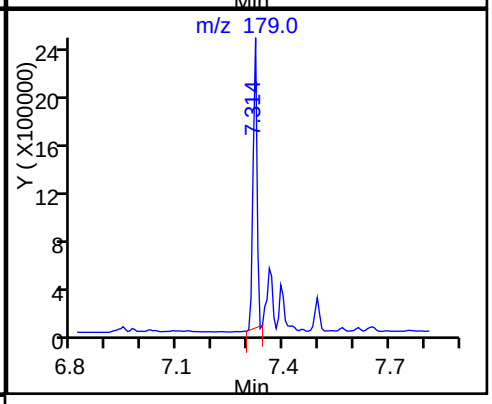
27 Phenanthrene, CAS: 85-01-8

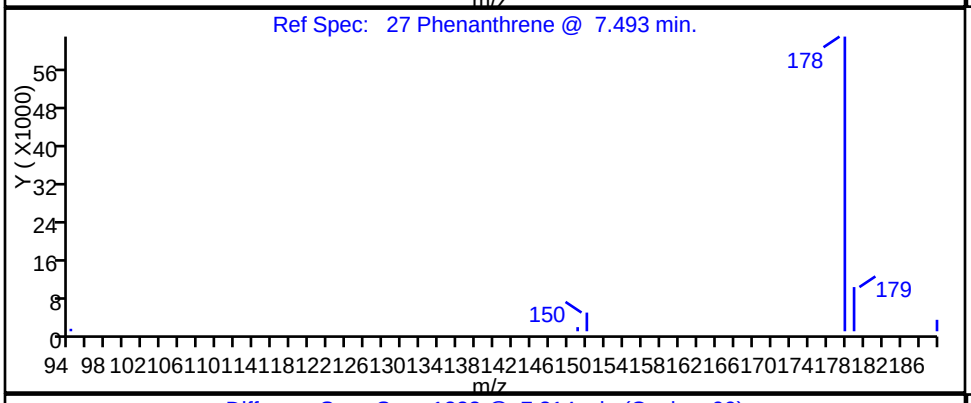
Potential Peak Saturated

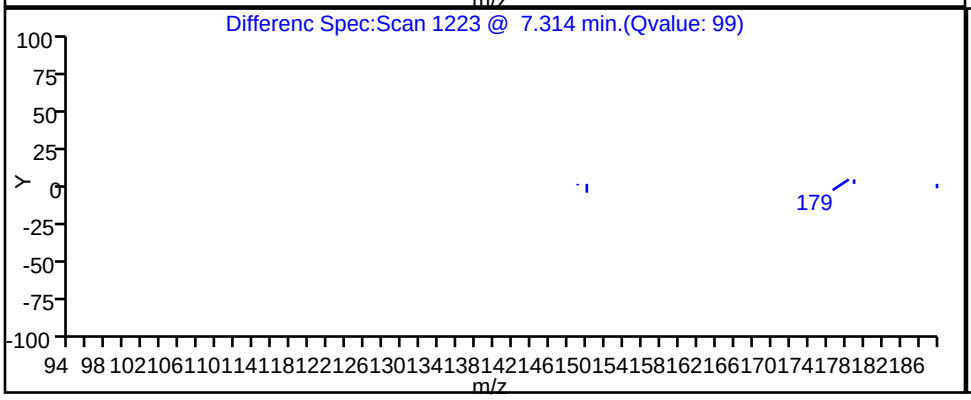


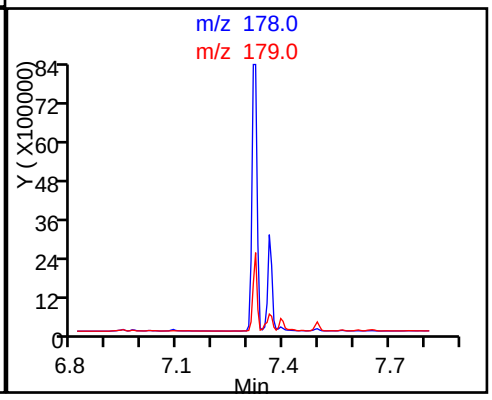












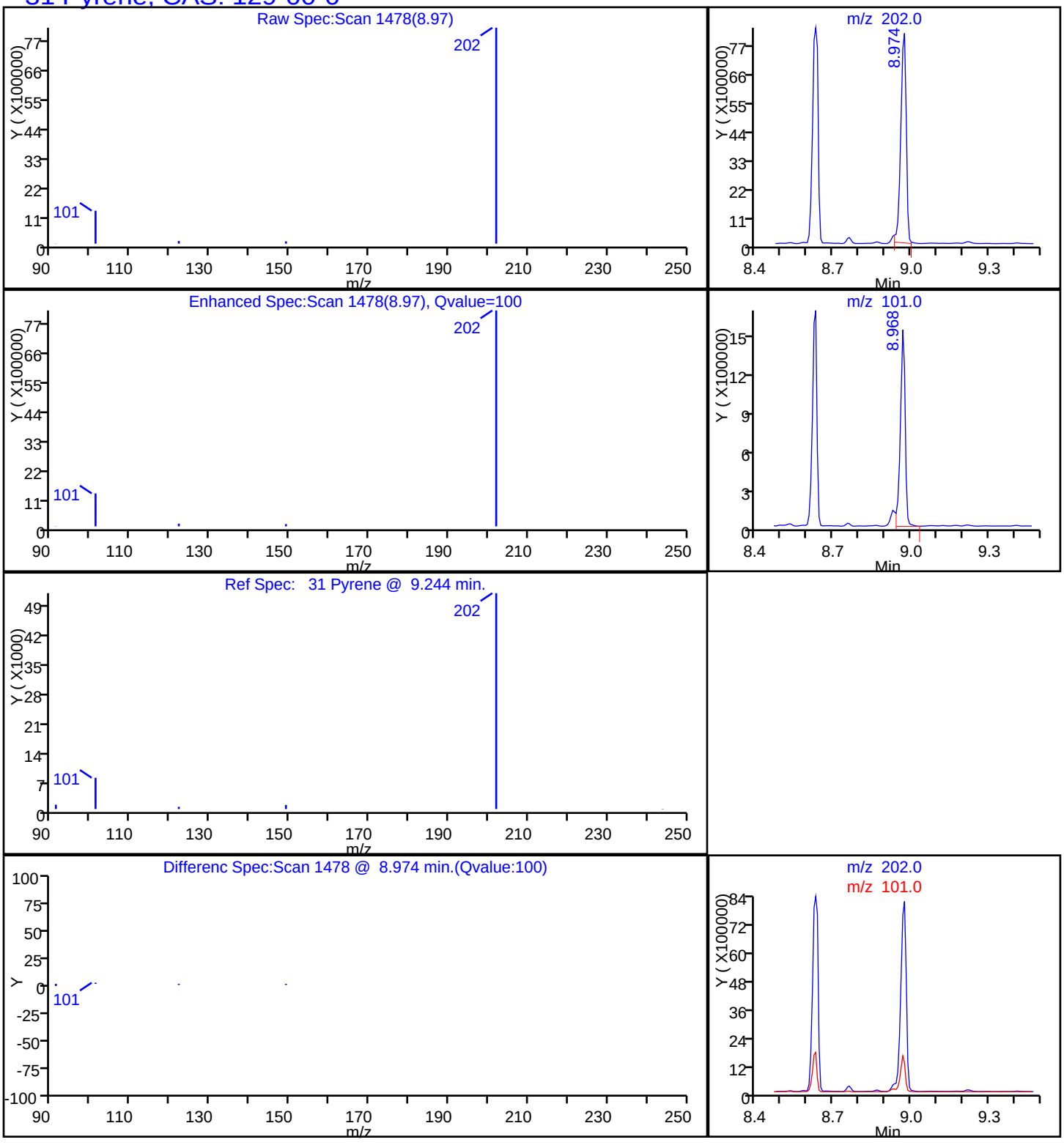
Report Date: 19-Jun-2017 15:44:15 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7279.D

Injection Date:	16-Jun-2017 19:57:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	12	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Pyrene, CAS: 129-00-0



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB01(0-2) DL | Lab Sample ID: 280-97928-8 DL

Matrix: Solid | Lab File ID: F7315.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 10:20

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 32.8(g) | Date Analyzed: 06/20/2017 20:26

Con. Extract Vol.: 1(mL) | Dilution Factor: 50

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 11.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378055 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	*1-Methylnaphthalene*	*94*	*J D Q*	*260*	26	*13*
91-57-6	*2-Methylnaphthalene*	*150*	*J D Q*	*260*	35	*16*
83-32-9	Acenaphthene	600	D Q	260	14	8.3
208-96-8	Acenaphthylene	280	D Q	260	35	8.8
120-12-7	Anthracene	1100	D Q	260	130	37
56-55-3	Benzo[a]anthracene	2300	D Q	260	130	47
50-32-8	Benzo[a]pyrene	2000	D Q	260	130	38
205-99-2	Benzo[b]fluoranthene	2800	D Q	260	130	62
191-24-2	Benzo[g,h,i]perylene	1100	D Q	260	130	57
207-08-9	Benzo[k]fluoranthene	1100	D Q	260	130	52
218-01-9	Chrysene	2700	D Q	260	130	52
53-70-3	Dibenz(a,h)anthracene	350	D Q	260	130	67
206-44-0	Fluoranthene	5500	D Q	260	130	52
86-73-7	Fluorene	590	D Q	260	35	24
193-39-5	Indeno[1,2,3-cd]pyrene	1000	D Q	260	130	57
91-20-3	Naphthalene	410	D Q	260	35	17
85-01-8	Phenanthrene	4400	D Q	260	130	57
129-00-0	Pyrene	4700	D Q	260	130	57

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	502	D Q	46-115
4165-60-0	Nitrobenzene-d5 (Surr)	0	D Q	44-125
1718-51-0	Terphenyl-d14 (Surr)	1746	D Q	58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7315.D
Lims ID: 280-97928-C-8-B
Client ID: SS025-SB01(0-2)
Sample Type: Client
Inject. Date: 20-Jun-2017 20:26:30 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 50.0000
Sample Info: 280-97928-c-8-b
Misc. Info.: 50X
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 21-Jun-2017 15:41:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: wickhamm Date: 21-Jun-2017 15:12:53

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	84	17448	600.0	
* 2 Phenanthrene-d10	188	7.301	7.308	-0.007	99	34708	600.0	
* 3 Chrysene-d12	240	11.371	11.378	-0.007	89	33027	600.0	
$ 4 Nitrobenzene-d5	82		4.001				ND	
$ 5 2-Fluorobiphenyl	172	5.440	5.436	0.004	99	2269	50.2	
$ 6 Terphenyl-d14	244	9.124	9.130	-0.006	95	6152	174.6	
14 Naphthalene	128	4.589	4.589	0.000	100	13346	236.0	
16 2-Methylnaphthalene	142	5.156	5.147	0.009	100	3148	86.6	
17 1-Methylnaphthalene	142	5.239	5.234	0.005	99	1981	54.4	
22 Acenaphthylene	152	5.917	5.917	0.000	99	9767	162.3	
23 Acenaphthene	153	6.055	6.055	0.000	97	12684	344.8	
25 Fluorene	166	6.494	6.494	0.000	97	15479	342.9	
27 Phenanthrene	178	7.321	7.321	0.000	100	186067	2527.7	
28 Anthracene	178	7.366	7.373	-0.007	99	45358	610.2	
30 Fluoranthene	202	8.623	8.629	-0.006	100	268698	3178.1	
31 Pyrene	202	8.968	8.974	-0.006	99	237220	2705.5	
35 Benzo[a]anthracene	228	11.344	11.350	-0.006	98	118815	1352.7	
36 Chrysene	228	11.434	11.450	-0.016	100	125353	1542.7	
38 Benzo[b]fluoranthene	252	14.498	14.513	-0.015	100	127336	1596.8	
39 Benzo[k]fluoranthene	252	14.577	14.596	-0.019	100	51099	637.1	
40 Benzo[a]pyrene	252	15.579	15.598	-0.019	100	92370	1173.8	
41 Indeno[1,2,3-cd]pyrene	276	18.671	18.682	-0.011	81	51713	579.3	
42 Dibenz(a,h)anthracene	278	18.693	18.708	-0.015	80	14273	204.9	
43 Benzo[g,h,i]perylene	276	19.104	19.115	-0.011	100	46900	619.3	

Reagents:

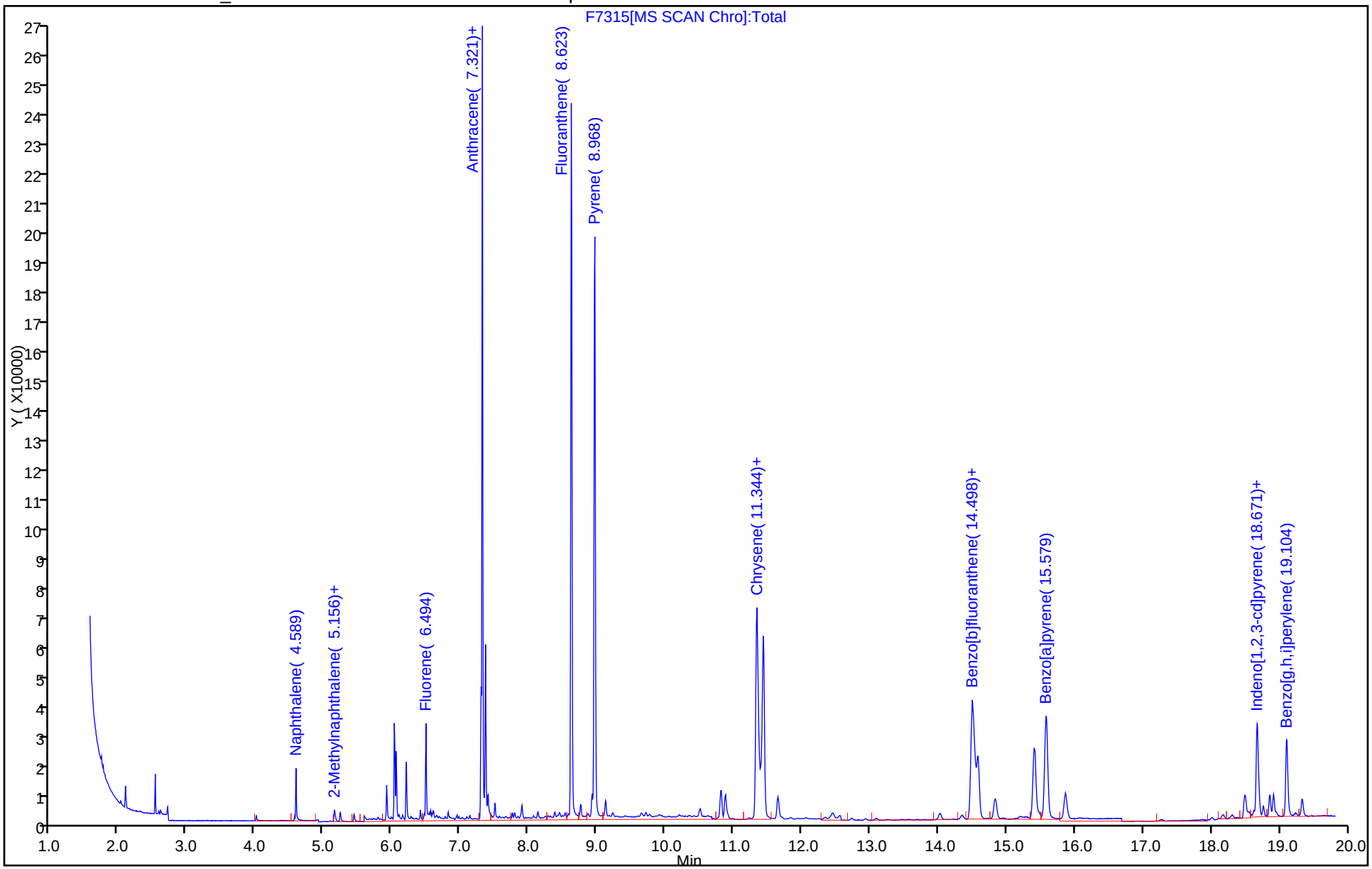
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 21-Jun-2017 15:41:14 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7315.D

Injection Date:	20-Jun-2017 20:26:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8	Worklist Smp#:	10
Client ID:	SS025-SB01(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	50.0000	ALS Bottle#:	10
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7315.D				
Lims ID:	280-97928-C-8-B				
Client ID:	SS025-SB01(0-2)				
Sample Type:	Client				
Inject. Date:	20-Jun-2017 20:26:30	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Sample Info:	280-97928-c-8-b				
Misc. Info.:	50X				
Operator ID:	WICKHAMM	Instrument ID:	SMS_F		
Method:	\\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\SMSF_8270SIMX.m				
Limit Group:	MSSV - 8270C-SIM				
Last Update:	21-Jun-2017 15:41:04	Calib Date:	11-May-2017 16:07:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK004				
First Level Reviewer: wickhamm		Date:	21-Jun-2017 15:12:53		

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 2-Fluorobiphenyl	500.0	50.2	501.54
$ 6 Terphenyl-d14	500.0	174.6	1745.72

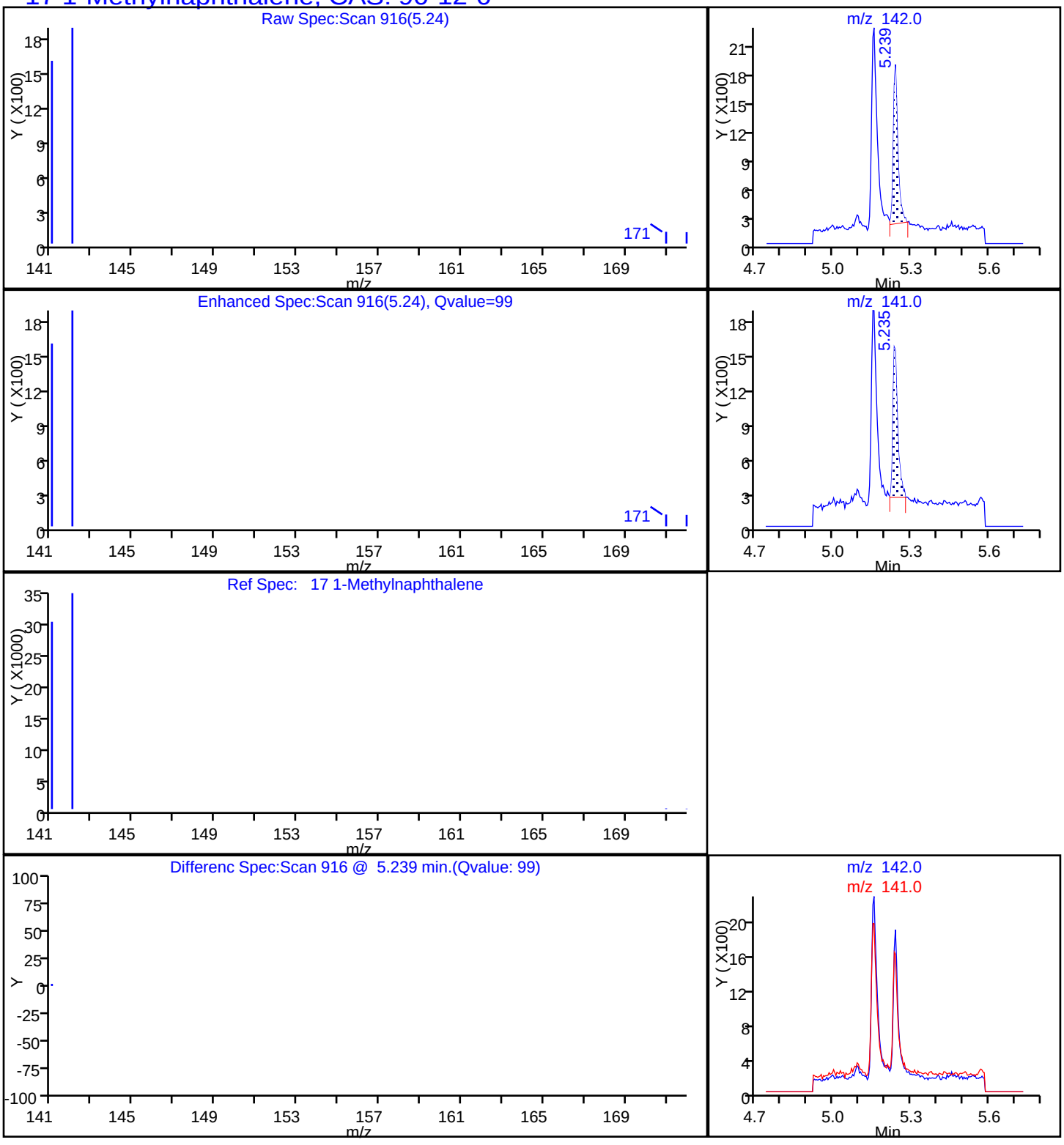
Report Date: 21-Jun-2017 15:41:14 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7315.D

Injection Date:	20-Jun-2017 20:26:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0



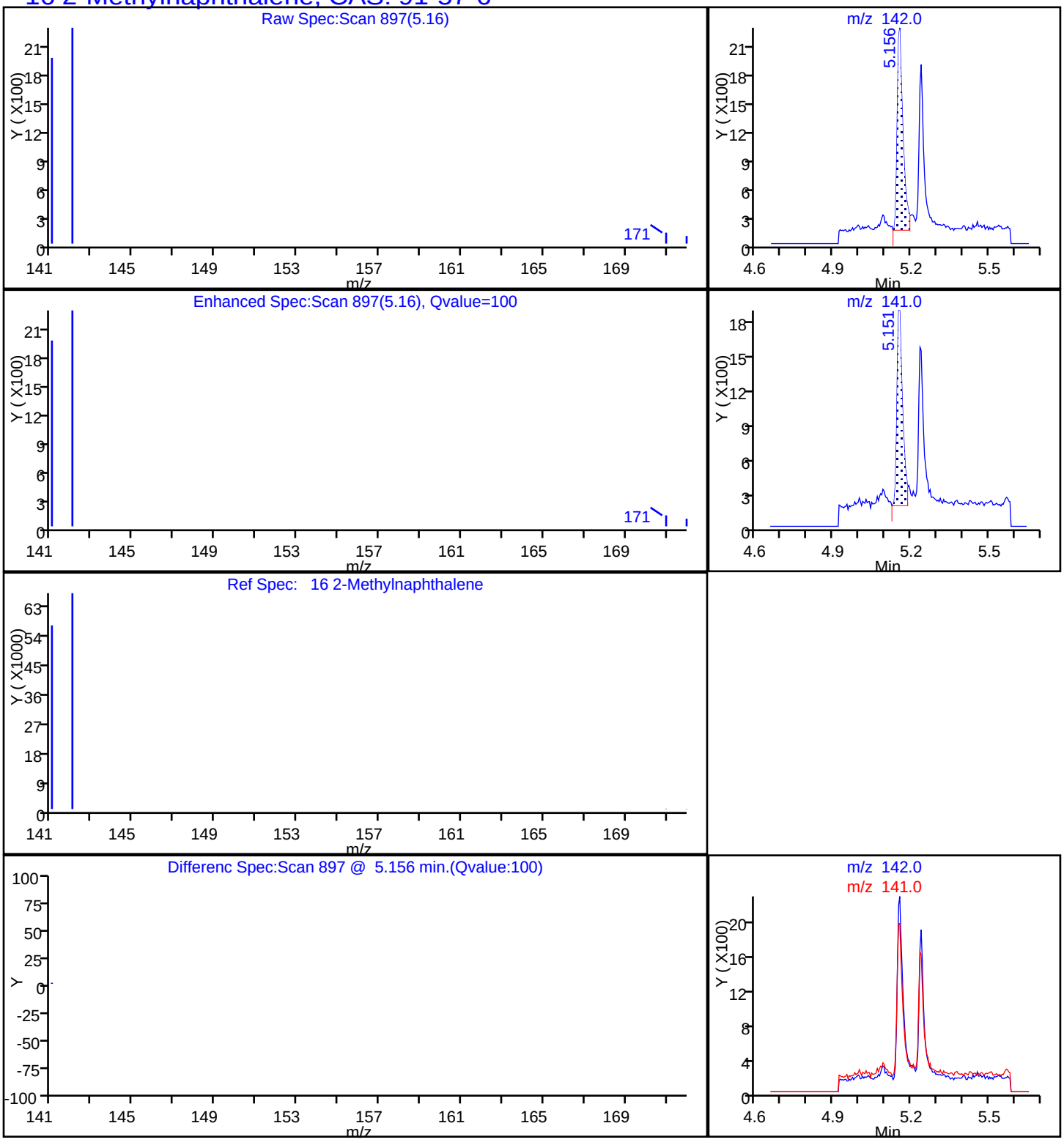
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7315.D

Injection Date:	20-Jun-2017 20:26:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



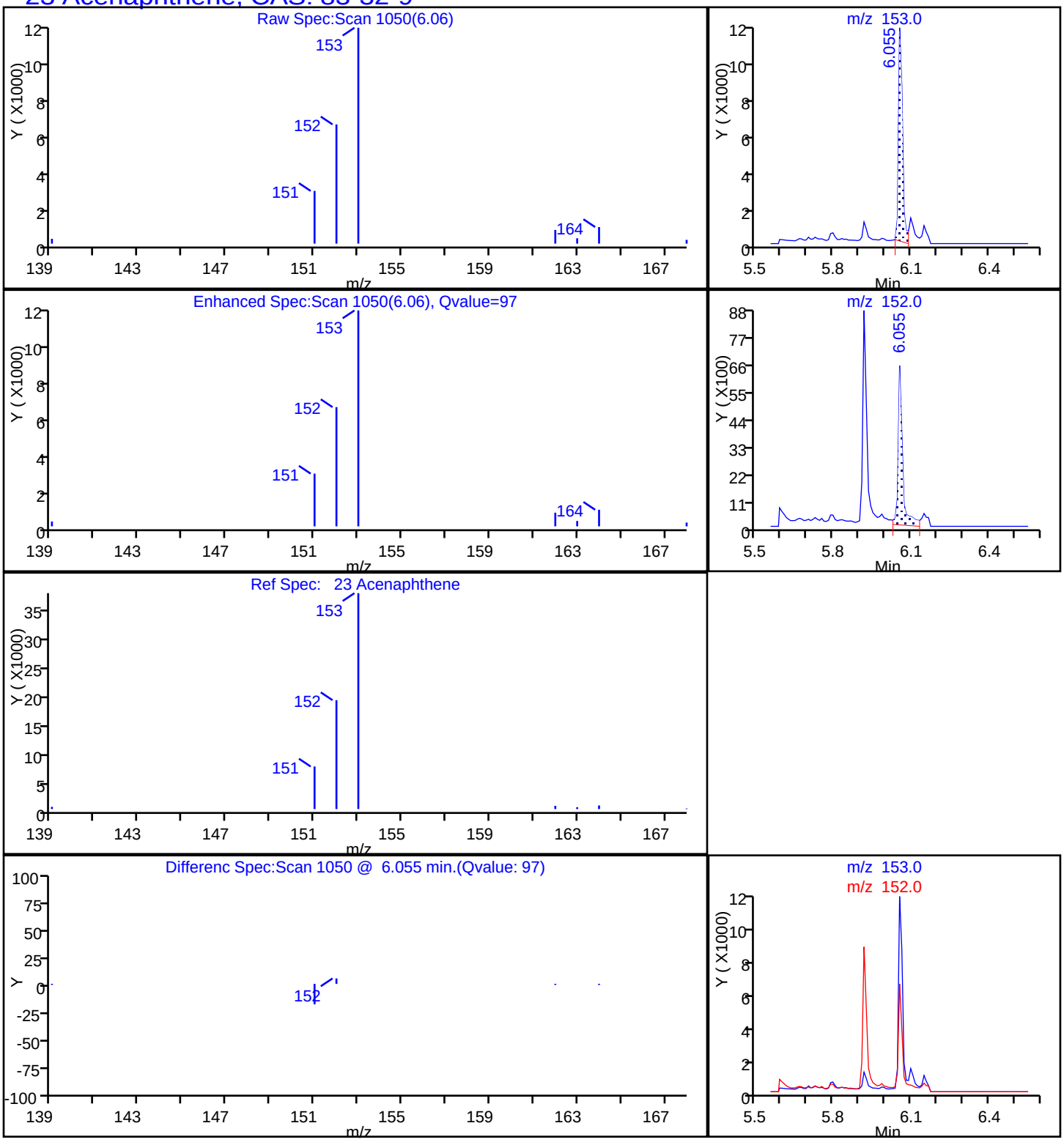
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7315.D

Injection Date:	20-Jun-2017 20:26:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9



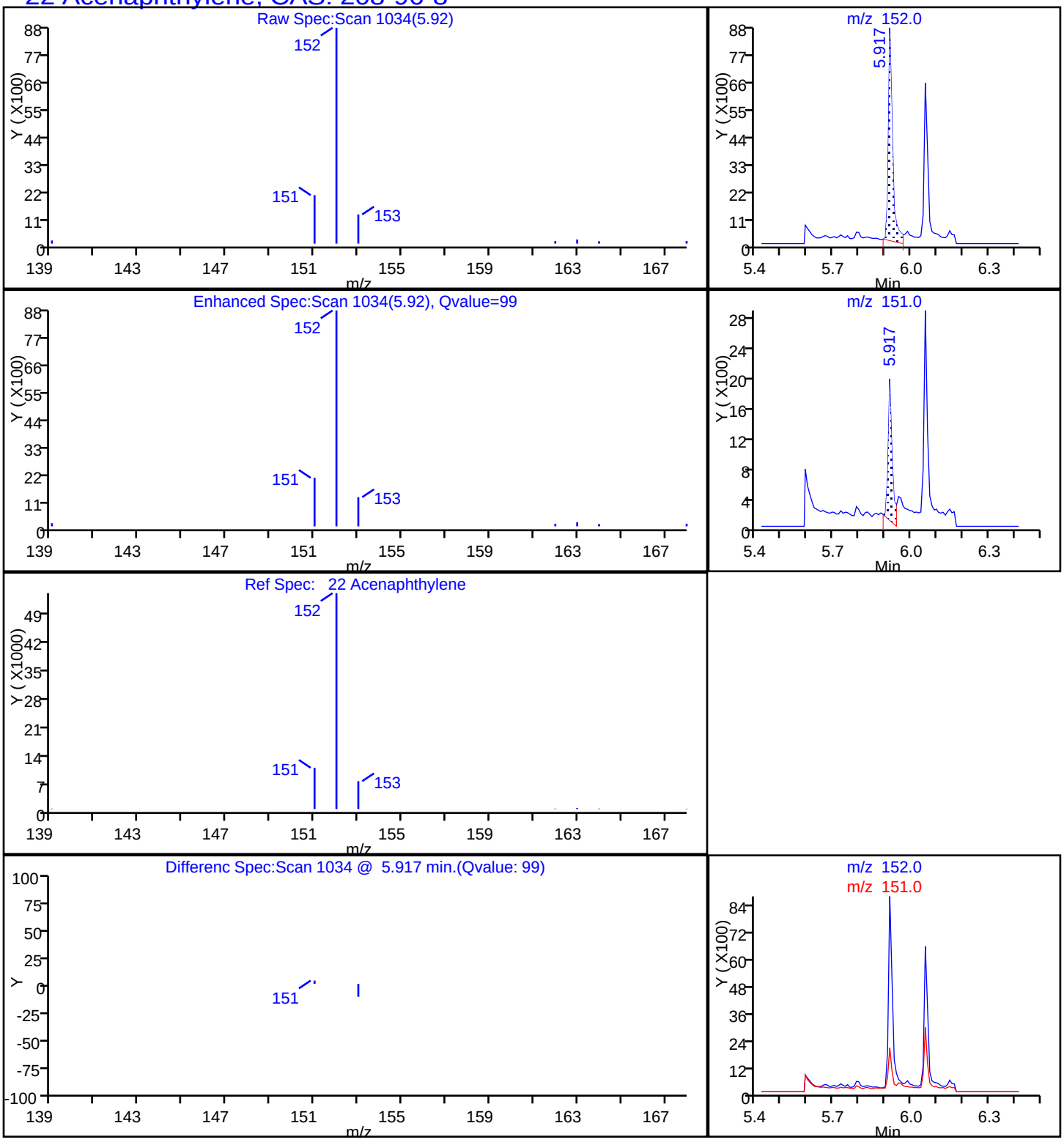
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7315.D

Injection Date:	20-Jun-2017 20:26:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Acenaphthylene, CAS: 208-96-8

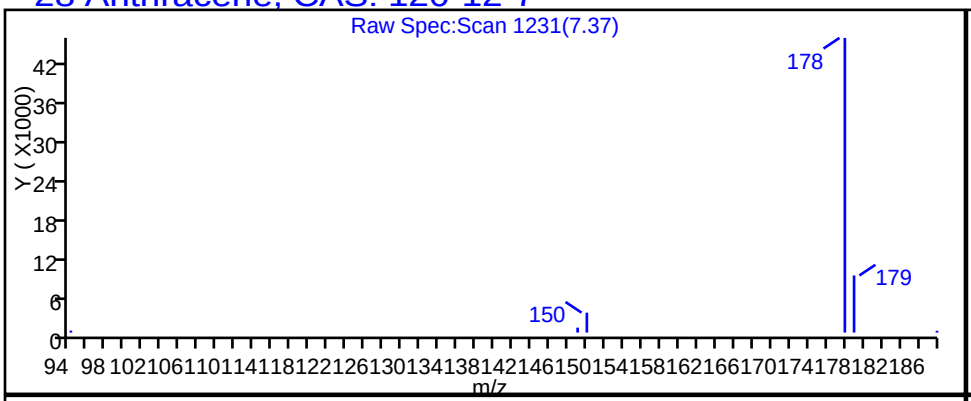


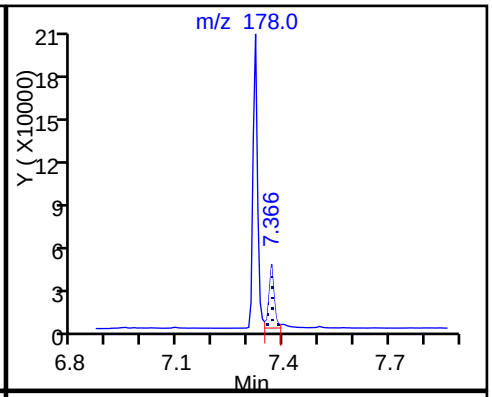
Report Date: 21-Jun-2017 15:41:14 Chrom Revision: 2.2 20-Jun-2017 07:42:38

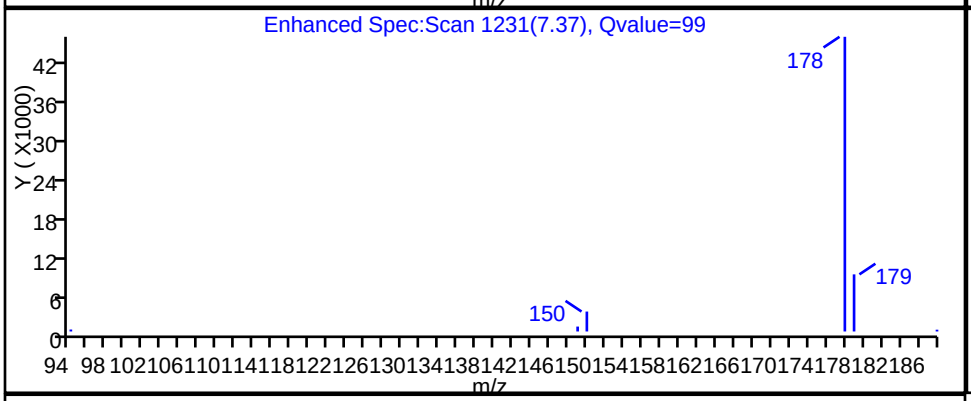
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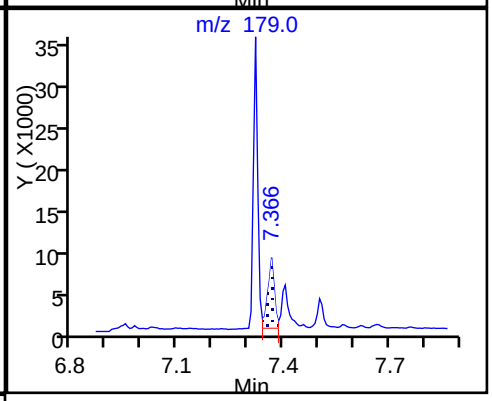
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Injection Date:	20-Jun-2017 20:26:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

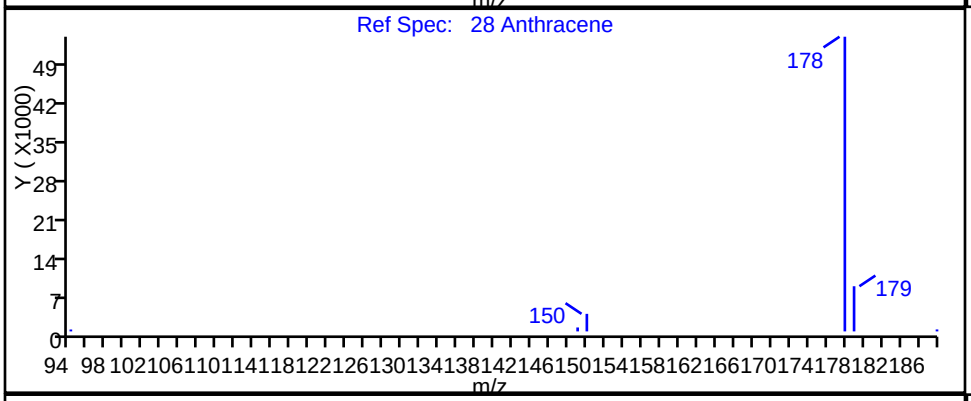
28 Anthracene, CAS: 120-12-7

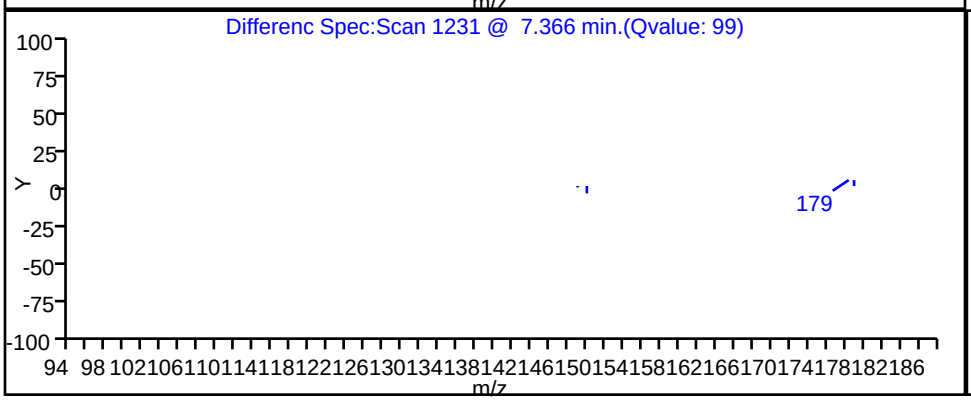


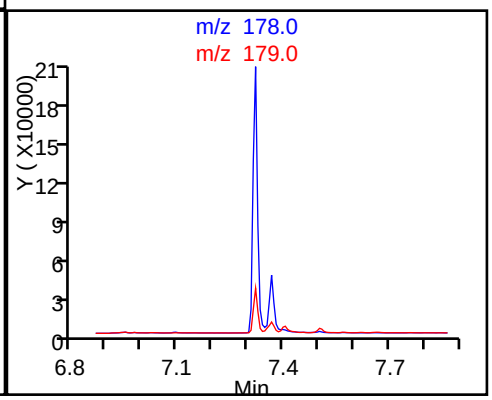












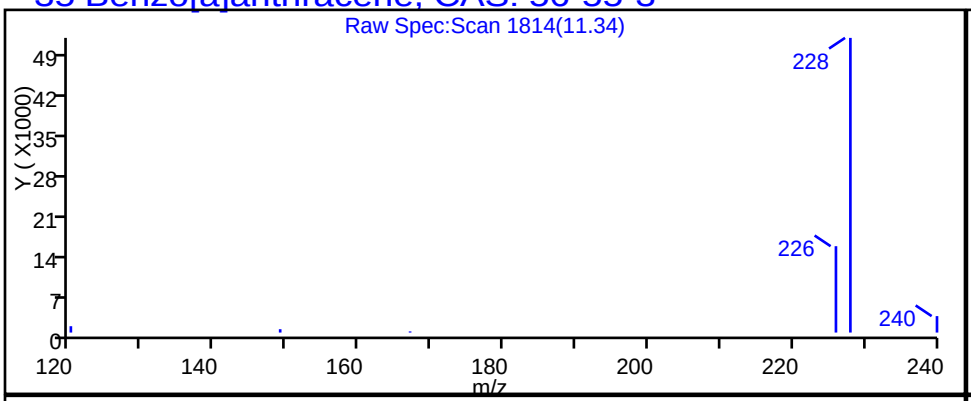
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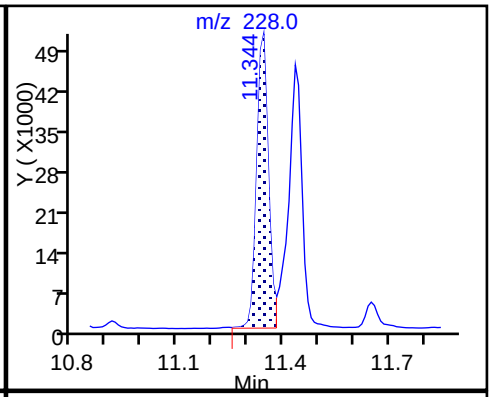
TestAmerica Denver

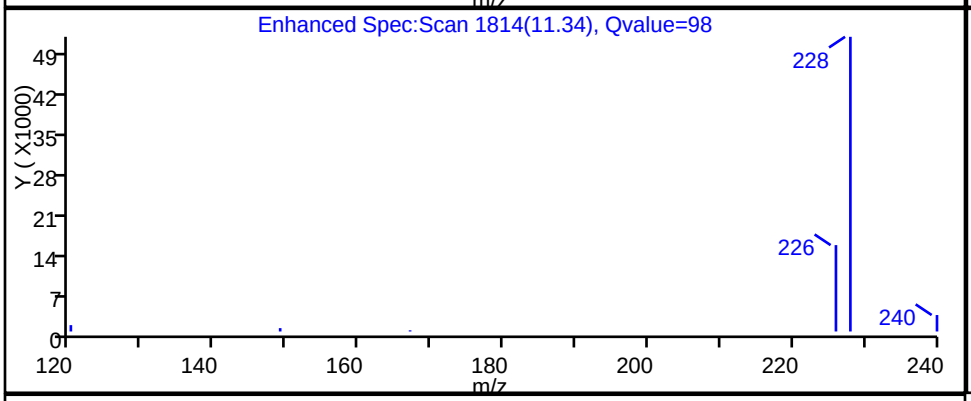
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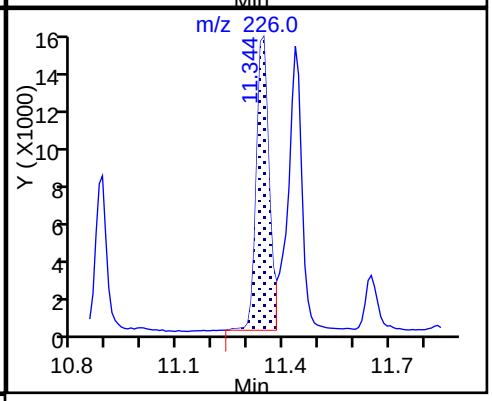
Injection Date:	20-Jun-2017 20:26:30	Instrument ID:	SMS_F
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8
Client ID:	SS025-SB01(0-2)		
Operator ID:	WICKHAMM	ALS Bottle#:	10 Worklist Smp#: 10
Injection Vol:	1.0 ul	Dil. Factor:	50.0000
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM
Column:		Detector	MS SCAN

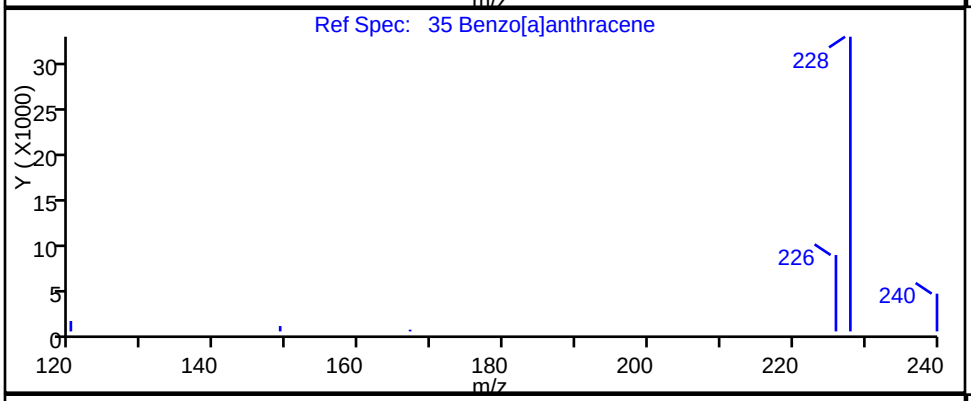
35 Benzo[a]anthracene, CAS: 56-55-3

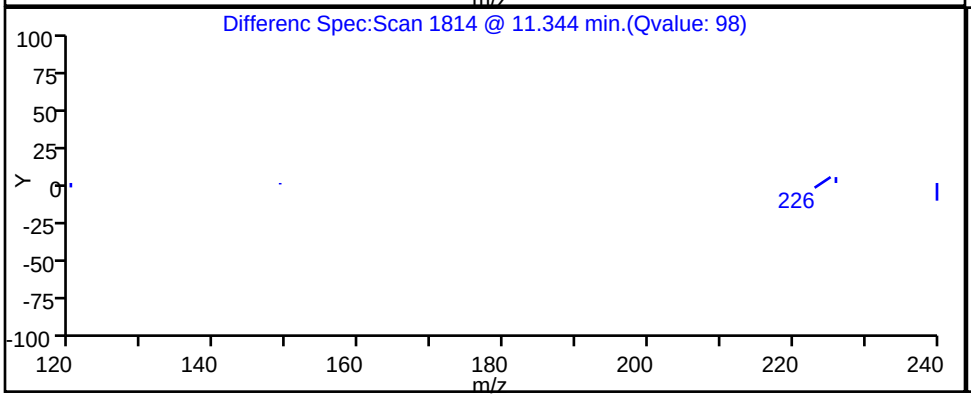


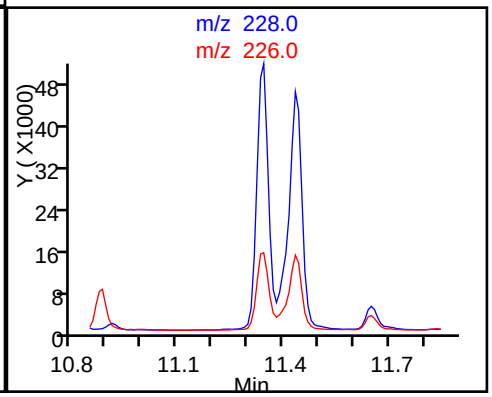












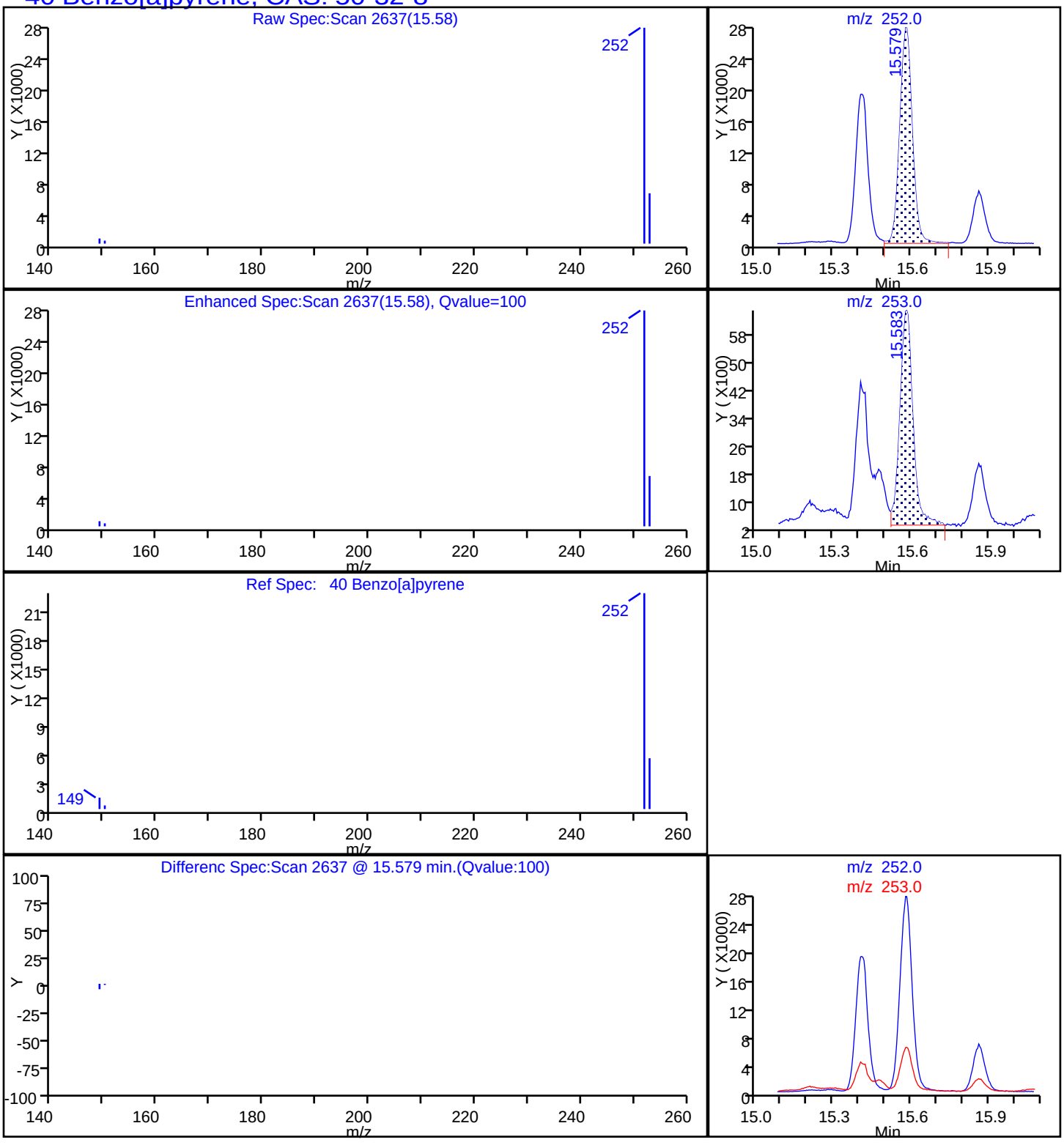
Report Date: 21-Jun-2017 15:41:14 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7315.D

Injection Date:	20-Jun-2017 20:26:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

40 Benzo[a]pyrene, CAS: 50-32-8



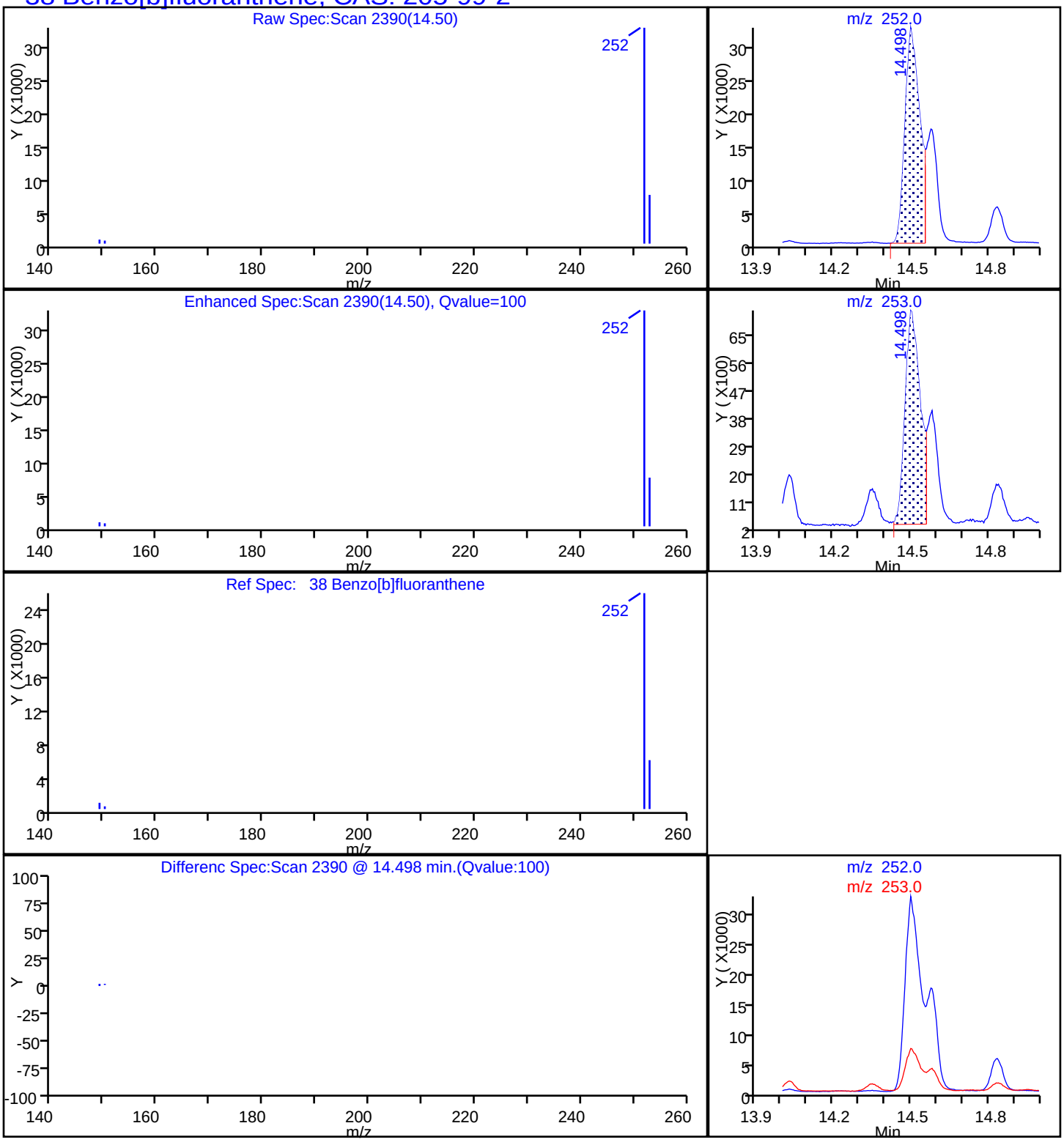
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7315.D

Injection Date:	20-Jun-2017 20:26:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Benzo[b]fluoranthene, CAS: 205-99-2



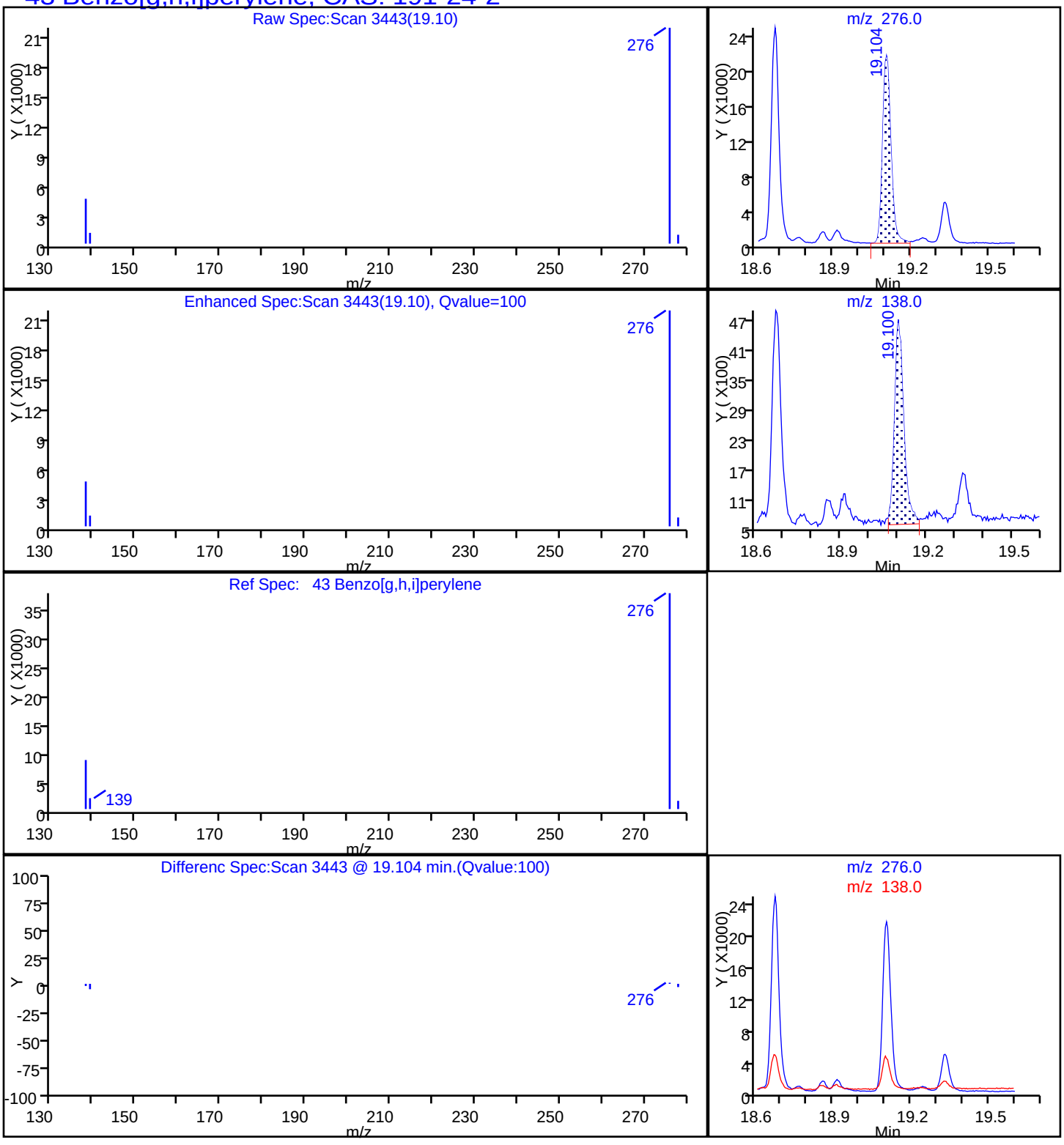
Report Date: 21-Jun-2017 15:41:14 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7315.D

Injection Date:	20-Jun-2017 20:26:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

43 Benzo[g,h,i]perylene, CAS: 191-24-2



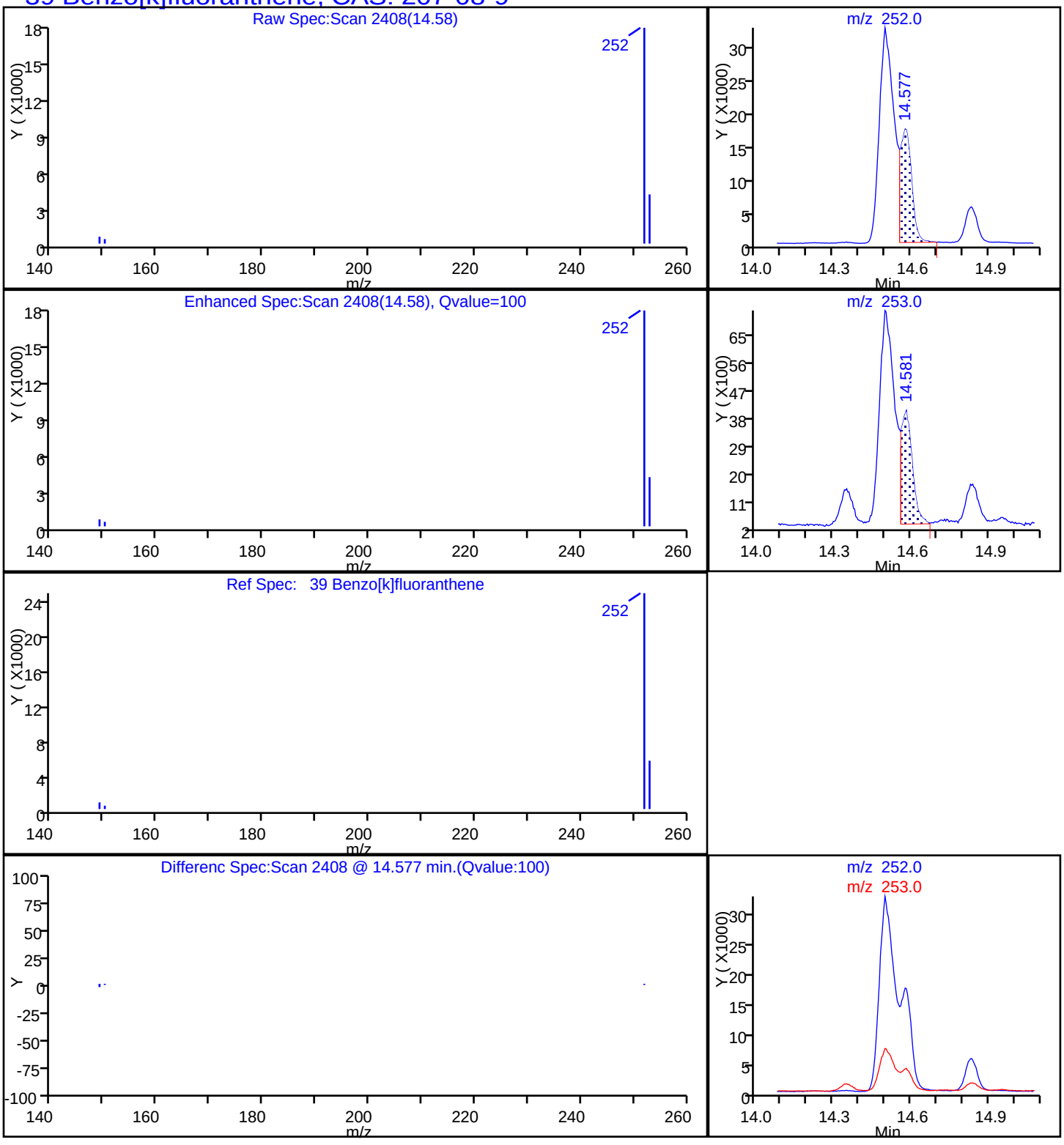
Report Date: 21-Jun-2017 15:41:14 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7315.D

Injection Date:	20-Jun-2017 20:26:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Benzo[k]fluoranthene, CAS: 207-08-9



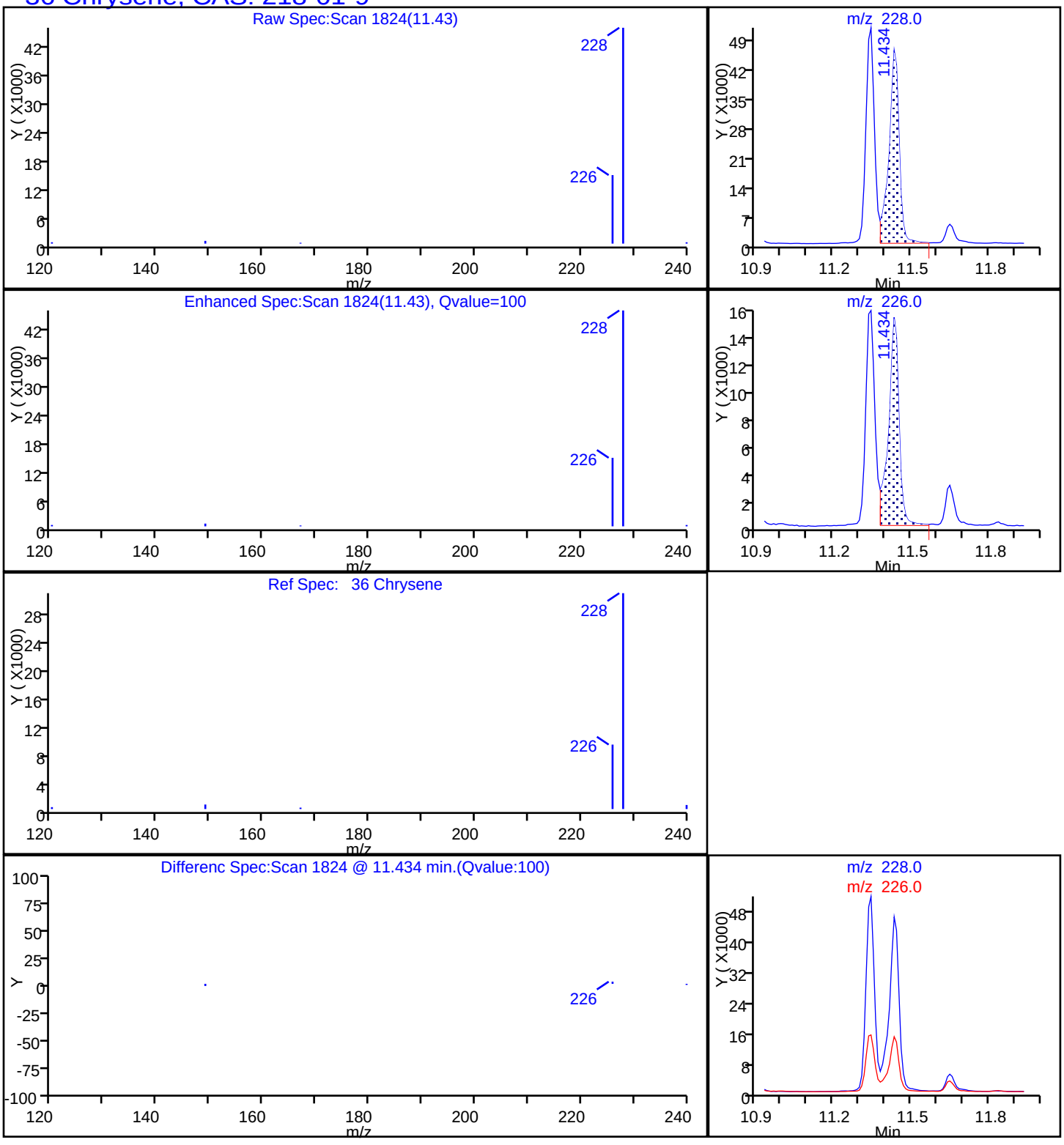
Report Date: 21-Jun-2017 15:41:14 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7315.D

Injection Date:	20-Jun-2017 20:26:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Chrysene, CAS: 218-01-9



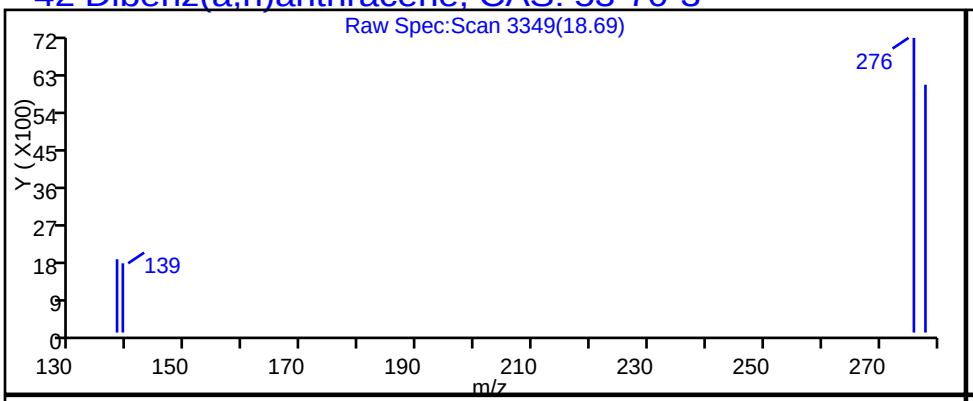
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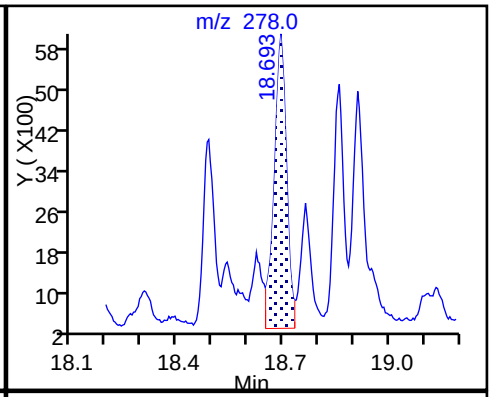
TestAmerica Denver

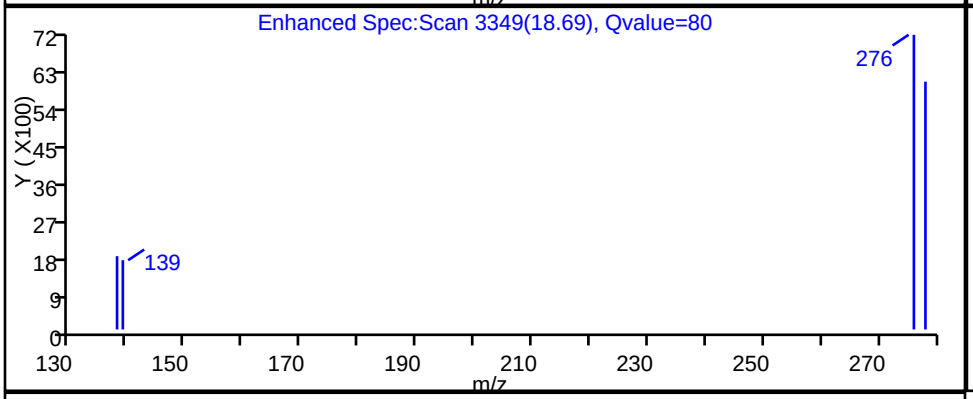
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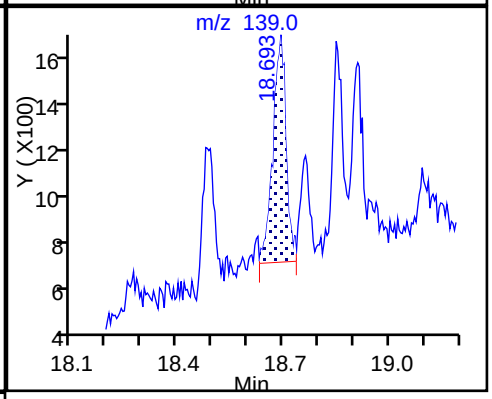
Injection Date:	20-Jun-2017 20:26:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

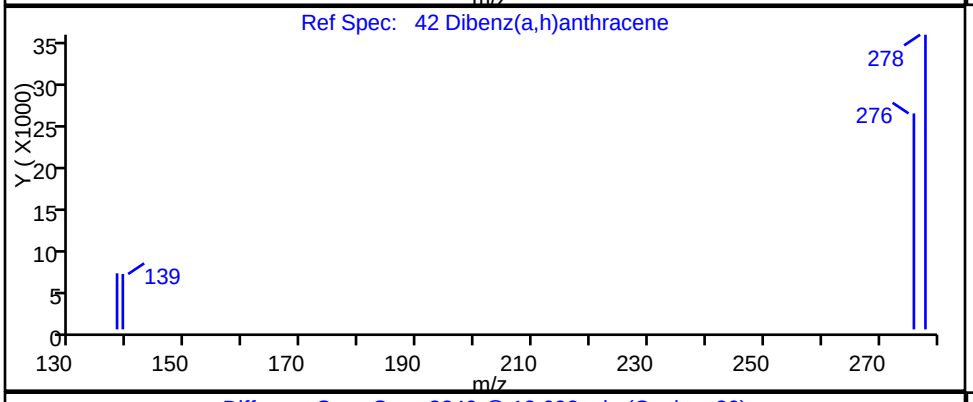
42 Dibenz(a,h)anthracene, CAS: 53-70-3

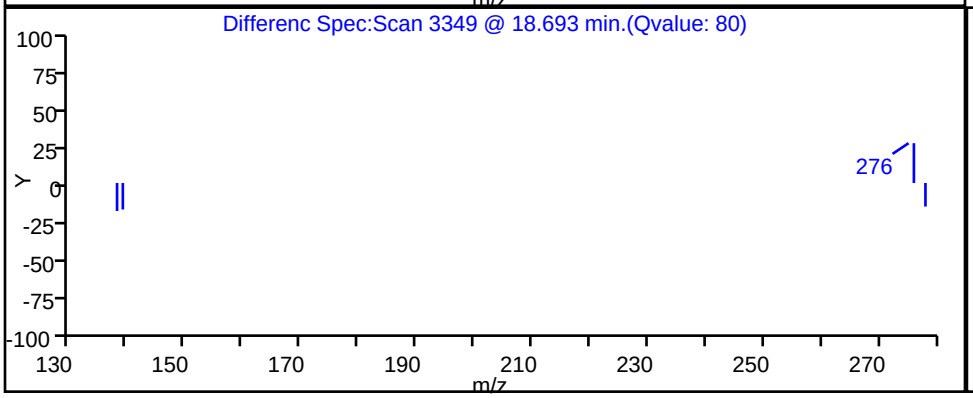


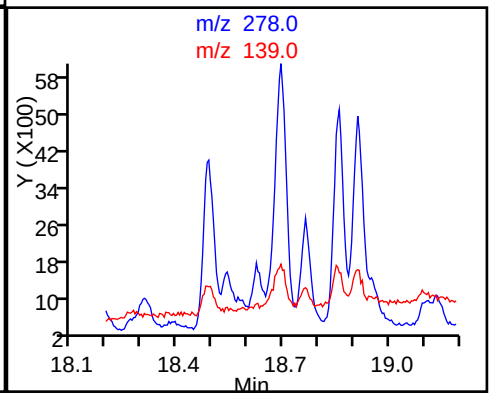












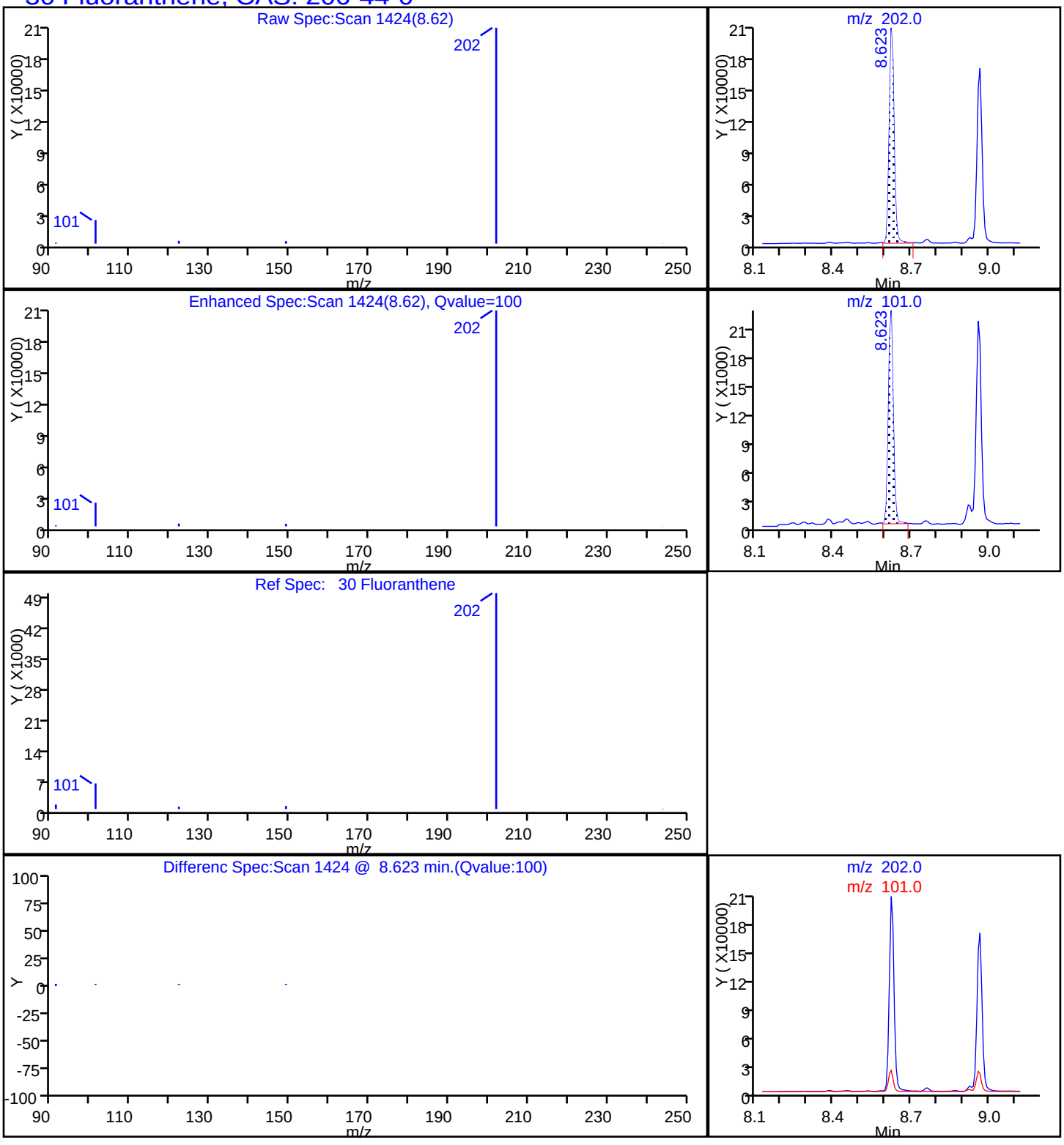
Report Date: 21-Jun-2017 15:41:14 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7315.D

Injection Date:	20-Jun-2017 20:26:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

30 Fluoranthene, CAS: 206-44-0



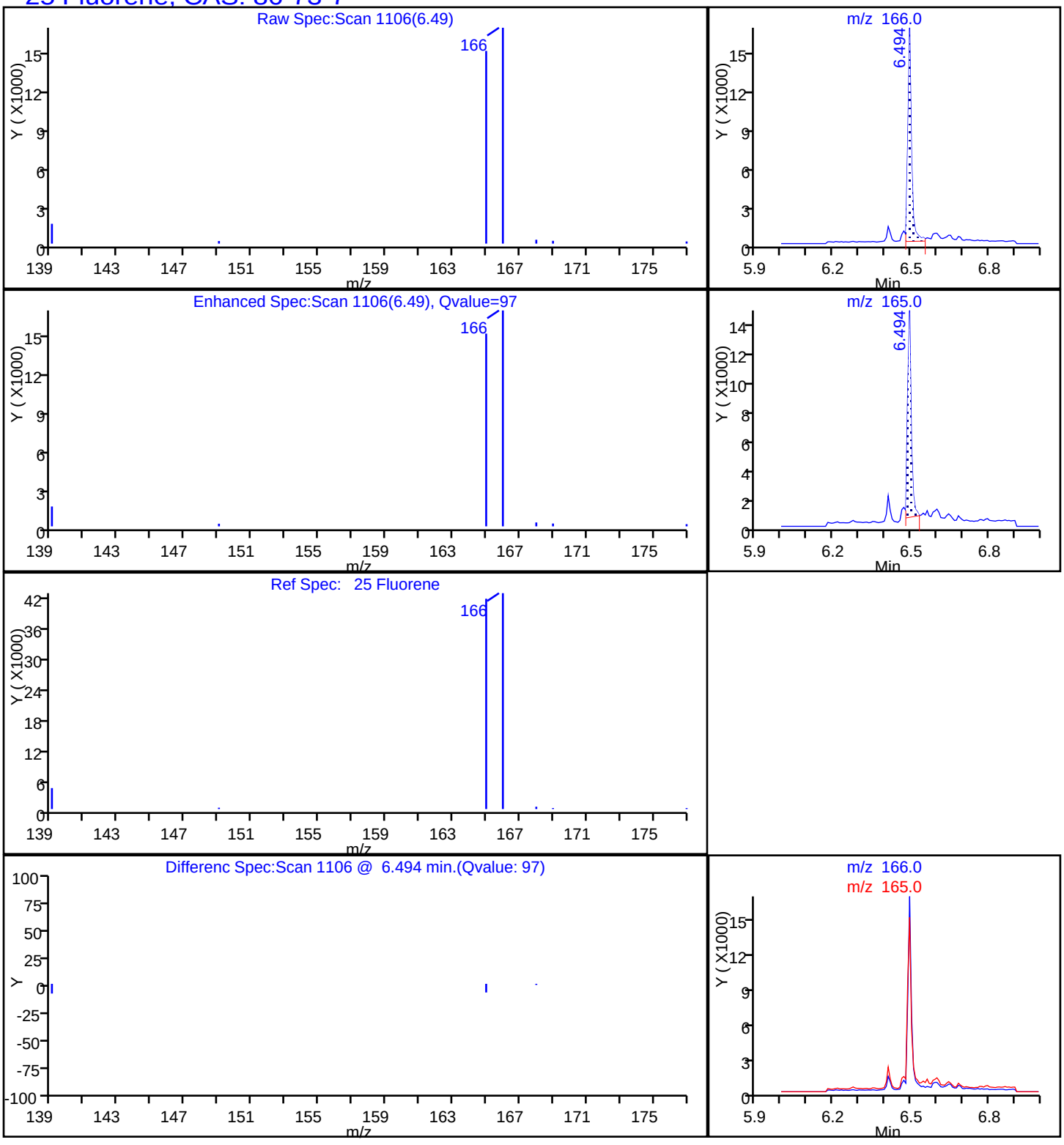
Report Date: 21-Jun-2017 15:41:14 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7315.D

Injection Date:	20-Jun-2017 20:26:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Fluorene, CAS: 86-73-7



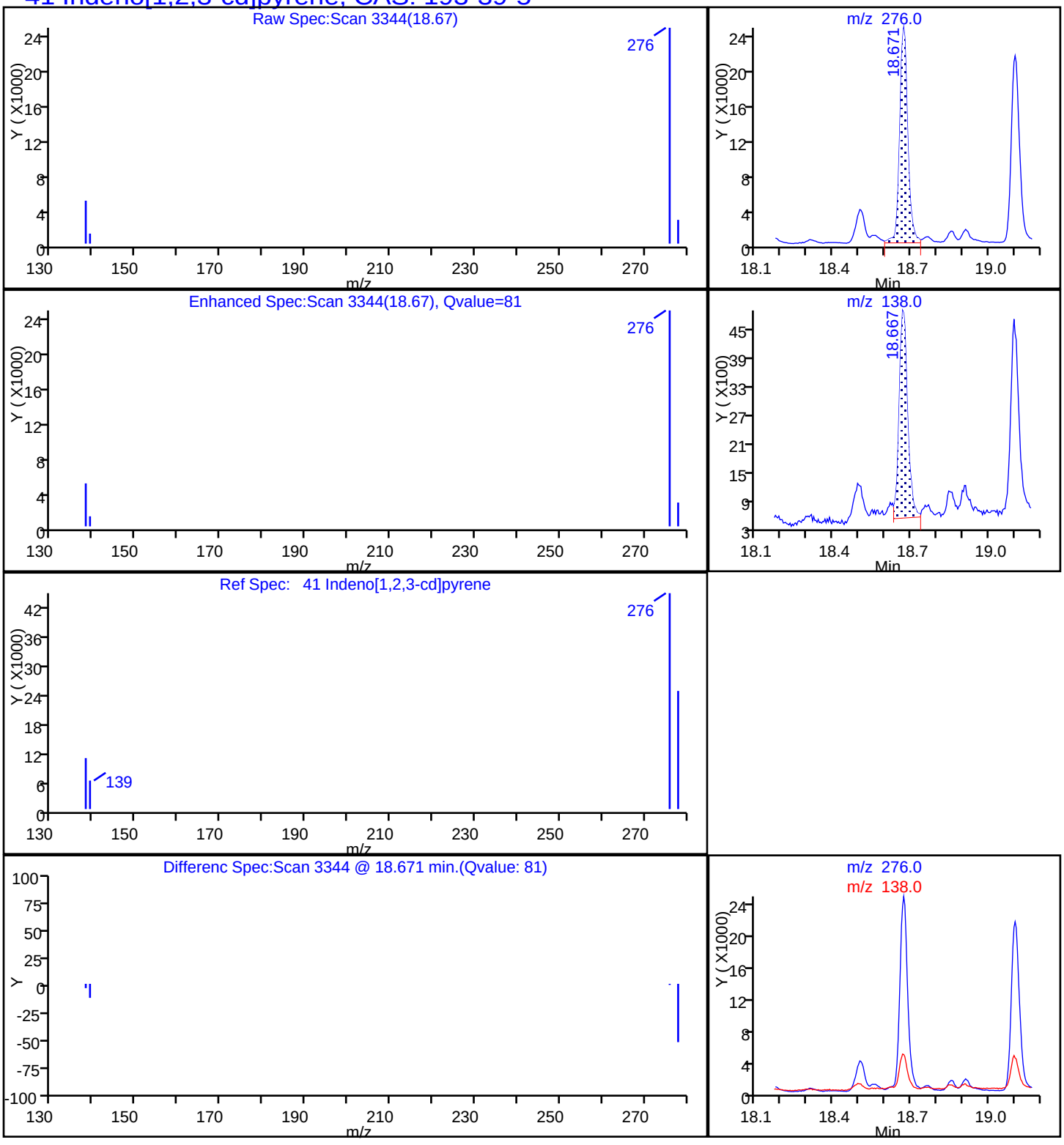
Report Date: 21-Jun-2017 15:41:14 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7315.D

Injection Date:	20-Jun-2017 20:26:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



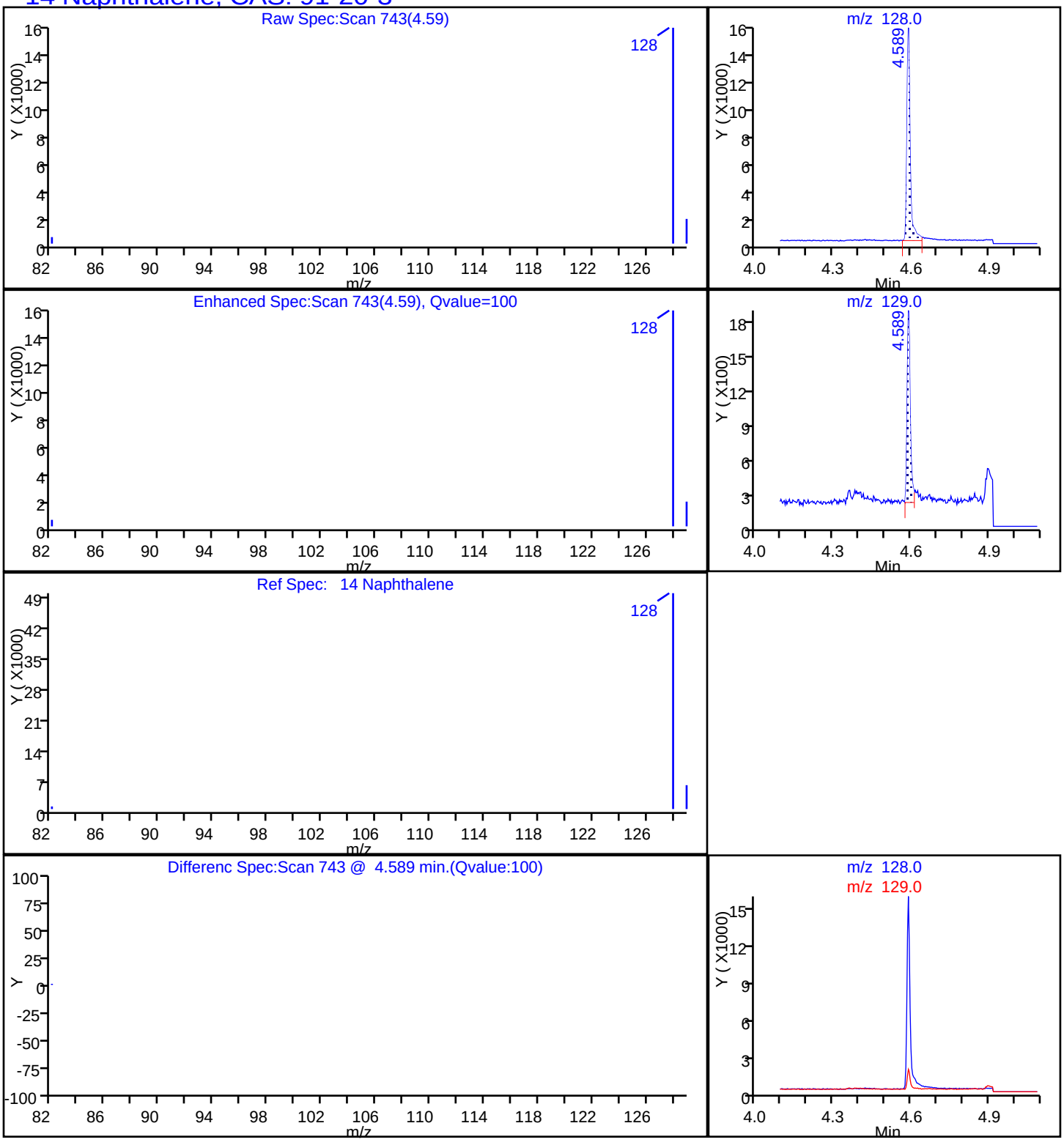
Report Date: 21-Jun-2017 15:41:14 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7315.D

Injection Date:	20-Jun-2017 20:26:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3



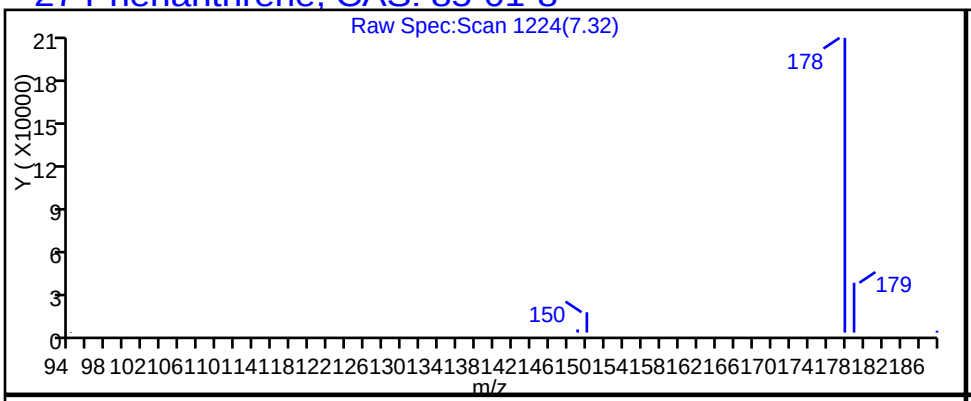
Report Date: 21-Jun-2017 15:41:14 Chrom Revision: 2.2 20-Jun-2017 07:42:38

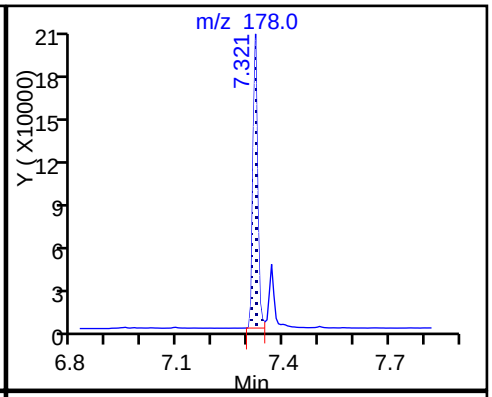
TestAmerica Denver

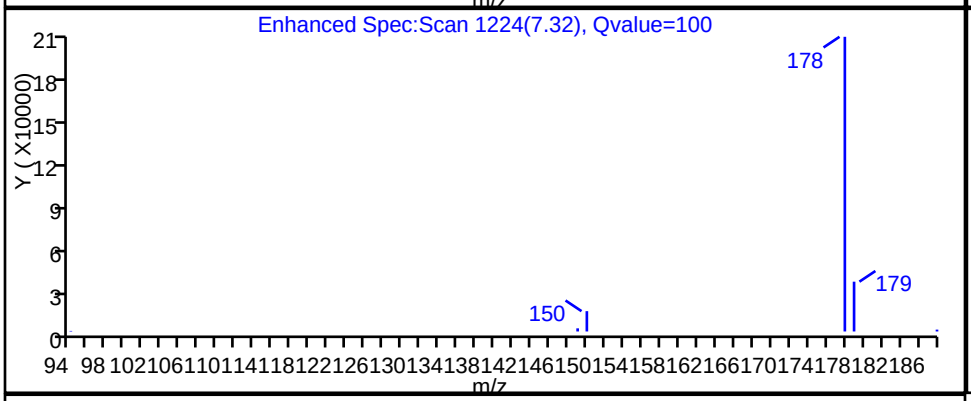
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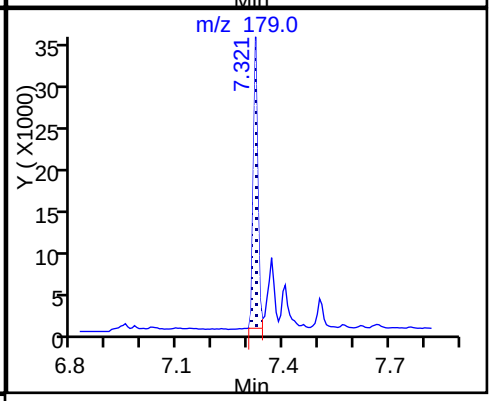
Injection Date:	20-Jun-2017 20:26:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

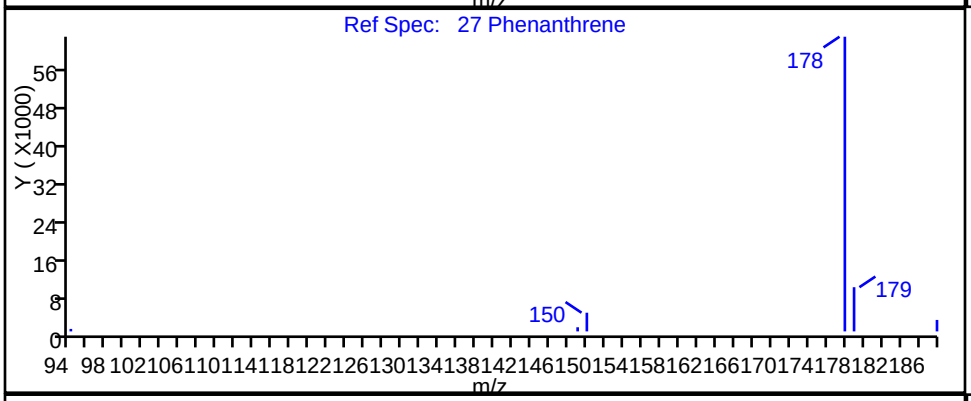
27 Phenanthrene, CAS: 85-01-8

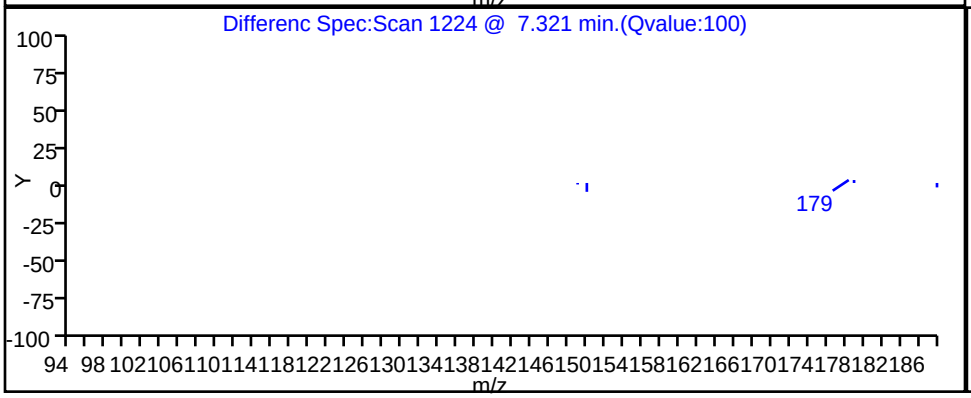


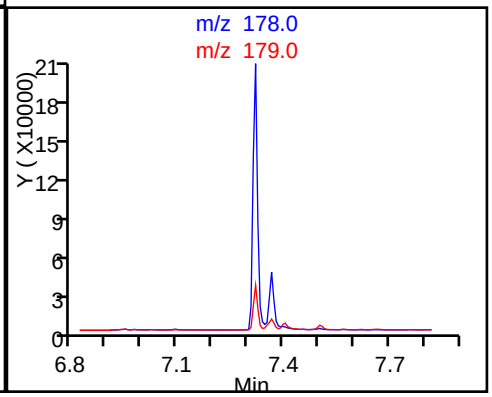












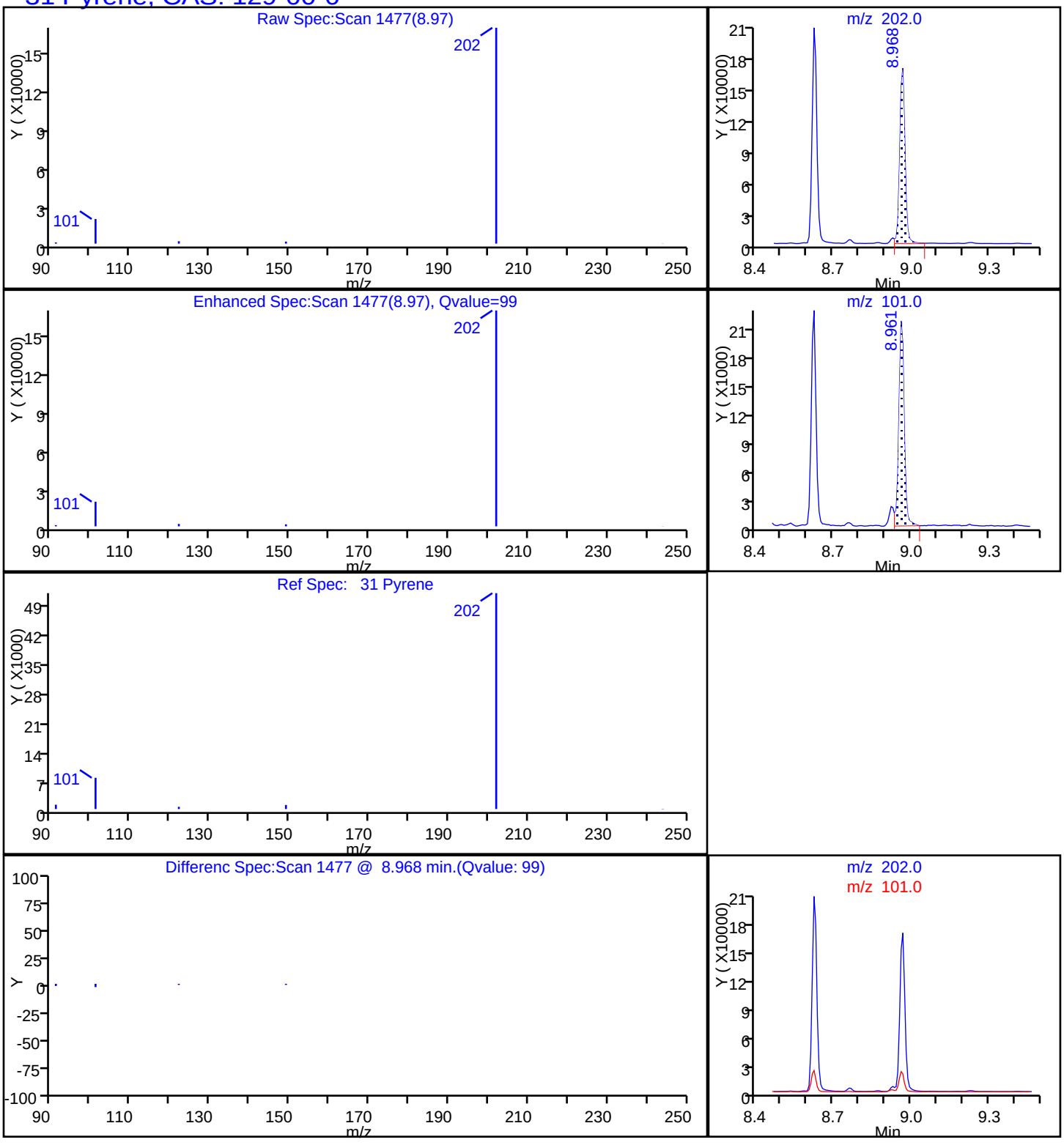
Report Date: 21-Jun-2017 15:41:14 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7315.D

Injection Date:	20-Jun-2017 20:26:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-8-B	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	50.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Pyrene, CAS: 129-00-0



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB01(0-2)-a | Lab Sample ID: 280-97928-9

Matrix: Solid | Lab File ID: F7280.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 10:20

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 32.0(g) | Date Analyzed: 06/16/2017 20:22

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 11.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	30		5.3	0.53	0.27
91-57-6	2-Methylnaphthalene	41		5.3	0.70	0.33
83-32-9	Acenaphthene	130		5.3	0.28	0.17
208-96-8	Acenaphthylene	76		5.3	0.70	0.18
120-12-7	*Anthracene*	*240*	*J*	*5.3*	2.6	*0.76*
56-55-3	*Benzo[a]anthracene*	*530*	*J*	*5.3*	2.6	*0.95*
50-32-8	*Benzo[a]pyrene*	*460*	*J*	*5.3*	2.6	*0.78*
205-99-2	*Benzo[b]fluoranthene*	*640*	*J*	*5.3*	2.6	*1.3*
191-24-2	Benzo[g,h,i]perylene	250		5.3	2.6	1.2
207-08-9	*Benzo[k]fluoranthene*	*230*	*J*	*5.3*	2.6	*1.1*
218-01-9	*Chrysene*	*610*	*J*	*5.3*	2.6	*1.1*
53-70-3	Dibenz(a,h)anthracene	80		5.3	2.6	1.4
206-44-0	*Fluoranthene*	*1100*	*J*	*5.3*	2.6	*1.1*
86-73-7	Fluorene	130		5.3	0.70	0.50
193-39-5	*Indeno[1,2,3-cd]pyrene*	*230*	*J*	*5.3*	2.6	*1.2*
91-20-3	Naphthalene	99		5.3	0.70	0.34
85-01-8	*Phenanthrene*	*950*	*J*	*5.3*	2.6	*1.2*
129-00-0	*Pyrene*	*990*	*J*	*5.3*	2.6	*1.2*

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	84		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	89		44-125
1718-51-0	Terphenyl-d14 (Surr)	87		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7280.D
Lims ID: 280-97928-B-9-B
Client ID: SS025-SB01(0-2)-a
Sample Type: Client
Inject. Date: 16-Jun-2017 20:22:30 ALS Bottle#: 13 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-b-9-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:21:42

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	98	25398	600.0	
* 2 Phenanthrene-d10	188	7.295	7.301	-0.006	100	42303	600.0	
* 3 Chrysene-d12	240	11.362	11.371	-0.009	7	37468	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	100	17637	443.3	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	99	27750	421.4	
$ 6 Terphenyl-d14	244	9.124	9.130	-0.006	93	18629	433.7	
14 Naphthalene	128	4.589	4.589	0.000	100	232038	2818.3	
16 2-Methylnaphthalene	142	5.143	5.147	-0.004	99	61923	1169.8	
17 1-Methylnaphthalene	142	5.230	5.235	-0.005	99	45383	856.1	
22 Acenaphthylene	152	5.908	5.917	-0.009	99	190032	2169.0	
23 Acenaphthene	153	6.055	6.055	0.000	97	199347	3722.4	
25 Fluorene	166	6.487	6.494	-0.007	100	237884	3619.7	
27 Phenanthrene	178	7.314	7.321	-0.007	100	2428720	27070	E
28 Anthracene	178	7.360	7.366	-0.006	100	631336	6968.6	E
30 Fluoranthene	202	8.623	8.629	-0.006	100	3268571	31719	E
31 Pyrene	202	8.968	8.968	0.000	99	3021117	28270	E
35 Benzo[a]anthracene	228	11.335	11.344	-0.009	96	1511496	15169	E
36 Chrysene	228	11.434	11.443	-0.009	100	1601925	17378	E
38 Benzo[b]fluoranthene	252	14.498	14.503	-0.005	100	1654746	18292	E
39 Benzo[k]fluoranthene	252	14.573	14.586	-0.013	100	585204	6431.6	E
40 Benzo[a]pyrene	252	15.570	15.587	-0.017	100	1171796	13125	E
41 Indeno[1,2,3-cd]pyrene	276	18.663	18.676	-0.014	79	666329	6579.8	E
42 Dibenz(a,h)anthracene	278	18.689	18.702	-0.013	99	180060	2278.2	
43 Benzo[g,h,i]perylene	276	19.096	19.109	-0.013	99	610977	7111.6	

QC Flag Legend

Processing Flags

E - Exceeded Maximum Amount

Reagents:

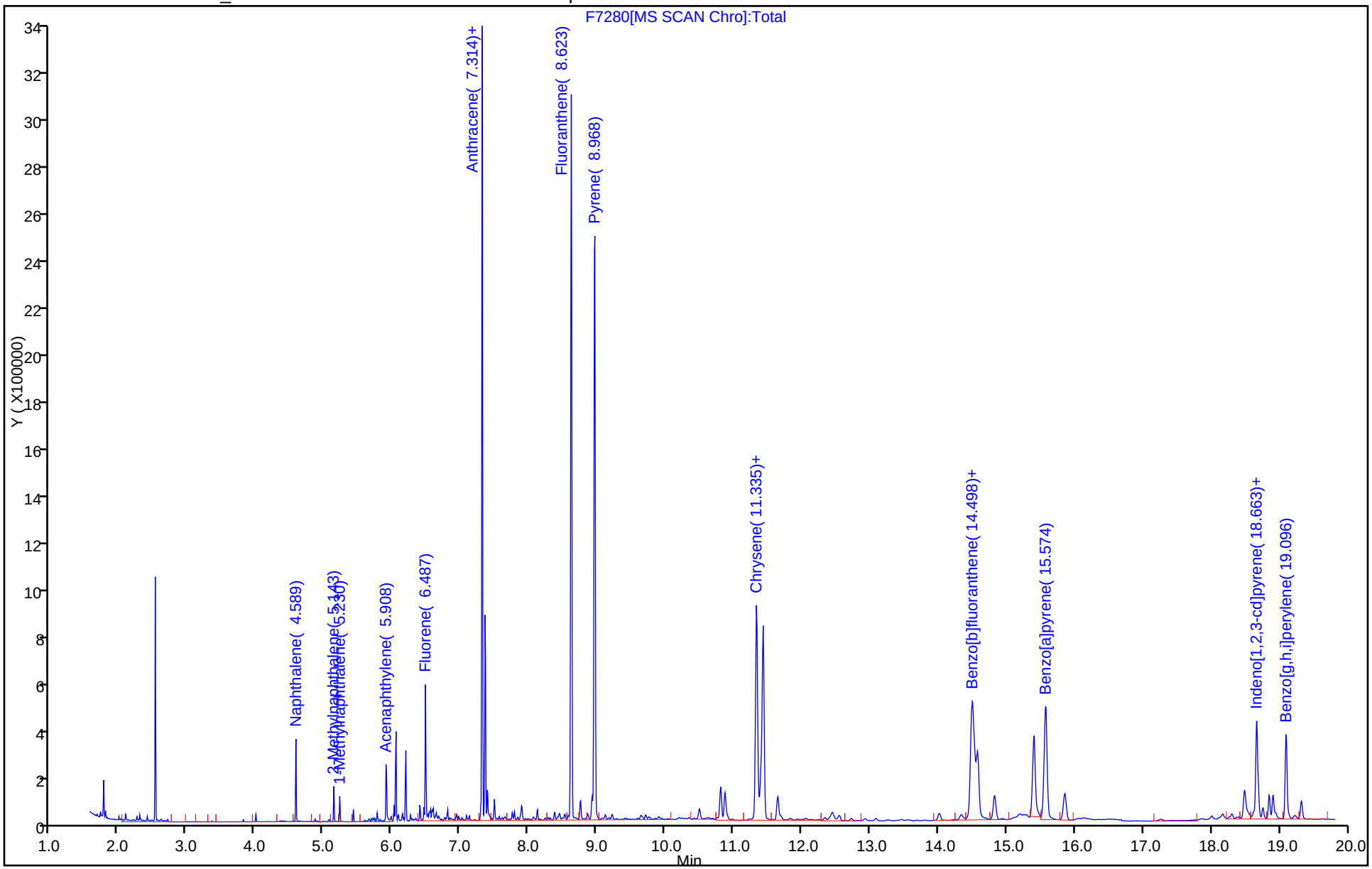
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:16 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7280.D

Injection Date:	16-Jun-2017 20:22:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9	Worklist Smp#:	14
Client ID:	SS025-SB01(0-2)-a				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7280.D
Lims ID: 280-97928-B-9-B
Client ID: SS025-SB01(0-2)-a
Sample Type: Client
Inject. Date: 16-Jun-2017 20:22:30 ALS Bottle#: 13 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-b-9-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:21:42

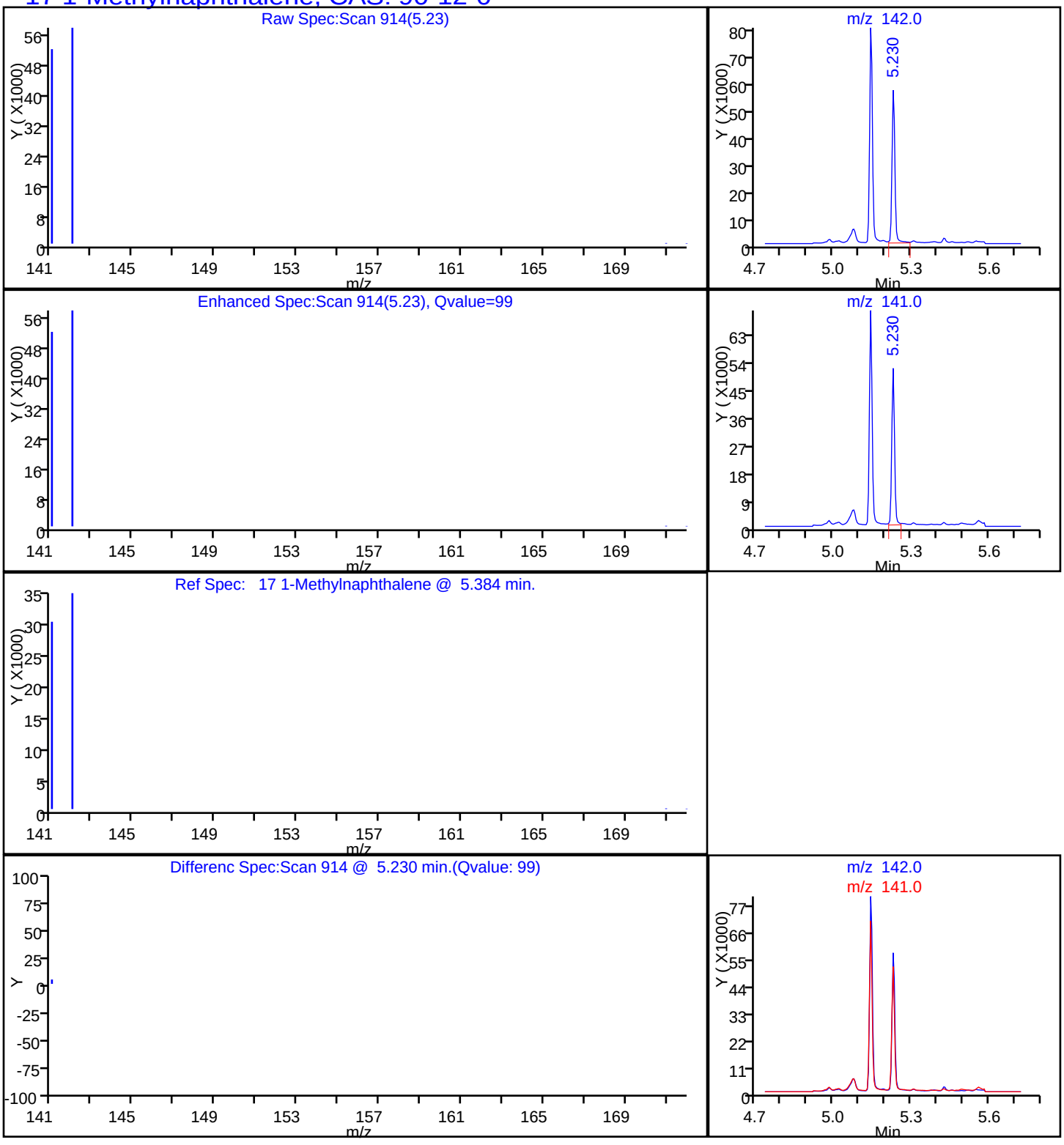
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	443.3	88.66
$ 5 2-Fluorobiphenyl	500.0	421.4	84.28
$ 6 Terphenyl-d14	500.0	433.7	86.74

Report Date: 19-Jun-2017 15:44:16 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7280.D				
Injection Date:	16-Jun-2017 20:22:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	13	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0

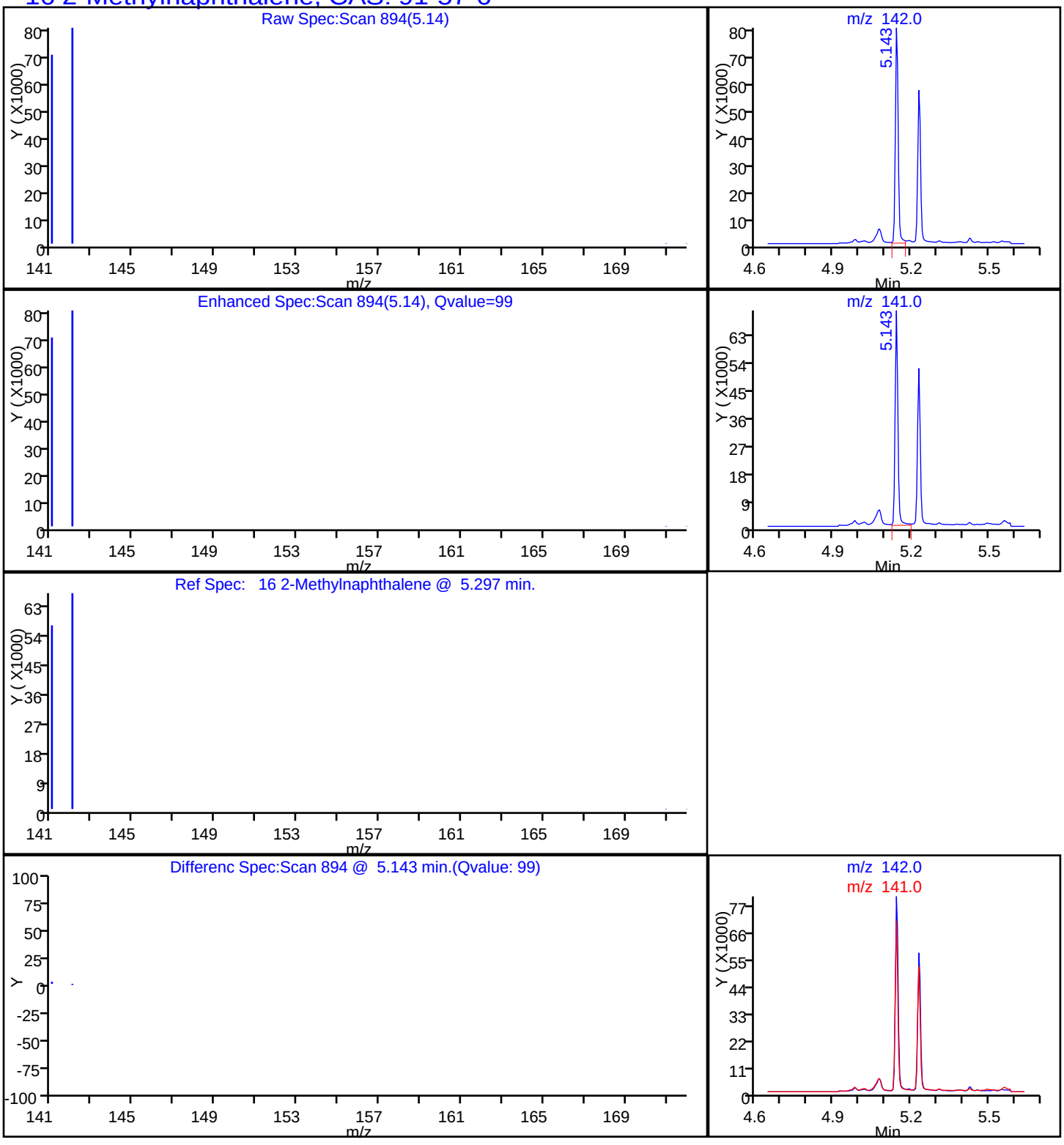


Report Date: 19-Jun-2017 15:44:16 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7280.D				
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Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	13	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



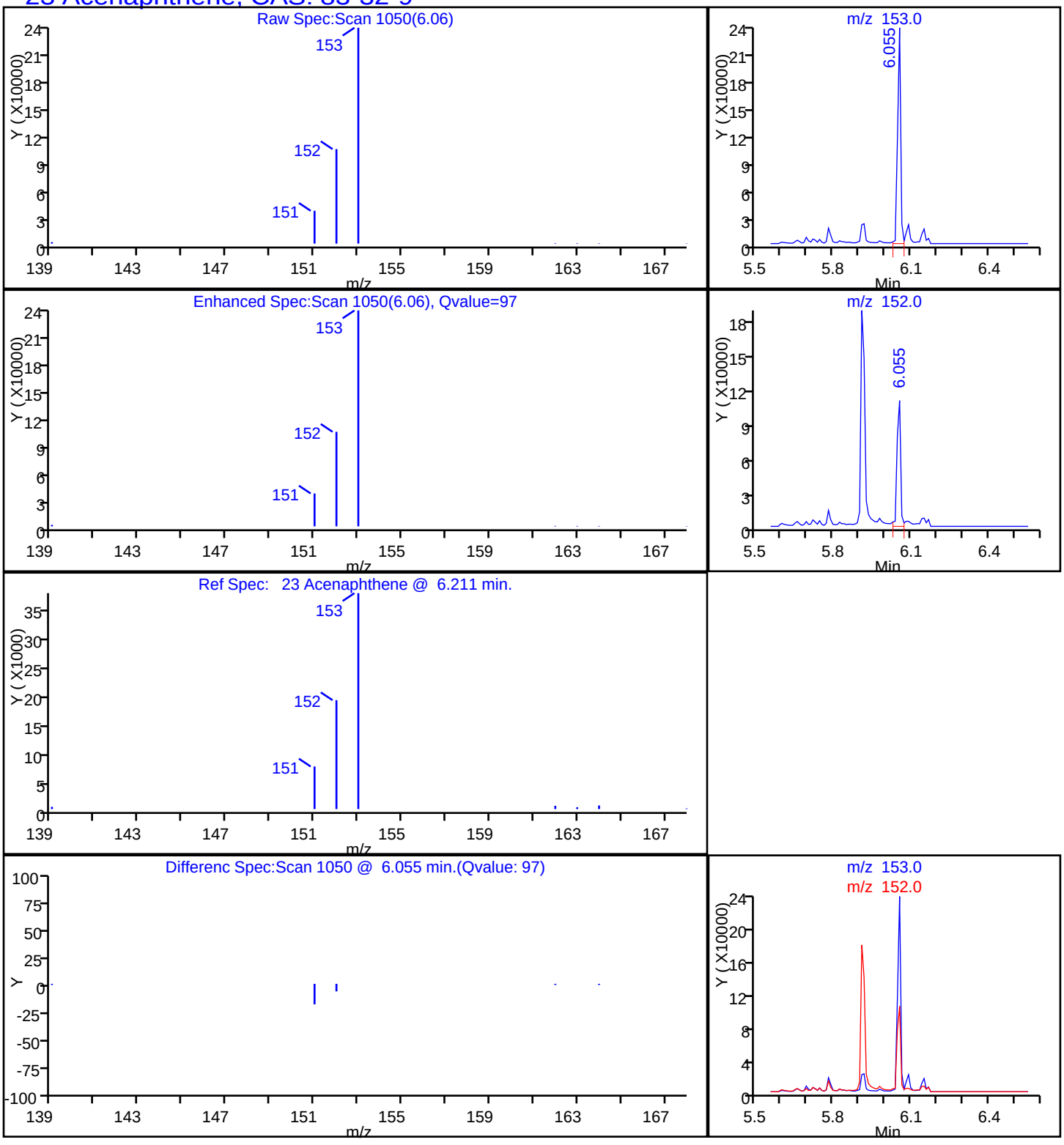
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7280.D

Injection Date:	16-Jun-2017 20:22:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	13	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9



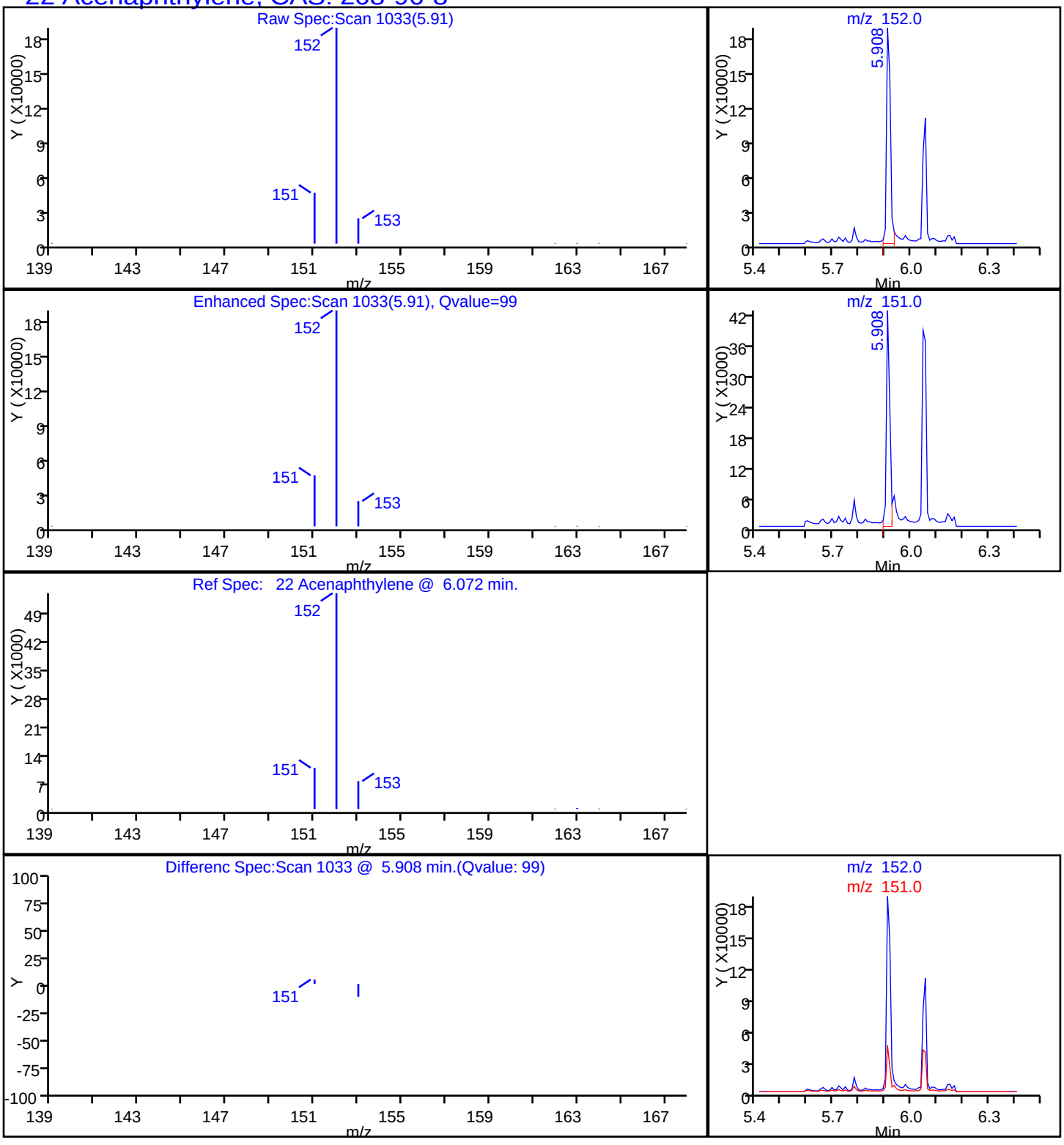
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7280.D

Injection Date:	16-Jun-2017 20:22:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	13	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Acenaphthylene, CAS: 208-96-8

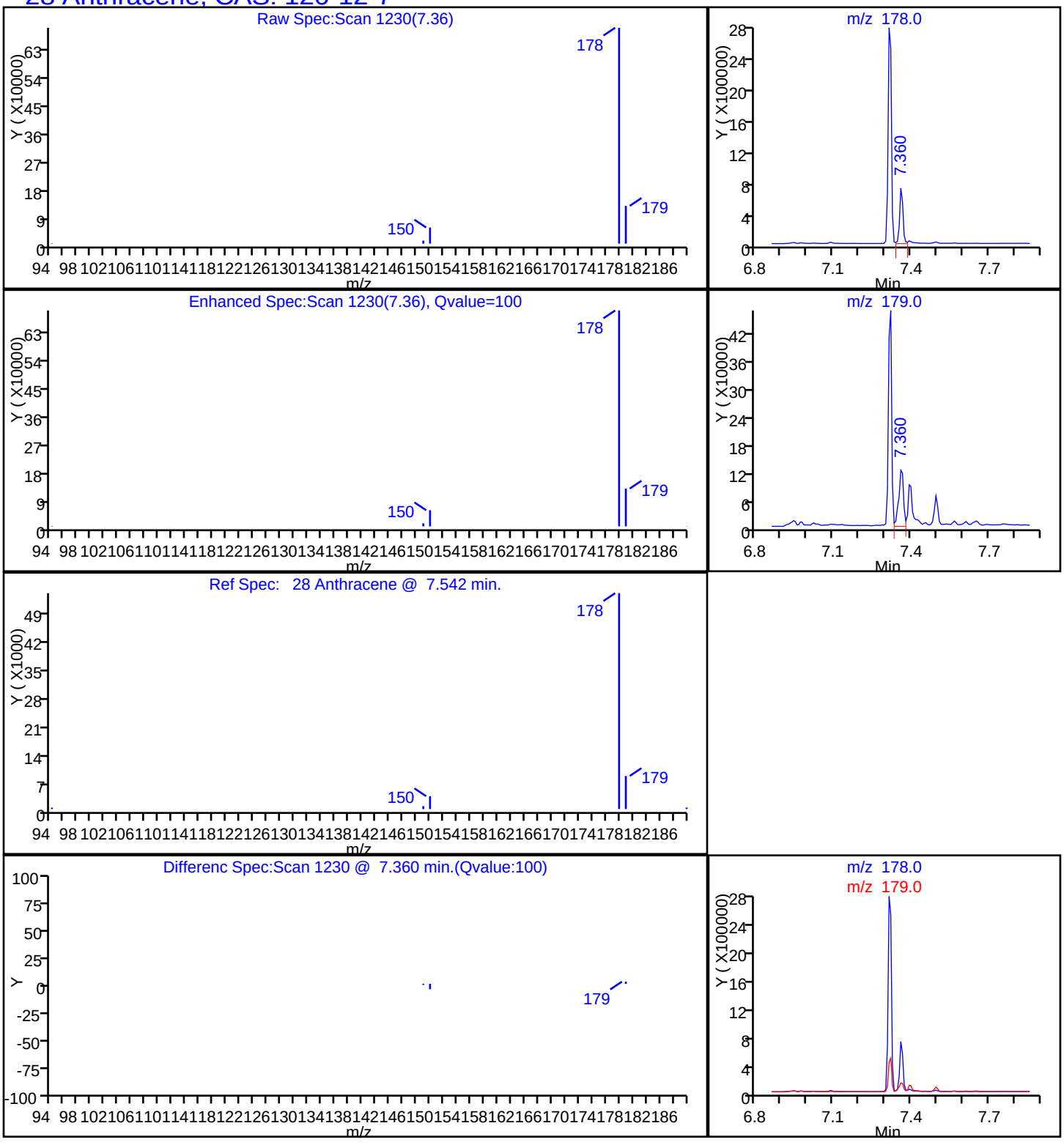


Report Date: 19-Jun-2017 15:44:16 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7280.D				
Injection Date:	16-Jun-2017 20:22:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	13	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

28 Anthracene, CAS: 120-12-7

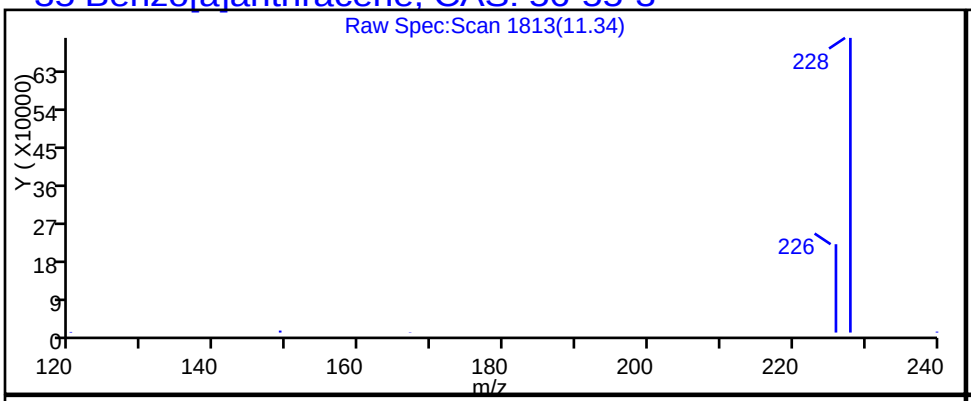


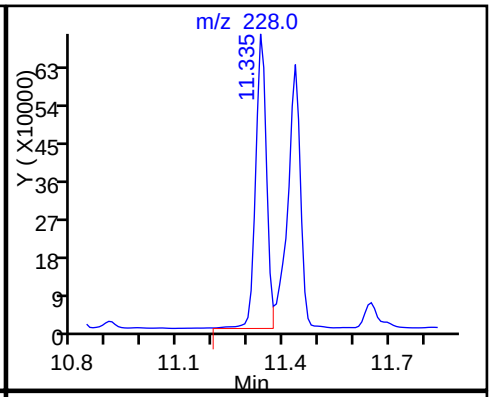
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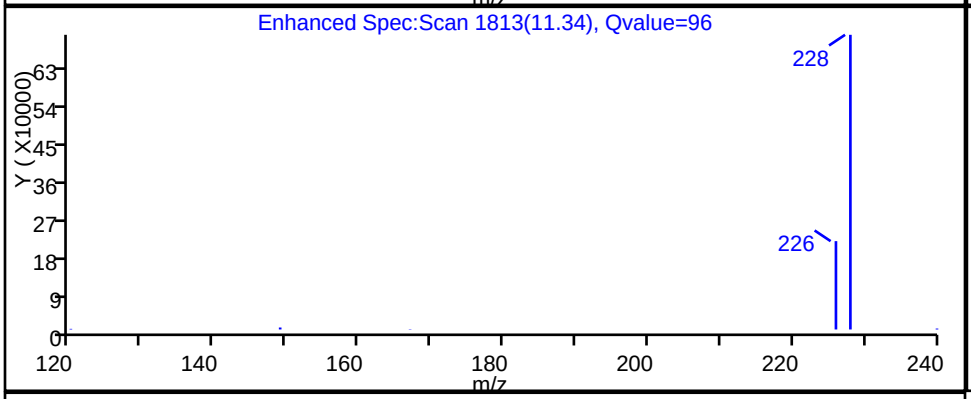
TestAmerica Denver

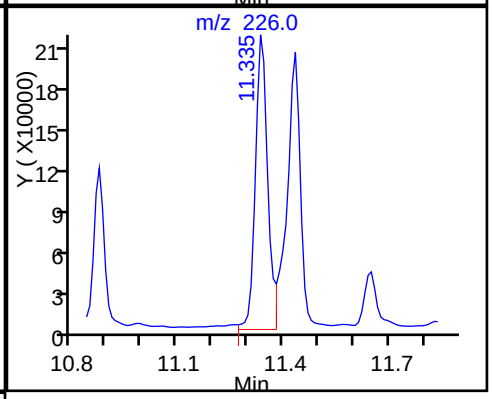
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Injection Date:	16-Jun-2017 20:22:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	13	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

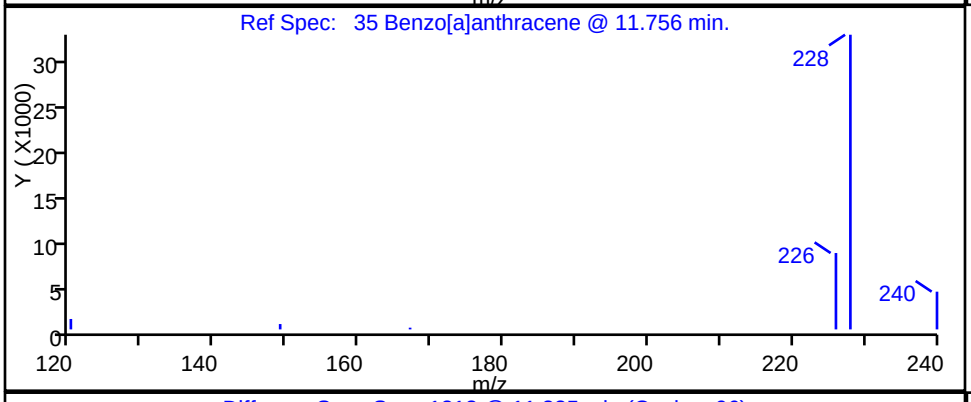
35 Benzo[a]anthracene, CAS: 56-55-3

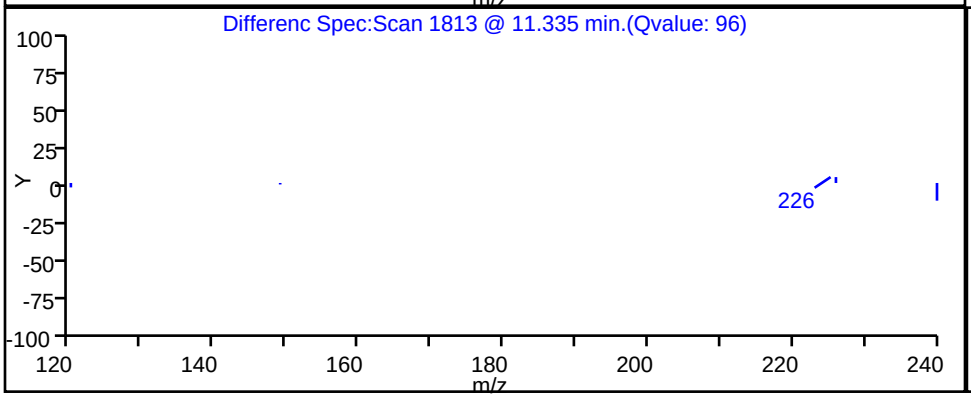


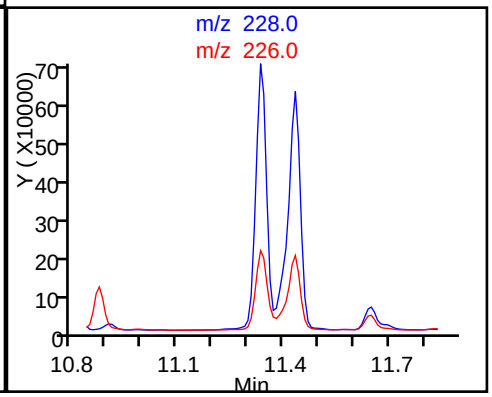












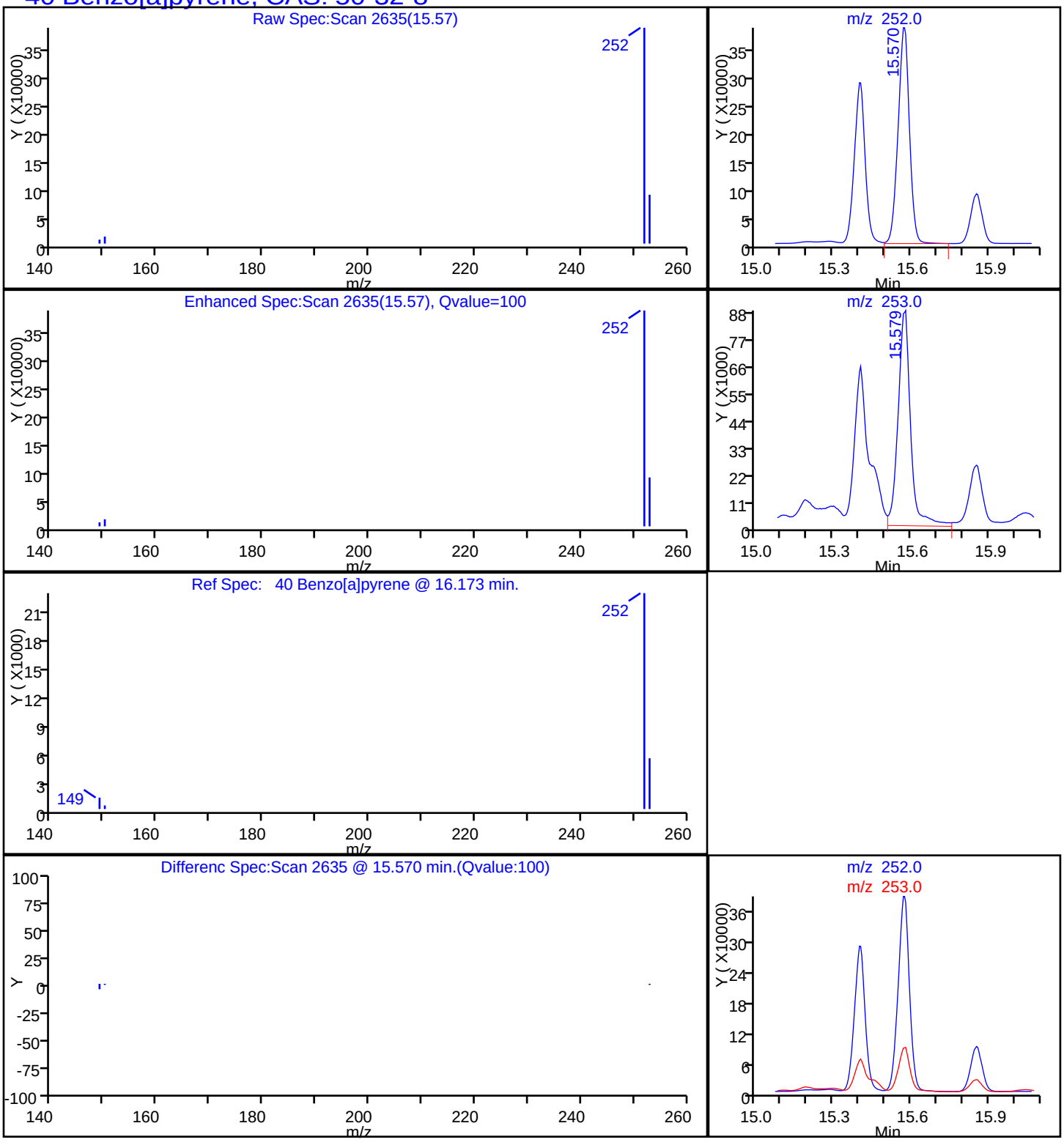
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7280.D

Injection Date:	16-Jun-2017 20:22:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	13	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

40 Benzo[a]pyrene, CAS: 50-32-8



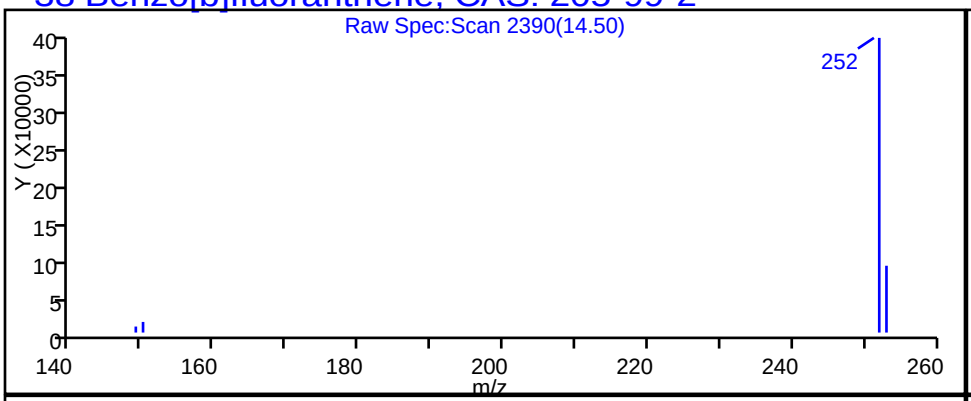
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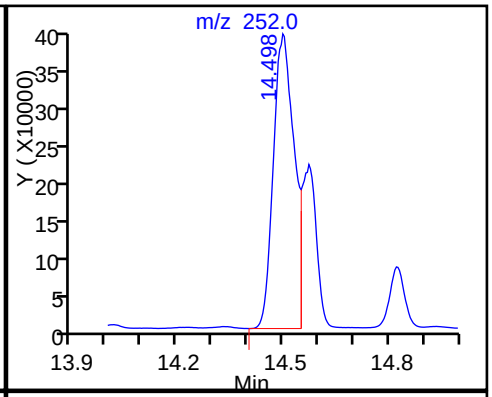
TestAmerica Denver

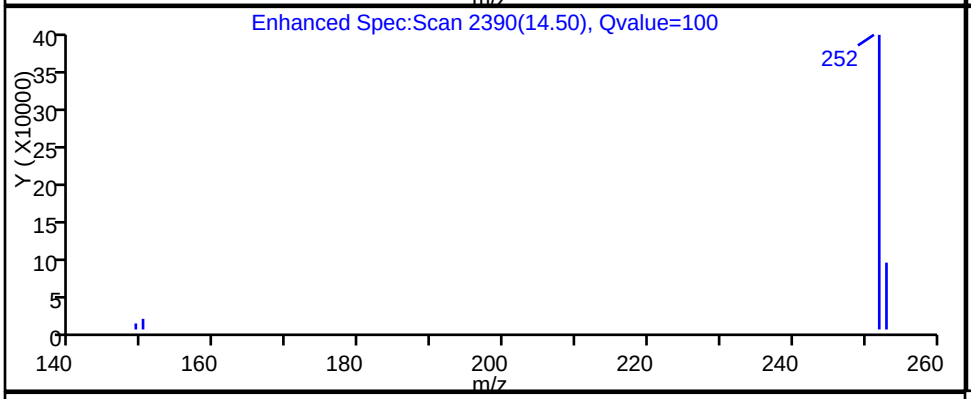
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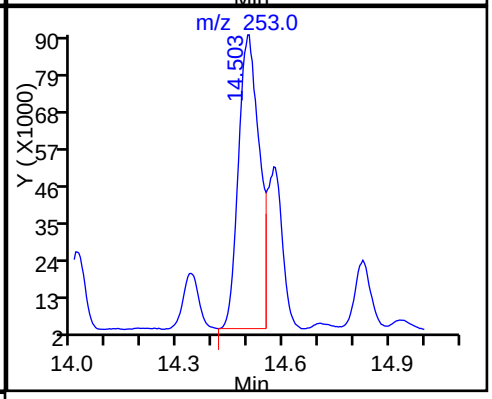
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Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	13	Worklist Smp#:	14
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Column:		Detector	MS SCAN		

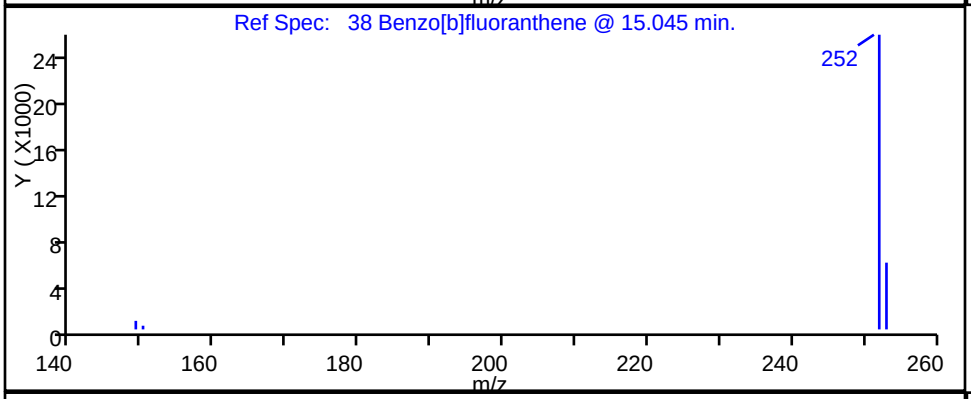
38 Benzo[b]fluoranthene, CAS: 205-99-2

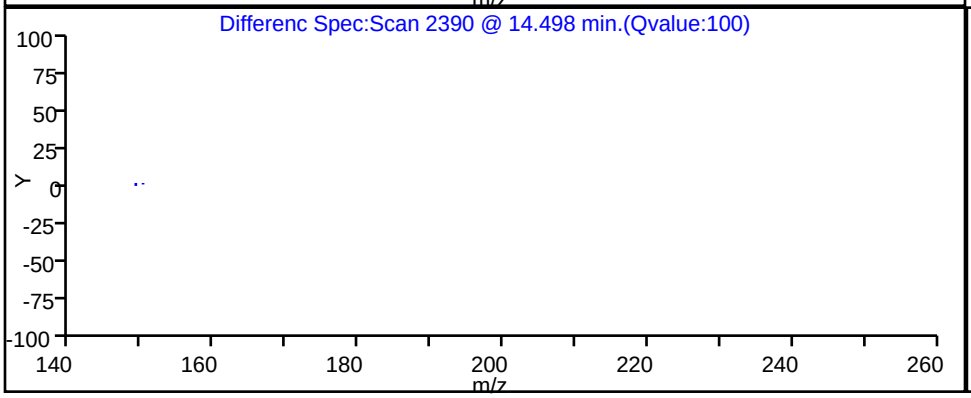


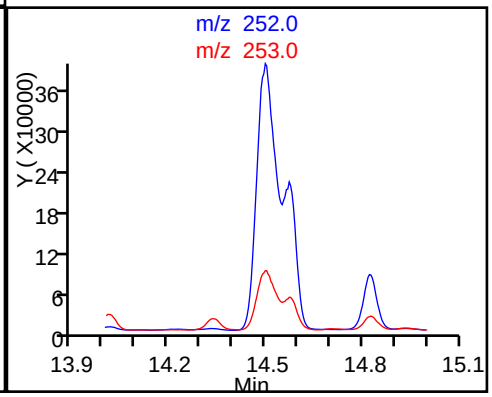










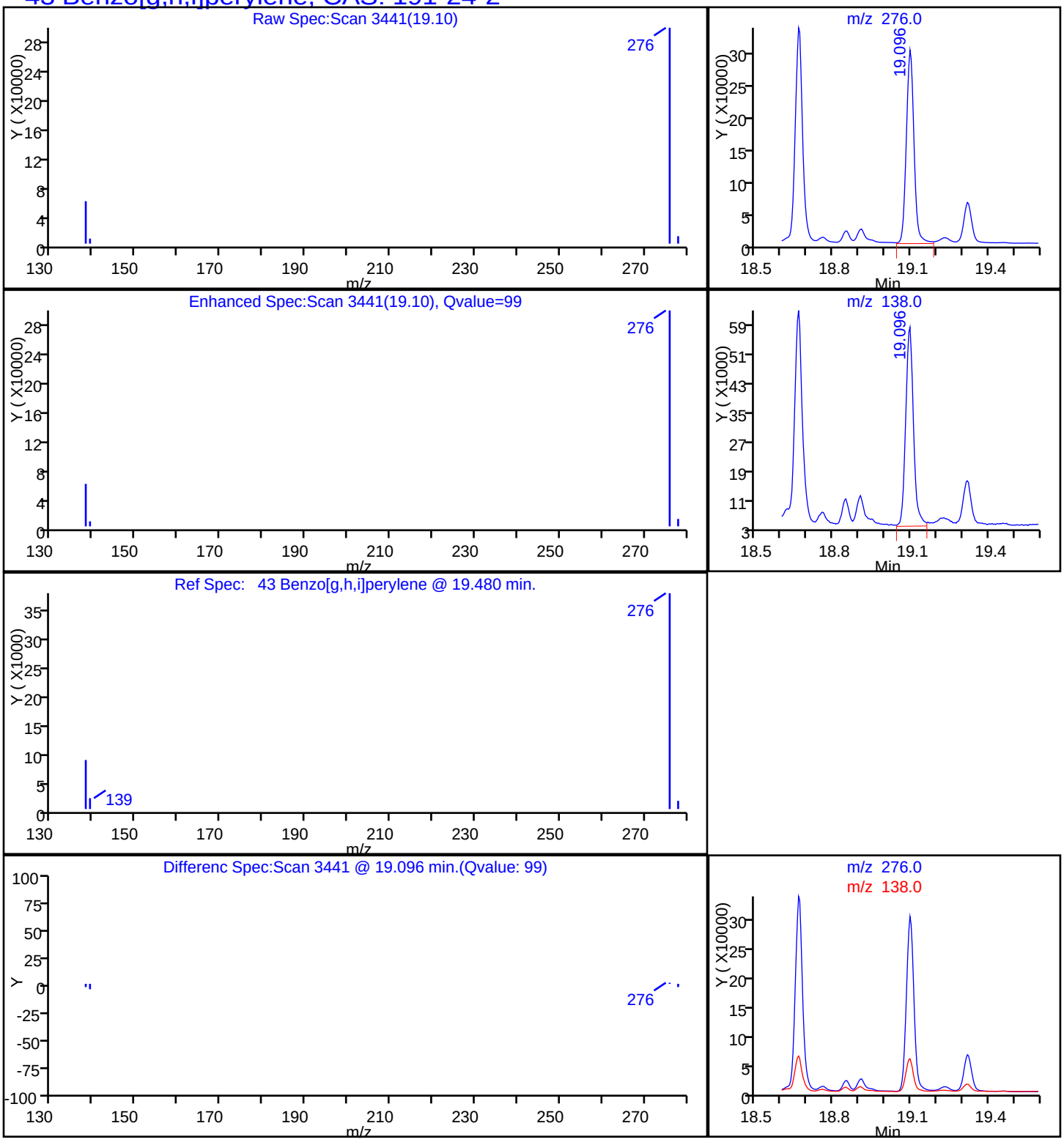


Report Date: 19-Jun-2017 15:44:17 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7280.D				
Injection Date:	16-Jun-2017 20:22:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	13	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

43 Benzo[g,h,i]perylene, CAS: 191-24-2

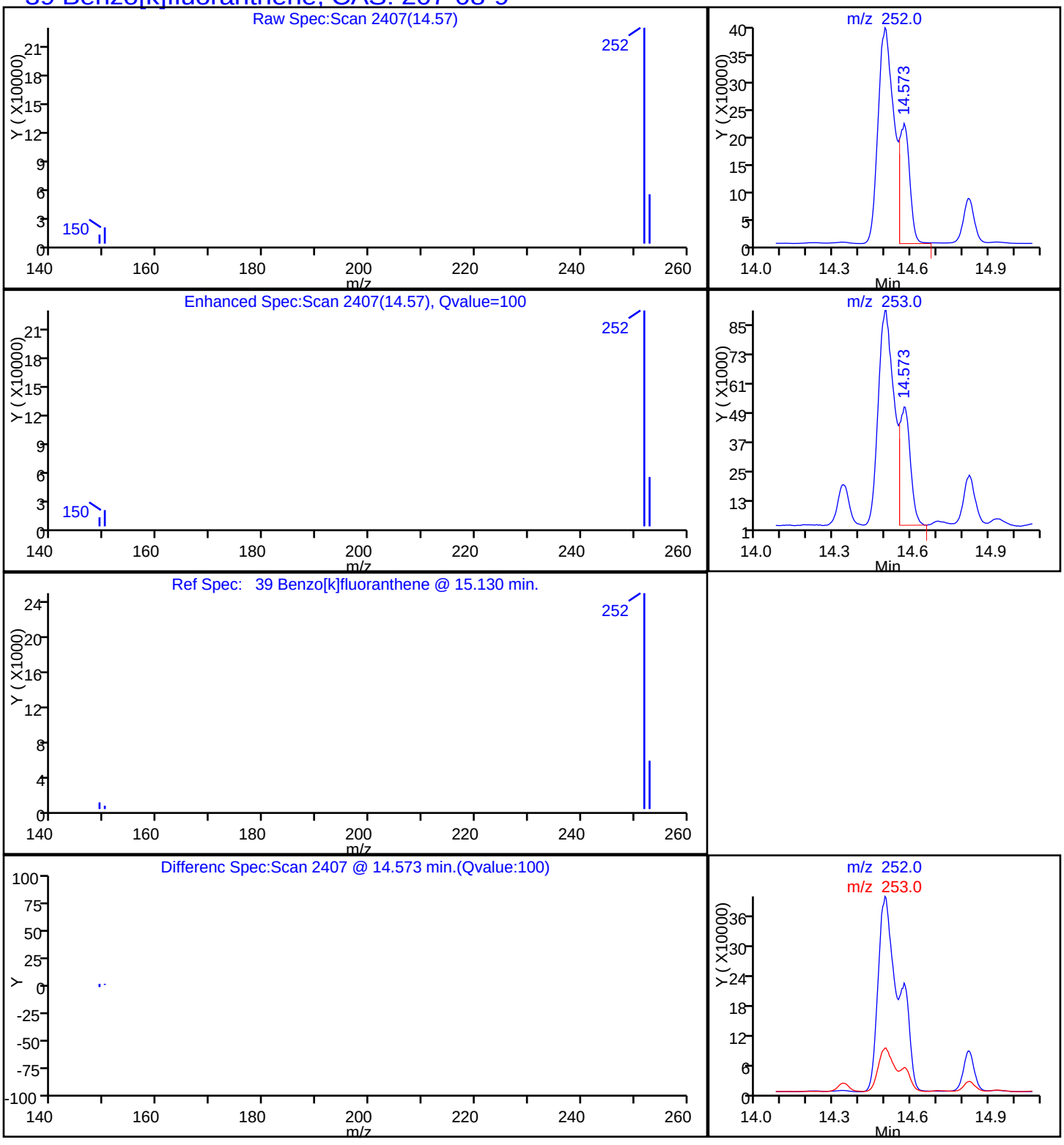


Report Date: 19-Jun-2017 15:44:17 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7280.D				
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Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Benzo[k]fluoranthene, CAS: 207-08-9



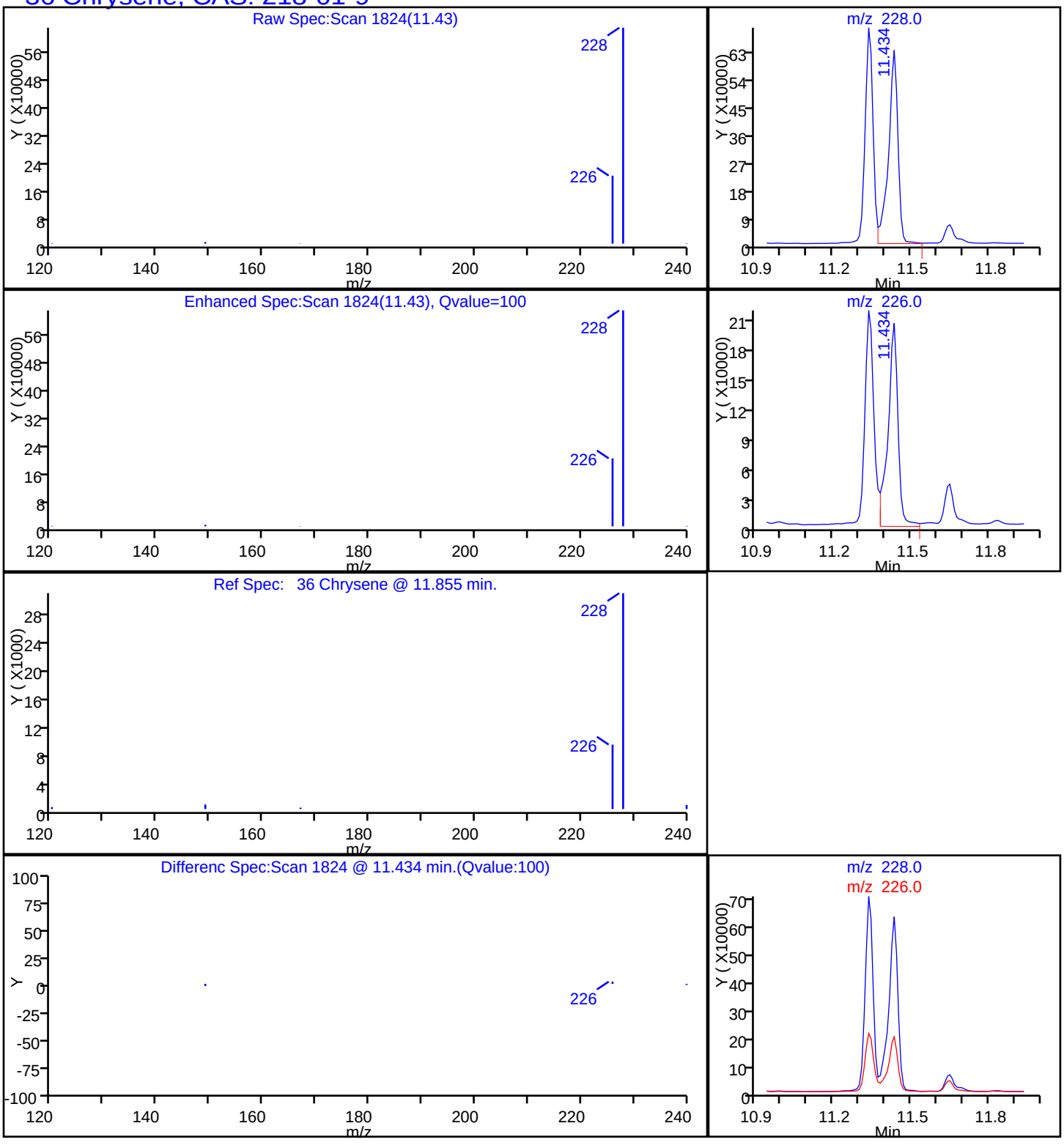
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7280.D

Injection Date:	16-Jun-2017 20:22:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	13	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Chrysene, CAS: 218-01-9

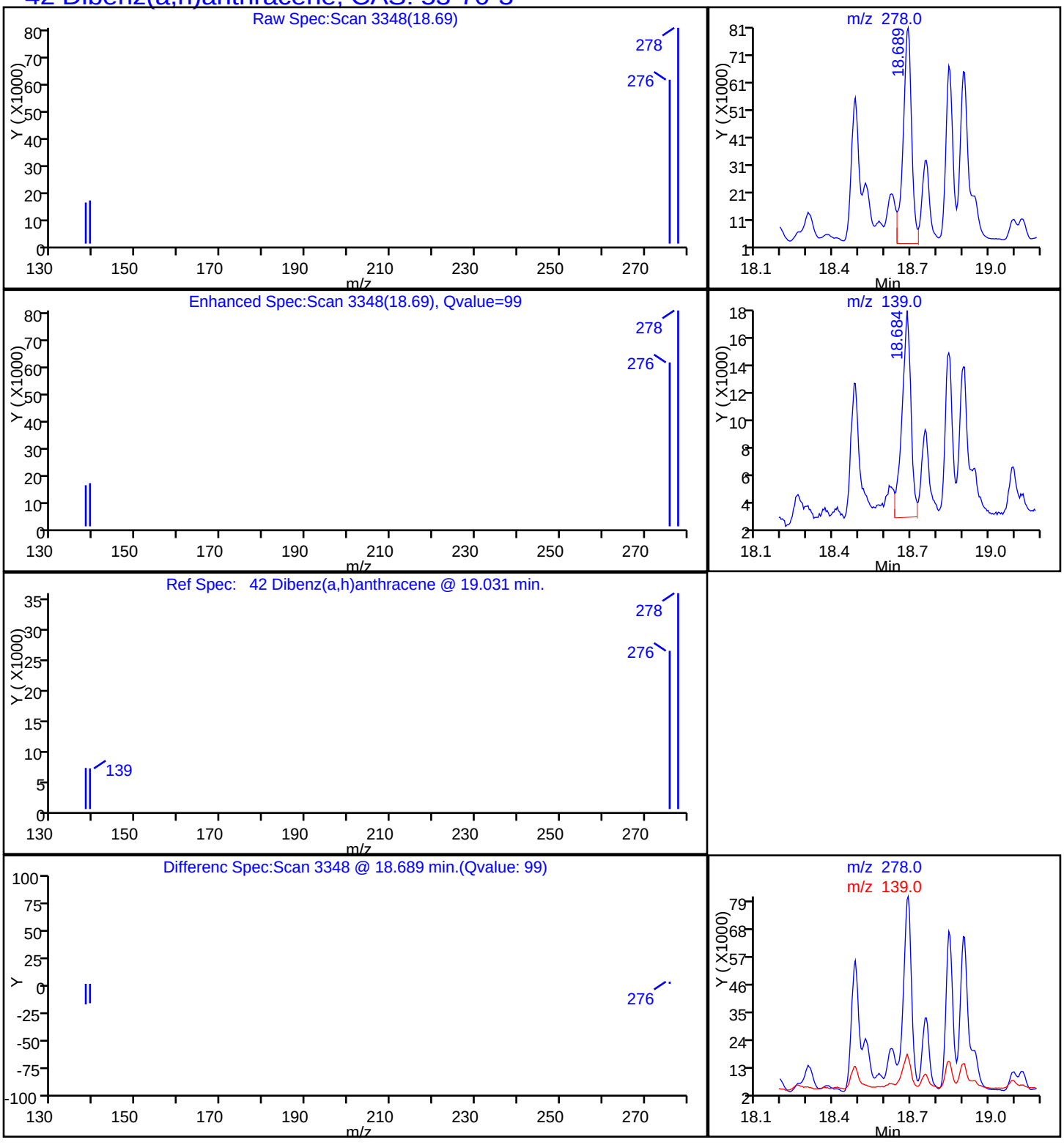


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TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7280.D				
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Client ID:	SS025-SB01(0-2)-a				
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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

42 Dibenz(a,h)anthracene, CAS: 53-70-3



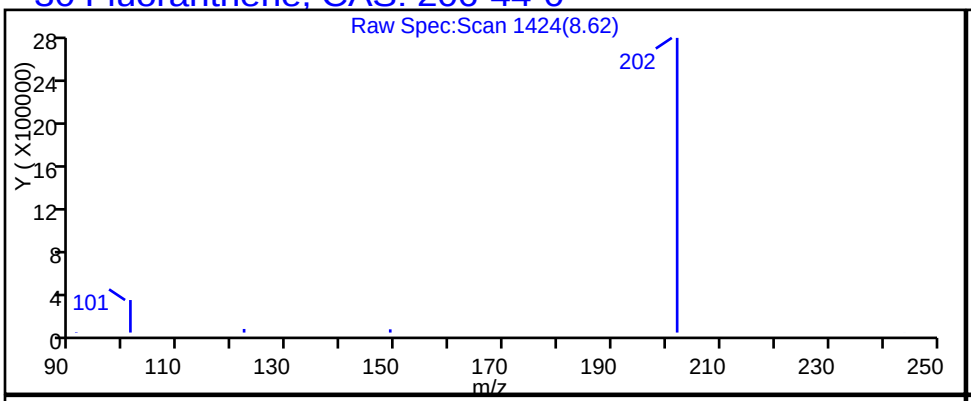
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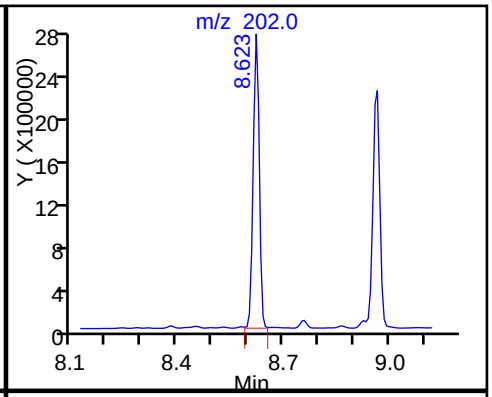
TestAmerica Denver

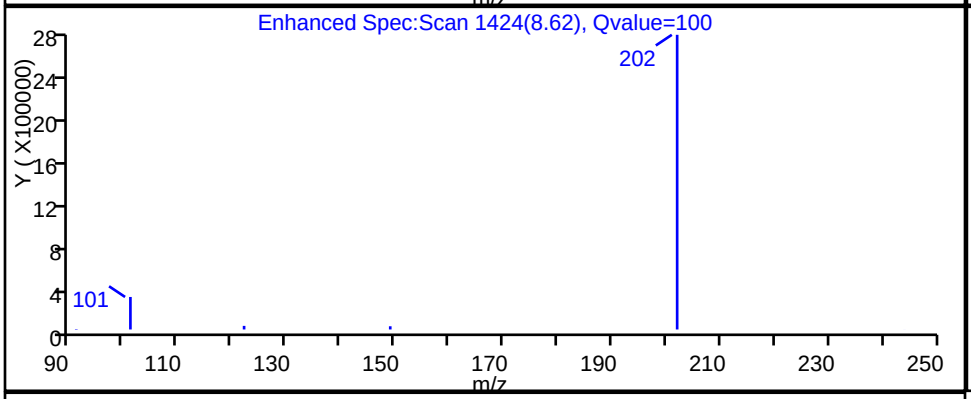
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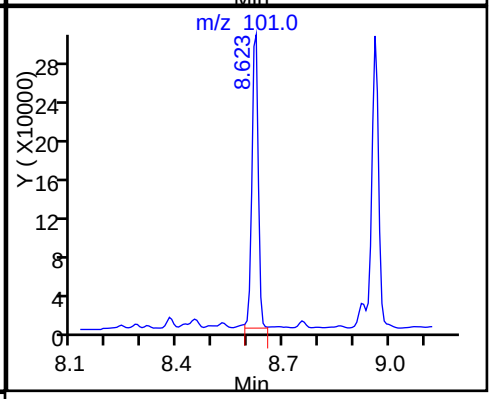
Injection Date:	16-Jun-2017 20:22:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	13	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

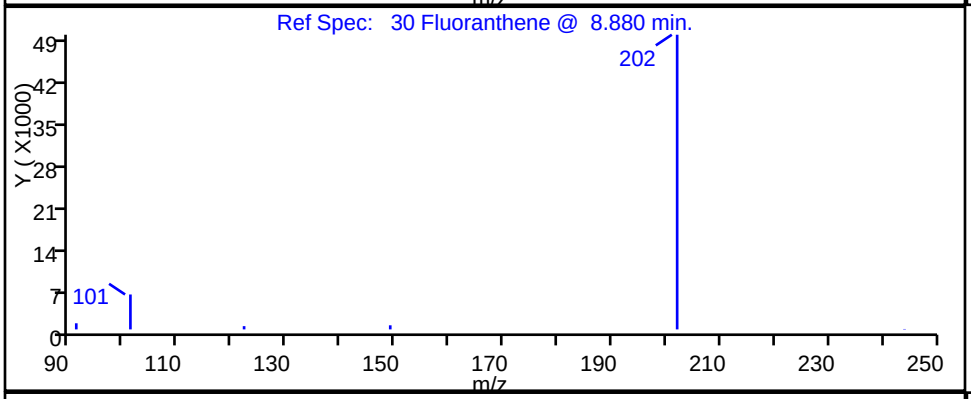
30 Fluoranthene, CAS: 206-44-0

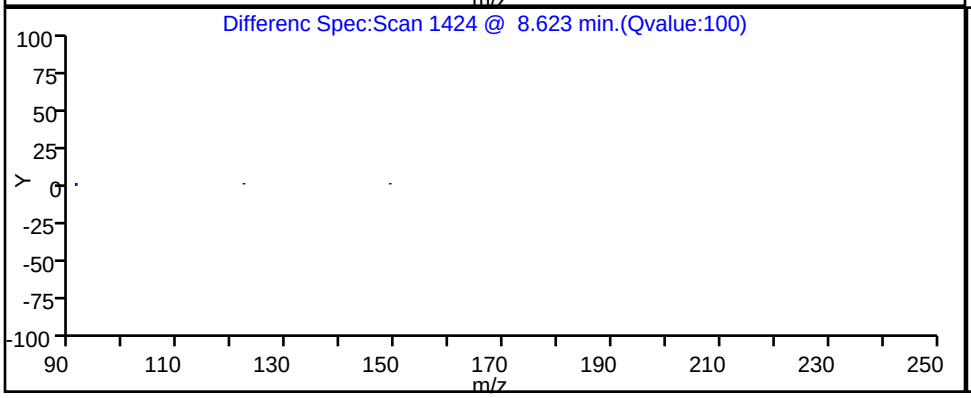


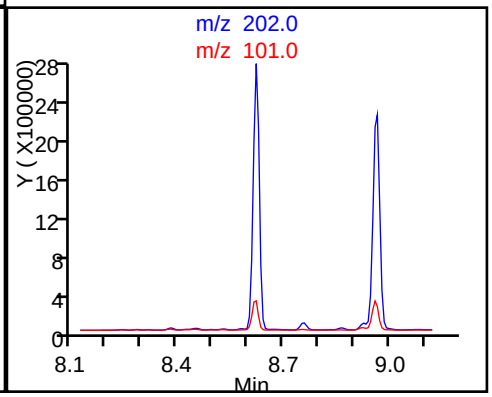












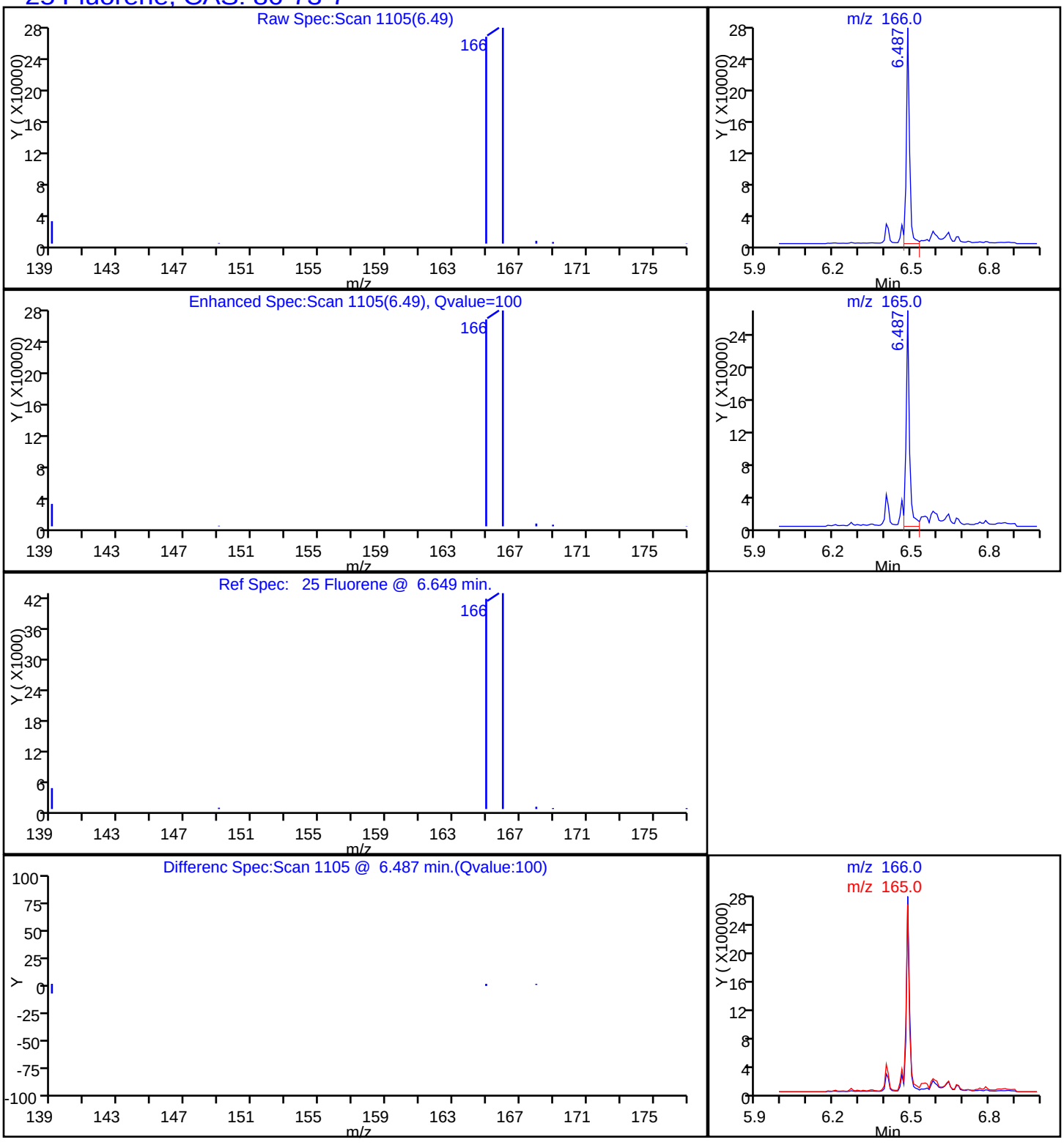
Report Date: 19-Jun-2017 15:44:16 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7280.D

Injection Date:	16-Jun-2017 20:22:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	13	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

25 Fluorene, CAS: 86-73-7



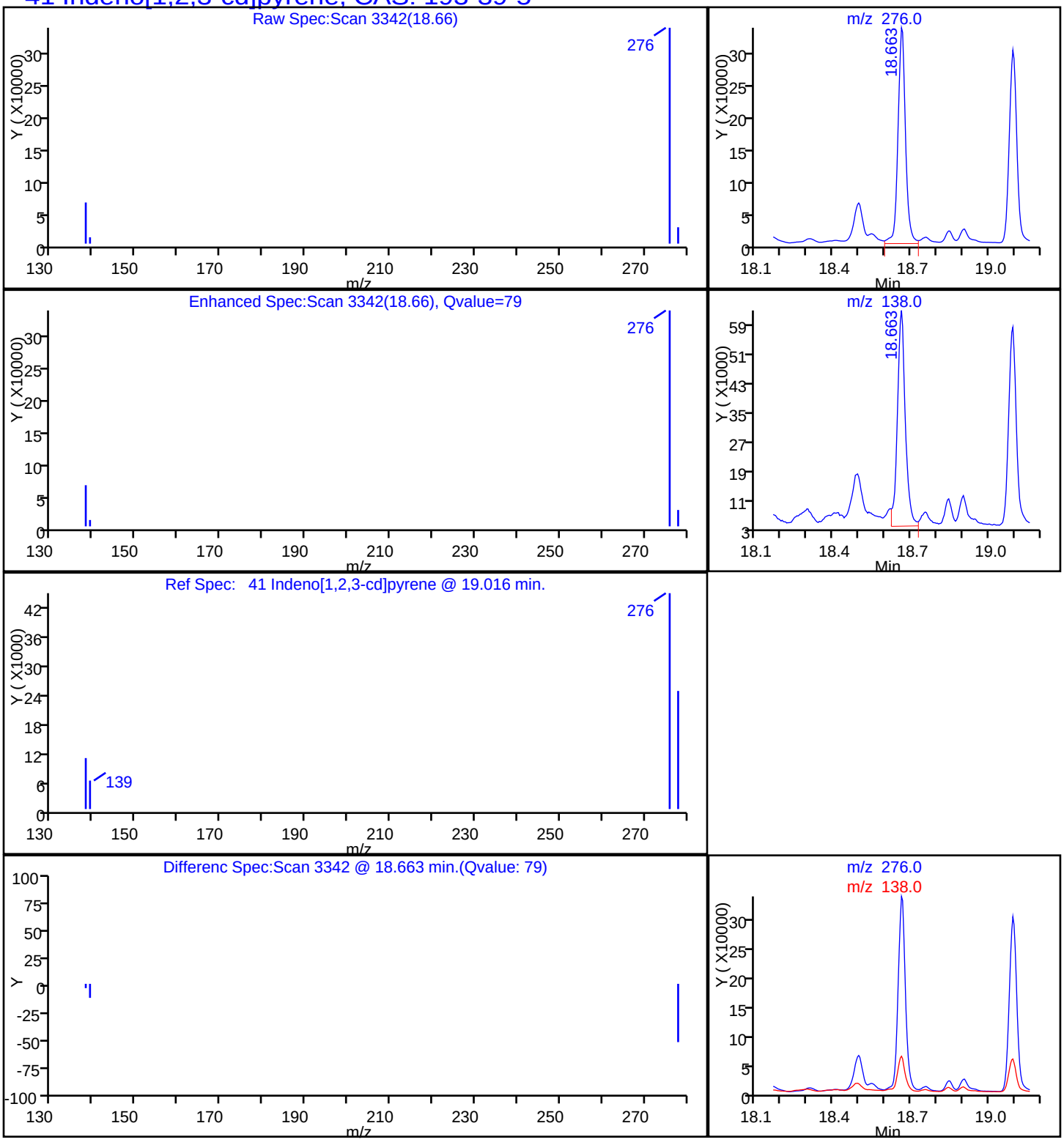
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7280.D

Injection Date:	16-Jun-2017 20:22:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	13	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

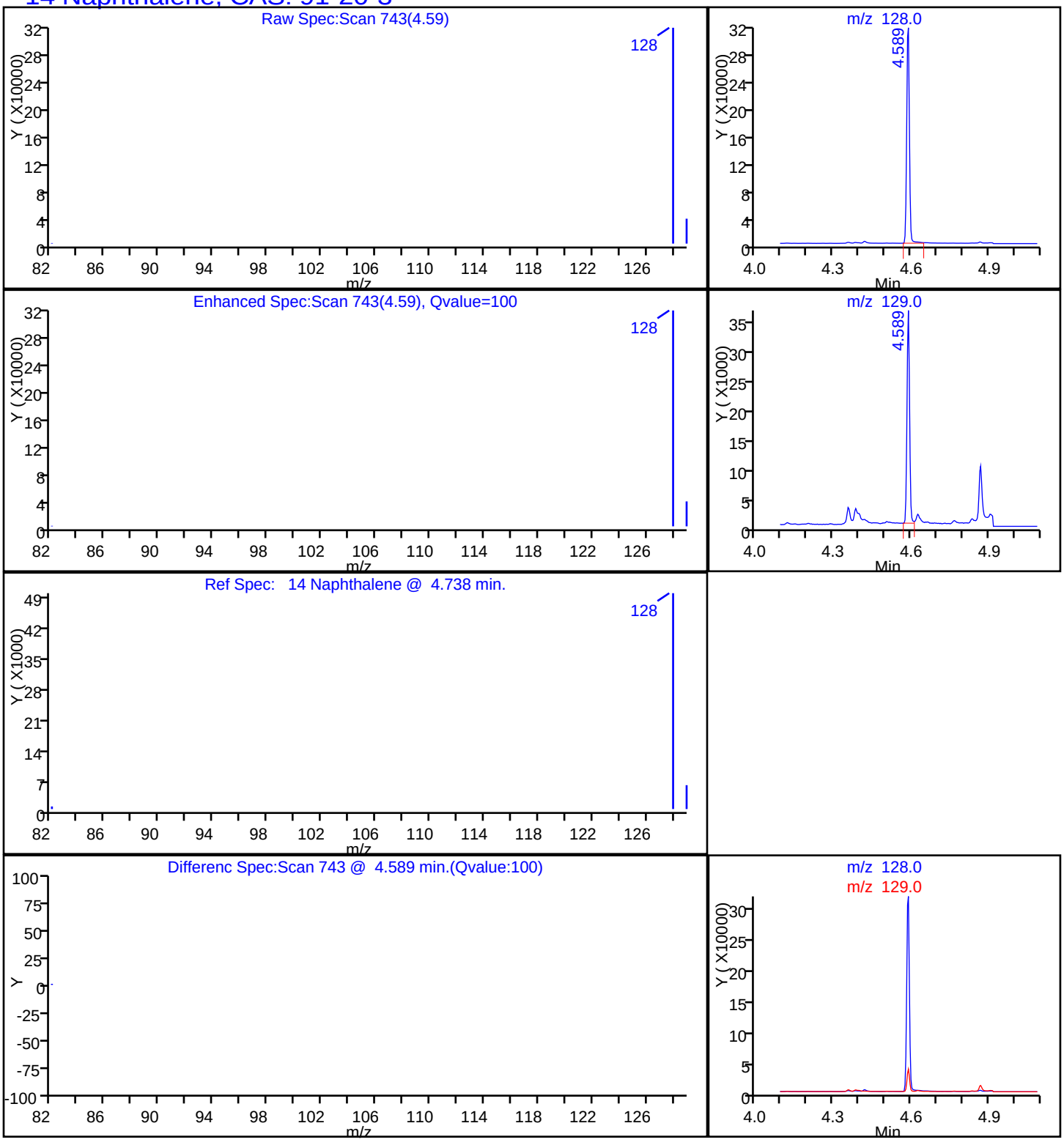


Report Date: 19-Jun-2017 15:44:16 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7280.D				
Injection Date:	16-Jun-2017 20:22:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	13	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3



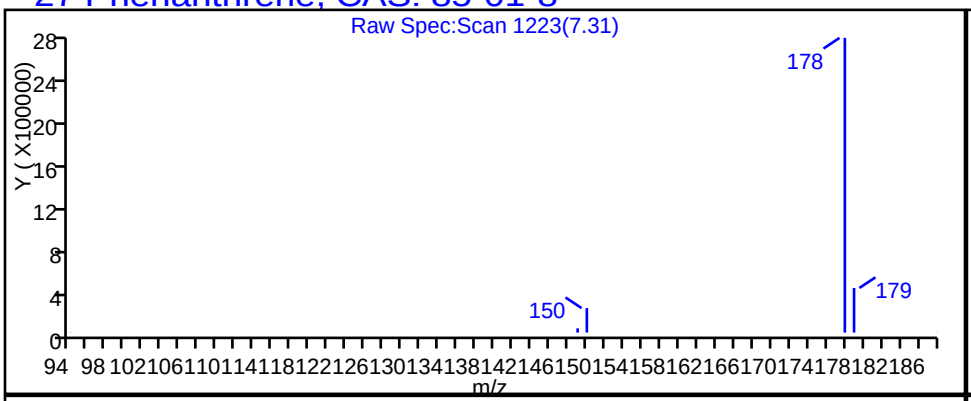
Report Date: 19-Jun-2017 15:44:16 Chrom Revision: 2.2 25-Apr-2017 13:27:22

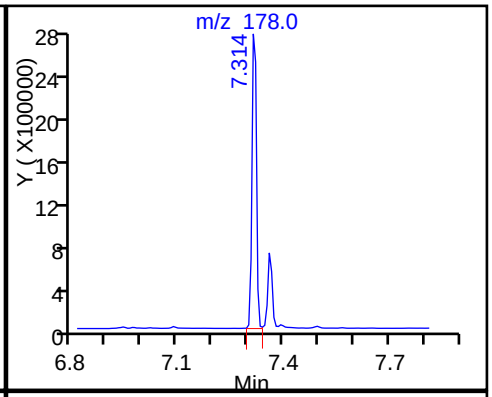
TestAmerica Denver

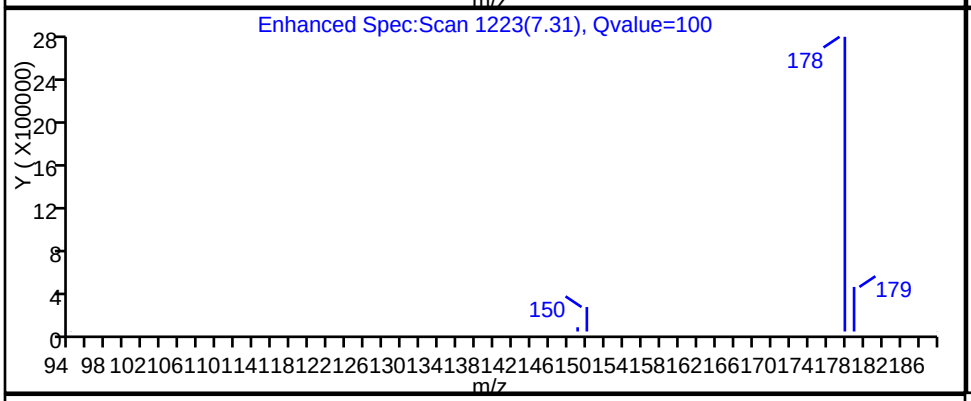
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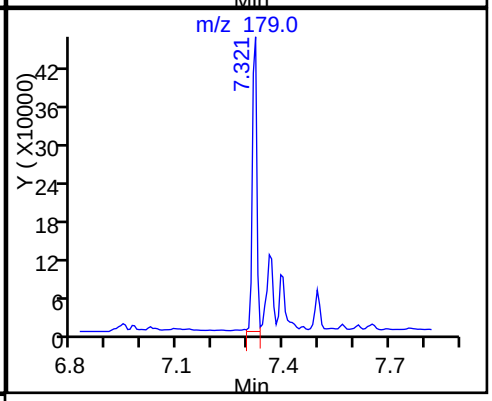
Injection Date:	16-Jun-2017 20:22:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	13	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

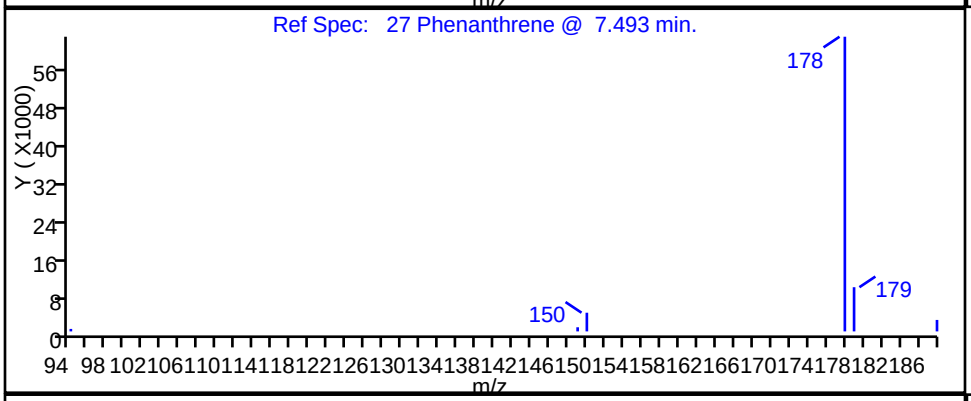
27 Phenanthrene, CAS: 85-01-8

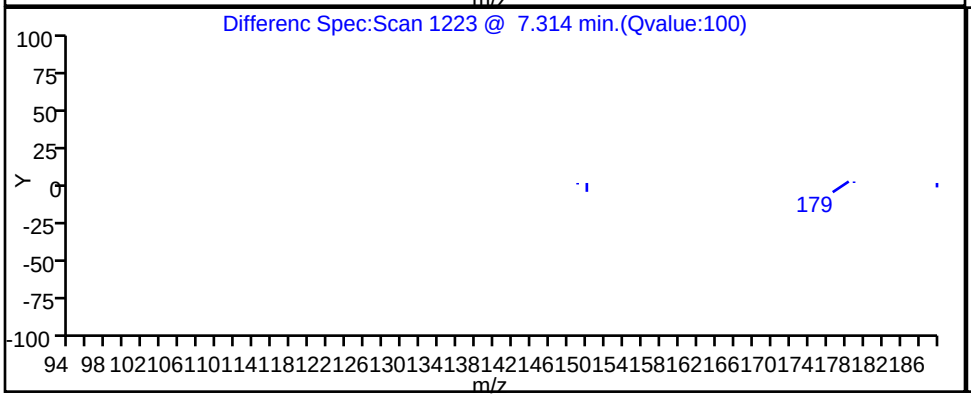


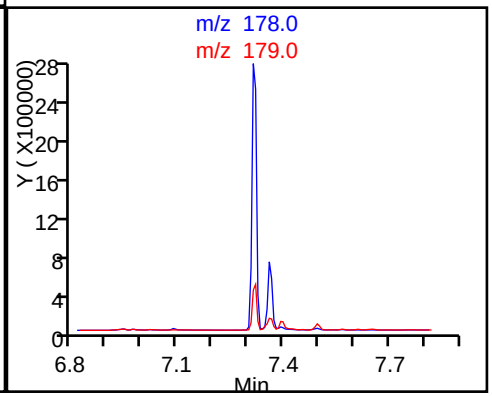












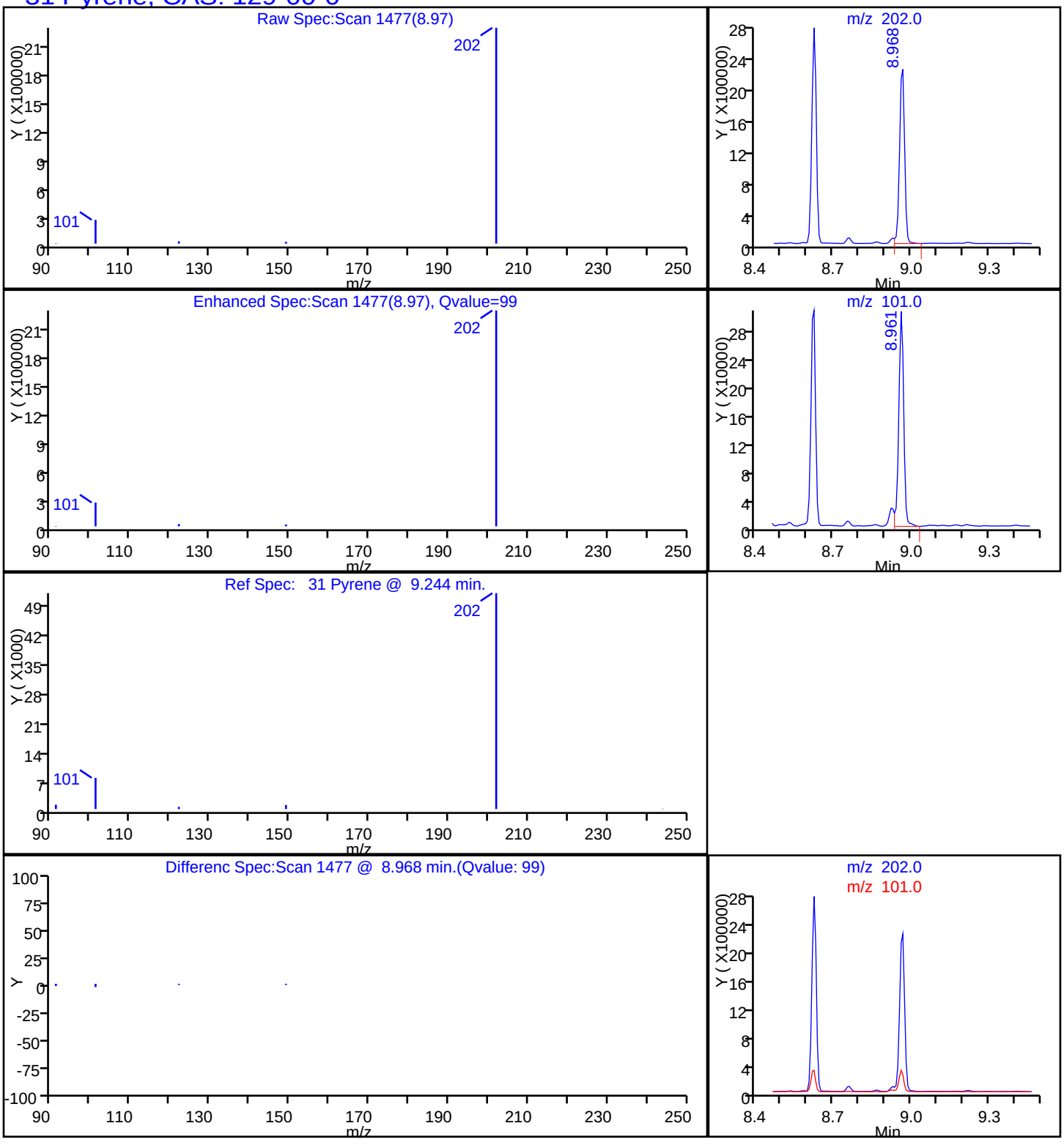
Report Date: 19-Jun-2017 15:44:16 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7280.D

Injection Date:	16-Jun-2017 20:22:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	13	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Pyrene, CAS: 129-00-0



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB01(0-2)-a DL | Lab Sample ID: 280-97928-9 DL

Matrix: Solid | Lab File ID: F7316.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 10:20

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 32.0(g) | Date Analyzed: 06/20/2017 20:52

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 11.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378055 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	*1-Methylnaphthalene*	*22*	*J D Q*	*53*	5.3	*2.7*
91-57-6	*2-Methylnaphthalene*	*34*	*J D Q*	*53*	7.0	*3.3*
83-32-9	*Acenaphthene*	*110*	*D*	*53*	2.8	*1.7*
208-96-8	*Acenaphthylene*	*81*	*D*	*53*	7.0	*1.8*
120-12-7	Anthracene	210	D	53	26	7.6
56-55-3	Benzo[a]anthracene	500	D	53	26	9.5
50-32-8	Benzo[a]pyrene	440	D	53	26	7.8
205-99-2	Benzo[b]fluoranthene	620	D	53	26	13
191-24-2	*Benzo[g,h,i]perylene*	*240*	*D*	*53*	26	*12*
207-08-9	Benzo[k]fluoranthene	220	D	53	26	11
218-01-9	Chrysene	580	D	53	26	11
53-70-3	*Dibenz(a,h)anthracene*	*74*	*D*	*53*	26	*14*
206-44-0	Fluoranthene	1100	D	53	26	11
86-73-7	*Fluorene*	*110*	*D*	*53*	7.0	*5.0*
193-39-5	Indeno[1,2,3-cd]pyrene	220	D	53	26	12
91-20-3	*Naphthalene*	*82*	*D Q*	*53*	7.0	*3.4*
85-01-8	Phenanthrene	860	D	53	26	12
129-00-0	Pyrene	1000	D	53	26	12

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	94	D	46-115
4165-60-0	Nitrobenzene-d5 (Surr)	0	D Q	44-125
1718-51-0	Terphenyl-d14 (Surr)	118	D	58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7316.D
Lims ID: 280-97928-B-9-B
Client ID: SS025-SB01(0-2)-a
Sample Type: Client
Inject. Date: 20-Jun-2017 20:52:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Sample Info: 280-97928-b-9-b
Misc. Info.: 10X
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 21-Jun-2017 15:41:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: wickhamm Date: 21-Jun-2017 15:13:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	86	19001	600.0	
* 2 Phenanthrene-d10	188	7.301	7.308	-0.007	99	36954	600.0	
* 3 Chrysene-d12	240	11.371	11.378	-0.007	91	33749	600.0	
$ 4 Nitrobenzene-d5	82		4.001				ND	
$ 5 2-Fluorobiphenyl	172	5.440	5.436	0.004	99	2309	46.9	
$ 6 Terphenyl-d14	244	9.118	9.130	-0.012	86	2212	59.0	
14 Naphthalene	128	4.589	4.589	0.000	100	14401	233.8	
16 2-Methylnaphthalene	142	5.152	5.147	0.005	97	3871	97.7	
17 1-Methylnaphthalene	142	5.239	5.234	0.005	100	2468	62.2	
22 Acenaphthylene	152	5.917	5.917	0.000	100	15082	230.1	
23 Acenaphthene	153	6.055	6.055	0.000	97	13112	327.3	
25 Fluorene	166	6.494	6.494	0.000	96	15897	323.3	
27 Phenanthrene	178	7.321	7.321	0.000	99	191532	2443.8	
28 Anthracene	178	7.367	7.373	-0.006	99	48338	610.8	
30 Fluoranthene	202	8.623	8.629	-0.006	100	288579	3205.8	
31 Pyrene	202	8.961	8.974	-0.013	100	265629	2845.4	
35 Benzo[a]anthracene	228	11.335	11.350	-0.015	97	128351	1430.0	
36 Chrysene	228	11.434	11.450	-0.016	100	138202	1664.4	
38 Benzo[b]fluoranthene	252	14.498	14.513	-0.015	100	144624	1774.8	
39 Benzo[k]fluoranthene	252	14.577	14.596	-0.019	100	51601	629.6	
40 Benzo[a]pyrene	252	15.579	15.598	-0.019	100	99709	1239.9	
41 Indeno[1,2,3-cd]pyrene	276	18.667	18.682	-0.015	80	56070	614.7	
42 Dibenz(a,h)anthracene	278	18.689	18.708	-0.019	75	14915	209.5	
43 Benzo[g,h,i]perylene	276	19.104	19.115	-0.011	100	52286	675.7	

Reagents:

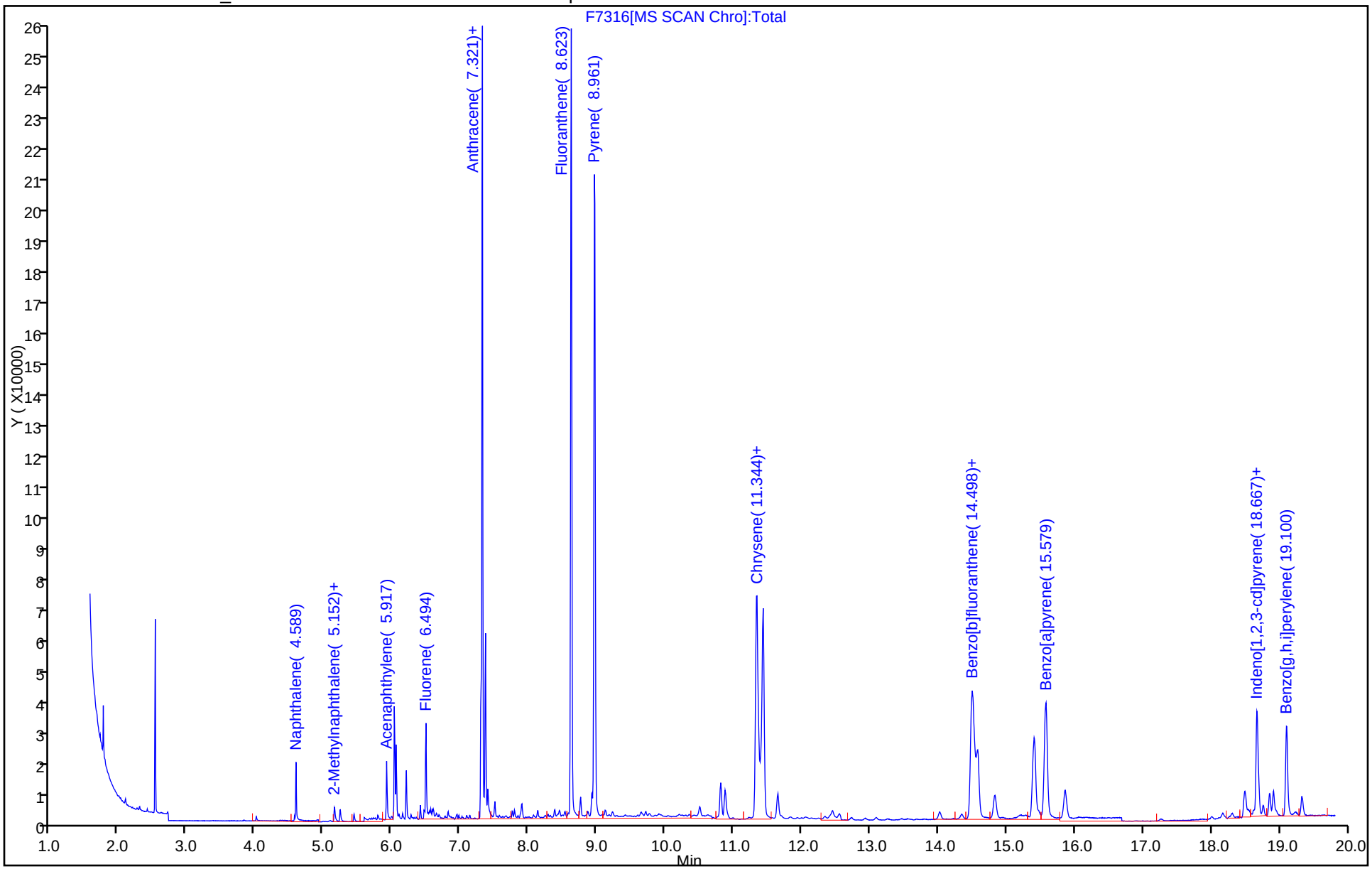
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 21-Jun-2017 15:41:15 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7316.D

Injection Date:	20-Jun-2017 20:52:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9	Worklist Smp#:	11
Client ID:	SS025-SB01(0-2)-a				
Injection Vol:	1.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	11
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7316.D				
Lims ID:	280-97928-B-9-B				
Client ID:	SS025-SB01(0-2)-a				
Sample Type:	Client				
Inject. Date:	20-Jun-2017 20:52:30	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Sample Info:	280-97928-b-9-b				
Misc. Info.:	10X				
Operator ID:	WICKHAMM	Instrument ID:	SMS_F		
Method:	\\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\SMSF_8270SIMX.m				
Limit Group:	MSSV - 8270C-SIM				
Last Update:	21-Jun-2017 15:41:04	Calib Date:	11-May-2017 16:07:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D				
Column 1 :			Det: MS SCAN		
Process Host:	XAWRK004				
First Level Reviewer: wickhamm		Date:	21-Jun-2017 15:13:23		

Compound	Amount Added	Amount Recovered	% Rec.
$ 5 2-Fluorobiphenyl	500.0	46.9	93.73
$ 6 Terphenyl-d14	500.0	59.0	117.91

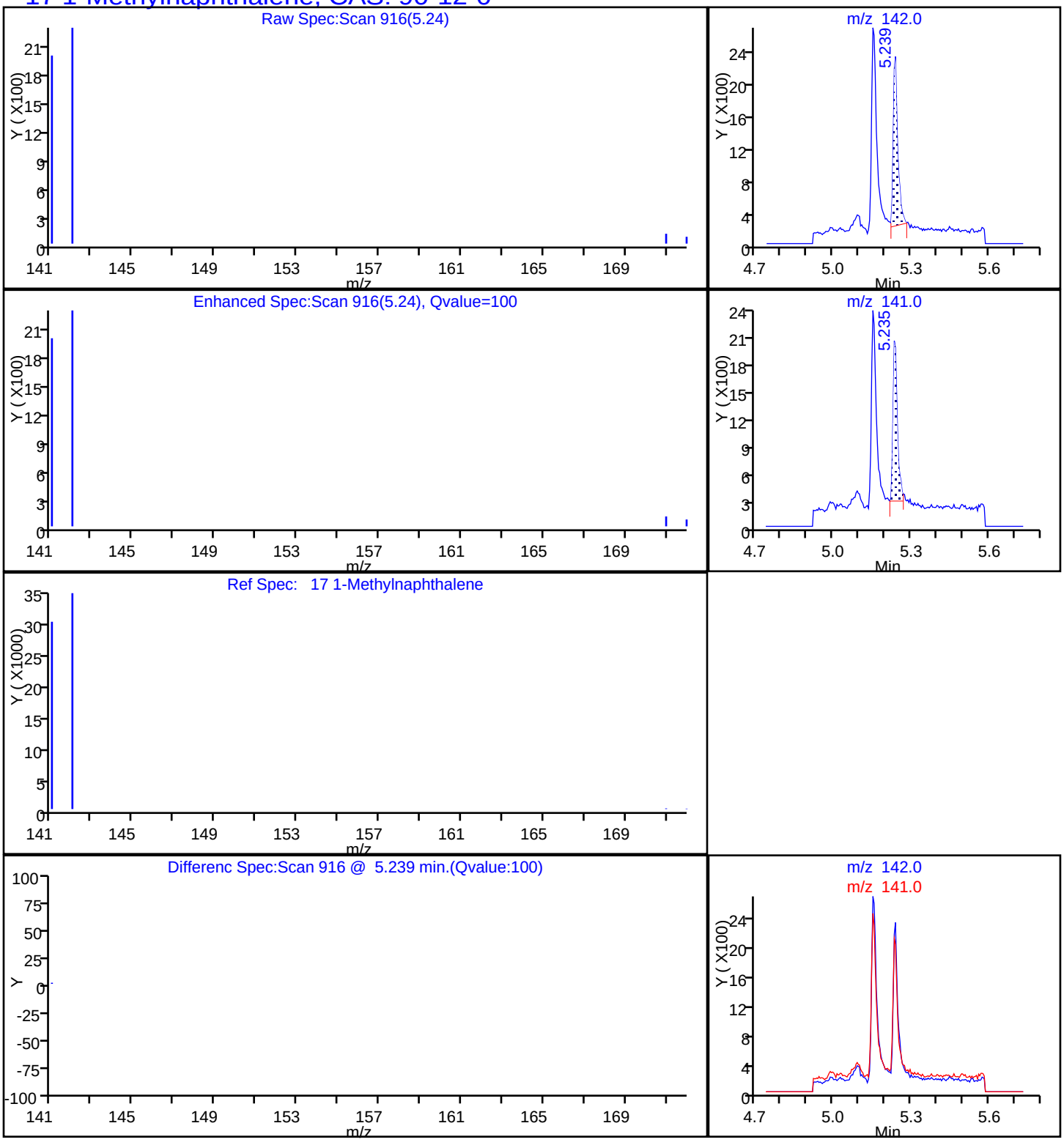
Report Date: 21-Jun-2017 15:41:15 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7316.D

Injection Date:	20-Jun-2017 20:52:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0

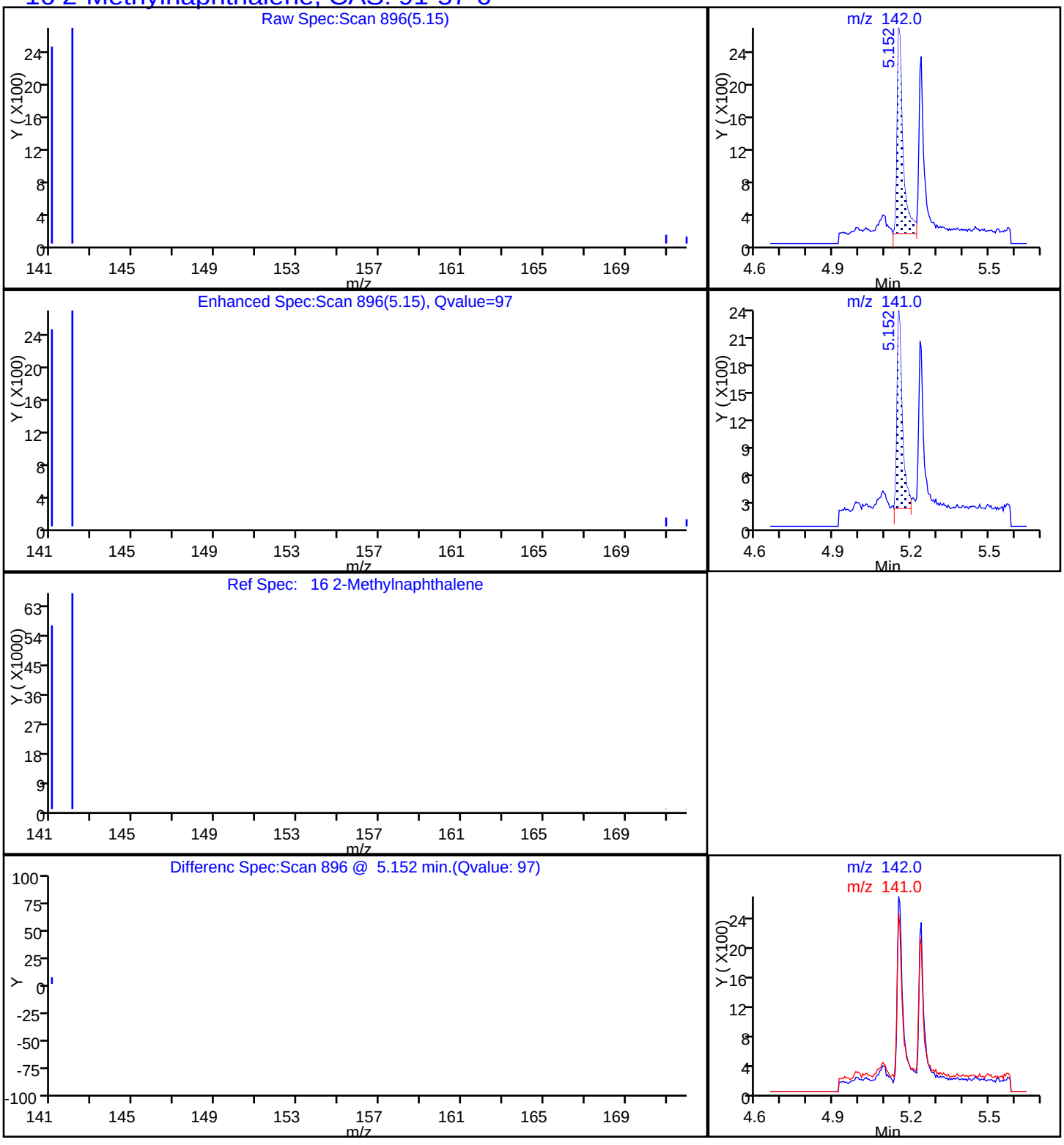


Report Date: 21-Jun-2017 15:41:15 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7316.D				
Injection Date:	20-Jun-2017 20:52:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



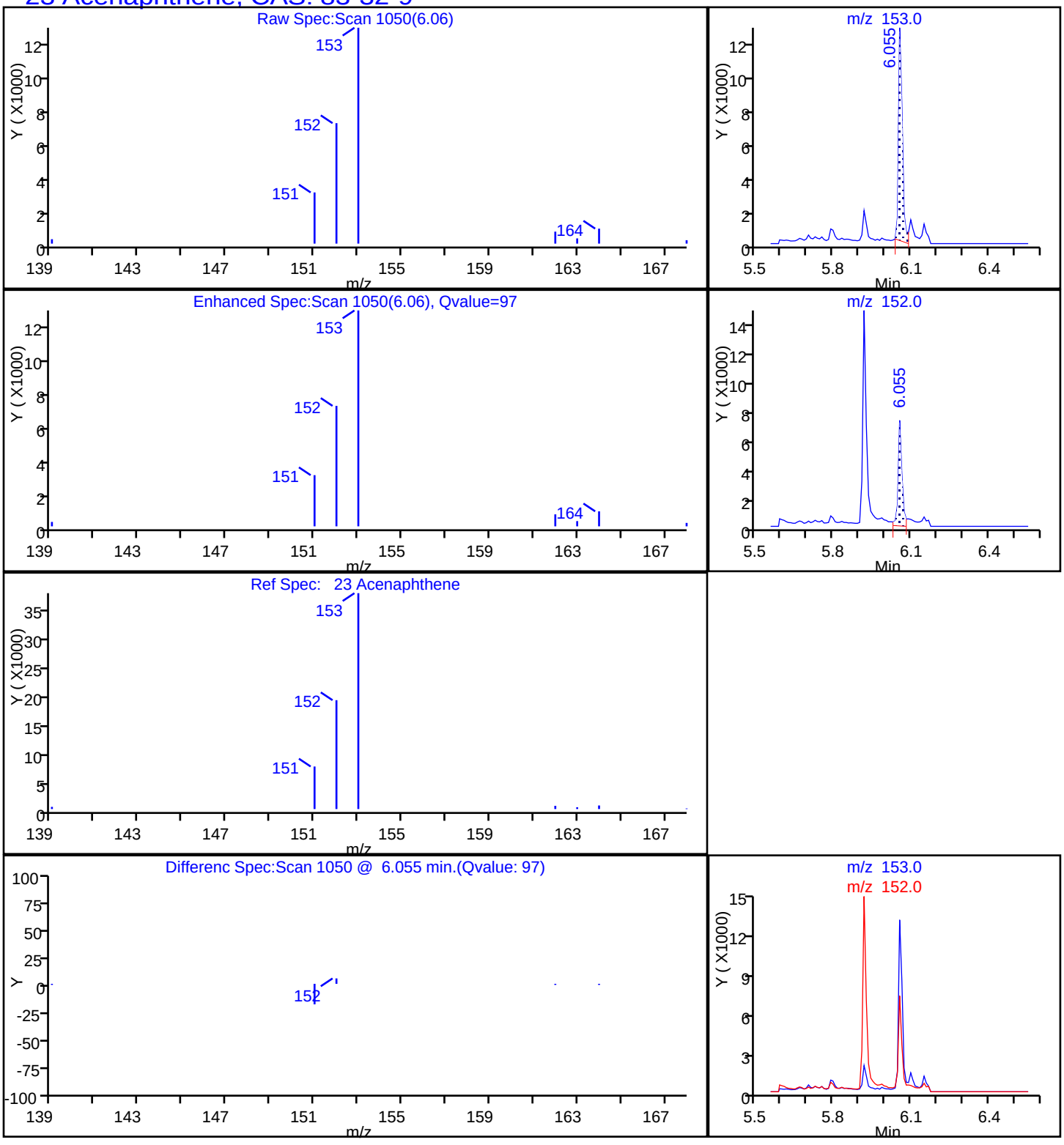
Report Date: 21-Jun-2017 15:41:15 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7316.D

Injection Date:	20-Jun-2017 20:52:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9



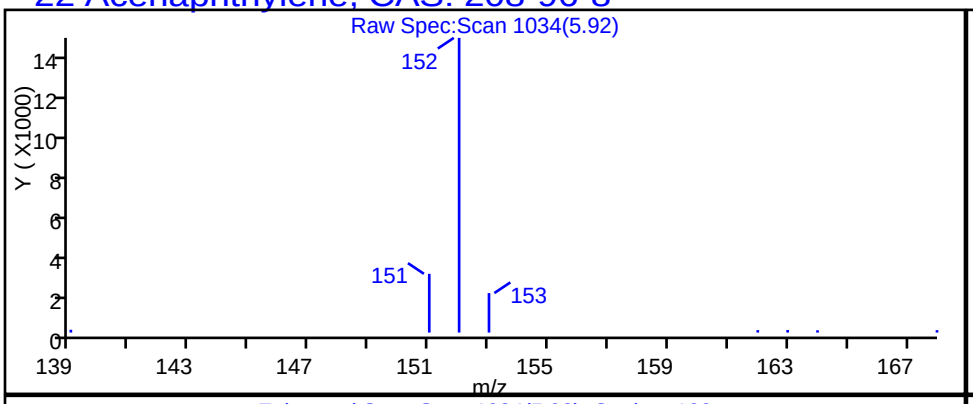
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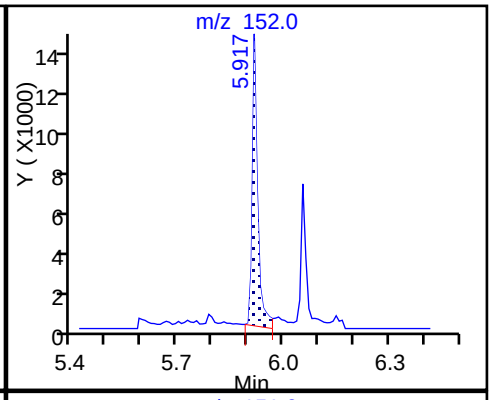
TestAmerica Denver

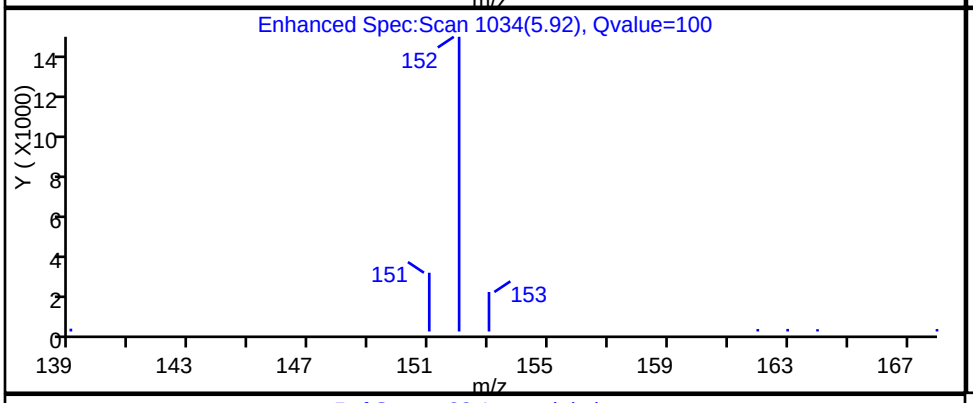
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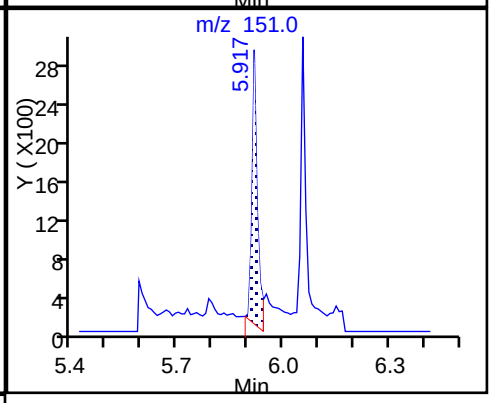
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Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	11	Worklist Smp#:	11
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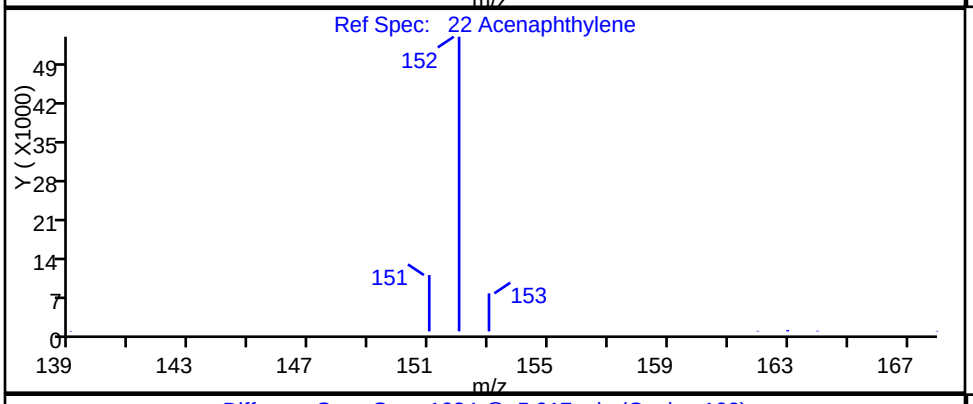
22 Acenaphthylene, CAS: 208-96-8

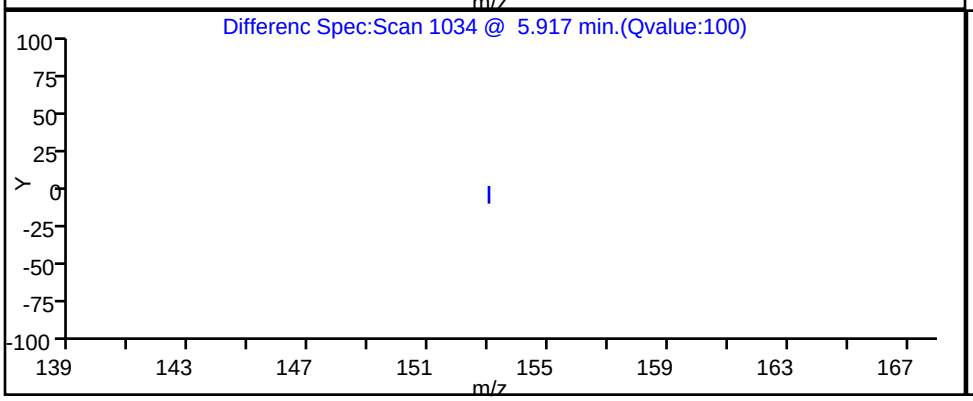


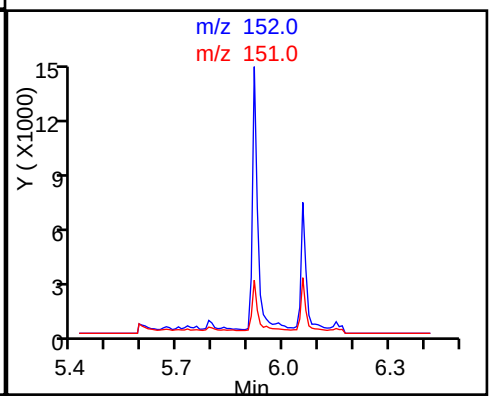










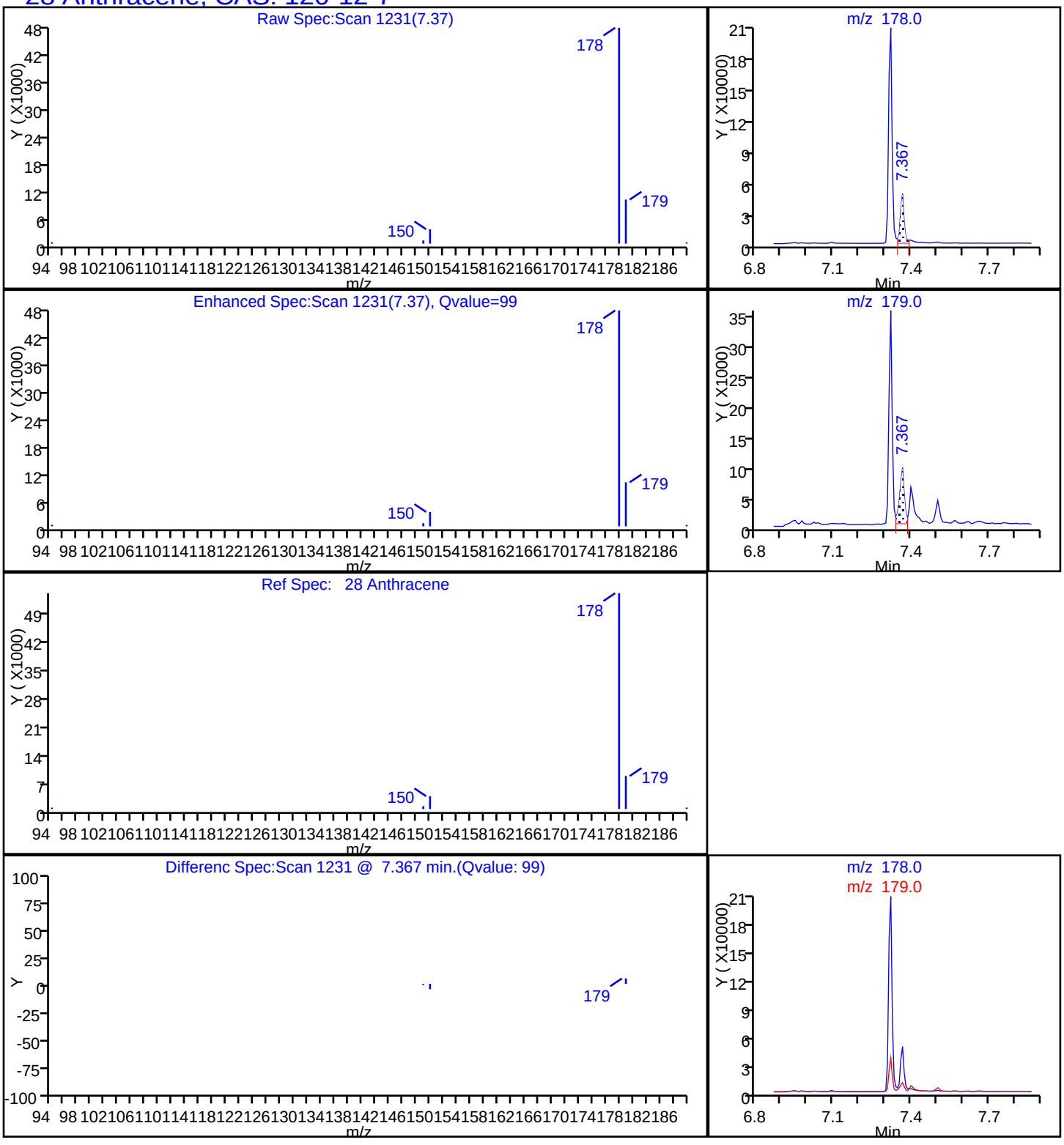


Report Date: 21-Jun-2017 15:41:15 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

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Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
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Column:		Detector	MS SCAN		

28 Anthracene, CAS: 120-12-7



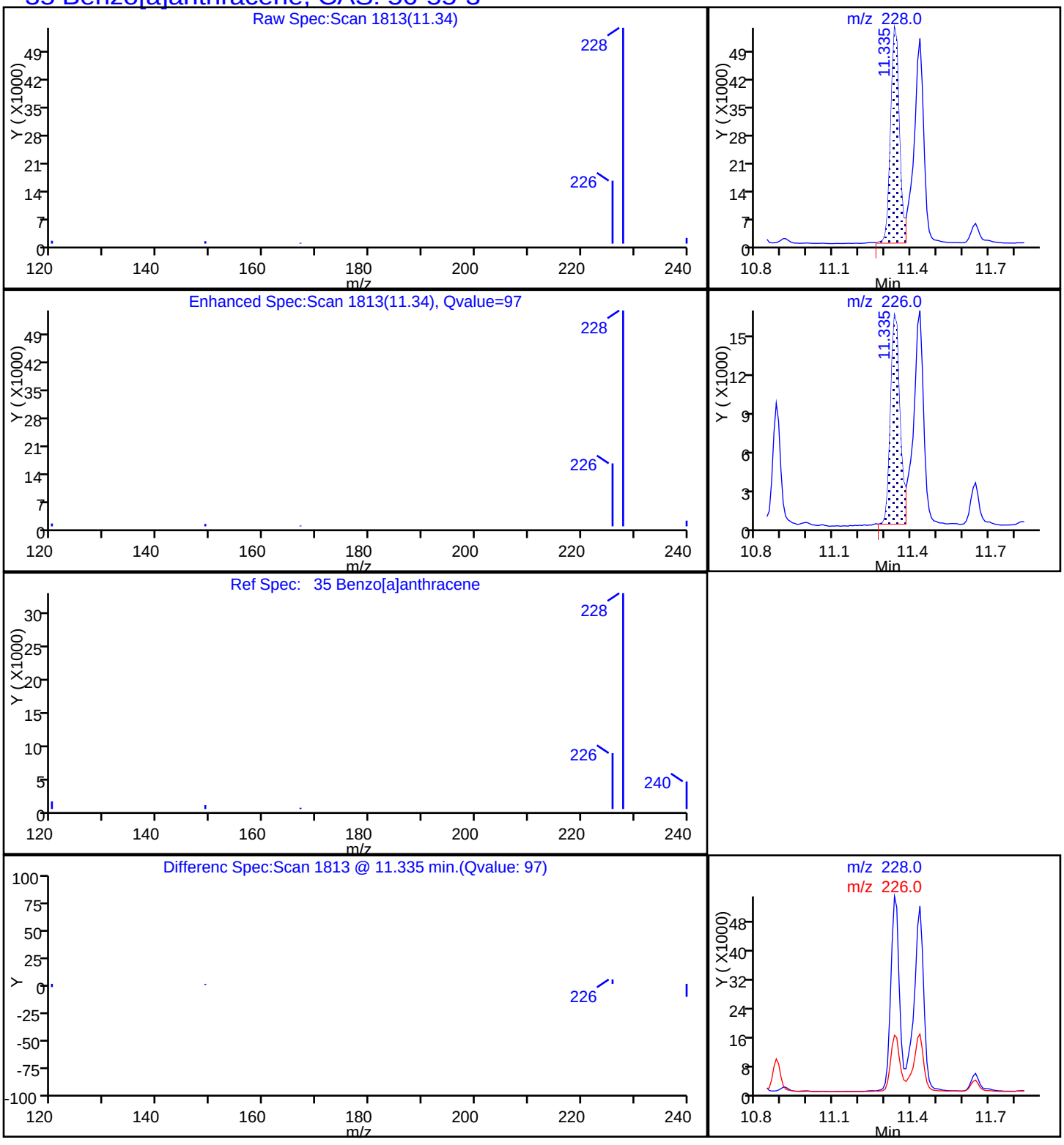
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TestAmerica Denver

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Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

35 Benzo[a]anthracene, CAS: 56-55-3



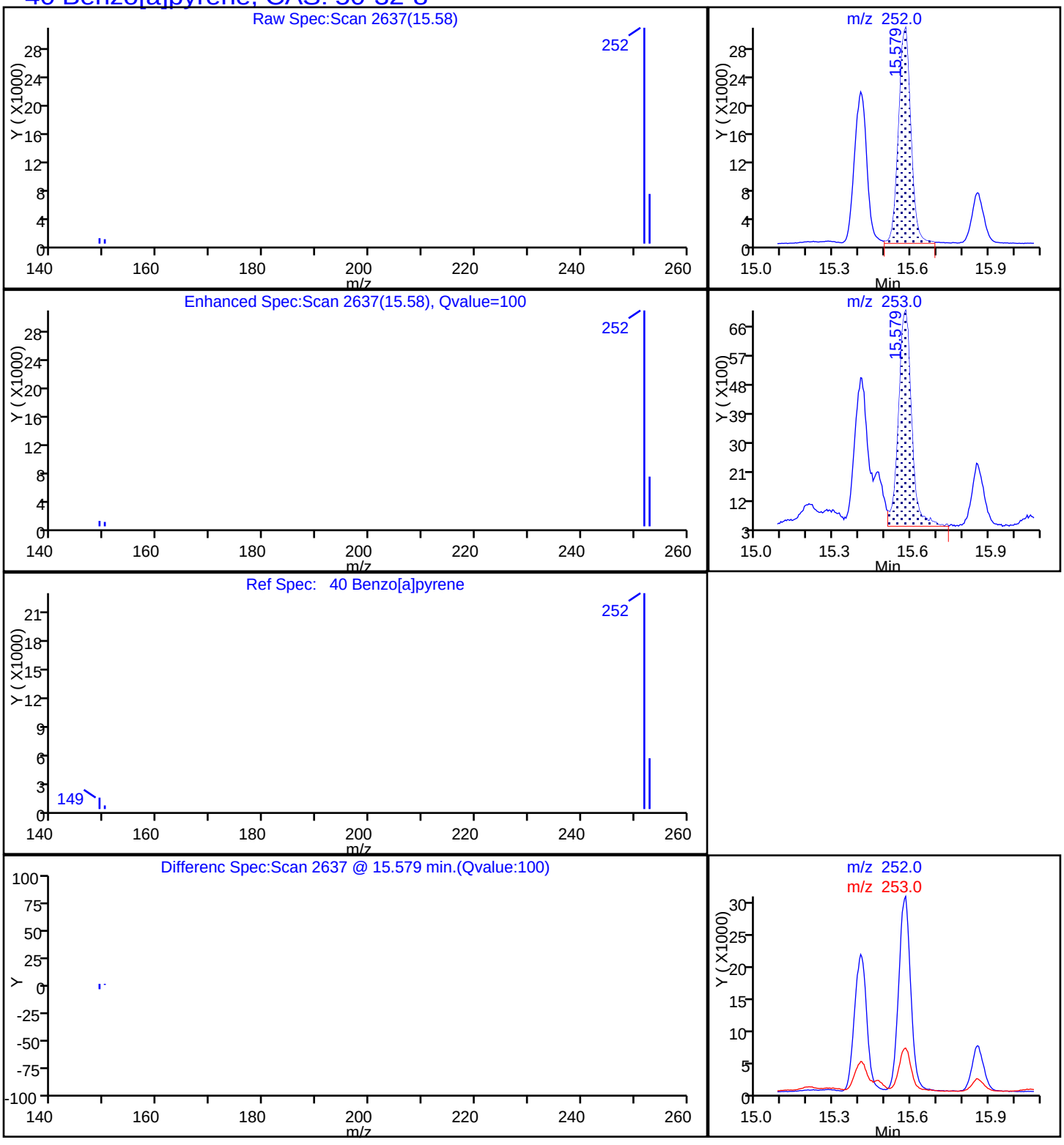
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TestAmerica Denver

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Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

40 Benzo[a]pyrene, CAS: 50-32-8



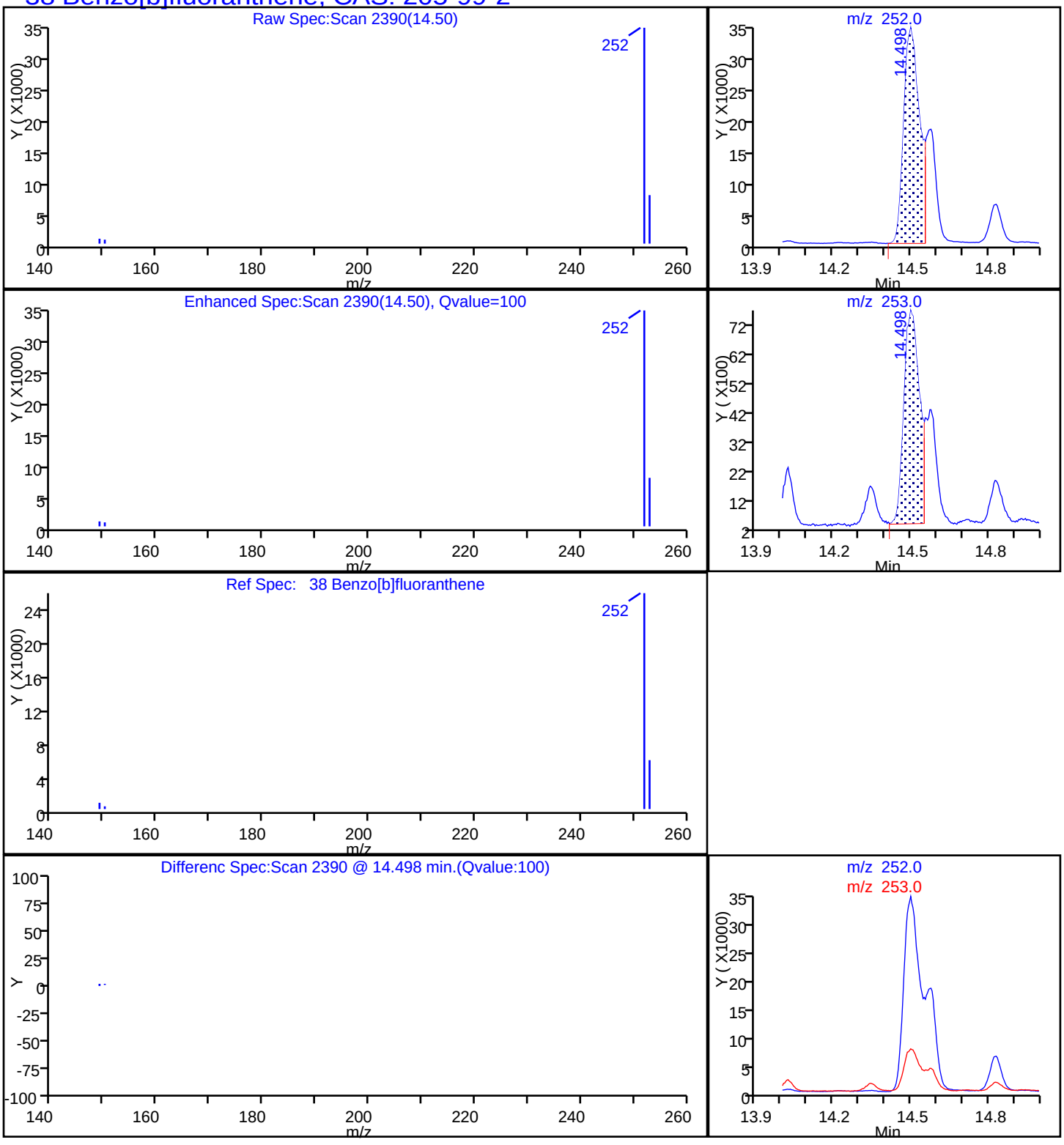
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TestAmerica Denver

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Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Benzo[b]fluoranthene, CAS: 205-99-2



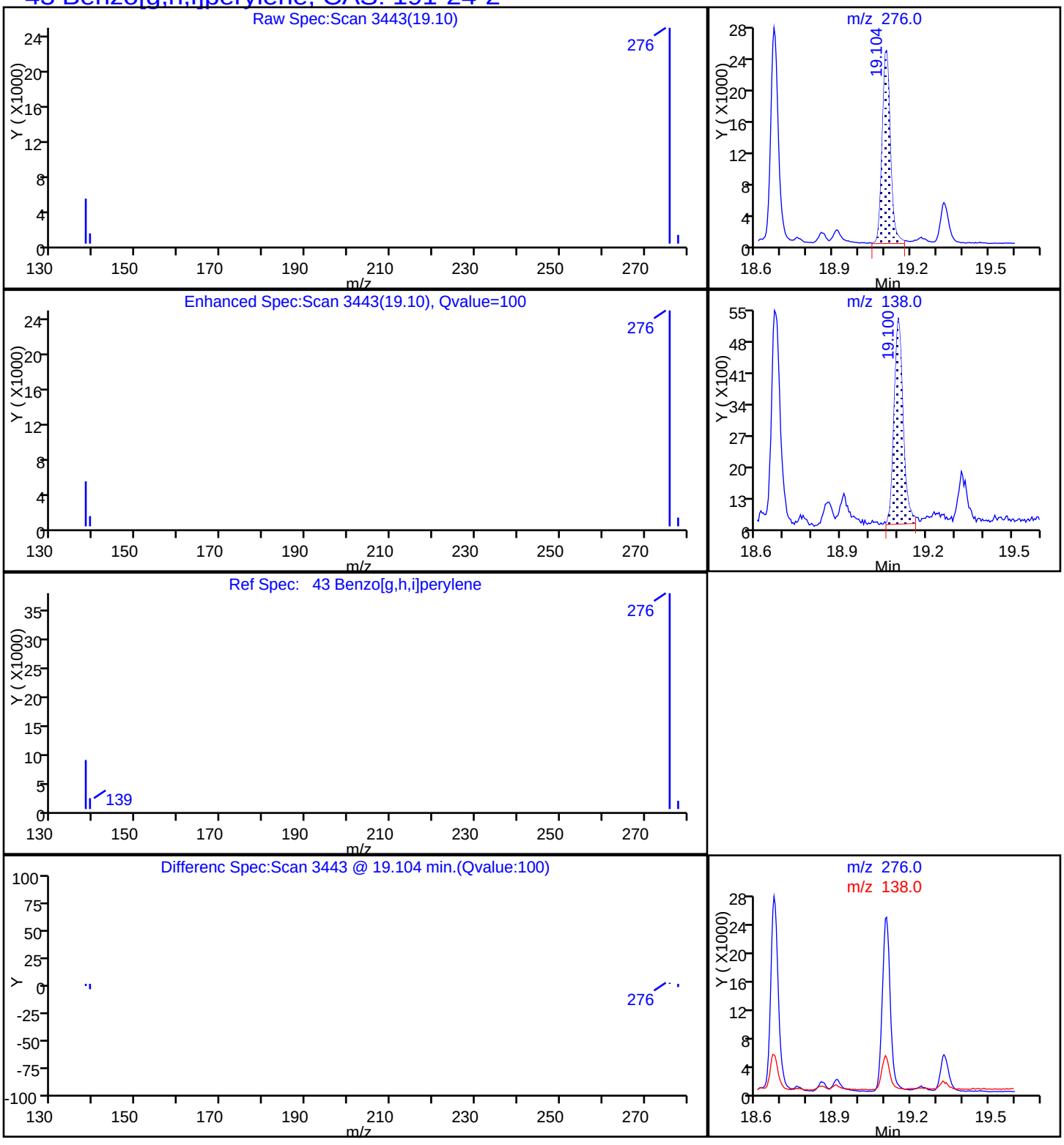
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TestAmerica Denver

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Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

43 Benzo[g,h,i]perylene, CAS: 191-24-2



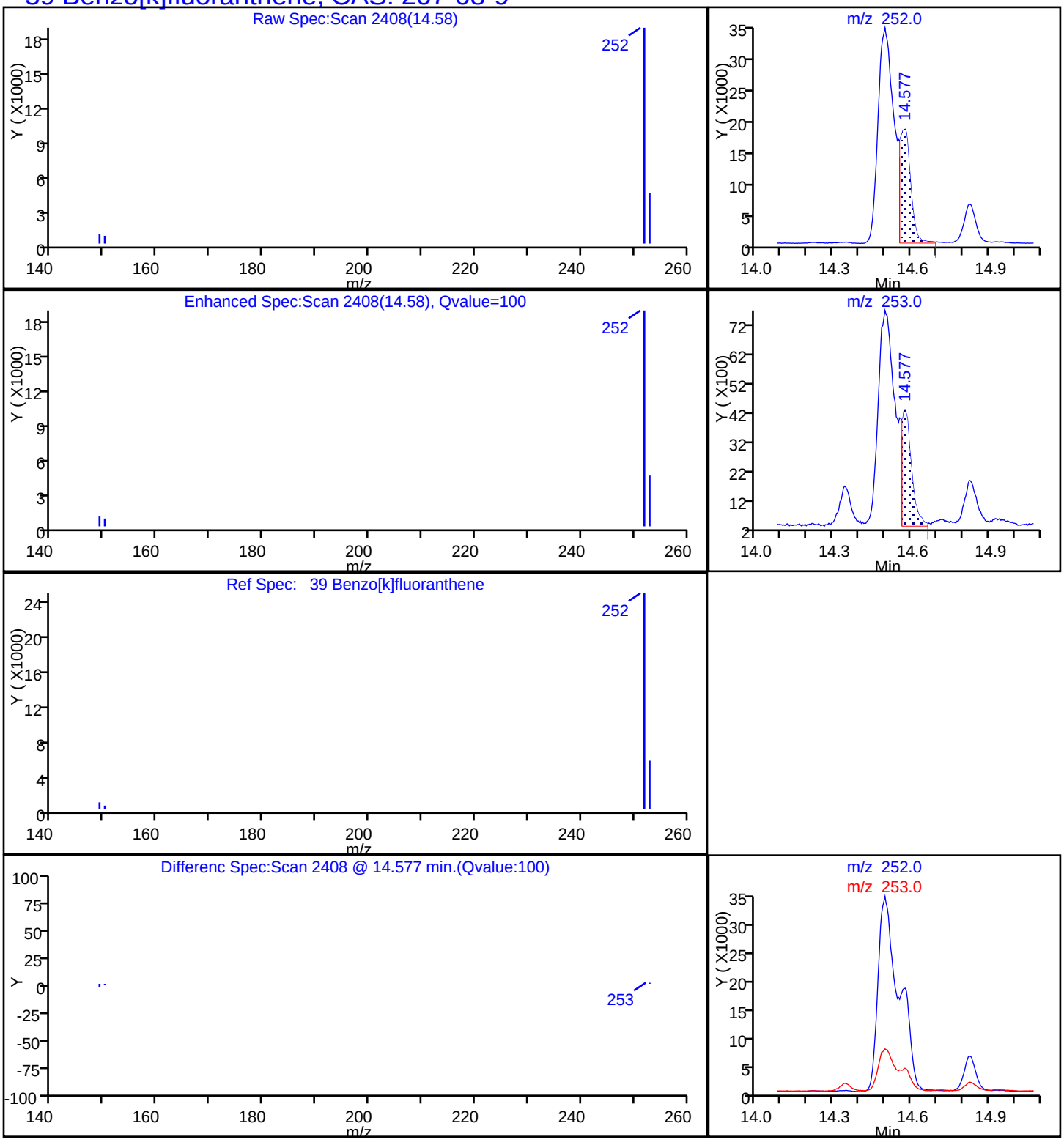
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TestAmerica Denver

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Injection Date:	20-Jun-2017 20:52:30	Instrument ID:	SMS_F		
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Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
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Column:		Detector	MS SCAN		

39 Benzo[k]fluoranthene, CAS: 207-08-9



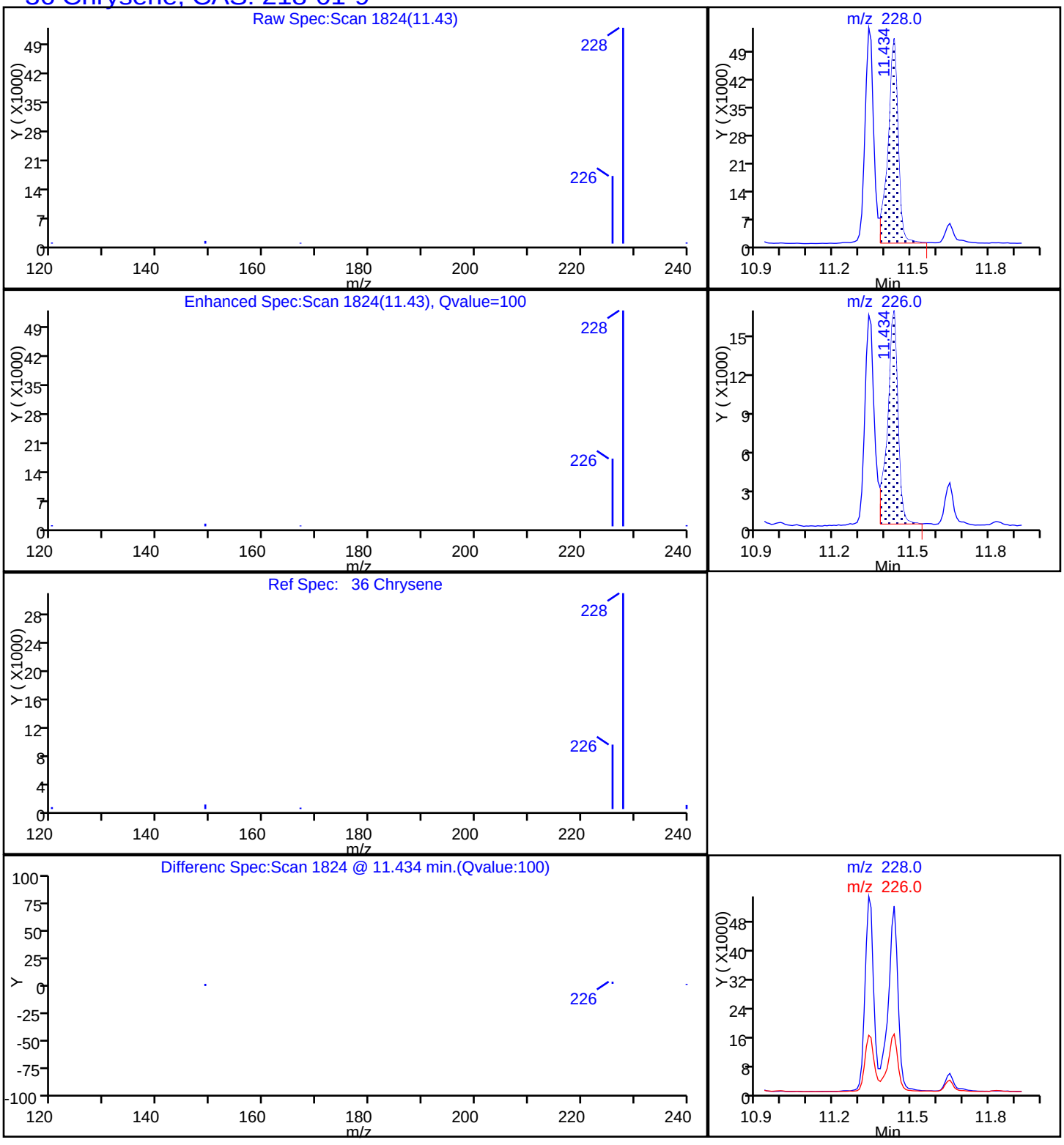
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7316.D

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Client ID:	SS025-SB01(0-2)-a				
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Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
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36 Chrysene, CAS: 218-01-9



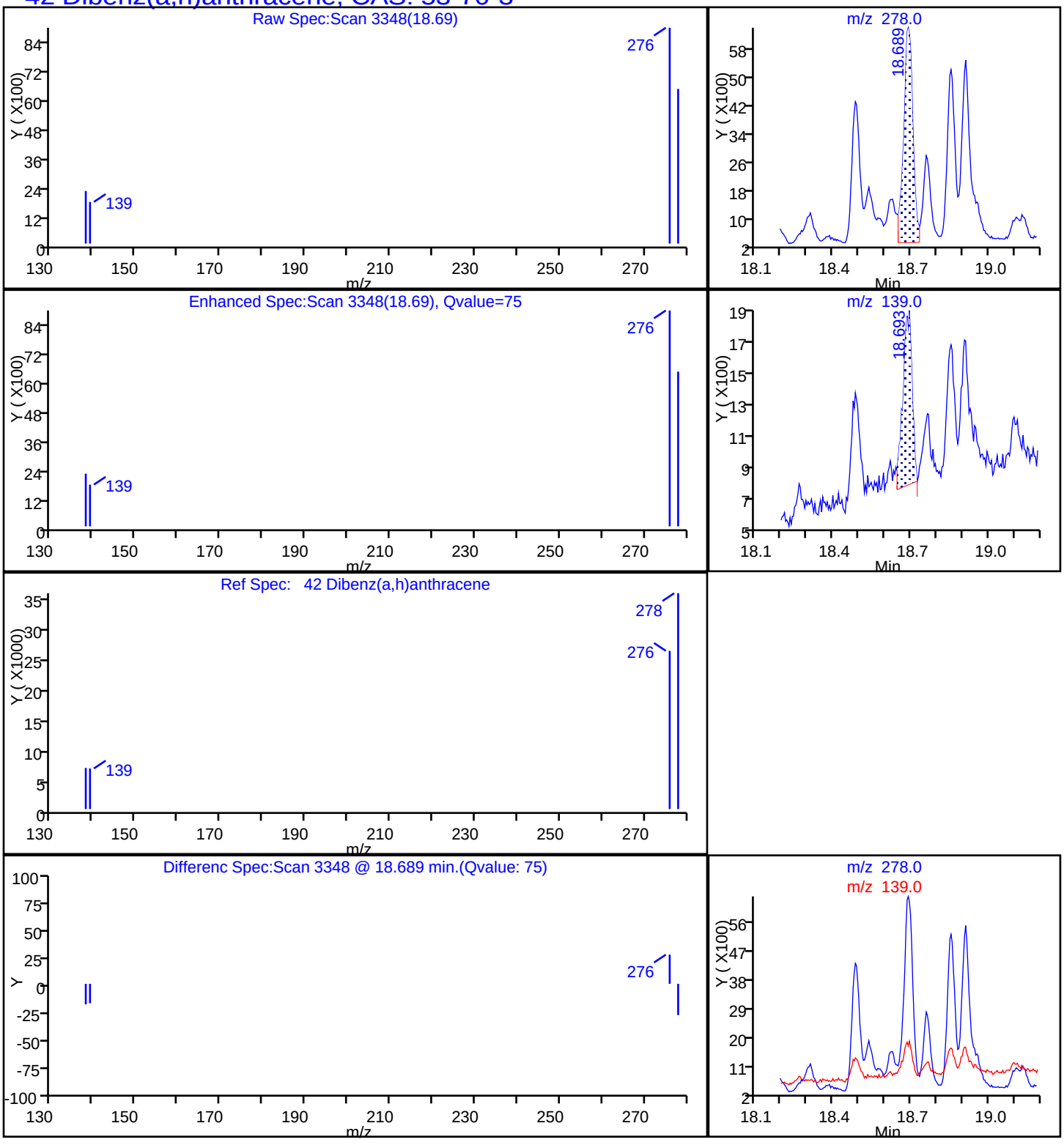
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TestAmerica Denver

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42 Dibenz(a,h)anthracene, CAS: 53-70-3



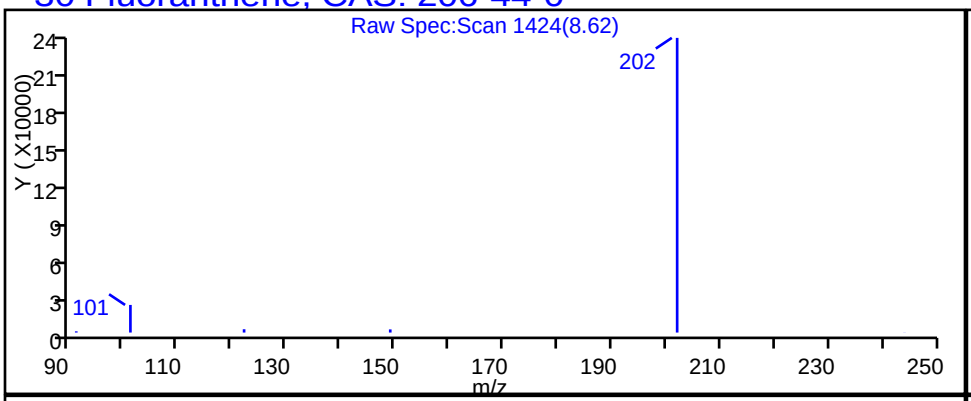
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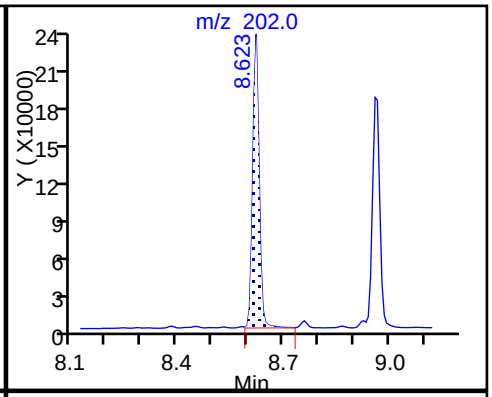
TestAmerica Denver

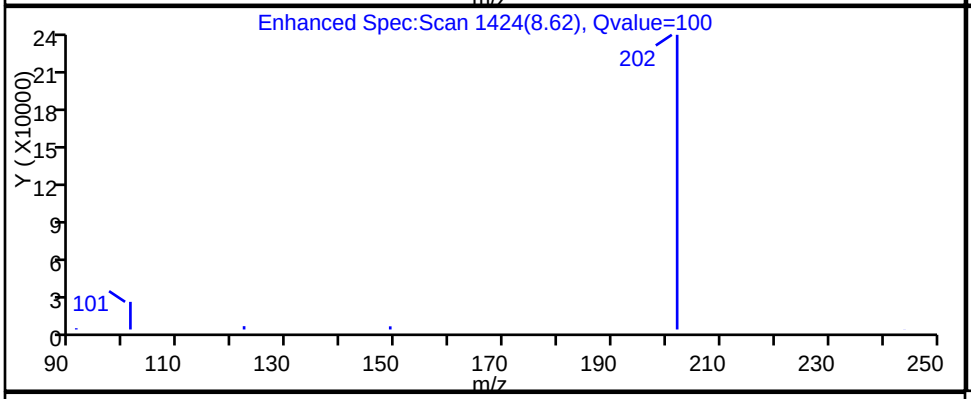
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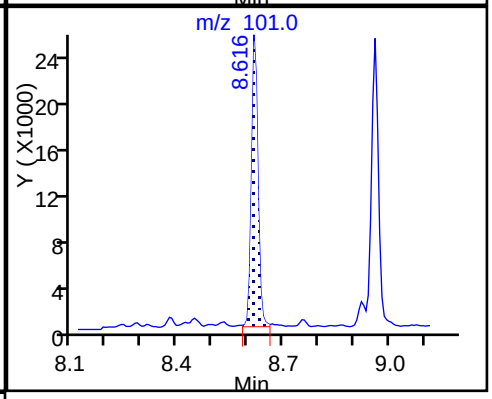
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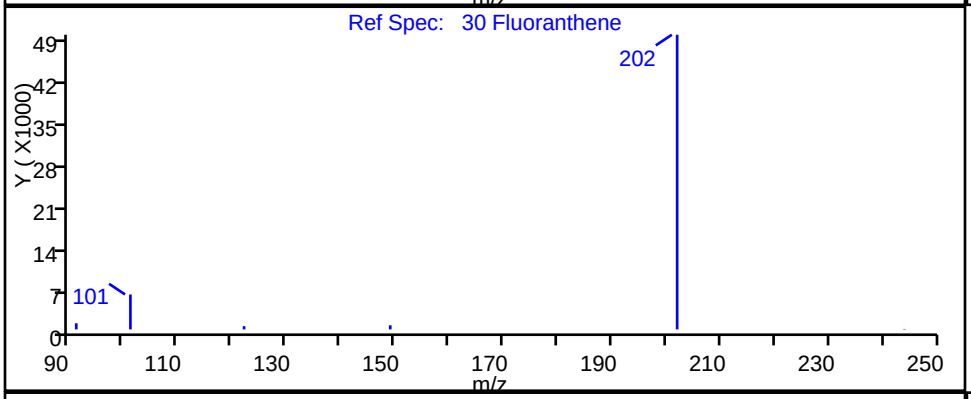
30 Fluoranthene, CAS: 206-44-0

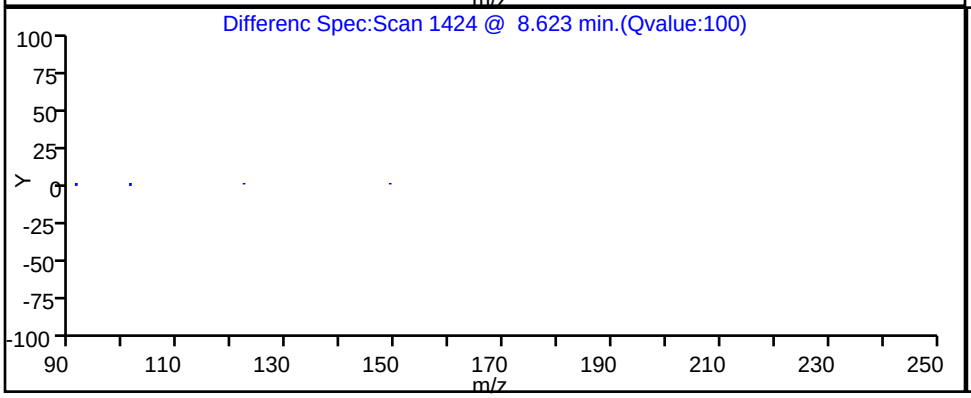


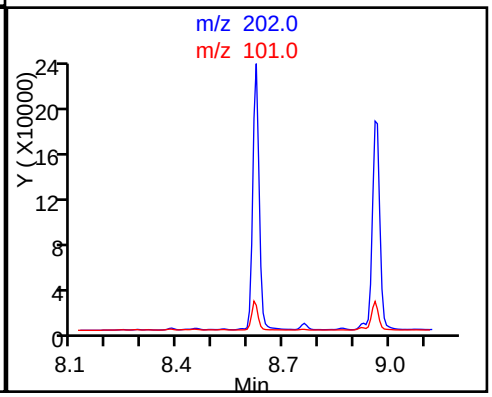












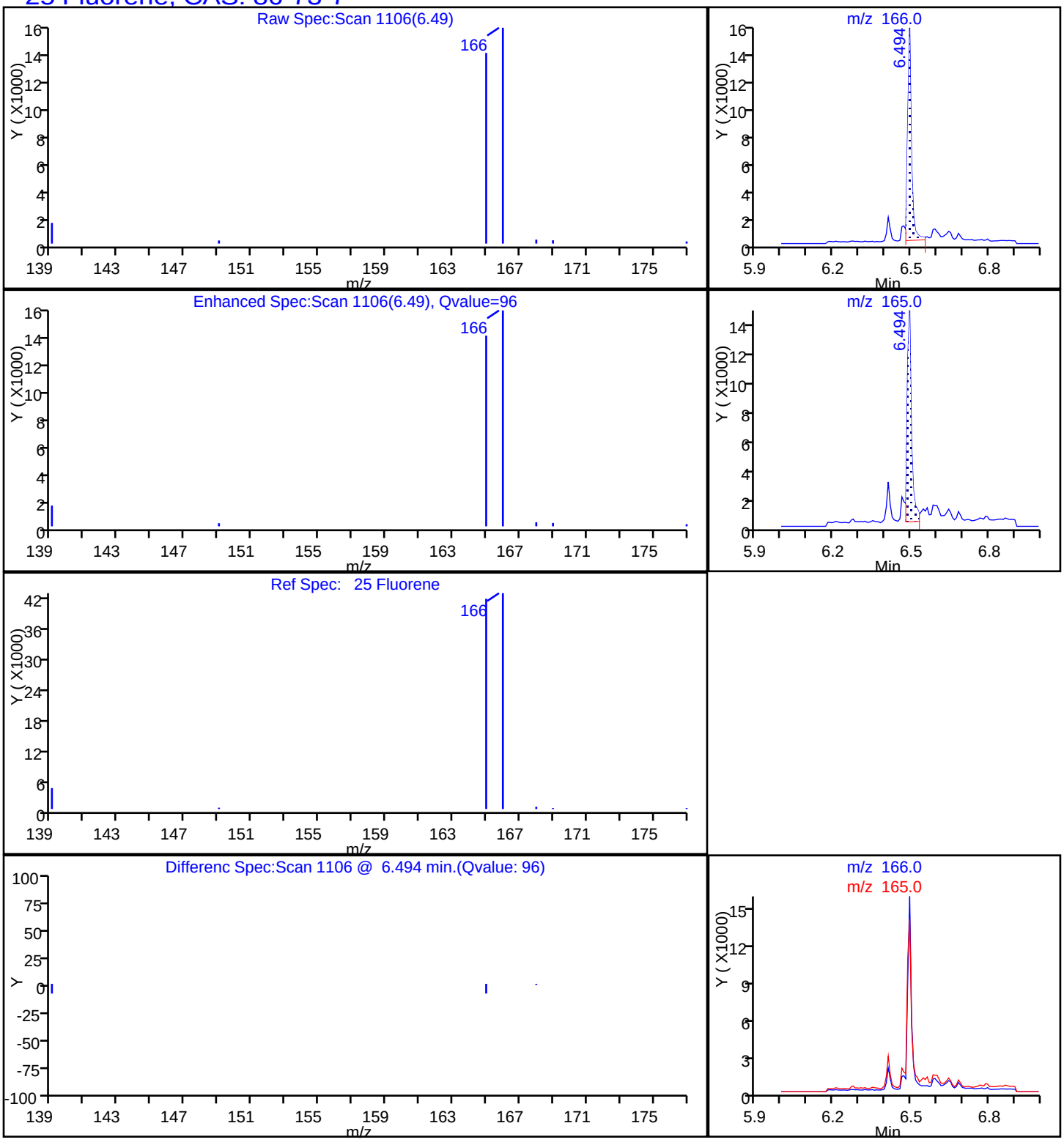
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TestAmerica Denver

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Client ID:	SS025-SB01(0-2)-a				
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Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
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Column:		Detector	MS SCAN		

25 Fluorene, CAS: 86-73-7



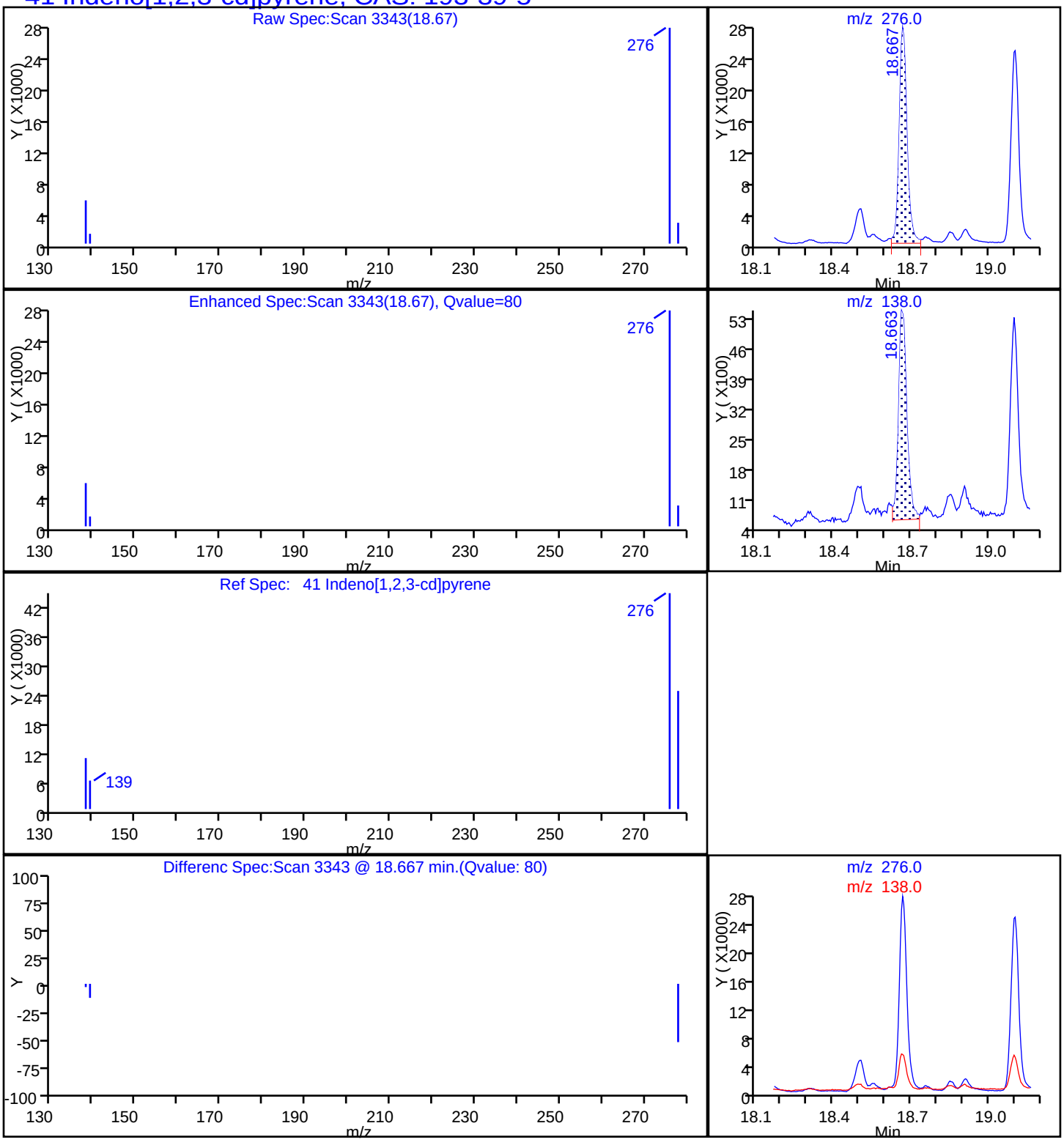
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TestAmerica Denver

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Injection Date:	20-Jun-2017 20:52:30	Instrument ID:	SMS_F		
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Client ID:	SS025-SB01(0-2)-a				
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Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



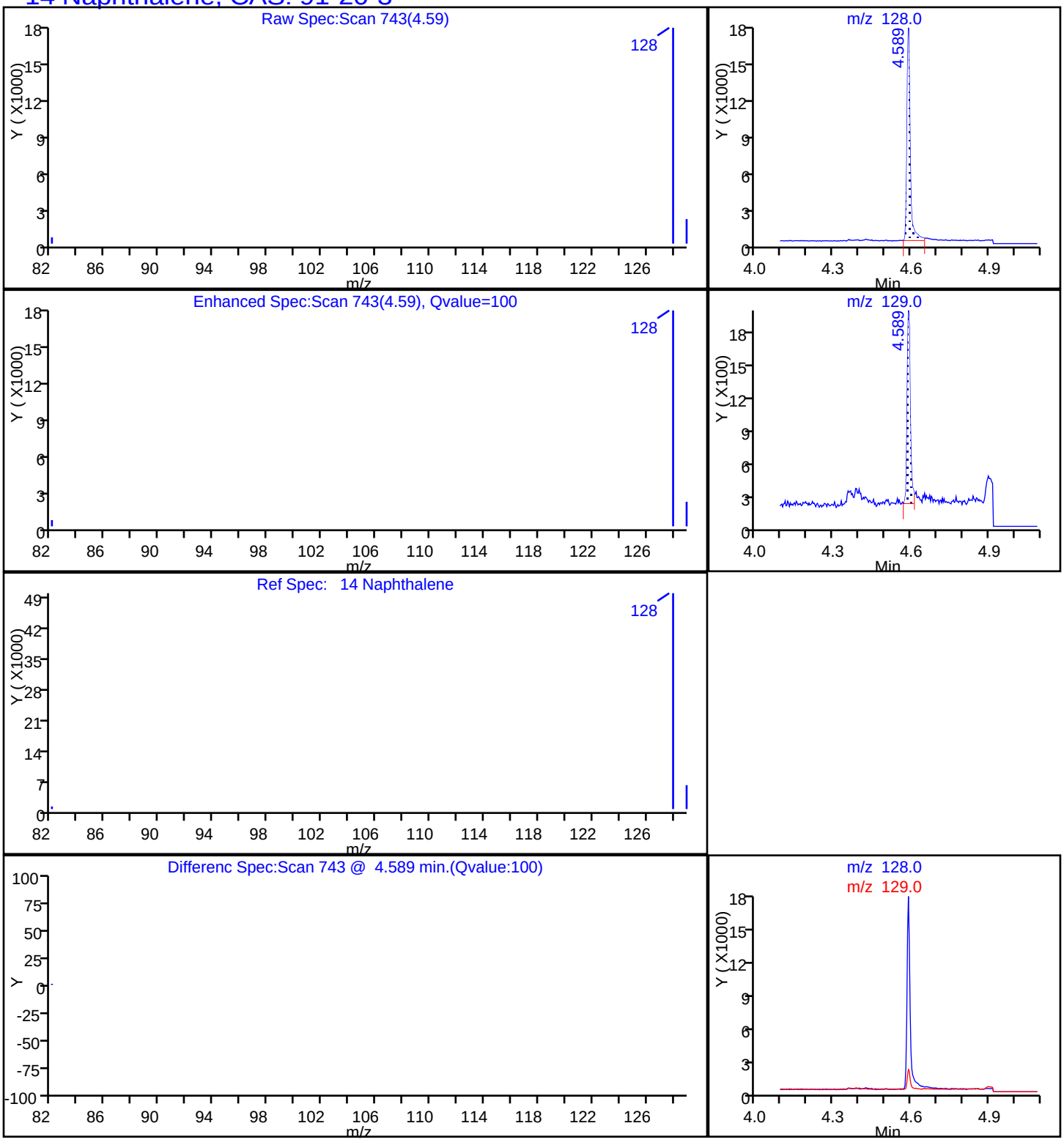
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TestAmerica Denver

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Client ID:	SS025-SB01(0-2)-a				
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Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
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Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3



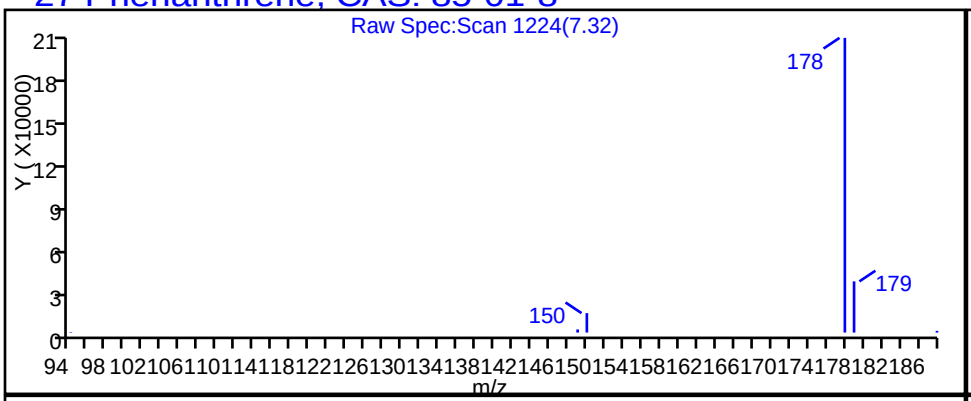
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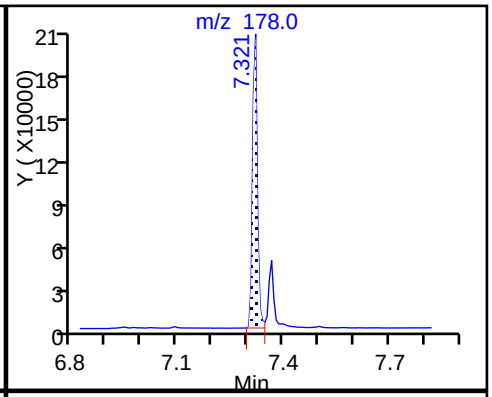
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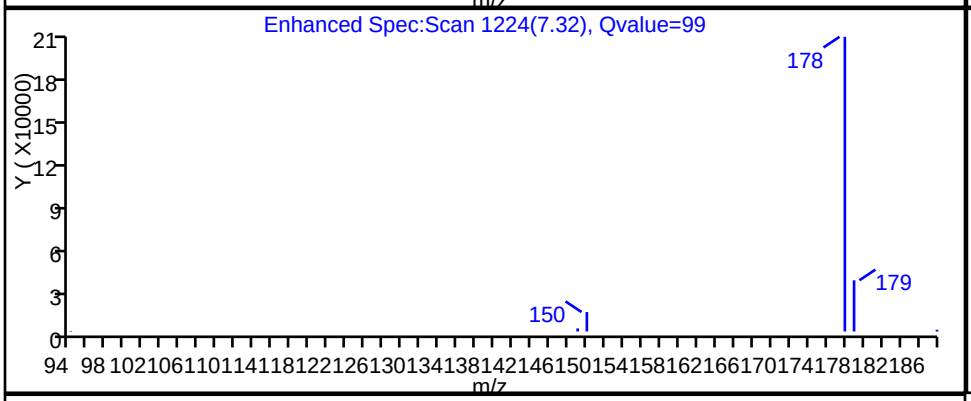
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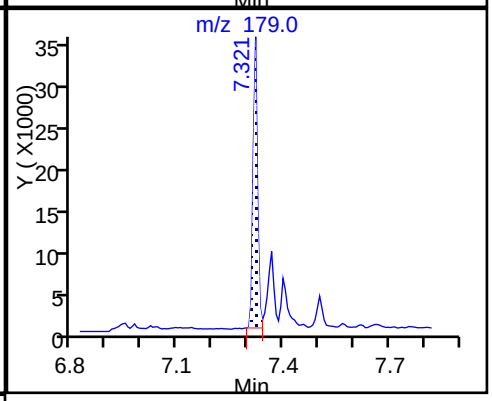
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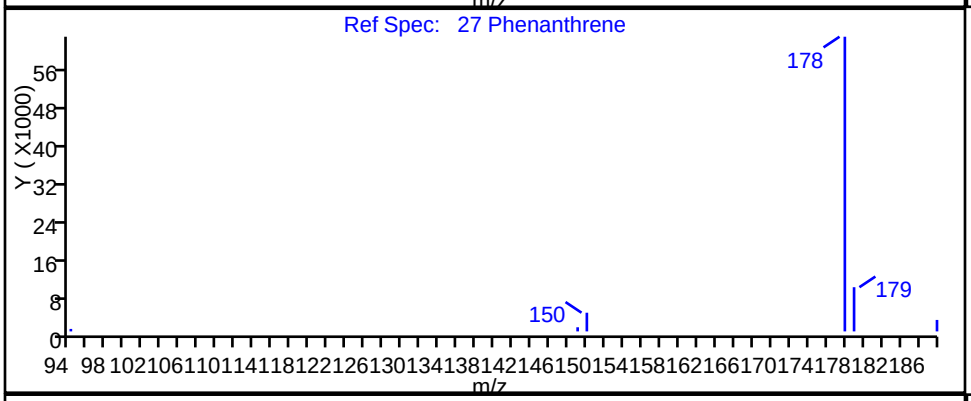
27 Phenanthrene, CAS: 85-01-8

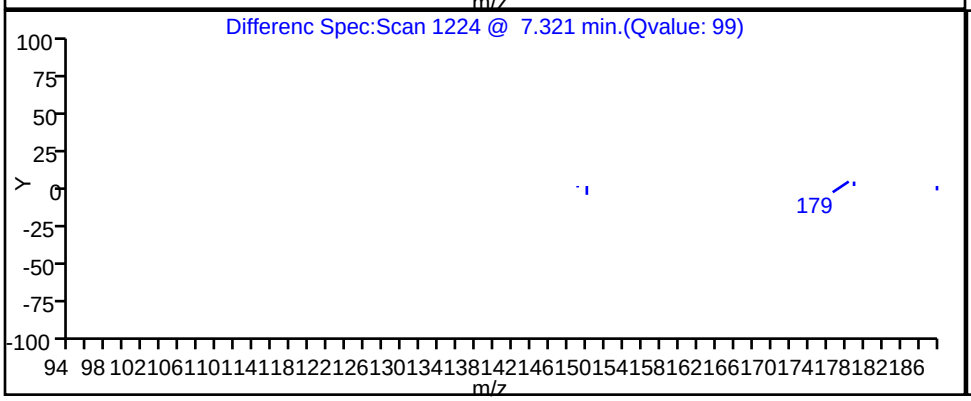


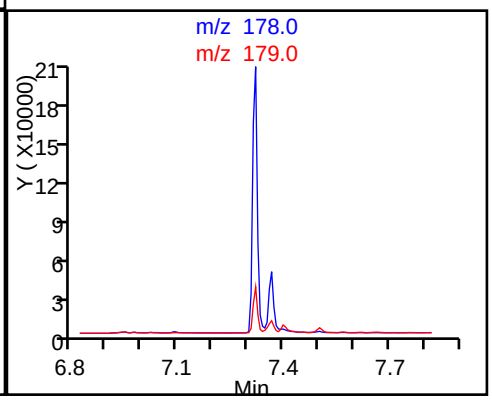












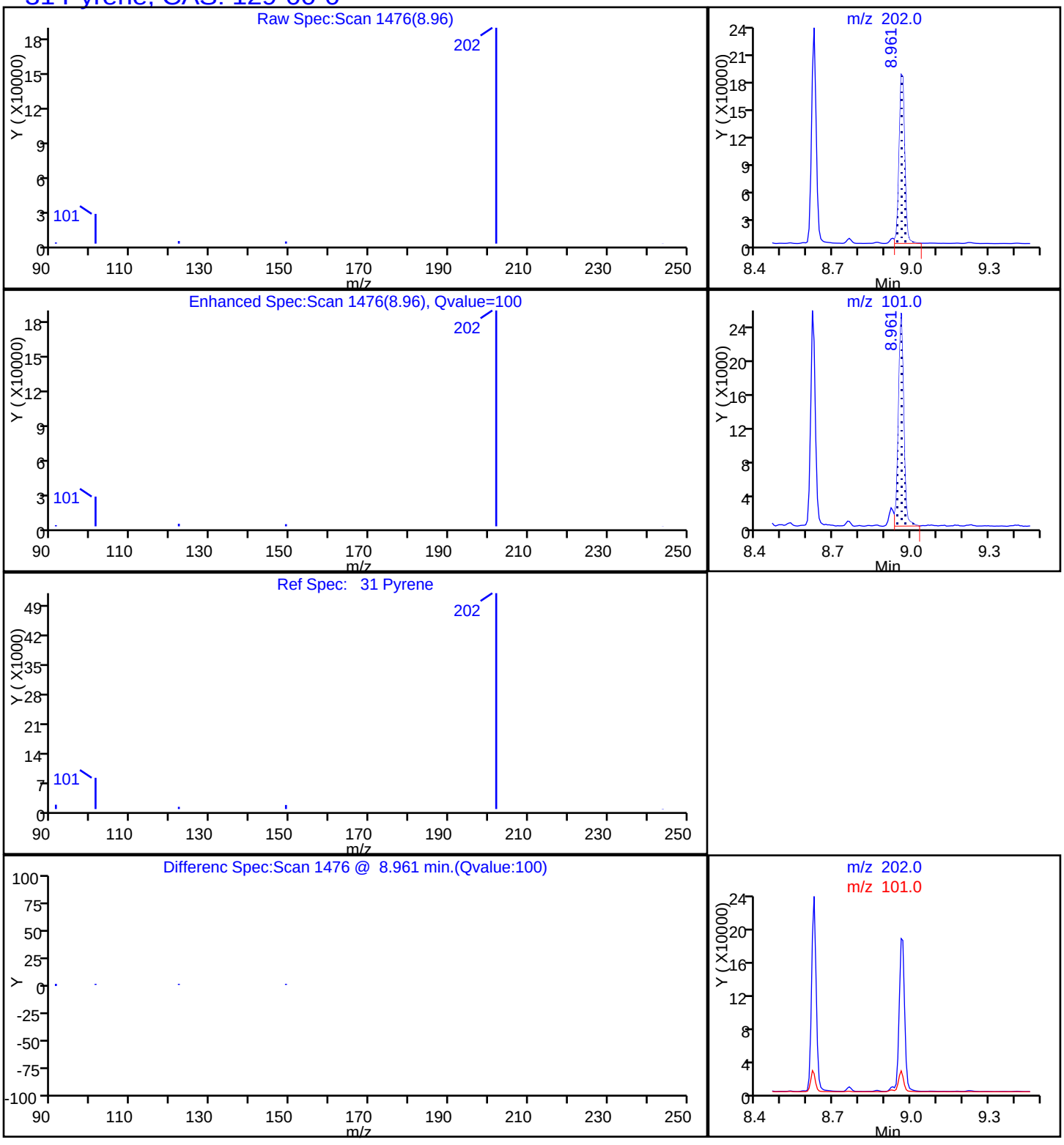
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7316.D

Injection Date:	20-Jun-2017 20:52:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-9-B	Lab Sample ID:	280-97928-9		
Client ID:	SS025-SB01(0-2)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Pyrene, CAS: 129-00-0



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB08(0-2) | Lab Sample ID: 280-97928-10

Matrix: Solid | Lab File ID: F7281.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 11:05

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 32.4(g) | Date Analyzed: 06/16/2017 20:48

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 10.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.50	J	5.2	0.52	0.27
91-57-6	2-Methylnaphthalene	0.88	J	5.2	0.69	0.32
83-32-9	Acenaphthene	0.64	J	5.2	0.28	0.16
208-96-8	Acenaphthylene	2.9	J M	5.2	0.69	0.18
120-12-7	Anthracene	1.5	J	5.2	2.6	0.74
56-55-3	Benzo[a]anthracene	3.7	J	5.2	2.6	0.93
50-32-8	Benzo[a]pyrene	3.8	J	5.2	2.6	0.76
205-99-2	Benzo[b]fluoranthene	6.6		5.2	2.6	1.2
191-24-2	Benzo[g,h,i]perylene	2.7	J	5.2	2.6	1.1
207-08-9	Benzo[k]fluoranthene	1.6	J	5.2	2.6	1.0
218-01-9	Chrysene	5.3		5.2	2.6	1.0
53-70-3	Dibenz(a,h)anthracene	2.6	U	5.2	2.6	1.3
206-44-0	Fluoranthene	7.4		5.2	2.6	1.0
86-73-7	Fluorene	1.1	J	5.2	0.69	0.48
193-39-5	Indeno[1,2,3-cd]pyrene	2.6	U	5.2	2.6	1.1
91-20-3	Naphthalene	0.56	J	5.2	0.69	0.34
85-01-8	Phenanthrene	4.1	J	5.2	2.6	1.1
129-00-0	Pyrene	7.0		5.2	2.6	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	81		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	82		44-125
1718-51-0	Terphenyl-d14 (Surr)	69		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7281.D
Lims ID: 280-97928-A-10-B
Client ID: SS025-SB08(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 20:48:30 ALS Bottle#: 14 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-a-10-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:23:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	96	24555	600.0	
* 2 Phenanthrene-d10	188	7.295	7.301	-0.006	100	44540	600.0	
* 3 Chrysene-d12	240	11.362	11.371	-0.009	95	37017	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	15735	409.1	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	100	25858	406.1	
$ 6 Terphenyl-d14	244	9.124	9.130	-0.006	97	15635	345.7	
14 Naphthalene	128	4.589	4.589	0.000	94	1307	16.4	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	100	1317	25.7	
17 1-Methylnaphthalene	142	5.234	5.235	-0.001	90	739	14.4	
22 Acenaphthylene	152	5.917	5.917	0.000	97	7045	83.2	M
23 Acenaphthene	153	6.055	6.055	0.000	84	959	18.5	
25 Fluorene	166	6.487	6.494	-0.007	87	2085	32.8	
27 Phenanthrene	178	7.314	7.321	-0.007	98	11250	119.1	
28 Anthracene	178	7.360	7.366	-0.006	90	4100	43.0	
30 Fluoranthene	202	8.623	8.629	-0.007	100	23447	216.1	
31 Pyrene	202	8.968	8.968	0.000	99	22899	203.5	
35 Benzo[a]anthracene	228	11.335	11.344	-0.009	88	10679	108.5	
36 Chrysene	228	11.434	11.443	-0.009	97	14144	155.3	
38 Benzo[b]fluoranthene	252	14.489	14.503	-0.014	92	17172	192.1	
39 Benzo[k]fluoranthene	252	14.568	14.586	-0.018	67	4262	47.4	
40 Benzo[a]pyrene	252	15.565	15.587	-0.022	87	9805	111.2	
41 Indeno[1,2,3-cd]pyrene	276		18.676				ND	
42 Dibenz(a,h)anthracene	278		18.702				ND	
43 Benzo[g,h,i]perylene	276	19.100	19.109	-0.009	79	6593	77.7	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

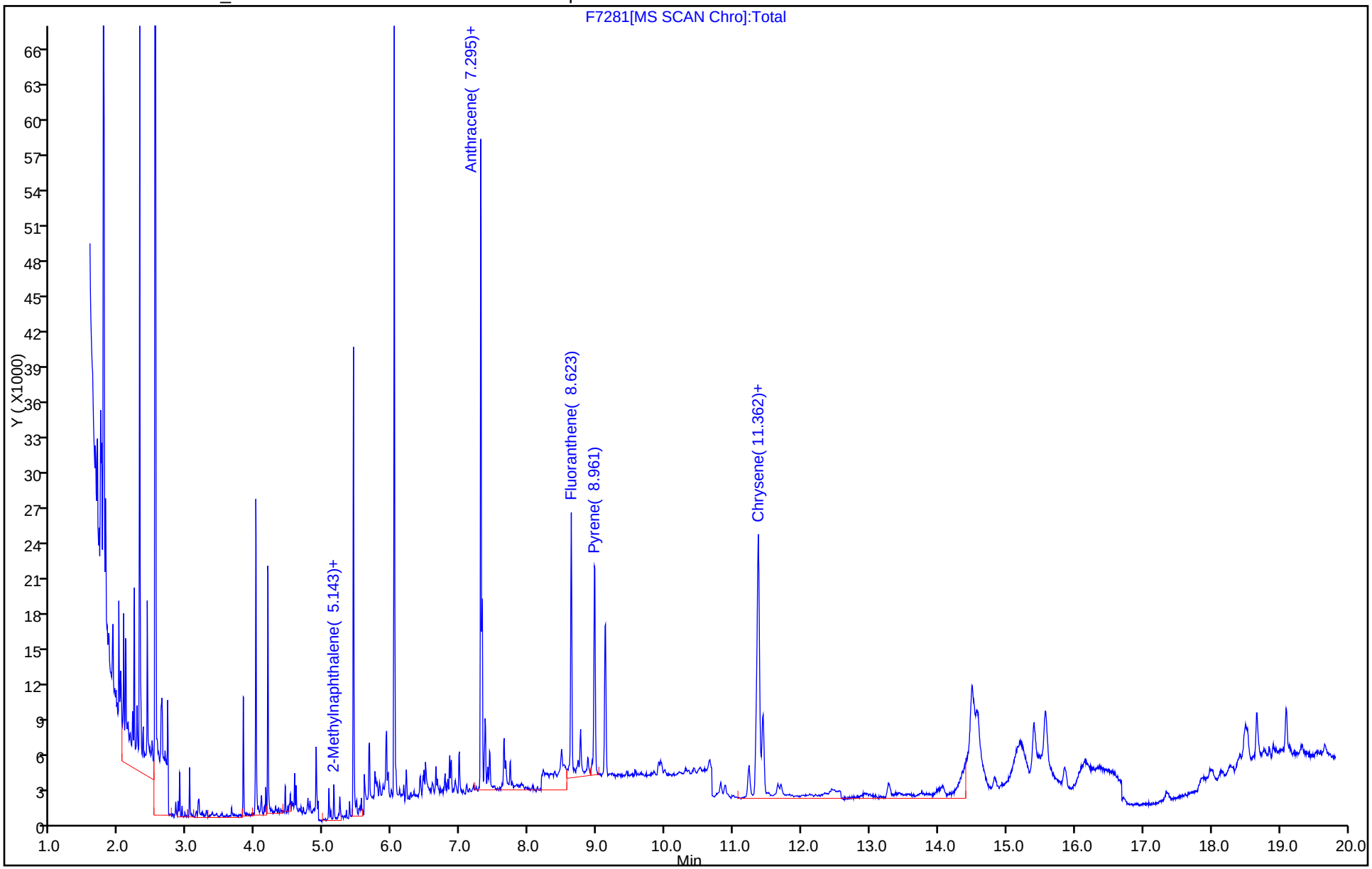
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:18 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7281.D

Injection Date:	16-Jun-2017 20:48:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-A-10-B	Lab Sample ID:	280-97928-10	Worklist Smp#:	15
Client ID:	SS025-SB08(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7281.D
Lims ID: 280-97928-A-10-B
Client ID: SS025-SB08(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 20:48:30 ALS Bottle#: 14 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-a-10-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:23:10

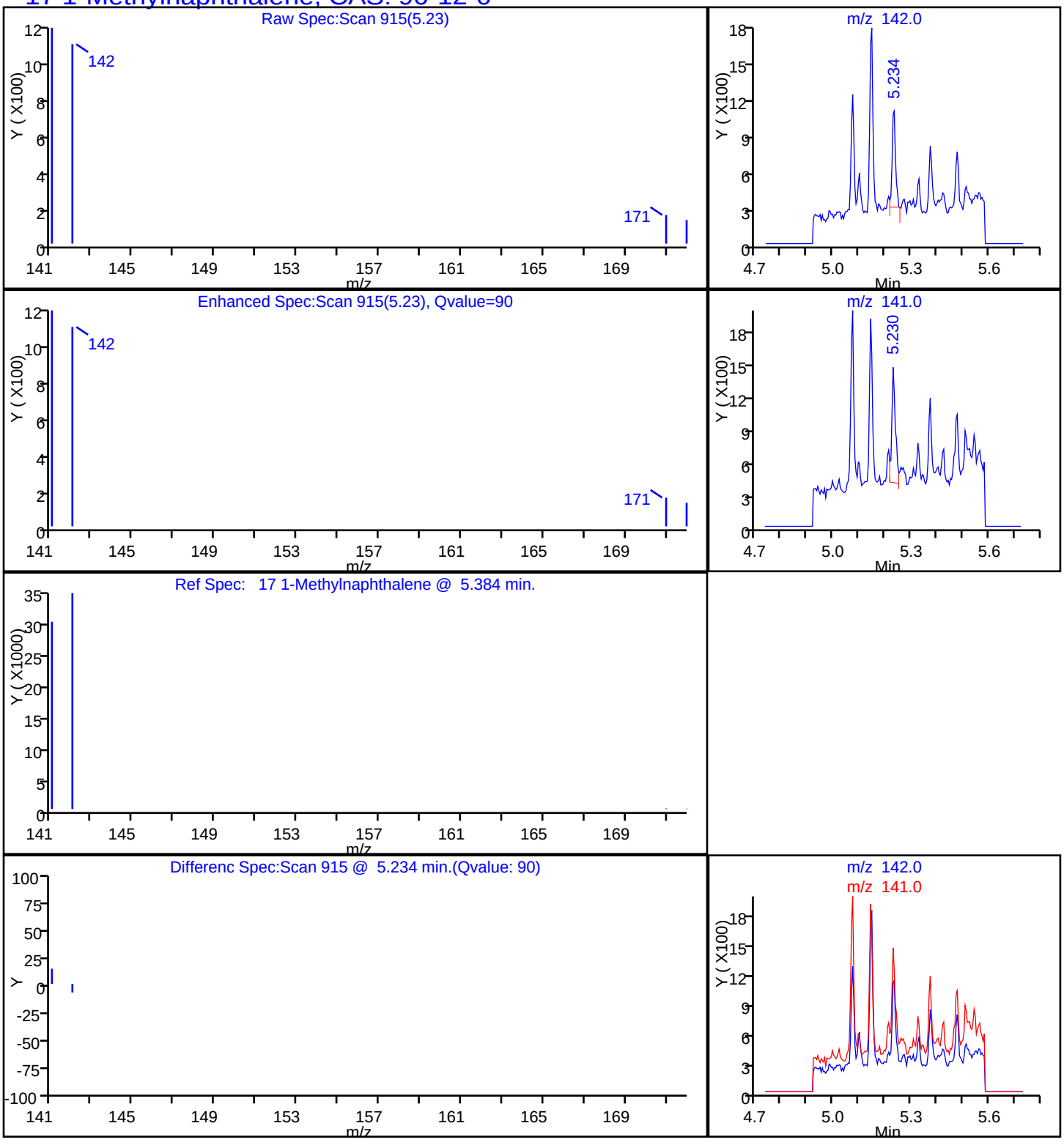
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	409.1	81.82
$ 5 2-Fluorobiphenyl	500.0	406.1	81.23
$ 6 Terphenyl-d14	500.0	345.7	69.15

Report Date: 19-Jun-2017 15:44:18 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7281.D				
Injection Date:	16-Jun-2017 20:48:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-10-B	Lab Sample ID:	280-97928-10		
Client ID:	SS025-SB08(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0

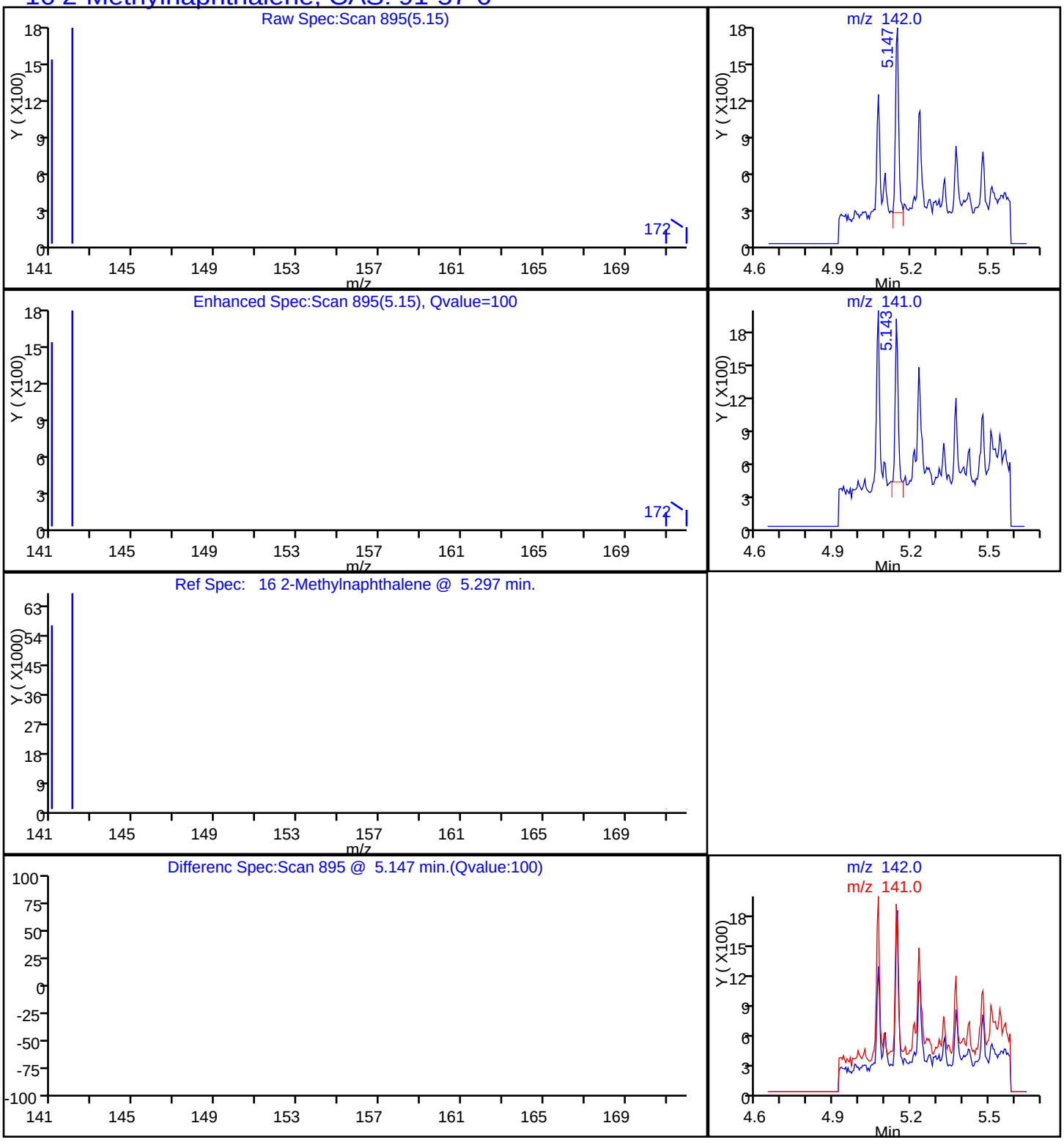


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TestAmerica Denver

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Injection Date:	16-Jun-2017 20:48:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-10-B	Lab Sample ID:	280-97928-10		
Client ID:	SS025-SB08(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



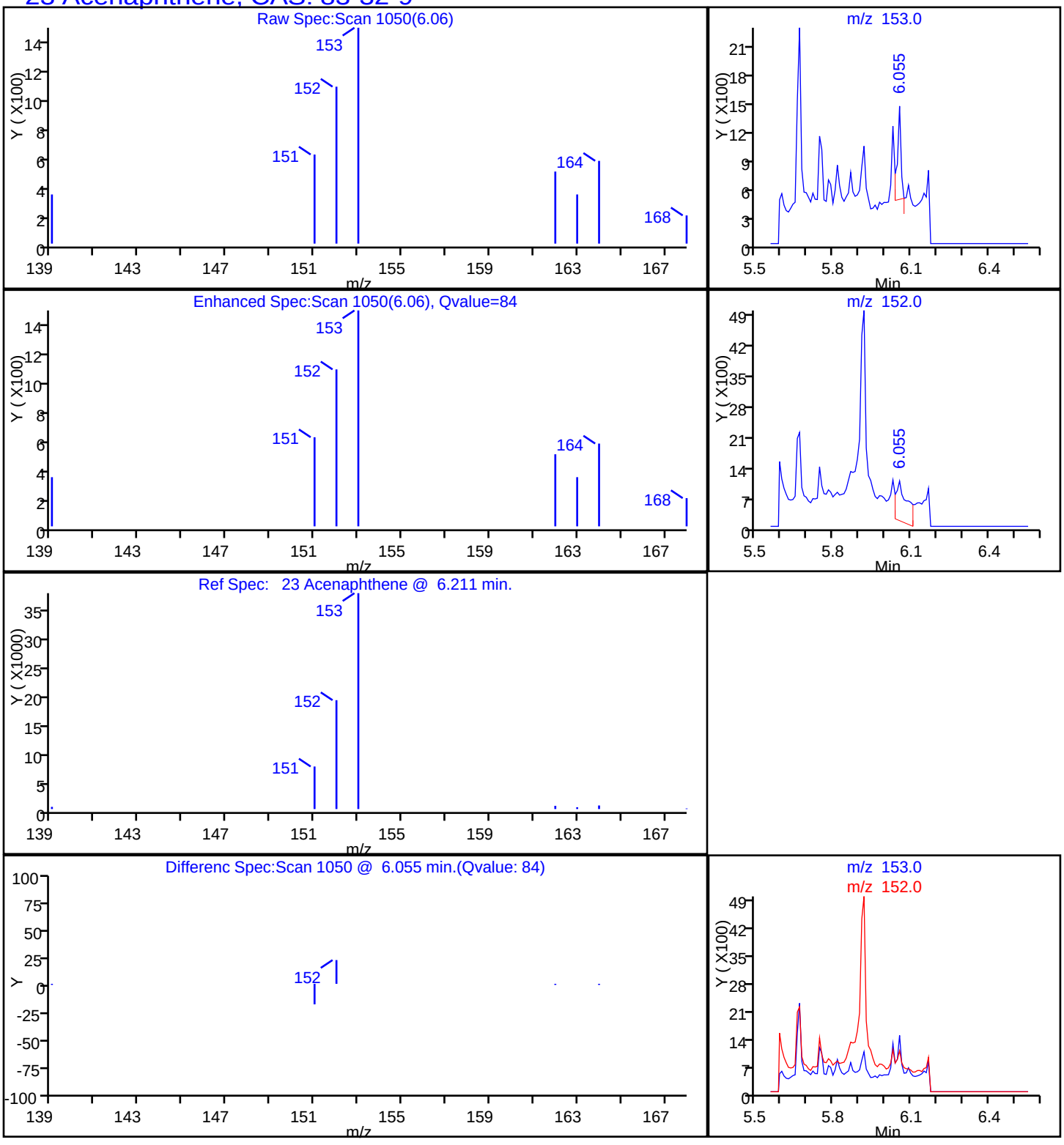
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7281.D

Injection Date:	16-Jun-2017 20:48:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-10-B	Lab Sample ID:	280-97928-10		
Client ID:	SS025-SB08(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9



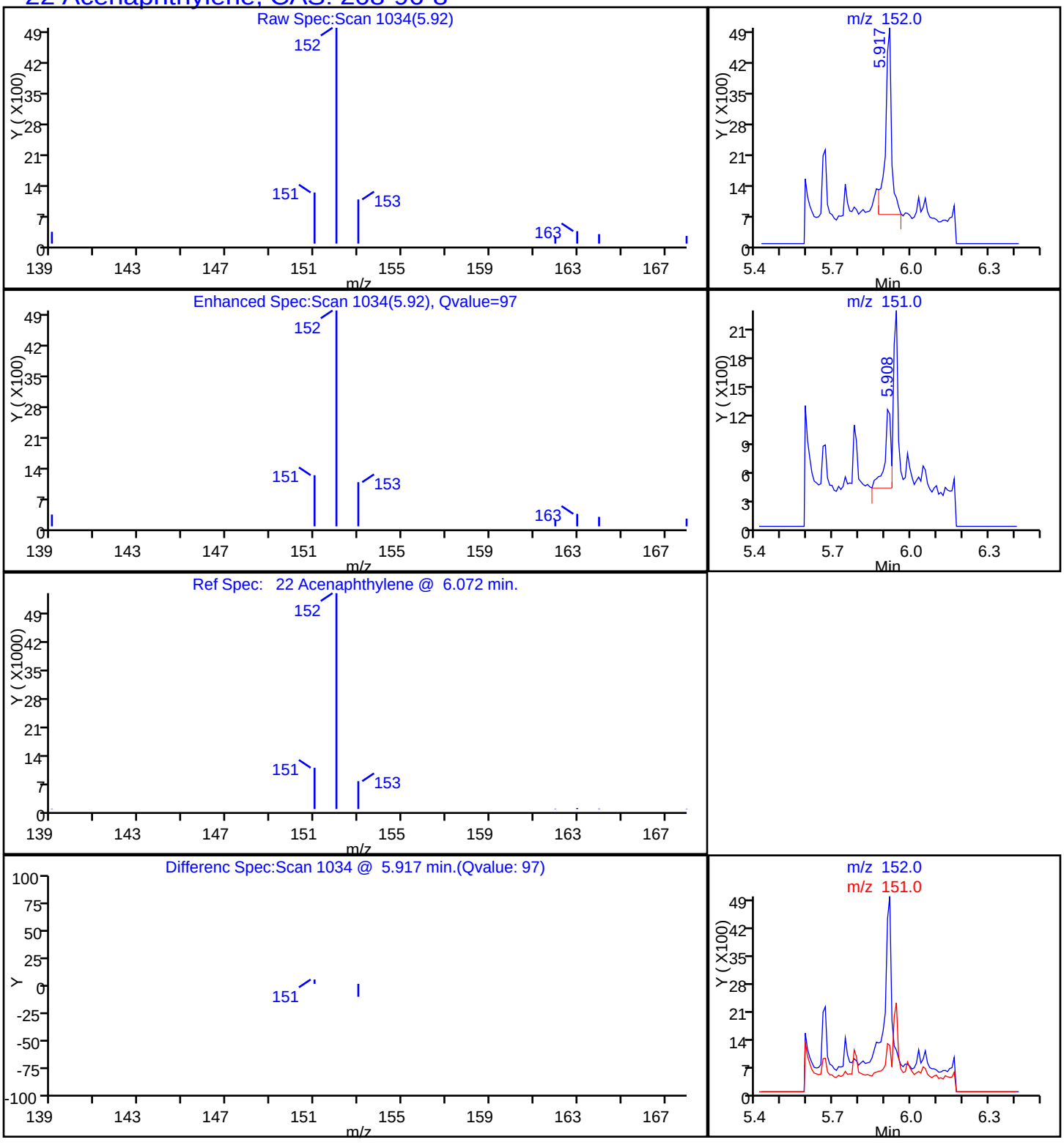
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7281.D

Injection Date:	16-Jun-2017 20:48:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-10-B	Lab Sample ID:	280-97928-10		
Client ID:	SS025-SB08(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Acenaphthylene, CAS: 208-96-8

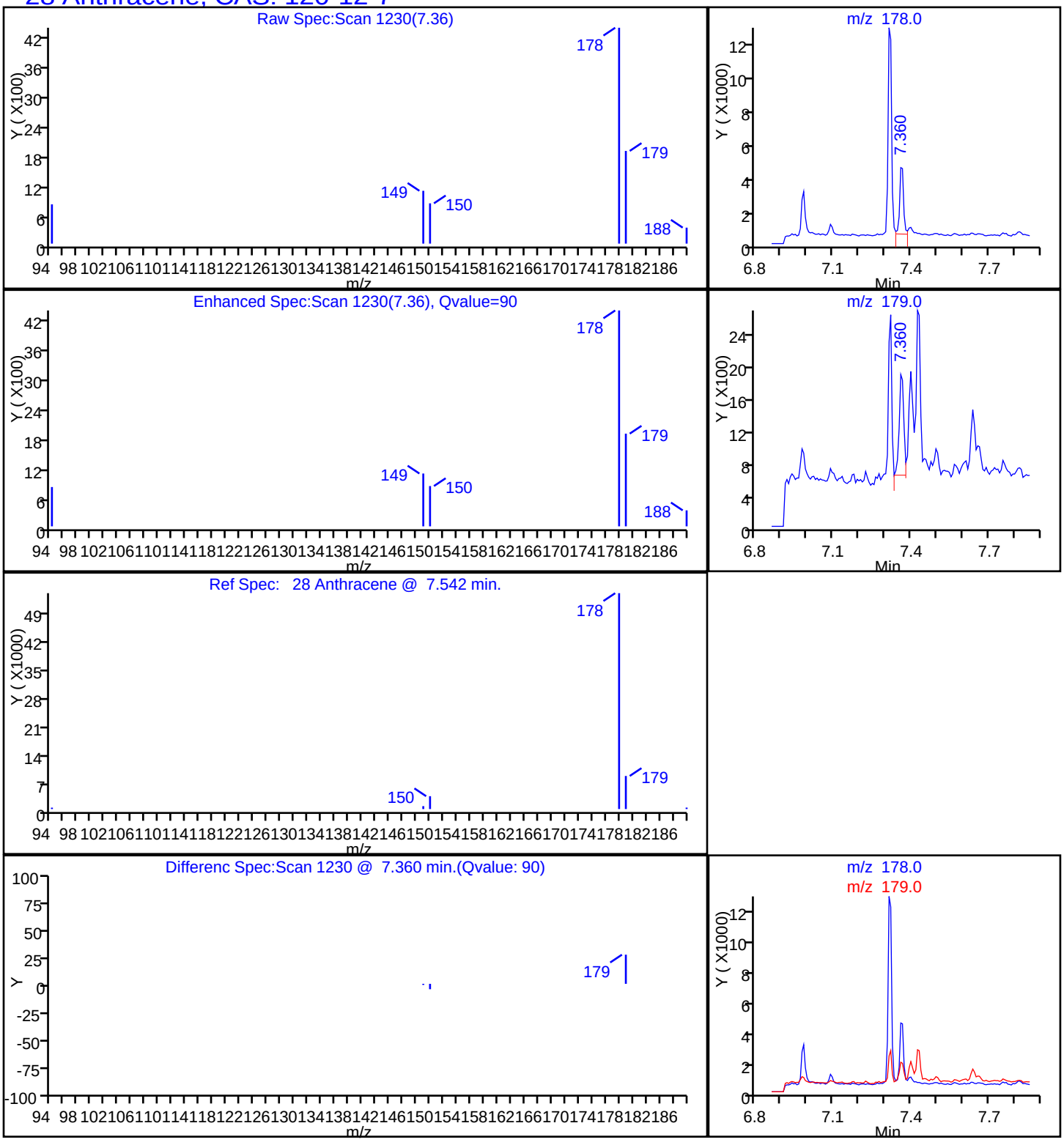


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TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7281.D				
Injection Date:	16-Jun-2017 20:48:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-10-B	Lab Sample ID:	280-97928-10		
Client ID:	SS025-SB08(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

28 Anthracene, CAS: 120-12-7

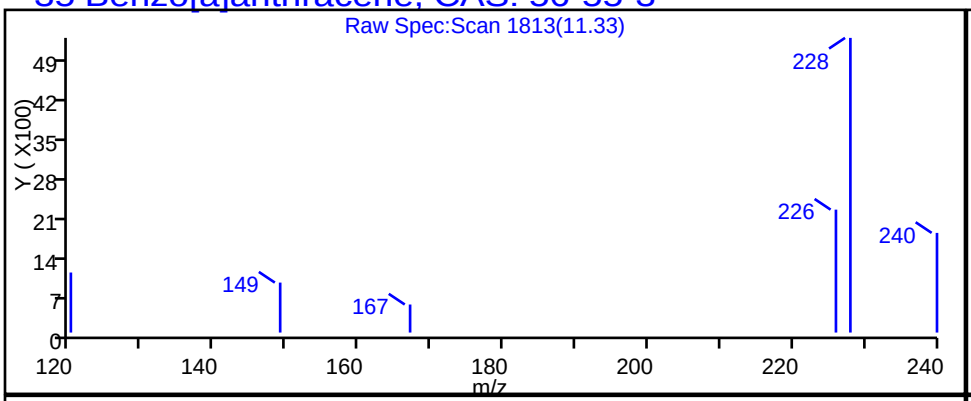


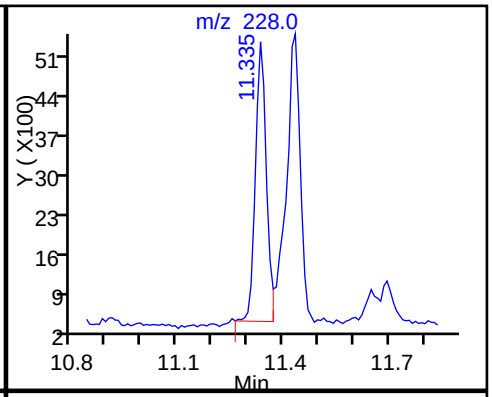
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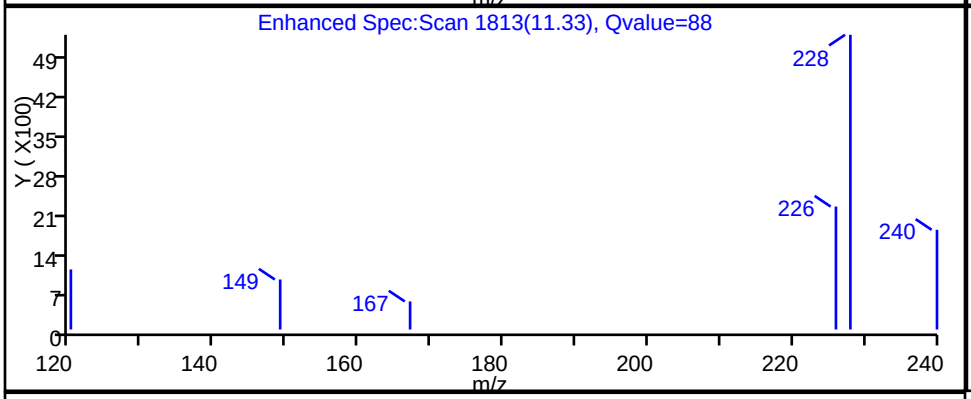
TestAmerica Denver

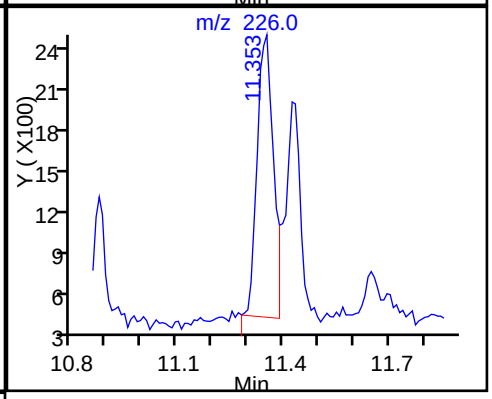
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Injection Date:	16-Jun-2017 20:48:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-10-B	Lab Sample ID:	280-97928-10		
Client ID:	SS025-SB08(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

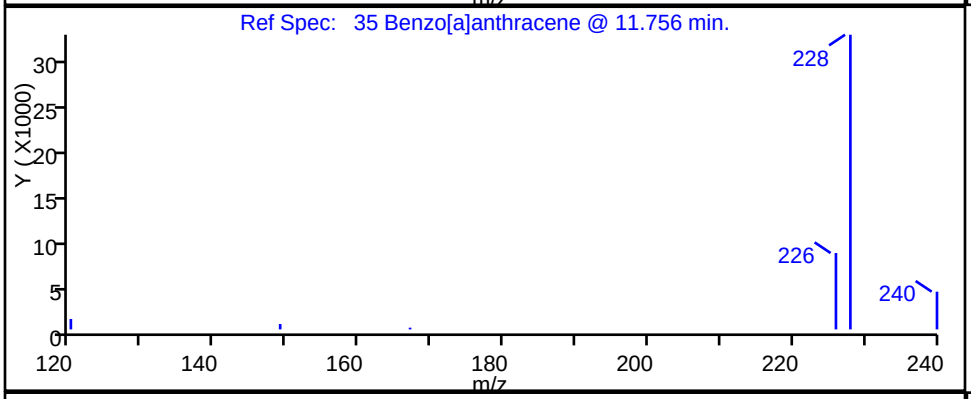
35 Benzo[a]anthracene, CAS: 56-55-3

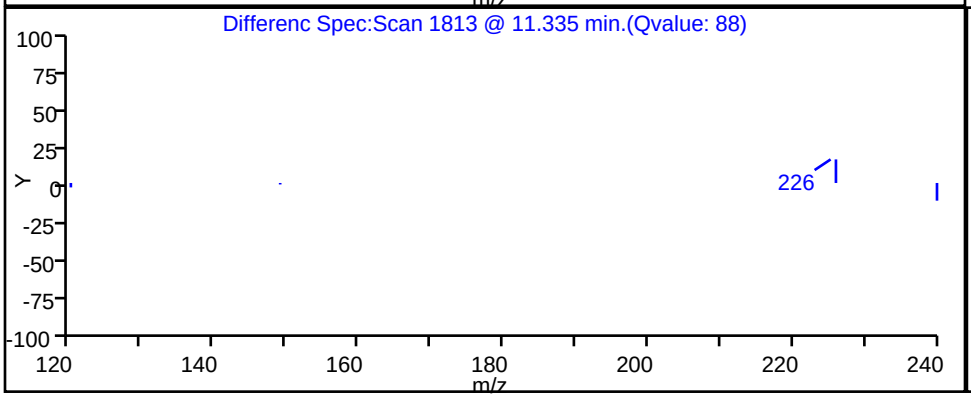


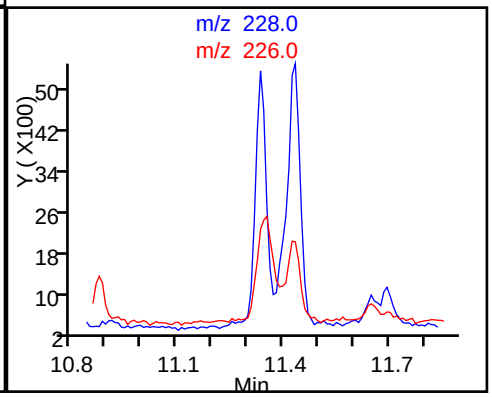












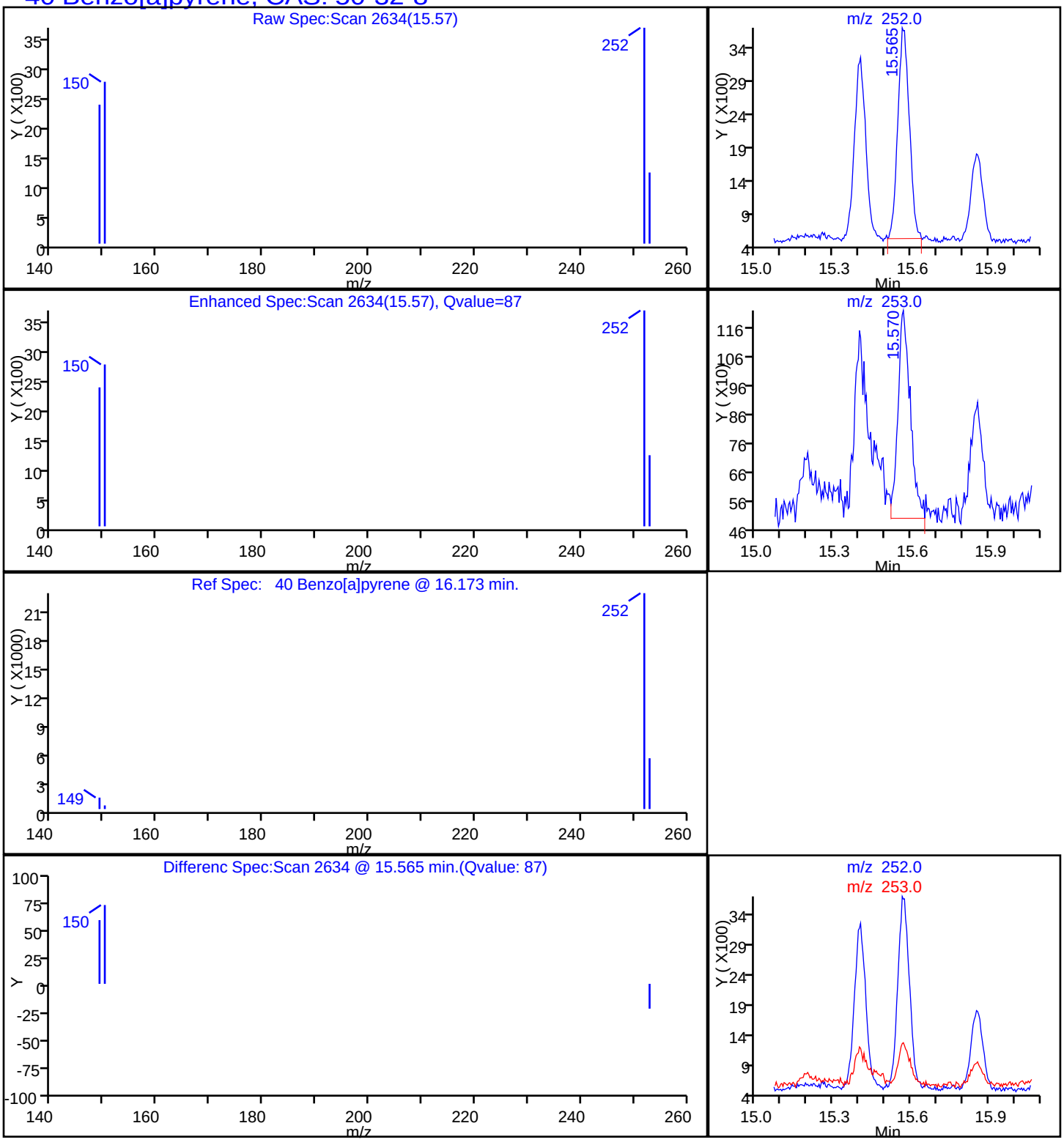
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7281.D

Injection Date:	16-Jun-2017 20:48:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-10-B	Lab Sample ID:	280-97928-10		
Client ID:	SS025-SB08(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

40 Benzo[a]pyrene, CAS: 50-32-8

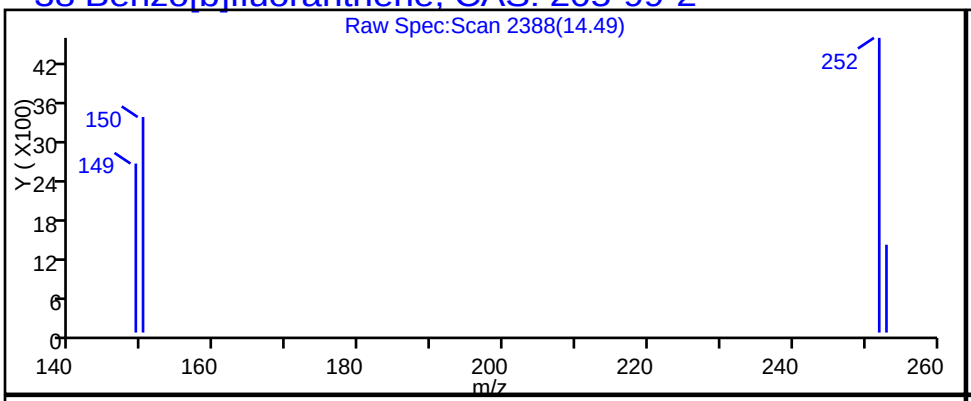


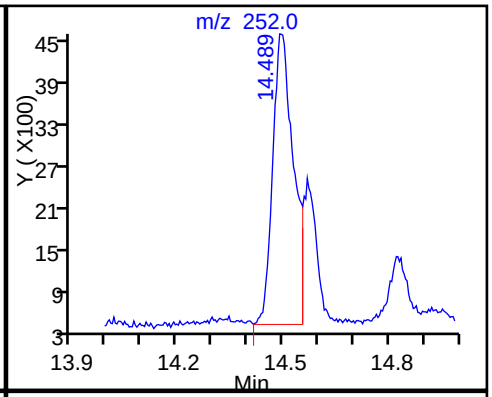
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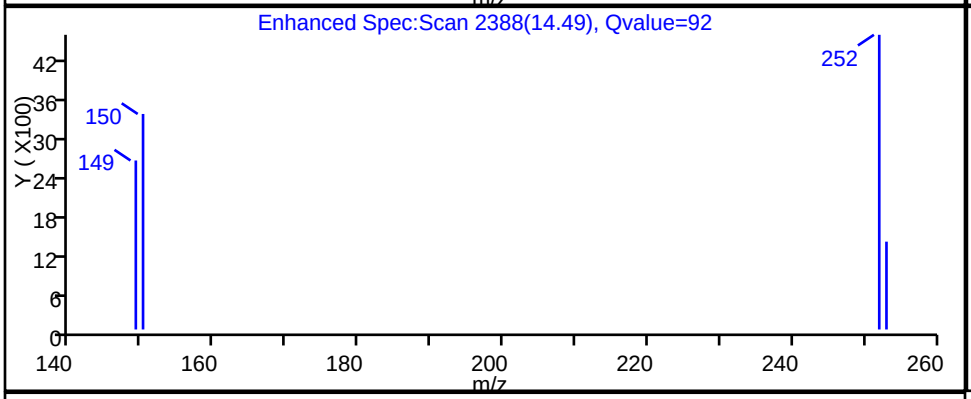
TestAmerica Denver

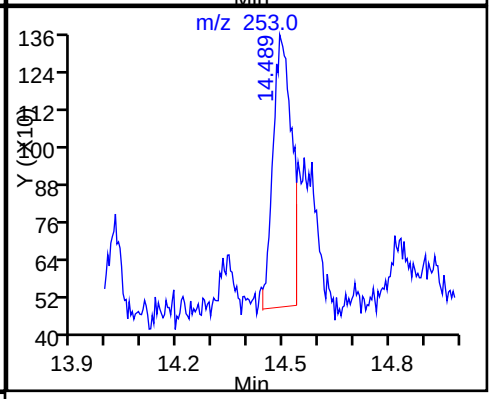
Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7281.D				
Injection Date:	16-Jun-2017 20:48:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-10-B	Lab Sample ID:	280-97928-10		
Client ID:	SS025-SB08(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

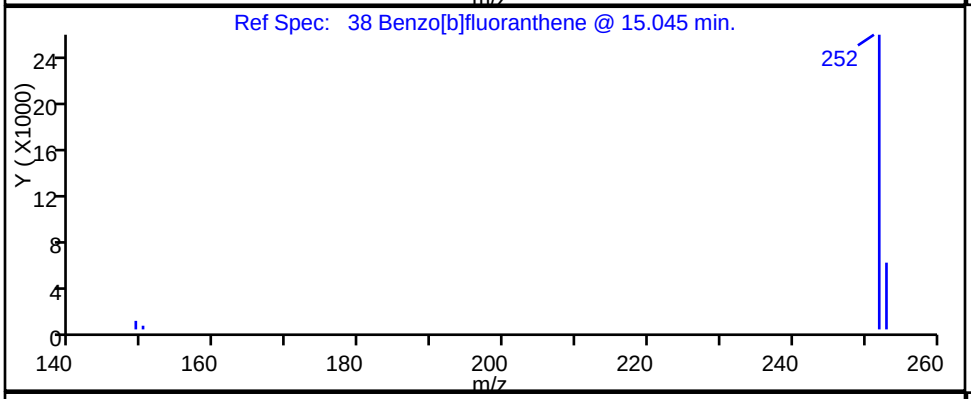
38 Benzo[b]fluoranthene, CAS: 205-99-2

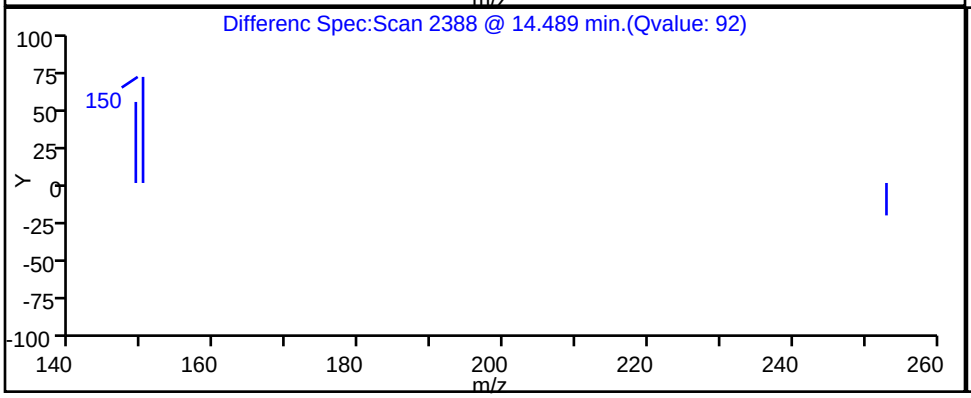


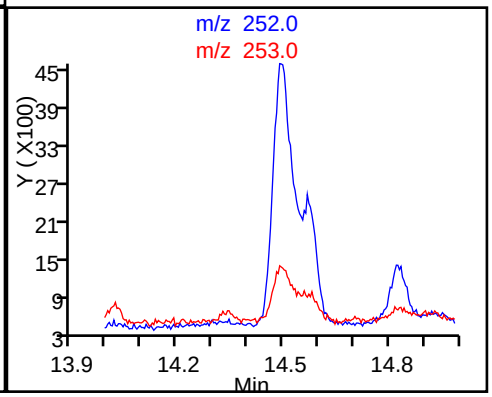










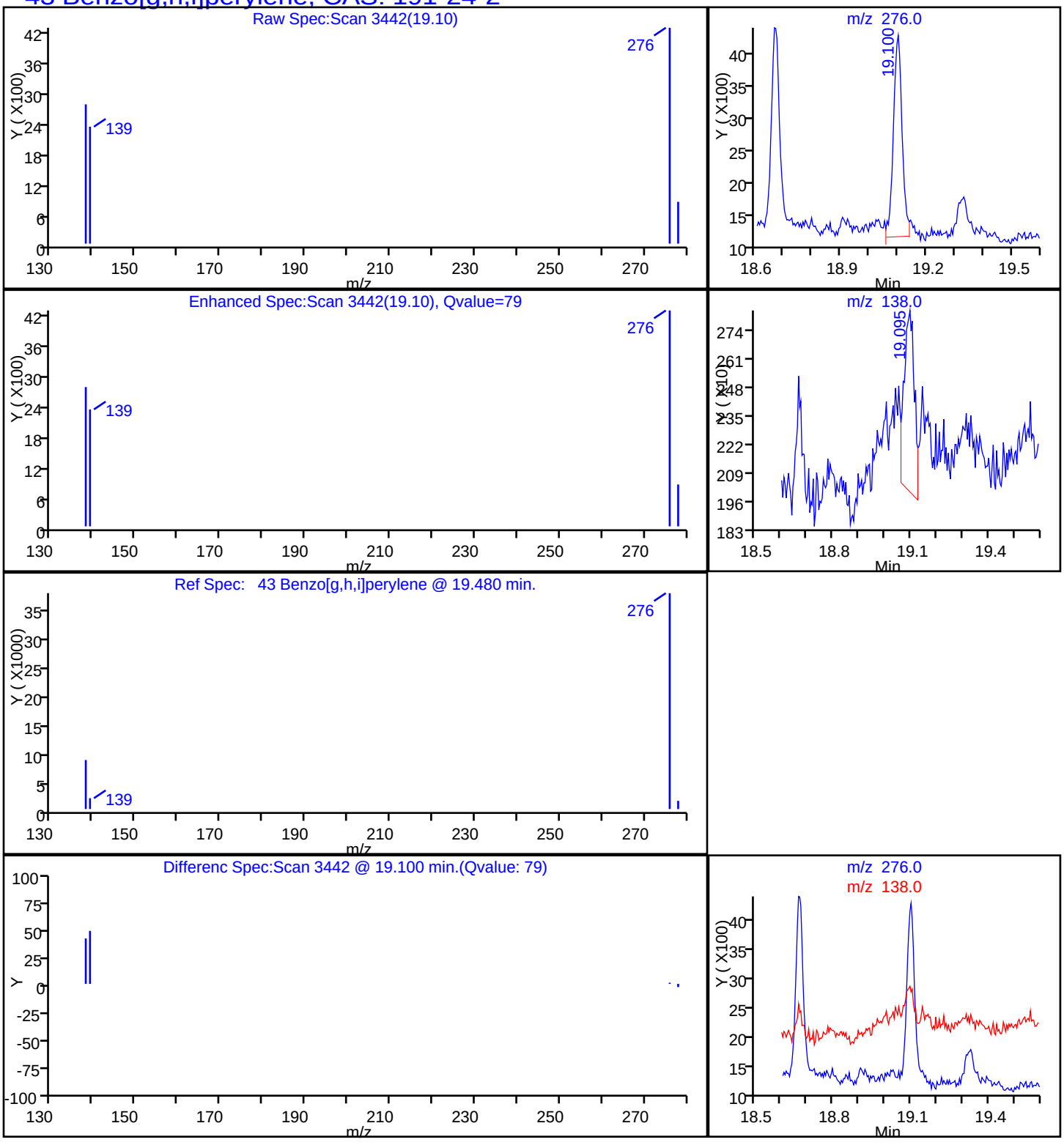


Report Date: 19-Jun-2017 15:44:18 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7281.D				
Injection Date:	16-Jun-2017 20:48:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-10-B	Lab Sample ID:	280-97928-10		
Client ID:	SS025-SB08(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

43 Benzo[g,h,i]perylene, CAS: 191-24-2

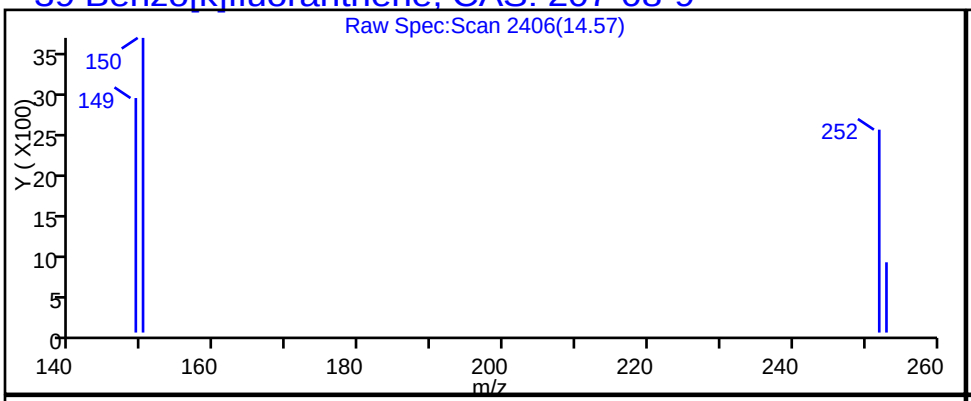


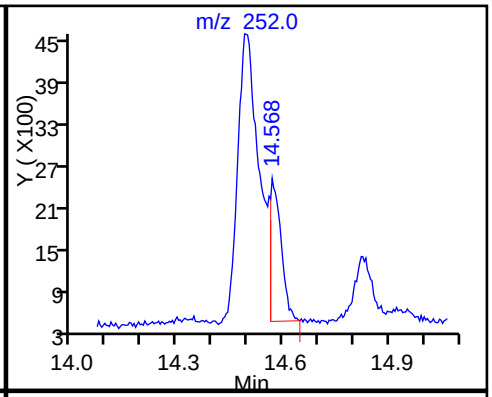
Report Date: 19-Jun-2017 15:44:18 Chrom Revision: 2.2 25-Apr-2017 13:27:22

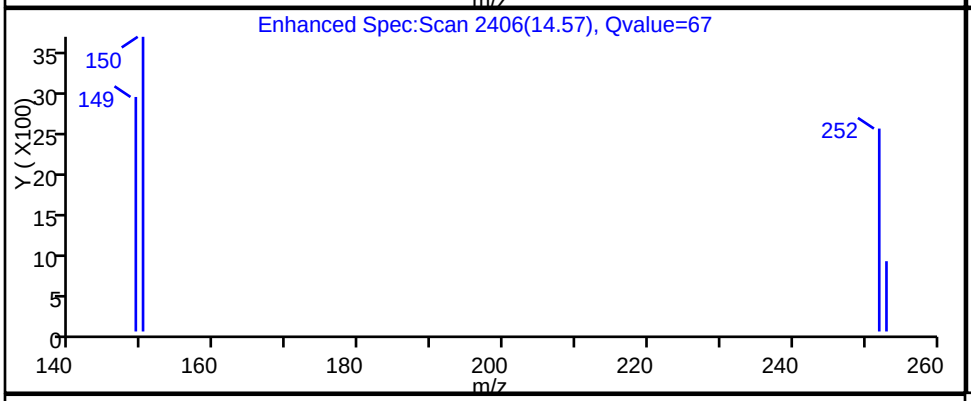
TestAmerica Denver

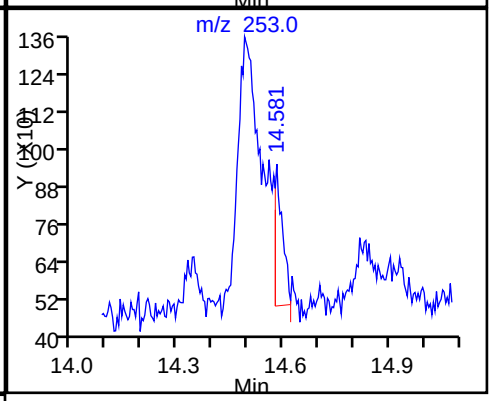
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Injection Date:	16-Jun-2017 20:48:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-10-B	Lab Sample ID:	280-97928-10		
Client ID:	SS025-SB08(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

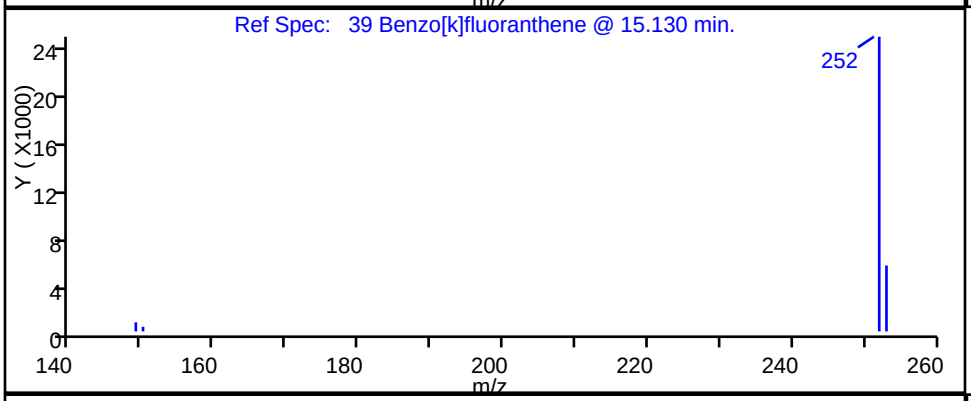
39 Benzo[k]fluoranthene, CAS: 207-08-9

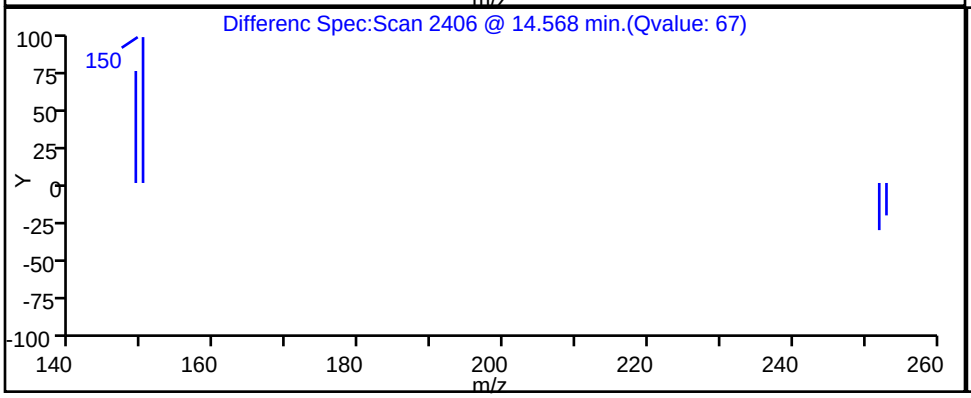


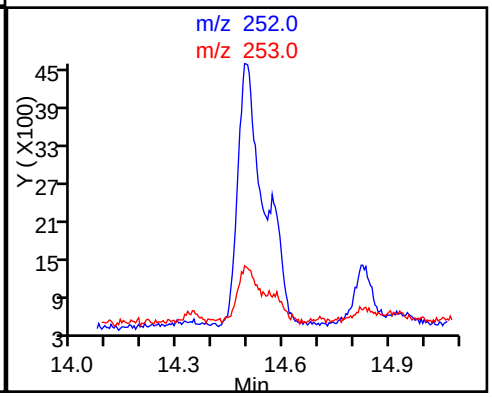












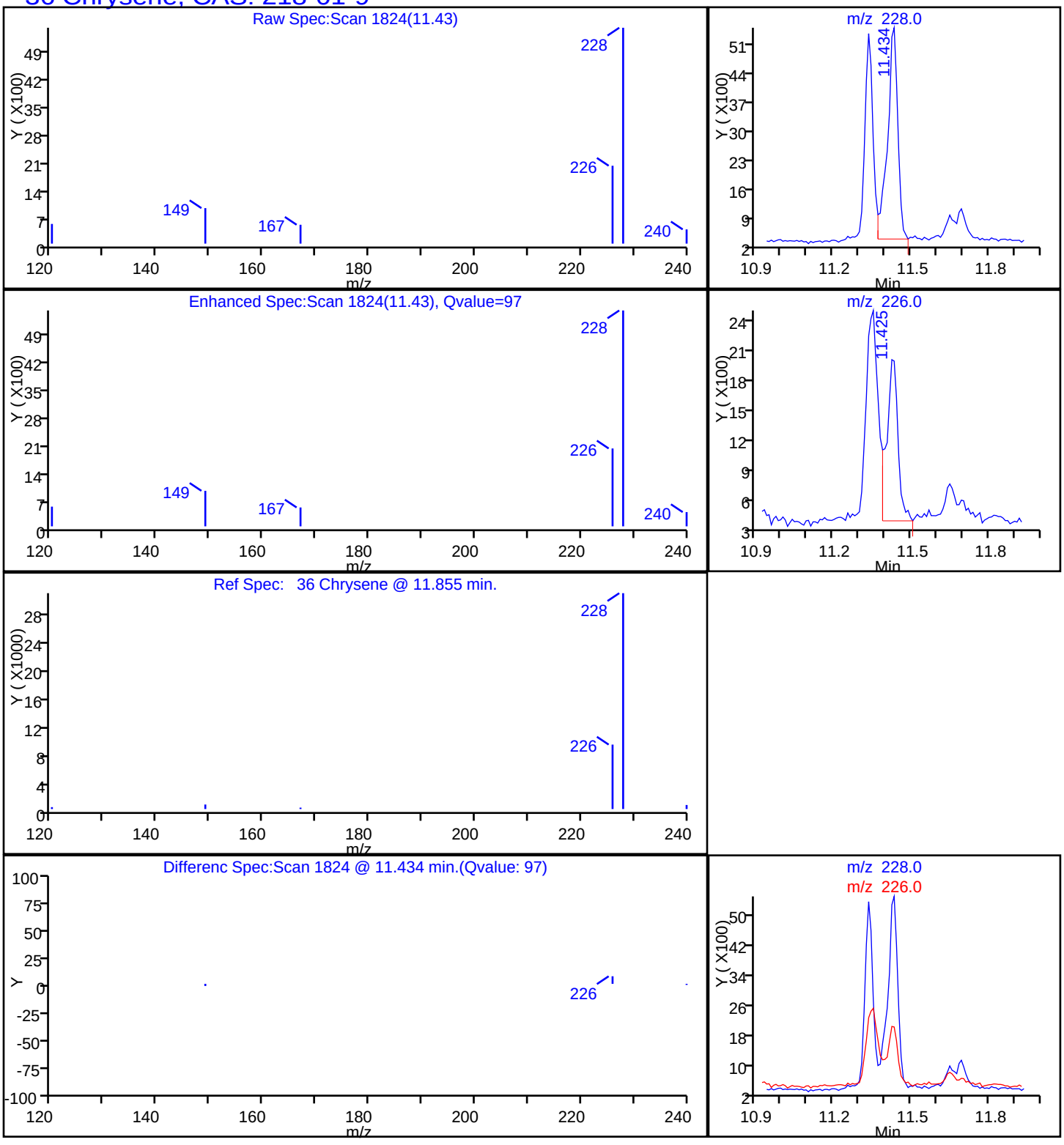
Report Date: 19-Jun-2017 15:44:18 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7281.D

Injection Date:	16-Jun-2017 20:48:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-10-B	Lab Sample ID:	280-97928-10		
Client ID:	SS025-SB08(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Chrysene, CAS: 218-01-9



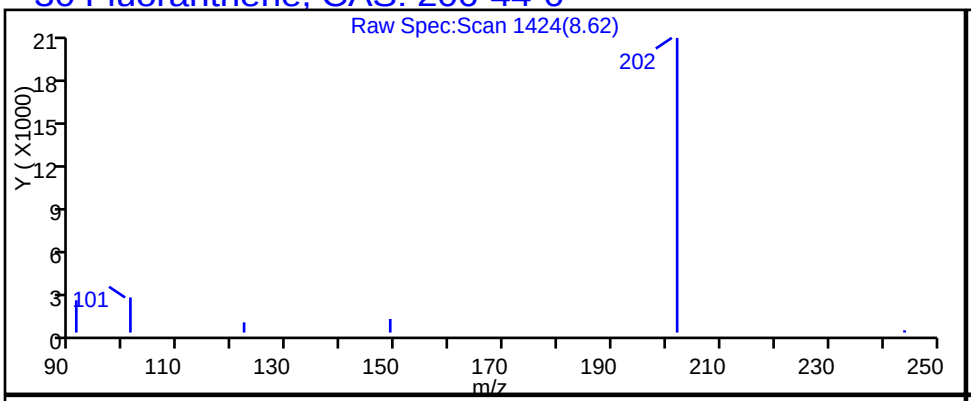
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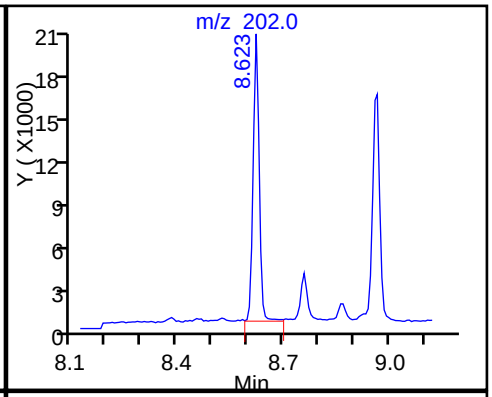
TestAmerica Denver

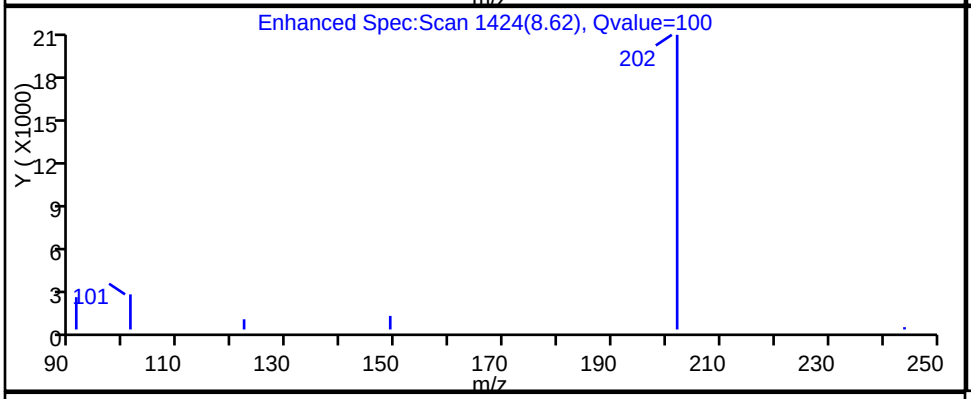
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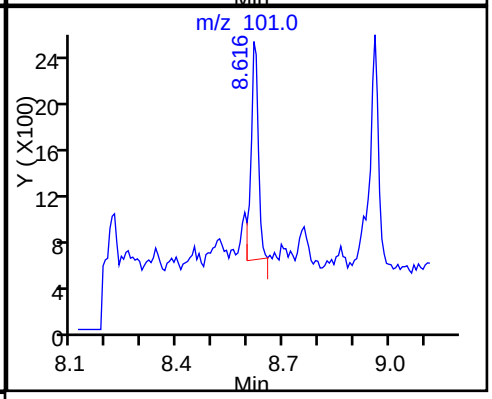
Injection Date:	16-Jun-2017 20:48:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-10-B	Lab Sample ID:	280-97928-10		
Client ID:	SS025-SB08(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

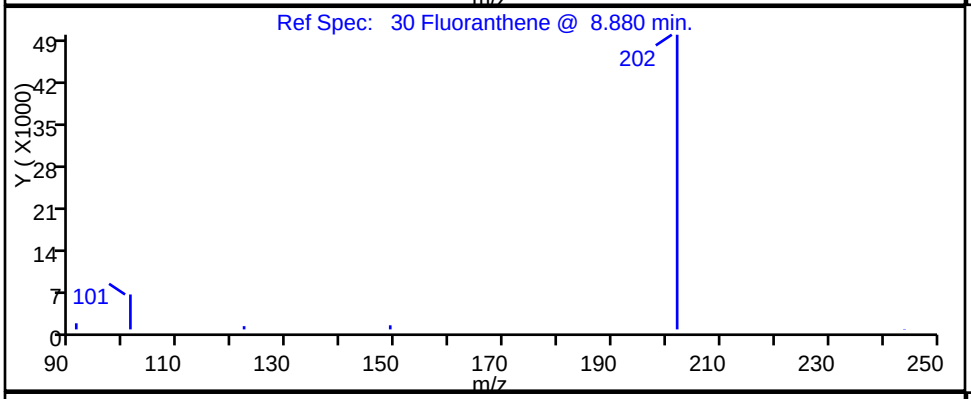
30 Fluoranthene, CAS: 206-44-0

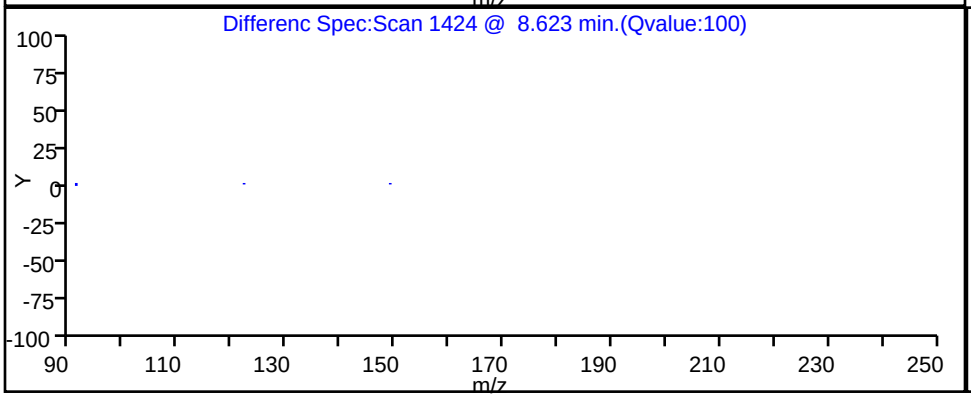


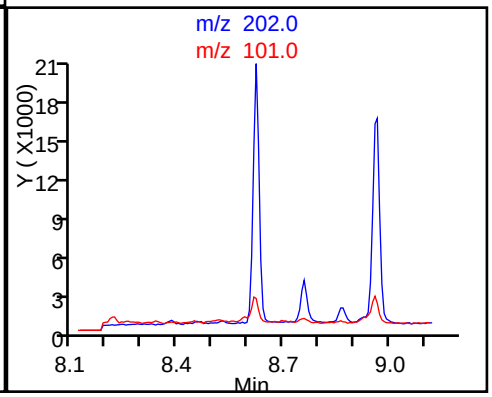












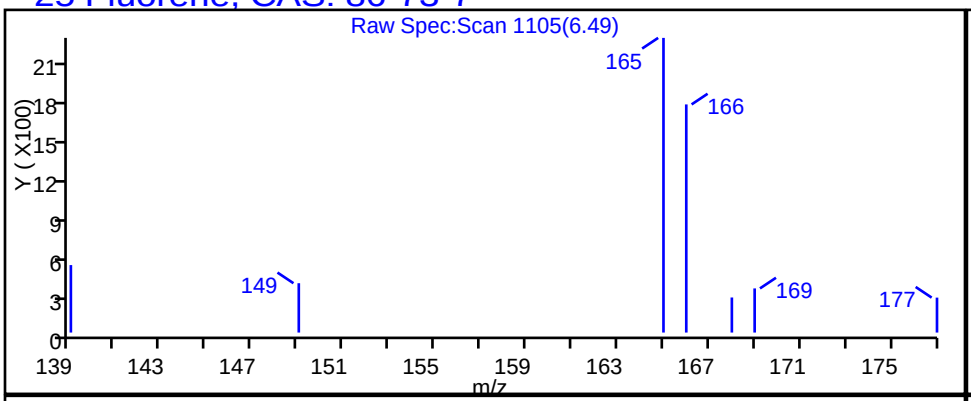
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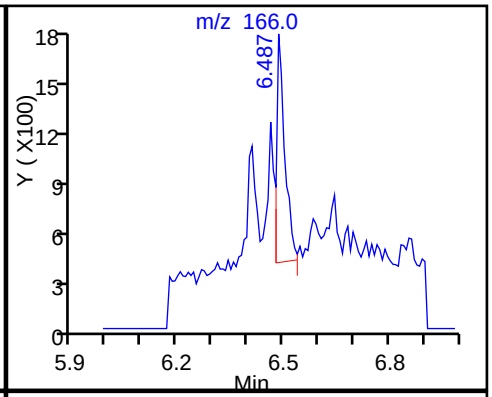
TestAmerica Denver

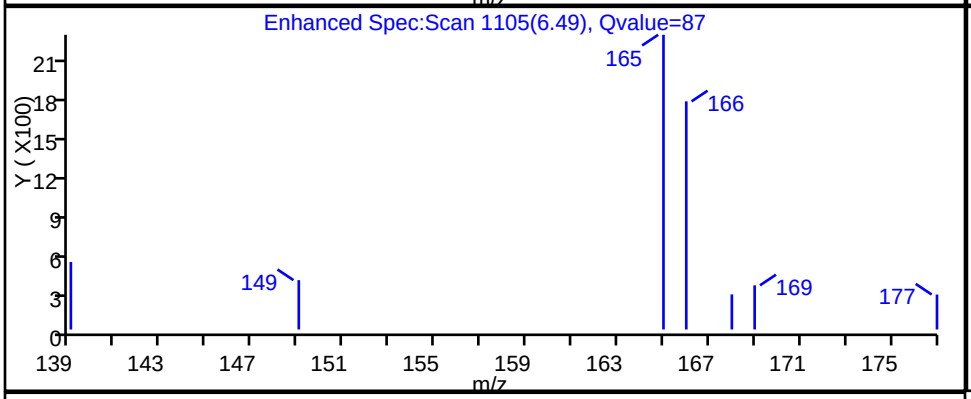
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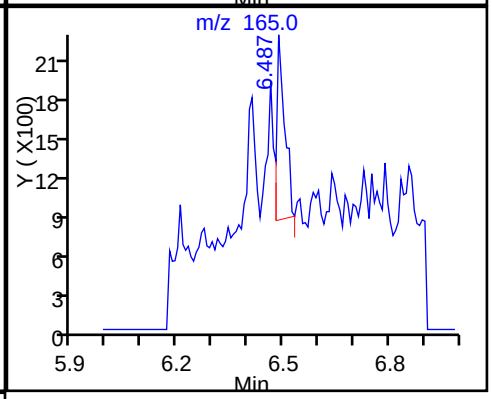
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Lims ID:	280-97928-A-10-B	Lab Sample ID:	280-97928-10
Client ID:	SS025-SB08(0-2)		
Operator ID:	WICKHAMM	ALS Bottle#:	14 Worklist Smp#: 15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM
Column:		Detector	MS SCAN

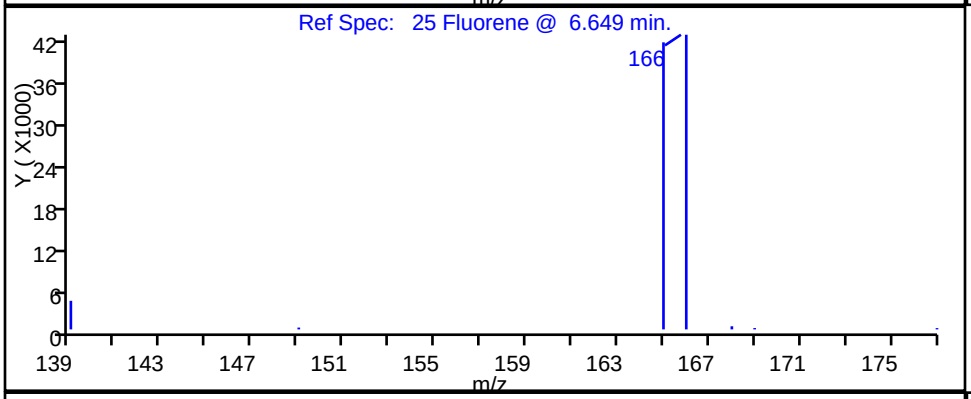
25 Fluorene, CAS: 86-73-7

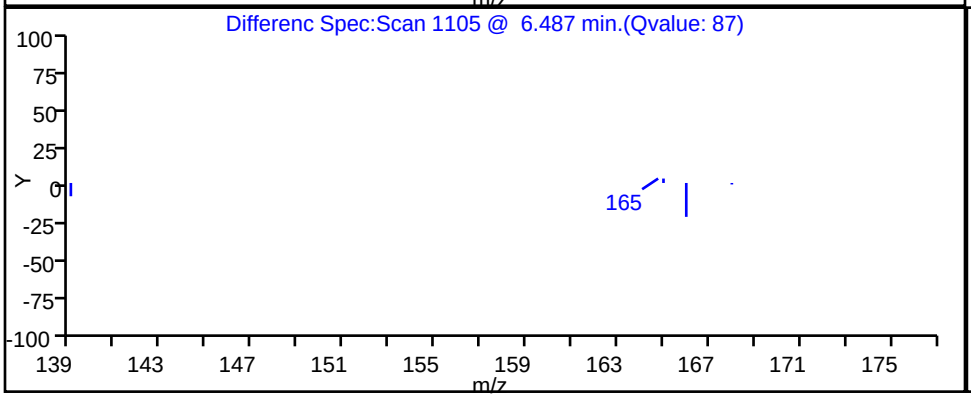


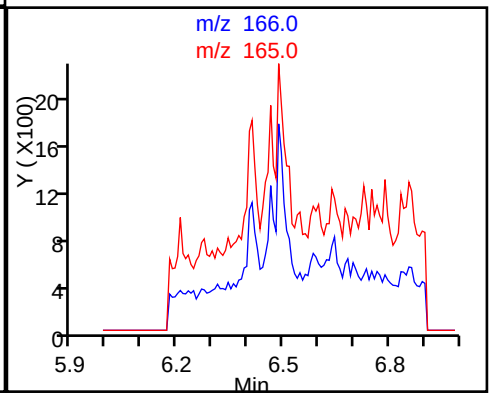












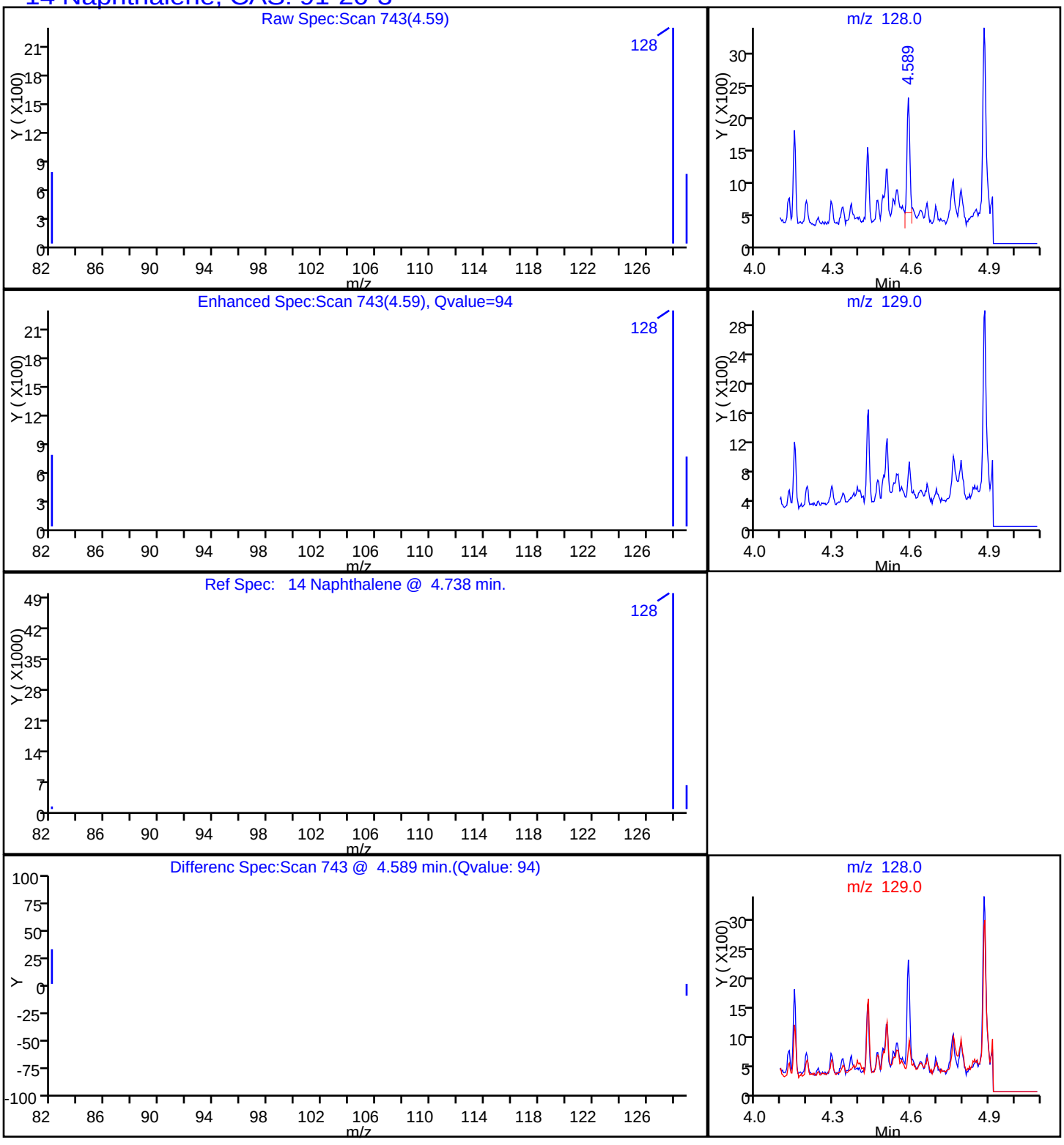
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7281.D

Injection Date:	16-Jun-2017 20:48:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-10-B	Lab Sample ID:	280-97928-10		
Client ID:	SS025-SB08(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3

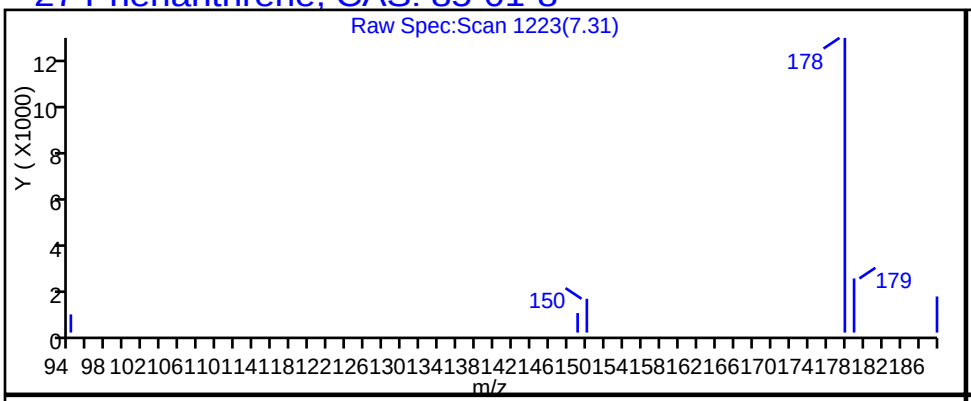


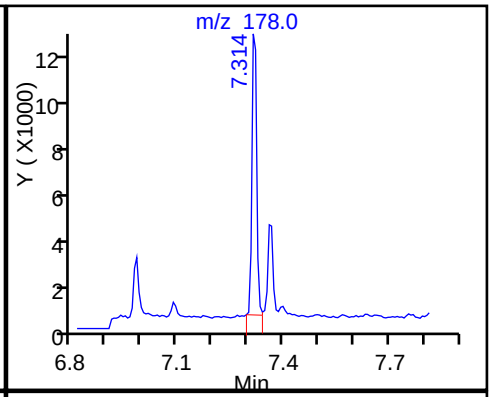
Report Date: 19-Jun-2017 15:44:18 Chrom Revision: 2.2 25-Apr-2017 13:27:22

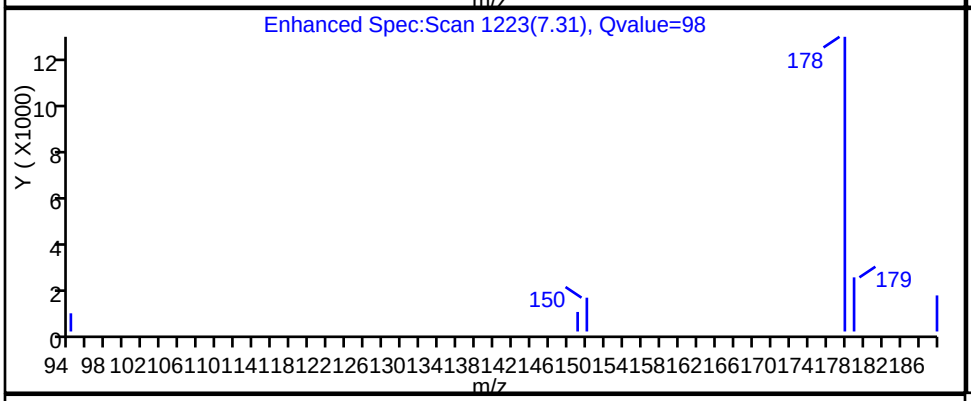
TestAmerica Denver

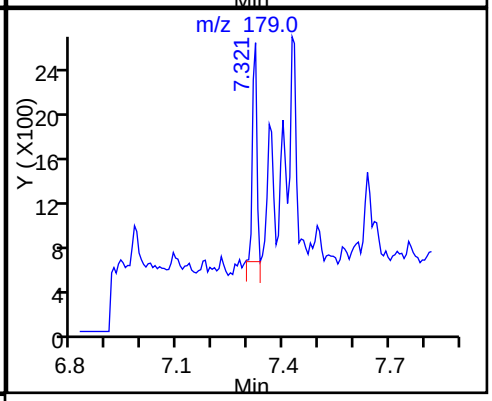
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Injection Date:	16-Jun-2017 20:48:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-10-B	Lab Sample ID:	280-97928-10		
Client ID:	SS025-SB08(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
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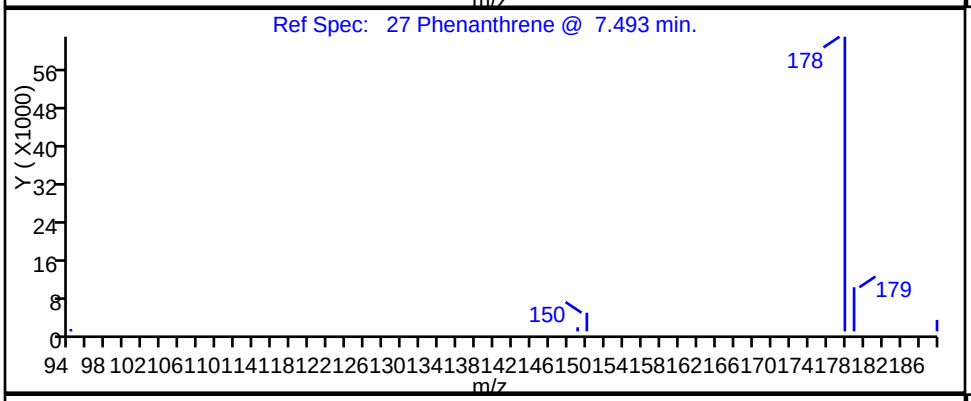
27 Phenanthrene, CAS: 85-01-8

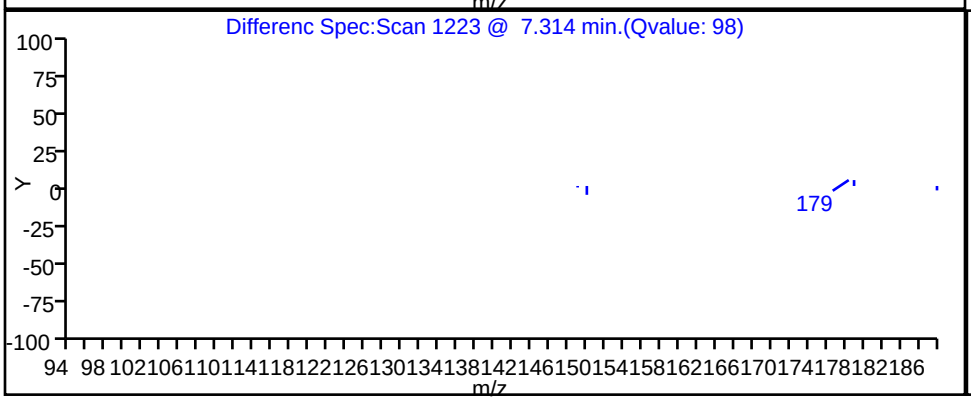


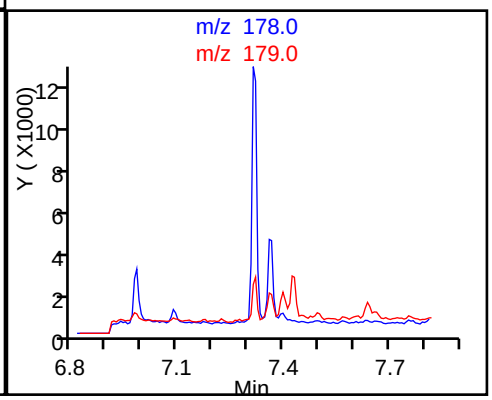












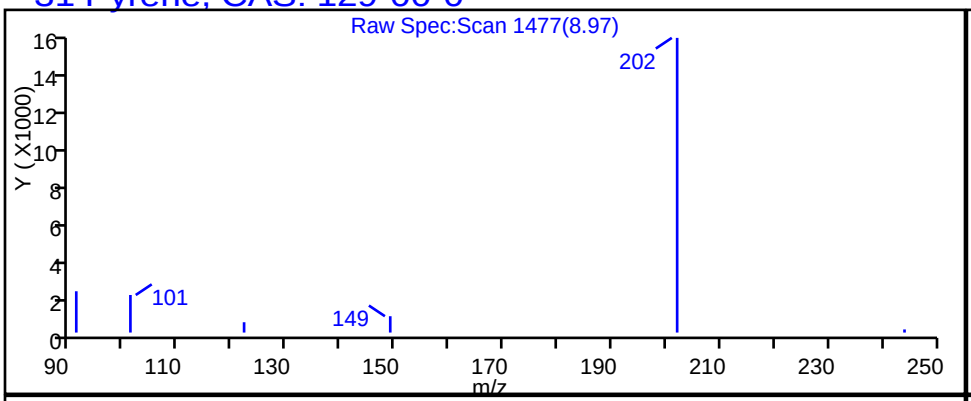
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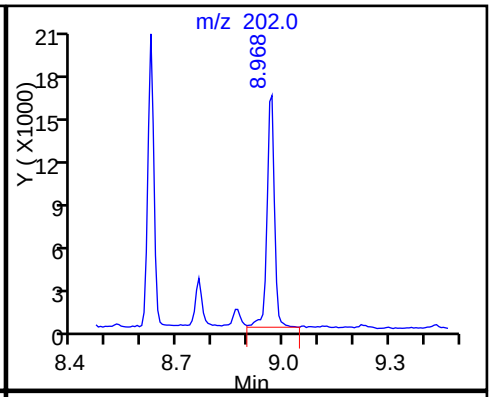
TestAmerica Denver

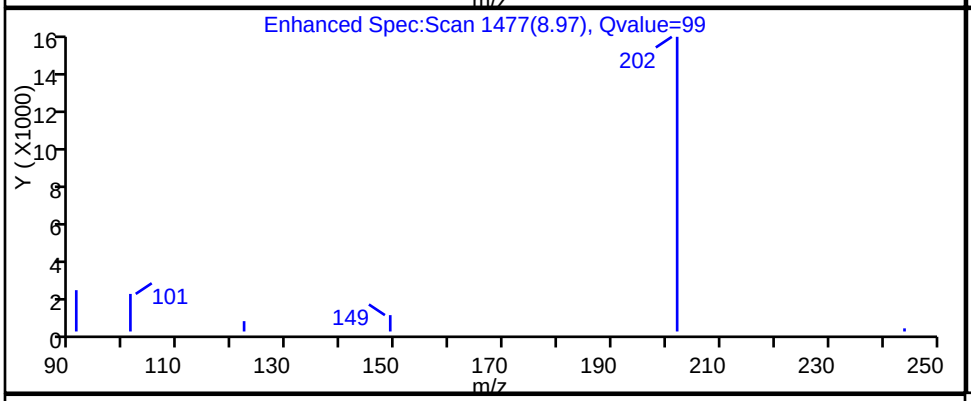
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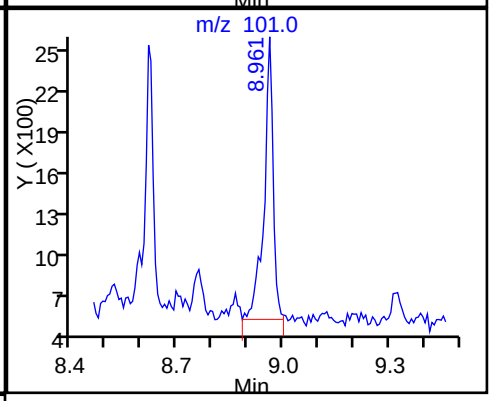
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Lims ID:	280-97928-A-10-B	Lab Sample ID:	280-97928-10		
Client ID:	SS025-SB08(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

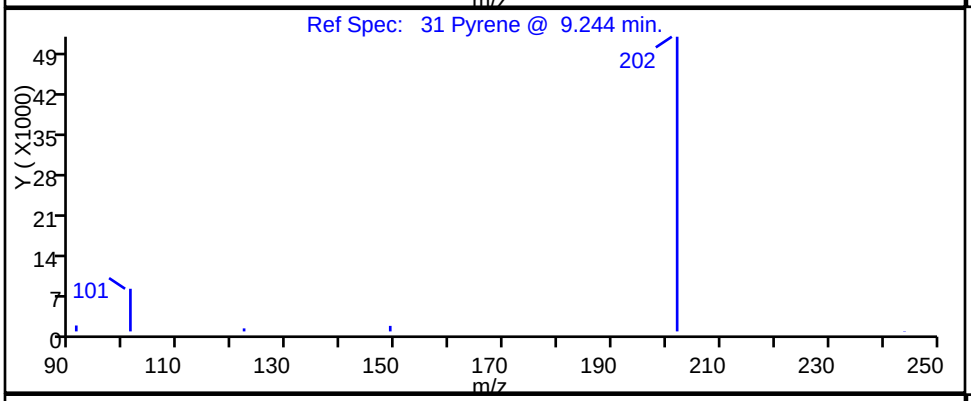
31 Pyrene, CAS: 129-00-0

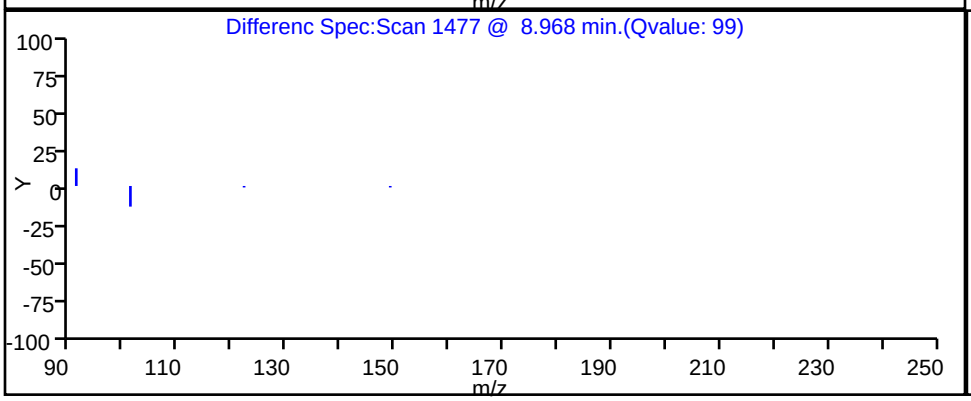


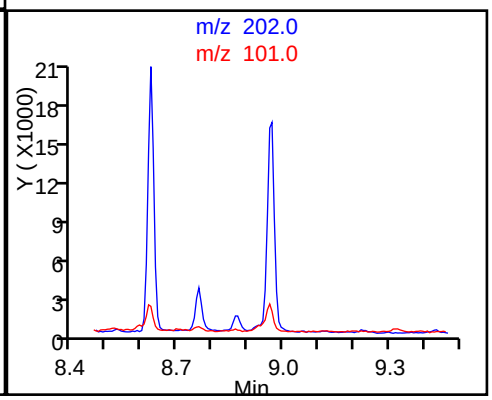












Manual Integration/User Assign Peak Report

TestAmerica Denver

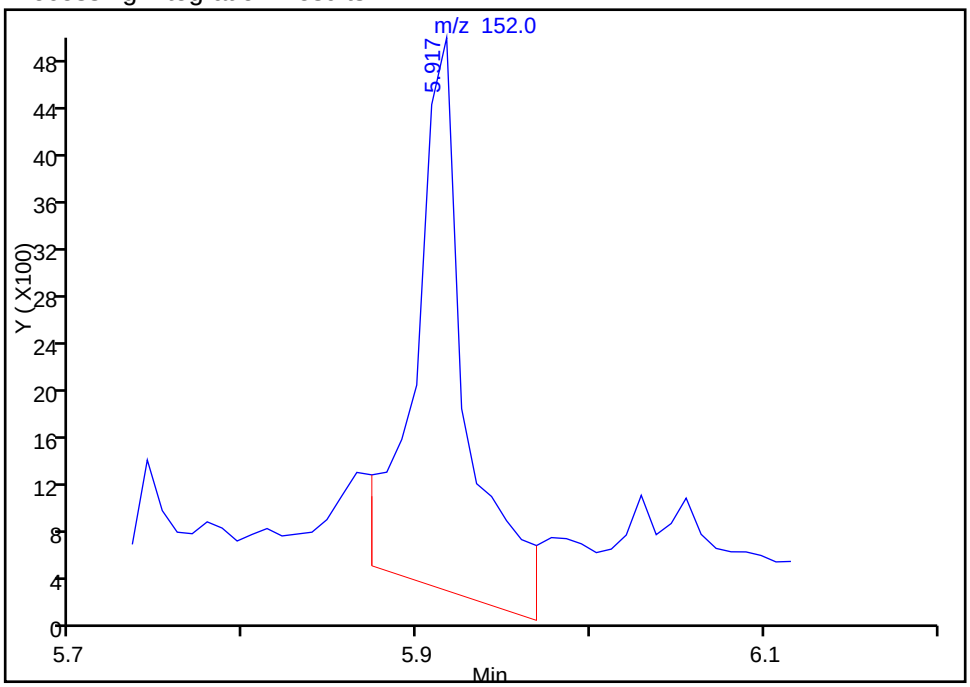
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Injection Date:	16-Jun-2017 20:48:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-10-B	Lab Sample ID:	280-97928-10		
Client ID:	SS025-SB08(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	14	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Acenaphthylene, CAS: 208-96-8

Signal: 1

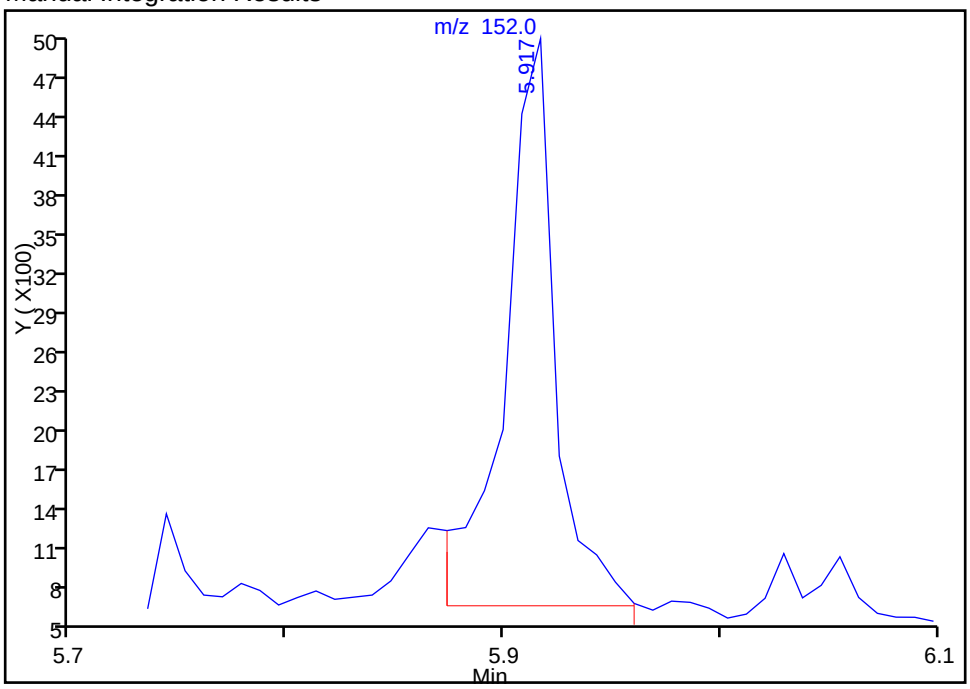
Processing Integration Results

RT: 5.92
Area: 9750
Amount: 115.1075
Amount Units: ng/ml



Manual Integration Results

RT: 5.92
Area: 7045
Amount: 83.172514
Amount Units: ng/ml



Reviewer: wickhamm, 19-Jun-2017 15:22:02

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB08(2-4) | Lab Sample ID: 280-97928-11

Matrix: Solid | Lab File ID: F7282.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 11:15

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 30.3(g) | Date Analyzed: 06/16/2017 21:14

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 13.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.57	U	5.7	0.57	0.30
91-57-6	2-Methylnaphthalene	0.76	U	5.7	0.76	0.35
83-32-9	Acenaphthene	0.31	U	5.7	0.31	0.18
208-96-8	Acenaphthylene	2.3	J	5.7	0.76	0.19
120-12-7	Anthracene	2.9	U	5.7	2.9	0.83
56-55-3	Benzo[a]anthracene	1.3	J	5.7	2.9	1.0
50-32-8	Benzo[a]pyrene	1.3	J	5.7	2.9	0.85
205-99-2	Benzo[b]fluoranthene	2.0	J	5.7	2.9	1.4
191-24-2	Benzo[g,h,i]perylene	2.9	U	5.7	2.9	1.3
207-08-9	Benzo[k]fluoranthene	2.9	U	5.7	2.9	1.1
218-01-9	Chrysene	1.8	J	5.7	2.9	1.1
53-70-3	Dibenz(a,h)anthracene	2.9	U	5.7	2.9	1.5
206-44-0	Fluoranthene	2.3	J	5.7	2.9	1.1
86-73-7	Fluorene	0.82	J	5.7	0.76	0.54
193-39-5	Indeno[1,2,3-cd]pyrene	2.9	U	5.7	2.9	1.3
91-20-3	Naphthalene	0.76	U	5.7	0.76	0.37
85-01-8	Phenanthrene	1.9	J	5.7	2.9	1.3
129-00-0	Pyrene	2.0	J	5.7	2.9	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	88		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	81		44-125
1718-51-0	Terphenyl-d14 (Surr)	75		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7282.D
Lims ID: 280-97928-A-11-B
Client ID: SS025-SB08(2-4)
Sample Type: Client
Inject. Date: 16-Jun-2017 21:14:30 ALS Bottle#: 15 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-a-11-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:24:07

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	96	24142	600.0	
* 2 Phenanthrene-d10	188	7.301	7.301	0.000	99	44084	600.0	
* 3 Chrysene-d12	240	11.362	11.371	-0.009	94	37553	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	100	15369	406.4	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	100	27444	438.4	
$ 6 Terphenyl-d14	244	9.124	9.130	-0.006	97	16808	375.5	
14 Naphthalene	128	4.590	4.589	0.001	94	680	8.69	
16 2-Methylnaphthalene	142		5.147				ND	
17 1-Methylnaphthalene	142		5.235				ND	
22 Acenaphthylene	152	5.908	5.917	-0.009	94	5060	60.8	
23 Acenaphthene	153		6.055				ND	
25 Fluorene	166	6.487	6.494	-0.007	89	1334	21.4	
27 Phenanthrene	178	7.321	7.321	0.000	95	4579	49.0	
28 Anthracene	178	7.367	7.366	0.001	91	1609	17.0	
30 Fluoranthene	202	8.623	8.629	-0.006	96	6332	59.0	
31 Pyrene	202	8.968	8.968	0.000	95	5853	52.6	
35 Benzo[a]anthracene	228	11.335	11.344	-0.009	64	3271	32.8	
36 Chrysene	228	11.434	11.443	-0.009	93	4249	46.0	
38 Benzo[b]fluoranthene	252	14.490	14.503	-0.013	89	4790	52.8	
39 Benzo[k]fluoranthene	252	14.573	14.586	-0.013	80	2189	24.0	
40 Benzo[a]pyrene	252	15.574	15.587	-0.013	73	3076	34.4	
41 Indeno[1,2,3-cd]pyrene	276	18.663	18.676	-0.013	64	2928	28.8	
42 Dibenz(a,h)anthracene	278	18.693	18.702	-0.009	50	1318	16.6	
43 Benzo[g,h,i]perylene	276	19.096	19.109	-0.013	62	2315	26.9	

Reagents:

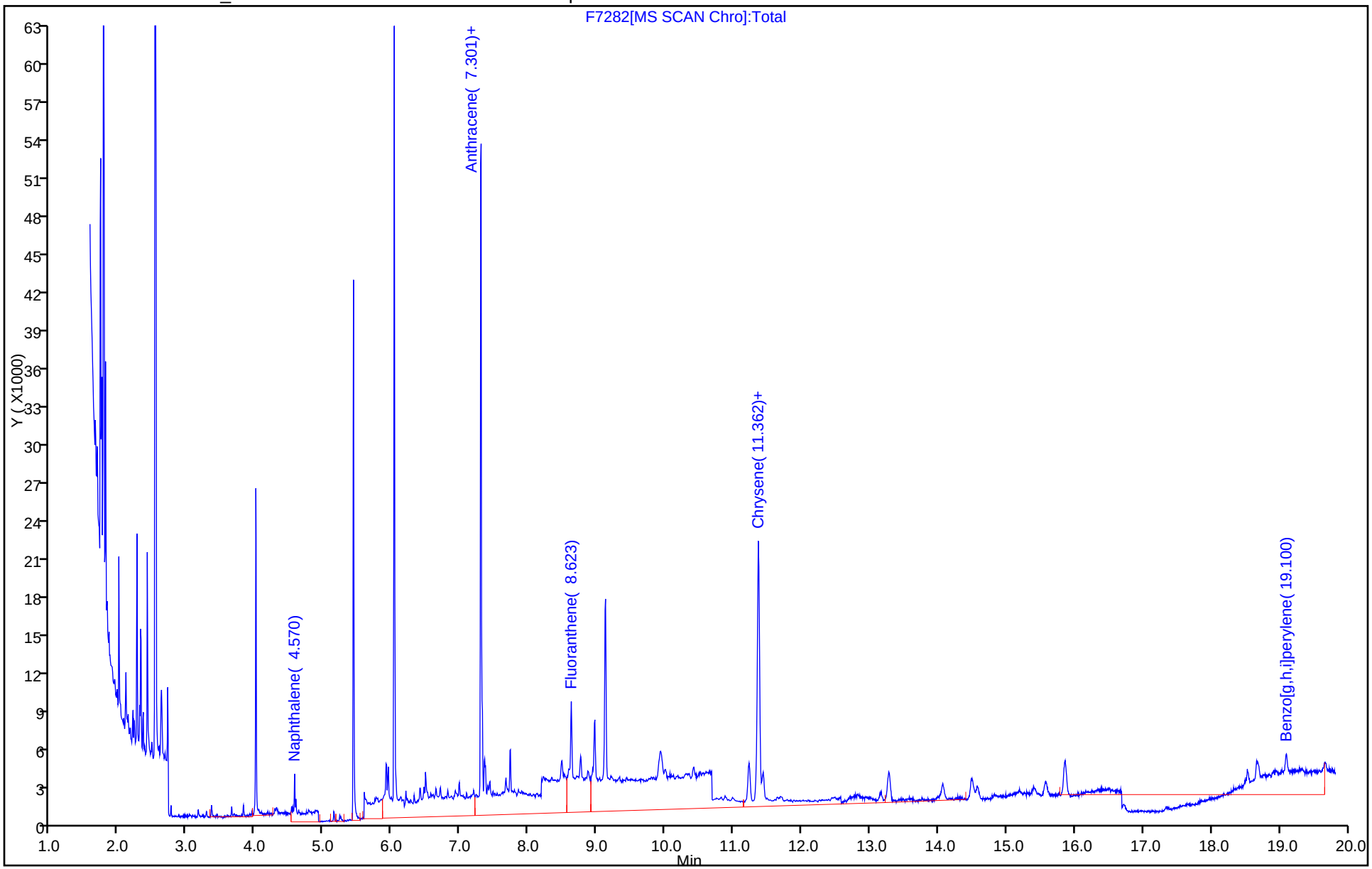
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7282.D

Injection Date:	16-Jun-2017 21:14:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-A-11-B	Lab Sample ID:	280-97928-11	Worklist Smp#:	16
Client ID:	SS025-SB08(2-4)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7282.D
Lims ID: 280-97928-A-11-B
Client ID: SS025-SB08(2-4)
Sample Type: Client
Inject. Date: 16-Jun-2017 21:14:30 ALS Bottle#: 15 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-a-11-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:24:07

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	406.4	81.28
$ 5 2-Fluorobiphenyl	500.0	438.4	87.68
$ 6 Terphenyl-d14	500.0	375.5	75.10

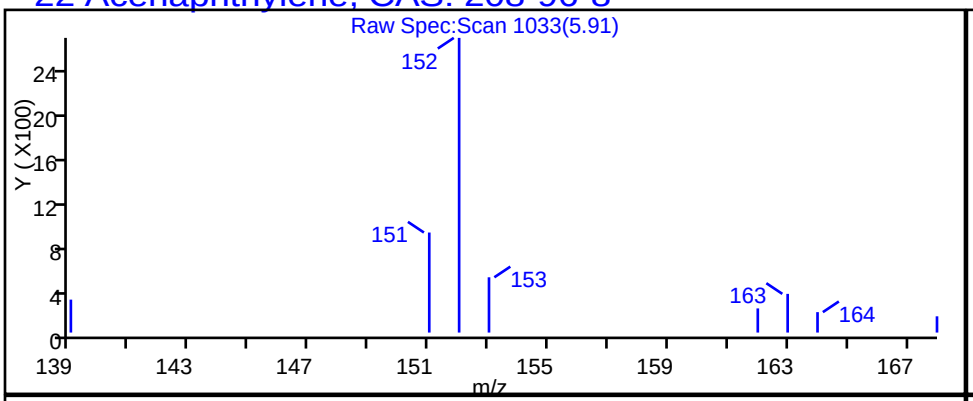
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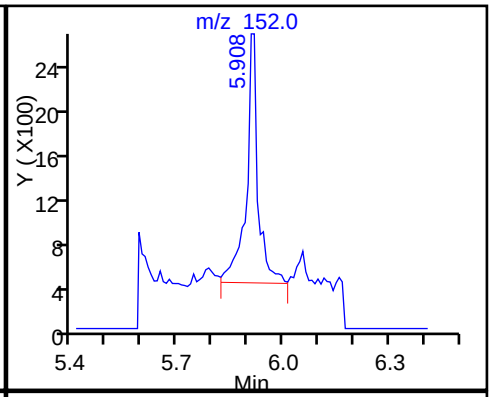
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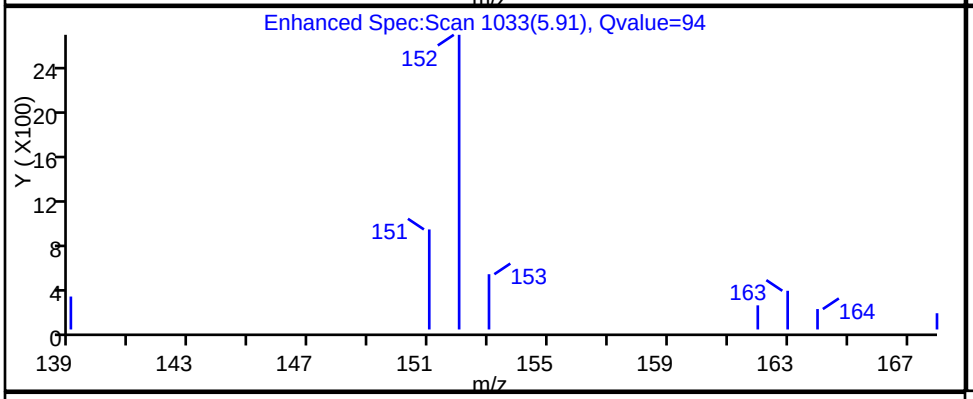
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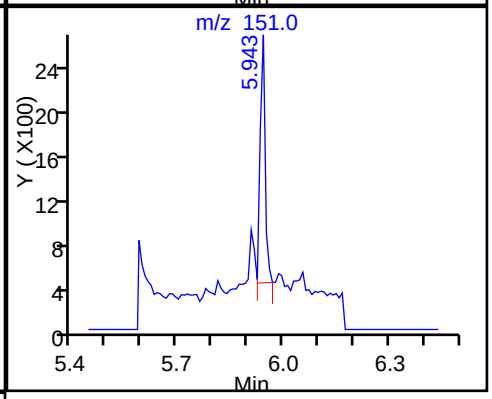
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Lims ID:	280-97928-A-11-B	Lab Sample ID:	280-97928-11		
Client ID:	SS025-SB08(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	15	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

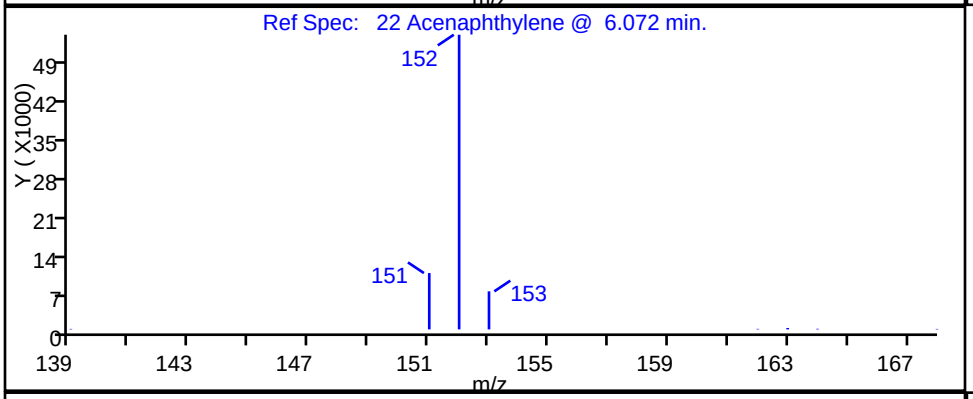
22 Acenaphthylene, CAS: 208-96-8

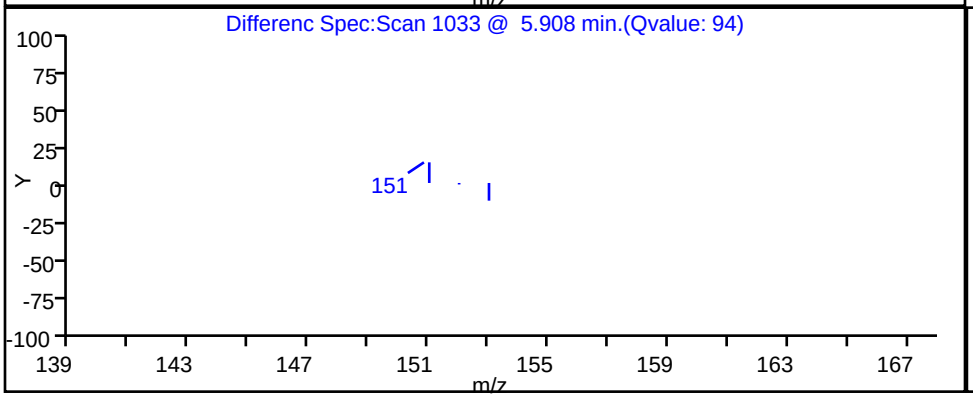


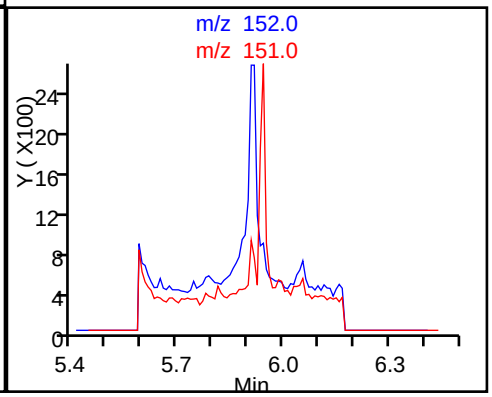












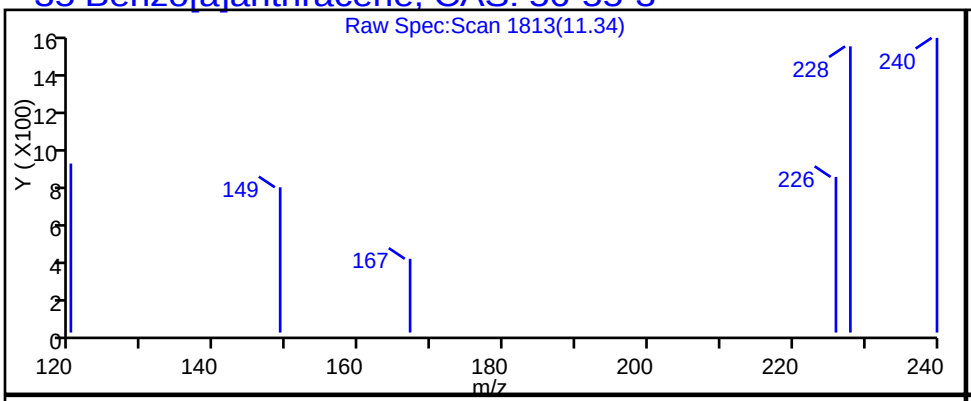
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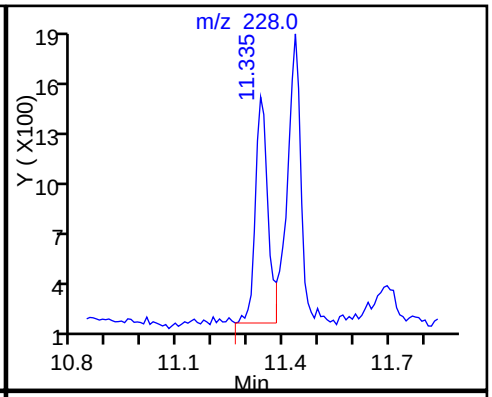
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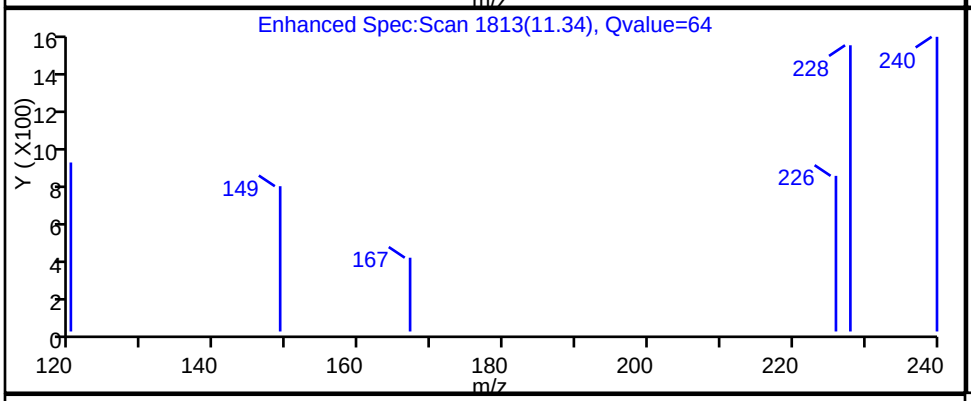
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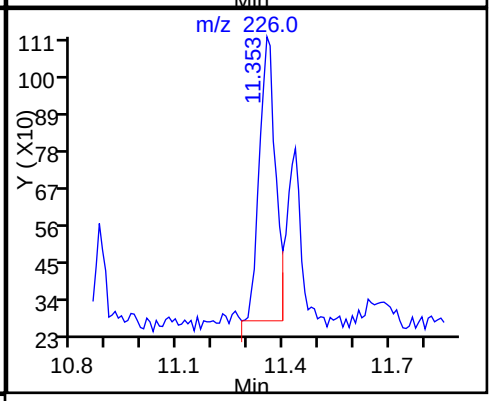
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Lims ID:	280-97928-A-11-B	Lab Sample ID:	280-97928-11		
Client ID:	SS025-SB08(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	15	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

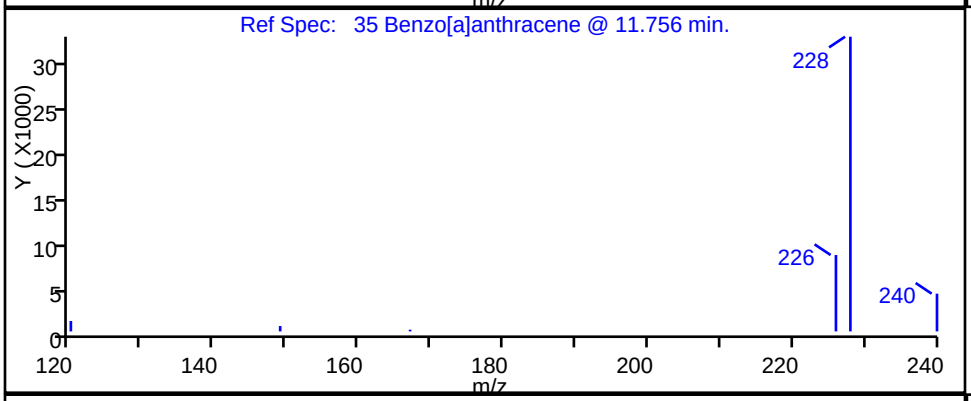
35 Benzo[a]anthracene, CAS: 56-55-3

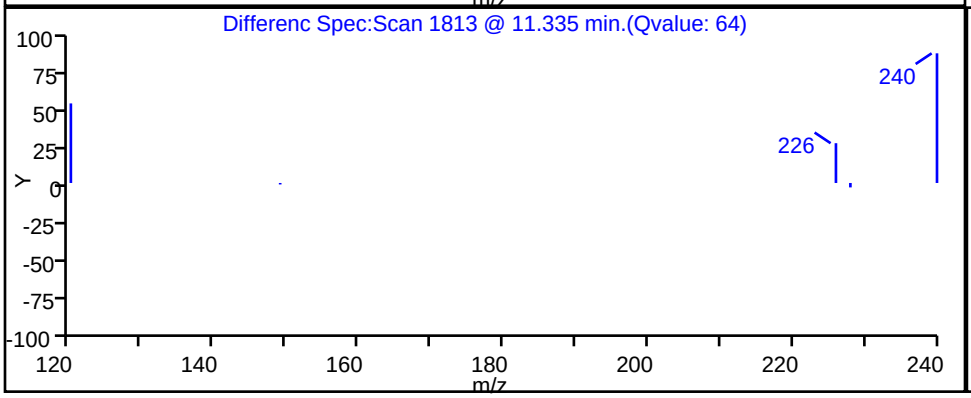


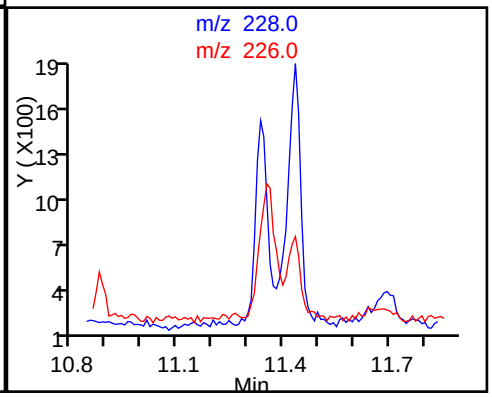












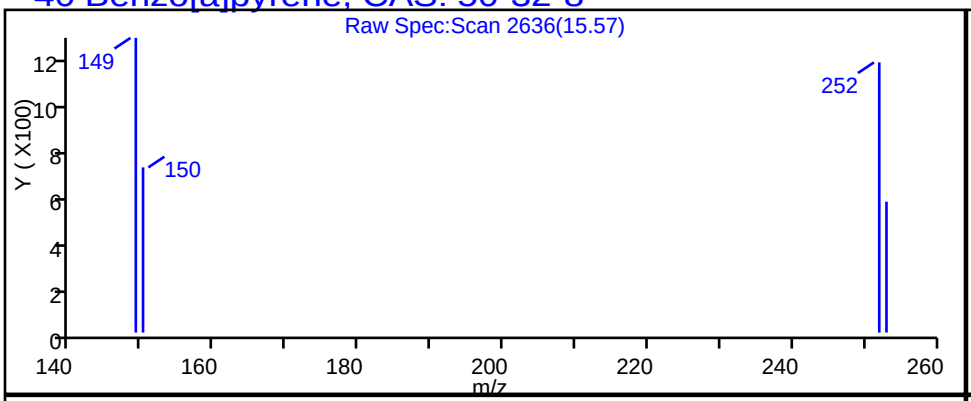
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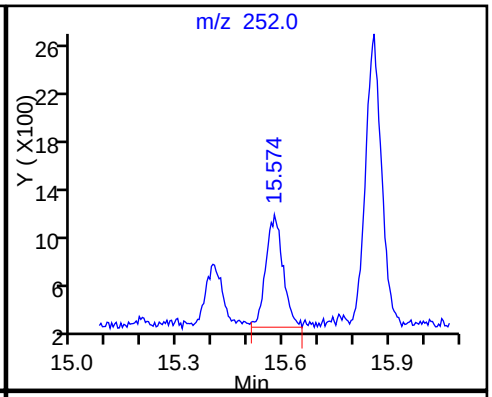
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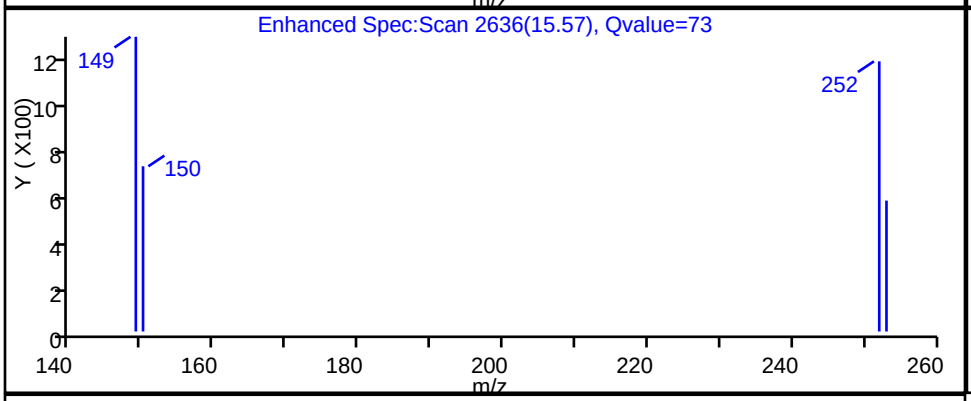
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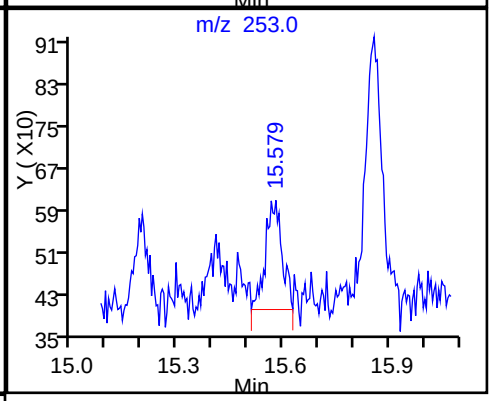
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Lims ID:	280-97928-A-11-B	Lab Sample ID:	280-97928-11		
Client ID:	SS025-SB08(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	15	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

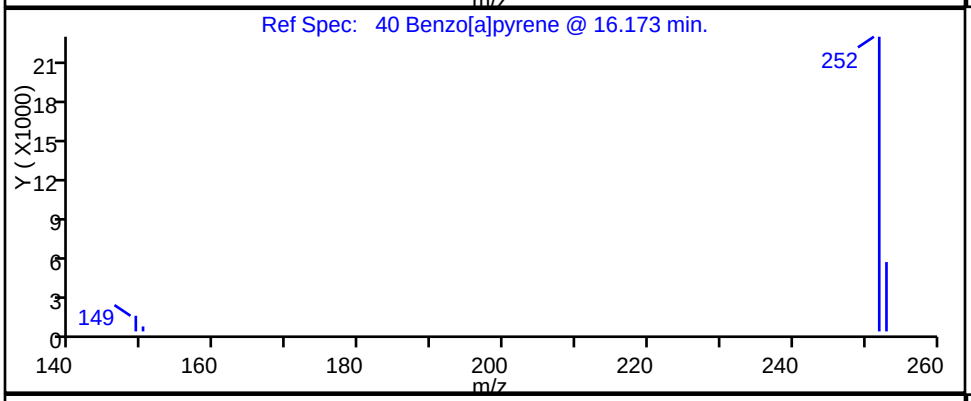
40 Benzo[a]pyrene, CAS: 50-32-8

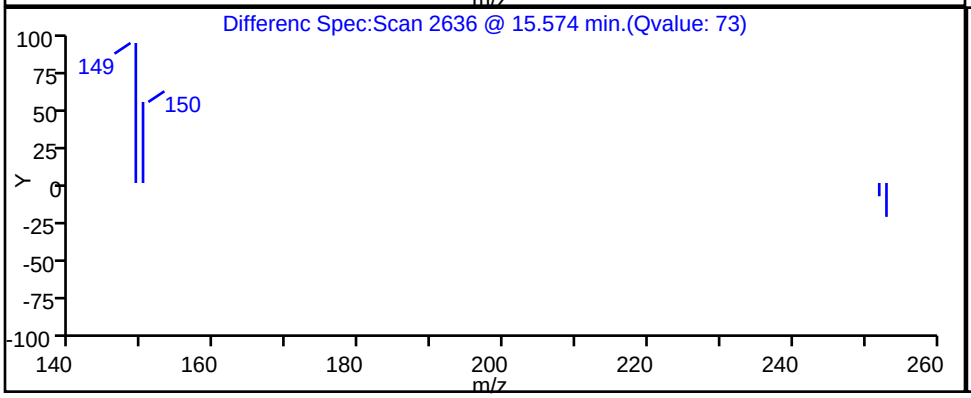


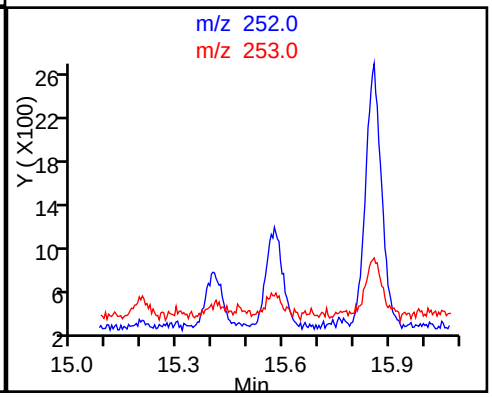










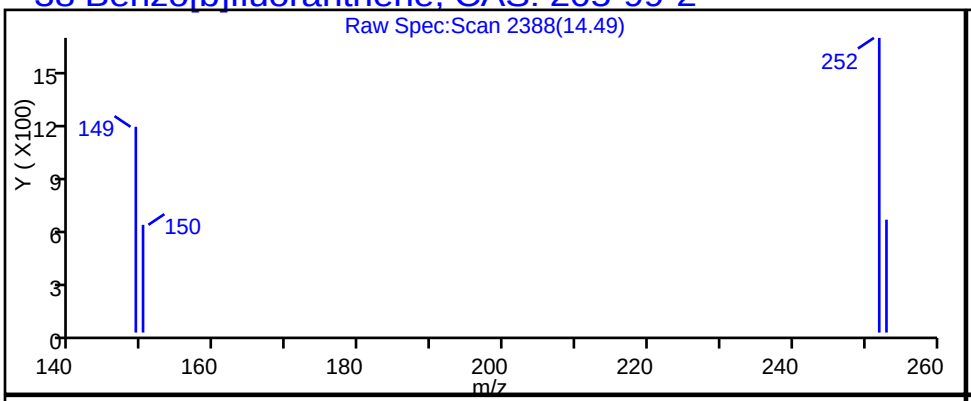


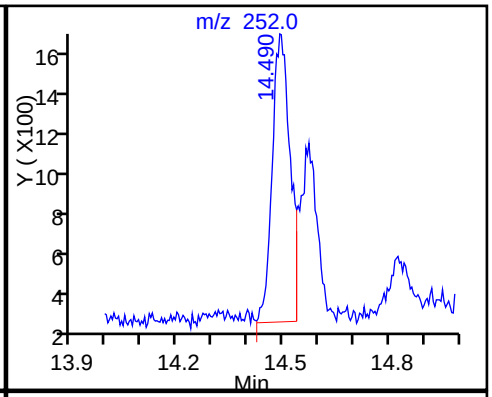
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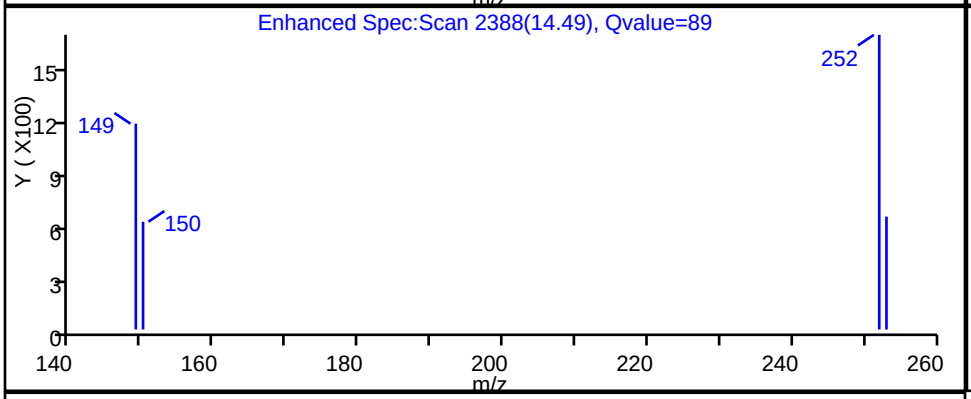
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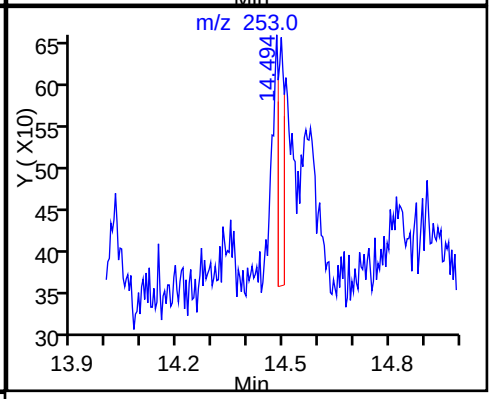
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Injection Date:	16-Jun-2017 21:14:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-11-B	Lab Sample ID:	280-97928-11		
Client ID:	SS025-SB08(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	15	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

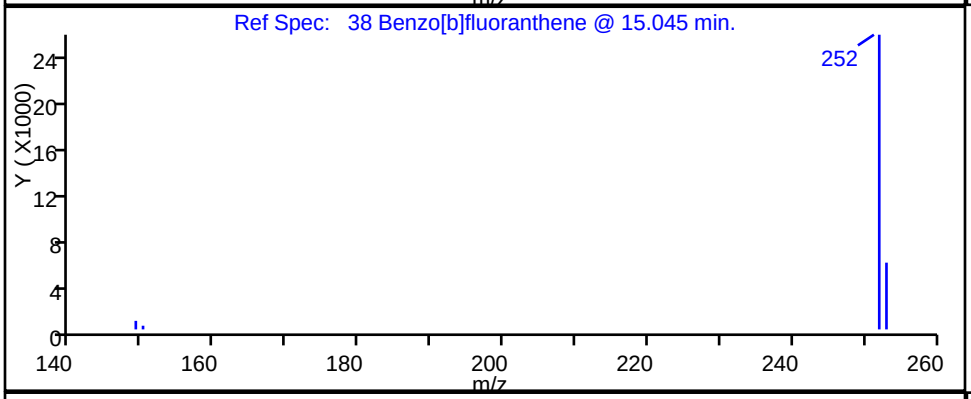
38 Benzo[b]fluoranthene, CAS: 205-99-2

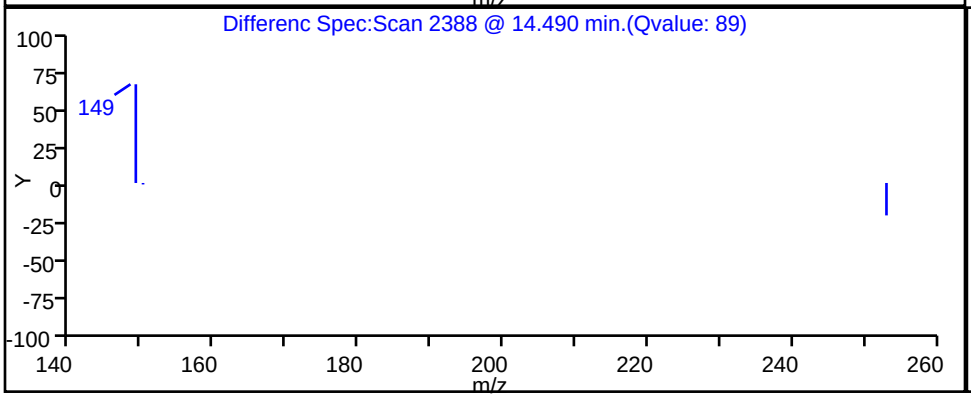


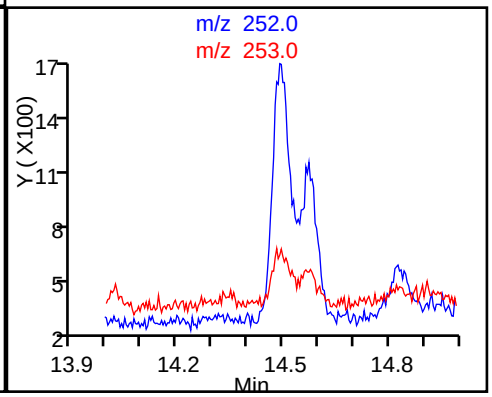












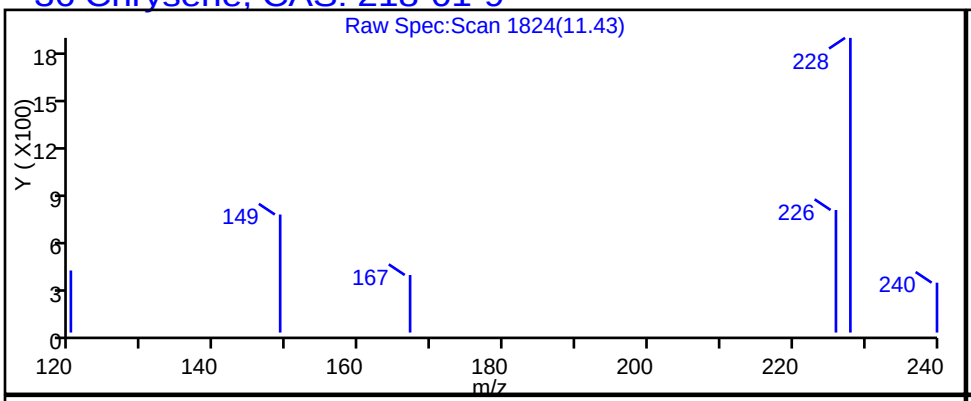
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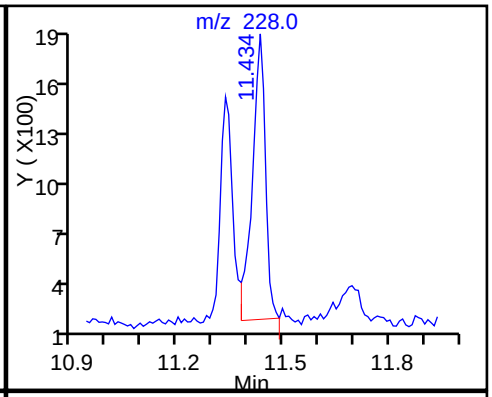
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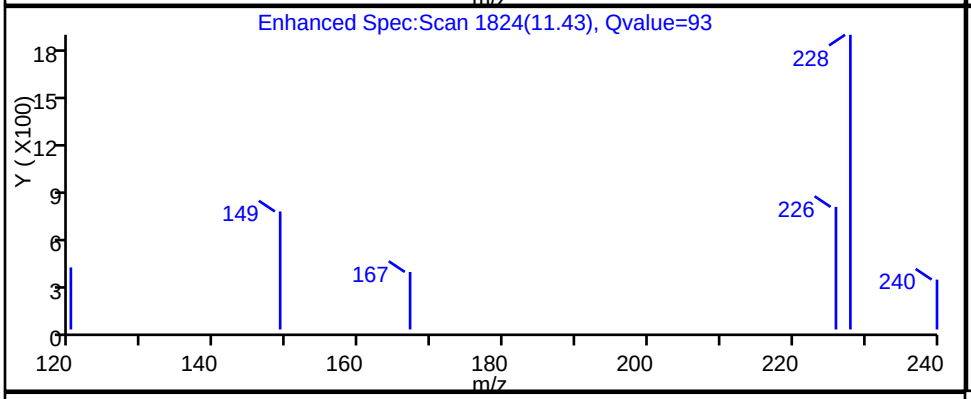
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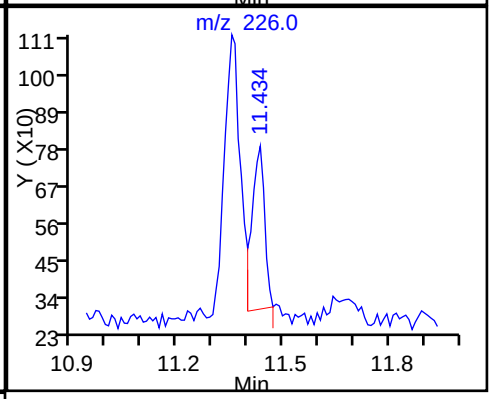
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Lims ID:	280-97928-A-11-B	Lab Sample ID:	280-97928-11		
Client ID:	SS025-SB08(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	15	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
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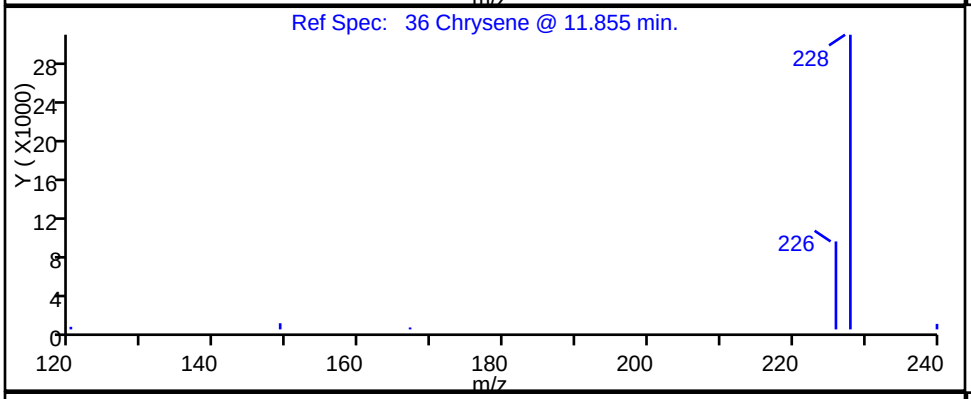
36 Chrysene, CAS: 218-01-9

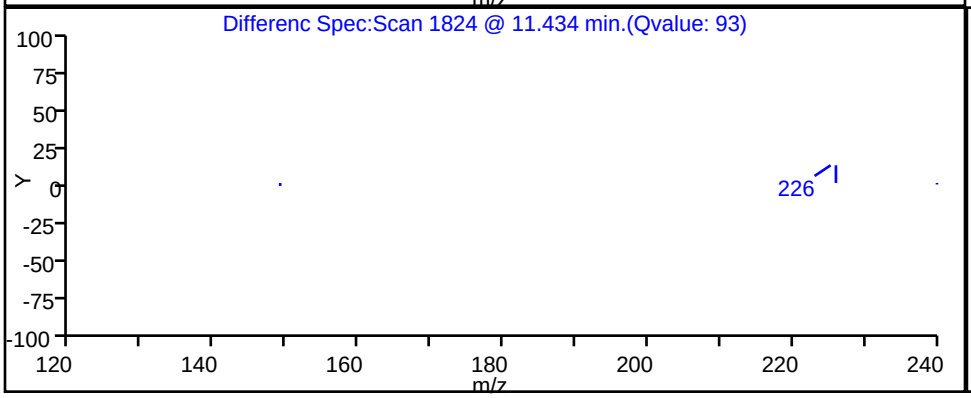


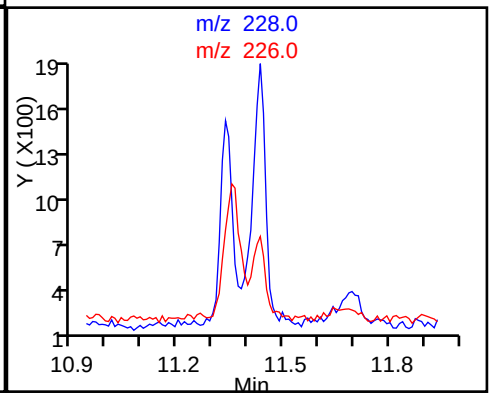












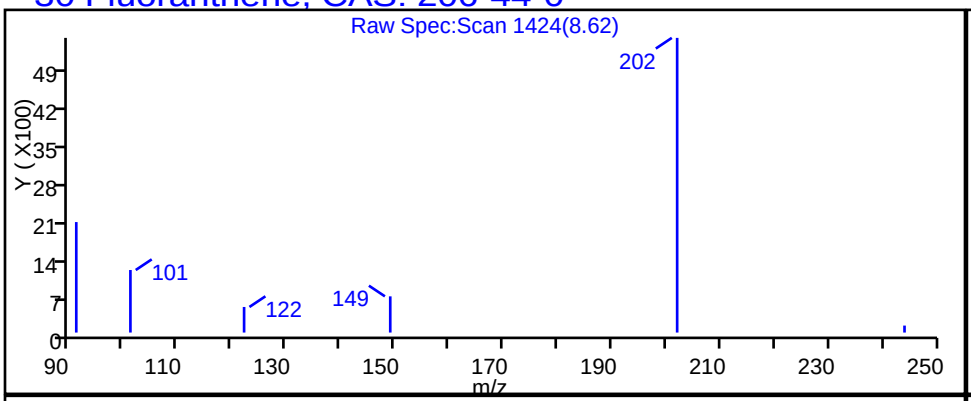
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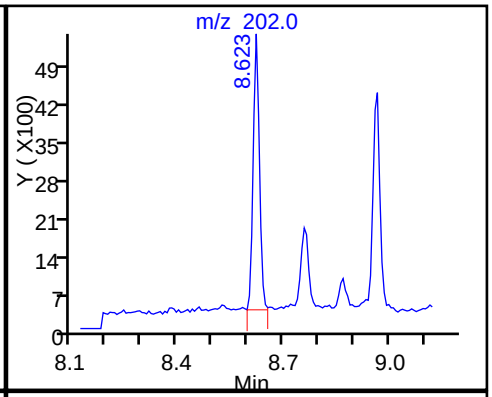
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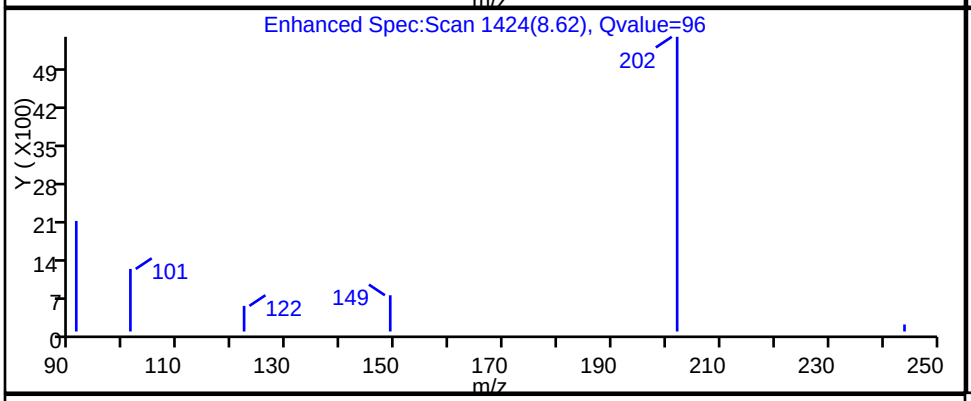
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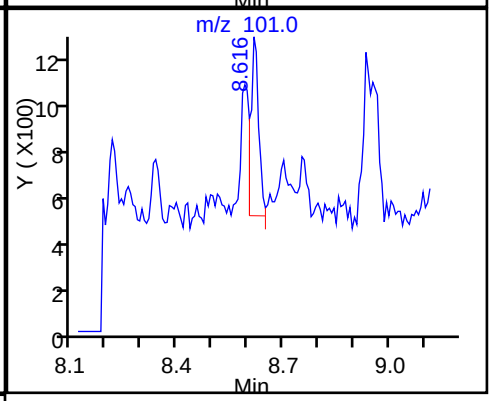
Injection Date:	16-Jun-2017 21:14:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-11-B	Lab Sample ID:	280-97928-11		
Client ID:	SS025-SB08(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	15	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

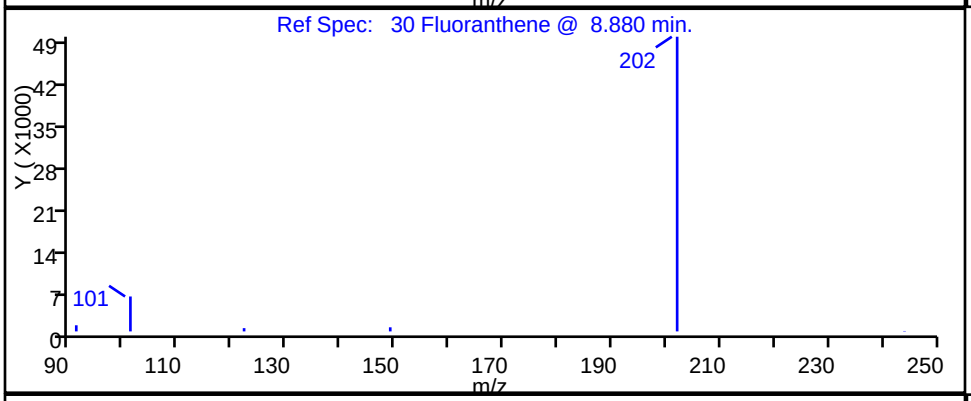
30 Fluoranthene, CAS: 206-44-0

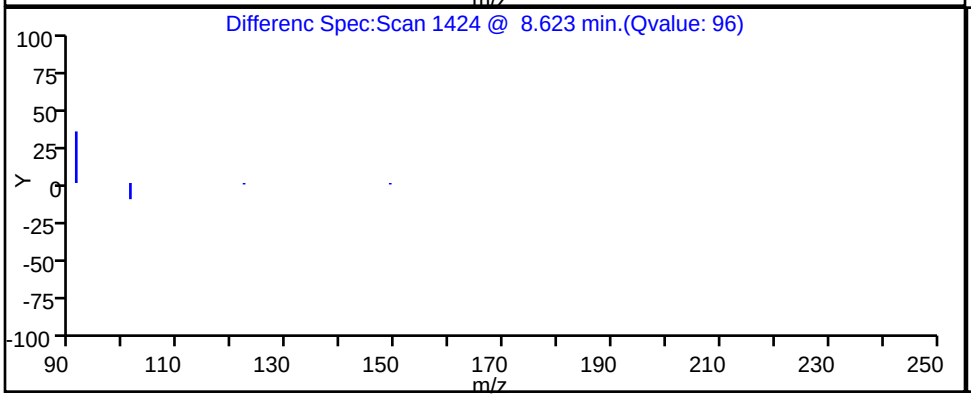


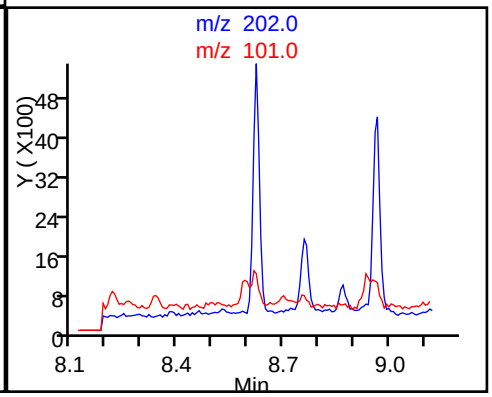












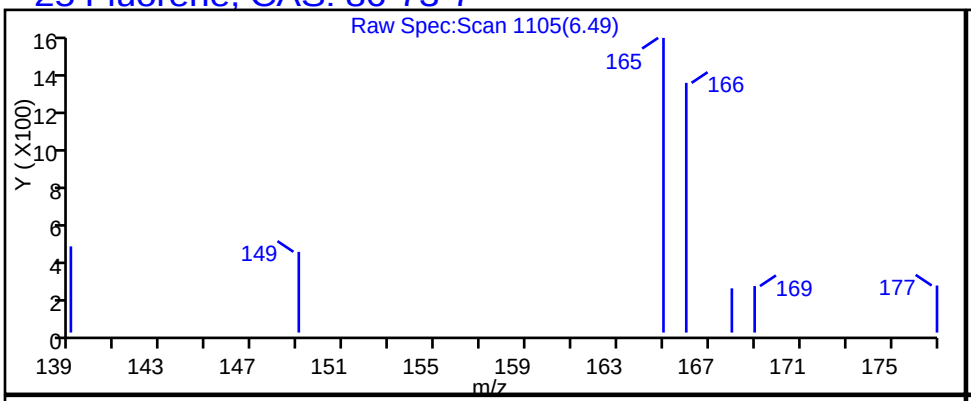
Report Date: 19-Jun-2017 15:44:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

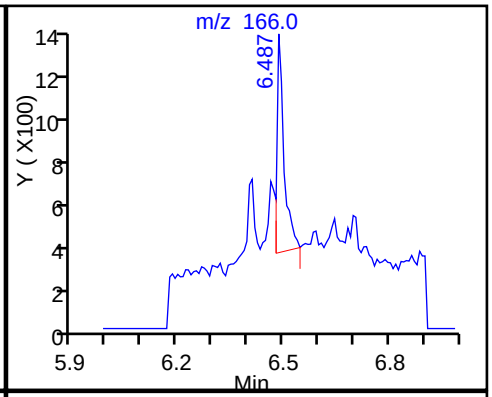
TestAmerica Denver

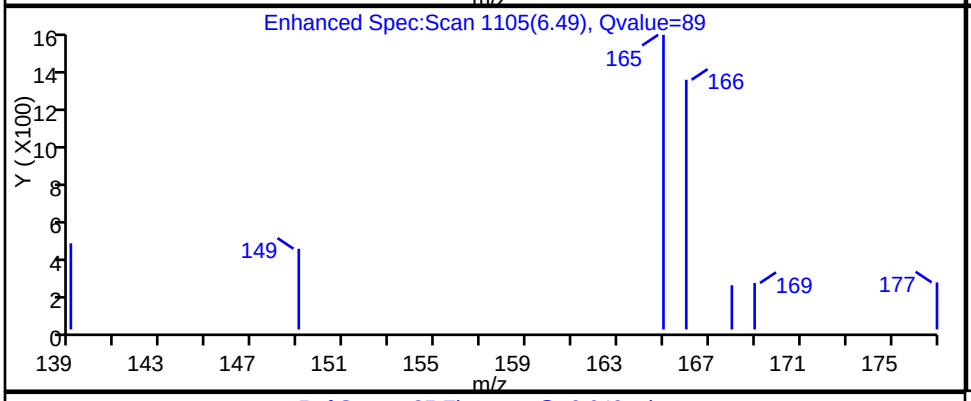
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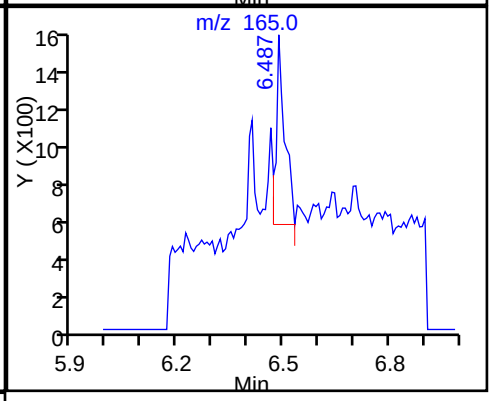
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Lims ID:	280-97928-A-11-B	Lab Sample ID:	280-97928-11		
Client ID:	SS025-SB08(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	15	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

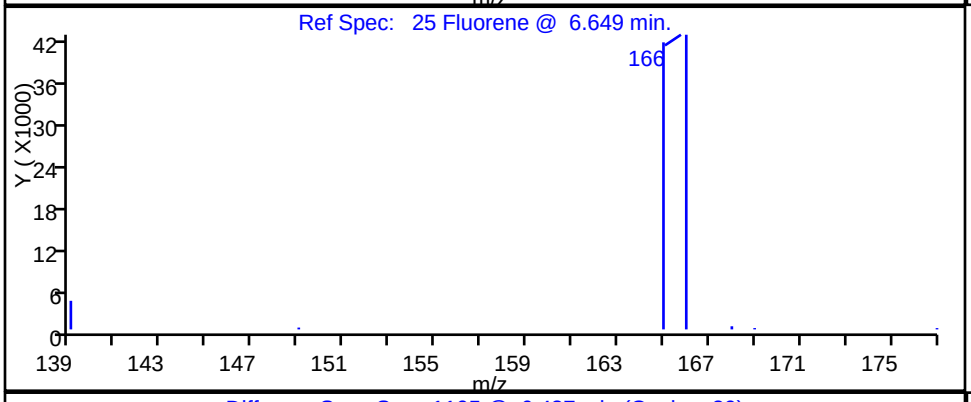
25 Fluorene, CAS: 86-73-7

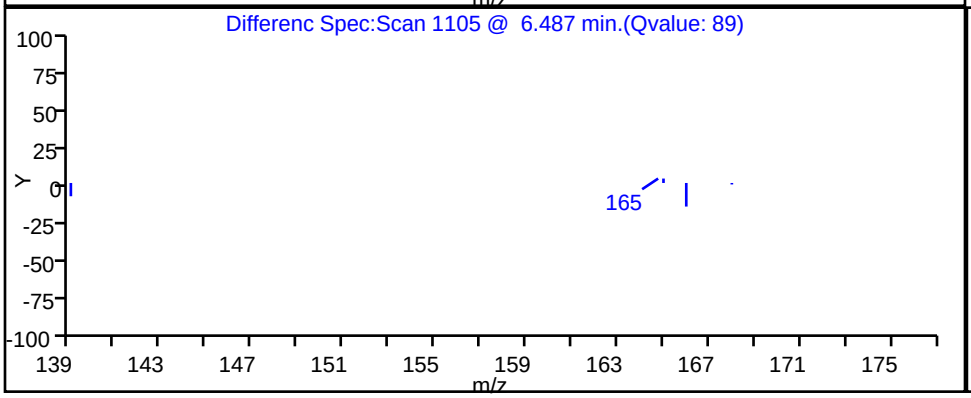


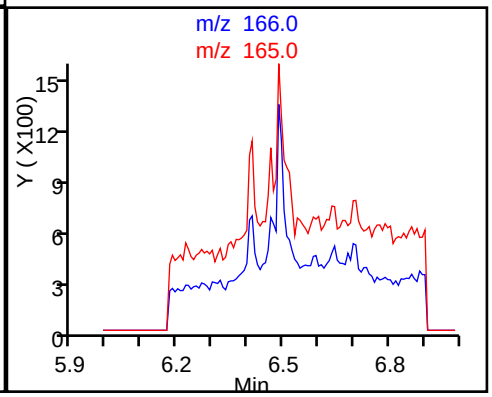












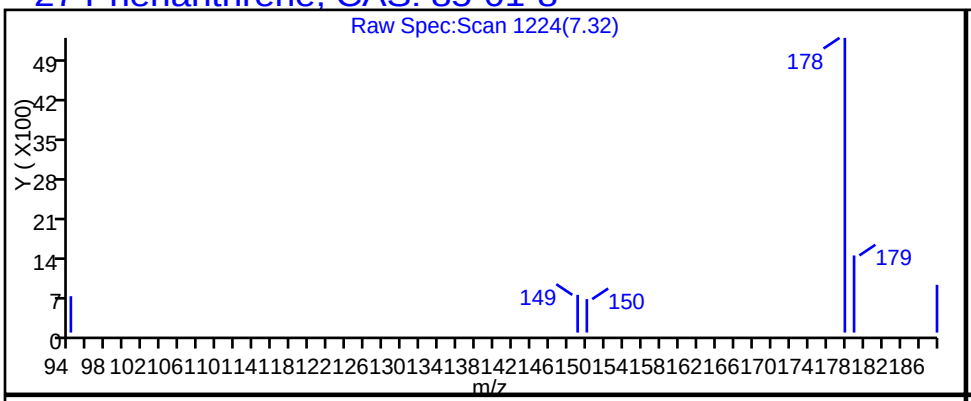
Report Date: 19-Jun-2017 15:44:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

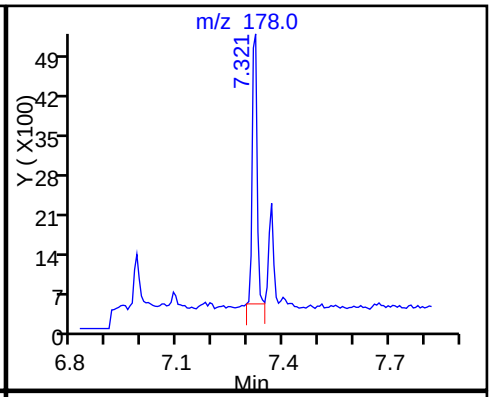
TestAmerica Denver

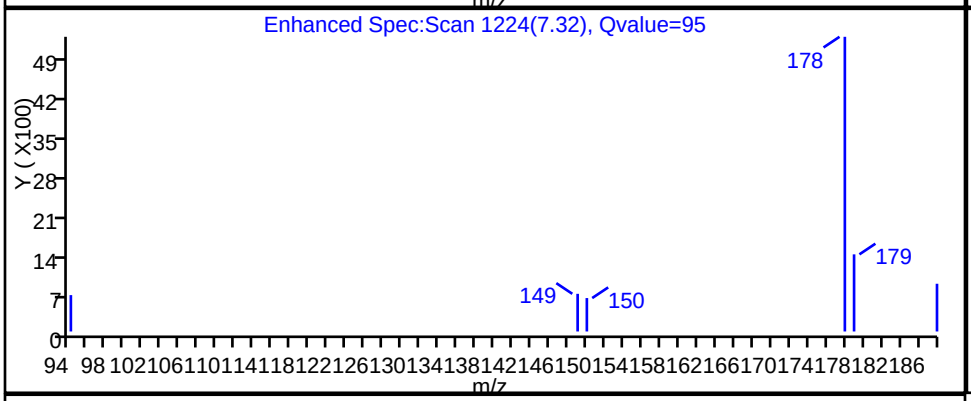
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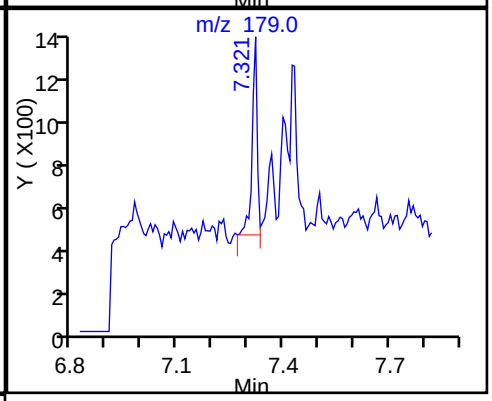
Injection Date:	16-Jun-2017 21:14:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-11-B	Lab Sample ID:	280-97928-11		
Client ID:	SS025-SB08(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	15	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

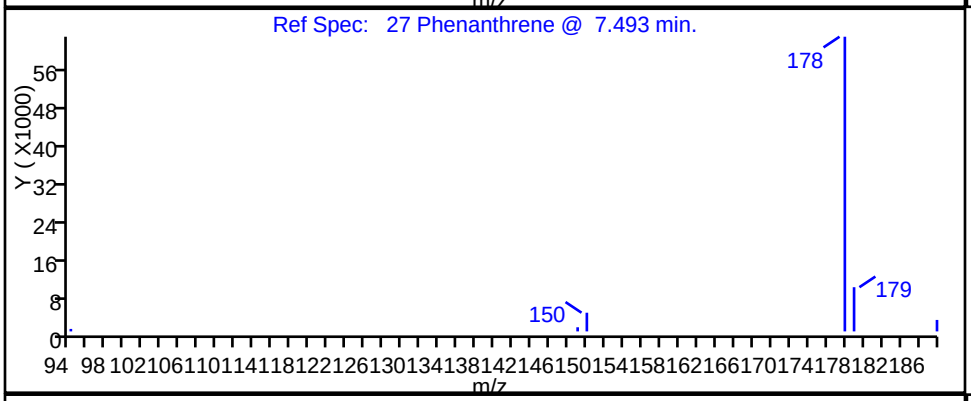
27 Phenanthrene, CAS: 85-01-8

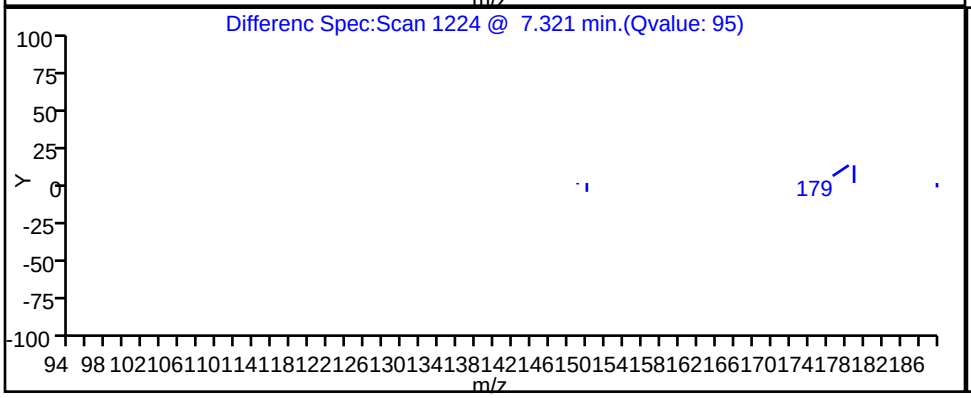


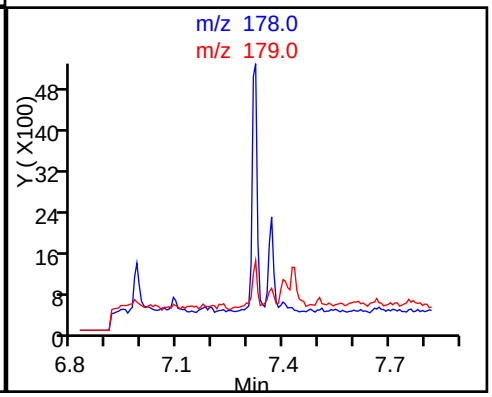












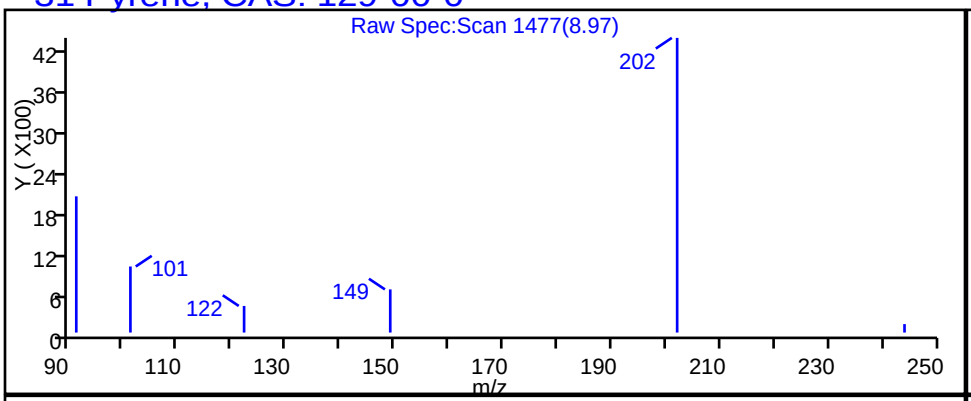
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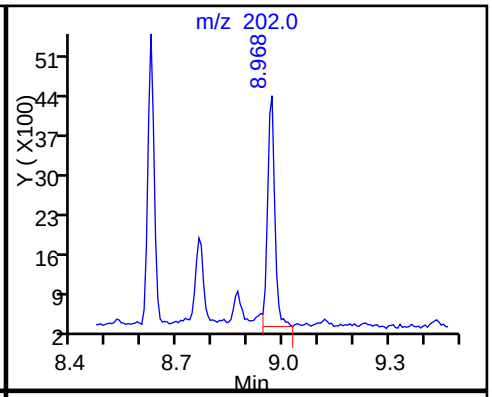
TestAmerica Denver

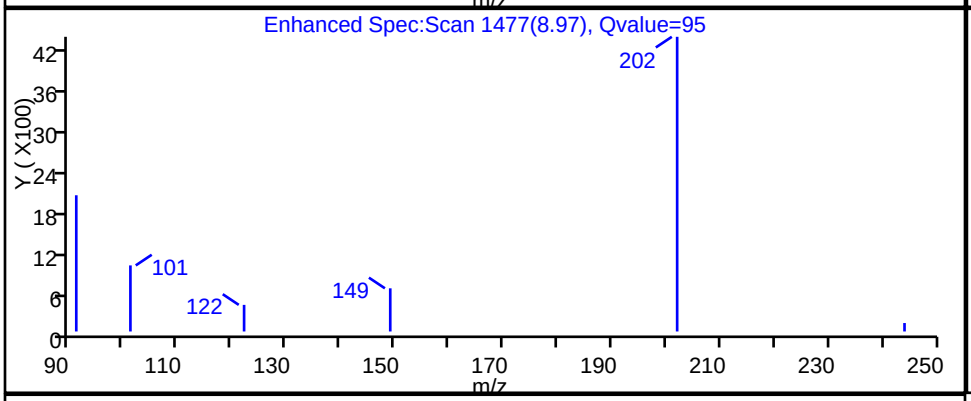
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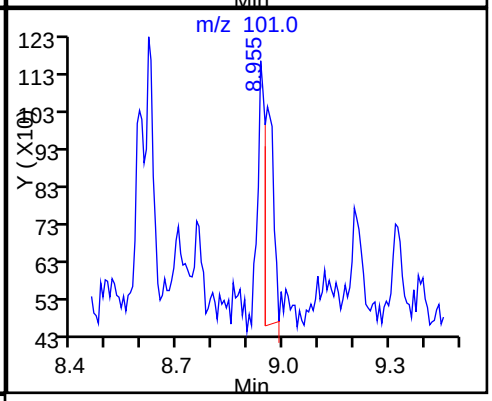
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Lims ID:	280-97928-A-11-B	Lab Sample ID:	280-97928-11		
Client ID:	SS025-SB08(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	15	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

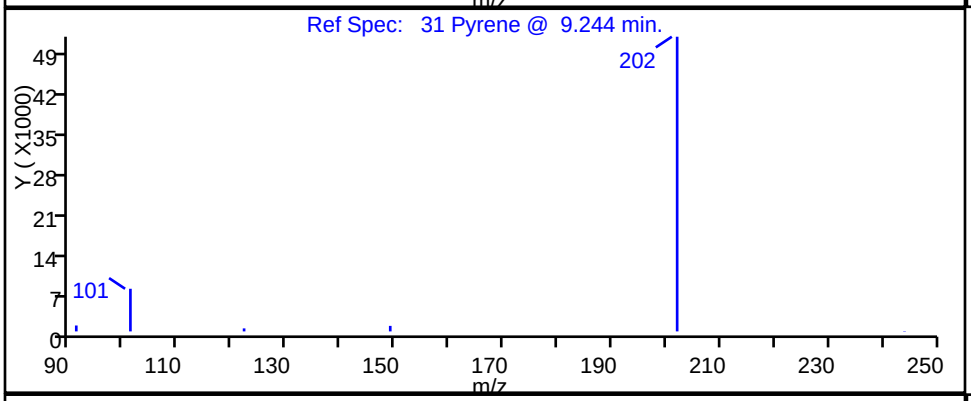
31 Pyrene, CAS: 129-00-0

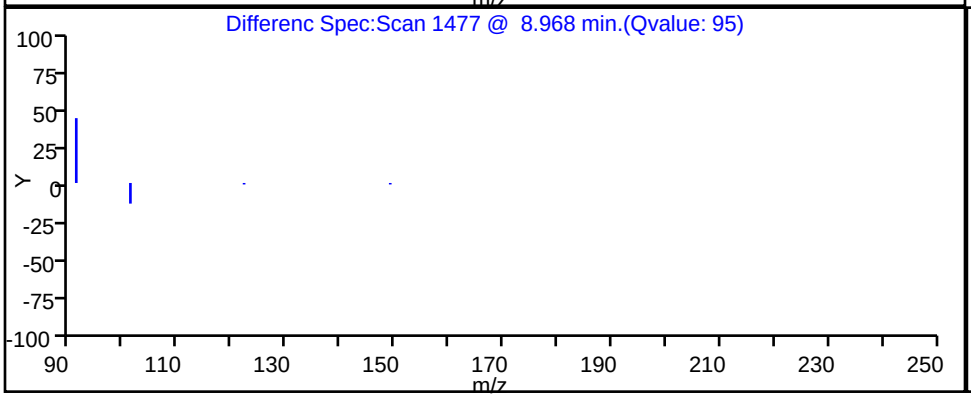


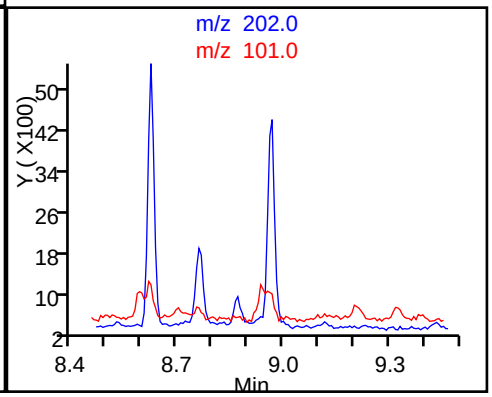












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS09 | Lab Sample ID: 280-97928-12

Matrix: Solid | Lab File ID: F7283.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 11:35

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 32.2(g) | Date Analyzed: 06/16/2017 21:40

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 11.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	2.7	J	5.3	0.53	0.27
91-57-6	2-Methylnaphthalene	4.2	J	5.3	0.70	0.33
83-32-9	Acenaphthene	1.4	J M	5.3	0.28	0.17
208-96-8	Acenaphthylene	4.7	J M	5.3	0.70	0.18
120-12-7	Anthracene	7.1		5.3	2.6	0.76
56-55-3	Benzo[a]anthracene	25		5.3	2.6	0.95
50-32-8	Benzo[a]pyrene	25		5.3	2.6	0.78
205-99-2	Benzo[b]fluoranthene	49		5.3	2.6	1.3
191-24-2	Benzo[g,h,i]perylene	19		5.3	2.6	1.2
207-08-9	Benzo[k]fluoranthene	16		5.3	2.6	1.1
218-01-9	Chrysene	46		5.3	2.6	1.1
53-70-3	Dibenz(a,h)anthracene	5.5		5.3	2.6	1.4
206-44-0	Fluoranthene	40		5.3	2.6	1.1
86-73-7	Fluorene	3.4	J	5.3	0.70	0.50
193-39-5	Indeno[1,2,3-cd]pyrene	16		5.3	2.6	1.2
91-20-3	Naphthalene	3.1	J	5.3	0.70	0.34
85-01-8	Phenanthrene	19		5.3	2.6	1.2
129-00-0	Pyrene	39		5.3	2.6	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	84		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	95		44-125
1718-51-0	Terphenyl-d14 (Surr)	77		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7283.D
Lims ID: 280-97928-B-12-B
Client ID: SS025-SS09
Sample Type: Client
Inject. Date: 16-Jun-2017 21:40:30 ALS Bottle#: 16 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-b-12-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:25:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	97	25362	600.0	
* 2 Phenanthrene-d10	188	7.295	7.301	-0.006	100	41806	600.0	
* 3 Chrysene-d12	240	11.362	11.371	-0.009	97	37202	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	100	18964	477.3	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	99	27526	418.6	
$ 6 Terphenyl-d14	244	9.118	9.130	-0.012	93	16261	383.1	
14 Naphthalene	128	4.590	4.589	0.001	99	7313	88.9	
16 2-Methylnaphthalene	142	5.143	5.147	-0.004	99	6316	119.5	
17 1-Methylnaphthalene	142	5.230	5.235	-0.005	98	4077	77.0	
22 Acenaphthylene	152	5.908	5.917	-0.009	99	11615	132.8	M
23 Acenaphthene	153	6.055	6.055	0.000	90	2166	40.5	M
25 Fluorene	166	6.487	6.494	-0.007	98	6273	95.6	
27 Phenanthrene	178	7.314	7.321	-0.007	99	47399	534.6	
28 Anthracene	178	7.360	7.366	-0.006	97	18027	201.3	
30 Fluoranthene	202	8.623	8.629	-0.006	100	116020	1139.3	
31 Pyrene	202	8.961	8.968	-0.007	100	117867	1116.0	
35 Benzo[a]anthracene	228	11.335	11.344	-0.009	98	69760	705.1	
36 Chrysene	228	11.425	11.443	-0.018	99	119289	1303.3	
38 Benzo[b]fluoranthene	252	14.490	14.503	-0.013	100	125073	1392.4	
39 Benzo[k]fluoranthene	252	14.568	14.586	-0.018	99	40419	447.4	
40 Benzo[a]pyrene	252	15.570	15.587	-0.017	100	64107	723.2	
41 Indeno[1,2,3-cd]pyrene	276	18.663	18.676	-0.013	82	46977	467.2	
42 Dibenz(a,h)anthracene	278	18.689	18.702	-0.013	85	12222	155.7	
43 Benzo[g,h,i]perylene	276	19.096	19.109	-0.013	98	46919	550.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

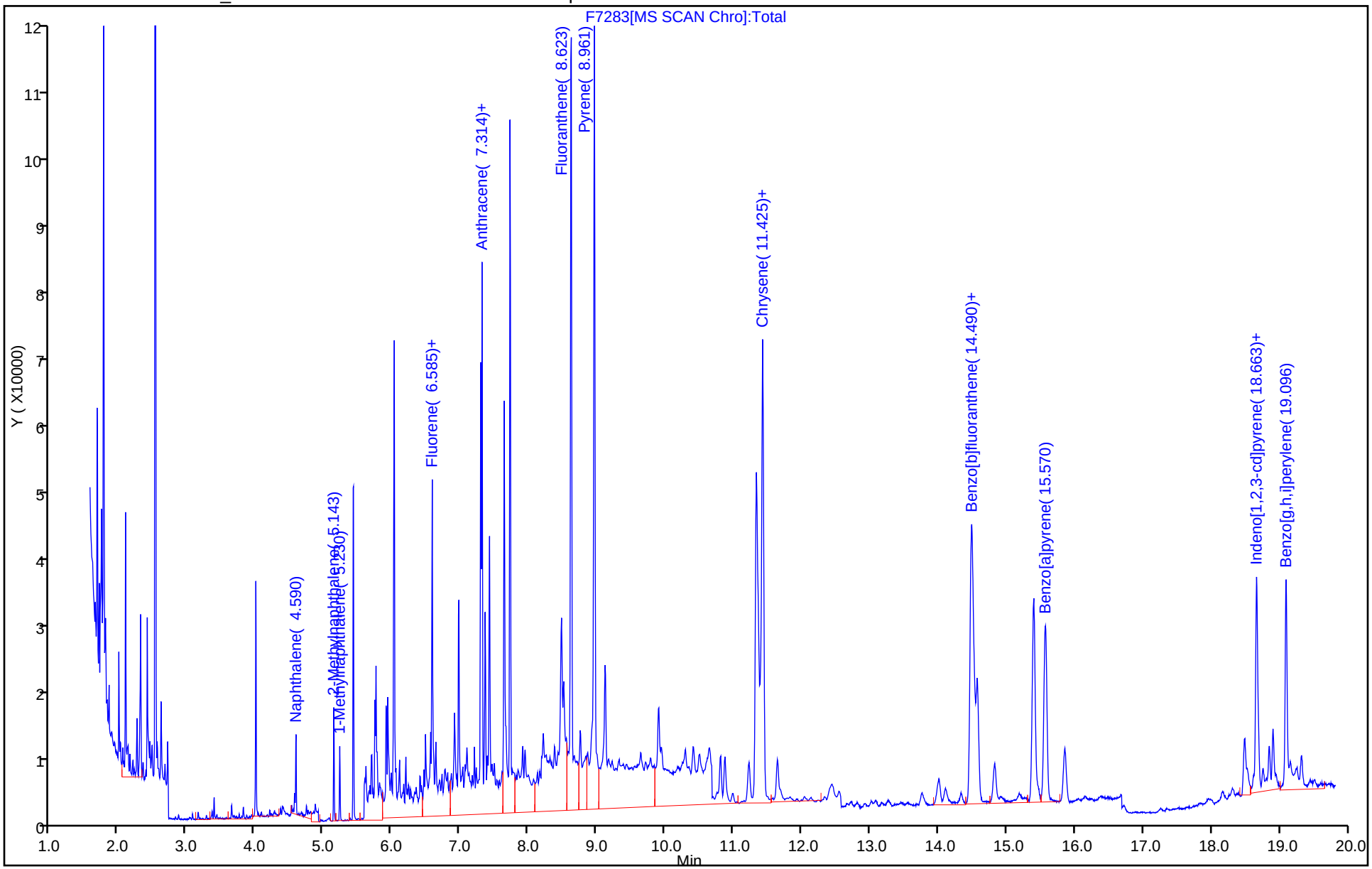
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7283.D

Injection Date:	16-Jun-2017 21:40:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-B-12-B	Lab Sample ID:	280-97928-12	Worklist Smp#:	17
Client ID:	SS025-SS09				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7283.D
Lims ID: 280-97928-B-12-B
Client ID: SS025-SS09
Sample Type: Client
Inject. Date: 16-Jun-2017 21:40:30 ALS Bottle#: 16 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-b-12-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:25:21

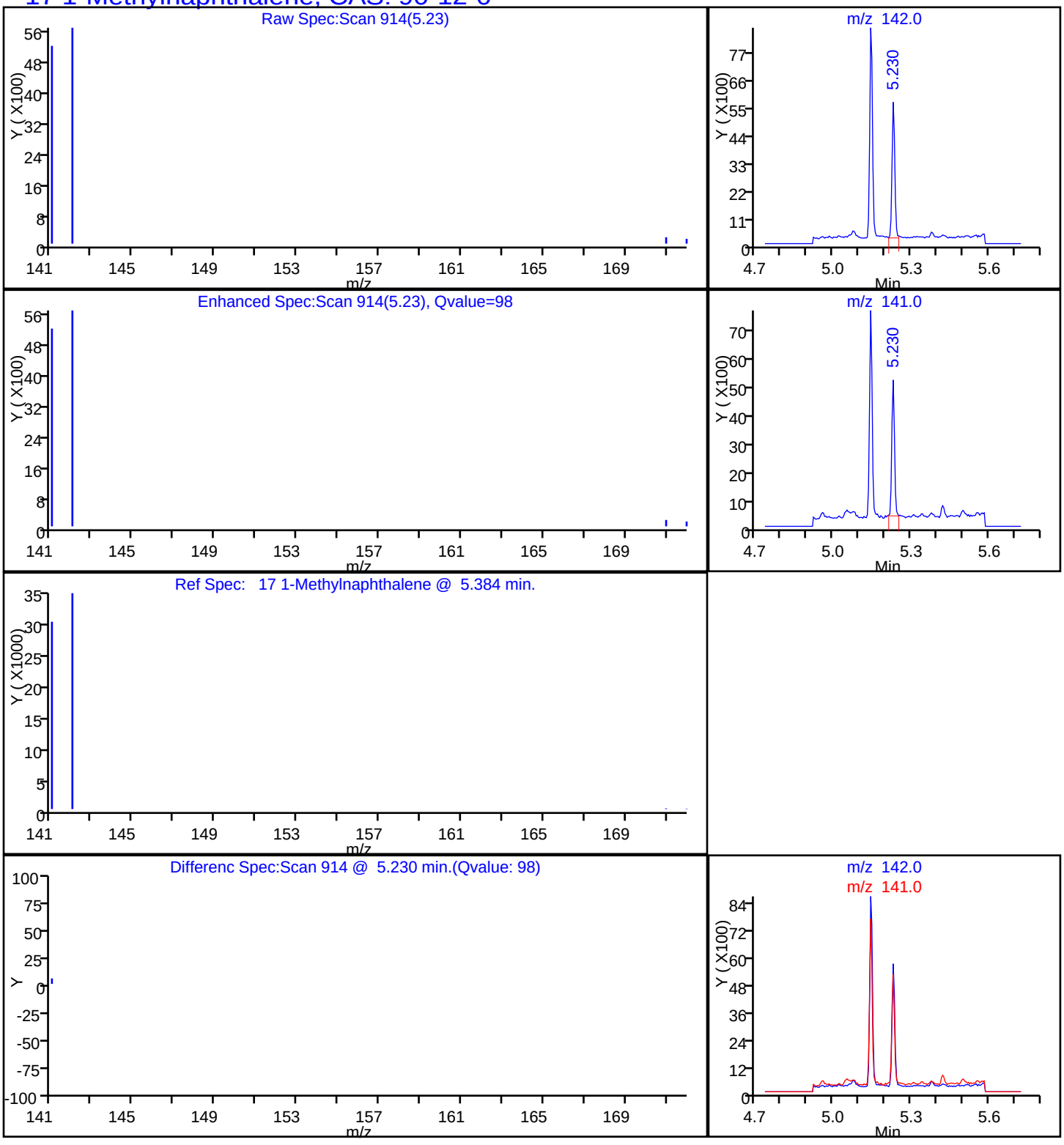
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	477.3	95.47
$ 5 2-Fluorobiphenyl	500.0	418.6	83.72
$ 6 Terphenyl-d14	500.0	383.1	76.62

Report Date: 19-Jun-2017 15:44:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7283.D				
Injection Date:	16-Jun-2017 21:40:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-12-B	Lab Sample ID:	280-97928-12		
Client ID:	SS025-SS09				
Operator ID:	WICKHAMM	ALS Bottle#:	16	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0



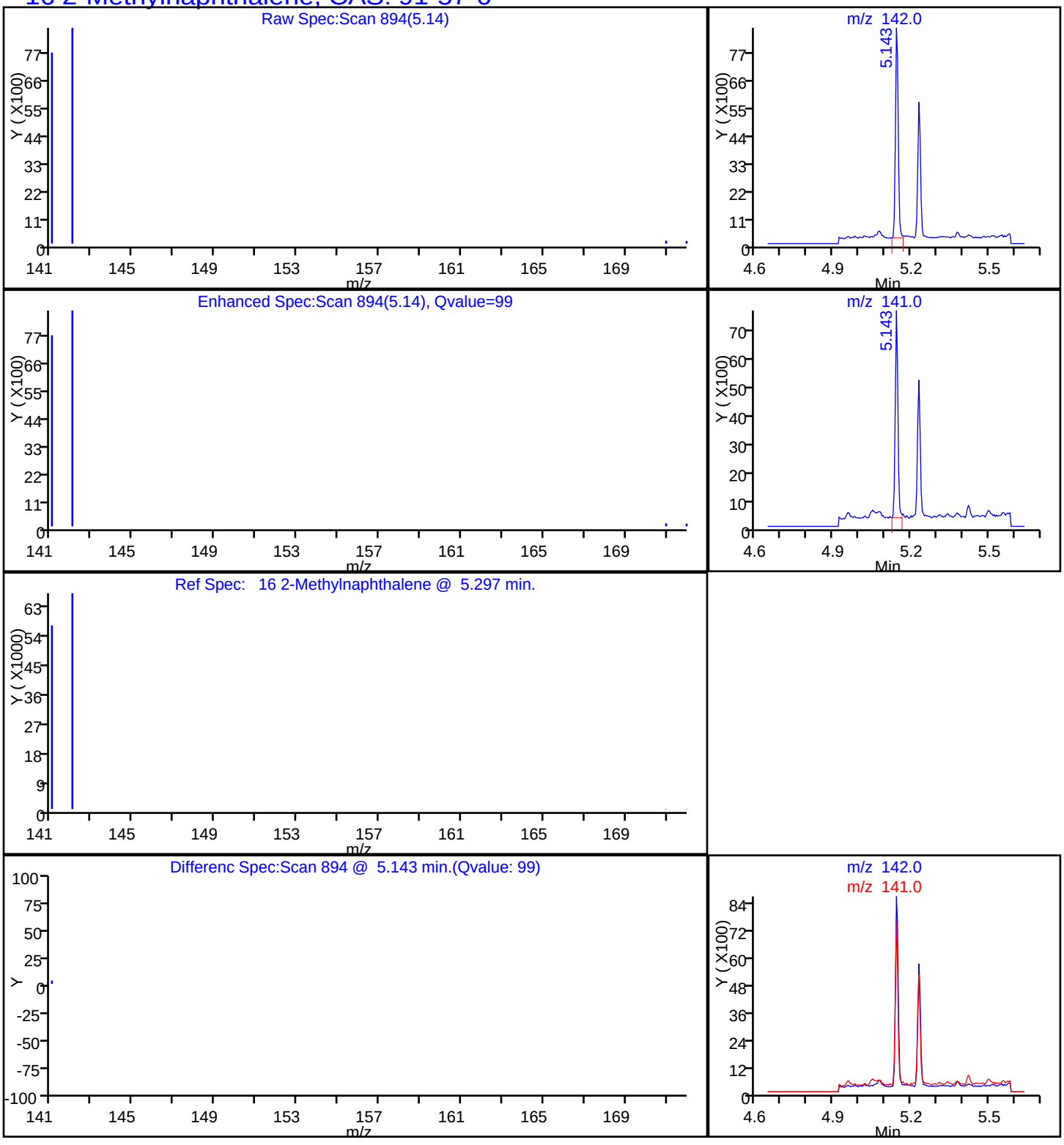
Report Date: 19-Jun-2017 15:44:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7283.D

Injection Date:	16-Jun-2017 21:40:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-12-B	Lab Sample ID:	280-97928-12		
Client ID:	SS025-SS09				
Operator ID:	WICKHAMM	ALS Bottle#:	16	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



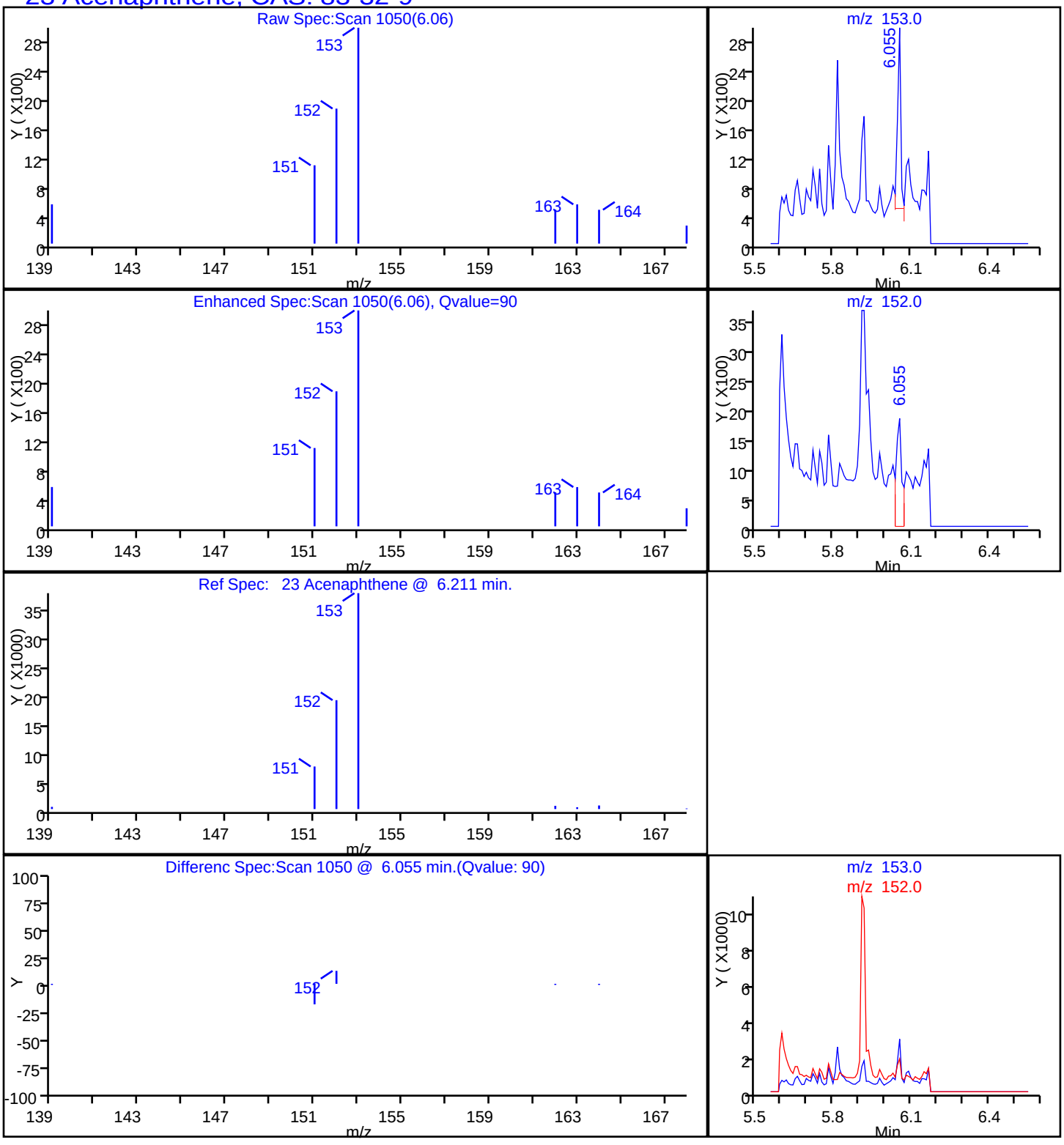
Report Date: 19-Jun-2017 15:44:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7283.D

Injection Date:	16-Jun-2017 21:40:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-12-B	Lab Sample ID:	280-97928-12		
Client ID:	SS025-SS09				
Operator ID:	WICKHAMM	ALS Bottle#:	16	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9



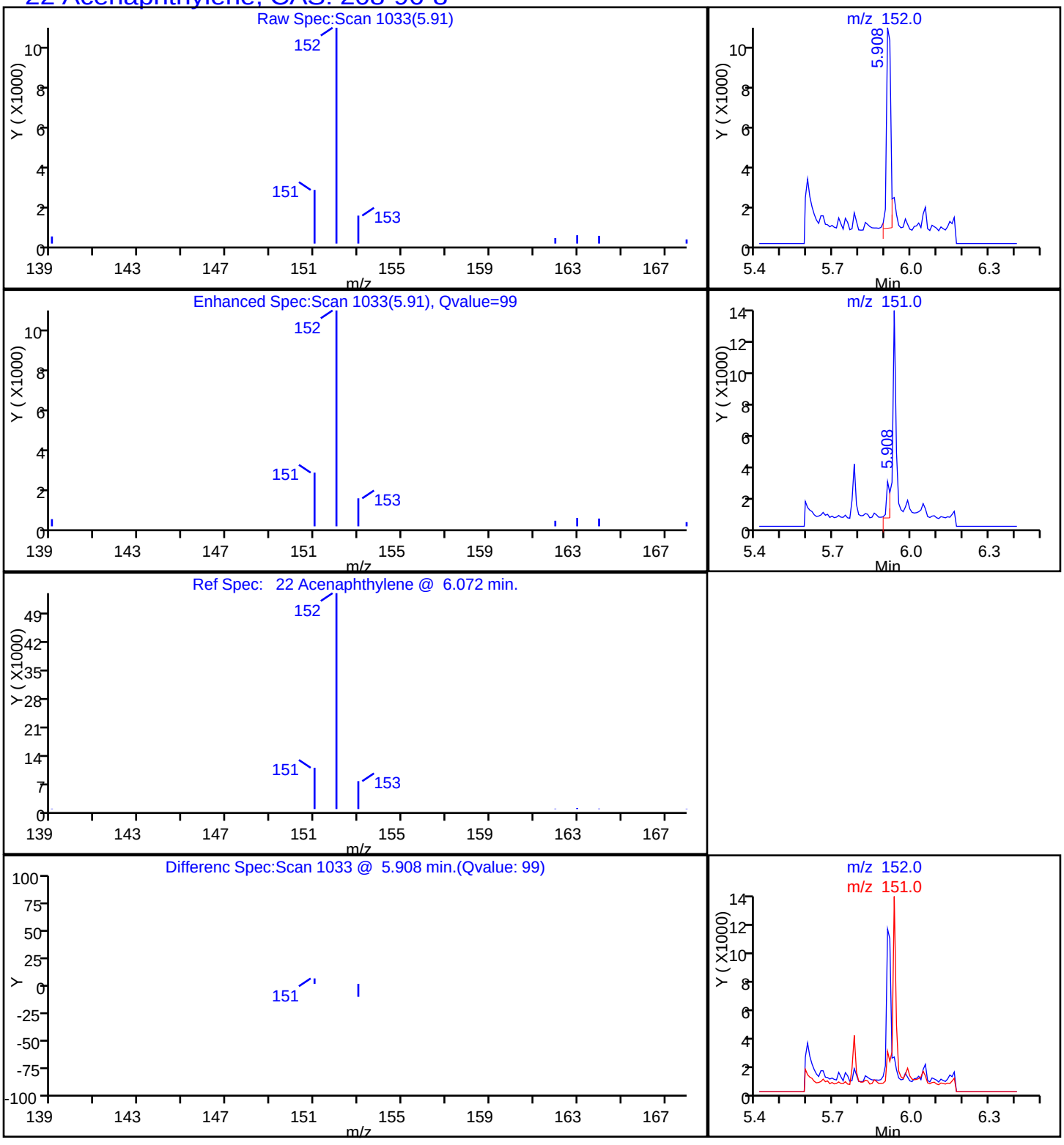
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TestAmerica Denver

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Client ID:	SS025-SS09				
Operator ID:	WICKHAMM	ALS Bottle#:	16	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Acenaphthylene, CAS: 208-96-8



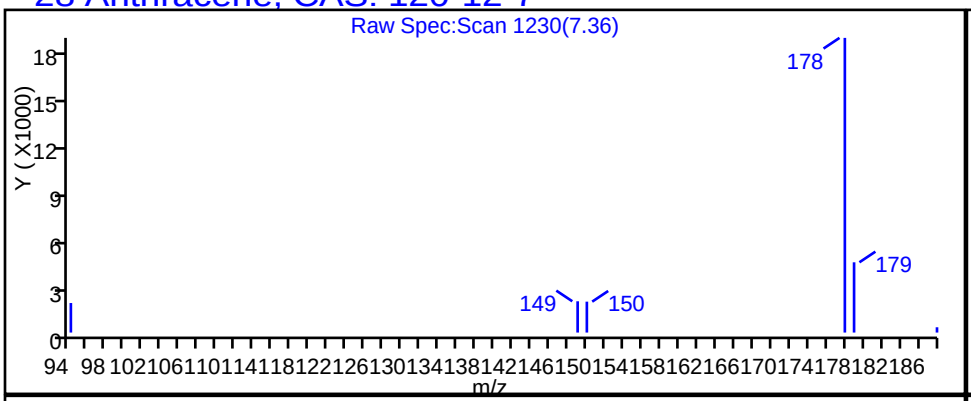
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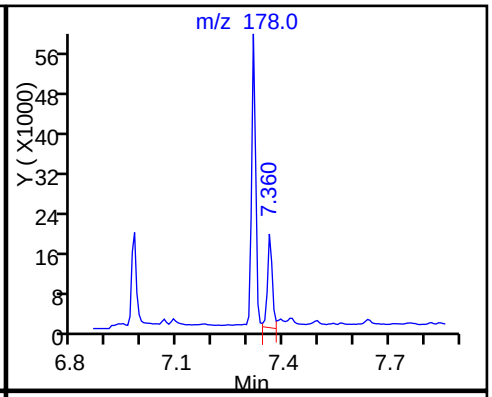
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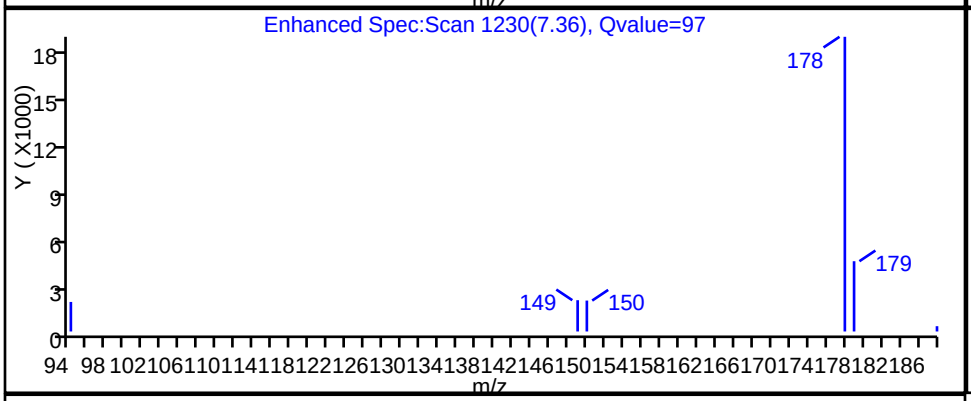
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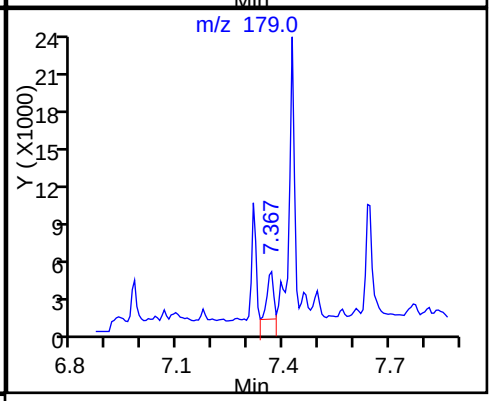
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Client ID:	SS025-SS09				
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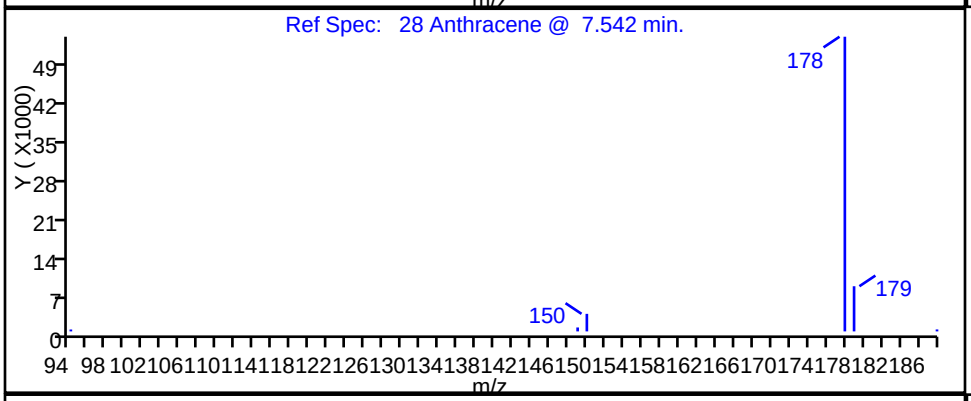
28 Anthracene, CAS: 120-12-7

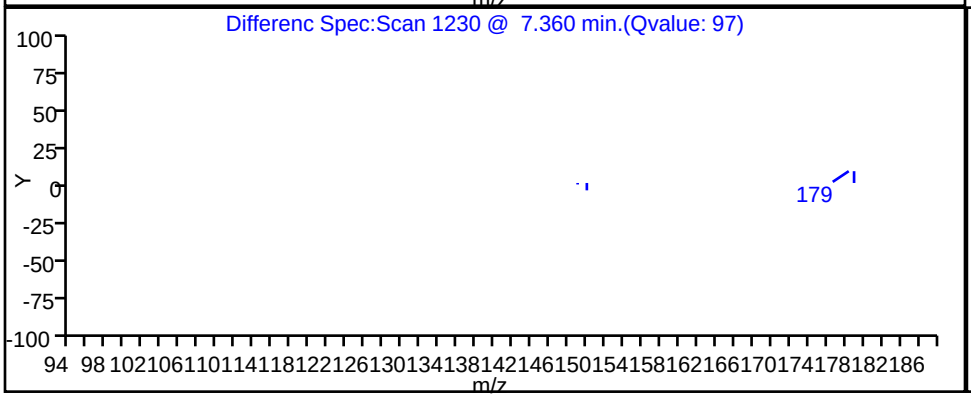


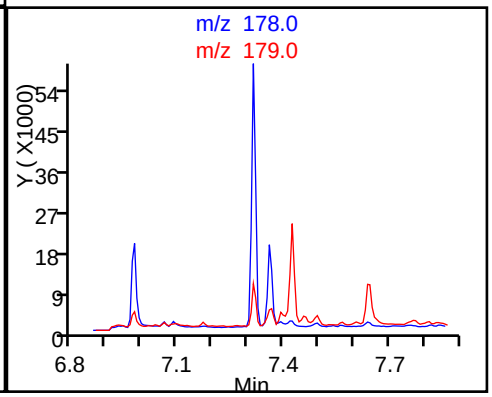












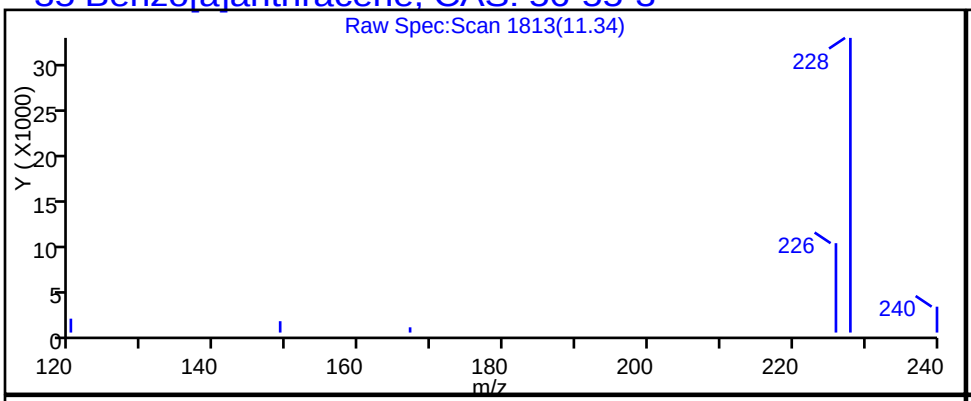
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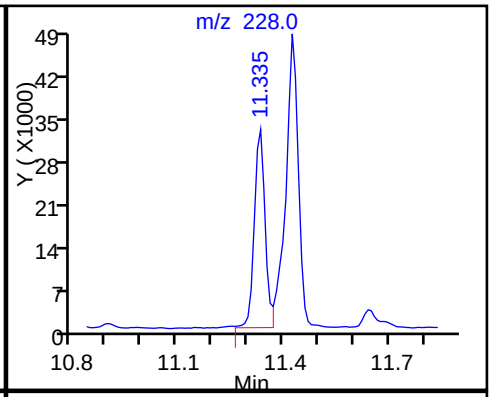
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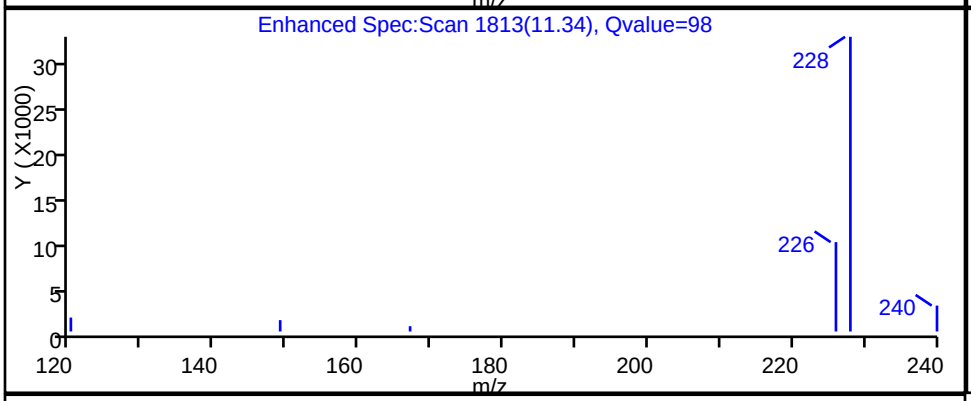
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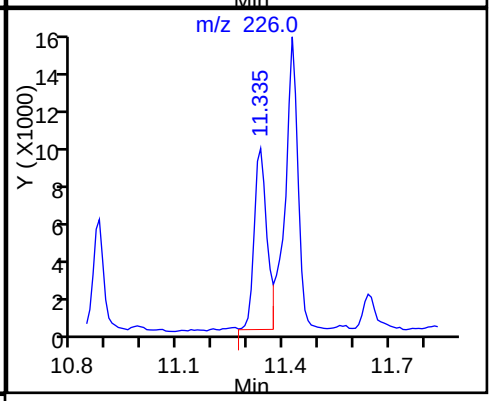
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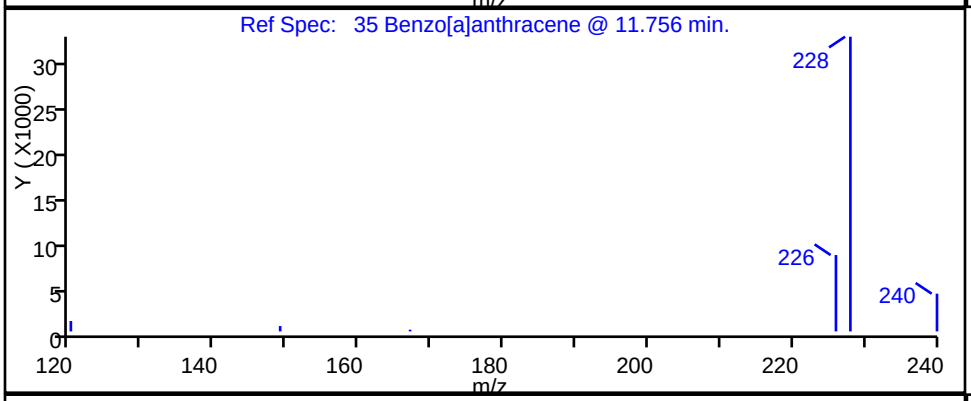
35 Benzo[a]anthracene, CAS: 56-55-3

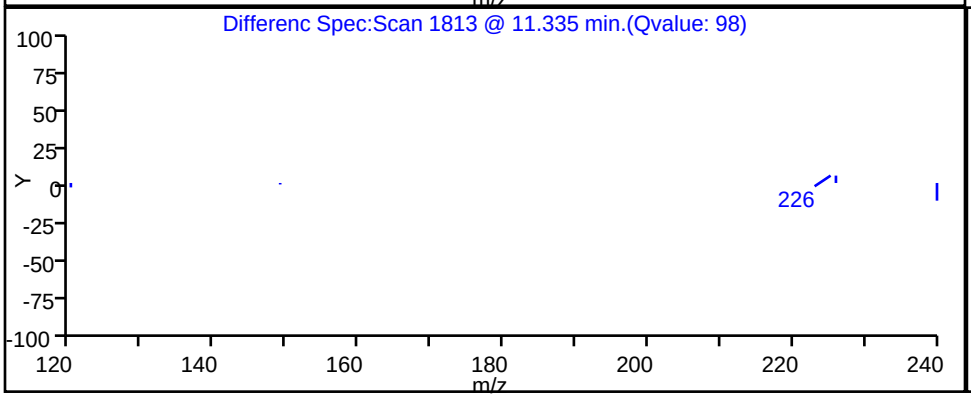


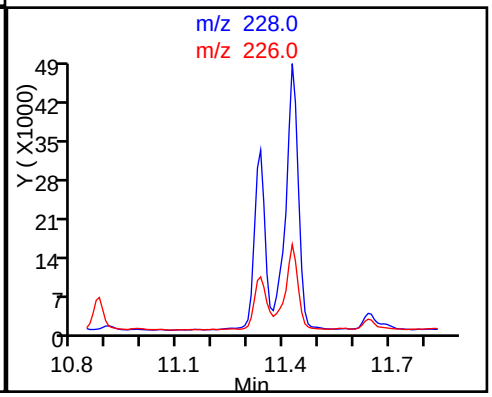












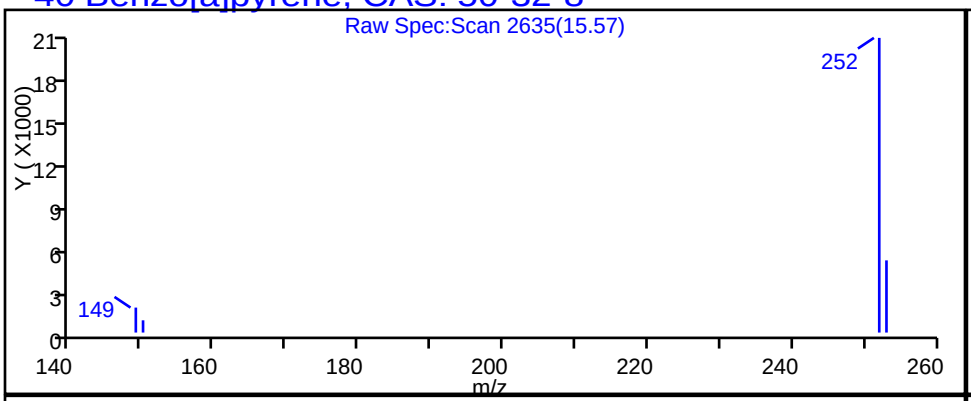
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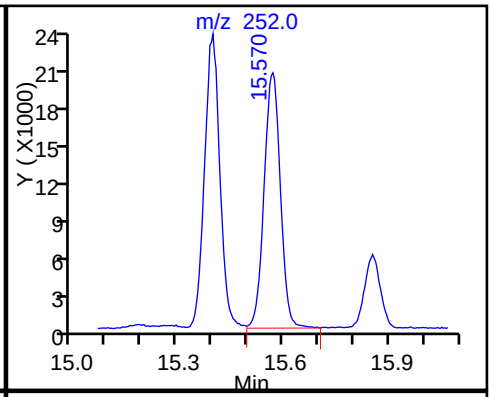
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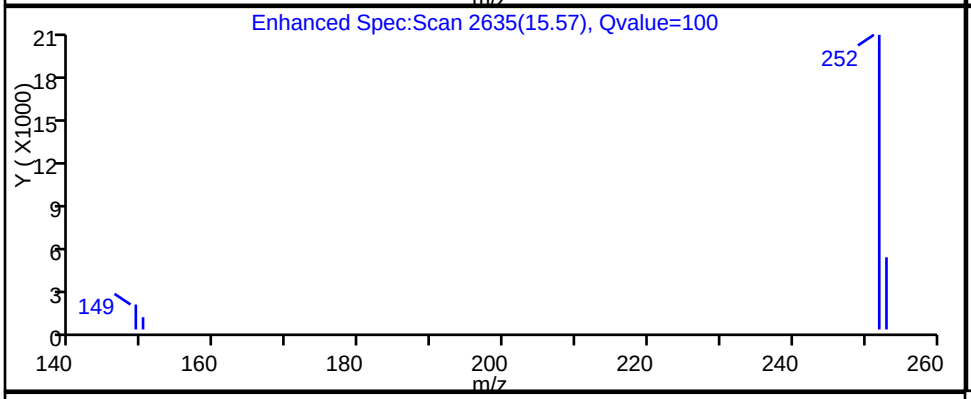
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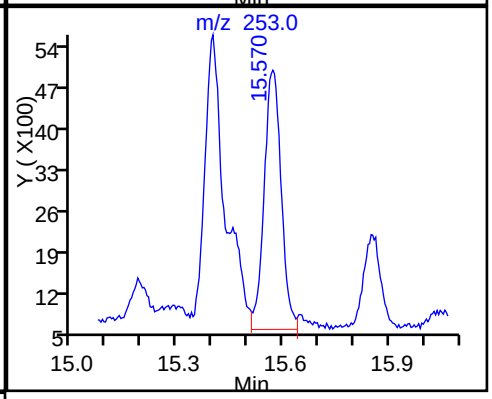
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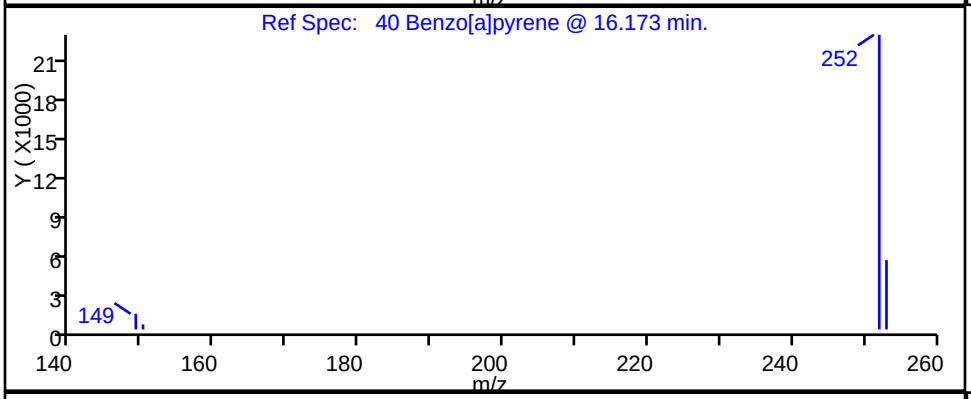
40 Benzo[a]pyrene, CAS: 50-32-8

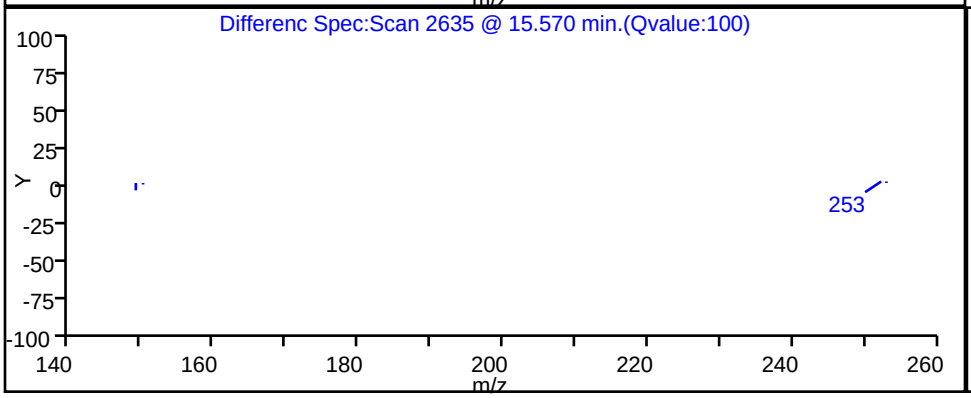


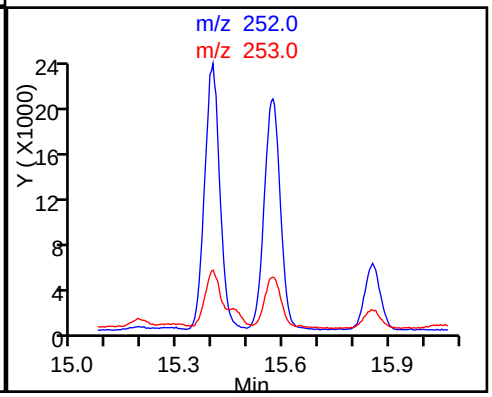












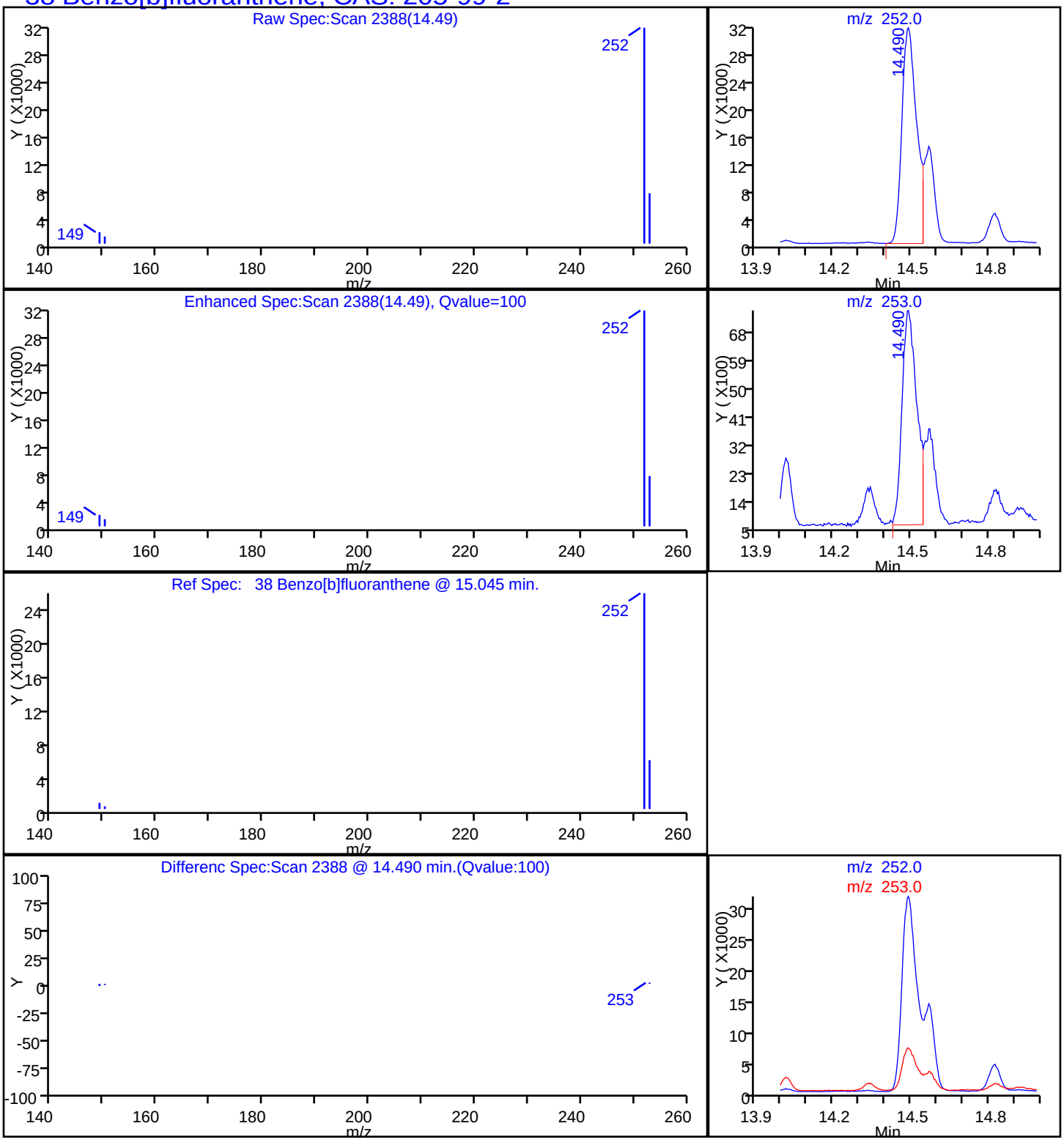
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38 Benzo[b]fluoranthene, CAS: 205-99-2

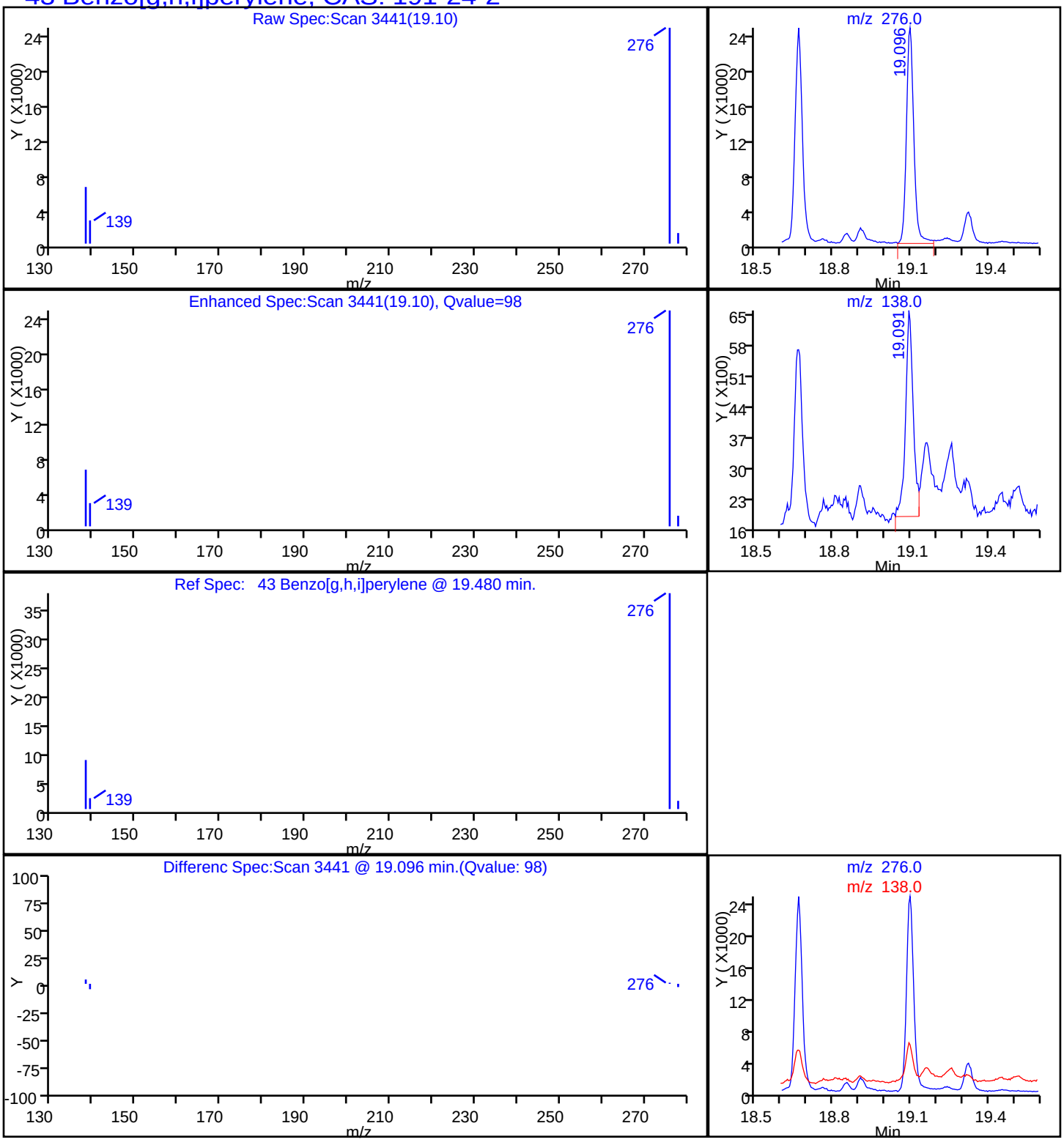


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TestAmerica Denver

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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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43 Benzo[g,h,i]perylene, CAS: 191-24-2

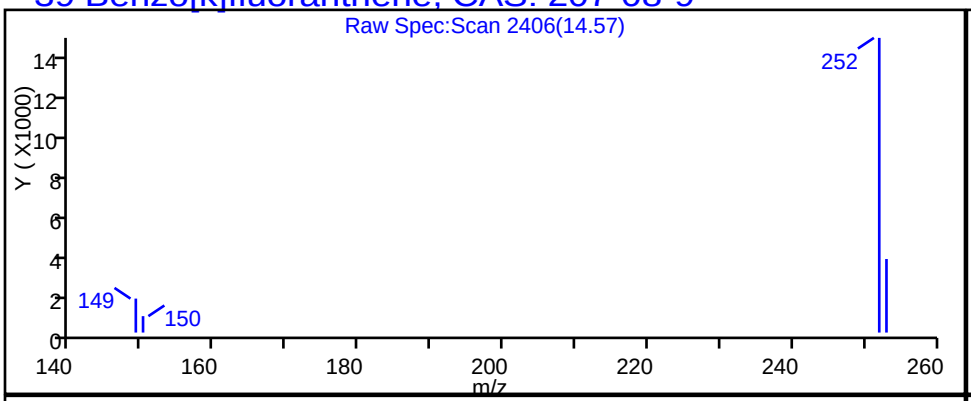


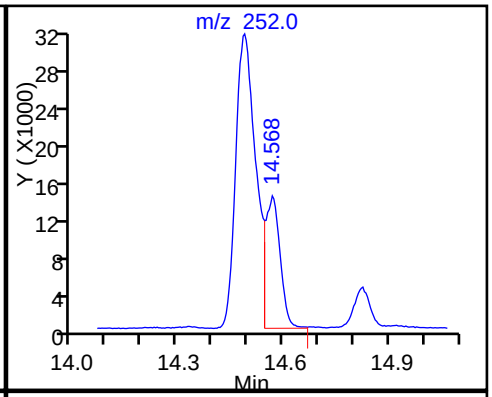
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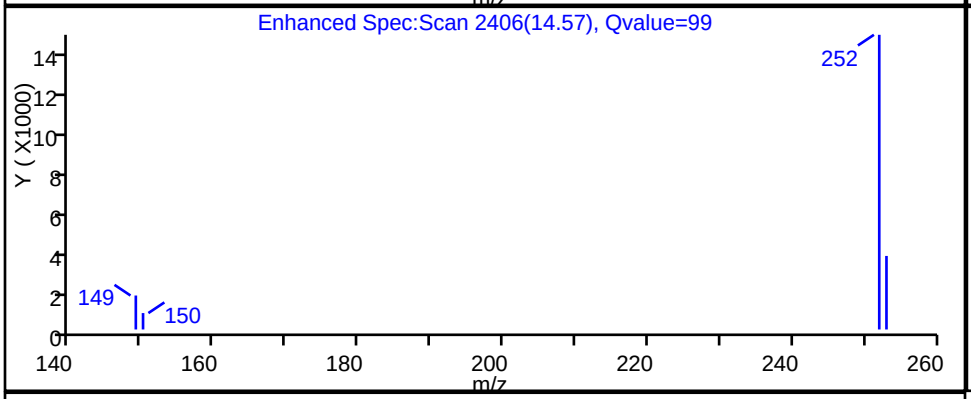
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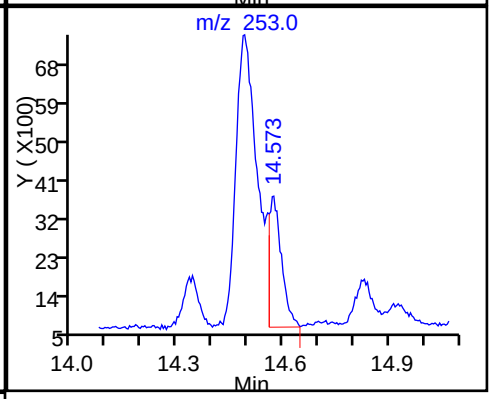
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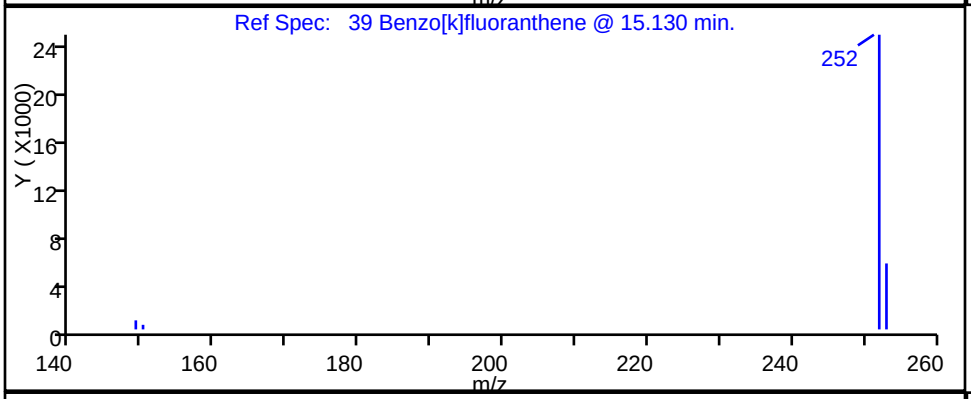
39 Benzo[k]fluoranthene, CAS: 207-08-9

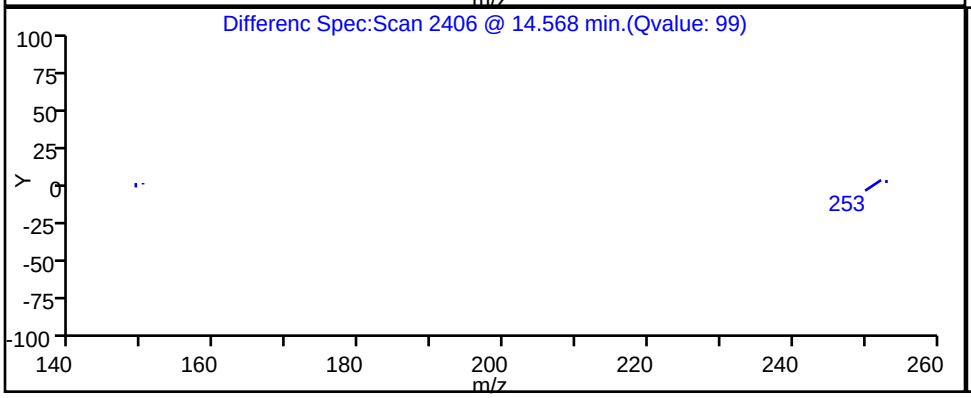


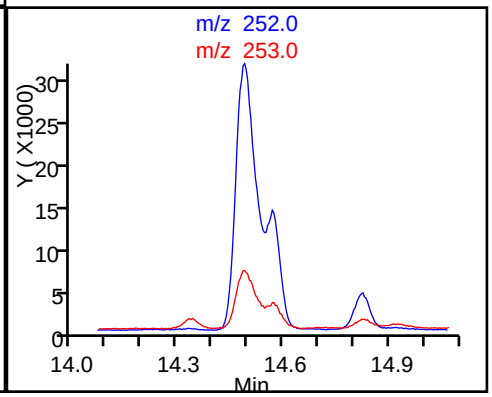












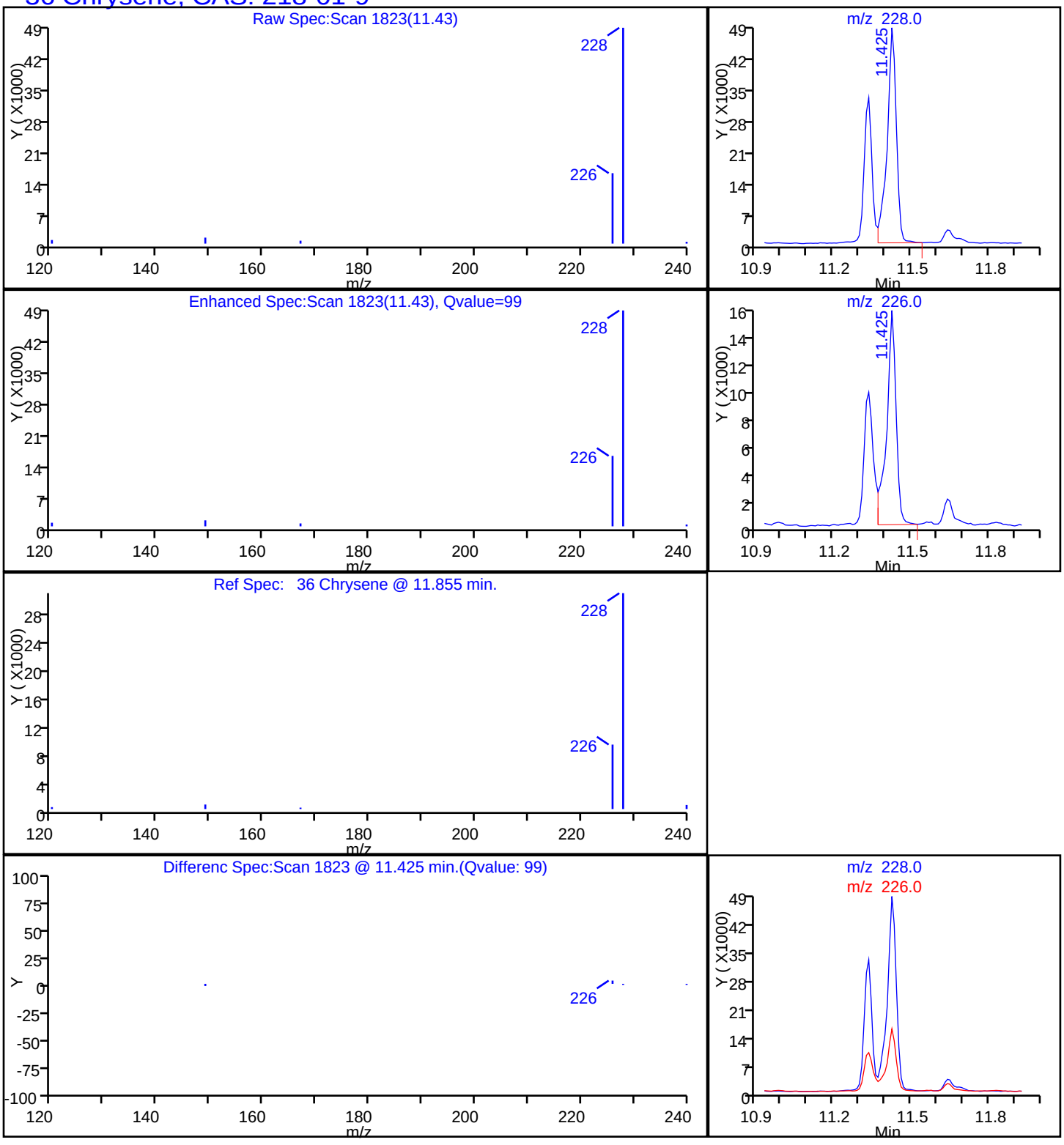
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TestAmerica Denver

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Client ID:	SS025-SS09				
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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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Column:		Detector	MS SCAN		

36 Chrysene, CAS: 218-01-9



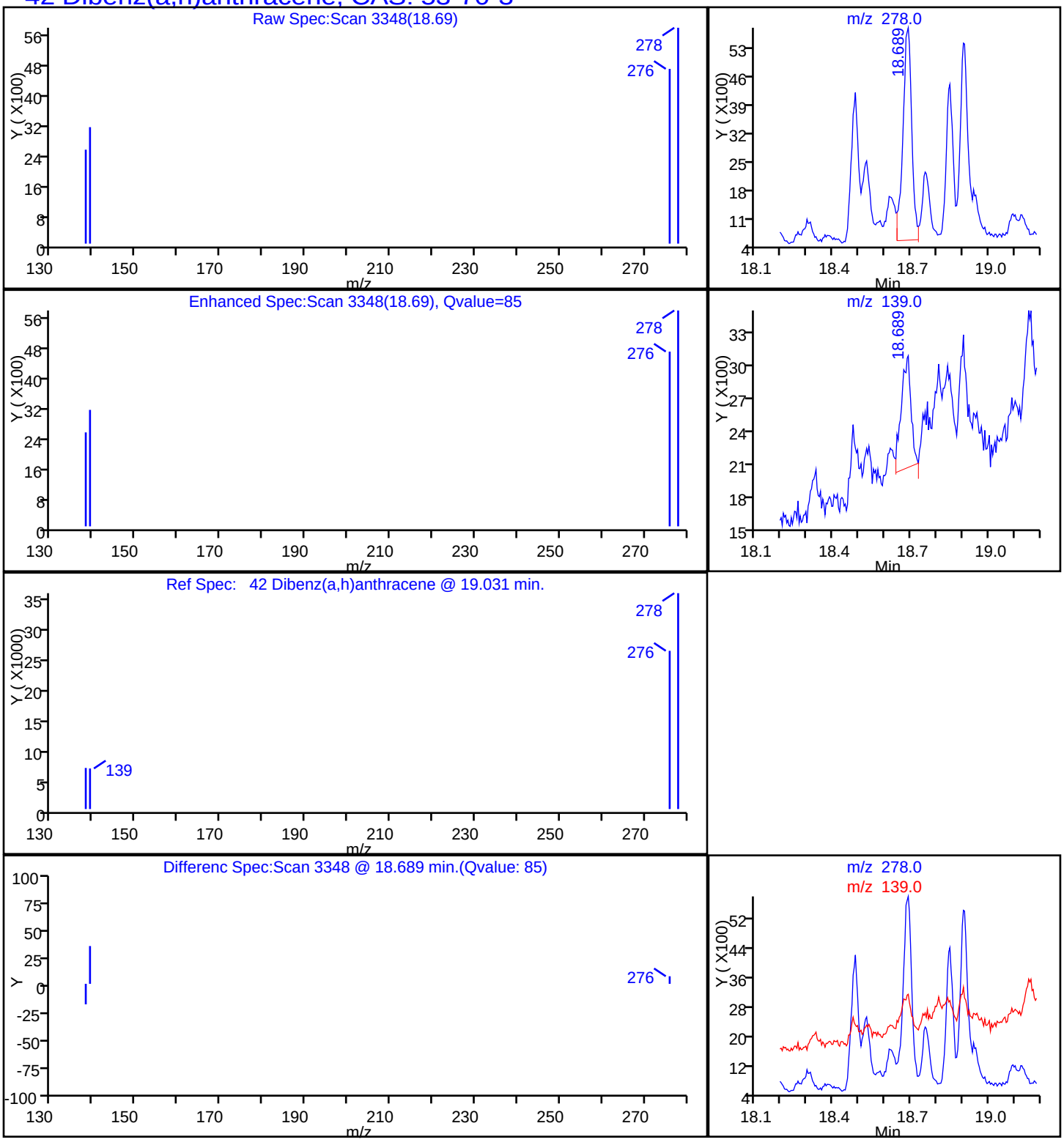
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TestAmerica Denver

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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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Column:		Detector	MS SCAN		

42 Dibenz(a,h)anthracene, CAS: 53-70-3

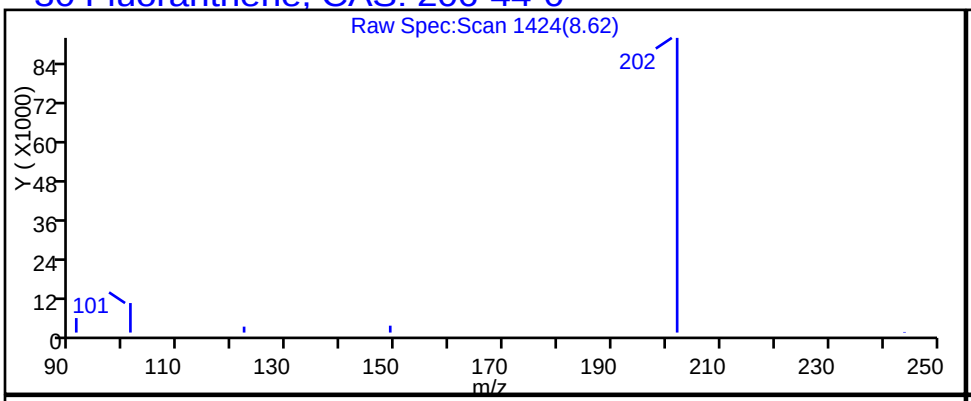


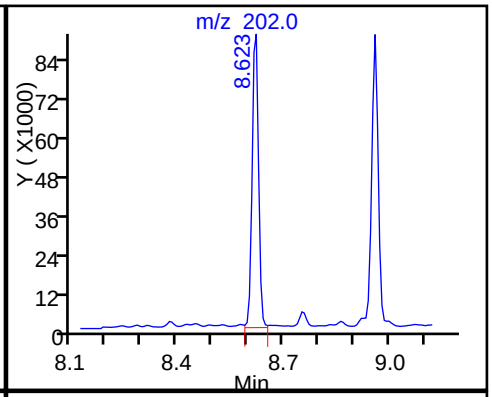
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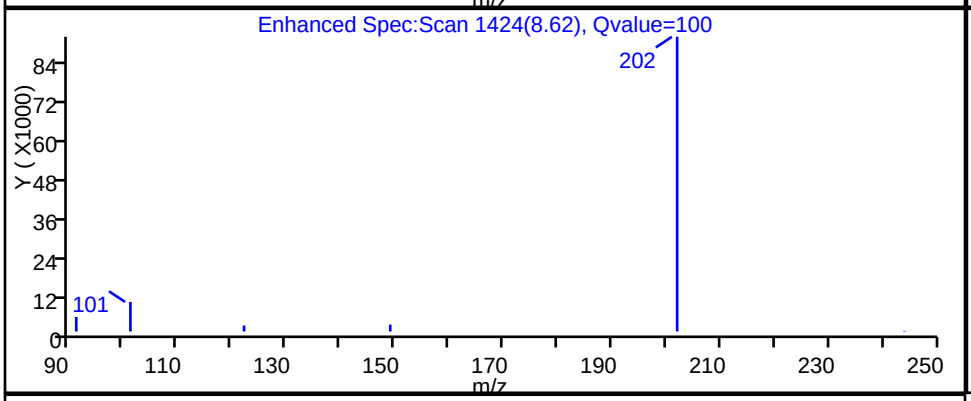
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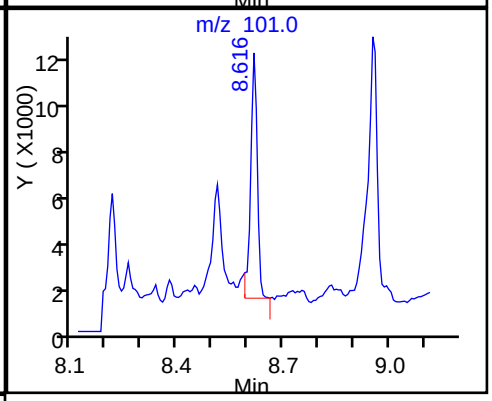
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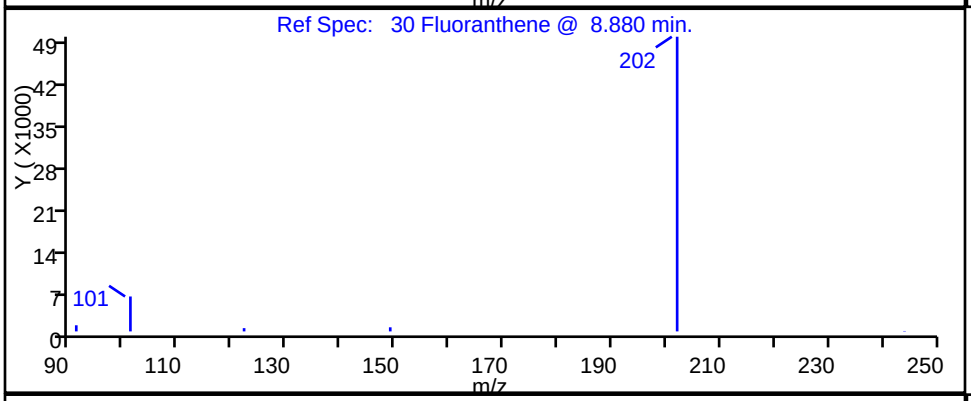
30 Fluoranthene, CAS: 206-44-0

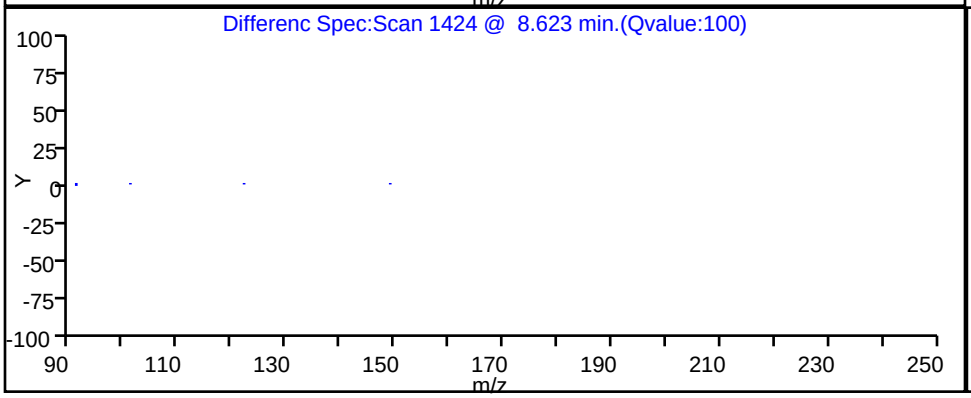


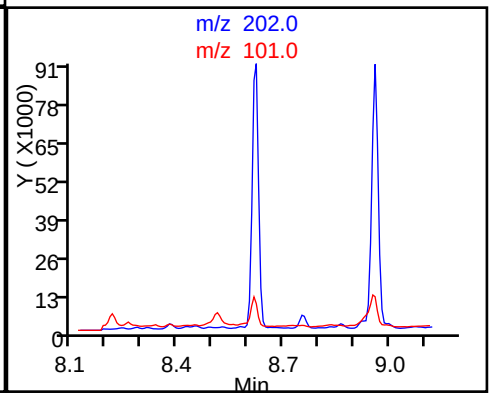












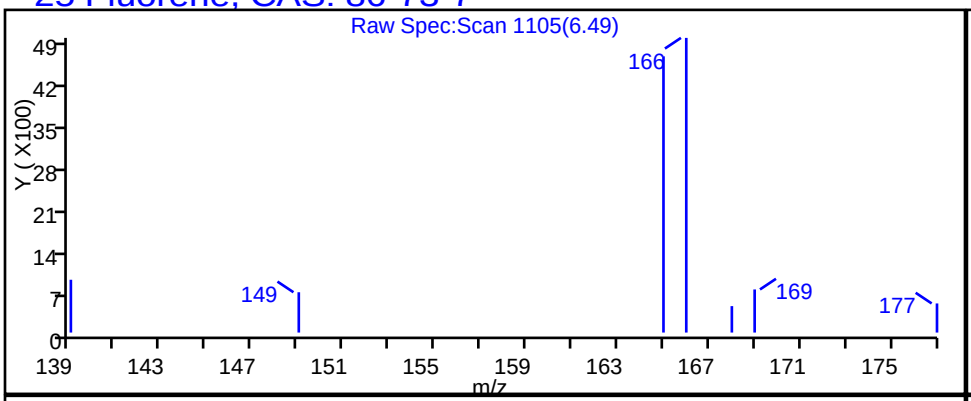
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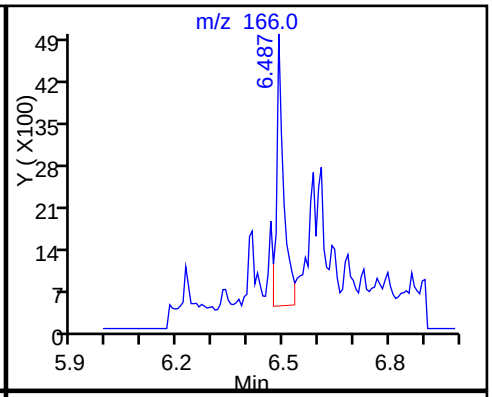
TestAmerica Denver

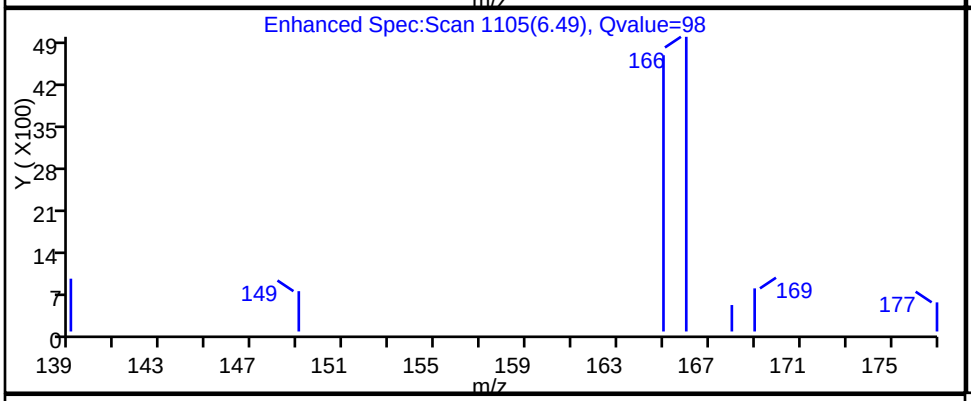
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7283.D

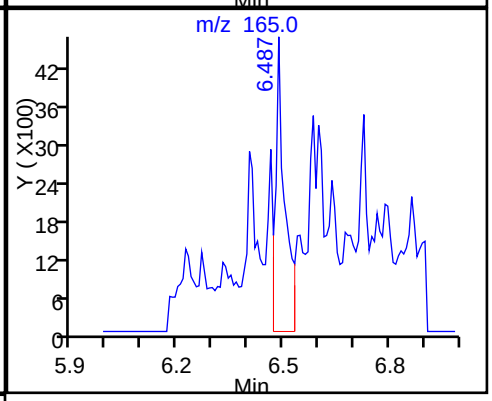
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Lims ID:	280-97928-B-12-B	Lab Sample ID:	280-97928-12		
Client ID:	SS025-SS09				
Operator ID:	WICKHAMM	ALS Bottle#:	16	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

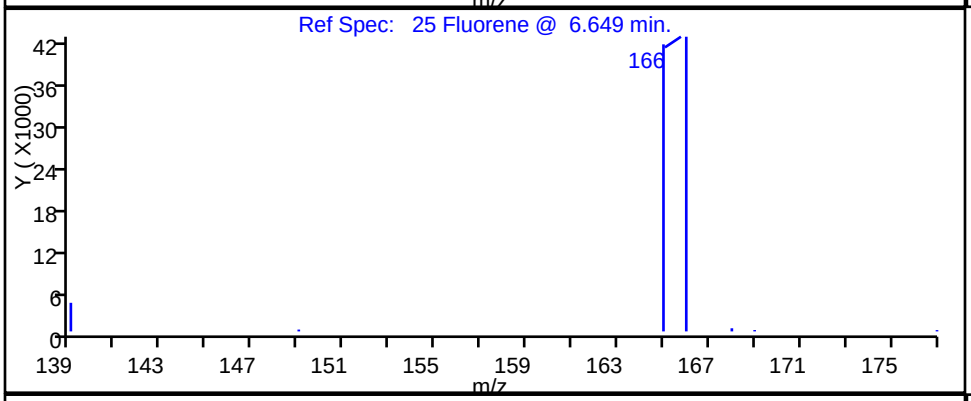
25 Fluorene, CAS: 86-73-7

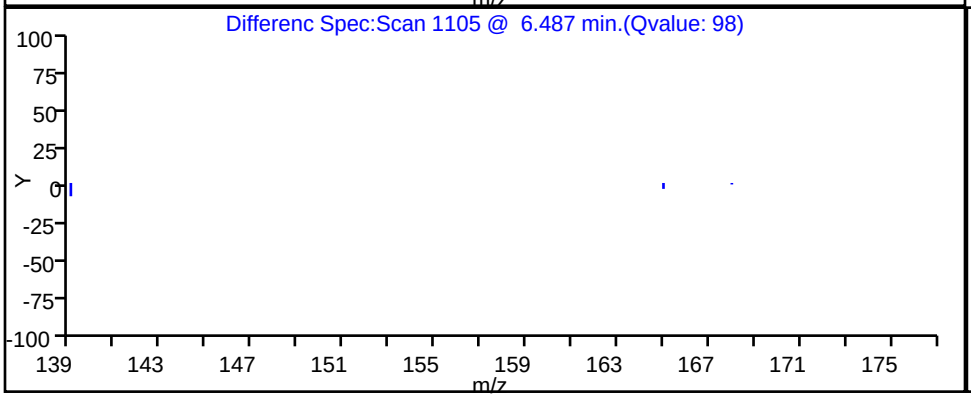


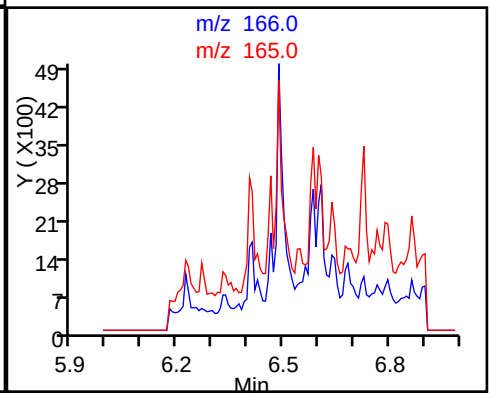










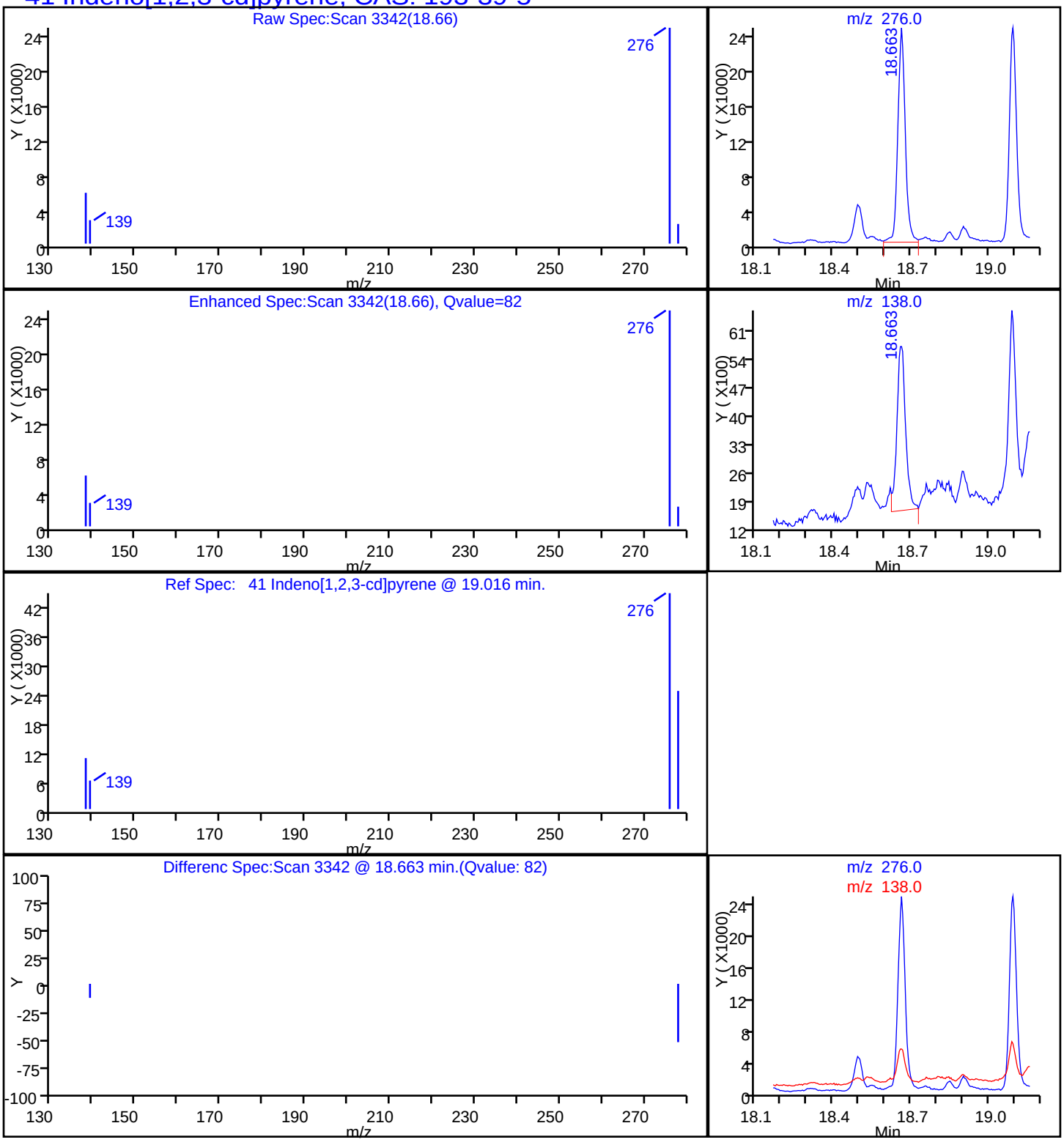


Report Date: 19-Jun-2017 15:44:21 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

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Lims ID:	280-97928-B-12-B	Lab Sample ID:	280-97928-12		
Client ID:	SS025-SS09				
Operator ID:	WICKHAMM	ALS Bottle#:	16	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

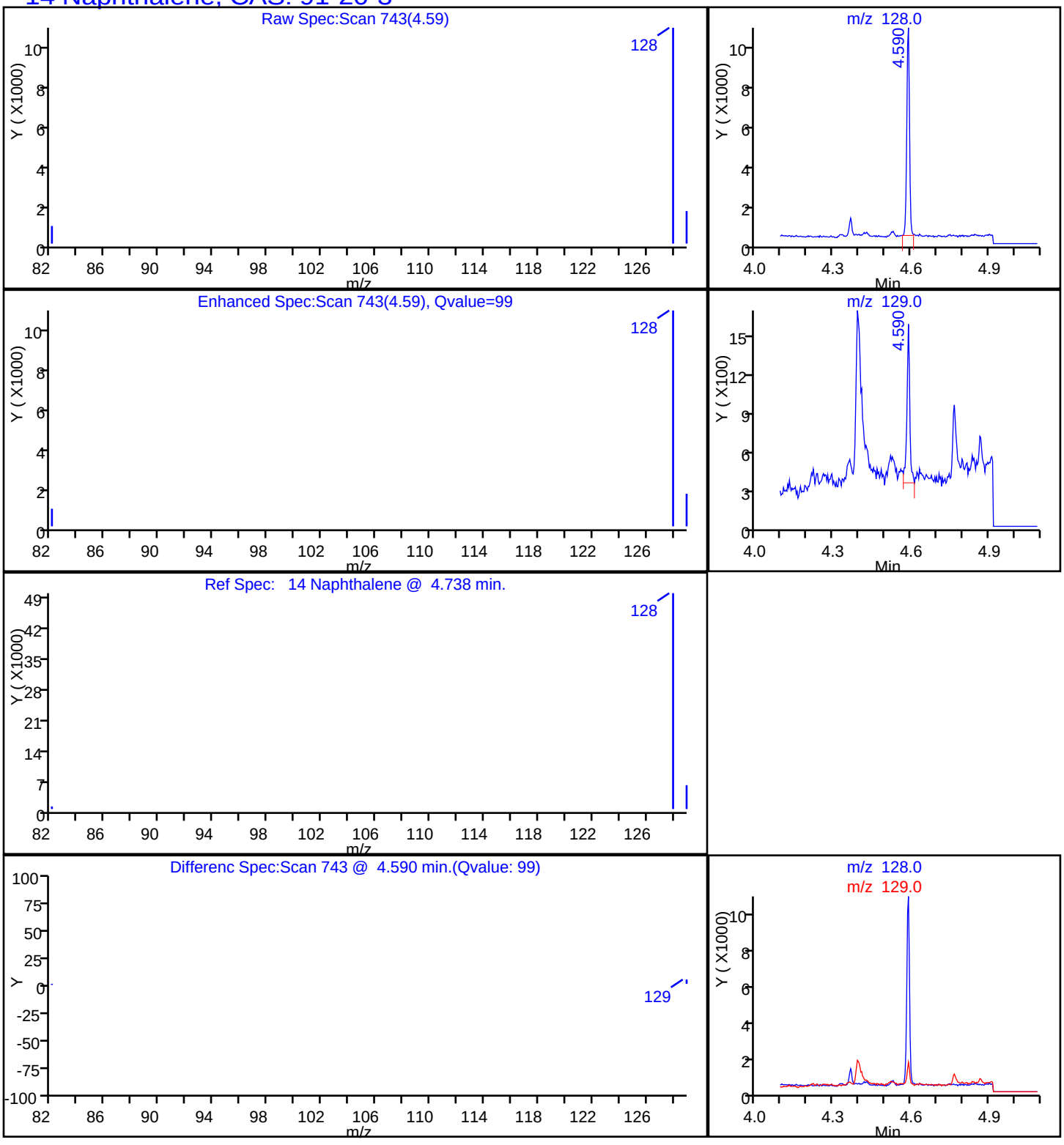


Report Date: 19-Jun-2017 15:44:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

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Injection Date:	16-Jun-2017 21:40:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-12-B	Lab Sample ID:	280-97928-12		
Client ID:	SS025-SS09				
Operator ID:	WICKHAMM	ALS Bottle#:	16	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3

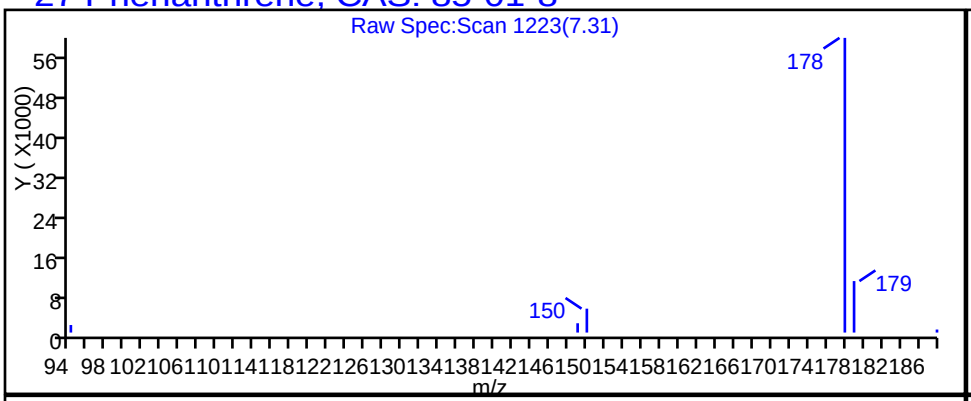


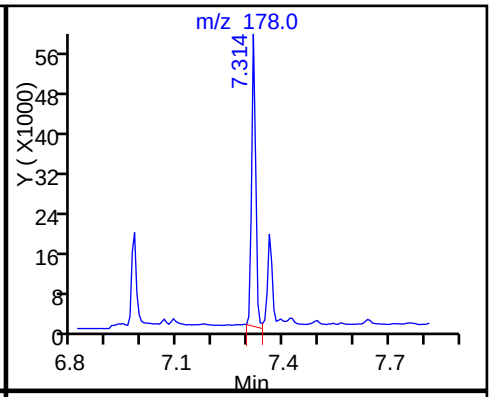
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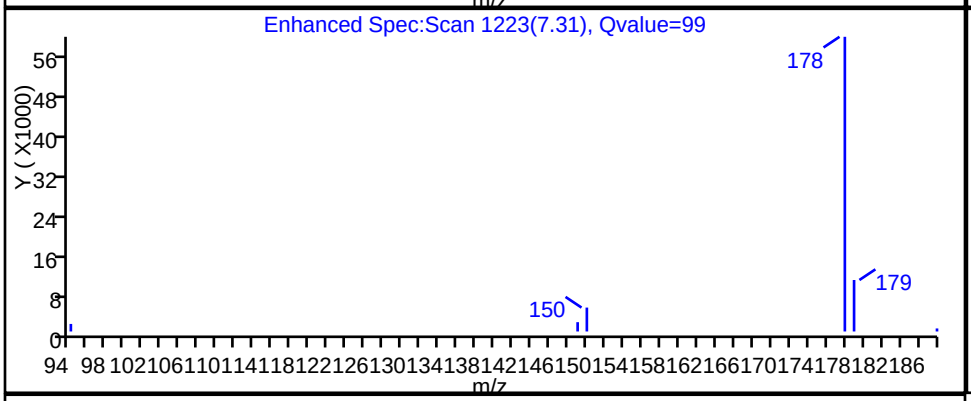
TestAmerica Denver

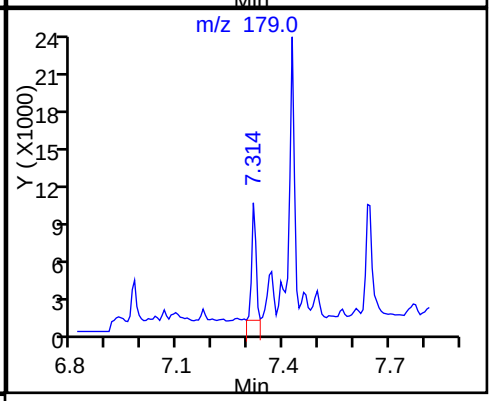
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Injection Date:	16-Jun-2017 21:40:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-12-B	Lab Sample ID:	280-97928-12		
Client ID:	SS025-SS09				
Operator ID:	WICKHAMM	ALS Bottle#:	16	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

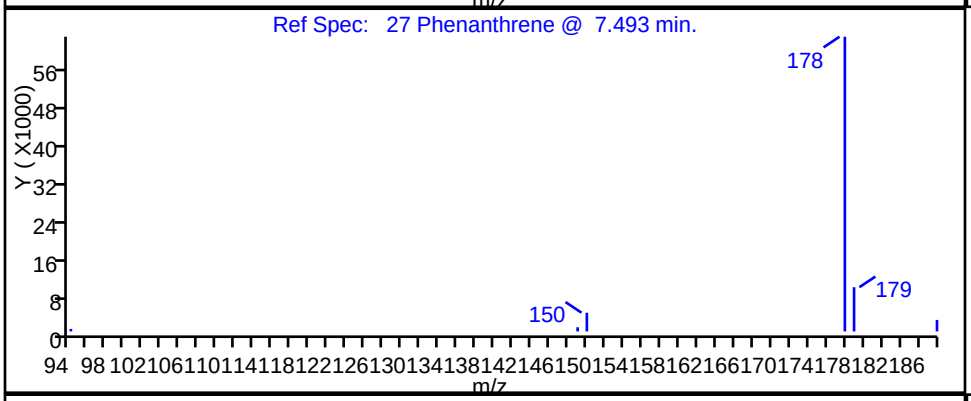
27 Phenanthrene, CAS: 85-01-8

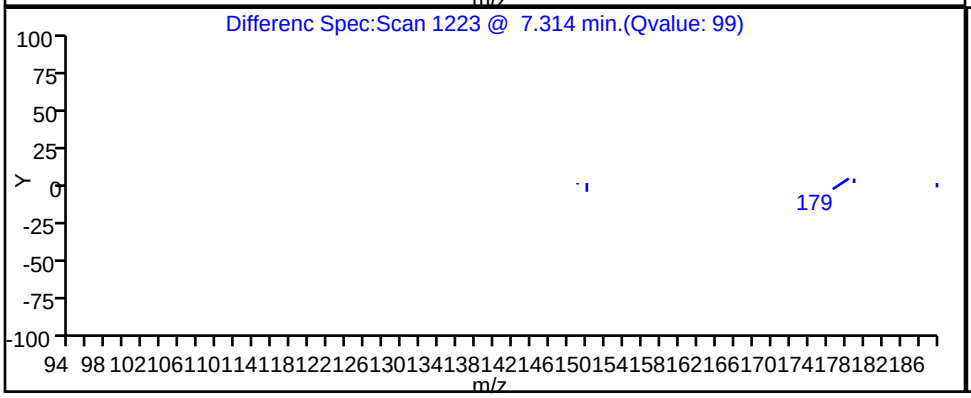


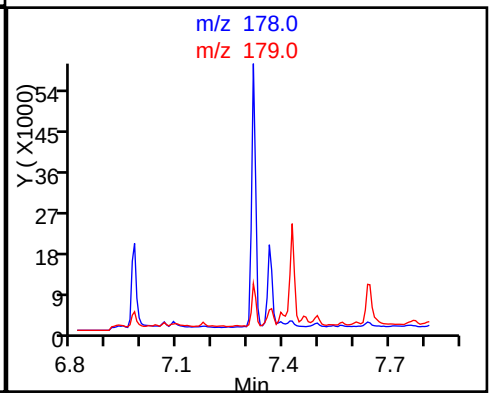












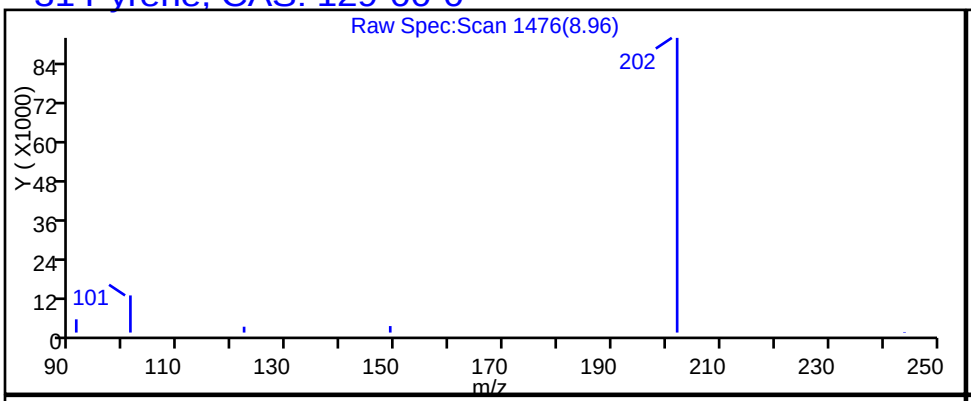
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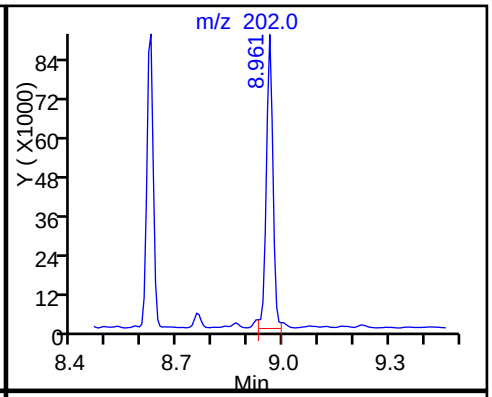
TestAmerica Denver

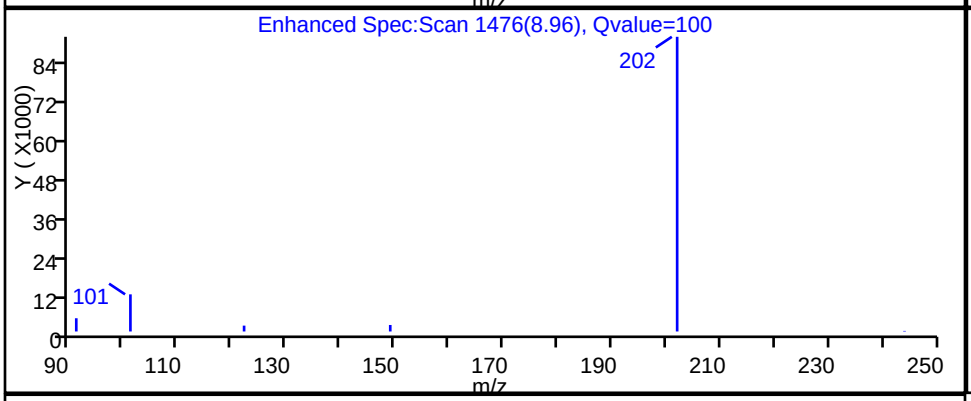
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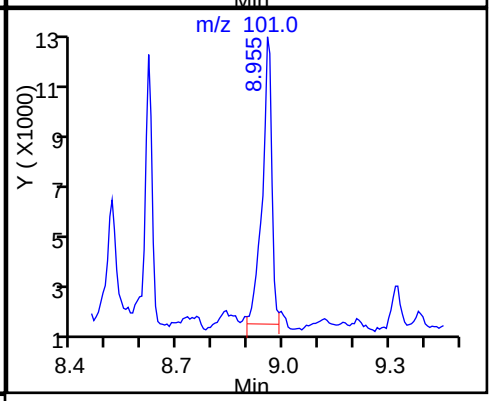
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Lims ID:	280-97928-B-12-B	Lab Sample ID:	280-97928-12		
Client ID:	SS025-SS09				
Operator ID:	WICKHAMM	ALS Bottle#:	16	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

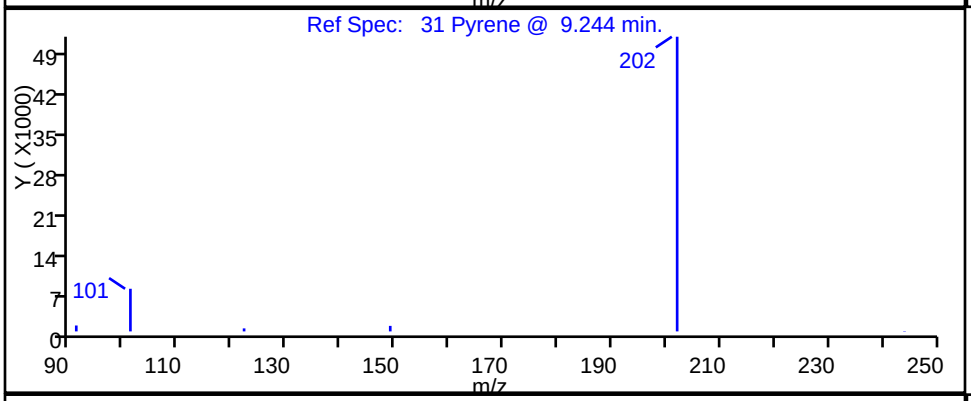
31 Pyrene, CAS: 129-00-0

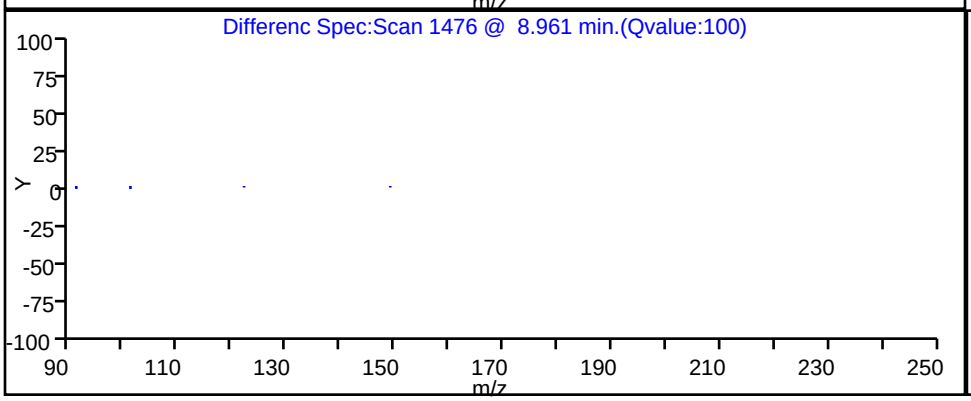


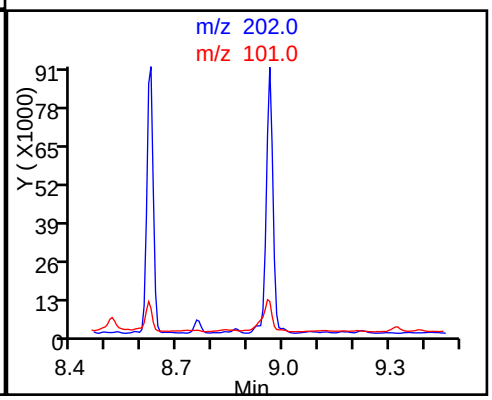












Manual Integration/User Assign Peak Report

TestAmerica Denver

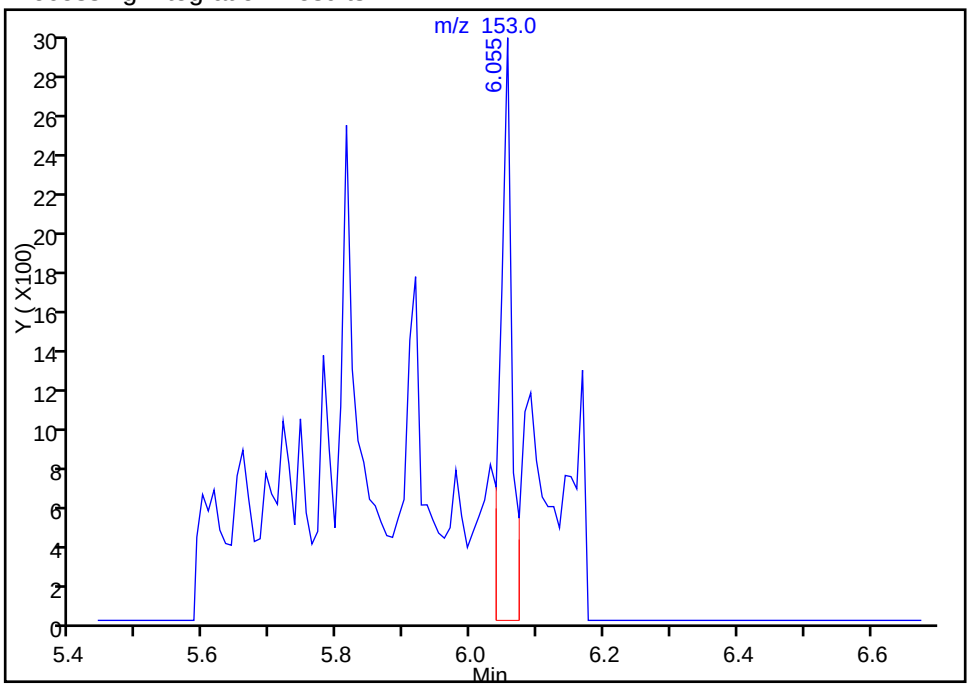
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Injection Date:	16-Jun-2017 21:40:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-12-B	Lab Sample ID:	280-97928-12		
Client ID:	SS025-SS09				
Operator ID:	WICKHAMM	ALS Bottle#:	16	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9

Signal: 1

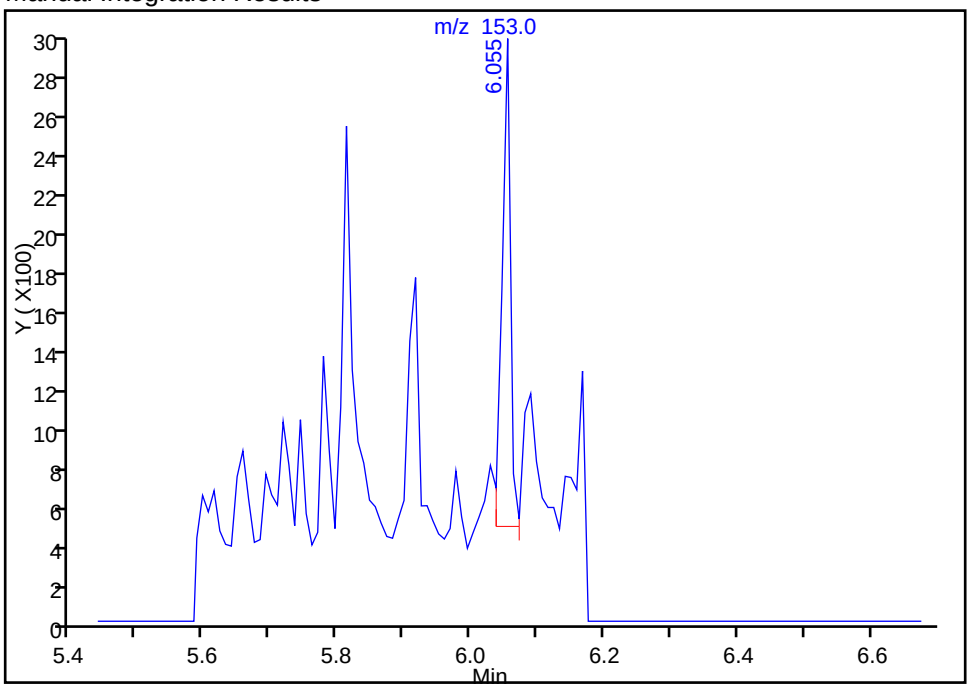
Processing Integration Results

RT: 6.06
Area: 3413
Amount: 63.820465
Amount Units: ng/ml



Manual Integration Results

RT: 6.06
Area: 2166
Amount: 40.502528
Amount Units: ng/ml



Reviewer: wickhamm, 19-Jun-2017 15:24:55

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Denver

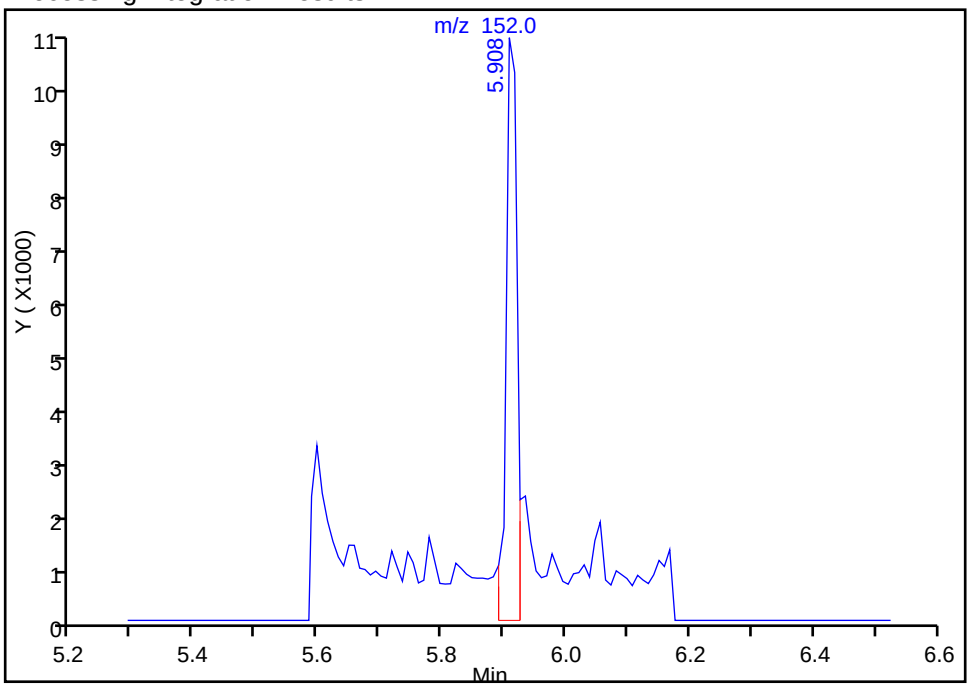
Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7283.D				
Injection Date:	16-Jun-2017 21:40:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-12-B	Lab Sample ID:	280-97928-12		
Client ID:	SS025-SS09				
Operator ID:	WICKHAMM	ALS Bottle#:	16	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Acenaphthylene, CAS: 208-96-8

Signal: 1

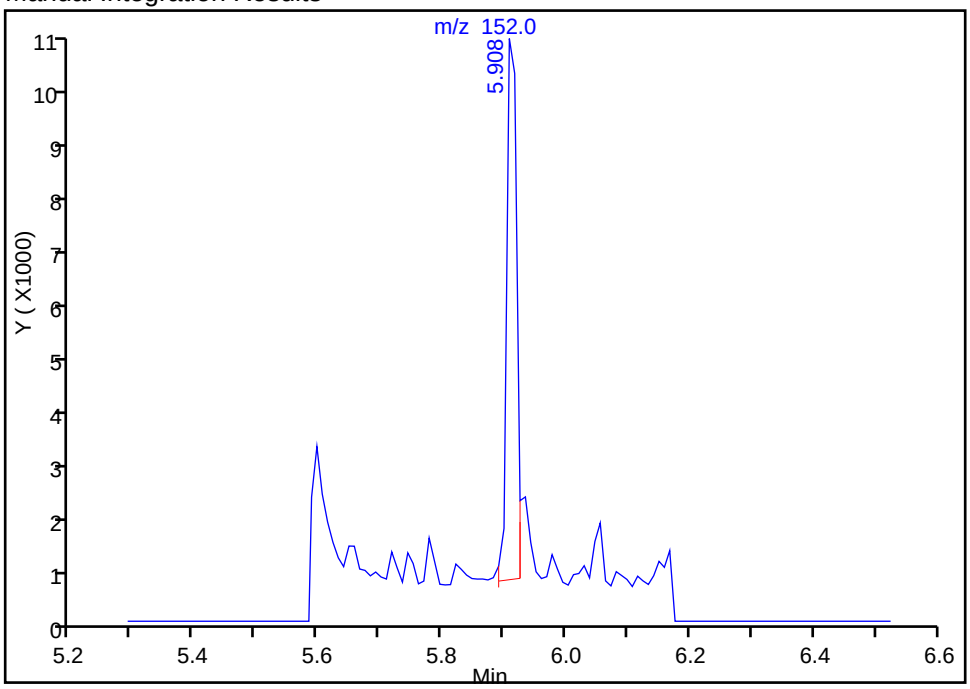
Processing Integration Results

RT: 5.91
Area: 13640
Amount: 155.9084
Amount Units: ng/ml



Manual Integration Results

RT: 5.91
Area: 11615
Amount: 132.7622
Amount Units: ng/ml



Reviewer: wickhamm, 19-Jun-2017 15:24:38

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-AB-060517 | Lab Sample ID: 280-97928-13

Matrix: Water | Lab File ID: F7314.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 11:50

Extract. Method: 3510C | Date Extracted: 06/12/2017 15:16

Sample wt/vol: 1050.7(mL) | Date Analyzed: 06/20/2017 19:59

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378055 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.011	U	0.095	0.011	0.0054
91-57-6	2-Methylnaphthalene	0.011	U	0.095	0.011	0.0049
83-32-9	Acenaphthene	0.029	U	0.095	0.029	0.010
208-96-8	Acenaphthylene	0.011	U	0.095	0.011	0.0095
120-12-7	Anthracene	0.019	U	0.095	0.019	0.014
56-55-3	Benzo[a]anthracene	0.011	U	0.095	0.011	0.0031
50-32-8	Benzo[a]pyrene	0.011	U	0.095	0.011	0.0049
205-99-2	Benzo[b]fluoranthene	0.011	U	0.095	0.011	0.0033
191-24-2	Benzo[g,h,i]perylene	0.011	U	0.095	0.011	0.0034
207-08-9	Benzo[k]fluoranthene	0.011	U	0.095	0.011	0.0048
218-01-9	Chrysene	0.011	U	0.095	0.011	0.0030
53-70-3	Dibenz(a,h)anthracene	0.011	U	0.095	0.011	0.0046
206-44-0	Fluoranthene	0.015	J	0.095	0.011	0.0043
86-73-7	Fluorene	0.019	U	0.095	0.019	0.018
193-39-5	Indeno[1,2,3-cd]pyrene	0.019	U	0.095	0.019	0.014
91-20-3	Naphthalene	0.011	U	0.095	0.011	0.0051
85-01-8	Phenanthrene	0.016	J	0.095	0.019	0.0093
129-00-0	Pyrene	0.0091	J	0.095	0.019	0.0077

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	74		53-106
4165-60-0	Nitrobenzene-d5 (Surr)	73		55-111
1718-51-0	Terphenyl-d14 (Surr)	84		58-132

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7314.D
Lims ID: 280-97928-B-13-A
Client ID: SS025-AB-060517
Sample Type: Client
Inject. Date: 20-Jun-2017 19:59:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-b-13-a
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 21-Jun-2017 15:41:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: wickhamm Date: 21-Jun-2017 15:12:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.038	6.029	0.009	99	16295	600.0	
* 2 Phenanthrene-d10	188	7.308	7.308	0.000	100	33372	600.0	
* 3 Chrysene-d12	240	11.386	11.378	0.008	93	31042	600.0	
$ 4 Nitrobenzene-d5	82	4.004	4.001	0.003	100	9340	365.9	
$ 5 2-Fluorobiphenyl	172	5.440	5.436	0.004	100	15729	372.3	
$ 6 Terphenyl-d14	244	9.130	9.130	0.000	98	14276	421.3	
14 Naphthalene	128		4.589				ND	
16 2-Methylnaphthalene	142		5.147				ND	
17 1-Methylnaphthalene	142		5.234				ND	
22 Acenaphthylene	152		5.917				ND	
23 Acenaphthene	153		6.055				ND	
25 Fluorene	166		6.494				ND	
27 Phenanthrene	178	7.327	7.321	0.006	33	1217	17.2	
28 Anthracene	178		7.373				ND	
30 Fluoranthene	202	8.636	8.629	0.007	89	1303	16.0	
31 Pyrene	202	8.981	8.974	0.007	69	803	9.52	
35 Benzo[a]anthracene	228		11.350				ND	
36 Chrysene	228		11.450				ND	
38 Benzo[b]fluoranthene	252		14.513				ND	
39 Benzo[k]fluoranthene	252		14.596				ND	
40 Benzo[a]pyrene	252		15.598				ND	
41 Indeno[1,2,3-cd]pyrene	276		18.682				ND	
42 Dibenz(a,h)anthracene	278		18.708				ND	
43 Benzo[g,h,i]perylene	276		19.115				ND	

Reagents:

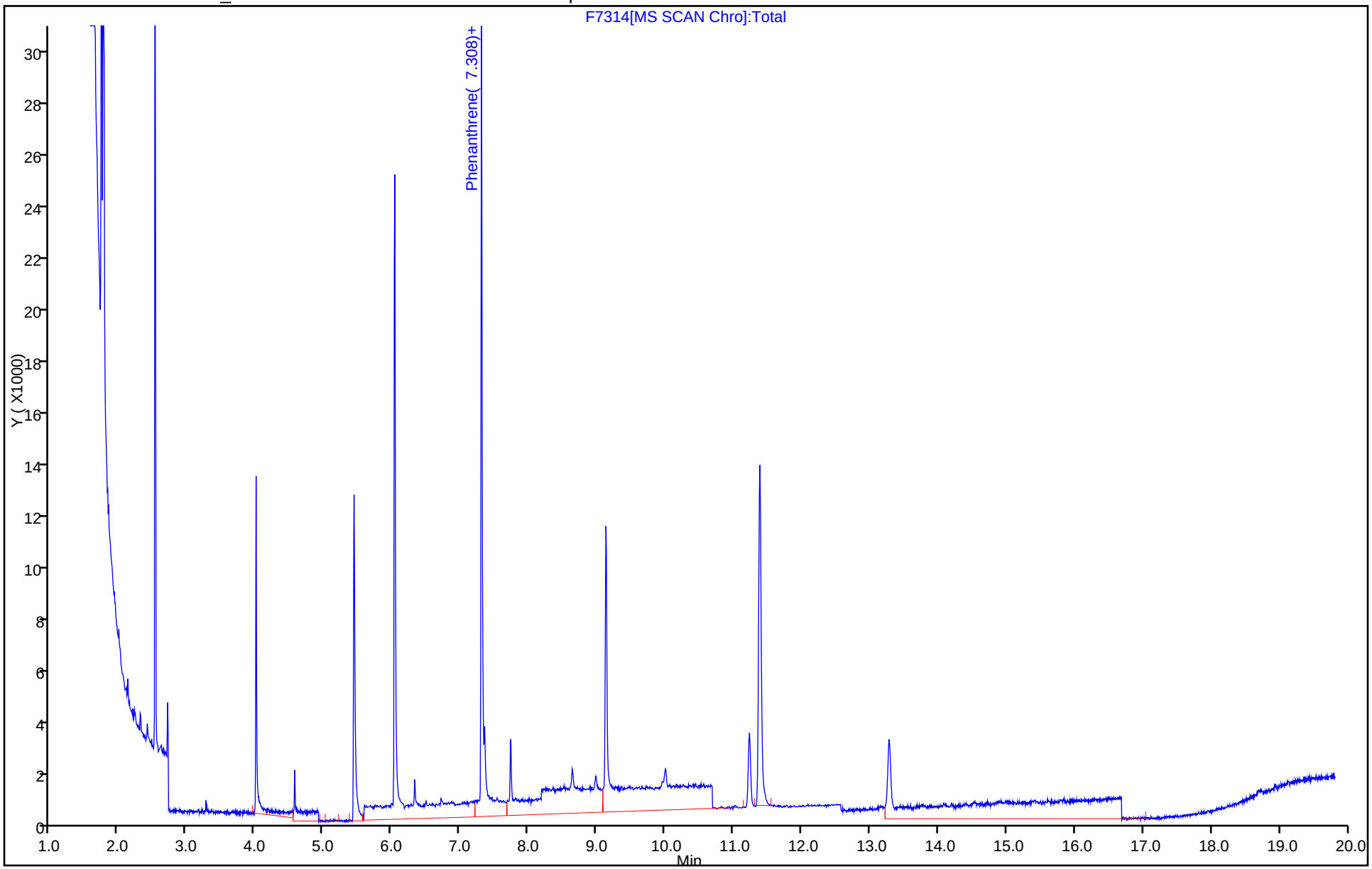
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 21-Jun-2017 15:41:12 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7314.D

Injection Date:	20-Jun-2017 19:59:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-B-13-A	Lab Sample ID:	280-97928-13	Worklist Smp#:	9
Client ID:	SS025-AB-060517				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7314.D
Lims ID: 280-97928-B-13-A
Client ID: SS025-AB-060517
Sample Type: Client
Inject. Date: 20-Jun-2017 19:59:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-b-13-a
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 21-Jun-2017 15:41:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: wickhamm Date: 21-Jun-2017 15:12:19

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	365.9	73.18
$ 5 2-Fluorobiphenyl	500.0	372.3	74.45
$ 6 Terphenyl-d14	500.0	421.3	84.26

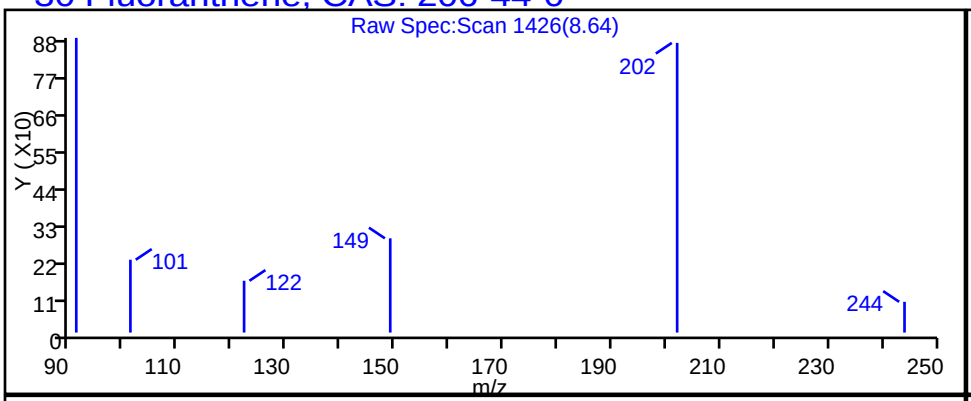
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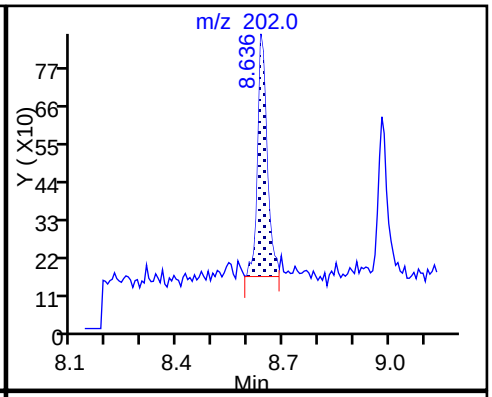
TestAmerica Denver

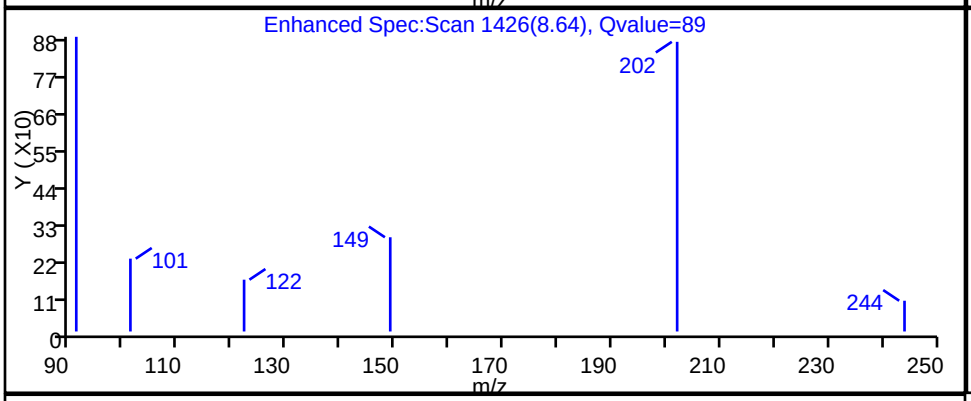
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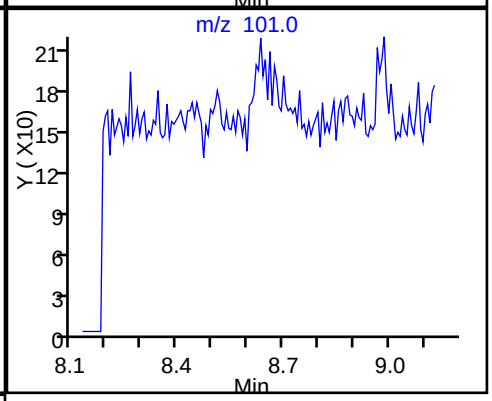
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Lims ID:	280-97928-B-13-A	Lab Sample ID:	280-97928-13		
Client ID:	SS025-AB-060517				
Operator ID:	WICKHAMM	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

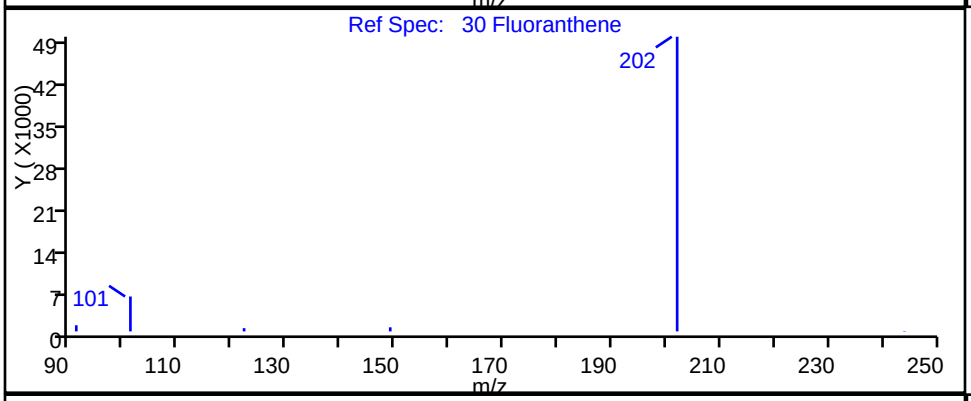
30 Fluoranthene, CAS: 206-44-0

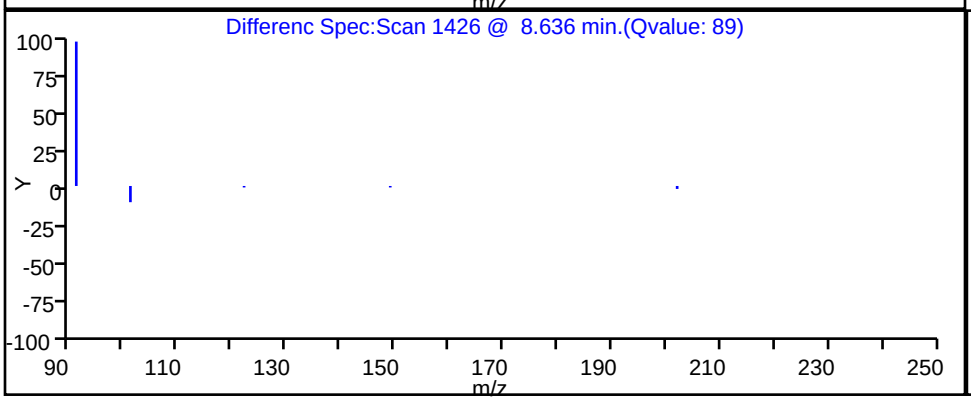


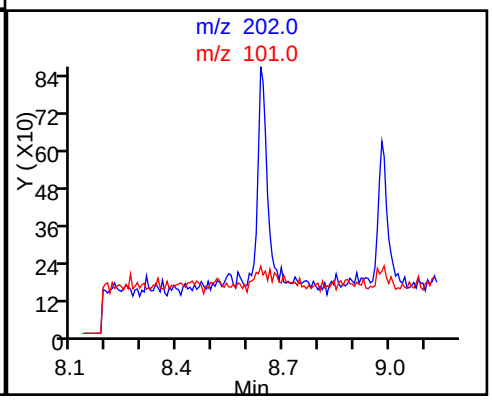












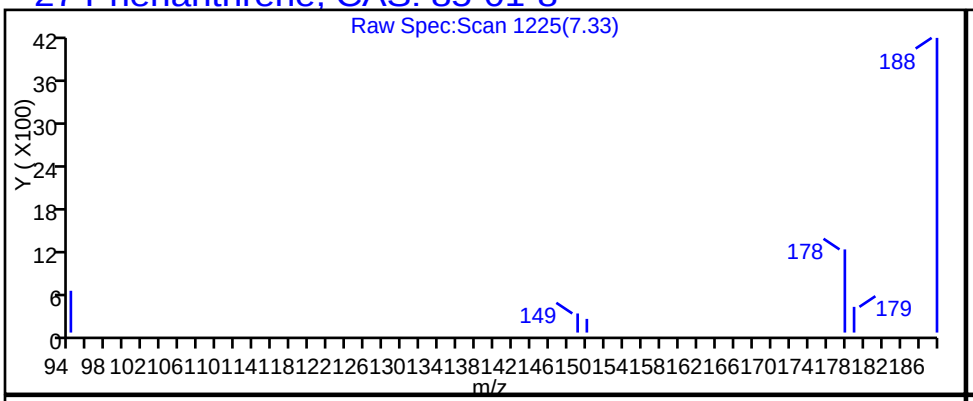
Report Date: 21-Jun-2017 15:41:12 Chrom Revision: 2.2 20-Jun-2017 07:42:38

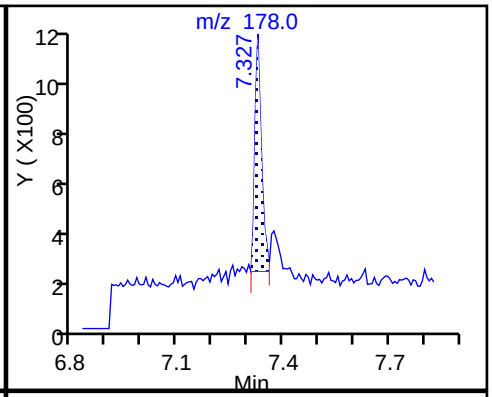
TestAmerica Denver

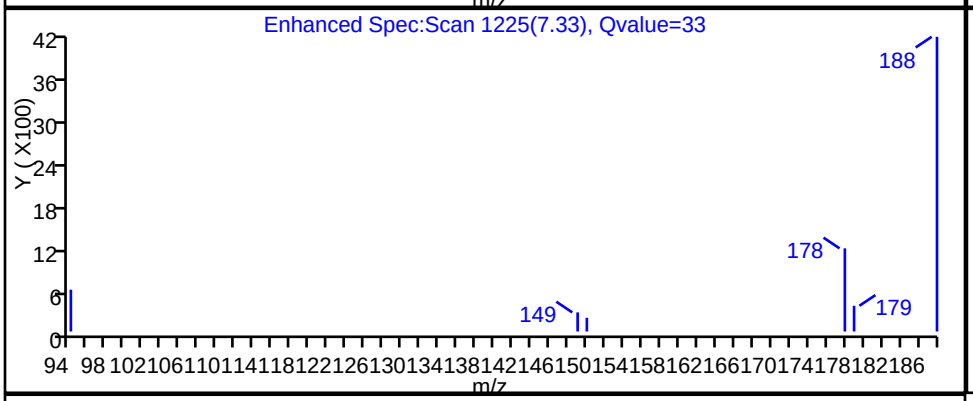
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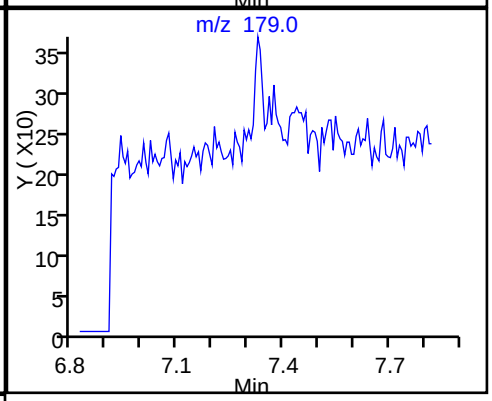
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Lims ID:	280-97928-B-13-A	Lab Sample ID:	280-97928-13		
Client ID:	SS025-AB-060517				
Operator ID:	WICKHAMM	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

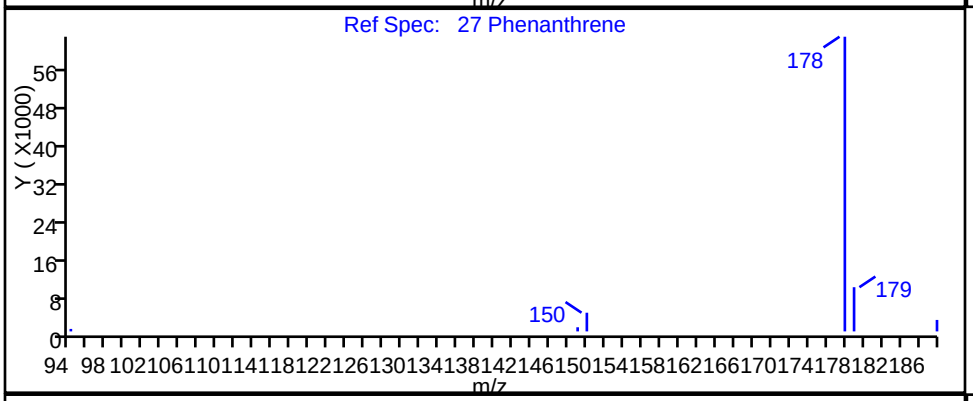
27 Phenanthrene, CAS: 85-01-8

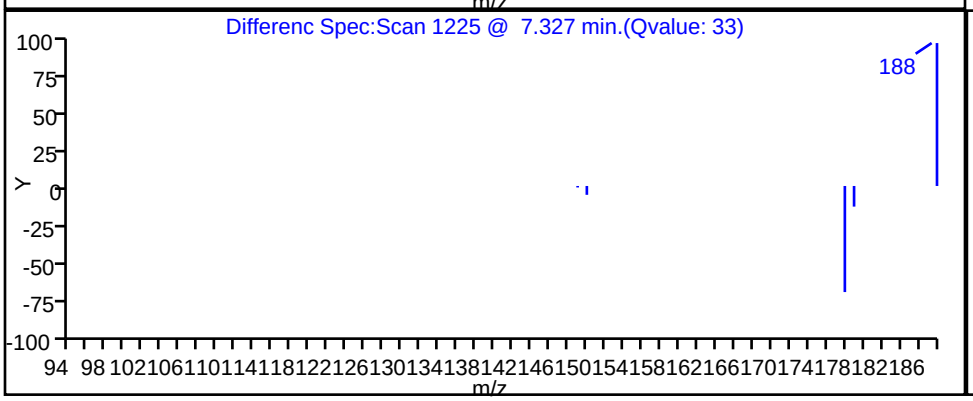


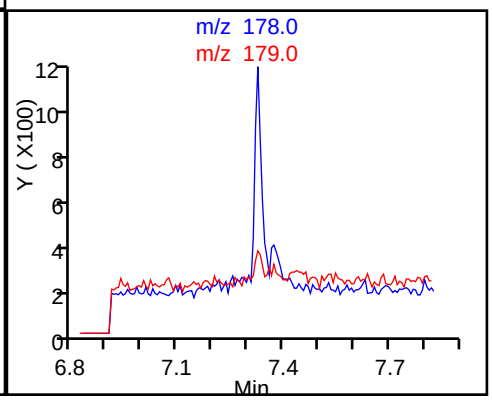










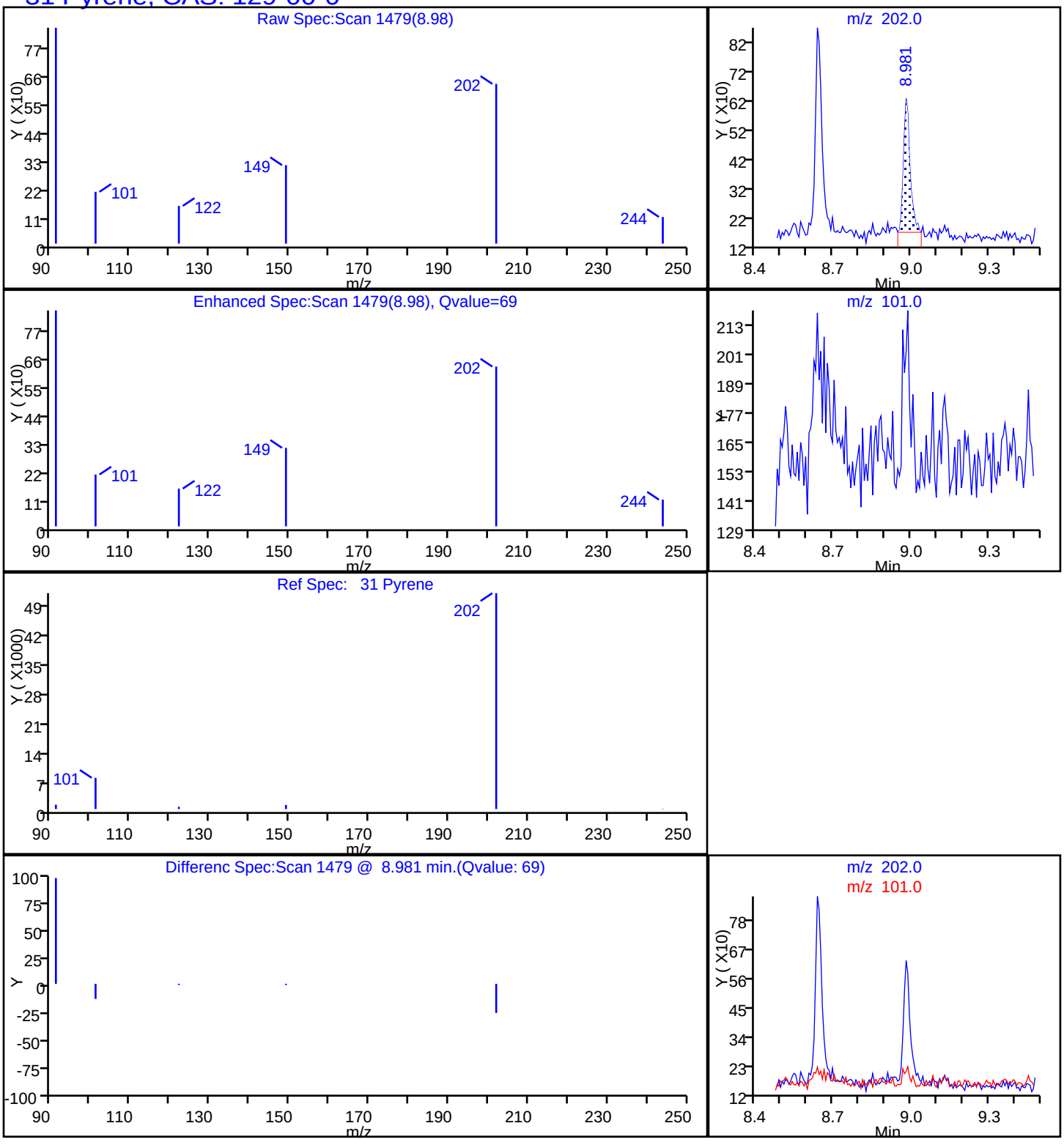


Report Date: 21-Jun-2017 15:41:13 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7314.D				
Injection Date:	20-Jun-2017 19:59:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-13-A	Lab Sample ID:	280-97928-13		
Client ID:	SS025-AB-060517				
Operator ID:	WICKHAMM	ALS Bottle#:	9	Worklist Smp#:	9
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Pyrene, CAS: 129-00-0



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(0-2) | Lab Sample ID: 280-97928-14

Matrix: Solid | Lab File ID: F7284.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 13:30

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 31.7(g) | Date Analyzed: 06/16/2017 22:06

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 11.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	2.4	J	5.3	0.53	0.28
91-57-6	2-Methylnaphthalene	3.7	J	5.3	0.71	0.33
83-32-9	Acenaphthene	2.0	J M	5.3	0.28	0.17
208-96-8	Acenaphthylene	5.2	J M	5.3	0.71	0.18
120-12-7	Anthracene	9.1		5.3	2.7	0.77
56-55-3	Benzo[a]anthracene	58		5.3	2.7	0.96
50-32-8	Benzo[a]pyrene	55		5.3	2.7	0.79
205-99-2	Benzo[b]fluoranthene	81		5.3	2.7	1.3
191-24-2	Benzo[g,h,i]perylene	29		5.3	2.7	1.2
207-08-9	Benzo[k]fluoranthene	28		5.3	2.7	1.1
218-01-9	Chrysene	69		5.3	2.7	1.1
53-70-3	Dibenz(a,h)anthracene	8.2		5.3	2.7	1.4
206-44-0	Fluoranthene	75		5.3	2.7	1.1
86-73-7	Fluorene	2.9	J	5.3	0.71	0.50
193-39-5	Indeno[1,2,3-cd]pyrene	26		5.3	2.7	1.2
91-20-3	Naphthalene	2.6	J	5.3	0.71	0.35
85-01-8	Phenanthrene	25		5.3	2.7	1.2
129-00-0	Pyrene	72		5.3	2.7	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	85		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	81		44-125
1718-51-0	Terphenyl-d14 (Surr)	78		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7284.D
Lims ID: 280-97928-C-14-B
Client ID: SS025-SB09(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 22:06:30 ALS Bottle#: 17 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-14-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:26:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	99	21797	600.0	
* 2 Phenanthrene-d10	188	7.295	7.301	-0.006	100	37819	600.0	
* 3 Chrysene-d12	240	11.362	11.371	-0.009	85	34058	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	13812	404.5	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	100	23882	422.6	
$ 6 Terphenyl-d14	244	9.124	9.130	-0.006	94	15055	392.1	
14 Naphthalene	128	4.589	4.589	0.000	99	5233	74.1	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	98	4695	103.3	
17 1-Methylnaphthalene	142	5.230	5.235	-0.005	97	3113	68.4	
22 Acenaphthylene	152	5.917	5.917	0.000	99	11104	147.7	M
23 Acenaphthene	153	6.055	6.055	0.000	97	2639	57.4	M
25 Fluorene	166	6.487	6.494	-0.007	96	4657	82.6	
27 Phenanthrene	178	7.314	7.321	-0.007	100	55575	692.9	
28 Anthracene	178	7.360	7.366	-0.006	98	20797	256.8	
30 Fluoranthene	202	8.623	8.629	-0.006	100	195070	2117.5	
31 Pyrene	202	8.961	8.968	-0.007	100	193374	2024.0	
35 Benzo[a]anthracene	228	11.335	11.344	-0.009	97	148196	1636.1	
36 Chrysene	228	11.434	11.443	-0.009	100	162725	1942.0	
38 Benzo[b]fluoranthene	252	14.489	14.503	-0.014	100	187877	2284.7	
39 Benzo[k]fluoranthene	252	14.564	14.586	-0.022	99	64882	784.5	
40 Benzo[a]pyrene	252	15.565	15.587	-0.022	100	124928	1539.4	
41 Indeno[1,2,3-cd]pyrene	276	18.662	18.676	-0.014	81	68129	740.1	
42 Dibenz(a,h)anthracene	278	18.684	18.702	-0.018	74	16725	232.8	
43 Benzo[g,h,i]perylene	276	19.095	19.109	-0.014	99	64143	821.4	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

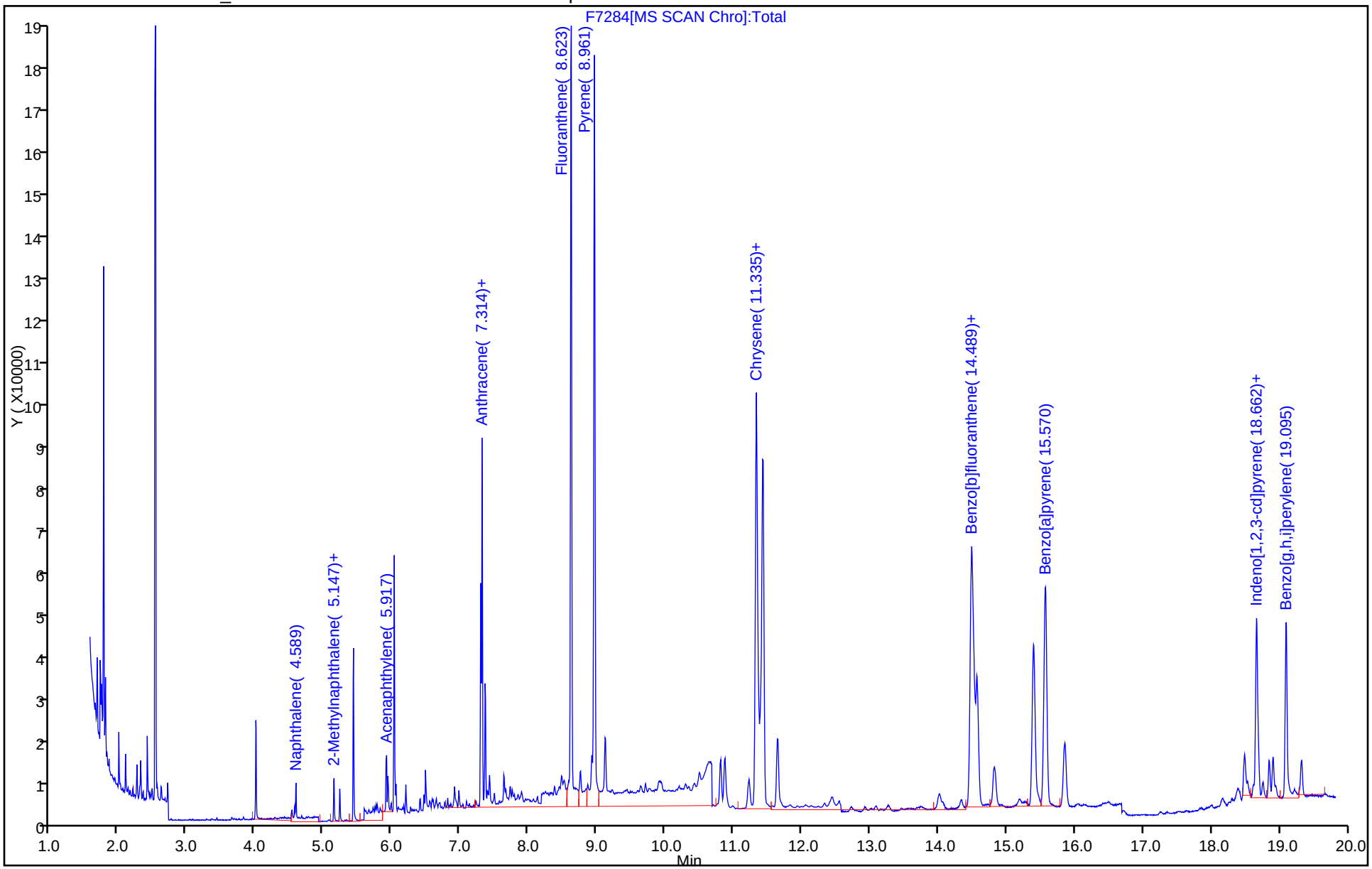
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:22 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7284.D

Injection Date:	16-Jun-2017 22:06:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-C-14-B	Lab Sample ID:	280-97928-14	Worklist Smp#:	18
Client ID:	SS025-SB09(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7284.D
Lims ID: 280-97928-C-14-B
Client ID: SS025-SB09(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 22:06:30 ALS Bottle#: 17 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-14-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:26:22

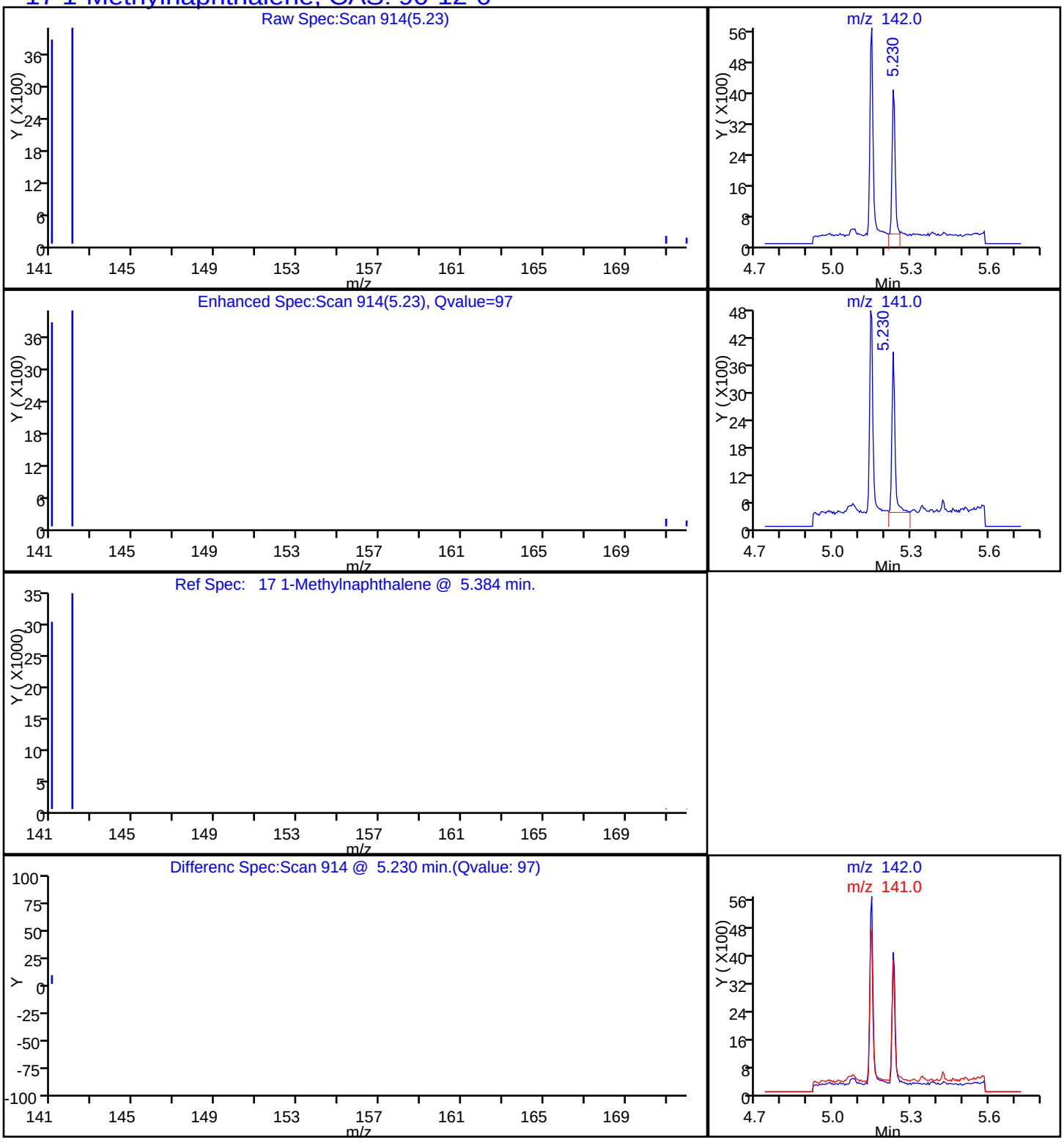
Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	404.5	80.90
$ 5 2-Fluorobiphenyl	500.0	422.6	84.51
$ 6 Terphenyl-d14	500.0	392.1	78.41

Report Date: 19-Jun-2017 15:44:22 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7284.D				
Injection Date:	16-Jun-2017 22:06:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-14-B	Lab Sample ID:	280-97928-14		
Client ID:	SS025-SB09(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	17	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0



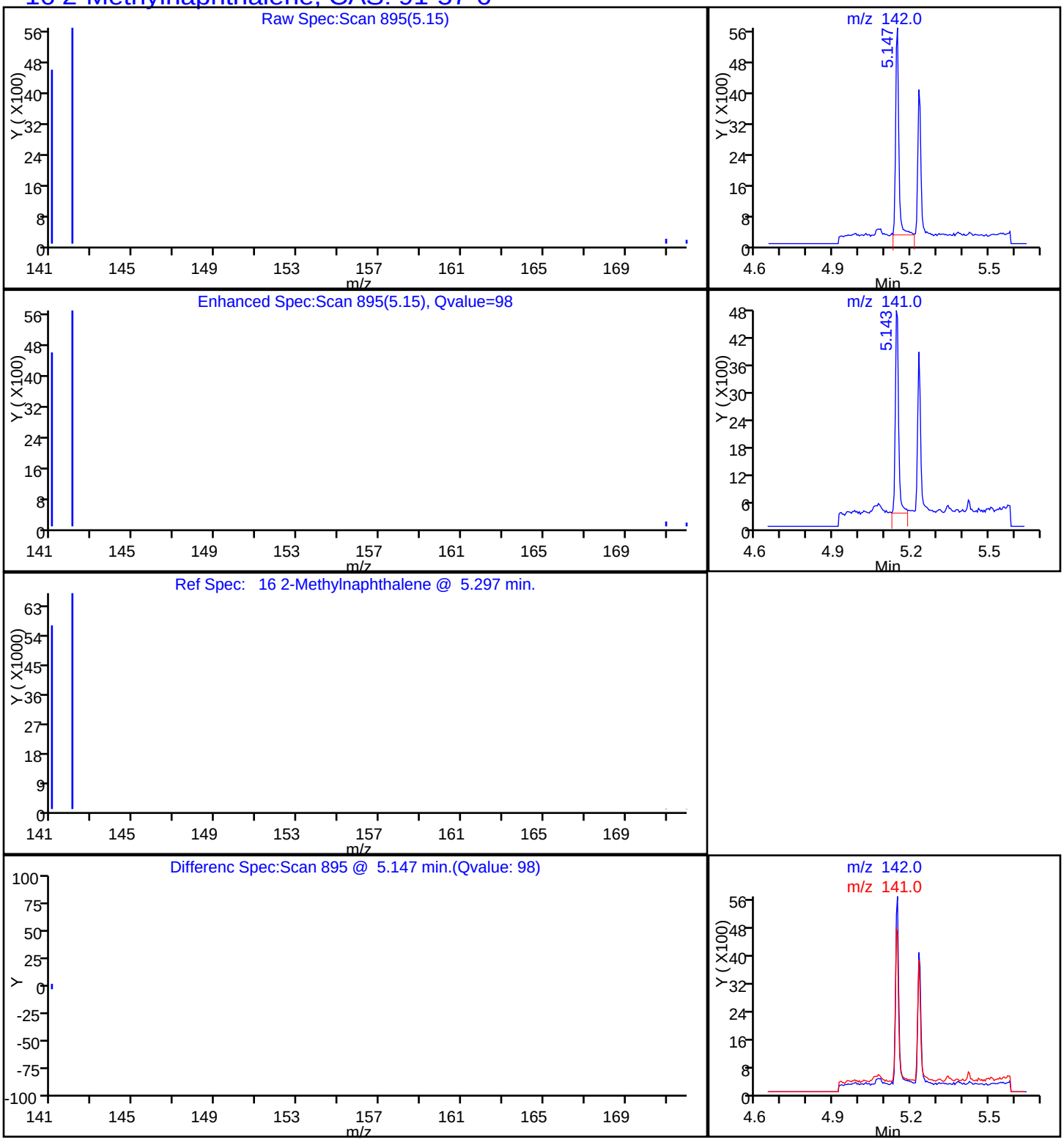
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7284.D

Injection Date:	16-Jun-2017 22:06:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-14-B	Lab Sample ID:	280-97928-14		
Client ID:	SS025-SB09(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	17	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



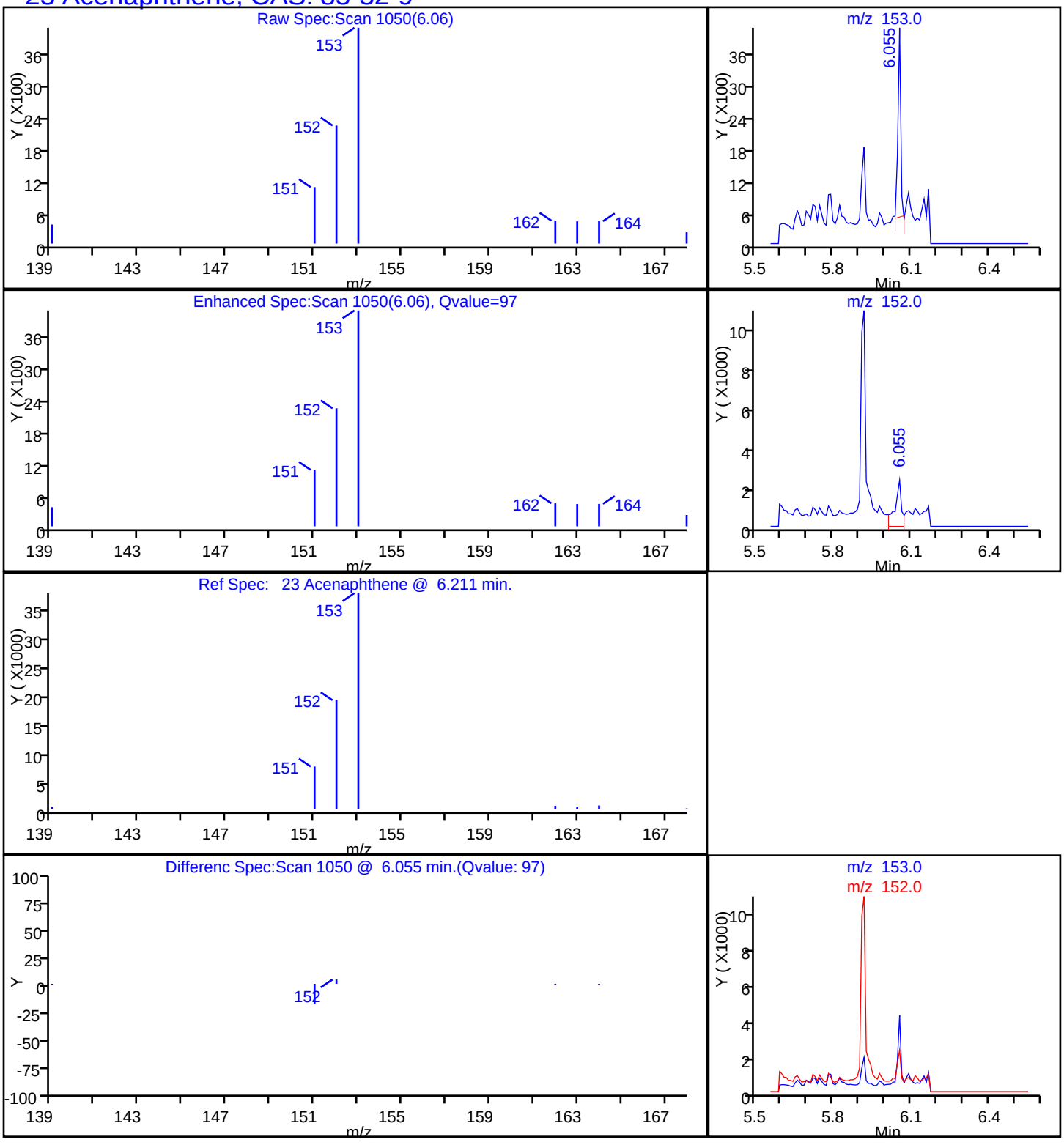
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7284.D

Injection Date:	16-Jun-2017 22:06:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-14-B	Lab Sample ID:	280-97928-14		
Client ID:	SS025-SB09(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	17	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9



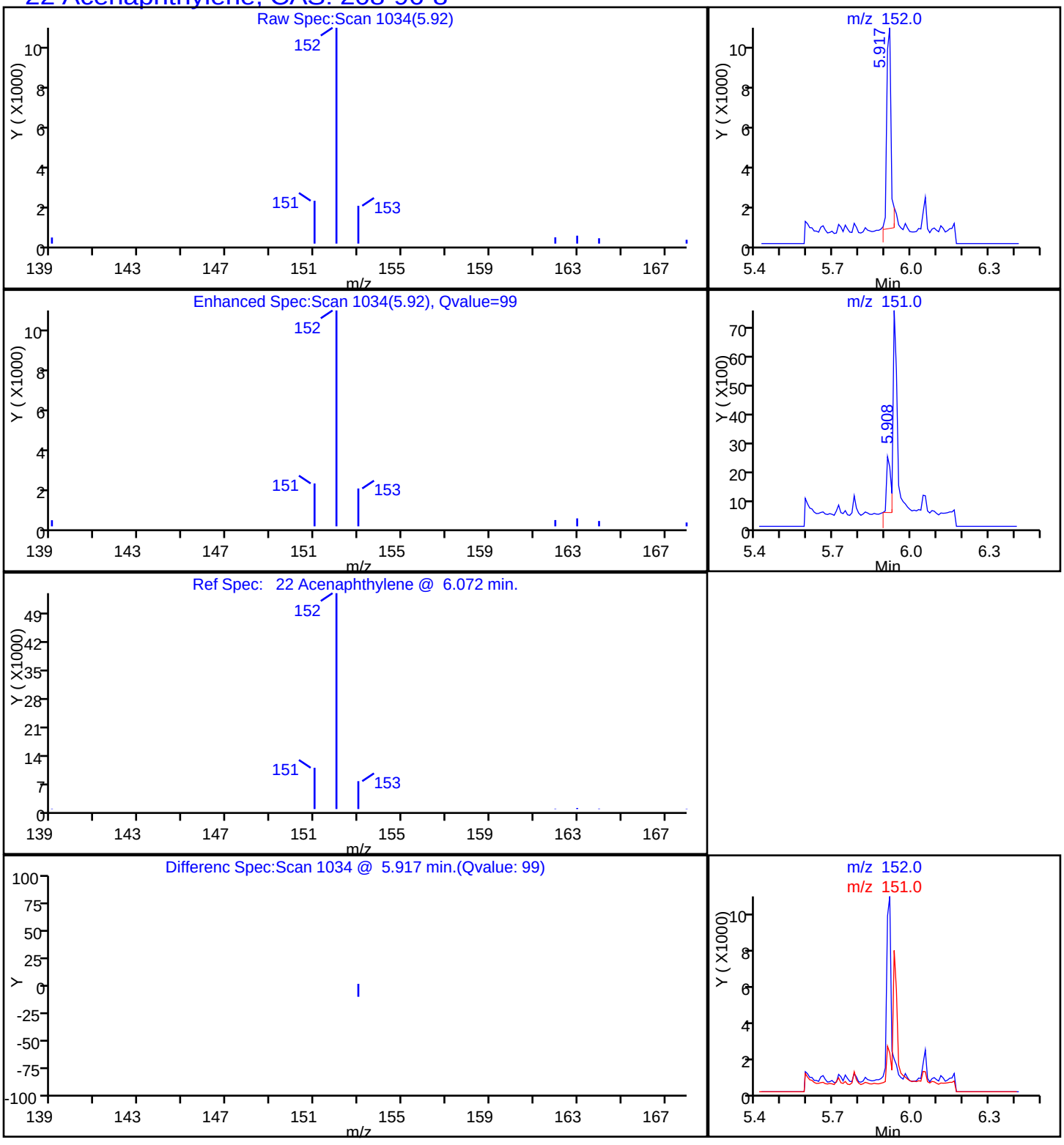
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7284.D

Injection Date:	16-Jun-2017 22:06:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-14-B	Lab Sample ID:	280-97928-14		
Client ID:	SS025-SB09(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	17	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Acenaphthylene, CAS: 208-96-8



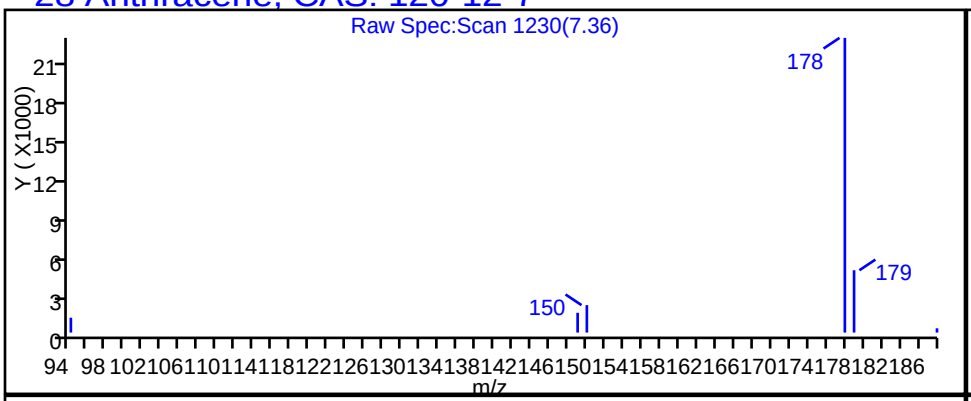
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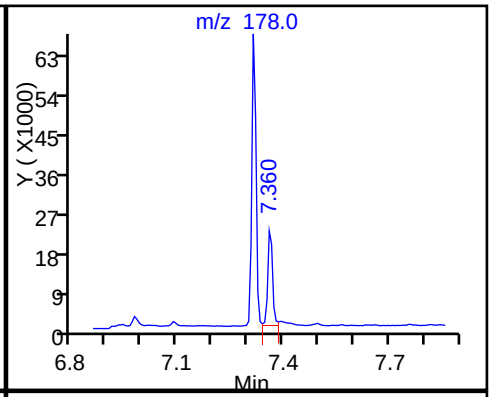
TestAmerica Denver

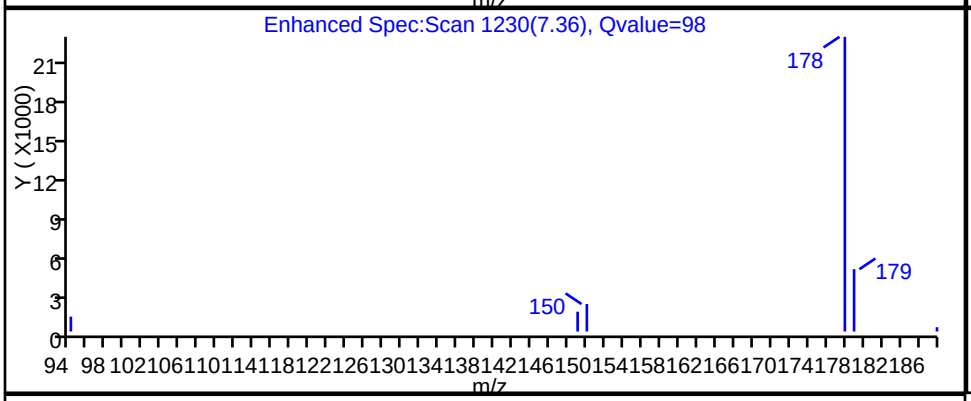
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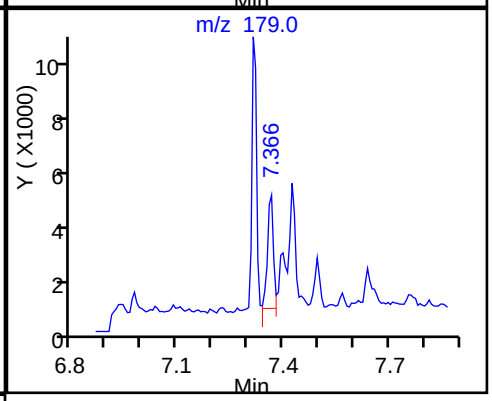
Injection Date:	16-Jun-2017 22:06:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-14-B	Lab Sample ID:	280-97928-14		
Client ID:	SS025-SB09(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	17	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

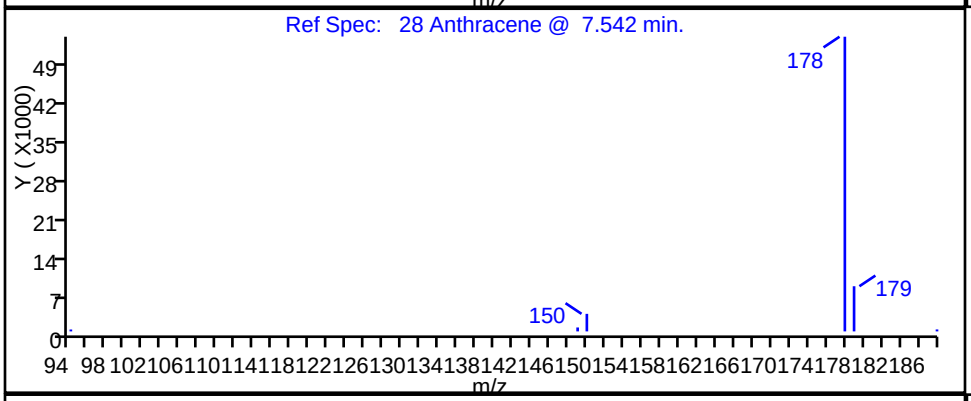
28 Anthracene, CAS: 120-12-7

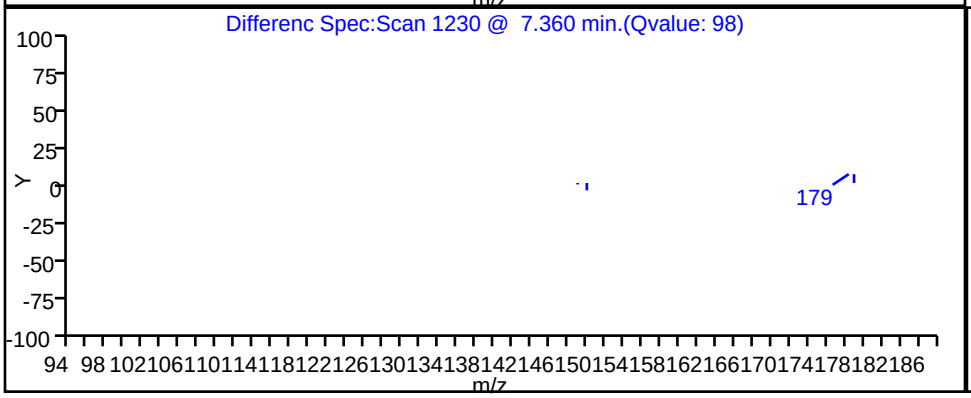


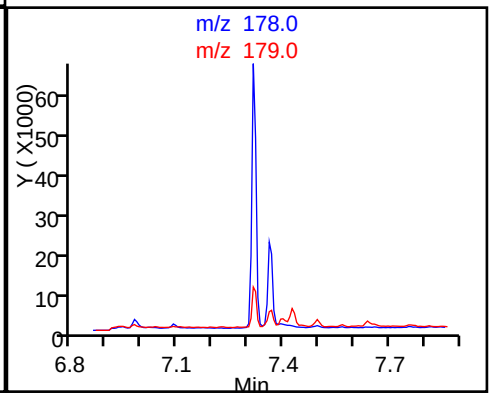












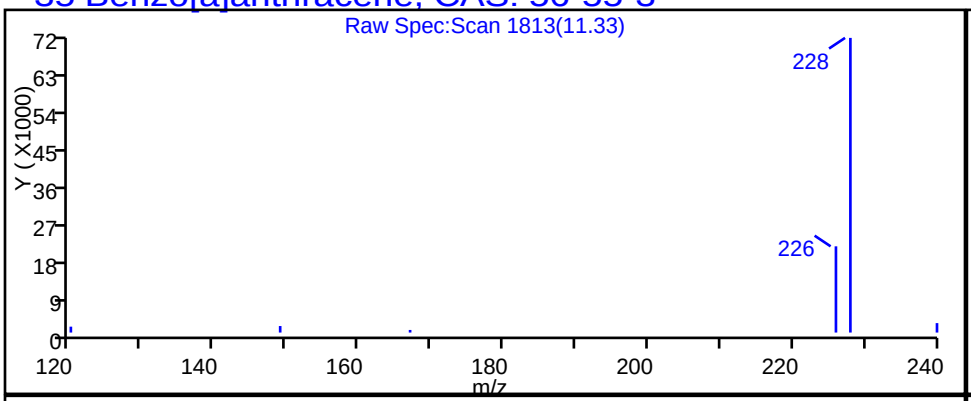
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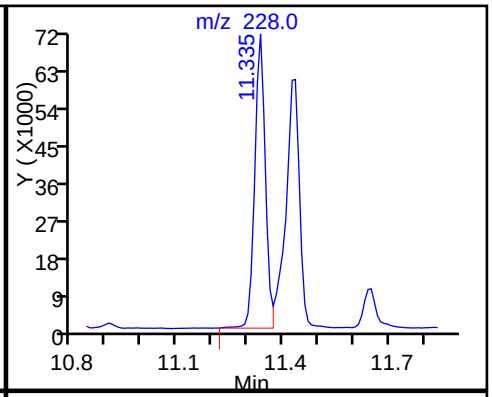
TestAmerica Denver

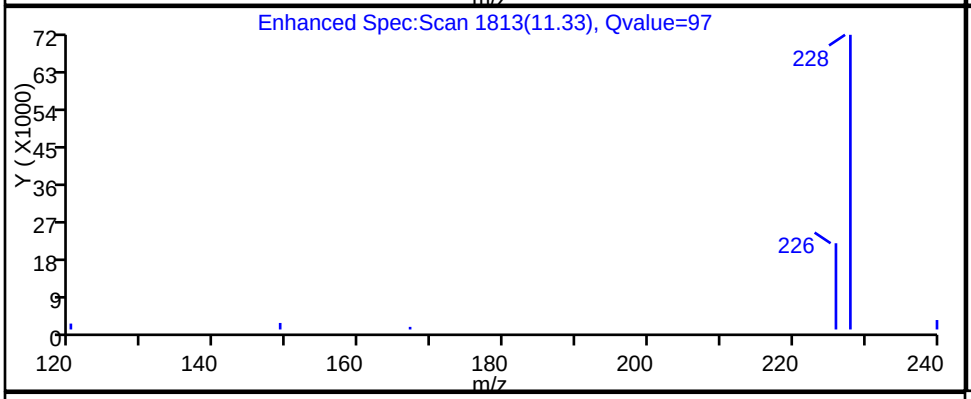
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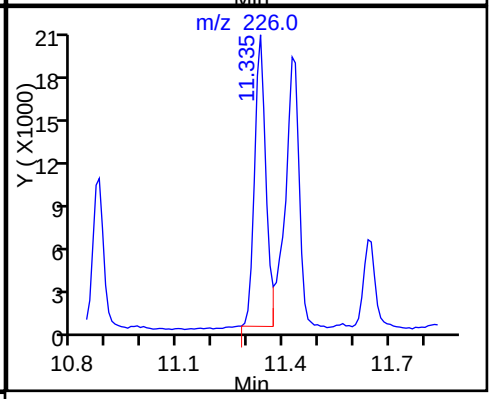
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Lims ID:	280-97928-C-14-B	Lab Sample ID:	280-97928-14		
Client ID:	SS025-SB09(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	17	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

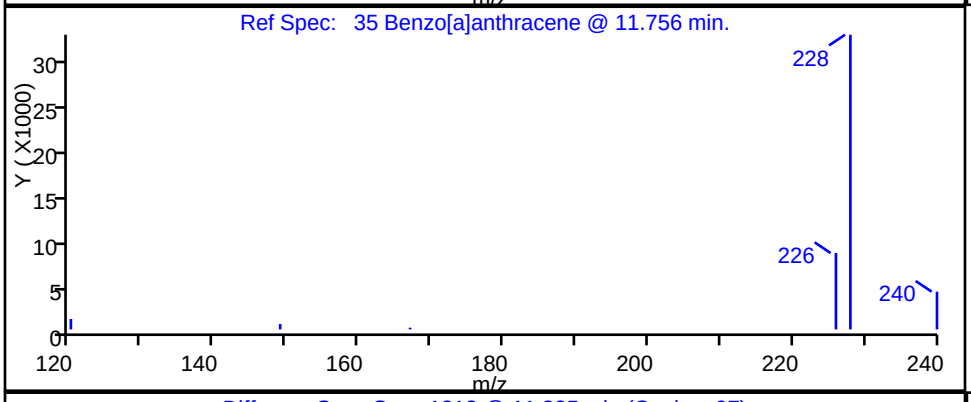
35 Benzo[a]anthracene, CAS: 56-55-3

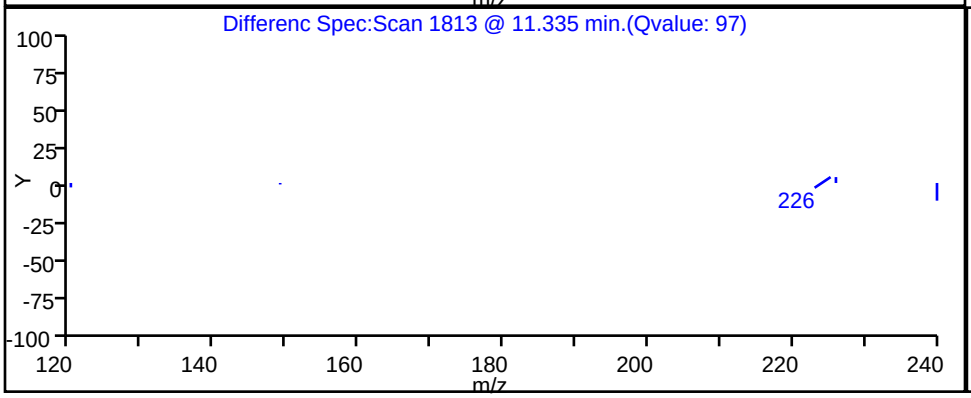


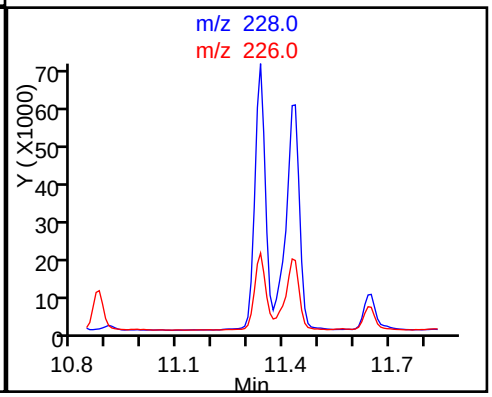












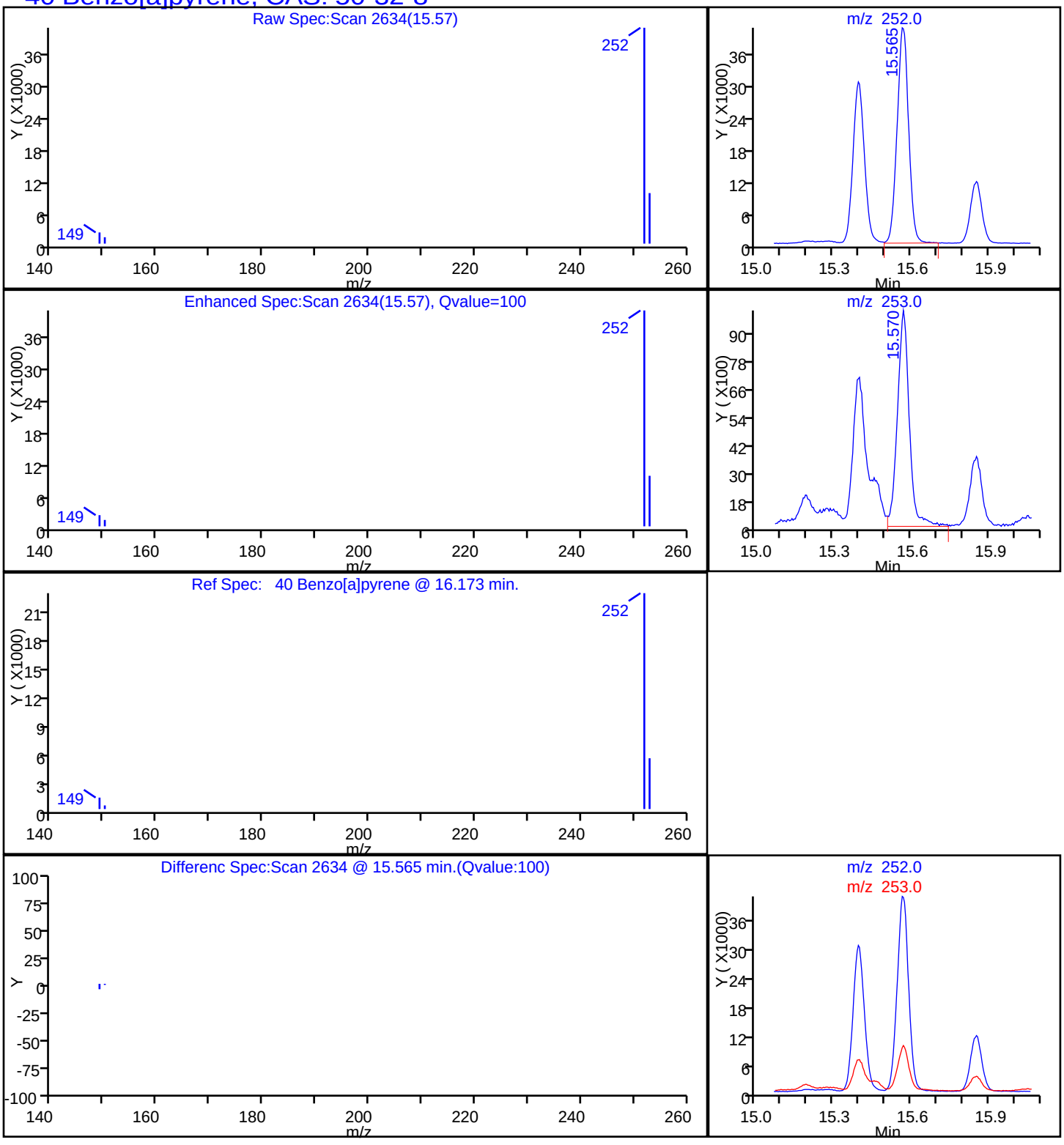
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TestAmerica Denver

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Client ID:	SS025-SB09(0-2)				
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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

40 Benzo[a]pyrene, CAS: 50-32-8

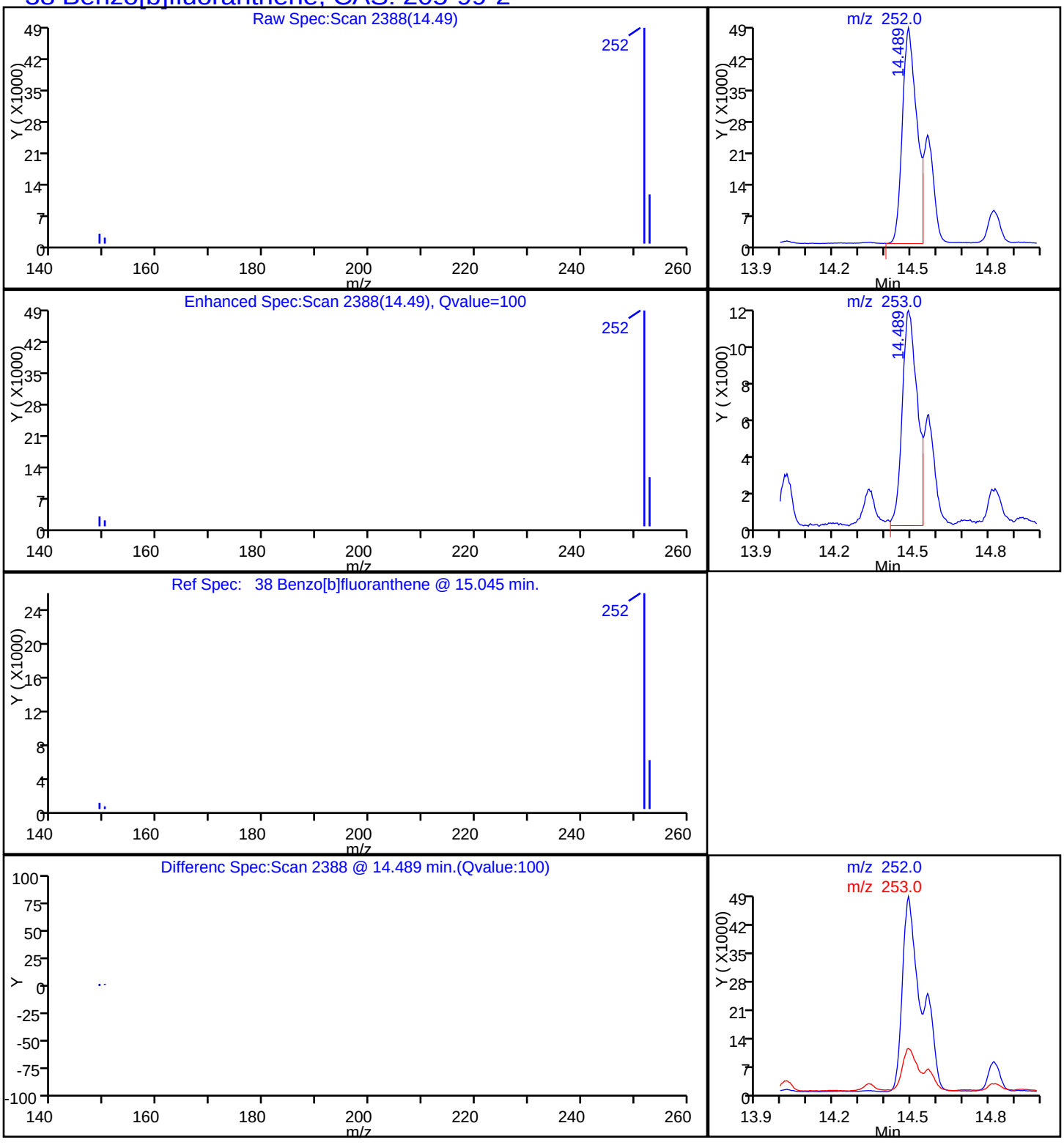


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TestAmerica Denver

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Client ID:	SS025-SB09(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	17	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

38 Benzo[b]fluoranthene, CAS: 205-99-2

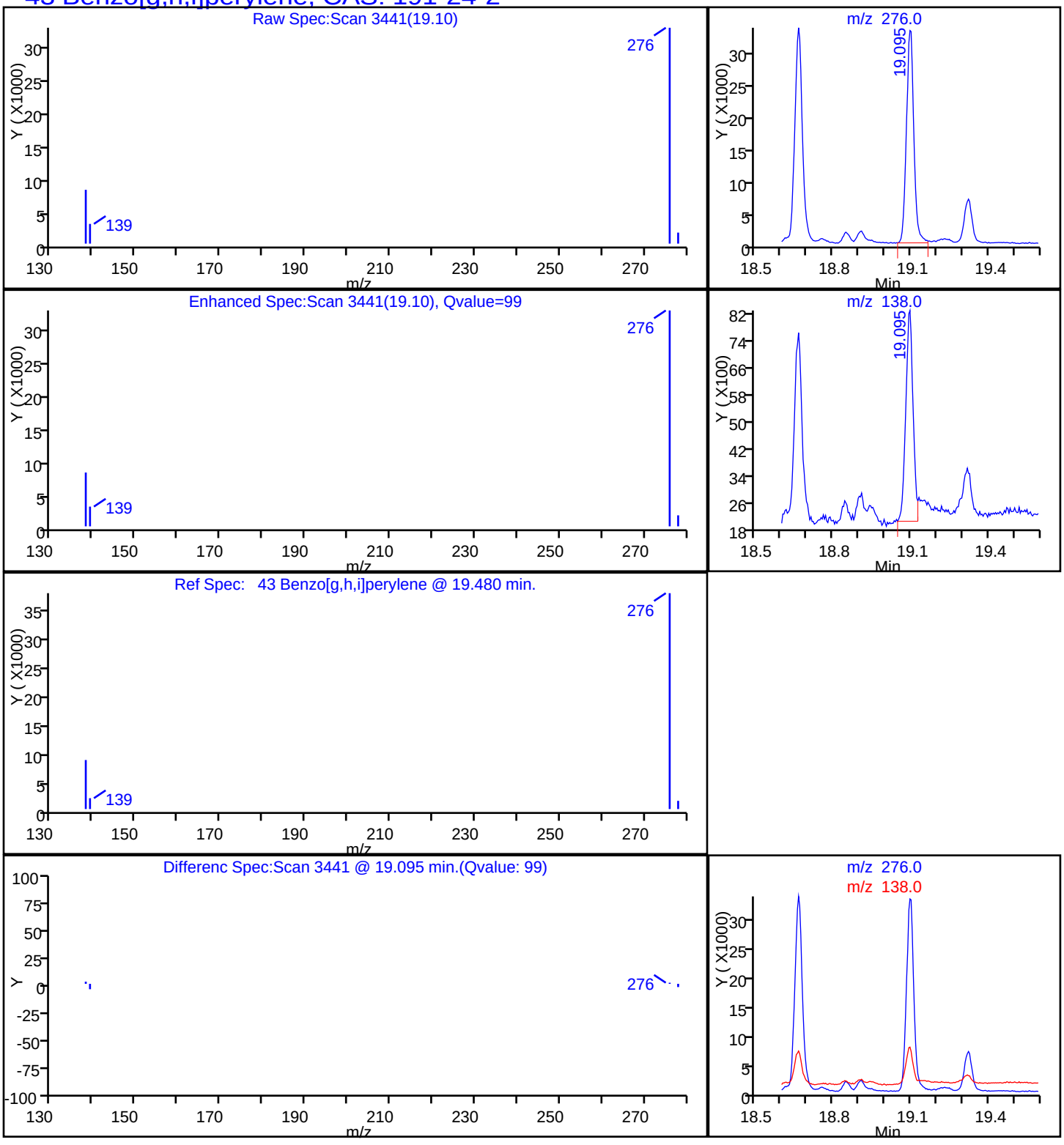


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TestAmerica Denver

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Client ID:	SS025-SB09(0-2)				
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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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Column:		Detector	MS SCAN		

43 Benzo[g,h,i]perylene, CAS: 191-24-2

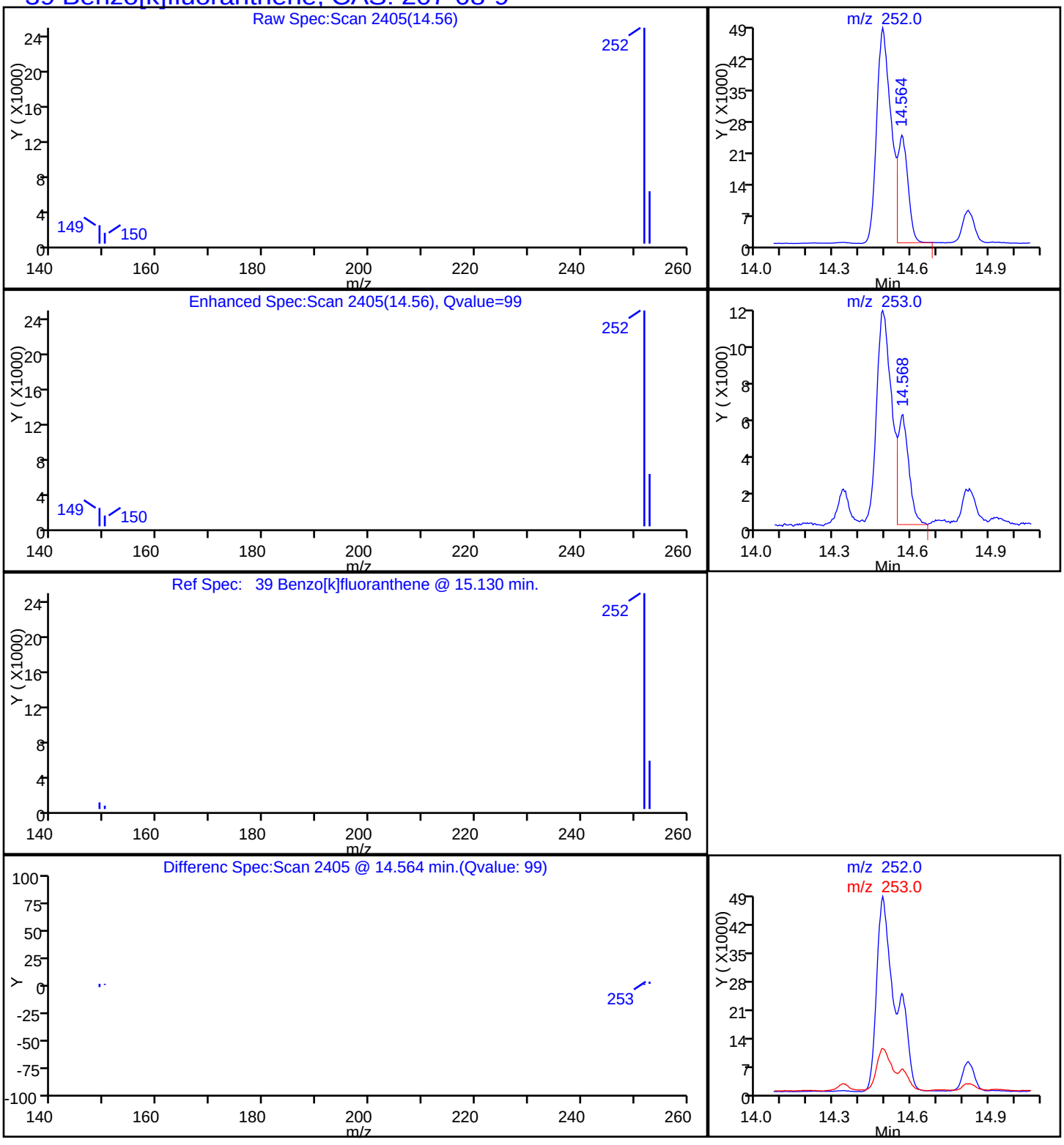


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TestAmerica Denver

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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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Column:		Detector	MS SCAN		

39 Benzo[k]fluoranthene, CAS: 207-08-9



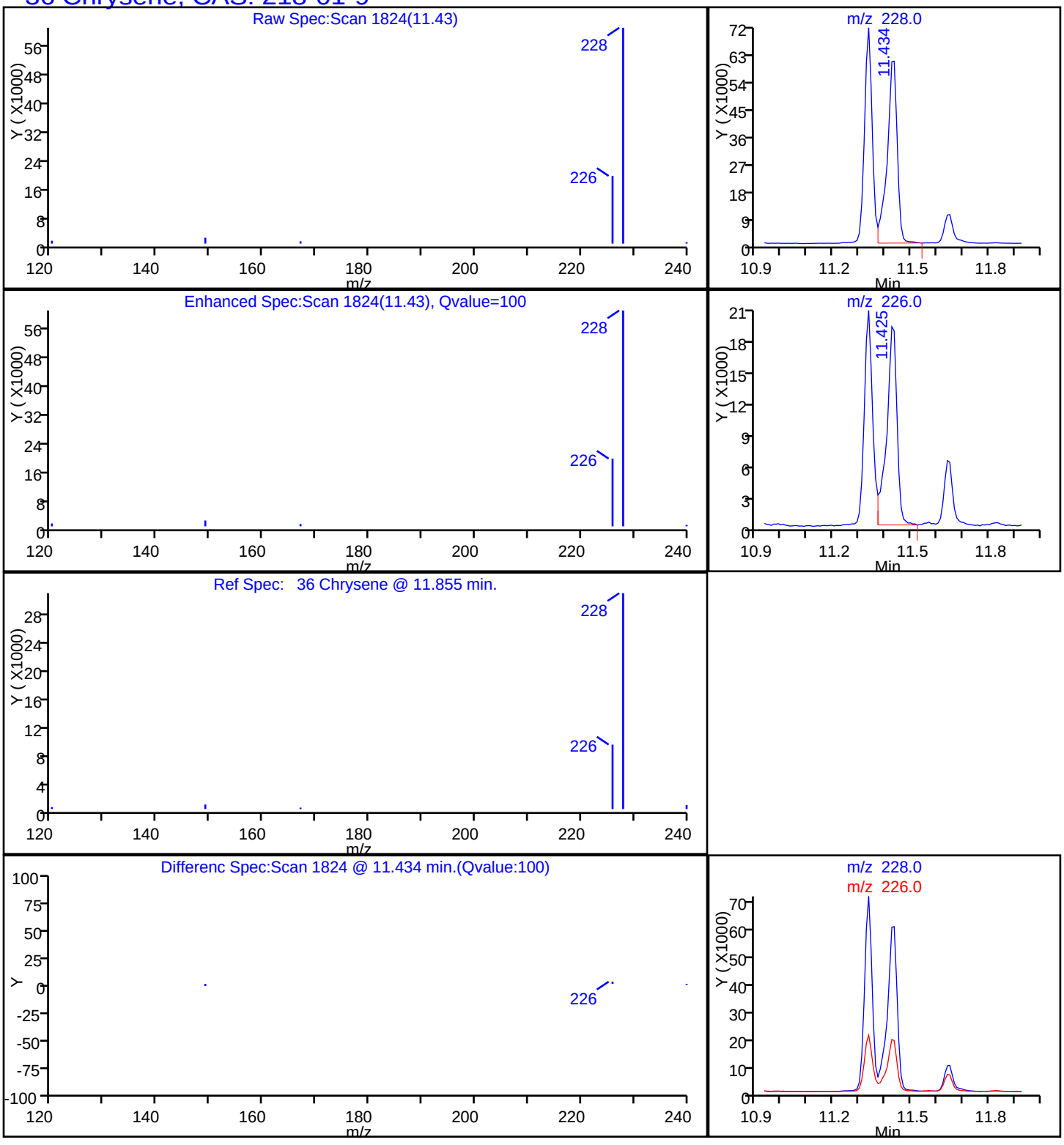
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TestAmerica Denver

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Client ID:	SS025-SB09(0-2)				
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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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36 Chrysene, CAS: 218-01-9

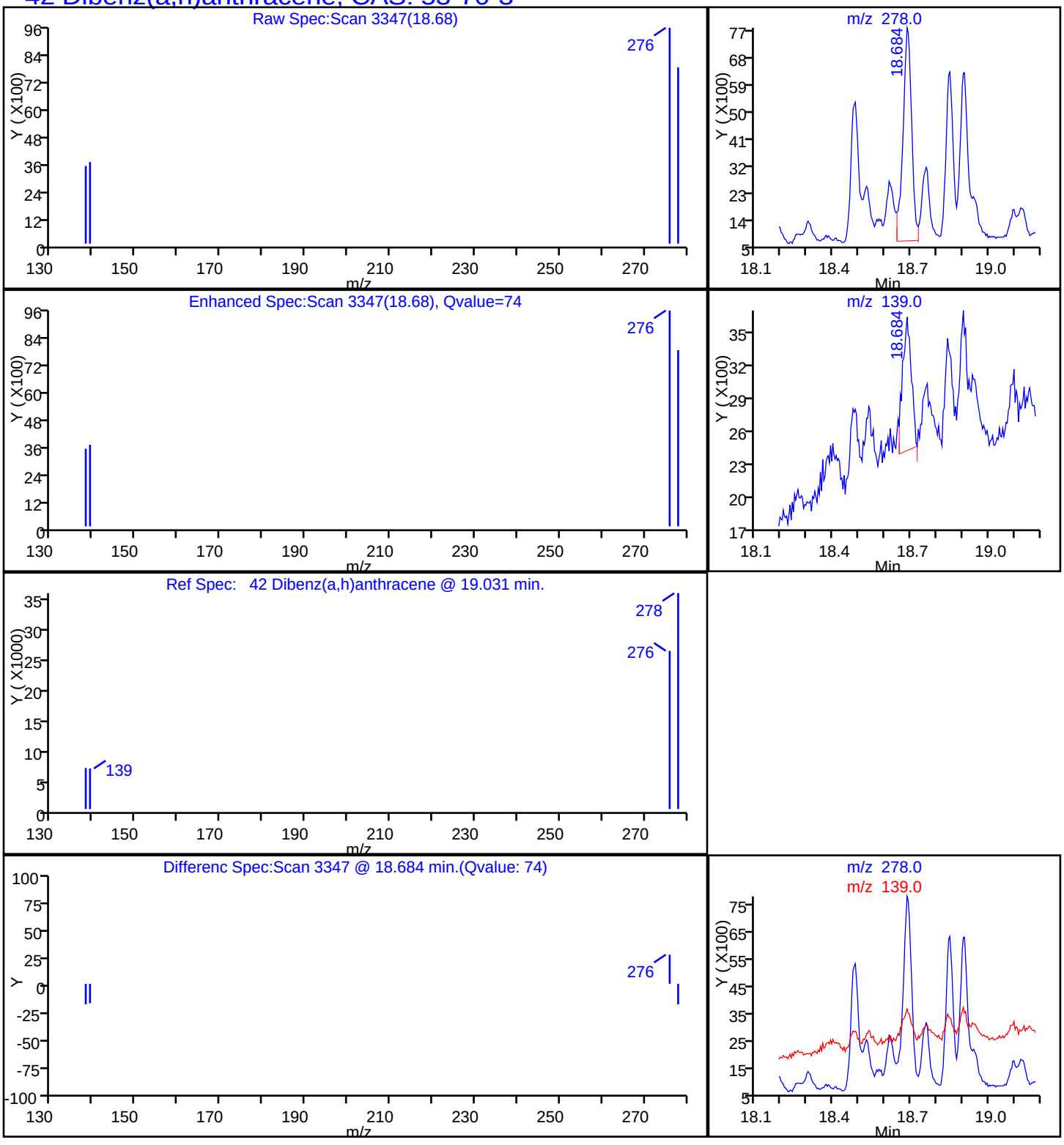


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TestAmerica Denver

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Column:		Detector	MS SCAN		

42 Dibenz(a,h)anthracene, CAS: 53-70-3



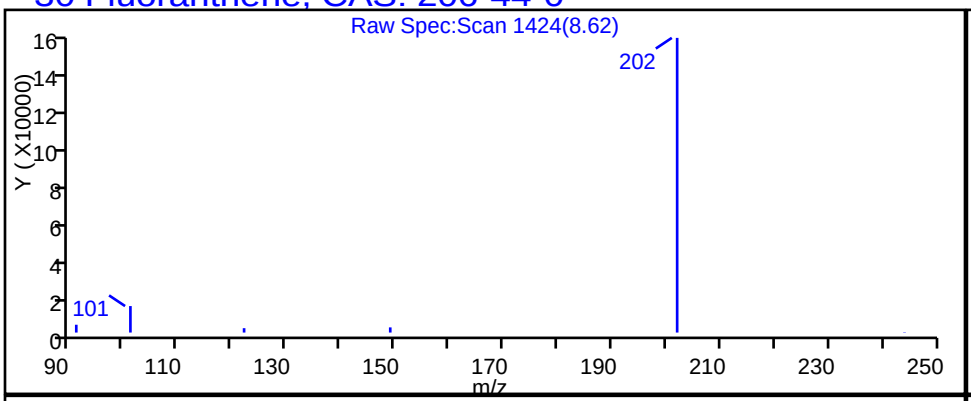
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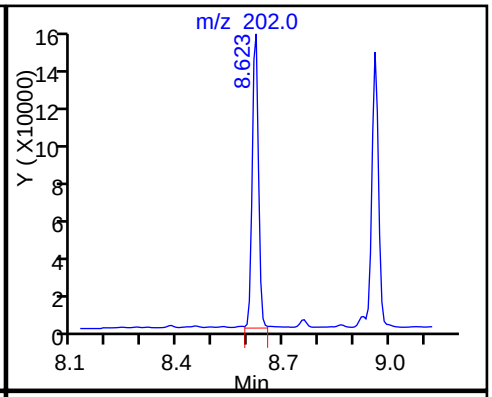
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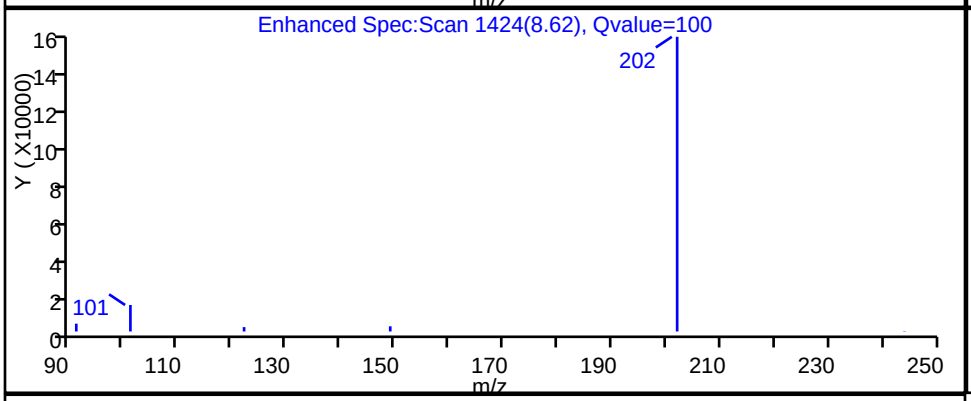
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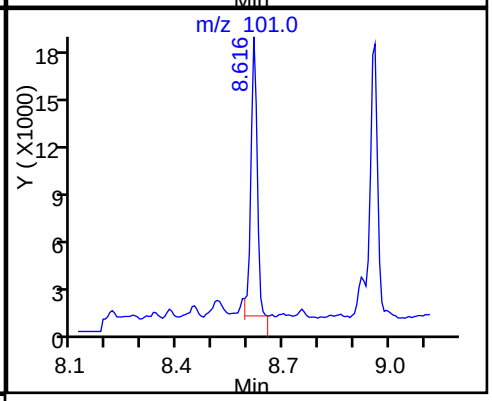
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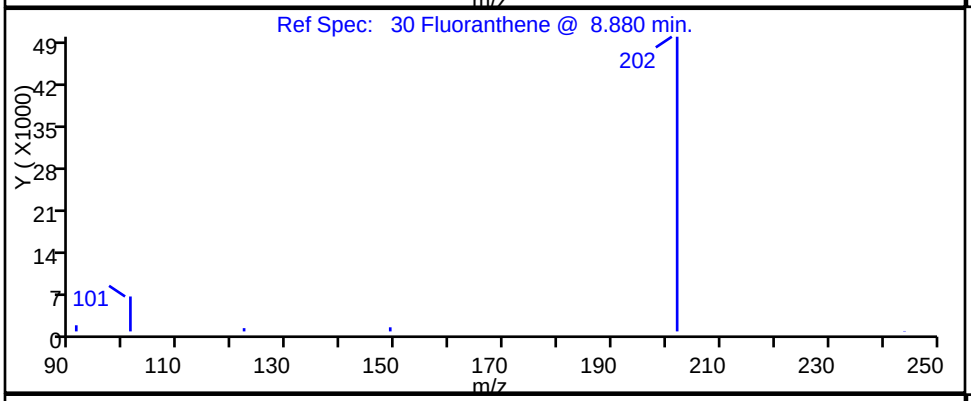
30 Fluoranthene, CAS: 206-44-0

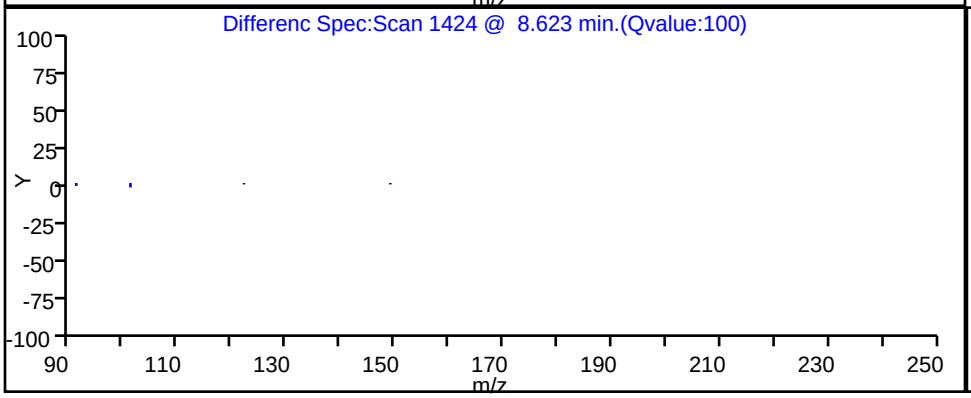


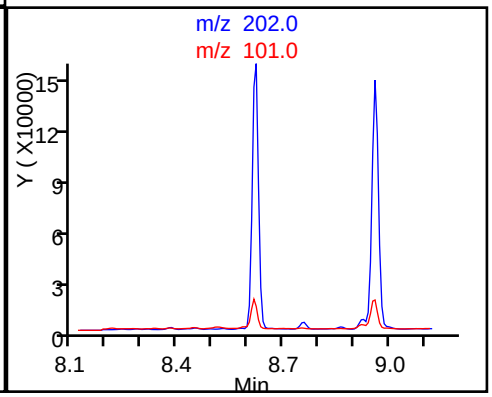












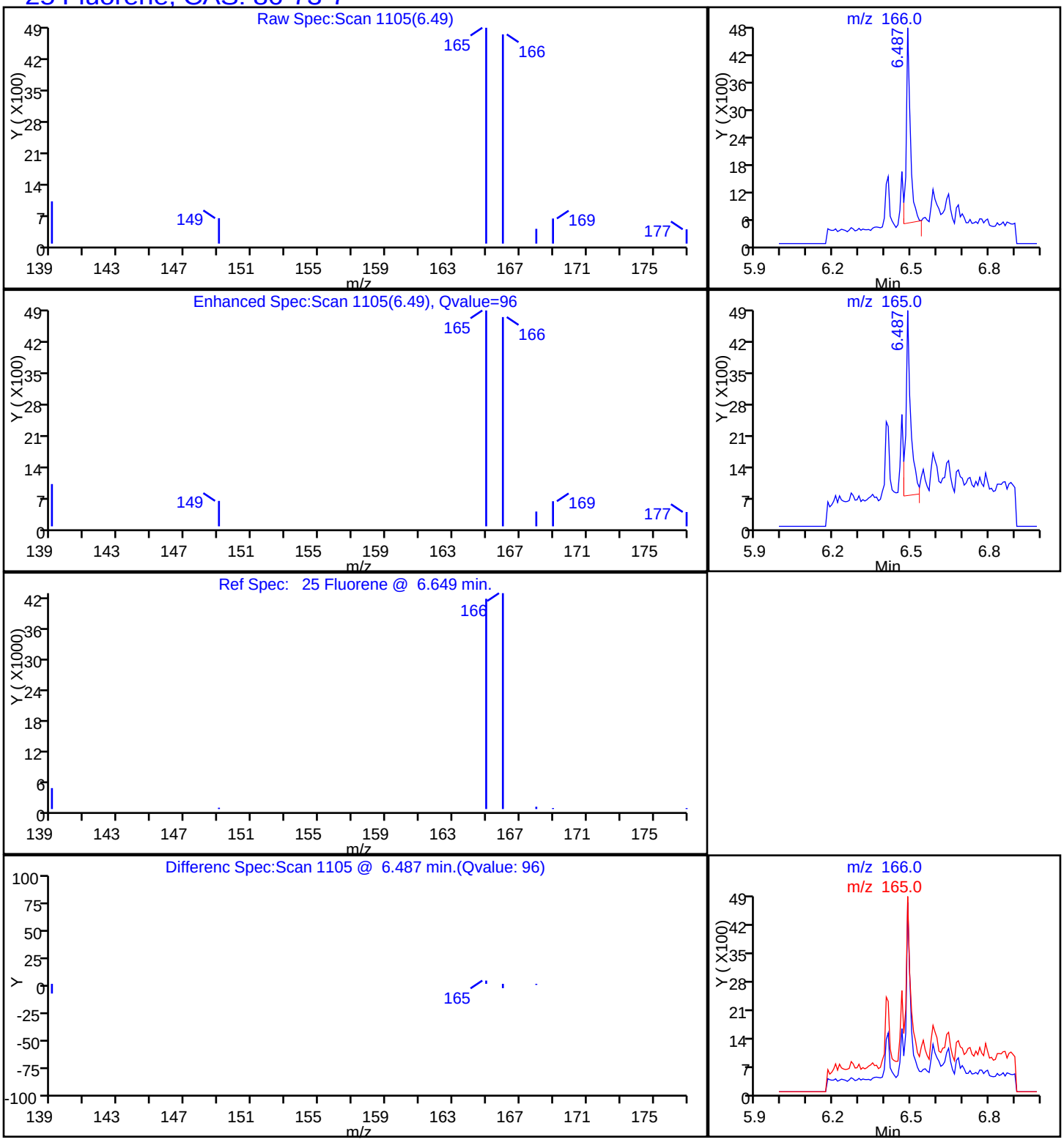
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TestAmerica Denver

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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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25 Fluorene, CAS: 86-73-7

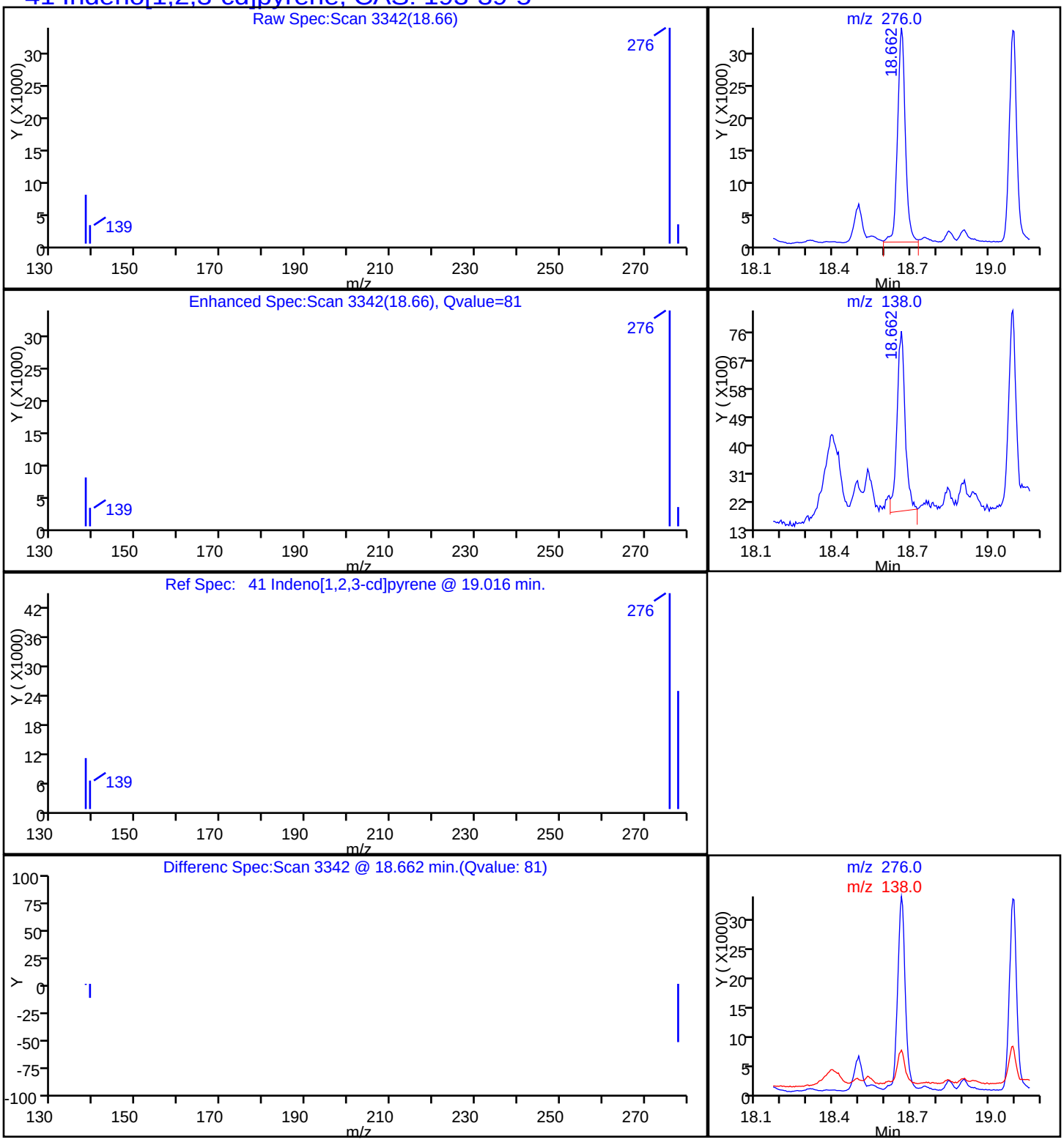


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TestAmerica Denver

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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

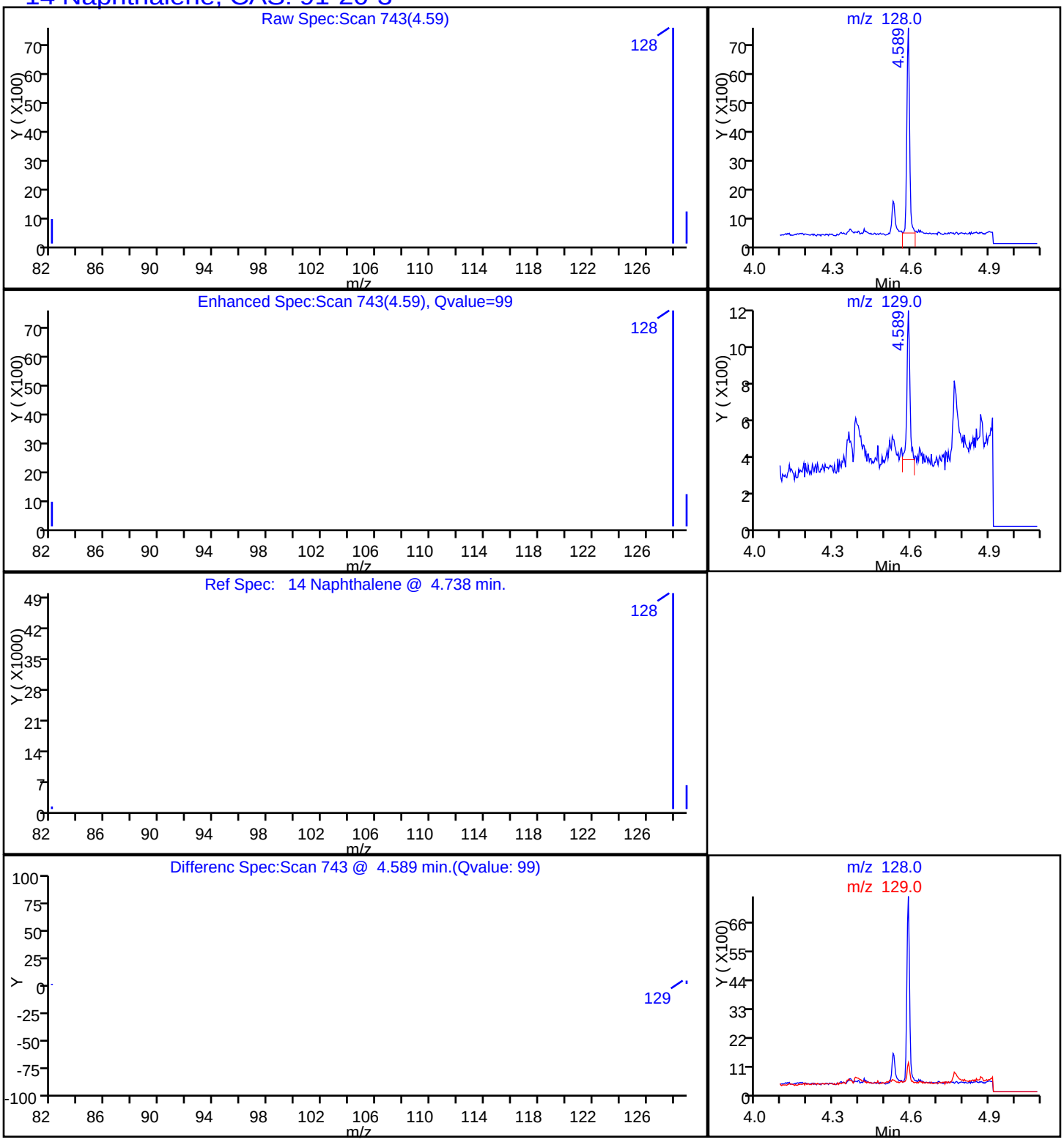


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TestAmerica Denver

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14 Naphthalene, CAS: 91-20-3

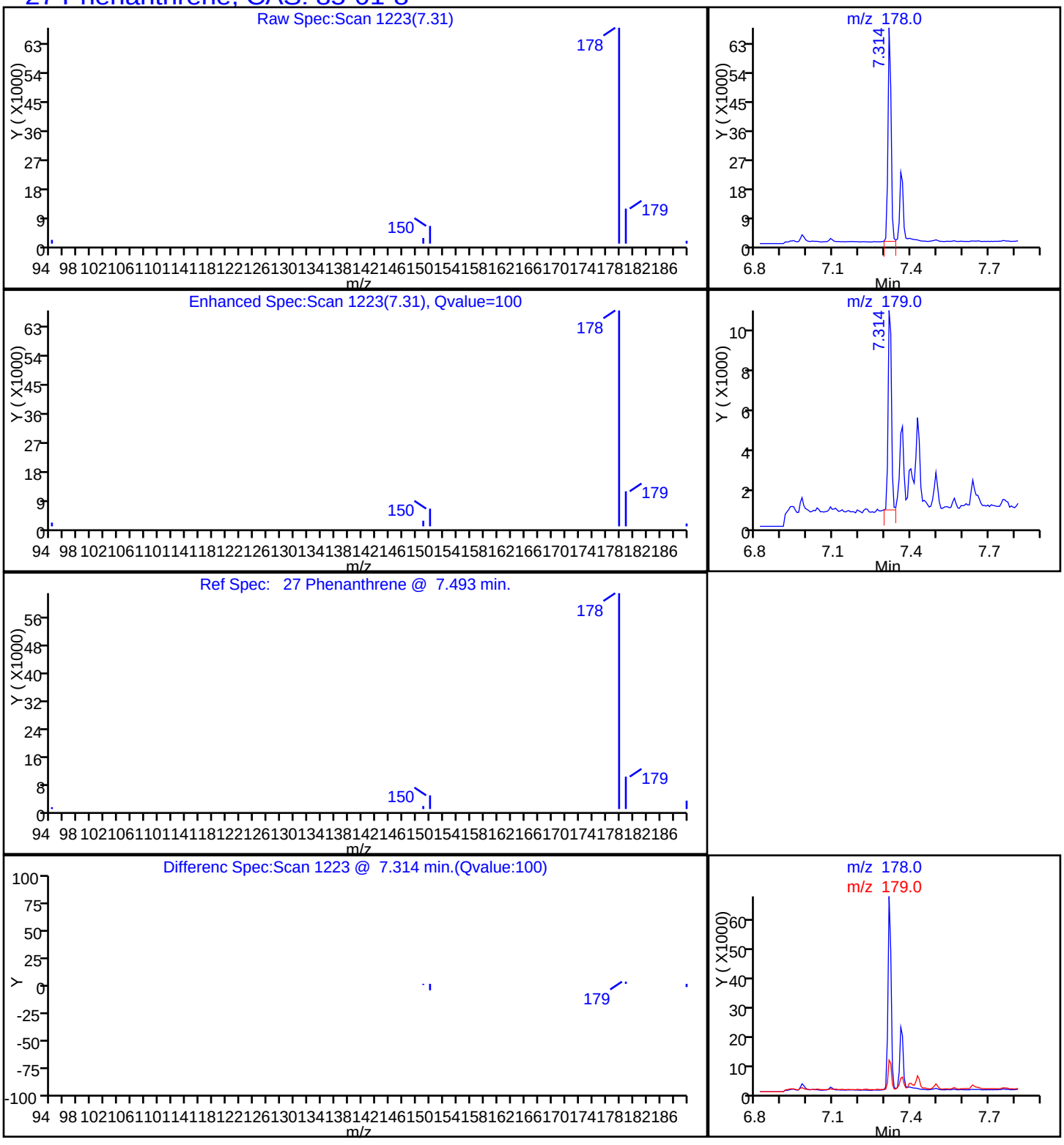


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TestAmerica Denver

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Column:		Detector	MS SCAN		

27 Phenanthrene, CAS: 85-01-8



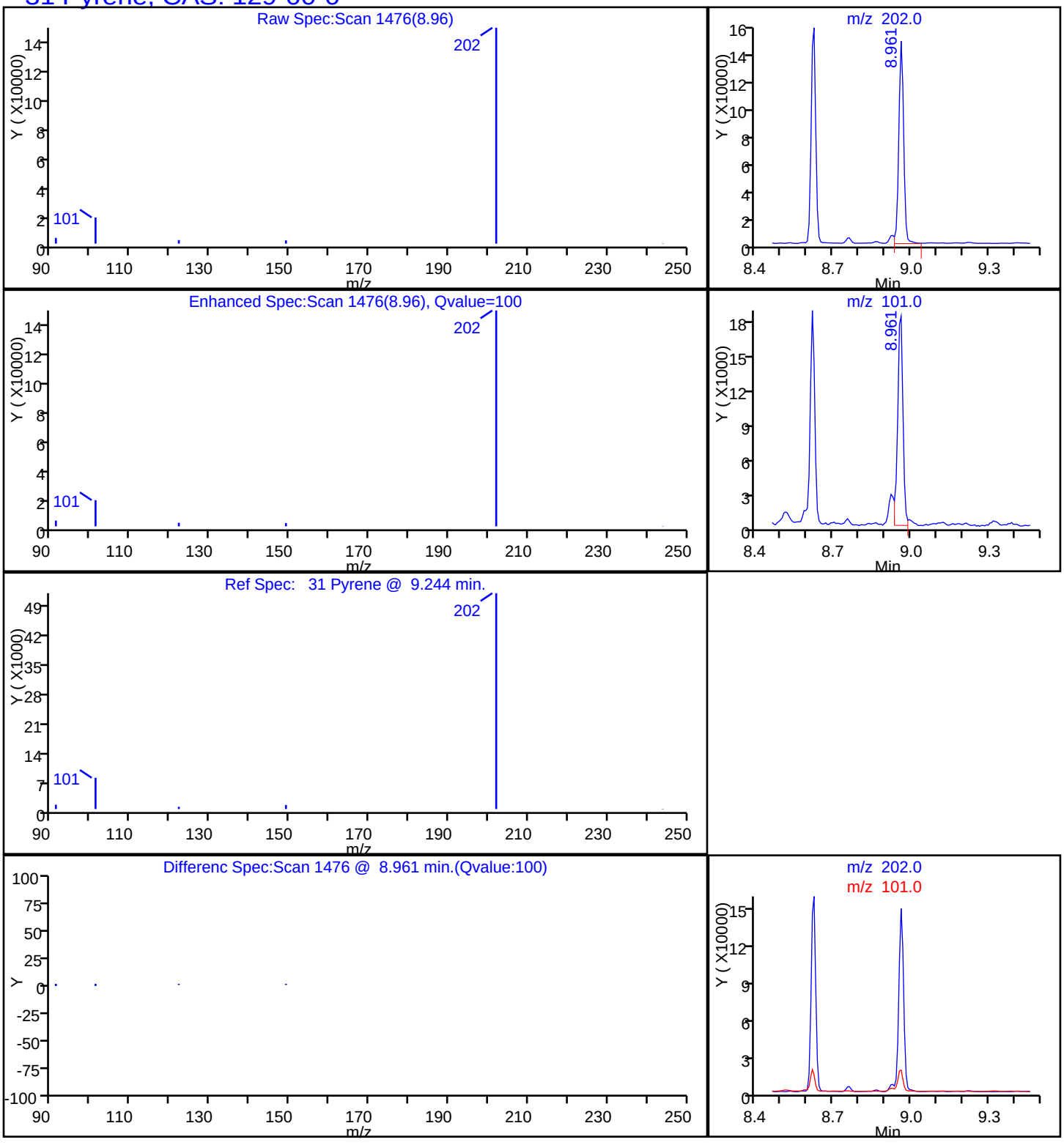
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TestAmerica Denver

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Injection Date:	16-Jun-2017 22:06:30	Instrument ID:	SMS_F		
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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Pyrene, CAS: 129-00-0



Manual Integration/User Assign Peak Report

TestAmerica Denver

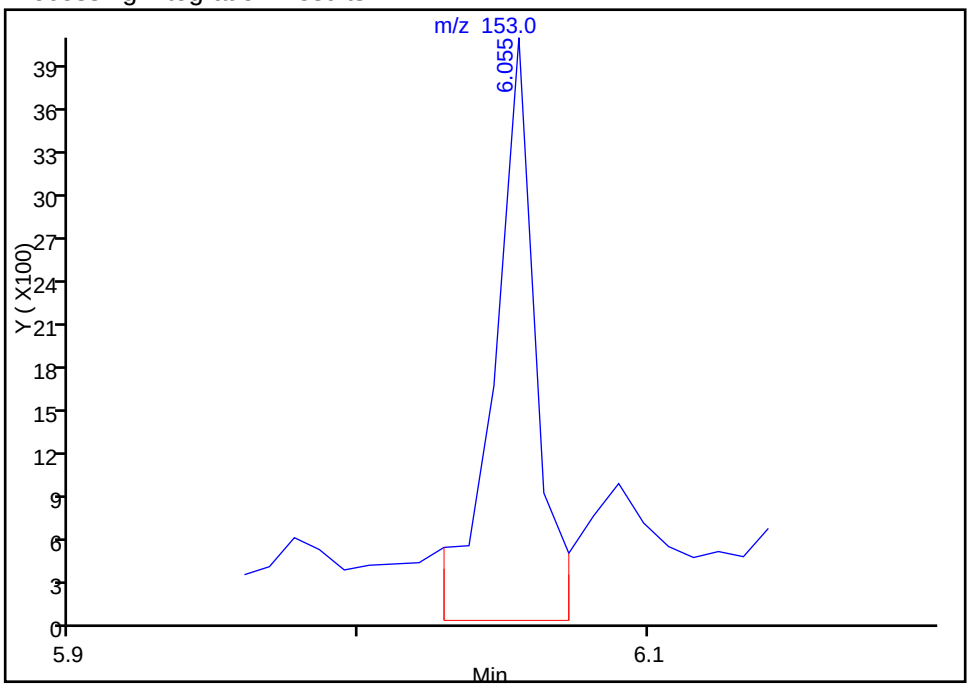
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Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9

Signal: 1

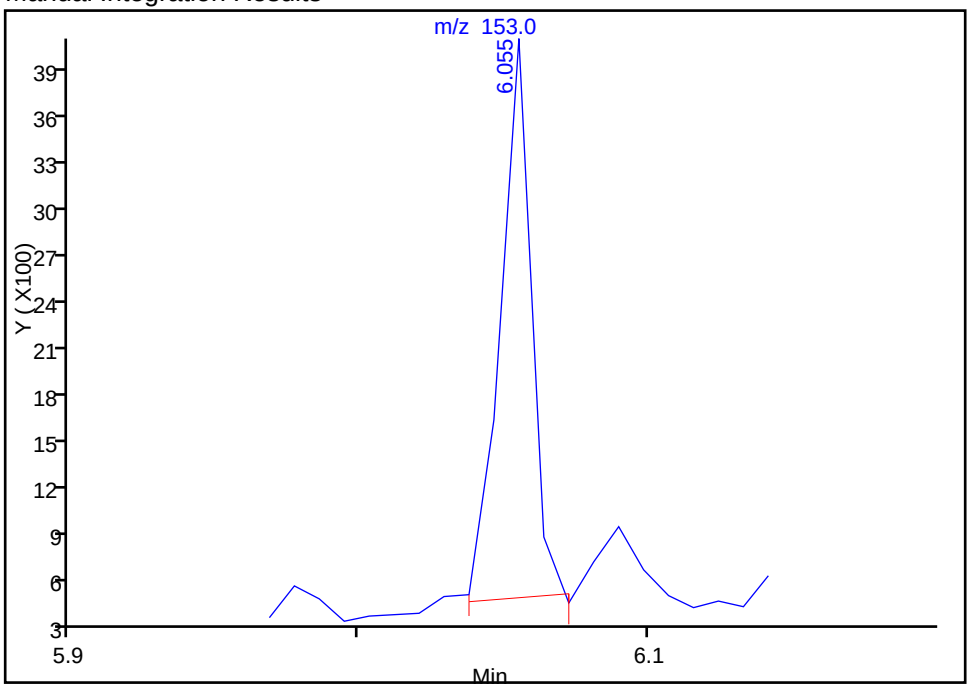
Processing Integration Results

RT: 6.06
Area: 4210
Amount: 91.599383
Amount Units: ng/ml



Manual Integration Results

RT: 6.06
Area: 2639
Amount: 57.418235
Amount Units: ng/ml



Reviewer: wickhamm, 19-Jun-2017 15:26:02

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Denver

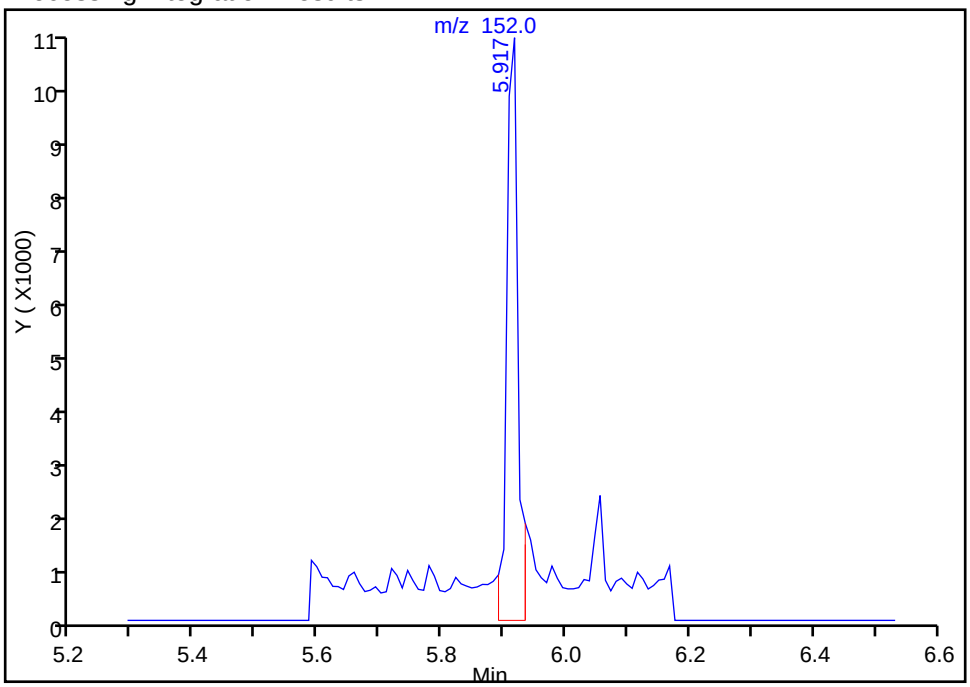
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Client ID:	SS025-SB09(0-2)				
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Column:		Detector	MS SCAN		

22 Acenaphthylene, CAS: 208-96-8

Signal: 1

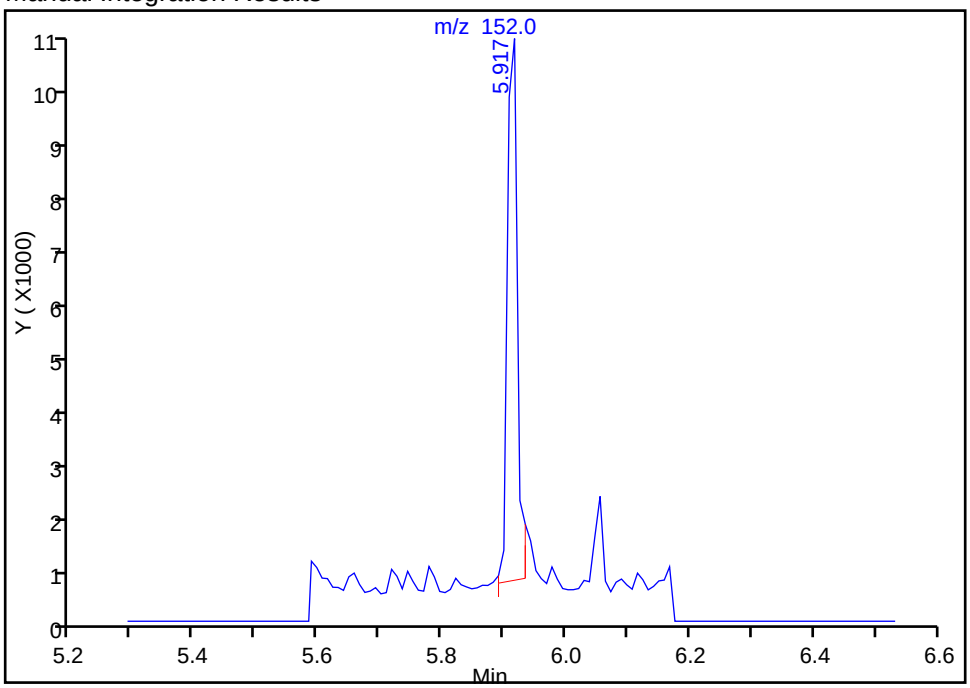
Processing Integration Results

RT: 5.92
Area: 13357
Amount: 177.6442
Amount Units: ng/ml



Manual Integration Results

RT: 5.92
Area: 11104
Amount: 147.6799
Amount Units: ng/ml



Reviewer: wickhamm, 19-Jun-2017 15:25:47

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(2-4) | Lab Sample ID: 280-97928-15

Matrix: Solid | Lab File ID: F7285.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 13:40

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 30.3(g) | Date Analyzed: 06/16/2017 22:32

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 9.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	3.0	J	5.5	0.55	0.29
91-57-6	2-Methylnaphthalene	3.8	J	5.5	0.73	0.34
83-32-9	Acenaphthene	1.2	J M	5.5	0.29	0.18
208-96-8	Acenaphthylene	6.5	M	5.5	0.73	0.19
120-12-7	Anthracene	7.4		5.5	2.7	0.79
56-55-3	Benzo[a]anthracene	22		5.5	2.7	0.99
50-32-8	Benzo[a]pyrene	24		5.5	2.7	0.81
205-99-2	Benzo[b]fluoranthene	37		5.5	2.7	1.3
191-24-2	Benzo[g,h,i]perylene	18		5.5	2.7	1.2
207-08-9	Benzo[k]fluoranthene	15	M	5.5	2.7	1.1
218-01-9	Chrysene	28		5.5	2.7	1.1
53-70-3	Dibenz(a,h)anthracene	4.9	J	5.5	2.7	1.4
206-44-0	Fluoranthene	34		5.5	2.7	1.1
86-73-7	Fluorene	2.5	J	5.5	0.73	0.52
193-39-5	Indeno[1,2,3-cd]pyrene	15		5.5	2.7	1.2
91-20-3	Naphthalene	2.6	J	5.5	0.73	0.36
85-01-8	Phenanthrene	15		5.5	2.7	1.2
129-00-0	Pyrene	34		5.5	2.7	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	88		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	90		44-125
1718-51-0	Terphenyl-d14 (Surr)	75		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7285.D
Lims ID: 280-97928-A-15-B
Client ID: SS025-SB09(2-4)
Sample Type: Client
Inject. Date: 16-Jun-2017 22:32:30 ALS Bottle#: 18 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-a-15-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:28:03

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	100	21740	600.0	
* 2 Phenanthrene-d10	188	7.295	7.301	-0.006	100	38323	600.0	
* 3 Chrysene-d12	240	11.362	11.371	-0.009	97	33485	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	15266	448.3	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	100	24766	439.3	
$ 6 Terphenyl-d14	244	9.118	9.130	-0.012	92	14629	376.0	
14 Naphthalene	128	4.589	4.589	0.000	99	5051	71.7	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	97	4755	104.9	
17 1-Methylnaphthalene	142	5.230	5.235	-0.005	97	3702	81.6	
22 Acenaphthylene	152	5.917	5.917	0.000	99	13390	178.5	M
23 Acenaphthene	153	6.055	6.055	0.000	92	1535	33.5	M
25 Fluorene	166	6.487	6.494	-0.007	93	3781	67.2	
27 Phenanthrene	178	7.314	7.321	-0.007	99	33750	415.2	
28 Anthracene	178	7.360	7.366	-0.006	97	16513	201.2	
30 Fluoranthene	202	8.623	8.629	-0.006	100	87172	933.8	
31 Pyrene	202	8.961	8.968	-0.007	100	88614	915.3	
35 Benzo[a]anthracene	228	11.335	11.344	-0.009	97	52932	594.4	
36 Chrysene	228	11.434	11.443	-0.009	99	62715	761.3	
38 Benzo[b]fluoranthene	252	14.485	14.503	-0.018	99	81053	1002.5	
39 Benzo[k]fluoranthene	252	14.568	14.586	-0.018	30	33177	408.0	M
40 Benzo[a]pyrene	252	15.566	15.587	-0.021	98	51845	649.8	
41 Indeno[1,2,3-cd]pyrene	276	18.663	18.676	-0.013	82	36502	403.3	
42 Dibenz(a,h)anthracene	278	18.684	18.702	-0.018	69	9491	134.4	
43 Benzo[g,h,i]perylene	276	19.096	19.109	-0.013	96	36882	480.4	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

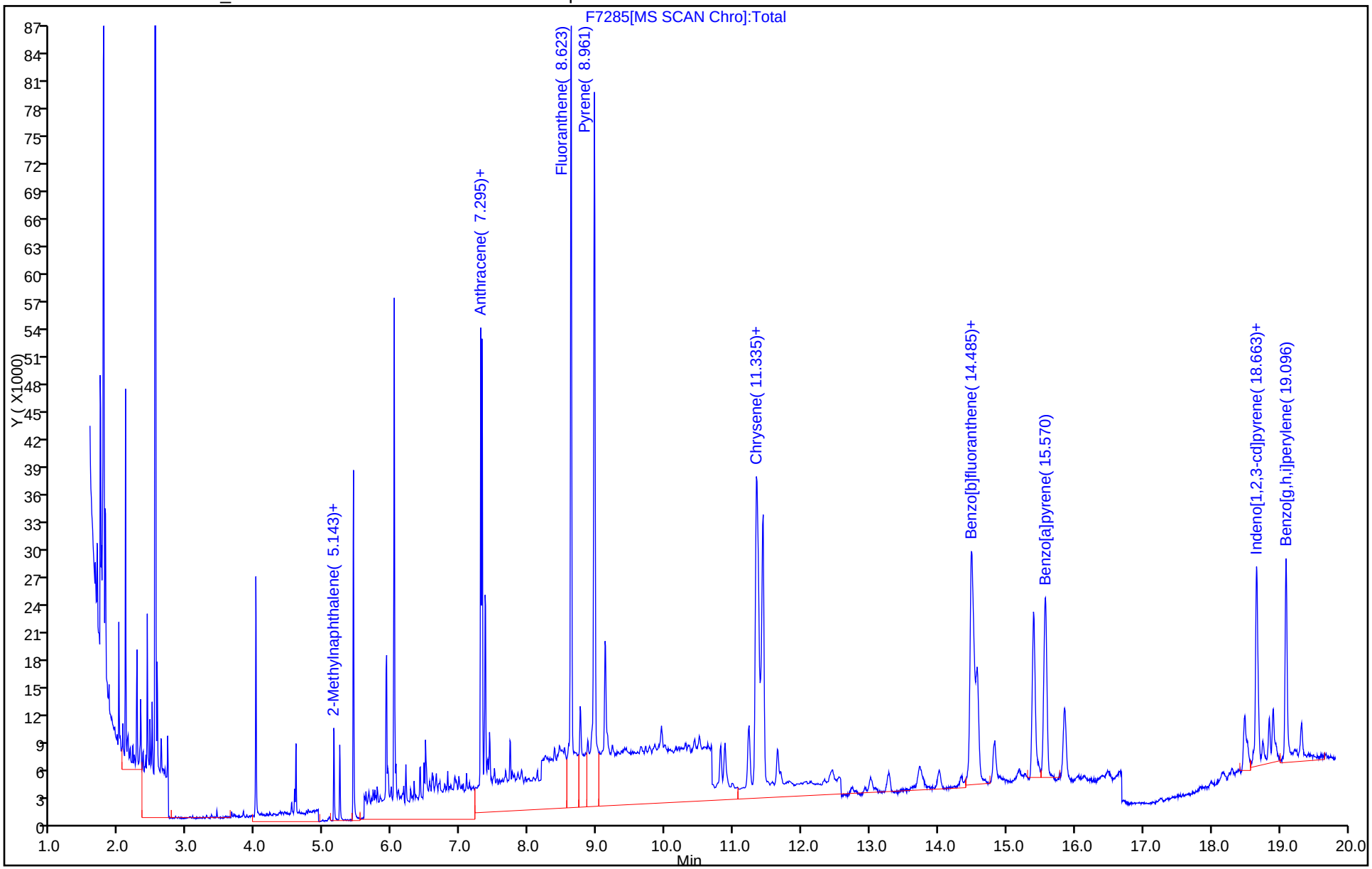
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:23 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7285.D

Injection Date:	16-Jun-2017 22:32:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-A-15-B	Lab Sample ID:	280-97928-15	Worklist Smp#:	19
Client ID:	SS025-SB09(2-4)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7285.D
Lims ID: 280-97928-A-15-B
Client ID: SS025-SB09(2-4)
Sample Type: Client
Inject. Date: 16-Jun-2017 22:32:30 ALS Bottle#: 18 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-a-15-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:28:03

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	448.3	89.66
$ 5 2-Fluorobiphenyl	500.0	439.3	87.87
$ 6 Terphenyl-d14	500.0	376.0	75.19

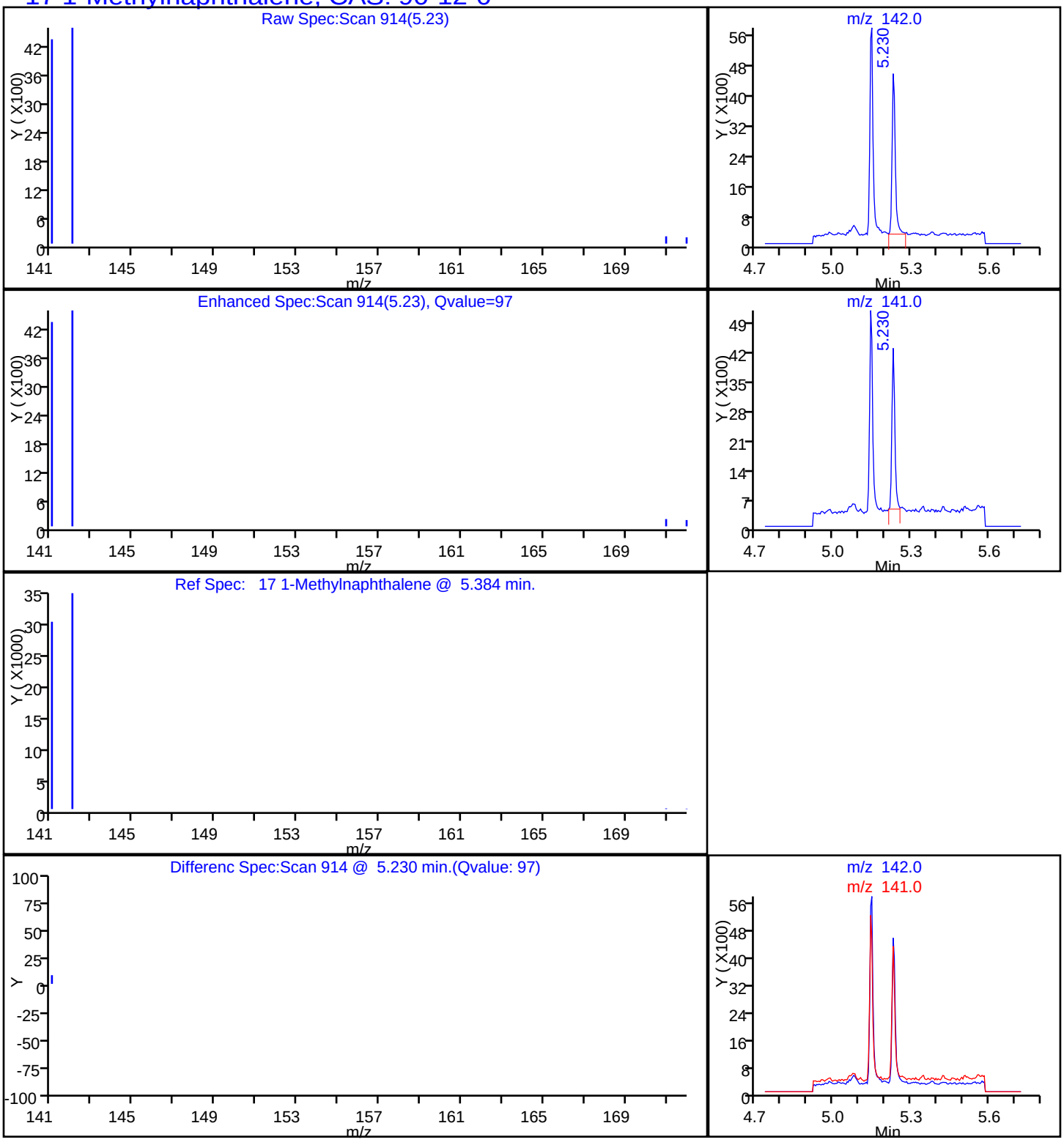
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7285.D

Injection Date:	16-Jun-2017 22:32:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-15-B	Lab Sample ID:	280-97928-15		
Client ID:	SS025-SB09(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	18	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0



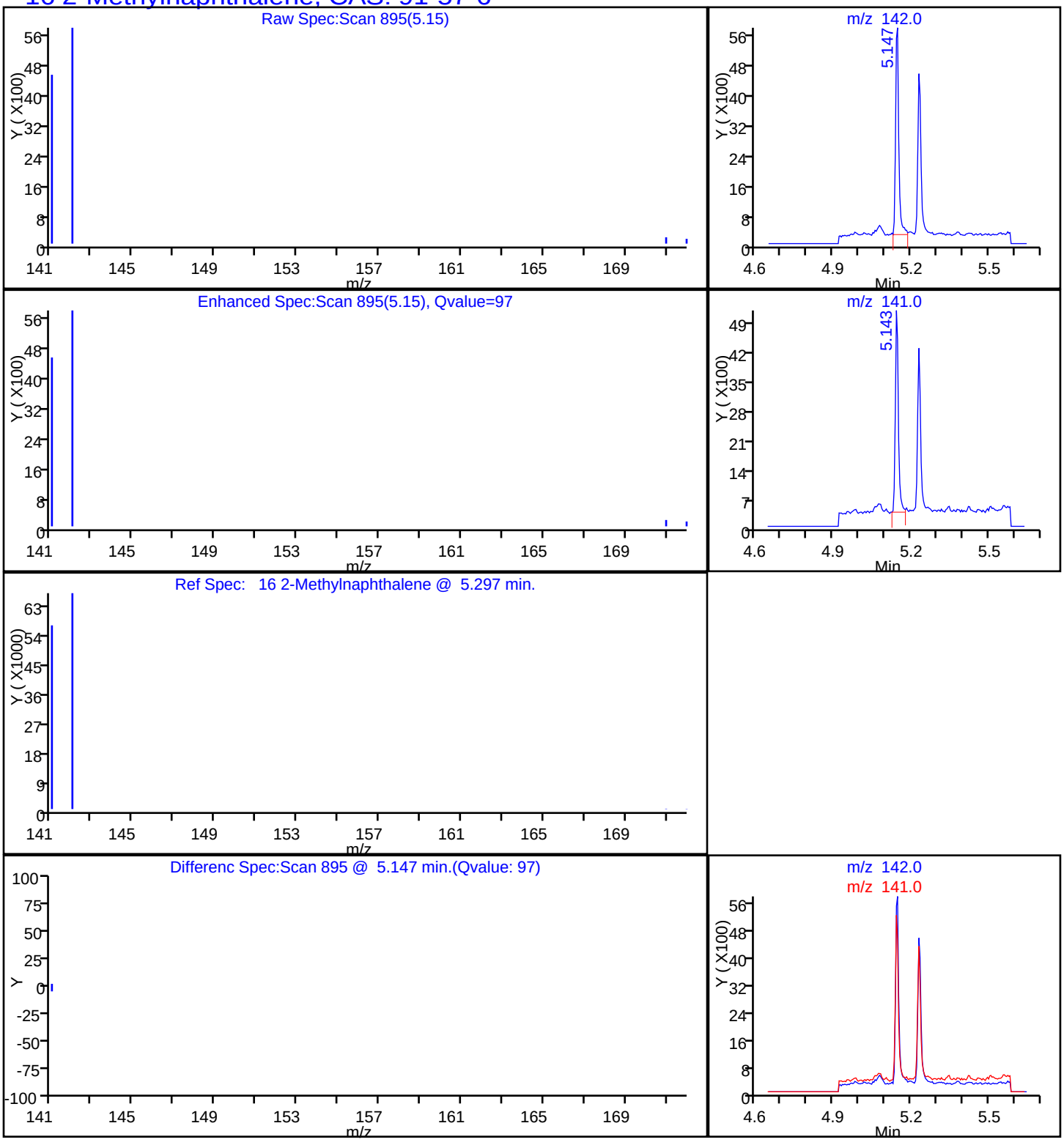
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7285.D

Injection Date:	16-Jun-2017 22:32:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-15-B	Lab Sample ID:	280-97928-15		
Client ID:	SS025-SB09(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	18	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



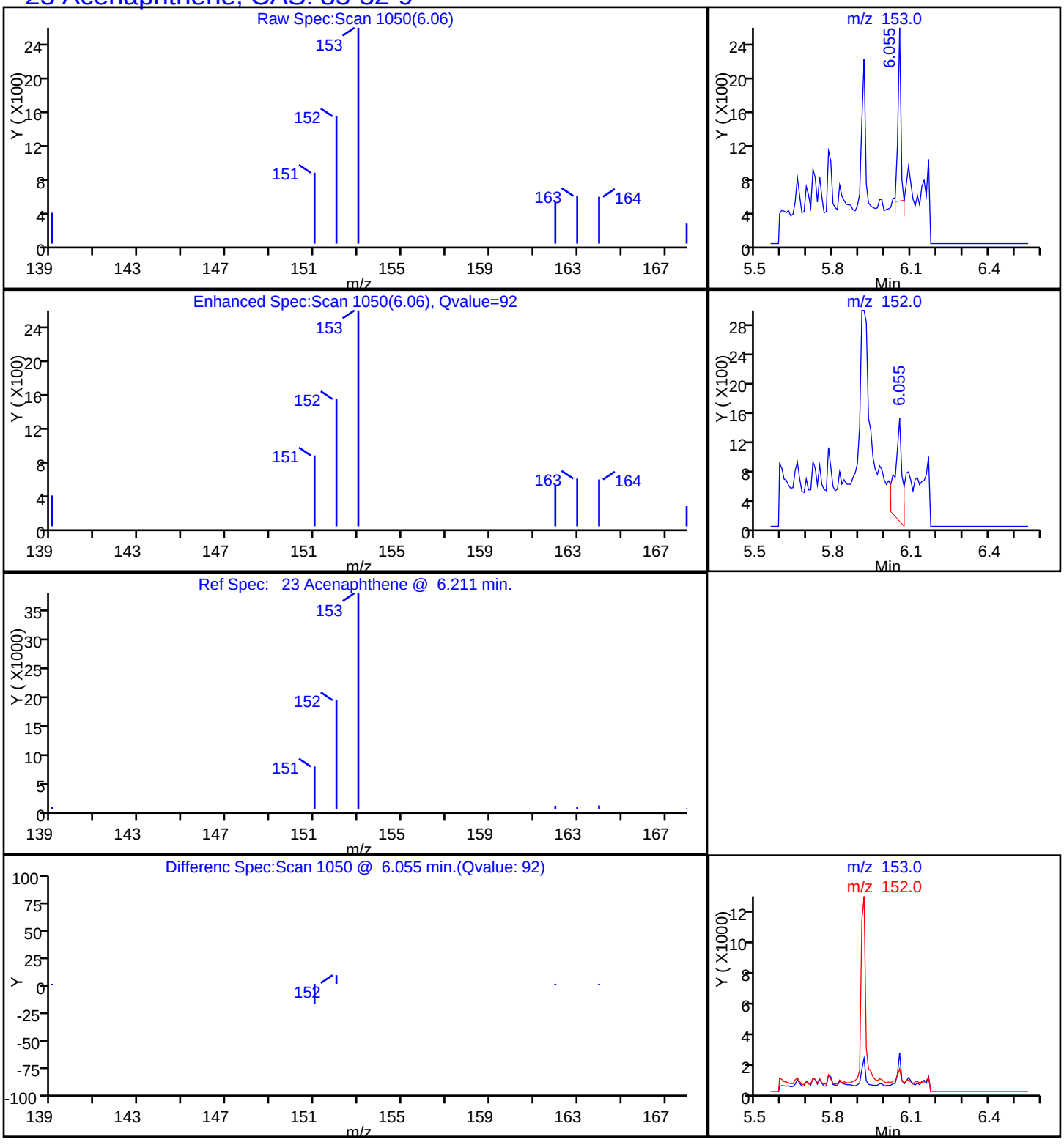
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TestAmerica Denver

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Injection Date:	16-Jun-2017 22:32:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-15-B	Lab Sample ID:	280-97928-15		
Client ID:	SS025-SB09(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	18	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9



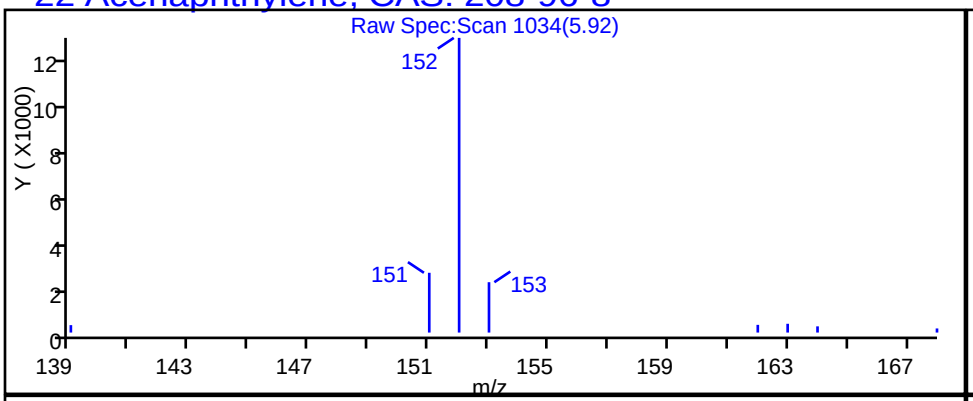
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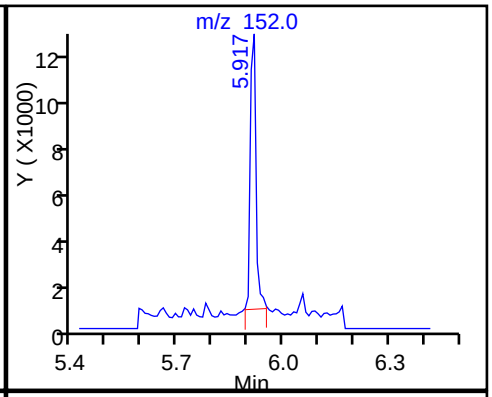
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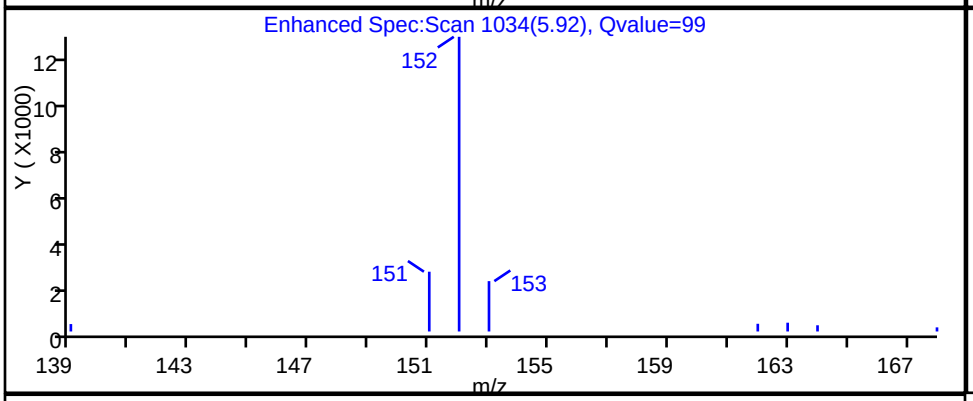
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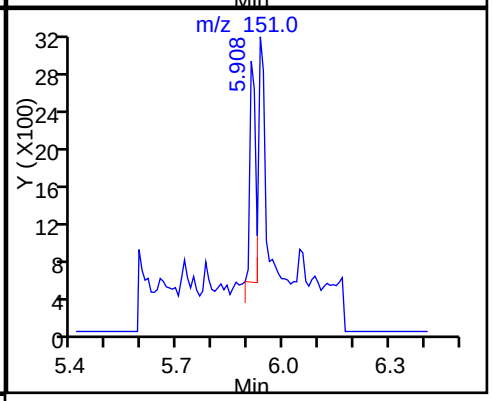
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Lims ID:	280-97928-A-15-B	Lab Sample ID:	280-97928-15		
Client ID:	SS025-SB09(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	18	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

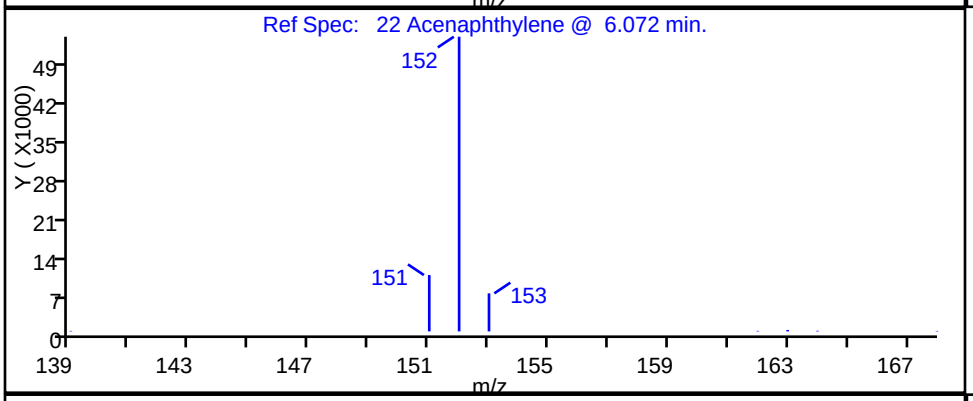
22 Acenaphthylene, CAS: 208-96-8

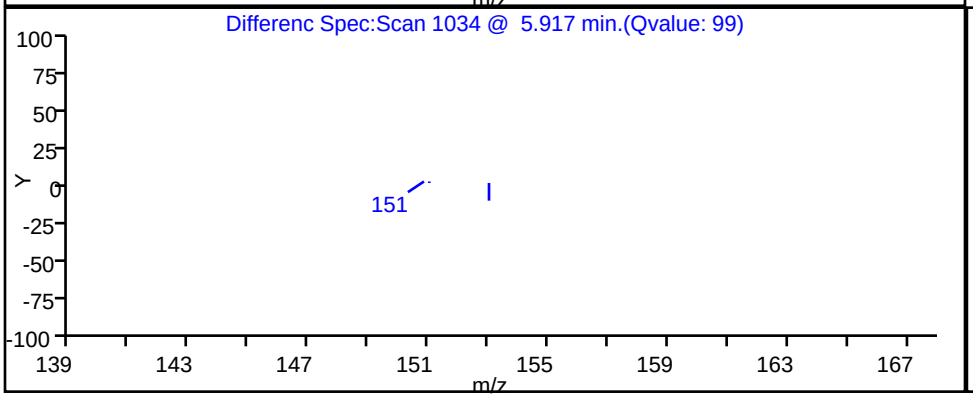


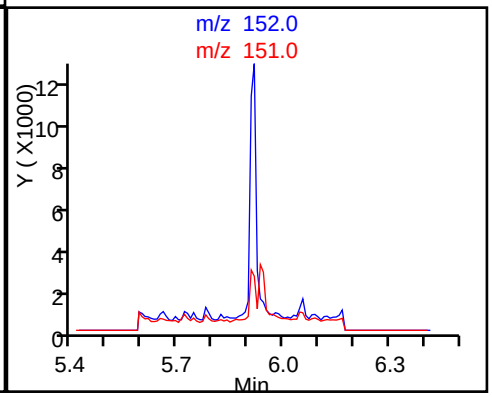










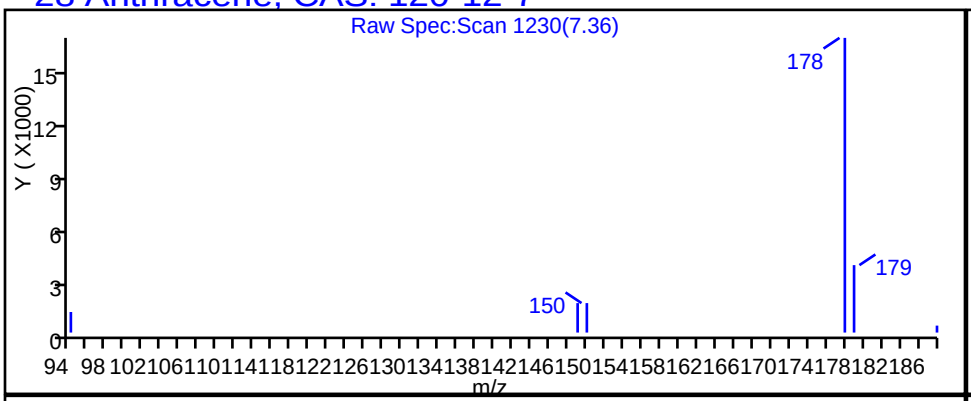


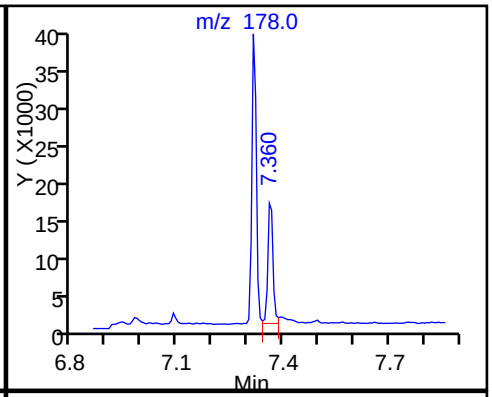
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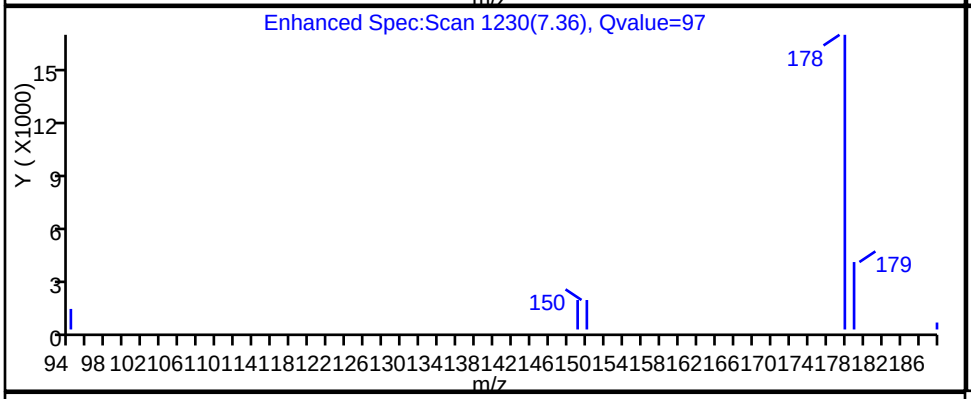
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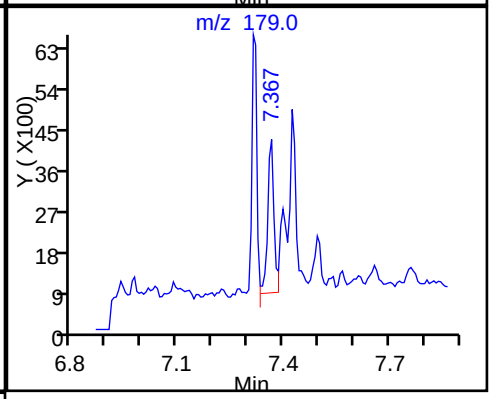
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Injection Date:	16-Jun-2017 22:32:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-15-B	Lab Sample ID:	280-97928-15		
Client ID:	SS025-SB09(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	18	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
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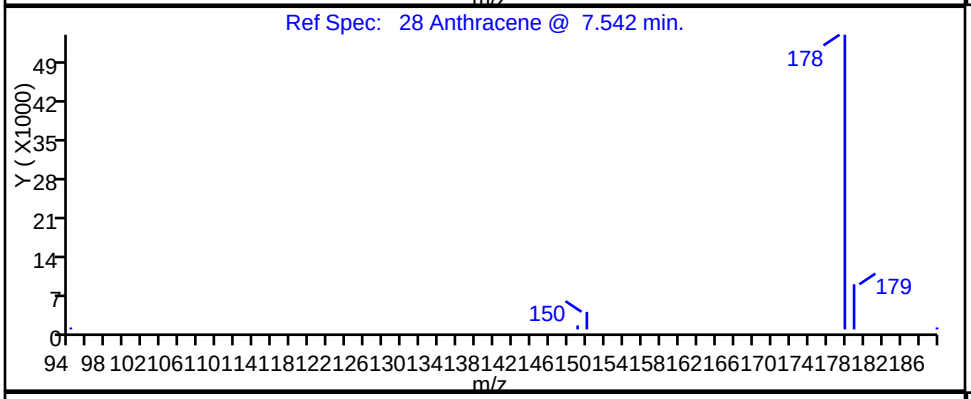
28 Anthracene, CAS: 120-12-7

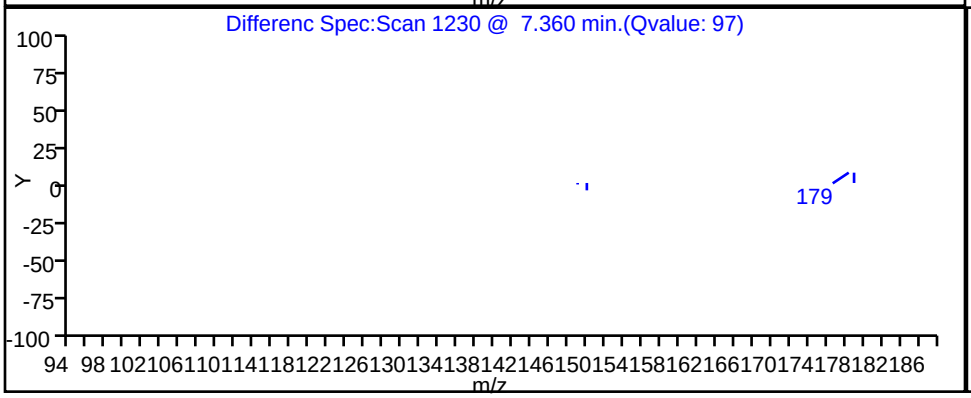


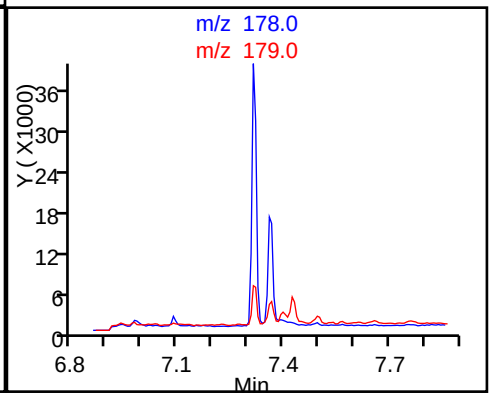












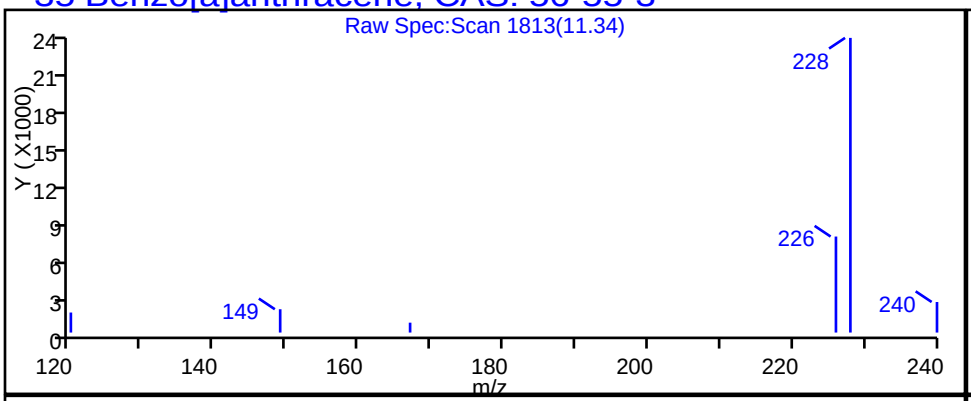
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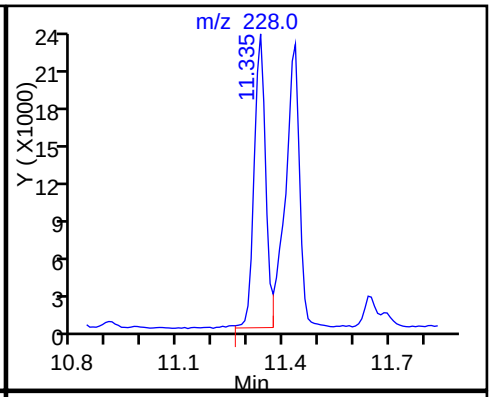
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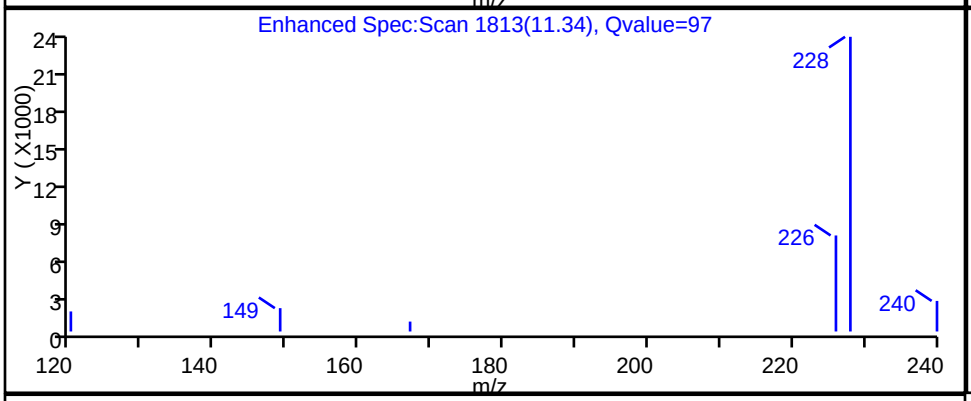
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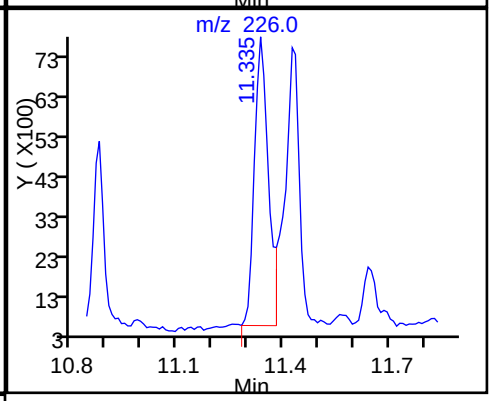
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Lims ID:	280-97928-A-15-B	Lab Sample ID:	280-97928-15		
Client ID:	SS025-SB09(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	18	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

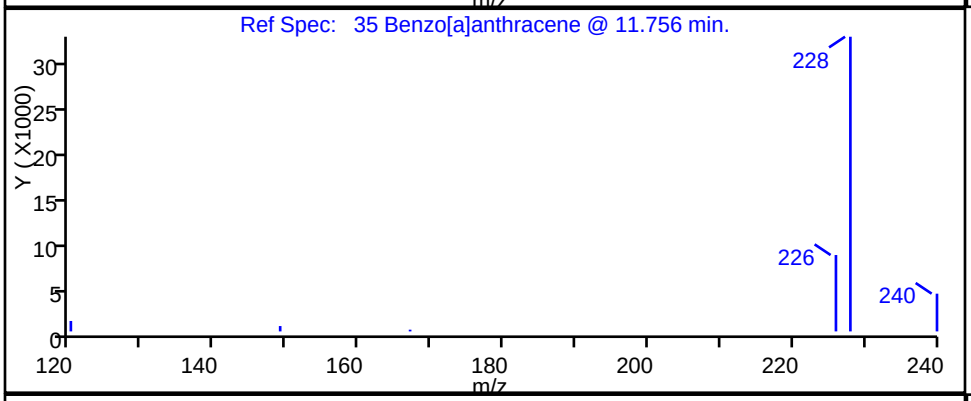
35 Benzo[a]anthracene, CAS: 56-55-3

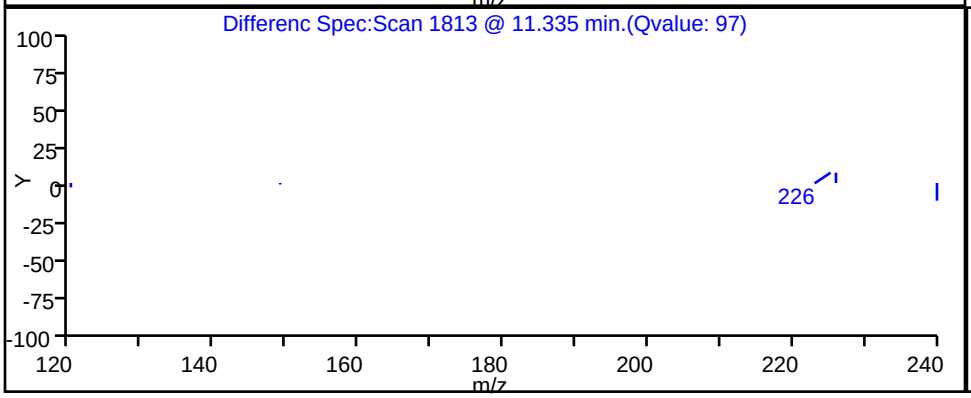


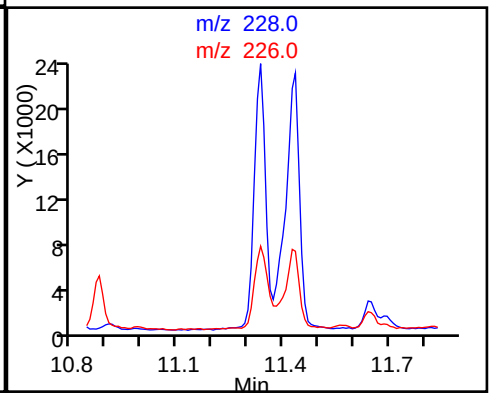












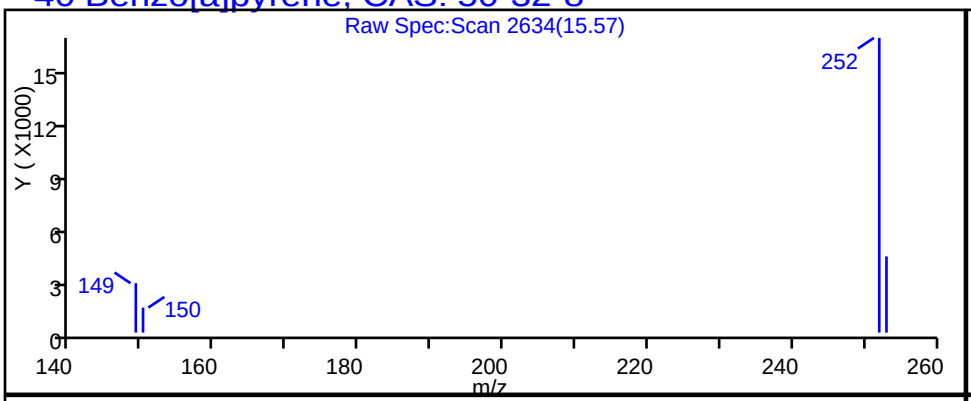
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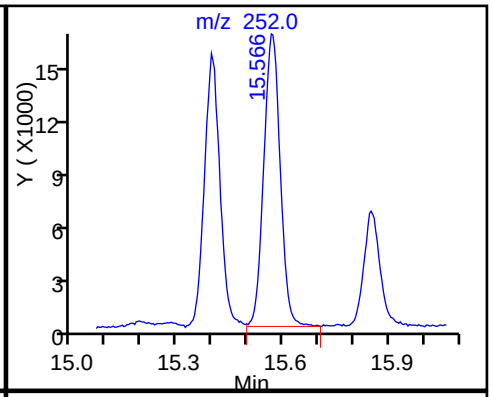
TestAmerica Denver

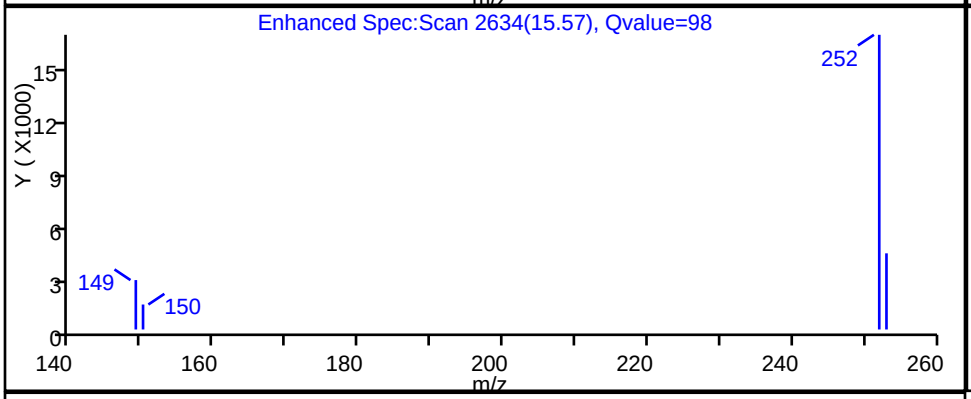
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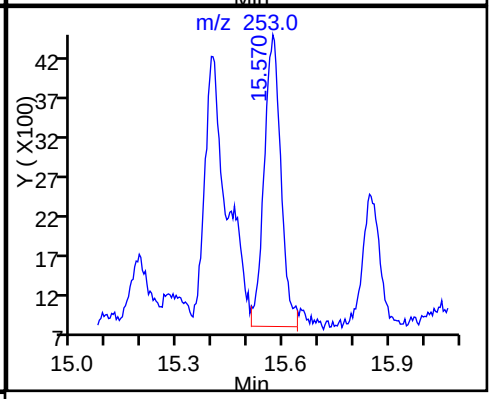
Injection Date:	16-Jun-2017 22:32:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-15-B	Lab Sample ID:	280-97928-15		
Client ID:	SS025-SB09(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	18	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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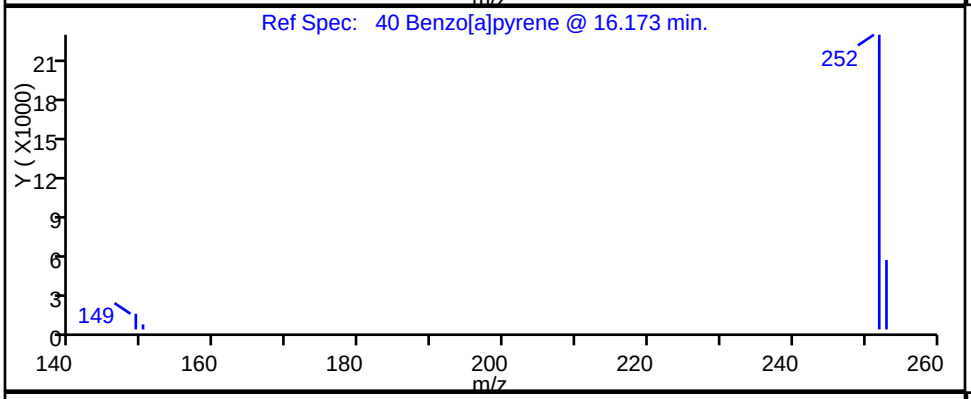
40 Benzo[a]pyrene, CAS: 50-32-8

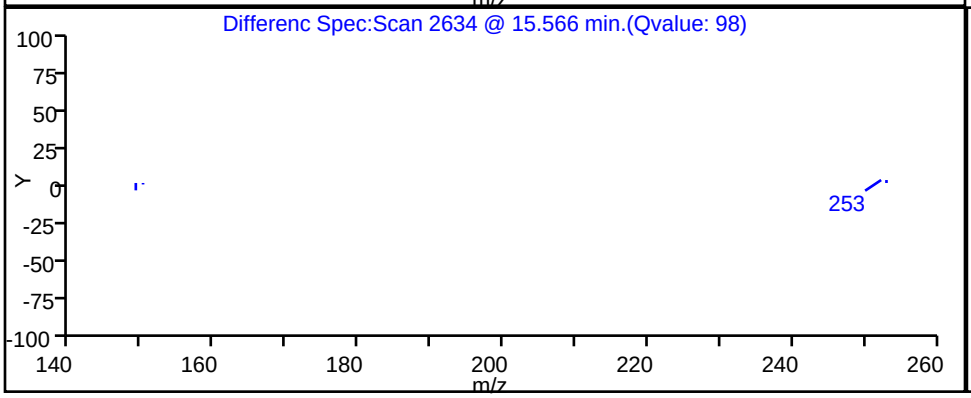


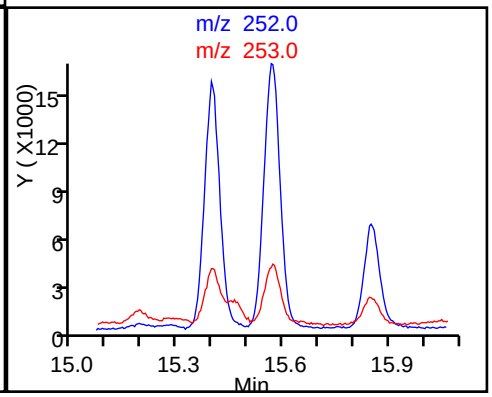










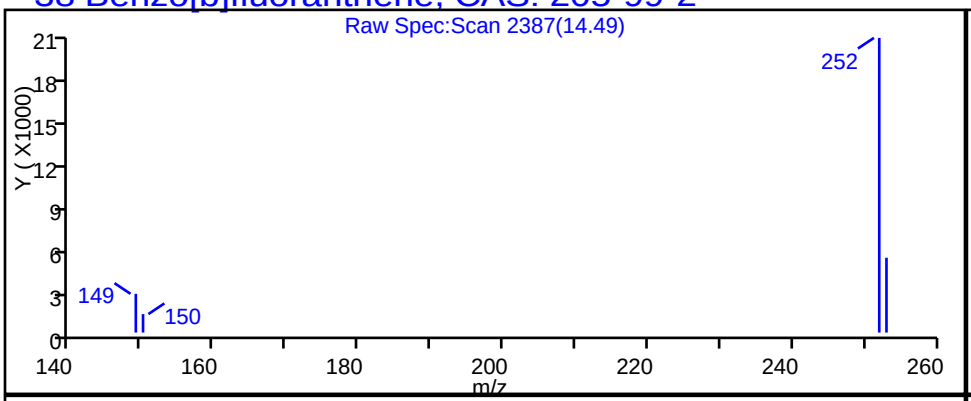


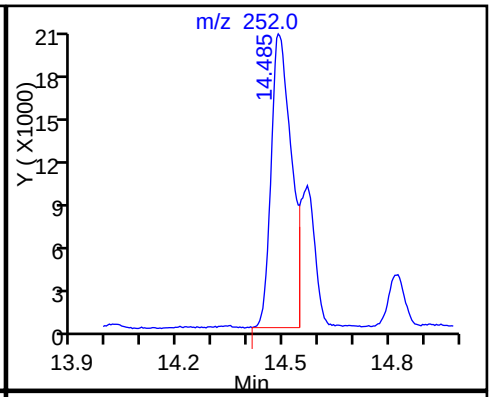
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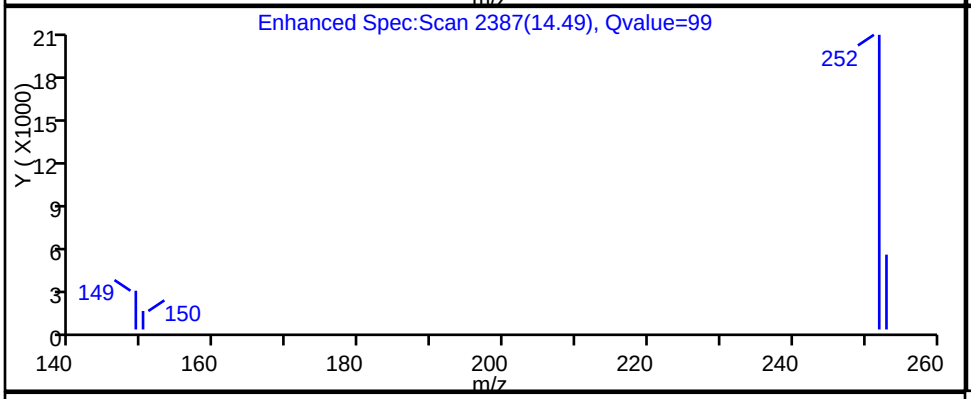
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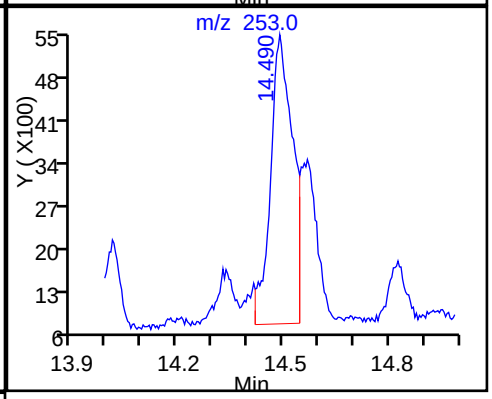
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Operator ID:	WICKHAMM	ALS Bottle#:	18	Worklist Smp#:	19
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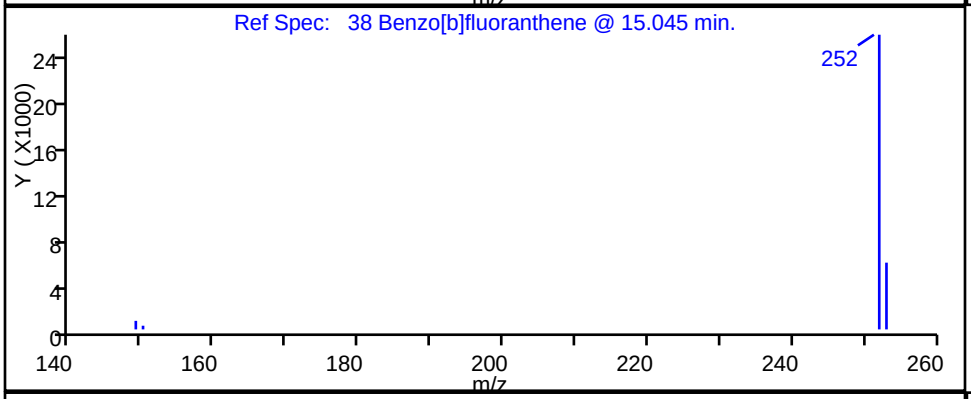
38 Benzo[b]fluoranthene, CAS: 205-99-2

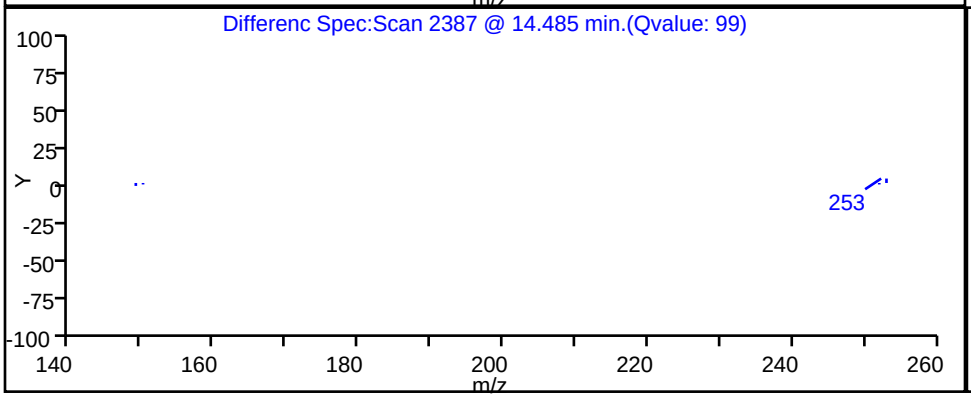


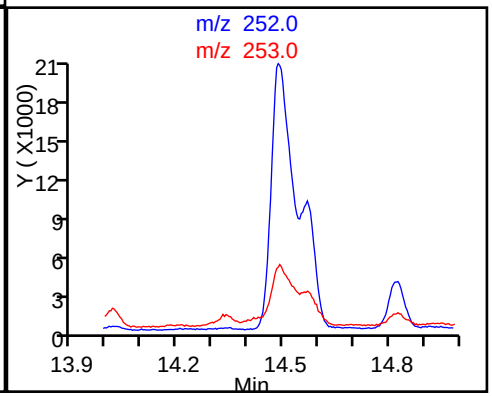










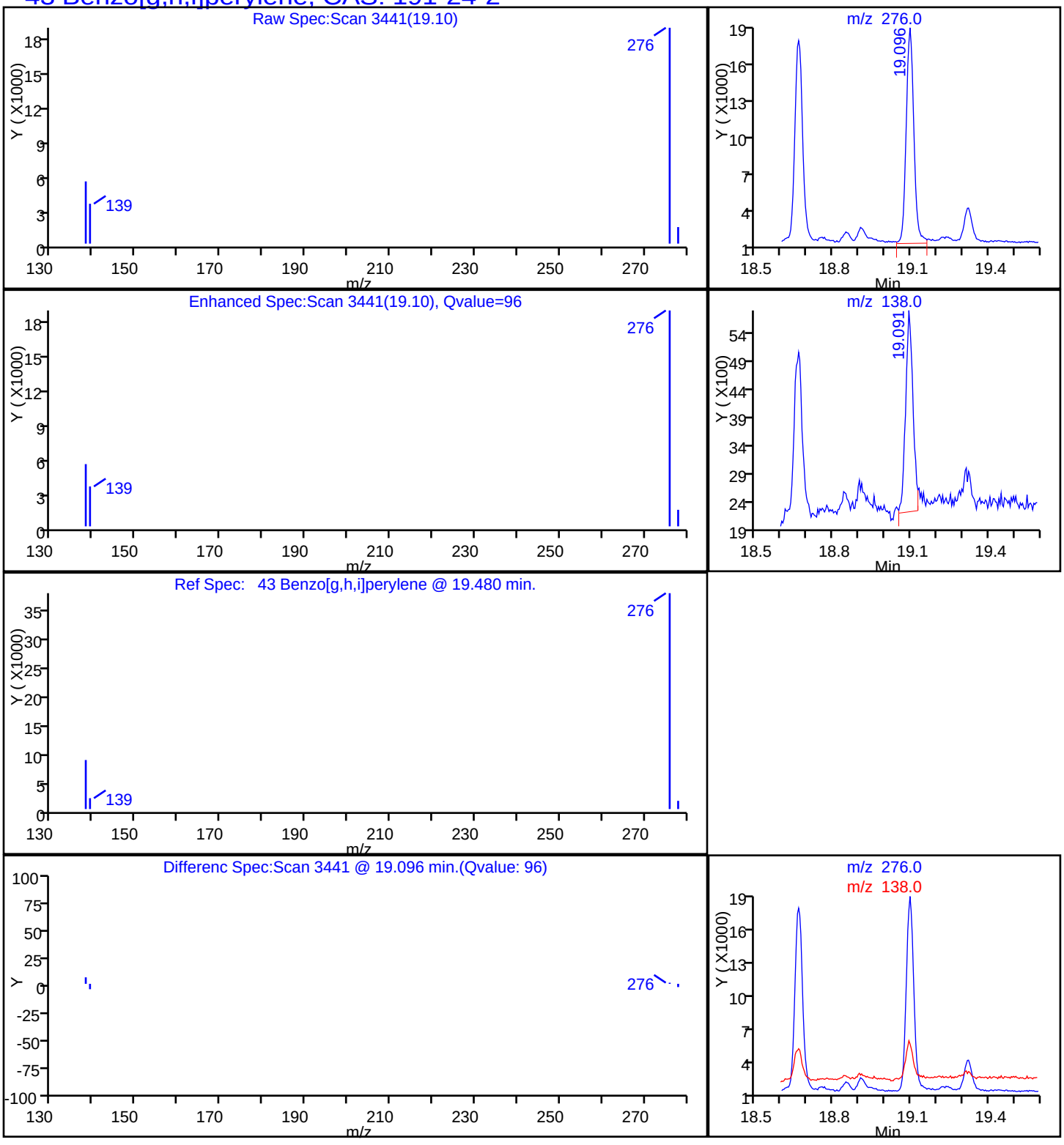


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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

43 Benzo[g,h,i]perylene, CAS: 191-24-2

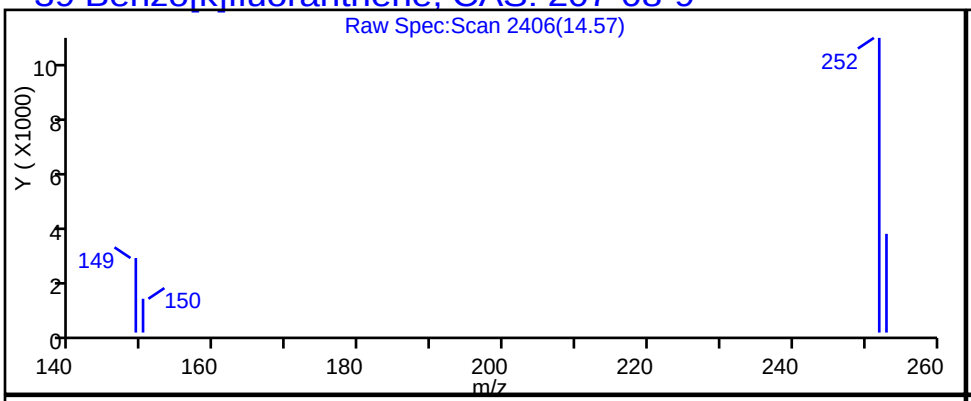


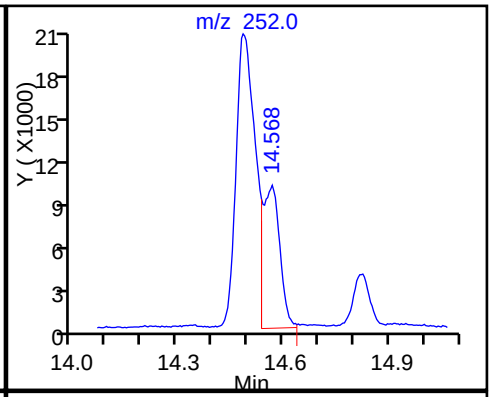
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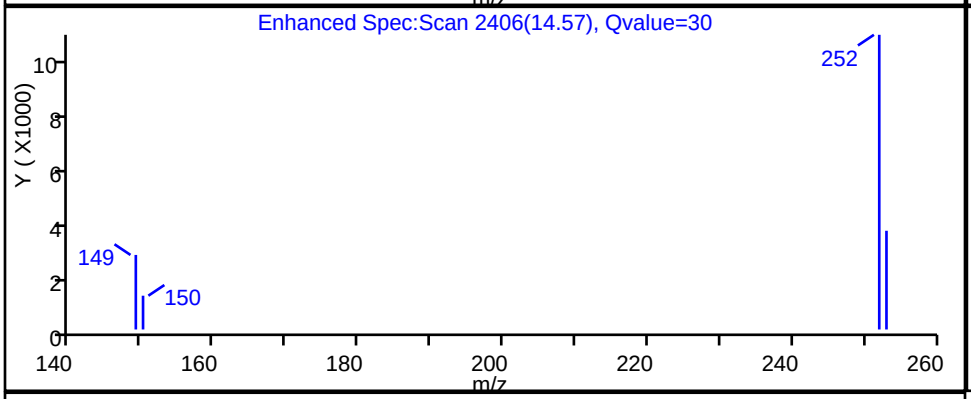
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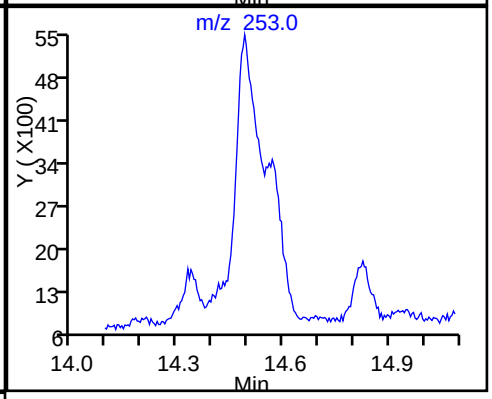
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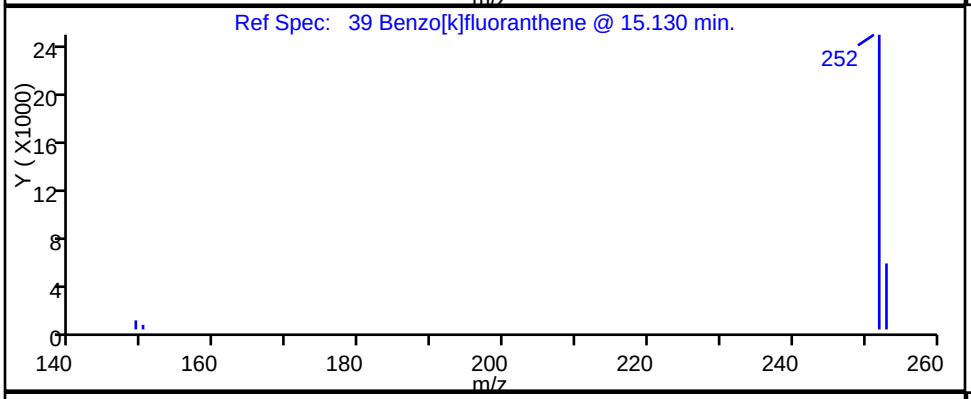
39 Benzo[k]fluoranthene, CAS: 207-08-9

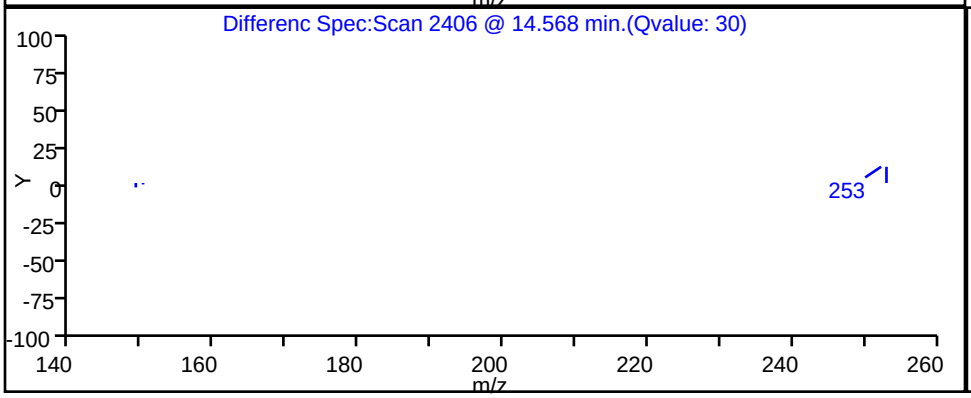


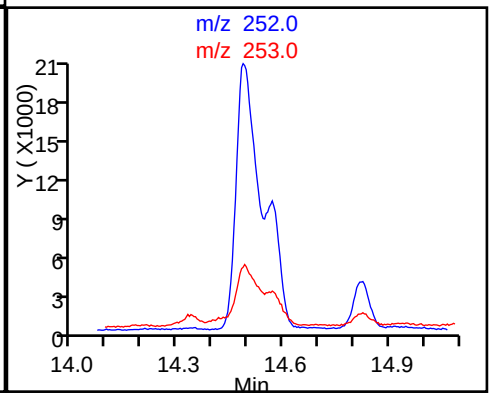










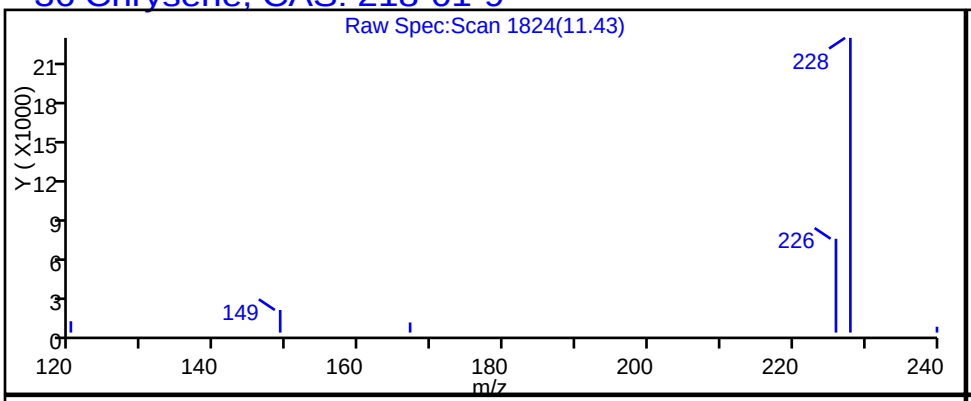


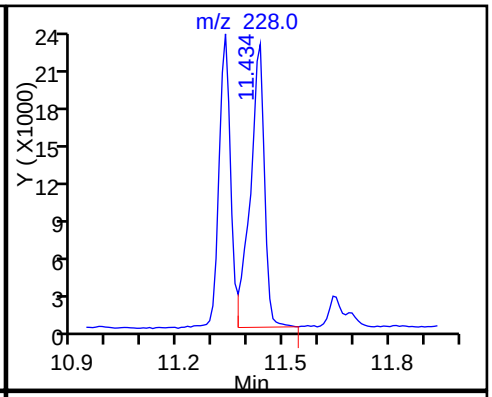
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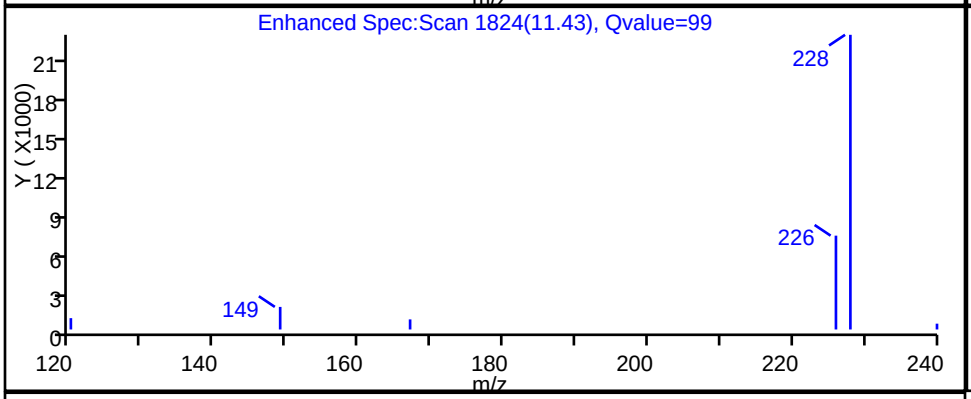
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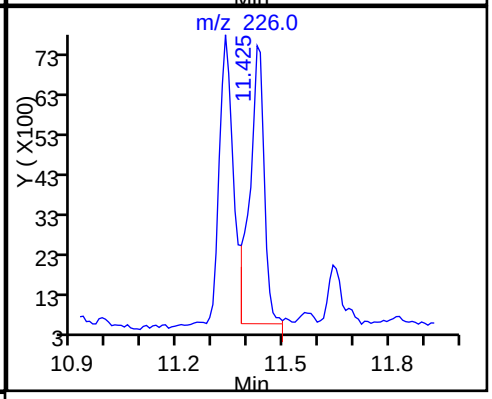
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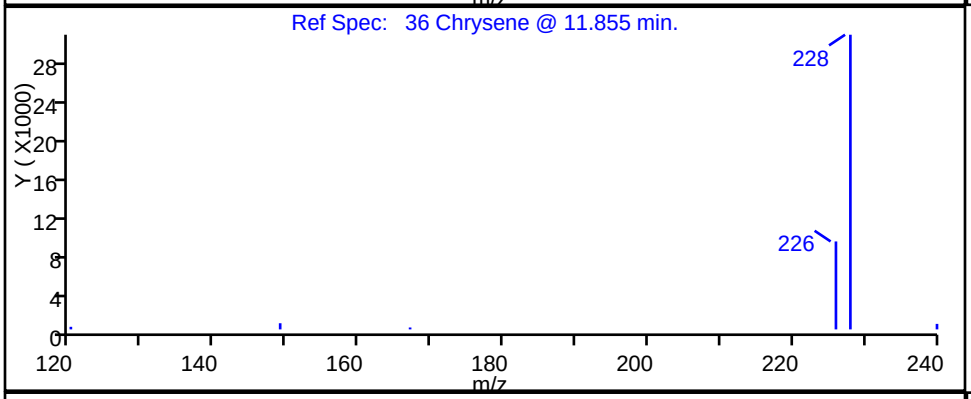
36 Chrysene, CAS: 218-01-9

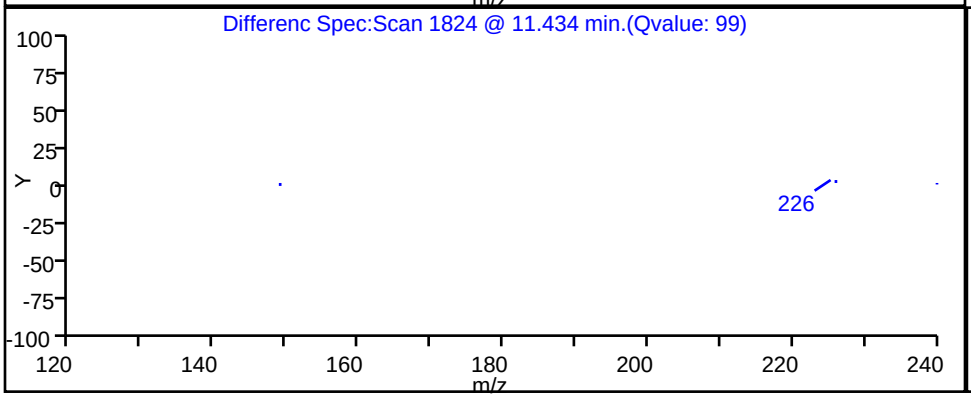


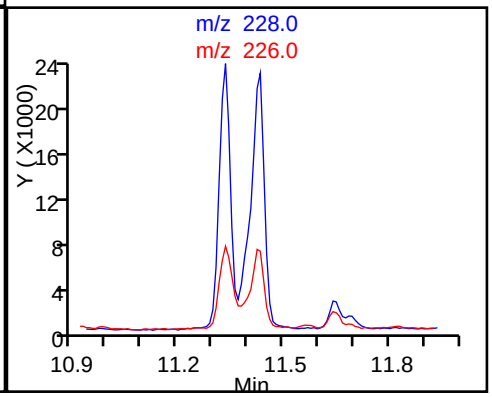












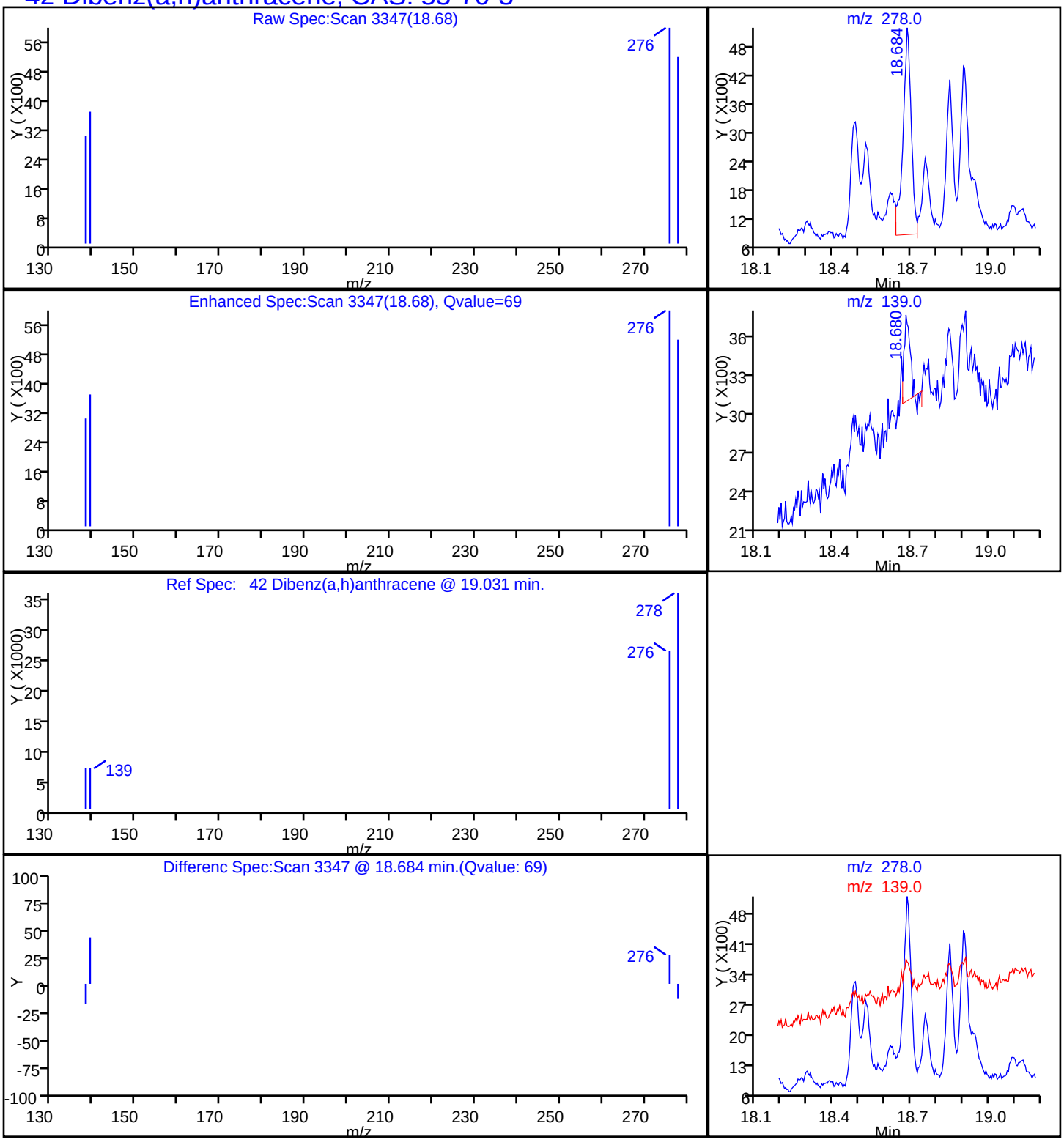
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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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Column:		Detector	MS SCAN		

42 Dibenz(a,h)anthracene, CAS: 53-70-3



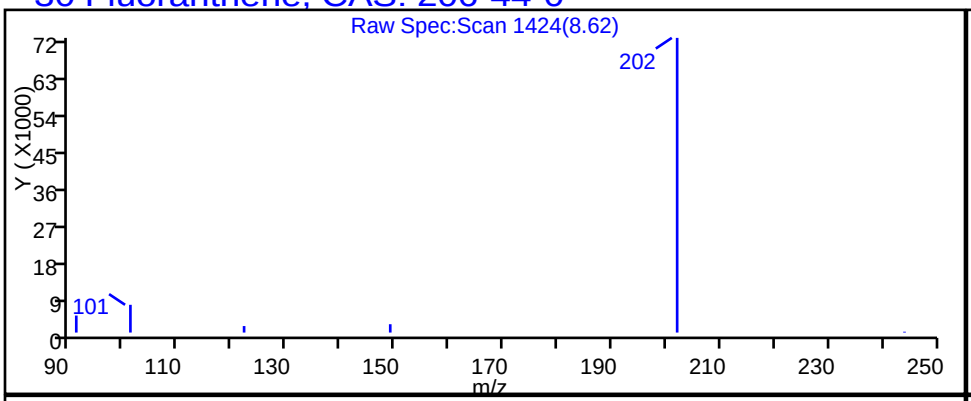
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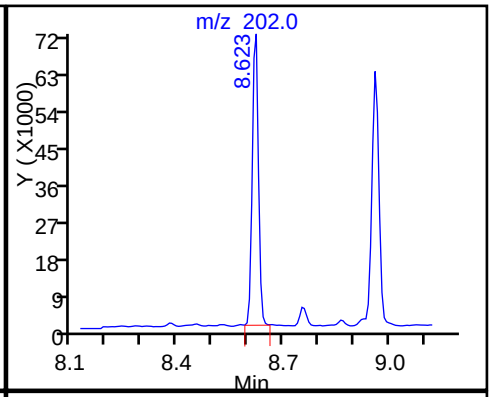
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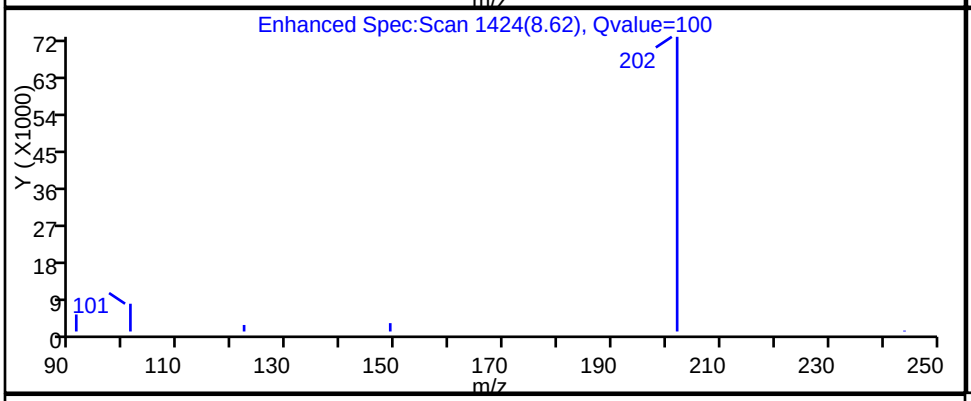
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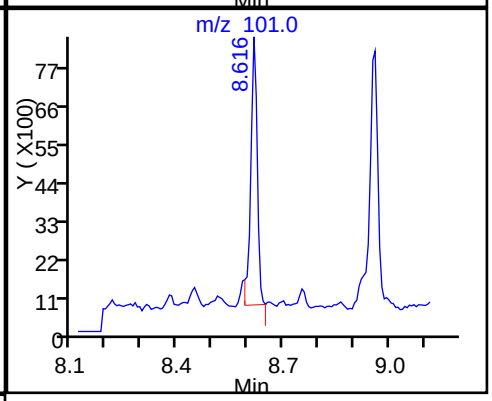
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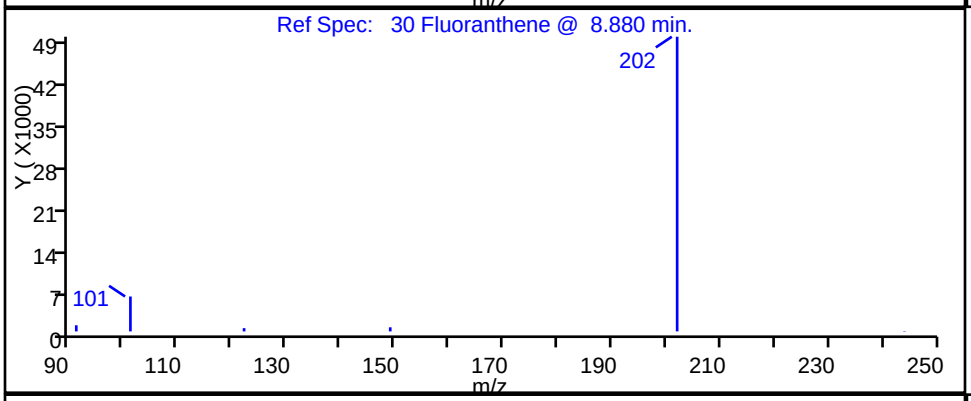
30 Fluoranthene, CAS: 206-44-0

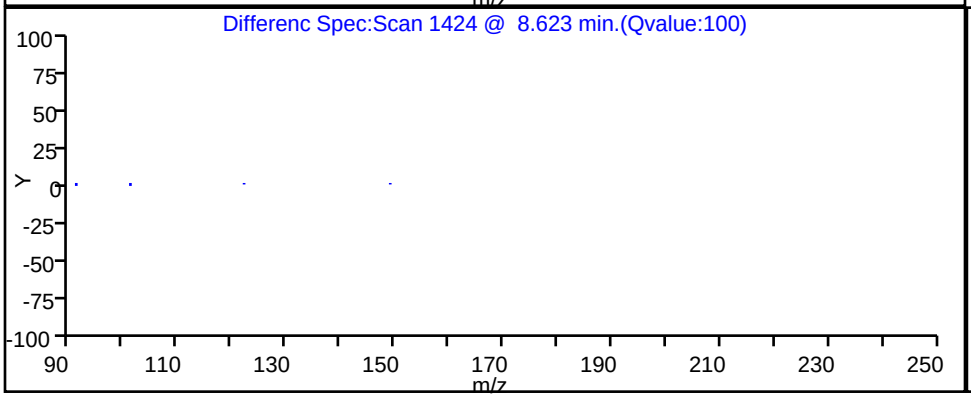


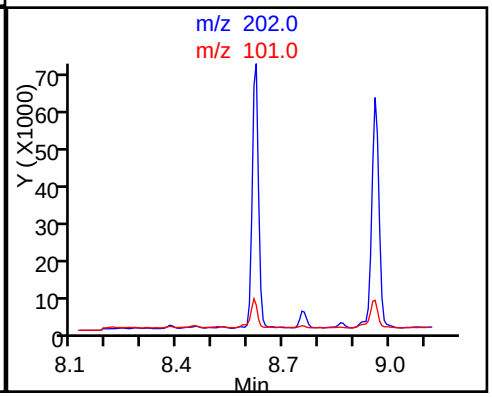












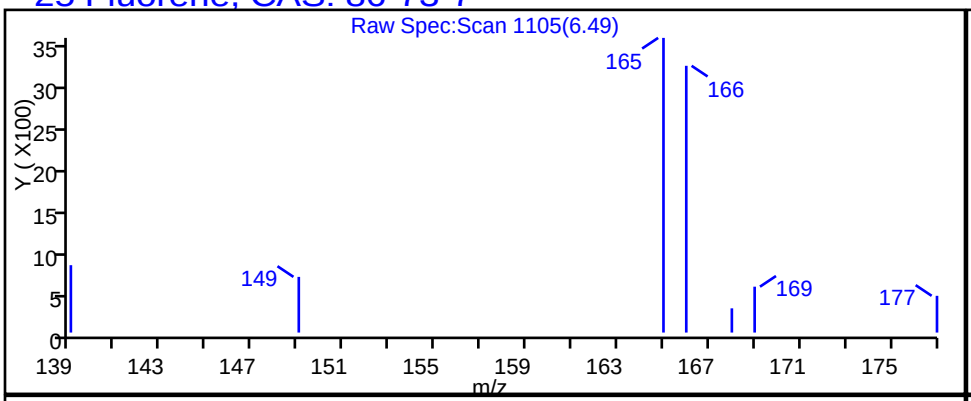
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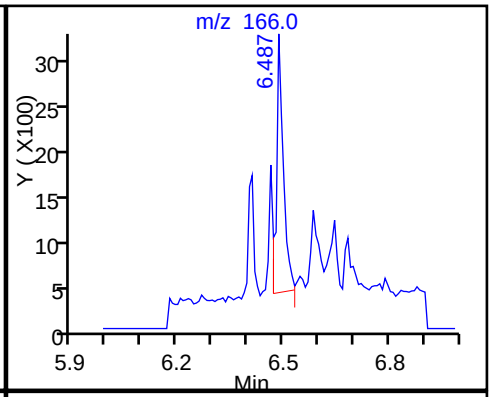
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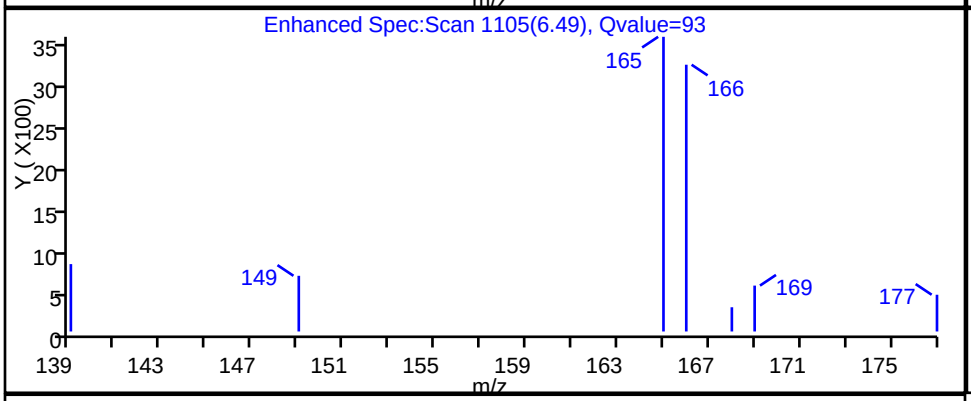
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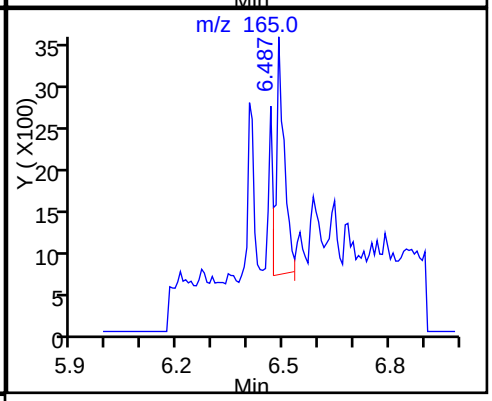
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Client ID:	SS025-SB09(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	18	Worklist Smp#:	19
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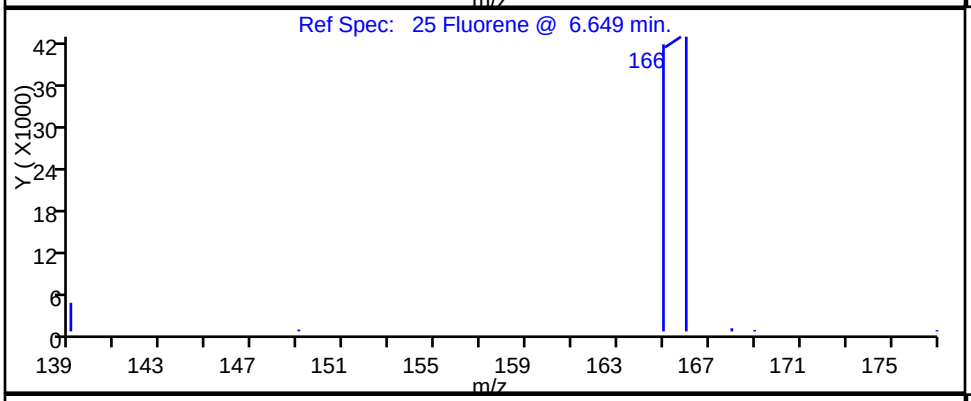
25 Fluorene, CAS: 86-73-7

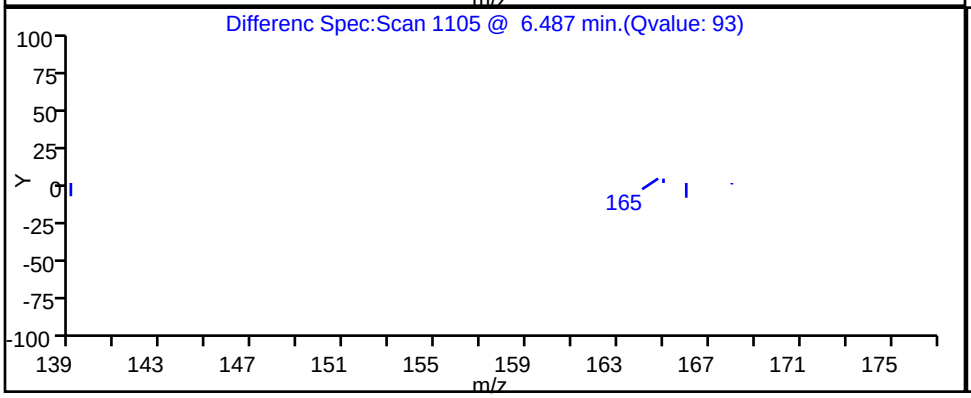


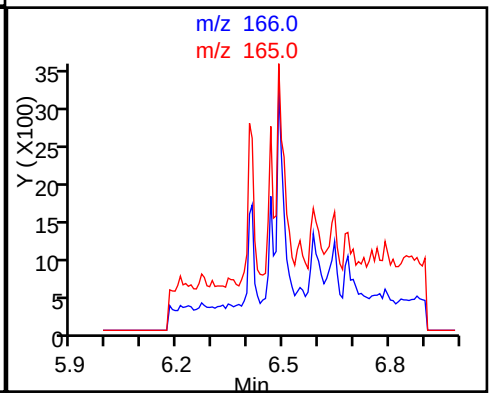












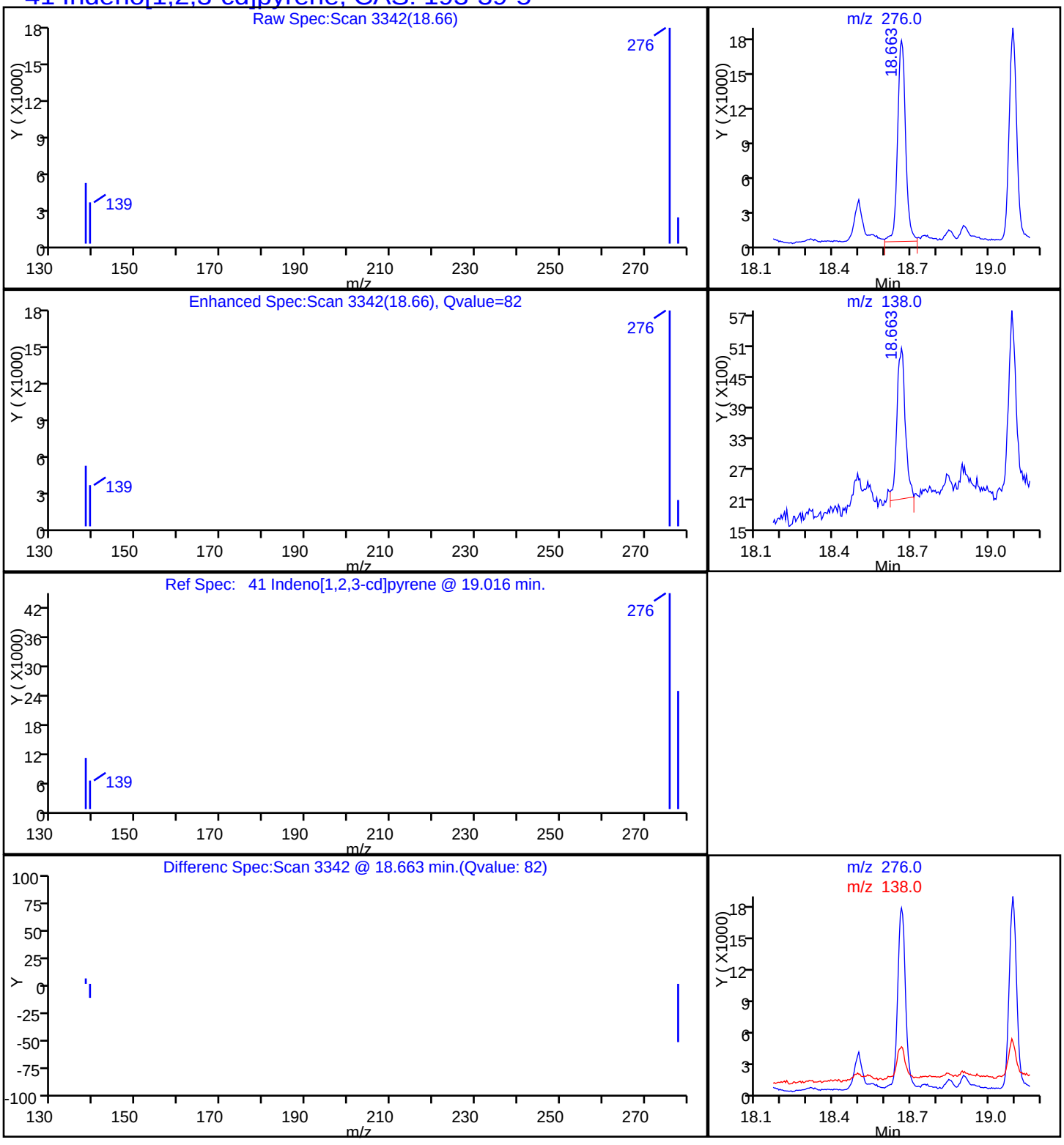
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TestAmerica Denver

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Client ID:	SS025-SB09(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	18	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

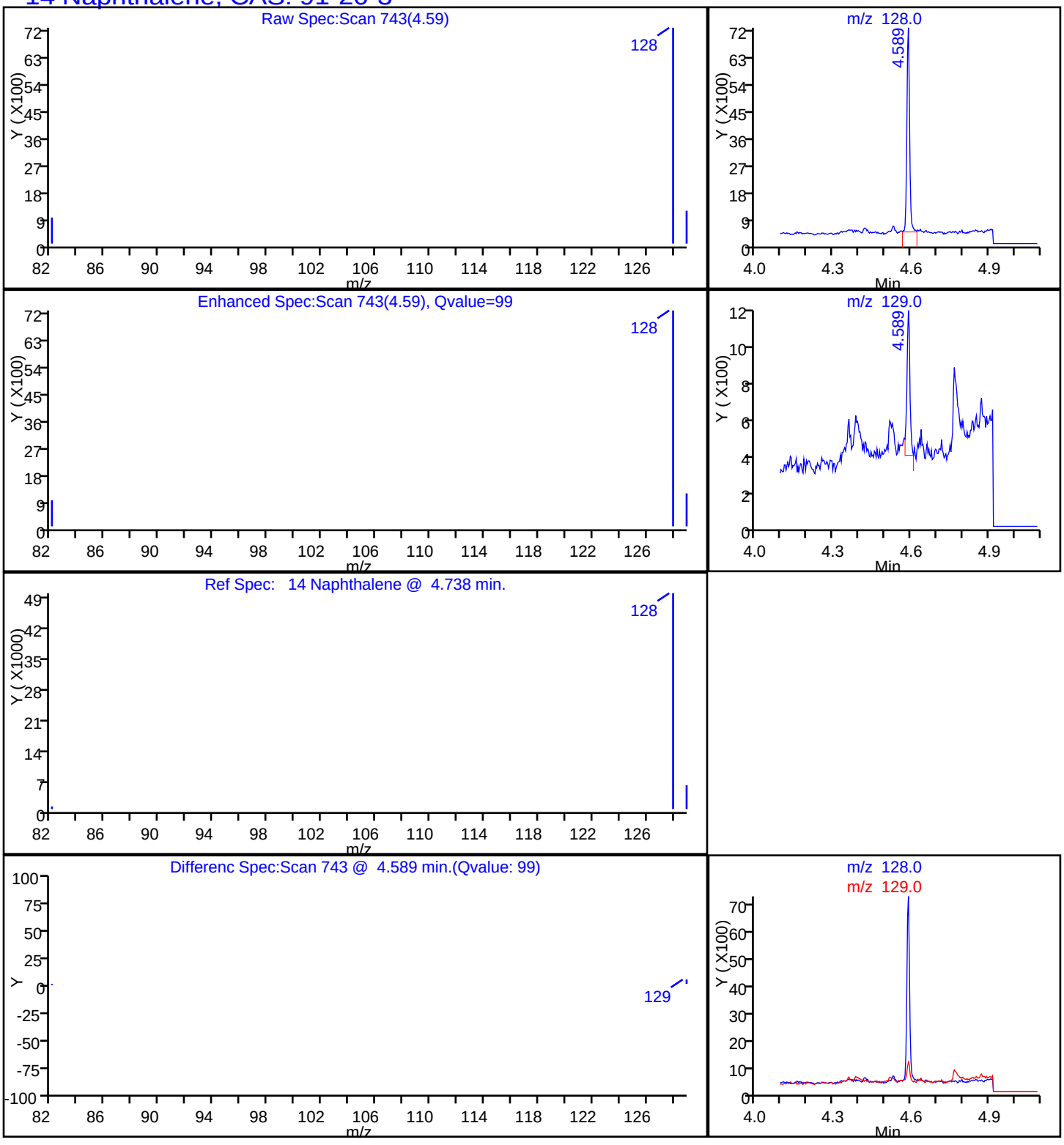


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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3

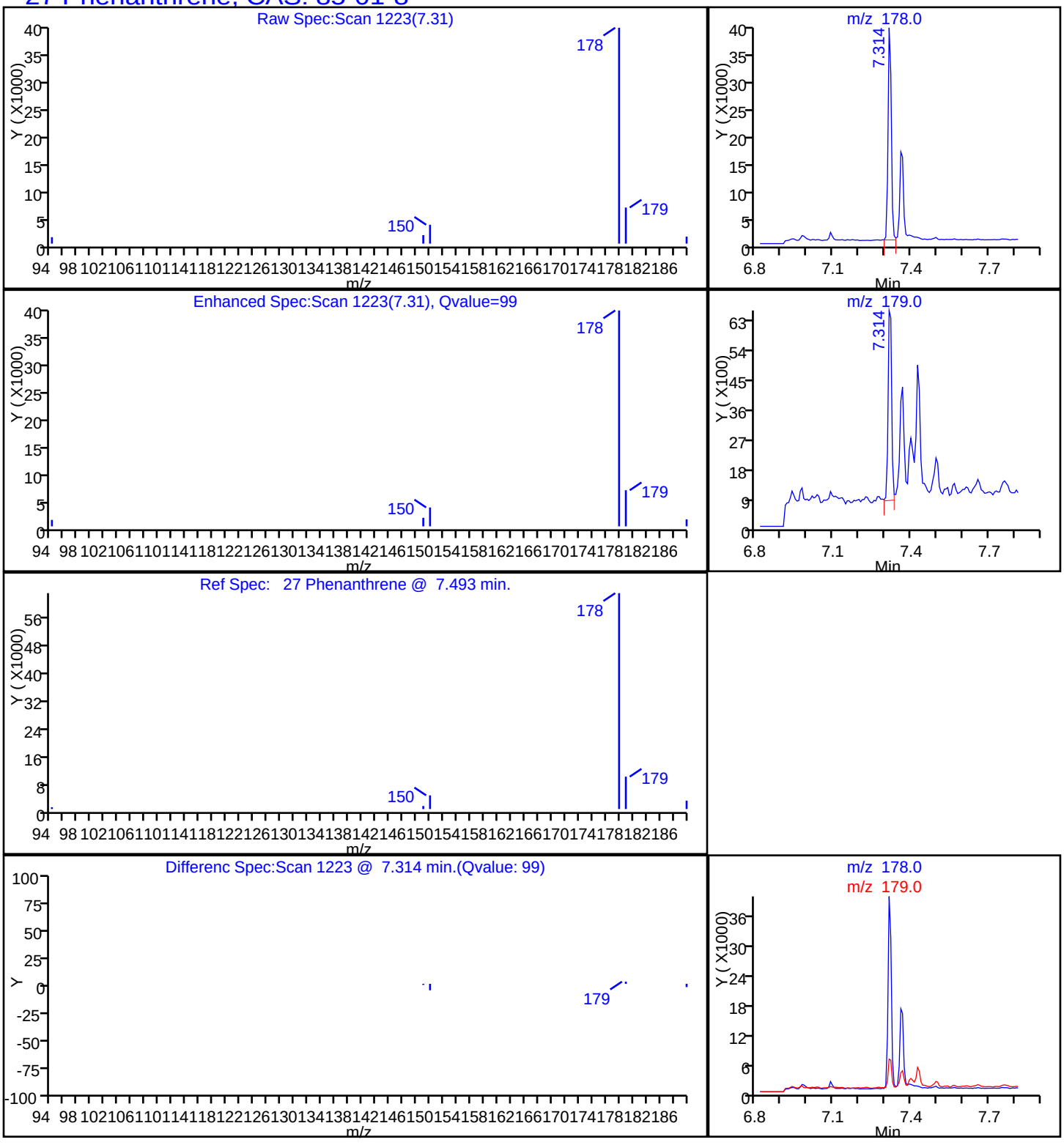


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TestAmerica Denver

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Injection Date:	16-Jun-2017 22:32:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-15-B	Lab Sample ID:	280-97928-15		
Client ID:	SS025-SB09(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	18	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

27 Phenanthrene, CAS: 85-01-8

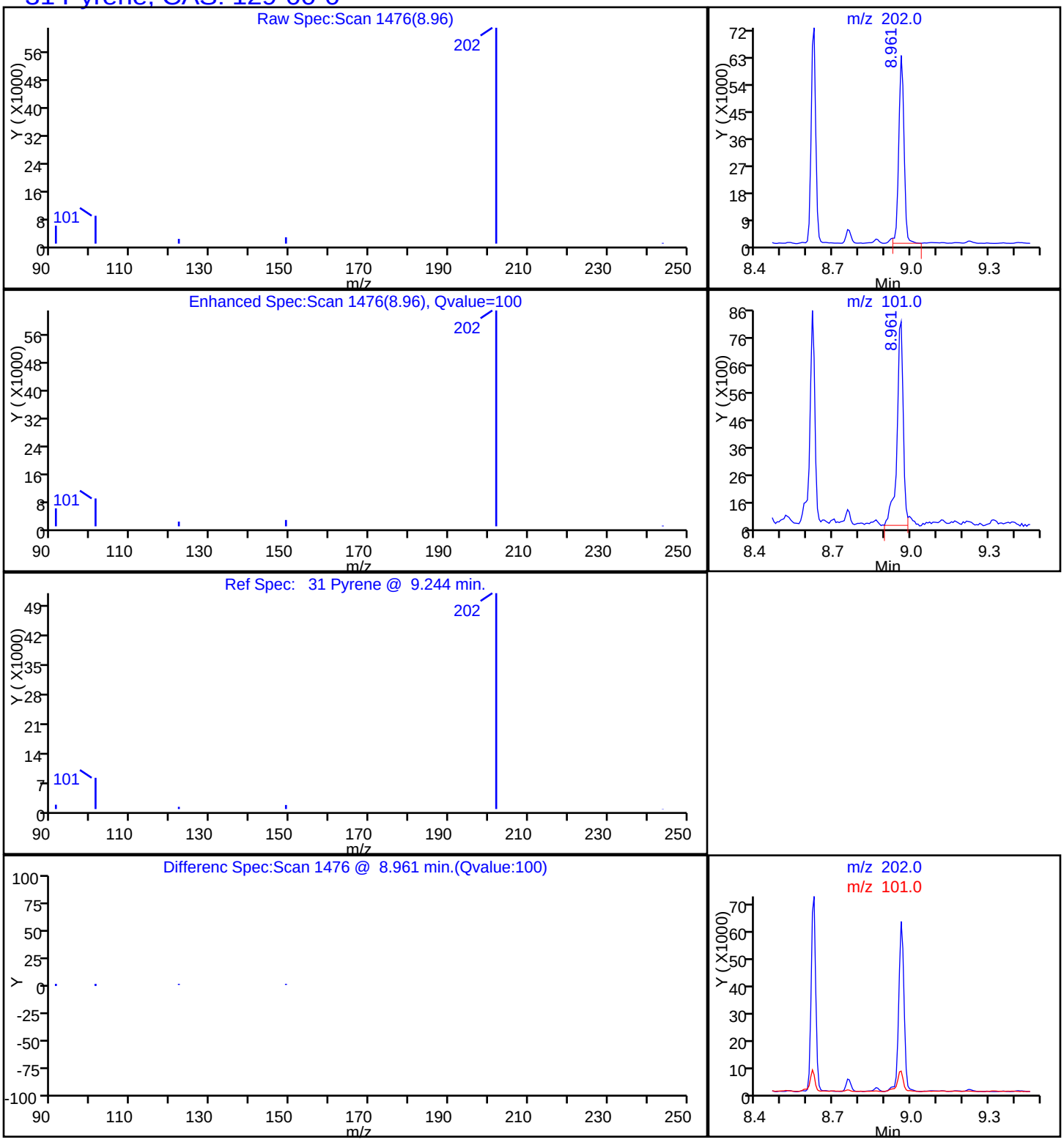


Report Date: 19-Jun-2017 15:44:23 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7285.D				
Injection Date:	16-Jun-2017 22:32:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-15-B	Lab Sample ID:	280-97928-15		
Client ID:	SS025-SB09(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	18	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Pyrene, CAS: 129-00-0



Manual Integration/User Assign Peak Report

TestAmerica Denver

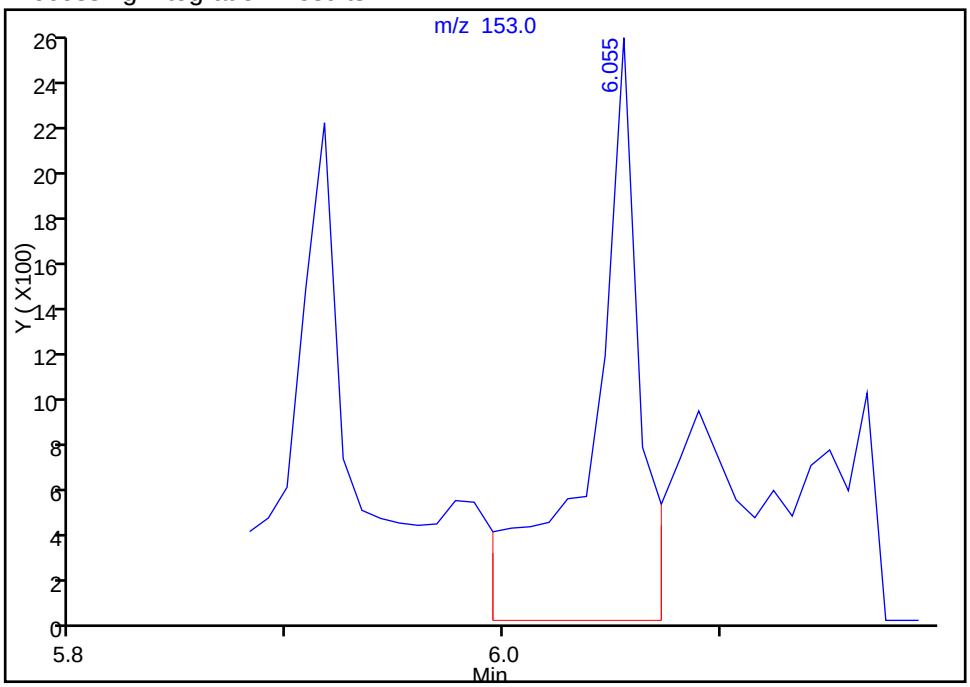
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Injection Date:	16-Jun-2017 22:32:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-15-B	Lab Sample ID:	280-97928-15		
Client ID:	SS025-SB09(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	18	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9

Signal: 1

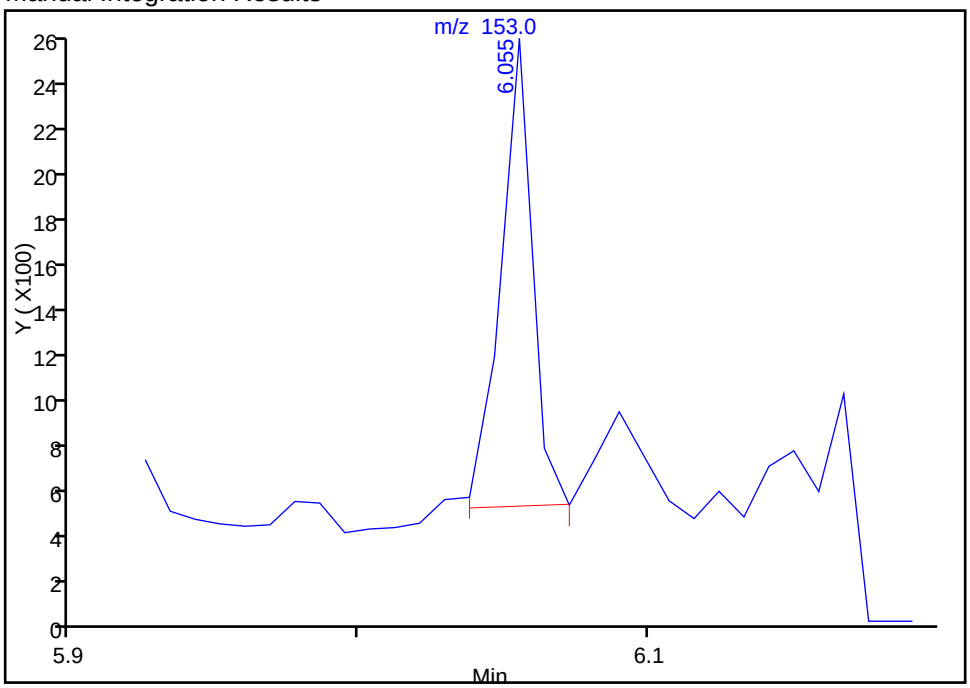
Processing Integration Results

RT: 6.06
Area: 3933
Amount: 85.796897
Amount Units: ng/ml



Manual Integration Results

RT: 6.06
Area: 1535
Amount: 33.485440
Amount Units: ng/ml



Reviewer: wickhamm, 19-Jun-2017 15:27:09

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Denver

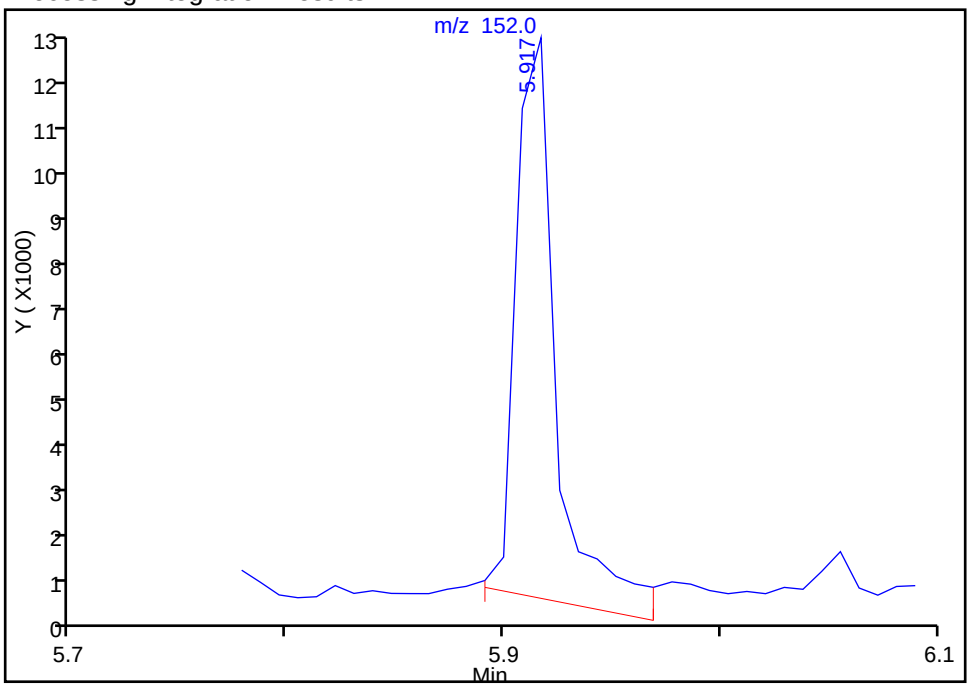
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Injection Date:	16-Jun-2017 22:32:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-15-B	Lab Sample ID:	280-97928-15		
Client ID:	SS025-SB09(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	18	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Acenaphthylene, CAS: 208-96-8

Signal: 1

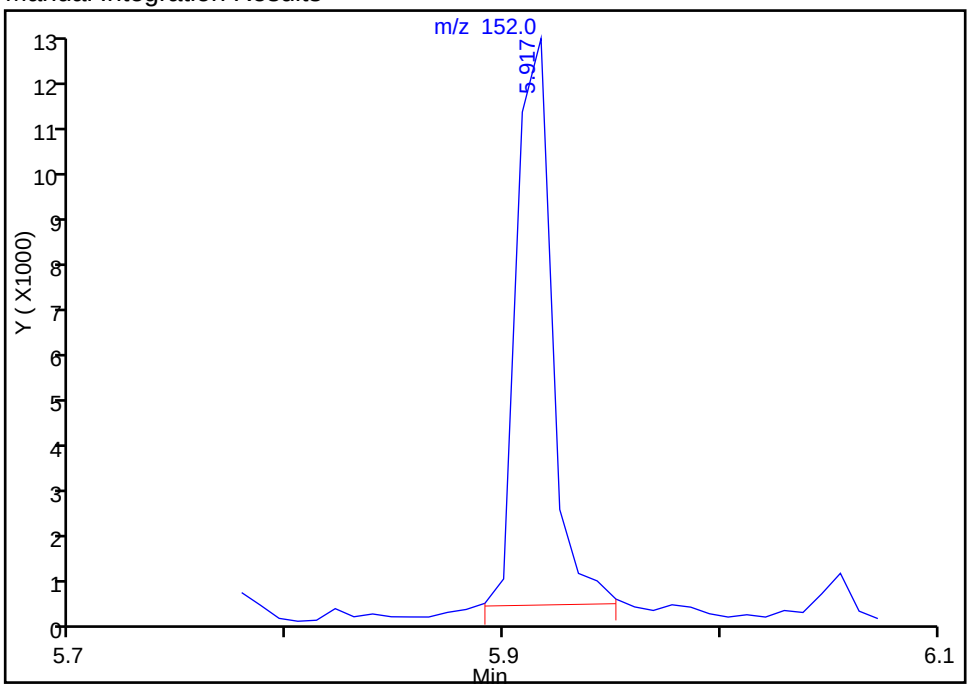
Processing Integration Results

RT: 5.92
Area: 15763
Amount: 210.1929
Amount Units: ng/ml



Manual Integration Results

RT: 5.92
Area: 13390
Amount: 178.5500
Amount Units: ng/ml



Reviewer: wickhamm, 19-Jun-2017 15:26:58

Audit Action: Manually Integrated Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Denver

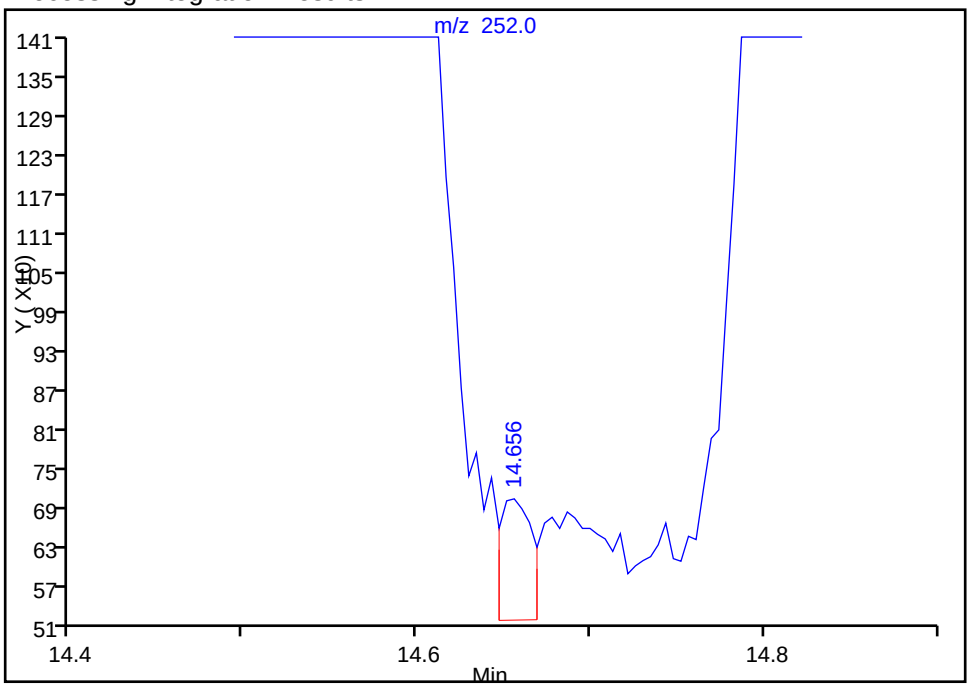
Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7285.D				
Injection Date:	16-Jun-2017 22:32:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-15-B	Lab Sample ID:	280-97928-15		
Client ID:	SS025-SB09(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	18	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Benzo[k]fluoranthene, CAS: 207-08-9

Signal: 1

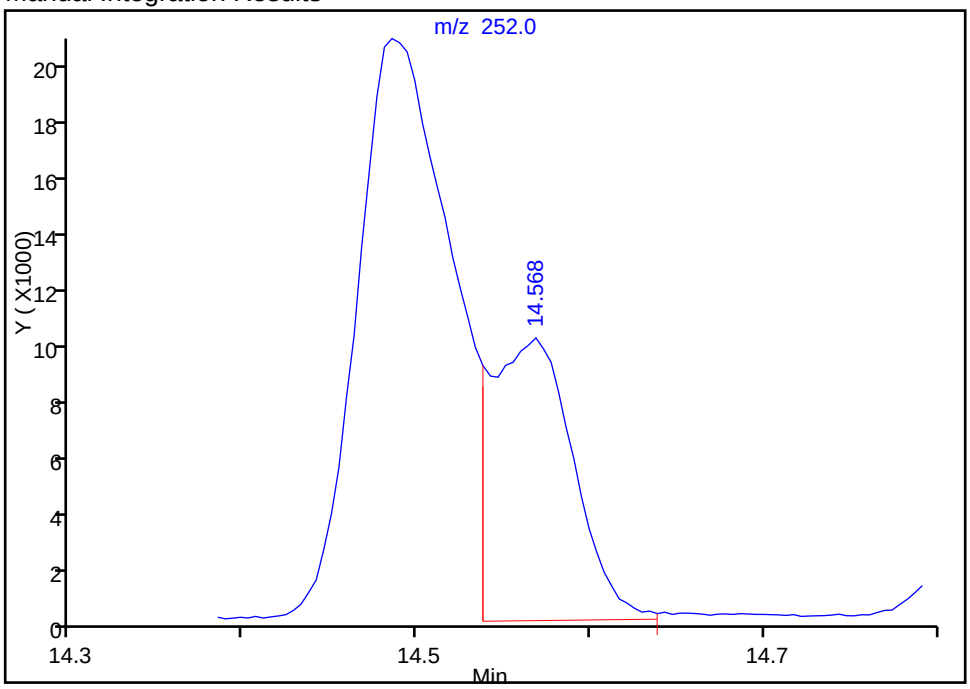
Processing Integration Results

RT: 14.66
Area: 245
Amount: 3.012920
Amount Units: ng/ml



Manual Integration Results

RT: 14.57
Area: 33177
Amount: 407.9986
Amount Units: ng/ml



Reviewer: wickhamm, 19-Jun-2017 15:27:23

Audit Action: Assigned Compound ID Audit Reason: Baseline

Manual Integration/User Assign Peak Report

TestAmerica Denver

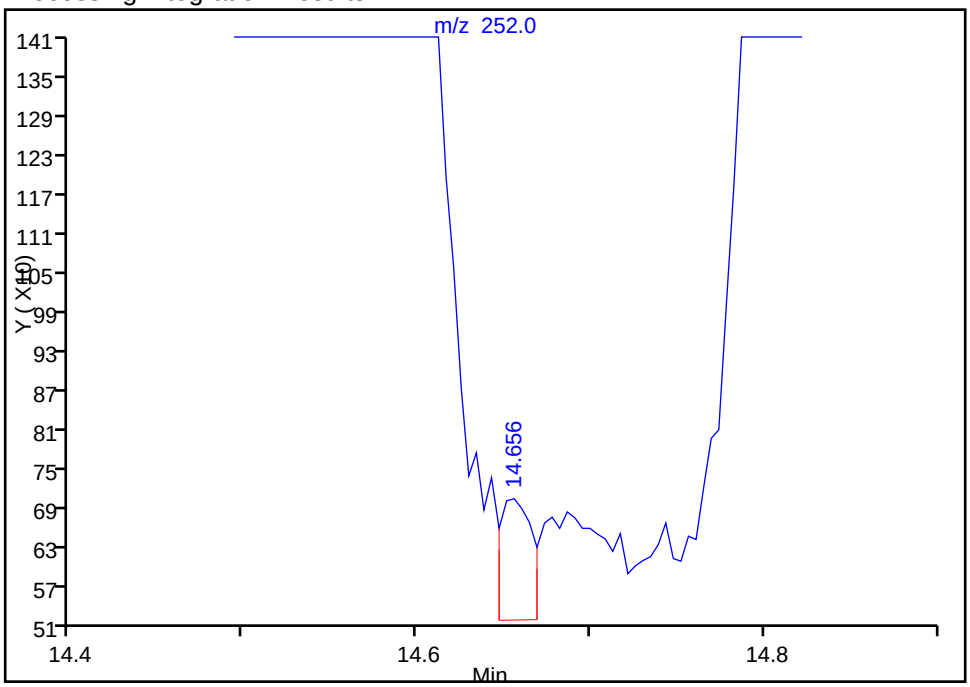
Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7285.D				
Injection Date:	16-Jun-2017 22:32:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-15-B	Lab Sample ID:	280-97928-15		
Client ID:	SS025-SB09(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	18	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

39 Benzo[k]fluoranthene, CAS: 207-08-9

Signal: 1

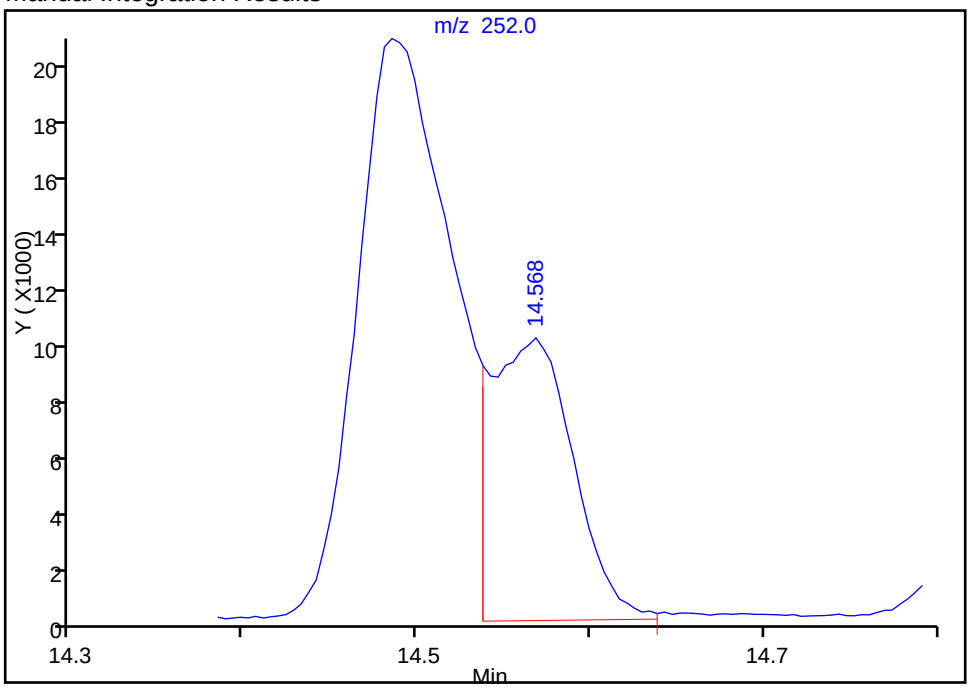
Processing Integration Results

RT: 14.66
Area: 245
Amount: 3.012920
Amount Units: ng/ml



Manual Integration Results

RT: 14.57
Area: 33177
Amount: 407.9986
Amount Units: ng/ml



Reviewer: wickhamm, 19-Jun-2017 15:27:54

Audit Action: Manually Integrated Audit Reason: Missed Peak

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(4-6) | Lab Sample ID: 280-97928-16

Matrix: Solid | Lab File ID: F7286.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 13:50

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 30.1(g) | Date Analyzed: 06/16/2017 22:57

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	3.7	J	6.0	0.60	0.31
91-57-6	2-Methylnaphthalene	5.9	J	6.0	0.80	0.37
83-32-9	Acenaphthene	3.1	J M	6.0	0.32	0.19
208-96-8	Acenaphthylene	14		6.0	0.80	0.20
120-12-7	Anthracene	15		6.0	3.0	0.86
56-55-3	Benzo[a]anthracene	39		6.0	3.0	1.1
50-32-8	Benzo[a]pyrene	39		6.0	3.0	0.89
205-99-2	Benzo[b]fluoranthene	64		6.0	3.0	1.4
191-24-2	Benzo[g,h,i]perylene	34		6.0	3.0	1.3
207-08-9	Benzo[k]fluoranthene	22		6.0	3.0	1.2
218-01-9	Chrysene	51		6.0	3.0	1.2
53-70-3	Dibenz(a,h)anthracene	8.6		6.0	3.0	1.6
206-44-0	Fluoranthene	75		6.0	3.0	1.2
86-73-7	Fluorene	4.9	J	6.0	0.80	0.56
193-39-5	Indeno[1,2,3-cd]pyrene	26		6.0	3.0	1.3
91-20-3	Naphthalene	5.2	J	6.0	0.80	0.39
85-01-8	Phenanthrene	35		6.0	3.0	1.3
129-00-0	Pyrene	70		6.0	3.0	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	81		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	96		44-125
1718-51-0	Terphenyl-d14 (Surr)	78		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7286.D
Lims ID: 280-97928-B-16-B
Client ID: SS025-SB09(4-6)
Sample Type: Client
Inject. Date: 16-Jun-2017 22:57:30 ALS Bottle#: 19 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-b-16-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:29:16

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	99	21712	600.0	
* 2 Phenanthrene-d10	188	7.295	7.301	-0.006	99	38491	600.0	
* 3 Chrysene-d12	240	11.371	11.371	0.000	85	34483	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	100	16241	477.5	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	100	22820	405.3	
$ 6 Terphenyl-d14	244	9.124	9.130	-0.006	39	15250	390.2	
14 Naphthalene	128	4.589	4.589	0.000	99	9238	131.3	
16 2-Methylnaphthalene	142	5.143	5.147	-0.004	96	6728	148.7	
17 1-Methylnaphthalene	142	5.230	5.235	-0.005	97	4180	92.2	
22 Acenaphthylene	152	5.917	5.917	0.000	99	26752	357.2	
23 Acenaphthene	153	6.055	6.055	0.000	94	3586	78.3	M
25 Fluorene	166	6.487	6.494	-0.007	93	6828	121.5	
27 Phenanthrene	178	7.314	7.321	-0.007	99	70668	865.7	
28 Anthracene	178	7.360	7.366	-0.006	97	31957	387.7	
30 Fluoranthene	202	8.623	8.629	-0.006	99	175677	1873.7	
31 Pyrene	202	8.961	8.968	-0.007	99	169337	1741.5	
35 Benzo[a]anthracene	228	11.335	11.344	-0.009	95	90372	985.4	
36 Chrysene	228	11.434	11.443	-0.009	97	108595	1280.0	
38 Benzo[b]fluoranthene	252	14.507	14.503	0.004	94	132642	1593.1	
39 Benzo[k]fluoranthene	252	14.586	14.586	0.000	80	45466	542.9	
40 Benzo[a]pyrene	252	15.596	15.587	0.009	87	80853	984.0	
41 Indeno[1,2,3-cd]pyrene	276	18.680	18.676	0.004	72	60159	645.5	
42 Dibenz(a,h)anthracene	278	18.706	18.702	0.004	44	15672	215.5	
43 Benzo[g,h,i]perylene	276	19.118	19.109	0.009	88	68227	862.9	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

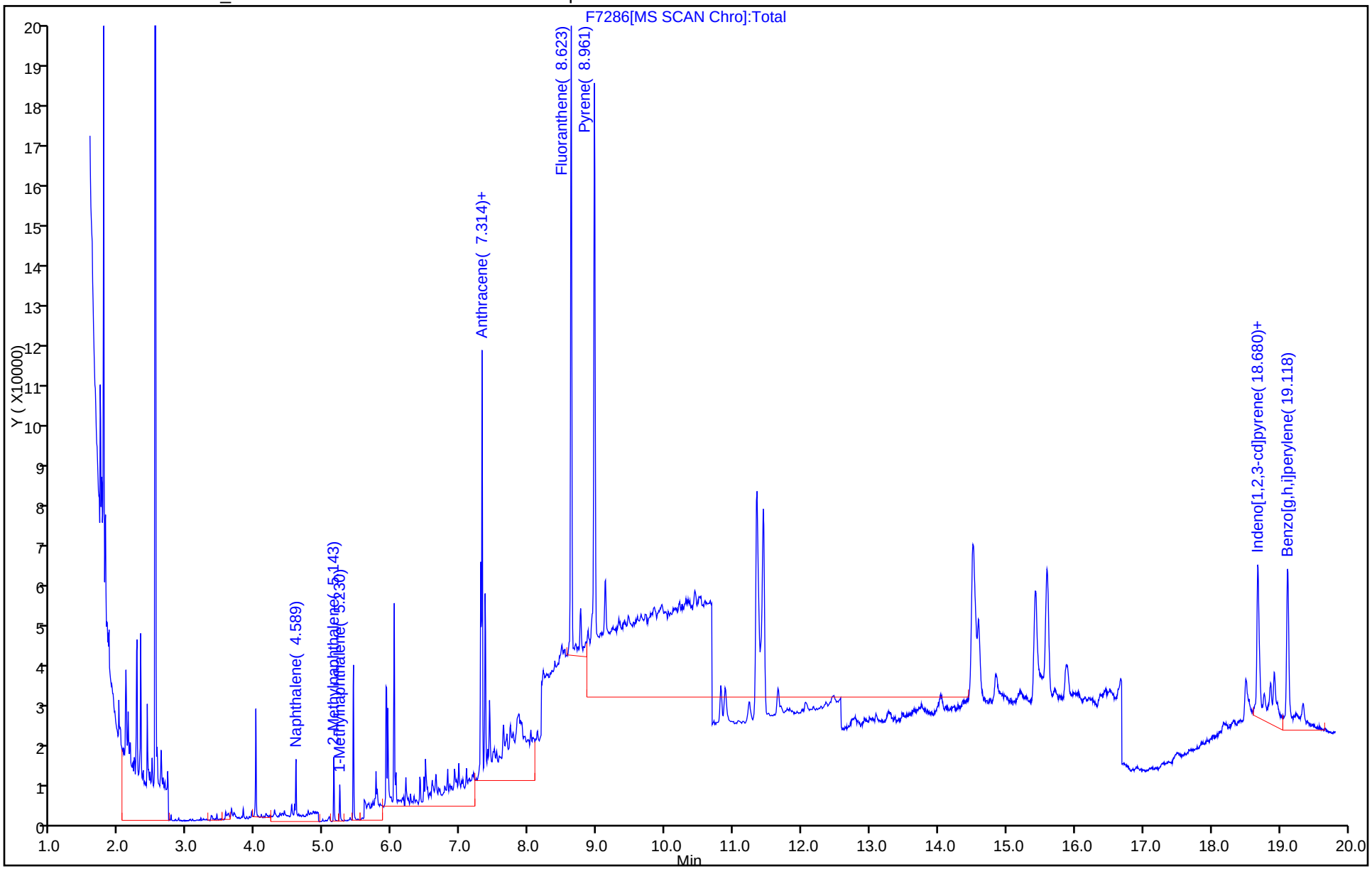
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7286.D

Injection Date:	16-Jun-2017 22:57:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-B-16-B	Lab Sample ID:	280-97928-16	Worklist Smp#:	20
Client ID:	SS025-SB09(4-6)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7286.D
Lims ID: 280-97928-B-16-B
Client ID: SS025-SB09(4-6)
Sample Type: Client
Inject. Date: 16-Jun-2017 22:57:30 ALS Bottle#: 19 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-b-16-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:29:16

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	477.5	95.50
$ 5 2-Fluorobiphenyl	500.0	405.3	81.07
$ 6 Terphenyl-d14	500.0	390.2	78.04

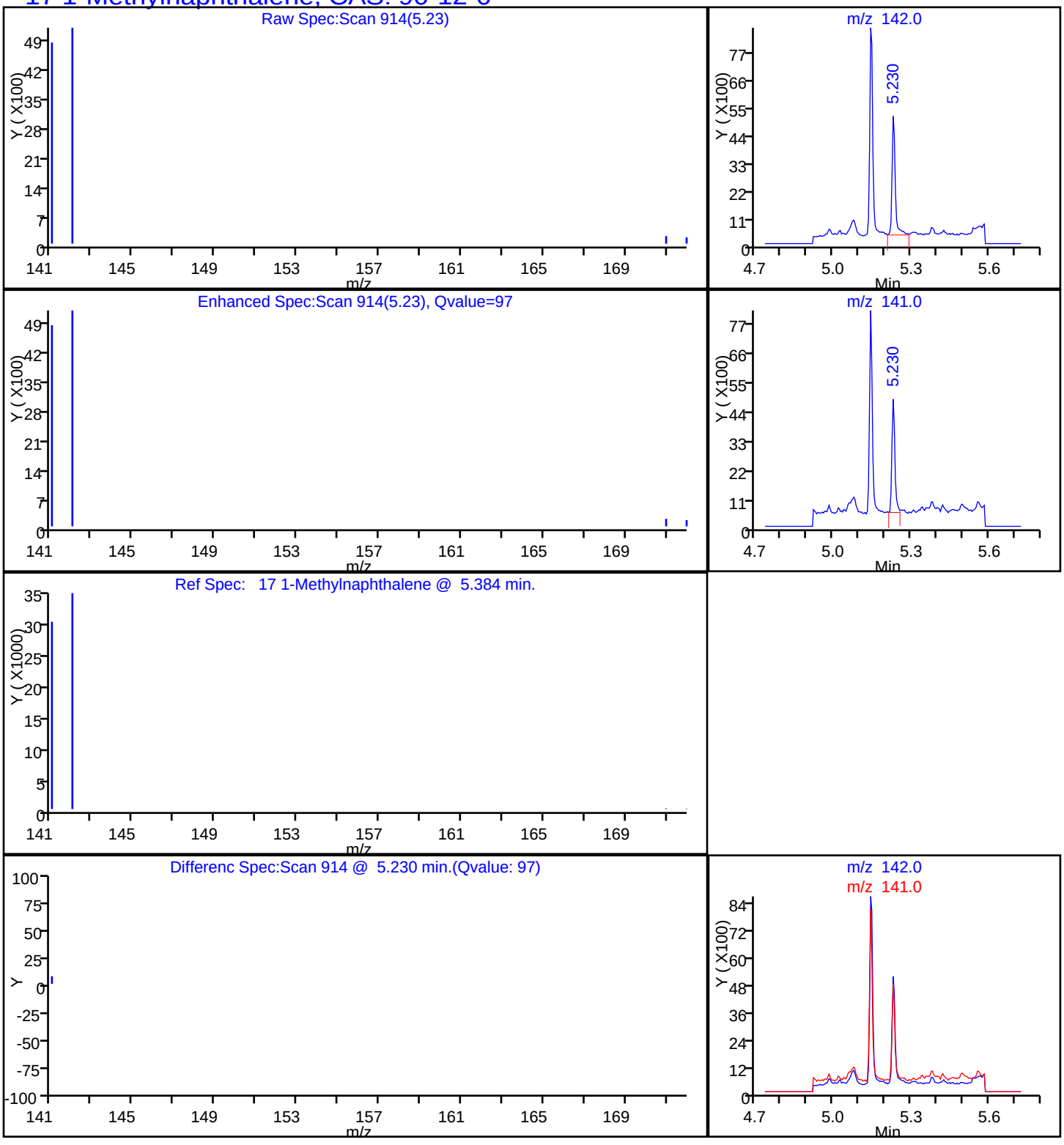
Report Date: 19-Jun-2017 15:44:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7286.D

Injection Date:	16-Jun-2017 22:57:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-16-B	Lab Sample ID:	280-97928-16		
Client ID:	SS025-SB09(4-6)				
Operator ID:	WICKHAMM	ALS Bottle#:	19	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

17 1-Methylnaphthalene, CAS: 90-12-0

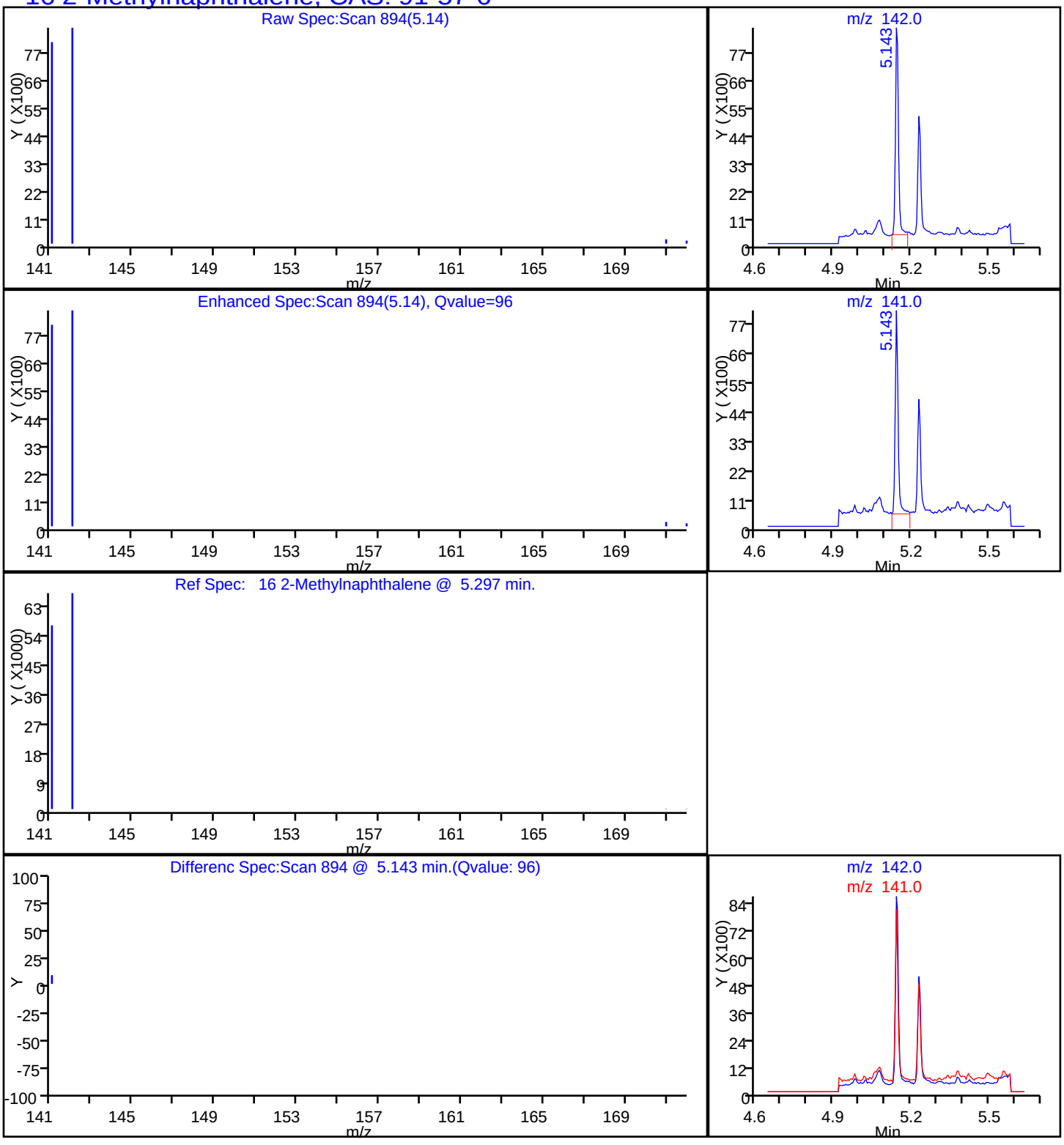


Report Date: 19-Jun-2017 15:44:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7286.D				
Injection Date:	16-Jun-2017 22:57:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-16-B	Lab Sample ID:	280-97928-16		
Client ID:	SS025-SB09(4-6)				
Operator ID:	WICKHAMM	ALS Bottle#:	19	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

16 2-Methylnaphthalene, CAS: 91-57-6



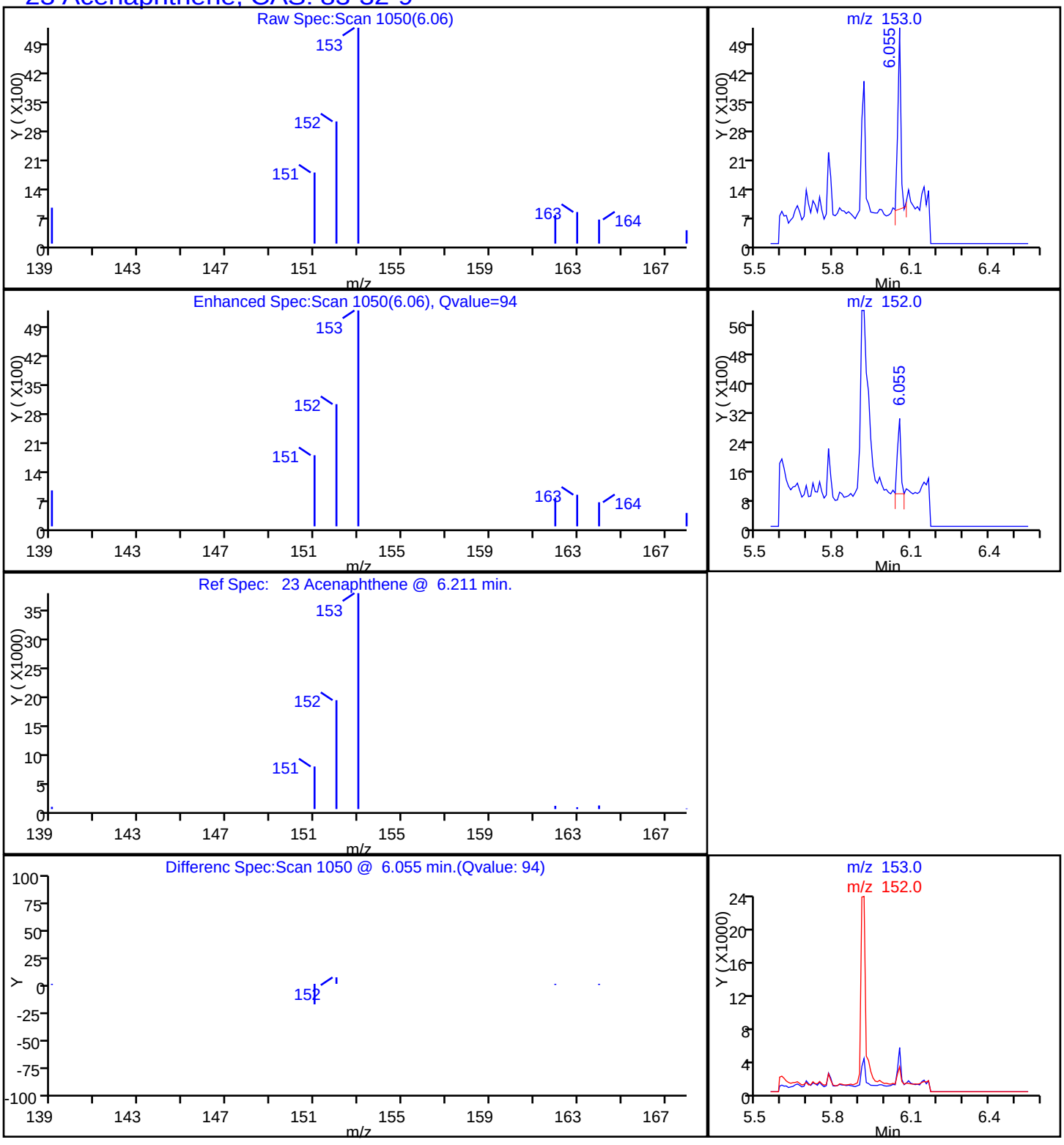
Report Date: 19-Jun-2017 15:44:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7286.D

Injection Date:	16-Jun-2017 22:57:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-16-B	Lab Sample ID:	280-97928-16		
Client ID:	SS025-SB09(4-6)				
Operator ID:	WICKHAMM	ALS Bottle#:	19	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9



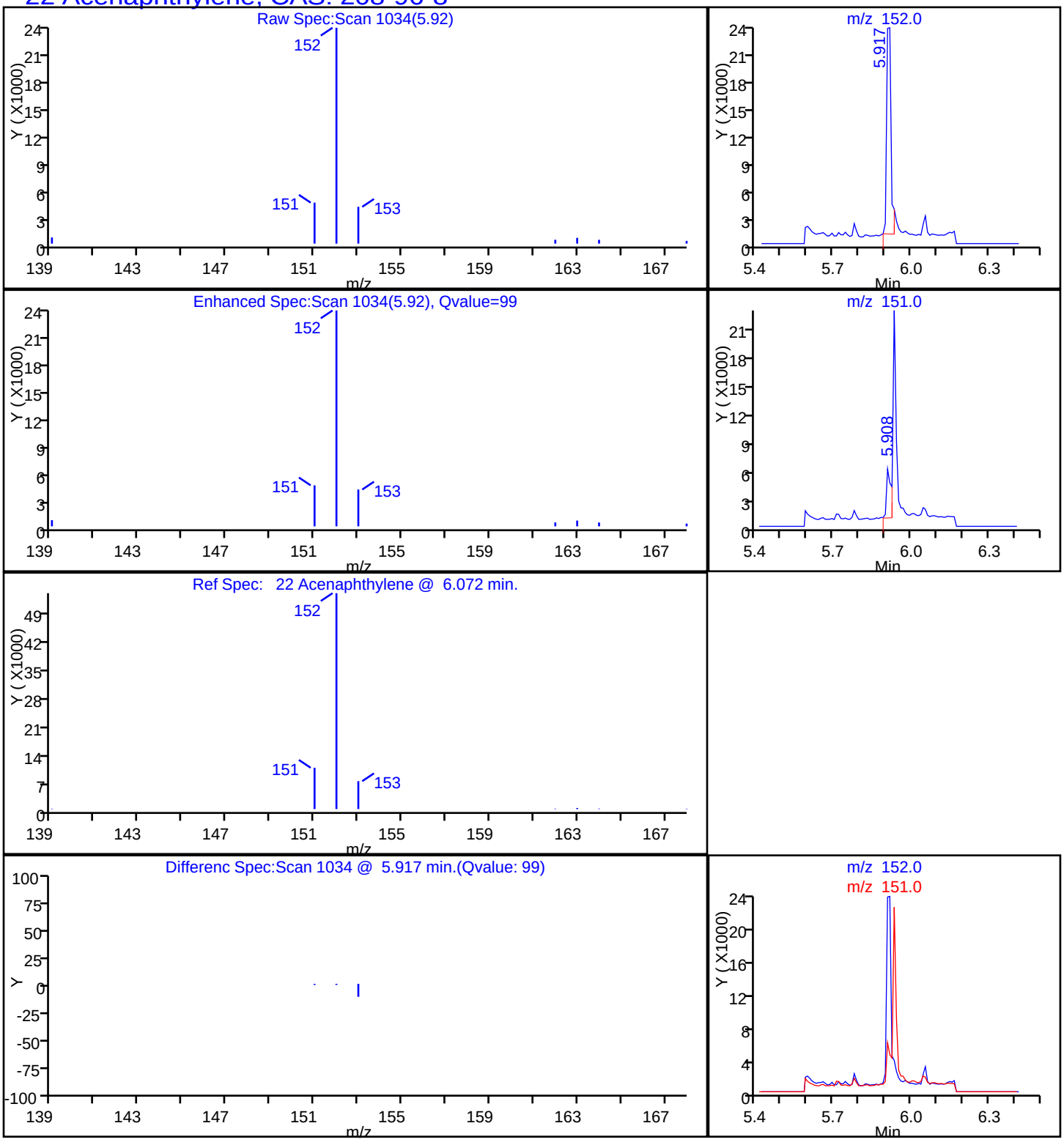
Report Date: 19-Jun-2017 15:44:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7286.D

Injection Date:	16-Jun-2017 22:57:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-16-B	Lab Sample ID:	280-97928-16		
Client ID:	SS025-SB09(4-6)				
Operator ID:	WICKHAMM	ALS Bottle#:	19	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Acenaphthylene, CAS: 208-96-8



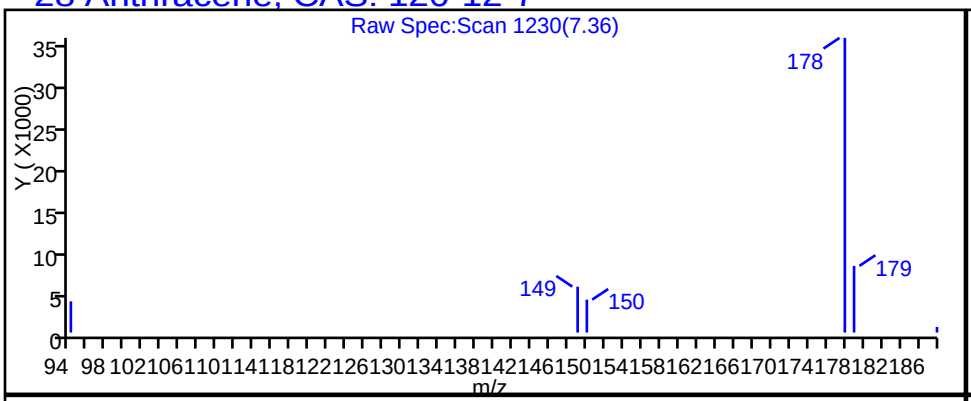
Report Date: 19-Jun-2017 15:44:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

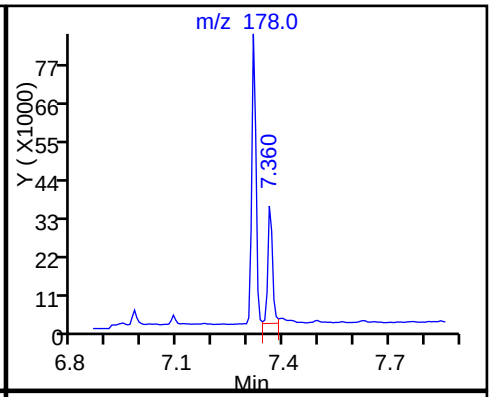
TestAmerica Denver

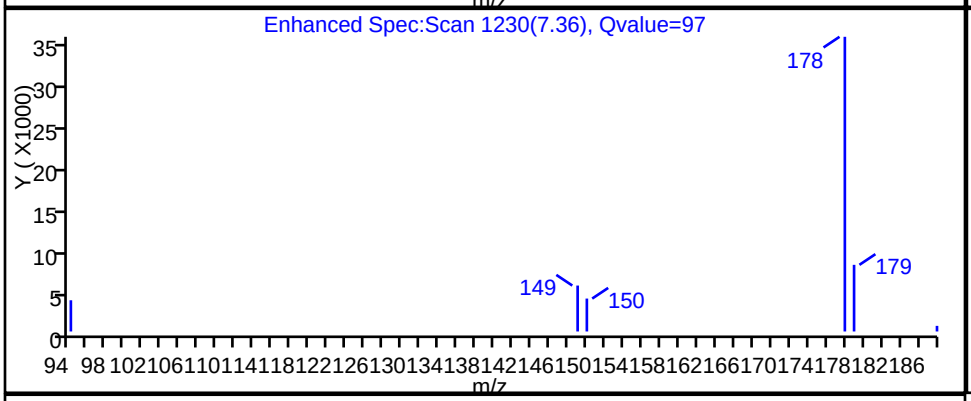
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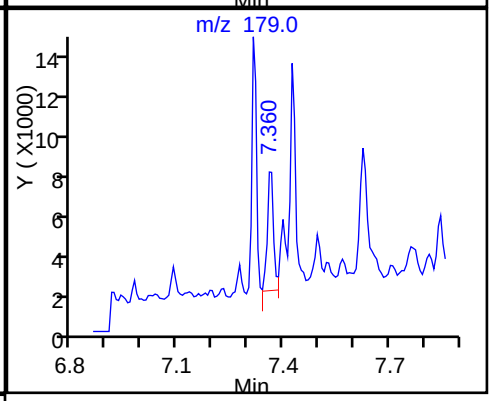
Injection Date:	16-Jun-2017 22:57:30	Instrument ID:	SMS_F
Lims ID:	280-97928-B-16-B	Lab Sample ID:	280-97928-16
Client ID:	SS025-SB09(4-6)		
Operator ID:	WICKHAMM	ALS Bottle#:	19 Worklist Smp#: 20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM
Column:		Detector	MS SCAN

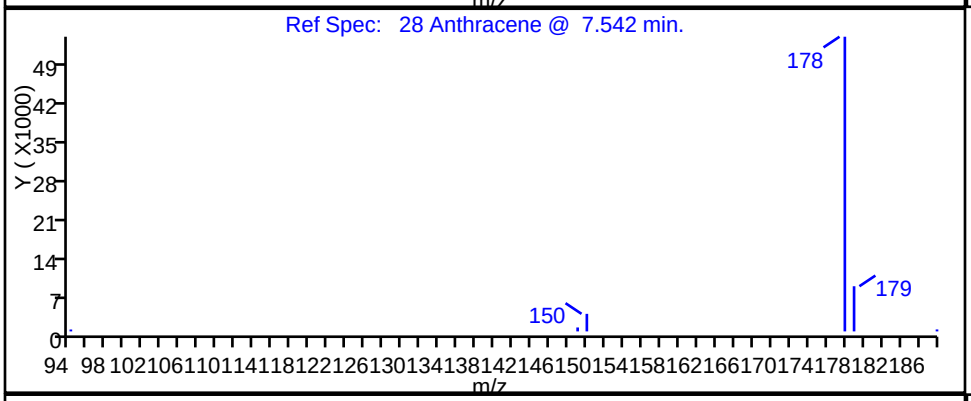
28 Anthracene, CAS: 120-12-7

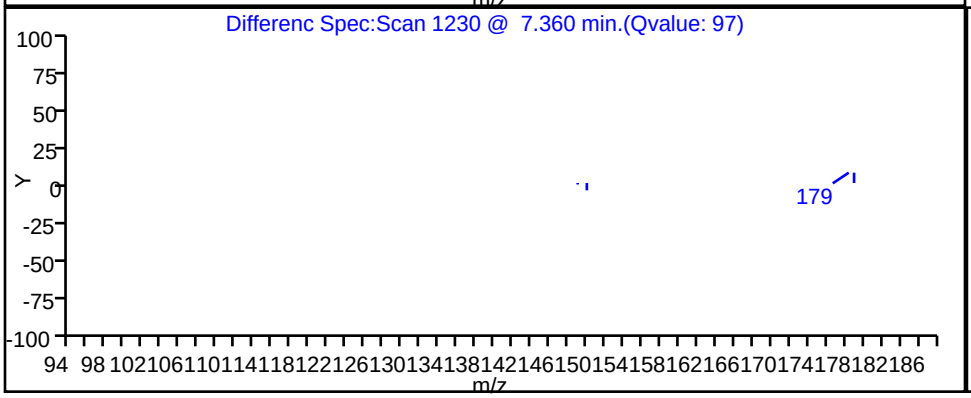


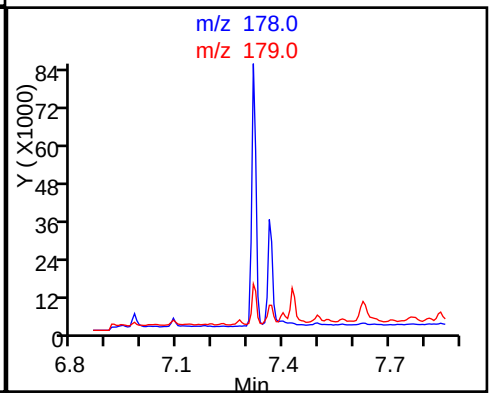












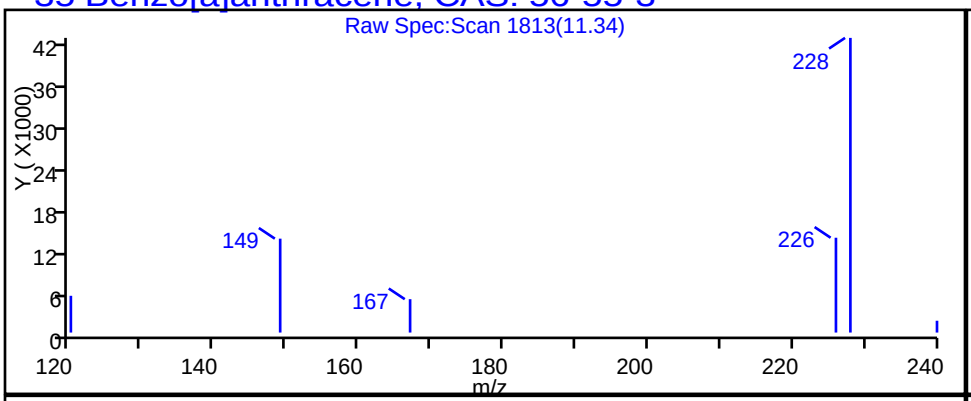
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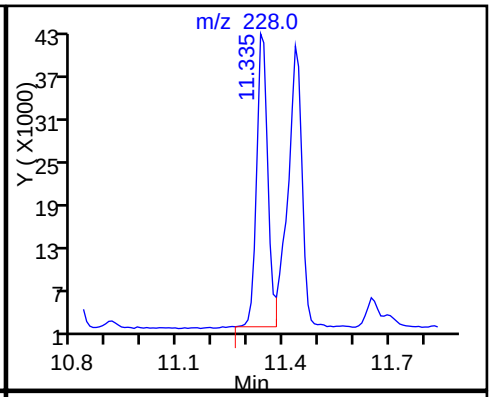
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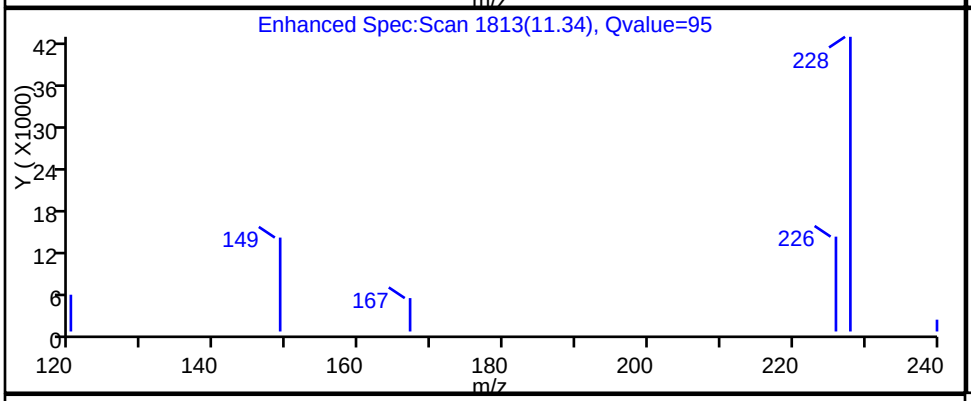
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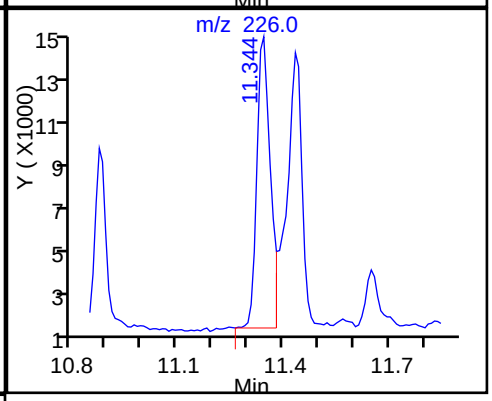
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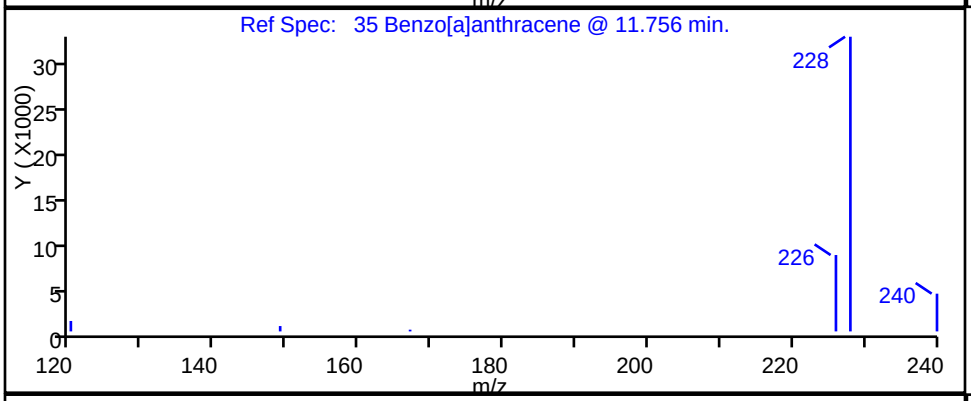
35 Benzo[a]anthracene, CAS: 56-55-3

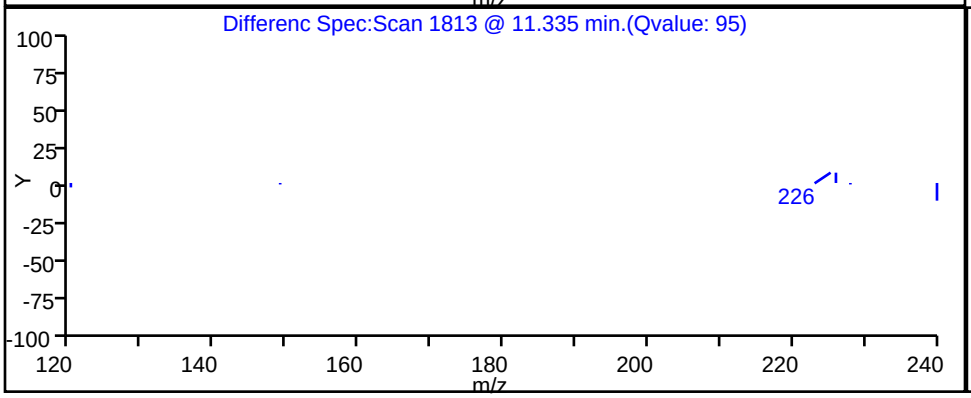


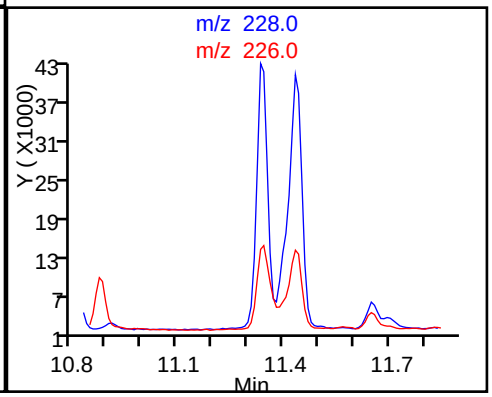












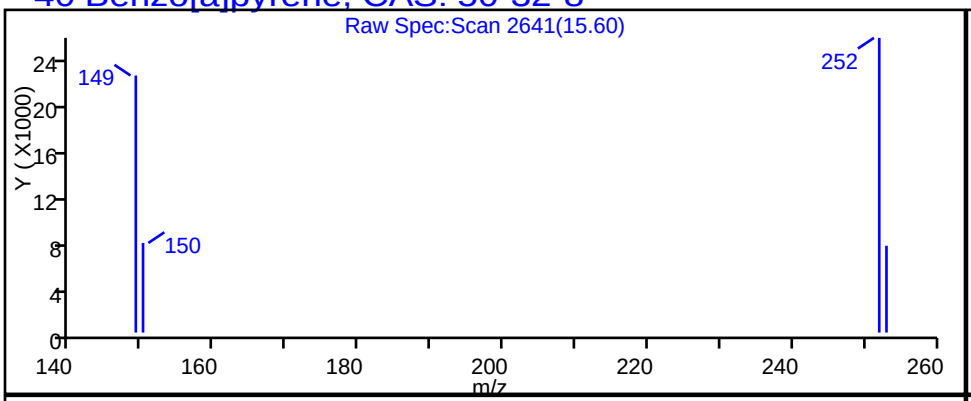
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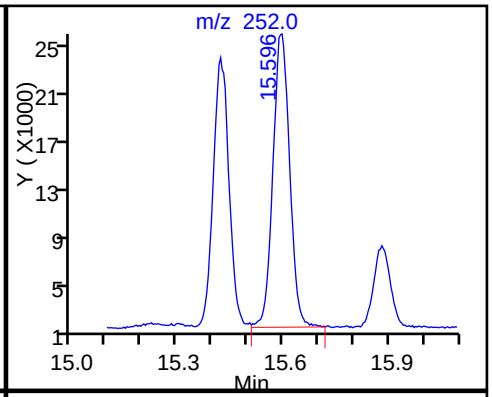
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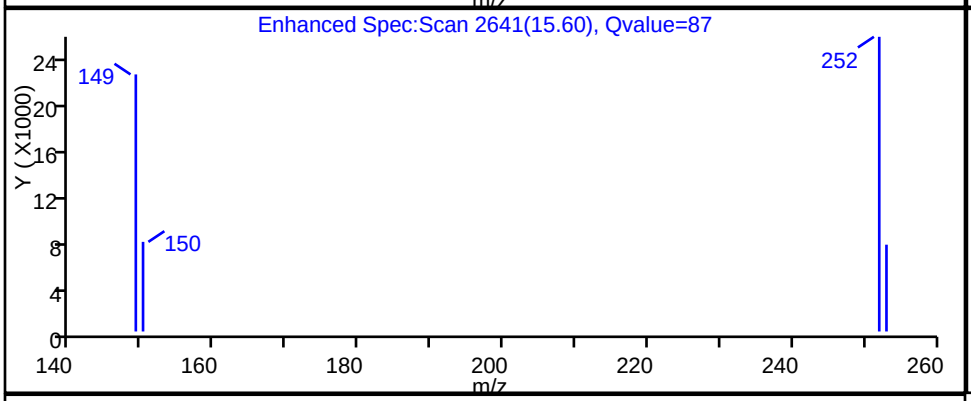
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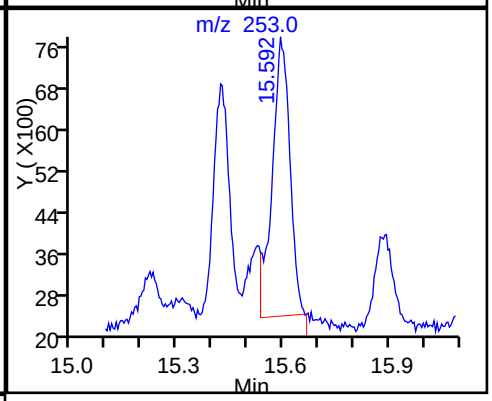
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Operator ID:	WICKHAMM	ALS Bottle#:	19	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
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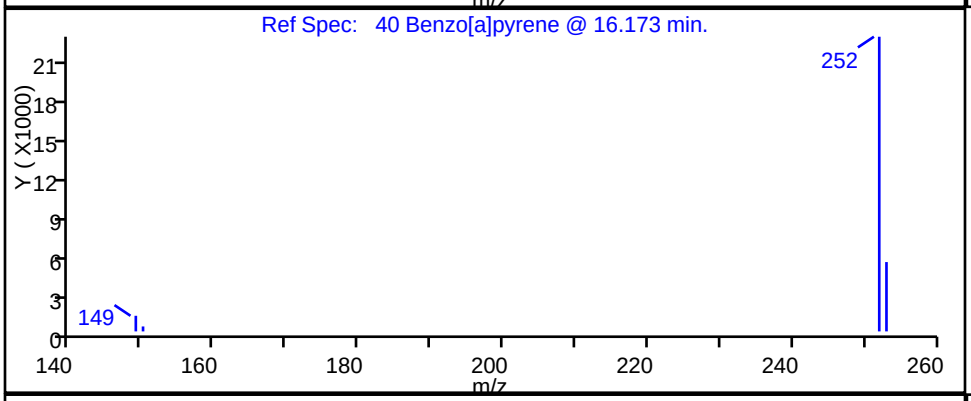
40 Benzo[a]pyrene, CAS: 50-32-8

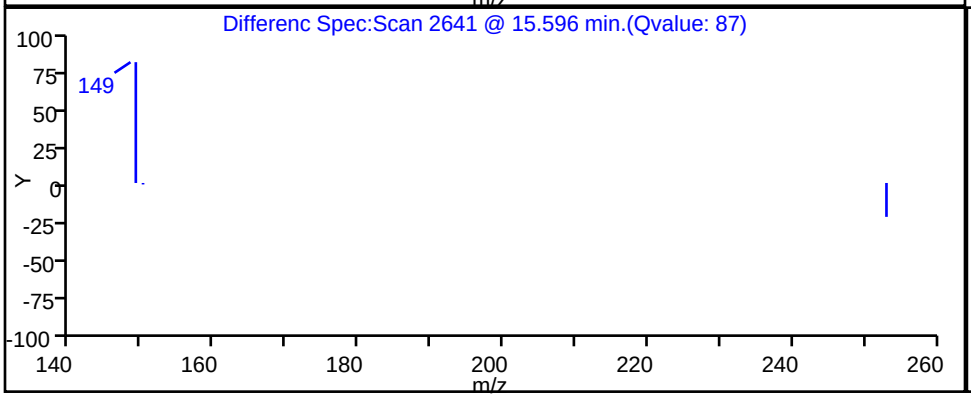


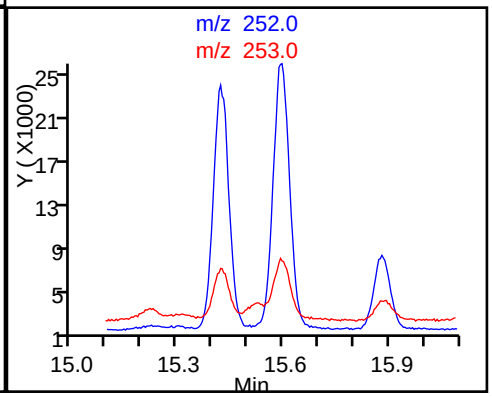












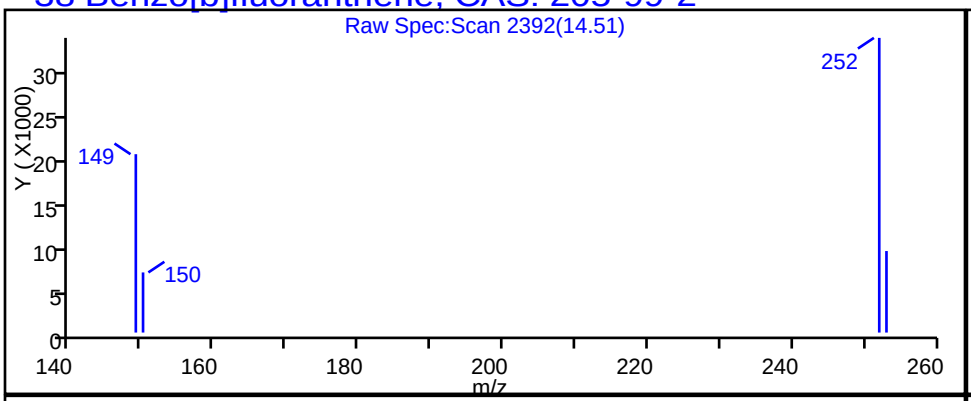
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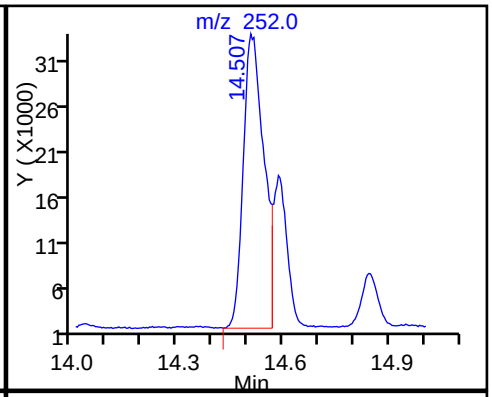
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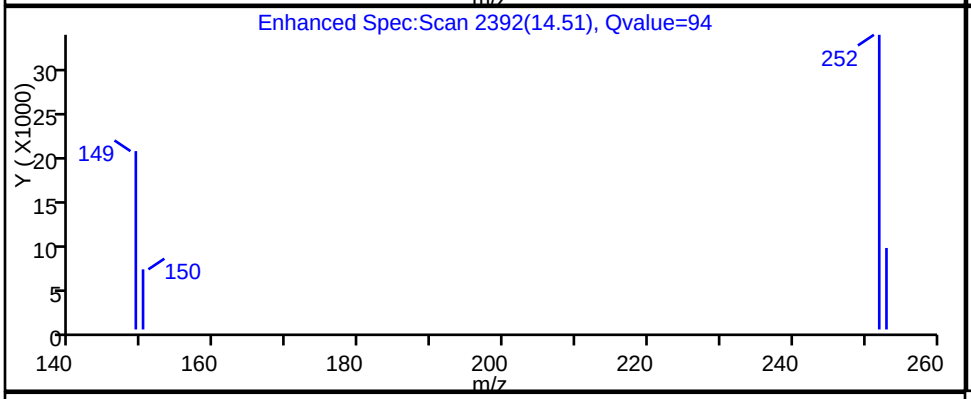
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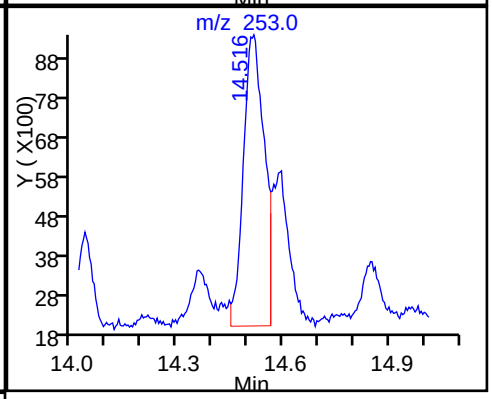
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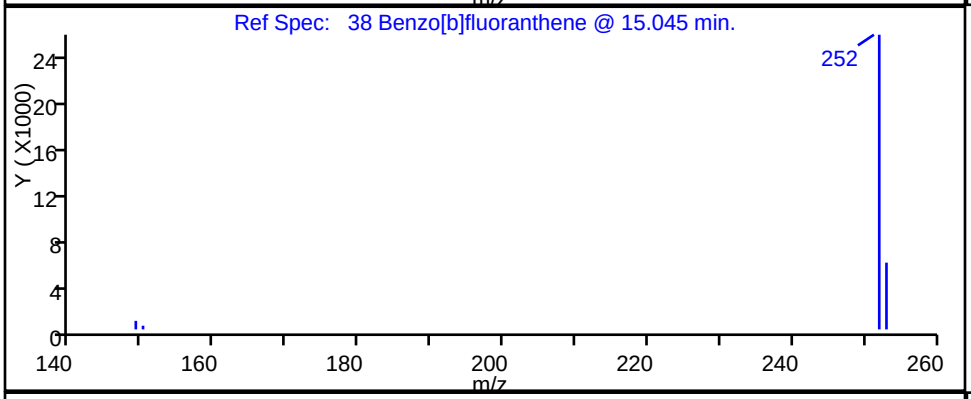
38 Benzo[b]fluoranthene, CAS: 205-99-2

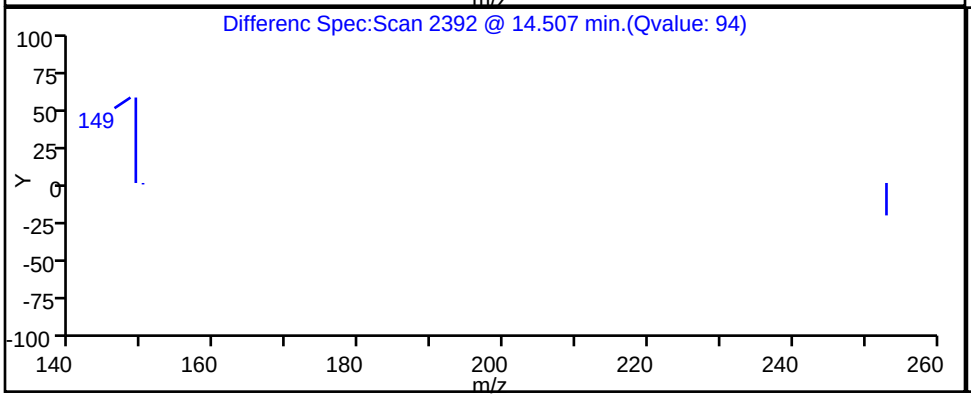


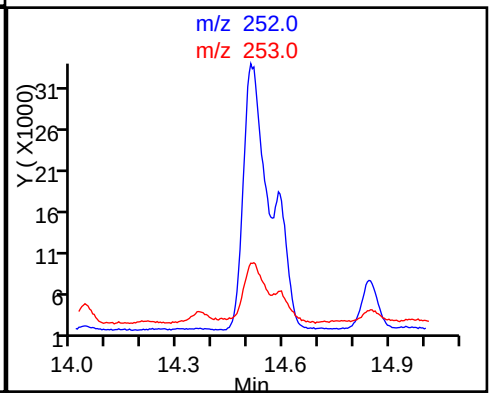












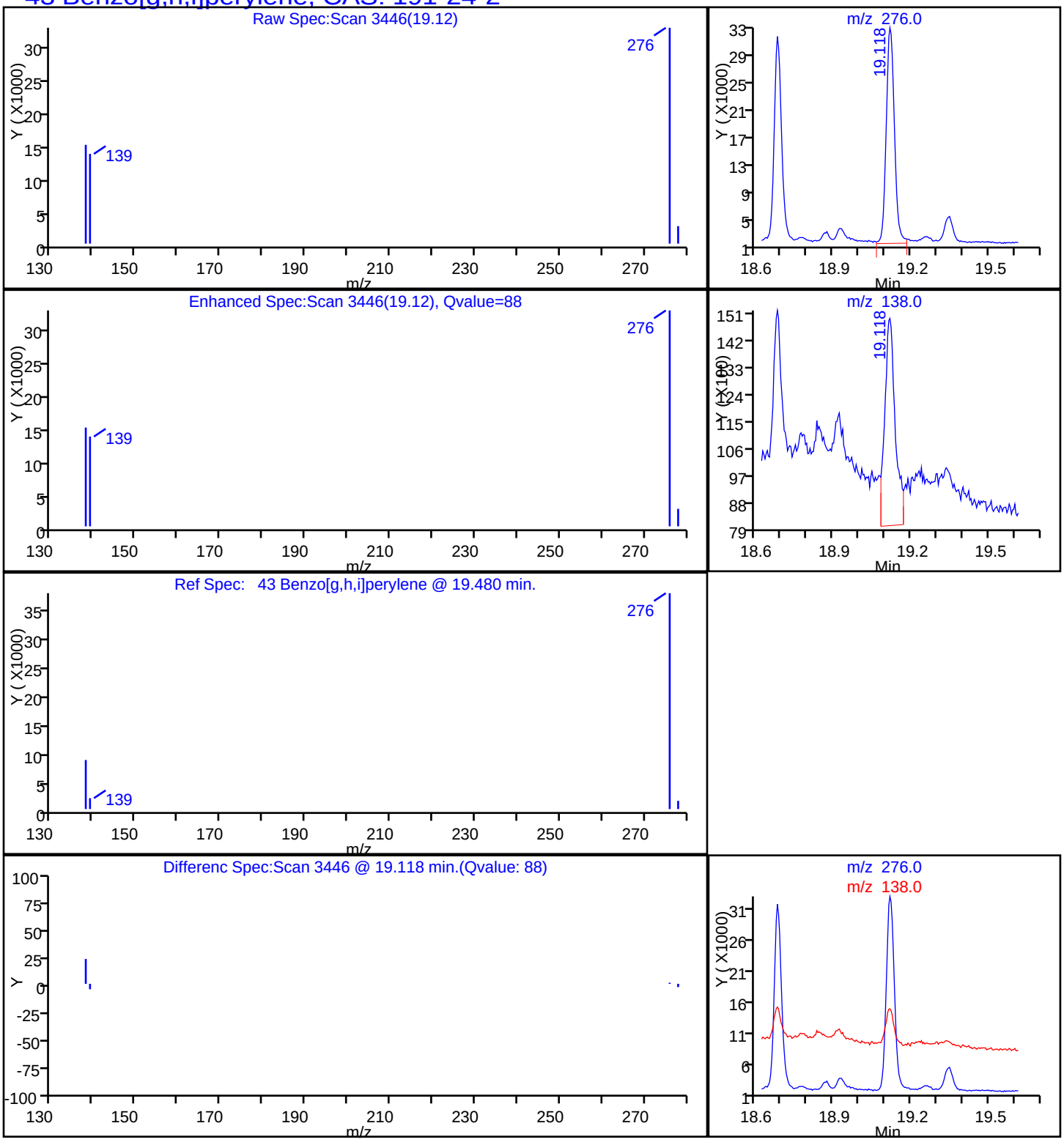
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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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43 Benzo[g,h,i]perylene, CAS: 191-24-2



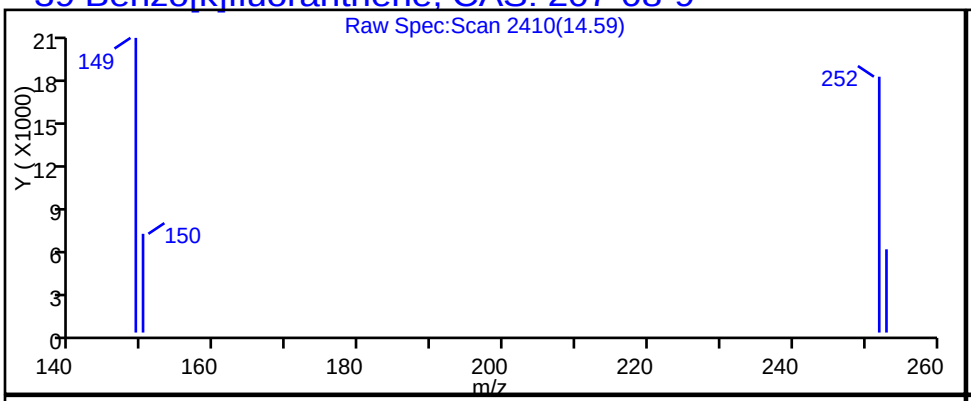
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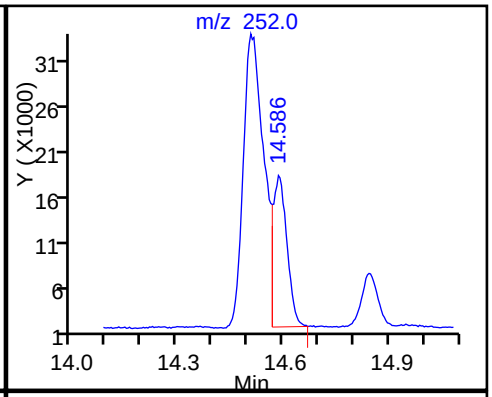
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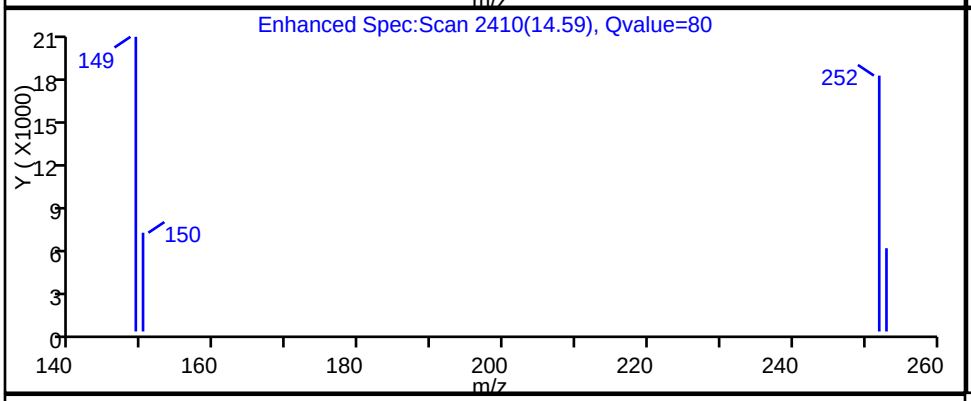
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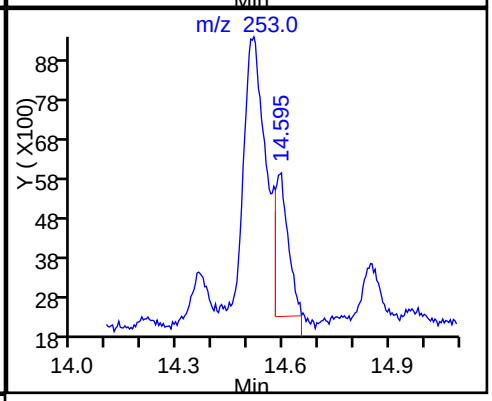
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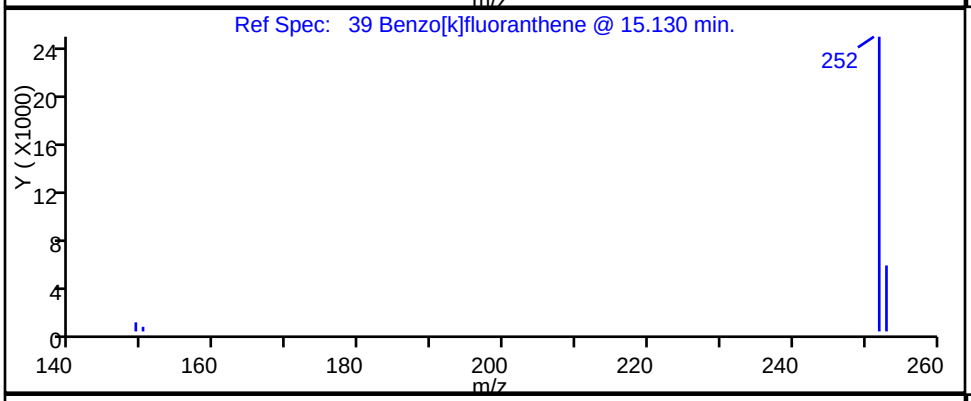
39 Benzo[k]fluoranthene, CAS: 207-08-9

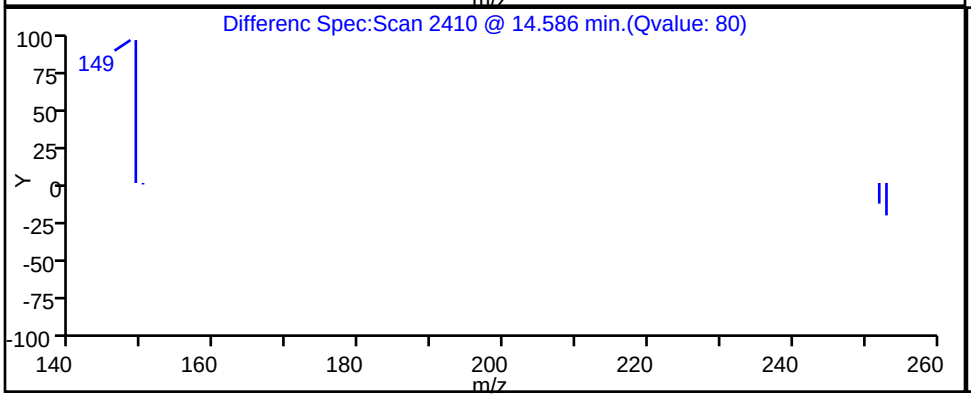


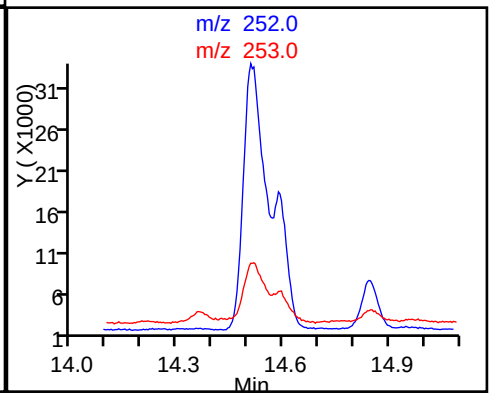












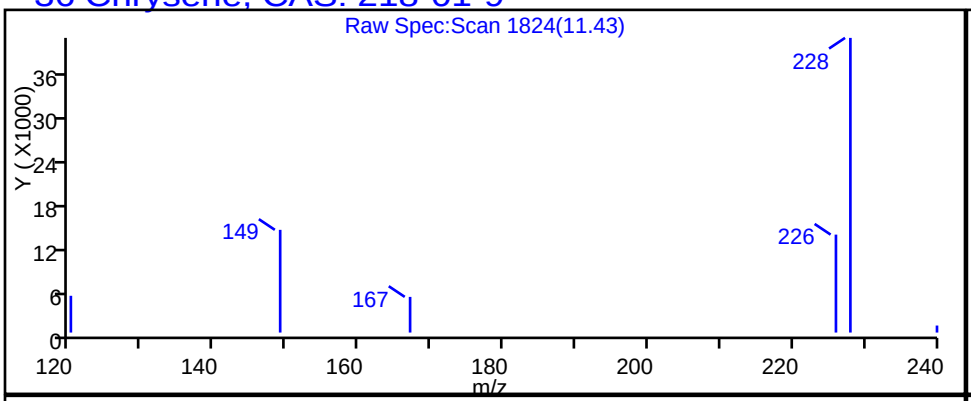
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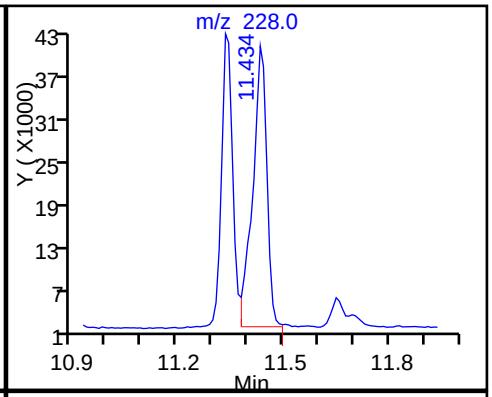
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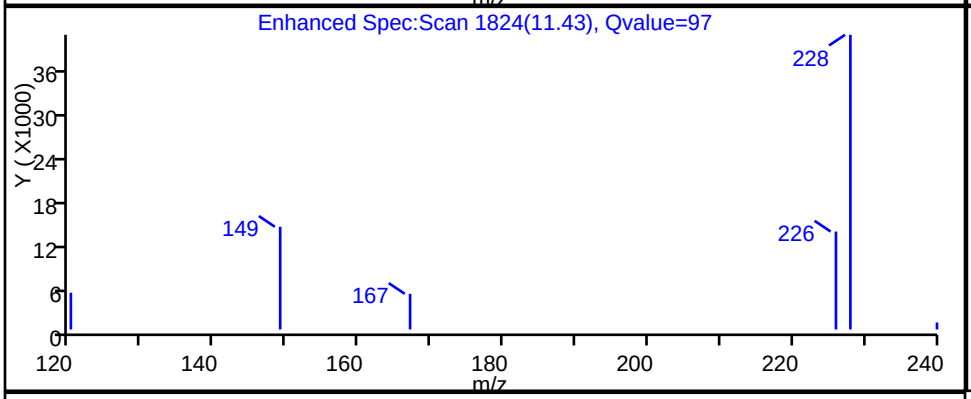
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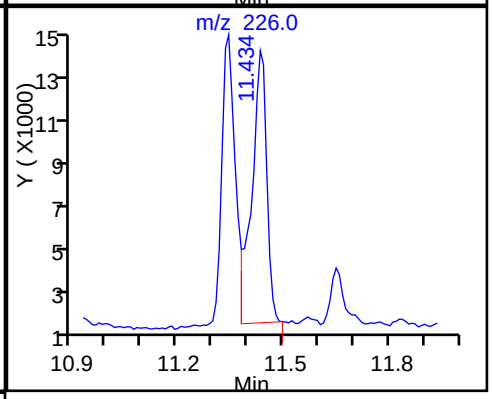
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Client ID:	SS025-SB09(4-6)		
Operator ID:	WICKHAMM	ALS Bottle#:	19 Worklist Smp#: 20
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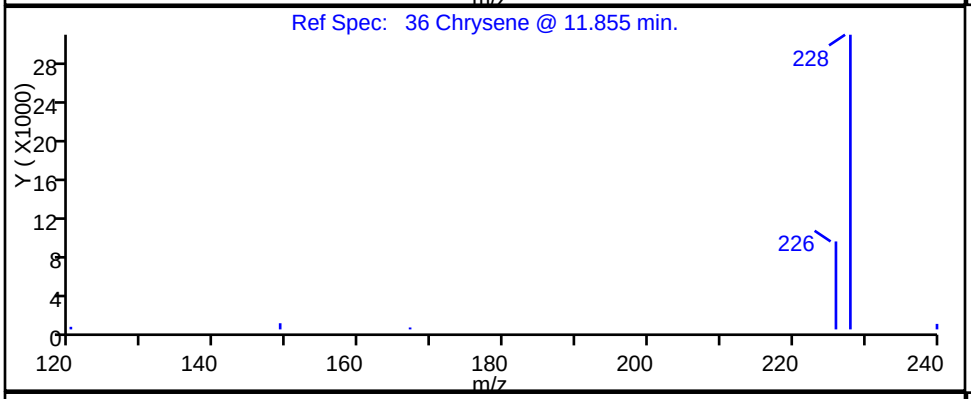
36 Chrysene, CAS: 218-01-9

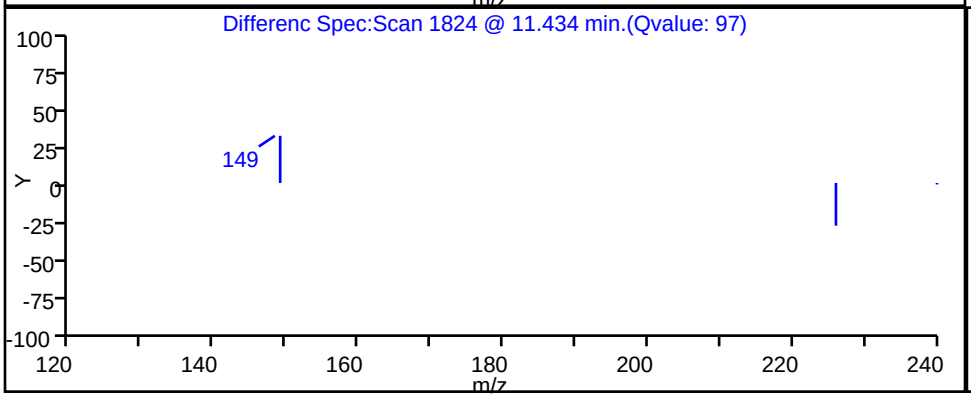


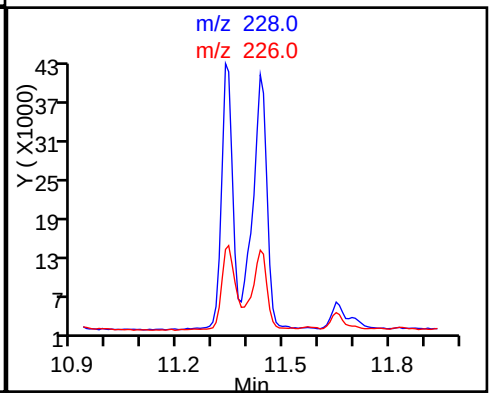










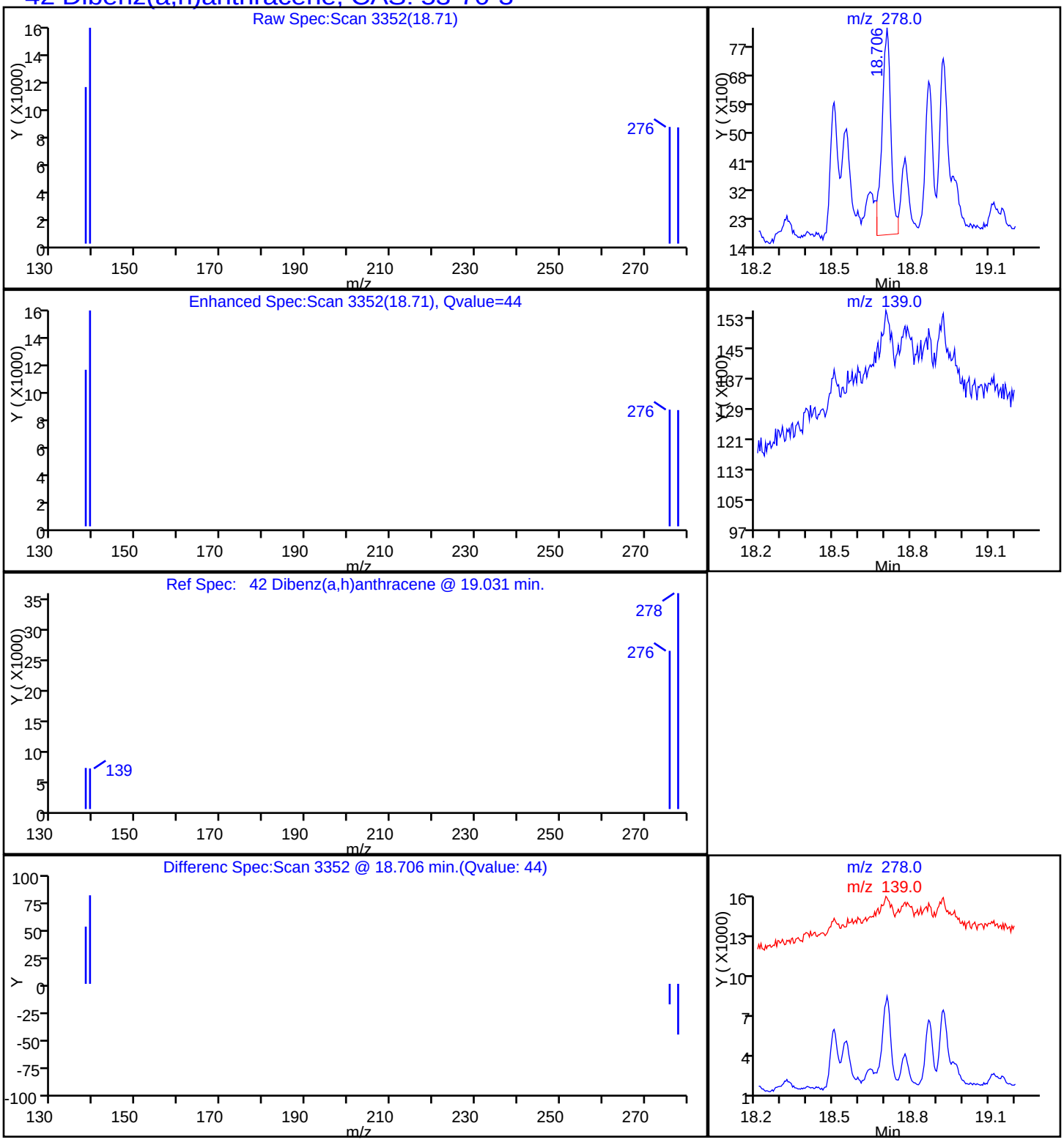


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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

42 Dibenz(a,h)anthracene, CAS: 53-70-3



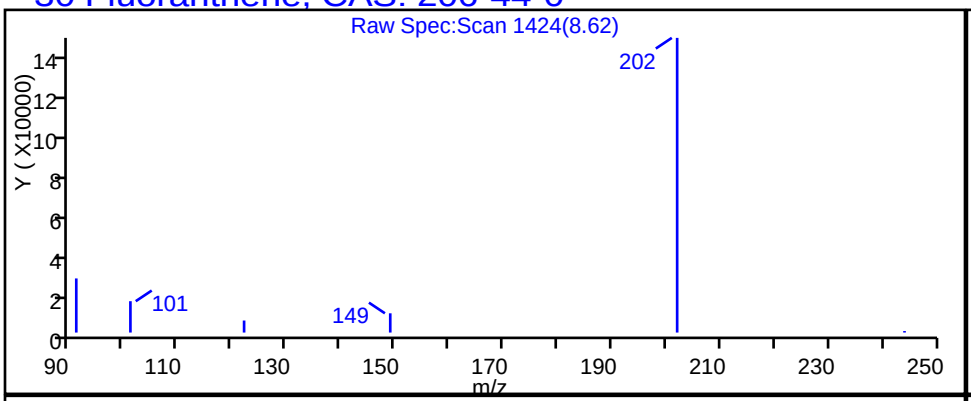
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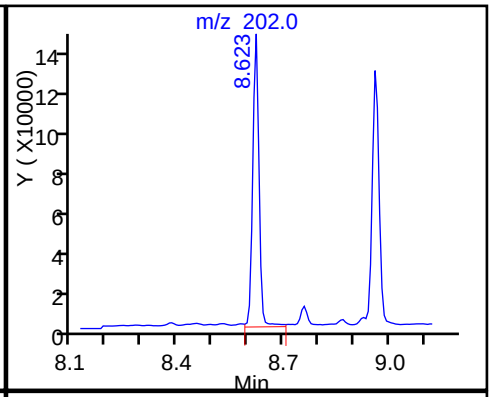
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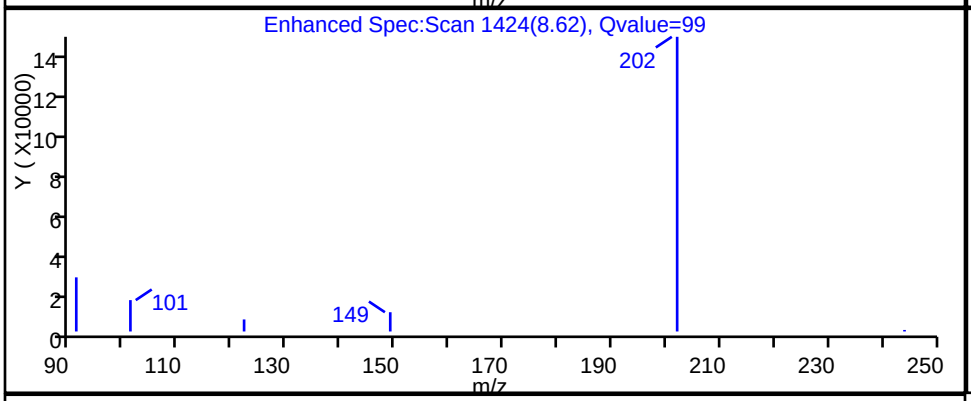
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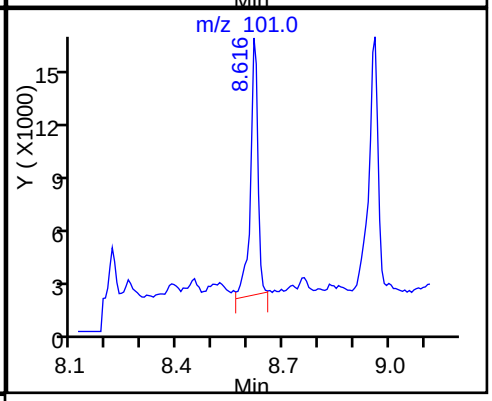
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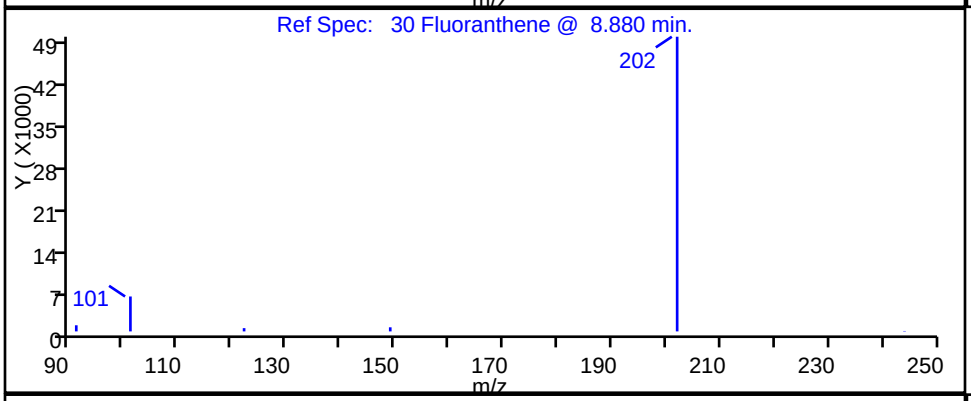
30 Fluoranthene, CAS: 206-44-0

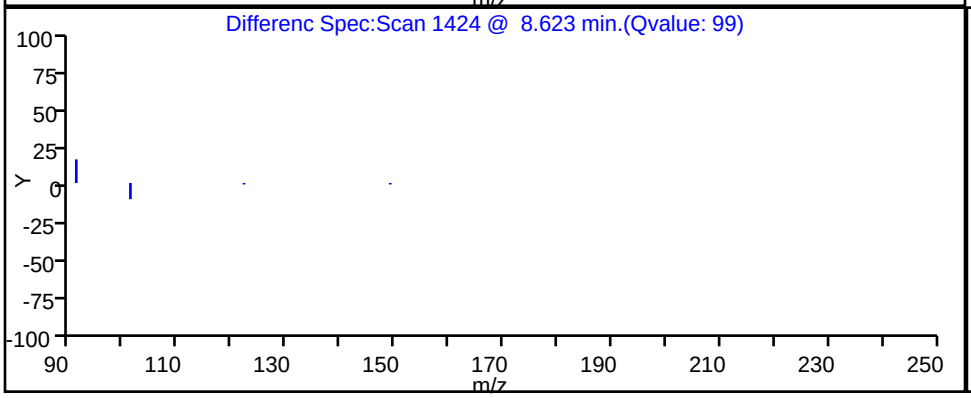


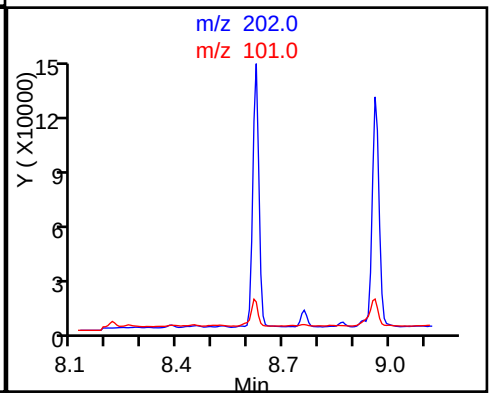












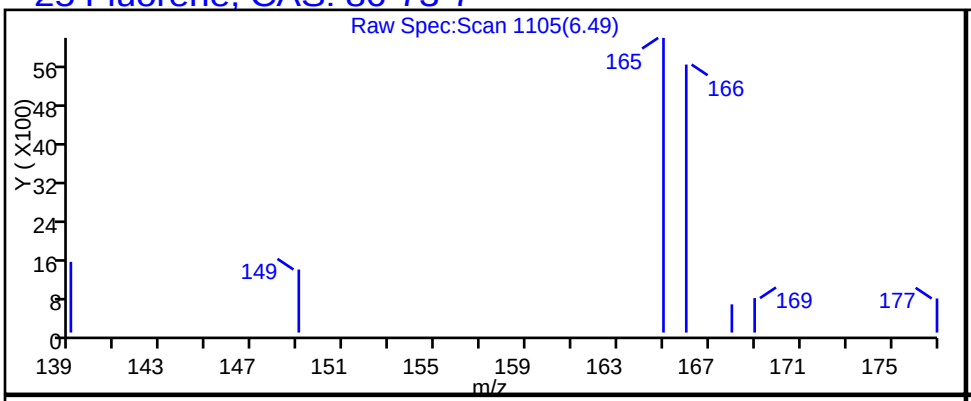
Report Date: 19-Jun-2017 15:44:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

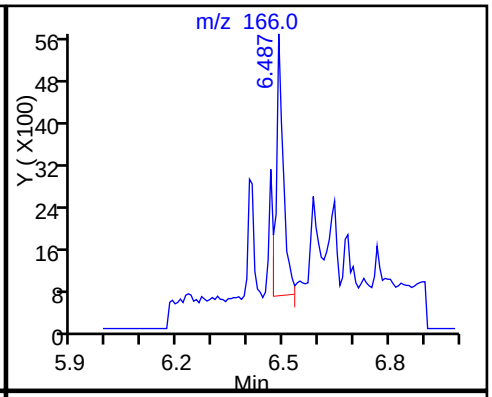
TestAmerica Denver

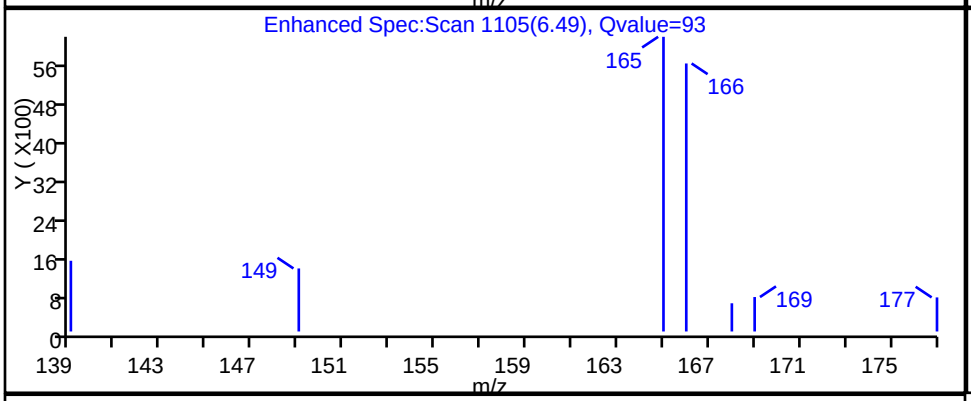
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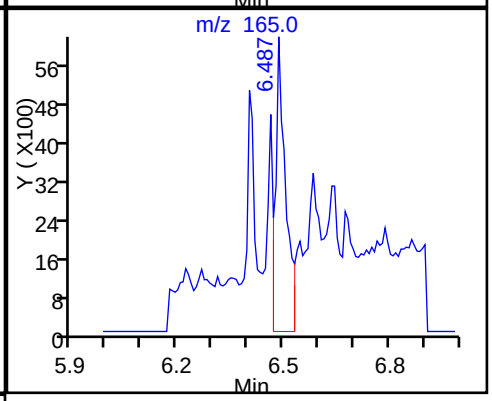
Injection Date:	16-Jun-2017 22:57:30	Instrument ID:	SMS_F
Lims ID:	280-97928-B-16-B	Lab Sample ID:	280-97928-16
Client ID:	SS025-SB09(4-6)		
Operator ID:	WICKHAMM	ALS Bottle#:	19 Worklist Smp#: 20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM
Column:		Detector	MS SCAN

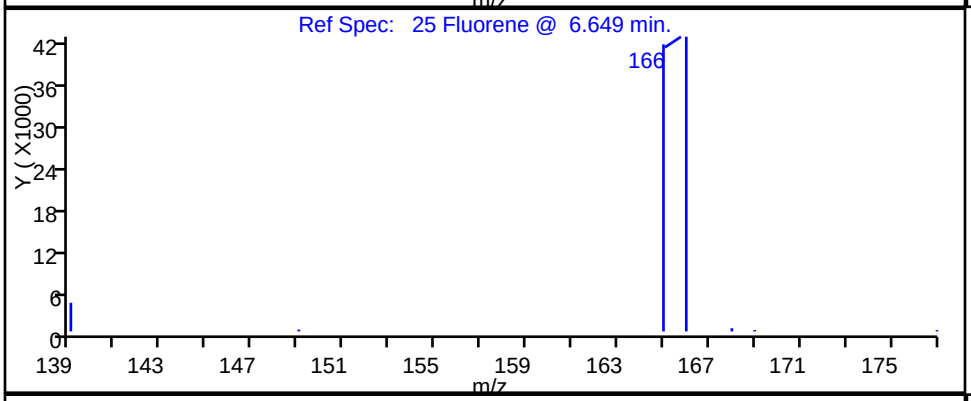
25 Fluorene, CAS: 86-73-7

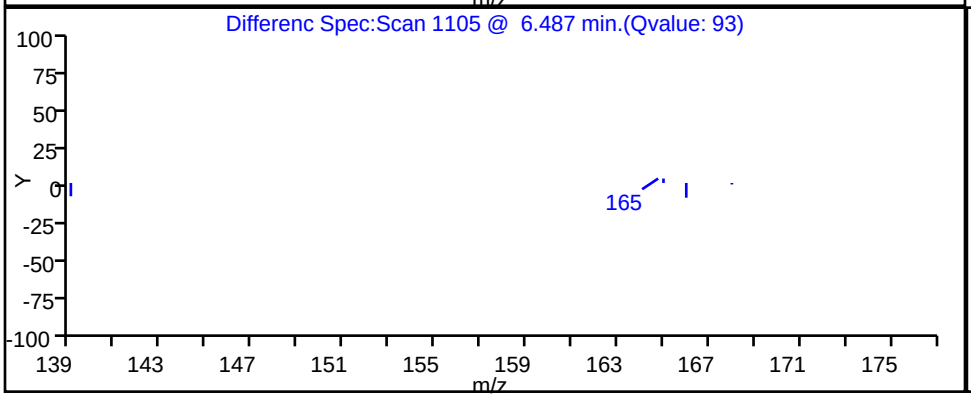


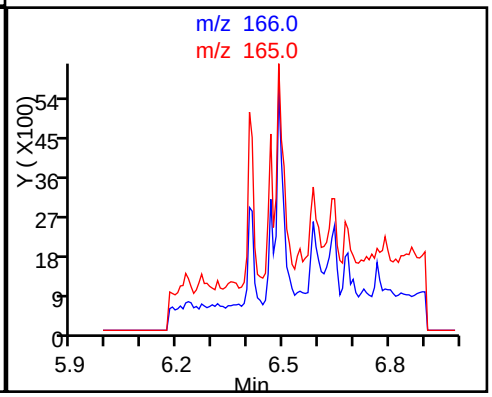










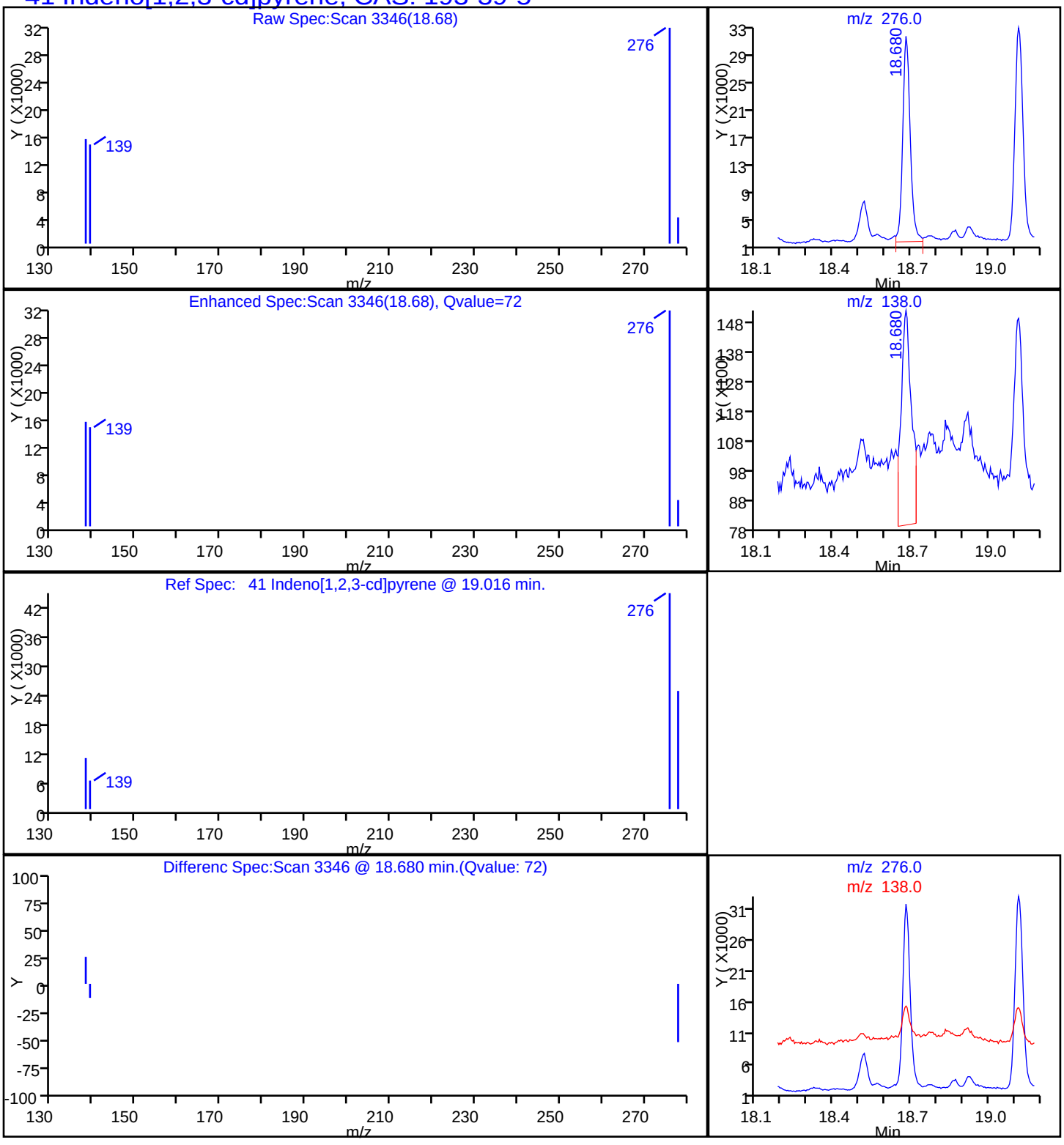


Report Date: 19-Jun-2017 15:44:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

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Injection Date:	16-Jun-2017 22:57:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-16-B	Lab Sample ID:	280-97928-16		
Client ID:	SS025-SB09(4-6)				
Operator ID:	WICKHAMM	ALS Bottle#:	19	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

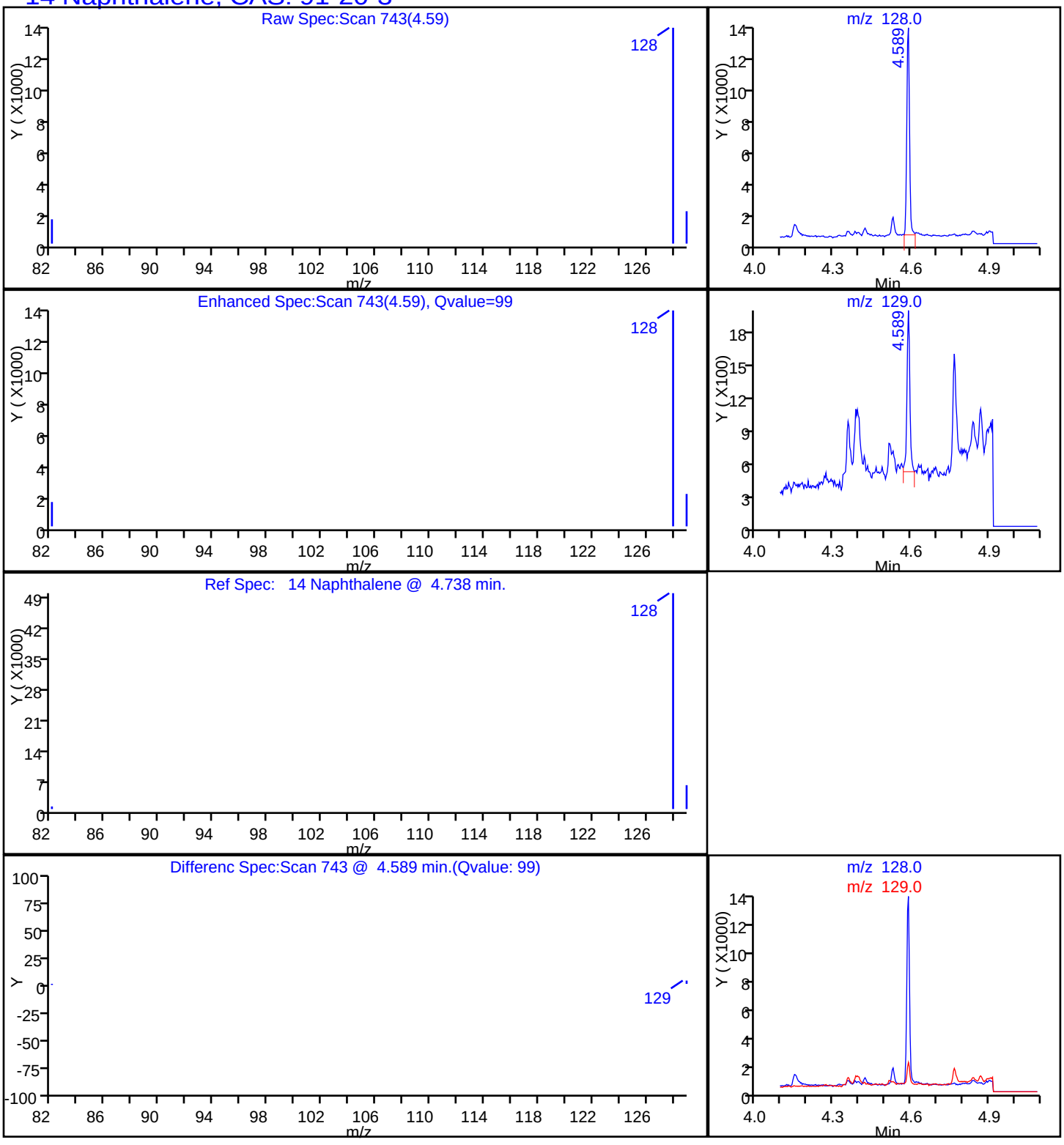


Report Date: 19-Jun-2017 15:44:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7286.D				
Injection Date:	16-Jun-2017 22:57:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-16-B	Lab Sample ID:	280-97928-16		
Client ID:	SS025-SB09(4-6)				
Operator ID:	WICKHAMM	ALS Bottle#:	19	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3

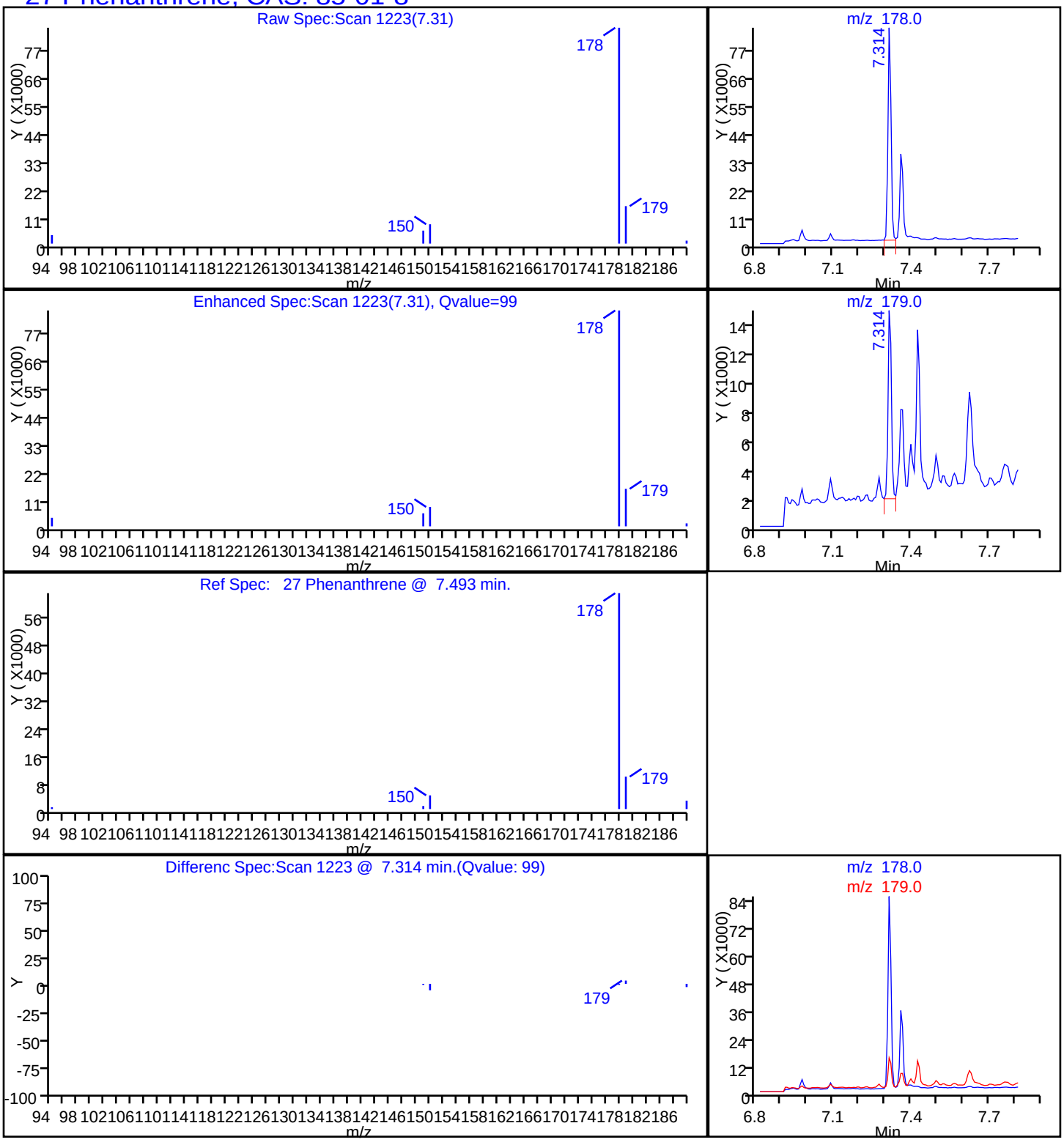


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TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7286.D				
Injection Date:	16-Jun-2017 22:57:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-16-B	Lab Sample ID:	280-97928-16		
Client ID:	SS025-SB09(4-6)				
Operator ID:	WICKHAMM	ALS Bottle#:	19	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

27 Phenanthrene, CAS: 85-01-8



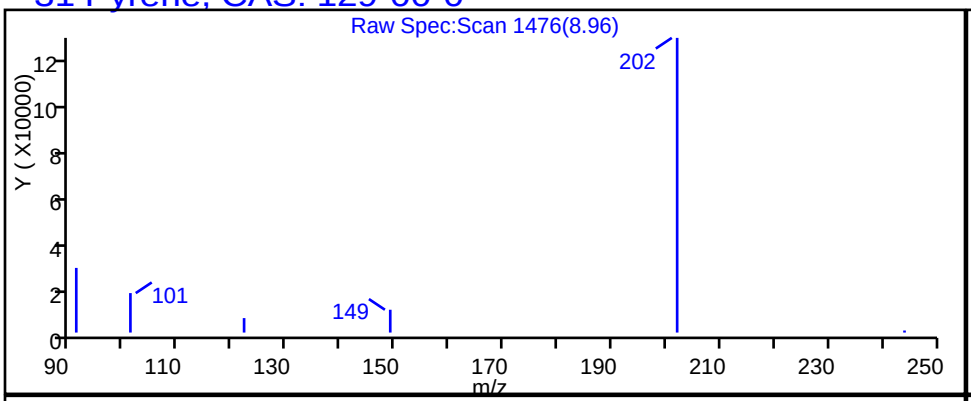
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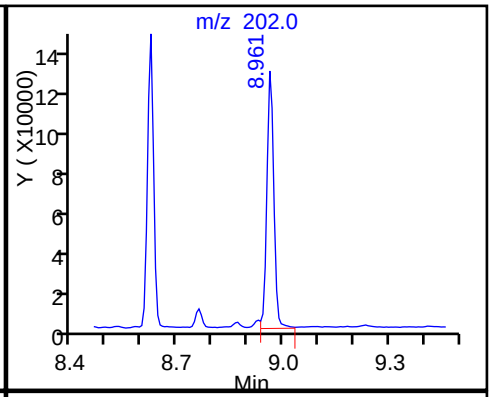
TestAmerica Denver

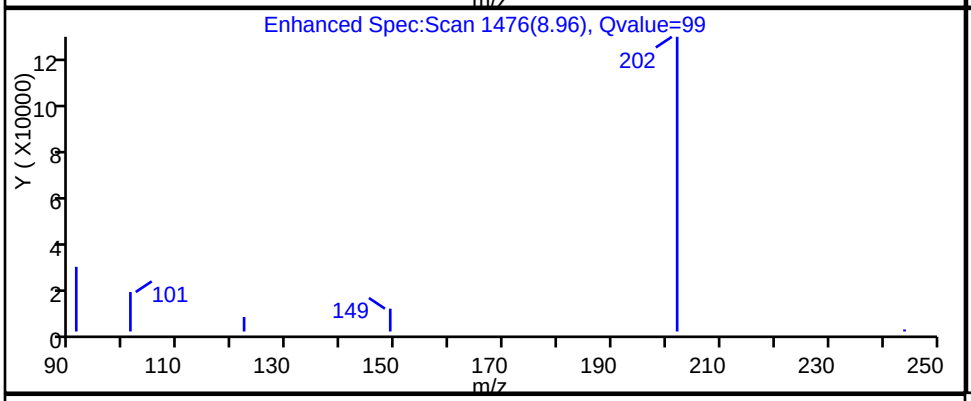
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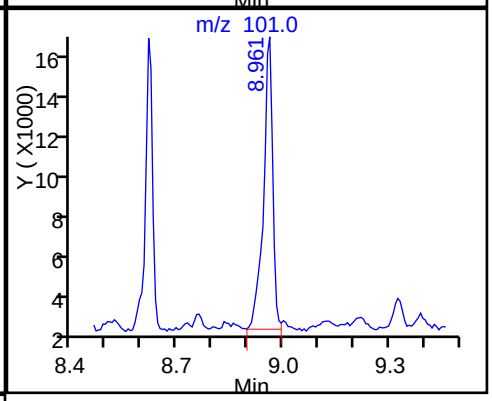
Injection Date:	16-Jun-2017 22:57:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-16-B	Lab Sample ID:	280-97928-16		
Client ID:	SS025-SB09(4-6)				
Operator ID:	WICKHAMM	ALS Bottle#:	19	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

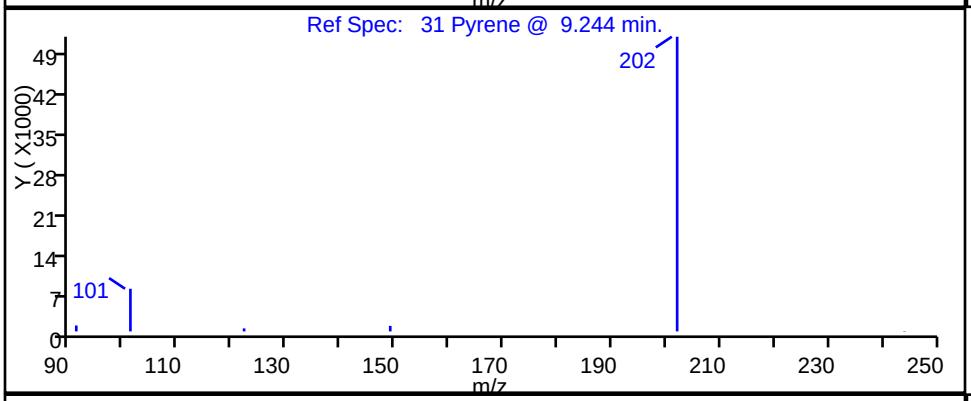
31 Pyrene, CAS: 129-00-0

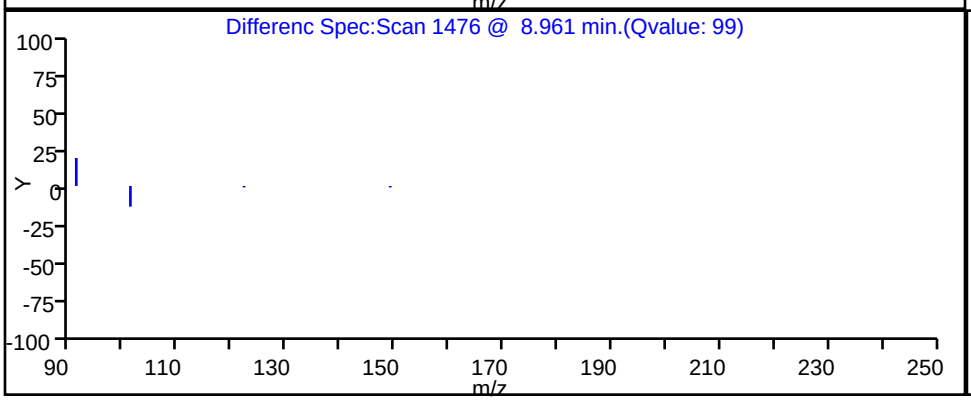


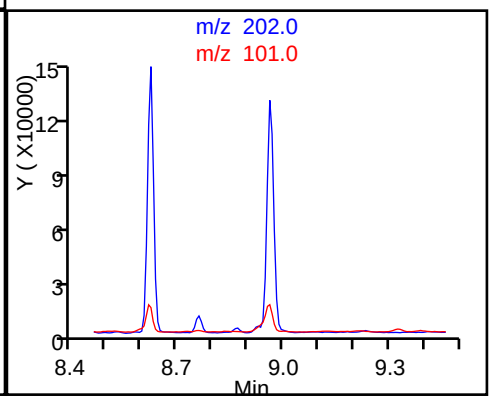












Manual Integration/User Assign Peak Report

TestAmerica Denver

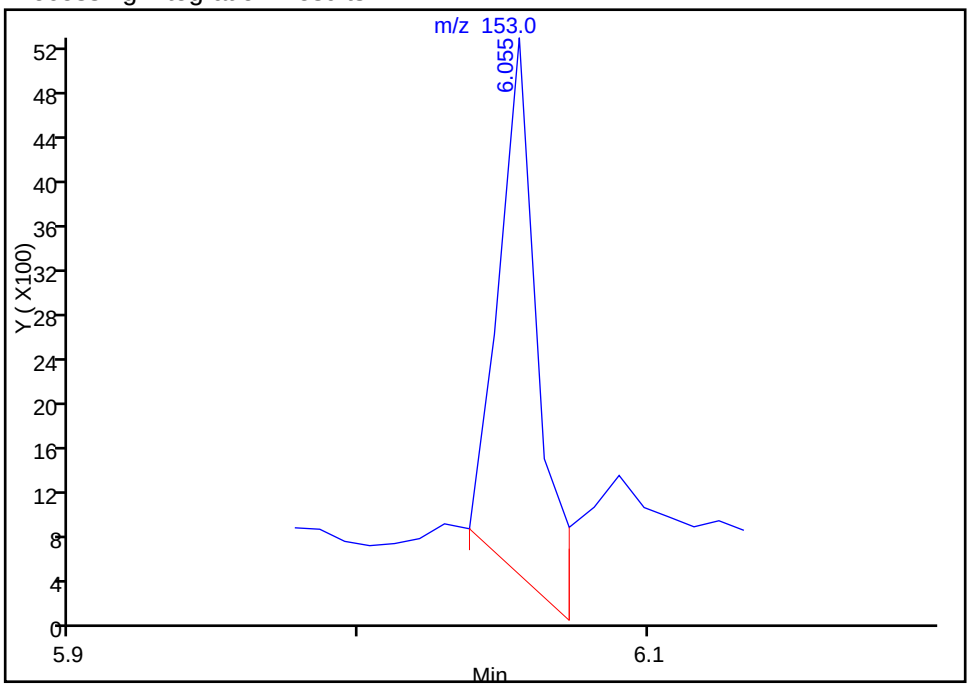
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Injection Date:	16-Jun-2017 22:57:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-16-B	Lab Sample ID:	280-97928-16		
Client ID:	SS025-SB09(4-6)				
Operator ID:	WICKHAMM	ALS Bottle#:	19	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

23 Acenaphthene, CAS: 83-32-9

Signal: 1

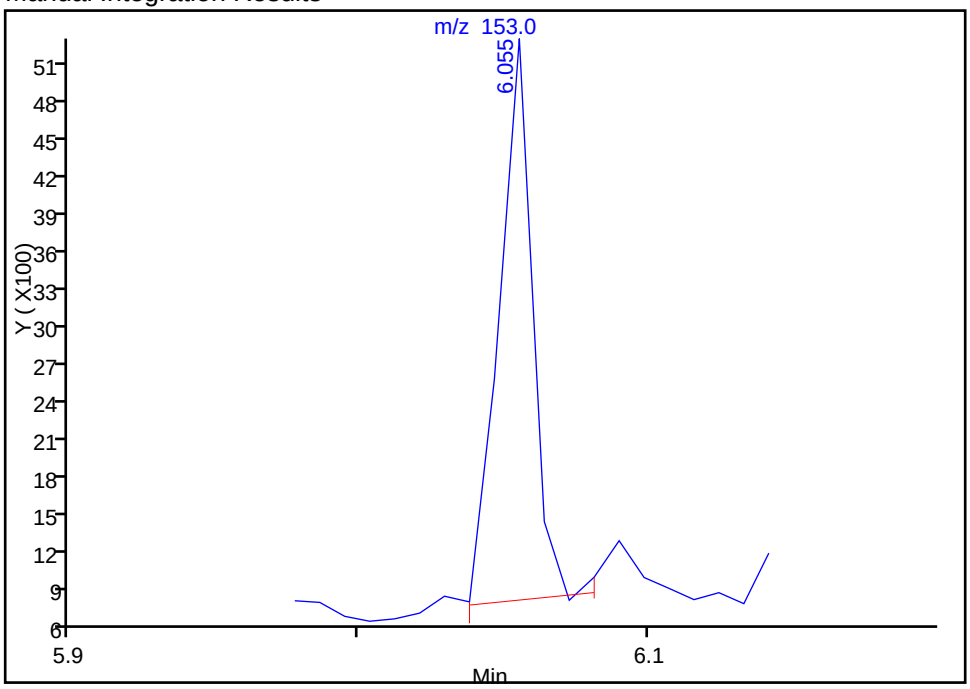
Processing Integration Results

RT: 6.06
Area: 4636
Amount: 101.2630
Amount Units: ng/ml



Manual Integration Results

RT: 6.06
Area: 3586
Amount: 78.328107
Amount Units: ng/ml



Reviewer: wickhamm, 19-Jun-2017 15:28:36

Audit Action: Manually Integrated Audit Reason: Baseline

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(6-8) | Lab Sample ID: 280-97928-17

Matrix: Solid | Lab File ID: F7287.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 14:10

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 31.7(g) | Date Analyzed: 06/16/2017 23:23

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 13.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.55	U	5.5	0.55	0.29
91-57-6	2-Methylnaphthalene	0.73	U	5.5	0.73	0.34
83-32-9	Acenaphthene	0.29	U	5.5	0.29	0.18
208-96-8	Acenaphthylene	1.1	J	5.5	0.73	0.19
120-12-7	Anthracene	2.7	U	5.5	2.7	0.79
56-55-3	Benzo[a]anthracene	2.7	U	5.5	2.7	0.99
50-32-8	Benzo[a]pyrene	0.85	J	5.5	2.7	0.81
205-99-2	Benzo[b]fluoranthene	1.7	J	5.5	2.7	1.3
191-24-2	Benzo[g,h,i]perylene	2.7	U	5.5	2.7	1.2
207-08-9	Benzo[k]fluoranthene	2.7	U	5.5	2.7	1.1
218-01-9	Chrysene	1.4	J	5.5	2.7	1.1
53-70-3	Dibenz(a,h)anthracene	2.7	U	5.5	2.7	1.4
206-44-0	Fluoranthene	1.3	J	5.5	2.7	1.1
86-73-7	Fluorene	0.73	U	5.5	0.73	0.52
193-39-5	Indeno[1,2,3-cd]pyrene	2.7	U	5.5	2.7	1.2
91-20-3	Naphthalene	0.73	U	5.5	0.73	0.36
85-01-8	Phenanthrene	2.7	U	5.5	2.7	1.2
129-00-0	Pyrene	1.3	J	5.5	2.7	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	89		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	91		44-125
1718-51-0	Terphenyl-d14 (Surr)	77		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7287.D
Lims ID: 280-97928-C-17-B
Client ID: SS025-SB09(6-8)
Sample Type: Client
Inject. Date: 16-Jun-2017 23:23:30 ALS Bottle#: 20 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-17-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:29:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	91	20964	600.0	
* 2 Phenanthrene-d10	188	7.301	7.301	0.000	100	35764	600.0	
* 3 Chrysene-d12	240	11.371	11.371	0.000	92	31716	600.0	
$ 4 Nitrobenzene-d5	82	4.005	4.001	0.004	100	14937	454.9	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	100	24120	443.7	
$ 6 Terphenyl-d14	244	9.124	9.130	-0.006	88	13905	382.9	
14 Naphthalene	128		4.589				ND	
16 2-Methylnaphthalene	142		5.147				ND	
17 1-Methylnaphthalene	142		5.235				ND	
22 Acenaphthylene	152	5.917	5.917	0.000	84	2197	30.4	
23 Acenaphthene	153		6.055				ND	
25 Fluorene	166		6.494				ND	
27 Phenanthrene	178	7.321	7.321	0.000	77	1925	25.4	
28 Anthracene	178	7.367	7.366	0.001	47	663	8.66	
30 Fluoranthene	202	8.629	8.629	0.000	50	3065	35.2	
31 Pyrene	202	8.968	8.968	0.000	51	3213	35.6	
35 Benzo[a]anthracene	228	11.344	11.344	0.000	38	1999	23.7	
36 Chrysene	228	11.443	11.443	0.000	51	3088	39.6	
38 Benzo[b]fluoranthene	252	14.498	14.503	-0.005	42	3565	46.6	
39 Benzo[k]fluoranthene	252	14.582	14.586	-0.004	31	1505	19.5	
40 Benzo[a]pyrene	252	15.592	15.587	0.005	28	1766	23.4	
41 Indeno[1,2,3-cd]pyrene	276	18.680	18.676	0.004	24	1637	19.1	
42 Dibenz(a,h)anthracene	278		18.702				ND	
43 Benzo[g,h,i]perylene	276		19.109				ND	

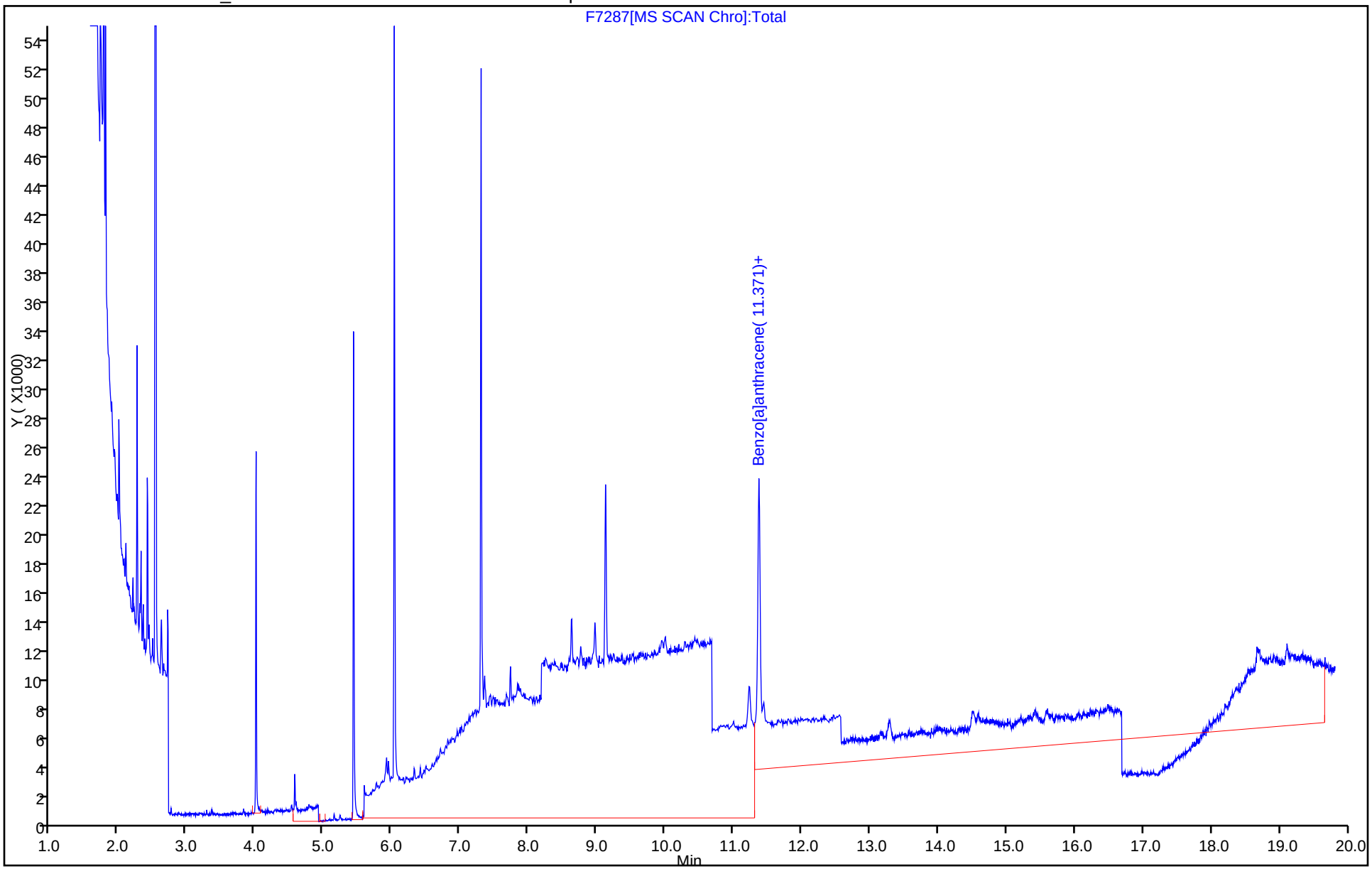
Reagents:

MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7287.D				
Injection Date:	16-Jun-2017 23:23:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-C-17-B	Lab Sample ID:	280-97928-17	Worklist Smp#:	21
Client ID:	SS025-SB09(6-8)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7287.D
Lims ID: 280-97928-C-17-B
Client ID: SS025-SB09(6-8)
Sample Type: Client
Inject. Date: 16-Jun-2017 23:23:30 ALS Bottle#: 20 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-17-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:29:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	454.9	90.97
$ 5 2-Fluorobiphenyl	500.0	443.7	88.75
$ 6 Terphenyl-d14	500.0	382.9	76.58

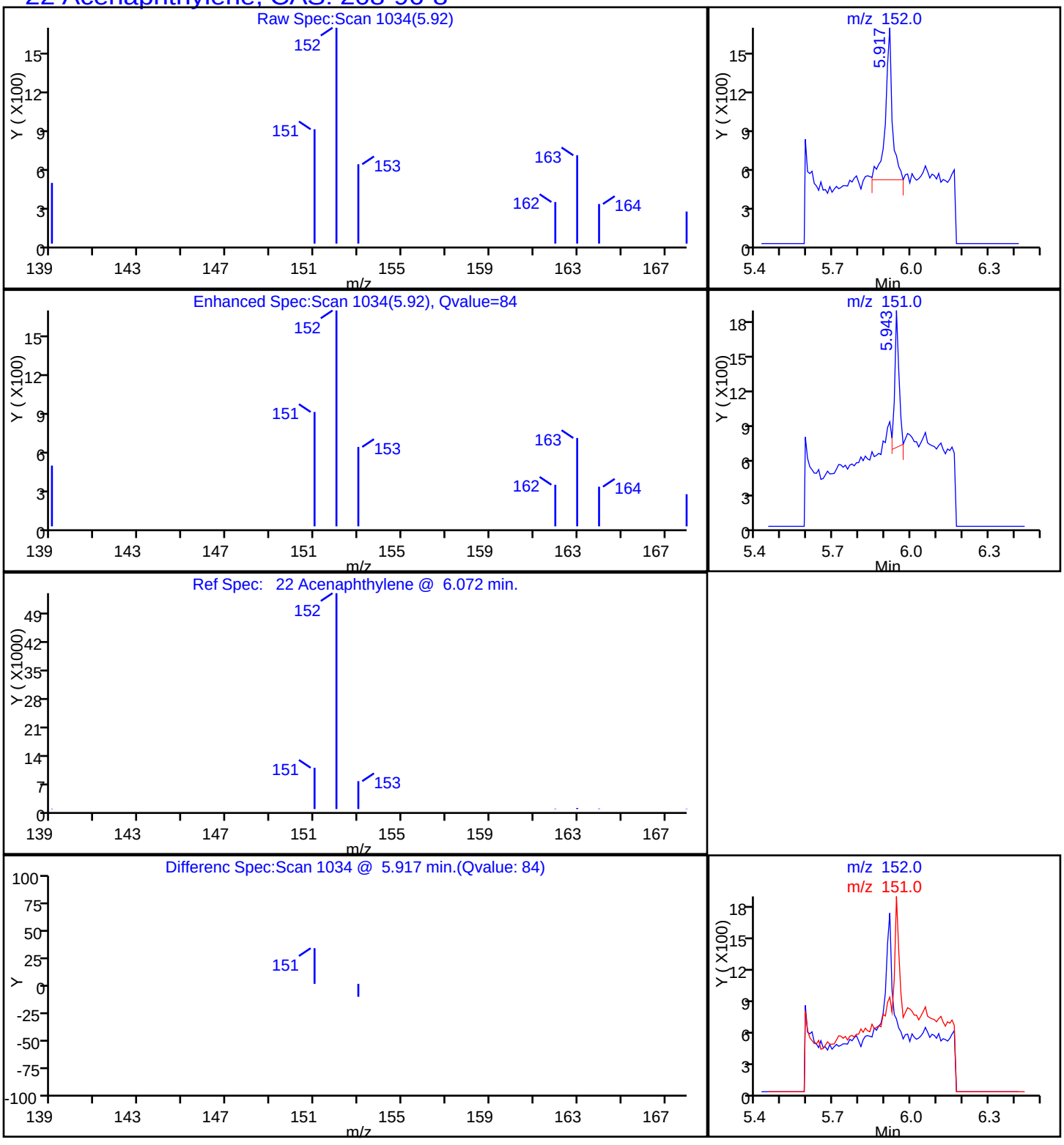
Report Date: 19-Jun-2017 15:44:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7287.D

Injection Date:	16-Jun-2017 23:23:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-17-B	Lab Sample ID:	280-97928-17		
Client ID:	SS025-SB09(6-8)				
Operator ID:	WICKHAMM	ALS Bottle#:	20	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Acenaphthylene, CAS: 208-96-8



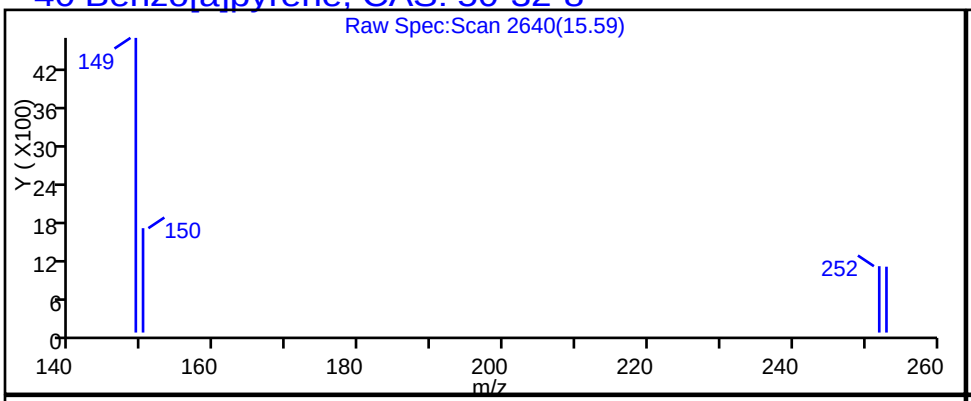
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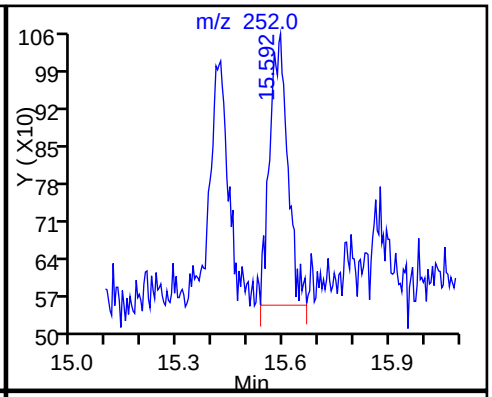
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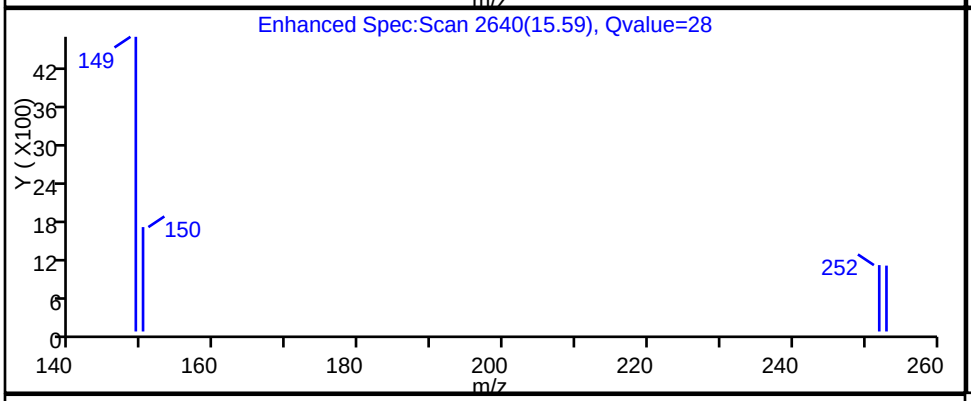
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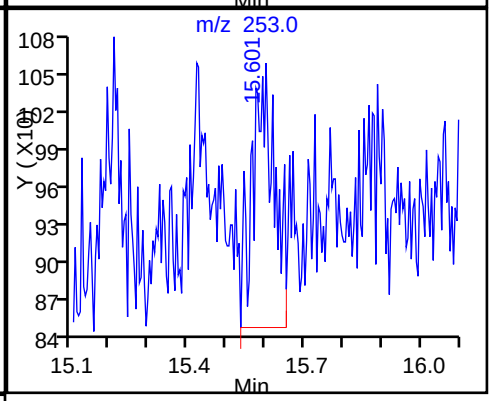
Injection Date:	16-Jun-2017 23:23:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-17-B	Lab Sample ID:	280-97928-17		
Client ID:	SS025-SB09(6-8)				
Operator ID:	WICKHAMM	ALS Bottle#:	20	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

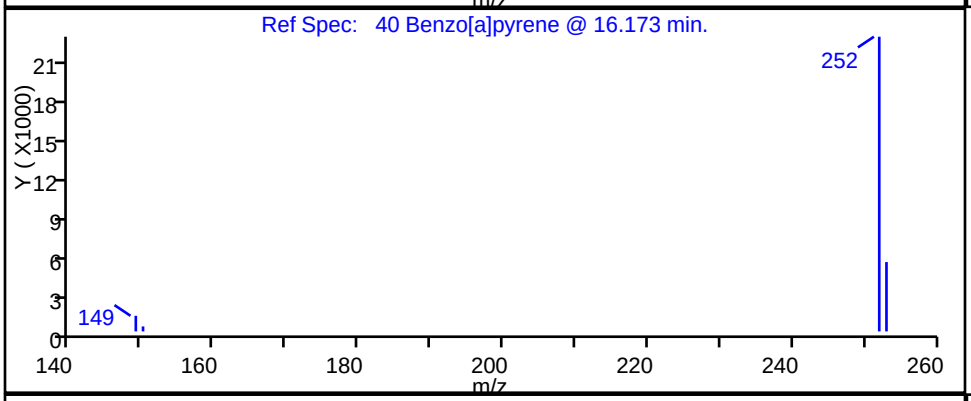
40 Benzo[a]pyrene, CAS: 50-32-8

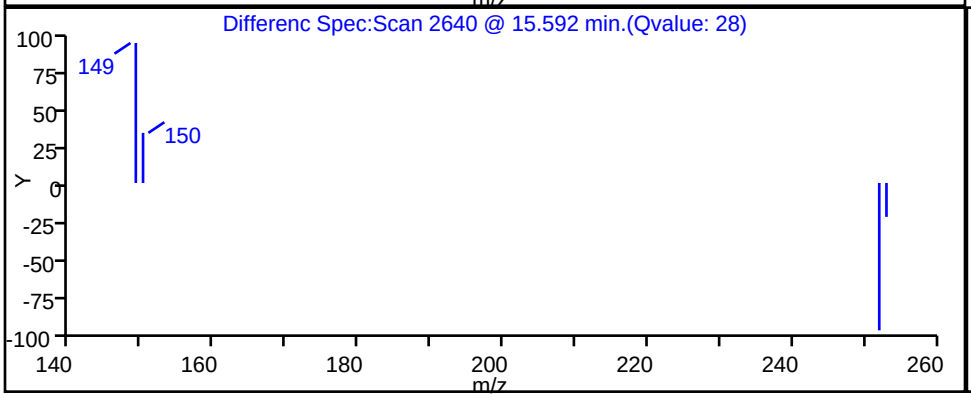


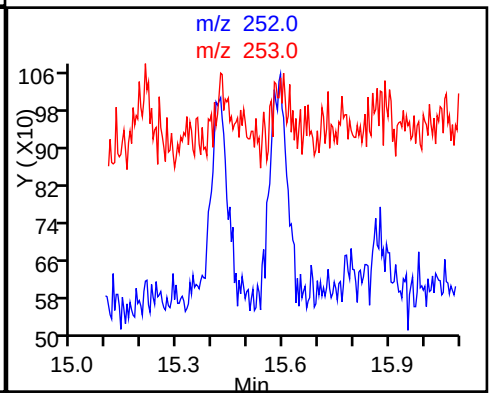










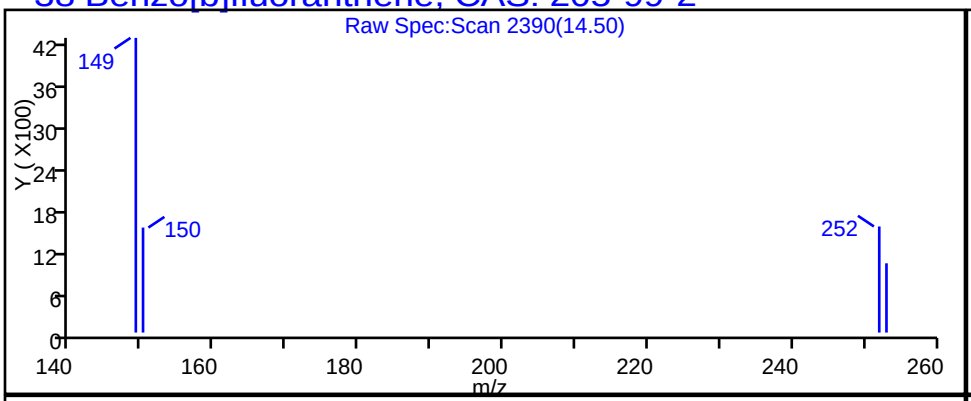


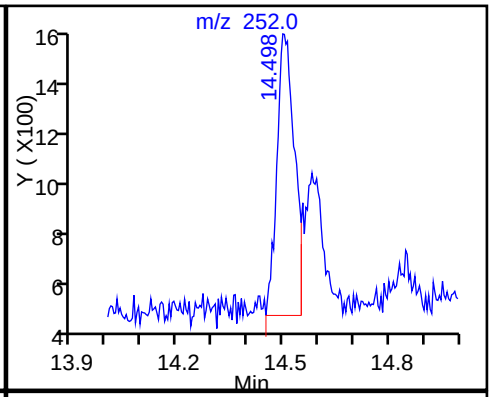
Report Date: 19-Jun-2017 15:44:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

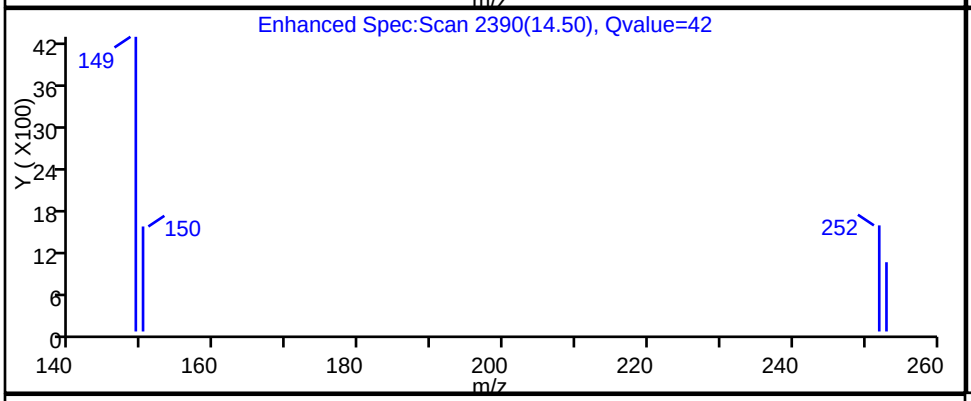
TestAmerica Denver

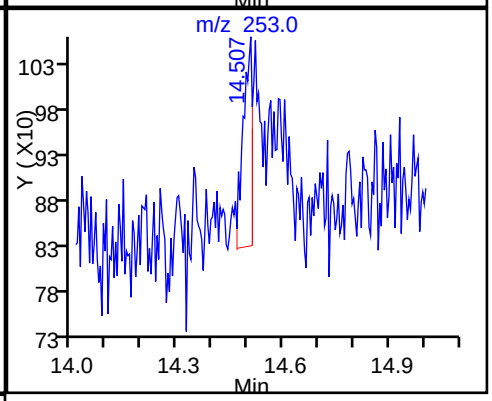
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Injection Date:	16-Jun-2017 23:23:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-17-B	Lab Sample ID:	280-97928-17		
Client ID:	SS025-SB09(6-8)				
Operator ID:	WICKHAMM	ALS Bottle#:	20	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

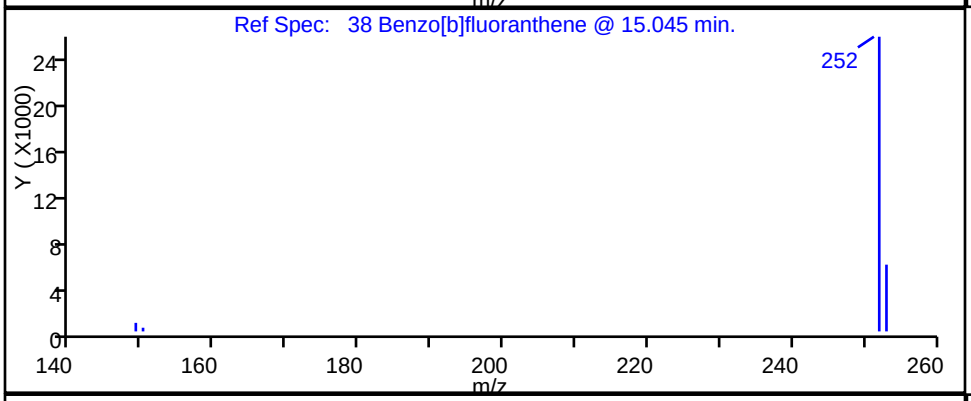
38 Benzo[b]fluoranthene, CAS: 205-99-2

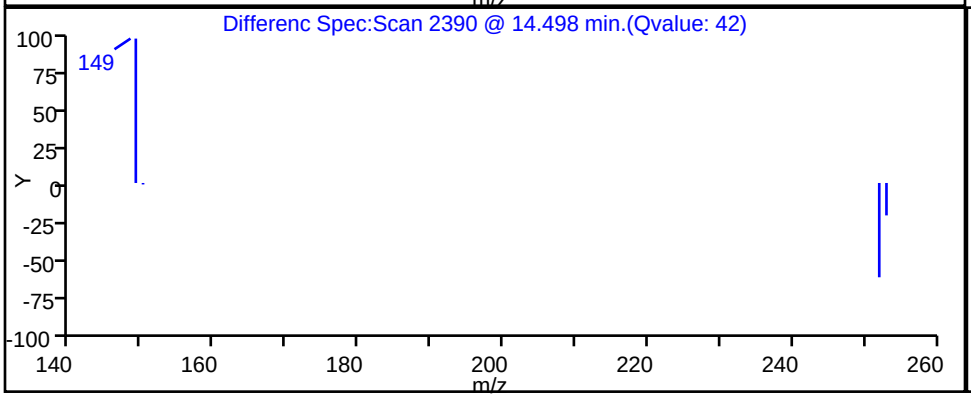


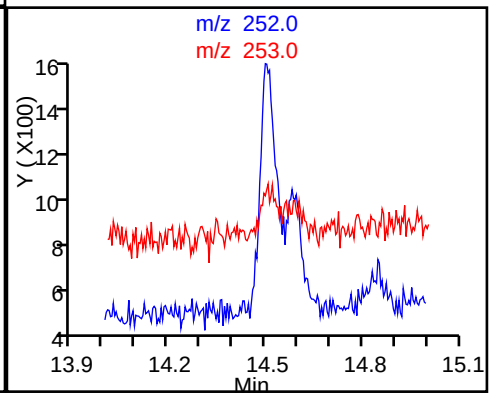










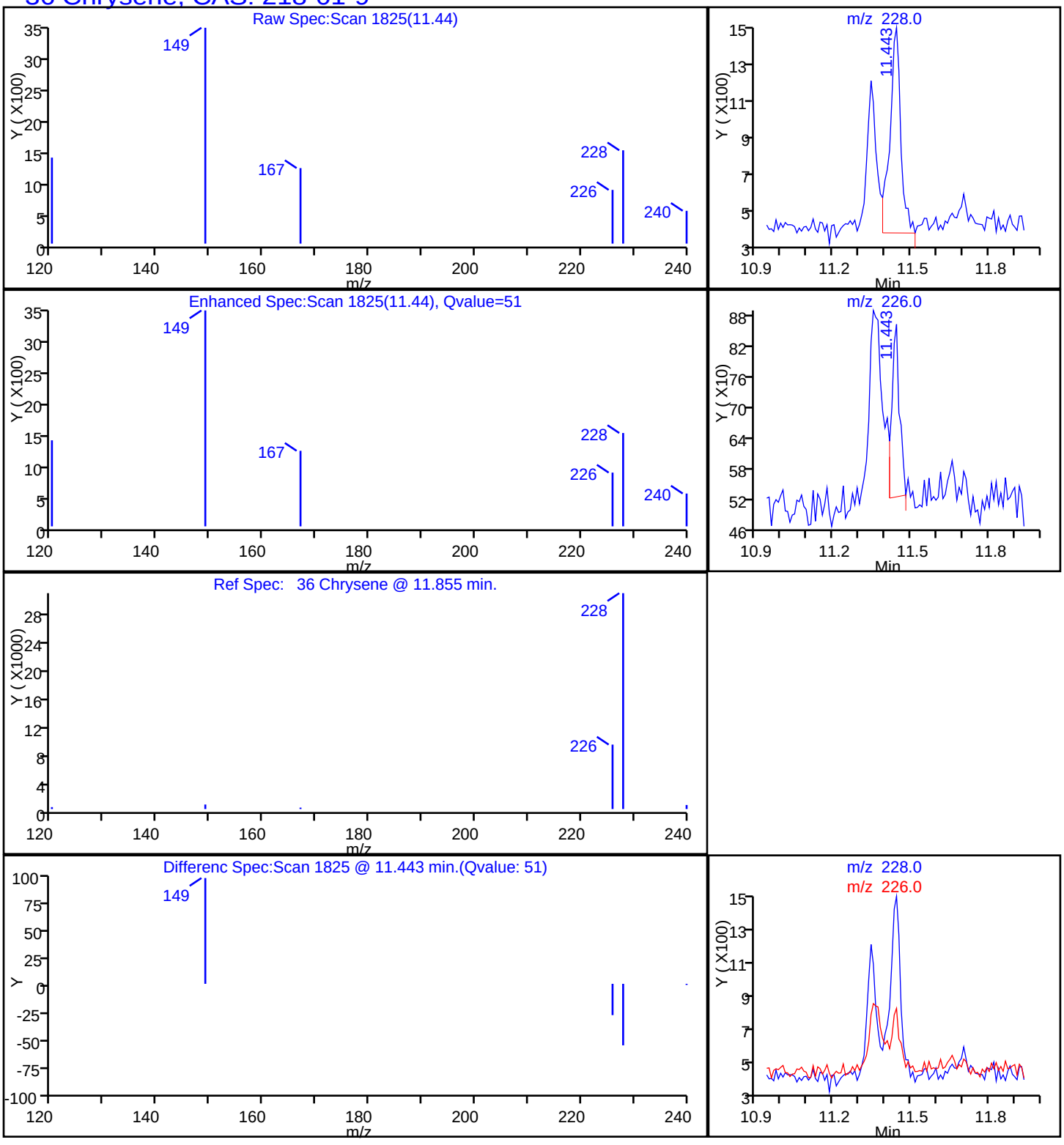


Report Date: 19-Jun-2017 15:44:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7287.D				
Injection Date:	16-Jun-2017 23:23:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-17-B	Lab Sample ID:	280-97928-17		
Client ID:	SS025-SB09(6-8)				
Operator ID:	WICKHAMM	ALS Bottle#:	20	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Chrysene, CAS: 218-01-9



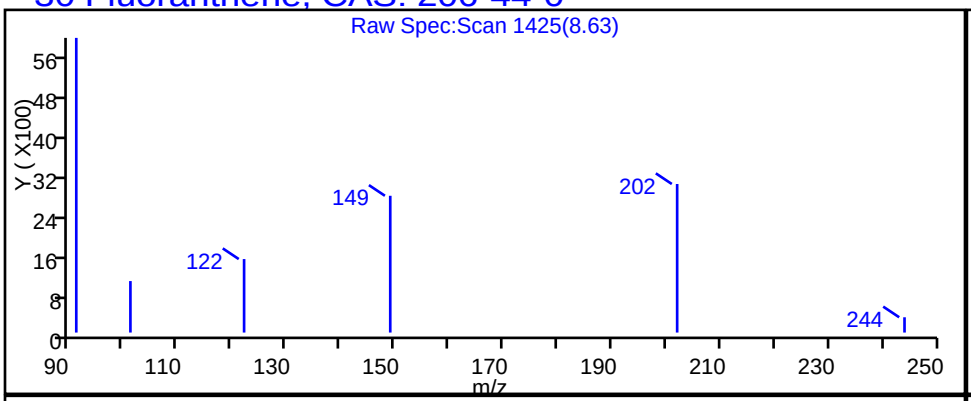
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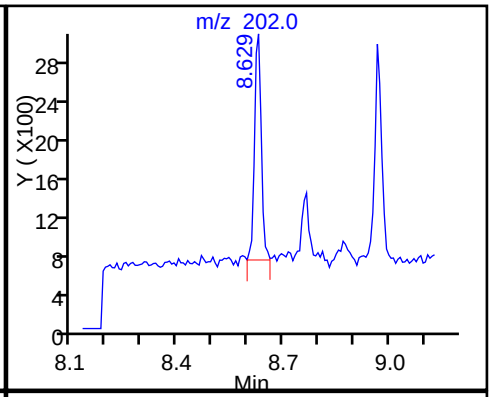
TestAmerica Denver

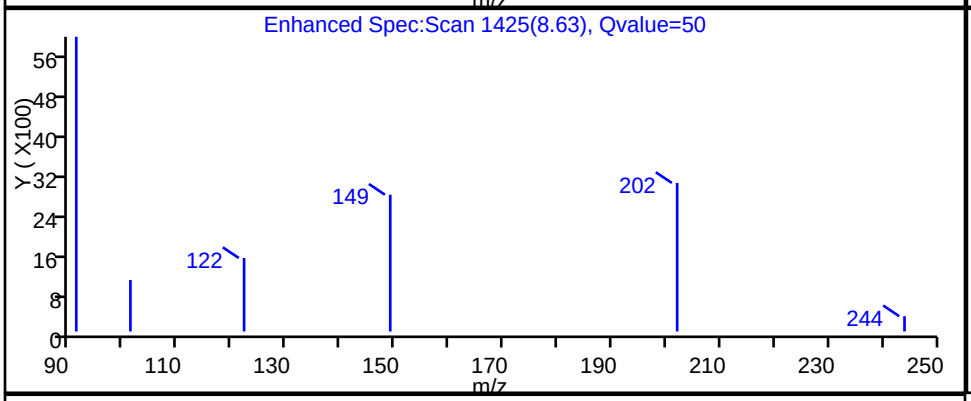
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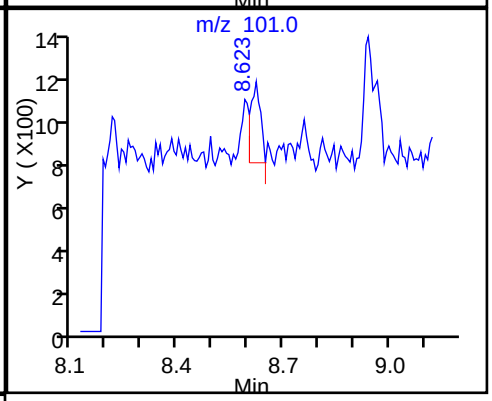
Injection Date:	16-Jun-2017 23:23:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-17-B	Lab Sample ID:	280-97928-17		
Client ID:	SS025-SB09(6-8)				
Operator ID:	WICKHAMM	ALS Bottle#:	20	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

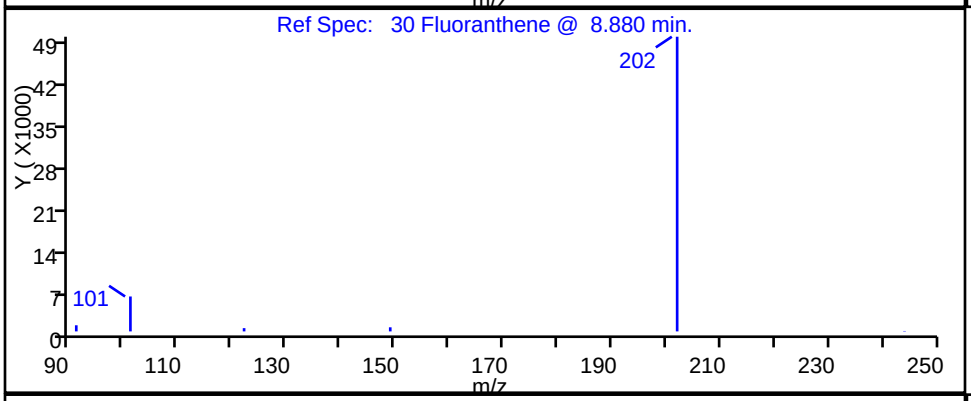
30 Fluoranthene, CAS: 206-44-0

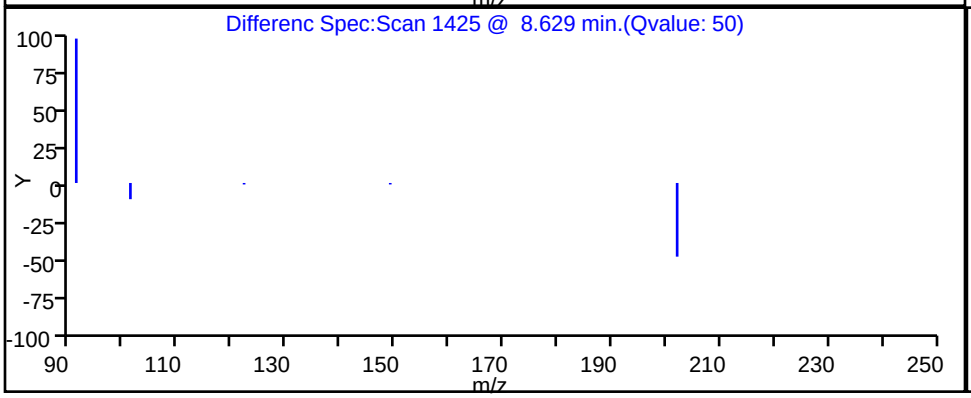


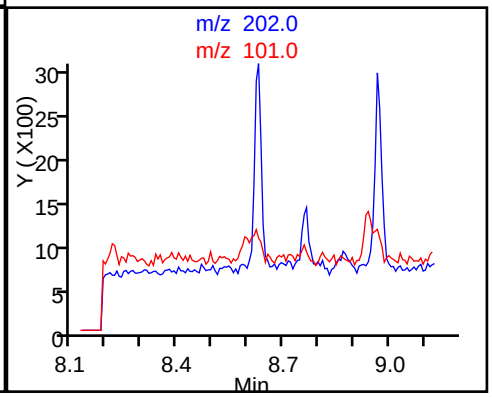












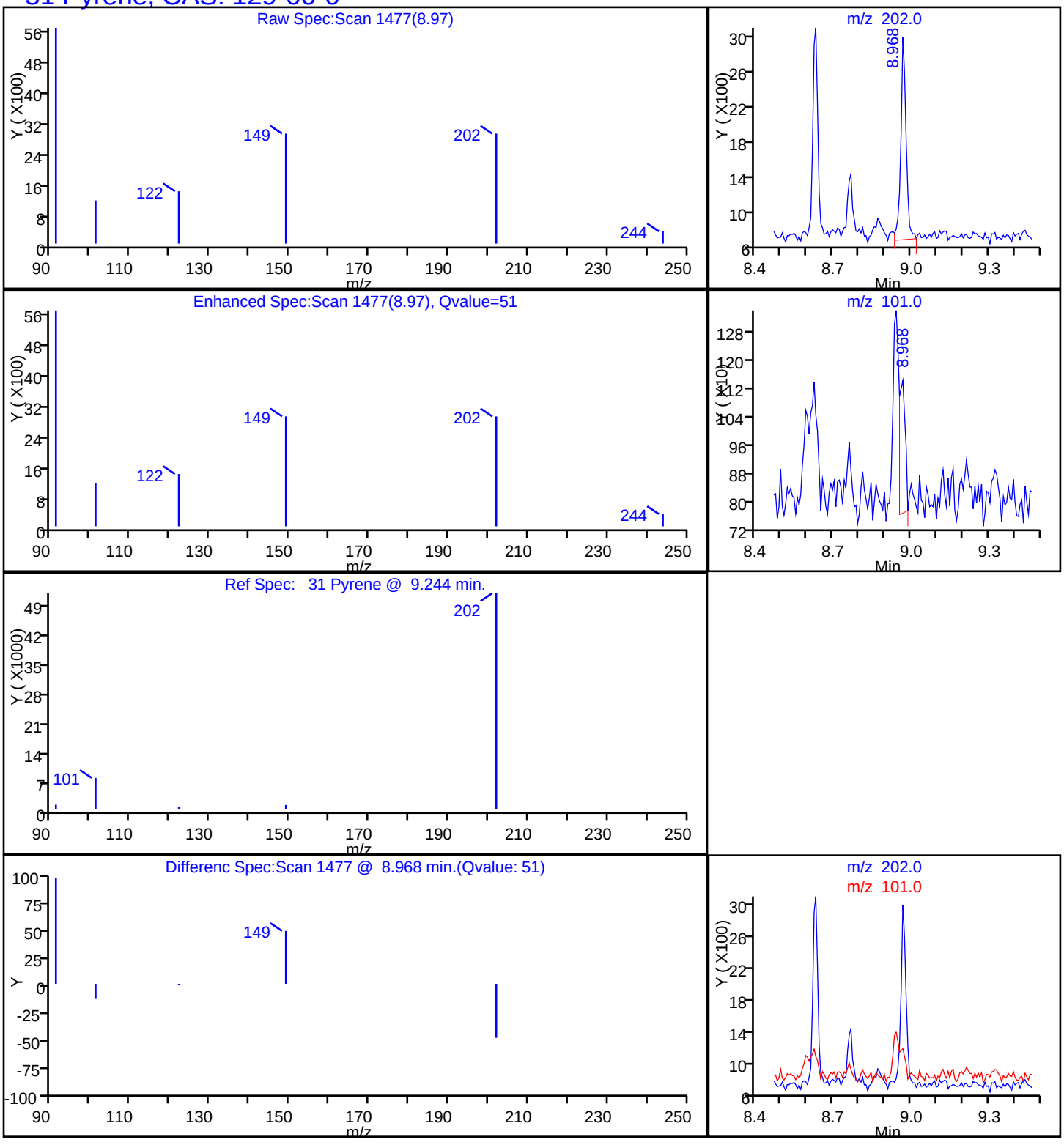
Report Date: 19-Jun-2017 15:44:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7287.D

Injection Date:	16-Jun-2017 23:23:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-17-B	Lab Sample ID:	280-97928-17		
Client ID:	SS025-SB09(6-8)				
Operator ID:	WICKHAMM	ALS Bottle#:	20	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

31 Pyrene, CAS: 129-00-0



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(0-2) | Lab Sample ID: 280-97928-18

Matrix: Solid | Lab File ID: F7288.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 14:35

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 32.6(g) | Date Analyzed: 06/16/2017 23:49

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 8.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.50	U	5.0	0.50	0.26
91-57-6	2-Methylnaphthalene	0.67	U	5.0	0.67	0.31
83-32-9	Acenaphthene	0.27	U	5.0	0.27	0.16
208-96-8	Acenaphthylene	1.1	J	5.0	0.67	0.17
120-12-7	Anthracene	0.84	J	5.0	2.5	0.72
56-55-3	Benzo[a]anthracene	2.7	J	5.0	2.5	0.90
50-32-8	Benzo[a]pyrene	3.2	J	5.0	2.5	0.74
205-99-2	Benzo[b]fluoranthene	4.8	J	5.0	2.5	1.2
191-24-2	Benzo[g,h,i]perylene	2.4	J	5.0	2.5	1.1
207-08-9	Benzo[k]fluoranthene	1.7	J	5.0	2.5	1.0
218-01-9	Chrysene	3.6	J	5.0	2.5	1.0
53-70-3	Dibenz(a,h)anthracene	2.5	U	5.0	2.5	1.3
206-44-0	Fluoranthene	5.1		5.0	2.5	1.0
86-73-7	Fluorene	0.48	J	5.0	0.67	0.47
193-39-5	Indeno[1,2,3-cd]pyrene	2.2	J	5.0	2.5	1.1
91-20-3	Naphthalene	0.67	U	5.0	0.67	0.33
85-01-8	Phenanthrene	2.4	J	5.0	2.5	1.1
129-00-0	Pyrene	4.5	J	5.0	2.5	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	90		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	94		44-125
1718-51-0	Terphenyl-d14 (Surr)	77		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7288.D
Lims ID: 280-97928-A-18-B
Client ID: SS025-SB10(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 23:49:30 ALS Bottle#: 21 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-a-18-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:34:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	90	22031	600.0	
* 2 Phenanthrene-d10	188	7.301	7.301	0.000	100	38515	600.0	
* 3 Chrysene-d12	240	11.371	11.371	0.000	94	34428	600.0	
$ 4 Nitrobenzene-d5	82	4.005	4.001	0.004	100	16148	467.9	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	99	25834	452.2	
$ 6 Terphenyl-d14	244	9.124	9.130	-0.006	95	15057	385.0	
14 Naphthalene	128	4.589	4.589	0.000	92	650	9.10	
16 2-Methylnaphthalene	142		5.147				ND	
17 1-Methylnaphthalene	142		5.235				ND	
22 Acenaphthylene	152	5.917	5.917	0.000	95	2558	33.7	
23 Acenaphthene	153		6.055				ND	
25 Fluorene	166	6.494	6.494	0.000	84	809	14.2	
27 Phenanthrene	178	7.321	7.321	0.000	95	5793	70.9	
28 Anthracene	178	7.366	7.366	0.000	89	2075	25.2	
30 Fluoranthene	202	8.623	8.629	-0.006	98	14223	151.6	
31 Pyrene	202	8.968	8.968	0.000	98	13085	134.5	
35 Benzo[a]anthracene	228	11.344	11.344	0.000	83	7388	80.7	
36 Chrysene	228	11.443	11.443	0.000	96	9139	107.9	
38 Benzo[b]fluoranthene	252	14.503	14.503	0.000	91	11988	144.2	
39 Benzo[k]fluoranthene	252	14.577	14.586	-0.009	73	4304	51.5	
40 Benzo[a]pyrene	252	15.579	15.587	-0.008	82	7731	94.2	
41 Indeno[1,2,3-cd]pyrene	276	18.671	18.676	-0.005	60	6007	64.6	
42 Dibenz(a,h)anthracene	278	18.693	18.702	-0.009	36	1610	22.2	
43 Benzo[g,h,i]perylene	276	19.109	19.109	0.000	61	5772	73.1	

Reagents:

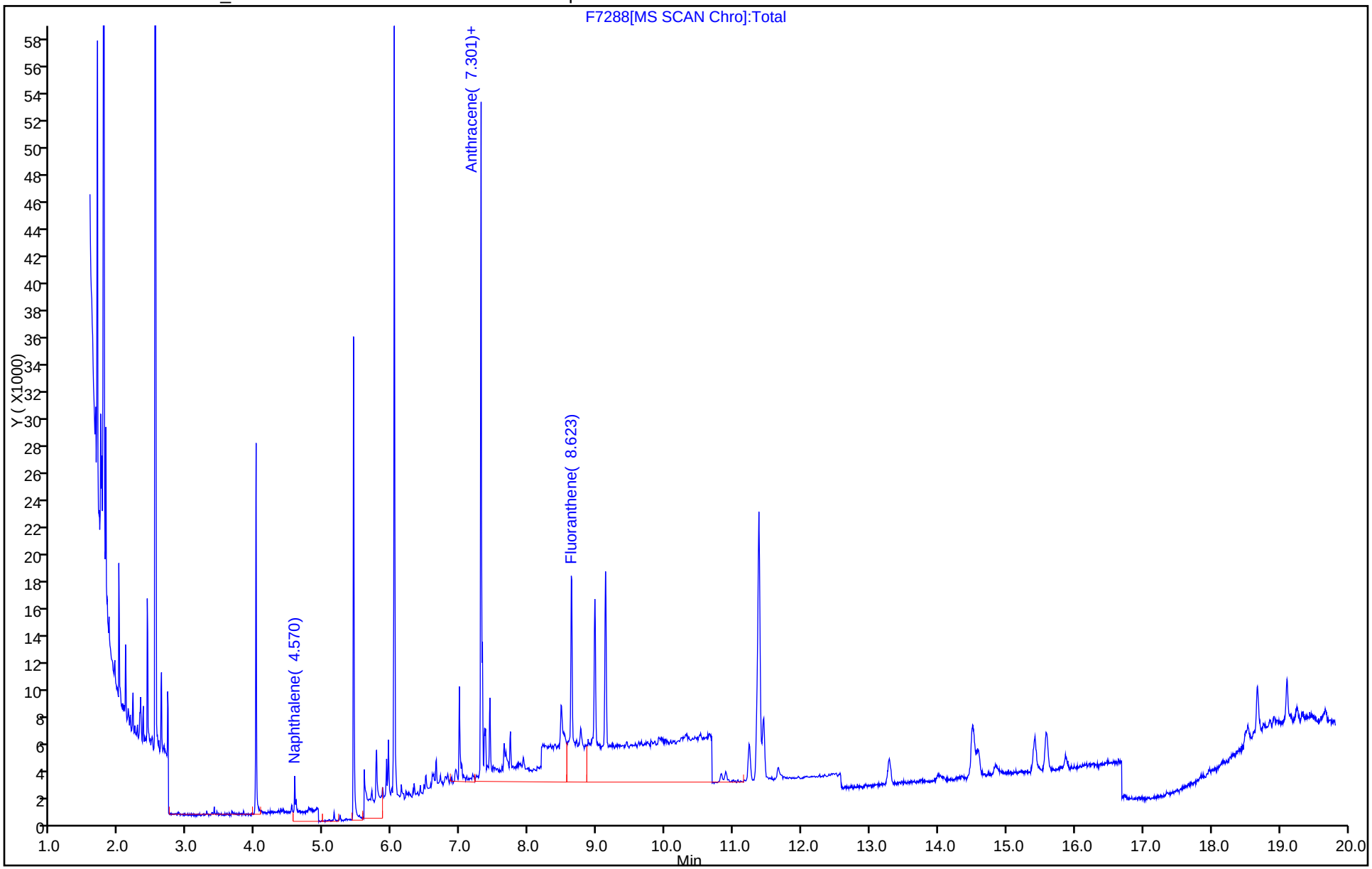
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:27 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7288.D

Injection Date:	16-Jun-2017 23:49:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-A-18-B	Lab Sample ID:	280-97928-18	Worklist Smp#:	22
Client ID:	SS025-SB10(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7288.D
Lims ID: 280-97928-A-18-B
Client ID: SS025-SB10(0-2)
Sample Type: Client
Inject. Date: 16-Jun-2017 23:49:30 ALS Bottle#: 21 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-a-18-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:34:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	467.9	93.58
$ 5 2-Fluorobiphenyl	500.0	452.2	90.45
$ 6 Terphenyl-d14	500.0	385.0	77.01

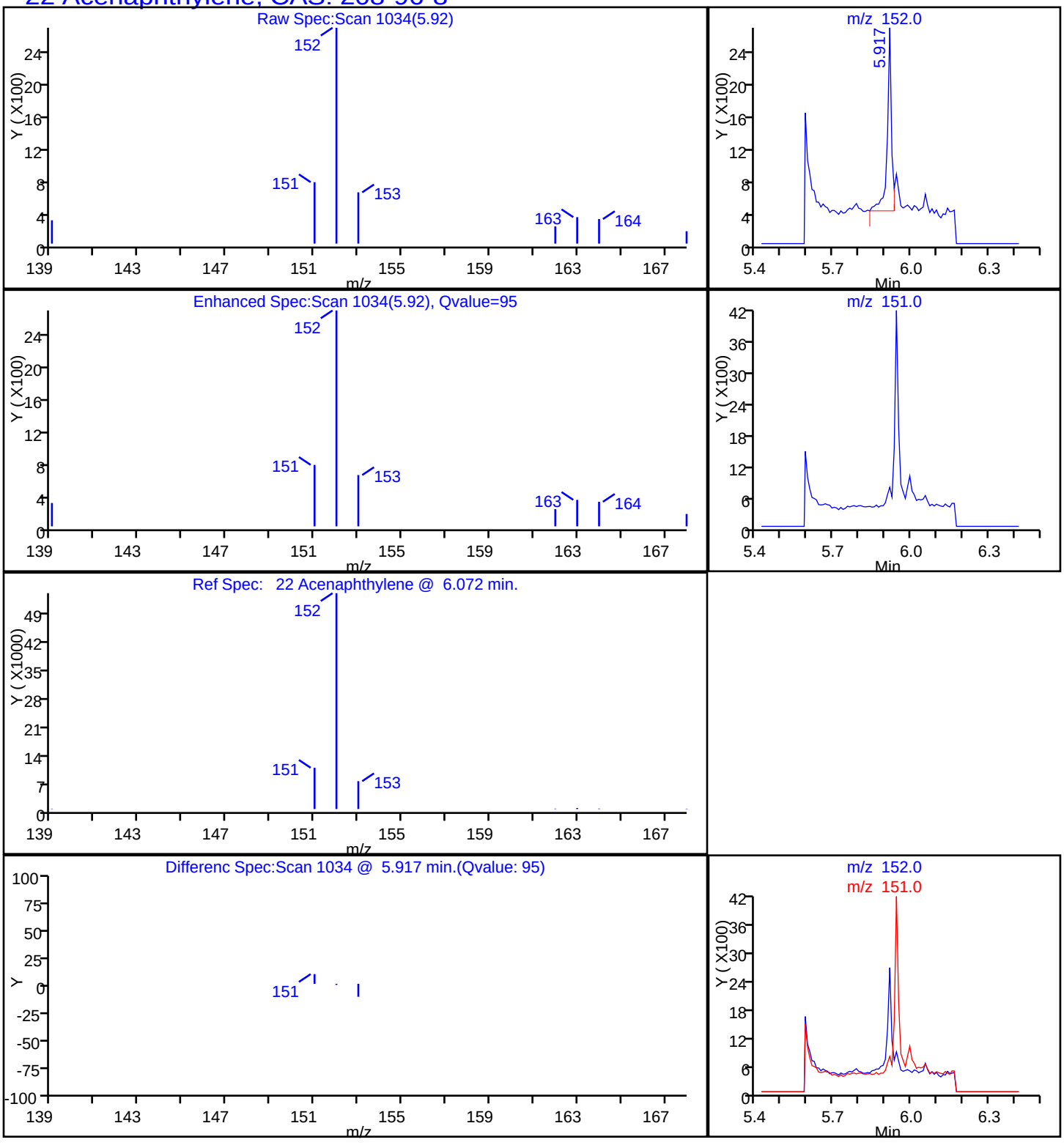
Report Date: 19-Jun-2017 15:44:27 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7288.D

Injection Date:	16-Jun-2017 23:49:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-18-B	Lab Sample ID:	280-97928-18		
Client ID:	SS025-SB10(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	21	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

22 Acenaphthylene, CAS: 208-96-8



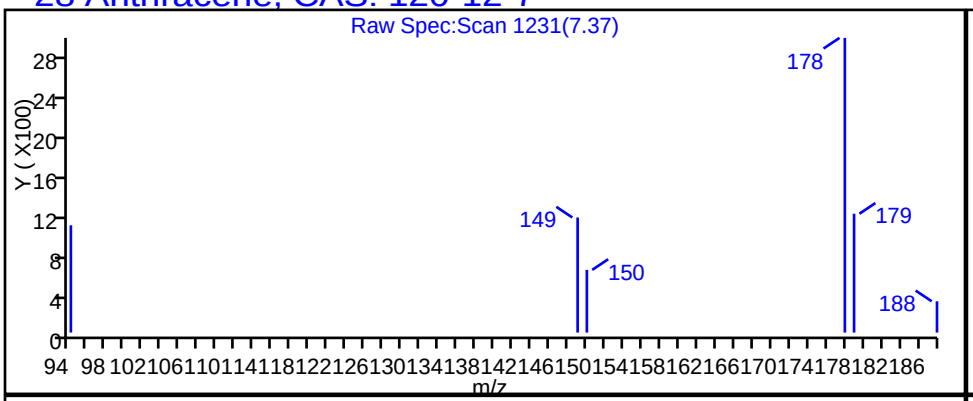
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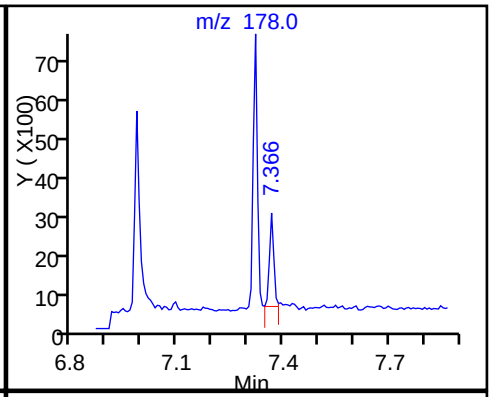
TestAmerica Denver

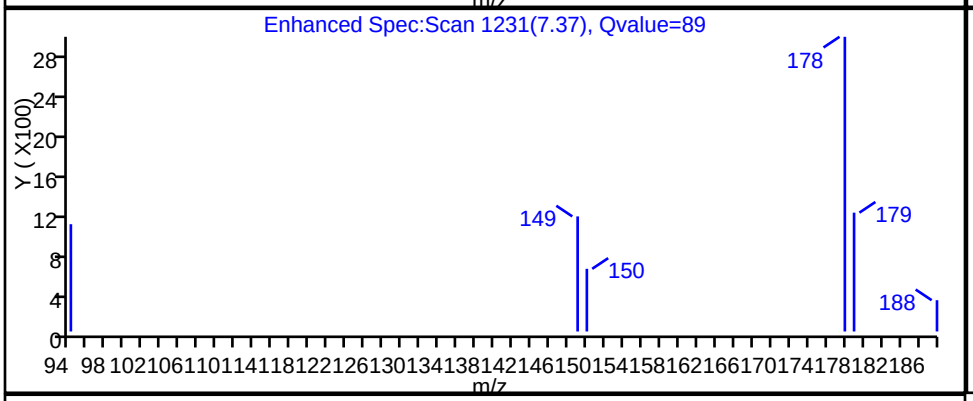
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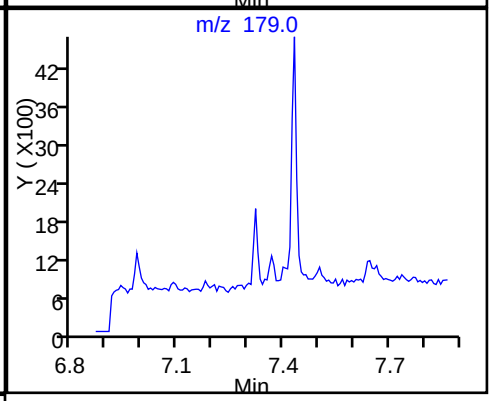
Injection Date:	16-Jun-2017 23:49:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-18-B	Lab Sample ID:	280-97928-18		
Client ID:	SS025-SB10(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	21	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

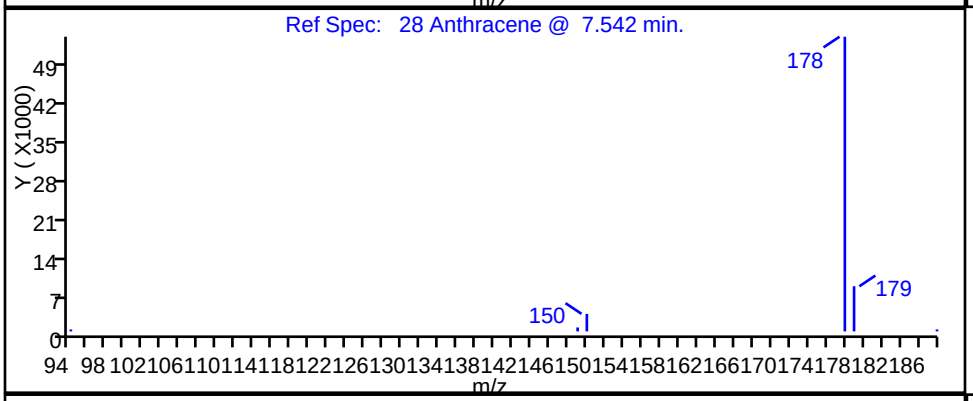
28 Anthracene, CAS: 120-12-7

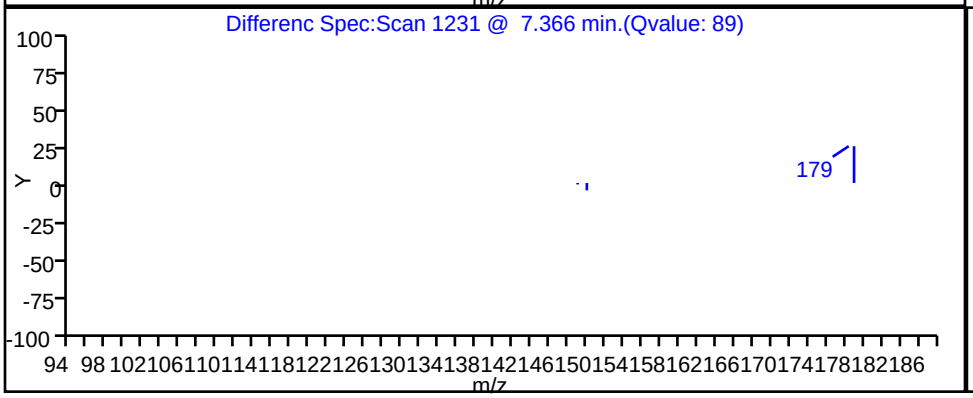


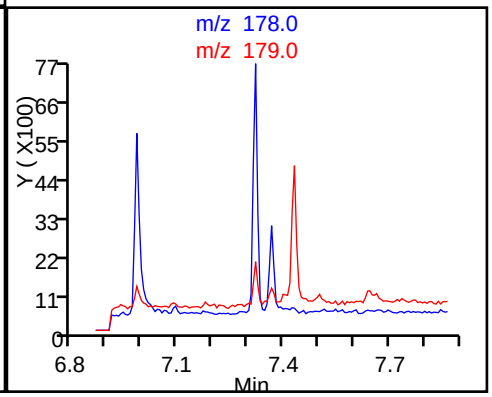










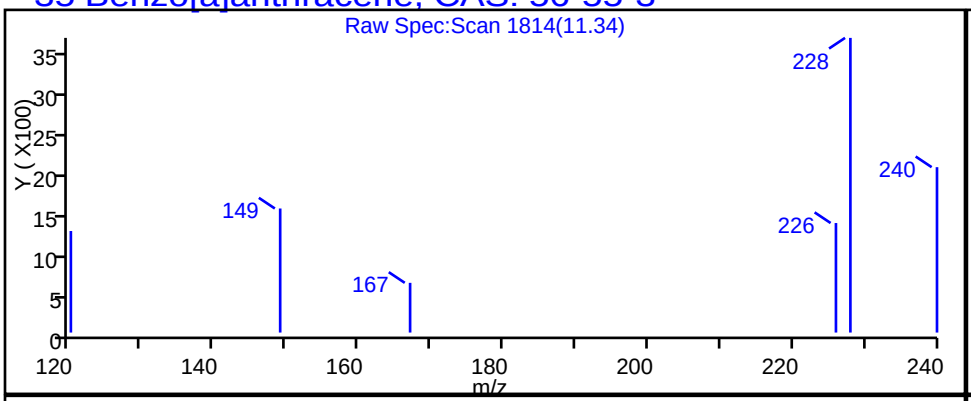


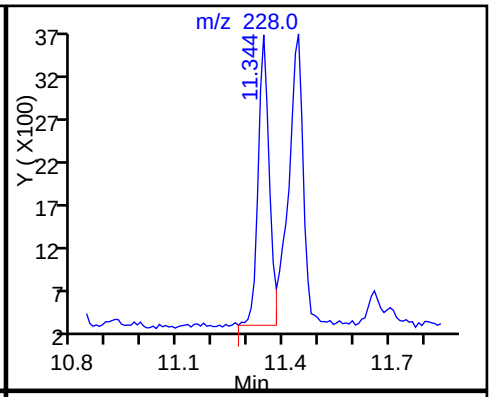
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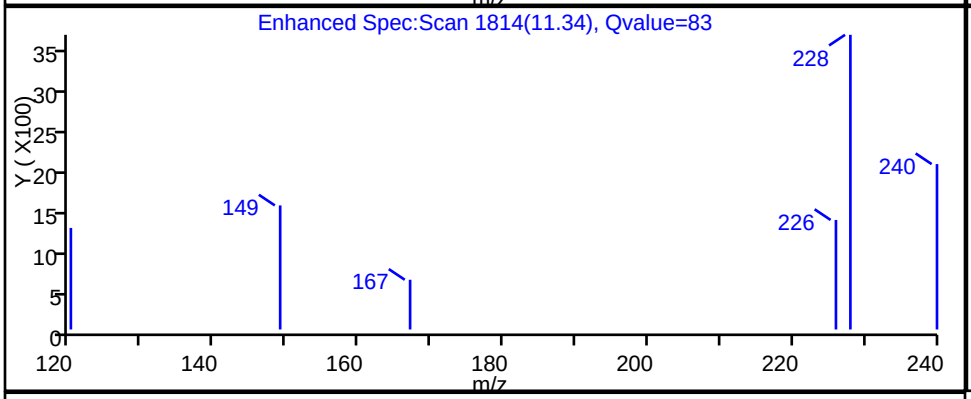
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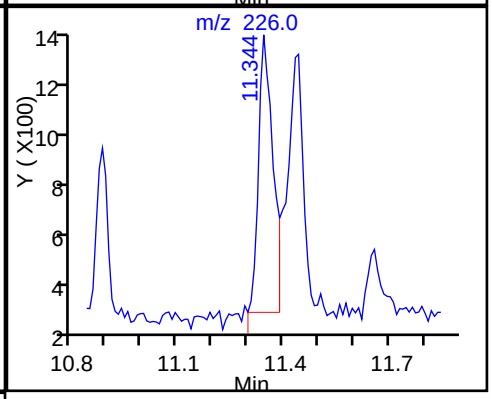
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Client ID:	SS025-SB10(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	21	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
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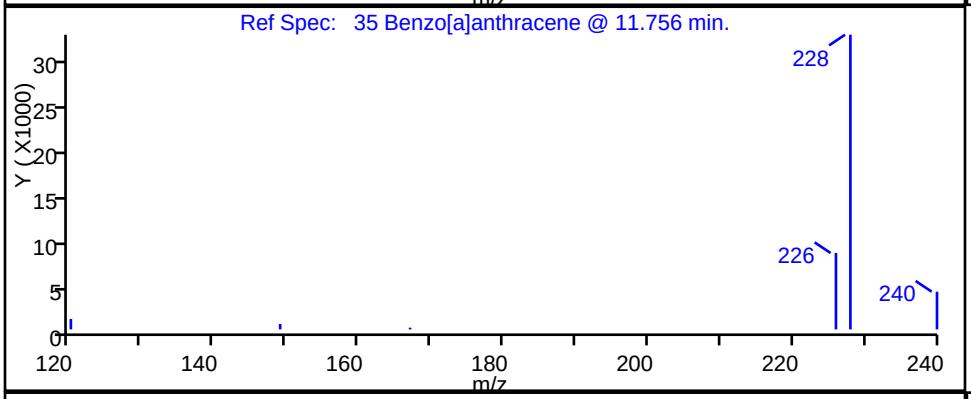
35 Benzo[a]anthracene, CAS: 56-55-3

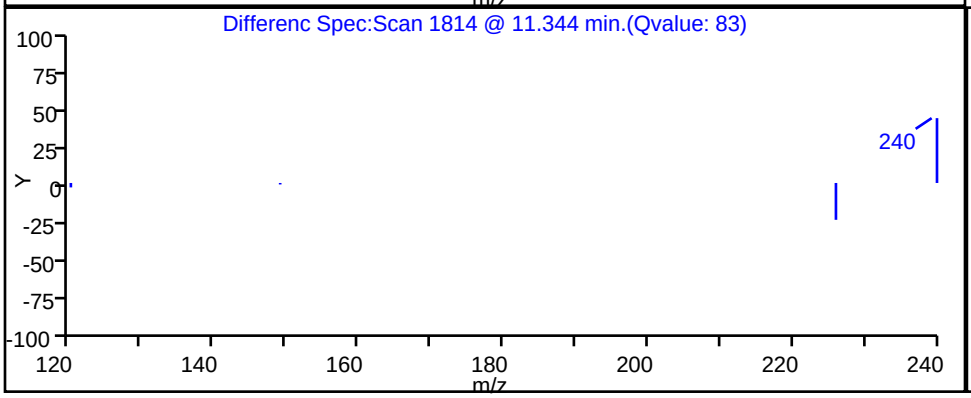


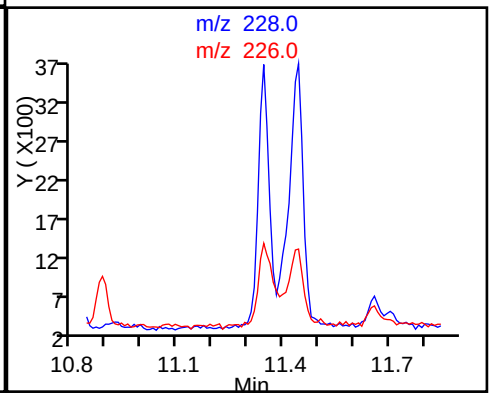












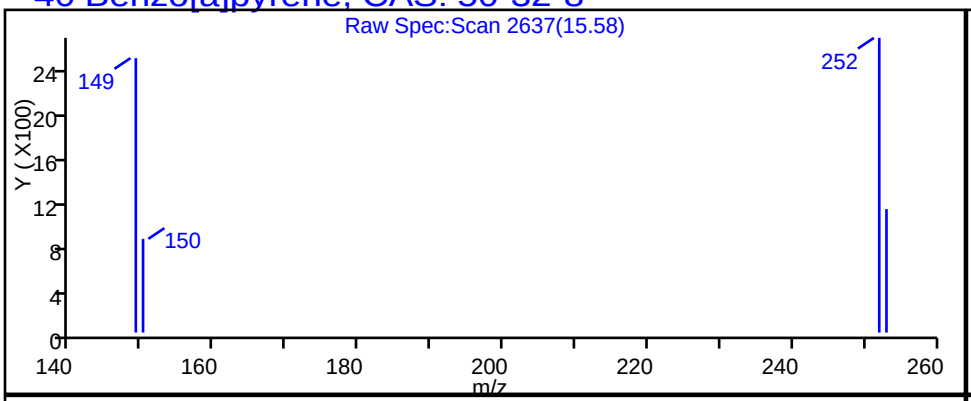
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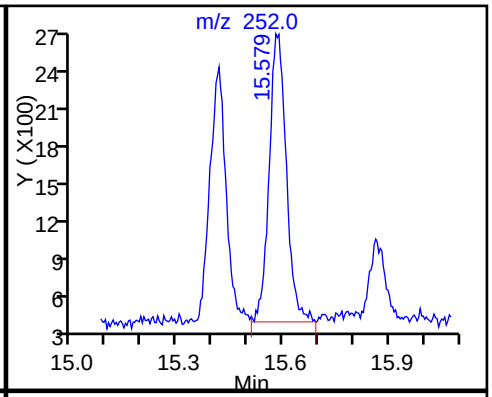
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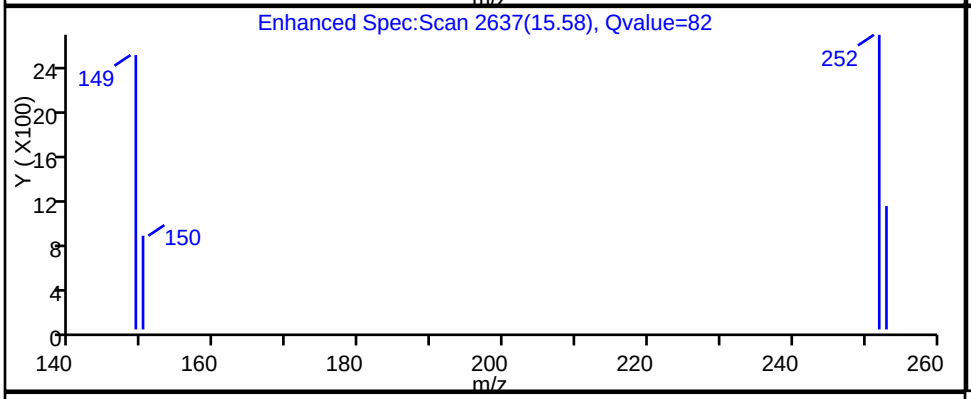
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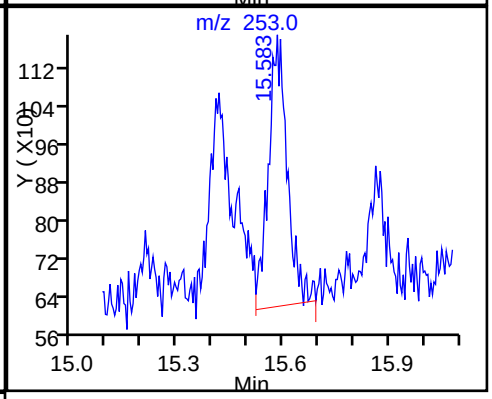
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Operator ID:	WICKHAMM	ALS Bottle#:	21	Worklist Smp#:	22
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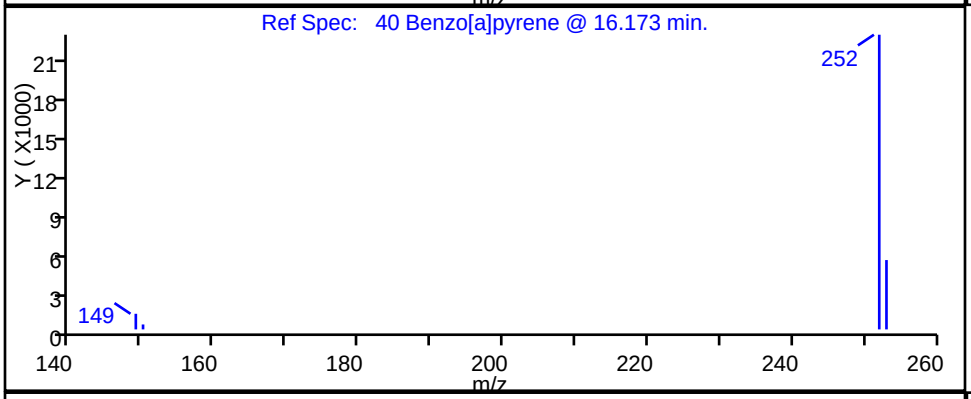
40 Benzo[a]pyrene, CAS: 50-32-8

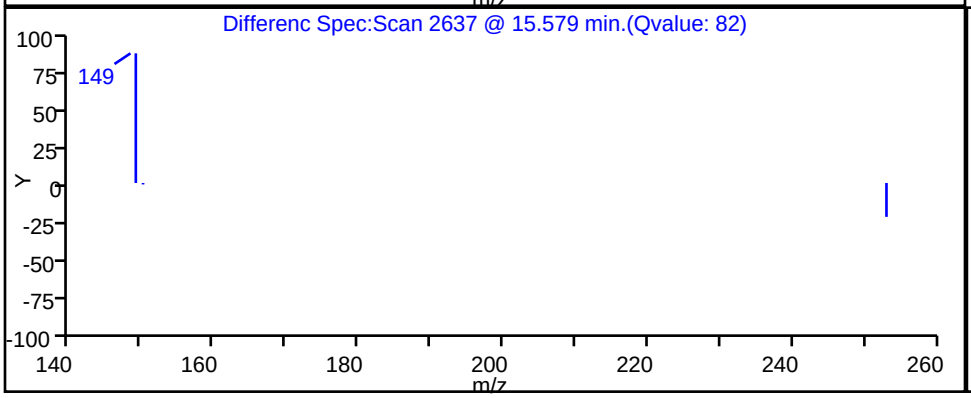


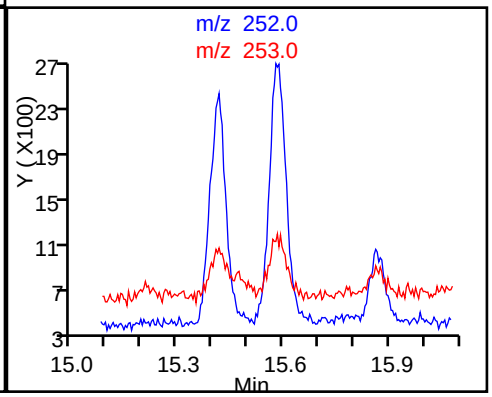












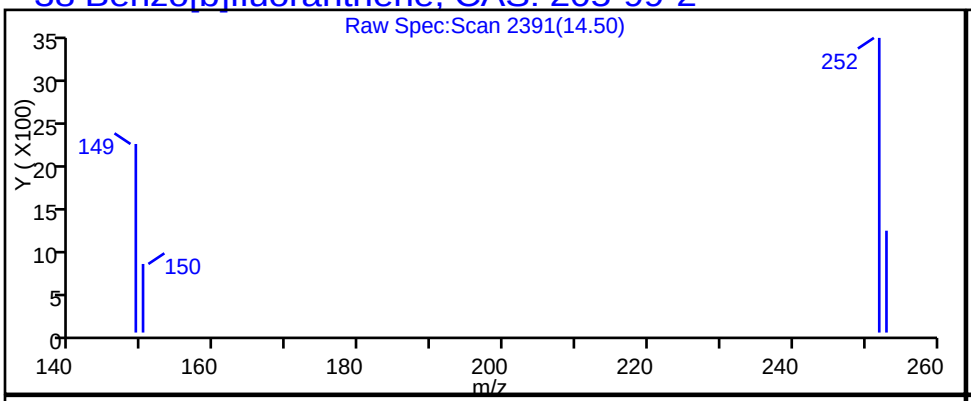
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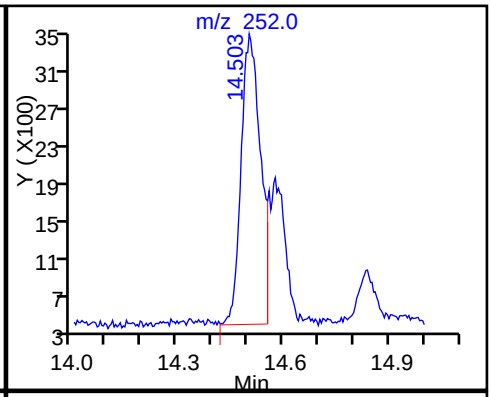
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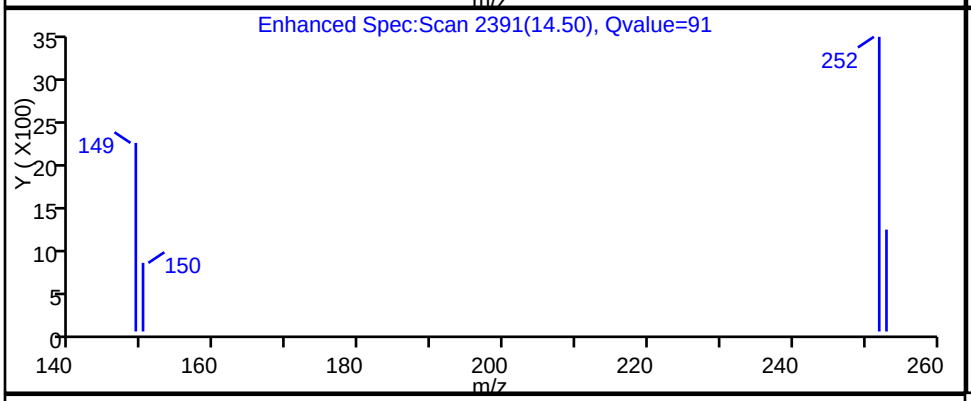
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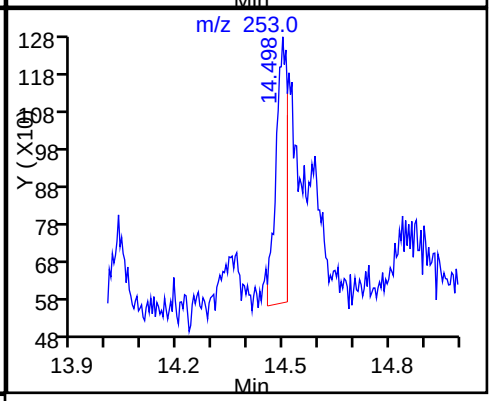
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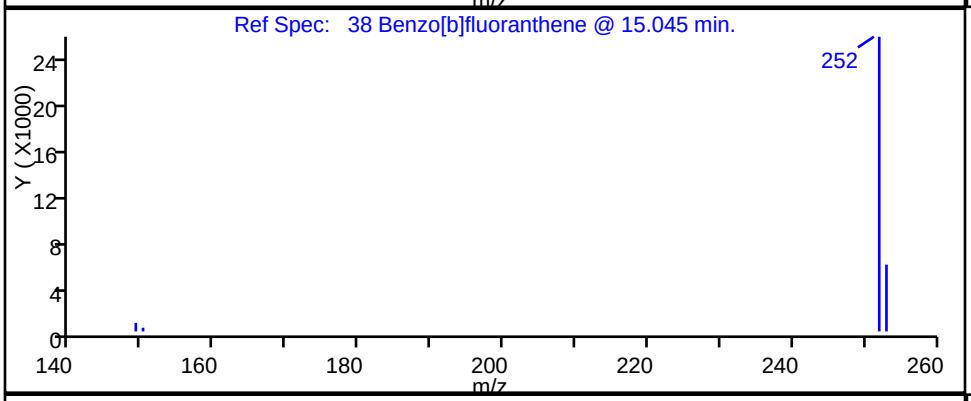
38 Benzo[b]fluoranthene, CAS: 205-99-2

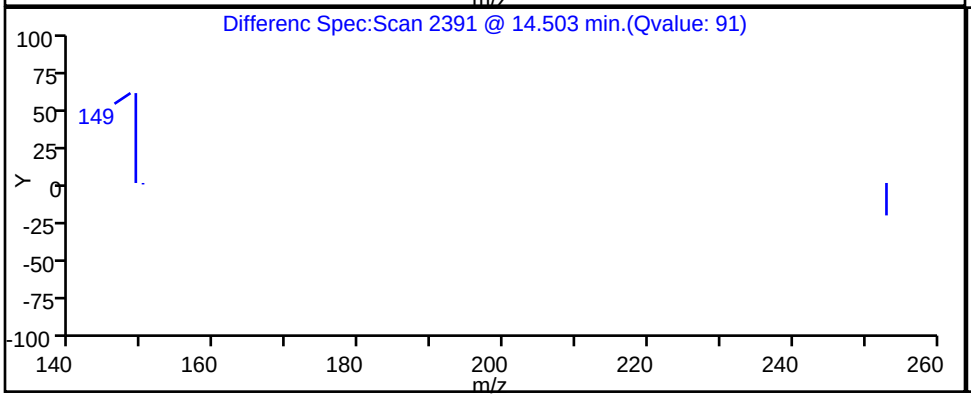


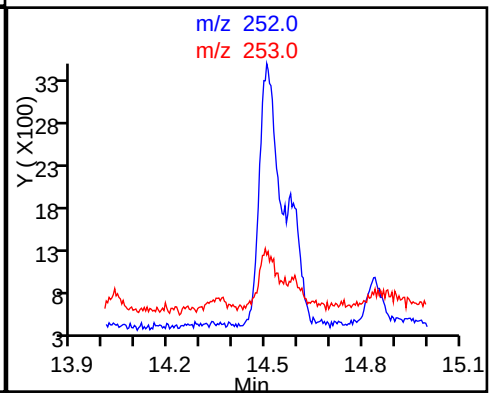












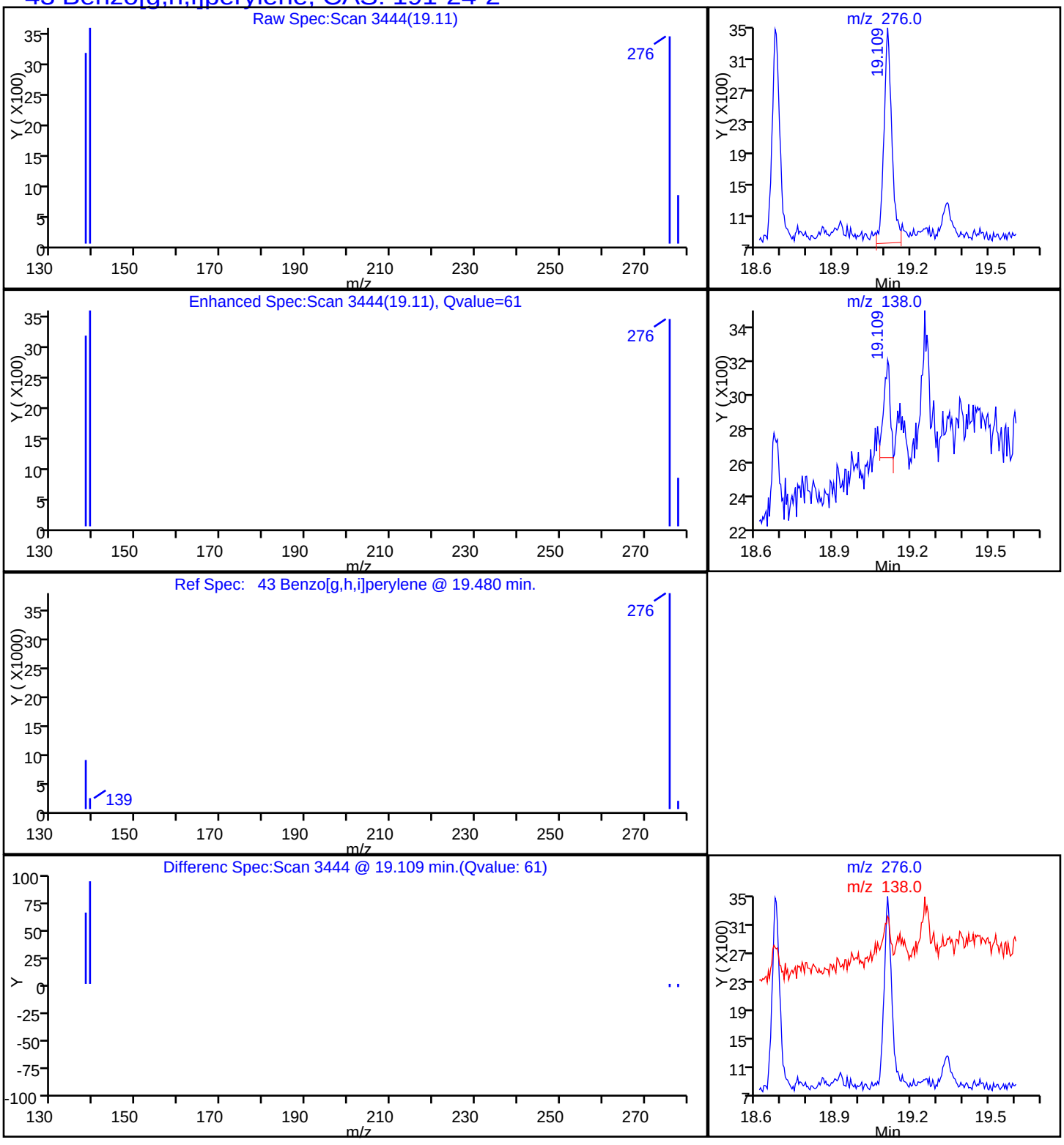
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Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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Column:		Detector	MS SCAN		

43 Benzo[g,h,i]perylene, CAS: 191-24-2



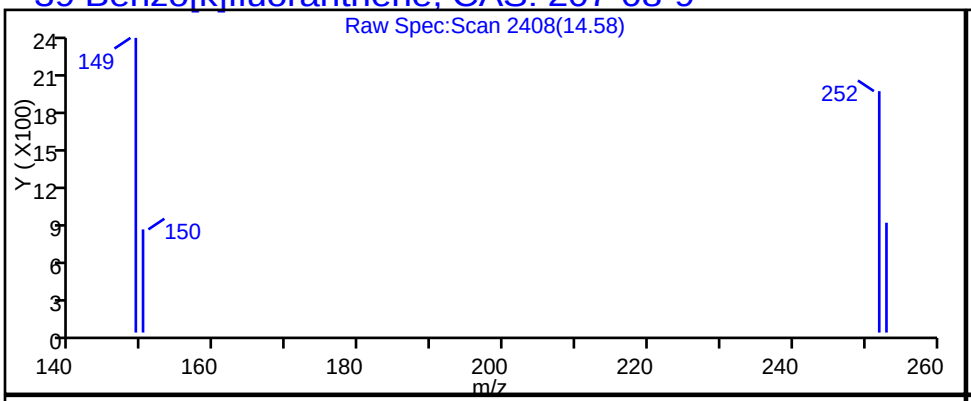
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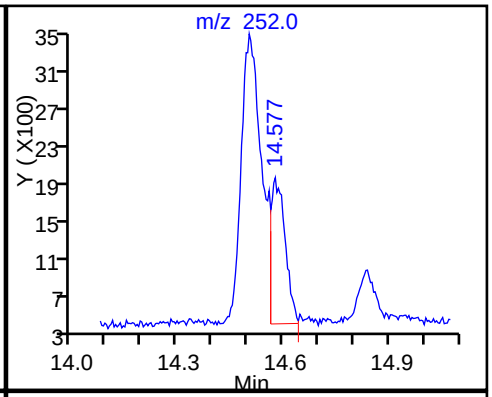
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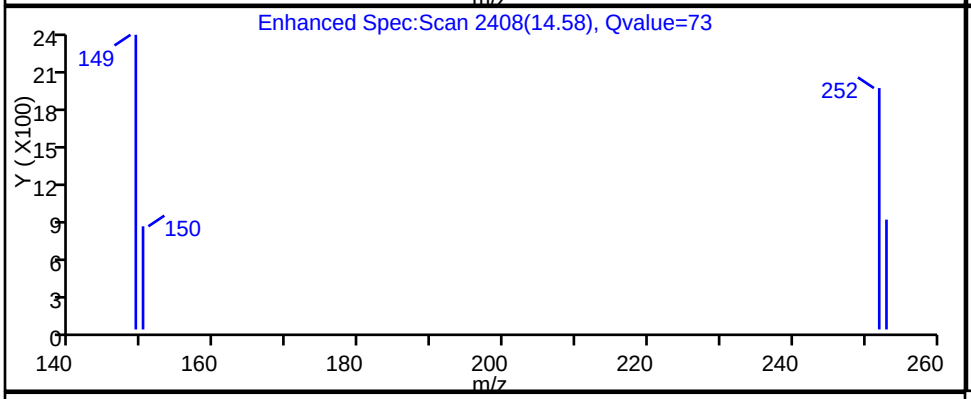
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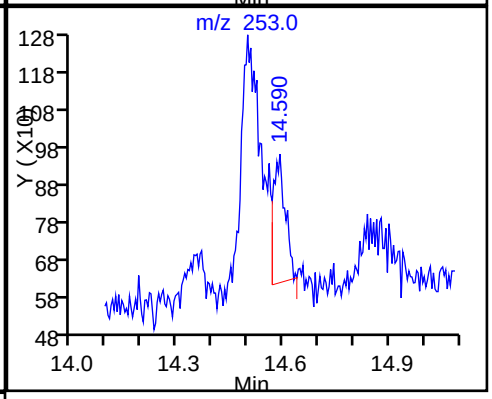
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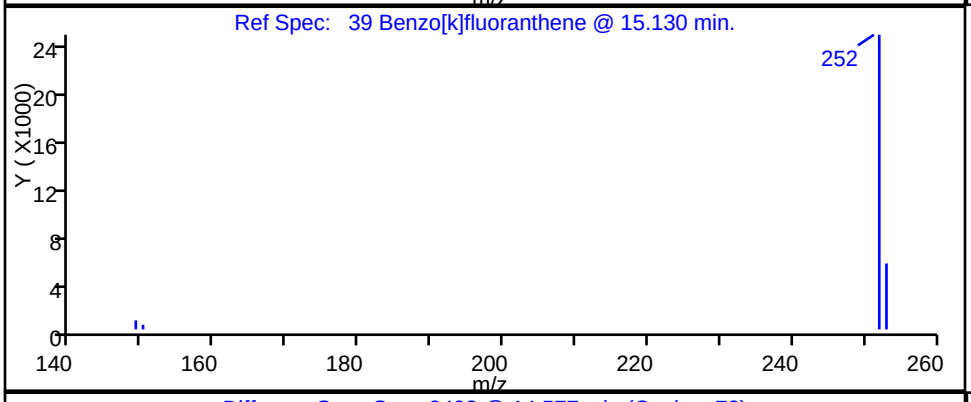
39 Benzo[k]fluoranthene, CAS: 207-08-9

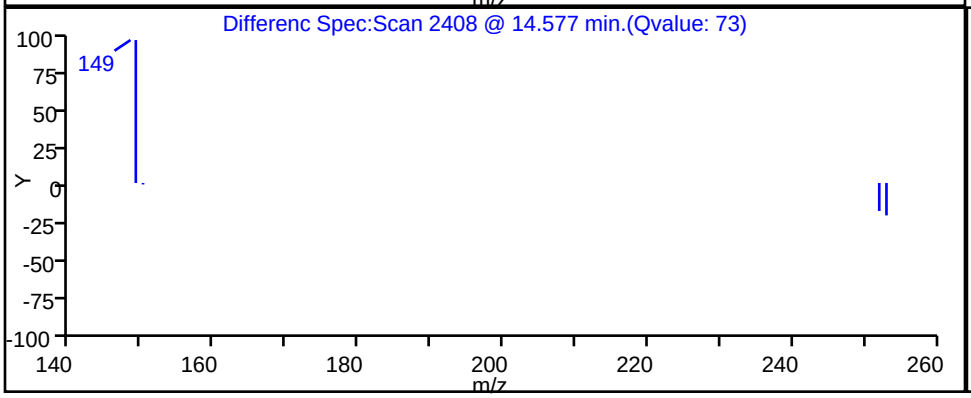


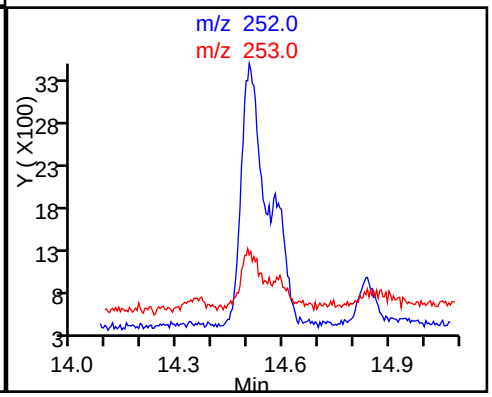












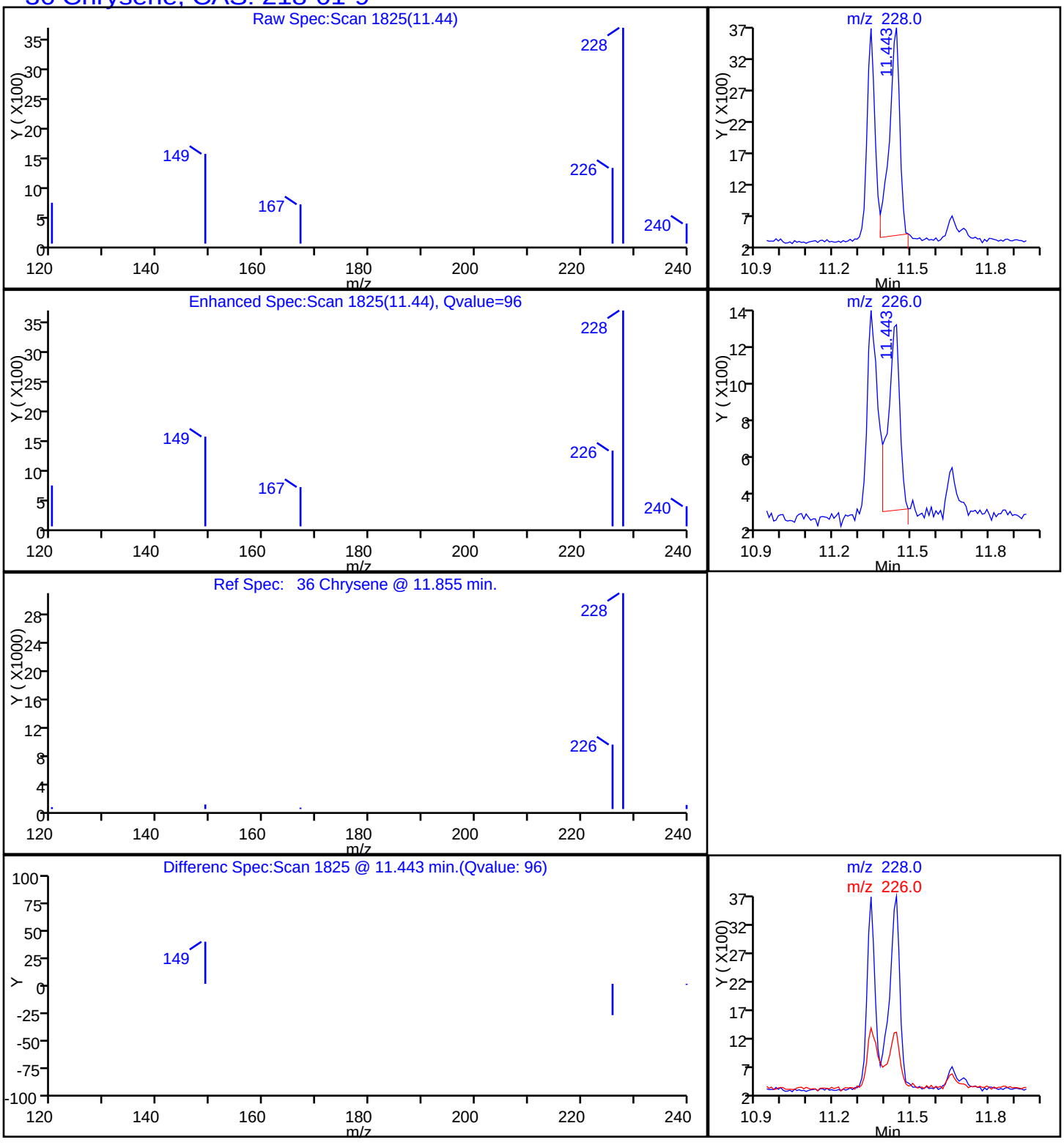
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Client ID:	SS025-SB10(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	21	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
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Column:		Detector	MS SCAN		

36 Chrysene, CAS: 218-01-9



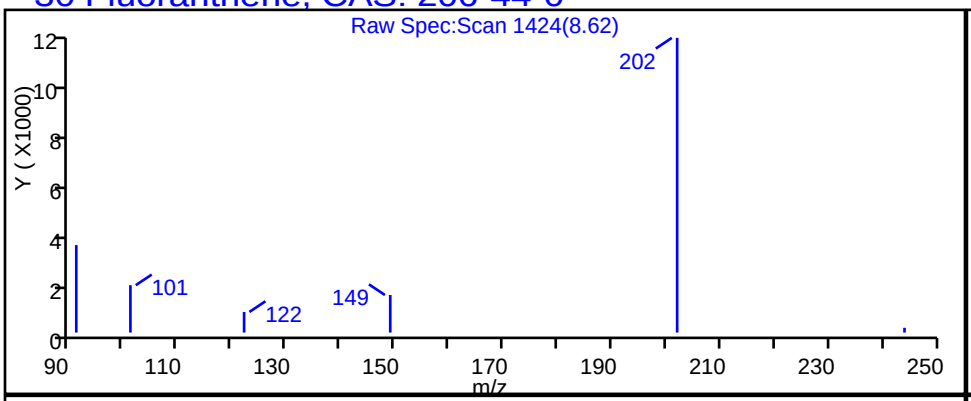
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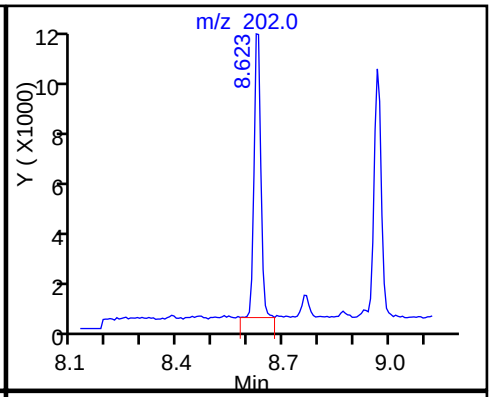
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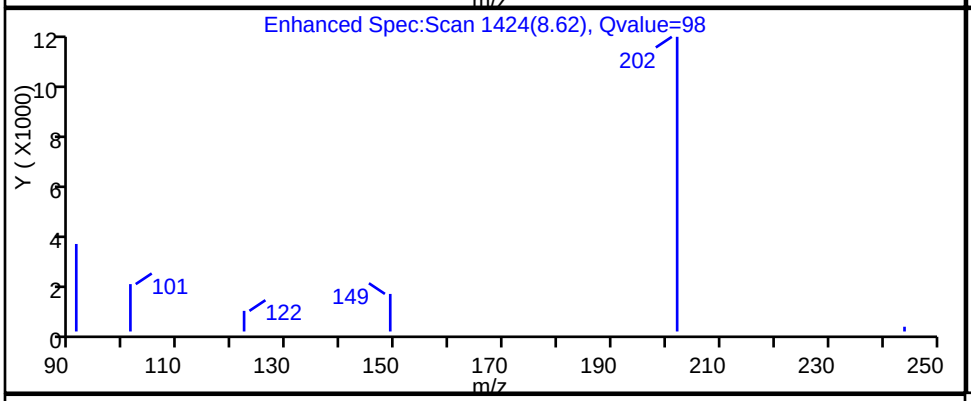
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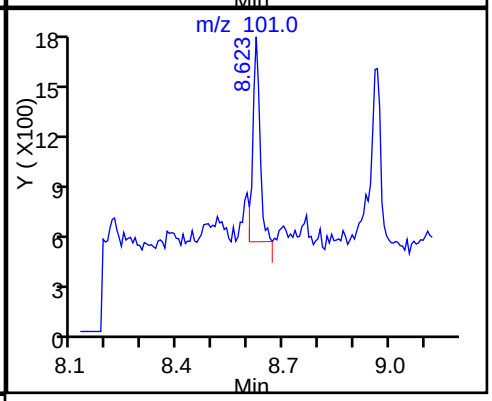
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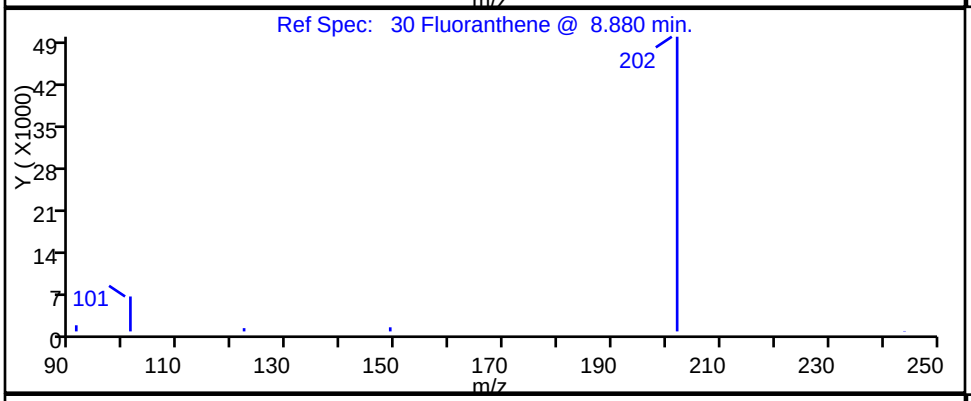
30 Fluoranthene, CAS: 206-44-0

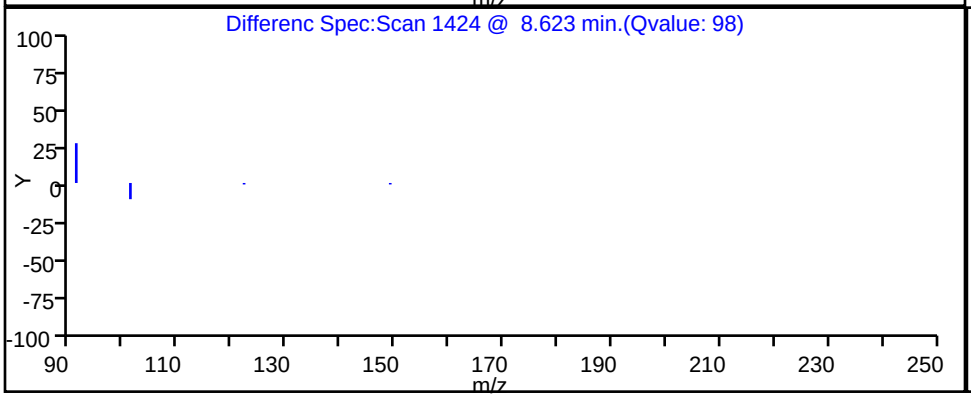


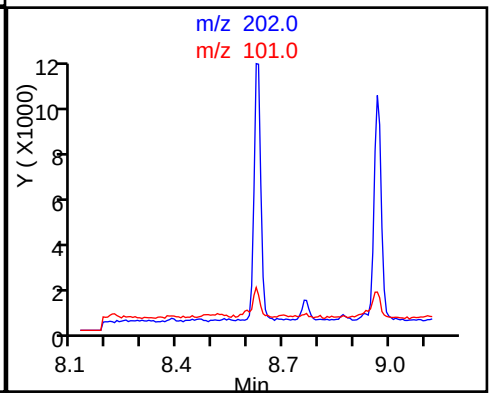












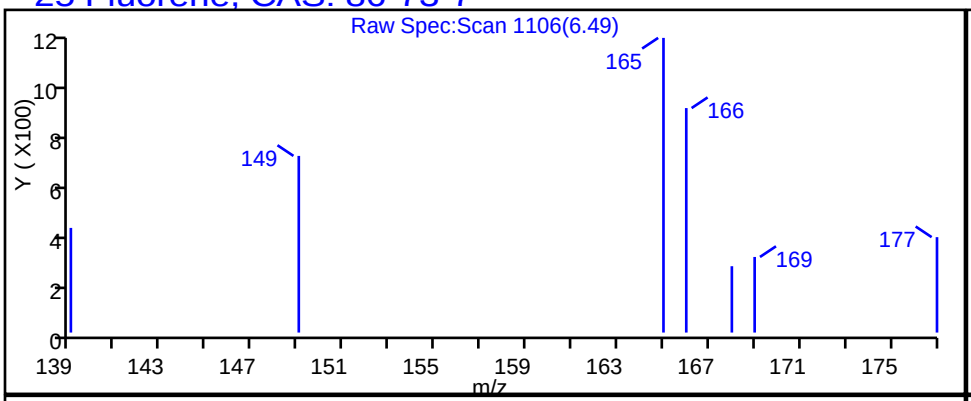
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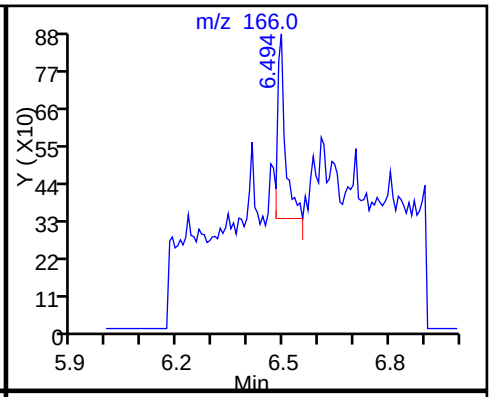
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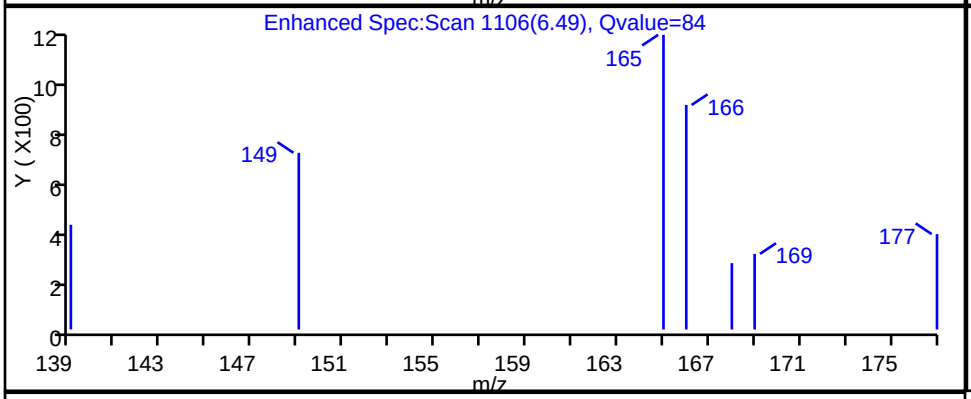
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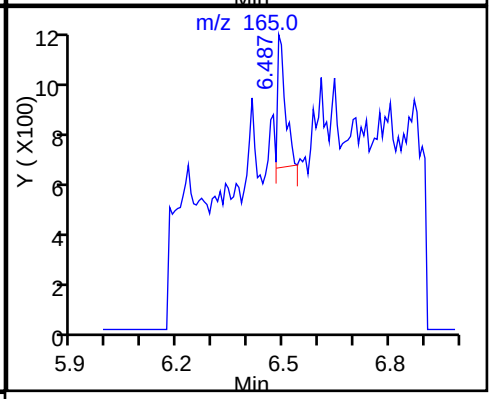
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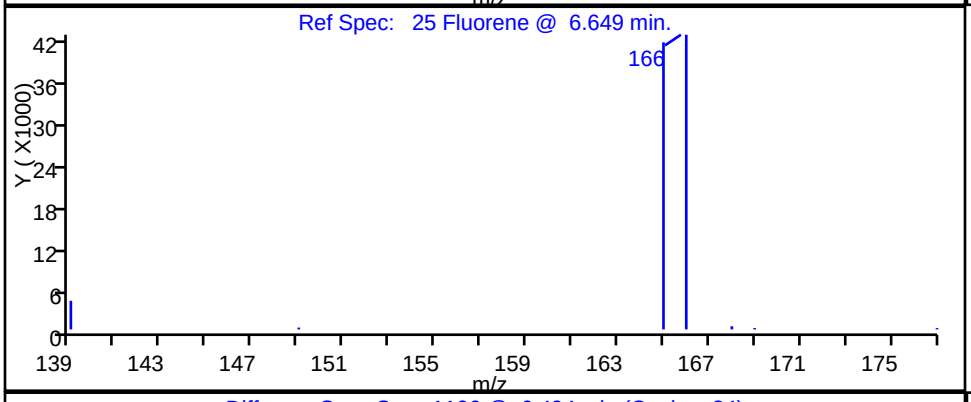
25 Fluorene, CAS: 86-73-7

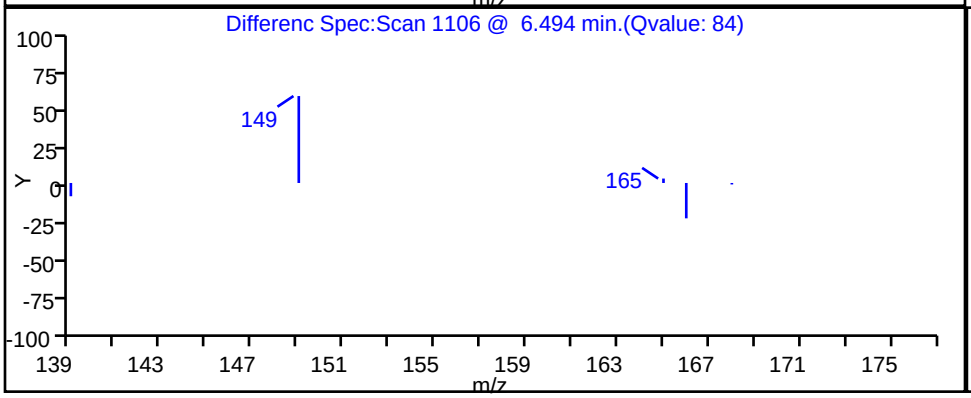


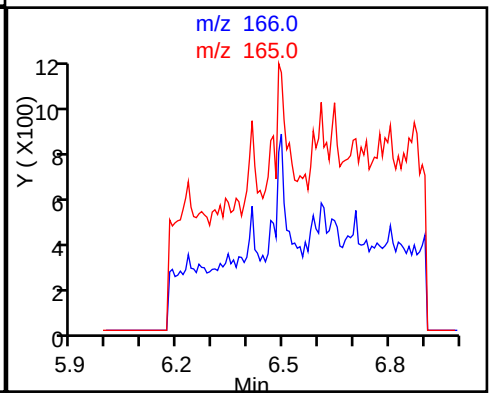










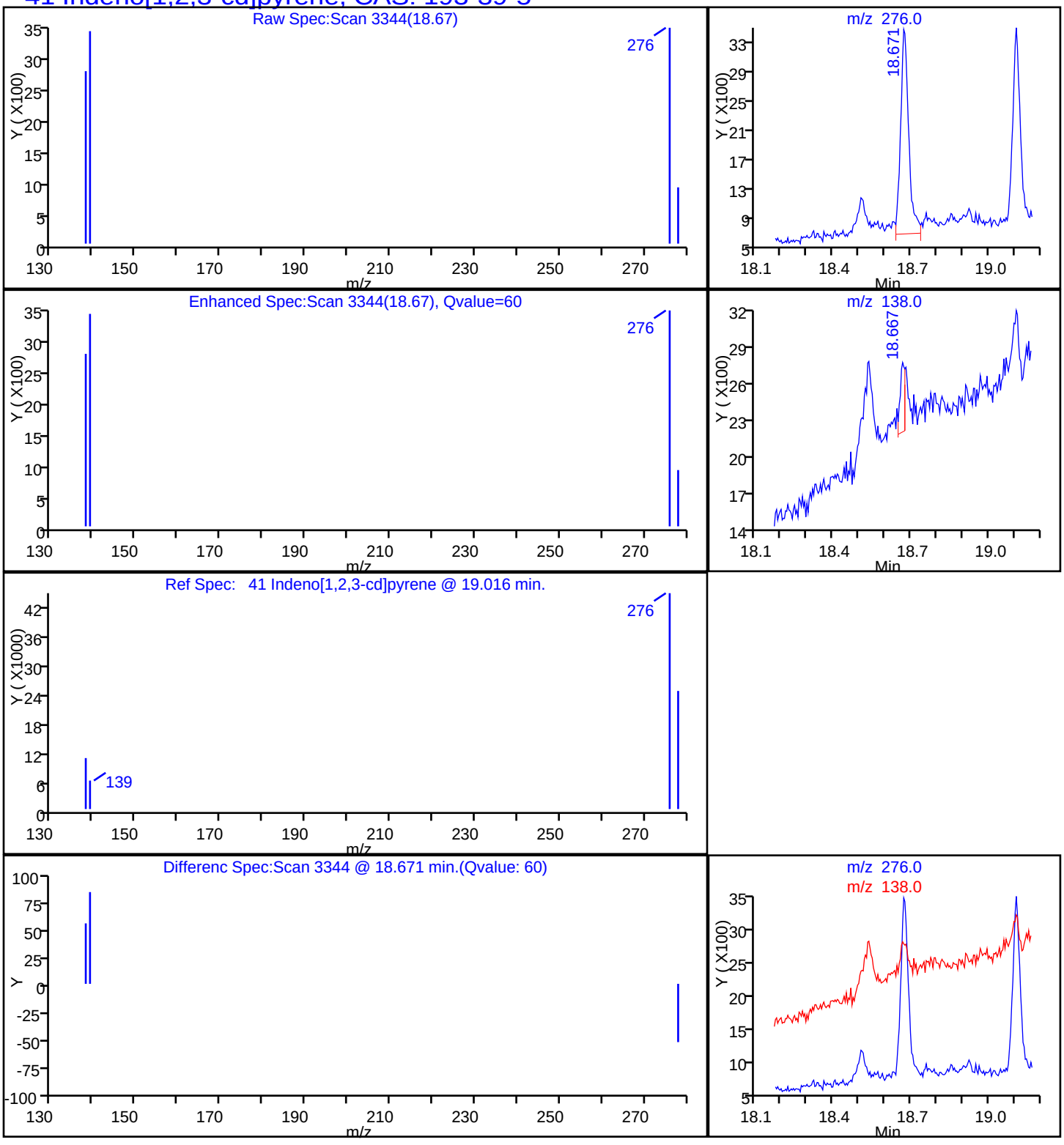


Report Date: 19-Jun-2017 15:44:27 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7288.D				
Injection Date:	16-Jun-2017 23:49:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-18-B	Lab Sample ID:	280-97928-18		
Client ID:	SS025-SB10(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	21	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



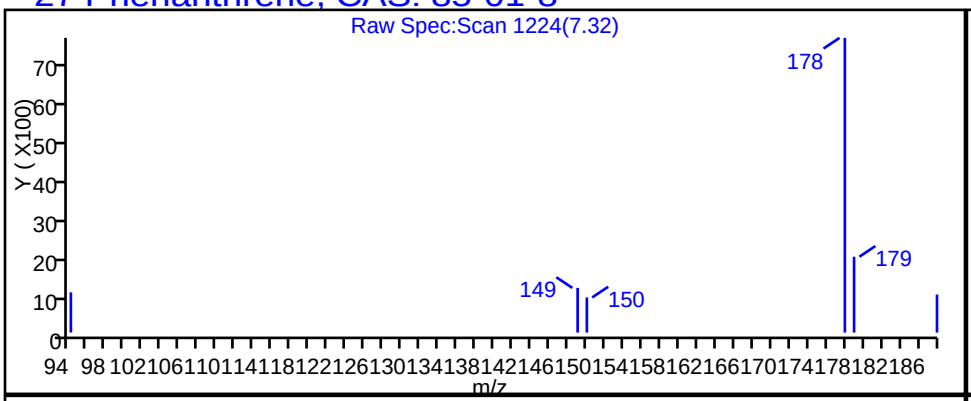
Report Date: 19-Jun-2017 15:44:27 Chrom Revision: 2.2 25-Apr-2017 13:27:22

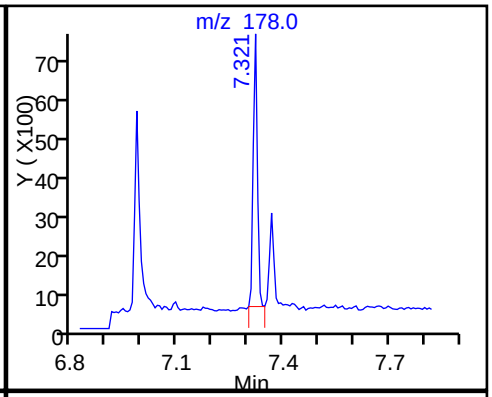
TestAmerica Denver

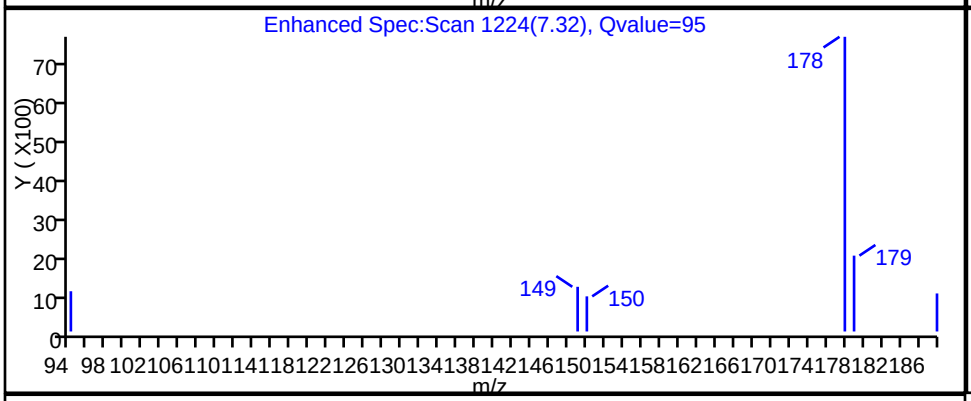
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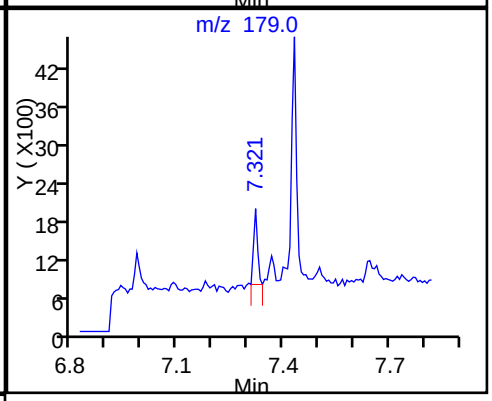
Injection Date:	16-Jun-2017 23:49:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-18-B	Lab Sample ID:	280-97928-18		
Client ID:	SS025-SB10(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	21	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

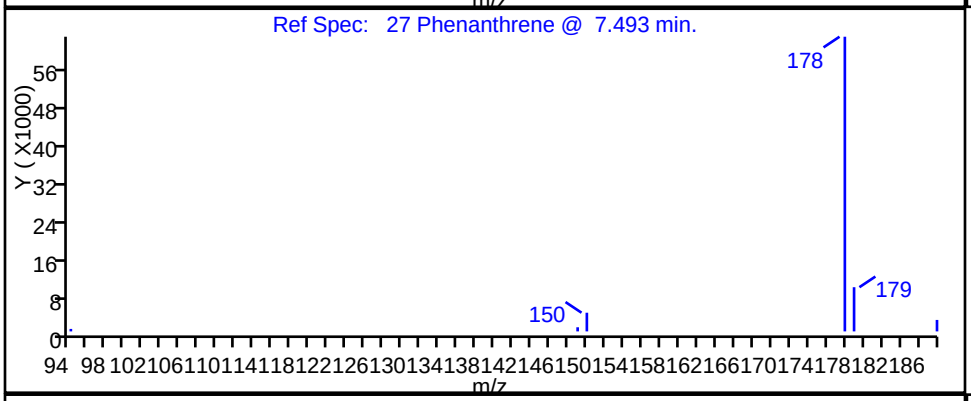
27 Phenanthrene, CAS: 85-01-8

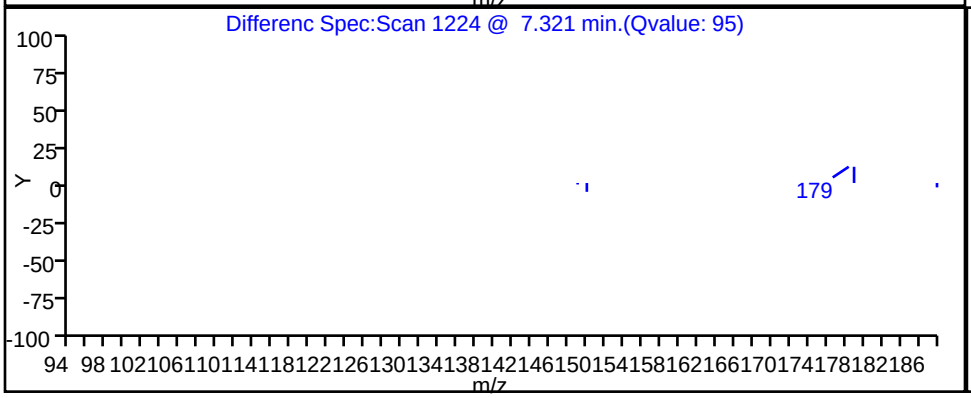


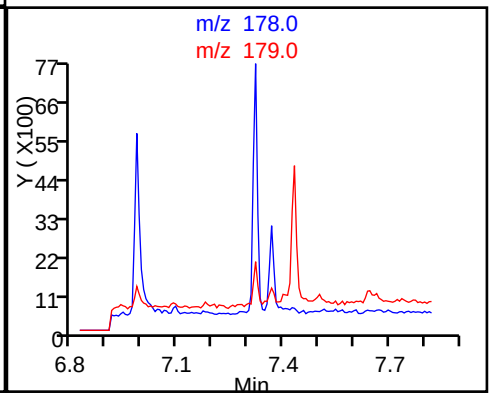












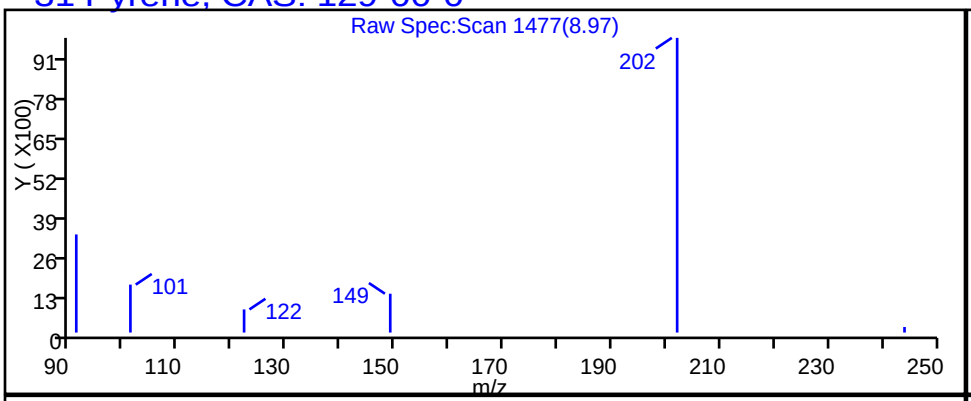
Report Date: 19-Jun-2017 15:44:27 Chrom Revision: 2.2 25-Apr-2017 13:27:22

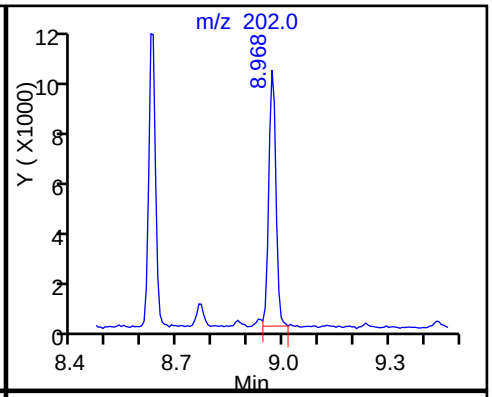
TestAmerica Denver

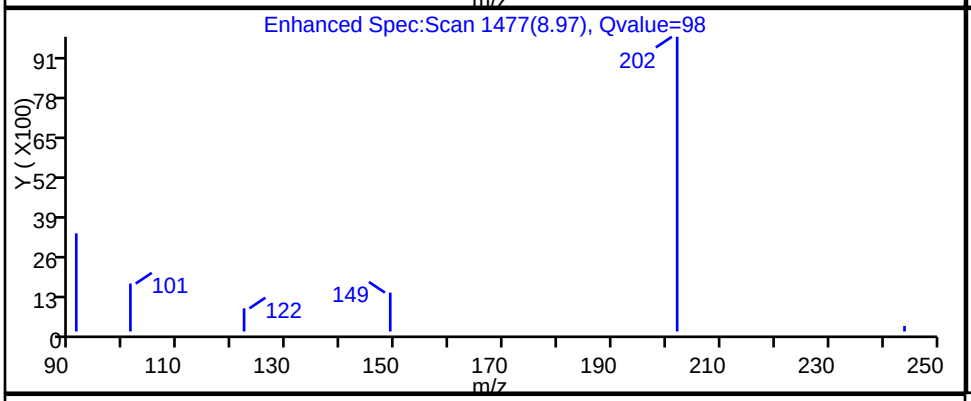
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7288.D

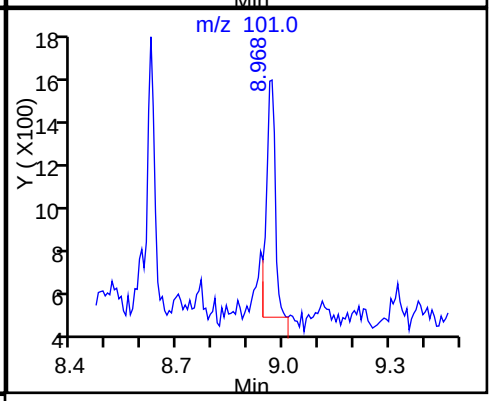
Injection Date:	16-Jun-2017 23:49:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-A-18-B	Lab Sample ID:	280-97928-18		
Client ID:	SS025-SB10(0-2)				
Operator ID:	WICKHAMM	ALS Bottle#:	21	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

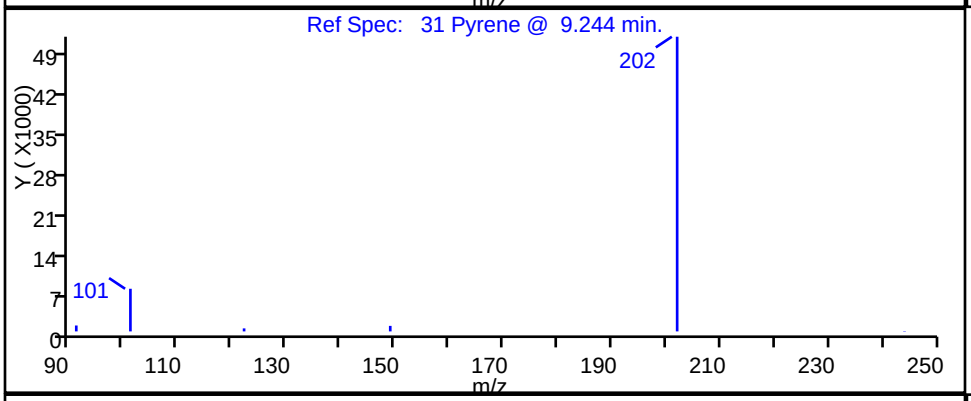
31 Pyrene, CAS: 129-00-0

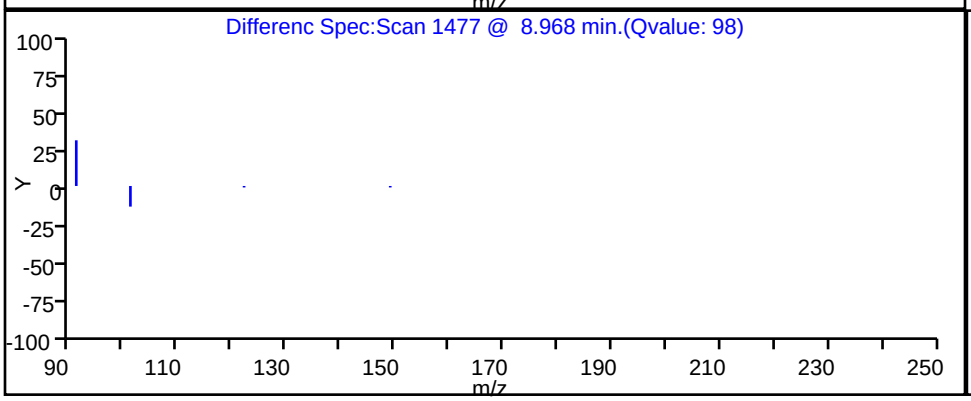


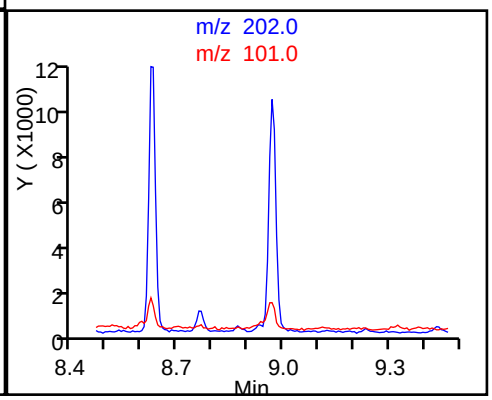












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(2-4) | Lab Sample ID: 280-97928-19

Matrix: Solid | Lab File ID: F7289.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 14:45

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 31.7(g) | Date Analyzed: 06/17/2017 00:15

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 7.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.51	U	5.1	0.51	0.26
91-57-6	2-Methylnaphthalene	0.68	U	5.1	0.68	0.31
83-32-9	Acenaphthene	0.27	U	5.1	0.27	0.16
208-96-8	Acenaphthylene	0.44	J	5.1	0.68	0.17
120-12-7	Anthracene	2.5	U	5.1	2.5	0.73
56-55-3	Benzo[a]anthracene	2.5	U	5.1	2.5	0.92
50-32-8	Benzo[a]pyrene	2.5	U	5.1	2.5	0.75
205-99-2	Benzo[b]fluoranthene	2.5	U	5.1	2.5	1.2
191-24-2	Benzo[g,h,i]perylene	2.5	U	5.1	2.5	1.1
207-08-9	Benzo[k]fluoranthene	2.5	U	5.1	2.5	1.0
218-01-9	Chrysene	2.5	U	5.1	2.5	1.0
53-70-3	Dibenz(a,h)anthracene	2.5	U	5.1	2.5	1.3
206-44-0	Fluoranthene	2.5	U	5.1	2.5	1.0
86-73-7	Fluorene	0.68	U	5.1	0.68	0.48
193-39-5	Indeno[1,2,3-cd]pyrene	2.5	U	5.1	2.5	1.1
91-20-3	Naphthalene	0.68	U	5.1	0.68	0.33
85-01-8	Phenanthrene	2.5	U	5.1	2.5	1.1
129-00-0	Pyrene	2.5	U	5.1	2.5	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	82		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	89		44-125
1718-51-0	Terphenyl-d14 (Surr)	74		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7289.D
Lims ID: 280-97928-C-19-B
Client ID: SS025-SB10(2-4)
Sample Type: Client
Inject. Date: 17-Jun-2017 00:15:30 ALS Bottle#: 22 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-19-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:35:17

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	86	20736	600.0	
* 2 Phenanthrene-d10	188	7.301	7.301	0.000	100	38398	600.0	
* 3 Chrysene-d12	240	11.378	11.371	0.007	93	35709	600.0	
$ 4 Nitrobenzene-d5	82	4.005	4.001	0.003	100	14472	445.5	
$ 5 2-Fluorobiphenyl	172	5.436	5.431	0.005	99	22054	410.2	
$ 6 Terphenyl-d14	244	9.124	9.130	-0.006	95	14431	370.1	
14 Naphthalene	128		4.589				ND	
16 2-Methylnaphthalene	142		5.147				ND	
17 1-Methylnaphthalene	142		5.235				ND	
22 Acenaphthylene	152	5.917	5.917	0.000	87	930	13.0	
23 Acenaphthene	153		6.055				ND	
25 Fluorene	166		6.494				ND	
27 Phenanthrene	178	7.321	7.321	0.000	63	1020	12.5	
28 Anthracene	178		7.366				ND	
30 Fluoranthene	202	8.629	8.629	0.000	46	1120	12.0	
31 Pyrene	202	8.974	8.968	0.006	43	1068	11.0	
35 Benzo[a]anthracene	228	11.351	11.344	0.007	10	522	5.50	
36 Chrysene	228	11.441	11.443	-0.002	55	938	10.7	
38 Benzo[b]fluoranthene	252		14.503				ND	
39 Benzo[k]fluoranthene	252		14.586				ND	
40 Benzo[a]pyrene	252		15.587				ND	
41 Indeno[1,2,3-cd]pyrene	276		18.676				ND	
42 Dibenz(a,h)anthracene	278		18.702				ND	
43 Benzo[g,h,i]perylene	276		19.109				ND	

Reagents:

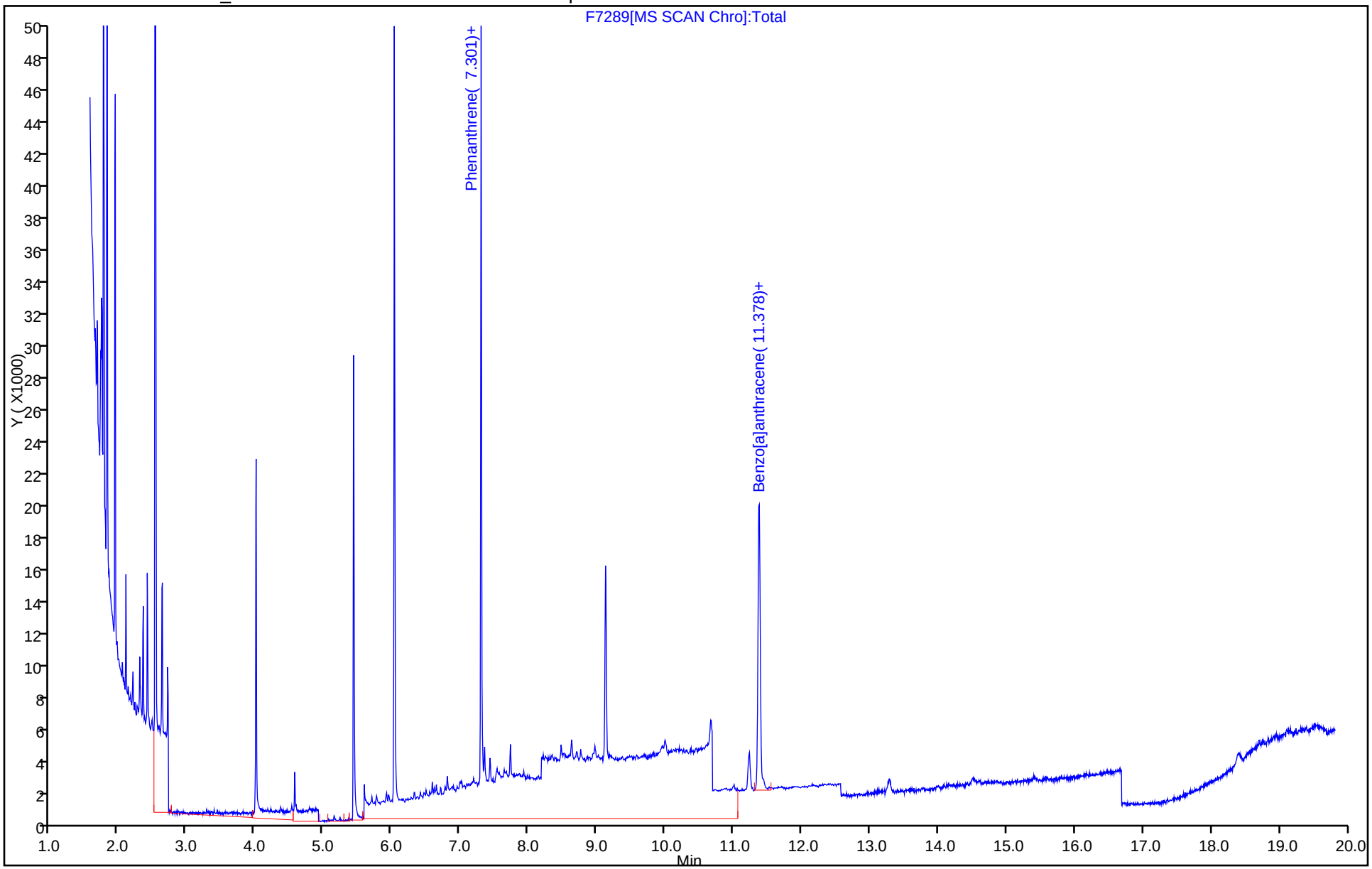
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:28 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7289.D

Injection Date:	17-Jun-2017 00:15:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-C-19-B	Lab Sample ID:	280-97928-19	Worklist Smp#:	23
Client ID:	SS025-SB10(2-4)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7289.D
Lims ID: 280-97928-C-19-B
Client ID: SS025-SB10(2-4)
Sample Type: Client
Inject. Date: 17-Jun-2017 00:15:30 ALS Bottle#: 22 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-19-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:35:17

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	445.5	89.11
$ 5 2-Fluorobiphenyl	500.0	410.2	82.04
$ 6 Terphenyl-d14	500.0	370.1	74.03

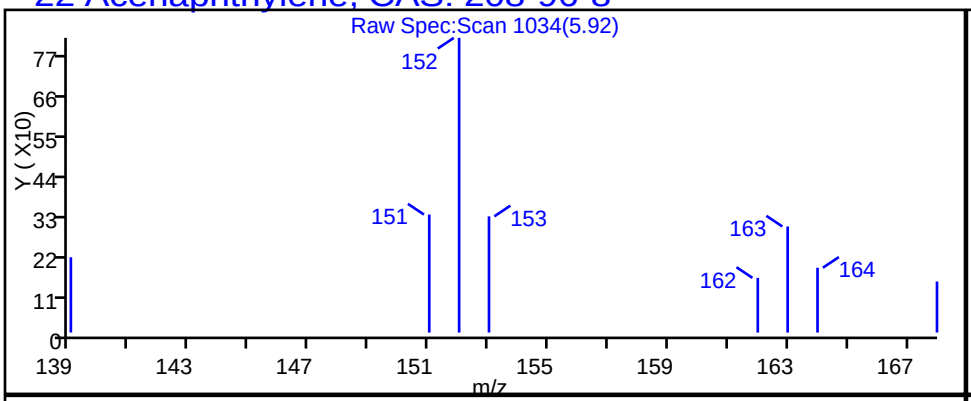
Report Date: 19-Jun-2017 15:44:28 Chrom Revision: 2.2 25-Apr-2017 13:27:22

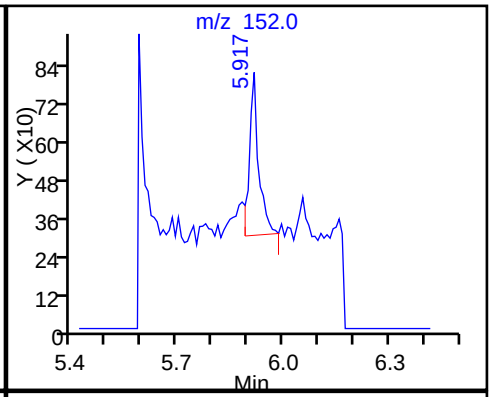
TestAmerica Denver

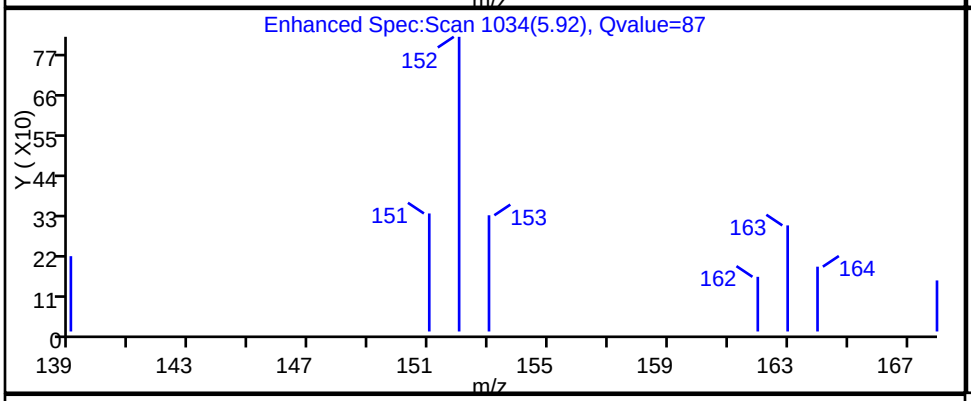
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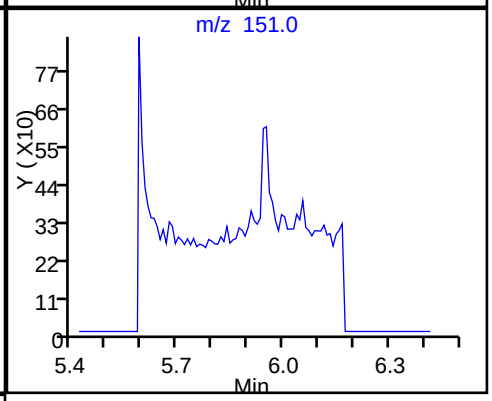
Injection Date:	17-Jun-2017 00:15:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-C-19-B	Lab Sample ID:	280-97928-19		
Client ID:	SS025-SB10(2-4)				
Operator ID:	WICKHAMM	ALS Bottle#:	22	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

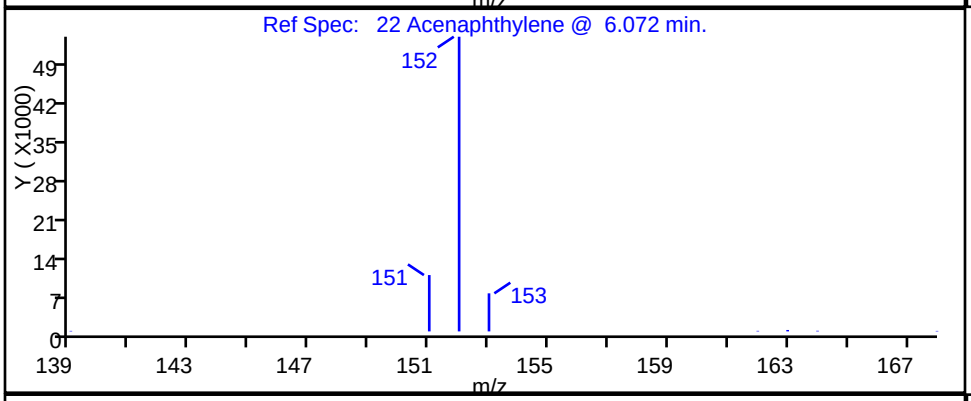
22 Acenaphthylene, CAS: 208-96-8

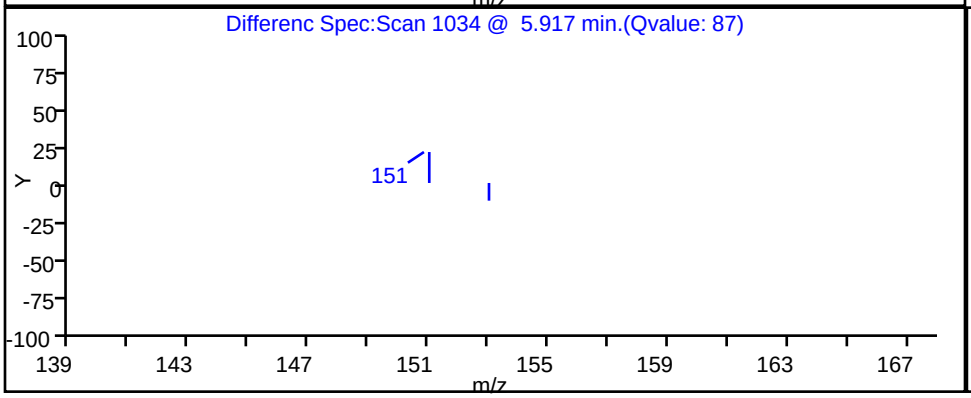


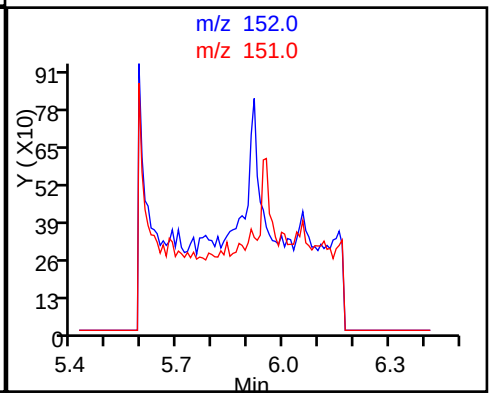












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(4-6) | Lab Sample ID: 280-97928-20

Matrix: Solid | Lab File ID: F7290.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 14:55

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 31.8(g) | Date Analyzed: 06/17/2017 00:40

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 6.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.50	U	5.0	0.50	0.26
91-57-6	2-Methylnaphthalene	0.67	U	5.0	0.67	0.31
83-32-9	Acenaphthene	0.27	U	5.0	0.27	0.16
208-96-8	Acenaphthylene	0.43	J	5.0	0.67	0.17
120-12-7	Anthracene	2.5	U	5.0	2.5	0.73
56-55-3	Benzo[a]anthracene	2.5	U	5.0	2.5	0.91
50-32-8	Benzo[a]pyrene	2.5	U	5.0	2.5	0.75
205-99-2	Benzo[b]fluoranthene	2.5	U	5.0	2.5	1.2
191-24-2	Benzo[g,h,i]perylene	2.5	U	5.0	2.5	1.1
207-08-9	Benzo[k]fluoranthene	2.5	U	5.0	2.5	1.0
218-01-9	Chrysene	2.5	U	5.0	2.5	1.0
53-70-3	Dibenz(a,h)anthracene	2.5	U	5.0	2.5	1.3
206-44-0	Fluoranthene	2.5	U	5.0	2.5	1.0
86-73-7	Fluorene	0.67	U	5.0	0.67	0.47
193-39-5	Indeno[1,2,3-cd]pyrene	2.5	U	5.0	2.5	1.1
91-20-3	Naphthalene	0.67	U	5.0	0.67	0.33
85-01-8	Phenanthrene	2.5	U	5.0	2.5	1.1
129-00-0	Pyrene	2.5	U	5.0	2.5	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	88		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	90		44-125
1718-51-0	Terphenyl-d14 (Surr)	75		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7290.D
Lims ID: 280-97928-B-20-B
Client ID: SS025-SB10(4-6)
Sample Type: Client
Inject. Date: 17-Jun-2017 00:40:30 ALS Bottle#: 23 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-b-20-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:35:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	89	21828	600.0	
* 2 Phenanthrene-d10	188	7.300	7.301	-0.001	100	38959	600.0	
* 3 Chrysene-d12	240	11.377	11.371	0.006	93	35240	600.0	
$ 4 Nitrobenzene-d5	82	4.005	4.001	0.004	100	15450	451.9	
$ 5 2-Fluorobiphenyl	172	5.436	5.431	0.005	99	24963	441.1	
$ 6 Terphenyl-d14	244	9.130	9.130	0.000	97	14762	373.2	
14 Naphthalene	128		4.589				ND	
16 2-Methylnaphthalene	142		5.147				ND	
17 1-Methylnaphthalene	142		5.235				ND	
22 Acenaphthylene	152	5.917	5.917	0.000	83	968	12.9	
23 Acenaphthene	153		6.055				ND	
25 Fluorene	166		6.494				ND	
27 Phenanthrene	178	7.320	7.321	-0.001	41	939	11.4	
28 Anthracene	178		7.366				ND	
30 Fluoranthene	202	8.628	8.629	-0.001	41	975	10.3	
31 Pyrene	202	8.973	8.968	0.005	40	698	7.09	
35 Benzo[a]anthracene	228		11.344				ND	
36 Chrysene	228	11.440	11.443	-0.003	52	652	7.52	
38 Benzo[b]fluoranthene	252		14.503				ND	
39 Benzo[k]fluoranthene	252		14.586				ND	
40 Benzo[a]pyrene	252		15.587				ND	
41 Indeno[1,2,3-cd]pyrene	276		18.676				ND	
42 Dibenz(a,h)anthracene	278		18.702				ND	
43 Benzo[g,h,i]perylene	276		19.109				ND	

Reagents:

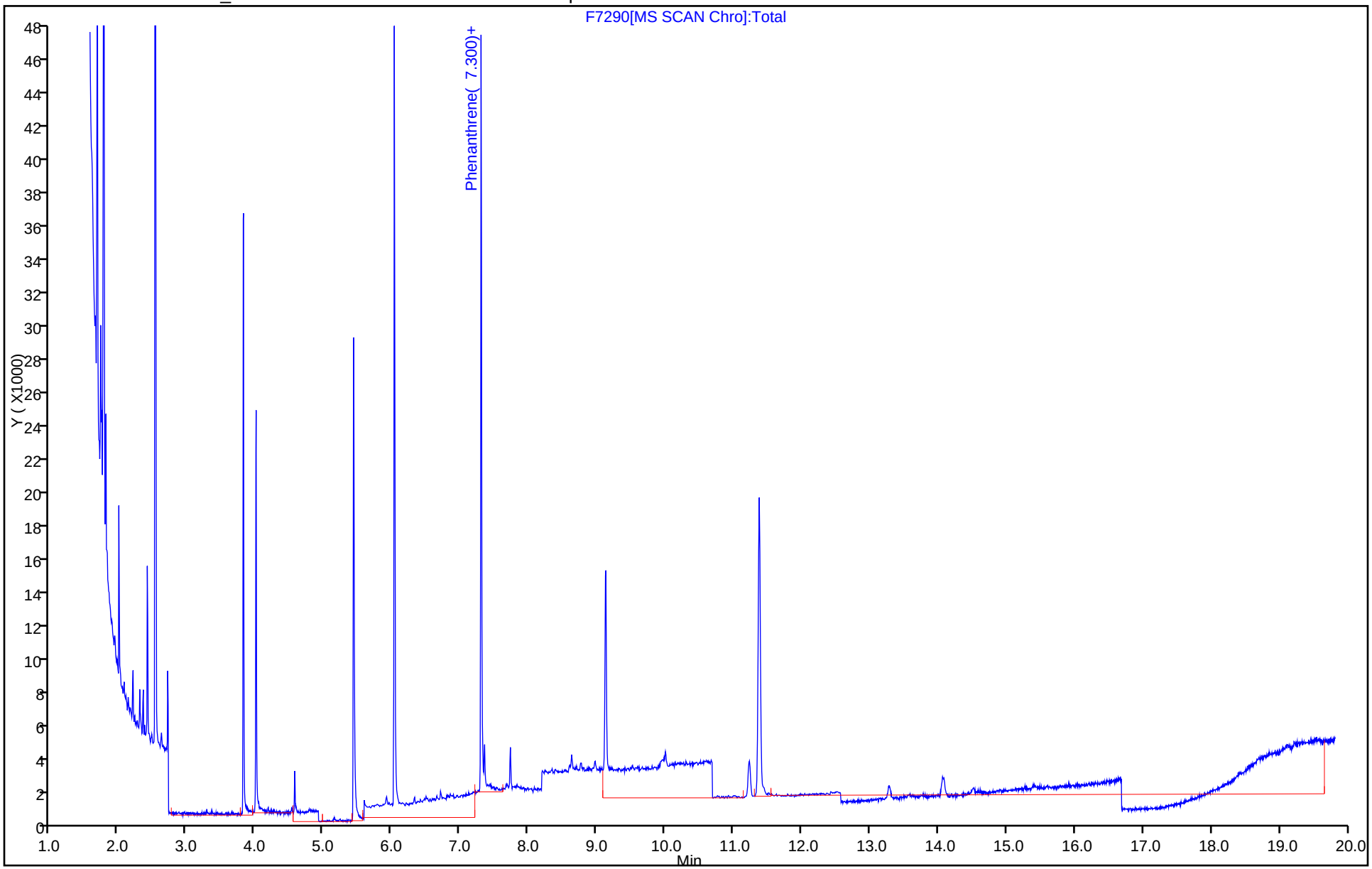
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:29 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7290.D

Injection Date:	17-Jun-2017 00:40:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-B-20-B	Lab Sample ID:	280-97928-20	Worklist Smp#:	24
Client ID:	SS025-SB10(4-6)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7290.D
Lims ID: 280-97928-B-20-B
Client ID: SS025-SB10(4-6)
Sample Type: Client
Inject. Date: 17-Jun-2017 00:40:30 ALS Bottle#: 23 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-b-20-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:35:55

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	451.9	90.37
$ 5 2-Fluorobiphenyl	500.0	441.1	88.21
$ 6 Terphenyl-d14	500.0	373.2	74.64

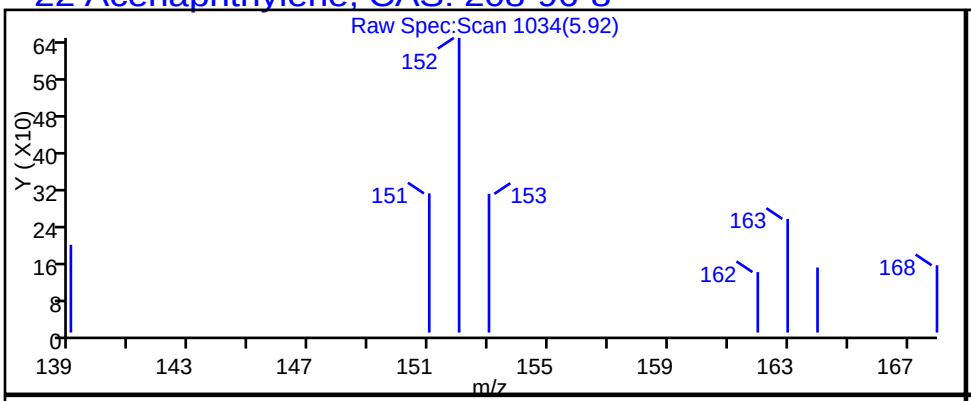
Report Date: 19-Jun-2017 15:44:29 Chrom Revision: 2.2 25-Apr-2017 13:27:22

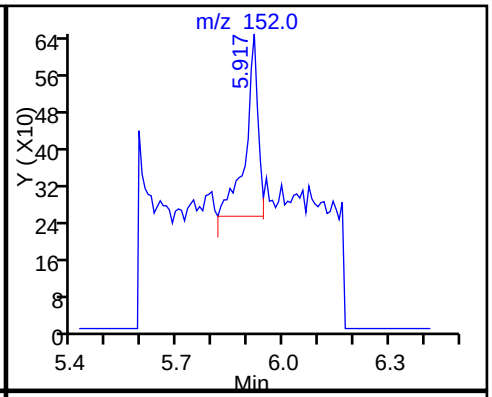
TestAmerica Denver

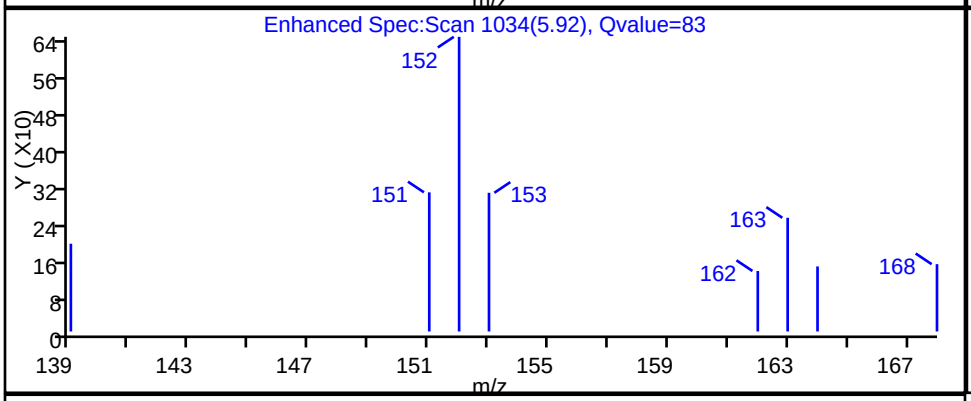
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7290.D

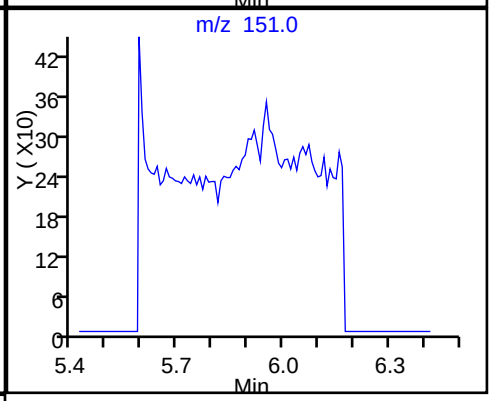
Injection Date:	17-Jun-2017 00:40:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-20-B	Lab Sample ID:	280-97928-20		
Client ID:	SS025-SB10(4-6)				
Operator ID:	WICKHAMM	ALS Bottle#:	23	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

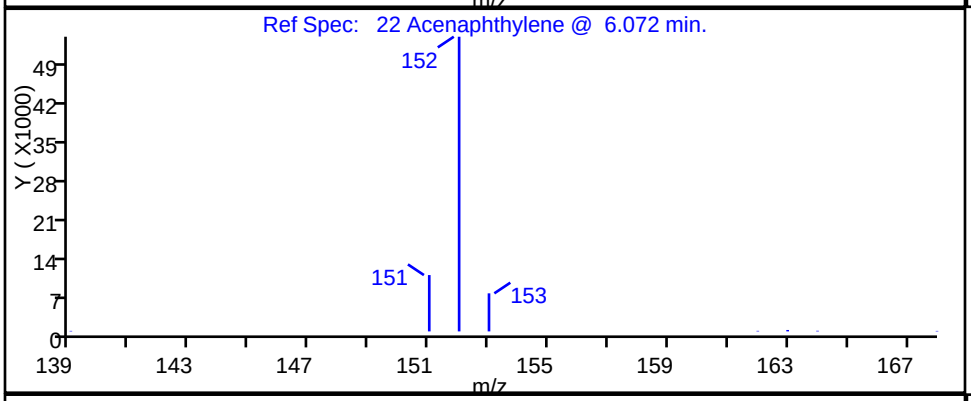
22 Acenaphthylene, CAS: 208-96-8

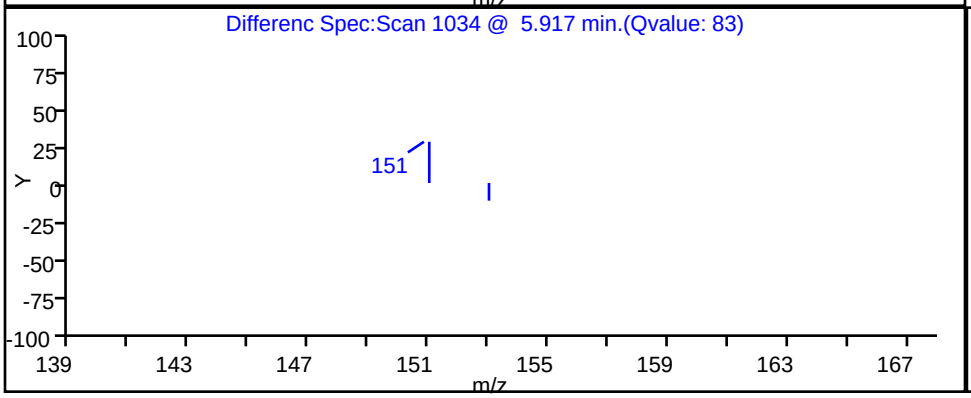


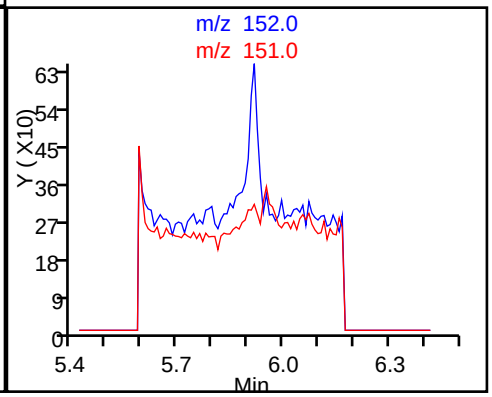












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(2-4)-a | Lab Sample ID: 280-97928-21

Matrix: Solid | Lab File ID: F7291.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 14:45

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 30.5(g) | Date Analyzed: 06/17/2017 01:06

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 5.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.52	U	5.2	0.52	0.27
91-57-6	2-Methylnaphthalene	0.70	U	5.2	0.70	0.32
83-32-9	Acenaphthene	0.28	U	5.2	0.28	0.17
208-96-8	Acenaphthylene	0.37	J	5.2	0.70	0.18
120-12-7	Anthracene	2.6	U	5.2	2.6	0.75
56-55-3	Benzo[a]anthracene	2.6	U	5.2	2.6	0.94
50-32-8	Benzo[a]pyrene	2.6	U	5.2	2.6	0.77
205-99-2	Benzo[b]fluoranthene	2.6	U	5.2	2.6	1.3
191-24-2	Benzo[g,h,i]perylene	2.6	U	5.2	2.6	1.1
207-08-9	Benzo[k]fluoranthene	2.6	U	5.2	2.6	1.0
218-01-9	Chrysene	2.6	U	5.2	2.6	1.0
53-70-3	Dibenz(a,h)anthracene	2.6	U	5.2	2.6	1.4
206-44-0	Fluoranthene	2.6	U	5.2	2.6	1.0
86-73-7	Fluorene	0.70	U	5.2	0.70	0.49
193-39-5	Indeno[1,2,3-cd]pyrene	2.6	U	5.2	2.6	1.1
91-20-3	Naphthalene	0.70	U	5.2	0.70	0.34
85-01-8	Phenanthrene	2.6	U	5.2	2.6	1.1
129-00-0	Pyrene	2.6	U	5.2	2.6	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	92		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	88		44-125
1718-51-0	Terphenyl-d14 (Surr)	76		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7291.D
Lims ID: 280-97928-B-21-B
Client ID: SS025-SB10(2-4)-a
Sample Type: Client
Inject. Date: 17-Jun-2017 01:06:30 ALS Bottle#: 24 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-b-21-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:36:22

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	88	21584	600.0	
* 2 Phenanthrene-d10	188	7.301	7.301	0.000	100	38673	600.0	
* 3 Chrysene-d12	240	11.380	11.371	0.009	93	35486	600.0	
$ 4 Nitrobenzene-d5	82	4.005	4.001	0.003	100	14934	441.7	
$ 5 2-Fluorobiphenyl	172	5.436	5.431	0.005	100	25621	457.8	
$ 6 Terphenyl-d14	244	9.124	9.130	-0.006	96	14925	380.1	
14 Naphthalene	128		4.589				ND	
16 2-Methylnaphthalene	142		5.147				ND	
17 1-Methylnaphthalene	142		5.235				ND	
22 Acenaphthylene	152	5.917	5.917	0.000	85	798	10.7	
23 Acenaphthene	153		6.055				ND	
25 Fluorene	166		6.494				ND	
27 Phenanthrene	178	7.321	7.321	0.000	43	824	10.0	
28 Anthracene	178		7.366				ND	
30 Fluoranthene	202	8.629	8.629	0.000	49	896	9.51	
31 Pyrene	202	8.974	8.968	0.006	46	804	8.23	
35 Benzo[a]anthracene	228	11.344	11.344	0.000	18	502	5.32	
36 Chrysene	228		11.443				ND	
38 Benzo[b]fluoranthene	252		14.503				ND	
39 Benzo[k]fluoranthene	252		14.586				ND	
40 Benzo[a]pyrene	252		15.587				ND	
41 Indeno[1,2,3-cd]pyrene	276		18.676				ND	
42 Dibenz(a,h)anthracene	278		18.702				ND	
43 Benzo[g,h,i]perylene	276		19.109				ND	

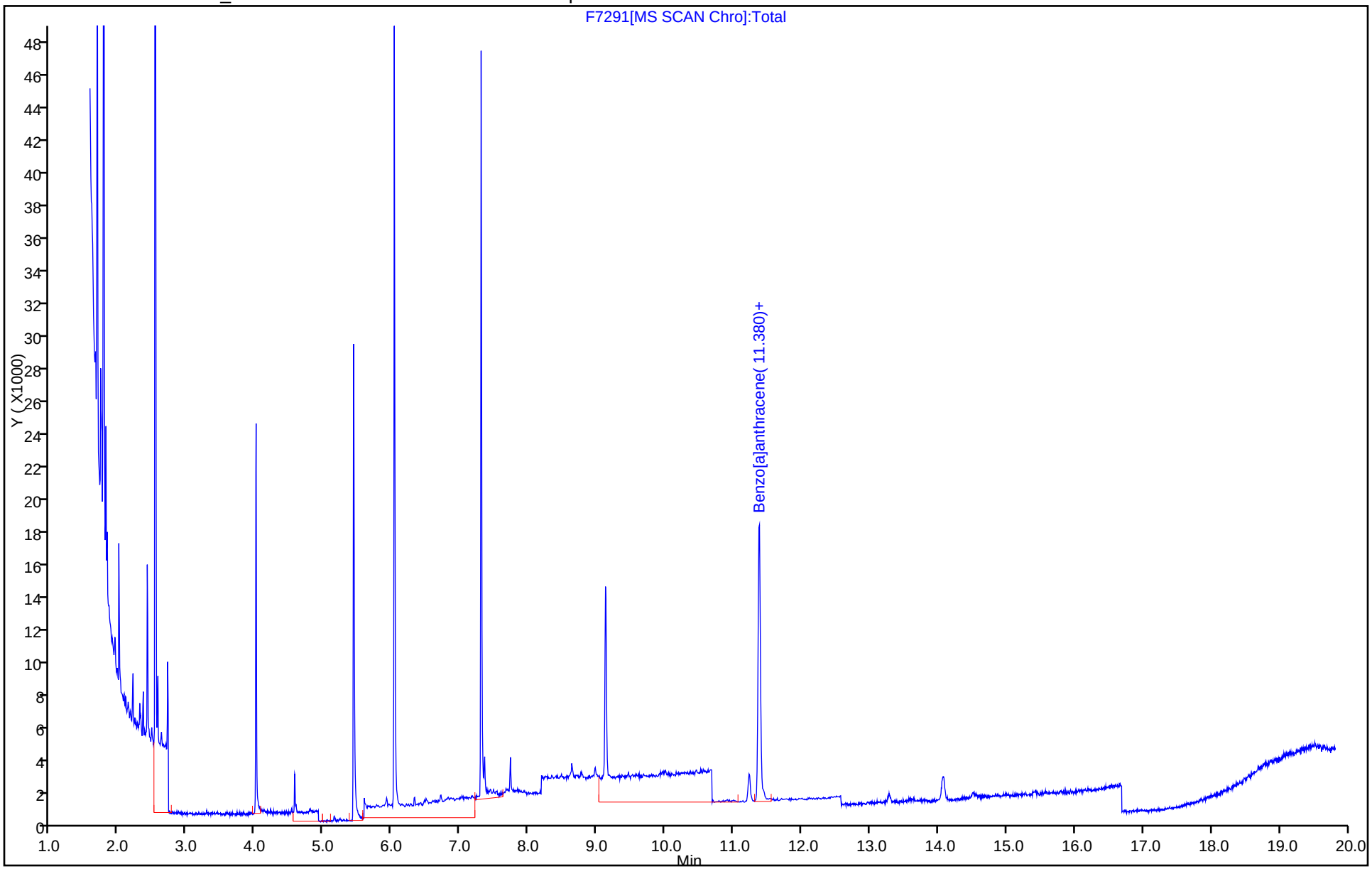
Reagents:

MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:30 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7291.D				
Injection Date:	17-Jun-2017 01:06:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-B-21-B	Lab Sample ID:	280-97928-21	Worklist Smp#:	25
Client ID:	SS025-SB10(2-4)-a				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7291.D
Lims ID: 280-97928-B-21-B
Client ID: SS025-SB10(2-4)-a
Sample Type: Client
Inject. Date: 17-Jun-2017 01:06:30 ALS Bottle#: 24 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-b-21-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:36:22

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	441.7	88.34
$ 5 2-Fluorobiphenyl	500.0	457.8	91.56
$ 6 Terphenyl-d14	500.0	380.1	76.02

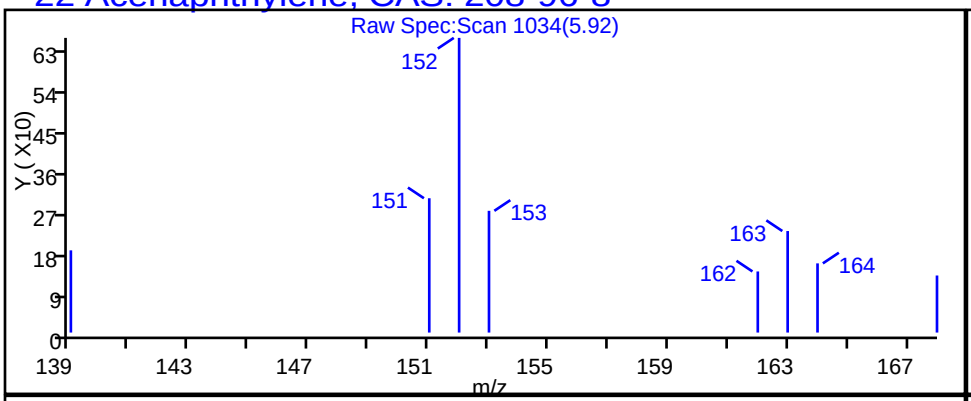
Report Date: 19-Jun-2017 15:44:30 Chrom Revision: 2.2 25-Apr-2017 13:27:22

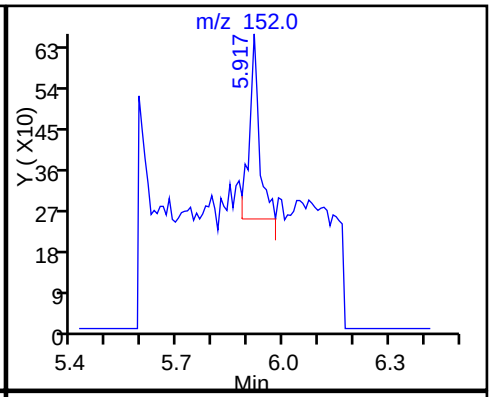
TestAmerica Denver

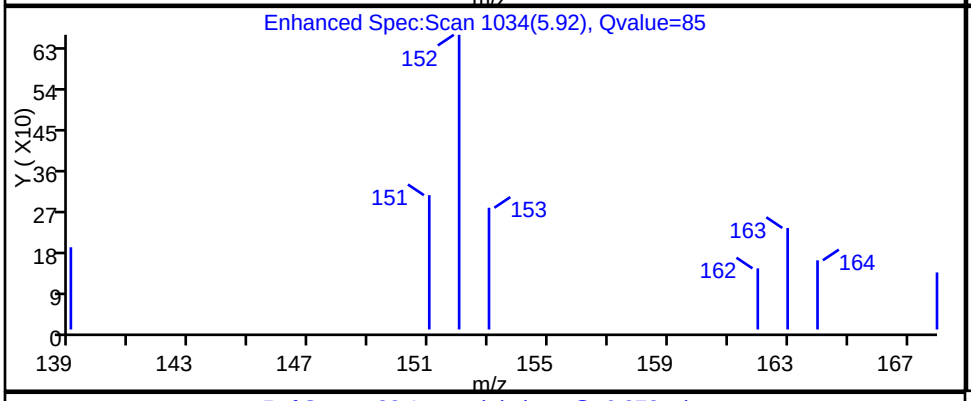
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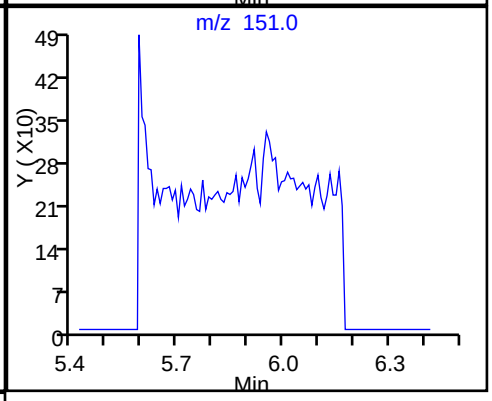
Injection Date:	17-Jun-2017 01:06:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-21-B	Lab Sample ID:	280-97928-21		
Client ID:	SS025-SB10(2-4)-a				
Operator ID:	WICKHAMM	ALS Bottle#:	24	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

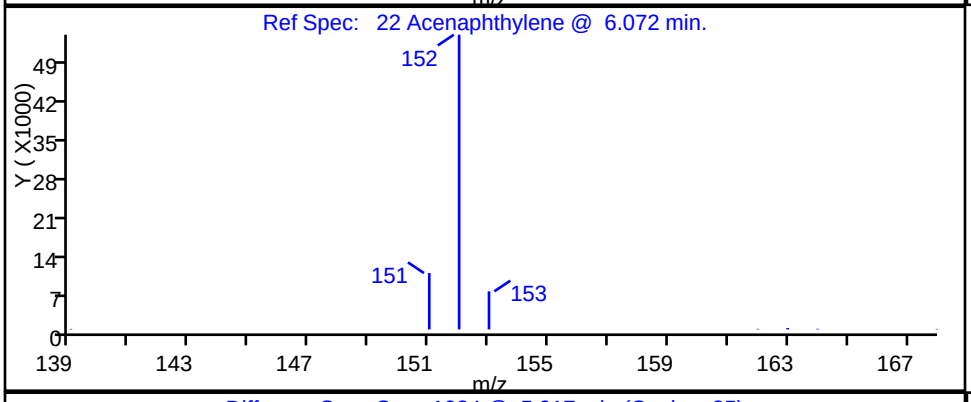
22 Acenaphthylene, CAS: 208-96-8

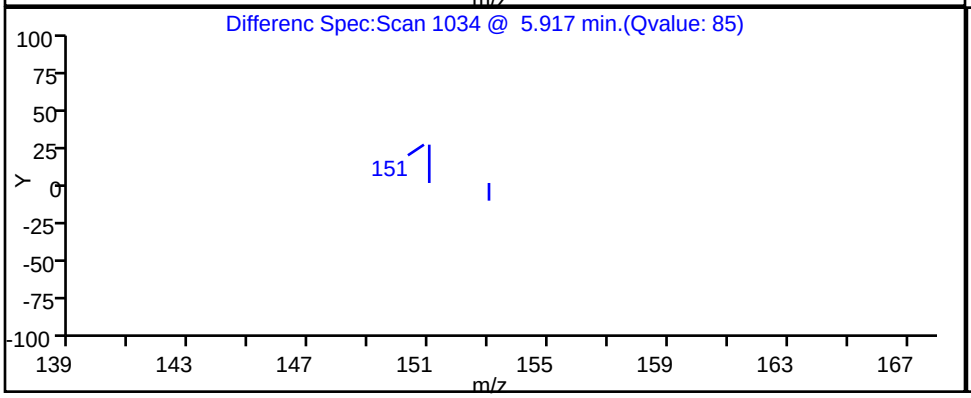


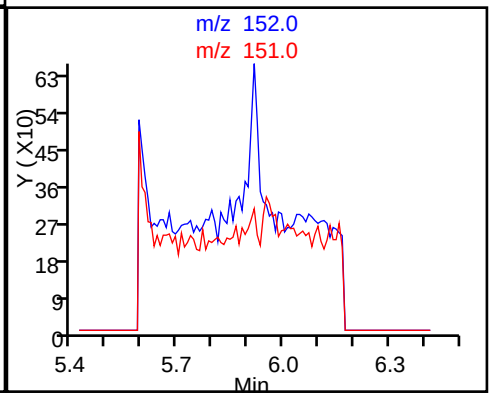












FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS10 | Lab Sample ID: 280-97928-22

Matrix: Solid | Lab File ID: F7292.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 15:20

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 31.3(g) | Date Analyzed: 06/17/2017 01:32

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 9.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.53	U	5.3	0.53	0.27
91-57-6	2-Methylnaphthalene	0.70	U	5.3	0.70	0.33
83-32-9	Acenaphthene	0.28	U	5.3	0.28	0.17
208-96-8	Acenaphthylene	1.3	J	5.3	0.70	0.18
120-12-7	Anthracene	1.4	J	5.3	2.6	0.76
56-55-3	Benzo[a]anthracene	4.7	J	5.3	2.6	0.95
50-32-8	Benzo[a]pyrene	5.4		5.3	2.6	0.78
205-99-2	Benzo[b]fluoranthene	8.2		5.3	2.6	1.3
191-24-2	Benzo[g,h,i]perylene	3.7	J	5.3	2.6	1.2
207-08-9	Benzo[k]fluoranthene	3.0	J	5.3	2.6	1.1
218-01-9	Chrysene	6.3		5.3	2.6	1.1
53-70-3	Dibenz(a,h)anthracene	2.6	U	5.3	2.6	1.4
206-44-0	Fluoranthene	9.0		5.3	2.6	1.1
86-73-7	Fluorene	0.50	J	5.3	0.70	0.50
193-39-5	Indeno[1,2,3-cd]pyrene	3.2	J	5.3	2.6	1.2
91-20-3	Naphthalene	0.34	J	5.3	0.70	0.34
85-01-8	Phenanthrene	3.3	J	5.3	2.6	1.2
129-00-0	Pyrene	8.4		5.3	2.6	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	78		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	80		44-125
1718-51-0	Terphenyl-d14 (Surr)	72		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7292.D
Lims ID: 280-97928-B-22-B
Client ID: SS025-SS10
Sample Type: Client
Inject. Date: 17-Jun-2017 01:32:30 ALS Bottle#: 25 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-b-22-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:36:47

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	95	23912	600.0	
* 2 Phenanthrene-d10	188	7.301	7.301	0.000	99	42724	600.0	
* 3 Chrysene-d12	240	11.371	11.371	0.000	95	40009	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	14932	398.6	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	100	24197	390.3	
$ 6 Terphenyl-d14	244	9.124	9.130	-0.006	96	15593	359.5	
14 Naphthalene	128	4.590	4.589	0.001	93	759	9.79	
16 2-Methylnaphthalene	142		5.147				ND	
17 1-Methylnaphthalene	142		5.235				ND	
22 Acenaphthylene	152	5.917	5.917	0.000	98	3128	37.9	
23 Acenaphthene	153		6.055				ND	
25 Fluorene	166	6.487	6.494	-0.007	90	882	14.3	
27 Phenanthrene	178	7.321	7.321	0.000	97	8518	94.0	
28 Anthracene	178	7.367	7.366	0.001	94	3631	39.7	
30 Fluoranthene	202	8.623	8.629	-0.006	100	26722	256.8	
31 Pyrene	202	8.968	8.968	0.000	100	25737	238.5	
35 Benzo[a]anthracene	228	11.344	11.344	0.000	84	14181	133.3	
36 Chrysene	228	11.434	11.443	-0.009	99	17735	180.2	
38 Benzo[b]fluoranthene	252	14.498	14.503	-0.005	97	22554	233.5	
39 Benzo[k]fluoranthene	252	14.573	14.586	-0.013	93	8201	84.4	
40 Benzo[a]pyrene	252	15.574	15.587	-0.013	95	14601	153.2	
41 Indeno[1,2,3-cd]pyrene	276	18.671	18.676	-0.005	77	9879	91.4	
42 Dibenz(a,h)anthracene	278	18.693	18.702	-0.009	55	2247	26.6	
43 Benzo[g,h,i]perylene	276	19.109	19.109	0.000	87	9785	106.7	

Reagents:

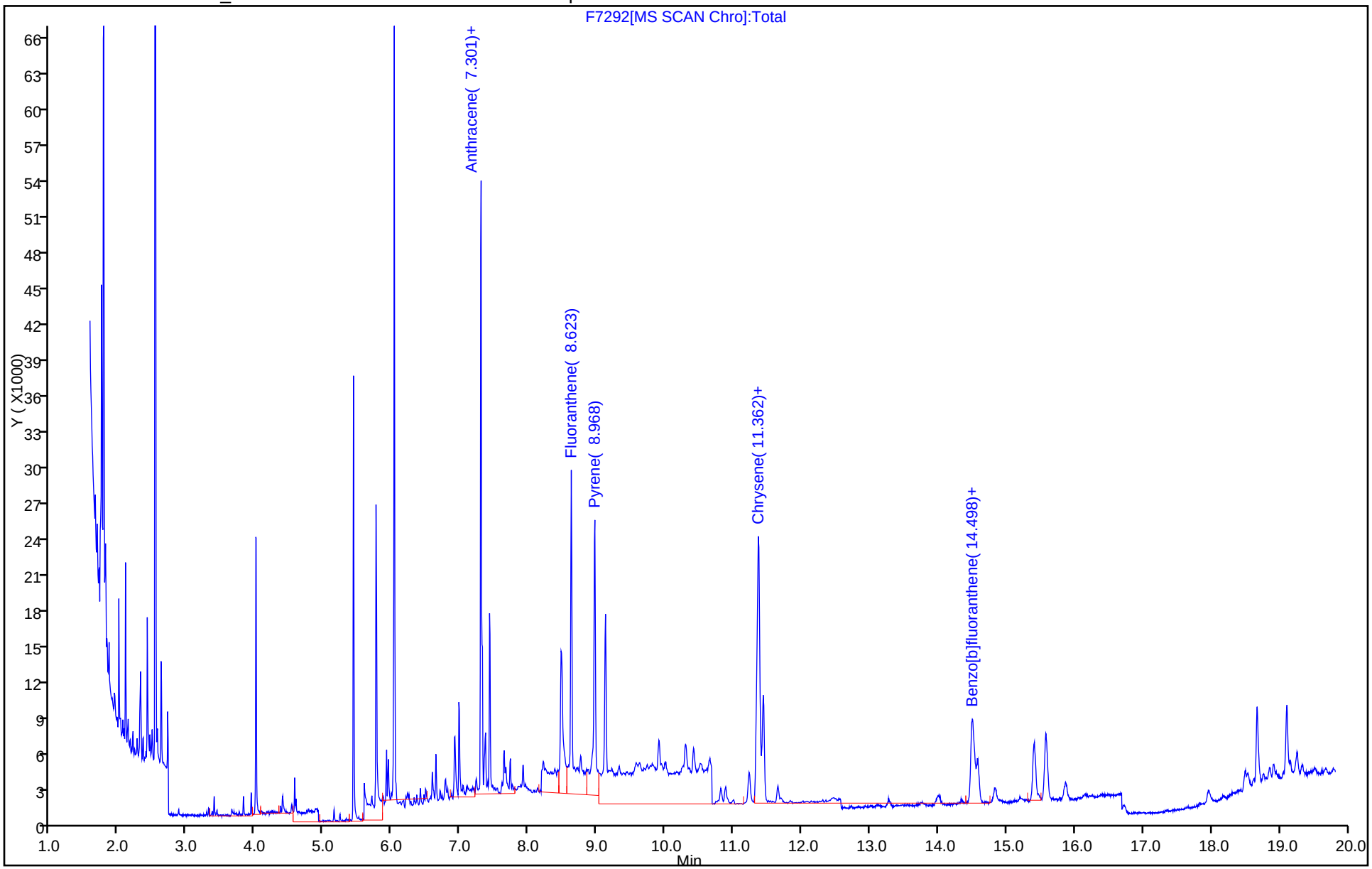
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7292.D

Injection Date:	17-Jun-2017 01:32:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-B-22-B	Lab Sample ID:	280-97928-22	Worklist Smp#:	26
Client ID:	SS025-SS10				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7292.D
Lims ID: 280-97928-B-22-B
Client ID: SS025-SS10
Sample Type: Client
Inject. Date: 17-Jun-2017 01:32:30 ALS Bottle#: 25 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-b-22-b
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:36:47

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	398.6	79.73
$ 5 2-Fluorobiphenyl	500.0	390.3	78.05
$ 6 Terphenyl-d14	500.0	359.5	71.89

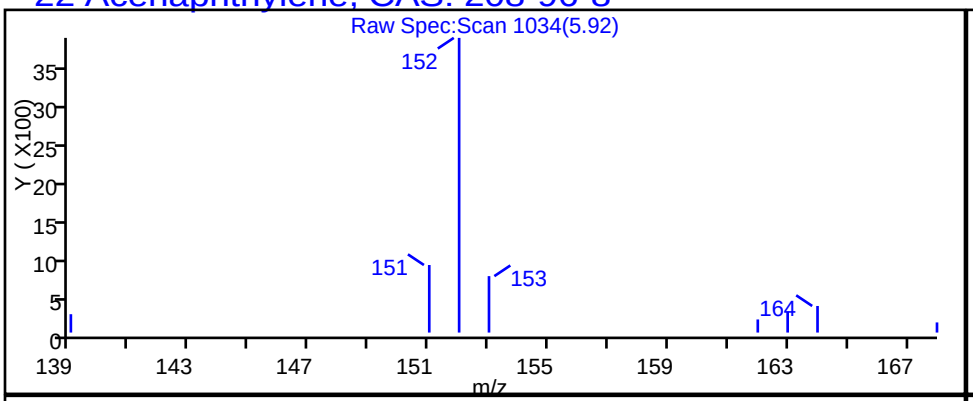
Report Date: 19-Jun-2017 15:44:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

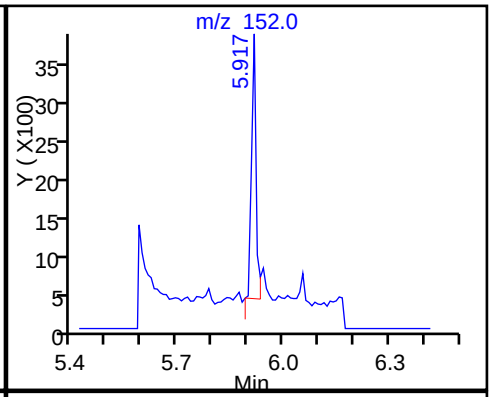
TestAmerica Denver

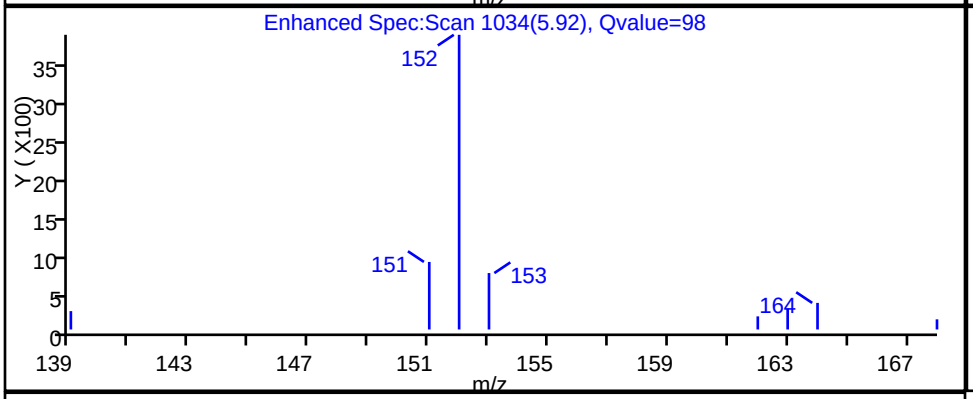
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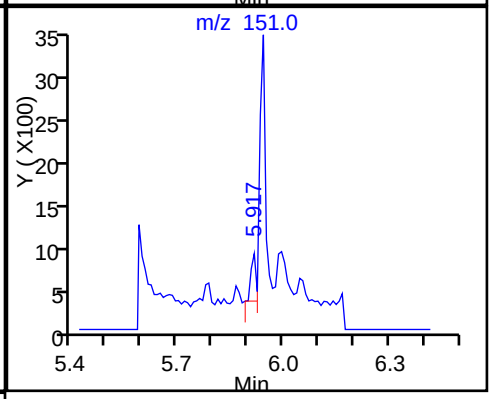
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Lims ID:	280-97928-B-22-B	Lab Sample ID:	280-97928-22
Client ID:	SS025-SS10		
Operator ID:	WICKHAMM	ALS Bottle#:	25 Worklist Smp#: 26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM
Column:		Detector	MS SCAN

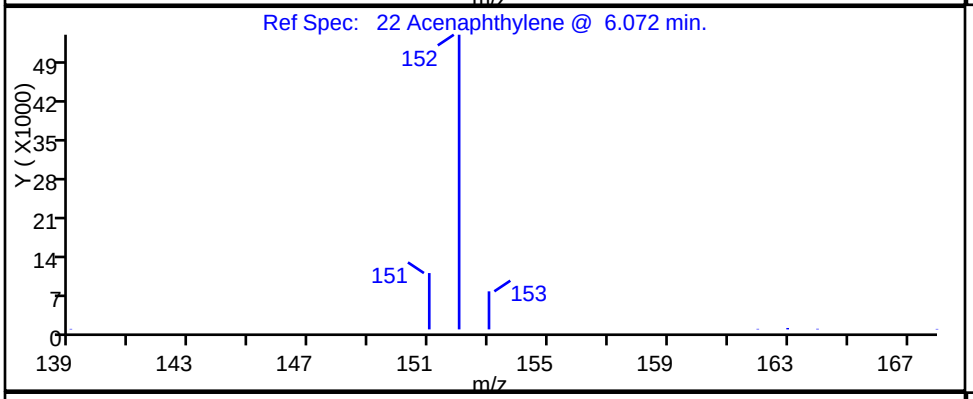
22 Acenaphthylene, CAS: 208-96-8

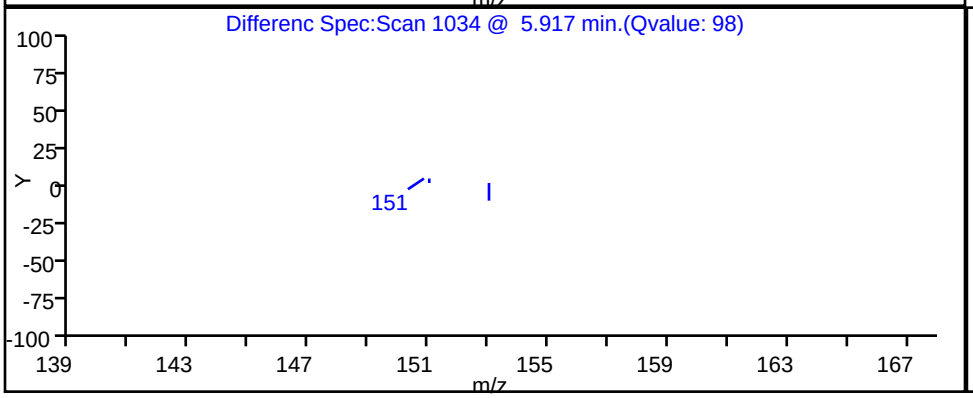


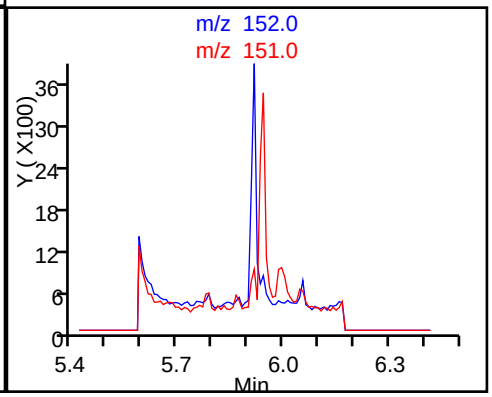












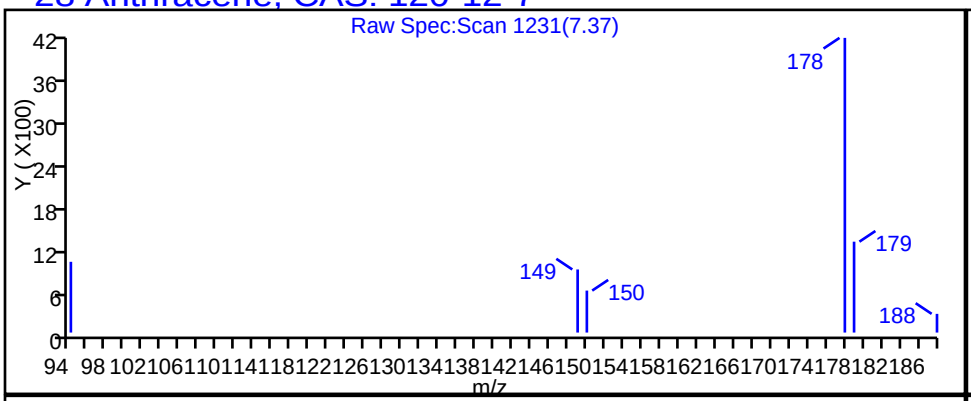
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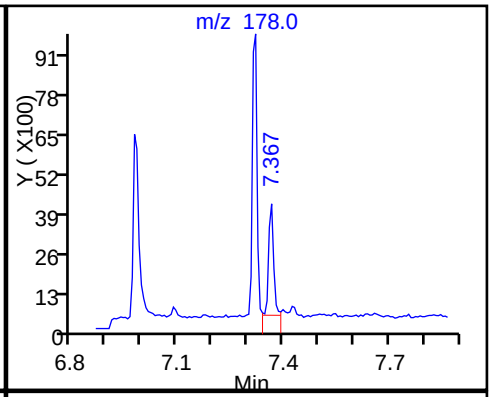
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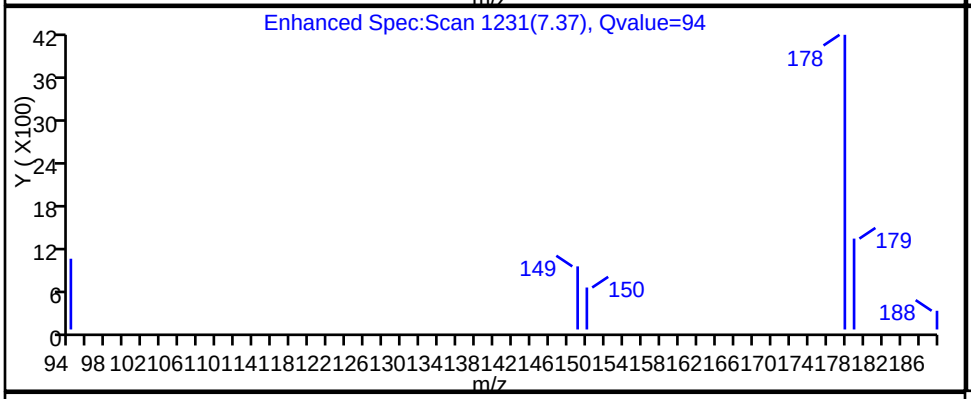
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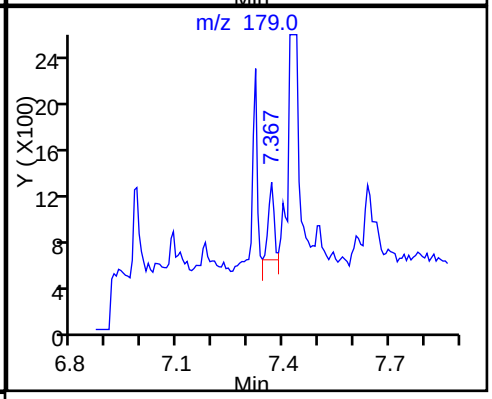
Injection Date:	17-Jun-2017 01:32:30	Instrument ID:	SMS_F
Lims ID:	280-97928-B-22-B	Lab Sample ID:	280-97928-22
Client ID:	SS025-SS10		
Operator ID:	WICKHAMM	ALS Bottle#:	25 Worklist Smp#: 26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM
Column:		Detector	MS SCAN

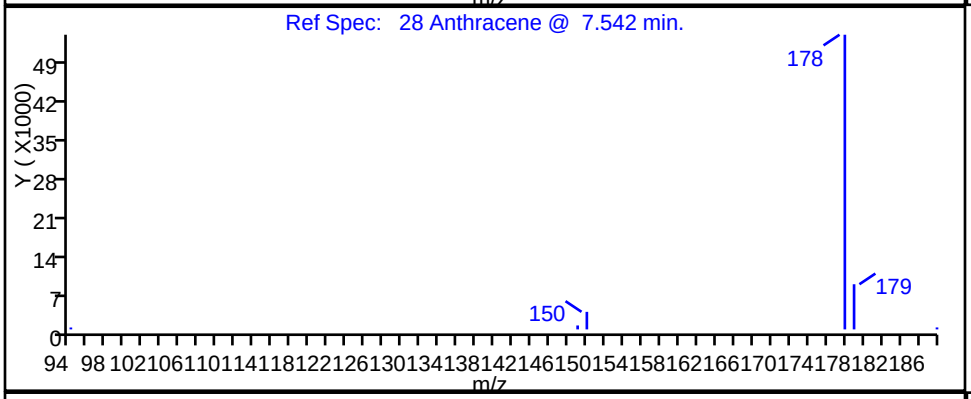
28 Anthracene, CAS: 120-12-7

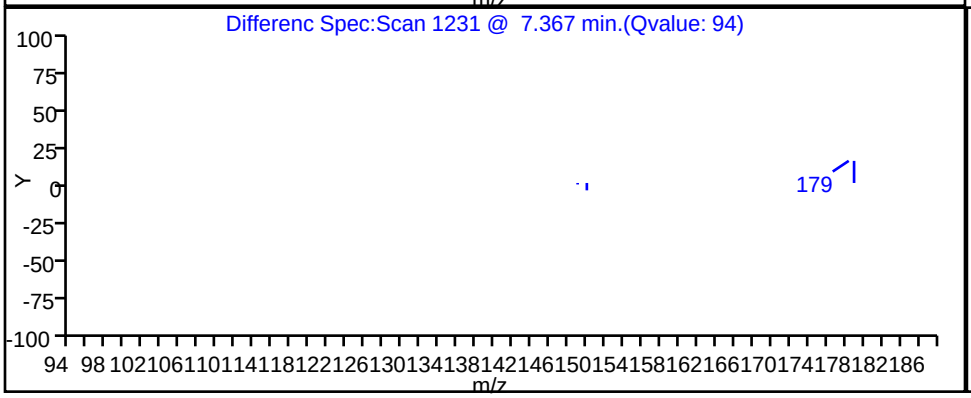


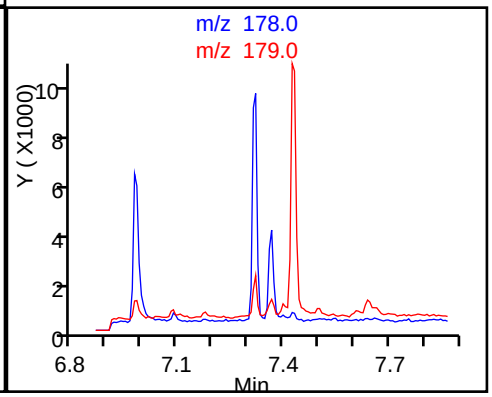












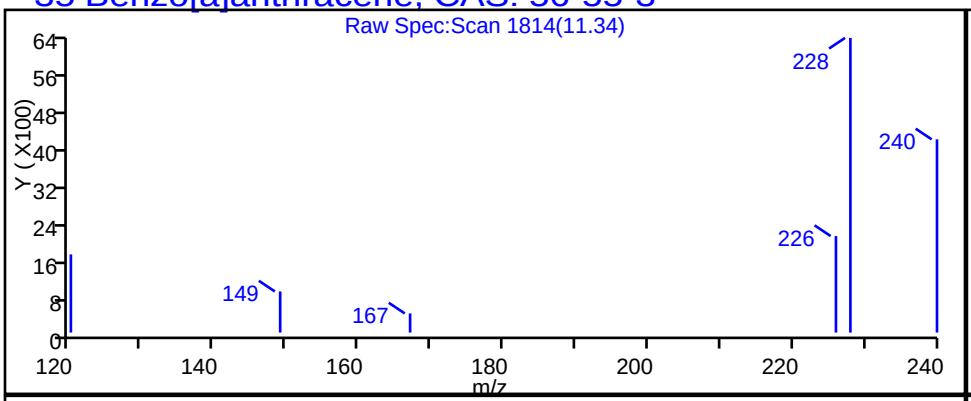
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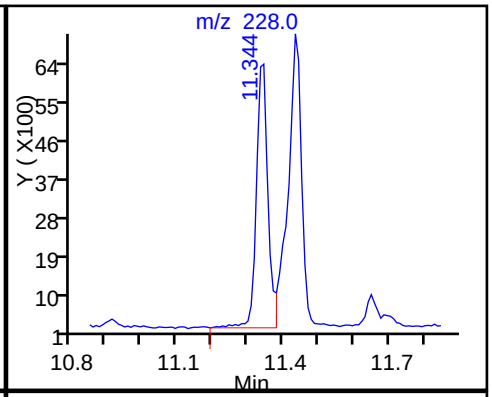
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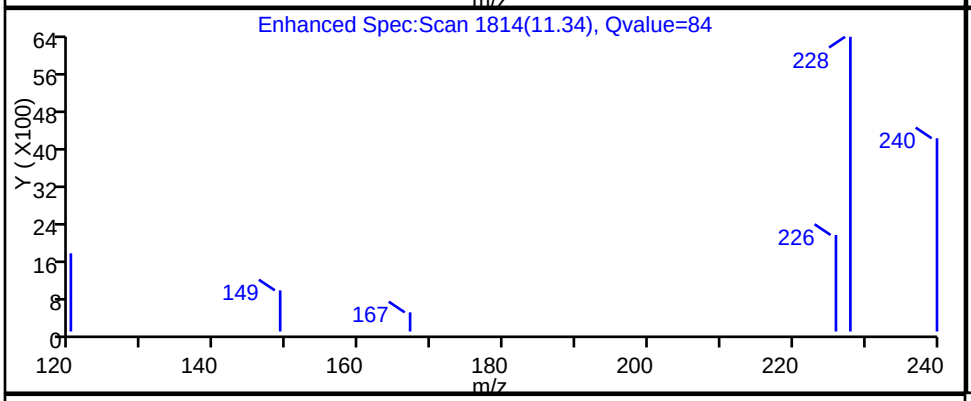
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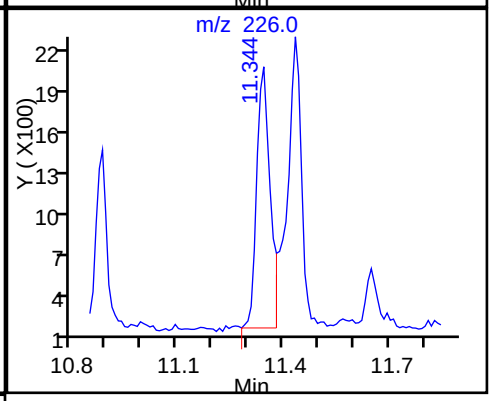
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Lims ID:	280-97928-B-22-B	Lab Sample ID:	280-97928-22		
Client ID:	SS025-SS10				
Operator ID:	WICKHAMM	ALS Bottle#:	25	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

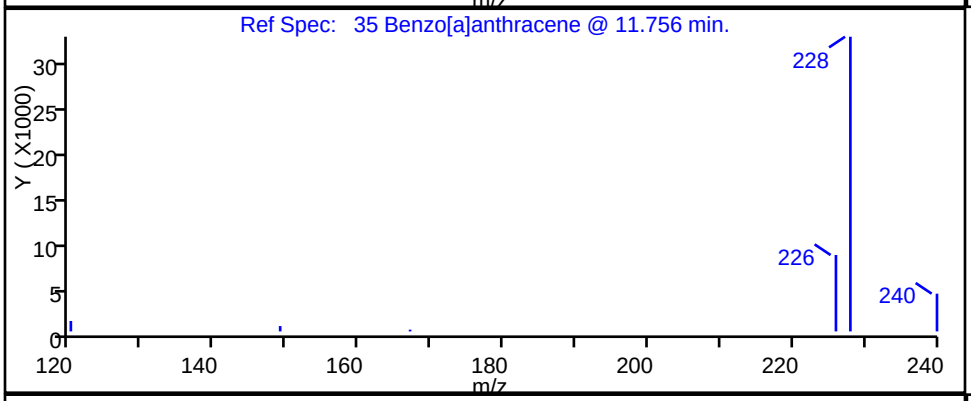
35 Benzo[a]anthracene, CAS: 56-55-3

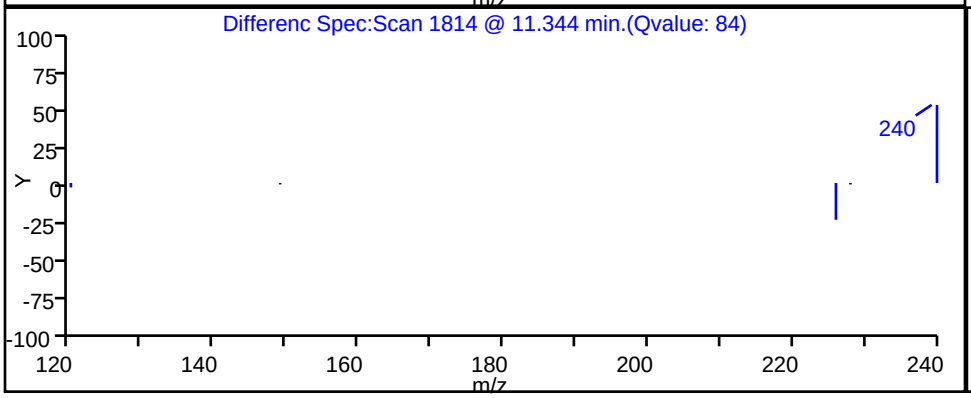


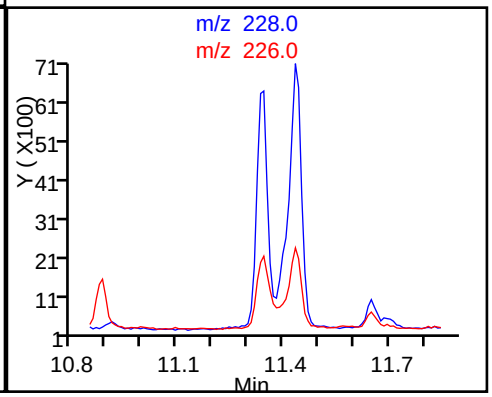












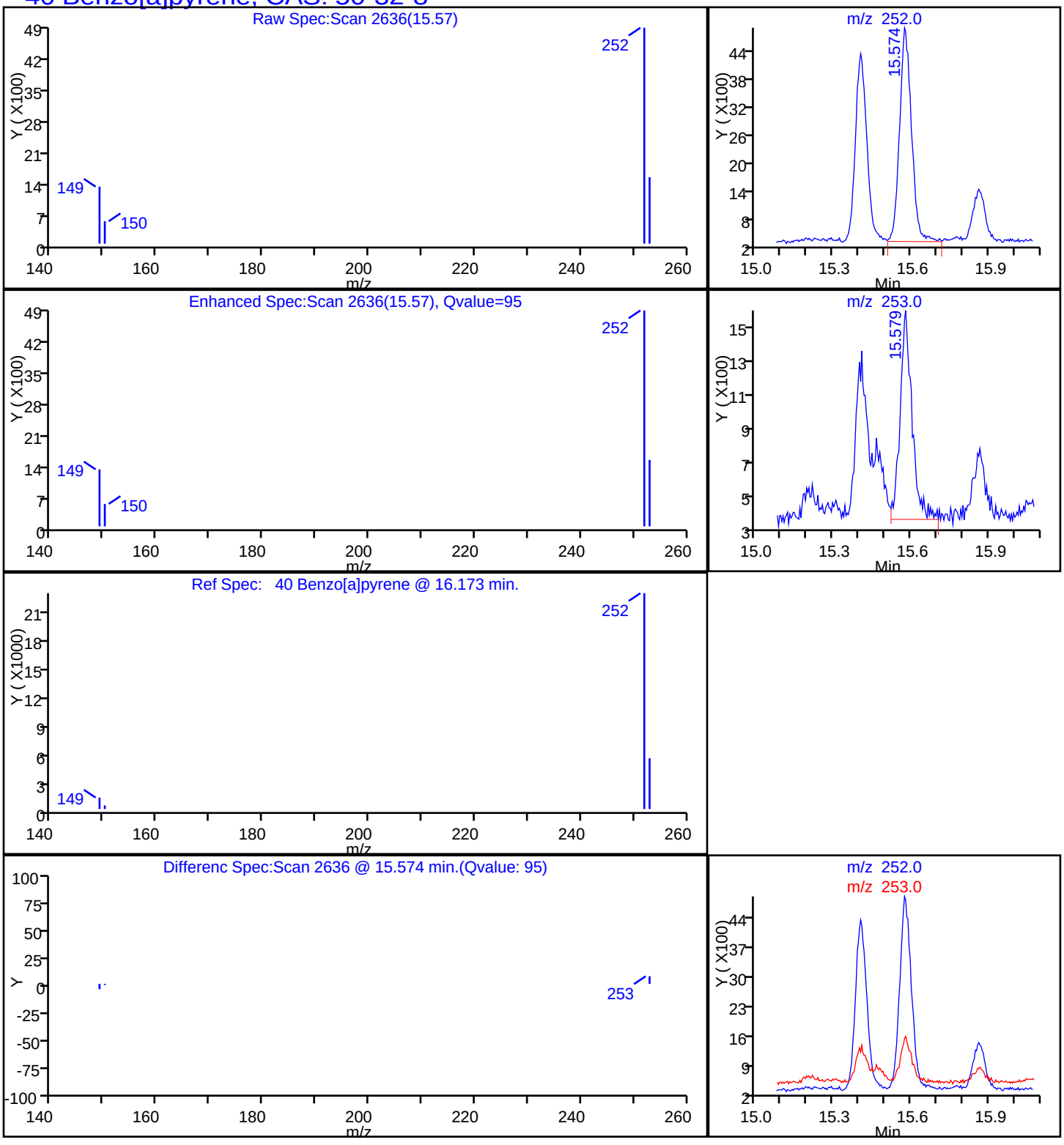
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TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7292.D

Injection Date:	17-Jun-2017 01:32:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-22-B	Lab Sample ID:	280-97928-22		
Client ID:	SS025-SS10				
Operator ID:	WICKHAMM	ALS Bottle#:	25	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

40 Benzo[a]pyrene, CAS: 50-32-8



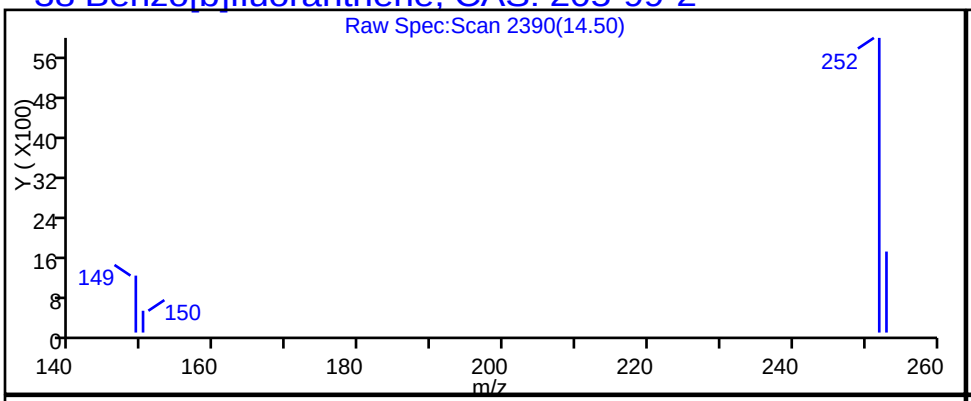
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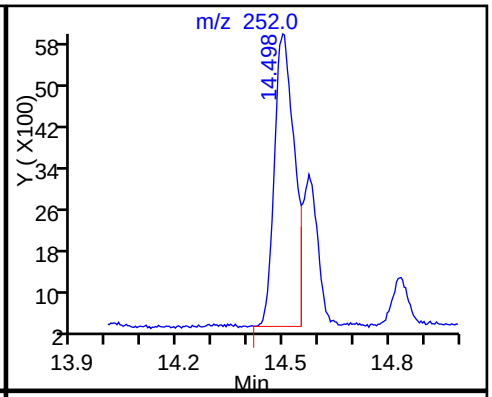
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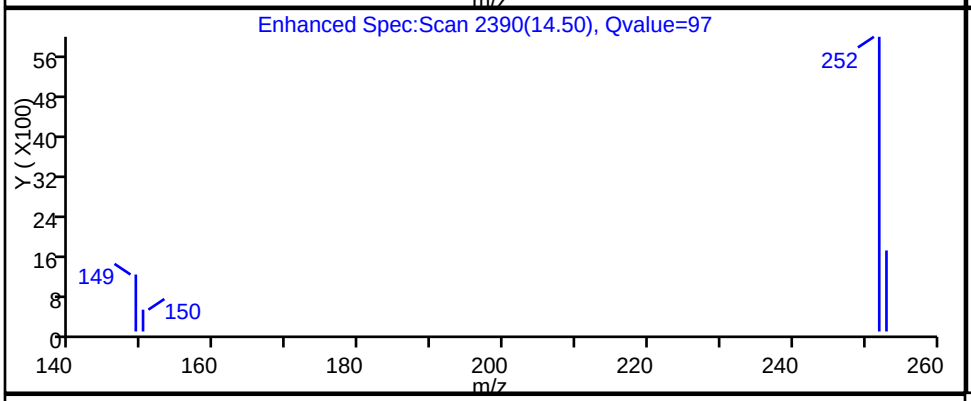
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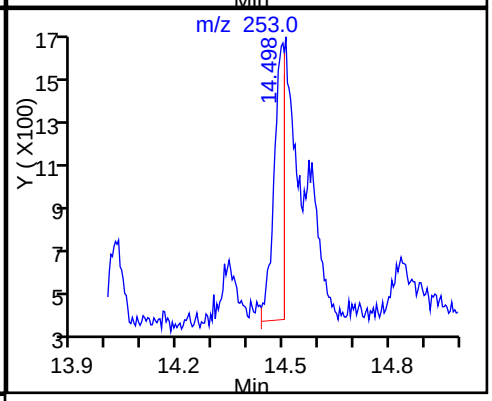
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Lims ID:	280-97928-B-22-B	Lab Sample ID:	280-97928-22		
Client ID:	SS025-SS10				
Operator ID:	WICKHAMM	ALS Bottle#:	25	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

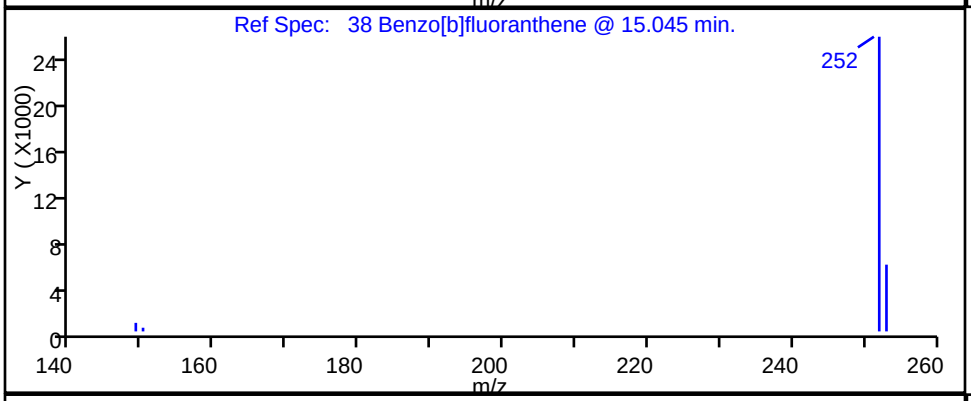
38 Benzo[b]fluoranthene, CAS: 205-99-2

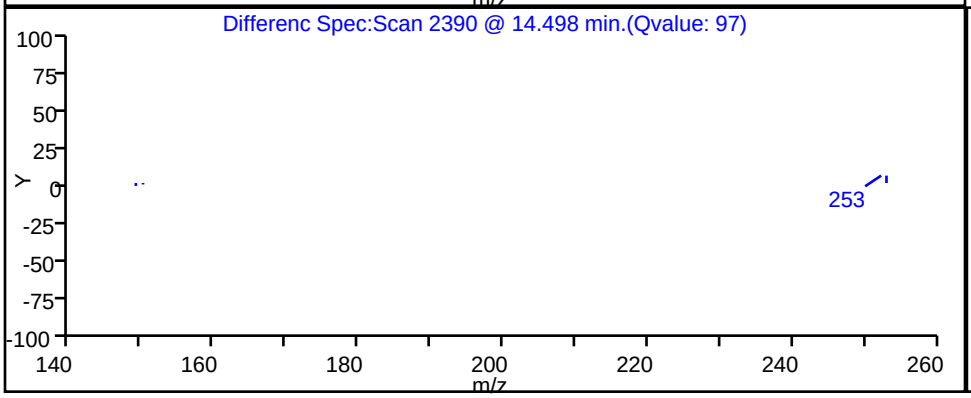


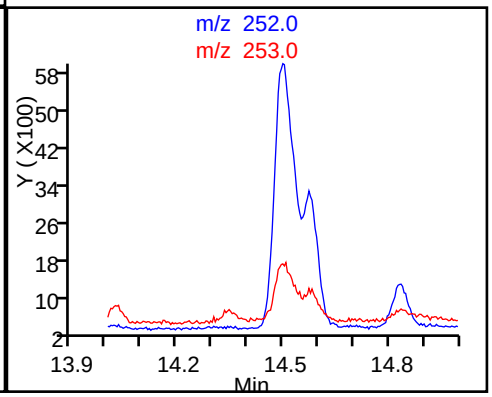










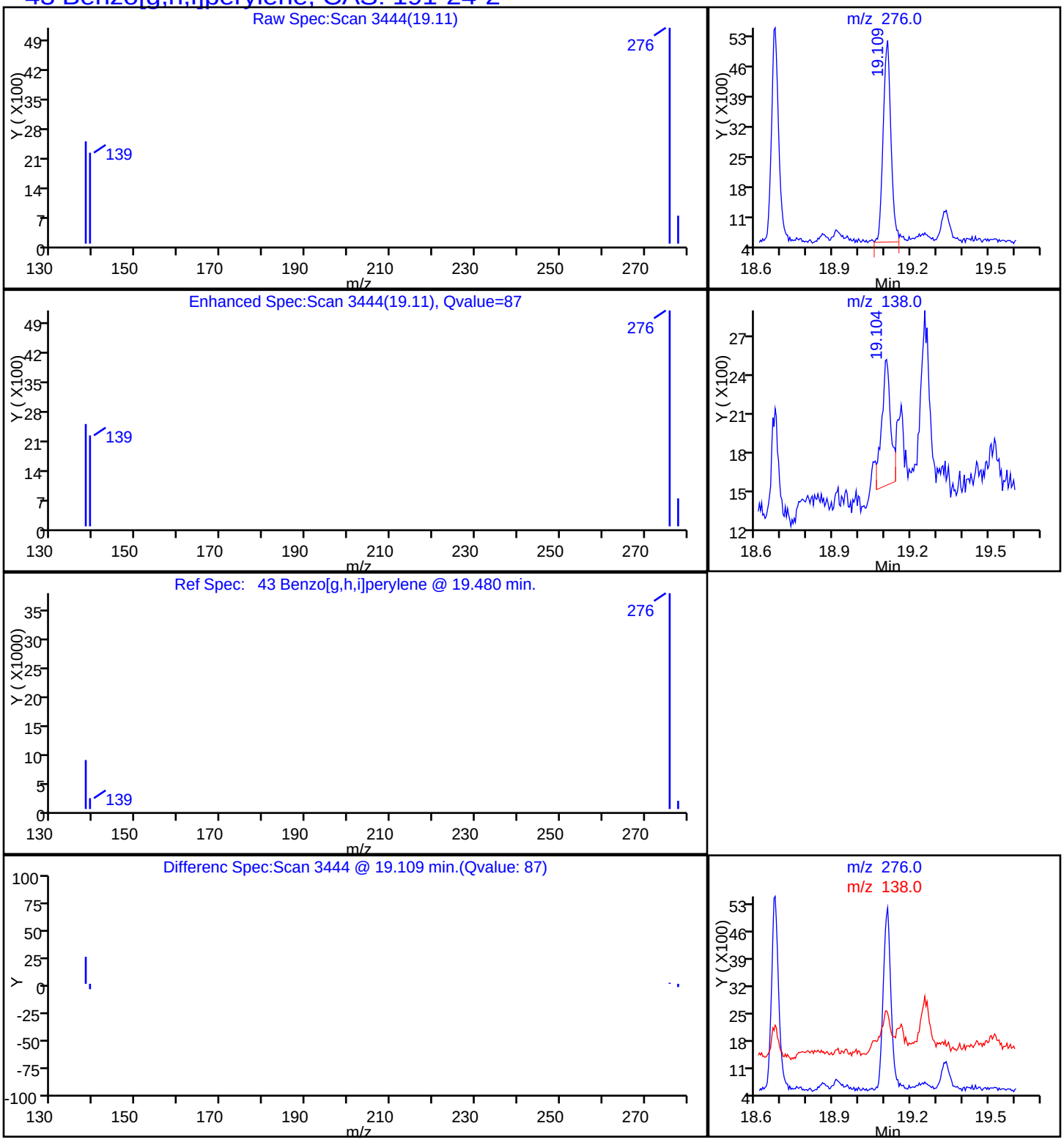


Report Date: 19-Jun-2017 15:44:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7292.D				
Injection Date:	17-Jun-2017 01:32:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-22-B	Lab Sample ID:	280-97928-22		
Client ID:	SS025-SS10				
Operator ID:	WICKHAMM	ALS Bottle#:	25	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

43 Benzo[g,h,i]perylene, CAS: 191-24-2

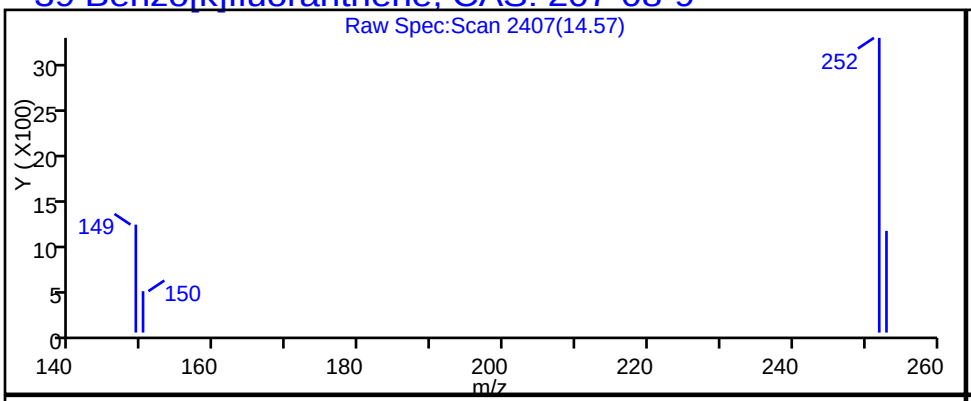


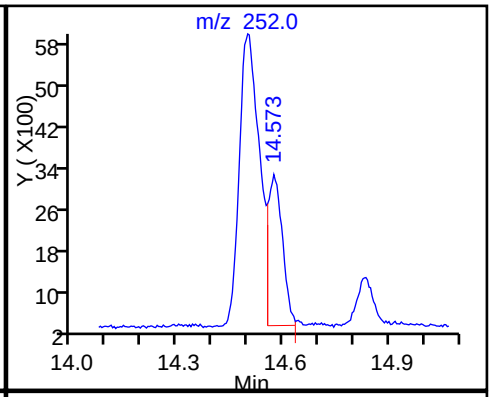
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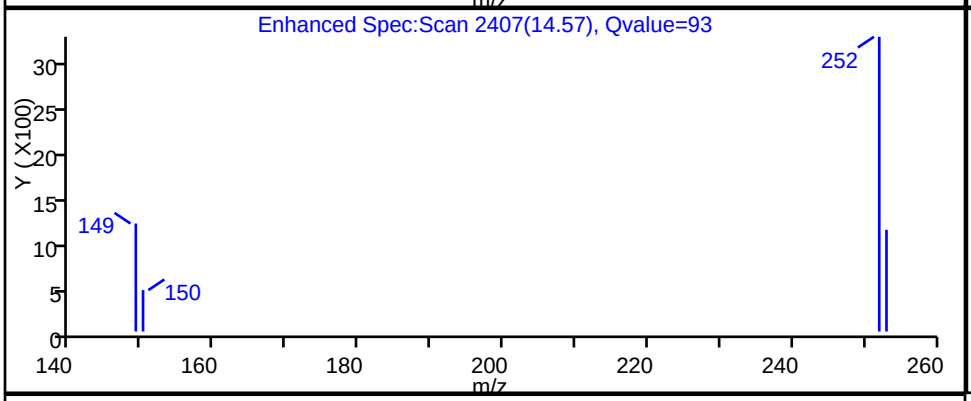
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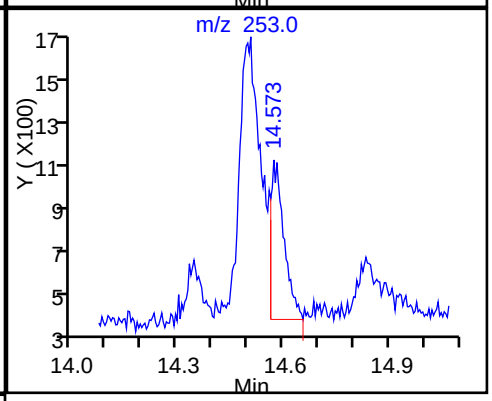
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Lims ID:	280-97928-B-22-B	Lab Sample ID:	280-97928-22		
Client ID:	SS025-SS10				
Operator ID:	WICKHAMM	ALS Bottle#:	25	Worklist Smp#:	26
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Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
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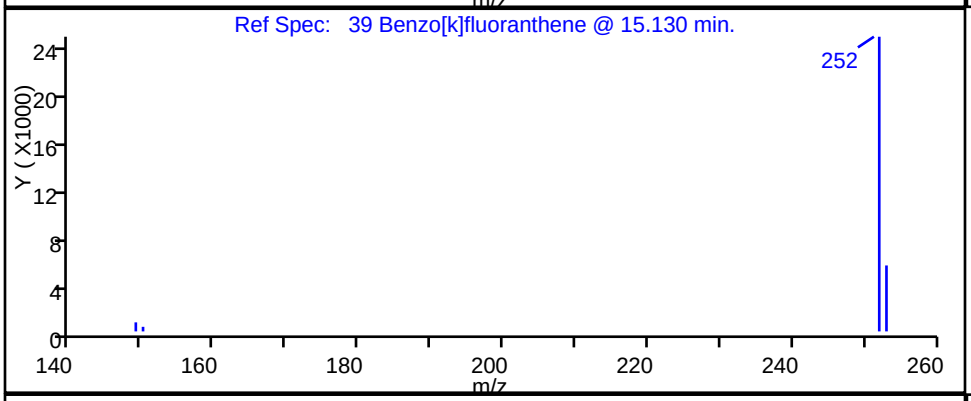
39 Benzo[k]fluoranthene, CAS: 207-08-9

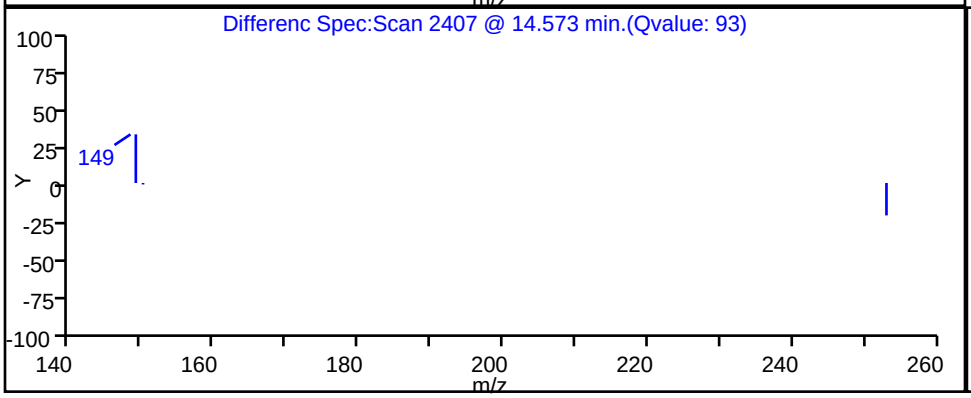


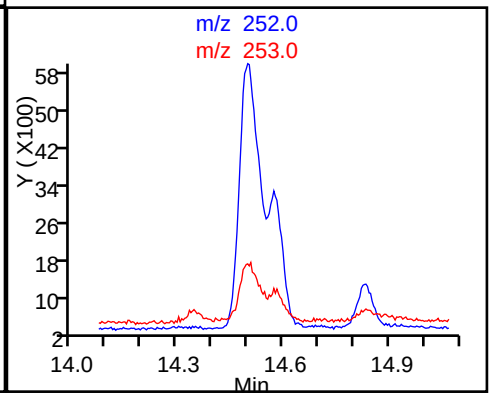












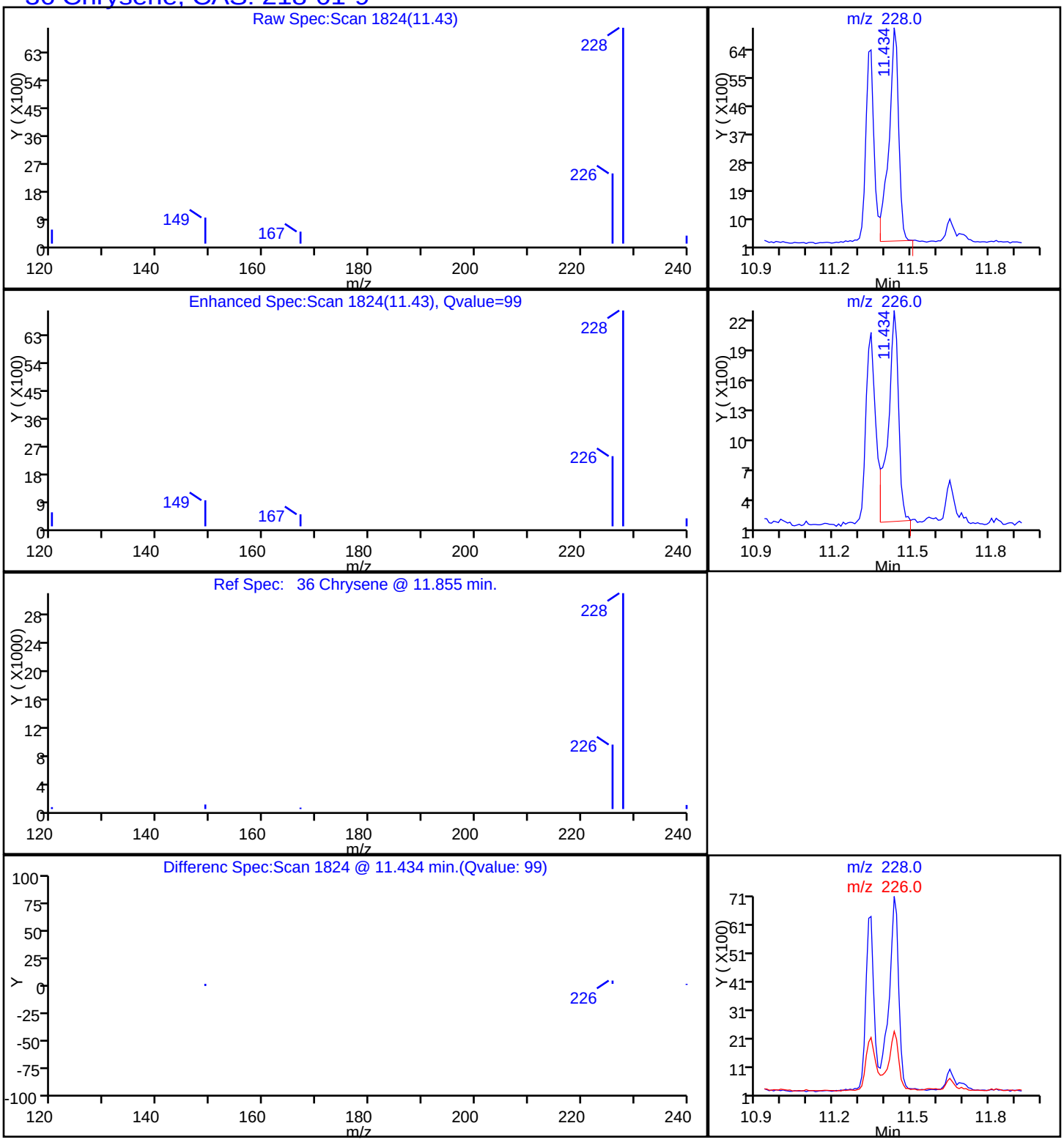
Report Date: 19-Jun-2017 15:44:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7292.D

Injection Date:	17-Jun-2017 01:32:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-22-B	Lab Sample ID:	280-97928-22		
Client ID:	SS025-SS10				
Operator ID:	WICKHAMM	ALS Bottle#:	25	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

36 Chrysene, CAS: 218-01-9

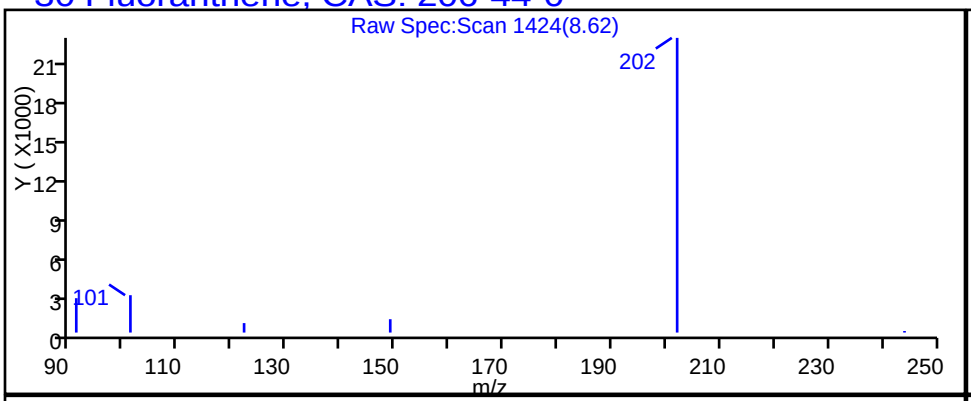


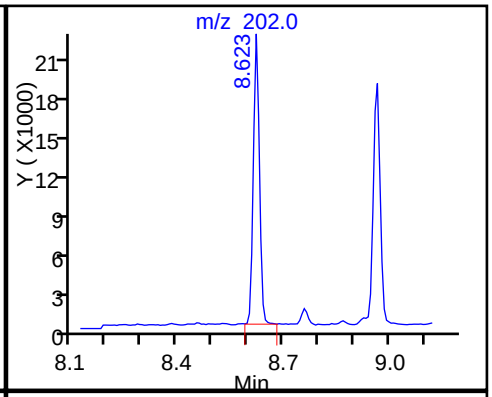
Report Date: 19-Jun-2017 15:44:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

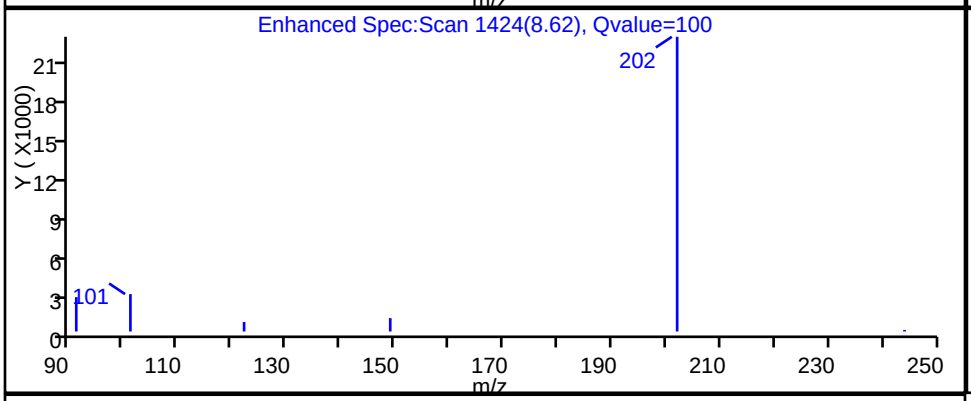
TestAmerica Denver

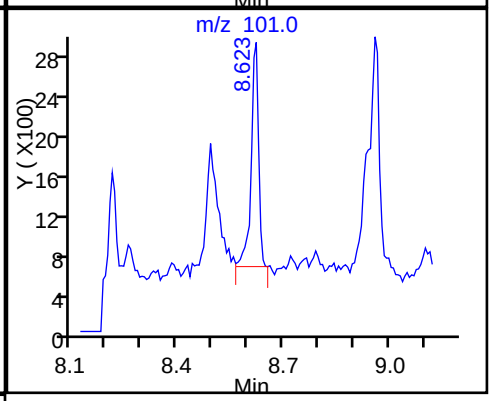
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Lims ID:	280-97928-B-22-B	Lab Sample ID:	280-97928-22		
Client ID:	SS025-SS10				
Operator ID:	WICKHAMM	ALS Bottle#:	25	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

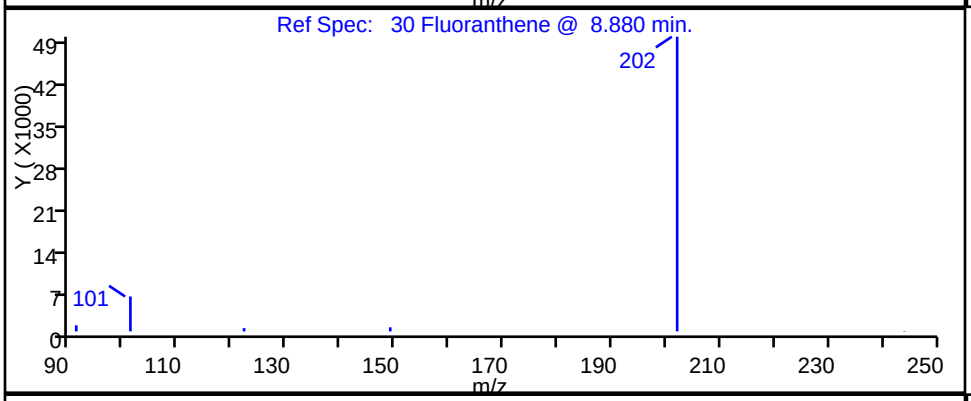
30 Fluoranthene, CAS: 206-44-0

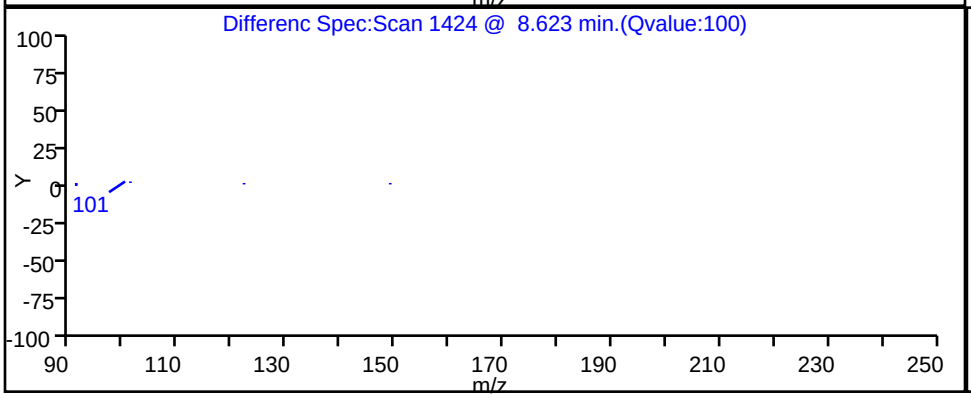


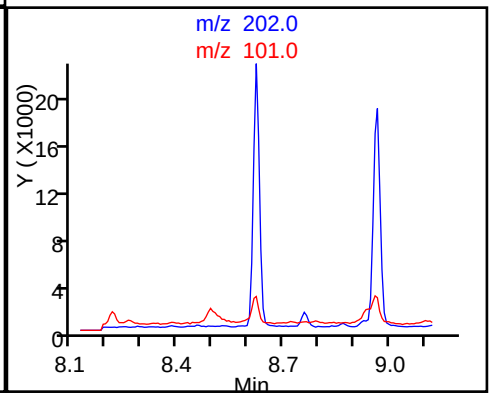












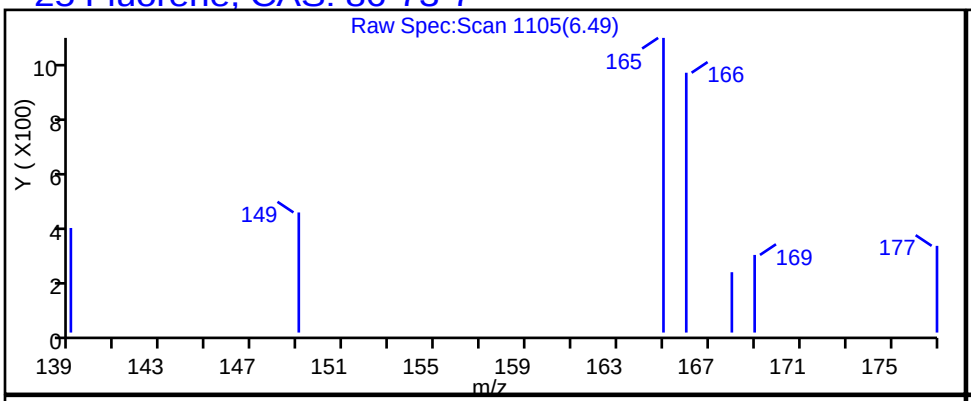
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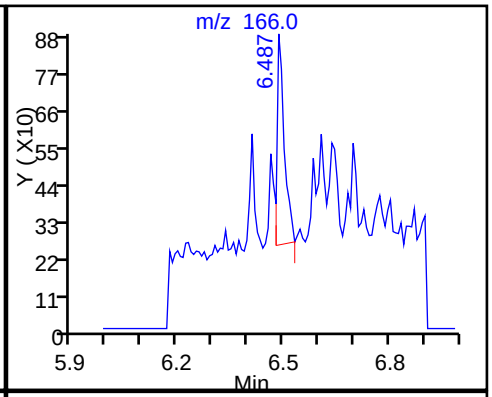
TestAmerica Denver

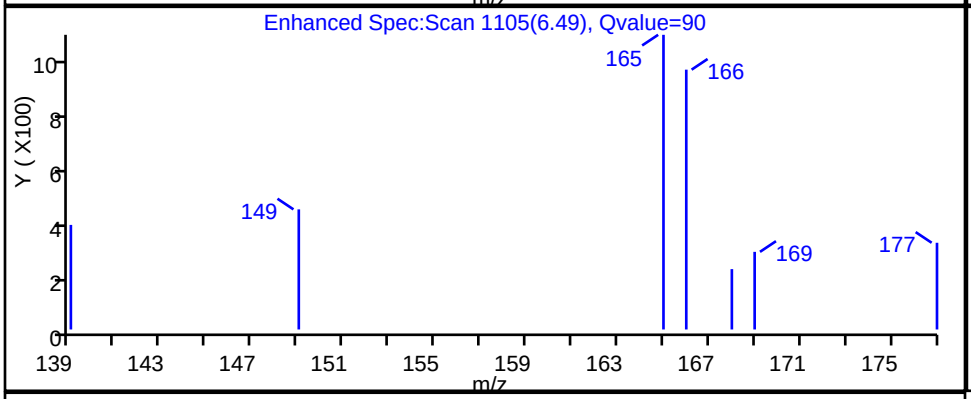
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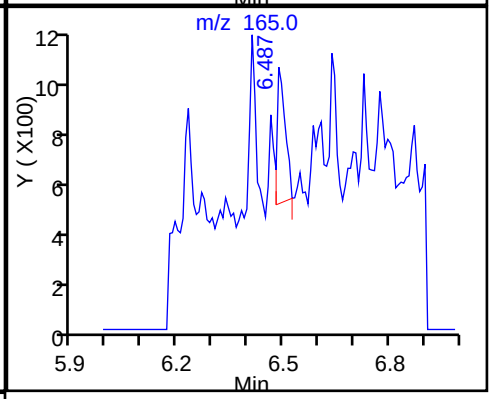
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Lims ID:	280-97928-B-22-B	Lab Sample ID:	280-97928-22		
Client ID:	SS025-SS10				
Operator ID:	WICKHAMM	ALS Bottle#:	25	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

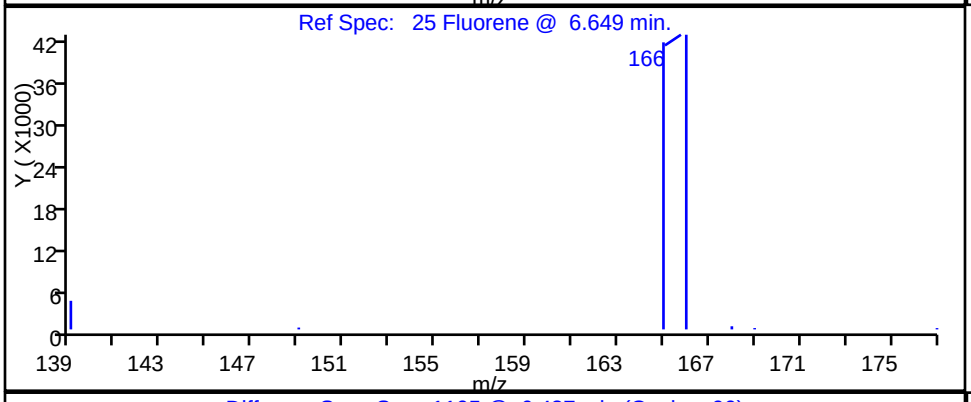
25 Fluorene, CAS: 86-73-7

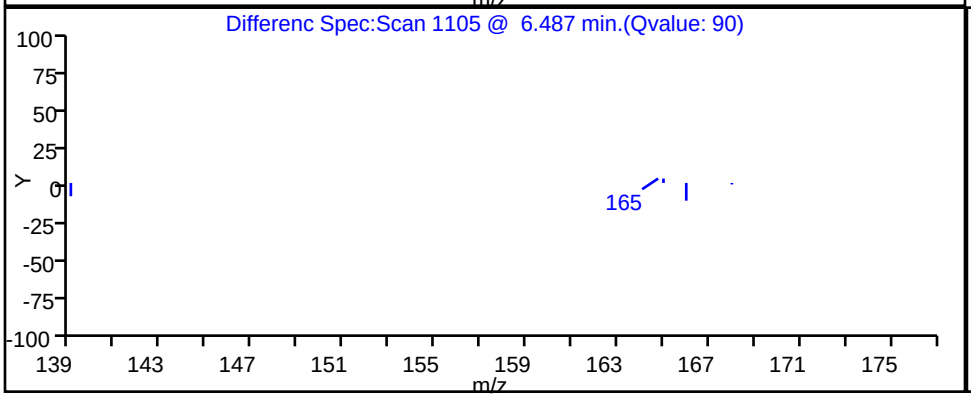


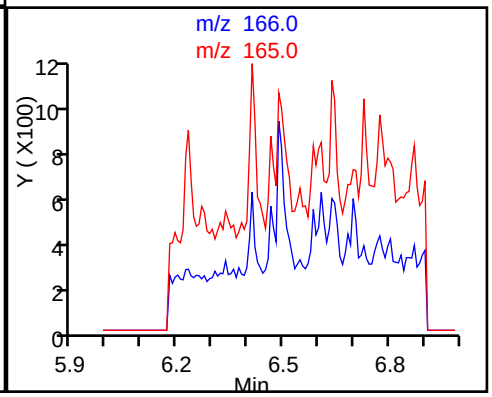










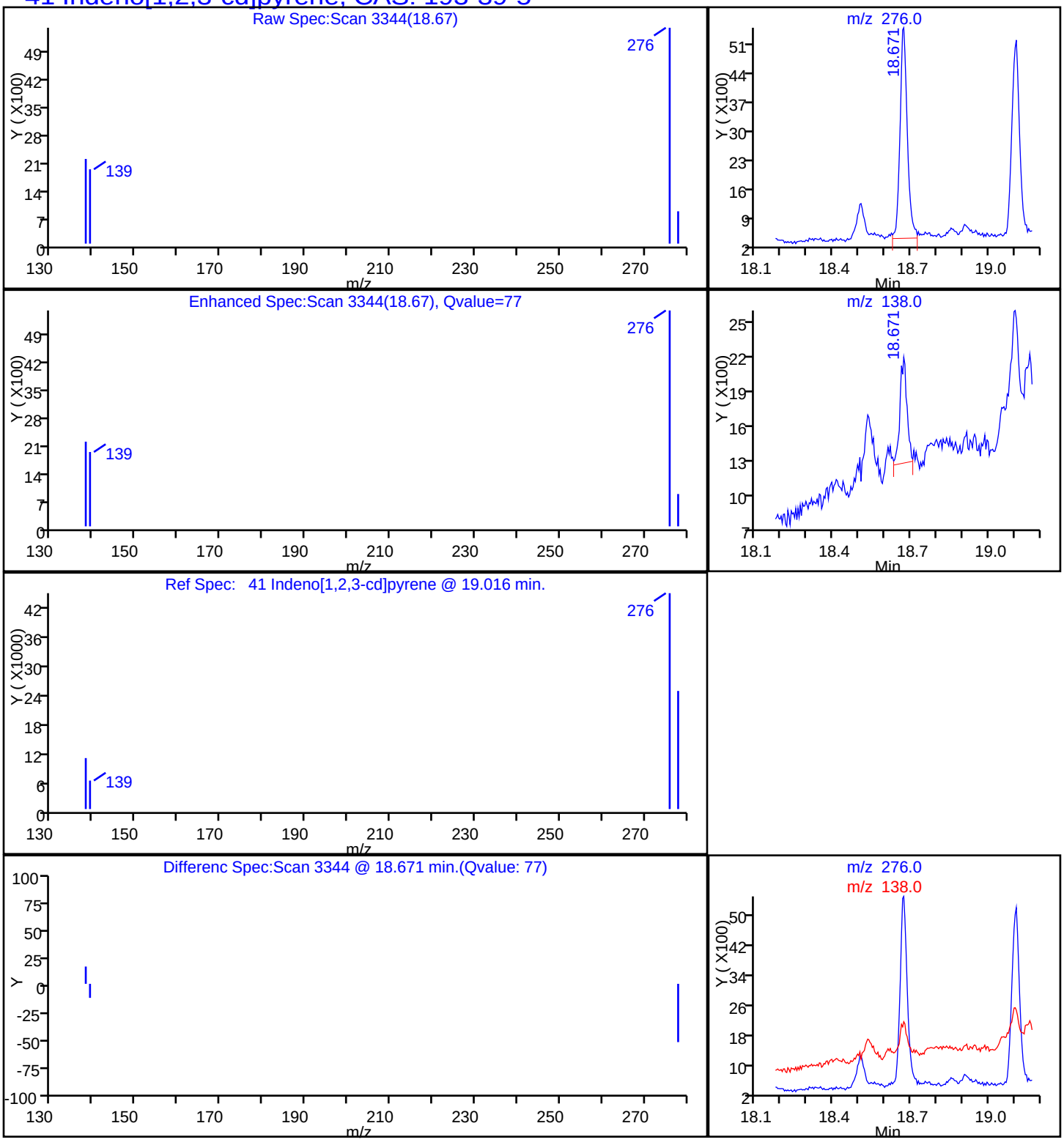


Report Date: 19-Jun-2017 15:44:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7292.D				
Injection Date:	17-Jun-2017 01:32:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-22-B	Lab Sample ID:	280-97928-22		
Client ID:	SS025-SS10				
Operator ID:	WICKHAMM	ALS Bottle#:	25	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5



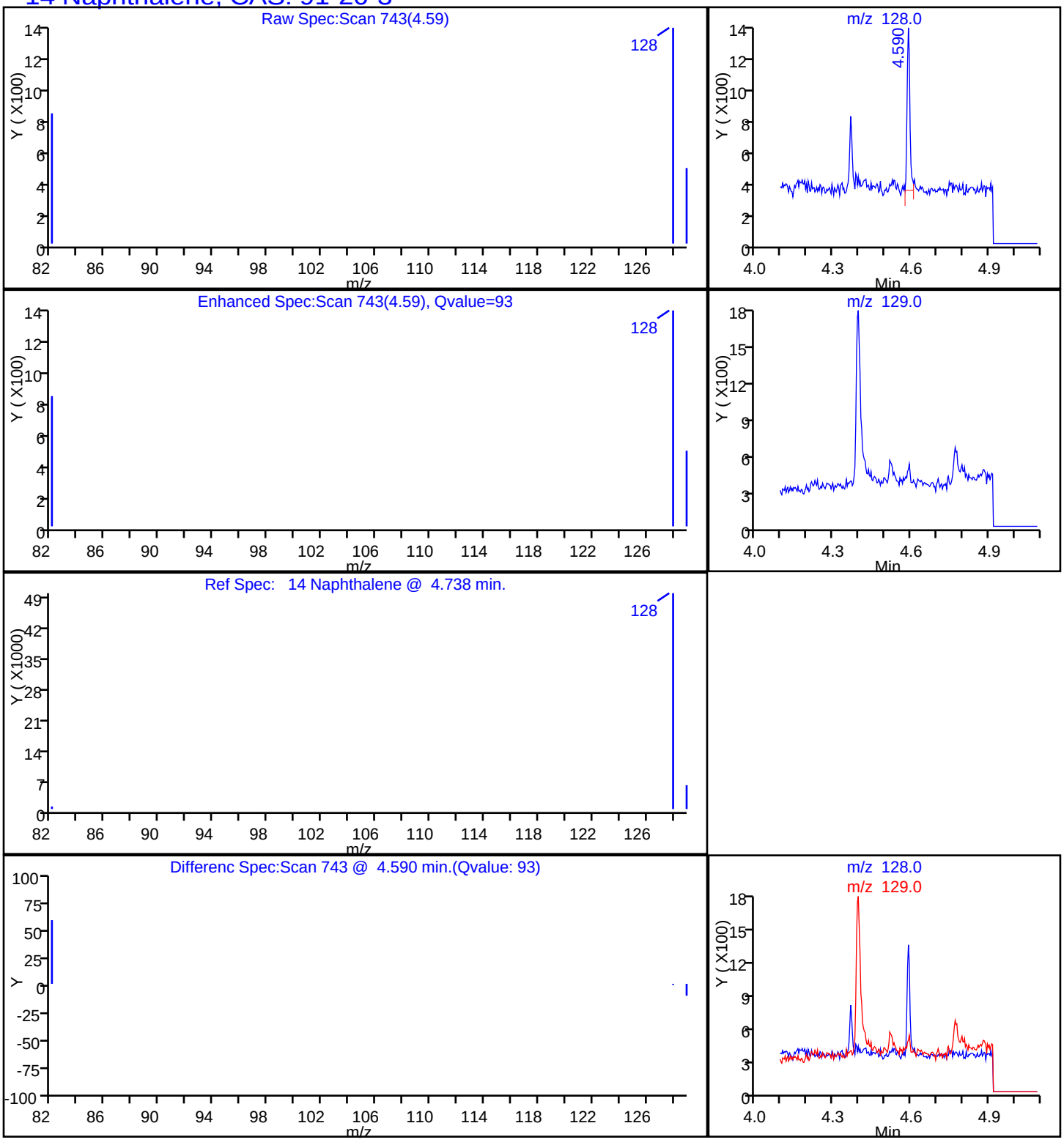
Report Date: 19-Jun-2017 15:44:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7292.D

Injection Date:	17-Jun-2017 01:32:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-22-B	Lab Sample ID:	280-97928-22		
Client ID:	SS025-SS10				
Operator ID:	WICKHAMM	ALS Bottle#:	25	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

14 Naphthalene, CAS: 91-20-3

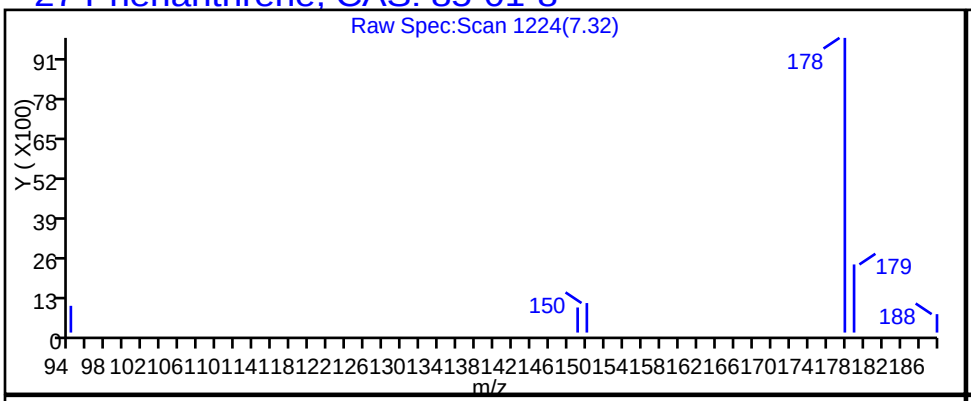


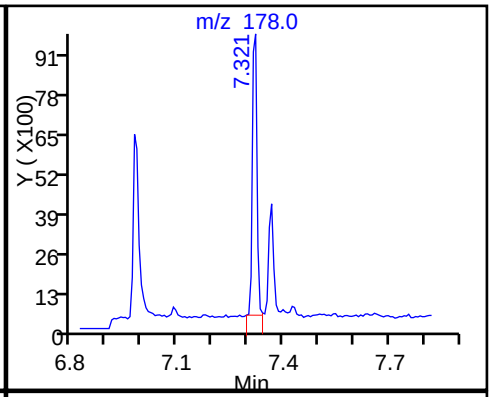
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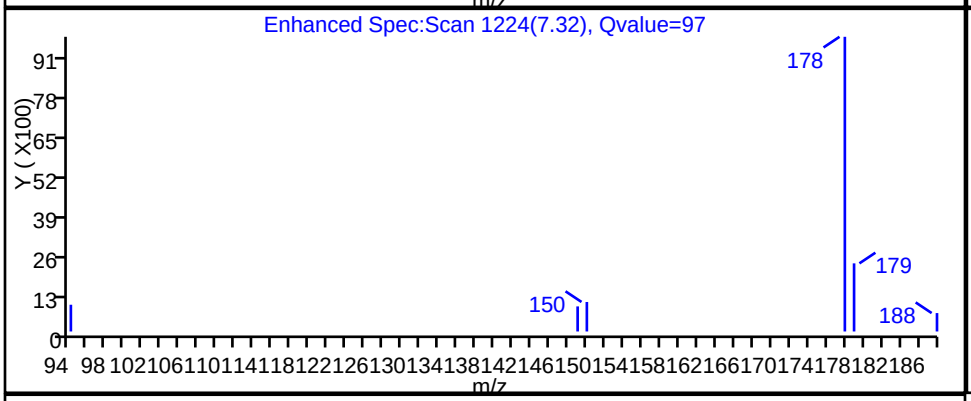
TestAmerica Denver

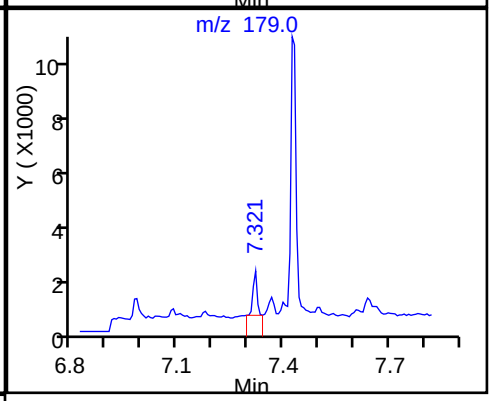
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Injection Date:	17-Jun-2017 01:32:30	Instrument ID:	SMS_F		
Lims ID:	280-97928-B-22-B	Lab Sample ID:	280-97928-22		
Client ID:	SS025-SS10				
Operator ID:	WICKHAMM	ALS Bottle#:	25	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

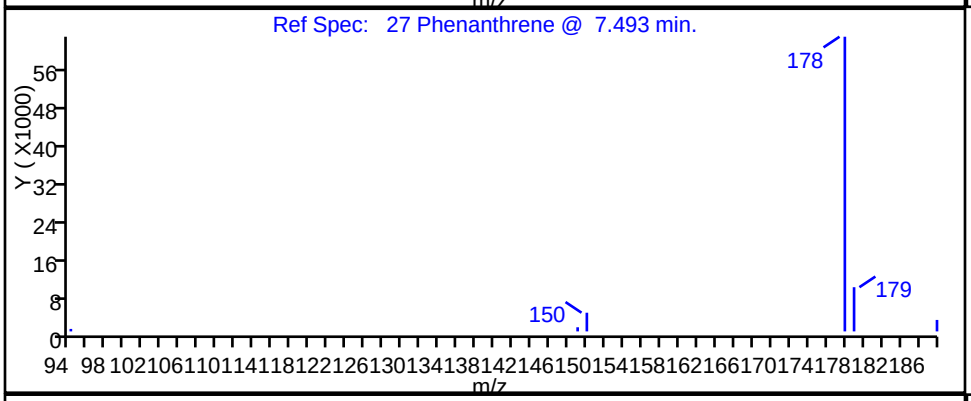
27 Phenanthrene, CAS: 85-01-8

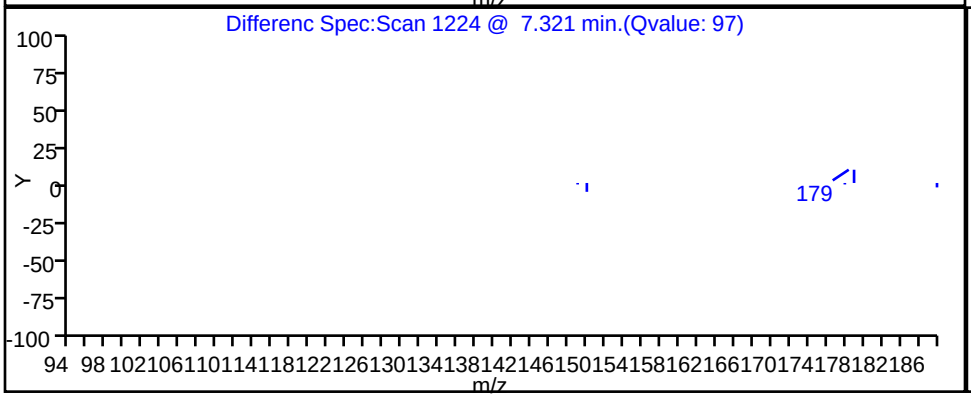


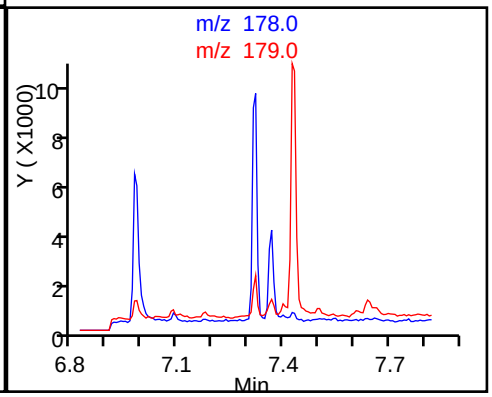












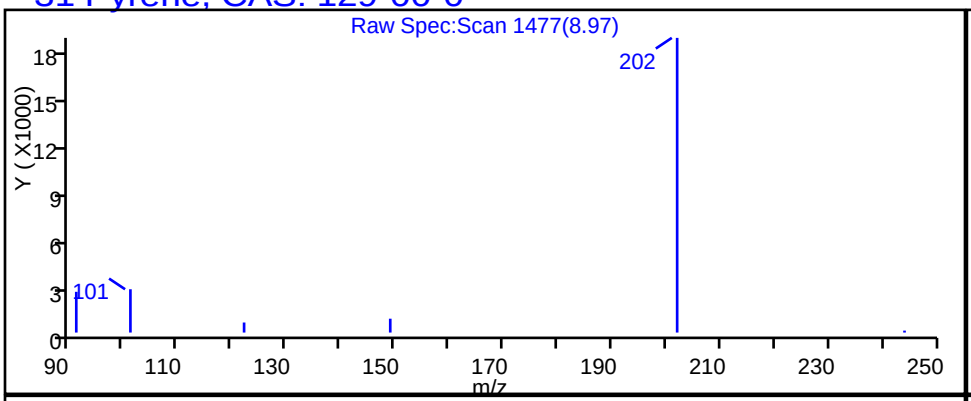
Report Date: 19-Jun-2017 15:44:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

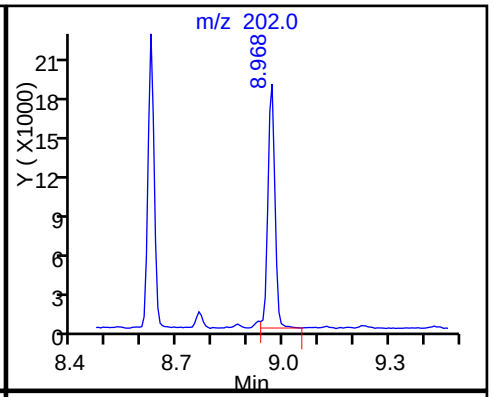
TestAmerica Denver

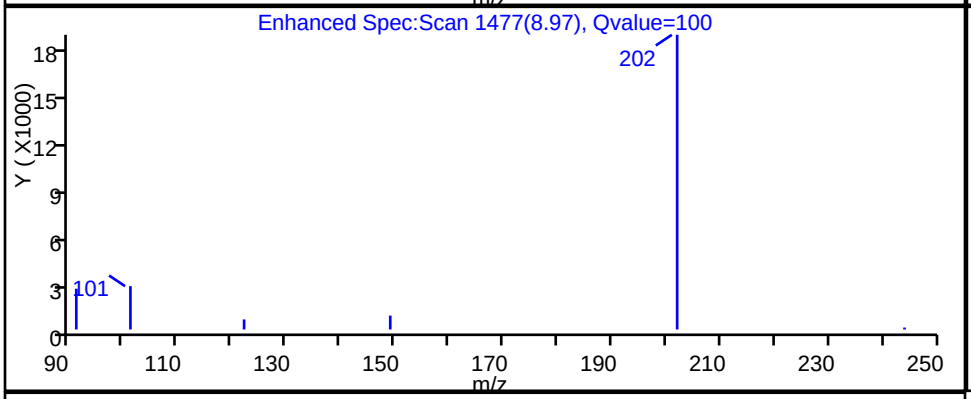
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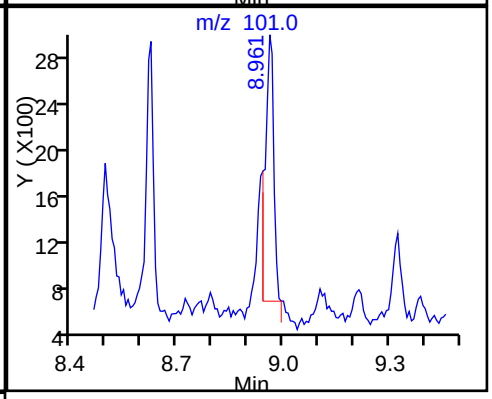
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Lims ID:	280-97928-B-22-B	Lab Sample ID:	280-97928-22		
Client ID:	SS025-SS10				
Operator ID:	WICKHAMM	ALS Bottle#:	25	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

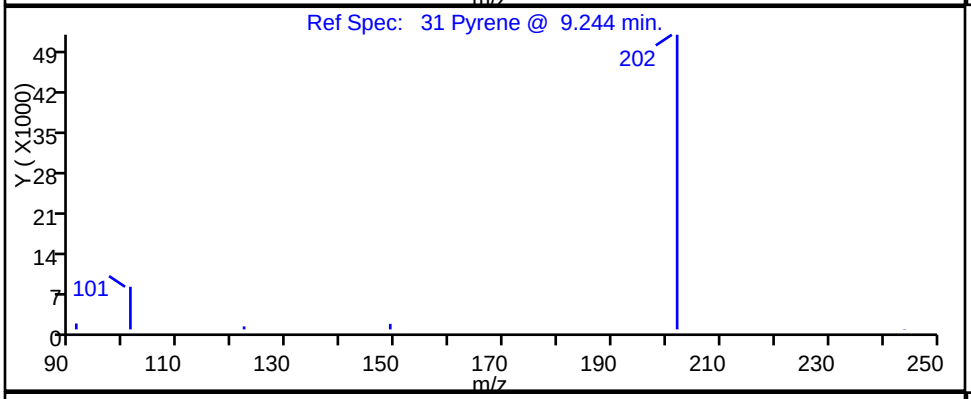
31 Pyrene, CAS: 129-00-0

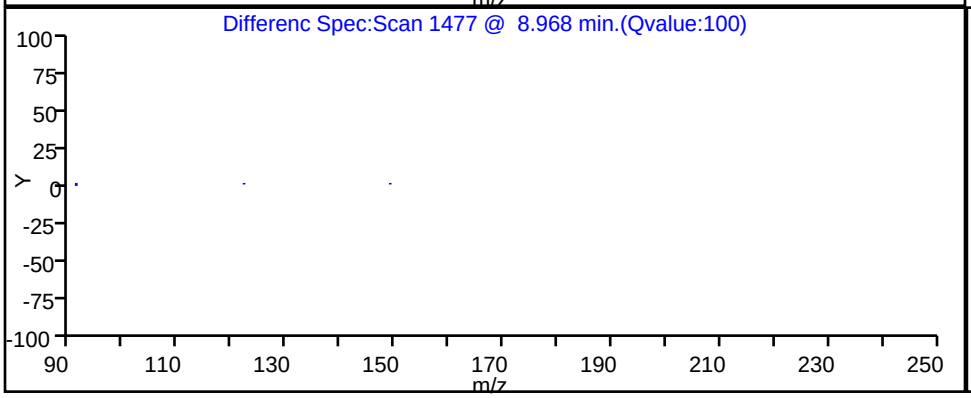


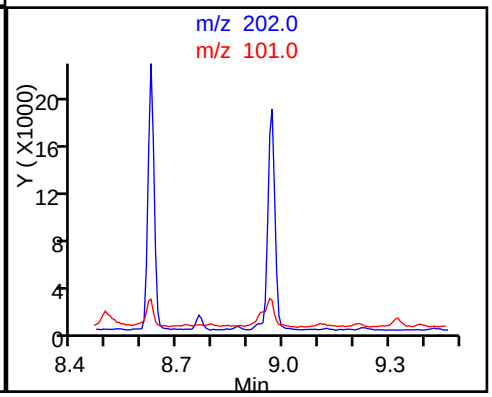












FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 373158

SDG No.:

Instrument ID: SMS_F GC Column: Rxi-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2017 12:58 Calibration End Date: 05/11/2017 16:07 Calibration ID: 29139

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD10000 280-373158/9	F6551.D
Level 2	STD0020 280-373158/3	F6545.D
Level 3	STD0100 280-373158/4	F6546.D
Level 4	STD0300 280-373158/5	F6547.D
Level 5	ICIS 280-373158/2	F6544.D
Level 6	STD1200 280-373158/6	F6548.D
Level 7	STD2500 280-373158/7	F6549.D
Level 8	STD5000 280-373158/8	F6550.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Naphthalene	+++++ 1.9596	2.1767 1.8539	1.9904 1.7532	1.9102	1.9711	Ave		1.9450			0.7000	6.7		15.0			
2-Methylnaphthalene	+++++ 1.2855	1.3137 1.2160	1.2852 1.1560	1.2243	1.2730	Ave		1.2505			0.4000	4.3		15.0			
1-Methylnaphthalene	+++++ 1.2706	1.3968 1.2067	1.2684 1.1420	1.2211	1.2612	Ave		1.2524			0.0500	6.3		15.0			
Acenaphthylene	+++++ 2.1371	2.1703 2.0566	2.1007 1.9402	2.0435	2.0397	Ave		2.0697			0.9000	3.6		15.0			
Acenaphthene	+++++ 1.2832	1.3798 1.2320	1.3020 1.1637	1.2504	1.2450	Ave		1.2652			0.9000	5.3		15.0			
Fluorene	+++++ 1.5973	1.7069 1.5400	1.5757 1.4289	1.5102	1.5089	Ave		1.5525			0.9000	5.6		15.0			
Phenanthrene	+++++ 1.2571	1.6152 1.1921	1.2432 1.1400	1.2272	1.2328	Ave		1.2725			0.7000	12.3		15.0			
Anthracene	+++++ 1.2951	1.5510 1.2175	1.2546 1.1733	1.2531	1.2502	Ave		1.2850			0.7000	9.6		15.0			
Fluoranthene	+++++ 1.4665	1.7251 1.4100	1.4761 1.3395	1.4148	1.3990	Ave		1.4616			0.6000	8.5		15.0			
Pyrene	+++++ 1.5022	1.8991 1.4485	1.4817 1.3733	1.4581	1.4472	Ave		1.5157			0.6000	11.5		15.0			
Benzo[a]anthracene	+++++ 1.5634	1.9782 1.4868	1.6042 1.4440	1.5367	1.5565	Ave		1.5957			0.8000	11.1		15.0			
Chrysene	+++++ 1.4573	1.7826 1.3944	1.4617 1.3431	1.4367	1.4574	Ave		1.4762			0.7000	9.6		15.0			
Benzo[b]fluoranthene	+++++ 1.4235	1.7190 1.3689	1.4586 1.3295	1.4045	1.4366	Ave		1.4487			0.7000	8.8		15.0			
Benzo[k]fluoranthene	+++++ 1.4764	1.6913 1.3784	1.4289 1.3443	1.4198	1.4605	Ave		1.4571			0.7000	7.7		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 373158

SDG No.:

Instrument ID: SMS_F GC Column: Rxi-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2017 12:58 Calibration End Date: 05/11/2017 16:07 Calibration ID: 29139

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Benzo[a]pyrene	+++++ 1.3964	1.8009 1.3185	1.4292 1.2868	1.3728	1.4029	Ave		1.4296			0.7000	12.0		15.0			
Indeno[1,2,3-cd]pyrene	+++++ 1.5768	2.0472 1.4661	1.6475 1.4452	1.5693	1.5996	Ave		1.6217			0.5000	12.4		15.0			
Dibenz(a,h)anthracene	+++++ 1.2529	1.6026 1.1675	1.1776 1.1432	1.2526	1.2630	Ave		1.2656			0.4000	12.3		15.0			
Benzo[g,h,i]perylene	1.2869 1.3328	1.8679 1.2444	1.3887 1.2138	1.3184	1.3534	Ave		1.3758			0.5000	15.0		15.0			
Nitrobenzene-d5 (Surr)	0.9312 0.9605	1.0452 0.9237	0.9188 0.8757	0.9018	0.9620	Ave		0.9399				5.4		15.0			
2-Fluorobiphenyl (Surr)	1.5125 1.5847	1.7388 1.5221	1.5704 1.4346	1.5352	1.5476	Ave		1.5557				5.6		15.0			
Terphenyl-d14 (Surr)	0.5983 0.6146	0.7154 0.5921	0.6246 0.5620	0.6014	0.5653	Ave		0.6092				7.9		15.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 373158

SDG No.:

Instrument ID: SMS_F GC Column: Rxi-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2017 12:58 Calibration End Date: 05/11/2017 16:07 Calibration ID: 29139

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD10000 280-373158/9	F6551.D
Level 2	STD0020 280-373158/3	F6545.D
Level 3	STD0100 280-373158/4	F6546.D
Level 4	STD0300 280-373158/5	F6547.D
Level 5	ICIS 280-373158/2	F6544.D
Level 6	STD1200 280-373158/6	F6548.D
Level 7	STD2500 280-373158/7	F6549.D
Level 8	STD5000 280-373158/8	F6550.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Naphthalene	ANT	Ave	+++++ 94281	2043 228112	8602 404564	25553	52878	+++++ 1200	20.0 2500	100 5000	300	600
2-Methylnaphthalene	ANT	Ave	+++++ 123693	2466 299233	11109 533515	32756	68299	+++++ 2400	40.0 5000	200 10000	600	1200
1-Methylnaphthalene	ANT	Ave	+++++ 61133	1311 148473	5482 263521	16335	33832	+++++ 1200	20.0 2500	100 5000	300	600
Acenaphthylene	ANT	Ave	+++++ 102818	2037 253042	9079 447724	27336	54716	+++++ 1200	20.0 2500	100 5000	300	600
Acenaphthene	ANT	Ave	+++++ 61738	1295 151592	5627 268543	16726	33398	+++++ 1200	20.0 2500	100 5000	300	600
Fluorene	ANT	Ave	+++++ 76847	1602 189482	6810 329727	20202	40477	+++++ 1200	20.0 2500	100 5000	300	600
Phenanthrene	PHN	Ave	+++++ 111683	2691 277752	10149 484562	30194	60417	+++++ 1200	20.0 2500	100 5000	300	600
Anthracene	PHN	Ave	+++++ 115053	2584 283675	10242 498719	30832	61266	+++++ 1200	20.0 2500	100 5000	300	600
Fluoranthene	PHN	Ave	+++++ 130280	2874 328525	12050 569375	34809	68559	+++++ 1200	20.0 2500	100 5000	300	600
Pyrene	PHN	Ave	+++++ 133458	3164 337491	12096 583741	35875	70923	+++++ 1200	20.0 2500	100 5000	300	600
Benzo[a]anthracene	CRY	Ave	+++++ 124103	2923 315528	11770 547347	33773	65338	+++++ 1200	20.0 2500	100 5000	300	600
Chrysene	CRY	Ave	+++++ 115675	2634 295905	10725 509125	31576	61177	+++++ 1200	20.0 2500	100 5000	300	600
Benzo[b]fluoranthene	CRY	Ave	+++++ 112998	2540 290503	10702 503976	30868	60307	+++++ 1200	20.0 2500	100 5000	300	600
Benzo[k]fluoranthene	CRY	Ave	+++++ 117190	2499 292518	10484 509563	31204	61309	+++++ 1200	20.0 2500	100 5000	300	600
Benzo[a]pyrene	CRY	Ave	+++++ 110841	2661 279807	10486 487782	30172	58893	+++++ 1200	20.0 2500	100 5000	300	600

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 373158

SDG No.:

Instrument ID: SMS_F GC Column: Rxi-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/11/2017 12:58 Calibration End Date: 05/11/2017 16:07 Calibration ID: 29139

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Indeno[1,2,3-cd]pyrene	CRY	Ave	+++++ 125164	3025 311134	12088 547816	34491	67148	+++++ 1200	20.0 2500	100 5000	300	600
Dibenz(a,h)anthracene	CRY	Ave	+++++ 99456	2368 247769	8640 433357	27529	53017	+++++ 1200	20.0 2500	100 5000	300	600
Benzo[g,h,i]perylene	CRY	Ave	968251 105797	2760 264085	10189 460086	28975	56811	10000 1200	20.0 2500	100 5000	300	600
Nitrobenzene-d5 (Surr)	ANT	Ave	425770 46257	982 113769	3975 202281	12076	25832	10010 1201	20.0 2503	100 5005	300	601
2-Fluorobiphenyl (Surr)	ANT	Ave	690907 76243	1632 187277	6787 331041	20536	41517	10000 1200	20.0 2500	100 5000	300	600
Terphenyl-d14 (Surr)	PHN	Ave	500874 54655	1193 138095	5104 239138	14812	27729	10010 1201	20.0 2503	100 5005	300	601

Curve Type Legend:
Ave = Average ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6544.D
Lims ID: ICIS STD0600
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 11-May-2017 12:58:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 12-May-2017 08:51:13 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: vasquezk Date: 11-May-2017 15:25:57

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.038	6.038	0.000	95	26826	600.0	600.0	
* 2 Phenanthrene-d10	188	7.307	7.307	0.000	99	49006	600.0	600.0	
* 3 Chrysene-d12	240	11.377	11.377	0.000	97	41978	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.005	4.005	0.000	100	25832	600.6	614.7	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	41517	600.0	596.9	
$ 6 Terphenyl-d14	244	9.136	9.136	0.000	96	27729	600.6	557.3	
9 1,4-Dioxane	88	1.909	1.909	0.000	0	9280	604.8	640.7	M
10 N-Nitrosodimethylamine	74	2.039	2.039	0.000	93	15543	600.0	630.3	
14 Naphthalene	128	4.596	4.596	0.000	100	52878	600.0	608.1	
16 2-Methylnaphthalene	142	5.152	5.152	0.000	98	68299	1200.0	1221.6	
17 1-Methylnaphthalene	142	5.239	5.239	0.000	99	33832	600.0	604.2	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	94798	1201.2	1246.5	
22 Acenaphthylene	152	5.917	5.917	0.000	99	54716	600.0	591.3	
23 Acenaphthene	153	6.064	6.064	0.000	95	33398	600.0	590.4	
32 Dibenzofuran	168	6.207	6.207	0.000	96	52446	600.6	593.6	
24 Diethyl phthalate	149	6.328	6.328	0.000	97	96103	1204.8	1223.0	
25 Fluorene	166	6.494	6.494	0.000	99	40477	600.0	583.1	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	98	27998	599.2	610.3	
27 Phenanthrene	178	7.326	7.326	0.000	99	60417	600.0	581.3	
28 Anthracene	178	7.372	7.372	0.000	100	61266	600.0	583.8	
29 Di-n-butyl phthalate	149	7.736	7.736	0.000	100	161793	1201.5	1215.7	
30 Fluoranthene	202	8.628	8.628	0.000	99	68559	600.0	574.3	
31 Pyrene	202	8.973	8.973	0.000	100	70923	600.0	572.9	
33 Butyl benzyl phthalate	149	9.969	9.969	0.000	98	73966	1201.5	1202.5	
34 Bis(2-ethylhexyl) phthalat	149	11.260	11.260	0.000	100	113874	1201.8	1256.6	
35 Benzo[a]anthracene	228	11.350	11.350	0.000	99	65338	600.0	585.3	
36 Chrysene	228	11.440	11.440	0.000	100	61177	600.0	592.4	
37 Di-n-octyl phthalate	149	13.192	13.192	0.000	100	180516	1203.3	1272.0	
38 Benzo[b]fluoranthene	252	14.495	14.495	0.000	99	60307	600.0	595.0	
39 Benzo[k]fluoranthene	252	14.582	14.582	0.000	99	61309	600.0	601.4	
40 Benzo[a]pyrene	252	15.571	15.571	0.000	98	58893	600.0	588.8	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.650	18.650	0.000	80	67148	600.0	591.8	M
42 Dibenz(a,h)anthracene	278	18.685	18.685	0.000	82	53017	600.0	598.7	
43 Benzo[g,h,i]perylene	276	19.079	19.079	0.000	97	56811	600.0	590.2	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

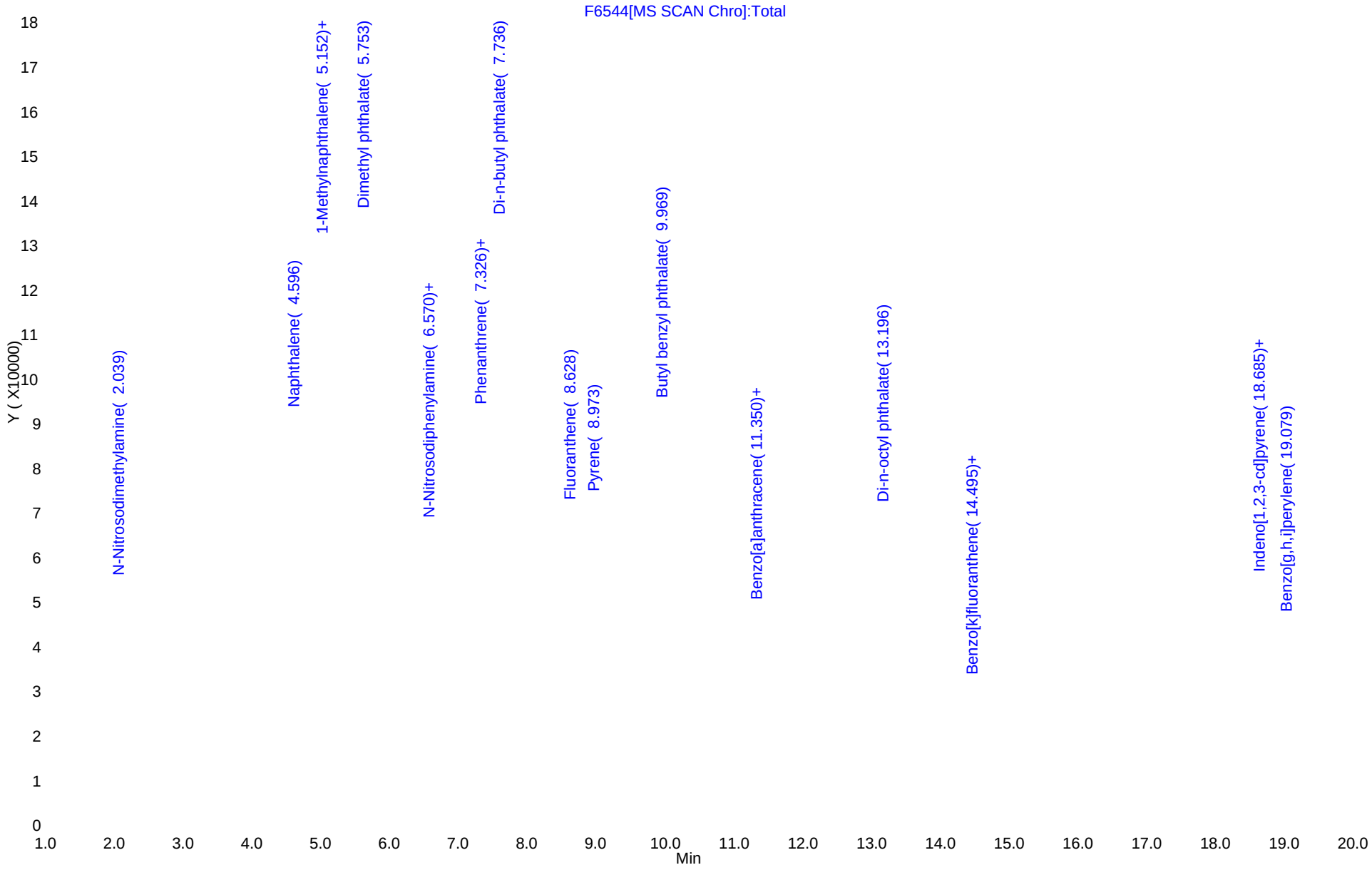
MS-SIMSL 0.6_00122 Amount Added: 1.00 Units: uL

Report Date: 12-May-2017 08:51:14 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6544.D

Injection Date:	11-May-2017 12:58:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	ICIS STD0600			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

TestAmerica Denver

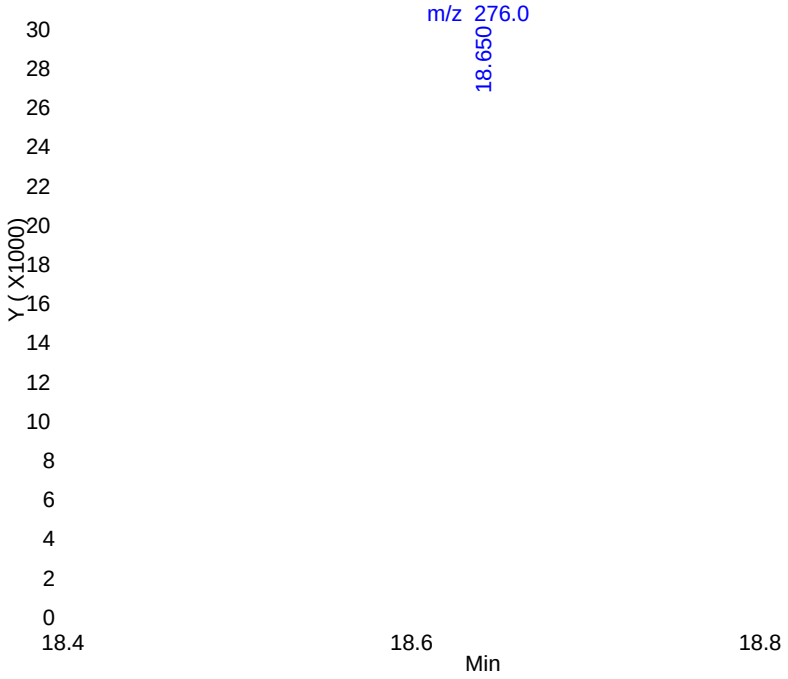
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6544.D
Injection Date: 11-May-2017 12:58:30 Instrument ID: SMS_F
Lims ID: ICIS STD0600
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM
Column: Detector MS SCAN

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

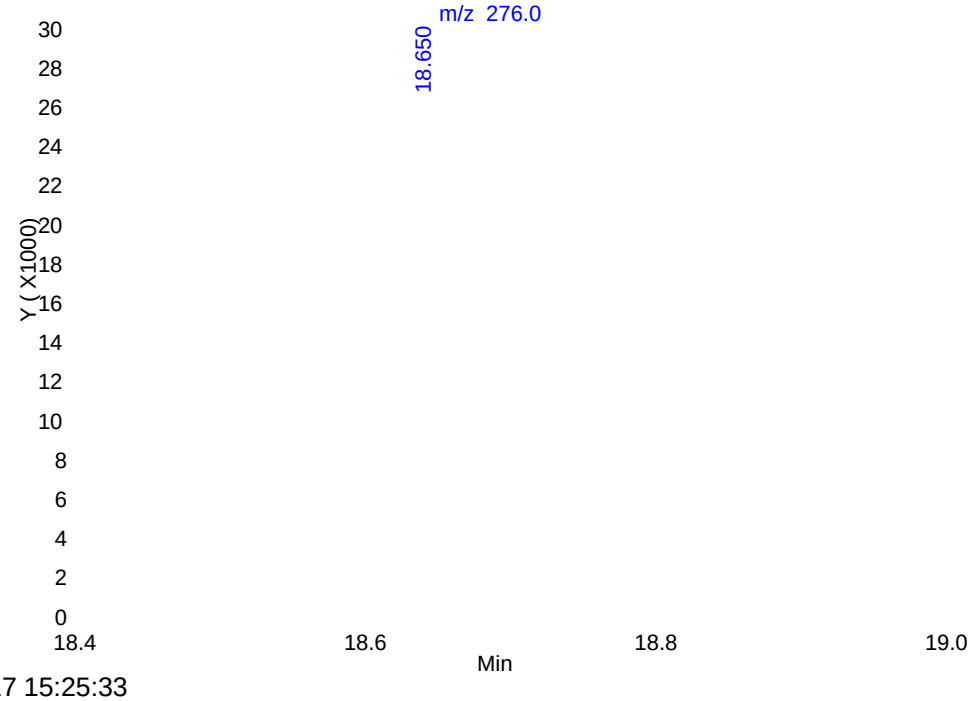
Processing Integration Results

RT: 18.65
Area: 58045
Amount: 600.0000
Amount Units: ng/ml



Manual Integration Results

RT: 18.65
Area: 67148
Amount: 591.8280
Amount Units: ng/ml



Reviewer: vasquezk, 11-May-2017 15:25:33
Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6545.D
Lims ID: STD0020
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 11-May-2017 13:34:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD0020
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 12-May-2017 08:51:16 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: vasquezk Date: 11-May-2017 15:26:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.038	6.038	0.000	100	28157	600.0	600.0	
* 2 Phenanthrene-d10	188	7.307	7.307	0.000	99	49981	600.0	600.0	
* 3 Chrysene-d12	240	11.377	11.377	0.000	93	44328	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.008	4.005	0.003	96	982	20.0	22.3	
$ 5 2-Fluorobiphenyl	172	5.440	5.436	0.004	99	1632	20.0	22.4	
$ 6 Terphenyl-d14	244	9.136	9.136	0.000	43	1193	20.0	23.5	
9 1,4-Dioxane	88		1.909				ND	ND	
10 N-Nitrosodimethylamine	74	2.039	2.039	0.000	52	609	20.0	23.5	
14 Naphthalene	128	4.596	4.596	0.000	98	2043	20.0	22.4	
16 2-Methylnaphthalene	142	5.152	5.152	0.000	94	2466	40.0	42.0	
17 1-Methylnaphthalene	142	5.239	5.239	0.000	98	1311	20.0	22.3	
20 Dimethyl phthalate	163		5.753				ND	ND	
22 Acenaphthylene	152	5.917	5.917	0.000	95	2037	20.0	21.0	
23 Acenaphthene	153	6.064	6.064	0.000	98	1295	20.0	21.8	
32 Dibenzofuran	168	6.207	6.207	0.000	91	2048	20.0	22.1	
24 Diethyl phthalate	149		6.328				ND	ND	
25 Fluorene	166	6.494	6.494	0.000	95	1602	20.0	22.0	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	97	1173	20.0	25.1	
27 Phenanthrene	178	7.326	7.326	0.000	91	2691	20.0	25.4	
28 Anthracene	178	7.372	7.372	0.000	94	2584	20.0	24.1	
29 Di-n-butyl phthalate	149		7.736				ND	ND	
30 Fluoranthene	202	8.635	8.628	0.007	93	2874	20.0	23.6	
31 Pyrene	202	8.973	8.973	0.000	93	3164	20.0	25.1	
33 Butyl benzyl phthalate	149		9.969				ND	ND	
34 Bis(2-ethylhexyl) phthalat	149		11.260				ND	ND	
35 Benzo[a]anthracene	228	11.350	11.350	0.000	33	2923	20.0	24.8	
36 Chrysene	228	11.449	11.440	0.009	91	2634	20.0	24.2	
37 Di-n-octyl phthalate	149		13.192				ND	ND	
38 Benzo[b]fluoranthene	252	14.495	14.495	0.000	76	2540	20.0	23.7	
39 Benzo[k]fluoranthene	252	14.582	14.582	0.000	70	2499	20.0	23.2	
40 Benzo[a]pyrene	252	15.575	15.571	0.004	60	2661	20.0	25.2	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.650	18.650	0.000	60	3025	20.0	25.2	M
42 Dibenz(a,h)anthracene	278	18.685	18.685	0.000	52	2368	20.0	25.3	
43 Benzo[g,h,i]perylene	276	19.079	19.079	0.000	51	2760	20.0	27.2	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

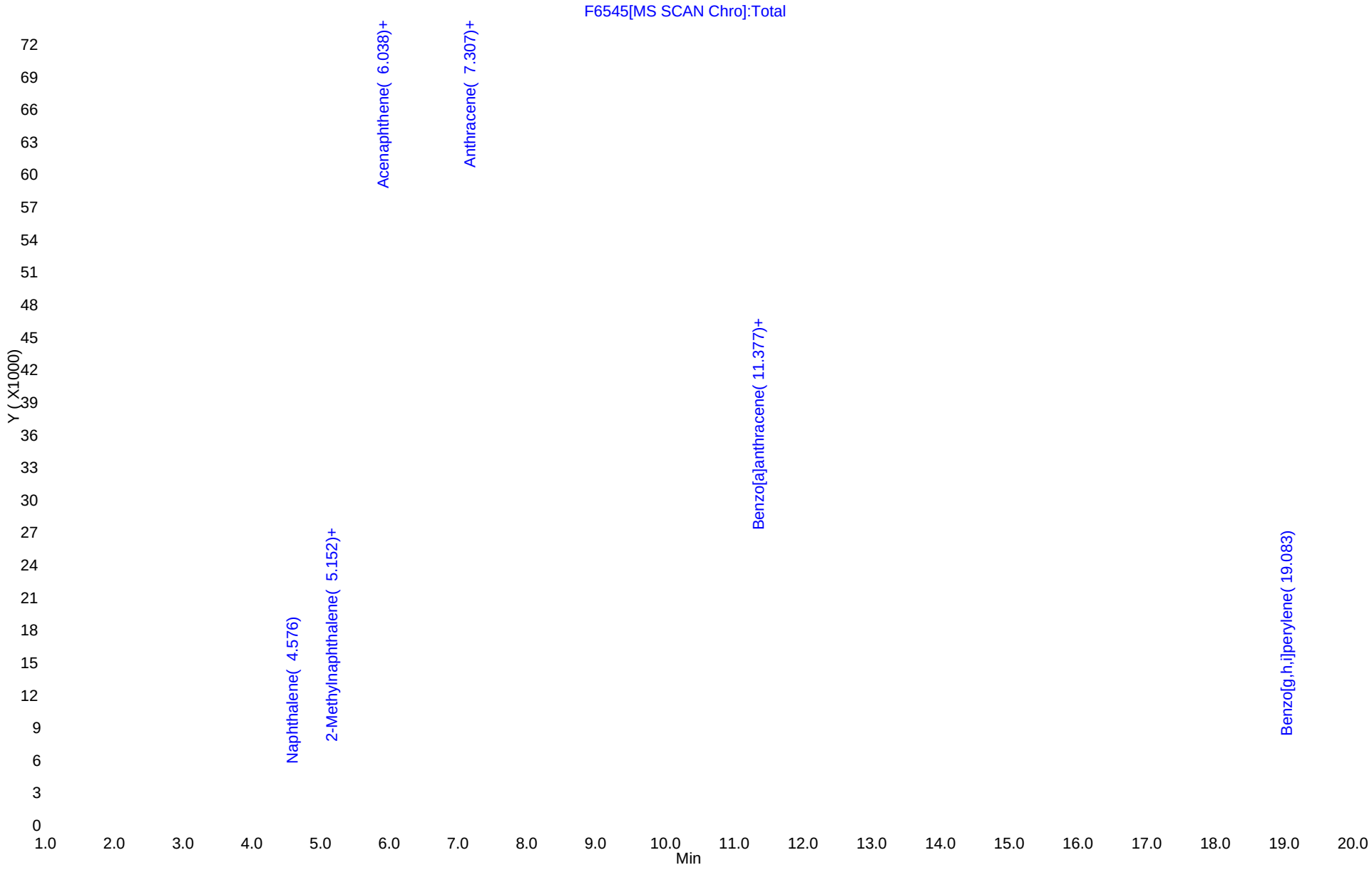
MS-SIMSL 0.02_00067 Amount Added: 1.00 Units: uL

Report Date: 12-May-2017 08:51:17 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6545.D

Injection Date:	11-May-2017 13:34:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	STD0020			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

TestAmerica Denver

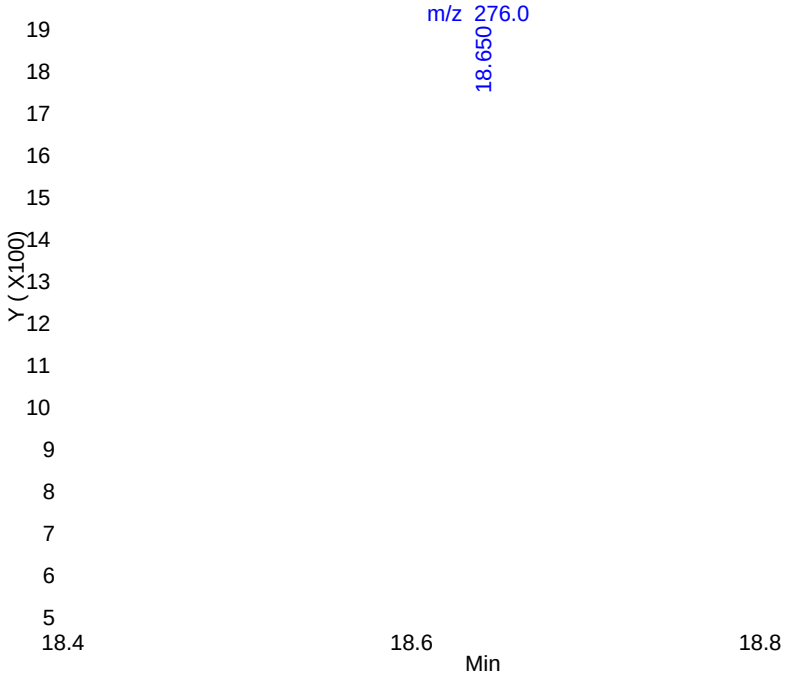
Data File:	\\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6545.D				
Injection Date:	11-May-2017 13:34:30	Instrument ID:	SMS_F		
Lims ID:	STD0020				
Client ID:					
Operator ID:	VASQUEZK	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		
Column:		Detector	MS SCAN		

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

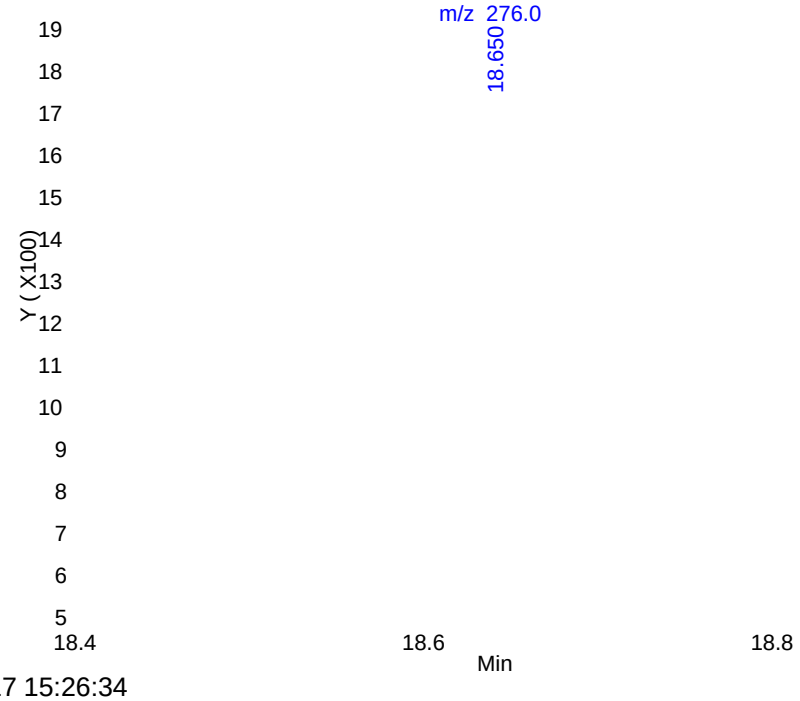
Processing Integration Results

RT: 18.65
Area: 2745
Amount: 22.515369
Amount Units: ng/ml



Manual Integration Results

RT: 18.65
Area: 3025
Amount: 25.248258
Amount Units: ng/ml



Reviewer: vasquezk, 11-May-2017 15:26:34

Audit Action: Manually Integrated Audit Reason: Split Peak

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6546.D
Lims ID: STD0100
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 11-May-2017 13:59:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD0100
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 12-May-2017 08:51:20 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: vasquezk Date: 11-May-2017 15:26:59

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.038	6.038	0.000	93	25931	600.0	600.0	
* 2 Phenanthrene-d10	188	7.300	7.307	-0.007	100	48980	600.0	600.0	
* 3 Chrysene-d12	240	11.367	11.377	-0.010	93	44023	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.008	4.005	0.003	98	3975	100.1	97.9	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	99	6787	100.0	100.9	
$ 6 Terphenyl-d14	244	9.129	9.136	-0.007	90	5104	100.1	102.6	
9 1,4-Dioxane	88	1.909	1.909	0.000	0	1685	100.8	120.3	M
10 N-Nitrosodimethylamine	74	2.039	2.039	0.000	69	2373	100.0	99.5	
14 Naphthalene	128	4.596	4.596	0.000	100	8602	100.0	102.3	
16 2-Methylnaphthalene	142	5.151	5.152	-0.001	100	11109	200.0	205.5	
17 1-Methylnaphthalene	142	5.239	5.239	0.000	98	5482	100.0	101.3	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	15411	200.2	209.6	
22 Acenaphthylene	152	5.917	5.917	0.000	99	9079	100.0	101.5	
23 Acenaphthene	153	6.055	6.064	-0.009	94	5627	100.0	102.9	
32 Dibenzofuran	168	6.206	6.207	-0.001	96	8861	100.1	103.7	
24 Diethyl phthalate	149	6.328	6.328	0.000	98	15815	200.8	208.2	
25 Fluorene	166	6.494	6.494	0.000	96	6810	100.0	101.5	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	98	4758	99.9	103.8	
27 Phenanthrene	178	7.320	7.326	-0.006	99	10149	100.0	97.7	
28 Anthracene	178	7.365	7.372	-0.007	100	10242	100.0	97.6	
29 Di-n-butyl phthalate	149	7.736	7.736	0.000	100	28181	200.3	211.9	
30 Fluoranthene	202	8.628	8.628	0.000	99	12050	100.0	101.0	
31 Pyrene	202	8.967	8.973	-0.006	99	12096	100.0	97.8	
33 Butyl benzyl phthalate	149	9.963	9.969	-0.006	97	12858	200.3	209.2	
34 Bis(2-ethylhexyl) phthalat	149	11.250	11.260	-0.010	100	21988	200.3	242.8	
35 Benzo[a]anthracene	228	11.340	11.350	-0.010	86	11770	100.0	100.5	
36 Chrysene	228	11.431	11.440	-0.010	98	10725	100.0	99.0	
37 Di-n-octyl phthalate	149	13.178	13.192	-0.014	100	30987	200.6	208.2	
38 Benzo[b]fluoranthene	252	14.477	14.495	-0.018	95	10702	100.0	100.7	
39 Benzo[k]fluoranthene	252	14.569	14.582	-0.013	95	10484	100.0	98.1	
40 Benzo[a]pyrene	252	15.557	15.571	-0.014	93	10486	100.0	100.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.646	18.650	-0.004	76	12088	100.0	101.6	
42 Dibenz(a,h)anthracene	278	18.685	18.685	0.000	76	8640	100.0	93.0	
43 Benzo[g,h,i]perylene	276	19.074	19.079	-0.005	87	10189	100.0	100.9	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

MS-SIMSL 0.1_00063 Amount Added: 1.00 Units: uL

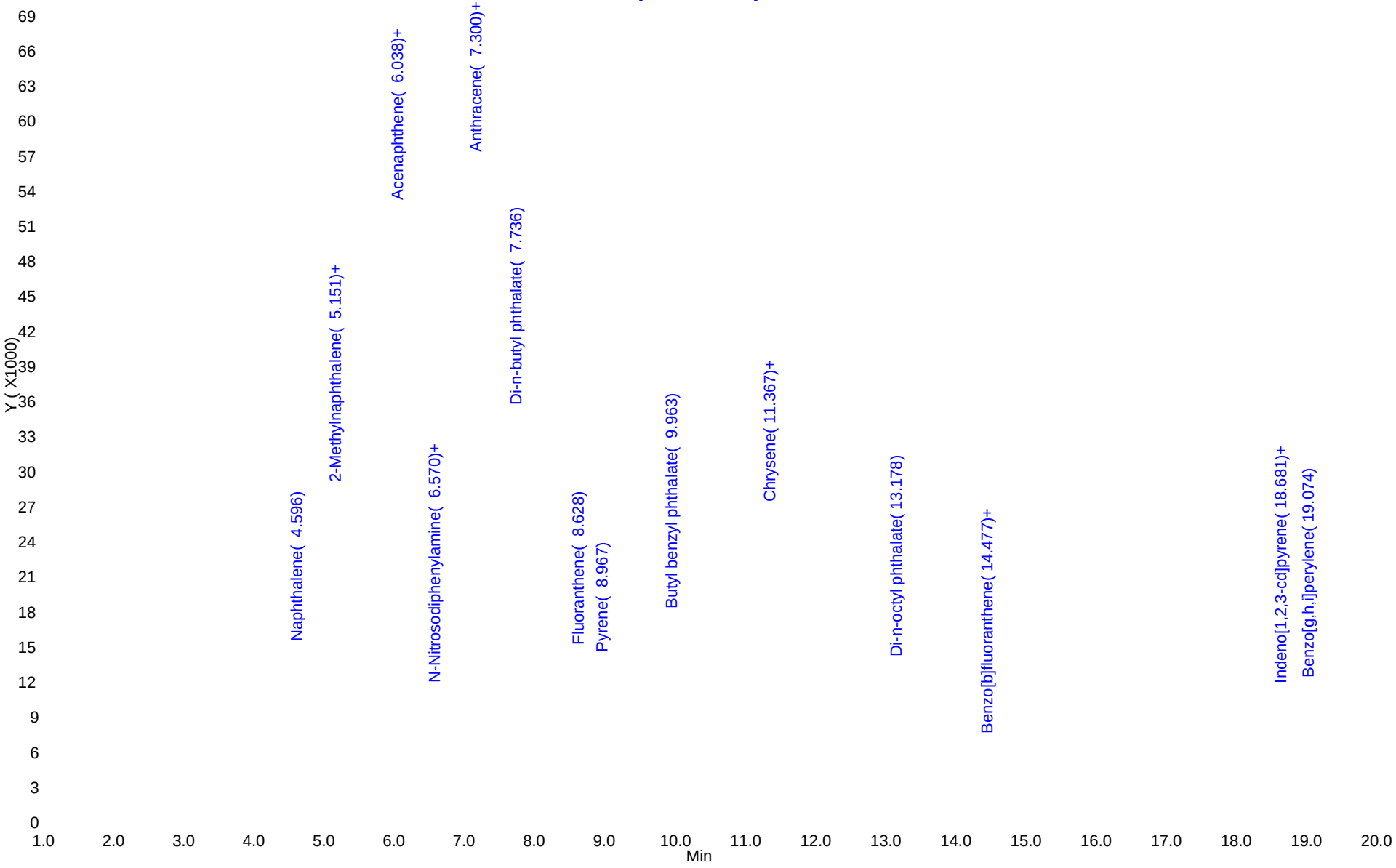
Report Date: 12-May-2017 08:51:20 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6546.D

Injection Date:	11-May-2017 13:59:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	STD0100			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		

F6546[MS SCAN Chro]:Total



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6547.D
Lims ID: STD0300
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 11-May-2017 14:25:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD0300
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 12-May-2017 08:51:22 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: vasquezk Date: 11-May-2017 15:27:19

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.038	6.038	0.000	92	26754	600.0	600.0	
* 2 Phenanthrene-d10	188	7.302	7.307	-0.005	100	49208	600.0	600.0	
* 3 Chrysene-d12	240	11.362	11.377	-0.015	96	43956	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.005	4.005	0.000	100	12076	300.3	288.1	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	20536	300.0	296.0	
$ 6 Terphenyl-d14	244	9.131	9.136	-0.005	97	14812	300.3	296.5	
9 1,4-Dioxane	88	1.909	1.909	0.000	0	4094	302.4	283.4	M
10 N-Nitrosodimethylamine	74	2.039	2.039	0.000	97	7181	300.0	292.0	
14 Naphthalene	128	4.596	4.596	0.000	100	25553	300.0	294.6	
16 2-Methylnaphthalene	142	5.152	5.152	0.000	98	32756	600.0	587.4	
17 1-Methylnaphthalene	142	5.239	5.239	0.000	97	16335	300.0	292.5	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	45810	600.6	604.0	
22 Acenaphthylene	152	5.917	5.917	0.000	100	27336	300.0	296.2	
23 Acenaphthene	153	6.055	6.064	-0.009	96	16726	300.0	296.5	
32 Dibenzofuran	168	6.207	6.207	0.000	97	25668	300.3	291.3	
24 Diethyl phthalate	149	6.328	6.328	0.000	99	47195	602.4	602.2	
25 Fluorene	166	6.494	6.494	0.000	95	20202	300.0	291.8	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	96	13920	299.6	302.2	
27 Phenanthrene	178	7.321	7.326	-0.005	100	30194	300.0	289.3	
28 Anthracene	178	7.367	7.372	-0.005	100	30832	300.0	292.6	
29 Di-n-butyl phthalate	149	7.738	7.736	0.002	100	81453	600.8	609.5	
30 Fluoranthene	202	8.623	8.628	-0.005	99	34809	300.0	290.4	
31 Pyrene	202	8.968	8.973	-0.005	100	35875	300.0	288.6	
33 Butyl benzyl phthalate	149	9.964	9.969	-0.005	94	37158	600.8	601.6	
34 Bis(2-ethylhexyl) phthalat	149	11.245	11.260	-0.015	100	54292	600.9	596.7	
35 Benzo[a]anthracene	228	11.335	11.350	-0.015	99	33773	300.0	288.9	
36 Chrysene	228	11.434	11.440	-0.006	100	31576	300.0	292.0	
37 Di-n-octyl phthalate	149	13.178	13.192	-0.014	100	89250	601.7	600.6	
38 Benzo[b]fluoranthene	252	14.477	14.495	-0.018	99	30868	300.0	290.9	
39 Benzo[k]fluoranthene	252	14.564	14.582	-0.018	100	31204	300.0	292.3	
40 Benzo[a]pyrene	252	15.557	15.571	-0.014	99	30172	300.0	288.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.641	18.650	-0.009	80	34491	300.0	290.3	
42 Dibenz(a,h)anthracene	278	18.680	18.685	-0.005	80	27529	300.0	296.9	
43 Benzo[g,h,i]perylene	276	19.070	19.079	-0.009	96	28975	300.0	287.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

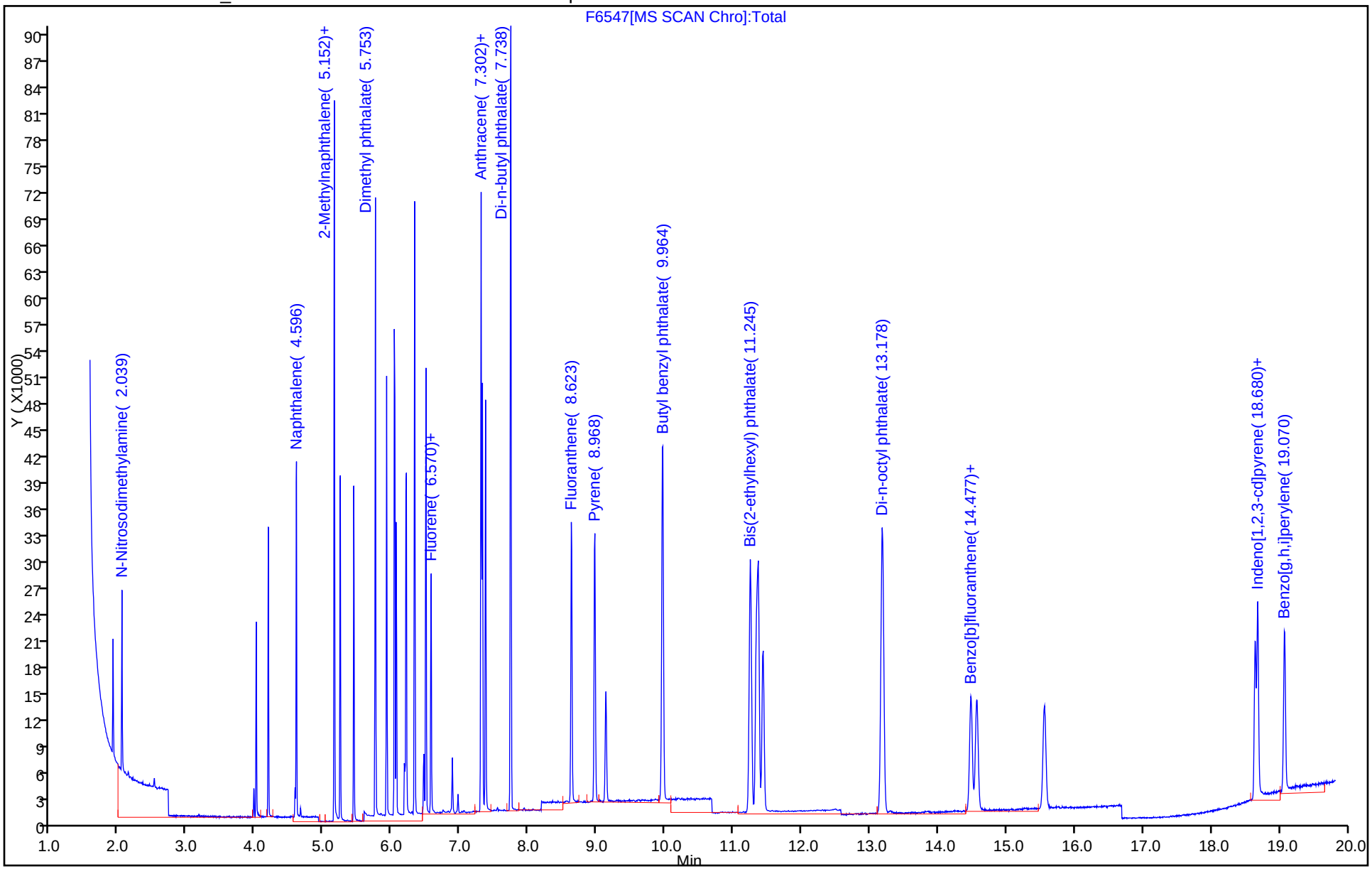
MS-SIMSL 0.3_00061 Amount Added: 1.00 Units: uL

Report Date: 12-May-2017 08:51:22 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6547.D

Injection Date:	11-May-2017 14:25:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	STD0300			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6548.D
Lims ID: STD1200
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 11-May-2017 14:50:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD1200
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 12-May-2017 08:51:24 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: vasquezk Date: 11-May-2017 15:27:41

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.038	6.038	0.000	91	24056	600.0	600.0	
* 2 Phenanthrene-d10	188	7.301	7.307	-0.006	100	44420	600.0	600.0	
* 3 Chrysene-d12	240	11.362	11.377	-0.015	85	39689	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.005	4.005	0.000	100	46257	1201.2	1227.5	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	76243	1200.0	1222.3	
$ 6 Terphenyl-d14	244	9.130	9.136	-0.006	99	54655	1201.2	1211.8	
9 1,4-Dioxane	88	1.909	1.909	0.000	0	15792	1209.6	1215.8	M
10 N-Nitrosodimethylamine	74	2.039	2.039	0.000	86	26136	1200.0	1181.8	
14 Naphthalene	128	4.596	4.596	0.000	100	94281	1200.0	1209.0	
16 2-Methylnaphthalene	142	5.152	5.152	0.000	96	123693	2400.0	2467.1	
17 1-Methylnaphthalene	142	5.235	5.239	-0.004	97	61133	1200.0	1217.5	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	171258	2402.4	2511.1	
22 Acenaphthylene	152	5.917	5.917	0.000	100	102818	1200.0	1239.0	
23 Acenaphthene	153	6.055	6.064	-0.009	96	61738	1200.0	1217.1	
32 Dibenzofuran	168	6.207	6.207	0.000	98	96559	1201.2	1218.6	
24 Diethyl phthalate	149	6.328	6.328	0.000	99	175004	2409.6	2483.5	
25 Fluorene	166	6.494	6.494	0.000	95	76847	1200.0	1234.6	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	95	49365	1198.3	1187.2	
27 Phenanthrene	178	7.321	7.326	-0.005	100	111683	1200.0	1185.5	
28 Anthracene	178	7.366	7.372	-0.006	100	115053	1200.0	1209.4	
29 Di-n-butyl phthalate	149	7.737	7.736	0.001	100	299391	2403.0	2481.8	
30 Fluoranthene	202	8.623	8.628	-0.005	100	130280	1200.0	1204.0	
31 Pyrene	202	8.968	8.973	-0.005	100	133458	1200.0	1189.3	
33 Butyl benzyl phthalate	149	9.964	9.969	-0.005	92	136554	2403.0	2449.3	
34 Bis(2-ethylhexyl) phthalat	149	11.245	11.260	-0.015	100	192708	2403.6	2346.2	
35 Benzo[a]anthracene	228	11.335	11.350	-0.015	98	124103	1200.0	1175.8	
36 Chrysene	228	11.434	11.440	-0.006	100	115675	1200.0	1184.6	
37 Di-n-octyl phthalate	149	13.178	13.192	-0.014	100	327232	2406.6	2438.9	
38 Benzo[b]fluoranthene	252	14.472	14.495	-0.023	100	112998	1200.0	1179.2	
39 Benzo[k]fluoranthene	252	14.560	14.582	-0.022	100	117190	1200.0	1215.9	
40 Benzo[a]pyrene	252	15.552	15.571	-0.019	100	110841	1200.0	1172.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.641	18.650	-0.009	78	125164	1200.0	1166.8	
42 Dibenz(a,h)anthracene	278	18.680	18.685	-0.005	80	99456	1200.0	1188.0	
43 Benzo[g,h,i]perylene	276	19.074	19.079	-0.005	100	105797	1200.0	1162.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

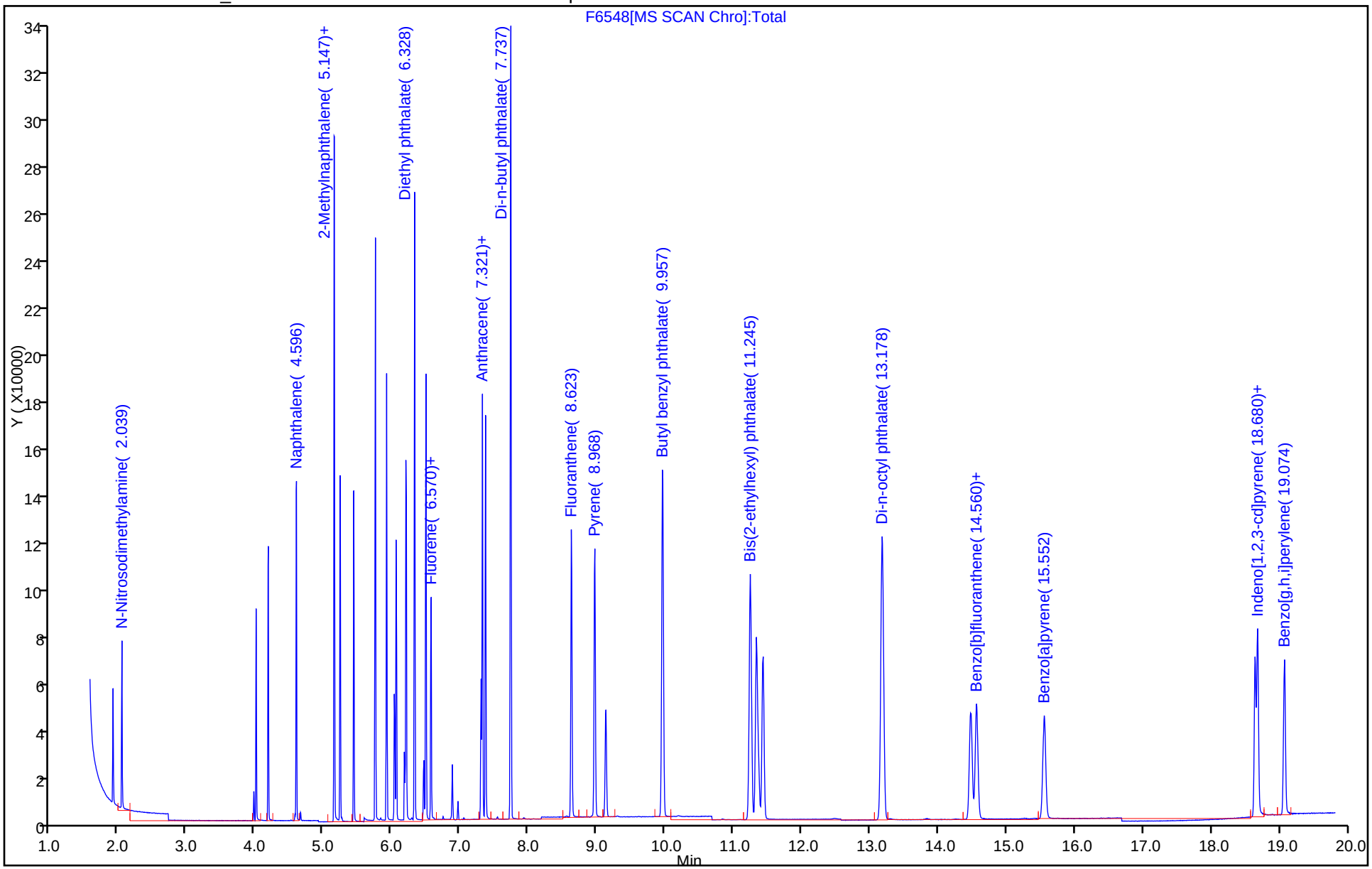
MS-SIMSL 1.2_00064 Amount Added: 1.00 Units: uL

Report Date: 12-May-2017 08:51:24 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6548.D

Injection Date:	11-May-2017 14:50:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	STD1200			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6549.D
Lims ID: STD2500
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 11-May-2017 15:16:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD2500
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 12-May-2017 08:51:26 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: vasquezk Date: 12-May-2017 05:49:55

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.038	-0.009	82	29530	600.0	600.0	
* 2 Phenanthrene-d10	188	7.300	7.307	-0.007	100	55918	600.0	600.0	
* 3 Chrysene-d12	240	11.367	11.377	-0.010	92	50932	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.004	4.005	-0.001	100	113769	2502.5	2459.5	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	187277	2500.0	2445.9	
$ 6 Terphenyl-d14	244	9.129	9.136	-0.007	99	138095	2502.5	2432.3	
9 1,4-Dioxane	88	1.909	1.909	0.000	0	38102	2520.0	2389.6	
10 N-Nitrosodimethylamine	74	2.039	2.039	0.000	90	63880	2500.0	2353.1	
14 Naphthalene	128	4.593	4.596	-0.003	100	228112	2500.0	2382.9	
16 2-Methylnaphthalene	142	5.151	5.152	-0.001	95	299233	5000.0	4861.9	
17 1-Methylnaphthalene	142	5.234	5.239	-0.005	97	148473	2500.0	2408.7	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	415418	5005.0	4962.0	
22 Acenaphthylene	152	5.917	5.917	0.000	100	253042	2500.0	2484.1	
23 Acenaphthene	153	6.055	6.064	-0.009	96	151592	2500.0	2434.6	
32 Dibenzofuran	168	6.206	6.207	-0.001	97	235581	2502.5	2422.1	
24 Diethyl phthalate	149	6.328	6.328	0.000	100	440297	5020.0	5090.1	
25 Fluorene	166	6.494	6.494	0.000	93	189482	2500.0	2479.8	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	95	114205	2496.5	2181.8	
27 Phenanthrene	178	7.320	7.326	-0.006	100	277752	2500.0	2342.0	
28 Anthracene	178	7.365	7.372	-0.007	100	283675	2500.0	2368.8	
29 Di-n-butyl phthalate	149	7.736	7.736	0.000	100	748330	5006.3	4927.7	
30 Fluoranthene	202	8.621	8.628	-0.007	100	328525	2500.0	2411.9	
31 Pyrene	202	8.967	8.973	-0.007	100	337491	2500.0	2389.1	
33 Butyl benzyl phthalate	149	9.963	9.969	-0.006	92	347502	5006.3	4951.2	
34 Bis(2-ethylhexyl) phthalat	149	11.250	11.260	-0.010	100	484331	5007.5	4684.1	
35 Benzo[a]anthracene	228	11.331	11.350	-0.019	97	315528	2500.0	2329.4	
36 Chrysene	228	11.430	11.440	-0.010	100	295905	2500.0	2361.4	
37 Di-n-octyl phthalate	149	13.178	13.192	-0.014	100	827297	5013.8	4804.8	
38 Benzo[b]fluoranthene	252	14.473	14.495	-0.022	100	290503	2500.0	2362.3	
39 Benzo[k]fluoranthene	252	14.560	14.582	-0.022	100	292518	2500.0	2365.0	
40 Benzo[a]pyrene	252	15.553	15.571	-0.018	99	279807	2500.0	2305.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.641	18.650	-0.009	78	311134	2500.0	2260.2	M
42 Dibenz(a,h)anthracene	278	18.676	18.685	-0.009	81	247769	2500.0	2306.2	
43 Benzo[g,h,i]perylene	276	19.070	19.079	-0.009	100	264085	2500.0	2261.3	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

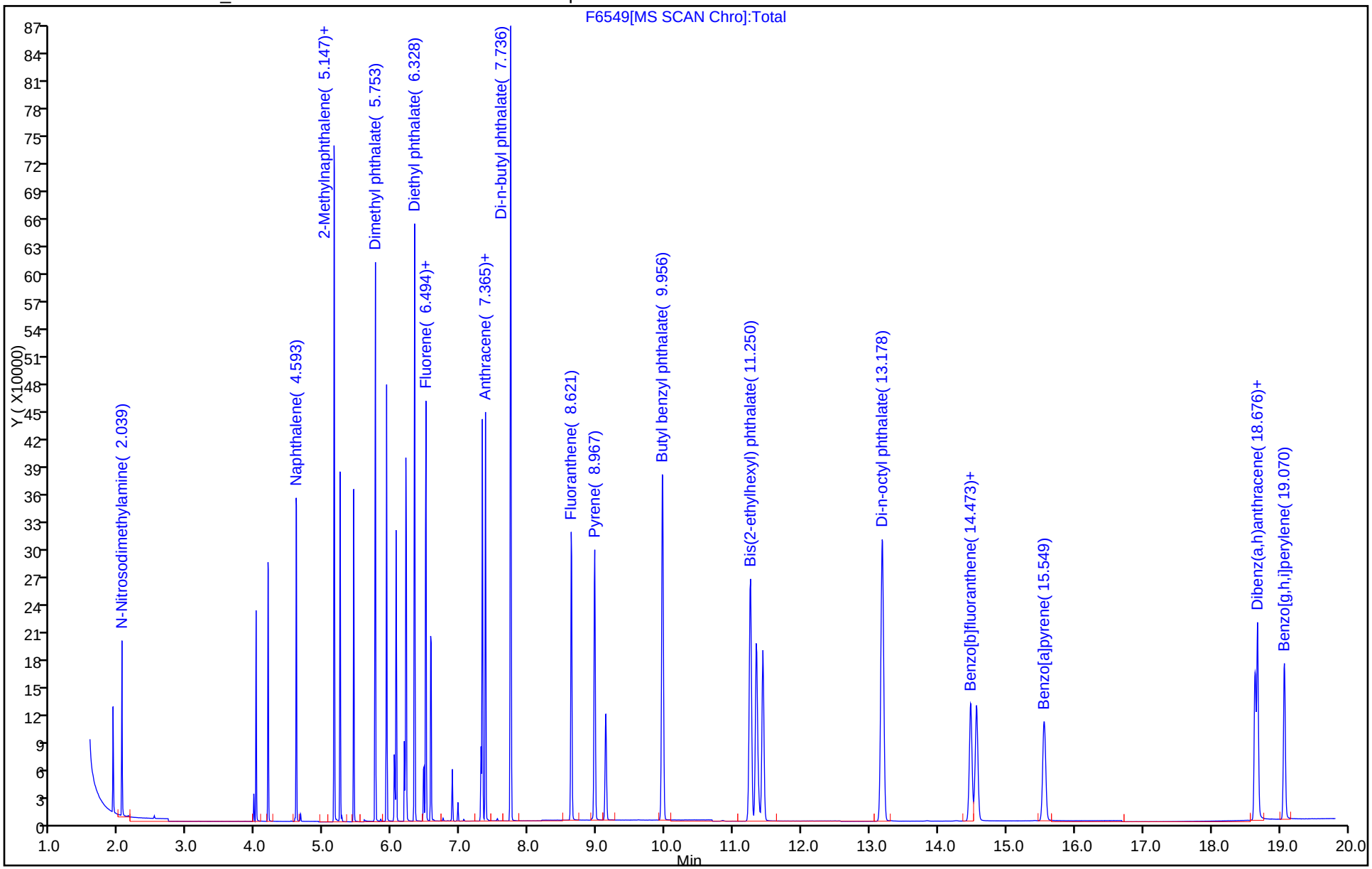
MS-SIMSL 2.5_00062 Amount Added: 1.00 Units: uL

Report Date: 12-May-2017 08:51:26 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6549.D

Injection Date:	11-May-2017 15:16:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	STD2500			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



Manual Integration/User Assign Peak Report

TestAmerica Denver

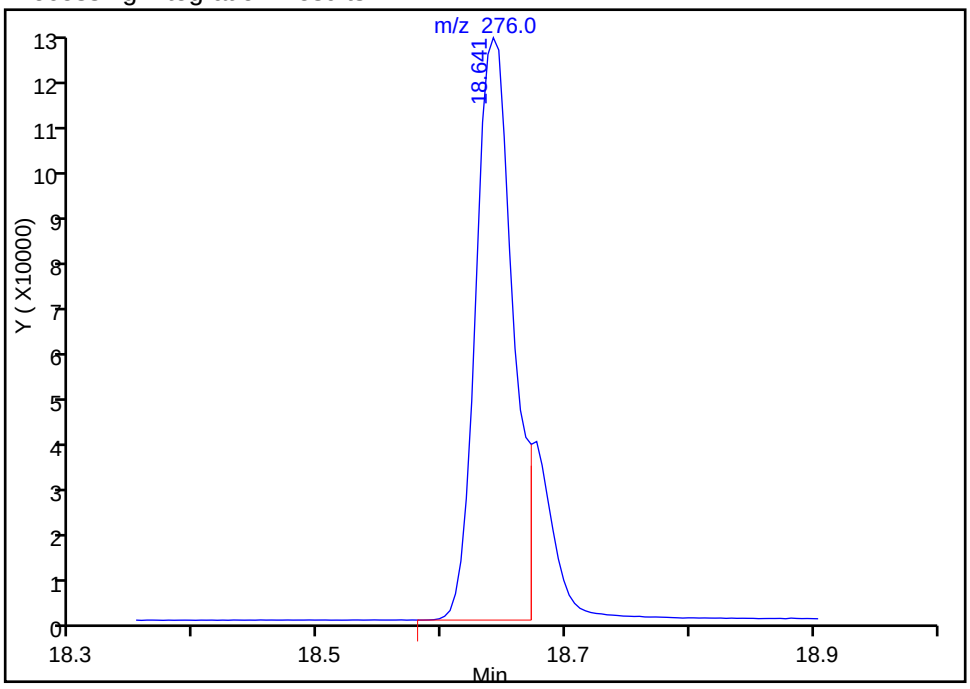
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6549.D
Injection Date: 11-May-2017 15:16:30 Instrument ID: SMS_F
Lims ID: STD2500
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM
Column: Detector MS SCAN

41 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

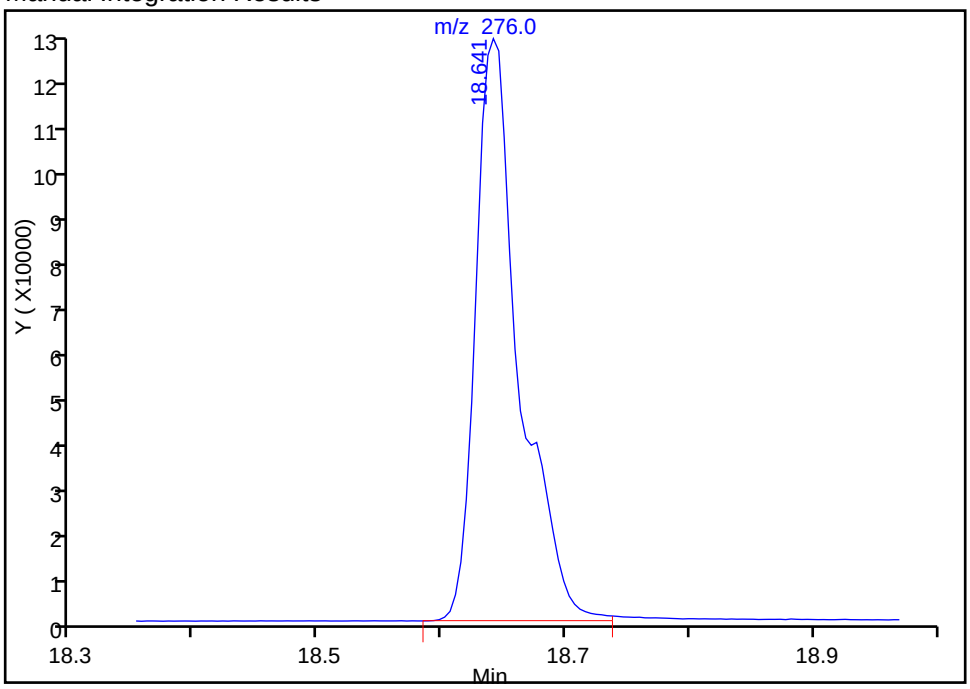
Processing Integration Results

RT: 18.64
Area: 269334
Amount: 2000.9233
Amount Units: ng/ml



Manual Integration Results

RT: 18.64
Area: 311134
Amount: 2260.1690
Amount Units: ng/ml



Reviewer: vasquezk, 12-May-2017 05:49:52
Audit Action: Manually Integrated Audit Reason: Split Peak

Report Date: 12-May-2017 08:51:29 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6550.D
Lims ID: STD5000
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 11-May-2017 15:42:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD5000
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 12-May-2017 08:51:28 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: vasquezk Date: 12-May-2017 05:50:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.038	-0.009	85	27691	600.0	600.0	
* 2 Phenanthrene-d10	188	7.300	7.307	-0.007	100	51008	600.0	600.0	
* 3 Chrysene-d12	240	11.368	11.377	-0.009	84	45487	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.005	4.005	0.000	99	202281	5005.0	4663.4	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	331041	5000.0	4610.6	
$ 6 Terphenyl-d14	244	9.130	9.136	-0.006	99	239138	5005.0	4617.4	
9 1,4-Dioxane	88	1.909	1.909	0.000	0	64535	5040.0	4316.1	
10 N-Nitrosodimethylamine	74	2.039	2.039	0.000	80	111805	5000.0	4392.0	
14 Naphthalene	128	4.593	4.596	-0.003	100	404564	5000.0	4506.9	
16 2-Methylnaphthalene	142	5.147	5.152	-0.005	98	533515	10000	9244.1	
17 1-Methylnaphthalene	142	5.235	5.239	-0.004	99	263521	5000.0	4559.1	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	721130	10010	9185.7	
22 Acenaphthylene	152	5.917	5.917	0.000	100	447724	5000.0	4687.2	
23 Acenaphthene	153	6.055	6.064	-0.009	98	268543	5000.0	4599.2	
32 Dibenzofuran	168	6.199	6.207	-0.008	88	419941	5005.0	4604.2	
24 Diethyl phthalate	149	6.328	6.328	0.000	100	763924	10040	9418.0	
25 Fluorene	166	6.494	6.494	0.000	92	329727	5000.0	4601.8	
26 N-Nitrosodiphenylamine	169	6.563	6.570	-0.007	97	193947	4993.0	4061.9	
27 Phenanthrene	178	7.320	7.326	-0.006	100	484562	5000.0	4479.1	
28 Anthracene	178	7.366	7.372	-0.006	100	498719	5000.0	4565.4	
29 Di-n-butyl phthalate	149	7.736	7.736	0.000	100	1289329	10013	9307.5	
30 Fluoranthene	202	8.622	8.628	-0.006	100	569375	5000.0	4582.4	
31 Pyrene	202	8.967	8.973	-0.006	100	583741	5000.0	4530.1	
33 Butyl benzyl phthalate	149	9.963	9.969	-0.006	91	603604	10013	9428.0	
34 Bis(2-ethylhexyl) phthalat	149	11.251	11.260	-0.009	100	840919	10015	8915.6	
35 Benzo[a]anthracene	228	11.332	11.350	-0.018	97	547347	5000.0	4524.6	
36 Chrysene	228	11.431	11.440	-0.009	100	509125	5000.0	4549.4	
37 Di-n-octyl phthalate	149	13.178	13.192	-0.014	100	1447092	10028	9410.5	
38 Benzo[b]fluoranthene	252	14.473	14.495	-0.022	100	503976	5000.0	4588.8	
39 Benzo[k]fluoranthene	252	14.565	14.582	-0.017	100	509563	5000.0	4613.0	
40 Benzo[a]pyrene	252	15.549	15.571	-0.022	99	487782	5000.0	4500.5	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.642	18.650	-0.008	78	547816	5000.0	4455.9	
42 Dibenz(a,h)anthracene	278	18.677	18.685	-0.008	80	433357	5000.0	4516.5	
43 Benzo[g,h,i]perylene	276	19.070	19.079	-0.009	100	460086	5000.0	4411.2	

Reagents:

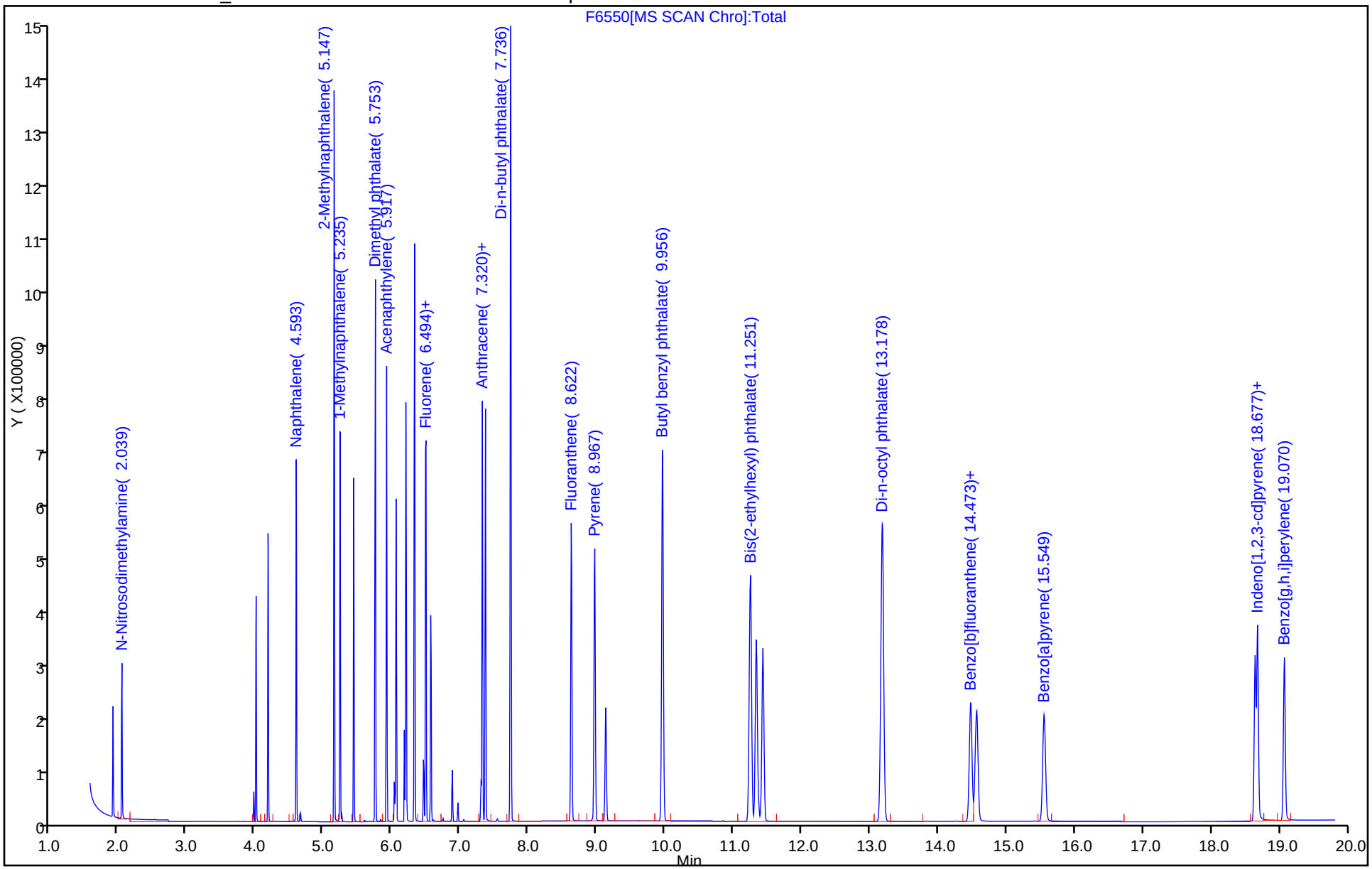
MS-SIMSL 5_00063 Amount Added: 1.00 Units: uL

Report Date: 12-May-2017 08:51:29 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6550.D

Injection Date:	11-May-2017 15:42:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	STD5000			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D
Lims ID: STD10000
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 11-May-2017 16:07:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD10000
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 12-May-2017 08:51:30 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: vasquezk Date: 12-May-2017 05:50:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.038	-0.009	85	27407	600.0	600.0	
* 2 Phenanthrene-d10	188	7.301	7.307	-0.006	99	50182	600.0	600.0	
* 3 Chrysene-d12	240	11.362	11.377	-0.015	21	45142	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.005	4.005	0.000	98	425770	10010	9917.4	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	690907	10000	9722.4	
$ 6 Terphenyl-d14	244	9.131	9.136	-0.005	99	500874	10010	9830.3	
9 1,4-Dioxane	88		1.909				ND	ND	
10 N-Nitrosodimethylamine	74		2.039				ND	ND	
14 Naphthalene	128		4.596				ND	ND	
16 2-Methylnaphthalene	142		5.152				ND	ND	
17 1-Methylnaphthalene	142		5.239				ND	ND	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	1486048	20020	19125	
22 Acenaphthylene	152		5.917				ND	ND	
23 Acenaphthene	153		6.064				ND	ND	
32 Dibenzofuran	168		6.207				ND	ND	
24 Diethyl phthalate	149	6.328	6.328	0.000	100	1556605	20080	19389	
25 Fluorene	166		6.494				ND	ND	
26 N-Nitrosodiphenylamine	169		6.570				ND	ND	
27 Phenanthrene	178		7.326				ND	ND	
28 Anthracene	178		7.372				ND	ND	
29 Di-n-butyl phthalate	149	7.738	7.736	0.002	100	2644395	20025	19404	
30 Fluoranthene	202		8.628				ND	ND	
31 Pyrene	202		8.973				ND	ND	
33 Butyl benzyl phthalate	149	9.964	9.969	-0.005	91	1265522	20025	20092	
34 Bis(2-ethylhexyl) phthalat	149	11.245	11.260	-0.015	100	1761247	20030	18981	
35 Benzo[a]anthracene	228		11.350				ND	ND	
36 Chrysene	228		11.440				ND	ND	
37 Di-n-octyl phthalate	149	13.182	13.192	-0.010	100	3048854	20055	19978	
38 Benzo[b]fluoranthene	252		14.495				ND	ND	
39 Benzo[k]fluoranthene	252		14.582				ND	ND	
40 Benzo[a]pyrene	252		15.571				ND	ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276		18.650				ND	ND	
42 Dibenz(a,h)anthracene	278		18.685				ND	ND	
43 Benzo[g,h,i]perylene	276	19.069	19.079	-0.010	100	968251	10000	9354.3	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

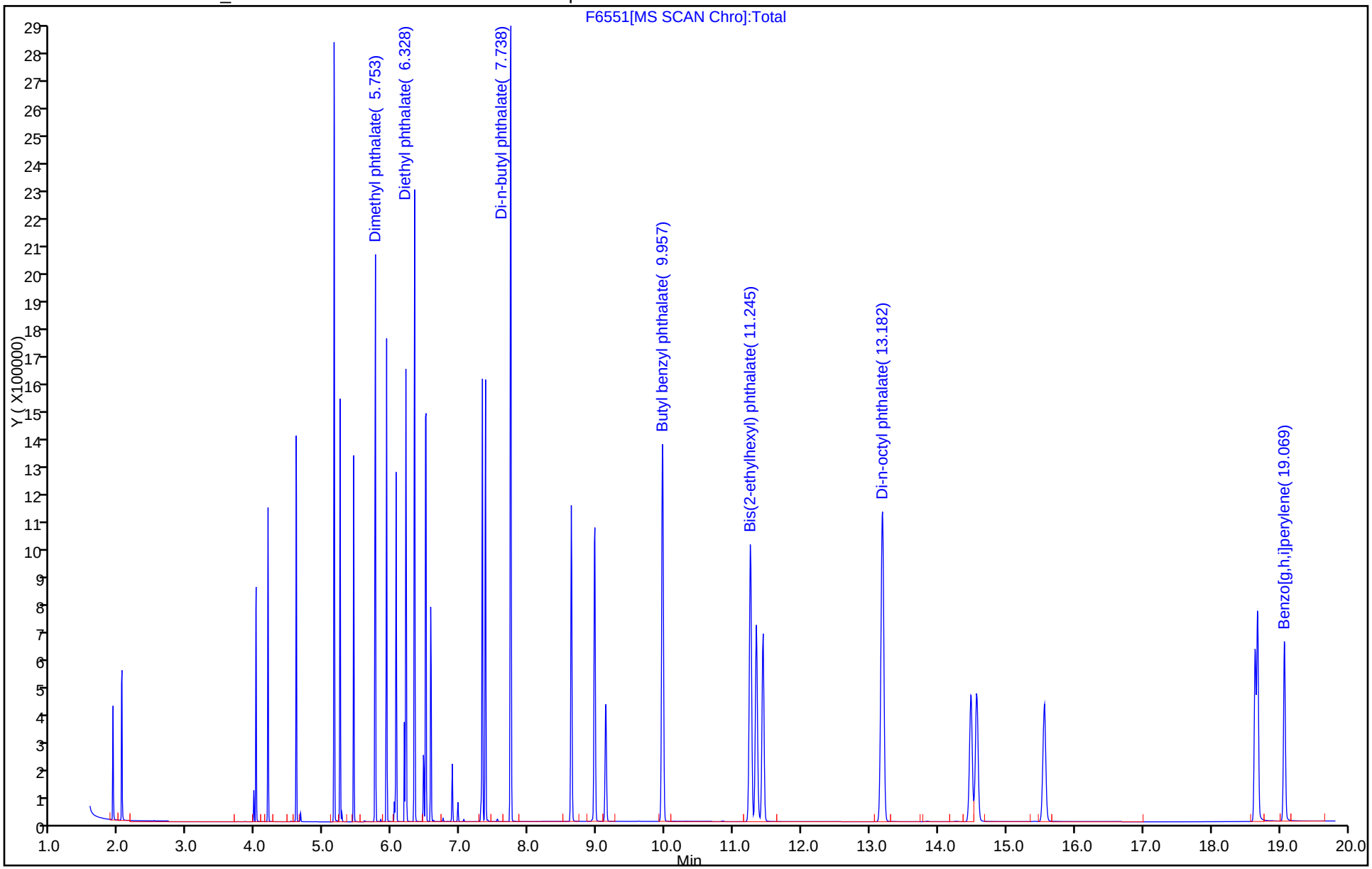
MS-SIMX 10_00055 Amount Added: 1.00 Units: uL

Report Date: 12-May-2017 08:51:30 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Injection Date:	11-May-2017 16:07:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	STD10000			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-373158/10 Calibration Date: 05/11/2017 16:33

Instrument ID: SMS_F Calib Start Date: 05/11/2017 12:58

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/11/2017 16:07

Lab File ID: F6552.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.945	1.964	0.7000	1210000	1200000	1.0	20.0
2-Methylnaphthalene	Ave	1.251	1.289	0.4000	1240000	1200000	3.1	20.0
1-Methylnaphthalene	Ave	1.252	1.218	0.0500	1170000	1200000	-2.8	20.0
Acenaphthylene	Ave	2.070	2.149	0.9000	1250000	1200000	3.8	20.0
Acenaphthene	Ave	1.265	1.330	0.9000	1260000	1200000	5.1	20.0
Fluorene	Ave	1.553	1.578	0.9000	1220000	1200000	1.6	20.0
Phenanthrene	Ave	1.273	1.290	0.7000	1220000	1200000	1.4	20.0
Anthracene	Ave	1.285	1.309	0.7000	1220000	1200000	1.9	20.0
Fluoranthene	Ave	1.462	1.498	0.6000	1230000	1200000	2.5	20.0
Pyrene	Ave	1.516	1.551	0.6000	1230000	1200000	2.3	20.0
Benzo[a]anthracene	Ave	1.596	1.636	0.8000	1230000	1200000	2.5	20.0
Chrysene	Ave	1.476	1.563	0.7000	1270000	1200000	5.9	20.0
Benzo[b]fluoranthene	Ave	1.449	1.452	0.7000	1200000	1200000	0.2	20.0
Benzo[k]fluoranthene	Ave	1.457	1.459	0.7000	1200000	1200000	0.2	20.0
Benzo[a]pyrene	Ave	1.430	1.358	0.7000	1140000	1200000	-5.0	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.622	1.557	0.5000	1150000	1200000	-4.0	20.0
Dibenz(a,h)anthracene	Ave	1.266	1.256	0.4000	1190000	1200000	-0.8	20.0
Benzo[g,h,i]perylene	Ave	1.376	1.405	0.5000	1230000	1200000	2.1	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6552.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 11-May-2017 16:33:30 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist:

Method: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 12-May-2017 08:54:08 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: vasquezk Date: 12-May-2017 08:54:35

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	85	28386	600.0	600.0	
* 2 Phenanthrene-d10	188	7.300	7.300	0.000	100	52370	600.0	600.0	
* 3 Chrysene-d12	240	11.359	11.359	0.000	85	47349	600.0	600.0	
9 1,4-Dioxane	88	1.909	1.909	0.000	0	17582	1200.0	1147.1	M
10 N-Nitrosodimethylamine	74	2.039	2.039	0.000	94	26592	1200.0	1019.0	
14 Naphthalene	128	4.593	4.593	0.000	100	111498	1200.0	1211.7	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	98	73180	1200.0	1236.9	
17 1-Methylnaphthalene	142	5.235	5.235	0.000	98	69134	1200.0	1166.8	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	99966	1200.0	1242.2	
22 Acenaphthylene	152	5.917	5.917	0.000	100	122017	1200.0	1246.1	
23 Acenaphthene	153	6.055	6.055	0.000	98	75516	1200.0	1261.7	
32 Dibenzofuran	168	6.199	6.199	0.000	87	112742	1200.0	1205.8	
24 Diethyl phthalate	149	6.328	6.328	0.000	100	101987	1200.0	1226.6	
25 Fluorene	166	6.494	6.487	0.007	91	89569	1200.0	1219.4	
26 N-Nitrosodiphenylamine	169	6.563	6.563	0.000	97	63912	1200.0	1303.7	
27 Phenanthrene	178	7.320	7.320	0.000	100	135094	1200.0	1216.3	
28 Anthracene	178	7.365	7.366	-0.001	100	137083	1200.0	1222.2	
29 Di-n-butyl phthalate	149	7.736	7.736	0.000	100	176047	1200.0	1237.8	
30 Fluoranthene	202	8.622	8.622	0.000	100	156879	1200.0	1229.8	
31 Pyrene	202	8.967	8.960	0.007	100	162452	1200.0	1227.9	
33 Butyl benzyl phthalate	149	9.956	9.956	0.000	97	81064	1200.0	1233.3	
34 Bis(2-ethylhexyl) phthalat	149	11.242	11.242	0.000	99	123000	1200.0	1270.2	
35 Benzo[a]anthracene	228	11.332	11.332	0.000	97	154929	1200.0	1230.3	
36 Chrysene	228	11.431	11.431	0.000	100	147988	1200.0	1270.4	
37 Di-n-octyl phthalate	149	13.174	13.170	0.004	100	185139	1200.0	1156.6	
38 Benzo[b]fluoranthene	252	14.473	14.464	0.009	100	137458	1200.0	1202.4	
39 Benzo[k]fluoranthene	252	14.560	14.552	0.008	100	138211	1200.0	1202.0	
40 Benzo[a]pyrene	252	15.553	15.545	0.008	100	128566	1200.0	1139.6	
41 Indeno[1,2,3-cd]pyrene	276	18.642	18.637	0.005	78	147436	1200.0	1152.1	
42 Dibenz(a,h)anthracene	278	18.677	18.677	0.000	81	118946	1200.0	1190.9	
43 Benzo[g,h,i]perylene	276	19.070	19.066	0.004	100	133014	1200.0	1225.1	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
7 Pentachlorophenol	266		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

Reagents:

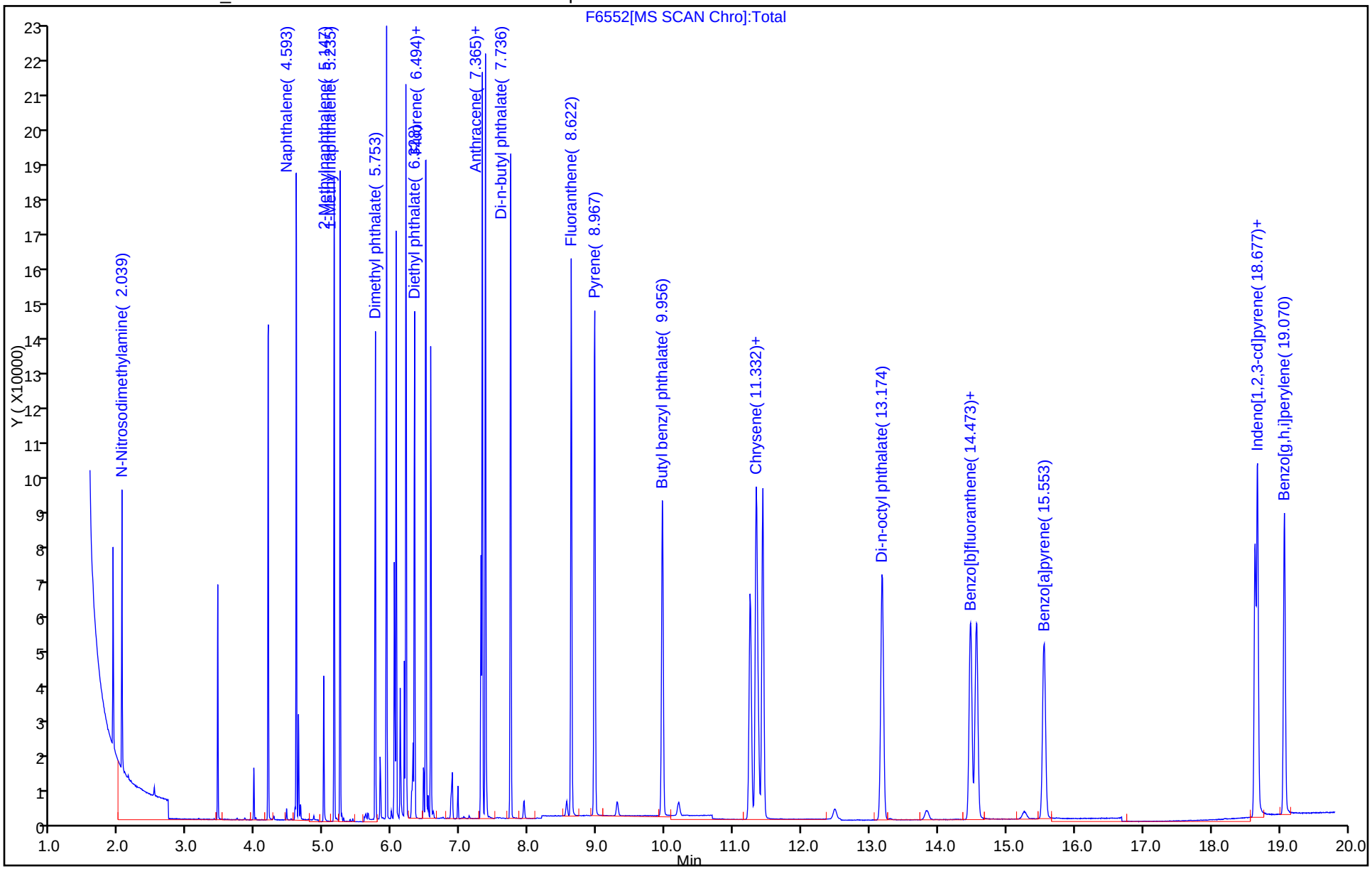
MS-SIM SSV_00116 Amount Added: 1.00 Units: uL

Report Date: 12-May-2017 08:54:36 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6552.D

Injection Date:	11-May-2017 16:33:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	ICV			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-377379/2 Calibration Date: 06/15/2017 07:01

Instrument ID: SMS_F Calib Start Date: 05/11/2017 12:58

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/11/2017 16:07

Lab File ID: F7224.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.945	1.788	0.7000	552000	600000	-8.1	20.0
2-Methylnaphthalene	Ave	1.251	1.203	0.4000	1150000	1200000	-3.8	20.0
1-Methylnaphthalene	Ave	1.252	1.220	0.0500	585000	600000	-2.6	20.0
Acenaphthylene	Ave	2.070	2.001	0.9000	580000	600000	-3.3	20.0
Acenaphthene	Ave	1.265	1.228	0.9000	582000	600000	-2.9	20.0
Fluorene	Ave	1.553	1.538	0.9000	594000	600000	-0.9	20.0
Phenanthrene	Ave	1.273	1.145	0.7000	540000	600000	-10.0	20.0
Anthracene	Ave	1.285	1.198	0.7000	560000	600000	-6.7	20.0
Fluoranthene	Ave	1.462	1.372	0.6000	563000	600000	-6.1	20.0
Pyrene	Ave	1.516	1.385	0.6000	548000	600000	-8.6	20.0
Benzo[a]anthracene	Ave	1.596	1.486	0.8000	559000	600000	-6.9	20.0
Chrysene	Ave	1.476	1.455	0.7000	591000	600000	-1.4	20.0
Benzo[b]fluoranthene	Ave	1.449	1.316	0.7000	545000	600000	-9.2	20.0
Benzo[k]fluoranthene	Ave	1.457	1.403	0.7000	578000	600000	-3.7	20.0
Benzo[a]pyrene	Ave	1.430	1.275	0.7000	535000	600000	-10.8	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.622	1.350	0.5000	499000	600000	-16.8	20.0
Dibenz(a,h)anthracene	Ave	1.266	1.051	0.4000	498000	600000	-17.0	20.0
Benzo[g,h,i]perylene	Ave	1.376	1.128	0.5000	492000	600000	-18.0	20.0
Nitrobenzene-d5 (Surr)	Ave	0.9399	0.9572		612000	601000	1.8	20.0
2-Fluorobiphenyl (Surr)	Ave	1.556	1.580		609000	600000	1.5	20.0
Terphenyl-d14 (Surr)	Ave	0.6092	0.5474		540000	601000	-10.1	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\F7224.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 15-Jun-2017 07:01:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 15-Jun-2017 15:05:59 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: vasquezk Date: 15-Jun-2017 15:03:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	91	39710	600.0	600.0	
* 2 Phenanthrene-d10	188	7.300	7.300	0.000	100	79184	600.0	600.0	
* 3 Chrysene-d12	240	11.376	11.376	0.000	100	67433	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	38050	600.6	611.7	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	100	62735	600.0	609.3	
$ 6 Terphenyl-d14	244	9.129	9.129	0.000	99	43389	600.6	539.7	
9 1,4-Dioxane	88	1.903	1.903	0.000	0	11619	604.8	541.9	
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	89	20240	600.0	554.4	
14 Naphthalene	128	4.589	4.589	0.000	100	70997	600.0	551.5	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	97	95546	1200.0	1154.4	
17 1-Methylnaphthalene	142	5.234	5.234	0.000	97	48462	600.0	584.7	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	140656	1201.2	1249.4	
22 Acenaphthylene	152	5.917	5.917	0.000	100	79457	600.0	580.1	
23 Acenaphthene	153	6.055	6.055	0.000	100	48765	600.0	582.4	
32 Dibenzofuran	168	6.199	6.199	0.000	87	78021	600.6	596.5	
24 Diethyl phthalate	149	6.320	6.320	0.000	96	145395	1204.8	1250.0	
25 Fluorene	166	6.494	6.494	0.000	92	61071	600.0	594.4	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	96	41552	599.2	560.6	
27 Phenanthrene	178	7.320	7.320	0.000	100	90695	600.0	540.0	
28 Anthracene	178	7.365	7.365	0.000	100	94883	600.0	559.5	
29 Di-n-butyl phthalate	149	7.730	7.730	0.000	100	235106	1201.5	1093.3	
30 Fluoranthene	202	8.628	8.628	0.000	100	108640	600.0	563.2	
31 Pyrene	202	8.967	8.967	0.000	100	109672	600.0	548.3	
33 Butyl benzyl phthalate	149	9.956	9.956	0.000	97	103163	1201.5	1038.0	
34 Bis(2-ethylhexyl) phthalat	149	11.232	11.232	0.000	99	160944	1201.8	1099.2	
35 Benzo[a]anthracene	228	11.340	11.340	0.000	98	100218	600.0	558.8	
36 Chrysene	228	11.440	11.440	0.000	100	98119	600.0	591.4	
37 Di-n-octyl phthalate	149	13.161	13.161	0.000	100	226387	1203.3	993.1	
38 Benzo[b]fluoranthene	252	14.499	14.499	0.000	100	88745	600.0	545.1	
39 Benzo[k]fluoranthene	252	14.587	14.587	0.000	100	94583	600.0	577.6	
40 Benzo[a]pyrene	252	15.588	15.588	0.000	100	85966	600.0	535.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.672	18.672	0.000	81	91035	600.0	499.5	
42 Dibenz(a,h)anthracene	278	18.698	18.698	0.000	87	70839	600.0	498.0	
43 Benzo[g,h,i]perylene	276	19.105	19.105	0.000	99	76046	600.0	491.8	

Reagents:

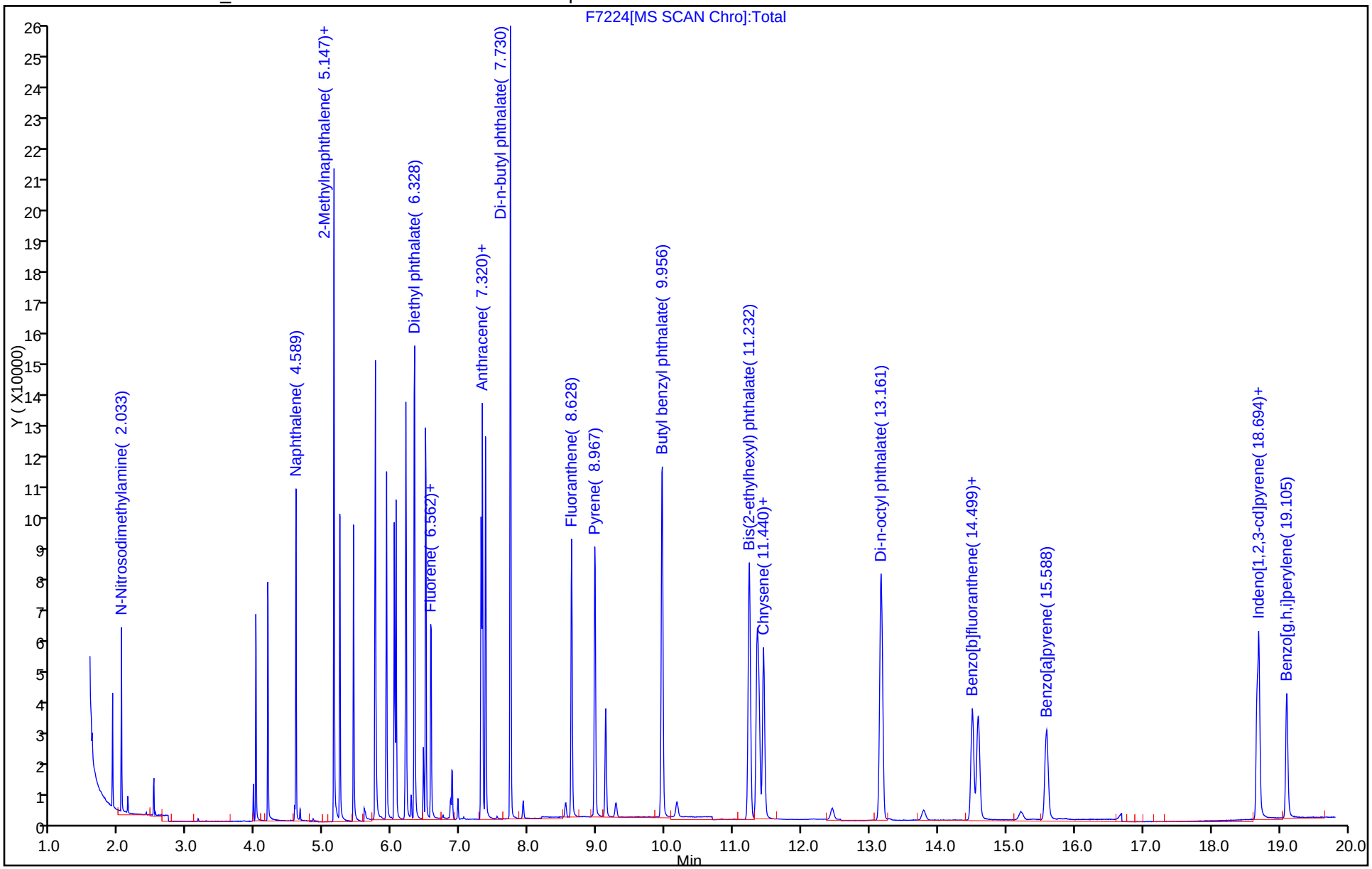
MS-SIMSL 0.6_00125 Amount Added: 1.00 Units: uL

Report Date: 15-Jun-2017 15:05:59 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\F7224.D

Injection Date:	15-Jun-2017 07:01:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVC 280-377379/7 Calibration Date: 06/15/2017 09:27

Instrument ID: SMS_F Calib Start Date: 05/11/2017 12:58

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/11/2017 16:07

Lab File ID: F7229.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.945	1.726	0.7000	532000	600000	-11.3	50.0
2-Methylnaphthalene	Ave	1.251	1.172	0.4000	1130000	1200000	-6.2	50.0
1-Methylnaphthalene	Ave	1.252	1.168	0.0500	559000	600000	-6.8	50.0
Acenaphthylene	Ave	2.070	1.966	0.9000	570000	600000	-5.0	50.0
Acenaphthene	Ave	1.265	1.197	0.9000	568000	600000	-5.4	50.0
Fluorene	Ave	1.553	1.504	0.9000	581000	600000	-3.1	50.0
Phenanthrene	Ave	1.273	1.185	0.7000	559000	600000	-6.9	50.0
Anthracene	Ave	1.285	1.246	0.7000	582000	600000	-3.0	50.0
Fluoranthene	Ave	1.462	1.402	0.6000	576000	600000	-4.1	50.0
Pyrene	Ave	1.516	1.434	0.6000	568000	600000	-5.4	50.0
Benzo[a]anthracene	Ave	1.596	1.493	0.8000	561000	600000	-6.5	50.0
Chrysene	Ave	1.476	1.462	0.7000	594000	600000	-1.0	50.0
Benzo[b]fluoranthene	Ave	1.449	1.389	0.7000	575000	600000	-4.1	50.0
Benzo[k]fluoranthene	Ave	1.457	1.474	0.7000	607000	600000	1.2	50.0
Benzo[a]pyrene	Ave	1.430	1.343	0.7000	564000	600000	-6.0	50.0
Indeno[1,2,3-cd]pyrene	Ave	1.622	1.435	0.5000	531000	600000	-11.5	50.0
Dibenz(a,h)anthracene	Ave	1.266	1.123	0.4000	532000	600000	-11.3	50.0
Benzo[g,h,i]perylene	Ave	1.376	1.203	0.5000	525000	600000	-12.5	50.0
Nitrobenzene-d5 (Surr)	Ave	0.9399	0.9022		577000	601000	-4.0	50.0
2-Fluorobiphenyl (Surr)	Ave	1.556	1.592		614000	600000	2.3	50.0
Terphenyl-d14 (Surr)	Ave	0.6092	0.5618		554000	601000	-7.8	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\F7229.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 15-Jun-2017 09:27:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVC
Operator ID: VASQUEZK Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 15-Jun-2017 15:06:06 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: vasquezk Date: 15-Jun-2017 13:39:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	97	41089	600.0	600.0	
* 2 Phenanthrene-d10	188	7.300	7.300	0.000	100	77300	600.0	600.0	
* 3 Chrysene-d12	240	11.367	11.367	0.000	96	69184	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	100	37107	600.6	576.5	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	100	65400	600.0	613.9	
$ 6 Terphenyl-d14	244	9.123	9.123	0.000	99	43474	600.6	553.9	
9 1,4-Dioxane	88	1.903	1.903	0.000	0	10184	604.8	459.0	
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	91	18127	600.0	479.9	
14 Naphthalene	128	4.586	4.586	0.000	100	70928	600.0	532.5	
16 2-Methylnaphthalene	142	5.143	5.143	0.000	99	96352	1200.0	1125.1	
17 1-Methylnaphthalene	142	5.230	5.230	0.000	99	47981	600.0	559.4	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	138914	1201.2	1192.5	
22 Acenaphthylene	152	5.917	5.917	0.000	100	80782	600.0	569.9	
23 Acenaphthene	153	6.055	6.055	0.000	98	49196	600.0	567.8	
32 Dibenzofuran	168	6.199	6.199	0.000	91	80497	600.6	594.8	
24 Diethyl phthalate	149	6.320	6.320	0.000	97	139567	1204.8	1159.6	
25 Fluorene	166	6.487	6.487	0.000	97	61802	600.0	581.3	
26 N-Nitrosodiphenylamine	169	6.562	6.562	0.000	98	42181	599.2	582.9	
27 Phenanthrene	178	7.320	7.320	0.000	100	91580	600.0	558.6	
28 Anthracene	178	7.365	7.365	0.000	100	96350	600.0	582.0	
29 Di-n-butyl phthalate	149	7.730	7.730	0.000	100	228969	1201.5	1090.7	
30 Fluoranthene	202	8.628	8.628	0.000	100	108396	600.0	575.7	
31 Pyrene	202	8.967	8.967	0.000	100	110822	600.0	567.5	
33 Butyl benzyl phthalate	149	9.950	9.950	0.000	100	100126	1201.5	1032.0	
34 Bis(2-ethylhexyl) phthalat	149	11.223	11.223	0.000	99	160828	1201.8	1125.2	
35 Benzo[a]anthracene	228	11.340	11.340	0.000	100	103264	600.0	561.2	
36 Chrysene	228	11.440	11.440	0.000	100	101124	600.0	594.1	
37 Di-n-octyl phthalate	149	13.156	13.156	0.000	100	226095	1203.3	966.7	
38 Benzo[b]fluoranthene	252	14.490	14.490	0.000	100	96110	600.0	575.4	
39 Benzo[k]fluoranthene	252	14.573	14.573	0.000	100	101985	600.0	607.0	
40 Benzo[a]pyrene	252	15.575	15.575	0.000	100	92928	600.0	563.7	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.668	18.668	0.000	81	99274	600.0	530.9	
42 Dibenz(a,h)anthracene	278	18.694	18.694	0.000	87	77695	600.0	532.4	
43 Benzo[g,h,i]perylene	276	19.096	19.096	0.000	99	83242	600.0	524.7	

Reagents:

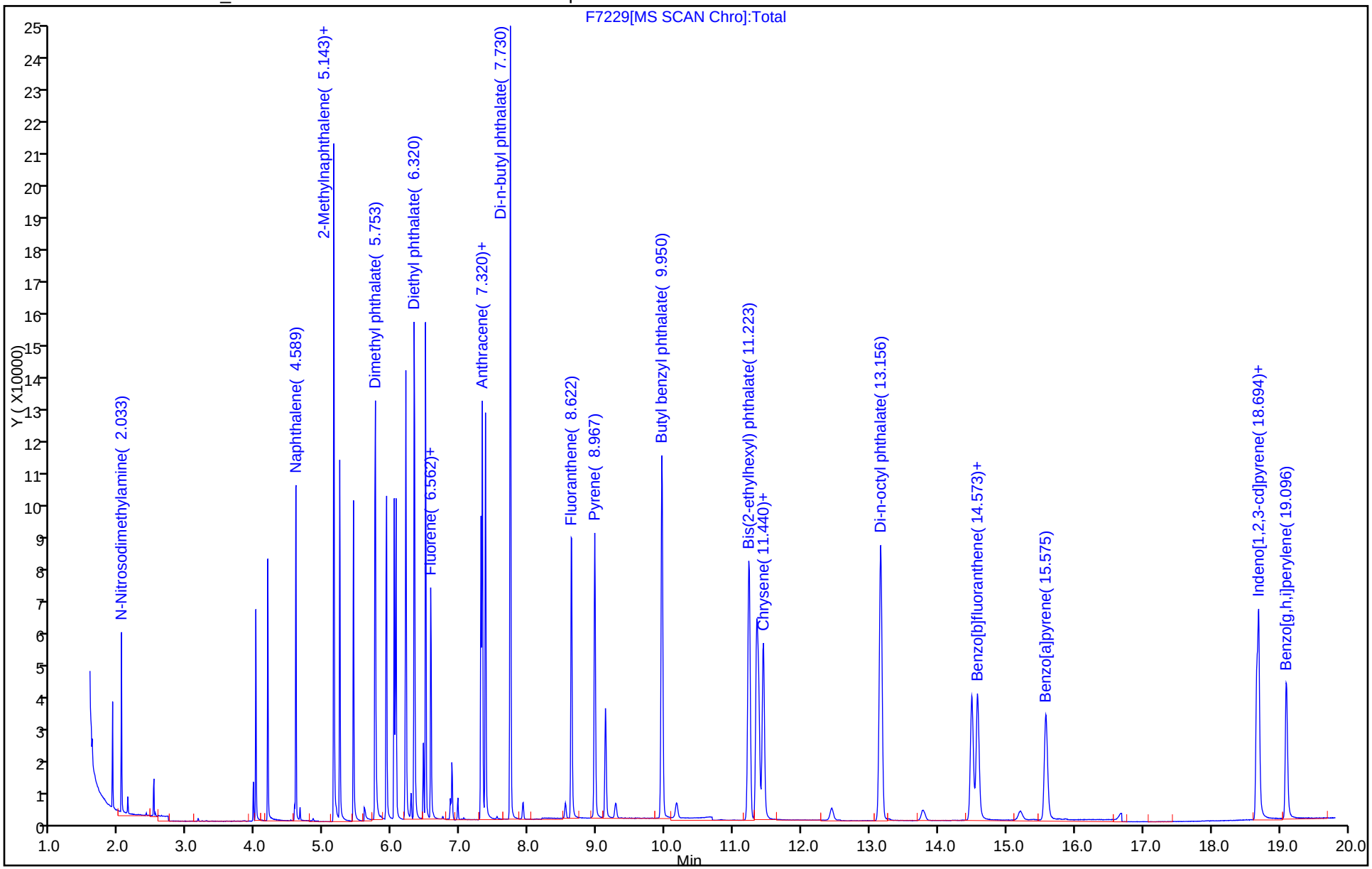
MS-SIMSL 0.6_00125 Amount Added: 1.00 Units: uL

Report Date: 15-Jun-2017 15:06:06 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\F7229.D

Injection Date:	15-Jun-2017 09:27:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	CCVC			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-377669/2 Calibration Date: 06/16/2017 15:08

Instrument ID: SMS_F Calib Start Date: 05/11/2017 12:58

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/11/2017 16:07

Lab File ID: F7268.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.945	1.765	0.7000	545000	600000	-9.2	20.0
2-Methylnaphthalene	Ave	1.251	1.171	0.4000	1120000	1200000	-6.4	20.0
1-Methylnaphthalene	Ave	1.252	1.190	0.0500	570000	600000	-4.9	20.0
Acenaphthylene	Ave	2.070	2.004	0.9000	581000	600000	-3.2	20.0
Acenaphthene	Ave	1.265	1.199	0.9000	569000	600000	-5.2	20.0
Fluorene	Ave	1.553	1.475	0.9000	570000	600000	-5.0	20.0
Phenanthrene	Ave	1.273	1.166	0.7000	550000	600000	-8.4	20.0
Anthracene	Ave	1.285	1.223	0.7000	571000	600000	-4.8	20.0
Fluoranthene	Ave	1.462	1.369	0.6000	562000	600000	-6.3	20.0
Pyrene	Ave	1.516	1.393	0.6000	551000	600000	-8.1	20.0
Benzo[a]anthracene	Ave	1.596	1.562	0.8000	587000	600000	-2.1	20.0
Chrysene	Ave	1.476	1.469	0.7000	597000	600000	-0.5	20.0
Benzo[b]fluoranthene	Ave	1.449	1.433	0.7000	593000	600000	-1.1	20.0
Benzo[k]fluoranthene	Ave	1.457	1.489	0.7000	613000	600000	2.2	20.0
Benzo[a]pyrene	Ave	1.430	1.423	0.7000	597000	600000	-0.5	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.622	1.464	0.5000	542000	600000	-9.7	20.0
Dibenz(a,h)anthracene	Ave	1.266	1.116	0.4000	529000	600000	-11.8	20.0
Benzo[g,h,i]perylene	Ave	1.376	1.211	0.5000	528000	600000	-12.0	20.0
Nitrobenzene-d5 (Surr)	Ave	0.9399	0.9655		617000	601000	2.7	20.0
2-Fluorobiphenyl (Surr)	Ave	1.556	1.571		606000	600000	1.0	20.0
Terphenyl-d14 (Surr)	Ave	0.6092	0.5458		538000	601000	-10.4	20.0

Report Date: 16-Jun-2017 20:08:14 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7268.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 16-Jun-2017 15:08:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: WICKHAMM Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 16-Jun-2017 20:08:13 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: wickhamm Date: 16-Jun-2017 15:42:11

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	92	27983	600.0	600.0	
* 2 Phenanthrene-d10	188	7.301	7.301	0.000	100	52312	600.0	600.0	
* 3 Chrysene-d12	240	11.380	11.380	0.000	99	44750	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	100	27044	600.6	617.0	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	100	43968	600.0	606.0	
$ 6 Terphenyl-d14	244	9.130	9.130	0.000	97	28578	600.6	538.0	
9 1,4-Dioxane	88	1.903	1.903	0.000	0	8933	604.8	591.2	
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	89	13698	600.0	532.5	
14 Naphthalene	128	4.589	4.589	0.000	100	49398	600.0	544.6	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	96	65535	1200.0	1123.7	
17 1-Methylnaphthalene	142	5.234	5.234	0.000	97	33313	600.0	570.3	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	96552	1201.2	1217.0	
22 Acenaphthylene	152	5.917	5.917	0.000	100	56079	600.0	581.0	
23 Acenaphthene	153	6.055	6.055	0.000	99	33554	600.0	568.7	
32 Dibenzofuran	168	6.199	6.199	0.000	86	52215	600.6	566.5	
24 Diethyl phthalate	149	6.320	6.320	0.000	95	101256	1204.8	1235.3	
25 Fluorene	166	6.494	6.494	0.000	94	41265	600.0	569.9	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	96	28768	599.2	587.5	
27 Phenanthrene	178	7.321	7.321	0.000	100	60986	600.0	549.7	
28 Anthracene	178	7.366	7.366	0.000	100	63981	600.0	571.1	
29 Di-n-butyl phthalate	149	7.731	7.731	0.000	100	158386	1201.5	1114.9	
30 Fluoranthene	202	8.629	8.629	0.000	100	71641	600.0	562.2	
31 Pyrene	202	8.974	8.974	0.000	100	72858	600.0	551.3	
33 Butyl benzyl phthalate	149	9.957	9.957	0.000	98	73881	1201.5	1125.2	
34 Bis(2-ethylhexyl) phthalat	149	11.236	11.236	0.000	99	123054	1201.8	1272.1	
35 Benzo[a]anthracene	228	11.344	11.344	0.000	98	69880	600.0	587.2	
36 Chrysene	228	11.443	11.443	0.000	99	65717	600.0	596.9	
37 Di-n-octyl phthalate	149	13.169	13.169	0.000	100	192862	1203.3	1274.8	
38 Benzo[b]fluoranthene	252	14.503	14.503	0.000	100	64113	600.0	593.4	
39 Benzo[k]fluoranthene	252	14.590	14.590	0.000	100	66640	600.0	613.2	
40 Benzo[a]pyrene	252	15.587	15.587	0.000	100	63659	600.0	597.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.675	18.675	0.000	84	65511	600.0	541.6	
42 Dibenz(a,h)anthracene	278	18.702	18.702	0.000	84	49942	600.0	529.1	
43 Benzo[g,h,i]perylene	276	19.109	19.109	0.000	99	54187	600.0	528.1	

Reagents:

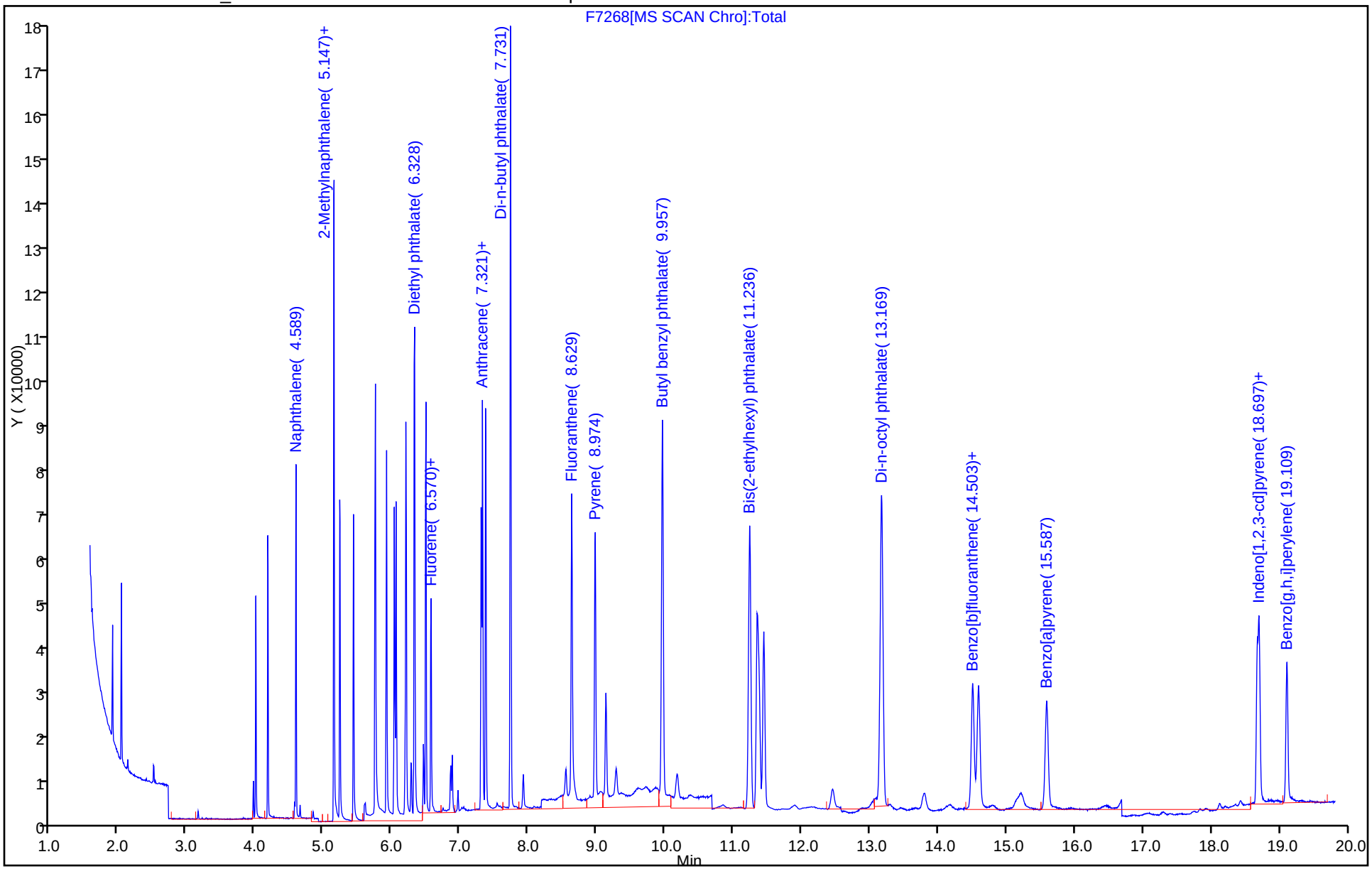
MS-SIMSL 0.6_00125 Amount Added: 1.00 Units: uL

Report Date: 16-Jun-2017 20:08:14 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7268.D

Injection Date:	16-Jun-2017 15:08:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVC 280-377669/27 Calibration Date: 06/17/2017 01:57

Instrument ID: SMS_F Calib Start Date: 05/11/2017 12:58

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/11/2017 16:07

Lab File ID: F7293.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.945	1.657	0.7000	511000	600000	-14.8	50.0
2-Methylnaphthalene	Ave	1.251	1.152	0.4000	1110000	1200000	-7.9	50.0
1-Methylnaphthalene	Ave	1.252	1.164	0.0500	558000	600000	-7.0	50.0
Acenaphthylene	Ave	2.070	1.963	0.9000	569000	600000	-5.1	50.0
Acenaphthene	Ave	1.265	1.211	0.9000	574000	600000	-4.3	50.0
Fluorene	Ave	1.553	1.514	0.9000	585000	600000	-2.5	50.0
Phenanthrene	Ave	1.273	1.161	0.7000	547000	600000	-8.8	50.0
Anthracene	Ave	1.285	1.237	0.7000	578000	600000	-3.7	50.0
Fluoranthene	Ave	1.462	1.377	0.6000	565000	600000	-5.8	50.0
Pyrene	Ave	1.516	1.416	0.6000	560000	600000	-6.6	50.0
Benzo[a]anthracene	Ave	1.596	1.541	0.8000	579000	600000	-3.4	50.0
Chrysene	Ave	1.476	1.470	0.7000	597000	600000	-0.4	50.0
Benzo[b]fluoranthene	Ave	1.449	1.338	0.7000	554000	600000	-7.6	50.0
Benzo[k]fluoranthene	Ave	1.457	1.411	0.7000	581000	600000	-3.2	50.0
Benzo[a]pyrene	Ave	1.430	1.289	0.7000	541000	600000	-9.9	50.0
Indeno[1,2,3-cd]pyrene	Ave	1.622	1.217	0.5000	450000	600000	-25.0	50.0
Dibenz(a,h)anthracene	Ave	1.266	0.9512	0.4000	451000	600000	-24.8	50.0
Benzo[g,h,i]perylene	Ave	1.376	1.003	0.5000	438000	600000	-27.1	50.0
Nitrobenzene-d5 (Surr)	Ave	0.9399	0.8653		553000	601000	-7.9	50.0
2-Fluorobiphenyl (Surr)	Ave	1.556	1.514		584000	600000	-2.7	50.0
Terphenyl-d14 (Surr)	Ave	0.6092	0.5481		540000	601000	-10.0	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7293.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 17-Jun-2017 01:57:30 ALS Bottle#: 26 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVC
Operator ID: WICKHAMM Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:44:32 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:40:04

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	90	30972	600.0	600.0	
* 2 Phenanthrene-d10	188	7.301	7.301	0.000	100	59163	600.0	600.0	
* 3 Chrysene-d12	240	11.371	11.371	0.000	91	49910	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	26827	600.6	552.9	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	100	46887	600.0	583.8	
$ 6 Terphenyl-d14	244	9.130	9.130	0.000	99	32461	600.6	540.4	
9 1,4-Dioxane	88	1.903	1.903	0.000	0	6625	604.8	396.1	
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	96	11662	600.0	409.6	
14 Naphthalene	128	4.589	4.589	0.000	100	51307	600.0	511.0	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	99	71370	1200.0	1105.6	
17 1-Methylnaphthalene	142	5.235	5.235	0.000	98	36066	600.0	557.9	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	101721	1201.2	1158.5	
22 Acenaphthylene	152	5.917	5.917	0.000	100	60812	600.0	569.2	
23 Acenaphthene	153	6.055	6.055	0.000	100	37517	600.0	574.5	
32 Dibenzofuran	168	6.199	6.199	0.000	88	60684	600.6	594.9	
24 Diethyl phthalate	149	6.320	6.320	0.000	96	104526	1204.8	1152.1	
25 Fluorene	166	6.494	6.494	0.000	93	46906	600.0	585.3	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	96	32550	599.2	587.7	
27 Phenanthrene	178	7.321	7.321	0.000	100	68666	600.0	547.2	
28 Anthracene	178	7.366	7.366	0.000	100	73187	600.0	577.6	
29 Di-n-butyl phthalate	149	7.731	7.731	0.000	100	174378	1201.5	1085.3	
30 Fluoranthene	202	8.629	8.629	0.000	100	81473	600.0	565.3	
31 Pyrene	202	8.968	8.968	0.000	100	83756	600.0	560.4	
33 Butyl benzyl phthalate	149	9.957	9.957	0.000	95	79893	1201.5	1075.9	
34 Bis(2-ethylhexyl) phthalat	149	11.227	11.227	0.000	99	128184	1201.8	1171.7	
35 Benzo[a]anthracene	228	11.344	11.344	0.000	98	76902	600.0	579.4	
36 Chrysene	228	11.443	11.443	0.000	100	73357	600.0	597.4	
37 Di-n-octyl phthalate	149	13.160	13.160	0.000	100	186012	1203.3	1102.4	
38 Benzo[b]fluoranthene	252	14.503	14.503	0.000	100	66784	600.0	554.2	
39 Benzo[k]fluoranthene	252	14.586	14.586	0.000	100	70422	600.0	581.0	
40 Benzo[a]pyrene	252	15.587	15.587	0.000	100	64320	600.0	540.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.676	18.676	0.000	82	60718	600.0	450.1	
42 Dibenz(a,h)anthracene	278	18.702	18.702	0.000	86	47476	600.0	451.0	
43 Benzo[g,h,i]perylene	276	19.109	19.109	0.000	100	50072	600.0	437.5	

Reagents:

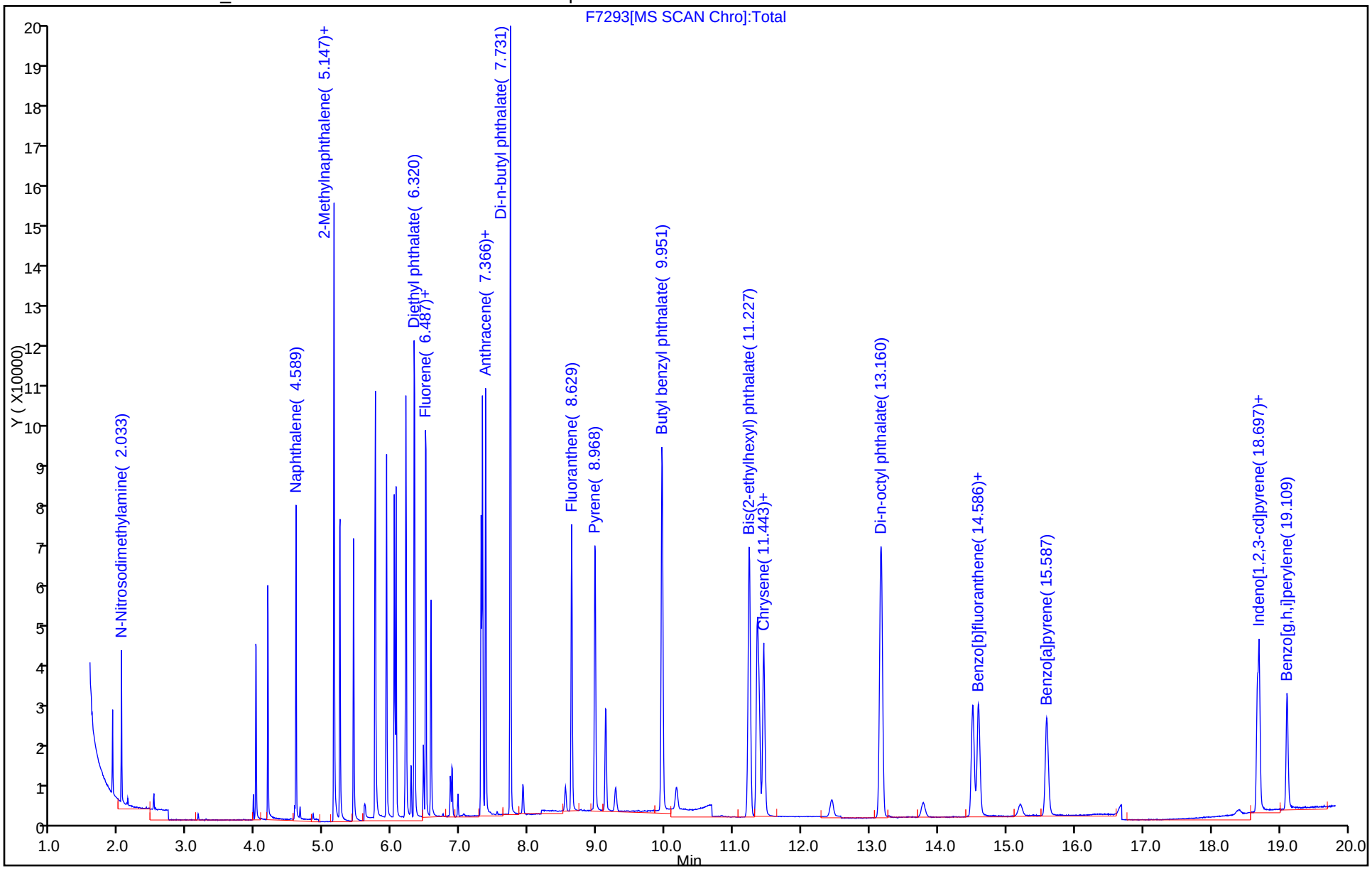
MS-SIMSL 0.6_00125 Amount Added: 1.00 Units: uL

Report Date: 19-Jun-2017 15:44:32 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7293.D

Injection Date:	17-Jun-2017 01:57:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	CCVC			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378055/2 Calibration Date: 06/20/2017 16:55

Instrument ID: SMS_F Calib Start Date: 05/11/2017 12:58

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/11/2017 16:07

Lab File ID: F7307.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.945	1.587	0.7000	490000	600000	-18.4	20.0
2-Methylnaphthalene	Ave	1.251	1.071	0.4000	1030000	1200000	-14.4	20.0
1-Methylnaphthalene	Ave	1.252	1.107	0.0500	530000	600000	-11.6	20.0
Acenaphthylene	Ave	2.070	1.868	0.9000	542000	600000	-9.7	20.0
Acenaphthene	Ave	1.265	1.142	0.9000	541000	600000	-9.8	20.0
Fluorene	Ave	1.553	1.443	0.9000	557000	600000	-7.1	20.0
Phenanthrene	Ave	1.273	1.163	0.7000	548000	600000	-8.6	20.0
Anthracene	Ave	1.285	1.192	0.7000	556000	600000	-7.3	20.0
Fluoranthene	Ave	1.462	1.418	0.6000	582000	600000	-3.0	20.0
Pyrene	Ave	1.516	1.455	0.6000	576000	600000	-4.0	20.0
Benzo[a]anthracene	Ave	1.596	1.525	0.8000	573000	600000	-4.4	20.0
Chrysene	Ave	1.476	1.481	0.7000	602000	600000	0.3	20.0
Benzo[b]fluoranthene	Ave	1.449	1.386	0.7000	574000	600000	-4.3	20.0
Benzo[k]fluoranthene	Ave	1.457	1.496	0.7000	616000	600000	2.7	20.0
Benzo[a]pyrene	Ave	1.430	1.425	0.7000	598000	600000	-0.4	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.622	1.422	0.5000	526000	600000	-12.3	20.0
Dibenz(a,h)anthracene	Ave	1.266	1.067	0.4000	506000	600000	-15.7	20.0
Benzo[g,h,i]perylene	Ave	1.376	1.129	0.5000	492000	600000	-17.9	20.0
Nitrobenzene-d5 (Surr)	Ave	0.9399	0.8459		541000	601000	-10.0	20.0
2-Fluorobiphenyl (Surr)	Ave	1.556	1.434		553000	600000	-7.8	20.0
Terphenyl-d14 (Surr)	Ave	0.6092	0.5627		555000	601000	-7.6	20.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7307.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 20-Jun-2017 16:55:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Operator ID: WICKHAMM Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 21-Jun-2017 15:41:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: wickhamm Date: 20-Jun-2017 23:24:43

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	85	16335	600.0	600.0	
* 2 Phenanthrene-d10	188	7.308	7.308	0.000	99	31312	600.0	600.0	
* 3 Chrysene-d12	240	11.378	11.378	0.000	88	28868	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	13832	600.6	540.6	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	23421	600.0	553.0	
$ 6 Terphenyl-d14	244	9.130	9.130	0.000	98	17637	600.6	554.8	
9 1,4-Dioxane	88	1.903	1.903	0.000	0	4217	604.8	478.1	M
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	94	7558	600.0	503.3	
14 Naphthalene	128	4.589	4.589	0.000	100	25922	600.0	489.5	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	100	34984	1200.0	1027.6	
17 1-Methylnaphthalene	142	5.234	5.234	0.000	100	18077	600.0	530.2	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	55255	1201.2	1193.1	
22 Acenaphthylene	152	5.917	5.917	0.000	100	30519	600.0	541.6	
23 Acenaphthene	153	6.055	6.055	0.000	97	18649	600.0	541.4	
32 Dibenzofuran	168	6.206	6.206	0.000	94	29811	600.6	554.1	
24 Diethyl phthalate	149	6.328	6.328	0.000	100	56656	1204.8	1184.1	
25 Fluorene	166	6.494	6.494	0.000	99	23564	600.0	557.5	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	99	15654	599.2	534.1	
27 Phenanthrene	178	7.321	7.321	0.000	99	36415	600.0	548.3	
28 Anthracene	178	7.373	7.373	0.000	99	37311	600.0	556.4	
29 Di-n-butyl phthalate	149	7.737	7.737	0.000	100	94965	1201.5	1116.8	
30 Fluoranthene	202	8.629	8.629	0.000	100	44404	600.0	582.2	
31 Pyrene	202	8.974	8.974	0.000	100	45551	600.0	575.9	
33 Butyl benzyl phthalate	149	9.957	9.957	0.000	100	46513	1201.5	1183.5	
34 Bis(2-ethylhexyl) phthalat	149	11.233	11.233	0.000	100	69012	1201.8	1191.9	
35 Benzo[a]anthracene	228	11.350	11.350	0.000	97	44024	600.0	573.4	
36 Chrysene	228	11.450	11.450	0.000	99	42754	600.0	602.0	
37 Di-n-octyl phthalate	149	13.171	13.171	0.000	100	110479	1203.3	1132.1	
38 Benzo[b]fluoranthene	252	14.513	14.513	0.000	99	40014	600.0	574.1	
39 Benzo[k]fluoranthene	252	14.596	14.596	0.000	98	43200	600.0	616.2	
40 Benzo[a]pyrene	252	15.598	15.598	0.000	95	41126	600.0	597.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.682	18.682	0.000	85	41055	600.0	526.2	
42 Dibenz(a,h)anthracene	278	18.708	18.708	0.000	86	30796	600.0	505.7	
43 Benzo[g,h,i]perylene	276	19.115	19.115	0.000	99	32597	600.0	492.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

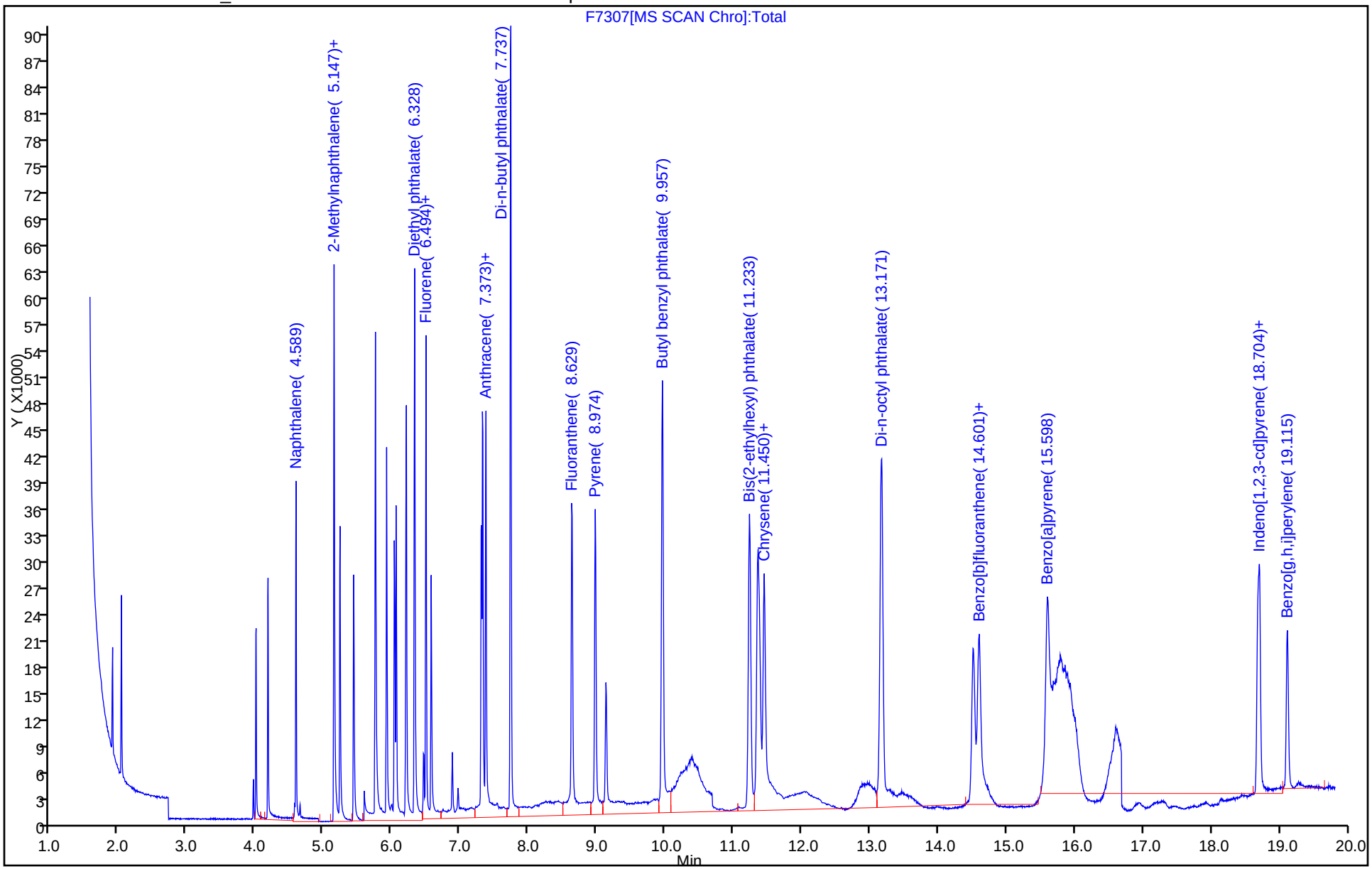
MS-SIMSL 0.6_00125 Amount Added: 1.00 Units: uL

Report Date: 21-Jun-2017 15:41:05 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7307.D

Injection Date:	20-Jun-2017 16:55:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	CCV			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVC 280-378055/27 Calibration Date: 06/21/2017 03:45

Instrument ID: SMS_F Calib Start Date: 05/11/2017 12:58

GC Column: Rxi-5Sil MS ID: 0.25(mm) Calib End Date: 05/11/2017 16:07

Lab File ID: F7332.D Conc. Units: ng/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Ave	1.945	1.604	0.7000	495000	600000	-17.6	50.0
2-Methylnaphthalene	Ave	1.251	1.055	0.4000	1010000	1200000	-15.7	50.0
1-Methylnaphthalene	Ave	1.252	1.164	0.0500	558000	600000	-7.1	50.0
Acenaphthylene	Ave	2.070	1.906	0.9000	553000	600000	-7.9	50.0
Acenaphthene	Ave	1.265	1.240	0.9000	588000	600000	-2.0	50.0
Fluorene	Ave	1.553	1.492	0.9000	576000	600000	-3.9	50.0
Phenanthrene	Ave	1.273	1.136	0.7000	536000	600000	-10.7	50.0
Anthracene	Ave	1.285	1.223	0.7000	571000	600000	-4.8	50.0
Fluoranthene	Ave	1.462	1.425	0.6000	585000	600000	-2.5	50.0
Pyrene	Ave	1.516	1.477	0.6000	585000	600000	-2.5	50.0
Benzo[a]anthracene	Ave	1.596	1.462	0.8000	550000	600000	-8.4	50.0
Chrysene	Ave	1.476	1.499	0.7000	609000	600000	1.5	50.0
Benzo[b]fluoranthene	Ave	1.449	1.328	0.7000	550000	600000	-8.3	50.0
Benzo[k]fluoranthene	Ave	1.457	1.498	0.7000	617000	600000	2.8	50.0
Benzo[a]pyrene	Ave	1.430	1.321	0.7000	554000	600000	-7.6	50.0
Indeno[1,2,3-cd]pyrene	Ave	1.622	1.336	0.5000	494000	600000	-17.6	50.0
Dibenz(a,h)anthracene	Ave	1.266	1.039	0.4000	493000	600000	-17.9	50.0
Benzo[g,h,i]perylene	Ave	1.376	1.103	0.5000	481000	600000	-19.8	50.0
Nitrobenzene-d5 (Surr)	Ave	0.9399	0.8141		520000	601000	-13.4	50.0
2-Fluorobiphenyl (Surr)	Ave	1.556	1.459		563000	600000	-6.2	50.0
Terphenyl-d14 (Surr)	Ave	0.6092	0.5665		558000	601000	-7.0	50.0

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7332.D
Lims ID: CCVC
Client ID:
Sample Type: CCVC
Inject. Date: 21-Jun-2017 03:45:30 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVC
Operator ID: WICKHAMM Instrument ID: SMS_F
Sublist: chrom-SMSF_8270SIMX*sub4

Method: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 21-Jun-2017 15:41:31 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: wickhamm Date: 21-Jun-2017 15:40:44

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	85	18016	600.0	600.0	
* 2 Phenanthrene-d10	188	7.308	7.308	0.000	99	36341	600.0	600.0	
* 3 Chrysene-d12	240	11.378	11.378	0.000	90	34685	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.004	4.004	0.000	100	14681	600.6	520.2	
$ 5 2-Fluorobiphenyl	172	5.440	5.440	0.000	100	26286	600.0	562.7	
$ 6 Terphenyl-d14	244	9.137	9.137	0.000	99	20607	600.6	558.5	
9 1,4-Dioxane	88	1.903	1.903	0.000	0	4447	604.8	457.1	M
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	98	7735	600.0	467.0	
14 Naphthalene	128	4.589	4.589	0.000	100	28891	600.0	494.7	
16 2-Methylnaphthalene	142	5.151	5.151	0.000	99	38007	1200.0	1012.2	
17 1-Methylnaphthalene	142	5.234	5.234	0.000	100	20969	600.0	557.6	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	60133	1201.2	1177.3	
22 Acenaphthylene	152	5.917	5.917	0.000	100	34342	600.0	552.6	
23 Acenaphthene	153	6.055	6.055	0.000	98	22340	600.0	588.1	
32 Dibenzofuran	168	6.206	6.206	0.000	92	33914	600.6	571.5	
24 Diethyl phthalate	149	6.328	6.328	0.000	100	61470	1204.8	1164.8	
25 Fluorene	166	6.494	6.494	0.000	98	26871	600.0	576.4	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	98	18597	599.2	546.7	
27 Phenanthrene	178	7.327	7.327	0.000	100	41282	600.0	535.6	
28 Anthracene	178	7.373	7.373	0.000	100	44446	600.0	571.1	
29 Di-n-butyl phthalate	149	7.731	7.731	0.000	100	103887	1201.5	1052.6	
30 Fluoranthene	202	8.636	8.636	0.000	100	51788	600.0	585.0	
31 Pyrene	202	8.974	8.974	0.000	100	53684	600.0	584.8	
33 Butyl benzyl phthalate	149	9.957	9.957	0.000	99	47192	1201.5	1034.6	
34 Bis(2-ethylhexyl) phthalat	149	11.224	11.224	0.000	99	65123	1201.8	969.1	
35 Benzo[a]anthracene	228	11.350	11.350	0.000	99	50718	600.0	549.8	
36 Chrysene	228	11.450	11.450	0.000	100	51991	600.0	609.3	
37 Di-n-octyl phthalate	149	13.162	13.162	0.000	100	107692	1203.3	918.4	
38 Benzo[b]fluoranthene	252	14.504	14.504	0.000	100	46065	600.0	550.1	
39 Benzo[k]fluoranthene	252	14.596	14.596	0.000	100	51960	600.0	616.9	
40 Benzo[a]pyrene	252	15.602	15.602	0.000	100	45813	600.0	554.3	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.682	18.682	0.000	83	46324	600.0	494.1	
42 Dibenz(a,h)anthracene	278	18.708	18.708	0.000	91	36040	600.0	492.6	
43 Benzo[g,h,i]perylene	276	19.115	19.115	0.000	100	38262	600.0	481.1	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

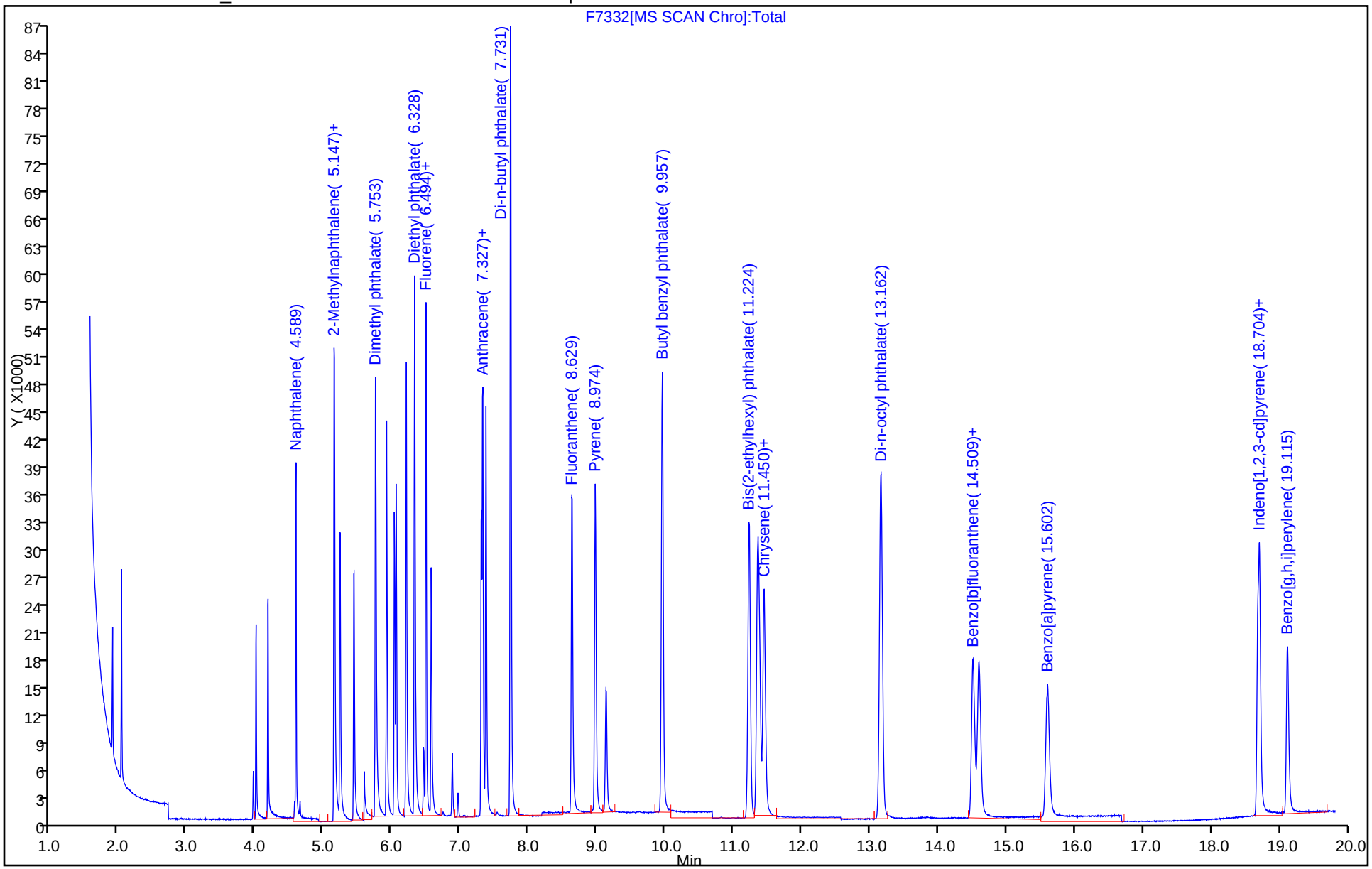
MS-SIMSL 0.6_00125 Amount Added: 1.00 Units: uL

Report Date: 21-Jun-2017 15:41:32 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7332.D

Injection Date:	21-Jun-2017 03:45:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	CCVC			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6543.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 11-May-2017 12:39:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 12-May-2017 08:51:10 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK007

First Level Reviewer: vasquezk Date: 11-May-2017 12:55:32

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 Pentachlorophenol_T	266	4.254	4.254	0.000	72	303726	NR	NR	
13 DFTPP									
15 Benzidine_T	184	5.388	5.388	0.000	95	1714681	NR	NR	
18 4,4'-DDD	235	5.857	5.857	0.000	79	9535	NR	NR	
19 4,4'-DDE	246	5.906	5.906	0.000	35	779	NR	NR	
21 4,4'-DDT	235	6.146	6.146	0.000	91	796091	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

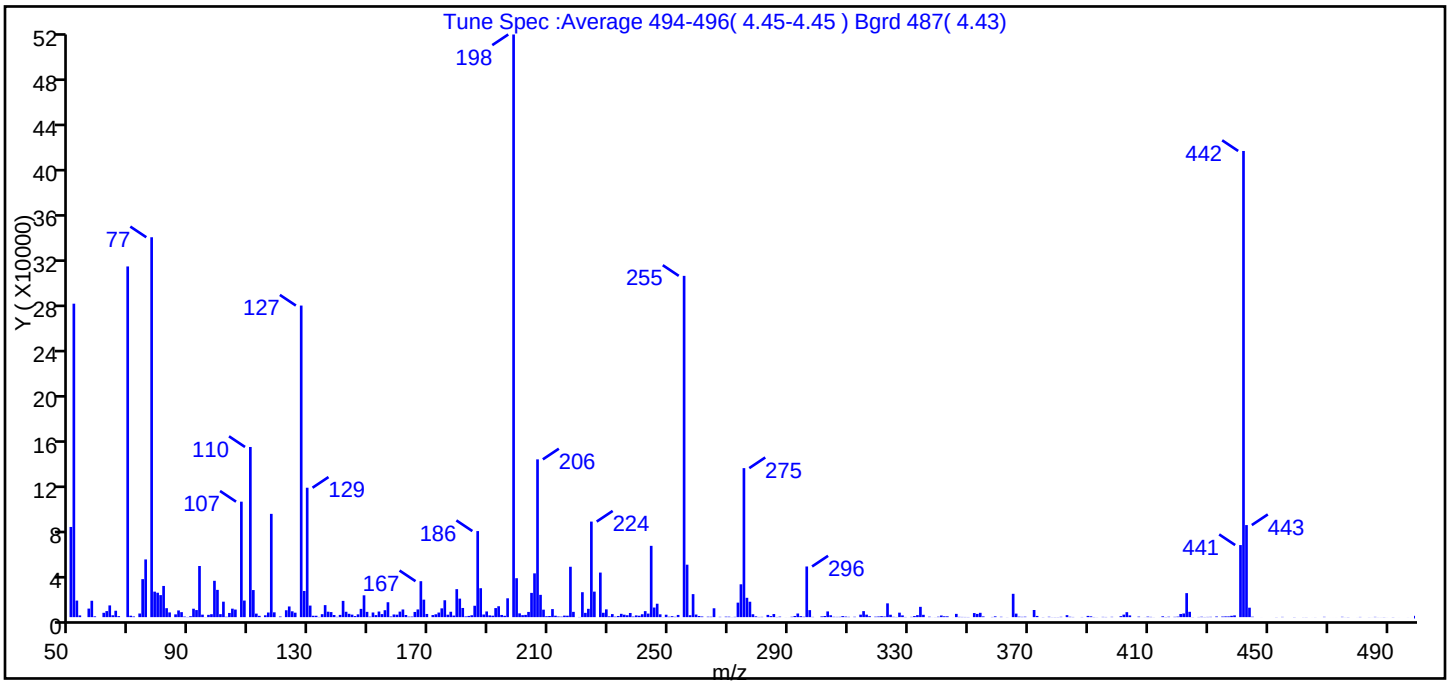
MS-DFTPP_00044 Amount Added: 0.50 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6543.D
Injection Date: 11-May-2017 12:39:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM
Tune Method: DFTPP Method 8270

13 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	53.8
68	<2% of mass 69	0.0 (0.0)
69	Present	60.2
70	<2% of mass 69	0.2 (0.4)
127	40-60% of mass 198	53.5
197	<1% of mass 198	0.0
199	5-9% of mass 198	6.7
275	10-30% of mass 198	25.6
365	>1% of mass 198	4.0
441	Present but less than mass 443	12.4 (78.3)
442	>40% of mass 198	80.0
443	17-23% of mass 442	15.8 (19.7)

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6543.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 11-May-2017 12:39:30
Spectrum: Tune Spec :Average 494-496(4.45-4.45) Bgrd 487(4.43)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 372

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	79672	158.00	2356	255.00	301504	366.00	3124
51.00	276928	159.00	2191	256.00	46344	367.00	425
52.00	14631	160.00	4877	257.00	1695	368.00	274
53.00	1541	161.00	6775	258.00	20344	369.00	403
56.00	7554	162.00	1899	259.00	2307	372.00	6316
57.00	14475	163.00	447	260.00	993	373.00	1063
58.00	692	164.00	513	261.00	574	375.00	118
61.00	3840	165.00	4585	263.00	414	376.00	2
62.00	5351	166.00	6813	264.00	355	377.00	341
63.00	10369	167.00	31760	265.00	7835	378.00	87
64.00	1641	168.00	15456	267.00	272	379.00	112
65.00	5660	169.00	2820	269.00	430	380.00	113
66.00	858	171.00	1845	270.00	406	381.00	294
69.00	309824	172.00	2524	271.00	71	383.00	1763
70.00	1265	173.00	4059	272.00	264	384.00	312
71.00	594	174.00	7776	273.00	12817	385.00	172
73.00	3206	175.00	14915	274.00	29024	388.00	150
74.00	33576	176.00	2147	275.00	131648	390.00	1103
75.00	50992	177.00	4768	276.00	17080	391.00	709
77.00	335616	178.00	1386	277.00	13608	392.00	141
78.00	22528	179.00	24736	278.00	2568	393.00	63
79.00	21568	180.00	16347	279.00	702	395.00	236
80.00	19464	181.00	8107	280.00	189	396.00	166
81.00	27560	182.00	616	281.00	260	398.00	286
82.00	7917	183.00	1086	283.00	1991	399.00	2
83.00	4172	184.00	1656	284.00	911	401.00	873
85.00	2458	185.00	10052	285.00	2750	402.00	2216
86.00	5917	186.00	76032	286.00	175	403.00	4389
87.00	4418	187.00	25560	287.00	450	404.00	1537
88.00	512	188.00	2333	289.00	34	407.00	456
89.00	154	189.00	5038	290.00	21	408.00	15
90.00	808	190.00	1568	291.00	346	409.00	46
91.00	7442	191.00	1290	292.00	1027	410.00	469

Report Date: 12-May-2017 08:51:11 Chrom Revision: 2.2 18-Apr-2017 07:43:58
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6543.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 11-May-2017 12:39:30
Spectrum: Tune Spec :Average 494-496(4.45-4.45) Bgrd 487(4.43)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 372

m/z	Y	m/z	Y	m/z	Y	m/z	Y
92.00	6250	192.00	8005	293.00	3222	411.00	225
93.00	45184	193.00	9640	294.00	882	412.00	56
94.00	2206	194.00	1933	295.00	342	414.00	20
95.00	84	195.00	1186	296.00	44760	415.00	719
96.00	2048	196.00	16656	297.00	6193	416.00	132
97.00	2593	198.00	514752	298.00	220	417.00	370
98.00	32104	199.00	34392	301.00	662	419.00	283
99.00	24096	200.00	3343	302.00	1003	420.00	447
100.00	2639	201.00	1751	303.00	5063	421.00	2800
101.00	13665	202.00	1989	304.00	1683	422.00	3225
102.00	356	203.00	4601	305.00	308	423.00	21216
103.00	3704	204.00	21432	306.00	242	424.00	4707
104.00	7486	205.00	38680	307.00	274	425.00	107
105.00	6695	206.00	139392	308.00	922	427.00	176
107.00	102024	207.00	19696	309.00	523	428.00	349
108.00	14651	208.00	6607	310.00	282	429.00	147
110.00	150336	209.00	804	312.00	336	430.00	217
111.00	23928	210.00	1018	314.00	2203	431.00	278
112.00	3120	211.00	7113	315.00	5314	433.00	575
113.00	1153	212.00	1251	316.00	2218	435.00	542
115.00	1616	213.00	579	317.00	831	436.00	671
116.00	4090	214.00	442	319.00	418	437.00	659
117.00	91248	215.00	1349	320.00	581	438.00	1189
118.00	4257	216.00	1275	321.00	878	439.00	1551
120.00	557	217.00	44512	322.00	567	441.00	63672
122.00	6086	218.00	4669	323.00	12191	442.00	411840
123.00	9444	219.00	12	324.00	2106	443.00	81336
124.00	5163	220.00	151	325.00	294	444.00	8352
125.00	3942	221.00	22032	326.00	167	445.00	385
127.00	275264	222.00	3783	327.00	3964	448.00	20
128.00	23128	223.00	7352	328.00	1538	453.00	97
129.00	114328	224.00	84424	329.00	171	455.00	227
130.00	10208	225.00	22544	331.00	253	457.00	5
131.00	1213	227.00	39376	332.00	954	459.00	128

Report Date: 12-May-2017 08:51:11 Chrom Revision: 2.2 18-Apr-2017 07:43:58
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6543.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 11-May-2017 12:39:30
Spectrum: Tune Spec :Average 494-496(4.45-4.45) Bgrd 487(4.43)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 372

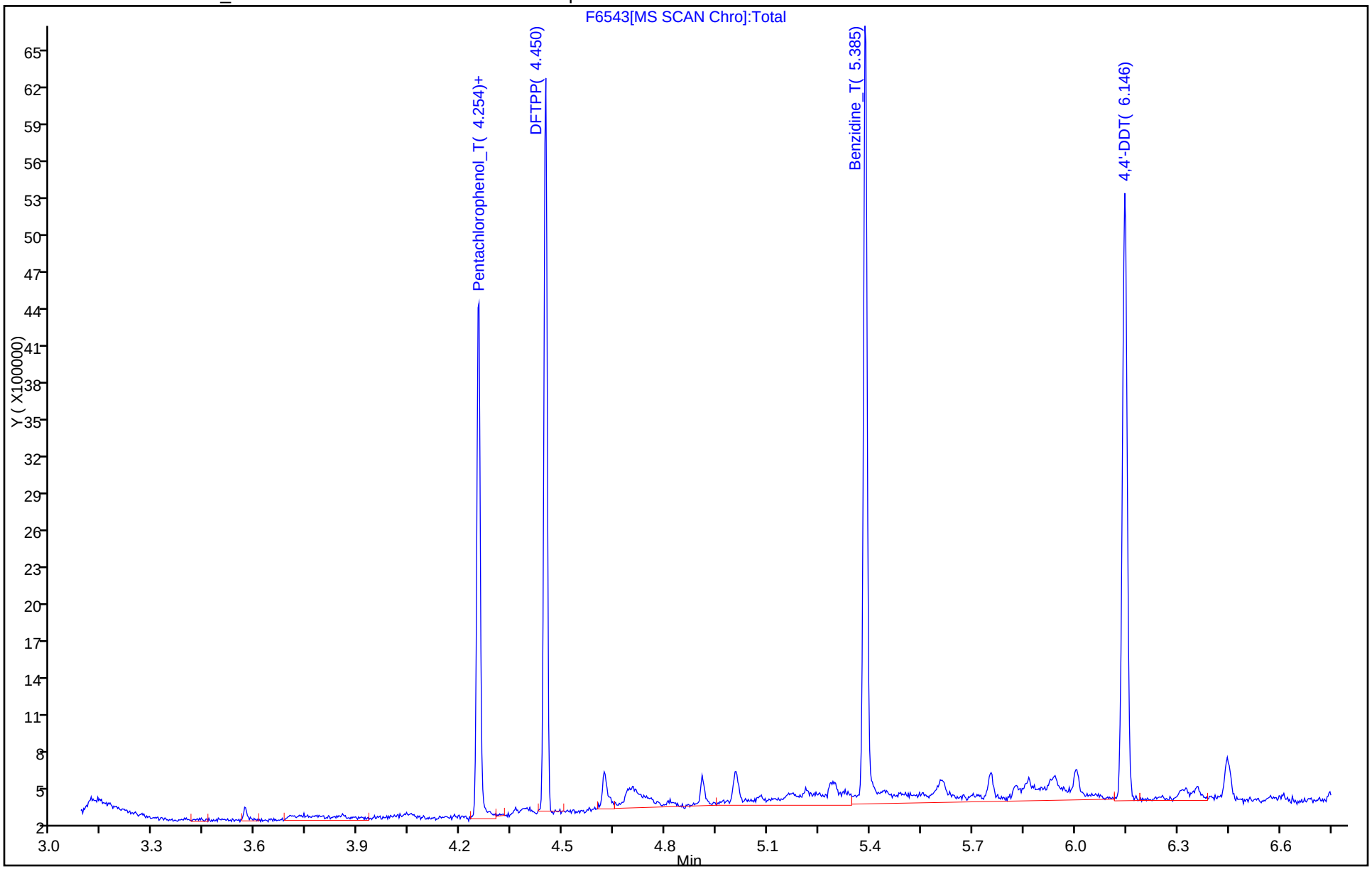
m/z	Y	m/z	Y	m/z	Y	m/z	Y
132.00	1229	228.00	3865	333.00	1764	462.00	67
133.00	194	229.00	6892	334.00	9102	463.00	87
134.00	2615	230.00	700	335.00	2066	465.00	13
135.00	10619	231.00	2699	336.00	17	466.00	56
136.00	4804	232.00	417	337.00	399	469.00	273
137.00	4467	233.00	1034	338.00	30	470.00	3
138.00	1875	234.00	2929	339.00	69	471.00	11
139.00	265	235.00	2157	340.00	384	472.00	8
140.00	1988	236.00	1655	341.00	1460	473.00	17
141.00	14372	237.00	3686	342.00	758	475.00	289
142.00	4751	238.00	526	343.00	728	476.00	44
143.00	2947	239.00	1542	345.00	33	477.00	118
144.00	2211	240.00	1244	346.00	2896	478.00	2
145.00	963	241.00	2564	347.00	253	480.00	25
146.00	2462	242.00	5318	348.00	191	481.00	186
147.00	7316	243.00	3123	349.00	166	484.00	67
148.00	19280	244.00	62992	350.00	142	485.00	23
149.00	4667	245.00	8496	352.00	3607	486.00	237
150.00	408	246.00	11857	353.00	2862	487.00	54
151.00	4116	247.00	2490	354.00	3823	488.00	38
152.00	1782	248.00	87	355.00	634	489.00	110
153.00	4973	249.00	2150	358.00	172	490.00	21
154.00	2691	250.00	383	359.00	706	492.00	112
155.00	6133	251.00	839	361.00	311	494.00	14
156.00	13180	252.00	284	363.00	68	497.00	29
157.00	574	253.00	1956	365.00	20616	499.00	1

Report Date: 12-May-2017 08:51:11 Chrom Revision: 2.2 18-Apr-2017 07:43:58

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6543.D

Injection Date:	11-May-2017 12:39:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	DFTPP			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		

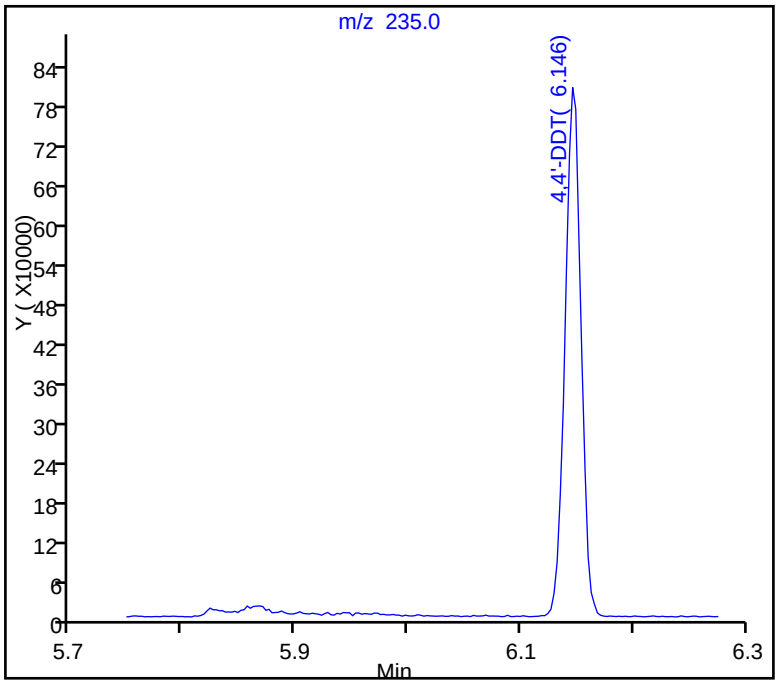


Breakdown Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6543.D
Injection Date: 11-May-2017 12:39:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

21 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

21 4,4'-DDT, Area = 796091
19 4,4'-DDE, Area = 779
18 4,4'-DDD, Area = 9535

%Breakdown: 1.28%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Denver

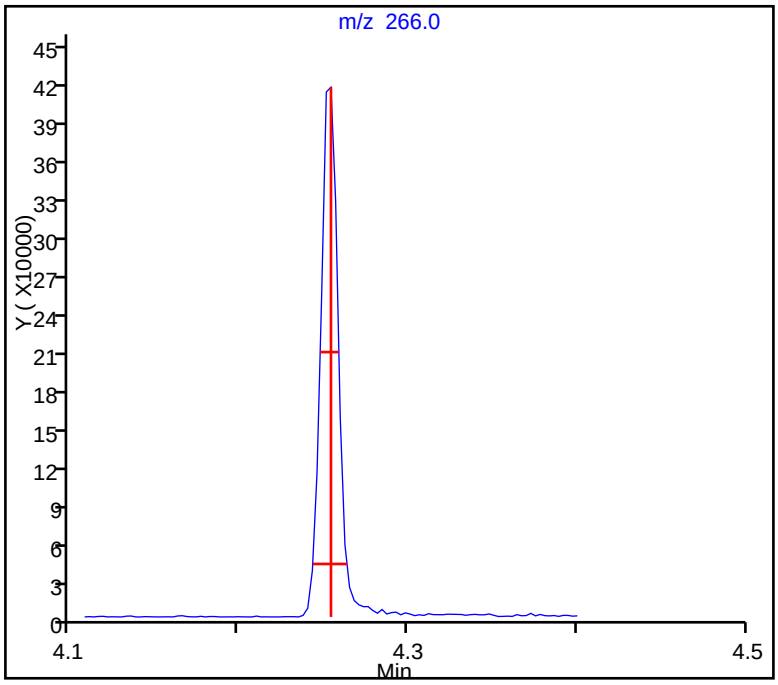
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6543.D
Injection Date: 11-May-2017 12:39:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

12 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.010 (min.)
Front Width = 0.011 (min.)

Tailing Factor = 0.9, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Denver

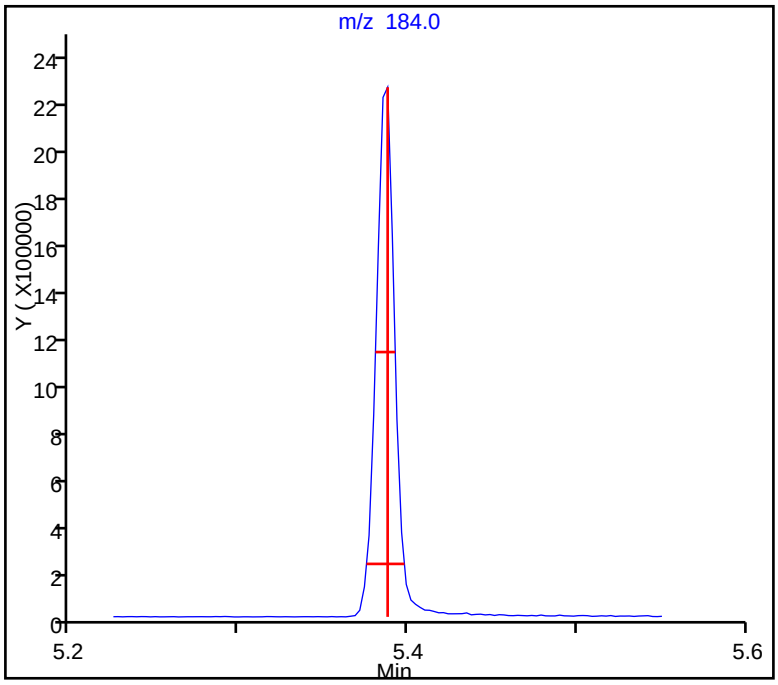
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6543.D
Injection Date: 11-May-2017 12:39:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

15 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.010 (min.)
Front Width = 0.013 (min.)

Tailing Factor = 0.8, Max. Tailing < 2.00
Passed



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\F7223.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 15-Jun-2017 06:49:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 15-Jun-2017 15:05:58 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: vasquezk Date: 15-Jun-2017 06:59:23

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 Pentachlorophenol_T	266	4.246	4.246	0.000	65	255107	NR	NR	
13 DFTPP									
15 Benzidine_T	184	5.371	5.371	0.000	94	2015221	NR	NR	
18 4,4'-DDD	235	5.840	5.840	0.000	76	11038	NR	NR	
19 4,4'-DDE	246		6.121				ND	ND	
21 4,4'-DDT	235	6.121	6.121	0.000	91	927423	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
ND - Not Detected or Marked ND

Reagents:

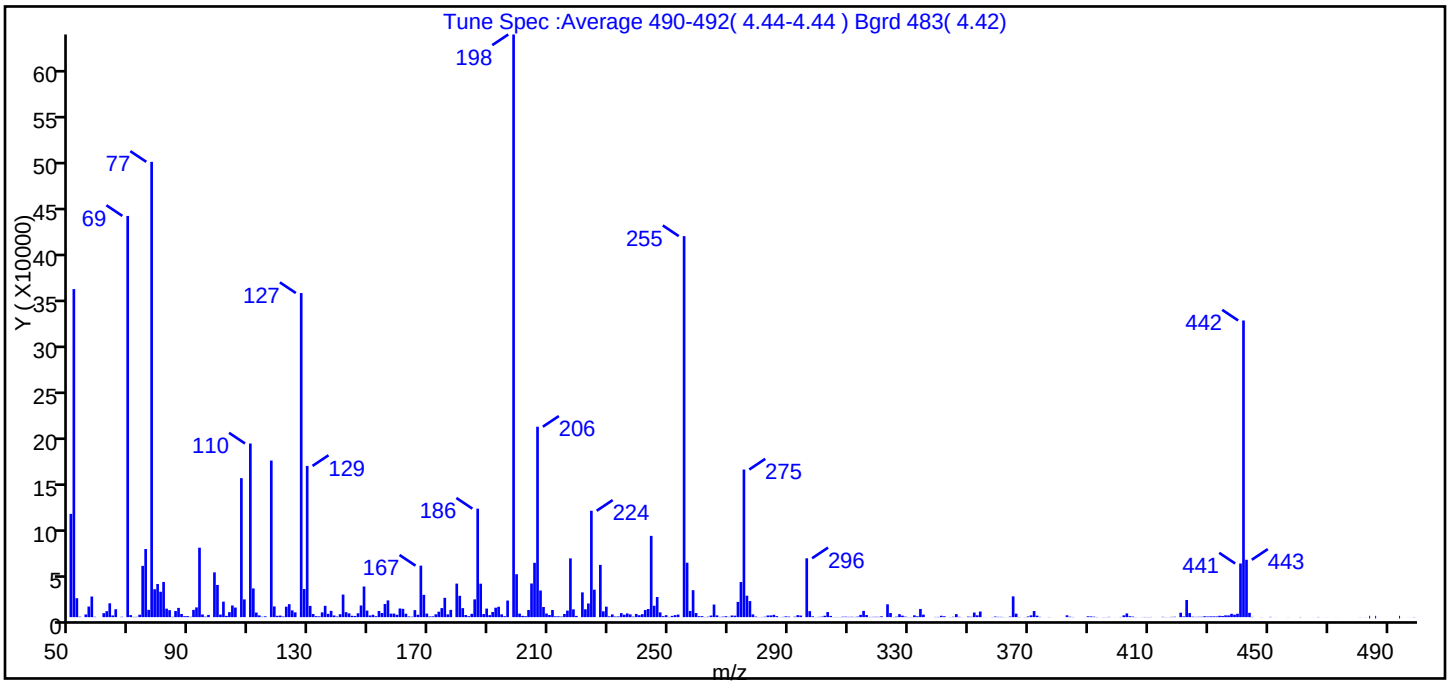
MS-DFTPP_00044 Amount Added: 0.50 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\F7223.D
Injection Date: 15-Jun-2017 06:49:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM
Tune Method: DFTPP Method 8270

13 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	56.3
68	<2% of mass 69	0.0 (0.0)
69	Present	68.9
70	<2% of mass 69	0.3 (0.5)
127	40-60% of mass 198	55.6
197	<1% of mass 198	0.0
199	5-9% of mass 198	7.4
275	10-30% of mass 198	25.3
365	>1% of mass 198	3.6
441	Present but less than mass 443	9.2 (93.5)
442	>40% of mass 198	50.9
443	17-23% of mass 442	9.8 (19.3)

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\F7223.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 15-Jun-2017 06:49:30
Spectrum: Tune Spec :Average 490-492(4.44-4.44) Bgrd 483(4.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 397

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	111944	160.00	9383	265.00	13642	370.00	766
51.00	355584	161.00	9009	266.00	1898	371.00	1938
52.00	20504	162.00	3717	267.00	282	372.00	6626
53.00	487	163.00	744	268.00	585	373.00	1609
55.00	2908	164.00	488	269.00	1016	374.00	300
56.00	11507	165.00	7638	270.00	292	376.00	16
57.00	22336	166.00	2607	271.00	1780	377.00	181
58.00	409	167.00	55800	272.00	1599	378.00	23
61.00	4316	168.00	24176	273.00	16528	379.00	16
62.00	6458	169.00	3862	274.00	38064	380.00	16
63.00	14998	170.00	778	275.00	160000	381.00	5
64.00	1828	171.00	878	276.00	23224	383.00	2001
65.00	8581	172.00	3065	277.00	17408	384.00	482
67.00	403	173.00	5914	278.00	2967	385.00	215
69.00	434880	174.00	9824	279.00	621	387.00	20
70.00	2187	175.00	20944	280.00	132	389.00	47
71.00	285	176.00	3032	281.00	237	390.00	903
72.00	346	177.00	7864	282.00	451	391.00	782
73.00	2652	179.00	36352	283.00	1807	392.00	523
74.00	55584	180.00	23104	284.00	1888	393.00	188
75.00	73832	181.00	9751	285.00	2531	395.00	146
76.00	7898	182.00	2296	286.00	1081	396.00	144
77.00	493504	183.00	1032	287.00	91	397.00	303
78.00	30264	184.00	3607	288.00	287	399.00	55
79.00	35912	185.00	19264	289.00	847	400.00	33
80.00	27544	186.00	117624	290.00	635	401.00	241
81.00	38152	187.00	36280	292.00	535	402.00	1948
82.00	9200	188.00	3361	293.00	2160	403.00	4007
83.00	7563	189.00	9288	294.00	1732	404.00	1004
84.00	353	190.00	2189	296.00	63808	405.00	630
85.00	6638	191.00	5590	297.00	6511	406.00	143
86.00	10020	192.00	10225	298.00	875	408.00	94
87.00	3437	193.00	11270	299.00	147	409.00	216

Report Date: 15-Jun-2017 15:05:58 Chrom Revision: 2.2 25-Apr-2017 13:27:22
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\F7223.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 15-Jun-2017 06:49:30
Spectrum: Tune Spec :Average 490-492(4.44-4.44) Bgrd 483(4.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 397

m/z	Y	m/z	Y	m/z	Y	m/z	Y
88.00	1067	194.00	3027	300.00	306	410.00	169
89.00	1151	195.00	995	301.00	528	411.00	213
90.00	377	196.00	18016	302.00	1498	413.00	43
91.00	7882	198.00	631552	303.00	5522	415.00	336
92.00	10567	199.00	46536	304.00	1321	416.00	163
93.00	75272	200.00	3839	305.00	164	417.00	112
94.00	2868	201.00	1401	306.00	205	418.00	324
95.00	537	202.00	1046	307.00	159	419.00	427
96.00	2377	203.00	7715	308.00	451	421.00	4756
98.00	48552	204.00	36480	309.00	501	422.00	749
99.00	34920	205.00	58864	310.00	342	423.00	18608
100.00	2792	206.00	206400	311.00	410	424.00	4408
101.00	16800	207.00	28840	312.00	245	425.00	518
102.00	1363	208.00	10989	313.00	568	426.00	338
103.00	5430	209.00	3929	314.00	2475	427.00	381
104.00	12658	210.00	2353	315.00	6789	428.00	425
105.00	10384	211.00	7723	316.00	2294	429.00	982
107.00	150656	212.00	927	317.00	231	430.00	730
108.00	19232	213.00	913	318.00	308	431.00	851
110.00	188224	214.00	637	319.00	404	432.00	842
111.00	31096	215.00	3454	320.00	341	433.00	769
112.00	4970	216.00	7095	321.00	904	434.00	1467
113.00	1901	217.00	63688	323.00	13915	435.00	1299
114.00	400	218.00	8479	324.00	4433	436.00	1949
115.00	881	219.00	1348	325.00	155	437.00	1877
117.00	169728	221.00	26848	326.00	547	438.00	3624
118.00	11620	222.00	8539	327.00	3214	439.00	2660
119.00	1460	223.00	14776	328.00	1629	440.00	3666
120.00	1698	224.00	115320	329.00	566	441.00	58144
121.00	678	225.00	29760	330.00	182	442.00	321536
122.00	11327	227.00	56632	331.00	205	443.00	62192
123.00	14072	228.00	6325	332.00	1972	444.00	4698
124.00	7319	229.00	11345	333.00	911	445.00	266
125.00	5168	230.00	890	334.00	8885	448.00	136

Report Date: 15-Jun-2017 15:05:58 Chrom Revision: 2.2 25-Apr-2017 13:27:22
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\F7223.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 15-Jun-2017 06:49:30
Spectrum: Tune Spec :Average 490-492(4.44-4.44) Bgrd 483(4.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 397

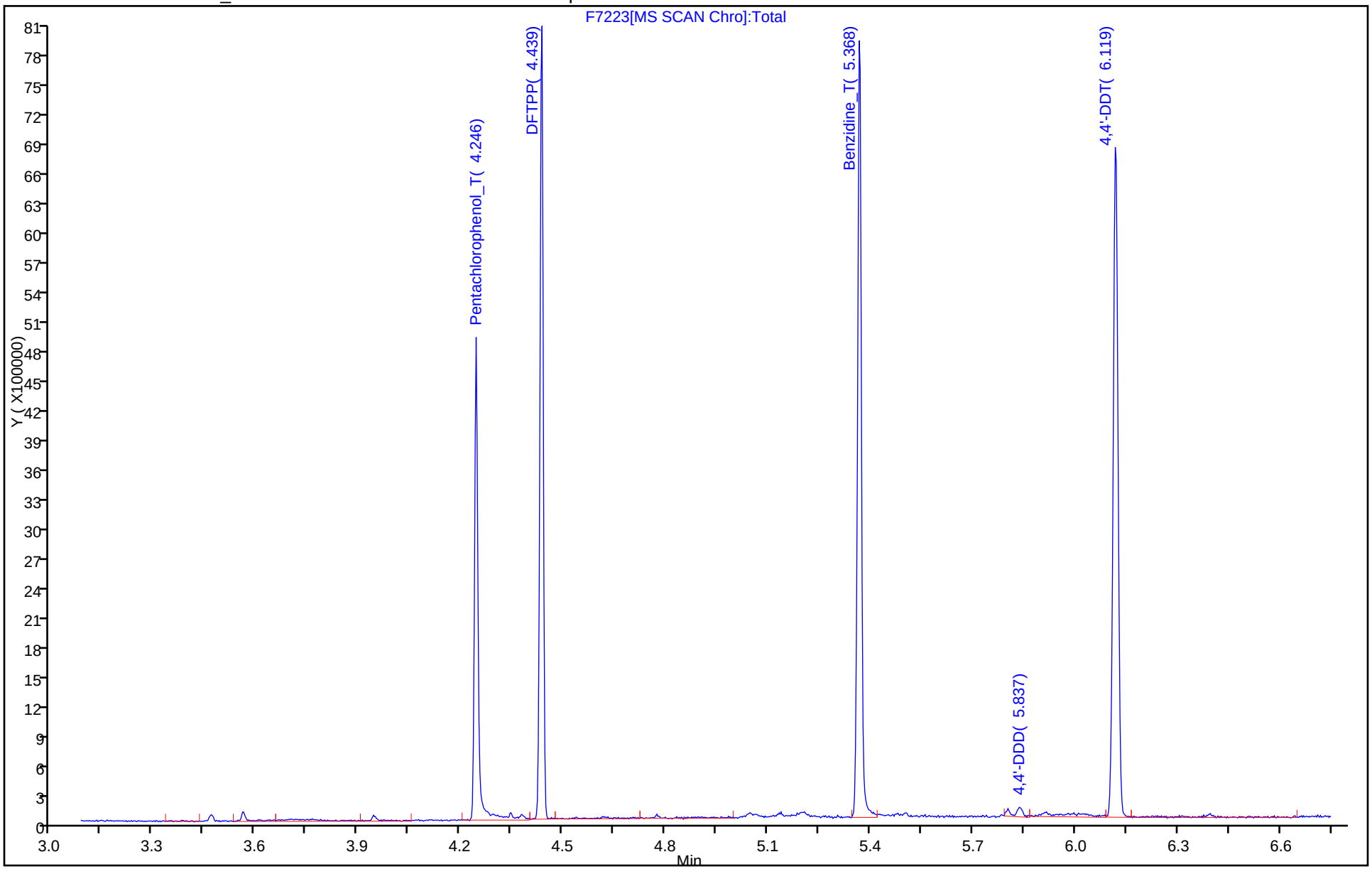
m/z	Y	m/z	Y	m/z	Y	m/z	Y
127.00	351296	231.00	2968	335.00	2771	450.00	3
128.00	30536	232.00	660	336.00	6	451.00	297
129.00	163904	233.00	777	337.00	37	452.00	9
130.00	12171	234.00	4353	339.00	237	453.00	50
131.00	3363	235.00	2619	340.00	270	454.00	8
132.00	1067	236.00	4049	341.00	1504	457.00	86
133.00	864	237.00	3024	342.00	950	458.00	3
134.00	5188	238.00	580	343.00	12	459.00	8
135.00	12253	239.00	3453	344.00	157	461.00	188
136.00	3585	240.00	2089	345.00	417	463.00	10
137.00	6821	241.00	3235	346.00	3272	465.00	54
138.00	1829	242.00	7717	347.00	356	467.00	208
139.00	674	243.00	8837	348.00	83	468.00	10
140.00	3162	244.00	88088	349.00	42	470.00	50
141.00	24488	245.00	12318	350.00	609	473.00	34
142.00	5401	246.00	21824	351.00	425	474.00	23
143.00	4083	247.00	5172	352.00	4989	476.00	11
144.00	1479	248.00	1045	353.00	1998	479.00	5
145.00	1288	249.00	2097	354.00	6078	480.00	10
146.00	4201	250.00	289	355.00	92	481.00	112
147.00	12659	251.00	1390	356.00	52	483.00	99
148.00	33216	252.00	2177	358.00	152	484.00	2
149.00	7097	253.00	2765	359.00	647	486.00	2
150.00	1816	255.00	412992	360.00	334	488.00	10
151.00	2585	256.00	59000	361.00	292	489.00	7
152.00	1008	257.00	6734	362.00	136	494.00	2
153.00	6663	258.00	29224	363.00	60	495.00	27
154.00	4495	259.00	4437	364.00	637	497.00	69
155.00	14243	260.00	1048	365.00	22520	498.00	6
156.00	18144	261.00	1066	366.00	3798	499.00	185
157.00	3816	262.00	184	367.00	202		
158.00	3852	263.00	467	368.00	12		
159.00	2608	264.00	1718	369.00	143		

Report Date: 15-Jun-2017 15:05:58 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\F7223.D

Injection Date:	15-Jun-2017 06:49:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	DFTPP			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		

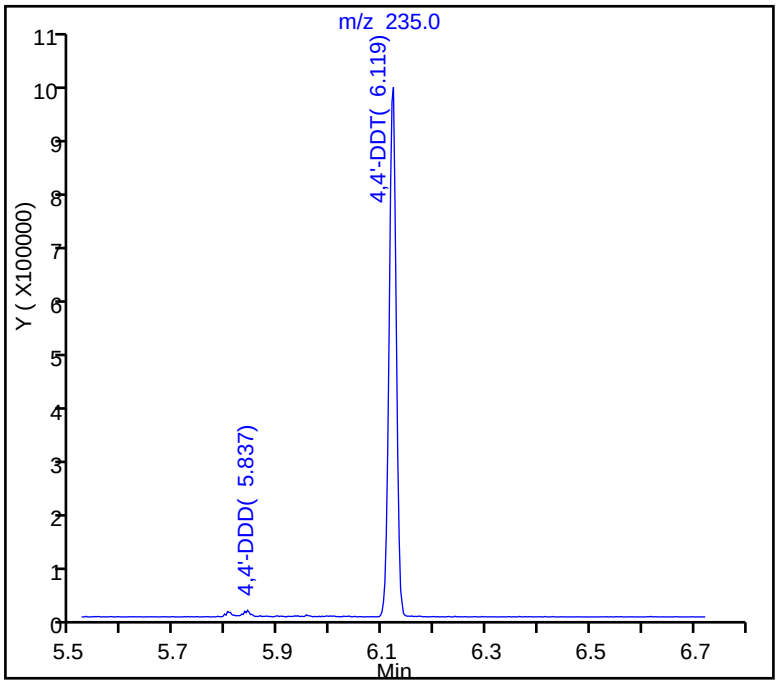


Breakdown Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\F7223.D
Injection Date: 15-Jun-2017 06:49:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

21 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

21 4,4'-DDT, Area = 927423
19 4,4'-DDE, Area = 0
18 4,4'-DDD, Area = 11038

%Breakdown: 1.18%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Denver

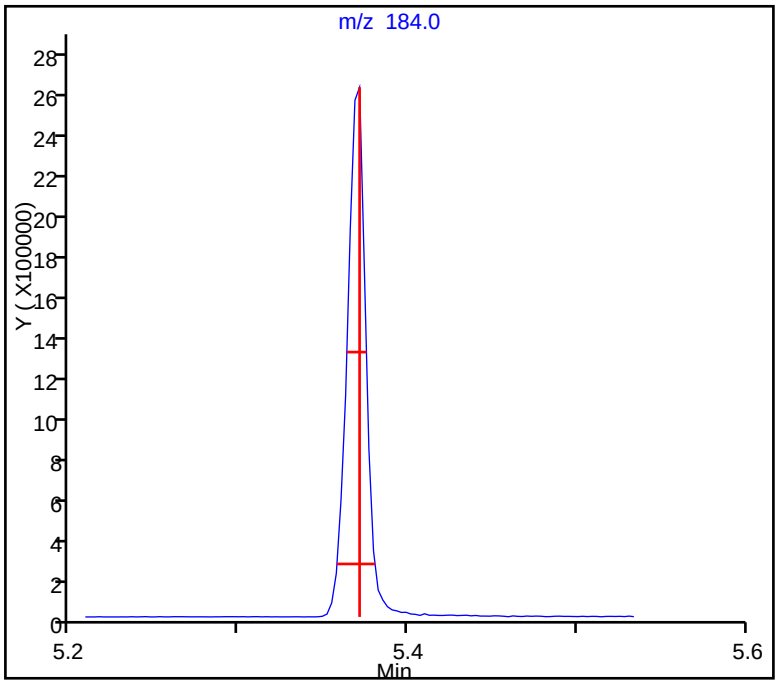
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\F7223.D
Injection Date: 15-Jun-2017 06:49:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

15 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.009 (min.)
Front Width = 0.013 (min.)

Tailing Factor = 0.7, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Denver

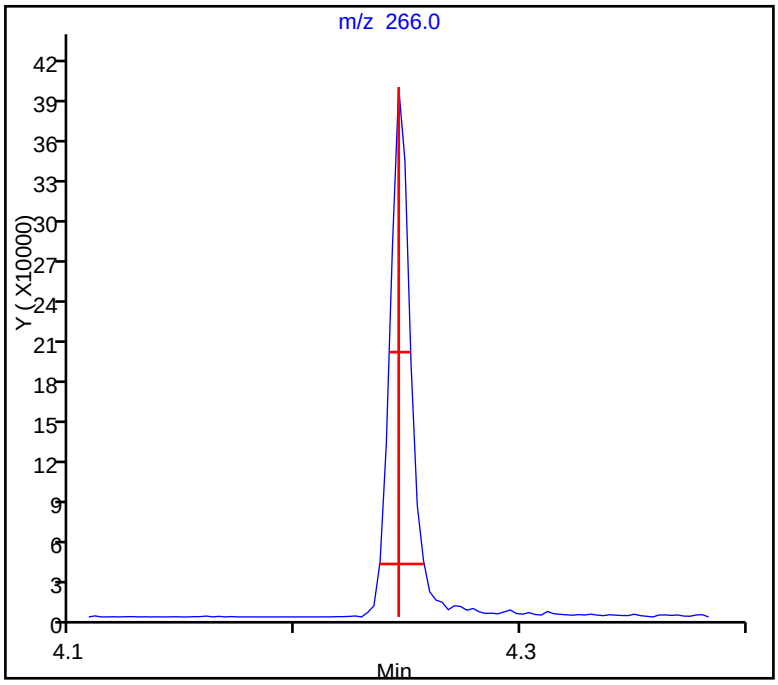
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\F7223.D
Injection Date: 15-Jun-2017 06:49:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: VASQUEZK ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

12 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.011 (min.)
Front Width = 0.008 (min.)

Tailing Factor = 1.3, Max. Tailing < 2.00
Passed



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7267.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 16-Jun-2017 14:53:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 16-Jun-2017 20:08:12 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK003

First Level Reviewer: wickhamm Date: 16-Jun-2017 15:07:40

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 Pentachlorophenol_T	266	4.254	4.254	0.000	68	446702	NR	NR	
13 DFTPP									
15 Benzidine_T	184	5.412	5.412	0.000	94	2555633	NR	NR	
19 4,4'-DDE	246	5.523	5.523	0.000	47	2207	NR	NR	
18 4,4'-DDD	235	5.848	5.848	0.000	72	15069	NR	NR	
21 4,4'-DDT	235	6.174	6.174	0.000	89	1436274	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

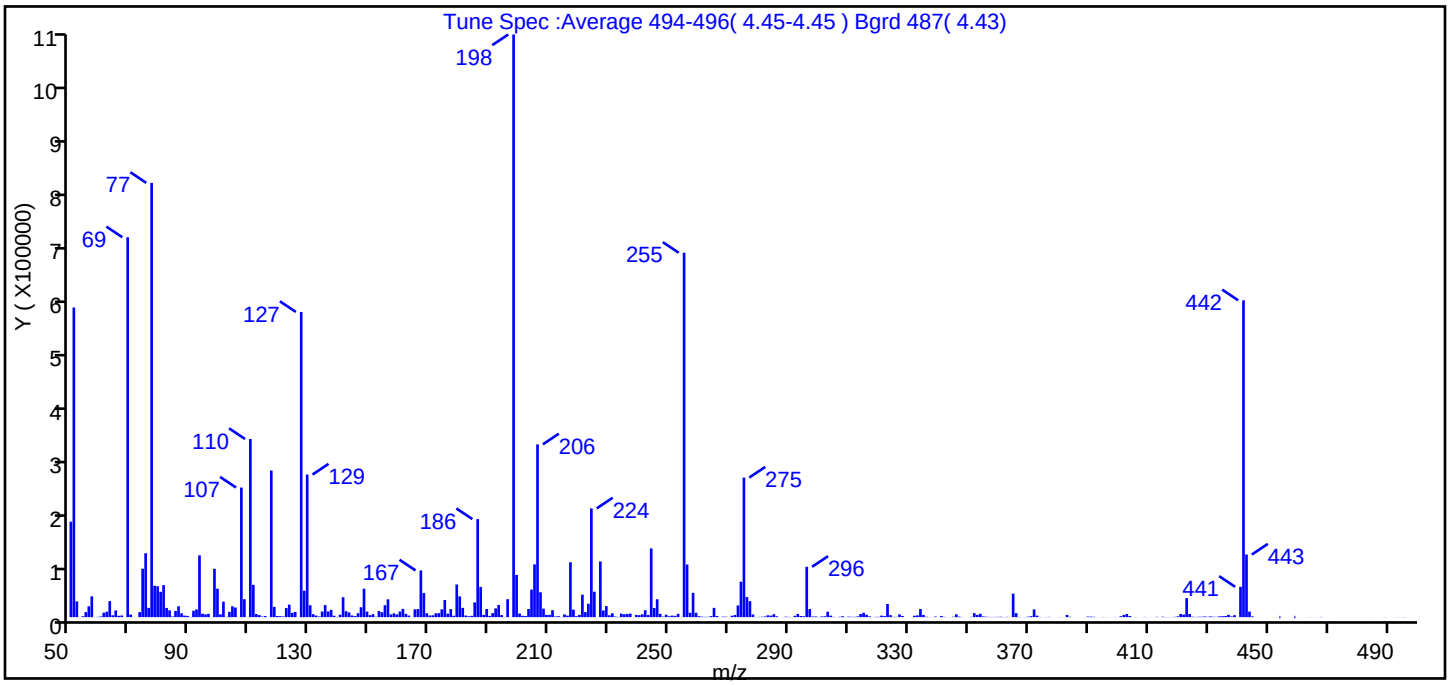
MS-DFTPP_00044 Amount Added: 0.50 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7267.D
Injection Date: 16-Jun-2017 14:53:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: WICKHAMM ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM
Tune Method: DFTPP Method 8270

13 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	53.1
68	<2% of mass 69	0.0 (0.0)
69	Present	65.2
70	<2% of mass 69	0.4 (0.7)
127	40-60% of mass 198	52.4
197	<1% of mass 198	0.0
199	5-9% of mass 198	7.2
275	10-30% of mass 198	24.0
365	>1% of mass 198	4.0
441	Present but less than mass 443	5.2 (48.4)
442	>40% of mass 198	54.4
443	17-23% of mass 442	10.7 (19.8)

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7267.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 16-Jun-2017 14:53:30
Spectrum: Tune Spec :Average 494-496(4.45-4.45) Bgrd 487(4.43)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 394

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	166976	156.00	31184	260.00	1754	367.00	372
51.00	541504	157.00	4845	261.00	761	368.00	119
52.00	27496	158.00	6612	262.00	546	369.00	189
53.00	132	159.00	4793	263.00	611	370.00	850
54.00	1586	160.00	9819	264.00	1819	371.00	1680
55.00	8760	161.00	14449	265.00	16235	372.00	13527
56.00	18960	162.00	5785	266.00	2018	373.00	2584
57.00	36344	163.00	2723	268.00	886	374.00	381
58.00	125	165.00	13667	269.00	734	376.00	219
59.00	529	166.00	14103	271.00	2448	377.00	464
60.00	1202	167.00	81704	272.00	3720	380.00	12
61.00	7703	168.00	42280	273.00	20472	381.00	205
62.00	9496	169.00	6789	274.00	62016	383.00	3899
63.00	28040	170.00	2883	275.00	244096	384.00	714
64.00	3228	171.00	3213	276.00	35112	386.00	13
65.00	11689	172.00	6680	277.00	28024	389.00	146
66.00	2392	173.00	7044	278.00	4732	390.00	1028
67.00	2897	174.00	13591	279.00	314	391.00	926
69.00	664320	175.00	29944	280.00	463	392.00	643
70.00	4446	176.00	6088	281.00	647	394.00	44
72.00	96	177.00	14039	282.00	1204	395.00	308
73.00	8697	178.00	2444	283.00	3224	396.00	221
74.00	84696	179.00	57104	284.00	2624	398.00	44
75.00	111840	180.00	36208	285.00	5140	399.00	386
76.00	16196	181.00	16205	286.00	1490	401.00	1560
77.00	759424	182.00	2830	287.00	11	402.00	3897
78.00	54928	183.00	1569	288.00	155	403.00	5481
79.00	54080	184.00	2292	289.00	795	404.00	1988
80.00	44288	185.00	25752	290.00	483	406.00	135
81.00	56008	186.00	171456	291.00	252	409.00	383
82.00	16095	187.00	52872	292.00	2333	411.00	64
83.00	11817	188.00	3996	293.00	5629	412.00	16
84.00	1134	189.00	14206	294.00	1990	413.00	511

Report Date: 16-Jun-2017 20:08:13 Chrom Revision: 2.2 25-Apr-2017 13:27:22
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7267.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 16-Jun-2017 14:53:30
Spectrum: Tune Spec :Average 494-496(4.45-4.45) Bgrd 487(4.43)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 394

m/z	Y	m/z	Y	m/z	Y	m/z	Y
85.00	10846	190.00	2201	295.00	1593	414.00	9
86.00	18976	191.00	6994	296.00	88016	415.00	742
87.00	6682	192.00	15334	297.00	14123	416.00	302
88.00	2755	193.00	21288	298.00	1110	417.00	246
89.00	2177	194.00	3681	299.00	1230	418.00	207
90.00	367	195.00	305	300.00	361	419.00	521
91.00	11120	196.00	31416	301.00	1159	420.00	1340
92.00	13446	198.00	1018944	302.00	1486	421.00	5501
93.00	108072	199.00	73808	303.00	9489	422.00	4424
94.00	5988	200.00	6305	304.00	2617	423.00	33296
95.00	4843	201.00	2376	305.00	577	424.00	5493
96.00	5767	202.00	2082	306.00	116	425.00	781
98.00	84576	203.00	14154	307.00	625	426.00	393
99.00	49768	204.00	48160	308.00	1636	427.00	647
100.00	4904	205.00	92272	309.00	169	428.00	757
101.00	27048	206.00	302144	310.00	854	429.00	1200
102.00	523	207.00	43512	311.00	587	430.00	650
103.00	9309	208.00	14906	312.00	552	431.00	1261
104.00	18992	209.00	3913	313.00	1225	432.00	659
105.00	16816	210.00	3996	314.00	5443	433.00	567
107.00	226624	211.00	12122	315.00	7666	434.00	1479
108.00	31344	212.00	1163	316.00	4176	435.00	1753
110.00	311552	213.00	1687	317.00	1451	436.00	2003
111.00	56480	214.00	312	318.00	119	437.00	4024
112.00	5382	215.00	4783	319.00	507	438.00	1213
113.00	3584	216.00	2674	320.00	567	439.00	3417
114.00	979	217.00	96056	321.00	2648	441.00	53000
115.00	1950	218.00	13167	322.00	1899	442.00	554112
117.00	256384	219.00	1667	323.00	22920	443.00	109464
118.00	17928	220.00	3897	324.00	3474	444.00	9765
119.00	2010	221.00	39352	325.00	523	445.00	1345
120.00	1691	222.00	8760	326.00	466	446.00	16
121.00	1201	223.00	23464	327.00	4794	447.00	51
122.00	15871	224.00	190144	328.00	2116	448.00	44

Report Date: 16-Jun-2017 20:08:13 Chrom Revision: 2.2 25-Apr-2017 13:27:22
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7267.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 16-Jun-2017 14:53:30
Spectrum: Tune Spec :Average 494-496(4.45-4.45) Bgrd 487(4.43)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 394

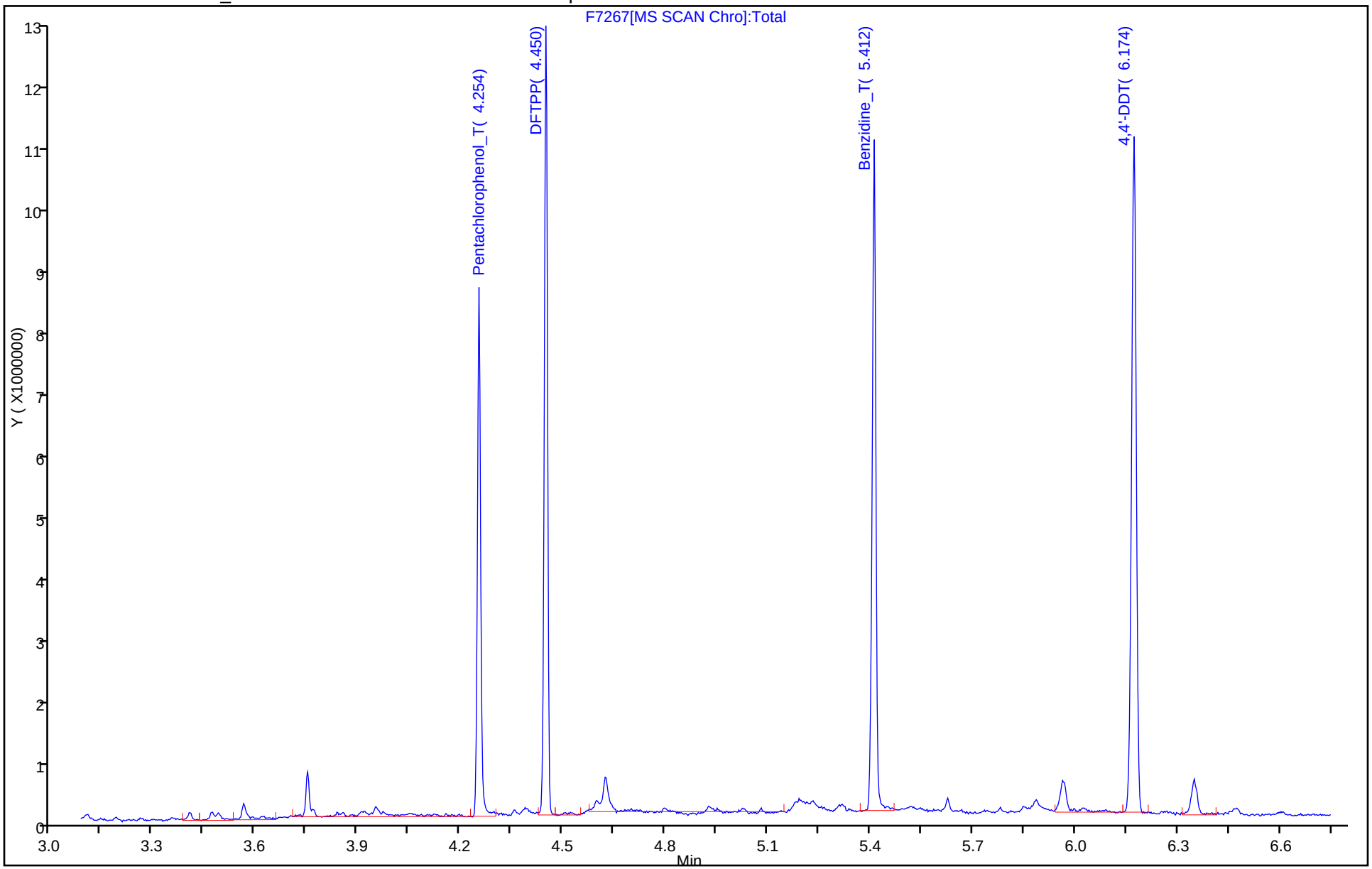
m/z	Y	m/z	Y	m/z	Y	m/z	Y
123.00	21912	225.00	44504	331.00	80	450.00	64
124.00	7434	227.00	97368	332.00	2446	453.00	91
125.00	8994	228.00	11673	333.00	3122	454.00	1
127.00	533696	229.00	19320	334.00	14287	455.00	28
128.00	46224	230.00	3179	335.00	3847	459.00	1
129.00	249344	231.00	6723	336.00	732	460.00	82
130.00	20776	232.00	1070	337.00	159	462.00	6
131.00	5170	233.00	418	338.00	136	464.00	164
132.00	2803	234.00	6167	339.00	1032	466.00	92
133.00	1115	235.00	5004	341.00	2122	467.00	67
134.00	9748	236.00	5586	342.00	517	468.00	361
135.00	21088	237.00	6198	343.00	151	469.00	7
136.00	9931	239.00	3926	344.00	149	470.00	4
137.00	12715	240.00	3400	345.00	789	474.00	53
138.00	2424	241.00	4941	346.00	4974	476.00	13
139.00	416	242.00	12108	347.00	927	477.00	40
140.00	4280	243.00	3774	348.00	280	479.00	72
141.00	34840	244.00	120144	351.00	553	481.00	64
142.00	10391	245.00	15971	352.00	6986	482.00	12
143.00	8253	246.00	31288	353.00	3954	483.00	65
144.00	2887	247.00	5804	354.00	5858	484.00	19
145.00	1944	248.00	909	355.00	1238	485.00	115
146.00	6792	249.00	4254	356.00	743	489.00	207
147.00	17320	250.00	1639	357.00	371	490.00	43
148.00	49720	251.00	2694	358.00	391	491.00	4
149.00	9683	252.00	2330	359.00	411	493.00	70
150.00	3454	253.00	5750	360.00	591	494.00	112
151.00	5183	255.00	637184	361.00	701	495.00	114
152.00	656	256.00	92056	362.00	249	496.00	231
153.00	10620	257.00	7668	363.00	563	499.00	45
154.00	8610	258.00	42560	365.00	41088		
155.00	20888	259.00	7620	366.00	6946		

Report Date: 16-Jun-2017 20:08:13 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7267.D

Injection Date:	16-Jun-2017 14:53:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	DFTPP			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		

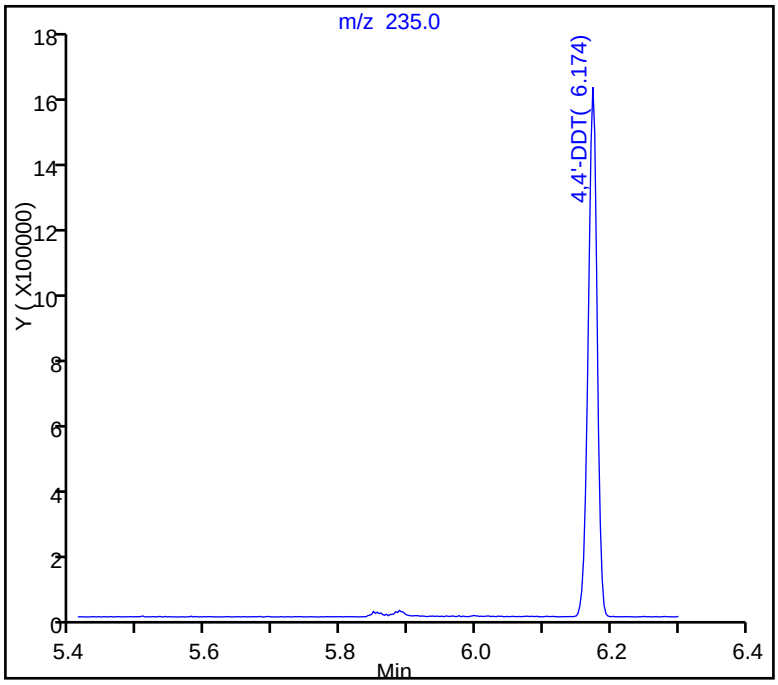


Breakdown Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7267.D
Injection Date: 16-Jun-2017 14:53:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: WICKHAMM ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

21 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

21 4,4'-DDT, Area = 1436274
19 4,4'-DDE, Area = 2207
18 4,4'-DDD, Area = 15069

%Breakdown: 1.19%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Denver

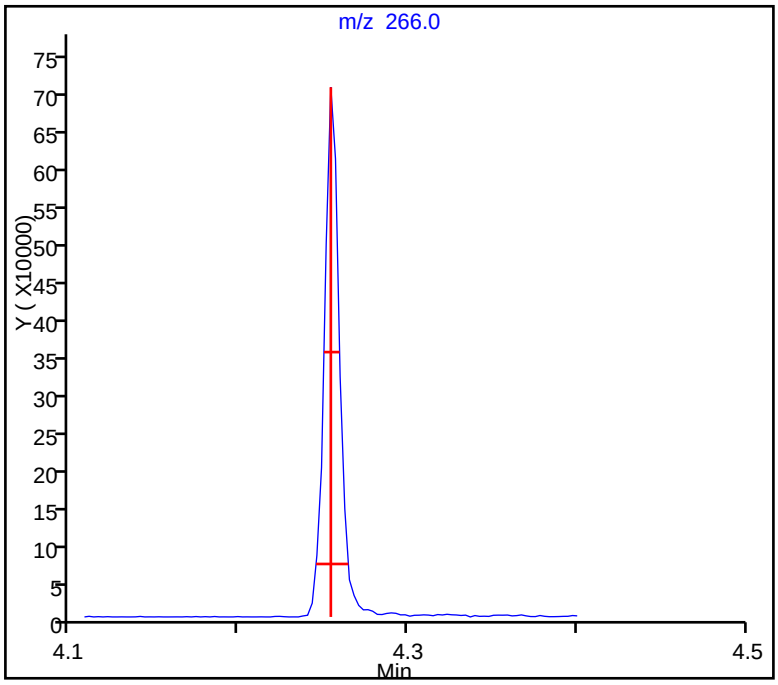
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7267.D
Injection Date: 16-Jun-2017 14:53:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: WICKHAMM ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

12 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.010 (min.)
Front Width = 0.009 (min.)

Tailing Factor = 1.2, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Denver

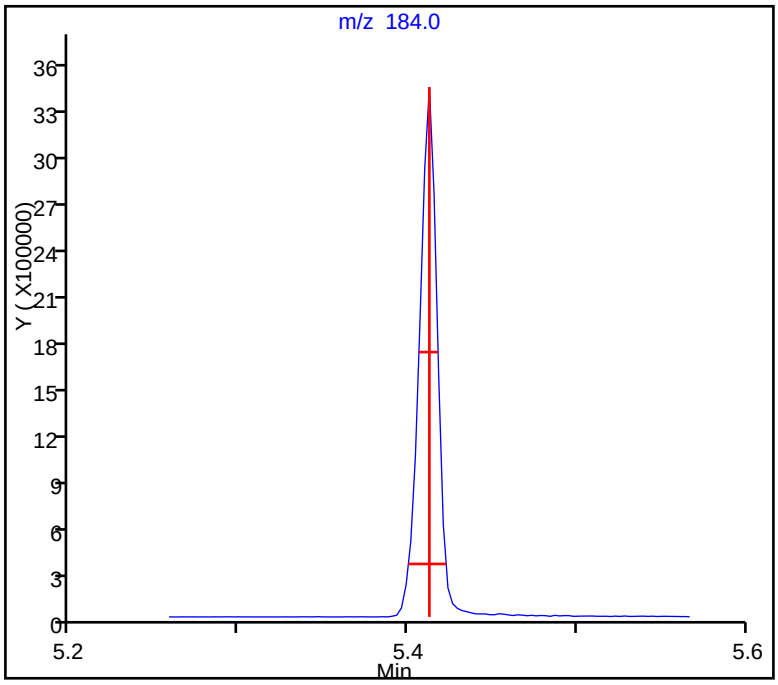
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7267.D
Injection Date: 16-Jun-2017 14:53:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: WICKHAMM ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

15 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.010 (min.)
Front Width = 0.012 (min.)

Tailing Factor = 0.8, Max. Tailing < 2.00
Passed



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7306.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 20-Jun-2017 16:43:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 21-Jun-2017 15:41:03 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: wickhamm Date: 20-Jun-2017 17:18:36

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 Pentachlorophenol_T	266	4.254	4.254	0.000	65	242866	NR	NR	
13 DFTPP									
15 Benzidine_T	184	5.404	5.404	0.000	94	2062789	NR	NR	
19 4,4'-DDE	246	5.523	5.523	0.000	41	988	NR	NR	
18 4,4'-DDD	235	5.879	5.879	0.000	67	11852	NR	NR	
21 4,4'-DDT	235	6.165	6.165	0.000	91	1015228	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

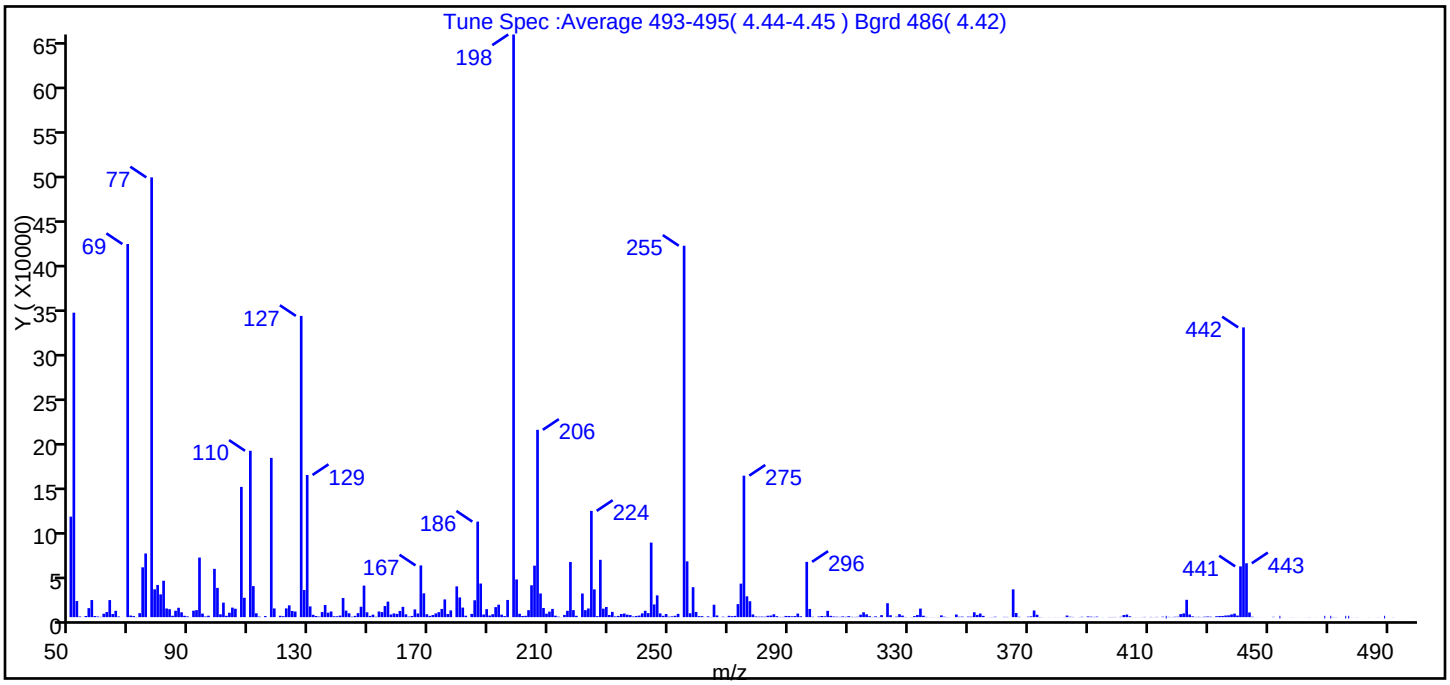
MS-DFTPP_00044 Amount Added: 0.50 Units: uL

MS Tune Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7306.D
Injection Date: 20-Jun-2017 16:43:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: WICKHAMM ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM
Tune Method: DFTPP Method 8270

13 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100% relative abundance	100.0
51	30-60% of mass 198	52.3
68	<2% of mass 69	0.0 (0.0)
69	Present	64.0
70	<2% of mass 69	0.3 (0.4)
127	40-60% of mass 198	51.7
197	<1% of mass 198	0.0
199	5-9% of mass 198	6.5
275	10-30% of mass 198	24.3
365	>1% of mass 198	4.8
441	Present but less than mass 443	8.7 (94.2)
442	>40% of mass 198	49.7
443	17-23% of mass 442	9.2 (18.6)

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7306.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 20-Jun-2017 16:43:30
Spectrum: Tune Spec :Average 493-495(4.44-4.45) Bgrd 486(4.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 397

m/z	Y	m/z	Y	m/z	Y	m/z	Y
50.00	113752	161.00	11664	266.00	1885	378.00	13
51.00	344576	162.00	3181	268.00	498	379.00	81
52.00	18208	163.00	641	269.00	96	380.00	85
53.00	727	164.00	1353	270.00	1503	382.00	123
55.00	1291	165.00	8765	271.00	1116	383.00	1837
56.00	10185	166.00	4136	272.00	1400	384.00	442
57.00	19344	167.00	58536	273.00	14757	385.00	258
58.00	1241	168.00	26944	274.00	37920	387.00	123
59.00	724	169.00	3285	275.00	160128	388.00	415
60.00	283	170.00	1440	276.00	23584	390.00	801
61.00	3858	171.00	2407	277.00	18000	391.00	547
62.00	5771	172.00	4208	278.00	3055	392.00	287
63.00	19304	173.00	5636	279.00	752	393.00	596
64.00	3580	174.00	9281	280.00	557	394.00	13
65.00	7161	175.00	20056	281.00	622	395.00	112
66.00	738	176.00	3584	282.00	495	397.00	179
69.00	422272	177.00	7632	283.00	1594	398.00	198
70.00	1812	179.00	34808	284.00	1775	399.00	220
71.00	1214	180.00	22312	285.00	3240	400.00	49
72.00	172	181.00	10819	286.00	1091	401.00	409
73.00	4517	182.00	1639	287.00	273	402.00	2392
74.00	56408	184.00	3664	288.00	285	403.00	2915
75.00	72048	185.00	19096	289.00	1382	404.00	962
77.00	497728	186.00	108096	290.00	1335	405.00	44
78.00	31496	187.00	38040	291.00	964	406.00	103
79.00	36440	188.00	3004	292.00	1216	407.00	47
80.00	25768	189.00	9057	293.00	4018	408.00	142
81.00	41192	190.00	1840	294.00	973	409.00	266
82.00	9790	191.00	3322	296.00	62592	411.00	259
83.00	9011	192.00	11328	297.00	9298	412.00	97
84.00	1558	193.00	14067	298.00	473	413.00	276
85.00	7228	194.00	2781	300.00	710	415.00	491
86.00	10605	195.00	1166	301.00	1298	416.00	2

Report Date: 21-Jun-2017 15:41:03 Chrom Revision: 2.2 20-Jun-2017 07:42:38
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7306.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 20-Jun-2017 16:43:30
Spectrum: Tune Spec :Average 493-495(4.44-4.45) Bgrd 486(4.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 397

m/z	Y	m/z	Y	m/z	Y	m/z	Y
87.00	5486	196.00	19456	302.00	926	417.00	326
88.00	1535	198.00	659456	303.00	7125	418.00	177
89.00	825	199.00	42664	304.00	1492	419.00	420
90.00	67	200.00	3818	305.00	696	420.00	481
91.00	7289	201.00	1316	306.00	523	421.00	3443
92.00	7953	202.00	1531	307.00	327	422.00	4228
93.00	67432	203.00	7914	308.00	819	423.00	19608
94.00	3999	204.00	36064	309.00	379	424.00	3028
95.00	740	205.00	58256	310.00	1119	425.00	866
96.00	1649	206.00	212032	311.00	392	426.00	255
98.00	54664	207.00	26784	312.00	269	427.00	350
99.00	33080	208.00	10345	313.00	428	428.00	203
100.00	3187	209.00	3916	314.00	2800	429.00	524
101.00	16432	210.00	6213	315.00	5503	430.00	734
102.00	1515	211.00	9306	316.00	3183	431.00	495
103.00	4963	212.00	1644	317.00	1078	432.00	77
104.00	10787	213.00	573	318.00	218	433.00	1047
105.00	9520	214.00	128	319.00	930	434.00	1317
107.00	147392	215.00	2523	320.00	169	435.00	1359
108.00	21936	216.00	7163	321.00	2242	436.00	1852
110.00	188288	217.00	62464	323.00	15743	437.00	2084
111.00	35128	218.00	7943	324.00	2184	438.00	3086
112.00	4378	219.00	1540	325.00	62	439.00	3954
113.00	639	221.00	26752	326.00	553	440.00	1826
115.00	1237	222.00	7934	327.00	3340	441.00	57456
117.00	180224	223.00	9814	328.00	1738	442.00	327936
118.00	9844	224.00	120272	329.00	228	443.00	60984
120.00	1521	225.00	31432	330.00	44	444.00	5289
121.00	1051	226.00	1146	331.00	155	445.00	465
122.00	9897	227.00	64872	332.00	1195	446.00	70
123.00	13353	228.00	9614	333.00	2474	447.00	54
124.00	6983	229.00	11489	334.00	9681	448.00	43
125.00	6359	230.00	2444	335.00	1610	452.00	338
127.00	340928	231.00	5953	336.00	271	454.00	1

Report Date: 21-Jun-2017 15:41:03 Chrom Revision: 2.2 20-Jun-2017 07:42:38
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7306.D\SMSF_8270SIMX.rslt\spectra.d
Injection Date: 20-Jun-2017 16:43:30
Spectrum: Tune Spec :Average 493-495(4.44-4.45) Bgrd 486(4.42)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 397

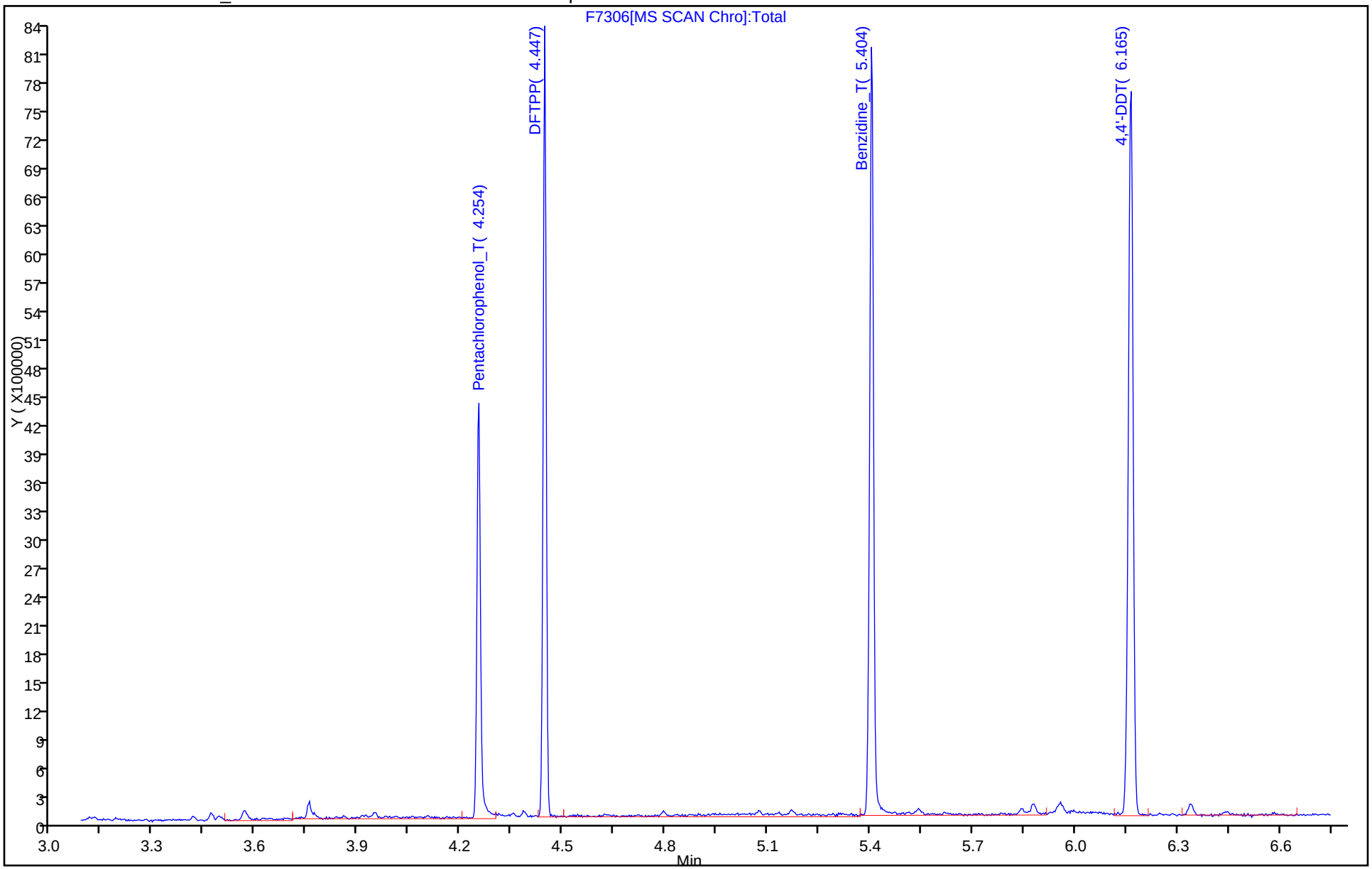
m/z	Y	m/z	Y	m/z	Y	m/z	Y
128.00	30680	232.00	837	337.00	46	455.00	49
129.00	160896	233.00	1401	338.00	132	457.00	36
130.00	12161	234.00	3514	339.00	65	458.00	80
131.00	2655	235.00	4093	340.00	131	459.00	49
132.00	1284	236.00	2825	341.00	2011	460.00	37
133.00	646	237.00	2364	342.00	493	461.00	9
134.00	5739	238.00	743	343.00	165	462.00	3
135.00	13727	239.00	1402	344.00	84	463.00	33
136.00	5017	240.00	1784	346.00	2997	464.00	108
137.00	6432	241.00	4273	347.00	432	466.00	45
138.00	996	242.00	7218	348.00	561	468.00	13
139.00	1005	243.00	4539	350.00	630	469.00	2
140.00	1750	244.00	84368	351.00	559	470.00	9
141.00	21664	245.00	14402	352.00	5504	471.00	2
142.00	7369	246.00	24640	353.00	2490	472.00	189
143.00	4394	247.00	4242	354.00	4087	473.00	135
144.00	501	248.00	1506	355.00	1454	476.00	2
145.00	1438	249.00	3504	357.00	116	477.00	1
146.00	4538	250.00	586	358.00	186	478.00	69
147.00	11748	251.00	927	359.00	496	479.00	31
148.00	35704	252.00	1534	362.00	306	480.00	105
149.00	5450	253.00	3720	363.00	276	482.00	4
150.00	1419	255.00	420352	365.00	31440	484.00	77
151.00	2777	256.00	63136	366.00	4665	486.00	8
152.00	437	257.00	4405	367.00	412	487.00	110
153.00	6374	258.00	33896	369.00	22	489.00	1
154.00	5706	259.00	5864	370.00	515	492.00	113
155.00	12614	260.00	1151	371.00	842	495.00	9
156.00	17592	261.00	1092	372.00	7518	498.00	12
157.00	3041	262.00	52	373.00	2717	499.00	49
158.00	4210	263.00	916	374.00	212		
159.00	3696	264.00	192	375.00	90		
160.00	6970	265.00	14074	377.00	99		

Report Date: 21-Jun-2017 15:41:03 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7306.D

Injection Date:	20-Jun-2017 16:43:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	DFTPP			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		

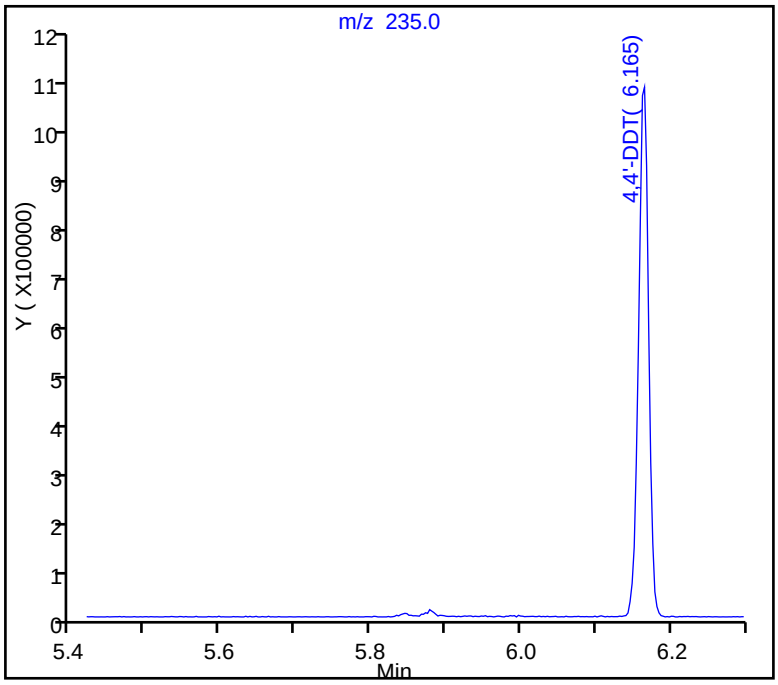


Breakdown Report

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7306.D
Injection Date: 20-Jun-2017 16:43:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: WICKHAMM ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

21 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

21 4,4'-DDT, Area = 1015228
19 4,4'-DDE, Area = 988
18 4,4'-DDD, Area = 11852

%Breakdown: 1.25%, Max Limit: 20.00%
Passed

Peak Tailing Report

TestAmerica Denver

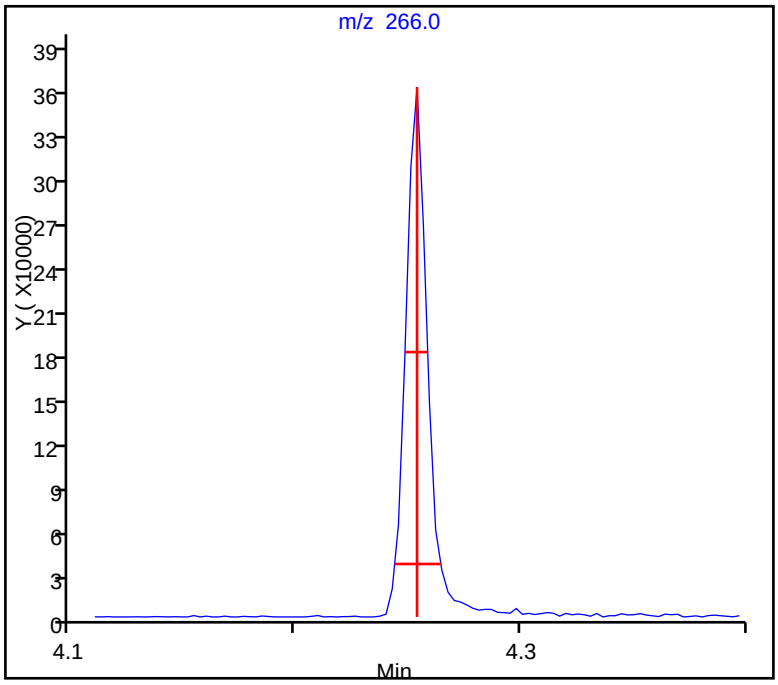
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7306.D
Injection Date: 20-Jun-2017 16:43:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: WICKHAMM ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

12 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.011 (min.)
Front Width = 0.010 (min.)

Tailing Factor = 1.1, Max. Tailing < 2.00
Passed



Peak Tailing Report

TestAmerica Denver

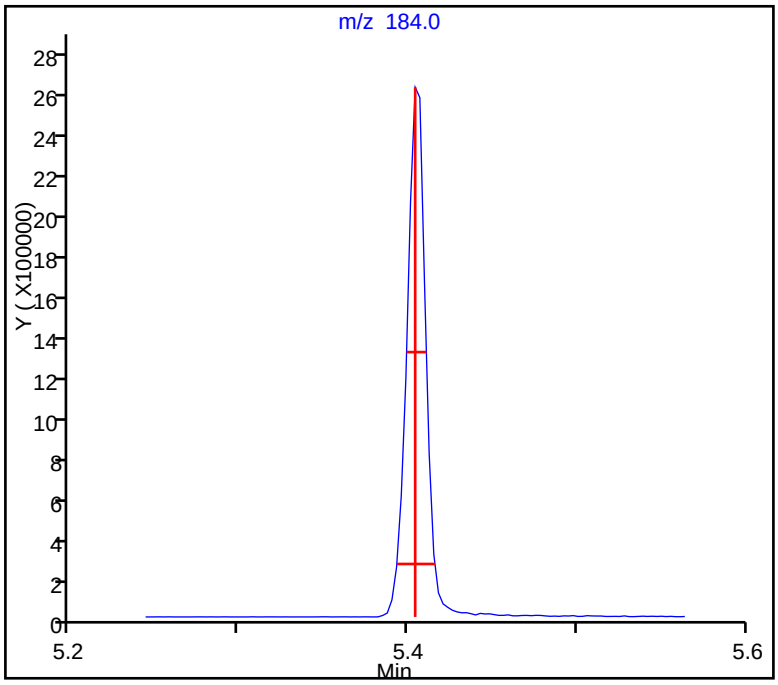
Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7306.D
Injection Date: 20-Jun-2017 16:43:30 Instrument ID: SMS_F
Lims ID: DFTPP
Client ID:
Operator ID: WICKHAMM ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

15 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.012 (min.)
Front Width = 0.011 (min.)

Tailing Factor = 1.1, Max. Tailing < 2.00
Passed



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-376824/1-A

Matrix: Solid | Lab File ID: F7225.D

Analysis Method: 8270D SIM | Date Collected:

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 30.4(g) | Date Analyzed: 06/15/2017 07:39

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377379 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.49	U	4.9	0.49	0.26
91-57-6	2-Methylnaphthalene	0.66	U	4.9	0.66	0.30
83-32-9	Acenaphthene	0.26	U	4.9	0.26	0.16
208-96-8	Acenaphthylene	0.66	U	4.9	0.66	0.17
120-12-7	Anthracene	2.5	U	4.9	2.5	0.71
56-55-3	Benzo[a]anthracene	2.5	U	4.9	2.5	0.89
50-32-8	Benzo[a]pyrene	2.5	U	4.9	2.5	0.73
205-99-2	Benzo[b]fluoranthene	2.5	U	4.9	2.5	1.2
191-24-2	Benzo[g,h,i]perylene	2.5	U	4.9	2.5	1.1
207-08-9	Benzo[k]fluoranthene	2.5	U	4.9	2.5	0.99
218-01-9	Chrysene	2.5	U	4.9	2.5	0.99
53-70-3	Dibenz(a,h)anthracene	2.5	U	4.9	2.5	1.3
206-44-0	Fluoranthene	2.5	U	4.9	2.5	0.99
86-73-7	Fluorene	0.66	U	4.9	0.66	0.46
193-39-5	Indeno[1,2,3-cd]pyrene	2.5	U	4.9	2.5	1.1
91-20-3	Naphthalene	0.66	U	4.9	0.66	0.32
85-01-8	Phenanthrene	2.5	U	4.9	2.5	1.1
129-00-0	Pyrene	2.5	U	4.9	2.5	1.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	86		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	86		44-125
1718-51-0	Terphenyl-d14 (Surr)	97		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\F7225.D
Lims ID: MB 280-376824/1-A
Client ID:
Sample Type: MB
Inject. Date: 15-Jun-2017 07:39:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: mb280-376824_1-a
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 15-Jun-2017 15:05:59 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: vasquezk Date: 15-Jun-2017 13:37:33

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.038	6.029	0.009	100	19921	600.0	600.0	
* 2 Phenanthrene-d10	188	7.307	7.300	0.007	100	39503	600.0	600.0	
* 3 Chrysene-d12	240	11.386	11.376	0.010	93	33101	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.005	4.001	0.004	100	13384	500.0	428.9	
$ 5 2-Fluorobiphenyl	172	5.436	5.431	0.005	100	22205	500.0	429.9	
$ 6 Terphenyl-d14	244	9.136	9.129	0.007	99	19468	500.0	485.4	
9 1,4-Dioxane	88		1.903					ND	
11 Morpholine	87	1.929	1.916	0.013	1	119		NC	
10 N-Nitrosodimethylamine	74		2.033					ND	
14 Naphthalene	128		4.589					ND	
16 2-Methylnaphthalene	142		5.147					ND	
17 1-Methylnaphthalene	142		5.234					ND	
20 Dimethyl phthalate	163		5.753					ND	
22 Acenaphthylene	152		5.917					ND	
23 Acenaphthene	153		6.055					ND	
32 Dibenzofuran	168		6.199					ND	
24 Diethyl phthalate	149	6.328	6.320	0.008	98	769		13.2	
25 Fluorene	166		6.494					ND	
26 N-Nitrosodiphenylamine	169		6.570					ND	
27 Phenanthrene	178		7.320					ND	
28 Anthracene	178		7.365					ND	
29 Di-n-butyl phthalate	149	7.736	7.730	0.006	99	1844		17.2	
30 Fluoranthene	202		8.628					ND	
31 Pyrene	202		8.967					ND	
33 Butyl benzyl phthalate	149		9.956					ND	
34 Bis(2-ethylhexyl) phthalat	149	11.241	11.232	0.009	99	2442		33.4	
35 Benzo[a]anthracene	228		11.340					ND	
36 Chrysene	228		11.440					ND	
37 Di-n-octyl phthalate	149		13.161					ND	
38 Benzo[b]fluoranthene	252		14.499					ND	
39 Benzo[k]fluoranthene	252		14.587					ND	
40 Benzo[a]pyrene	252		15.588					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276		18.672					ND	
42 Dibenz(a,h)anthracene	278		18.698					ND	
43 Benzo[g,h,i]perylene	276		19.105					ND	
7 Pentachlorophenol	266		0.000					ND	
8 Benzidine	184		0.000					ND	
12 Pentachlorophenol_T	266		4.246					ND	
15 Benzidine_T	184		5.371					ND	
18 4,4'-DDD	235		5.840					ND	
19 4,4'-DDE	246		6.121					ND	
21 4,4'-DDT	235		6.121					ND	
S 52 TPAH	1		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

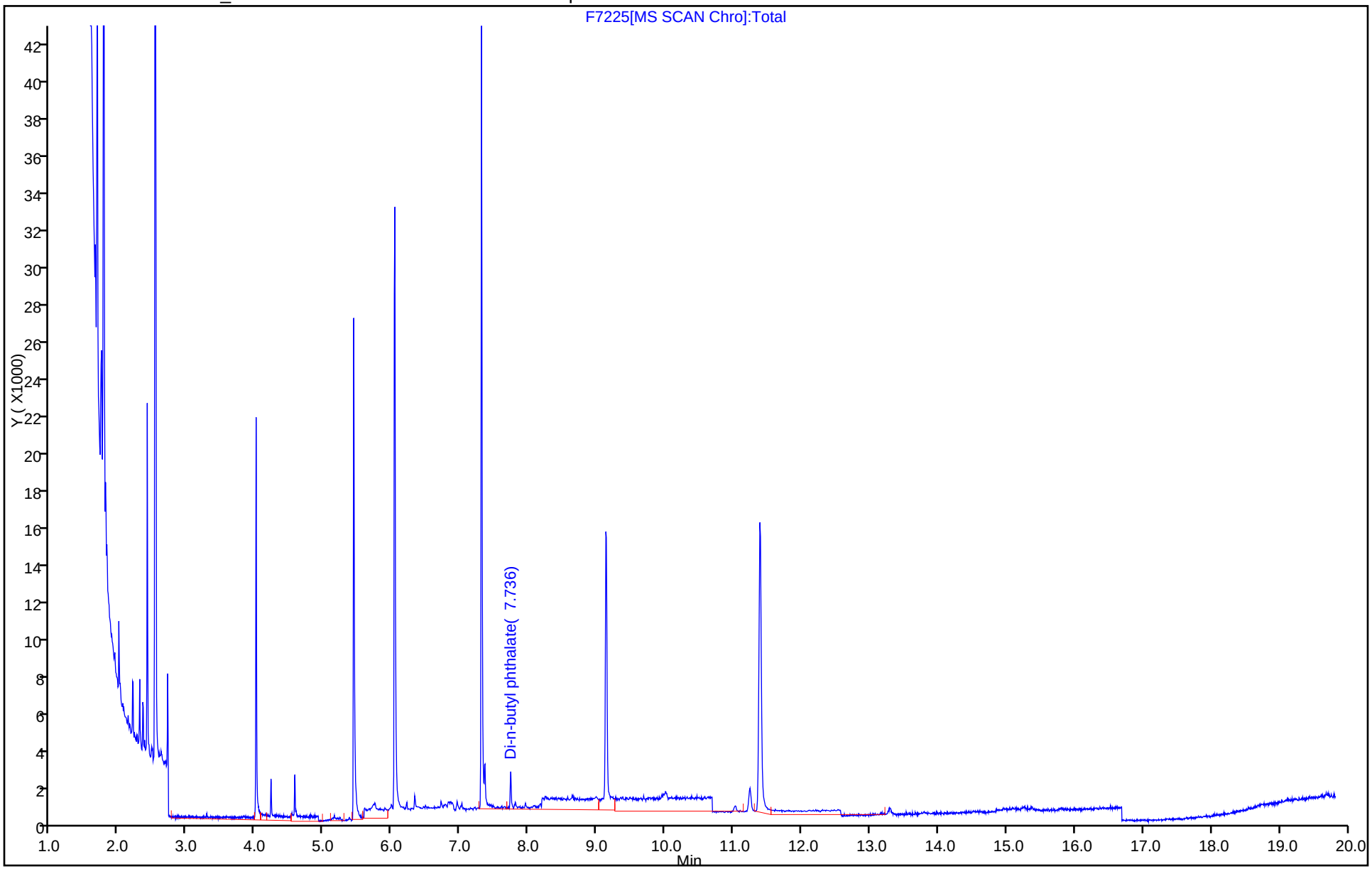
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Jun-2017 15:06:00 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\F7225.D

Injection Date:	15-Jun-2017 07:39:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	MB 280-376824/1-A			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\F7225.D
Lims ID: MB 280-376824/1-A
Client ID:
Sample Type: MB
Inject. Date: 15-Jun-2017 07:39:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: mb280-376824_1-a
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 15-Jun-2017 15:05:59 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: vasquezk Date: 15-Jun-2017 13:37:33

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	428.9	85.78
$ 5 2-Fluorobiphenyl	500.0	429.9	85.98
$ 6 Terphenyl-d14	500.0	485.4	97.08

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-376856/1-A

Matrix: Water | Lab File ID: F7308.D

Analysis Method: 8270D SIM | Date Collected:

Extract. Method: 3510C | Date Extracted: 06/12/2017 15:16

Sample wt/vol: 1000(mL) | Date Analyzed: 06/20/2017 17:23

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378055 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.012	U	0.10	0.012	0.0057
91-57-6	2-Methylnaphthalene	0.012	U	0.10	0.012	0.0052
83-32-9	Acenaphthene	0.030	U	0.10	0.030	0.011
208-96-8	Acenaphthylene	0.012	U	0.10	0.012	0.010
120-12-7	Anthracene	0.020	U	0.10	0.020	0.014
56-55-3	Benzo[a]anthracene	0.00650	J	0.10	0.012	0.0032
50-32-8	Benzo[a]pyrene	0.012	U	0.10	0.012	0.0051
205-99-2	Benzo[b]fluoranthene	0.012	U	0.10	0.012	0.0034
191-24-2	Benzo[g,h,i]perylene	0.012	U	0.10	0.012	0.0036
207-08-9	Benzo[k]fluoranthene	0.012	U	0.10	0.012	0.0051
218-01-9	Chrysene	0.012	U	0.10	0.012	0.0032
53-70-3	Dibenz(a,h)anthracene	0.012	U	0.10	0.012	0.0048
206-44-0	Fluoranthene	0.0178	J	0.10	0.012	0.0045
86-73-7	Fluorene	0.020	U	0.10	0.020	0.019
193-39-5	Indeno[1,2,3-cd]pyrene	0.020	U	0.10	0.020	0.015
91-20-3	Naphthalene	0.012	U	0.10	0.012	0.0053
85-01-8	Phenanthrene	0.0231	J	0.10	0.020	0.0098
129-00-0	Pyrene	0.0105	J	0.10	0.020	0.0081

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	78		53-106
4165-60-0	Nitrobenzene-d5 (Surr)	84		55-111
1718-51-0	Terphenyl-d14 (Surr)	85		58-132

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7308.D
Lims ID: MB 280-376856/1-A
Client ID:
Sample Type: MB
Inject. Date: 20-Jun-2017 17:23:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: mb280-376856_1-a
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 21-Jun-2017 15:41:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: wickhamm Date: 21-Jun-2017 15:06:39

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.038	6.029	0.009	99	16728	600.0	600.0	
* 2 Phenanthrene-d10	188	7.308	7.308	0.000	100	32352	600.0	600.0	
* 3 Chrysene-d12	240	11.389	11.378	0.011	93	29900	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	11046	500.0	421.5	
$ 5 2-Fluorobiphenyl	172	5.436	5.436	0.000	100	16857	500.0	388.6	
$ 6 Terphenyl-d14	244	9.130	9.130	0.000	97	13928	500.0	424.0	
9 1,4-Dioxane	88		1.903					ND	
11 Morpholine	87		1.916					ND	
10 N-Nitrosodimethylamine	74		2.033					ND	
14 Naphthalene	128		4.589					ND	
16 2-Methylnaphthalene	142		5.147					ND	
17 1-Methylnaphthalene	142		5.234					ND	
20 Dimethyl phthalate	163		5.753					ND	
22 Acenaphthylene	152		5.917					ND	
23 Acenaphthene	153		6.055					ND	
32 Dibenzofuran	168		6.206					ND	
24 Diethyl phthalate	149	6.328	6.328	0.000	99	1300		26.5	
25 Fluorene	166		6.494					ND	
26 N-Nitrosodiphenylamine	169		6.570					ND	
27 Phenanthrene	178	7.327	7.321	0.006	53	1586		23.1	
28 Anthracene	178		7.373					ND	
29 Di-n-butyl phthalate	149	7.731	7.737	-0.006	99	2797		31.8	
30 Fluoranthene	202	8.636	8.629	0.007	87	1401		17.8	
31 Pyrene	202	8.981	8.974	0.007	68	856		10.5	
33 Butyl benzyl phthalate	149		9.957					ND	
34 Bis(2-ethylhexyl) phthalat	149	11.236	11.233	0.003	99	5640		94.3	
35 Benzo[a]anthracene	228	11.362	11.350	0.012	8	517		6.50	
36 Chrysene	228		11.450					ND	
37 Di-n-octyl phthalate	149	13.164	13.171	-0.006	92	106		1.05	
38 Benzo[b]fluoranthene	252		14.513					ND	
39 Benzo[k]fluoranthene	252		14.596					ND	
40 Benzo[a]pyrene	252		15.598					ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276		18.682					ND	
42 Dibenz(a,h)anthracene	278		18.708					ND	
43 Benzo[g,h,i]perylene	276		19.115					ND	
8 Benzidine	184		0.000					ND	
7 Pentachlorophenol	266		0.000					ND	
12 Pentachlorophenol_T	266		4.254					ND	
15 Benzidine_T	184		5.404					ND	
19 4,4'-DDE	246		5.523					ND	
18 4,4'-DDD	235		5.879					ND	
21 4,4'-DDT	235		6.165					ND	
S 52 TPAH	1		0.000					ND	

Reagents:

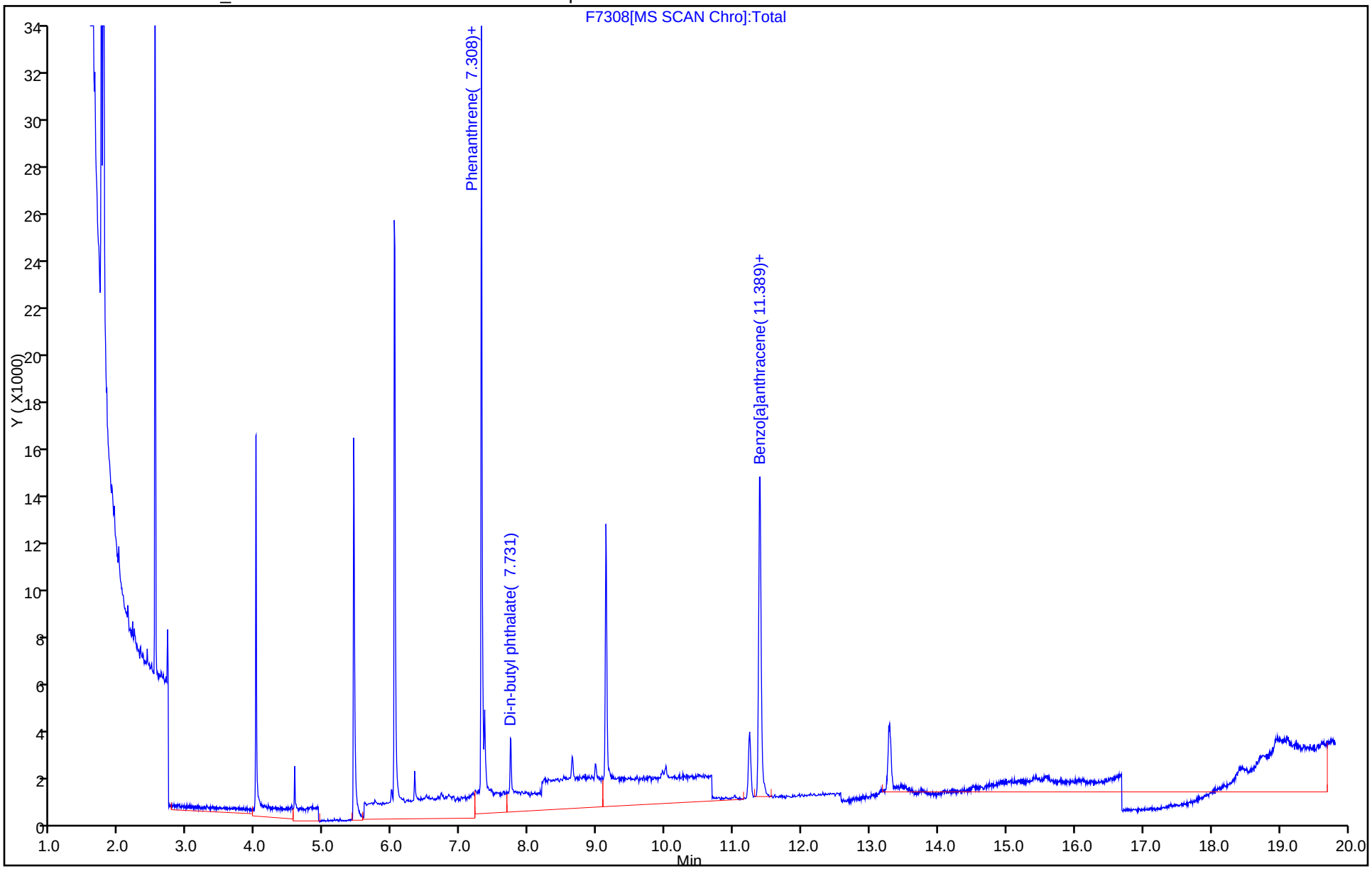
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 21-Jun-2017 15:41:06 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7308.D

Injection Date:	20-Jun-2017 17:23:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	MB 280-376856/1-A			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7308.D
Lims ID: MB 280-376856/1-A
Client ID:
Sample Type: MB
Inject. Date: 20-Jun-2017 17:23:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: mb280-376856_1-a
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 21-Jun-2017 15:41:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: wickhamm Date: 21-Jun-2017 15:06:39

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	421.5	84.31
$ 5 2-Fluorobiphenyl	500.0	388.6	77.73
$ 6 Terphenyl-d14	500.0	424.0	84.80

Report Date: 21-Jun-2017 15:41:06 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7308.D

Injection Date: 20-Jun-2017 17:23:30 Instrument ID: SMS_F

Lims ID: MB 280-376856/1-A

Client ID:

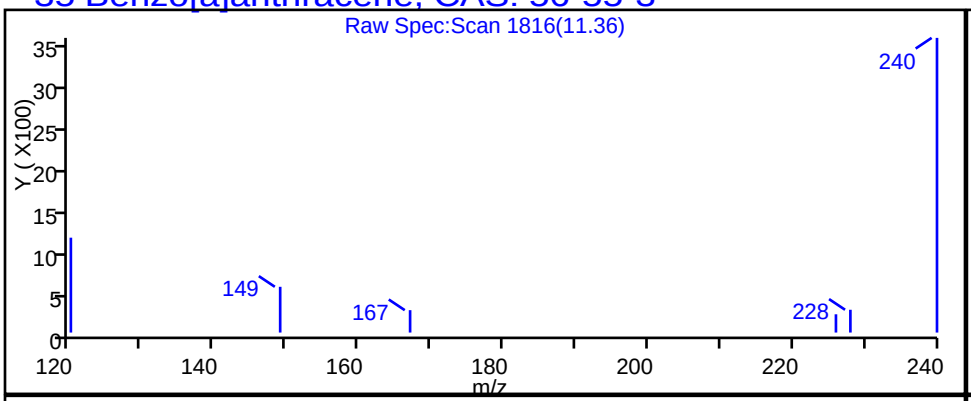
Operator ID: WICKHAMM ALS Bottle#: 3 Worklist Smp#: 3

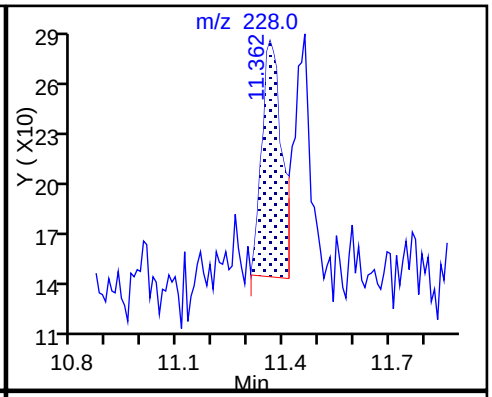
Injection Vol: 1.0 ul Dil. Factor: 1.0000

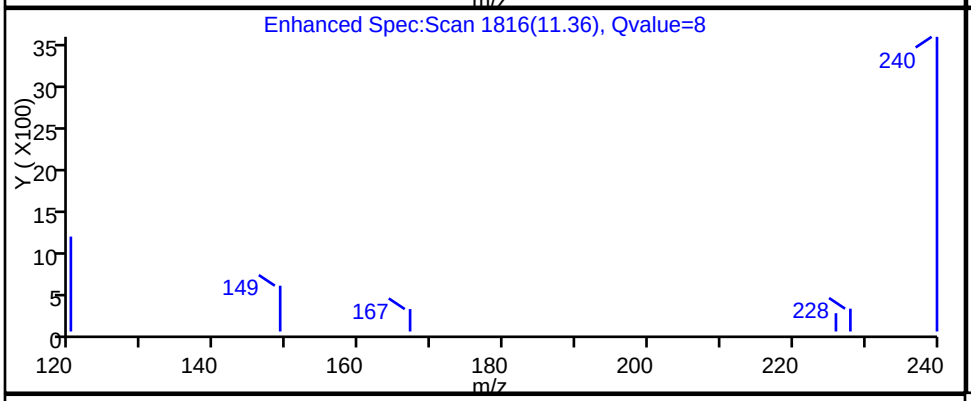
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

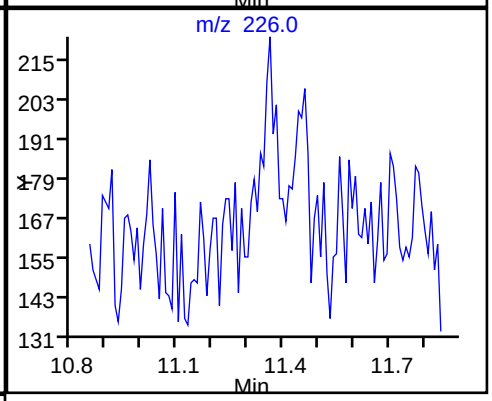
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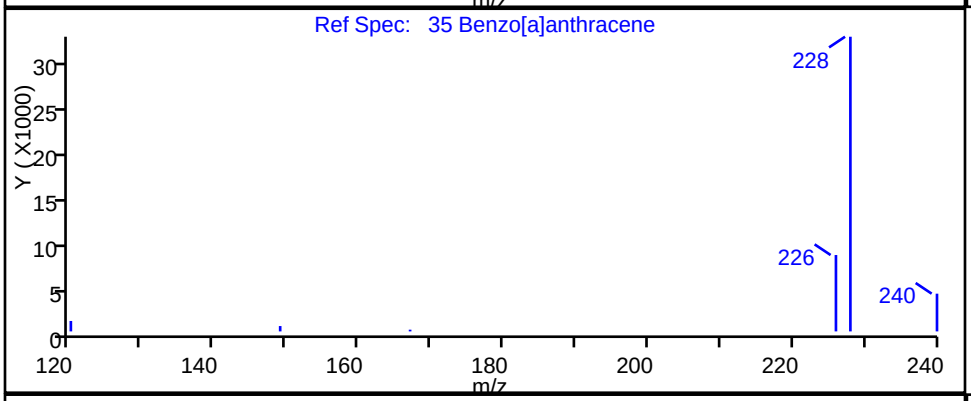
35 Benzo[a]anthracene, CAS: 56-55-3

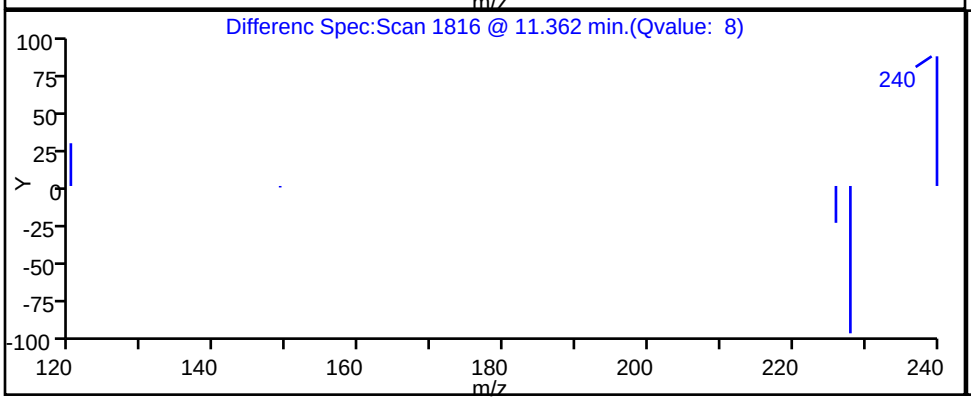


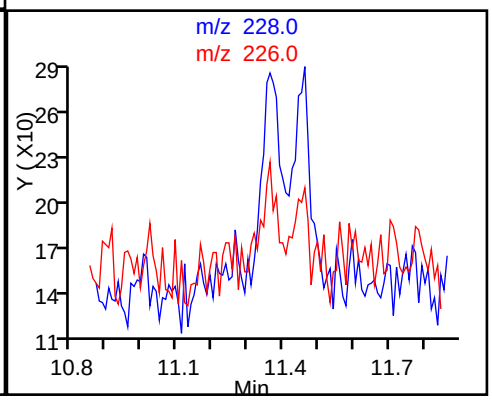












Report Date: 21-Jun-2017 15:41:06 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7308.D

Injection Date: 20-Jun-2017 17:23:30 Instrument ID: SMS_F

Lims ID: MB 280-376856/1-A

Client ID:

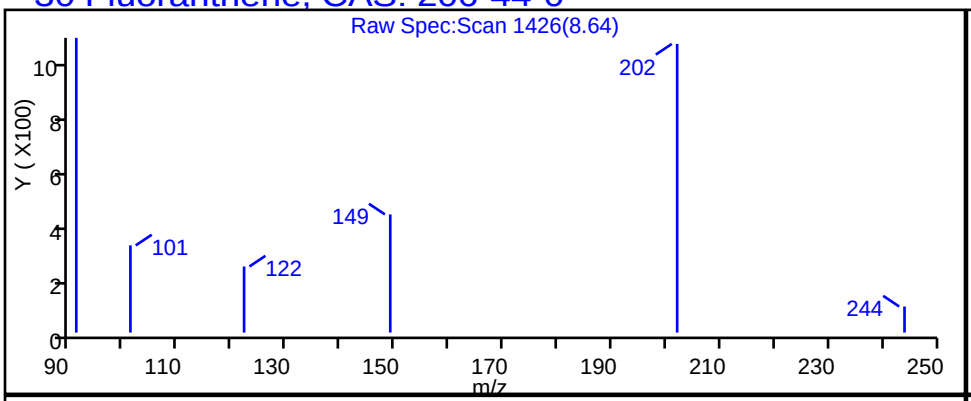
Operator ID: WICKHAMM ALS Bottle#: 3 Worklist Smp#: 3

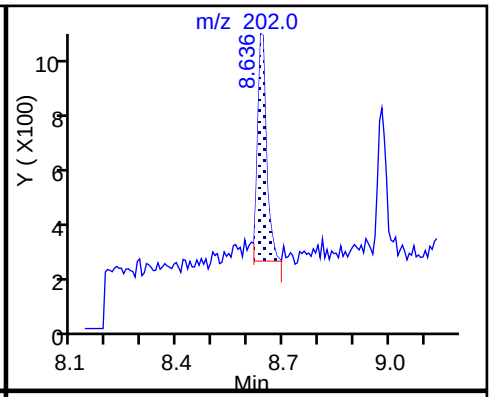
Injection Vol: 1.0 ul Dil. Factor: 1.0000

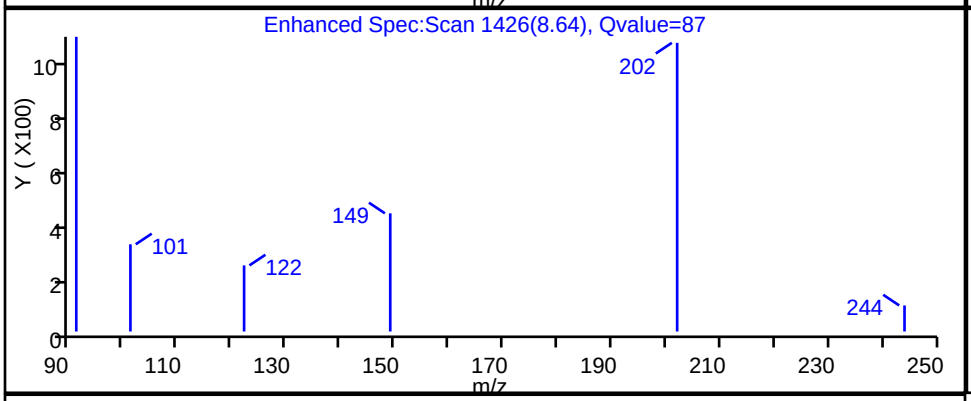
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

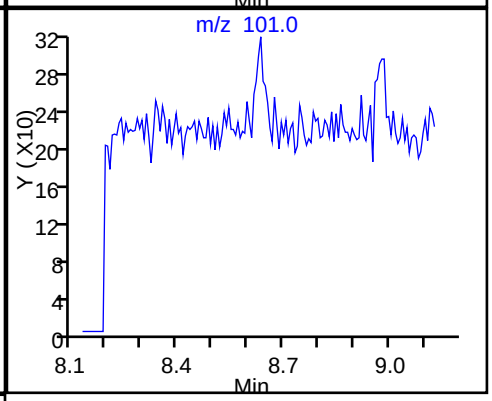
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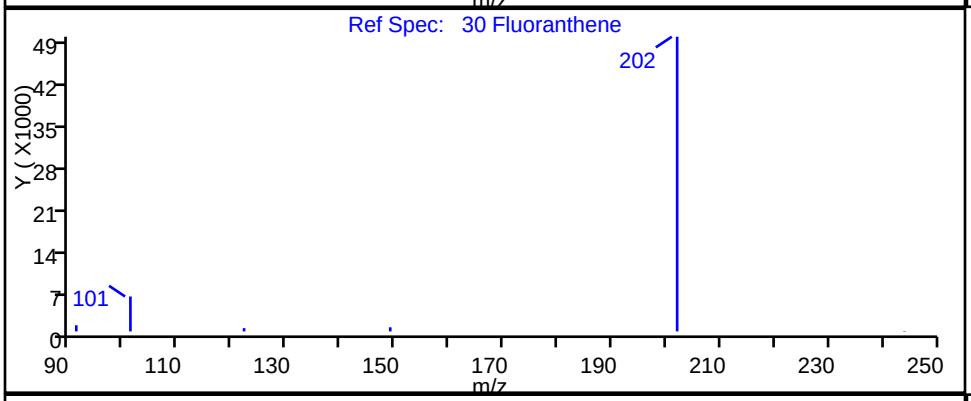
30 Fluoranthene, CAS: 206-44-0

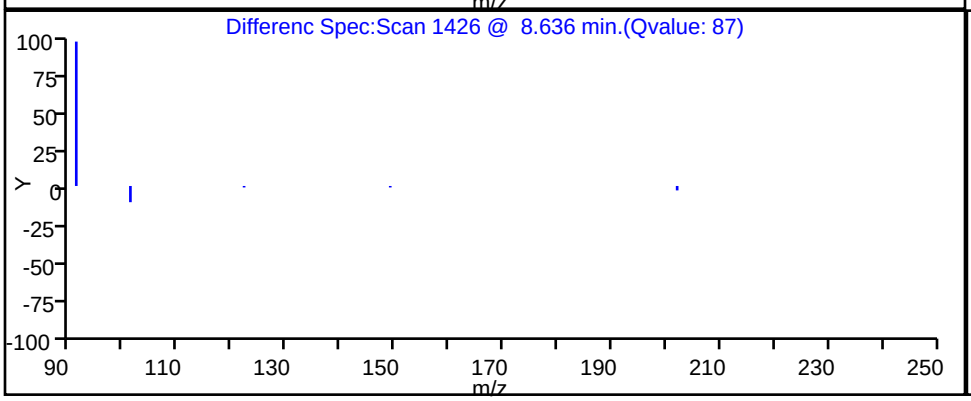


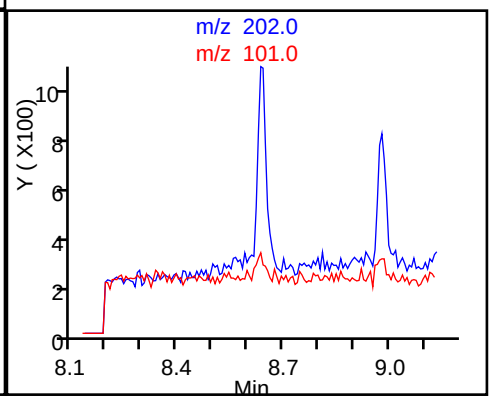












Report Date: 21-Jun-2017 15:41:06 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7308.D

Injection Date: 20-Jun-2017 17:23:30 Instrument ID: SMS_F

Lims ID: MB 280-376856/1-A

Client ID:

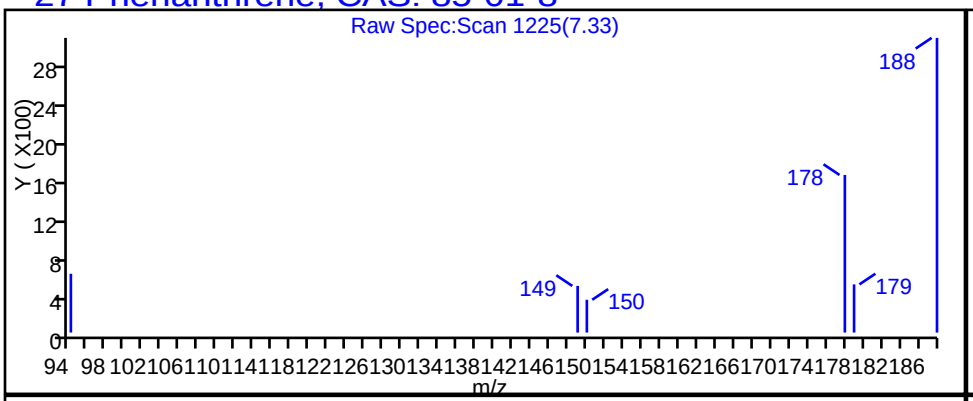
Operator ID: WICKHAMM ALS Bottle#: 3 Worklist Smp#: 3

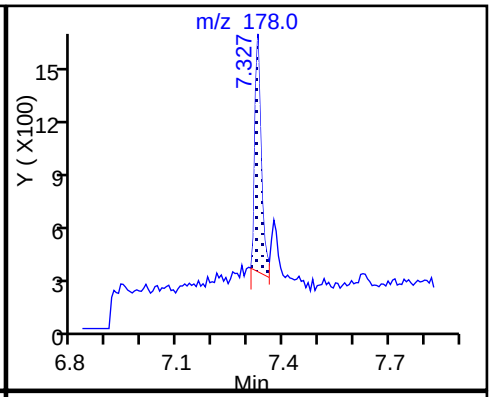
Injection Vol: 1.0 ul Dil. Factor: 1.0000

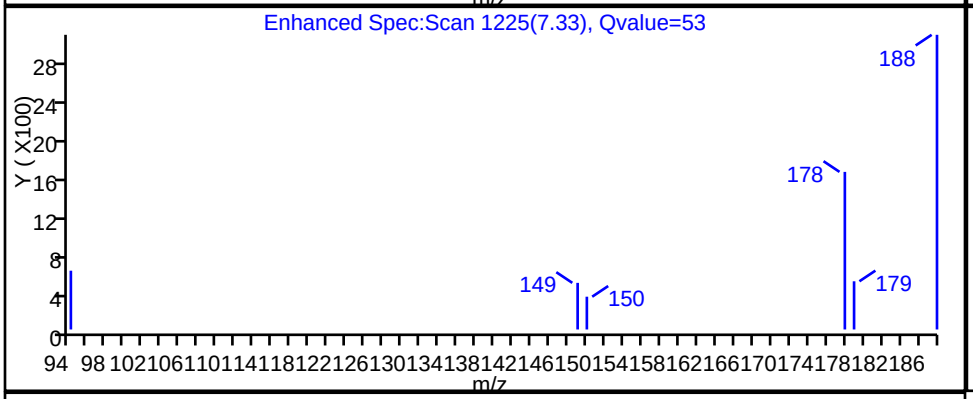
Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

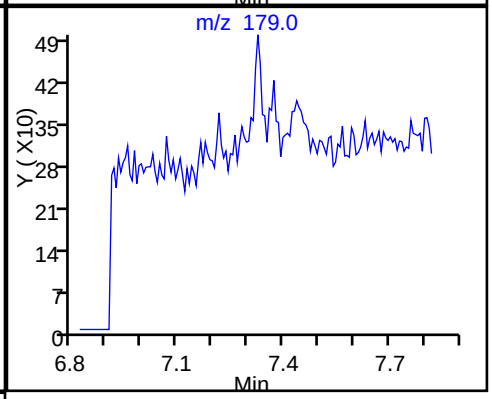
Column: Detector MS SCAN

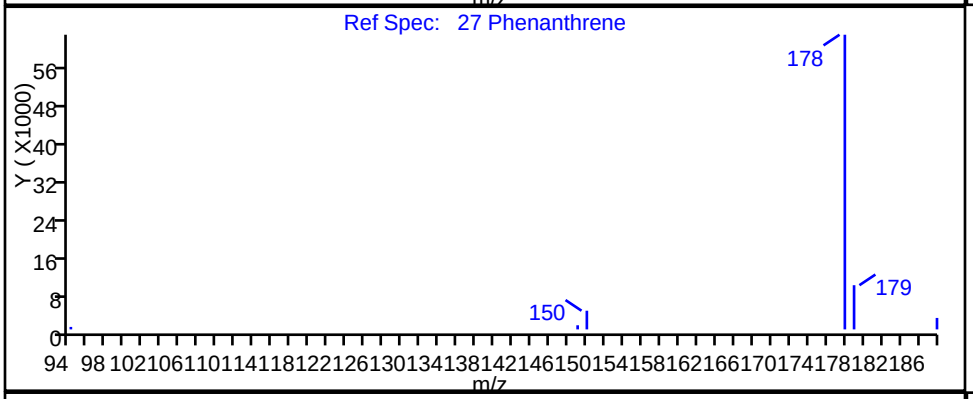
27 Phenanthrene, CAS: 85-01-8

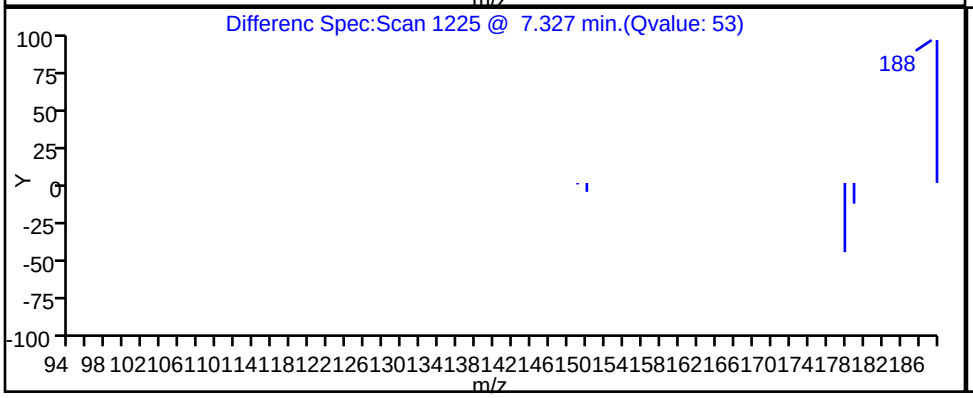


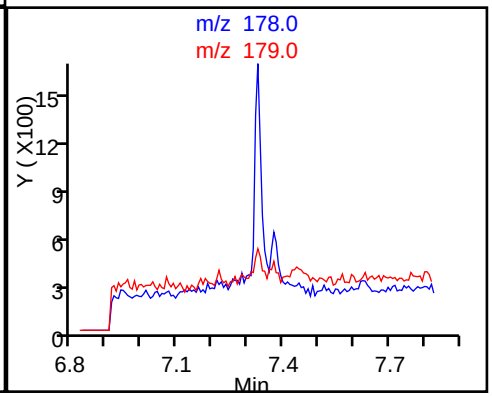












Report Date: 21-Jun-2017 15:41:06 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7308.D

Injection Date: 20-Jun-2017 17:23:30 Instrument ID: SMS_F

Lims ID: MB 280-376856/1-A

Client ID:

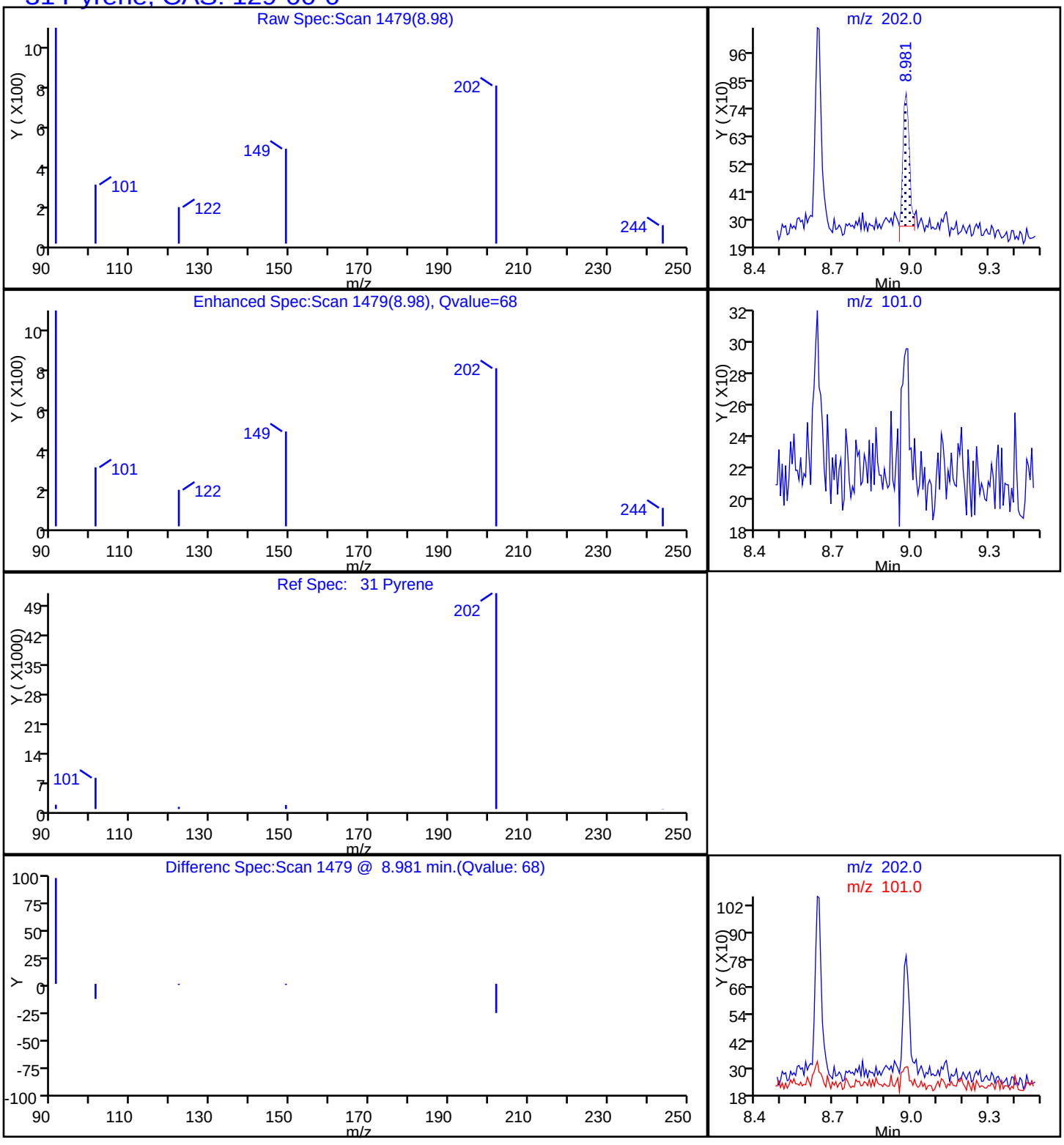
Operator ID: WICKHAMM ALS Bottle#: 3 Worklist Smp#: 3

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: SMSF_8270SIMX Limit Group: MSSV - 8270C-SIM

Column: Detector MS SCAN

31 Pyrene, CAS: 129-00-0



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-376824/2-A

Matrix: Solid | Lab File ID: F7226.D

Analysis Method: 8270D SIM | Date Collected:

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 31.9(g) | Date Analyzed: 06/15/2017 08:04

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377379 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	22.0		4.7	0.47	0.24
91-57-6	2-Methylnaphthalene	23.6		4.7	0.63	0.29
83-32-9	Acenaphthene	23.3		4.7	0.25	0.15
208-96-8	Acenaphthylene	21.9		4.7	0.63	0.16
120-12-7	Anthracene	22.7		4.7	2.4	0.68
56-55-3	Benzo[a]anthracene	23.9		4.7	2.4	0.85
50-32-8	Benzo[a]pyrene	21.0		4.7	2.4	0.70
205-99-2	Benzo[b]fluoranthene	22.5		4.7	2.4	1.1
191-24-2	Benzo[g,h,i]perylene	18.1		4.7	2.4	1.0
207-08-9	Benzo[k]fluoranthene	23.0		4.7	2.4	0.94
218-01-9	Chrysene	26.1		4.7	2.4	0.94
53-70-3	Dibenz(a,h)anthracene	18.5		4.7	2.4	1.2
206-44-0	Fluoranthene	23.6		4.7	2.4	0.94
86-73-7	Fluorene	24.2		4.7	0.63	0.44
193-39-5	Indeno[1,2,3-cd]pyrene	18.6		4.7	2.4	1.0
91-20-3	Naphthalene	22.1		4.7	0.63	0.31
85-01-8	Phenanthrene	22.6		4.7	2.4	1.0
129-00-0	Pyrene	24.0		4.7	2.4	1.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	90		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	92		44-125
1718-51-0	Terphenyl-d14 (Surr)	85		58-133

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\F7226.D
Lims ID: LCS 280-376824/2-A
Client ID:
Sample Type: LCS
Inject. Date: 15-Jun-2017 08:04:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: lcs280-376824_2-a
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 15-Jun-2017 15:05:59 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: vasquezk Date: 15-Jun-2017 13:39:13

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	96	20314	600.0	600.0	
* 2 Phenanthrene-d10	188	7.300	7.300	0.000	100	41204	600.0	600.0	
* 3 Chrysene-d12	240	11.368	11.376	-0.008	87	34702	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	99	14613	500.0	459.2	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	100	23649	500.0	449.0	
$ 6 Terphenyl-d14	244	9.129	9.129	0.000	99	17832	500.0	426.2	
9 1,4-Dioxane	88	1.909	1.903	0.006	0	4111	900.0	374.8	
10 N-Nitrosodimethylamine	74	2.039	2.033	0.006	81	10613	900.0	568.3	
14 Naphthalene	128	4.589	4.589	0.000	100	46362	900.0	704.0	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	96	31846	900.0	752.2	
17 1-Methylnaphthalene	142	5.230	5.234	-0.004	99	29772	900.0	702.1	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	46748	900.0	811.7	
22 Acenaphthylene	152	5.917	5.917	0.000	100	49028	900.0	699.7	
23 Acenaphthene	153	6.055	6.055	0.000	100	31790	900.0	742.2	
32 Dibenzofuran	168	6.199	6.199	0.000	89	52523	900.0	785.0	
24 Diethyl phthalate	149	6.320	6.320	0.000	96	49141	900.0	825.8	
25 Fluorene	166	6.487	6.494	-0.007	97	40647	900.0	773.3	
26 N-Nitrosodiphenylamine	169	6.562	6.570	-0.008	97	28523	900.0	739.5	
27 Phenanthrene	178	7.320	7.320	0.000	100	62928	900.0	720.1	
28 Anthracene	178	7.365	7.365	0.000	100	63965	900.0	724.9	
29 Di-n-butyl phthalate	149	7.730	7.730	0.000	100	81519	900.0	728.5	
30 Fluoranthene	202	8.628	8.628	0.000	100	75625	900.0	753.5	
31 Pyrene	202	8.967	8.967	0.000	100	79616	900.0	764.9	
33 Butyl benzyl phthalate	149	9.956	9.956	0.000	94	33346	900.0	644.8	
34 Bis(2-ethylhexyl) phthalat	149	11.223	11.232	-0.009	99	50762	900.0	666.2	
35 Benzo[a]anthracene	228	11.341	11.340	0.000	98	70344	900.0	762.2	
36 Chrysene	228	11.440	11.440	0.000	100	71043	900.0	832.1	
37 Di-n-octyl phthalate	149	13.156	13.161	-0.005	100	61755	900.0	526.4	
38 Benzo[b]fluoranthene	252	14.495	14.499	-0.004	100	60005	900.0	716.2	
39 Benzo[k]fluoranthene	252	14.578	14.587	-0.009	100	61800	900.0	733.3	
40 Benzo[a]pyrene	252	15.584	15.588	-0.004	100	55405	900.0	670.1	
41 Indeno[1,2,3-cd]pyrene	276	18.672	18.672	0.000	82	55518	900.0	591.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
42 Dibenz(a,h)anthracene	278	18.698	18.698	0.000	87	43169	900.0	589.7	
43 Benzo[g,h,i]perylene	276	19.101	19.105	-0.004	100	46019	900.0	578.3	
7 Pentachlorophenol	266		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

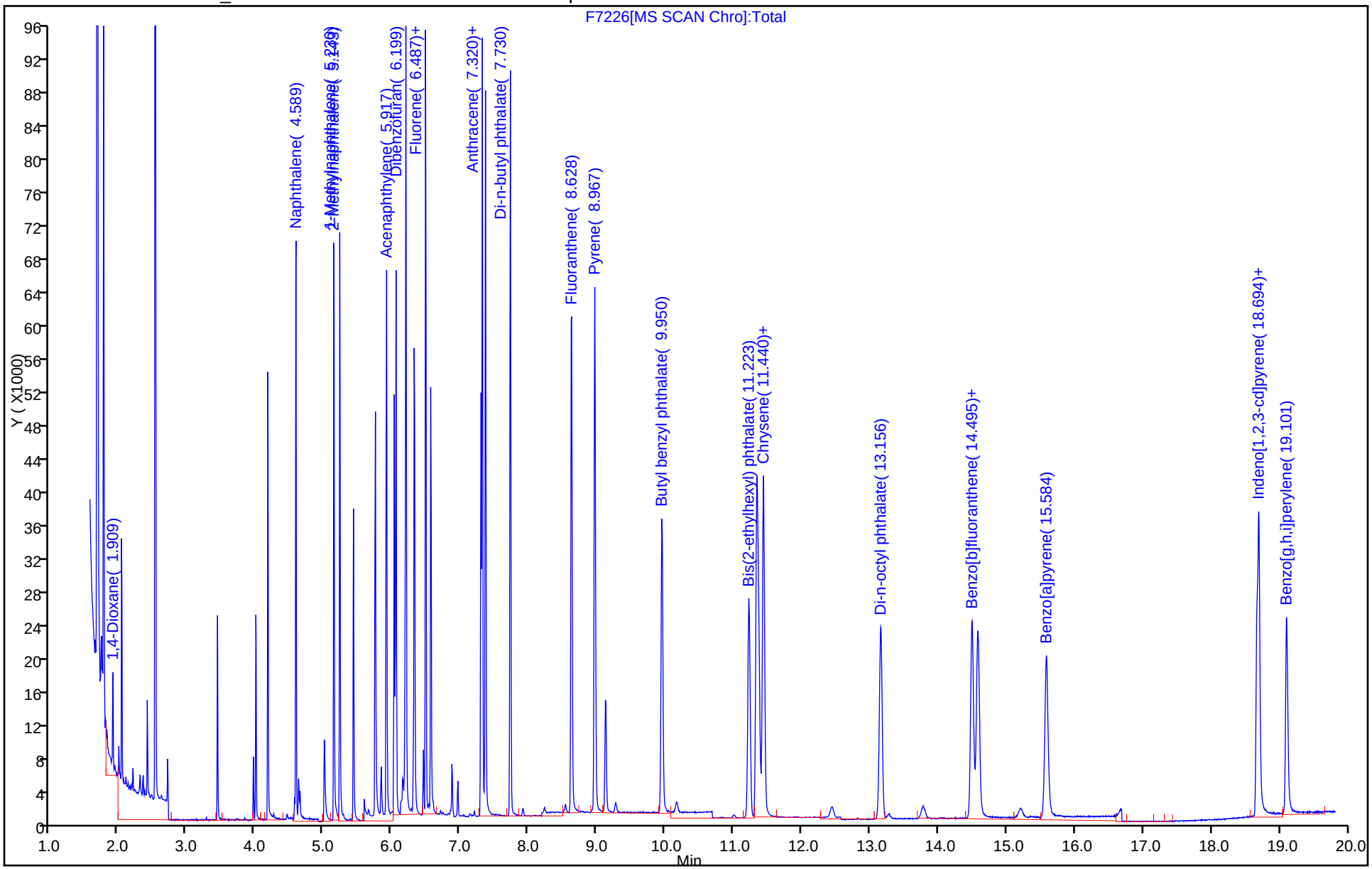
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 15-Jun-2017 15:06:01 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\F7226.D

Injection Date:	15-Jun-2017 08:04:30	Instrument ID:	SMS_F	Operator ID:	VASQUEZK
Lims ID:	LCS 280-376824/2-A			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\F7226.D
Lims ID: LCS 280-376824/2-A
Client ID:
Sample Type: LCS
Inject. Date: 15-Jun-2017 08:04:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: lcs280-376824_2-a
Operator ID: VASQUEZK Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170615-59779.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 15-Jun-2017 15:05:59 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK008

First Level Reviewer: vasquezk Date: 15-Jun-2017 13:39:13

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	459.2	91.85
$ 5 2-Fluorobiphenyl	500.0	449.0	89.80
$ 6 Terphenyl-d14	500.0	426.2	85.25

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-376856/2-A

Matrix: Water | Lab File ID: F7309.D

Analysis Method: 8270D SIM | Date Collected:

Extract. Method: 3510C | Date Extracted: 06/12/2017 15:16

Sample wt/vol: 1000(mL) | Date Analyzed: 06/20/2017 17:49

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378055 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.621		0.10	0.012	0.0057
91-57-6	2-Methylnaphthalene	0.657		0.10	0.012	0.0052
83-32-9	Acenaphthene	0.715		0.10	0.030	0.011
208-96-8	Acenaphthylene	0.651		0.10	0.012	0.010
120-12-7	Anthracene	0.721		0.10	0.020	0.014
56-55-3	Benzo[a]anthracene	0.785		0.10	0.012	0.0032
50-32-8	Benzo[a]pyrene	0.761		0.10	0.012	0.0051
205-99-2	Benzo[b]fluoranthene	0.778		0.10	0.012	0.0034
191-24-2	Benzo[g,h,i]perylene	0.682		0.10	0.012	0.0036
207-08-9	Benzo[k]fluoranthene	0.810		0.10	0.012	0.0051
218-01-9	Chrysene	0.851		0.10	0.012	0.0032
53-70-3	Dibenz(a,h)anthracene	0.691		0.10	0.012	0.0048
206-44-0	Fluoranthene	0.748		0.10	0.012	0.0045
86-73-7	Fluorene	0.721		0.10	0.020	0.019
193-39-5	Indeno[1,2,3-cd]pyrene	0.697		0.10	0.020	0.015
91-20-3	Naphthalene	0.624		0.10	0.012	0.0053
85-01-8	Phenanthrene	0.694		0.10	0.020	0.0098
129-00-0	Pyrene	0.757		0.10	0.020	0.0081

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	81		53-106
4165-60-0	Nitrobenzene-d5 (Surr)	83		55-111
1718-51-0	Terphenyl-d14 (Surr)	107		58-132

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7309.D
Lims ID: LCS 280-376856/2-A
Client ID:
Sample Type: LCS
Inject. Date: 20-Jun-2017 17:49:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: lcs280-376856_2-a
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 21-Jun-2017 15:41:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: wickhamm Date: 21-Jun-2017 15:09:21

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.030	6.029	0.001	92	18458	600.0	600.0	
* 2 Phenanthrene-d10	188	7.302	7.308	-0.006	100	37336	600.0	600.0	
* 3 Chrysene-d12	240	11.380	11.378	0.002	96	31783	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.002	4.001	0.001	100	11929	500.0	412.6	
$ 5 2-Fluorobiphenyl	172	5.432	5.436	-0.004	100	19393	500.0	405.2	
$ 6 Terphenyl-d14	244	9.131	9.130	0.001	98	20251	500.0	534.2	
9 1,4-Dioxane	88	1.906	1.903	0.003	0	13671	900.0	1371.7	
10 N-Nitrosodimethylamine	74	2.036	2.033	0.003	84	4453	900.0	262.4	
14 Naphthalene	128	4.586	4.589	-0.003	100	37328	900.0	623.8	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	98	25271	900.0	656.9	
17 1-Methylnaphthalene	142	5.230	5.234	-0.004	97	23945	900.0	621.5	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	42103	900.0	804.6	
22 Acenaphthylene	152	5.917	5.917	0.000	100	41436	900.0	650.8	
23 Acenaphthene	153	6.056	6.055	0.001	100	27829	900.0	715.0	
32 Dibenzofuran	168	6.199	6.206	-0.007	86	43143	900.0	709.6	
24 Diethyl phthalate	149	6.320	6.328	-0.008	96	45665	900.0	844.6	
25 Fluorene	166	6.495	6.494	0.001	92	34442	900.0	721.1	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	97	25970	900.0	743.1	
27 Phenanthrene	178	7.321	7.321	0.000	100	54990	900.0	694.4	
28 Anthracene	178	7.367	7.373	-0.006	100	57617	900.0	720.6	
29 Di-n-butyl phthalate	149	7.731	7.737	-0.006	100	75571	900.0	745.3	
30 Fluoranthene	202	8.629	8.629	0.000	100	68057	900.0	748.3	
31 Pyrene	202	8.974	8.974	0.000	100	71445	900.0	757.5	
33 Butyl benzyl phthalate	149	9.958	9.957	0.001	98	31732	900.0	677.1	
34 Bis(2-ethylhexyl) phthalat	149	11.227	11.233	-0.006	99	54708	900.0	792.4	
35 Benzo[a]anthracene	228	11.344	11.350	-0.006	97	66373	900.0	785.2	
36 Chrysene	228	11.443	11.450	-0.007	100	66553	900.0	851.1	
37 Di-n-octyl phthalate	149	13.156	13.171	-0.014	100	72652	900.0	676.2	
38 Benzo[b]fluoranthene	252	14.503	14.513	-0.010	100	59705	900.0	778.0	
39 Benzo[k]fluoranthene	252	14.590	14.596	-0.006	100	62524	900.0	810.1	
40 Benzo[a]pyrene	252	15.587	15.598	-0.011	100	57659	900.0	761.4	
41 Indeno[1,2,3-cd]pyrene	276	18.676	18.682	-0.006	81	59877	900.0	697.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
42 Dibenz(a,h)anthracene	278	18.706	18.708	-0.002	85	46347	900.0	691.3	
43 Benzo[g,h,i]perylene	276	19.113	19.115	-0.002	100	49676	900.0	681.6	
7 Pentachlorophenol	266		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

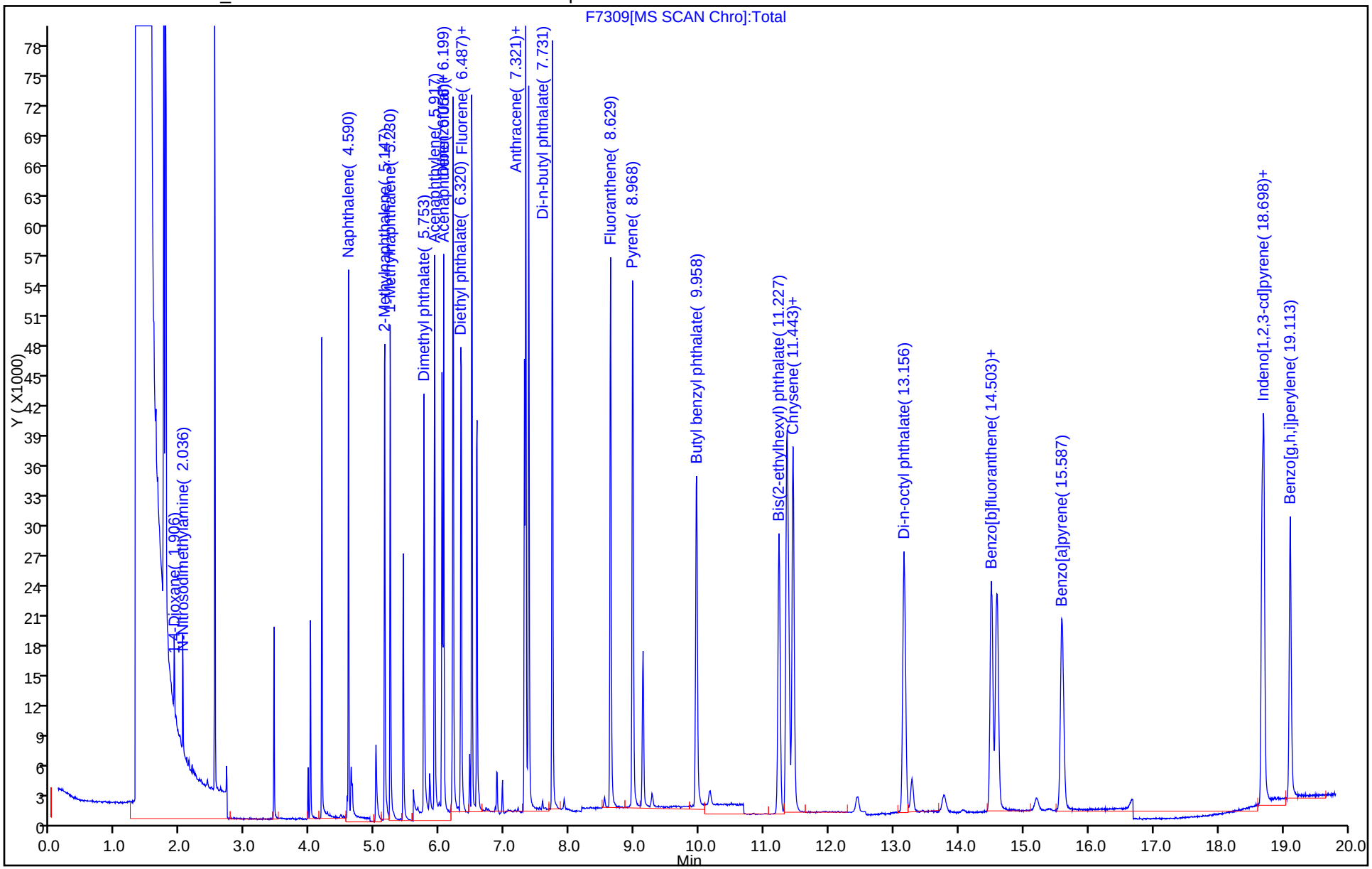
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 21-Jun-2017 15:41:08 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7309.D

Injection Date:	20-Jun-2017 17:49:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	LCS 280-376856/2-A			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7309.D
Lims ID: LCS 280-376856/2-A
Client ID:
Sample Type: LCS
Inject. Date: 20-Jun-2017 17:49:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: lcs280-376856_2-a
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 21-Jun-2017 15:41:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: wickhamm Date: 21-Jun-2017 15:09:21

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	412.6	82.51
$ 5 2-Fluorobiphenyl	500.0	405.2	81.04
$ 6 Terphenyl-d14	500.0	534.2	106.84

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 280-376856/3-A

Matrix: Water | Lab File ID: F7310.D

Analysis Method: 8270D SIM | Date Collected:

Extract. Method: 3510C | Date Extracted: 06/12/2017 15:16

Sample wt/vol: 1000(mL) | Date Analyzed: 06/20/2017 18:15

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378055 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	0.669		0.10	0.012	0.0057
91-57-6	2-Methylnaphthalene	0.703		0.10	0.012	0.0052
83-32-9	Acenaphthene	0.761		0.10	0.030	0.011
208-96-8	Acenaphthylene	0.706		0.10	0.012	0.010
120-12-7	Anthracene	0.758		0.10	0.020	0.014
56-55-3	Benzo[a]anthracene	0.784		0.10	0.012	0.0032
50-32-8	Benzo[a]pyrene	0.763		0.10	0.012	0.0051
205-99-2	Benzo[b]fluoranthene	0.770		0.10	0.012	0.0034
191-24-2	Benzo[g,h,i]perylene	0.667		0.10	0.012	0.0036
207-08-9	Benzo[k]fluoranthene	0.807		0.10	0.012	0.0051
218-01-9	Chrysene	0.848		0.10	0.012	0.0032
53-70-3	Dibenz(a,h)anthracene	0.677		0.10	0.012	0.0048
206-44-0	Fluoranthene	0.781		0.10	0.012	0.0045
86-73-7	Fluorene	0.764		0.10	0.020	0.019
193-39-5	Indeno[1,2,3-cd]pyrene	0.682		0.10	0.020	0.015
91-20-3	Naphthalene	0.644		0.10	0.012	0.0053
85-01-8	Phenanthrene	0.729		0.10	0.020	0.0098
129-00-0	Pyrene	0.775		0.10	0.020	0.0081

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	86		53-106
4165-60-0	Nitrobenzene-d5 (Surr)	88		55-111
1718-51-0	Terphenyl-d14 (Surr)	83		58-132

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7310.D
Lims ID: LCSD 280-376856/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 20-Jun-2017 18:15:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: lcsd280-376856_3-a
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 21-Jun-2017 15:41:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: wickhamm Date: 21-Jun-2017 15:09:52

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	94	17170	600.0	600.0	
* 2 Phenanthrene-d10	188	7.301	7.308	-0.007	100	34962	600.0	600.0	
* 3 Chrysene-d12	240	11.380	11.378	0.002	96	31173	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	100	11776	500.0	437.8	
$ 5 2-Fluorobiphenyl	172	5.431	5.436	-0.005	100	19069	500.0	428.3	
$ 6 Terphenyl-d14	244	9.130	9.130	0.000	98	14695	500.0	414.0	
9 1,4-Dioxane	88	1.903	1.903	0.000	0	2825	900.0	304.7	
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	93	4123	900.0	261.2	
14 Naphthalene	128	4.589	4.589	0.000	100	35860	900.0	644.3	
16 2-Methylnaphthalene	142	5.147	5.147	0.000	99	25170	900.0	703.3	
17 1-Methylnaphthalene	142	5.230	5.234	-0.004	99	23962	900.0	668.6	
20 Dimethyl phthalate	163	5.753	5.753	0.000	100	40117	900.0	824.1	
22 Acenaphthylene	152	5.917	5.917	0.000	100	41802	900.0	705.8	
23 Acenaphthene	153	6.055	6.055	0.000	100	27564	900.0	761.3	
32 Dibenzofuran	168	6.199	6.206	-0.007	86	43217	900.0	764.2	
24 Diethyl phthalate	149	6.320	6.328	-0.008	96	42709	900.0	849.2	
25 Fluorene	166	6.494	6.494	0.000	92	33958	900.0	764.3	
26 N-Nitrosodiphenylamine	169	6.570	6.570	0.000	97	24831	900.0	758.7	
27 Phenanthrene	178	7.321	7.321	0.000	100	54047	900.0	728.9	
28 Anthracene	178	7.366	7.373	-0.007	100	56730	900.0	757.7	
29 Di-n-butyl phthalate	149	7.731	7.737	-0.006	100	72621	900.0	764.8	
30 Fluoranthene	202	8.629	8.629	0.000	100	66492	900.0	780.7	
31 Pyrene	202	8.968	8.974	-0.006	100	68417	900.0	774.6	
33 Butyl benzyl phthalate	149	9.951	9.957	-0.006	100	31602	900.0	720.2	
34 Bis(2-ethylhexyl) phthalat	149	11.227	11.233	-0.006	98	54517	900.0	843.3	
35 Benzo[a]anthracene	228	11.344	11.350	-0.006	98	64994	900.0	784.0	
36 Chrysene	228	11.443	11.450	-0.007	100	65048	900.0	848.1	
37 Di-n-octyl phthalate	149	13.160	13.171	-0.010	100	70019	900.0	664.4	
38 Benzo[b]fluoranthene	252	14.503	14.513	-0.010	100	57957	900.0	770.0	
39 Benzo[k]fluoranthene	252	14.590	14.596	-0.006	100	61085	900.0	806.9	
40 Benzo[a]pyrene	252	15.592	15.598	-0.006	100	56645	900.0	762.6	
41 Indeno[1,2,3-cd]pyrene	276	18.680	18.682	-0.002	85	57424	900.0	681.6	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
42 Dibenz(a,h)anthracene	278	18.706	18.708	-0.002	85	44535	900.0	677.3	
43 Benzo[g,h,i]perylene	276	19.113	19.115	-0.002	100	47661	900.0	666.8	
7 Pentachlorophenol	266		0.000				ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

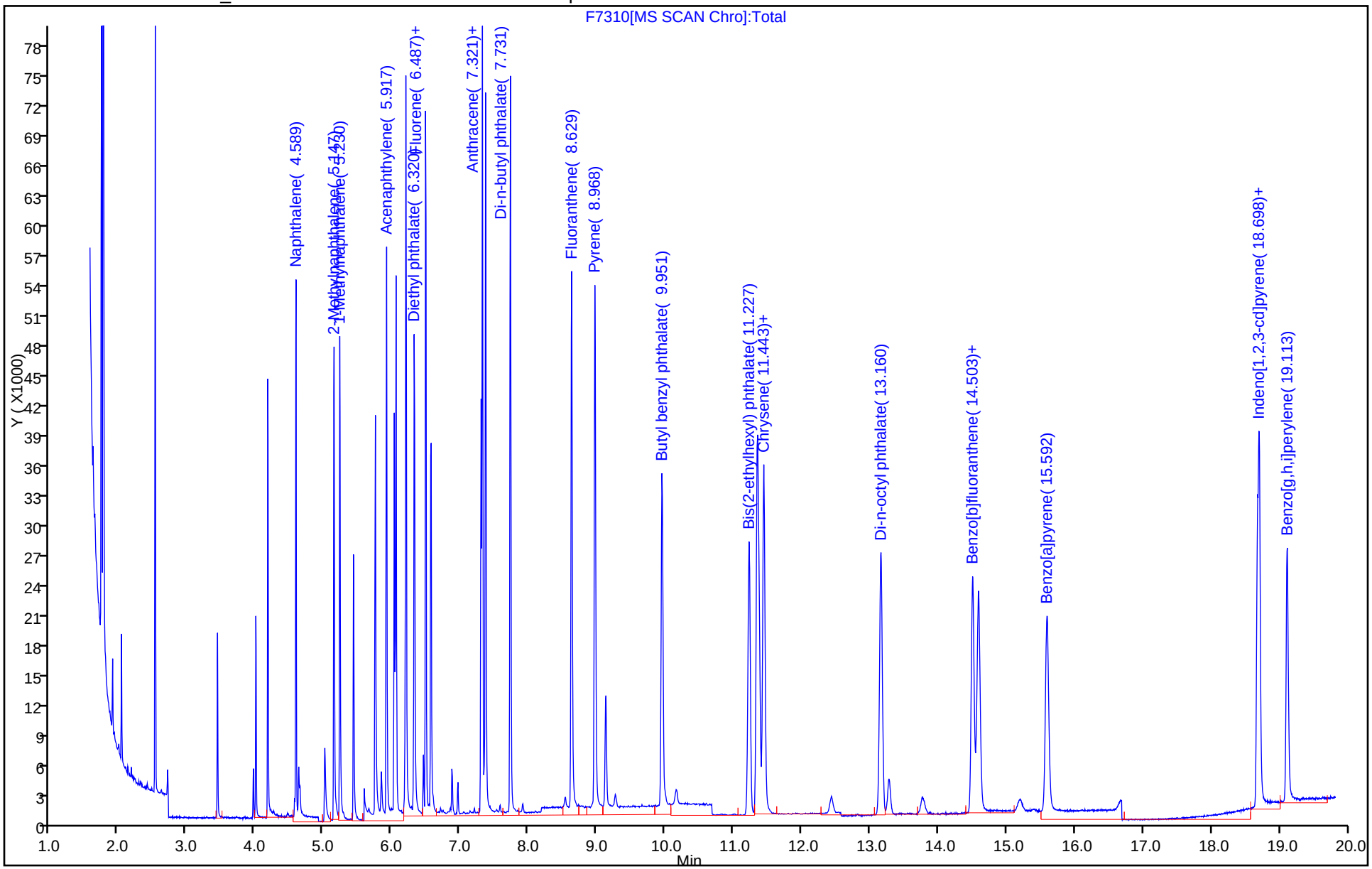
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 21-Jun-2017 15:41:09 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7310.D

Injection Date:	20-Jun-2017 18:15:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	LCSD 280-376856/3-A			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\F7310.D
Lims ID: LCSD 280-376856/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 20-Jun-2017 18:15:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: lcsd280-376856_3-a
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170620-59949.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 21-Jun-2017 15:41:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK004

First Level Reviewer: wickhamm Date: 21-Jun-2017 15:09:52

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	437.8	87.57
$ 5 2-Fluorobiphenyl	500.0	428.3	85.66
$ 6 Terphenyl-d14	500.0	414.0	82.79

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS07 MS | Lab Sample ID: 280-97928-1 MS

Matrix: Solid | Lab File ID: F7272.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 08:15

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 30.6(g) | Date Analyzed: 06/16/2017 16:55

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 13.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	22.7		5.7	0.57	0.29
91-57-6	2-Methylnaphthalene	24.7		5.7	0.75	0.35
83-32-9	Acenaphthene	23.9		5.7	0.30	0.18
208-96-8	Acenaphthylene	23.8		5.7	0.75	0.19
120-12-7	Anthracene	24.5		5.7	2.8	0.81
56-55-3	Benzo[a]anthracene	30.8		5.7	2.8	1.0
50-32-8	Benzo[a]pyrene	31.2		5.7	2.8	0.84
205-99-2	Benzo[b]fluoranthene	36.0		5.7	2.8	1.4
191-24-2	Benzo[g,h,i]perylene	25.2		5.7	2.8	1.2
207-08-9	Benzo[k]fluoranthene	30.7		5.7	2.8	1.1
218-01-9	Chrysene	35.6		5.7	2.8	1.1
53-70-3	Dibenz(a,h)anthracene	22.0		5.7	2.8	1.5
206-44-0	Fluoranthene	36.1		5.7	2.8	1.1
86-73-7	Fluorene	24.5		5.7	0.75	0.53
193-39-5	Indeno[1,2,3-cd]pyrene	25.5		5.7	2.8	1.2
91-20-3	Naphthalene	22.6		5.7	0.75	0.37
85-01-8	Phenanthrene	29.3		5.7	2.8	1.2
129-00-0	Pyrene	34.8		5.7	2.8	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	72		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	96		44-125
1718-51-0	Terphenyl-d14 (Surr)	67		58-133

Report Date: 19-Jun-2017 15:44:08 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7272.D
Lims ID: 280-97928-C-1-E MS
Client ID:
Sample Type: MS
Inject. Date: 16-Jun-2017 16:55:30 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-1-ems
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 16-Jun-2017 17:33:05

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	98	27375	600.0	600.0	
* 2 Phenanthrene-d10	188	7.295	7.301	-0.006	100	48365	600.0	600.0	
* 3 Chrysene-d12	240	11.362	11.371	-0.009	98	38601	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	100	20599	500.0	480.4	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	99	25646	500.0	361.3	
$ 6 Terphenyl-d14	244	9.118	9.130	-0.012	93	16338	500.0	332.7	
9 1,4-Dioxane	88	1.909	1.903	0.006	0	4374	900.0	295.9	
11 Morpholine	87	1.909	1.916	-0.007	1	355		NC	
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	70	10777	900.0	428.2	
14 Naphthalene	128	4.589	4.589	0.000	100	53284	900.0	600.4	
16 2-Methylnaphthalene	142	5.143	5.147	-0.004	100	37347	900.0	654.6	
17 1-Methylnaphthalene	142	5.230	5.235	-0.005	100	34384	900.0	601.7	
20 Dimethyl phthalate	163	5.744	5.753	-0.009	100	51248	900.0	660.3	
22 Acenaphthylene	152	5.908	5.917	-0.009	99	59717	900.0	632.4	
23 Acenaphthene	153	6.055	6.055	0.000	98	36589	900.0	633.9	
32 Dibenzofuran	168	6.199	6.199	0.000	96	70586	900.0	782.8	
24 Diethyl phthalate	149	6.320	6.320	0.000	98	51323	900.0	640.0	
25 Fluorene	166	6.487	6.494	-0.007	99	46109	900.0	650.9	
26 N-Nitrosodiphenylamine	169	6.563	6.570	-0.007	98	30517	900.0	674.0	
27 Phenanthrene	178	7.314	7.321	-0.007	100	79821	900.0	778.2	
28 Anthracene	178	7.360	7.366	-0.006	100	67383	900.0	650.5	
29 Di-n-butyl phthalate	149	7.724	7.731	-0.007	100	80489	900.0	612.8	
30 Fluoranthene	202	8.616	8.629	-0.013	100	112940	900.0	958.6	
31 Pyrene	202	8.961	8.968	-0.007	100	112759	900.0	922.9	
33 Butyl benzyl phthalate	149	9.951	9.957	-0.006	99	35092	900.0	578.1	
34 Bis(2-ethylhexyl) phthalat	149	11.227	11.227	0.000	100	65960	900.0	737.5	
35 Benzo[a]anthracene	228	11.335	11.344	-0.009	98	83751	900.0	815.8	
36 Chrysene	228	11.434	11.443	-0.009	100	89756	900.0	945.1	
37 Di-n-octyl phthalate	149	13.156	13.160	-0.004	100	78448	900.0	601.2	
38 Benzo[b]fluoranthene	252	14.490	14.503	-0.013	100	88943	900.0	954.3	
39 Benzo[k]fluoranthene	252	14.573	14.586	-0.013	100	76234	900.0	813.2	
40 Benzo[a]pyrene	252	15.570	15.587	-0.017	100	76052	900.0	826.9	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.663	18.676	-0.013	81	70648	900.0	677.2	
42 Dibenz(a,h)anthracene	278	18.693	18.702	-0.009	84	47615	900.0	584.8	
43 Benzo[g,h,i]perylene	276	19.100	19.109	-0.009	99	59167	900.0	668.5	
7 Pentachlorophenol	266		0.000				ND	ND	
8 Benzidine	184		0.000					ND	
12 Pentachlorophenol_T	266		4.254					ND	
15 Benzidine_T	184		5.412					ND	
19 4,4'-DDE	246		5.523					ND	
18 4,4'-DDD	235		5.848					ND	
21 4,4'-DDT	235		6.174					ND	
S 52 TPAH	1		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

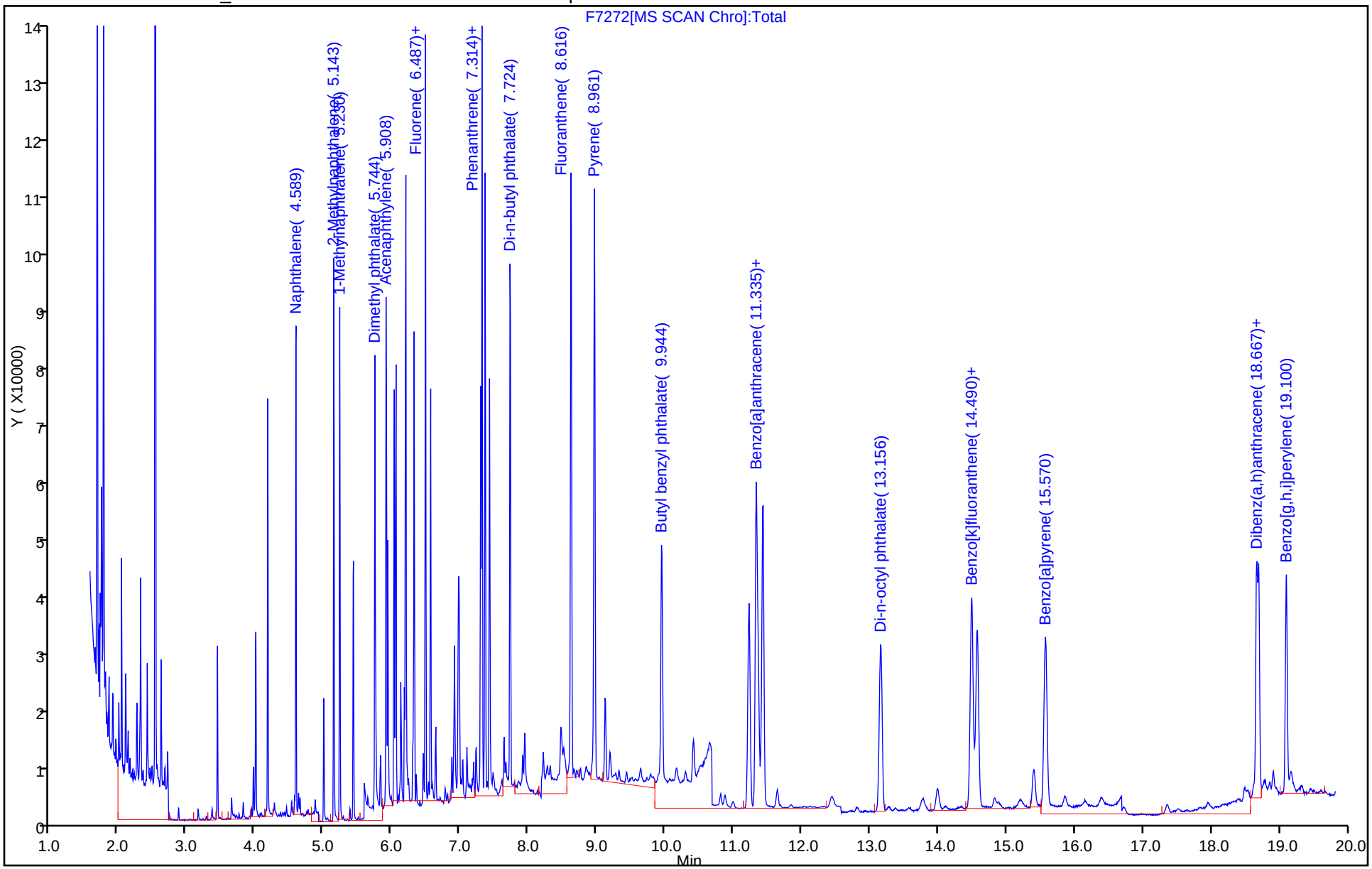
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:08 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7272.D

Injection Date:	16-Jun-2017 16:55:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-C-1-E MS			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7272.D
Lims ID: 280-97928-C-1-E MS
Client ID:
Sample Type: MS
Inject. Date: 16-Jun-2017 16:55:30 ALS Bottle#: 5 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-1-ems
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 16-Jun-2017 17:33:05

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	480.4	96.07
$ 5 2-Fluorobiphenyl	500.0	361.3	72.26
$ 6 Terphenyl-d14	500.0	332.7	66.54

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS07 MSD | Lab Sample ID: 280-97928-1 MSD

Matrix: Solid | Lab File ID: F7273.D

Analysis Method: 8270D SIM | Date Collected: 06/05/2017 08:15

Extract. Method: 3546 | Date Extracted: 06/11/2017 07:19

Sample wt/vol: 31.2(g) | Date Analyzed: 06/16/2017 17:21

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 13.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 377669 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
90-12-0	1-Methylnaphthalene	22.2		5.5	0.55	0.29
91-57-6	2-Methylnaphthalene	23.6		5.5	0.74	0.34
83-32-9	Acenaphthene	24.5		5.5	0.30	0.18
208-96-8	Acenaphthylene	23.9		5.5	0.74	0.19
120-12-7	Anthracene	25.6		5.5	2.8	0.80
56-55-3	Benzo[a]anthracene	33.1		5.5	2.8	1.0
50-32-8	Benzo[a]pyrene	32.5		5.5	2.8	0.82
205-99-2	Benzo[b]fluoranthene	37.9		5.5	2.8	1.3
191-24-2	Benzo[g,h,i]perylene	26.2		5.5	2.8	1.2
207-08-9	Benzo[k]fluoranthene	31.6		5.5	2.8	1.1
218-01-9	Chrysene	37.8		5.5	2.8	1.1
53-70-3	Dibenz(a,h)anthracene	21.7		5.5	2.8	1.4
206-44-0	Fluoranthene	40.5		5.5	2.8	1.1
86-73-7	Fluorene	24.8		5.5	0.74	0.52
193-39-5	Indeno[1,2,3-cd]pyrene	25.9		5.5	2.8	1.2
91-20-3	Naphthalene	22.1		5.5	0.74	0.36
85-01-8	Phenanthrene	31.4		5.5	2.8	1.2
129-00-0	Pyrene	39.6		5.5	2.8	1.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
321-60-8	2-Fluorobiphenyl (Surr)	73		46-115
4165-60-0	Nitrobenzene-d5 (Surr)	98		44-125
1718-51-0	Terphenyl-d14 (Surr)	68		58-133

Report Date: 19-Jun-2017 15:44:08 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7273.D
Lims ID: 280-97928-C-1-F MSD
Client ID:
Sample Type: MSD
Inject. Date: 16-Jun-2017 17:21:30 ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-1-fmsd
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:15:10

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 Acenaphthene-d10	164	6.029	6.029	0.000	99	26104	600.0	600.0	
* 2 Phenanthrene-d10	188	7.295	7.301	-0.006	99	47187	600.0	600.0	
* 3 Chrysene-d12	240	11.360	11.371	-0.011	89	40875	600.0	600.0	
$ 4 Nitrobenzene-d5	82	4.001	4.001	0.000	100	20017	500.0	489.5	
$ 5 2-Fluorobiphenyl	172	5.431	5.431	0.000	99	24626	500.0	363.8	
$ 6 Terphenyl-d14	244	9.124	9.130	-0.006	93	16272	500.0	339.6	
9 1,4-Dioxane	88	1.909	1.903	0.006	0	3752	900.0	266.2	
11 Morpholine	87	1.929	1.916	0.013	1	65		NC	
10 N-Nitrosodimethylamine	74	2.033	2.033	0.000	73	9794	900.0	408.1	
14 Naphthalene	128	4.589	4.589	0.000	100	50577	900.0	597.7	
16 2-Methylnaphthalene	142	5.143	5.147	-0.004	99	34746	900.0	638.6	
17 1-Methylnaphthalene	142	5.230	5.235	-0.005	100	32670	900.0	599.6	
20 Dimethyl phthalate	163	5.744	5.753	-0.009	100	49604	900.0	670.3	
22 Acenaphthylene	152	5.908	5.917	-0.009	98	58304	900.0	647.5	
23 Acenaphthene	153	6.055	6.055	0.000	99	36505	900.0	663.2	
32 Dibenzofuran	168	6.199	6.199	0.000	95	74649	900.0	868.2	
24 Diethyl phthalate	149	6.320	6.320	0.000	98	51577	900.0	674.5	
25 Fluorene	166	6.487	6.494	-0.007	100	45264	900.0	670.1	
26 N-Nitrosodiphenylamine	169	6.562	6.570	-0.008	98	30680	900.0	694.6	
27 Phenanthrene	178	7.314	7.321	-0.007	100	84890	900.0	848.2	
28 Anthracene	178	7.360	7.366	-0.006	100	69976	900.0	692.4	
29 Di-n-butyl phthalate	149	7.724	7.731	-0.007	100	82083	900.0	640.5	
30 Fluoranthene	202	8.623	8.629	-0.006	100	126013	900.0	1096.3	
31 Pyrene	202	8.961	8.968	-0.007	100	127629	900.0	1070.7	
33 Butyl benzyl phthalate	149	9.951	9.957	-0.006	96	37998	900.0	641.6	
34 Bis(2-ethylhexyl) phthalat	149	11.224	11.227	-0.003	99	75404	900.0	864.2	
35 Benzo[a]anthracene	228	11.333	11.344	-0.012	97	97430	900.0	896.3	
36 Chrysene	228	11.432	11.443	-0.011	100	102814	900.0	1022.4	
37 Di-n-octyl phthalate	149	13.153	13.160	-0.007	100	86361	900.0	625.0	
38 Benzo[b]fluoranthene	252	14.491	14.503	-0.012	100	101243	900.0	1025.9	
39 Benzo[k]fluoranthene	252	14.570	14.586	-0.016	100	84966	900.0	856.0	
40 Benzo[a]pyrene	252	15.567	15.587	-0.020	100	85613	900.0	879.0	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
41 Indeno[1,2,3-cd]pyrene	276	18.664	18.676	-0.012	81	77492	900.0	701.4	
42 Dibenz(a,h)anthracene	278	18.695	18.702	-0.007	84	50578	900.0	586.6	
43 Benzo[g,h,i]perylene	276	19.102	19.109	-0.007	99	66311	900.0	707.5	
7 Pentachlorophenol	266		0.000				ND	ND	
8 Benzidine	184		0.000					ND	
12 Pentachlorophenol_T	266		4.254					ND	
15 Benzidine_T	184		5.412					ND	
19 4,4'-DDE	246		5.523					ND	
18 4,4'-DDD	235		5.848					ND	
21 4,4'-DDT	235		6.174					ND	
S 52 TPAH	1		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

ND - Not Detected or Marked ND

Reagents:

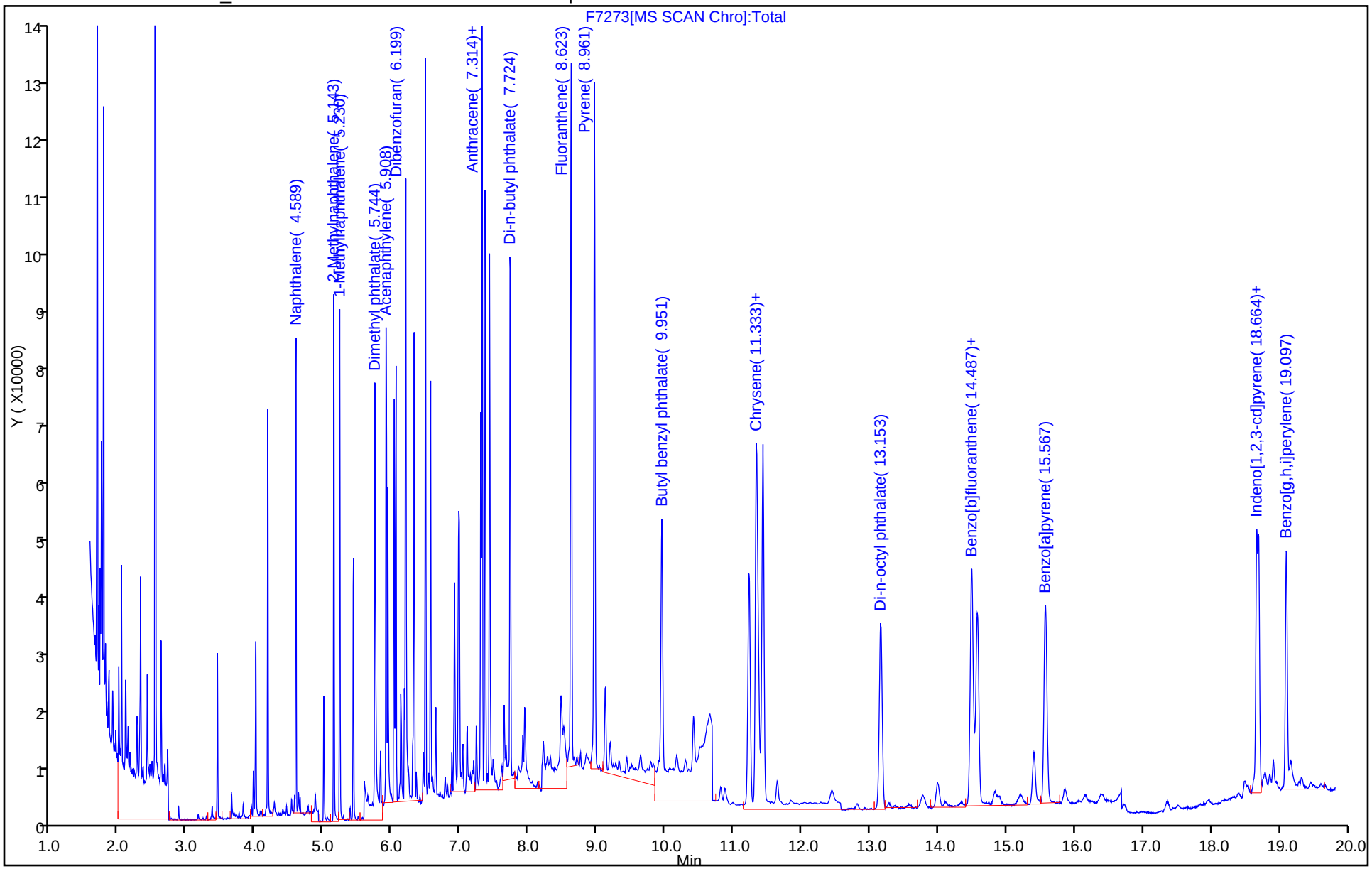
MS-SIM IS_00029 Amount Added: 20.00 Units: uL Run Reagent

Report Date: 19-Jun-2017 15:44:08 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7273.D

Injection Date:	16-Jun-2017 17:21:30	Instrument ID:	SMS_F	Operator ID:	WICKHAMM
Lims ID:	280-97928-C-1-F MSD			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	SMSF_8270SIMX	Limit Group:	MSSV - 8270C-SIM		



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\F7273.D
Lims ID: 280-97928-C-1-F MSD
Client ID:
Sample Type: MSD
Inject. Date: 16-Jun-2017 17:21:30 ALS Bottle#: 6 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-c-1-fmsd
Operator ID: WICKHAMM Instrument ID: SMS_F

Method: \\ChromNA\Denver\ChromData\SMS_F\20170616-59844.b\SMSF_8270SIMX.m
Limit Group: MSSV - 8270C-SIM
Last Update: 19-Jun-2017 15:40:04 Calib Date: 11-May-2017 16:07:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SMS_F\20170511-58577.b\F6551.D

Column 1 : Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: wickhamm Date: 19-Jun-2017 15:15:10

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Nitrobenzene-d5	500.0	489.5	97.90
$ 5 2-Fluorobiphenyl	500.0	363.8	72.77
$ 6 Terphenyl-d14	500.0	339.6	67.93

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SMS_F Start Date: 05/11/2017 12:39

Analysis Batch Number: 373158 End Date: 05/11/2017 20:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 280-373158/1		05/11/2017 12:39	1	F6543.D	Rxi-5Sil MS 0.25(mm)
ICIS 280-373158/2		05/11/2017 12:58	1	F6544.D	Rxi-5Sil MS 0.25(mm)
STD0020 280-373158/3 IC		05/11/2017 13:34	1	F6545.D	Rxi-5Sil MS 0.25(mm)
STD0100 280-373158/4 IC		05/11/2017 13:59	1	F6546.D	Rxi-5Sil MS 0.25(mm)
STD0300 280-373158/5 IC		05/11/2017 14:25	1	F6547.D	Rxi-5Sil MS 0.25(mm)
STD1200 280-373158/6 IC		05/11/2017 14:50	1	F6548.D	Rxi-5Sil MS 0.25(mm)
STD2500 280-373158/7 IC		05/11/2017 15:16	1	F6549.D	Rxi-5Sil MS 0.25(mm)
STD5000 280-373158/8 IC		05/11/2017 15:42	1	F6550.D	Rxi-5Sil MS 0.25(mm)
STD10000 280-373158/9 IC		05/11/2017 16:07	1	F6551.D	Rxi-5Sil MS 0.25(mm)
ICV 280-373158/10		05/11/2017 16:33	1	F6552.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		05/11/2017 16:59	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		05/11/2017 17:24	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		05/11/2017 17:50	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		05/11/2017 18:16	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		05/11/2017 18:41	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		05/11/2017 19:07	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		05/11/2017 19:33	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		05/11/2017 19:58	1		Rxi-5Sil MS 0.25(mm)
CCVC 280-373158/19		05/11/2017 20:24	1		Rxi-5Sil MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SMS_F Start Date: 06/15/2017 06:49

Analysis Batch Number: 377379 End Date: 06/15/2017 14:11

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 280-377379/1		06/15/2017 06:49	1	F7223.D	Rxi-5Sil MS 0.25(mm)
CCV 280-377379/2		06/15/2017 07:01	1	F7224.D	Rxi-5Sil MS 0.25(mm)
MB 280-376824/1-A		06/15/2017 07:39	1	F7225.D	Rxi-5Sil MS 0.25(mm)
LCS 280-376824/2-A		06/15/2017 08:04	1	F7226.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/15/2017 08:30	400		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/15/2017 09:02	4		Rxi-5Sil MS 0.25(mm)
CCVC 280-377379/7		06/15/2017 09:27	1	F7229.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/15/2017 09:53	100		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/15/2017 10:19	40		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/15/2017 10:45	4		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/15/2017 11:10	2		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/15/2017 11:36	10		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/15/2017 12:02	10		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/15/2017 12:28	20		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/15/2017 12:54	20		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/15/2017 13:20	20		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/15/2017 13:46	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/15/2017 14:11	1		Rxi-5Sil MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SMS_F Start Date: 06/16/2017 14:53

Analysis Batch Number: 377669 End Date: 06/17/2017 01:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 280-377669/1		06/16/2017 14:53	1	F7267.D	Rxi-5Sil MS 0.25(mm)
CCV 280-377669/2		06/16/2017 15:08	1	F7268.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/16/2017 15:37	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/16/2017 16:03	80		Rxi-5Sil MS 0.25(mm)
280-97928-1		06/16/2017 16:29	1	F7271.D	Rxi-5Sil MS 0.25(mm)
280-97928-1 MS		06/16/2017 16:55	1	F7272.D	Rxi-5Sil MS 0.25(mm)
280-97928-1 MSD		06/16/2017 17:21	1	F7273.D	Rxi-5Sil MS 0.25(mm)
280-97928-3		06/16/2017 17:47	1	F7274.D	Rxi-5Sil MS 0.25(mm)
280-97928-4		06/16/2017 18:13	1	F7275.D	Rxi-5Sil MS 0.25(mm)
280-97928-5		06/16/2017 18:39	1	F7276.D	Rxi-5Sil MS 0.25(mm)
280-97928-6		06/16/2017 19:05	1	F7277.D	Rxi-5Sil MS 0.25(mm)
280-97928-7		06/16/2017 19:30	1	F7278.D	Rxi-5Sil MS 0.25(mm)
280-97928-8		06/16/2017 19:57	1	F7279.D	Rxi-5Sil MS 0.25(mm)
280-97928-9		06/16/2017 20:22	1	F7280.D	Rxi-5Sil MS 0.25(mm)
280-97928-10		06/16/2017 20:48	1	F7281.D	Rxi-5Sil MS 0.25(mm)
280-97928-11		06/16/2017 21:14	1	F7282.D	Rxi-5Sil MS 0.25(mm)
280-97928-12		06/16/2017 21:40	1	F7283.D	Rxi-5Sil MS 0.25(mm)
280-97928-14		06/16/2017 22:06	1	F7284.D	Rxi-5Sil MS 0.25(mm)
280-97928-15		06/16/2017 22:32	1	F7285.D	Rxi-5Sil MS 0.25(mm)
280-97928-16		06/16/2017 22:57	1	F7286.D	Rxi-5Sil MS 0.25(mm)
280-97928-17		06/16/2017 23:23	1	F7287.D	Rxi-5Sil MS 0.25(mm)
280-97928-18		06/16/2017 23:49	1	F7288.D	Rxi-5Sil MS 0.25(mm)
280-97928-19		06/17/2017 00:15	1	F7289.D	Rxi-5Sil MS 0.25(mm)
280-97928-20		06/17/2017 00:40	1	F7290.D	Rxi-5Sil MS 0.25(mm)
280-97928-21		06/17/2017 01:06	1	F7291.D	Rxi-5Sil MS 0.25(mm)
280-97928-22		06/17/2017 01:32	1	F7292.D	Rxi-5Sil MS 0.25(mm)
CCVC 280-377669/27		06/17/2017 01:57	1	F7293.D	Rxi-5Sil MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SMS_F Start Date: 06/20/2017 16:43

Analysis Batch Number: 378055 End Date: 06/21/2017 03:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 280-378055/1		06/20/2017 16:43	1	F7306.D	Rxi-5Sil MS 0.25(mm)
CCV 280-378055/2		06/20/2017 16:55	1	F7307.D	Rxi-5Sil MS 0.25(mm)
MB 280-376856/1-A		06/20/2017 17:23	1	F7308.D	Rxi-5Sil MS 0.25(mm)
LCS 280-376856/2-A		06/20/2017 17:49	1	F7309.D	Rxi-5Sil MS 0.25(mm)
LCSD 280-376856/3-A		06/20/2017 18:15	1	F7310.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/20/2017 18:41	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/20/2017 19:07	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/20/2017 19:33	1		Rxi-5Sil MS 0.25(mm)
280-97928-13		06/20/2017 19:59	1	F7314.D	Rxi-5Sil MS 0.25(mm)
280-97928-8 DL		06/20/2017 20:26	50	F7315.D	Rxi-5Sil MS 0.25(mm)
280-97928-9 DL		06/20/2017 20:52	10	F7316.D	Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/20/2017 21:17	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/20/2017 21:44	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/20/2017 22:09	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/20/2017 22:35	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/20/2017 23:01	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/20/2017 23:27	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/20/2017 23:53	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/21/2017 00:19	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/21/2017 00:45	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/21/2017 01:11	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/21/2017 01:37	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/21/2017 02:03	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/21/2017 02:28	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/21/2017 02:54	1		Rxi-5Sil MS 0.25(mm)
ZZZZZ		06/21/2017 03:20	1		Rxi-5Sil MS 0.25(mm)
CCVC 280-378055/27		06/21/2017 03:45	1	F7332.D	Rxi-5Sil MS 0.25(mm)

TestAmerica *Denver*

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GC/MS Semivolatile Data Review Checklist-CCV and Tune

LIMS Batch Number: 377669	Worklist #: 59844	Instrument ID: F 6-16-17
Analyst/1st Reviewer: MW 6-16-17 Date:	Method (circle): 625 (8270C) (8270D)	Circle: Full Scan (SIM) BP LL SIM
QC Type (circle): (Standard) DOD Q4 (DoD Q5)	QAPP_____	Other_____

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable? (List NCM #)
A. Tune/Calibration Verification					
1. Did DFTPP meet tune criteria? If SIM, did the PFTBA Tune check meet ion ratio criteria?	Y			/	
2. Are the Benzidine and PCP tailing ≤ 2? (8270D/DoD), Benzidine tailing ≤3 and PCP tailing ≤5? (8270C)	Y			/	
3. Is the DDT degradation ≤ 20%	Y			/	
4. Were all standards injected within 12 hr of DFTPP? (or 24 hrs for 625)?	Y			/	
5. Was the correct ICAL used for quantitation? Date & Instrument ID verified? (Check both Chrom and TALS)	Y			/	
6. Do the RFs meet method minimum criteria? (8270D/625) Are the RFs for SPCCs ≥0.050? (8270C)	Y			/	
7. Is the %D (difference or drift) 8270C: ≤20% for all CCCs? all other analytes within 35%, or 55% (poor performers) 8270D: %D ≤ 20% for all analytes, at least 80% of compounds meet criteria?	Y			/	(8270C: %D high, samples ND?) (8270D: <20% of cmpds fail criteria & for failed cmpds RL std verifies sensitivity for NDs?) List Compounds outside criteria:
8. For any compound > 20% D (low), was RL standard analyzed and detected? (8270D)			Y	/	
9. NOTE: For any compounds > 20% D (high or low), detects will be flagged as "EST" & narrated. (8270D)			Y	/	□ Must be done in consultation with client.
10. Are the internal standard responses within limits? (between -50% and +100% of the mid-level ICAL standard)	Y			/	
11. Are the internal standard retention times within method limits? (±30 sec of ICAL mid pt for 8270C/D)	Y			/	
12. Benzo(b & k)fluoranthene: height of the valley between must be less than 50% of the average of the two peak heights?	Y			/	
13. Elution order checked isomeric pairs and coeluters?				/	(Chrom: View/Documents/Methods/Isomers)
• aniline / bis(2-chloroethyl)ether			Y	/	
• N-nitrosodiphenylamine/diphenylamine			Y	/	
• 1,3-, 1,4-, 1,2-dichlorobenzene			Y	/	
• benzyl alcohol / 2-methylphenol / 3/4-methylphenol			Y	/	
• 2 & 1 – methylnaphthalene	Y			/	
• 2,4-dimethylphenol / 3,5-dimethylphenol			Y	/	
• 2,4,6- and 2,4,5-trichlorophenol			Y	/	
• phenanthrene / anthracene	Y			/	

A. Tune/Calibration Verification (cont.)					
Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable? (Use NCM #)
• fluoranthene / pyrene	Y			/	
• benzo(a)anthracene / chrysene	Y			/	
• benzo(e)pyrene/benzo(a)pyrene	Y			/	
• bis(2-ethylhexyl)/di-n-octyl phthalate	Y			/	
• benzo(b)fluoranthene / benzo(k)fluoranthene	Y			/	
• indeno(1,2,3-cd)pyrene / benzo(g,h,i)perylene	Y			/	
• safrole/1-chloronaphthalene			Y	/	
• 1-/2-naphthylamine			Y	/	
• 1 and 2-chloronaphthalene			Y	/	
• 2,4,6 and 2,4,5-tribromophenol			Y	/	
14. If any criteria from items above were not met, was a NCM generated?			Y	/	
15. Were manual integrations performed correctly and properly documented? (dated, initialed and reason given) 2nd review of all MIs required	Y			/	

Comments: _____

2nd Reviewer: Phuriya Review Date: 06/19/2017

MW 6-16-17

TestAmerica Denver

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GC/MS Semivolatile Data Review Checklist-CCV and Tune

LIMS Batch Number: 328055	Worklist#: 59949	Instrument ID: F 6-20-17
Analyst/1st Reviewer: MW 6-20-17 Date:	Method(circle): 625 8270SIM 8270D	Circle: Fullscan SIM BP Lo SIM
QC Type (circle): Standard DSDP QS DoD QS		QSTP_____ Other_____

Review Items	Yes	Nlx	N/A	2nd Rev	If Nlx, why is data reportable? (Lab N/C#)
Tune/Calibration Verification					
1. Did DFTPP meet tune criteria? If SIM, did the PFTBA Tune check meet ion ratio criteria?	X			/	
2. Are the Benzidine and PCP tailing ≤ 2? (8270D/DoD), Benzidine tailing ≤3 and PCP tailing ≤5? (8270C)	X			/	
3. Is the DBT degradation ≤ 20%	X			/	
4. Were all standards injected within 12 hr of DFTPP? (or 24 hrs for 625)?	X			/	
5. Was the correct ICAL used for quantitation? Date & Instrument ID verified? (Check both Chrom and TALS)	X			/	
6. Do the RFs meet method minimum criteria? (8270D/625) Are the RFs for SPCCs ≥0.050? (8270C)	X			/	
7. Is the %D (difference or drift) 8270C: ≤20% for all CCCs? all other analytes within 35%, or 55% (poor performers) 8270D: %D ≤ 20% for all analytes, at least 80% of compounds meet criteria?	X			/	(8270C: %D high, samples ND?) (8270D: <20% of cmpds fail criteria & for failed cmpds RL std verifies sensitivity for NDs?) List Compounds outside criteria:
8. For any compound > 20% D (low), was RL standard analyzed and detected? (8270D)			X		
9. NOTE: For any compounds > 20% D (high or low), detects will be flagged as "EST" & narrated. (8270D)			X		Must be done in consultation with client.
10. Are the internal standard responses within limits? (between -50% and +100% of the mid-level ICAL standard)	X			/	
11. Are the internal standard retention times within method limits? (±30sec of ICAL mid-pt. for 8270D)	X			/	
12. Peak resolution: Is the valley between two peaks less than 50% of the average of the two peak heights?	X			/	
13. Elution order checked: isomeric pairs and coeluters?					(Chrom: V:\Documents\Methods\Isomers)
• aniline / bis(2-chloroethyl)ether			X		
• N-nitrosodiphenylamine/diphenylamine			X		
• 1,3-, 1,4-, 1,2-dichlorobenzene			X		
• benzyl alcohol / 2-methylphenol / bis(2-chloroisopropyl)			X		
• 2,6- & 1,1-methylnaphthalene	X			/	
• 2,4-dimethylphenol / benzoic acid			X		
• 2,4,6- and 2,4,5-trichlorophenol			X		
• phenanthrene / anthracene	X			/	

Phenanthrene
confirmation

TestAmerica Denver

A. Run/Calibration Verification (cont.)					
Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable? (Use NCM if applicable)
• fluoranthene / pyrene					
• benzo(a)anthracene / chrysene					
• benzo(e)pyrene/benzo(a)pyrene					
• bis(2-ethylhexyl)/di-n-octyl phthalate					
• benzo(b)fluoranthene / benzo(k)fluoranthene					
• indeno(1,2,3-cd)pyrene / benzo(g,h,i)perylene					
• anisole/1-chloronaphthalene					
• 1-/2-naphthylamine					
• 1 and 2-chloronaphthalene					
• 2,4,6 and 2,4,5-tribromophenol					
14. If any criteria from items above were not met, was a NCM generated?					
15. Were manual integrations performed correctly and properly documented? (dated, initialed and reason given) 2nd review of all MIs required					

Comments: _____

2nd Reviewer: _____ Review Date: 06/21/17

MW 6-20-17

Phuong 06/22/2017

Test America Laboratories
Worklist Run Log Report

Worklist Name: 062017 Worklist Num: 539949
Instrument: SMS_F Method: SIM8F_8270D.M
Batch Directory: \\ChromNA\Denver\ChromData\SMS_F\20170620-539949.b
Analysis Type: SemiVOA Creator: Whitham, Melanie K
Inj Volume: 1.00 Inj Vol Units: ul
Run Reagents:
MS-SIM IS_00029, Amount Added: 20.00, Units: uL

Lab ID	Worklist ID	Sample Type	Inj Date/Time	File Name	Well	Dil Factor	Client ID	Fract
DFTPP	280-0059949-001	DFTPP	20-Jun-2017 16:43:30	F7306.D	1	1.0		SV
CCV	280-0059949-002	CCV	20-Jun-2017 16:55:30	F7307.D	2	1.0		SV
MB 280-378856/1-A	280-0059949-003	MB	20-Jun-2017 17:23:30	F7308.D	3	1.0		SV
LCS 280-378856/2-A	280-0059949-004	LCS	20-Jun-2017 17:49:30	F7309.D	4	1.0		SV
LCSD 280-378856/3-A	280-0059949-005	LCSD	20-Jun-2017 18:15:30	F7310.D	5	1.0		SV
MB 280-377961/1-A	280-0059949-006	MB	20-Jun-2017 18:41:30	F7311.D	6	1.0		SV
LCS 280-377961/2-A	280-0059949-007	LCS	20-Jun-2017 19:07:30	F7312.D	7	1.0		SV
LCSD 280-377961/3-A	280-0059949-008	LCSD	20-Jun-2017 19:33:30	F7313.D	8	1.0		SV
280-97928-B-13-A	280-0059949-009	Client	20-Jun-2017 19:59:30	F7314.D	9	1.0	59926-AB-060617	SV
280-97928-C-8-B	280-0059949-010	Client	20-Jun-2017 20:26:30	F7315.D	10	50.0	59926-SB01(0-2)	SV
280-97928-B-8-B	280-0059949-011	Client	20-Jun-2017 20:52:30	F7316.D	11	10.0	59926-SB01(0-2)-B	SV
280-98125-B-16-A	280-0059949-012	Client	20-Jun-2017 21:17:30	F7317.D	12	1.0	TU044-MW-16-060617	SV
280-98125-A-16-A	280-0059949-013	Client	20-Jun-2017 21:44:30	F7318.D	13	1.0	TU044-MW-11-060617	SV
280-98125-B-17-A	280-0059949-014	Client	20-Jun-2017 22:09:30	F7319.D	14	1.0	TU044-MW-8-060617	SV
280-98125-A-18-A	280-0059949-015	Client	20-Jun-2017 22:35:30	F7320.D	15	1.0	TU044-MW-18-060617	SV
280-98125-A-19-A	280-0059949-016	Client	20-Jun-2017 23:01:30	F7321.D	16	1.0	TU044-MW-22R-060617	SV
280-98125-B-20-A	280-0059949-017	Client	20-Jun-2017 23:27:30	F7322.D	17	1.0	TU044-MW-22D-060617	SV
280-98125-A-21-A	280-0059949-018	Client	20-Jun-2017 23:53:30	F7323.D	18	1.0	TU044-MW-19-060617	SV
280-98125-A-22-A	280-0059949-019	Client	21-Jun-2017 00:19:30	F7324.D	19	1.0	TU044-MW-15-060617	SV
280-98125-A-23-A	280-0059949-020	Client	21-Jun-2017 00:46:30	F7325.D	20	1.0	TU044-MW-23R-060617	SV
280-98125-A-24-A	280-0059949-021	Client	21-Jun-2017 01:11:30	F7326.D	21	1.0	TU044-MW-23D-060617	SV
280-98125-A-25-A	280-0059949-022	Client	21-Jun-2017 01:37:30	F7327.D	22	1.0	TU044-MW-6-060617	SV
280-98125-B-26-A	280-0059949-023	Client	21-Jun-2017 02:03:30	F7328.D	23	1.0	TU044-MW-10-060617	SV
280-98125-B-27-A	280-0059949-024	Client	21-Jun-2017 02:28:30	F7329.D	24	1.0	TU044-MW-5-060617	SV
280-98125-A-28-A	280-0059949-025	Client	21-Jun-2017 02:54:30	F7330.D	25	1.0	TU044-FD-MW-6-060617	SV
280-98125-A-29-A	280-0059949-026	Client	21-Jun-2017 03:20:30	F7331.D	26	1.0	TU044-MW-17-060617	SV
CCVC	280-0059949-027	CCVC	21-Jun-2017 03:46:30	F7332.D	27	1.0		SV

TUNE: 16:43
CHROM WL: 539949
LIMS BATCH: 378055

METHOD(s): 8270D_3Dm_1005
SOLVENT LOT: 157164
PIPETTE ID(s): S1-15

DAILY MAINTENANCE INCLUDED:

- ☐ REPLACED SEPTA
- ☐ REPLACED LINER
- ☐ REPLACED GOLD SEAL
- ☐ REPLACED FERRULE
- ☐ CLIPPED COLUMN

MW 6-21-17

MW 6-21-17

Phuvia 06/21/2017

TestAmerica-Denver

TestAmerica

GC/MS Semivolatile Initial Calibration Data Review Checklist

051117

LIMS Batch Number: 373158	Worklist: 58577	ICIS/ICIV Line # 2/10	2nd Day ICV Line # NA	Instrument ID: F
Analyst/1st Reviewer: KW Date: 05/12/17	Method (circle): 625 (8270C) (8270D)		Circle: Full Scan (SIM) BP LLSIM	
QC Type (circle): (Standard) DoD Q4 DoD Q5 QAPP_____ Other_____				

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
A. Tune/Calibration Verification					
1. Did DFTPP meet tune criteria? If SIM, did the BFTBA Tune check meet ion ratio criteria?	✓			✓	
2. Are the Benzidine and PCP tailing ≤ 2? (8270D/DoD) Benzidine tailing ≤3 and PCP tailing ≤5? (8270C)	✓			✓	
3. Is the DDT degradation ≤ 20% .	✓			✓	
4. Were all standards injected within 12 hr of DFTPP? (or 24 hrs for 625)?	✓			✓	
5. Were ≥ 5 levels of each compound and surrogate analyzed?	✓			✓	
6. At least 6 consecutive points used for quadratic curves?			✓	NA	
7. Was low level standard at or below RL?	✓			✓	
8. If calibration points removed, were reasons for removal documented? Did sufficient calibration points remain? (removal from middle of curve not allowed)			✓	NA	(e.g.; some points <RL removed)
9. Does the low level standard have enough sensitivity to produce at least 5-10 scans across the peak, and all secondary ions are present?	✓			✓	
10. Do the average RFs meet minimum RF requirements? (625 – not method defined) (8270C-SPCCs ≥0.05) (8270D- all cmpds have min RFs defined in method/SOP)	✓			✓	
11. Did the calibration %RSD meet method requirements? (625: ≤35% all cmpds) (8270C: ≤30% for CCCs & ≤15% for all other cmpds/surrogates) (8270D: ≤20% for all cmpds/surrogates)	✓			✓	
12. Was a linear or quadratic regression fit used for analytes that exceeded the %RSD requirements?			✓	NA	
13. If regression fit used, r^2 ≥0.990?			✓	NA	
14. Does the low point of a linear regression fit meet the ±30% read-back criteria? (8270D)	✓			✓	
15. For quadratic – evaluate curve fitting errors: Does each point fall within criteria when 'read-back' against the curve? (TA requirement – CA-Q-S-005; recommended limits ±30% low point & ±20% all other points) (Chrom Report - Details of Calibration per Analyte)			✓	NA	
16. Is the concentration intercept <|RL| for each cmpd? ("X" intercept in Chrom)	✓			✓	
17. Were manual integrations performed correctly and properly documented (Dated, Initialed and reason given) for all calibration points? 2nd review of all hits required	✓			✓	
18. Was the high point checked for detector saturation?	✓			✓	
19. Do the relative retention times for each analyte in each standard agree within +/-0.06 units (abs RT +/-0.5 min)	✓			✓	
20. Benzo(b & k)fluoranthene: height of the valley between must be less than 50% of the average of the two peak heights?	✓			✓	

Phuvinha
06/19/2017

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
20. Elution order checked isomeric pairs and coeluters?					Chrom: View/Documents/Methods/Isomers)
• aniline / bis(2-chloroethyl)ether			—	MA	
• N-nitrosodiphenylamine/diphenylamine			—		
• 1,3- , 1,4- , 1,2-dichlorobenzene			—		
• benzyl alcohol / 2-methylphenol / 3/4-methylphenol			—		
• 2,4-dimethylphenol / 3,5-dimethylphenol			—		
• 2 & 1 - methylnaphthalene	—				
• 2,4,6- and 2,4,5-trichlorophenol			—	MA	
• phenanthrene / anthracene	—				
• fluoranthene / pyrene	—				
• benzo(a)anthracene / chrysene	—				
• bis(2-ethylhexyl)/di-n-octyl phthalate	—		—		
• benzo(b)fluoranthene / benzo(k)fluoranthene	—				
• indeno(1,2,3-cd)pyrene / benzo(g,h,i)perylene	—				
• safrole/1-chloronaphthalene			—	MA	
• 1-/2-naphthylamine			—		
• 1- and 2-chloronaphthalene			—		
• 2,4,6- and 2,4,5-tribromophenol			—		
• Benzo(e)pyrene / benzo(a)pyrene	—				
21. Was the ICV within required criteria? 625 = QCS method defined/Table8 8270C = ±35% or ±55% of expected for poor performers; 8270D = ±20% poor performers <50% DOD = ±20% QAPP/Other	—			—	
22. If any criteria from items above were not met, was NCM generated?			—	NA	NCM #:
23. Were manual integrations for ICV performed correctly and properly documented? (dated, initialed and reason given; 2nd review of all MIs required)	—			—	
24. Are all files and QC linked and processed correctly?	—			—	☐ Files linked properly to calibration levels? ☐ All points are in the most recent active calibration event? [Calibration Events – 'Fix ICAL linkage' if needed] ☐ Runs linked to DFTPP? [QC links] ☐ Checklist & run log scanned, attached & assigned properly?
25. Is the ICAL locked in TALS and Chrom?	—			—	

Comments: KRV 05/15/17

2nd Reviewer: Alex Hoffer Review Date: 05/15/17

Phenthyn 06/19/2017

Test America Laboratories
Worklist Run Log Report

Worklist Name: 0511117 Worklist Num: 585777
Instrument: SMS_F Method: SW8F_8270SIMX
Batch Directory: \\Chrom\A\Denver\ChromData\SMS_F\20170511-585777.b
Analysis Type: Semi VOA Creator: Vasquez, Karla G
Inj Volume: 1.00 Inj Vol Units: ul
Run Reagents:
MS-SM IS_00029, Amount Added: 20.00, Units: uL

Lab ID	Worklist ID	Sample Type	Cal Lvl	Inj Date/Time	File Name	Vial	Dil Factor	Client ID	Prep
DFTPP	280-0585577-001	DFTPP	0	11-May-2017 12:39:30	F0543.D	1	1.0		SV
ICIS STD0500	280-0585577-002	ICIS	4	11-May-2017 12:58:30	F0544.D	2	1.0		SV
STD0020	280-0585577-003	IC	1	11-May-2017 13:34:30	F0545.D	3	1.0		SV
STD0100	280-0585577-004	IC	2	11-May-2017 13:53:30	F0546.D	4	1.0		SV
STD0500	280-0585577-005	IC	3	11-May-2017 14:25:30	F0547.D	5	1.0		SV
STD1000	280-0585577-006	IC	5	11-May-2017 14:58:30	F0548.D	6	1.0		SV
STD2500	280-0585577-007	IC	6	11-May-2017 15:15:30	F0549.D	7	1.0		SV
STD5000	280-0585577-008	IC	7	11-May-2017 15:42:30	F0550.D	8	1.0		SV
STD10000	280-0585577-009	IC	8	11-May-2017 16:07:30	F0551.D	9	1.0		SV
ICV	280-0585577-010	ICV	0	11-May-2017 16:33:30	F0552.D	10	1.0		SV
MB 280-371650/1-A	280-0585577-011	MB	0	11-May-2017 16:58:30	F0553.D	11	1.0		SV
LCS 280-371650/2-A	280-0585577-012	LCS	0	11-May-2017 17:24:30	F0554.D	12	1.0		SV
LCSD 280-371650/3-A	280-0585577-013	LCSD	0	11-May-2017 17:50:30	F0555.D	13	1.0		SV
280-99349-N-1-A	280-0585577-014	Client	0	11-May-2017 18:16:30	F0556.D	14	1.0	FWGmw-010-042517-GW	SV
280-99349-N-2-A	280-0585577-015	Client	0	11-May-2017 18:41:30	F0557.D	15	1.0	FWGmw-012-042517-GW	SV
280-99349-M-8-A	280-0585577-016	Client	0	11-May-2017 19:07:30	F0558.D	16	1.0	LL1mw-006-042617-GW	SV
280-99349-J-17-A	280-0585577-017	Client	0	11-May-2017 19:33:30	F0559.D	17	1.0	DET-003-042417-GW	SV
280-99349-J-18-A	280-0585577-018	Client	0	11-May-2017 19:58:30	F0560.D	18	1.0	DET-600-042417-GW	SV
CCVC	280-0585577-019	CCVC	0	11-May-2017 20:24:30	F0561.D	19	1.0		SV

TUNE: 1239-2024
CHROM WL: 585577
LIMS BATCH: 373158

METHOD(s): 8270SIM
SOLVENT LOT: 151164
PIPETTE ID(s): SV-5

DAILY MAINTENANCE INCLUDED:

- ☐ REPLACED SEPTA
- ☒ REPLACED LINER
- ☐ REPLACED GOLD SEAL
- ☐ REPLACED FERRULE
- ☐ CLIPPED COLUMN

Phuriya
06/9/2017

TestAmerica Denver

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

GC/MS Semivolatile Initial Calibration Data Review Checklist

05/11/17

LIMS Batch Number: 373158	Worklist: 58577	ICIS/ICIV Line#: 2 (ICIS)	2nd Day ICIS/ICIV Line#: N/A	Instrument ID: F
Analyst/2nd Reviewer: KW Date: 05/24/17	Method (circle): 625 8270C 8270D		Circle: FullScan SIM BP LLSIM
QC Type (circle): Standard DoD Q4 DoD Q5 QAPP _____ Other _____			

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
A. Tune/Calibration Validation					
1. Did DFTPP meet tune criteria? If SIM, did the BFB/BA Tune check meet ion ratio criteria?	✓			✓	
2. Are the Benzidine and PCP tailing ≤ 2? (8270D/DoD) Benzidine tailing ≤3 and PCP tailing ≤5? (8270C)	✓			✓	
3. Is the DDT degradation ≤ 20% .	✓			✓	
4. Were all standards injected within 12 hr of DFTPP? (or 24 hrs for 625)?	✓			✓	
5. Were ≥ 5 levels of each compound and surrogate analyzed?	✓			✓	
6. At least 6 consecutive points used for quadratic curves?			✓	NA	
7. Was low level standard at or below RL?	✓			✓	
8. If calibration points removed, were reasons for removal documented? Did sufficient calibration points remain? (removal from middle of curve not allowed)			✓	NA	(e.g.; some points <RL removed)
9. Does the low level standard have enough sensitivity to produce at least 5-10 scans across the peak, and all secondary ions are present?	✓			✓	
10. Do the average RFs meet minimum RF requirements? (625 = not method defined) (8270C=SPCCs ≥0.05) (8270D= all cmpds have min RFs defined in method/SOP)	✓			✓	
10. Did the calibration %RSD meet method requirements? (625: ≤35% all cmpds) (8270C: ≤30% for CCCs & ≤15% for all other cmpds/surrogates) (8270D: ≤20% for all cmpds/surrogates)	✓			✓	
11. Was a linear or quadratic regression fit used for analytes that exceeded the %RSD requirements?			✓	NA	
12. If regression fit used, r^2 ≥0.990?				✓	
13. Does the low point of a linear regression fit meet the ±30% read-back criteria? (8270D)	✓			✓	
14. For quadratic - evaluate curve fitting errors: Does each point fall within criteria when 'read back' against the curve? (EPA requirement - CCs ≤ 0.5000; recommended limits: ±30% low point & ±20% all other points) (Chrom Reports - Details of Calibration per Analyte)			✓	NA	
15. Is the concentration intercept <|RL| for each cmpd? (RT Intercept in Chrom)	✓			✓	
16. Were manual integrations performed correctly and properly documented (dated, initialed and reason given)) for all calibration points? 2nd review of all MIs required	✓			✓	
17. Was the high point checked for detector saturation?	✓			✓	
18. Do the relative retention times for each analyte in each standard fall within +/- 0.06 units absRT +/- 0.05 min)	✓			✓	
19. Benzo(b) & (k) fluoranthene: Height of the valley between these two peaks ≤ 50% of the average of the two peak heights?	✓			✓	

Phenthy
w/ retain

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
20. Elution order checked isomeric pairs and coeluters?					Chrom: View/Documents/Methods/Isomers)
• aniline / bis(2-chloroethyl)ether			—	MM	
• N-nitrosodiphenylamine/diphenylamine			—		
• 1,3- , 1,4- , 1,2-dichlorobenzene			—		
• benzyl alcohol / 2-methylphenol / 3/4-methylphenol			—		
• 2,4-dimethylphenol / 3,5-dimethylphenol			—		
• 2 & 1 - methylnaphthalene	—			—	
• 2,4,6- and 2,4,5-trichlorophenol			—	MM	
• phenanthrene / anthracene	—			—	
• fluoranthene / pyrene	—			—	
• benzo(a)anthracene / chrysene	—			—	
• bis(2-ethylhexyl)/di-n-octyl phthalate	—			—	
• benzo(b)fluoranthene / benzo(k)fluoranthene	—			—	
• indeno(1,2,3-cd)pyrene / benzo(g,h,i)perylene	—			—	
• safrole/1-chloronaphthalene			—	MM	
• 1-/2-naphthylamine			—		
• 1- and 2-chloronaphthalene			—		
• 2,4,6- and 2,4,5-tribromophenol			—		
• Benzo(e)pyrene / benzo(a)pyrene	—			—	
21. Was the ICV within required criteria? 625 = QCS method defined/Table6 8270C = ±30% or ±55% of expected for poor performers; 8270D = ±20% poor performers <30% 680 = ±20% QAPP/Other	—			—	
22. If any criteria from items above were not met, was NCM generated?			—	NA	NCM #:
23. Were manual integrations for ICV performed correctly and properly documented? (dated, initialed and reason given; 2nd review of all MIs required)	—			—	
24. Are all files and QC linked and processed correctly?	—			—	☐ Files linked properly to calibration levels? ☐ All points are in the most recent active calibration event? [Calibration Events→'Fix ICAL linkage' if needed] ☐ Runs linked to DFTPP? [QC links] ☐ Checklist & run log scanned, attached & assigned properly?
25. Is the ICAL locked in TALS and Chrom?	—			—	

Comments:

KPN 05/15/17

2nd Reviewer: Alex Hartler Review Date: 05/15/17

Pharma 05/11/2017

Test Name: Lab Level Studies
Worklist Run Log Report

Worklist Name: 0511117 Worklist Num: 585777
Instrument: SIMS_F Method: SIMS_F_827QSIM.M
Batch Directory: \\Chrom\MA\Data\Chrom\Data\SIMS_F\2017\05\11\585777.b
Analysis Type: SemiVOA Creator: Vasquez, Karla G
Inj Volume: 1.00 Inj Vol Units: ul
Run Reagents:
MS-SIMS_00029, Amount Added: 20.00, Units: ul

Lab ID	Worklist ID	Sample Type	Cal Lvl	Inj Date/Time	File Name	Vial	Dil Factor	Client ID	Fract Prec
DFTPP	280-0585577-001	DFTPP	0	11-May-2017 12:39:30	F0545.D	1	1.0		SV
ICIS STD0500	280-0585577-002	ICIS	4	11-May-2017 12:58:30	F0544.D	2	1.0		SV
STD0020	280-0585577-003	IC	1	11-May-2017 13:34:30	F0545.D	3	1.0		SV
STD0100	280-0585577-004	IC	2	11-May-2017 13:53:30	F0546.D	4	1.0		SV
STD0300	280-0585577-005	IC	3	11-May-2017 14:29:30	F0547.D	5	1.0		SV
STD1200	280-0585577-006	IC	5	11-May-2017 14:50:30	F0548.D	6	1.0		SV
STD2500	280-0585577-007	IC	6	11-May-2017 15:15:30	F0549.D	7	1.0		SV
STD5000	280-0585577-008	IC	7	11-May-2017 15:42:30	F0550.D	8	1.0		SV
STD10000	280-0585577-009	IC	8	11-May-2017 16:07:30	F0551.D	9	1.0		SV
ICV	280-0585577-010	ICV	0	11-May-2017 16:33:30	F0552.D	10	1.0		SV
MB 280-371650/1-A	280-0585577-011	MB	0	11-May-2017 16:50:30	F0553.D	11	1.0		SV
LCS 280-371650/2-A	280-0585577-012	LCS	0	11-May-2017 17:24:30	F0554.D	12	1.0		SV
LCSD 280-371650/3-A	280-0585577-013	LCSD	0	11-May-2017 17:50:30	F0555.D	13	1.0		SV
280-96349-N-1-A	280-0585577-014	Client	0	11-May-2017 18:16:30	F0556.D	14	1.0	FWSmw-010-042517-SW	SV
280-96349-N-2-A	280-0585577-015	Client	0	11-May-2017 18:41:30	F0557.D	15	1.0	FWSmw-020-042517-SW	SV
280-96349-M-3-A	280-0585577-016	Client	0	11-May-2017 19:07:30	F0558.D	16	1.0	LL1mw-060-042517-SW	SV
280-96349-L-17-A	280-0585577-017	Client	0	11-May-2017 19:33:30	F0559.D	17	1.0	DET-009-042417-SW	SV
280-96349-L-18-A	280-0585577-018	Client	0	11-May-2017 19:58:30	F0560.D	18	1.0	DET-008-042417-SW	SV
CCVC	280-0585577-019	CCVC	0	11-May-2017 20:24:30	F0561.D	19	1.0		SV

TUNE: 1239-2024
CHROM WL: 68811
LIMS BATCH: 371650

Phenol
outliers

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Batch Number: 376824 Batch Start Date: 06/11/17 07:19 Batch Analyst: Wisniewski, Jared D

Batch Method: 3546 Batch End Date: 06/14/17 12:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8270 SIM Surr 00070	8270BO-SIMLCS 00022		
MB 280-376824/1		3546, 8270D SIM		30.4 g	1 mL	1 mL			
LCS 280-376824/2		3546, 8270D SIM		31.9 g	1 mL	1 mL	1 mL		
280-97928-C-1	SS025-SS07	3546, 8270D SIM	T	31.0 g	1 mL	1 mL			
280-97928-C-1 MS	SS025-SS07	3546, 8270D SIM	T	30.6 g	1 mL	1 mL	1 mL		
280-97928-C-1 MSD	SS025-SS07	3546, 8270D SIM	T	31.2 g	1 mL	1 mL	1 mL		
280-97928-C-3	SS025-SB06(0-2)	3546, 8270D SIM	T	30.6 g	1 mL	1 mL			
280-97928-B-4	SS025-SB06(2-4)	3546, 8270D SIM	T	31.6 g	1 mL	1 mL			
280-97928-C-5	SS025-SS08	3546, 8270D SIM	T	30.0 g	1 mL	1 mL			
280-97928-C-6	SS025-SB07(0-2)	3546, 8270D SIM	T	30.8 g	1 mL	1 mL			
280-97928-C-7	SS025-SB07(2-4)	3546, 8270D SIM	T	31.4 g	1 mL	1 mL			
280-97928-C-8	SS025-SB01(0-2)	3546, 8270D SIM	T	32.8 g	1 mL	1 mL			
280-97928-B-9	SS025-SB01(0-2) -a	3546, 8270D SIM	T	32.0 g	1 mL	1 mL			
280-97928-A-10	SS025-SB08(0-2)	3546, 8270D SIM	T	32.4 g	1 mL	1 mL			
280-97928-A-11	SS025-SB08(2-4)	3546, 8270D SIM	T	30.3 g	1 mL	1 mL			
280-97928-B-12	SS025-SS09	3546, 8270D SIM	T	32.2 g	1 mL	1 mL			
280-97928-C-14	SS025-SB09(0-2)	3546, 8270D SIM	T	31.7 g	1 mL	1 mL			
280-97928-A-15	SS025-SB09(2-4)	3546, 8270D SIM	T	30.3 g	1 mL	1 mL			
280-97928-B-16	SS025-SB09(4-6)	3546, 8270D SIM	T	30.1 g	1 mL	1 mL			
280-97928-C-17	SS025-SB09(6-8)	3546, 8270D SIM	T	31.7 g	1 mL	1 mL			
280-97928-A-18	SS025-SB10(0-2)	3546, 8270D SIM	T	32.6 g	1 mL	1 mL			
280-97928-C-19	SS025-SB10(2-4)	3546, 8270D SIM	T	31.7 g	1 mL	1 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Batch Number: 376824 Batch Start Date: 06/11/17 07:19 Batch Analyst: Wisniewski, Jared D

Batch Method: 3546 Batch End Date: 06/14/17 12:15

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8270 SIM Surr 00070	8270BO-SIMLCS 00022		
280-97928-B-20	SS025-SB10(4-6)	3546, 8270D SIM	T	31.8 g	1 mL	1 mL			
280-97928-B-21	SS025-SB10(2-4) -a	3546, 8270D SIM	T	30.5 g	1 mL	1 mL			
280-97928-B-22	SS025-SS10	3546, 8270D SIM	T	31.3 g	1 mL	1 mL			

Batch Notes	
Balance ID	24750402
Analyst ID - Concentration	JDW
Final Concentrator Volume	1 mL
MeCL2 ID	see above
MeCl2 / Acetone ID	see above
Microwave Oven ID	MARS
Microwave Start Time	06/11/17 0730
Microwave Stop Time	06/11/17 0800
Na2SO4 ID	0000150871_00002
Ottawa Sand ID	170485
Pipette ID	L
Person's name who did the prep	JDW
Solvent Lot #	MeCl2_Cycl_00340/341/1:1AceMeCl2_00065
Solvent Name	1:1AceMeCl2/MeCl2
SOP Number	DV-OP-0015/0007
Analyst ID - Spike Analyst	JDW
Analyst ID - Spike Witness Analyst	reviewer:MAVJr
Water Bath ID	B
Water Bath Temperature	89 OBS @ 88

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Batch Number: 376856 Batch Start Date: 06/12/17 15:16 Batch Analyst: Carroll, Randall P

Batch Method: 3510C Batch End Date: 06/16/17 13:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	ReceivedpH	GrossWeight	TareWeight	InitialAmount	FinalAmount	8270 SIM Surr 00068
MB 280-376856/1		3510C, 8270D SIM		7			1000 mL	1 mL	1 mL
LCS 280-376856/2		3510C, 8270D SIM		7			1000 mL	1 mL	1 mL
LCSD 280-376856/3		3510C, 8270D SIM		7			1000 mL	1 mL	1 mL
280-97928-B-13	SS025-AB-060517	3510C, 8270D SIM	T	5	1555.2 g	504.5 g	1050.7 mL	1 mL	1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	8270BO-SIMLCS 00022					
MB 280-376856/1		3510C, 8270D SIM							
LCS 280-376856/2		3510C, 8270D SIM		1 mL					
LCSD 280-376856/3		3510C, 8270D SIM		1 mL					
280-97928-B-13	SS025-AB-060517	3510C, 8270D SIM	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Batch Number: 376856 Batch Start Date: 06/12/17 15:16 Batch Analyst: Carroll, Randall P

Batch Method: 3510C Batch End Date: 06/16/17 13:40

Batch Notes	
Balance ID	24750399
Batch Comment	DV-OP-0006/0007 H2O: S. Elga
Analyst ID - Concentration	cdc
Final Concentrator Volume	1 mL
Na2SO4 ID	0000158371_00001
NaCl ID	167538
Oven, Bath or Block Temperature 1	A/B@84C
Pipette ID	O
Prep Solvent ID	MeCl2_Cycl_00340/341
Prep Solvent Name	MeCl2
Prep Solvent Volume Used	180 mL
Person's name who did the prep	RC (Trainee) / KI (Trainer)
Analyst ID - Reagent Drop Witness	Reviewer: DB
Sufficient volume for MS/MSD?	no
Uncorrected Temperature	85C Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8081B_DOD5

Organochlorine Pesticides (GC)

FORM II
PESTICIDES SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	TCX1 #	TCX2 #	DCBP1 #	DCBP2 #
SS025-SS07	280-97928-1	81			79
SS025-SB06(0-2)	280-97928-3	64		69	
SS025-SB06(2-4)	280-97928-4	71		76	
SS025-SS08	280-97928-5	83		71	
SS025-SB07(0-2)	280-97928-6	81		75	
SS025-SB07(2-4)	280-97928-7		67		64
SS025-SB01(0-2)	280-97928-8	45		0 Q	
SS025-SB01(0-2) DL	280-97928-8 DL	69 D		0 D Q	
SS025-SB01(0-2)-a	280-97928-9	59		697 Q	
SS025-SB08(0-2)	280-97928-10	84		85	
SS025-SB08(2-4)	280-97928-11	64		64	
SS025-SS09	280-97928-12	50		97	
SS025-SB09(0-2)	280-97928-14		77		77
SS025-SB09(0-2) DL	280-97928-14 DL	81 D		94 D	
SS025-SB09(2-4)	280-97928-15	51			74
SS025-SB09(4-6)	280-97928-16	56		68	
SS025-SB09(6-8)	280-97928-17	62			66
SS025-SB10(0-2)	280-97928-18	78		72	
SS025-SB10(2-4)	280-97928-19	80		79	
SS025-SB10(4-6)	280-97928-20	69		68	
SS025-SB10(2-4)-a	280-97928-21	79		75	
SS025-SS10	280-97928-22	65		65	
	MB 280-377615/1-A	85		87	
	LCS 280-377615/2-A	85		86	
	LCS 280-377615/3-A	85		83	
SS025-SB06(0-2) MS	280-97928-3 MS	22 Q		24 Q	
SS025-SB06(0-2) MS	280-97928-3 MS	79		82	
SS025-SB06(0-2) MSD	280-97928-3 MSD	78		72	
SS025-SB06(0-2) MSD	280-97928-3 MSD	69		89	

	QC LIMITS
TCX = Tetrachloro-m-xylene (Surr)	42-129
DCBP = DCB Decachlorobiphenyl (Surr)	63-121

Column to be used to flag recovery values

FORM II 8081B

FORM III
PESTICIDES LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06250014.D

Lab ID: LCS 280-377615/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
4,4'-DDD	16.3	13.9	85	56-139	
4,4'-DDE	16.3	14.3	87	56-134	
4,4'-DDT	16.3	14.8	91	50-141	
Aldrin	16.3	13.5	82	45-136	
alpha-BHC	16.3	14.1	86	45-137	
alpha-Chlordane	16.3	14.2	87	54-133	
beta-BHC	16.3	13.8	84	50-136	
delta-BHC	16.3	14.0	86	47-139	
Dieldrin	16.3	14.7	90	56-136	
Endosulfan I	16.3	14.0	86	53-132	
Endosulfan II	16.3	13.6	83	53-134	
Endosulfan sulfate	16.3	13.6	83	55-136	
Endrin	16.3	15.9	97	57-140	
Endrin aldehyde	16.3	13.0	79	35-137	
gamma-BHC (Lindane)	16.3	14.1	87	49-135	
gamma-Chlordane	16.3	14.3	87	53-135	
Heptachlor	16.3	15.1	92	47-136	
Heptachlor epoxide	16.3	14.3	88	52-136	
Methoxychlor	16.3	14.3	87	52-143	

Column to be used to flag recovery and RPD values

FORM III 8081B

FORM III
PESTICIDES LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06250015.D

Lab ID: LCS 280-377615/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Toxaphene	63.7	60.3 J	95	33-141	

Column to be used to flag recovery and RPD values

FORM III 8081B

FORM III
PESTICIDES MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06250018.D

Lab ID: 280-97928-3 MS Client ID: SS025-SB06(0-2) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
4,4'-DDD	16.9	1.8 U	2.86	17	56-139	Q J
4,4'-DDE	16.9	0.43 J	3.14	16	56-134	Q J
4,4'-DDT	16.9	1.8 U	3.37	20	50-141	Q J
Aldrin	16.9	0.71 U	3.10	18	45-136	Q J
alpha-BHC	16.9	0.71 U	3.36	20	45-137	Q J
alpha-Chlordane	16.9	0.71 U	3.08	18	54-133	Q J
beta-BHC	16.9	1.8 U	3.42	20	50-136	Q J
delta-BHC	16.9	1.1 U	3.22	19	47-139	Q J
Dieldrin	16.9	0.71 U	3.25	19	56-136	Q J
Endosulfan I	16.9	0.71 U	2.97	18	53-132	Q J
Endosulfan II	16.9	0.71 U	2.91	17	53-134	Q J
Endosulfan sulfate	16.9	0.71 U	3.08	18	55-136	Q J
Endrin	16.9	0.71 U	3.54	21	57-140	Q J
Endrin aldehyde	16.9	0.71 U	2.64	16	35-137	Q J
gamma-BHC (Lindane)	16.9	1.1 U	3.36	20	49-135	Q J
gamma-Chlordane	16.9	0.71 U	3.04	18	53-135	Q J
Heptachlor	16.9	0.71 U	3.45	20	47-136	Q J
Heptachlor epoxide	16.9	1.1 U	3.26	19	52-136	Q J
Methoxychlor	16.9	1.1 U	3.33	20	52-143	Q J

Column to be used to flag recovery and RPD values

FORM III 8081B

FORM III
PESTICIDES MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06250020.D

Lab ID: 280-97928-3 MS Client ID: SS025-SB06(0-2) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Toxaphene	69.9	35 U	70.8 J	101	33-141	

Column to be used to flag recovery and RPD values

FORM III 8081B

FORM III
PESTICIDES MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06250019.D

Lab ID: 280-97928-3 MSD Client ID: SS025-SB06(0-2) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
4,4'-DDD	17.2	12.3	72	125	30	56-139	J
4,4'-DDE	17.2	12.4	69	119	30	56-134	J
4,4'-DDT	17.2	14.3	83	124	30	50-141	J
Aldrin	17.2	12.0	70	118	30	45-136	J
alpha-BHC	17.2	13.2	77	119	30	45-137	J
alpha-Chlordane	17.2	12.2	71	120	30	54-133	J
beta-BHC	17.2	12.4	72	113	30	50-136	J
delta-BHC	17.2	13.0	76	121	30	47-139	J
Dieldrin	17.2	13.0	76	120	30	56-136	J
Endosulfan I	17.2	12.2	71	121	30	53-132	J
Endosulfan II	17.2	11.9	69	121	30	53-134	J
Endosulfan sulfate	17.2	12.5	73	121	30	55-136	J
Endrin	17.2	14.5	84	121	30	57-140	J
Endrin aldehyde	17.2	10.3	60	119	30	35-137	J
gamma-BHC (Lindane)	17.2	13.0	76	118	30	49-135	J
gamma-Chlordane	17.2	10.6	61	111	30	53-135	J
Heptachlor	17.2	14.2	82	122	30	47-136	J
Heptachlor epoxide	17.2	12.9	75	119	30	52-136	J
Methoxychlor	17.2	13.9	81	123	30	52-143	J

Column to be used to flag recovery and RPD values

FORM III 8081B

FORM III
PESTICIDES MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06250021.D

Lab ID: 280-97928-3 MSD Client ID: SS025-SB06(0-2) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Toxaphene	70.3	59.5 J	85	17	30	33-141	

Column to be used to flag recovery and RPD values

FORM III 8081B

FORM IV
PESTICIDES METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: MB 280-377615/1-A

Matrix: Solid Date Extracted: 06/16/2017 13:00

Lab File ID:(1) 06250013.D Lab File ID:(2) 06250013.D

Date Analyzed:(1) 06/25/2017 15:58 Date Analyzed:(2) 06/25/2017 15:58

Instrument ID:(1) SGC_P1 Instrument ID:(2) SGC_P1

GC Column:(1) CLP1 ID: 0.32(mm) GC Column:(2) CLP2 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-377615/2-A	06/25/2017 16:15	06/25/2017 16:15
	LCS 280-377615/3-A	06/25/2017 16:32	06/25/2017 16:32
SS025-SS07	280-97928-1	06/25/2017 16:49	06/25/2017 16:49
SS025-SB06(0-2)	280-97928-3	06/25/2017 17:06	06/25/2017 17:06
SS025-SB06(0-2) MS	280-97928-3 MS	06/25/2017 17:23	06/25/2017 17:23
SS025-SB06(0-2) MSD	280-97928-3 MSD	06/25/2017 17:39	06/25/2017 17:39
SS025-SB06(0-2) MS	280-97928-3 MS	06/25/2017 17:56	06/25/2017 17:56
SS025-SB06(0-2) MSD	280-97928-3 MSD	06/25/2017 18:13	06/25/2017 18:13
SS025-SB06(2-4)	280-97928-4	06/25/2017 18:30	06/25/2017 18:30
SS025-SS08	280-97928-5	06/25/2017 18:47	06/25/2017 18:47
SS025-SB07(0-2)	280-97928-6	06/25/2017 19:04	06/25/2017 19:04
SS025-SB07(2-4)	280-97928-7	06/25/2017 19:21	06/25/2017 19:21
SS025-SB01(0-2) DL	280-97928-8 DL	06/25/2017 19:38	06/25/2017 19:38
SS025-SB08(0-2)	280-97928-10	06/25/2017 20:11	06/25/2017 20:11
SS025-SB08(2-4)	280-97928-11	06/25/2017 20:28	06/25/2017 20:28
SS025-SB09(0-2) DL	280-97928-14 DL	06/25/2017 22:09	06/25/2017 22:09
SS025-SB09(6-8)	280-97928-17	06/25/2017 23:00	06/25/2017 23:00
SS025-SB10(0-2)	280-97928-18	06/25/2017 23:17	06/25/2017 23:17
SS025-SB10(2-4)	280-97928-19	06/25/2017 23:34	06/25/2017 23:34
SS025-SB10(4-6)	280-97928-20	06/25/2017 23:51	06/25/2017 23:51
SS025-SB10(2-4)-a	280-97928-21	06/26/2017 00:07	06/26/2017 00:07
SS025-SS10	280-97928-22	06/26/2017 00:24	06/26/2017 00:24
SS025-SB01(0-2)	280-97928-8	06/26/2017 01:32	06/26/2017 01:32
SS025-SB01(0-2)-a	280-97928-9	06/26/2017 01:49	06/26/2017 01:49
SS025-SS09	280-97928-12	06/26/2017 02:05	06/26/2017 02:05
SS025-SB09(0-2)	280-97928-14	06/26/2017 02:22	06/26/2017 02:22
SS025-SB09(2-4)	280-97928-15	06/26/2017 02:39	06/26/2017 02:39
SS025-SB09(4-6)	280-97928-16	06/26/2017 02:56	06/26/2017 02:56

FORM VIII
PESTICIDES INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Sample No.: STD4 280-368670/26 Date Analyzed: 04/10/2017 17:56

Instrument ID: SGC_P1 GC Column: CLP1 ID: 0.32(mm)

Lab File ID (Standard): 04100026.D Heated Purge: (Y/N) N

Calibration ID: 28724

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1451506563	3.03				
UPPER LIMIT		2903013126	3.53				
LOWER LIMIT		725753282	2.53				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-368670/31		1449739244	3.03				
ICV 280-368670/33		1345529908	3.03				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8081B

FORM VIII
PESTICIDES INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Sample No.: STD4 280-368670/26 Date Analyzed: 04/10/2017 17:56

Instrument ID: SGC_P1 GC Column: CLP2 ID: 0.32(mm)

Lab File ID (Standard): 04100026.D Heated Purge: (Y/N) N

Calibration ID: 28725

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		339364371	2.84				
UPPER LIMIT		678728742	3.34				
LOWER LIMIT		169682186	2.34				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-368670/31		340722898	2.84				
ICV 280-368670/33		320310102	2.84				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8081B

FORM VIII
PESTICIDES INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Sample No.: CCVIS 280-378628/12 Date Analyzed: 06/25/2017 15:41

Instrument ID: SGC_P1 GC Column: CLP1 ID: 0.32(mm)

Lab File ID (Standard): 06250012.D Heated Purge: (Y/N) N

Calibration ID: 28724

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		2227253286	2.99				
UPPER LIMIT		4454506572	3.49				
LOWER LIMIT		1113626643	2.49				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 280-377615/1-A		2029843804	2.99				
LCS 280-377615/2-A		2145650755	2.99				
LCS 280-377615/3-A		2240875695	2.99				
280-97928-1	SS025-SS07	2163046524	2.99				
280-97928-3	SS025-SB06(0-2)	2261849870	2.99				
280-97928-3 MS	SS025-SB06(0-2) MS	2189655849	2.99				
280-97928-3 MSD	SS025-SB06(0-2) MSD	2245790879	2.99				
280-97928-3 MS	SS025-SB06(0-2) MS	2304680830	2.99				
280-97928-3 MSD	SS025-SB06(0-2) MSD	2015949228	2.99				
280-97928-4	SS025-SB06(2-4)	2203982458	2.99				
280-97928-5	SS025-SS08	2012233941	2.99				
280-97928-6	SS025-SB07(0-2)	2162553509	2.99				
280-97928-7	SS025-SB07(2-4)	1960905703	2.99				
280-97928-8 DL	SS025-SB01(0-2) DL	2092113475	2.99				
280-97928-10	SS025-SB08(0-2)	2073964054	2.99				
280-97928-11	SS025-SB08(2-4)	2557212227	2.99				
CCV 280-378628/30		2201180951	2.99				
CCV 280-378628/32		2213811263	2.99				
280-97928-14 DL	SS025-SB09(0-2) DL	2322458958	2.99				
280-97928-17	SS025-SB09(6-8)	2291461385	2.99				
280-97928-18	SS025-SB10(0-2)	2155293498	2.99				
280-97928-19	SS025-SB10(2-4)	2171982946	2.99				
280-97928-20	SS025-SB10(4-6)	2254117727	2.99				
280-97928-21	SS025-SB10(2-4)-a	2196455193	2.99				
280-97928-22	SS025-SS10	2292430476	2.99				
CCV 280-378628/44		2154774119	2.99				
CCV 280-378628/46		2312261485	2.99				
280-97928-8	SS025-SB01(0-2)	2322212038	2.99				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8081B

FORM VIII
PESTICIDES INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Sample No.: CCVIS 280-378628/12 Date Analyzed: 06/25/2017 15:41

Instrument ID: SGC_P1 GC Column: CLP1 ID: 0.32(mm)

Lab File ID (Standard): 06250012.D Heated Purge: (Y/N) N

Calibration ID: 28724

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		2227253286	2.99				
UPPER LIMIT		4454506572	3.49				
LOWER LIMIT		1113626643	2.49				
LAB SAMPLE ID	CLIENT SAMPLE ID						
280-97928-9	SS025-SB01(0-2)-a	2389303925	2.99				
280-97928-12	SS025-SS09	2854835357	2.99				
280-97928-14	SS025-SB09(0-2)	5290396856Q	2.98				
280-97928-15	SS025-SB09(2-4)	2672122871	2.99				
280-97928-16	SS025-SB09(4-6)	2685674072	2.99				
CCV 280-378628/53		2313392018	2.99				
CCV 280-378628/55		2010632727	2.99				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8081B

FORM VIII
PESTICIDES INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Sample No.: CCVIS 280-378628/12 Date Analyzed: 06/25/2017 15:41

Instrument ID: SGC_P1 GC Column: CLP2 ID: 0.32(mm)

Lab File ID (Standard): 06250012.D Heated Purge: (Y/N) N

Calibration ID: 28725

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		462713784	2.76				
UPPER LIMIT		925427568	3.26				
LOWER LIMIT		231356892	2.26				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 280-377615/1-A		427000912	2.76				
LCS 280-377615/2-A		446648838	2.76				
LCS 280-377615/3-A		460721081	2.76				
280-97928-1	SS025-SS07	436480586	2.76				
280-97928-3	SS025-SB06(0-2)	456111681	2.76				
280-97928-3 MS	SS025-SB06(0-2) MS	450109726	2.76				
280-97928-3 MSD	SS025-SB06(0-2) MSD	451783908	2.76				
280-97928-3 MS	SS025-SB06(0-2) MS	430962939	2.76				
280-97928-3 MSD	SS025-SB06(0-2) MSD	406443194	2.76				
280-97928-4	SS025-SB06(2-4)	455047404	2.76				
280-97928-5	SS025-SS08	415564424	2.76				
280-97928-6	SS025-SB07(0-2)	437437325	2.76				
280-97928-7	SS025-SB07(2-4)	407563690	2.76				
280-97928-8 DL	SS025-SB01(0-2) DL	436869006	2.76				
280-97928-10	SS025-SB08(0-2)	426009330	2.76				
280-97928-11	SS025-SB08(2-4)	424738670	2.76				
CCV 280-378628/30		454410780	2.76				
CCV 280-378628/32		456602458	2.76				
280-97928-14 DL	SS025-SB09(0-2) DL	460878830	2.76				
280-97928-17	SS025-SB09(6-8)	453303986	2.76				
280-97928-18	SS025-SB10(0-2)	449974430	2.76				
280-97928-19	SS025-SB10(2-4)	453030083	2.76				
280-97928-20	SS025-SB10(4-6)	469341653	2.76				
280-97928-21	SS025-SB10(2-4)-a	460293119	2.76				
280-97928-22	SS025-SS10	477704794	2.76				
CCV 280-378628/44		453526991	2.76				
CCV 280-378628/46		484943095	2.76				
280-97928-8	SS025-SB01(0-2)	468830989	2.76				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8081B

FORM VIII
PESTICIDES INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Sample No.: CCVIS 280-378628/12 Date Analyzed: 06/25/2017 15:41

Instrument ID: SGC_P1 GC Column: CLP2 ID: 0.32(mm)

Lab File ID (Standard): 06250012.D Heated Purge: (Y/N) N

Calibration ID: 28725

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		462713784	2.76				
UPPER LIMIT		925427568	3.26				
LOWER LIMIT		231356892	2.26				
LAB SAMPLE ID	CLIENT SAMPLE ID						
280-97928-9	SS025-SB01(0-2)-a	469577988	2.76				
280-97928-12	SS025-SS09	478135097	2.76				
280-97928-14	SS025-SB09(0-2)	473890136	2.76				
280-97928-15	SS025-SB09(2-4)	470232619	2.76				
280-97928-16	SS025-SB09(4-6)	473927960	2.76				
CCV 280-378628/53		486663982	2.76				
CCV 280-378628/55		425461095	2.76				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8081B

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(0-2) Lab Sample ID: 280-97928-3

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/25/2017 17:06 Date Analyzed (2): 06/25/2017 17:06

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4,4'-DDE	1		6.45	6.44	6.46	0.43		18.6
	2		6.41	6.40	6.42	0.36		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(0-2) MS Lab Sample ID: 280-97928-3 MS

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/25/2017 17:23 Date Analyzed (2): 06/25/2017 17:23

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
alpha-BHC	1		4.37	4.36	4.38	3.36		6.5
	2		4.24	4.23	4.25	3.59		
gamma-BHC (Lindane)	1		4.68	4.67	4.69	3.36		6.8
	2		4.57	4.56	4.58	3.59		
beta-BHC	1		4.76	4.75	4.77	3.42		4.8
	2		4.65	4.64	4.66	3.59		
delta-BHC	1		4.94	4.93	4.95	3.22		6.8
	2		4.92	4.91	4.93	3.45		
Heptachlor	1		5.14	5.13	5.15	3.45		4.3
	2		4.98	4.97	4.99	3.60		
Aldrin	1		5.43	5.42	5.44	3.10		10.6
	2		5.28	5.27	5.29	3.44		
Heptachlor epoxide	1		6.05	6.04	6.06	3.26		7.9
	2		5.83	5.82	5.84	3.53		
gamma-Chlordane	1		6.20	6.19	6.21	3.04		10.7
	2		6.03	6.02	6.04	3.38		
alpha-Chlordane	1		6.36	6.35	6.37	3.08		11.5
	2		6.20	6.19	6.21	3.45		
4,4'-DDE	1		6.45	6.44	6.46	3.14		13.3
	2		6.41	6.40	6.42	3.59		
Endosulfan I	1		6.53	6.52	6.54	2.97		6.7
	2		6.26	6.25	6.27	3.18		
Dieldrin	1		6.81	6.80	6.82	3.25		10.2
	2		6.60	6.59	6.61	3.60		
Endrin	1		7.08	7.07	7.09	3.54		14.6
	2		6.96	6.95	6.97	4.10		
4,4'-DDD	1		7.16	7.15	7.17	2.86		21.2
	2		7.11	7.10	7.12	3.53		
Endosulfan II	1		7.33	7.32	7.34	2.91		12.3
	2		7.20	7.19	7.21	3.30		
4,4'-DDT	1		7.47	7.46	7.48	3.37		15.0
	2		7.46	7.45	7.47	3.92		
Endrin aldehyde	1		7.78	7.78	7.80	2.64		16.9
	2		7.58	7.57	7.59	3.13		
Methoxychlor	1		7.98	7.97	7.99	3.33		22.7
	2		8.18	8.17	8.19	4.18		
Endosulfan sulfate	1		8.23	8.22	8.24	3.08		11.9
	2		7.87	7.86	7.88	3.47		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(0-2) MS Lab Sample ID: 280-97928-3 MS

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/25/2017 17:56 Date Analyzed (2): 06/25/2017 17:56

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Toxaphene	1	1	5.60	5.59	5.63	83.1	70.8	31.8
		2	6.94	6.91	6.95	110		
		3	7.19	7.17	7.21	61.8		
		4	7.69	7.67	7.71	46.9		
		5	8.13	8.12	8.16	52.0		
	2	2	7.15	7.14	7.18	31.0	51.4	
		3	7.30	7.28	7.32	35.2		
		4	7.59	7.57	7.61	49.1		
		5	8.11	8.09	8.13	90.2		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(0-2) MSD Lab Sample ID: 280-97928-3 MSD

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/25/2017 17:39 Date Analyzed (2): 06/25/2017 17:39

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
alpha-BHC	1		4.37	4.36	4.38	13.2		4.3
	2		4.24	4.23	4.25	13.8		
gamma-BHC (Lindane)	1		4.68	4.67	4.69	13.0		4.9
	2		4.57	4.56	4.58	13.6		
beta-BHC	1		4.76	4.75	4.77	12.4		4.1
	2		4.65	4.64	4.66	12.9		
delta-BHC	1		4.93	4.93	4.95	13.0		6.8
	2		4.92	4.91	4.93	12.2		
Heptachlor	1		5.14	5.13	5.15	14.2		3.6
	2		4.98	4.97	4.99	13.7		
Aldrin	1		5.43	5.42	5.44	12.0		9.9
	2		5.28	5.27	5.29	13.3		
Heptachlor epoxide	1		6.05	6.04	6.06	12.9		1.1
	2		5.83	5.82	5.84	13.1		
gamma-Chlordane	1		6.19	6.19	6.21	10.6		19.8
	2		6.03	6.02	6.04	12.9		
alpha-Chlordane	1		6.36	6.35	6.37	12.2		9.0
	2		6.20	6.19	6.21	13.4		
4,4'-DDE	1		6.45	6.44	6.46	12.4		13.1
	2		6.41	6.40	6.42	14.1		
Endosulfan I	1		6.53	6.52	6.54	12.2		2.3
	2		6.26	6.25	6.27	12.4		
Dieldrin	1		6.81	6.80	6.82	13.0		4.2
	2		6.60	6.59	6.61	13.6		
Endrin	1		7.08	7.07	7.09	14.5		6.2
	2		6.96	6.95	6.97	15.4		
4,4'-DDD	1		7.16	7.15	7.17	12.3		12.7
	2		7.11	7.10	7.12	14.0		
Endosulfan II	1		7.33	7.32	7.34	11.9		6.0
	2		7.20	7.19	7.21	12.6		
4,4'-DDT	1		7.47	7.46	7.48	14.3		6.6
	2		7.46	7.45	7.47	15.3		
Endrin aldehyde	1		7.78	7.78	7.80	10.3		2.4
	2		7.58	7.57	7.59	10.6		
Methoxychlor	1		7.98	7.97	7.99	13.9		5.8
	2		8.18	8.17	8.19	14.8		
Endosulfan sulfate	1		8.23	8.22	8.24	12.5		5.1
	2		7.87	7.86	7.88	13.1		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(0-2) MSD Lab Sample ID: 280-97928-3 MSD

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/25/2017 18:13 Date Analyzed (2): 06/25/2017 18:13

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Toxaphene	1	1	5.60	5.59	5.63	54.4	59.5	27.5
		2	6.93	6.91	6.95	80.2		
		3	7.19	7.17	7.21	58.6		
		4	7.69	7.67	7.71	49.0		
		5	8.14	8.12	8.16	55.4		
	2	2	7.15	7.14	7.18	26.6	45.1	
		3	7.30	7.28	7.32	35.5		
		4	7.59	7.57	7.61	39.2		
		5	8.12	8.09	8.13	79.1		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB01(0-2) Lab Sample ID: 280-97928-8

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/26/2017 01:32 Date Analyzed (2): 06/26/2017 01:32

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4,4'-DDE	1		6.45	6.44	6.46	15		14.0
	2		6.41	6.40	6.42	17		
Endosulfan II	1		7.33	7.32	7.34	0.33		170.6
	2		7.21	7.19	7.21	4.1		
4,4'-DDT	1		7.47	7.46	7.48	47		4.8
	2		7.46	7.45	7.47	49		
Methoxychlor	1		7.99	7.97	7.99	1.9		123.6
	2		8.18	8.17	8.19	8.1		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB01(0-2) DL Lab Sample ID: 280-97928-8 DL

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/25/2017 19:38 Date Analyzed (2): 06/25/2017 19:38

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4,4'-DDE	1		6.45	6.44	6.46	16		22.6
	2		6.41	6.40	6.42	20		
4,4'-DDT	1		7.47	7.46	7.48	52		3.9
	2		7.46	7.45	7.47	54		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB01(0-2)-a Lab Sample ID: 280-97928-9

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/26/2017 01:49 Date Analyzed (2): 06/26/2017 01:49

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4,4'-DDE	1		6.45	6.44	6.46	1.3		25.5
	2		6.41	6.40	6.42	1.0		
4,4'-DDT	1		7.47	7.46	7.48	4.6		12.4
	2		7.46	7.45	7.47	5.3		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS09 Lab Sample ID: 280-97928-12

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/26/2017 02:05 Date Analyzed (2): 06/26/2017 02:05

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4,4'-DDE	1		6.44	6.44	6.46	0.59		79.1
	2		6.41	6.40	6.42	0.26		
Dieldrin	1		6.81	6.80	6.82	2.0		154.9
	2		6.60	6.59	6.61	0.26		
4,4'-DDT	1		7.46	7.46	7.48	1.3		115.6
	2		7.46	7.45	7.47	5.0		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(0-2) Lab Sample ID: 280-97928-14

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/26/2017 02:22 Date Analyzed (2): 06/26/2017 02:22

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
gamma-Chlordane	1		6.19	6.19	6.21	0.78		115.9
	2		6.03	6.02	6.04	2.9		
alpha-Chlordane	1		6.35	6.35	6.37	0.62		88.6
	2		6.19	6.19	6.21	1.6		
4,4'-DDE	1		6.45	6.44	6.46	0.73		0.6
	2		6.41	6.40	6.42	0.72		
4,4'-DDT	1		7.46	7.46	7.48	1.1		143.1
	2		7.46	7.45	7.47	6.4		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(2-4) Lab Sample ID: 280-97928-15

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/26/2017 02:39 Date Analyzed (2): 06/26/2017 02:39

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4,4'-DDE	1		6.44	6.44	6.46	1.1		91.1
	2		6.41	6.40	6.42	0.40		
Dieldrin	1		6.81	6.80	6.82	2.9		42.7
	2		6.60	6.59	6.61	1.9		
4,4'-DDT	1		7.46	7.46	7.48	2.2		100.4
	2		7.46	7.45	7.47	6.5		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(4-6) Lab Sample ID: 280-97928-16

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/26/2017 02:56 Date Analyzed (2): 06/26/2017 02:56

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
4,4'-DDE	1		6.45	6.44	6.46	2.4		42.7
	2		6.41	6.40	6.42	3.7		
Dieldrin	1		6.81	6.80	6.82	2.5		23.6
	2		6.60	6.59	6.61	3.2		
4,4'-DDT	1		7.47	7.46	7.48	5.1		47.7
	2		7.46	7.45	7.47	8.3		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-377615/2-A

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/25/2017 16:15 Date Analyzed (2): 06/25/2017 16:15

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
alpha-BHC	1		4.37	4.36	4.38	14.1		0.8
	2		4.24	4.23	4.25	14.2		
gamma-BHC (Lindane)	1		4.68	4.67	4.69	14.1		0.3
	2		4.57	4.56	4.58	14.1		
beta-BHC	1		4.76	4.75	4.77	13.8		1.1
	2		4.65	4.64	4.66	13.9		
delta-BHC	1		4.93	4.93	4.95	14.0		0.2
	2		4.92	4.91	4.93	14.0		
Heptachlor	1		5.15	5.13	5.15	15.1		3.3
	2		4.98	4.97	4.99	14.6		
Aldrin	1		5.43	5.42	5.44	13.5		0.4
	2		5.28	5.27	5.29	13.4		
Heptachlor epoxide	1		6.05	6.04	6.06	14.3		0.9
	2		5.83	5.82	5.84	14.2		
gamma-Chlordane	1		6.20	6.19	6.21	14.3		1.7
	2		6.03	6.02	6.04	14.0		
alpha-Chlordane	1		6.36	6.35	6.37	14.2		0.1
	2		6.20	6.19	6.21	14.2		
4,4'-DDE	1		6.45	6.44	6.46	14.3		3.3
	2		6.41	6.40	6.42	13.8		
Endosulfan I	1		6.53	6.52	6.54	14.0		6.0
	2		6.26	6.25	6.27	13.2		
Dieldrin	1		6.81	6.80	6.82	14.7		3.1
	2		6.60	6.59	6.61	14.3		
Endrin	1		7.08	7.07	7.09	15.9		0.6
	2		6.96	6.95	6.97	15.8		
4,4'-DDD	1		7.16	7.15	7.17	13.9		4.1
	2		7.11	7.10	7.12	14.4		
Endosulfan II	1		7.33	7.32	7.34	13.6		1.7
	2		7.20	7.19	7.21	13.3		
4,4'-DDT	1		7.47	7.46	7.48	14.8		0.0
	2		7.46	7.45	7.47	14.8		
Endrin aldehyde	1		7.79	7.78	7.80	13.0		0.3
	2		7.58	7.57	7.59	13.0		
Methoxychlor	1		7.98	7.97	7.99	14.3		8.5
	2		8.18	8.17	8.19	15.5		
Endosulfan sulfate	1		8.23	8.22	8.24	13.6		3.0
	2		7.87	7.86	7.88	14.0		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-377615/3-A

Instrument ID (1): SGC_P1 Instrument ID (2): SGC_P1

Date Analyzed (1): 06/25/2017 16:32 Date Analyzed (2): 06/25/2017 16:32

GC Column (1): CLP1 ID: 0.32(mm) GC Column (2): CLP2 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Toxaphene	1	1	5.60	5.59	5.63	50.9	60.3	16.6
		2	6.92	6.91	6.95	72.7		
		3	7.19	7.17	7.21	63.7		
		4	7.69	7.67	7.71	49.9		
		5	8.13	8.12	8.16	64.4		
	2	1	6.11	6.09	6.13	63.0	51.1	
		2	7.15	7.14	7.18	36.4		
		3	7.30	7.28	7.32	41.5		
		4	7.59	7.57	7.61	54.7		
		5	8.11	8.09	8.13	59.8		

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS07 | Lab Sample ID: 280-97928-1

Matrix: Solid | Lab File ID: 06250016.D

Analysis Method: 8081B | Date Collected: 06/05/2017 08:15

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.6(g) | Date Analyzed: 06/25/2017 16:49

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 13.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.8	U Q	1.9	1.8	0.60
72-55-9	4,4'-DDE	0.73	U Q	1.9	0.73	0.26
50-29-3	4,4'-DDT	1.8	U Q	2.2	1.8	0.65
309-00-2	Aldrin	0.73	U Q	1.9	0.73	0.27
319-84-6	alpha-BHC	0.73	U Q	1.9	0.73	0.23
5103-71-9	alpha-Chlordane	0.73	U Q	1.9	0.73	0.35
319-85-7	beta-BHC	1.8	U Q	1.9	1.8	0.73
319-86-8	delta-BHC	1.1	U Q	1.9	1.1	0.44
959-98-8	Endosulfan I	0.73	U Q	1.9	0.73	0.19
33213-65-9	Endosulfan II	0.73	U Q	1.9	0.73	0.31
1031-07-8	Endosulfan sulfate	0.73	U Q	1.9	0.73	0.30
72-20-8	Endrin	0.73	U Q	1.9	0.73	0.34
7421-93-4	Endrin aldehyde	0.73	U Q	1.9	0.73	0.19
58-89-9	gamma-BHC (Lindane)	1.1	U Q	1.9	1.1	0.51
5103-74-2	gamma-Chlordane	0.73	U Q	1.9	0.73	0.29
76-44-8	Heptachlor	0.73	U Q	1.9	0.73	0.23
1024-57-3	Heptachlor epoxide	1.1	U Q	1.9	1.1	0.47
72-43-5	Methoxychlor	1.1	U Q	3.6	1.1	0.49
8001-35-2	Toxaphene	36	U Q	190	36	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene (Surr)	81		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250016.D
Lims ID: 280-97928-C-1-J
Client ID: SS025-SS07
Sample Type: Client
Inject. Date: 25-Jun-2017 16:49:08 ALS Bottle#: 10 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-1-J
Misc. Info.: 280-0060103-016
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:12 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:32:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					0.5873	
2					0.1007	
					RPD = 141.45	
* 2 1-Bromo-2-nitrobenzene						
1	2.993	2.993	-0.001	2163046524	150.0	
2	2.763	2.763	-0.001	436480586	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.819	3.819	0.000	265397025	16.2	
2	3.678	3.678	0.000	51895124	16.9	
					RPD = 4.01	
5 Hexachlorobenzene						
1		4.200			ND	
2		4.104				
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1	4.356	4.361	-0.005	7670732	-1.79	
2	3.973	3.971	0.002	1553550	-0.0763	
					RPD = -183.65	
LOD = 0.002000						
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1		4.676			ND	
2		4.567				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.760			ND	
2		4.648				
11 2,4,5-Trichlorophenol						
1	4.856	4.861	-0.005	10599614	NC	
2	4.791	4.772	0.019	6335883	NC	
					RPD = 0.00	
12 delta-BHC						
1	4.935	4.935	0.000	1485918	0.5873	
2	4.918	4.920	-0.002	925639	0.1007	
					RPD = 141.45	
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1		5.144			ND	
2		4.978				
16 Aldrin						
1		5.431			ND	
2		5.283				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				
18 Isodrin						
1		5.758			ND	
2		5.645				
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1	6.050	6.053	-0.003	946760	-0.0413	
2	5.823	5.828	-0.005	577611	-0.5258	
					RPD = -170.86	
LOD = 0.002000						
22 gamma-Chlordane						
1	6.193	6.196	-0.003	2929202	0.4296	
2	6.033	6.028	0.005	7821577	1.82	
					RPD = 123.64	
23 alpha-Chlordane						
1		6.357			ND	
2		6.196				
24 4,4'-DDE						
1		6.453			ND	
2		6.413				
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1	6.812	6.813	-0.001	18191246	0.9124	
2	6.594	6.599	-0.005	2026461	0.0405	
					RPD = 183.00	

	Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
	29 2,4'-DDT						
	1		6.961			ND	
	2		7.022				
	30 Endrin						
	1		7.082			ND	
	2		6.959				
	31 Kepone						
	1	7.121	7.129	-0.008	20739756	3.16	
	2	7.078	7.088	-0.010	18402855	14.5	
						RPD = 128.25	
	32 4,4'-DDD						
	1		7.158			ND	
	2		7.110				
	33 Chlorobenzilate						
	1		7.173			ND	
	2		6.971				
	34 Endosulfan II						
	1		7.331			ND	
	2		7.203				
	35 4,4'-DDT						
	1		7.468			ND	
	2		7.459				
	36 Endrin aldehyde						
	1		7.785			ND	
	2		7.578				
	37 Methoxychlor						
	1		7.981			ND	
	2		8.182				
	38 Mirex						
	1		8.127			ND	
	2		8.353				
	39 Endosulfan sulfate						
	1		8.232			ND	
	2		7.873				
	40 Endrin ketone						
	1		8.513			ND	
	2		8.399				
$	41 DCB Decachlorobiphenyl						
	1	9.491	9.492	-0.001	137790455	12.0	
	2	9.594	9.593	0.001	29927431	15.7	
						RPD = 26.75	
	42 Tris(2,3-dibromopropyl)phosphate						
	1		11.272			ND	
	2		11.308				
S	3 Endosulfan, Total						
	1		0.000			ND	
	2		0.000				

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

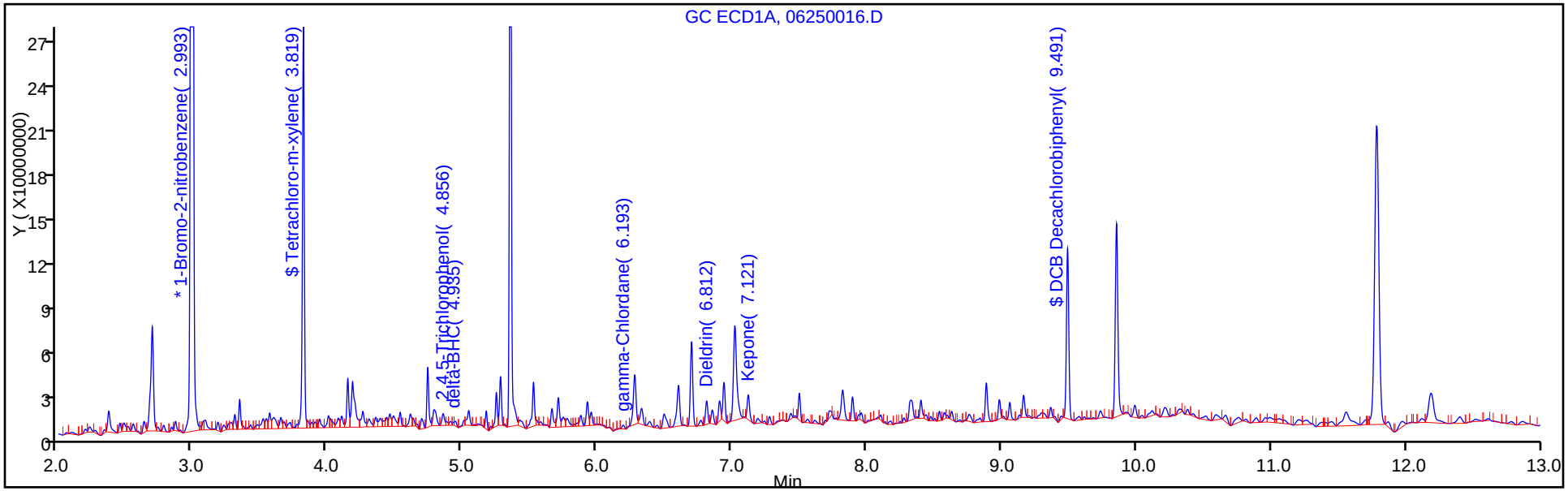
Report Date: 26-Jun-2017 11:56:21 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

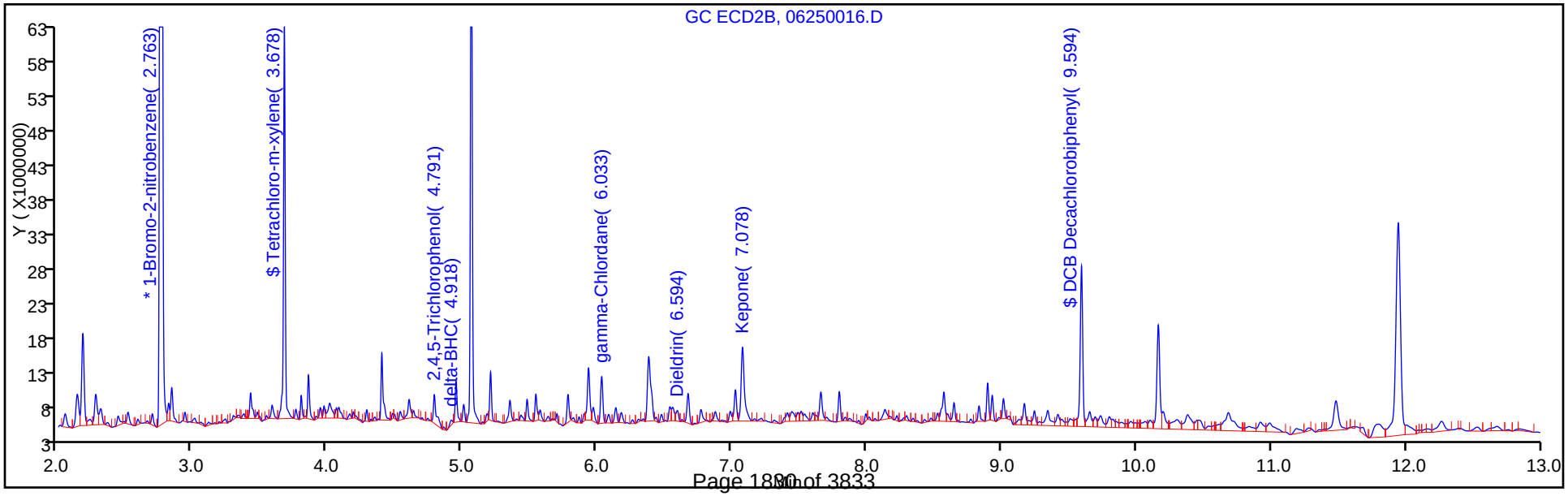
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250016.D

Injection Date:	25-Jun-2017 16:49:08	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-C-1-J	Lab Sample ID:	280-97928-1	Worklist Smp#:	16
Client ID:	SS025-SS07				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250016.D				
Lims ID:	280-97928-C-1-J				
Client ID:	SS025-SS07				
Sample Type:	Client				
Inject. Date:	25-Jun-2017 16:49:08	ALS Bottle#:	10	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-1-J				
Misc. Info.:	280-0060103-016				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:12	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:32:39		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	16.2	81.08
$ 41 DCB Decachlorobiphenyl	20.0	12.0	60.09

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	16.9	84.39
$ 41 DCB Decachlorobiphenyl	20.0	15.7	78.64

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS07 | Lab Sample ID: 280-97928-1

Matrix: Solid | Lab File ID: 06250016.D

Analysis Method: 8081B | Date Collected: 06/05/2017 08:15

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.6(g) | Date Analyzed: 06/25/2017 16:49

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 13.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
60-57-1	Dieldrin	0.73	U	1.9	0.73	0.23

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	79		63-121

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250016.D
Lims ID: 280-97928-C-1-J
Client ID: SS025-SS07
Sample Type: Client
Inject. Date: 25-Jun-2017 16:49:08 ALS Bottle#: 10 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-1-J
Misc. Info.: 280-0060103-016
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:12 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:32:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					0.5873	
2					0.1007	
					RPD = 141.45	
* 2 1-Bromo-2-nitrobenzene						
1	2.993	2.993	-0.001	2163046524	150.0	
2	2.763	2.763	-0.001	436480586	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.819	3.819	0.000	265397025	16.2	
2	3.678	3.678	0.000	51895124	16.9	
					RPD = 4.01	
5 Hexachlorobenzene						
1		4.200			ND	
2		4.104				
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1	4.356	4.361	-0.005	7670732	-1.79	
2	3.973	3.971	0.002	1553550	-0.0763	
					RPD = -183.65	
LOD = 0.002000						
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1		4.676			ND	
2		4.567				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.760			ND	
2		4.648				
11 2,4,5-Trichlorophenol						
1	4.856	4.861	-0.005	10599614	NC	
2	4.791	4.772	0.019	6335883	NC	
					RPD = 0.00	
12 delta-BHC						
1	4.935	4.935	0.000	1485918	0.5873	
2	4.918	4.920	-0.002	925639	0.1007	
					RPD = 141.45	
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1		5.144			ND	
2		4.978				
16 Aldrin						
1		5.431			ND	
2		5.283				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				
18 Isodrin						
1		5.758			ND	
2		5.645				
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1	6.050	6.053	-0.003	946760	-0.0413	
2	5.823	5.828	-0.005	577611	-0.5258	
					RPD = -170.86	
LOD = 0.002000						
22 gamma-Chlordane						
1	6.193	6.196	-0.003	2929202	0.4296	
2	6.033	6.028	0.005	7821577	1.82	
					RPD = 123.64	
23 alpha-Chlordane						
1		6.357			ND	
2		6.196				
24 4,4'-DDE						
1		6.453			ND	
2		6.413				
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1	6.812	6.813	-0.001	18191246	0.9124	
2	6.594	6.599	-0.005	2026461	0.0405	
					RPD = 183.00	

	Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
	29 2,4'-DDT						
	1		6.961			ND	
	2		7.022				
	30 Endrin						
	1		7.082			ND	
	2		6.959				
	31 Kepone						
	1	7.121	7.129	-0.008	20739756	3.16	
	2	7.078	7.088	-0.010	18402855	14.5	
						RPD = 128.25	
	32 4,4'-DDD						
	1		7.158			ND	
	2		7.110				
	33 Chlorobenzilate						
	1		7.173			ND	
	2		6.971				
	34 Endosulfan II						
	1		7.331			ND	
	2		7.203				
	35 4,4'-DDT						
	1		7.468			ND	
	2		7.459				
	36 Endrin aldehyde						
	1		7.785			ND	
	2		7.578				
	37 Methoxychlor						
	1		7.981			ND	
	2		8.182				
	38 Mirex						
	1		8.127			ND	
	2		8.353				
	39 Endosulfan sulfate						
	1		8.232			ND	
	2		7.873				
	40 Endrin ketone						
	1		8.513			ND	
	2		8.399				
$	41 DCB Decachlorobiphenyl						
	1	9.491	9.492	-0.001	137790455	12.0	
	2	9.594	9.593	0.001	29927431	15.7	
						RPD = 26.75	
	42 Tris(2,3-dibromopropyl)phosphate						
	1		11.272			ND	
	2		11.308				
S	3 Endosulfan, Total						
	1		0.000			ND	
	2		0.000				

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

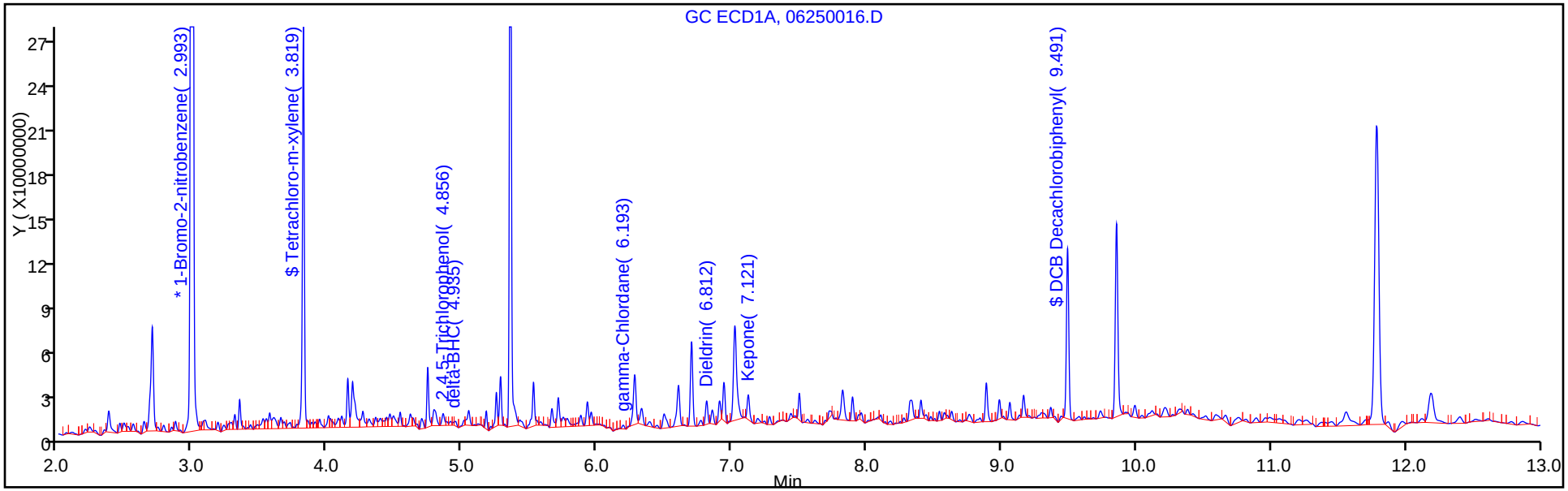
Report Date: 26-Jun-2017 11:56:21 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

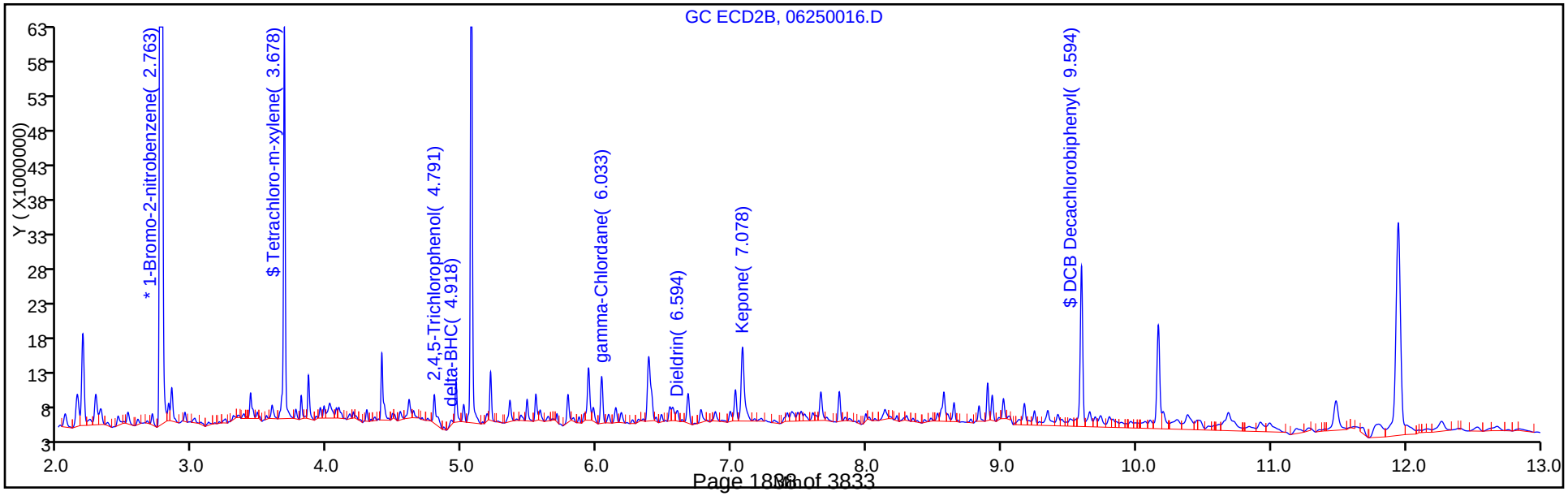
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250016.D

Injection Date:	25-Jun-2017 16:49:08	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-C-1-J	Lab Sample ID:	280-97928-1	Worklist Smp#:	16
Client ID:	SS025-SS07				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250016.D				
Lims ID:	280-97928-C-1-J				
Client ID:	SS025-SS07				
Sample Type:	Client				
Inject. Date:	25-Jun-2017 16:49:08	ALS Bottle#:	10	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-1-J				
Misc. Info.:	280-0060103-016				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:12	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:32:39		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	16.2	81.08
$ 41 DCB Decachlorobiphenyl	20.0	12.0	60.09

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	16.9	84.39
$ 41 DCB Decachlorobiphenyl	20.0	15.7	78.64

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(0-2) | Lab Sample ID: 280-97928-3

Matrix: Solid | Lab File ID: 06250017.D

Analysis Method: 8081B | Date Collected: 06/05/2017 08:35

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.3(g) | Date Analyzed: 06/25/2017 17:06

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 9.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.8	U J	1.8	1.8	0.58
72-55-9	4,4'-DDE	0.43	J	1.8	0.71	0.25
50-29-3	4,4'-DDT	1.8	U M J	2.1	1.8	0.63
309-00-2	Aldrin	0.71	U J	1.8	0.71	0.27
319-84-6	alpha-BHC	0.71	U J	1.8	0.71	0.23
5103-71-9	alpha-Chlordane	0.71	U J	1.8	0.71	0.34
319-85-7	beta-BHC	1.8	U J	1.8	1.8	0.70
319-86-8	delta-BHC	1.1	U J	1.8	1.1	0.43
60-57-1	Dieldrin	0.71	U J	1.8	0.71	0.22
959-98-8	Endosulfan I	0.71	U J	1.8	0.71	0.19
33213-65-9	Endosulfan II	0.71	U J	1.8	0.71	0.30
1031-07-8	Endosulfan sulfate	0.71	U J	1.8	0.71	0.29
72-20-8	Endrin	0.71	U J	1.8	0.71	0.32
7421-93-4	Endrin aldehyde	0.71	U J	1.8	0.71	0.18
58-89-9	gamma-BHC (Lindane)	1.1	U J	1.8	1.1	0.49
5103-74-2	gamma-Chlordane	0.71	U J	1.8	0.71	0.28
76-44-8	Heptachlor	0.71	U J	1.8	0.71	0.23
1024-57-3	Heptachlor epoxide	1.1	U J	1.8	1.1	0.45
72-43-5	Methoxychlor	1.1	U J	3.5	1.1	0.48
8001-35-2	Toxaphene	35	U	180	35	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	69		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	64		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250017.D
Lims ID: 280-97928-C-3-I
Client ID: SS025-SB06(0-2)
Sample Type: Client
Inject. Date: 25-Jun-2017 17:06:07 ALS Bottle#: 11 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-3-I
Misc. Info.: 280-0060103-017
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:12 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:33:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					0.7469	
2					-0.5050	
					RPD = 1034.95	
LOD = 0.002000						
* 2 1-Bromo-2-nitrobenzene						
1	2.993	2.993	0.000	2261849870	150.0	
2	2.763	2.763	0.000	456111681	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.820	3.819	0.001	218587829	12.8	
2	3.679	3.678	0.001	45851623	14.2	
					RPD = 10.27	
5 Hexachlorobenzene						
1	4.198	4.200	-0.002	9184191	0.4306	
2	4.105	4.104	0.001	670695	-0.6846	
					RPD = -877.88	
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1		4.361			ND	
2		3.971				
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1		4.676			ND	
2		4.567				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1	4.754	4.760	-0.006	2082420	0.1417	
2	4.639	4.648	-0.009	830069	-0.5884	
					RPD = -326.92	
11 2,4,5-Trichlorophenol						
1		4.861			ND	
2		4.772				
12 delta-BHC						
1	4.929	4.935	-0.006	2072069	0.6052	
2	4.918	4.920	-0.002	894773	0.0834	
					RPD = 151.53	
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1		5.144			ND	
2		4.978				
16 Aldrin						
1		5.431			ND	
2		5.283				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				
18 Isodrin						
1	5.749	5.758	-0.009	116688	0.0103	
2	5.645	5.645	0.000	107760	-0.6015	
					RPD = -206.95	
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1	6.052	6.053	-0.001	553904	-0.0612	
2	5.831	5.828	0.003	231022	-0.6398	
					RPD = -165.07	
LOD = 0.002000						
22 gamma-Chlordane						
1	6.195	6.196	-0.001	329082	0.3176	
2	6.033	6.028	0.005	425922	-0.4389	
					RPD = -1246.69	
23 alpha-Chlordane						
1	6.364	6.357	0.007	841562	0.2445	
2	6.194	6.196	-0.002	236122	-0.6161	
					RPD = -463.28	
24 4,4'-DDE						
1	6.451	6.453	-0.002	20673532	1.23	
2	6.411	6.413	-0.002	5133970	1.02	
					RPD = 18.60	
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1	6.809	6.813	-0.004	5336380	0.3390	
2	6.599	6.599	0.000	1171500	-0.2324	
					RPD = 187.84	

	Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
	29 2,4'-DDT						
	1		6.961			ND	
	2		7.022				
	30 Endrin						
	1		7.082			ND	
	2		6.959				
	31 Kepone						
	1		7.129			ND	
	2		7.088				
	32 4,4'-DDD						
	1		7.158			ND	
	2		7.110				
	33 Chlorobenzilate						
	1		7.173			ND	
	2		6.971				
	34 Endosulfan II						
	1		7.331			ND	
	2		7.203				
	35 4,4'-DDT						M
	1	7.467	7.468	-0.001	20481003	1.60	M
	2	7.459	7.459	0.000	6187894	2.04	
						RPD = 24.35	
	36 Endrin aldehyde						
	1		7.785			ND	
	2		7.578				
	37 Methoxychlor						
	1		7.981			ND	
	2		8.182				
	38 Mirex						
	1		8.127			ND	
	2		8.353				
	39 Endosulfan sulfate						
	1		8.232			ND	
	2		7.873				
	40 Endrin ketone						
	1		8.513			ND	
	2		8.399				
$	41 DCB Decachlorobiphenyl						
	1	9.490	9.492	-0.002	165212569	13.8	
	2	9.594	9.593	0.001	34320066	17.4	
						RPD = 22.69	
	42 Tris(2,3-dibromopropyl)phosphate						
	1		11.272			ND	
	2		11.308				
S	3 Endosulfan, Total						
	1		0.000			ND	
	2		0.000				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

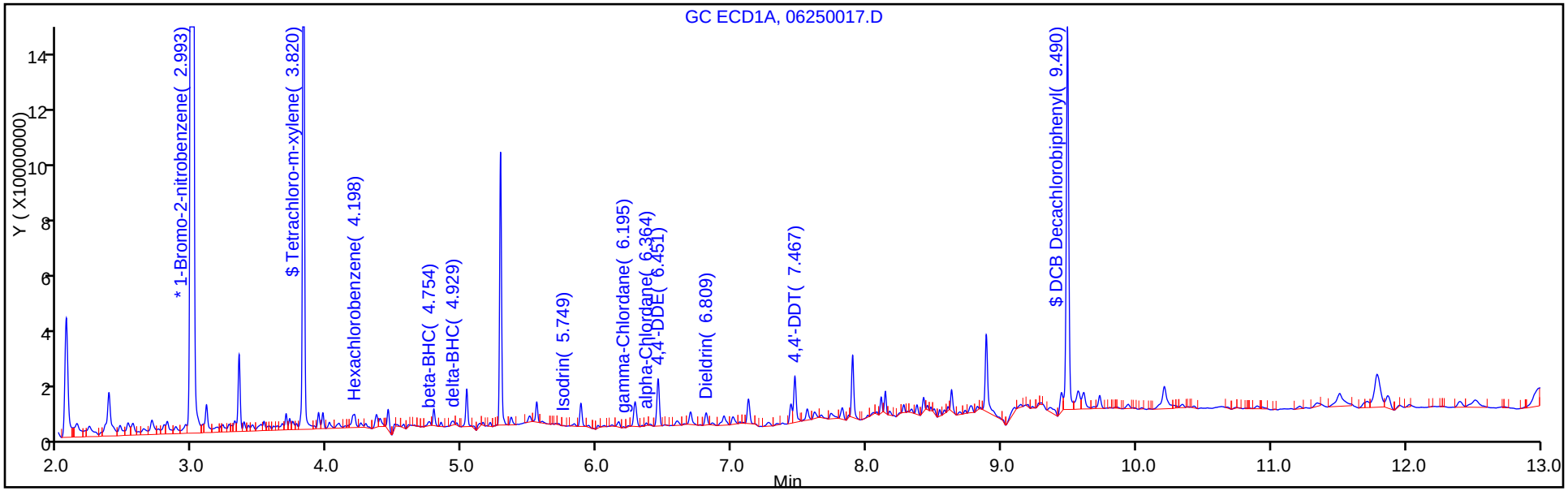
Report Date: 26-Jun-2017 11:56:23 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

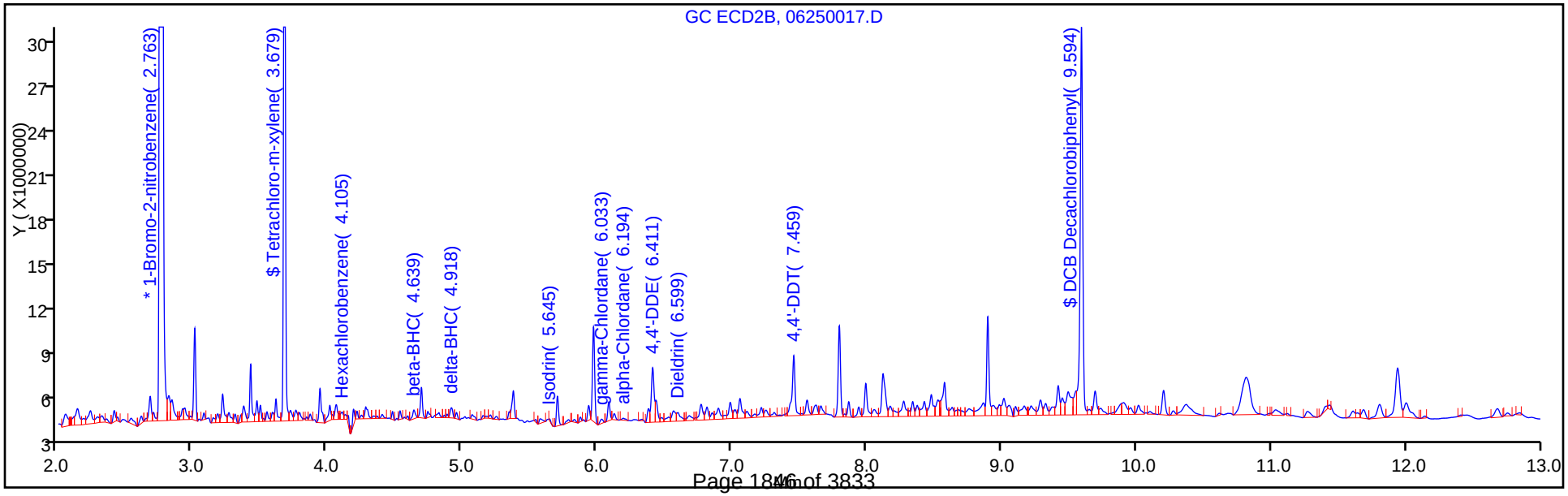
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Injection Date:	25-Jun-2017 17:06:07	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-C-3-I	Lab Sample ID:	280-97928-3	Worklist Smp#:	17
Client ID:	SS025-SB06(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250017.D				
Lims ID:	280-97928-C-3-I				
Client ID:	SS025-SB06(0-2)				
Sample Type:	Client				
Inject. Date:	25-Jun-2017 17:06:07	ALS Bottle#:	11	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-3-I				
Misc. Info.:	280-0060103-017				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:12	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:33:04		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	12.8	63.97
$ 41 DCB Decachlorobiphenyl	20.0	13.8	69.17

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	14.2	70.89
$ 41 DCB Decachlorobiphenyl	20.0	17.4	86.88

Manual Integration/User Assign Peak Report

TestAmerica Denver

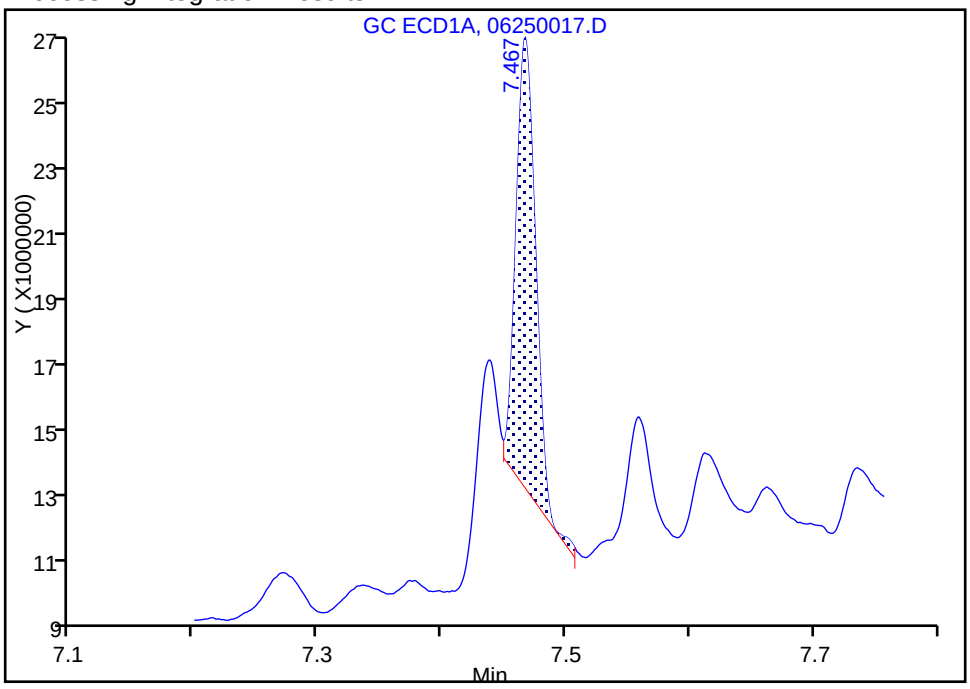
Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250017.D				
Injection Date:	25-Jun-2017 17:06:07	Instrument ID:	SGC_P1		
Lims ID:	280-97928-C-3-I	Lab Sample ID:	280-97928-3		
Client ID:	SS025-SB06(0-2)				
Operator ID:	DAW	ALS Bottle#:	11	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

35 4,4'-DDT, CAS: 50-29-3

Signal: 1

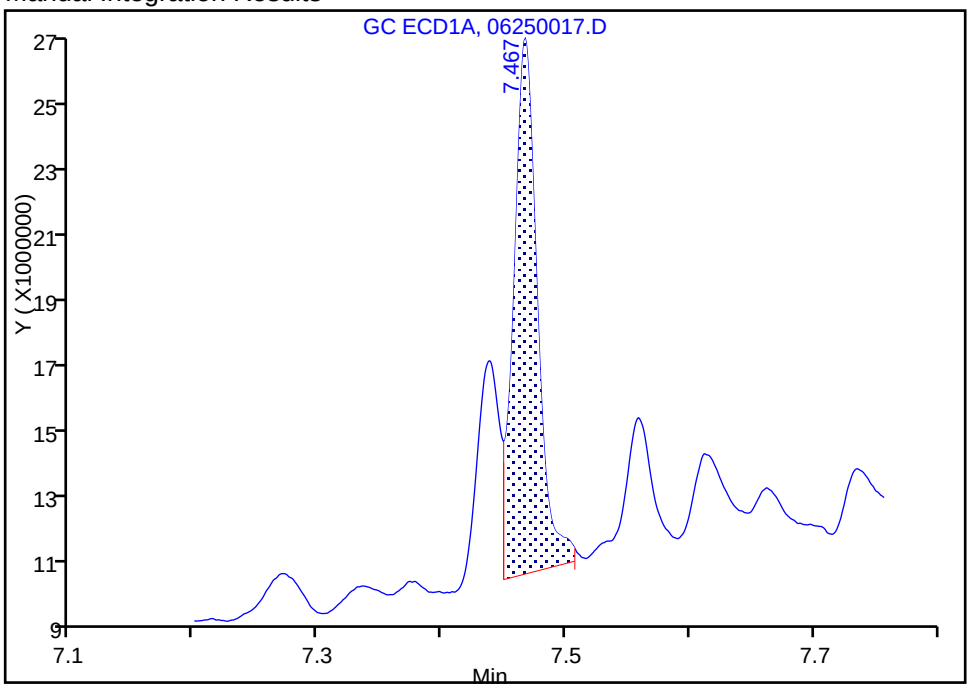
Processing Integration Results

RT: 7.47
Area: 14322049
Amount: 1.282009
Amount Units: ng/mL



Manual Integration Results

RT: 7.47
Area: 20481003
Amount: 1.596761
Amount Units: ng/mL



Reviewer: wellsd, 26-Jun-2017 10:33:01

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(2-4) | Lab Sample ID: 280-97928-4

Matrix: Solid | Lab File ID: 06250022.D

Analysis Method: 8081B | Date Collected: 06/05/2017 08:50

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.7(g) | Date Analyzed: 06/25/2017 18:30

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 12.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.8	U	1.8	1.8	0.59
72-55-9	4,4'-DDE	0.72	U	1.8	0.72	0.26
50-29-3	4,4'-DDT	1.8	U	2.2	1.8	0.64
309-00-2	Aldrin	0.72	U	1.8	0.72	0.27
319-84-6	alpha-BHC	0.72	U	1.8	0.72	0.23
5103-71-9	alpha-Chlordane	0.72	U	1.8	0.72	0.35
319-85-7	beta-BHC	1.8	U	1.8	1.8	0.72
319-86-8	delta-BHC	1.1	U	1.8	1.1	0.43
60-57-1	Dieldrin	0.72	U	1.8	0.72	0.23
959-98-8	Endosulfan I	0.72	U	1.8	0.72	0.19
33213-65-9	Endosulfan II	0.72	U	1.8	0.72	0.31
1031-07-8	Endosulfan sulfate	0.72	U	1.8	0.72	0.30
72-20-8	Endrin	0.72	U	1.8	0.72	0.33
7421-93-4	Endrin aldehyde	0.72	U	1.8	0.72	0.18
58-89-9	gamma-BHC (Lindane)	1.1	U	1.8	1.1	0.50
5103-74-2	gamma-Chlordane	0.72	U	1.8	0.72	0.29
76-44-8	Heptachlor	0.72	U	1.8	0.72	0.23
1024-57-3	Heptachlor epoxide	1.1	U	1.8	1.1	0.46
72-43-5	Methoxychlor	1.1	U	3.6	1.1	0.49
8001-35-2	Toxaphene	36	U	180	36	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	76		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	71		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250022.D
Lims ID: 280-97928-B-4-D
Client ID: SS025-SB06(2-4)
Sample Type: Client
Inject. Date: 25-Jun-2017 18:30:32 ALS Bottle#: 16 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-B-4-D
Misc. Info.: 280-0060103-022
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:12 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					0.5560	
2					-0.1039	
					RPD = 291.88	
LOD = 0.002000						
* 2 1-Bromo-2-nitrobenzene						
1	2.994	2.993	0.000	2203982458	150.0	
2	2.764	2.763	0.000	455047404	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.820	3.819	0.001	236270523	14.2	
2	3.679	3.678	0.001	49148996	15.3	
					RPD = 7.45	
5 Hexachlorobenzene						
1		4.200			ND	
2		4.104				
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1		4.361			ND	
2		3.971				
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1		4.676			ND	
2		4.567				
10 beta-BHC						
1		4.760			ND	
2		4.648				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
11 2,4,5-Trichlorophenol						
1		4.861			ND	
2		4.772				
12 delta-BHC						
1	4.931	4.935	-0.004	628795	0.5560	
2	4.920	4.920	0.000	108286	-0.1039	
					RPD = 291.88	
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1		5.144			ND	
2		4.978				
16 Aldrin						
1		5.431			ND	
2		5.283				
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
18 Isodrin						
1		5.758			ND	
2		5.645				
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1		6.053			ND	
2		5.828				
22 gamma-Chlordane						
1		6.196			ND	
2		6.028				
23 alpha-Chlordane						
1		6.357			ND	
2		6.196				
24 4,4'-DDE						
1	6.450	6.453	-0.003	236153	0.3769	
2	6.416	6.413	0.003	110392	-0.4728	
					RPD = -1772.42	
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1		6.813			ND	
2		6.599				
29 2,4'-DDT						
1		6.961			ND	
2		7.022				
30 Endrin						
1		7.082			ND	
2		6.959				
31 Kepone						
1		7.129			ND	
2		7.088				
32 4,4'-DDD						
1		7.158			ND	
2		7.110				
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1		7.331			ND	
2		7.203				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
35 4,4'-DDT						
1	7.464	7.468	-0.004	663179	0.5849	
2	7.461	7.459	0.002	253955	-0.2625	
					RPD = 525.82	
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1		7.981			ND	
2		8.182				
38 Mirex						
1		8.127			ND	
2		8.353				
39 Endosulfan sulfate						
1		8.232			ND	
2		7.873				
40 Endrin ketone						
1	8.507	8.513	-0.006	127131	0.1271	
2	8.400	8.399	0.001	486226	-0.5422	
					RPD = -322.53	
$ 41 DCB Decachlorobiphenyl						
1	9.490	9.492	-0.002	176232821	15.2	
2	9.593	9.593	0.000	28229408	14.1	
					RPD = 7.25	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				
S 3 Endosulfan, Total						
1		0.000			ND	
2		0.000				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

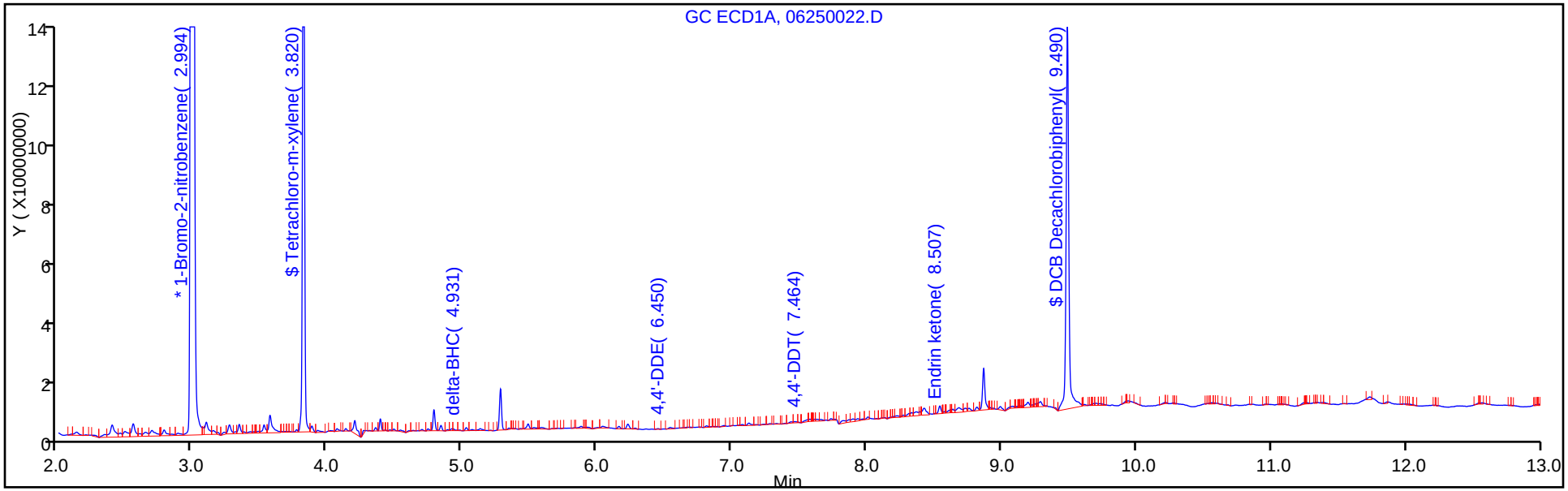
Report Date: 26-Jun-2017 11:56:35 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

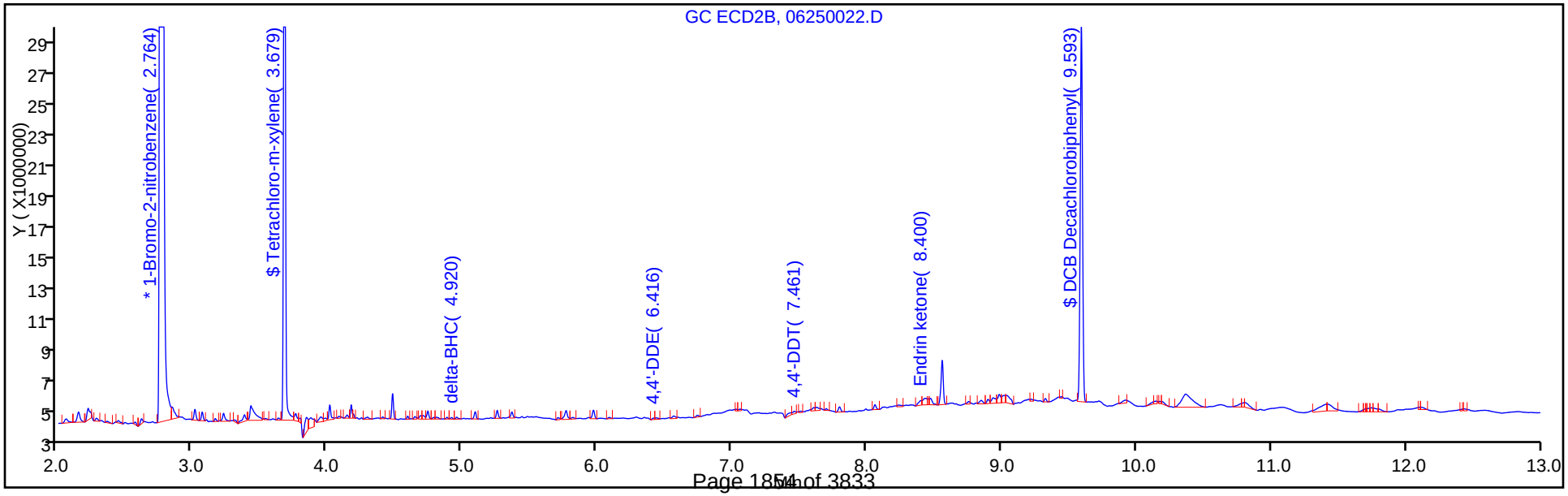
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Injection Date:	25-Jun-2017 18:30:32	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-B-4-D	Lab Sample ID:	280-97928-4	Worklist Smp#:	22
Client ID:	SS025-SB06(2-4)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250022.D				
Lims ID:	280-97928-B-4-D				
Client ID:	SS025-SB06(2-4)				
Sample Type:	Client				
Inject. Date:	25-Jun-2017 18:30:32	ALS Bottle#:	16	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-B-4-D				
Misc. Info.:	280-0060103-022				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:12	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	14.2	70.91
$ 41 DCB Decachlorobiphenyl	20.0	15.2	75.90

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	15.3	76.39
$ 41 DCB Decachlorobiphenyl	20.0	14.1	70.59

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS08 | Lab Sample ID: 280-97928-5

Matrix: Solid | Lab File ID: 06250023.D

Analysis Method: 8081B | Date Collected: 06/05/2017 09:35

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 30.5(g) | Date Analyzed: 06/25/2017 18:47

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 13.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.9	U	1.9	1.9	0.62
72-55-9	4,4'-DDE	0.76	U	1.9	0.76	0.27
50-29-3	4,4'-DDT	1.9	U	2.3	1.9	0.67
309-00-2	Aldrin	0.76	U	1.9	0.76	0.28
319-84-6	alpha-BHC	0.76	U	1.9	0.76	0.24
5103-71-9	alpha-Chlordane	0.76	U	1.9	0.76	0.37
319-85-7	beta-BHC	1.9	U	1.9	1.9	0.75
319-86-8	delta-BHC	1.1	U	1.9	1.1	0.45
60-57-1	Dieldrin	0.76	U	1.9	0.76	0.24
959-98-8	Endosulfan I	0.76	U	1.9	0.76	0.20
33213-65-9	Endosulfan II	0.76	U	1.9	0.76	0.33
1031-07-8	Endosulfan sulfate	0.76	U	1.9	0.76	0.31
72-20-8	Endrin	0.76	U	1.9	0.76	0.35
7421-93-4	Endrin aldehyde	0.76	U	1.9	0.76	0.19
58-89-9	gamma-BHC (Lindane)	1.1	U	1.9	1.1	0.53
5103-74-2	gamma-Chlordane	0.76	U	1.9	0.76	0.30
76-44-8	Heptachlor	0.76	U	1.9	0.76	0.24
1024-57-3	Heptachlor epoxide	1.1	U	1.9	1.1	0.48
72-43-5	Methoxychlor	1.1	U	3.7	1.1	0.51
8001-35-2	Toxaphene	37	U	190	37	18

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	71		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	83		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250023.D
Lims ID: 280-97928-C-5-D
Client ID: SS025-SB08
Sample Type: Client
Inject. Date: 25-Jun-2017 18:47:24 ALS Bottle#: 17 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-5-D
Misc. Info.: 280-0060103-023
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:12 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:34:18

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1		1.000			ND	
2		0.000				
* 2 1-Bromo-2-nitrobenzene						
1	2.993	2.993	0.000	2012233941	150.0	
2	2.763	2.763	0.000	415564424	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.820	3.819	0.001	251895831	16.5	
2	3.678	3.678	0.000	49996689	17.1	
					RPD = 3.24	
5 Hexachlorobenzene						
1		4.200			ND	
2		4.104				
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1	4.355	4.361	-0.006	6165215	-2.64	
2	3.973	3.971	0.002	1487291	-0.0252	
					RPD = -196.21	
LOD = 0.002000						
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1		4.676			ND	
2		4.567				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.760			ND	
2		4.648				
11 2,4,5-Trichlorophenol						
1	4.861	4.861	0.000	5018165	NC	
2	4.791	4.772	0.019	2044396	NC	
					RPD = 0.00	
12 delta-BHC						
1		4.935			ND	
2		4.920				
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1		5.144			ND	
2		4.978				
16 Aldrin						
1		5.431			ND	
2		5.283				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1	5.672	5.665	0.007	19494556	0.8984	
2	5.504	5.511	-0.007	1457236	-1.56	
					RPD = -745.48	
18 Isodrin						
1		5.758			ND	
2		5.645				
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1		6.053			ND	
2		5.828				
22 gamma-Chlordane						
1		6.196			ND	
2		6.028				
23 alpha-Chlordane						
1		6.357			ND	
2		6.196				
24 4,4'-DDE						
1		6.453			ND	
2		6.413				
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1		6.813			ND	
2		6.599				
29 2,4'-DDT						
1		6.961			ND	
2		7.022				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
30 Endrin						
1	7.083	7.082	0.001	12036989	0.8536	
2	6.952	6.959	-0.007	257205	-0.3782	
					RPD = 518.18	
31 Kepone						
1		7.129			ND	
2		7.088				
32 4,4'-DDD						
1		7.158			ND	
2		7.110				
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1	7.336	7.331	0.005	4432370	0.2019	
2	7.197	7.203	-0.006	173915	-0.8043	
					RPD = -334.04	
35 4,4'-DDT						
1	7.466	7.468	-0.002	6102958	0.9007	
2	7.465	7.459	0.006	1507493	0.2806	
					RPD = 104.98	
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1		7.981			ND	
2		8.182				
38 Mirex						
1	8.137	8.127	0.010	1597256	-0.0902	
2	8.349	8.353	-0.004	1545593	0.8609	
					RPD = 246.79	
39 Endosulfan sulfate						
1		8.232			ND	
2		7.873				
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1	9.489	9.492	-0.003	150394631	14.2	
2	9.592	9.593	-0.001	29899441	16.6	
					RPD = 15.61	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				
S 3 Endosulfan, Total						
1					0.2019	
2					-0.8043	
					RPD = -334.04	

LOD = 0.002000

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

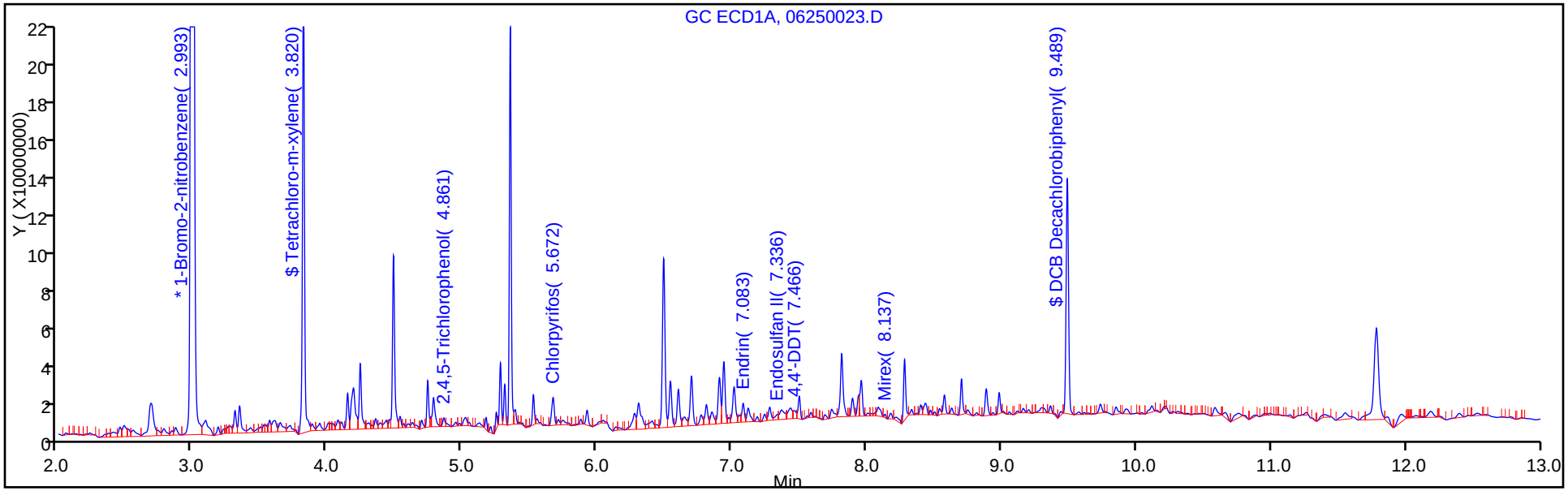
Report Date: 26-Jun-2017 11:56:37 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

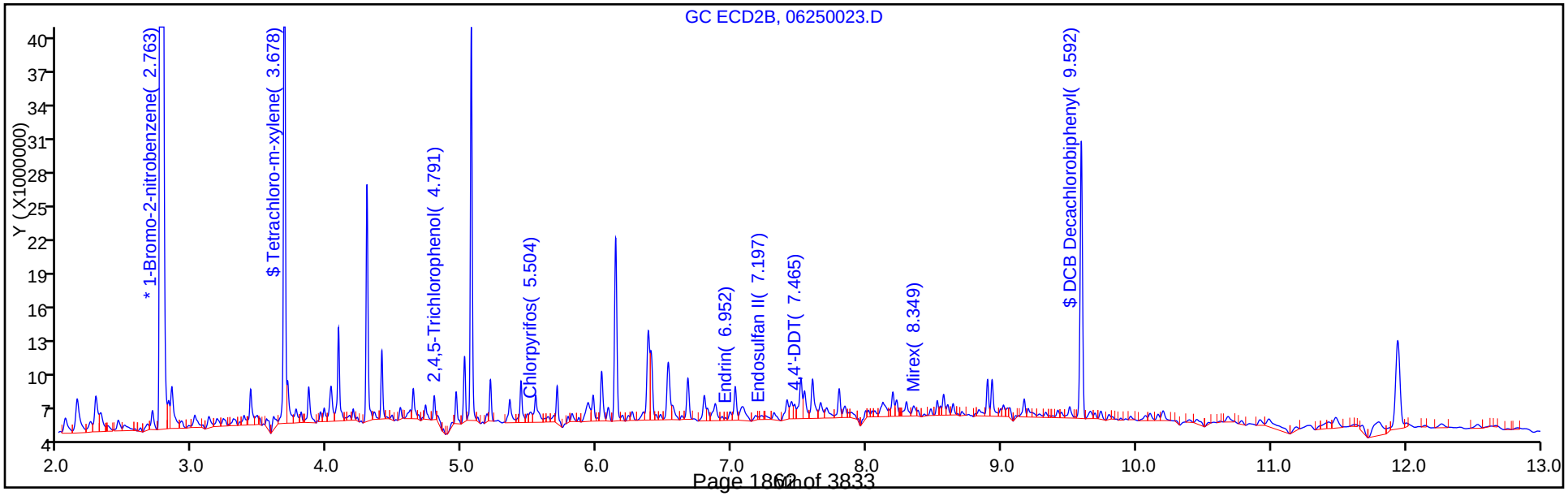
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250023.D

Injection Date:	25-Jun-2017 18:47:24	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-C-5-D	Lab Sample ID:	280-97928-5	Worklist Smp#:	23
Client ID:	SS025-SB08				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250023.D				
Lims ID:	280-97928-C-5-D				
Client ID:	SS025-SB08				
Sample Type:	Client				
Inject. Date:	25-Jun-2017 18:47:24	ALS Bottle#:	17	Worklist Smp#:	23
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-5-D				
Misc. Info.:	280-0060103-023				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:12	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:34:18		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	16.5	82.71
$ 41 DCB Decachlorobiphenyl	20.0	14.2	70.82

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	17.1	85.43
$ 41 DCB Decachlorobiphenyl	20.0	16.6	82.81

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB07(0-2) | Lab Sample ID: 280-97928-6

Matrix: Solid | Lab File ID: 06250024.D

Analysis Method: 8081B | Date Collected: 06/05/2017 09:45

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 32.7(g) | Date Analyzed: 06/25/2017 19:04

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 12.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.8	U	1.8	1.8	0.58
72-55-9	4,4'-DDE	0.71	U	1.8	0.71	0.25
50-29-3	4,4'-DDT	1.8	U	2.1	1.8	0.62
309-00-2	Aldrin	0.71	U	1.8	0.71	0.26
5103-71-9	alpha-Chlordane	0.71	U	1.8	0.71	0.34
319-85-7	beta-BHC	1.8	U	1.8	1.8	0.70
319-86-8	delta-BHC	1.1	U	1.8	1.1	0.42
60-57-1	Dieldrin	0.71	U	1.8	0.71	0.22
959-98-8	Endosulfan I	0.71	U	1.8	0.71	0.19
33213-65-9	Endosulfan II	0.71	U	1.8	0.71	0.30
1031-07-8	Endosulfan sulfate	0.71	U	1.8	0.71	0.29
72-20-8	Endrin	0.71	U	1.8	0.71	0.32
7421-93-4	Endrin aldehyde	0.71	U	1.8	0.71	0.18
58-89-9	gamma-BHC (Lindane)	1.1	U	1.8	1.1	0.49
5103-74-2	gamma-Chlordane	0.71	U	1.8	0.71	0.28
76-44-8	Heptachlor	0.71	U	1.8	0.71	0.23
1024-57-3	Heptachlor epoxide	1.1	U	1.8	1.1	0.45
72-43-5	Methoxychlor	1.1	U	3.5	1.1	0.47
8001-35-2	Toxaphene	35	U	180	35	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	75		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	81		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250024.D
Lims ID: 280-97928-C-6-D
Client ID: SS025-SB07(0-2)
Sample Type: Client
Inject. Date: 25-Jun-2017 19:04:15 ALS Bottle#: 18 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-6-D
Misc. Info.: 280-0060103-024
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:12 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:34:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					0.7219	
2					-0.0123	
					RPD = 206.95	
LOD = 0.002000						
* 2 1-Bromo-2-nitrobenzene						
1	2.993	2.993	-0.001	2162553509	150.0	
2	2.764	2.763	0.000	437437325	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.819	3.819	0.000	264488018	16.2	
2	3.678	3.678	0.000	54229903	17.6	
					RPD = 8.65	
5 Hexachlorobenzene						
1	4.190	4.200	-0.010	11167681	0.5611	
2	4.095	4.104	-0.009	2781820	0.0109	
					RPD = 192.36	
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1	4.353	4.361	-0.008	1304166	-6.97	
2	3.975	3.971	0.004	977774	-3.51	
					RPD = -66.21	
LOD = 0.002000						
8 alpha-BHC						M
1	4.375	4.368	0.007	2646806	0.7219	
2	4.250	4.241	0.009	305463	-0.0123	M
					RPD = 206.95	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
9 gamma-BHC (Lindane)						
1		4.676			ND	
2		4.567				
10 beta-BHC						
1		4.760			ND	
2		4.648				
11 2,4,5-Trichlorophenol						
1		4.861			ND	
2		4.772				
12 delta-BHC						
1		4.935			ND	
2		4.920				
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1		5.144			ND	
2		4.978				
16 Aldrin						
1		5.431			ND	
2		5.283				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				
18 Isodrin						
1	5.751	5.758	-0.007	463834	0.0292	
2	5.642	5.645	-0.003	211264	-0.5624	
					RPD = -221.89	
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1	6.049	6.053	-0.004	924624	-0.0424	
2	5.823	5.828	-0.005	1619228	-0.1939	
					RPD = -128.27	
LOD = 0.002000						
22 gamma-Chlordane						
1		6.196			ND	
2		6.028				
23 alpha-Chlordane						
1		6.357			ND	
2		6.196				
24 4,4'-DDE						
1		6.453			ND	
2		6.413				
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1	6.810	6.813	-0.003	2455092	0.2230	
2	6.599	6.599	0.000	203046	-0.5092	
					RPD = -511.72	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
29 2,4'-DDT						
1		6.961			ND	
2		7.022				
30 Endrin						
1		7.082			ND	
2		6.959				
31 Kepone						
1		7.129			ND	
2		7.088				
32 4,4'-DDD						
1		7.158			ND	
2		7.110				
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1		7.331			ND	
2		7.203				
35 4,4'-DDT						
1	7.465	7.468	-0.003	694228	0.5872	
2	7.455	7.459	-0.004	1559570	0.2696	
					RPD = 74.14	
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1		7.981			ND	
2		8.182				
38 Mirex						
1		8.127			ND	
2		8.353				
39 Endosulfan sulfate						
1	8.230	8.232	-0.002	504723	0.2061	
2	7.868	7.873	-0.005	159640	-0.8156	
					RPD = -335.25	
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1	9.490	9.492	-0.002	171059585	15.0	
2	9.593	9.593	0.000	30915524	16.2	
					RPD = 7.90	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				
S 3 Endosulfan, Total						
1					0.2061	
2					-0.8156	
					RPD = -335.25	

LOD = 0.002000

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

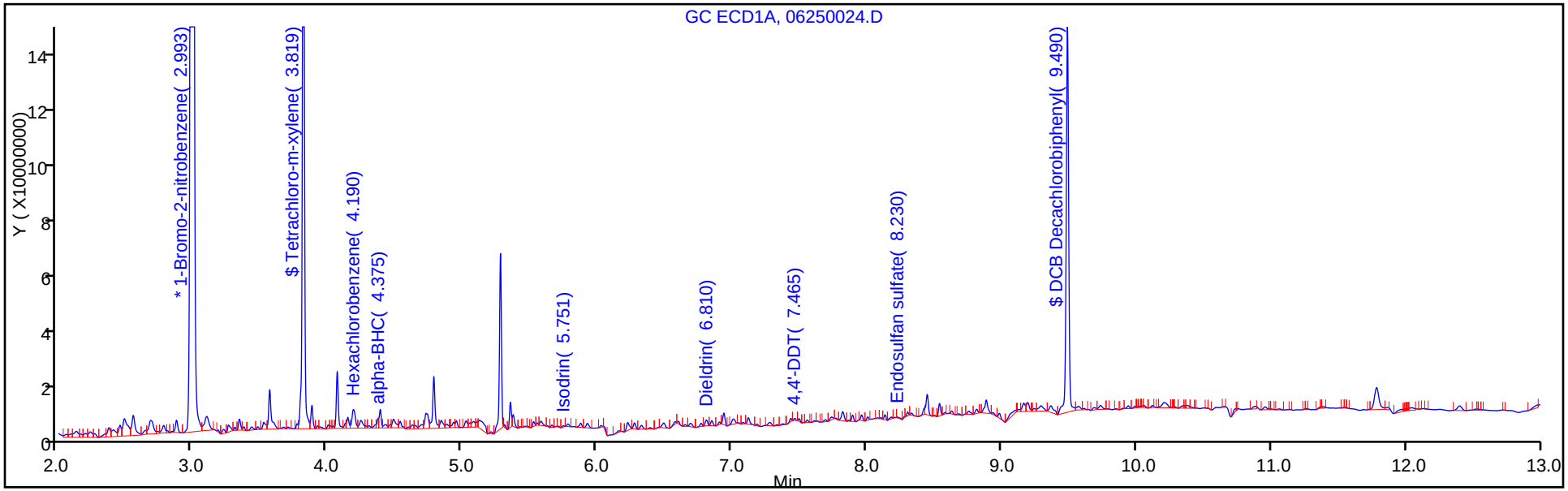
Report Date: 26-Jun-2017 11:56:39 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

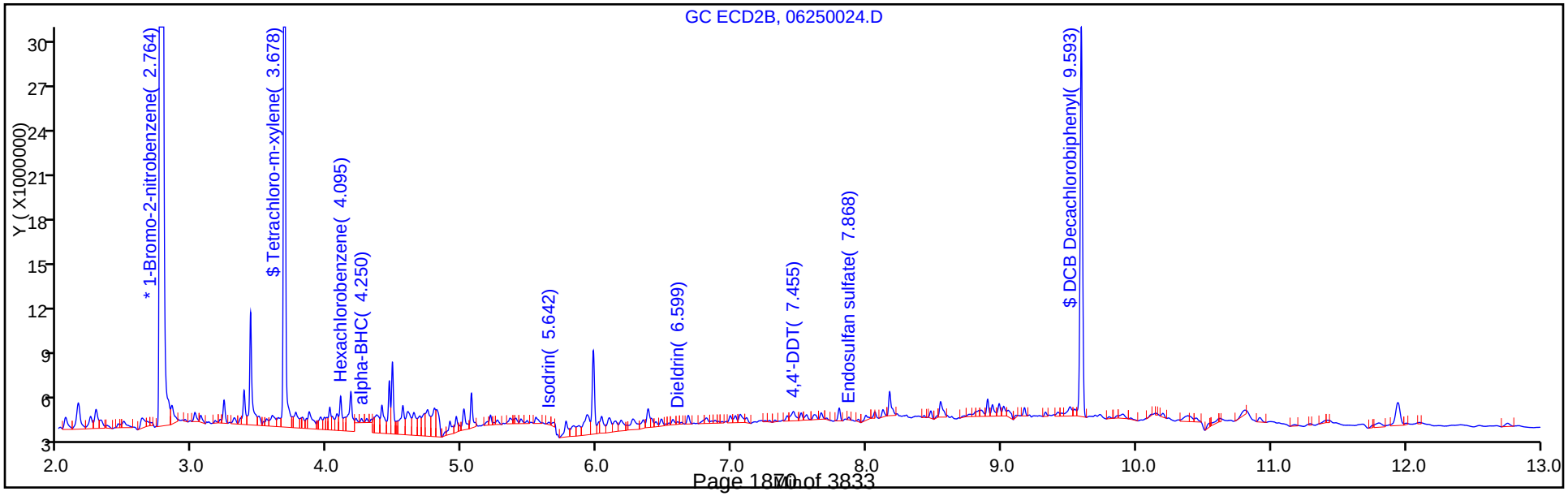
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250024.D

Injection Date:	25-Jun-2017 19:04:15	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-C-6-D	Lab Sample ID:	280-97928-6	Worklist Smp#:	24
Client ID:	SS025-SB07(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250024.D				
Lims ID:	280-97928-C-6-D				
Client ID:	SS025-SB07(0-2)				
Sample Type:	Client				
Inject. Date:	25-Jun-2017 19:04:15	ALS Bottle#:	18	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-6-D				
Misc. Info.:	280-0060103-024				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:12	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:34:25		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	16.2	80.82
$ 41 DCB Decachlorobiphenyl	20.0	15.0	75.07

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	17.6	88.13
$ 41 DCB Decachlorobiphenyl	20.0	16.2	81.24

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB07(0-2) | Lab Sample ID: 280-97928-6

Matrix: Solid | Lab File ID: 06250024.D

Analysis Method: 8081B | Date Collected: 06/05/2017 09:45

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 32.7(g) | Date Analyzed: 06/25/2017 19:04

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 12.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
319-84-6	alpha-BHC	0.71	U M	1.8	0.71	0.23

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250024.D
Lims ID: 280-97928-C-6-D
Client ID: SS025-SB07(0-2)
Sample Type: Client
Inject. Date: 25-Jun-2017 19:04:15 ALS Bottle#: 18 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-6-D
Misc. Info.: 280-0060103-024
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:12 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:34:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					0.7219	
2					-0.0123	
					RPD = 206.95	
LOD = 0.002000						
* 2 1-Bromo-2-nitrobenzene						
1	2.993	2.993	-0.001	2162553509	150.0	
2	2.764	2.763	0.000	437437325	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.819	3.819	0.000	264488018	16.2	
2	3.678	3.678	0.000	54229903	17.6	
					RPD = 8.65	
5 Hexachlorobenzene						
1	4.190	4.200	-0.010	11167681	0.5611	
2	4.095	4.104	-0.009	2781820	0.0109	
					RPD = 192.36	
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1	4.353	4.361	-0.008	1304166	-6.97	
2	3.975	3.971	0.004	977774	-3.51	
					RPD = -66.21	
LOD = 0.002000						
8 alpha-BHC						M
1	4.375	4.368	0.007	2646806	0.7219	
2	4.250	4.241	0.009	305463	-0.0123	M
					RPD = 206.95	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
9 gamma-BHC (Lindane)						
1		4.676			ND	
2		4.567				
10 beta-BHC						
1		4.760			ND	
2		4.648				
11 2,4,5-Trichlorophenol						
1		4.861			ND	
2		4.772				
12 delta-BHC						
1		4.935			ND	
2		4.920				
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1		5.144			ND	
2		4.978				
16 Aldrin						
1		5.431			ND	
2		5.283				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				
18 Isodrin						
1	5.751	5.758	-0.007	463834	0.0292	
2	5.642	5.645	-0.003	211264	-0.5624	
					RPD = -221.89	
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1	6.049	6.053	-0.004	924624	-0.0424	
2	5.823	5.828	-0.005	1619228	-0.1939	
					RPD = -128.27	
LOD = 0.002000						
22 gamma-Chlordane						
1		6.196			ND	
2		6.028				
23 alpha-Chlordane						
1		6.357			ND	
2		6.196				
24 4,4'-DDE						
1		6.453			ND	
2		6.413				
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1	6.810	6.813	-0.003	2455092	0.2230	
2	6.599	6.599	0.000	203046	-0.5092	
					RPD = -511.72	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
29 2,4'-DDT						
1		6.961			ND	
2		7.022				
30 Endrin						
1		7.082			ND	
2		6.959				
31 Kepone						
1		7.129			ND	
2		7.088				
32 4,4'-DDD						
1		7.158			ND	
2		7.110				
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1		7.331			ND	
2		7.203				
35 4,4'-DDT						
1	7.465	7.468	-0.003	694228	0.5872	
2	7.455	7.459	-0.004	1559570	0.2696	
					RPD = 74.14	
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1		7.981			ND	
2		8.182				
38 Mirex						
1		8.127			ND	
2		8.353				
39 Endosulfan sulfate						
1	8.230	8.232	-0.002	504723	0.2061	
2	7.868	7.873	-0.005	159640	-0.8156	
					RPD = -335.25	
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1	9.490	9.492	-0.002	171059585	15.0	
2	9.593	9.593	0.000	30915524	16.2	
					RPD = 7.90	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				
S 3 Endosulfan, Total						
1					0.2061	
2					-0.8156	
					RPD = -335.25	

LOD = 0.002000

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

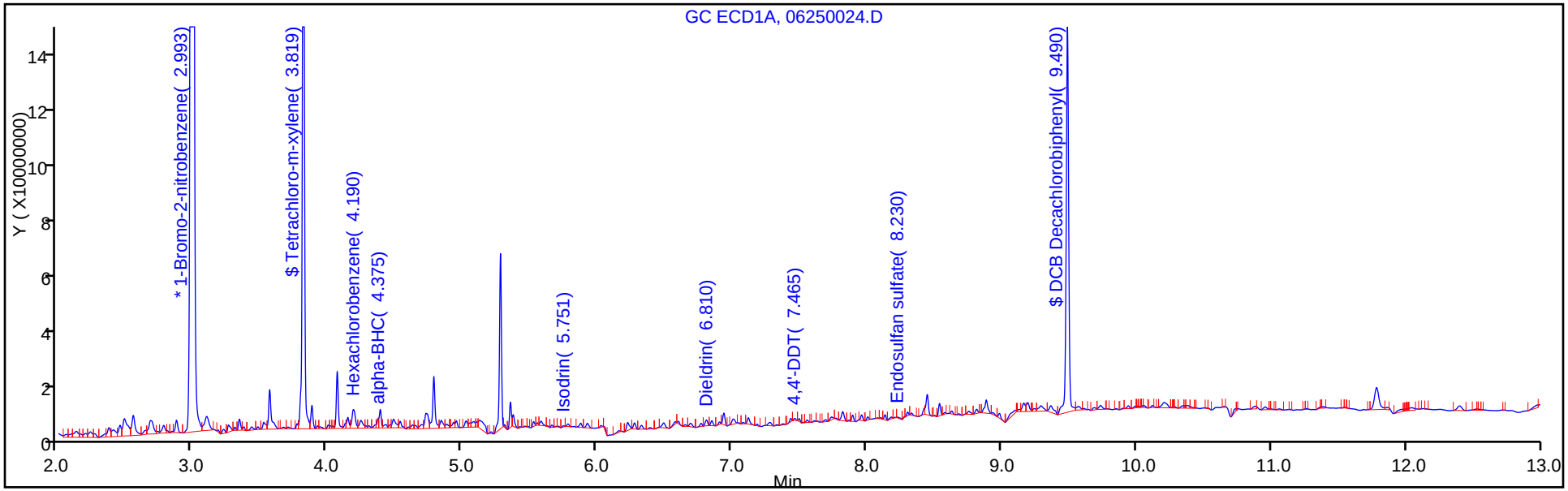
Report Date: 26-Jun-2017 11:56:39 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

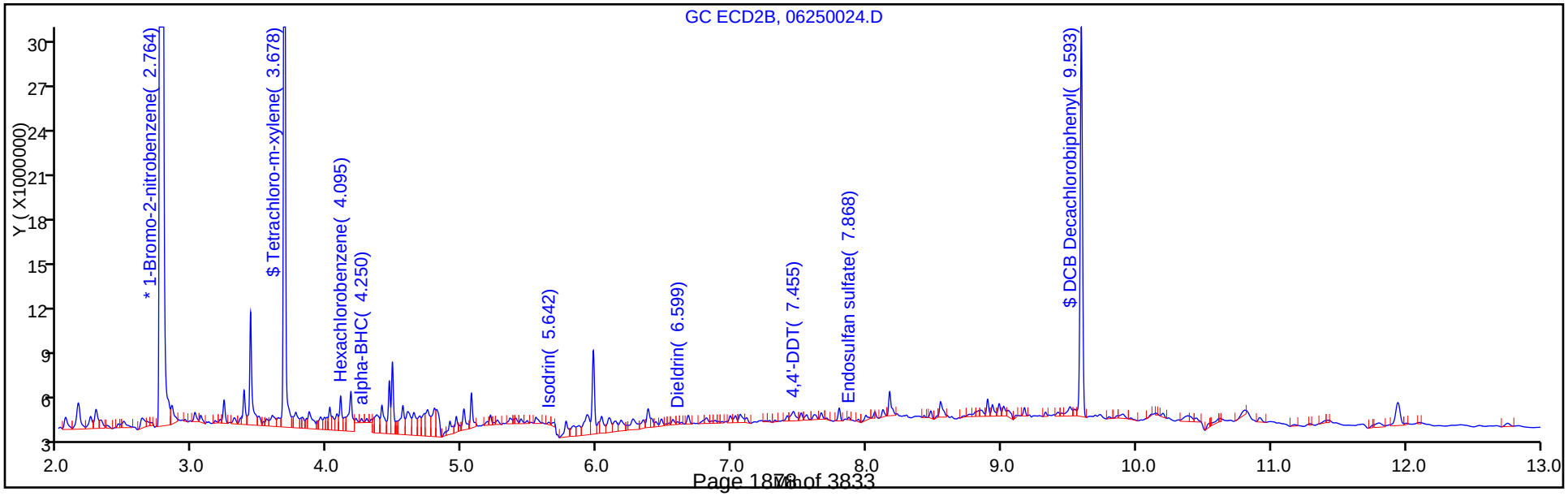
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Injection Date:	25-Jun-2017 19:04:15	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-C-6-D	Lab Sample ID:	280-97928-6	Worklist Smp#:	24
Client ID:	SS025-SB07(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250024.D				
Lims ID:	280-97928-C-6-D				
Client ID:	SS025-SB07(0-2)				
Sample Type:	Client				
Inject. Date:	25-Jun-2017 19:04:15	ALS Bottle#:	18	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-6-D				
Misc. Info.:	280-0060103-024				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:12	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:34:25		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	16.2	80.82
$ 41 DCB Decachlorobiphenyl	20.0	15.0	75.07

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	17.6	88.13
$ 41 DCB Decachlorobiphenyl	20.0	16.2	81.24

Manual Integration/User Assign Peak Report

TestAmerica Denver

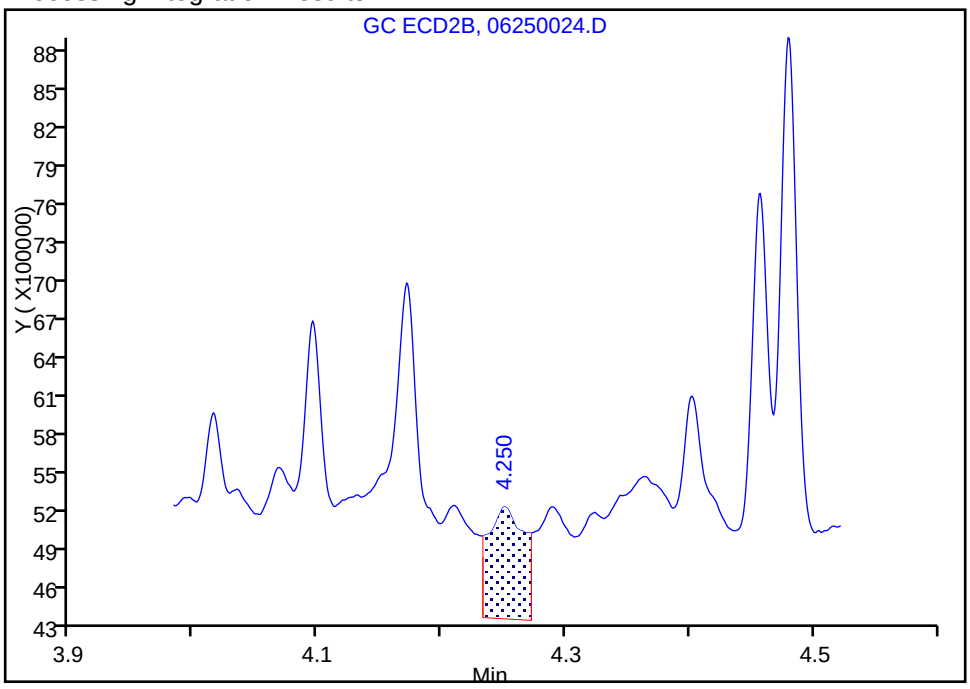
Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250024.D				
Injection Date:	25-Jun-2017 19:04:15	Instrument ID:	SGC_P1		
Lims ID:	280-97928-C-6-D	Lab Sample ID:	280-97928-6		
Client ID:	SS025-SB07(0-2)				
Operator ID:	DAW	ALS Bottle#:	18	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

8 alpha-BHC, CAS: 319-84-6

Signal: 2

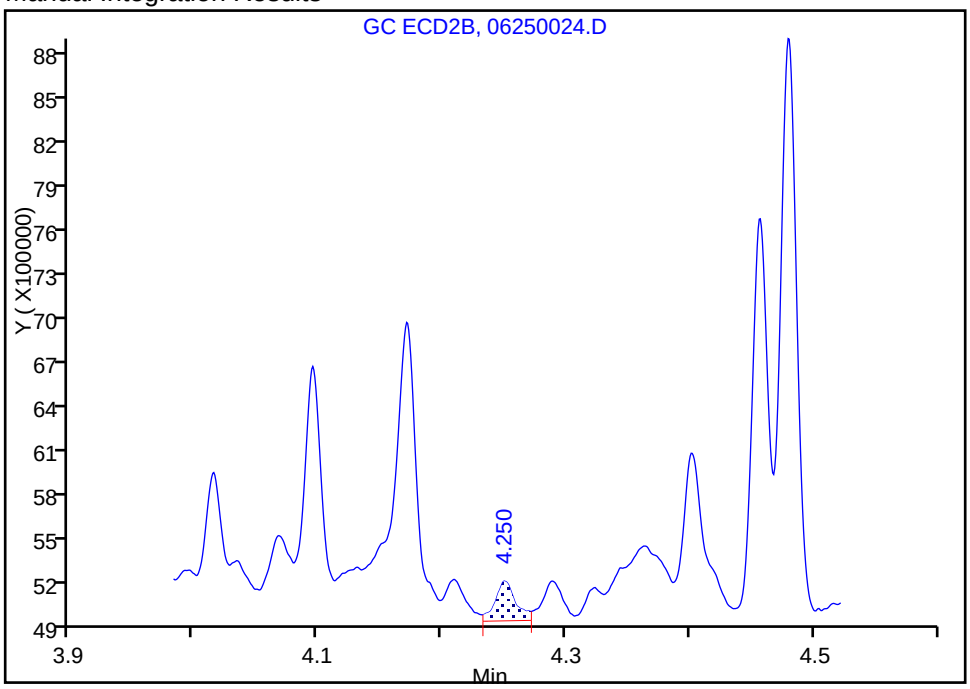
Processing Integration Results

RT: 4.25
Area: 1726215
Amount: 0.308413
Amount Units: ng/mL



Manual Integration Results

RT: 4.25
Area: 305463
Amount: -0.012322
Amount Units: ng/mL



Reviewer: wellsd, 26-Jun-2017 10:34:35
Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB07(2-4) | Lab Sample ID: 280-97928-7

Matrix: Solid | Lab File ID: 06250025.D

Analysis Method: 8081B | Date Collected: 06/05/2017 09:55

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 30.5(g) | Date Analyzed: 06/25/2017 19:21

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 15.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.9	U	2.0	1.9	0.63
72-55-9	4,4'-DDE	0.78	U	2.0	0.78	0.28
50-29-3	4,4'-DDT	1.9	U	2.3	1.9	0.68
309-00-2	Aldrin	0.78	U	2.0	0.78	0.29
319-84-6	alpha-BHC	0.78	U	2.0	0.78	0.25
5103-71-9	alpha-Chlordane	0.78	U	2.0	0.78	0.37
319-85-7	beta-BHC	1.9	U	2.0	1.9	0.77
319-86-8	delta-BHC	1.2	U	2.0	1.2	0.47
60-57-1	Dieldrin	0.78	U	2.0	0.78	0.24
959-98-8	Endosulfan I	0.78	U	2.0	0.78	0.20
33213-65-9	Endosulfan II	0.78	U	2.0	0.78	0.33
1031-07-8	Endosulfan sulfate	0.78	U	2.0	0.78	0.32
72-20-8	Endrin	0.78	U	2.0	0.78	0.36
7421-93-4	Endrin aldehyde	0.78	U	2.0	0.78	0.20
58-89-9	gamma-BHC (Lindane)	1.2	U	2.0	1.2	0.54
5103-74-2	gamma-Chlordane	0.78	U	2.0	0.78	0.31
76-44-8	Heptachlor	0.78	U	2.0	0.78	0.25
1024-57-3	Heptachlor epoxide	1.2	U	2.0	1.2	0.49
72-43-5	Methoxychlor	1.2	U	3.8	1.2	0.52
8001-35-2	Toxaphene	38	U	200	38	18

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	64		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	67		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250025.D
Lims ID: 280-97928-C-7-D
Client ID: SS025-SB07(2-4)
Sample Type: Client
Inject. Date: 25-Jun-2017 19:21:12 ALS Bottle#: 19 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-7-D
Misc. Info.: 280-0060103-025
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:12 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1		1.000			ND	
2		0.000				
* 2 1-Bromo-2-nitrobenzene						
1	2.993	2.993	0.000	1960905703	150.0	
2	2.762	2.763	-0.001	407563690	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.819	3.819	0.000	181644560	12.3	
2	3.678	3.678	0.000	38830014	13.4	
					RPD = 8.87	
5 Hexachlorobenzene						
1	4.200	4.200	0.000	3227549	0.1450	
2	4.096	4.104	-0.008	116076	-0.8533	
					RPD = -281.86	
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1		4.361			ND	
2		3.971				
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1		4.676			ND	
2		4.567				
10 beta-BHC						
1		4.760			ND	
2		4.648				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
11 2,4,5-Trichlorophenol						
1		4.861			ND	
2		4.772				
12 delta-BHC						
1		4.935			ND	
2		4.920				
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1		5.144			ND	
2		4.978				
16 Aldrin						
1		5.431			ND	
2		5.283				
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				
18 Isodrin						
1		5.758			ND	
2		5.645				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1		6.053			ND	
2		5.828				
22 gamma-Chlordane						
1		6.196			ND	
2		6.028				
23 alpha-Chlordane						
1		6.357			ND	
2		6.196				
24 4,4'-DDE						
1		6.453			ND	
2		6.413				
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1		6.813			ND	
2		6.599				
29 2,4'-DDT						
1		6.961			ND	
2		7.022				
30 Endrin						
1		7.082			ND	
2		6.959				
31 Kepone						
1		7.129			ND	
2		7.088				
32 4,4'-DDD						
1		7.158			ND	
2		7.110				
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1		7.331			ND	
2		7.203				
35 4,4'-DDT						
1	7.471	7.468	0.003	445456	0.5763	
2	7.460	7.459	0.001	182104	-0.2822	
					RPD = 583.86	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1		7.981			ND	
2		8.182				
38 Mirex						
1		8.127			ND	
2		8.353				
39 Endosulfan sulfate						
1		8.232			ND	
2		7.873				
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1	9.490	9.492	-0.002	116544439	11.2	
2	9.593	9.593	0.000	23003610	12.7	
					RPD = 12.98	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				
S 3 Endosulfan, Total						
1		0.000			ND	
2		0.000				

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

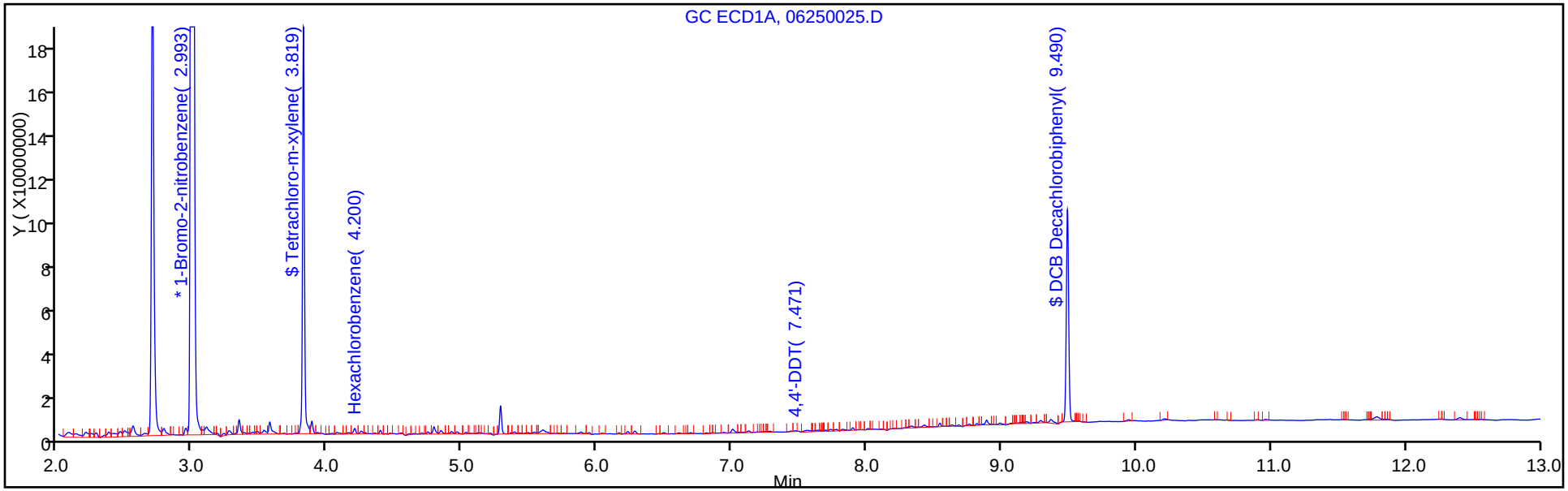
Report Date: 26-Jun-2017 11:56:41 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

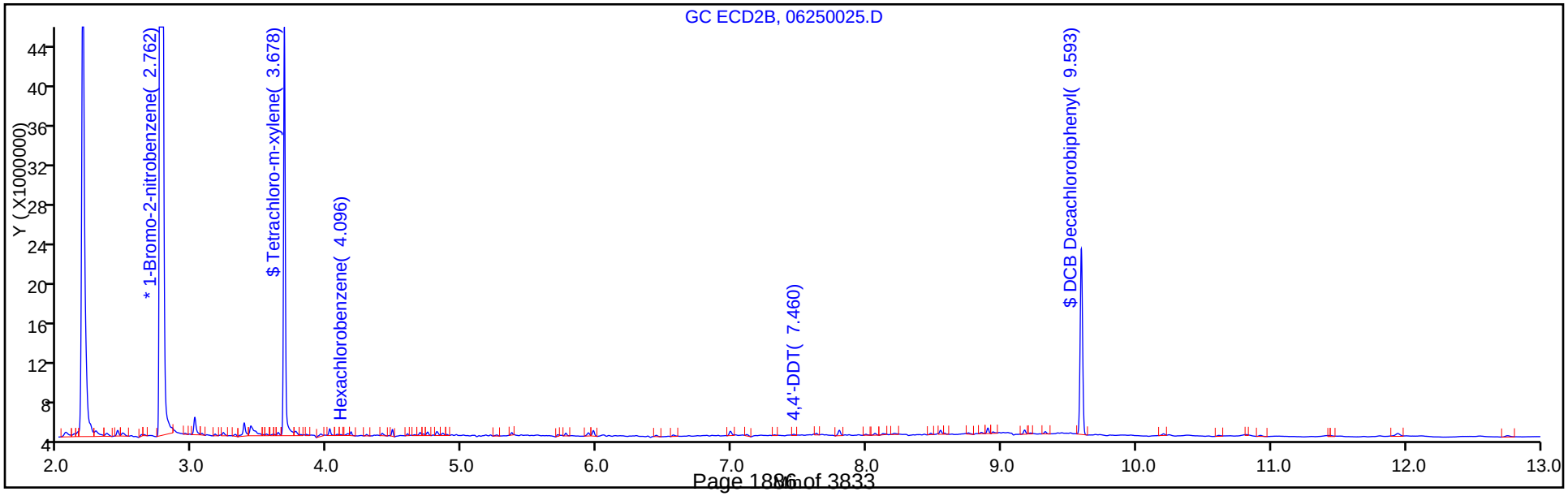
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Injection Date:	25-Jun-2017 19:21:12	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-C-7-D	Lab Sample ID:	280-97928-7	Worklist Smp#:	25
Client ID:	SS025-SB07(2-4)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250025.D				
Lims ID:	280-97928-C-7-D				
Client ID:	SS025-SB07(2-4)				
Sample Type:	Client				
Inject. Date:	25-Jun-2017 19:21:12	ALS Bottle#:	19	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-7-D				
Misc. Info.:	280-0060103-025				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:12	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	12.3	61.34
$ 41 DCB Decachlorobiphenyl	20.0	11.2	55.93

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	13.4	67.03
$ 41 DCB Decachlorobiphenyl	20.0	12.7	63.70

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB01(0-2) | Lab Sample ID: 280-97928-8

Matrix: Solid | Lab File ID: 06250047.D

Analysis Method: 8081B | Date Collected: 06/05/2017 10:20

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.3(g) | Date Analyzed: 06/26/2017 01:32

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 11.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.8	U Q	1.8	1.8	0.59
72-55-9	4,4'-DDE	15	Q	1.8	0.73	0.26
50-29-3	*4,4'-DDT*	*47*	*J Q*	*2.2*	1.8	*0.64*
309-00-2	Aldrin	0.73	U Q	1.8	0.73	0.27
319-84-6	alpha-BHC	0.73	U Q	1.8	0.73	0.23
5103-71-9	alpha-Chlordane	0.73	U Q	1.8	0.73	0.35
319-85-7	beta-BHC	1.8	U Q	1.8	1.8	0.72
319-86-8	delta-BHC	1.1	U Q	1.8	1.1	0.44
60-57-1	Dieldrin	0.73	U Q	1.8	0.73	0.23
959-98-8	Endosulfan I	0.73	U Q	1.8	0.73	0.19
33213-65-9	Endosulfan II	0.33	J Q	1.8	0.73	0.31
1031-07-8	Endosulfan sulfate	0.73	U Q	1.8	0.73	0.30
72-20-8	Endrin	0.73	U Q	1.8	0.73	0.33
7421-93-4	Endrin aldehyde	0.73	U Q	1.8	0.73	0.19
58-89-9	gamma-BHC (Lindane)	1.1	U Q	1.8	1.1	0.50
5103-74-2	gamma-Chlordane	0.73	U Q	1.8	0.73	0.29
76-44-8	Heptachlor	0.73	U Q	1.8	0.73	0.23
1024-57-3	Heptachlor epoxide	1.1	U Q	1.8	1.1	0.46
72-43-5	Methoxychlor	1.9	J Q	3.6	1.1	0.49
8001-35-2	Toxaphene	36	U Q	180	36	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	0	Q	63-121
877-09-8	Tetrachloro-m-xylene (Surr)	45		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250047.D
Lims ID: 280-97928-C-8-D
Client ID: SS025-SB01(0-2)
Sample Type: Client
Inject. Date: 26-Jun-2017 01:32:13 ALS Bottle#: 41 Worklist Smp#: 47
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-8-D
Misc. Info.: 280-0060103-047
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:57:28 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:40:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					0.5663	
2					0.6251	
					RPD = 9.88	
* 2 1-Bromo-2-nitrobenzene						
1	2.993	2.993	-0.001	2322212038	150.0	
2	2.763	2.763	-0.001	468830989	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.819	3.819	0.000	156614313	8.96	
2	3.678	3.678	0.000	35143108	10.4	
					RPD = 15.08	
5 Hexachlorobenzene						
1		4.200			ND	
2		4.104				
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1		4.361			ND	
2		3.971				
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1		4.676			ND	
2		4.567				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.760			ND	
2		4.648				
11 2,4,5-Trichlorophenol						
1	4.877	4.861	0.016	334112	NC	
2	4.758	4.772	-0.014	3084279	NC	
					RPD = 0.00	
12 delta-BHC						
1	4.942	4.935	0.007	968723	0.5663	
2	4.914	4.920	-0.006	3257140	0.6251	
					RPD = 9.88	
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1		5.144			ND	
2		4.978				
16 Aldrin						
1	5.433	5.431	0.002	562286	0.3061	
2	5.288	5.283	0.005	741010	-0.1451	
					RPD = 560.48	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1	5.659	5.665	-0.006	960660	-1.63	
2	5.504	5.511	-0.007	811388	-2.15	
					RPD = -27.19	
LOD = 0.002000						
18 Isodrin						
1		5.758			ND	
2		5.645				
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1		6.053			ND	
2		5.828				
22 gamma-Chlordane						
1		6.196			ND	
2		6.028				
23 alpha-Chlordane						
1		6.357			ND	
2		6.196				
24 4,4'-DDE						
1	6.453	6.453	0.000	983399427	40.2	
2	6.411	6.413	-0.002	162056619	46.3	
					RPD = 14.02	
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1	6.654	6.661	-0.007	4289358	0.0757	
2	6.655	6.661	-0.006	232305	-0.2543	
					RPD = -369.55	
27 Dieldrin						
1		6.813			ND	
2		6.599				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
29 2,4'-DDT						
1	6.960	6.961	-0.001	284472920	18.8	
2	7.019	7.022	-0.003	56726532	25.0	
					RPD = 28.01	
30 Endrin						
1		7.082			ND	
2		6.959				
31 Kepone						
1	7.119	7.129	-0.010	389848585	46.8	
2	7.108	7.088	0.020	9154923	5.88	a
					RPD = 155.36	
32 4,4'-DDD						
1	7.157	7.158	-0.001	10914176	0.5024	a
2	7.108	7.110	-0.002	9154923	2.53	a
					RPD = 133.68	
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1	7.328	7.331	-0.003	19552532	0.9069	
2	7.213	7.203	0.010	36183155	11.4	
					RPD = 170.63	
35 4,4'-DDT						
1	7.467	7.468	-0.001	2572265403	128.6	E
2	7.457	7.459	-0.002	358359063	134.9	E
					RPD = 4.79	
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1	7.990	7.981	0.009	47933358	5.27	
2	8.182	8.182	0.000	28931140	22.3	
					RPD = 123.59	
38 Mirex						
1		8.127			ND	
2		8.353				
39 Endosulfan sulfate						
1		8.232			ND	
2		7.873				
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1		9.492			ND	
2		9.593				
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 3 Endosulfan, Total						
1					0.9069	
2					11.4	
					RPD = 170.63	

QC Flag Legend

Processing Flags

NC - Not Calibrated

E - Exceeded Maximum Amount

7 - Failed Limit of Detection

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

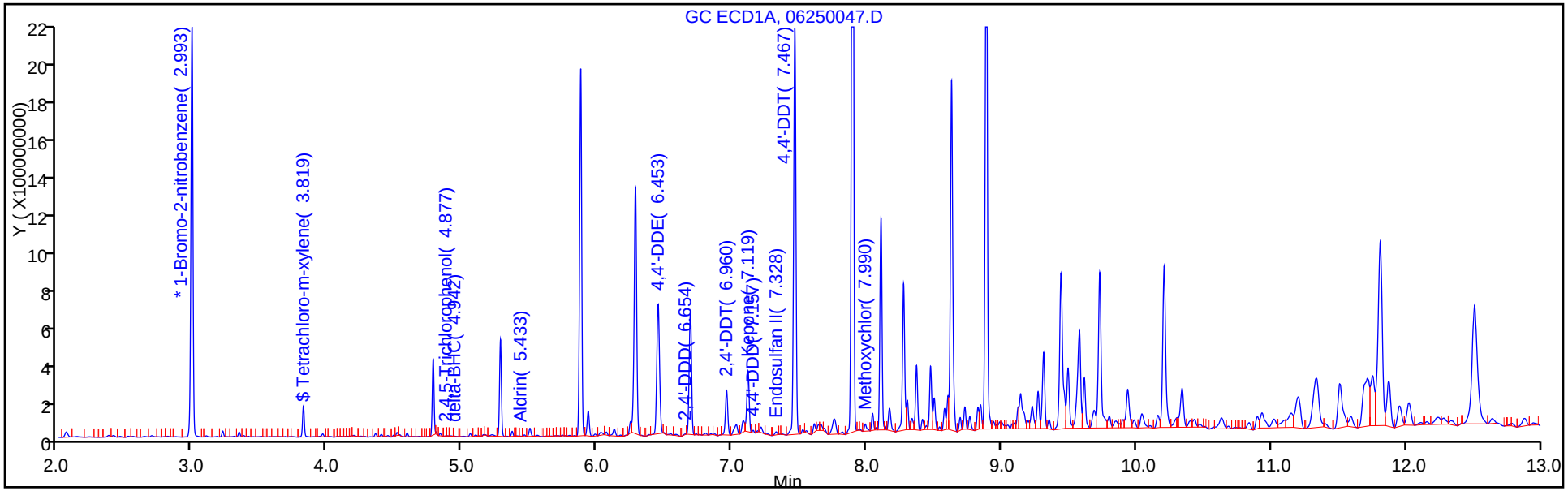
Report Date: 26-Jun-2017 11:57:31 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

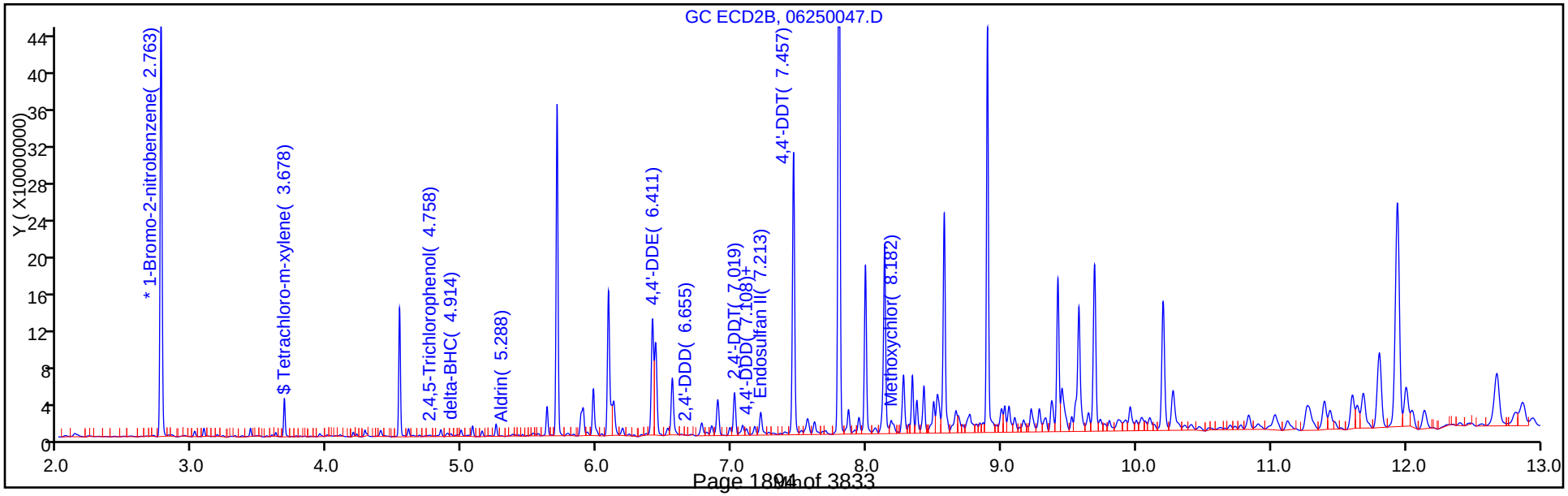
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250047.D

Injection Date:	26-Jun-2017 01:32:13	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-C-8-D	Lab Sample ID:	280-97928-8	Worklist Smp#:	47
Client ID:	SS025-SB01(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	41
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250047.D				
Lims ID:	280-97928-C-8-D				
Client ID:	SS025-SB01(0-2)				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 01:32:13	ALS Bottle#:	41	Worklist Smp#:	47
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-8-D				
Misc. Info.:	280-0060103-047				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:57:28	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:40:29		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	8.96	44.80

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	10.4	52.10

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB01(0-2) DL | Lab Sample ID: 280-97928-8 DL

Matrix: Solid | Lab File ID: 06250026.D

Analysis Method: 8081B | Date Collected: 06/05/2017 10:20

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.3(g) | Date Analyzed: 06/25/2017 19:38

Con. Extract Vol.: 10(mL) | Dilution Factor: 10

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 11.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	*4,4'-DDD*	*18*	*U Q*	*18*	18	*5.9*
72-55-9	*4,4'-DDE*	*16*	*J D Q*	*18*	7.3	*2.6*
50-29-3	4,4'-DDT	52	D Q	22	18	6.4
309-00-2	*Aldrin*	*7.3*	*U Q*	*18*	7.3	*2.7*
319-84-6	*alpha-BHC*	*7.3*	*U Q*	*18*	7.3	*2.3*
5103-71-9	*alpha-Chlordane*	*7.3*	*U Q*	*18*	7.3	*3.5*
319-85-7	*beta-BHC*	*18*	*U Q*	*18*	18	*7.2*
319-86-8	*delta-BHC*	*11*	*U Q*	*18*	11	*4.4*
60-57-1	*Dieldrin*	*7.3*	*U Q*	*18*	7.3	*2.3*
959-98-8	*Endosulfan I*	*7.3*	*U Q*	*18*	7.3	*1.9*
33213-65-9	*Endosulfan II*	*7.3*	*U Q*	*18*	7.3	*3.1*
1031-07-8	*Endosulfan sulfate*	*7.3*	*U Q*	*18*	7.3	*3.0*
72-20-8	*Endrin*	*7.3*	*U Q*	*18*	7.3	*3.3*
7421-93-4	*Endrin aldehyde*	*7.3*	*U Q*	*18*	7.3	*1.9*
58-89-9	*gamma-BHC (Lindane)*	*11*	*U Q*	*18*	11	*5.0*
5103-74-2	*gamma-Chlordane*	*7.3*	*U Q*	*18*	7.3	*2.9*
76-44-8	*Heptachlor*	*7.3*	*U Q*	*18*	7.3	*2.3*
1024-57-3	*Heptachlor epoxide*	*11*	*U Q*	*18*	11	*4.6*
72-43-5	*Methoxychlor*	*11*	*U Q*	*36*	11	*4.9*
8001-35-2	*Toxaphene*	*360*	*U Q*	*1800*	360	*170*

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	0	D Q	63-121
877-09-8	Tetrachloro-m-xylene (Surr)	69	D	42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250026.D
Lims ID: 280-97928-C-8-D
Client ID: SS025-SB01(0-2)
Sample Type: Client
Inject. Date: 25-Jun-2017 19:38:03 ALS Bottle#: 20 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Sample Info: 280-97928-C-8-D
Misc. Info.: 280-0060103-026
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 16:29:49 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK027

First Level Reviewer: wellsd Date: 26-Jun-2017 10:35:12

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1		1.000			ND	
2		0.000				
* 2 1-Bromo-2-nitrobenzene						
1	2.993	2.993	-0.001	2092113475	150.0	
2	2.764	2.763	0.000	436869006	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.820	3.819	0.001	20378946	1.38	
2	3.679	3.678	0.001	4715348	0.9872	
					RPD = 33.23	
5 Hexachlorobenzene						
1	4.198	4.200	-0.002	2370331	0.0843	
2	4.096	4.104	-0.008	683709	-0.6712	
					RPD = -257.45	
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1		4.361			ND	
2		3.971				
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1		4.676			ND	
2		4.567				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.760			ND	
2		4.648				
11 2,4,5-Trichlorophenol						
1		4.861			ND	
2		4.772				
12 delta-BHC						
1		4.935			ND	
2		4.920				
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1		5.144			ND	
2		4.978				
16 Aldrin						
1	5.433	5.431	0.002	113459	0.2895	
2	5.289	5.283	0.006	437267	-0.2164	
					RPD = 1383.37	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1	5.662	5.665	-0.003	143739	-1.73	
2	5.506	5.511	-0.005	166174	-2.59	
					RPD = -40.15	
LOD = 0.002000						
18 Isodrin						
1		5.758			ND	
2		5.645				
19 Dicofol						
1	5.796	5.798	-0.002	658091	-14.2	
2	5.606	5.610	-0.004	103520	-18.6	
					RPD = -27.11	
LOD = 0.002000						
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1		6.053			ND	
2		5.828				
22 gamma-Chlordane						
1		6.196			ND	
2		6.028				
23 alpha-Chlordane						
1		6.357			ND	
2		6.196				
24 4,4'-DDE						
1	6.449	6.453	-0.004	87872482	4.32	
2	6.411	6.413	-0.002	19120991	5.42	
					RPD = 22.58	
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1		6.813			ND	
2		6.599				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
29 2,4'-DDT						
1	6.960	6.961	-0.001	38767117	2.78	
2	7.020	7.022	-0.002	6335650	2.69	
					RPD = 3.34	
30 Endrin						
1		7.082			ND	
2		6.959				
31 Kepone						
1	7.120	7.129	-0.009	38842029	5.64	
2	7.109	7.088	0.021	1773065	0.0197	a
					RPD = 198.61	
32 4,4'-DDD						
1	7.154	7.158	-0.004	3562563	0.1652	a
2	7.109	7.110	-0.001	1773065	-0.1222	a
					RPD = 1337.79	
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1		7.331			ND	
2		7.203				
35 4,4'-DDT						
1	7.466	7.468	-0.002	250280576	14.4	
2	7.459	7.459	0.000	37807947	15.0	
					RPD = 3.92	
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1	7.990	7.981	0.009	6986836	0.6006	
2	8.182	8.182	0.000	4090306	2.52	
					RPD = 123.10	
38 Mirex						
1		8.127			ND	
2		8.353				
39 Endosulfan sulfate						
1		8.232			ND	
2		7.873				
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1		9.492			ND	
2		9.593				
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 3 Endosulfan, Total						
1		0.000			ND	
2		0.000				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

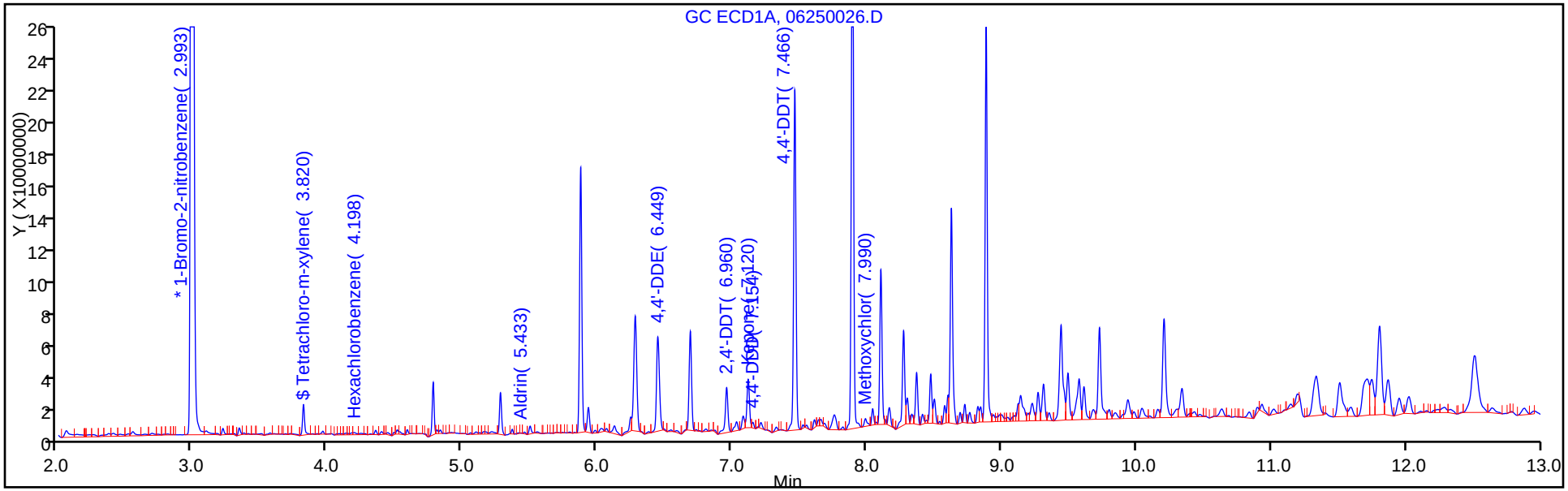
Report Date: 27-Jun-2017 16:41:50 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

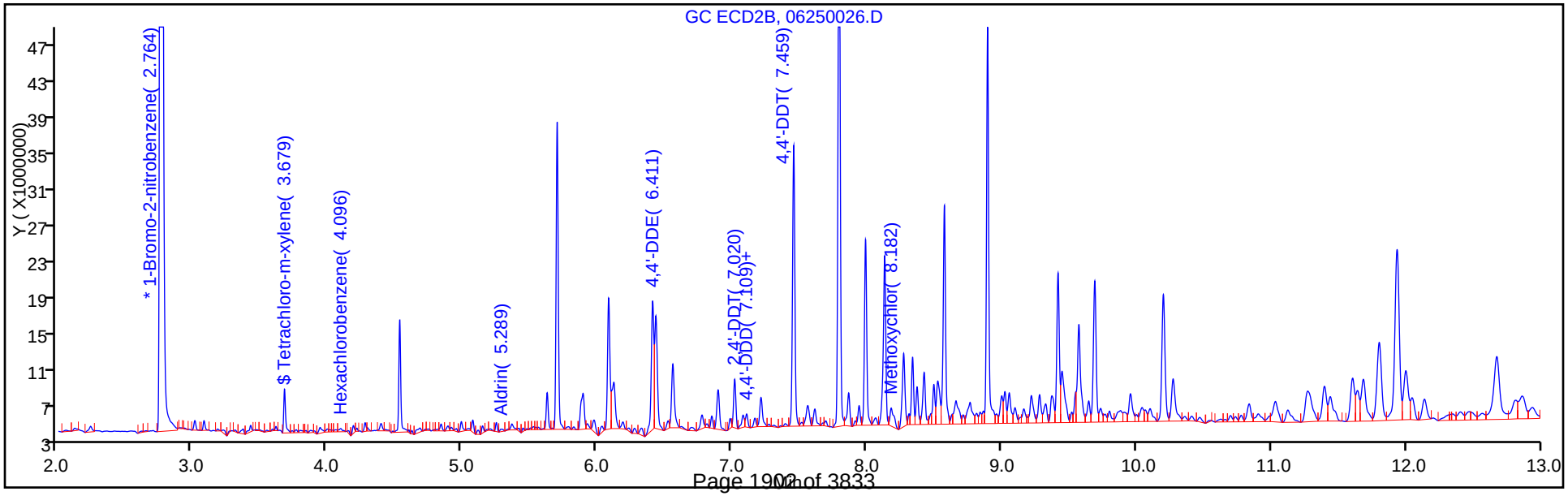
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Injection Date:	25-Jun-2017 19:38:03	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-C-8-D	Lab Sample ID:	280-97928-8	Worklist Smp#:	26
Client ID:	SS025-SB01(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	20
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250026.D				
Lims ID:	280-97928-C-8-D				
Client ID:	SS025-SB01(0-2)				
Sample Type:	Client				
Inject. Date:	25-Jun-2017 19:38:03	ALS Bottle#:	20	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Sample Info:	280-97928-C-8-D				
Misc. Info.:	280-0060103-026				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 16:29:49	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK027				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:35:12		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	1.38	69.03

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	0.9872	49.36

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB01(0-2)-a | Lab Sample ID: 280-97928-9

Matrix: Solid | Lab File ID: 06250048.D

Analysis Method: 8081B | Date Collected: 06/05/2017 10:20

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 30.2(g) | Date Analyzed: 06/26/2017 01:49

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 11.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.9	U Q	1.9	1.9	0.61
72-55-9	4,4'-DDE	1.3	J Q	1.9	0.75	0.27
50-29-3	4,4'-DDT	4.6	Q	2.2	1.9	0.66
309-00-2	Aldrin	0.75	U Q	1.9	0.75	0.28
319-84-6	alpha-BHC	0.75	U Q	1.9	0.75	0.24
5103-71-9	alpha-Chlordane	0.75	U Q	1.9	0.75	0.36
319-85-7	beta-BHC	1.9	U Q	1.9	1.9	0.74
319-86-8	delta-BHC	1.1	U Q	1.9	1.1	0.45
60-57-1	Dieldrin	0.75	U Q	1.9	0.75	0.23
959-98-8	Endosulfan I	0.75	U Q	1.9	0.75	0.20
33213-65-9	Endosulfan II	0.75	U Q	1.9	0.75	0.32
1031-07-8	Endosulfan sulfate	0.75	U Q	1.9	0.75	0.31
72-20-8	Endrin	0.75	U Q	1.9	0.75	0.34
7421-93-4	Endrin aldehyde	0.75	U Q	1.9	0.75	0.19
58-89-9	gamma-BHC (Lindane)	1.1	U Q	1.9	1.1	0.52
5103-74-2	gamma-Chlordane	0.75	U Q	1.9	0.75	0.30
76-44-8	Heptachlor	0.75	U Q	1.9	0.75	0.24
1024-57-3	Heptachlor epoxide	1.1	U Q	1.9	1.1	0.48
72-43-5	Methoxychlor	1.1	U Q	3.7	1.1	0.50
8001-35-2	Toxaphene	37	U Q	190	37	18

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	697	Q	63-121
877-09-8	Tetrachloro-m-xylene (Surr)	59		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250048.D
Lims ID: 280-97928-B-9-D
Client ID: SS025-SB01(0-2)-a
Sample Type: Client
Inject. Date: 26-Jun-2017 01:49:02 ALS Bottle#: 42 Worklist Smp#: 48
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-B-9-D
Misc. Info.: 280-0060103-048
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:57:28 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 11:55:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1		1.000			ND	
2		0.000				
* 2 1-Bromo-2-nitrobenzene						
1	2.993	2.993	0.000	2389303925	150.0	
2	2.764	2.763	0.001	469577988	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.820	3.819	0.001	212080504	11.8	
2	3.678	3.678	0.000	42389893	12.7	
					RPD = 7.47	
5 Hexachlorobenzene						
1		4.200			ND	
2		4.104				
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1		4.361			ND	
2		3.971				
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1		4.676			ND	
2		4.567				
10 beta-BHC						
1		4.760			ND	
2		4.648				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
11 2,4,5-Trichlorophenol						
1		4.861			ND	
2		4.772				
12 delta-BHC						
1		4.935			ND	
2		4.920				
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1		5.144			ND	
2		4.978				
16 Aldrin						
1		5.431			ND	
2		5.283				
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				
18 Isodrin						
1		5.758			ND	
2		5.645				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
19 Dicofol						
1	5.797	5.798	-0.001	36977643	230.4	
2	5.603	5.610	-0.007	375404	-8.34	
					RPD = 215.02	
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1		6.053			ND	
2		5.828				
22 gamma-Chlordane						
1		6.196			ND	
2		6.028				
23 alpha-Chlordane						
1	6.365	6.357	0.008	1623968	0.2744	
2	6.188	6.196	-0.008	831448	-0.4407	
					RPD = -860.33	
24 4,4'-DDE						
1	6.450	6.453	-0.003	81549373	3.58	
2	6.410	6.413	-0.003	11361420	2.77	
					RPD = 25.49	
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1	6.661	6.661	0.000	3072668	-0.0179	
2	6.656	6.661	-0.005	1321740	0.2926	
					RPD = 226.03	
27 Dieldrin						
1		6.813			ND	
2		6.599				
29 2,4'-DDT						
1	6.960	6.961	-0.001	48173024	3.03	
2	7.019	7.022	-0.003	11810512	4.92	
					RPD = 47.42	
30 Endrin						
1		7.082			ND	
2		6.959				
31 Kepone						
1	7.119	7.129	-0.010	29599693	3.93	
2	7.107	7.088	0.019	8948699	5.71	a
					RPD = 36.74	
32 4,4'-DDD						
1	7.156	7.158	-0.002	27931487	1.29	a
2	7.107	7.110	-0.003	8948699	2.45	a
					RPD = 62.01	
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
34 Endosulfan II						
1	7.328	7.331	-0.003	9560660	0.4059	
2	7.213	7.203	0.010	6451358	1.32	
					RPD = 106.00	
35 4,4'-DDT						
1	7.466	7.468	-0.002	246373581	12.5	
2	7.457	7.459	-0.002	38412249	14.1	
					RPD = 12.38	
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1		7.981			ND	
2		8.182				
38 Mirex						
1		8.127			ND	
2		8.353				
39 Endosulfan sulfate						
1		8.232			ND	
2		7.873				
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1	9.491	9.492	-0.001	1716305407	139.4	
2	9.590	9.593	-0.003	25544253	12.2	
					RPD = 167.72	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				
S 3 Endosulfan, Total						
1					0.4059	
2					1.32	
					RPD = 106.00	

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

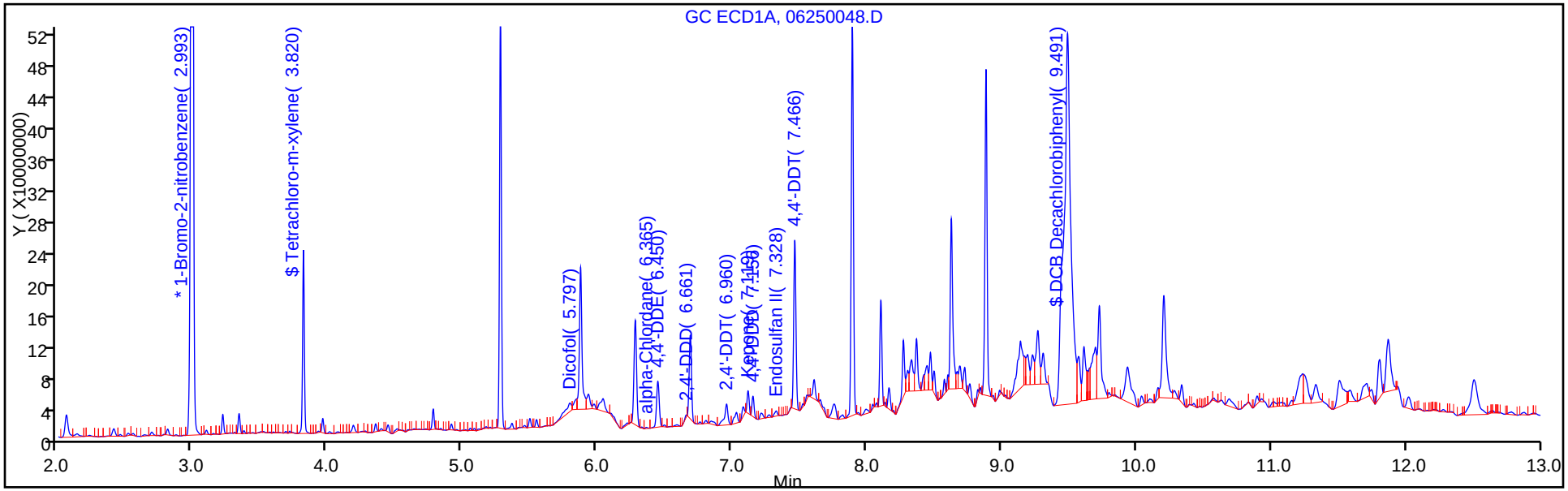
Report Date: 26-Jun-2017 11:57:33 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

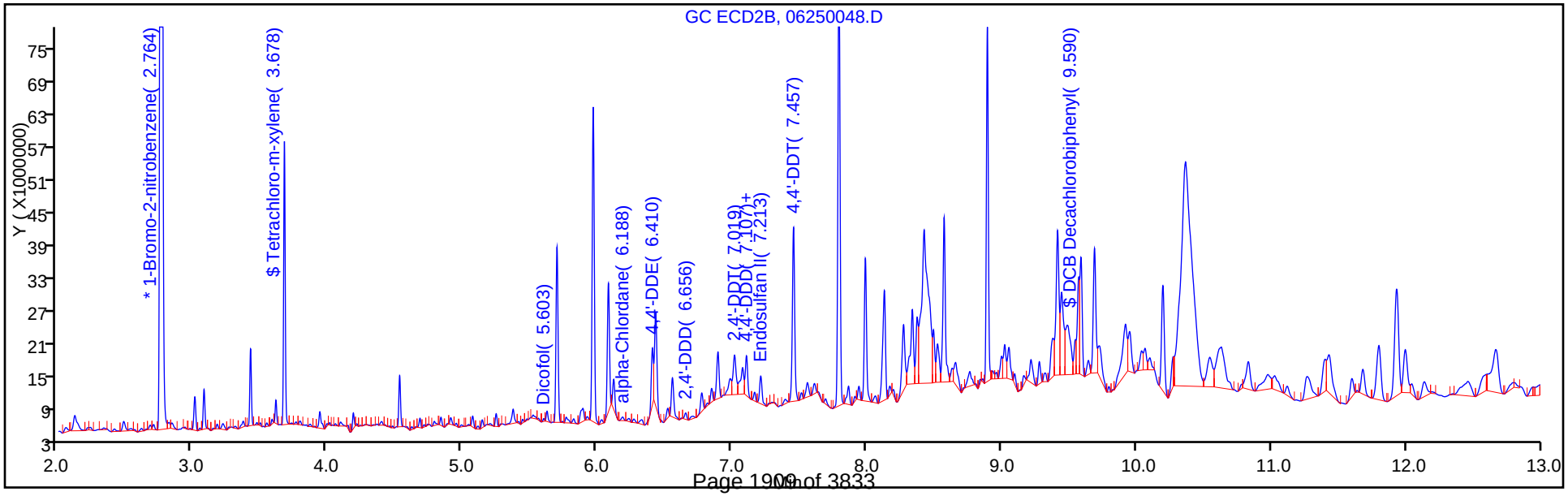
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250048.D

Injection Date:	26-Jun-2017 01:49:02	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-B-9-D	Lab Sample ID:	280-97928-9	Worklist Smp#:	48
Client ID:	SS025-SB01(0-2)-a				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	42
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250048.D				
Lims ID:	280-97928-B-9-D				
Client ID:	SS025-SB01(0-2)-a				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 01:49:02	ALS Bottle#:	42	Worklist Smp#:	48
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-B-9-D				
Misc. Info.:	280-0060103-048				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:57:28	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				
First Level Reviewer: wellsd		Date:	26-Jun-2017 11:55:49		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	11.8	58.80
$ 41 DCB Decachlorobiphenyl	20.0	139.4	696.89

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	12.7	63.36
$ 41 DCB Decachlorobiphenyl	20.0	12.2	61.18

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB08(0-2) | Lab Sample ID: 280-97928-10

Matrix: Solid | Lab File ID: 06250028.D

Analysis Method: 8081B | Date Collected: 06/05/2017 11:05

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.4(g) | Date Analyzed: 06/25/2017 20:11

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 10.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.8	U	1.8	1.8	0.58
72-55-9	4,4'-DDE	0.71	U	1.8	0.71	0.25
50-29-3	4,4'-DDT	1.8	U	2.1	1.8	0.63
309-00-2	Aldrin	0.71	U	1.8	0.71	0.27
319-84-6	alpha-BHC	0.71	U	1.8	0.71	0.23
5103-71-9	alpha-Chlordane	0.71	U	1.8	0.71	0.34
319-85-7	beta-BHC	1.8	U	1.8	1.8	0.71
319-86-8	delta-BHC	1.1	U	1.8	1.1	0.43
60-57-1	Dieldrin	0.71	U	1.8	0.71	0.22
959-98-8	Endosulfan I	0.71	U	1.8	0.71	0.19
33213-65-9	Endosulfan II	0.71	U	1.8	0.71	0.31
1031-07-8	Endosulfan sulfate	0.71	U	1.8	0.71	0.29
72-20-8	Endrin	0.71	U	1.8	0.71	0.33
7421-93-4	Endrin aldehyde	0.71	U	1.8	0.71	0.18
58-89-9	gamma-BHC (Lindane)	1.1	U	1.8	1.1	0.49
5103-74-2	gamma-Chlordane	0.71	U	1.8	0.71	0.28
76-44-8	Heptachlor	0.71	U	1.8	0.71	0.23
1024-57-3	Heptachlor epoxide	1.1	U	1.8	1.1	0.45
72-43-5	Methoxychlor	1.1	U	3.5	1.1	0.48
8001-35-2	Toxaphene	35	U	180	35	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	85		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	84		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250028.D
Lims ID: 280-97928-A-10-D
Client ID: SS025-SB08(0-2)
Sample Type: Client
Inject. Date: 25-Jun-2017 20:11:46 ALS Bottle#: 22 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-A-10-D
Misc. Info.: 280-0060103-028
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:12 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:35:43

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1		1.000			ND	
2		0.000				
* 2 1-Bromo-2-nitrobenzene						
1	2.993	2.993	0.000	2073964054	150.0	
2	2.764	2.763	0.001	426009330	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.820	3.819	0.001	262724226	16.7	
2	3.678	3.678	0.000	52304604	17.4	
					RPD = 4.16	
5 Hexachlorobenzene						
1		4.200			ND	
2		4.104				
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1	4.355	4.361	-0.006	3803113	-4.81	
2	3.977	3.971	0.006	588548	-5.72	
					RPD = -17.30	
LOD = 0.002000						
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1		4.676			ND	
2		4.567				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.760			ND	
2		4.648				
11 2,4,5-Trichlorophenol						
1		4.861			ND	
2		4.772				
12 delta-BHC						
1		4.935			ND	
2		4.920				
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1		5.144			ND	
2		4.978				
16 Aldrin						
1		5.431			ND	
2		5.283				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				
18 Isodrin						
1		5.758			ND	
2		5.645				
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1	6.050	6.053	-0.003	2214586	0.0237	
2	5.828	5.828	0.000	328715	-0.6028	
					RPD = -216.37	
22 gamma-Chlordane						
1		6.196			ND	
2		6.028				
23 alpha-Chlordane						
1		6.357			ND	
2		6.196				
24 4,4'-DDE						
1		6.453			ND	
2		6.413				
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1		6.813			ND	
2		6.599				
29 2,4'-DDT						
1		6.961			ND	
2		7.022				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
30 Endrin						
1		7.082			ND	
2		6.959				
31 Kepone						
1	7.122	7.129	-0.007	10224141	1.88	
2	7.080	7.088	-0.008	331742	-1.22	
					RPD = 949.85	
32 4,4'-DDD						
1		7.158			ND	
2		7.110				
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1		7.331			ND	
2		7.203				
35 4,4'-DDT						
1	7.466	7.468	-0.002	3338932	0.7362	
2	7.459	7.459	0.000	1892864	0.4250	
					RPD = 53.60	
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1		7.981			ND	
2		8.182				
38 Mirex						
1		8.127			ND	
2		8.353				
39 Endosulfan sulfate						
1		8.232			ND	
2		7.873				
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1	9.490	9.492	-0.002	185542440	17.0	
2	9.593	9.593	0.000	32442917	17.6	
					RPD = 3.30	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				
S 3 Endosulfan, Total						
1		0.000			ND	
2		0.000				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

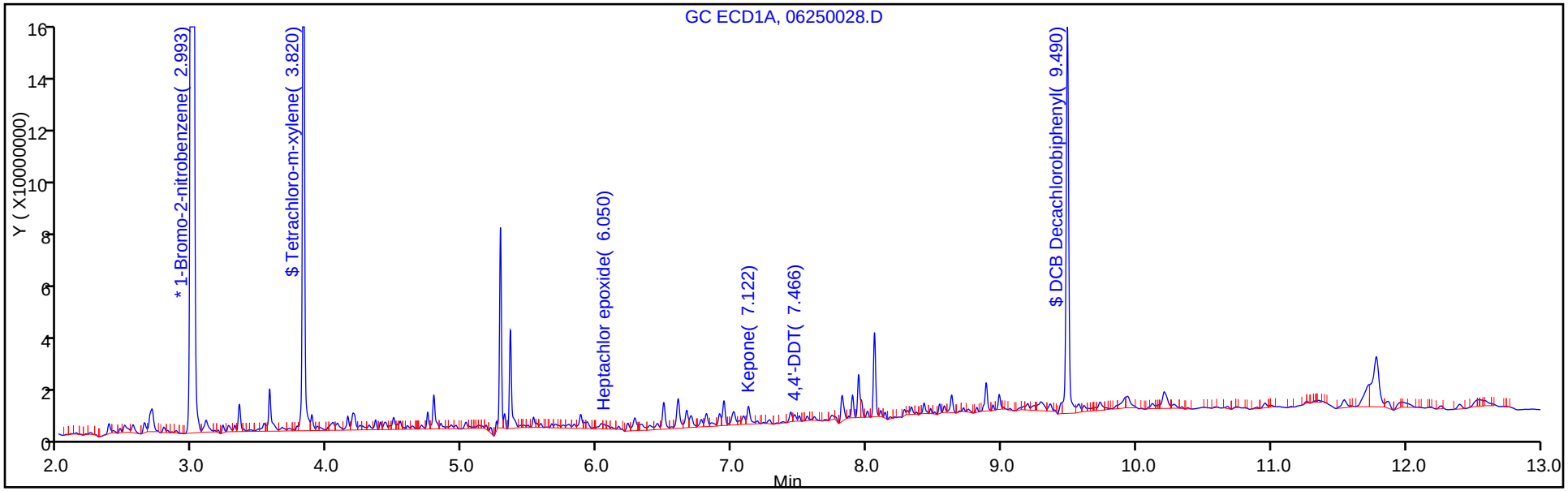
Report Date: 26-Jun-2017 11:56:47 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

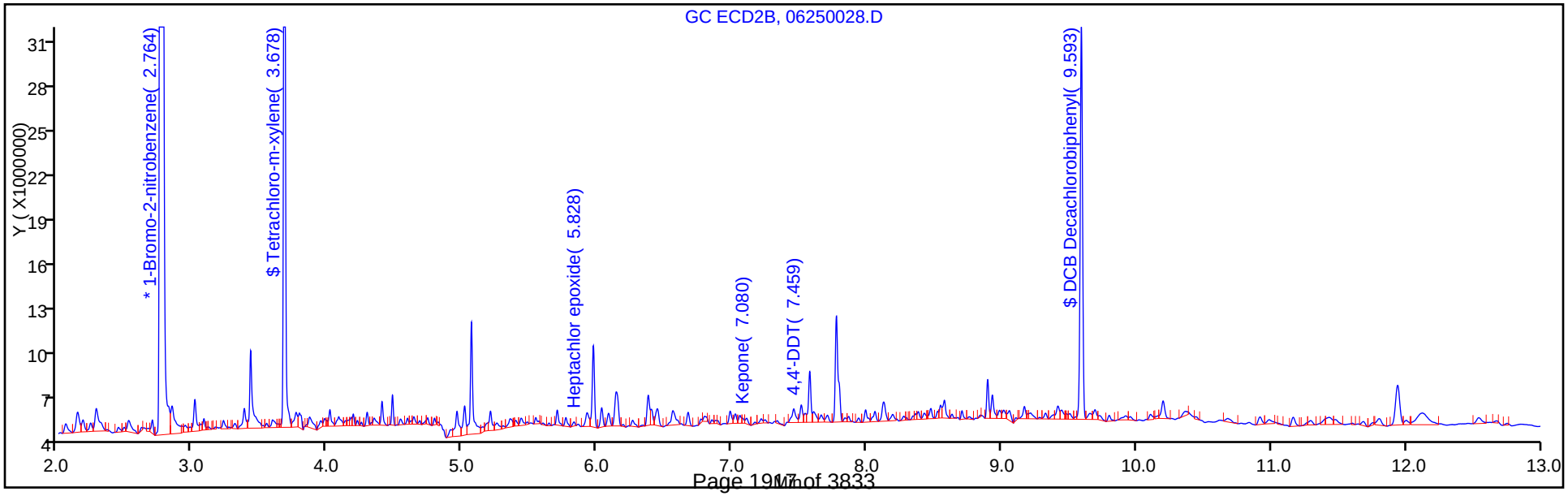
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250028.D

Injection Date:	25-Jun-2017 20:11:46	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-A-10-D	Lab Sample ID:	280-97928-10	Worklist Smp#:	28
Client ID:	SS025-SB08(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250028.D				
Lims ID:	280-97928-A-10-D				
Client ID:	SS025-SB08(0-2)				
Sample Type:	Client				
Inject. Date:	25-Jun-2017 20:11:46	ALS Bottle#:	22	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-A-10-D				
Misc. Info.:	280-0060103-028				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:12	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:35:43		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	16.7	83.70
$ 41 DCB Decachlorobiphenyl	20.0	17.0	85.14

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	17.4	87.25
$ 41 DCB Decachlorobiphenyl	20.0	17.6	88.00

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB08(2-4) | Lab Sample ID: 280-97928-11

Matrix: Solid | Lab File ID: 06250029.D

Analysis Method: 8081B | Date Collected: 06/05/2017 11:15

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 32.1(g) | Date Analyzed: 06/25/2017 20:28

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 13.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.8	U	1.8	1.8	0.59
72-55-9	4,4'-DDE	0.73	U	1.8	0.73	0.26
50-29-3	4,4'-DDT	1.8	U	2.2	1.8	0.64
309-00-2	Aldrin	0.73	U	1.8	0.73	0.27
319-84-6	alpha-BHC	0.73	U	1.8	0.73	0.23
5103-71-9	alpha-Chlordane	0.73	U	1.8	0.73	0.35
319-85-7	beta-BHC	1.8	U	1.8	1.8	0.72
319-86-8	delta-BHC	1.1	U	1.8	1.1	0.43
60-57-1	Dieldrin	0.73	U	1.8	0.73	0.23
959-98-8	Endosulfan I	0.73	U	1.8	0.73	0.19
33213-65-9	Endosulfan II	0.73	U	1.8	0.73	0.31
1031-07-8	Endosulfan sulfate	0.73	U	1.8	0.73	0.30
72-20-8	Endrin	0.73	U	1.8	0.73	0.33
7421-93-4	Endrin aldehyde	0.73	U	1.8	0.73	0.19
58-89-9	gamma-BHC (Lindane)	1.1	U	1.8	1.1	0.50
5103-74-2	gamma-Chlordane	0.73	U	1.8	0.73	0.29
76-44-8	Heptachlor	0.73	U	1.8	0.73	0.23
1024-57-3	Heptachlor epoxide	1.1	U	1.8	1.1	0.46
72-43-5	Methoxychlor	1.1	U	3.6	1.1	0.49
8001-35-2	Toxaphene	36	U	180	36	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	64		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	64		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250029.D
Lims ID: 280-97928-A-11-D
Client ID: SS025-SB08(2-4)
Sample Type: Client
Inject. Date: 25-Jun-2017 20:28:42 ALS Bottle#: 23 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-A-11-D
Misc. Info.: 280-0060103-029
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:12 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1		1.000			ND	
2		0.000				
* 2 1-Bromo-2-nitrobenzene						
1	2.992	2.993	-0.002	2557212227	150.0	
2	2.762	2.763	-0.001	424738670	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.819	3.819	0.000	247840336	12.8	
2	3.677	3.678	-0.001	50902636	17.0	
					RPD = 28.06	
5 Hexachlorobenzene						
1		4.200			ND	
2		4.104				
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1	4.353	4.361	-0.008	5987454	-3.91	
2	3.972	3.971	0.001	151762	-8.37	
					RPD = -72.59	
LOD = 0.002000						
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1		4.676			ND	
2		4.567				
10 beta-BHC						
1		4.760			ND	
2		4.648				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
11 2,4,5-Trichlorophenol						
1		4.861			ND	
2		4.772				
12 delta-BHC						
1		4.935			ND	
2		4.920				
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1		5.144			ND	
2		4.978				
16 Aldrin						
1		5.431			ND	
2		5.283				
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				
18 Isodrin						
1		5.758			ND	
2		5.645				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
19 Dicofol						
1	5.797	5.798	-0.001	3589202	3.38	
2	5.601	5.610	-0.009	713827	7.78	
					RPD = 78.77	
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1		6.053			ND	
2		5.828				
22 gamma-Chlordane						
1		6.196			ND	
2		6.028				
23 alpha-Chlordane						
1		6.357			ND	
2		6.196				
24 4,4'-DDE						
1	6.451	6.453	-0.002	2949513	0.4754	
2	6.411	6.413	-0.002	145904	-0.4591	
					RPD = 11495.48	
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1		6.813			ND	
2		6.599				
29 2,4'-DDT						
1		6.961			ND	
2		7.022				
30 Endrin						
1		7.082			ND	
2		6.959				
31 Kepone						
1		7.129			ND	
2		7.088				
32 4,4'-DDD						
1		7.158			ND	
2		7.110				
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1	7.337	7.331	0.006	863519	-0.009614	
2	7.201	7.203	-0.002	1601410	-0.2694	
					RPD = -186.22	

LOD = 0.002000

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
35 4,4'-DDT						
1		7.468			ND	
2		7.459				
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1		7.981			ND	
2		8.182				
38 Mirex						
1		8.127			ND	
2		8.353				
39 Endosulfan sulfate						
1		8.232			ND	
2		7.873				
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1	9.489	9.492	-0.003	172451953	12.7	
2	9.592	9.593	-0.001	30043033	16.3	
					RPD = 24.26	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				
S 3 Endosulfan, Total						
1					-0.009614	
2					-0.2694	
					RPD = -186.22	

LOD = 0.002000

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

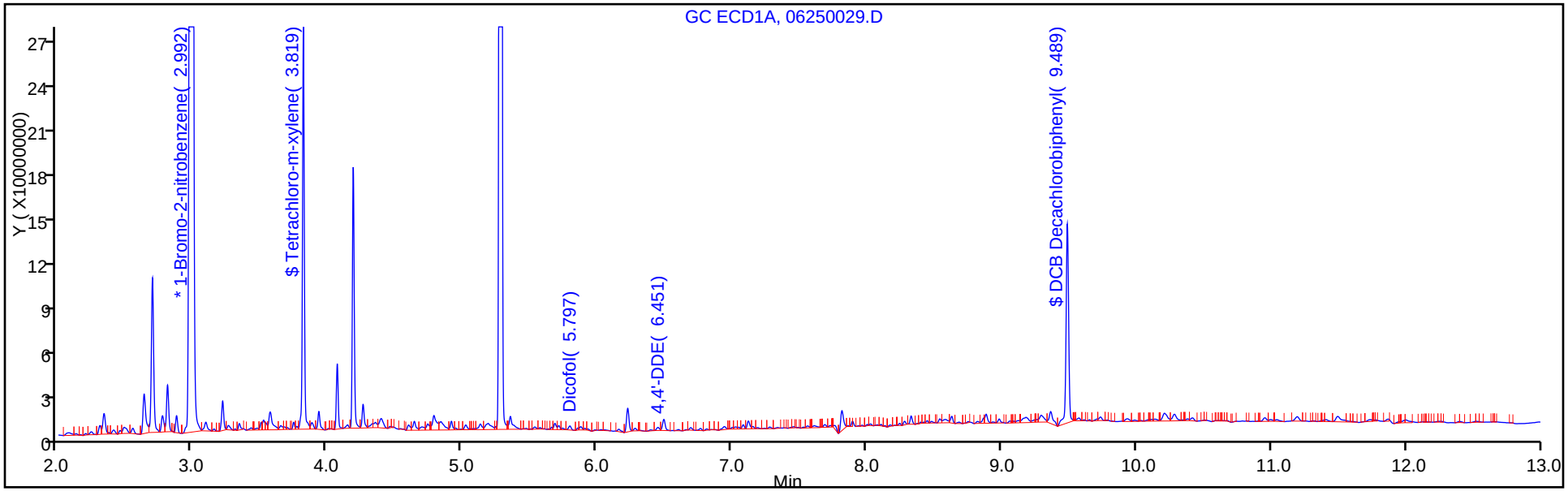
Report Date: 26-Jun-2017 11:56:49 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

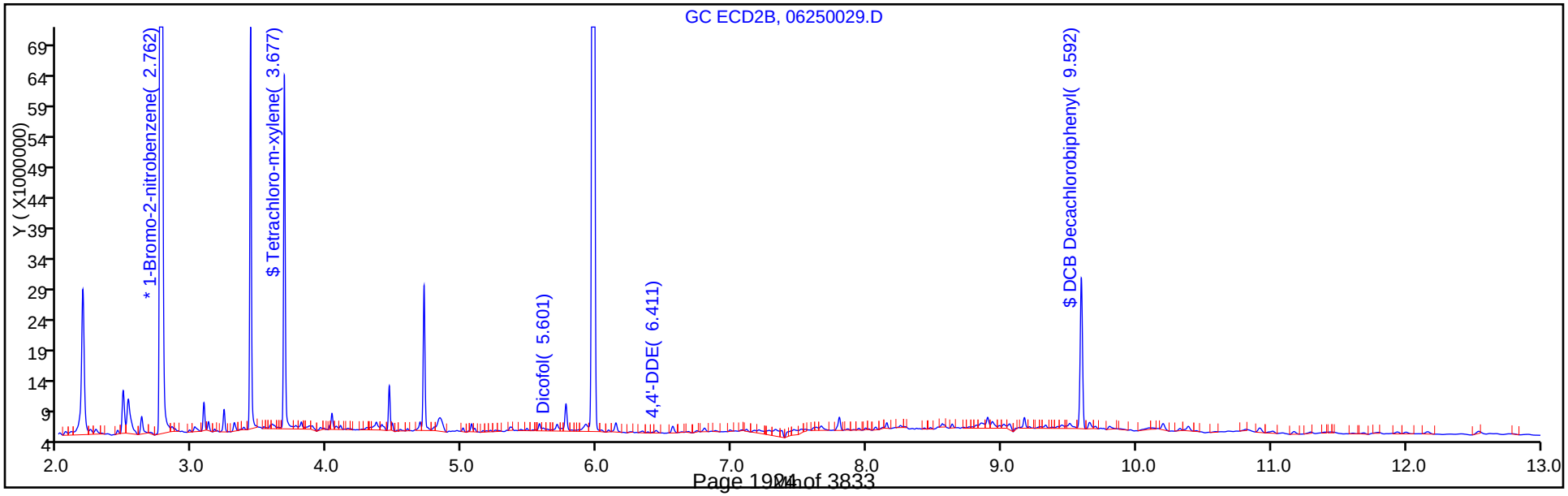
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Injection Date:	25-Jun-2017 20:28:42	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-A-11-D	Lab Sample ID:	280-97928-11	Worklist Smp#:	29
Client ID:	SS025-SB08(2-4)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250029.D				
Lims ID:	280-97928-A-11-D				
Client ID:	SS025-SB08(2-4)				
Sample Type:	Client				
Inject. Date:	25-Jun-2017 20:28:42	ALS Bottle#:	23	Worklist Smp#:	29
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-A-11-D				
Misc. Info.:	280-0060103-029				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:12	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	12.8	64.15
$ 41 DCB Decachlorobiphenyl	20.0	12.7	63.72

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	17.0	85.09
$ 41 DCB Decachlorobiphenyl	20.0	16.3	81.31

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS09 | Lab Sample ID: 280-97928-12

Matrix: Solid | Lab File ID: 06250049.D

Analysis Method: 8081B | Date Collected: 06/05/2017 11:35

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.8(g) | Date Analyzed: 06/26/2017 02:05

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 11.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.8	U	1.8	1.8	0.58
72-55-9	4,4'-DDE	0.59	J	1.8	0.72	0.25
50-29-3	4,4'-DDT	1.3	J	2.1	1.8	0.63
309-00-2	Aldrin	0.72	U	1.8	0.72	0.27
319-84-6	alpha-BHC	0.72	U	1.8	0.72	0.23
5103-71-9	alpha-Chlordane	0.72	U	1.8	0.72	0.35
319-85-7	beta-BHC	1.8	U	1.8	1.8	0.71
319-86-8	delta-BHC	1.1	U	1.8	1.1	0.43
60-57-1	Dieldrin	2.0		1.8	0.72	0.22
959-98-8	Endosulfan I	0.72	U	1.8	0.72	0.19
33213-65-9	Endosulfan II	0.72	U	1.8	0.72	0.31
1031-07-8	Endosulfan sulfate	0.72	U	1.8	0.72	0.30
72-20-8	Endrin	0.72	U	1.8	0.72	0.33
7421-93-4	Endrin aldehyde	0.72	U	1.8	0.72	0.18
58-89-9	gamma-BHC (Lindane)	1.1	U	1.8	1.1	0.50
5103-74-2	gamma-Chlordane	0.72	U	1.8	0.72	0.28
76-44-8	Heptachlor	0.72	U	1.8	0.72	0.23
1024-57-3	Heptachlor epoxide	1.1	U	1.8	1.1	0.46
72-43-5	Methoxychlor	1.1	U	3.5	1.1	0.48
8001-35-2	Toxaphene	35	U Q	180	35	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	97		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	50		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250049.D
Lims ID: 280-97928-B-12-D
Client ID: SS025-SS09
Sample Type: Client
Inject. Date: 26-Jun-2017 02:05:56 ALS Bottle#: 43 Worklist Smp#: 49
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-B-12-D
Misc. Info.: 280-0060103-049
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:57:28 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:41:23

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					1.22	
2					-0.0843	
					RPD = 229.58	
LOD = 0.002000						
* 2 1-Bromo-2-nitrobenzene						
1	2.993	2.993	-0.001	2854835357	150.0	
2	2.763	2.763	-0.001	478135097	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.819	3.819	0.000	216328714	10.1	
2	3.678	3.678	0.000	45741472	13.5	
					RPD = 29.00	
5 Hexachlorobenzene						
1		4.200			ND	
2		4.104				
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1		4.361			ND	
2		3.971				
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1	4.675	4.676	-0.001	978814	0.5955	
2	4.564	4.567	-0.003	362524	-0.1248	
					RPD = 306.01	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.760			ND	
2		4.648				
11 2,4,5-Trichlorophenol						
1	4.864	4.861	0.003	7316223	NC	
2	4.757	4.772	-0.015	146556	NC	
					RPD = 0.00	
12 delta-BHC						
1	4.937	4.935	0.002	3484774	0.6289	
2	4.915	4.920	-0.005	748862	0.0405	
					RPD = 175.82	
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1		5.144			ND	
2		4.978				
16 Aldrin						
1		5.431			ND	
2		5.283				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				
18 Isodrin						
1		5.758			ND	
2		5.645				
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1	6.052	6.053	-0.001	8059322	0.2048	
2	5.826	5.828	-0.002	6037754	1.05	
					RPD = 134.80	
22 gamma-Chlordane						
1	6.193	6.196	-0.003	9831336	0.6232	
2	6.026	6.028	-0.002	10052940	2.23	
					RPD = 112.75	
23 alpha-Chlordane						
1	6.356	6.357	-0.001	6644900	0.4345	
2	6.190	6.196	-0.006	4272180	0.5624	
					RPD = 25.65	
24 4,4'-DDE						
1	6.444	6.453	-0.009	39468400	1.67	
2	6.407	6.413	-0.006	4337833	0.7226	
					RPD = 79.09	
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1	6.806	6.813	-0.007	167681933	5.68	
2	6.595	6.599	-0.004	4697274	0.7221	
					RPD = 154.89	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
29 2,4'-DDT						
1		6.961			ND	
2		7.022				
30 Endrin						
1		7.082			ND	
2		6.959				
31 Kepone						
1		7.129			ND	
2		7.088				
32 4,4'-DDD						
1		7.158			ND	
2		7.110				
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1		7.331			ND	
2		7.203				
35 4,4'-DDT						
1	7.463	7.468	-0.005	79486690	3.77	
2	7.457	7.459	-0.002	39072484	14.1	
					RPD = 115.64	
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1		7.981			ND	
2		8.182				
38 Mirex						
1		8.127			ND	
2		8.353				
39 Endosulfan sulfate						
1		8.232			ND	
2		7.873				
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1	9.490	9.492	-0.002	288884995	19.3	
2	9.592	9.593	-0.001	31149660	14.9	
					RPD = 25.88	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				
S 3 Endosulfan, Total						
1		0.000			ND	
2		0.000				

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

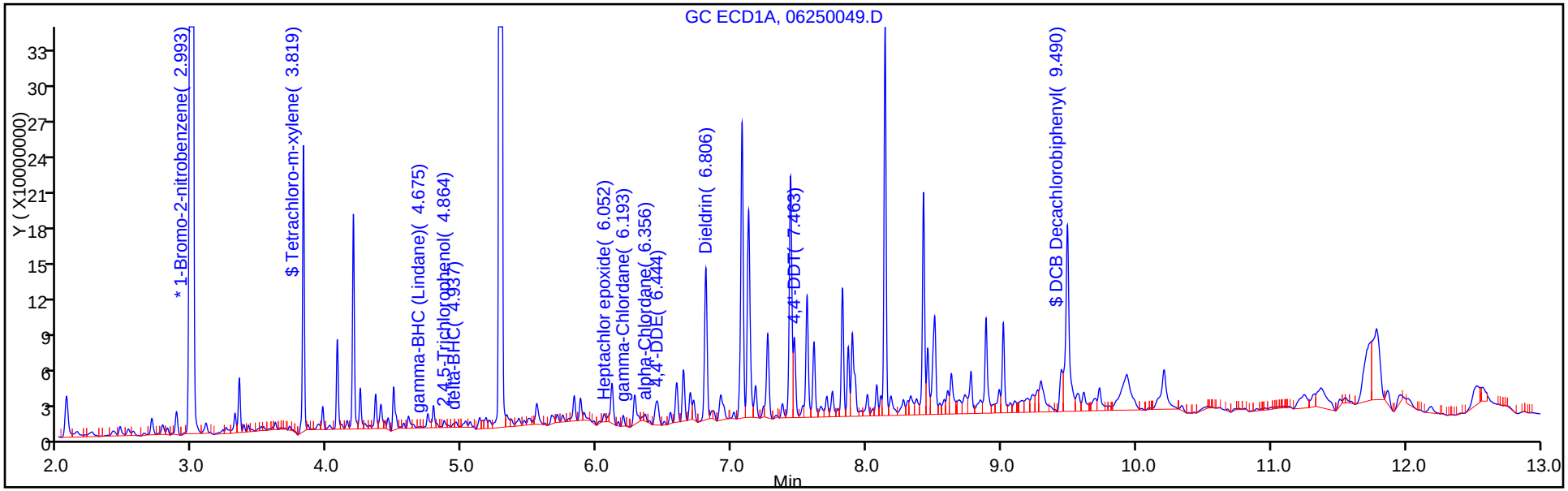
Report Date: 26-Jun-2017 11:57:35 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

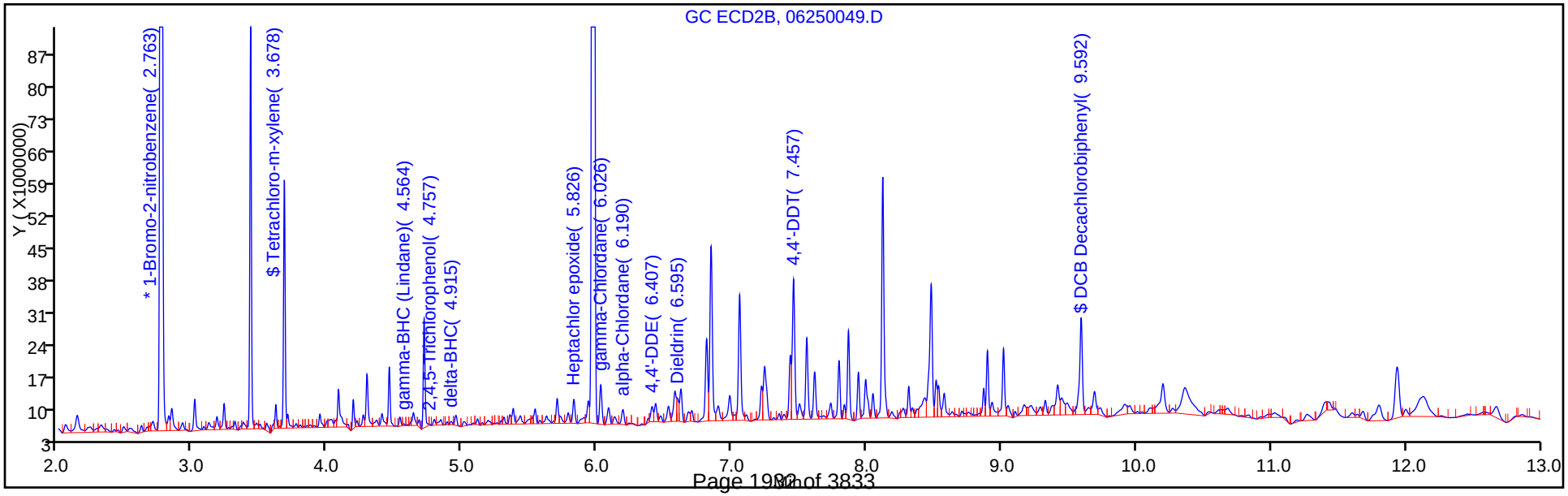
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Injection Date:	26-Jun-2017 02:05:56	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-B-12-D	Lab Sample ID:	280-97928-12	Worklist Smp#:	49
Client ID:	SS025-SS09				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	43
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 26-Jun-2017 11:57:35 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250049.D				
Lims ID:	280-97928-B-12-D				
Client ID:	SS025-SS09				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 02:05:56	ALS Bottle#:	43	Worklist Smp#:	49
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-B-12-D				
Misc. Info.:	280-0060103-049				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:57:28	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:41:23		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	10.1	50.27
$ 41 DCB Decachlorobiphenyl	20.0	19.3	96.55

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	13.5	67.32
$ 41 DCB Decachlorobiphenyl	20.0	14.9	74.43

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(0-2) | Lab Sample ID: 280-97928-14

Matrix: Solid | Lab File ID: 06250050.D

Analysis Method: 8081B | Date Collected: 06/05/2017 13:30

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 30.3(g) | Date Analyzed: 06/26/2017 02:22

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 11.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.9	U	1.9	1.9	0.61
72-55-9	*4,4'-DDE*	*0.72*	*J*	*1.9*	0.75	*0.26*
50-29-3	*4,4'-DDT*	*6.4*	*J*	*2.2*	1.9	*0.66*
309-00-2	Aldrin	0.75	U	1.9	0.75	0.28
319-84-6	alpha-BHC	0.75	U	1.9	0.75	0.24
5103-71-9	*alpha-Chlordane*	*1.6*	*J*	*1.9*	0.75	*0.36*
319-85-7	beta-BHC	1.9	U	1.9	1.9	0.74
319-86-8	delta-BHC	1.1	U	1.9	1.1	0.45
60-57-1	Dieldrin	0.75	U	1.9	0.75	0.23
959-98-8	Endosulfan I	0.75	U	1.9	0.75	0.20
33213-65-9	Endosulfan II	0.75	U	1.9	0.75	0.32
1031-07-8	Endosulfan sulfate	0.75	U	1.9	0.75	0.31
72-20-8	Endrin	0.75	U	1.9	0.75	0.34
7421-93-4	Endrin aldehyde	0.75	U	1.9	0.75	0.19
58-89-9	gamma-BHC (Lindane)	1.1	U	1.9	1.1	0.52
5103-74-2	*gamma-Chlordane*	*2.9*	*J*	*1.9*	0.75	*0.30*
76-44-8	Heptachlor	0.75	U	1.9	0.75	0.24
1024-57-3	*Heptachlor epoxide*	*1.7*	*J*	*1.9*	1.1	*0.47*
72-43-5	Methoxychlor	1.1	U	3.7	1.1	0.50
8001-35-2	Toxaphene	37	U Q	190	37	18

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	77		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	77		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250050.D
Lims ID: 280-97928-C-14-D
Client ID: SS025-SB09(0-2)
Sample Type: Client
Inject. Date: 26-Jun-2017 02:22:44 ALS Bottle#: 44 Worklist Smp#: 50
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-14-D
Misc. Info.: 280-0060103-050
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:57:28 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					1.47	
2					0.7552	
					RPD = 63.98	
* 2 1-Bromo-2-nitrobenzene						s
1	2.982	2.993	-0.012	5290396856	150.0	
2	2.764	2.763	0.000	473890136	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.819	3.819	0.000	251867015	6.35	
2	3.678	3.678	0.000	51399123	15.3	
					RPD = 82.87	
5 Hexachlorobenzene						
1	4.190	4.200	-0.010	1566295618	35.0	
2	4.096	4.104	-0.008	1589091	-0.4167	
					RPD = 204.82	
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1		4.361			ND	
2		3.971				
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1	4.680	4.676	0.004	5644021	0.6554	
2	4.566	4.567	-0.001	443577	-0.1048	
					RPD = 276.16	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.760			ND	
2		4.648				
11 2,4,5-Trichlorophenol						
1	4.860	4.861	-0.001	10996274	NC	
2	4.758	4.772	-0.014	784914	NC	
					RPD = 0.00	
12 delta-BHC						
1	4.934	4.935	-0.001	18753585	0.8102	
2	4.912	4.920	-0.008	4316562	0.8600	
					RPD = 5.96	
14 Chlordane (technical)						
1	0.000	5.065	-5.065	0	0	
1	0.000	5.560	-5.560	0	0	
1	6.194	6.197	-0.003	102665072	23.3	
1	6.333	6.337	-0.004	147076249	21.5	
1	7.264	7.258	0.006	82023968	52.8	
		Average of Peak Amounts =			32.6	
2	4.837	4.840	-0.003	12404313	105.5	
2	5.429	5.425	0.004	4516730	31.0	
2	6.026	6.029	-0.003	30137613	76.6	
2	6.194	6.196	-0.002	17043978	55.0	
2	7.247	7.254	-0.007	25363331	206.6	
		Average of Peak Amounts =			94.9	
					RPD = 97.86	
13 Technical Chlordane						
1	0.000	5.065	-5.065	0	0	
1	0.000	5.560	-5.560	0	0	
1	6.194	6.197	-0.003	102665072	23.3	
1	6.333	6.337	-0.004	147076249	21.5	
1	7.264	7.258	0.006	82023968	52.8	
		Average of Peak Amounts =			32.6	
2	4.837	4.840	-0.003	12404313	105.5	
2	5.429	5.425	0.004	4516730	31.0	
2	6.026	6.029	-0.003	30137613	76.6	
2	6.194	6.196	-0.002	17043978	55.0	
2	7.247	7.254	-0.007	25363331	206.6	
		Average of Peak Amounts =			94.9	
					RPD = 97.86	
15 Heptachlor						
1	5.144	5.144	0.000	51679523	1.03	
2	4.975	4.978	-0.003	1323381	-0.1761	
					RPD = 282.83	
16 Aldrin						
1		5.431			ND	
2		5.283				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				
18 Isodrin						
1		5.758			ND	
2		5.645				
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1	6.052	6.053	-0.001	25297420	0.4069	
2	5.826	5.828	-0.002	18268925	4.67	
					RPD = 167.94	
22 gamma-Chlordane						
1	6.194	6.196	-0.002	102665072	2.10	
2	6.026	6.028	-0.002	30137613	7.90	
					RPD = 115.91	
23 alpha-Chlordane						
1	6.352	6.357	-0.005	80076969	1.68	
2	6.194	6.196	-0.002	17043978	4.35	
					RPD = 88.55	
24 4,4'-DDE						
1	6.446	6.453	-0.007	89458300	1.96	
2	6.409	6.413	-0.004	8580625	1.95	
					RPD = 0.65	
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1		6.813			ND	
2		6.599				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
29 2,4'-DDT						
1		6.961			ND	
2		7.022				
30 Endrin						
1		7.082			ND	
2		6.959				
31 Kepone						
1		7.129			ND	
2		7.088				
32 4,4'-DDD						
1		7.158			ND	
2		7.110				
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1		7.331			ND	
2		7.203				
35 4,4'-DDT						
1	7.464	7.468	-0.004	106732826	2.88	
2	7.456	7.459	-0.003	47477641	17.4	
					RPD = 143.07	
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1		7.981			ND	
2		8.182				
38 Mirex						
1		8.127			ND	
2		8.353				
39 Endosulfan sulfate						
1		8.232			ND	
2		7.873				
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1	9.489	9.492	-0.003	220710821	7.74	
2	9.592	9.593	-0.001	31825297	15.4	
					RPD = 66.09	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				
S 3 Endosulfan, Total						
1		0.000			ND	
2		0.000				

QC Flag Legend

Processing Flags

NC - Not Calibrated

s - Failed ISTD Recovery Test

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

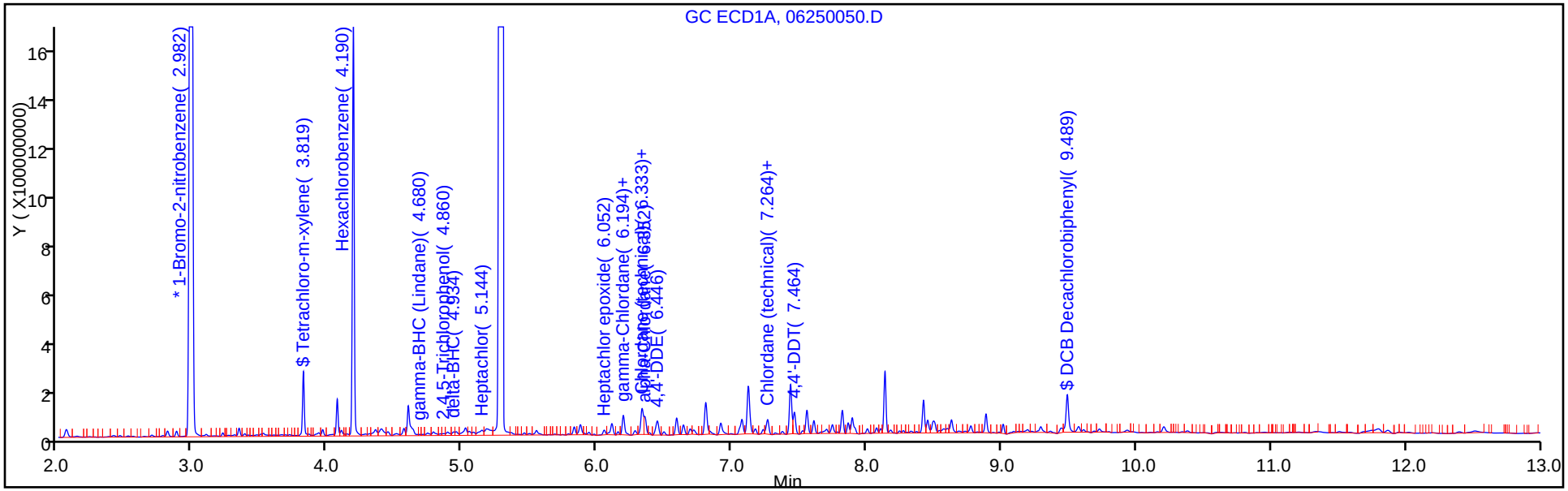
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TestAmerica Denver

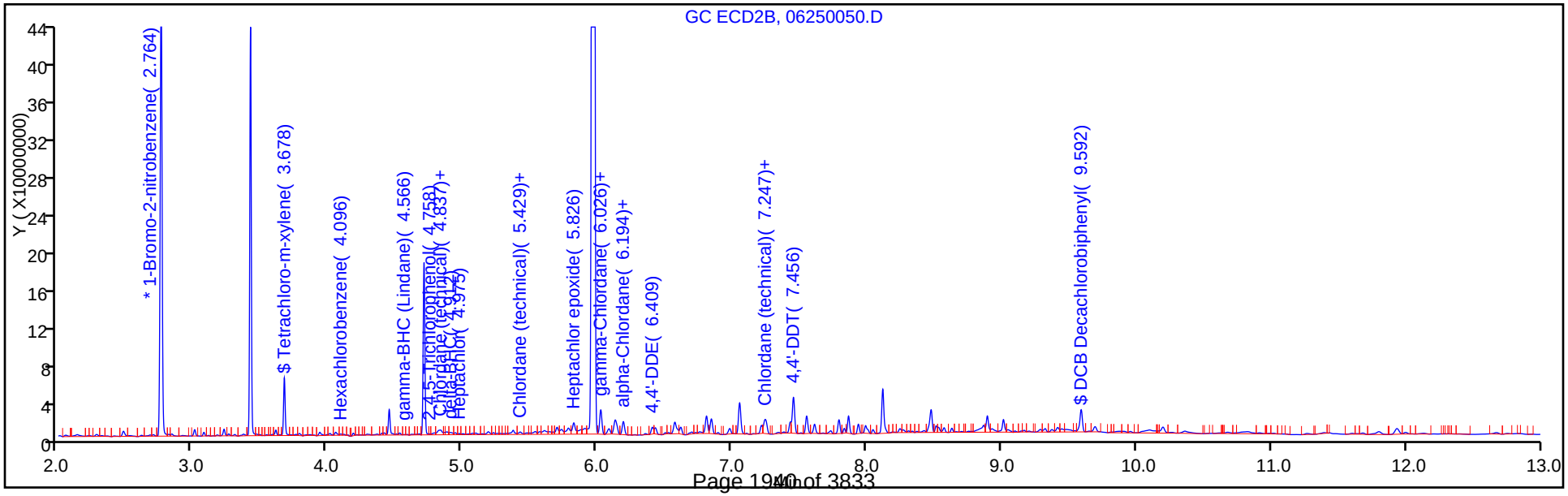
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Injection Date:	26-Jun-2017 02:22:44	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-C-14-D	Lab Sample ID:	280-97928-14	Worklist Smp#:	50
Client ID:	SS025-SB09(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	44
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250050.D				
Lims ID:	280-97928-C-14-D				
Client ID:	SS025-SB09(0-2)				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 02:22:44	ALS Bottle#:	44	Worklist Smp#:	50
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-14-D				
Misc. Info.:	280-0060103-050				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:57:28	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	6.35	31.77
$ 41 DCB Decachlorobiphenyl	20.0	7.74	38.70

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	15.3	76.73
$ 41 DCB Decachlorobiphenyl	20.0	15.4	76.91

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(0-2) DL | Lab Sample ID: 280-97928-14 DL

Matrix: Solid | Lab File ID: 06250035.D

Analysis Method: 8081B | Date Collected: 06/05/2017 13:30

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 30.3(g) | Date Analyzed: 06/25/2017 22:09

Con. Extract Vol.: 10(mL) | Dilution Factor: 10

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 11.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	*4,4'-DDD*	*19*	*U*	*19*	19	*6.1*
72-55-9	4,4'-DDE	3.0	J D	19	7.5	2.6
50-29-3	4,4'-DDT	19	U	22	19	6.6
309-00-2	*Aldrin*	*7.5*	*U*	*19*	7.5	*2.8*
319-84-6	*alpha-BHC*	*7.5*	*U*	*19*	7.5	*2.4*
5103-71-9	alpha-Chlordane	4.9	J D	19	7.5	3.6
319-85-7	*beta-BHC*	*19*	*U*	*19*	19	*7.4*
319-86-8	*delta-BHC*	*11*	*U*	*19*	11	*4.5*
60-57-1	*Dieldrin*	*7.5*	*U*	*19*	7.5	*2.3*
959-98-8	*Endosulfan I*	*7.5*	*U*	*19*	7.5	*2.0*
33213-65-9	*Endosulfan II*	*7.5*	*U*	*19*	7.5	*3.2*
1031-07-8	*Endosulfan sulfate*	*7.5*	*U*	*19*	7.5	*3.1*
72-20-8	*Endrin*	*7.5*	*U*	*19*	7.5	*3.4*
7421-93-4	*Endrin aldehyde*	*7.5*	*U*	*19*	7.5	*1.9*
58-89-9	*gamma-BHC (Lindane)*	*11*	*U*	*19*	11	*5.2*
5103-74-2	gamma-Chlordane	3.1	J D	19	7.5	3.0
76-44-8	*Heptachlor*	*7.5*	*U*	*19*	7.5	*2.4*
1024-57-3	Heptachlor epoxide	11	U	19	11	4.7
72-43-5	*Methoxychlor*	*11*	*U*	*37*	11	*5.0*
8001-35-2	*Toxaphene*	*370*	*U*	*1900*	370	*180*

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	94	D	63-121
877-09-8	Tetrachloro-m-xylene (Surr)	81	D	42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250035.D
Lims ID: 280-97928-C-14-D
Client ID: SS025-SB09(0-2)
Sample Type: Client
Inject. Date: 25-Jun-2017 22:09:52 ALS Bottle#: 29 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 10.0000
Sample Info: 280-97928-C-14-D
Misc. Info.: 280-0060103-035
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 16:29:49 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK027

First Level Reviewer: wellsd Date: 26-Jun-2017 10:37:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					0.5923	
2					-0.0569	
					RPD = 242.53	
LOD = 0.002000						
* 2 1-Bromo-2-nitrobenzene						
1	2.993	2.993	0.000	2322458958	150.0	
2	2.764	2.763	0.000	460878830	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.820	3.819	0.001	26702628	1.61	
2	3.679	3.678	0.001	6045381	1.33	
					RPD = 19.22	
5 Hexachlorobenzene						
1	4.191	4.200	-0.009	36369038	1.80	
2	4.097	4.104	-0.007	1412333	-0.4578	
					RPD = 336.19	
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1		4.361			ND	
2		3.971				
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1		4.676			ND	
2		4.567				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.760			ND	
2		4.648				
11 2,4,5-Trichlorophenol						
1		4.861			ND	
2		4.772				
12 delta-BHC						
1	4.935	4.935	0.000	1744423	0.5923	
2	4.921	4.920	0.001	308765	-0.0569	
					RPD = 242.53	
14 Chlordane (technical)						
1	5.060	5.065	-0.005	895230	5.56	
1	5.551	5.560	-0.009	3031823	4.08	
1	6.195	6.197	-0.002	13300720	13.0	
1	6.335	6.337	-0.002	26426715	14.4	a
1	7.265	7.258	0.007	11070187	24.1	
		Average of Peak Amounts =			12.2	
2	4.841	4.840	0.001	1380010	6.01	
2	5.430	5.425	0.005	307966	-10.2	
2	6.027	6.029	-0.002	4174294	10.6	
2	0.000	6.196	-6.196	0	0	
2	7.247	7.254	-0.007	3586380	31.5	
		Average of Peak Amounts =			9.48	
					RPD = 25.28	
13 Technical Chlordane						
1	5.060	5.065	-0.005	895230	5.56	
1	5.551	5.560	-0.009	3031823	4.08	
1	6.195	6.197	-0.002	13300720	13.0	
1	6.335	6.337	-0.002	26426715	14.4	a
1	7.265	7.258	0.007	11070187	24.1	
		Average of Peak Amounts =			12.2	
2	4.841	4.840	0.001	1380010	6.01	
2	5.430	5.425	0.005	307966	-10.2	
2	6.027	6.029	-0.002	4174294	10.6	
2	0.000	6.196	-6.196	0	0	
2	7.247	7.254	-0.007	3586380	31.5	
		Average of Peak Amounts =			9.48	
					RPD = 25.28	
15 Heptachlor						
1	5.144	5.144	0.000	3113410	0.2650	
2	4.978	4.978	0.000	111995	-0.4876	
					RPD = -676.17	
16 Aldrin						
1		5.431			ND	
2		5.283				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				
18 Isodrin						
1		5.758			ND	
2		5.645				
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1	6.053	6.053	0.000	2945259	0.0444	
2	5.827	5.828	-0.001	1763337	-0.1765	
					RPD = -334.29	
22 gamma-Chlordane						
1	6.195	6.196	-0.001	13300720	0.8348	
2	6.027	6.028	-0.001	4174294	0.6418	
					RPD = 26.14	
23 alpha-Chlordane						
1	6.335	6.357	-0.022	26426715	1.31	a
2	6.195	6.196	-0.001	2403036	0.0414	a
					RPD = 187.77	
24 4,4'-DDE						
1	6.447	6.453	-0.006	11067343	0.8154	
2	6.411	6.413	-0.002	1042237	-0.1995	
					RPD = 329.56	
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1		6.813			ND	
2		6.599				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
29 2,4'-DDT						
1		6.961			ND	
2		7.022				
30 Endrin						
1		7.082			ND	
2		6.959				
31 Kepone						
1		7.129			ND	
2		7.088				
32 4,4'-DDD						
1		7.158			ND	
2		7.110				
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1		7.331			ND	
2		7.203				
35 4,4'-DDT						
1	7.464	7.468	-0.004	12393096	1.17	
2	7.458	7.459	-0.001	6420663	2.10	
					RPD = 57.30	
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1		7.981			ND	
2		8.182				
38 Mirex						
1		8.127			ND	
2		8.353				
39 Endosulfan sulfate						
1		8.232			ND	
2		7.873				
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1	9.491	9.492	-0.001	27000711	1.89	
2	9.592	9.593	-0.001	4742135	1.36	
					RPD = 32.30	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				
S 3 Endosulfan, Total						
1		0.000			ND	
2		0.000				

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

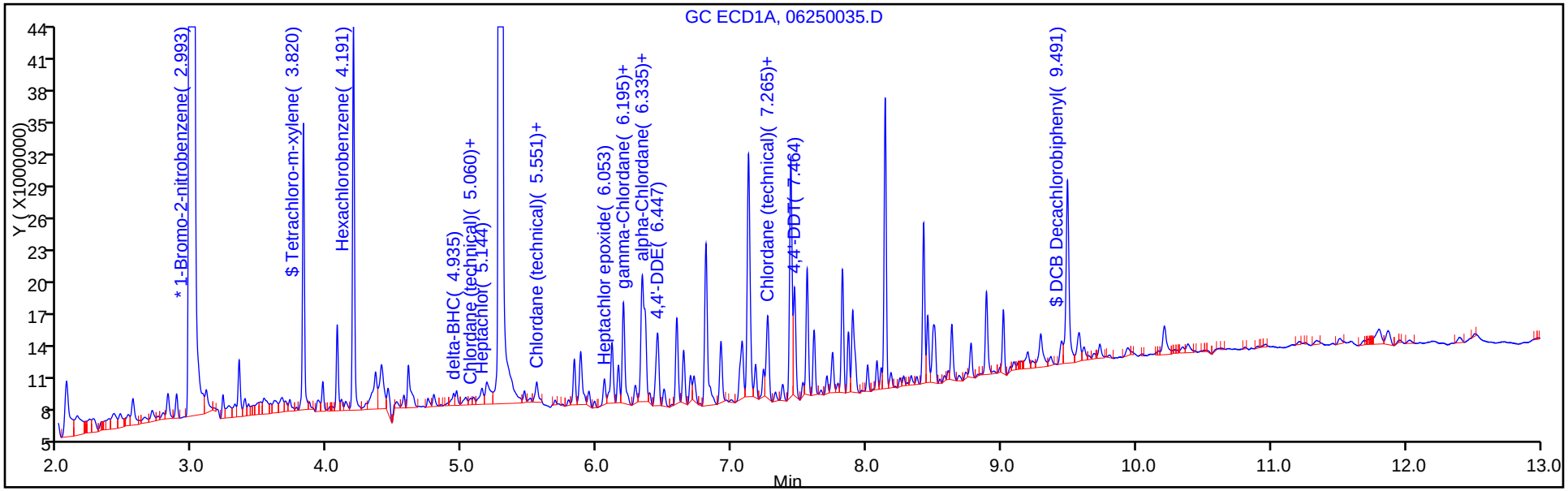
Report Date: 27-Jun-2017 16:41:40 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

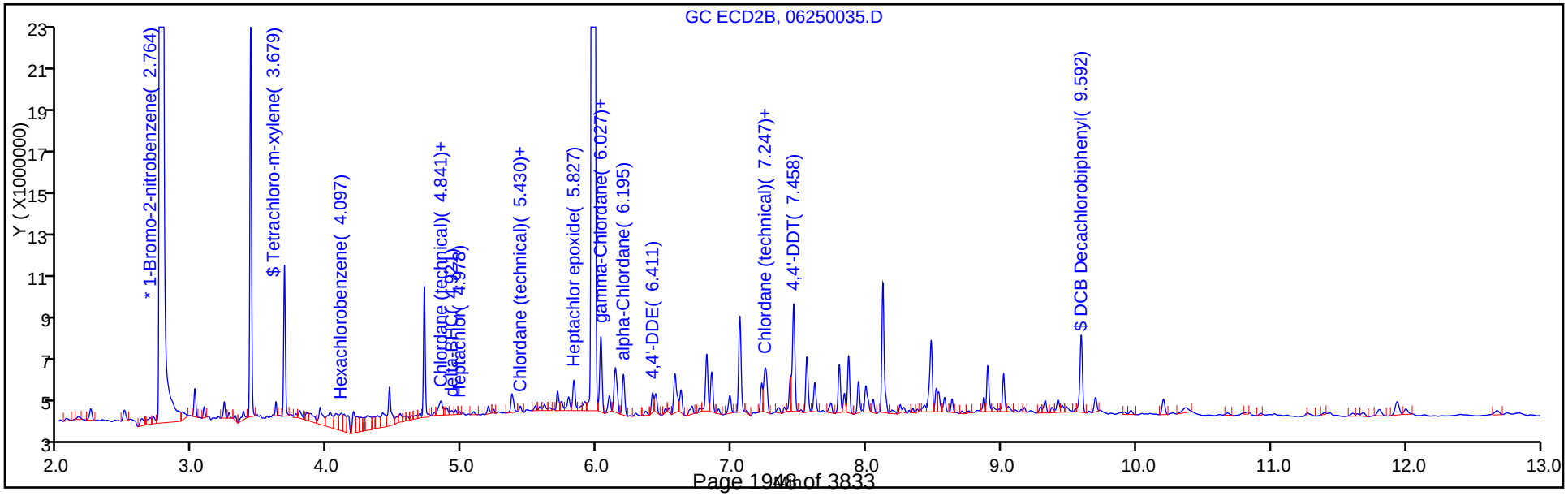
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250035.D

Injection Date:	25-Jun-2017 22:09:52	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-C-14-D	Lab Sample ID:	280-97928-14	Worklist Smp#:	35
Client ID:	SS025-SB09(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	10.0000	ALS Bottle#:	29
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250035.D				
Lims ID:	280-97928-C-14-D				
Client ID:	SS025-SB09(0-2)				
Sample Type:	Client				
Inject. Date:	25-Jun-2017 22:09:52	ALS Bottle#:	29	Worklist Smp#:	35
Injection Vol:	1.0 ul	Dil. Factor:	10.0000		
Sample Info:	280-97928-C-14-D				
Misc. Info.:	280-0060103-035				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 16:29:49	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK027				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:37:35		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	1.61	80.57
$ 41 DCB Decachlorobiphenyl	20.0	1.89	94.28

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	1.33	66.44
$ 41 DCB Decachlorobiphenyl	20.0	1.36	68.06

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(2-4) | Lab Sample ID: 280-97928-15

Matrix: Solid | Lab File ID: 06250051.D

Analysis Method: 8081B | Date Collected: 06/05/2017 13:40

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 30.4(g) | Date Analyzed: 06/26/2017 02:39

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 9.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.8	U Q	1.9	1.8	0.60
72-55-9	4,4'-DDE	1.1	J Q	1.9	0.73	0.26
50-29-3	4,4'-DDT	2.2	Q	2.2	1.8	0.65
309-00-2	Aldrin	0.73	U Q	1.9	0.73	0.28
319-84-6	alpha-BHC	0.73	U Q	1.9	0.73	0.23
5103-71-9	alpha-Chlordane	0.73	U Q	1.9	0.73	0.35
319-85-7	beta-BHC	1.8	U Q	1.9	1.8	0.73
319-86-8	delta-BHC	1.1	U Q	1.9	1.1	0.44
60-57-1	Dieldrin	2.9	Q	1.9	0.73	0.23
959-98-8	Endosulfan I	0.73	U Q	1.9	0.73	0.19
33213-65-9	Endosulfan II	0.73	U Q	1.9	0.73	0.31
1031-07-8	Endosulfan sulfate	0.73	U Q	1.9	0.73	0.30
72-20-8	Endrin	0.73	U Q	1.9	0.73	0.34
7421-93-4	Endrin aldehyde	0.73	U Q	1.9	0.73	0.19
58-89-9	gamma-BHC (Lindane)	1.1	U Q	1.9	1.1	0.51
5103-74-2	gamma-Chlordane	0.73	U Q	1.9	0.73	0.29
76-44-8	Heptachlor	0.73	U Q	1.9	0.73	0.23
1024-57-3	Heptachlor epoxide	1.1	U Q	1.9	1.1	0.47
72-43-5	Methoxychlor	1.1	U Q	3.6	1.1	0.49
8001-35-2	Toxaphene	36	U Q	190	36	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene (Surr)	51		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250051.D
Lims ID: 280-97928-A-15-D
Client ID: SS025-SB09(2-4)
Sample Type: Client
Inject. Date: 26-Jun-2017 02:39:32 ALS Bottle#: 45 Worklist Smp#: 51
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-A-15-D
Misc. Info.: 280-0060103-051
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:57:28 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:41:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					0.5734	
2					-0.1817	
					RPD = 385.60	
LOD = 0.002000						
* 2 1-Bromo-2-nitrobenzene						
1	2.992	2.993	-0.002	2672122871	150.0	
2	2.762	2.763	-0.002	470232619	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.819	3.819	0.000	207330994	10.3	
2	3.677	3.678	-0.001	43867260	13.1	
					RPD = 24.12	
5 Hexachlorobenzene						
1		4.200			ND	
2		4.104				
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1		4.361			ND	
2		3.971				
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1	4.668	4.676	-0.008	199917	0.5734	
2	4.566	4.567	-0.001	117675	-0.1817	
					RPD = 385.60	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.760			ND	
2		4.648				
11 2,4,5-Trichlorophenol						
1	4.863	4.861	0.002	433236	NC	
2	4.756	4.772	-0.016	255346	NC	
					RPD = 0.00	
12 delta-BHC						
1		4.935			ND	
2		4.920				
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1		5.144			ND	
2		4.978				
16 Aldrin						
1	5.430	5.431	-0.001	170033	0.2904	
2	5.281	5.283	-0.002	449602	-0.2219	
					RPD = 1496.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				
18 Isodrin						
1		5.758			ND	
2		5.645				
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1	6.052	6.053	-0.001	16680884	0.5576	
2	5.826	5.828	-0.002	10571250	2.43	
					RPD = 125.26	
22 gamma-Chlordane						
1	6.194	6.196	-0.002	1398319	0.3526	
2	6.026	6.028	-0.002	11713807	2.75	
					RPD = 154.56	
23 alpha-Chlordane						
1	6.360	6.357	0.003	1107413	0.2487	
2	6.193	6.196	-0.003	1357342	-0.2844	
					RPD = -2980.18	
24 4,4'-DDE						
1	6.444	6.453	-0.009	72956041	2.94	
2	6.411	6.413	-0.002	5573641	1.10	
					RPD = 91.07	
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1	6.808	6.813	-0.005	217614814	7.83	
2	6.595	6.599	-0.004	20185919	5.08	
					RPD = 42.69	

	Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
	29 2,4'-DDT						
	1	6.962	6.961	0.001	3424766	0.1171	
	2	7.020	7.022	-0.002	1479377	0.3131	
						RPD = 91.12	
	30 Endrin						
	1		7.082			ND	
	2		6.959				
	31 Kepone						
	1		7.129			ND	
	2		7.088				
	32 4,4'-DDD						
	1		7.158			ND	
	2		7.110				
	33 Chlorobenzilate						
	1		7.173			ND	
	2		6.971				
	34 Endosulfan II						
	1		7.331			ND	
	2		7.203				
	35 4,4'-DDT						
	1	7.464	7.468	-0.004	124174410	5.92	
	2	7.458	7.459	-0.001	48414527	17.9	
						RPD = 100.39	
	36 Endrin aldehyde						
	1		7.785			ND	
	2		7.578				
	37 Methoxychlor						
	1		7.981			ND	
	2		8.182				
	38 Mirex						
	1		8.127			ND	
	2		8.353				
	39 Endosulfan sulfate						
	1		8.232			ND	
	2		7.873				
	40 Endrin ketone						
	1		8.513			ND	
	2		8.399				
$	41 DCB Decachlorobiphenyl						
	1	9.489	9.492	-0.003	156198989	11.0	
	2	9.593	9.593	0.000	30440724	14.8	
						RPD = 29.39	
	42 Tris(2,3-dibromopropyl)phosphate						
	1		11.272			ND	
	2		11.308				
S	3 Endosulfan, Total						
	1		0.000			ND	
	2		0.000				

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

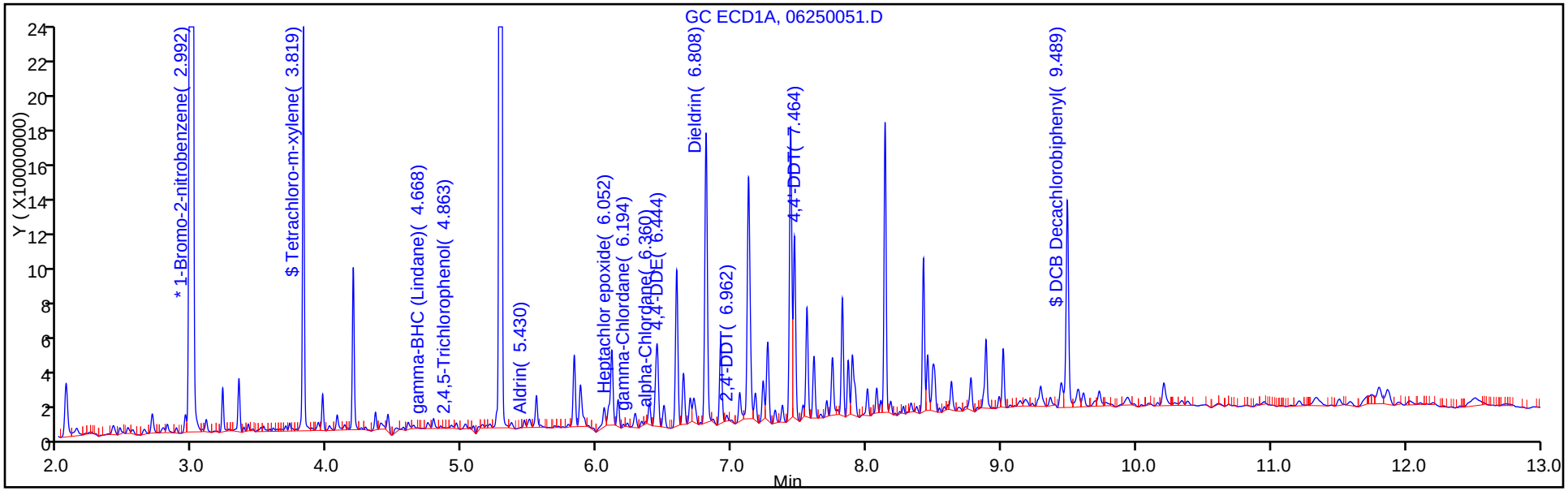
Report Date: 26-Jun-2017 11:57:39 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

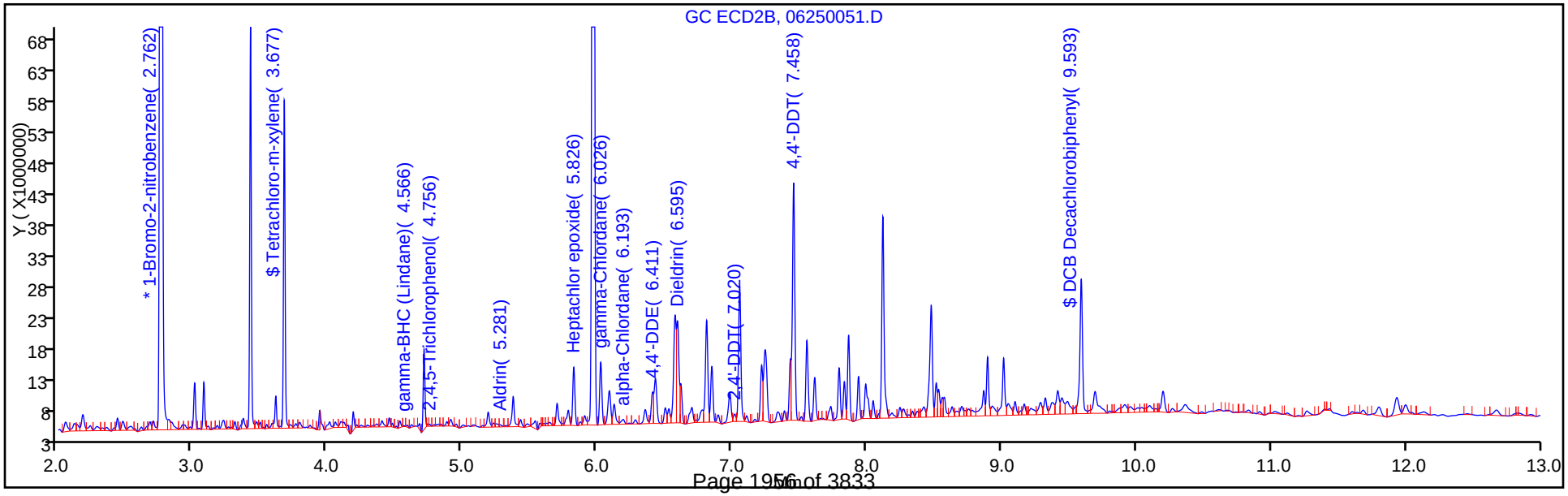
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250051.D

Injection Date:	26-Jun-2017 02:39:32	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-A-15-D	Lab Sample ID:	280-97928-15	Worklist Smp#:	51
Client ID:	SS025-SB09(2-4)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	45
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250051.D				
Lims ID:	280-97928-A-15-D				
Client ID:	SS025-SB09(2-4)				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 02:39:32	ALS Bottle#:	45	Worklist Smp#:	51
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-A-15-D				
Misc. Info.:	280-0060103-051				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:57:28	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:41:49		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	10.3	51.46
$ 41 DCB Decachlorobiphenyl	20.0	11.0	54.98

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	13.1	65.57
$ 41 DCB Decachlorobiphenyl	20.0	14.8	73.92

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(2-4) | Lab Sample ID: 280-97928-15

Matrix: Solid | Lab File ID: 06250051.D

Analysis Method: 8081B | Date Collected: 06/05/2017 13:40

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 30.4(g) | Date Analyzed: 06/26/2017 02:39

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 9.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	74		63-121

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250051.D
Lims ID: 280-97928-A-15-D
Client ID: SS025-SB09(2-4)
Sample Type: Client
Inject. Date: 26-Jun-2017 02:39:32 ALS Bottle#: 45 Worklist Smp#: 51
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-A-15-D
Misc. Info.: 280-0060103-051
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:57:28 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:41:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					0.5734	
2					-0.1817	
					RPD = 385.60	
LOD = 0.002000						
* 2 1-Bromo-2-nitrobenzene						
1	2.992	2.993	-0.002	2672122871	150.0	
2	2.762	2.763	-0.002	470232619	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.819	3.819	0.000	207330994	10.3	
2	3.677	3.678	-0.001	43867260	13.1	
					RPD = 24.12	
5 Hexachlorobenzene						
1		4.200			ND	
2		4.104				
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1		4.361			ND	
2		3.971				
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1	4.668	4.676	-0.008	199917	0.5734	
2	4.566	4.567	-0.001	117675	-0.1817	
					RPD = 385.60	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.760			ND	
2		4.648				
11 2,4,5-Trichlorophenol						
1	4.863	4.861	0.002	433236	NC	
2	4.756	4.772	-0.016	255346	NC	
					RPD = 0.00	
12 delta-BHC						
1		4.935			ND	
2		4.920				
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1		5.144			ND	
2		4.978				
16 Aldrin						
1	5.430	5.431	-0.001	170033	0.2904	
2	5.281	5.283	-0.002	449602	-0.2219	
					RPD = 1496.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				
18 Isodrin						
1		5.758			ND	
2		5.645				
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1	6.052	6.053	-0.001	16680884	0.5576	
2	5.826	5.828	-0.002	10571250	2.43	
					RPD = 125.26	
22 gamma-Chlordane						
1	6.194	6.196	-0.002	1398319	0.3526	
2	6.026	6.028	-0.002	11713807	2.75	
					RPD = 154.56	
23 alpha-Chlordane						
1	6.360	6.357	0.003	1107413	0.2487	
2	6.193	6.196	-0.003	1357342	-0.2844	
					RPD = -2980.18	
24 4,4'-DDE						
1	6.444	6.453	-0.009	72956041	2.94	
2	6.411	6.413	-0.002	5573641	1.10	
					RPD = 91.07	
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1	6.808	6.813	-0.005	217614814	7.83	
2	6.595	6.599	-0.004	20185919	5.08	
					RPD = 42.69	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
29 2,4'-DDT						
1	6.962	6.961	0.001	3424766	0.1171	
2	7.020	7.022	-0.002	1479377	0.3131	
					RPD = 91.12	
30 Endrin						
1		7.082			ND	
2		6.959				
31 Kepone						
1		7.129			ND	
2		7.088				
32 4,4'-DDD						
1		7.158			ND	
2		7.110				
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1		7.331			ND	
2		7.203				
35 4,4'-DDT						
1	7.464	7.468	-0.004	124174410	5.92	
2	7.458	7.459	-0.001	48414527	17.9	
					RPD = 100.39	
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1		7.981			ND	
2		8.182				
38 Mirex						
1		8.127			ND	
2		8.353				
39 Endosulfan sulfate						
1		8.232			ND	
2		7.873				
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1	9.489	9.492	-0.003	156198989	11.0	
2	9.593	9.593	0.000	30440724	14.8	
					RPD = 29.39	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				
S 3 Endosulfan, Total						
1		0.000			ND	
2		0.000				

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

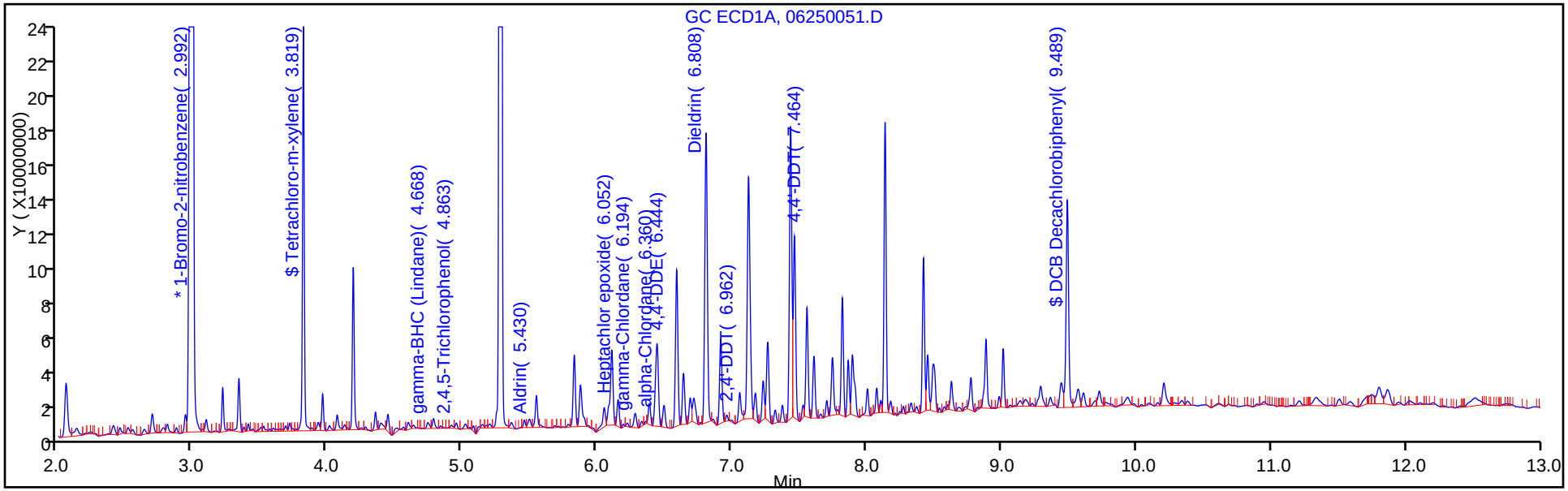
Report Date: 26-Jun-2017 11:57:40 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

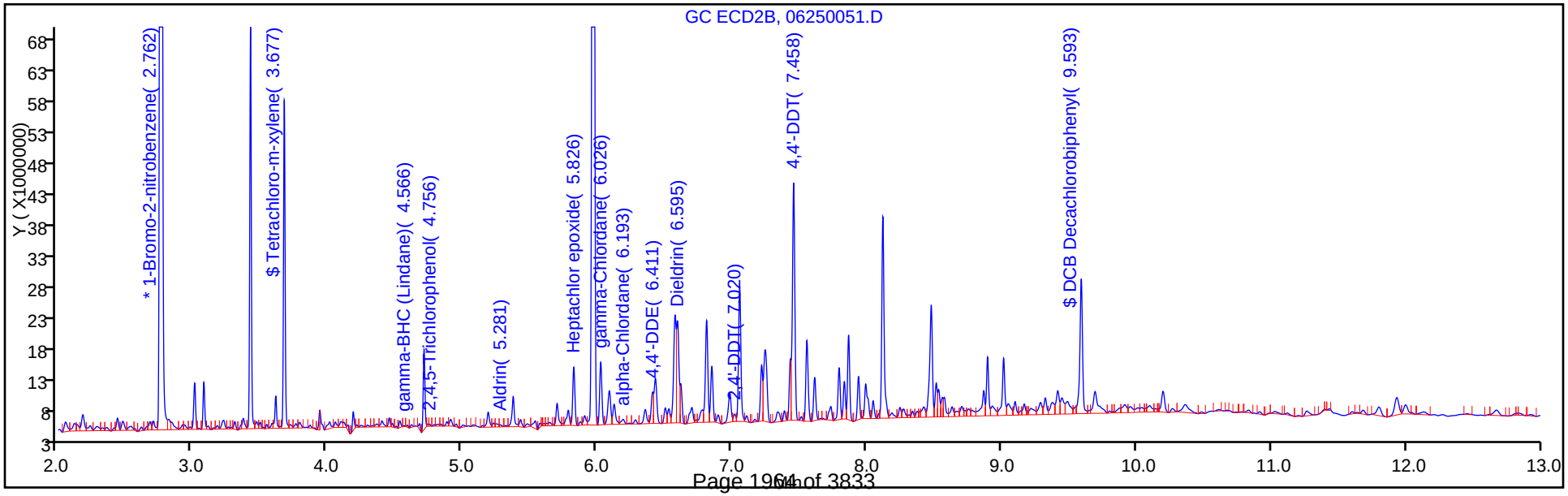
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250051.D

Injection Date:	26-Jun-2017 02:39:32	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-A-15-D	Lab Sample ID:	280-97928-15	Worklist Smp#:	51
Client ID:	SS025-SB09(2-4)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	45
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250051.D				
Lims ID:	280-97928-A-15-D				
Client ID:	SS025-SB09(2-4)				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 02:39:32	ALS Bottle#:	45	Worklist Smp#:	51
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-A-15-D				
Misc. Info.:	280-0060103-051				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:57:28	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:41:49		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	10.3	51.46
$ 41 DCB Decachlorobiphenyl	20.0	11.0	54.98

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	13.1	65.57
$ 41 DCB Decachlorobiphenyl	20.0	14.8	73.92

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(4-6) | Lab Sample ID: 280-97928-16

Matrix: Solid | Lab File ID: 06250052.D

Analysis Method: 8081B | Date Collected: 06/05/2017 13:50

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.6(g) | Date Analyzed: 06/26/2017 02:56

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 16.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.9	U	1.9	1.9	0.62
72-55-9	4,4'-DDE	2.4		1.9	0.77	0.27
50-29-3	4,4'-DDT	5.1		2.3	1.9	0.67
309-00-2	Aldrin	0.77	U	1.9	0.77	0.29
319-84-6	alpha-BHC	0.77	U	1.9	0.77	0.24
5103-71-9	alpha-Chlordane	0.77	U	1.9	0.77	0.37
319-85-7	beta-BHC	1.9	U	1.9	1.9	0.76
319-86-8	delta-BHC	1.1	U	1.9	1.1	0.46
60-57-1	Dieldrin	2.5		1.9	0.77	0.24
959-98-8	Endosulfan I	0.77	U	1.9	0.77	0.20
33213-65-9	Endosulfan II	0.77	U	1.9	0.77	0.33
1031-07-8	Endosulfan sulfate	0.77	U	1.9	0.77	0.32
72-20-8	Endrin	0.77	U	1.9	0.77	0.35
7421-93-4	Endrin aldehyde	0.77	U	1.9	0.77	0.20
58-89-9	gamma-BHC (Lindane)	1.1	U	1.9	1.1	0.53
5103-74-2	gamma-Chlordane	0.77	U	1.9	0.77	0.30
76-44-8	Heptachlor	0.77	U	1.9	0.77	0.24
1024-57-3	Heptachlor epoxide	1.1	U	1.9	1.1	0.49
72-43-5	Methoxychlor	1.1	U	3.8	1.1	0.51
8001-35-2	Toxaphene	38	U Q	190	38	18

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	68		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	56		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250052.D
Lims ID: 280-97928-B-16-D
Client ID: SS025-SB09(4-6)
Sample Type: Client
Inject. Date: 26-Jun-2017 02:56:22 ALS Bottle#: 46 Worklist Smp#: 52
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-B-16-D
Misc. Info.: 280-0060103-052
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:57:28 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1		1.000			ND	
2		0.000				
* 2 1-Bromo-2-nitrobenzene						
1	2.992	2.993	-0.001	2685674072	150.0	
2	2.763	2.763	0.000	473927960	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.819	3.819	0.000	227288933	11.2	
2	3.678	3.678	0.000	46873425	13.9	
					RPD = 21.65	
5 Hexachlorobenzene						
1		4.200			ND	
2		4.104				
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1		4.361			ND	
2		3.971				
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1		4.676			ND	
2		4.567				
10 beta-BHC						
1		4.760			ND	
2		4.648				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
11 2,4,5-Trichlorophenol						
1	4.869	4.861	0.008	15329115	NC	
2	4.790	4.772	0.018	1692017	NC	
					RPD = 0.00	
12 delta-BHC						
1		4.935			ND	
2		4.920				
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1	5.151	5.144	0.007	2728538	0.2357	
2	4.981	4.978	0.003	616909	-0.3582	
					RPD = -969.18	
16 Aldrin						
1		5.431			ND	
2		5.283				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				
18 Isodrin						
1		5.758			ND	
2		5.645				
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1	6.047	6.053	-0.006	9600129	0.2824	
2	5.825	5.828	-0.003	2557469	0.0426	
					RPD = 147.56	
22 gamma-Chlordane						
1	6.191	6.196	-0.005	3100588	0.4111	
2	6.026	6.028	-0.002	7673891	1.59	
					RPD = 117.87	
23 alpha-Chlordane						
1		6.357			ND	
2		6.196				
24 4,4'-DDE						
1	6.449	6.453	-0.004	167169290	6.23	
2	6.410	6.413	-0.003	35390115	9.60	
					RPD = 42.69	
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1	6.810	6.813	-0.003	185003692	6.64	
2	6.596	6.599	-0.003	32397596	8.42	
					RPD = 23.63	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
29 2,4'-DDT						
1	6.958	6.961	-0.003	23410576	1.26	
2	7.019	7.022	-0.003	4487257	1.64	
					RPD = 25.56	
30 Endrin						
1		7.082			ND	
2		6.959				
31 Kepone						
1		7.129			ND	
2		7.088				
32 4,4'-DDD						
1		7.158			ND	
2		7.110				
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1		7.331			ND	
2		7.203				
35 4,4'-DDT						
1	7.465	7.468	-0.003	297332509	13.3	
2	7.457	7.459	-0.002	59083362	21.7	
					RPD = 47.66	
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1		7.981			ND	
2		8.182				
38 Mirex						
1		8.127			ND	
2		8.353				
39 Endosulfan sulfate						
1	8.241	8.232	0.009	4474187	0.3808	
2	7.864	7.873	-0.009	5660508	1.24	
					RPD = 105.88	
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1	9.490	9.492	-0.002	191587135	13.5	
2	9.592	9.593	-0.001	30298159	14.6	
					RPD = 7.71	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				
S 3 Endosulfan, Total						
1					0.3808	
2					1.24	
					RPD = 105.88	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

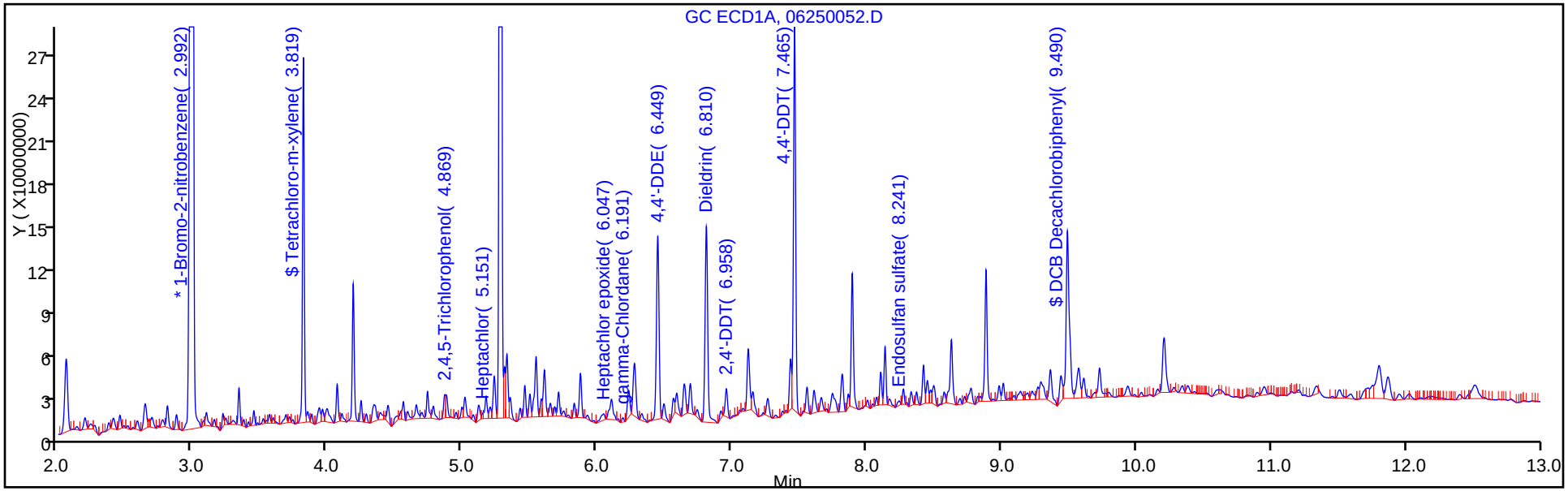
Report Date: 26-Jun-2017 11:57:42 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

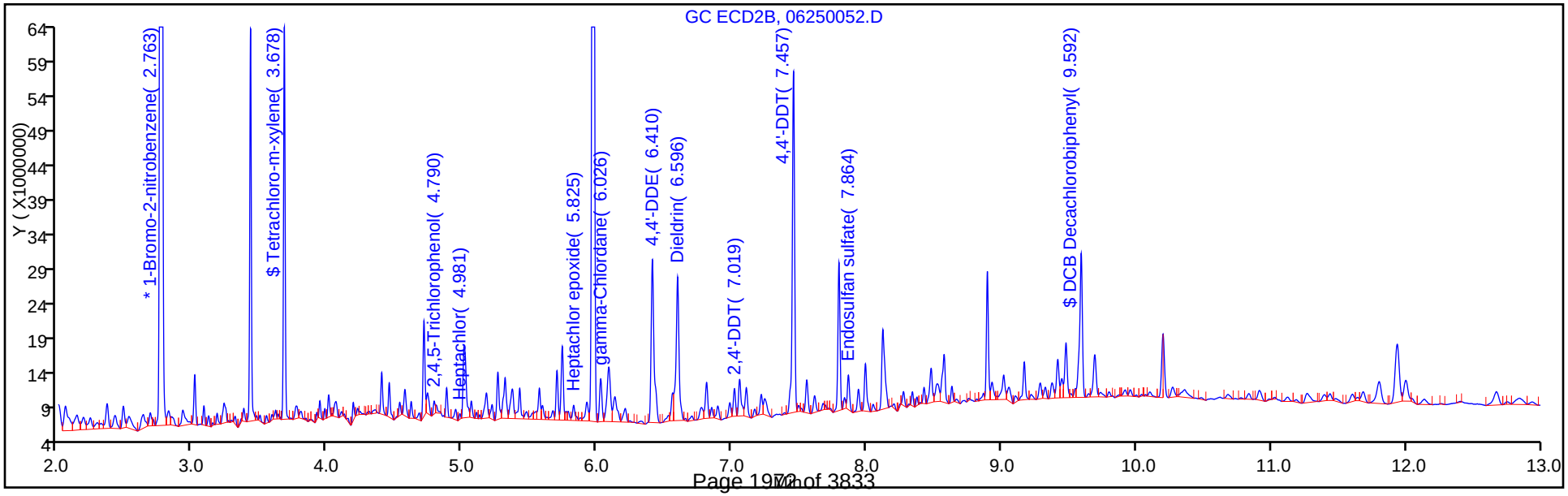
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250052.D

Injection Date:	26-Jun-2017 02:56:22	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-B-16-D	Lab Sample ID:	280-97928-16	Worklist Smp#:	52
Client ID:	SS025-SB09(4-6)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	46
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250052.D				
Lims ID:	280-97928-B-16-D				
Client ID:	SS025-SB09(4-6)				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 02:56:22	ALS Bottle#:	46	Worklist Smp#:	52
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-B-16-D				
Misc. Info.:	280-0060103-052				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:57:28	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	11.2	56.08
$ 41 DCB Decachlorobiphenyl	20.0	13.5	67.51

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	13.9	69.70
$ 41 DCB Decachlorobiphenyl	20.0	14.6	72.93

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(6-8) | Lab Sample ID: 280-97928-17

Matrix: Solid | Lab File ID: 06250038.D

Analysis Method: 8081B | Date Collected: 06/05/2017 14:10

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.7(g) | Date Analyzed: 06/25/2017 23:00

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 13.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.8	U Q	1.9	1.8	0.60
50-29-3	4,4'-DDT	1.8	U Q	2.2	1.8	0.65
309-00-2	Aldrin	0.74	U Q	1.9	0.74	0.28
319-84-6	alpha-BHC	0.74	U Q	1.9	0.74	0.23
5103-71-9	alpha-Chlordane	0.74	U Q	1.9	0.74	0.35
319-85-7	beta-BHC	1.8	U Q	1.9	1.8	0.73
319-86-8	delta-BHC	1.1	U Q	1.9	1.1	0.44
60-57-1	Dieldrin	0.74	U Q	1.9	0.74	0.23
959-98-8	Endosulfan I	0.74	U Q	1.9	0.74	0.19
33213-65-9	Endosulfan II	0.74	U Q	1.9	0.74	0.31
1031-07-8	Endosulfan sulfate	0.74	U Q	1.9	0.74	0.30
72-20-8	Endrin	0.74	U Q	1.9	0.74	0.34
7421-93-4	Endrin aldehyde	0.74	U Q	1.9	0.74	0.19
58-89-9	gamma-BHC (Lindane)	1.1	U Q	1.9	1.1	0.51
5103-74-2	gamma-Chlordane	0.74	U Q	1.9	0.74	0.29
76-44-8	Heptachlor	0.74	U Q	1.9	0.74	0.23
1024-57-3	Heptachlor epoxide	1.1	U Q	1.9	1.1	0.47
72-43-5	Methoxychlor	1.1	U Q	3.6	1.1	0.49
8001-35-2	Toxaphene	36	U Q	190	36	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
877-09-8	Tetrachloro-m-xylene (Surr)	62		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250038.D
Lims ID: 280-97928-C-17-D
Client ID: SS025-SB09(6-8)
Sample Type: Client
Inject. Date: 25-Jun-2017 23:00:30 ALS Bottle#: 32 Worklist Smp#: 38
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-17-D
Misc. Info.: 280-0060103-038
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:57 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:38:22

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1		1.000			ND	
2		0.000				
* 2 1-Bromo-2-nitrobenzene						
1	2.992	2.993	-0.001	2291461385	150.0	
2	2.762	2.763	-0.001	453303986	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.819	3.819	0.000	216104643	12.5	
2	3.677	3.678	-0.001	43442049	13.5	
					RPD = 7.71	
5 Hexachlorobenzene						
1		4.200			ND	
2		4.104				
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1		4.361			ND	
2		3.971				
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1		4.676			ND	
2		4.567				
10 beta-BHC						
1		4.760			ND	
2		4.648				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
11 2,4,5-Trichlorophenol						
1	4.842	4.861	-0.019	24498247	NC	
2	4.789	4.772	0.017	582408	NC	
					RPD = 0.00	
12 delta-BHC						
1		4.935			ND	
2		4.920				
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1	5.147	5.144	0.003	942537	0.1811	
2	4.981	4.978	0.003	113526	-0.4867	
					RPD = -436.97	
16 Aldrin						
1	5.422	5.431	-0.009	830190	0.3168	
2	5.273	5.283	-0.010	203225	-0.2844	
					RPD = 3710.41	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				
18 Isodrin						
1		5.758			ND	
2		5.645				
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1		6.053			ND	
2		5.828				
22 gamma-Chlordane						
1		6.196			ND	
2		6.028				
23 alpha-Chlordane						
1		6.357			ND	
2		6.196				
24 4,4'-DDE						
1	6.451	6.453	-0.002	9644334	0.7630	
2	6.410	6.413	-0.003	1777857	0.0253	
					RPD = 187.14	
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1	6.809	6.813	-0.004	2601504	0.2230	
2	6.598	6.599	-0.001	261464	-0.4944	
					RPD = -528.75	
29 2,4'-DDT						
1	6.962	6.961	0.001	736185	-0.0311	
2	7.019	7.022	-0.003	374506	-0.1721	
					RPD = -138.70	

LOD = 0.002000

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
30 Endrin						
1		7.082			ND	
2		6.959				
31 Kepone						
1		7.129			ND	
2		7.088				
32 4,4'-DDD						
1		7.158			ND	
2		7.110				
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1	7.328	7.331	-0.003	103855	-0.0428	
2	7.206	7.203	0.003	176273	-0.8091	
					RPD = -179.92	
LOD = 0.002000						
35 4,4'-DDT						
1	7.466	7.468	-0.002	9825853	1.05	
2	7.458	7.459	-0.001	1892501	0.3775	
					RPD = 93.91	
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1		7.981			ND	
2		8.182				
38 Mirex						
1		8.127			ND	
2		8.353				
39 Endosulfan sulfate						
1		8.232			ND	
2		7.873				
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1	9.490	9.492	-0.002	144902242	11.9	
2	9.593	9.593	0.000	26495936	13.2	
					RPD = 10.40	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				
S 3 Endosulfan, Total						
1					-0.0428	
2					-0.8091	
					RPD = -179.92	
LOD = 0.002000						

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

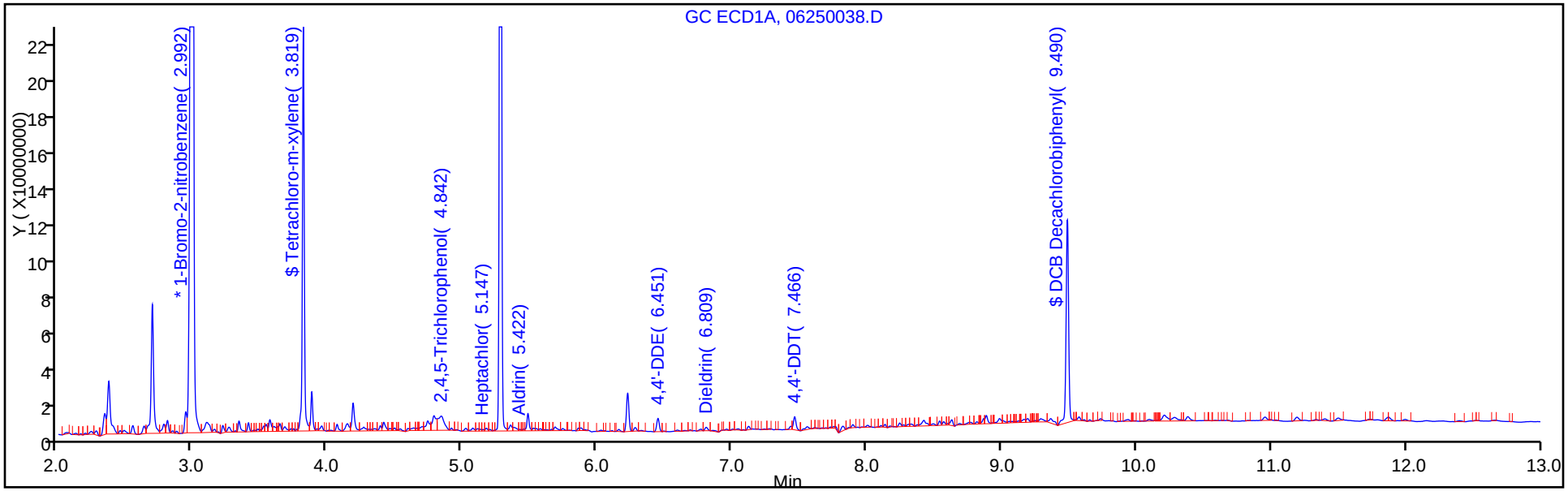
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TestAmerica Denver

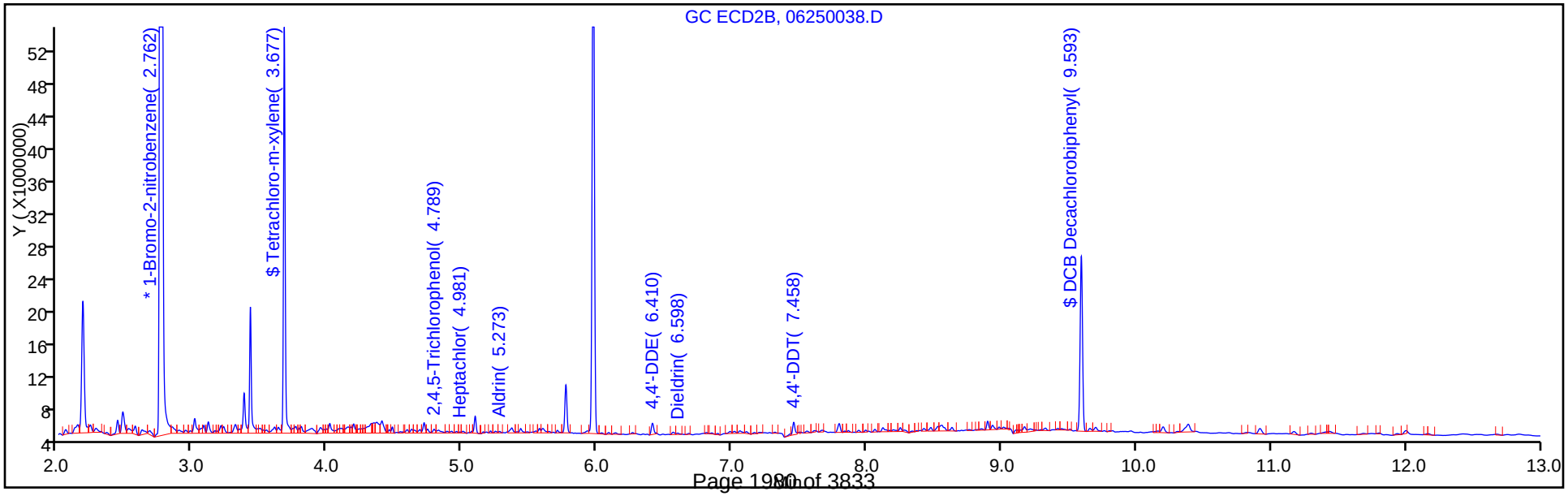
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Injection Date:	25-Jun-2017 23:00:30	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-C-17-D	Lab Sample ID:	280-97928-17	Worklist Smp#:	38
Client ID:	SS025-SB09(6-8)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250038.D				
Lims ID:	280-97928-C-17-D				
Client ID:	SS025-SB09(6-8)				
Sample Type:	Client				
Inject. Date:	25-Jun-2017 23:00:30	ALS Bottle#:	32	Worklist Smp#:	38
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-17-D				
Misc. Info.:	280-0060103-038				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:57	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:38:22		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	12.5	62.44
$ 41 DCB Decachlorobiphenyl	20.0	11.9	59.63

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	13.5	67.44
$ 41 DCB Decachlorobiphenyl	20.0	13.2	66.17

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(6-8) | Lab Sample ID: 280-97928-17

Matrix: Solid | Lab File ID: 06250038.D

Analysis Method: 8081B | Date Collected: 06/05/2017 14:10

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.7(g) | Date Analyzed: 06/25/2017 23:00

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 13.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-55-9	4,4'-DDE	0.74	U	1.9	0.74	0.26

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	66		63-121

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250038.D
Lims ID: 280-97928-C-17-D
Client ID: SS025-SB09(6-8)
Sample Type: Client
Inject. Date: 25-Jun-2017 23:00:30 ALS Bottle#: 32 Worklist Smp#: 38
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-17-D
Misc. Info.: 280-0060103-038
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:57 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:38:22

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1		1.000			ND	
2		0.000				
* 2 1-Bromo-2-nitrobenzene						
1	2.992	2.993	-0.001	2291461385	150.0	
2	2.762	2.763	-0.001	453303986	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.819	3.819	0.000	216104643	12.5	
2	3.677	3.678	-0.001	43442049	13.5	
					RPD = 7.71	
5 Hexachlorobenzene						
1		4.200			ND	
2		4.104				
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1		4.361			ND	
2		3.971				
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1		4.676			ND	
2		4.567				
10 beta-BHC						
1		4.760			ND	
2		4.648				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
11 2,4,5-Trichlorophenol						
1	4.842	4.861	-0.019	24498247	NC	
2	4.789	4.772	0.017	582408	NC	
					RPD = 0.00	
12 delta-BHC						
1		4.935			ND	
2		4.920				
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1	5.147	5.144	0.003	942537	0.1811	
2	4.981	4.978	0.003	113526	-0.4867	
					RPD = -436.97	
16 Aldrin						
1	5.422	5.431	-0.009	830190	0.3168	
2	5.273	5.283	-0.010	203225	-0.2844	
					RPD = 3710.41	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				
18 Isodrin						
1		5.758			ND	
2		5.645				
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1		6.053			ND	
2		5.828				
22 gamma-Chlordane						
1		6.196			ND	
2		6.028				
23 alpha-Chlordane						
1		6.357			ND	
2		6.196				
24 4,4'-DDE						
1	6.451	6.453	-0.002	9644334	0.7630	
2	6.410	6.413	-0.003	1777857	0.0253	
					RPD = 187.14	
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1	6.809	6.813	-0.004	2601504	0.2230	
2	6.598	6.599	-0.001	261464	-0.4944	
					RPD = -528.75	
29 2,4'-DDT						
1	6.962	6.961	0.001	736185	-0.0311	
2	7.019	7.022	-0.003	374506	-0.1721	
					RPD = -138.70	

LOD = 0.002000

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
30 Endrin						
1		7.082			ND	
2		6.959				
31 Kepone						
1		7.129			ND	
2		7.088				
32 4,4'-DDD						
1		7.158			ND	
2		7.110				
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1	7.328	7.331	-0.003	103855	-0.0428	
2	7.206	7.203	0.003	176273	-0.8091	
					RPD = -179.92	
LOD = 0.002000						
35 4,4'-DDT						
1	7.466	7.468	-0.002	9825853	1.05	
2	7.458	7.459	-0.001	1892501	0.3775	
					RPD = 93.91	
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1		7.981			ND	
2		8.182				
38 Mirex						
1		8.127			ND	
2		8.353				
39 Endosulfan sulfate						
1		8.232			ND	
2		7.873				
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1	9.490	9.492	-0.002	144902242	11.9	
2	9.593	9.593	0.000	26495936	13.2	
					RPD = 10.40	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				
S 3 Endosulfan, Total						
1					-0.0428	
2					-0.8091	
					RPD = -179.92	
LOD = 0.002000						

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

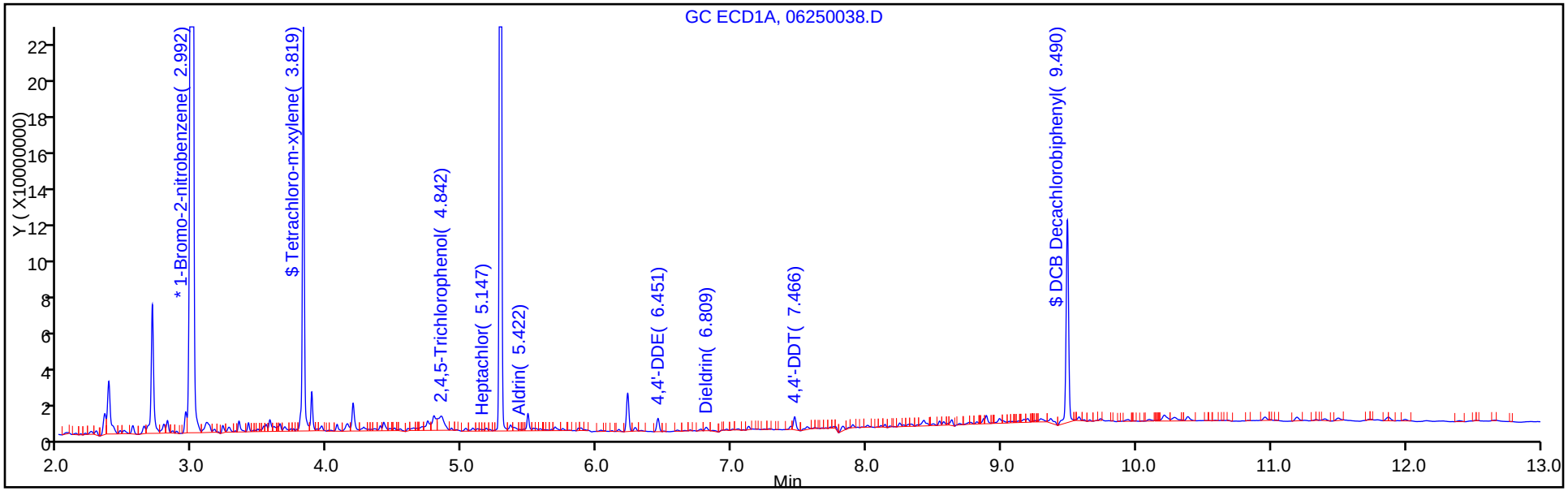
Report Date: 26-Jun-2017 11:57:11 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

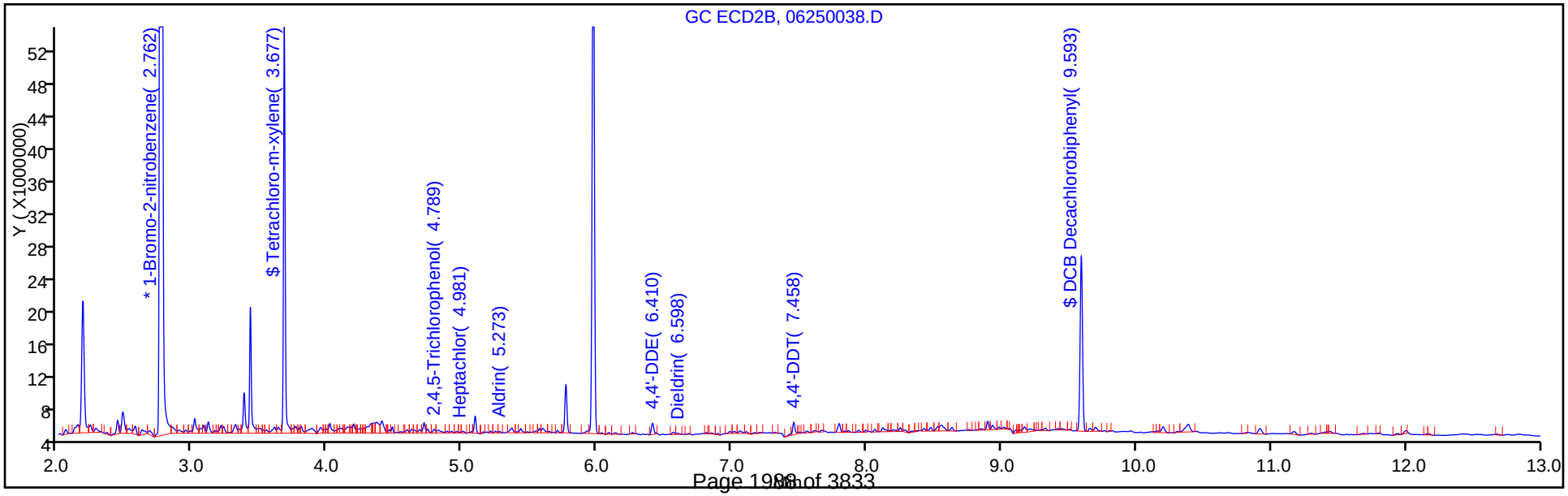
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Injection Date:	25-Jun-2017 23:00:30	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-C-17-D	Lab Sample ID:	280-97928-17	Worklist Smp#:	38
Client ID:	SS025-SB09(6-8)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250038.D				
Lims ID:	280-97928-C-17-D				
Client ID:	SS025-SB09(6-8)				
Sample Type:	Client				
Inject. Date:	25-Jun-2017 23:00:30	ALS Bottle#:	32	Worklist Smp#:	38
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-17-D				
Misc. Info.:	280-0060103-038				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:57	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:38:22		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	12.5	62.44
$ 41 DCB Decachlorobiphenyl	20.0	11.9	59.63

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	13.5	67.44
$ 41 DCB Decachlorobiphenyl	20.0	13.2	66.17

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(0-2) | Lab Sample ID: 280-97928-18

Matrix: Solid | Lab File ID: 06250039.D

Analysis Method: 8081B | Date Collected: 06/05/2017 14:35

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.2(g) | Date Analyzed: 06/25/2017 23:17

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 8.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.8	U	1.8	1.8	0.57
72-55-9	4,4'-DDE	0.70	U	1.8	0.70	0.25
50-29-3	4,4'-DDT	1.8	U	2.1	1.8	0.62
309-00-2	Aldrin	0.70	U	1.8	0.70	0.26
319-84-6	alpha-BHC	0.70	U	1.8	0.70	0.22
5103-71-9	alpha-Chlordane	0.70	U	1.8	0.70	0.34
319-85-7	beta-BHC	1.8	U	1.8	1.8	0.70
319-86-8	delta-BHC	1.0	U	1.8	1.0	0.42
60-57-1	Dieldrin	0.70	U	1.8	0.70	0.22
959-98-8	Endosulfan I	0.70	U	1.8	0.70	0.18
33213-65-9	Endosulfan II	0.70	U	1.8	0.70	0.30
1031-07-8	Endosulfan sulfate	0.70	U	1.8	0.70	0.29
72-20-8	Endrin	0.70	U	1.8	0.70	0.32
7421-93-4	Endrin aldehyde	0.70	U	1.8	0.70	0.18
58-89-9	gamma-BHC (Lindane)	1.0	U	1.8	1.0	0.49
5103-74-2	gamma-Chlordane	0.70	U	1.8	0.70	0.28
76-44-8	Heptachlor	0.70	U	1.8	0.70	0.22
1024-57-3	Heptachlor epoxide	1.0	U	1.8	1.0	0.45
72-43-5	Methoxychlor	1.0	U	3.5	1.0	0.47
8001-35-2	Toxaphene	35	U	180	35	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	72		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	78		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250039.D
Lims ID: 280-97928-A-18-D
Client ID: SS025-SB10(0-2)
Sample Type: Client
Inject. Date: 25-Jun-2017 23:17:18 ALS Bottle#: 33 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-A-18-D
Misc. Info.: 280-0060103-039
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:57 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:38:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1		1.000			ND	
2		0.000				
* 2 1-Bromo-2-nitrobenzene						
1	2.992	2.993	-0.001	2155293498	150.0	
2	2.763	2.763	0.000	449974430	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.819	3.819	0.000	255404991	15.7	
2	3.678	3.678	0.000	56828438	18.0	
					RPD = 13.69	
5 Hexachlorobenzene						
1		4.200			ND	
2		4.104				
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1	4.354	4.361	-0.007	3368012	-5.28	
2	3.975	3.971	0.004	677676	-5.39	
					RPD = -2.06	
LOD = 0.002000						
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1		4.676			ND	
2		4.567				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.760			ND	
2		4.648				
11 2,4,5-Trichlorophenol						
1	4.865	4.861	0.004	892711	NC	
2	4.791	4.772	0.019	419433	NC	
					RPD = 0.00	
12 delta-BHC						
1		4.935			ND	
2		4.920				
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1		5.144			ND	
2		4.978				
16 Aldrin						
1		5.431			ND	
2		5.283				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1	5.660	5.665	-0.005	3468531	-1.31	
2	5.514	5.511	0.003	477474	-2.37	
					RPD = -57.81	
LOD = 0.002000						
18 Isodrin						
1		5.758			ND	
2		5.645				
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1	6.032	6.039	-0.007	3560931	-0.0725	
2	6.035	6.038	-0.003	734376	-0.0450	
					RPD = -46.78	
LOD = 0.002000						
21 Heptachlor epoxide						
1		6.053			ND	
2		5.828				
22 gamma-Chlordane						
1		6.196			ND	
2		6.028				
23 alpha-Chlordane						
1		6.357			ND	
2		6.196				
24 4,4'-DDE						
1		6.453			ND	
2		6.413				
25 Endosulfan I						
1	6.528	6.528	0.000	501076	-0.0952	
2	6.263	6.260	0.003	493940	-0.7679	
					RPD = -155.87	
LOD = 0.002000						
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1		6.813			ND	
2		6.599				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
29 2,4'-DDT						
1		6.961			ND	
2		7.022				
30 Endrin						
1		7.082			ND	
2		6.959				
31 Kepone						
1	7.120	7.129	-0.009	7462453	1.47	
2	7.080	7.088	-0.008	356199	-1.22	
					RPD = 2128.71	
32 4,4'-DDD						
1		7.158			ND	
2		7.110				
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1		7.331			ND	
2		7.203				
35 4,4'-DDT						
1	7.464	7.468	-0.004	2908126	0.7061	
2	7.456	7.459	-0.003	1002084	0.0328	
					RPD = 182.25	
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1		7.981			ND	
2		8.182				
38 Mirex						
1	8.133	8.127	0.006	408655	-0.1918	
2	8.344	8.353	-0.009	495643	0.2550	
					RPD = 1413.84	
39 Endosulfan sulfate						
1		8.232			ND	
2		7.873				
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1	9.489	9.492	-0.003	164728755	14.5	
2	9.592	9.593	-0.001	30877856	15.7	
					RPD = 8.26	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				
S 3 Endosulfan, Total						
1					-0.0952	
2					-0.7679	
					RPD = -155.87	

LOD = 0.002000

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

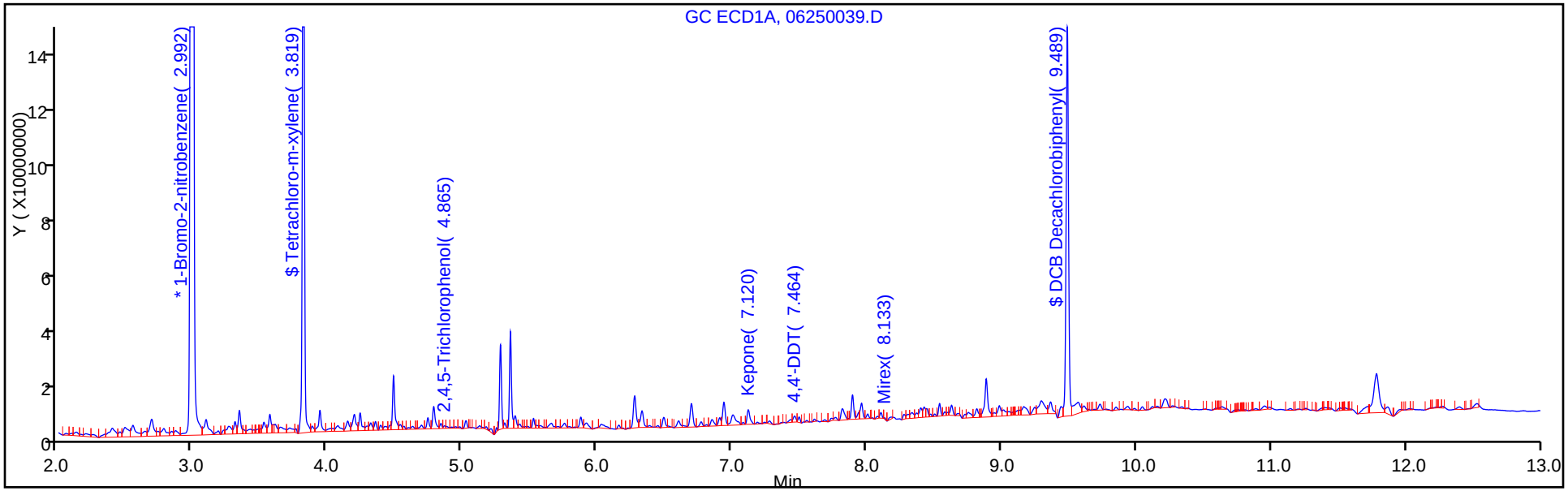
Report Date: 26-Jun-2017 11:57:13 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

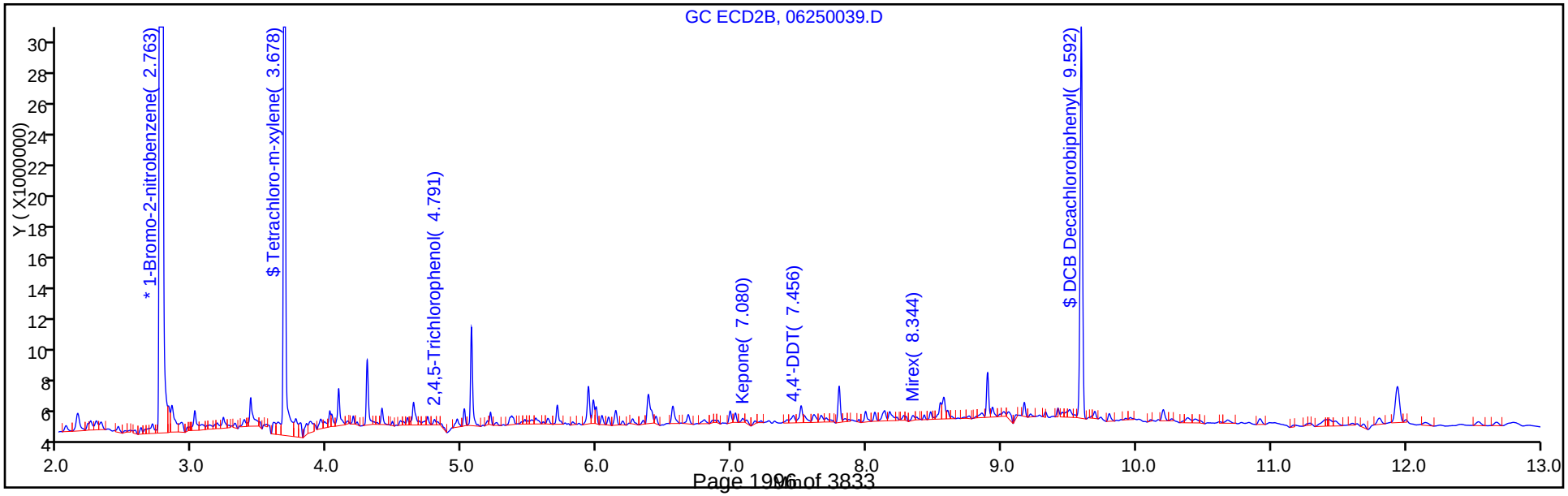
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250039.D

Injection Date:	25-Jun-2017 23:17:18	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-A-18-D	Lab Sample ID:	280-97928-18	Worklist Smp#:	39
Client ID:	SS025-SB10(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250039.D				
Lims ID:	280-97928-A-18-D				
Client ID:	SS025-SB10(0-2)				
Sample Type:	Client				
Inject. Date:	25-Jun-2017 23:17:18	ALS Bottle#:	33	Worklist Smp#:	39
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-A-18-D				
Misc. Info.:	280-0060103-039				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:57	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:38:42		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	15.7	78.33
$ 41 DCB Decachlorobiphenyl	20.0	14.5	72.47

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	18.0	89.83
$ 41 DCB Decachlorobiphenyl	20.0	15.7	78.71

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(2-4) | Lab Sample ID: 280-97928-19

Matrix: Solid | Lab File ID: 06250040.D

Analysis Method: 8081B | Date Collected: 06/05/2017 14:45

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.0(g) | Date Analyzed: 06/25/2017 23:34

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 7.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.7	U	1.8	1.7	0.57
72-55-9	4,4'-DDE	0.70	U	1.8	0.70	0.25
50-29-3	4,4'-DDT	1.7	U	2.1	1.7	0.61
309-00-2	Aldrin	0.70	U	1.8	0.70	0.26
319-84-6	alpha-BHC	0.70	U	1.8	0.70	0.22
5103-71-9	alpha-Chlordane	0.70	U	1.8	0.70	0.34
319-85-7	beta-BHC	1.7	U	1.8	1.7	0.69
319-86-8	delta-BHC	1.0	U	1.8	1.0	0.42
60-57-1	Dieldrin	0.70	U	1.8	0.70	0.22
959-98-8	Endosulfan I	0.70	U	1.8	0.70	0.18
33213-65-9	Endosulfan II	0.70	U	1.8	0.70	0.30
1031-07-8	Endosulfan sulfate	0.70	U	1.8	0.70	0.29
72-20-8	Endrin	0.70	U	1.8	0.70	0.32
7421-93-4	Endrin aldehyde	0.70	U	1.8	0.70	0.18
58-89-9	gamma-BHC (Lindane)	1.0	U	1.8	1.0	0.48
5103-74-2	gamma-Chlordane	0.70	U	1.8	0.70	0.28
76-44-8	Heptachlor	0.70	U	1.8	0.70	0.22
1024-57-3	Heptachlor epoxide	1.0	U	1.8	1.0	0.44
72-43-5	Methoxychlor	1.0	U	3.4	1.0	0.47
8001-35-2	Toxaphene	34	U	180	34	16

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	79		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	80		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250040.D
Lims ID: 280-97928-C-19-C
Client ID: SS025-SB10(2-4)
Sample Type: Client
Inject. Date: 25-Jun-2017 23:34:10 ALS Bottle#: 34 Worklist Smp#: 40
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-19-C
Misc. Info.: 280-0060103-040
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:57 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					0.6190	
2					-0.1692	
					RPD = 350.44	
LOD = 0.002000						
* 2 1-Bromo-2-nitrobenzene						
1	2.994	2.993	0.000	2171982946	150.0	
2	2.763	2.763	-0.001	453030083	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.820	3.819	0.001	261774118	15.9	
2	3.678	3.678	0.000	52657069	16.5	
					RPD = 3.44	
5 Hexachlorobenzene						
1		4.200			ND	
2		4.104				
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1	4.355	4.361	-0.006	3151114	-5.48	
2	3.976	3.971	0.005	108473	-8.67	
					RPD = -45.12	
LOD = 0.002000						
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1	4.685	4.676	0.009	1361578	0.6190	
2	4.566	4.567	-0.001	164052	-0.1692	
					RPD = 350.44	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.760			ND	
2		4.648				
11 2,4,5-Trichlorophenol						
1		4.861			ND	
2		4.772				
12 delta-BHC						
1		4.935			ND	
2		4.920				
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1		5.144			ND	
2		4.978				
16 Aldrin						
1		5.431			ND	
2		5.283				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				
18 Isodrin						
1		5.758			ND	
2		5.645				
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1	6.035	6.039	-0.004	4215965	-0.0258	
2	6.036	6.038	-0.002	226247	-0.2828	
					RPD = -166.58	
LOD = 0.002000						
21 Heptachlor epoxide						
1		6.053			ND	
2		5.828				
22 gamma-Chlordane						
1		6.196			ND	
2		6.028				
23 alpha-Chlordane						
1	6.358	6.357	0.001	114447	0.2135	
2	6.190	6.196	-0.006	155955	-0.6404	
					RPD = -400.08	
24 4,4'-DDE						
1		6.453			ND	
2		6.413				
25 Endosulfan I						
1	6.531	6.528	0.003	635352	-0.0888	
2	6.262	6.260	0.002	141341	-0.8830	
					RPD = -163.45	
LOD = 0.002000						
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1		6.813			ND	
2		6.599				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
29 2,4'-DDT						
1		6.961			ND	
2		7.022				
30 Endrin						
1	7.082	7.082	0.000	444793	0.1793	
2	6.955	6.959	-0.004	115509	-0.4378	
					RPD = -477.35	
31 Kepone						
1		7.129			ND	
2		7.088				
32 4,4'-DDD						
1		7.158			ND	
2		7.110				
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1		7.331			ND	
2		7.203				
35 4,4'-DDT						
1	7.468	7.468	0.000	1976955	0.6553	
2	7.460	7.459	0.001	474406	-0.1760	
					RPD = 346.88	
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1		7.981			ND	
2		8.182				
38 Mirex						
1	8.131	8.127	0.004	538594	-0.1820	
2	8.351	8.353	-0.002	282998	0.1446	
					RPD = -1748.24	
39 Endosulfan sulfate						
1		8.232			ND	
2		7.873				
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1	9.489	9.492	-0.003	180953651	15.8	
2	9.593	9.593	0.000	31920682	16.2	
					RPD = 2.27	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				
S 3 Endosulfan, Total						
1					-0.0888	
2					-0.8830	
					RPD = -163.45	

LOD = 0.002000

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

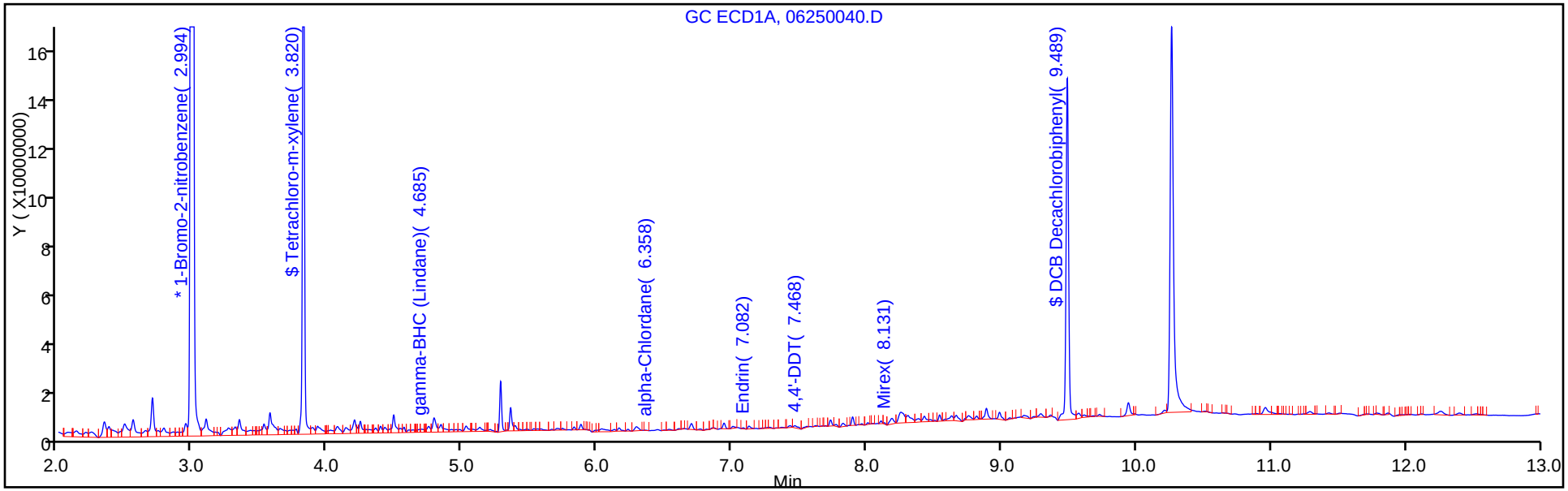
Report Date: 26-Jun-2017 11:57:15 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

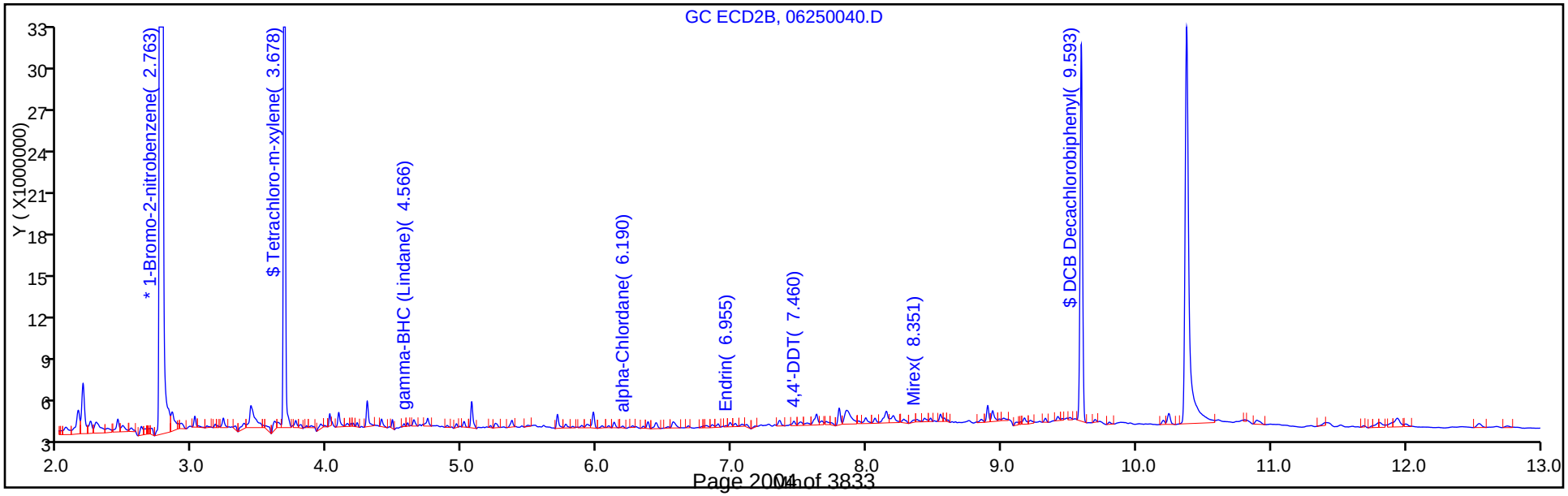
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250040.D

Injection Date:	25-Jun-2017 23:34:10	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-C-19-C	Lab Sample ID:	280-97928-19	Worklist Smp#:	40
Client ID:	SS025-SB10(2-4)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250040.D				
Lims ID:	280-97928-C-19-C				
Client ID:	SS025-SB10(2-4)				
Sample Type:	Client				
Inject. Date:	25-Jun-2017 23:34:10	ALS Bottle#:	34	Worklist Smp#:	40
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-19-C				
Misc. Info.:	280-0060103-040				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:57	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	15.9	79.65
$ 41 DCB Decachlorobiphenyl	20.0	15.8	79.16

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	16.5	82.44
$ 41 DCB Decachlorobiphenyl	20.0	16.2	80.98

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(4-6) | Lab Sample ID: 280-97928-20

Matrix: Solid | Lab File ID: 06250041.D

Analysis Method: 8081B | Date Collected: 06/05/2017 14:55

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.8(g) | Date Analyzed: 06/25/2017 23:51

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 6.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.7	U	1.7	1.7	0.55
72-55-9	4,4'-DDE	0.68	U	1.7	0.68	0.24
50-29-3	4,4'-DDT	1.7	U	2.0	1.7	0.59
309-00-2	Aldrin	0.68	U	1.7	0.68	0.25
319-84-6	alpha-BHC	0.68	U	1.7	0.68	0.22
5103-71-9	alpha-Chlordane	0.68	U	1.7	0.68	0.33
319-85-7	beta-BHC	1.7	U	1.7	1.7	0.67
319-86-8	delta-BHC	1.0	U	1.7	1.0	0.40
60-57-1	Dieldrin	0.68	U	1.7	0.68	0.21
959-98-8	Endosulfan I	0.68	U	1.7	0.68	0.18
33213-65-9	Endosulfan II	0.68	U	1.7	0.68	0.29
1031-07-8	Endosulfan sulfate	0.68	U	1.7	0.68	0.28
72-20-8	Endrin	0.68	U	1.7	0.68	0.31
7421-93-4	Endrin aldehyde	0.68	U	1.7	0.68	0.17
58-89-9	gamma-BHC (Lindane)	1.0	U	1.7	1.0	0.47
5103-74-2	gamma-Chlordane	0.68	U	1.7	0.68	0.27
76-44-8	Heptachlor	0.68	U	1.7	0.68	0.22
1024-57-3	Heptachlor epoxide	1.0	U	1.7	1.0	0.43
72-43-5	Methoxychlor	1.0	U	3.3	1.0	0.45
8001-35-2	Toxaphene	33	U	170	33	16

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	68		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	69		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250041.D
Lims ID: 280-97928-B-20-C
Client ID: SS025-SB10(4-6)
Sample Type: Client
Inject. Date: 25-Jun-2017 23:51:06 ALS Bottle#: 35 Worklist Smp#: 41
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-B-20-C
Misc. Info.: 280-0060103-041
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:57 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:38:51

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1		1.000			ND	
2		0.000				
* 2 1-Bromo-2-nitrobenzene						
1	2.994	2.993	0.000	2254117727	150.0	
2	2.763	2.763	-0.001	469341653	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.820	3.819	0.001	233521601	13.7	
2	3.678	3.678	0.000	48802492	14.7	
					RPD = 6.89	
5 Hexachlorobenzene						
1		4.200			ND	
2		4.104				
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1		4.361			ND	
2		3.971				
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1		4.676			ND	
2		4.567				
10 beta-BHC						
1		4.760			ND	
2		4.648				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
11 2,4,5-Trichlorophenol						
1		4.861			ND	
2		4.772				
12 delta-BHC						
1		4.935			ND	
2		4.920				
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1		5.144			ND	
2		4.978				
16 Aldrin						
1		5.431			ND	
2		5.283				
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				
18 Isodrin						
1		5.758			ND	
2		5.645				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1		6.053			ND	
2		5.828				
22 gamma-Chlordane						
1		6.196			ND	
2		6.028				
23 alpha-Chlordane						
1		6.357			ND	
2		6.196				
24 4,4'-DDE						
1		6.453			ND	
2		6.413				
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1		6.813			ND	
2		6.599				
29 2,4'-DDT						
1		6.961			ND	
2		7.022				
30 Endrin						
1		7.082			ND	
2		6.959				
31 Kepone						
1		7.129			ND	
2		7.088				
32 4,4'-DDD						
1		7.158			ND	
2		7.110				
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1		7.331			ND	
2		7.203				
35 4,4'-DDT						
1	7.462	7.468	-0.006	4816219	0.7971	
2	7.465	7.459	0.006	124465	-0.3144	
					RPD = 460.52	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1		7.981			ND	
2		8.182				
38 Mirex						
1		8.127			ND	
2		8.353				
39 Endosulfan sulfate						
1		8.232			ND	
2		7.873				
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1	9.490	9.492	-0.002	161296014	13.5	
2	9.592	9.593	-0.001	29643011	14.4	
					RPD = 6.09	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				
S 3 Endosulfan, Total						
1		0.000			ND	
2		0.000				

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

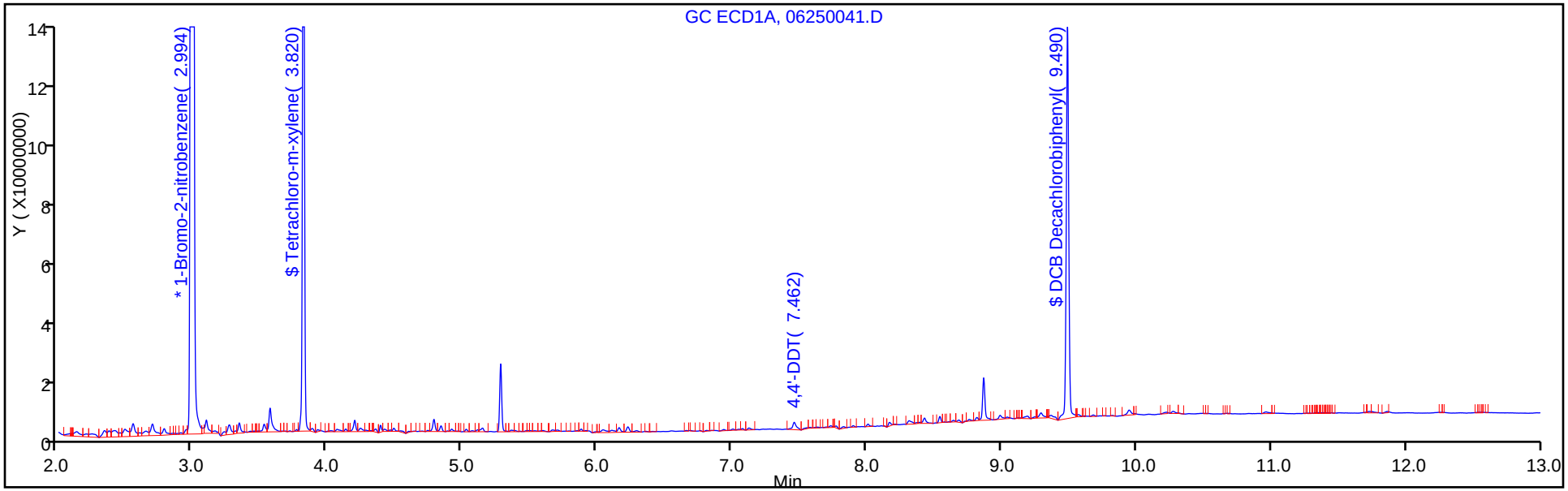
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TestAmerica Denver

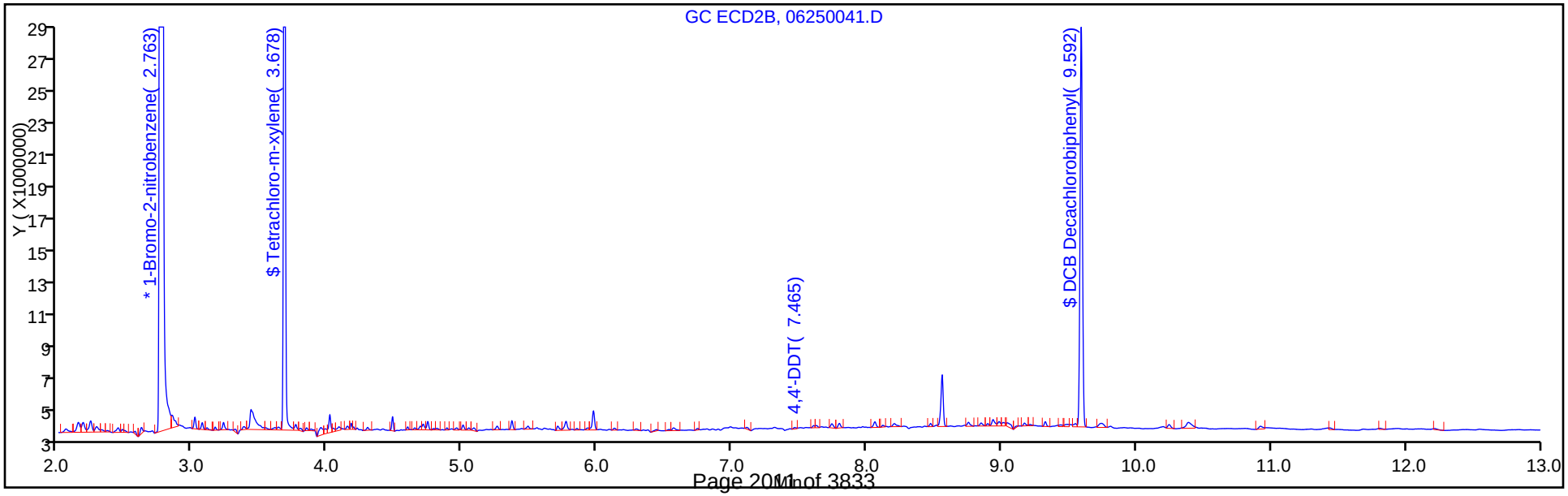
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Injection Date:	25-Jun-2017 23:51:06	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-B-20-C	Lab Sample ID:	280-97928-20	Worklist Smp#:	41
Client ID:	SS025-SB10(4-6)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250041.D				
Lims ID:	280-97928-B-20-C				
Client ID:	SS025-SB10(4-6)				
Sample Type:	Client				
Inject. Date:	25-Jun-2017 23:51:06	ALS Bottle#:	35	Worklist Smp#:	41
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-B-20-C				
Misc. Info.:	280-0060103-041				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:57	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:38:51		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	13.7	68.54
$ 41 DCB Decachlorobiphenyl	20.0	13.5	67.73

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	14.7	73.43
$ 41 DCB Decachlorobiphenyl	20.0	14.4	71.98

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(2-4)-a | Lab Sample ID: 280-97928-21

Matrix: Solid | Lab File ID: 06250042.D

Analysis Method: 8081B | Date Collected: 06/05/2017 14:45

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 30.7(g) | Date Analyzed: 06/26/2017 00:07

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 5.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.7	U	1.8	1.7	0.57
72-55-9	4,4'-DDE	0.70	U	1.8	0.70	0.25
50-29-3	4,4'-DDT	1.7	U	2.1	1.7	0.61
309-00-2	Aldrin	0.70	U	1.8	0.70	0.26
319-84-6	alpha-BHC	0.70	U	1.8	0.70	0.22
5103-71-9	alpha-Chlordane	0.70	U	1.8	0.70	0.34
319-85-7	beta-BHC	1.7	U	1.8	1.7	0.69
319-86-8	delta-BHC	1.0	U	1.8	1.0	0.42
60-57-1	Dieldrin	0.70	U	1.8	0.70	0.22
959-98-8	Endosulfan I	0.70	U	1.8	0.70	0.18
33213-65-9	Endosulfan II	0.70	U	1.8	0.70	0.30
1031-07-8	Endosulfan sulfate	0.70	U	1.8	0.70	0.29
72-20-8	Endrin	0.70	U	1.8	0.70	0.32
7421-93-4	Endrin aldehyde	0.70	U	1.8	0.70	0.18
58-89-9	gamma-BHC (Lindane)	1.0	U	1.8	1.0	0.48
5103-74-2	gamma-Chlordane	0.70	U	1.8	0.70	0.28
76-44-8	Heptachlor	0.70	U	1.8	0.70	0.22
1024-57-3	Heptachlor epoxide	1.0	U	1.8	1.0	0.44
72-43-5	Methoxychlor	1.0	U	3.4	1.0	0.47
8001-35-2	Toxaphene	34	U	180	34	16

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	75		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	79		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250042.D
Lims ID: 280-97928-B-21-C
Client ID: SS025-SB10(2-4)-a
Sample Type: Client
Inject. Date: 26-Jun-2017 00:07:57 ALS Bottle#: 36 Worklist Smp#: 42
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-B-21-C
Misc. Info.: 280-0060103-042
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:57 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:38:58

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1		1.000			ND	
2		0.000				
* 2 1-Bromo-2-nitrobenzene						
1	2.994	2.993	0.000	2196455193	150.0	
2	2.764	2.763	0.000	460293119	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.819	3.819	0.000	262707060	15.8	
2	3.679	3.678	0.001	53894135	16.6	
					RPD = 4.95	
5 Hexachlorobenzene						
1		4.200			ND	
2		4.104				
6 Diallate						
1		4.218			ND	
2		4.056				
7 Propachlor						
1		4.361			ND	
2		3.971				
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1		4.676			ND	
2		4.567				
10 beta-BHC						
1		4.760			ND	
2		4.648				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
11 2,4,5-Trichlorophenol						
1		4.861			ND	
2		4.772				
12 delta-BHC						
1		4.935			ND	
2		4.920				
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1	5.146	5.144	0.002	1390243	0.2011	
2	4.977	4.978	-0.001	112680	-0.4874	
					RPD = -480.93	
16 Aldrin						
1		5.431			ND	
2		5.283				
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1		5.665			ND	
2		5.511				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
18 Isodrin						
1		5.758			ND	
2		5.645				
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1		6.053			ND	
2		5.828				
22 gamma-Chlordane						
1		6.196			ND	
2		6.028				
23 alpha-Chlordane						
1		6.357			ND	
2		6.196				
24 4,4'-DDE						
1		6.453			ND	
2		6.413				
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				
27 Dieldrin						
1		6.813			ND	
2		6.599				
29 2,4'-DDT						
1	6.959	6.961	-0.002	3110200	0.1378	
2	7.019	7.022	-0.003	474530	-0.1293	
					RPD = 6255.02	
30 Endrin						
1		7.082			ND	
2		6.959				
31 Kepone						
1		7.129			ND	
2		7.088				
32 4,4'-DDD						
1		7.158			ND	
2		7.110				
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1		7.331			ND	
2		7.203				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
35 4,4'-DDT						
1	7.466	7.468	-0.002	7829762	0.9621	
2	7.458	7.459	-0.001	1497071	0.2142	
					RPD = 127.15	
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1		7.981			ND	
2		8.182				
38 Mirex						
1		8.127			ND	
2		8.353				
39 Endosulfan sulfate						
1		8.232			ND	
2		7.873				
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1	9.489	9.492	-0.003	173627128	15.0	
2	9.593	9.593	0.000	33230133	16.6	
					RPD = 10.24	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				
S 3 Endosulfan, Total						
1		0.000			ND	
2		0.000				

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

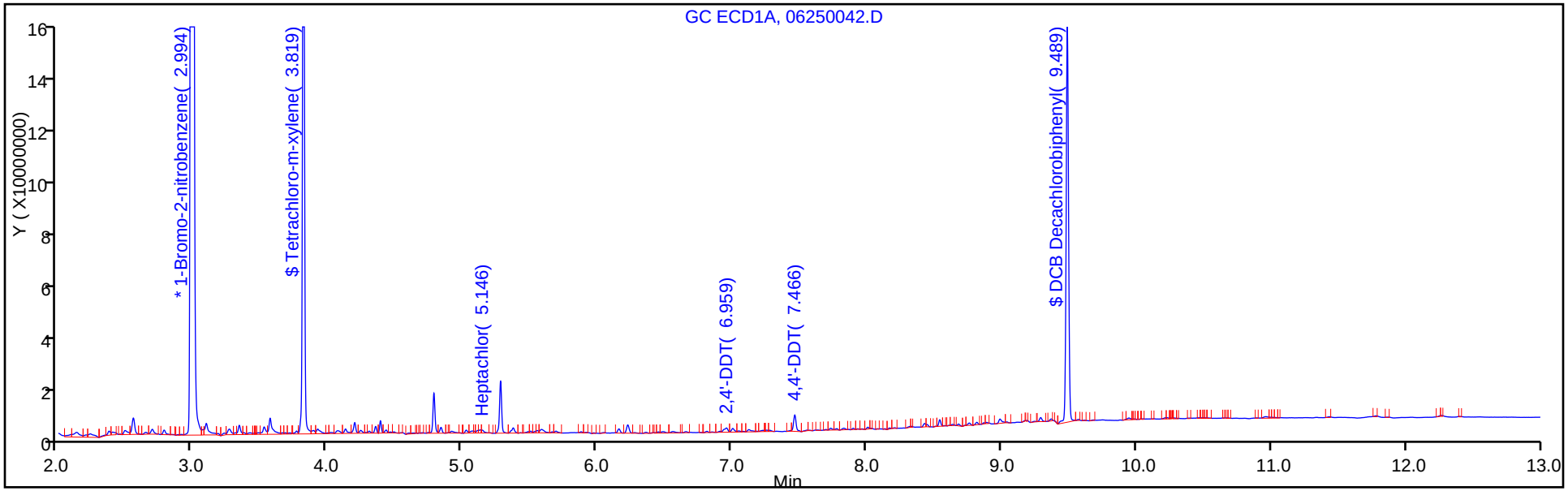
Report Date: 26-Jun-2017 11:57:19 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

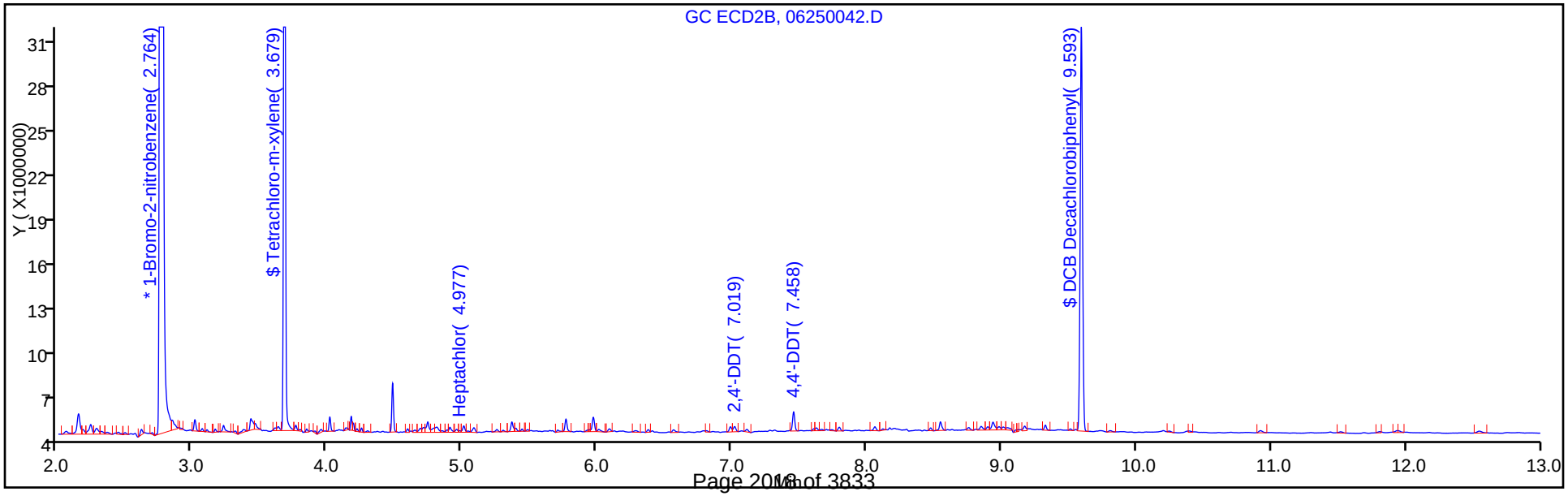
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250042.D

Injection Date:	26-Jun-2017 00:07:57	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-B-21-C	Lab Sample ID:	280-97928-21	Worklist Smp#:	42
Client ID:	SS025-SB10(2-4)-a				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250042.D				
Lims ID:	280-97928-B-21-C				
Client ID:	SS025-SB10(2-4)-a				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 00:07:57	ALS Bottle#:	36	Worklist Smp#:	42
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-B-21-C				
Misc. Info.:	280-0060103-042				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:57	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:38:58		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	15.8	79.05
$ 41 DCB Decachlorobiphenyl	20.0	15.0	75.01

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	16.6	83.07
$ 41 DCB Decachlorobiphenyl	20.0	16.6	83.11

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS10 | Lab Sample ID: 280-97928-22

Matrix: Solid | Lab File ID: 06250043.D

Analysis Method: 8081B | Date Collected: 06/05/2017 15:20

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.7(g) | Date Analyzed: 06/26/2017 00:24

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 9.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.7	U	1.8	1.7	0.57
72-55-9	4,4'-DDE	0.70	U	1.8	0.70	0.25
50-29-3	4,4'-DDT	1.7	U	2.1	1.7	0.61
309-00-2	Aldrin	0.70	U	1.8	0.70	0.26
319-84-6	alpha-BHC	0.70	U	1.8	0.70	0.22
5103-71-9	alpha-Chlordane	0.70	U	1.8	0.70	0.34
319-85-7	beta-BHC	1.7	U	1.8	1.7	0.69
319-86-8	delta-BHC	1.0	U	1.8	1.0	0.42
60-57-1	Dieldrin	0.70	U	1.8	0.70	0.22
959-98-8	Endosulfan I	0.70	U	1.8	0.70	0.18
33213-65-9	Endosulfan II	0.70	U	1.8	0.70	0.30
1031-07-8	Endosulfan sulfate	0.70	U	1.8	0.70	0.29
72-20-8	Endrin	0.70	U	1.8	0.70	0.32
7421-93-4	Endrin aldehyde	0.70	U	1.8	0.70	0.18
58-89-9	gamma-BHC (Lindane)	1.0	U	1.8	1.0	0.48
5103-74-2	gamma-Chlordane	0.70	U	1.8	0.70	0.28
76-44-8	Heptachlor	0.70	U	1.8	0.70	0.22
1024-57-3	Heptachlor epoxide	1.0	U	1.8	1.0	0.44
72-43-5	Methoxychlor	1.0	U	3.4	1.0	0.47
8001-35-2	Toxaphene	34	U	180	34	16

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	65		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	65		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250043.D
Lims ID: 280-97928-B-22-D
Client ID: SS025-SS10
Sample Type: Client
Inject. Date: 26-Jun-2017 00:24:48 ALS Bottle#: 37 Worklist Smp#: 43
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-B-22-D
Misc. Info.: 280-0060103-043
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:57 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:39:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical						
1					0.5896	
2					-0.0138	
					RPD = 209.62	
LOD = 0.002000						
* 2 1-Bromo-2-nitrobenzene						
1	2.994	2.993	0.000	2292430476	150.0	
2	2.764	2.763	0.000	477704794	150.0	
$ 4 Tetrachloro-m-xylene						
1	3.820	3.819	0.001	223533229	12.9	
2	3.679	3.678	0.001	48129483	14.2	
					RPD = 9.61	
5 Hexachlorobenzene						
1		4.200			ND	
2		4.104				
6 Diallate						
1	4.216	4.218	-0.002	1670475	-38.5	
2	4.057	4.056	0.001	861681	-50.5	
					RPD = -26.88	
LOD = 0.002000						
7 Propachlor						
1		4.361			ND	
2		3.971				
8 alpha-BHC						
1		4.368			ND	
2		4.241				
9 gamma-BHC (Lindane)						
1	4.673	4.676	-0.003	620244	0.5896	
2	4.561	4.567	-0.006	834771	-0.0138	
					RPD = 209.62	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
10 beta-BHC						
1		4.760			ND	
2		4.648				
11 2,4,5-Trichlorophenol						
1	4.866	4.861	0.005	2020908	NC	
2	4.757	4.772	-0.015	582327	NC	
					RPD = 0.00	
12 delta-BHC						
1		4.935			ND	
2		4.920				
14 Chlordane (technical)						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
13 Technical Chlordane						
1		5.065			ND	
1		5.560				
1		6.197				
1		6.337				
1		7.258				
2		4.840				
2		5.425				
2		6.029				
2		6.196				
2		7.254				
15 Heptachlor						
1		5.144			ND	
2		4.978				
16 Aldrin						
1		5.431			ND	
2		5.283				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
28 Toxaphene						
1		5.606			ND	
1		6.925				
1		7.187				
1		7.693				
1		8.135				
2		6.108				
2		7.156				
2		7.300				
2		7.589				
2		8.112				
17 Chlorpyrifos						
1	5.663	5.665	-0.002	2640139	-1.43	
2	5.508	5.511	-0.003	233595	-2.56	
					RPD = -56.50	
LOD = 0.002000						
18 Isodrin						
1	5.756	5.758	-0.002	1829956	0.0969	
2	5.644	5.645	-0.001	1082341	-0.2792	
					RPD = -412.71	
19 Dicofol						
1		5.798			ND	
2		5.610				
20 2,4'-DDE						
1		6.039			ND	
2		6.038				
21 Heptachlor epoxide						
1	6.052	6.053	-0.001	1349720	-0.0257	
2	5.829	5.828	0.001	115013	-0.6768	
					RPD = -185.35	
LOD = 0.002000						
22 gamma-Chlordane						
1	6.190	6.196	-0.006	604612	0.3285	
2	6.031	6.028	0.003	840354	-0.3291	
					RPD = -217579.20	
23 alpha-Chlordane						
1	6.362	6.357	0.005	3065614	0.3383	
2	6.190	6.196	-0.006	577919	-0.5192	
					RPD = -948.19	
24 4,4'-DDE						
1	6.449	6.453	-0.004	2719395	0.4785	
2	6.406	6.413	-0.007	372848	-0.4000	
					RPD = 2237.78	
25 Endosulfan I						
1		6.528			ND	
2		6.260				
26 2,4'-DDD						
1		6.661			ND	
2		6.661				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
27 Dieldrin						
1		6.813			ND	
2		6.599				
29 2,4'-DDT						
1		6.961			ND	
2		7.022				
30 Endrin						
1		7.082			ND	
2		6.959				
31 Kepone						
1		7.129			ND	
2		7.088				
32 4,4'-DDD						
1		7.158			ND	
2		7.110				
33 Chlorobenzilate						
1		7.173			ND	
2		6.971				
34 Endosulfan II						
1		7.331			ND	
2		7.203				
35 4,4'-DDT						
1	7.466	7.468	-0.002	8749360	0.99	
2	7.457	7.459	-0.002	2629858	0.6129	
					RPD = 47.17	
36 Endrin aldehyde						
1		7.785			ND	
2		7.578				
37 Methoxychlor						
1		7.981			ND	
2		8.182				
38 Mirex						
1		8.127			ND	
2		8.353				
39 Endosulfan sulfate						
1		8.232			ND	
2		7.873				
40 Endrin ketone						
1		8.513			ND	
2		8.399				
$ 41 DCB Decachlorobiphenyl						
1	9.488	9.492	-0.004	156870072	12.9	
2	9.591	9.593	-0.002	31474026	15.1	
					RPD = 15.22	
42 Tris(2,3-dibromopropyl)phosphate						
1		11.272			ND	
2		11.308				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/mL	Flags
S 3 Endosulfan, Total						
1		0.000			ND	
2		0.000				

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

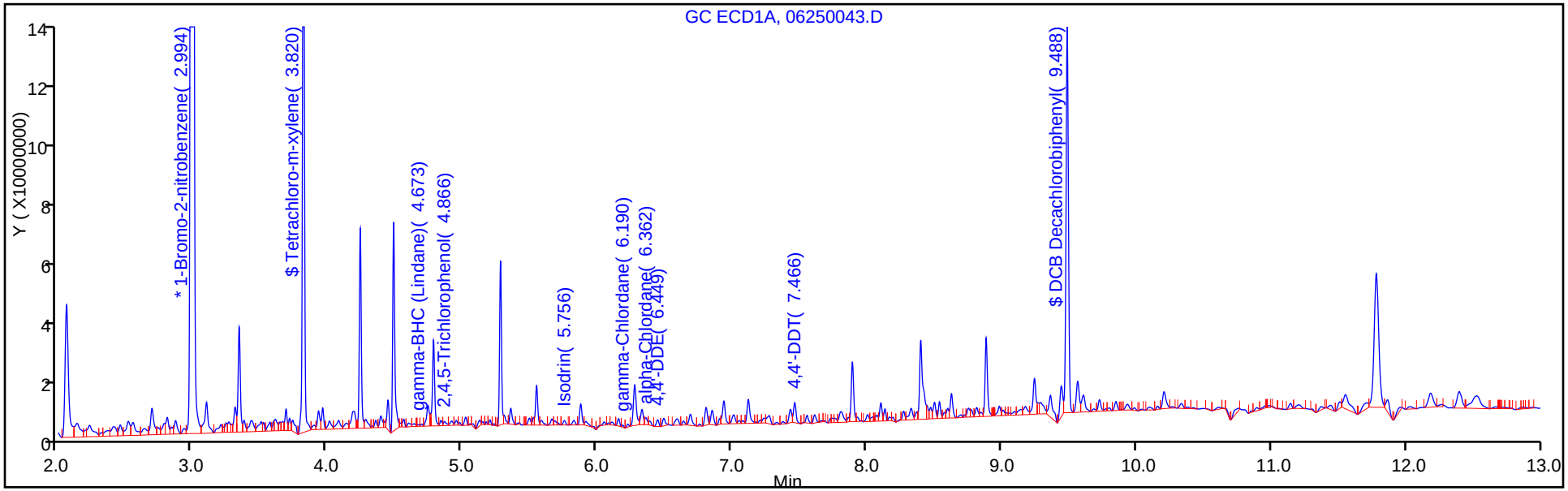
Report Date: 26-Jun-2017 11:57:21 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

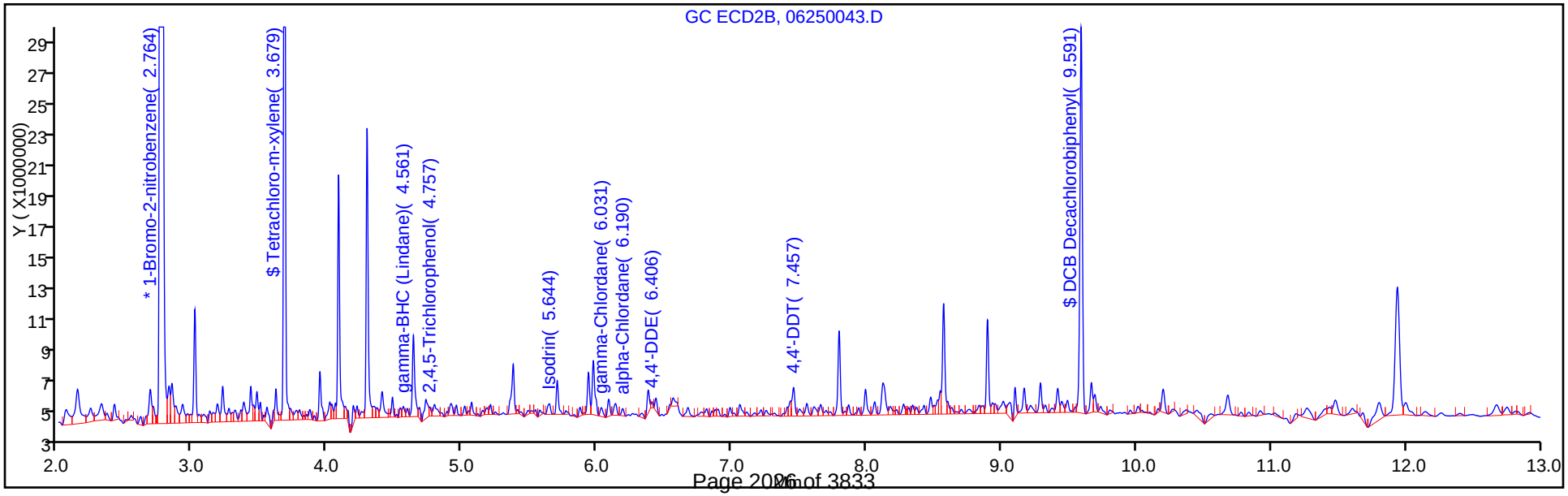
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250043.D

Injection Date:	26-Jun-2017 00:24:48	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-B-22-D	Lab Sample ID:	280-97928-22	Worklist Smp#:	43
Client ID:	SS025-SS10				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250043.D				
Lims ID:	280-97928-B-22-D				
Client ID:	SS025-SS10				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 00:24:48	ALS Bottle#:	37	Worklist Smp#:	43
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-B-22-D				
Misc. Info.:	280-0060103-043				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:57	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:39:25		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	12.9	64.54
$ 41 DCB Decachlorobiphenyl	20.0	12.9	64.68

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	14.2	71.06
$ 41 DCB Decachlorobiphenyl	20.0	15.1	75.34

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 14:16 Calibration End Date: 04/10/2017 15:40 Calibration ID: 28716

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-368670/18	04100018.D
Level 2	STD2 280-368670/17	04100017.D
Level 3	STD3 280-368670/16	04100016.D
Level 4	STD4 280-368670/15	04100015.D
Level 5	STD5 280-368670/14	04100014.D
Level 6	STD6 280-368670/13	04100013.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Toxaphene Peak 1	0.0028 0.0027	0.0027	0.0027	0.0026	0.0028	Lin2	0.0096	0.0027							0.9990		0.9900
Toxaphene Peak 2	0.0220 0.0269	0.0199	0.0250	0.0267	0.0289	Qua	-4.920	0.0315	0						1.0000		0.9900
Toxaphene Peak 3	0.0154 0.0192	0.0165	0.0174	0.0200	0.0205	Lin2	-0.948	0.0196							0.9960		0.9900
Toxaphene Peak 4	0.0363 0.0453	0.0391	0.0418	0.0452	0.0491	Lin2	-2.199	0.0460							0.9970		0.9900
Toxaphene Peak 5	0.0410 0.0512	0.0445	0.0473	0.0528	0.0547	Lin2	-2.509	0.0523							0.9970		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 14:16 Calibration End Date: 04/10/2017 15:40 Calibration ID: 28716

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-368670/18	04100018.D
Level 2	STD2 280-368670/17	04100017.D
Level 3	STD3 280-368670/16	04100016.D
Level 4	STD4 280-368670/15	04100015.D
Level 5	STD5 280-368670/14	04100014.D
Level 6	STD6 280-368670/13	04100013.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Toxaphene Peak 1	BNB	Lin2	4842628 274960413	11506754	23922821	46012778	131950321	200 10000	500	1000	2000	5000
Toxaphene Peak 2	BNB	Qua	38516555 2723402477	84483421	221313458	474769847	1345059246	200 10000	500	1000	2000	5000
Toxaphene Peak 3	BNB	Lin2	26891128 1942487748	69922737	154272139	355461912	952730600	200 10000	500	1000	2000	5000
Toxaphene Peak 4	BNB	Lin2	63408945 4585703000	165888842	370003310	802936973	2284388717	200 10000	500	1000	2000	5000
Toxaphene Peak 5	BNB	Lin2	71753800 5187725515	188486212	418442324	938106314	2543887609	200 10000	500	1000	2000	5000

Curve Type Legend:

Lin2 = Linear 1/conc^2 ISTD
Qua = Quadratic ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100013.D
Lims ID: STD6 TOX
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 10-Apr-2017 14:16:20 ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD6 TOX
Misc. Info.: 280-0057376-013
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:22 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:43:22

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.030	3.031	-0.001	1518668051	150.0	150.0	
2	2.839	2.839	0.000	356597752	150.0	150.0	
28 Toxaphene							M
1	5.648	5.647	0.001	274960413	10000	10028	
1	6.976	6.974	0.002	2723402477	10000	9982.1	
1	7.238	7.237	0.001	1942487748	10000	9861.7	
1	7.743	7.742	0.001	4585703000	10000	9889.8	
1	8.184	8.184	0.000	5187725515	10000	9852.9	
		Average of Peak Amounts =				9923.0	
2	6.230	6.229	0.001	179222117	10000	9000.5	M
2	7.275	7.275	0.000	425486845	10000	9264.9	M
2	7.421	7.420	0.001	1192670953	10000	10221	M
2	7.705	7.704	0.001	745018660	10000	9387.8	M
2	8.226	8.225	0.001	639703048	10000	9408.8	M
		Average of Peak Amounts =				9456.6	
						RPD = 4.81	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxL6_00020 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

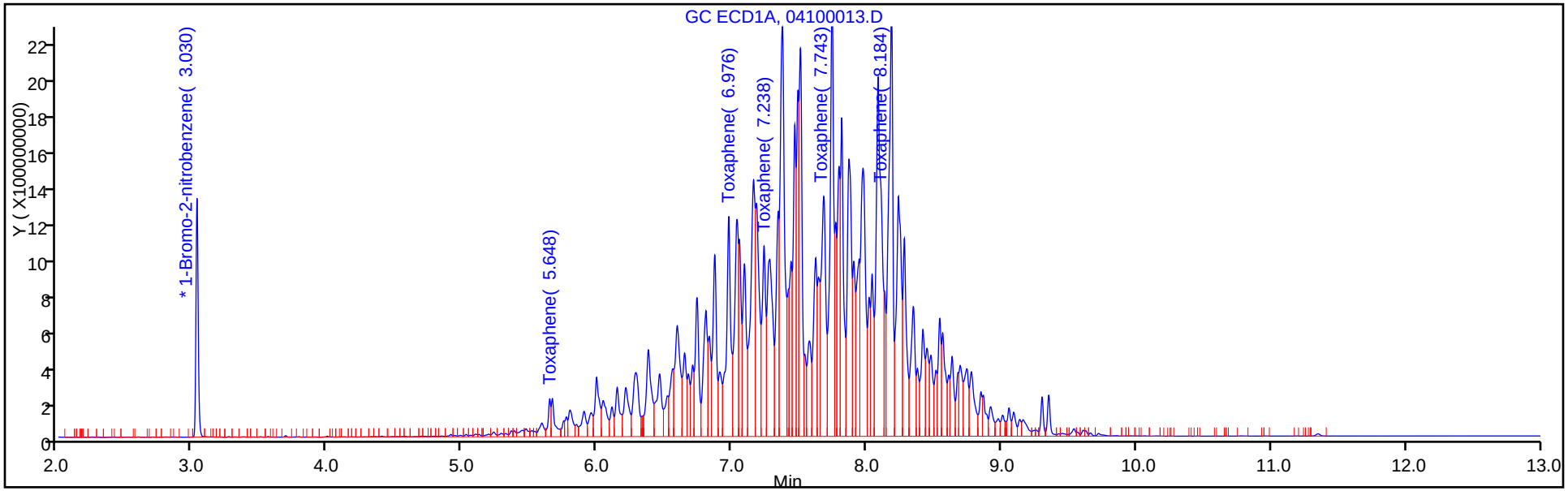
Report Date: 17-Apr-2017 13:21:24 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

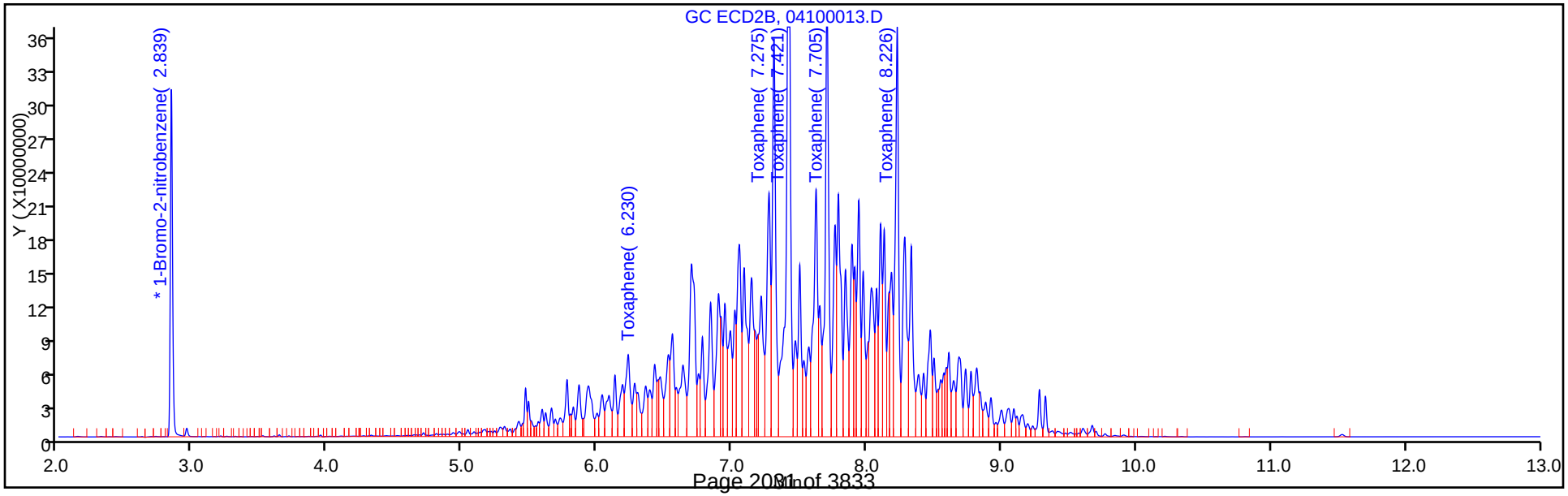
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100013.D

Injection Date:	10-Apr-2017 14:16:20	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD6 TOX			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100014.D
Lims ID: STD5 TOX
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 10-Apr-2017 14:33:12 ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD5 TOX
Misc. Info.: 280-0057376-014
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:26 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:43:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.029	3.031	-0.002	1396189255	150.0	150.0	
2	2.839	2.839	0.000	327973383	150.0	150.0	
28 Toxaphene							M
1	5.647	5.647	0.000	131950321	5000.0	5233.0	M
1	6.975	6.974	0.001	1345059246	5000.0	5079.9	M
1	7.235	7.237	-0.002	952730600	5000.0	5283.8	M
1	7.742	7.742	0.000	2284388717	5000.0	5380.7	M
1	8.184	8.184	0.000	2543887609	5000.0	5277.8	M
		Average of Peak Amounts =				5251.0	
2	6.229	6.229	0.000	91944119	5000.0	4976.4	M
2	7.273	7.275	-0.002	217561537	5000.0	5132.5	M
2	7.420	7.420	0.000	503382115	5000.0	4669.2	M
2	7.704	7.704	0.000	375808736	5000.0	5135.4	M
2	8.226	8.225	0.001	318242854	5000.0	5078.4	M
		Average of Peak Amounts =				4998.4	
						RPD = 4.93	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxL5_00018 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

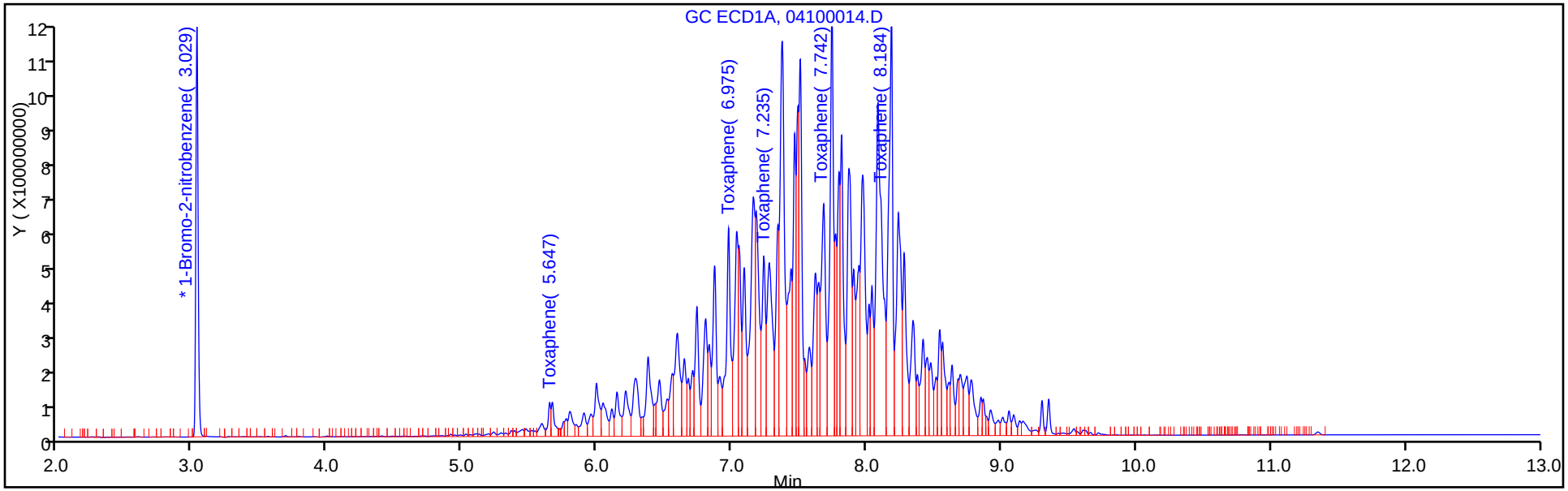
Report Date: 17-Apr-2017 13:21:28 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

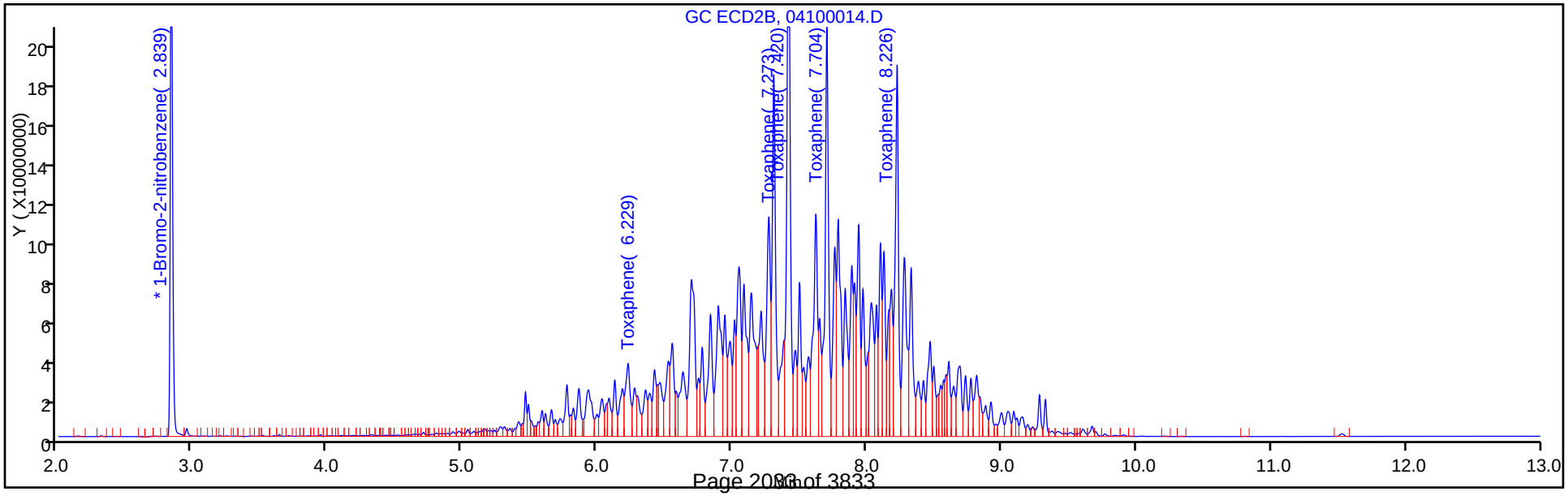
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100014.D

Injection Date:	10-Apr-2017 14:33:12	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD5 TOX			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:28 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100014.D

Injection Date: 10-Apr-2017 14:33:12 Instrument ID: SGC_P1

Lims ID: STD5 TOX

Client ID:

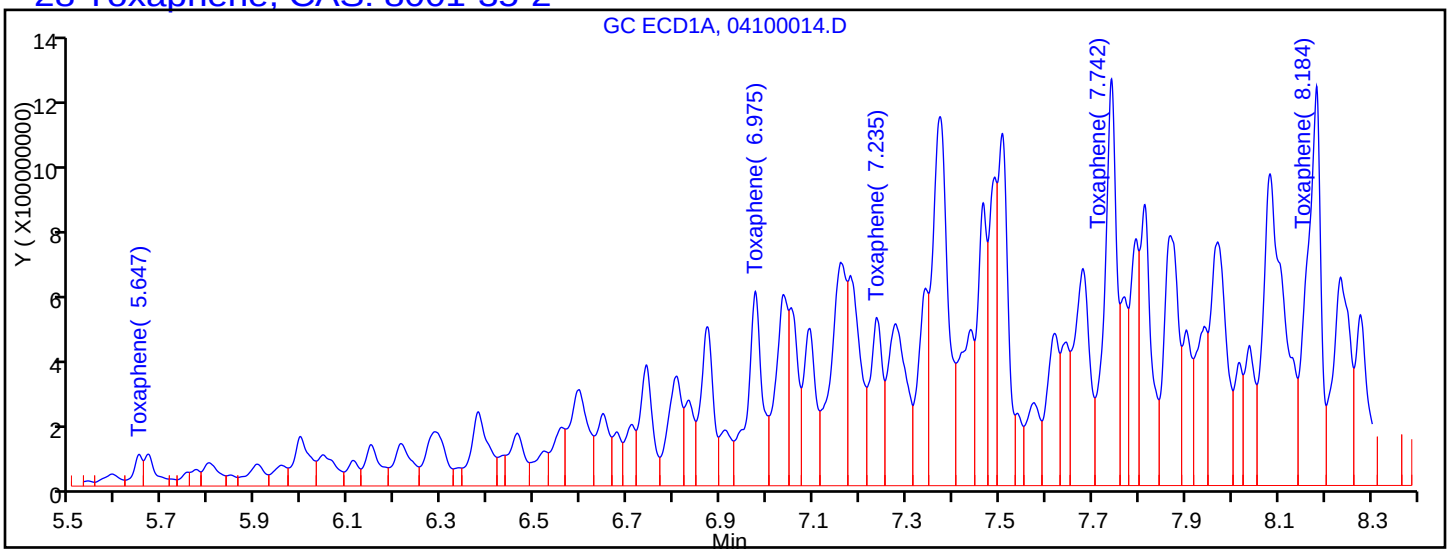
Operator ID: DAW ALS Bottle#: 12 Worklist Smp#: 14

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

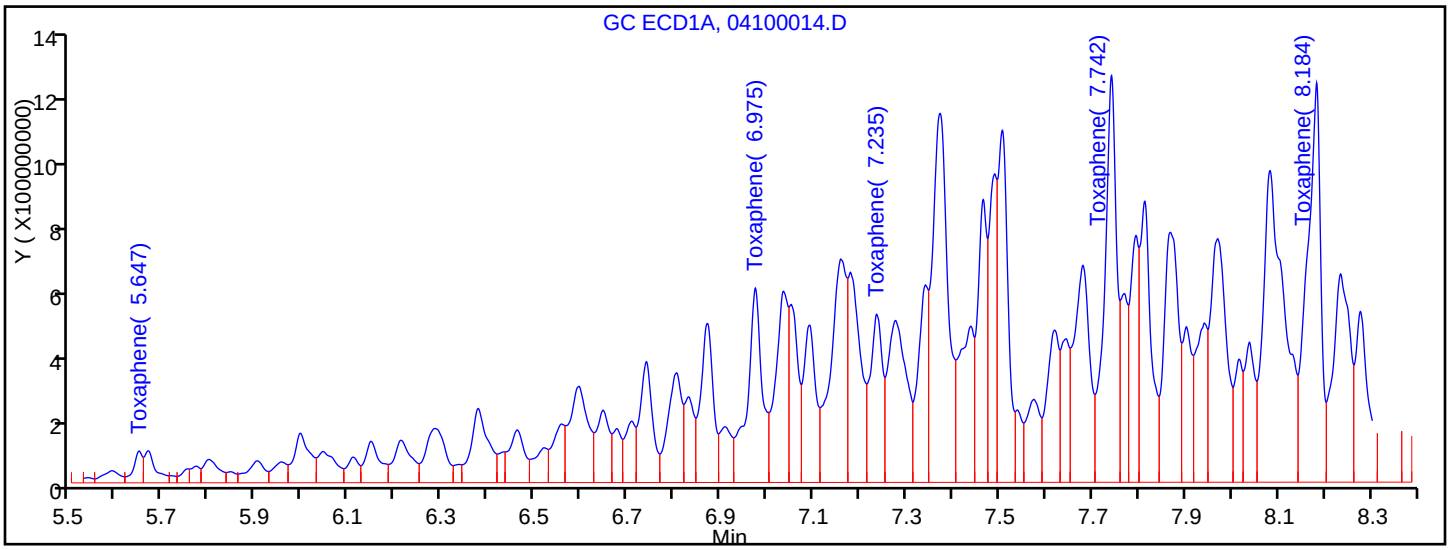
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.647	Response = 131494244
6.975	Response = 1344529103
7.235	Response = 952493378
7.742	Response = 2284118276
8.184	Response = 2543712898



Manual Integration Results

5.647	Response = 131950321	M
6.975	Response = 1345059246	M
7.235	Response = 952730600	M
7.742	Response = 2284388717	M
8.184	Response = 2543887609	M

Reviewer: wellsd, 17-Apr-2017 13:21:25

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100015.D
Lims ID: STD4 TOX
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 10-Apr-2017 14:50:03 ALS Bottle#: 13 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD4 TOX
Misc. Info.: 280-0057376-015
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:29 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:42:55

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.029	3.029	0.000	1331968560	150.0	150.0	
2	2.839	2.839	0.000	316438895	150.0	150.0	
28 Toxaphene							M
1	5.647	5.647	0.000	46012778	2000.0	1910.5	M
1	6.974	6.974	0.000	474769847	2000.0	1902.1	M
1	7.237	7.237	0.000	355461912	2000.0	2095.9	M
1	7.742	7.742	0.000	802936973	2000.0	2012.6	M
1	8.184	8.184	0.000	938106314	2000.0	2069.6	M
		Average of Peak Amounts =				1998.2	
2	6.229	6.229	0.000	37649797	2000.0	2054.8	M
2	7.275	7.275	0.000	84253007	2000.0	2035.5	M
2	7.420	7.420	0.000	195795188	2000.0	1858.9	M
2	7.704	7.704	0.000	145369209	2000.0	2041.1	M
2	8.225	8.225	0.000	125363190	2000.0	2059.4	M
		Average of Peak Amounts =				2009.9	
						RPD = 0.59	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00011 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

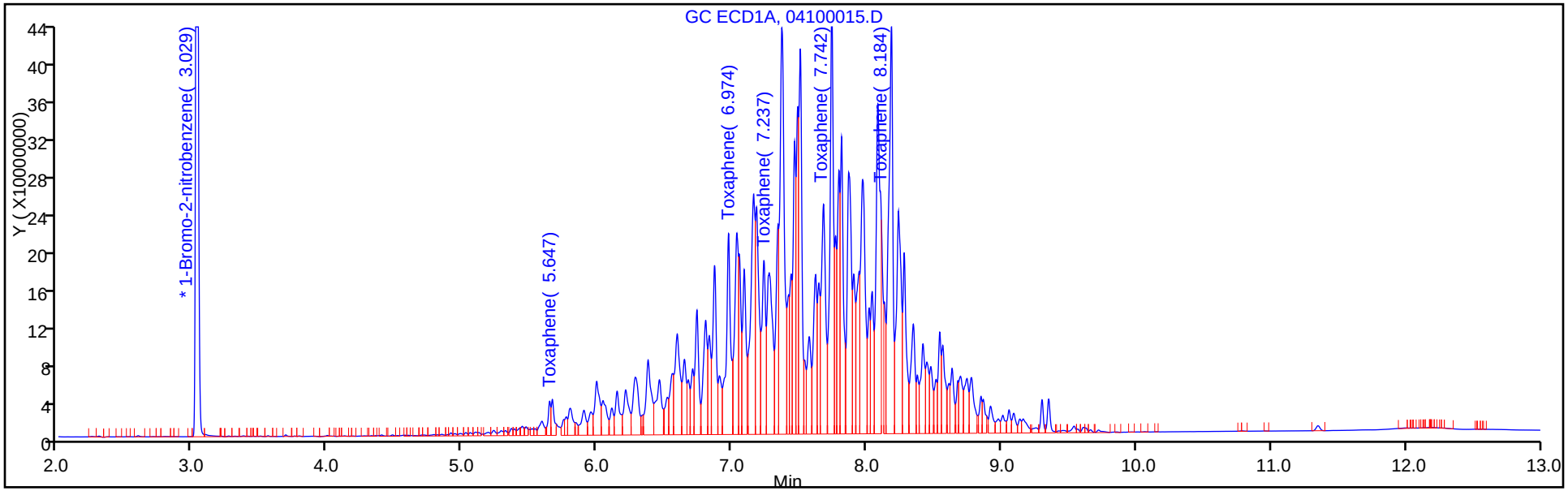
Report Date: 17-Apr-2017 13:21:31 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

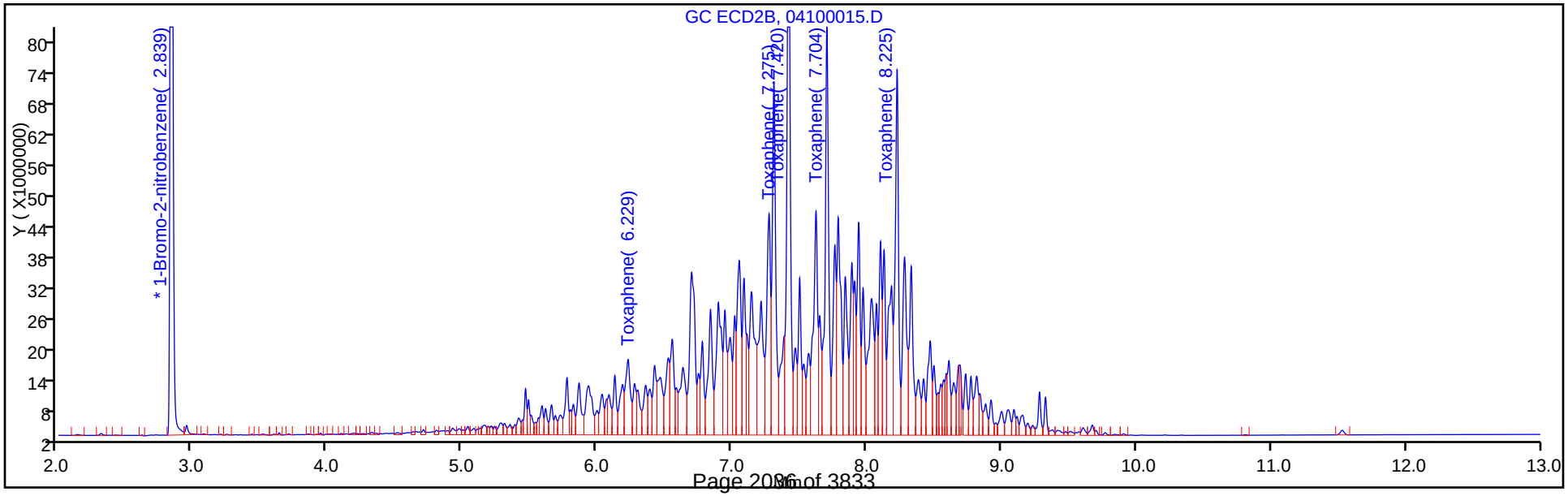
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100015.D

Injection Date:	10-Apr-2017 14:50:03	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD4 TOX			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:31 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100015.D

Injection Date: 10-Apr-2017 14:50:03 Instrument ID: SGC_P1

Lims ID: STD4 TOX

Client ID:

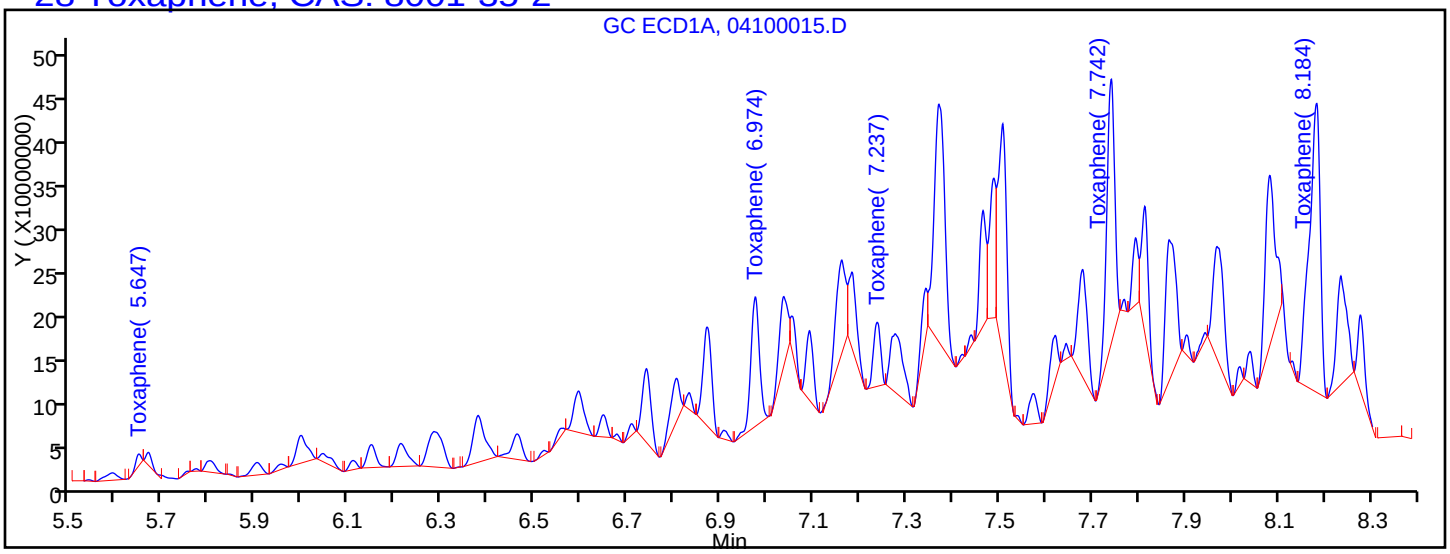
Operator ID: DAW ALS Bottle#: 13 Worklist Smp#: 15

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

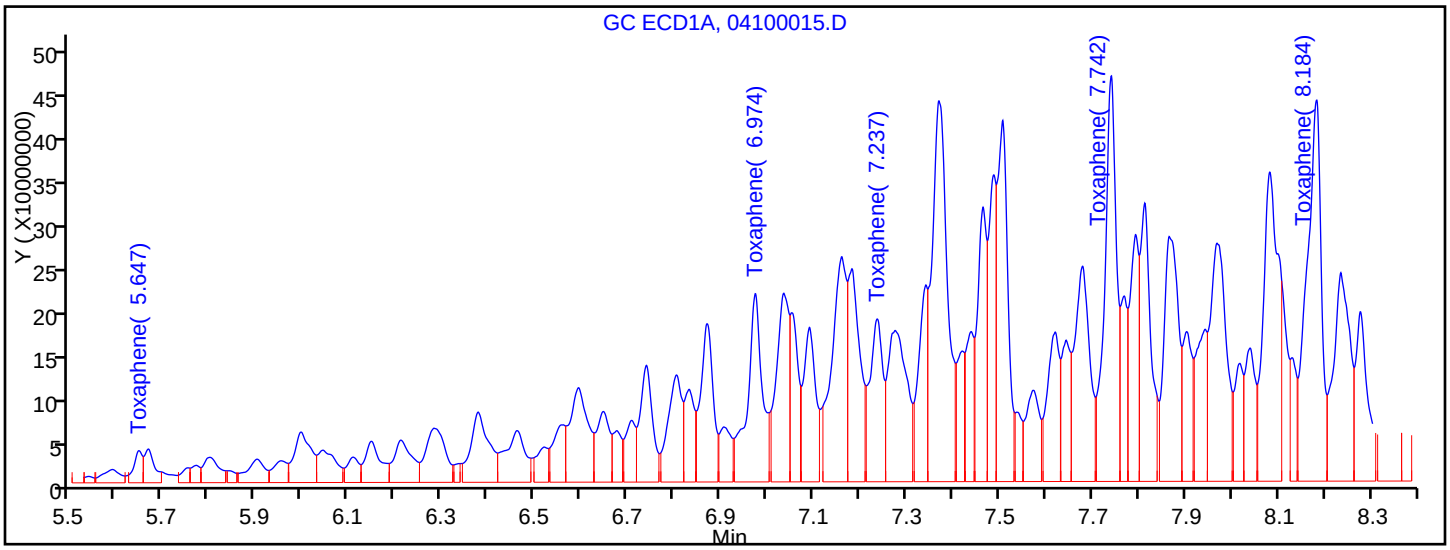
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.647	Response = 10597236
6.974	Response = 189137794
7.237	Response = 78098453
7.742	Response = 358120191
8.184	Response = 538408716



Manual Integration Results

5.647	Response = 46012778	M
6.974	Response = 474769847	M
7.237	Response = 355461912	M
7.742	Response = 802936973	M
8.184	Response = 938106314	M

Reviewer: wellsd, 17-Apr-2017 13:21:29

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100016.D
Lims ID: STD3 TOX
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 10-Apr-2017 15:06:53 ALS Bottle#: 14 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD3 TOX
Misc. Info.: 280-0057376-016
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:33 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:44:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.030	3.029	0.000	1328367555	150.0	150.0	
2	2.839	2.839	0.000	314624628	150.0	150.0	
28 Toxaphene							M
1	5.647	5.647	0.000	23922821	1000.0	994.3	M
1	6.975	6.974	0.001	221313458	1000.0	962.6	M
1	7.236	7.237	-0.001	154272139	1000.0	939.5	M
1	7.741	7.742	-0.001	370003310	1000.0	955.7	M
1	8.184	8.184	0.000	418442324	1000.0	952.2	M
		Average of Peak Amounts =				960.8	
2	6.230	6.229	0.001	19766153	1000.0	1038.0	M
2	7.275	7.275	0.000	42789752	1000.0	1019.6	M
2	7.420	7.420	0.000	118584476	1000.0	1116.9	M
2	7.704	7.704	0.000	72430934	1000.0	1008.1	M
2	8.226	8.225	0.001	61954620	1000.0	1011.7	M
		Average of Peak Amounts =				1038.9	
						RPD = 7.80	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxL3_00017 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

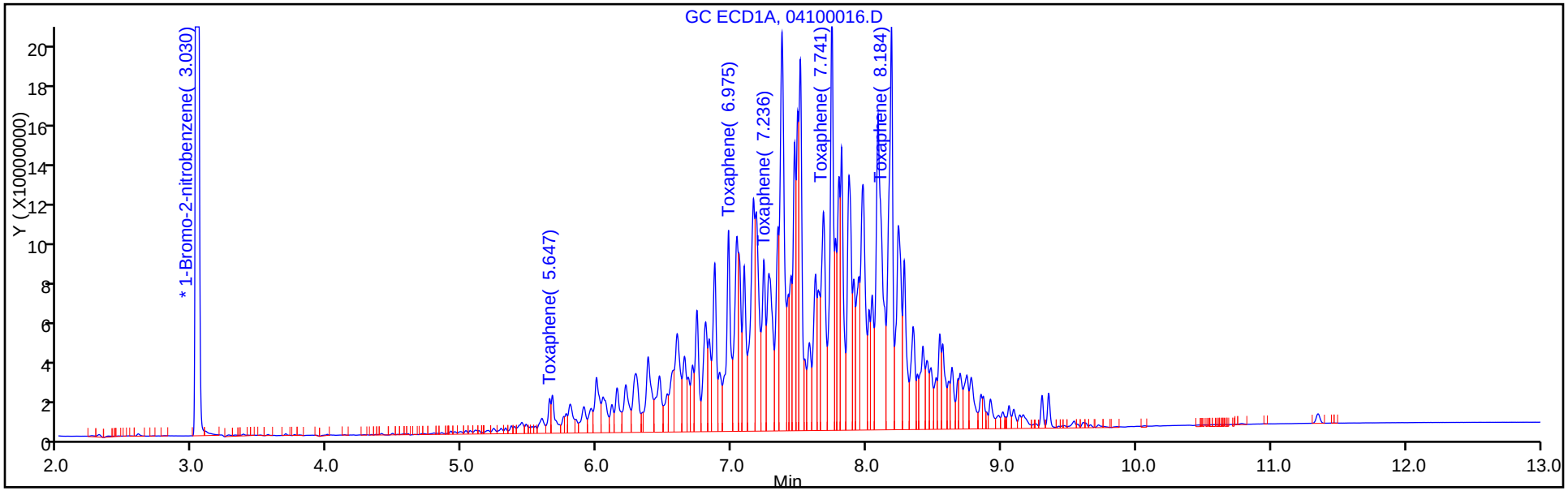
Report Date: 17-Apr-2017 13:21:35 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

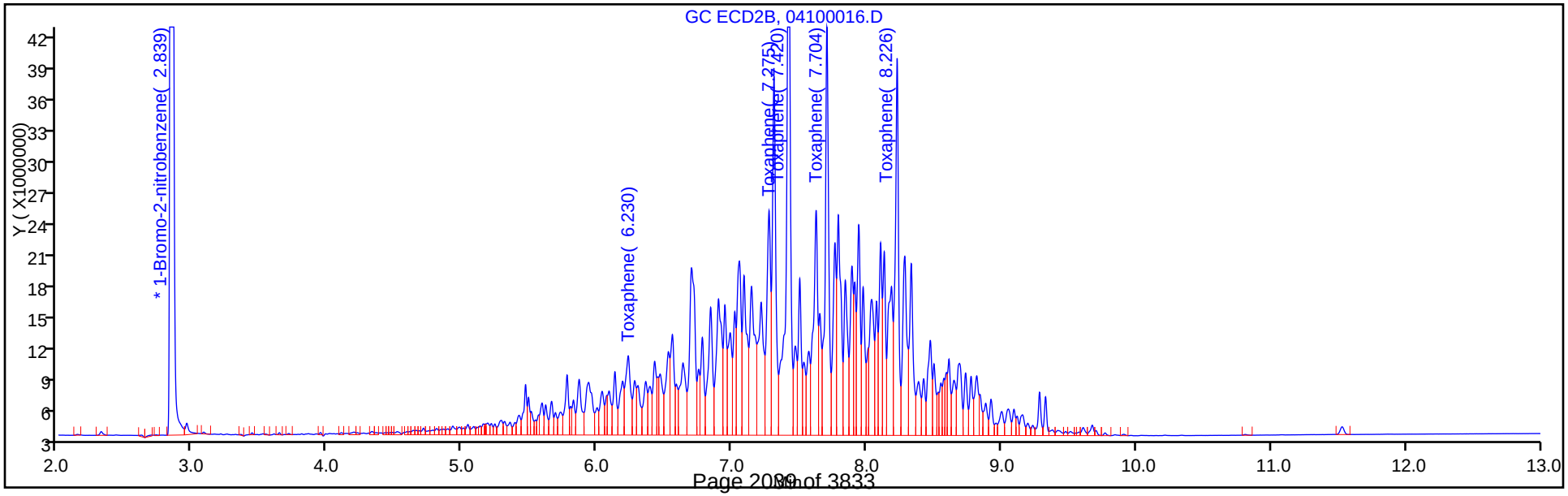
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100016.D

Injection Date:	10-Apr-2017 15:06:53	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD3 TOX			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:35 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100016.D

Injection Date: 10-Apr-2017 15:06:53 Instrument ID: SGC_P1

Lims ID: STD3 TOX

Client ID:

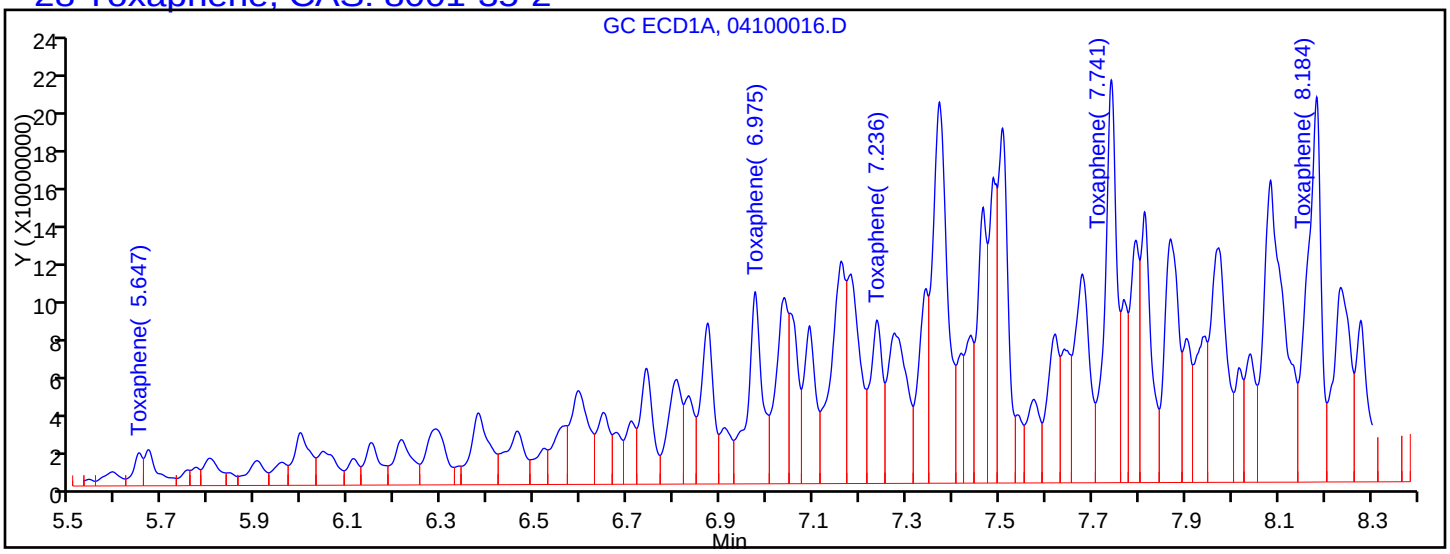
Operator ID: DAW ALS Bottle#: 14 Worklist Smp#: 16

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

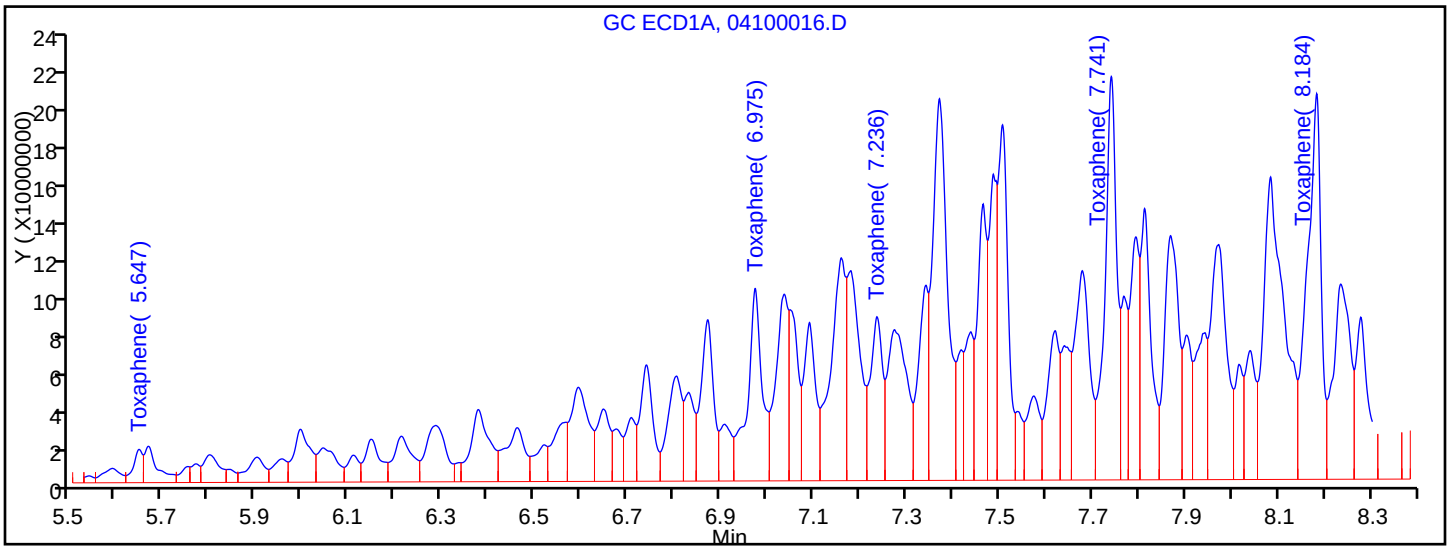
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.647	Response = 23586452
6.975	Response = 220095751
7.236	Response = 153595859
7.741	Response = 368896001
8.184	Response = 417065746



Manual Integration Results

5.647	Response = 23922821	M
6.975	Response = 221313458	M
7.236	Response = 154272139	M
7.741	Response = 370003310	M
8.184	Response = 418442324	M

Reviewer: wellsd, 17-Apr-2017 13:21:33

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100017.D
Lims ID: STD2 TOX
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 10-Apr-2017 15:23:55 ALS Bottle#: 15 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD2 TOX
Misc. Info.: 280-0057376-017
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:36 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:44:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.030	3.029	0.000	1271892489	150.0	150.0	
2	2.839	2.839	0.000	303577463	150.0	150.0	
28 Toxaphene							M
1	5.648	5.647	0.001	11506754	500.0	497.7	M
1	6.975	6.974	0.001	84483421	500.0	476.0	M
1	7.237	7.237	0.000	69922737	500.0	470.2	M
1	7.742	7.742	0.000	165888842	500.0	472.9	M
1	8.184	8.184	0.000	188486212	500.0	473.4	M
		Average of Peak Amounts =				478.0	
2	6.229	6.229	0.000	10714229	500.0	539.5	M
2	7.275	7.275	0.000	21547501	500.0	512.5	M
2	7.420	7.420	0.000	54344230	500.0	509.8	M
2	7.705	7.704	0.001	36174204	500.0	507.5	M
2	8.226	8.225	0.001	30565148	500.0	505.7	M
		Average of Peak Amounts =				515.0	
						RPD = 7.44	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxL2_00018 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

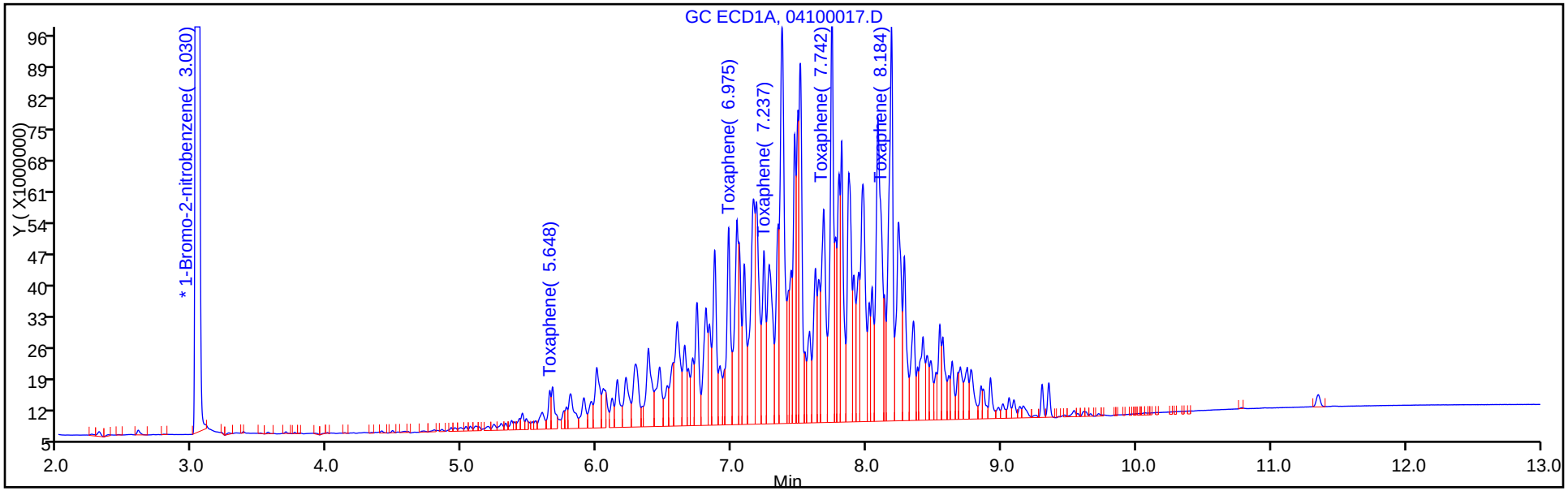
Report Date: 17-Apr-2017 13:21:39 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

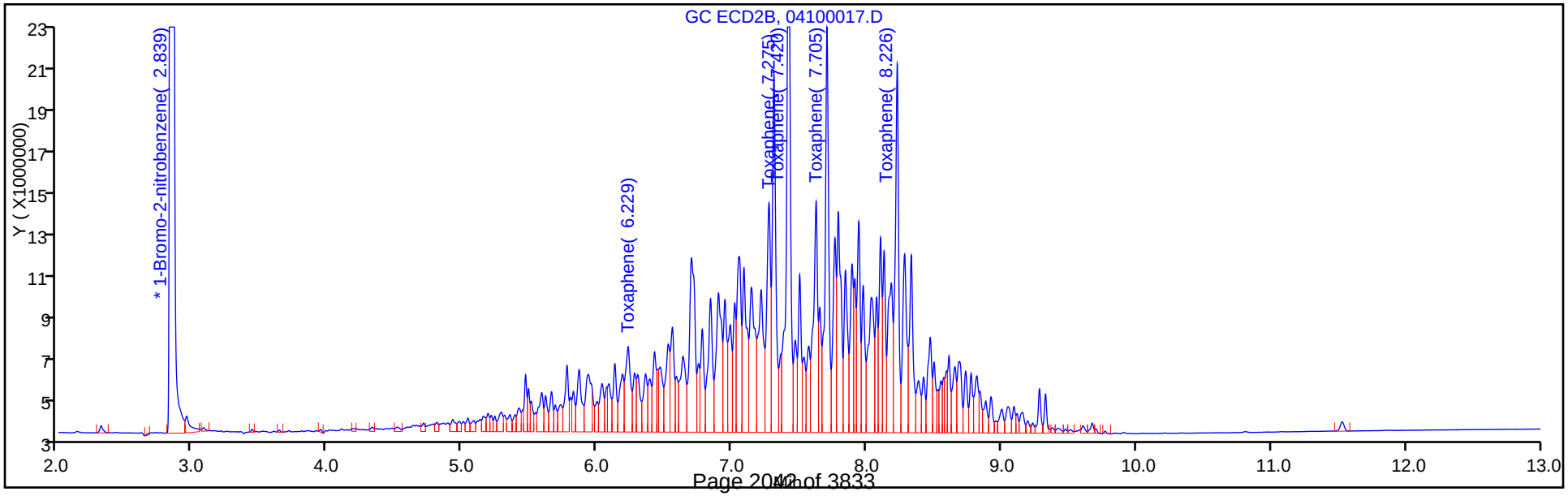
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100017.D

Injection Date:	10-Apr-2017 15:23:55	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD2 TOX			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:39 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100017.D

Injection Date: 10-Apr-2017 15:23:55 Instrument ID: SGC_P1

Lims ID: STD2 TOX

Client ID:

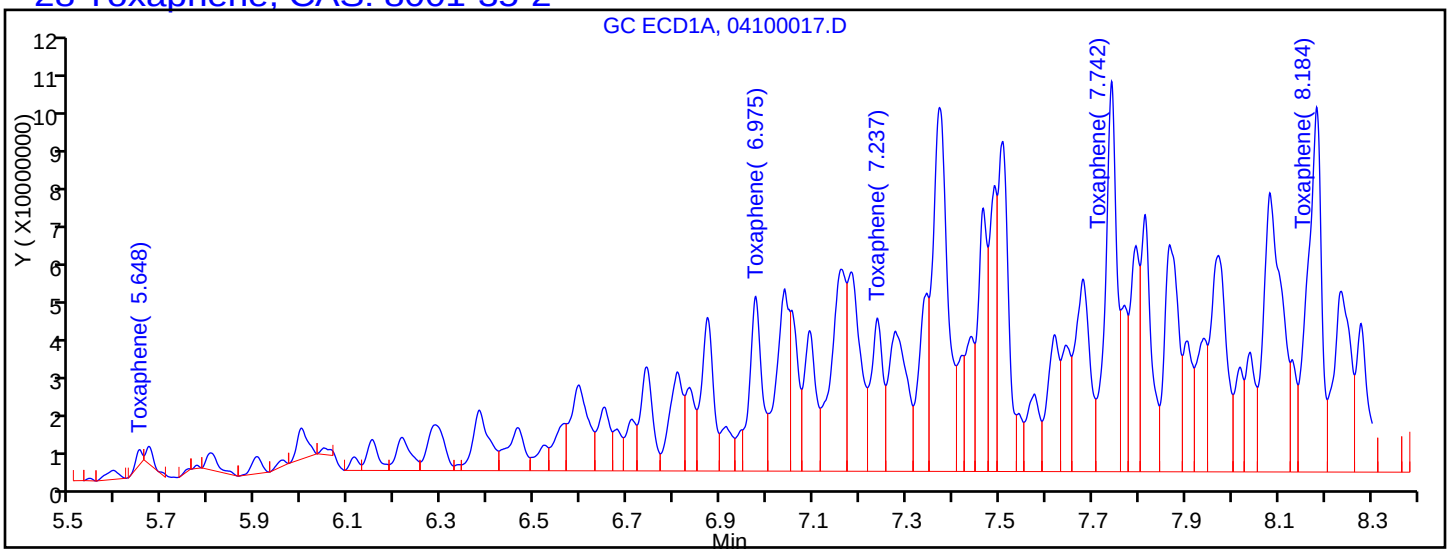
Operator ID: DAW ALS Bottle#: 15 Worklist Smp#: 17

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

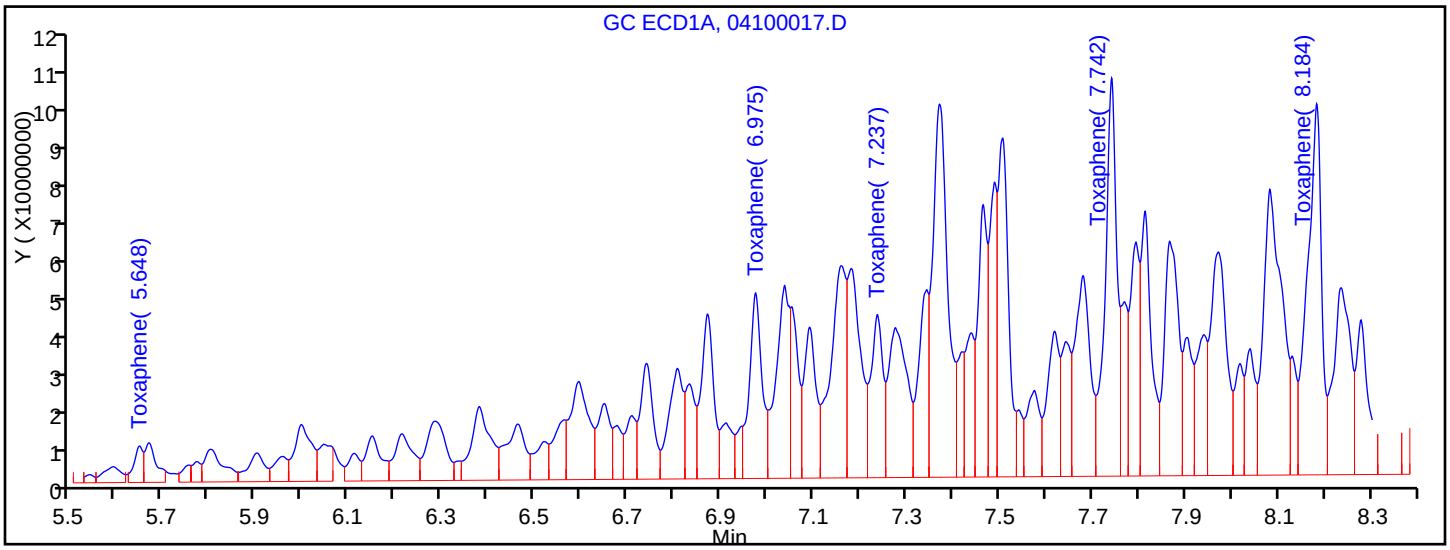
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.648	Response = 3345446
6.975	Response = 75950194
7.237	Response = 64306453
7.742	Response = 159678760
8.184	Response = 182620676



Manual Integration Results

5.648	Response = 11506754	M
6.975	Response = 84483421	M
7.237	Response = 69922737	M
7.742	Response = 165888842	M
8.184	Response = 188486212	M

Reviewer: wellsd, 17-Apr-2017 13:21:36

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100018.D
Lims ID: STD1 TOX
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 10-Apr-2017 15:40:48 ALS Bottle#: 16 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD1 TOX
Misc. Info.: 280-0057376-018
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:40 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:45:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.029	3.029	0.000	1311119836	150.0	150.0	
2	2.840	2.839	0.001	311390768	150.0	150.0	
28 Toxaphene							M
1	5.647	5.647	0.000	4842628	200.0	201.1	M
1	6.974	6.974	0.000	38516555	200.0	297.6	M
1	7.237	7.237	0.000	26891128	200.0	205.8	M
1	7.741	7.742	-0.001	63408945	200.0	205.4	M
1	8.184	8.184	0.000	71753800	200.0	205.1	M
		Average of Peak Amounts =				223.0	
2	6.229	6.229	0.000	5013988	200.0	192.0	M
2	7.275	7.275	0.000	9504996	200.0	196.9	M
2	7.420	7.420	0.000	23847616	200.0	195.6	M
2	7.705	7.704	0.001	15729985	200.0	198.1	M
2	8.226	8.225	0.001	13139084	200.0	198.1	M
		Average of Peak Amounts =				196.2	
						RPD = 12.80	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxL1_00017 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

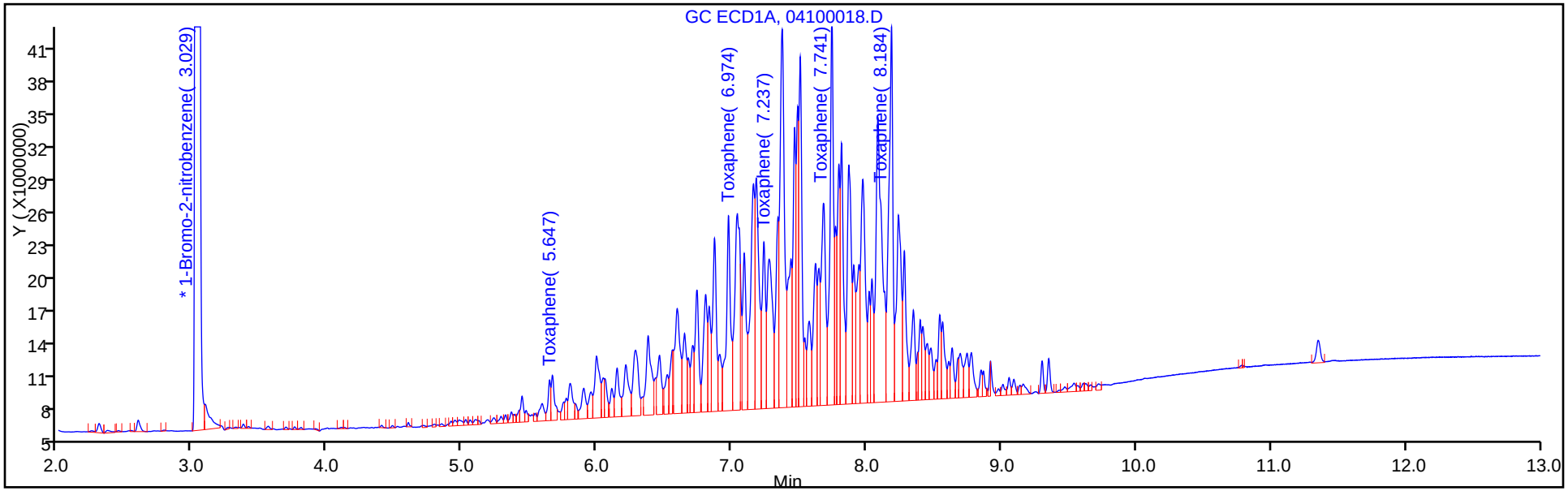
Report Date: 17-Apr-2017 13:21:41 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

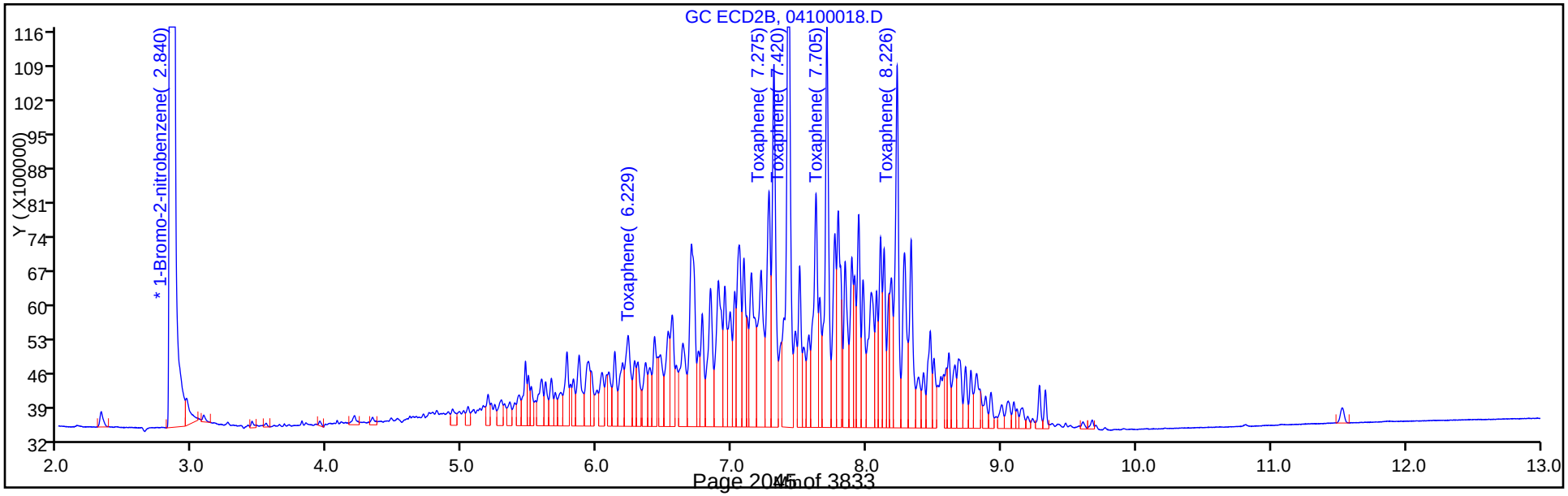
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100018.D

Injection Date:	10-Apr-2017 15:40:48	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD1 TOX			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:41 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100018.D

Injection Date: 10-Apr-2017 15:40:48 Instrument ID: SGC_P1

Lims ID: STD1 TOX

Client ID:

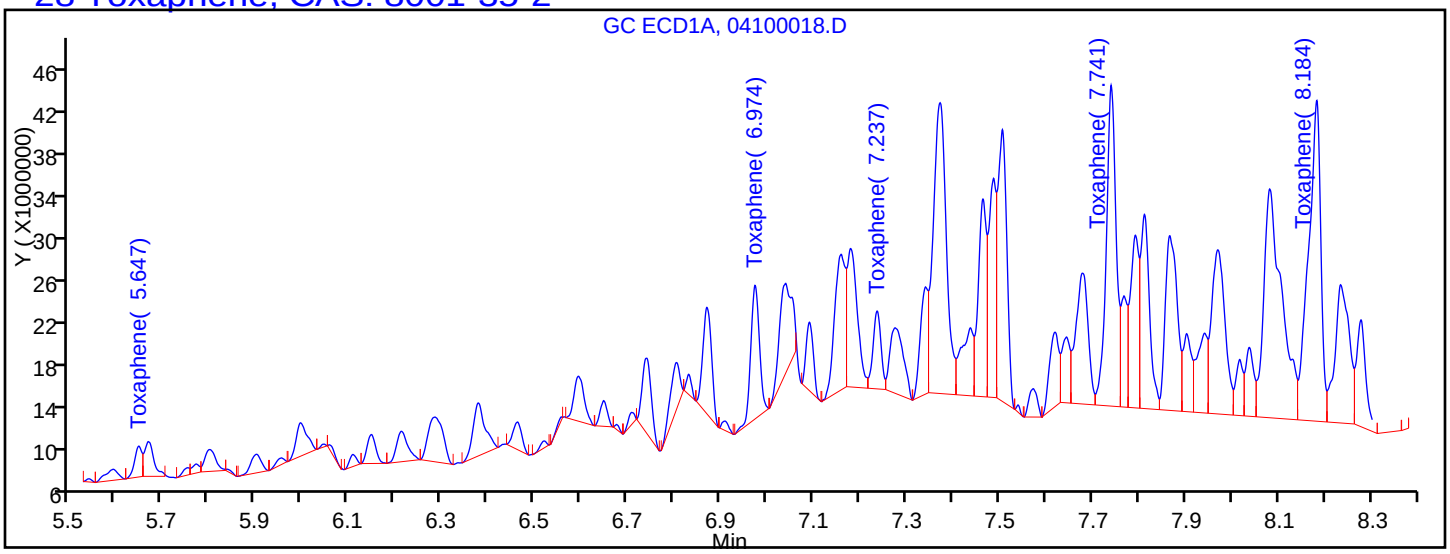
Operator ID: DAW ALS Bottle#: 16 Worklist Smp#: 18

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

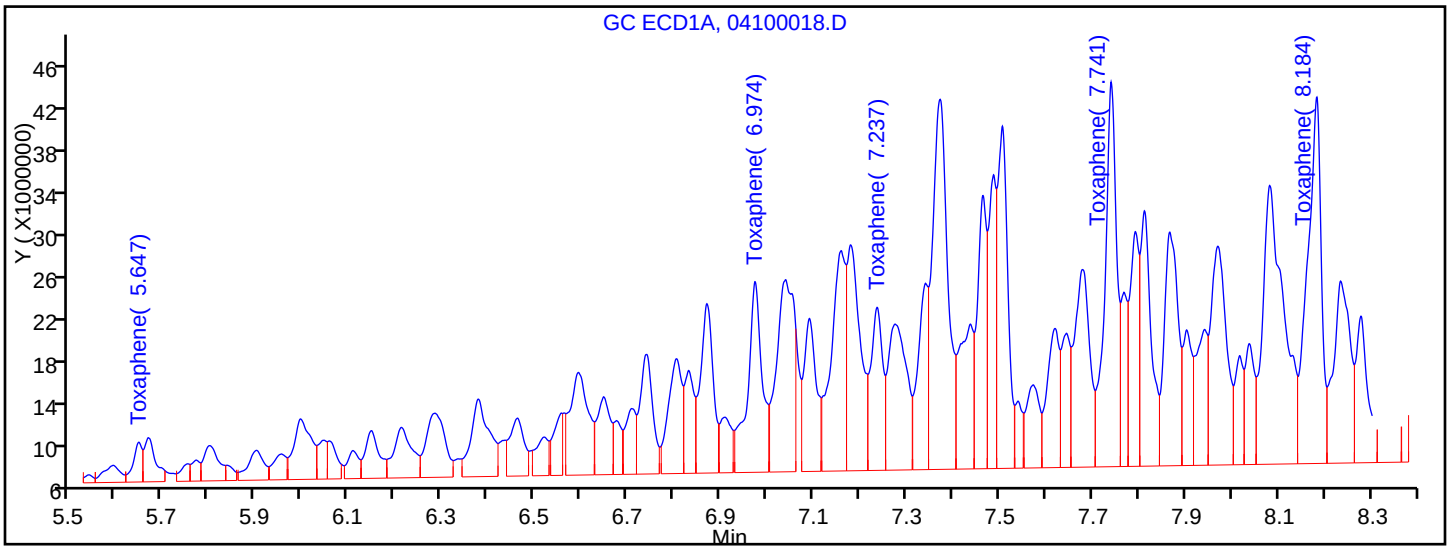
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.647	Response = 3130099
6.974	Response = 16195357
7.237	Response = 8707765
7.741	Response = 43916810
8.184	Response = 55376882



Manual Integration Results

5.647	Response = 4842628	M
6.974	Response = 38516555	M
7.237	Response = 26891128	M
7.741	Response = 63408945	M
8.184	Response = 71753800	M

Reviewer: wellsd, 17-Apr-2017 13:21:40

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 14:16 Calibration End Date: 04/10/2017 15:40 Calibration ID: 28717

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-368670/18	04100018.D
Level 2	STD2 280-368670/17	04100017.D
Level 3	STD3 280-368670/16	04100016.D
Level 4	STD4 280-368670/15	04100015.D
Level 5	STD5 280-368670/14	04100014.D
Level 6	STD6 280-368670/13	04100013.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Toxaphene Peak 1	0.0121 0.0075	0.0106	0.0094	0.0089	0.0084	Lin2	0.8243	0.0083							0.9940		0.9900
Toxaphene Peak 2	0.0229 0.0179	0.0213	0.0204	0.0200	0.0199	Lin2	0.7908	0.0192							0.9980		0.9900
Toxaphene Peak 3	0.0574 0.0502	0.0537	0.0565	0.0464	0.0460	Lin2	1.9237	0.0489							0.9930		0.9900
Toxaphene Peak 4	0.0379 0.0313	0.0357	0.0345	0.0345	0.0344	Lin2	0.9853	0.0333							0.9980		0.9900
Toxaphene Peak 5	0.0316 0.0269	0.0302	0.0295	0.0297	0.0291	Lin2	0.6768	0.0285							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 14:16 Calibration End Date: 04/10/2017 15:40 Calibration ID: 28717

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-368670/18	04100018.D
Level 2	STD2 280-368670/17	04100017.D
Level 3	STD3 280-368670/16	04100016.D
Level 4	STD4 280-368670/15	04100015.D
Level 5	STD5 280-368670/14	04100014.D
Level 6	STD6 280-368670/13	04100013.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Toxaphene Peak 1	BNB	Lin2	5013988 179222117	10714229	19766153	37649797	91944119	200 10000	500	1000	2000	5000
Toxaphene Peak 2	BNB	Lin2	9504996 425486845	21547501	42789752	84253007	217561537	200 10000	500	1000	2000	5000
Toxaphene Peak 3	BNB	Lin2	23847616 1192670953	54344230	118584476	195795188	503382115	200 10000	500	1000	2000	5000
Toxaphene Peak 4	BNB	Lin2	15729985 745018660	36174204	72430934	145369209	375808736	200 10000	500	1000	2000	5000
Toxaphene Peak 5	BNB	Lin2	13139084 639703048	30565148	61954620	125363190	318242854	200 10000	500	1000	2000	5000

Curve Type Legend:
Lin2 = Linear 1/conc^2 ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100013.D
Lims ID: STD6 TOX
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 10-Apr-2017 14:16:20 ALS Bottle#: 11 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD6 TOX
Misc. Info.: 280-0057376-013
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:22 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:43:22

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.030	3.031	-0.001	1518668051	150.0	150.0	
2	2.839	2.839	0.000	356597752	150.0	150.0	
28 Toxaphene							M
1	5.648	5.647	0.001	274960413	10000	10028	
1	6.976	6.974	0.002	2723402477	10000	9982.1	
1	7.238	7.237	0.001	1942487748	10000	9861.7	
1	7.743	7.742	0.001	4585703000	10000	9889.8	
1	8.184	8.184	0.000	5187725515	10000	9852.9	
		Average of Peak Amounts =				9923.0	
2	6.230	6.229	0.001	179222117	10000	9000.5	M
2	7.275	7.275	0.000	425486845	10000	9264.9	M
2	7.421	7.420	0.001	1192670953	10000	10221	M
2	7.705	7.704	0.001	745018660	10000	9387.8	M
2	8.226	8.225	0.001	639703048	10000	9408.8	M
		Average of Peak Amounts =				9456.6	
						RPD = 4.81	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxL6_00020 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

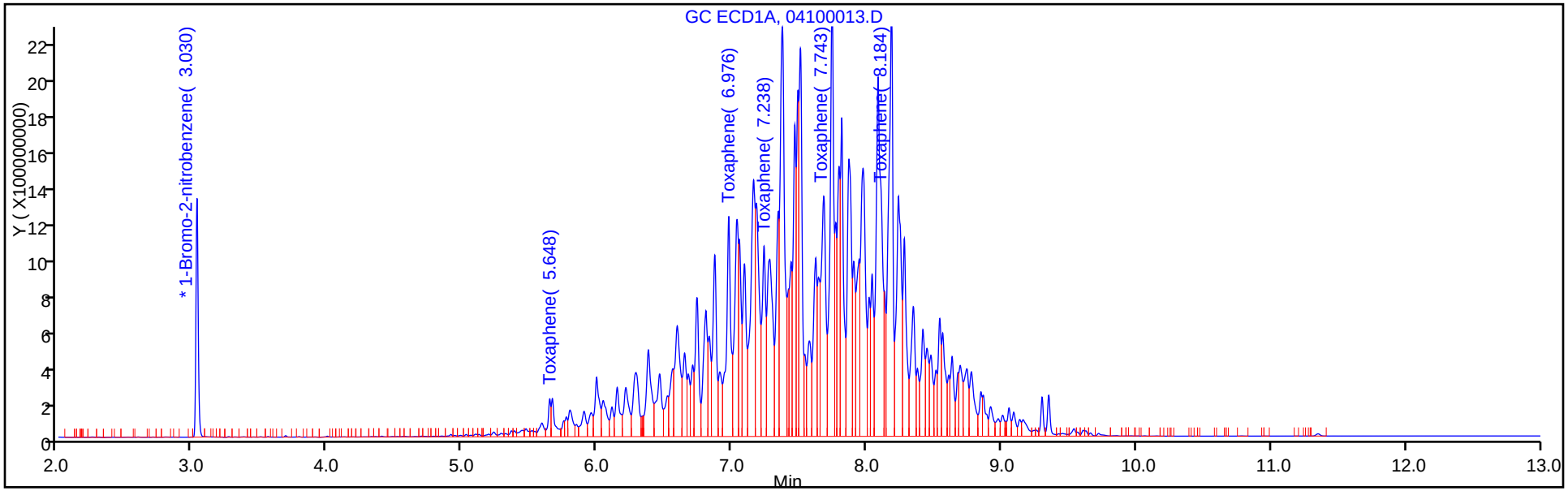
Report Date: 17-Apr-2017 13:21:24 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

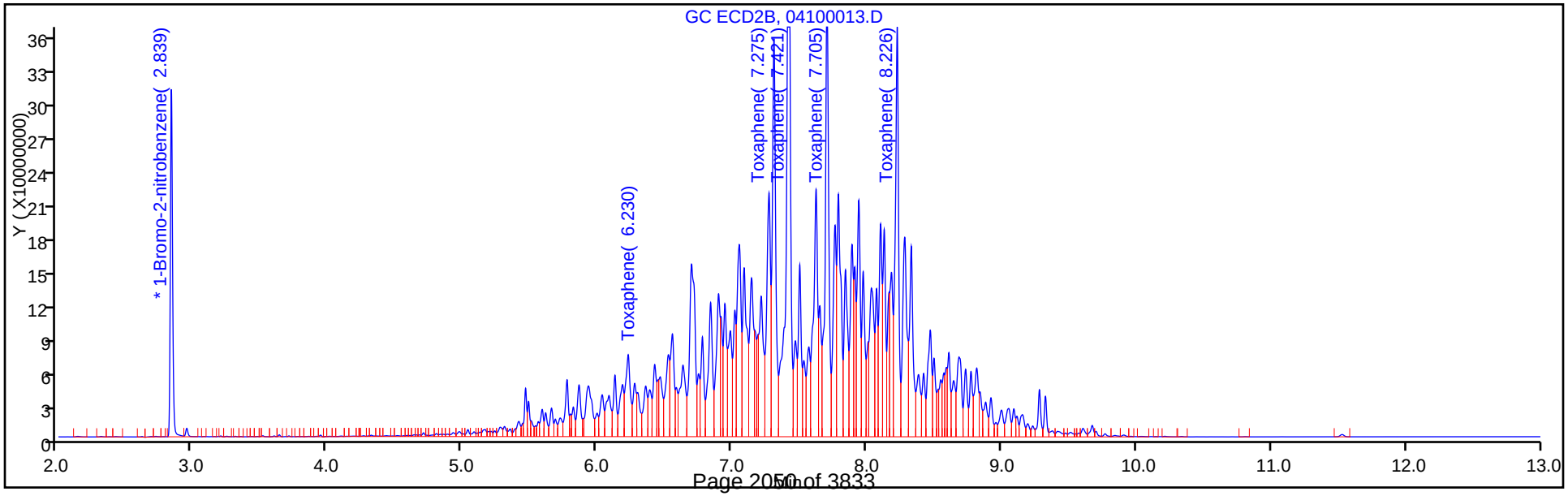
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100013.D

Injection Date:	10-Apr-2017 14:16:20	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD6 TOX			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:24 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100013.D

Injection Date: 10-Apr-2017 14:16:20 Instrument ID: SGC_P1

Lims ID: STD6 TOX

Client ID:

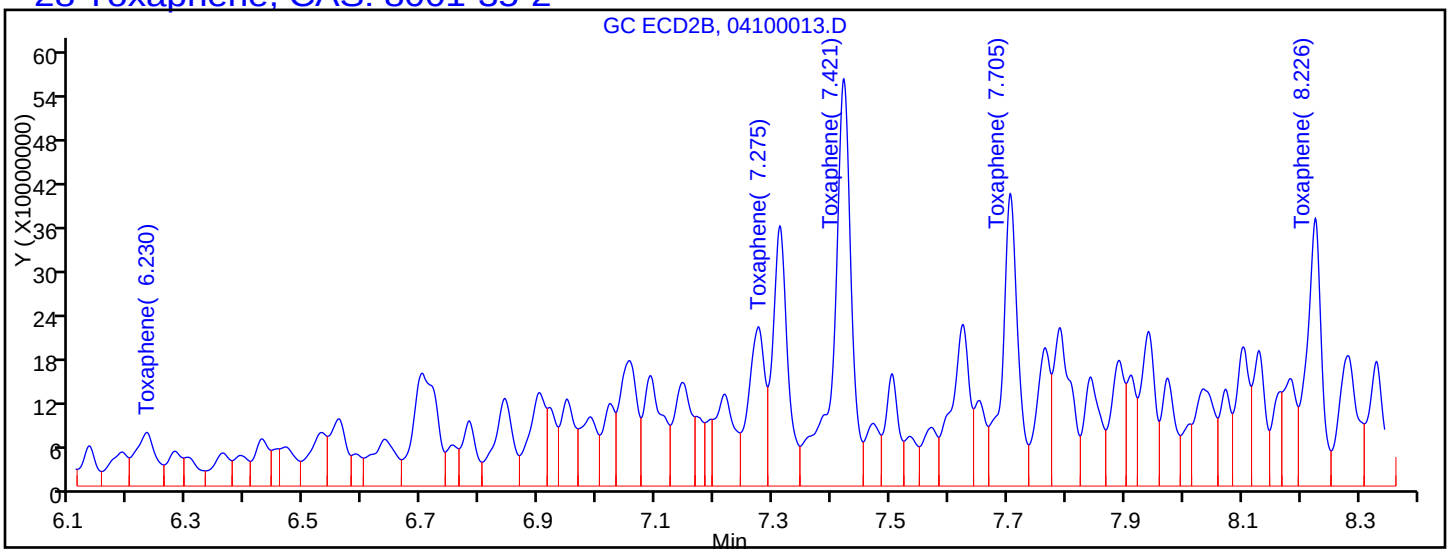
Operator ID: DAW ALS Bottle#: 11 Worklist Smp#: 13

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

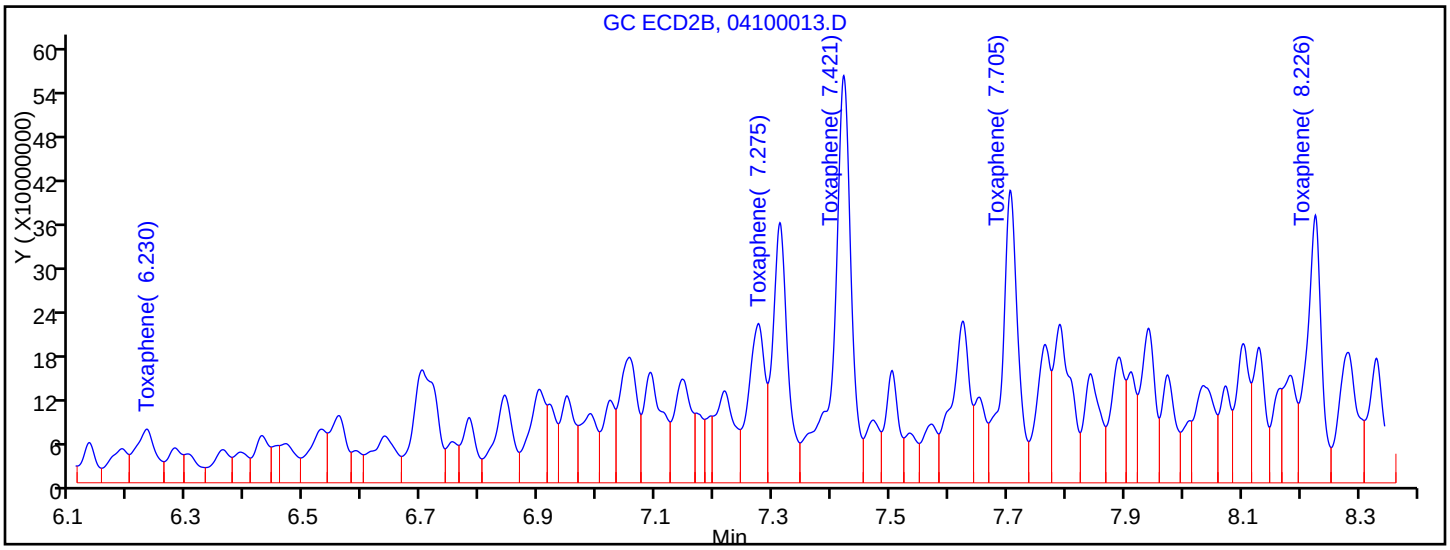
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.230	Response = 179233751
7.275	Response = 425304564
7.421	Response = 1192191230
7.705	Response = 744633992
8.226	Response = 639273238



Manual Integration Results

6.230	Response = 179222117	M
7.275	Response = 425486845	M
7.421	Response = 1192670953	M
7.705	Response = 745018660	M
8.226	Response = 639703048	M

Reviewer: wellsd, 17-Apr-2017 13:21:22

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100014.D
Lims ID: STD5 TOX
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 10-Apr-2017 14:33:12 ALS Bottle#: 12 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD5 TOX
Misc. Info.: 280-0057376-014
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:26 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:43:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.029	3.031	-0.002	1396189255	150.0	150.0	
2	2.839	2.839	0.000	327973383	150.0	150.0	
28 Toxaphene							M
1	5.647	5.647	0.000	131950321	5000.0	5233.0	M
1	6.975	6.974	0.001	1345059246	5000.0	5079.9	M
1	7.235	7.237	-0.002	952730600	5000.0	5283.8	M
1	7.742	7.742	0.000	2284388717	5000.0	5380.7	M
1	8.184	8.184	0.000	2543887609	5000.0	5277.8	M
		Average of Peak Amounts =				5251.0	
2	6.229	6.229	0.000	91944119	5000.0	4976.4	M
2	7.273	7.275	-0.002	217561537	5000.0	5132.5	M
2	7.420	7.420	0.000	503382115	5000.0	4669.2	M
2	7.704	7.704	0.000	375808736	5000.0	5135.4	M
2	8.226	8.225	0.001	318242854	5000.0	5078.4	M
		Average of Peak Amounts =				4998.4	
						RPD = 4.93	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxL5_00018 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

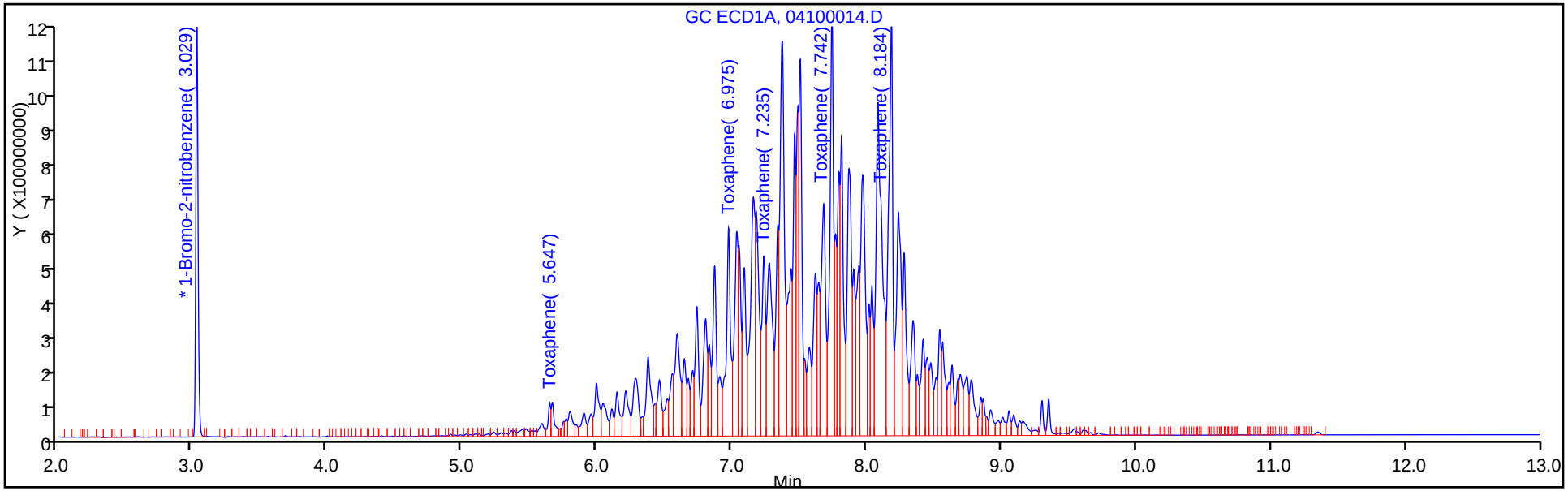
Report Date: 17-Apr-2017 13:21:28 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

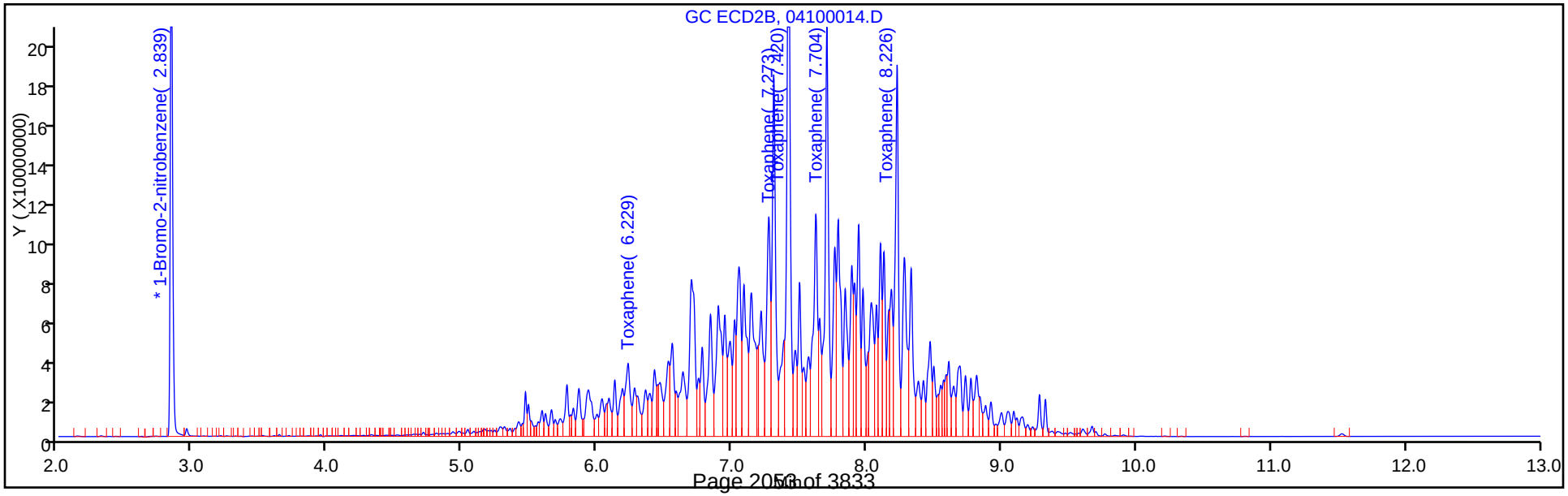
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100014.D

Injection Date:	10-Apr-2017 14:33:12	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD5 TOX			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:28 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100014.D

Injection Date: 10-Apr-2017 14:33:12 Instrument ID: SGC_P1

Lims ID: STD5 TOX

Client ID:

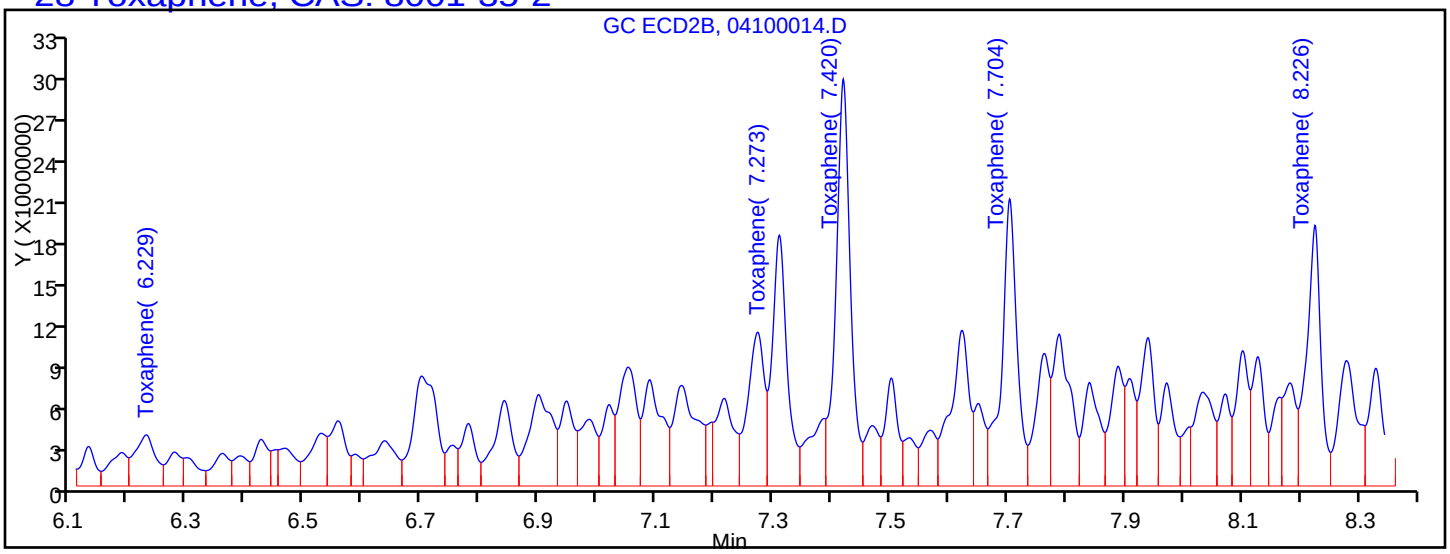
Operator ID: DAW ALS Bottle#: 12 Worklist Smp#: 14

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

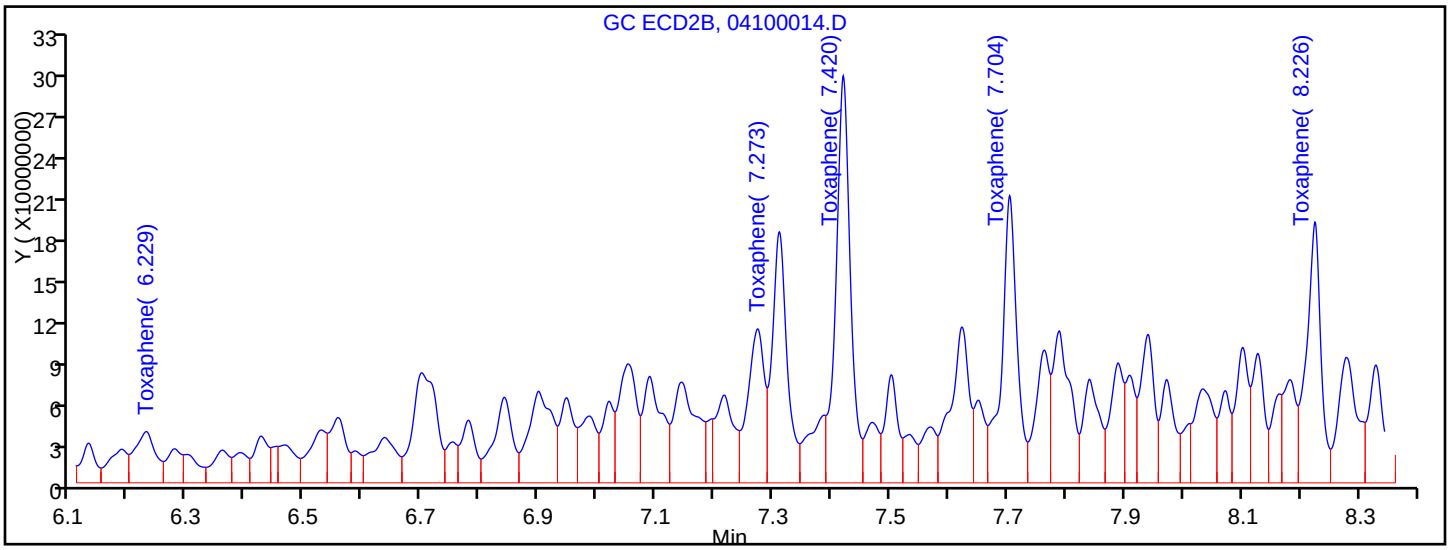
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.229	Response = 91668165
7.273	Response = 217276212
7.420	Response = 502988551
7.704	Response = 375359788
8.226	Response = 317844149



Manual Integration Results

6.229	Response = 91944119	M
7.273	Response = 217561537	M
7.420	Response = 503382115	M
7.704	Response = 375808736	M
8.226	Response = 318242854	M

Reviewer: wellsd, 17-Apr-2017 13:21:25

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100015.D
Lims ID: STD4 TOX
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 10-Apr-2017 14:50:03 ALS Bottle#: 13 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD4 TOX
Misc. Info.: 280-0057376-015
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:29 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:42:55

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.029	3.029	0.000	1331968560	150.0	150.0	
2	2.839	2.839	0.000	316438895	150.0	150.0	
28 Toxaphene							M
1	5.647	5.647	0.000	46012778	2000.0	1910.5	M
1	6.974	6.974	0.000	474769847	2000.0	1902.1	M
1	7.237	7.237	0.000	355461912	2000.0	2095.9	M
1	7.742	7.742	0.000	802936973	2000.0	2012.6	M
1	8.184	8.184	0.000	938106314	2000.0	2069.6	M
		Average of Peak Amounts =				1998.2	
2	6.229	6.229	0.000	37649797	2000.0	2054.8	M
2	7.275	7.275	0.000	84253007	2000.0	2035.5	M
2	7.420	7.420	0.000	195795188	2000.0	1858.9	M
2	7.704	7.704	0.000	145369209	2000.0	2041.1	M
2	8.225	8.225	0.000	125363190	2000.0	2059.4	M
		Average of Peak Amounts =				2009.9	
						RPD = 0.59	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00011 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

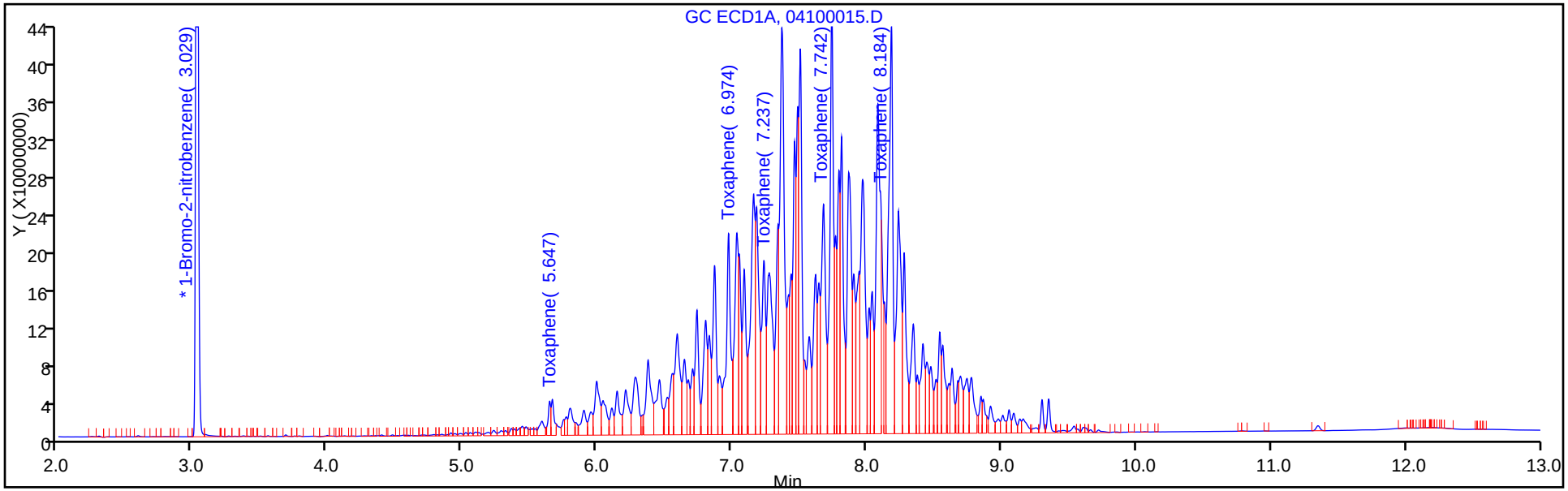
Report Date: 17-Apr-2017 13:21:32 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

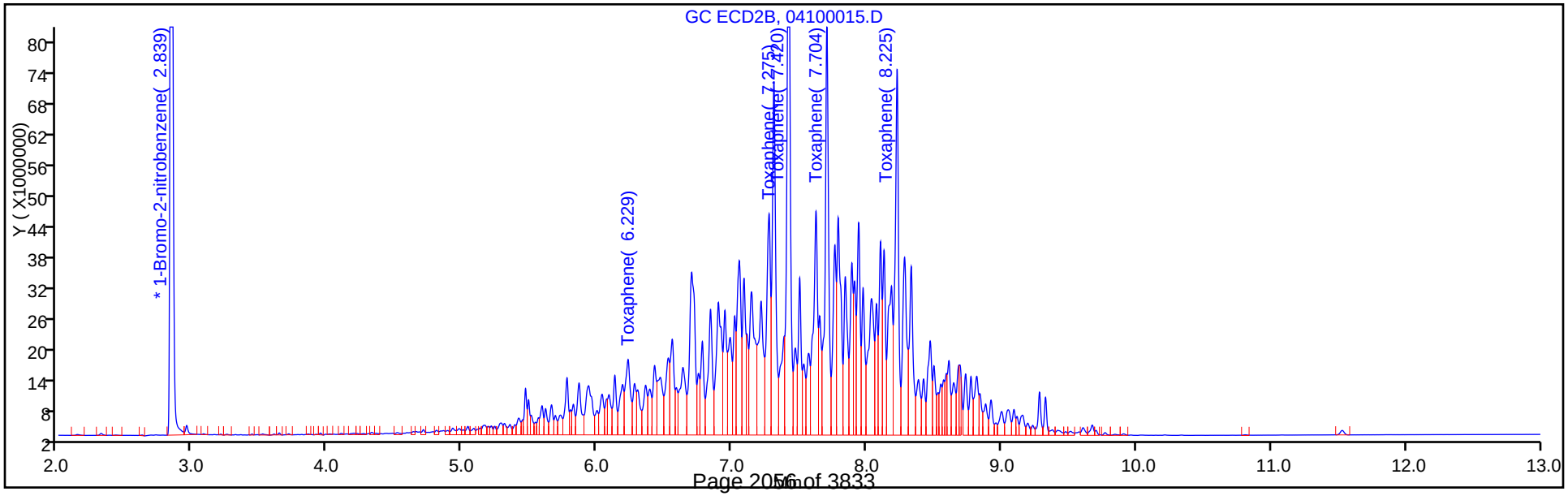
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100015.D

Injection Date:	10-Apr-2017 14:50:03	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD4 TOX			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:32 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100015.D

Injection Date: 10-Apr-2017 14:50:03 Instrument ID: SGC_P1

Lims ID: STD4 TOX

Client ID:

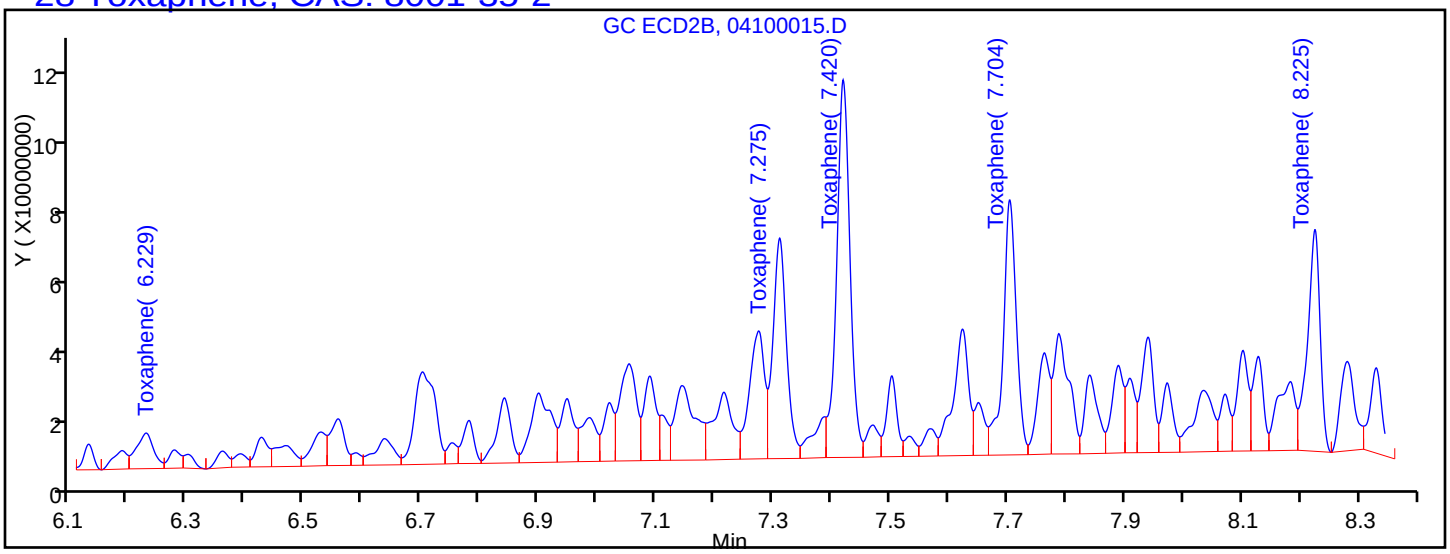
Operator ID: DAW ALS Bottle#: 13 Worklist Smp#: 15

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

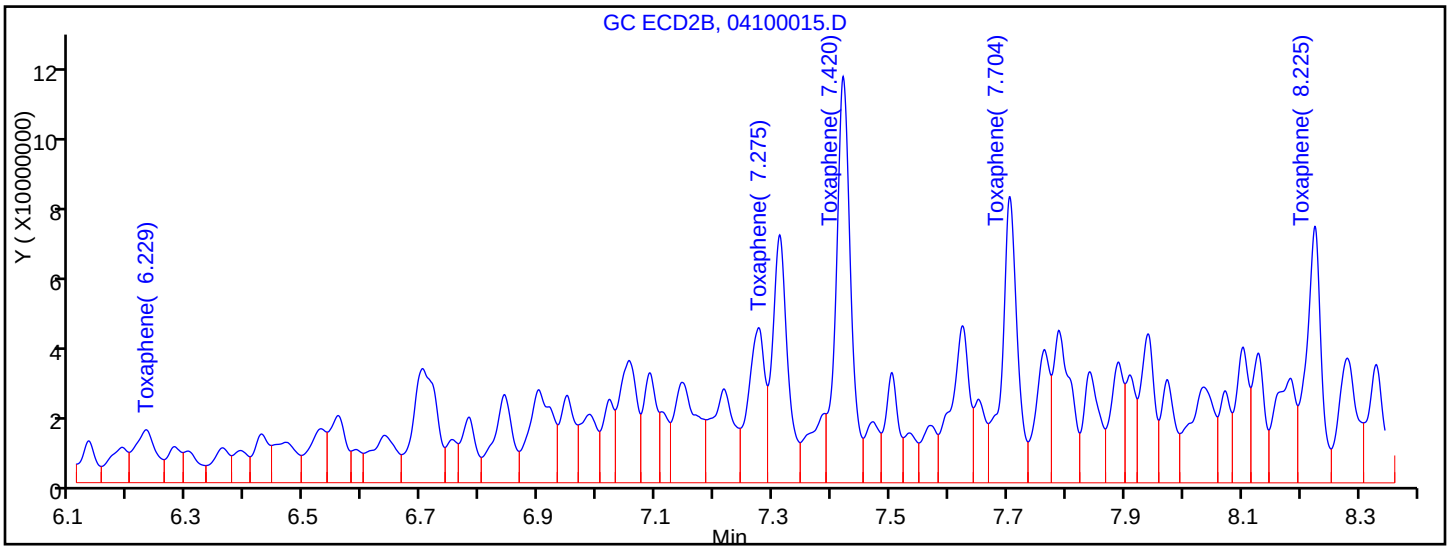
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.229	Response = 20460735
7.275	Response = 63319569
7.420	Response = 165790385
7.704	Response = 110604716
8.225	Response = 92229053



Manual Integration Results

6.229	Response = 37649797	M
7.275	Response = 84253007	M
7.420	Response = 195795188	M
7.704	Response = 145369209	M
8.225	Response = 125363190	M

Reviewer: wellsd, 17-Apr-2017 13:21:29

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100016.D
Lims ID: STD3 TOX
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 10-Apr-2017 15:06:53 ALS Bottle#: 14 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD3 TOX
Misc. Info.: 280-0057376-016
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:33 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:44:30

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.030	3.029	0.000	1328367555	150.0	150.0	
2	2.839	2.839	0.000	314624628	150.0	150.0	
28 Toxaphene							M
1	5.647	5.647	0.000	23922821	1000.0	994.3	M
1	6.975	6.974	0.001	221313458	1000.0	962.6	M
1	7.236	7.237	-0.001	154272139	1000.0	939.5	M
1	7.741	7.742	-0.001	370003310	1000.0	955.7	M
1	8.184	8.184	0.000	418442324	1000.0	952.2	M
		Average of Peak Amounts =				960.8	
2	6.230	6.229	0.001	19766153	1000.0	1038.0	M
2	7.275	7.275	0.000	42789752	1000.0	1019.6	M
2	7.420	7.420	0.000	118584476	1000.0	1116.9	M
2	7.704	7.704	0.000	72430934	1000.0	1008.1	M
2	8.226	8.225	0.001	61954620	1000.0	1011.7	M
		Average of Peak Amounts =				1038.9	
						RPD = 7.80	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxL3_00017 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

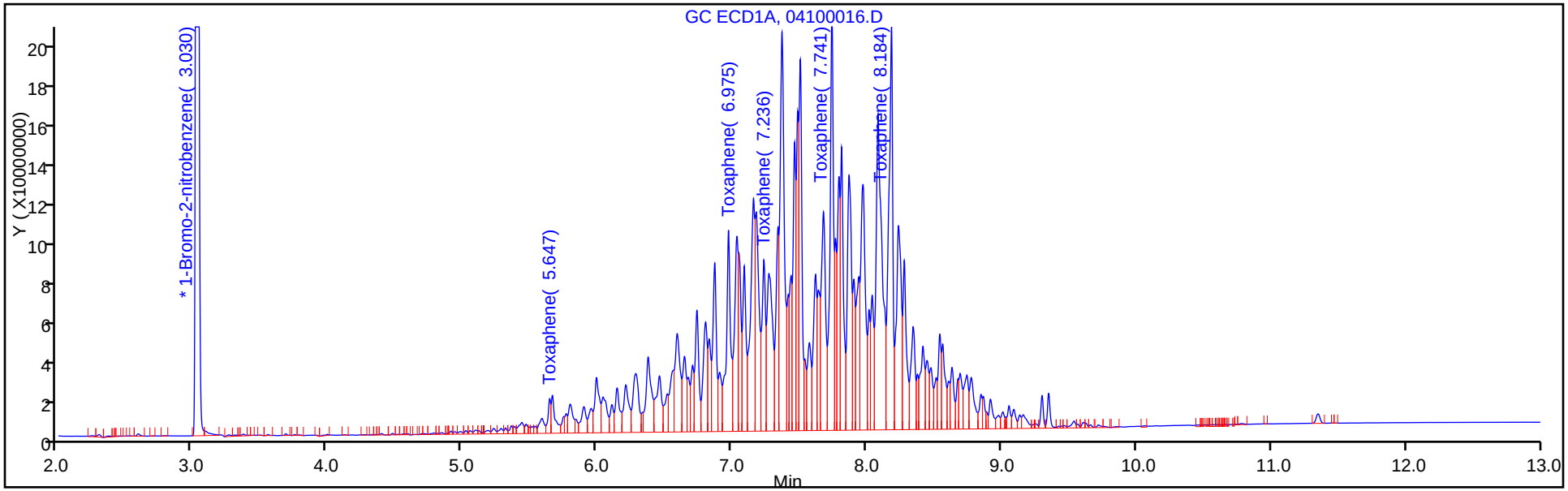
Report Date: 17-Apr-2017 13:21:35 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

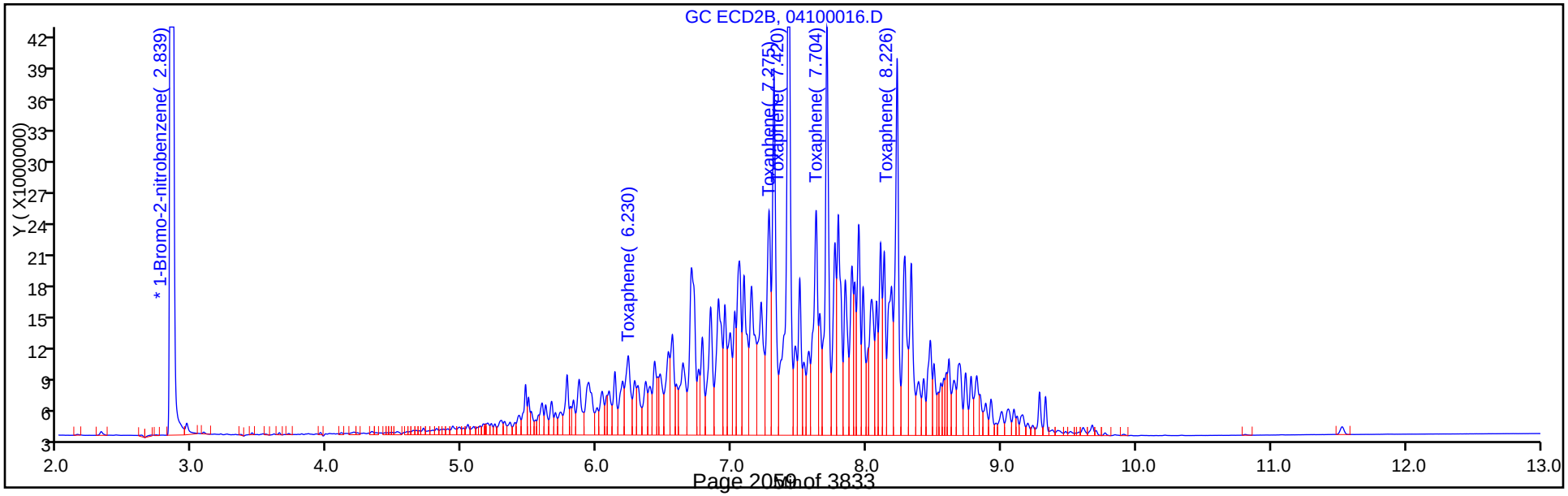
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100016.D

Injection Date:	10-Apr-2017 15:06:53	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD3 TOX			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:36 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100016.D

Injection Date: 10-Apr-2017 15:06:53 Instrument ID: SGC_P1

Lims ID: STD3 TOX

Client ID:

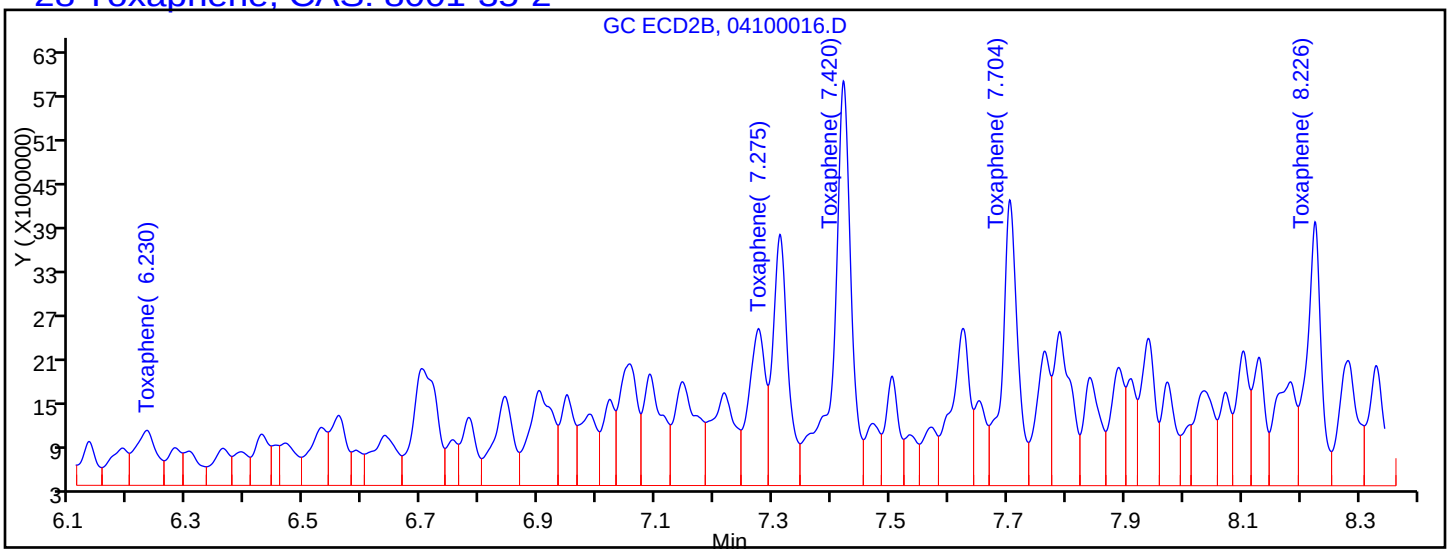
Operator ID: DAW ALS Bottle#: 14 Worklist Smp#: 16

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

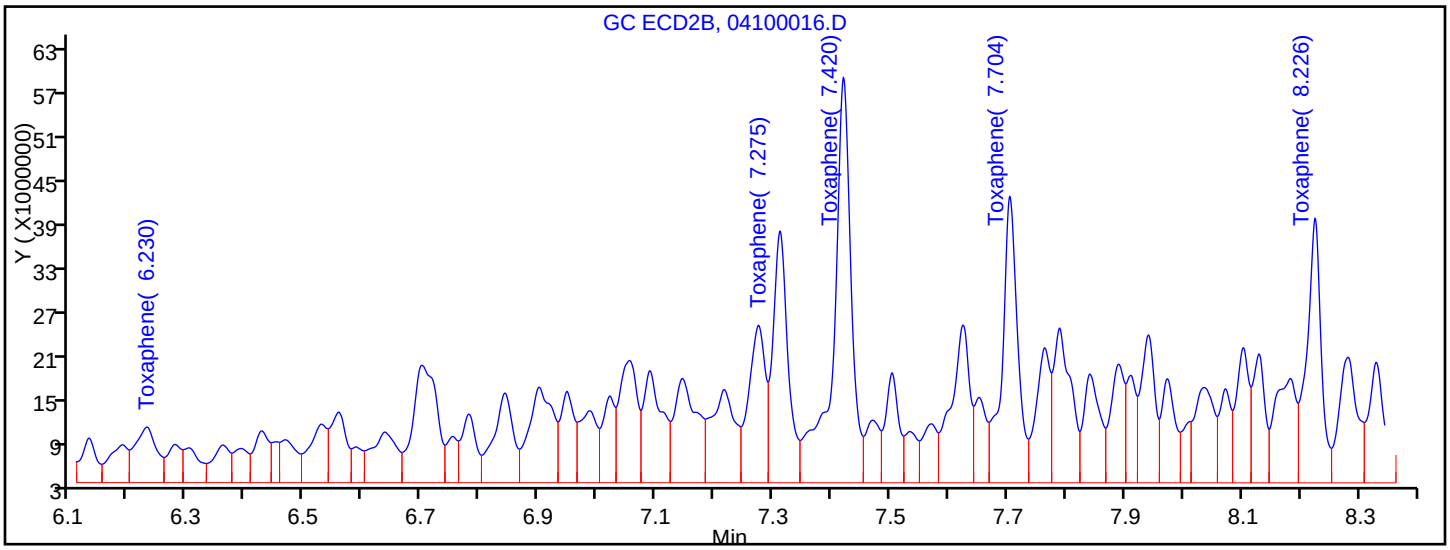
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.230	Response = 19484062
7.275	Response = 42600377
7.420	Response = 118154599
7.704	Response = 72177058
8.226	Response = 61761735



Manual Integration Results

6.230	Response = 19766153	M
7.275	Response = 42789752	M
7.420	Response = 118584476	M
7.704	Response = 72430934	M
8.226	Response = 61954620	M

Reviewer: wellsd, 17-Apr-2017 13:21:33

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100017.D
Lims ID: STD2 TOX
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 10-Apr-2017 15:23:55 ALS Bottle#: 15 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD2 TOX
Misc. Info.: 280-0057376-017
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:36 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:44:57

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.030	3.029	0.000	1271892489	150.0	150.0	
2	2.839	2.839	0.000	303577463	150.0	150.0	
28 Toxaphene							M
1	5.648	5.647	0.001	11506754	500.0	497.7	M
1	6.975	6.974	0.001	84483421	500.0	476.0	M
1	7.237	7.237	0.000	69922737	500.0	470.2	M
1	7.742	7.742	0.000	165888842	500.0	472.9	M
1	8.184	8.184	0.000	188486212	500.0	473.4	M
		Average of Peak Amounts =				478.0	
2	6.229	6.229	0.000	10714229	500.0	539.5	M
2	7.275	7.275	0.000	21547501	500.0	512.5	M
2	7.420	7.420	0.000	54344230	500.0	509.8	M
2	7.705	7.704	0.001	36174204	500.0	507.5	M
2	8.226	8.225	0.001	30565148	500.0	505.7	M
		Average of Peak Amounts =				515.0	
						RPD = 7.44	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxL2_00018 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

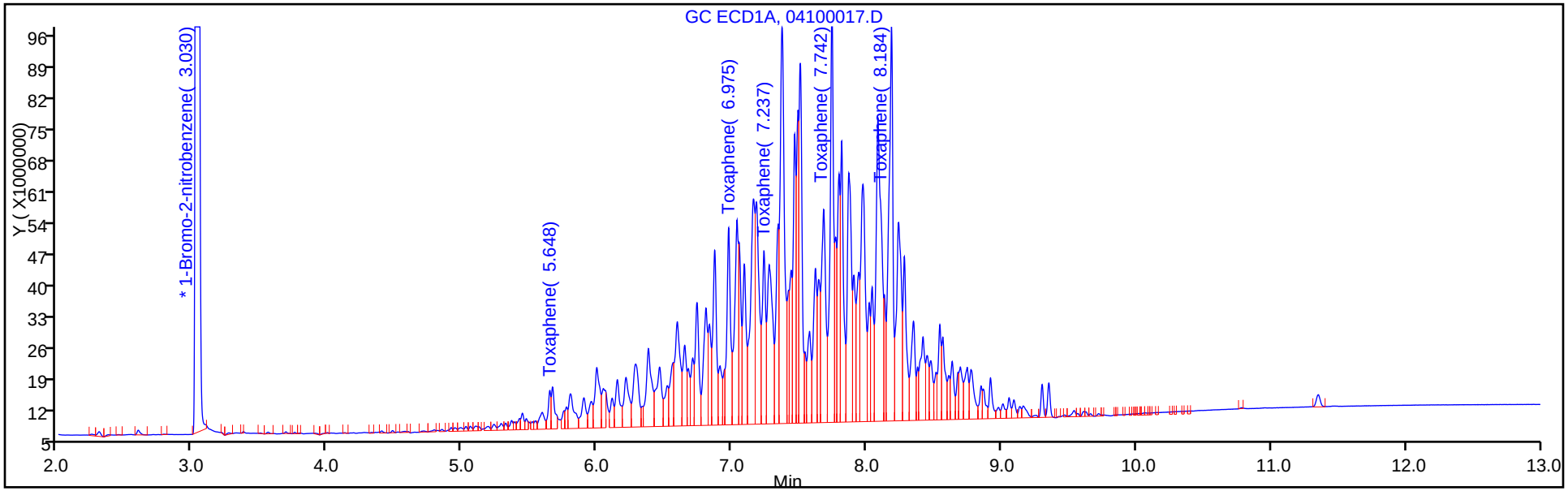
Report Date: 17-Apr-2017 13:21:39 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

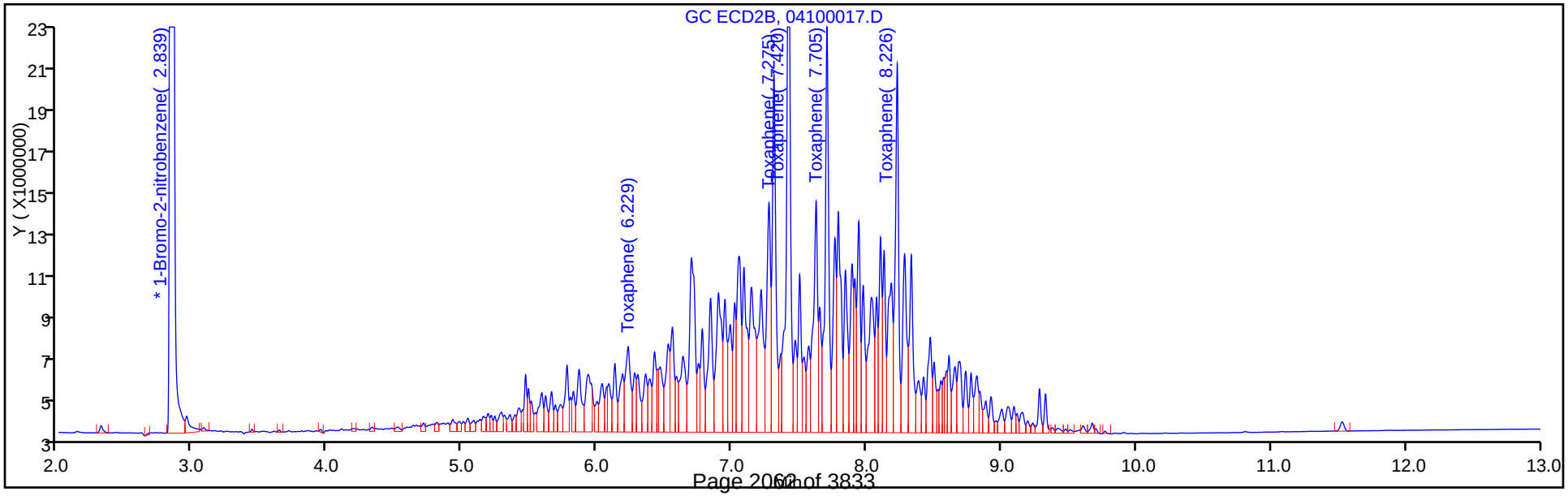
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100017.D

Injection Date:	10-Apr-2017 15:23:55	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD2 TOX			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:39 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100017.D

Injection Date: 10-Apr-2017 15:23:55 Instrument ID: SGC_P1

Lims ID: STD2 TOX

Client ID:

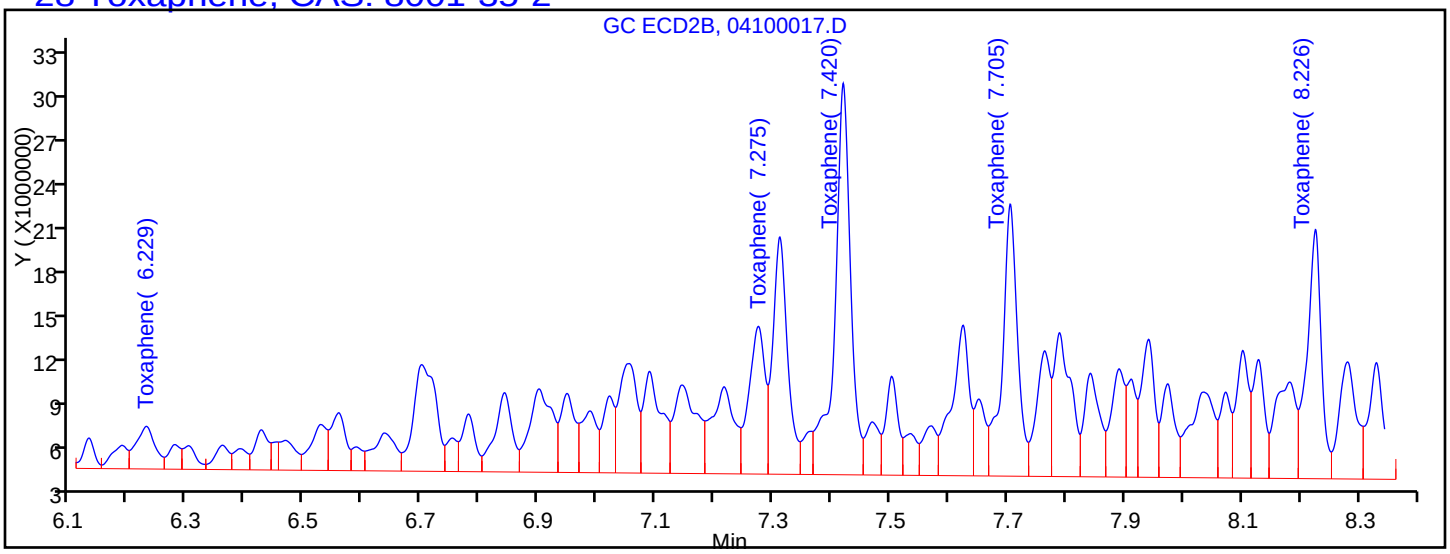
Operator ID: DAW ALS Bottle#: 15 Worklist Smp#: 17

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

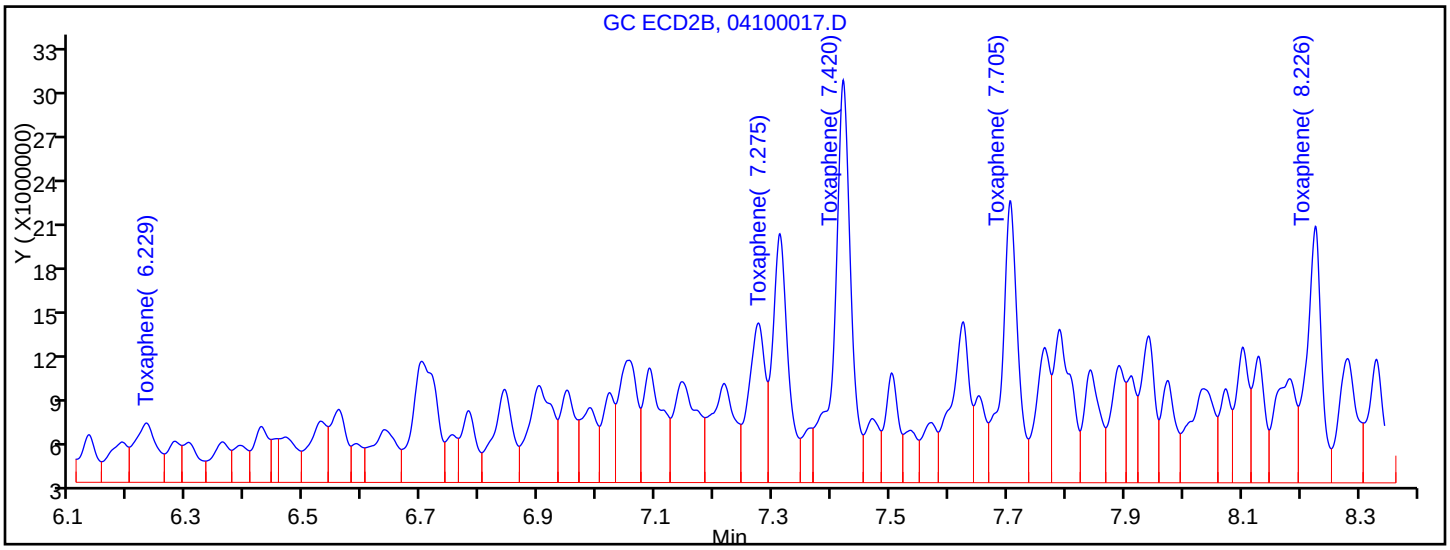
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.229	Response = 6638752
7.275	Response = 19290335
7.420	Response = 50423702
7.705	Response = 33427858
8.226	Response = 28846244



Manual Integration Results

6.229	Response = 10714229	M
7.275	Response = 21547501	M
7.420	Response = 54344230	M
7.705	Response = 36174204	M
8.226	Response = 30565148	M

Reviewer: wellsd, 17-Apr-2017 13:21:36

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100018.D
Lims ID: STD1 TOX
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 10-Apr-2017 15:40:48 ALS Bottle#: 16 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD1 TOX
Misc. Info.: 280-0057376-018
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:40 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:45:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.029	3.029	0.000	1311119836	150.0	150.0	
2	2.840	2.839	0.001	311390768	150.0	150.0	
28 Toxaphene							M
1	5.647	5.647	0.000	4842628	200.0	201.1	M
1	6.974	6.974	0.000	38516555	200.0	297.6	M
1	7.237	7.237	0.000	26891128	200.0	205.8	M
1	7.741	7.742	-0.001	63408945	200.0	205.4	M
1	8.184	8.184	0.000	71753800	200.0	205.1	M
		Average of Peak Amounts =				223.0	
2	6.229	6.229	0.000	5013988	200.0	192.0	M
2	7.275	7.275	0.000	9504996	200.0	196.9	M
2	7.420	7.420	0.000	23847616	200.0	195.6	M
2	7.705	7.704	0.001	15729985	200.0	198.1	M
2	8.226	8.225	0.001	13139084	200.0	198.1	M
		Average of Peak Amounts =				196.2	
						RPD = 12.80	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxL1_00017 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

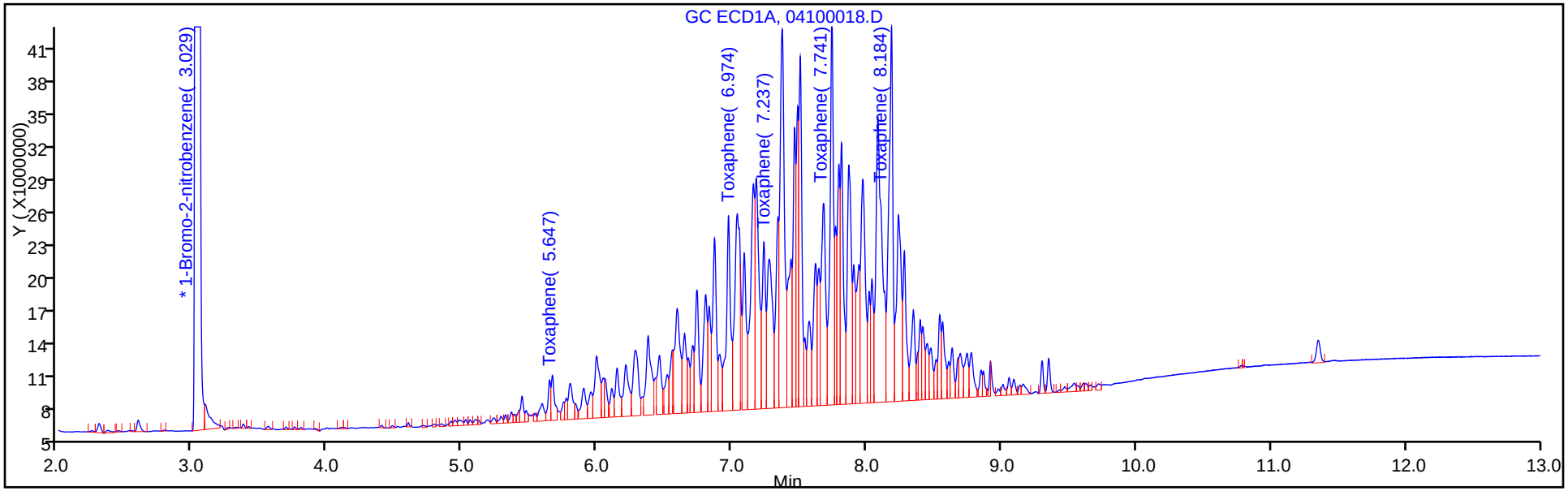
Report Date: 17-Apr-2017 13:21:42 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

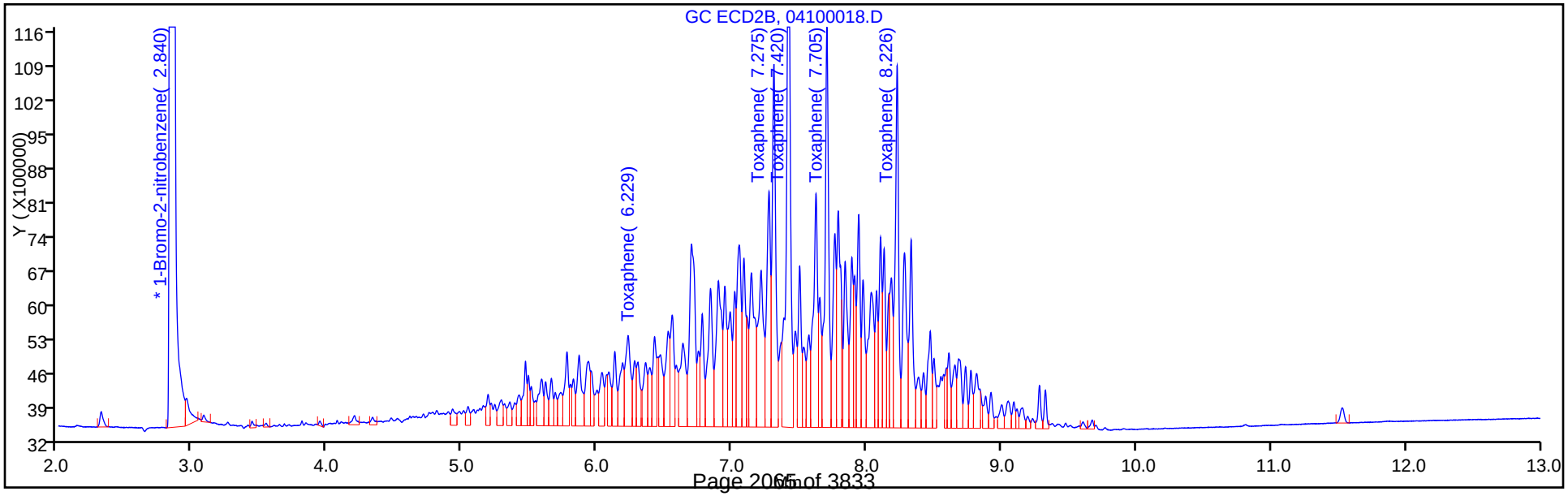
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100018.D

Injection Date:	10-Apr-2017 15:40:48	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD1 TOX			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:21:42 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100018.D

Injection Date: 10-Apr-2017 15:40:48 Instrument ID: SGC_P1

Lims ID: STD1 TOX

Client ID:

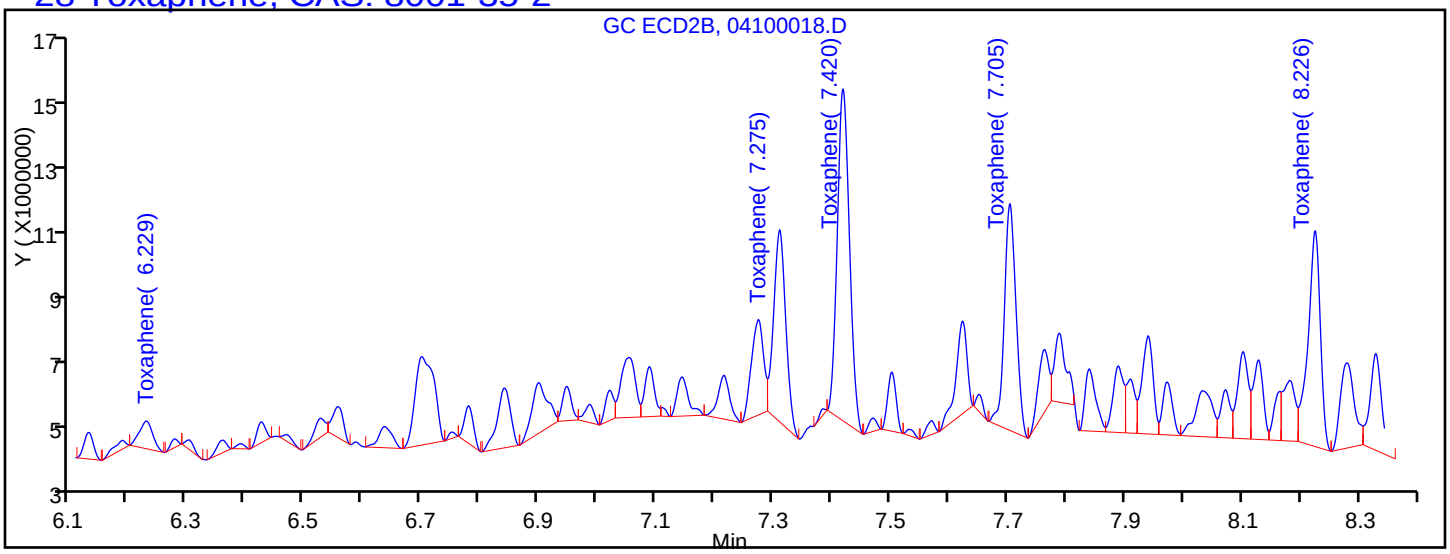
Operator ID: DAW ALS Bottle#: 16 Worklist Smp#: 18

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

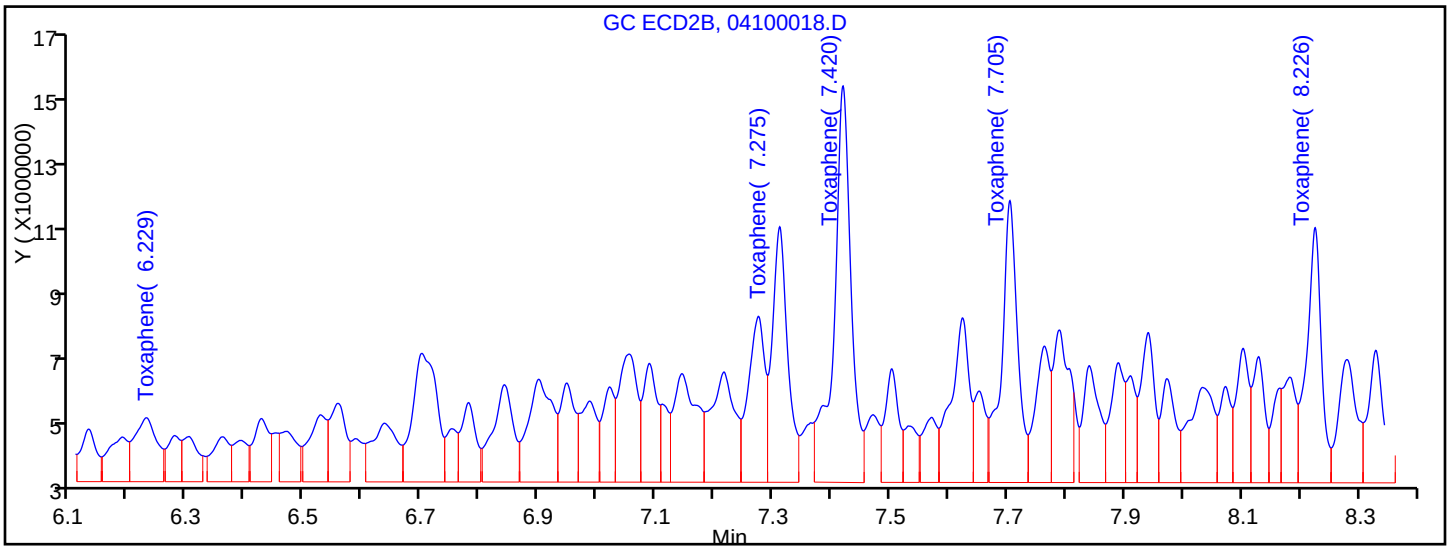
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.229	Response = 1298288	
7.275	Response = 4055996	
7.420	Response = 14110140	
7.705	Response = 9161011	
8.226	Response = 9236918	



Manual Integration Results

6.229	Response = 5013988	M
7.275	Response = 9504996	M
7.420	Response = 23847616	M
7.705	Response = 15729985	M
8.226	Response = 13139084	M

Reviewer: wellsd, 17-Apr-2017 13:21:40

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 17:22 Calibration End Date: 04/10/2017 18:46 Calibration ID: 28724

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-368670/29	04100029.D
Level 2	STD2 280-368670/28	04100028.D
Level 3	STD3 280-368670/27	04100027.D
Level 4	STD4 280-368670/26	04100026.D
Level 5	STD5 280-368670/25	04100025.D
Level 6	STD6 280-368670/24	04100024.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Hexachlorobenzene	1.2831 1.2696	1.2805	1.2529	1.2928	1.2574	Lin2	0.0631	1.2682							1.0000		0.9900
alpha-BHC	1.7126 2.0585	1.8568	1.9112	2.0116	1.9788	Lin2	-1.270	2.0133							0.9990		0.9900
gamma-BHC (Lindane)	1.5708 1.8550	1.6873	1.7331	1.8158	1.7791	Lin2	-1.029	1.8145							0.9990		0.9900
beta-BHC	0.7018 0.7030	0.7000	0.6821	0.7009	0.6815	Lin2	0.0400	0.6920							1.0000		0.9900
delta-BHC	1.6778 1.9548	1.7992	1.8493	1.9322	1.8807	Lin2	-1.026	1.9231							1.0000		0.9900
Heptachlor	1.5848 1.6218	1.6724	1.6639	1.6936	1.6237	Lin2	-0.239	1.6606							0.9990		0.9900
Aldrin	1.5656 1.6660	1.6758	1.6864	1.7249	1.6610	Lin2	-0.484	1.6982							1.0000		0.9900
Heptachlor epoxide	1.4604 1.3991	1.5210	1.4834	1.4964	1.4165	Lin2	0.1257	1.4537							0.9990		0.9900
gamma-Chlordane	1.4969 1.6174	1.5733	1.5688	1.6437	1.5994	Lin2	-0.492	1.6188							1.0000		0.9900
alpha-Chlordane	1.4611 1.5339	1.5216	1.5111	1.5705	1.5259	Lin2	-0.322	1.5439							1.0000		0.9900
4,4'-DDE	1.4433 1.5664	1.5476	1.5535	1.6248	1.5728	Lin2	-0.585	1.5936							1.0000		0.9900
Endosulfan I	1.4184 1.3395	1.4637	1.4224	1.4491	1.3698	Lin2	0.1680	1.3984							0.9990		0.9900
Dieldrin	1.5213 1.5221	1.5991	1.5856	1.6309	1.5597	Lin2	-0.183	1.5830							0.9990		0.9900
Endrin	1.2329 1.2557	1.2775	1.2462	1.3136	1.2986	Lin2	-0.200	1.2852							0.9990		0.9900
4,4'-DDD	1.3479 1.3242	1.3228	1.3167	1.3732	1.3296	Lin2	0.0353	1.3332							1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 17:22 Calibration End Date: 04/10/2017 18:46 Calibration ID: 28724

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Endosulfan II	1.3210 1.2626	1.3650	1.3445	1.3706	1.3000	Lin2	0.0634	1.3227							0.9990		0.9900
4,4'-DDT	1.1289 1.2897	1.2095	1.2314	1.3093	1.3080	Lin2	-0.714	1.2977							1.0000		0.9900
Endrin aldehyde	1.0671 1.0310	1.0978	1.0880	1.1044	1.0503	Lin2	0.0338	1.0706							0.9990		0.9900
Methoxychlor	0.5894 0.5348	0.5918	0.5624	0.5692	0.5574	Lin2	0.1674	0.5554							0.9990		0.9900
Endosulfan sulfate	1.1681 1.2007	1.2251	1.2156	1.2556	1.2182	Lin2	-0.218	1.2297							1.0000		0.9900
Endrin ketone	1.3056 1.3116	1.3799	1.3733	1.3979	1.3369	Lin2	-0.165	1.3628							0.9990		0.9900
Tetrachloro-m-xylene (Surr)	1.1098 1.1277	1.1381	1.1358	1.1624	1.1287	Lin2	-0.116	1.1421							1.0000		0.9900
DCB Decachlorobiphenyl (Surr)	0.8362 0.7557	0.8183	0.7832	0.7893	0.7690	Lin2	0.2902	0.7710							1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 17:22 Calibration End Date: 04/10/2017 18:46 Calibration ID: 28724

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-368670/29	04100029.D
Level 2	STD2 280-368670/28	04100028.D
Level 3	STD3 280-368670/27	04100027.D
Level 4	STD4 280-368670/26	04100026.D
Level 5	STD5 280-368670/25	04100025.D
Level 6	STD6 280-368670/24	04100024.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Hexachlorobenzene	BNB	Lin2	50408254 1319385871	122073382	302011012	625478519	953751155	4.00 100	10.0	25.0	50.0	75.0
alpha-BHC	BNB	Lin2	67283578 2139137586	177015109	460689005	973305622	1500963941	4.00 100	10.0	25.0	50.0	75.0
gamma-BHC (Lindane)	BNB	Lin2	61711453 1927755733	160851275	417761684	878541538	1349509916	4.00 100	10.0	25.0	50.0	75.0
beta-BHC	BNB	Lin2	27570072 730597628	66733070	164419828	339126643	516930048	4.00 100	10.0	25.0	50.0	75.0
delta-BHC	BNB	Lin2	65915279 2031436177	171519904	445756739	934862866	1426546662	4.00 100	10.0	25.0	50.0	75.0
Heptachlor	BNB	Lin2	62263366 1685369246	159432609	401076446	819438517	1231615698	4.00 100	10.0	25.0	50.0	75.0
Aldrin	BNB	Lin2	61506570 1731342352	159758366	406498125	834572536	1259887652	4.00 100	10.0	25.0	50.0	75.0
Heptachlor epoxide	BNB	Lin2	57377311 1453989120	144999613	357575852	724013320	1074417824	4.00 100	10.0	25.0	50.0	75.0
gamma-Chlordane	BNB	Lin2	58808048 1680849049	149983574	378143079	795275882	1213169134	4.00 100	10.0	25.0	50.0	75.0
alpha-Chlordane	BNB	Lin2	57404226 1594072207	145056359	364243044	759869729	1157453219	4.00 100	10.0	25.0	50.0	75.0
4,4'-DDE	BNB	Lin2	56703371 1627815932	147537531	374471464	786120791	1192992637	4.00 100	10.0	25.0	50.0	75.0
Endosulfan I	BNB	Lin2	55727204 1392008263	139542986	342859423	701131485	1039014644	4.00 100	10.0	25.0	50.0	75.0
Dieldrin	BNB	Lin2	59769469 1581813705	152444419	382209842	789092288	1183080417	4.00 100	10.0	25.0	50.0	75.0
Endrin	BNB	Lin2	48438787 1304915588	121790203	300398177	635546942	984991714	4.00 100	10.0	25.0	50.0	75.0
4,4'-DDD	BNB	Lin2	52953763 1376055631	126102765	317389076	664379086	1008545196	4.00 100	10.0	25.0	50.0	75.0
Endosulfan II	BNB	Lin2	51900672 1312067628	130132659	324094271	663138940	986071296	4.00 100	10.0	25.0	50.0	75.0

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 17:22 Calibration End Date: 04/10/2017 18:46 Calibration ID: 28724

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
4,4'-DDT	BNB	Lin2	44351007 1340252548	115302783	296830977	633475863	992108573	4.00 100	10.0	25.0	50.0	75.0
Endrin aldehyde	BNB	Lin2	41923660 1071395989	104654709	262263031	534341175	796638608	4.00 100	10.0	25.0	50.0	75.0
Methoxychlor	BNB	Lin2	23156143 555725549	56417993	135571591	275387035	422779700	4.00 100	10.0	25.0	50.0	75.0
Endosulfan sulfate	BNB	Lin2	45892091 1247773585	116790690	293004864	607504059	924054452	4.00 100	10.0	25.0	50.0	75.0
Endrin ketone	BNB	Lin2	51293926 1363046988	131548129	331024497	676344945	1014092028	4.00 100	10.0	25.0	50.0	75.0
Tetrachloro-m-xylene (Surr)	BNB	Lin2	43599324 1171889809	108494839	273789743	562387248	856099240	4.00 100	10.0	25.0	50.0	75.0
DCB Decachlorobiphenyl (Surr)	BNB	Lin2	32850791 785371404	78010565	188781011	381877964	583329943	4.00 100	10.0	25.0	50.0	75.0

Curve Type Legend:
Lin2 = Linear 1/conc^2 ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100024.D
Lims ID: STD6 AB
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 10-Apr-2017 17:22:18 ALS Bottle#: 22 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD6 AB
Misc. Info.: 280-0057376-024
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:58 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						409.4	
2						398.2	
						RPD = 2.76	
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.029	-0.001	1558796871	150.0	150.0	
2	2.839	2.839	-0.001	366505847	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.852	3.851	0.001	1171889809	100.0	98.8	
2	3.746	3.746	0.000	242345914	100.0	96.6	
						RPD = 2.29	
5 Hexachlorobenzene							
1	4.233	4.232	0.001	1319385871	100.0	100.1	
2	4.179	4.179	0.000	253485608	100.0	97.5	
						RPD = 2.59	
8 alpha-BHC							
1	4.403	4.402	0.001	2139137586	100.0	102.9	
2	4.321	4.321	0.000	370997094	100.0	99.9	
						RPD = 2.95	
9 gamma-BHC (Lindane)							
1	4.713	4.712	0.001	1927755733	100.0	102.8	
2	4.652	4.652	0.000	327118196	100.0	99.9	
						RPD = 2.89	
10 beta-BHC							
1	4.798	4.797	0.001	730597628	100.0	101.5	
2	4.734	4.732	0.002	133734765	100.0	98.7	
						RPD = 2.84	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.973	4.973	0.000	2031436177	100.0	102.2	
2	5.011	5.011	0.000	337086663	100.0	99.8	
						RPD = 2.36	
15 Heptachlor							
1	5.183	5.183	0.000	1685369246	100.0	97.8	
2	5.068	5.067	0.001	295396332	100.0	98.0	
						RPD = 0.17	
16 Aldrin							
1	5.468	5.467	0.001	1731342352	100.0	98.4	
2	5.374	5.372	0.002	291642553	100.0	97.5	
						RPD = 0.89	
18 Isodrin							
1	5.803	5.803	0.000	1311049624	100.0	97.6	
2	5.749	5.747	0.002	224390799	100.0	96.6	
						RPD = 1.07	
21 Heptachlor epoxide							
1	6.102	6.101	0.001	1453989120	100.0	96.2	
2	5.937	5.936	0.001	253962352	100.0	96.0	
						RPD = 0.18	
22 gamma-Chlordane							
1	6.246	6.246	0.000	1680849049	100.0	100.2	
2	6.144	6.143	0.001	270338491	100.0	97.6	
						RPD = 2.69	
23 alpha-Chlordane							
1	6.410	6.408	0.002	1594072207	100.0	99.6	
2	6.319	6.318	0.001	255751262	100.0	97.0	
						RPD = 2.60	
24 4,4'-DDE							
1	6.503	6.504	-0.001	1627815932	100.0	98.7	
2	6.539	6.537	0.002	263208174	100.0	96.7	
						RPD = 1.98	
25 Endosulfan I							
1	6.580	6.580	0.000	1392008263	100.0	95.7	
2	6.388	6.387	0.001	240949933	100.0	95.4	
						RPD = 0.32	
27 Dieldrin							
1	6.865	6.864	0.001	1581813705	100.0	96.3	
2	6.728	6.727	0.001	269459295	100.0	96.1	
						RPD = 0.13	
30 Endrin							
1	7.133	7.132	0.001	1304915588	100.0	97.9	
2	7.084	7.083	0.001	219610884	100.0	97.8	
						RPD = 0.07	
32 4,4'-DDD							
1	7.206	7.206	0.000	1376055631	100.0	99.3	
2	7.227	7.227	0.000	211626206	100.0	98.1	
						RPD = 1.21	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.383	7.382	0.001	1312067628	100.0	95.4	
2	7.325	7.325	0.000	218906323	100.0	94.4	
						RPD = 1.01	
35 4,4'-DDT							
1	7.515	7.516	-0.001	1340252548	100.0	99.9	
2	7.572	7.571	0.001	204416040	100.0	98.3	
						RPD = 1.61	
36 Endrin aldehyde							
1	7.836	7.836	0.000	1071395989	100.0	96.3	
2	7.697	7.697	0.000	178319421	100.0	94.6	
						RPD = 1.75	
37 Methoxychlor							
1	8.027	8.027	0.000	555725549	100.0	96.0	
2	8.289	8.289	0.000	92769855	100.0	94.8	
						RPD = 1.29	
38 Mirex							
1	8.173	8.174	-0.001	912564075	100.0	98.2	
2	8.467	8.466	0.001	137845186	100.0	87.1	
						RPD = 12.07	
39 Endosulfan sulfate							
1	8.284	8.285	-0.001	1247773585	100.0	97.8	
2	7.988	7.987	0.001	199432581	100.0	95.6	
						RPD = 2.29	
40 Endrin ketone							
1	8.563	8.563	0.000	1363046988	100.0	96.4	
2	8.515	8.514	0.001	225857141	100.0	95.0	
						RPD = 1.43	
$ 41 DCB Decachlorobiphenyl							
1	9.542	9.541	0.001	785371404	100.0	97.6	
2	9.721	9.722	-0.001	142760332	100.0	94.9	
						RPD = 2.90	
S 3 Endosulfan, Total							
1						288.9	
2						285.4	
						RPD = 1.21	

Reagents:

8081IcalL6_00021	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

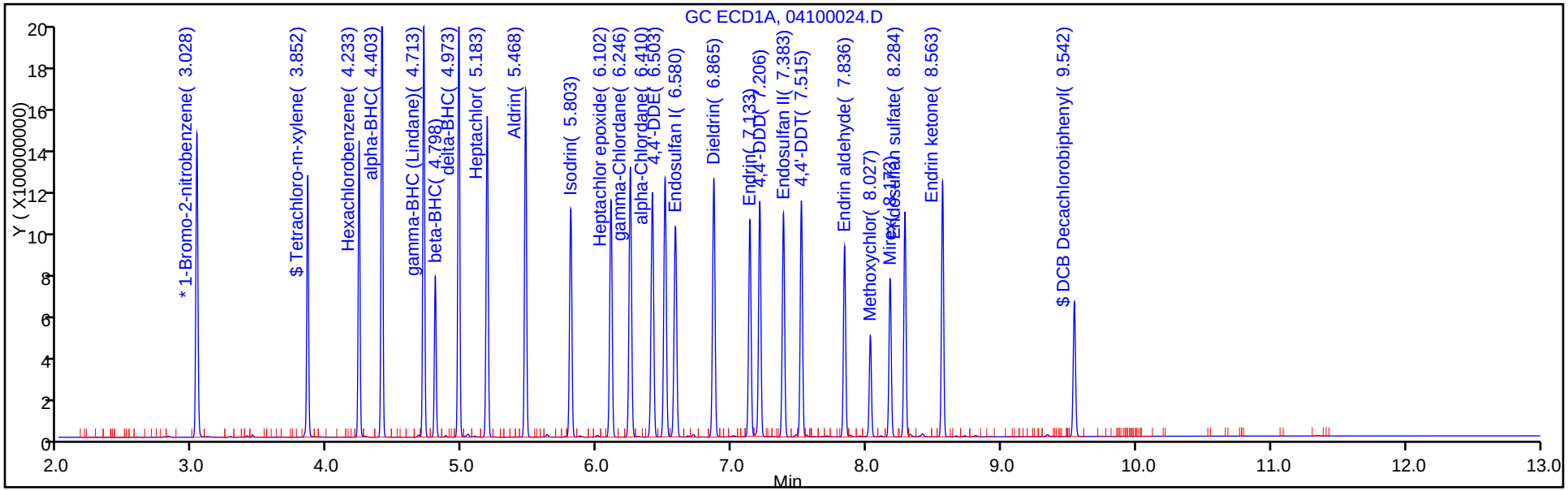
Report Date: 17-Apr-2017 13:22:00 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

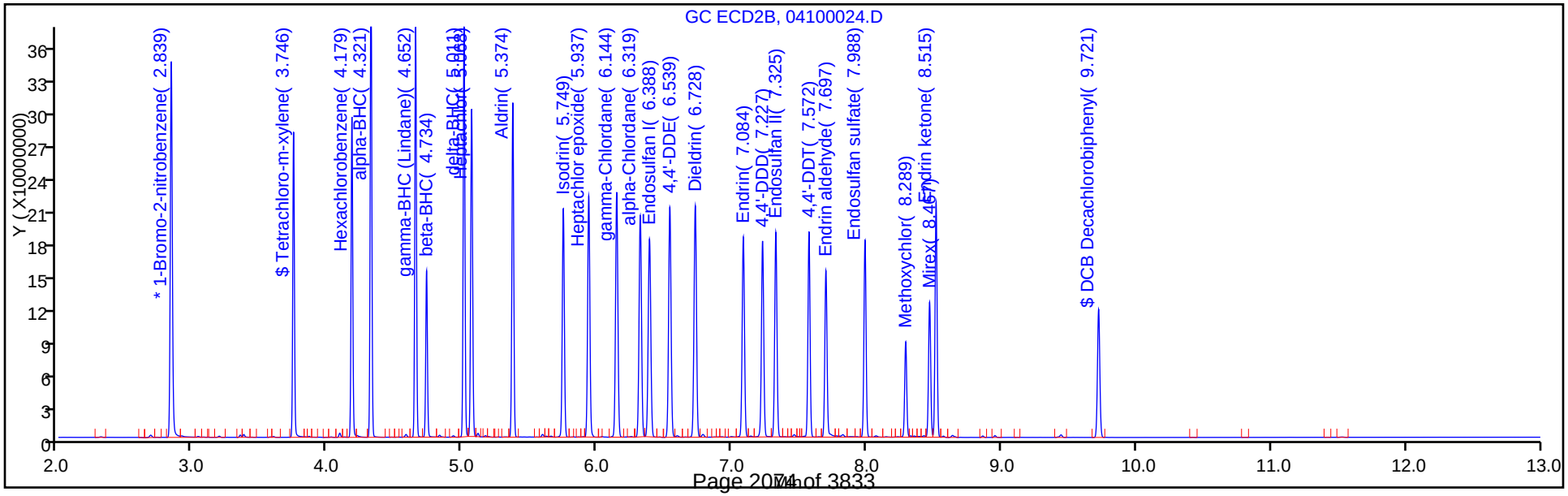
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100024.D

Injection Date:	10-Apr-2017 17:22:18	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD6 AB			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100025.D
Lims ID: STD5 AB
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 10-Apr-2017 17:39:16 ALS Bottle#: 23 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD5 AB
Misc. Info.: 280-0057376-025
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:01 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						296.1	
2						293.1	
						RPD = 1.03	
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.029	-0.001	1517029565	150.0	150.0	
2	2.838	2.839	-0.001	355277678	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.851	3.851	0.000	856099240	75.0	74.2	
2	3.746	3.746	0.000	178030117	75.0	73.1	
						RPD = 1.57	
5 Hexachlorobenzene							
1	4.233	4.232	0.001	953751155	75.0	74.3	
2	4.179	4.179	0.000	183033435	75.0	72.4	
						RPD = 2.61	
8 alpha-BHC							
1	4.403	4.402	0.001	1500963941	75.0	74.3	
2	4.321	4.321	0.000	264970568	75.0	73.6	
						RPD = 1.05	
9 gamma-BHC (Lindane)							
1	4.713	4.712	0.001	1349509916	75.0	74.1	
2	4.652	4.652	0.000	233222609	75.0	73.4	
						RPD = 0.96	
10 beta-BHC							
1	4.798	4.797	0.001	516930048	75.0	73.8	
2	4.733	4.732	0.001	95698762	75.0	72.6	
						RPD = 1.68	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.973	4.973	0.000	1426546662	75.0	73.9	
2	5.011	5.011	0.000	240986417	75.0	73.6	
						RPD = 0.42	
15 Heptachlor							
1	5.183	5.183	0.000	1231615698	75.0	73.5	
2	5.068	5.067	0.001	214523974	75.0	73.3	
						RPD = 0.28	
16 Aldrin							
1	5.468	5.467	0.001	1259887652	75.0	73.6	
2	5.374	5.372	0.002	212851933	75.0	73.3	
						RPD = 0.41	
18 Isodrin							
1	5.804	5.803	0.001	962034429	75.0	73.6	
2	5.748	5.747	0.001	165503258	75.0	73.3	
						RPD = 0.37	
21 Heptachlor epoxide							
1	6.102	6.101	0.001	1074417824	75.0	73.0	
2	5.937	5.936	0.001	187200128	75.0	72.8	
						RPD = 0.24	
22 gamma-Chlordane							
1	6.246	6.246	0.000	1213169134	75.0	74.4	
2	6.144	6.143	0.001	197434182	75.0	73.4	
						RPD = 1.41	
23 alpha-Chlordane							
1	6.409	6.408	0.001	1157453219	75.0	74.3	
2	6.319	6.318	0.001	187880416	75.0	73.4	
						RPD = 1.33	
24 4,4'-DDE							
1	6.504	6.504	0.000	1192992637	75.0	74.4	
2	6.539	6.537	0.002	194272112	75.0	73.5	
						RPD = 1.16	
25 Endosulfan I							
1	6.581	6.580	0.001	1039014644	75.0	73.3	
2	6.388	6.387	0.001	178467168	75.0	72.6	
						RPD = 0.96	
27 Dieldrin							
1	6.866	6.864	0.002	1183080417	75.0	74.0	
2	6.727	6.727	0.000	199141205	75.0	73.2	
						RPD = 1.15	
30 Endrin							
1	7.133	7.132	0.001	984991714	75.0	75.9	
2	7.084	7.083	0.001	164902943	75.0	75.6	
						RPD = 0.39	
32 4,4'-DDD							
1	7.208	7.206	0.002	1008545196	75.0	74.8	
2	7.226	7.227	-0.001	158020255	75.0	75.4	
						RPD = 0.80	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.383	7.382	0.001	986071296	75.0	73.7	
2	7.325	7.325	0.000	164394784	75.0	73.0	
						RPD = 0.95	
35 4,4'-DDT							
1	7.517	7.516	0.001	992108573	75.0	76.1	
2	7.572	7.571	0.001	150950240	75.0	74.8	
						RPD = 1.75	
36 Endrin aldehyde							
1	7.837	7.836	0.001	796638608	75.0	73.5	
2	7.697	7.697	0.000	133235574	75.0	72.7	
						RPD = 1.12	
37 Methoxychlor							
1	8.028	8.027	0.001	422779700	75.0	75.0	
2	8.289	8.289	0.000	70535274	75.0	74.1	
						RPD = 1.16	
38 Mirex							
1	8.174	8.174	0.000	676105049	75.0	74.7	
2	8.466	8.466	0.000	103451263	75.0	67.4	
						RPD = 10.32	
39 Endosulfan sulfate							
1	8.284	8.285	-0.001	924054452	75.0	74.5	
2	7.987	7.987	0.000	148963202	75.0	73.5	
						RPD = 1.37	
40 Endrin ketone							
1	8.564	8.563	0.001	1014092028	75.0	73.7	
2	8.515	8.514	0.001	168496296	75.0	73.0	
						RPD = 1.02	
$ 41 DCB Decachlorobiphenyl							
1	9.543	9.541	0.002	583329943	75.0	74.4	
2	9.722	9.722	0.000	106744621	75.0	72.9	
						RPD = 2.08	
S 3 Endosulfan, Total							
1						221.5	
2						219.1	
						RPD = 1.09	

Reagents:

8081IcalL5_00022	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

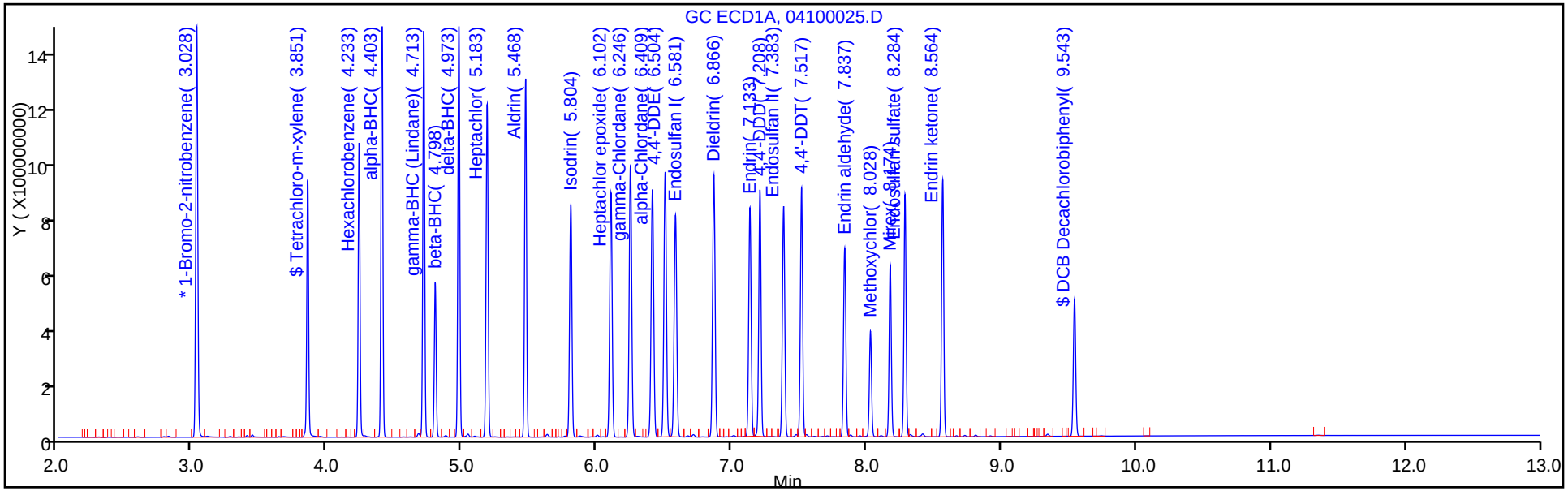
Report Date: 17-Apr-2017 13:22:03 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

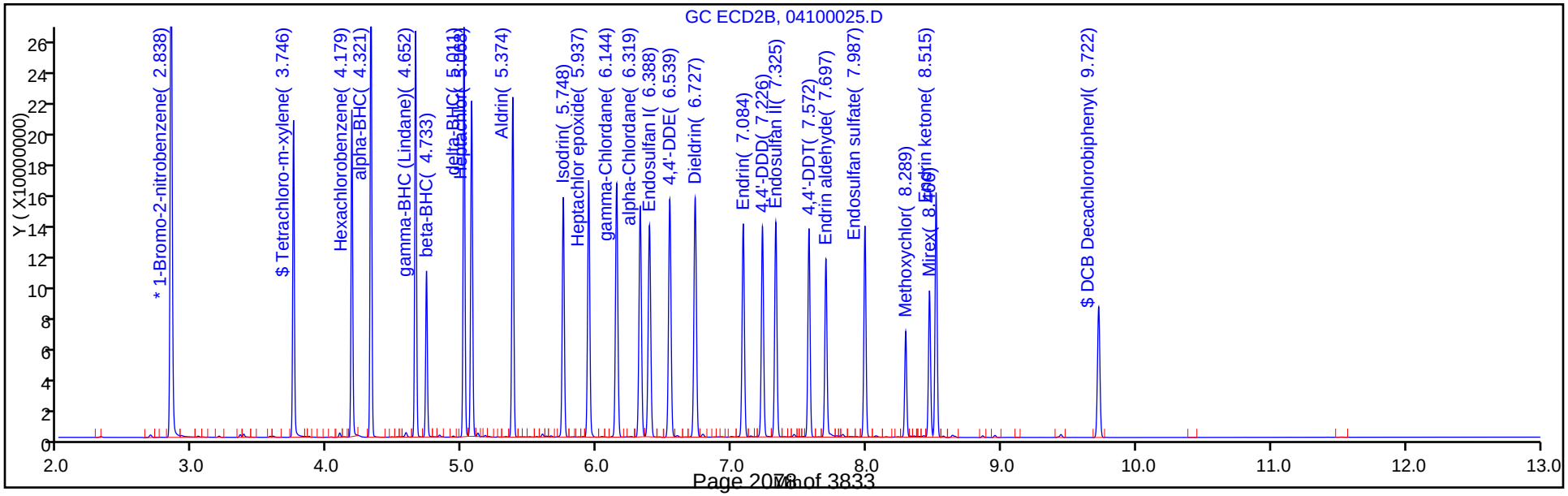
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100025.D

Injection Date:	10-Apr-2017 17:39:16	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD5 AB			Worklist Smp#:	25
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100026.D
Lims ID: STD4 AB
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 10-Apr-2017 17:56:08 ALS Bottle#: 24 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD4 AB
Misc. Info.: 280-0057376-026
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:04 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:50:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.028	0.000	1451506563	150.0	150.0	
2	2.837	2.837	0.000	339364371	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.851	3.851	0.000	562387248	50.0	51.0	
2	3.746	3.746	0.000	118986099	50.0	50.9	
						RPD = 0.09	
5 Hexachlorobenzene							
1	4.232	4.232	0.000	625478519	50.0	50.9	
2	4.179	4.179	0.000	124406761	50.0	51.3	
						RPD = 0.67	
8 alpha-BHC							
1	4.402	4.402	0.000	973305622	50.0	50.6	
2	4.321	4.321	0.000	174668568	50.0	50.7	
						RPD = 0.31	
9 gamma-BHC (Lindane)							
1	4.712	4.712	0.000	878541538	50.0	50.6	
2	4.652	4.652	0.000	154208805	50.0	50.7	
						RPD = 0.28	
10 beta-BHC							
1	4.797	4.797	0.000	339126643	50.0	50.6	
2	4.732	4.732	0.000	64160741	50.0	50.6	
						RPD = 0.06	
12 delta-BHC							
1	4.973	4.973	0.000	934862866	50.0	50.8	
2	5.011	5.011	0.000	159334546	50.0	50.9	
						RPD = 0.23	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
15 Heptachlor							M
1	5.183	5.183	0.000	819438517	50.0	51.1	M
2	5.067	5.067	0.000	142994349	50.0	51.0	
						RPD = 0.32	
16 Aldrin							
1	5.467	5.467	0.000	834572536	50.0	51.1	
2	5.372	5.372	0.000	141683787	50.0	51.0	
						RPD = 0.13	
18 Isodrin							
1	5.803	5.803	0.000	640783415	50.0	51.2	
2	5.747	5.747	0.000	110988794	50.0	51.3	
						RPD = 0.10	
21 Heptachlor epoxide							
1	6.101	6.101	0.000	724013320	50.0	51.4	
2	5.936	5.936	0.000	126082810	50.0	51.1	
						RPD = 0.48	
22 gamma-Chlordane							
1	6.246	6.246	0.000	795275882	50.0	51.1	
2	6.143	6.143	0.000	131570155	50.0	51.0	
						RPD = 0.12	
23 alpha-Chlordane							
1	6.408	6.408	0.000	759869729	50.0	51.1	
2	6.318	6.318	0.000	125325291	50.0	51.0	
						RPD = 0.10	
24 4,4'-DDE							
1	6.504	6.504	0.000	786120791	50.0	51.3	
2	6.537	6.537	0.000	129314457	50.0	51.1	
						RPD = 0.51	
25 Endosulfan I							
1	6.580	6.580	0.000	701131485	50.0	51.7	
2	6.387	6.387	0.000	120761574	50.0	51.2	
						RPD = 0.97	
27 Dieldrin							
1	6.864	6.864	0.000	789092288	50.0	51.6	
2	6.727	6.727	0.000	133527150	50.0	51.2	
						RPD = 0.85	
30 Endrin							
1	7.132	7.132	0.000	635546942	50.0	51.3	
2	7.083	7.083	0.000	106053471	50.0	50.8	
						RPD = 0.95	
32 4,4'-DDD							
1	7.206	7.206	0.000	664379086	50.0	51.5	
2	7.227	7.227	0.000	104312966	50.0	51.8	
						RPD = 0.71	
34 Endosulfan II							
1	7.382	7.382	0.000	663138940	50.0	51.8	
2	7.325	7.325	0.000	111026040	50.0	51.3	
						RPD = 0.82	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
35 4,4'-DDT							
1	7.516	7.516	0.000	633475863	50.0	51.0	
2	7.571	7.571	0.000	98154653	50.0	50.8	
						RPD = 0.35	
36 Endrin aldehyde							
1	7.836	7.836	0.000	534341175	50.0	51.5	
2	7.697	7.697	0.000	90372120	50.0	51.4	
						RPD = 0.28	
37 Methoxychlor							
1	8.027	8.027	0.000	275387035	50.0	50.9	
2	8.289	8.289	0.000	46429927	50.0	50.7	
						RPD = 0.37	
38 Mirex							
1	8.174	8.174	0.000	443577236	50.0	51.2	
2	8.466	8.466	0.000	69614170	50.0	47.5	
						RPD = 7.49	
39 Endosulfan sulfate							
1	8.285	8.285	0.000	607504059	50.0	51.2	
2	7.987	7.987	0.000	99316939	50.0	51.0	
						RPD = 0.43	
40 Endrin ketone							
1	8.563	8.563	0.000	676344945	50.0	51.4	
2	8.514	8.514	0.000	113392553	50.0	51.2	
						RPD = 0.43	
$ 41 DCB Decachlorobiphenyl							
1	9.541	9.541	0.000	381877964	50.0	50.8	
2	9.722	9.722	0.000	71798840	50.0	51.0	
						RPD = 0.34	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081IcalL4_00024	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

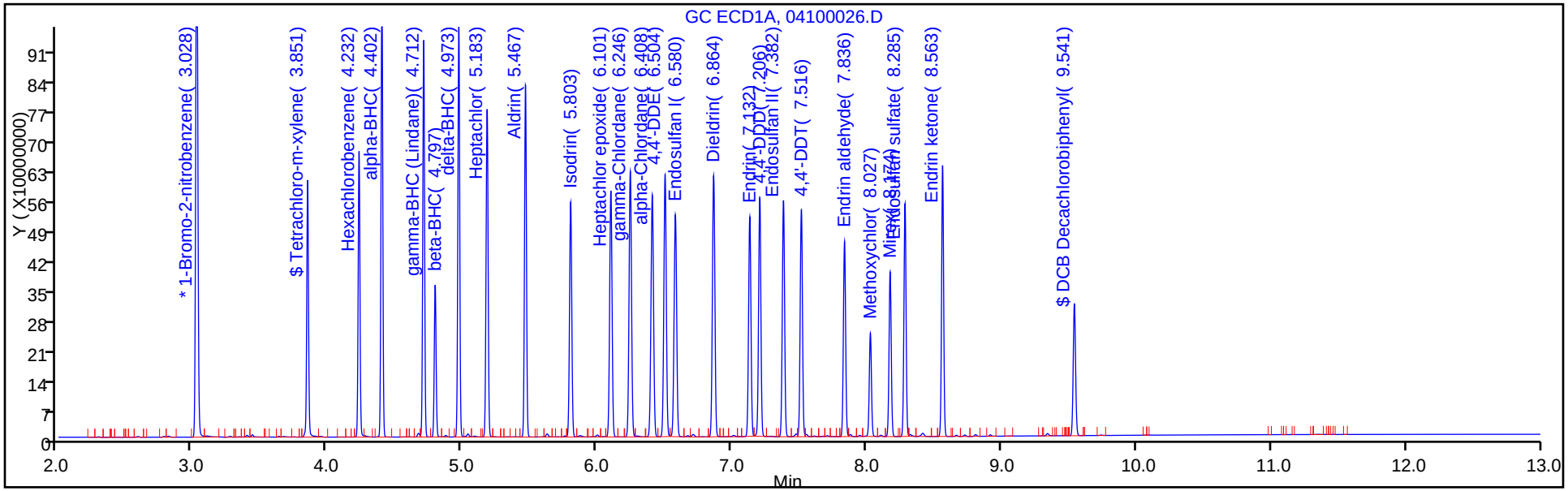
Report Date: 17-Apr-2017 13:22:06 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

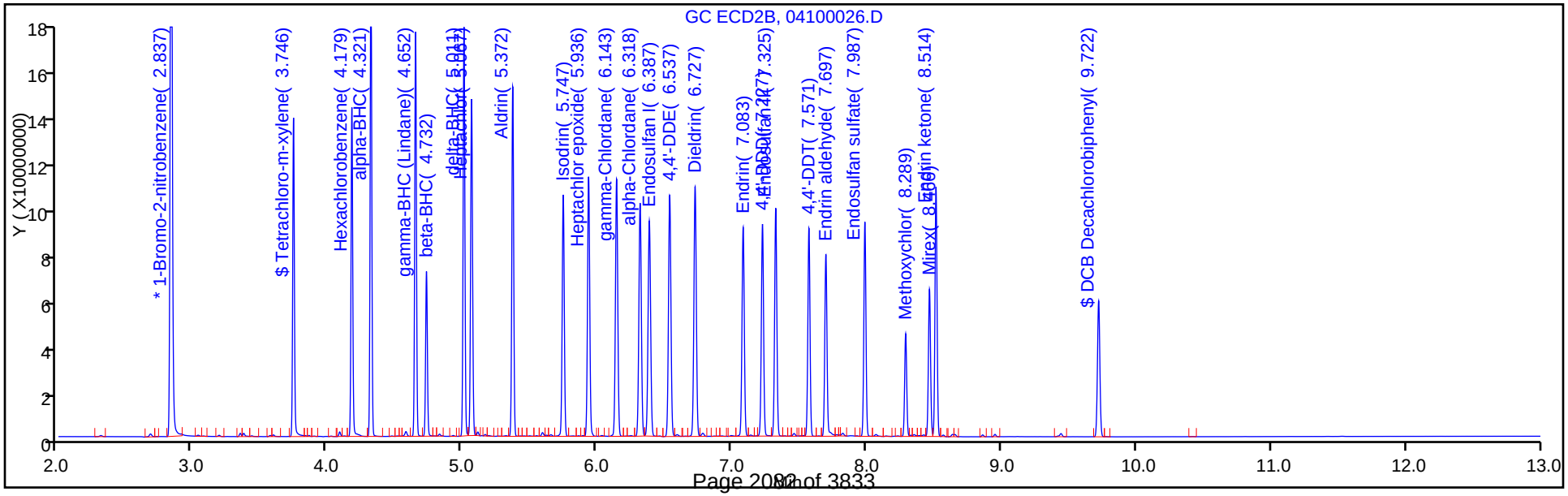
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Injection Date:	10-Apr-2017 17:56:08	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD4 AB			Worklist Smp#:	26
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Manual Integration/User Assign Peak Report

TestAmerica Denver

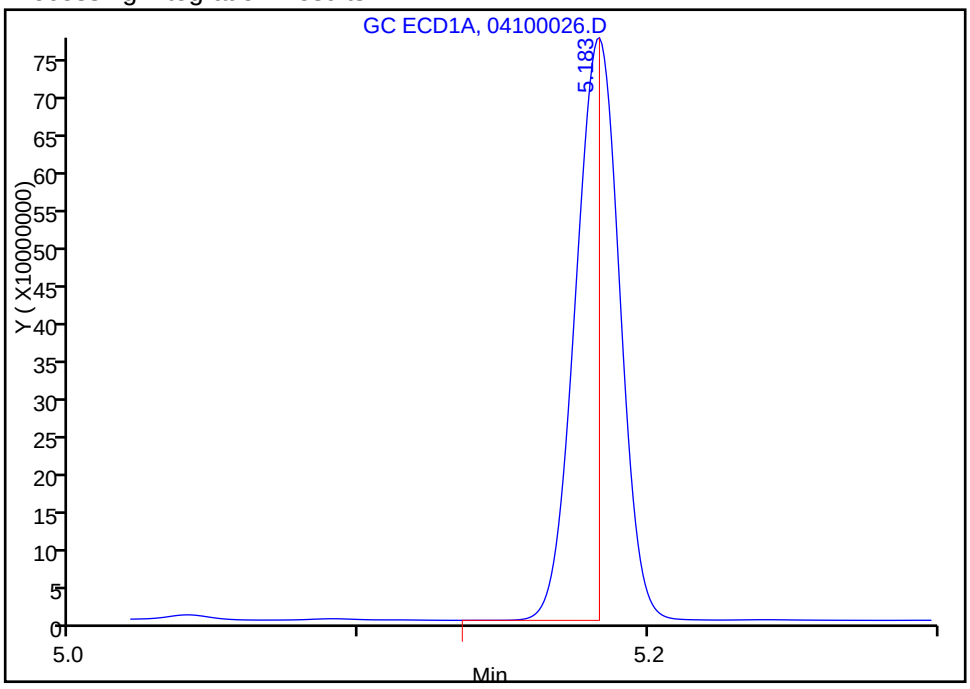
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Injection Date:	10-Apr-2017 17:56:08	Instrument ID:	SGC_P1		
Lims ID:	STD4 AB				
Client ID:					
Operator ID:	DAW	ALS Bottle#:	24	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		
Column:	CLP1 Pesticides Column 1 (0.32 mm)	Detector	GC ECD1A		

15 Heptachlor, CAS: 76-44-8

Signal: 1

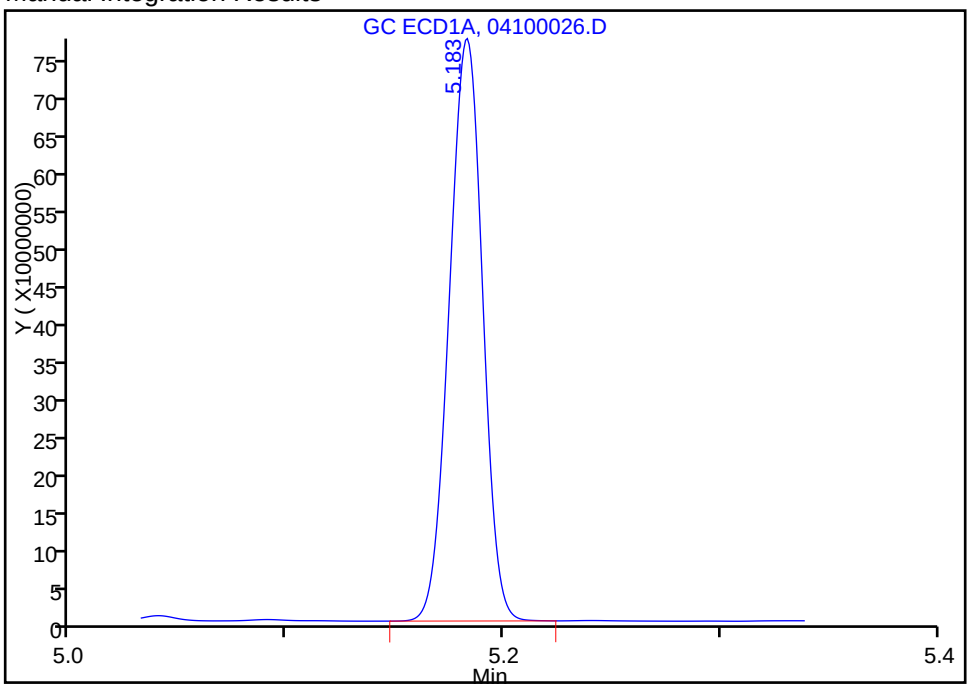
Processing Integration Results

RT: 5.18
Area: 435760377
Amount: 29.798580
Amount Units: ng/mL



Manual Integration Results

RT: 5.18
Area: 819438517
Amount: 51.137398
Amount Units: ng/mL



Reviewer: wellsd, 17-Apr-2017 13:22:04

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100027.D
Lims ID: STD3 AB
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 10-Apr-2017 18:13:01 ALS Bottle#: 25 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD3 AB
Misc. Info.: 280-0057376-027
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:07 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						98.0	
2						99.5	
						RPD = 1.58	
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.028	0.000	1446267602	150.0	150.0	
2	2.838	2.837	0.000	345787317	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.851	3.851	0.000	273789743	25.0	25.0	
2	3.746	3.746	0.000	60503421	25.0	25.1	
						RPD = 0.63	
5 Hexachlorobenzene							
1	4.233	4.232	0.001	302011012	25.0	24.7	
2	4.179	4.179	0.000	63899697	25.0	25.4	
						RPD = 2.99	
8 alpha-BHC							
1	4.402	4.402	0.000	460689005	25.0	24.4	
2	4.320	4.321	-0.001	87083564	25.0	24.8	
						RPD = 1.73	
9 gamma-BHC (Lindane)							
1	4.712	4.712	0.000	417761684	25.0	24.4	
2	4.651	4.652	-0.001	77141534	25.0	24.8	
						RPD = 1.46	
10 beta-BHC							
1	4.798	4.797	0.001	164419828	25.0	24.6	
2	4.732	4.732	0.000	33241659	25.0	25.2	
						RPD = 2.48	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.973	4.973	0.000	445756739	25.0	24.6	
2	5.010	5.011	-0.001	79129370	25.0	24.7	
						RPD = 0.65	
15 Heptachlor							
1	5.183	5.183	0.000	401076446	25.0	25.2	
2	5.067	5.067	0.000	72058218	25.0	24.9	
						RPD = 0.98	
16 Aldrin							
1	5.468	5.467	0.001	406498125	25.0	25.1	
2	5.372	5.372	0.000	71370151	25.0	25.0	
						RPD = 0.27	
18 Isodrin							
1	5.803	5.803	0.000	312423563	25.0	25.1	
2	5.747	5.747	0.000	56024647	25.0	25.1	
						RPD = 0.05	
21 Heptachlor epoxide							
1	6.101	6.101	0.000	357575852	25.0	25.4	
2	5.935	5.936	-0.001	64465114	25.0	25.3	
						RPD = 0.47	
22 gamma-Chlordane							
1	6.246	6.246	0.000	378143079	25.0	24.5	
2	6.143	6.143	0.000	66346703	25.0	25.0	
						RPD = 1.74	
23 alpha-Chlordane							
1	6.408	6.408	0.000	364243044	25.0	24.7	
2	6.318	6.318	0.000	63562482	25.0	25.0	
						RPD = 1.49	
24 4,4'-DDE							
1	6.503	6.504	-0.001	374471464	25.0	24.7	
2	6.537	6.537	0.000	65457244	25.0	25.1	
						RPD = 1.55	
25 Endosulfan I							
1	6.579	6.580	-0.001	342859423	25.0	25.3	
2	6.386	6.387	-0.001	62120738	25.0	25.4	
						RPD = 0.30	
27 Dieldrin							
1	6.864	6.864	0.000	382209842	25.0	25.2	
2	6.726	6.727	-0.001	67785138	25.0	25.2	
						RPD = 0.24	
30 Endrin							
1	7.132	7.132	0.000	300398177	25.0	24.4	
2	7.083	7.083	0.000	52425236	25.0	24.4	
						RPD = 0.05	
32 4,4'-DDD							
1	7.206	7.206	0.000	317389076	25.0	24.7	
2	7.225	7.227	-0.002	50752321	25.0	24.3	
						RPD = 1.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.383	7.382	0.001	324094271	25.0	25.4	
2	7.324	7.325	-0.001	56976525	25.0	25.4	
						RPD = 0.23	
35 4,4'-DDT							
1	7.515	7.516	-0.001	296830977	25.0	24.3	
2	7.571	7.571	0.000	48768461	25.0	24.6	
						RPD = 1.32	
36 Endrin aldehyde							
1	7.836	7.836	0.000	262263031	25.0	25.4	
2	7.696	7.697	-0.001	47066343	25.0	25.9	
						RPD = 1.94	
37 Methoxychlor							
1	8.028	8.027	0.001	135571591	25.0	25.0	
2	8.289	8.289	0.000	23885044	25.0	25.1	
						RPD = 0.41	
38 Mirex							
1	8.174	8.174	0.000	213842758	25.0	24.6	
2	8.466	8.466	0.000	36419123	25.0	24.4	
						RPD = 1.08	
39 Endosulfan sulfate							
1	8.284	8.285	-0.001	293004864	25.0	24.9	
2	7.986	7.987	-0.001	50867703	25.0	25.2	
						RPD = 1.25	
40 Endrin ketone							
1	8.563	8.563	0.000	331024497	25.0	25.3	
2	8.514	8.514	0.000	58223219	25.0	25.4	
						RPD = 0.51	
$ 41 DCB Decachlorobiphenyl							
1	9.542	9.541	0.001	188781011	25.0	25.0	
2	9.721	9.722	-0.001	37258509	25.0	25.4	
						RPD = 1.47	
S 3 Endosulfan, Total							
1						75.6	
2						76.0	
						RPD = 0.59	

Reagents:

8081IcalL3_00022	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

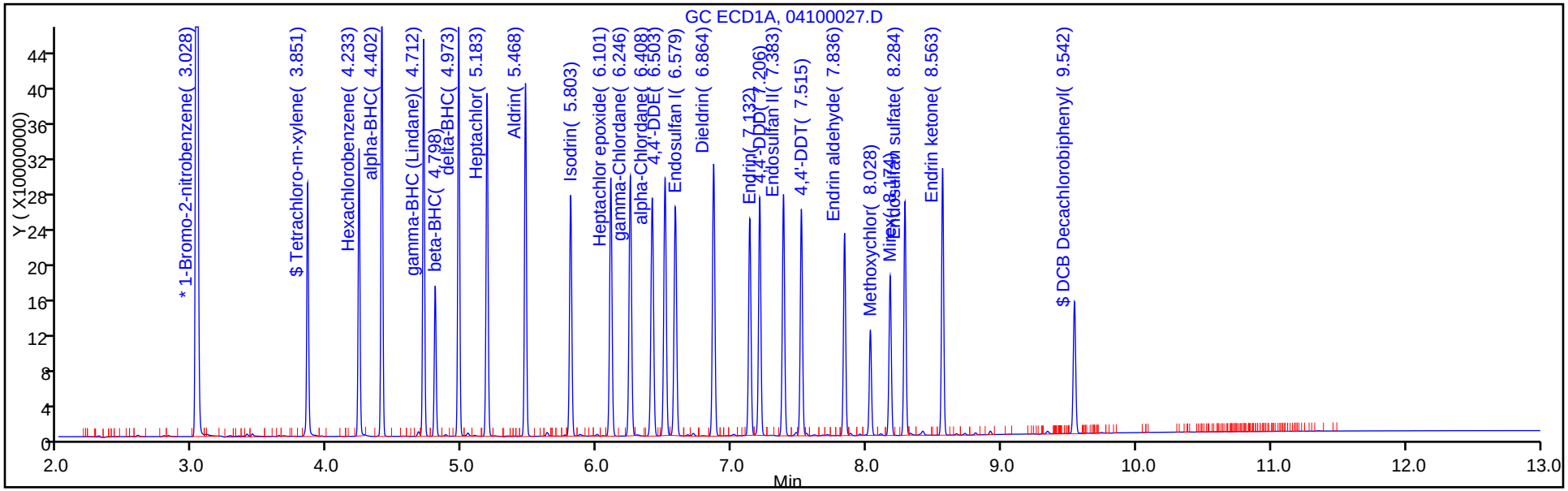
Report Date: 17-Apr-2017 13:22:09 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

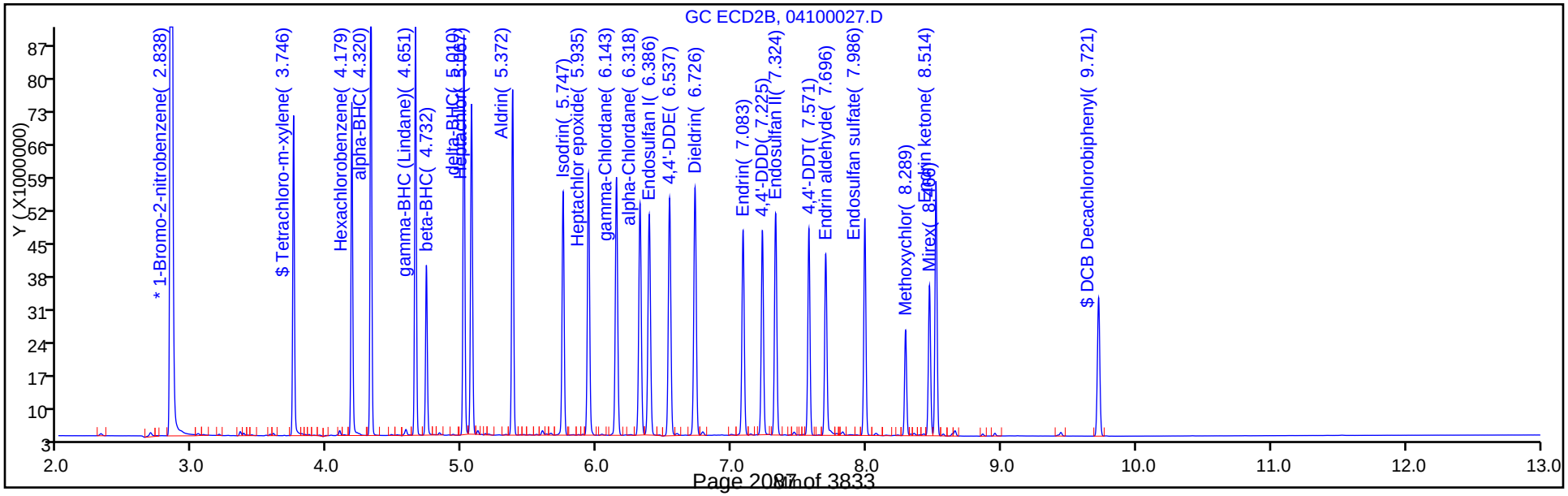
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100027.D

Injection Date:	10-Apr-2017 18:13:01	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD3 AB			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100028.D
Lims ID: STD2 AB
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 10-Apr-2017 18:29:51 ALS Bottle#: 26 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD2 AB
Misc. Info.: 280-0057376-028
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:11 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:52:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						39.7	
2						41.1	
						RPD = 3.49	
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.028	0.000	1429998779	150.0	150.0	
2	2.838	2.837	0.000	339336707	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.850	3.851	-0.001	108494839	10.0	10.1	
2	3.746	3.746	0.000	25832556	10.0	10.6	
						RPD = 5.09	
5 Hexachlorobenzene							
1	4.232	4.232	0.000	122073382	10.0	10.0	
2	4.179	4.179	0.000	26785004	10.0	10.3	
						RPD = 2.83	
8 alpha-BHC							
1	4.401	4.402	-0.001	177015109	10.0	9.85	
2	4.321	4.321	0.000	35363947	10.0	10.2	
						RPD = 3.56	
9 gamma-BHC (Lindane)							
1	4.711	4.712	-0.001	160851275	10.0	9.87	
2	4.652	4.652	0.000	31624492	10.0	10.2	
						RPD = 3.72	
10 beta-BHC							
1	4.797	4.797	0.000	66733070	10.0	10.1	
2	4.733	4.732	0.001	14272625	10.0	10.4	
						RPD = 3.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.971	4.973	-0.002	171519904	10.0	9.89	
2	5.011	5.011	0.000	32291959	10.0	10.2	
						RPD = 3.19	
15 Heptachlor							
1	5.181	5.183	-0.002	159432609	10.0	10.2	
2	5.068	5.067	0.001	30372278	10.0	10.4	
						RPD = 1.99	
16 Aldrin							
1	5.467	5.467	0.000	159758366	10.0	10.2	
2	5.373	5.372	0.001	29674030	10.0	10.4	
						RPD = 2.55	
18 Isodrin							
1	5.803	5.803	0.000	126129601	10.0	10.2	
2	5.748	5.747	0.001	23681593	10.0	10.4	
						RPD = 1.95	
21 Heptachlor epoxide							
1	6.100	6.101	-0.001	144999613	10.0	10.4	
2	5.936	5.936	0.000	27458496	10.0	10.6	
						RPD = 1.96	
22 gamma-Chlordane							M
1	6.245	6.246	-0.001	149983574	10.0	10.0	
2	6.144	6.143	0.001	28075644	10.0	10.4	M
						RPD = 4.11	
23 alpha-Chlordane							
1	6.408	6.408	0.000	145056359	10.0	10.1	
2	6.319	6.318	0.001	27086741	10.0	10.5	
						RPD = 4.12	
24 4,4'-DDE							
1	6.503	6.504	-0.001	147537531	10.0	10.1	
2	6.538	6.537	0.001	27415435	10.0	10.4	
						RPD = 3.46	
25 Endosulfan I							
1	6.579	6.580	-0.001	139542986	10.0	10.3	
2	6.387	6.387	0.000	26833467	10.0	10.7	
						RPD = 2.92	
27 Dieldrin							
1	6.863	6.864	-0.001	152444419	10.0	10.2	
2	6.726	6.727	-0.001	28593555	10.0	10.5	
						RPD = 2.87	
30 Endrin							
1	7.132	7.132	0.000	121790203	10.0	10.1	
2	7.084	7.083	0.001	22356175	10.0	10.3	
						RPD = 2.25	
32 4,4'-DDD							
1	7.205	7.206	-0.001	126102765	10.0	9.90	
2	7.226	7.227	-0.001	21500580	10.0	10.0	
						RPD = 1.42	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.383	7.382	0.001	130132659	10.0	10.3	
2	7.324	7.325	-0.001	24540848	10.0	10.7	
						RPD = 3.80	
35 4,4'-DDT							
1	7.514	7.516	-0.002	115302783	10.0	9.87	
2	7.571	7.571	0.000	20401372	10.0	10.3	
						RPD = 4.04	
36 Endrin aldehyde							M
1	7.835	7.836	-0.001	104654709	10.0	10.2	
2	7.697	7.697	0.000	19465371	10.0	10.4	M
						RPD = 1.99	
37 Methoxychlor							
1	8.026	8.027	-0.001	56417993	10.0	10.4	
2	8.289	8.289	0.000	10538870	10.0	10.7	
						RPD = 3.59	
38 Mirex							
1	8.174	8.174	0.000	88404883	10.0	10.2	
2	8.466	8.466	0.000	16304012	10.0	11.1	
						RPD = 8.90	
39 Endosulfan sulfate							
1	8.283	8.285	-0.002	116790690	10.0	10.1	
2	7.986	7.987	-0.001	21970039	10.0	10.6	
						RPD = 4.43	
40 Endrin ketone							
1	8.563	8.563	0.000	131548129	10.0	10.2	
2	8.514	8.514	0.000	24745189	10.0	10.6	
						RPD = 3.56	
$ 41 DCB Decachlorobiphenyl							
1	9.541	9.541	0.000	78010565	10.0	10.2	
2	9.720	9.722	-0.002	16408327	10.0	10.7	
						RPD = 4.85	
S 3 Endosulfan, Total							
1						30.8	
2						31.9	
						RPD = 3.71	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081IcalL2_00021	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

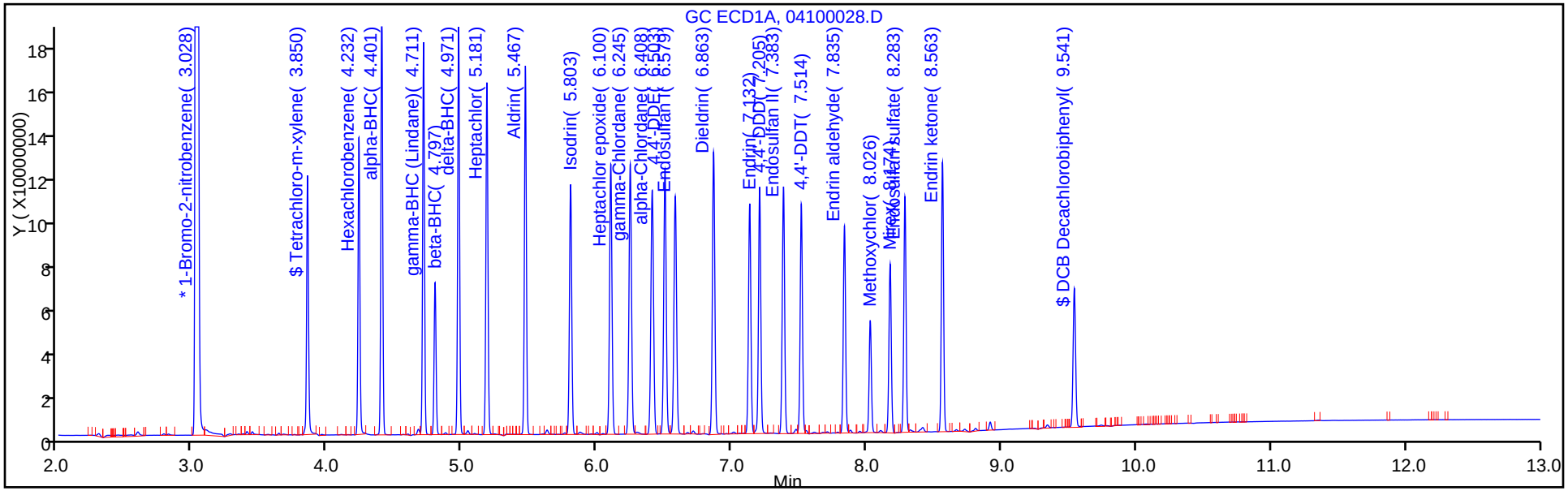
Report Date: 17-Apr-2017 13:22:12 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

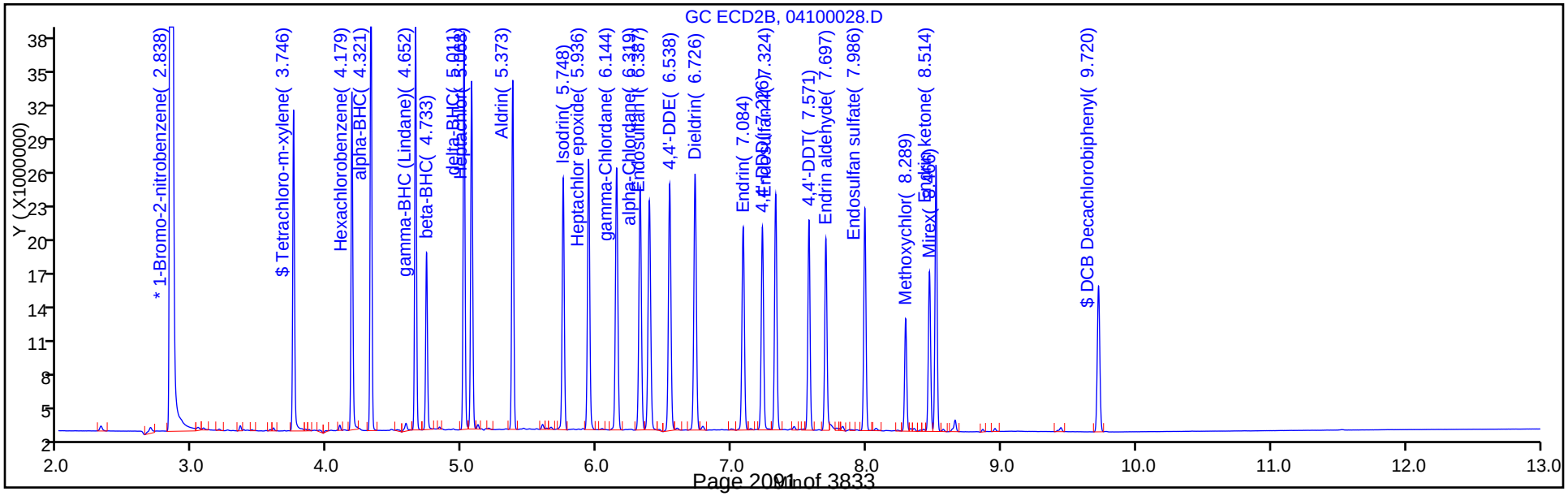
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100028.D

Injection Date:	10-Apr-2017 18:29:51	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD2 AB			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D
Lims ID: STD1 AB
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 10-Apr-2017 18:46:48 ALS Bottle#: 27 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD1 AB
Misc. Info.: 280-0057376-029
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:14 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:52:43

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						16.1	
2						15.8	
						RPD = 1.52	
* 2 1-Bromo-2-nitrobenzene							
1	3.029	3.028	0.001	1473279982	150.0	150.0	
2	2.838	2.837	0.001	348639046	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.851	3.851	0.000	43599324	4.00	3.99	
2	3.746	3.746	0.000	10687729	4.00	3.91	
						RPD = 2.05	
5 Hexachlorobenzene							
1	4.232	4.232	0.000	50408254	4.00	4.00	
2	4.179	4.179	0.000	11843720	4.00	3.94	
						RPD = 1.46	
8 alpha-BHC							
1	4.402	4.402	0.000	67283578	4.00	4.03	
2	4.320	4.321	-0.001	14307480	4.00	3.97	
						RPD = 1.55	
9 gamma-BHC (Lindane)							
1	4.712	4.712	0.000	61711453	4.00	4.03	
2	4.651	4.652	-0.001	12985616	4.00	3.97	
						RPD = 1.58	
10 beta-BHC							
1	4.798	4.797	0.001	27570072	4.00	4.00	
2	4.732	4.732	0.000	6399213	4.00	3.93	
						RPD = 1.65	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.972	4.973	-0.001	65915279	4.00	4.02	
2	5.010	5.011	-0.001	13161015	4.00	3.97	
						RPD = 1.29	
15 Heptachlor							
1	5.182	5.183	-0.001	62263366	4.00	3.96	
2	5.067	5.067	0.000	12705798	4.00	3.94	
						RPD = 0.64	
16 Aldrin							M
1	5.468	5.467	0.001	61506570	4.00	3.97	M
2	5.373	5.372	0.001	12117568	4.00	3.93	
						RPD = 0.95	
18 Isodrin							
1	5.803	5.803	0.000	50192475	4.00	3.96	
2	5.747	5.747	0.000	10027080	4.00	3.93	
						RPD = 0.77	
21 Heptachlor epoxide							
1	6.101	6.101	0.000	57377311	4.00	3.93	
2	5.936	5.936	0.000	11529652	4.00	3.90	
						RPD = 0.70	
22 gamma-Chlordane							
1	6.245	6.246	-0.001	58808048	4.00	4.00	
2	6.143	6.143	0.000	11780419	4.00	3.93	
						RPD = 1.78	
23 alpha-Chlordane							
1	6.409	6.408	0.001	57404226	4.00	3.99	
2	6.318	6.318	0.000	11485496	4.00	3.92	
						RPD = 1.77	
24 4,4'-DDE							
1	6.503	6.504	-0.001	56703371	4.00	3.99	
2	6.538	6.537	0.001	11422598	4.00	3.93	
						RPD = 1.50	
25 Endosulfan I							
1	6.580	6.580	0.000	55727204	4.00	3.94	
2	6.387	6.387	0.000	11474152	4.00	3.89	
						RPD = 1.16	
27 Dieldrin							
1	6.864	6.864	0.000	59769469	4.00	3.96	
2	6.726	6.727	-0.001	11889081	4.00	3.92	
						RPD = 1.11	
30 Endrin							
1	7.133	7.132	0.001	48438787	4.00	3.99	
2	7.083	7.083	0.000	9438768	4.00	3.96	
						RPD = 0.81	
32 4,4'-DDD							
1	7.207	7.206	0.001	52953763	4.00	4.02	
2	7.226	7.227	-0.001	9807152	4.00	4.00	
						RPD = 0.40	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.382	7.382	0.000	51900672	4.00	3.95	
2	7.325	7.325	0.000	10397764	4.00	3.89	
						RPD = 1.50	
35 4,4'-DDT							
1	7.515	7.516	-0.001	44351007	4.00	4.03	
2	7.571	7.571	0.000	8521262	4.00	3.96	
						RPD = 1.65	
36 Endrin aldehyde							
1	7.835	7.836	-0.001	41923660	4.00	3.96	
2	7.697	7.697	0.000	8422036	4.00	3.92	
						RPD = 1.01	
37 Methoxychlor							
1	8.028	8.027	0.001	23156143	4.00	3.94	
2	8.289	8.289	0.000	4519499	4.00	3.89	
						RPD = 1.47	
38 Mirex							
1	8.174	8.174	0.000	36796915	4.00	3.98	
2	8.465	8.466	-0.001	7191747	4.00	4.77	
						RPD = 18.23	
39 Endosulfan sulfate							
1	8.284	8.285	-0.001	45892091	4.00	3.98	
2	7.987	7.987	0.000	9406004	4.00	3.90	
						RPD = 1.87	
40 Endrin ketone							
1	8.564	8.563	0.001	51293926	4.00	3.95	
2	8.515	8.514	0.001	10335104	4.00	3.90	
						RPD = 1.45	
$ 41 DCB Decachlorobiphenyl							
1	9.543	9.541	0.002	32850791	4.00	3.96	
2	9.721	9.722	-0.001	7147355	4.00	3.88	
						RPD = 2.12	
S 3 Endosulfan, Total							
1						11.9	
2						11.7	
						RPD = 1.51	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081IcalL1_00021	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

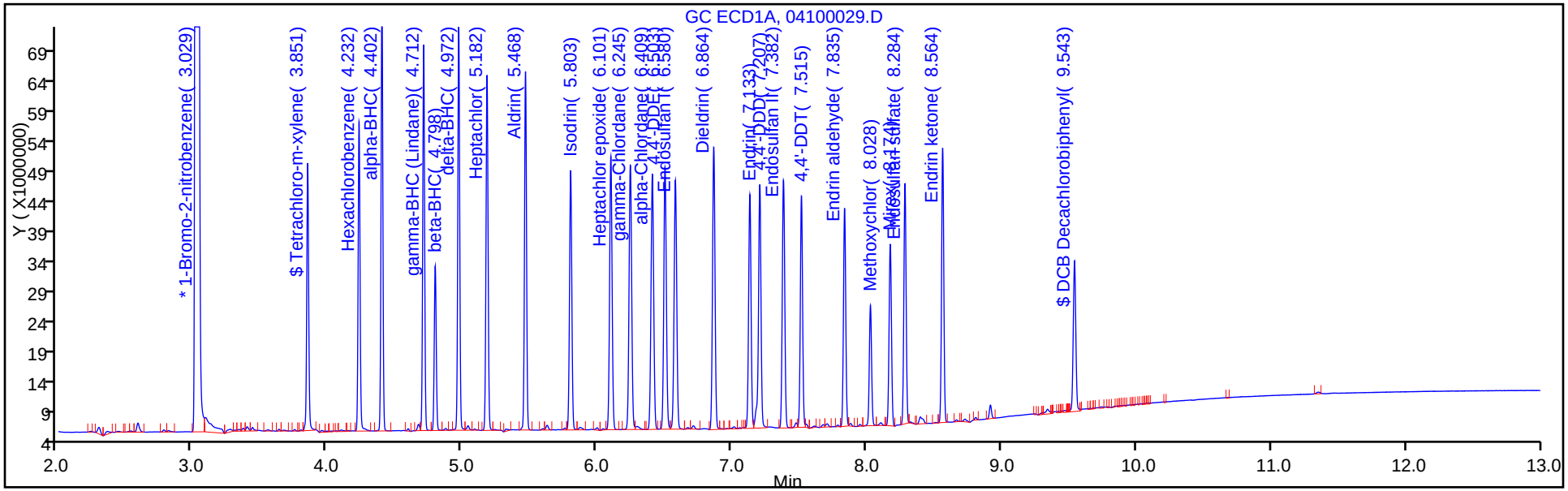
Report Date: 17-Apr-2017 13:22:15 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

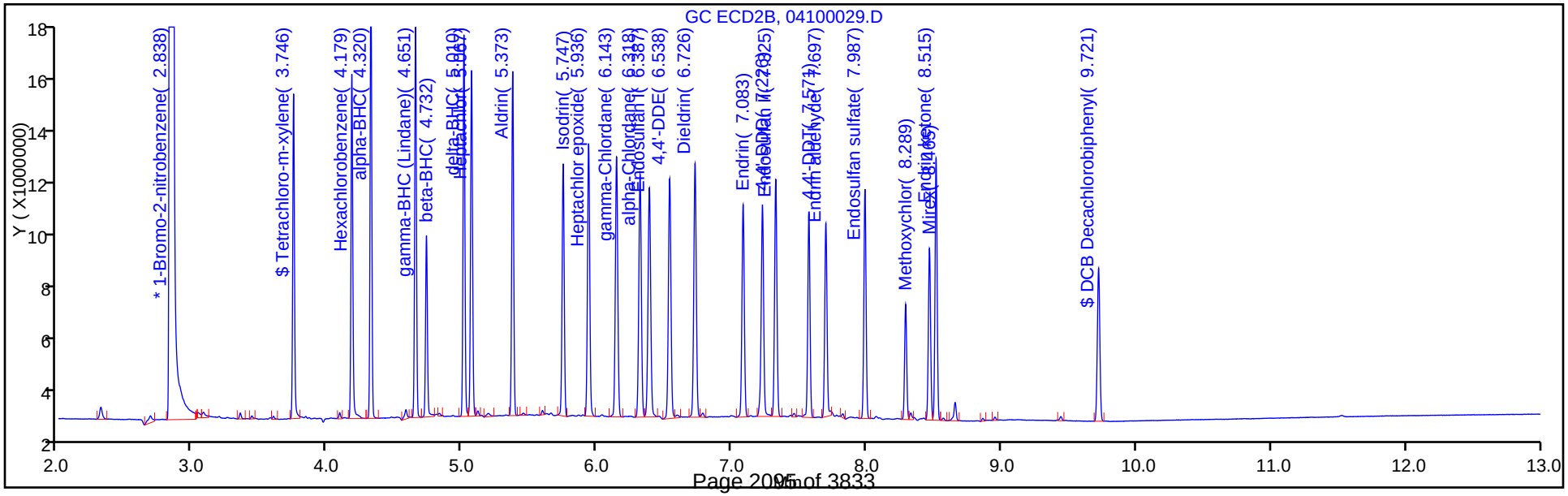
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Injection Date:	10-Apr-2017 18:46:48	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD1 AB			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Manual Integration/User Assign Peak Report

TestAmerica Denver

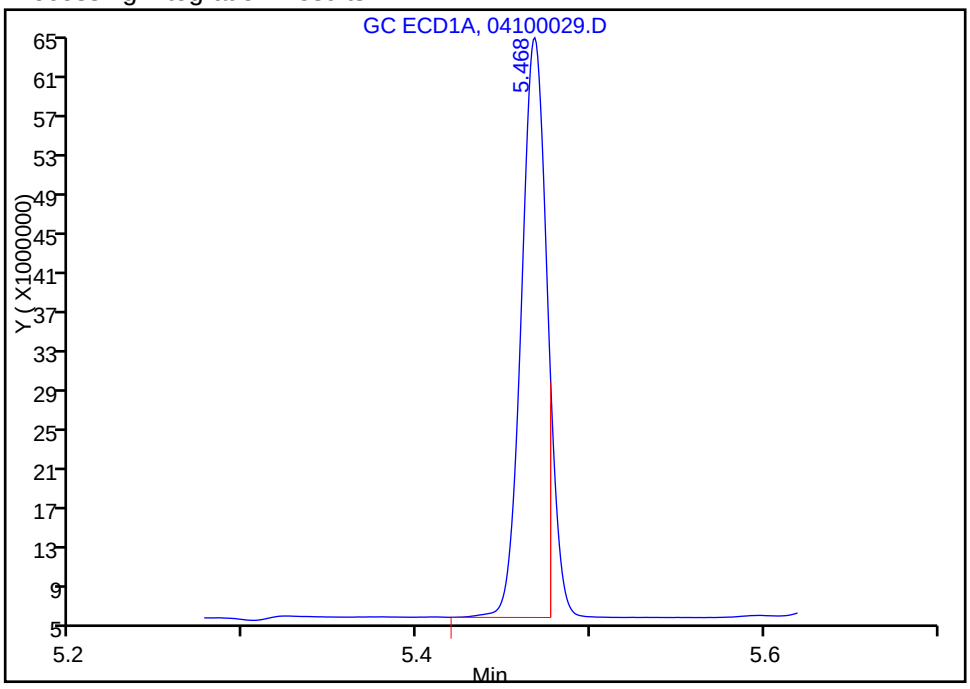
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D
Injection Date: 10-Apr-2017 18:46:48 Instrument ID: SGC_P1
Lims ID: STD1 AB
Client ID:
Operator ID: DAW ALS Bottle#: 27 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: P1 8081 IS Limit Group: GCSV - 8081A - IS
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

16 Aldrin, CAS: 309-00-2

Signal: 1

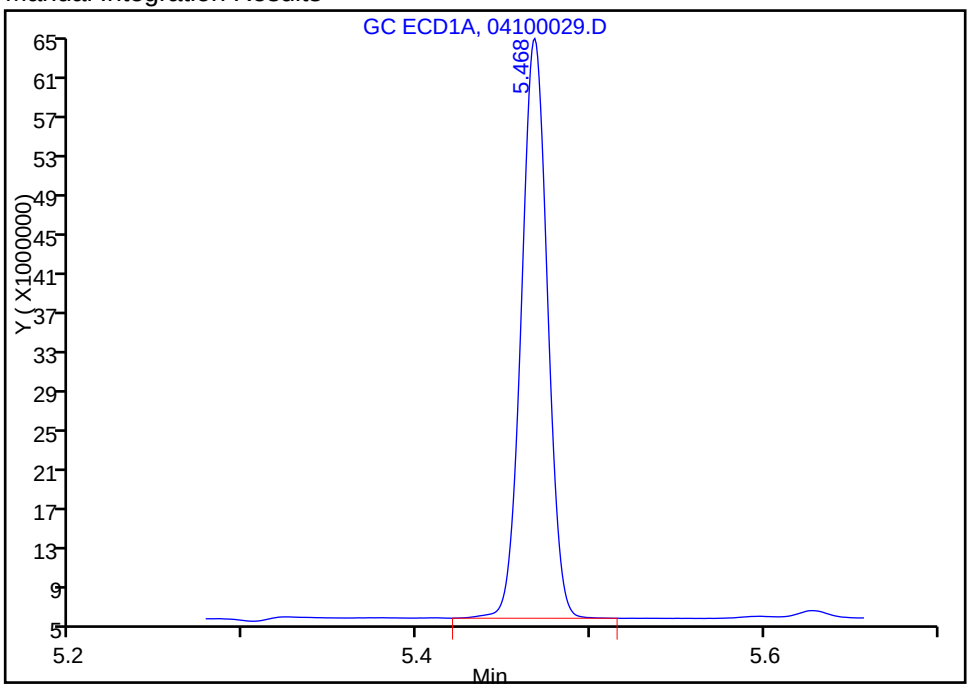
Processing Integration Results

RT: 5.47
Area: 55724276
Amount: 3.936104
Amount Units: ng/mL



Manual Integration Results

RT: 5.47
Area: 61506570
Amount: 3.972303
Amount Units: ng/mL



Reviewer: wellsd, 17-Apr-2017 13:22:13
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 17:22 Calibration End Date: 04/10/2017 18:46 Calibration ID: 28725

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-368670/29	04100029.D
Level 2	STD2 280-368670/28	04100028.D
Level 3	STD3 280-368670/27	04100027.D
Level 4	STD4 280-368670/26	04100026.D
Level 5	STD5 280-368670/25	04100025.D
Level 6	STD6 280-368670/24	04100024.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Hexachlorobenzene	1.2739 1.0374	1.1840	1.1088	1.0998	1.0304	Lin2	0.9424	1.0543							0.9990		0.9900
alpha-BHC	1.5389 1.5184	1.5632	1.5110	1.5441	1.4916	Lin2	0.1235	1.5190							1.0000		0.9900
gamma-BHC (Lindane)	1.3967 1.3388	1.3979	1.3385	1.3632	1.3129	Lin2	0.2806	1.3378							1.0000		0.9900
beta-BHC	0.6883 0.5473	0.6309	0.5768	0.5672	0.5387	Lin2	0.5957	0.5485							0.9990		0.9900
delta-BHC	1.4156 1.3796	1.4274	1.3730	1.4085	1.3566	Lin2	0.1791	1.3805							1.0000		0.9900
Heptachlor	1.3666 1.2090	1.3426	1.2503	1.2641	1.2076	Lin2	0.6350	1.2275							0.9990		0.9900
Aldrin	1.3034 1.1936	1.3117	1.2384	1.2525	1.1982	Lin2	0.4141	1.2197							0.9990		0.9900
Heptachlor epoxide	1.2401 1.0394	1.2138	1.1186	1.1146	1.0538	Lin2	0.7637	1.0749							0.9980		0.9900
gamma-Chlordane	1.2671 1.1064	1.2411	1.1512	1.1631	1.1114	Lin2	0.6350	1.1275							0.9990		0.9900
alpha-Chlordane	1.2354 1.0467	1.1973	1.1029	1.1079	1.0577	Lin2	0.7377	1.0714							0.9990		0.9900
Endosulfan I	1.2342 0.9861	1.1861	1.0779	1.0675	1.0047	Lin2	0.9510	1.0241							0.9970		0.9900
4,4'-DDE	1.2286 1.0772	1.2119	1.1358	1.1431	1.0936	Lin2	0.5602	1.1079							0.9990		0.9900
Dieldrin	1.2788 1.1028	1.2639	1.1762	1.1804	1.1210	Lin2	0.6502	1.1402							0.9980		0.9900
Endrin	1.0152 0.8988	0.9882	0.9097	0.9375	0.9283	Lin2	0.4387	0.9146							0.9990		0.9900
4,4'-DDD	1.0549 0.8661	0.9504	0.8806	0.9221	0.8896	Lin2	0.7158	0.8756							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 17:22 Calibration End Date: 04/10/2017 18:46 Calibration ID: 28725

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Endosulfan II	1.1184 0.8959	1.0848	0.9886	0.9815	0.9254	Lin2	0.8188	0.9400							0.9970		0.9900
4,4'-DDT	0.9166 0.8366	0.9018	0.8462	0.8677	0.8498	Lin2	0.3063	0.8477							1.0000		0.9900
Endrin aldehyde	0.9059 0.7298	0.8604	0.8167	0.7989	0.7500	Lin2	0.6286	0.7649							0.9980		0.9900
Endosulfan sulfate	1.0117 0.8162	0.9712	0.8826	0.8780	0.8386	Lin2	0.7446	0.8459							0.9980		0.9900
Methoxychlor	0.4861 0.3797	0.4659	0.4144	0.4104	0.3971	Lin2	0.4040	0.3964							0.9970		0.9900
Endrin ketone	1.1117 0.9244	1.0938	1.0103	1.0024	0.9485	Lin2	0.6839	0.9658							0.9980		0.9900
Tetrachloro-m-xylene (Surr)	1.1496 0.9919	1.1419	1.0498	1.0518	1.0022	Lin2	0.6117	1.0204							0.9980		0.9900
DCB Decachlorobiphenyl (Surr)	0.7688 0.5843	0.7253	0.6465	0.6347	0.6009	Lin2	0.7152	0.6084							0.9970		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 17:22 Calibration End Date: 04/10/2017 18:46 Calibration ID: 28725

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 280-368670/29	04100029.D
Level 2	STD2 280-368670/28	04100028.D
Level 3	STD3 280-368670/27	04100027.D
Level 4	STD4 280-368670/26	04100026.D
Level 5	STD5 280-368670/25	04100025.D
Level 6	STD6 280-368670/24	04100024.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Hexachlorobenzene	BNB	Lin2	11843720 253485608	26785004	63899697	124406761	183033435	4.00 100	10.0	25.0	50.0	75.0
alpha-BHC	BNB	Lin2	14307480 370997094	35363947	87083564	174668568	264970568	4.00 100	10.0	25.0	50.0	75.0
gamma-BHC (Lindane)	BNB	Lin2	12985616 327118196	31624492	77141534	154208805	233222609	4.00 100	10.0	25.0	50.0	75.0
beta-BHC	BNB	Lin2	6399213 133734765	14272625	33241659	64160741	95698762	4.00 100	10.0	25.0	50.0	75.0
delta-BHC	BNB	Lin2	13161015 337086663	32291959	79129370	159334546	240986417	4.00 100	10.0	25.0	50.0	75.0
Heptachlor	BNB	Lin2	12705798 295396332	30372278	72058218	142994349	214523974	4.00 100	10.0	25.0	50.0	75.0
Aldrin	BNB	Lin2	12117568 291642553	29674030	71370151	141683787	212851933	4.00 100	10.0	25.0	50.0	75.0
Heptachlor epoxide	BNB	Lin2	11529652 253962352	27458496	64465114	126082810	187200128	4.00 100	10.0	25.0	50.0	75.0
gamma-Chlordane	BNB	Lin2	11780419 270338491	28075644	66346703	131570155	197434182	4.00 100	10.0	25.0	50.0	75.0
alpha-Chlordane	BNB	Lin2	11485496 255751262	27086741	63562482	125325291	187880416	4.00 100	10.0	25.0	50.0	75.0
Endosulfan I	BNB	Lin2	11474152 240949933	26833467	62120738	120761574	178467168	4.00 100	10.0	25.0	50.0	75.0
4,4'-DDE	BNB	Lin2	11422598 263208174	27415435	65457244	129314457	194272112	4.00 100	10.0	25.0	50.0	75.0
Dieldrin	BNB	Lin2	11889081 269459295	28593555	67785138	133527150	199141205	4.00 100	10.0	25.0	50.0	75.0
Endrin	BNB	Lin2	9438768 219610884	22356175	52425236	106053471	164902943	4.00 100	10.0	25.0	50.0	75.0
4,4'-DDD	BNB	Lin2	9807152 211626206	21500580	50752321	104312966	158020255	4.00 100	10.0	25.0	50.0	75.0
Endosulfan II	BNB	Lin2	10397764 218906323	24540848	56976525	111026040	164394784	4.00 100	10.0	25.0	50.0	75.0

FORM VI
PESTICIDES BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 368670

SDG No.:

Instrument ID: SGC_P1 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/10/2017 17:22 Calibration End Date: 04/10/2017 18:46 Calibration ID: 28725

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
4,4'-DDT	BNB	Lin2	8521262 204416040	20401372	48768461	98154653	150950240	4.00 100	10.0	25.0	50.0	75.0
Endrin aldehyde	BNB	Lin2	8422036 178319421	19465371	47066343	90372120	133235574	4.00 100	10.0	25.0	50.0	75.0
Endosulfan sulfate	BNB	Lin2	9406004 199432581	21970039	50867703	99316939	148963202	4.00 100	10.0	25.0	50.0	75.0
Methoxychlor	BNB	Lin2	4519499 92769855	10538870	23885044	46429927	70535274	4.00 100	10.0	25.0	50.0	75.0
Endrin ketone	BNB	Lin2	10335104 225857141	24745189	58223219	113392553	168496296	4.00 100	10.0	25.0	50.0	75.0
Tetrachloro-m-xylene (Surr)	BNB	Lin2	10687729 242345914	25832556	60503421	118986099	178030117	4.00 100	10.0	25.0	50.0	75.0
DCB Decachlorobiphenyl (Surr)	BNB	Lin2	7147355 142760332	16408327	37258509	71798840	106744621	4.00 100	10.0	25.0	50.0	75.0

Curve Type Legend:
Lin2 = Linear 1/conc^2 ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100024.D
Lims ID: STD6 AB
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 10-Apr-2017 17:22:18 ALS Bottle#: 22 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD6 AB
Misc. Info.: 280-0057376-024
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:21:58 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						409.4	
2						398.2	
						RPD = 2.76	
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.029	-0.001	1558796871	150.0	150.0	
2	2.839	2.839	-0.001	366505847	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.852	3.851	0.001	1171889809	100.0	98.8	
2	3.746	3.746	0.000	242345914	100.0	96.6	
						RPD = 2.29	
5 Hexachlorobenzene							
1	4.233	4.232	0.001	1319385871	100.0	100.1	
2	4.179	4.179	0.000	253485608	100.0	97.5	
						RPD = 2.59	
8 alpha-BHC							
1	4.403	4.402	0.001	2139137586	100.0	102.9	
2	4.321	4.321	0.000	370997094	100.0	99.9	
						RPD = 2.95	
9 gamma-BHC (Lindane)							
1	4.713	4.712	0.001	1927755733	100.0	102.8	
2	4.652	4.652	0.000	327118196	100.0	99.9	
						RPD = 2.89	
10 beta-BHC							
1	4.798	4.797	0.001	730597628	100.0	101.5	
2	4.734	4.732	0.002	133734765	100.0	98.7	
						RPD = 2.84	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.973	4.973	0.000	2031436177	100.0	102.2	
2	5.011	5.011	0.000	337086663	100.0	99.8	
						RPD = 2.36	
15 Heptachlor							
1	5.183	5.183	0.000	1685369246	100.0	97.8	
2	5.068	5.067	0.001	295396332	100.0	98.0	
						RPD = 0.17	
16 Aldrin							
1	5.468	5.467	0.001	1731342352	100.0	98.4	
2	5.374	5.372	0.002	291642553	100.0	97.5	
						RPD = 0.89	
18 Isodrin							
1	5.803	5.803	0.000	1311049624	100.0	97.6	
2	5.749	5.747	0.002	224390799	100.0	96.6	
						RPD = 1.07	
21 Heptachlor epoxide							
1	6.102	6.101	0.001	1453989120	100.0	96.2	
2	5.937	5.936	0.001	253962352	100.0	96.0	
						RPD = 0.18	
22 gamma-Chlordane							
1	6.246	6.246	0.000	1680849049	100.0	100.2	
2	6.144	6.143	0.001	270338491	100.0	97.6	
						RPD = 2.69	
23 alpha-Chlordane							
1	6.410	6.408	0.002	1594072207	100.0	99.6	
2	6.319	6.318	0.001	255751262	100.0	97.0	
						RPD = 2.60	
24 4,4'-DDE							
1	6.503	6.504	-0.001	1627815932	100.0	98.7	
2	6.539	6.537	0.002	263208174	100.0	96.7	
						RPD = 1.98	
25 Endosulfan I							
1	6.580	6.580	0.000	1392008263	100.0	95.7	
2	6.388	6.387	0.001	240949933	100.0	95.4	
						RPD = 0.32	
27 Dieldrin							
1	6.865	6.864	0.001	1581813705	100.0	96.3	
2	6.728	6.727	0.001	269459295	100.0	96.1	
						RPD = 0.13	
30 Endrin							
1	7.133	7.132	0.001	1304915588	100.0	97.9	
2	7.084	7.083	0.001	219610884	100.0	97.8	
						RPD = 0.07	
32 4,4'-DDD							
1	7.206	7.206	0.000	1376055631	100.0	99.3	
2	7.227	7.227	0.000	211626206	100.0	98.1	
						RPD = 1.21	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.383	7.382	0.001	1312067628	100.0	95.4	
2	7.325	7.325	0.000	218906323	100.0	94.4	
						RPD = 1.01	
35 4,4'-DDT							
1	7.515	7.516	-0.001	1340252548	100.0	99.9	
2	7.572	7.571	0.001	204416040	100.0	98.3	
						RPD = 1.61	
36 Endrin aldehyde							
1	7.836	7.836	0.000	1071395989	100.0	96.3	
2	7.697	7.697	0.000	178319421	100.0	94.6	
						RPD = 1.75	
37 Methoxychlor							
1	8.027	8.027	0.000	555725549	100.0	96.0	
2	8.289	8.289	0.000	92769855	100.0	94.8	
						RPD = 1.29	
38 Mirex							
1	8.173	8.174	-0.001	912564075	100.0	98.2	
2	8.467	8.466	0.001	137845186	100.0	87.1	
						RPD = 12.07	
39 Endosulfan sulfate							
1	8.284	8.285	-0.001	1247773585	100.0	97.8	
2	7.988	7.987	0.001	199432581	100.0	95.6	
						RPD = 2.29	
40 Endrin ketone							
1	8.563	8.563	0.000	1363046988	100.0	96.4	
2	8.515	8.514	0.001	225857141	100.0	95.0	
						RPD = 1.43	
$ 41 DCB Decachlorobiphenyl							
1	9.542	9.541	0.001	785371404	100.0	97.6	
2	9.721	9.722	-0.001	142760332	100.0	94.9	
						RPD = 2.90	
S 3 Endosulfan, Total							
1						288.9	
2						285.4	
						RPD = 1.21	

Reagents:

8081IcalL6_00021	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

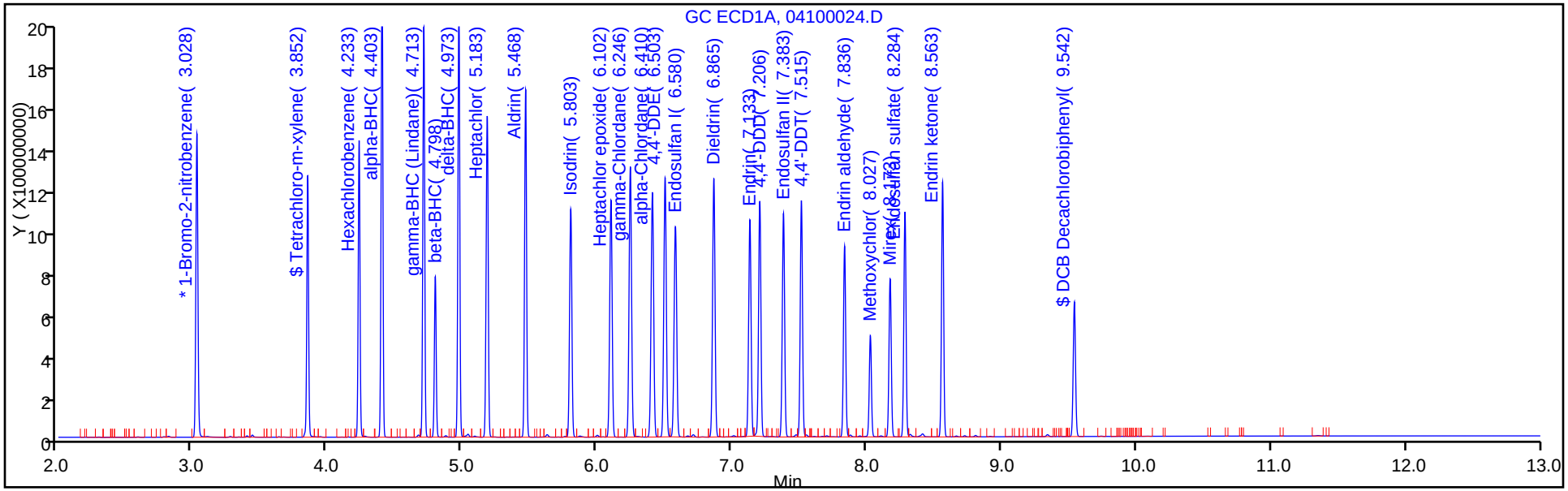
Report Date: 17-Apr-2017 13:22:00 Chrom Revision: 2.2 13-Mar-2017 15:50:30

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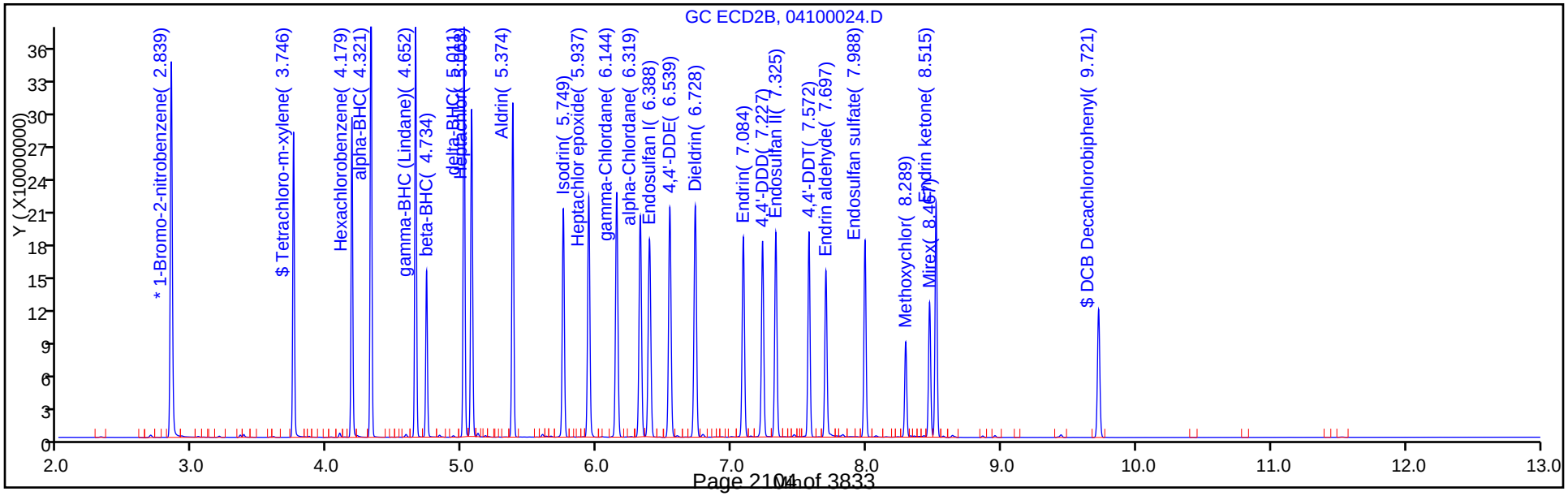
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100024.D

Injection Date:	10-Apr-2017 17:22:18	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD6 AB			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100025.D
Lims ID: STD5 AB
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 10-Apr-2017 17:39:16 ALS Bottle#: 23 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD5 AB
Misc. Info.: 280-0057376-025
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:01 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						296.1	
2						293.1	
						RPD = 1.03	
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.029	-0.001	1517029565	150.0	150.0	
2	2.838	2.839	-0.001	355277678	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.851	3.851	0.000	856099240	75.0	74.2	
2	3.746	3.746	0.000	178030117	75.0	73.1	
						RPD = 1.57	
5 Hexachlorobenzene							
1	4.233	4.232	0.001	953751155	75.0	74.3	
2	4.179	4.179	0.000	183033435	75.0	72.4	
						RPD = 2.61	
8 alpha-BHC							
1	4.403	4.402	0.001	1500963941	75.0	74.3	
2	4.321	4.321	0.000	264970568	75.0	73.6	
						RPD = 1.05	
9 gamma-BHC (Lindane)							
1	4.713	4.712	0.001	1349509916	75.0	74.1	
2	4.652	4.652	0.000	233222609	75.0	73.4	
						RPD = 0.96	
10 beta-BHC							
1	4.798	4.797	0.001	516930048	75.0	73.8	
2	4.733	4.732	0.001	95698762	75.0	72.6	
						RPD = 1.68	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.973	4.973	0.000	1426546662	75.0	73.9	
2	5.011	5.011	0.000	240986417	75.0	73.6	
						RPD = 0.42	
15 Heptachlor							
1	5.183	5.183	0.000	1231615698	75.0	73.5	
2	5.068	5.067	0.001	214523974	75.0	73.3	
						RPD = 0.28	
16 Aldrin							
1	5.468	5.467	0.001	1259887652	75.0	73.6	
2	5.374	5.372	0.002	212851933	75.0	73.3	
						RPD = 0.41	
18 Isodrin							
1	5.804	5.803	0.001	962034429	75.0	73.6	
2	5.748	5.747	0.001	165503258	75.0	73.3	
						RPD = 0.37	
21 Heptachlor epoxide							
1	6.102	6.101	0.001	1074417824	75.0	73.0	
2	5.937	5.936	0.001	187200128	75.0	72.8	
						RPD = 0.24	
22 gamma-Chlordane							
1	6.246	6.246	0.000	1213169134	75.0	74.4	
2	6.144	6.143	0.001	197434182	75.0	73.4	
						RPD = 1.41	
23 alpha-Chlordane							
1	6.409	6.408	0.001	1157453219	75.0	74.3	
2	6.319	6.318	0.001	187880416	75.0	73.4	
						RPD = 1.33	
24 4,4'-DDE							
1	6.504	6.504	0.000	1192992637	75.0	74.4	
2	6.539	6.537	0.002	194272112	75.0	73.5	
						RPD = 1.16	
25 Endosulfan I							
1	6.581	6.580	0.001	1039014644	75.0	73.3	
2	6.388	6.387	0.001	178467168	75.0	72.6	
						RPD = 0.96	
27 Dieldrin							
1	6.866	6.864	0.002	1183080417	75.0	74.0	
2	6.727	6.727	0.000	199141205	75.0	73.2	
						RPD = 1.15	
30 Endrin							
1	7.133	7.132	0.001	984991714	75.0	75.9	
2	7.084	7.083	0.001	164902943	75.0	75.6	
						RPD = 0.39	
32 4,4'-DDD							
1	7.208	7.206	0.002	1008545196	75.0	74.8	
2	7.226	7.227	-0.001	158020255	75.0	75.4	
						RPD = 0.80	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.383	7.382	0.001	986071296	75.0	73.7	
2	7.325	7.325	0.000	164394784	75.0	73.0	
						RPD = 0.95	
35 4,4'-DDT							
1	7.517	7.516	0.001	992108573	75.0	76.1	
2	7.572	7.571	0.001	150950240	75.0	74.8	
						RPD = 1.75	
36 Endrin aldehyde							
1	7.837	7.836	0.001	796638608	75.0	73.5	
2	7.697	7.697	0.000	133235574	75.0	72.7	
						RPD = 1.12	
37 Methoxychlor							
1	8.028	8.027	0.001	422779700	75.0	75.0	
2	8.289	8.289	0.000	70535274	75.0	74.1	
						RPD = 1.16	
38 Mirex							
1	8.174	8.174	0.000	676105049	75.0	74.7	
2	8.466	8.466	0.000	103451263	75.0	67.4	
						RPD = 10.32	
39 Endosulfan sulfate							
1	8.284	8.285	-0.001	924054452	75.0	74.5	
2	7.987	7.987	0.000	148963202	75.0	73.5	
						RPD = 1.37	
40 Endrin ketone							
1	8.564	8.563	0.001	1014092028	75.0	73.7	
2	8.515	8.514	0.001	168496296	75.0	73.0	
						RPD = 1.02	
$ 41 DCB Decachlorobiphenyl							
1	9.543	9.541	0.002	583329943	75.0	74.4	
2	9.722	9.722	0.000	106744621	75.0	72.9	
						RPD = 2.08	
S 3 Endosulfan, Total							
1						221.5	
2						219.1	
						RPD = 1.09	

Reagents:

8081IcalL5_00022	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

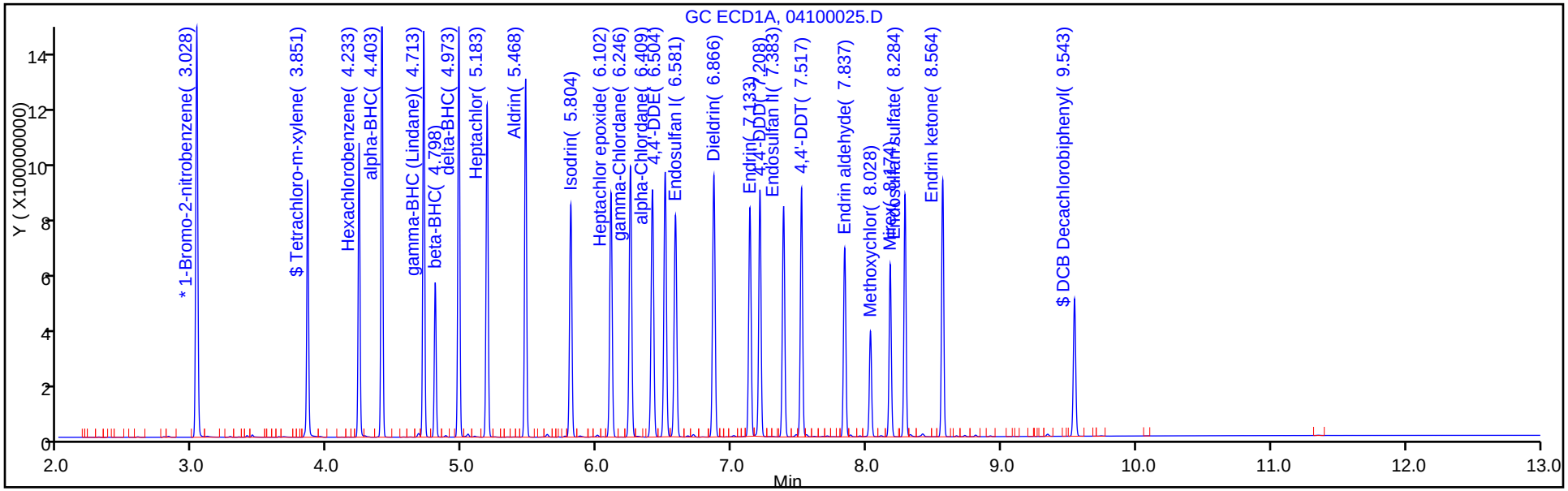
Report Date: 17-Apr-2017 13:22:03 Chrom Revision: 2.2 13-Mar-2017 15:50:30

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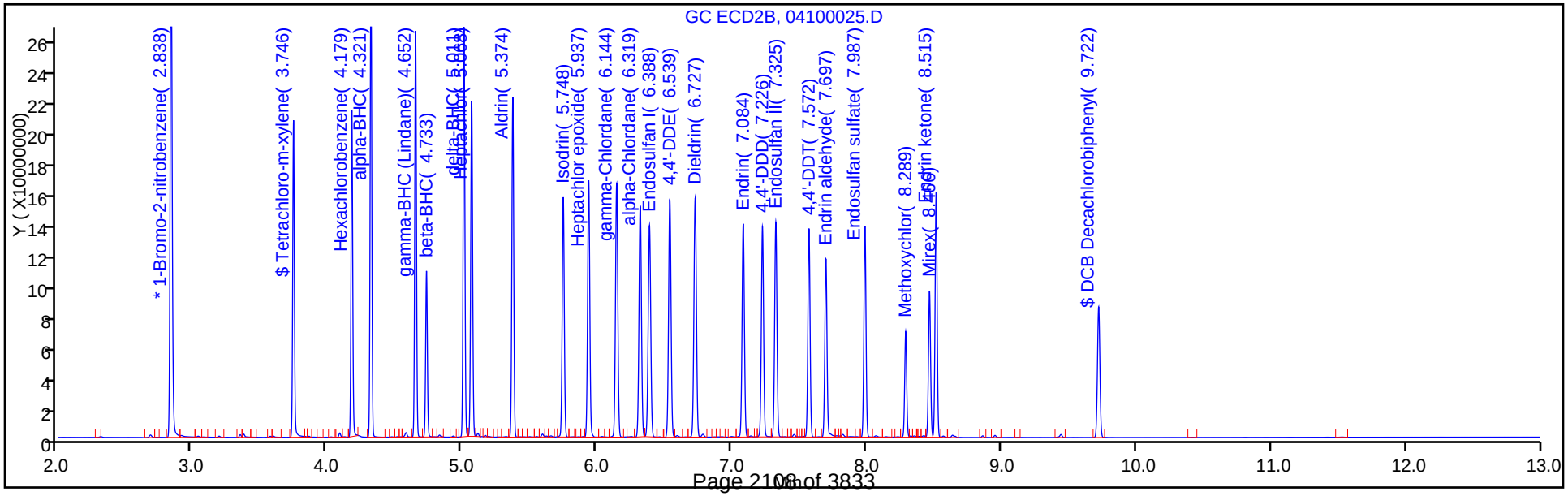
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100025.D

Injection Date:	10-Apr-2017 17:39:16	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD5 AB			Worklist Smp#:	25
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100026.D
Lims ID: STD4 AB
Client ID:
Sample Type: ICIS Calib Level: 4
Inject. Date: 10-Apr-2017 17:56:08 ALS Bottle#: 24 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD4 AB
Misc. Info.: 280-0057376-026
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:04 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:50:49

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.028	0.000	1451506563	150.0	150.0	
2	2.837	2.837	0.000	339364371	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.851	3.851	0.000	562387248	50.0	51.0	
2	3.746	3.746	0.000	118986099	50.0	50.9	
						RPD = 0.09	
5 Hexachlorobenzene							
1	4.232	4.232	0.000	625478519	50.0	50.9	
2	4.179	4.179	0.000	124406761	50.0	51.3	
						RPD = 0.67	
8 alpha-BHC							
1	4.402	4.402	0.000	973305622	50.0	50.6	
2	4.321	4.321	0.000	174668568	50.0	50.7	
						RPD = 0.31	
9 gamma-BHC (Lindane)							
1	4.712	4.712	0.000	878541538	50.0	50.6	
2	4.652	4.652	0.000	154208805	50.0	50.7	
						RPD = 0.28	
10 beta-BHC							
1	4.797	4.797	0.000	339126643	50.0	50.6	
2	4.732	4.732	0.000	64160741	50.0	50.6	
						RPD = 0.06	
12 delta-BHC							
1	4.973	4.973	0.000	934862866	50.0	50.8	
2	5.011	5.011	0.000	159334546	50.0	50.9	
						RPD = 0.23	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
15 Heptachlor							M
1	5.183	5.183	0.000	819438517	50.0	51.1	M
2	5.067	5.067	0.000	142994349	50.0	51.0	
						RPD = 0.32	
16 Aldrin							
1	5.467	5.467	0.000	834572536	50.0	51.1	
2	5.372	5.372	0.000	141683787	50.0	51.0	
						RPD = 0.13	
18 Isodrin							
1	5.803	5.803	0.000	640783415	50.0	51.2	
2	5.747	5.747	0.000	110988794	50.0	51.3	
						RPD = 0.10	
21 Heptachlor epoxide							
1	6.101	6.101	0.000	724013320	50.0	51.4	
2	5.936	5.936	0.000	126082810	50.0	51.1	
						RPD = 0.48	
22 gamma-Chlordane							
1	6.246	6.246	0.000	795275882	50.0	51.1	
2	6.143	6.143	0.000	131570155	50.0	51.0	
						RPD = 0.12	
23 alpha-Chlordane							
1	6.408	6.408	0.000	759869729	50.0	51.1	
2	6.318	6.318	0.000	125325291	50.0	51.0	
						RPD = 0.10	
24 4,4'-DDE							
1	6.504	6.504	0.000	786120791	50.0	51.3	
2	6.537	6.537	0.000	129314457	50.0	51.1	
						RPD = 0.51	
25 Endosulfan I							
1	6.580	6.580	0.000	701131485	50.0	51.7	
2	6.387	6.387	0.000	120761574	50.0	51.2	
						RPD = 0.97	
27 Dieldrin							
1	6.864	6.864	0.000	789092288	50.0	51.6	
2	6.727	6.727	0.000	133527150	50.0	51.2	
						RPD = 0.85	
30 Endrin							
1	7.132	7.132	0.000	635546942	50.0	51.3	
2	7.083	7.083	0.000	106053471	50.0	50.8	
						RPD = 0.95	
32 4,4'-DDD							
1	7.206	7.206	0.000	664379086	50.0	51.5	
2	7.227	7.227	0.000	104312966	50.0	51.8	
						RPD = 0.71	
34 Endosulfan II							
1	7.382	7.382	0.000	663138940	50.0	51.8	
2	7.325	7.325	0.000	111026040	50.0	51.3	
						RPD = 0.82	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
35 4,4'-DDT							
1	7.516	7.516	0.000	633475863	50.0	51.0	
2	7.571	7.571	0.000	98154653	50.0	50.8	
						RPD = 0.35	
36 Endrin aldehyde							
1	7.836	7.836	0.000	534341175	50.0	51.5	
2	7.697	7.697	0.000	90372120	50.0	51.4	
						RPD = 0.28	
37 Methoxychlor							
1	8.027	8.027	0.000	275387035	50.0	50.9	
2	8.289	8.289	0.000	46429927	50.0	50.7	
						RPD = 0.37	
38 Mirex							
1	8.174	8.174	0.000	443577236	50.0	51.2	
2	8.466	8.466	0.000	69614170	50.0	47.5	
						RPD = 7.49	
39 Endosulfan sulfate							
1	8.285	8.285	0.000	607504059	50.0	51.2	
2	7.987	7.987	0.000	99316939	50.0	51.0	
						RPD = 0.43	
40 Endrin ketone							
1	8.563	8.563	0.000	676344945	50.0	51.4	
2	8.514	8.514	0.000	113392553	50.0	51.2	
						RPD = 0.43	
$ 41 DCB Decachlorobiphenyl							
1	9.541	9.541	0.000	381877964	50.0	50.8	
2	9.722	9.722	0.000	71798840	50.0	51.0	
						RPD = 0.34	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081IcalL4_00024	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

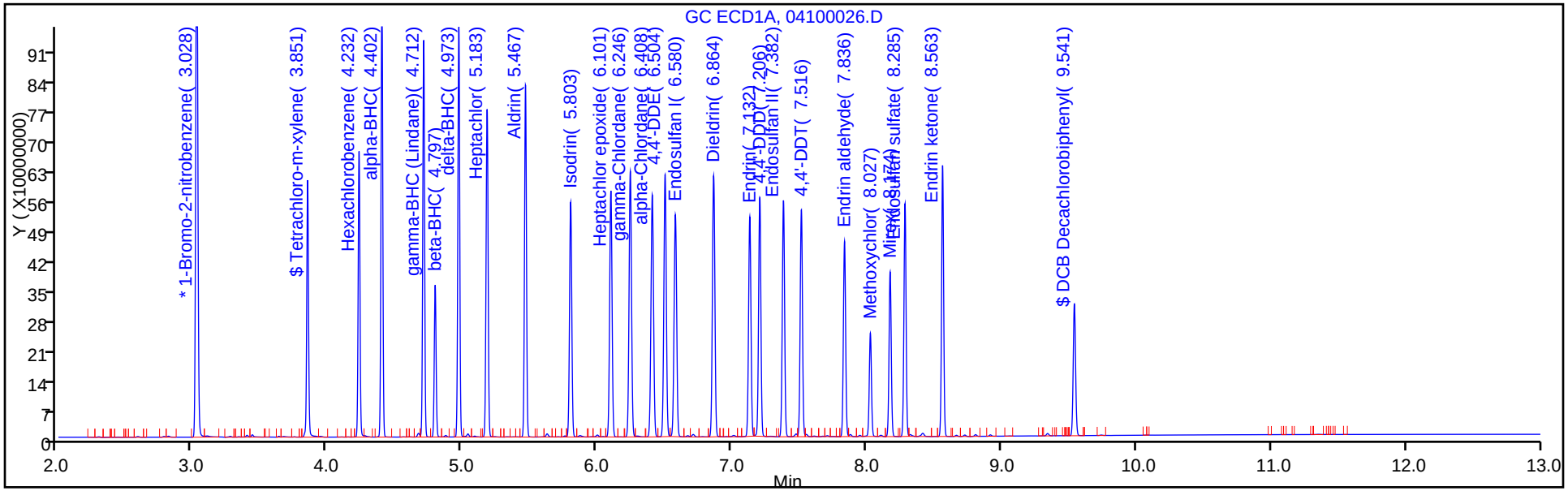
Report Date: 17-Apr-2017 13:22:07 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

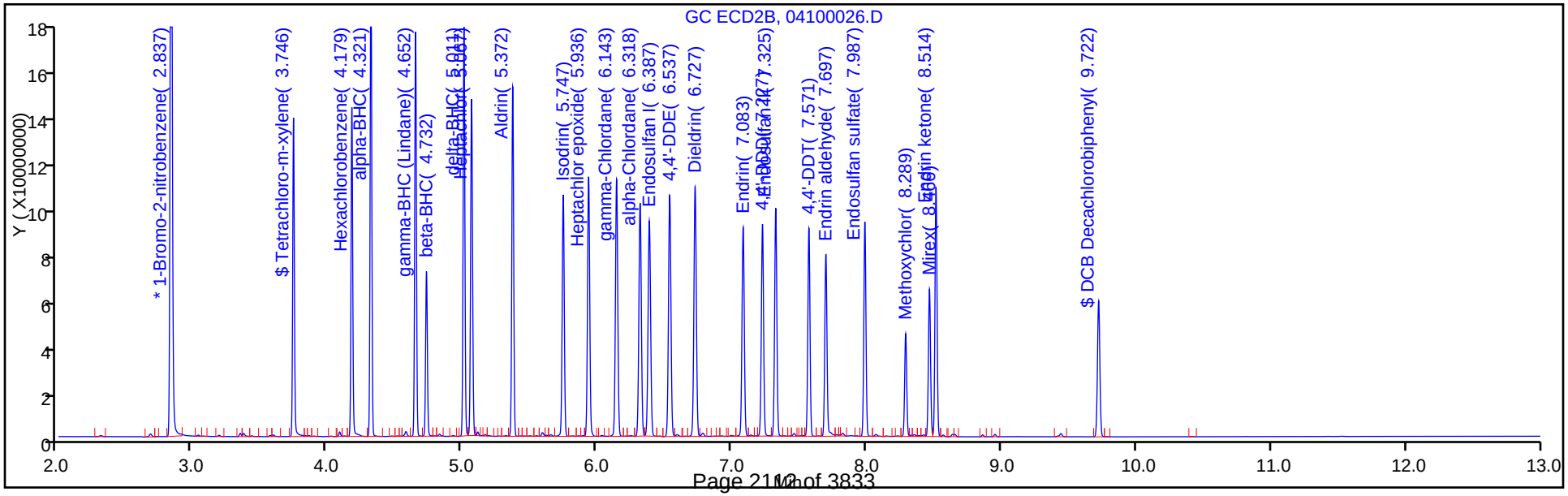
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100026.D

Injection Date:	10-Apr-2017 17:56:08	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD4 AB			Worklist Smp#:	26
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100027.D
Lims ID: STD3 AB
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 10-Apr-2017 18:13:01 ALS Bottle#: 25 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD3 AB
Misc. Info.: 280-0057376-027
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:07 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						98.0	
2						99.5	
						RPD = 1.58	
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.028	0.000	1446267602	150.0	150.0	
2	2.838	2.837	0.000	345787317	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.851	3.851	0.000	273789743	25.0	25.0	
2	3.746	3.746	0.000	60503421	25.0	25.1	
						RPD = 0.63	
5 Hexachlorobenzene							
1	4.233	4.232	0.001	302011012	25.0	24.7	
2	4.179	4.179	0.000	63899697	25.0	25.4	
						RPD = 2.99	
8 alpha-BHC							
1	4.402	4.402	0.000	460689005	25.0	24.4	
2	4.320	4.321	-0.001	87083564	25.0	24.8	
						RPD = 1.73	
9 gamma-BHC (Lindane)							
1	4.712	4.712	0.000	417761684	25.0	24.4	
2	4.651	4.652	-0.001	77141534	25.0	24.8	
						RPD = 1.46	
10 beta-BHC							
1	4.798	4.797	0.001	164419828	25.0	24.6	
2	4.732	4.732	0.000	33241659	25.0	25.2	
						RPD = 2.48	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.973	4.973	0.000	445756739	25.0	24.6	
2	5.010	5.011	-0.001	79129370	25.0	24.7	
						RPD = 0.65	
15 Heptachlor							
1	5.183	5.183	0.000	401076446	25.0	25.2	
2	5.067	5.067	0.000	72058218	25.0	24.9	
						RPD = 0.98	
16 Aldrin							
1	5.468	5.467	0.001	406498125	25.0	25.1	
2	5.372	5.372	0.000	71370151	25.0	25.0	
						RPD = 0.27	
18 Isodrin							
1	5.803	5.803	0.000	312423563	25.0	25.1	
2	5.747	5.747	0.000	56024647	25.0	25.1	
						RPD = 0.05	
21 Heptachlor epoxide							
1	6.101	6.101	0.000	357575852	25.0	25.4	
2	5.935	5.936	-0.001	64465114	25.0	25.3	
						RPD = 0.47	
22 gamma-Chlordane							
1	6.246	6.246	0.000	378143079	25.0	24.5	
2	6.143	6.143	0.000	66346703	25.0	25.0	
						RPD = 1.74	
23 alpha-Chlordane							
1	6.408	6.408	0.000	364243044	25.0	24.7	
2	6.318	6.318	0.000	63562482	25.0	25.0	
						RPD = 1.49	
24 4,4'-DDE							
1	6.503	6.504	-0.001	374471464	25.0	24.7	
2	6.537	6.537	0.000	65457244	25.0	25.1	
						RPD = 1.55	
25 Endosulfan I							
1	6.579	6.580	-0.001	342859423	25.0	25.3	
2	6.386	6.387	-0.001	62120738	25.0	25.4	
						RPD = 0.30	
27 Dieldrin							
1	6.864	6.864	0.000	382209842	25.0	25.2	
2	6.726	6.727	-0.001	67785138	25.0	25.2	
						RPD = 0.24	
30 Endrin							
1	7.132	7.132	0.000	300398177	25.0	24.4	
2	7.083	7.083	0.000	52425236	25.0	24.4	
						RPD = 0.05	
32 4,4'-DDD							
1	7.206	7.206	0.000	317389076	25.0	24.7	
2	7.225	7.227	-0.002	50752321	25.0	24.3	
						RPD = 1.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.383	7.382	0.001	324094271	25.0	25.4	
2	7.324	7.325	-0.001	56976525	25.0	25.4	
						RPD = 0.23	
35 4,4'-DDT							
1	7.515	7.516	-0.001	296830977	25.0	24.3	
2	7.571	7.571	0.000	48768461	25.0	24.6	
						RPD = 1.32	
36 Endrin aldehyde							
1	7.836	7.836	0.000	262263031	25.0	25.4	
2	7.696	7.697	-0.001	47066343	25.0	25.9	
						RPD = 1.94	
37 Methoxychlor							
1	8.028	8.027	0.001	135571591	25.0	25.0	
2	8.289	8.289	0.000	23885044	25.0	25.1	
						RPD = 0.41	
38 Mirex							
1	8.174	8.174	0.000	213842758	25.0	24.6	
2	8.466	8.466	0.000	36419123	25.0	24.4	
						RPD = 1.08	
39 Endosulfan sulfate							
1	8.284	8.285	-0.001	293004864	25.0	24.9	
2	7.986	7.987	-0.001	50867703	25.0	25.2	
						RPD = 1.25	
40 Endrin ketone							
1	8.563	8.563	0.000	331024497	25.0	25.3	
2	8.514	8.514	0.000	58223219	25.0	25.4	
						RPD = 0.51	
$ 41 DCB Decachlorobiphenyl							
1	9.542	9.541	0.001	188781011	25.0	25.0	
2	9.721	9.722	-0.001	37258509	25.0	25.4	
						RPD = 1.47	
S 3 Endosulfan, Total							
1						75.6	
2						76.0	
						RPD = 0.59	

Reagents:

8081IcalL3_00022	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

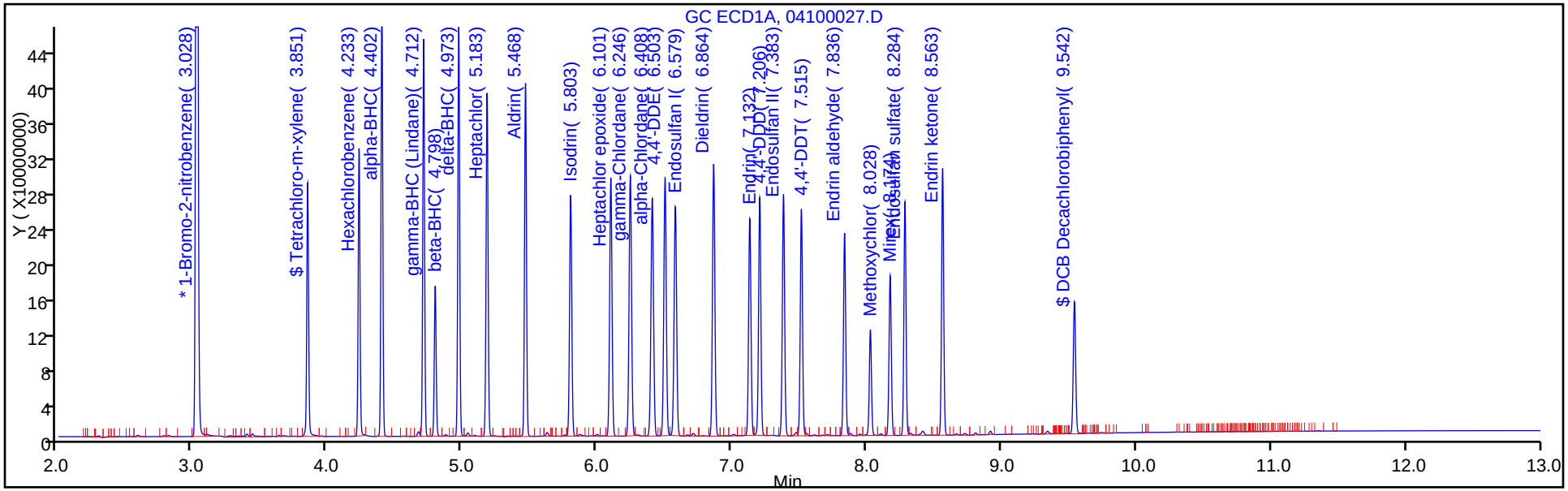
Report Date: 17-Apr-2017 13:22:09 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

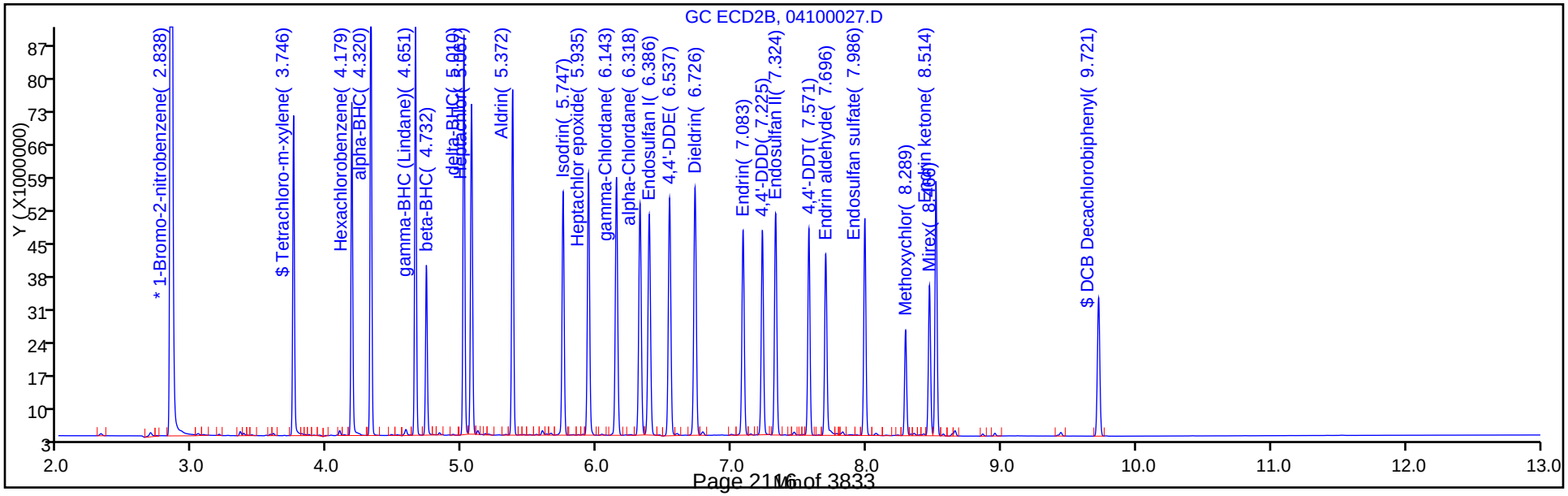
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100027.D

Injection Date:	10-Apr-2017 18:13:01	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD3 AB			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100028.D
Lims ID: STD2 AB
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 10-Apr-2017 18:29:51 ALS Bottle#: 26 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD2 AB
Misc. Info.: 280-0057376-028
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:11 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:52:26

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						39.7	
2						41.1	
						RPD = 3.49	
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.028	0.000	1429998779	150.0	150.0	
2	2.838	2.837	0.000	339336707	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.850	3.851	-0.001	108494839	10.0	10.1	
2	3.746	3.746	0.000	25832556	10.0	10.6	
						RPD = 5.09	
5 Hexachlorobenzene							
1	4.232	4.232	0.000	122073382	10.0	10.0	
2	4.179	4.179	0.000	26785004	10.0	10.3	
						RPD = 2.83	
8 alpha-BHC							
1	4.401	4.402	-0.001	177015109	10.0	9.85	
2	4.321	4.321	0.000	35363947	10.0	10.2	
						RPD = 3.56	
9 gamma-BHC (Lindane)							
1	4.711	4.712	-0.001	160851275	10.0	9.87	
2	4.652	4.652	0.000	31624492	10.0	10.2	
						RPD = 3.72	
10 beta-BHC							
1	4.797	4.797	0.000	66733070	10.0	10.1	
2	4.733	4.732	0.001	14272625	10.0	10.4	
						RPD = 3.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.971	4.973	-0.002	171519904	10.0	9.89	
2	5.011	5.011	0.000	32291959	10.0	10.2	
						RPD = 3.19	
15 Heptachlor							
1	5.181	5.183	-0.002	159432609	10.0	10.2	
2	5.068	5.067	0.001	30372278	10.0	10.4	
						RPD = 1.99	
16 Aldrin							
1	5.467	5.467	0.000	159758366	10.0	10.2	
2	5.373	5.372	0.001	29674030	10.0	10.4	
						RPD = 2.55	
18 Isodrin							
1	5.803	5.803	0.000	126129601	10.0	10.2	
2	5.748	5.747	0.001	23681593	10.0	10.4	
						RPD = 1.95	
21 Heptachlor epoxide							
1	6.100	6.101	-0.001	144999613	10.0	10.4	
2	5.936	5.936	0.000	27458496	10.0	10.6	
						RPD = 1.96	
22 gamma-Chlordane							M
1	6.245	6.246	-0.001	149983574	10.0	10.0	
2	6.144	6.143	0.001	28075644	10.0	10.4	M
						RPD = 4.11	
23 alpha-Chlordane							
1	6.408	6.408	0.000	145056359	10.0	10.1	
2	6.319	6.318	0.001	27086741	10.0	10.5	
						RPD = 4.12	
24 4,4'-DDE							
1	6.503	6.504	-0.001	147537531	10.0	10.1	
2	6.538	6.537	0.001	27415435	10.0	10.4	
						RPD = 3.46	
25 Endosulfan I							
1	6.579	6.580	-0.001	139542986	10.0	10.3	
2	6.387	6.387	0.000	26833467	10.0	10.7	
						RPD = 2.92	
27 Dieldrin							
1	6.863	6.864	-0.001	152444419	10.0	10.2	
2	6.726	6.727	-0.001	28593555	10.0	10.5	
						RPD = 2.87	
30 Endrin							
1	7.132	7.132	0.000	121790203	10.0	10.1	
2	7.084	7.083	0.001	22356175	10.0	10.3	
						RPD = 2.25	
32 4,4'-DDD							
1	7.205	7.206	-0.001	126102765	10.0	9.90	
2	7.226	7.227	-0.001	21500580	10.0	10.0	
						RPD = 1.42	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.383	7.382	0.001	130132659	10.0	10.3	
2	7.324	7.325	-0.001	24540848	10.0	10.7	
						RPD = 3.80	
35 4,4'-DDT							
1	7.514	7.516	-0.002	115302783	10.0	9.87	
2	7.571	7.571	0.000	20401372	10.0	10.3	
						RPD = 4.04	
36 Endrin aldehyde							M
1	7.835	7.836	-0.001	104654709	10.0	10.2	
2	7.697	7.697	0.000	19465371	10.0	10.4	M
						RPD = 1.99	
37 Methoxychlor							
1	8.026	8.027	-0.001	56417993	10.0	10.4	
2	8.289	8.289	0.000	10538870	10.0	10.7	
						RPD = 3.59	
38 Mirex							
1	8.174	8.174	0.000	88404883	10.0	10.2	
2	8.466	8.466	0.000	16304012	10.0	11.1	
						RPD = 8.90	
39 Endosulfan sulfate							
1	8.283	8.285	-0.002	116790690	10.0	10.1	
2	7.986	7.987	-0.001	21970039	10.0	10.6	
						RPD = 4.43	
40 Endrin ketone							
1	8.563	8.563	0.000	131548129	10.0	10.2	
2	8.514	8.514	0.000	24745189	10.0	10.6	
						RPD = 3.56	
$ 41 DCB Decachlorobiphenyl							
1	9.541	9.541	0.000	78010565	10.0	10.2	
2	9.720	9.722	-0.002	16408327	10.0	10.7	
						RPD = 4.85	
S 3 Endosulfan, Total							
1						30.8	
2						31.9	
						RPD = 3.71	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081IcalL2_00021	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

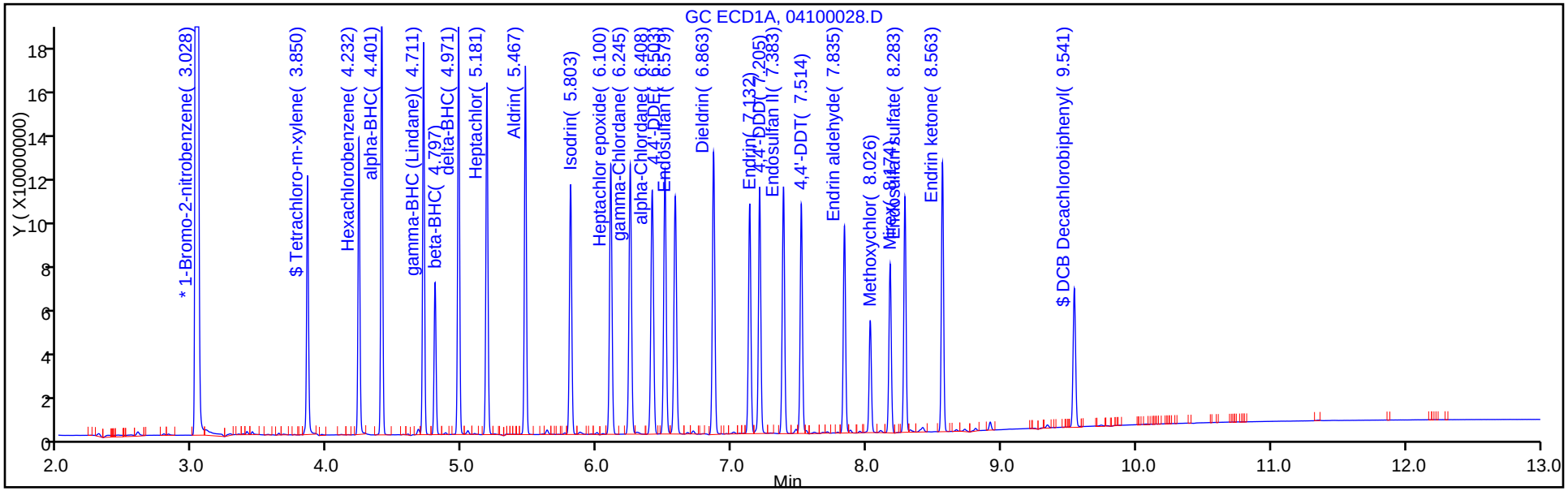
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TestAmerica Denver

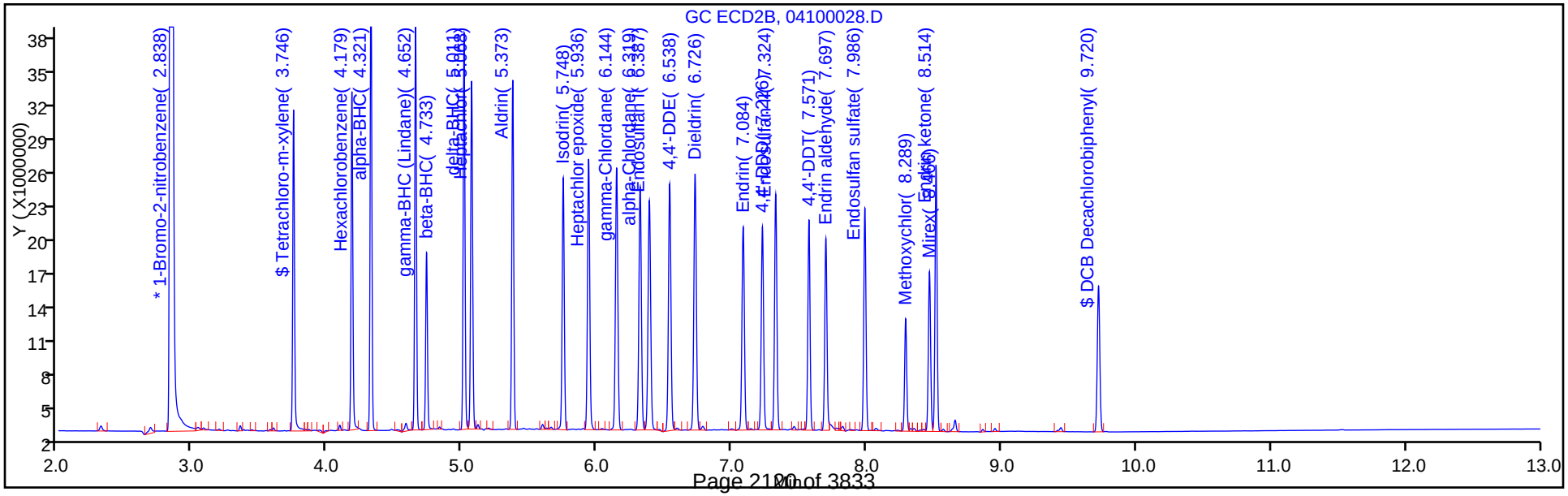
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100028.D

Injection Date:	10-Apr-2017 18:29:51	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD2 AB			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Manual Integration/User Assign Peak Report

TestAmerica Denver

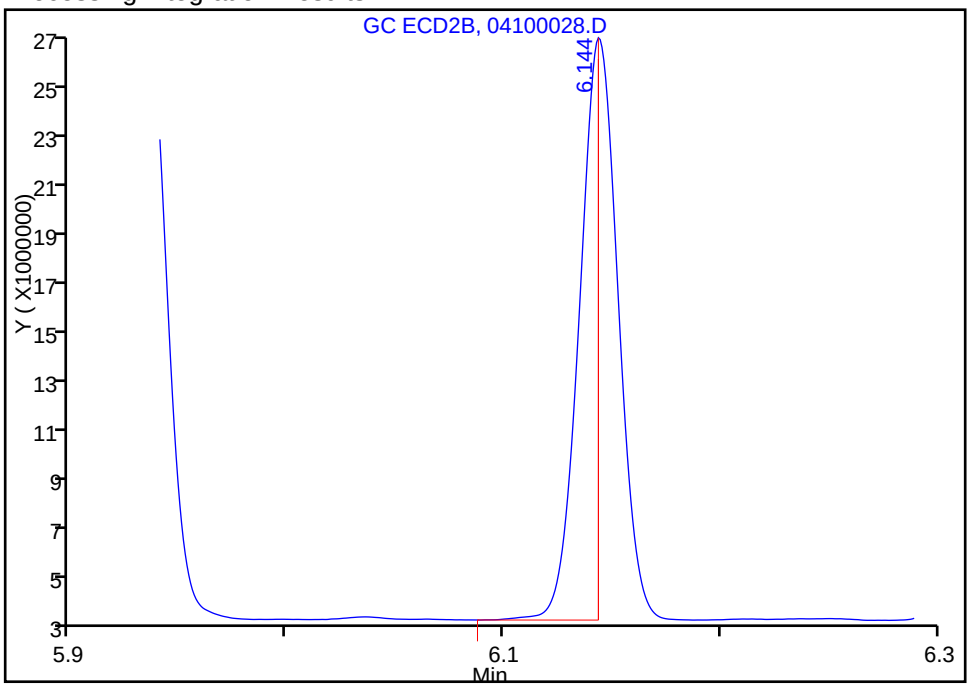
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100028.D
Injection Date: 10-Apr-2017 18:29:51 Instrument ID: SGC_P1
Lims ID: STD2 AB
Client ID:
Operator ID: DAW ALS Bottle#: 26 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: P1 8081 IS Limit Group: GCSV - 8081A - IS
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

22 gamma-Chlordane, CAS: 5103-74-2

Signal: 2

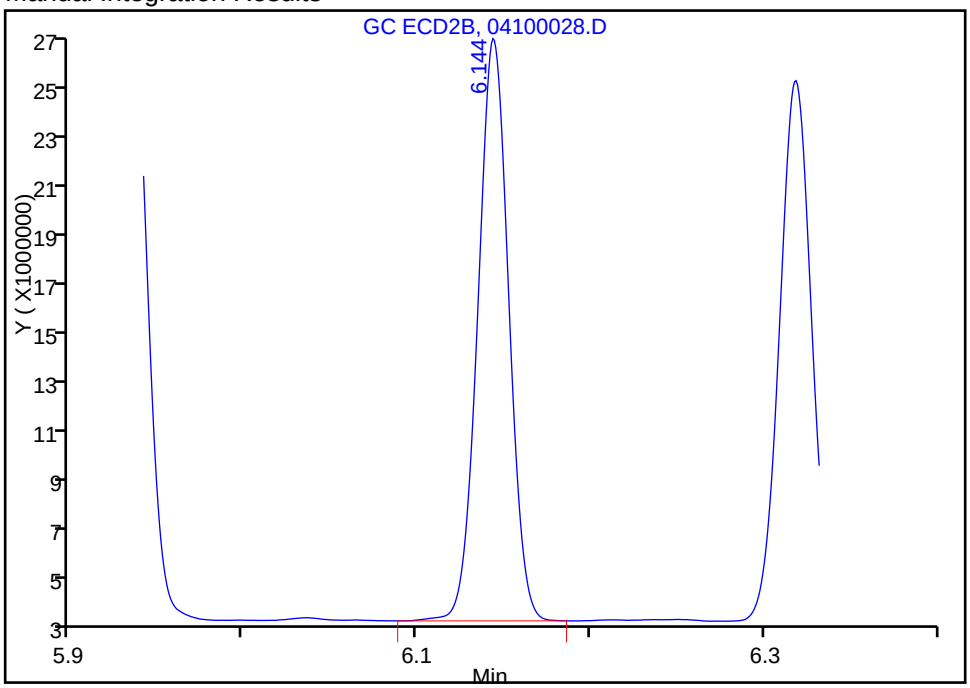
Processing Integration Results

RT: 6.14
Area: 13614808
Amount: 6.890232
Amount Units: ng/mL



Manual Integration Results

RT: 6.14
Area: 28075644
Amount: 10.443671
Amount Units: ng/mL



Reviewer: wellsd, 17-Apr-2017 13:22:10
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

TestAmerica Denver

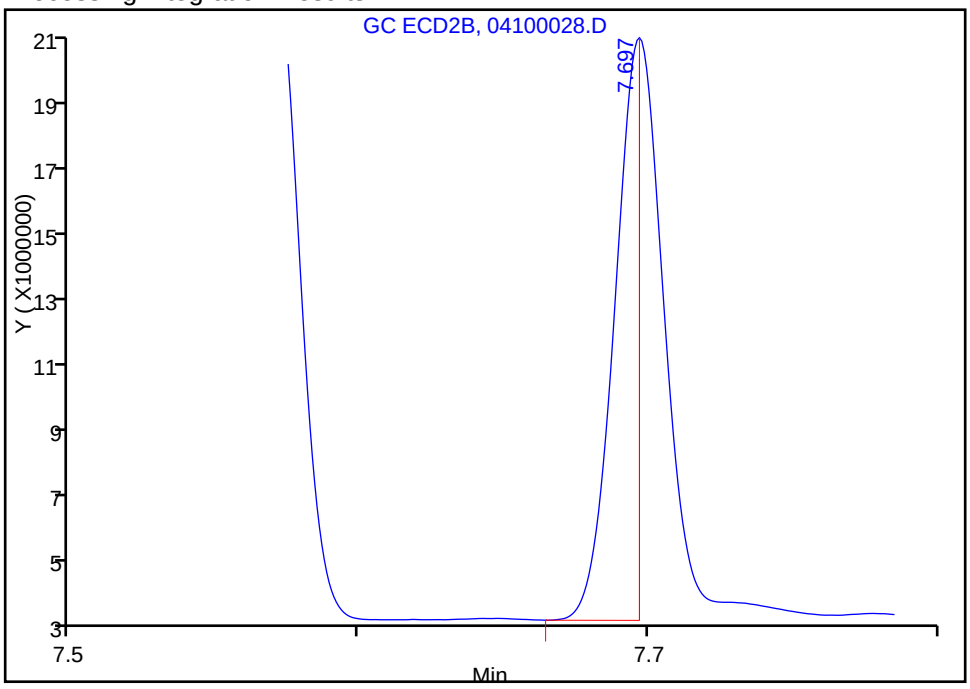
Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100028.D				
Injection Date:	10-Apr-2017 18:29:51	Instrument ID:	SGC_P1		
Lims ID:	STD2 AB				
Client ID:					
Operator ID:	DAW	ALS Bottle#:	26	Worklist Smp#:	28
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

36 Endrin aldehyde, CAS: 7421-93-4

Signal: 2

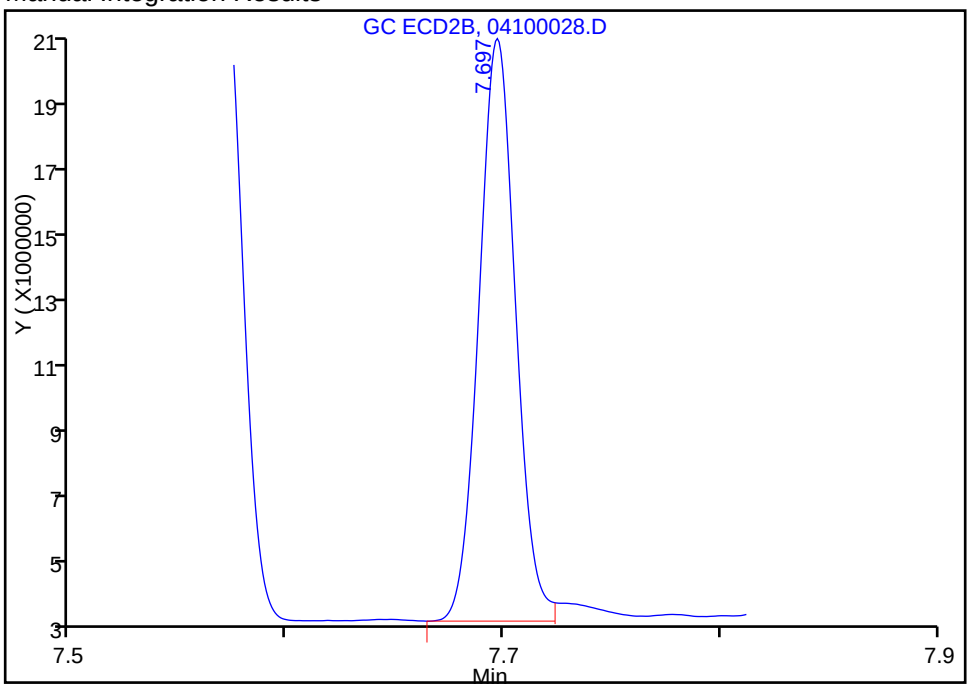
Processing Integration Results

RT: 7.70
Area: 9613067
Amount: 6.812311
Amount Units: ng/mL



Manual Integration Results

RT: 7.70
Area: 19465371
Amount: 10.427408
Amount Units: ng/mL



Reviewer: wellsd, 17-Apr-2017 13:22:10

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D
Lims ID: STD1 AB
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 10-Apr-2017 18:46:48 ALS Bottle#: 27 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STD1 AB
Misc. Info.: 280-0057376-029
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:14 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:52:43

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						16.1	
2						15.8	
						RPD = 1.52	
* 2 1-Bromo-2-nitrobenzene							
1	3.029	3.028	0.001	1473279982	150.0	150.0	
2	2.838	2.837	0.001	348639046	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.851	3.851	0.000	43599324	4.00	3.99	
2	3.746	3.746	0.000	10687729	4.00	3.91	
						RPD = 2.05	
5 Hexachlorobenzene							
1	4.232	4.232	0.000	50408254	4.00	4.00	
2	4.179	4.179	0.000	11843720	4.00	3.94	
						RPD = 1.46	
8 alpha-BHC							
1	4.402	4.402	0.000	67283578	4.00	4.03	
2	4.320	4.321	-0.001	14307480	4.00	3.97	
						RPD = 1.55	
9 gamma-BHC (Lindane)							
1	4.712	4.712	0.000	61711453	4.00	4.03	
2	4.651	4.652	-0.001	12985616	4.00	3.97	
						RPD = 1.58	
10 beta-BHC							
1	4.798	4.797	0.001	27570072	4.00	4.00	
2	4.732	4.732	0.000	6399213	4.00	3.93	
						RPD = 1.65	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.972	4.973	-0.001	65915279	4.00	4.02	
2	5.010	5.011	-0.001	13161015	4.00	3.97	
						RPD = 1.29	
15 Heptachlor							
1	5.182	5.183	-0.001	62263366	4.00	3.96	
2	5.067	5.067	0.000	12705798	4.00	3.94	
						RPD = 0.64	
16 Aldrin							M
1	5.468	5.467	0.001	61506570	4.00	3.97	M
2	5.373	5.372	0.001	12117568	4.00	3.93	
						RPD = 0.95	
18 Isodrin							
1	5.803	5.803	0.000	50192475	4.00	3.96	
2	5.747	5.747	0.000	10027080	4.00	3.93	
						RPD = 0.77	
21 Heptachlor epoxide							
1	6.101	6.101	0.000	57377311	4.00	3.93	
2	5.936	5.936	0.000	11529652	4.00	3.90	
						RPD = 0.70	
22 gamma-Chlordane							
1	6.245	6.246	-0.001	58808048	4.00	4.00	
2	6.143	6.143	0.000	11780419	4.00	3.93	
						RPD = 1.78	
23 alpha-Chlordane							
1	6.409	6.408	0.001	57404226	4.00	3.99	
2	6.318	6.318	0.000	11485496	4.00	3.92	
						RPD = 1.77	
24 4,4'-DDE							
1	6.503	6.504	-0.001	56703371	4.00	3.99	
2	6.538	6.537	0.001	11422598	4.00	3.93	
						RPD = 1.50	
25 Endosulfan I							
1	6.580	6.580	0.000	55727204	4.00	3.94	
2	6.387	6.387	0.000	11474152	4.00	3.89	
						RPD = 1.16	
27 Dieldrin							
1	6.864	6.864	0.000	59769469	4.00	3.96	
2	6.726	6.727	-0.001	11889081	4.00	3.92	
						RPD = 1.11	
30 Endrin							
1	7.133	7.132	0.001	48438787	4.00	3.99	
2	7.083	7.083	0.000	9438768	4.00	3.96	
						RPD = 0.81	
32 4,4'-DDD							
1	7.207	7.206	0.001	52953763	4.00	4.02	
2	7.226	7.227	-0.001	9807152	4.00	4.00	
						RPD = 0.40	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.382	7.382	0.000	51900672	4.00	3.95	
2	7.325	7.325	0.000	10397764	4.00	3.89	
						RPD = 1.50	
35 4,4'-DDT							
1	7.515	7.516	-0.001	44351007	4.00	4.03	
2	7.571	7.571	0.000	8521262	4.00	3.96	
						RPD = 1.65	
36 Endrin aldehyde							
1	7.835	7.836	-0.001	41923660	4.00	3.96	
2	7.697	7.697	0.000	8422036	4.00	3.92	
						RPD = 1.01	
37 Methoxychlor							
1	8.028	8.027	0.001	23156143	4.00	3.94	
2	8.289	8.289	0.000	4519499	4.00	3.89	
						RPD = 1.47	
38 Mirex							
1	8.174	8.174	0.000	36796915	4.00	3.98	
2	8.465	8.466	-0.001	7191747	4.00	4.77	
						RPD = 18.23	
39 Endosulfan sulfate							
1	8.284	8.285	-0.001	45892091	4.00	3.98	
2	7.987	7.987	0.000	9406004	4.00	3.90	
						RPD = 1.87	
40 Endrin ketone							
1	8.564	8.563	0.001	51293926	4.00	3.95	
2	8.515	8.514	0.001	10335104	4.00	3.90	
						RPD = 1.45	
$ 41 DCB Decachlorobiphenyl							
1	9.543	9.541	0.002	32850791	4.00	3.96	
2	9.721	9.722	-0.001	7147355	4.00	3.88	
						RPD = 2.12	
S 3 Endosulfan, Total							
1						11.9	
2						11.7	
						RPD = 1.51	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081IcalL1_00021	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

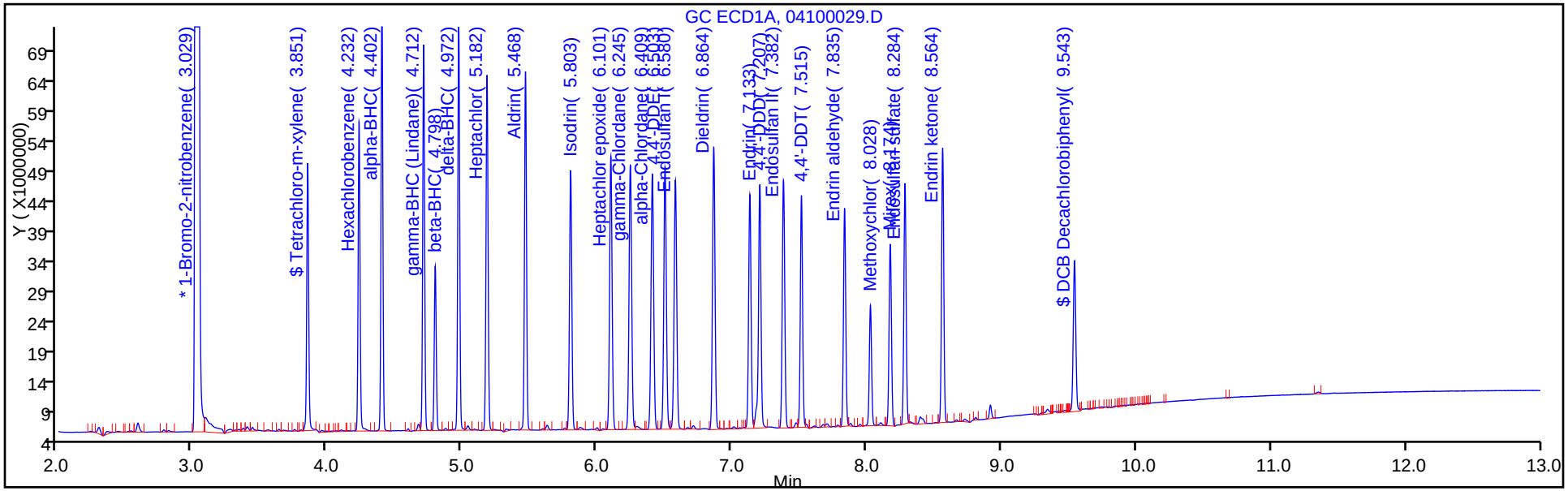
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TestAmerica Denver

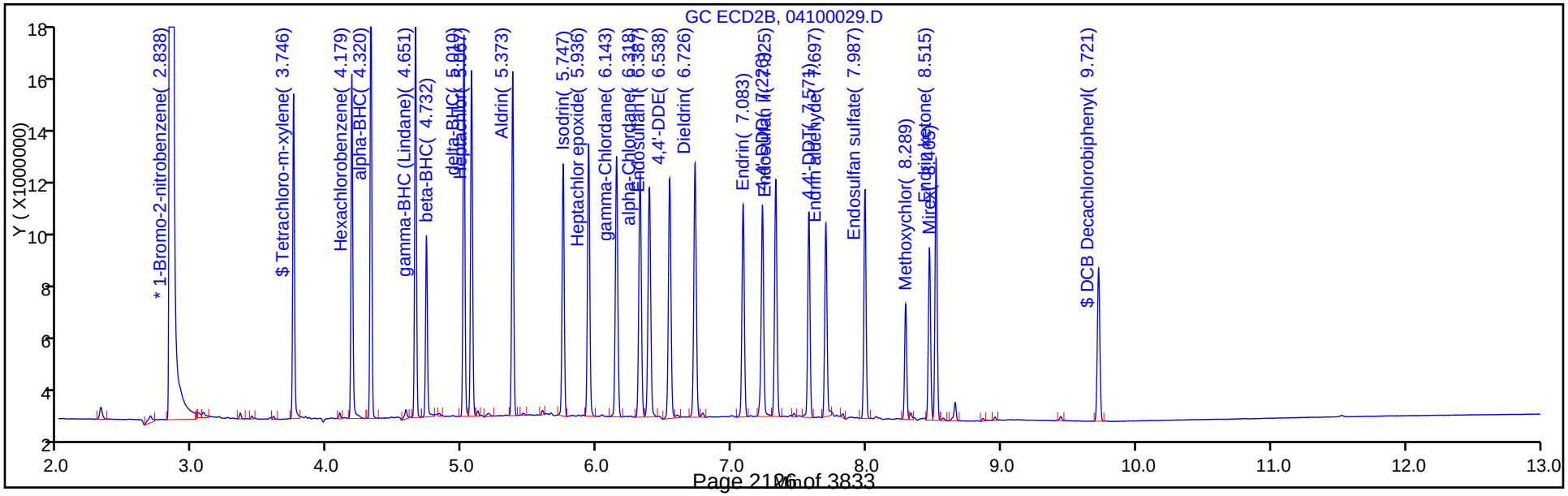
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Injection Date:	10-Apr-2017 18:46:48	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	STD1 AB			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID (1): PEM 280-378628/7 Instrument ID (1): SGC_P1

GC Column (1): CLP1 ID: 0.32(mm) Date Analyzed (1): 06/25/2017 14:17

ANALYTE	RT	RESOLUTION (%)
4,4'-DDE	6.45	100.0
Endrin	7.08	100.0
4,4'-DDD	7.16	100.0
4,4'-DDT	7.47	100.0
Endrin aldehyde	7.78	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID (2): PEM 280-378628/7 Instrument ID (2): SGC_P1

GC Column (2): CLP2 ID: 0.32(mm) Date Analyzed (2): 06/25/2017 14:17

ANALYTE	RT	RESOLUTION (%)
4,4'-DDE	6.41	100.0
Endrin	6.96	100.0
4,4'-DDD	7.11	100.0
4,4'-DDT	7.46	100.0
Endrin aldehyde	7.58	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID (1): PEM 280-378628/33 Instrument ID (1): SGC_P1

GC Column (1): CLP1 ID: 0.32(mm) Date Analyzed (1): 06/25/2017 21:36

ANALYTE	RT	RESOLUTION (%)
4,4'-DDE	6.45	100.0
Endrin	7.08	100.0
4,4'-DDD	7.16	100.0
4,4'-DDT	7.47	100.0
Endrin aldehyde	7.78	100.0

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID (2): PEM 280-378628/33 Instrument ID (2): SGC_P1

GC Column (2): CLP2 ID: 0.32(mm) Date Analyzed (2): 06/25/2017 21:36

ANALYTE	RT	RESOLUTION (%)
4,4'-DDE	6.41	100.0
Endrin	6.96	100.0
4,4'-DDD	7.11	100.0
4,4'-DDT	7.46	100.0
Endrin aldehyde	7.58	100.0

FORM VII
PESTICIDES PERFORMANCE EVALUATION MIXTURE (PEM)

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: PEM 280-378628/7 Calibration Date: 06/25/2017 14:17

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06250007.D Conc. Units: ug/L

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
Endrin	7.08	792806092	2.01	15	
Endrin aldehyde	7.78	6969460			
Endrin ketone	8.51	9301667			

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
4,4'-DDT	7.47	744346598	0.97	15	
4,4'-DDD	7.16	5293823			
4,4'-DDE	6.45	2024298			

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250007.D
Lims ID: PEM
Client ID:
Sample Type: PEM
Inject. Date: 25-Jun-2017 14:17:10 ALS Bottle#: 2 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: PEM
Misc. Info.: 280-0060103-007
Operator ID: DAW Instrument ID: SGC_P1
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:55:49 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.994	-0.001	2129415747	150.0	150.0	
2	2.764	2.764	0.000	451070174	150.0	150.0	
24 4,4'-DDE							
1	6.453	6.453	0.000	2024298		0.4563	
2	6.413	6.413	0.000	447725		-0.3713	
						RPD = 1946.12	
30 Endrin							
1	7.082	7.082	0.000	792806092	40.0	43.6	
2	6.959	6.959	0.000	122354035	40.0	44.0	
						RPD = 0.91	
32 4,4'-DDD							
1	7.159	7.158	0.001	5293823		0.2533	
2	7.111	7.110	0.001	1043411		-0.4212	
						RPD = -803.29	
35 4,4'-DDT							
1	7.467	7.468	-0.001	744346598	40.0	41.0	
2	7.460	7.459	0.001	105615722	40.0	41.1	
						RPD = 0.29	
36 Endrin aldehyde							
1	7.784	7.785	-0.001	6969460		0.4270	
2	7.579	7.578	0.001	1568700		-0.1398	
						RPD = 394.76	
40 Endrin ketone							
1	8.512	8.513	-0.001	9301667		0.6016	
2	8.399	8.399	0.000	1942969		-0.0391	
						RPD = 227.82	

Reagents:

8081_EvalBPEM_00008	Amount Added:	1.00	Units: mL	
8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

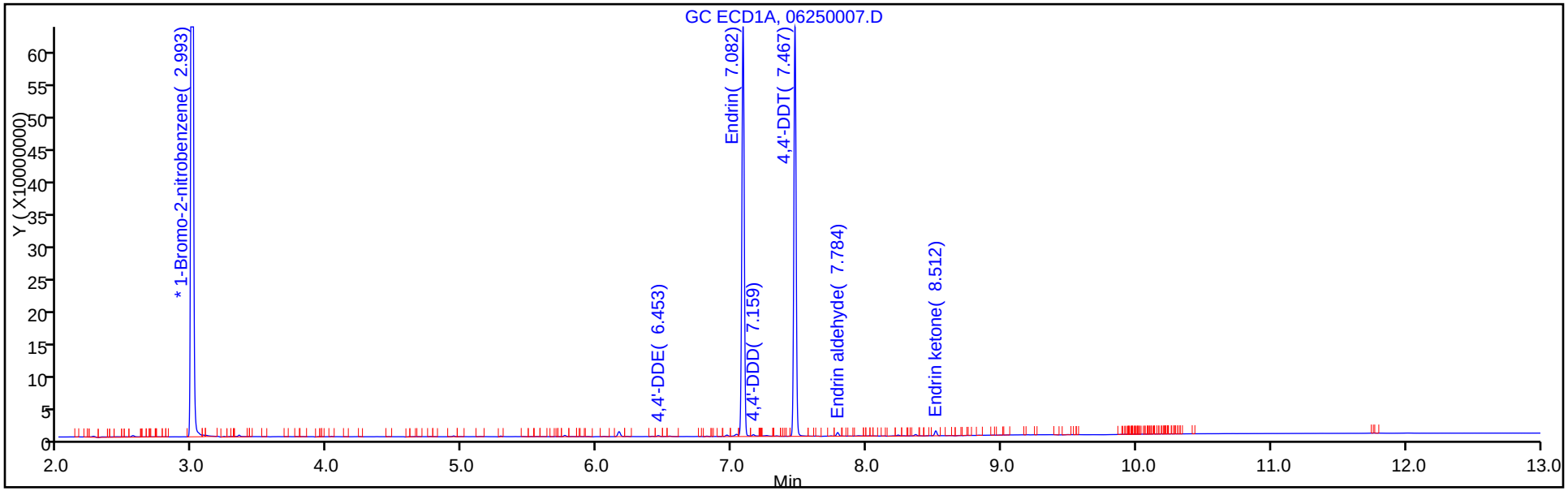
Report Date: 26-Jun-2017 11:56:02 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

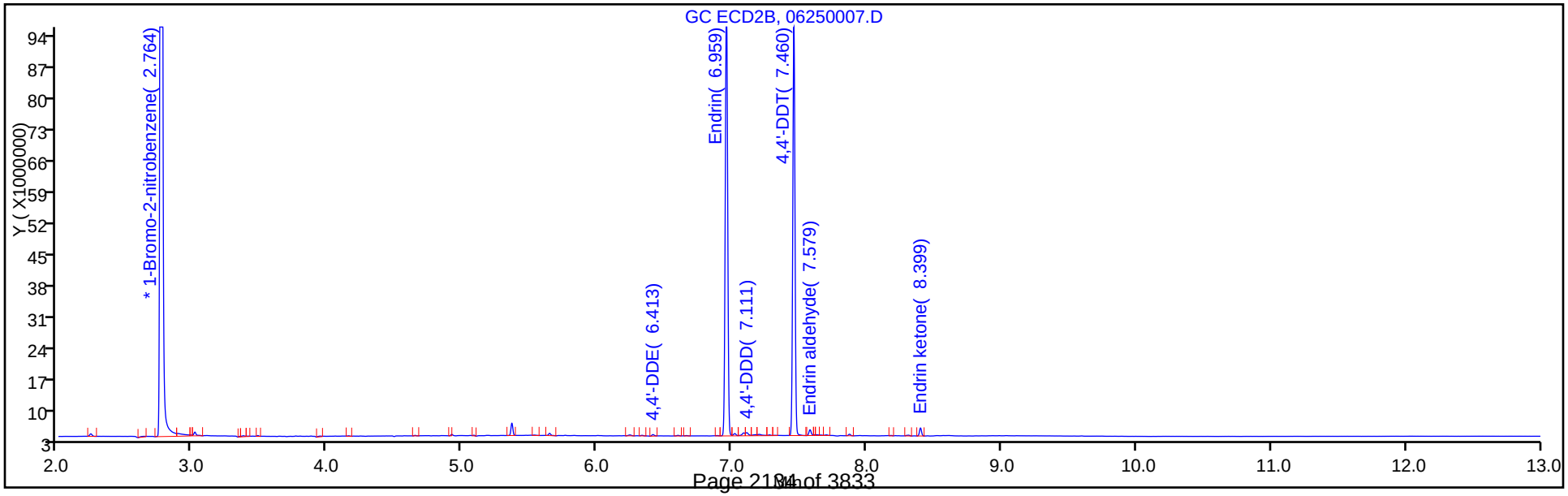
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250007.D

Injection Date:	25-Jun-2017 14:17:10	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	PEM			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES PERFORMANCE EVALUATION MIXTURE (PEM)

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: PEM 280-378628/7 Calibration Date: 06/25/2017 14:17

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06250007.D Conc. Units: ug/L

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
Endrin	6.96	122354035	2.79	15	
Endrin aldehyde	7.58	1568700			
Endrin ketone	8.40	1942969			

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
4,4'-DDT	7.46	105615722	1.39	15	
4,4'-DDD	7.11	1043411			
4,4'-DDE	6.41	447725			

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250007.D
Lims ID: PEM
Client ID:
Sample Type: PEM
Inject. Date: 25-Jun-2017 14:17:10 ALS Bottle#: 2 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: PEM
Misc. Info.: 280-0060103-007
Operator ID: DAW Instrument ID: SGC_P1
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:55:49 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.994	-0.001	2129415747	150.0	150.0	
2	2.764	2.764	0.000	451070174	150.0	150.0	
24 4,4'-DDE							
1	6.453	6.453	0.000	2024298		0.4563	
2	6.413	6.413	0.000	447725		-0.3713	
						RPD = 1946.12	
30 Endrin							
1	7.082	7.082	0.000	792806092	40.0	43.6	
2	6.959	6.959	0.000	122354035	40.0	44.0	
						RPD = 0.91	
32 4,4'-DDD							
1	7.159	7.158	0.001	5293823		0.2533	
2	7.111	7.110	0.001	1043411		-0.4212	
						RPD = -803.29	
35 4,4'-DDT							
1	7.467	7.468	-0.001	744346598	40.0	41.0	
2	7.460	7.459	0.001	105615722	40.0	41.1	
						RPD = 0.29	
36 Endrin aldehyde							
1	7.784	7.785	-0.001	6969460		0.4270	
2	7.579	7.578	0.001	1568700		-0.1398	
						RPD = 394.76	
40 Endrin ketone							
1	8.512	8.513	-0.001	9301667		0.6016	
2	8.399	8.399	0.000	1942969		-0.0391	
						RPD = 227.82	

Reagents:

8081_EvalBPEM_00008	Amount Added:	1.00	Units: mL	
8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

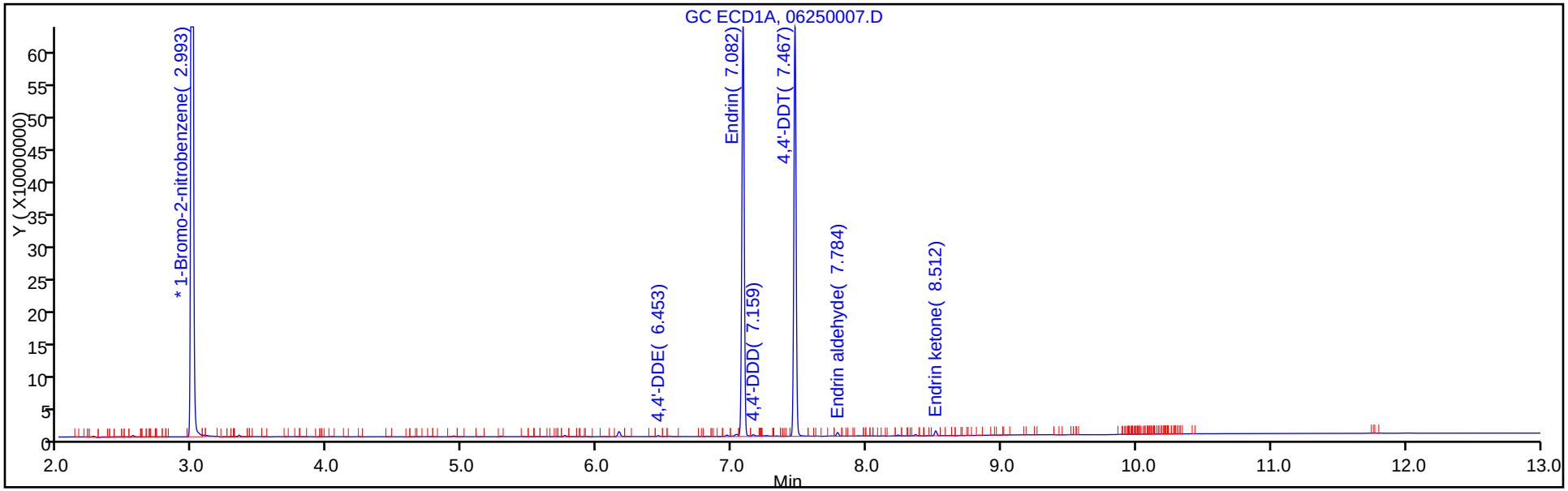
Report Date: 26-Jun-2017 11:56:03 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

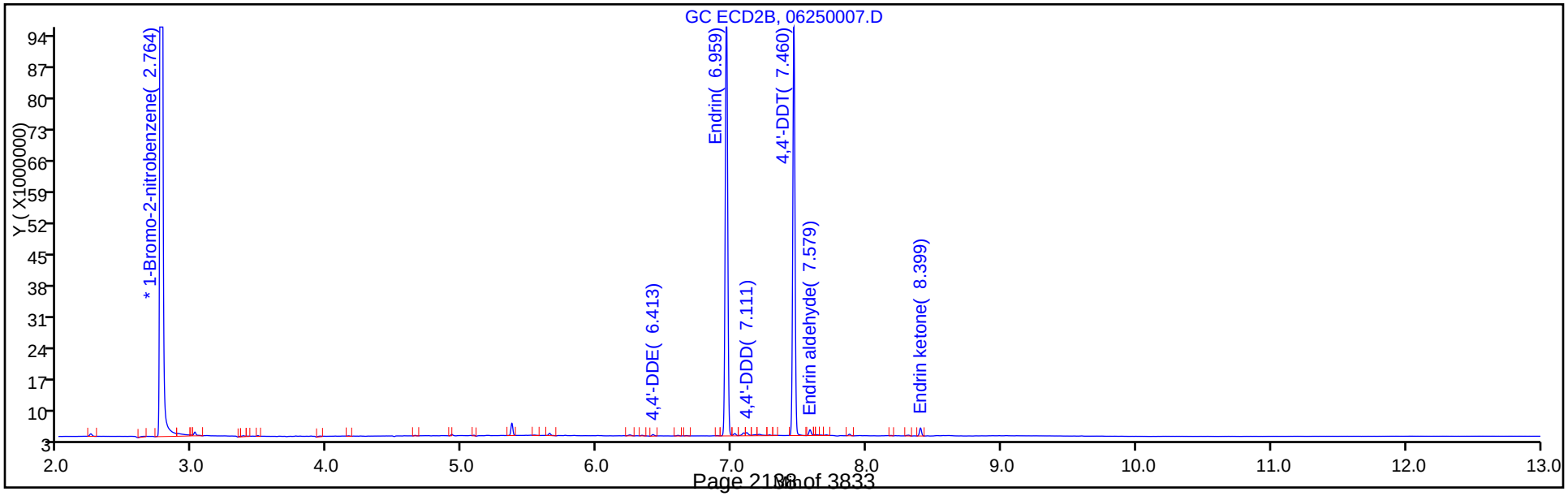
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250007.D

Injection Date:	25-Jun-2017 14:17:10	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	PEM			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES PERFORMANCE EVALUATION MIXTURE (PEM)

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: PEM 280-378628/33 Calibration Date: 06/25/2017 21:36

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06250033.D Conc. Units: ug/L

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
Endrin	7.08	820632085	1.75	15	
Endrin aldehyde	7.78	5072212			
Endrin ketone	8.51	9586717			

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
4,4'-DDT	7.47	743595202	1.92	15	
4,4'-DDD	7.16	12665733			
4,4'-DDE	6.45	1918205			

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250033.D
Lims ID: PEM
Client ID:
Sample Type: PEM
Inject. Date: 25-Jun-2017 21:36:12 ALS Bottle#: 27 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: PEM
Misc. Info.: 280-0060103-033
Operator ID: DAW Instrument ID: SGC_P1
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:57 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:36:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.993	0.000	2258193721	150.0	150.0	
2	2.764	2.763	0.001	469261221	150.0	150.0	
24 4,4'-DDE							
1	6.453	6.453	0.000	1918205		0.4468	
2	6.414	6.413	0.001	451980		-0.3752	
						RPD = 2298.03	
30 Endrin							
1	7.081	7.082	-0.001	820632085	40.0	42.6	
2	6.959	6.959	0.000	124915306	40.0	43.2	
						RPD = 1.42	
32 4,4'-DDD							M
1	7.157	7.158	-0.001	12665733		0.6046	
2	7.110	7.110	0.000	2341339		0.0373	M
						RPD = 176.77	
35 4,4'-DDT							
1	7.466	7.468	-0.002	743595202	40.0	38.6	
2	7.458	7.459	-0.001	104546681	40.0	39.1	
						RPD = 1.16	
36 Endrin aldehyde							
1	7.783	7.785	-0.002	5072212		0.2831	
2	7.578	7.578	0.000	1152203		-0.3403	
						RPD = -2180.12	
40 Endrin ketone							
1	8.511	8.513	-0.002	9586717		0.5881	
2	8.399	8.399	0.000	2022154		-0.0388	
						RPD = 228.29	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081_EvalBPEM_00008	Amount Added:	1.00	Units: mL	
8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

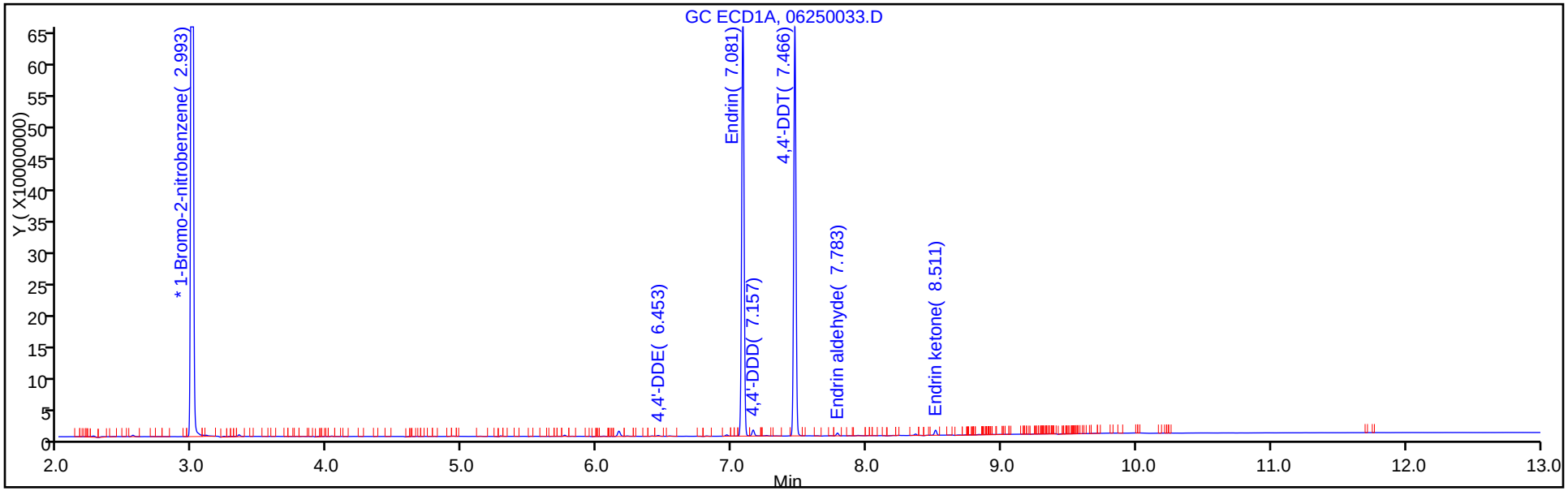
Report Date: 26-Jun-2017 11:56:59 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

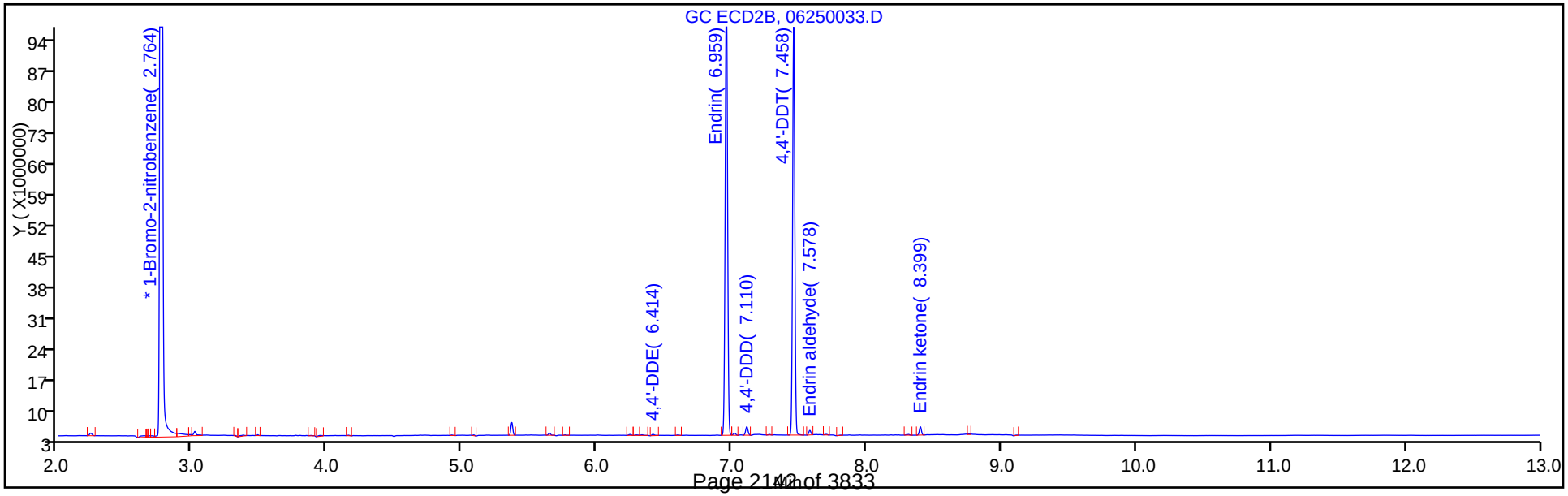
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Injection Date:	25-Jun-2017 21:36:12	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	PEM			Worklist Smp#:	33
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES PERFORMANCE EVALUATION MIXTURE (PEM)

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: PEM 280-378628/33 Calibration Date: 06/25/2017 21:36

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06250033.D Conc. Units: ug/L

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
Endrin	6.96	124915306	2.48	15	
Endrin aldehyde	7.58	1152203			
Endrin ketone	8.40	2022154			

ANALYTE	RT	RESPONSE	BREAKDOWN (%)	LIMIT	#
4,4'-DDT	7.46	104546681	2.60	15	
4,4'-DDD	7.11	2341339			
4,4'-DDE	6.41	451980			

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250033.D
Lims ID: PEM
Client ID:
Sample Type: PEM
Inject. Date: 25-Jun-2017 21:36:12 ALS Bottle#: 27 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: PEM
Misc. Info.: 280-0060103-033
Operator ID: DAW Instrument ID: SGC_P1
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:57 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:36:36

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.993	0.000	2258193721	150.0	150.0	
2	2.764	2.763	0.001	469261221	150.0	150.0	
24 4,4'-DDE							
1	6.453	6.453	0.000	1918205		0.4468	
2	6.414	6.413	0.001	451980		-0.3752	
						RPD = 2298.03	
30 Endrin							
1	7.081	7.082	-0.001	820632085	40.0	42.6	
2	6.959	6.959	0.000	124915306	40.0	43.2	
						RPD = 1.42	
32 4,4'-DDD							M
1	7.157	7.158	-0.001	12665733		0.6046	
2	7.110	7.110	0.000	2341339		0.0373	M
						RPD = 176.77	
35 4,4'-DDT							
1	7.466	7.468	-0.002	743595202	40.0	38.6	
2	7.458	7.459	-0.001	104546681	40.0	39.1	
						RPD = 1.16	
36 Endrin aldehyde							
1	7.783	7.785	-0.002	5072212		0.2831	
2	7.578	7.578	0.000	1152203		-0.3403	
						RPD = -2180.12	
40 Endrin ketone							
1	8.511	8.513	-0.002	9586717		0.5881	
2	8.399	8.399	0.000	2022154		-0.0388	
						RPD = 228.29	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081_EvalBPEM_00008	Amount Added:	1.00	Units: mL	
8081_IS_00006	Amount Added:	75.00	Units: uL	Run Reagent

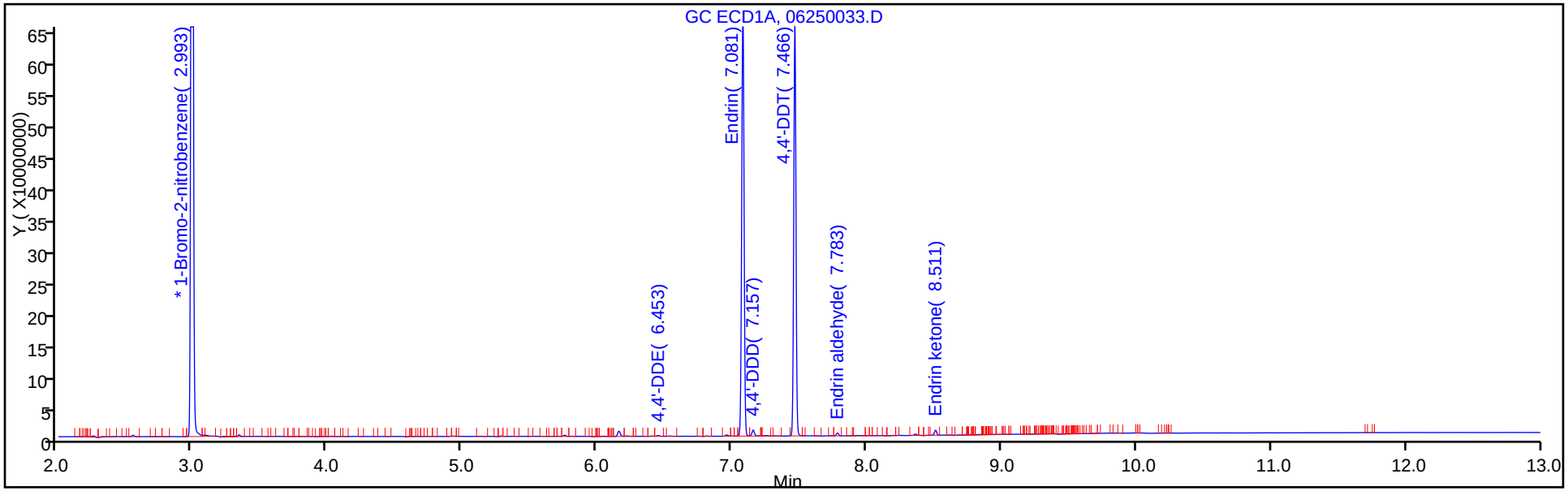
Report Date: 26-Jun-2017 11:56:59 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

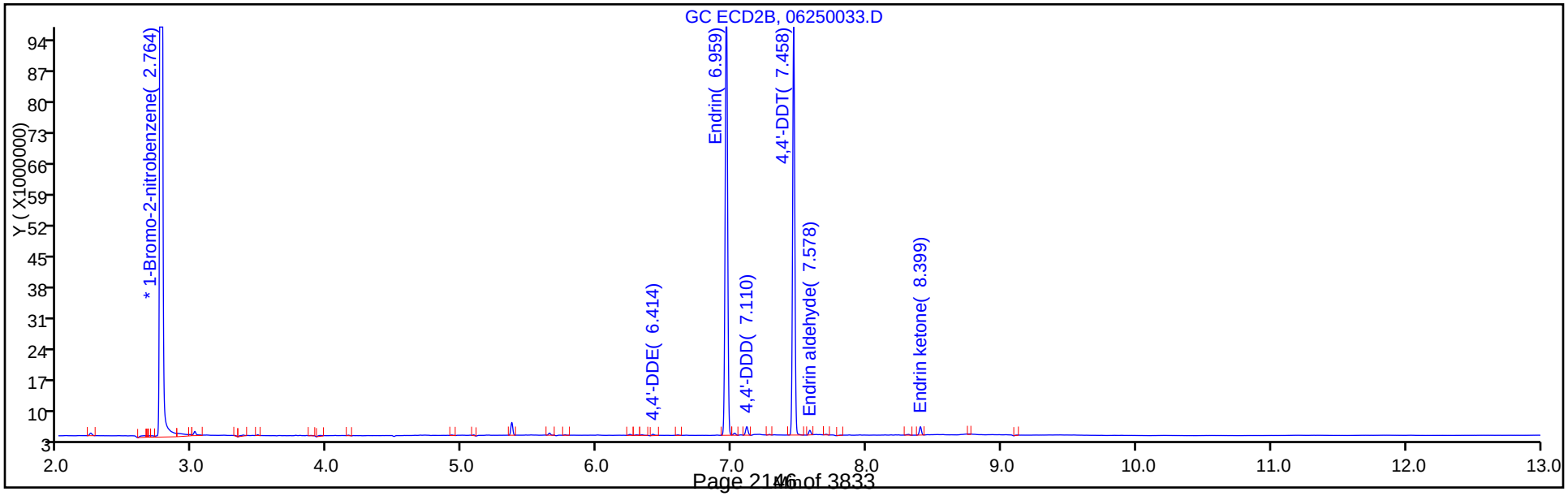
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250033.D

Injection Date:	25-Jun-2017 21:36:12	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	PEM			Worklist Smp#:	33
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Manual Integration/User Assign Peak Report

TestAmerica Denver

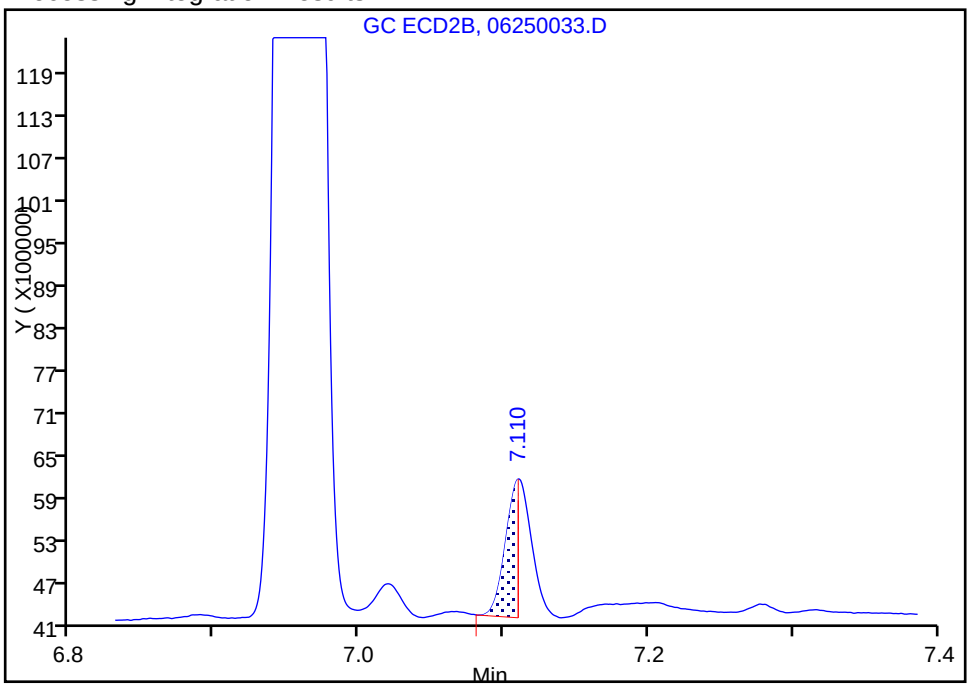
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250033.D
Injection Date: 25-Jun-2017 21:36:12 Instrument ID: SGC_P1
Lims ID: PEM
Client ID:
Operator ID: DAW ALS Bottle#: 27 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: P1 8081 IS Limit Group: GCSV - 8081A - IS
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

32 4,4'-DDD, CAS: 72-54-8

Signal: 2

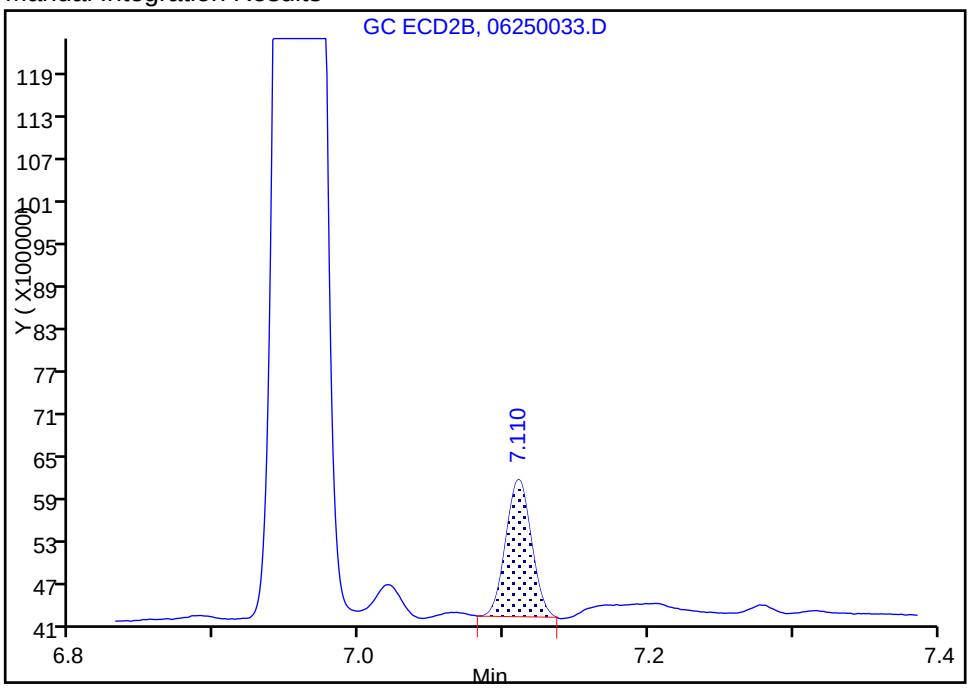
Processing Integration Results

RT: 7.11
Area: 1147267
Amount: -0.398648
Amount Units: ng/mL



Manual Integration Results

RT: 7.11
Area: 2341339
Amount: 0.037270
Amount Units: ng/mL



Reviewer: wellsd, 26-Jun-2017 10:36:32
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-368670/31 Calibration Date: 04/10/2017 19:20

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 04100031.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0028		1040	1000	3.8	20.0
Toxaphene Peak 2	Qua		0.0192		774	1000	-22.6*	20.0
Toxaphene Peak 3	Lin2		0.0205		1100	1000	9.8	20.0
Toxaphene Peak 4	Lin2		0.0317		736	1000	-26.4*	20.0
Toxaphene Peak 5	Lin2		0.0540		1080	1000	8.2	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-368670/31 Calibration Date: 04/10/2017 19:20

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 04100031.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	5.65	5.63	5.67
Toxaphene Peak 2	6.97	6.95	6.99
Toxaphene Peak 3	7.23	7.22	7.26
Toxaphene Peak 4	7.74	7.72	7.76
Toxaphene Peak 5	8.18	8.16	8.20

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100031.D
Lims ID: ICV TOX
Client ID:
Sample Type: ICV
Inject. Date: 10-Apr-2017 19:20:30 ALS Bottle#: 29 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV TOX
Misc. Info.: 280-0057376-031
Operator ID: DAW Instrument ID: SGC_P1
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:14 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:53:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.028	0.000	1449739244	150.0	150.0	
2	2.838	2.837	0.001	340722898	150.0	150.0	
28 Toxaphene							M
1	5.645	5.647	-0.002	27244956	1000.0	1037.7	M
1	6.974	6.974	0.000	185389448	1000.0	773.7	M
1	7.234	7.237	-0.003	198270883	1000.0	1097.7	M
1	7.742	7.742	0.000	306029774	1000.0	735.8	M
1	8.181	8.184	-0.003	522129257	1000.0	1081.8	M
		Average of Peak Amounts =				945.4	
2	6.228	6.229	-0.001	24572831	1000.0	1206.3	M
2	7.271	7.275	-0.004	32162765	1000.0	695.1	M
2	7.418	7.420	-0.002	81205109	1000.0	691.8	M
2	7.703	7.704	-0.001	75959214	1000.0	975.3	M
2	8.225	8.225	0.000	77110297	1000.0	1166.3	M
		Average of Peak Amounts =				947.0	
						RPD = 0.17	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxICVL3_00010 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

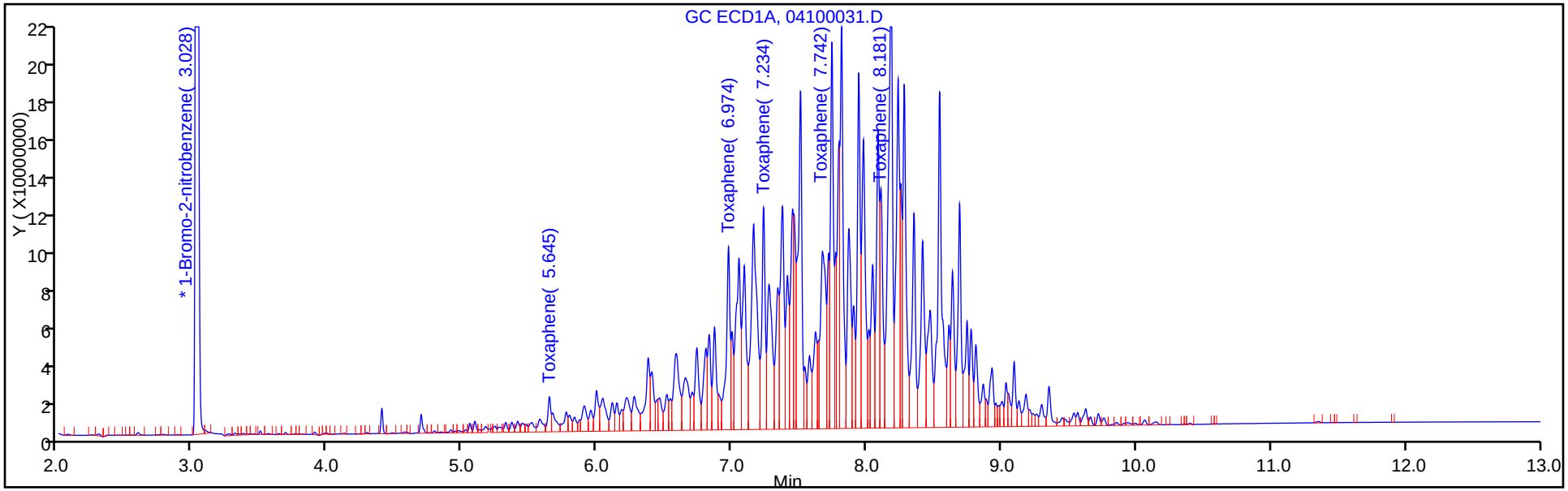
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TestAmerica Denver

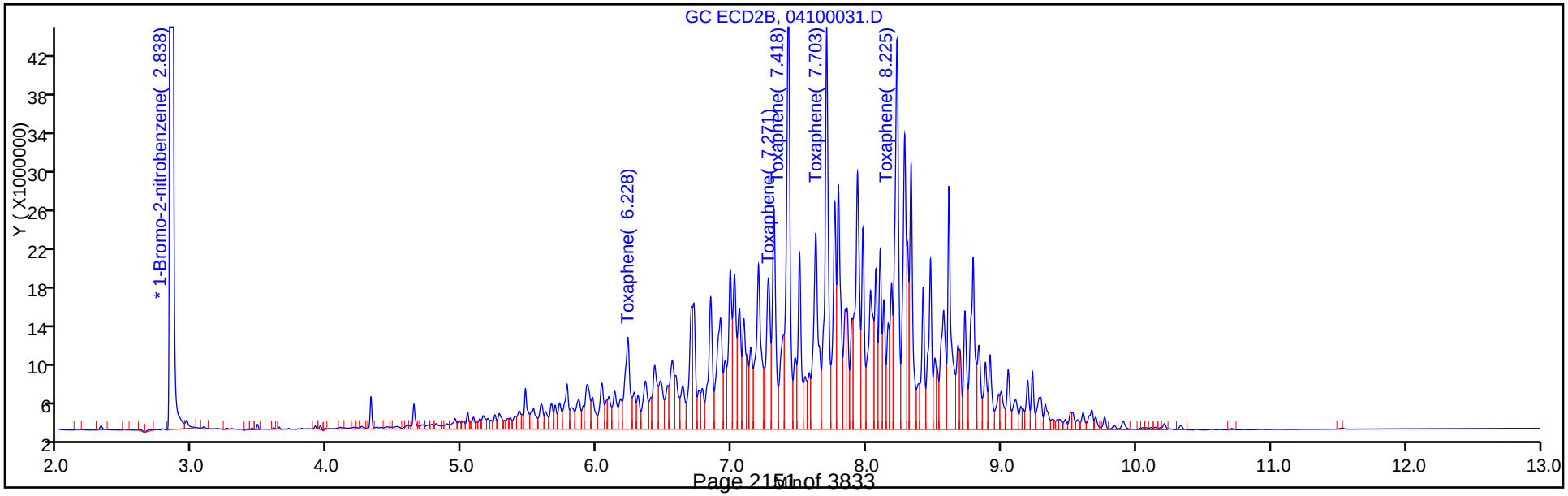
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100031.D

Injection Date:	10-Apr-2017 19:20:30	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	ICV TOX			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:22:20 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100031.D

Injection Date: 10-Apr-2017 19:20:30 Instrument ID: SGC_P1

Lims ID: ICV TOX

Client ID:

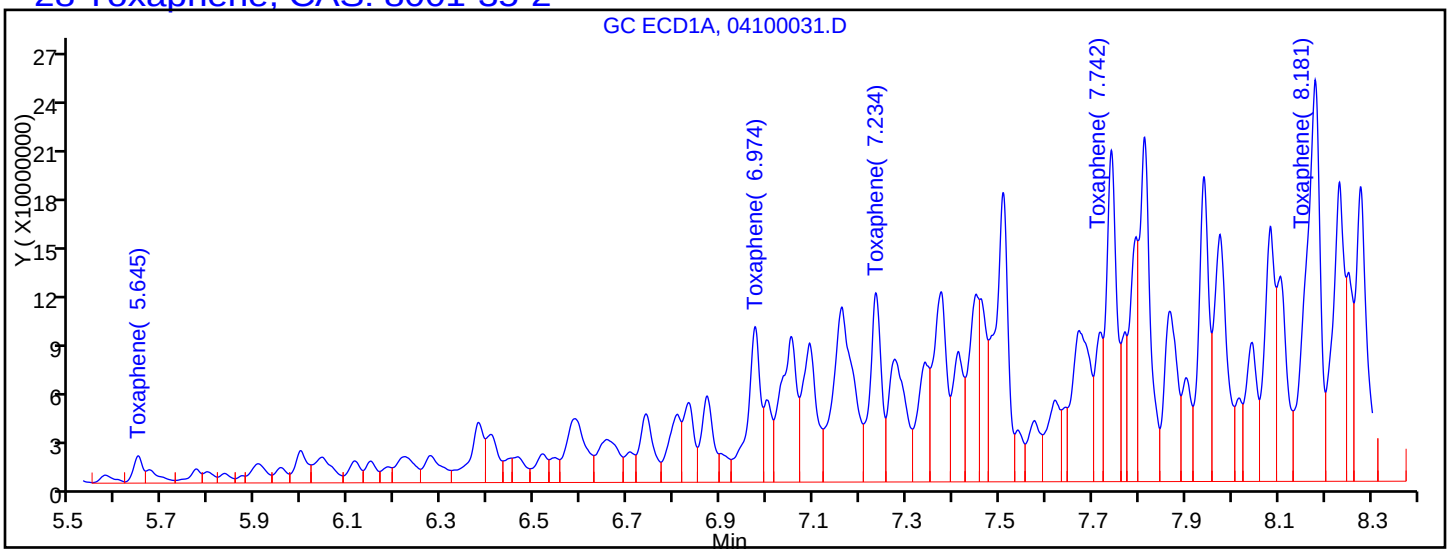
Operator ID: DAW ALS Bottle#: 29 Worklist Smp#: 31

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

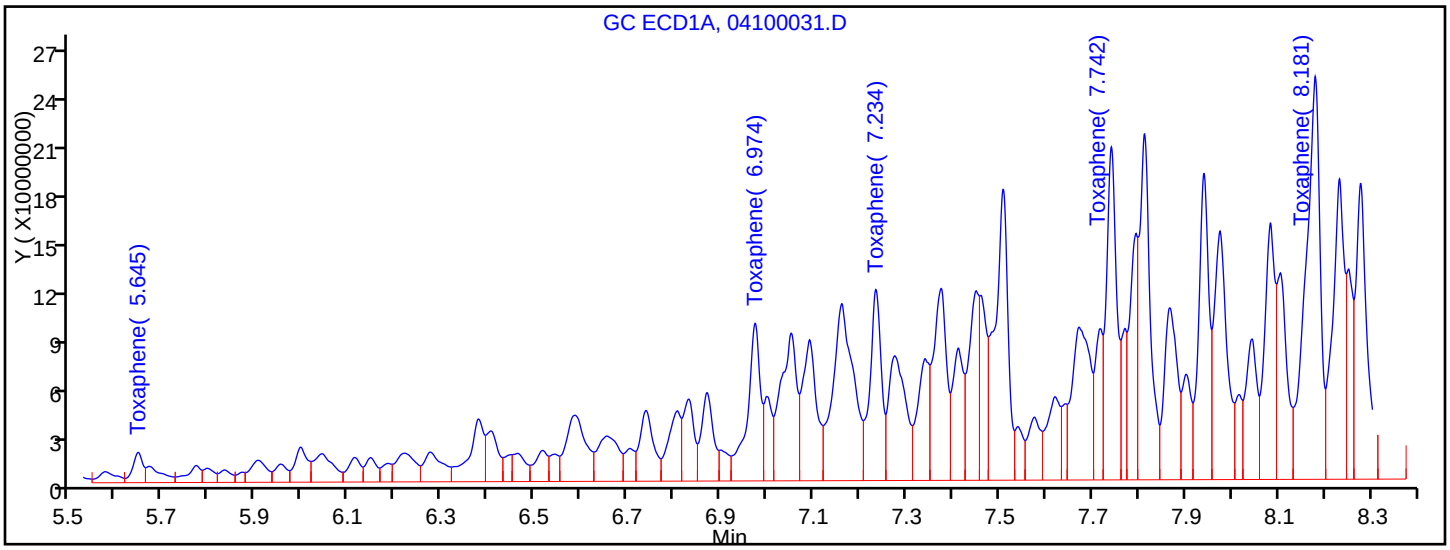
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.645	Response = 22462442
6.974	Response = 179946349
7.234	Response = 194806405
7.742	Response = 303683339
8.181	Response = 518523494



Manual Integration Results

5.645	Response = 27244956	M
6.974	Response = 185389448	M
7.234	Response = 198270883	M
7.742	Response = 306029774	M
8.181	Response = 522129257	M

Reviewer: wellsd, 17-Apr-2017 13:22:19

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-368670/31 Calibration Date: 04/10/2017 19:20

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 04100031.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0108		1210	1000	20.6*	20.0
Toxaphene Peak 2	Lin2		0.0142		695	1000	-30.5*	20.0
Toxaphene Peak 3	Lin2		0.0358		692	1000	-30.8*	20.0
Toxaphene Peak 4	Lin2		0.0334		975	1000	-2.5	20.0
Toxaphene Peak 5	Lin2		0.0340		1170	1000	16.6	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-368670/31 Calibration Date: 04/10/2017 19:20

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 04100031.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	6.23	6.21	6.25
Toxaphene Peak 2	7.27	7.26	7.30
Toxaphene Peak 3	7.42	7.40	7.44
Toxaphene Peak 4	7.70	7.68	7.72
Toxaphene Peak 5	8.23	8.21	8.25

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100031.D
Lims ID: ICV TOX
Client ID:
Sample Type: ICV
Inject. Date: 10-Apr-2017 19:20:30 ALS Bottle#: 29 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV TOX
Misc. Info.: 280-0057376-031
Operator ID: DAW Instrument ID: SGC_P1
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:14 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 12-Apr-2017 15:53:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	3.028	3.028	0.000	1449739244	150.0	150.0	
2	2.838	2.837	0.001	340722898	150.0	150.0	
28 Toxaphene							M
1	5.645	5.647	-0.002	27244956	1000.0	1037.7	M
1	6.974	6.974	0.000	185389448	1000.0	773.7	M
1	7.234	7.237	-0.003	198270883	1000.0	1097.7	M
1	7.742	7.742	0.000	306029774	1000.0	735.8	M
1	8.181	8.184	-0.003	522129257	1000.0	1081.8	M
		Average of Peak Amounts =				945.4	
2	6.228	6.229	-0.001	24572831	1000.0	1206.3	M
2	7.271	7.275	-0.004	32162765	1000.0	695.1	M
2	7.418	7.420	-0.002	81205109	1000.0	691.8	M
2	7.703	7.704	-0.001	75959214	1000.0	975.3	M
2	8.225	8.225	0.000	77110297	1000.0	1166.3	M
		Average of Peak Amounts =				947.0	
						RPD = 0.17	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081ToxICVL3_00010 Amount Added: 1.00 Units: mL
8081_IS_00005 Amount Added: 75.00 Units: uL Run Reagent

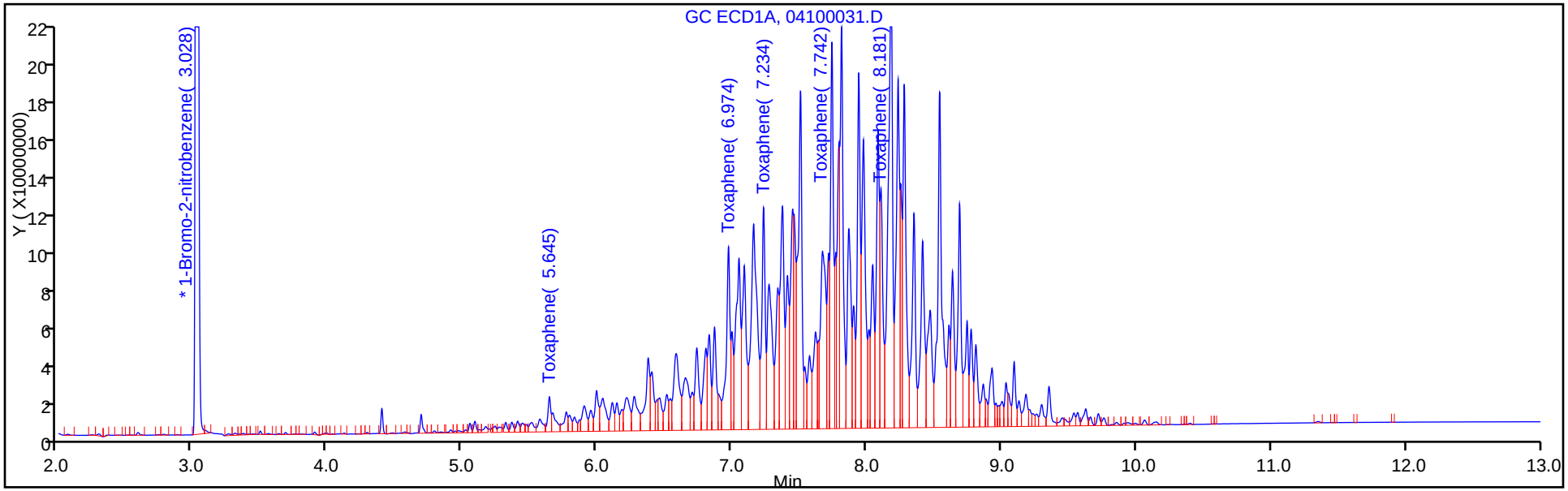
Report Date: 17-Apr-2017 13:22:20 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

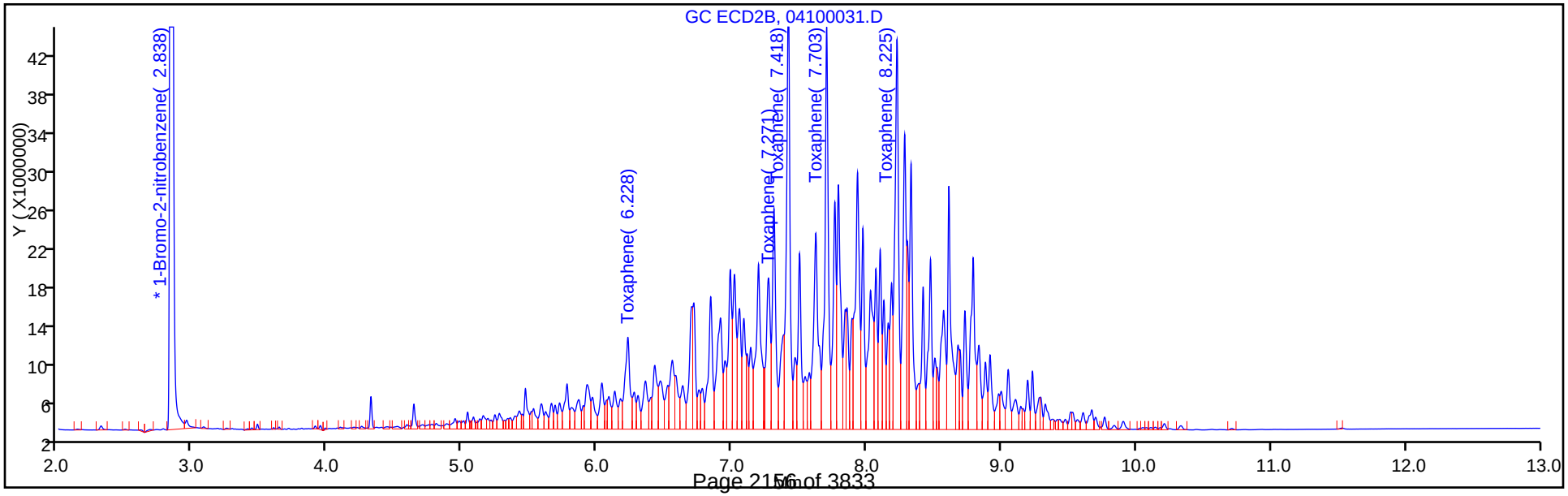
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Injection Date:	10-Apr-2017 19:20:30	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	ICV TOX			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 17-Apr-2017 13:22:21 Chrom Revision: 2.2 13-Mar-2017 15:50:30

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100031.D

Injection Date: 10-Apr-2017 19:20:30 Instrument ID: SGC_P1

Lims ID: ICV TOX

Client ID:

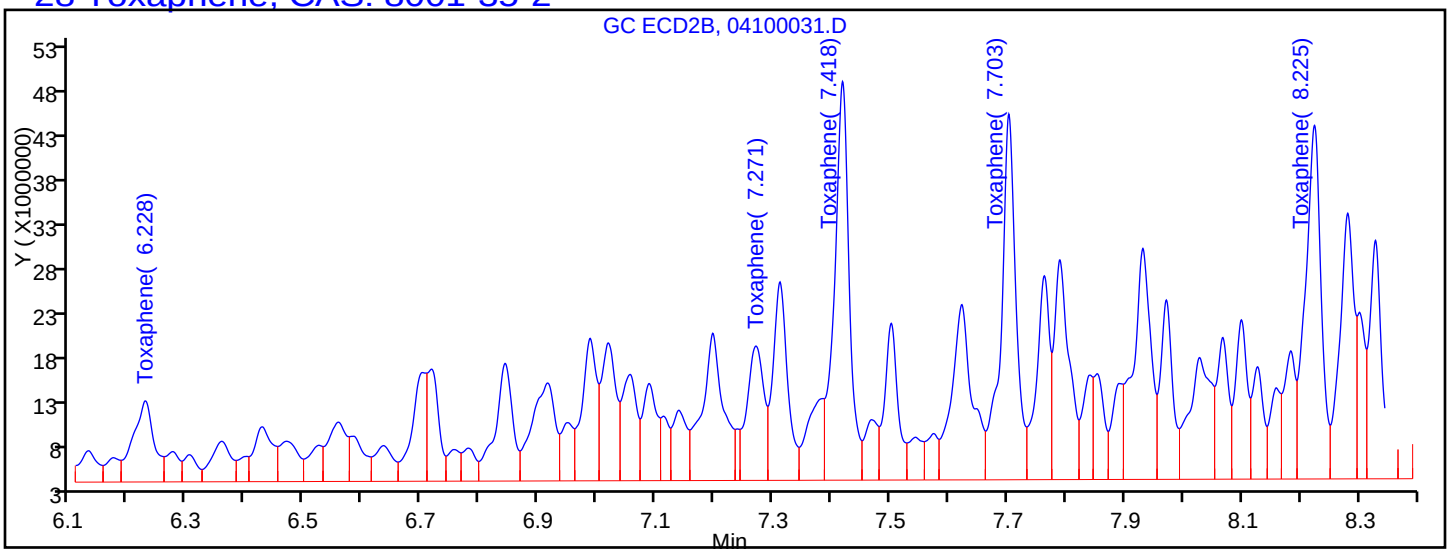
Operator ID: DAW ALS Bottle#: 29 Worklist Smp#: 31

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

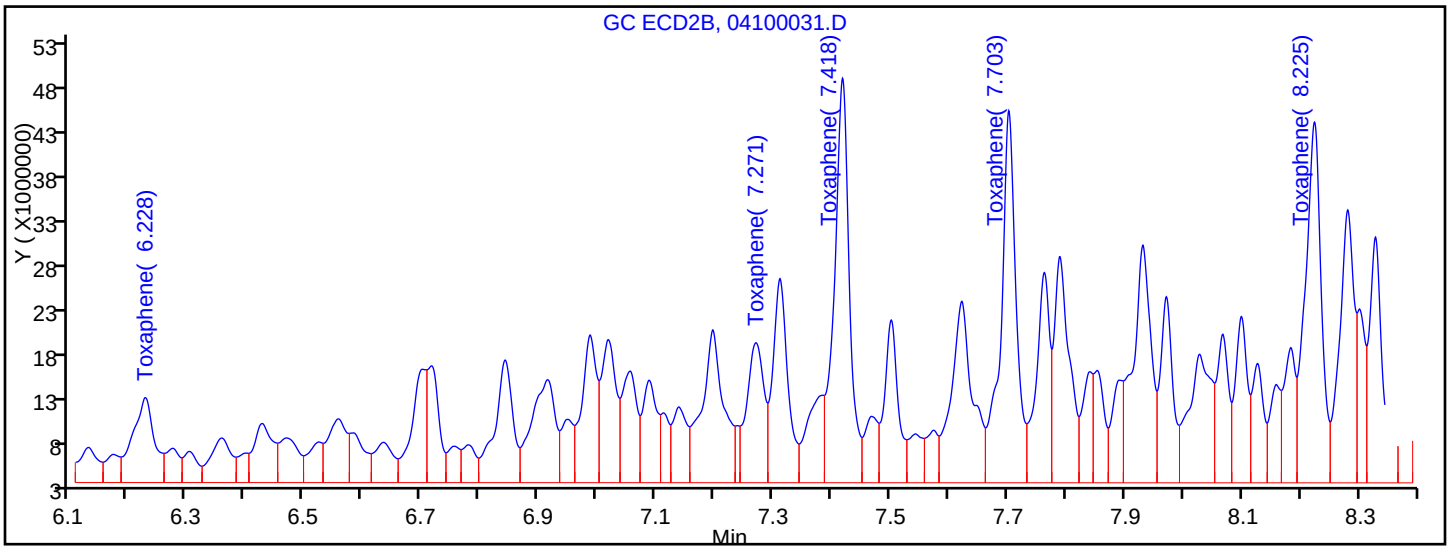
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.228	Response = 22659407
7.271	Response = 30375061
7.418	Response = 78683858
7.703	Response = 72975925
8.225	Response = 74391294



Manual Integration Results

6.228	Response = 24572831	M
7.271	Response = 32162765	M
7.418	Response = 81205109	M
7.703	Response = 75959214	M
8.225	Response = 77110297	M

Reviewer: wellsd, 17-Apr-2017 13:22:19

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-368670/33 Calibration Date: 04/10/2017 19:54

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 04100033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		1.422		28.0	25.0	12.0	20.0
alpha-BHC	Lin2		2.068		26.3	25.0	5.2	20.0
gamma-BHC (Lindane)	Lin2		1.852		26.1	25.0	4.3	20.0
beta-BHC	Lin2		0.7297		26.3	25.0	5.2	20.0
delta-BHC	Lin2		1.950		25.9	25.0	3.5	20.0
Heptachlor	Lin2		1.740		26.3	25.0	5.4	20.0
Aldrin	Lin2		1.880		28.0	25.0	11.8	20.0
Heptachlor epoxide	Lin2		1.619		27.7	25.0	11.0	20.0
gamma-Chlordane	Lin2		1.769		27.6	25.0	10.5	20.0
alpha-Chlordane	Lin2		1.734		28.3	25.0	13.1	20.0
4,4'-DDE	Lin2		1.733		27.6	25.0	10.2	20.0
Endosulfan I	Lin2		1.558		27.7	25.0	10.9	20.0
Dieldrin	Lin2		1.732		27.5	25.0	9.9	20.0
Endrin	Lin2		1.373		26.9	25.0	7.5	20.0
4,4'-DDD	Lin2		1.447		27.1	25.0	8.5	20.0
Endosulfan II	Lin2		1.490		28.1	25.0	12.5	20.0
4,4'-DDT	Lin2		1.387		27.3	25.0	9.1	20.0
Endrin aldehyde	Lin2		1.183		27.6	25.0	10.4	20.0
Methoxychlor	Lin2		0.6389		28.5	25.0	13.8	20.0
Endosulfan sulfate	Lin2		1.307		26.8	25.0	7.0	20.0
Endrin ketone	Lin2		1.520		28.0	25.0	12.0	20.0
Tetrachloro-m-xylene (Surr)	Lin2		1.230		27.0	25.0	8.1	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.8728		27.9	25.0	11.7	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-368670/33 Calibration Date: 04/10/2017 19:54

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 04100033.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.23	4.22	4.24
alpha-BHC	4.40	4.39	4.41
gamma-BHC (Lindane)	4.71	4.70	4.72
beta-BHC	4.80	4.79	4.81
delta-BHC	4.97	4.96	4.98
Heptachlor	5.18	5.17	5.19
Aldrin	5.47	5.46	5.48
Heptachlor epoxide	6.10	6.09	6.11
gamma-Chlordane	6.25	6.24	6.26
alpha-Chlordane	6.41	6.40	6.42
4,4'-DDE	6.50	6.49	6.51
Endosulfan I	6.58	6.57	6.59
Dieldrin	6.87	6.85	6.87
Endrin	7.13	7.12	7.14
4,4'-DDD	7.21	7.20	7.22
Endosulfan II	7.38	7.37	7.39
4,4'-DDT	7.52	7.51	7.53
Endrin aldehyde	7.84	7.83	7.85
Methoxychlor	8.03	8.02	8.04
Endosulfan sulfate	8.28	8.28	8.30
Endrin ketone	8.56	8.55	8.57
Tetrachloro-m-xylene (Surr)	3.85	3.84	3.86
DCB Decachlorobiphenyl (Surr)	9.54	9.53	9.55

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100033.D
Lims ID: ICV AB
Client ID:
Sample Type: ICV
Inject. Date: 10-Apr-2017 19:54:20 ALS Bottle#: 31 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV AB
Misc. Info.: 280-0057376-033
Operator ID: DAW Instrument ID: SGC_P1
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:14 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 17-Apr-2017 12:49:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1					100.0	104.6	
2					100.0	106.4	
						RPD = 1.73	
* 2 1-Bromo-2-nitrobenzene							
1	3.029	3.028	0.001	1345529908	150.0	150.0	
2	2.836	2.837	-0.001	320310102	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.850	3.851	-0.001	275882656	25.0	27.0	
2	3.746	3.746	0.000	61324356	25.0	27.5	
						RPD = 1.89	
5 Hexachlorobenzene							
1	4.232	4.232	0.000	318984854	25.0	28.0	
2	4.178	4.179	-0.001	65952851	25.0	28.4	
						RPD = 1.45	
8 alpha-BHC							
1	4.401	4.402	-0.001	463671527	25.0	26.3	
2	4.320	4.321	-0.001	86932516	25.0	26.7	
						RPD = 1.56	
9 gamma-BHC (Lindane)							
1	4.711	4.712	-0.001	415235195	25.0	26.1	
2	4.651	4.652	-0.001	76375366	25.0	26.5	
						RPD = 1.70	
10 beta-BHC							
1	4.798	4.797	0.001	163642455	25.0	26.3	
2	4.732	4.732	0.000	32942025	25.0	27.0	
						RPD = 2.75	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.972	4.973	-0.001	437344153	25.0	25.9	
2	5.011	5.011	0.000	77375614	25.0	26.1	
						RPD = 0.89	
15 Heptachlor							
1	5.182	5.183	-0.001	390284801	25.0	26.3	
2	5.067	5.067	0.000	69952138	25.0	26.2	
						RPD = 0.67	
16 Aldrin							
1	5.468	5.467	0.001	421597216	25.0	28.0	
2	5.372	5.372	0.000	73237638	25.0	27.8	
						RPD = 0.65	
18 Isodrin							
1	5.803	5.803	0.000	314133149	25.0	27.1	
2	5.746	5.747	-0.001	56369886	25.0	27.3	
						RPD = 0.75	
21 Heptachlor epoxide							
1	6.101	6.101	0.000	362955734	25.0	27.7	
2	5.935	5.936	-0.001	64684651	25.0	27.5	
						RPD = 1.00	
22 gamma-Chlordane							
1	6.246	6.246	0.000	396648481	25.0	27.6	
2	6.143	6.143	0.000	68701704	25.0	28.0	
						RPD = 1.26	
23 alpha-Chlordane							
1	6.409	6.408	0.001	388795379	25.0	28.3	
2	6.317	6.318	-0.001	67138235	25.0	28.7	
						RPD = 1.32	
24 4,4'-DDE							
1	6.504	6.504	0.000	388643138	25.0	27.6	
2	6.537	6.537	0.000	67151548	25.0	27.9	
						RPD = 1.17	
25 Endosulfan I							
1	6.580	6.580	0.000	349394667	25.0	27.7	
2	6.386	6.387	-0.001	62580402	25.0	27.7	
						RPD = 0.16	
27 Dieldrin							
1	6.865	6.864	0.001	388422094	25.0	27.5	
2	6.726	6.727	-0.001	68313438	25.0	27.5	
						RPD = 0.06	
30 Endrin							
1	7.132	7.132	0.000	307908028	25.0	26.9	
2	7.082	7.083	-0.001	53419049	25.0	26.9	
						RPD = 0.03	
32 4,4'-DDD							
1	7.206	7.206	0.000	324578925	25.0	27.1	
2	7.226	7.227	-0.001	52809298	25.0	27.4	
						RPD = 1.14	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.383	7.382	0.001	334143296	25.0	28.1	
2	7.324	7.325	-0.001	58029364	25.0	28.0	
						RPD = 0.27	
35 4,4'-DDT							
1	7.515	7.516	-0.001	310975000	25.0	27.3	
2	7.570	7.571	-0.001	50704627	25.0	27.7	
						RPD = 1.40	
36 Endrin aldehyde							
1	7.835	7.836	-0.001	265328498	25.0	27.6	
2	7.696	7.697	-0.001	47156314	25.0	28.0	
						RPD = 1.63	
37 Methoxychlor							
1	8.027	8.027	0.000	143281943	25.0	28.5	
2	8.288	8.289	-0.001	25055267	25.0	28.6	
						RPD = 0.42	
38 Mirex							
1	8.175	8.174	0.001	230114279	25.0	28.5	
2	8.466	8.466	0.000	38613708	25.0	27.9	
						RPD = 2.26	
39 Endosulfan sulfate							
1	8.284	8.285	-0.001	293158242	25.0	26.8	
2	7.986	7.987	-0.001	50495814	25.0	27.1	
						RPD = 1.18	
40 Endrin ketone							
1	8.564	8.563	0.001	340862580	25.0	28.0	
2	8.514	8.514	0.000	59577835	25.0	28.2	
						RPD = 0.62	
$ 41 DCB Decachlorobiphenyl							
1	9.542	9.541	0.001	195726844	25.0	27.9	
2	9.720	9.722	-0.002	38729311	25.0	28.6	
						RPD = 2.51	
S 3 Endosulfan, Total							
1					75.0	82.6	
2					75.0	82.8	
						RPD = 0.24	

Reagents:

8081ABICVL3_00028	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

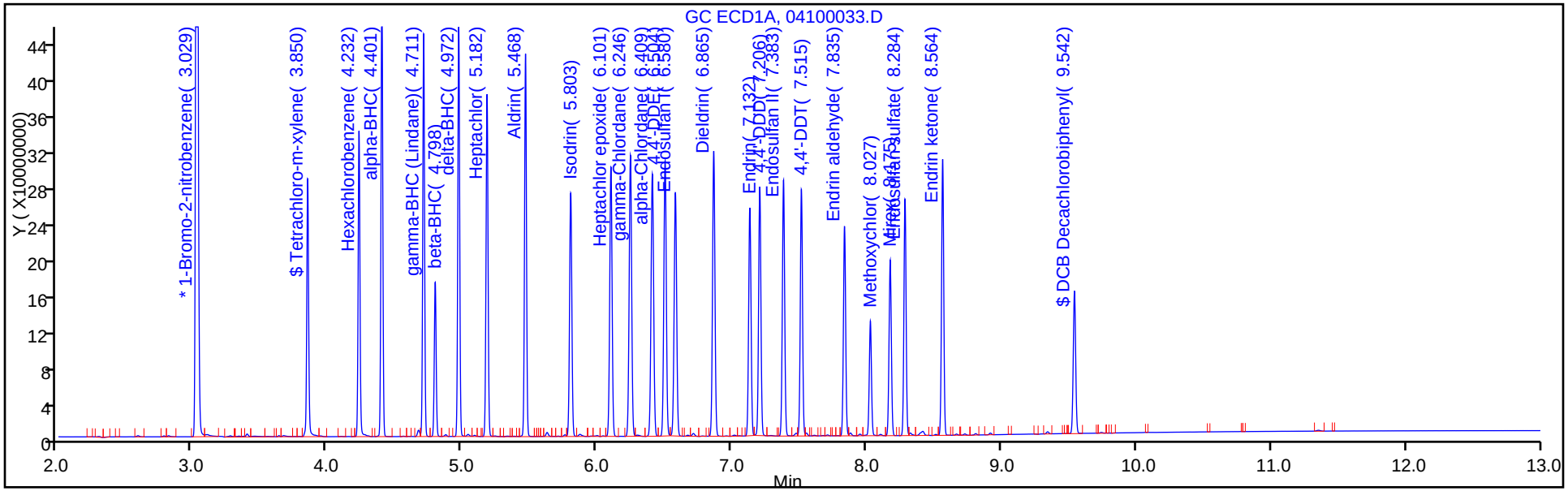
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TestAmerica Denver

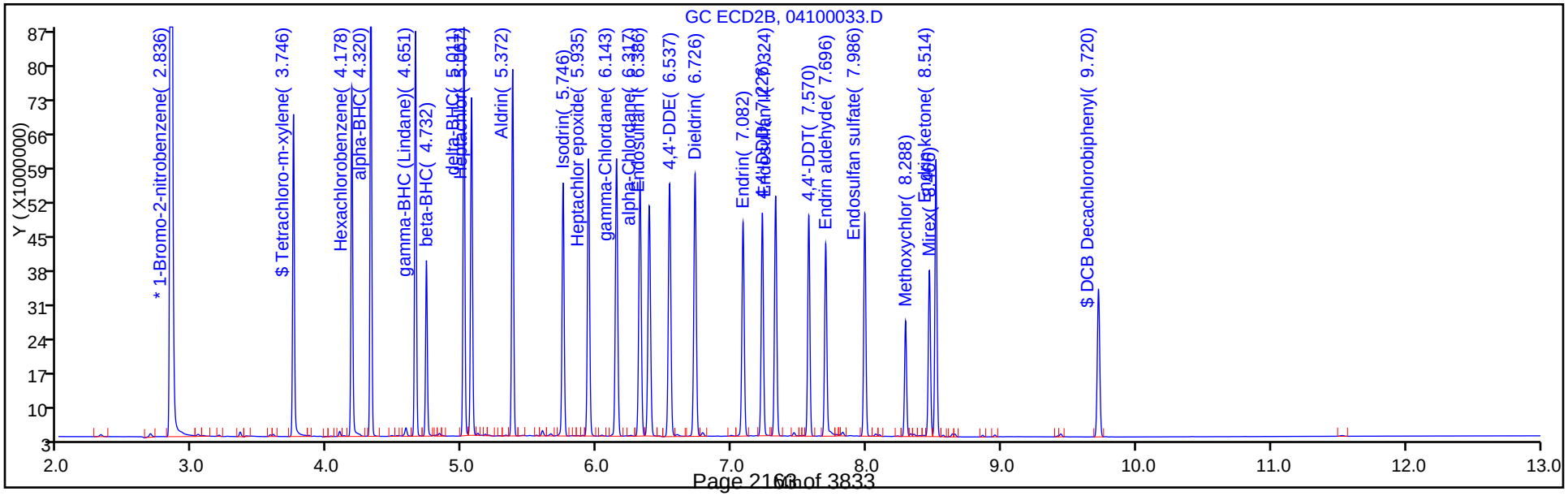
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Injection Date:	10-Apr-2017 19:54:20	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	ICV AB			Worklist Smp#:	33
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-368670/33 Calibration Date: 04/10/2017 19:54

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 04100033.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		1.235		28.4	25.0	13.6	20.0
alpha-BHC	Lin2		1.628		26.7	25.0	6.9	20.0
gamma-BHC (Lindane)	Lin2		1.431		26.5	25.0	6.1	20.0
beta-BHC	Lin2		0.6171		27.0	25.0	8.2	20.0
delta-BHC	Lin2		1.449		26.1	25.0	4.5	20.0
Heptachlor	Lin2		1.310		26.2	25.0	4.7	20.0
Aldrin	Lin2		1.372		27.8	25.0	11.1	20.0
Heptachlor epoxide	Lin2		1.212		27.5	25.0	9.9	20.0
gamma-Chlordane	Lin2		1.287		28.0	25.0	11.9	20.0
alpha-Chlordane	Lin2		1.258		28.7	25.0	14.6	20.0
Endosulfan I	Lin2		1.172		27.7	25.0	10.8	20.0
4,4'-DDE	Lin2		1.258		27.9	25.0	11.5	20.0
Dieldrin	Lin2		1.280		27.5	25.0	9.9	20.0
Endrin	Lin2		1.001		26.9	25.0	7.5	20.0
4,4'-DDD	Lin2		0.9892		27.4	25.0	9.7	20.0
Endosulfan II	Lin2		1.087		28.0	25.0	12.2	20.0
4,4'-DDT	Lin2		0.9498		27.7	25.0	10.6	20.0
Endrin aldehyde	Lin2		0.8833		28.0	25.0	12.2	20.0
Endosulfan sulfate	Lin2		0.9459		27.1	25.0	8.3	20.0
Methoxychlor	Lin2		0.4693		28.6	25.0	14.3	20.0
Endrin ketone	Lin2		1.116		28.2	25.0	12.7	20.0
Tetrachloro-m-xylene (Surr)	Lin2		1.149		27.5	25.0	10.2	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.7255		28.6	25.0	14.5	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-368670/33 Calibration Date: 04/10/2017 19:54

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 04100033.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.18	4.17	4.19
alpha-BHC	4.32	4.31	4.33
gamma-BHC (Lindane)	4.65	4.64	4.66
beta-BHC	4.73	4.72	4.74
delta-BHC	5.01	5.00	5.02
Heptachlor	5.07	5.06	5.08
Aldrin	5.37	5.36	5.38
Heptachlor epoxide	5.94	5.93	5.95
gamma-Chlordane	6.14	6.13	6.15
alpha-Chlordane	6.32	6.31	6.33
Endosulfan I	6.39	6.38	6.40
4,4'-DDE	6.54	6.53	6.55
Dieldrin	6.73	6.72	6.74
Endrin	7.08	7.07	7.09
4,4'-DDD	7.23	7.22	7.24
Endosulfan II	7.32	7.32	7.34
4,4'-DDT	7.57	7.56	7.58
Endrin aldehyde	7.70	7.69	7.71
Endosulfan sulfate	7.99	7.98	8.00
Methoxychlor	8.29	8.28	8.30
Endrin ketone	8.51	8.50	8.52
Tetrachloro-m-xylene (Surr)	3.75	3.74	3.76
DCB Decachlorobiphenyl (Surr)	9.72	9.71	9.73

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100033.D
Lims ID: ICV AB
Client ID:
Sample Type: ICV
Inject. Date: 10-Apr-2017 19:54:20 ALS Bottle#: 31 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV AB
Misc. Info.: 280-0057376-033
Operator ID: DAW Instrument ID: SGC_P1
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 17-Apr-2017 13:22:14 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK028

First Level Reviewer: wellsd Date: 17-Apr-2017 12:49:08

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1					100.0	104.6	
2					100.0	106.4	
						RPD = 1.73	
* 2 1-Bromo-2-nitrobenzene							
1	3.029	3.028	0.001	1345529908	150.0	150.0	
2	2.836	2.837	-0.001	320310102	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.850	3.851	-0.001	275882656	25.0	27.0	
2	3.746	3.746	0.000	61324356	25.0	27.5	
						RPD = 1.89	
5 Hexachlorobenzene							
1	4.232	4.232	0.000	318984854	25.0	28.0	
2	4.178	4.179	-0.001	65952851	25.0	28.4	
						RPD = 1.45	
8 alpha-BHC							
1	4.401	4.402	-0.001	463671527	25.0	26.3	
2	4.320	4.321	-0.001	86932516	25.0	26.7	
						RPD = 1.56	
9 gamma-BHC (Lindane)							
1	4.711	4.712	-0.001	415235195	25.0	26.1	
2	4.651	4.652	-0.001	76375366	25.0	26.5	
						RPD = 1.70	
10 beta-BHC							
1	4.798	4.797	0.001	163642455	25.0	26.3	
2	4.732	4.732	0.000	32942025	25.0	27.0	
						RPD = 2.75	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.972	4.973	-0.001	437344153	25.0	25.9	
2	5.011	5.011	0.000	77375614	25.0	26.1	
						RPD = 0.89	
15 Heptachlor							
1	5.182	5.183	-0.001	390284801	25.0	26.3	
2	5.067	5.067	0.000	69952138	25.0	26.2	
						RPD = 0.67	
16 Aldrin							
1	5.468	5.467	0.001	421597216	25.0	28.0	
2	5.372	5.372	0.000	73237638	25.0	27.8	
						RPD = 0.65	
18 Isodrin							
1	5.803	5.803	0.000	314133149	25.0	27.1	
2	5.746	5.747	-0.001	56369886	25.0	27.3	
						RPD = 0.75	
21 Heptachlor epoxide							
1	6.101	6.101	0.000	362955734	25.0	27.7	
2	5.935	5.936	-0.001	64684651	25.0	27.5	
						RPD = 1.00	
22 gamma-Chlordane							
1	6.246	6.246	0.000	396648481	25.0	27.6	
2	6.143	6.143	0.000	68701704	25.0	28.0	
						RPD = 1.26	
23 alpha-Chlordane							
1	6.409	6.408	0.001	388795379	25.0	28.3	
2	6.317	6.318	-0.001	67138235	25.0	28.7	
						RPD = 1.32	
24 4,4'-DDE							
1	6.504	6.504	0.000	388643138	25.0	27.6	
2	6.537	6.537	0.000	67151548	25.0	27.9	
						RPD = 1.17	
25 Endosulfan I							
1	6.580	6.580	0.000	349394667	25.0	27.7	
2	6.386	6.387	-0.001	62580402	25.0	27.7	
						RPD = 0.16	
27 Dieldrin							
1	6.865	6.864	0.001	388422094	25.0	27.5	
2	6.726	6.727	-0.001	68313438	25.0	27.5	
						RPD = 0.06	
30 Endrin							
1	7.132	7.132	0.000	307908028	25.0	26.9	
2	7.082	7.083	-0.001	53419049	25.0	26.9	
						RPD = 0.03	
32 4,4'-DDD							
1	7.206	7.206	0.000	324578925	25.0	27.1	
2	7.226	7.227	-0.001	52809298	25.0	27.4	
						RPD = 1.14	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.383	7.382	0.001	334143296	25.0	28.1	
2	7.324	7.325	-0.001	58029364	25.0	28.0	
						RPD = 0.27	
35 4,4'-DDT							
1	7.515	7.516	-0.001	310975000	25.0	27.3	
2	7.570	7.571	-0.001	50704627	25.0	27.7	
						RPD = 1.40	
36 Endrin aldehyde							
1	7.835	7.836	-0.001	265328498	25.0	27.6	
2	7.696	7.697	-0.001	47156314	25.0	28.0	
						RPD = 1.63	
37 Methoxychlor							
1	8.027	8.027	0.000	143281943	25.0	28.5	
2	8.288	8.289	-0.001	25055267	25.0	28.6	
						RPD = 0.42	
38 Mirex							
1	8.175	8.174	0.001	230114279	25.0	28.5	
2	8.466	8.466	0.000	38613708	25.0	27.9	
						RPD = 2.26	
39 Endosulfan sulfate							
1	8.284	8.285	-0.001	293158242	25.0	26.8	
2	7.986	7.987	-0.001	50495814	25.0	27.1	
						RPD = 1.18	
40 Endrin ketone							
1	8.564	8.563	0.001	340862580	25.0	28.0	
2	8.514	8.514	0.000	59577835	25.0	28.2	
						RPD = 0.62	
$ 41 DCB Decachlorobiphenyl							
1	9.542	9.541	0.001	195726844	25.0	27.9	
2	9.720	9.722	-0.002	38729311	25.0	28.6	
						RPD = 2.51	
S 3 Endosulfan, Total							
1					75.0	82.6	
2					75.0	82.8	
						RPD = 0.24	

Reagents:

8081ABICVL3_00028	Amount Added: 1.00	Units: mL	
8081_IS_00005	Amount Added: 75.00	Units: uL	Run Reagent

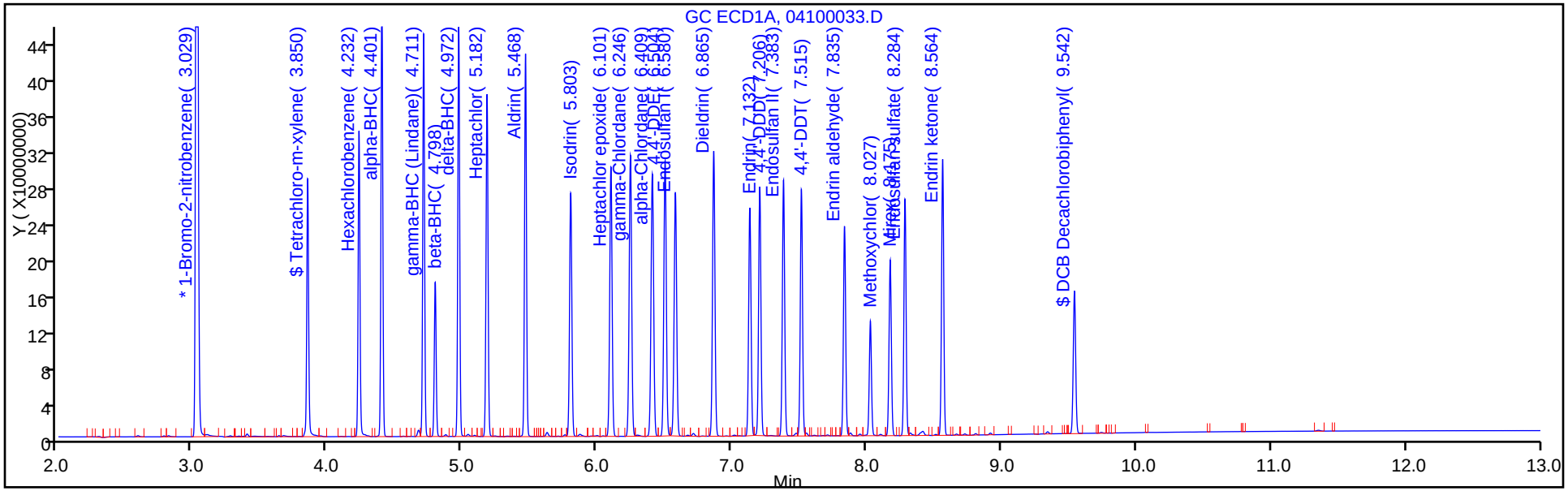
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TestAmerica Denver

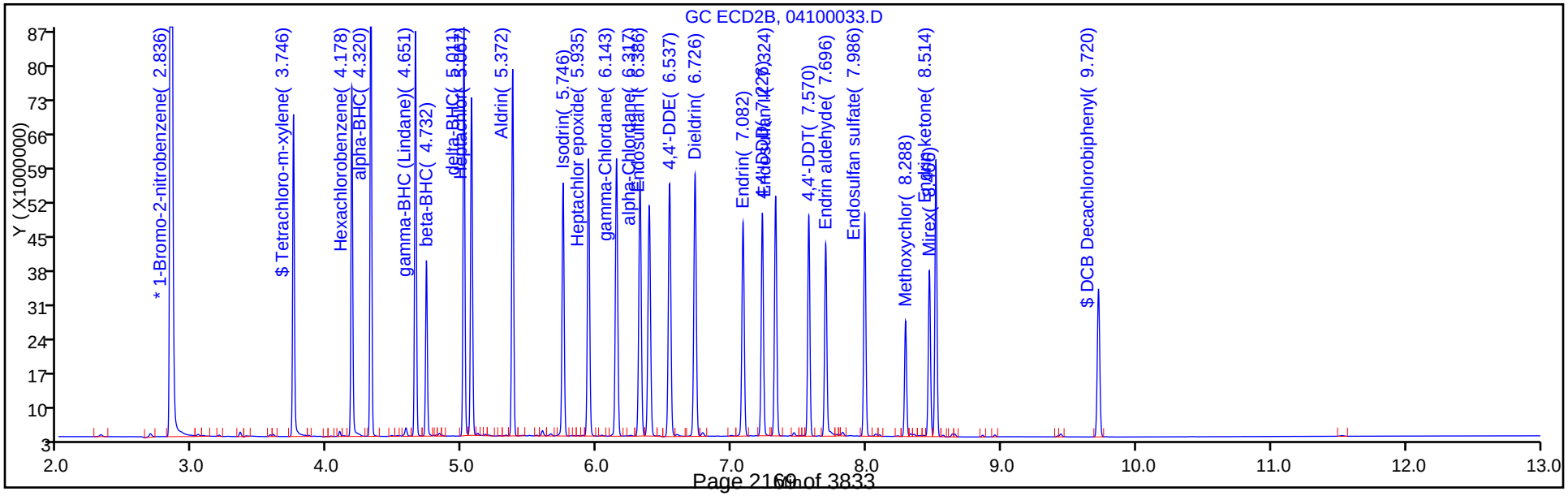
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Injection Date:	10-Apr-2017 19:54:20	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	ICV AB			Worklist Smp#:	33
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/10 Calibration Date: 06/25/2017 15:07

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06250010.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0021		1550	2000	-22.4*	20.0
Toxaphene Peak 2	Qua		0.0238		1710	2000	-14.7	20.0
Toxaphene Peak 3	Lin2		0.0176		1850	2000	-7.4	20.0
Toxaphene Peak 4	Lin2		0.0453		2020	2000	0.8	20.0
Toxaphene Peak 5	Lin2		0.0525		2060	2000	2.9	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/10 Calibration Date: 06/25/2017 15:07

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06250010.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	5.61	5.59	5.63
Toxaphene Peak 2	6.93	6.91	6.95
Toxaphene Peak 3	7.19	7.17	7.21
Toxaphene Peak 4	7.69	7.67	7.71
Toxaphene Peak 5	8.14	8.12	8.16

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250010.D
Lims ID: CCV TOX
Client ID:
Sample Type: CCV
Inject. Date: 25-Jun-2017 15:07:54 ALS Bottle#: 4 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV TOX
Misc. Info.: 280-0060103-010
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:06 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 25-Jun-2017 15:41:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.994	2.994	0.000	1965514955	150.0	150.0	
2	2.764	2.764	0.000	416050334	150.0	150.0	
28 Toxaphene							M
1	5.606	5.606	0.000	55178485	2000.0	1552.0	M
1	6.925	6.925	0.000	623361358	2000.0	1705.7	M
1	7.187	7.187	0.000	462272677	2000.0	1852.9	M
1	7.693	7.693	0.000	1186775514	2000.0	2015.8	M
1	8.135	8.135	0.000	1376788014	2000.0	2058.6	M
		Average of Peak Amounts =				1837.0	
2	6.108	6.108	0.000	44084869	2000.0	1819.0	M
2	7.156	7.156	0.000	97617884	2000.0	1788.8	M
2	7.300	7.300	0.000	230607008	2000.0	1661.1	M
2	7.589	7.589	0.000	172258213	2000.0	1836.7	M
2	8.112	8.112	0.000	142360542	2000.0	1775.5	M
		Average of Peak Amounts =				1776.2	
						RPD = 3.36	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00012 Amount Added: 1.00 Units: mL
8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

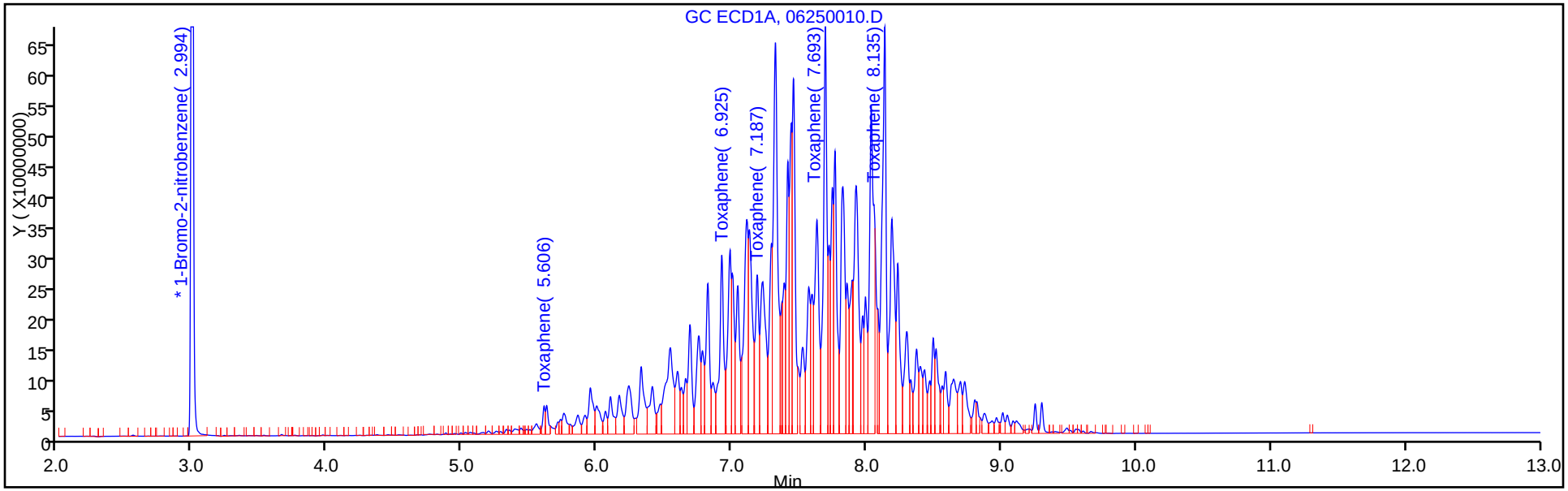
Report Date: 26-Jun-2017 11:56:06 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

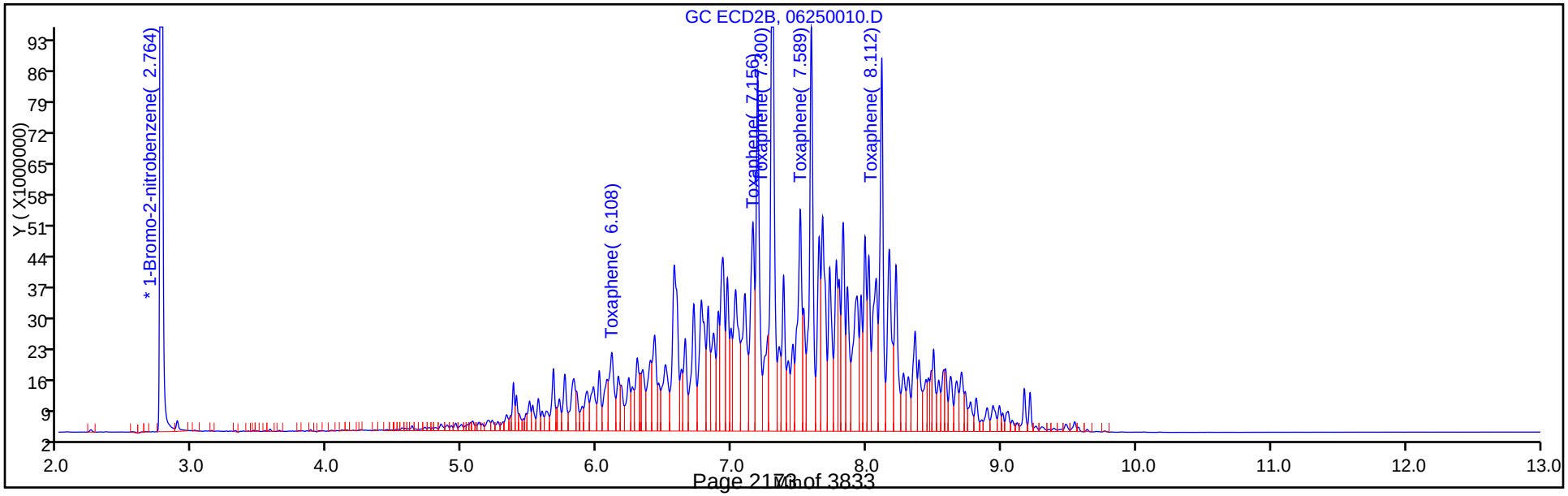
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Injection Date:	25-Jun-2017 15:07:54	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV TOX			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 26-Jun-2017 11:56:07 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250010.D

Injection Date: 25-Jun-2017 15:07:54 Instrument ID: SGC_P1

Lims ID: CCV TOX

Client ID:

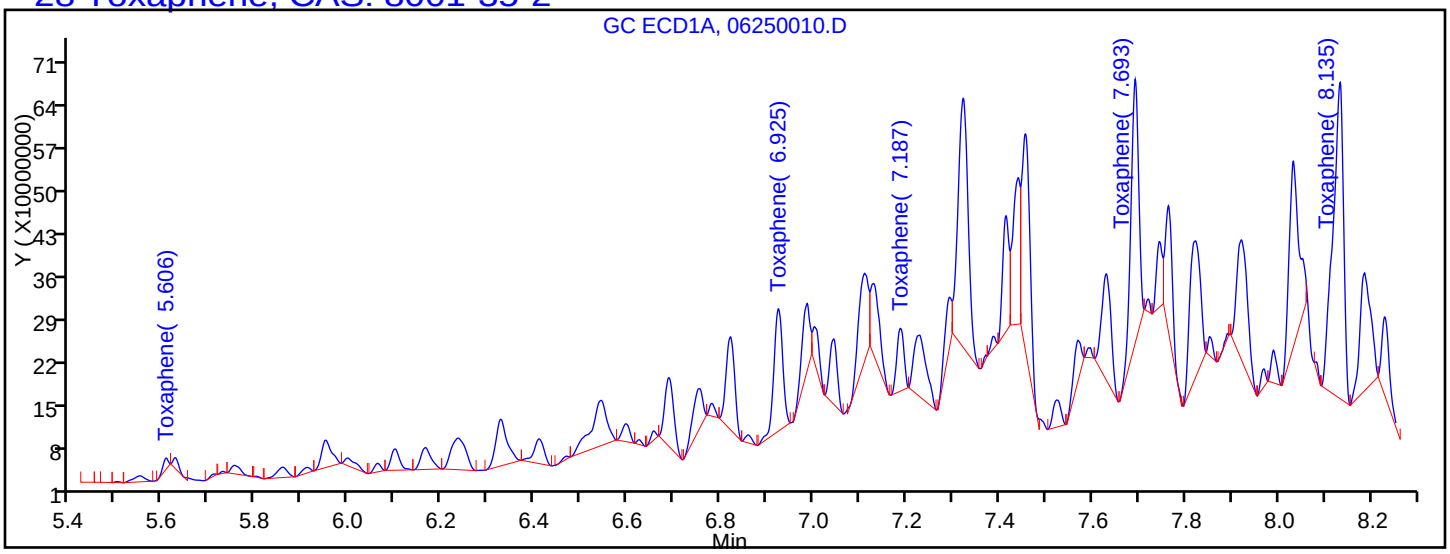
Operator ID: DAW ALS Bottle#: 4 Worklist Smp#: 10

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

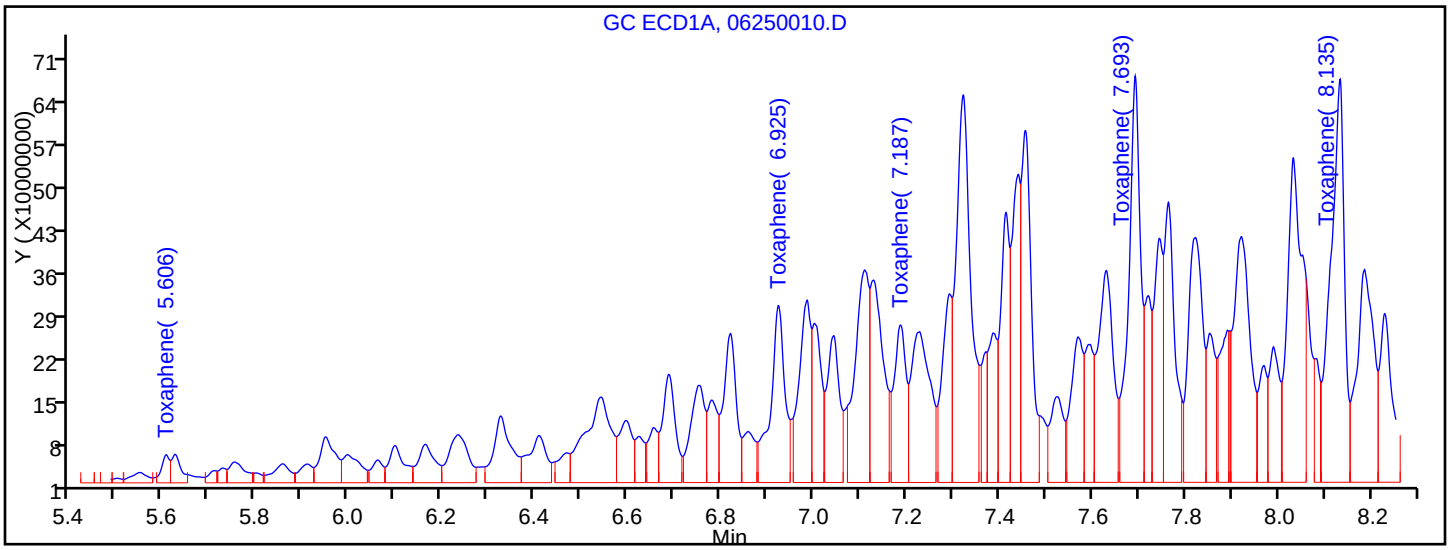
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.606	Response = 14545766
6.925	Response = 269128920
7.187	Response = 111783639
7.693	Response = 510553255
8.135	Response = 827529398



Manual Integration Results

5.606	Response = 55178485	M
6.925	Response = 623361358	M
7.187	Response = 462272677	M
7.693	Response = 1186775514	M
8.135	Response = 1376788014	M

Reviewer: wellsd, 25-Jun-2017 15:41:02

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/10 Calibration Date: 06/25/2017 15:07

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06250010.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0080		1820	2000	-9.0	20.0
Toxaphene Peak 2	Lin2		0.0176		1790	2000	-10.6	20.0
Toxaphene Peak 3	Lin2		0.0416		1660	2000	-16.9	20.0
Toxaphene Peak 4	Lin2		0.0311		1840	2000	-8.2	20.0
Toxaphene Peak 5	Lin2		0.0257		1780	2000	-11.2	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/10 Calibration Date: 06/25/2017 15:07

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06250010.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	6.11	6.09	6.13
Toxaphene Peak 2	7.16	7.14	7.18
Toxaphene Peak 3	7.30	7.28	7.32
Toxaphene Peak 4	7.59	7.57	7.61
Toxaphene Peak 5	8.11	8.09	8.13

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250010.D
Lims ID: CCV TOX
Client ID:
Sample Type: CCV
Inject. Date: 25-Jun-2017 15:07:54 ALS Bottle#: 4 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV TOX
Misc. Info.: 280-0060103-010
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:06 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 25-Jun-2017 15:41:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.994	2.994	0.000	1965514955	150.0	150.0	
2	2.764	2.764	0.000	416050334	150.0	150.0	
28 Toxaphene							M
1	5.606	5.606	0.000	55178485	2000.0	1552.0	M
1	6.925	6.925	0.000	623361358	2000.0	1705.7	M
1	7.187	7.187	0.000	462272677	2000.0	1852.9	M
1	7.693	7.693	0.000	1186775514	2000.0	2015.8	M
1	8.135	8.135	0.000	1376788014	2000.0	2058.6	M
		Average of Peak Amounts =				1837.0	
2	6.108	6.108	0.000	44084869	2000.0	1819.0	M
2	7.156	7.156	0.000	97617884	2000.0	1788.8	M
2	7.300	7.300	0.000	230607008	2000.0	1661.1	M
2	7.589	7.589	0.000	172258213	2000.0	1836.7	M
2	8.112	8.112	0.000	142360542	2000.0	1775.5	M
		Average of Peak Amounts =				1776.2	
						RPD = 3.36	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00012 Amount Added: 1.00 Units: mL
8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

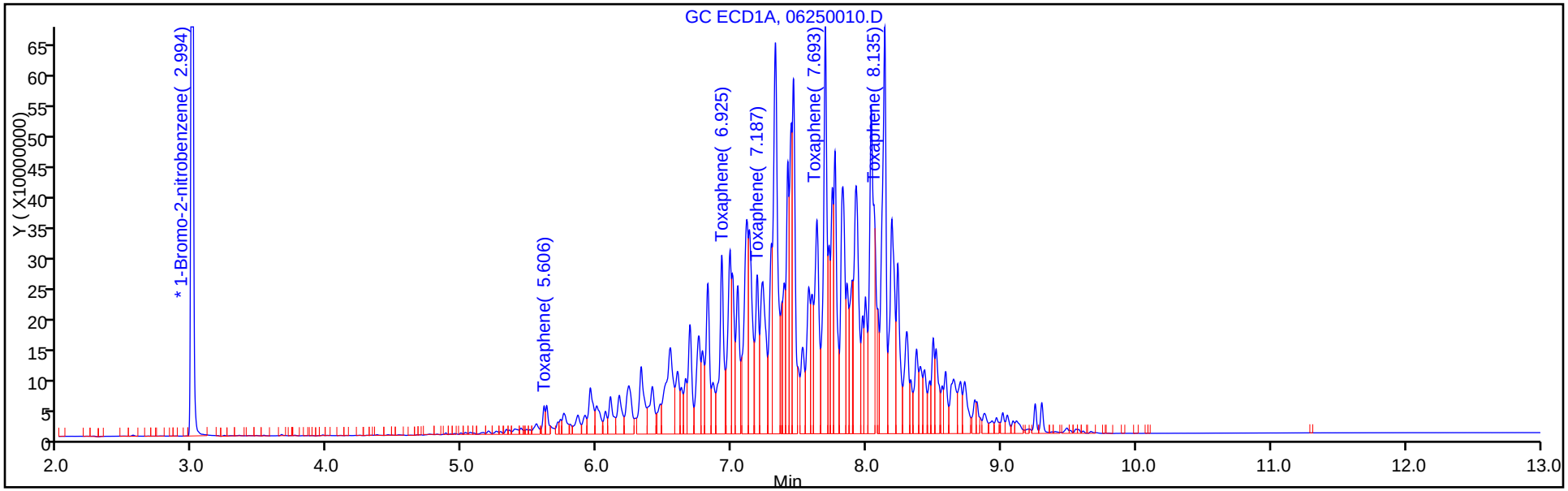
Report Date: 26-Jun-2017 11:56:08 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

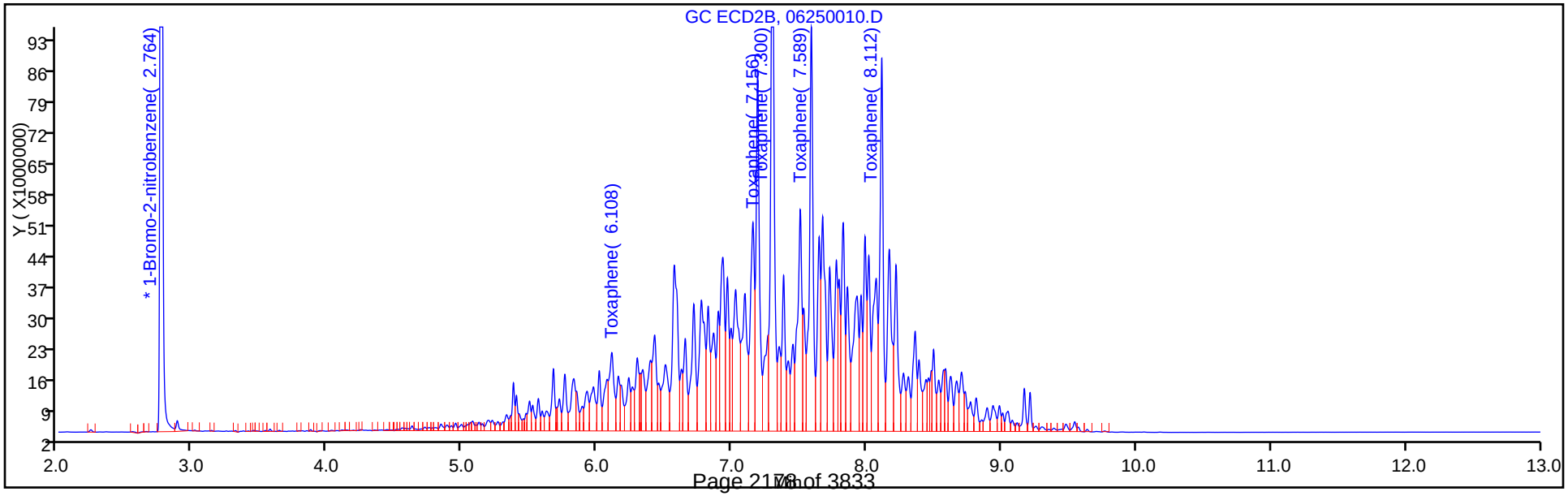
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Injection Date:	25-Jun-2017 15:07:54	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV TOX			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 26-Jun-2017 11:56:08 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250010.D

Injection Date: 25-Jun-2017 15:07:54 Instrument ID: SGC_P1

Lims ID: CCV TOX

Client ID:

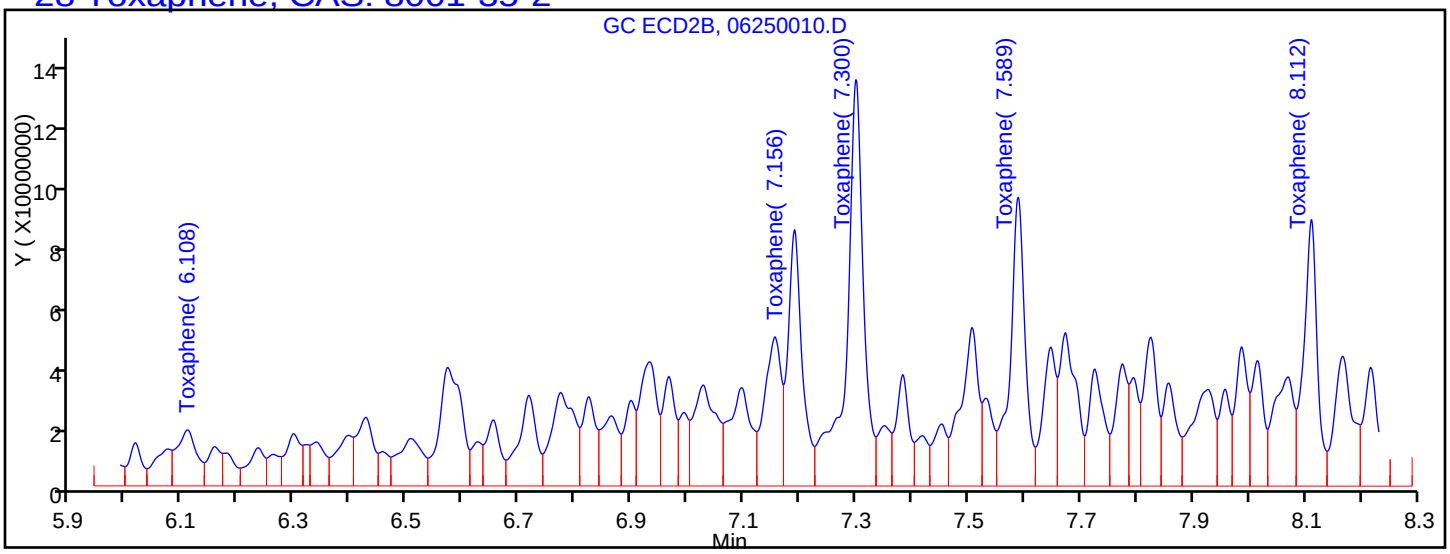
Operator ID: DAW ALS Bottle#: 4 Worklist Smp#: 10

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

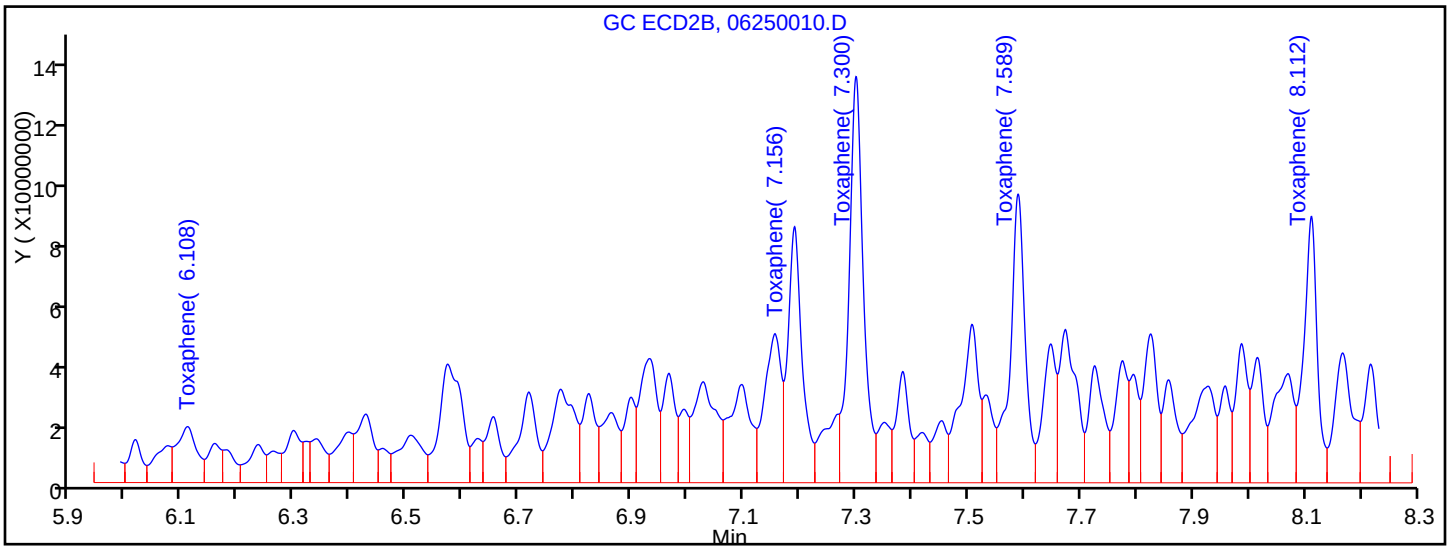
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.108	Response = 44144181
7.156	Response = 97657753
7.300	Response = 276852533
7.589	Response = 172310651
8.112	Response = 142396868



Manual Integration Results

6.108	Response = 44084869	M
7.156	Response = 97617884	M
7.300	Response = 230607008	M
7.589	Response = 172258213	M
8.112	Response = 142360542	M

Reviewer: wellsd, 25-Jun-2017 15:41:08

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVIS 280-378628/12 Calibration Date: 06/25/2017 15:41

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06250012.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		1.159		45.6	50.0	-8.7	20.0
alpha-BHC	Lin2		1.843		46.4	50.0	-7.2	20.0
gamma-BHC (Lindane)	Lin2		1.681		46.9	50.0	-6.2	20.0
beta-BHC	Lin2		0.6186		44.6	50.0	-10.7	20.0
delta-BHC	Lin2		1.739		45.7	50.0	-8.5	20.0
Heptachlor	Lin2		1.598		48.3	50.0	-3.5	20.0
Aldrin	Lin2		1.565		46.4	50.0	-7.3	20.0
Heptachlor epoxide	Lin2		1.345		46.2	50.0	-7.7	20.0
gamma-Chlordane	Lin2		1.503		46.7	50.0	-6.5	20.0
alpha-Chlordane	Lin2		1.422		46.3	50.0	-7.5	20.0
4,4'-DDE	Lin2		1.440		45.5	50.0	-8.9	20.0
Endosulfan I	Lin2		1.320		47.1	50.0	-5.8	20.0
Dieldrin	Lin2		1.453		46.0	50.0	-8.0	20.0
Endrin	Lin2		1.318		51.4	50.0	2.8	20.0
4,4'-DDD	Lin2		1.191		44.7	50.0	-10.7	20.0
Endosulfan II	Lin2		1.244		47.0	50.0	-6.0	20.0
4,4'-DDT	Lin2		1.272		49.6	50.0	-0.9	20.0
Endrin aldehyde	Lin2		0.9735		45.4	50.0	-9.1	20.0
Methoxychlor	Lin2		0.5445		48.7	50.0	-2.6	20.0
Endosulfan sulfate	Lin2		1.153		47.1	50.0	-5.8	20.0
Endrin ketone	Lin2		1.226		45.1	50.0	-9.8	20.0
Tetrachloro-m-xylene (Surr)	Lin2		1.033		45.3	50.0	-9.3	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.7498		48.2	50.0	-3.5	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVIS 280-378628/12 Calibration Date: 06/25/2017 15:41

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06250012.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.20	4.19	4.21
alpha-BHC	4.37	4.36	4.38
gamma-BHC (Lindane)	4.68	4.67	4.69
beta-BHC	4.76	4.75	4.77
delta-BHC	4.94	4.93	4.95
Heptachlor	5.14	5.13	5.15
Aldrin	5.43	5.42	5.44
Heptachlor epoxide	6.05	6.04	6.06
gamma-Chlordane	6.20	6.19	6.21
alpha-Chlordane	6.36	6.35	6.37
4,4'-DDE	6.45	6.44	6.46
Endosulfan I	6.53	6.52	6.54
Dieldrin	6.81	6.80	6.82
Endrin	7.08	7.07	7.09
4,4'-DDD	7.16	7.15	7.17
Endosulfan II	7.33	7.32	7.34
4,4'-DDT	7.47	7.46	7.48
Endrin aldehyde	7.79	7.78	7.80
Methoxychlor	7.98	7.97	7.99
Endosulfan sulfate	8.23	8.22	8.24
Endrin ketone	8.51	8.50	8.52
Tetrachloro-m-xylene (Surr)	3.82	3.81	3.83
DCB Decachlorobiphenyl (Surr)	9.49	9.48	9.50

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250012.D
Lims ID: CCVIS AB
Client ID:
Sample Type: CCVIS
Inject. Date: 25-Jun-2017 15:41:38 ALS Bottle#: 6 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVIS AB
Misc. Info.: 280-0060103-012
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:12 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.993	0.000	2227253286	150.0	150.0	
2	2.763	2.763	0.000	462713784	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.819	3.819	0.000	767154630	50.0	45.3	
2	3.678	3.678	0.000	146975803	50.0	46.1	
						RPD = 1.65	
5 Hexachlorobenzene							
1	4.200	4.200	0.000	860200582	50.0	45.6	
2	4.104	4.104	0.000	152425485	50.0	46.0	
						RPD = 0.74	
8 alpha-BHC							
1	4.368	4.368	0.000	1368491161	50.0	46.4	
2	4.241	4.241	0.000	217992863	50.0	46.4	
						RPD = 0.07	
9 gamma-BHC (Lindane)							
1	4.676	4.676	0.000	1247981115	50.0	46.9	
2	4.567	4.567	0.000	191725088	50.0	46.3	
						RPD = 1.37	
10 beta-BHC							
1	4.760	4.760	0.000	459259162	50.0	44.6	
2	4.648	4.648	0.000	77675967	50.0	44.8	
						RPD = 0.41	
12 delta-BHC							
1	4.935	4.935	0.000	1290801099	50.0	45.7	
2	4.920	4.920	0.000	195654876	50.0	45.8	
						RPD = 0.17	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
15 Heptachlor							
1	5.144	5.144	0.000	1186218554	50.0	48.3	
2	4.978	4.978	0.000	179412824	50.0	46.9	
						RPD = 2.92	
16 Aldrin							
1	5.431	5.431	0.000	1162091078	50.0	46.4	
2	5.283	5.283	0.000	173998976	50.0	45.9	
						RPD = 1.01	
18 Isodrin							
1	5.758	5.758	0.000	887912530	50.0	46.3	
2	5.645	5.645	0.000	135975006	50.0	46.0	
						RPD = 0.54	
21 Heptachlor epoxide							
1	6.053	6.053	0.000	998491877	50.0	46.2	
2	5.828	5.828	0.000	152483187	50.0	45.3	
						RPD = 1.96	
22 gamma-Chlordane							
1	6.196	6.196	0.000	1115861118	50.0	46.7	
2	6.028	6.028	0.000	157555089	50.0	44.7	
						RPD = 4.36	
23 alpha-Chlordane							
1	6.357	6.357	0.000	1055847257	50.0	46.3	
2	6.196	6.196	0.000	151832204	50.0	45.3	
						RPD = 2.21	
24 4,4'-DDE							
1	6.453	6.453	0.000	1068719044	50.0	45.5	
2	6.413	6.413	0.000	148713277	50.0	43.0	
						RPD = 5.70	
25 Endosulfan I							
1	6.528	6.528	0.000	980008403	50.0	47.1	
2	6.260	6.260	0.000	140291881	50.0	43.5	
						RPD = 7.94	
27 Dieldrin							
1	6.813	6.813	0.000	1078773977	50.0	46.0	
2	6.599	6.599	0.000	158832335	50.0	44.6	
						RPD = 3.14	
30 Endrin							
1	7.082	7.082	0.000	978363275	50.0	51.4	
2	6.959	6.959	0.000	145571977	50.0	51.1	
						RPD = 0.60	
32 4,4'-DDD							
1	7.158	7.158	0.000	884531626	50.0	44.7	
2	7.110	7.110	0.000	123940615	50.0	45.1	
						RPD = 0.92	
34 Endosulfan II							
1	7.331	7.331	0.000	923704487	50.0	47.0	
2	7.203	7.203	0.000	133932375	50.0	45.3	
						RPD = 3.61	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
35 4,4'-DDT							
1	7.468	7.468	0.000	944354068	50.0	49.6	
2	7.459	7.459	0.000	125478117	50.0	47.6	
						RPD = 3.98	
36 Endrin aldehyde							
1	7.785	7.785	0.000	722708510	50.0	45.4	
2	7.578	7.578	0.000	106532142	50.0	44.3	
						RPD = 2.45	
37 Methoxychlor							
1	7.981	7.981	0.000	404279169	50.0	48.7	
2	8.182	8.182	0.000	60755781	50.0	48.7	
						RPD = 0.12	
38 Mirex							
1	8.127	8.127	0.000	607795801	50.0	45.7	
2	8.353	8.353	0.000	86224162	50.0	43.1	
						RPD = 5.72	
39 Endosulfan sulfate							
1	8.232	8.232	0.000	856326701	50.0	47.1	
2	7.873	7.873	0.000	120612448	50.0	45.3	
						RPD = 3.76	
40 Endrin ketone							
1	8.513	8.513	0.000	910266596	50.0	45.1	
2	8.399	8.399	0.000	134523097	50.0	44.4	
						RPD = 1.47	
$ 41 DCB Decachlorobiphenyl							
1	9.492	9.492	0.000	556665910	50.0	48.2	
2	9.593	9.593	0.000	92701735	50.0	48.2	
						RPD = 0.07	

Reagents:

8081IcalL4_00026	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

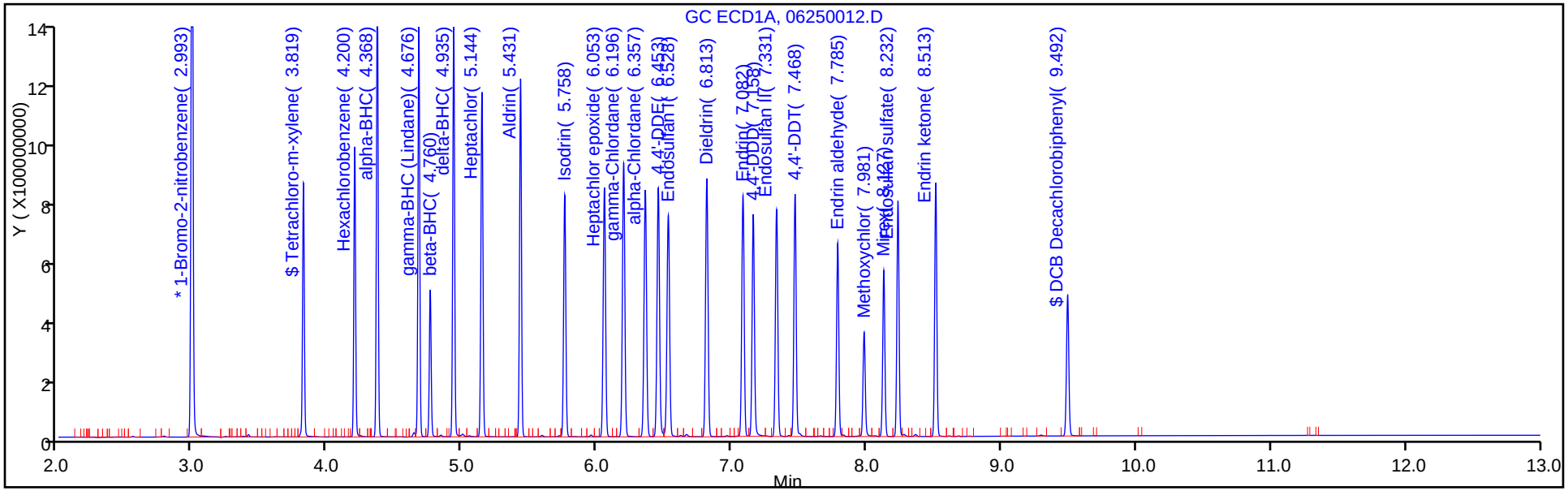
Report Date: 26-Jun-2017 11:56:13 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

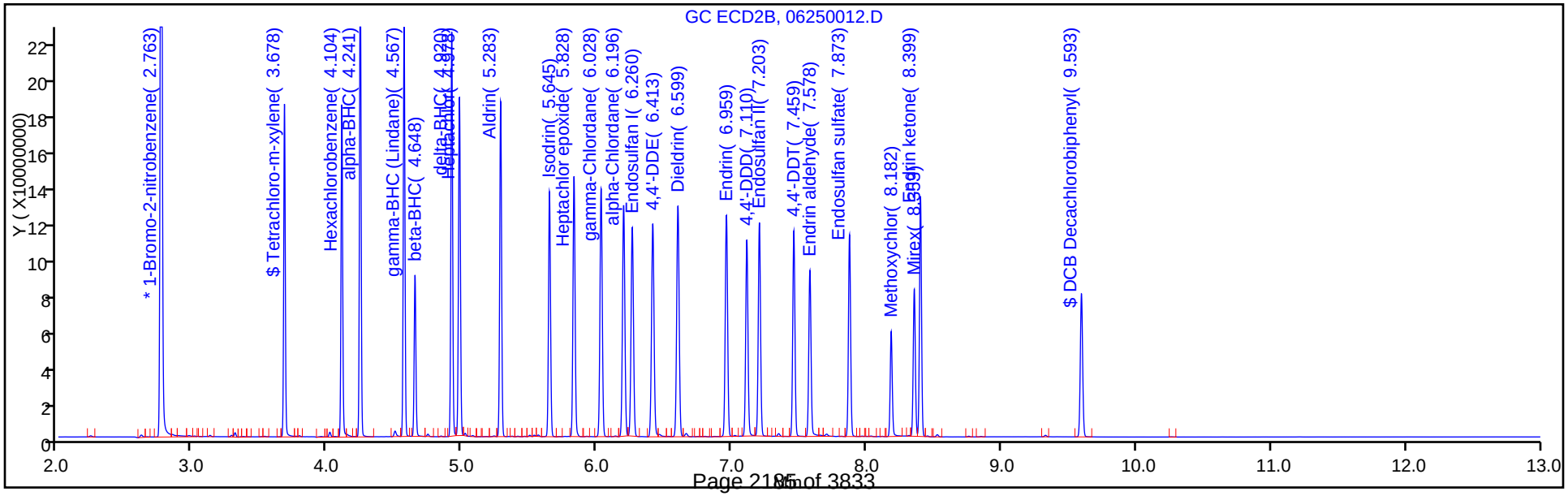
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250012.D

Injection Date:	25-Jun-2017 15:41:38	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCVIS AB			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVIS 280-378628/12 Calibration Date: 06/25/2017 15:41

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06250012.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		0.9883		46.0	50.0	-8.1	20.0
alpha-BHC	Lin2		1.413		46.4	50.0	-7.1	20.0
gamma-BHC (Lindane)	Lin2		1.243		46.3	50.0	-7.5	20.0
beta-BHC	Lin2		0.5036		44.8	50.0	-10.4	20.0
delta-BHC	Lin2		1.269		45.8	50.0	-8.4	20.0
Heptachlor	Lin2		1.163		46.9	50.0	-6.3	20.0
Aldrin	Lin2		1.128		45.9	50.0	-8.2	20.0
Heptachlor epoxide	Lin2		0.9886		45.3	50.0	-9.4	20.0
gamma-Chlordane	Lin2		1.022		44.7	50.0	-10.5	20.0
alpha-Chlordane	Lin2		0.9844		45.3	50.0	-9.5	20.0
Endosulfan I	Lin2		0.9096		43.5	50.0	-13.0	20.0
4,4'-DDE	Lin2		0.9642		43.0	50.0	-14.0	20.0
Dieldrin	Lin2		1.030		44.6	50.0	-10.8	20.0
Endrin	Lin2		0.9438		51.1	50.0	2.2	20.0
4,4'-DDD	Lin2		0.8036		45.1	50.0	-9.9	20.0
Endosulfan II	Lin2		0.8684		45.3	50.0	-9.4	20.0
4,4'-DDT	Lin2		0.8135		47.6	50.0	-4.7	20.0
Endrin aldehyde	Lin2		0.6907		44.3	50.0	-11.3	20.0
Endosulfan sulfate	Lin2		0.7820		45.3	50.0	-9.3	20.0
Methoxychlor	Lin2		0.3939		48.7	50.0	-2.7	20.0
Endrin ketone	Lin2		0.8722		44.4	50.0	-11.1	20.0
Tetrachloro-m-xylene (Surr)	Lin2		0.9529		46.1	50.0	-7.8	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.6010		48.2	50.0	-3.6	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVIS 280-378628/12 Calibration Date: 06/25/2017 15:41

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06250012.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.10	4.09	4.11
alpha-BHC	4.24	4.23	4.25
gamma-BHC (Lindane)	4.57	4.56	4.58
beta-BHC	4.65	4.64	4.66
delta-BHC	4.92	4.91	4.93
Heptachlor	4.98	4.97	4.99
Aldrin	5.28	5.27	5.29
Heptachlor epoxide	5.83	5.82	5.84
gamma-Chlordane	6.03	6.02	6.04
alpha-Chlordane	6.20	6.19	6.21
Endosulfan I	6.26	6.25	6.27
4,4'-DDE	6.41	6.40	6.42
Dieldrin	6.60	6.59	6.61
Endrin	6.96	6.95	6.97
4,4'-DDD	7.11	7.10	7.12
Endosulfan II	7.20	7.19	7.21
4,4'-DDT	7.46	7.45	7.47
Endrin aldehyde	7.58	7.57	7.59
Endosulfan sulfate	7.87	7.86	7.88
Methoxychlor	8.18	8.17	8.19
Endrin ketone	8.40	8.39	8.41
Tetrachloro-m-xylene (Surr)	3.68	3.67	3.69
DCB Decachlorobiphenyl (Surr)	9.59	9.58	9.60

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250012.D
Lims ID: CCVIS AB
Client ID:
Sample Type: CCVIS
Inject. Date: 25-Jun-2017 15:41:38 ALS Bottle#: 6 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVIS AB
Misc. Info.: 280-0060103-012
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:12 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.993	0.000	2227253286	150.0	150.0	
2	2.763	2.763	0.000	462713784	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.819	3.819	0.000	767154630	50.0	45.3	
2	3.678	3.678	0.000	146975803	50.0	46.1	
						RPD = 1.65	
5 Hexachlorobenzene							
1	4.200	4.200	0.000	860200582	50.0	45.6	
2	4.104	4.104	0.000	152425485	50.0	46.0	
						RPD = 0.74	
8 alpha-BHC							
1	4.368	4.368	0.000	1368491161	50.0	46.4	
2	4.241	4.241	0.000	217992863	50.0	46.4	
						RPD = 0.07	
9 gamma-BHC (Lindane)							
1	4.676	4.676	0.000	1247981115	50.0	46.9	
2	4.567	4.567	0.000	191725088	50.0	46.3	
						RPD = 1.37	
10 beta-BHC							
1	4.760	4.760	0.000	459259162	50.0	44.6	
2	4.648	4.648	0.000	77675967	50.0	44.8	
						RPD = 0.41	
12 delta-BHC							
1	4.935	4.935	0.000	1290801099	50.0	45.7	
2	4.920	4.920	0.000	195654876	50.0	45.8	
						RPD = 0.17	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
15 Heptachlor							
1	5.144	5.144	0.000	1186218554	50.0	48.3	
2	4.978	4.978	0.000	179412824	50.0	46.9	
						RPD = 2.92	
16 Aldrin							
1	5.431	5.431	0.000	1162091078	50.0	46.4	
2	5.283	5.283	0.000	173998976	50.0	45.9	
						RPD = 1.01	
18 Isodrin							
1	5.758	5.758	0.000	887912530	50.0	46.3	
2	5.645	5.645	0.000	135975006	50.0	46.0	
						RPD = 0.54	
21 Heptachlor epoxide							
1	6.053	6.053	0.000	998491877	50.0	46.2	
2	5.828	5.828	0.000	152483187	50.0	45.3	
						RPD = 1.96	
22 gamma-Chlordane							
1	6.196	6.196	0.000	1115861118	50.0	46.7	
2	6.028	6.028	0.000	157555089	50.0	44.7	
						RPD = 4.36	
23 alpha-Chlordane							
1	6.357	6.357	0.000	1055847257	50.0	46.3	
2	6.196	6.196	0.000	151832204	50.0	45.3	
						RPD = 2.21	
24 4,4'-DDE							
1	6.453	6.453	0.000	1068719044	50.0	45.5	
2	6.413	6.413	0.000	148713277	50.0	43.0	
						RPD = 5.70	
25 Endosulfan I							
1	6.528	6.528	0.000	980008403	50.0	47.1	
2	6.260	6.260	0.000	140291881	50.0	43.5	
						RPD = 7.94	
27 Dieldrin							
1	6.813	6.813	0.000	1078773977	50.0	46.0	
2	6.599	6.599	0.000	158832335	50.0	44.6	
						RPD = 3.14	
30 Endrin							
1	7.082	7.082	0.000	978363275	50.0	51.4	
2	6.959	6.959	0.000	145571977	50.0	51.1	
						RPD = 0.60	
32 4,4'-DDD							
1	7.158	7.158	0.000	884531626	50.0	44.7	
2	7.110	7.110	0.000	123940615	50.0	45.1	
						RPD = 0.92	
34 Endosulfan II							
1	7.331	7.331	0.000	923704487	50.0	47.0	
2	7.203	7.203	0.000	133932375	50.0	45.3	
						RPD = 3.61	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
35 4,4'-DDT							
1	7.468	7.468	0.000	944354068	50.0	49.6	
2	7.459	7.459	0.000	125478117	50.0	47.6	
						RPD = 3.98	
36 Endrin aldehyde							
1	7.785	7.785	0.000	722708510	50.0	45.4	
2	7.578	7.578	0.000	106532142	50.0	44.3	
						RPD = 2.45	
37 Methoxychlor							
1	7.981	7.981	0.000	404279169	50.0	48.7	
2	8.182	8.182	0.000	60755781	50.0	48.7	
						RPD = 0.12	
38 Mirex							
1	8.127	8.127	0.000	607795801	50.0	45.7	
2	8.353	8.353	0.000	86224162	50.0	43.1	
						RPD = 5.72	
39 Endosulfan sulfate							
1	8.232	8.232	0.000	856326701	50.0	47.1	
2	7.873	7.873	0.000	120612448	50.0	45.3	
						RPD = 3.76	
40 Endrin ketone							
1	8.513	8.513	0.000	910266596	50.0	45.1	
2	8.399	8.399	0.000	134523097	50.0	44.4	
						RPD = 1.47	
$ 41 DCB Decachlorobiphenyl							
1	9.492	9.492	0.000	556665910	50.0	48.2	
2	9.593	9.593	0.000	92701735	50.0	48.2	
						RPD = 0.07	

Reagents:

8081IcalL4_00026	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

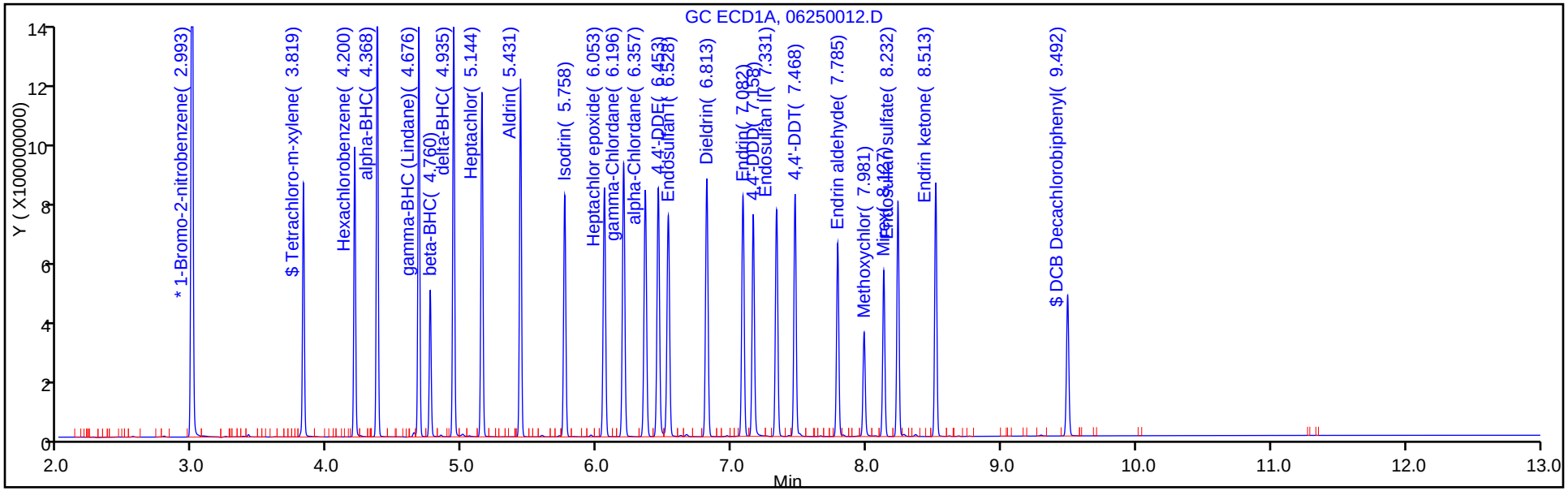
Report Date: 26-Jun-2017 11:56:13 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

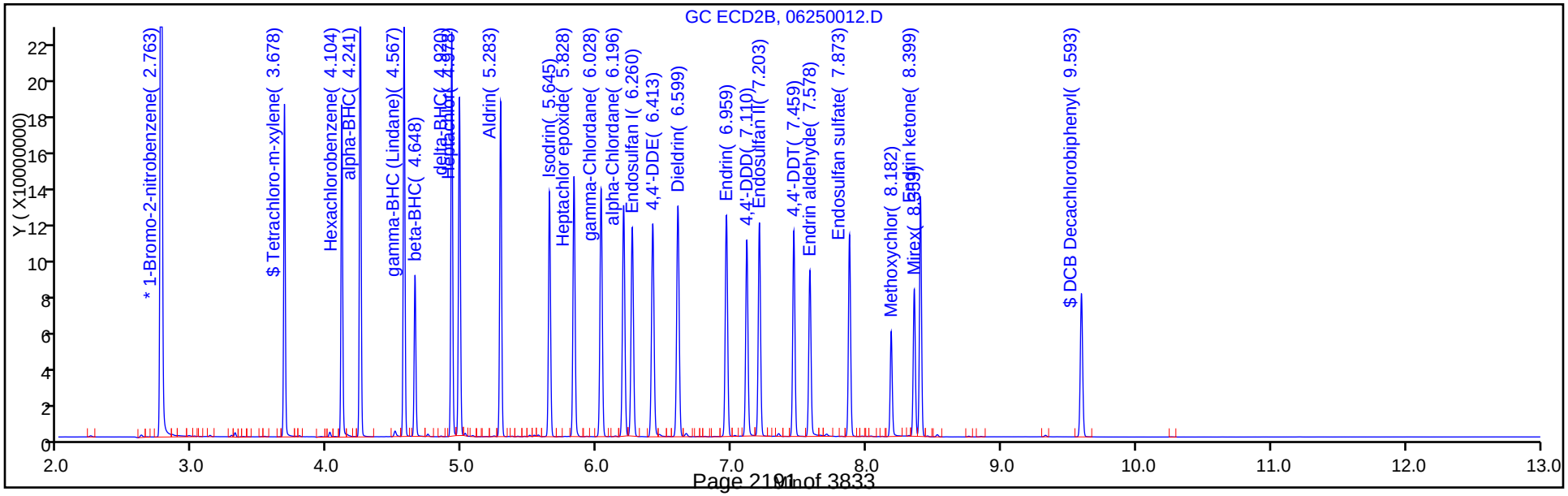
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Injection Date:	25-Jun-2017 15:41:38	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCVIS AB			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/30 Calibration Date: 06/25/2017 20:45

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06250030.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0024		1780	2000	-11.0	20.0
Toxaphene Peak 2	Qua		0.0246		1760	2000	-11.9	20.0
Toxaphene Peak 3	Lin2		0.0174		1830	2000	-8.4	20.0
Toxaphene Peak 4	Lin2		0.0417		1860	2000	-7.1	20.0
Toxaphene Peak 5	Lin2		0.0433		1700	2000	-14.8	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/30 Calibration Date: 06/25/2017 20:45

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06250030.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	5.60	5.59	5.63
Toxaphene Peak 2	6.92	6.91	6.95
Toxaphene Peak 3	7.19	7.17	7.21
Toxaphene Peak 4	7.69	7.67	7.71
Toxaphene Peak 5	8.13	8.12	8.16

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250030.D
Lims ID: CCV TOX
Client ID:
Sample Type: CCV
Inject. Date: 25-Jun-2017 20:45:33 ALS Bottle#: 24 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV TOX
Misc. Info.: 280-0060103-030
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:51 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:36:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.992	2.993	-0.001	2201180951	150.0	150.0	
2	2.763	2.763	0.000	454410780	150.0	150.0	
28 Toxaphene							M
1	5.604	5.606	-0.002	70880390	2000.0	1780.7	M
1	6.923	6.925	-0.002	722907544	2000.0	1761.9	M
1	7.186	7.187	-0.001	511907988	2000.0	1832.7	M
1	7.690	7.693	-0.003	1222521793	2000.0	1858.1	M
1	8.134	8.135	-0.001	1269447743	2000.0	1703.3	M
		Average of Peak Amounts =				1787.3	
2	6.106	6.108	-0.002	51103478	2000.0	1936.7	M
2	7.156	7.156	0.000	101828615	2000.0	1706.6	M
2	7.300	7.300	0.000	238389685	2000.0	1570.1	M
2	7.588	7.589	-0.001	173684085	2000.0	1693.3	M
2	8.110	8.112	-0.002	136955991	2000.0	1561.0	M
		Average of Peak Amounts =				1693.5	
						RPD = 5.39	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00012 Amount Added: 1.00 Units: mL
8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

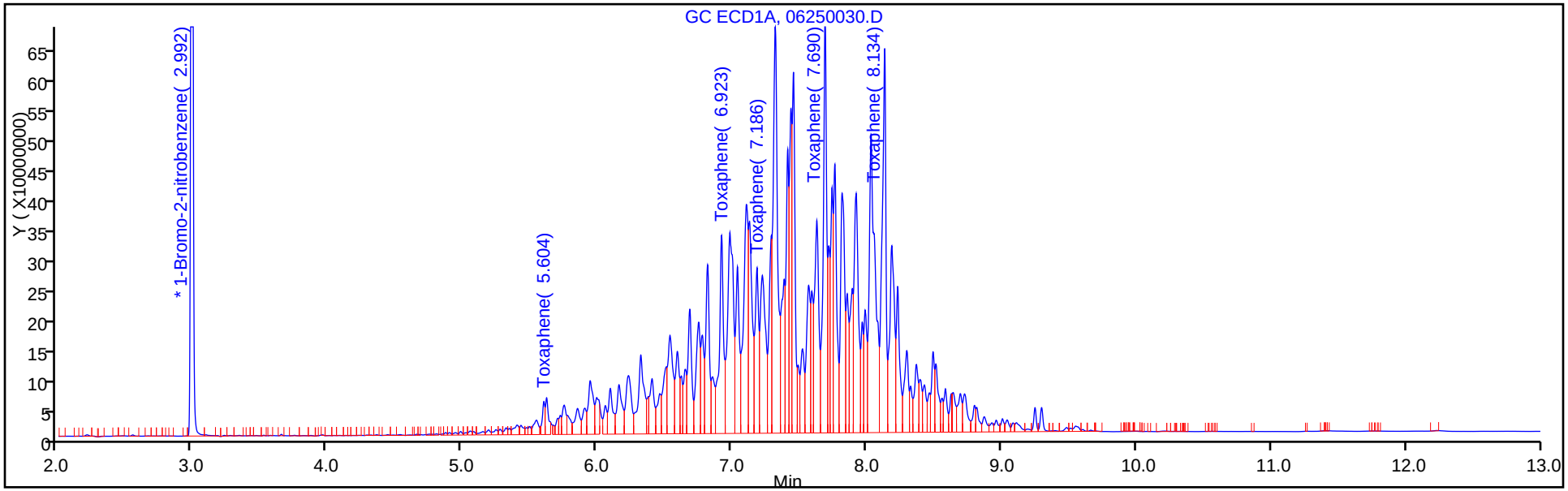
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TestAmerica Denver

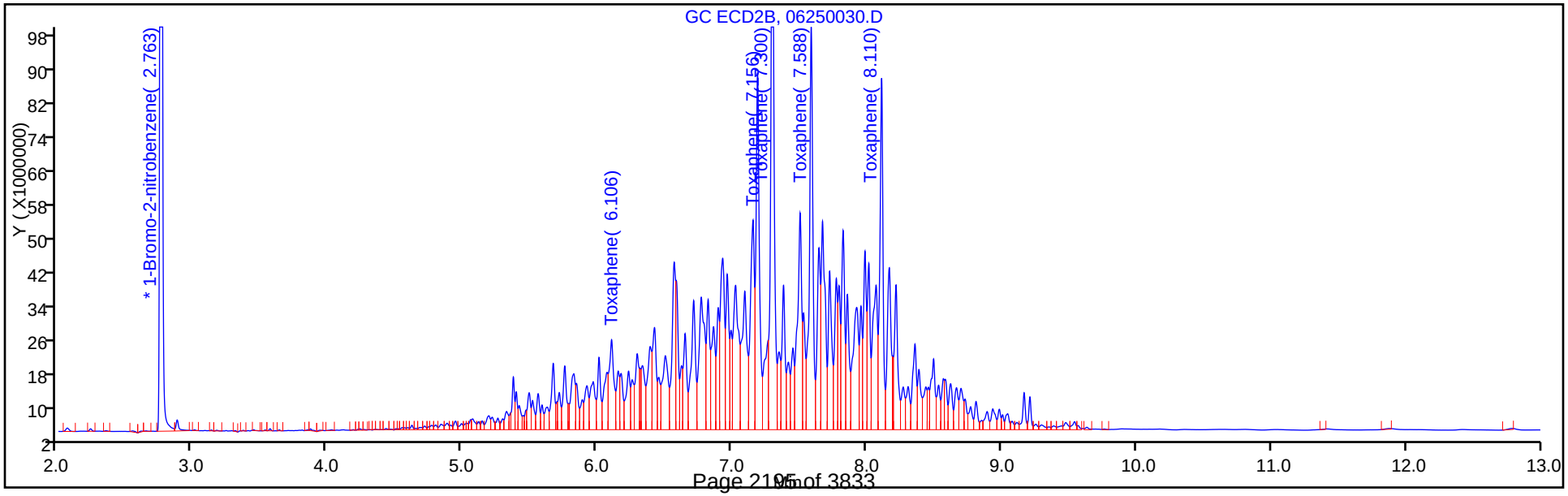
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Injection Date:	25-Jun-2017 20:45:33	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV TOX			Worklist Smp#:	30
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 26-Jun-2017 11:56:52 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250030.D

Injection Date: 25-Jun-2017 20:45:33 Instrument ID: SGC_P1

Lims ID: CCV TOX

Client ID:

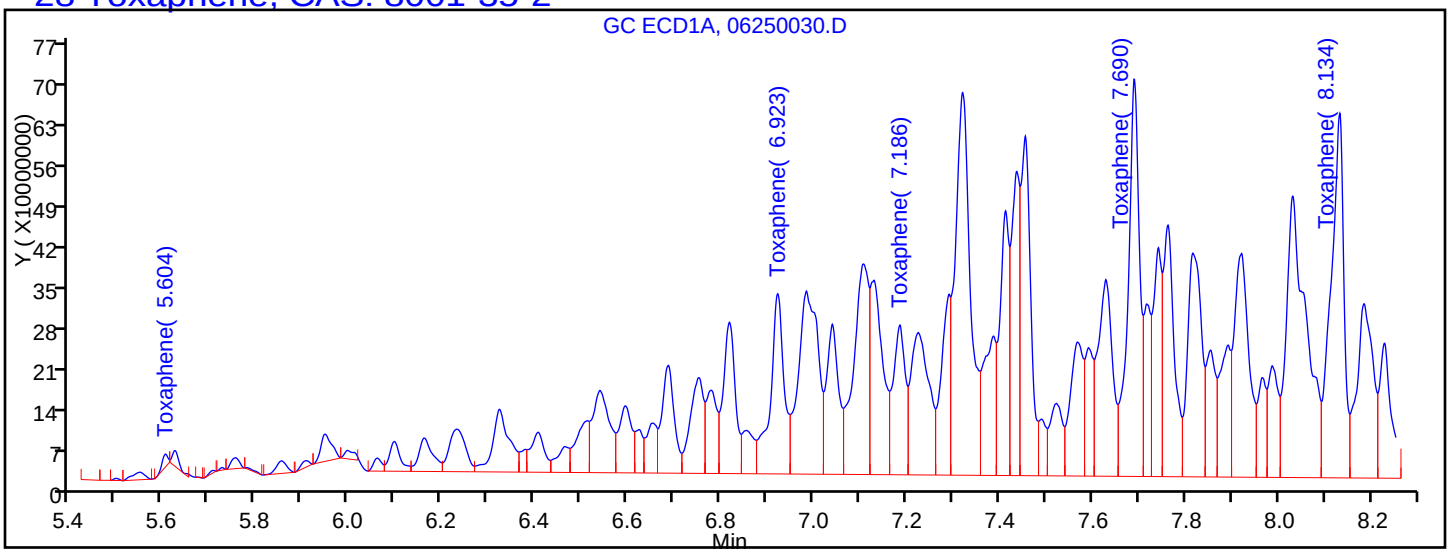
Operator ID: DAW ALS Bottle#: 24 Worklist Smp#: 30

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

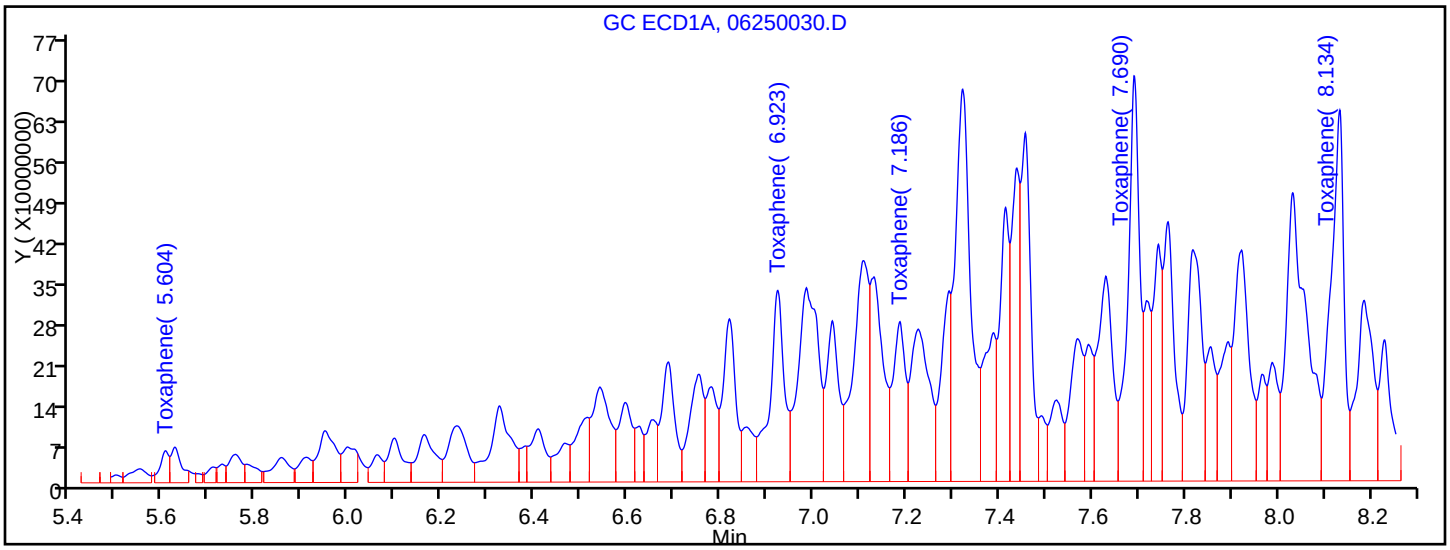
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.604	Response = 19003936
6.923	Response = 638983696
7.186	Response = 470095061
7.690	Response = 1177132762
8.134	Response = 1229068836



Manual Integration Results

5.604	Response = 70880390	M
6.923	Response = 722907544	M
7.186	Response = 511907988	M
7.690	Response = 1222521793	M
8.134	Response = 1269447743	M

Reviewer: wellsd, 26-Jun-2017 10:36:06

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/30 Calibration Date: 06/25/2017 20:45

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06250030.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0084		1940	2000	-3.2	20.0
Toxaphene Peak 2	Lin2		0.0168		1710	2000	-14.7	20.0
Toxaphene Peak 3	Lin2		0.0394		1570	2000	-21.5*	20.0
Toxaphene Peak 4	Lin2		0.0287		1690	2000	-15.3	20.0
Toxaphene Peak 5	Lin2		0.0226		1560	2000	-21.9*	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/30 Calibration Date: 06/25/2017 20:45

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06250030.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	6.11	6.09	6.13
Toxaphene Peak 2	7.16	7.14	7.18
Toxaphene Peak 3	7.30	7.28	7.32
Toxaphene Peak 4	7.59	7.57	7.61
Toxaphene Peak 5	8.11	8.09	8.13

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250030.D
Lims ID: CCV TOX
Client ID:
Sample Type: CCV
Inject. Date: 25-Jun-2017 20:45:33 ALS Bottle#: 24 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV TOX
Misc. Info.: 280-0060103-030
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:51 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:36:15

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.992	2.993	-0.001	2201180951	150.0	150.0	
2	2.763	2.763	0.000	454410780	150.0	150.0	
28 Toxaphene							M
1	5.604	5.606	-0.002	70880390	2000.0	1780.7	M
1	6.923	6.925	-0.002	722907544	2000.0	1761.9	M
1	7.186	7.187	-0.001	511907988	2000.0	1832.7	M
1	7.690	7.693	-0.003	1222521793	2000.0	1858.1	M
1	8.134	8.135	-0.001	1269447743	2000.0	1703.3	M
		Average of Peak Amounts =				1787.3	
2	6.106	6.108	-0.002	51103478	2000.0	1936.7	M
2	7.156	7.156	0.000	101828615	2000.0	1706.6	M
2	7.300	7.300	0.000	238389685	2000.0	1570.1	M
2	7.588	7.589	-0.001	173684085	2000.0	1693.3	M
2	8.110	8.112	-0.002	136955991	2000.0	1561.0	M
		Average of Peak Amounts =				1693.5	
						RPD = 5.39	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00012 Amount Added: 1.00 Units: mL
8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

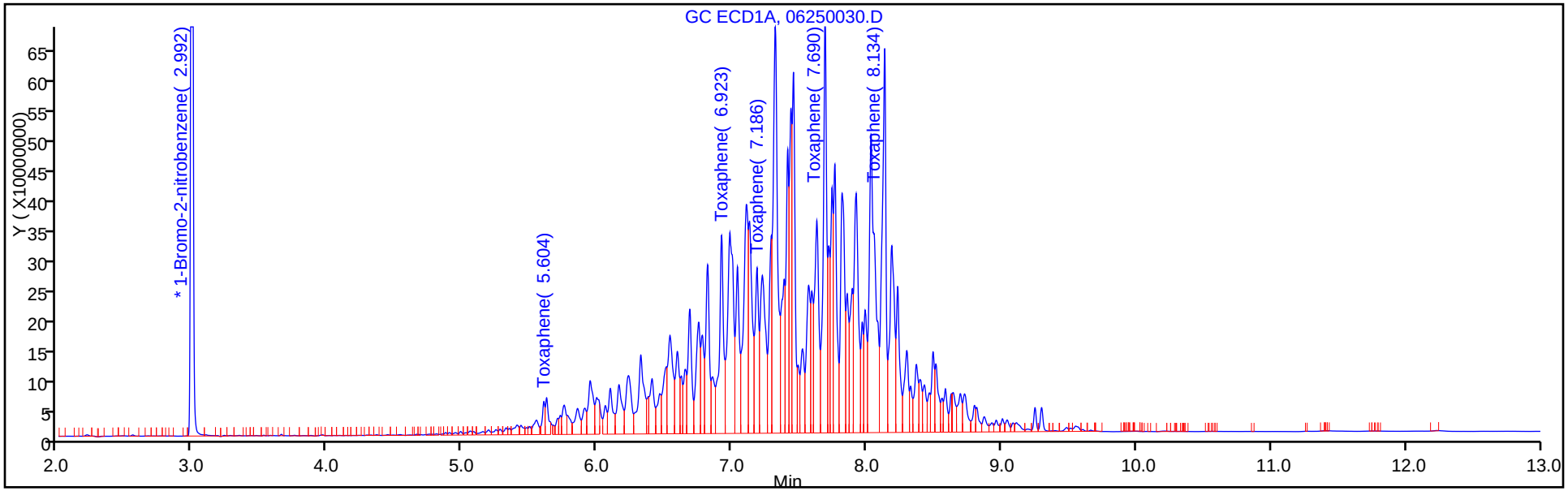
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TestAmerica Denver

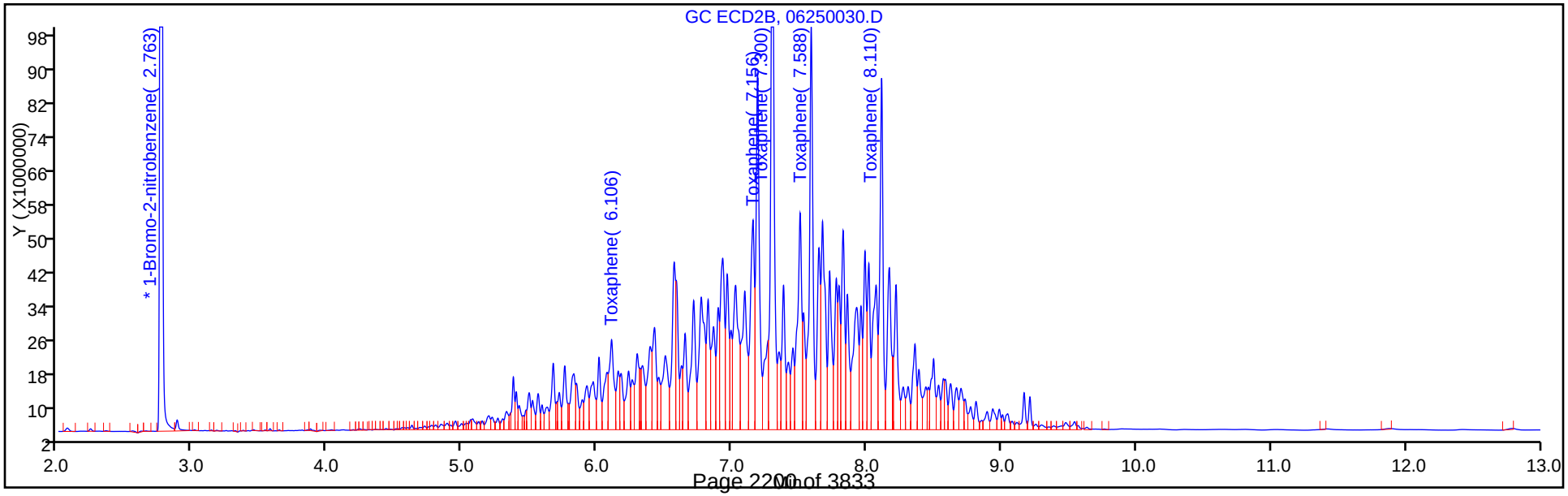
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Injection Date:	25-Jun-2017 20:45:33	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV TOX			Worklist Smp#:	30
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 26-Jun-2017 11:56:53 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250030.D

Injection Date: 25-Jun-2017 20:45:33 Instrument ID: SGC_P1

Lims ID: CCV TOX

Client ID:

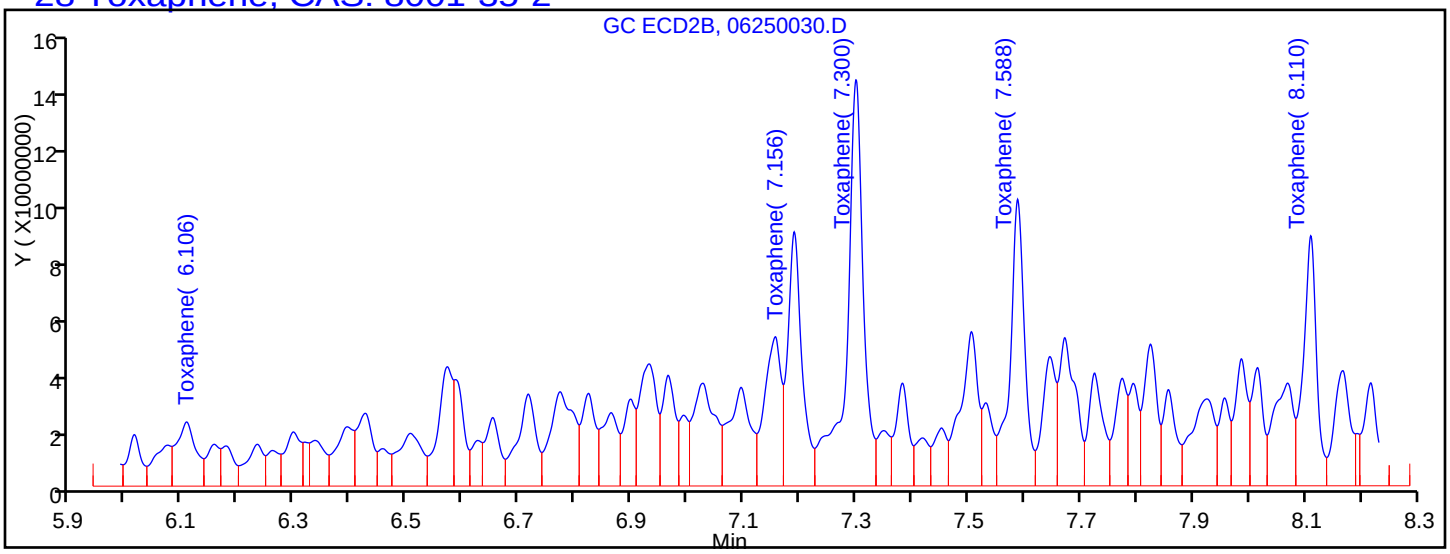
Operator ID: DAW ALS Bottle#: 24 Worklist Smp#: 30

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

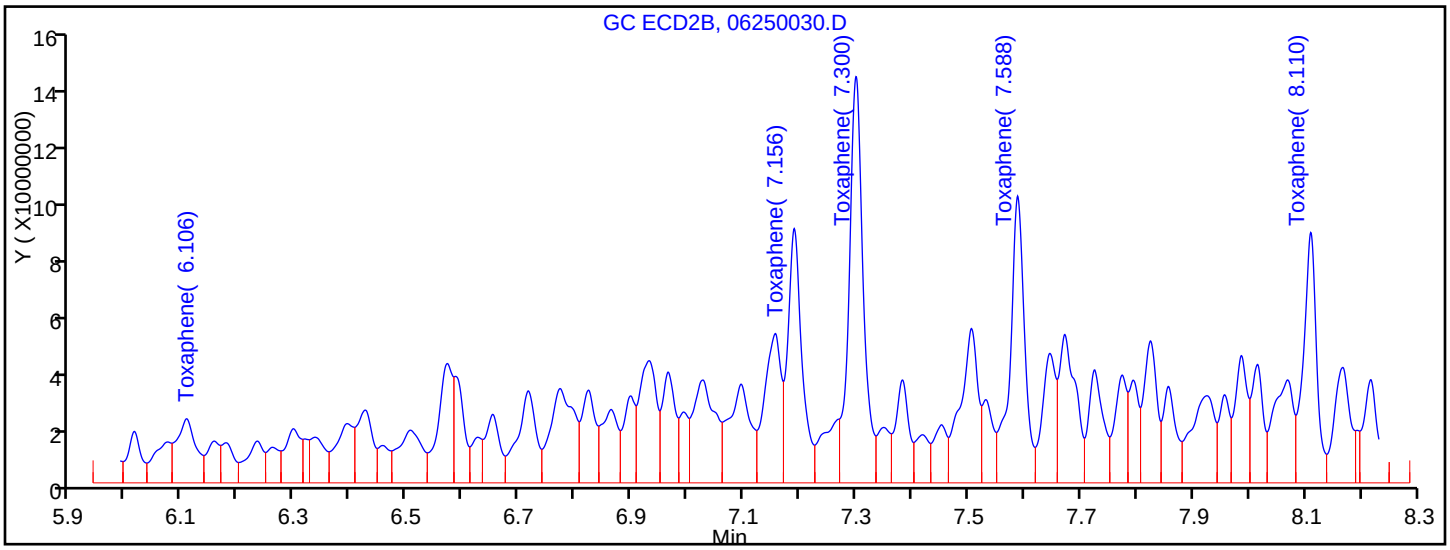
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.106	Response = 51192756
7.156	Response = 101746728
7.300	Response = 283530015
7.588	Response = 173470084
8.110	Response = 136692612



Manual Integration Results

6.106	Response = 51103478	M
7.156	Response = 101828615	M
7.300	Response = 238389685	M
7.588	Response = 173684085	M
8.110	Response = 136955991	M

Reviewer: wellsd, 26-Jun-2017 10:36:13

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/32 Calibration Date: 06/25/2017 21:19

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06250032.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		1.175		46.3	50.0	-7.4	20.0
alpha-BHC	Lin2		1.835		46.2	50.0	-7.6	20.0
gamma-BHC (Lindane)	Lin2		1.671		46.6	50.0	-6.8	20.0
beta-BHC	Lin2		0.6192		44.7	50.0	-10.6	20.0
delta-BHC	Lin2		1.757		46.2	50.0	-7.6	20.0
Heptachlor	Lin2		1.568		47.4	50.0	-5.3	20.0
Aldrin	Lin2		1.574		46.6	50.0	-6.7	20.0
Heptachlor epoxide	Lin2		1.351		46.4	50.0	-7.3	20.0
gamma-Chlordane	Lin2		1.511		47.0	50.0	-6.0	20.0
alpha-Chlordane	Lin2		1.442		46.9	50.0	-6.2	20.0
4,4'-DDE	Lin2		1.466		46.4	50.0	-7.3	20.0
Endosulfan I	Lin2		1.313		46.8	50.0	-6.4	20.0
Dieldrin	Lin2		1.473		46.6	50.0	-6.7	20.0
Endrin	Lin2		1.353		52.8	50.0	5.6	20.0
4,4'-DDD	Lin2		1.286		48.2	50.0	-3.6	20.0
Endosulfan II	Lin2		1.265		47.8	50.0	-4.4	20.0
4,4'-DDT	Lin2		1.142		44.6	50.0	-10.9	20.0
Endrin aldehyde	Lin2		0.9775		45.6	50.0	-8.8	20.0
Methoxychlor	Lin2		0.5161		46.2	50.0	-7.7	20.0
Endosulfan sulfate	Lin2		1.157		47.2	50.0	-5.6	20.0
Endrin ketone	Lin2		1.208		44.5	50.0	-11.1	20.0
Tetrachloro-m-xylene (Surr)	Lin2		1.035		45.4	50.0	-9.2	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.7349		47.3	50.0	-5.4	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/32 Calibration Date: 06/25/2017 21:19

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06250032.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.20	4.19	4.21
alpha-BHC	4.37	4.36	4.38
gamma-BHC (Lindane)	4.68	4.67	4.69
beta-BHC	4.76	4.75	4.77
delta-BHC	4.93	4.93	4.95
Heptachlor	5.14	5.13	5.15
Aldrin	5.43	5.42	5.44
Heptachlor epoxide	6.05	6.04	6.06
gamma-Chlordane	6.19	6.19	6.21
alpha-Chlordane	6.36	6.35	6.37
4,4'-DDE	6.45	6.44	6.46
Endosulfan I	6.53	6.52	6.54
Dieldrin	6.81	6.80	6.82
Endrin	7.08	7.07	7.09
4,4'-DDD	7.16	7.15	7.17
Endosulfan II	7.33	7.32	7.34
4,4'-DDT	7.47	7.46	7.48
Endrin aldehyde	7.78	7.78	7.80
Methoxychlor	7.98	7.97	7.99
Endosulfan sulfate	8.23	8.22	8.24
Endrin ketone	8.51	8.50	8.52
Tetrachloro-m-xylene (Surr)	3.82	3.81	3.83
DCB Decachlorobiphenyl (Surr)	9.49	9.48	9.50

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250032.D
Lims ID: CCV AB
Client ID:
Sample Type: CCV
Inject. Date: 25-Jun-2017 21:19:15 ALS Bottle#: 26 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV AB
Misc. Info.: 280-0060103-032
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:57 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						183.7	
2						183.9	
						RPD = 0.09	
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.993	-0.001	2213811263	150.0	150.0	
2	2.763	2.763	-0.001	456602458	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.819	3.819	0.000	763753147	50.0	45.4	
2	3.678	3.678	0.000	146213493	50.0	46.5	
						RPD = 2.31	
5 Hexachlorobenzene							
1	4.199	4.200	-0.001	867376399	50.0	46.3	
2	4.103	4.104	-0.001	152085774	50.0	46.5	
						RPD = 0.43	
8 alpha-BHC							
1	4.367	4.368	-0.001	1353872522	50.0	46.2	
2	4.240	4.241	-0.001	215364428	50.0	46.5	
						RPD = 0.65	
9 gamma-BHC (Lindane)							
1	4.675	4.676	-0.001	1233136009	50.0	46.6	
2	4.565	4.567	-0.002	188433604	50.0	46.1	
						RPD = 1.19	
10 beta-BHC							
1	4.760	4.760	0.000	456940307	50.0	44.7	
2	4.646	4.648	-0.002	76845595	50.0	44.9	
						RPD = 0.57	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.933	4.935	-0.002	1296807393	50.0	46.2	
2	4.918	4.920	-0.002	195444967	50.0	46.4	
						RPD = 0.33	
15 Heptachlor							
1	5.143	5.144	-0.001	1157030224	50.0	47.4	
2	4.976	4.978	-0.002	174399044	50.0	46.2	
						RPD = 2.56	
16 Aldrin							
1	5.430	5.431	-0.001	1161685782	50.0	46.6	
2	5.282	5.283	-0.001	173392188	50.0	46.4	
						RPD = 0.59	
18 Isodrin							
1	5.758	5.758	0.000	889176999	50.0	46.6	
2	5.644	5.645	-0.001	135199744	50.0	46.4	
						RPD = 0.52	
21 Heptachlor epoxide							
1	6.051	6.053	-0.002	996819947	50.0	46.4	
2	5.826	5.828	-0.002	151397090	50.0	45.6	
						RPD = 1.77	
22 gamma-Chlordane							
1	6.194	6.196	-0.002	1115183117	50.0	47.0	
2	6.027	6.028	-0.001	157737710	50.0	45.4	
						RPD = 3.44	
23 alpha-Chlordane							
1	6.355	6.357	-0.002	1064137471	50.0	46.9	
2	6.194	6.196	-0.002	151666604	50.0	45.8	
						RPD = 2.35	
24 4,4'-DDE							
1	6.451	6.453	-0.002	1081894927	50.0	46.4	
2	6.410	6.413	-0.003	150834396	50.0	44.2	
						RPD = 4.74	
25 Endosulfan I							
1	6.525	6.528	-0.003	968850848	50.0	46.8	
2	6.258	6.260	-0.002	140517015	50.0	44.1	
						RPD = 5.88	
27 Dieldrin							
1	6.811	6.813	-0.002	1086887032	50.0	46.6	
2	6.597	6.599	-0.002	158970641	50.0	45.2	
						RPD = 3.06	
30 Endrin							
1	7.081	7.082	-0.001	998782440	50.0	52.8	
2	6.958	6.959	-0.001	147271241	50.0	52.4	
						RPD = 0.75	
32 4,4'-DDD							
1	7.157	7.158	-0.001	949181598	50.0	48.2	
2	7.108	7.110	-0.002	132959487	50.0	49.1	
						RPD = 1.75	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.330	7.331	-0.001	933694776	50.0	47.8	
2	7.202	7.203	-0.001	135422061	50.0	46.5	
						RPD = 2.81	
35 4,4'-DDT							
1	7.466	7.468	-0.002	842708804	50.0	44.6	
2	7.457	7.459	-0.002	113904438	50.0	43.8	
						RPD = 1.74	
36 Endrin aldehyde							
1	7.783	7.785	-0.002	721312630	50.0	45.6	
2	7.577	7.578	-0.001	107069351	50.0	45.2	
						RPD = 1.00	
37 Methoxychlor							
1	7.978	7.981	-0.003	380866895	50.0	46.2	
2	8.180	8.182	-0.002	58751131	50.0	47.7	
						RPD = 3.21	
38 Mirex							
1	8.125	8.127	-0.002	606213519	50.0	45.8	
2	8.352	8.353	-0.001	87152604	50.0	44.2	
						RPD = 3.67	
39 Endosulfan sulfate							
1	8.231	8.232	-0.001	853780023	50.0	47.2	
2	7.871	7.873	-0.002	122085931	50.0	46.5	
						RPD = 1.48	
40 Endrin ketone							
1	8.511	8.513	-0.002	891703530	50.0	44.5	
2	8.398	8.399	-0.001	134295613	50.0	45.0	
						RPD = 1.16	
$ 41 DCB Decachlorobiphenyl							
1	9.489	9.492	-0.003	542281349	50.0	47.3	
2	9.593	9.593	0.000	92011940	50.0	48.5	
						RPD = 2.56	
S 3 Endosulfan, Total							
1						141.8	
2						137.1	
						RPD = 3.36	

Reagents:

8081IcalL4_00026	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

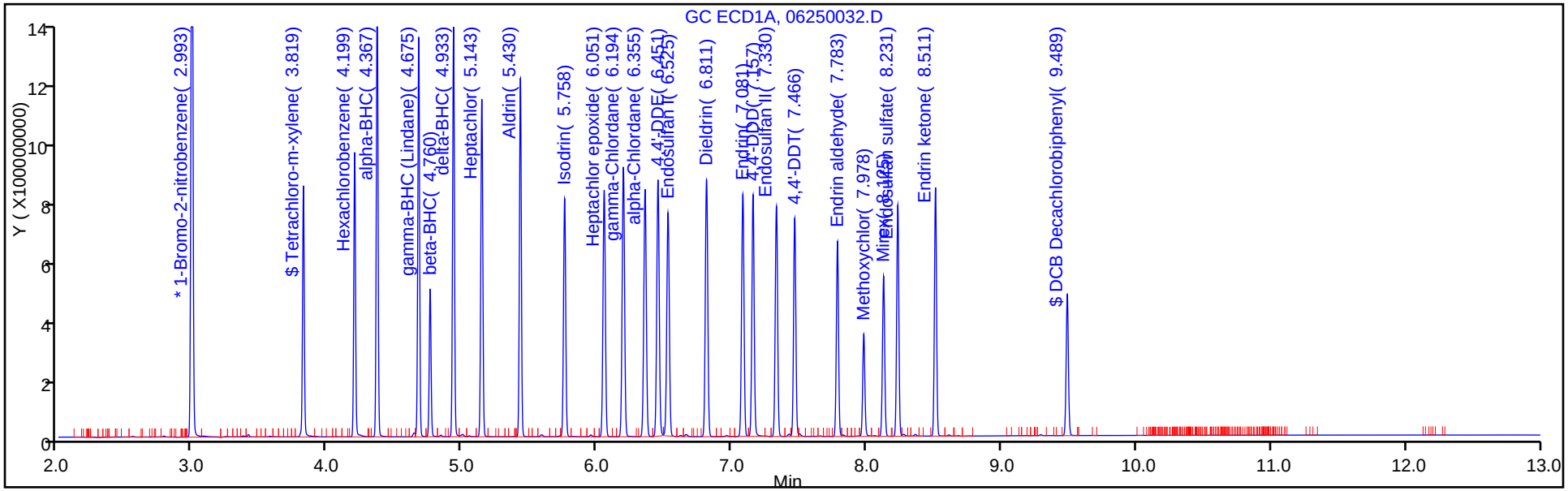
Report Date: 26-Jun-2017 11:56:57 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

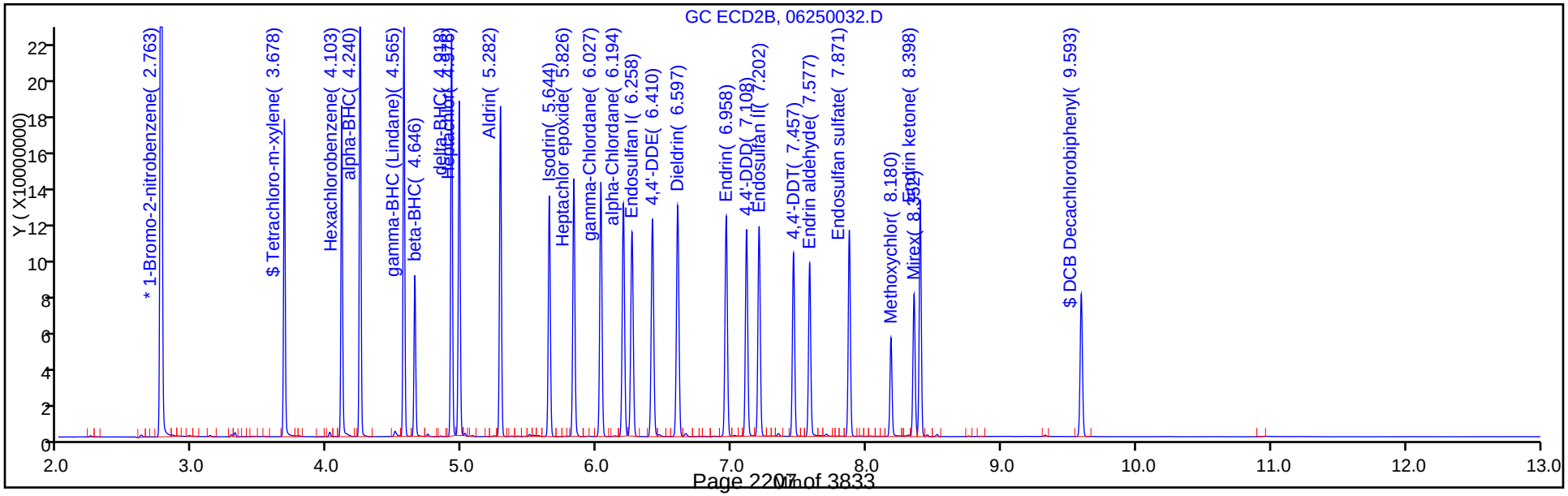
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250032.D

Injection Date:	25-Jun-2017 21:19:15	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV AB			Worklist Smp#:	32
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/32 Calibration Date: 06/25/2017 21:19

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06250032.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		0.999		46.5	50.0	-7.0	20.0
alpha-BHC	Lin2		1.415		46.5	50.0	-7.0	20.0
gamma-BHC (Lindane)	Lin2		1.238		46.1	50.0	-7.9	20.0
beta-BHC	Lin2		0.5049		44.9	50.0	-10.1	20.0
delta-BHC	Lin2		1.284		46.4	50.0	-7.2	20.0
Heptachlor	Lin2		1.146		46.2	50.0	-7.7	20.0
Aldrin	Lin2		1.139		46.4	50.0	-7.3	20.0
Heptachlor epoxide	Lin2		0.9947		45.6	50.0	-8.9	20.0
gamma-Chlordane	Lin2		1.036		45.4	50.0	-9.2	20.0
alpha-Chlordane	Lin2		0.996		45.8	50.0	-8.4	20.0
Endosulfan I	Lin2		0.9232		44.1	50.0	-11.7	20.0
4,4'-DDE	Lin2		0.9910		44.2	50.0	-11.6	20.0
Dieldrin	Lin2		1.044		45.2	50.0	-9.5	20.0
Endrin	Lin2		0.9676		52.4	50.0	4.8	20.0
4,4'-DDD	Lin2		0.8736		49.1	50.0	-1.9	20.0
Endosulfan II	Lin2		0.8898		46.5	50.0	-7.1	20.0
4,4'-DDT	Lin2		0.7484		43.8	50.0	-12.4	20.0
Endrin aldehyde	Lin2		0.7035		45.2	50.0	-9.7	20.0
Endosulfan sulfate	Lin2		0.8021		46.5	50.0	-6.9	20.0
Methoxychlor	Lin2		0.3860		47.7	50.0	-4.7	20.0
Endrin ketone	Lin2		0.8824		45.0	50.0	-10.1	20.0
Tetrachloro-m-xylene (Surr)	Lin2		0.9607		46.5	50.0	-7.0	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.6045		48.5	50.0	-3.0	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/32 Calibration Date: 06/25/2017 21:19

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06250032.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.10	4.09	4.11
alpha-BHC	4.24	4.23	4.25
gamma-BHC (Lindane)	4.57	4.56	4.58
beta-BHC	4.65	4.64	4.66
delta-BHC	4.92	4.91	4.93
Heptachlor	4.98	4.97	4.99
Aldrin	5.28	5.27	5.29
Heptachlor epoxide	5.83	5.82	5.84
gamma-Chlordane	6.03	6.02	6.04
alpha-Chlordane	6.19	6.19	6.21
Endosulfan I	6.26	6.25	6.27
4,4'-DDE	6.41	6.40	6.42
Dieldrin	6.60	6.59	6.61
Endrin	6.96	6.95	6.97
4,4'-DDD	7.11	7.10	7.12
Endosulfan II	7.20	7.19	7.21
4,4'-DDT	7.46	7.45	7.47
Endrin aldehyde	7.58	7.57	7.59
Endosulfan sulfate	7.87	7.86	7.88
Methoxychlor	8.18	8.17	8.19
Endrin ketone	8.40	8.39	8.41
Tetrachloro-m-xylene (Surr)	3.68	3.67	3.69
DCB Decachlorobiphenyl (Surr)	9.59	9.58	9.60

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250032.D
Lims ID: CCV AB
Client ID:
Sample Type: CCV
Inject. Date: 25-Jun-2017 21:19:15 ALS Bottle#: 26 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV AB
Misc. Info.: 280-0060103-032
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:57 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						183.7	
2						183.9	
						RPD = 0.09	
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.993	-0.001	2213811263	150.0	150.0	
2	2.763	2.763	-0.001	456602458	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.819	3.819	0.000	763753147	50.0	45.4	
2	3.678	3.678	0.000	146213493	50.0	46.5	
						RPD = 2.31	
5 Hexachlorobenzene							
1	4.199	4.200	-0.001	867376399	50.0	46.3	
2	4.103	4.104	-0.001	152085774	50.0	46.5	
						RPD = 0.43	
8 alpha-BHC							
1	4.367	4.368	-0.001	1353872522	50.0	46.2	
2	4.240	4.241	-0.001	215364428	50.0	46.5	
						RPD = 0.65	
9 gamma-BHC (Lindane)							
1	4.675	4.676	-0.001	1233136009	50.0	46.6	
2	4.565	4.567	-0.002	188433604	50.0	46.1	
						RPD = 1.19	
10 beta-BHC							
1	4.760	4.760	0.000	456940307	50.0	44.7	
2	4.646	4.648	-0.002	76845595	50.0	44.9	
						RPD = 0.57	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.933	4.935	-0.002	1296807393	50.0	46.2	
2	4.918	4.920	-0.002	195444967	50.0	46.4	
						RPD = 0.33	
15 Heptachlor							
1	5.143	5.144	-0.001	1157030224	50.0	47.4	
2	4.976	4.978	-0.002	174399044	50.0	46.2	
						RPD = 2.56	
16 Aldrin							
1	5.430	5.431	-0.001	1161685782	50.0	46.6	
2	5.282	5.283	-0.001	173392188	50.0	46.4	
						RPD = 0.59	
18 Isodrin							
1	5.758	5.758	0.000	889176999	50.0	46.6	
2	5.644	5.645	-0.001	135199744	50.0	46.4	
						RPD = 0.52	
21 Heptachlor epoxide							
1	6.051	6.053	-0.002	996819947	50.0	46.4	
2	5.826	5.828	-0.002	151397090	50.0	45.6	
						RPD = 1.77	
22 gamma-Chlordane							
1	6.194	6.196	-0.002	1115183117	50.0	47.0	
2	6.027	6.028	-0.001	157737710	50.0	45.4	
						RPD = 3.44	
23 alpha-Chlordane							
1	6.355	6.357	-0.002	1064137471	50.0	46.9	
2	6.194	6.196	-0.002	151666604	50.0	45.8	
						RPD = 2.35	
24 4,4'-DDE							
1	6.451	6.453	-0.002	1081894927	50.0	46.4	
2	6.410	6.413	-0.003	150834396	50.0	44.2	
						RPD = 4.74	
25 Endosulfan I							
1	6.525	6.528	-0.003	968850848	50.0	46.8	
2	6.258	6.260	-0.002	140517015	50.0	44.1	
						RPD = 5.88	
27 Dieldrin							
1	6.811	6.813	-0.002	1086887032	50.0	46.6	
2	6.597	6.599	-0.002	158970641	50.0	45.2	
						RPD = 3.06	
30 Endrin							
1	7.081	7.082	-0.001	998782440	50.0	52.8	
2	6.958	6.959	-0.001	147271241	50.0	52.4	
						RPD = 0.75	
32 4,4'-DDD							
1	7.157	7.158	-0.001	949181598	50.0	48.2	
2	7.108	7.110	-0.002	132959487	50.0	49.1	
						RPD = 1.75	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.330	7.331	-0.001	933694776	50.0	47.8	
2	7.202	7.203	-0.001	135422061	50.0	46.5	
						RPD = 2.81	
35 4,4'-DDT							
1	7.466	7.468	-0.002	842708804	50.0	44.6	
2	7.457	7.459	-0.002	113904438	50.0	43.8	
						RPD = 1.74	
36 Endrin aldehyde							
1	7.783	7.785	-0.002	721312630	50.0	45.6	
2	7.577	7.578	-0.001	107069351	50.0	45.2	
						RPD = 1.00	
37 Methoxychlor							
1	7.978	7.981	-0.003	380866895	50.0	46.2	
2	8.180	8.182	-0.002	58751131	50.0	47.7	
						RPD = 3.21	
38 Mirex							
1	8.125	8.127	-0.002	606213519	50.0	45.8	
2	8.352	8.353	-0.001	87152604	50.0	44.2	
						RPD = 3.67	
39 Endosulfan sulfate							
1	8.231	8.232	-0.001	853780023	50.0	47.2	
2	7.871	7.873	-0.002	122085931	50.0	46.5	
						RPD = 1.48	
40 Endrin ketone							
1	8.511	8.513	-0.002	891703530	50.0	44.5	
2	8.398	8.399	-0.001	134295613	50.0	45.0	
						RPD = 1.16	
$ 41 DCB Decachlorobiphenyl							
1	9.489	9.492	-0.003	542281349	50.0	47.3	
2	9.593	9.593	0.000	92011940	50.0	48.5	
						RPD = 2.56	
S 3 Endosulfan, Total							
1						141.8	
2						137.1	
						RPD = 3.36	

Reagents:

8081IcalL4_00026	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

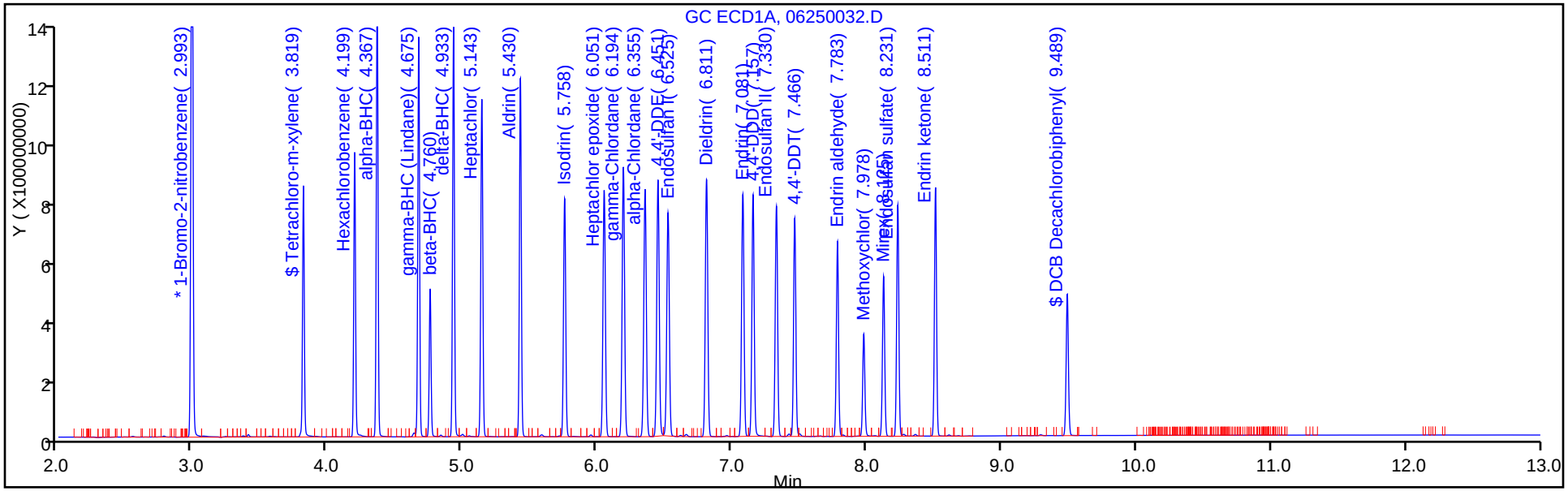
Report Date: 26-Jun-2017 11:56:58 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

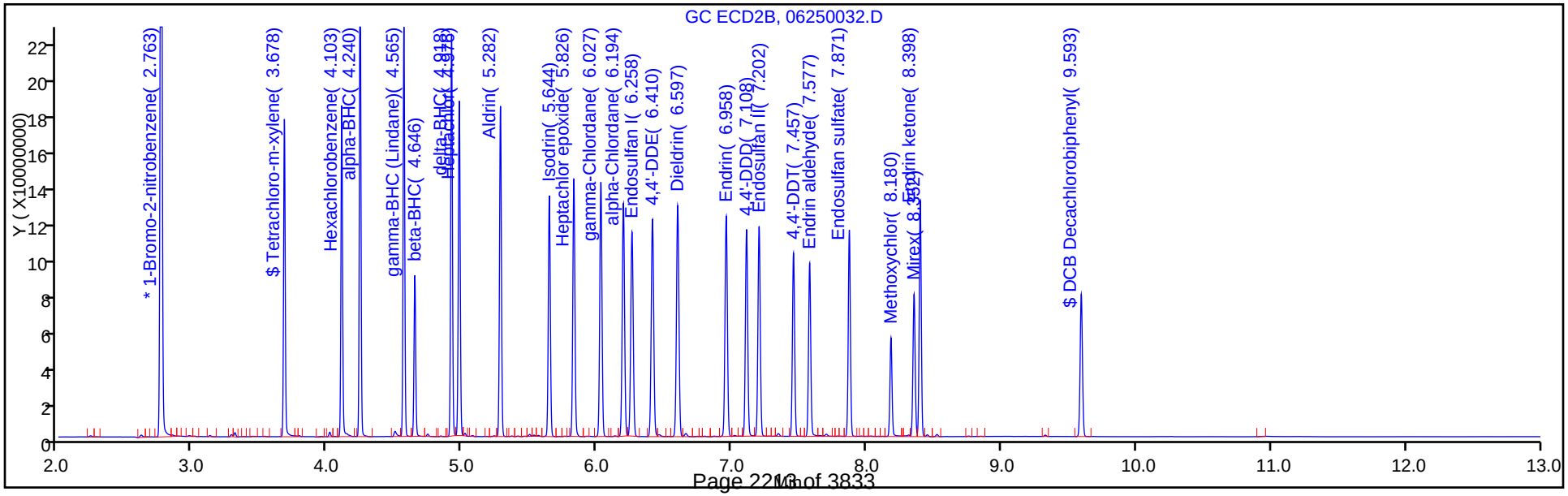
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250032.D

Injection Date:	25-Jun-2017 21:19:15	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV AB			Worklist Smp#:	32
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/44 Calibration Date: 06/26/2017 00:41

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06250044.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0026		1930	2000	-3.6	20.0
Toxaphene Peak 2	Qua		0.0239		1710	2000	-14.3	20.0
Toxaphene Peak 3	Lin2		0.0152		1600	2000	-19.9	20.0
Toxaphene Peak 4	Lin2		0.0413		1840	2000	-8.0	20.0
Toxaphene Peak 5	Lin2		0.0433		1710	2000	-14.7	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/44 Calibration Date: 06/26/2017 00:41

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06250044.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	5.60	5.59	5.63
Toxaphene Peak 2	6.92	6.91	6.95
Toxaphene Peak 3	7.19	7.17	7.21
Toxaphene Peak 4	7.69	7.67	7.71
Toxaphene Peak 5	8.13	8.12	8.16

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250044.D
Lims ID: CCV TOX
Client ID:
Sample Type: CCV
Inject. Date: 26-Jun-2017 00:41:39 ALS Bottle#: 38 Worklist Smp#: 44
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV TOX
Misc. Info.: 280-0060103-044
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:57:23 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:39:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.993	-0.001	2154774119	150.0	150.0	
2	2.764	2.763	0.000	453526991	150.0	150.0	
28 Toxaphene							M
1	5.604	5.606	-0.002	75079061	2000.0	1927.1	M
1	6.923	6.925	-0.002	687250301	2000.0	1714.6	M
1	7.185	7.187	-0.002	436103233	2000.0	1601.2	M
1	7.691	7.693	-0.002	1185200524	2000.0	1840.6	M
1	8.131	8.135	-0.004	1244481497	2000.0	1705.7	M
		Average of Peak Amounts =				1757.9	
2	6.106	6.108	-0.002	49943188	2000.0	1894.4	M
2	7.155	7.156	-0.001	96974929	2000.0	1626.6	M
2	7.299	7.300	-0.001	240243552	2000.0	1585.7	M
2	7.587	7.589	-0.002	176107472	2000.0	1720.7	M
2	8.110	8.112	-0.002	140172242	2000.0	1601.4	M
		Average of Peak Amounts =				1685.8	
						RPD = 4.19	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00012 Amount Added: 1.00 Units: mL
8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

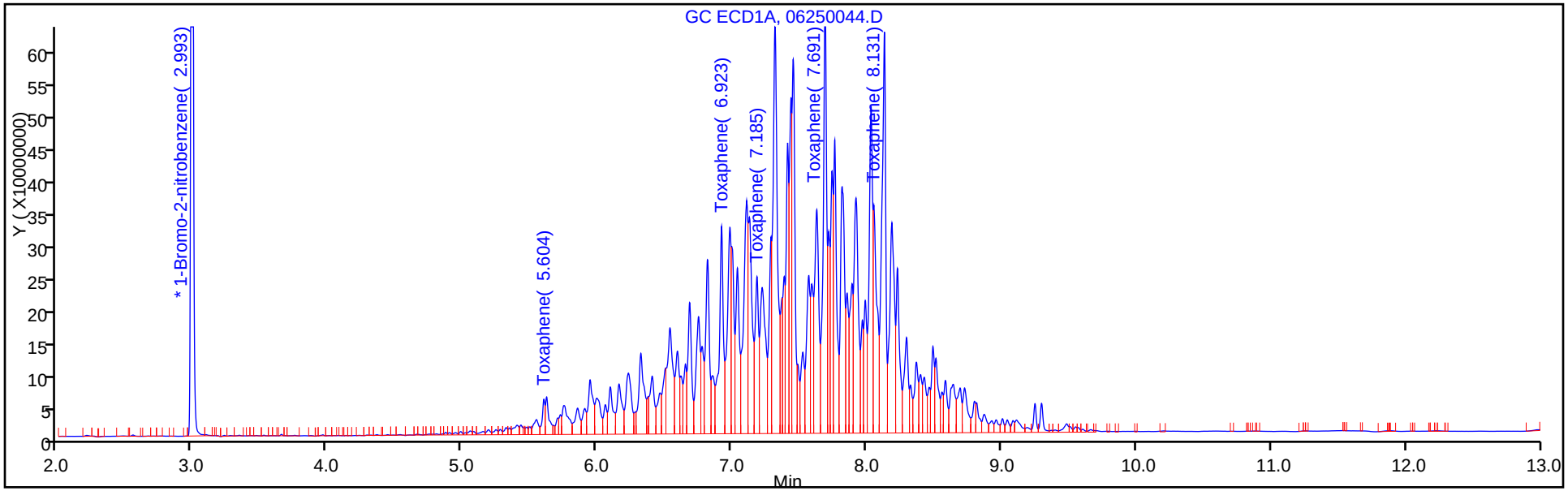
Report Date: 26-Jun-2017 11:57:23 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

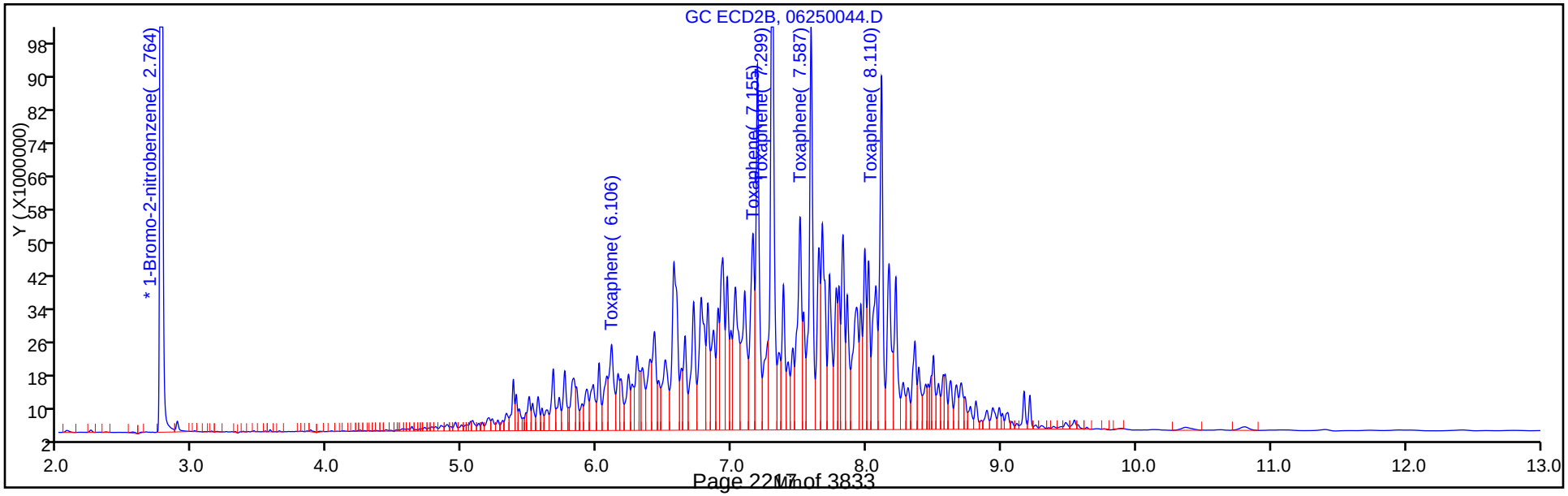
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250044.D

Injection Date:	26-Jun-2017 00:41:39	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV TOX			Worklist Smp#:	44
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 26-Jun-2017 11:57:24 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250044.D

Injection Date: 26-Jun-2017 00:41:39 Instrument ID: SGC_P1

Lims ID: CCV TOX

Client ID:

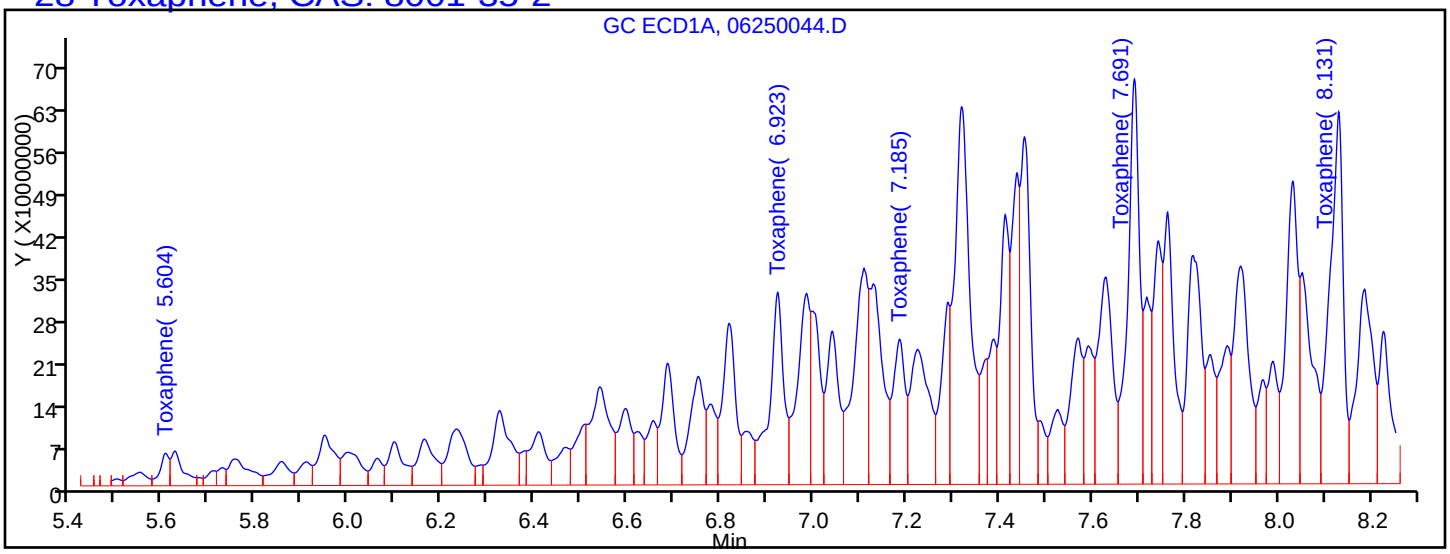
Operator ID: DAW ALS Bottle#: 38 Worklist Smp#: 44

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

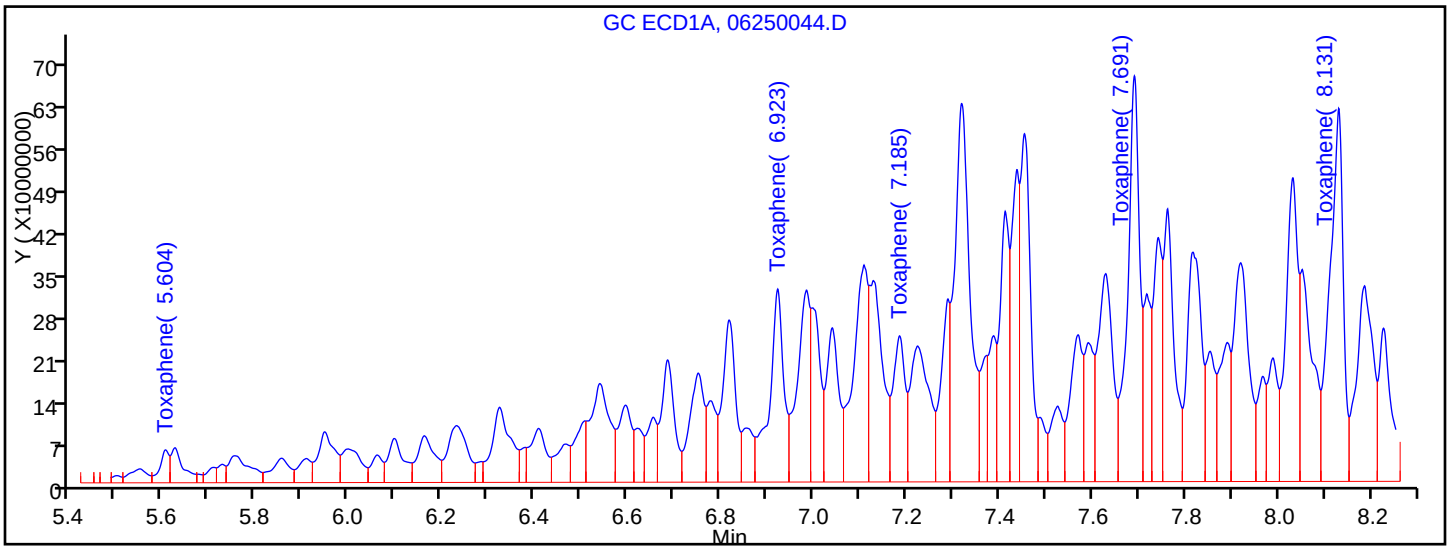
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.604	Response = 73667161
6.923	Response = 682261656
7.185	Response = 433253296
7.691	Response = 1180529456
8.131	Response = 1238567705



Manual Integration Results

5.604	Response = 75079061	M
6.923	Response = 687250301	M
7.185	Response = 436103233	M
7.691	Response = 1185200524	M
8.131	Response = 1244481497	M

Reviewer: wellsd, 26-Jun-2017 10:39:43

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/44 Calibration Date: 06/26/2017 00:41

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06250044.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0083		1890	2000	-5.3	20.0
Toxaphene Peak 2	Lin2		0.0160		1630	2000	-18.7	20.0
Toxaphene Peak 3	Lin2		0.0397		1590	2000	-20.7*	20.0
Toxaphene Peak 4	Lin2		0.0291		1720	2000	-14.0	20.0
Toxaphene Peak 5	Lin2		0.0232		1600	2000	-19.9	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/44 Calibration Date: 06/26/2017 00:41

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06250044.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	6.11	6.09	6.13
Toxaphene Peak 2	7.16	7.14	7.18
Toxaphene Peak 3	7.30	7.28	7.32
Toxaphene Peak 4	7.59	7.57	7.61
Toxaphene Peak 5	8.11	8.09	8.13

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250044.D
Lims ID: CCV TOX
Client ID:
Sample Type: CCV
Inject. Date: 26-Jun-2017 00:41:39 ALS Bottle#: 38 Worklist Smp#: 44
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV TOX
Misc. Info.: 280-0060103-044
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:57:23 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:39:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.993	-0.001	2154774119	150.0	150.0	
2	2.764	2.763	0.000	453526991	150.0	150.0	
28 Toxaphene							M
1	5.604	5.606	-0.002	75079061	2000.0	1927.1	M
1	6.923	6.925	-0.002	687250301	2000.0	1714.6	M
1	7.185	7.187	-0.002	436103233	2000.0	1601.2	M
1	7.691	7.693	-0.002	1185200524	2000.0	1840.6	M
1	8.131	8.135	-0.004	1244481497	2000.0	1705.7	M
		Average of Peak Amounts =				1757.9	
2	6.106	6.108	-0.002	49943188	2000.0	1894.4	M
2	7.155	7.156	-0.001	96974929	2000.0	1626.6	M
2	7.299	7.300	-0.001	240243552	2000.0	1585.7	M
2	7.587	7.589	-0.002	176107472	2000.0	1720.7	M
2	8.110	8.112	-0.002	140172242	2000.0	1601.4	M
		Average of Peak Amounts =				1685.8	
						RPD = 4.19	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00012 Amount Added: 1.00 Units: mL
8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

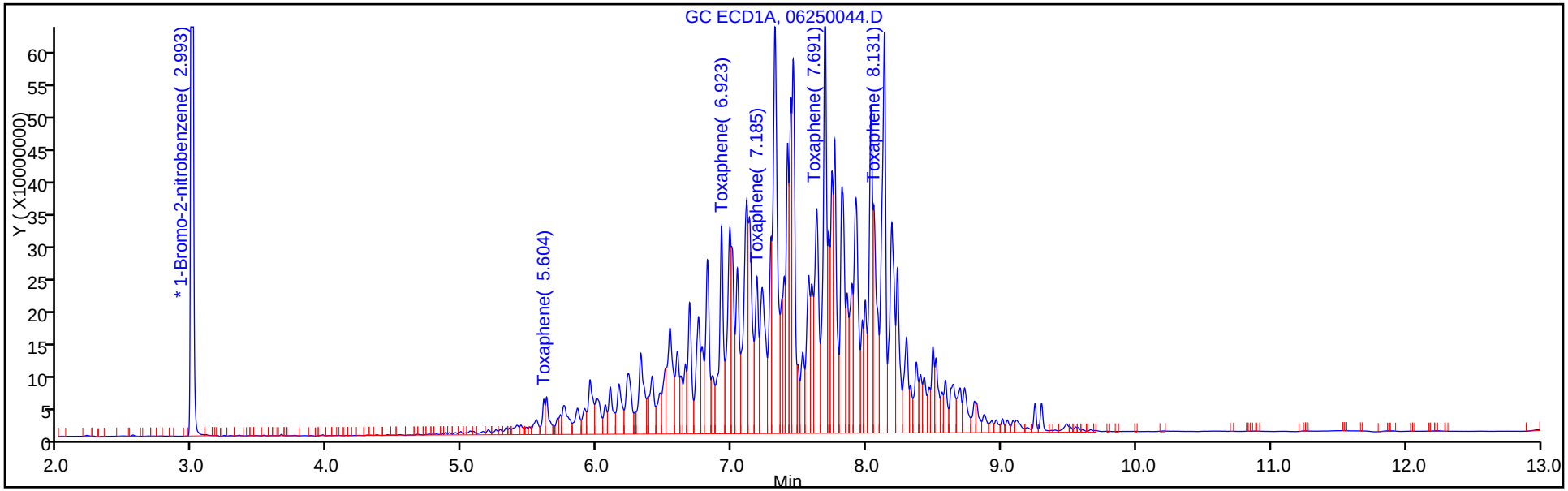
Report Date: 26-Jun-2017 11:57:24 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

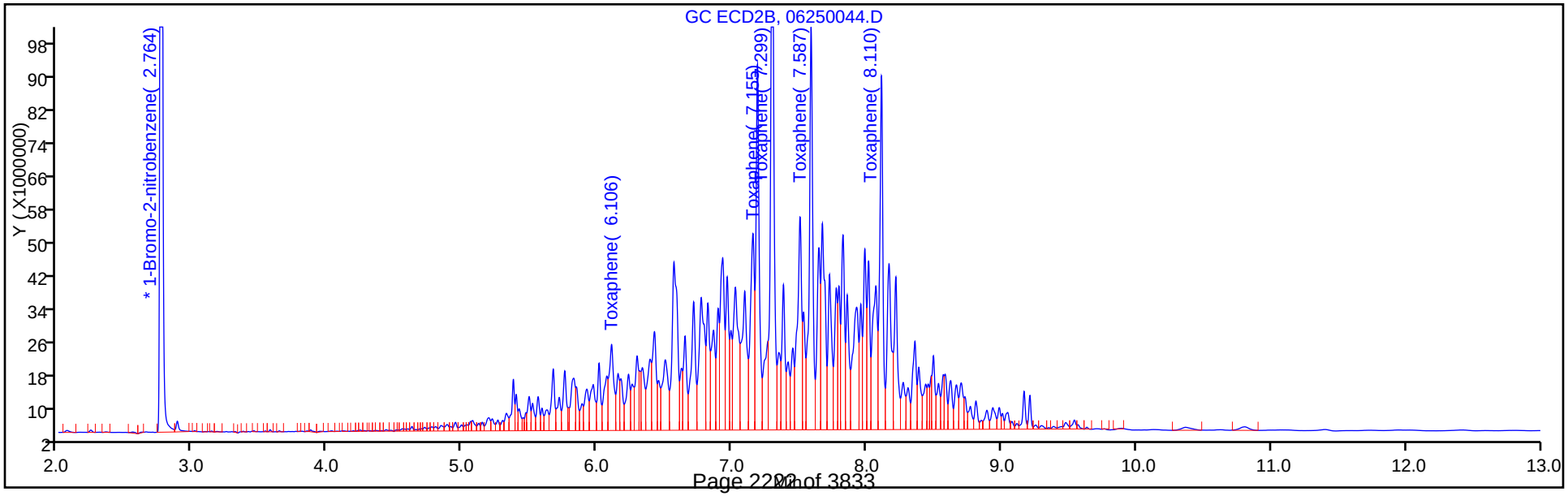
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250044.D

Injection Date:	26-Jun-2017 00:41:39	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV TOX			Worklist Smp#:	44
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 26-Jun-2017 11:57:24 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250044.D

Injection Date: 26-Jun-2017 00:41:39 Instrument ID: SGC_P1

Lims ID: CCV TOX

Client ID:

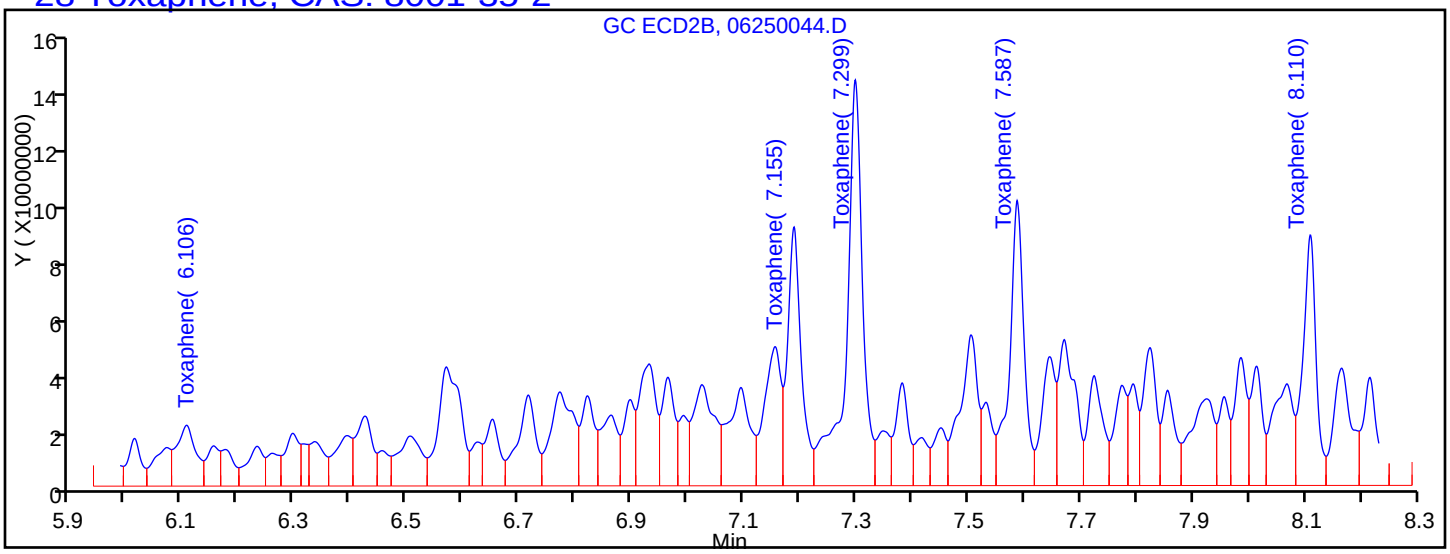
Operator ID: DAW ALS Bottle#: 38 Worklist Smp#: 44

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

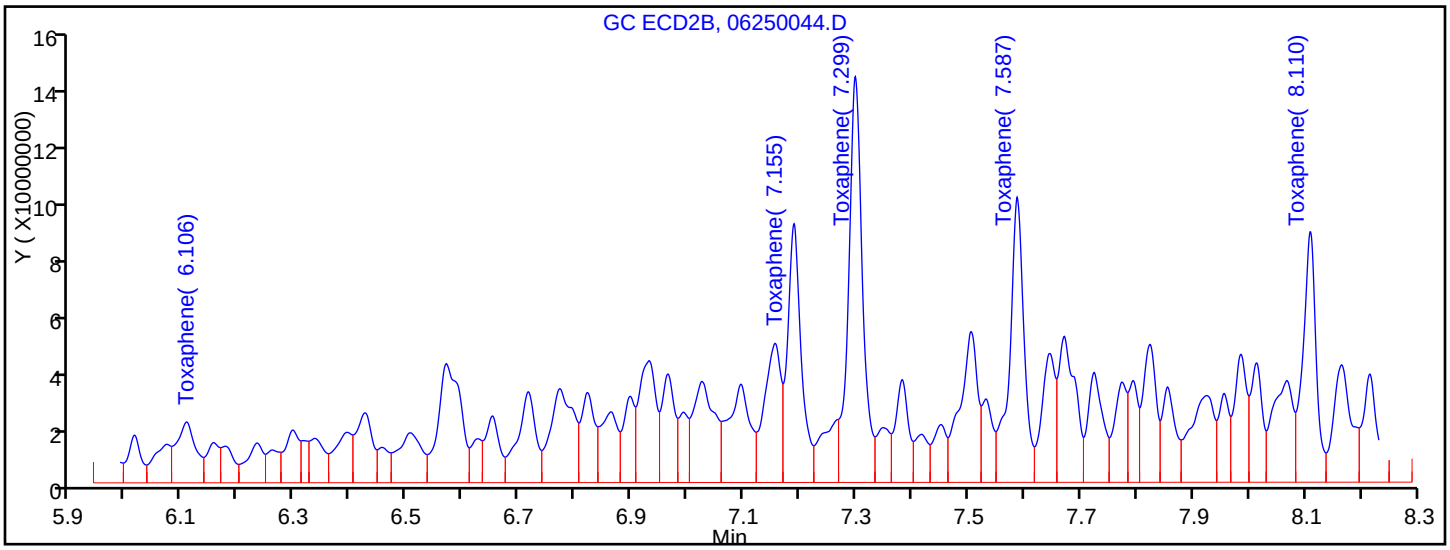
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.106	Response = 49941651
7.155	Response = 96948457
7.299	Response = 285657481
7.587	Response = 176057362
8.110	Response = 140116792



Manual Integration Results

6.106	Response = 49943188	M
7.155	Response = 96974929	M
7.299	Response = 240243552	M
7.587	Response = 176107472	M
8.110	Response = 140172242	M

Reviewer: wellsd, 26-Jun-2017 10:39:48

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/46 Calibration Date: 06/26/2017 01:15

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06250046.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		1.146		45.1	50.0	-9.8	20.0
alpha-BHC	Lin2		1.795		45.2	50.0	-9.6	20.0
gamma-BHC (Lindane)	Lin2		1.656		46.2	50.0	-7.6	20.0
beta-BHC	Lin2		0.6164		44.5	50.0	-11.0	20.0
delta-BHC	Lin2		1.746		45.9	50.0	-8.1	20.0
Heptachlor	Lin2		1.575		47.6	50.0	-4.9	20.0
Aldrin	Lin2		1.550		45.9	50.0	-8.2	20.0
Heptachlor epoxide	Lin2		1.330		45.7	50.0	-8.7	20.0
gamma-Chlordane	Lin2		1.485		46.2	50.0	-7.7	20.0
alpha-Chlordane	Lin2		1.415		46.0	50.0	-7.9	20.0
4,4'-DDE	Lin2		1.436		45.4	50.0	-9.2	20.0
Endosulfan I	Lin2		1.285		45.8	50.0	-8.3	20.0
Dieldrin	Lin2		1.447		45.8	50.0	-8.4	20.0
Endrin	Lin2		1.319		51.5	50.0	2.9	20.0
4,4'-DDD	Lin2		1.241		46.5	50.0	-7.0	20.0
Endosulfan II	Lin2		1.240		46.8	50.0	-6.4	20.0
4,4'-DDT	Lin2		1.156		45.1	50.0	-9.8	20.0
Endrin aldehyde	Lin2		0.9636		45.0	50.0	-10.1	20.0
Methoxychlor	Lin2		0.5114		45.7	50.0	-8.5	20.0
Endosulfan sulfate	Lin2		1.138		46.5	50.0	-7.1	20.0
Endrin ketone	Lin2		1.193		43.9	50.0	-12.2	20.0
Tetrachloro-m-xylene (Surr)	Lin2		1.017		44.6	50.0	-10.7	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.7100		45.7	50.0	-8.7	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/46 Calibration Date: 06/26/2017 01:15

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06250046.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.20	4.19	4.21
alpha-BHC	4.37	4.36	4.38
gamma-BHC (Lindane)	4.68	4.67	4.69
beta-BHC	4.76	4.75	4.77
delta-BHC	4.93	4.93	4.95
Heptachlor	5.14	5.13	5.15
Aldrin	5.43	5.42	5.44
Heptachlor epoxide	6.05	6.04	6.06
gamma-Chlordane	6.20	6.19	6.21
alpha-Chlordane	6.36	6.35	6.37
4,4'-DDE	6.45	6.44	6.46
Endosulfan I	6.53	6.52	6.54
Dieldrin	6.81	6.80	6.82
Endrin	7.08	7.07	7.09
4,4'-DDD	7.16	7.15	7.17
Endosulfan II	7.33	7.32	7.34
4,4'-DDT	7.47	7.46	7.48
Endrin aldehyde	7.78	7.78	7.80
Methoxychlor	7.98	7.97	7.99
Endosulfan sulfate	8.23	8.22	8.24
Endrin ketone	8.51	8.50	8.52
Tetrachloro-m-xylene (Surr)	3.82	3.81	3.83
DCB Decachlorobiphenyl (Surr)	9.49	9.48	9.50

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250046.D
Lims ID: CCV AB
Client ID:
Sample Type: CCV
Inject. Date: 26-Jun-2017 01:15:24 ALS Bottle#: 40 Worklist Smp#: 46
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV AB
Misc. Info.: 280-0060103-046
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:57:28 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:40:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						181.8	
2						181.0	
						RPD = 0.47	
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.993	-0.001	2312261485	150.0	150.0	
2	2.763	2.763	0.000	484943095	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.819	3.819	0.000	783894760	50.0	44.6	
2	3.678	3.678	0.000	150517428	50.0	45.0	
						RPD = 0.90	
5 Hexachlorobenzene							
1	4.199	4.200	-0.001	882997410	50.0	45.1	
2	4.104	4.104	0.000	155624514	50.0	44.8	
						RPD = 0.79	
8 alpha-BHC							
1	4.368	4.368	0.000	1383257592	50.0	45.2	
2	4.241	4.241	0.000	224597817	50.0	45.7	
						RPD = 1.00	
9 gamma-BHC (Lindane)							
1	4.676	4.676	0.000	1276715914	50.0	46.2	
2	4.566	4.567	-0.001	197392694	50.0	45.4	
						RPD = 1.70	
10 beta-BHC							
1	4.760	4.760	0.000	475078446	50.0	44.5	
2	4.647	4.648	-0.001	80378735	50.0	44.2	
						RPD = 0.54	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.933	4.935	-0.002	1345754879	50.0	45.9	
2	4.919	4.920	-0.001	204255470	50.0	45.6	
						RPD = 0.64	
15 Heptachlor							
1	5.143	5.144	-0.001	1213650866	50.0	47.6	
2	4.977	4.978	-0.001	183824739	50.0	45.8	
						RPD = 3.75	
16 Aldrin							
1	5.430	5.431	-0.001	1194666015	50.0	45.9	
2	5.283	5.283	0.000	179275272	50.0	45.1	
						RPD = 1.75	
18 Isodrin							
1	5.758	5.758	0.000	910909169	50.0	45.7	
2	5.645	5.645	0.000	139611068	50.0	45.1	
						RPD = 1.43	
21 Heptachlor epoxide							
1	6.053	6.053	0.000	1025473470	50.0	45.7	
2	5.828	5.828	0.000	156225209	50.0	44.2	
						RPD = 3.18	
22 gamma-Chlordane							
1	6.195	6.196	-0.001	1144426302	50.0	46.2	
2	6.028	6.028	0.000	163094657	50.0	44.2	
						RPD = 4.40	
23 alpha-Chlordane							
1	6.356	6.357	-0.001	1090751907	50.0	46.0	
2	6.195	6.196	-0.001	156442149	50.0	44.5	
						RPD = 3.45	
24 4,4'-DDE							
1	6.452	6.453	-0.001	1106421690	50.0	45.4	
2	6.411	6.413	-0.002	155569852	50.0	42.9	
						RPD = 5.61	
25 Endosulfan I							
1	6.526	6.528	-0.002	990736254	50.0	45.8	
2	6.259	6.260	-0.001	144863616	50.0	42.8	
						RPD = 6.80	
27 Dieldrin							
1	6.813	6.813	0.000	1114978608	50.0	45.8	
2	6.598	6.599	-0.001	163154039	50.0	43.7	
						RPD = 4.73	
30 Endrin							
1	7.081	7.082	-0.001	1016430136	50.0	51.5	
2	6.958	6.959	-0.001	150134151	50.0	50.3	
						RPD = 2.29	
32 4,4'-DDD							
1	7.157	7.158	-0.001	956637417	50.0	46.5	
2	7.109	7.110	-0.001	134914378	50.0	46.8	
						RPD = 0.68	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.330	7.331	-0.001	955648243	50.0	46.8	
2	7.202	7.203	-0.001	138965712	50.0	44.9	
						RPD = 4.28	
35 4,4'-DDT							
1	7.466	7.468	-0.002	890836642	50.0	45.1	
2	7.458	7.459	-0.001	120627684	50.0	43.7	
						RPD = 3.22	
36 Endrin aldehyde							
1	7.783	7.785	-0.002	742700249	50.0	45.0	
2	7.577	7.578	-0.001	110120209	50.0	43.7	
						RPD = 2.84	
37 Methoxychlor							
1	7.978	7.981	-0.003	394122147	50.0	45.7	
2	8.181	8.182	-0.001	60624369	50.0	46.3	
						RPD = 1.20	
38 Mirex							
1	8.125	8.127	-0.002	623818846	50.0	45.2	
2	8.352	8.353	-0.001	89401324	50.0	42.7	
						RPD = 5.65	
39 Endosulfan sulfate							
1	8.231	8.232	-0.001	877496880	50.0	46.5	
2	7.871	7.873	-0.002	124758427	50.0	44.7	
						RPD = 3.80	
40 Endrin ketone							
1	8.511	8.513	-0.002	919194689	50.0	43.9	
2	8.398	8.399	-0.001	138801914	50.0	43.7	
						RPD = 0.30	
$ 41 DCB Decachlorobiphenyl							M
1	9.489	9.492	-0.003	547258876	50.0	45.7	
2	9.592	9.593	-0.001	93695282	50.0	46.5	M
						RPD = 1.71	
S 3 Endosulfan, Total							
1						139.1	
2						132.4	
						RPD = 4.94	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081IcalL4_00026	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

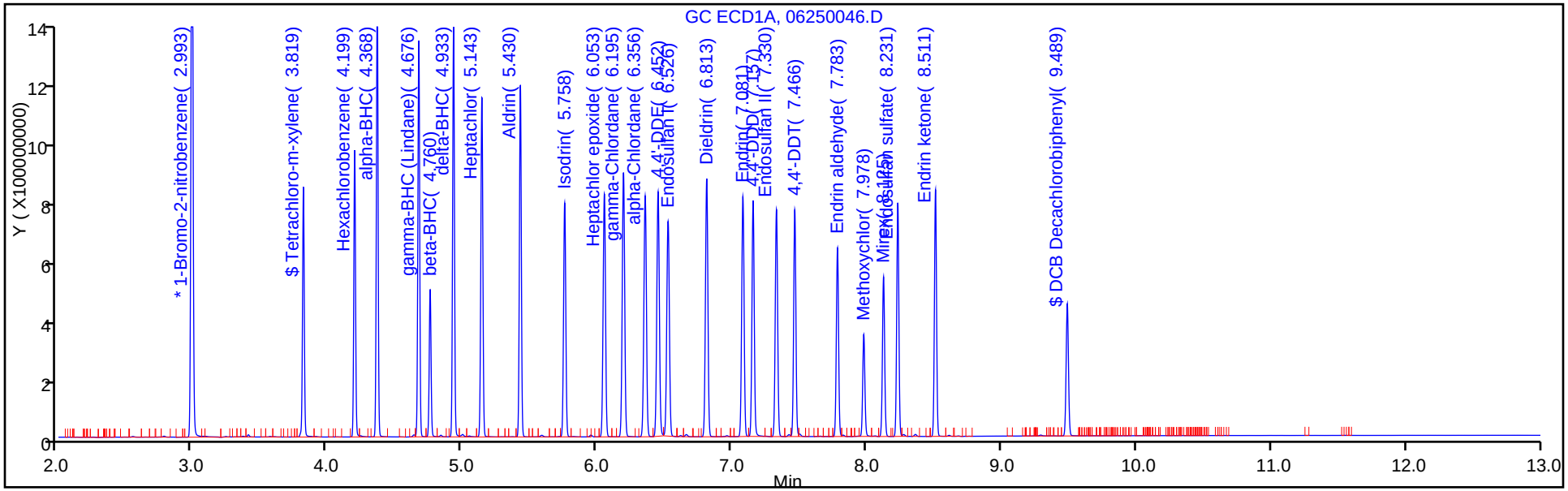
Report Date: 26-Jun-2017 11:57:29 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

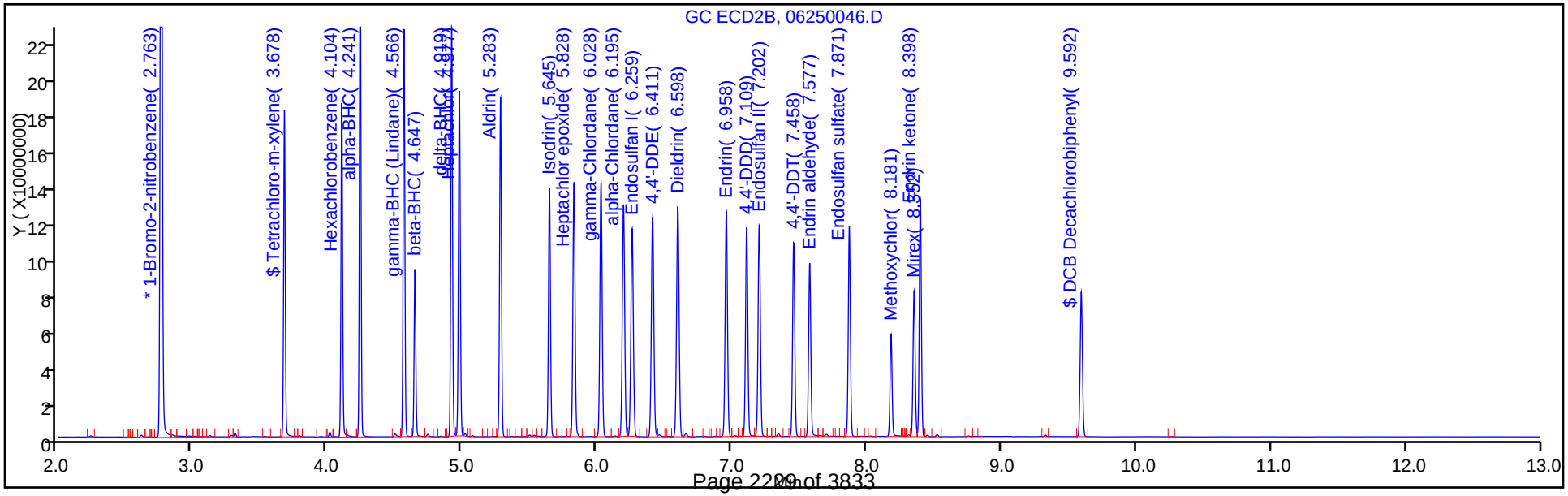
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250046.D

Injection Date:	26-Jun-2017 01:15:24	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV AB			Worklist Smp#:	46
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/46 Calibration Date: 06/26/2017 01:15

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06250046.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		0.9627		44.8	50.0	-10.5	20.0
alpha-BHC	Lin2		1.389		45.7	50.0	-8.7	20.0
gamma-BHC (Lindane)	Lin2		1.221		45.4	50.0	-9.1	20.0
beta-BHC	Lin2		0.4973		44.2	50.0	-11.5	20.0
delta-BHC	Lin2		1.264		45.6	50.0	-8.7	20.0
Heptachlor	Lin2		1.137		45.8	50.0	-8.4	20.0
Aldrin	Lin2		1.109		45.1	50.0	-9.8	20.0
Heptachlor epoxide	Lin2		0.9665		44.2	50.0	-11.5	20.0
gamma-Chlordane	Lin2		1.009		44.2	50.0	-11.6	20.0
alpha-Chlordane	Lin2		0.9678		44.5	50.0	-11.0	20.0
Endosulfan I	Lin2		0.8962		42.8	50.0	-14.3	20.0
4,4'-DDE	Lin2		0.9624		42.9	50.0	-14.1	20.0
Dieldrin	Lin2		1.009		43.7	50.0	-12.6	20.0
Endrin	Lin2		0.9288		50.3	50.0	0.6	20.0
4,4'-DDD	Lin2		0.8346		46.8	50.0	-6.3	20.0
Endosulfan II	Lin2		0.8597		44.9	50.0	-10.3	20.0
4,4'-DDT	Lin2		0.7462		43.7	50.0	-12.7	20.0
Endrin aldehyde	Lin2		0.6812		43.7	50.0	-12.6	20.0
Endosulfan sulfate	Lin2		0.7718		44.7	50.0	-10.5	20.0
Methoxychlor	Lin2		0.3750		46.3	50.0	-7.4	20.0
Endrin ketone	Lin2		0.8587		43.7	50.0	-12.5	20.0
Tetrachloro-m-xylene (Surr)	Lin2		0.9311		45.0	50.0	-9.9	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.5796		46.5	50.0	-7.1	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/46 Calibration Date: 06/26/2017 01:15

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06250046.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.10	4.09	4.11
alpha-BHC	4.24	4.23	4.25
gamma-BHC (Lindane)	4.57	4.56	4.58
beta-BHC	4.65	4.64	4.66
delta-BHC	4.92	4.91	4.93
Heptachlor	4.98	4.97	4.99
Aldrin	5.28	5.27	5.29
Heptachlor epoxide	5.83	5.82	5.84
gamma-Chlordane	6.03	6.02	6.04
alpha-Chlordane	6.20	6.19	6.21
Endosulfan I	6.26	6.25	6.27
4,4'-DDE	6.41	6.40	6.42
Dieldrin	6.60	6.59	6.61
Endrin	6.96	6.95	6.97
4,4'-DDD	7.11	7.10	7.12
Endosulfan II	7.20	7.19	7.21
4,4'-DDT	7.46	7.45	7.47
Endrin aldehyde	7.58	7.57	7.59
Endosulfan sulfate	7.87	7.86	7.88
Methoxychlor	8.18	8.17	8.19
Endrin ketone	8.40	8.39	8.41
Tetrachloro-m-xylene (Surr)	3.68	3.67	3.69
DCB Decachlorobiphenyl (Surr)	9.59	9.58	9.60

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250046.D
Lims ID: CCV AB
Client ID:
Sample Type: CCV
Inject. Date: 26-Jun-2017 01:15:24 ALS Bottle#: 40 Worklist Smp#: 46
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV AB
Misc. Info.: 280-0060103-046
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:57:28 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:40:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						181.8	
2						181.0	
						RPD = 0.47	
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.993	-0.001	2312261485	150.0	150.0	
2	2.763	2.763	0.000	484943095	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.819	3.819	0.000	783894760	50.0	44.6	
2	3.678	3.678	0.000	150517428	50.0	45.0	
						RPD = 0.90	
5 Hexachlorobenzene							
1	4.199	4.200	-0.001	882997410	50.0	45.1	
2	4.104	4.104	0.000	155624514	50.0	44.8	
						RPD = 0.79	
8 alpha-BHC							
1	4.368	4.368	0.000	1383257592	50.0	45.2	
2	4.241	4.241	0.000	224597817	50.0	45.7	
						RPD = 1.00	
9 gamma-BHC (Lindane)							
1	4.676	4.676	0.000	1276715914	50.0	46.2	
2	4.566	4.567	-0.001	197392694	50.0	45.4	
						RPD = 1.70	
10 beta-BHC							
1	4.760	4.760	0.000	475078446	50.0	44.5	
2	4.647	4.648	-0.001	80378735	50.0	44.2	
						RPD = 0.54	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.933	4.935	-0.002	1345754879	50.0	45.9	
2	4.919	4.920	-0.001	204255470	50.0	45.6	
						RPD = 0.64	
15 Heptachlor							
1	5.143	5.144	-0.001	1213650866	50.0	47.6	
2	4.977	4.978	-0.001	183824739	50.0	45.8	
						RPD = 3.75	
16 Aldrin							
1	5.430	5.431	-0.001	1194666015	50.0	45.9	
2	5.283	5.283	0.000	179275272	50.0	45.1	
						RPD = 1.75	
18 Isodrin							
1	5.758	5.758	0.000	910909169	50.0	45.7	
2	5.645	5.645	0.000	139611068	50.0	45.1	
						RPD = 1.43	
21 Heptachlor epoxide							
1	6.053	6.053	0.000	1025473470	50.0	45.7	
2	5.828	5.828	0.000	156225209	50.0	44.2	
						RPD = 3.18	
22 gamma-Chlordane							
1	6.195	6.196	-0.001	1144426302	50.0	46.2	
2	6.028	6.028	0.000	163094657	50.0	44.2	
						RPD = 4.40	
23 alpha-Chlordane							
1	6.356	6.357	-0.001	1090751907	50.0	46.0	
2	6.195	6.196	-0.001	156442149	50.0	44.5	
						RPD = 3.45	
24 4,4'-DDE							
1	6.452	6.453	-0.001	1106421690	50.0	45.4	
2	6.411	6.413	-0.002	155569852	50.0	42.9	
						RPD = 5.61	
25 Endosulfan I							
1	6.526	6.528	-0.002	990736254	50.0	45.8	
2	6.259	6.260	-0.001	144863616	50.0	42.8	
						RPD = 6.80	
27 Dieldrin							
1	6.813	6.813	0.000	1114978608	50.0	45.8	
2	6.598	6.599	-0.001	163154039	50.0	43.7	
						RPD = 4.73	
30 Endrin							
1	7.081	7.082	-0.001	1016430136	50.0	51.5	
2	6.958	6.959	-0.001	150134151	50.0	50.3	
						RPD = 2.29	
32 4,4'-DDD							
1	7.157	7.158	-0.001	956637417	50.0	46.5	
2	7.109	7.110	-0.001	134914378	50.0	46.8	
						RPD = 0.68	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.330	7.331	-0.001	955648243	50.0	46.8	
2	7.202	7.203	-0.001	138965712	50.0	44.9	
						RPD = 4.28	
35 4,4'-DDT							
1	7.466	7.468	-0.002	890836642	50.0	45.1	
2	7.458	7.459	-0.001	120627684	50.0	43.7	
						RPD = 3.22	
36 Endrin aldehyde							
1	7.783	7.785	-0.002	742700249	50.0	45.0	
2	7.577	7.578	-0.001	110120209	50.0	43.7	
						RPD = 2.84	
37 Methoxychlor							
1	7.978	7.981	-0.003	394122147	50.0	45.7	
2	8.181	8.182	-0.001	60624369	50.0	46.3	
						RPD = 1.20	
38 Mirex							
1	8.125	8.127	-0.002	623818846	50.0	45.2	
2	8.352	8.353	-0.001	89401324	50.0	42.7	
						RPD = 5.65	
39 Endosulfan sulfate							
1	8.231	8.232	-0.001	877496880	50.0	46.5	
2	7.871	7.873	-0.002	124758427	50.0	44.7	
						RPD = 3.80	
40 Endrin ketone							
1	8.511	8.513	-0.002	919194689	50.0	43.9	
2	8.398	8.399	-0.001	138801914	50.0	43.7	
						RPD = 0.30	
$ 41 DCB Decachlorobiphenyl							M
1	9.489	9.492	-0.003	547258876	50.0	45.7	
2	9.592	9.593	-0.001	93695282	50.0	46.5	M
						RPD = 1.71	
S 3 Endosulfan, Total							
1						139.1	
2						132.4	
						RPD = 4.94	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081IcalL4_00026	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

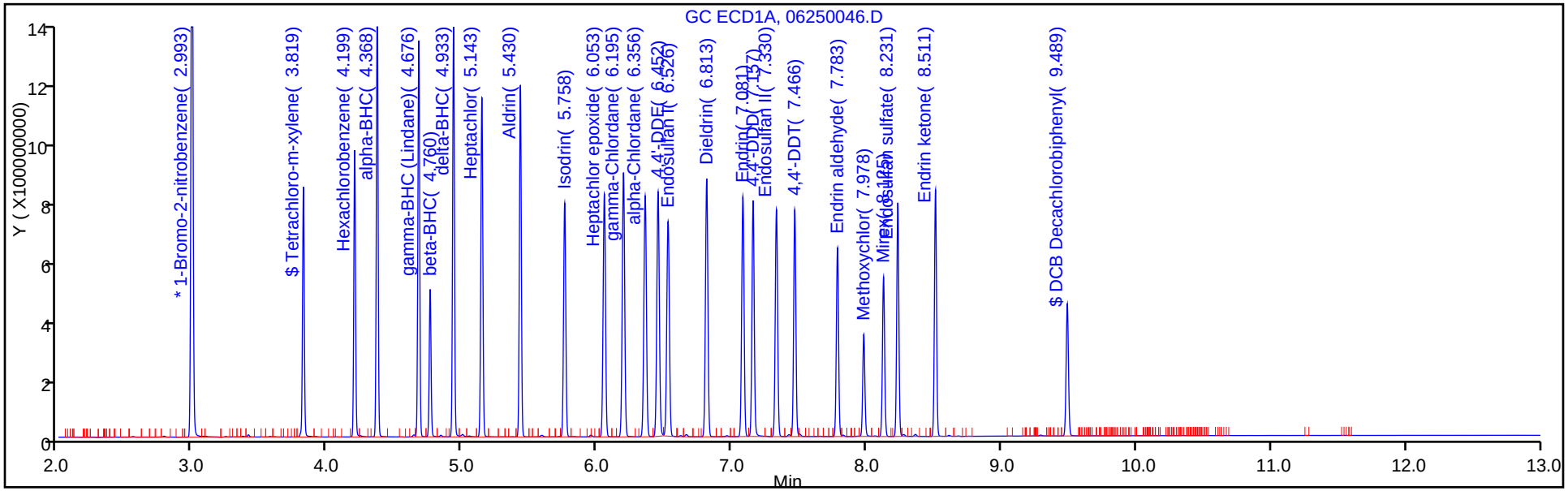
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TestAmerica Denver

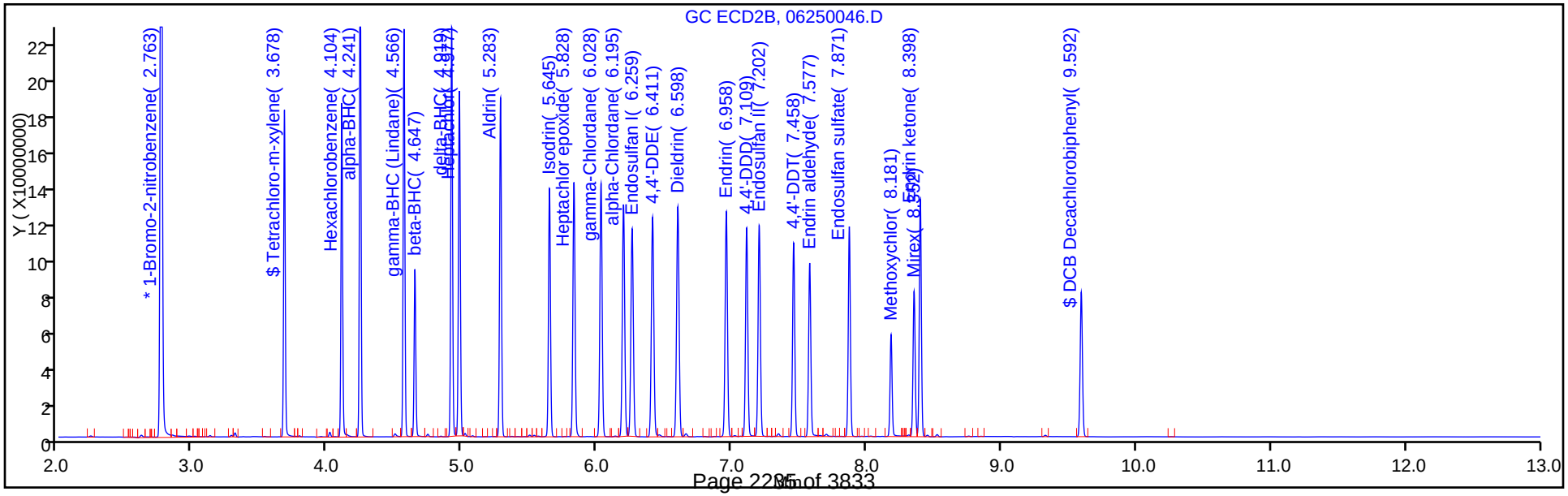
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Injection Date:	26-Jun-2017 01:15:24	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV AB			Worklist Smp#:	46
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Manual Integration/User Assign Peak Report

TestAmerica Denver

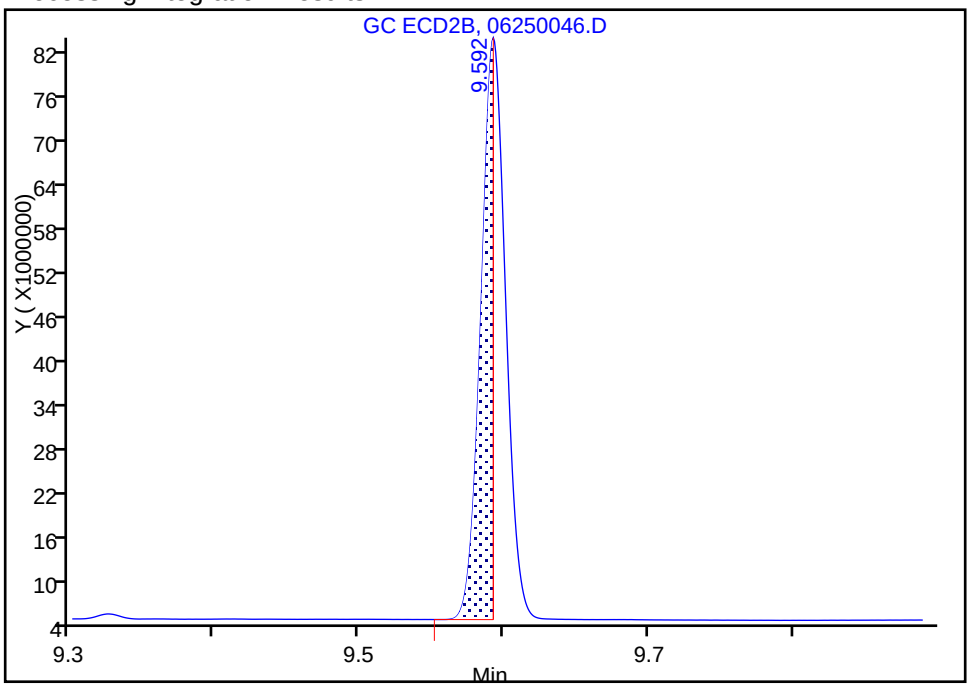
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Injection Date: 26-Jun-2017 01:15:24 Instrument ID: SGC_P1
Lims ID: CCV AB
Client ID:
Operator ID: DAW ALS Bottle#: 40 Worklist Smp#: 46
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Method: P1 8081 IS Limit Group: GCSV - 8081A - IS
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

$ 41 DCB Decachlorobiphenyl, CAS: 2051-24-3

Signal: 2

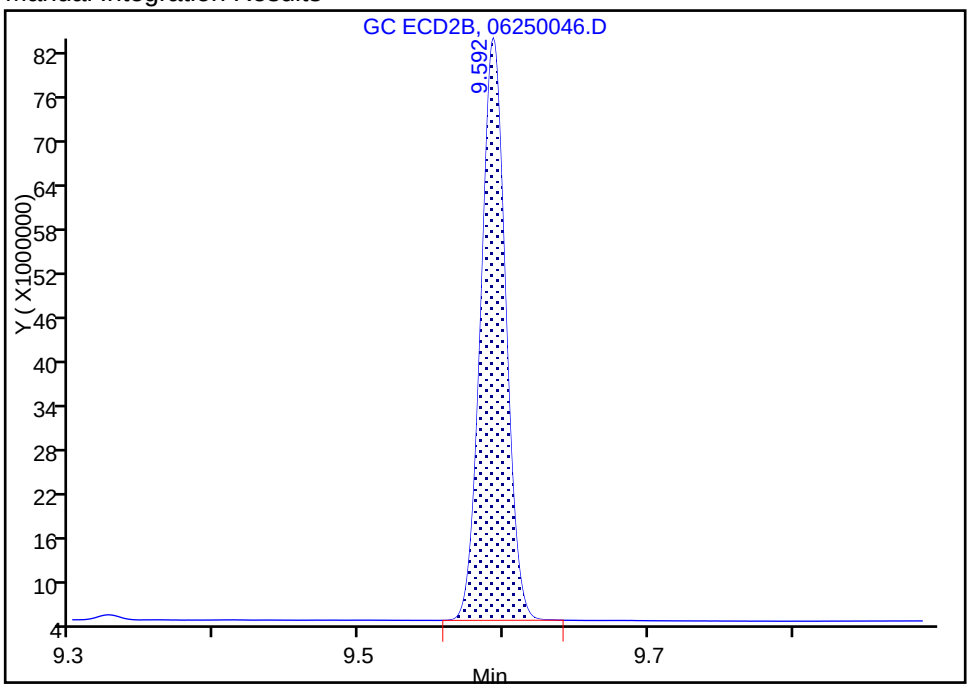
Processing Integration Results

RT: 9.59
Area: 46122556
Amount: 22.272560
Amount Units: ng/mL



Manual Integration Results

RT: 9.59
Area: 93695282
Amount: 46.457941
Amount Units: ng/mL



Reviewer: wellsd, 26-Jun-2017 10:40:01
Audit Action: Manually Integrated Audit Reason: Incomplete Integration

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/53 Calibration Date: 06/26/2017 03:13

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06250053.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0022		1620	2000	-19.2	20.0
Toxaphene Peak 2	Qua		0.0166		1230	2000	-38.3*	20.0
Toxaphene Peak 3	Lin2		0.0123		1310	2000	-34.7*	20.0
Toxaphene Peak 4	Lin2		0.0291		1310	2000	-34.5*	20.0
Toxaphene Peak 5	Lin2		0.0311		1240	2000	-38.2*	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/53 Calibration Date: 06/26/2017 03:13

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06250053.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	5.60	5.59	5.63
Toxaphene Peak 2	6.92	6.91	6.95
Toxaphene Peak 3	7.19	7.17	7.21
Toxaphene Peak 4	7.69	7.67	7.71
Toxaphene Peak 5	8.13	8.12	8.16

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250053.D
Lims ID: CCV TOX
Client ID:
Sample Type: CCV
Inject. Date: 26-Jun-2017 03:13:16 ALS Bottle#: 47 Worklist Smp#: 53
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV TOX
Misc. Info.: 280-0060103-053
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:57:43 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:42:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.993	-0.001	2313392018	150.0	150.0	
2	2.763	2.763	-0.001	486663982	150.0	150.0	
28 Toxaphene							M
1	5.604	5.606	-0.002	67586421	2000.0	1615.2	M
1	6.923	6.925	-0.002	513141310	2000.0	1233.4	M
1	7.186	7.187	-0.001	379372206	2000.0	1306.6	M
1	7.691	7.693	-0.002	896055835	2000.0	1310.3	M
1	8.133	8.135	-0.002	958107865	2000.0	1236.8	M
		Average of Peak Amounts =				1340.5	
2	6.105	6.108	-0.003	50479720	2000.0	1778.6	M
2	7.153	7.156	-0.003	96401663	2000.0	1503.8	M
2	7.298	7.300	-0.002	225885764	2000.0	1384.6	M
2	7.587	7.589	-0.002	162851383	2000.0	1478.8	M
2	8.110	8.112	-0.002	125663129	2000.0	1334.0	M
		Average of Peak Amounts =				1495.9	
						RPD = 10.96	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00012 Amount Added: 1.00 Units: mL
8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

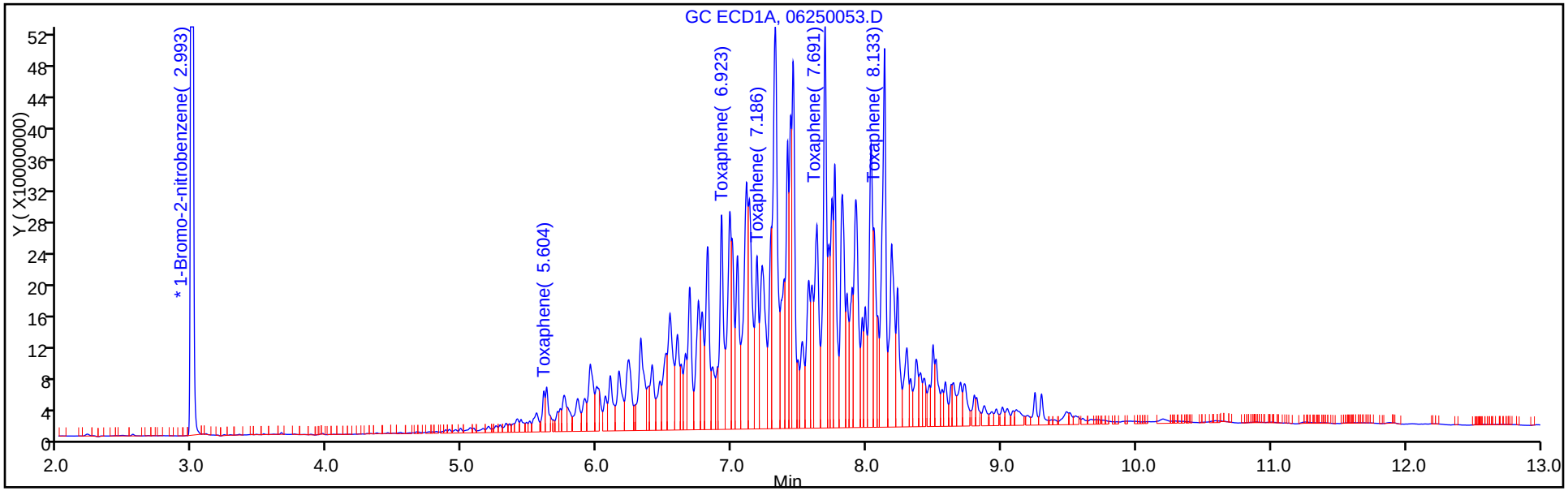
Report Date: 26-Jun-2017 11:57:43 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

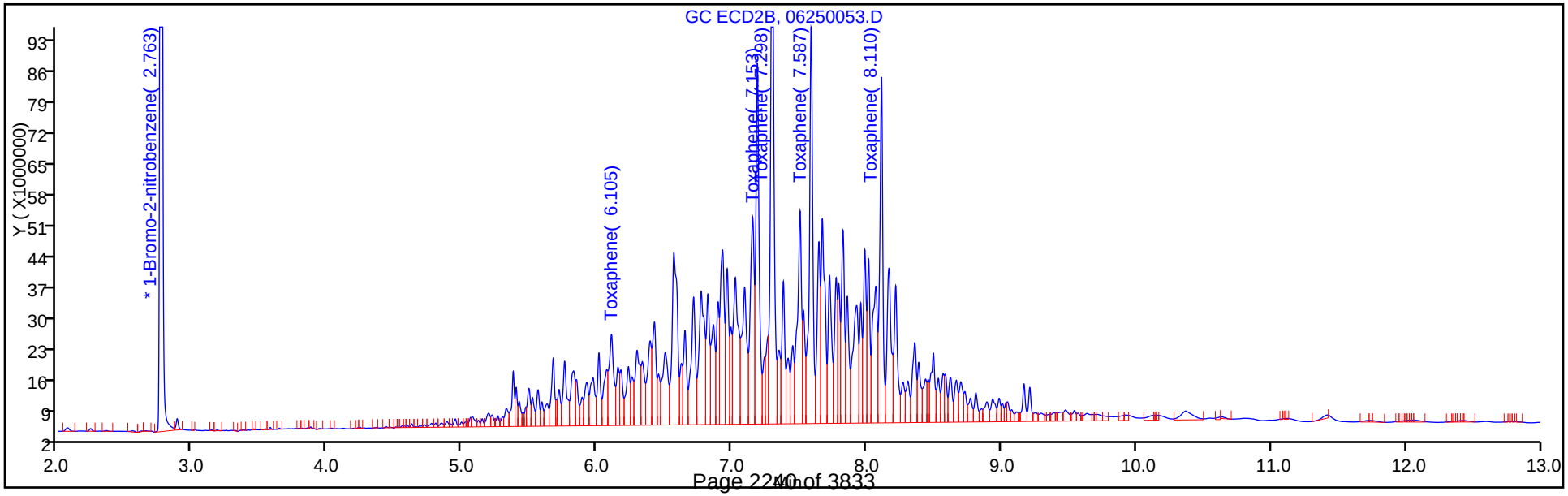
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Injection Date:	26-Jun-2017 03:13:16	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV TOX			Worklist Smp#:	53
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	47
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 26-Jun-2017 11:57:44 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250053.D

Injection Date: 26-Jun-2017 03:13:16 Instrument ID: SGC_P1

Lims ID: CCV TOX

Client ID:

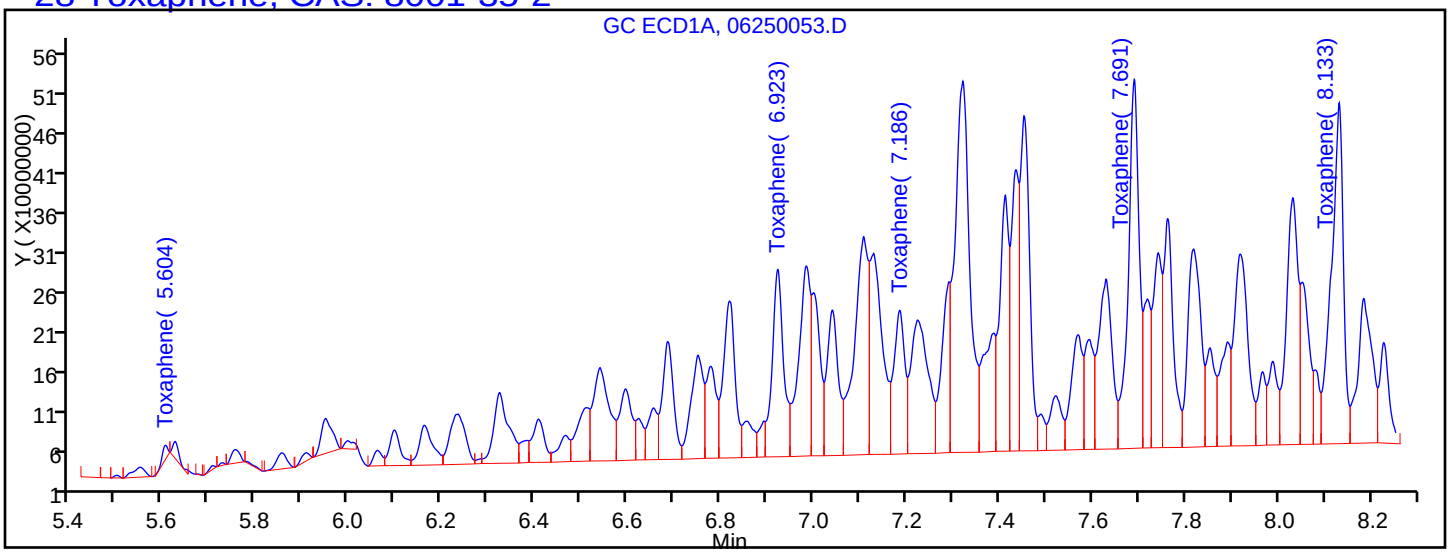
Operator ID: DAW ALS Bottle#: 47 Worklist Smp#: 53

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

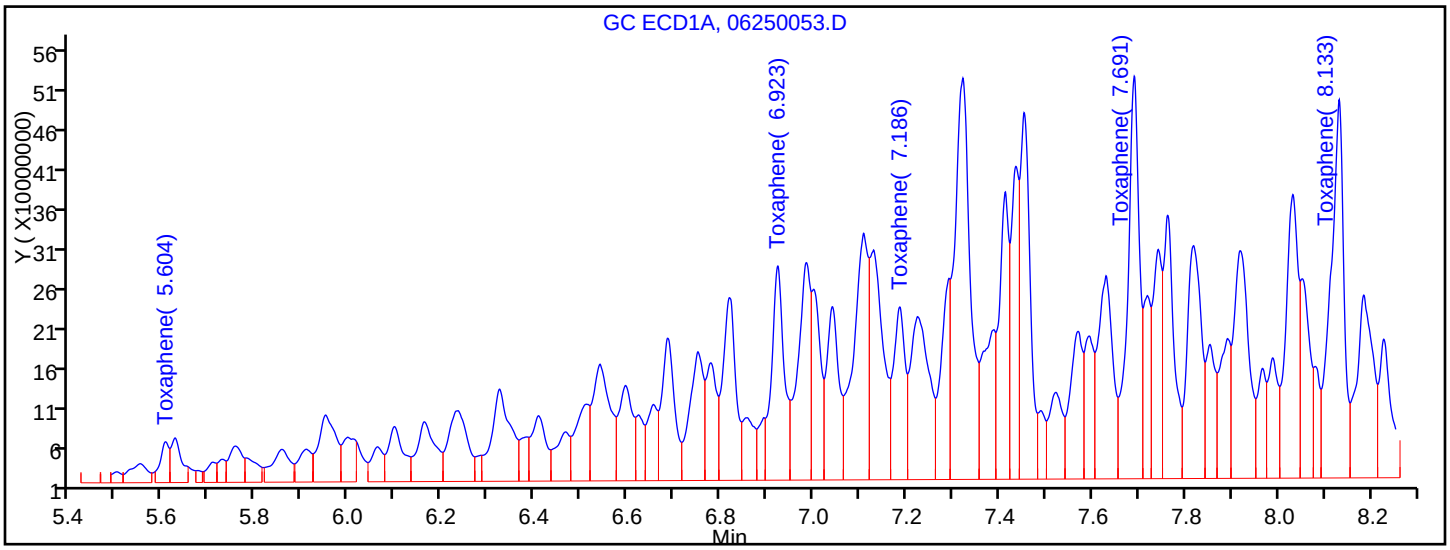
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.604	Response = 15046769
6.923	Response = 404164982
7.186	Response = 298108306
7.691	Response = 759136022
8.133	Response = 779059635



Manual Integration Results

5.604	Response = 67586421	M
6.923	Response = 513141310	M
7.186	Response = 379372206	M
7.691	Response = 896055835	M
8.133	Response = 958107865	M

Reviewer: wellsd, 26-Jun-2017 10:42:13

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/53 Calibration Date: 06/26/2017 03:13

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06250053.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Toxaphene Peak 1	Lin2		0.0078		1780	2000	-11.1	20.0
Toxaphene Peak 2	Lin2		0.0149		1500	2000	-24.8*	20.0
Toxaphene Peak 3	Lin2		0.0348		1380	2000	-30.8*	20.0
Toxaphene Peak 4	Lin2		0.0251		1480	2000	-26.1*	20.0
Toxaphene Peak 5	Lin2		0.0194		1330	2000	-33.3*	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/53 Calibration Date: 06/26/2017 03:13

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 14:16

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 15:40

Lab File ID: 06250053.D

Analyte	RT	RT WINDOW	
		FROM	TO
Toxaphene Peak 1	6.11	6.09	6.13
Toxaphene Peak 2	7.15	7.14	7.18
Toxaphene Peak 3	7.30	7.28	7.32
Toxaphene Peak 4	7.59	7.57	7.61
Toxaphene Peak 5	8.11	8.09	8.13

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250053.D
Lims ID: CCV TOX
Client ID:
Sample Type: CCV
Inject. Date: 26-Jun-2017 03:13:16 ALS Bottle#: 47 Worklist Smp#: 53
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV TOX
Misc. Info.: 280-0060103-053
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:57:43 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:42:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.993	-0.001	2313392018	150.0	150.0	
2	2.763	2.763	-0.001	486663982	150.0	150.0	
28 Toxaphene							M
1	5.604	5.606	-0.002	67586421	2000.0	1615.2	M
1	6.923	6.925	-0.002	513141310	2000.0	1233.4	M
1	7.186	7.187	-0.001	379372206	2000.0	1306.6	M
1	7.691	7.693	-0.002	896055835	2000.0	1310.3	M
1	8.133	8.135	-0.002	958107865	2000.0	1236.8	M
		Average of Peak Amounts =				1340.5	
2	6.105	6.108	-0.003	50479720	2000.0	1778.6	M
2	7.153	7.156	-0.003	96401663	2000.0	1503.8	M
2	7.298	7.300	-0.002	225885764	2000.0	1384.6	M
2	7.587	7.589	-0.002	162851383	2000.0	1478.8	M
2	8.110	8.112	-0.002	125663129	2000.0	1334.0	M
		Average of Peak Amounts =				1495.9	
						RPD = 10.96	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

8081TOXCCVL4_00012 Amount Added: 1.00 Units: mL
8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

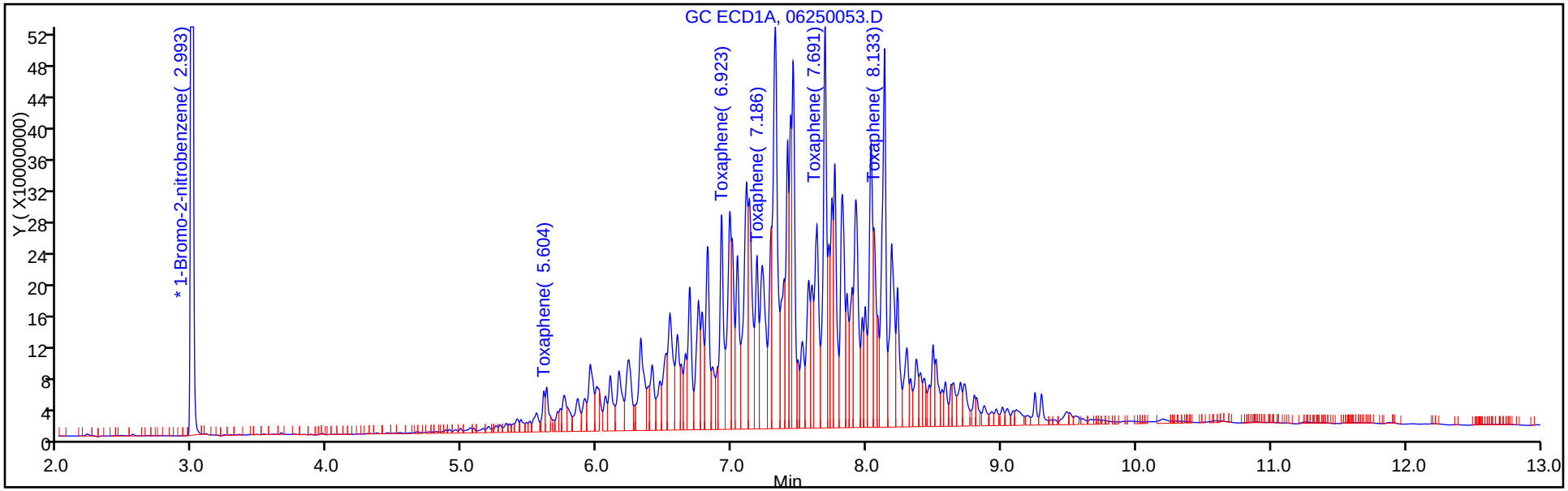
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TestAmerica Denver

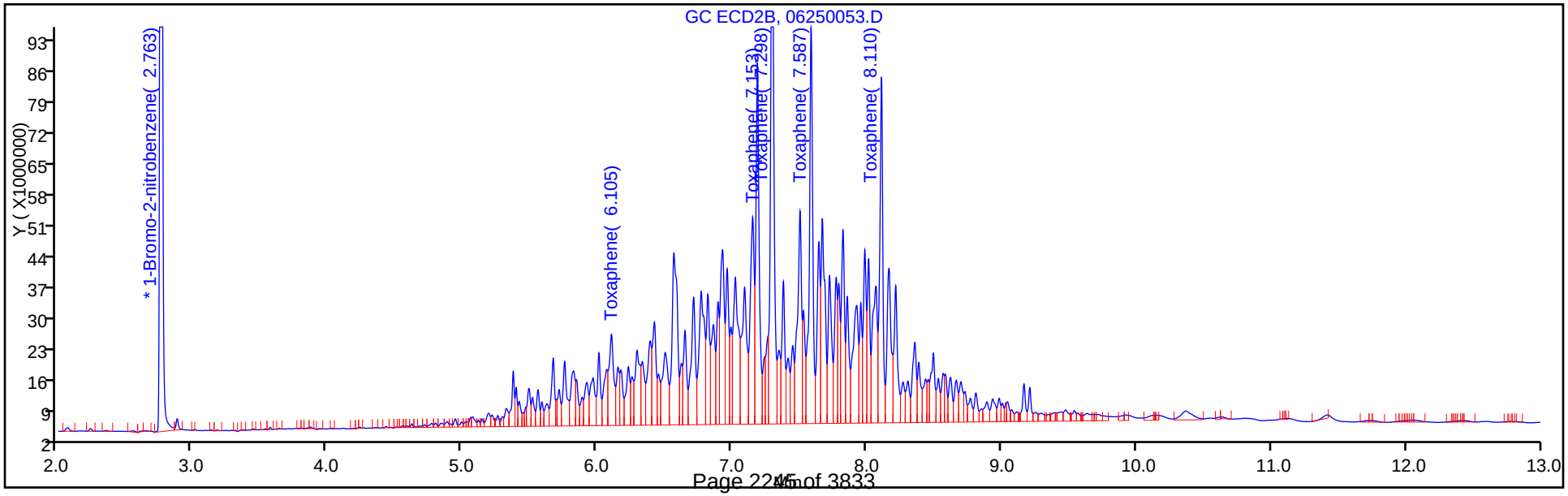
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250053.D

Injection Date:	26-Jun-2017 03:13:16	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV TOX			Worklist Smp#:	53
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	47
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Report Date: 26-Jun-2017 11:57:44 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250053.D

Injection Date: 26-Jun-2017 03:13:16 Instrument ID: SGC_P1

Lims ID: CCV TOX

Client ID:

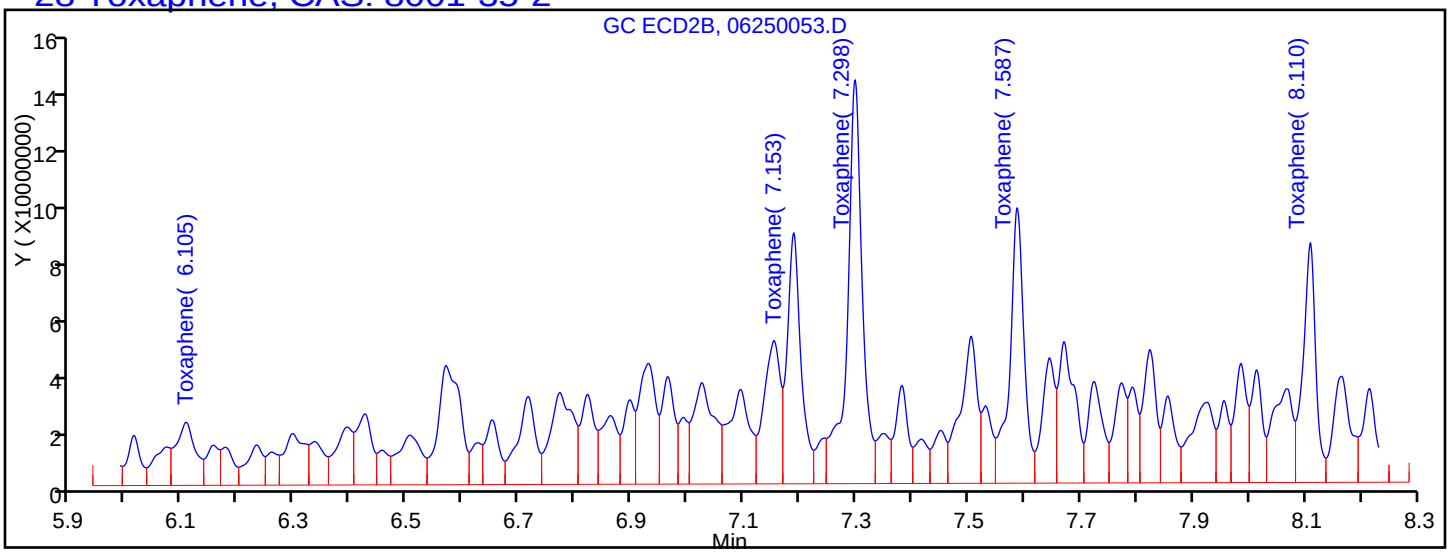
Operator ID: DAW ALS Bottle#: 47 Worklist Smp#: 53

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

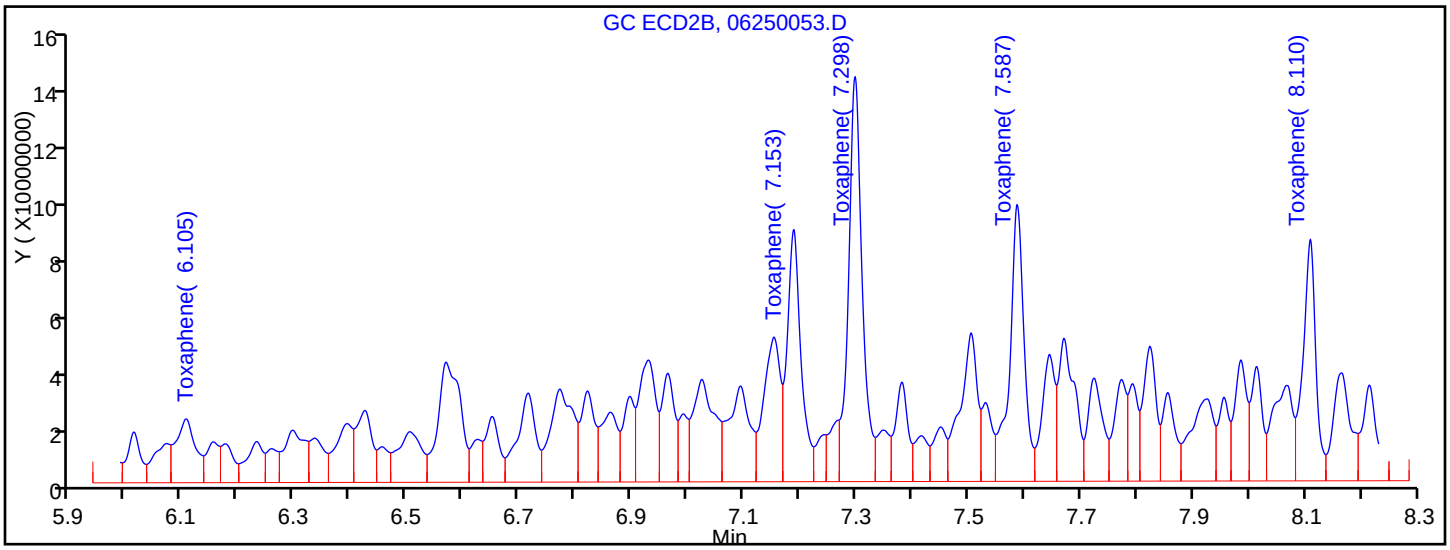
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

6.105	Response = 49632830
7.153	Response = 95172025
7.298	Response = 248304540
7.587	Response = 160725895
8.110	Response = 123701295



Manual Integration Results

6.105	Response = 50479720	M
7.153	Response = 96401663	M
7.298	Response = 225885764	M
7.587	Response = 162851383	M
8.110	Response = 125663129	M

Reviewer: wellsd, 26-Jun-2017 10:42:26

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/55 Calibration Date: 06/26/2017 03:46

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06250055.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		1.181		46.5	50.0	-7.0	20.0
alpha-BHC	Lin2		1.832		46.1	50.0	-7.7	20.0
gamma-BHC (Lindane)	Lin2		1.654		46.2	50.0	-7.7	20.0
beta-BHC	Lin2		0.6184		44.6	50.0	-10.7	20.0
delta-BHC	Lin2		1.771		46.6	50.0	-6.8	20.0
Heptachlor	Lin2		1.522		46.0	50.0	-8.1	20.0
Aldrin	Lin2		1.617		47.9	50.0	-4.2	20.0
Heptachlor epoxide	Lin2		1.405		48.2	50.0	-3.6	20.0
gamma-Chlordane	Lin2		1.578		49.0	50.0	-1.9	20.0
alpha-Chlordane	Lin2		1.513		49.2	50.0	-1.6	20.0
4,4'-DDE	Lin2		1.544		48.8	50.0	-2.4	20.0
Endosulfan I	Lin2		1.385		49.4	50.0	-1.2	20.0
Dieldrin	Lin2		1.555		49.2	50.0	-1.5	20.0
Endrin	Lin2		1.390		54.2	50.0	8.5	20.0
4,4'-DDD	Lin2		1.395		52.3	50.0	4.6	20.0
Endosulfan II	Lin2		1.351		51.0	50.0	2.0	20.0
4,4'-DDT	Lin2		1.113		43.4	50.0	-13.1	20.0
Endrin aldehyde	Lin2		1.045		48.8	50.0	-2.5	20.0
Methoxychlor	Lin2		0.5297		47.4	50.0	-5.2	20.0
Endosulfan sulfate	Lin2		1.240		50.6	50.0	1.2	20.0
Endrin ketone	Lin2		1.324		48.7	50.0	-2.6	20.0
Tetrachloro-m-xylene (Surr)	Lin2		1.032		45.3	50.0	-9.5	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.8002		51.5	50.0	3.0	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/55 Calibration Date: 06/26/2017 03:46

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06250055.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.20	4.19	4.21
alpha-BHC	4.37	4.36	4.38
gamma-BHC (Lindane)	4.68	4.67	4.69
beta-BHC	4.76	4.75	4.77
delta-BHC	4.94	4.93	4.95
Heptachlor	5.14	5.13	5.15
Aldrin	5.43	5.42	5.44
Heptachlor epoxide	6.05	6.04	6.06
gamma-Chlordane	6.20	6.19	6.21
alpha-Chlordane	6.36	6.35	6.37
4,4'-DDE	6.45	6.44	6.46
Endosulfan I	6.53	6.52	6.54
Dieldrin	6.81	6.80	6.82
Endrin	7.08	7.07	7.09
4,4'-DDD	7.16	7.15	7.17
Endosulfan II	7.33	7.32	7.34
4,4'-DDT	7.47	7.46	7.48
Endrin aldehyde	7.78	7.78	7.80
Methoxychlor	7.98	7.97	7.99
Endosulfan sulfate	8.23	8.22	8.24
Endrin ketone	8.51	8.50	8.52
Tetrachloro-m-xylene (Surr)	3.82	3.81	3.83
DCB Decachlorobiphenyl (Surr)	9.49	9.48	9.50

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250055.D
Lims ID: CCV AB
Client ID:
Sample Type: CCV
Inject. Date: 26-Jun-2017 03:46:54 ALS Bottle#: 49 Worklist Smp#: 55
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV AB
Misc. Info.: 280-0060103-055
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:57:48 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						183.5	
2						183.2	
						RPD = 0.17	
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.993	-0.001	2010632727	150.0	150.0	
2	2.763	2.763	-0.001	425461095	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.820	3.819	0.001	691352682	50.0	45.3	
2	3.679	3.678	0.001	137038104	50.0	46.8	
						RPD = 3.24	
5 Hexachlorobenzene							
1	4.200	4.200	0.000	791198724	50.0	46.5	
2	4.104	4.104	0.000	142027193	50.0	46.6	
						RPD = 0.22	
8 alpha-BHC							
1	4.368	4.368	0.000	1228041345	50.0	46.1	
2	4.240	4.241	-0.001	199505925	50.0	46.2	
						RPD = 0.19	
9 gamma-BHC (Lindane)							
1	4.676	4.676	0.000	1108693470	50.0	46.2	
2	4.565	4.567	-0.002	173229916	50.0	45.4	
						RPD = 1.54	
10 beta-BHC							
1	4.760	4.760	0.000	414468044	50.0	44.6	
2	4.646	4.648	-0.002	71967021	50.0	45.2	
						RPD = 1.21	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.935	4.935	0.000	1187144210	50.0	46.6	
2	4.919	4.920	-0.001	182012999	50.0	46.4	
						RPD = 0.50	
15 Heptachlor							
1	5.144	5.144	0.000	1020160464	50.0	46.0	
2	4.976	4.978	-0.002	155666974	50.0	44.2	
						RPD = 3.95	
16 Aldrin							
1	5.430	5.431	-0.001	1083896913	50.0	47.9	
2	5.282	5.283	-0.001	164554735	50.0	47.2	
						RPD = 1.42	
18 Isodrin							
1	5.759	5.758	0.001	833976811	50.0	48.2	
2	5.645	5.645	0.000	129035304	50.0	47.5	
						RPD = 1.31	
21 Heptachlor epoxide							
1	6.052	6.053	-0.001	941363419	50.0	48.2	
2	5.826	5.828	-0.002	144217522	50.0	46.6	
						RPD = 3.44	
22 gamma-Chlordane							
1	6.195	6.196	-0.001	1057556915	50.0	49.0	
2	6.027	6.028	-0.001	152008411	50.0	47.0	
						RPD = 4.32	
23 alpha-Chlordane							
1	6.355	6.357	-0.002	1014341745	50.0	49.2	
2	6.195	6.196	-0.001	146865410	50.0	47.6	
						RPD = 3.26	
24 4,4'-DDE							
1	6.452	6.453	-0.001	1034740214	50.0	48.8	
2	6.410	6.413	-0.003	145199683	50.0	45.7	
						RPD = 6.58	
25 Endosulfan I							
1	6.526	6.528	-0.002	928266869	50.0	49.4	
2	6.258	6.260	-0.002	136393390	50.0	46.0	
						RPD = 7.07	
27 Dieldrin							
1	6.811	6.813	-0.002	1042480867	50.0	49.2	
2	6.598	6.599	-0.001	154863578	50.0	47.3	
						RPD = 4.00	
30 Endrin							
1	7.081	7.082	-0.001	931467424	50.0	54.2	
2	6.957	6.959	-0.002	140353280	50.0	53.6	
						RPD = 1.12	
32 4,4'-DDD							
1	7.156	7.158	-0.002	935074742	50.0	52.3	
2	7.108	7.110	-0.002	133864577	50.0	53.1	
						RPD = 1.49	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.330	7.331	-0.001	905153335	50.0	51.0	
2	7.202	7.203	-0.001	134156265	50.0	49.4	
						RPD = 3.10	
35 4,4'-DDT							
1	7.467	7.468	-0.001	746126663	50.0	43.4	
2	7.458	7.459	-0.001	103986866	50.0	42.9	
						RPD = 1.29	
36 Endrin aldehyde							
1	7.783	7.785	-0.002	700336227	50.0	48.8	
2	7.576	7.578	-0.002	106091781	50.0	48.1	
						RPD = 1.42	
37 Methoxychlor							
1	7.979	7.981	-0.002	354998974	50.0	47.4	
2	8.180	8.182	-0.002	55076919	50.0	48.0	
						RPD = 1.22	
38 Mirex							
1	8.125	8.127	-0.002	598222529	50.0	49.8	
2	8.352	8.353	-0.001	87306308	50.0	47.5	
						RPD = 4.77	
39 Endosulfan sulfate							
1	8.231	8.232	-0.001	831257047	50.0	50.6	
2	7.871	7.873	-0.002	120565168	50.0	49.4	
						RPD = 2.49	
40 Endrin ketone							
1	8.510	8.513	-0.003	887248018	50.0	48.7	
2	8.397	8.399	-0.002	135872245	50.0	48.9	
						RPD = 0.41	
$ 41 DCB Decachlorobiphenyl							
1	9.490	9.492	-0.002	536269962	50.0	51.5	
2	9.593	9.593	0.000	92250178	50.0	52.3	
						RPD = 1.48	
S 3 Endosulfan, Total							
1						151.0	
2						144.8	
						RPD = 4.17	

Reagents:

8081IcalL4_00026	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

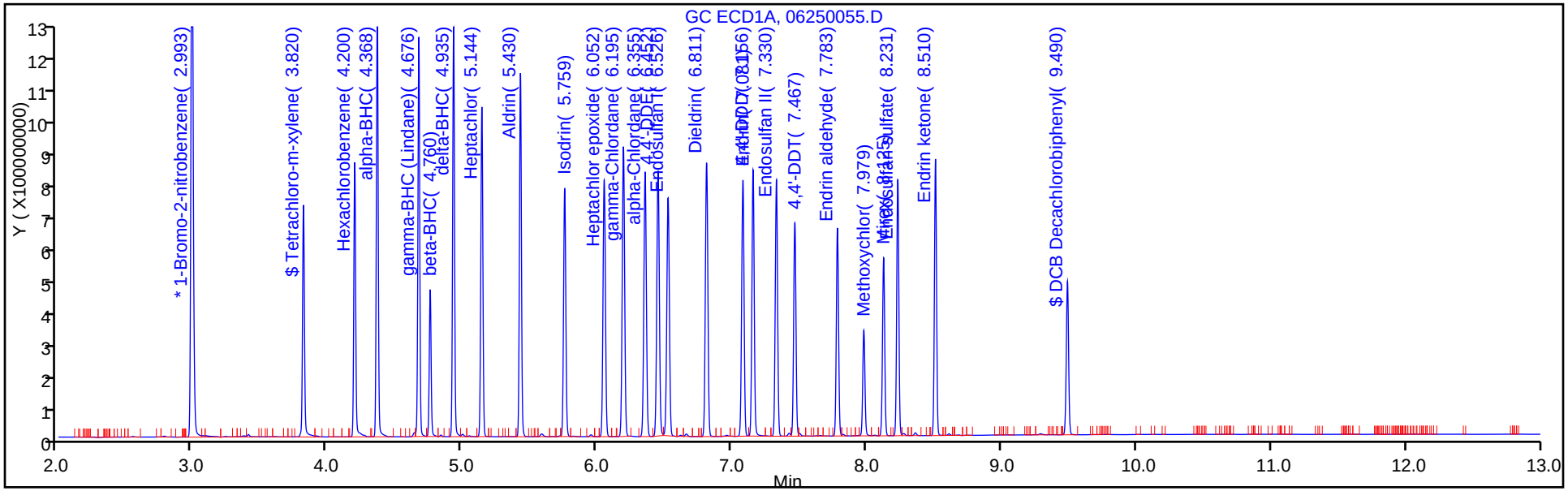
Report Date: 26-Jun-2017 11:57:48 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

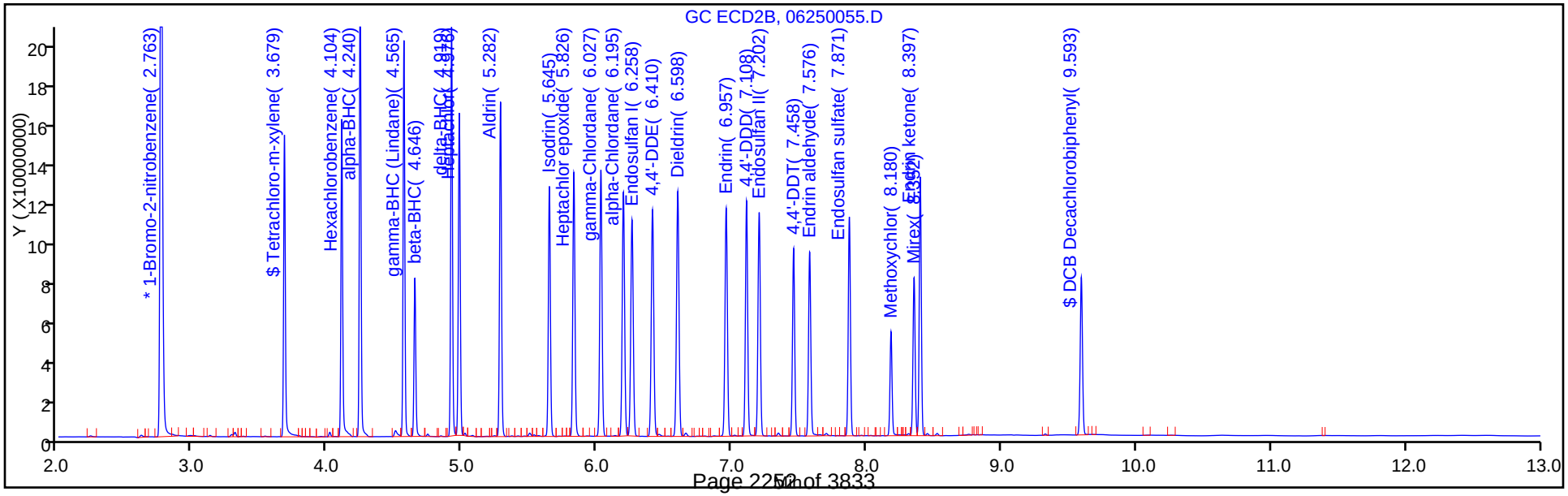
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250055.D

Injection Date:	26-Jun-2017 03:46:54	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV AB			Worklist Smp#:	55
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	49
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM VII
PESTICIDES CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/55 Calibration Date: 06/26/2017 03:46

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06250055.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Hexachlorobenzene	Lin2		1.001		46.6	50.0	-6.8	20.0
alpha-BHC	Lin2		1.407		46.2	50.0	-7.6	20.0
gamma-BHC (Lindane)	Lin2		1.221		45.4	50.0	-9.1	20.0
beta-BHC	Lin2		0.5075		45.2	50.0	-9.7	20.0
delta-BHC	Lin2		1.283		46.4	50.0	-7.3	20.0
Heptachlor	Lin2		1.098		44.2	50.0	-11.6	20.0
Aldrin	Lin2		1.160		47.2	50.0	-5.6	20.0
Heptachlor epoxide	Lin2		1.017		46.6	50.0	-6.8	20.0
gamma-Chlordane	Lin2		1.072		47.0	50.0	-6.1	20.0
alpha-Chlordane	Lin2		1.036		47.6	50.0	-4.7	20.0
Endosulfan I	Lin2		0.9617		46.0	50.0	-7.9	20.0
4,4'-DDE	Lin2		1.024		45.7	50.0	-8.6	20.0
Dieldrin	Lin2		1.092		47.3	50.0	-5.4	20.0
Endrin	Lin2		0.9897		53.6	50.0	7.2	20.0
4,4'-DDD	Lin2		0.9439		53.1	50.0	6.2	20.0
Endosulfan II	Lin2		0.9460		49.4	50.0	-1.1	20.0
4,4'-DDT	Lin2		0.7332		42.9	50.0	-14.2	20.0
Endrin aldehyde	Lin2		0.7481		48.1	50.0	-3.8	20.0
Endosulfan sulfate	Lin2		0.8501		49.4	50.0	-1.3	20.0
Methoxychlor	Lin2		0.3884		48.0	50.0	-4.1	20.0
Endrin ketone	Lin2		0.9581		48.9	50.0	-2.2	20.0
Tetrachloro-m-xylene (Surr)	Lin2		0.9663		46.8	50.0	-6.5	20.0
DCB Decachlorobiphenyl (Surr)	Lin2		0.6505		52.3	50.0	4.6	20.0

FORM VII
PESTICIDES CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378628/55 Calibration Date: 06/26/2017 03:46

Instrument ID: SGC_P1 Calib Start Date: 04/10/2017 17:22

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 04/10/2017 18:46

Lab File ID: 06250055.D

Analyte	RT	RT WINDOW	
		FROM	TO
Hexachlorobenzene	4.10	4.09	4.11
alpha-BHC	4.24	4.23	4.25
gamma-BHC (Lindane)	4.57	4.56	4.58
beta-BHC	4.65	4.64	4.66
delta-BHC	4.92	4.91	4.93
Heptachlor	4.98	4.97	4.99
Aldrin	5.28	5.27	5.29
Heptachlor epoxide	5.83	5.82	5.84
gamma-Chlordane	6.03	6.02	6.04
alpha-Chlordane	6.20	6.19	6.21
Endosulfan I	6.26	6.25	6.27
4,4'-DDE	6.41	6.40	6.42
Dieldrin	6.60	6.59	6.61
Endrin	6.96	6.95	6.97
4,4'-DDD	7.11	7.10	7.12
Endosulfan II	7.20	7.19	7.21
4,4'-DDT	7.46	7.45	7.47
Endrin aldehyde	7.58	7.57	7.59
Endosulfan sulfate	7.87	7.86	7.88
Methoxychlor	8.18	8.17	8.19
Endrin ketone	8.40	8.39	8.41
Tetrachloro-m-xylene (Surr)	3.68	3.67	3.69
DCB Decachlorobiphenyl (Surr)	9.59	9.58	9.60

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250055.D
Lims ID: CCV AB
Client ID:
Sample Type: CCV
Inject. Date: 26-Jun-2017 03:46:54 ALS Bottle#: 49 Worklist Smp#: 55
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV AB
Misc. Info.: 280-0060103-055
Operator ID: DAW Instrument ID: SGC_P1
Sublist: chrom-P1 8081 IS*sub6

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:57:48 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						183.5	
2						183.2	
						RPD = 0.17	
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.993	-0.001	2010632727	150.0	150.0	
2	2.763	2.763	-0.001	425461095	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.820	3.819	0.001	691352682	50.0	45.3	
2	3.679	3.678	0.001	137038104	50.0	46.8	
						RPD = 3.24	
5 Hexachlorobenzene							
1	4.200	4.200	0.000	791198724	50.0	46.5	
2	4.104	4.104	0.000	142027193	50.0	46.6	
						RPD = 0.22	
8 alpha-BHC							
1	4.368	4.368	0.000	1228041345	50.0	46.1	
2	4.240	4.241	-0.001	199505925	50.0	46.2	
						RPD = 0.19	
9 gamma-BHC (Lindane)							
1	4.676	4.676	0.000	1108693470	50.0	46.2	
2	4.565	4.567	-0.002	173229916	50.0	45.4	
						RPD = 1.54	
10 beta-BHC							
1	4.760	4.760	0.000	414468044	50.0	44.6	
2	4.646	4.648	-0.002	71967021	50.0	45.2	
						RPD = 1.21	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
12 delta-BHC							
1	4.935	4.935	0.000	1187144210	50.0	46.6	
2	4.919	4.920	-0.001	182012999	50.0	46.4	
						RPD = 0.50	
15 Heptachlor							
1	5.144	5.144	0.000	1020160464	50.0	46.0	
2	4.976	4.978	-0.002	155666974	50.0	44.2	
						RPD = 3.95	
16 Aldrin							
1	5.430	5.431	-0.001	1083896913	50.0	47.9	
2	5.282	5.283	-0.001	164554735	50.0	47.2	
						RPD = 1.42	
18 Isodrin							
1	5.759	5.758	0.001	833976811	50.0	48.2	
2	5.645	5.645	0.000	129035304	50.0	47.5	
						RPD = 1.31	
21 Heptachlor epoxide							
1	6.052	6.053	-0.001	941363419	50.0	48.2	
2	5.826	5.828	-0.002	144217522	50.0	46.6	
						RPD = 3.44	
22 gamma-Chlordane							
1	6.195	6.196	-0.001	1057556915	50.0	49.0	
2	6.027	6.028	-0.001	152008411	50.0	47.0	
						RPD = 4.32	
23 alpha-Chlordane							
1	6.355	6.357	-0.002	1014341745	50.0	49.2	
2	6.195	6.196	-0.001	146865410	50.0	47.6	
						RPD = 3.26	
24 4,4'-DDE							
1	6.452	6.453	-0.001	1034740214	50.0	48.8	
2	6.410	6.413	-0.003	145199683	50.0	45.7	
						RPD = 6.58	
25 Endosulfan I							
1	6.526	6.528	-0.002	928266869	50.0	49.4	
2	6.258	6.260	-0.002	136393390	50.0	46.0	
						RPD = 7.07	
27 Dieldrin							
1	6.811	6.813	-0.002	1042480867	50.0	49.2	
2	6.598	6.599	-0.001	154863578	50.0	47.3	
						RPD = 4.00	
30 Endrin							
1	7.081	7.082	-0.001	931467424	50.0	54.2	
2	6.957	6.959	-0.002	140353280	50.0	53.6	
						RPD = 1.12	
32 4,4'-DDD							
1	7.156	7.158	-0.002	935074742	50.0	52.3	
2	7.108	7.110	-0.002	133864577	50.0	53.1	
						RPD = 1.49	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
34 Endosulfan II							
1	7.330	7.331	-0.001	905153335	50.0	51.0	
2	7.202	7.203	-0.001	134156265	50.0	49.4	
						RPD = 3.10	
35 4,4'-DDT							
1	7.467	7.468	-0.001	746126663	50.0	43.4	
2	7.458	7.459	-0.001	103986866	50.0	42.9	
						RPD = 1.29	
36 Endrin aldehyde							
1	7.783	7.785	-0.002	700336227	50.0	48.8	
2	7.576	7.578	-0.002	106091781	50.0	48.1	
						RPD = 1.42	
37 Methoxychlor							
1	7.979	7.981	-0.002	354998974	50.0	47.4	
2	8.180	8.182	-0.002	55076919	50.0	48.0	
						RPD = 1.22	
38 Mirex							
1	8.125	8.127	-0.002	598222529	50.0	49.8	
2	8.352	8.353	-0.001	87306308	50.0	47.5	
						RPD = 4.77	
39 Endosulfan sulfate							
1	8.231	8.232	-0.001	831257047	50.0	50.6	
2	7.871	7.873	-0.002	120565168	50.0	49.4	
						RPD = 2.49	
40 Endrin ketone							
1	8.510	8.513	-0.003	887248018	50.0	48.7	
2	8.397	8.399	-0.002	135872245	50.0	48.9	
						RPD = 0.41	
$ 41 DCB Decachlorobiphenyl							
1	9.490	9.492	-0.002	536269962	50.0	51.5	
2	9.593	9.593	0.000	92250178	50.0	52.3	
						RPD = 1.48	
S 3 Endosulfan, Total							
1						151.0	
2						144.8	
						RPD = 4.17	

Reagents:

8081IcalL4_00026	Amount Added: 1.00	Units: mL	
8081_IS_00006	Amount Added: 75.00	Units: uL	Run Reagent

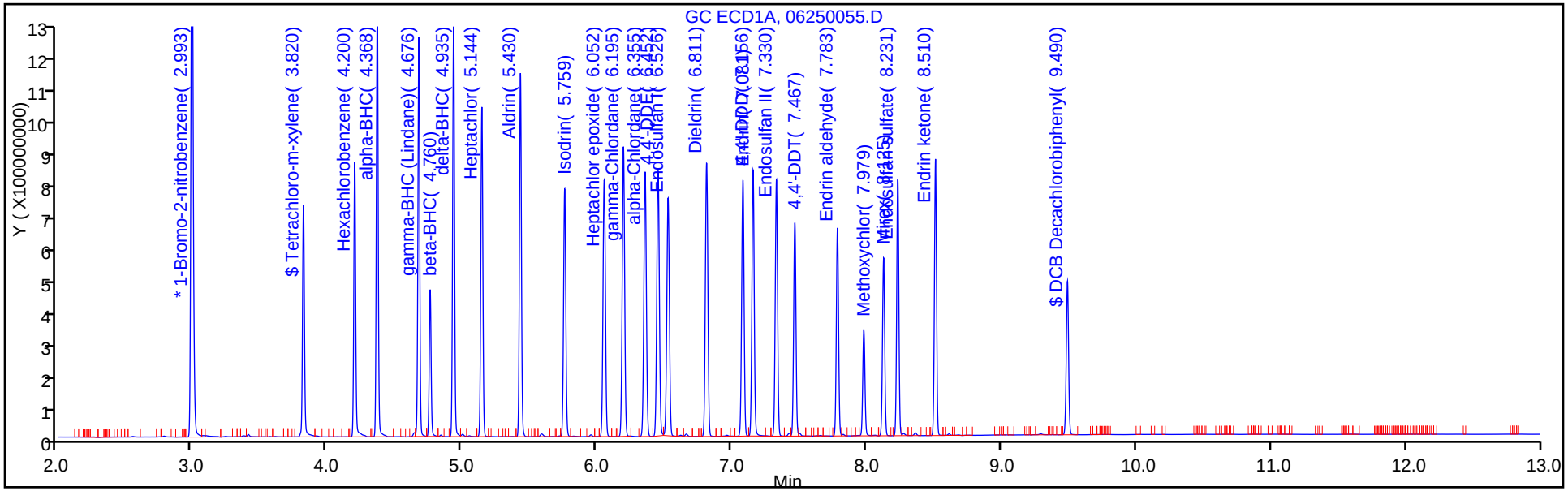
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TestAmerica Denver

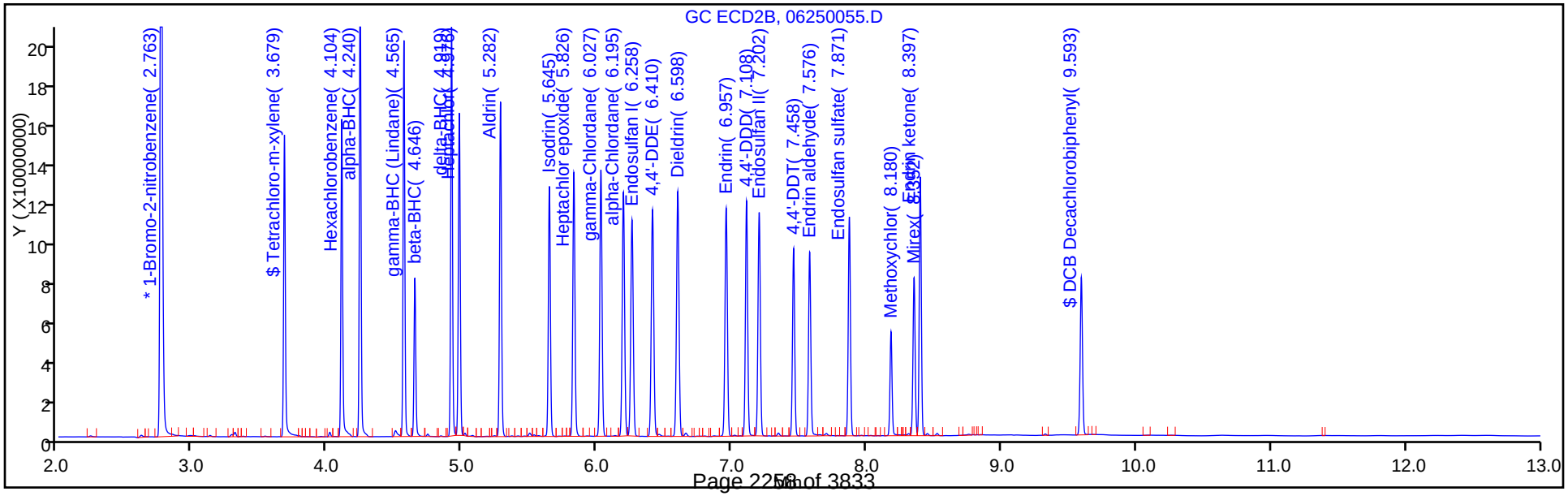
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Injection Date:	26-Jun-2017 03:46:54	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	CCV AB			Worklist Smp#:	55
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	49
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-377615/1-A

Matrix: Solid | Lab File ID: 06250013.D

Analysis Method: 8081B | Date Collected:

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.2(g) | Date Analyzed: 06/25/2017 15:58

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	1.6	U	1.6	1.6	0.53
72-55-9	4,4'-DDE	0.64	U	1.6	0.64	0.23
50-29-3	4,4'-DDT	1.6	U	1.9	1.6	0.57
309-00-2	Aldrin	0.64	U	1.6	0.64	0.24
319-84-6	alpha-BHC	0.64	U	1.6	0.64	0.21
5103-71-9	alpha-Chlordane	0.64	U	1.6	0.64	0.31
319-85-7	beta-BHC	1.6	U	1.6	1.6	0.64
319-86-8	delta-BHC	0.96	U	1.6	0.96	0.39
60-57-1	Dieldrin	0.64	U	1.6	0.64	0.20
959-98-8	Endosulfan I	0.64	U	1.6	0.64	0.17
33213-65-9	Endosulfan II	0.64	U	1.6	0.64	0.28
1031-07-8	Endosulfan sulfate	0.64	U	1.6	0.64	0.27
72-20-8	Endrin	0.64	U	1.6	0.64	0.29
7421-93-4	Endrin aldehyde	0.64	U	1.6	0.64	0.16
58-89-9	gamma-BHC (Lindane)	0.96	U	1.6	0.96	0.45
5103-74-2	gamma-Chlordane	0.64	U	1.6	0.64	0.26
76-44-8	Heptachlor	0.64	U	1.6	0.64	0.21
1024-57-3	Heptachlor epoxide	0.96	U	1.6	0.96	0.41
72-43-5	Methoxychlor	0.96	U	3.2	0.96	0.43
8001-35-2	Toxaphene	32	U	160	32	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	87		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	85		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250013.D
Lims ID: MB 280-377615/1-A
Client ID:
Sample Type: MB
Inject. Date: 25-Jun-2017 15:58:35 ALS Bottle#: 7 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-377615/1-
Misc. Info.: 280-0060103-013
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:12 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
S 1 Hexachlorocyclohexane, technical							
1						0.5415	
2						-0.8959	
						RPD = -810.97	
LOD = 0.002000							
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.993	-0.001	2029843804	150.0	150.0	
2	2.763	2.763	0.000	427000912	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.820	3.819	0.001	261545732	20.0	17.0	
2	3.678	3.678	0.000	54567472	20.0	18.2	
						RPD = 6.60	
5 Hexachlorobenzene							
1	4.201	4.200	0.001	3940938		0.1799	
2	4.103	4.104	-0.001	159278		-0.8408	
						RPD = -308.91	
6 Diallate							
1		4.218				ND	
2		4.056					
7 Propachlor							
1		4.361				ND	
2		3.971					
8 alpha-BHC							
1		4.368				ND	
2		4.241					
9 gamma-BHC (Lindane)							
1		4.676				ND	
2		4.567					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
10 beta-BHC							
1	4.763	4.760	0.003	143309		-0.0425	
2	4.646	4.648	-0.002	416525		-0.8193	
						RPD = -180.26	
LOD = 0.002000							
11 2,4,5-Trichlorophenol							
1	4.842	4.861	-0.019	2116207		NC	
2	4.788	4.772	0.016	241163		NC	
						RPD = 0.00	
12 delta-BHC							
1	4.934	4.935	-0.001	1308132		0.5840	
2	4.921	4.920	0.001	208696		-0.0766	
						RPD = 260.39	
14 Chlordane (technical)							
1		5.065				ND	
1		5.560					
1		6.197					
1		6.337					
1		7.258					
2		4.840					
2		5.425					
2		6.029					
2		6.196					
2		7.254					
13 Technical Chlordane							
1		5.065				ND	
1		5.560					
1		6.197					
1		6.337					
1		7.258					
2		4.840					
2		5.425					
2		6.029					
2		6.196					
2		7.254					
15 Heptachlor							
1		5.144				ND	
2		4.978					
16 Aldrin							
1		5.431				ND	
2		5.283					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
28 Toxaphene							
1		5.606				ND	
1		6.925					
1		7.187					
1		7.693					
1		8.135					
2		6.108					
2		7.156					
2		7.300					
2		7.589					
2		8.112					
17 Chlorpyrifos							
1		5.665				ND	
2		5.511					
18 Isodrin							
1		5.758				ND	
2		5.645					
19 Dicofol							
1		5.798				ND	
2		5.610					
20 2,4'-DDE							
1		6.039				ND	
2		6.038					
21 Heptachlor epoxide							
1	6.053	6.053	0.000	205440		-0.0760	
2	5.833	5.828	0.005	100695		-0.6775	
						RPD = -159.64	
LOD = 0.002000							
22 gamma-Chlordane							
1		6.196				ND	
2		6.028					
23 alpha-Chlordane							
1		6.357				ND	
2		6.196					
24 4,4'-DDE							
1		6.453				ND	
2		6.413					
25 Endosulfan I							
1		6.528				ND	
2		6.260					
26 2,4'-DDD							
1		6.661				ND	
2		6.661					
27 Dieldrin							
1		6.813				ND	
2		6.599					
29 2,4'-DDT							
1		6.961				ND	
2		7.022					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
30 Endrin							
1		7.082				ND	
2		6.959					
31 Kepone							
1		7.129				ND	
2		7.088					
32 4,4'-DDD							
1		7.158				ND	
2		7.110					
33 Chlorobenzilate							
1		7.173				ND	
2		6.971					
34 Endosulfan II							
1	7.332	7.331	0.001	633907		-0.0125	
2	7.204	7.203	0.001	644746		-0.6302	
						RPD = -192.22	
LOD = 0.002000							
35 4,4'-DDT							
1		7.468				ND	
2		7.459					
36 Endrin aldehyde							
1	7.785	7.785	0.000	801888		0.0238	
2	7.579	7.578	0.001	333542		-0.6686	
						RPD = -214.75	
37 Methoxychlor							
1	7.979	7.981	-0.002	188807		-0.2762	
2	8.174	8.182	-0.008	140557		-0.8945	
						RPD = -105.62	
LOD = 0.002000							
38 Mirex							
1	8.122	8.127	-0.005	545897		-0.1784	
2	8.352	8.353	-0.001	538418		0.2919	
						RPD = 829.14	
39 Endosulfan sulfate							
1	8.233	8.232	0.001	894374		0.2314	
2	7.873	7.873	0.000	417081		-0.7071	
						RPD = -394.53	
40 Endrin ketone							
1	8.512	8.513	-0.001	883257		0.1687	
2	8.399	8.399	0.000	596040		-0.4913	
						RPD = -409.13	
$ 41 DCB Decachlorobiphenyl							
1	9.491	9.492	-0.001	185045172	20.0	17.4	
2	9.594	9.593	0.001	35495736	20.0	19.3	
						RPD = 10.68	
42 Tris(2,3-dibromopropyl)phosphate							
1		11.272				ND	
2		11.308					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags

S 3 Endosulfan, Total

1						0.2189	
2						-1.34	
						RPD = -278.28	

LOD = 0.002000

QC Flag Legend

Processing Flags

NC - Not Calibrated

7 - Failed Limit of Detection

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

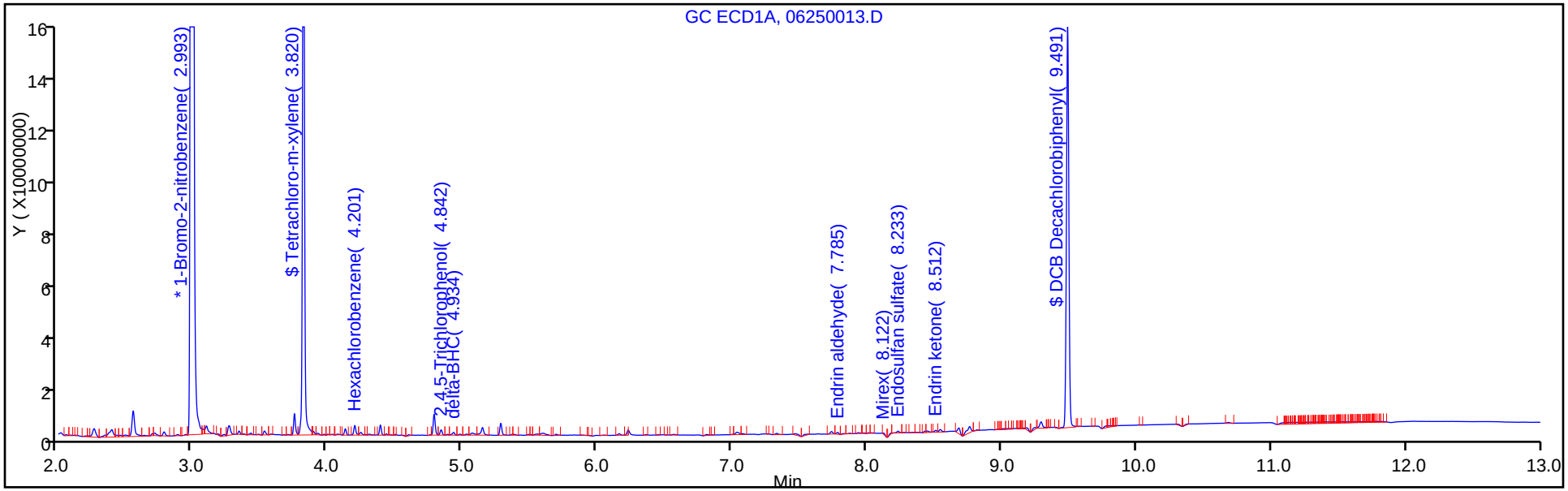
Report Date: 26-Jun-2017 11:56:15 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

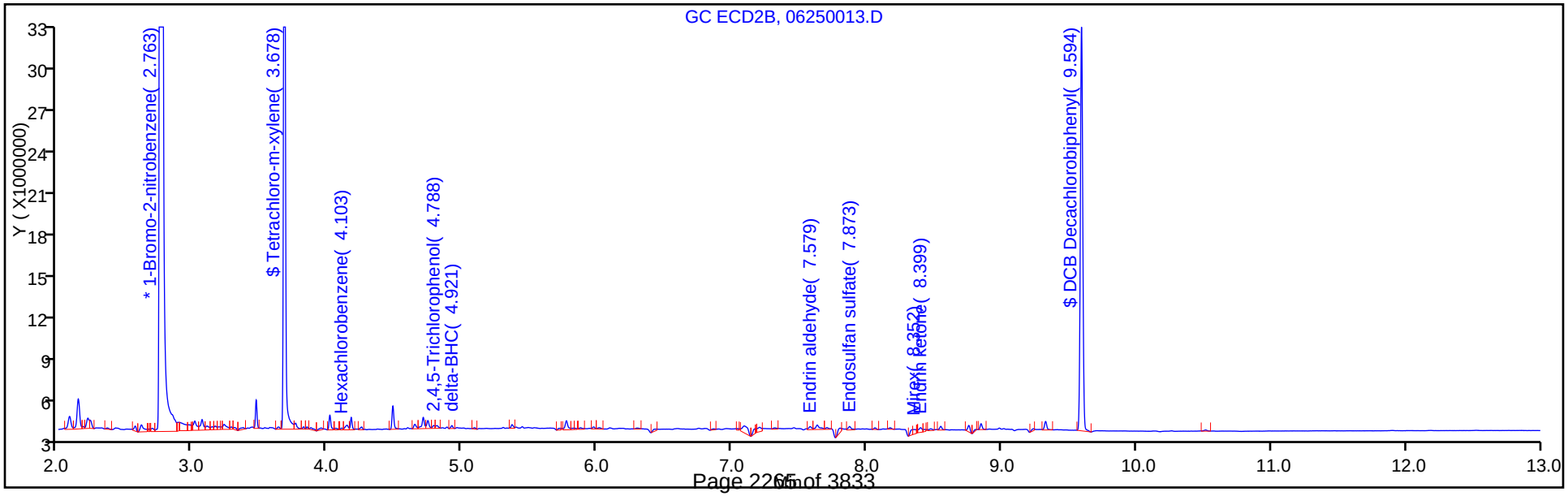
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Injection Date:	25-Jun-2017 15:58:35	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	MB 280-377615/1-A			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250013.D				
Lims ID:	MB 280-377615/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	25-Jun-2017 15:58:35	ALS Bottle#:	7	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-377615/1-				
Misc. Info.:	280-0060103-013				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:12	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	17.0	85.12
$ 41 DCB Decachlorobiphenyl	20.0	17.4	86.80

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	18.2	90.93
$ 41 DCB Decachlorobiphenyl	20.0	19.3	96.59

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-377615/2-A

Matrix: Solid | Lab File ID: 06250014.D

Analysis Method: 8081B | Date Collected:

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 30.6(g) | Date Analyzed: 06/25/2017 16:15

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	13.9		1.7	1.6	0.54
72-55-9	4,4'-DDE	14.3		1.7	0.66	0.23
50-29-3	4,4'-DDT	14.8		2.0	1.6	0.58
309-00-2	Aldrin	13.5		1.7	0.66	0.25
319-84-6	alpha-BHC	14.1		1.7	0.66	0.21
5103-71-9	alpha-Chlordane	14.2		1.7	0.66	0.32
319-85-7	beta-BHC	13.8		1.7	1.6	0.65
319-86-8	delta-BHC	14.0		1.7	0.98	0.39
60-57-1	Dieldrin	14.7		1.7	0.66	0.21
959-98-8	Endosulfan I	14.0		1.7	0.66	0.17
33213-65-9	Endosulfan II	13.6		1.7	0.66	0.28
1031-07-8	Endosulfan sulfate	13.6		1.7	0.66	0.27
72-20-8	Endrin	15.9		1.7	0.66	0.30
7421-93-4	Endrin aldehyde	13.0		1.7	0.66	0.17
58-89-9	gamma-BHC (Lindane)	14.1		1.7	0.98	0.45
5103-74-2	gamma-Chlordane	14.3		1.7	0.66	0.26
76-44-8	Heptachlor	15.1		1.7	0.66	0.21
1024-57-3	Heptachlor epoxide	14.3		1.7	0.98	0.42
72-43-5	Methoxychlor	14.3		3.2	0.98	0.44

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	86		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	85		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250014.D
Lims ID: LCS 280-377615/2-A
Client ID:
Sample Type: LCS
Inject. Date: 25-Jun-2017 16:15:25 ALS Bottle#: 8 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-377615/2
Misc. Info.: 280-0060103-014
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:12 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.993	0.000	2145650755	150.0	150.0	
2	2.764	2.763	0.001	446648838	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.819	3.819	0.000	277568299	20.0	17.1	
2	3.678	3.678	0.000	58405242	20.0	18.6	
						RPD = 8.58	
8 alpha-BHC							
1	4.367	4.368	-0.001	1226561694	50.0	43.2	
2	4.241	4.241	0.000	197462057	50.0	43.6	
						RPD = 0.82	
9 gamma-BHC (Lindane)							
1	4.676	4.676	0.000	1108974996	50.0	43.3	
2	4.566	4.567	-0.001	172814253	50.0	43.2	
						RPD = 0.28	
10 beta-BHC							
1	4.761	4.760	0.001	417442986	50.0	42.1	
2	4.647	4.648	-0.001	71311817	50.0	42.6	
						RPD = 1.09	
12 delta-BHC							
1	4.934	4.935	-0.001	1166280966	50.0	42.9	
2	4.920	4.920	0.000	176632798	50.0	42.8	
						RPD = 0.21	
15 Heptachlor							
1	5.145	5.144	0.001	1094161496	50.0	46.2	
2	4.977	4.978	-0.001	165285605	50.0	44.7	
						RPD = 3.31	
16 Aldrin							
1	5.431	5.431	0.000	994424600	50.0	41.2	
2	5.283	5.283	0.000	150332553	50.0	41.1	
						RPD = 0.41	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
21 Heptachlor epoxide							
1	6.052	6.053	-0.001	913538992	50.0	43.8	
2	5.828	5.828	0.000	141334675	50.0	43.4	
						RPD = 0.91	
22 gamma-Chlordane							
1	6.196	6.196	0.000	1003602870	50.0	43.6	
2	6.029	6.028	0.001	146022184	50.0	42.9	
						RPD = 1.65	
23 alpha-Chlordane							
1	6.357	6.357	0.000	957266230	50.0	43.6	
2	6.196	6.196	0.000	141274413	50.0	43.6	
						RPD = 0.10	
24 4,4'-DDE							
1	6.453	6.453	0.000	986924568	50.0	43.7	
2	6.412	6.413	-0.001	141075931	50.0	42.3	
						RPD = 3.27	
25 Endosulfan I							
1	6.526	6.528	-0.002	860414909	50.0	42.9	
2	6.259	6.260	-0.001	126025831	50.0	40.4	
						RPD = 5.99	
27 Dieldrin							
1	6.813	6.813	0.000	1016079844	50.0	45.0	
2	6.599	6.599	0.000	150005505	50.0	43.6	
						RPD = 3.11	
30 Endrin							
1	7.081	7.082	-0.001	892274404	50.0	48.7	
2	6.958	6.959	-0.001	133152549	50.0	48.4	
						RPD = 0.58	
32 4,4'-DDD							
1	7.157	7.158	-0.001	809110162	50.0	42.4	
2	7.110	7.110	0.000	117318961	50.0	44.2	
						RPD = 4.11	
34 Endosulfan II							
1	7.331	7.331	0.000	786204877	50.0	41.5	
2	7.203	7.203	0.000	116696517	50.0	40.8	
						RPD = 1.66	
35 4,4'-DDT							
1	7.468	7.468	0.000	829984825	50.0	45.3	
2	7.459	7.459	0.000	115188607	50.0	45.3	
						RPD = 0.03	
36 Endrin aldehyde							
1	7.785	7.785	0.000	609206467	50.0	39.7	
2	7.578	7.578	0.000	92710311	50.0	39.9	
						RPD = 0.34	
37 Methoxychlor							
1	7.980	7.981	-0.001	348928429	50.0	43.6	
2	8.181	8.182	-0.001	57264215	50.0	47.5	
						RPD = 8.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
39 Endosulfan sulfate							
1	8.232	8.232	0.000	728752784	50.0	41.6	
2	7.872	7.873	-0.001	110254738	50.0	42.9	
						RPD = 3.03	
40 Endrin ketone							
1	8.511	8.513	-0.002	755732935	50.0	38.9	
2	8.399	8.399	0.000	119271275	50.0	40.8	
						RPD = 4.71	
$ 41 DCB Decachlorobiphenyl							
1	9.491	9.492	-0.001	193169595	20.0	17.1	
2	9.595	9.593	0.002	35986095	20.0	18.7	
						RPD = 8.65	

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

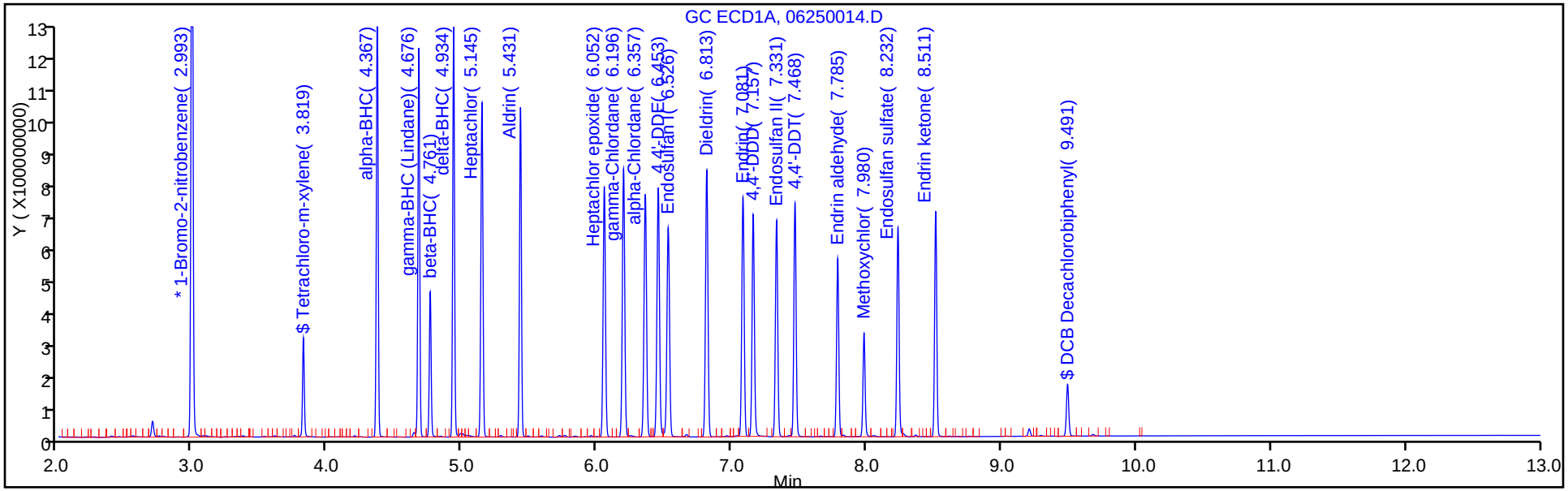
Report Date: 26-Jun-2017 11:56:16 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

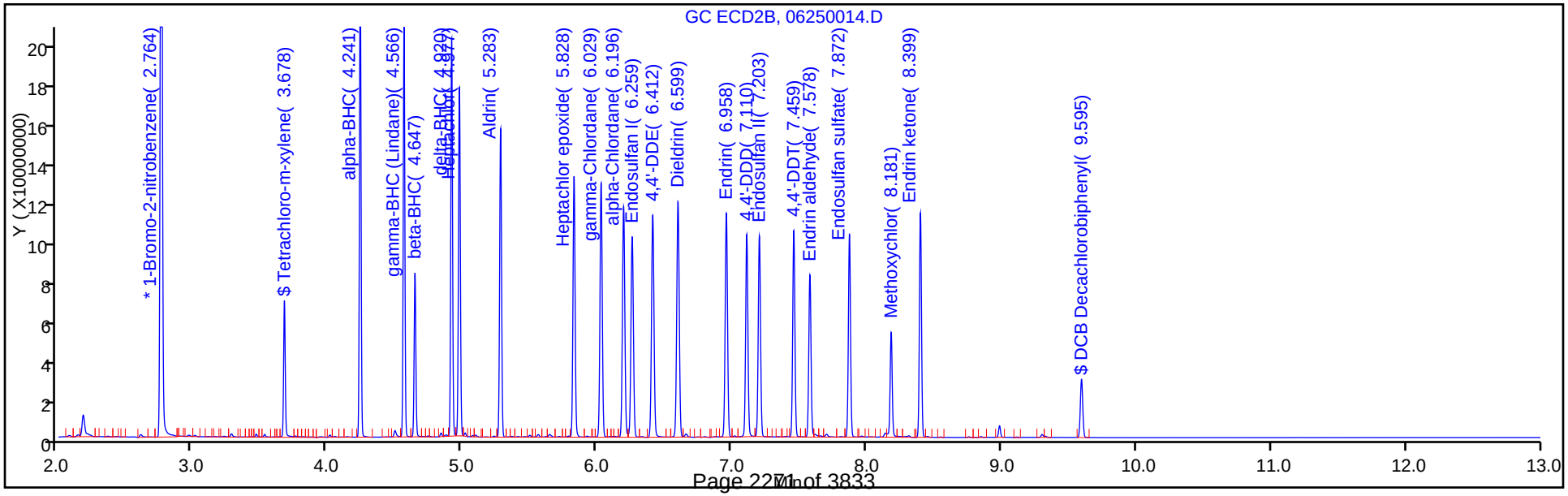
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Injection Date:	25-Jun-2017 16:15:25	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	LCS 280-377615/2-A			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250014.D				
Lims ID:	LCS 280-377615/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	25-Jun-2017 16:15:25	ALS Bottle#:	8	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-377615/2				
Misc. Info.:	280-0060103-014				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:12	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	17.1	85.46
$ 41 DCB Decachlorobiphenyl	20.0	17.1	85.70

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	18.6	93.12
$ 41 DCB Decachlorobiphenyl	20.0	18.7	93.44

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-377615/3-A

Matrix: Solid | Lab File ID: 06250015.D

Analysis Method: 8081B | Date Collected:

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.4(g) | Date Analyzed: 06/25/2017 16:32

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
8001-35-2	Toxaphene	60.3	J	160	32	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	83		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	85		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250015.D
Lims ID: LCS 280-377615/3-A
Client ID:
Sample Type: LCS
Inject. Date: 25-Jun-2017 16:32:15 ALS Bottle#: 9 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-377615/3
Misc. Info.: 280-0060103-015
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:12 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:32:21

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.993	-0.001	2240875695	150.0	150.0	
2	2.763	2.763	0.000	460721081	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.820	3.819	0.001	289109523	20.0	17.0	
2	3.678	3.678	0.000	58316530	20.0	18.0	
						RPD = 5.49	
28 Toxaphene							M
1	5.603	5.606	-0.003	6607006	200.0	159.8	M
1	6.923	6.925	-0.002	33509506	200.0	228.3	M
1	7.186	7.187	-0.001	44233487	200.0	199.9	M
1	7.693	7.693	0.000	74798536	200.0	156.6	M
1	8.133	8.135	-0.002	120440064	200.0	202.3	M
		Average of Peak Amounts =				189.4	
2	6.107	6.108	-0.001	7561887	200.0	197.7	M
2	7.151	7.156	-0.005	9175180	200.0	114.2	M
2	7.299	7.300	-0.001	25482365	200.0	130.3	M
2	7.588	7.589	-0.001	20574344	200.0	171.7	M
2	8.111	8.112	-0.001	18524411	200.0	187.7	M
		Average of Peak Amounts =				160.3	
						RPD = 16.62	
$ 41 DCB Decachlorobiphenyl							
1	9.490	9.492	-0.002	194489129	20.0	16.5	
2	9.594	9.593	0.001	36132102	20.0	18.2	
						RPD = 9.52	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

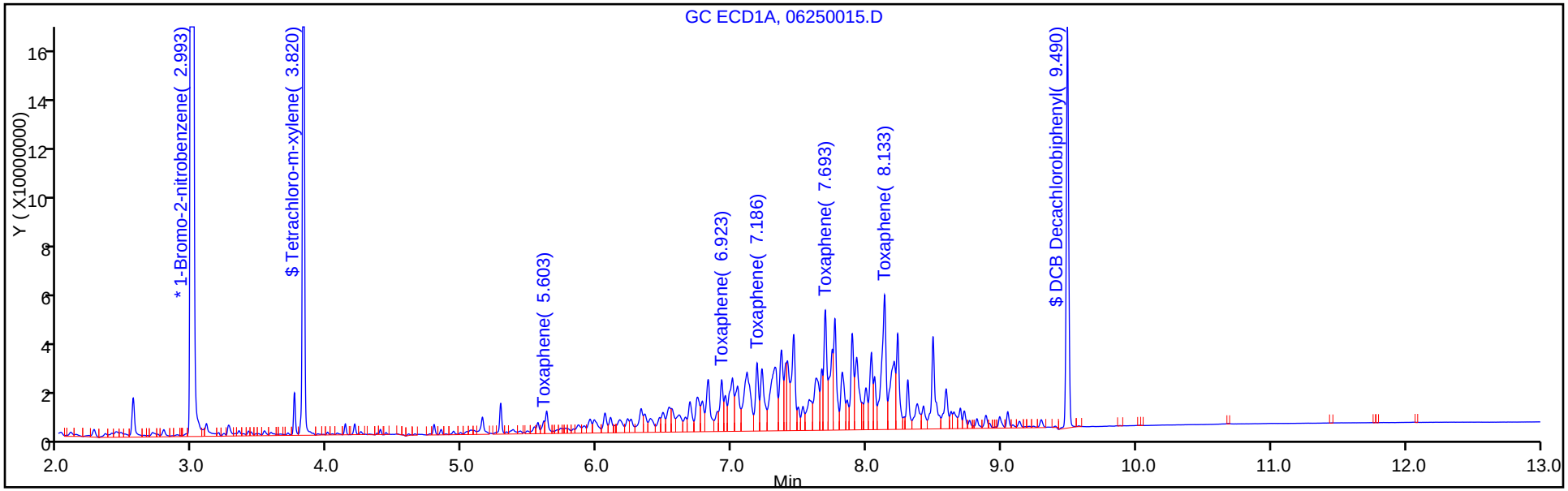
Report Date: 26-Jun-2017 11:56:18 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

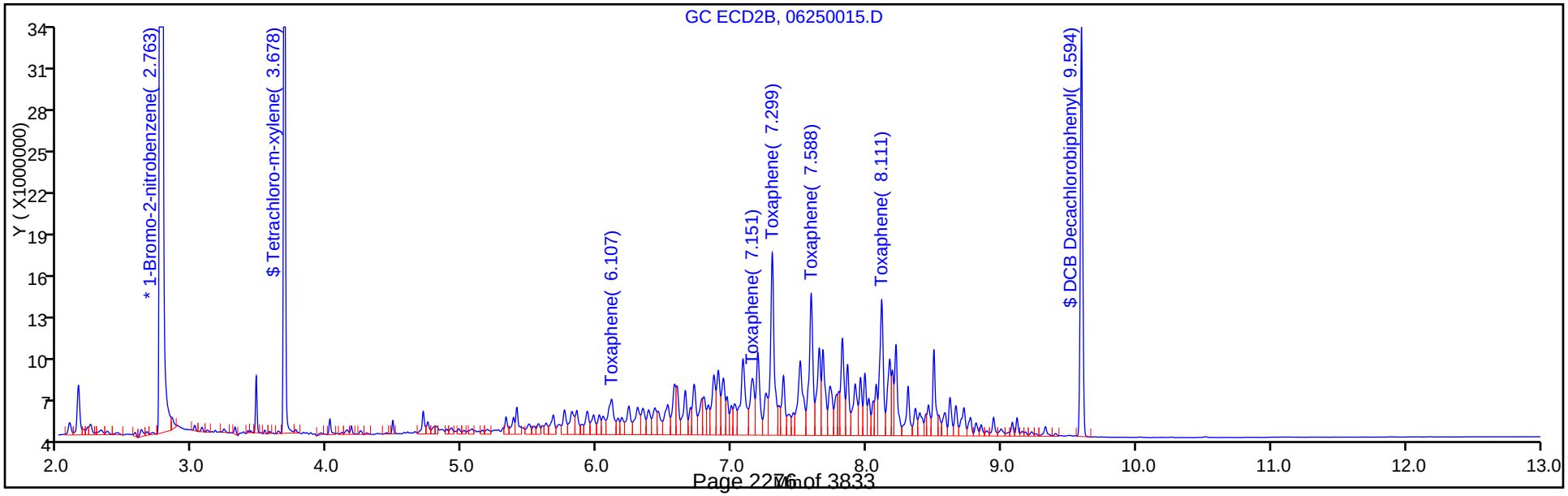
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Injection Date:	25-Jun-2017 16:32:15	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	LCS 280-377615/3-A			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250015.D				
Lims ID:	LCS 280-377615/3-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	25-Jun-2017 16:32:15	ALS Bottle#:	9	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-377615/3				
Misc. Info.:	280-0060103-015				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:12	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:32:21		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	17.0	85.23
$ 41 DCB Decachlorobiphenyl	20.0	16.5	82.55

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	18.0	90.04
$ 41 DCB Decachlorobiphenyl	20.0	18.2	90.80

Report Date: 26-Jun-2017 11:56:18 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250015.D

Injection Date: 25-Jun-2017 16:32:15 Instrument ID: SGC_P1

Lims ID: LCS 280-377615/3-A

Client ID:

Operator ID: DAW ALS Bottle#: 9 Worklist Smp#: 15

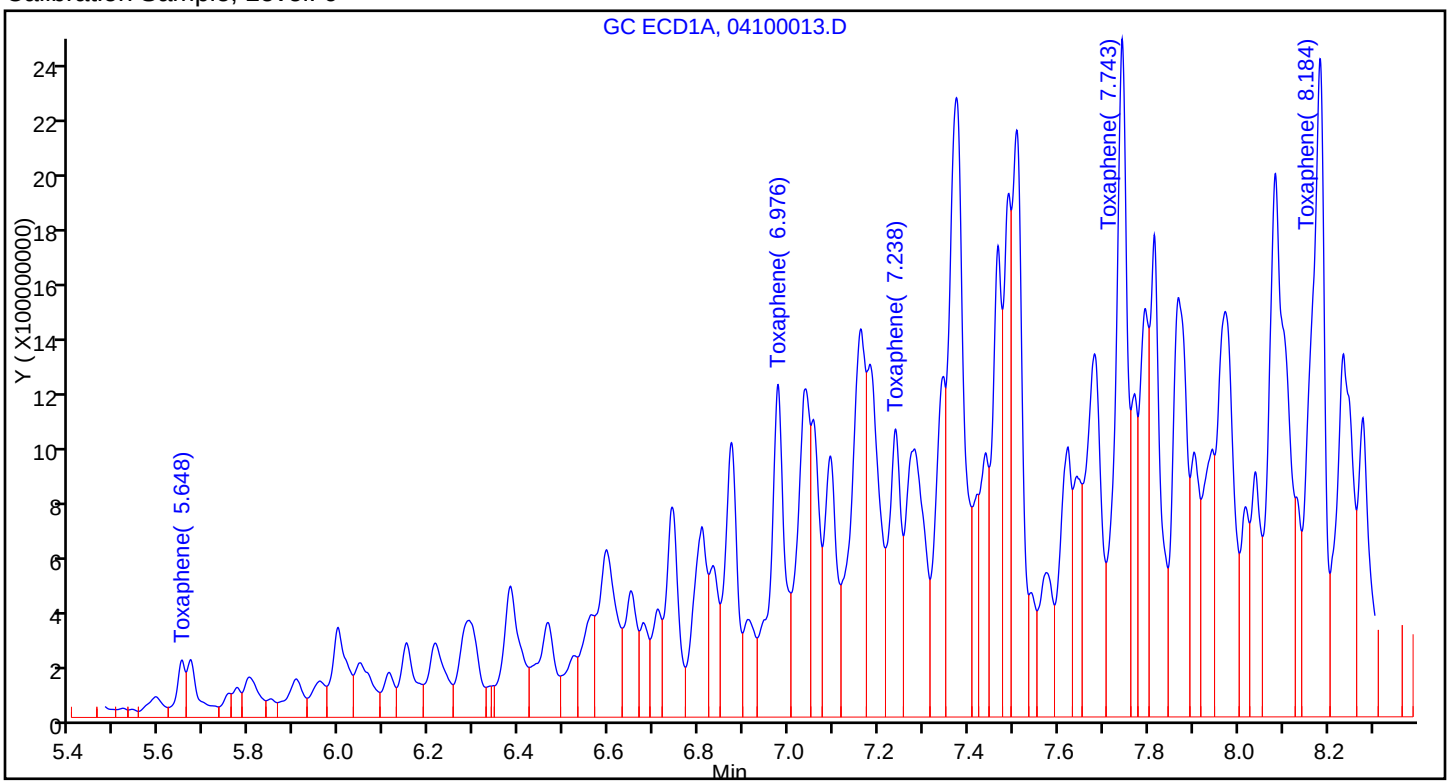
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

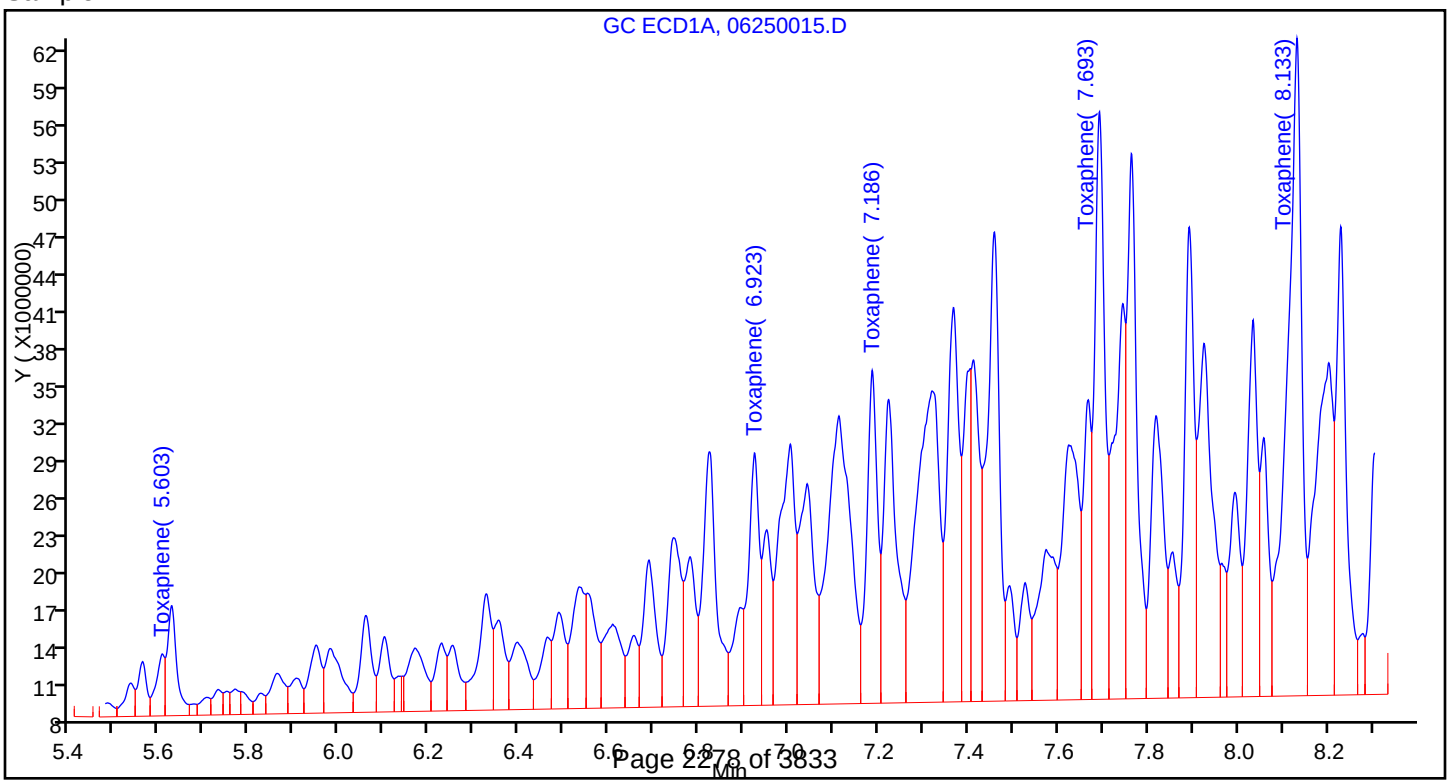
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2

Calibration Sample, Level: 6



Sample



Report Date: 26-Jun-2017 11:56:19 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250015.D

Injection Date: 25-Jun-2017 16:32:15 Instrument ID: SGC_P1

Lims ID: LCS 280-377615/3-A

Client ID:

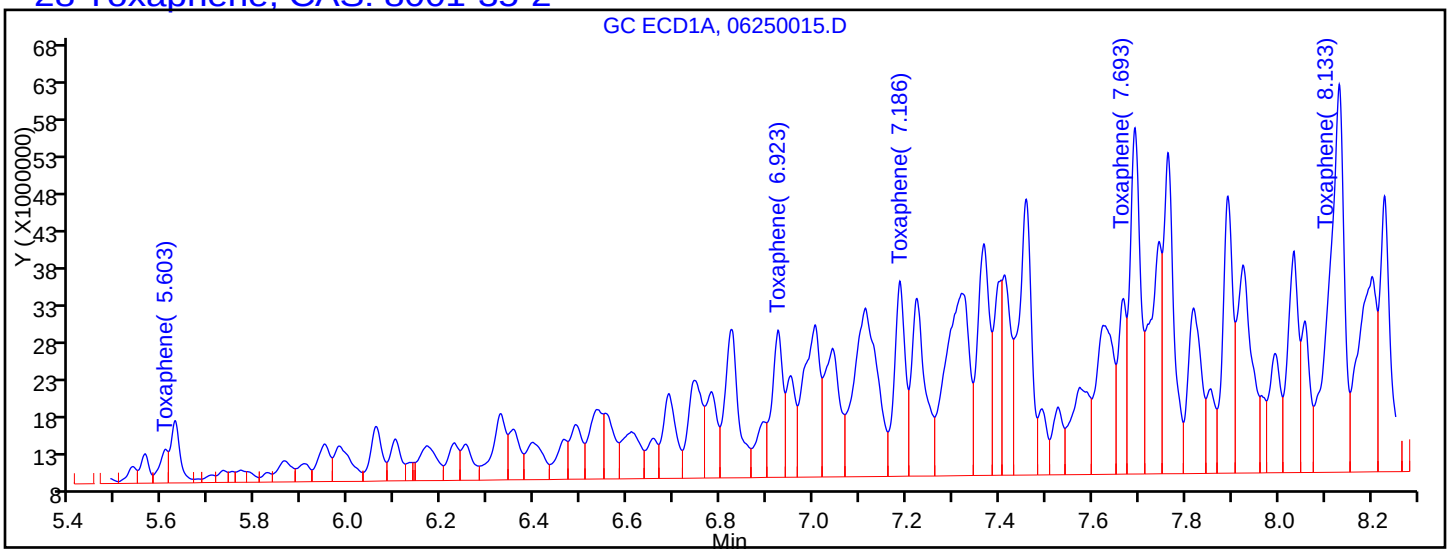
Operator ID: DAW ALS Bottle#: 9 Worklist Smp#: 15

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

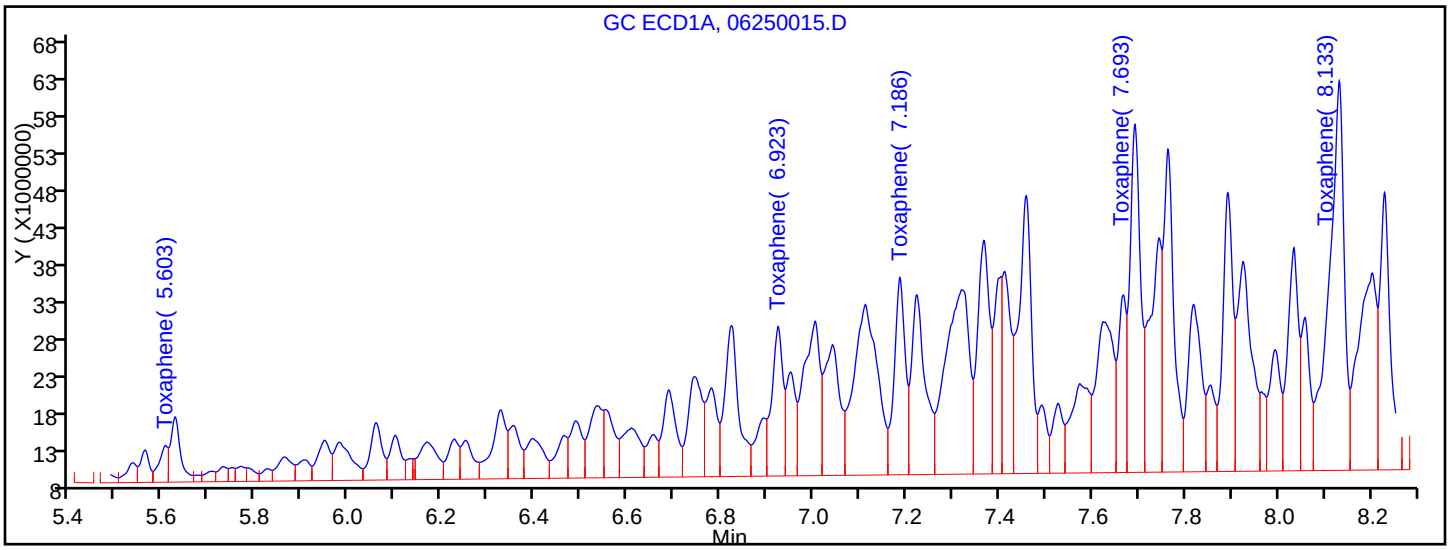
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.603	Response = 5789663
6.923	Response = 32694390
7.186	Response = 43391894
7.693	Response = 74122934
8.133	Response = 119210641



Manual Integration Results

5.603	Response = 6607006	M
6.923	Response = 33509506	M
7.186	Response = 44233487	M
7.693	Response = 74798536	M
8.133	Response = 120440064	M

Reviewer: wellsd, 26-Jun-2017 10:32:14

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(0-2) MS | Lab Sample ID: 280-97928-3 MS

Matrix: Solid | Lab File ID: 06250018.D

Analysis Method: 8081B | Date Collected: 06/05/2017 08:35

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 32.8(g) | Date Analyzed: 06/25/2017 17:23

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 9.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	2.86	Q J	1.7	1.7	0.55
72-55-9	4,4'-DDE	3.14	Q J	1.7	0.68	0.24
50-29-3	4,4'-DDT	3.37	Q J	2.0	1.7	0.60
309-00-2	Aldrin	3.10	Q J	1.7	0.68	0.25
319-84-6	alpha-BHC	3.36	Q J	1.7	0.68	0.22
5103-71-9	alpha-Chlordane	3.08	Q J	1.7	0.68	0.33
319-85-7	beta-BHC	3.42	Q J	1.7	1.7	0.67
319-86-8	delta-BHC	3.22	Q J	1.7	1.0	0.41
60-57-1	Dieldrin	3.25	Q J	1.7	0.68	0.21
959-98-8	Endosulfan I	2.97	Q J	1.7	0.68	0.18
33213-65-9	Endosulfan II	2.91	Q J	1.7	0.68	0.29
1031-07-8	Endosulfan sulfate	3.08	Q J	1.7	0.68	0.28
72-20-8	Endrin	3.54	Q J	1.7	0.68	0.31
7421-93-4	Endrin aldehyde	2.64	Q J	1.7	0.68	0.17
58-89-9	gamma-BHC (Lindane)	3.36	Q J	1.7	1.0	0.47
5103-74-2	gamma-Chlordane	3.04	Q J	1.7	0.68	0.27
76-44-8	Heptachlor	3.45	Q J	1.7	0.68	0.22
1024-57-3	Heptachlor epoxide	3.26	Q J	1.7	1.0	0.43
72-43-5	Methoxychlor	3.33	Q J	3.3	1.0	0.46

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	24	Q	63-121
877-09-8	Tetrachloro-m-xylene (Surr)	22	Q	42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250018.D
Lims ID: 280-97928-C-3-J MS
Client ID:
Sample Type: MS
Inject. Date: 25-Jun-2017 17:23:00 ALS Bottle#: 12 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-3-J
Misc. Info.: 280-0060103-018
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:12 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.993	0.000	2189655849	150.0	150.0	
2	2.764	2.763	0.001	450109726	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.820	3.819	0.001	70951677	20.0	4.36	
2	3.678	3.678	0.000	15556374	20.0	4.48	
						RPD = 2.81	
8 alpha-BHC							
1	4.367	4.368	-0.001	273841809	50.0	9.95	
2	4.241	4.241	0.000	48780859	50.0	10.6	
						RPD = 6.54	
9 gamma-BHC (Lindane)							
1	4.676	4.676	0.000	248475449	50.0	9.95	
2	4.566	4.567	-0.001	43568870	50.0	10.6	
						RPD = 6.76	
10 beta-BHC							
1	4.761	4.760	0.001	102862262	50.0	10.1	
2	4.647	4.648	-0.001	19277156	50.0	10.6	
						RPD = 4.83	
12 delta-BHC							
1	4.935	4.935	0.000	253015867	50.0	9.55	
2	4.920	4.920	0.000	42882152	50.0	10.2	
						RPD = 6.83	
15 Heptachlor							
1	5.144	5.144	0.000	243892451	50.0	10.2	
2	4.977	4.978	-0.001	41150896	50.0	10.7	
						RPD = 4.31	
16 Aldrin							
1	5.431	5.431	0.000	220453220	50.0	9.18	
2	5.283	5.283	0.000	38574955	50.0	10.2	
						RPD = 10.55	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
21 Heptachlor epoxide							
1	6.052	6.053	-0.001	206686676	50.0	9.65	
2	5.827	5.828	-0.001	35973605	50.0	10.4	
						RPD = 7.86	
22 gamma-Chlordane							
1	6.196	6.196	0.000	205572912	50.0	9.00	
2	6.029	6.028	0.001	35799319	50.0	10.0	
						RPD = 10.66	
23 alpha-Chlordane							
1	6.356	6.357	-0.001	200590193	50.0	9.11	
2	6.196	6.196	0.000	35079261	50.0	10.2	
						RPD = 11.53	
24 4,4'-DDE							
1	6.452	6.453	-0.001	207924119	50.0	9.30	
2	6.411	6.413	-0.002	37026225	50.0	10.6	
						RPD = 13.31	
25 Endosulfan I							
1	6.527	6.528	-0.001	182131706	50.0	8.80	
2	6.260	6.260	0.000	31777533	50.0	9.41	
						RPD = 6.70	
27 Dieldrin							
1	6.813	6.813	0.000	219892023	50.0	9.63	
2	6.599	6.599	0.000	38437107	50.0	10.7	
						RPD = 10.17	
30 Endrin							
1	7.082	7.082	0.000	193891351	50.0	10.5	
2	6.959	6.959	0.000	34643916	50.0	12.1	
						RPD = 14.61	
32 4,4'-DDD							
1	7.157	7.158	-0.001	165061607	50.0	8.46	
2	7.109	7.110	-0.001	29641433	50.0	10.5	
						RPD = 21.24	
34 Endosulfan II							
1	7.331	7.331	0.000	167575621	50.0	8.63	
2	7.203	7.203	0.000	29997194	50.0	9.76	
						RPD = 12.32	
35 4,4'-DDT							
1	7.466	7.468	-0.002	178738015	50.0	9.99	
2	7.458	7.459	-0.001	30441879	50.0	11.6	
						RPD = 15.02	
36 Endrin aldehyde							
1	7.784	7.785	-0.001	122814420	50.0	7.83	
2	7.578	7.578	0.000	23174252	50.0	9.27	
						RPD = 16.94	
37 Methoxychlor							
1	7.980	7.981	-0.001	82373179	50.0	9.86	
2	8.181	8.182	-0.001	15943937	50.0	12.4	
						RPD = 22.71	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
39 Endosulfan sulfate							
1	8.232	8.232	0.000	160635243	50.0	9.13	
2	7.871	7.873	-0.002	28341284	50.0	10.3	
						RPD = 11.93	
40 Endrin ketone							
1	8.512	8.513	-0.001	162737257	50.0	8.30	
2	8.399	8.399	0.000	30236071	50.0	9.73	
						RPD = 15.80	
$ 41 DCB Decachlorobiphenyl							
1	9.491	9.492	-0.001	57243537	20.0	4.71	
2	9.594	9.593	0.001	9678891	20.0	4.13	
						RPD = 13.22	

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

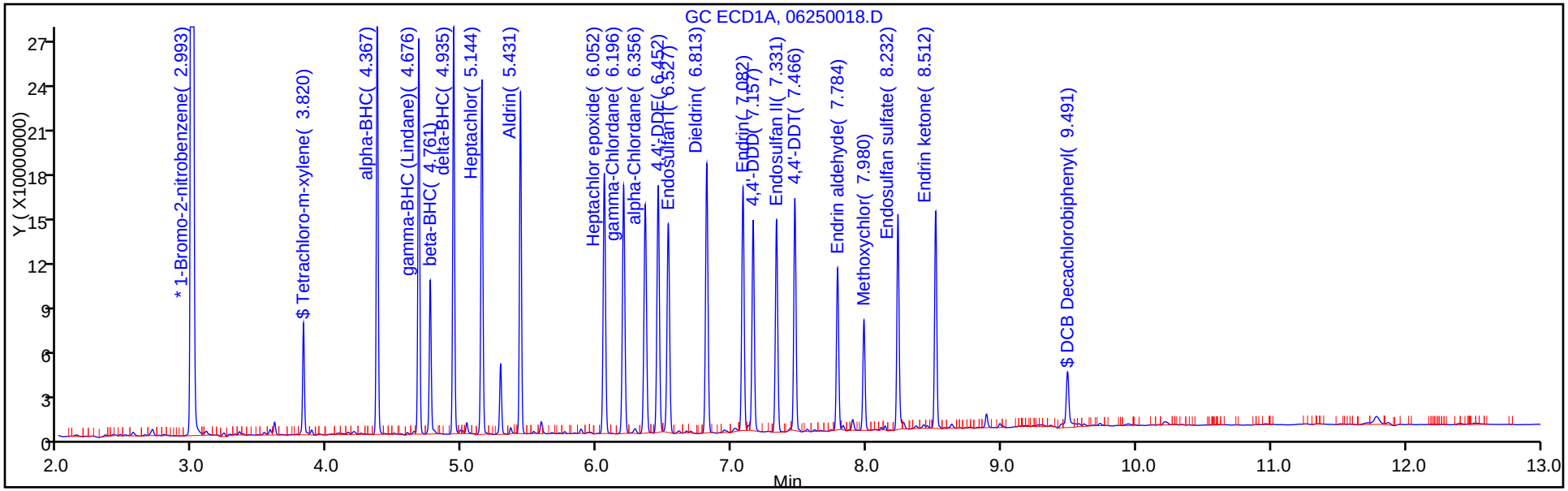
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TestAmerica Denver

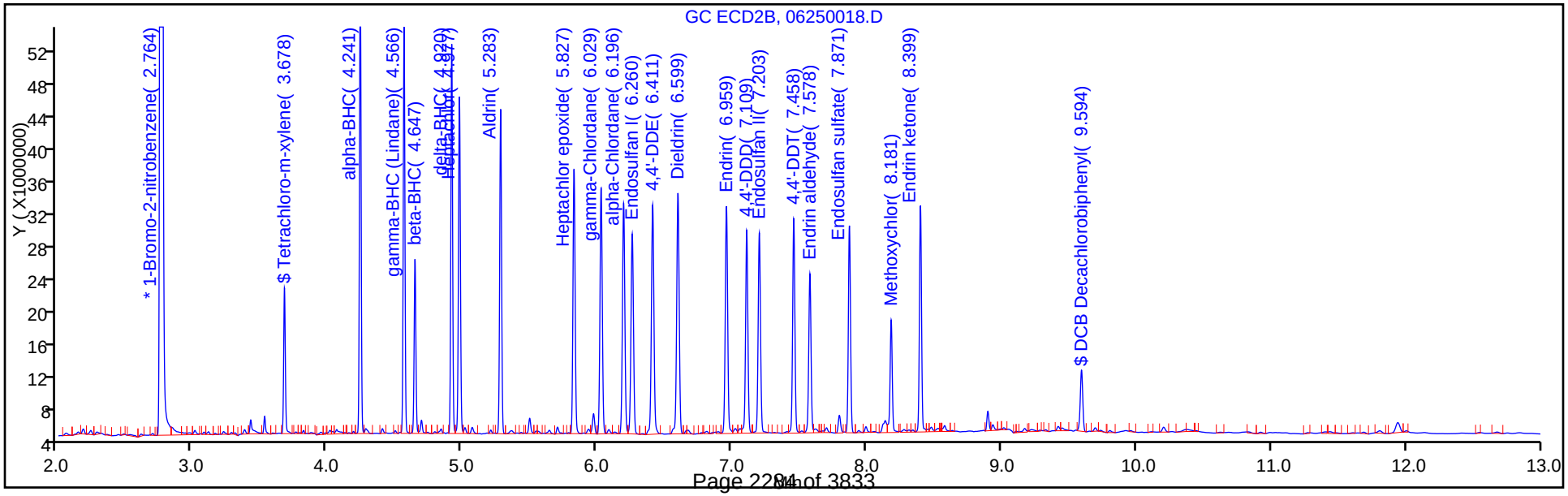
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250018.D

Injection Date:	25-Jun-2017 17:23:00	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-C-3-J MS			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250018.D				
Lims ID:	280-97928-C-3-J MS				
Client ID:					
Sample Type:	MS				
Inject. Date:	25-Jun-2017 17:23:00	ALS Bottle#:	12	Worklist Smp#:	18
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-3-J				
Misc. Info.:	280-0060103-018				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:12	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	4.36	21.79
$ 41 DCB Decachlorobiphenyl	20.0	4.71	23.55

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	4.48	22.41
$ 41 DCB Decachlorobiphenyl	20.0	4.13	20.63

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(0-2) MS | Lab Sample ID: 280-97928-3 MS

Matrix: Solid | Lab File ID: 06250020.D

Analysis Method: 8081B | Date Collected: 06/05/2017 08:35

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.7(g) | Date Analyzed: 06/25/2017 17:56

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 9.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
8001-35-2	Toxaphene	70.8	J	180	35	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	82		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	79		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250020.D
Lims ID: 280-97928-C-3-L MS
Client ID:
Sample Type: MS
Inject. Date: 25-Jun-2017 17:56:42 ALS Bottle#: 14 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-3-L
Misc. Info.: 280-0060103-020
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:12 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:33:45

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.993	2.993	-0.001	2304680830	150.0	150.0	
2	2.763	2.763	0.000	430962939	150.0	150.0	
$ 4 Tetrachloro-m-xylene							M
1	3.819	3.819	0.000	275839204	20.0	15.8	
2	3.678	3.678	0.000	51322928	20.0	16.9	M
						RPD = 6.64	
28 Toxaphene							M
1	5.603	5.606	-0.003	10046766	200.0	238.0	M
1	6.942	6.925	0.017	76308604	200.0	315.5	M
1	7.185	7.187	-0.002	38533168	200.0	176.7	M
1	7.693	7.693	0.000	61122040	200.0	134.2	M
1	8.134	8.135	-0.001	80992232	200.0	148.9	M
		Average of Peak Amounts =				202.7	
2	0.000	6.108	-6.108	0	200.0	0	
2	7.151	7.156	-0.005	7181057	200.0	88.8	M
2	7.298	7.300	-0.002	19667677	200.0	100.7	M
2	7.588	7.589	-0.001	16264424	200.0	140.5	M
2	8.114	8.112	0.002	23094413	200.0	258.0	M
		Average of Peak Amounts =				147.0	
						RPD = 31.83	
$ 41 DCB Decachlorobiphenyl							M
1	9.488	9.492	-0.004	199886264	20.0	16.5	
2	9.593	9.593	0.000	35343216	20.0	19.0	M
						RPD = 14.33	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

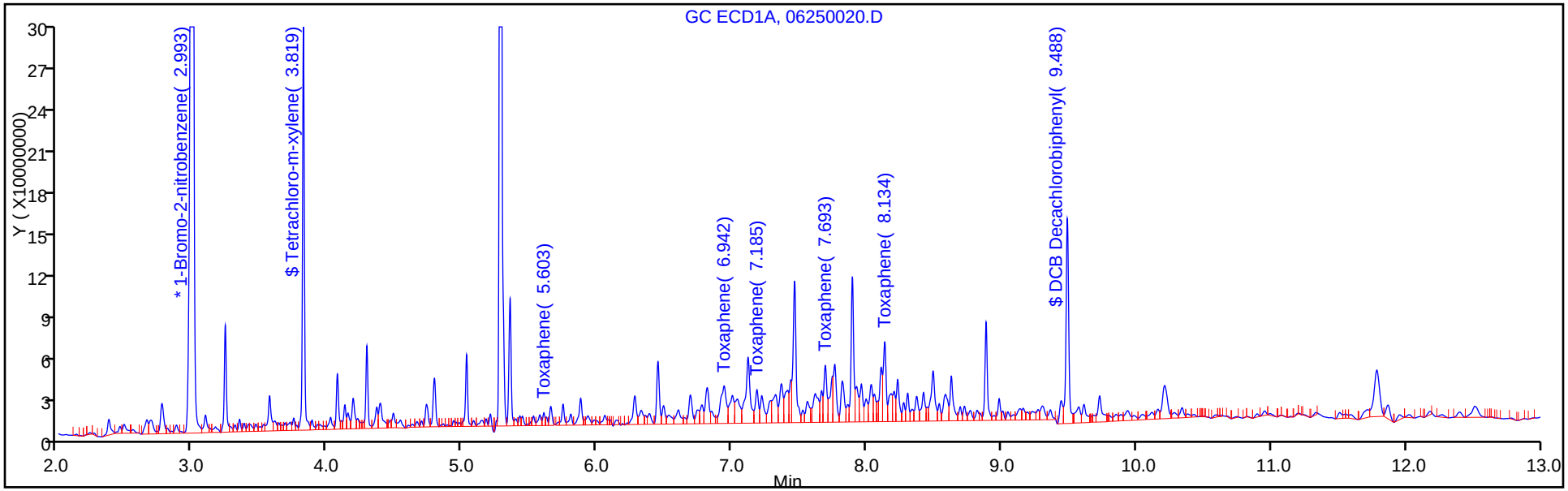
Report Date: 26-Jun-2017 11:56:29 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

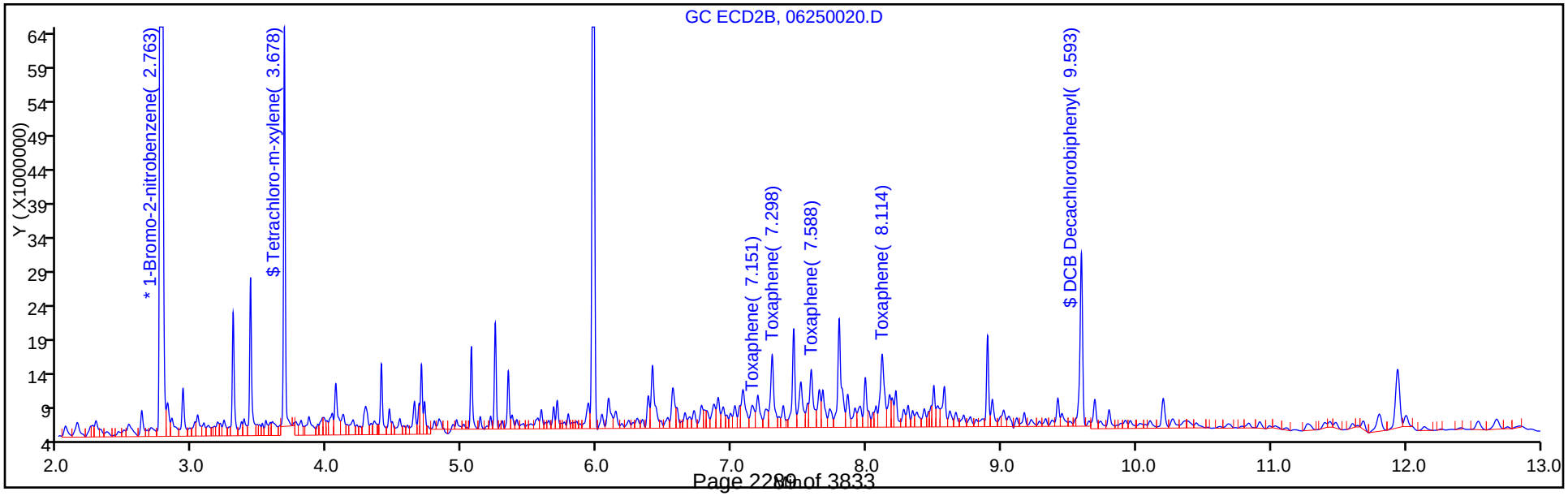
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250020.D

Injection Date:	25-Jun-2017 17:56:42	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-C-3-L MS			Worklist Smp#:	20
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250020.D				
Lims ID:	280-97928-C-3-L MS				
Client ID:					
Sample Type:	MS				
Inject. Date:	25-Jun-2017 17:56:42	ALS Bottle#:	14	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-3-L				
Misc. Info.:	280-0060103-020				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:12	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				
First Level Reviewer: wellsd		Date:	26-Jun-2017 10:33:45		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	15.8	79.10
$ 41 DCB Decachlorobiphenyl	20.0	16.5	82.49

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	16.9	84.54
$ 41 DCB Decachlorobiphenyl	20.0	19.0	95.22

Report Date: 26-Jun-2017 11:56:30 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250020.D

Injection Date: 25-Jun-2017 17:56:42 Instrument ID: SGC_P1

Lims ID: 280-97928-C-3-L MS

Client ID:

Operator ID: DAW ALS Bottle#: 14 Worklist Smp#: 20

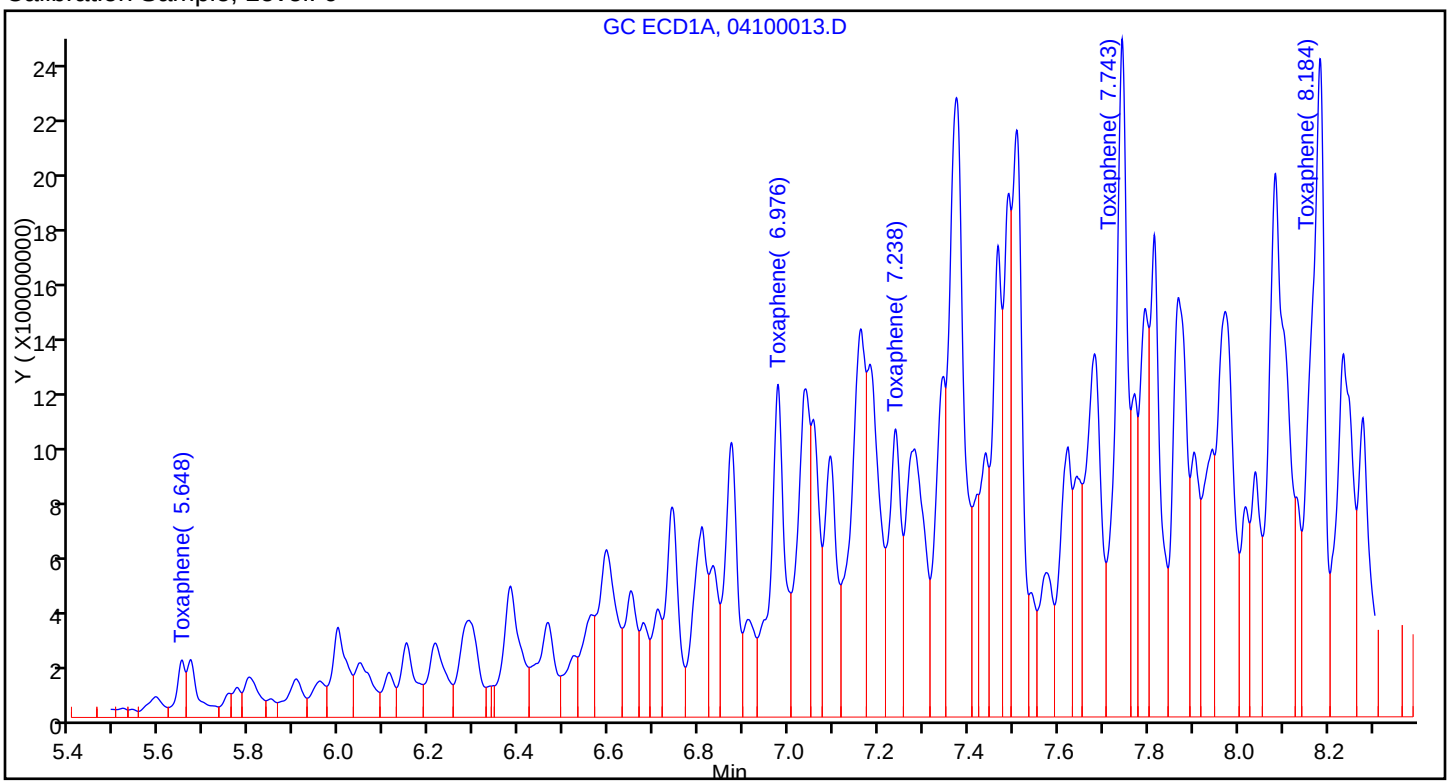
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

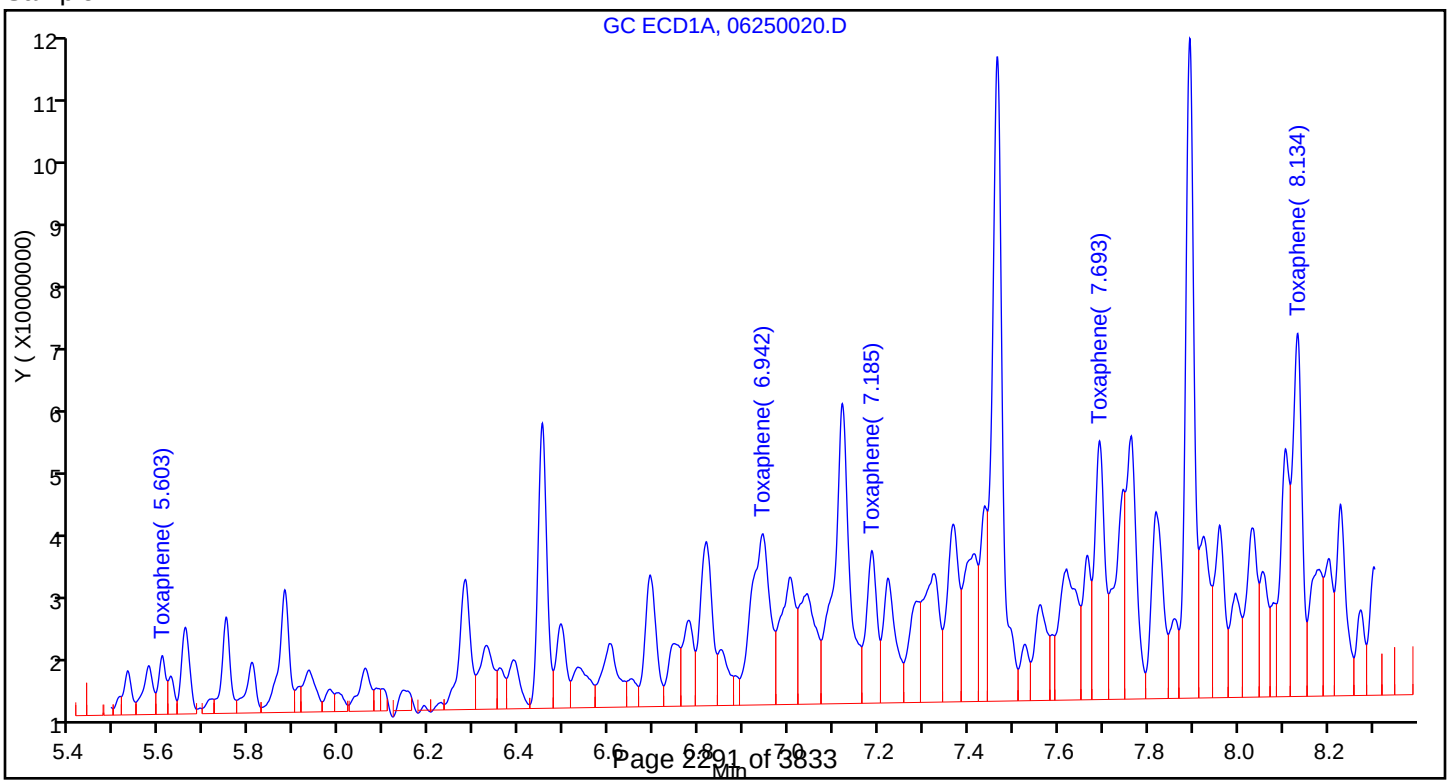
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2

Calibration Sample, Level: 6



Sample



Report Date: 26-Jun-2017 11:56:30 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250020.D

Injection Date: 25-Jun-2017 17:56:42 Instrument ID: SGC_P1

Lims ID: 280-97928-C-3-L MS

Client ID:

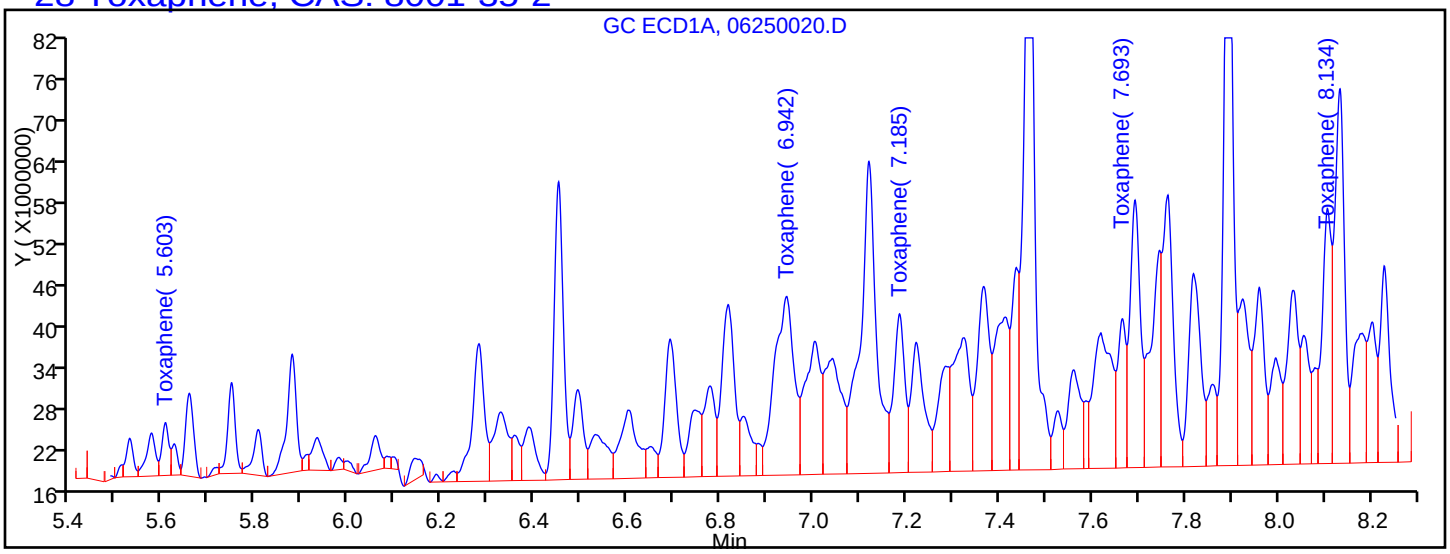
Operator ID: DAW ALS Bottle#: 14 Worklist Smp#: 20

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

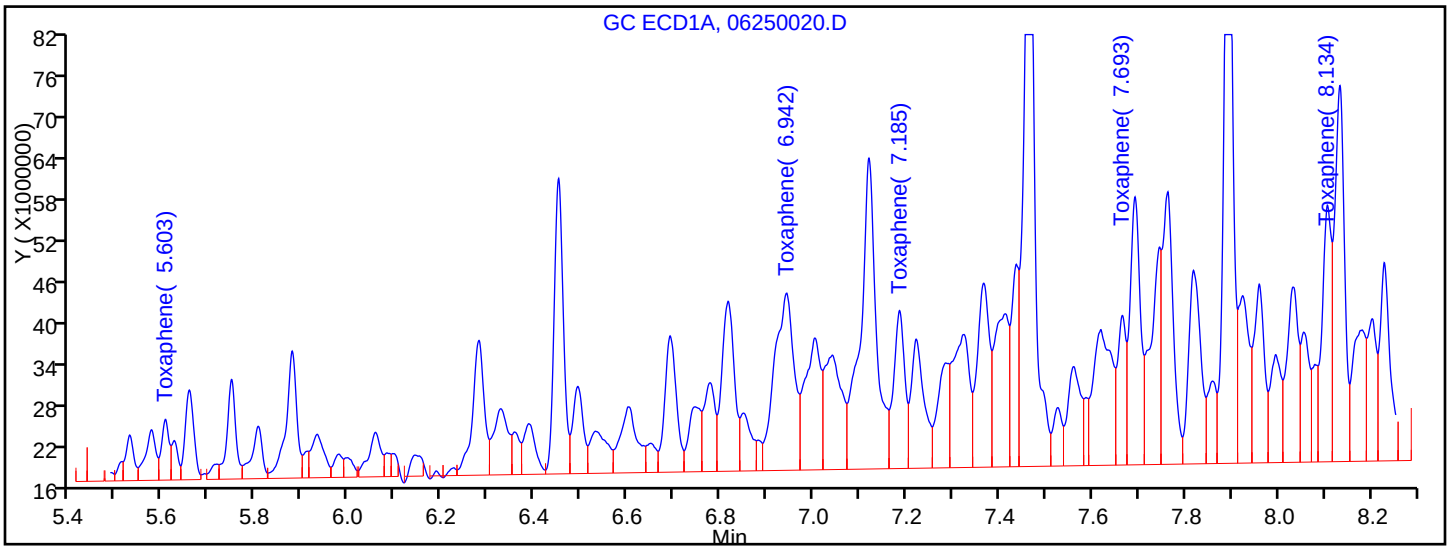
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.603	Response = 8198678
6.942	Response = 77333113
7.185	Response = 38829073
7.693	Response = 60948219
8.134	Response = 80479504



Manual Integration Results

5.603	Response = 10046766	M
6.942	Response = 76308604	M
7.185	Response = 38533168	M
7.693	Response = 61122040	M
8.134	Response = 80992232	M

Reviewer: wellsd, 26-Jun-2017 10:33:24

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(0-2) MSD | Lab Sample ID: 280-97928-3 MSD

Matrix: Solid | Lab File ID: 06250019.D

Analysis Method: 8081B | Date Collected: 06/05/2017 08:35

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 32.2(g) | Date Analyzed: 06/25/2017 17:39

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 9.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
72-54-8	4,4'-DDD	12.3	J	1.8	1.7	0.56
72-55-9	4,4'-DDE	12.4	J	1.8	0.69	0.25
50-29-3	4,4'-DDT	14.3	J	2.1	1.7	0.61
309-00-2	Aldrin	12.0	J	1.8	0.69	0.26
319-84-6	alpha-BHC	13.2	J	1.8	0.69	0.22
5103-71-9	alpha-Chlordane	12.2	J	1.8	0.69	0.33
319-85-7	beta-BHC	12.4	J	1.8	1.7	0.69
319-86-8	delta-BHC	13.0	J	1.8	1.0	0.41
60-57-1	Dieldrin	13.0	J	1.8	0.69	0.22
959-98-8	Endosulfan I	12.2	J	1.8	0.69	0.18
33213-65-9	Endosulfan II	11.9	J	1.8	0.69	0.30
1031-07-8	Endosulfan sulfate	12.5	J	1.8	0.69	0.28
72-20-8	Endrin	14.5	J	1.8	0.69	0.32
7421-93-4	Endrin aldehyde	10.3	J	1.8	0.69	0.18
58-89-9	gamma-BHC (Lindane)	13.0	J	1.8	1.0	0.48
5103-74-2	gamma-Chlordane	10.6	J	1.8	0.69	0.27
76-44-8	Heptachlor	14.2	J	1.8	0.69	0.22
1024-57-3	Heptachlor epoxide	12.9	J	1.8	1.0	0.44
72-43-5	Methoxychlor	13.9	J	3.4	1.0	0.46

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	72		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	78		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250019.D
Lims ID: 280-97928-C-3-K MSD
Client ID:
Sample Type: MSD
Inject. Date: 25-Jun-2017 17:39:50 ALS Bottle#: 13 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-3-K
Misc. Info.: 280-0060103-019
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:12 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.994	2.993	0.000	2245790879	150.0	150.0	
2	2.764	2.763	0.000	451783908	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.820	3.819	0.001	265695304	20.0	15.6	
2	3.678	3.678	0.000	54423852	20.0	17.1	
						RPD = 8.98	
8 alpha-BHC							
1	4.367	4.368	-0.001	1138319488	50.0	38.4	
2	4.241	4.241	0.000	183697651	50.0	40.1	
						RPD = 4.27	
9 gamma-BHC (Lindane)							
1	4.675	4.676	-0.001	1010676858	50.0	37.8	
2	4.566	4.567	-0.001	160629812	50.0	39.7	
						RPD = 4.87	
10 beta-BHC							
1	4.760	4.760	0.000	373390822	50.0	36.0	
2	4.647	4.648	-0.001	63751345	50.0	37.5	
						RPD = 4.14	
12 delta-BHC							
1	4.934	4.935	-0.001	1076487481	50.0	37.9	
2	4.919	4.920	-0.001	147908355	50.0	35.4	
						RPD = 6.76	
15 Heptachlor							
1	5.143	5.144	-0.001	1020879250	50.0	41.2	
2	4.976	4.978	-0.002	148799611	50.0	39.7	
						RPD = 3.64	
16 Aldrin							
1	5.430	5.431	-0.001	882035584	50.0	35.0	
2	5.282	5.283	-0.001	143084534	50.0	38.6	
						RPD = 9.87	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
21 Heptachlor epoxide							
1	6.052	6.053	-0.001	820055246	50.0	37.6	
2	5.827	5.828	-0.001	125312922	50.0	38.0	
						RPD = 1.07	
22 gamma-Chlordane							
1	6.194	6.196	-0.002	736801370	50.0	30.7	
2	6.028	6.028	0.000	129098209	50.0	37.5	
						RPD = 19.80	
23 alpha-Chlordane							
1	6.355	6.357	-0.002	815566594	50.0	35.5	
2	6.195	6.196	-0.001	127537046	50.0	38.8	
						RPD = 9.00	
24 4,4'-DDE							
1	6.450	6.453	-0.003	849656178	50.0	36.0	
2	6.411	6.413	-0.002	138598812	50.0	41.0	
						RPD = 13.12	
25 Endosulfan I							
1	6.526	6.528	-0.002	742539208	50.0	35.3	
2	6.258	6.260	-0.002	114396721	50.0	36.2	
						RPD = 2.28	
27 Dieldrin							
1	6.812	6.813	-0.001	896005310	50.0	37.9	
2	6.598	6.599	-0.001	137729642	50.0	39.5	
						RPD = 4.17	
30 Endrin							
1	7.080	7.082	-0.002	808453099	50.0	42.2	
2	6.958	6.959	-0.001	124974600	50.0	44.9	
						RPD = 6.24	
32 4,4'-DDD							
1	7.156	7.158	-0.002	717028884	50.0	35.9	
2	7.110	7.110	0.000	109670623	50.0	40.8	
						RPD = 12.71	
34 Endosulfan II							
1	7.330	7.331	-0.001	684181477	50.0	34.5	
2	7.203	7.203	0.000	106214204	50.0	36.6	
						RPD = 6.03	
35 4,4'-DDT							
1	7.465	7.468	-0.003	799001308	50.0	41.7	
2	7.459	7.459	0.000	114606246	50.0	44.5	
						RPD = 6.62	
36 Endrin aldehyde							
1	7.781	7.785	-0.004	482676872	50.0	30.1	
2	7.577	7.578	-0.001	72880500	50.0	30.8	
						RPD = 2.41	
37 Methoxychlor							
1	7.978	7.981	-0.003	339686312	50.0	40.5	
2	8.180	8.182	-0.002	52507285	50.0	43.0	
						RPD = 5.77	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
39 Endosulfan sulfate							
1	8.231	8.232	-0.001	665116295	50.0	36.3	
2	7.872	7.873	-0.001	99568284	50.0	38.2	
						RPD = 5.08	
40 Endrin ketone							
1	8.510	8.513	-0.003	667237433	50.0	32.8	
2	8.399	8.399	0.000	105879822	50.0	35.7	
						RPD = 8.37	
$ 41 DCB Decachlorobiphenyl							
1	9.490	9.492	-0.002	171270008	20.0	14.5	
2	9.593	9.593	0.000	34832132	20.0	17.8	
						RPD = 20.88	

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

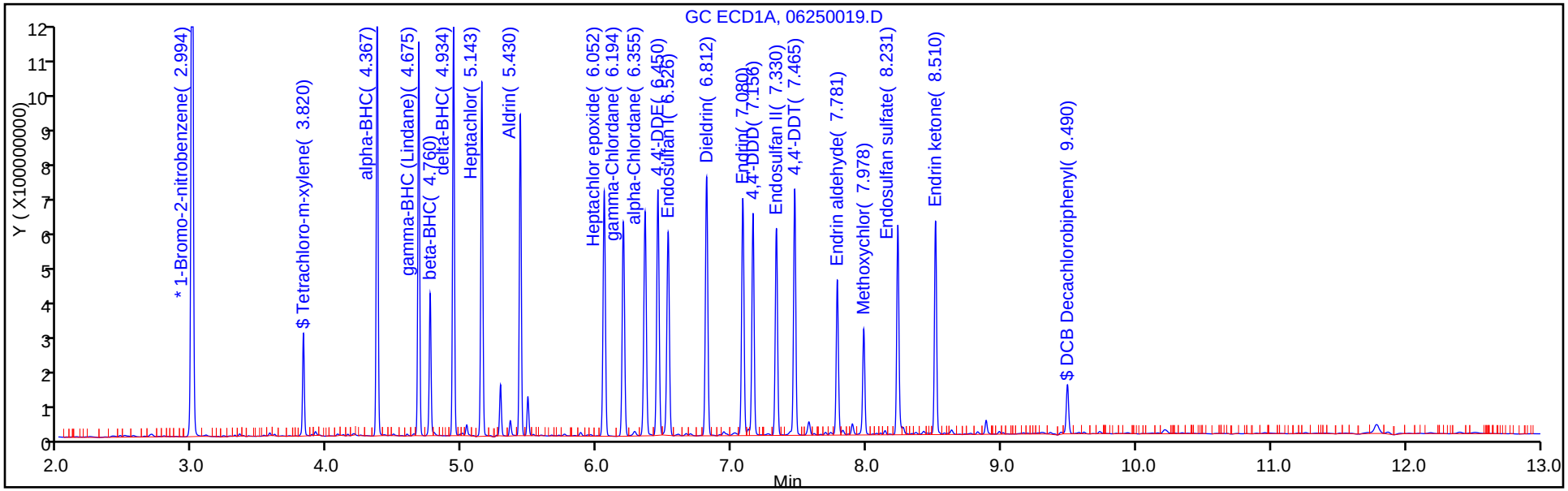
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TestAmerica Denver

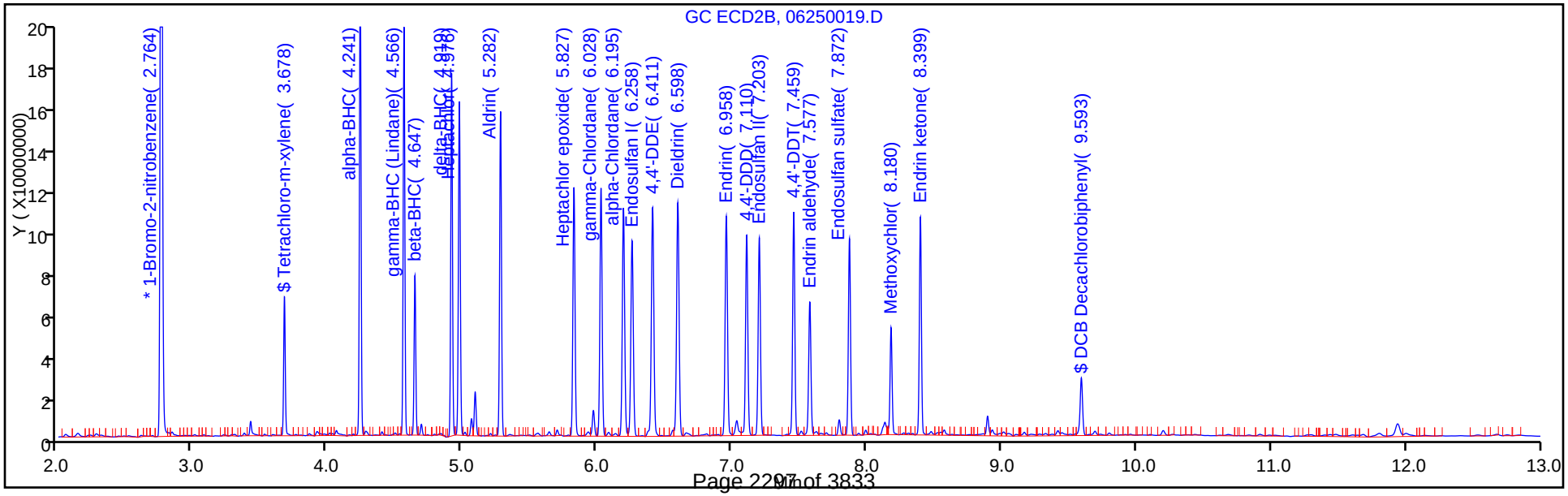
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250019.D

Injection Date:	25-Jun-2017 17:39:50	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-C-3-K MSD			Worklist Smp#:	19
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250019.D				
Lims ID:	280-97928-C-3-K MSD				
Client ID:					
Sample Type:	MSD				
Inject. Date:	25-Jun-2017 17:39:50	ALS Bottle#:	13	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-3-K				
Misc. Info.:	280-0060103-019				
Operator ID:	DAW	Instrument ID:	SGC_P1		
Method:	\\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m				
Limit Group:	GCSV - 8081A - IS				
Last Update:	26-Jun-2017 11:56:12	Calib Date:	10-Apr-2017 18:46:48		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK026				

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	15.6	78.20
$ 41 DCB Decachlorobiphenyl	20.0	14.5	72.30

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	17.1	85.55
$ 41 DCB Decachlorobiphenyl	20.0	17.8	89.16

FORM I
PESTICIDES ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(0-2) MSD | Lab Sample ID: 280-97928-3 MSD

Matrix: Solid | Lab File ID: 06250021.D

Analysis Method: 8081B | Date Collected: 06/05/2017 08:35

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.5(g) | Date Analyzed: 06/25/2017 18:13

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP1 ID: 0.32(mm)

% Moisture: 9.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378628 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
8001-35-2	Toxaphene	59.5	J	180	35	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	89		63-121
877-09-8	Tetrachloro-m-xylene (Surr)	69		42-129

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250021.D
Lims ID: 280-97928-C-3-M MSD
Client ID:
Sample Type: MSD
Inject. Date: 25-Jun-2017 18:13:42 ALS Bottle#: 15 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-3-M
Misc. Info.: 280-0060103-021
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:12 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:34:05

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/mL	OnCol Amt ng/mL	Flags
* 2 1-Bromo-2-nitrobenzene							
1	2.994	2.993	0.001	2015949228	150.0	150.0	
2	2.764	2.763	0.001	406443194	150.0	150.0	
$ 4 Tetrachloro-m-xylene							
1	3.820	3.819	0.001	211354241	20.0	13.9	
2	3.679	3.678	0.001	44102259	20.0	15.4	
						RPD = 10.14	
28 Toxaphene							M
1	5.603	5.606	-0.003	5760051	200.0	154.8	M
1	6.925	6.925	0.000	29987800	200.0	228.0	M
1	7.186	7.187	-0.001	31030241	200.0	166.6	M
1	7.692	7.693	-0.001	56643550	200.0	139.4	M
1	8.135	8.135	0.000	76885287	200.0	157.5	M
		Average of Peak Amounts =				169.2	
2	0.000	6.108	-6.108	0	200.0	0	
2	7.152	7.156	-0.004	6088230	200.0	75.7	M
2	7.299	7.300	-0.001	18579052	200.0	100.9	M
2	7.587	7.589	-0.002	12734148	200.0	111.6	M
2	8.115	8.112	0.003	19222832	200.0	225.0	M
		Average of Peak Amounts =				128.3	
						RPD = 27.52	
$ 41 DCB Decachlorobiphenyl							
1	9.491	9.492	-0.001	188219978	20.0	17.8	
2	9.594	9.593	0.001	31288375	20.0	17.8	
						RPD = 0.08	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8081_IS_00006 Amount Added: 75.00 Units: uL Run Reagent

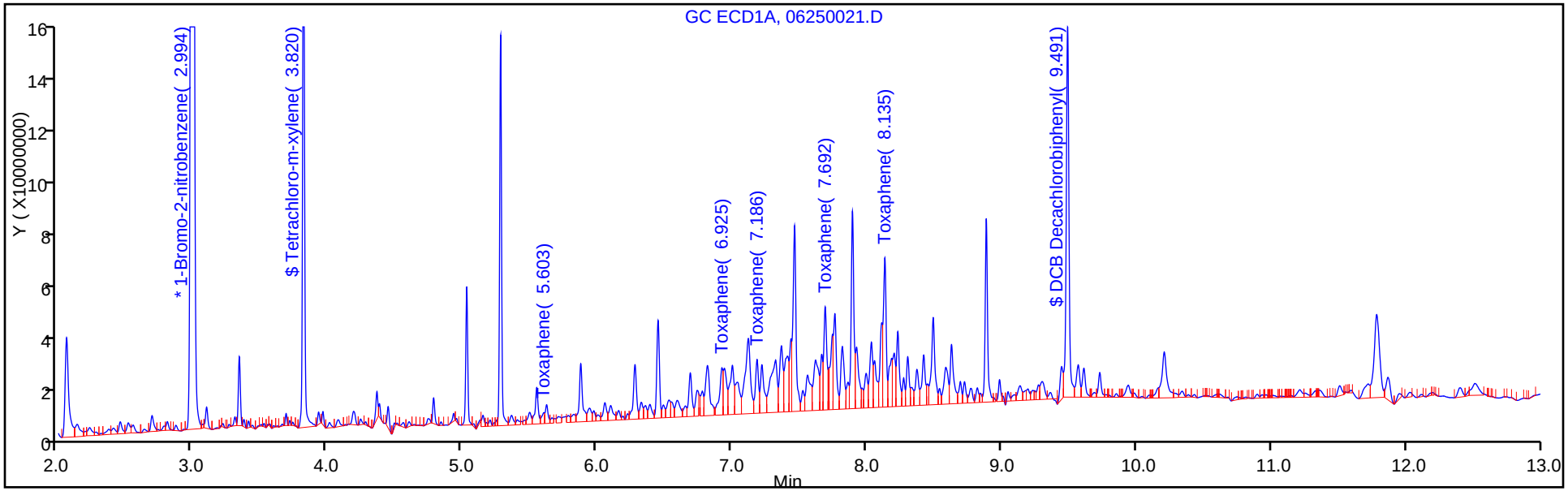
Report Date: 26-Jun-2017 11:56:32 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

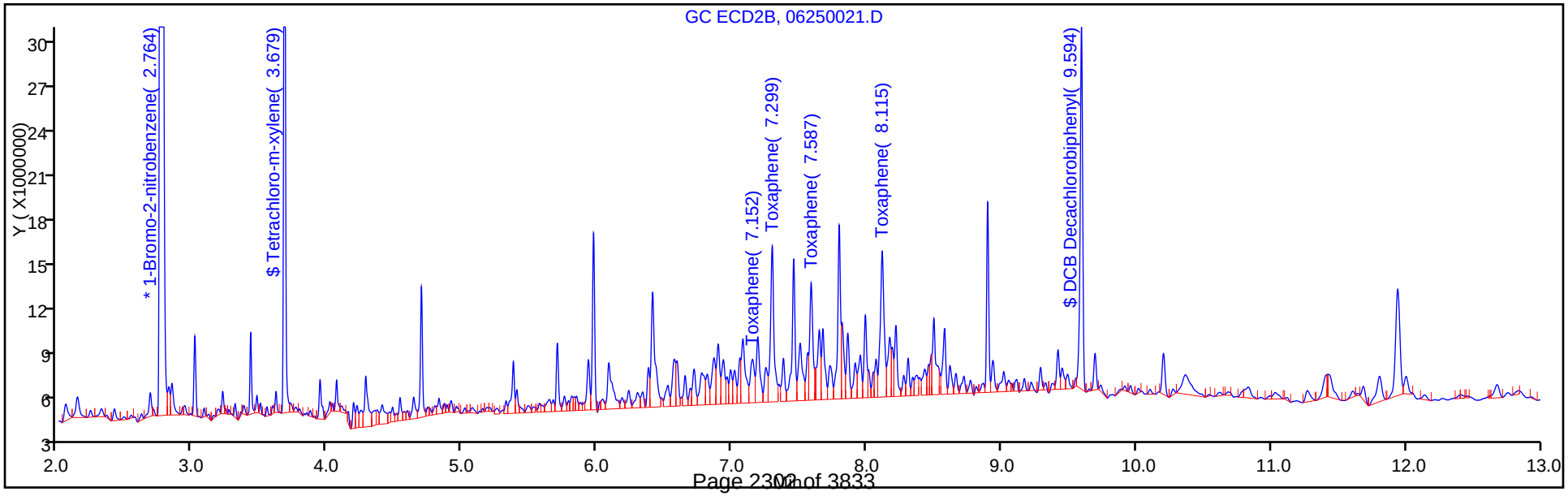
Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250021.D

Injection Date:	25-Jun-2017 18:13:42	Instrument ID:	SGC_P1	Operator ID:	DAW
Lims ID:	280-97928-C-3-M MSD			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	P1 8081 IS	Limit Group:	GCSV - 8081A - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Peak: 3



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250021.D
Lims ID: 280-97928-C-3-M MSD
Client ID:
Sample Type: MSD
Inject. Date: 25-Jun-2017 18:13:42 ALS Bottle#: 15 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-3-M
Misc. Info.: 280-0060103-021
Operator ID: DAW Instrument ID: SGC_P1

Method: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\P1 8081 IS.m
Limit Group: GCSV - 8081A - IS
Last Update: 26-Jun-2017 11:56:12 Calib Date: 10-Apr-2017 18:46:48
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P1\20170410-57376.b\04100029.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK026

First Level Reviewer: wellsd Date: 26-Jun-2017 10:34:05

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	13.9	69.36
$ 41 DCB Decachlorobiphenyl	20.0	17.8	88.94

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 4 Tetrachloro-m-xylene	20.0	15.4	76.76
$ 41 DCB Decachlorobiphenyl	20.0	17.8	89.02

Report Date: 26-Jun-2017 11:56:32 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250021.D

Injection Date: 25-Jun-2017 18:13:42 Instrument ID: SGC_P1

Lims ID: 280-97928-C-3-M MSD

Client ID:

Operator ID: DAW ALS Bottle#: 15 Worklist Smp#: 21

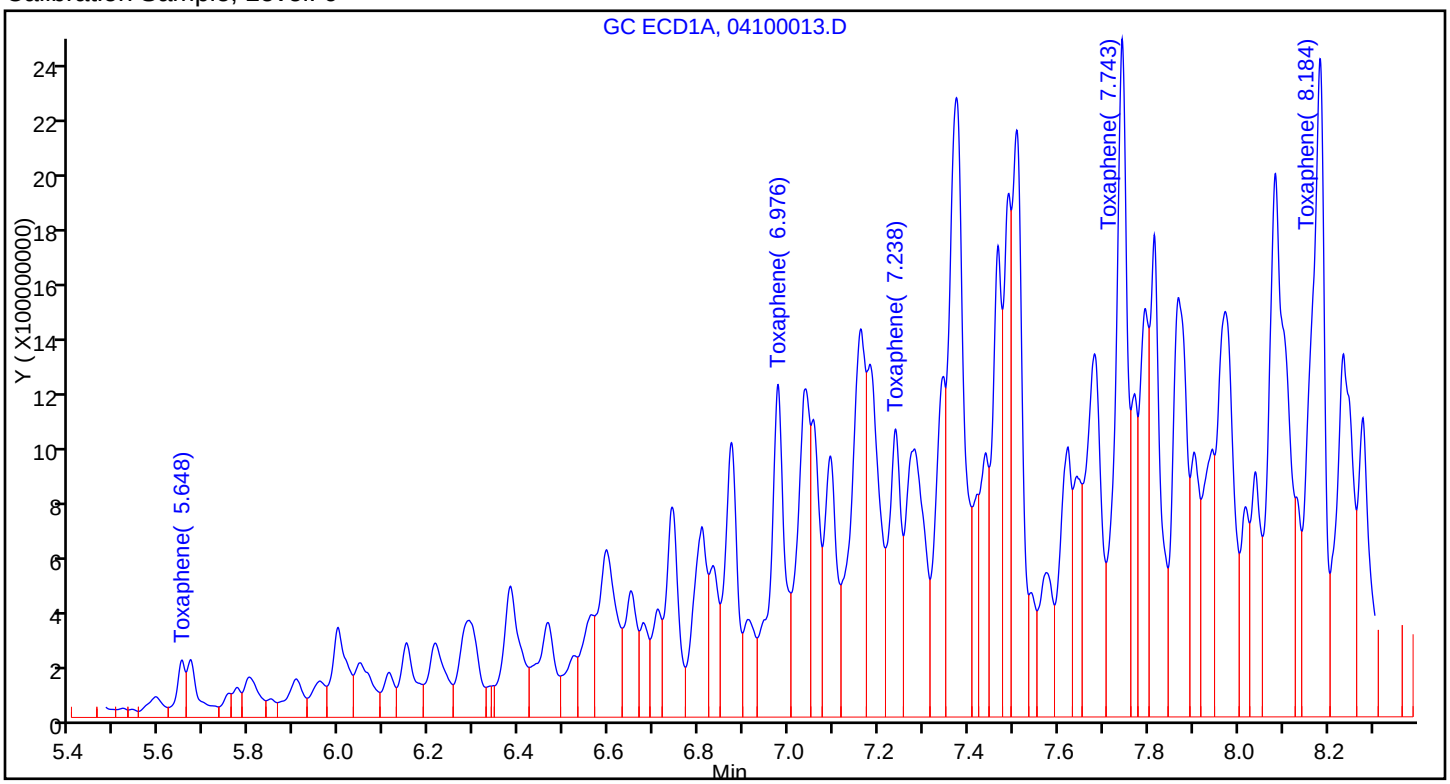
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

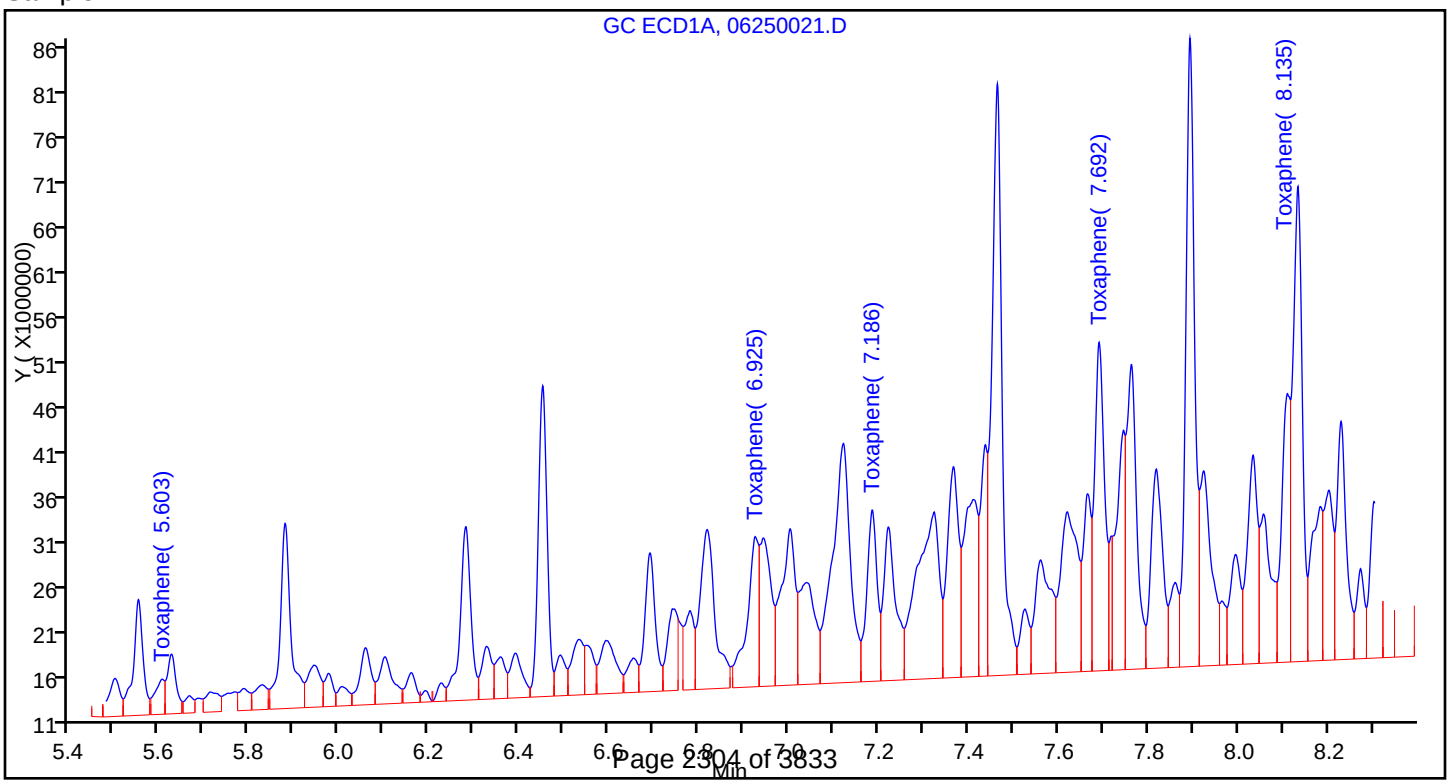
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2

Calibration Sample, Level: 6



Sample



Report Date: 26-Jun-2017 11:56:32 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P1\20170625-60103.b\06250021.D

Injection Date: 25-Jun-2017 18:13:42 Instrument ID: SGC_P1

Lims ID: 280-97928-C-3-M MSD

Client ID:

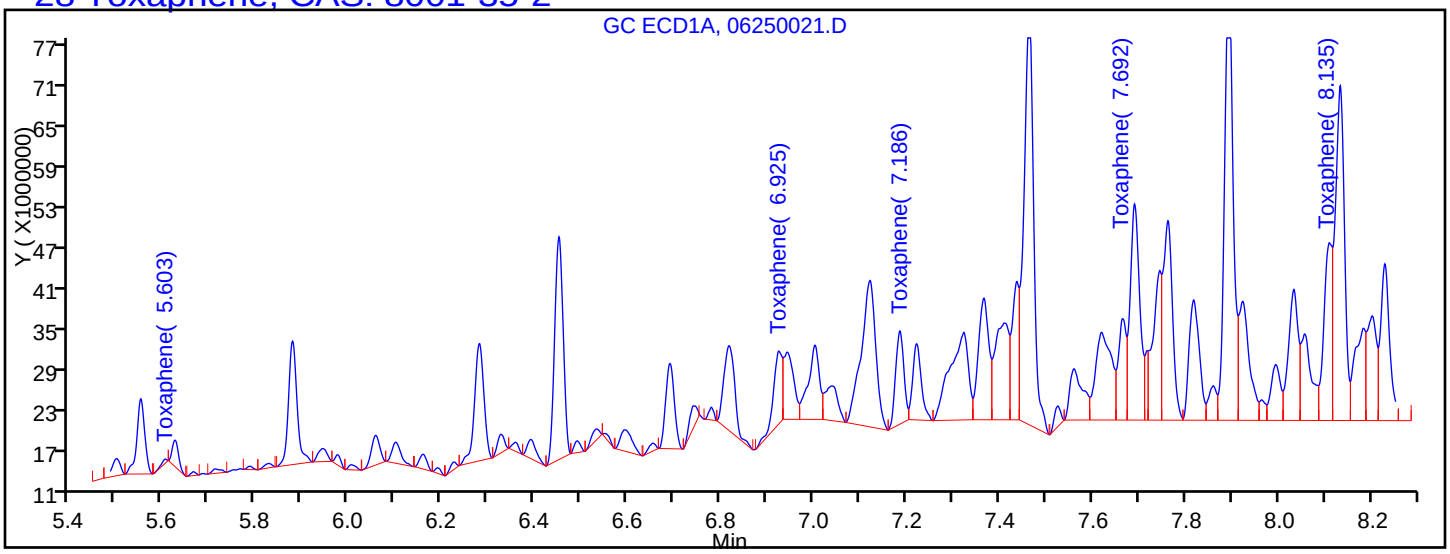
Operator ID: DAW ALS Bottle#: 15 Worklist Smp#: 21

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: P1 8081 IS Limit Group: GCSV - 8081A - IS

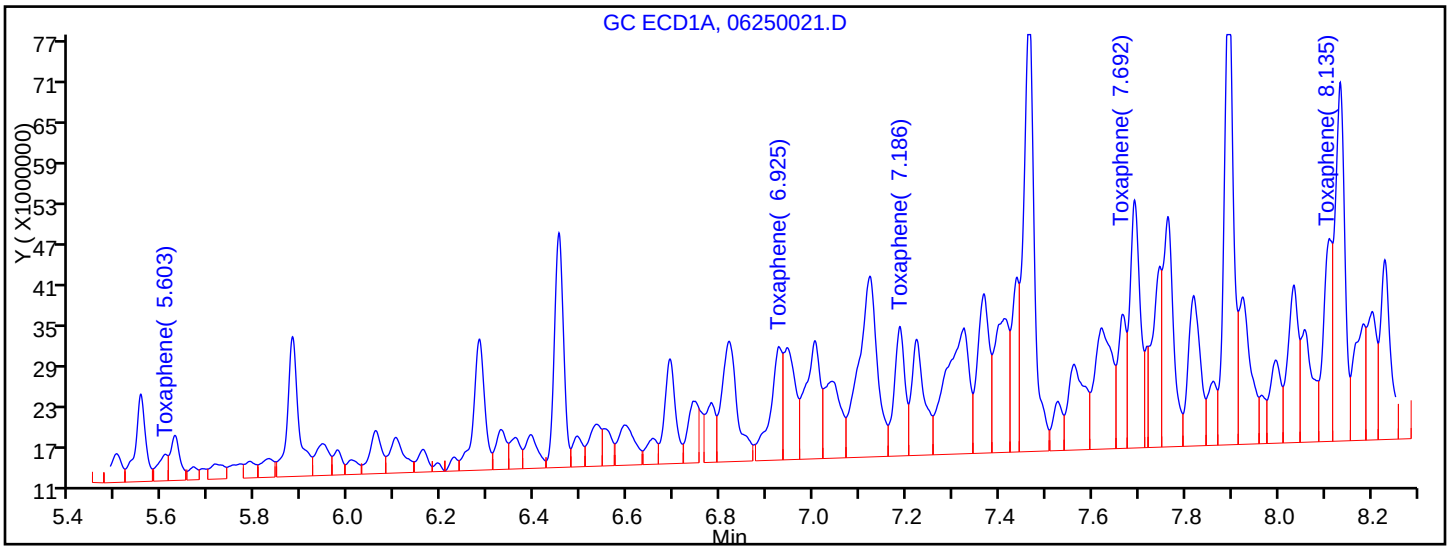
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

28 Toxaphene, CAS: 8001-35-2



Processing Integration Results

5.603	Response = 537581
6.925	Response = 14001741
7.186	Response = 17035663
7.692	Response = 45826807
8.135	Response = 68335542



Manual Integration Results

5.603	Response = 5760051	M
6.925	Response = 29987800	M
7.186	Response = 31030241	M
7.692	Response = 56643550	M
8.135	Response = 76885287	M

Reviewer: wellsd, 26-Jun-2017 10:34:01

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P1 Start Date: 04/10/2017 11:26

Analysis Batch Number: 368670 End Date: 04/11/2017 08:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
PEM 280-368670/3		04/10/2017 11:26	1		CLP1 0.32(mm)
PEM 280-368670/3		04/10/2017 11:26	1		CLP2 0.32(mm)
STD7 280-368670/6 IC		04/10/2017 12:17	1		CLP1 0.32(mm)
STD7 280-368670/6 IC		04/10/2017 12:17	1		CLP2 0.32(mm)
STD6 280-368670/7 IC		04/10/2017 12:34	1		CLP1 0.32(mm)
STD6 280-368670/7 IC		04/10/2017 12:34	1		CLP2 0.32(mm)
STD5 280-368670/8 IC		04/10/2017 12:51	1		CLP1 0.32(mm)
STD5 280-368670/8 IC		04/10/2017 12:51	1		CLP2 0.32(mm)
STD4 280-368670/9 IC		04/10/2017 13:08	1		CLP1 0.32(mm)
STD4 280-368670/9 IC		04/10/2017 13:08	1		CLP2 0.32(mm)
STD3 280-368670/10 IC		04/10/2017 13:25	1		CLP1 0.32(mm)
STD3 280-368670/10 IC		04/10/2017 13:25	1		CLP2 0.32(mm)
STD2 280-368670/11 IC		04/10/2017 13:42	1		CLP1 0.32(mm)
STD2 280-368670/11 IC		04/10/2017 13:42	1		CLP2 0.32(mm)
STD1 280-368670/12 IC		04/10/2017 13:59	1		CLP1 0.32(mm)
STD1 280-368670/12 IC		04/10/2017 13:59	1		CLP2 0.32(mm)
STD6 280-368670/13 IC		04/10/2017 14:16	1	04100013.D	CLP1 0.32(mm)
STD6 280-368670/13 IC		04/10/2017 14:16	1	04100013.D	CLP2 0.32(mm)
STD5 280-368670/14 IC		04/10/2017 14:33	1	04100014.D	CLP1 0.32(mm)
STD5 280-368670/14 IC		04/10/2017 14:33	1	04100014.D	CLP2 0.32(mm)
STD4 280-368670/15 IC		04/10/2017 14:50	1	04100015.D	CLP1 0.32(mm)
STD4 280-368670/15 IC		04/10/2017 14:50	1	04100015.D	CLP2 0.32(mm)
STD3 280-368670/16 IC		04/10/2017 15:06	1	04100016.D	CLP1 0.32(mm)
STD3 280-368670/16 IC		04/10/2017 15:06	1	04100016.D	CLP2 0.32(mm)
STD2 280-368670/17 IC		04/10/2017 15:23	1	04100017.D	CLP1 0.32(mm)
STD2 280-368670/17 IC		04/10/2017 15:23	1	04100017.D	CLP2 0.32(mm)
STD1 280-368670/18 IC		04/10/2017 15:40	1	04100018.D	CLP1 0.32(mm)
STD1 280-368670/18 IC		04/10/2017 15:40	1	04100018.D	CLP2 0.32(mm)
STD5 280-368670/19 IC		04/10/2017 15:57	1		CLP1 0.32(mm)
STD5 280-368670/19 IC		04/10/2017 15:57	1		CLP2 0.32(mm)
STD4 280-368670/20 IC		04/10/2017 16:14	1		CLP1 0.32(mm)
STD4 280-368670/20 IC		04/10/2017 16:14	1		CLP2 0.32(mm)
STD3 280-368670/21 IC		04/10/2017 16:31	1		CLP1 0.32(mm)
STD3 280-368670/21 IC		04/10/2017 16:31	1		CLP2 0.32(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P1 Start Date: 04/10/2017 11:26

Analysis Batch Number: 368670 End Date: 04/11/2017 08:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STD2 280-368670/22 IC		04/10/2017 16:48	1		CLP1 0.32(mm)
STD2 280-368670/22 IC		04/10/2017 16:48	1		CLP2 0.32(mm)
STD1 280-368670/23 IC		04/10/2017 17:05	1		CLP1 0.32(mm)
STD1 280-368670/23 IC		04/10/2017 17:05	1		CLP2 0.32(mm)
STD6 280-368670/24 IC		04/10/2017 17:22	1	04100024.D	CLP1 0.32(mm)
STD6 280-368670/24 IC		04/10/2017 17:22	1	04100024.D	CLP2 0.32(mm)
STD5 280-368670/25 IC		04/10/2017 17:39	1	04100025.D	CLP1 0.32(mm)
STD5 280-368670/25 IC		04/10/2017 17:39	1	04100025.D	CLP2 0.32(mm)
STD4 280-368670/26 ICIS		04/10/2017 17:56	1	04100026.D	CLP1 0.32(mm)
STD4 280-368670/26 ICIS		04/10/2017 17:56	1	04100026.D	CLP2 0.32(mm)
STD3 280-368670/27 IC		04/10/2017 18:13	1	04100027.D	CLP1 0.32(mm)
STD3 280-368670/27 IC		04/10/2017 18:13	1	04100027.D	CLP2 0.32(mm)
STD2 280-368670/28 IC		04/10/2017 18:29	1	04100028.D	CLP1 0.32(mm)
STD2 280-368670/28 IC		04/10/2017 18:29	1	04100028.D	CLP2 0.32(mm)
STD1 280-368670/29 IC		04/10/2017 18:46	1	04100029.D	CLP1 0.32(mm)
STD1 280-368670/29 IC		04/10/2017 18:46	1	04100029.D	CLP2 0.32(mm)
ICV 280-368670/30		04/10/2017 19:03	1		CLP1 0.32(mm)
ICV 280-368670/30		04/10/2017 19:03	1		CLP2 0.32(mm)
ICV 280-368670/31		04/10/2017 19:20	1	04100031.D	CLP1 0.32(mm)
ICV 280-368670/31		04/10/2017 19:20	1	04100031.D	CLP2 0.32(mm)
ICV 280-368670/32		04/10/2017 19:37	1		CLP1 0.32(mm)
ICV 280-368670/32		04/10/2017 19:37	1		CLP2 0.32(mm)
ICV 280-368670/33		04/10/2017 19:54	1	04100033.D	CLP1 0.32(mm)
ICV 280-368670/33		04/10/2017 19:54	1	04100033.D	CLP2 0.32(mm)
PEM 280-368670/34		04/10/2017 20:11	1		CLP1 0.32(mm)
PEM 280-368670/34		04/10/2017 20:11	1		CLP2 0.32(mm)
ZZZZZ		04/10/2017 20:28	1		CLP1 0.32(mm)
ZZZZZ		04/10/2017 20:28	1		CLP2 0.32(mm)
280-94919-A-1-A MDLV		04/10/2017 20:44	1		CLP1 0.32(mm)
280-94919-A-1-A MDLV		04/10/2017 20:44	1		CLP2 0.32(mm)
280-94919-A-2-A MDLV		04/10/2017 21:01	1		CLP1 0.32(mm)
280-94919-A-2-A MDLV		04/10/2017 21:01	1		CLP2 0.32(mm)
280-94919-A-3-A MDLV		04/10/2017 21:18	1		CLP1 0.32(mm)
280-94919-A-3-A MDLV		04/10/2017 21:18	1		CLP2 0.32(mm)
280-94919-A-4-A MDLV		04/10/2017 21:35	1		CLP1 0.32(mm)
280-94919-A-4-A MDLV		04/10/2017 21:35	1		CLP2 0.32(mm)
280-94919-A-5-A MDLV		04/10/2017 21:52	1		CLP1 0.32(mm)
280-94919-A-5-A MDLV		04/10/2017 21:52	1		CLP2 0.32(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P1 Start Date: 04/10/2017 11:26

Analysis Batch Number: 368670 End Date: 04/11/2017 08:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-94919-A-6-A MDLV		04/10/2017 22:09	1		CLP1 0.32(mm)
280-94919-A-6-A MDLV		04/10/2017 22:09	1		CLP2 0.32(mm)
280-94919-A-7-A MDLV		04/10/2017 22:26	1		CLP1 0.32(mm)
280-94919-A-7-A MDLV		04/10/2017 22:26	1		CLP2 0.32(mm)
280-94919-A-8-A MDLV		04/10/2017 22:43	1		CLP1 0.32(mm)
280-94919-A-8-A MDLV		04/10/2017 22:43	1		CLP2 0.32(mm)
280-94919-A-9-A MDLV		04/10/2017 23:00	1		CLP1 0.32(mm)
280-94919-A-9-A MDLV		04/10/2017 23:00	1		CLP2 0.32(mm)
280-94919-A-10-A MDLV		04/10/2017 23:17	1		CLP1 0.32(mm)
280-94919-A-10-A MDLV		04/10/2017 23:17	1		CLP2 0.32(mm)
280-94919-A-11-A MDLV		04/10/2017 23:34	1		CLP1 0.32(mm)
280-94919-A-11-A MDLV		04/10/2017 23:34	1		CLP2 0.32(mm)
280-94919-A-12-A MDLV		04/10/2017 23:50	1		CLP1 0.32(mm)
280-94919-A-12-A MDLV		04/10/2017 23:50	1		CLP2 0.32(mm)
ZZZZZ		04/11/2017 00:07	1		CLP1 0.32(mm)
ZZZZZ		04/11/2017 00:07	1		CLP2 0.32(mm)
280-94919-A-13-A MDLV		04/11/2017 00:24	1		CLP1 0.32(mm)
280-94919-A-13-A MDLV		04/11/2017 00:24	1		CLP2 0.32(mm)
280-94919-A-14-A MDLV		04/11/2017 00:41	1		CLP1 0.32(mm)
280-94919-A-14-A MDLV		04/11/2017 00:41	1		CLP2 0.32(mm)
280-94919-A-15-A MDLV		04/11/2017 00:58	1		CLP1 0.32(mm)
280-94919-A-15-A MDLV		04/11/2017 00:58	1		CLP2 0.32(mm)
280-94919-A-16-A MDLV		04/11/2017 01:15	1		CLP1 0.32(mm)
280-94919-A-16-A MDLV		04/11/2017 01:15	1		CLP2 0.32(mm)
280-94919-A-17-A MDLV		04/11/2017 01:32	1		CLP1 0.32(mm)
280-94919-A-17-A MDLV		04/11/2017 01:32	1		CLP2 0.32(mm)
280-94919-A-18-A MDLV		04/11/2017 01:49	1		CLP1 0.32(mm)
280-94919-A-18-A MDLV		04/11/2017 01:49	1		CLP2 0.32(mm)
280-94919-A-19-A MDLV		04/11/2017 02:06	1		CLP1 0.32(mm)
280-94919-A-19-A MDLV		04/11/2017 02:06	1		CLP2 0.32(mm)
CCV 280-368670/56		04/11/2017 02:23	1		CLP1 0.32(mm)
CCV 280-368670/56		04/11/2017 02:23	1		CLP2 0.32(mm)
CCV 280-368670/57		04/11/2017 02:39	1		CLP1 0.32(mm)
CCV 280-368670/57		04/11/2017 02:39	1		CLP2 0.32(mm)
CCV 280-368670/58		04/11/2017 02:56	1		CLP1 0.32(mm)
CCV 280-368670/58		04/11/2017 02:56	1		CLP2 0.32(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P1 Start Date: 04/10/2017 11:26

Analysis Batch Number: 368670 End Date: 04/11/2017 08:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-368670/59		04/11/2017 03:13	1		CLP1 0.32(mm)
CCV 280-368670/59		04/11/2017 03:13	1		CLP2 0.32(mm)
280-94919-A-20-A MDLV		04/11/2017 03:30	1		CLP1 0.32(mm)
280-94919-A-20-A MDLV		04/11/2017 03:30	1		CLP2 0.32(mm)
280-94919-A-21-A MDLV		04/11/2017 03:47	1		CLP1 0.32(mm)
280-94919-A-21-A MDLV		04/11/2017 03:47	1		CLP2 0.32(mm)
280-94919-A-22-A MDLV		04/11/2017 04:04	1		CLP1 0.32(mm)
280-94919-A-22-A MDLV		04/11/2017 04:04	1		CLP2 0.32(mm)
280-94919-A-23-A MDLV		04/11/2017 04:21	1		CLP1 0.32(mm)
280-94919-A-23-A MDLV		04/11/2017 04:21	1		CLP2 0.32(mm)
280-94919-A-24-A MDLV		04/11/2017 04:38	1		CLP1 0.32(mm)
280-94919-A-24-A MDLV		04/11/2017 04:38	1		CLP2 0.32(mm)
280-94919-A-25-A MDLV		04/11/2017 04:55	1		CLP1 0.32(mm)
280-94919-A-25-A MDLV		04/11/2017 04:55	1		CLP2 0.32(mm)
ZZZZZ		04/11/2017 05:12	1		CLP1 0.32(mm)
ZZZZZ		04/11/2017 05:12	1		CLP2 0.32(mm)
280-94919-A-26-A MDLV		04/11/2017 05:29	1		CLP1 0.32(mm)
280-94919-A-26-A MDLV		04/11/2017 05:29	1		CLP2 0.32(mm)
280-94919-A-27-A MDLV		04/11/2017 05:45	1		CLP1 0.32(mm)
280-94919-A-27-A MDLV		04/11/2017 05:45	1		CLP2 0.32(mm)
280-94919-A-28-A MDLV		04/11/2017 06:02	1		CLP1 0.32(mm)
280-94919-A-28-A MDLV		04/11/2017 06:02	1		CLP2 0.32(mm)
280-94919-A-29-A MDLV		04/11/2017 06:19	1		CLP1 0.32(mm)
280-94919-A-29-A MDLV		04/11/2017 06:19	1		CLP2 0.32(mm)
280-94919-A-30-A MDLV		04/11/2017 06:36	1		CLP1 0.32(mm)
280-94919-A-30-A MDLV		04/11/2017 06:36	1		CLP2 0.32(mm)
280-94919-A-31-A MDLV		04/11/2017 06:53	1		CLP1 0.32(mm)
280-94919-A-31-A MDLV		04/11/2017 06:53	1		CLP2 0.32(mm)
280-94919-A-32-A MDLV		04/11/2017 07:10	1		CLP1 0.32(mm)
280-94919-A-32-A MDLV		04/11/2017 07:10	1		CLP2 0.32(mm)
280-94919-A-33-A MDLV		04/11/2017 07:27	1		CLP1 0.32(mm)
280-94919-A-33-A MDLV		04/11/2017 07:27	1		CLP2 0.32(mm)
280-94919-A-34-A MDLV		04/11/2017 07:44	1		CLP1 0.32(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P1 Start Date: 04/10/2017 11:26

Analysis Batch Number: 368670 End Date: 04/11/2017 08:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-94919-A-34-A MDLV		04/11/2017 07:44	1		CLP2 0.32(mm)
280-94919-A-35-A MDLV		04/11/2017 08:01	1		CLP1 0.32(mm)
280-94919-A-35-A MDLV		04/11/2017 08:01	1		CLP2 0.32(mm)
280-94919-A-36-A MDLV		04/11/2017 08:18	1		CLP1 0.32(mm)
280-94919-A-36-A MDLV		04/11/2017 08:18	1		CLP2 0.32(mm)
280-94919-A-37-A MDLV		04/11/2017 08:35	1		CLP1 0.32(mm)
280-94919-A-37-A MDLV		04/11/2017 08:35	1		CLP2 0.32(mm)
280-94919-A-38-A MDLV		04/11/2017 08:52	1		CLP1 0.32(mm)
280-94919-A-38-A MDLV		04/11/2017 08:52	1		CLP2 0.32(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P1 Start Date: 06/25/2017 14:17

Analysis Batch Number: 378628 End Date: 06/26/2017 03:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
PEM 280-378628/7		06/25/2017 14:17	1	06250007.D	CLP1 0.32(mm)
PEM 280-378628/7		06/25/2017 14:17	1	06250007.D	CLP2 0.32(mm)
CCV 280-378628/10		06/25/2017 15:07	1	06250010.D	CLP1 0.32(mm)
CCV 280-378628/10		06/25/2017 15:07	1	06250010.D	CLP2 0.32(mm)
CCV 280-378628/11		06/25/2017 15:24	1		CLP1 0.32(mm)
CCV 280-378628/11		06/25/2017 15:24	1		CLP2 0.32(mm)
CCVIS 280-378628/12		06/25/2017 15:41	1	06250012.D	CLP1 0.32(mm)
CCVIS 280-378628/12		06/25/2017 15:41	1	06250012.D	CLP2 0.32(mm)
MB 280-377615/1-A		06/25/2017 15:58	1	06250013.D	CLP1 0.32(mm)
MB 280-377615/1-A		06/25/2017 15:58	1	06250013.D	CLP2 0.32(mm)
LCS 280-377615/2-A		06/25/2017 16:15	1	06250014.D	CLP1 0.32(mm)
LCS 280-377615/2-A		06/25/2017 16:15	1	06250014.D	CLP2 0.32(mm)
LCS 280-377615/3-A		06/25/2017 16:32	1	06250015.D	CLP1 0.32(mm)
LCS 280-377615/3-A		06/25/2017 16:32	1	06250015.D	CLP2 0.32(mm)
280-97928-1		06/25/2017 16:49	1	06250016.D	CLP1 0.32(mm)
280-97928-1		06/25/2017 16:49	1	06250016.D	CLP2 0.32(mm)
280-97928-3		06/25/2017 17:06	1	06250017.D	CLP1 0.32(mm)
280-97928-3		06/25/2017 17:06	1	06250017.D	CLP2 0.32(mm)
280-97928-3 MS		06/25/2017 17:23	1	06250018.D	CLP1 0.32(mm)
280-97928-3 MS		06/25/2017 17:23	1	06250018.D	CLP2 0.32(mm)
280-97928-3 MSD		06/25/2017 17:39	1	06250019.D	CLP1 0.32(mm)
280-97928-3 MSD		06/25/2017 17:39	1	06250019.D	CLP2 0.32(mm)
280-97928-3 MS		06/25/2017 17:56	1	06250020.D	CLP1 0.32(mm)
280-97928-3 MS		06/25/2017 17:56	1	06250020.D	CLP2 0.32(mm)
280-97928-3 MSD		06/25/2017 18:13	1	06250021.D	CLP1 0.32(mm)
280-97928-3 MSD		06/25/2017 18:13	1	06250021.D	CLP2 0.32(mm)
280-97928-4		06/25/2017 18:30	1	06250022.D	CLP1 0.32(mm)
280-97928-4		06/25/2017 18:30	1	06250022.D	CLP2 0.32(mm)
280-97928-5		06/25/2017 18:47	1	06250023.D	CLP1 0.32(mm)
280-97928-5		06/25/2017 18:47	1	06250023.D	CLP2 0.32(mm)
280-97928-6		06/25/2017 19:04	1	06250024.D	CLP1 0.32(mm)
280-97928-6		06/25/2017 19:04	1	06250024.D	CLP2 0.32(mm)
280-97928-7		06/25/2017 19:21	1	06250025.D	CLP1 0.32(mm)
280-97928-7		06/25/2017 19:21	1	06250025.D	CLP2 0.32(mm)
280-97928-8 DL		06/25/2017 19:38	10	06250026.D	CLP1 0.32(mm)
280-97928-8 DL		06/25/2017 19:38	10	06250026.D	CLP2 0.32(mm)
ZZZZZ		06/25/2017 19:54	10		CLP1 0.32(mm)
ZZZZZ		06/25/2017 19:54	10		CLP2 0.32(mm)
280-97928-10		06/25/2017 20:11	1	06250028.D	CLP1 0.32(mm)
280-97928-10		06/25/2017 20:11	1	06250028.D	CLP2 0.32(mm)
280-97928-11		06/25/2017 20:28	1	06250029.D	CLP1 0.32(mm)
280-97928-11		06/25/2017 20:28	1	06250029.D	CLP2 0.32(mm)
CCV 280-378628/30		06/25/2017 20:45	1	06250030.D	CLP1 0.32(mm)
CCV 280-378628/30		06/25/2017 20:45	1	06250030.D	CLP2 0.32(mm)
CCV 280-378628/31		06/25/2017 21:02	1		CLP1 0.32(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P1 Start Date: 06/25/2017 14:17

Analysis Batch Number: 378628 End Date: 06/26/2017 03:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-378628/31		06/25/2017 21:02	1		CLP2 0.32(mm)
CCV 280-378628/32		06/25/2017 21:19	1	06250032.D	CLP1 0.32(mm)
CCV 280-378628/32		06/25/2017 21:19	1	06250032.D	CLP2 0.32(mm)
PEM 280-378628/33		06/25/2017 21:36	1	06250033.D	CLP1 0.32(mm)
PEM 280-378628/33		06/25/2017 21:36	1	06250033.D	CLP2 0.32(mm)
ZZZZZ		06/25/2017 21:53	10		CLP1 0.32(mm)
ZZZZZ		06/25/2017 21:53	10		CLP2 0.32(mm)
280-97928-14 DL		06/25/2017 22:09	10	06250035.D	CLP1 0.32(mm)
280-97928-14 DL		06/25/2017 22:09	10	06250035.D	CLP2 0.32(mm)
ZZZZZ		06/25/2017 22:26	10		CLP1 0.32(mm)
ZZZZZ		06/25/2017 22:26	10		CLP2 0.32(mm)
ZZZZZ		06/25/2017 22:43	10		CLP1 0.32(mm)
ZZZZZ		06/25/2017 22:43	10		CLP2 0.32(mm)
280-97928-17		06/25/2017 23:00	1	06250038.D	CLP1 0.32(mm)
280-97928-17		06/25/2017 23:00	1	06250038.D	CLP2 0.32(mm)
280-97928-18		06/25/2017 23:17	1	06250039.D	CLP1 0.32(mm)
280-97928-18		06/25/2017 23:17	1	06250039.D	CLP2 0.32(mm)
280-97928-19		06/25/2017 23:34	1	06250040.D	CLP1 0.32(mm)
280-97928-19		06/25/2017 23:34	1	06250040.D	CLP2 0.32(mm)
280-97928-20		06/25/2017 23:51	1	06250041.D	CLP1 0.32(mm)
280-97928-20		06/25/2017 23:51	1	06250041.D	CLP2 0.32(mm)
280-97928-21		06/26/2017 00:07	1	06250042.D	CLP1 0.32(mm)
280-97928-21		06/26/2017 00:07	1	06250042.D	CLP2 0.32(mm)
280-97928-22		06/26/2017 00:24	1	06250043.D	CLP1 0.32(mm)
280-97928-22		06/26/2017 00:24	1	06250043.D	CLP2 0.32(mm)
CCV 280-378628/44		06/26/2017 00:41	1	06250044.D	CLP1 0.32(mm)
CCV 280-378628/44		06/26/2017 00:41	1	06250044.D	CLP2 0.32(mm)
CCV 280-378628/45		06/26/2017 00:58	1		CLP1 0.32(mm)
CCV 280-378628/45		06/26/2017 00:58	1		CLP2 0.32(mm)
CCV 280-378628/46		06/26/2017 01:15	1	06250046.D	CLP1 0.32(mm)
CCV 280-378628/46		06/26/2017 01:15	1	06250046.D	CLP2 0.32(mm)
280-97928-8		06/26/2017 01:32	1	06250047.D	CLP1 0.32(mm)
280-97928-8		06/26/2017 01:32	1	06250047.D	CLP2 0.32(mm)
280-97928-9		06/26/2017 01:49	1	06250048.D	CLP1 0.32(mm)
280-97928-9		06/26/2017 01:49	1	06250048.D	CLP2 0.32(mm)
280-97928-12		06/26/2017 02:05	1	06250049.D	CLP1 0.32(mm)
280-97928-12		06/26/2017 02:05	1	06250049.D	CLP2 0.32(mm)
280-97928-14		06/26/2017 02:22	1	06250050.D	CLP1 0.32(mm)
280-97928-14		06/26/2017 02:22	1	06250050.D	CLP2 0.32(mm)
280-97928-15		06/26/2017 02:39	1	06250051.D	CLP1 0.32(mm)
280-97928-15		06/26/2017 02:39	1	06250051.D	CLP2 0.32(mm)
280-97928-16		06/26/2017 02:56	1	06250052.D	CLP1 0.32(mm)
280-97928-16		06/26/2017 02:56	1	06250052.D	CLP2 0.32(mm)
CCV 280-378628/53		06/26/2017 03:13	1	06250053.D	CLP1 0.32(mm)
CCV 280-378628/53		06/26/2017 03:13	1	06250053.D	CLP2 0.32(mm)

PESTICIDES ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P1 Start Date: 06/25/2017 14:17

Analysis Batch Number: 378628 End Date: 06/26/2017 03:46

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 280-378628/54		06/26/2017 03:30	1		CLP1 0.32(mm)
CCV 280-378628/54		06/26/2017 03:30	1		CLP2 0.32(mm)
CCV 280-378628/55		06/26/2017 03:46	1	06250055.D	CLP1 0.32(mm)
CCV 280-378628/55		06/26/2017 03:46	1	06250055.D	CLP2 0.32(mm)

PESTICIDES BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Batch Number: 377615 Batch Start Date: 06/16/17 13:00 Batch Analyst: Bourgery, David F

Batch Method: 3546 Batch End Date: 06/23/17 10:06

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8081 LCS 00379	8081/82 Surr 00094	8081Toxaphene 00027	AnalysisComment
MB 280-377615/1		3546, 8081B		31.2 g	10 mL		1 mL		
LCS 280-377615/2		3546, 8081B		30.6 g	10 mL	1 mL	1 mL		8081
LCS 280-377615/3		3546, 8081B		31.4 g	10 mL		1 mL	1 mL	TOX
280-97928-C-1	SS025-SS07	3546, 8081B	T	31.6 g	10 mL		1 mL		
280-97928-C-3	SS025-SB06(0-2)	3546, 8081B	T	31.3 g	10 mL		1 mL		
280-97928-C-3 MS	SS025-SB06(0-2)	3546, 8081B	T	32.8 g	10 mL	1 mL	1 mL		
280-97928-C-3 MSD	SS025-SB06(0-2)	3546, 8081B	T	32.2 g	10 mL	1 mL	1 mL		81
280-97928-C-3 MS	SS025-SB06(0-2)	3546, 8081B	T	31.7 g	10 mL		1 mL	1 mL	81
280-97928-C-3 MSD	SS025-SB06(0-2)	3546, 8081B	T	31.5 g	10 mL		1 mL	1 mL	TOX
280-97928-B-4	SS025-SB06(2-4)	3546, 8081B	T	31.7 g	10 mL		1 mL		TOX
280-97928-C-5	SS025-SS08	3546, 8081B	T	30.5 g	10 mL		1 mL		82
280-97928-C-6	SS025-SB07(0-2)	3546, 8081B	T	32.7 g	10 mL		1 mL		
280-97928-C-7	SS025-SB07(2-4)	3546, 8081B	T	30.5 g	10 mL		1 mL		
280-97928-C-8	SS025-SB01(0-2)	3546, 8081B	T	31.3 g	10 mL		1 mL		
280-97928-B-9	SS025-SB01(0-2) -a	3546, 8081B	T	30.2 g	10 mL		1 mL		
280-97928-A-10	SS025-SB08(0-2)	3546, 8081B	T	31.4 g	10 mL		1 mL		
280-97928-A-11	SS025-SB08(2-4)	3546, 8081B	T	32.1 g	10 mL		1 mL		
280-97928-B-12	SS025-SS09	3546, 8081B	T	31.8 g	10 mL		1 mL		
280-97928-C-14	SS025-SB09(0-2)	3546, 8081B	T	30.3 g	10 mL		1 mL		
280-97928-A-15	SS025-SB09(2-4)	3546, 8081B	T	30.4 g	10 mL		1 mL		
280-97928-B-16	SS025-SB09(4-6)	3546, 8081B	T	31.6 g	10 mL		1 mL		
280-97928-C-17	SS025-SB09(6-8)	3546, 8081B	T	31.7 g	10 mL		1 mL		
280-97928-A-18	SS025-SB10(0-2)	3546, 8081B	T	31.2 g	10 mL		1 mL		
280-97928-C-19	SS025-SB10(2-4)	3546, 8081B	T	31.0 g	10 mL		1 mL		
280-97928-B-20	SS025-SB10(4-6)	3546, 8081B	T	31.8 g	10 mL		1 mL		
280-97928-B-21	SS025-SB10(2-4) -a	3546, 8081B	T	30.7 g	10 mL		1 mL		
280-97928-B-22	SS025-SS10	3546, 8081B	T	31.7 g	10 mL		1 mL		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PESTICIDES BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Batch Number: 377615 Batch Start Date: 06/16/17 13:00 Batch Analyst: Bourgery, David F

Batch Method: 3546 Batch End Date: 06/23/17 10:06

Batch Notes	
Balance ID	24750402
Batch Comment	Aliquot:HA, pip: BB-8 (10.00), R2-D2 (2.00), N (2x1.00)
Analyst ID - Concentration	GLK/ELV/CDC(supervisor)
Exchange Solvent ID	Hexane_Cycl_00044
Exchange Solvent Name	Hexane
Final Concentrator Volume	10 mL
Florisil ID	FlorisilSol_00130, cart 3441026
Hexane ID	see below
MeCL2 ID	see above
MeCl2 / Acetone ID	see above
Microwave Oven ID	MARS 5
Microwave Start Time	06/16/17 1325
Microwave Stop Time	06/16/17 1357
Na2SO4 ID	0000150871_00002
Ottawa Sand ID	170485
Pipette ID	K
Person's name who did the prep	DB/HA
Solvent Lot #	MeCl2_Cycl_00341/342 / 1:1AceMeCl2_00065
Solvent Name	1:1AceMeCl2/MeCl2
SOP Number	DV-OP-0015/0007
Analyst ID - Spike Analyst	DB
Analyst ID - Spike Witness Analyst	reviewer:GLK
Water Bath ID	B
Water Bath Temperature	88 (obs @ 89)

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

8082A_DOD5

Polychlorinated Biphenyls (PCBs) by Gas Chromatography

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): CLP2 ID: 0.32(mm)

Client Sample ID	Lab Sample ID	DCBP1 #
SS025-SS07	280-97928-1	81
SS025-SB06(0-2)	280-97928-3	87
SS025-SB06(2-4)	280-97928-4	83
SS025-SS08	280-97928-5	82
SS025-SB07(0-2)	280-97928-6	84
SS025-SB07(2-4)	280-97928-7	62
SS025-SB01(0-2)	280-97928-8	74
SS025-SB01(0-2)-a	280-97928-9	76
SS025-SB08(0-2)	280-97928-10	84
SS025-SB08(2-4)	280-97928-11	82
SS025-SS09	280-97928-12	72
SS025-SB09(0-2)	280-97928-14	78
SS025-SB09(2-4)	280-97928-15	65
SS025-SB09(4-6)	280-97928-16	54 Q
SS025-SB09(6-8)	280-97928-17	69
SS025-SB10(0-2)	280-97928-18	81
SS025-SB10(2-4)	280-97928-19	80
SS025-SB10(4-6)	280-97928-20	77
SS025-SB10(2-4)-a	280-97928-21	85
SS025-SS10	280-97928-22	75
	MB 280-377615/1-A	90
	LCS 280-377615/4-A	92
SS025-SB06(2-4) MS	280-97928-4 MS	86
SS025-SB06(2-4) MSD	280-97928-4 MSD	81

	QC LIMITS
DCBP = DCB Decachlorobiphenyl (Surr)	59-130

Column to be used to flag recovery values

FORM II 8082A

FORM III
PCBS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06261705.D

Lab ID: LCS 280-377615/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Arochlor 1016	61.7	61.6	100	47-134	
Arochlor 1260	61.7	60.3	98	53-140	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM III
PCBS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06261709.D

Lab ID: 280-97928-4 MS Client ID: SS025-SB06(2-4) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Arochlor 1016	73.5	16 U	65.9	90	47-134	
Arochlor 1260	73.5	8.3 U	65.8	90	53-140	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM III
PCBS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 06261710.D

Lab ID: 280-97928-4 MSD Client ID: SS025-SB06(2-4) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Arochlor 1016	71.0	61.4	87	7	30	47-134	
Arochlor 1260	71.0	61.4	87	7	30	53-140	

Column to be used to flag recovery and RPD values

FORM III 8082A

FORM IV
PCBS METHOD BLANK SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: MB 280-377615/1-A

Matrix: Solid Date Extracted: 06/16/2017 13:00

Lab File ID:(1) 06261704.D Lab File ID:(2) 06261704.D

Date Analyzed:(1) 06/26/2017 13:46 Date Analyzed:(2) 06/26/2017 13:46

Instrument ID:(1) SGC_P3 Instrument ID:(2) SGC_P3

GC Column:(1) CLP2 ID: 0.32(mm) GC Column:(2) CLP1 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 280-377615/4-A	06/26/2017 14:07	06/26/2017 14:07
SS025-SS07	280-97928-1	06/26/2017 14:29	06/26/2017 14:29
SS025-SB06(0-2)	280-97928-3	06/26/2017 14:51	06/26/2017 14:51
SS025-SB06(2-4)	280-97928-4	06/26/2017 15:12	06/26/2017 15:12
SS025-SB06(2-4) MS	280-97928-4 MS	06/26/2017 15:34	06/26/2017 15:34
SS025-SB06(2-4) MSD	280-97928-4 MSD	06/26/2017 15:56	06/26/2017 15:56
SS025-SS08	280-97928-5	06/26/2017 16:18	06/26/2017 16:18
SS025-SB07(0-2)	280-97928-6	06/26/2017 16:39	06/26/2017 16:39
SS025-SB07(2-4)	280-97928-7	06/26/2017 17:01	06/26/2017 17:01
SS025-SB01(0-2)	280-97928-8	06/26/2017 17:23	06/26/2017 17:23
SS025-SB01(0-2)-a	280-97928-9	06/26/2017 17:45	06/26/2017 17:45
SS025-SB08(0-2)	280-97928-10	06/26/2017 18:06	06/26/2017 18:06
SS025-SB08(2-4)	280-97928-11	06/26/2017 18:28	06/26/2017 18:28
SS025-SS09	280-97928-12	06/26/2017 19:12	06/26/2017 19:12
SS025-SB09(0-2)	280-97928-14	06/26/2017 19:33	06/26/2017 19:33
SS025-SB09(2-4)	280-97928-15	06/26/2017 19:55	06/26/2017 19:55
SS025-SB09(4-6)	280-97928-16	06/26/2017 20:17	06/26/2017 20:17
SS025-SB09(6-8)	280-97928-17	06/26/2017 20:39	06/26/2017 20:39
SS025-SB10(0-2)	280-97928-18	06/26/2017 21:00	06/26/2017 21:00
SS025-SB10(2-4)	280-97928-19	06/26/2017 21:22	06/26/2017 21:22
SS025-SB10(4-6)	280-97928-20	06/26/2017 21:44	06/26/2017 21:44
SS025-SB10(2-4)-a	280-97928-21	06/26/2017 22:05	06/26/2017 22:05
SS025-SS10	280-97928-22	06/26/2017 22:27	06/26/2017 22:27

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Sample No.: STDL51660 280-376236/17 Date Analyzed: 06/06/2017 19:36

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm)

Lab File ID (Standard): 06061717.D Heated Purge: (Y/N) N

Calibration ID: 29393

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		347177456	1.83				
UPPER LIMIT		694354912	2.33				
LOWER LIMIT		173588728	1.33				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-376236/36		350254462	1.83				
ICV 280-376236/37		352622017	1.83				
ICV 280-376236/38		353177277	1.83				
ICV 280-376236/39		352348854	1.83				
ICV 280-376236/40		353734205	1.83				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Sample No.: STDL51660 280-376236/17 Date Analyzed: 06/06/2017 19:36

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm)

Lab File ID (Standard): 06061717.D Heated Purge: (Y/N) N

Calibration ID: 29394

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		402955781	1.60				
UPPER LIMIT		805911562	2.10				
LOWER LIMIT		201477891	1.10				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 280-376236/36		389956483	1.60				
ICV 280-376236/37		393234638	1.60				
ICV 280-376236/38		392415021	1.60				
ICV 280-376236/39		393122135	1.60				
ICV 280-376236/40		393095785	1.60				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Sample No.: CCVIS 280-378729/3 Date Analyzed: 06/26/2017 13:24

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm)

Lab File ID (Standard): 06261703.D Heated Purge: (Y/N) N

Calibration ID: 29401

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		365008735	1.83				
UPPER LIMIT		730017470	2.33				
LOWER LIMIT		182504368	1.33				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 280-377615/1-A		373306045	1.83				
LCS 280-377615/4-A		360555415	1.83				
280-97928-1	SS025-SS07	362609457	1.82				
280-97928-3	SS025-SB06(0-2)	370096129	1.83				
280-97928-4	SS025-SB06(2-4)	357490027	1.82				
280-97928-4 MS	SS025-SB06(2-4) MS	350038398	1.82				
280-97928-4 MSD	SS025-SB06(2-4) MSD	360519814	1.83				
280-97928-5	SS025-SS08	381492965	1.83				
280-97928-6	SS025-SB07(0-2)	378313538	1.82				
280-97928-7	SS025-SB07(2-4)	376171608	1.83				
280-97928-8	SS025-SB01(0-2)	394944064	1.83				
280-97928-9	SS025-SB01(0-2)-a	402303244	1.83				
280-97928-10	SS025-SB08(0-2)	382003247	1.82				
280-97928-11	SS025-SB08(2-4)	393261843	1.83				
CCV 280-378729/18		382824670	1.82				
280-97928-12	SS025-SS09	391663480	1.83				
280-97928-14	SS025-SB09(0-2)	395225278	1.82				
280-97928-15	SS025-SB09(2-4)	394596356	1.83				
280-97928-16	SS025-SB09(4-6)	393685305	1.82				
280-97928-17	SS025-SB09(6-8)	370273169	1.82				
280-97928-18	SS025-SB10(0-2)	372200468	1.83				
280-97928-19	SS025-SB10(2-4)	381010715	1.82				
280-97928-20	SS025-SB10(4-6)	366310337	1.83				
280-97928-21	SS025-SB10(2-4)-a	375595480	1.82				
280-97928-22	SS025-SS10	361406880	1.83				
CCV 280-378729/29		394861207	1.82				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Sample No.: CCVIS 280-378729/3 Date Analyzed: 06/26/2017 13:24

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm)

Lab File ID (Standard): 06261703.D Heated Purge: (Y/N) N

Calibration ID: 29402

		BNB					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		410699040	1.58				
UPPER LIMIT		821398080	2.08				
LOWER LIMIT		205349520	1.08				
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 280-377615/1-A		428982020	1.58				
LCS 280-377615/4-A		418833888	1.58				
280-97928-1	SS025-SS07	416786688	1.58				
280-97928-3	SS025-SB06(0-2)	424916562	1.58				
280-97928-4	SS025-SB06(2-4)	415811711	1.58				
280-97928-4 MS	SS025-SB06(2-4) MS	408874445	1.58				
280-97928-4 MSD	SS025-SB06(2-4) MSD	418991370	1.58				
280-97928-5	SS025-SS08	440645037	1.58				
280-97928-6	SS025-SB07(0-2)	432118708	1.58				
280-97928-7	SS025-SB07(2-4)	439198864	1.58				
280-97928-8	SS025-SB01(0-2)	426754007	1.58				
280-97928-9	SS025-SB01(0-2)-a	442946501	1.59				
280-97928-10	SS025-SB08(0-2)	438486874	1.58				
280-97928-11	SS025-SB08(2-4)	445088590	1.58				
CCV 280-378729/18		439606247	1.58				
280-97928-12	SS025-SS09	440902525	1.58				
280-97928-14	SS025-SB09(0-2)	436036084	1.58				
280-97928-15	SS025-SB09(2-4)	452176490	1.58				
280-97928-16	SS025-SB09(4-6)	436919043	1.58				
280-97928-17	SS025-SB09(6-8)	423905998	1.58				
280-97928-18	SS025-SB10(0-2)	426258537	1.58				
280-97928-19	SS025-SB10(2-4)	442385430	1.58				
280-97928-20	SS025-SB10(4-6)	423402687	1.58				
280-97928-21	SS025-SB10(2-4)-a	432944135	1.58				
280-97928-22	SS025-SS10	420952945	1.58				
CCV 280-378729/29		452290444	1.58				

BNB = 1-Bromo-2-nitrobenzene

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8082A

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(2-4) MS Lab Sample ID: 280-97928-4 MS

Instrument ID (1): SGC_P3 Instrument ID (2): SGC_P3

Date Analyzed (1): 06/26/2017 15:34 Date Analyzed (2): 06/26/2017 15:34

GC Column (1): CLP2 ID: 0.32(mm) GC Column (2): CLP1 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Arochlor 1016	1	1	3.49	3.24	3.74	68.4	65.9	10.0
		2	3.93	3.68	4.18	66.9		
		3	4.06	3.81	4.31	64.8		
		4	4.29	4.04	4.54	64.6		
		5	4.56	4.31	4.81	64.6		
	2	1	3.48	3.23	3.73	65.9	72.8	
		2	3.95	3.70	4.20	63.2		
		3	4.09	3.84	4.34	65.2		
		4	4.15	3.90	4.40	102		
		5	4.53	4.28	4.78	67.8		
Arochlor 1260	1	1	6.37	6.12	6.62	62.1	65.8	8.0
		2	6.82	6.57	7.07	58.6		
		3	7.34	7.09	7.59	70.6		
		4	7.71	7.46	7.96	67.6		
		5	8.20	7.95	8.45	70.2		
	2	1	6.01	5.76	6.26	60.5	60.7	
		2	6.74	6.49	6.99	53.5		
		3	7.23	6.98	7.48	65.2		
		4	7.66	7.41	7.91	63.7		
		5	8.04	7.80	8.30	60.9		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(2-4) MSD Lab Sample ID: 280-97928-4 MSD

Instrument ID (1): SGC_P3 Instrument ID (2): SGC_P3

Date Analyzed (1): 06/26/2017 15:56 Date Analyzed (2): 06/26/2017 15:56

GC Column (1): CLP2 ID: 0.32(mm) GC Column (2): CLP1 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Arochlor 1016	1	1	3.49	3.24	3.74	63.4	61.4	14.7
		2	3.93	3.68	4.18	62.8		
		3	4.06	3.81	4.31	60.3		
		4	4.29	4.04	4.54	58.8		
		5	4.56	4.31	4.81	61.6		
	2	1	3.48	3.23	3.73	62.6	71.1	
		2	3.95	3.70	4.20	58.9		
		3	4.09	3.84	4.34	61.8		
		4	4.16	3.90	4.40	110		
		5	4.53	4.28	4.78	62.8		
Arochlor 1260	1	1	6.37	6.12	6.62	58.3	61.4	9.7
		2	6.82	6.57	7.07	54.7		
		3	7.34	7.09	7.59	66.3		
		4	7.71	7.46	7.96	62.7		
		5	8.20	7.95	8.45	65.1		
	2	1	6.01	5.76	6.26	55.9	55.8	
		2	6.74	6.49	6.99	49.4		
		3	7.23	6.98	7.48	59.5		
		4	7.66	7.41	7.91	58.9		
		5	8.05	7.80	8.30	55.2		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB01(0-2) Lab Sample ID: 280-97928-8

Instrument ID (1): SGC_P3 Instrument ID (2): SGC_P3

Date Analyzed (1): 06/26/2017 17:23 Date Analyzed (2): 06/26/2017 17:23

GC Column (1): CLP2 ID: 0.32(mm) GC Column (2): CLP1 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Arochlor 1260	1	1	6.37	6.12	6.62	7.55	17	30.8
		3	7.34	7.09	7.59	12.0		
		4	7.71	7.46	7.96	12.3		
		5	8.20	7.95	8.45	36.4		
	2	1	6.01	5.76	6.26	8.28	13	
		2	6.73	6.49	6.99	14.0		
		3	7.23	6.98	7.48	16.3		
		4	7.66	7.41	7.91	8.39		
		5	8.05	7.80	8.30	15.5		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS09 Lab Sample ID: 280-97928-12

Instrument ID (1): SGC_P3 Instrument ID (2): SGC_P3

Date Analyzed (1): 06/26/2017 19:12 Date Analyzed (2): 06/26/2017 19:12

GC Column (1): CLP2 ID: 0.32(mm) GC Column (2): CLP1 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Arochlor 1260	1	1	6.37	6.12	6.62	84.1	95	8.2
		2	6.82	6.57	7.07	94.7		
		3	7.34	7.09	7.59	89.9		
		4	7.71	7.46	7.96	94.7		
		5	8.20	7.95	8.45	110		
	2	1	6.01	5.76	6.26	69.6	87	
		2	6.73	6.49	6.99	90.1		
		3	7.23	6.98	7.48	86.8		
		4	7.66	7.41	7.91	85.5		
		5	8.04	7.80	8.30	104		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(0-2) Lab Sample ID: 280-97928-14

Instrument ID (1): SGC_P3 Instrument ID (2): SGC_P3

Date Analyzed (1): 06/26/2017 19:33 Date Analyzed (2): 06/26/2017 19:33

GC Column (1): CLP2 ID: 0.32(mm) GC Column (2): CLP1 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Arochlor 1260	1	1	6.37	6.12	6.62	76.6	81	8.1
		2	6.82	6.57	7.07	96.6		
		3	7.34	7.09	7.59	73.7		
		4	7.71	7.46	7.96	75.1		
		5	8.20	7.95	8.45	81.4		
	2	1	6.01	5.76	6.26	72.9	74	
		2	6.73	6.49	6.99	77.8		
		3	7.22	6.98	7.48	75.0		
		4	7.66	7.41	7.91	70.3		
		5	8.04	7.80	8.30	76.1		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(2-4) Lab Sample ID: 280-97928-15

Instrument ID (1): SGC_P3 Instrument ID (2): SGC_P3

Date Analyzed (1): 06/26/2017 19:55 Date Analyzed (2): 06/26/2017 19:55

GC Column (1): CLP2 ID: 0.32(mm) GC Column (2): CLP1 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Arochlor 1260	1	1	6.37	6.12	6.62	65.8	69	14.8
		2	6.83	6.57	7.07	100		
		3	7.34	7.09	7.59	59.2		
		4	7.71	7.46	7.96	59.5		
		5	8.20	7.95	8.45	62.5		
	2	1	6.01	5.76	6.26	60.5	60	
		2	6.74	6.49	6.99	67.0		
		3	7.23	6.98	7.48	58.8		
		4	7.66	7.41	7.91	53.6		
		5	8.04	7.80	8.30	59.2		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(4-6) Lab Sample ID: 280-97928-16

Instrument ID (1): SGC_P3 Instrument ID (2): SGC_P3

Date Analyzed (1): 06/26/2017 20:17 Date Analyzed (2): 06/26/2017 20:17

GC Column (1): CLP2 ID: 0.32(mm) GC Column (2): CLP1 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Arochlor 1260	1	1	6.37	6.12	6.62	10.0	14	8.2
		3	7.34	7.09	7.59	13.3		
		4	7.71	7.46	7.96	13.6		
		5	8.20	7.95	8.45	17.4		
	2	1	6.01	5.76	6.26	17.4	15	
		2	6.73	6.49	6.99	13.9		
		3	7.22	6.98	7.48	14.9		
		4	7.66	7.41	7.91	13.5		
		5	8.04	7.80	8.30	14.0		

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 280-377615/4-A

Instrument ID (1): SGC_P3 Instrument ID (2): SGC_P3

Date Analyzed (1): 06/26/2017 14:07 Date Analyzed (2): 06/26/2017 14:07

GC Column (1): CLP2 ID: 0.32(mm) GC Column (2): CLP1 ID: 0.32(mm)

ANALYTE	COL	PEAK	RT	RT WINDOW		CONCENTRATION		RPD
				FROM	TO	PEAK	MEAN	
Arochlor 1016	1	1	3.49	3.24	3.74	63.2	61.6	13.8
		2	3.93	3.68	4.18	62.1		
		3	4.06	3.81	4.31	60.9		
		4	4.29	4.04	4.54	59.4		
		5	4.56	4.31	4.81	62.3		
	2	1	3.48	3.23	3.73	59.8	70.7	
		2	3.95	3.70	4.20	57.4		
		3	4.09	3.84	4.34	59.5		
		4	4.16	3.90	4.40	116		
		5	4.54	4.28	4.78	60.3		
Arochlor 1260	1	1	6.37	6.12	6.62	57.4	60.3	8.3
		2	6.82	6.57	7.07	53.8		
		3	7.34	7.09	7.59	65.1		
		4	7.71	7.46	7.96	61.8		
		5	8.21	7.95	8.45	63.5		
	2	1	6.01	5.76	6.26	55.2	55.5	
		2	6.74	6.49	6.99	50.1		
		3	7.23	6.98	7.48	59.1		
		4	7.66	7.41	7.91	58.4		
		5	8.05	7.80	8.30	54.7		

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS07 | Lab Sample ID: 280-97928-1

Matrix: Solid | Lab File ID: 06261706.D

Analysis Method: 8082A | Date Collected: 06/05/2017 08:15

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.6(g) | Date Analyzed: 06/26/2017 14:29

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 13.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	16	U	36	16	5.6
11104-28-2	Arochlor 1221	19	U	51	19	17
11141-16-5	Arochlor 1232	16	U	36	16	5.6
53469-21-9	Arochlor 1242	36	U	36	36	10
12672-29-6	Arochlor 1248	22	U	36	22	6.1
11097-69-1	Arochlor 1254	19	U	36	19	6.0
11096-82-5	Arochlor 1260	8.4	U	36	8.4	2.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	81		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261706.D
Lims ID: 280-97928-C-1-J
Client ID: SS025-SS07
Sample Type: Client
Inject. Date: 26-Jun-2017 14:29:34 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-1-J
Misc. Info.: 280-0060129-006
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 26-Jun-2017 14:55:48

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.824	1.825	-0.001	362609457	1000.0	
2	1.584	1.582	0.002	416786688	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.750	2.749	0.001	65249022	16.5	
2	2.634	2.632	0.002	86225120	17.8	
					RPD = 7.57	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.482			ND	
1		3.945				
1		4.085				
1		4.149				
1		4.532				
2		3.492				
2		3.925				
2		4.062				
2		4.285				
2		4.559				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						
1		6.009			ND	
1		6.735				
1		7.225				
1		7.659				
1		8.045				
2		6.369				
2		6.822				
2		7.339				
2		7.709				
2		8.202				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.624	9.622	0.002	57498746	15.0	
2	9.857	9.859	-0.002	64366664	16.1	
					RPD = 7.02	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

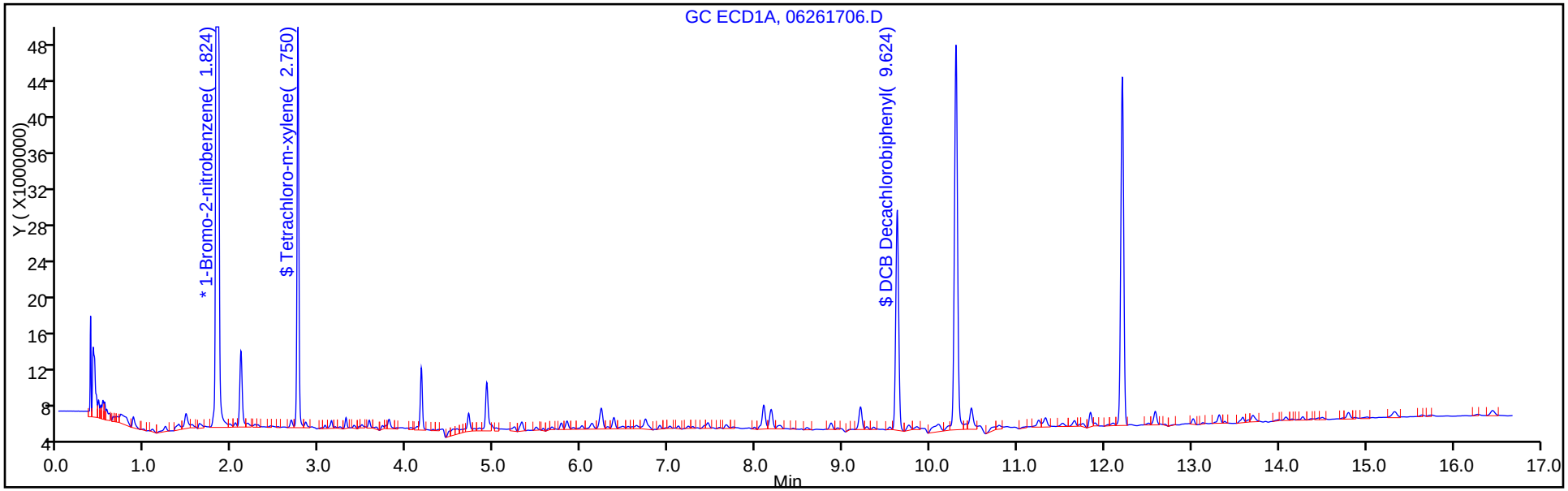
Report Date: 27-Jun-2017 10:22:16 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

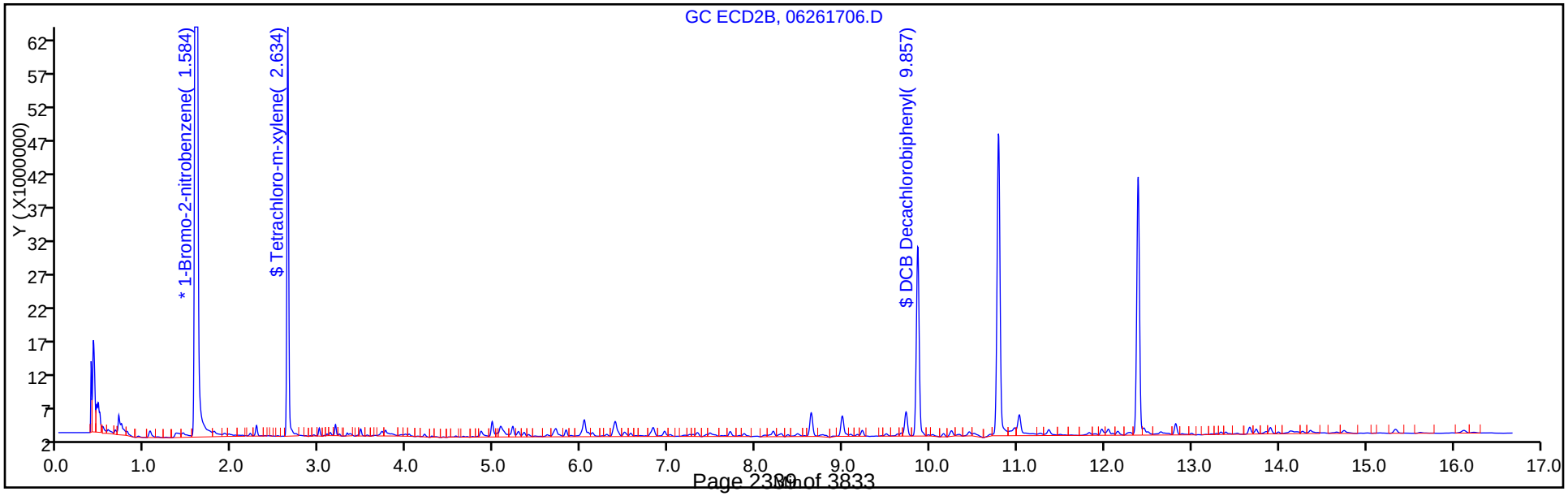
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261706.D

Injection Date:	26-Jun-2017 14:29:34	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-C-1-J	Lab Sample ID:	280-97928-1	Worklist Smp#:	6
Client ID:	SS025-SS07				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261706.D				
Lims ID:	280-97928-C-1-J				
Client ID:	SS025-SS07				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 14:29:34	ALS Bottle#:	6	Worklist Smp#:	6
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-1-J				
Misc. Info.:	280-0060129-006				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:09	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	26-Jun-2017 14:55:48		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	16.5	82.68
$ 15 DCB Decachlorobiphenyl	20.0	15.0	75.14

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.8	89.19
$ 15 DCB Decachlorobiphenyl	20.0	16.1	80.61

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(0-2) | Lab Sample ID: 280-97928-3

Matrix: Solid | Lab File ID: 06261707.D

Analysis Method: 8082A | Date Collected: 06/05/2017 08:35

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.3(g) | Date Analyzed: 06/26/2017 14:51

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 9.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	16	U	35	16	5.4
11104-28-2	Arochlor 1221	18	U	50	18	17
11141-16-5	Arochlor 1232	16	U	35	16	5.4
53469-21-9	Arochlor 1242	35	U	35	35	9.7
12672-29-6	Arochlor 1248	21	U	35	21	6.0
11097-69-1	Arochlor 1254	18	U	35	18	5.9
11096-82-5	Arochlor 1260	8.2	U	35	8.2	2.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	87		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261707.D
Lims ID: 280-97928-C-3-I
Client ID: SS025-SB06(0-2)
Sample Type: Client
Inject. Date: 26-Jun-2017 14:51:15 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-3-I
Misc. Info.: 280-0060129-007
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:18:06

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.825	1.825	0.000	370096129	1000.0	
2	1.582	1.582	0.000	424916562	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.748	2.749	-0.001	71781603	17.9	
2	2.632	2.632	0.000	92124416	18.7	
					RPD = 4.80	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.482			ND	
1		3.945				
1		4.085				
1		4.149				
1		4.532				
2		3.492				
2		3.925				
2		4.062				
2		4.285				
2		4.559				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						
1		6.009			ND	
1		6.735				
1		7.225				
1		7.659				
1		8.045				
2		6.369				
2		6.822				
2		7.339				
2		7.709				
2		8.202				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.622	9.622	0.000	62629362	16.1	
2	9.858	9.859	-0.001	70550435	17.4	
					RPD = 7.86	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

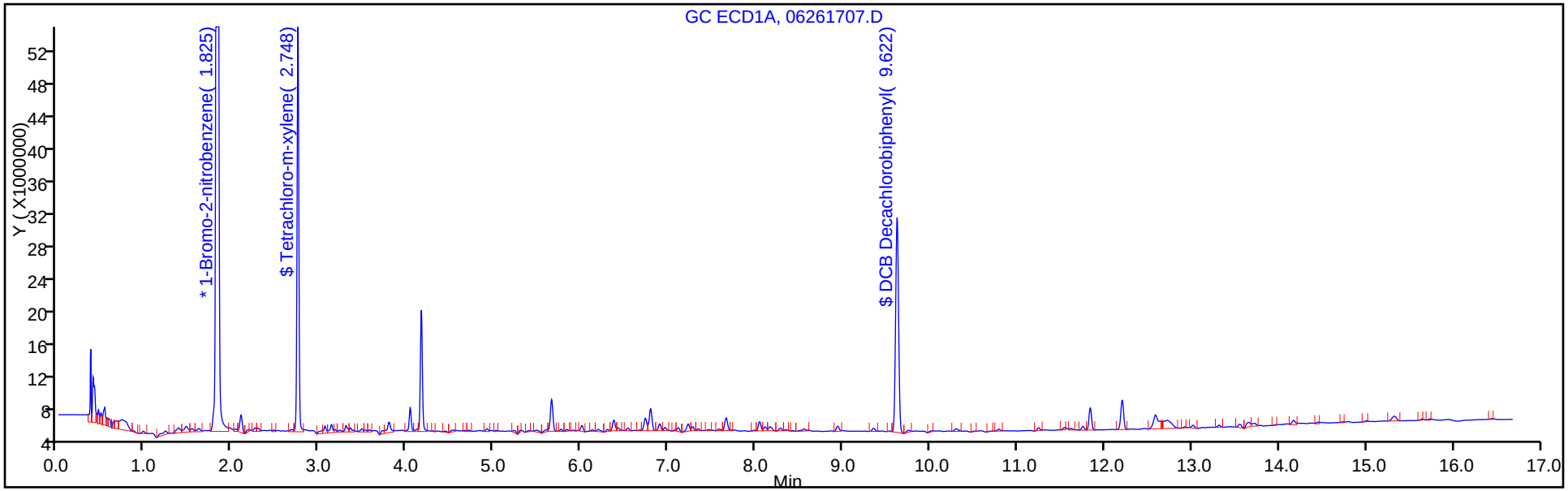
Report Date: 27-Jun-2017 10:22:18 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

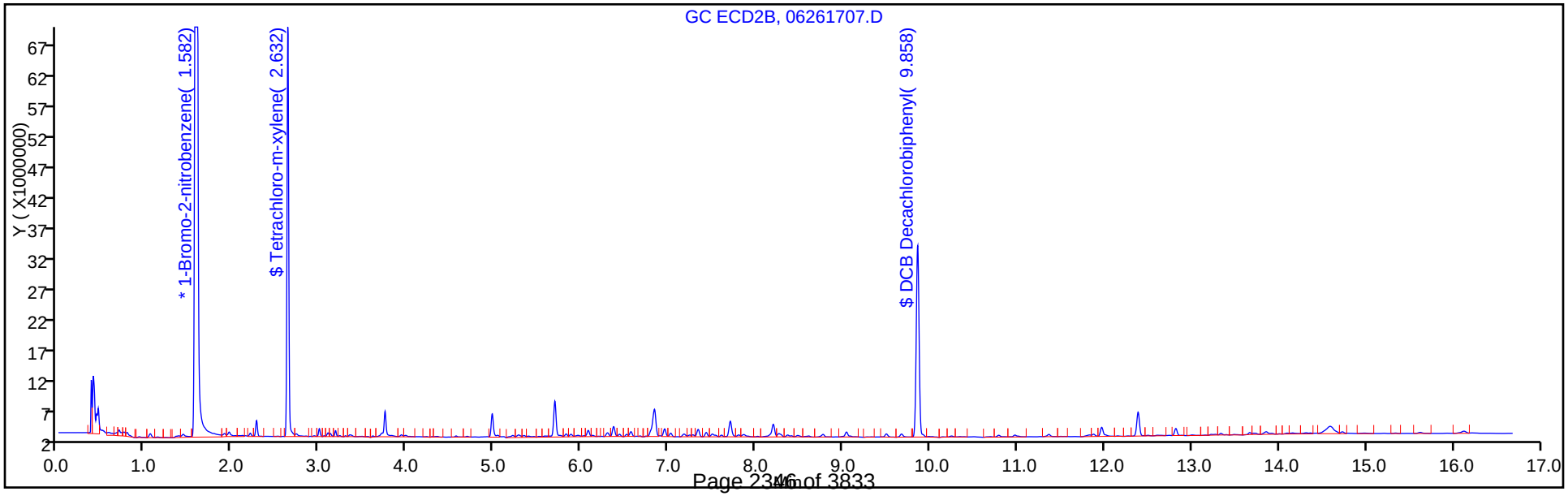
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261707.D

Injection Date:	26-Jun-2017 14:51:15	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-C-3-I	Lab Sample ID:	280-97928-3	Worklist Smp#:	7
Client ID:	SS025-SB06(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261707.D				
Lims ID:	280-97928-C-3-I				
Client ID:	SS025-SB06(0-2)				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 14:51:15	ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-3-I				
Misc. Info.:	280-0060129-007				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:09	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	27-Jun-2017 07:18:06		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.9	89.27
$ 15 DCB Decachlorobiphenyl	20.0	16.1	80.41

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	18.7	93.66
$ 15 DCB Decachlorobiphenyl	20.0	17.4	86.99

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(2-4) | Lab Sample ID: 280-97928-4

Matrix: Solid | Lab File ID: 06261708.D

Analysis Method: 8082A | Date Collected: 06/05/2017 08:50

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.7(g) | Date Analyzed: 06/26/2017 15:12

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 12.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	16	U	36	16	5.5
11104-28-2	Arochlor 1221	18	U	51	18	17
11141-16-5	Arochlor 1232	16	U	36	16	5.5
53469-21-9	Arochlor 1242	36	U	36	36	9.8
12672-29-6	Arochlor 1248	22	U	36	22	6.0
11097-69-1	Arochlor 1254	18	U	36	18	6.0
11096-82-5	Arochlor 1260	8.3	U	36	8.3	2.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	83		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261708.D
Lims ID: 280-97928-B-4-D
Client ID: SS025-SB06(2-4)
Sample Type: Client
Inject. Date: 26-Jun-2017 15:12:58 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-B-4-D
Misc. Info.: 280-0060129-008
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:18:16

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.823	1.825	-0.002	357490027	1000.0	
2	1.583	1.582	0.001	415811711	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.750	2.749	0.001	64783097	16.7	
2	2.633	2.632	0.001	87988414	18.3	
					RPD = 9.21	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.482			ND	
1		3.945				
1		4.085				
1		4.149				
1		4.532				
2		3.492				
2		3.925				
2		4.062				
2		4.285				
2		4.559				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						
1		6.009			ND	
1		6.735				
1		7.225				
1		7.659				
1		8.045				
2		6.369				
2		6.822				
2		7.339				
2		7.709				
2		8.202				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.623	9.622	0.001	60315869	16.0	
2	9.857	9.859	-0.002	65912209	16.6	
					RPD = 3.30	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

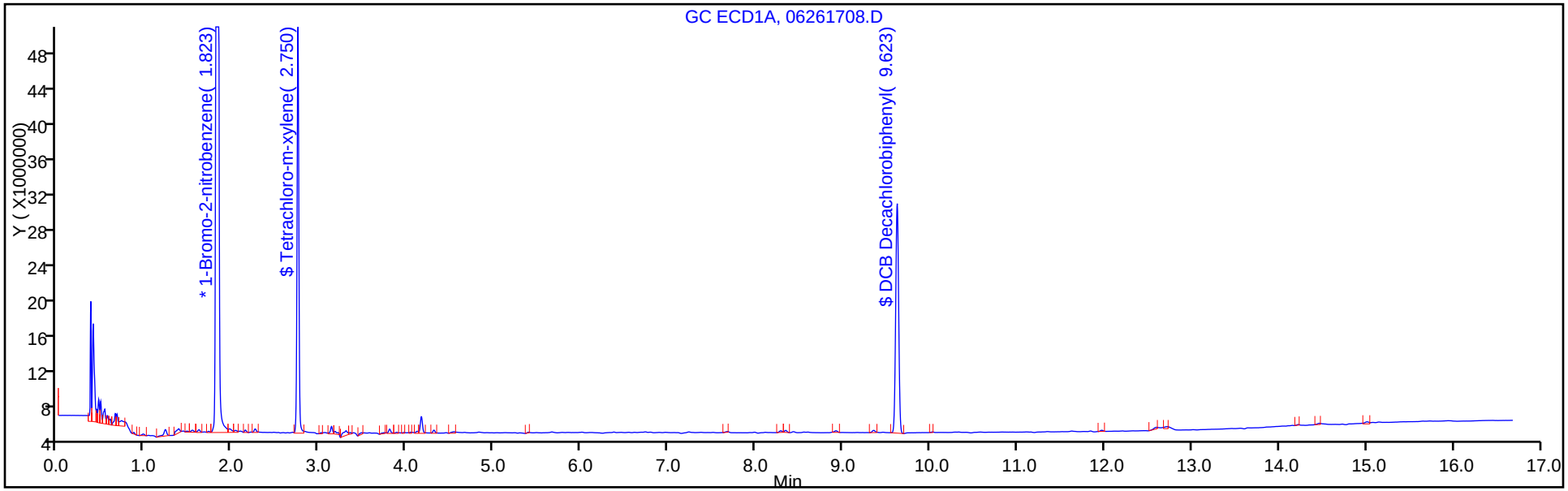
Report Date: 27-Jun-2017 10:22:20 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

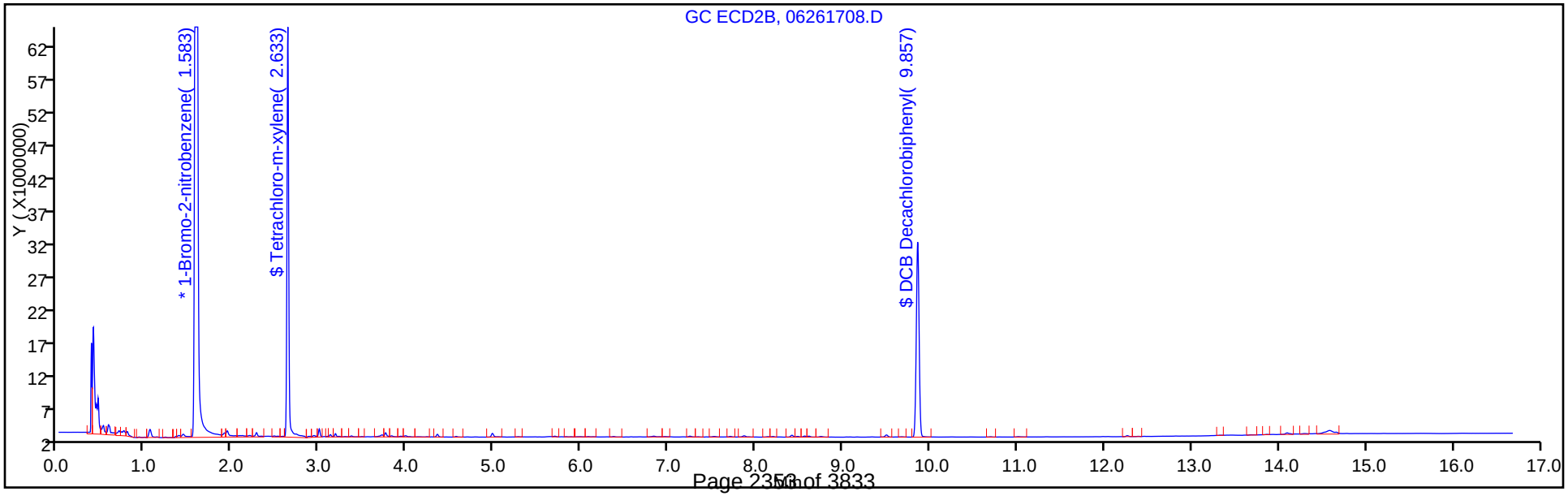
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261708.D

Injection Date:	26-Jun-2017 15:12:58	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-B-4-D	Lab Sample ID:	280-97928-4	Worklist Smp#:	8
Client ID:	SS025-SB06(2-4)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 27-Jun-2017 10:22:20 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261708.D				
Lims ID:	280-97928-B-4-D				
Client ID:	SS025-SB06(2-4)				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 15:12:58	ALS Bottle#:	8	Worklist Smp#:	8
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-B-4-D				
Misc. Info.:	280-0060129-008				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:09	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	27-Jun-2017 07:18:16		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	16.7	83.28
$ 15 DCB Decachlorobiphenyl	20.0	16.0	80.16

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	18.3	91.32
$ 15 DCB Decachlorobiphenyl	20.0	16.6	82.85

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS08 | Lab Sample ID: 280-97928-5

Matrix: Solid | Lab File ID: 06261711.D

Analysis Method: 8082A | Date Collected: 06/05/2017 09:35

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 30.5(g) | Date Analyzed: 06/26/2017 16:18

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 13.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	17	U	37	17	5.8
11104-28-2	Arochlor 1221	19	U	53	19	18
11141-16-5	Arochlor 1232	17	U	37	17	5.8
53469-21-9	Arochlor 1242	37	U	37	37	10
12672-29-6	Arochlor 1248	23	U	37	23	6.4
11097-69-1	Arochlor 1254	19	U	37	19	6.3
11096-82-5	Arochlor 1260	8.7	U	37	8.7	3.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	82		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261711.D
Lims ID: 280-97928-C-5-D
Client ID: SS025-SB08
Sample Type: Client
Inject. Date: 26-Jun-2017 16:18:14 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-5-D
Misc. Info.: 280-0060129-011
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:18:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.825	1.825	0.000	381492965	1000.0	
2	1.582	1.582	0.000	440645037	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.748	2.749	-0.001	74388908	18.0	
2	2.635	2.632	0.003	81312258	15.8	
					RPD = 12.61	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.482			ND	
1		3.945				
1		4.085				
1		4.149				
1		4.532				
2		3.492				
2		3.925				
2		4.062				
2		4.285				
2		4.559				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						
1		6.009			ND	
1		6.735				
1		7.225				
1		7.659				
1		8.045				
2		6.369				
2		6.822				
2		7.339				
2		7.709				
2		8.202				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.622	9.622	0.000	63202655	15.7	
2	9.858	9.859	-0.001	69336856	16.4	
					RPD = 4.42	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

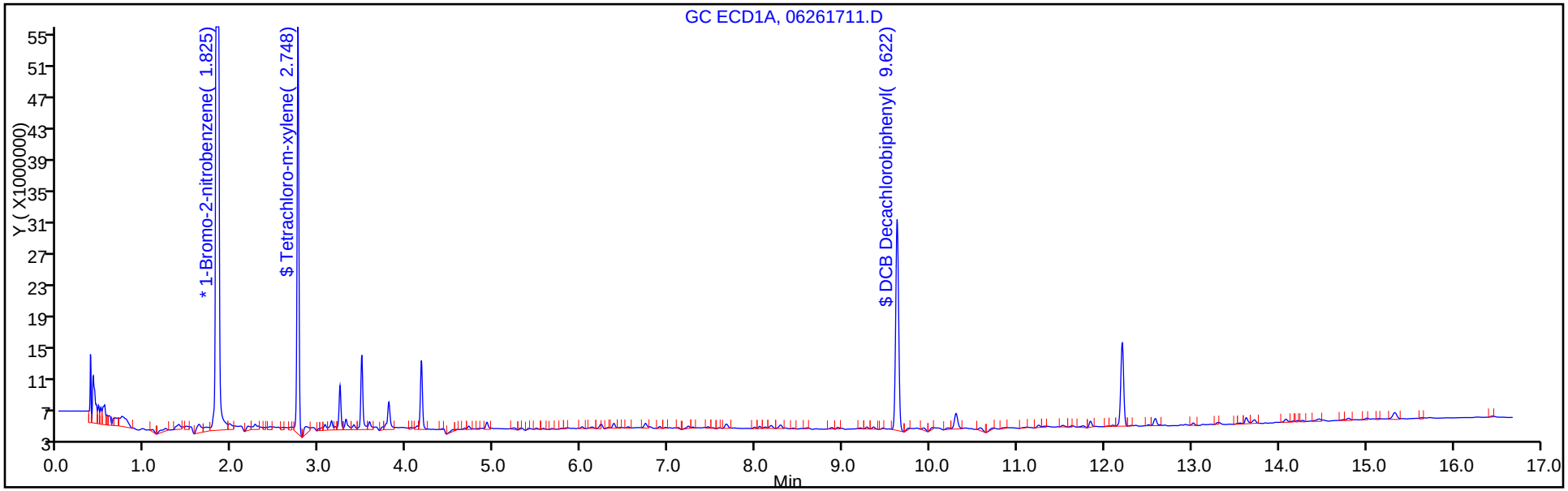
Report Date: 27-Jun-2017 10:22:26 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

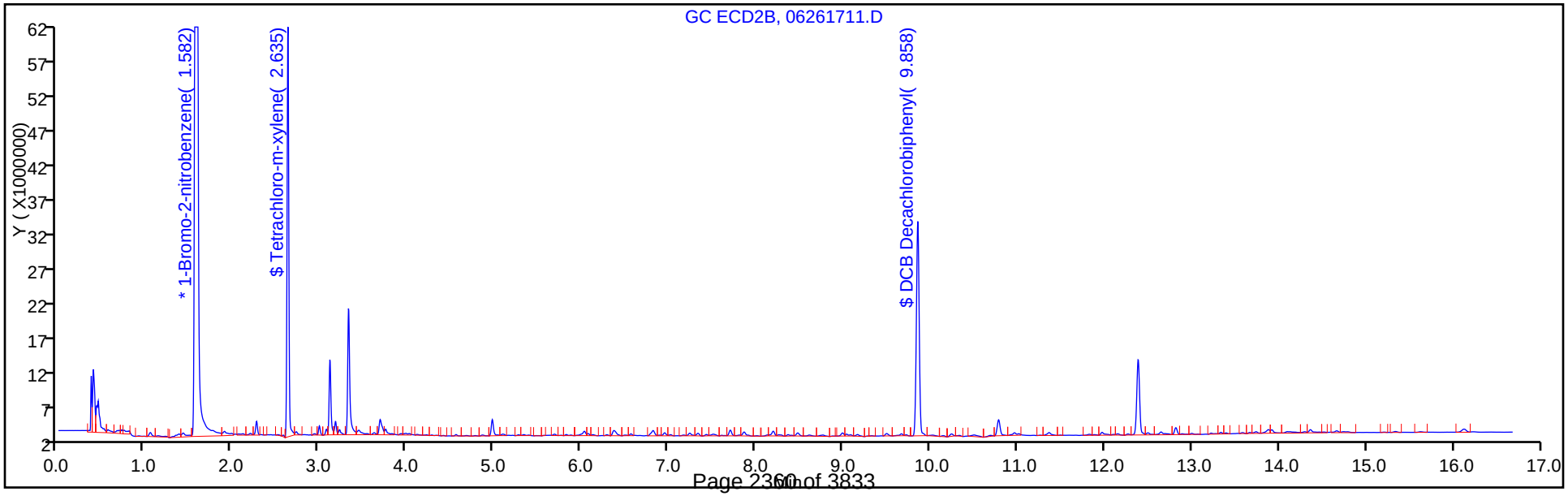
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261711.D

Injection Date:	26-Jun-2017 16:18:14	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-C-5-D	Lab Sample ID:	280-97928-5	Worklist Smp#:	11
Client ID:	SS025-SB08				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261711.D				
Lims ID:	280-97928-C-5-D				
Client ID:	SS025-SB08				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 16:18:14	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-5-D				
Misc. Info.:	280-0060129-011				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:09	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	27-Jun-2017 07:18:50		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	18.0	89.76
$ 15 DCB Decachlorobiphenyl	20.0	15.7	78.65

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	15.8	79.11
$ 15 DCB Decachlorobiphenyl	20.0	16.4	82.21

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB07(0-2) | Lab Sample ID: 280-97928-6

Matrix: Solid | Lab File ID: 06261712.D

Analysis Method: 8082A | Date Collected: 06/05/2017 09:45

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 32.7(g) | Date Analyzed: 06/26/2017 16:39

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 12.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	16	U	35	16	5.4
11104-28-2	Arochlor 1221	18	U	50	18	16
11141-16-5	Arochlor 1232	16	U	35	16	5.4
53469-21-9	Arochlor 1242	35	U	35	35	9.6
12672-29-6	Arochlor 1248	21	U	35	21	5.9
11097-69-1	Arochlor 1254	18	U	35	18	5.8
11096-82-5	Arochlor 1260	8.1	U	35	8.1	2.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	84		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261712.D
Lims ID: 280-97928-C-6-D
Client ID: SS025-SB07(0-2)
Sample Type: Client
Inject. Date: 26-Jun-2017 16:39:59 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-6-D
Misc. Info.: 280-0060129-012
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:19:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.824	1.825	-0.001	378313538	1000.0	
2	1.580	1.582	-0.002	432118708	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.750	2.749	0.001	72162576	17.6	
2	2.634	2.632	0.002	95145091	19.0	
					RPD = 8.11	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.482			ND	
1		3.945				
1		4.085				
1		4.149				
1		4.532				
2		3.492				
2		3.925				
2		4.062				
2		4.285				
2		4.559				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						
1		6.009			ND	
1		6.735				
1		7.225				
1		7.659				
1		8.045				
2		6.369				
2		6.822				
2		7.339				
2		7.709				
2		8.202				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.620	9.622	-0.002	64289600	16.2	
2	9.857	9.859	-0.002	69648999	16.9	
					RPD = 4.31	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

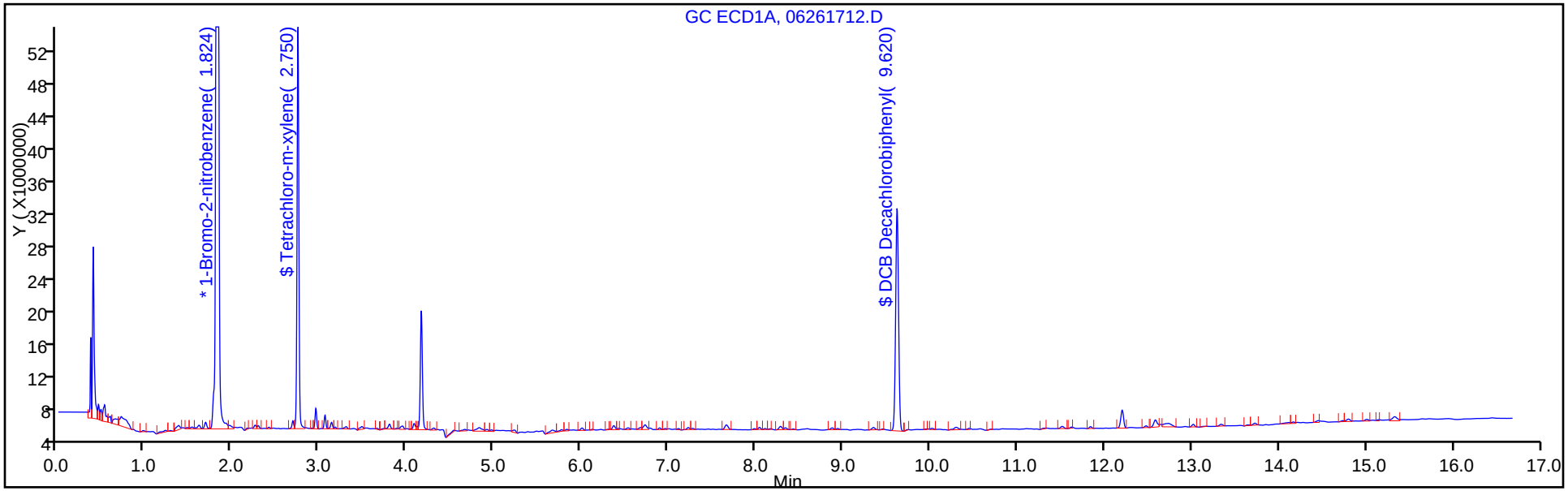
Report Date: 27-Jun-2017 10:22:28 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

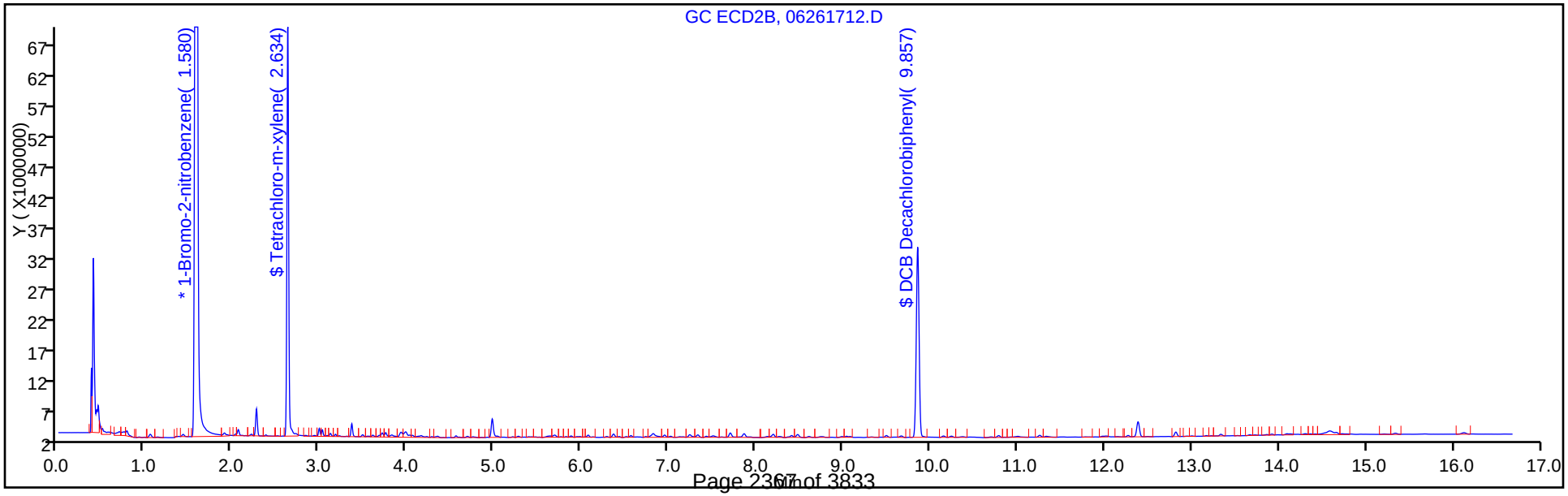
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261712.D

Injection Date:	26-Jun-2017 16:39:59	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-C-6-D	Lab Sample ID:	280-97928-6	Worklist Smp#:	12
Client ID:	SS025-SB07(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261712.D				
Lims ID:	280-97928-C-6-D				
Client ID:	SS025-SB07(0-2)				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 16:39:59	ALS Bottle#:	12	Worklist Smp#:	12
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-6-D				
Misc. Info.:	280-0060129-012				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:09	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	27-Jun-2017 07:19:01		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.6	87.77
$ 15 DCB Decachlorobiphenyl	20.0	16.2	80.76

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	19.0	95.19
$ 15 DCB Decachlorobiphenyl	20.0	16.9	84.32

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB07(2-4) | Lab Sample ID: 280-97928-7

Matrix: Solid | Lab File ID: 06261713.D

Analysis Method: 8082A | Date Collected: 06/05/2017 09:55

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 30.5(g) | Date Analyzed: 06/26/2017 17:01

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 15.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	17	U	38	17	5.9
11104-28-2	Arochlor 1221	20	U	55	20	18
11141-16-5	Arochlor 1232	17	U	38	17	5.9
53469-21-9	Arochlor 1242	38	U	38	38	11
12672-29-6	Arochlor 1248	23	U	38	23	6.5
11097-69-1	Arochlor 1254	20	U	38	20	6.4
11096-82-5	Arochlor 1260	8.9	U	38	8.9	3.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	62		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261713.D
Lims ID: 280-97928-C-7-D
Client ID: SS025-SB07(2-4)
Sample Type: Client
Inject. Date: 26-Jun-2017 17:01:42 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-7-D
Misc. Info.: 280-0060129-013
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:19:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.825	1.825	0.000	376171608	1000.0	
2	1.582	1.582	0.000	439198864	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.749	2.749	0.000	55769677	13.6	
2	2.632	2.632	0.000	75289520	14.6	
					RPD = 7.69	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.482			ND	
1		3.945				
1		4.085				
1		4.149				
1		4.532				
2		3.492				
2		3.925				
2		4.062				
2		4.285				
2		4.559				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						
1		6.009			ND	
1		6.735				
1		7.225				
1		7.659				
1		8.045				
2		6.369				
2		6.822				
2		7.339				
2		7.709				
2		8.202				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.622	9.622	0.000	47885169	11.9	
2	9.859	9.859	0.000	52613445	12.3	
					RPD = 3.10	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

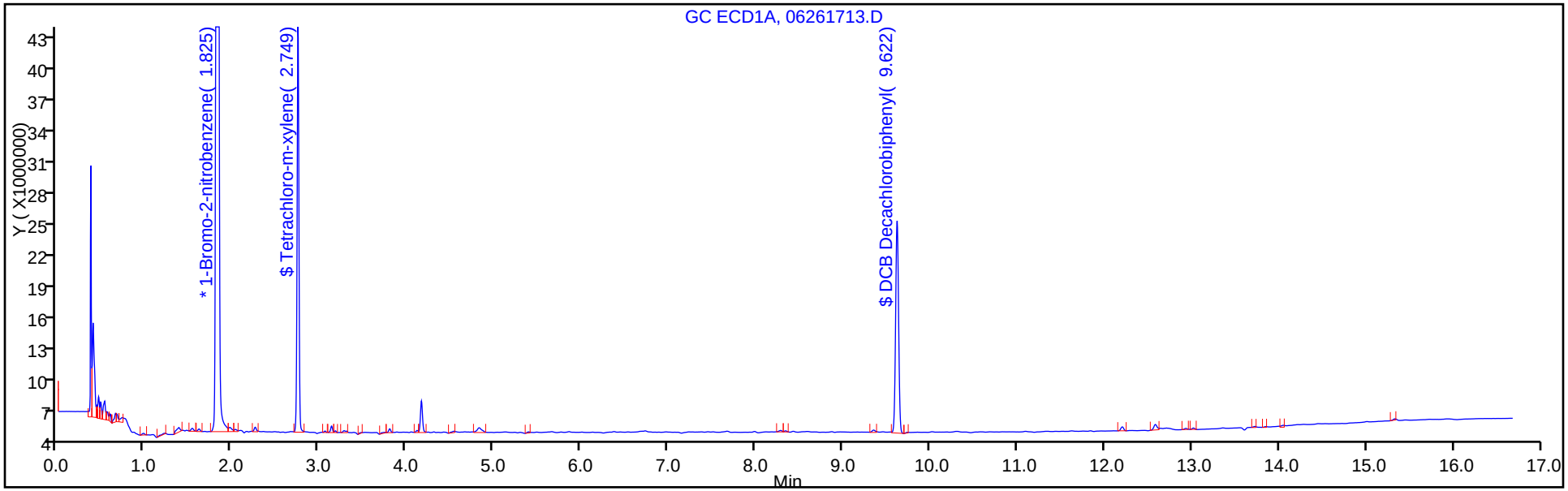
Report Date: 27-Jun-2017 10:22:30 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

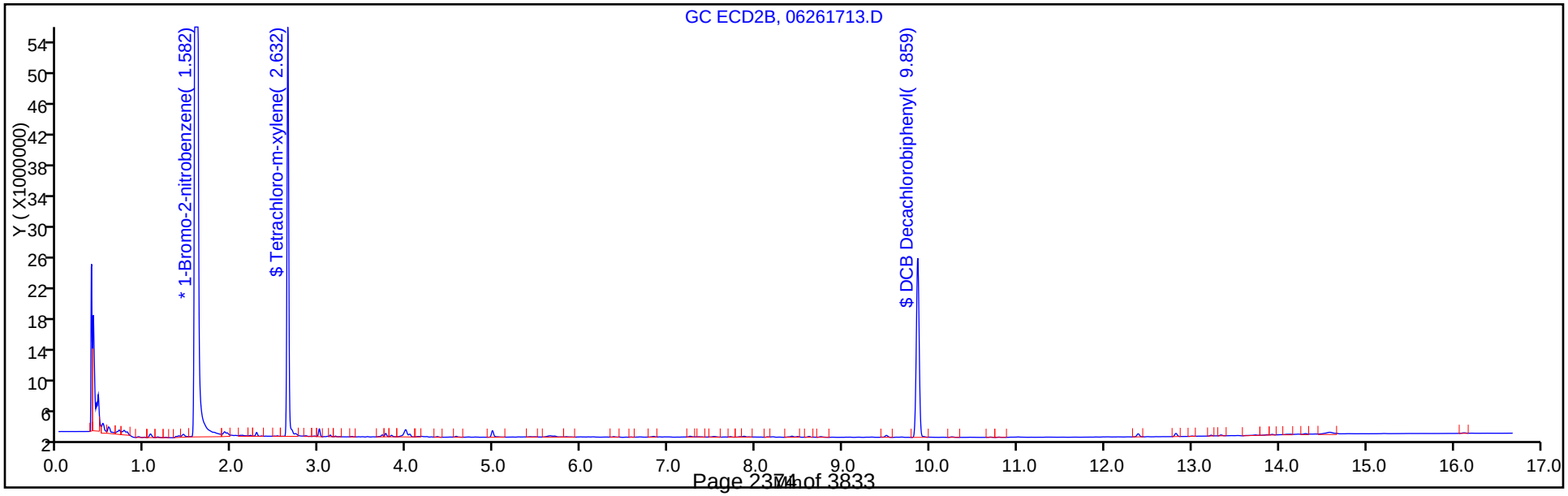
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261713.D

Injection Date:	26-Jun-2017 17:01:42	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-C-7-D	Lab Sample ID:	280-97928-7	Worklist Smp#:	13
Client ID:	SS025-SB07(2-4)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 27-Jun-2017 10:22:30 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261713.D				
Lims ID:	280-97928-C-7-D				
Client ID:	SS025-SB07(2-4)				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 17:01:42	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-7-D				
Misc. Info.:	280-0060129-013				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:09	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	27-Jun-2017 07:19:13		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	13.6	67.78
$ 15 DCB Decachlorobiphenyl	20.0	11.9	59.66

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	14.6	73.20
$ 15 DCB Decachlorobiphenyl	20.0	12.3	61.54

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB01(0-2) | Lab Sample ID: 280-97928-8

Matrix: Solid | Lab File ID: 06261714.D

Analysis Method: 8082A | Date Collected: 06/05/2017 10:20

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.3(g) | Date Analyzed: 06/26/2017 17:23

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 11.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	16	U	36	16	5.5
11104-28-2	Arochlor 1221	18	U	51	18	17
11141-16-5	Arochlor 1232	16	U	36	16	5.6
53469-21-9	Arochlor 1242	36	U	36	36	9.9
12672-29-6	Arochlor 1248	22	U	36	22	6.1
11097-69-1	Arochlor 1254	18	U	36	18	6.0
11096-82-5	Arochlor 1260	17	J	36	8.4	2.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	74		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261714.D
Lims ID: 280-97928-C-8-D
Client ID: SS025-SB01(0-2)
Sample Type: Client
Inject. Date: 26-Jun-2017 17:23:28 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-8-D
Misc. Info.: 280-0060129-014
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:20:05

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.826	1.825	0.001	394944064	1000.0	
2	1.582	1.582	0.000	426754007	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.749	2.749	0.000	58532404	13.6	
2	2.632	2.632	0.000	77303264	15.5	
					RPD = 13.52	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.482			ND	
1		3.945				
1		4.085				
1		4.149				
1		4.532				
2		3.492				
2		3.925				
2		4.062				
2		4.285				
2		4.559				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						M
1	6.006	6.009	-0.003	7069743	22.9	M
1	6.732	6.735	-0.003	18385782	38.8	M
1	7.226	7.225	0.001	9977720	45.1	M
1	7.659	7.659	0.000	11830933	23.2	M
1	8.046	8.045	0.001	11752376	42.8	M
		Average of Peak Amounts =			34.6	
2	6.369	6.369	0.000	10304955	20.9	
2	0.000	6.822	0.000	0	0	
2	7.339	7.339	0.000	9329818	33.2	
2	7.709	7.709	0.000	20005922	34.0	
2	8.202	8.202	0.000	35474935	100.5	
		Average of Peak Amounts =			47.2	
					RPD = 30.82	
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						M
1	9.616	9.622	-0.006	167623080	41.3	M
2	9.859	9.859	0.000	60498266	14.7	
					RPD = 94.94	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total						
1					34.6	
2					47.2	
					RPD = 30.82	
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

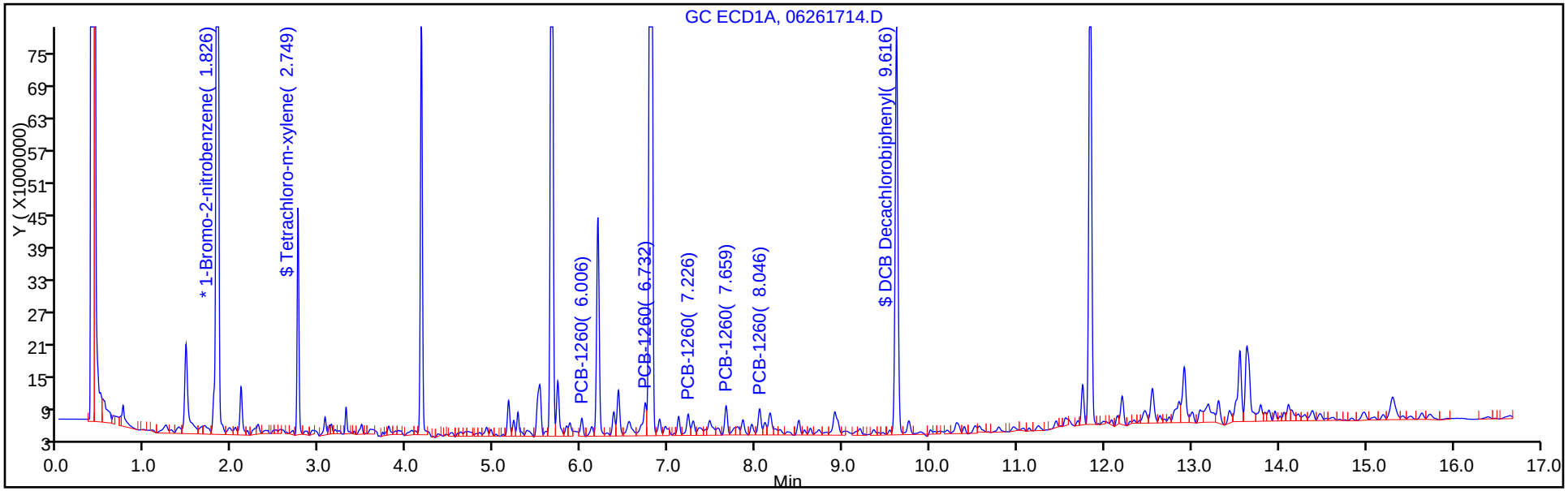
Report Date: 27-Jun-2017 10:22:32 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

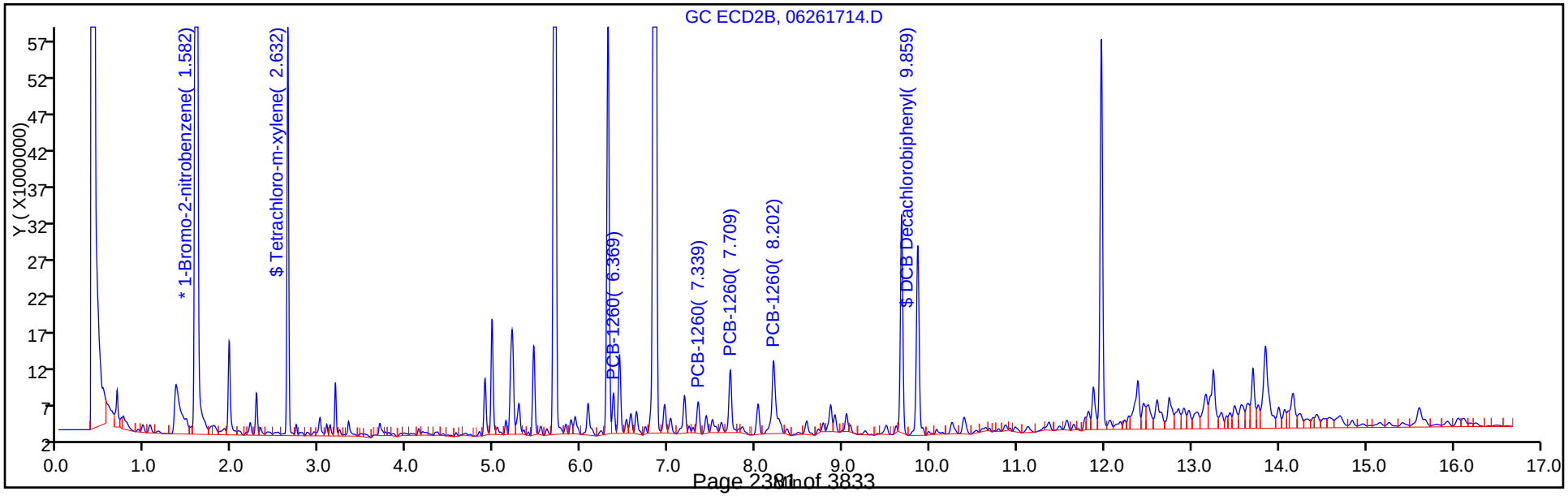
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261714.D

Injection Date:	26-Jun-2017 17:23:28	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-C-8-D	Lab Sample ID:	280-97928-8	Worklist Smp#:	14
Client ID:	SS025-SB01(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261714.D				
Lims ID:	280-97928-C-8-D				
Client ID:	SS025-SB01(0-2)				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 17:23:28	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-8-D				
Misc. Info.:	280-0060129-014				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:09	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	27-Jun-2017 07:20:05		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	13.6	67.76
$ 15 DCB Decachlorobiphenyl	20.0	41.3	206.70

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	15.5	77.58
$ 15 DCB Decachlorobiphenyl	20.0	14.7	73.63

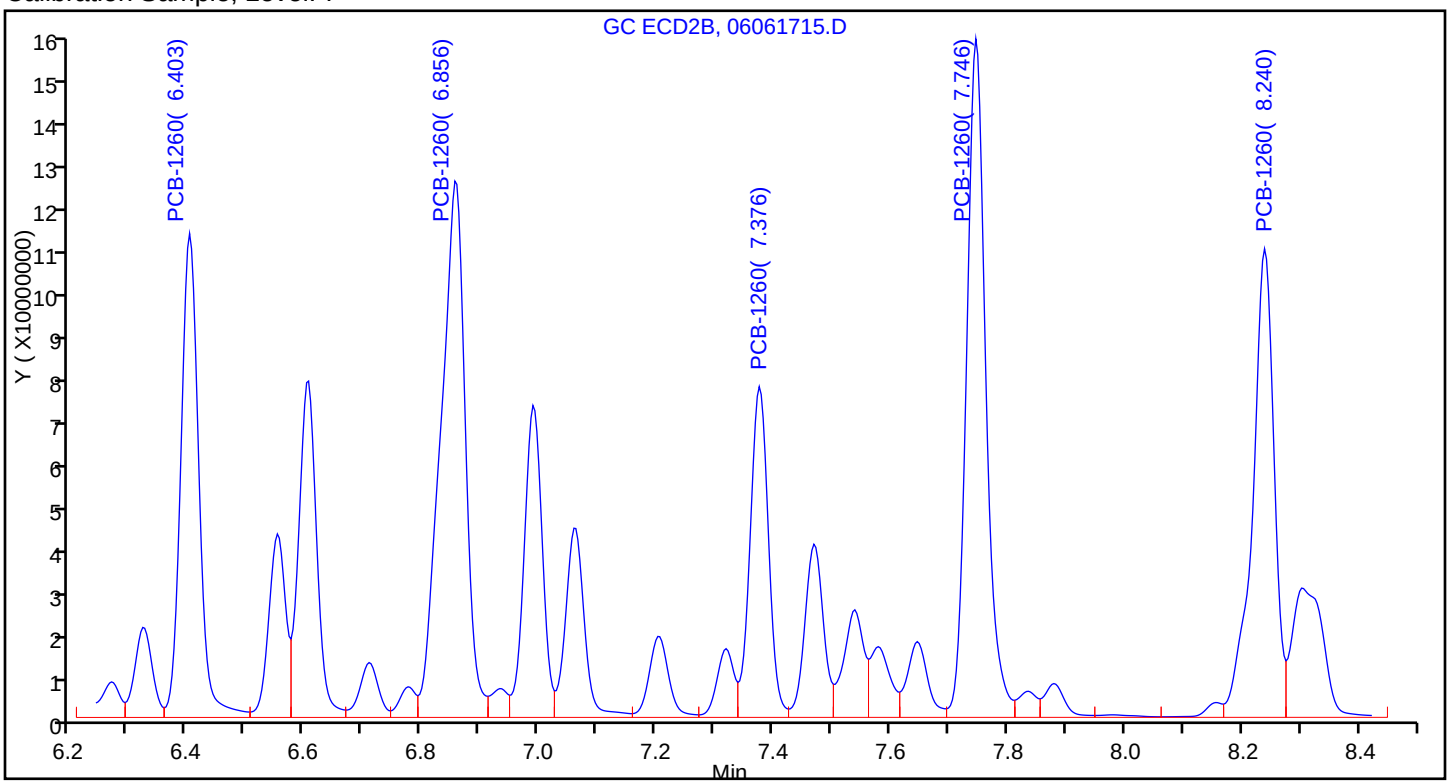
Report Date: 27-Jun-2017 10:22:32 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

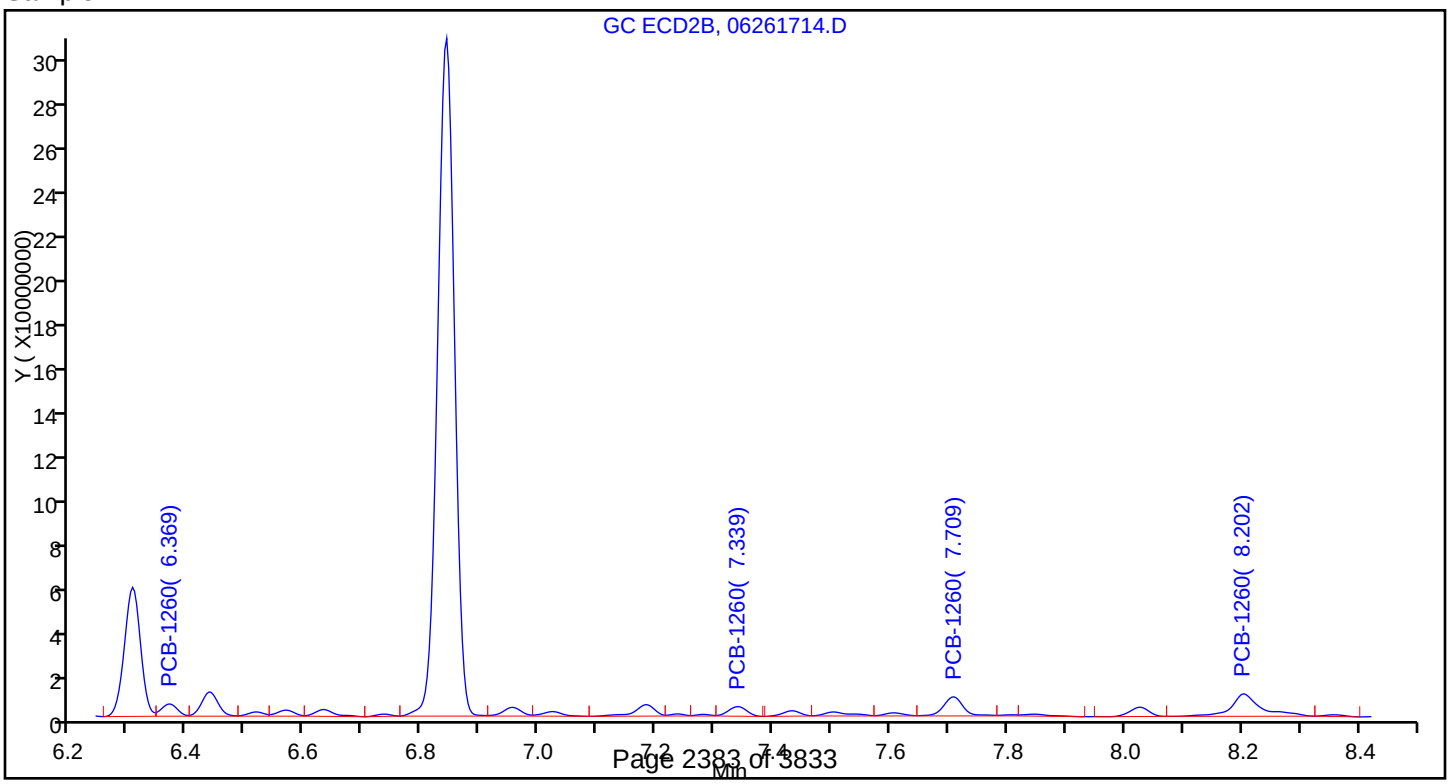
Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261714.D				
Injection Date:	26-Jun-2017 17:23:28	Instrument ID:	SGC_P3		
Lims ID:	280-97928-C-8-D	Lab Sample ID:	280-97928-8		
Client ID:	SS025-SB01(0-2)				
Operator ID:	jax	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

12 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB01(0-2)-a | Lab Sample ID: 280-97928-9

Matrix: Solid | Lab File ID: 06261715.D

Analysis Method: 8082A | Date Collected: 06/05/2017 10:20

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 30.2(g) | Date Analyzed: 06/26/2017 17:45

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 11.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	17	U	37	17	5.7
11104-28-2	Arochlor 1221	19	U	52	19	17
11141-16-5	Arochlor 1232	17	U	37	17	5.7
53469-21-9	Arochlor 1242	37	U	37	37	10
12672-29-6	Arochlor 1248	22	U	37	22	6.3
11097-69-1	Arochlor 1254	19	U	37	19	6.2
11096-82-5	Arochlor 1260	8.6	U	37	8.6	3.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	76		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261715.D
Lims ID: 280-97928-B-9-D
Client ID: SS025-SB01(0-2)-a
Sample Type: Client
Inject. Date: 26-Jun-2017 17:45:14 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-B-9-D
Misc. Info.: 280-0060129-015
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:20:54

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.825	1.825	0.000	402303244	1000.0	
2	1.585	1.582	0.003	442946501	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.748	2.749	-0.001	68712264	15.7	
2	2.635	2.632	0.003	88569086	17.2	
					RPD = 9.34	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.482			ND	
1		3.945				
1		4.085				
1		4.149				
1		4.532				
2		3.492				
2		3.925				
2		4.062				
2		4.285				
2		4.559				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						
1		6.009			ND	
1		6.735				
1		7.225				
1		7.659				
1		8.045				
2		6.369				
2		6.822				
2		7.339				
2		7.709				
2		8.202				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.618	9.622	-0.004	60719960	14.3	
2	9.858	9.859	-0.001	64788459	15.2	
					RPD = 6.45	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

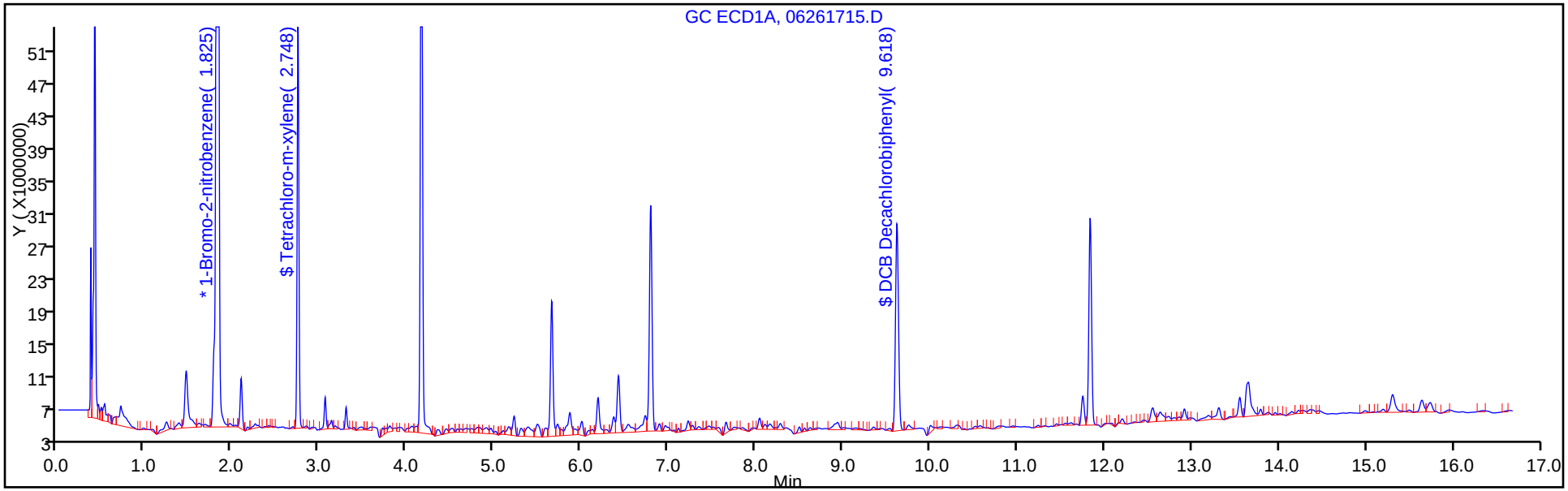
Report Date: 27-Jun-2017 10:22:34 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

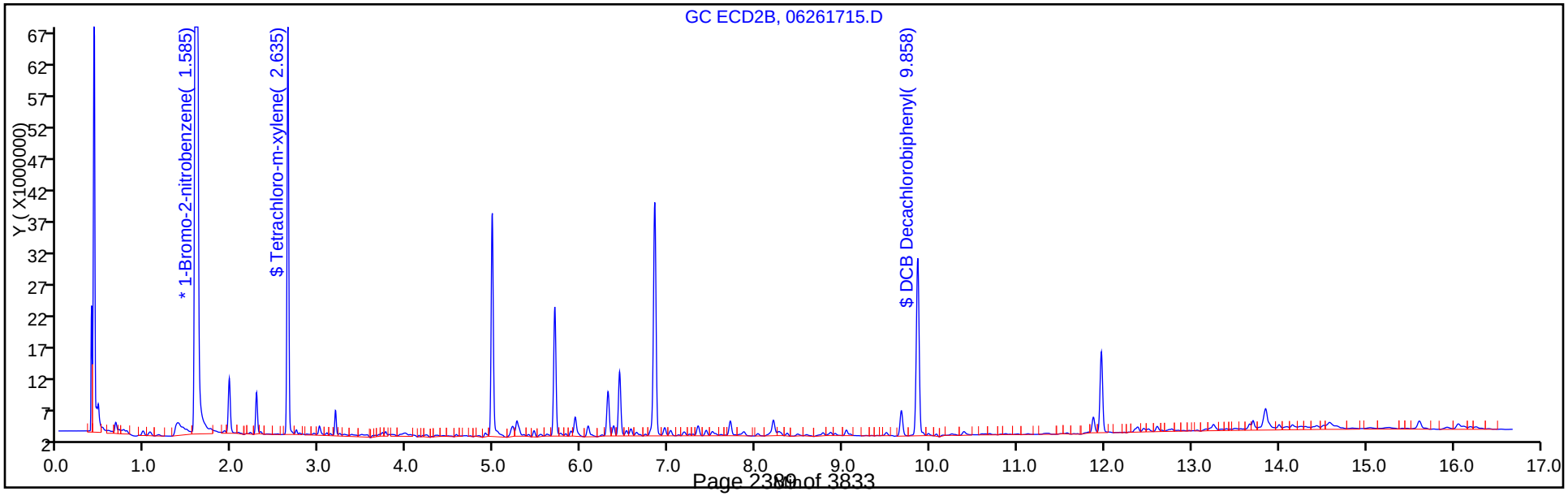
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261715.D

Injection Date:	26-Jun-2017 17:45:14	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-B-9-D	Lab Sample ID:	280-97928-9	Worklist Smp#:	15
Client ID:	SS025-SB01(0-2)-a				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261715.D				
Lims ID:	280-97928-B-9-D				
Client ID:	SS025-SB01(0-2)-a				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 17:45:14	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-B-9-D				
Misc. Info.:	280-0060129-015				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:09	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	27-Jun-2017 07:20:54		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	15.7	78.38
$ 15 DCB Decachlorobiphenyl	20.0	14.3	71.36

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.2	86.07
$ 15 DCB Decachlorobiphenyl	20.0	15.2	76.11

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB08(0-2) | Lab Sample ID: 280-97928-10

Matrix: Solid | Lab File ID: 06261716.D

Analysis Method: 8082A | Date Collected: 06/05/2017 11:05

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.4(g) | Date Analyzed: 06/26/2017 18:06

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 10.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	16	U	35	16	5.4
11104-28-2	Arochlor 1221	18	U	50	18	17
11141-16-5	Arochlor 1232	16	U	35	16	5.4
53469-21-9	Arochlor 1242	35	U	35	35	9.7
12672-29-6	Arochlor 1248	21	U	35	21	6.0
11097-69-1	Arochlor 1254	18	U	35	18	5.9
11096-82-5	Arochlor 1260	8.2	U	35	8.2	2.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	84		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261716.D
Lims ID: 280-97928-A-10-D
Client ID: SS025-SB08(0-2)
Sample Type: Client
Inject. Date: 26-Jun-2017 18:06:57 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-A-10-D
Misc. Info.: 280-0060129-016
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:21:04

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.824	1.825	-0.001	382003247	1000.0	
2	1.584	1.582	0.002	438486874	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.750	2.749	0.001	74267593	17.9	
2	2.634	2.632	0.002	96097104	18.9	
					RPD = 5.68	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.482			ND	
1		3.945				
1		4.085				
1		4.149				
1		4.532				
2		3.492				
2		3.925				
2		4.062				
2		4.285				
2		4.559				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						
1		6.009			ND	
1		6.735				
1		7.225				
1		7.659				
1		8.045				
2		6.369				
2		6.822				
2		7.339				
2		7.709				
2		8.202				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.620	9.622	-0.002	64676607	16.1	
2	9.857	9.859	-0.002	70515252	16.8	
					RPD = 4.45	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

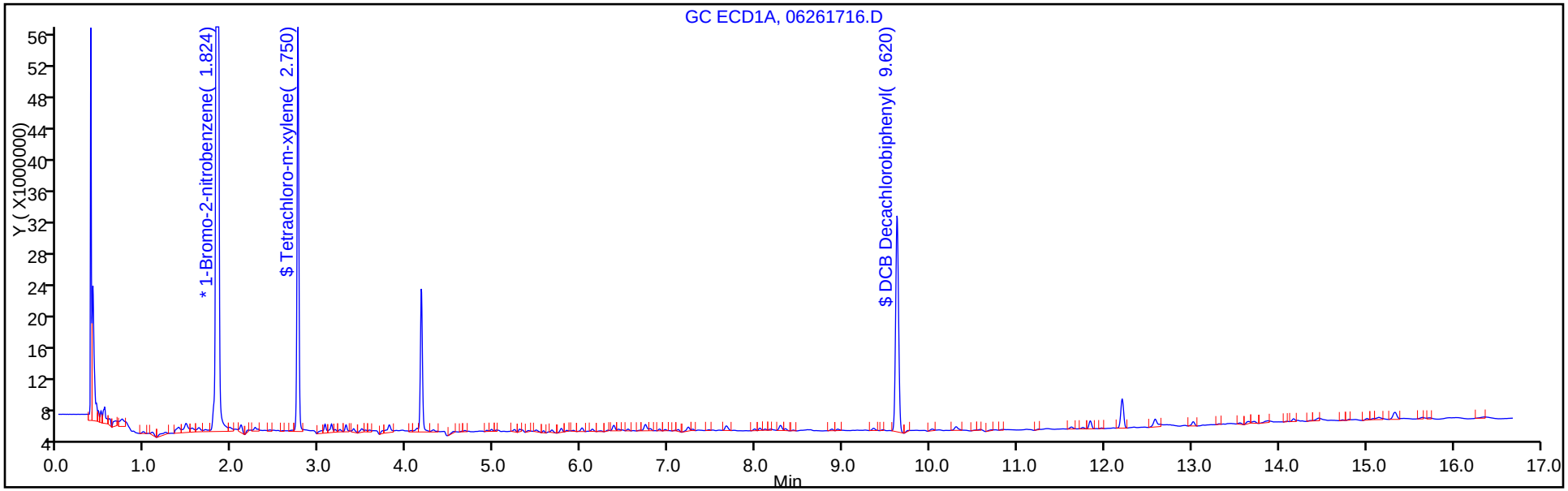
Report Date: 27-Jun-2017 10:22:36 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

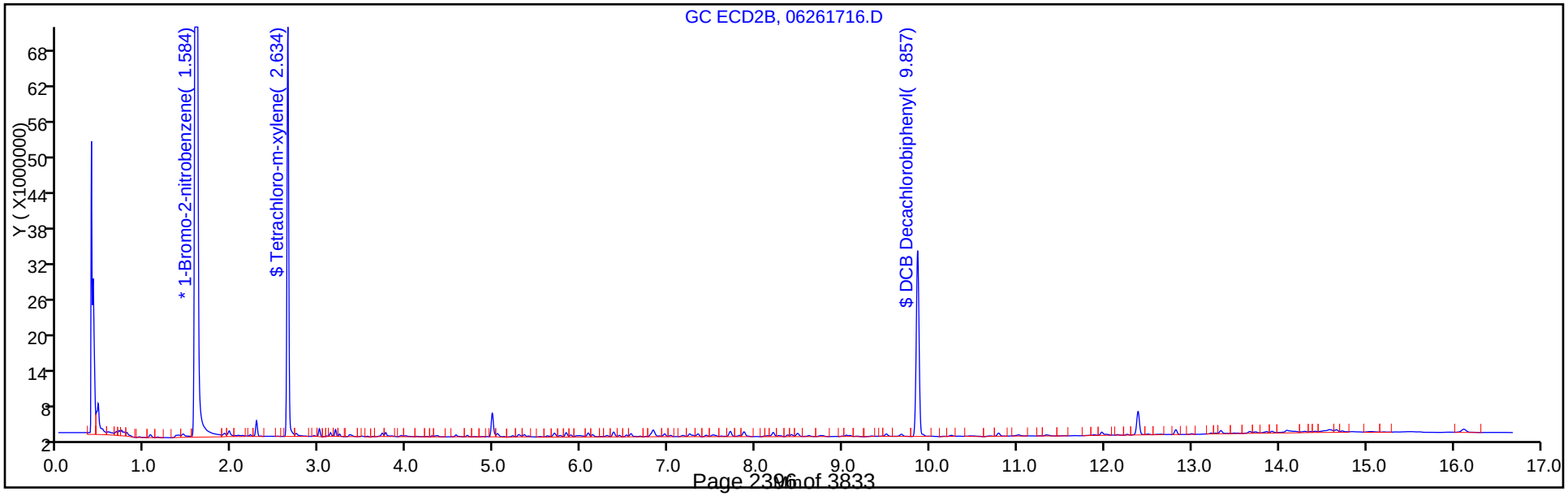
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261716.D

Injection Date:	26-Jun-2017 18:06:57	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-A-10-D	Lab Sample ID:	280-97928-10	Worklist Smp#:	16
Client ID:	SS025-SB08(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261716.D				
Lims ID:	280-97928-A-10-D				
Client ID:	SS025-SB08(0-2)				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 18:06:57	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-A-10-D				
Misc. Info.:	280-0060129-016				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:09	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	27-Jun-2017 07:21:04		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.9	89.49
$ 15 DCB Decachlorobiphenyl	20.0	16.1	80.45

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	18.9	94.72
$ 15 DCB Decachlorobiphenyl	20.0	16.8	84.12

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB08(2-4) | Lab Sample ID: 280-97928-11

Matrix: Solid | Lab File ID: 06261717.D

Analysis Method: 8082A | Date Collected: 06/05/2017 11:15

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 32.1(g) | Date Analyzed: 06/26/2017 18:28

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 13.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	16	U	36	16	5.5
11104-28-2	Arochlor 1221	18	U	51	18	17
11141-16-5	Arochlor 1232	16	U	36	16	5.5
53469-21-9	Arochlor 1242	36	U	36	36	9.9
12672-29-6	Arochlor 1248	22	U	36	22	6.1
11097-69-1	Arochlor 1254	18	U	36	18	6.0
11096-82-5	Arochlor 1260	8.3	U	36	8.3	2.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	82		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261717.D
Lims ID: 280-97928-A-11-D
Client ID: SS025-SB08(2-4)
Sample Type: Client
Inject. Date: 26-Jun-2017 18:28:42 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-A-11-D
Misc. Info.: 280-0060129-017
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:21:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.826	1.825	0.001	393261843	1000.0	
2	1.583	1.582	0.001	445088590	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.749	2.749	0.000	68858485	16.1	
2	2.633	2.632	0.001	97277627	18.9	
					RPD = 16.07	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.482			ND	
1		3.945				
1		4.085				
1		4.149				
1		4.532				
2		3.492				
2		3.925				
2		4.062				
2		4.285				
2		4.559				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						
1		6.009			ND	
1		6.735				
1		7.225				
1		7.659				
1		8.045				
2		6.369				
2		6.822				
2		7.339				
2		7.709				
2		8.202				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.623	9.622	0.001	63378773	15.3	
2	9.856	9.859	-0.003	69501817	16.3	
					RPD = 6.50	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

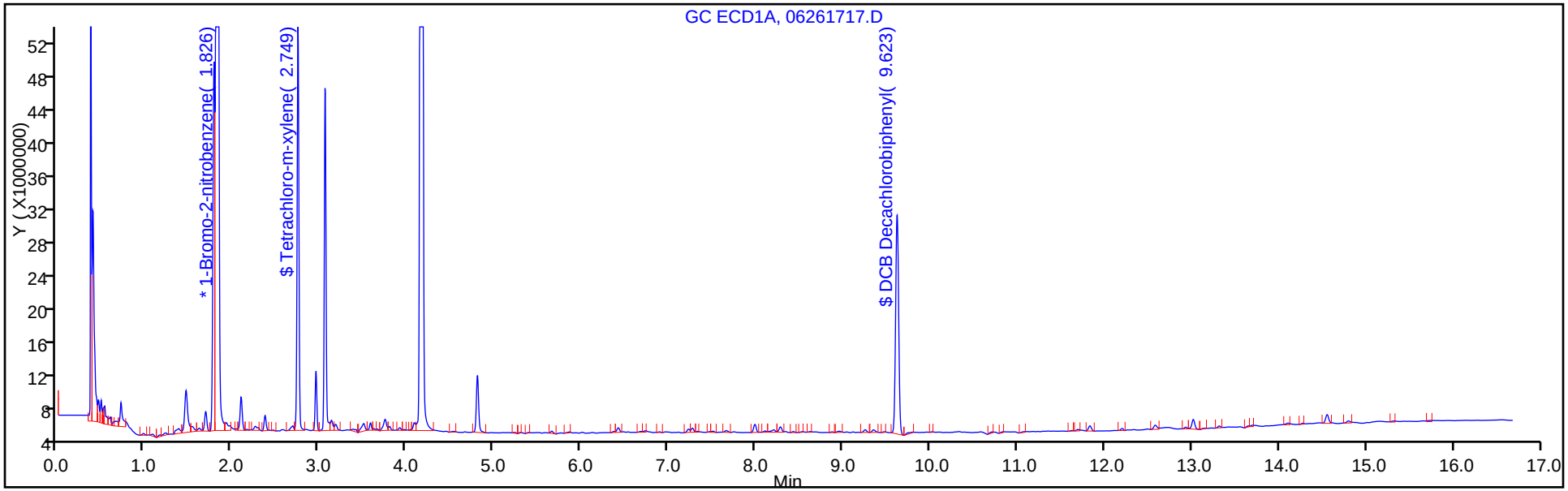
Report Date: 27-Jun-2017 10:22:38 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

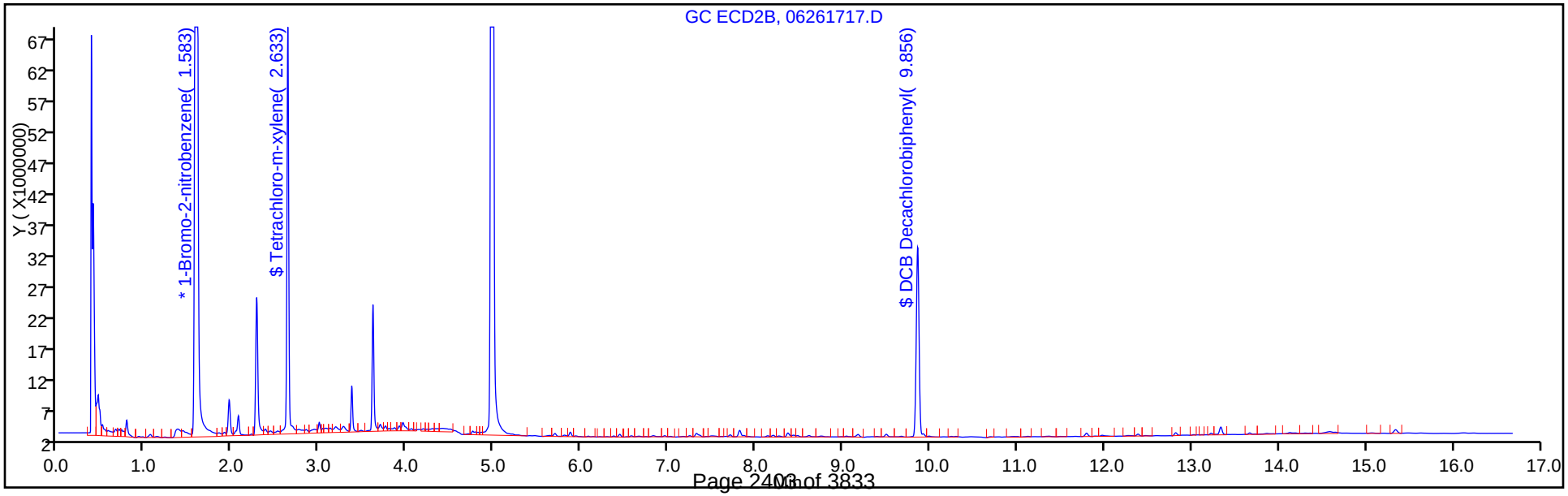
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261717.D

Injection Date:	26-Jun-2017 18:28:42	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-A-11-D	Lab Sample ID:	280-97928-11	Worklist Smp#:	17
Client ID:	SS025-SB08(2-4)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261717.D				
Lims ID:	280-97928-A-11-D				
Client ID:	SS025-SB08(2-4)				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 18:28:42	ALS Bottle#:	17	Worklist Smp#:	17
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-A-11-D				
Misc. Info.:	280-0060129-017				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:09	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	27-Jun-2017 07:21:14		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	16.1	80.40
$ 15 DCB Decachlorobiphenyl	20.0	15.3	76.42

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	18.9	94.45
$ 15 DCB Decachlorobiphenyl	20.0	16.3	81.55

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS09 | Lab Sample ID: 280-97928-12

Matrix: Solid | Lab File ID: 06261719.D

Analysis Method: 8082A | Date Collected: 06/05/2017 11:35

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.8(g) | Date Analyzed: 06/26/2017 19:12

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 11.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	16	U	35	16	5.4
11104-28-2	Arochlor 1221	18	U	50	18	17
11141-16-5	Arochlor 1232	16	U	35	16	5.5
53469-21-9	Arochlor 1242	35	U	35	35	9.8
12672-29-6	Arochlor 1248	21	U	35	21	6.0
11097-69-1	Arochlor 1254	18	U	35	18	5.9
11096-82-5	Arochlor 1260	95		35	8.2	2.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	72		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261719.D
Lims ID: 280-97928-B-12-D
Client ID: SS025-SS09
Sample Type: Client
Inject. Date: 26-Jun-2017 19:12:05 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-B-12-D
Misc. Info.: 280-0060129-019
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:39 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:21:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.825	1.825	0.000	391663480	1000.0	
2	1.582	1.582	0.000	440902525	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.748	2.749	-0.001	71385422	16.8	
2	2.635	2.632	0.003	81381743	15.8	
					RPD = 5.70	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.482			ND	
1		3.945				
1		4.085				
1		4.149				
1		4.532				
2		3.492				
2		3.925				
2		4.062				
2		4.285				
2		4.559				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						
1	6.005	6.009	-0.004	40360249	195.0	
1	6.732	6.735	-0.003	100269020	252.6	
1	7.225	7.225	0.000	45063273	243.3	
1	7.658	7.659	-0.001	97310389	239.9	
1	8.042	8.045	-0.003	67941535	291.0	
		Average of Peak Amounts =			244.4	
2	6.368	6.369	-0.001	69950327	235.7	
2	6.822	6.822	0.000	117820144	265.6	
2	7.338	7.339	-0.001	51307306	252.0	
2	7.705	7.709	-0.004	115627463	265.6	
2	8.202	8.202	0.000	102163874	307.9	
		Average of Peak Amounts =			265.4	
					RPD = 8.24	
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.622	9.622	0.000	53697691	12.9	
2	9.858	9.859	-0.001	61106213	14.4	
					RPD = 10.81	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total						
1					244.4	
2					265.4	
					RPD = 8.24	
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

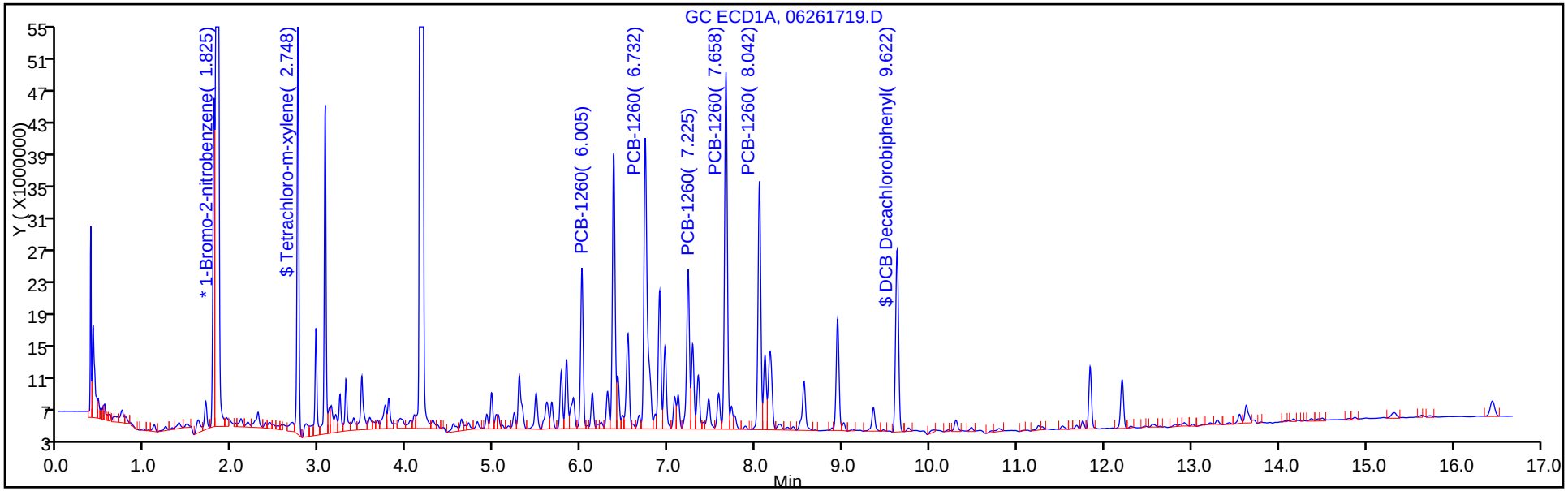
Report Date: 27-Jun-2017 10:22:43 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

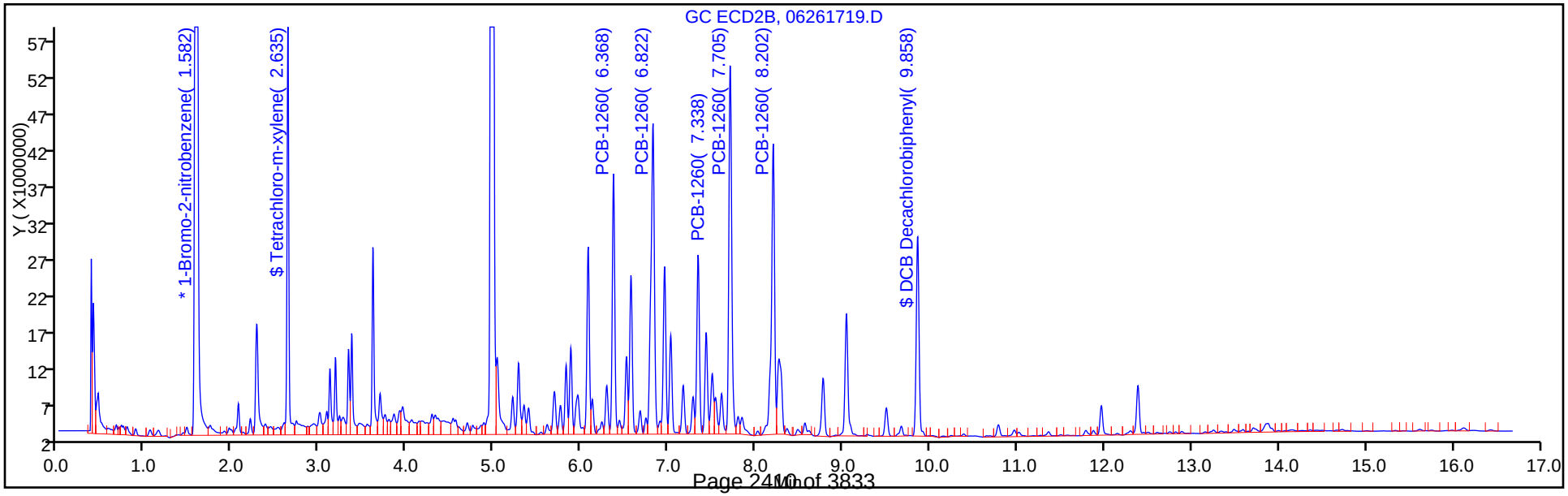
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261719.D

Injection Date:	26-Jun-2017 19:12:05	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-B-12-D	Lab Sample ID:	280-97928-12	Worklist Smp#:	19
Client ID:	SS025-SS09				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261719.D				
Lims ID:	280-97928-B-12-D				
Client ID:	SS025-SS09				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 19:12:05	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-B-12-D				
Misc. Info.:	280-0060129-019				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:39	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	27-Jun-2017 07:21:39		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	16.8	83.77
$ 15 DCB Decachlorobiphenyl	20.0	12.9	64.51

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	15.8	79.13
$ 15 DCB Decachlorobiphenyl	20.0	14.4	71.89

Report Date: 27-Jun-2017 10:22:44 Chrom Revision: 2.2 20-Jun-2017 07:42:38

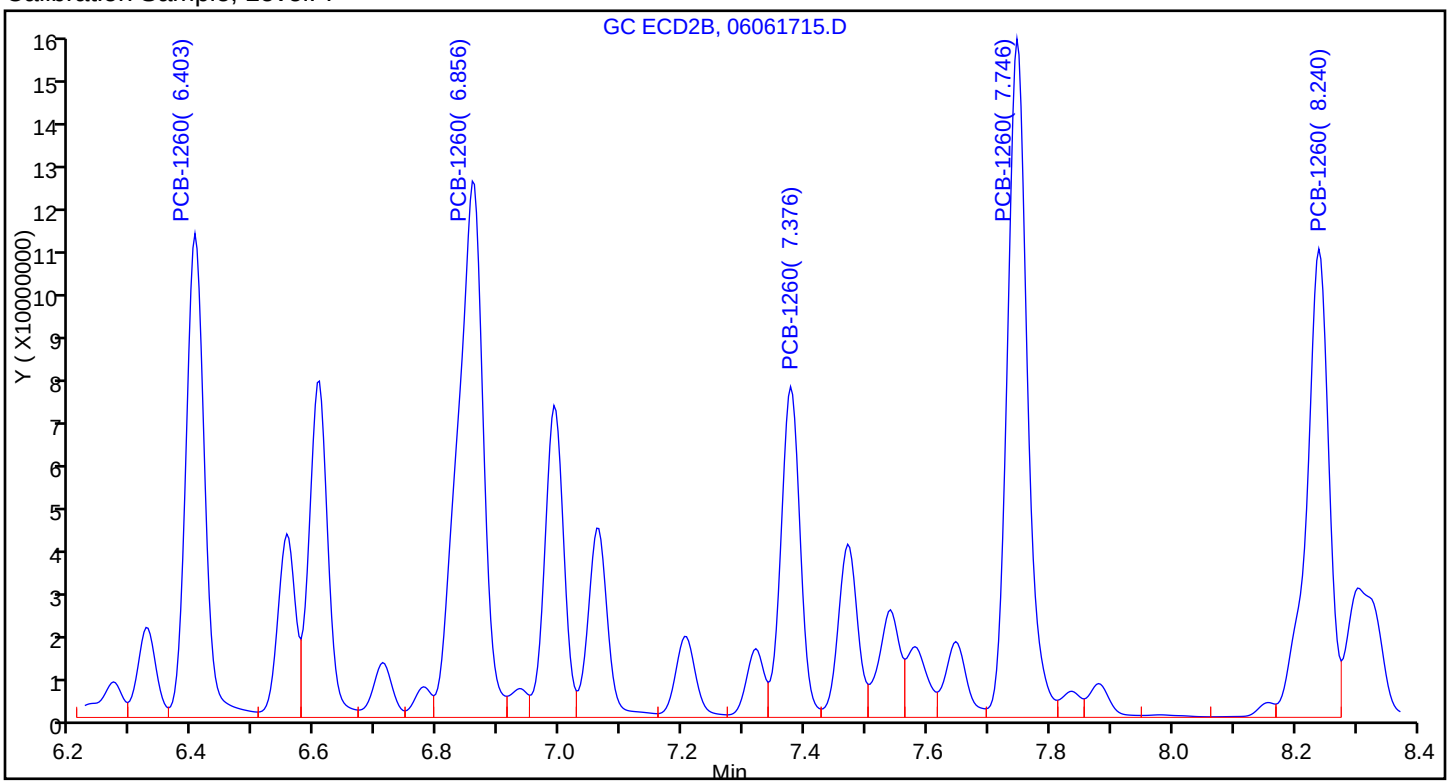
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261719.D

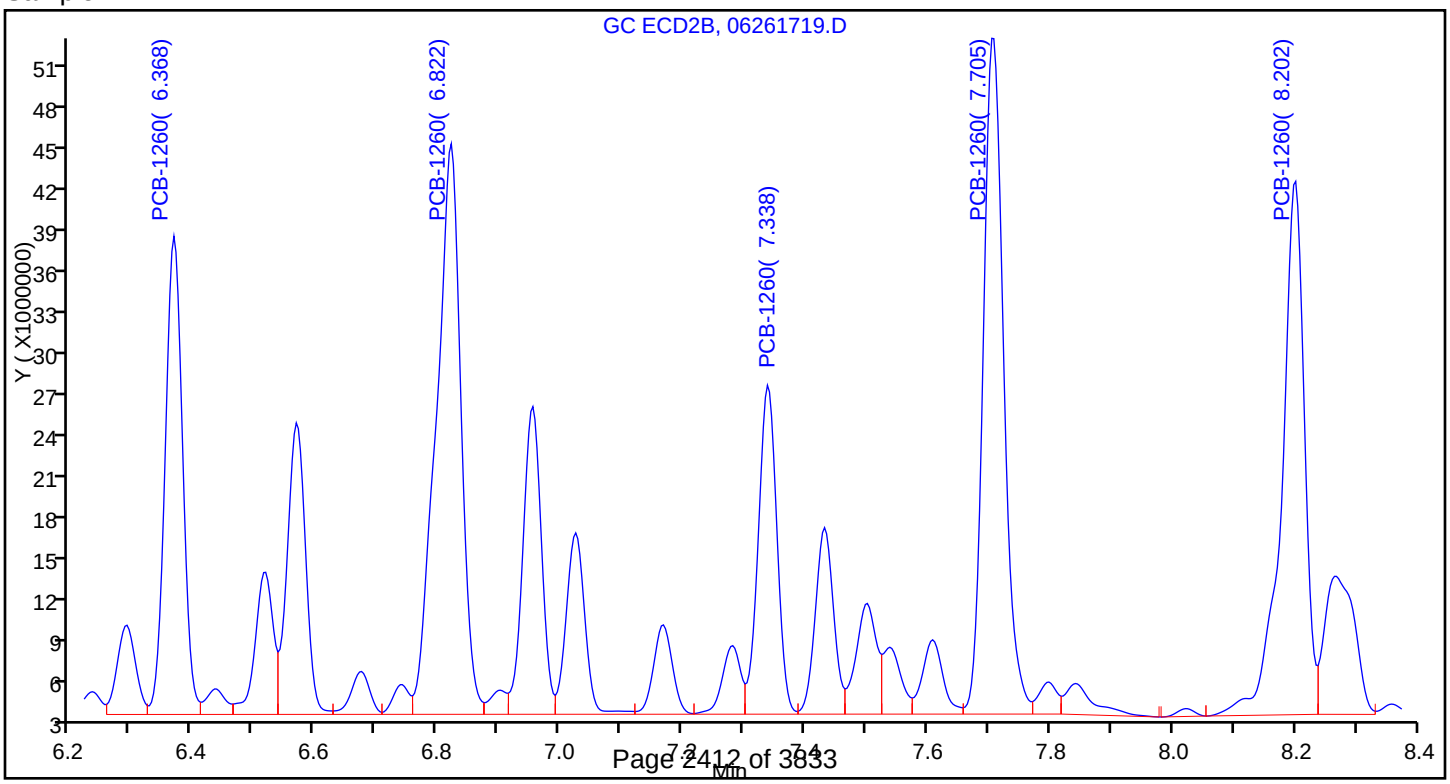
Injection Date:	26-Jun-2017 19:12:05	Instrument ID:	SGC_P3		
Lims ID:	280-97928-B-12-D	Lab Sample ID:	280-97928-12		
Client ID:	SS025-SS09				
Operator ID:	jax	ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

12 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(0-2) | Lab Sample ID: 280-97928-14

Matrix: Solid | Lab File ID: 06261720.D

Analysis Method: 8082A | Date Collected: 06/05/2017 13:30

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 30.3(g) | Date Analyzed: 06/26/2017 19:33

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 11.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	17	U	37	17	5.7
11104-28-2	Arochlor 1221	19	U	52	19	17
11141-16-5	Arochlor 1232	17	U	37	17	5.7
53469-21-9	Arochlor 1242	37	U	37	37	10
12672-29-6	Arochlor 1248	22	U	37	22	6.2
11097-69-1	Arochlor 1254	19	U	37	19	6.1
11096-82-5	Arochlor 1260	81		37	8.6	2.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	78		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261720.D
Lims ID: 280-97928-C-14-D
Client ID: SS025-SB09(0-2)
Sample Type: Client
Inject. Date: 26-Jun-2017 19:33:47 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-14-D
Misc. Info.: 280-0060129-020
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:39 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:21:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.823	1.825	-0.002	395225278	1000.0	
2	1.583	1.582	0.001	436036084	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.750	2.749	0.001	70166931	16.3	
2	2.633	2.632	0.001	114668504	22.9	
					RPD = 33.60	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.482			ND	
1		3.945				
1		4.085				
1		4.149				
1		4.532				
2		3.492				
2		3.925				
2		4.062				
2		4.285				
2		4.559				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						
1	6.006	6.009	-0.003	41020394	196.5	
1	6.733	6.735	-0.002	84646141	209.9	
1	7.223	7.225	-0.002	38128083	202.3	
1	7.660	7.659	0.001	78143359	189.6	
1	8.043	8.045	-0.002	48961513	205.4	
		Average of Peak Amounts =			200.7	
2	6.370	6.369	0.001	61222766	206.6	
2	6.823	6.822	0.001	114404013	260.5	
2	7.340	7.339	0.001	40707997	198.8	
2	7.706	7.709	-0.003	88857341	202.7	
2	8.203	8.202	0.001	73495232	219.7	
		Average of Peak Amounts =			217.7	
					RPD = 8.09	
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.623	9.622	0.001	65327725	15.7	
2	9.856	9.859	-0.003	65633217	15.7	
					RPD = 0.02	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total						
1					200.7	
2					217.7	
					RPD = 8.09	
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

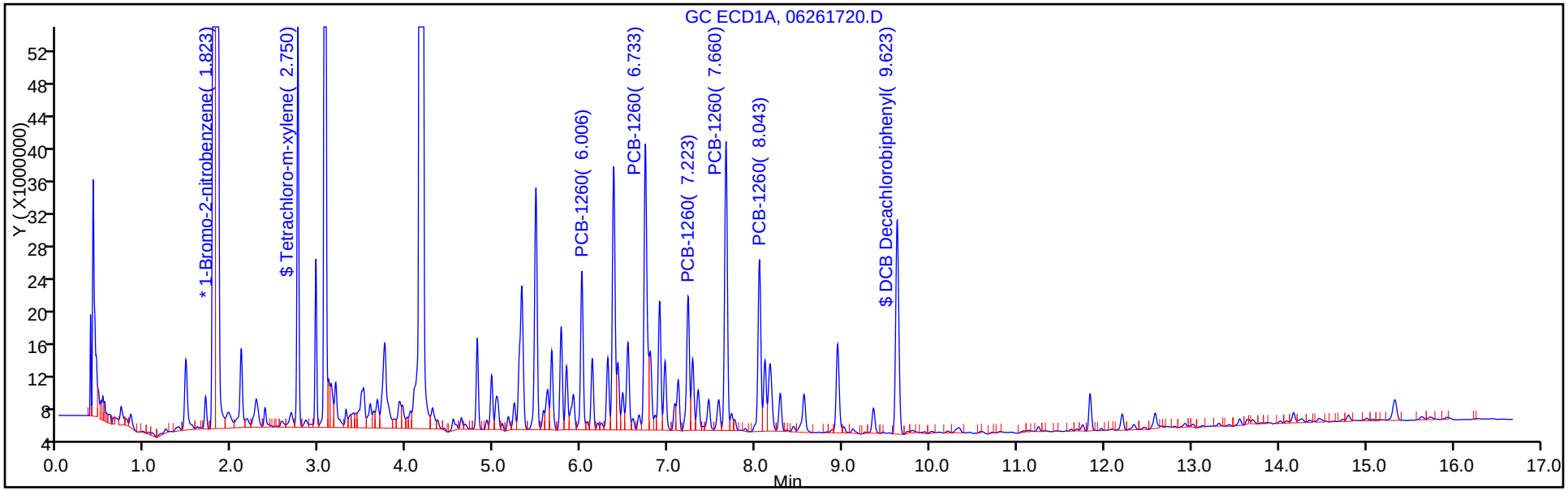
Report Date: 27-Jun-2017 10:22:46 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

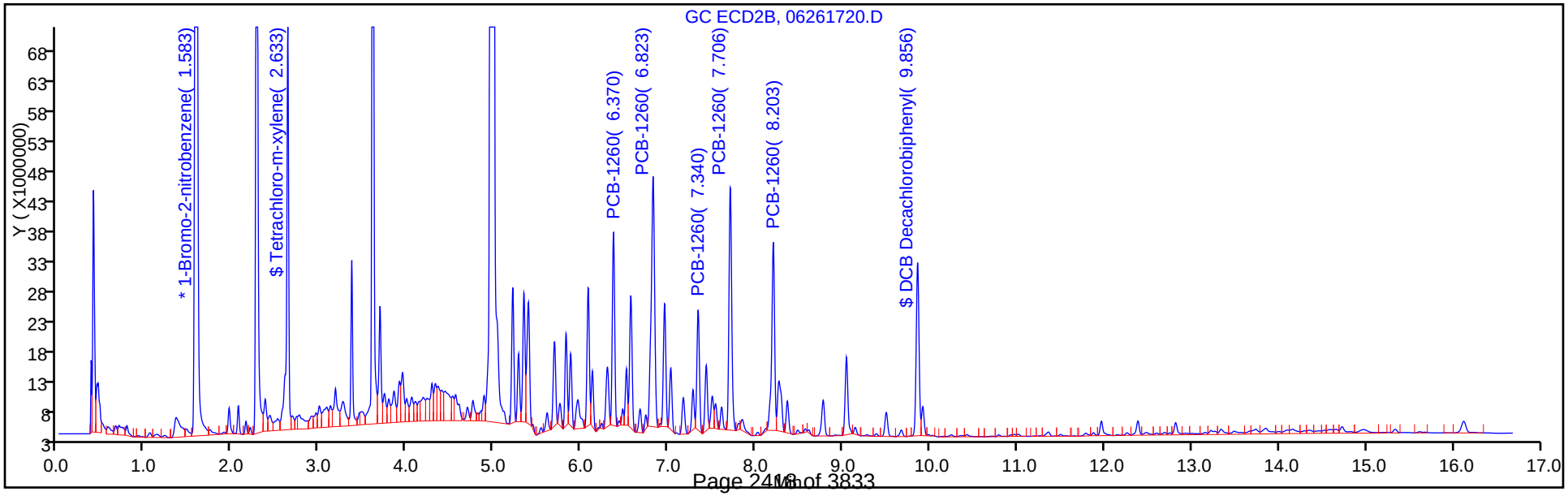
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261720.D

Injection Date:	26-Jun-2017 19:33:47	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-C-14-D	Lab Sample ID:	280-97928-14	Worklist Smp#:	20
Client ID:	SS025-SB09(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261720.D				
Lims ID:	280-97928-C-14-D				
Client ID:	SS025-SB09(0-2)				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 19:33:47	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-14-D				
Misc. Info.:	280-0060129-020				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:39	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	27-Jun-2017 07:21:50		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	16.3	81.55
$ 15 DCB Decachlorobiphenyl	20.0	15.7	78.46

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	22.9	114.48
$ 15 DCB Decachlorobiphenyl	20.0	15.7	78.45

Report Date: 27-Jun-2017 10:22:46 Chrom Revision: 2.2 20-Jun-2017 07:42:38

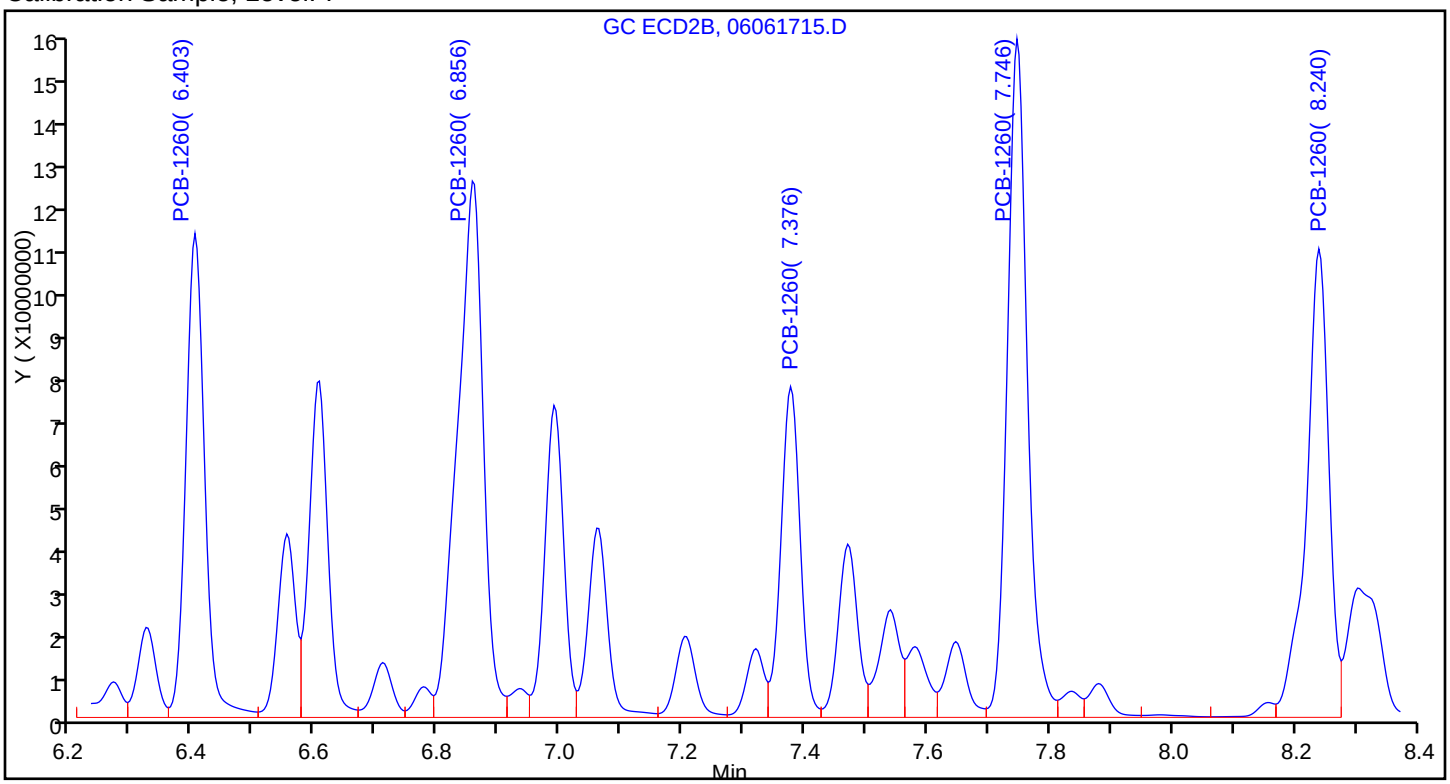
TestAmerica Denver

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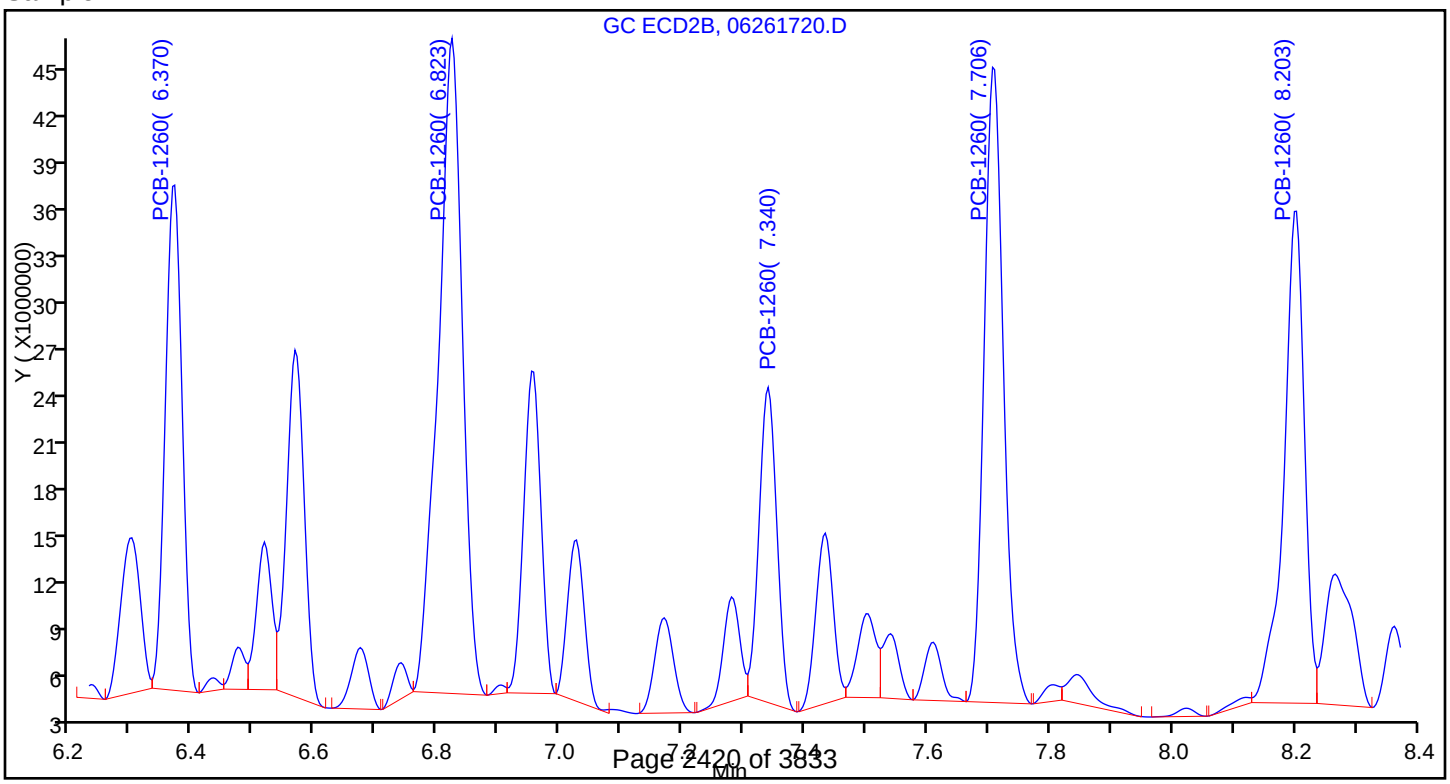
Injection Date:	26-Jun-2017 19:33:47	Instrument ID:	SGC_P3		
Lims ID:	280-97928-C-14-D	Lab Sample ID:	280-97928-14		
Client ID:	SS025-SB09(0-2)				
Operator ID:	jax	ALS Bottle#:	20	Worklist Smp#:	20
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

12 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(2-4) | Lab Sample ID: 280-97928-15

Matrix: Solid | Lab File ID: 06261721.D

Analysis Method: 8082A | Date Collected: 06/05/2017 13:40

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 30.4(g) | Date Analyzed: 06/26/2017 19:55

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 9.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	16	U	36	16	5.6
11104-28-2	Arochlor 1221	19	U	51	19	17
11141-16-5	Arochlor 1232	16	U	36	16	5.6
53469-21-9	Arochlor 1242	36	U	36	36	10
12672-29-6	Arochlor 1248	22	U	36	22	6.1
11097-69-1	Arochlor 1254	19	U	36	19	6.0
11096-82-5	Arochlor 1260	69		36	8.4	2.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	65		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261721.D
Lims ID: 280-97928-A-15-D
Client ID: SS025-SB09(2-4)
Sample Type: Client
Inject. Date: 26-Jun-2017 19:55:32 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-A-15-D
Misc. Info.: 280-0060129-021
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:39 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:22:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.825	1.825	0.000	394596356	1000.0	
2	1.582	1.582	0.000	452176490	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.749	2.749	0.000	65878115	15.3	
2	2.632	2.632	0.000	91206740	17.4	
					RPD = 12.58	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.482			ND	
1		3.945				
1		4.085				
1		4.149				
1		4.532				
2		3.492				
2		3.925				
2		4.062				
2		4.285				
2		4.559				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						
1	6.005	6.009	-0.004	34927263	165.7	
1	6.735	6.735	0.000	74229707	183.3	
1	7.225	7.225	0.000	30676946	161.0	
1	7.659	7.659	0.000	61000316	146.8	
1	8.042	8.045	-0.003	39000188	162.1	
		Average of Peak Amounts =			163.8	
2	6.369	6.369	0.000	56012588	180.2	
2	6.825	6.822	0.003	124009126	273.1	
2	7.339	7.339	0.000	35068890	162.2	
2	7.709	7.709	0.000	75451242	163.0	
2	8.199	8.202	-0.003	60492554	171.2	
		Average of Peak Amounts =			189.9	
					RPD = 14.79	
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.622	9.622	0.000	53876245	12.8	
2	9.859	9.859	0.000	57217729	13.1	
					RPD = 1.57	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total						
1					163.8	
2					189.9	
					RPD = 14.79	
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

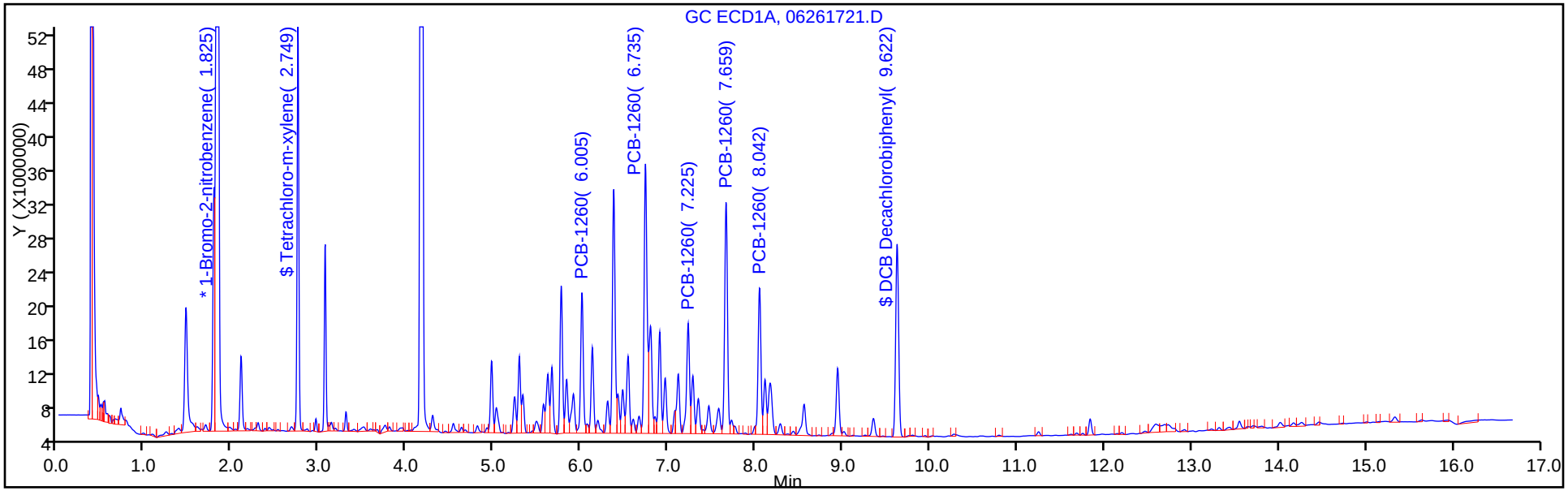
Report Date: 27-Jun-2017 10:22:48 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

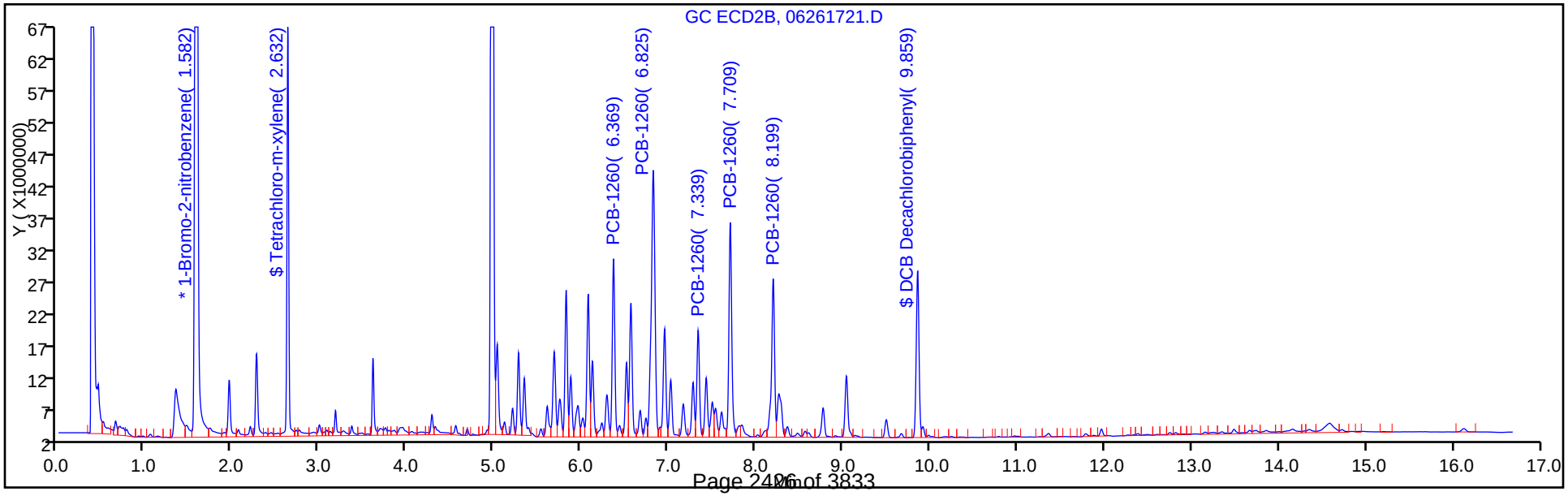
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261721.D

Injection Date:	26-Jun-2017 19:55:32	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-A-15-D	Lab Sample ID:	280-97928-15	Worklist Smp#:	21
Client ID:	SS025-SB09(2-4)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261721.D				
Lims ID:	280-97928-A-15-D				
Client ID:	SS025-SB09(2-4)				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 19:55:32	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-A-15-D				
Misc. Info.:	280-0060129-021				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:39	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	27-Jun-2017 07:22:01		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	15.3	76.57
$ 15 DCB Decachlorobiphenyl	20.0	12.8	64.23

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.4	86.86
$ 15 DCB Decachlorobiphenyl	20.0	13.1	65.25

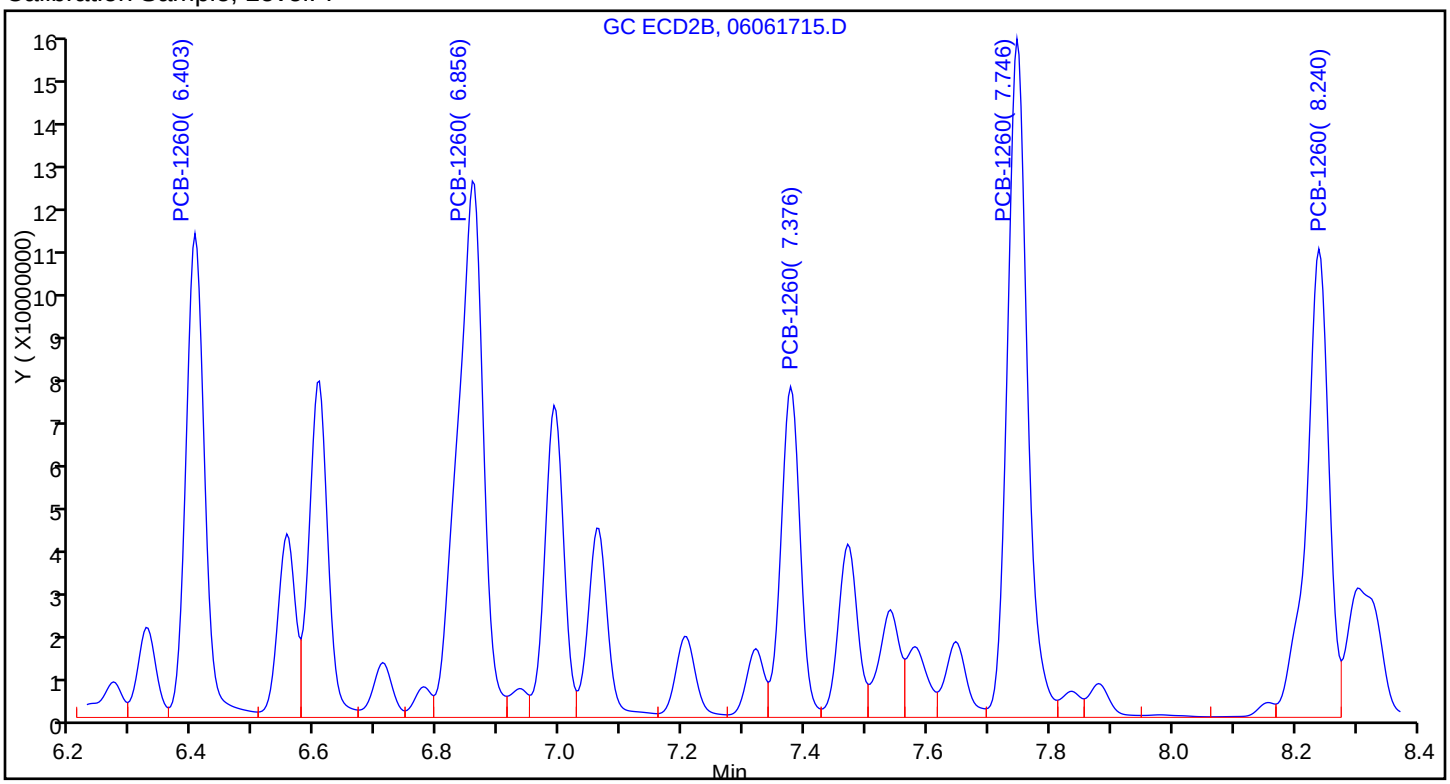
Report Date: 27-Jun-2017 10:22:48 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

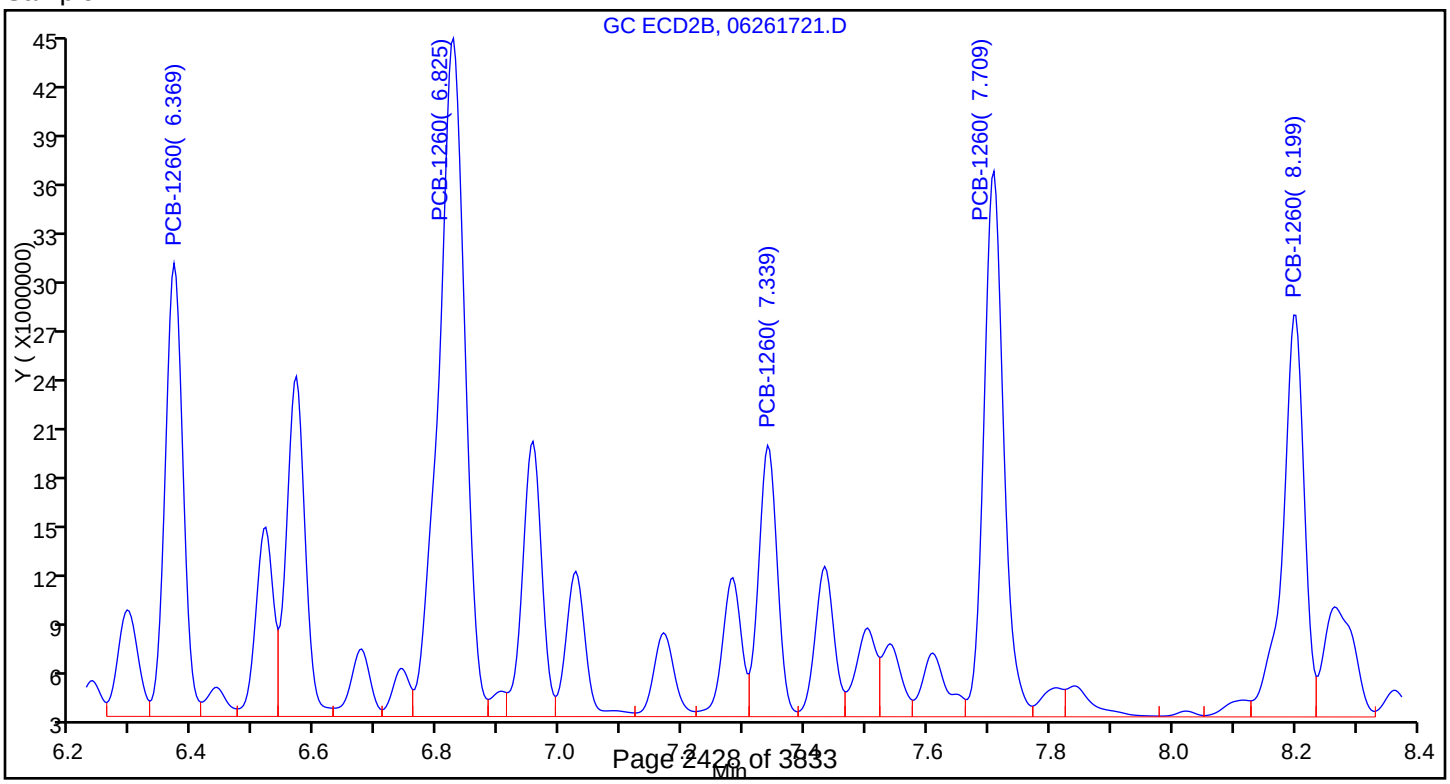
Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261721.D				
Injection Date:	26-Jun-2017 19:55:32	Instrument ID:	SGC_P3		
Lims ID:	280-97928-A-15-D	Lab Sample ID:	280-97928-15		
Client ID:	SS025-SB09(2-4)				
Operator ID:	jax	ALS Bottle#:	21	Worklist Smp#:	21
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

12 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(4-6) | Lab Sample ID: 280-97928-16

Matrix: Solid | Lab File ID: 06261722.D

Analysis Method: 8082A | Date Collected: 06/05/2017 13:50

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.6(g) | Date Analyzed: 06/26/2017 20:17

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 16.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	17	U Q	38	17	5.8
11104-28-2	Arochlor 1221	19	U Q	54	19	18
11141-16-5	Arochlor 1232	17	U Q	38	17	5.8
53469-21-9	Arochlor 1242	38	U Q	38	38	10
12672-29-6	Arochlor 1248	23	U Q	38	23	6.4
11097-69-1	Arochlor 1254	19	U Q	38	19	6.3
11096-82-5	Arochlor 1260	14	J Q	38	8.8	3.0

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	54	Q	59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261722.D				
Lims ID:	280-97928-B-16-D				
Client ID:	SS025-SB09(4-6)				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 20:17:16	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-B-16-D				
Misc. Info.:	280-0060129-022				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:39	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:22:14

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.824	1.825	-0.001	393685305	1000.0	
2	1.584	1.582	0.002	436919043	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.751	2.749	0.002	64646760	15.1	
2	2.631	2.632	-0.001	83468471	16.4	
					RPD = 8.60	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.482			ND	
1		3.945				
1		4.085				
1		4.149				
1		4.532				
2		3.492				
2		3.925				
2		4.062				
2		4.285				
2		4.559				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						
1	6.008	6.009	-0.001	11490574	45.7	
1	6.734	6.735	-0.001	17402979	36.4	
1	7.224	7.225	-0.001	8892195	39.2	
1	7.661	7.659	0.002	16653300	35.4	
1	8.044	8.045	-0.001	10338105	36.8	
		Average of Peak Amounts =			38.7	
2	6.368	6.369	-0.001	12002816	26.2	
2	0.000	6.822	0.000	0	0	
2	7.341	7.339	0.002	9890780	35.0	
2	7.708	7.709	-0.001	21156390	35.7	
2	8.201	8.202	-0.001	19193389	45.8	
		Average of Peak Amounts =			35.7	
					RPD = 8.17	
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.624	9.622	0.002	50434253	12.0	
2	9.858	9.859	-0.001	46266798	10.8	
					RPD = 10.84	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total						
1					38.7	
2					35.7	
					RPD = 8.17	
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

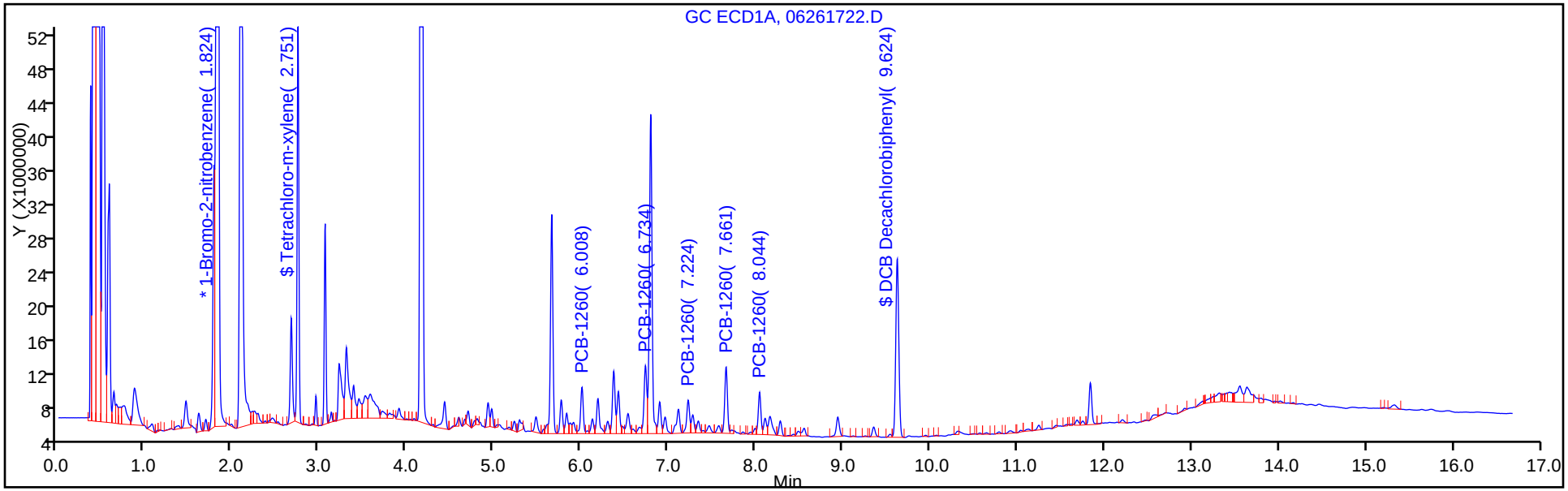
Report Date: 27-Jun-2017 10:22:50 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

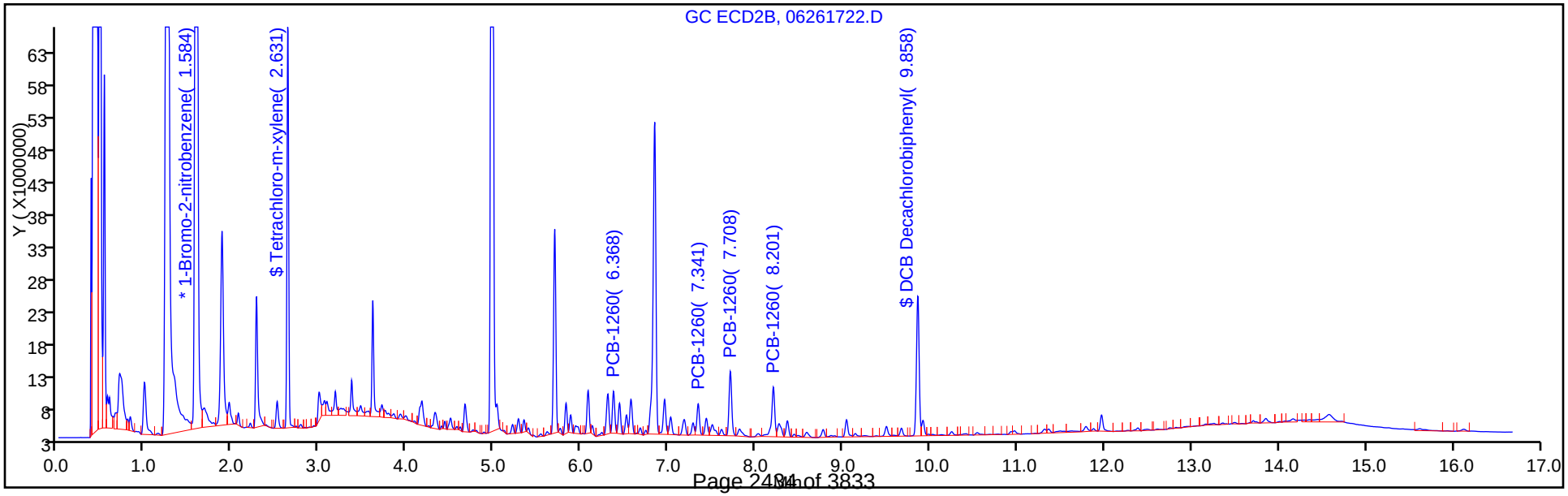
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261722.D

Injection Date:	26-Jun-2017 20:17:16	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-B-16-D	Lab Sample ID:	280-97928-16	Worklist Smp#:	22
Client ID:	SS025-SB09(4-6)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261722.D				
Lims ID:	280-97928-B-16-D				
Client ID:	SS025-SB09(4-6)				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 20:17:16	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-B-16-D				
Misc. Info.:	280-0060129-022				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:39	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	27-Jun-2017 07:22:14		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	15.1	75.28
$ 15 DCB Decachlorobiphenyl	20.0	12.0	60.06

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	16.4	82.05
$ 15 DCB Decachlorobiphenyl	20.0	10.8	53.89

Report Date: 27-Jun-2017 10:22:51 Chrom Revision: 2.2 20-Jun-2017 07:42:38

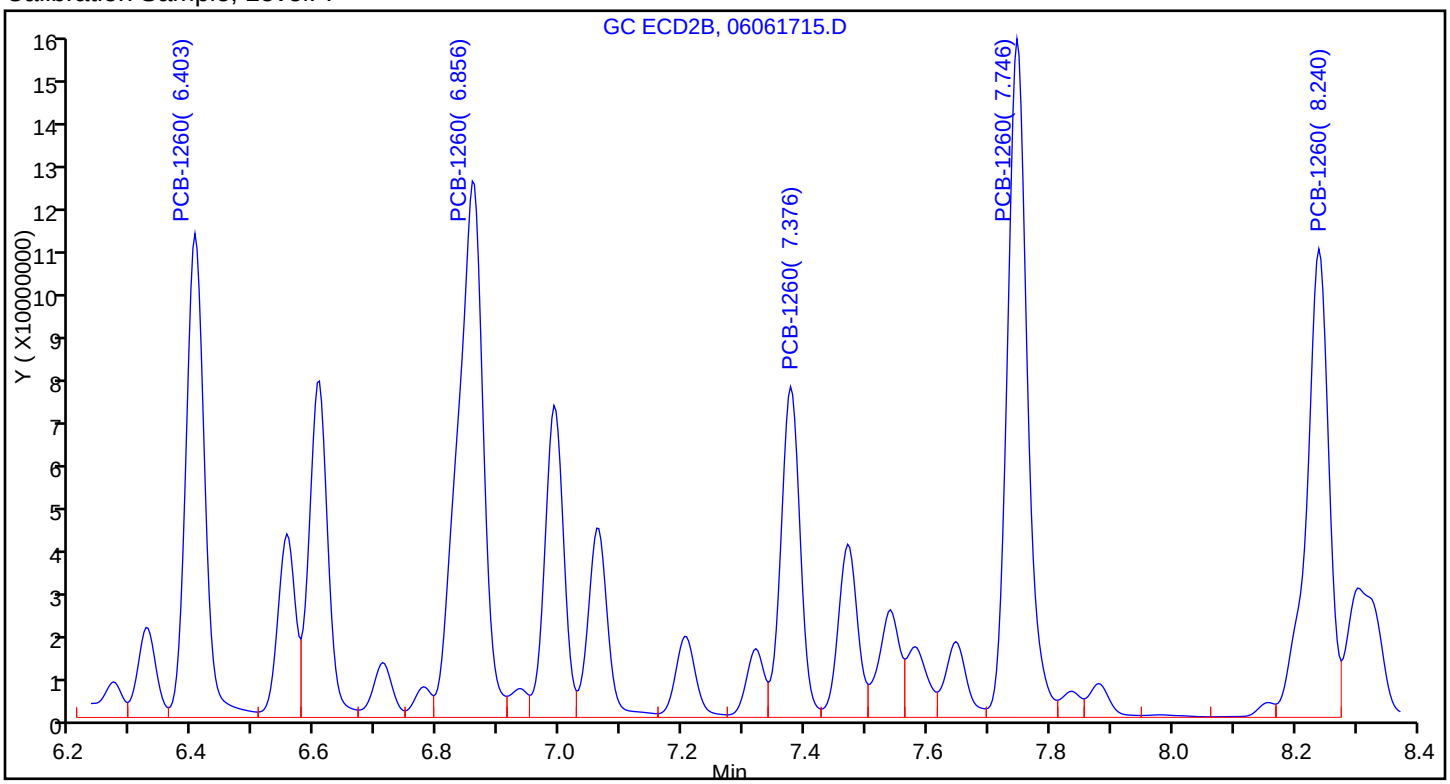
TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261722.D

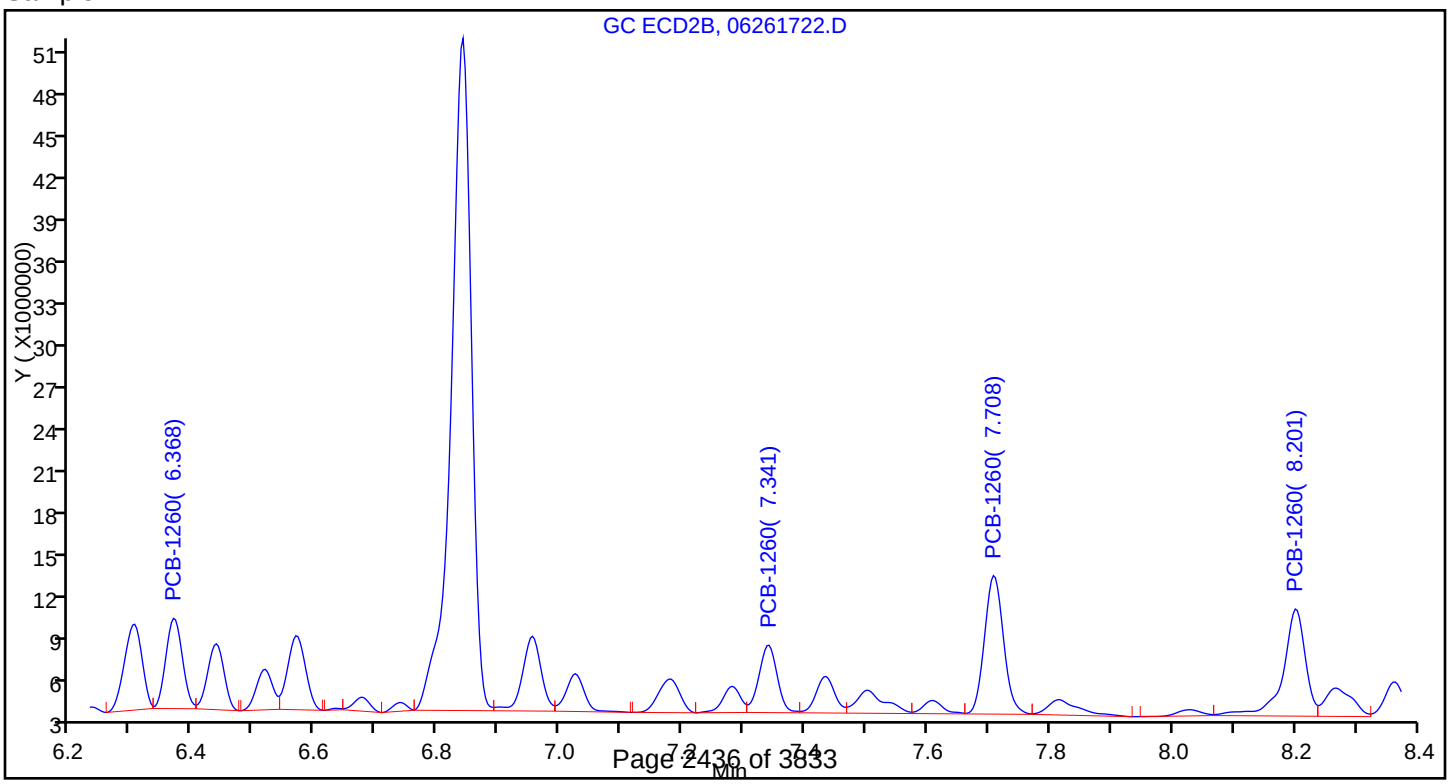
Injection Date:	26-Jun-2017 20:17:16	Instrument ID:	SGC_P3		
Lims ID:	280-97928-B-16-D	Lab Sample ID:	280-97928-16		
Client ID:	SS025-SB09(4-6)				
Operator ID:	jax	ALS Bottle#:	22	Worklist Smp#:	22
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		
Column:	CLP2 Pesticides Column 2 (0.32 mm)	Detector	GC ECD2B		

12 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB09(6-8) | Lab Sample ID: 280-97928-17

Matrix: Solid | Lab File ID: 06261723.D

Analysis Method: 8082A | Date Collected: 06/05/2017 14:10

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.7(g) | Date Analyzed: 06/26/2017 20:39

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 13.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	16	U	36	16	5.6
11104-28-2	Arochlor 1221	19	U	52	19	17
11141-16-5	Arochlor 1232	16	U	36	16	5.6
53469-21-9	Arochlor 1242	36	U	36	36	10
12672-29-6	Arochlor 1248	22	U	36	22	6.2
11097-69-1	Arochlor 1254	19	U	36	19	6.1
11096-82-5	Arochlor 1260	8.5	U	36	8.5	2.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	69		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261723.D
Lims ID: 280-97928-C-17-D
Client ID: SS025-SB09(6-8)
Sample Type: Client
Inject. Date: 26-Jun-2017 20:39:01 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-17-D
Misc. Info.: 280-0060129-023
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:39 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:23:03

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.823	1.825	-0.002	370273169	1000.0	
2	1.583	1.582	0.001	423905998	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.750	2.749	0.001	59149950	14.6	
2	2.633	2.632	0.001	79377387	16.1	
					RPD = 9.32	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.482			ND	
1		3.945				
1		4.085				
1		4.149				
1		4.532				
2		3.492				
2		3.925				
2		4.062				
2		4.285				
2		4.559				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						
1		6.009			ND	
1		6.735				
1		7.225				
1		7.659				
1		8.045				
2		6.369				
2		6.822				
2		7.339				
2		7.709				
2		8.202				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.620	9.622	-0.002	52632812	13.4	
2	9.857	9.859	-0.002	56331558	13.7	
					RPD = 2.56	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

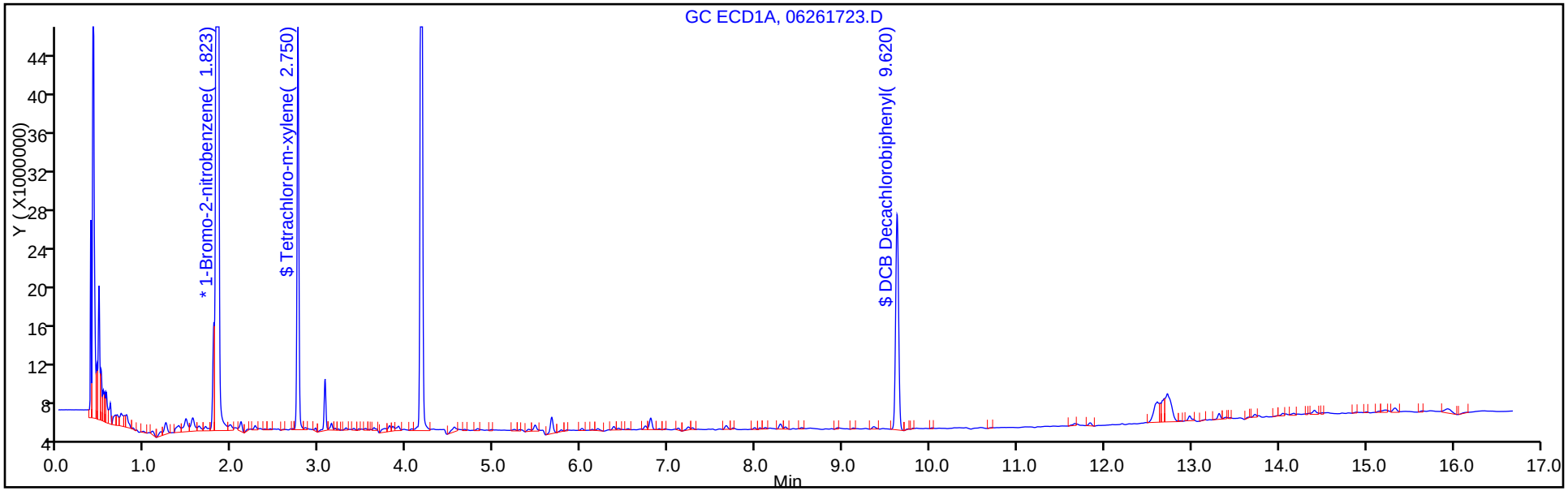
Report Date: 27-Jun-2017 10:22:53 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

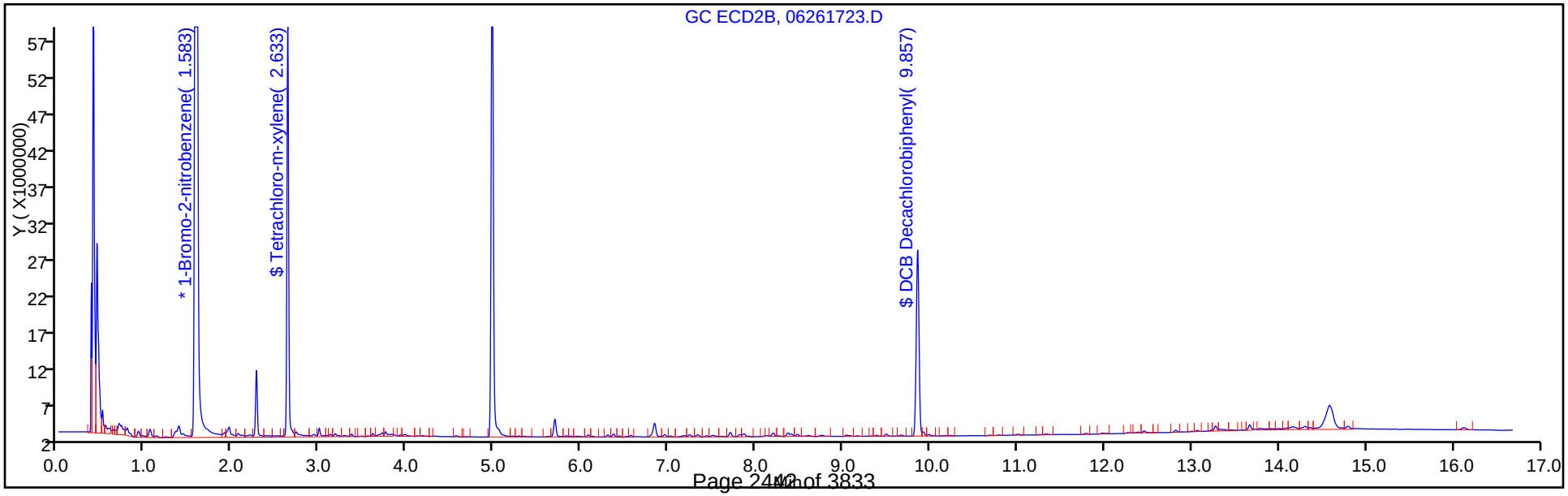
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261723.D

Injection Date:	26-Jun-2017 20:39:01	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-C-17-D	Lab Sample ID:	280-97928-17	Worklist Smp#:	23
Client ID:	SS025-SB09(6-8)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261723.D
Lims ID: 280-97928-C-17-D
Client ID: SS025-SB09(6-8)
Sample Type: Client
Inject. Date: 26-Jun-2017 20:39:01 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-17-D
Misc. Info.: 280-0060129-023
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:39 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:23:03

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	14.6	73.19
$ 15 DCB Decachlorobiphenyl	20.0	13.4	67.01

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	16.1	80.34
$ 15 DCB Decachlorobiphenyl	20.0	13.7	68.74

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(0-2) | Lab Sample ID: 280-97928-18

Matrix: Solid | Lab File ID: 06261724.D

Analysis Method: 8082A | Date Collected: 06/05/2017 14:35

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.2(g) | Date Analyzed: 06/26/2017 21:00

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 8.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	16	U	35	16	5.3
11104-28-2	Arochlor 1221	18	U	49	18	16
11141-16-5	Arochlor 1232	16	U	35	16	5.4
53469-21-9	Arochlor 1242	35	U	35	35	9.6
12672-29-6	Arochlor 1248	21	U	35	21	5.9
11097-69-1	Arochlor 1254	18	U	35	18	5.8
11096-82-5	Arochlor 1260	8.1	U	35	8.1	2.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	81		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261724.D
Lims ID: 280-97928-A-18-D
Client ID: SS025-SB10(0-2)
Sample Type: Client
Inject. Date: 26-Jun-2017 21:00:45 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-A-18-D
Misc. Info.: 280-0060129-024
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:39 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:23:11

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.825	1.825	0.000	372200468	1000.0	
2	1.582	1.582	0.000	426258537	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.749	2.749	0.000	69461604	17.2	
2	2.632	2.632	0.000	85418253	17.3	
					RPD = 0.51	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.482			ND	
1		3.945				
1		4.085				
1		4.149				
1		4.532				
2		3.492				
2		3.925				
2		4.062				
2		4.285				
2		4.559				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						
1		6.009			ND	
1		6.735				
1		7.225				
1		7.659				
1		8.045				
2		6.369				
2		6.822				
2		7.339				
2		7.709				
2		8.202				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.622	9.622	0.000	61354657	15.6	
2	9.855	9.859	-0.004	66463435	16.3	
					RPD = 3.99	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

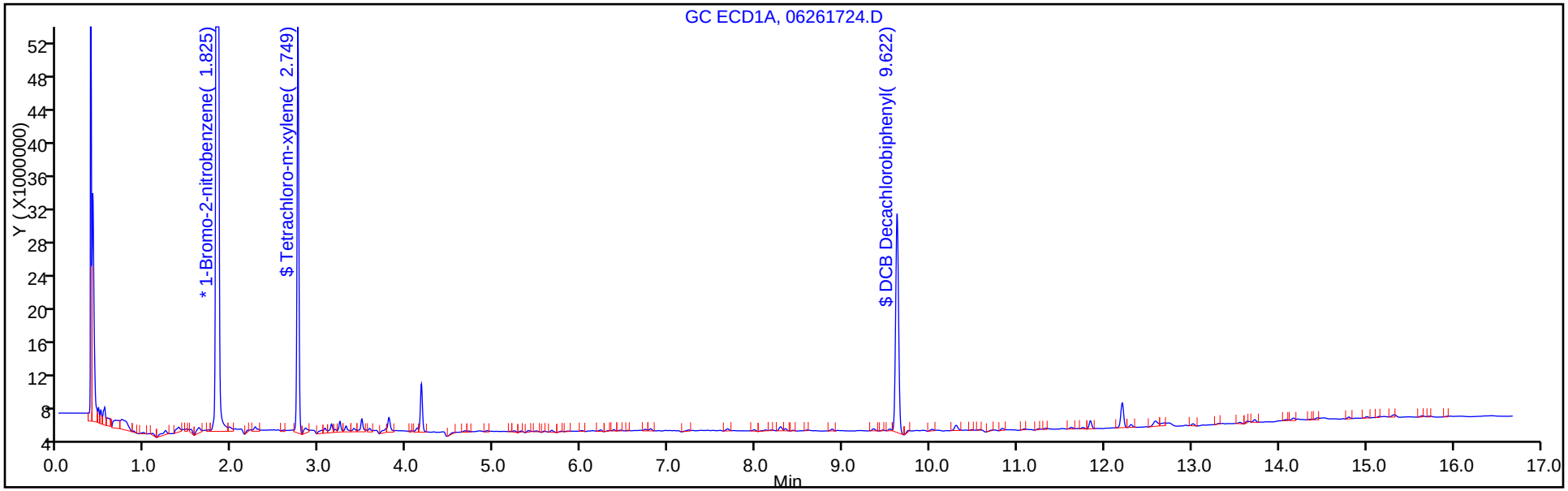
Report Date: 27-Jun-2017 10:22:55 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

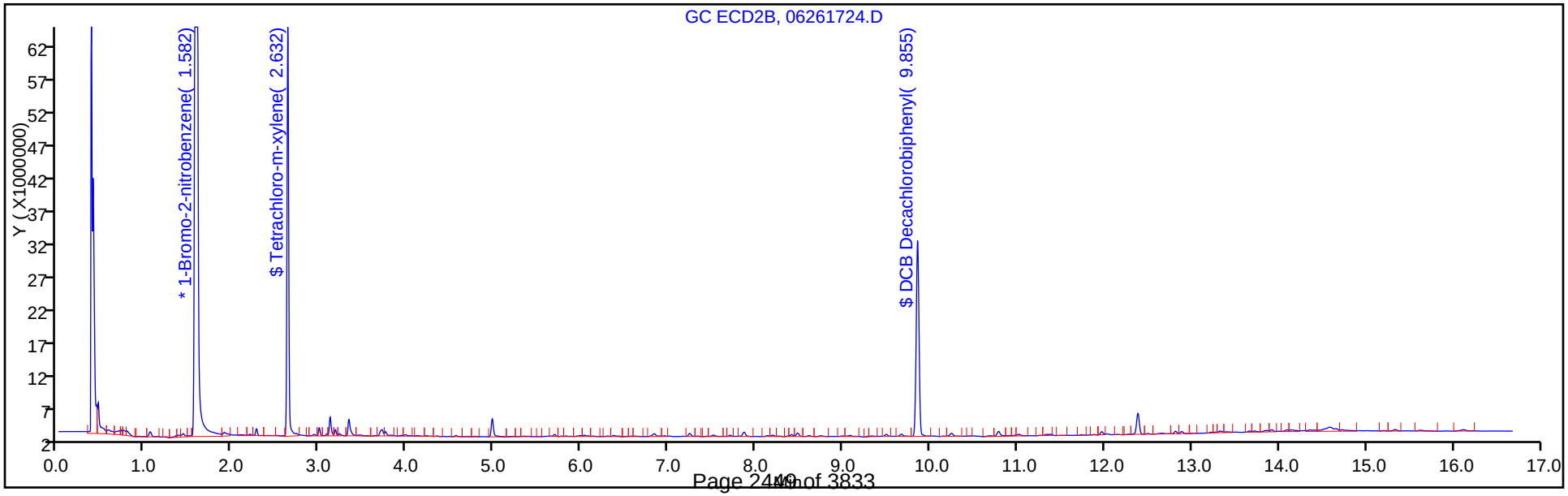
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261724.D

Injection Date:	26-Jun-2017 21:00:45	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-A-18-D	Lab Sample ID:	280-97928-18	Worklist Smp#:	24
Client ID:	SS025-SB10(0-2)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261724.D				
Lims ID:	280-97928-A-18-D				
Client ID:	SS025-SB10(0-2)				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 21:00:45	ALS Bottle#:	24	Worklist Smp#:	24
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-A-18-D				
Misc. Info.:	280-0060129-024				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:39	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	27-Jun-2017 07:23:11		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.2	85.83
$ 15 DCB Decachlorobiphenyl	20.0	15.6	78.24

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.3	86.26
$ 15 DCB Decachlorobiphenyl	20.0	16.3	81.42

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(2-4) | Lab Sample ID: 280-97928-19

Matrix: Solid | Lab File ID: 06261725.D

Analysis Method: 8082A | Date Collected: 06/05/2017 14:45

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.0(g) | Date Analyzed: 06/26/2017 21:22

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 7.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	16	U	34	16	5.3
11104-28-2	Arochlor 1221	18	U	49	18	16
11141-16-5	Arochlor 1232	16	U	34	16	5.3
53469-21-9	Arochlor 1242	34	U	34	34	9.5
12672-29-6	Arochlor 1248	21	U	34	21	5.8
11097-69-1	Arochlor 1254	18	U	34	18	5.7
11096-82-5	Arochlor 1260	8.0	U	34	8.0	2.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	80		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261725.D
Lims ID: 280-97928-C-19-C
Client ID: SS025-SB10(2-4)
Sample Type: Client
Inject. Date: 26-Jun-2017 21:22:28 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-C-19-C
Misc. Info.: 280-0060129-025
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:39 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:23:20

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.824	1.825	-0.001	381010715	1000.0	
2	1.584	1.582	0.002	442385430	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.751	2.749	0.002	70582053	17.0	
2	2.634	2.632	0.002	87211309	17.0	
					RPD = 0.45	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.482			ND	
1		3.945				
1		4.085				
1		4.149				
1		4.532				
2		3.492				
2		3.925				
2		4.062				
2		4.285				
2		4.559				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						
1		6.009			ND	
1		6.735				
1		7.225				
1		7.659				
1		8.045				
2		6.369				
2		6.822				
2		7.339				
2		7.709				
2		8.202				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.621	9.622	-0.001	62533182	15.6	
2	9.854	9.859	-0.005	67626107	15.9	
					RPD = 2.35	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

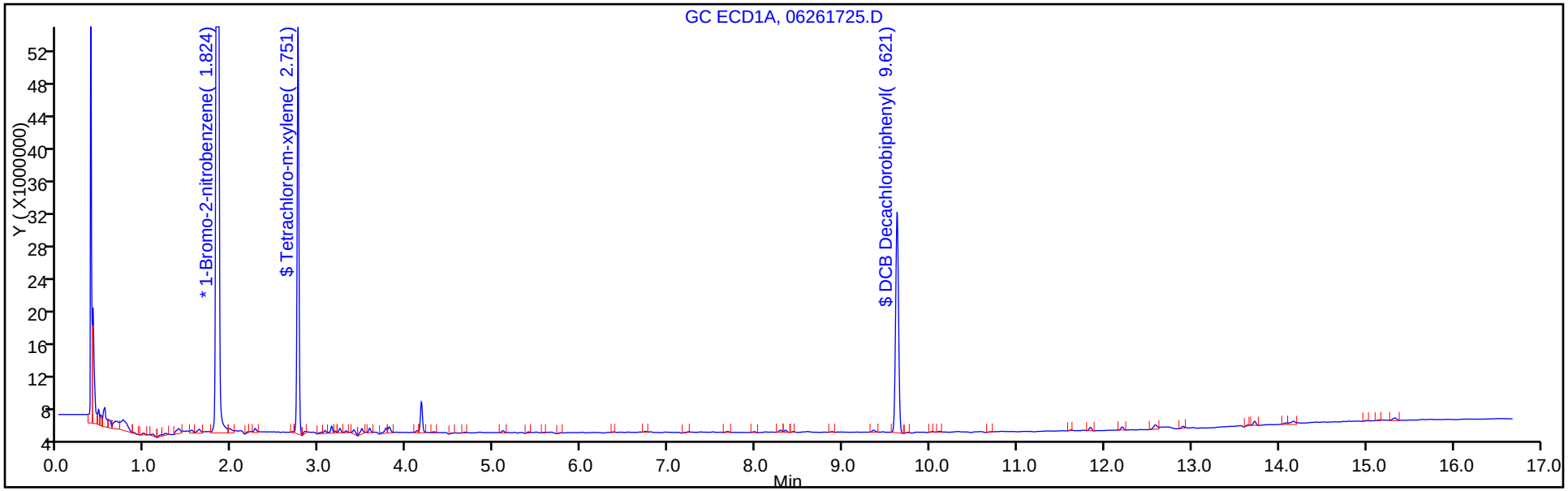
Report Date: 27-Jun-2017 10:22:57 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

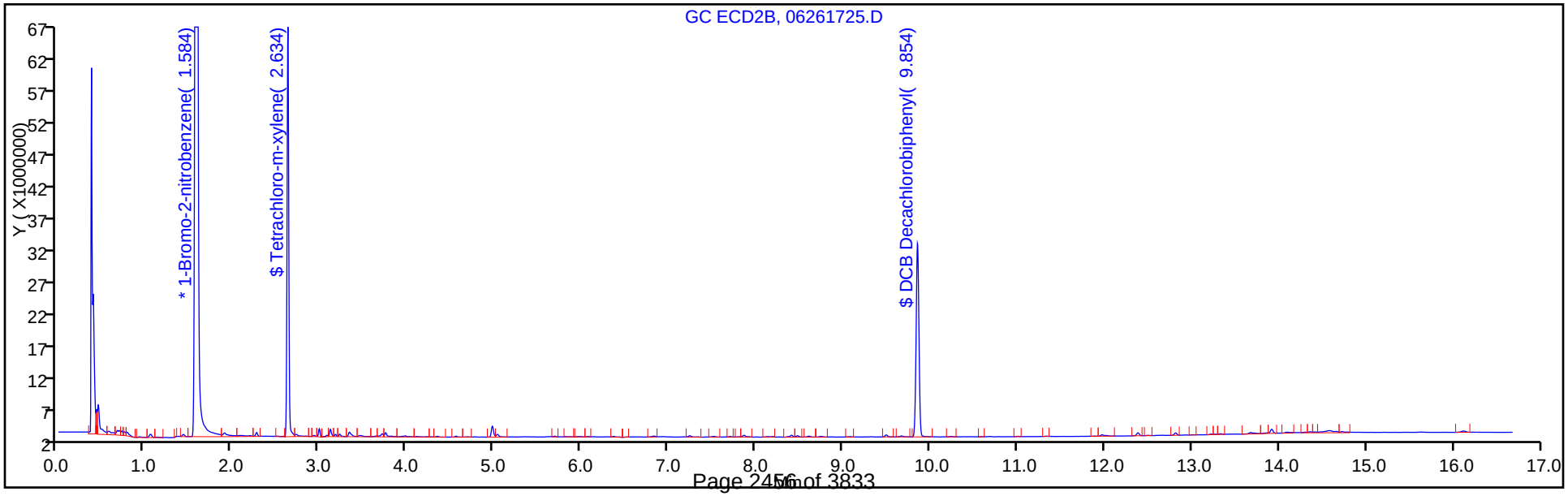
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261725.D

Injection Date:	26-Jun-2017 21:22:28	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-C-19-C	Lab Sample ID:	280-97928-19	Worklist Smp#:	25
Client ID:	SS025-SB10(2-4)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261725.D				
Lims ID:	280-97928-C-19-C				
Client ID:	SS025-SB10(2-4)				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 21:22:28	ALS Bottle#:	25	Worklist Smp#:	25
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-C-19-C				
Misc. Info.:	280-0060129-025				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:39	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	27-Jun-2017 07:23:20		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.0	85.18
$ 15 DCB Decachlorobiphenyl	20.0	15.6	77.89

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.0	84.80
$ 15 DCB Decachlorobiphenyl	20.0	15.9	79.74

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(4-6) | Lab Sample ID: 280-97928-20

Matrix: Solid | Lab File ID: 06261726.D

Analysis Method: 8082A | Date Collected: 06/05/2017 14:55

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.8(g) | Date Analyzed: 06/26/2017 21:44

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 6.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	15	U	33	15	5.1
11104-28-2	Arochlor 1221	17	U	47	17	16
11141-16-5	Arochlor 1232	15	U	33	15	5.2
53469-21-9	Arochlor 1242	33	U	33	33	9.2
12672-29-6	Arochlor 1248	20	U	33	20	5.7
11097-69-1	Arochlor 1254	17	U	33	17	5.6
11096-82-5	Arochlor 1260	7.8	U	33	7.8	2.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	77		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261726.D
Lims ID: 280-97928-B-20-C
Client ID: SS025-SB10(4-6)
Sample Type: Client
Inject. Date: 26-Jun-2017 21:44:11 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-B-20-C
Misc. Info.: 280-0060129-026
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:39 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:23:29

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.826	1.825	0.001	366310337	1000.0	
2	1.582	1.582	0.000	423402687	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.749	2.749	0.000	64362290	16.1	
2	2.632	2.632	0.000	84752332	17.2	
					RPD = 6.56	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.482			ND	
1		3.945				
1		4.085				
1		4.149				
1		4.532				
2		3.492				
2		3.925				
2		4.062				
2		4.285				
2		4.559				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						
1		6.009			ND	
1		6.735				
1		7.225				
1		7.659				
1		8.045				
2		6.369				
2		6.822				
2		7.339				
2		7.709				
2		8.202				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.622	9.622	0.000	58664198	15.2	
2	9.856	9.859	-0.003	62928857	15.5	
					RPD = 1.94	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

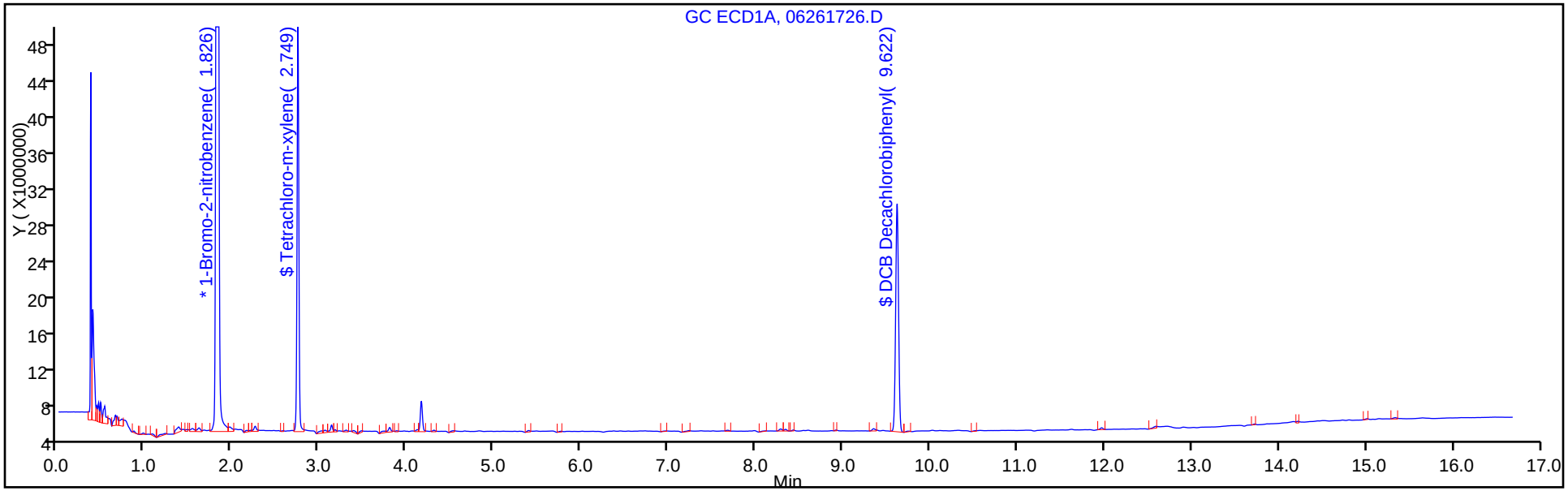
Report Date: 27-Jun-2017 10:22:59 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

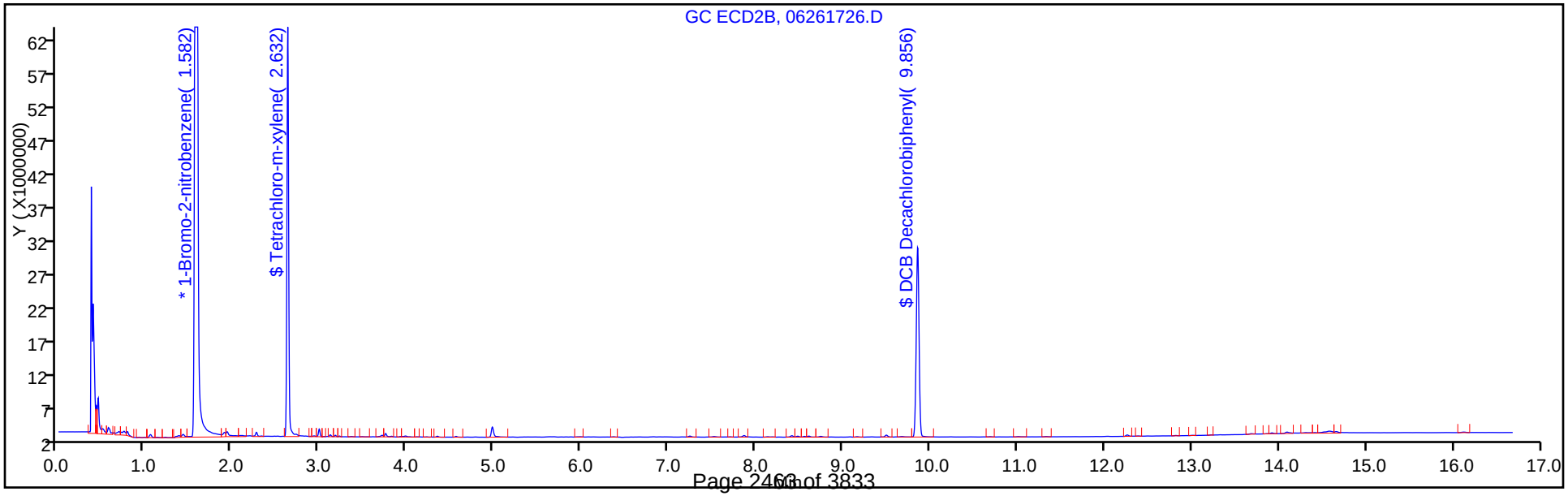
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261726.D

Injection Date:	26-Jun-2017 21:44:11	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-B-20-C	Lab Sample ID:	280-97928-20	Worklist Smp#:	26
Client ID:	SS025-SB10(4-6)				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 27-Jun-2017 10:22:59 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261726.D				
Lims ID:	280-97928-B-20-C				
Client ID:	SS025-SB10(4-6)				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 21:44:11	ALS Bottle#:	26	Worklist Smp#:	26
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-B-20-C				
Misc. Info.:	280-0060129-026				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:39	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	27-Jun-2017 07:23:29		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	16.1	80.69
$ 15 DCB Decachlorobiphenyl	20.0	15.2	75.92

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.2	86.16
$ 15 DCB Decachlorobiphenyl	20.0	15.5	77.41

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB10(2-4)-a | Lab Sample ID: 280-97928-21

Matrix: Solid | Lab File ID: 06261727.D

Analysis Method: 8082A | Date Collected: 06/05/2017 14:45

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 30.7(g) | Date Analyzed: 06/26/2017 22:05

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 5.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	16	U	34	16	5.3
11104-28-2	Arochlor 1221	18	U	49	18	16
11141-16-5	Arochlor 1232	16	U	34	16	5.3
53469-21-9	Arochlor 1242	34	U	34	34	9.5
12672-29-6	Arochlor 1248	21	U	34	21	5.8
11097-69-1	Arochlor 1254	18	U	34	18	5.7
11096-82-5	Arochlor 1260	8.0	U	34	8.0	2.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	85		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261727.D
Lims ID: 280-97928-B-21-C
Client ID: SS025-SB10(2-4)-a
Sample Type: Client
Inject. Date: 26-Jun-2017 22:05:53 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-B-21-C
Misc. Info.: 280-0060129-027
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:39 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:23:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.824	1.825	-0.001	375595480	1000.0	
2	1.584	1.582	0.002	432944135	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.750	2.749	0.001	72403496	17.7	
2	2.634	2.632	0.002	94907740	19.0	
					RPD = 6.58	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.482			ND	
1		3.945				
1		4.085				
1		4.149				
1		4.532				
2		3.492				
2		3.925				
2		4.062				
2		4.285				
2		4.559				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						
1		6.009			ND	
1		6.735				
1		7.225				
1		7.659				
1		8.045				
2		6.369				
2		6.822				
2		7.339				
2		7.709				
2		8.202				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.620	9.622	-0.002	65604459	16.6	
2	9.857	9.859	-0.002	69945740	16.9	
					RPD = 1.70	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

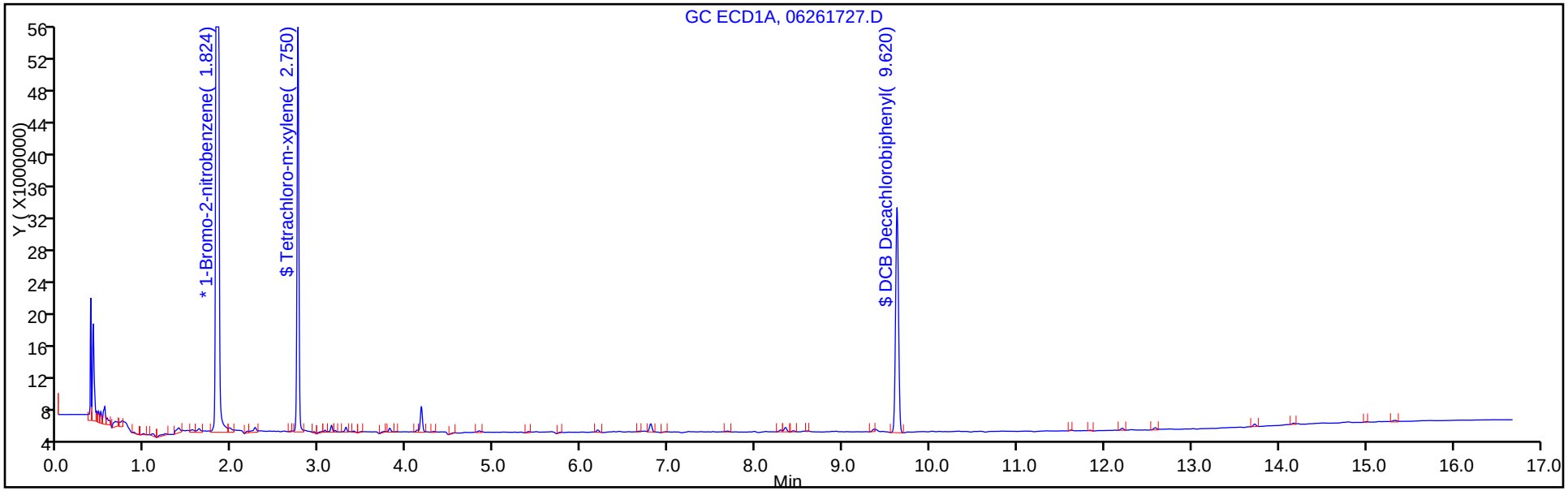
Report Date: 27-Jun-2017 10:23:01 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

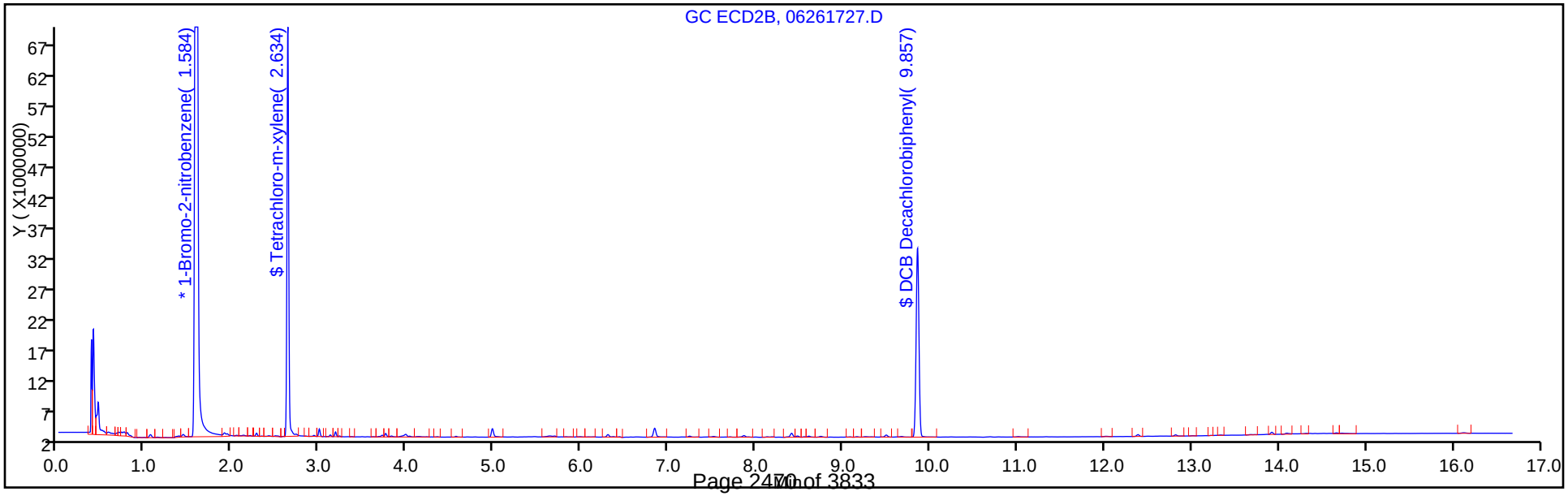
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261727.D

Injection Date:	26-Jun-2017 22:05:53	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-B-21-C	Lab Sample ID:	280-97928-21	Worklist Smp#:	27
Client ID:	SS025-SB10(2-4)-a				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261727.D				
Lims ID:	280-97928-B-21-C				
Client ID:	SS025-SB10(2-4)-a				
Sample Type:	Client				
Inject. Date:	26-Jun-2017 22:05:53	ALS Bottle#:	27	Worklist Smp#:	27
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-B-21-C				
Misc. Info.:	280-0060129-027				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:39	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	27-Jun-2017 07:23:38		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.7	88.72
$ 15 DCB Decachlorobiphenyl	20.0	16.6	83.10

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	19.0	94.75
$ 15 DCB Decachlorobiphenyl	20.0	16.9	84.53

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SS10 | Lab Sample ID: 280-97928-22

Matrix: Solid | Lab File ID: 06261728.D

Analysis Method: 8082A | Date Collected: 06/05/2017 15:20

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.7(g) | Date Analyzed: 06/26/2017 22:27

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 9.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	16	U	34	16	5.3
11104-28-2	Arochlor 1221	18	U	49	18	16
11141-16-5	Arochlor 1232	16	U	34	16	5.3
53469-21-9	Arochlor 1242	34	U	34	34	9.5
12672-29-6	Arochlor 1248	21	U	34	21	5.8
11097-69-1	Arochlor 1254	18	U	34	18	5.7
11096-82-5	Arochlor 1260	8.0	U	34	8.0	2.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	75		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261728.D
Lims ID: 280-97928-B-22-D
Client ID: SS025-SS10
Sample Type: Client
Inject. Date: 26-Jun-2017 22:27:36 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-B-22-D
Misc. Info.: 280-0060129-028
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:39 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:23:47

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene						
1	1.826	1.825	0.001	361406880	1000.0	
2	1.582	1.582	0.000	420952945	1000.0	
					RPD = 0.00	
$ 14 Tetrachloro-m-xylene						
1	2.749	2.749	0.000	70522550	18.0	
2	2.632	2.632	0.000	77977442	15.9	
					RPD = 12.28	
3 PCB-1221						
1		2.959			ND	
1		3.102				
1		3.139				
2		2.952				
2		3.079				
2		3.129				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
7 PCB-1232						
1		3.144			ND	
1		3.487				
1		3.950				
1		4.090				
1		4.537				
2		3.140				
2		3.510				
2		3.950				
2		4.087				
2		4.720				
1 PCB-1016						
1		3.482			ND	
1		3.945				
1		4.085				
1		4.149				
1		4.532				
2		3.492				
2		3.925				
2		4.062				
2		4.285				
2		4.559				
4 PCB-1248						
1		3.486			ND	
1		3.946				
1		4.302				
1		4.539				
1		5.289				
2		3.949				
2		4.586				
2		4.719				
2		5.029				
2		5.072				
10 PCB-1242						
1		3.487			ND	
1		3.951				
1		4.091				
1		5.027				
1		5.054				
2		3.511				
2		3.951				
2		4.087				
2		5.031				
2		5.074				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
9 PCB-1254						
1		5.286			ND	
1		5.616				
1		5.769				
1		6.476				
1		6.736				
2		5.289				
2		5.692				
2		5.839				
2		6.142				
2		6.836				
12 PCB-1260						
1		6.009			ND	
1		6.735				
1		7.225				
1		7.659				
1		8.045				
2		6.369				
2		6.822				
2		7.339				
2		7.709				
2		8.202				
5 PCB-1262						
1		6.377			ND	
1		6.904				
1		7.230				
1		7.667				
1		8.050				
2		6.400				
2		6.990				
2		7.377				
2		7.744				
2		8.237				
13 PCB-1268						
1		8.111			ND	
1		8.164				
1		8.437				
1		8.947				
1		9.357				
2		8.237				
2		8.301				
2		8.647				
2		9.077				
2		9.537				
$ 15 DCB Decachlorobiphenyl						
1	9.619	9.622	-0.003	55890181	14.6	
2	9.856	9.859	-0.003	60744097	15.0	
					RPD = 2.47	
S 8 Polychlorinated biphenyls, Total						
1		0.000			ND	
2		0.000				

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ng/ml	Flags
2 PCB-5460						
1		0.000			ND	
1		12.739				
1		0.000				
1		13.802				
1		14.259				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
6 PCB-5432						
1		7.063			ND	
1		7.693				
1		8.203				
1		9.029				
1		9.459				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
11 PCB-5442						
1		9.459			ND	
1		9.923				
1		10.079				
1		10.289				
1		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				
2		0.000				

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

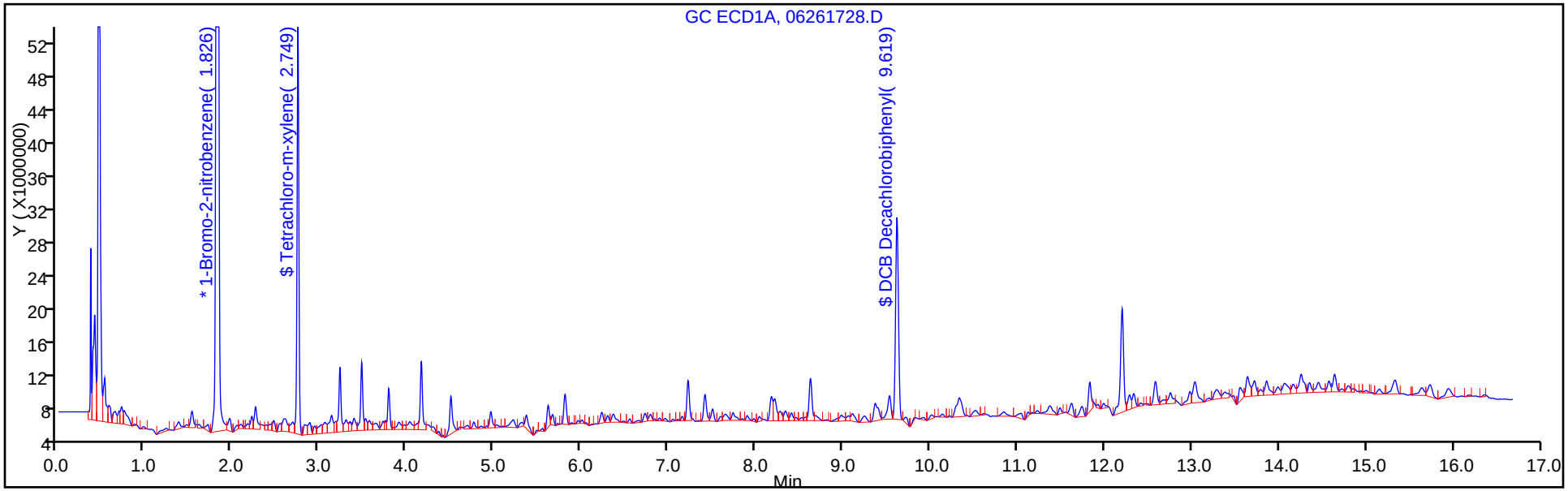
Report Date: 27-Jun-2017 10:23:05 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

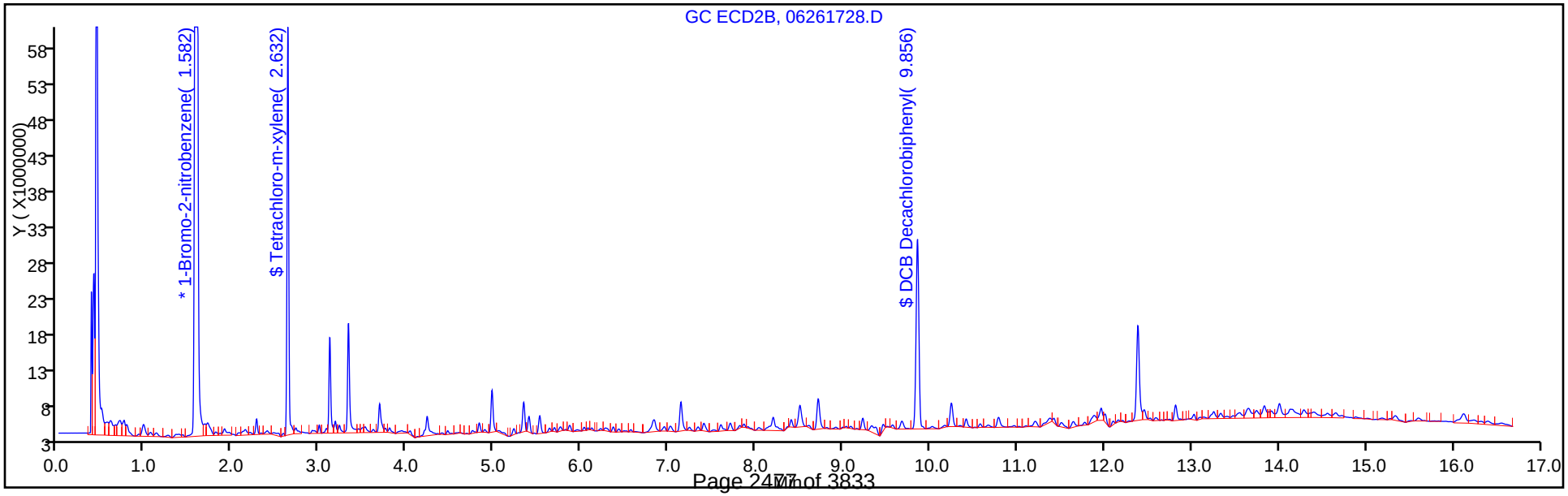
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261728.D

Injection Date:	26-Jun-2017 22:27:36	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-B-22-D	Lab Sample ID:	280-97928-22	Worklist Smp#:	28
Client ID:	SS025-SS10				
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261728.D
Lims ID: 280-97928-B-22-D
Client ID: SS025-SS10
Sample Type: Client
Inject. Date: 26-Jun-2017 22:27:36 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-B-22-D
Misc. Info.: 280-0060129-028
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:39 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:23:47

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	18.0	89.83
$ 15 DCB Decachlorobiphenyl	20.0	14.6	73.20

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	15.9	79.43
$ 15 DCB Decachlorobiphenyl	20.0	15.0	75.03

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 13:49 Calibration End Date: 06/06/2017 15:59 Calibration ID: 29385

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11248 280-376236/7	06061707.D
Level 2	STDL21248 280-376236/6	06061706.D
Level 3	STDL31248 280-376236/5	06061705.D
Level 4	STDL41248 280-376236/4	06061704.D
Level 5	STDL51248 280-376236/3	06061703.D
Level 6	STDL61248 280-376236/2	06061702.D
Level 7	STDL71248 280-376236/1	06061701.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1248 Peak 1	0.2147 0.1570	0.2000 0.1549	0.1787	0.1603	0.1525	Lin1	1.8880	0.1529							0.9990		0.9900
PCB-1248 Peak 2	0.5593 0.4171	0.5102 0.4262	0.4604	0.4247	0.4148	Lin1	3.9052	0.4153							1.0000		0.9900
PCB-1248 Peak 3	0.5996 0.4309	0.5434 0.4343	0.4919	0.4389	0.4282	Lin1	4.9722	0.4254							1.0000		0.9900
PCB-1248 Peak 4	0.6338 0.4207	0.5489 0.4256	0.5003	0.4398	0.4216	Lin1	6.1277	0.4158							1.0000		0.9900
PCB-1248 Peak 5	0.4237 0.3132	0.3859 0.3168	0.3471	0.3233	0.3143	Lin1	3.1452	0.3111							1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 13:49 Calibration End Date: 06/06/2017 15:59 Calibration ID: 29385

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11248 280-376236/7	06061707.D
Level 2	STDL21248 280-376236/6	06061706.D
Level 3	STDL31248 280-376236/5	06061705.D
Level 4	STDL41248 280-376236/4	06061704.D
Level 5	STDL51248 280-376236/3	06061703.D
Level 6	STDL61248 280-376236/2	06061702.D
Level 7	STDL71248 280-376236/1	06061701.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1248 Peak 1	BNB	Lin1	1738031 37083917	3291704 48550285	6019277	13436171	24749110	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 2	BNB	Lin1	4527237 98499824	8395956 133611078	15503715	35602134	67300939	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 3	BNB	Lin1	4853502 101771802	8940744 136147687	16563599	36790257	69471291	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 4	BNB	Lin1	5130218 99347497	9031280 133399245	16846461	36867560	68399630	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 5	BNB	Lin1	3429912 73957477	6349225 99315895	11688134	27101154	51001785	25.0 750	50.0 1000	100	250	500

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061701.D
Lims ID: STDL71248
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 13:49:03 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL71248
Misc. Info.: 280-0059455-001
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:16 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 06-Jun-2017 14:49:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	313463735	1000.0	1000.0	
2	1.598	1.599	-0.001	337522132	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							M
1	3.488	3.486	0.002	48550285	1000.0	1000.6	
1	3.948	3.946	0.002	133611078	1000.0	1017.0	
1	4.301	4.302	-0.001	136147687	1000.0	1009.4	
1	4.538	4.539	-0.001	133399245	1000.0	1008.8	
1	5.291	5.289	0.002	99315895	1000.0	1008.2	
		Average of Peak Amounts =				1008.8	
2	3.948	3.949	-0.001	155312014	1000.0	1000.0	M
2	4.585	4.586	-0.001	119725030	1000.0	1008.0	M
2	4.718	4.719	-0.001	138430869	1000.0	990.5	M
2	5.028	5.029	-0.001	133820350	1000.0	1002.1	M
2	5.071	5.072	-0.001	157166673	1000.0	992.9	M
		Average of Peak Amounts =				998.7	
						RPD = 1.01	
S 8 Polychlorinated biphenyls, Total							
1						1008.8	
2						998.7	
						RPD = 1.01	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1248_L7_00014	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

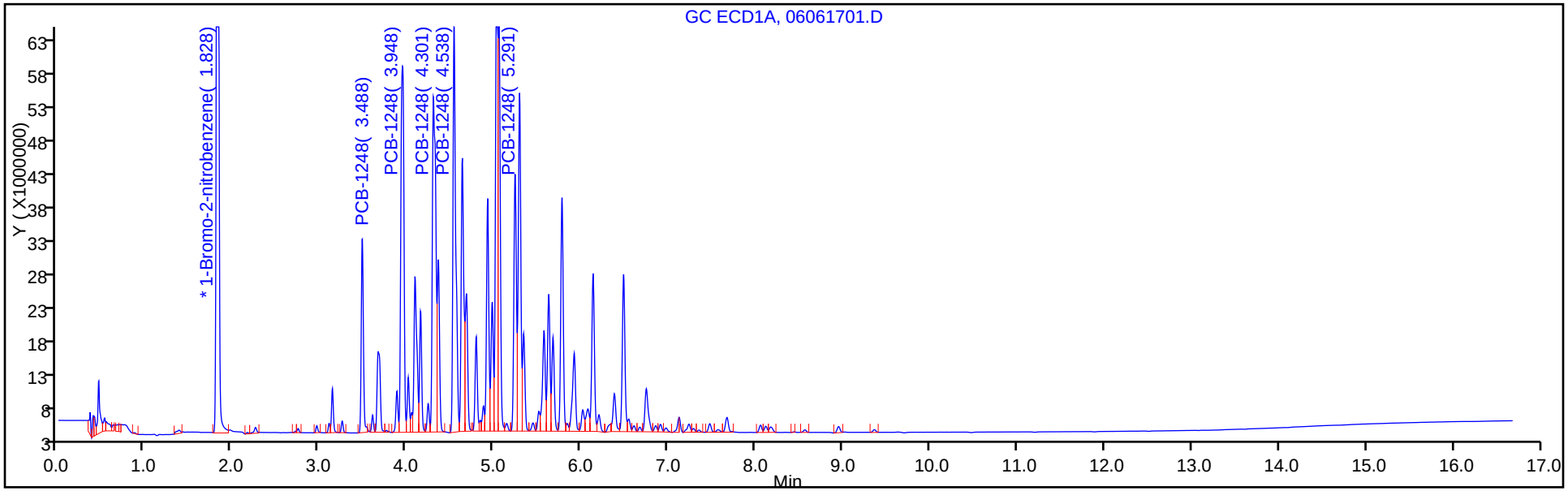
Report Date: 07-Jun-2017 06:52:17 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

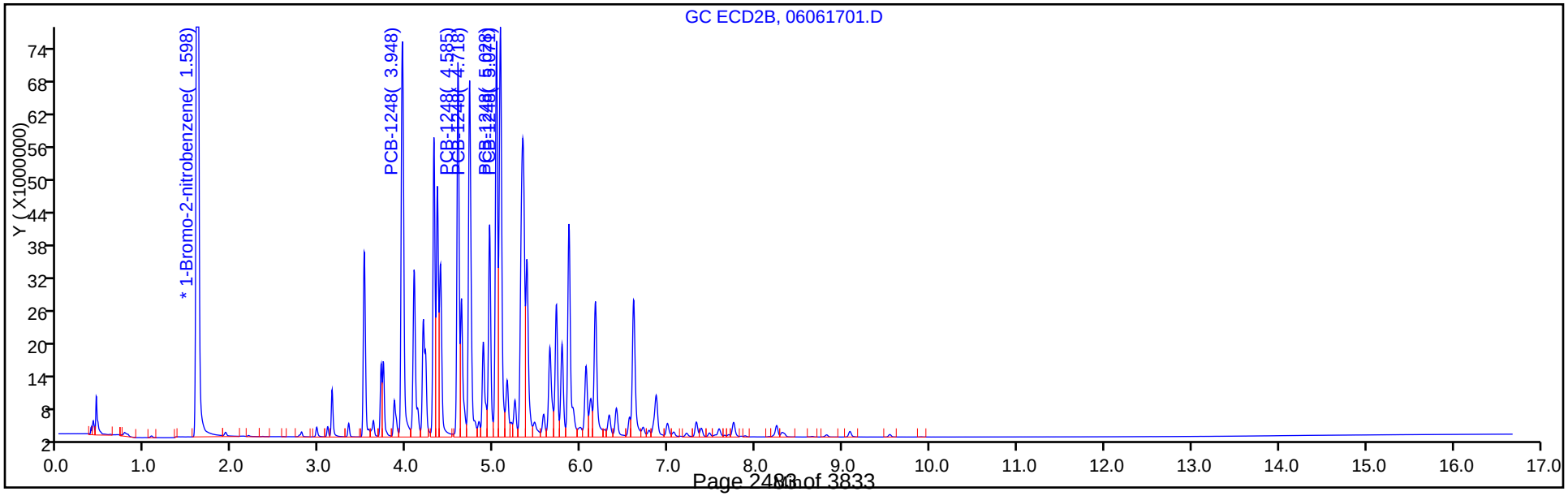
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061701.D

Injection Date:	06-Jun-2017 13:49:03	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL71248			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061702.D
Lims ID: STDL61248
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Jun-2017 14:10:47 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL61248
Misc. Info.: 280-0059455-002
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:18 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 06-Jun-2017 14:49:51

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	314882116	1000.0	1000.0	
2	1.600	1.599	0.001	349495294	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							M
1	3.484	3.486	-0.002	37083917	750.0	757.9	
1	3.947	3.946	0.001	98499824	750.0	743.9	
1	4.300	4.302	-0.002	101771802	750.0	748.1	
1	4.537	4.539	-0.002	99347497	750.0	744.1	
1	5.290	5.289	0.001	73957477	750.0	744.8	
		Average of Peak Amounts =				747.8	
2	3.950	3.949	0.001	120287134	750.0	744.7	M
2	4.587	4.586	0.001	91229179	750.0	737.5	M
2	4.720	4.719	0.001	108775603	750.0	748.4	M
2	5.027	5.029	-0.002	104787269	750.0	755.6	M
2	5.074	5.072	0.002	121390047	750.0	736.3	M
		Average of Peak Amounts =				744.5	
						RPD = 0.44	
S 8 Polychlorinated biphenyls, Total							
1						747.8	
2						744.5	
						RPD = 0.44	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1248_L6_00016	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

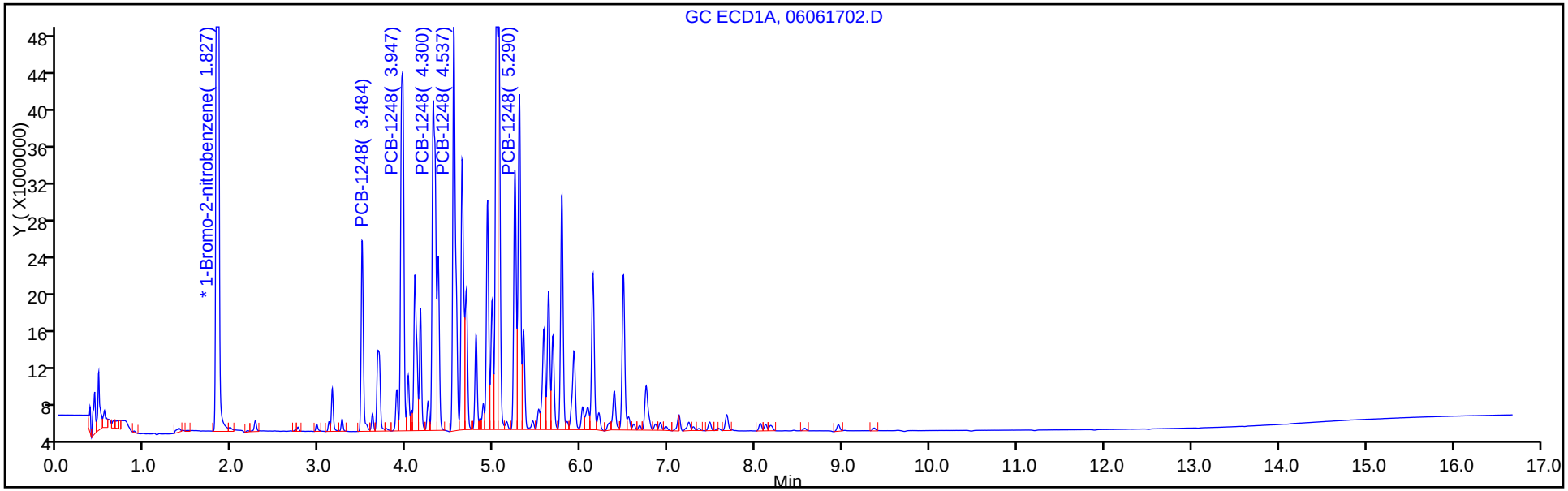
Report Date: 07-Jun-2017 06:52:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

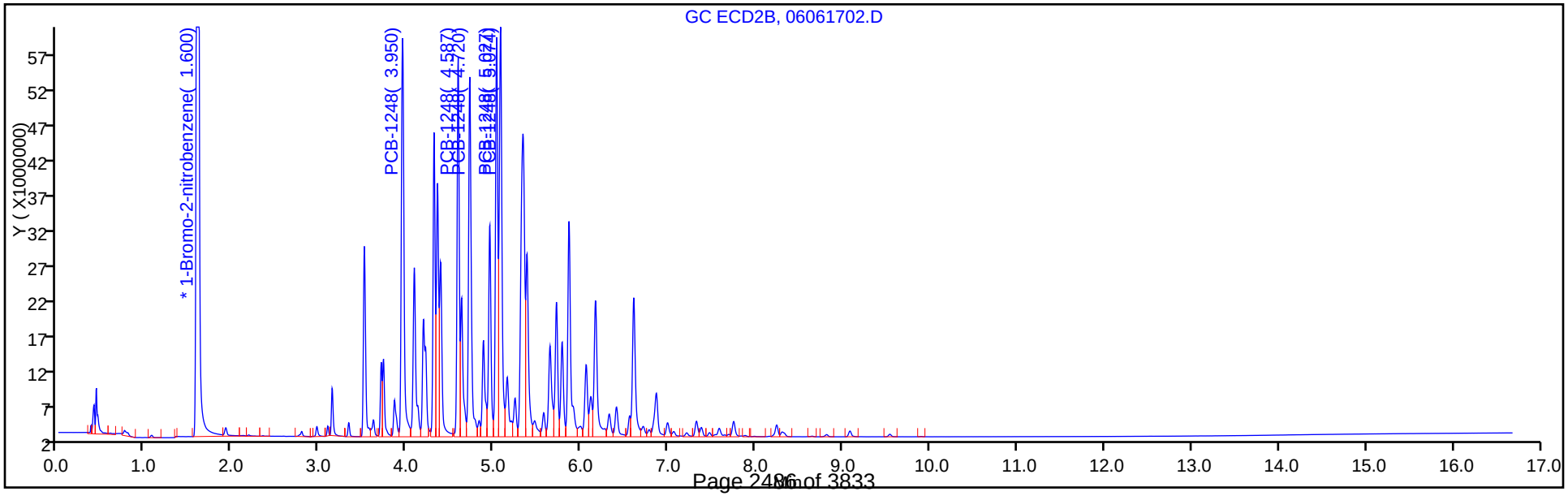
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061702.D

Injection Date:	06-Jun-2017 14:10:47	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL61248			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061703.D
Lims ID: STDL51248
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 06-Jun-2017 14:32:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL51248
Misc. Info.: 280-0059455-003
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:20 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 06-Jun-2017 14:58:06

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	324506738	1000.0	1000.0	
2	1.599	1.599	0.000	366994281	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							M
1	3.486	3.486	0.000	24749110	500.0	486.4	
1	3.946	3.946	0.000	67300939	500.0	490.0	
1	4.302	4.302	0.000	69471291	500.0	491.6	
1	4.539	4.539	0.000	68399630	500.0	492.2	
1	5.289	5.289	0.000	51001785	500.0	495.0	
		Average of Peak Amounts =				491.1	
2	3.949	3.949	0.000	86095391	500.0	503.5	M
2	4.586	4.586	0.000	65804904	500.0	501.5	M
2	4.719	4.719	0.000	77873035	500.0	506.1	M
2	5.029	5.029	0.000	71686977	500.0	489.1	M
2	5.072	5.072	0.000	89792945	500.0	513.7	M
		Average of Peak Amounts =				502.8	
						RPD = 2.36	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

AR_1248_L5_00018 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

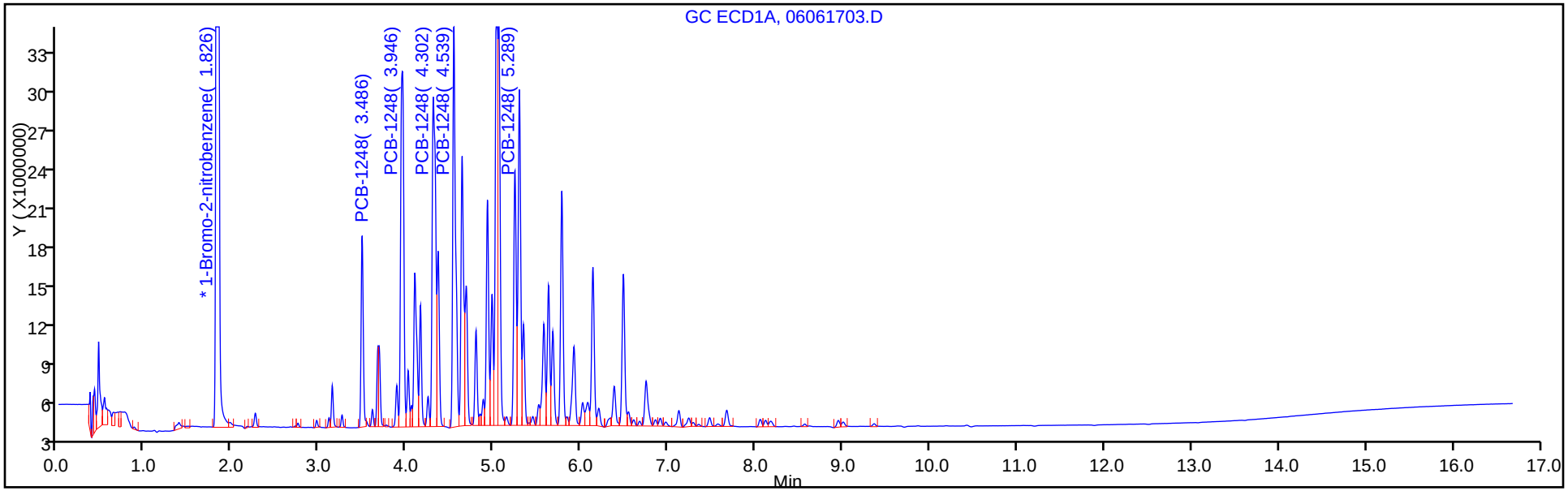
Report Date: 07-Jun-2017 06:52:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

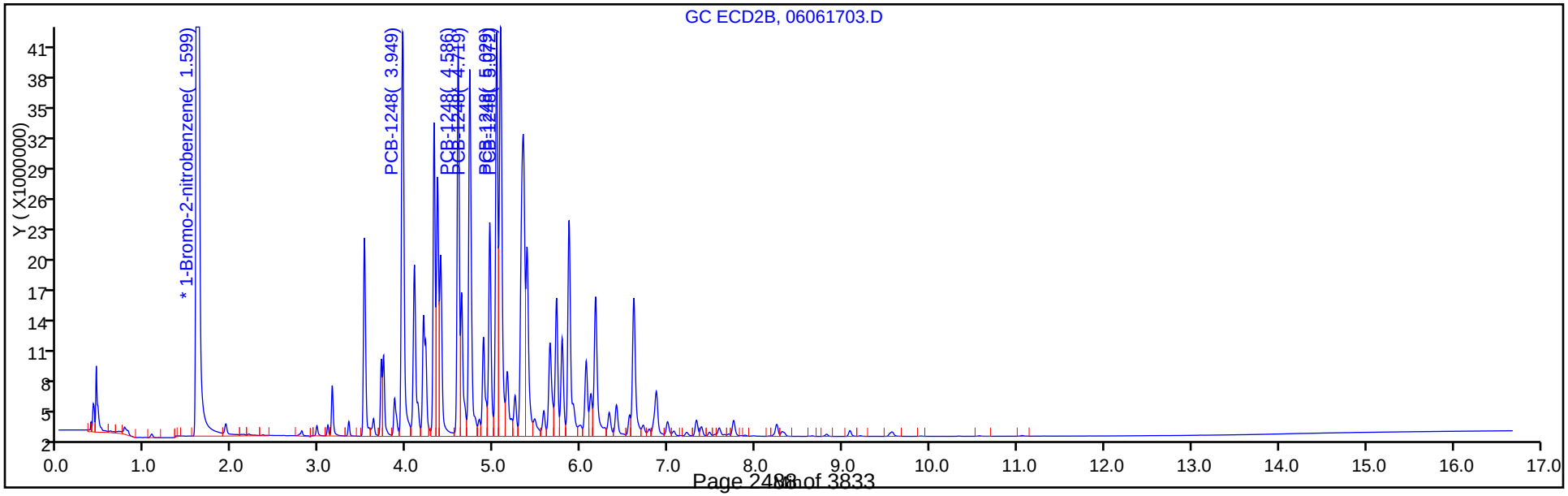
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061703.D

Injection Date:	06-Jun-2017 14:32:30	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL51248			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061704.D
Lims ID: STDL41248
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Jun-2017 14:54:14 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL41248
Misc. Info.: 280-0059455-004
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:22 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	335308096	1000.0	1000.0	
2	1.598	1.599	-0.001	382534910	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							
1	3.485	3.486	-0.001	13436171	250.0	249.7	
1	3.948	3.946	0.002	35602134	250.0	246.3	
1	4.301	4.302	-0.001	36790257	250.0	246.2	
1	4.538	4.539	-0.001	36867560	250.0	249.7	
1	5.288	5.289	-0.001	27101154	250.0	249.7	
		Average of Peak Amounts =				248.3	
2	3.951	3.949	0.002	45463769	250.0	248.7	
2	4.588	4.586	0.002	35114541	250.0	248.8	
2	4.721	4.719	0.002	41404953	250.0	251.7	
2	5.028	5.029	-0.001	39323682	250.0	253.1	
2	5.075	5.072	0.003	47383534	250.0	251.7	
		Average of Peak Amounts =				250.8	
						RPD = 0.99	
S 8 Polychlorinated biphenyls, Total							
1						248.3	
2						250.8	
						RPD = 0.99	

Reagents:

AR_1248_L4_00019 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

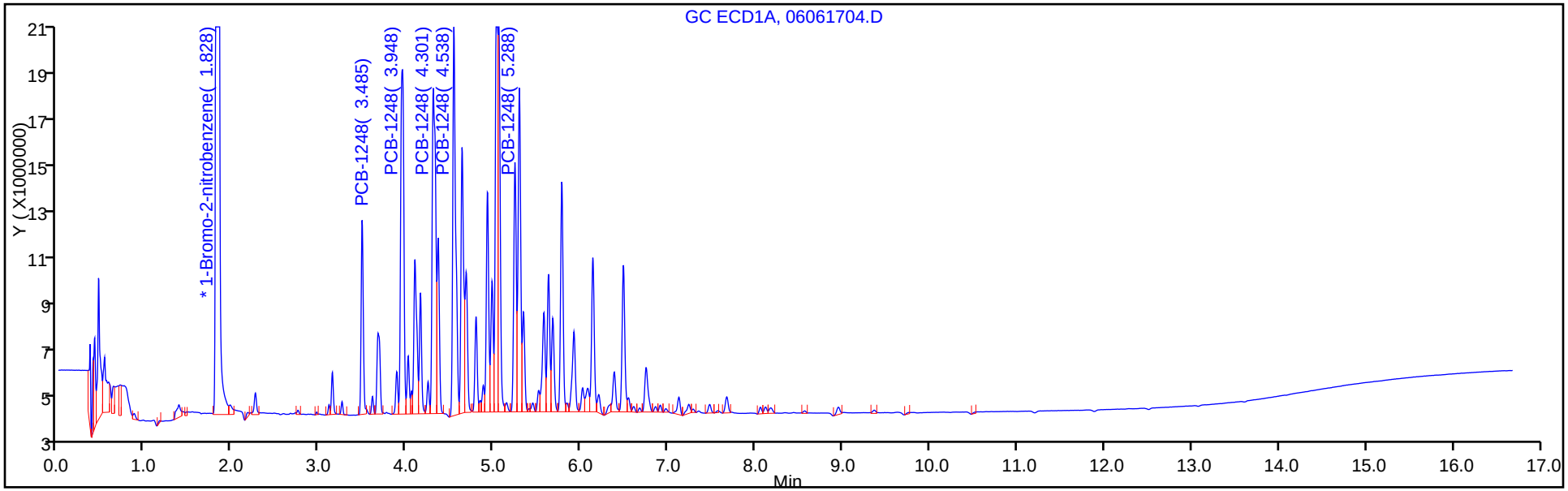
Report Date: 07-Jun-2017 06:52:22 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

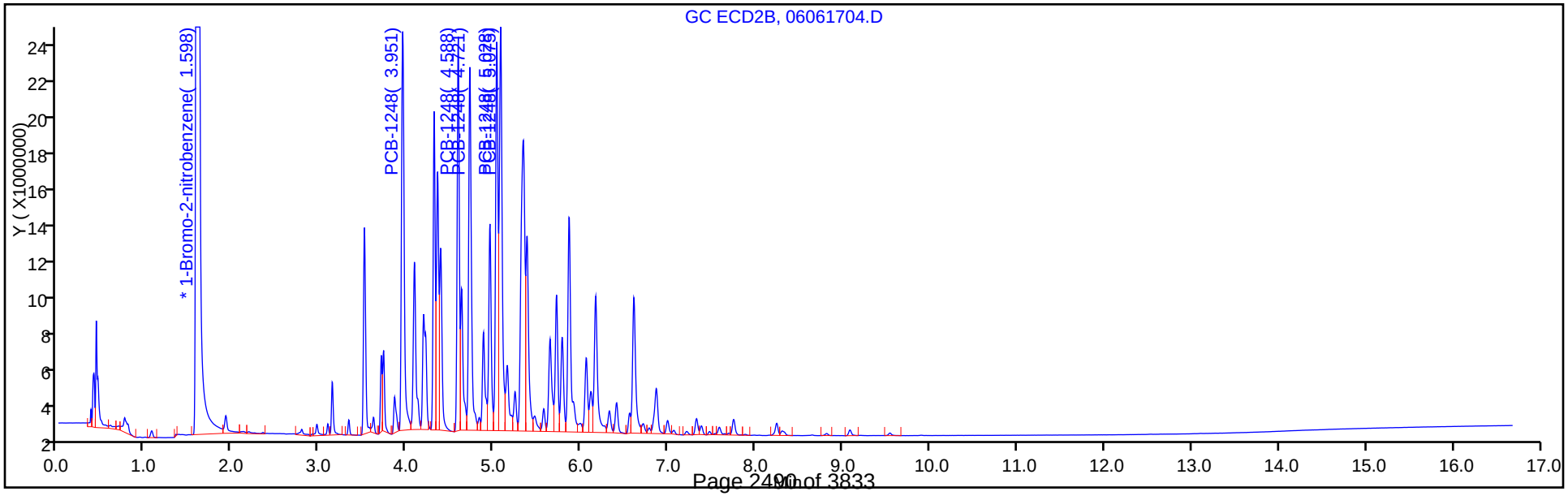
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061704.D

Injection Date:	06-Jun-2017 14:54:14	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL41248			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061705.D
Lims ID: STDL31248
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Jun-2017 15:16:00 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL31248
Misc. Info.: 280-0059455-005
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:24 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	336751844	1000.0	1000.0	
2	1.601	1.599	0.002	386854498	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							
1	3.484	3.486	-0.002	6019277	100.0	104.6	
1	3.947	3.946	0.001	15503715	100.0	101.5	
1	4.301	4.302	-0.001	16563599	100.0	103.9	
1	4.537	4.539	-0.002	16846461	100.0	105.6	
1	5.291	5.289	0.002	11688134	100.0	101.4	
		Average of Peak Amounts =				103.4	
2	3.951	3.949	0.002	20203711	100.0	102.1	
2	4.587	4.586	0.001	16080114	100.0	103.7	
2	4.721	4.719	0.002	18307755	100.0	102.7	
2	5.031	5.029	0.002	16388685	100.0	99.0	
2	5.074	5.072	0.002	21842398	100.0	105.5	
		Average of Peak Amounts =				102.6	
						RPD = 0.78	
S 8 Polychlorinated biphenyls, Total							
1						103.4	
2						102.6	
						RPD = 0.78	

Reagents:

AR_1248_L3_00018 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

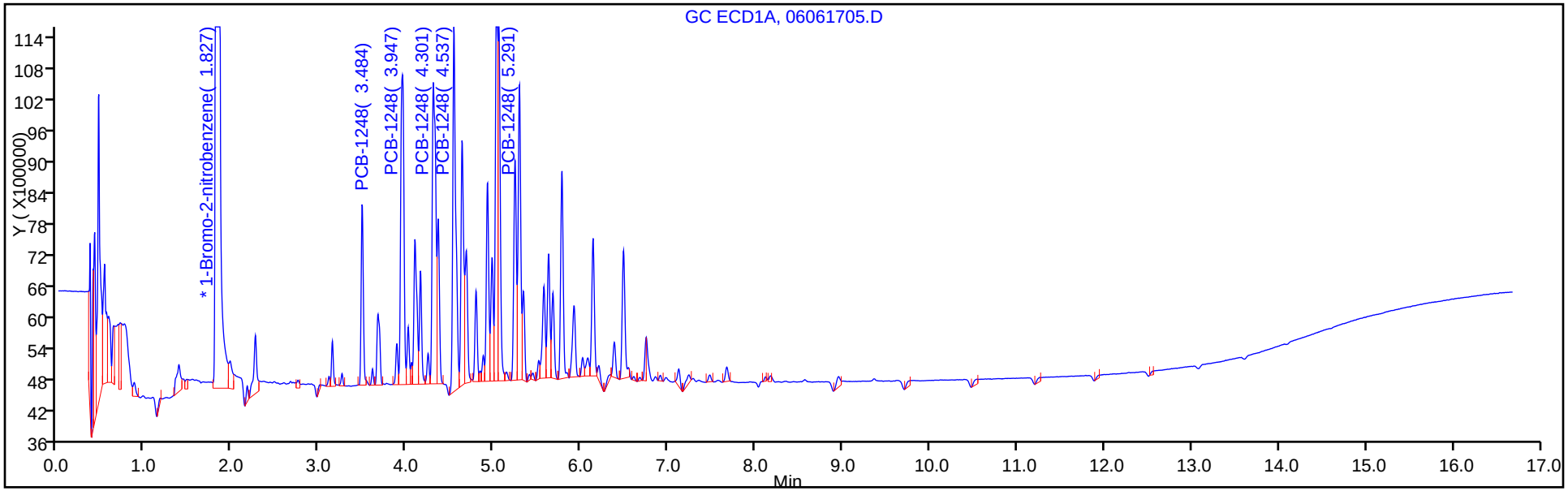
Report Date: 07-Jun-2017 06:52:24 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

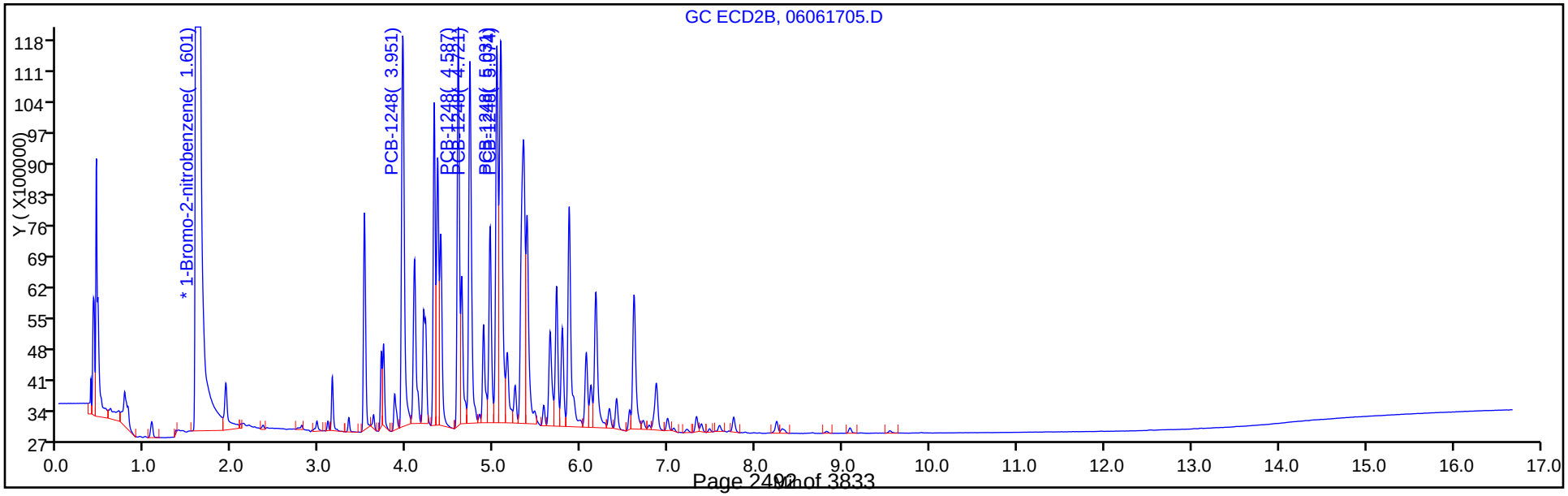
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061705.D

Injection Date:	06-Jun-2017 15:16:00	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL31248			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061706.D
Lims ID: STDL21248
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Jun-2017 15:37:43 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL21248
Misc. Info.: 280-0059455-006
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:25 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	329096535	1000.0	1000.0	
2	1.599	1.599	0.000	380878712	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							
1	3.486	3.486	0.000	3291704	50.0	53.1	
1	3.949	3.946	0.003	8395956	50.0	52.0	
1	4.302	4.302	0.000	8940744	50.0	52.2	
1	4.539	4.539	0.000	9031280	50.0	51.3	
1	5.289	5.289	0.000	6349225	50.0	51.9	
		Average of Peak Amounts =				52.1	
2	3.952	3.949	0.003	11389337	50.0	52.9	
2	4.589	4.586	0.003	9088866	50.0	52.6	
2	4.722	4.719	0.003	10286784	50.0	53.0	
2	5.032	5.029	0.003	9091862	50.0	51.8	
2	5.076	5.072	0.004	12277558	50.0	53.0	
		Average of Peak Amounts =				52.7	
						RPD = 1.08	
S 8 Polychlorinated biphenyls, Total							
1						52.1	
2						52.7	
						RPD = 1.08	

Reagents:

AR_1248_L2_00018 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

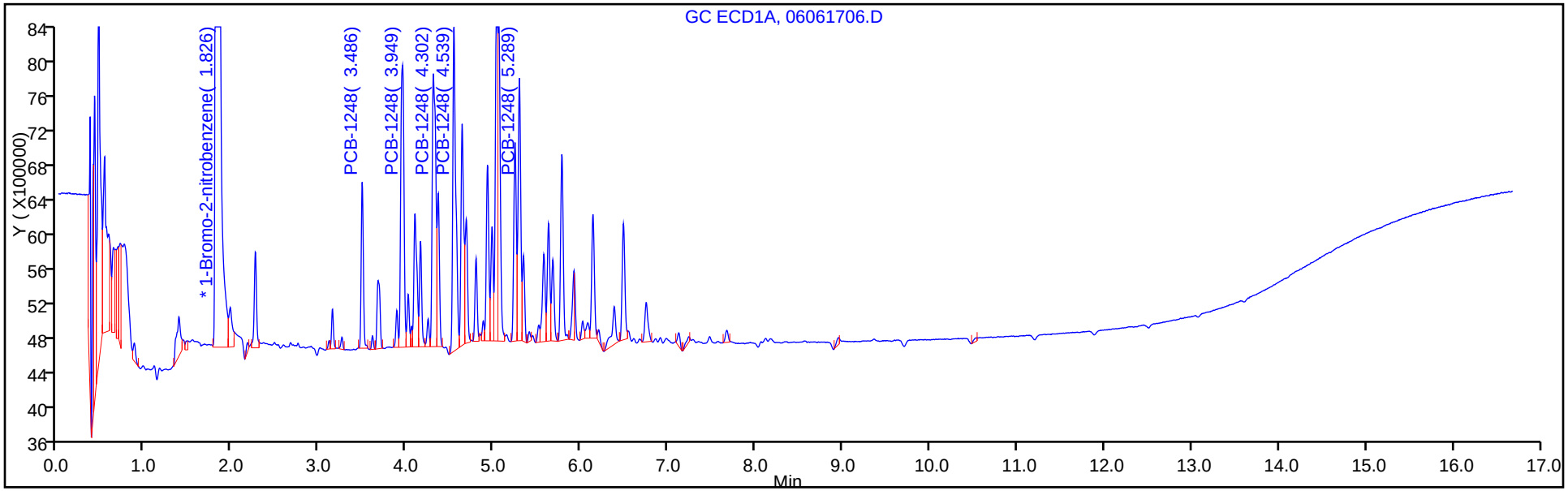
Report Date: 07-Jun-2017 06:52:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

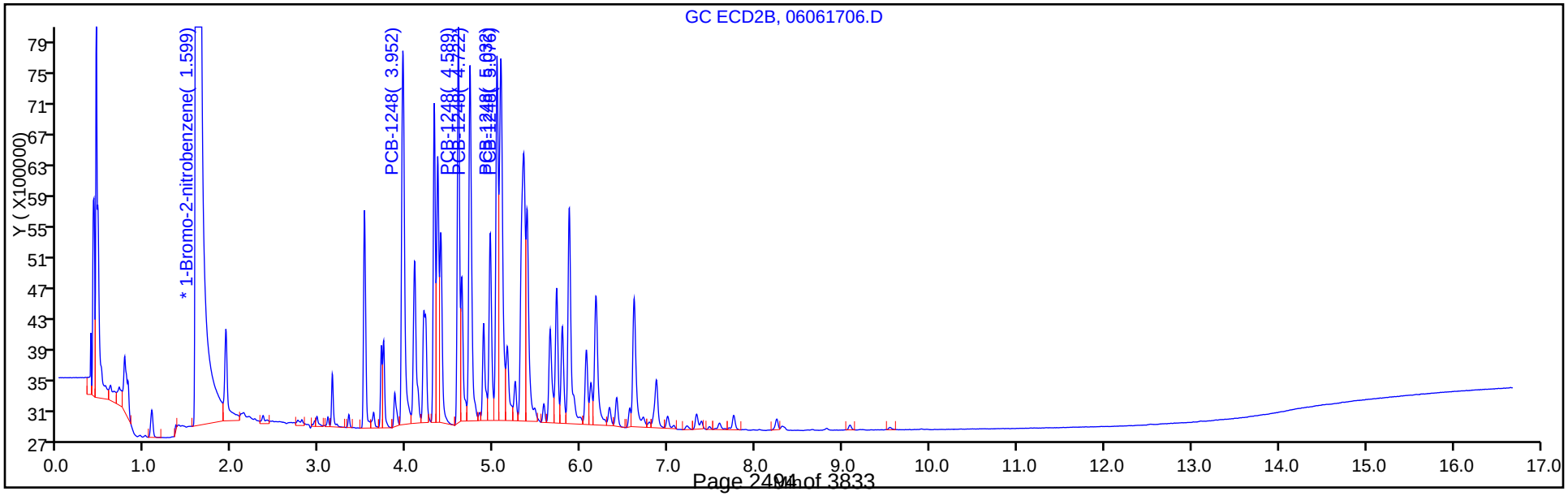
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061706.D

Injection Date:	06-Jun-2017 15:37:43	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL21248			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061707.D
Lims ID: STDL11248
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Jun-2017 15:59:26 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL11248
Misc. Info.: 280-0059455-007
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:27 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	323790667	1000.0	1000.0	
2	1.601	1.599	0.002	376309903	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							
1	3.484	3.486	-0.002	1738031	25.0	22.8	
1	3.948	3.946	0.002	4527237	25.0	24.3	
1	4.301	4.302	-0.001	4853502	25.0	23.5	
1	4.538	4.539	-0.001	5130218	25.0	23.4	
1	5.291	5.289	0.002	3429912	25.0	23.9	
		Average of Peak Amounts =				23.6	
2	3.954	3.949	0.005	6160645	25.0	23.1	
2	4.588	4.586	0.002	5129916	25.0	23.0	
2	4.724	4.719	0.005	5505999	25.0	22.7	
2	5.034	5.029	0.005	4933253	25.0	24.4	
2	5.078	5.072	0.006	6731688	25.0	21.9	
		Average of Peak Amounts =				23.0	
						RPD = 2.37	
S 8 Polychlorinated biphenyls, Total							
1						23.6	
2						23.0	
						RPD = 2.37	

Reagents:

AR_1248_L1_00019 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

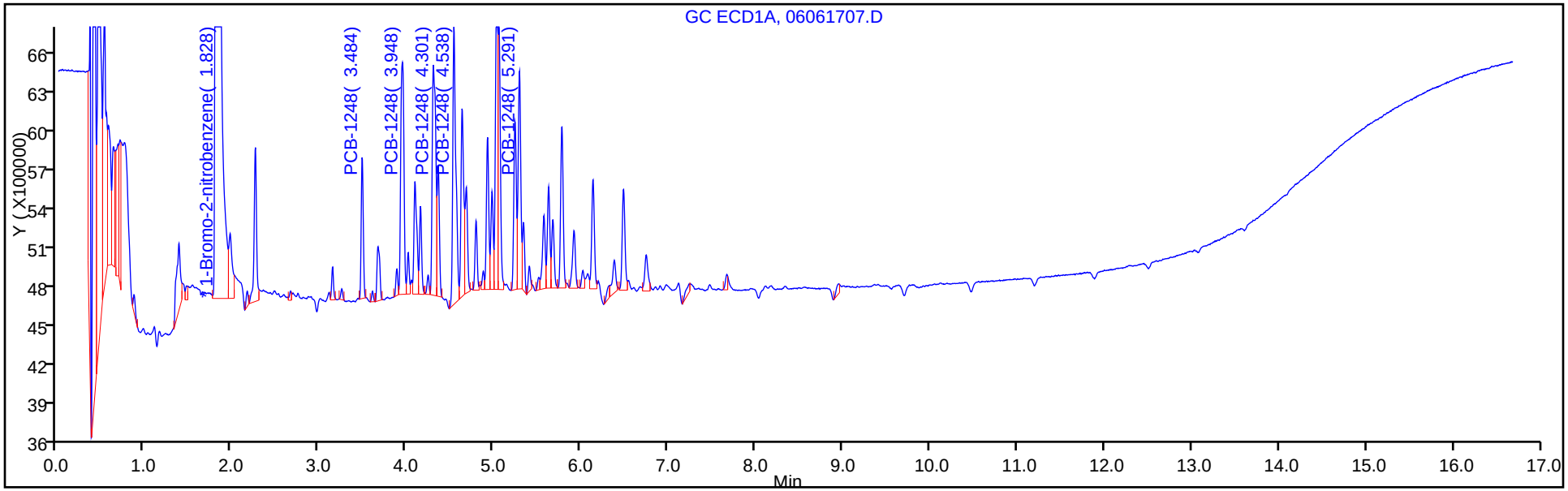
Report Date: 07-Jun-2017 06:52:28 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

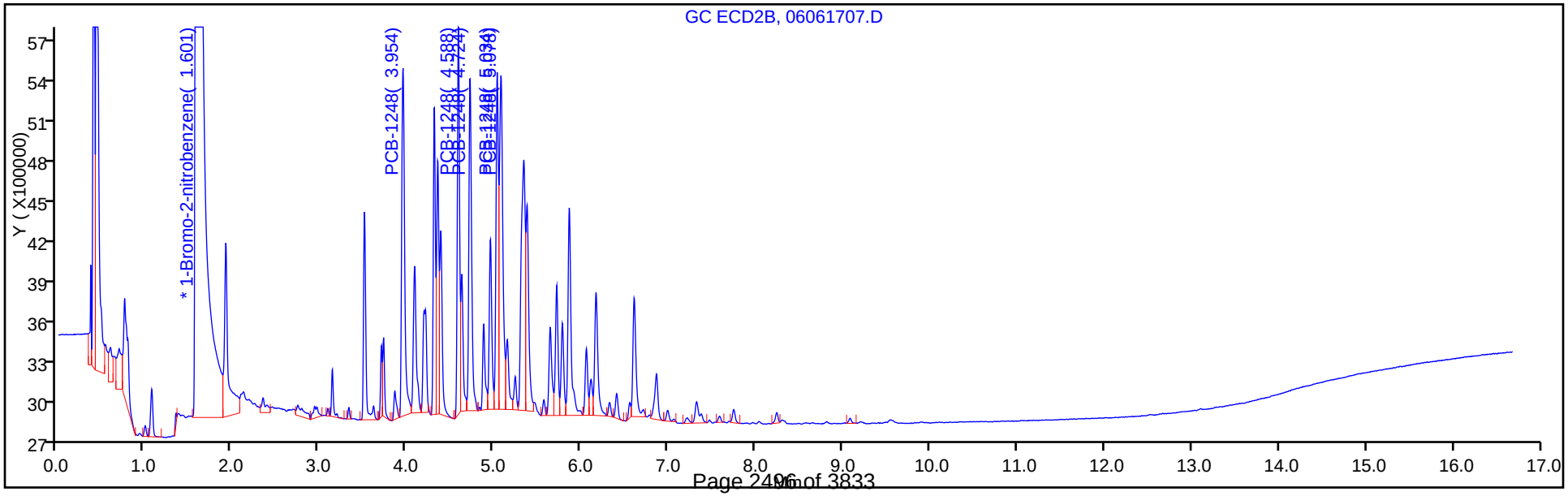
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061707.D

Injection Date:	06-Jun-2017 15:59:26	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL11248			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 13:49 Calibration End Date: 06/06/2017 15:59 Calibration ID: 29386

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11248 280-376236/7	06061707.D
Level 2	STDL21248 280-376236/6	06061706.D
Level 3	STDL31248 280-376236/5	06061705.D
Level 4	STDL41248 280-376236/4	06061704.D
Level 5	STDL51248 280-376236/3	06061703.D
Level 6	STDL61248 280-376236/2	06061702.D
Level 7	STDL71248 280-376236/1	06061701.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1248 Peak 1	0.6548 0.4589	0.5981 0.4602	0.5223	0.4754	0.4692	Lin1	5.8545	0.4543							1.0000		0.9900
PCB-1248 Peak 2	0.5453 0.3480	0.4773 0.3547	0.4157	0.3672	0.3586	Lin1	5.6508	0.3463							1.0000		0.9900
PCB-1248 Peak 3	0.5853 0.4150	0.5402 0.4101	0.4732	0.4330	0.4244	Lin1	5.3670	0.4087							1.0000		0.9900
PCB-1248 Peak 4	0.5244 0.3998	0.4774 0.3965	0.4236	0.4112	0.3907	Lin1	3.5599	0.3921							1.0000		0.9900
PCB-1248 Peak 5	0.7155 0.4631	0.6447 0.4656	0.5646	0.4955	0.4893	Lin1	7.7928	0.4611							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 13:49 Calibration End Date: 06/06/2017 15:59 Calibration ID: 29386

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11248 280-376236/7	06061707.D
Level 2	STDL21248 280-376236/6	06061706.D
Level 3	STDL31248 280-376236/5	06061705.D
Level 4	STDL41248 280-376236/4	06061704.D
Level 5	STDL51248 280-376236/3	06061703.D
Level 6	STDL61248 280-376236/2	06061702.D
Level 7	STDL71248 280-376236/1	06061701.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1248 Peak 1	BNB	Lin1	6160645 120287134	11389337 155312014	20203711	45463769	86095391	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 2	BNB	Lin1	5129916 91229179	9088866 119725030	16080114	35114541	65804904	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 3	BNB	Lin1	5505999 108775603	10286784 138430869	18307755	41404953	77873035	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 4	BNB	Lin1	4933253 104787269	9091862 133820350	16388685	39323682	71686977	25.0 750	50.0 1000	100	250	500
PCB-1248 Peak 5	BNB	Lin1	6731688 121390047	12277558 157166673	21842398	47383534	89792945	25.0 750	50.0 1000	100	250	500

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061701.D
Lims ID: STDL71248
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 13:49:03 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL71248
Misc. Info.: 280-0059455-001
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:16 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 06-Jun-2017 14:49:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	313463735	1000.0	1000.0	
2	1.598	1.599	-0.001	337522132	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							M
1	3.488	3.486	0.002	48550285	1000.0	1000.6	
1	3.948	3.946	0.002	133611078	1000.0	1017.0	
1	4.301	4.302	-0.001	136147687	1000.0	1009.4	
1	4.538	4.539	-0.001	133399245	1000.0	1008.8	
1	5.291	5.289	0.002	99315895	1000.0	1008.2	
		Average of Peak Amounts =				1008.8	
2	3.948	3.949	-0.001	155312014	1000.0	1000.0	M
2	4.585	4.586	-0.001	119725030	1000.0	1008.0	M
2	4.718	4.719	-0.001	138430869	1000.0	990.5	M
2	5.028	5.029	-0.001	133820350	1000.0	1002.1	M
2	5.071	5.072	-0.001	157166673	1000.0	992.9	M
		Average of Peak Amounts =				998.7	
						RPD = 1.01	
S 8 Polychlorinated biphenyls, Total							
1						1008.8	
2						998.7	
						RPD = 1.01	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1248_L7_00014	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

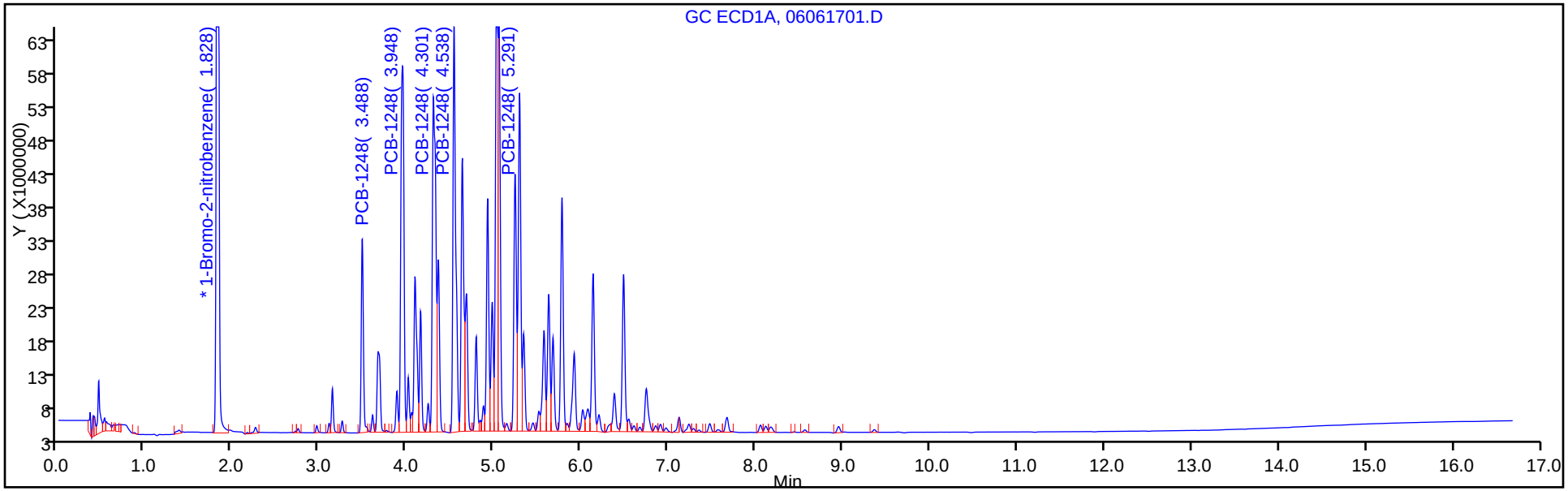
Report Date: 07-Jun-2017 06:52:17 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

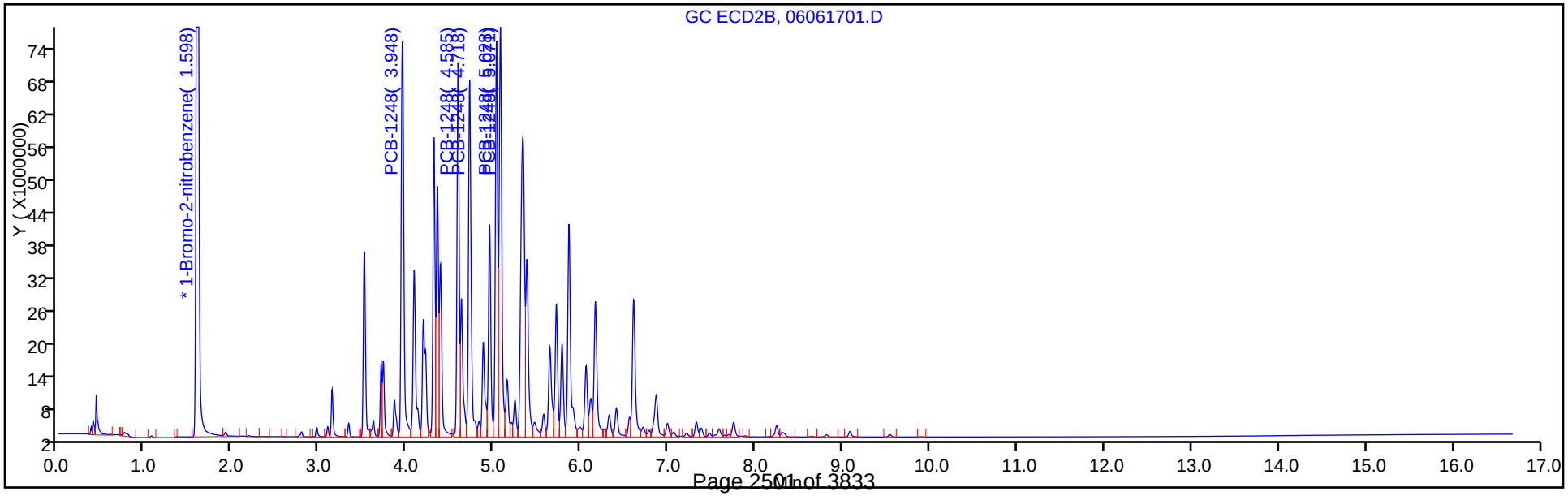
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061701.D

Injection Date:	06-Jun-2017 13:49:03	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL71248			Worklist Smp#:	1
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:52:17 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061701.D

Injection Date: 06-Jun-2017 13:49:03 Instrument ID: SGC_P3

Lims ID: STDL71248

Client ID:

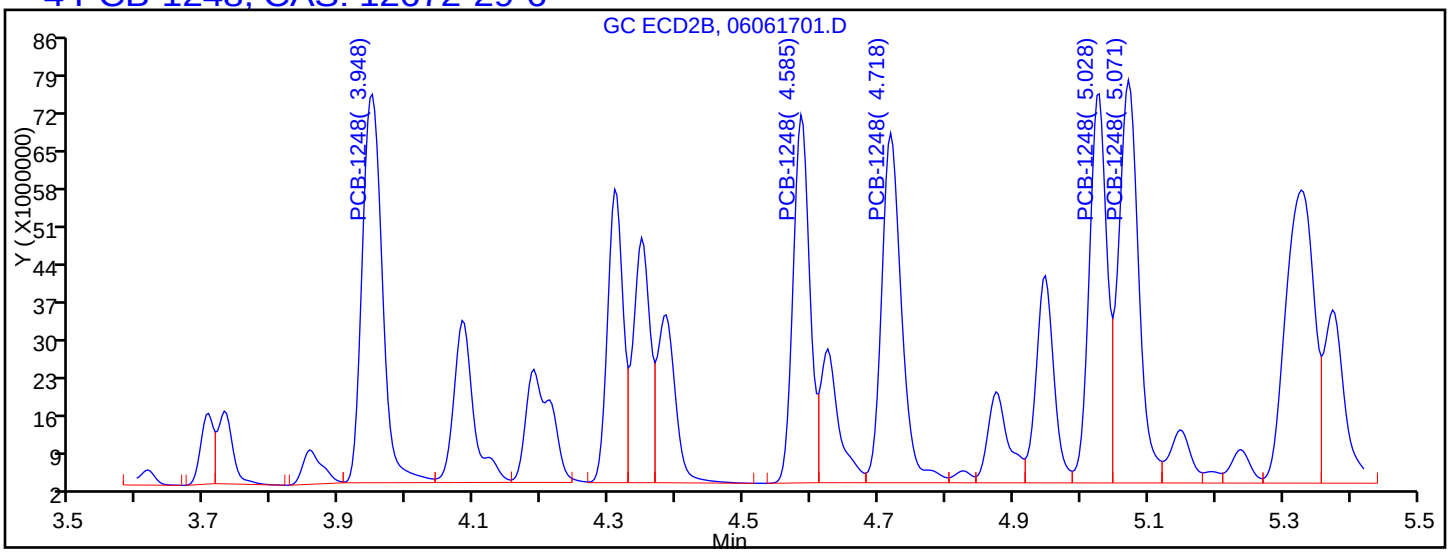
Operator ID: jax ALS Bottle#: 1 Worklist Smp#: 1

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

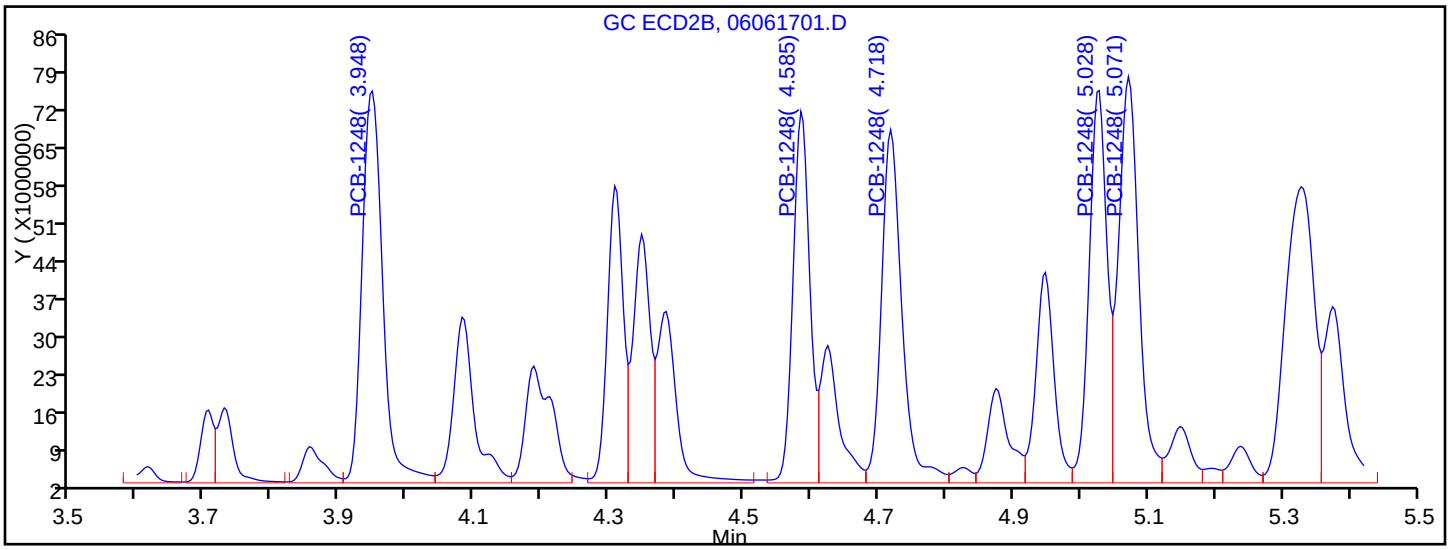
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

4 PCB-1248, CAS: 12672-29-6



Processing Integration Results

3.948	Response = 150080976
4.585	Response = 117052766
4.718	Response = 133755057
5.028	Response = 131666371
5.071	Response = 154567511



Manual Integration Results

3.948	Response = 155312014	M
4.585	Response = 119725030	M
4.718	Response = 138430869	M
5.028	Response = 133820350	M
5.071	Response = 157166673	M

Reviewer: jacksonto, 06-Jun-2017 14:59:04

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061702.D
Lims ID: STDL61248
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Jun-2017 14:10:47 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL61248
Misc. Info.: 280-0059455-002
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:18 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 06-Jun-2017 14:49:51

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	314882116	1000.0	1000.0	
2	1.600	1.599	0.001	349495294	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							M
1	3.484	3.486	-0.002	37083917	750.0	757.9	
1	3.947	3.946	0.001	98499824	750.0	743.9	
1	4.300	4.302	-0.002	101771802	750.0	748.1	
1	4.537	4.539	-0.002	99347497	750.0	744.1	
1	5.290	5.289	0.001	73957477	750.0	744.8	
		Average of Peak Amounts =				747.8	
2	3.950	3.949	0.001	120287134	750.0	744.7	M
2	4.587	4.586	0.001	91229179	750.0	737.5	M
2	4.720	4.719	0.001	108775603	750.0	748.4	M
2	5.027	5.029	-0.002	104787269	750.0	755.6	M
2	5.074	5.072	0.002	121390047	750.0	736.3	M
		Average of Peak Amounts =				744.5	
						RPD = 0.44	
S 8 Polychlorinated biphenyls, Total							
1						747.8	
2						744.5	
						RPD = 0.44	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1248_L6_00016	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

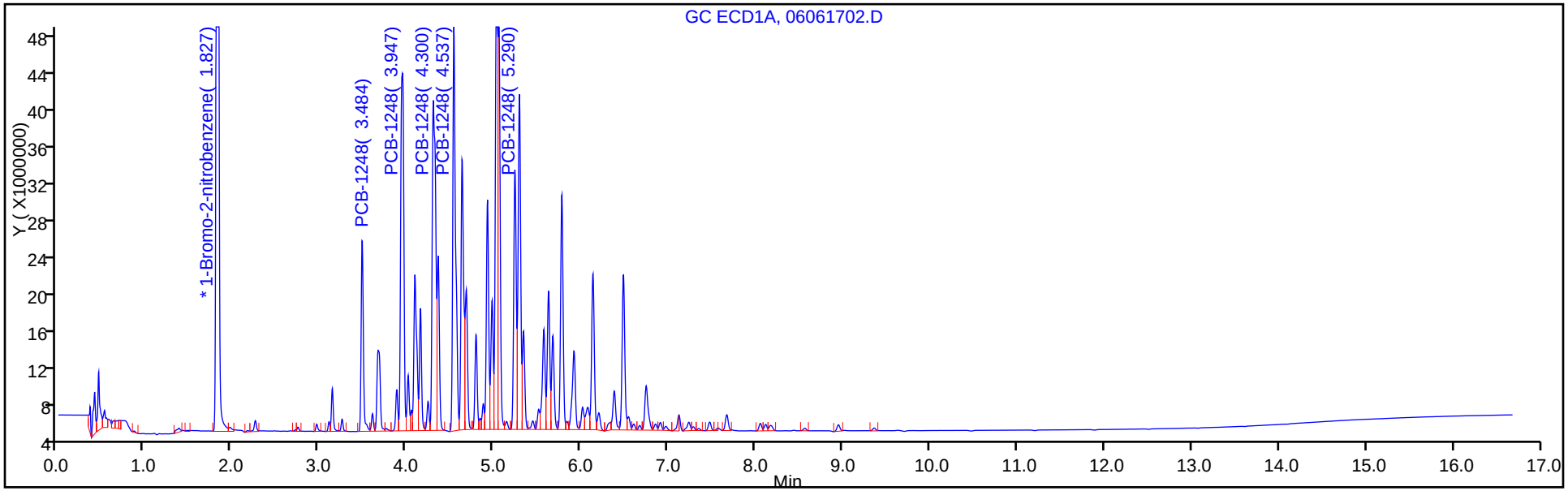
Report Date: 07-Jun-2017 06:52:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

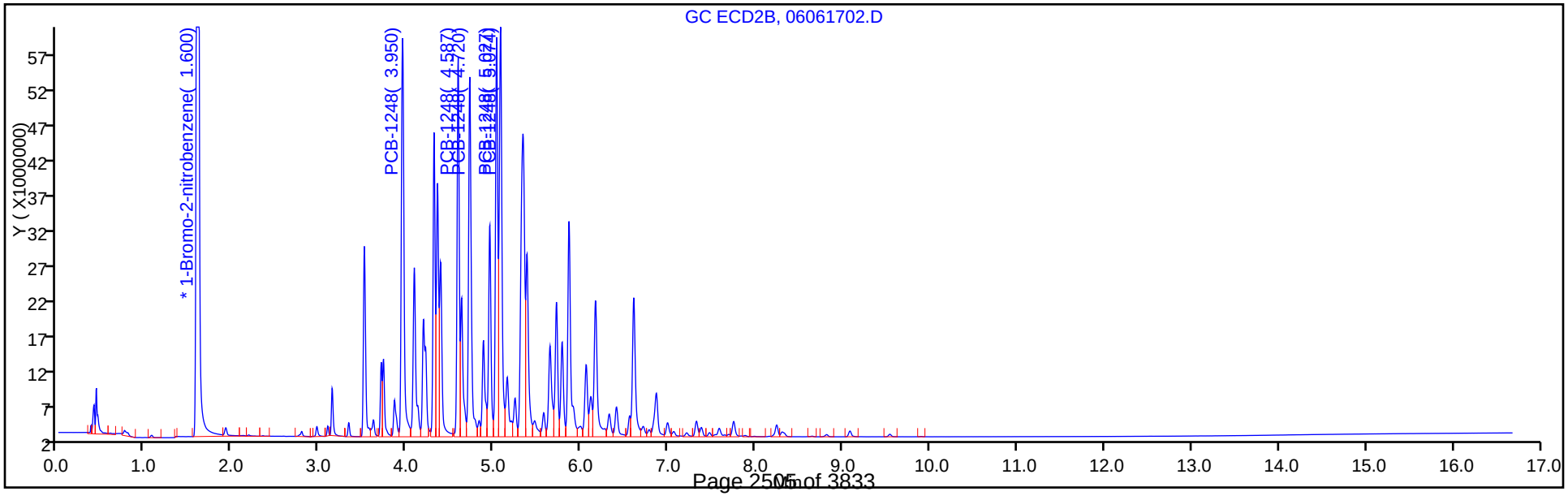
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061702.D

Injection Date:	06-Jun-2017 14:10:47	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL61248			Worklist Smp#:	2
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:52:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061702.D

Injection Date: 06-Jun-2017 14:10:47 Instrument ID: SGC_P3

Lims ID: STDL61248

Client ID:

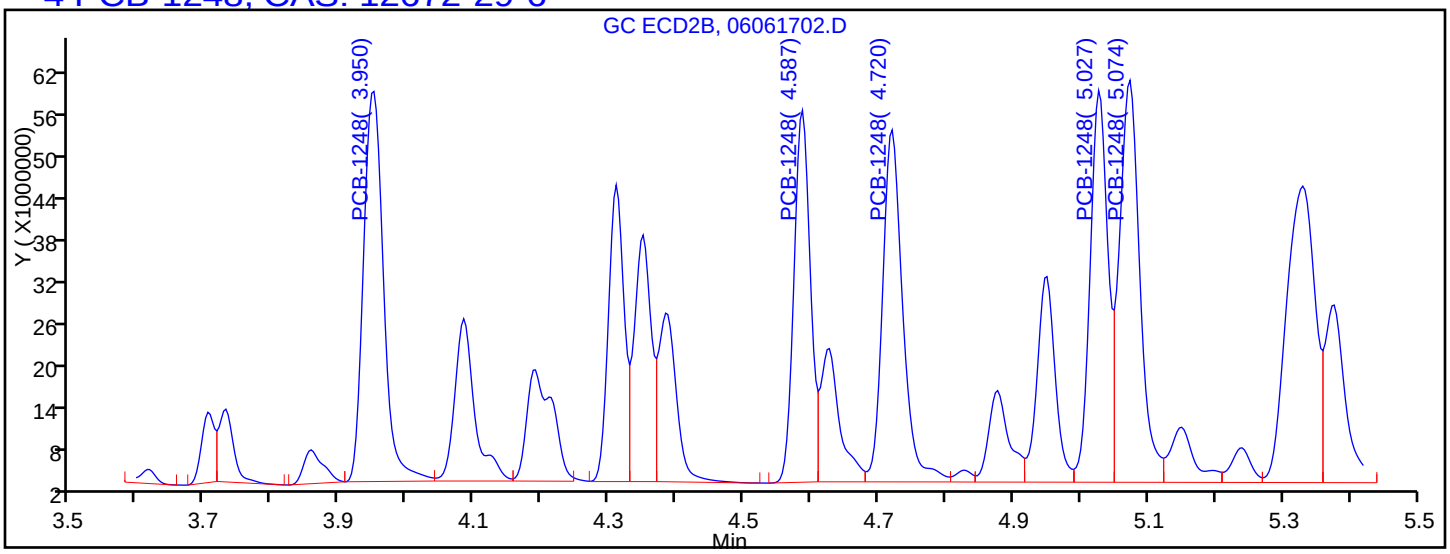
Operator ID: jax ALS Bottle#: 2 Worklist Smp#: 2

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

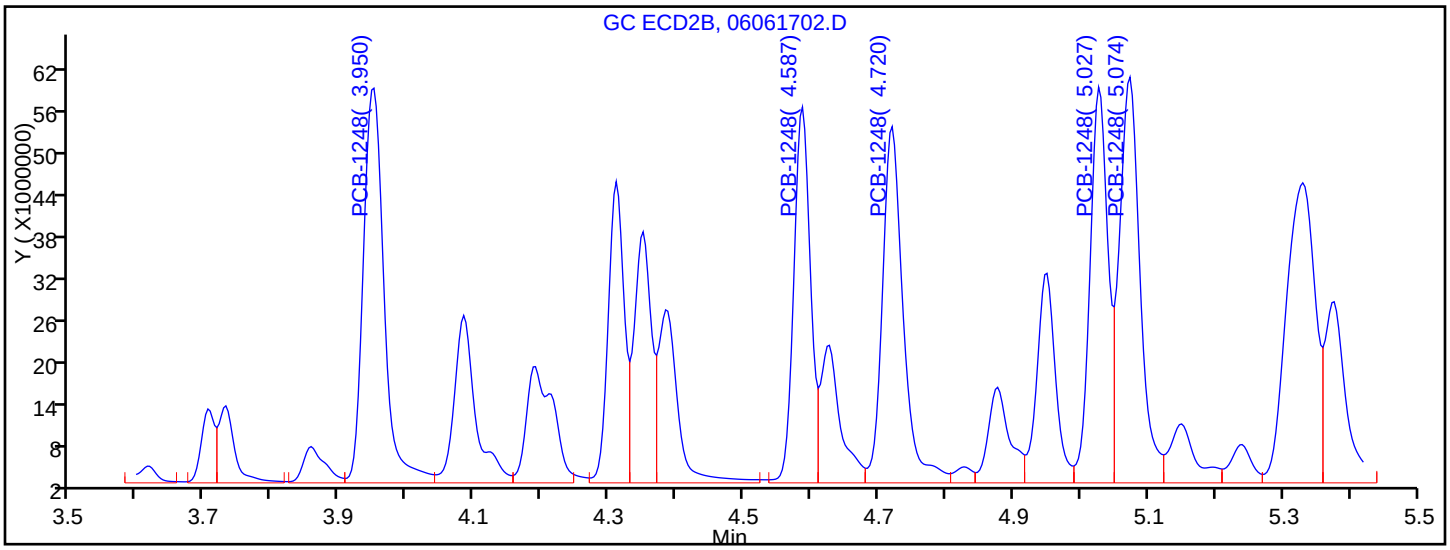
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

4 PCB-1248, CAS: 12672-29-6



Processing Integration Results

3.950	Response = 114908670
4.587	Response = 88921245
4.720	Response = 104198221
5.027	Response = 102783381
5.074	Response = 118984177



Manual Integration Results

3.950	Response = 120287134	M
4.587	Response = 91229179	M
4.720	Response = 108775603	M
5.027	Response = 104787269	M
5.074	Response = 121390047	M

Reviewer: jacksonto, 06-Jun-2017 14:58:39

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061703.D
Lims ID: STDL51248
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 06-Jun-2017 14:32:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL51248
Misc. Info.: 280-0059455-003
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:20 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 06-Jun-2017 14:58:06

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	324506738	1000.0	1000.0	
2	1.599	1.599	0.000	366994281	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							M
1	3.486	3.486	0.000	24749110	500.0	486.4	
1	3.946	3.946	0.000	67300939	500.0	490.0	
1	4.302	4.302	0.000	69471291	500.0	491.6	
1	4.539	4.539	0.000	68399630	500.0	492.2	
1	5.289	5.289	0.000	51001785	500.0	495.0	
		Average of Peak Amounts =				491.1	
2	3.949	3.949	0.000	86095391	500.0	503.5	M
2	4.586	4.586	0.000	65804904	500.0	501.5	M
2	4.719	4.719	0.000	77873035	500.0	506.1	M
2	5.029	5.029	0.000	71686977	500.0	489.1	M
2	5.072	5.072	0.000	89792945	500.0	513.7	M
		Average of Peak Amounts =				502.8	
						RPD = 2.36	

QC Flag Legend

Review Flags
M - Manually Integrated

Reagents:

AR_1248_L5_00018 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

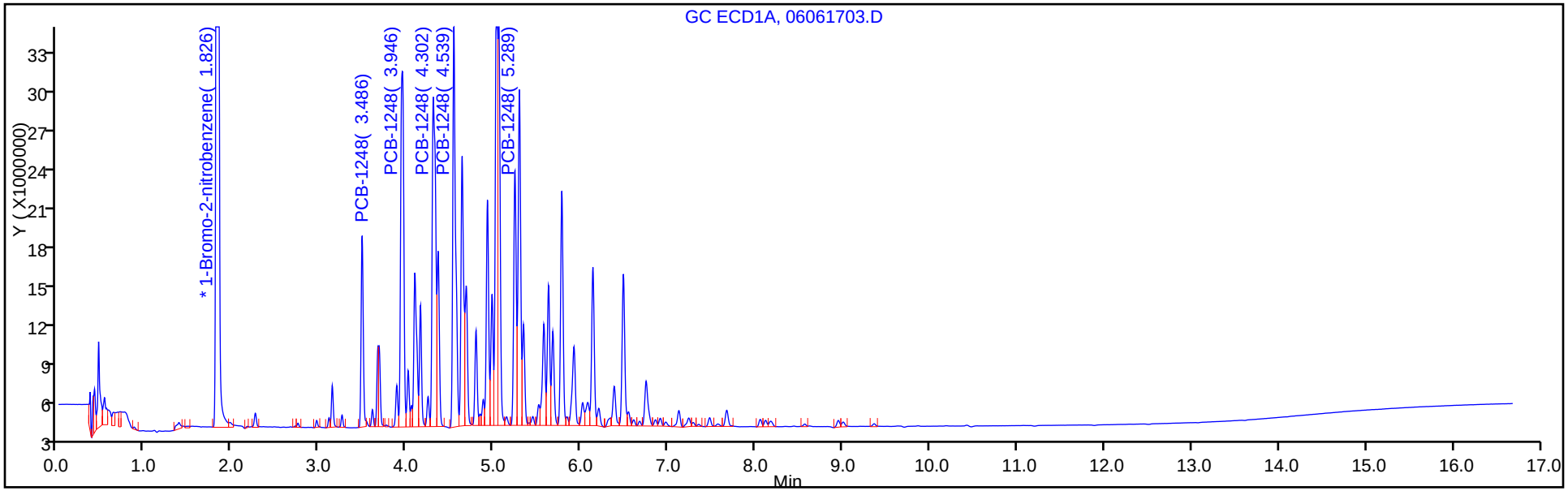
Report Date: 07-Jun-2017 06:52:21 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

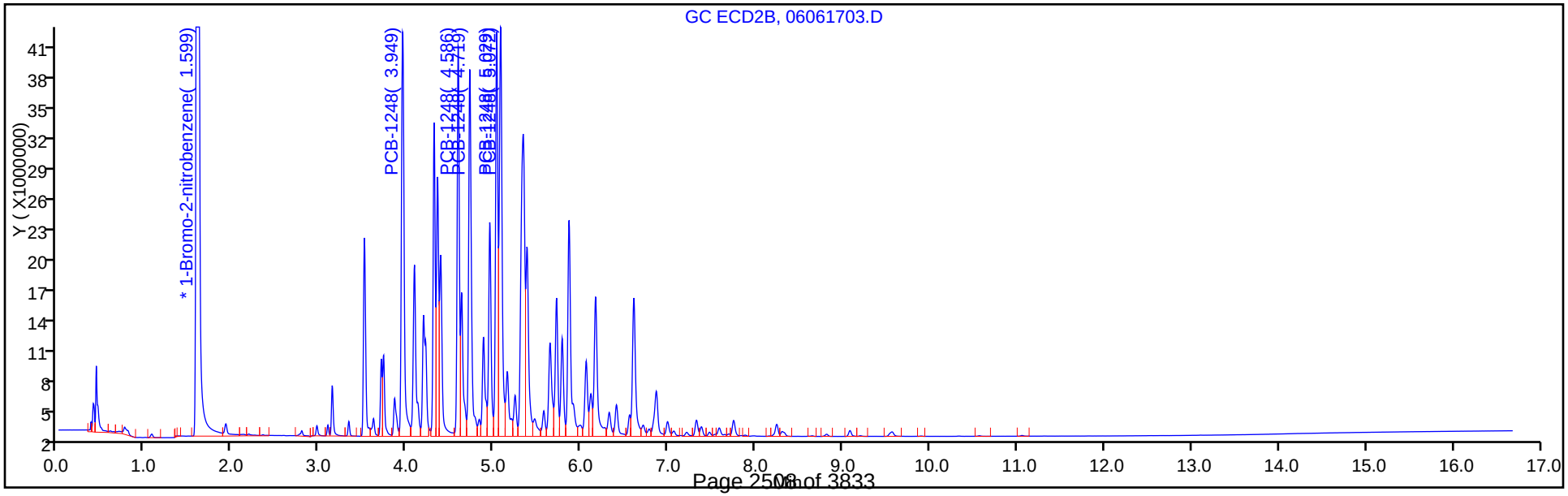
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061703.D

Injection Date:	06-Jun-2017 14:32:30	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL51248			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:52:21 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061703.D

Injection Date: 06-Jun-2017 14:32:30 Instrument ID: SGC_P3

Lims ID: STDL51248

Client ID:

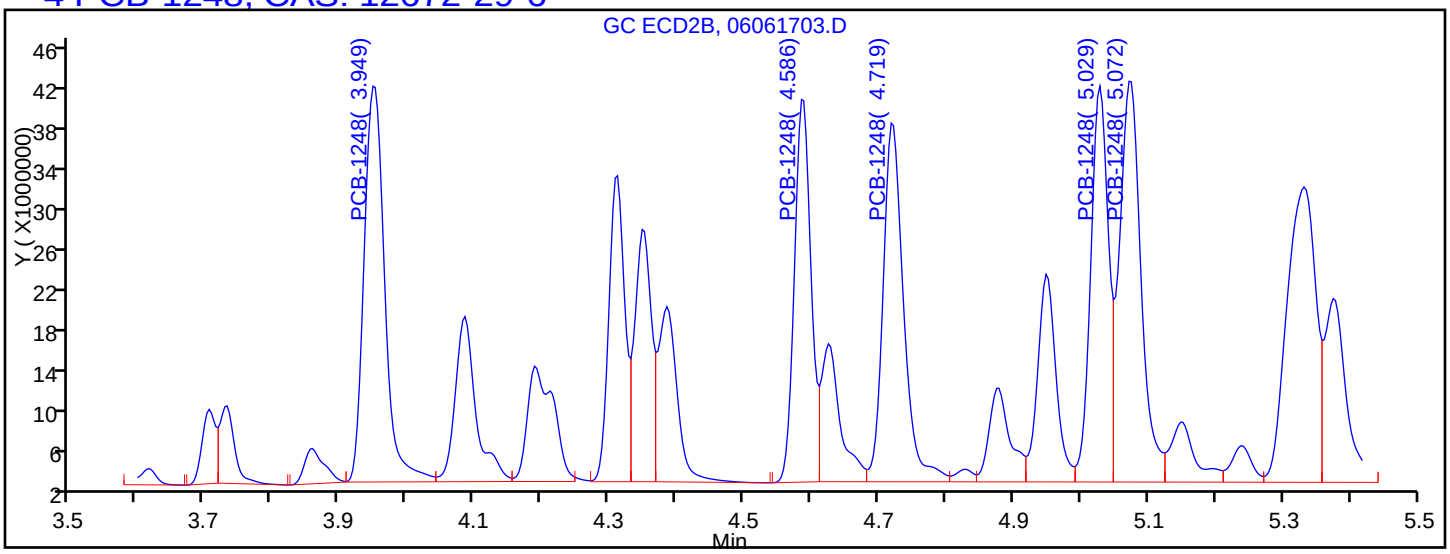
Operator ID: jax ALS Bottle#: 3 Worklist Smp#: 3

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

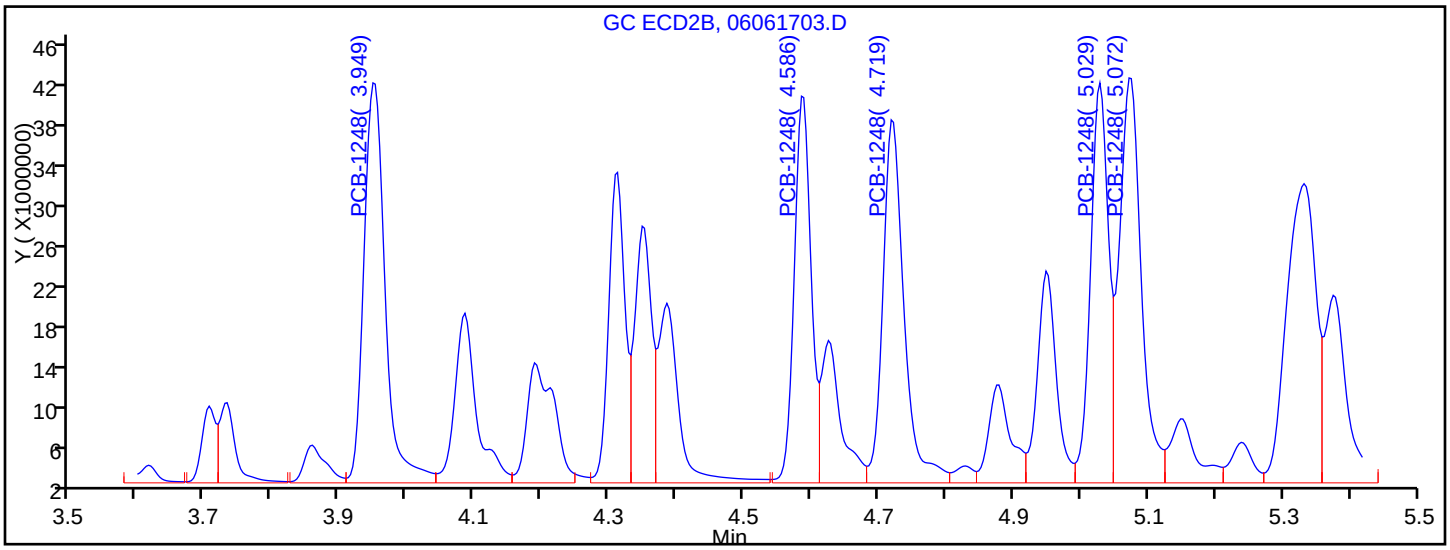
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

4 PCB-1248, CAS: 12672-29-6



Processing Integration Results

3.949	Response = 82794271
4.586	Response = 64203713
4.719	Response = 74705472
5.029	Response = 70307442
5.072	Response = 87951572



Manual Integration Results

3.949	Response = 86095391	M
4.586	Response = 65804904	M
4.719	Response = 77873035	M
5.029	Response = 71686977	M
5.072	Response = 89792945	M

Reviewer: jacksonto, 06-Jun-2017 14:59:22

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061704.D
Lims ID: STDL41248
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Jun-2017 14:54:14 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL41248
Misc. Info.: 280-0059455-004
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:22 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	335308096	1000.0	1000.0	
2	1.598	1.599	-0.001	382534910	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							
1	3.485	3.486	-0.001	13436171	250.0	249.7	
1	3.948	3.946	0.002	35602134	250.0	246.3	
1	4.301	4.302	-0.001	36790257	250.0	246.2	
1	4.538	4.539	-0.001	36867560	250.0	249.7	
1	5.288	5.289	-0.001	27101154	250.0	249.7	
		Average of Peak Amounts =				248.3	
2	3.951	3.949	0.002	45463769	250.0	248.7	
2	4.588	4.586	0.002	35114541	250.0	248.8	
2	4.721	4.719	0.002	41404953	250.0	251.7	
2	5.028	5.029	-0.001	39323682	250.0	253.1	
2	5.075	5.072	0.003	47383534	250.0	251.7	
		Average of Peak Amounts =				250.8	
						RPD = 0.99	
S 8 Polychlorinated biphenyls, Total							
1						248.3	
2						250.8	
						RPD = 0.99	

Reagents:

AR_1248_L4_00019 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

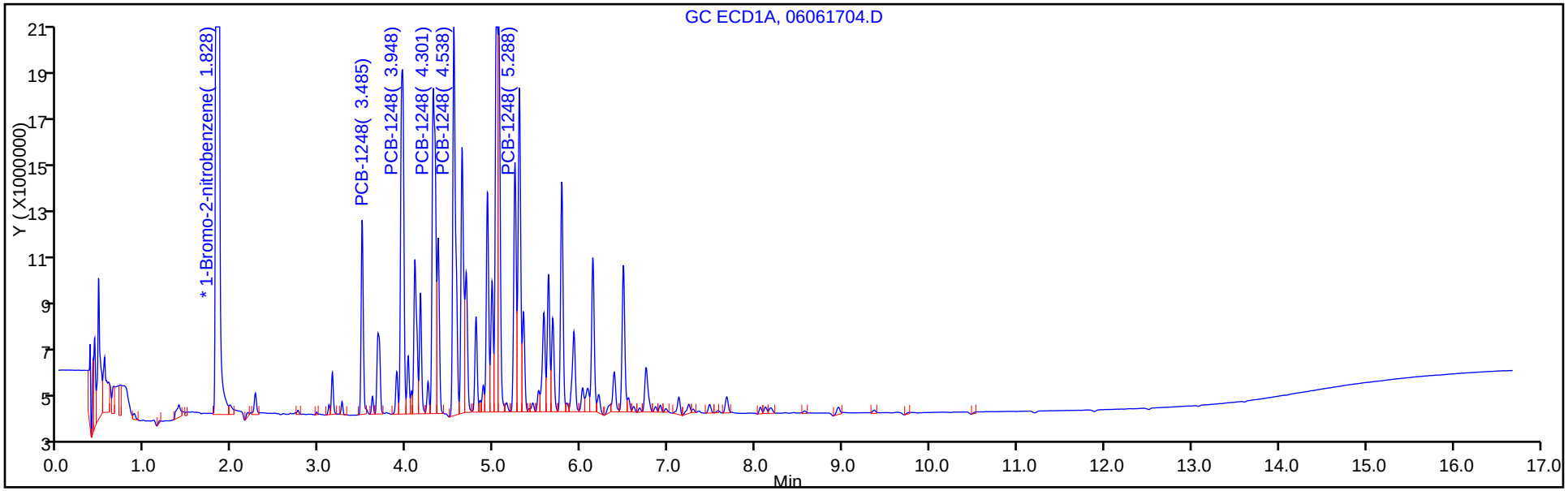
Report Date: 07-Jun-2017 06:52:22 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

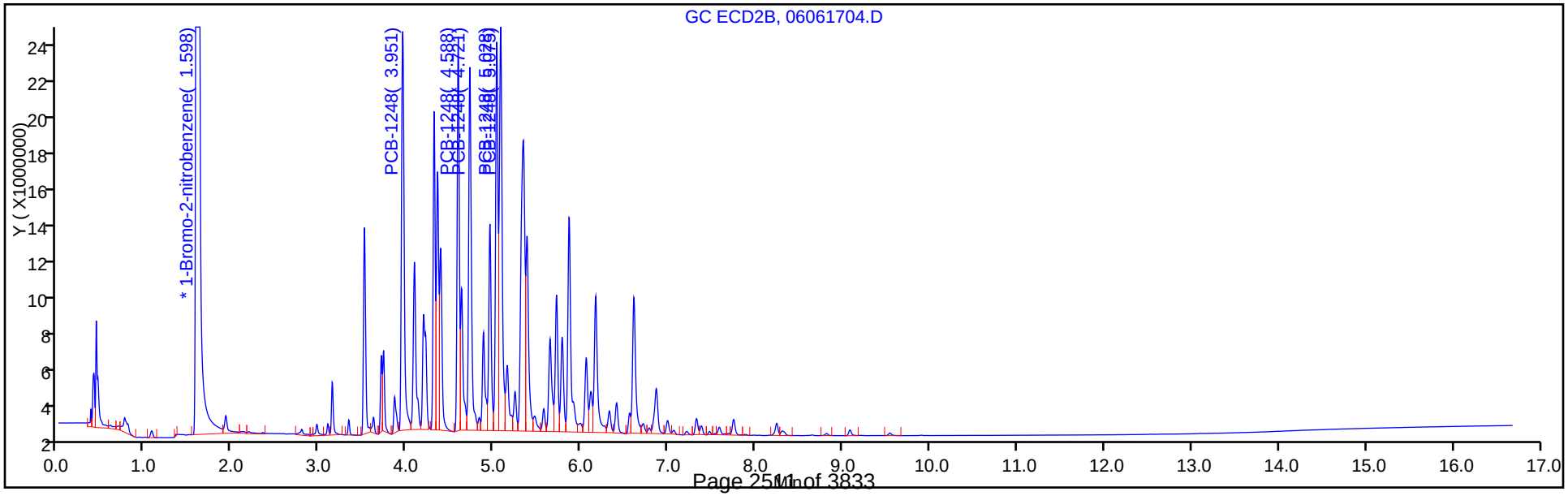
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061704.D

Injection Date:	06-Jun-2017 14:54:14	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL41248			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061705.D
Lims ID: STDL31248
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Jun-2017 15:16:00 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL31248
Misc. Info.: 280-0059455-005
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:24 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	336751844	1000.0	1000.0	
2	1.601	1.599	0.002	386854498	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							
1	3.484	3.486	-0.002	6019277	100.0	104.6	
1	3.947	3.946	0.001	15503715	100.0	101.5	
1	4.301	4.302	-0.001	16563599	100.0	103.9	
1	4.537	4.539	-0.002	16846461	100.0	105.6	
1	5.291	5.289	0.002	11688134	100.0	101.4	
		Average of Peak Amounts =				103.4	
2	3.951	3.949	0.002	20203711	100.0	102.1	
2	4.587	4.586	0.001	16080114	100.0	103.7	
2	4.721	4.719	0.002	18307755	100.0	102.7	
2	5.031	5.029	0.002	16388685	100.0	99.0	
2	5.074	5.072	0.002	21842398	100.0	105.5	
		Average of Peak Amounts =				102.6	
						RPD = 0.78	
S 8 Polychlorinated biphenyls, Total							
1						103.4	
2						102.6	
						RPD = 0.78	

Reagents:

AR_1248_L3_00018 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

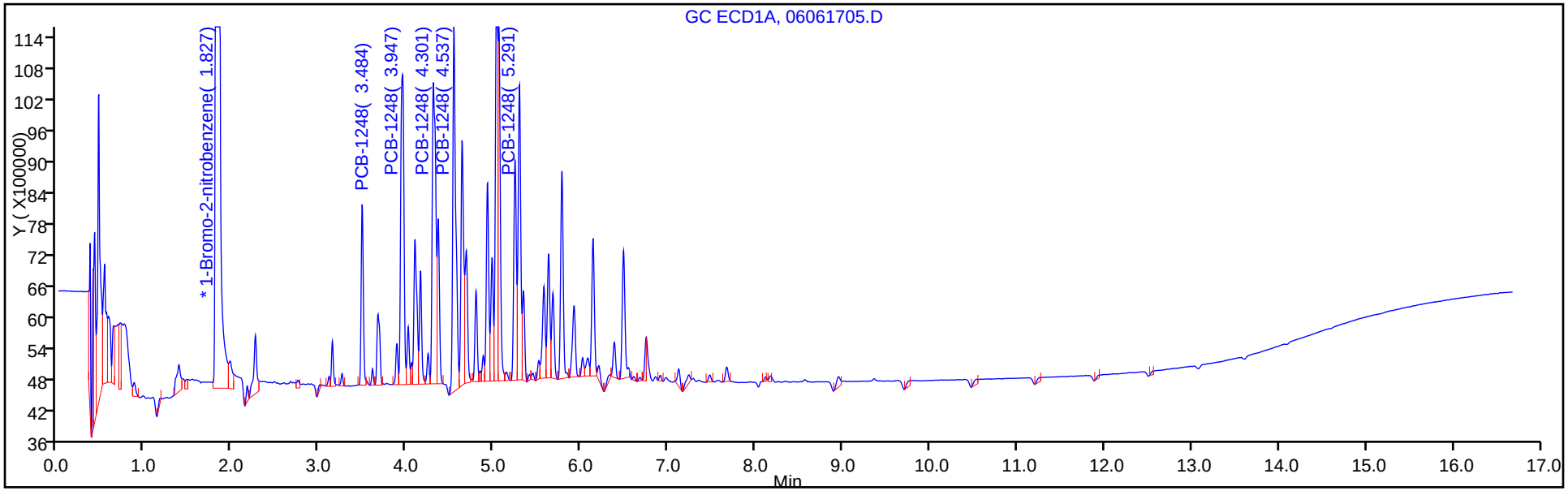
Report Date: 07-Jun-2017 06:52:24 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

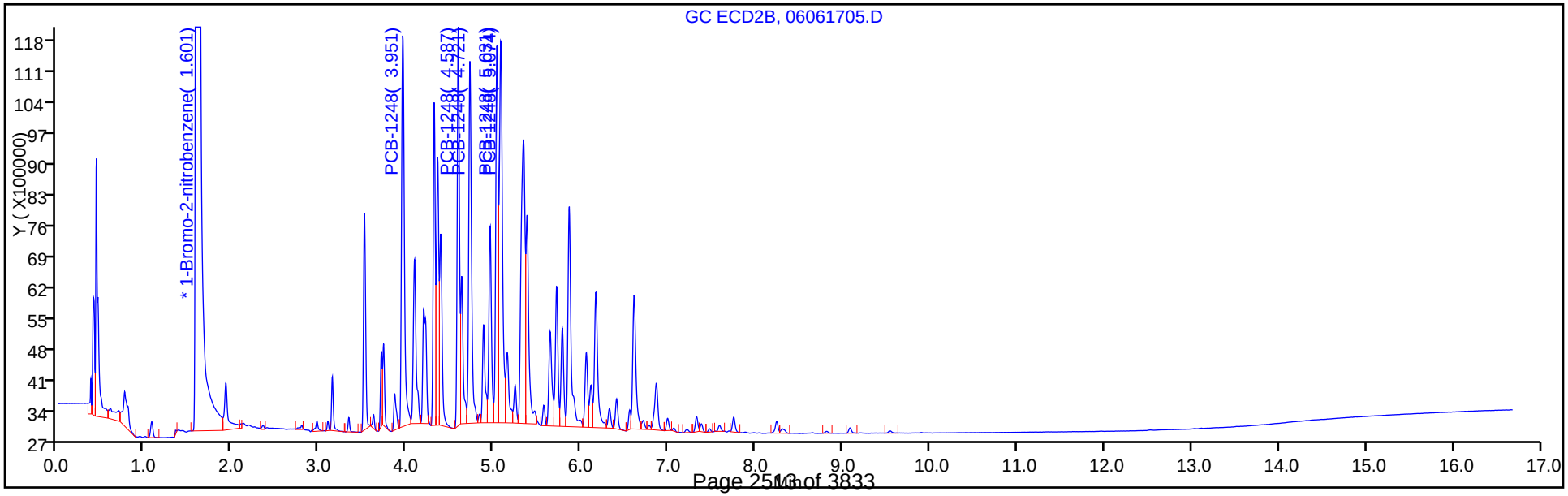
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061705.D

Injection Date:	06-Jun-2017 15:16:00	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL31248			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061706.D
Lims ID: STDL21248
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Jun-2017 15:37:43 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL21248
Misc. Info.: 280-0059455-006
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:25 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	329096535	1000.0	1000.0	
2	1.599	1.599	0.000	380878712	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							
1	3.486	3.486	0.000	3291704	50.0	53.1	
1	3.949	3.946	0.003	8395956	50.0	52.0	
1	4.302	4.302	0.000	8940744	50.0	52.2	
1	4.539	4.539	0.000	9031280	50.0	51.3	
1	5.289	5.289	0.000	6349225	50.0	51.9	
		Average of Peak Amounts =				52.1	
2	3.952	3.949	0.003	11389337	50.0	52.9	
2	4.589	4.586	0.003	9088866	50.0	52.6	
2	4.722	4.719	0.003	10286784	50.0	53.0	
2	5.032	5.029	0.003	9091862	50.0	51.8	
2	5.076	5.072	0.004	12277558	50.0	53.0	
		Average of Peak Amounts =				52.7	
						RPD = 1.08	
S 8 Polychlorinated biphenyls, Total							
1						52.1	
2						52.7	
						RPD = 1.08	

Reagents:

AR_1248_L2_00018 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

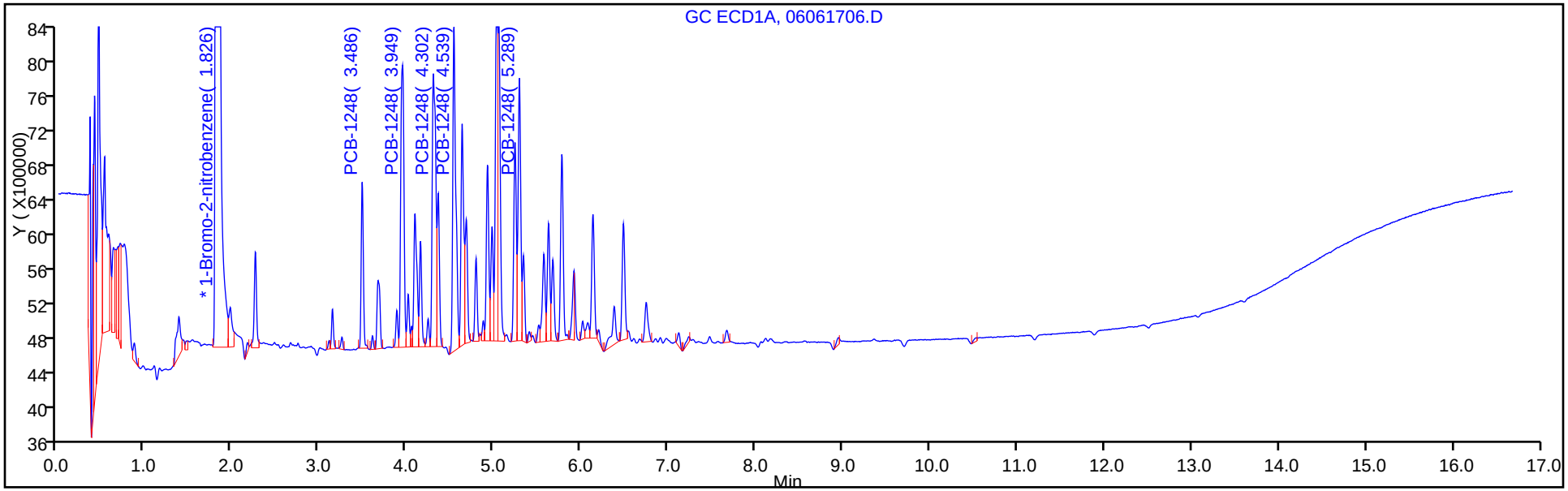
Report Date: 07-Jun-2017 06:52:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

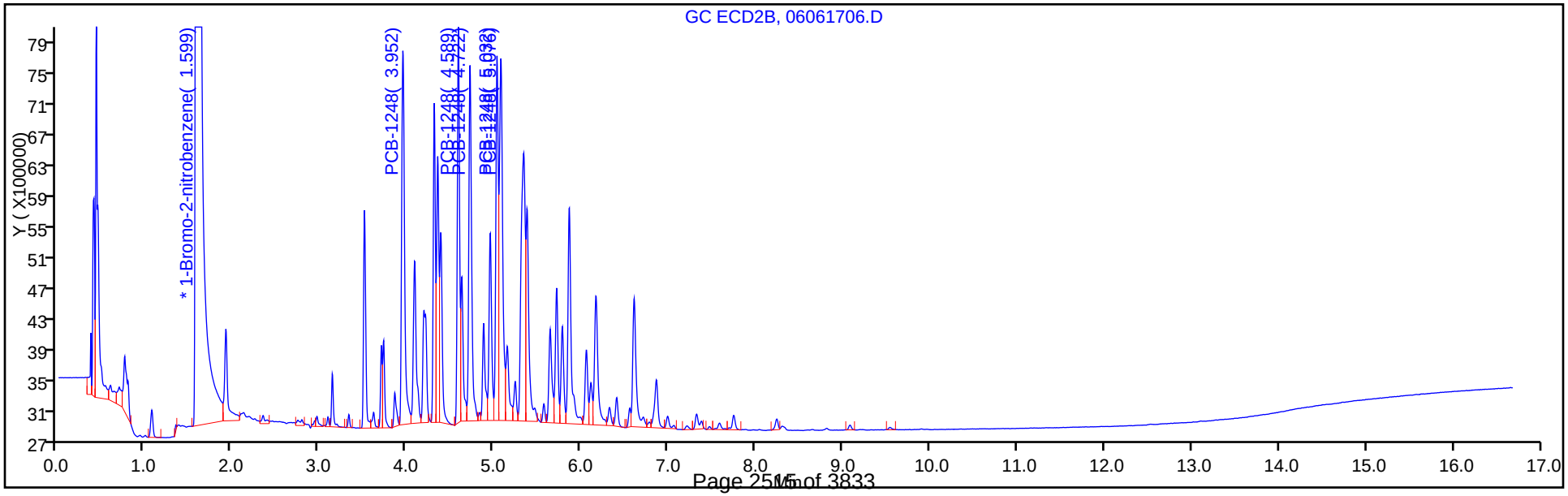
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061706.D

Injection Date:	06-Jun-2017 15:37:43	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL21248			Worklist Smp#:	6
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061707.D
Lims ID: STDL11248
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Jun-2017 15:59:26 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL11248
Misc. Info.: 280-0059455-007
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub2

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:27 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	323790667	1000.0	1000.0	
2	1.601	1.599	0.002	376309903	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							
1	3.484	3.486	-0.002	1738031	25.0	22.8	
1	3.948	3.946	0.002	4527237	25.0	24.3	
1	4.301	4.302	-0.001	4853502	25.0	23.5	
1	4.538	4.539	-0.001	5130218	25.0	23.4	
1	5.291	5.289	0.002	3429912	25.0	23.9	
		Average of Peak Amounts =				23.6	
2	3.954	3.949	0.005	6160645	25.0	23.1	
2	4.588	4.586	0.002	5129916	25.0	23.0	
2	4.724	4.719	0.005	5505999	25.0	22.7	
2	5.034	5.029	0.005	4933253	25.0	24.4	
2	5.078	5.072	0.006	6731688	25.0	21.9	
		Average of Peak Amounts =				23.0	
						RPD = 2.37	
S 8 Polychlorinated biphenyls, Total							
1						23.6	
2						23.0	
						RPD = 2.37	

Reagents:

AR_1248_L1_00019 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

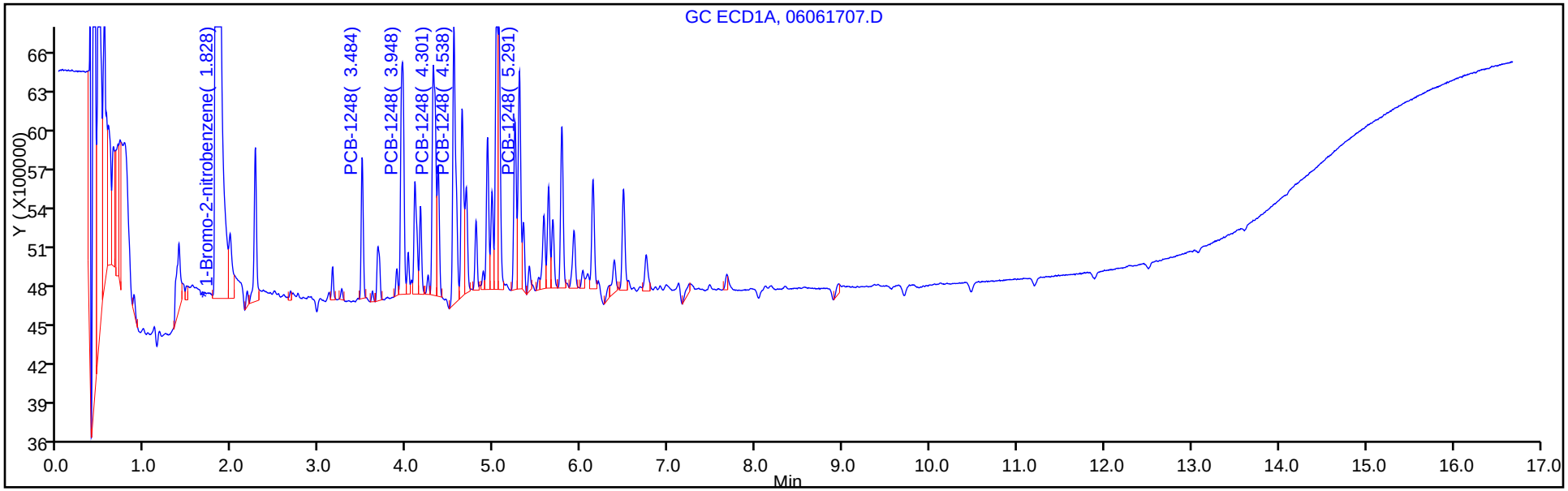
Report Date: 07-Jun-2017 06:52:28 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

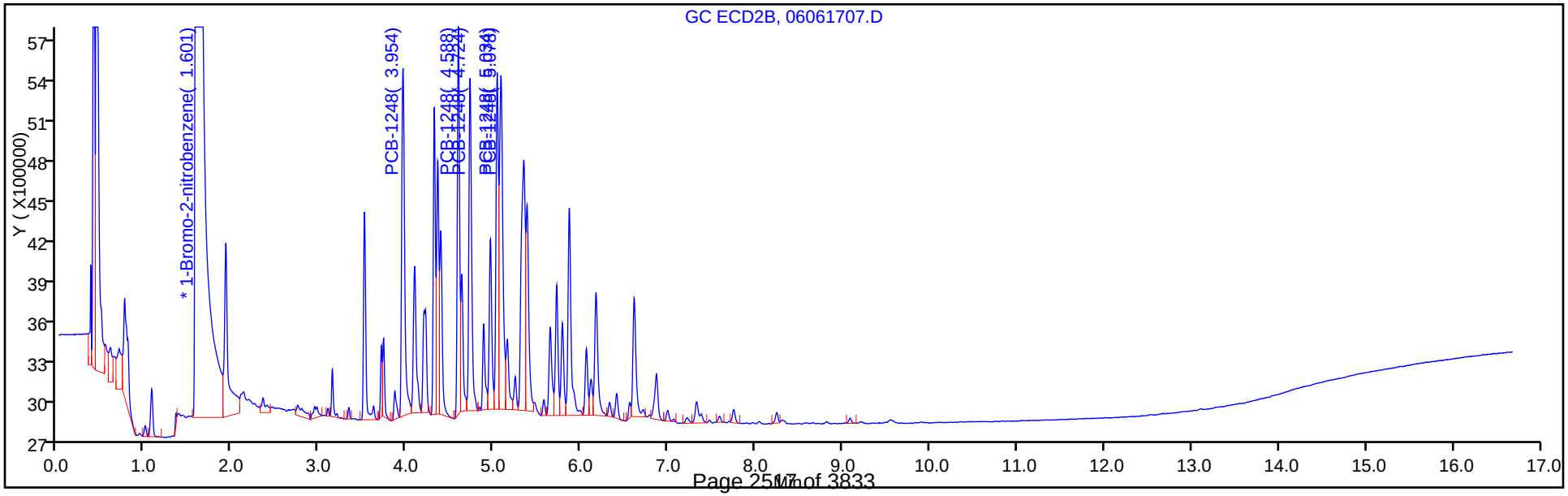
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061707.D

Injection Date:	06-Jun-2017 15:59:26	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL11248			Worklist Smp#:	7
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 16:21 Calibration End Date: 06/06/2017 18:31 Calibration ID: 29389

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL12154 280-376236/14	06061714.D
Level 2	STDL22154 280-376236/13	06061713.D
Level 3	STDL32154 280-376236/12	06061712.D
Level 4	STDL42154 280-376236/11	06061711.D
Level 5	STDL52154 280-376236/10	06061710.D
Level 6	STDL62154 280-376236/9	06061709.D
Level 7	STDL72154 280-376236/8	06061708.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1221 Peak 1	0.1253 0.0972	0.1023 0.1064	0.0980	0.1080	0.1054	Lin1	0.2950	0.1028							0.9980		0.9900
PCB-1221 Peak 2	0.1048 0.0683	0.0929 0.0655	0.0796	0.0733	0.0671	Lin1	1.1733	0.0657							0.9990		0.9900
PCB-1221 Peak 3	0.3470 0.2431	0.3100 0.2506	0.2789	0.2485	0.2442	Lin1	2.8504	0.2427							0.9990		0.9900
PCB-1254 Peak 1	0.6296 0.4420	0.5693 0.4559	0.5036	0.4705	0.4535	Lin1	5.2533	0.4447							1.0000		0.9900
PCB-1254 Peak 2	0.5031 0.3724	0.4682 0.3797	0.4245	0.3823	0.3715	Lin1	3.9292	0.3706							1.0000		0.9900
PCB-1254 Peak 3	0.8580 0.6550	0.7972 0.6726	0.7289	0.6684	0.6540	Lin1	5.7371	0.6550							1.0000		0.9900
PCB-1254 Peak 4	0.4424 0.3015	0.3589 0.3108	0.3286	0.3017	0.3008	Lin1	3.1112	0.3001							0.9990		0.9900
PCB-1254 Peak 5	0.9624 0.6830	0.8421 0.6993	0.7701	0.6992	0.6849	Lin1	7.3700	0.6805							1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 16:21 Calibration End Date: 06/06/2017 18:31 Calibration ID: 29389

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL12154 280-376236/14	06061714.D
Level 2	STDL22154 280-376236/13	06061713.D
Level 3	STDL32154 280-376236/12	06061712.D
Level 4	STDL42154 280-376236/11	06061711.D
Level 5	STDL52154 280-376236/10	06061710.D
Level 6	STDL62154 280-376236/9	06061709.D
Level 7	STDL72154 280-376236/8	06061708.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1221 Peak 1	BNB	Lin1	1018371 23963442	1705036 33640746	3318748	9170289	17607107	25.0 750	50.0 1000	100	250	500
PCB-1221 Peak 2	BNB	Lin1	851869 16837948	1547959 20724612	2693650	6227622	11206513	25.0 750	50.0 1000	100	250	500
PCB-1221 Peak 3	BNB	Lin1	2819790 59902311	5166102 79270143	9441334	21102703	40802556	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 1	BNB	Lin1	5116092 108912956	9488010 144211497	17048738	39951293	75771132	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 2	BNB	Lin1	4087907 91761761	7803681 120105022	14371710	32459148	62065761	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 3	BNB	Lin1	6971281 161409171	13287742 212753675	24674939	56756901	109266180	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 4	BNB	Lin1	3594296 74297254	5981741 98319369	11123568	25618583	50250511	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 5	BNB	Lin1	7819837 168315474	14035652 221189851	26068218	59368878	114428399	25.0 750	50.0 1000	100	250	500

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061708.D
Lims ID: STDL72154
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 16:21:08 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL72154
Misc. Info.: 280-0059455-008
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:29 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	316300518	1000.0	1000.0	
2	1.599	1.599	0.000	372219415	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.962	2.963	-0.001	33640746	1000.0	1031.8	
1	3.106	3.106	0.000	20724612	1000.0	980.0	
1	3.142	3.143	-0.001	79270143	1000.0	1020.8	
		Average of Peak Amounts =				1010.8	
2	2.966	2.966	0.000	46394184	1000.0	976.3	
2	3.092	3.090	0.002	28508769	1000.0	974.7	
2	3.142	3.143	-0.001	102422041	1000.0	974.0	
		Average of Peak Amounts =				975.0	
						RPD = 3.61	
9 PCB-1254							
1	5.292	5.293	-0.001	144211497	1000.0	1013.4	
1	5.622	5.623	-0.001	120105022	1000.0	1014.1	
1	5.776	5.776	0.000	212753675	1000.0	1018.2	
1	6.482	6.483	-0.001	98319369	1000.0	1025.3	
1	6.742	6.743	-0.001	221189851	1000.0	1016.8	
		Average of Peak Amounts =				1017.6	
2	5.309	5.310	-0.001	174597621	1000.0	992.0	
2	5.712	5.713	-0.001	134782458	1000.0	991.6	
2	5.859	5.860	-0.001	241478572	1000.0	981.5	
2	6.159	6.163	-0.004	186005612	1000.0	992.3	
2	6.859	6.860	-0.001	255987198	1000.0	988.6	
		Average of Peak Amounts =				989.2	
						RPD = 2.83	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						2028.4	
2						1964.2	
						RPD = 3.22	

Reagents:

AR_2154_L7_00014	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

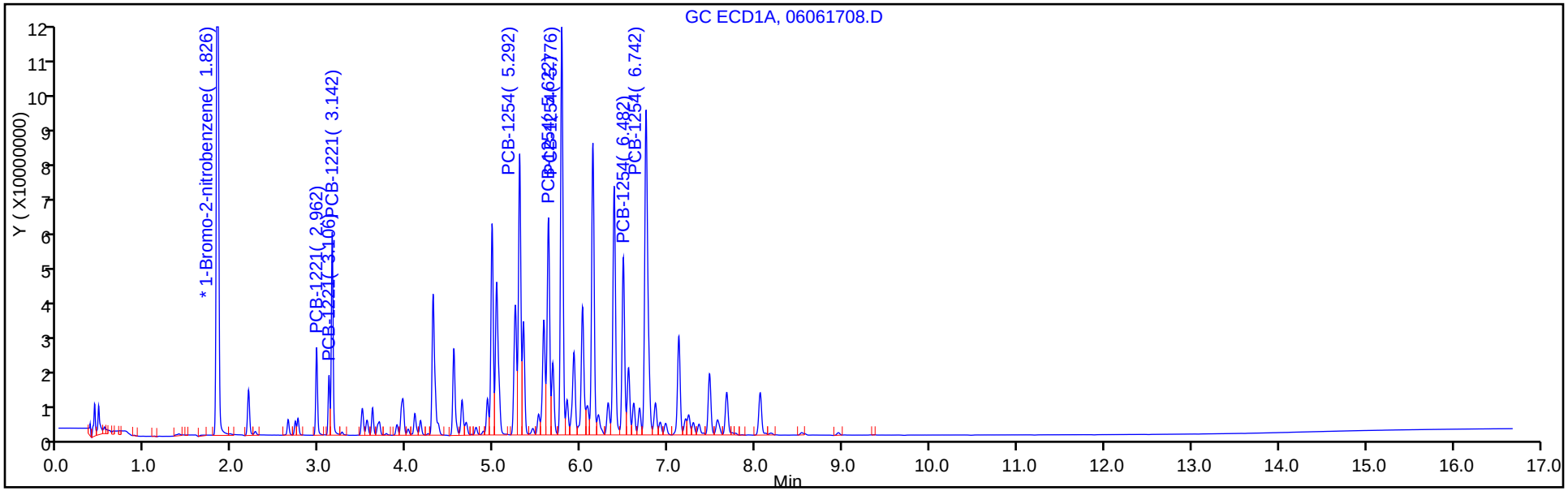
Report Date: 07-Jun-2017 06:52:30 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

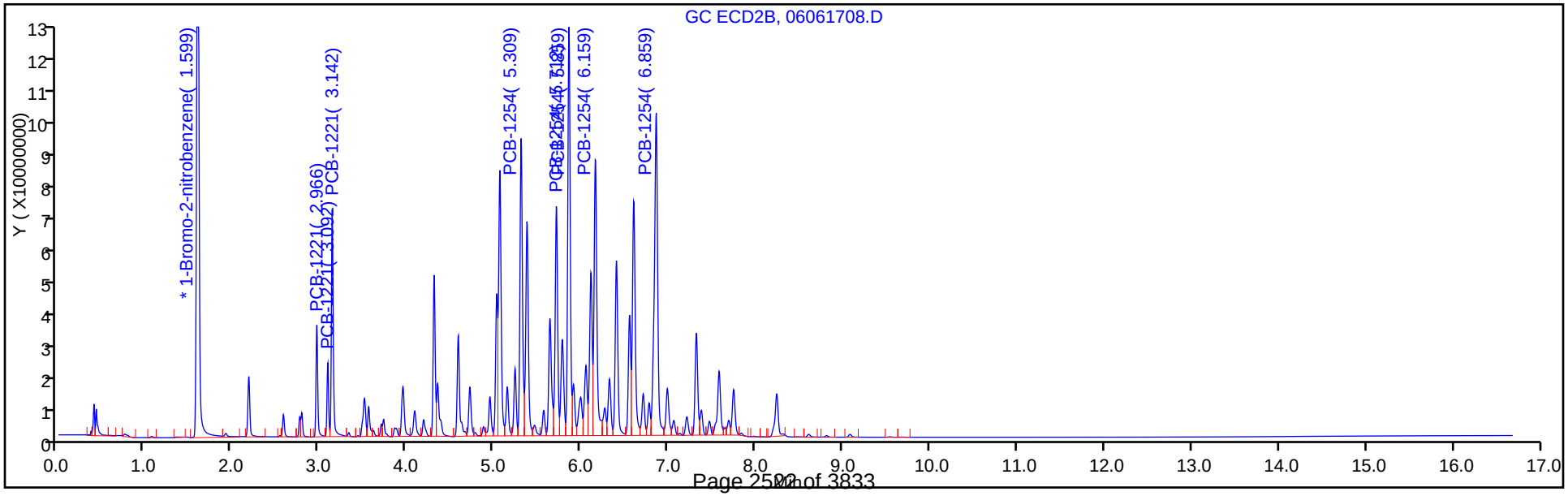
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061708.D

Injection Date:	06-Jun-2017 16:21:08	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL72154			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061709.D
Lims ID: STDL62154
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Jun-2017 16:42:53 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL62154
Misc. Info.: 280-0059455-009
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:31 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	328567077	1000.0	1000.0	
2	1.598	1.599	-0.001	380847710	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.962	2.963	-0.001	23963442	750.0	706.6	
1	3.105	3.106	-0.001	16837948	750.0	762.6	
1	3.142	3.143	-0.001	59902311	750.0	739.4	
		Average of Peak Amounts =				736.2	
2	2.965	2.966	-0.001	36157066	750.0	737.6	
2	3.092	3.090	0.002	21964316	750.0	728.4	
2	3.142	3.143	-0.001	80047709	750.0	738.4	
		Average of Peak Amounts =				734.8	
						RPD = 0.19	
9 PCB-1254							
1	5.295	5.293	0.002	108912956	750.0	733.6	
1	5.622	5.623	-0.001	91761761	750.0	743.1	
1	5.775	5.776	-0.001	161409171	750.0	741.3	
1	6.482	6.483	-0.001	74297254	750.0	743.0	
1	6.742	6.743	-0.001	168315474	750.0	741.9	
		Average of Peak Amounts =				740.6	
2	5.308	5.310	-0.002	133710123	750.0	738.0	
2	5.715	5.713	0.002	103746642	750.0	741.6	
2	5.858	5.860	-0.002	185343534	750.0	729.5	
2	6.162	6.163	-0.001	141015897	750.0	730.2	
2	6.858	6.860	-0.002	197027605	750.0	738.8	
		Average of Peak Amounts =				735.6	
						RPD = 0.67	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						1476.8	
2						1470.4	
						RPD = 0.43	

Reagents:

AR_2154_L6_00016	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

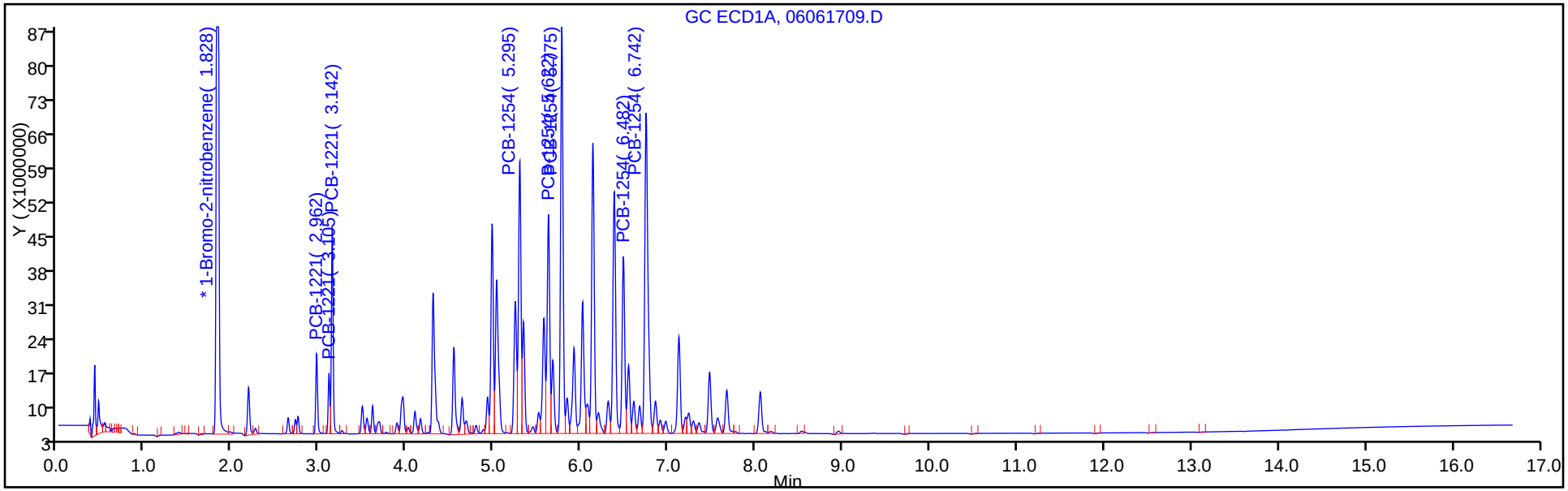
Report Date: 07-Jun-2017 06:52:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

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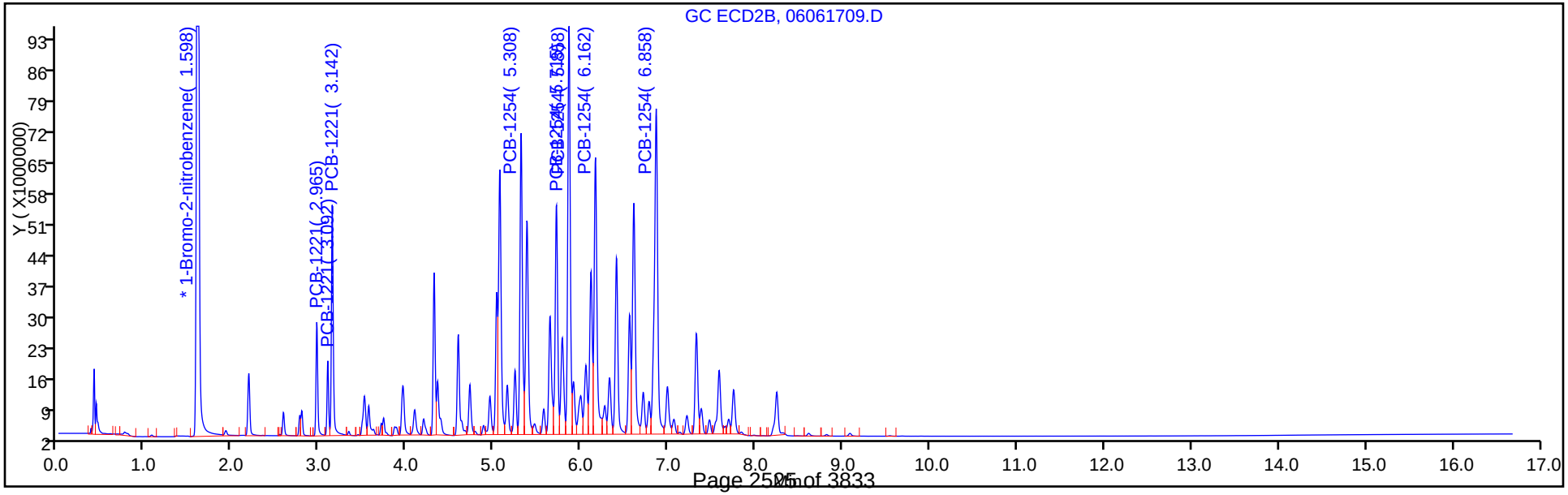
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061709.D

Injection Date:	06-Jun-2017 16:42:53	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL62154			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061710.D
Lims ID: STDL52154
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 06-Jun-2017 17:04:36 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL52154
Misc. Info.: 280-0059455-010
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:33 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:29:24

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	334139738	1000.0	1000.0	
2	1.600	1.600	0.000	386892170	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.963	2.963	0.000	17607107	500.0	509.8	
1	3.106	3.106	0.000	11206513	500.0	492.9	
1	3.143	3.143	0.000	40802556	500.0	491.3	
		Average of Peak Amounts =				498.0	
2	2.966	2.966	0.000	25638632	500.0	507.3	
2	3.090	3.090	0.000	16029821	500.0	517.0	
2	3.143	3.143	0.000	57049824	500.0	511.0	
		Average of Peak Amounts =				511.8	
						RPD = 2.73	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
9 PCB-1254							
1	5.293	5.293	0.000	75771132	500.0	498.1	
1	5.623	5.623	0.000	62065761	500.0	490.7	
1	5.776	5.776	0.000	109266180	500.0	490.5	
1	6.483	6.483	0.000	50250511	500.0	490.7	
1	6.743	6.743	0.000	114428399	500.0	492.4	
		Average of Peak Amounts =				492.5	
2	5.310	5.310	0.000	93742064	500.0	503.8	
2	5.713	5.713	0.000	72065281	500.0	501.4	
2	5.860	5.860	0.000	129031405	500.0	491.3	
2	6.163	6.163	0.000	100338904	500.0	505.7	
2	6.860	6.860	0.000	137801037	500.0	502.5	
		Average of Peak Amounts =				500.9	
						RPD = 1.71	

Reagents:

AR_2154_L5_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

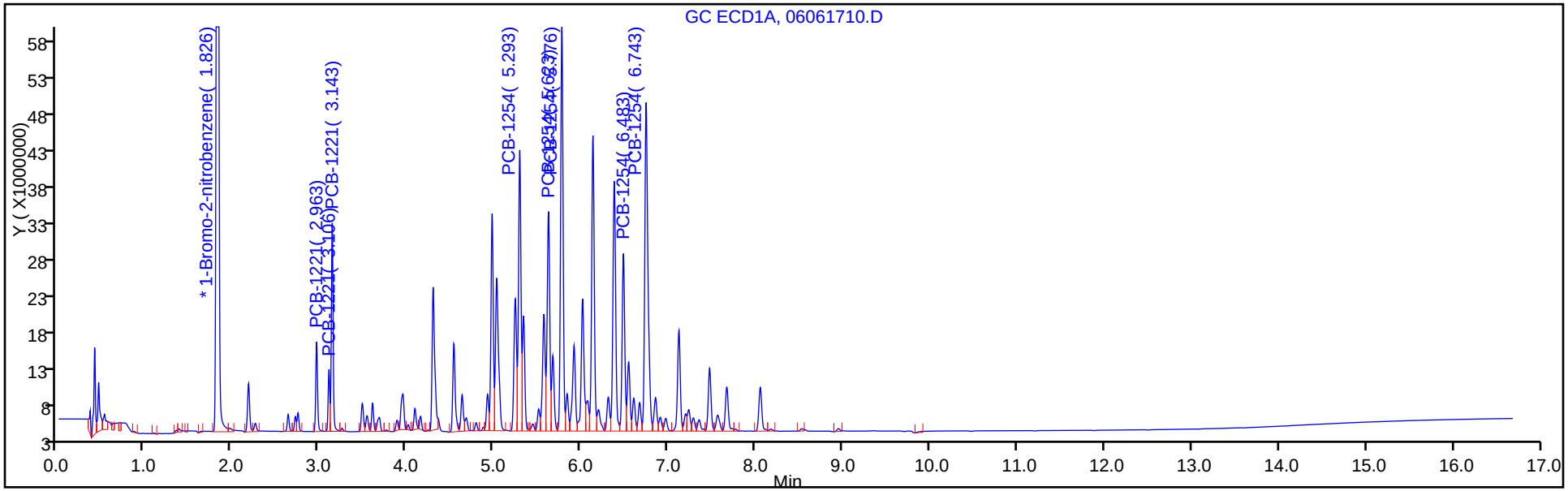
Report Date: 07-Jun-2017 06:52:33 Chrom Revision: 2.2 25-Apr-2017 13:27:22

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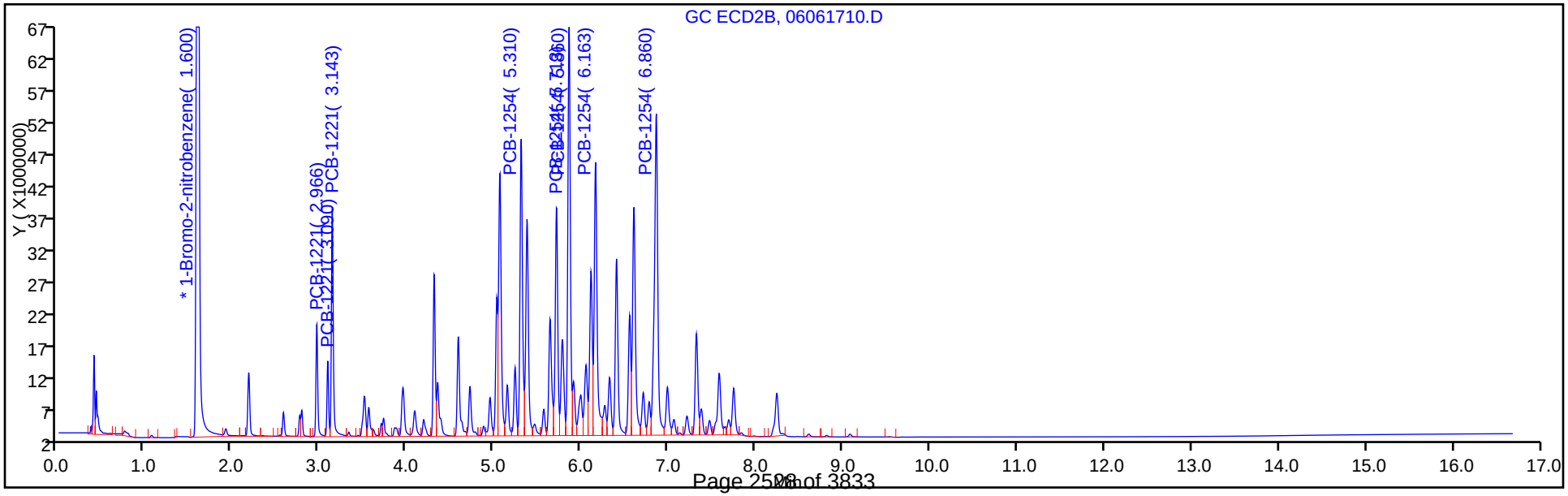
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061710.D

Injection Date:	06-Jun-2017 17:04:36	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL52154			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061711.D
Lims ID: STDL42154
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Jun-2017 17:26:17 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL42154
Misc. Info.: 280-0059455-011
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:35 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	339641861	1000.0	1000.0	
2	1.601	1.600	0.001	392534131	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.964	2.963	0.001	9170289	250.0	259.8	
1	3.104	3.106	-0.002	6227622	250.0	261.4	
1	3.141	3.143	-0.002	21102703	250.0	244.2	
		Average of Peak Amounts =				255.1	
2	2.964	2.966	-0.002	14237129	250.0	266.3	
2	3.091	3.090	0.001	8747606	250.0	267.7	
2	3.141	3.143	-0.002	31352454	250.0	265.9	
		Average of Peak Amounts =				266.7	
						RPD = 4.42	
9 PCB-1254							
1	5.294	5.293	0.001	39951293	250.0	252.7	
1	5.624	5.623	0.001	32459148	250.0	247.3	
1	5.774	5.776	-0.002	56756901	250.0	246.4	
1	6.481	6.483	-0.002	25618583	250.0	240.9	
1	6.744	6.743	0.001	59368878	250.0	246.0	
		Average of Peak Amounts =				246.7	
2	5.311	5.310	0.001	50891523	250.0	261.3	
2	5.714	5.713	0.001	39005754	250.0	259.2	
2	5.861	5.860	0.001	79398910	250.0	287.3	
2	6.164	6.163	0.001	55012397	250.0	264.3	
2	6.861	6.860	0.001	75955522	250.0	264.1	
		Average of Peak Amounts =				267.2	
						RPD = 8.00	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						501.8	
2						533.9	
						RPD = 6.19	

Reagents:

AR_2154_L4_00019	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

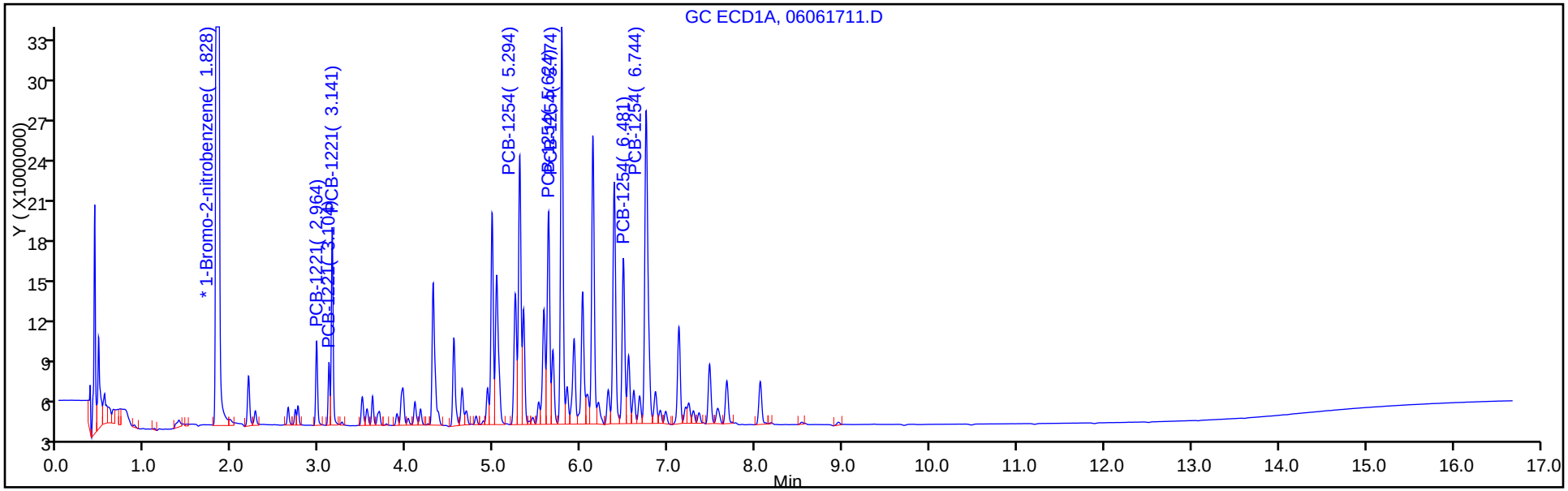
Report Date: 07-Jun-2017 06:52:35 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

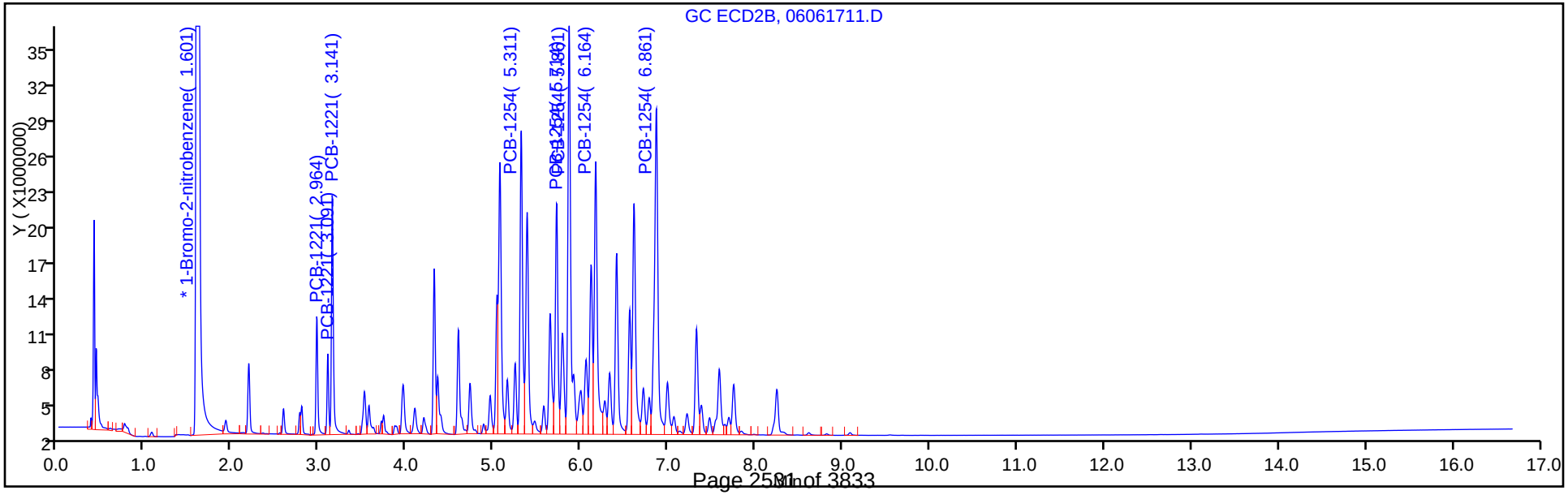
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061711.D

Injection Date:	06-Jun-2017 17:26:17	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL42154			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061712.D
Lims ID: STDL32154
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Jun-2017 17:47:59 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL32154
Misc. Info.: 280-0059455-012
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	338520893	1000.0	1000.0	
2	1.599	1.600	-0.001	389851526	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.963	2.963	0.000	3318748	100.0	92.5	
1	3.106	3.106	0.000	2693650	100.0	103.3	
1	3.143	3.143	0.000	9441334	100.0	103.2	
		Average of Peak Amounts =				99.7	
2	2.966	2.966	0.000	6759704	100.0	114.2	
2	3.093	3.090	0.003	4089850	100.0	114.2	
2	3.143	3.143	0.000	14699343	100.0	113.1	
		Average of Peak Amounts =				113.8	
						RPD = 13.27	
9 PCB-1254							
1	5.293	5.293	0.000	17048738	100.0	101.4	
1	5.623	5.623	0.000	14371710	100.0	104.0	
1	5.776	5.776	0.000	24674939	100.0	102.5	
1	6.483	6.483	0.000	11123568	100.0	99.1	
1	6.746	6.743	0.003	26068218	100.0	102.3	
		Average of Peak Amounts =				101.9	
2	5.313	5.310	0.003	22558142	100.0	106.7	
2	5.716	5.713	0.003	17593511	100.0	107.9	
2	5.859	5.860	-0.001	35750963	100.0	115.4	
2	6.166	6.163	0.003	24838007	100.0	109.6	
2	6.859	6.860	-0.001	33922293	100.0	108.0	
		Average of Peak Amounts =				109.5	
						RPD = 7.24	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						201.5	
2						223.3	
						RPD = 10.26	

Reagents:

AR_2154_L3_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

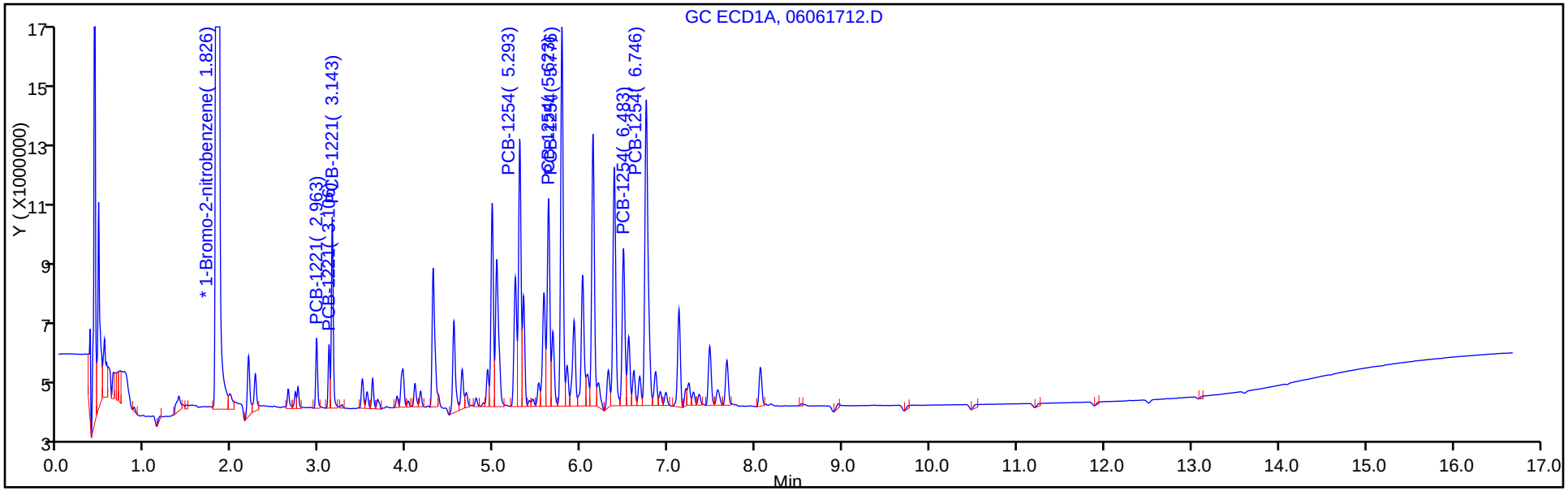
Report Date: 07-Jun-2017 06:52:37 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

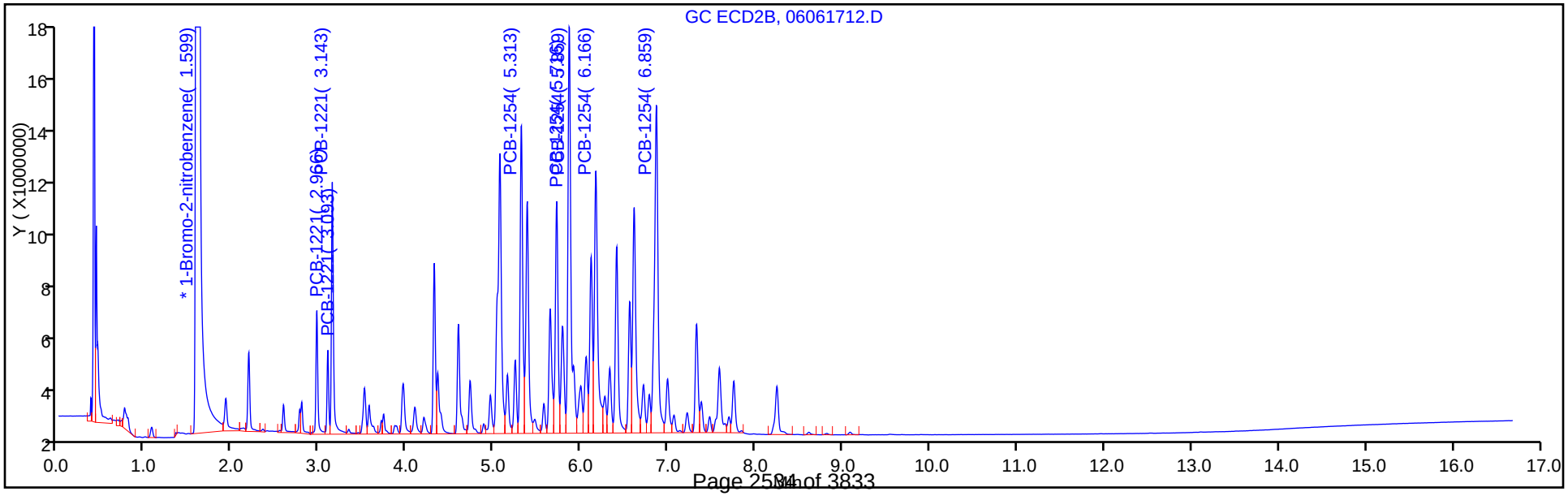
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061712.D

Injection Date:	06-Jun-2017 17:47:59	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL32154			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061713.D
Lims ID: STDL22154
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Jun-2017 18:09:41 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL22154
Misc. Info.: 280-0059455-013
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:38 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	333347331	1000.0	1000.0	
2	1.600	1.600	0.000	384100570	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.964	2.963	0.001	1705036	50.0	46.9	
1	3.107	3.106	0.001	1547959	50.0	52.9	
1	3.144	3.143	0.001	5166102	50.0	52.1	
		Average of Peak Amounts =				50.6	
2	2.967	2.966	0.001	3864936	50.0	55.7	
2	3.094	3.090	0.004	2301219	50.0	55.6	
2	3.144	3.143	0.001	8219031	50.0	53.9	
		Average of Peak Amounts =				55.1	
						RPD = 8.48	
9 PCB-1254							
1	5.294	5.293	0.001	9488010	50.0	52.2	
1	5.624	5.623	0.001	7803681	50.0	52.6	
1	5.777	5.776	0.001	13287742	50.0	52.1	
1	6.484	6.483	0.001	5981741	50.0	49.4	
1	6.744	6.743	0.001	14035652	50.0	51.0	
		Average of Peak Amounts =				51.5	
2	5.310	5.310	0.000	12340322	50.0	51.3	
2	5.717	5.713	0.004	9569387	50.0	51.6	
2	5.860	5.860	0.000	19574882	50.0	52.0	
2	6.167	6.163	0.004	13590764	50.0	52.2	
2	6.860	6.860	0.000	18701747	50.0	51.8	
		Average of Peak Amounts =				51.8	
						RPD = 0.64	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						102.1	
2						106.9	
						RPD = 4.60	

Reagents:

AR_2154_L2_00019	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

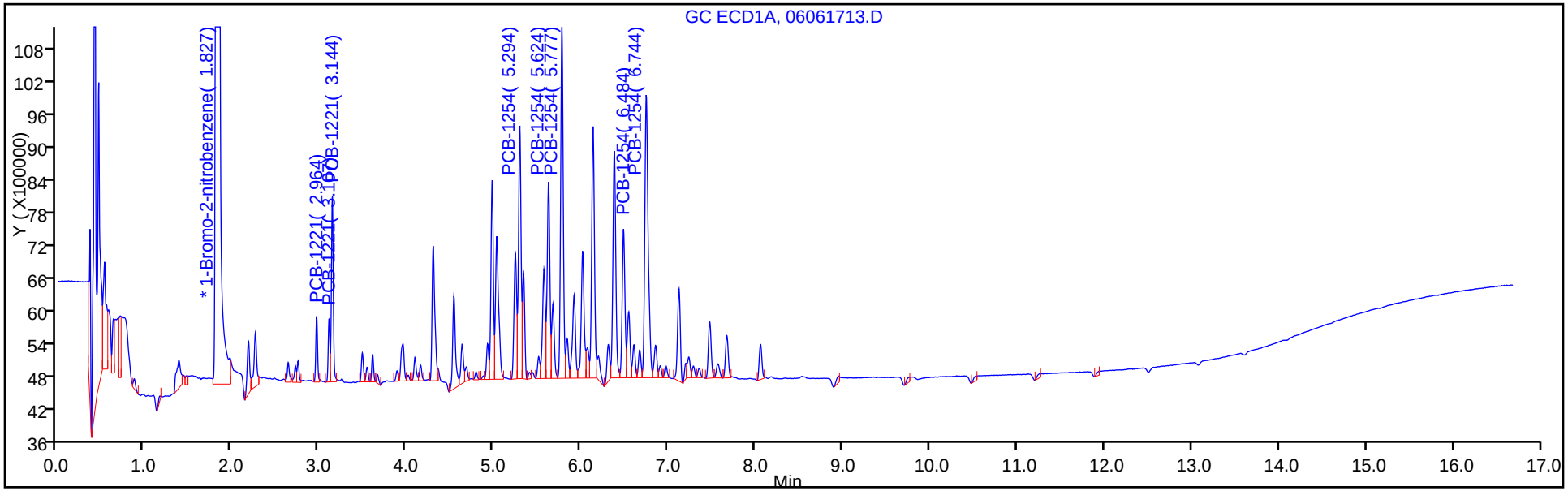
Report Date: 07-Jun-2017 06:52:39 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

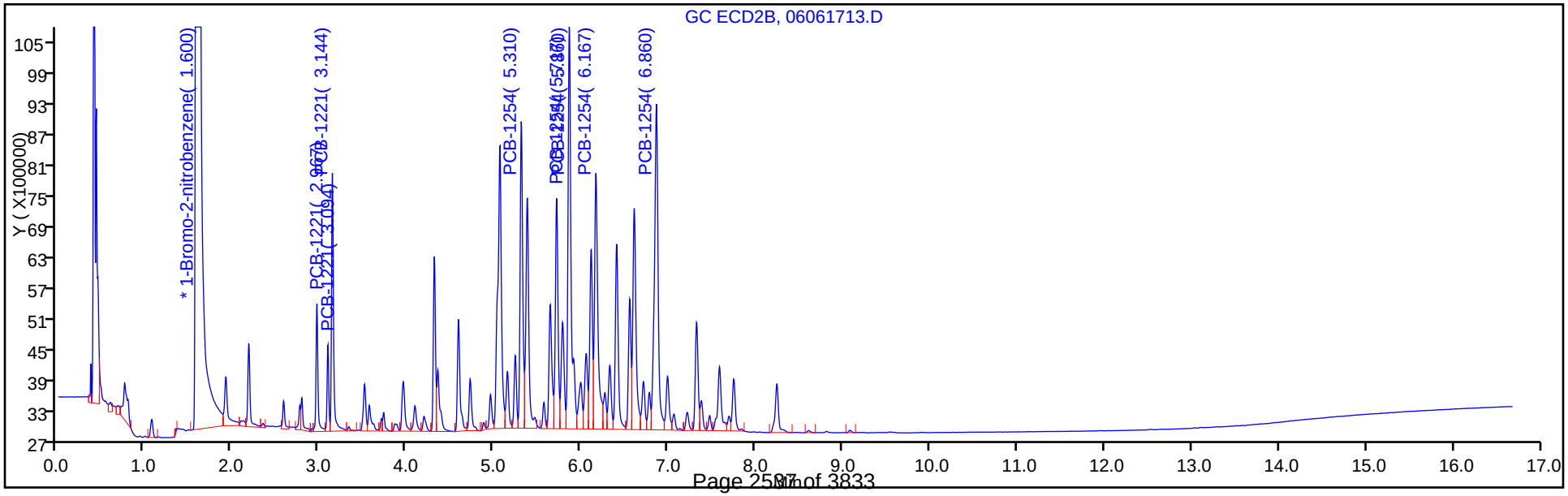
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061713.D

Injection Date:	06-Jun-2017 18:09:41	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL22154			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061714.D
Lims ID: STDL12154
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Jun-2017 18:31:23 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL12154
Misc. Info.: 280-0059455-014
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:40 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.826	-0.001	325012905	1000.0	1000.0	
2	1.599	1.600	-0.001	375991567	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.962	2.963	-0.001	1018371	25.0	27.6	
1	3.105	3.106	-0.001	851869	25.0	22.0	
1	3.142	3.143	-0.001	2819790	25.0	24.0	
		Average of Peak Amounts =				24.6	
2	2.965	2.966	-0.001	1998442	25.0	17.6	
2	3.092	3.090	0.002	1147785	25.0	17.4	
2	3.142	3.143	-0.001	4387732	25.0	18.7	
		Average of Peak Amounts =				17.9	
						RPD = 31.48	
9 PCB-1254							
1	5.292	5.293	-0.001	5116092	25.0	23.6	
1	5.622	5.623	-0.001	4087907	25.0	23.3	
1	5.775	5.776	-0.001	6971281	25.0	24.0	
1	6.485	6.483	0.002	3594296	25.0	26.5	
1	6.745	6.743	0.002	7819837	25.0	24.5	
		Average of Peak Amounts =				24.4	
2	5.312	5.310	0.002	6943955	25.0	21.9	
2	5.718	5.713	0.005	5341101	25.0	21.7	
2	5.862	5.860	0.002	10932751	25.0	18.0	
2	6.168	6.163	0.005	7440552	25.0	20.6	
2	6.858	6.860	-0.002	10458541	25.0	21.2	
		Average of Peak Amounts =				20.7	
						RPD = 16.33	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						48.9	
2						38.6	
						RPD = 23.67	

Reagents:

AR_2154_L1_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

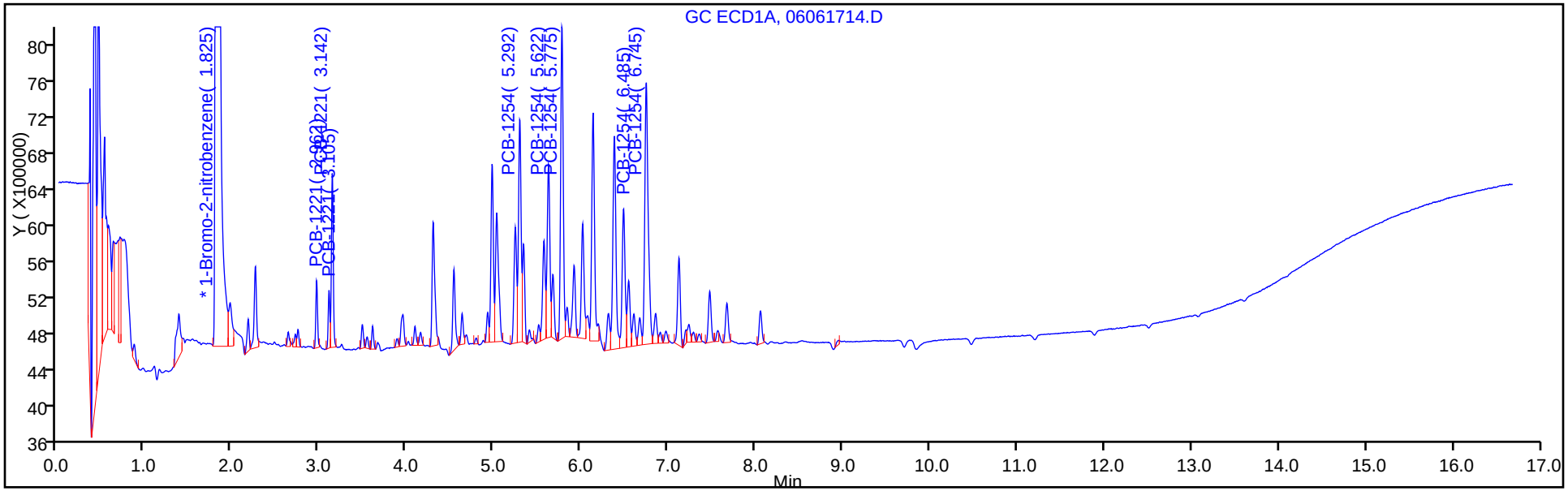
Report Date: 07-Jun-2017 06:52:40 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

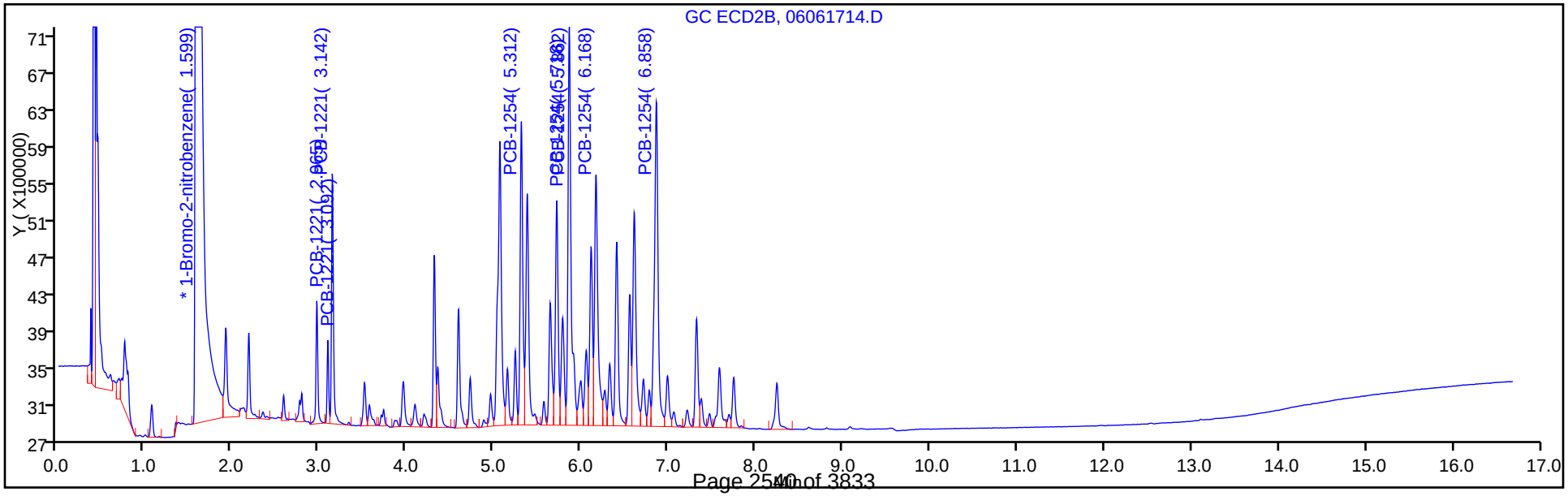
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061714.D

Injection Date:	06-Jun-2017 18:31:23	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL12154			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 16:21 Calibration End Date: 06/06/2017 18:31 Calibration ID: 29390

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL12154 280-376236/14	06061714.D
Level 2	STDL22154 280-376236/13	06061713.D
Level 3	STDL32154 280-376236/12	06061712.D
Level 4	STDL42154 280-376236/11	06061711.D
Level 5	STDL52154 280-376236/10	06061710.D
Level 6	STDL62154 280-376236/9	06061709.D
Level 7	STDL72154 280-376236/8	06061708.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1221 Peak 1	0.2126 0.1266	0.2012 0.1246	0.1734	0.1451	0.1325	Lin1	3.1249	0.1245							0.9970		0.9900
PCB-1221 Peak 2	0.1221 0.0769	0.1198 0.0766	0.1049	0.0891	0.0829	Lin1	1.7184	0.0768							0.9960		0.9900
PCB-1221 Peak 3	0.4668 0.2802	0.4280 0.2752	0.3770	0.3195	0.2949	Lin1	6.5227	0.2758							0.9970		0.9900
PCB-1254 Peak 1	0.7387 0.4681	0.6426 0.4691	0.5786	0.5186	0.4846	Lin1	8.2805	0.4645							0.9990		0.9900
PCB-1254 Peak 2	0.5682 0.3632	0.4983 0.3621	0.4513	0.3975	0.3725	Lin1	6.4112	0.3587							0.9990		0.9900
PCB-1254 Peak 3	1.1631 0.6489	1.0193 0.6488	0.9170	0.8091	0.6670	Lin1	17.503	0.6431							0.9950		0.9900
PCB-1254 Peak 4	0.7916 0.4937	0.7077 0.4997	0.6371	0.5606	0.5187	Lin1	9.5964	0.4939							0.9980		0.9900
PCB-1254 Peak 5	1.1126 0.6898	0.9738 0.6877	0.8701	0.7740	0.7123	Lin1	13.341	0.6822							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 16:21 Calibration End Date: 06/06/2017 18:31 Calibration ID: 29390

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL12154 280-376236/14	06061714.D
Level 2	STDL22154 280-376236/13	06061713.D
Level 3	STDL32154 280-376236/12	06061712.D
Level 4	STDL42154 280-376236/11	06061711.D
Level 5	STDL52154 280-376236/10	06061710.D
Level 6	STDL62154 280-376236/9	06061709.D
Level 7	STDL72154 280-376236/8	06061708.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1221 Peak 1	BNB	Lin1	1998442 36157066	3864936 46394184	6759704	14237129	25638632	25.0 750	50.0 1000	100	250	500
PCB-1221 Peak 2	BNB	Lin1	1147785 21964316	2301219 28508769	4089850	8747606	16029821	25.0 750	50.0 1000	100	250	500
PCB-1221 Peak 3	BNB	Lin1	4387732 80047709	8219031 102422041	14699343	31352454	57049824	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 1	BNB	Lin1	6943955 133710123	12340322 174597621	22558142	50891523	93742064	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 2	BNB	Lin1	5341101 103746642	9569387 134782458	17593511	39005754	72065281	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 3	BNB	Lin1	10932751 185343534	19574882 241478572	35750963	79398910	129031405	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 4	BNB	Lin1	7440552 141015897	13590764 186005612	24838007	55012397	100338904	25.0 750	50.0 1000	100	250	500
PCB-1254 Peak 5	BNB	Lin1	10458541 197027605	18701747 255987198	33922293	75955522	137801037	25.0 750	50.0 1000	100	250	500

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061708.D
Lims ID: STDL72154
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 16:21:08 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL72154
Misc. Info.: 280-0059455-008
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:29 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	316300518	1000.0	1000.0	
2	1.599	1.599	0.000	372219415	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.962	2.963	-0.001	33640746	1000.0	1031.8	
1	3.106	3.106	0.000	20724612	1000.0	980.0	
1	3.142	3.143	-0.001	79270143	1000.0	1020.8	
		Average of Peak Amounts =				1010.8	
2	2.966	2.966	0.000	46394184	1000.0	976.3	
2	3.092	3.090	0.002	28508769	1000.0	974.7	
2	3.142	3.143	-0.001	102422041	1000.0	974.0	
		Average of Peak Amounts =				975.0	
						RPD = 3.61	
9 PCB-1254							
1	5.292	5.293	-0.001	144211497	1000.0	1013.4	
1	5.622	5.623	-0.001	120105022	1000.0	1014.1	
1	5.776	5.776	0.000	212753675	1000.0	1018.2	
1	6.482	6.483	-0.001	98319369	1000.0	1025.3	
1	6.742	6.743	-0.001	221189851	1000.0	1016.8	
		Average of Peak Amounts =				1017.6	
2	5.309	5.310	-0.001	174597621	1000.0	992.0	
2	5.712	5.713	-0.001	134782458	1000.0	991.6	
2	5.859	5.860	-0.001	241478572	1000.0	981.5	
2	6.159	6.163	-0.004	186005612	1000.0	992.3	
2	6.859	6.860	-0.001	255987198	1000.0	988.6	
		Average of Peak Amounts =				989.2	
						RPD = 2.83	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						2028.4	
2						1964.2	
						RPD = 3.22	

Reagents:

AR_2154_L7_00014	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

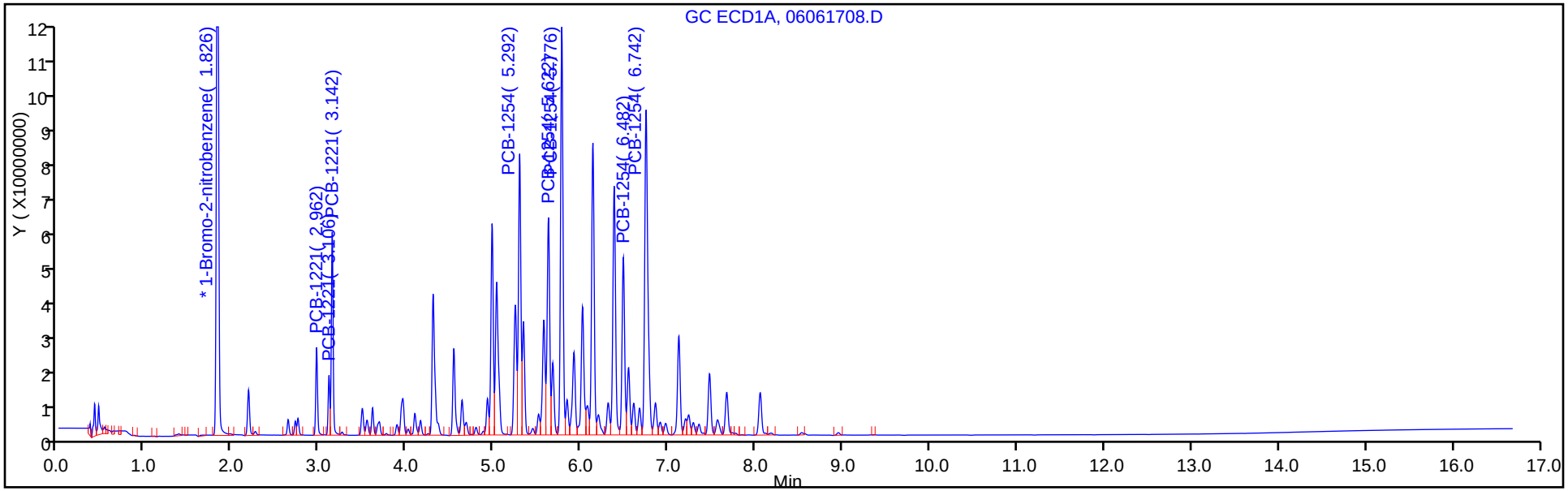
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TestAmerica Denver

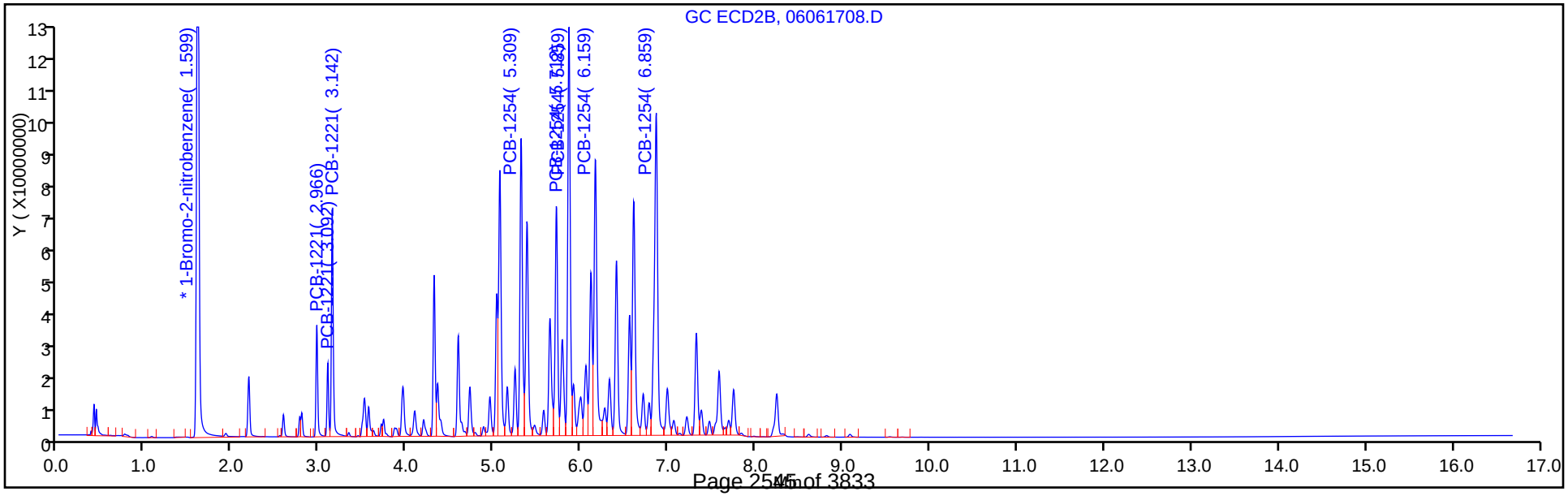
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061708.D

Injection Date:	06-Jun-2017 16:21:08	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL72154			Worklist Smp#:	8
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061709.D
Lims ID: STDL62154
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Jun-2017 16:42:53 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL62154
Misc. Info.: 280-0059455-009
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:31 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	328567077	1000.0	1000.0	
2	1.598	1.599	-0.001	380847710	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.962	2.963	-0.001	23963442	750.0	706.6	
1	3.105	3.106	-0.001	16837948	750.0	762.6	
1	3.142	3.143	-0.001	59902311	750.0	739.4	
		Average of Peak Amounts =				736.2	
2	2.965	2.966	-0.001	36157066	750.0	737.6	
2	3.092	3.090	0.002	21964316	750.0	728.4	
2	3.142	3.143	-0.001	80047709	750.0	738.4	
		Average of Peak Amounts =				734.8	
						RPD = 0.19	
9 PCB-1254							
1	5.295	5.293	0.002	108912956	750.0	733.6	
1	5.622	5.623	-0.001	91761761	750.0	743.1	
1	5.775	5.776	-0.001	161409171	750.0	741.3	
1	6.482	6.483	-0.001	74297254	750.0	743.0	
1	6.742	6.743	-0.001	168315474	750.0	741.9	
		Average of Peak Amounts =				740.6	
2	5.308	5.310	-0.002	133710123	750.0	738.0	
2	5.715	5.713	0.002	103746642	750.0	741.6	
2	5.858	5.860	-0.002	185343534	750.0	729.5	
2	6.162	6.163	-0.001	141015897	750.0	730.2	
2	6.858	6.860	-0.002	197027605	750.0	738.8	
		Average of Peak Amounts =				735.6	
						RPD = 0.67	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						1476.8	
2						1470.4	
						RPD = 0.43	

Reagents:

AR_2154_L6_00016	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

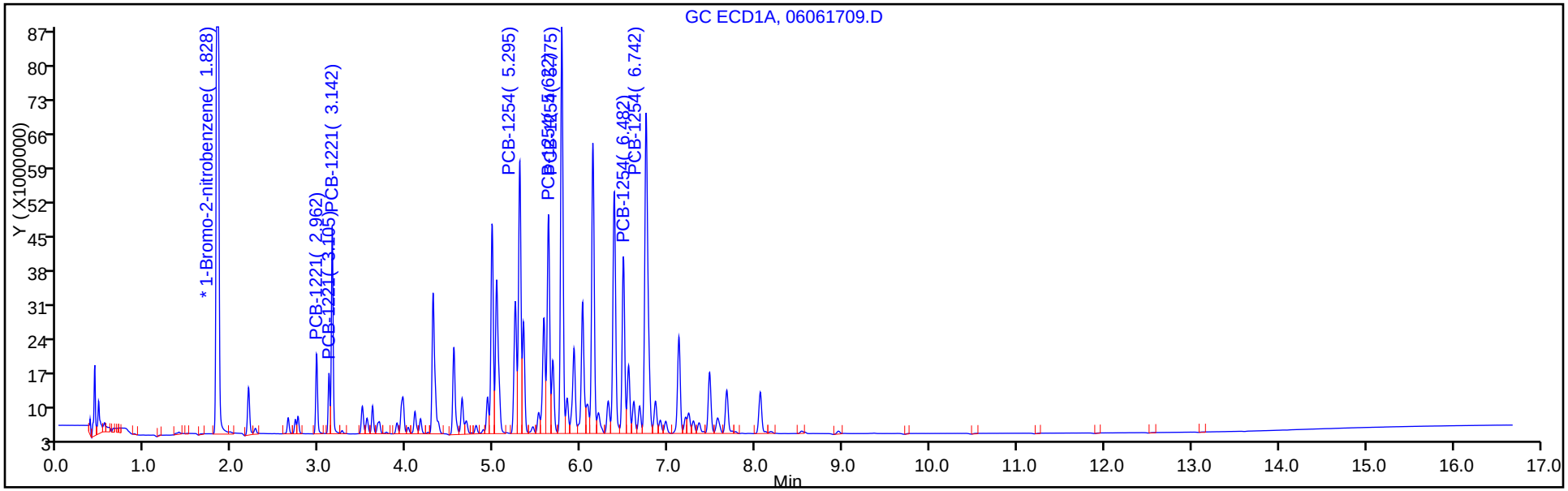
Report Date: 07-Jun-2017 06:52:32 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

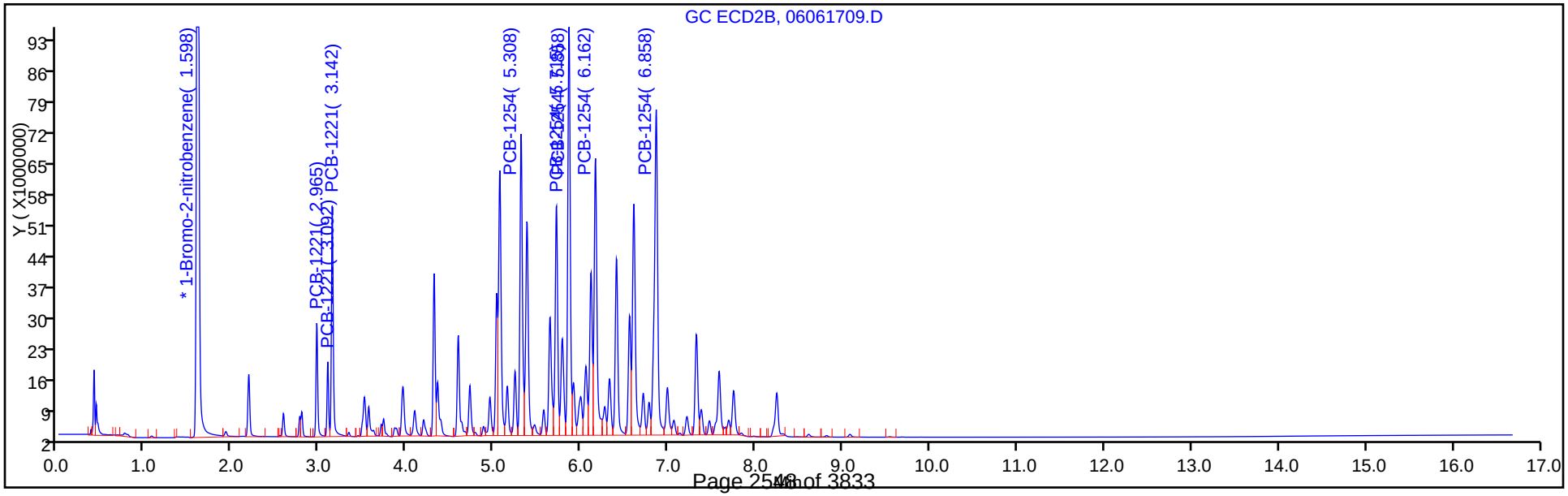
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Injection Date:	06-Jun-2017 16:42:53	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL62154			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061710.D
Lims ID: STDL52154
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 06-Jun-2017 17:04:36 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL52154
Misc. Info.: 280-0059455-010
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:33 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:29:24

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	334139738	1000.0	1000.0	
2	1.600	1.600	0.000	386892170	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.963	2.963	0.000	17607107	500.0	509.8	
1	3.106	3.106	0.000	11206513	500.0	492.9	
1	3.143	3.143	0.000	40802556	500.0	491.3	
		Average of Peak Amounts =				498.0	
2	2.966	2.966	0.000	25638632	500.0	507.3	
2	3.090	3.090	0.000	16029821	500.0	517.0	
2	3.143	3.143	0.000	57049824	500.0	511.0	
		Average of Peak Amounts =				511.8	
						RPD = 2.73	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
9 PCB-1254							
1	5.293	5.293	0.000	75771132	500.0	498.1	
1	5.623	5.623	0.000	62065761	500.0	490.7	
1	5.776	5.776	0.000	109266180	500.0	490.5	
1	6.483	6.483	0.000	50250511	500.0	490.7	
1	6.743	6.743	0.000	114428399	500.0	492.4	
		Average of Peak Amounts =				492.5	
2	5.310	5.310	0.000	93742064	500.0	503.8	
2	5.713	5.713	0.000	72065281	500.0	501.4	
2	5.860	5.860	0.000	129031405	500.0	491.3	
2	6.163	6.163	0.000	100338904	500.0	505.7	
2	6.860	6.860	0.000	137801037	500.0	502.5	
		Average of Peak Amounts =				500.9	
						RPD = 1.71	

Reagents:

AR_2154_L5_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

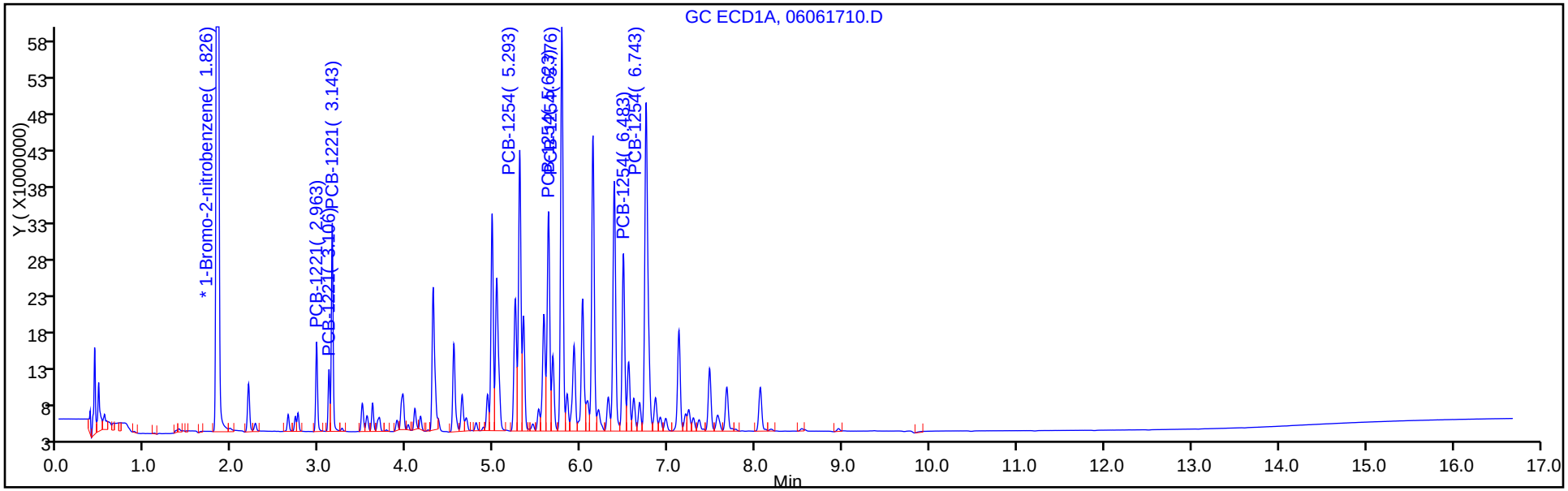
Report Date: 07-Jun-2017 06:52:34 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

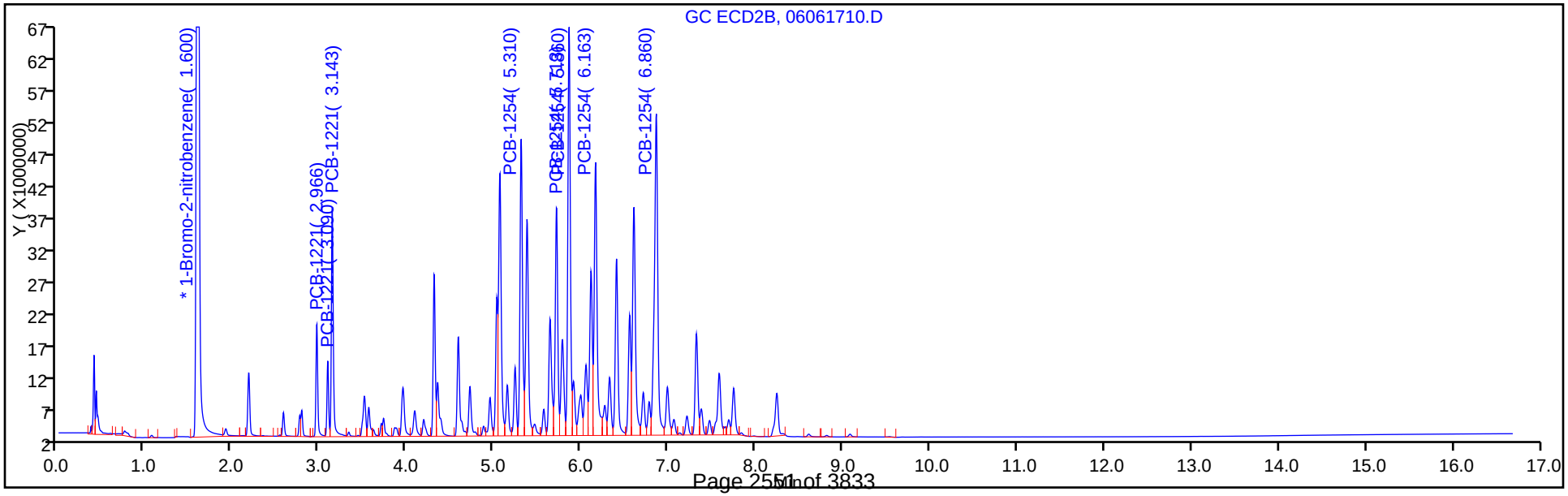
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061710.D

Injection Date:	06-Jun-2017 17:04:36	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL52154			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061711.D
Lims ID: STDL42154
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Jun-2017 17:26:17 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL42154
Misc. Info.: 280-0059455-011
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:35 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	339641861	1000.0	1000.0	
2	1.601	1.600	0.001	392534131	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.964	2.963	0.001	9170289	250.0	259.8	
1	3.104	3.106	-0.002	6227622	250.0	261.4	
1	3.141	3.143	-0.002	21102703	250.0	244.2	
		Average of Peak Amounts =				255.1	
2	2.964	2.966	-0.002	14237129	250.0	266.3	
2	3.091	3.090	0.001	8747606	250.0	267.7	
2	3.141	3.143	-0.002	31352454	250.0	265.9	
		Average of Peak Amounts =				266.7	
						RPD = 4.42	
9 PCB-1254							
1	5.294	5.293	0.001	39951293	250.0	252.7	
1	5.624	5.623	0.001	32459148	250.0	247.3	
1	5.774	5.776	-0.002	56756901	250.0	246.4	
1	6.481	6.483	-0.002	25618583	250.0	240.9	
1	6.744	6.743	0.001	59368878	250.0	246.0	
		Average of Peak Amounts =				246.7	
2	5.311	5.310	0.001	50891523	250.0	261.3	
2	5.714	5.713	0.001	39005754	250.0	259.2	
2	5.861	5.860	0.001	79398910	250.0	287.3	
2	6.164	6.163	0.001	55012397	250.0	264.3	
2	6.861	6.860	0.001	75955522	250.0	264.1	
		Average of Peak Amounts =				267.2	
						RPD = 8.00	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						501.8	
2						533.9	
						RPD = 6.19	

Reagents:

AR_2154_L4_00019	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

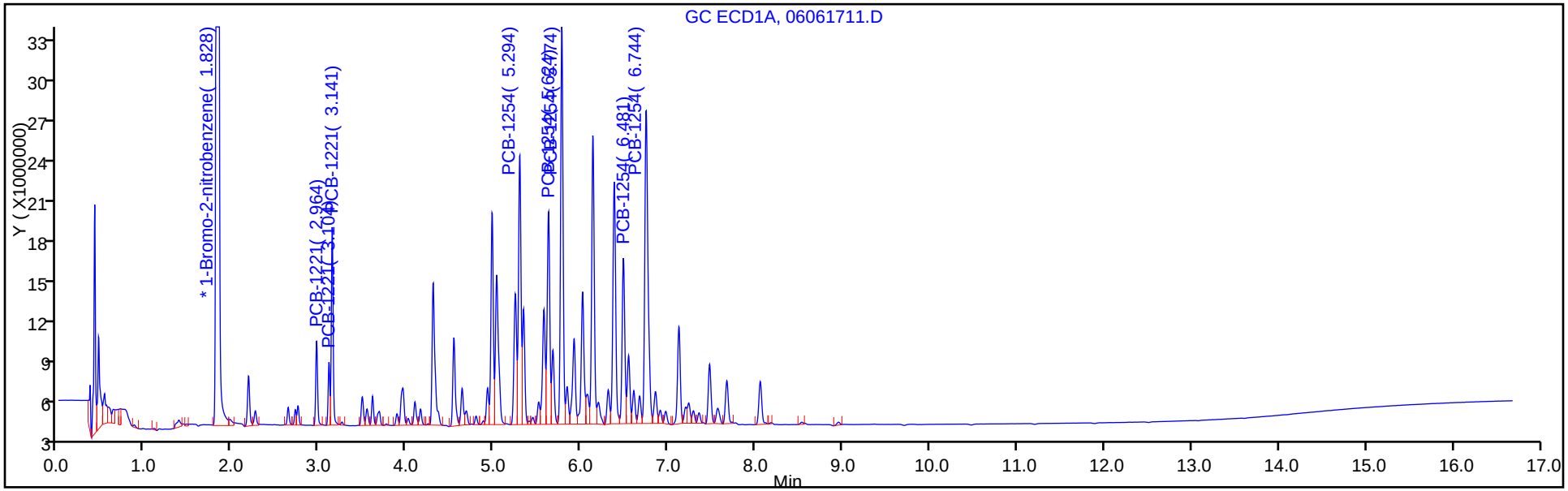
Report Date: 07-Jun-2017 06:52:35 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

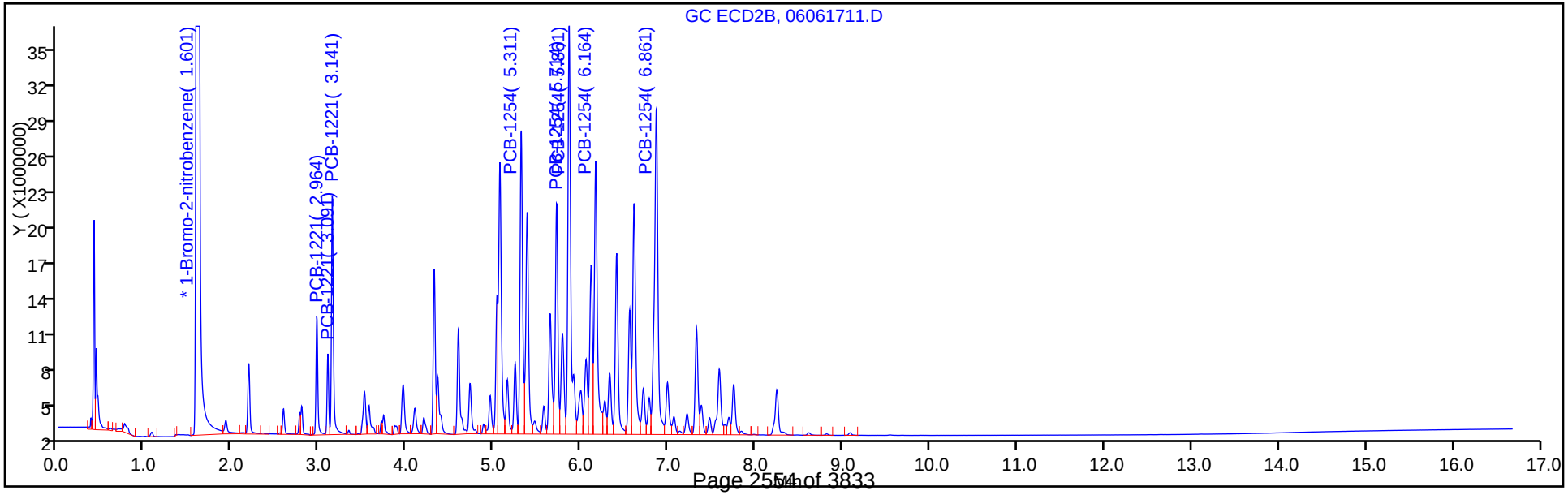
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061711.D

Injection Date:	06-Jun-2017 17:26:17	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL42154			Worklist Smp#:	11
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061712.D
Lims ID: STDL32154
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Jun-2017 17:47:59 ALS Bottle#: 12 Worklist Smp#: 12
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL32154
Misc. Info.: 280-0059455-012
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:37 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	338520893	1000.0	1000.0	
2	1.599	1.600	-0.001	389851526	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.963	2.963	0.000	3318748	100.0	92.5	
1	3.106	3.106	0.000	2693650	100.0	103.3	
1	3.143	3.143	0.000	9441334	100.0	103.2	
		Average of Peak Amounts =				99.7	
2	2.966	2.966	0.000	6759704	100.0	114.2	
2	3.093	3.090	0.003	4089850	100.0	114.2	
2	3.143	3.143	0.000	14699343	100.0	113.1	
		Average of Peak Amounts =				113.8	
						RPD = 13.27	
9 PCB-1254							
1	5.293	5.293	0.000	17048738	100.0	101.4	
1	5.623	5.623	0.000	14371710	100.0	104.0	
1	5.776	5.776	0.000	24674939	100.0	102.5	
1	6.483	6.483	0.000	11123568	100.0	99.1	
1	6.746	6.743	0.003	26068218	100.0	102.3	
		Average of Peak Amounts =				101.9	
2	5.313	5.310	0.003	22558142	100.0	106.7	
2	5.716	5.713	0.003	17593511	100.0	107.9	
2	5.859	5.860	-0.001	35750963	100.0	115.4	
2	6.166	6.163	0.003	24838007	100.0	109.6	
2	6.859	6.860	-0.001	33922293	100.0	108.0	
		Average of Peak Amounts =				109.5	
						RPD = 7.24	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S	8 Polychlorinated biphenyls, Total						
1						201.5	
2						223.3	
						RPD = 10.26	

Reagents:

AR_2154_L3_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

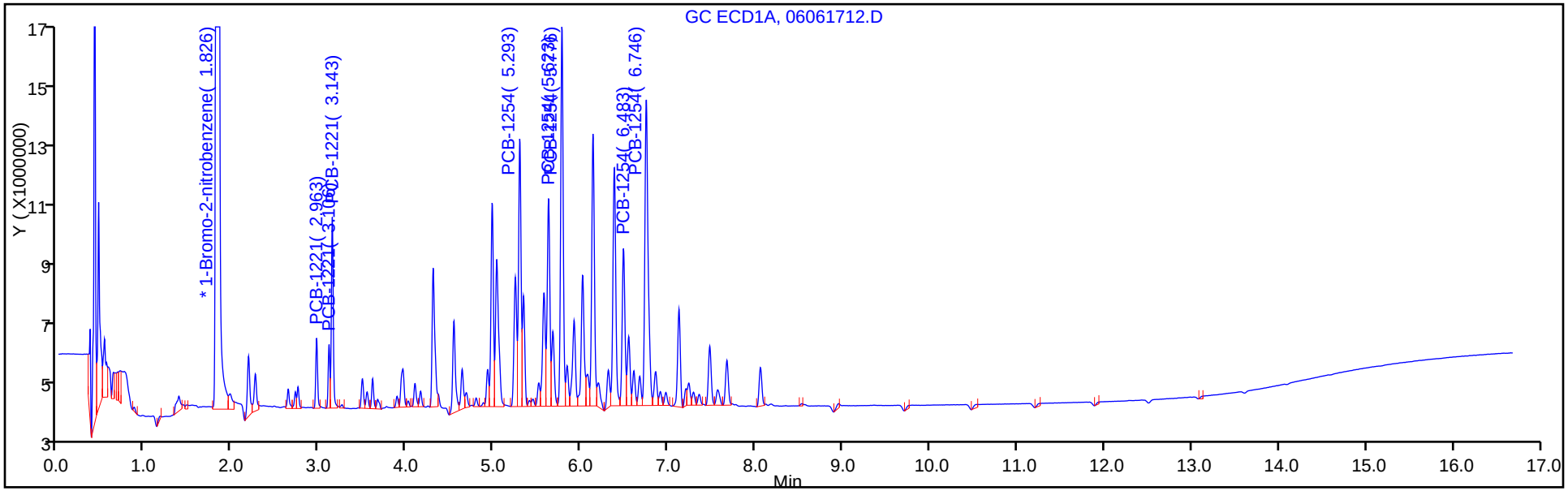
Report Date: 07-Jun-2017 06:52:37 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

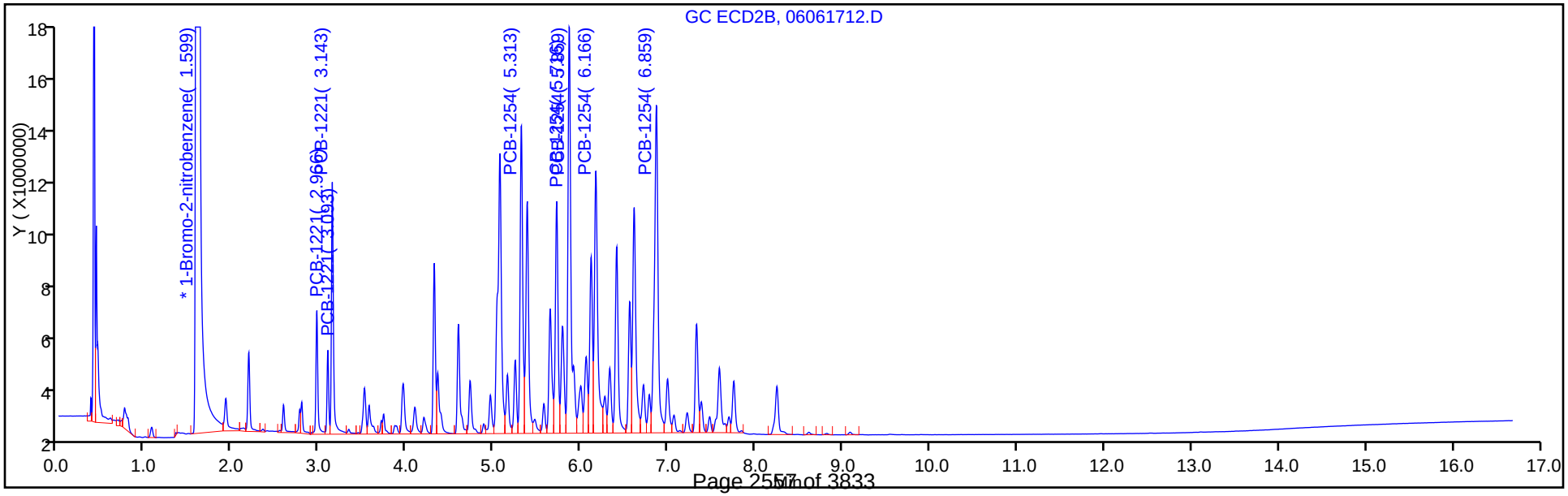
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061712.D

Injection Date:	06-Jun-2017 17:47:59	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL32154			Worklist Smp#:	12
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061713.D
Lims ID: STDL22154
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Jun-2017 18:09:41 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL22154
Misc. Info.: 280-0059455-013
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:38 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	333347331	1000.0	1000.0	
2	1.600	1.600	0.000	384100570	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.964	2.963	0.001	1705036	50.0	46.9	
1	3.107	3.106	0.001	1547959	50.0	52.9	
1	3.144	3.143	0.001	5166102	50.0	52.1	
		Average of Peak Amounts =				50.6	
2	2.967	2.966	0.001	3864936	50.0	55.7	
2	3.094	3.090	0.004	2301219	50.0	55.6	
2	3.144	3.143	0.001	8219031	50.0	53.9	
		Average of Peak Amounts =				55.1	
						RPD = 8.48	
9 PCB-1254							
1	5.294	5.293	0.001	9488010	50.0	52.2	
1	5.624	5.623	0.001	7803681	50.0	52.6	
1	5.777	5.776	0.001	13287742	50.0	52.1	
1	6.484	6.483	0.001	5981741	50.0	49.4	
1	6.744	6.743	0.001	14035652	50.0	51.0	
		Average of Peak Amounts =				51.5	
2	5.310	5.310	0.000	12340322	50.0	51.3	
2	5.717	5.713	0.004	9569387	50.0	51.6	
2	5.860	5.860	0.000	19574882	50.0	52.0	
2	6.167	6.163	0.004	13590764	50.0	52.2	
2	6.860	6.860	0.000	18701747	50.0	51.8	
		Average of Peak Amounts =				51.8	
						RPD = 0.64	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						102.1	
2						106.9	
						RPD = 4.60	

Reagents:

AR_2154_L2_00019	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

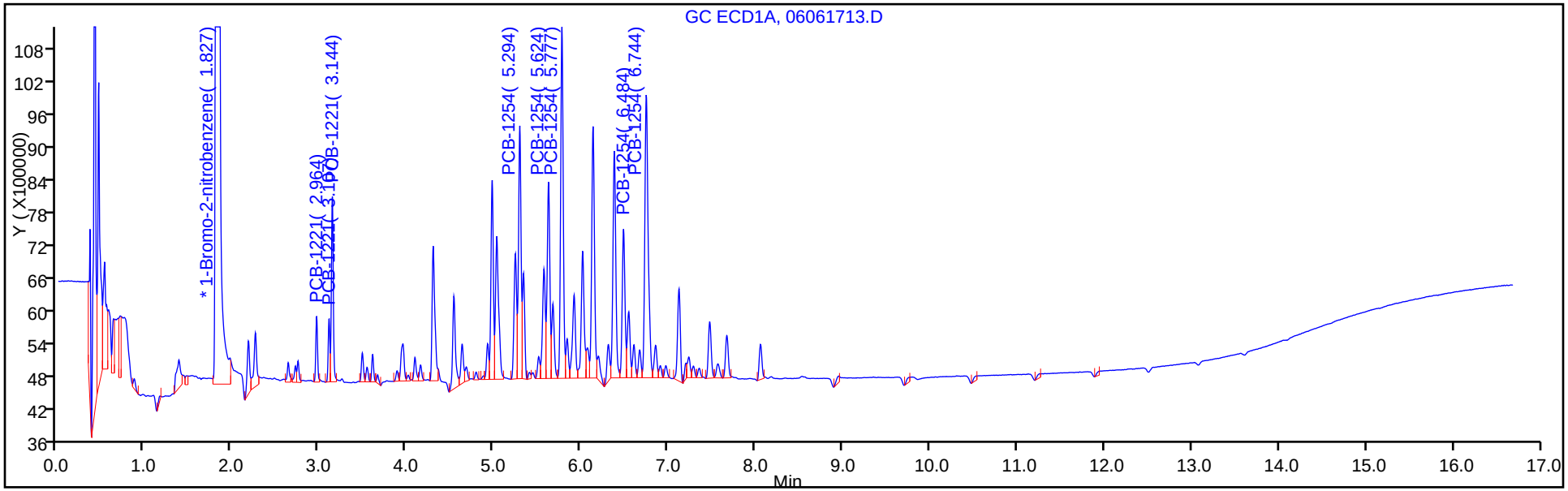
Report Date: 07-Jun-2017 06:52:39 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

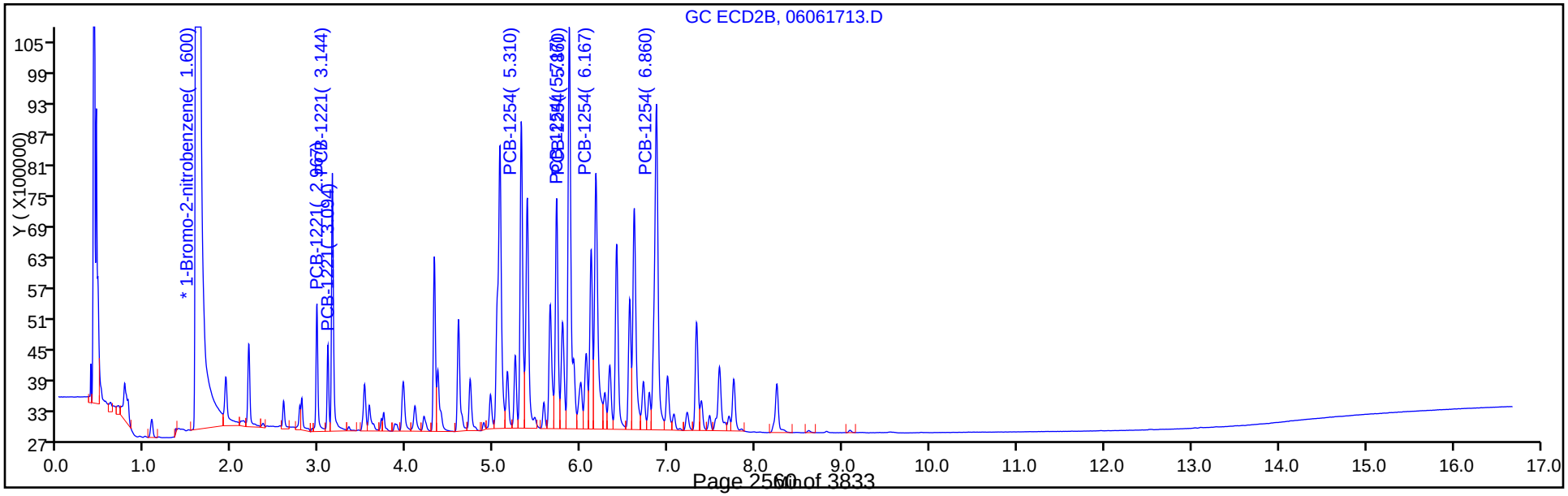
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061713.D

Injection Date:	06-Jun-2017 18:09:41	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL22154			Worklist Smp#:	13
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061714.D
Lims ID: STDL12154
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Jun-2017 18:31:23 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL12154
Misc. Info.: 280-0059455-014
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:40 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.826	-0.001	325012905	1000.0	1000.0	
2	1.599	1.600	-0.001	375991567	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.962	2.963	-0.001	1018371	25.0	27.6	
1	3.105	3.106	-0.001	851869	25.0	22.0	
1	3.142	3.143	-0.001	2819790	25.0	24.0	
		Average of Peak Amounts =				24.6	
2	2.965	2.966	-0.001	1998442	25.0	17.6	
2	3.092	3.090	0.002	1147785	25.0	17.4	
2	3.142	3.143	-0.001	4387732	25.0	18.7	
		Average of Peak Amounts =				17.9	
						RPD = 31.48	
9 PCB-1254							
1	5.292	5.293	-0.001	5116092	25.0	23.6	
1	5.622	5.623	-0.001	4087907	25.0	23.3	
1	5.775	5.776	-0.001	6971281	25.0	24.0	
1	6.485	6.483	0.002	3594296	25.0	26.5	
1	6.745	6.743	0.002	7819837	25.0	24.5	
		Average of Peak Amounts =				24.4	
2	5.312	5.310	0.002	6943955	25.0	21.9	
2	5.718	5.713	0.005	5341101	25.0	21.7	
2	5.862	5.860	0.002	10932751	25.0	18.0	
2	6.168	6.163	0.005	7440552	25.0	20.6	
2	6.858	6.860	-0.002	10458541	25.0	21.2	
		Average of Peak Amounts =				20.7	
						RPD = 16.33	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
S 8 Polychlorinated biphenyls, Total							
1						48.9	
2						38.6	
						RPD = 23.67	

Reagents:

AR_2154_L1_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

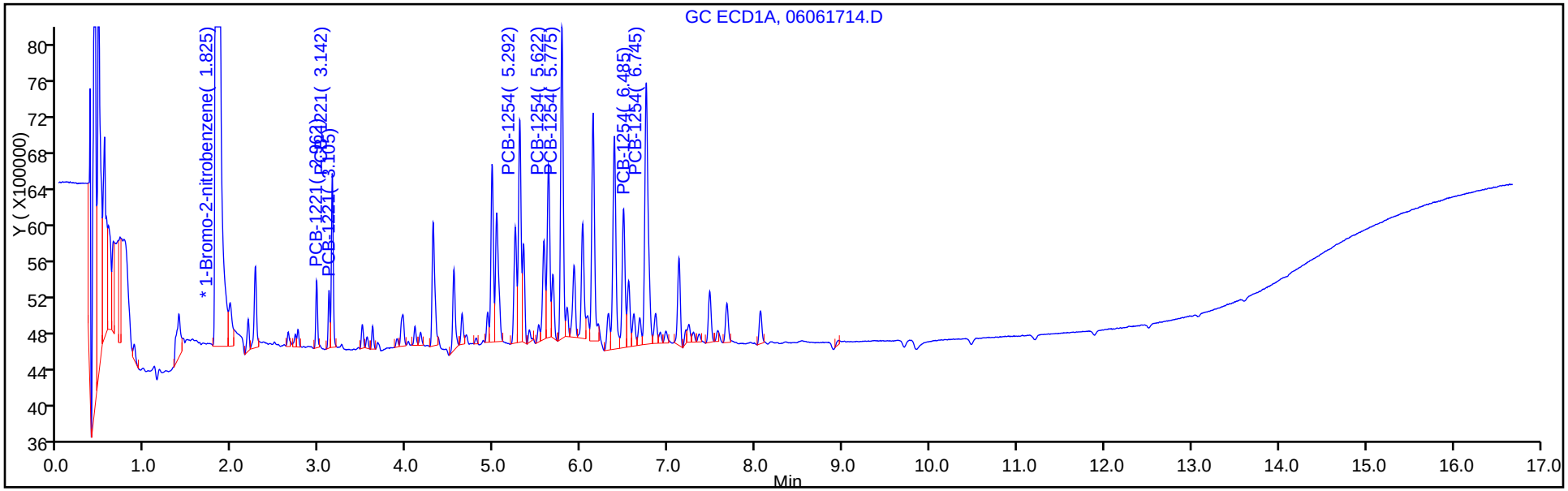
Report Date: 07-Jun-2017 06:52:40 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

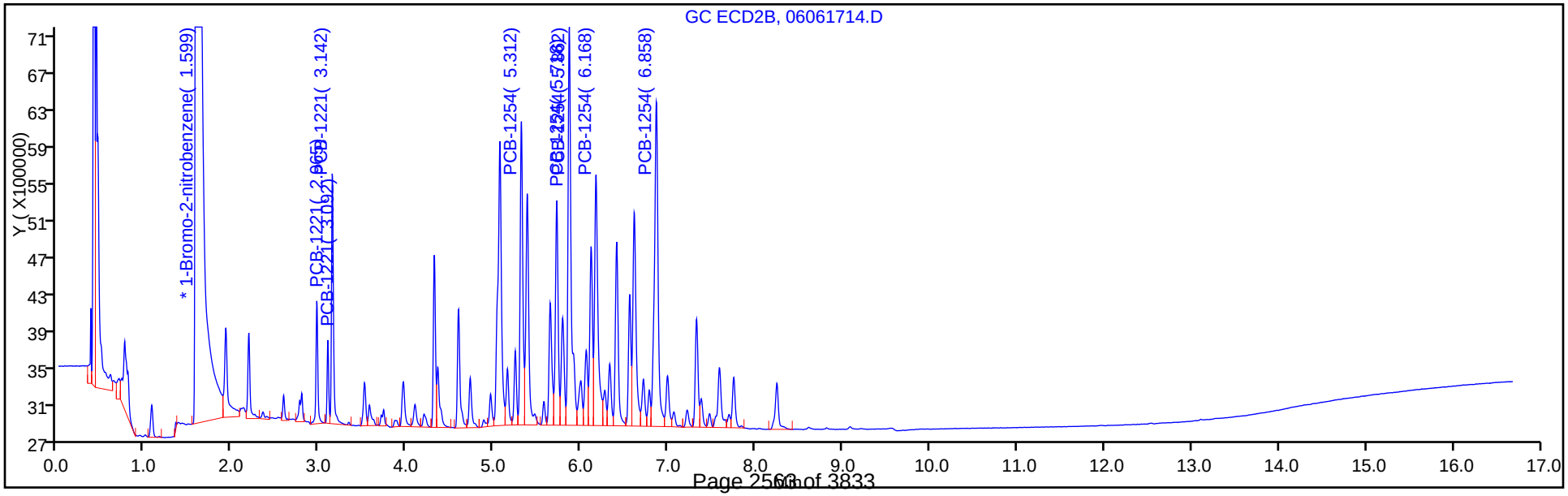
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Injection Date:	06-Jun-2017 18:31:23	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL12154			Worklist Smp#:	14
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 18:53 Calibration End Date: 06/06/2017 21:03 Calibration ID: 29393

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11660 280-376236/21	06061721.D
Level 2	STDL21660 280-376236/20	06061720.D
Level 3	STDL31660 280-376236/19	06061719.D
Level 4	STDL41660 280-376236/18	06061718.D
Level 5	STDL51660 280-376236/17	06061717.D
Level 6	STDL61660 280-376236/16	06061716.D
Level 7	STDL71660 280-376236/15	06061715.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1016 Peak 1	0.4917 0.3208	0.4393 0.3273	0.3887	0.3488	0.3315	Lin1	5.1435	0.3207							0.9990		0.9900
PCB-1016 Peak 2	0.9983 0.7457	0.8937 0.7708	0.8354	0.7785	0.7619	Lin1	6.6090	0.7524							1.0000		0.9900
PCB-1016 Peak 3	0.4697 0.3068	0.4012 0.3185	0.3643	0.3330	0.3188	Lin1	4.3862	0.3098							0.9990		0.9900
PCB-1016 Peak 4	0.3007 0.2010	0.2574 0.2054	0.2384	0.2125	0.2053	Lin1	2.7562	0.2007							1.0000		0.9900
PCB-1016 Peak 5	0.5169 0.3215	0.4338 0.3305	0.3942	0.3486	0.3341	Lin1	5.4106	0.3223							1.0000		0.9900
PCB-1260 Peak 1	0.7311 0.4900	0.6328 0.5100	0.5840	0.5263	0.5034	Lin1	6.5791	0.4946							0.9990		0.9900
PCB-1260 Peak 2	1.2770 0.9640	1.1750 1.0105	1.1023	1.0112	0.9859	Lin1	8.5383	0.9796							0.9990		0.9900
PCB-1260 Peak 3	0.6142 0.4426	0.5620 0.4674	0.5206	0.4797	0.4617	Lin1	4.8074	0.4531							0.9990		0.9900
PCB-1260 Peak 4	1.2563 0.9886	1.1559 1.0424	1.0982	1.0232	1.0094	Lin1	6.5850	1.0083							0.9990		0.9900
PCB-1260 Peak 5	0.7698 0.5724	0.6767 0.5957	0.6466	0.5993	0.5823	Lin1	4.9739	0.5790							1.0000		0.9900
Tetrachloro-m-xylene	13.655 10.513	12.568 10.904	11.596	10.936	10.732	Lin1	4.1404	10.631							1.0000		0.9900
DCB Decachlorobiphenyl (Surr)	14.882 9.9663	13.215 10.447	11.824	10.571	10.382	Lin1	6.7423	10.103							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 18:53 Calibration End Date: 06/06/2017 21:03 Calibration ID: 29393

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11660 280-376236/21	06061721.D
Level 2	STDL21660 280-376236/20	06061720.D
Level 3	STDL31660 280-376236/19	06061719.D
Level 4	STDL41660 280-376236/18	06061718.D
Level 5	STDL51660 280-376236/17	06061717.D
Level 6	STDL61660 280-376236/16	06061716.D
Level 7	STDL71660 280-376236/15	06061715.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	BNB	Lin1	4092312 82791241	7487332 105338158	13576390	30630958	57542662	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 2	BNB	Lin1	8308605 192453551	15232704 248061775	29176200	68368331	132265539	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 3	BNB	Lin1	3909235 79177898	6838654 102498619	12724584	29242149	55335667	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 4	BNB	Lin1	2502681 51885493	4388185 66091491	8326427	18665090	35641561	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 5	BNB	Lin1	4302074 82989882	7393798 106371789	13769298	30611537	58003485	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 1	BNB	Lin1	6084608 126475373	10786770 164134452	20396415	46213959	87377831	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 2	BNB	Lin1	10628001 248807451	20028581 325199626	38501119	88801710	171141272	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 3	BNB	Lin1	5112131 114243529	9579328 150433029	18183829	42122701	80138230	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 4	BNB	Lin1	10456027 255142631	19703088 335464075	38357309	89857466	175214565	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 5	BNB	Lin1	6406784 147731172	11533959 191696219	22581951	52630695	101076767	25.0 750	50.0 1000	100	250	500
Tetrachloro-m-xylene	BNB	Lin1	5682531 135663505	10710894 175452107	20251060	48018977	93146869	1.25 37.5	2.50 50.0	5.00	12.5	25.0
DCB Decachlorobiphenyl (Surr)	BNB	Lin1	6193110 128612077	11262263 168104066	20648715	46414402	90106465	1.25 37.5	2.50 50.0	5.00	12.5	25.0

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061715.D
Lims ID: STDL71660
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 18:53:04 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL71660
Misc. Info.: 280-0059455-015
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:42 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	321825122	1000.0	1000.0	
2	1.600	1.600	0.000	374030457	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.753	2.752	0.001	175452107	50.0	50.9	
2	2.650	2.649	0.001	208703729	50.0	49.5	
						RPD = 2.78	
1 PCB-1016							
1	3.486	3.486	0.000	105338158	1000.0	1004.5	
1	3.953	3.952	0.001	248061775	1000.0	1015.7	
1	4.090	4.089	0.001	102498619	1000.0	1013.9	
1	4.156	4.156	0.000	66091491	1000.0	1009.5	
1	4.540	4.539	0.001	106371789	1000.0	1008.8	
		Average of Peak Amounts =				1010.5	
2	3.513	3.512	0.001	129837588	1000.0	979.4	
2	3.950	3.952	-0.002	293501737	1000.0	991.2	
2	4.086	4.086	0.000	133413833	1000.0	990.9	
2	4.310	4.312	-0.002	71370957	1000.0	974.2	
2	4.586	4.586	0.000	98944888	1000.0	996.1	
		Average of Peak Amounts =				986.4	
						RPD = 2.42	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.013	6.012	0.001	164134452	1000.0	1017.9	
1	6.743	6.742	0.001	325199626	1000.0	1022.8	
1	7.233	7.232	0.001	150433029	1000.0	1021.0	
1	7.666	7.666	0.000	335464075	1000.0	1027.3	
1	8.050	8.049	0.001	191696219	1000.0	1020.2	
		Average of Peak Amounts =				1021.8	
2	6.403	6.402	0.001	239675892	1000.0	1006.0	
2	6.856	6.859	-0.003	362610626	1000.0	1010.5	
2	7.376	7.376	0.000	166712528	1000.0	1014.6	
2	7.746	7.746	0.000	357449619	1000.0	1011.1	
2	8.240	8.239	0.001	275897553	1000.0	1014.0	
		Average of Peak Amounts =				1011.2	
						RPD = 1.04	
$ 15 DCB Decachlorobiphenyl							
1	9.630	9.629	0.001	168104066	50.0	51.0	
2	9.900	9.896	0.004	174736569	50.0	50.5	
						RPD = 0.95	
S 8 Polychlorinated biphenyls, Total							
1						2032.3	
2						1997.6	
						RPD = 1.72	

Reagents:

AR_1660_L7_00022	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

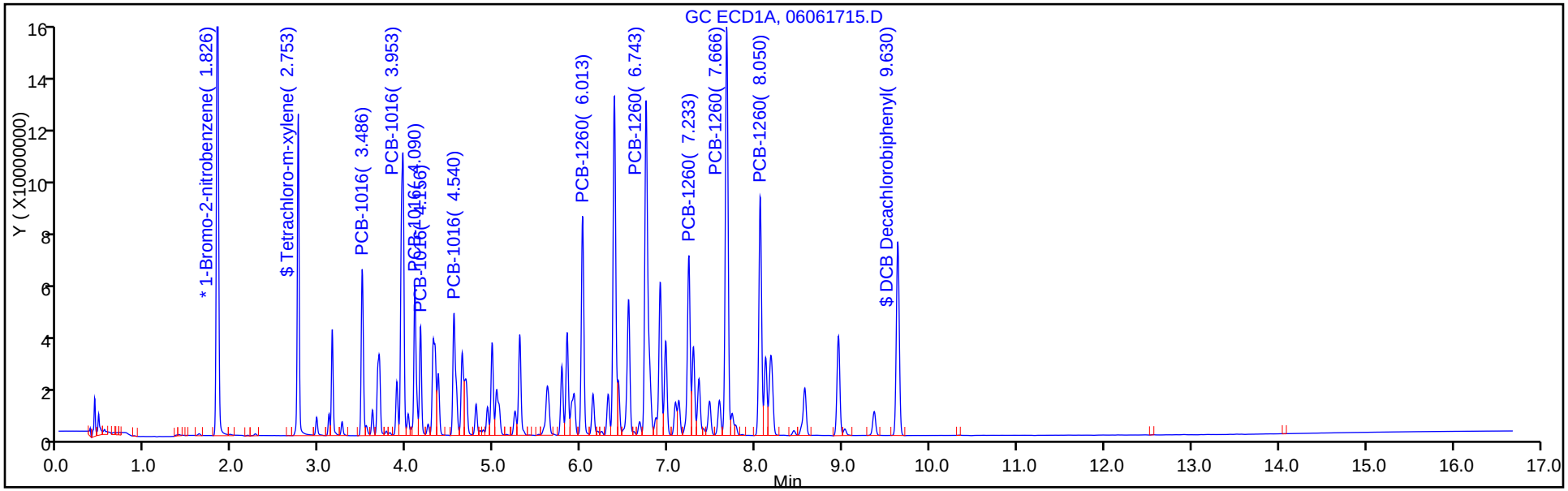
Report Date: 07-Jun-2017 06:52:42 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

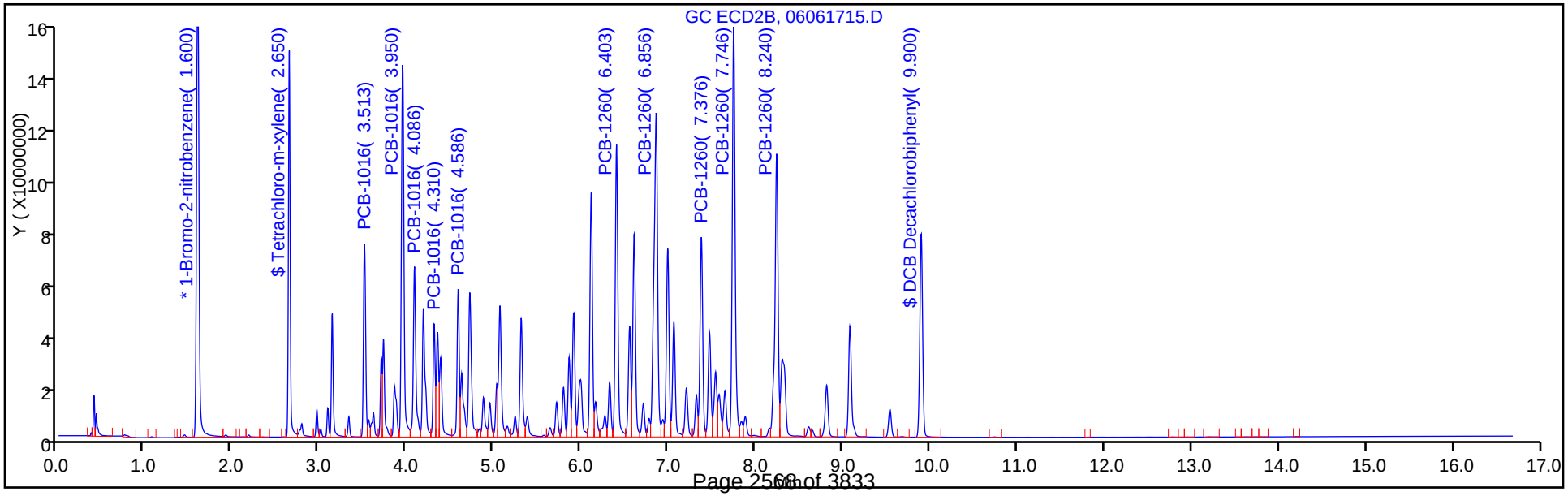
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Injection Date:	06-Jun-2017 18:53:04	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL71660			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061716.D
Lims ID: STDL61660
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Jun-2017 19:14:47 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL61660
Misc. Info.: 280-0059455-016
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:43 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	344124721	1000.0	1000.0	
2	1.601	1.600	0.001	398623816	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.751	2.752	-0.001	135663505	37.5	36.7	
2	2.648	2.649	-0.001	165562777	37.5	36.6	
						RPD = 0.16	
1 PCB-1016							
1	3.488	3.486	0.002	82791241	750.0	734.1	
1	3.951	3.952	-0.001	192453551	750.0	734.5	
1	4.091	4.089	0.002	79177898	750.0	728.5	
1	4.154	4.156	-0.002	51885493	750.0	737.5	
1	4.538	4.539	-0.001	82989882	750.0	731.5	
		Average of Peak Amounts =				733.2	
2	3.511	3.512	-0.001	104124315	750.0	731.2	
2	3.951	3.952	-0.001	232024594	750.0	730.7	
2	4.084	4.086	-0.002	105182049	750.0	727.6	
2	4.311	4.312	-0.001	58197834	750.0	740.5	
2	4.588	4.586	0.002	78260144	750.0	734.4	
		Average of Peak Amounts =				732.9	
						RPD = 0.05	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.014	6.012	0.002	126475373	750.0	729.8	
1	6.741	6.742	-0.001	248807451	750.0	729.4	
1	7.231	7.232	-0.001	114243529	750.0	722.1	
1	7.668	7.666	0.002	255142631	750.0	728.8	
1	8.051	8.049	0.002	147731172	750.0	732.8	
		Average of Peak Amounts =				728.6	
2	6.401	6.402	-0.001	185671410	750.0	726.4	
2	6.858	6.859	-0.001	280310149	750.0	728.1	
2	7.374	7.376	-0.002	127525216	750.0	723.3	
2	7.744	7.746	-0.002	276328319	750.0	728.9	
2	8.241	8.239	0.002	211869985	750.0	726.3	
		Average of Peak Amounts =				726.6	
						RPD = 0.27	
$ 15 DCB Decachlorobiphenyl							
1	9.631	9.629	0.002	128612077	37.5	36.3	
2	9.898	9.896	0.002	135357270	37.5	36.5	
						RPD = 0.48	
S 8 Polychlorinated biphenyls, Total							
1						1461.8	
2						1459.5	
						RPD = 0.16	

Reagents:

AR_1660_L6_00029	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

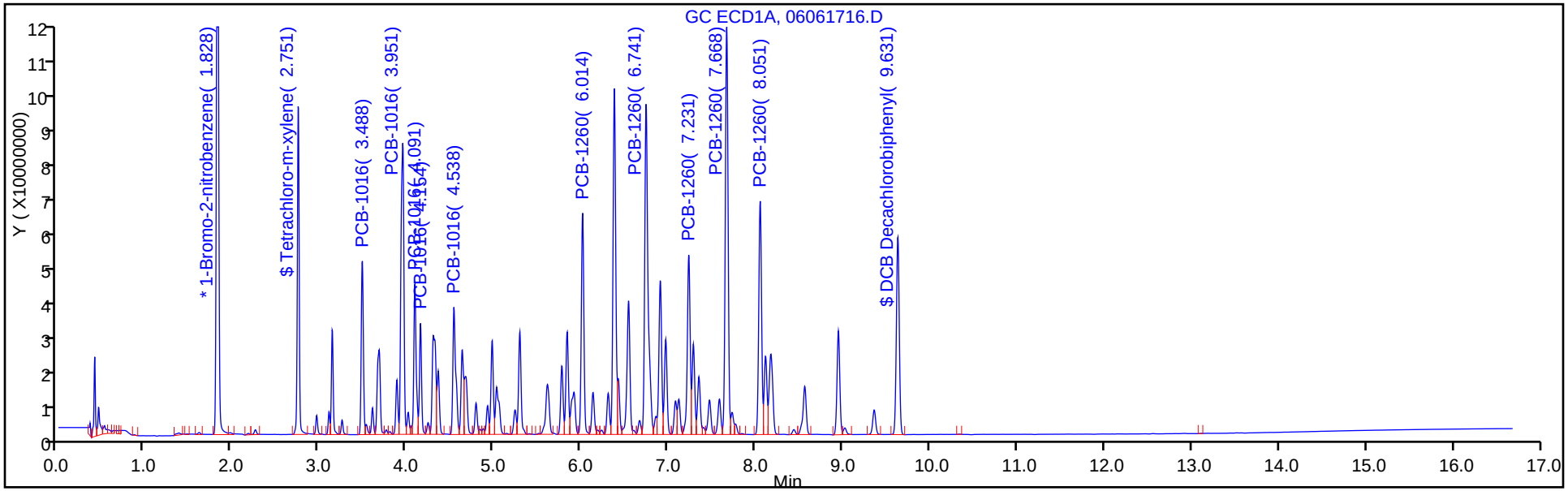
Report Date: 07-Jun-2017 06:52:44 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

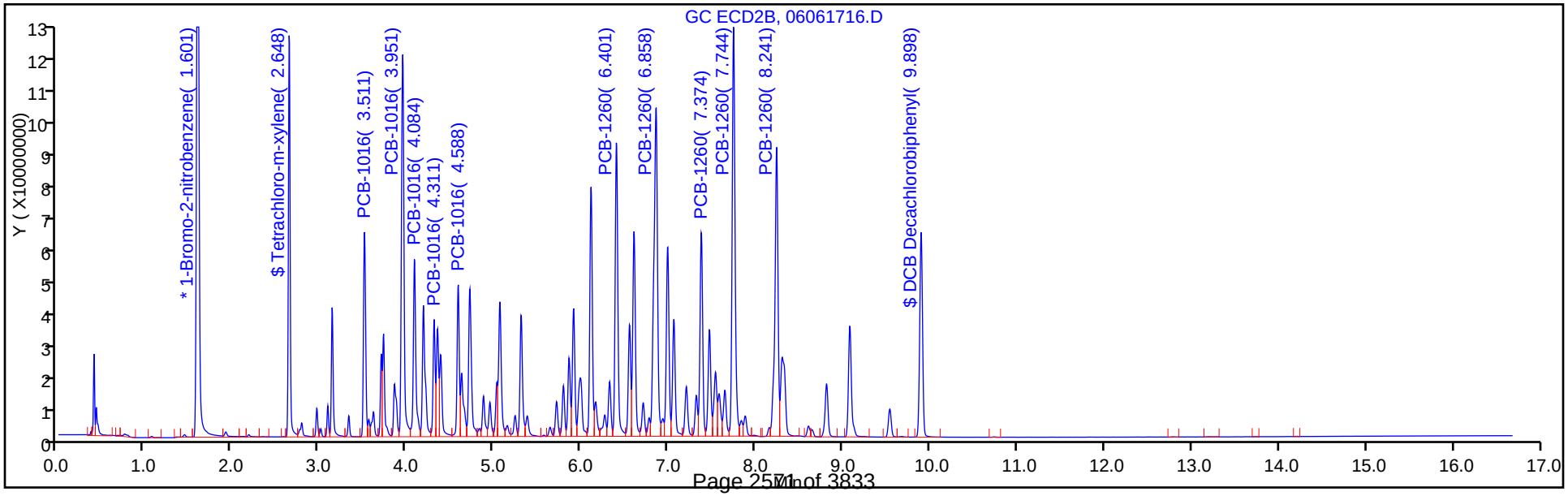
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061716.D

Injection Date:	06-Jun-2017 19:14:47	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL61660			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061717.D
Lims ID: STDL51660
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 06-Jun-2017 19:36:29 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL51660
Misc. Info.: 280-0059455-017
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:45 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:29:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	347177456	1000.0	1000.0	
2	1.599	1.599	0.000	402955781	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.752	2.752	0.000	93146869	25.0	24.8	
2	2.649	2.649	0.000	117388845	25.0	25.5	
						RPD = 2.40	
1 PCB-1016							
1	3.486	3.486	0.000	57542662	500.0	500.7	
1	3.952	3.952	0.000	132265539	500.0	497.6	
1	4.089	4.089	0.000	55335667	500.0	500.3	
1	4.156	4.156	0.000	35641561	500.0	497.8	
1	4.539	4.539	0.000	58003485	500.0	501.6	
		Average of Peak Amounts =				499.6	
2	3.512	3.512	0.000	74393220	500.0	510.0	
2	3.952	3.952	0.000	164511841	500.0	507.3	
2	4.086	4.086	0.000	74822022	500.0	505.8	
2	4.312	4.312	0.000	41568287	500.0	517.1	
2	4.586	4.586	0.000	55402125	500.0	508.6	
		Average of Peak Amounts =				509.7	
						RPD = 2.01	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							M
1	6.012	6.012	0.000	87377831	500.0	495.6	M
1	6.742	6.742	0.000	171141272	500.0	494.5	M
1	7.232	7.232	0.000	80138230	500.0	498.8	M
1	7.666	7.666	0.000	175214565	500.0	494.0	M
1	8.049	8.049	0.000	101076767	500.0	494.2	M
		Average of Peak Amounts =				495.4	
2	6.402	6.402	0.000	131171686	500.0	502.3	
2	6.859	6.859	0.000	196787463	500.0	500.2	
2	7.376	7.376	0.000	89679438	500.0	497.9	
2	7.746	7.746	0.000	192606616	500.0	497.5	
2	8.239	8.239	0.000	148410731	500.0	498.5	
		Average of Peak Amounts =				499.3	
						RPD = 0.78	
$ 15 DCB Decachlorobiphenyl							
1	9.629	9.629	0.000	90106465	25.0	25.0	
2	9.896	9.896	0.000	94188936	25.0	24.9	
						RPD = 0.68	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

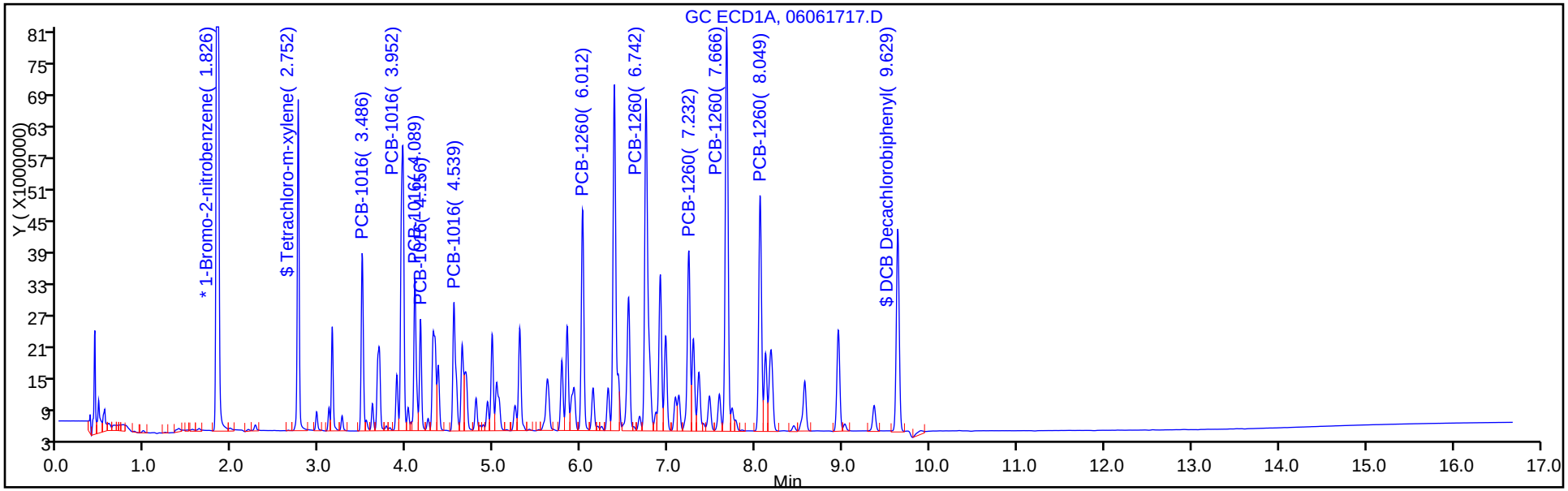
Report Date: 07-Jun-2017 06:52:46 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

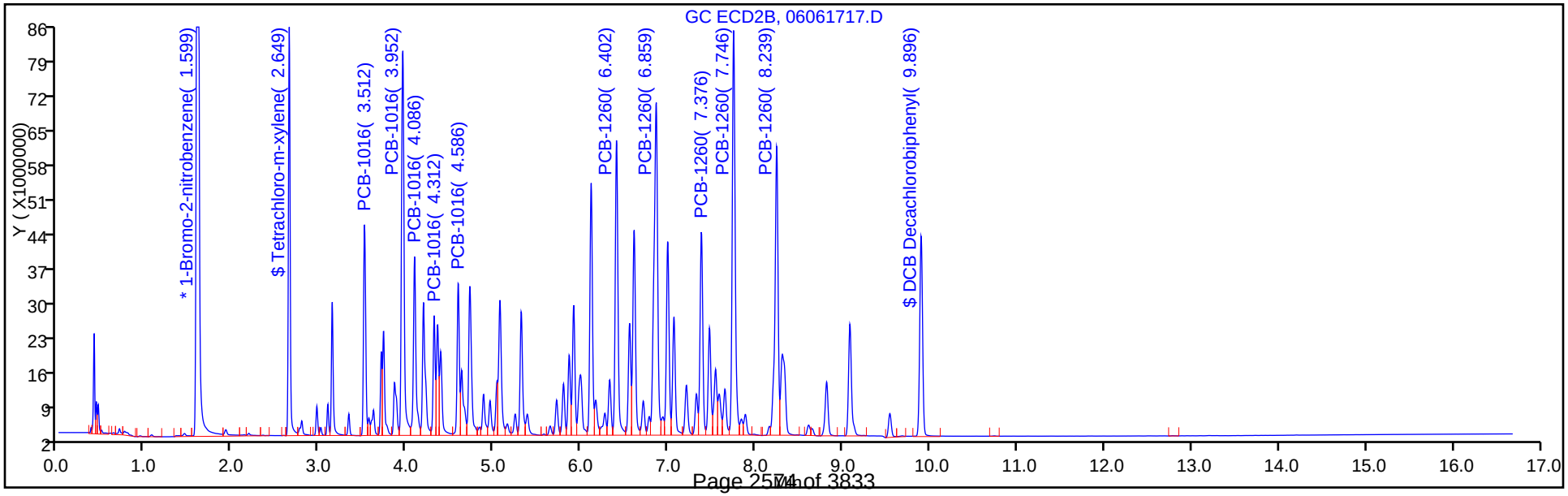
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061717.D

Injection Date:	06-Jun-2017 19:36:29	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL51660			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:52:46 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061717.D

Injection Date: 06-Jun-2017 19:36:29 Instrument ID: SGC_P3

Lims ID: STDL51660

Client ID:

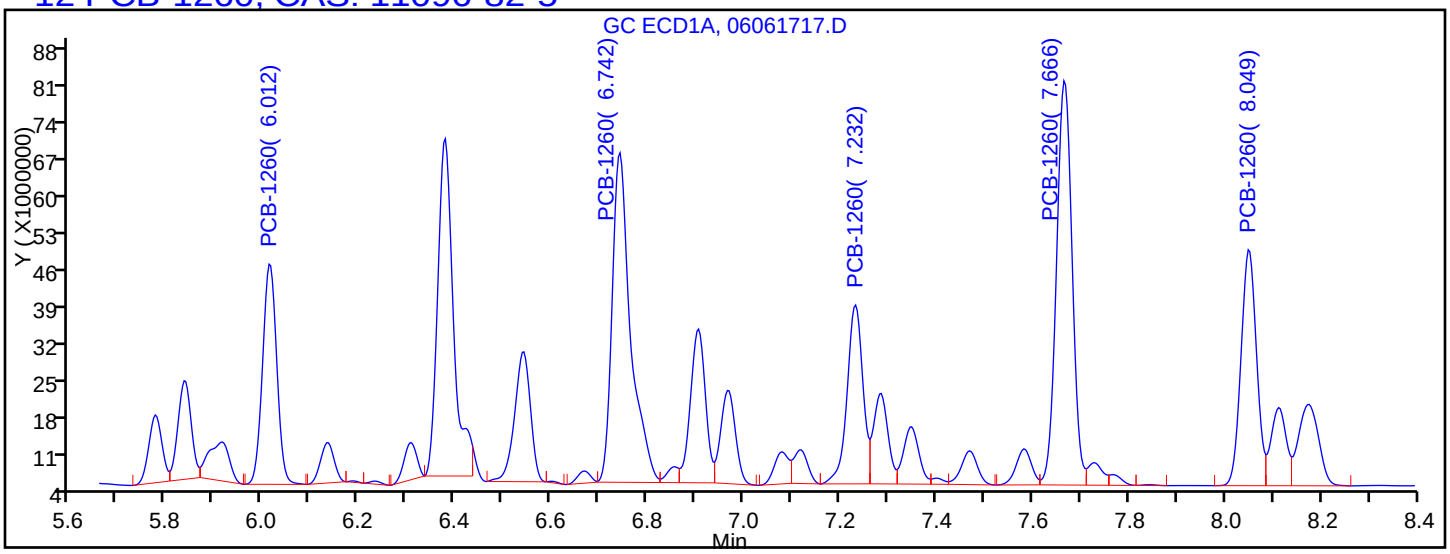
Operator ID: jax ALS Bottle#: 17 Worklist Smp#: 17

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

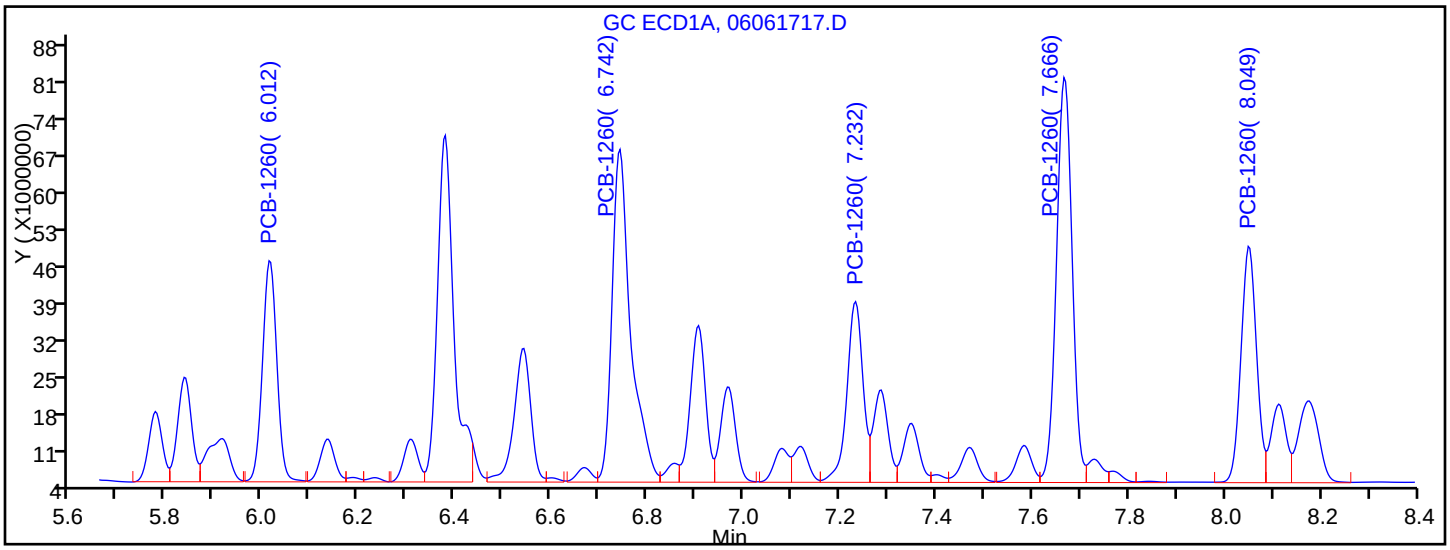
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

12 PCB-1260, CAS: 11096-82-5



Processing Integration Results

6.012	Response = 85994187
6.742	Response = 166321094
7.232	Response = 77883820
7.666	Response = 174128404
8.049	Response = 100529603



Manual Integration Results

6.012	Response = 87377831	M
6.742	Response = 171141272	M
7.232	Response = 80138230	M
7.666	Response = 175214565	M
8.049	Response = 101076767	M

Reviewer: jacksonto, 07-Jun-2017 06:44:38

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061718.D
Lims ID: STDL41660
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Jun-2017 19:58:10 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL41660
Misc. Info.: 280-0059455-018
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:47 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:44:59

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	351266835	1000.0	1000.0	
2	1.600	1.599	0.001	406000007	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.754	2.752	0.002	48018977	12.5	12.5	
2	2.650	2.649	0.001	62936226	12.5	13.2	
						RPD = 5.40	
1 PCB-1016							
1	3.487	3.486	0.001	30630958	250.0	255.8	
1	3.950	3.952	-0.002	68368331	250.0	249.9	
1	4.090	4.089	0.001	29242149	250.0	254.5	
1	4.154	4.156	-0.002	18665090	250.0	251.0	
1	4.537	4.539	-0.002	30611537	250.0	253.6	
		Average of Peak Amounts =				253.0	
2	3.514	3.512	0.002	41290967	250.0	270.4	
2	3.954	3.952	0.002	89114924	250.0	264.6	
2	4.087	4.086	0.001	41182323	250.0	266.8	
2	4.310	4.312	-0.002	21824117	250.0	259.4	
2	4.587	4.586	0.001	29054635	250.0	255.7	
		Average of Peak Amounts =				263.4	
						RPD = 4.03	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							M
1	6.014	6.012	0.002	46213959	250.0	252.7	M
1	6.744	6.742	0.002	88801710	250.0	249.4	M
1	7.234	7.232	0.002	42122701	250.0	254.1	M
1	7.667	7.666	0.001	89857466	250.0	247.2	M
1	8.050	8.049	0.001	52630695	250.0	250.2	M
		Average of Peak Amounts =				250.7	
2	6.404	6.402	0.002	70279490	250.0	258.8	
2	6.857	6.859	-0.002	104568912	250.0	255.4	
2	7.377	7.376	0.001	48056088	250.0	256.7	
2	7.747	7.746	0.001	103428097	250.0	257.5	
2	8.240	8.239	0.001	78925507	250.0	255.8	
		Average of Peak Amounts =				256.8	
						RPD = 2.42	
$ 15 DCB Decachlorobiphenyl							
1	9.630	9.629	0.001	46414402	12.5	12.4	
2	9.897	9.896	0.001	50266976	12.5	12.7	
						RPD = 2.69	
S 8 Polychlorinated biphenyls, Total							
1						503.7	
2						520.2	
						RPD = 3.23	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1660_L4_00065	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

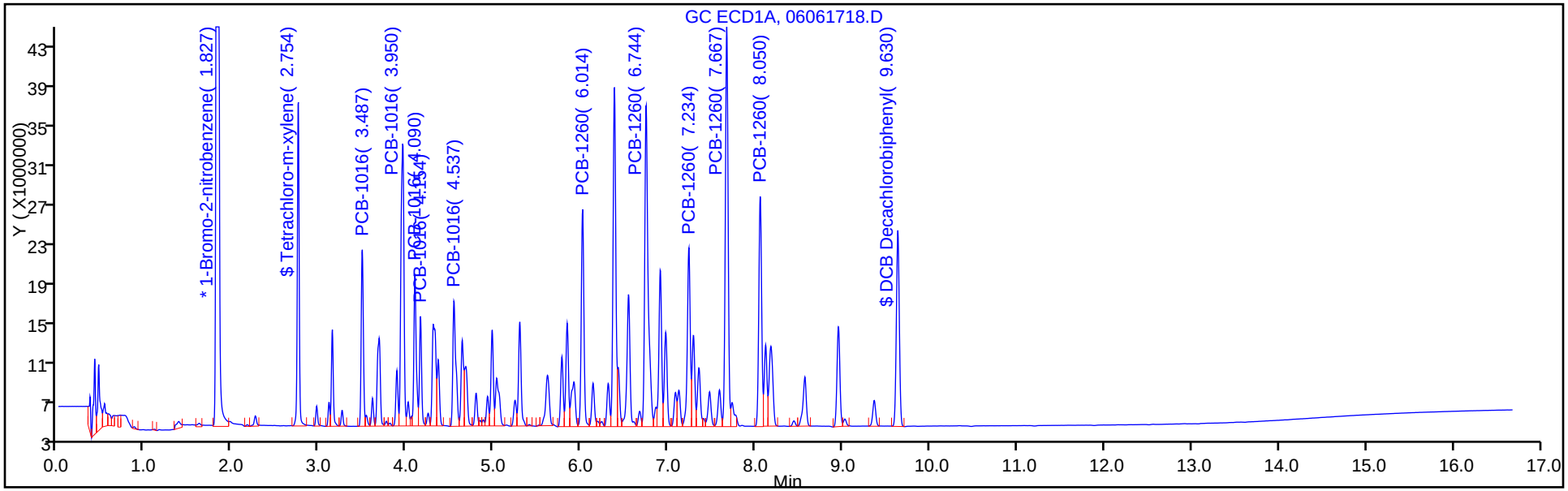
Report Date: 07-Jun-2017 06:52:48 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

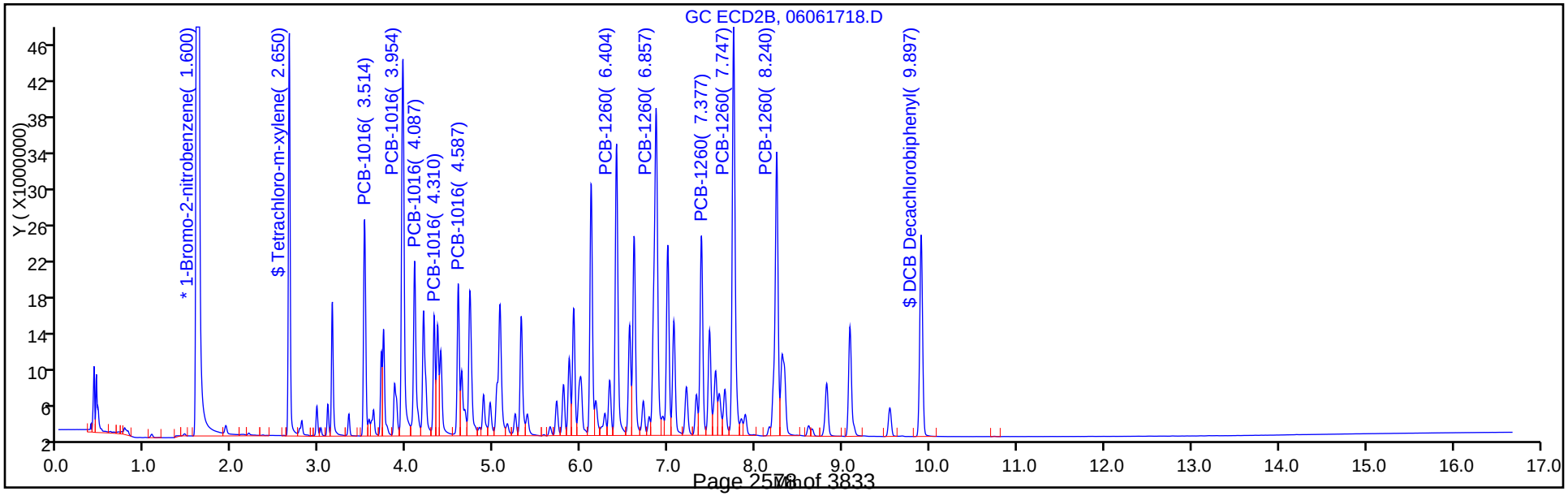
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061718.D

Injection Date:	06-Jun-2017 19:58:10	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL41660			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:52:48 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061718.D

Injection Date: 06-Jun-2017 19:58:10 Instrument ID: SGC_P3

Lims ID: STDL41660

Client ID:

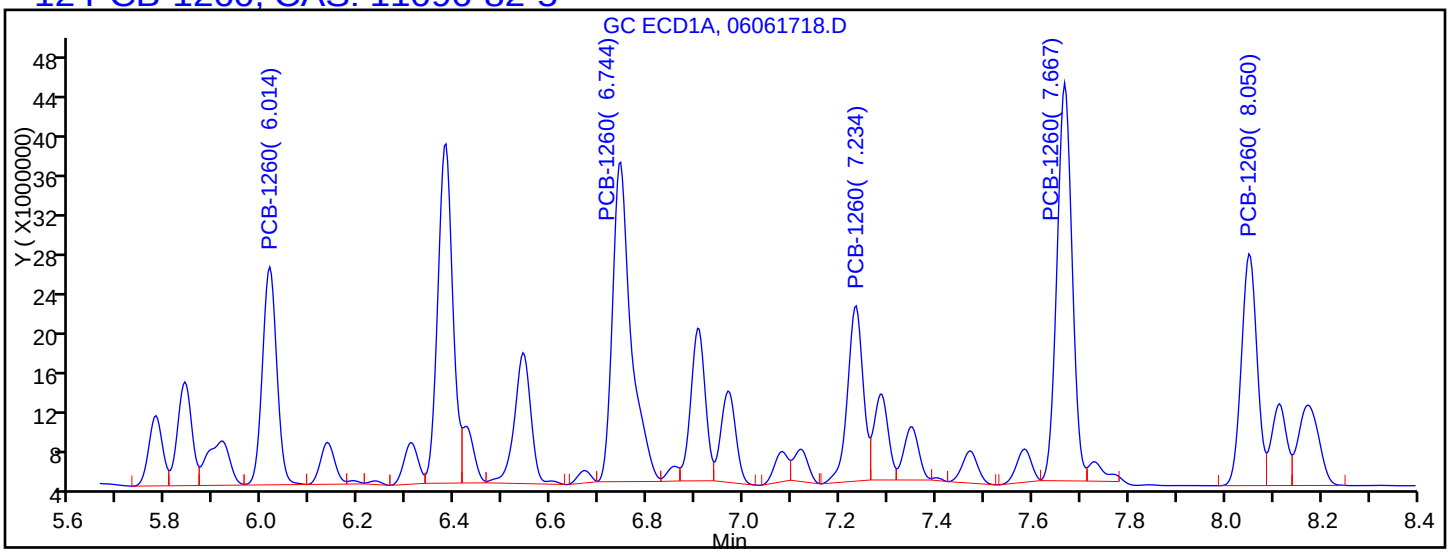
Operator ID: jax ALS Bottle#: 18 Worklist Smp#: 18

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

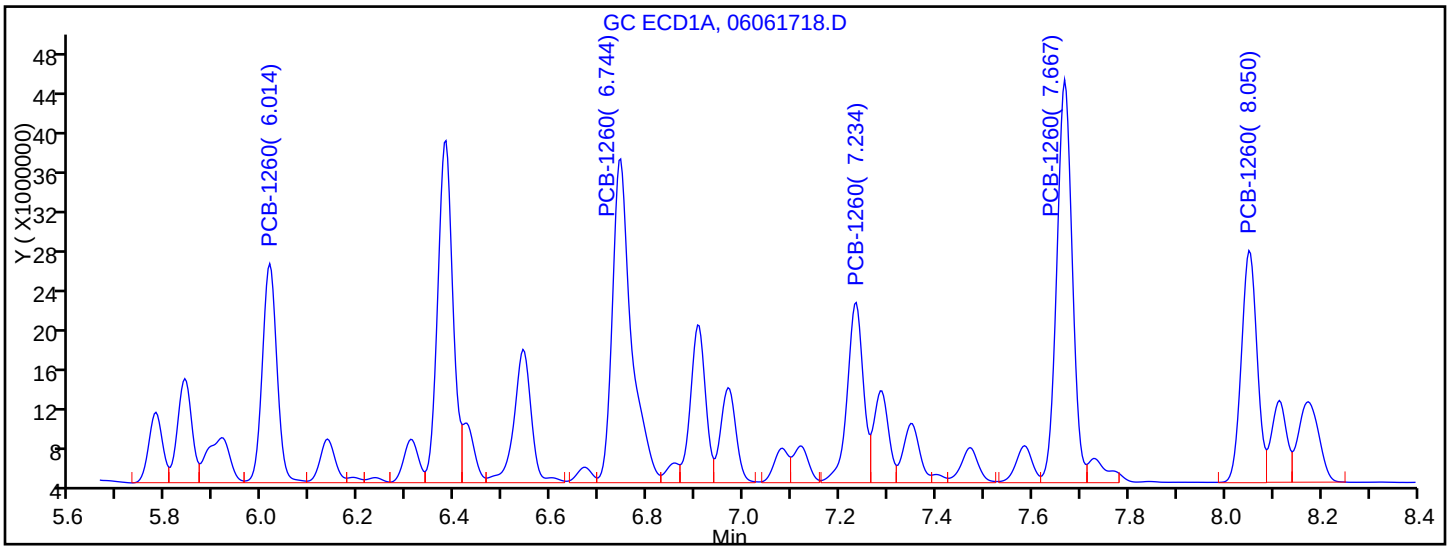
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

12 PCB-1260, CAS: 11096-82-5



Processing Integration Results

6.014	Response = 45271282
6.744	Response = 85314182
7.234	Response = 39599298
7.667	Response = 86876793
8.050	Response = 52413624



Manual Integration Results

6.014	Response = 46213959	M
6.744	Response = 88801710	M
7.234	Response = 42122701	M
7.667	Response = 89857466	M
8.050	Response = 52630695	M

Reviewer: jacksonto, 07-Jun-2017 06:44:56

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061719.D
Lims ID: STDL31660
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Jun-2017 20:19:52 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL31660
Misc. Info.: 280-0059455-019
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:50 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:45:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.826	-0.001	349267665	1000.0	1000.0	
2	1.598	1.599	-0.001	401174526	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.752	2.752	0.000	20251060	5.00	5.06	
2	2.648	2.649	-0.001	27564865	5.00	5.38	
						RPD = 6.01	
1 PCB-1016							
1	3.485	3.486	-0.001	13576390	100.0	105.2	
1	3.952	3.952	0.000	29176200	100.0	102.2	
1	4.092	4.089	0.003	12724584	100.0	103.4	
1	4.155	4.156	-0.001	8326427	100.0	105.0	
1	4.538	4.539	-0.001	13769298	100.0	105.5	
		Average of Peak Amounts =				104.3	
2	3.512	3.512	0.000	18866129	100.0	112.5	
2	3.952	3.952	0.000	39486542	100.0	109.0	
2	4.088	4.086	0.002	18812749	100.0	112.1	
2	4.312	4.312	0.000	10118153	100.0	110.6	
2	4.588	4.586	0.002	13141078	100.0	106.8	
		Average of Peak Amounts =				110.2	
						RPD = 5.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							M
1	6.012	6.012	0.000	20396415	100.0	104.8	M
1	6.742	6.742	0.000	38501119	100.0	103.8	M
1	7.232	7.232	0.000	18183829	100.0	104.3	M
1	7.665	7.666	-0.001	38357309	100.0	102.4	M
1	8.052	8.049	0.003	22581951	100.0	103.1	
		Average of Peak Amounts =				103.7	
2	6.405	6.402	0.003	31630755	100.0	108.2	
2	6.858	6.859	-0.001	46948114	100.0	106.3	
2	7.375	7.376	-0.001	21934007	100.0	109.2	
2	7.745	7.746	-0.001	46020806	100.0	107.0	
2	8.238	8.239	-0.001	35117129	100.0	106.6	
		Average of Peak Amounts =				107.5	
						RPD = 3.60	
$ 15 DCB Decachlorobiphenyl							
1	9.628	9.629	-0.001	20648715	5.00	5.18	
2	9.895	9.896	-0.001	22903310	5.00	5.40	
						RPD = 4.17	
S 8 Polychlorinated biphenyls, Total							
1						208.0	
2						217.7	
						RPD = 4.56	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1660_L3_00028	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

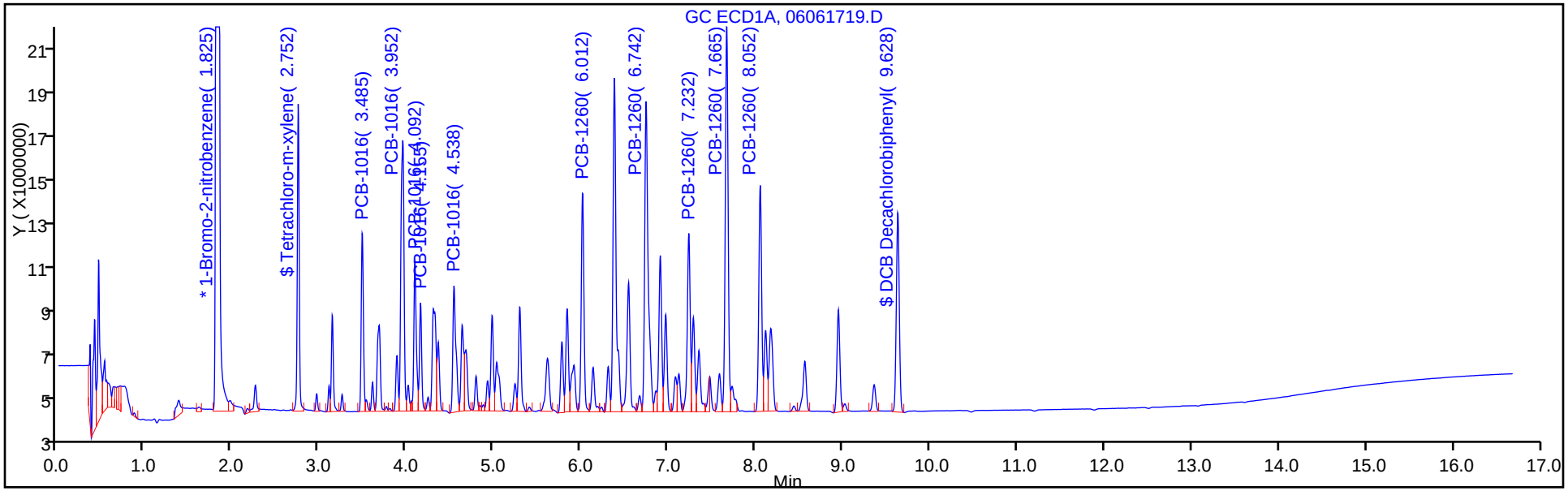
Report Date: 07-Jun-2017 06:52:50 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

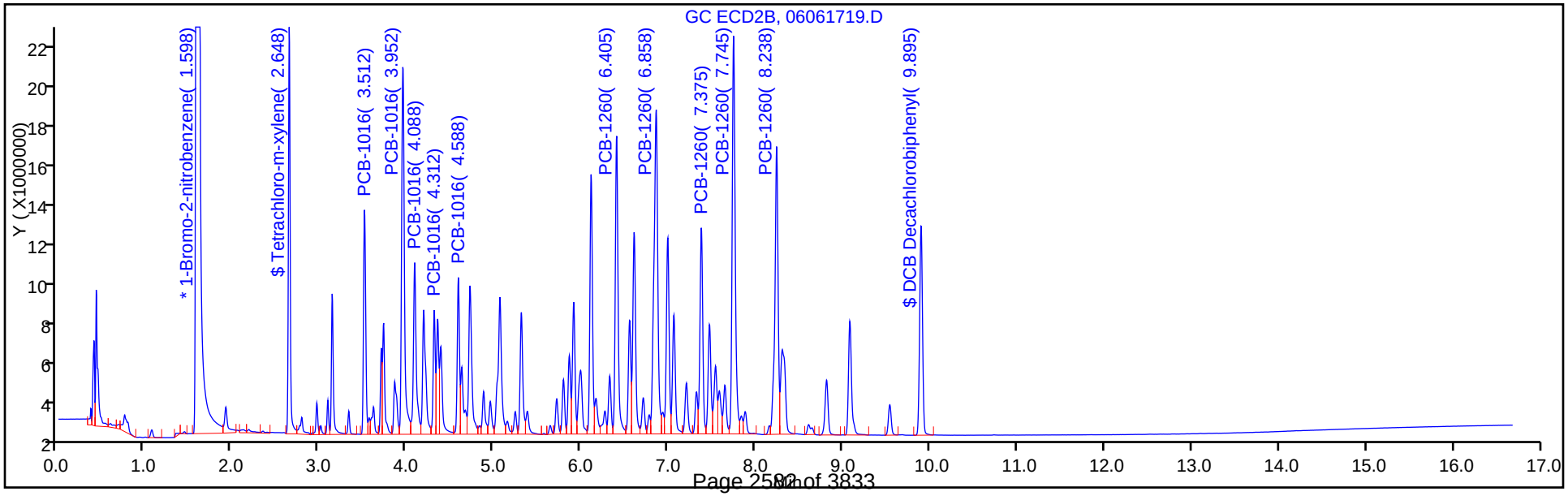
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061719.D

Injection Date:	06-Jun-2017 20:19:52	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL31660			Worklist Smp#:	19
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:52:50 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061719.D

Injection Date: 06-Jun-2017 20:19:52 Instrument ID: SGC_P3

Lims ID: STDL31660

Client ID:

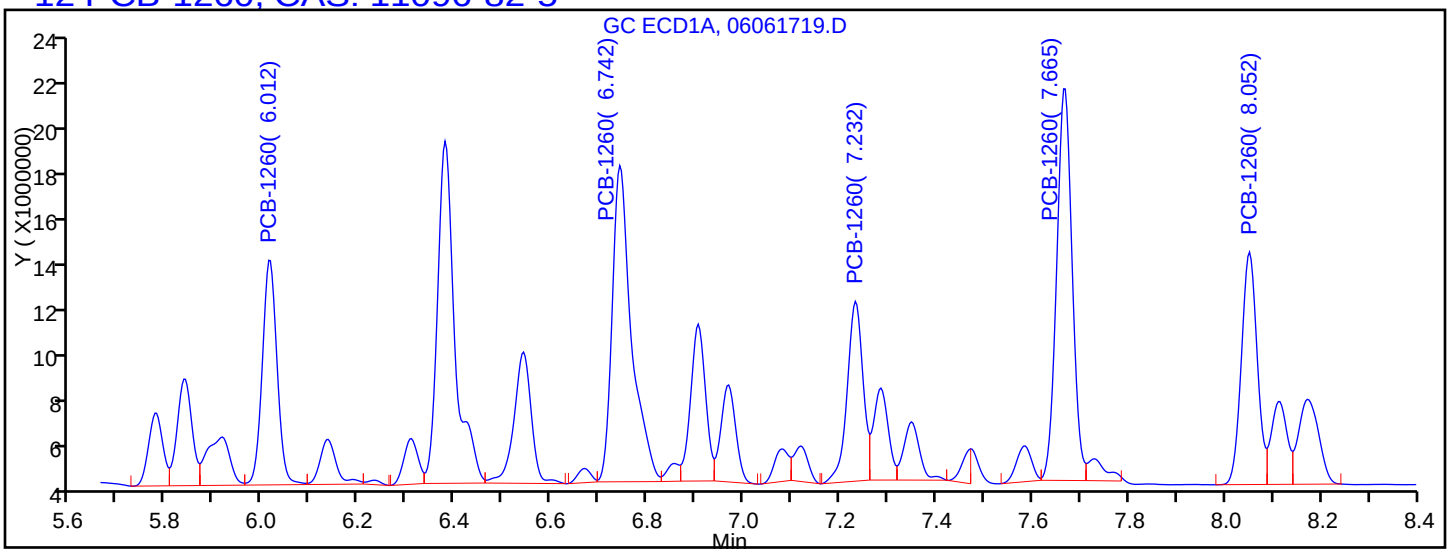
Operator ID: jax ALS Bottle#: 19 Worklist Smp#: 19

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

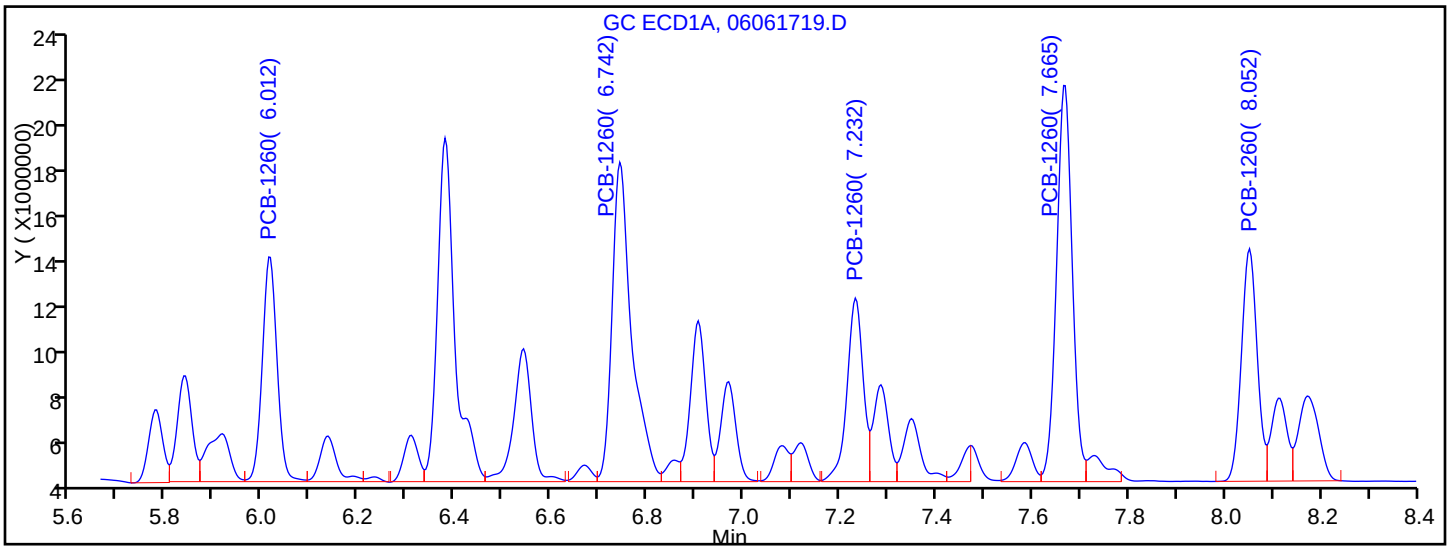
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

12 PCB-1260, CAS: 11096-82-5



Processing Integration Results

6.012	Response = 20360098
6.742	Response = 37411651
7.232	Response = 17416363
7.665	Response = 37287242
8.052	Response = 22581951



Manual Integration Results

6.012	Response = 20396415	M
6.742	Response = 38501119	M
7.232	Response = 18183829	M
7.665	Response = 38357309	M
8.052	Response = 22581951	

Reviewer: jacksonto, 07-Jun-2017 06:45:11

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061720.D
Lims ID: STDL21660
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Jun-2017 20:41:35 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL21660
Misc. Info.: 280-0059455-020
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:52 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:45:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	340905881	1000.0	1000.0	
2	1.600	1.599	0.001	397262080	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.750	2.752	-0.002	10710894	2.50	2.57	
2	2.650	2.649	0.001	14763535	2.50	2.53	
						RPD = 1.27	
1 PCB-1016							M
1	3.487	3.486	0.001	7487332	50.0	52.4	M
1	3.950	3.952	-0.002	15232704	50.0	50.6	M
1	4.090	4.089	0.001	6838654	50.0	50.6	M
1	4.154	4.156	-0.002	4388185	50.0	50.4	M
1	4.537	4.539	-0.002	7393798	50.0	50.5	M
		Average of Peak Amounts =				50.9	
2	3.514	3.512	0.002	10340490	50.0	51.8	
2	3.954	3.952	0.002	21185063	50.0	51.0	
2	4.087	4.086	0.001	10182486	50.0	51.7	
2	4.314	4.312	0.002	5663090	50.0	53.4	
2	4.587	4.586	0.001	7265300	50.0	51.2	
		Average of Peak Amounts =				51.9	
						RPD = 1.84	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.014	6.012	0.002	10786770	50.0	50.7	
1	6.744	6.742	0.002	20028581	50.0	51.3	
1	7.230	7.232	-0.002	9579328	50.0	51.4	
1	7.667	7.666	0.001	19703088	50.0	50.8	
1	8.050	8.049	0.001	11533959	50.0	49.8	
		Average of Peak Amounts =				50.8	
2	6.404	6.402	0.002	17185730	50.0	51.4	
2	6.857	6.859	-0.002	26266856	50.0	52.3	
2	7.377	7.376	0.001	11810705	50.0	51.5	
2	7.747	7.746	0.001	24394598	50.0	49.7	
2	8.240	8.239	0.001	18973980	50.0	51.1	
		Average of Peak Amounts =				51.2	
						RPD = 0.77	
$ 15 DCB Decachlorobiphenyl							
1	9.630	9.629	0.001	11262263	2.50	2.60	
2	9.897	9.896	0.001	12516089	2.50	2.59	
						RPD = 0.54	
S 8 Polychlorinated biphenyls, Total							
1						101.7	
2						103.0	
						RPD = 1.31	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1660_L2_00027	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

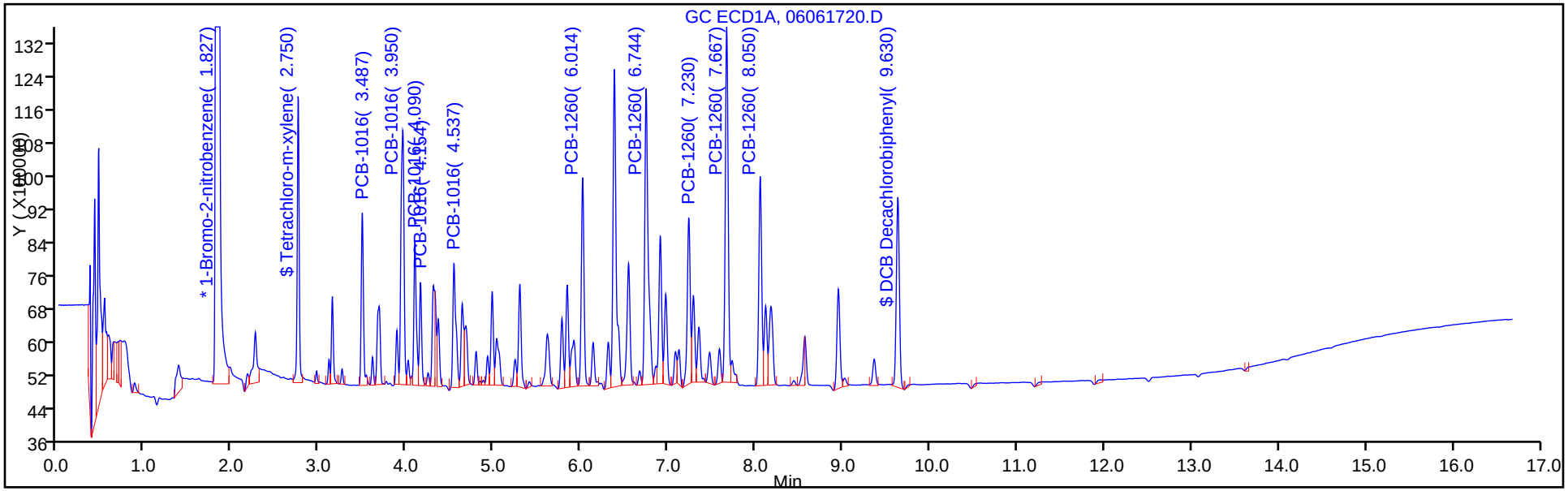
Report Date: 07-Jun-2017 06:52:53 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

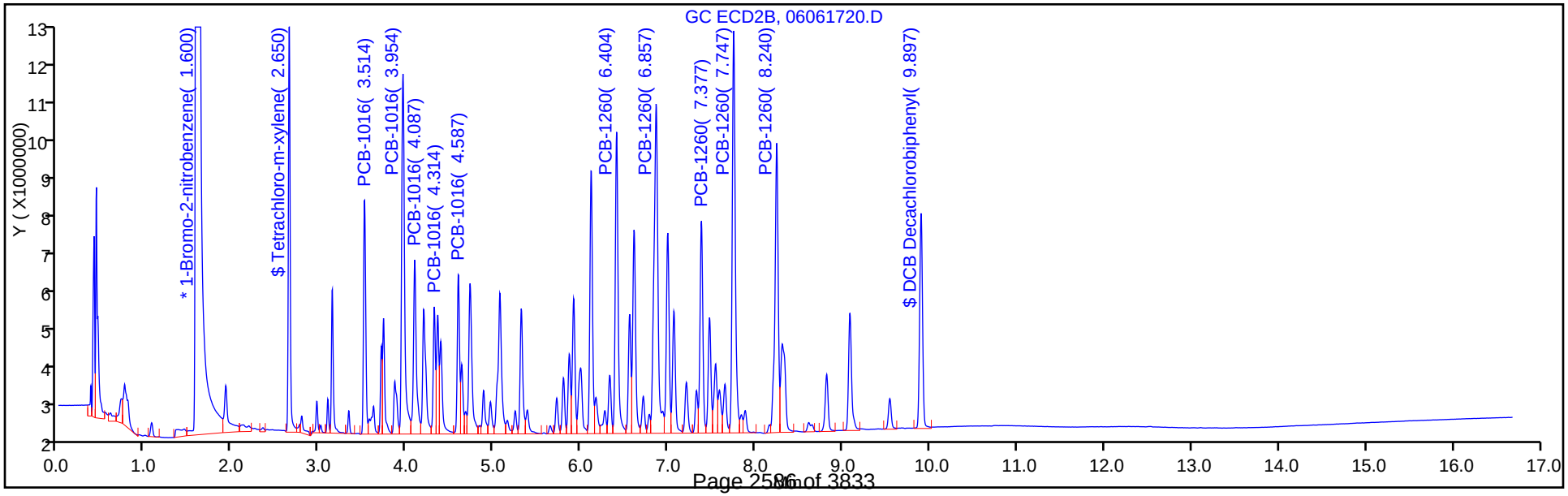
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061720.D

Injection Date:	06-Jun-2017 20:41:35	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL21660			Worklist Smp#:	20
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:52:53 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061720.D

Injection Date: 06-Jun-2017 20:41:35 Instrument ID: SGC_P3

Lims ID: STDL21660

Client ID:

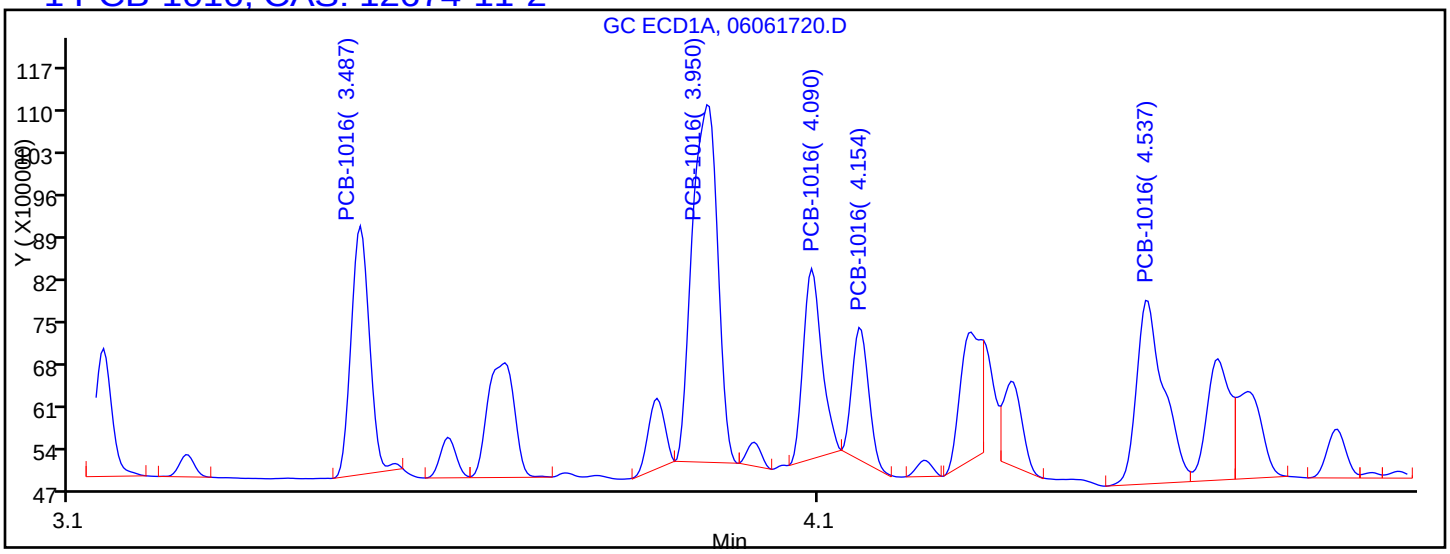
Operator ID: jax ALS Bottle#: 20 Worklist Smp#: 20

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

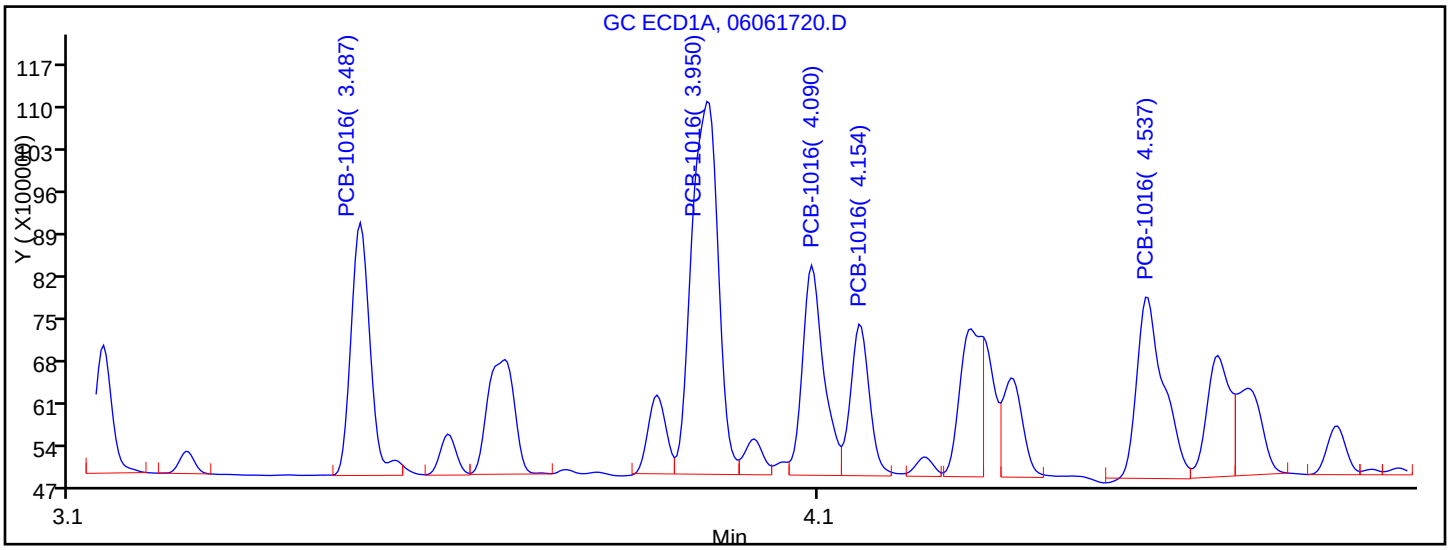
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

1 PCB-1016, CAS: 12674-11-2



Processing Integration Results

3.487	Response = 7008499
3.950	Response = 13925344
4.090	Response = 5407273
4.154	Response = 3366057
4.537	Response = 7632070



Manual Integration Results

3.487	Response = 7487332	M
3.950	Response = 15232704	M
4.090	Response = 6838654	M
4.154	Response = 4388185	M
4.537	Response = 7393798	M

Reviewer: jacksonto, 07-Jun-2017 06:45:29

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061721.D
Lims ID: STDL11660
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Jun-2017 21:03:19 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL11660
Misc. Info.: 280-0059455-021
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:54 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.826	-0.001	332915517	1000.0	1000.0	
2	1.599	1.599	0.000	383255503	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.752	2.752	0.000	5682531	1.25	1.22	
2	2.649	2.649	0.000	8113860	1.25	1.09	
						RPD = 10.81	
1 PCB-1016							
1	3.485	3.486	-0.001	4092312	25.0	22.3	
1	3.952	3.952	0.000	8308605	25.0	24.4	
1	4.092	4.089	0.003	3909235	25.0	23.7	
1	4.155	4.156	-0.001	2502681	25.0	23.7	
1	4.539	4.539	0.000	4302074	25.0	23.3	
		Average of Peak Amounts =				23.5	
2	3.512	3.512	0.000	5691344	25.0	19.5	
2	3.955	3.952	0.003	11577594	25.0	21.3	
2	4.089	4.086	0.003	5549736	25.0	20.1	
2	4.312	4.312	0.000	2990008	25.0	19.8	
2	4.589	4.586	0.003	4118821	25.0	22.3	
		Average of Peak Amounts =				20.6	
						RPD = 13.06	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.015	6.012	0.003	6084608	25.0	23.7	
1	6.742	6.742	0.000	10628001	25.0	23.9	
1	7.232	7.232	0.000	5112131	25.0	23.3	
1	7.669	7.666	0.003	10456027	25.0	24.6	
1	8.052	8.049	0.003	6406784	25.0	24.6	
		Average of Peak Amounts =				24.0	
2	6.405	6.402	0.003	9499407	25.0	21.9	
2	6.859	6.859	0.000	14466167	25.0	22.2	
2	7.375	7.376	-0.001	6507193	25.0	21.9	
2	7.749	7.746	0.003	14111422	25.0	23.2	
2	8.242	8.239	0.003	10499776	25.0	22.7	
		Average of Peak Amounts =				22.4	
						RPD = 7.00	
$ 15 DCB Decachlorobiphenyl							
1	9.632	9.629	0.003	6193110	1.25	1.17	
2	9.899	9.896	0.003	6915591	1.25	1.11	
						RPD = 5.90	
S 8 Polychlorinated biphenyls, Total							
1						47.5	
2						43.0	
						RPD = 9.95	

Reagents:

AR_1660_L1_00028	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

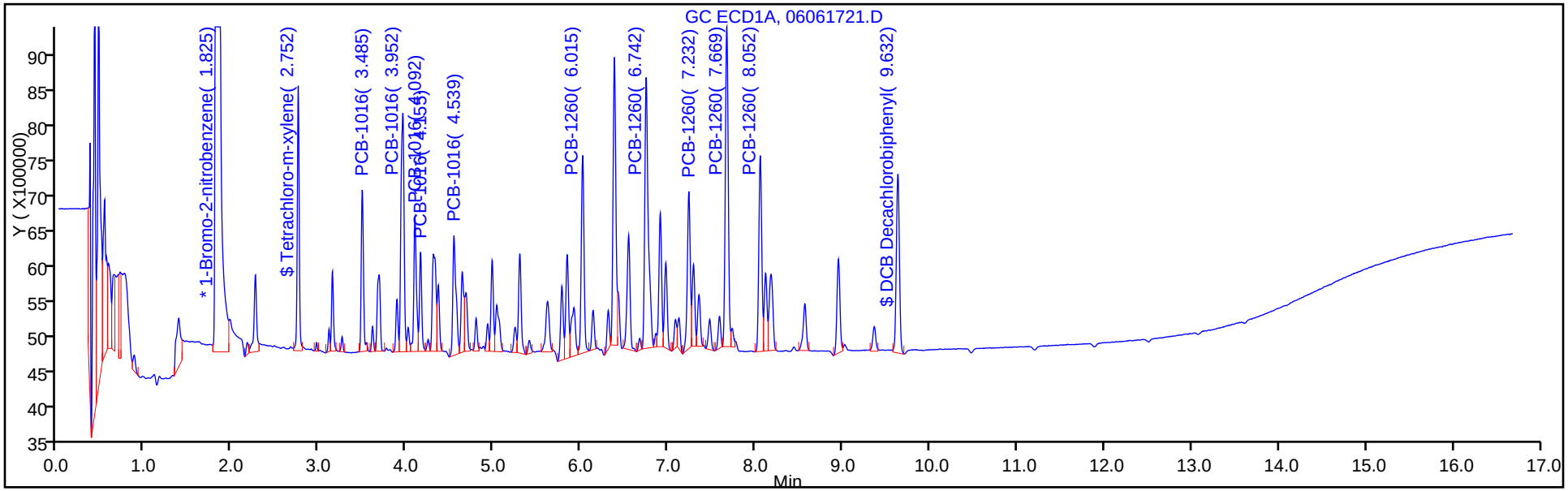
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TestAmerica Denver

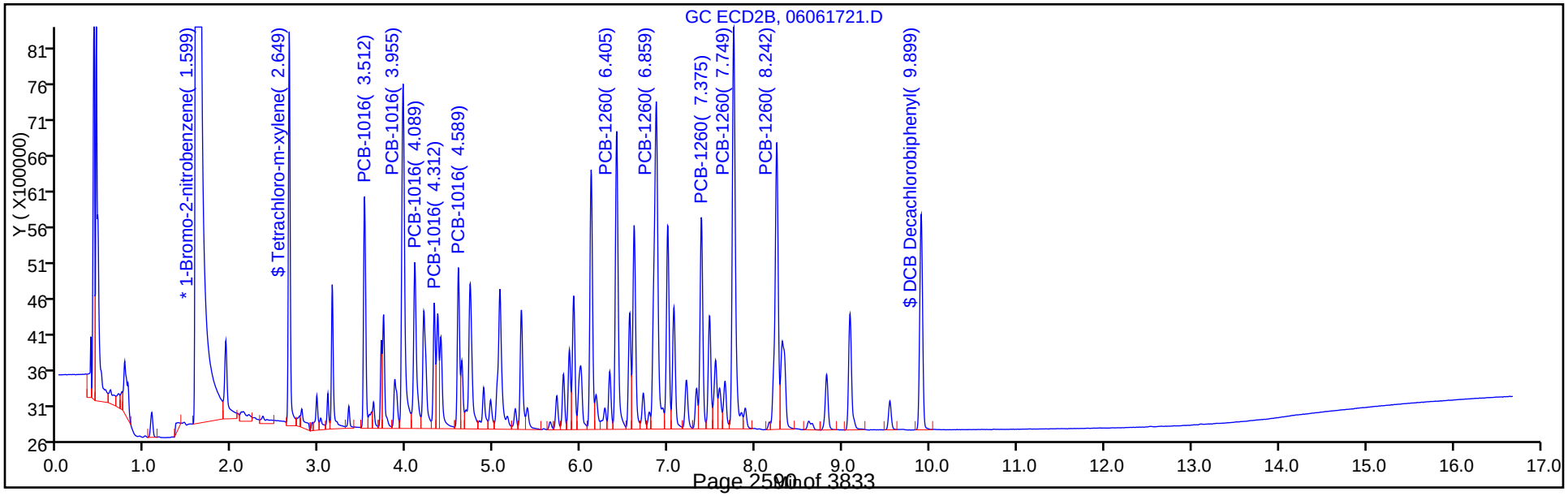
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061721.D

Injection Date:	06-Jun-2017 21:03:19	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL11660			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 18:53 Calibration End Date: 06/06/2017 21:03 Calibration ID: 29394

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11660 280-376236/21	06061721.D
Level 2	STDL21660 280-376236/20	06061720.D
Level 3	STDL31660 280-376236/19	06061719.D
Level 4	STDL41660 280-376236/18	06061718.D
Level 5	STDL51660 280-376236/17	06061717.D
Level 6	STDL61660 280-376236/16	06061716.D
Level 7	STDL71660 280-376236/15	06061715.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1016 Peak 1	0.5940 0.3483	0.5206 0.3471	0.4703	0.4068	0.3692	Lin1	8.0831	0.3462							0.9970		0.9900
PCB-1016 Peak 2	1.2083 0.7761	1.0666 0.7847	0.9843	0.8780	0.8165	Lin1	13.646	0.7779							0.9990		0.9900
PCB-1016 Peak 3	0.5792 0.3518	0.5126 0.3567	0.4689	0.4057	0.3714	Lin1	7.3899	0.3525							0.9980		0.9900
PCB-1016 Peak 4	0.3121 0.1947	0.2851 0.1908	0.2522	0.2150	0.2063	Lin1	4.0070	0.1918							0.9980		0.9900
PCB-1016 Peak 5	0.4299 0.2618	0.3658 0.2645	0.3276	0.2863	0.2750	Lin1	4.9320	0.2606							0.9990		0.9900
PCB-1260 Peak 1	0.9914 0.6210	0.8652 0.6408	0.7885	0.6924	0.6510	Lin1	11.089	0.6260							0.9990		0.9900
PCB-1260 Peak 2	1.5098 0.9376	1.3224 0.9695	1.1703	1.0302	0.9767	Lin1	16.820	0.9427							0.9990		0.9900
PCB-1260 Peak 3	0.6791 0.4266	0.5946 0.4457	0.5467	0.4735	0.4451	Lin1	7.5045	0.4319							0.9990		0.9900
PCB-1260 Peak 4	1.4728 0.9243	1.2281 0.9557	1.1472	1.0190	0.9560	Lin1	15.221	0.9301							0.9990		0.9900
PCB-1260 Peak 5	1.0959 0.7087	0.9552 0.7376	0.8754	0.7776	0.7366	Lin1	11.124	0.7165							0.9990		0.9900
Tetrachloro-m-xylene	16.937 11.076	14.865 11.160	13.742	12.401	11.653	Lin1	9.0681	11.090							0.9990		0.9900
DCB Decachlorobiphenyl (Surr)	14.435 9.0550	12.602 9.3434	11.418	9.9048	9.3498	Lin1	7.9921	9.0840							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 18:53 Calibration End Date: 06/06/2017 21:03 Calibration ID: 29394

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL11660 280-376236/21	06061721.D
Level 2	STDL21660 280-376236/20	06061720.D
Level 3	STDL31660 280-376236/19	06061719.D
Level 4	STDL41660 280-376236/18	06061718.D
Level 5	STDL51660 280-376236/17	06061717.D
Level 6	STDL61660 280-376236/16	06061716.D
Level 7	STDL71660 280-376236/15	06061715.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1016 Peak 1	BNB	Lin1	5691344 104124315	10340490 129837588	18866129	41290967	74393220	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 2	BNB	Lin1	11577594 232024594	21185063 293501737	39486542	89114924	164511841	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 3	BNB	Lin1	5549736 105182049	10182486 133413833	18812749	41182323	74822022	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 4	BNB	Lin1	2990008 58197834	5663090 71370957	10118153	21824117	41568287	25.0 750	50.0 1000	100	250	500
PCB-1016 Peak 5	BNB	Lin1	4118821 78260144	7265300 98944888	13141078	29054635	55402125	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 1	BNB	Lin1	9499407 185671410	17185730 239675892	31630755	70279490	131171686	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 2	BNB	Lin1	14466167 280310149	26266856 362610626	46948114	104568912	196787463	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 3	BNB	Lin1	6507193 127525216	11810705 166712528	21934007	48056088	89679438	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 4	BNB	Lin1	14111422 276328319	24394598 357449619	46020806	103428097	192606616	25.0 750	50.0 1000	100	250	500
PCB-1260 Peak 5	BNB	Lin1	10499776 211869985	18973980 275897553	35117129	78925507	148410731	25.0 750	50.0 1000	100	250	500
Tetrachloro-m-xylene	BNB	Lin1	8113860 165562777	14763535 208703729	27564865	62936226	117388845	1.25 37.5	2.50 50.0	5.00	12.5	25.0
DCB Decachlorobiphenyl (Surr)	BNB	Lin1	6915591 135357270	12516089 174736569	22903310	50266976	94188936	1.25 37.5	2.50 50.0	5.00	12.5	25.0

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061715.D
Lims ID: STDL71660
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 18:53:04 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL71660
Misc. Info.: 280-0059455-015
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:42 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	321825122	1000.0	1000.0	
2	1.600	1.600	0.000	374030457	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.753	2.752	0.001	175452107	50.0	50.9	
2	2.650	2.649	0.001	208703729	50.0	49.5	
						RPD = 2.78	
1 PCB-1016							
1	3.486	3.486	0.000	105338158	1000.0	1004.5	
1	3.953	3.952	0.001	248061775	1000.0	1015.7	
1	4.090	4.089	0.001	102498619	1000.0	1013.9	
1	4.156	4.156	0.000	66091491	1000.0	1009.5	
1	4.540	4.539	0.001	106371789	1000.0	1008.8	
		Average of Peak Amounts =				1010.5	
2	3.513	3.512	0.001	129837588	1000.0	979.4	
2	3.950	3.952	-0.002	293501737	1000.0	991.2	
2	4.086	4.086	0.000	133413833	1000.0	990.9	
2	4.310	4.312	-0.002	71370957	1000.0	974.2	
2	4.586	4.586	0.000	98944888	1000.0	996.1	
		Average of Peak Amounts =				986.4	
						RPD = 2.42	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.013	6.012	0.001	164134452	1000.0	1017.9	
1	6.743	6.742	0.001	325199626	1000.0	1022.8	
1	7.233	7.232	0.001	150433029	1000.0	1021.0	
1	7.666	7.666	0.000	335464075	1000.0	1027.3	
1	8.050	8.049	0.001	191696219	1000.0	1020.2	
		Average of Peak Amounts =				1021.8	
2	6.403	6.402	0.001	239675892	1000.0	1006.0	
2	6.856	6.859	-0.003	362610626	1000.0	1010.5	
2	7.376	7.376	0.000	166712528	1000.0	1014.6	
2	7.746	7.746	0.000	357449619	1000.0	1011.1	
2	8.240	8.239	0.001	275897553	1000.0	1014.0	
		Average of Peak Amounts =				1011.2	
						RPD = 1.04	
$ 15 DCB Decachlorobiphenyl							
1	9.630	9.629	0.001	168104066	50.0	51.0	
2	9.900	9.896	0.004	174736569	50.0	50.5	
						RPD = 0.95	
S 8 Polychlorinated biphenyls, Total							
1						2032.3	
2						1997.6	
						RPD = 1.72	

Reagents:

AR_1660_L7_00022	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

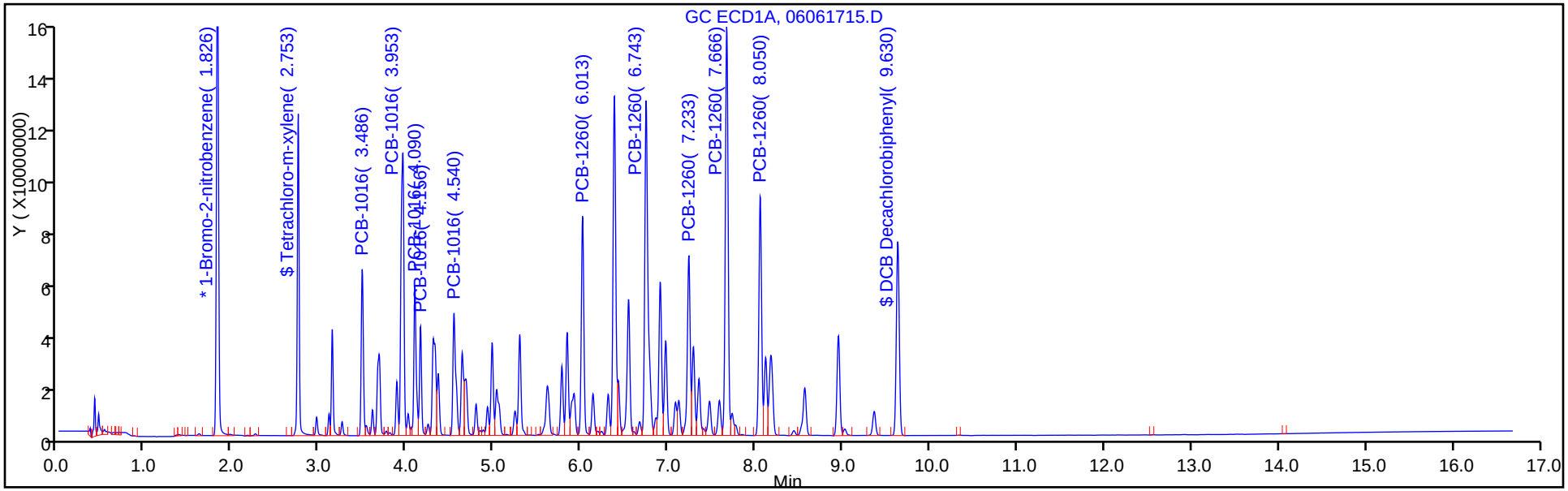
Report Date: 07-Jun-2017 06:52:42 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

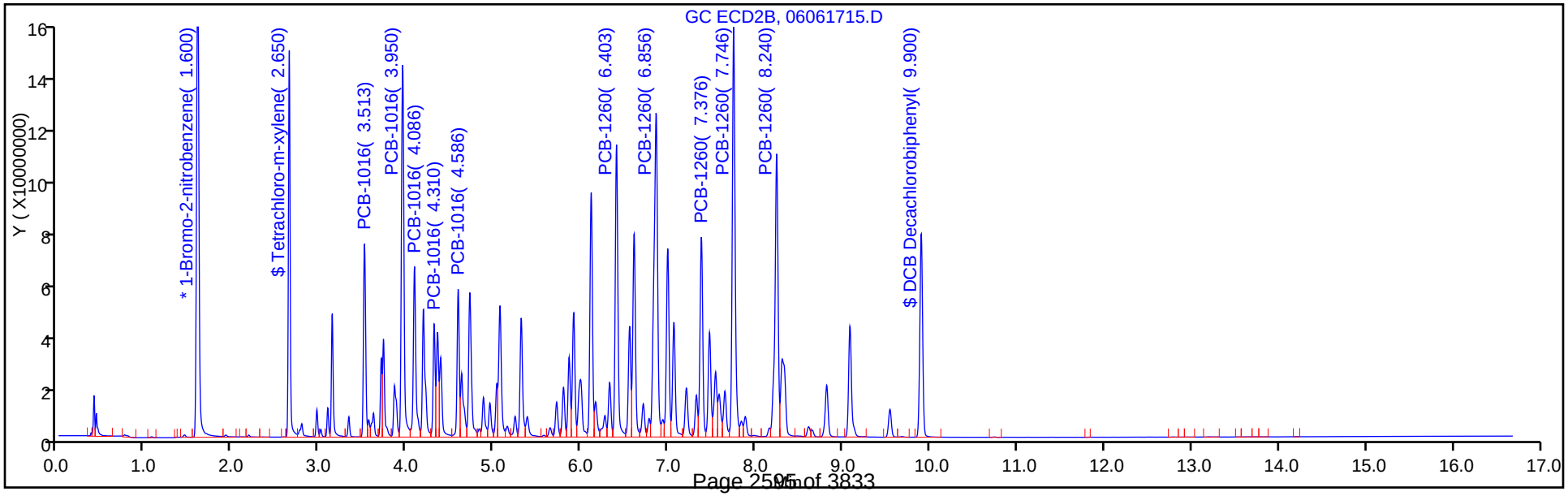
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061715.D

Injection Date:	06-Jun-2017 18:53:04	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL71660			Worklist Smp#:	15
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061716.D
Lims ID: STDL61660
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Jun-2017 19:14:47 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL61660
Misc. Info.: 280-0059455-016
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:43 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.826	0.002	344124721	1000.0	1000.0	
2	1.601	1.600	0.001	398623816	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.751	2.752	-0.001	135663505	37.5	36.7	
2	2.648	2.649	-0.001	165562777	37.5	36.6	
						RPD = 0.16	
1 PCB-1016							
1	3.488	3.486	0.002	82791241	750.0	734.1	
1	3.951	3.952	-0.001	192453551	750.0	734.5	
1	4.091	4.089	0.002	79177898	750.0	728.5	
1	4.154	4.156	-0.002	51885493	750.0	737.5	
1	4.538	4.539	-0.001	82989882	750.0	731.5	
		Average of Peak Amounts =				733.2	
2	3.511	3.512	-0.001	104124315	750.0	731.2	
2	3.951	3.952	-0.001	232024594	750.0	730.7	
2	4.084	4.086	-0.002	105182049	750.0	727.6	
2	4.311	4.312	-0.001	58197834	750.0	740.5	
2	4.588	4.586	0.002	78260144	750.0	734.4	
		Average of Peak Amounts =				732.9	
						RPD = 0.05	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.014	6.012	0.002	126475373	750.0	729.8	
1	6.741	6.742	-0.001	248807451	750.0	729.4	
1	7.231	7.232	-0.001	114243529	750.0	722.1	
1	7.668	7.666	0.002	255142631	750.0	728.8	
1	8.051	8.049	0.002	147731172	750.0	732.8	
		Average of Peak Amounts =				728.6	
2	6.401	6.402	-0.001	185671410	750.0	726.4	
2	6.858	6.859	-0.001	280310149	750.0	728.1	
2	7.374	7.376	-0.002	127525216	750.0	723.3	
2	7.744	7.746	-0.002	276328319	750.0	728.9	
2	8.241	8.239	0.002	211869985	750.0	726.3	
		Average of Peak Amounts =				726.6	
						RPD = 0.27	
$ 15 DCB Decachlorobiphenyl							
1	9.631	9.629	0.002	128612077	37.5	36.3	
2	9.898	9.896	0.002	135357270	37.5	36.5	
						RPD = 0.48	
S 8 Polychlorinated biphenyls, Total							
1						1461.8	
2						1459.5	
						RPD = 0.16	

Reagents:

AR_1660_L6_00029	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

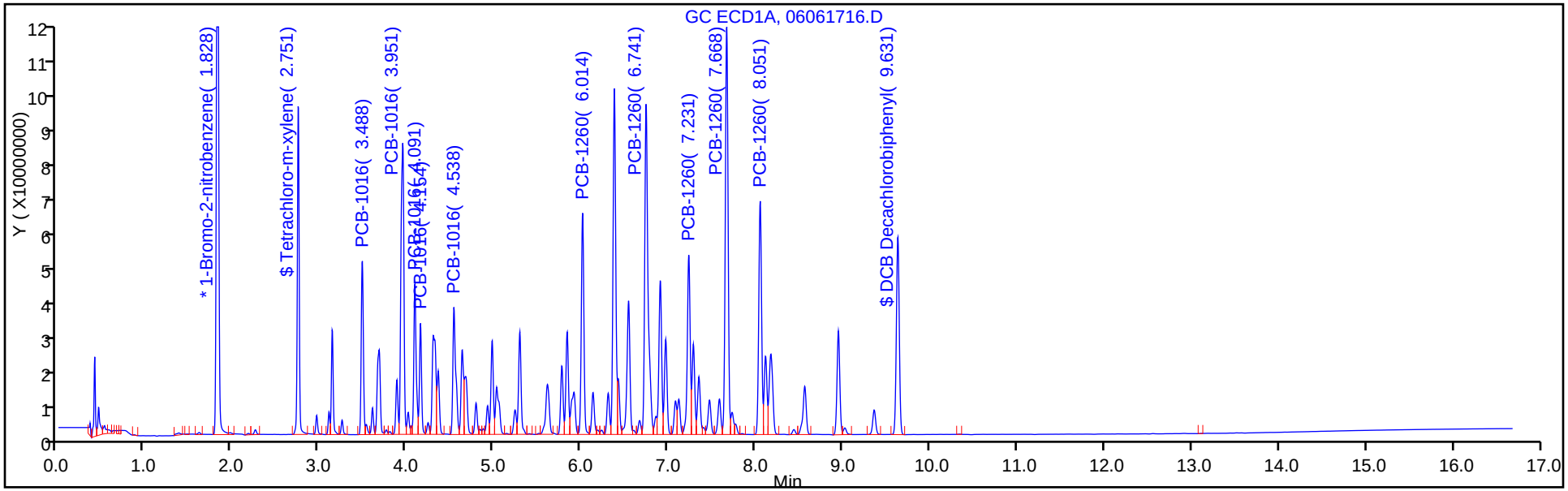
Report Date: 07-Jun-2017 06:52:44 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

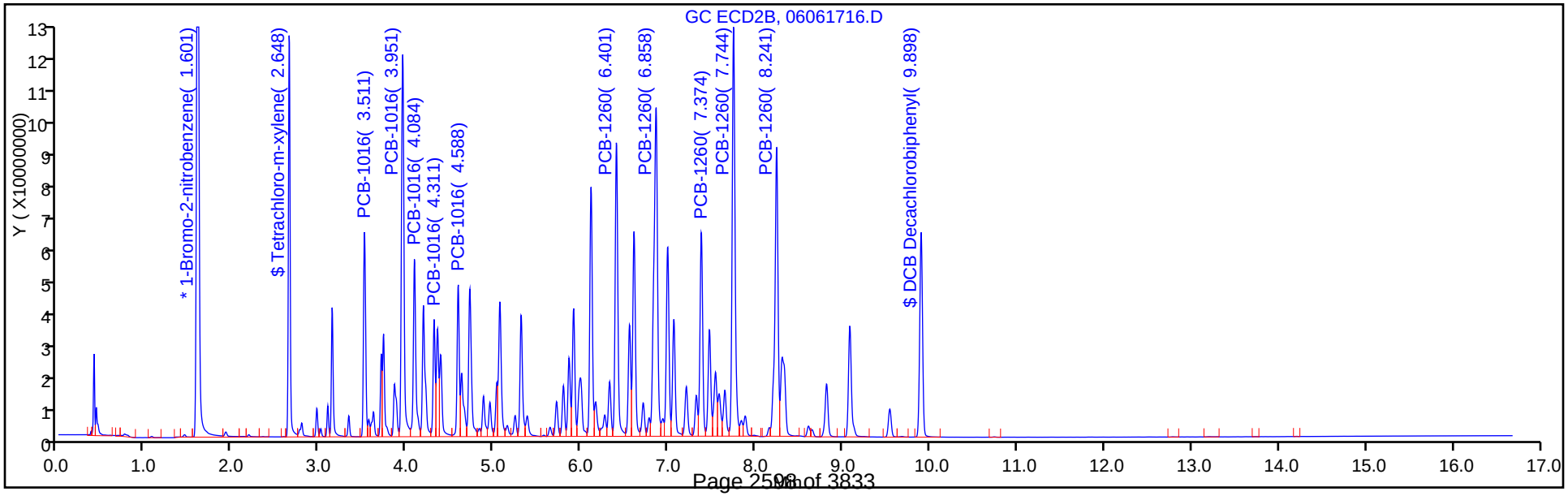
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061716.D

Injection Date:	06-Jun-2017 19:14:47	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL61660			Worklist Smp#:	16
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061717.D
Lims ID: STDL51660
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 06-Jun-2017 19:36:29 ALS Bottle#: 17 Worklist Smp#: 17
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL51660
Misc. Info.: 280-0059455-017
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:45 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:29:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.826	0.000	347177456	1000.0	1000.0	
2	1.599	1.599	0.000	402955781	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.752	2.752	0.000	93146869	25.0	24.8	
2	2.649	2.649	0.000	117388845	25.0	25.5	
						RPD = 2.40	
1 PCB-1016							
1	3.486	3.486	0.000	57542662	500.0	500.7	
1	3.952	3.952	0.000	132265539	500.0	497.6	
1	4.089	4.089	0.000	55335667	500.0	500.3	
1	4.156	4.156	0.000	35641561	500.0	497.8	
1	4.539	4.539	0.000	58003485	500.0	501.6	
		Average of Peak Amounts =				499.6	
2	3.512	3.512	0.000	74393220	500.0	510.0	
2	3.952	3.952	0.000	164511841	500.0	507.3	
2	4.086	4.086	0.000	74822022	500.0	505.8	
2	4.312	4.312	0.000	41568287	500.0	517.1	
2	4.586	4.586	0.000	55402125	500.0	508.6	
		Average of Peak Amounts =				509.7	
						RPD = 2.01	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							M
1	6.012	6.012	0.000	87377831	500.0	495.6	M
1	6.742	6.742	0.000	171141272	500.0	494.5	M
1	7.232	7.232	0.000	80138230	500.0	498.8	M
1	7.666	7.666	0.000	175214565	500.0	494.0	M
1	8.049	8.049	0.000	101076767	500.0	494.2	M
		Average of Peak Amounts =				495.4	
2	6.402	6.402	0.000	131171686	500.0	502.3	
2	6.859	6.859	0.000	196787463	500.0	500.2	
2	7.376	7.376	0.000	89679438	500.0	497.9	
2	7.746	7.746	0.000	192606616	500.0	497.5	
2	8.239	8.239	0.000	148410731	500.0	498.5	
		Average of Peak Amounts =				499.3	
						RPD = 0.78	
$ 15 DCB Decachlorobiphenyl							
1	9.629	9.629	0.000	90106465	25.0	25.0	
2	9.896	9.896	0.000	94188936	25.0	24.9	
						RPD = 0.68	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

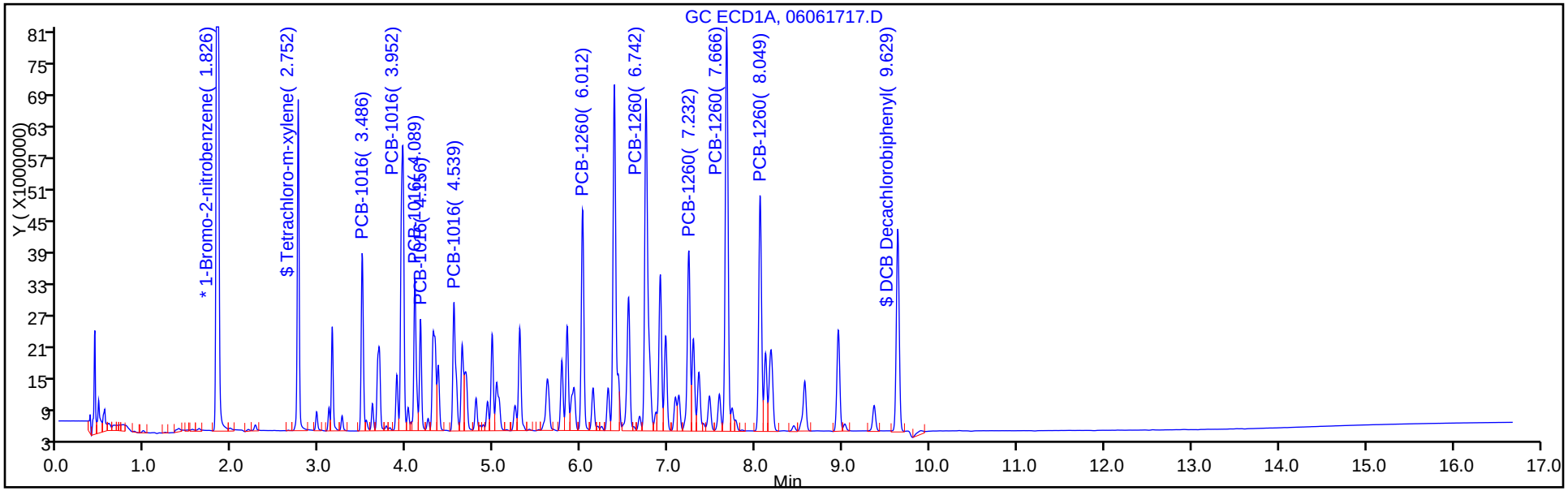
Report Date: 07-Jun-2017 06:52:46 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

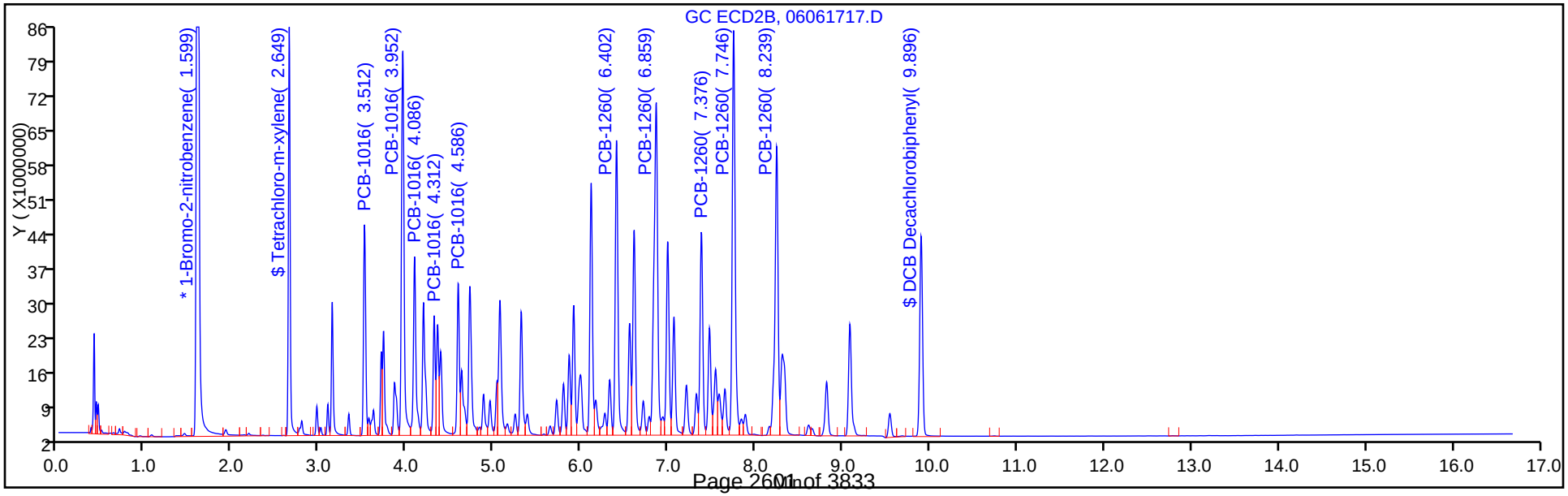
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061717.D

Injection Date:	06-Jun-2017 19:36:29	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL51660			Worklist Smp#:	17
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	17
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061718.D
Lims ID: STDL41660
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Jun-2017 19:58:10 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL41660
Misc. Info.: 280-0059455-018
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:47 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:44:59

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	351266835	1000.0	1000.0	
2	1.600	1.599	0.001	406000007	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.754	2.752	0.002	48018977	12.5	12.5	
2	2.650	2.649	0.001	62936226	12.5	13.2	
						RPD = 5.40	
1 PCB-1016							
1	3.487	3.486	0.001	30630958	250.0	255.8	
1	3.950	3.952	-0.002	68368331	250.0	249.9	
1	4.090	4.089	0.001	29242149	250.0	254.5	
1	4.154	4.156	-0.002	18665090	250.0	251.0	
1	4.537	4.539	-0.002	30611537	250.0	253.6	
		Average of Peak Amounts =				253.0	
2	3.514	3.512	0.002	41290967	250.0	270.4	
2	3.954	3.952	0.002	89114924	250.0	264.6	
2	4.087	4.086	0.001	41182323	250.0	266.8	
2	4.310	4.312	-0.002	21824117	250.0	259.4	
2	4.587	4.586	0.001	29054635	250.0	255.7	
		Average of Peak Amounts =				263.4	
						RPD = 4.03	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							M
1	6.014	6.012	0.002	46213959	250.0	252.7	M
1	6.744	6.742	0.002	88801710	250.0	249.4	M
1	7.234	7.232	0.002	42122701	250.0	254.1	M
1	7.667	7.666	0.001	89857466	250.0	247.2	M
1	8.050	8.049	0.001	52630695	250.0	250.2	M
		Average of Peak Amounts =				250.7	
2	6.404	6.402	0.002	70279490	250.0	258.8	
2	6.857	6.859	-0.002	104568912	250.0	255.4	
2	7.377	7.376	0.001	48056088	250.0	256.7	
2	7.747	7.746	0.001	103428097	250.0	257.5	
2	8.240	8.239	0.001	78925507	250.0	255.8	
		Average of Peak Amounts =				256.8	
						RPD = 2.42	
$ 15 DCB Decachlorobiphenyl							
1	9.630	9.629	0.001	46414402	12.5	12.4	
2	9.897	9.896	0.001	50266976	12.5	12.7	
						RPD = 2.69	
S 8 Polychlorinated biphenyls, Total							
1						503.7	
2						520.2	
						RPD = 3.23	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1660_L4_00065	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

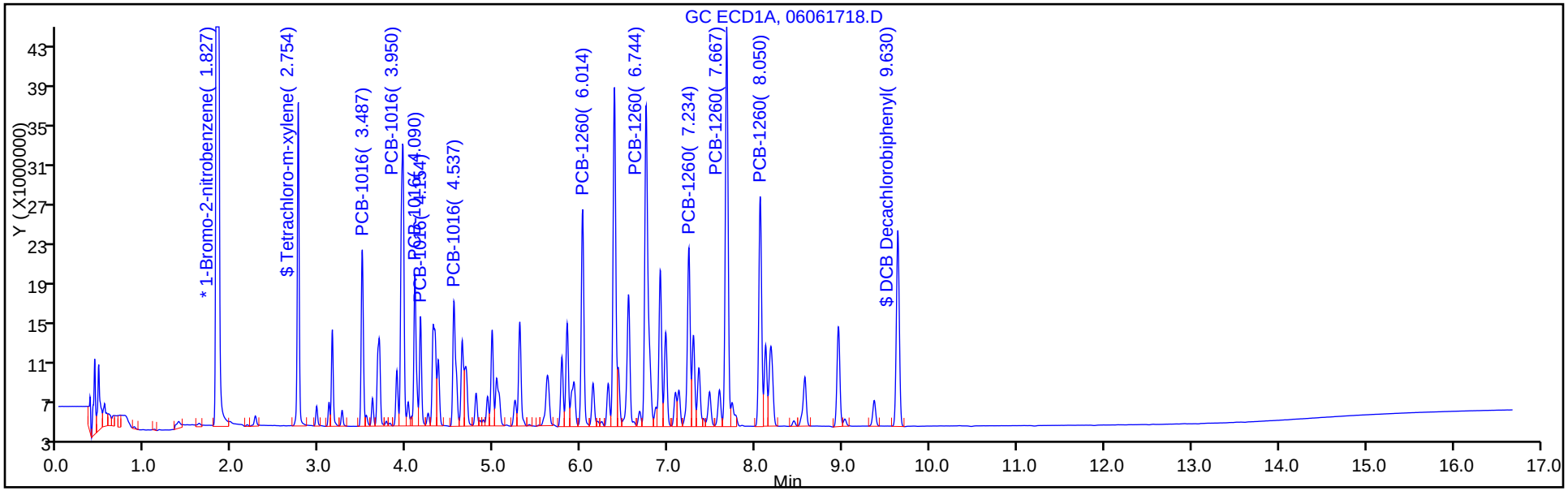
Report Date: 07-Jun-2017 06:52:48 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

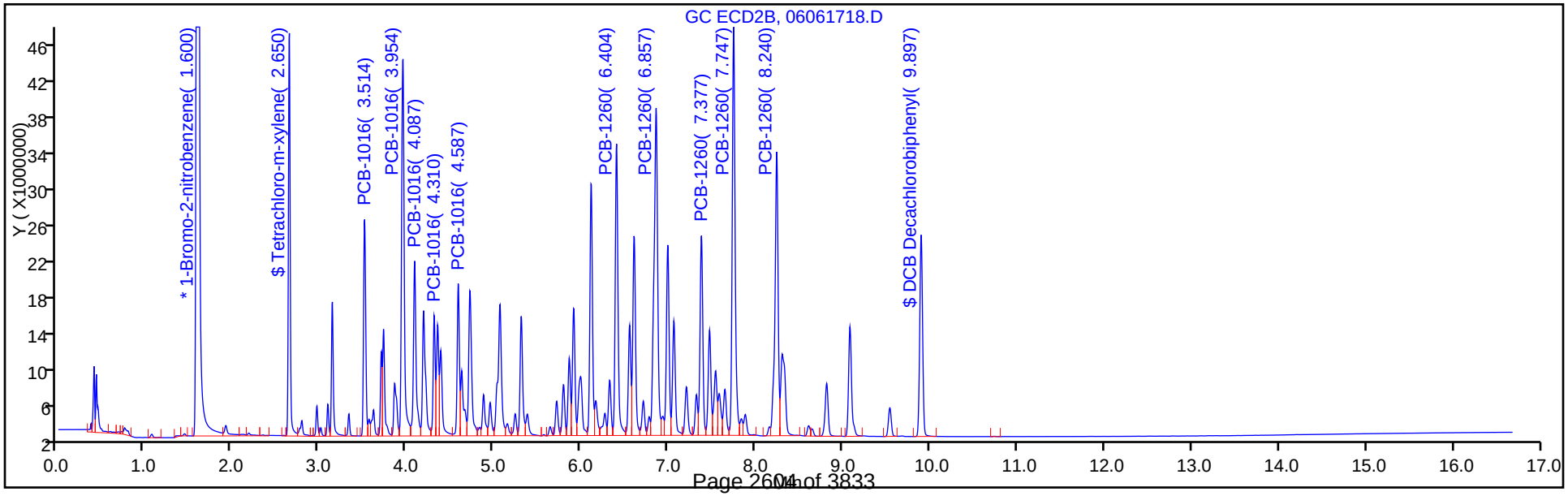
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061718.D

Injection Date:	06-Jun-2017 19:58:10	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL41660			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061719.D
Lims ID: STDL31660
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Jun-2017 20:19:52 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL31660
Misc. Info.: 280-0059455-019
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:50 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:45:13

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.826	-0.001	349267665	1000.0	1000.0	
2	1.598	1.599	-0.001	401174526	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.752	2.752	0.000	20251060	5.00	5.06	
2	2.648	2.649	-0.001	27564865	5.00	5.38	
						RPD = 6.01	
1 PCB-1016							
1	3.485	3.486	-0.001	13576390	100.0	105.2	
1	3.952	3.952	0.000	29176200	100.0	102.2	
1	4.092	4.089	0.003	12724584	100.0	103.4	
1	4.155	4.156	-0.001	8326427	100.0	105.0	
1	4.538	4.539	-0.001	13769298	100.0	105.5	
		Average of Peak Amounts =				104.3	
2	3.512	3.512	0.000	18866129	100.0	112.5	
2	3.952	3.952	0.000	39486542	100.0	109.0	
2	4.088	4.086	0.002	18812749	100.0	112.1	
2	4.312	4.312	0.000	10118153	100.0	110.6	
2	4.588	4.586	0.002	13141078	100.0	106.8	
		Average of Peak Amounts =				110.2	
						RPD = 5.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							M
1	6.012	6.012	0.000	20396415	100.0	104.8	M
1	6.742	6.742	0.000	38501119	100.0	103.8	M
1	7.232	7.232	0.000	18183829	100.0	104.3	M
1	7.665	7.666	-0.001	38357309	100.0	102.4	M
1	8.052	8.049	0.003	22581951	100.0	103.1	
		Average of Peak Amounts =				103.7	
2	6.405	6.402	0.003	31630755	100.0	108.2	
2	6.858	6.859	-0.001	46948114	100.0	106.3	
2	7.375	7.376	-0.001	21934007	100.0	109.2	
2	7.745	7.746	-0.001	46020806	100.0	107.0	
2	8.238	8.239	-0.001	35117129	100.0	106.6	
		Average of Peak Amounts =				107.5	
						RPD = 3.60	
$ 15 DCB Decachlorobiphenyl							
1	9.628	9.629	-0.001	20648715	5.00	5.18	
2	9.895	9.896	-0.001	22903310	5.00	5.40	
						RPD = 4.17	
S 8 Polychlorinated biphenyls, Total							
1						208.0	
2						217.7	
						RPD = 4.56	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1660_L3_00028	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

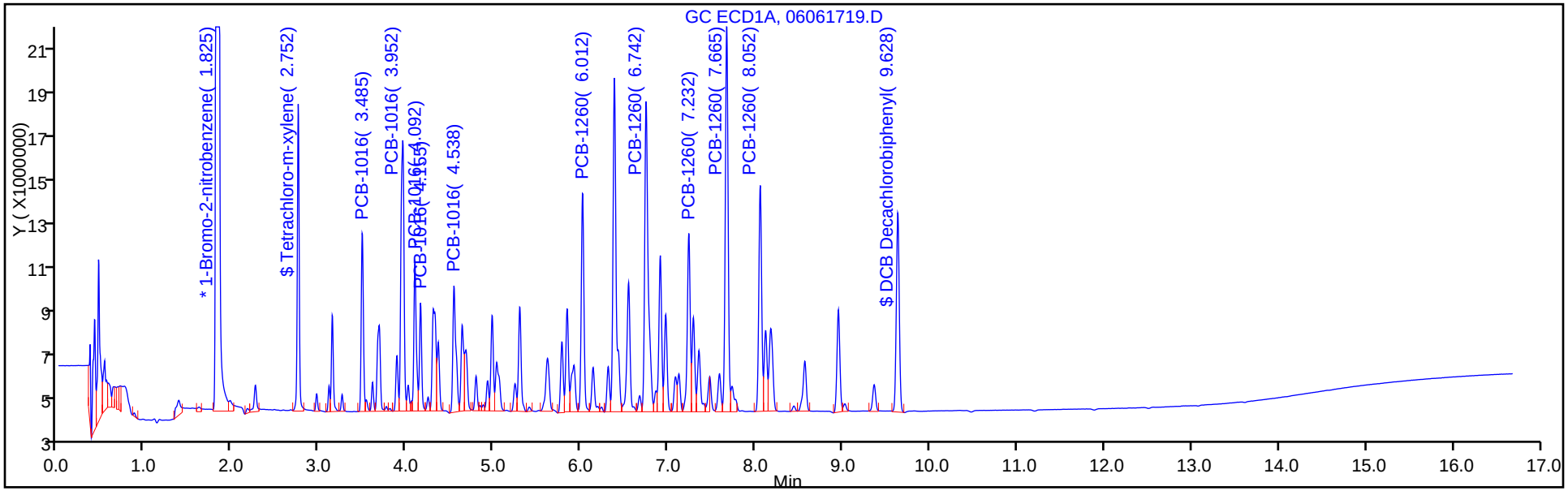
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TestAmerica Denver

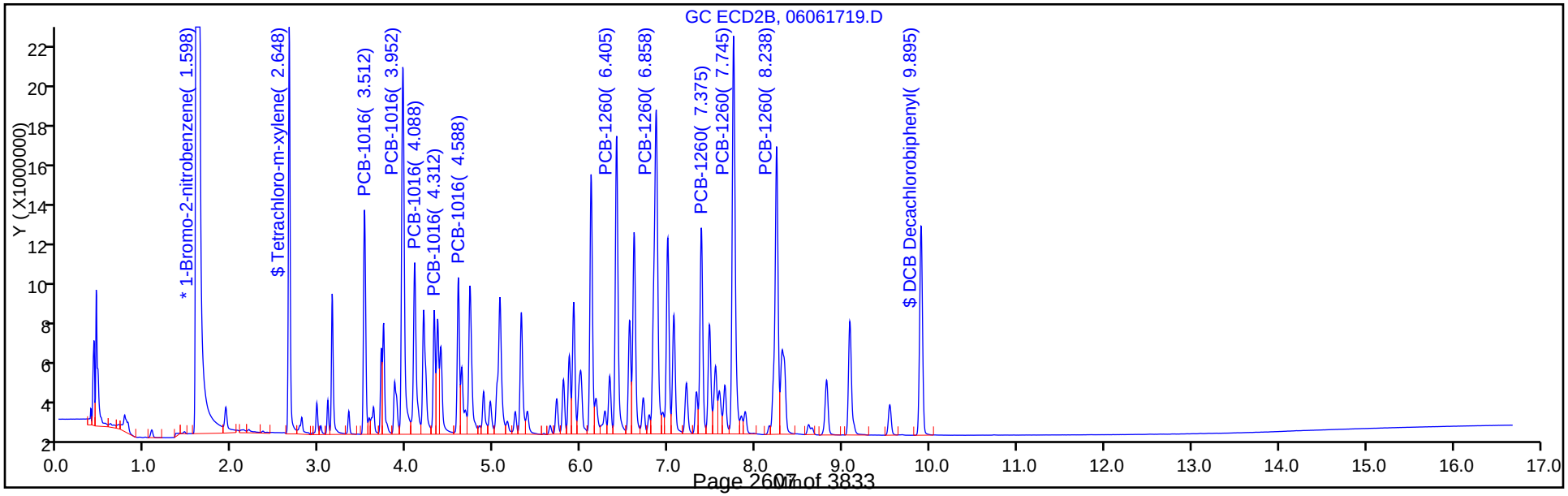
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061719.D

Injection Date:	06-Jun-2017 20:19:52	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL31660			Worklist Smp#:	19
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061720.D
Lims ID: STDL21660
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Jun-2017 20:41:35 ALS Bottle#: 20 Worklist Smp#: 20
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL21660
Misc. Info.: 280-0059455-020
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:52 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:45:42

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	340905881	1000.0	1000.0	
2	1.600	1.599	0.001	397262080	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.750	2.752	-0.002	10710894	2.50	2.57	
2	2.650	2.649	0.001	14763535	2.50	2.53	
						RPD = 1.27	
1 PCB-1016							M
1	3.487	3.486	0.001	7487332	50.0	52.4	M
1	3.950	3.952	-0.002	15232704	50.0	50.6	M
1	4.090	4.089	0.001	6838654	50.0	50.6	M
1	4.154	4.156	-0.002	4388185	50.0	50.4	M
1	4.537	4.539	-0.002	7393798	50.0	50.5	M
		Average of Peak Amounts =				50.9	
2	3.514	3.512	0.002	10340490	50.0	51.8	
2	3.954	3.952	0.002	21185063	50.0	51.0	
2	4.087	4.086	0.001	10182486	50.0	51.7	
2	4.314	4.312	0.002	5663090	50.0	53.4	
2	4.587	4.586	0.001	7265300	50.0	51.2	
		Average of Peak Amounts =				51.9	
						RPD = 1.84	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.014	6.012	0.002	10786770	50.0	50.7	
1	6.744	6.742	0.002	20028581	50.0	51.3	
1	7.230	7.232	-0.002	9579328	50.0	51.4	
1	7.667	7.666	0.001	19703088	50.0	50.8	
1	8.050	8.049	0.001	11533959	50.0	49.8	
		Average of Peak Amounts =				50.8	
2	6.404	6.402	0.002	17185730	50.0	51.4	
2	6.857	6.859	-0.002	26266856	50.0	52.3	
2	7.377	7.376	0.001	11810705	50.0	51.5	
2	7.747	7.746	0.001	24394598	50.0	49.7	
2	8.240	8.239	0.001	18973980	50.0	51.1	
		Average of Peak Amounts =				51.2	
						RPD = 0.77	
$ 15 DCB Decachlorobiphenyl							
1	9.630	9.629	0.001	11262263	2.50	2.60	
2	9.897	9.896	0.001	12516089	2.50	2.59	
						RPD = 0.54	
S 8 Polychlorinated biphenyls, Total							
1						101.7	
2						103.0	
						RPD = 1.31	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1660_L2_00027	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

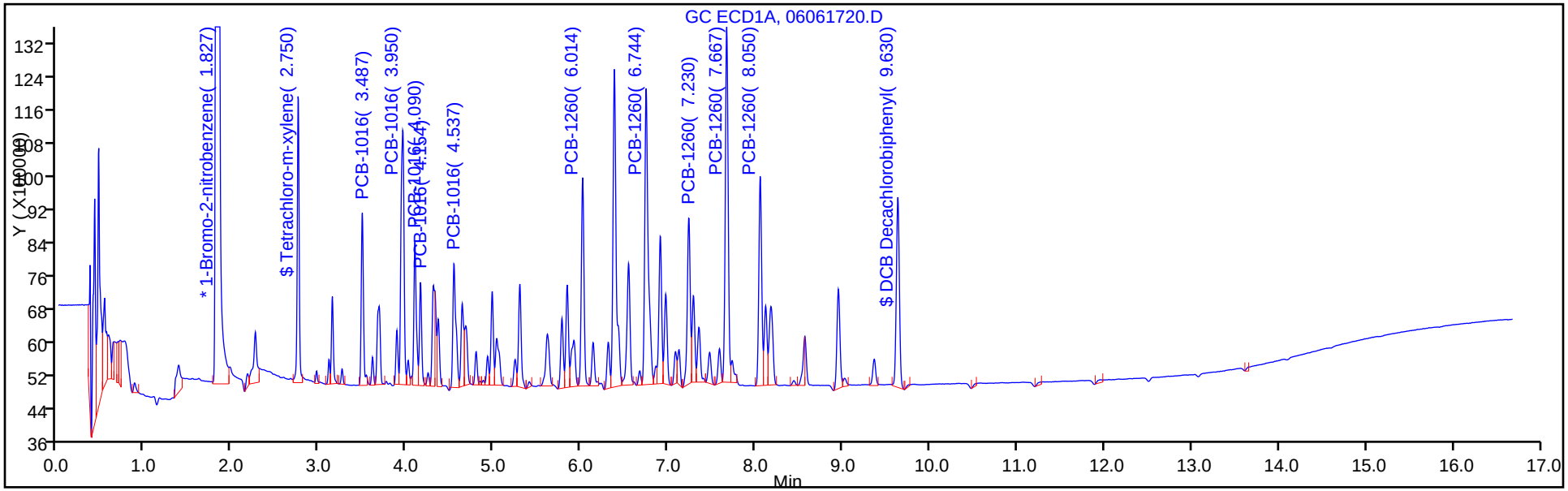
Report Date: 07-Jun-2017 06:52:53 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

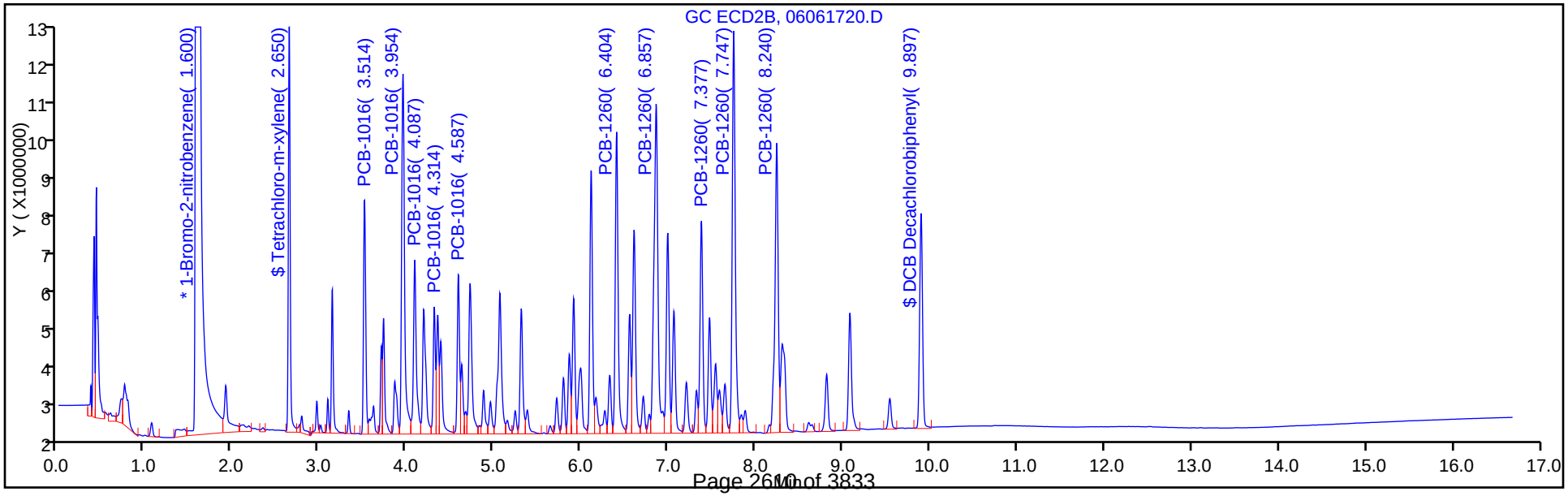
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061720.D

Injection Date:	06-Jun-2017 20:41:35	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL21660			Worklist Smp#:	20
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	20
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061721.D
Lims ID: STDL11660
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Jun-2017 21:03:19 ALS Bottle#: 21 Worklist Smp#: 21
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL11660
Misc. Info.: 280-0059455-021
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:54 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.826	-0.001	332915517	1000.0	1000.0	
2	1.599	1.599	0.000	383255503	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.752	2.752	0.000	5682531	1.25	1.22	
2	2.649	2.649	0.000	8113860	1.25	1.09	
						RPD = 10.81	
1 PCB-1016							
1	3.485	3.486	-0.001	4092312	25.0	22.3	
1	3.952	3.952	0.000	8308605	25.0	24.4	
1	4.092	4.089	0.003	3909235	25.0	23.7	
1	4.155	4.156	-0.001	2502681	25.0	23.7	
1	4.539	4.539	0.000	4302074	25.0	23.3	
		Average of Peak Amounts =				23.5	
2	3.512	3.512	0.000	5691344	25.0	19.5	
2	3.955	3.952	0.003	11577594	25.0	21.3	
2	4.089	4.086	0.003	5549736	25.0	20.1	
2	4.312	4.312	0.000	2990008	25.0	19.8	
2	4.589	4.586	0.003	4118821	25.0	22.3	
		Average of Peak Amounts =				20.6	
						RPD = 13.06	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.015	6.012	0.003	6084608	25.0	23.7	
1	6.742	6.742	0.000	10628001	25.0	23.9	
1	7.232	7.232	0.000	5112131	25.0	23.3	
1	7.669	7.666	0.003	10456027	25.0	24.6	
1	8.052	8.049	0.003	6406784	25.0	24.6	
		Average of Peak Amounts =				24.0	
2	6.405	6.402	0.003	9499407	25.0	21.9	
2	6.859	6.859	0.000	14466167	25.0	22.2	
2	7.375	7.376	-0.001	6507193	25.0	21.9	
2	7.749	7.746	0.003	14111422	25.0	23.2	
2	8.242	8.239	0.003	10499776	25.0	22.7	
		Average of Peak Amounts =				22.4	
						RPD = 7.00	
$ 15 DCB Decachlorobiphenyl							
1	9.632	9.629	0.003	6193110	1.25	1.17	
2	9.899	9.896	0.003	6915591	1.25	1.11	
						RPD = 5.90	
S 8 Polychlorinated biphenyls, Total							
1						47.5	
2						43.0	
						RPD = 9.95	

Reagents:

AR_1660_L1_00028	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

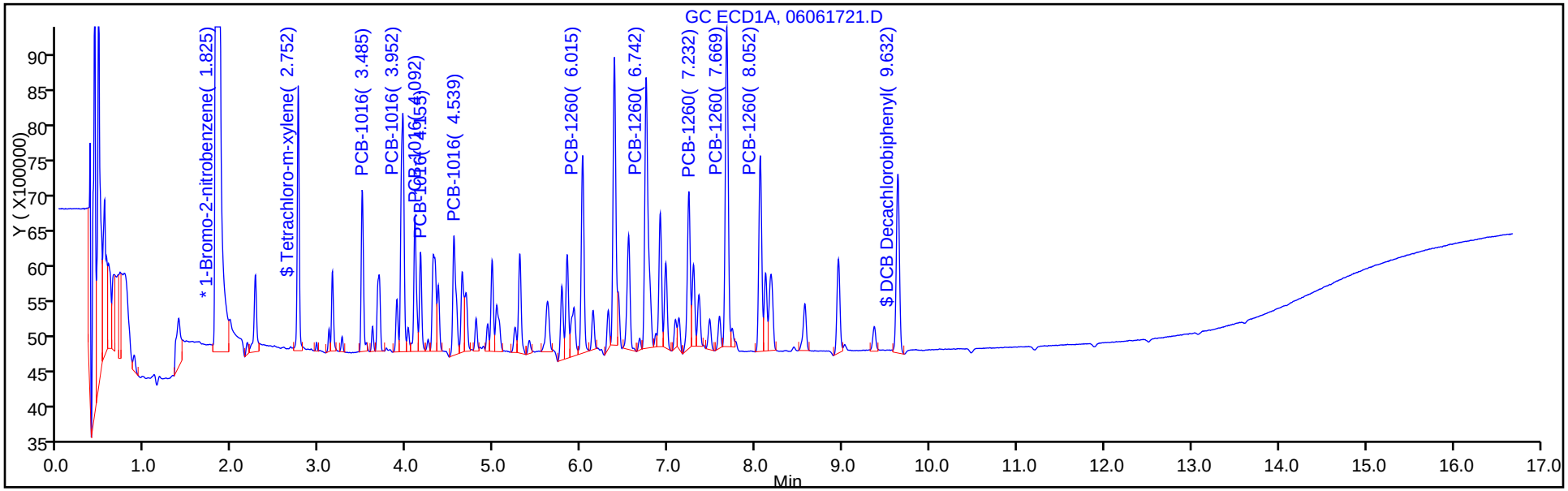
Report Date: 07-Jun-2017 06:52:55 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

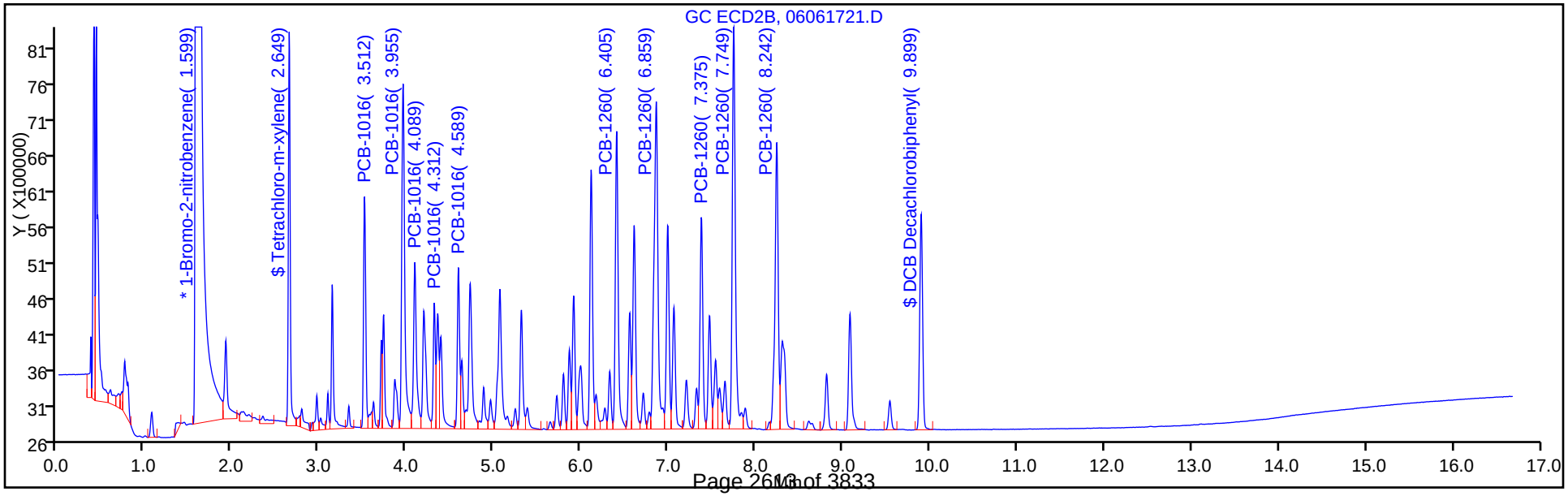
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061721.D

Injection Date:	06-Jun-2017 21:03:19	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL11660			Worklist Smp#:	21
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	21
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 21:25 Calibration End Date: 06/06/2017 23:35 Calibration ID: 29397

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL13262 280-376236/28	06061728.D
Level 2	STDL23262 280-376236/27	06061727.D
Level 3	STDL33262 280-376236/26	06061726.D
Level 4	STDL43262 280-376236/25	06061725.D
Level 5	STDL53262 280-376236/24	06061724.D
Level 6	STDL63262 280-376236/23	06061723.D
Level 7	STDL73262 280-376236/22	06061722.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1232 Peak 1	0.2668 0.1981	0.2506 0.2047	0.2106	0.2117	0.1886	Lin1	1.9328	0.1971							0.9980		0.9900
PCB-1232 Peak 2	0.2418 0.1650	0.2198 0.1688	0.1934	0.1771	0.1665	Lin1	2.2999	0.1646							0.9990		0.9900
PCB-1232 Peak 3	0.4975 0.3699	0.4578 0.3811	0.4069	0.3817	0.3708	Lin1	3.4776	0.3705							1.0000		0.9900
PCB-1232 Peak 4	0.2095 0.1546	0.2136 0.1599	0.1815	0.1653	0.1587	Lin1	1.9369	0.1559							0.9990		0.9900
PCB-1232 Peak 5	0.3017 0.1526	0.2235 0.1548	0.1918	0.1658	0.1570	Lin1	3.8240	0.1497							1.0000		0.9900
PCB-1262 Peak 1	0.8061 0.5511	0.6919 0.5644	0.6136	0.5742	0.5466	Lin1	6.5770	0.5475							1.0000		0.9900
PCB-1262 Peak 2	0.9084 0.6695	0.8056 0.6983	0.7211	0.6978	0.6717	Lin1	5.7027	0.6751							0.9990		0.9900
PCB-1262 Peak 3	0.8781 0.6333	0.7606 0.6642	0.6818	0.6557	0.6401	Lin1	5.5151	0.6403							0.9990		0.9900
PCB-1262 Peak 4	1.6450 1.3271	1.4966 1.3783	1.3873	1.3397	1.3135	Lin1	6.9100	1.3352							0.9990		0.9900
PCB-1262 Peak 5	0.5954 0.4784	0.5666 0.4960	0.5092	0.4895	0.4711	Lin1	3.1055	0.4804							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 21:25 Calibration End Date: 06/06/2017 23:35 Calibration ID: 29397

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL13262 280-376236/28	06061728.D
Level 2	STDL23262 280-376236/27	06061727.D
Level 3	STDL33262 280-376236/26	06061726.D
Level 4	STDL43262 280-376236/25	06061725.D
Level 5	STDL53262 280-376236/24	06061724.D
Level 6	STDL63262 280-376236/23	06061723.D
Level 7	STDL73262 280-376236/22	06061722.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1232 Peak 1	BNB	Lin1	2254800 49950534	4332251 66831187	7625374	18582944	32574776	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 2	BNB	Lin1	2043724 41602498	3800391 55100752	7002746	15543577	28758007	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 3	BNB	Lin1	4204179 93282372	7916345 124406074	14731505	33505628	64030988	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 4	BNB	Lin1	1770550 38993619	3692971 52209473	6571821	14507611	27407244	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 5	BNB	Lin1	2549767 38490320	3864320 50543394	6943036	14557895	27108738	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 1	BNB	Lin1	6812468 138973554	11962772 184259486	22214790	50411406	94379620	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 2	BNB	Lin1	7676871 168829991	13930001 227961906	26104325	61260216	115993986	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 3	BNB	Lin1	7420682 159690802	13151829 216838119	24683282	57567381	110540902	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 4	BNB	Lin1	13901548 334643148	25877583 449972880	50224652	117615624	226813809	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 5	BNB	Lin1	5031849 120647458	9797565 161934653	18434551	42973067	81344778	25.0 750	50.0 1000	100	250	500

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061722.D
Lims ID: STDL73262
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 21:25:02 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL73262
Misc. Info.: 280-0059455-022
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:56 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:42:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	326469961	1000.0	1000.0	
2	1.597	1.599	-0.002	378335438	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							M
1	3.144	3.144	0.000	66831187	1000.0	1028.8	
1	3.487	3.487	0.000	55100752	1000.0	1011.4	
1	3.951	3.950	0.001	124406074	1000.0	1019.2	
1	4.091	4.090	0.001	52209473	1000.0	1013.3	
1	4.537	4.537	0.000	50543394	1000.0	1008.8	
		Average of Peak Amounts =				1016.3	
2	3.141	3.140	0.001	88477099	1000.0	989.4	M
2	3.511	3.510	0.001	74313105	1000.0	990.0	M
2	3.951	3.950	0.001	154518713	1000.0	999.6	M
2	4.087	4.087	0.000	70104319	1000.0	996.2	M
2	4.721	4.720	0.001	58730430	1000.0	993.5	M
		Average of Peak Amounts =				993.8	
						RPD = 2.24	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.377	6.377	0.000	184259486	1000.0	1018.8	
1	6.904	6.904	0.000	227961906	1000.0	1025.9	
1	7.231	7.230	0.001	216838119	1000.0	1028.8	
1	7.667	7.667	0.000	449972880	1000.0	1027.1	
1	8.051	8.050	0.001	161934653	1000.0	1026.0	
		Average of Peak Amounts =				1025.3	
2	6.404	6.400	0.004	179846346	1000.0	980.0	
2	6.991	6.990	0.001	246080866	1000.0	993.0	
2	7.377	7.377	0.000	233547010	1000.0	994.1	
2	7.744	7.744	0.000	451765891	1000.0	1003.0	
2	8.241	8.237	0.004	336602637	1000.0	1003.9	
		Average of Peak Amounts =				994.8	
						RPD = 3.02	
S 8 Polychlorinated biphenyls, Total							
1						2041.6	
2						1988.5	
						RPD = 2.63	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_3262_L7_00014	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

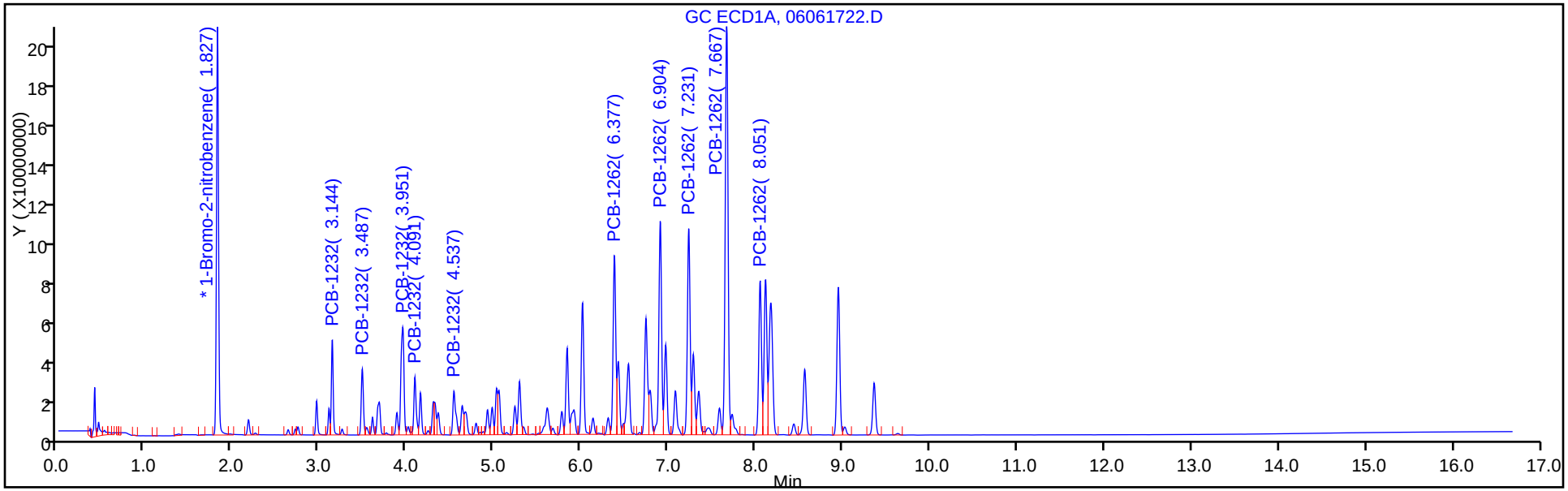
Report Date: 07-Jun-2017 06:52:57 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

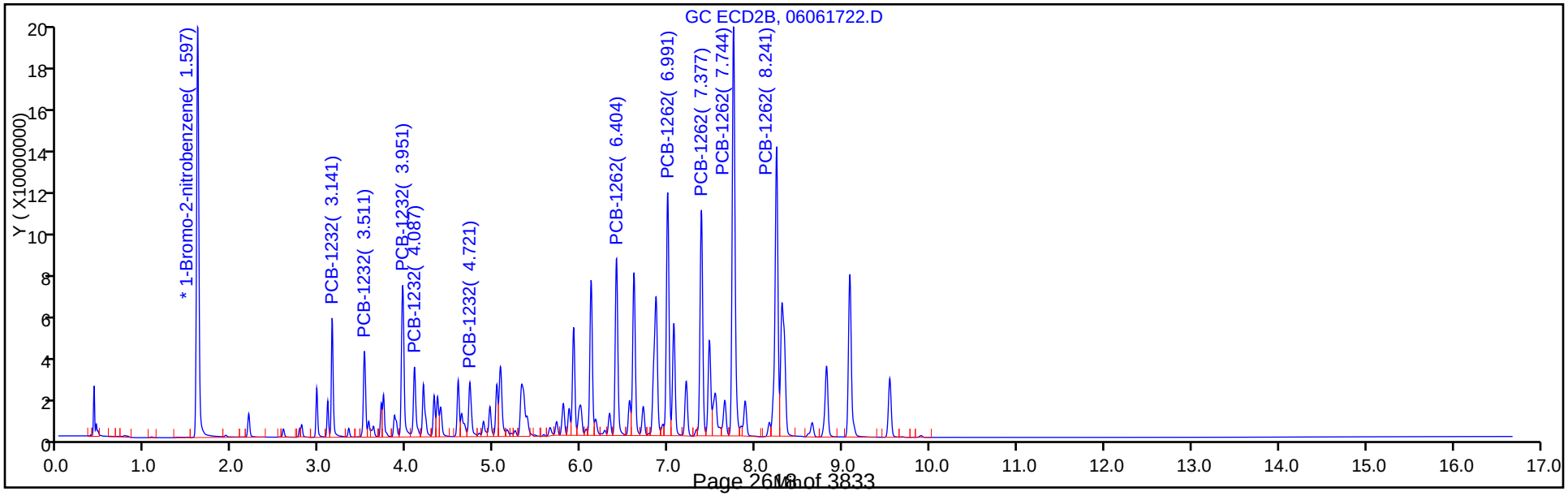
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061722.D

Injection Date:	06-Jun-2017 21:25:02	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL73262			Worklist Smp#:	22
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061723.D
Lims ID: STDL63262
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Jun-2017 21:46:42 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL63262
Misc. Info.: 280-0059455-023
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:58 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:42:21

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.826	-0.001	336227049	1000.0	1000.0	
2	1.598	1.599	-0.001	386918312	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							M
1	3.141	3.144	-0.003	49950534	750.0	743.9	
1	3.485	3.487	-0.002	41602498	750.0	737.7	
1	3.951	3.950	0.001	93282372	750.0	739.5	
1	4.091	4.090	0.001	38993619	750.0	731.4	
1	4.538	4.537	0.001	38490320	750.0	739.3	
		Average of Peak Amounts =				738.4	
2	3.141	3.140	0.001	67001709	750.0	726.9	M
2	3.511	3.510	0.001	56933808	750.0	736.8	M
2	3.951	3.950	0.001	116505142	750.0	733.0	
2	4.088	4.087	0.001	52421719	750.0	723.5	
2	4.721	4.720	0.001	43643074	750.0	716.7	
		Average of Peak Amounts =				727.4	
						RPD = 1.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.378	6.377	0.001	138973554	750.0	742.9	
1	6.905	6.904	0.001	168829991	750.0	735.3	
1	7.231	7.230	0.001	159690802	750.0	733.2	
1	7.665	7.667	-0.002	334643148	750.0	740.3	
1	8.048	8.050	-0.002	120647458	750.0	740.4	
		Average of Peak Amounts =				738.4	
2	6.401	6.400	0.001	140538968	750.0	744.7	
2	6.988	6.990	-0.002	188941264	750.0	741.4	
2	7.375	7.377	-0.002	179185616	750.0	741.7	
2	7.745	7.744	0.001	342965563	750.0	740.6	
2	8.238	8.237	0.001	253251911	750.0	734.5	
		Average of Peak Amounts =				740.6	
						RPD = 0.29	
S 8 Polychlorinated biphenyls, Total							
1						1476.8	
2						1467.9	
						RPD = 0.60	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_3262_L6_00016	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

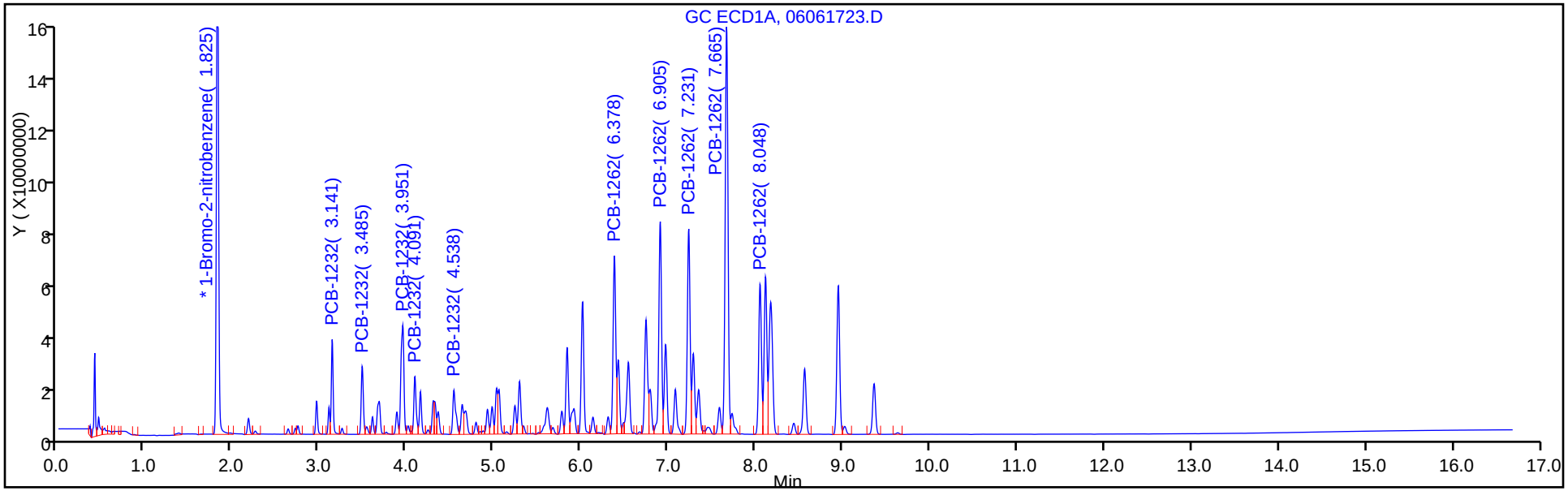
Report Date: 07-Jun-2017 06:52:59 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

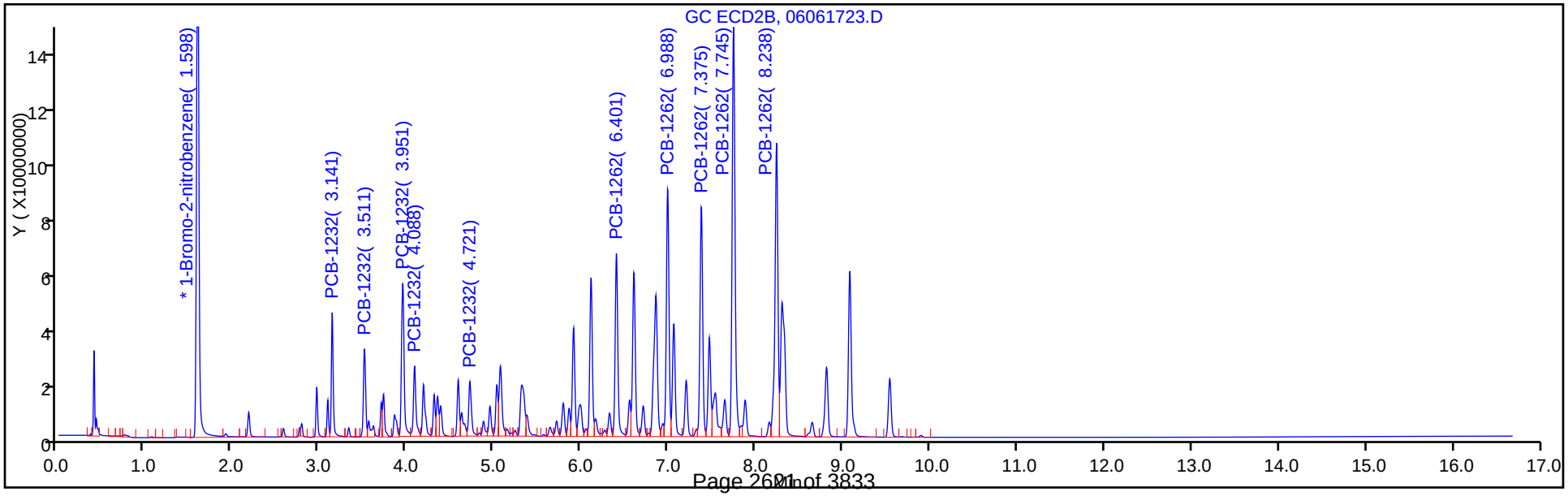
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061723.D

Injection Date:	06-Jun-2017 21:46:42	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL63262			Worklist Smp#:	23
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061724.D
Lims ID: STDL53262
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 06-Jun-2017 22:08:19 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL53262
Misc. Info.: 280-0059455-024
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:00 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:36:43

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	345363738	1000.0	1000.0	
2	1.600	1.600	0.000	394714346	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							M
1	3.144	3.144	0.000	32574776	500.0	468.7	
1	3.487	3.487	0.000	28758007	500.0	491.9	
1	3.950	3.950	0.000	64030988	500.0	491.1	
1	4.090	4.090	0.000	27407244	500.0	496.6	
1	4.537	4.537	0.000	27108738	500.0	498.9	
		Average of Peak Amounts =				489.4	
2	3.140	3.140	0.000	47980333	500.0	503.8	M
2	3.510	3.510	0.000	39960058	500.0	500.9	M
2	3.950	3.950	0.000	81987882	500.0	500.9	M
2	4.087	4.087	0.000	37731995	500.0	505.0	M
2	4.720	4.720	0.000	31747336	500.0	505.6	M
		Average of Peak Amounts =				503.2	
						RPD = 2.78	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.377	6.377	0.000	94379620	500.0	487.1	
1	6.904	6.904	0.000	115993986	500.0	489.1	
1	7.230	7.230	0.000	110540902	500.0	491.3	
1	7.667	7.667	0.000	226813809	500.0	486.7	
1	8.050	8.050	0.000	81344778	500.0	483.8	
		Average of Peak Amounts =				487.6	
2	6.400	6.400	0.000	97962805	500.0	503.3	
2	6.990	6.990	0.000	131184185	500.0	499.2	
2	7.377	7.377	0.000	124354300	500.0	499.3	
2	7.744	7.744	0.000	235948648	500.0	494.5	
2	8.237	8.237	0.000	177257747	500.0	499.2	
		Average of Peak Amounts =				499.1	
						RPD = 2.33	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_3262_L5_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

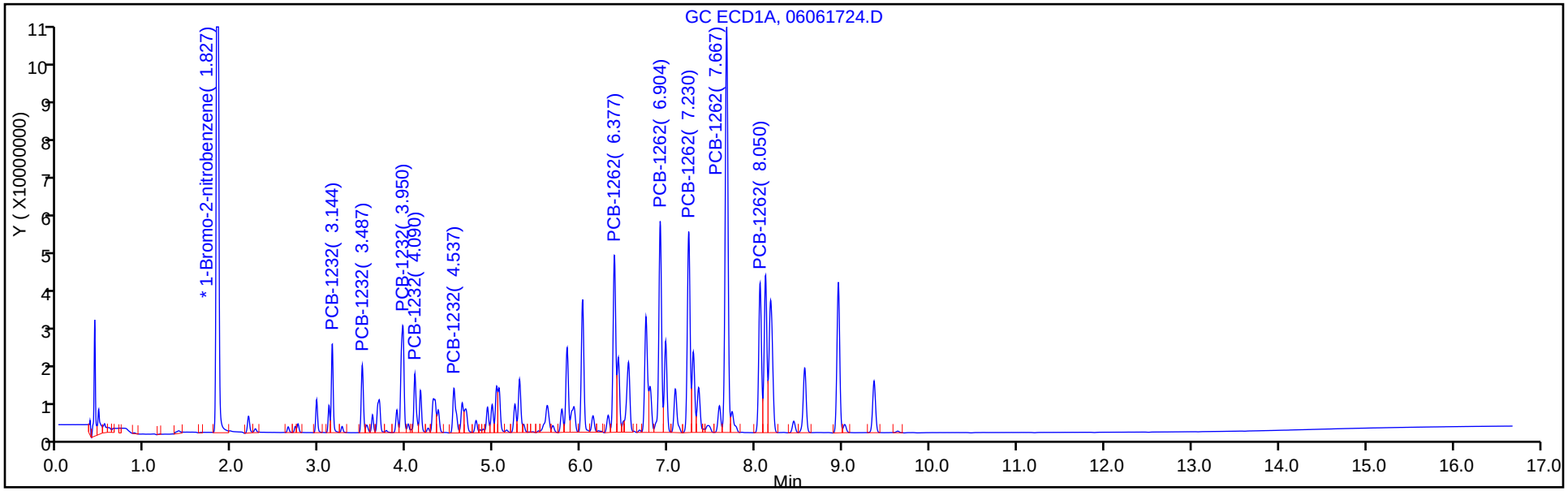
Report Date: 07-Jun-2017 06:53:01 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

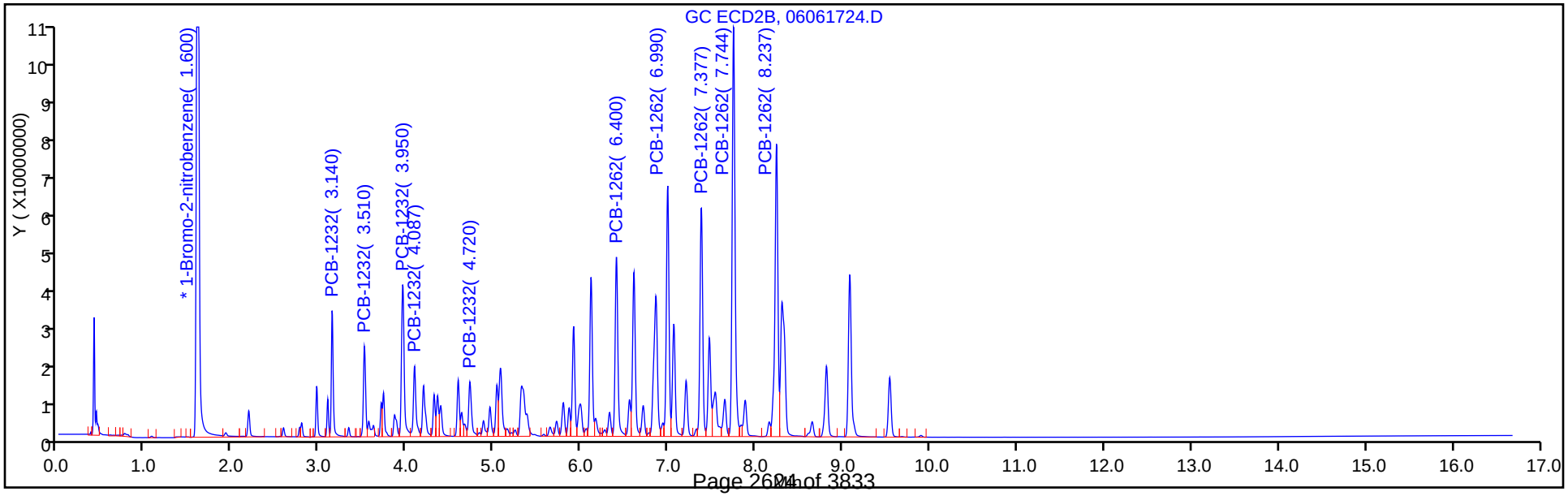
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061724.D

Injection Date:	06-Jun-2017 22:08:19	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL53262			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061725.D
Lims ID: STDL43262
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Jun-2017 22:30:01 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL43262
Misc. Info.: 280-0059455-025
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:03 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:42:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.827	-0.002	351163612	1000.0	1000.0	
2	1.599	1.600	-0.001	398318609	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							
1	3.142	3.144	-0.002	18582944	250.0	258.7	
1	3.485	3.487	-0.002	15543577	250.0	254.9	
1	3.952	3.950	0.002	33505628	250.0	248.2	
1	4.089	4.090	-0.001	14507611	250.0	252.5	
1	4.539	4.537	0.002	14557895	250.0	251.4	
		Average of Peak Amounts =				253.1	
2	3.142	3.140	0.002	26849747	250.0	269.6	
2	3.512	3.510	0.002	22036182	250.0	264.9	
2	3.952	3.950	0.002	44391565	250.0	261.6	
2	4.089	4.087	0.002	20818050	250.0	267.7	
2	4.722	4.720	0.002	17945127	250.0	274.8	
		Average of Peak Amounts =				267.7	
						RPD = 5.60	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.379	6.377	0.002	50411406	250.0	250.2	
1	6.905	6.904	0.001	61260216	250.0	250.0	
1	7.232	7.230	0.002	57567381	250.0	247.4	
1	7.665	7.667	-0.002	117615624	250.0	245.7	
1	8.049	8.050	-0.001	42973067	250.0	248.3	
		Average of Peak Amounts =				248.3	
2	6.402	6.400	0.002	53835004	250.0	266.0	
2	6.989	6.990	-0.001	71465471	250.0	261.9	
2	7.375	7.377	-0.002	67384151	250.0	260.4	
2	7.745	7.744	0.001	127652955	250.0	258.1	
2	8.239	8.237	0.002	95117097	250.0	258.4	
		Average of Peak Amounts =				260.9	
						RPD = 4.97	
S 8 Polychlorinated biphenyls, Total							
1						501.4	
2						528.7	
						RPD = 5.29	

Reagents:

AR_3262_L4_00019	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

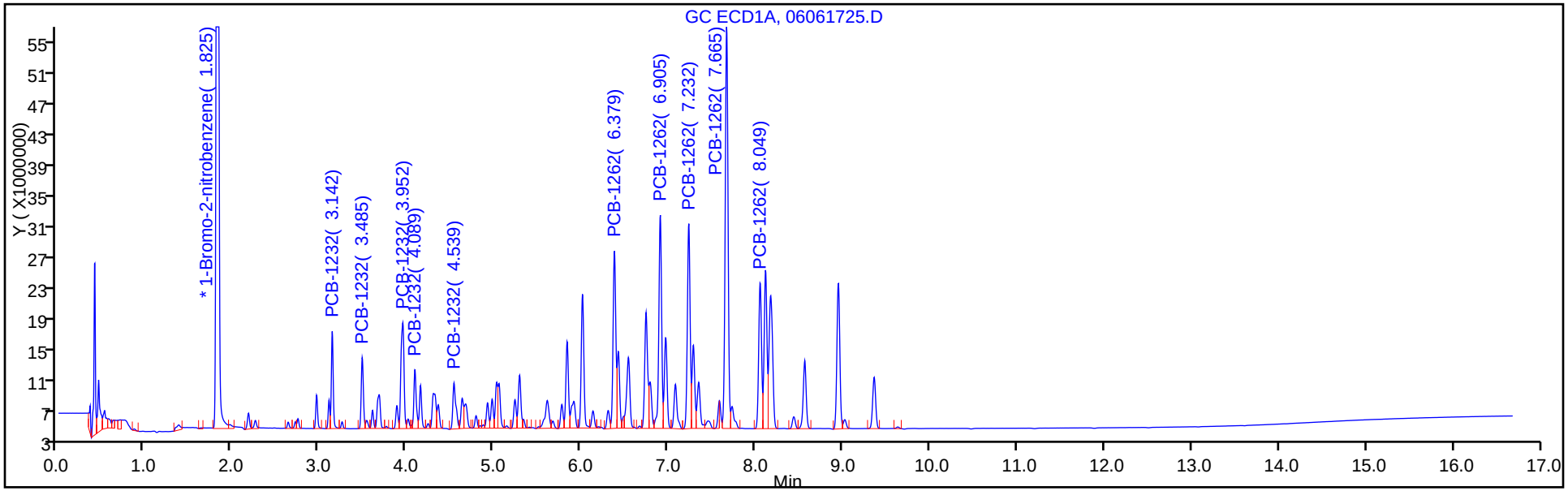
Report Date: 07-Jun-2017 06:53:03 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

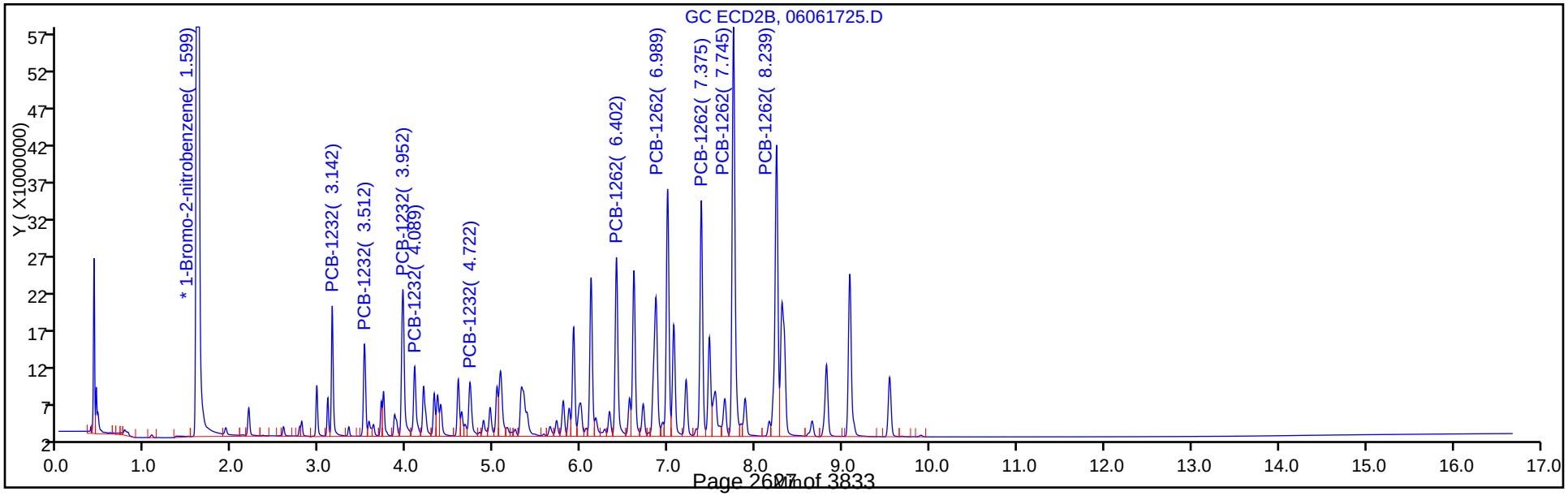
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061725.D

Injection Date:	06-Jun-2017 22:30:01	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL43262			Worklist Smp#:	25
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061726.D
Lims ID: STDL33262
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Jun-2017 22:51:40 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL33262
Misc. Info.: 280-0059455-026
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:05 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.827	-0.002	362023594	1000.0	1000.0	
2	1.599	1.600	-0.001	407648233	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							
1	3.142	3.144	-0.002	7625374	100.0	97.1	
1	3.485	3.487	-0.002	7002746	100.0	103.5	
1	3.952	3.950	0.002	14731505	100.0	100.5	
1	4.089	4.090	-0.001	6571821	100.0	104.0	
1	4.539	4.537	0.002	6943036	100.0	102.6	
		Average of Peak Amounts =				101.5	
2	3.142	3.140	0.002	12639596	100.0	112.2	
2	3.512	3.510	0.002	10204639	100.0	109.3	
2	3.955	3.950	0.005	19941032	100.0	106.2	
2	4.089	4.087	0.002	9609816	100.0	110.6	
2	4.725	4.720	0.005	8246500	100.0	112.9	
		Average of Peak Amounts =				110.2	
						RPD = 8.22	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.379	6.377	0.002	22214790	100.0	100.1	
1	6.905	6.904	0.001	26104325	100.0	98.4	
1	7.232	7.230	0.002	24683282	100.0	97.9	
1	7.669	7.667	0.002	50224652	100.0	98.7	
1	8.052	8.050	0.002	18434551	100.0	99.5	
		Average of Peak Amounts =				98.9	
2	6.402	6.400	0.002	24313865	100.0	107.6	
2	6.989	6.990	-0.001	32077578	100.0	105.5	
2	7.375	7.377	-0.002	30344872	100.0	105.3	
2	7.745	7.744	0.001	56659168	100.0	103.3	
2	8.239	8.237	0.002	42683559	100.0	104.8	
		Average of Peak Amounts =				105.3	
						RPD = 6.25	
S 8 Polychlorinated biphenyls, Total							
1						200.4	
2						215.5	
						RPD = 7.26	

Reagents:

AR_3262_L3_00018	Amount Added: 1.00	Units: mL		
BNB IS_00009	Amount Added: 1.00	Units: mL	Run Reagent	

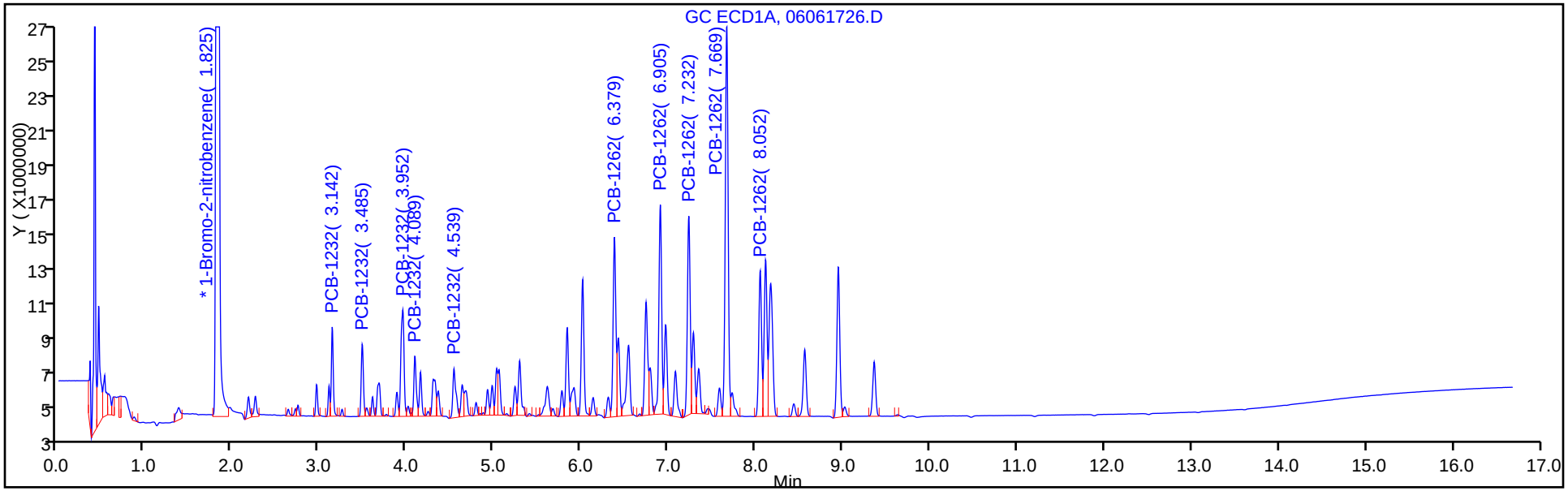
Report Date: 07-Jun-2017 06:53:05 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

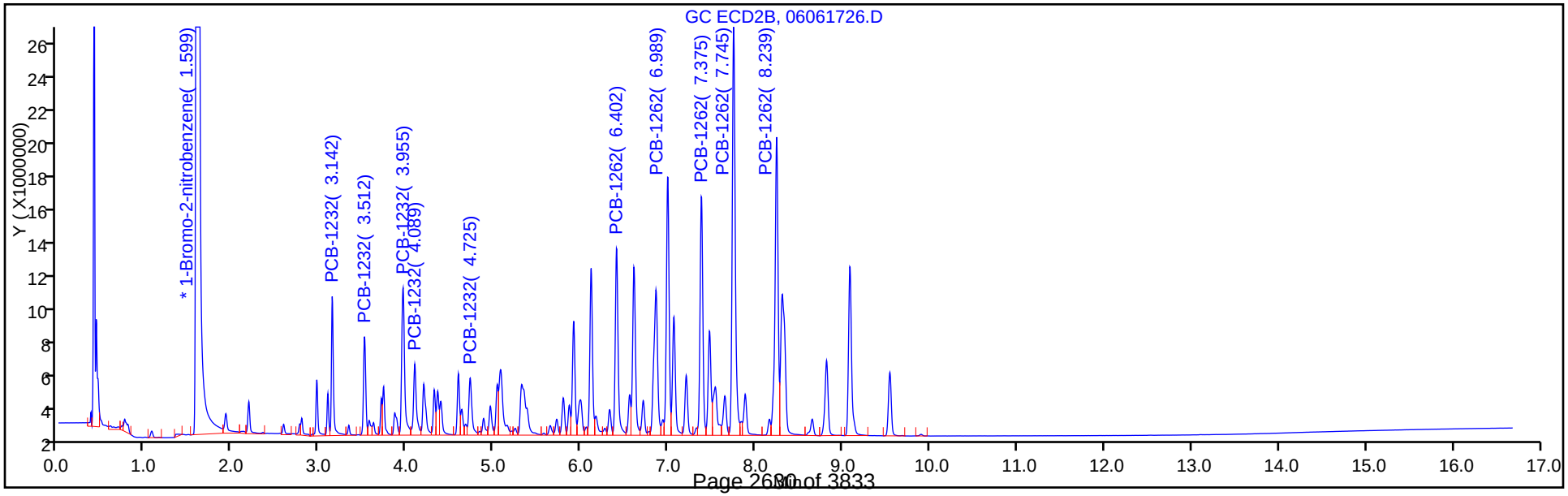
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061726.D

Injection Date:	06-Jun-2017 22:51:40	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL33262			Worklist Smp#:	26
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061727.D
Lims ID: STDL23262
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Jun-2017 23:13:20 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL23262
Misc. Info.: 280-0059455-027
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:08 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.827	-0.001	345816428	1000.0	1000.0	
2	1.599	1.600	-0.001	391077106	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							
1	3.142	3.144	-0.002	4332251	50.0	53.8	
1	3.486	3.487	-0.001	3800391	50.0	52.8	
1	3.952	3.950	0.002	7916345	50.0	52.4	
1	4.089	4.090	-0.001	3692971	50.0	56.1	
1	4.539	4.537	0.002	3864320	50.0	49.1	
		Average of Peak Amounts =				52.8	
2	3.142	3.140	0.002	6917575	50.0	54.6	
2	3.512	3.510	0.002	5483232	50.0	52.7	
2	3.956	3.950	0.006	10568168	50.0	51.8	
2	4.089	4.087	0.002	4998211	50.0	51.5	
2	4.726	4.720	0.006	4272758	50.0	52.2	
		Average of Peak Amounts =				52.6	
						RPD = 0.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.379	6.377	0.002	11962772	50.0	51.2	
1	6.906	6.904	0.002	13930001	50.0	51.2	
1	7.232	7.230	0.002	13151829	50.0	50.8	
1	7.666	7.667	-0.001	25877583	50.0	50.9	
1	8.052	8.050	0.002	9797565	50.0	52.5	
		Average of Peak Amounts =				51.3	
2	6.406	6.400	0.006	13115771	50.0	52.8	
2	6.989	6.990	-0.001	17363273	50.0	52.3	
2	7.376	7.377	-0.001	16435175	50.0	52.3	
2	7.746	7.744	0.002	31404984	50.0	53.3	
2	8.239	8.237	0.002	22837988	50.0	51.7	
		Average of Peak Amounts =				52.5	
						RPD = 2.22	
S 8 Polychlorinated biphenyls, Total							
1						104.1	
2						105.0	
						RPD = 0.85	

Reagents:

AR_3262_L2_00018	Amount Added: 1.00	Units: mL		
BNB IS_00009	Amount Added: 1.00	Units: mL	Run Reagent	

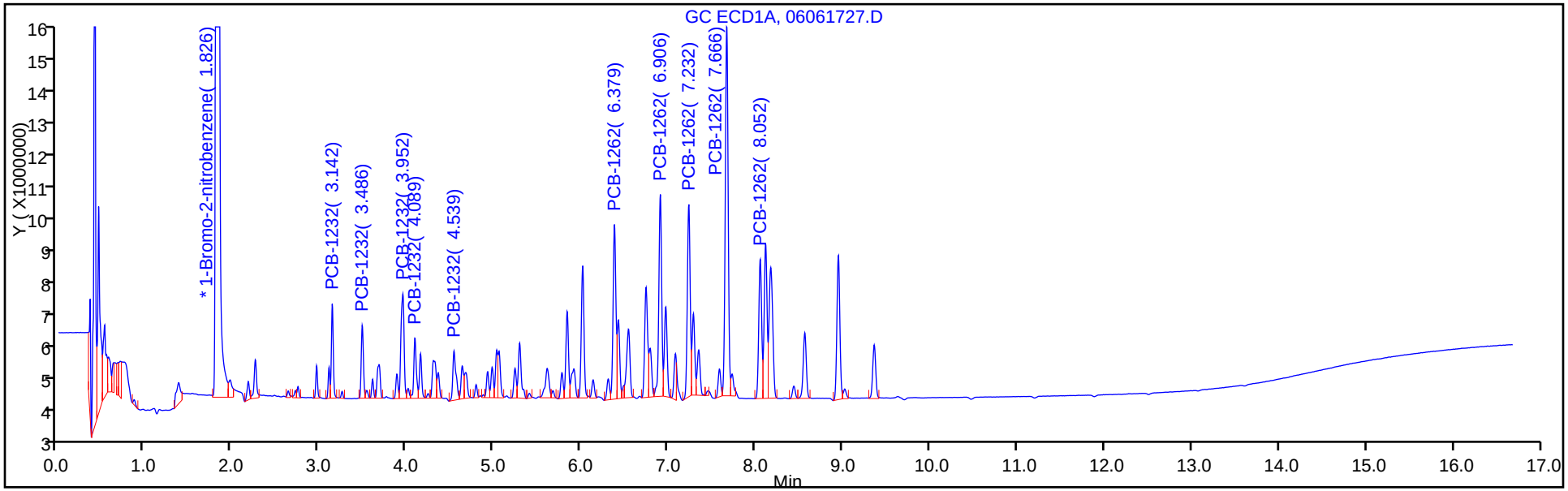
Report Date: 07-Jun-2017 06:53:08 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

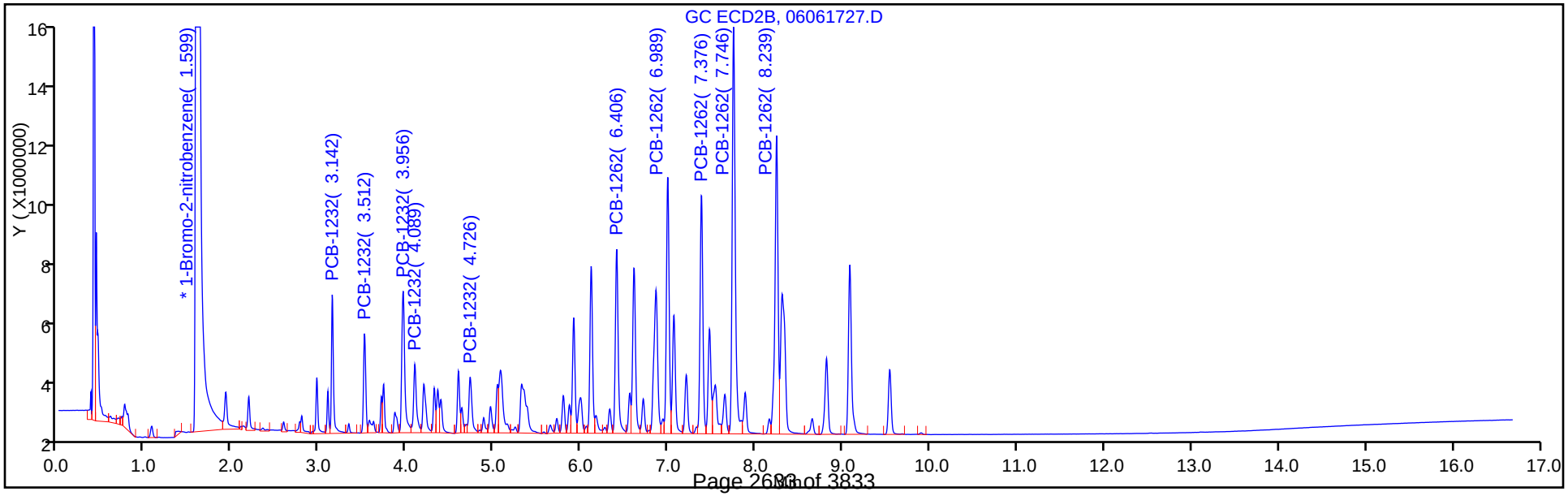
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061727.D

Injection Date:	06-Jun-2017 23:13:20	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL23262			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061728.D
Lims ID: STDL13262
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Jun-2017 23:35:00 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL13262
Misc. Info.: 280-0059455-028
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.827	-0.001	338038512	1000.0	1000.0	
2	1.600	1.600	0.000	381673034	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							
1	3.143	3.144	-0.001	2254800	25.0	24.0	
1	3.486	3.487	-0.001	2043724	25.0	22.8	
1	3.953	3.950	0.003	4204179	25.0	24.2	
1	4.090	4.090	0.000	1770550	25.0	21.2	
1	4.540	4.537	0.003	2549767	25.0	24.8	
		Average of Peak Amounts =				23.4	
2	3.143	3.140	0.003	3569366	25.0	18.5	
2	3.513	3.510	0.003	2956752	25.0	20.5	
2	3.956	3.950	0.006	5725234	25.0	21.9	
2	4.090	4.087	0.003	2726167	25.0	20.6	
2	4.723	4.720	0.003	2234999	25.0	19.2	
		Average of Peak Amounts =				20.1	
						RPD = 14.98	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.380	6.377	0.003	6812468	25.0	24.8	
1	6.903	6.904	-0.001	7676871	25.0	25.2	
1	7.233	7.230	0.003	7420682	25.0	25.7	
1	7.666	7.667	-0.001	13901548	25.0	25.6	
1	8.053	8.050	0.003	5031849	25.0	24.5	
		Average of Peak Amounts =				25.2	
2	6.403	6.400	0.003	6953757	25.0	20.6	
2	6.990	6.990	0.000	9456656	25.0	21.8	
2	7.376	7.377	-0.001	8973726	25.0	22.0	
2	7.746	7.744	0.002	16769672	25.0	22.3	
2	8.240	8.237	0.003	12567737	25.0	22.6	
		Average of Peak Amounts =				21.8	
						RPD = 14.13	
S 8 Polychlorinated biphenyls, Total							
1						48.6	
2						42.0	
						RPD = 14.54	

Reagents:

AR_3262_L1_00019	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

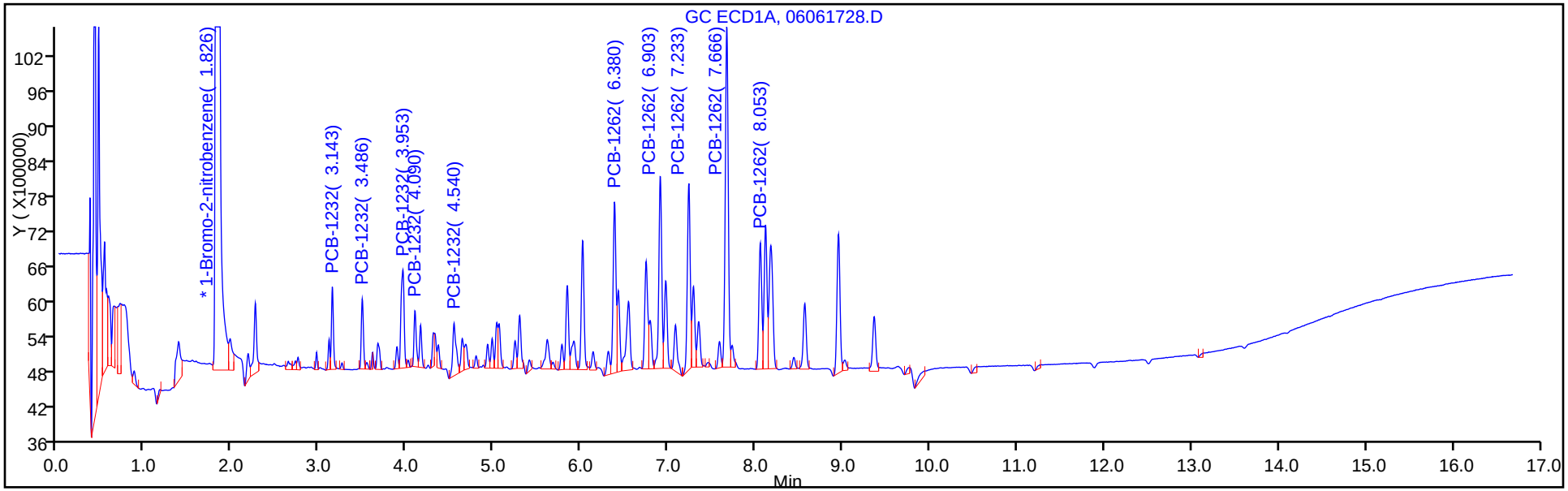
Report Date: 07-Jun-2017 06:53:10 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

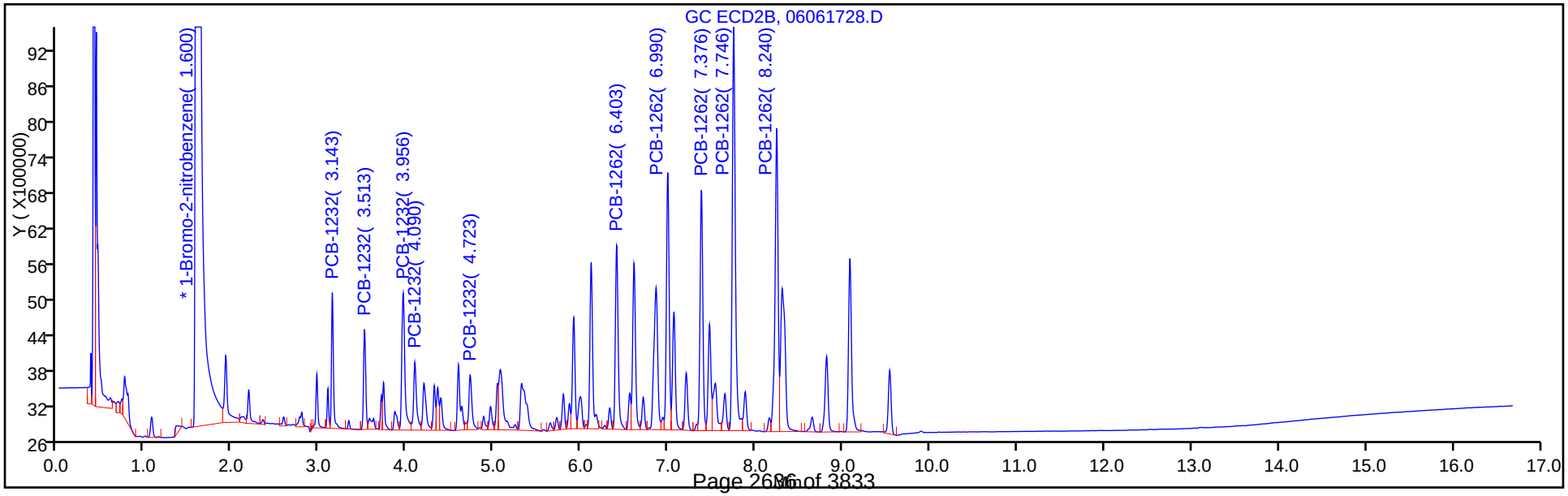
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061728.D

Injection Date:	06-Jun-2017 23:35:00	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL13262			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 21:25 Calibration End Date: 06/06/2017 23:35 Calibration ID: 29398

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL13262 280-376236/28	06061728.D
Level 2	STDL23262 280-376236/27	06061727.D
Level 3	STDL33262 280-376236/26	06061726.D
Level 4	STDL43262 280-376236/25	06061725.D
Level 5	STDL53262 280-376236/24	06061724.D
Level 6	STDL63262 280-376236/23	06061723.D
Level 7	STDL73262 280-376236/22	06061722.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1232 Peak 1	0.3741 0.2309	0.3538 0.2339	0.3101	0.2696	0.2431	Lin1	5.0637	0.2312							0.9970		0.9900
PCB-1232 Peak 2	0.3099 0.1962	0.2804 0.1964	0.2503	0.2213	0.2025	Lin1	3.7621	0.1946							0.9990		0.9900
PCB-1232 Peak 3	0.6000 0.4015	0.5405 0.4084	0.4892	0.4458	0.4154	Lin1	6.1800	0.4024							0.9990		0.9900
PCB-1232 Peak 4	0.2857 0.1806	0.2556 0.1853	0.2357	0.2091	0.1912	Lin1	3.3837	0.1826							0.9980		0.9900
PCB-1232 Peak 5	0.2342 0.1504	0.2185 0.1552	0.2023	0.1802	0.1609	Lin1	2.9181	0.1533							0.9970		0.9900
PCB-1262 Peak 1	0.7288 0.4843	0.6708 0.4754	0.5964	0.5406	0.4964	Lin1	8.3899	0.4765							0.9990		0.9900
PCB-1262 Peak 2	0.9911 0.6511	0.8880 0.6504	0.7869	0.7177	0.6647	Lin1	10.727	0.6442							0.9990		0.9900
PCB-1262 Peak 3	0.9405 0.6175	0.8405 0.6173	0.7444	0.6767	0.6301	Lin1	10.102	0.6108							0.9990		0.9900
PCB-1262 Peak 4	1.7575 1.1819	1.6061 1.1941	1.3899	1.2819	1.1955	Lin1	17.843	1.1727							0.9990		0.9900
PCB-1262 Peak 5	1.3171 0.8727	1.1680 0.8897	1.0471	0.9552	0.8982	Lin1	13.228	0.8731							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 21:25 Calibration End Date: 06/06/2017 23:35 Calibration ID: 29398

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL13262 280-376236/28	06061728.D
Level 2	STDL23262 280-376236/27	06061727.D
Level 3	STDL33262 280-376236/26	06061726.D
Level 4	STDL43262 280-376236/25	06061725.D
Level 5	STDL53262 280-376236/24	06061724.D
Level 6	STDL63262 280-376236/23	06061723.D
Level 7	STDL73262 280-376236/22	06061722.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1232 Peak 1	BNB	Lin1	3569366 67001709	6917575 88477099	12639596	26849747	47980333	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 2	BNB	Lin1	2956752 56933808	5483232 74313105	10204639	22036182	39960058	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 3	BNB	Lin1	5725234 116505142	10568168 154518713	19941032	44391565	81987882	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 4	BNB	Lin1	2726167 52421719	4998211 70104319	9609816	20818050	37731995	25.0 750	50.0 1000	100	250	500
PCB-1232 Peak 5	BNB	Lin1	2234999 43643074	4272758 58730430	8246500	17945127	31747336	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 1	BNB	Lin1	6953757 140538968	13115771 179846346	24313865	53835004	97962805	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 2	BNB	Lin1	9456656 188941264	17363273 246080866	32077578	71465471	131184185	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 3	BNB	Lin1	8973726 179185616	16435175 233547010	30344872	67384151	124354300	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 4	BNB	Lin1	16769672 342965563	31404984 451765891	56659168	127652955	235948648	25.0 750	50.0 1000	100	250	500
PCB-1262 Peak 5	BNB	Lin1	12567737 253251911	22837988 336602637	42683559	95117097	177257747	25.0 750	50.0 1000	100	250	500

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061722.D
Lims ID: STDL73262
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 21:25:02 ALS Bottle#: 22 Worklist Smp#: 22
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL73262
Misc. Info.: 280-0059455-022
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:56 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:42:01

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.826	0.001	326469961	1000.0	1000.0	
2	1.597	1.599	-0.002	378335438	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							M
1	3.144	3.144	0.000	66831187	1000.0	1028.8	
1	3.487	3.487	0.000	55100752	1000.0	1011.4	
1	3.951	3.950	0.001	124406074	1000.0	1019.2	
1	4.091	4.090	0.001	52209473	1000.0	1013.3	
1	4.537	4.537	0.000	50543394	1000.0	1008.8	
		Average of Peak Amounts =				1016.3	
2	3.141	3.140	0.001	88477099	1000.0	989.4	M
2	3.511	3.510	0.001	74313105	1000.0	990.0	M
2	3.951	3.950	0.001	154518713	1000.0	999.6	M
2	4.087	4.087	0.000	70104319	1000.0	996.2	M
2	4.721	4.720	0.001	58730430	1000.0	993.5	M
		Average of Peak Amounts =				993.8	
						RPD = 2.24	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.377	6.377	0.000	184259486	1000.0	1018.8	
1	6.904	6.904	0.000	227961906	1000.0	1025.9	
1	7.231	7.230	0.001	216838119	1000.0	1028.8	
1	7.667	7.667	0.000	449972880	1000.0	1027.1	
1	8.051	8.050	0.001	161934653	1000.0	1026.0	
		Average of Peak Amounts =				1025.3	
2	6.404	6.400	0.004	179846346	1000.0	980.0	
2	6.991	6.990	0.001	246080866	1000.0	993.0	
2	7.377	7.377	0.000	233547010	1000.0	994.1	
2	7.744	7.744	0.000	451765891	1000.0	1003.0	
2	8.241	8.237	0.004	336602637	1000.0	1003.9	
		Average of Peak Amounts =				994.8	
						RPD = 3.02	
S 8 Polychlorinated biphenyls, Total							
1						2041.6	
2						1988.5	
						RPD = 2.63	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_3262_L7_00014	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

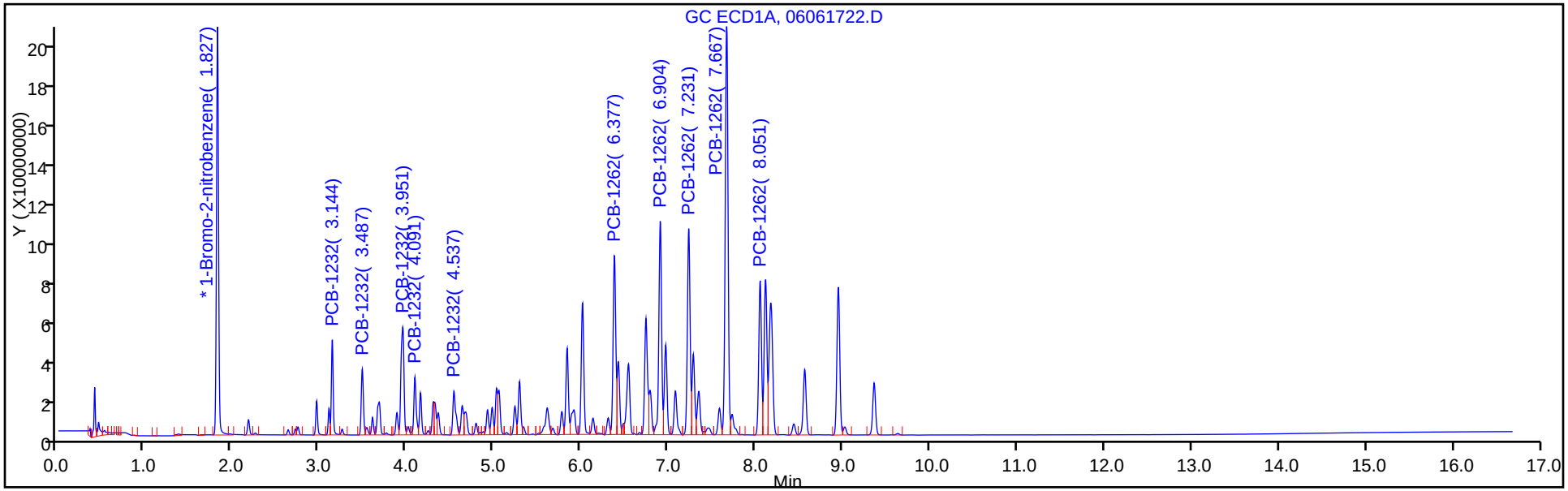
Report Date: 07-Jun-2017 06:52:57 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

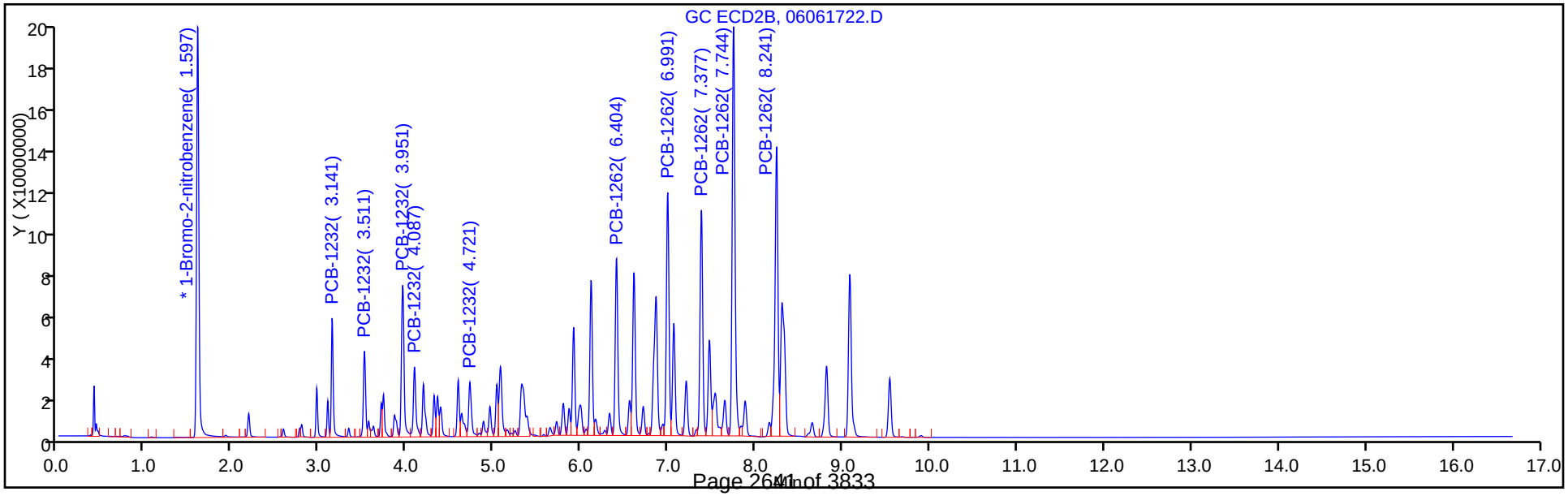
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061722.D

Injection Date:	06-Jun-2017 21:25:02	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL73262			Worklist Smp#:	22
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	22
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:52:57 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061722.D

Injection Date: 06-Jun-2017 21:25:02 Instrument ID: SGC_P3

Lims ID: STDL73262

Client ID:

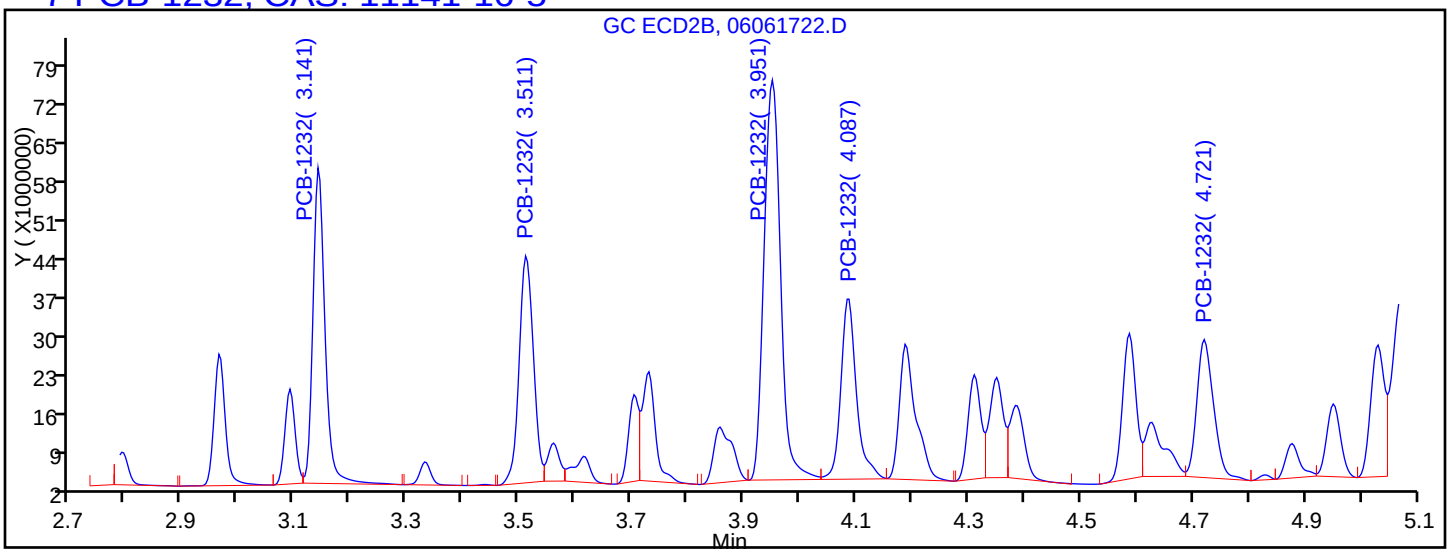
Operator ID: jax ALS Bottle#: 22 Worklist Smp#: 22

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

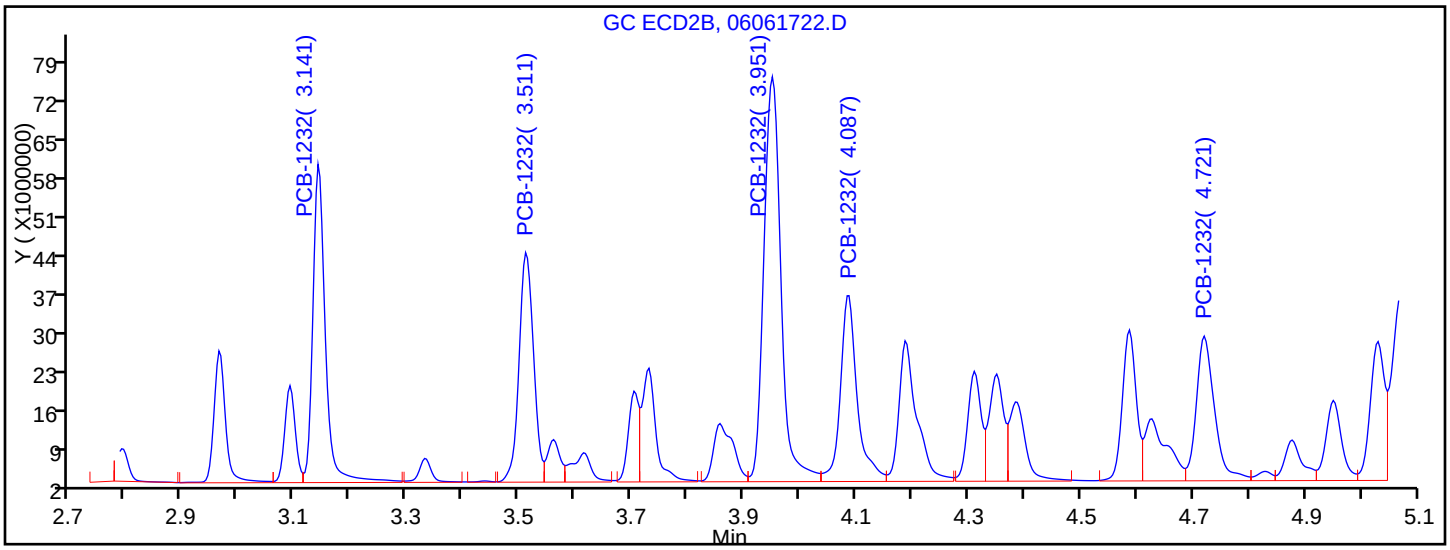
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

7 PCB-1232, CAS: 11141-16-5



Processing Integration Results

3.141	Response = 84345261
3.511	Response = 72152310
3.951	Response = 146991393
4.087	Response = 62696776
4.721	Response = 51440808



Manual Integration Results

3.141	Response = 88477099	M
3.511	Response = 74313105	M
3.951	Response = 154518713	M
4.087	Response = 70104319	M
4.721	Response = 58730430	M

Reviewer: jacksonto, 07-Jun-2017 06:41:55

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061723.D
Lims ID: STDL63262
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 06-Jun-2017 21:46:42 ALS Bottle#: 23 Worklist Smp#: 23
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL63262
Misc. Info.: 280-0059455-023
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:52:58 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:42:21

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.826	-0.001	336227049	1000.0	1000.0	
2	1.598	1.599	-0.001	386918312	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							M
1	3.141	3.144	-0.003	49950534	750.0	743.9	
1	3.485	3.487	-0.002	41602498	750.0	737.7	
1	3.951	3.950	0.001	93282372	750.0	739.5	
1	4.091	4.090	0.001	38993619	750.0	731.4	
1	4.538	4.537	0.001	38490320	750.0	739.3	
		Average of Peak Amounts =				738.4	
2	3.141	3.140	0.001	67001709	750.0	726.9	M
2	3.511	3.510	0.001	56933808	750.0	736.8	M
2	3.951	3.950	0.001	116505142	750.0	733.0	
2	4.088	4.087	0.001	52421719	750.0	723.5	
2	4.721	4.720	0.001	43643074	750.0	716.7	
		Average of Peak Amounts =				727.4	
						RPD = 1.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.378	6.377	0.001	138973554	750.0	742.9	
1	6.905	6.904	0.001	168829991	750.0	735.3	
1	7.231	7.230	0.001	159690802	750.0	733.2	
1	7.665	7.667	-0.002	334643148	750.0	740.3	
1	8.048	8.050	-0.002	120647458	750.0	740.4	
		Average of Peak Amounts =				738.4	
2	6.401	6.400	0.001	140538968	750.0	744.7	
2	6.988	6.990	-0.002	188941264	750.0	741.4	
2	7.375	7.377	-0.002	179185616	750.0	741.7	
2	7.745	7.744	0.001	342965563	750.0	740.6	
2	8.238	8.237	0.001	253251911	750.0	734.5	
		Average of Peak Amounts =				740.6	
						RPD = 0.29	
S 8 Polychlorinated biphenyls, Total							
1						1476.8	
2						1467.9	
						RPD = 0.60	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_3262_L6_00016	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

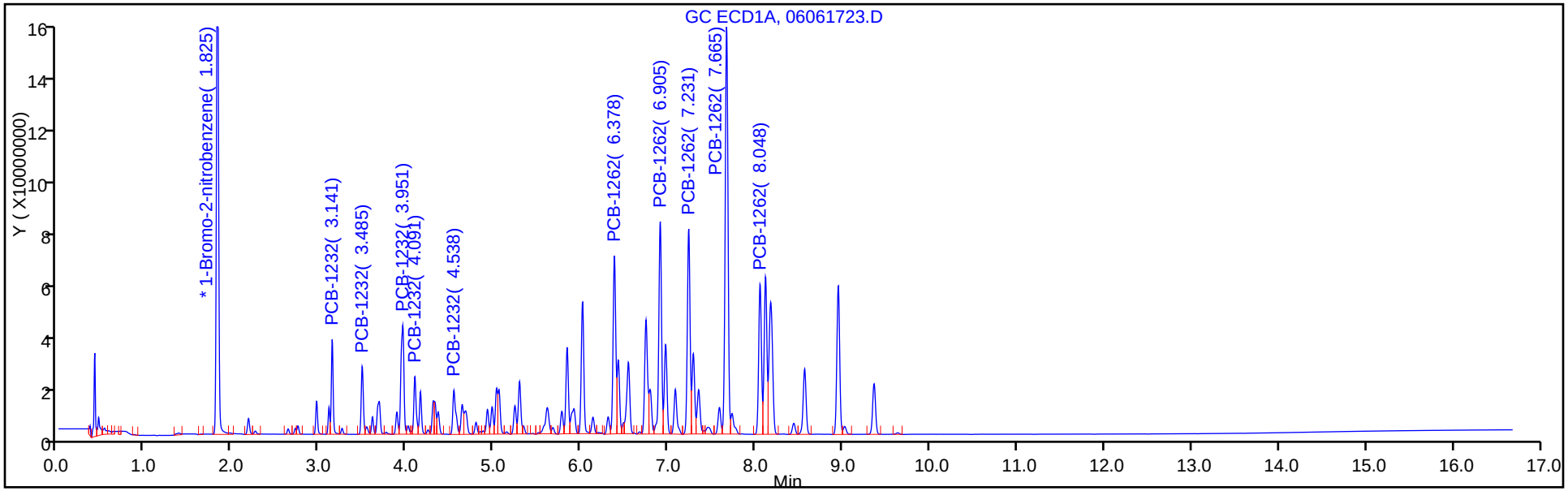
Report Date: 07-Jun-2017 06:52:59 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

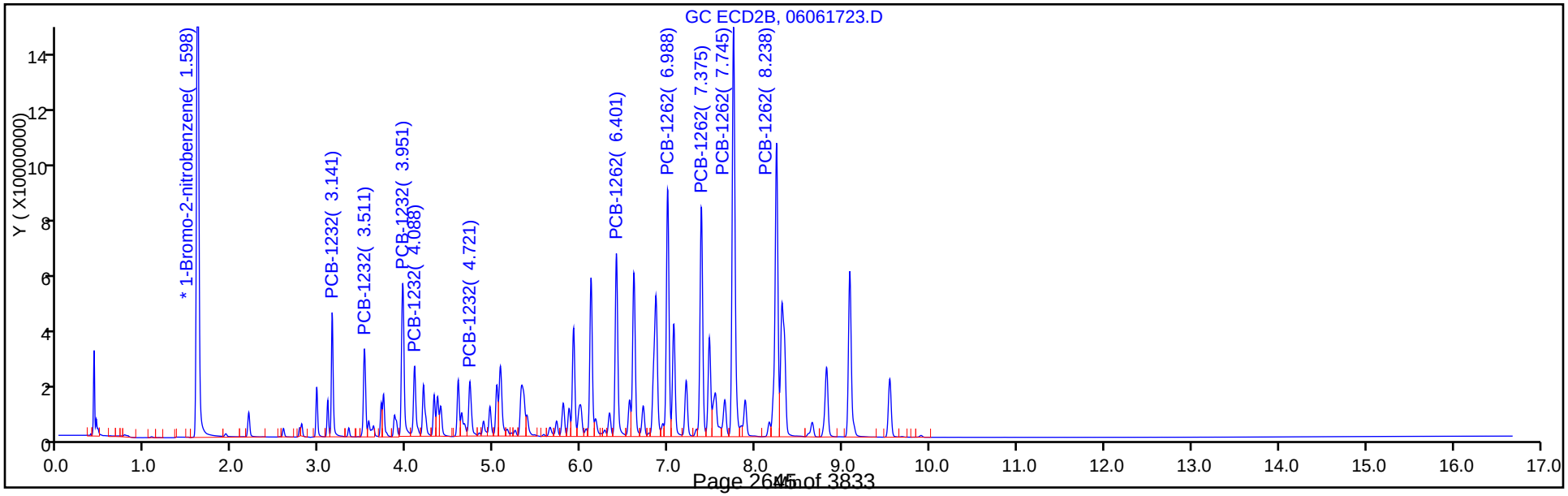
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061723.D

Injection Date:	06-Jun-2017 21:46:42	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL63262			Worklist Smp#:	23
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	23
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:52:59 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061723.D

Injection Date: 06-Jun-2017 21:46:42 Instrument ID: SGC_P3

Lims ID: STDL63262

Client ID:

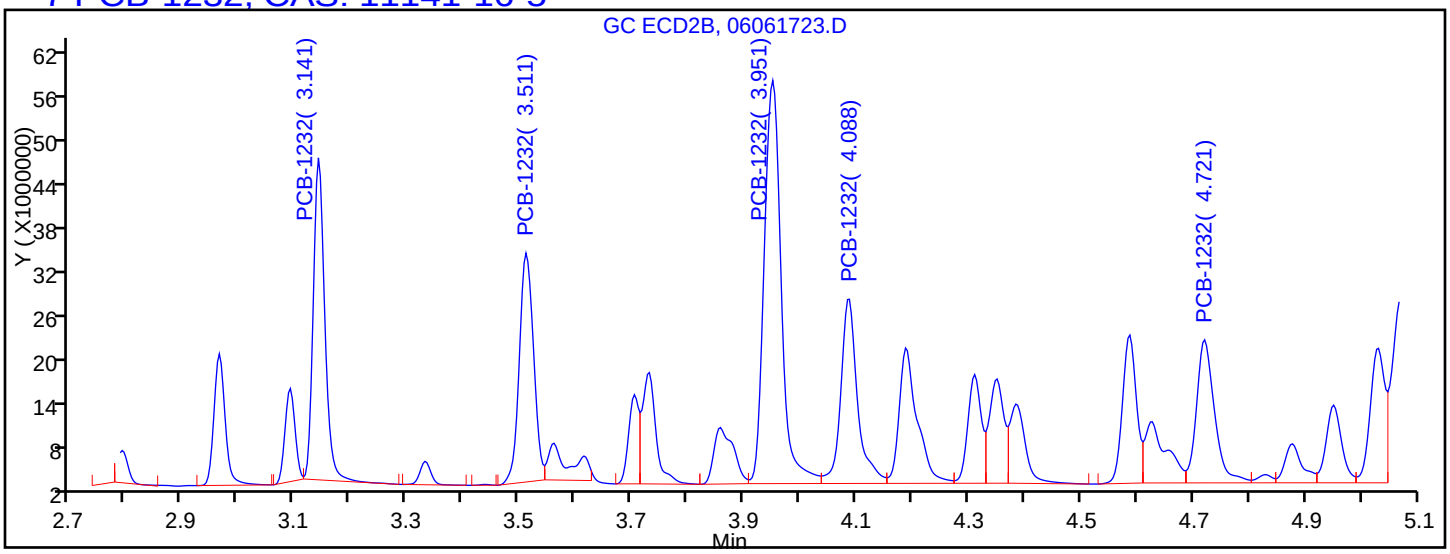
Operator ID: jax ALS Bottle#: 23 Worklist Smp#: 23

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

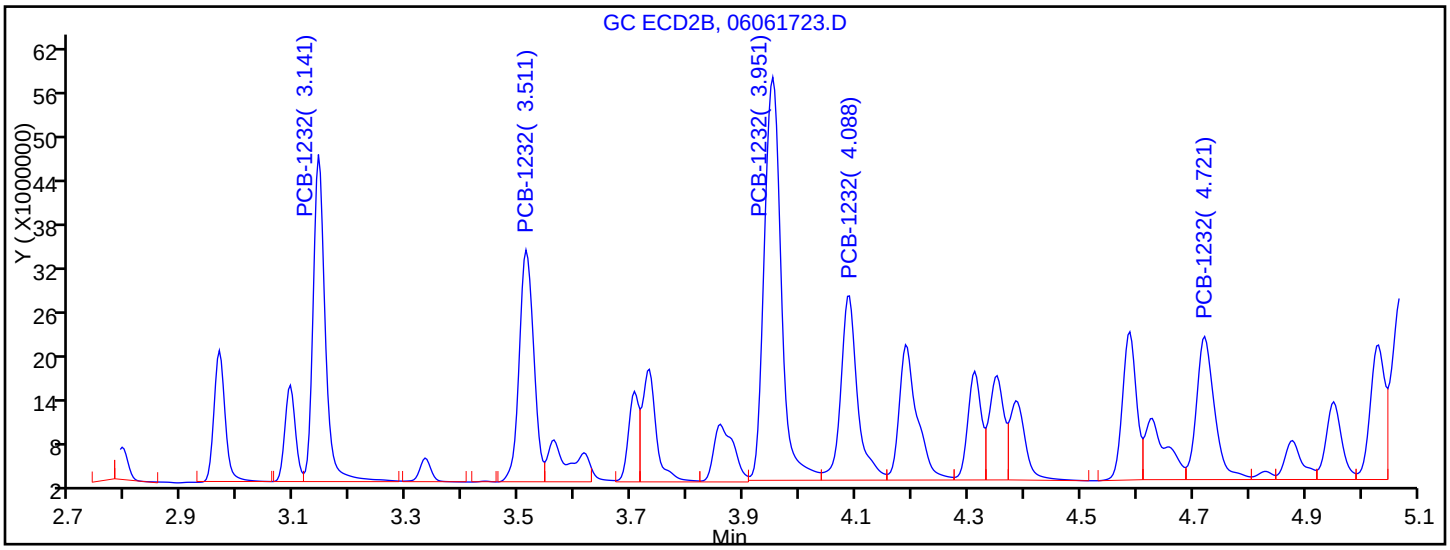
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

7 PCB-1232, CAS: 11141-16-5



Processing Integration Results

3.141	Response = 62581631
3.511	Response = 55214998
3.951	Response = 116505142
4.088	Response = 52421719
4.721	Response = 43643074



Manual Integration Results

3.141	Response = 67001709	M
3.511	Response = 56933808	M
3.951	Response = 116505142	
4.088	Response = 52421719	
4.721	Response = 43643074	

Reviewer: jacksonto, 07-Jun-2017 06:42:18

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061724.D
Lims ID: STDL53262
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 06-Jun-2017 22:08:19 ALS Bottle#: 24 Worklist Smp#: 24
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL53262
Misc. Info.: 280-0059455-024
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:00 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:36:43

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	345363738	1000.0	1000.0	
2	1.600	1.600	0.000	394714346	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							M
1	3.144	3.144	0.000	32574776	500.0	468.7	
1	3.487	3.487	0.000	28758007	500.0	491.9	
1	3.950	3.950	0.000	64030988	500.0	491.1	
1	4.090	4.090	0.000	27407244	500.0	496.6	
1	4.537	4.537	0.000	27108738	500.0	498.9	
		Average of Peak Amounts =				489.4	
2	3.140	3.140	0.000	47980333	500.0	503.8	M
2	3.510	3.510	0.000	39960058	500.0	500.9	M
2	3.950	3.950	0.000	81987882	500.0	500.9	M
2	4.087	4.087	0.000	37731995	500.0	505.0	M
2	4.720	4.720	0.000	31747336	500.0	505.6	M
		Average of Peak Amounts =				503.2	
						RPD = 2.78	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.377	6.377	0.000	94379620	500.0	487.1	
1	6.904	6.904	0.000	115993986	500.0	489.1	
1	7.230	7.230	0.000	110540902	500.0	491.3	
1	7.667	7.667	0.000	226813809	500.0	486.7	
1	8.050	8.050	0.000	81344778	500.0	483.8	
		Average of Peak Amounts =				487.6	
2	6.400	6.400	0.000	97962805	500.0	503.3	
2	6.990	6.990	0.000	131184185	500.0	499.2	
2	7.377	7.377	0.000	124354300	500.0	499.3	
2	7.744	7.744	0.000	235948648	500.0	494.5	
2	8.237	8.237	0.000	177257747	500.0	499.2	
		Average of Peak Amounts =				499.1	
						RPD = 2.33	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_3262_L5_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

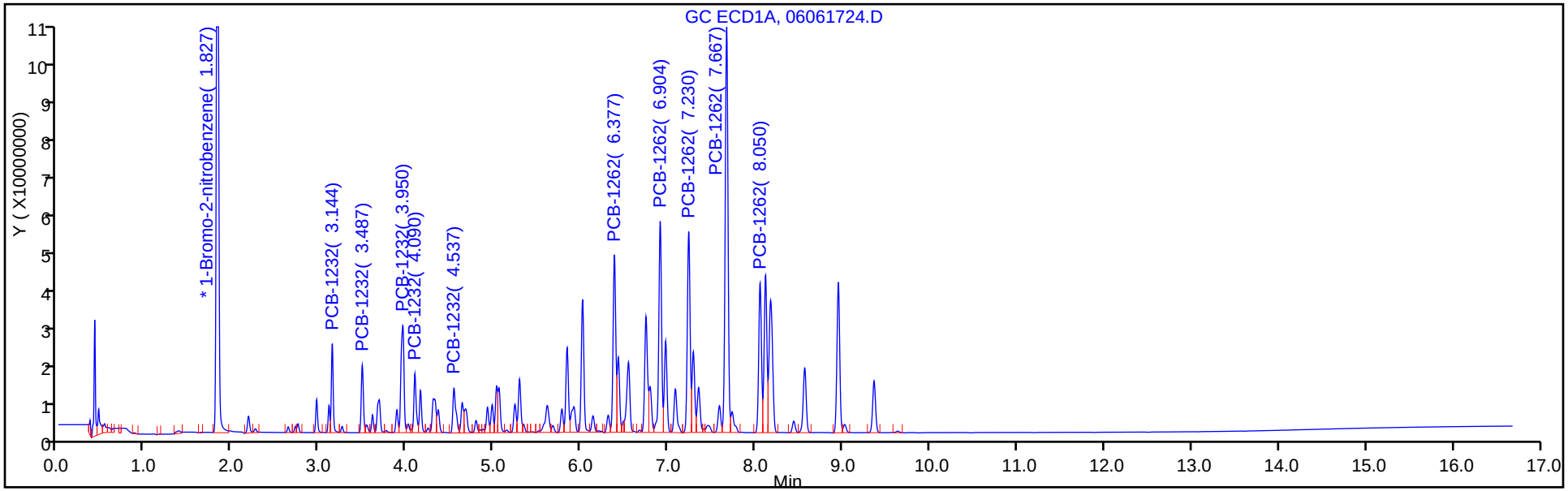
Report Date: 07-Jun-2017 06:53:01 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

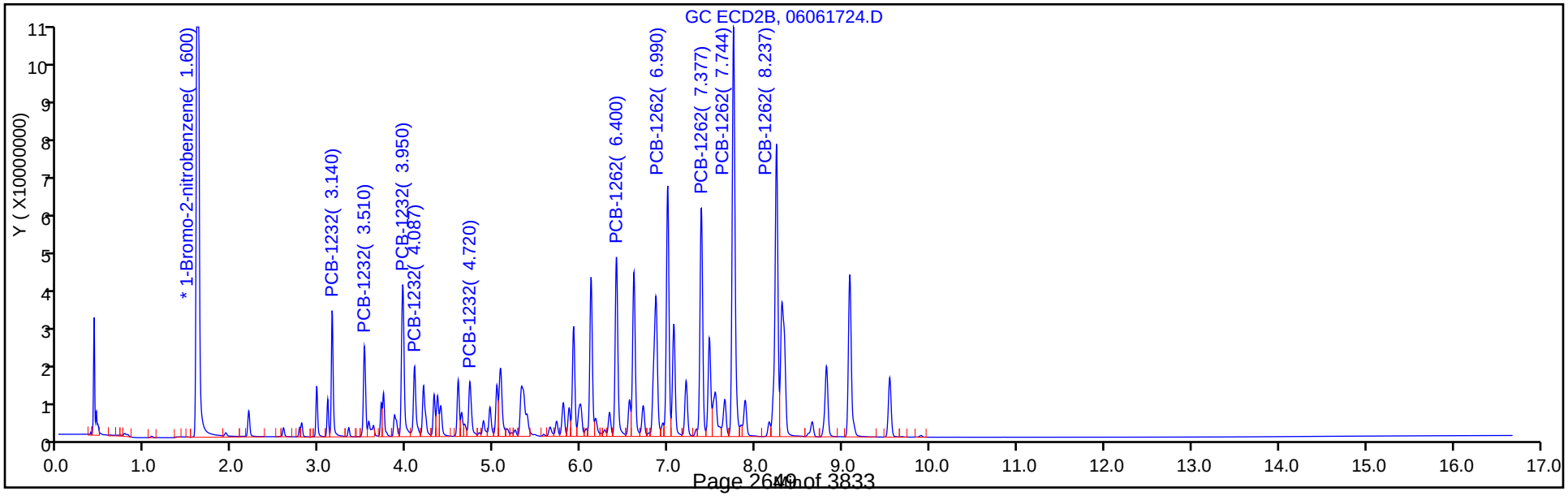
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061724.D

Injection Date:	06-Jun-2017 22:08:19	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL53262			Worklist Smp#:	24
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	24
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:53:01 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061724.D

Injection Date: 06-Jun-2017 22:08:19 Instrument ID: SGC_P3

Lims ID: STDL53262

Client ID:

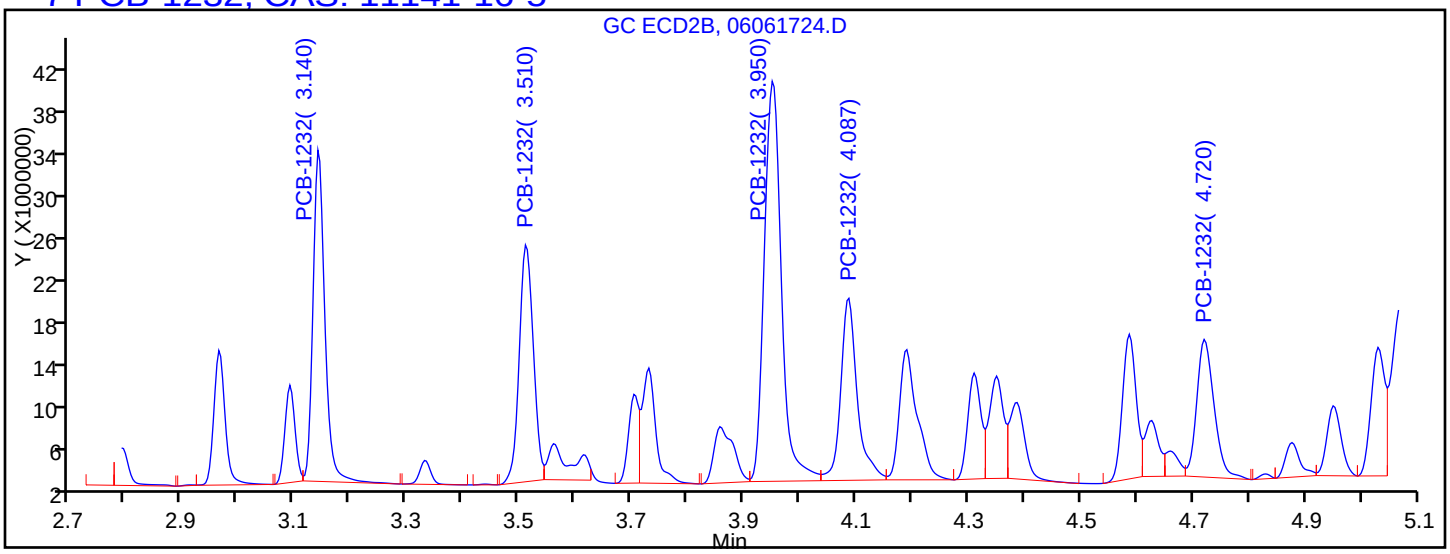
Operator ID: jax ALS Bottle#: 24 Worklist Smp#: 24

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

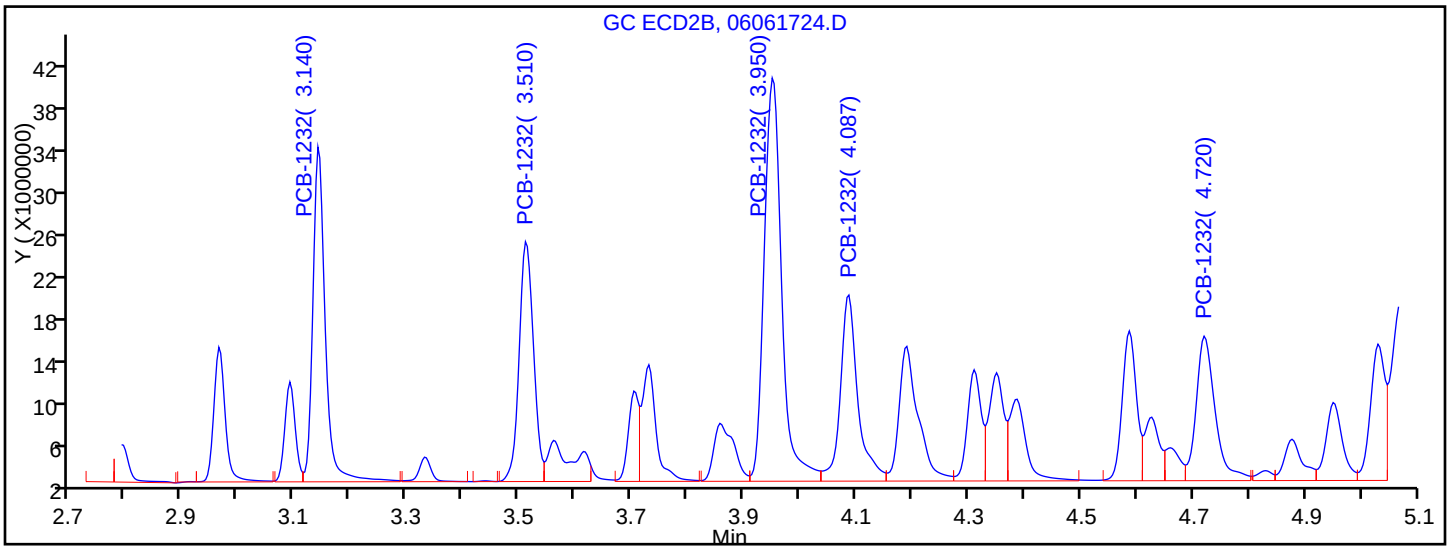
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

7 PCB-1232, CAS: 11141-16-5



Processing Integration Results

3.140	Response = 45436893
3.510	Response = 38780103
3.950	Response = 79604263
4.087	Response = 35020667
4.720	Response = 27733035



Manual Integration Results

3.140	Response = 47980333	M
3.510	Response = 39960058	M
3.950	Response = 81987882	M
4.087	Response = 37731995	M
4.720	Response = 31747336	M

Reviewer: jacksonto, 07-Jun-2017 06:43:27

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061725.D
Lims ID: STDL43262
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 06-Jun-2017 22:30:01 ALS Bottle#: 25 Worklist Smp#: 25
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL43262
Misc. Info.: 280-0059455-025
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:03 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:42:39

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.827	-0.002	351163612	1000.0	1000.0	
2	1.599	1.600	-0.001	398318609	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							
1	3.142	3.144	-0.002	18582944	250.0	258.7	
1	3.485	3.487	-0.002	15543577	250.0	254.9	
1	3.952	3.950	0.002	33505628	250.0	248.2	
1	4.089	4.090	-0.001	14507611	250.0	252.5	
1	4.539	4.537	0.002	14557895	250.0	251.4	
		Average of Peak Amounts =				253.1	
2	3.142	3.140	0.002	26849747	250.0	269.6	
2	3.512	3.510	0.002	22036182	250.0	264.9	
2	3.952	3.950	0.002	44391565	250.0	261.6	
2	4.089	4.087	0.002	20818050	250.0	267.7	
2	4.722	4.720	0.002	17945127	250.0	274.8	
		Average of Peak Amounts =				267.7	
						RPD = 5.60	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.379	6.377	0.002	50411406	250.0	250.2	
1	6.905	6.904	0.001	61260216	250.0	250.0	
1	7.232	7.230	0.002	57567381	250.0	247.4	
1	7.665	7.667	-0.002	117615624	250.0	245.7	
1	8.049	8.050	-0.001	42973067	250.0	248.3	
		Average of Peak Amounts =				248.3	
2	6.402	6.400	0.002	53835004	250.0	266.0	
2	6.989	6.990	-0.001	71465471	250.0	261.9	
2	7.375	7.377	-0.002	67384151	250.0	260.4	
2	7.745	7.744	0.001	127652955	250.0	258.1	
2	8.239	8.237	0.002	95117097	250.0	258.4	
		Average of Peak Amounts =				260.9	
						RPD = 4.97	
S 8 Polychlorinated biphenyls, Total							
1						501.4	
2						528.7	
						RPD = 5.29	

Reagents:

AR_3262_L4_00019	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

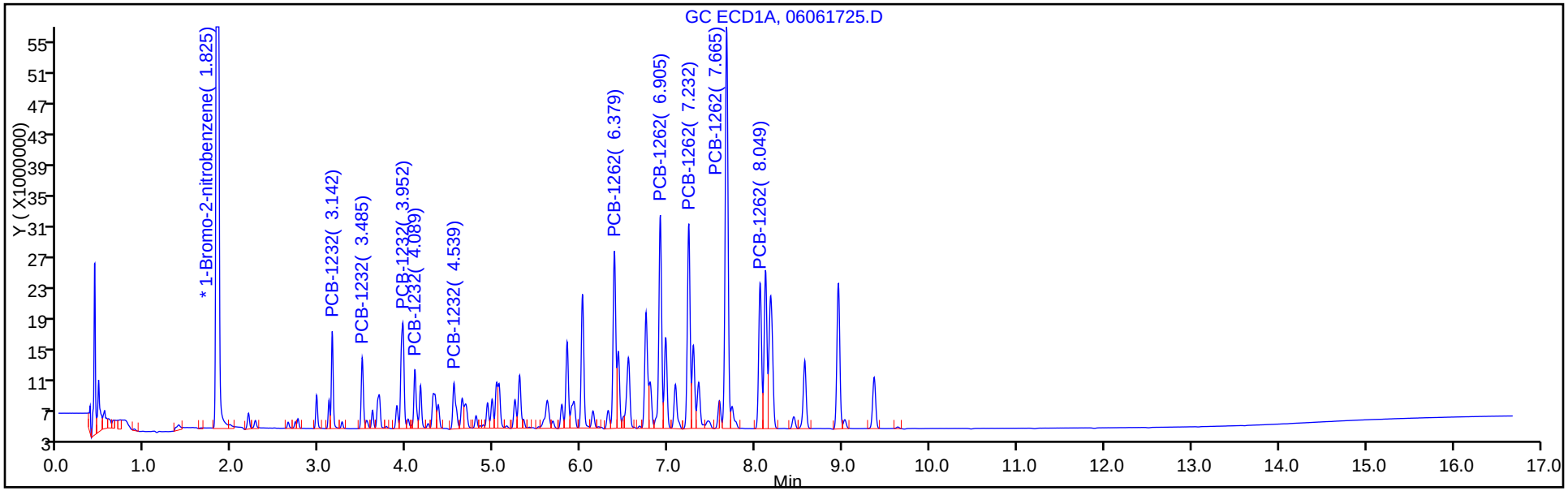
Report Date: 07-Jun-2017 06:53:04 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

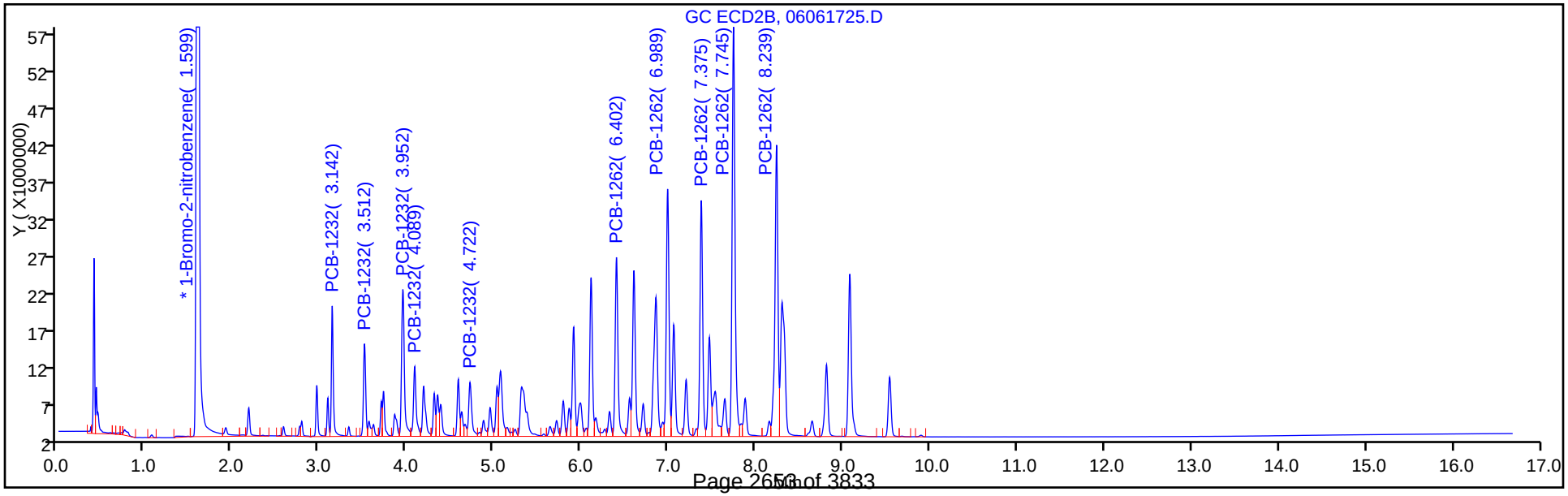
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061725.D

Injection Date:	06-Jun-2017 22:30:01	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL43262			Worklist Smp#:	25
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	25
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061726.D
Lims ID: STDL33262
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 06-Jun-2017 22:51:40 ALS Bottle#: 26 Worklist Smp#: 26
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL33262
Misc. Info.: 280-0059455-026
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:05 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.827	-0.002	362023594	1000.0	1000.0	
2	1.599	1.600	-0.001	407648233	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							
1	3.142	3.144	-0.002	7625374	100.0	97.1	
1	3.485	3.487	-0.002	7002746	100.0	103.5	
1	3.952	3.950	0.002	14731505	100.0	100.5	
1	4.089	4.090	-0.001	6571821	100.0	104.0	
1	4.539	4.537	0.002	6943036	100.0	102.6	
		Average of Peak Amounts =				101.5	
2	3.142	3.140	0.002	12639596	100.0	112.2	
2	3.512	3.510	0.002	10204639	100.0	109.3	
2	3.955	3.950	0.005	19941032	100.0	106.2	
2	4.089	4.087	0.002	9609816	100.0	110.6	
2	4.725	4.720	0.005	8246500	100.0	112.9	
		Average of Peak Amounts =				110.2	
						RPD = 8.22	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.379	6.377	0.002	22214790	100.0	100.1	
1	6.905	6.904	0.001	26104325	100.0	98.4	
1	7.232	7.230	0.002	24683282	100.0	97.9	
1	7.669	7.667	0.002	50224652	100.0	98.7	
1	8.052	8.050	0.002	18434551	100.0	99.5	
		Average of Peak Amounts =				98.9	
2	6.402	6.400	0.002	24313865	100.0	107.6	
2	6.989	6.990	-0.001	32077578	100.0	105.5	
2	7.375	7.377	-0.002	30344872	100.0	105.3	
2	7.745	7.744	0.001	56659168	100.0	103.3	
2	8.239	8.237	0.002	42683559	100.0	104.8	
		Average of Peak Amounts =				105.3	
						RPD = 6.25	
S 8 Polychlorinated biphenyls, Total							
1						200.4	
2						215.5	
						RPD = 7.26	

Reagents:

AR_3262_L3_00018	Amount Added: 1.00	Units: mL		
BNB IS_00009	Amount Added: 1.00	Units: mL	Run Reagent	

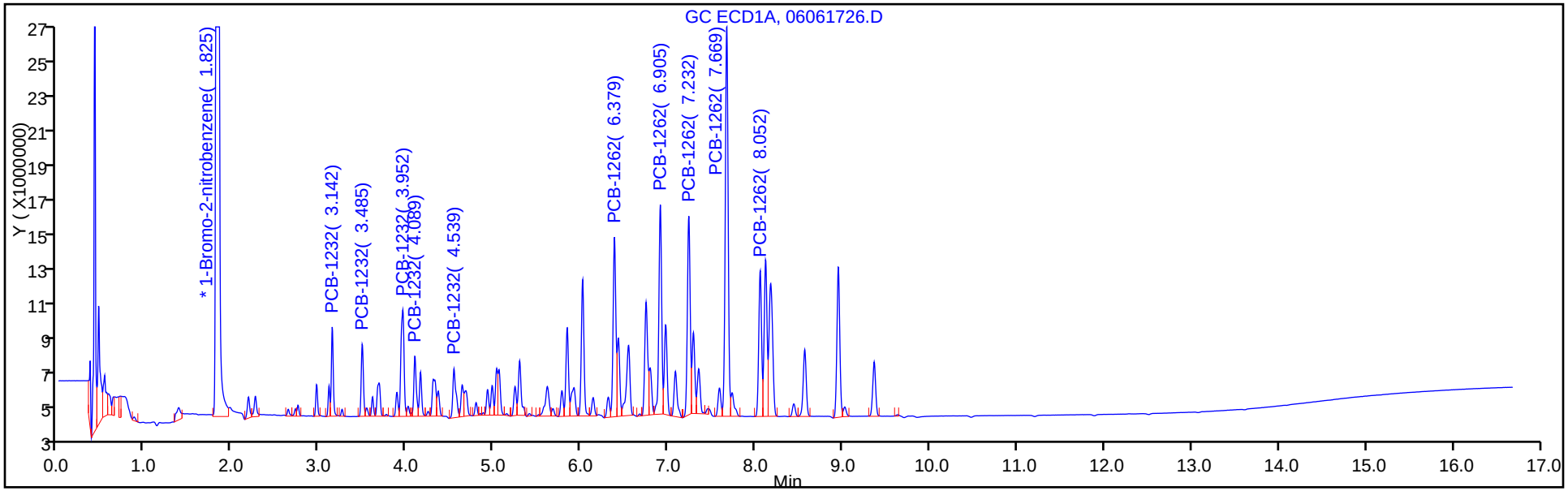
Report Date: 07-Jun-2017 06:53:06 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

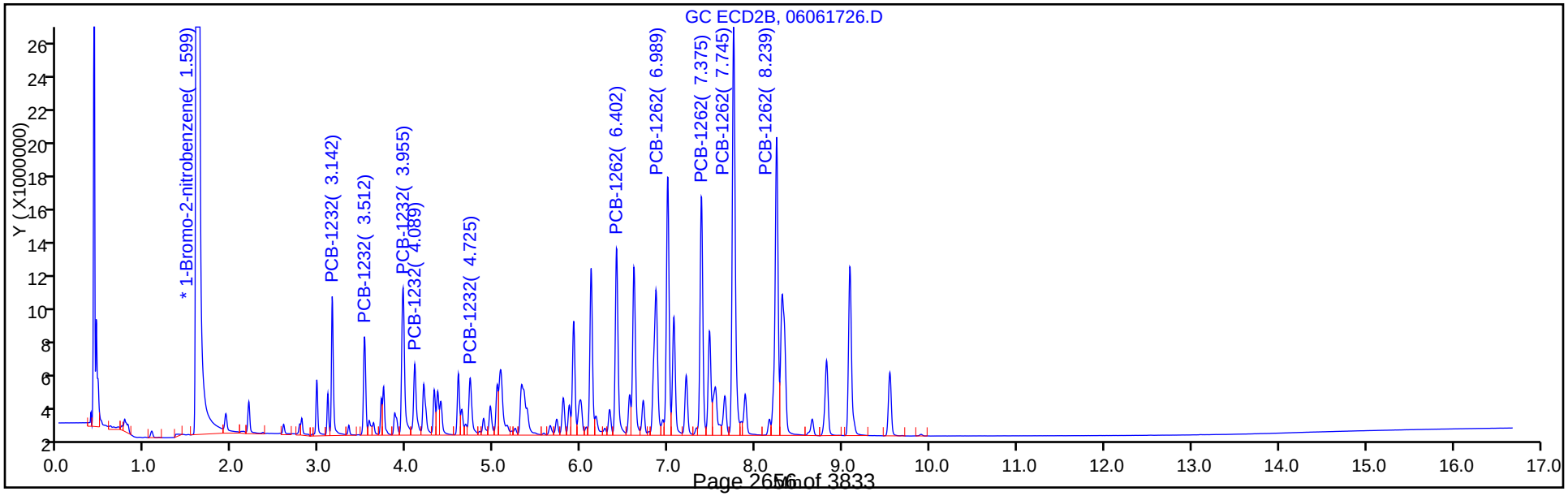
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061726.D

Injection Date:	06-Jun-2017 22:51:40	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL33262			Worklist Smp#:	26
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061727.D
Lims ID: STDL23262
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 06-Jun-2017 23:13:20 ALS Bottle#: 27 Worklist Smp#: 27
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL23262
Misc. Info.: 280-0059455-027
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:08 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.827	-0.001	345816428	1000.0	1000.0	
2	1.599	1.600	-0.001	391077106	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							
1	3.142	3.144	-0.002	4332251	50.0	53.8	
1	3.486	3.487	-0.001	3800391	50.0	52.8	
1	3.952	3.950	0.002	7916345	50.0	52.4	
1	4.089	4.090	-0.001	3692971	50.0	56.1	
1	4.539	4.537	0.002	3864320	50.0	49.1	
		Average of Peak Amounts =				52.8	
2	3.142	3.140	0.002	6917575	50.0	54.6	
2	3.512	3.510	0.002	5483232	50.0	52.7	
2	3.956	3.950	0.006	10568168	50.0	51.8	
2	4.089	4.087	0.002	4998211	50.0	51.5	
2	4.726	4.720	0.006	4272758	50.0	52.2	
		Average of Peak Amounts =				52.6	
						RPD = 0.50	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.379	6.377	0.002	11962772	50.0	51.2	
1	6.906	6.904	0.002	13930001	50.0	51.2	
1	7.232	7.230	0.002	13151829	50.0	50.8	
1	7.666	7.667	-0.001	25877583	50.0	50.9	
1	8.052	8.050	0.002	9797565	50.0	52.5	
		Average of Peak Amounts =				51.3	
2	6.406	6.400	0.006	13115771	50.0	52.8	
2	6.989	6.990	-0.001	17363273	50.0	52.3	
2	7.376	7.377	-0.001	16435175	50.0	52.3	
2	7.746	7.744	0.002	31404984	50.0	53.3	
2	8.239	8.237	0.002	22837988	50.0	51.7	
		Average of Peak Amounts =				52.5	
						RPD = 2.22	
S 8 Polychlorinated biphenyls, Total							
1						104.1	
2						105.0	
						RPD = 0.85	

Reagents:

AR_3262_L2_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

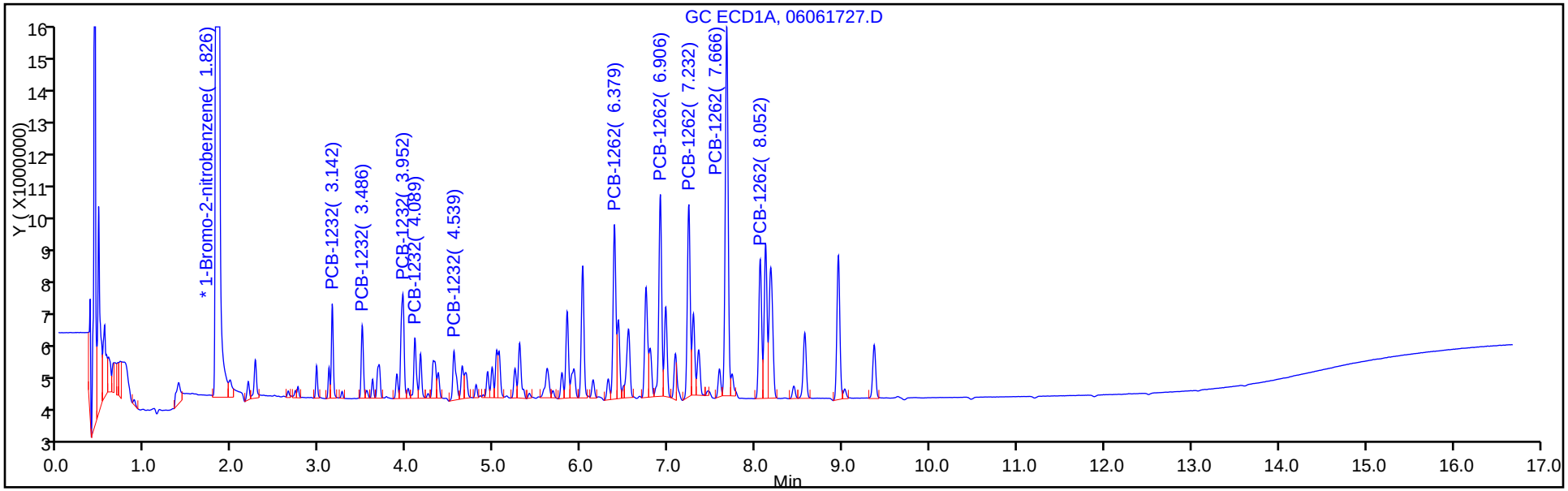
Report Date: 07-Jun-2017 06:53:08 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

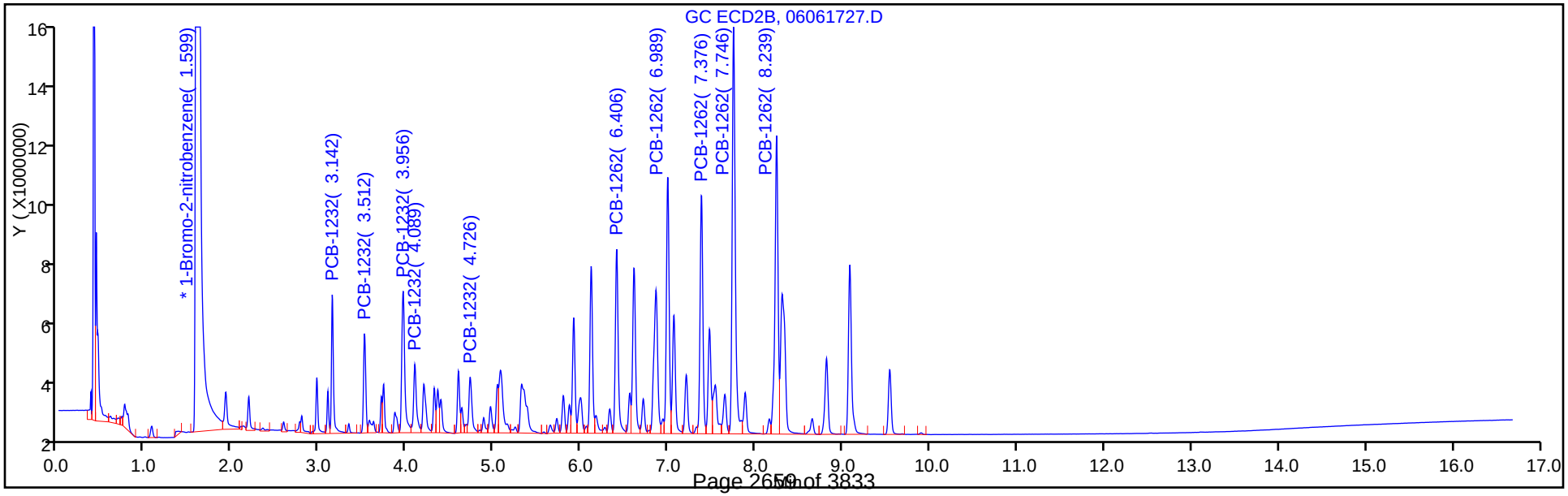
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Injection Date:	06-Jun-2017 23:13:20	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL23262			Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061728.D
Lims ID: STDL13262
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 06-Jun-2017 23:35:00 ALS Bottle#: 28 Worklist Smp#: 28
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL13262
Misc. Info.: 280-0059455-028
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub4

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.827	-0.001	338038512	1000.0	1000.0	
2	1.600	1.600	0.000	381673034	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							
1	3.143	3.144	-0.001	2254800	25.0	24.0	
1	3.486	3.487	-0.001	2043724	25.0	22.8	
1	3.953	3.950	0.003	4204179	25.0	24.2	
1	4.090	4.090	0.000	1770550	25.0	21.2	
1	4.540	4.537	0.003	2549767	25.0	24.8	
		Average of Peak Amounts =				23.4	
2	3.143	3.140	0.003	3569366	25.0	18.5	
2	3.513	3.510	0.003	2956752	25.0	20.5	
2	3.956	3.950	0.006	5725234	25.0	21.9	
2	4.090	4.087	0.003	2726167	25.0	20.6	
2	4.723	4.720	0.003	2234999	25.0	19.2	
		Average of Peak Amounts =				20.1	
						RPD = 14.98	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.380	6.377	0.003	6812468	25.0	24.8	
1	6.903	6.904	-0.001	7676871	25.0	25.2	
1	7.233	7.230	0.003	7420682	25.0	25.7	
1	7.666	7.667	-0.001	13901548	25.0	25.6	
1	8.053	8.050	0.003	5031849	25.0	24.5	
		Average of Peak Amounts =				25.2	
2	6.403	6.400	0.003	6953757	25.0	20.6	
2	6.990	6.990	0.000	9456656	25.0	21.8	
2	7.376	7.377	-0.001	8973726	25.0	22.0	
2	7.746	7.744	0.002	16769672	25.0	22.3	
2	8.240	8.237	0.003	12567737	25.0	22.6	
		Average of Peak Amounts =				21.8	
						RPD = 14.13	
S 8 Polychlorinated biphenyls, Total							
1						48.6	
2						42.0	
						RPD = 14.54	

Reagents:

AR_3262_L1_00019	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

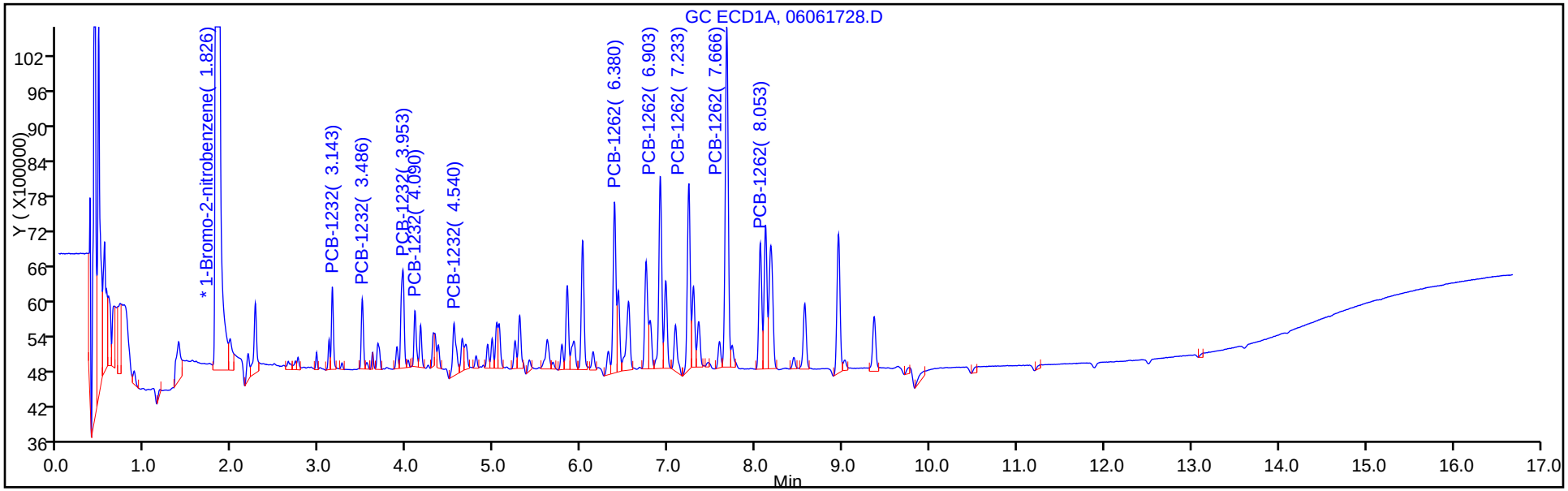
Report Date: 07-Jun-2017 06:53:10 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

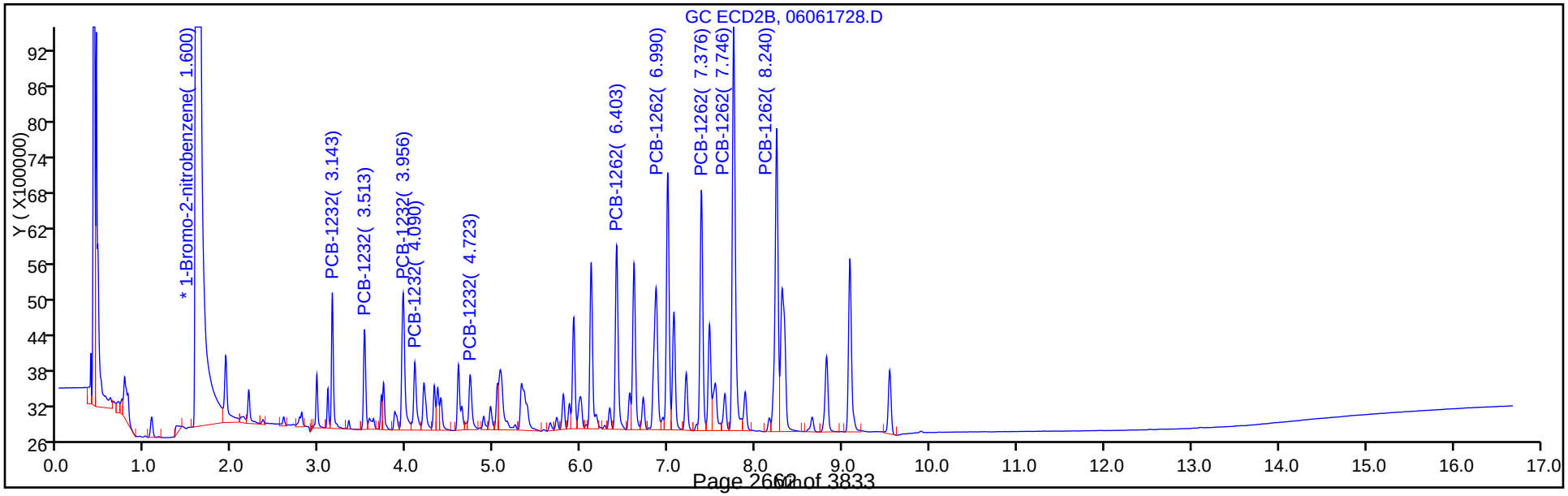
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061728.D

Injection Date:	06-Jun-2017 23:35:00	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL13262			Worklist Smp#:	28
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	28
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 23:56 Calibration End Date: 06/07/2017 02:06 Calibration ID: 29401

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL14268 280-376236/35	06061735.D
Level 2	STDL24268 280-376236/34	06061734.D
Level 3	STDL34268 280-376236/33	06061733.D
Level 4	STDL44268 280-376236/32	06061732.D
Level 5	STDL54268 280-376236/31	06061731.D
Level 6	STDL64268 280-376236/30	06061730.D
Level 7	STDL74268 280-376236/29	06061729.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1242 Peak 1	0.4206 0.2818	0.3722 0.2807	0.3263	0.2932	0.2843	Lin1	4.0999	0.2768							1.0000		0.9900
PCB-1242 Peak 2	0.8413 0.6465	0.7541 0.6520	0.6949	0.6448	0.6395	Lin1	5.0673	0.6395							1.0000		0.9900
PCB-1242 Peak 3	0.3999 0.2699	0.3372 0.2705	0.3051	0.2789	0.2710	Lin1	3.4628	0.2659							1.0000		0.9900
PCB-1242 Peak 4	0.3027 0.2201	0.2733 0.2196	0.2522	0.2220	0.2194	Lin1	2.4793	0.2164							1.0000		0.9900
PCB-1242 Peak 5	0.3020 0.2244	0.2731 0.2274	0.2408	0.2338	0.2285	Lin1	2.0677	0.2240							1.0000		0.9900
PCB-1268 Peak 1	1.8520 1.5143	1.6284 1.5160	1.5904	1.4695	1.5079	Lin1	7.5759	1.4978							1.0000		0.9900
PCB-1268 Peak 2	1.7248 1.3249	1.5509 1.3503	1.4585	1.3036	1.3238	Lin1	10.343	1.3181							1.0000		0.9900
PCB-1268 Peak 3	1.4883 1.1739	1.3575 1.1872	1.2662	1.1616	1.1691	Lin1	8.2872	1.1650							1.0000		0.9900
PCB-1268 Peak 4	0.7362 0.5446	0.6647 0.5474	0.6242	0.5467	0.5464	Lin1	5.6309	0.5384							1.0000		0.9900
PCB-1268 Peak 5	4.5000 3.7506	4.1730 3.7868	3.9394	3.6935	3.7424	Lin1	18.847	3.7299							1.0000		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP1 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 23:56 Calibration End Date: 06/07/2017 02:06 Calibration ID: 29401

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL14268 280-376236/35	06061735.D
Level 2	STDL24268 280-376236/34	06061734.D
Level 3	STDL34268 280-376236/33	06061733.D
Level 4	STDL44268 280-376236/32	06061732.D
Level 5	STDL54268 280-376236/31	06061731.D
Level 6	STDL64268 280-376236/30	06061730.D
Level 7	STDL74268 280-376236/29	06061729.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1242 Peak 1	BNB	Lin1	3674493 70020435	6334637 91708535	11134685	25661290	47551350	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 2	BNB	Lin1	7351035 160614929	12834381 213025667	23715179	56434653	106978681	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 3	BNB	Lin1	3494368 67049695	5738481 88378438	10410653	24410165	45330386	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 4	BNB	Lin1	2645013 54684692	4650896 71750055	8605894	19431100	36710146	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 5	BNB	Lin1	2638273 55742619	4647866 74299071	8218340	20462038	38229137	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 1	BNB	Lin1	16180997 376220426	27715280 495331868	54271619	128607568	252241454	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 2	BNB	Lin1	15069585 329159696	26396914 441196713	49772095	114090191	221446416	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 3	BNB	Lin1	13004037 291651767	23105572 387907316	43210879	101656959	195576665	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 4	BNB	Lin1	6432094 135309757	11312963 178840786	21302708	47849944	91399906	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 5	BNB	Lin1	39317946 931831022	71024384 1237299243	134431811	323246560	626046071	25.0 750	50.0 1000	100	250	500

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061729.D
Lims ID: STDL74268
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 23:56:39 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL74268
Misc. Info.: 280-0059455-029
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:11 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	326738142	1000.0	1000.0	
2	1.600	1.600	0.000	373438498	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.487	3.487	0.000	91708535	1000.0	999.1	
1	3.950	3.951	-0.001	213025667	1000.0	1011.7	
1	4.090	4.091	-0.001	88378438	1000.0	1004.3	
1	5.027	5.027	0.000	71750055	1000.0	1003.1	
1	5.054	5.054	0.000	74299071	1000.0	1005.9	
		Average of Peak Amounts =				1004.8	
2	3.510	3.511	-0.001	111207386	1000.0	975.4	
2	3.950	3.951	-0.001	245465999	1000.0	980.5	
2	4.084	4.087	-0.003	109301278	1000.0	970.7	
2	5.027	5.031	-0.004	83124728	1000.0	986.4	
2	5.074	5.074	0.000	101377377	1000.0	973.2	
		Average of Peak Amounts =				977.3	
						RPD = 2.78	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.114	8.111	0.003	495331868	1000.0	1007.1	
1	8.167	8.164	0.003	441196713	1000.0	1016.6	
1	8.437	8.437	0.000	387907316	1000.0	1012.0	
1	8.947	8.947	0.000	178840786	1000.0	1006.1	
1	9.357	9.357	0.000	1237299243	1000.0	1010.2	
		Average of Peak Amounts =				1010.4	
2	8.237	8.237	0.000	489685565	1000.0	993.1	
2	8.300	8.301	-0.001	472715160	1000.0	990.5	
2	8.647	8.647	0.000	396502502	1000.0	992.9	
2	9.080	9.077	0.003	189860561	1000.0	996.9	
2	9.537	9.537	0.000	1120913687	1000.0	993.7	
		Average of Peak Amounts =				993.4	
						RPD = 1.70	
S 8 Polychlorinated biphenyls, Total							
1						2015.2	
2						1970.7	
						RPD = 2.23	

Reagents:

AR_4268_L7_00013	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

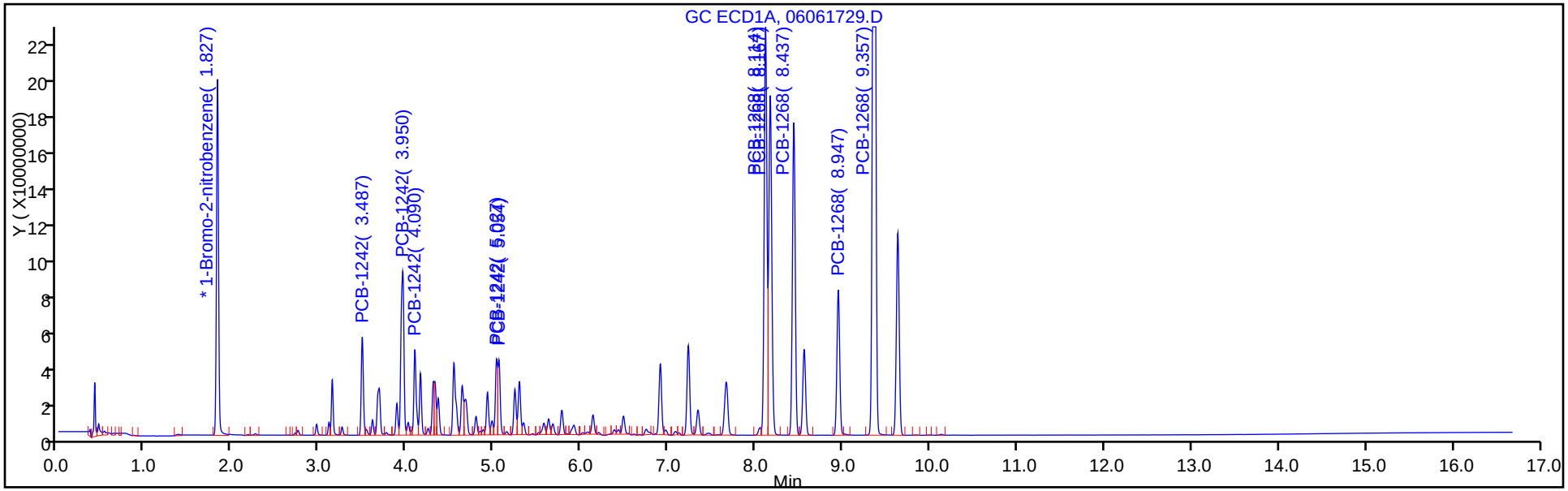
Report Date: 07-Jun-2017 06:53:11 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

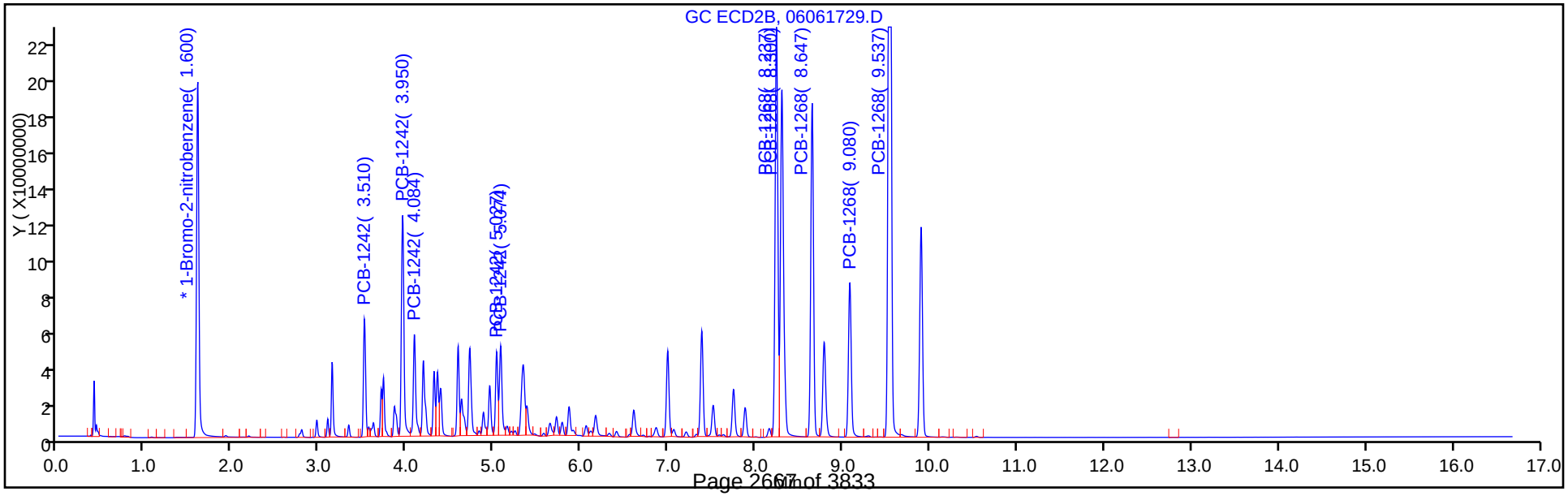
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061729.D

Injection Date:	06-Jun-2017 23:56:39	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL74268			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061730.D
Lims ID: STDL64268
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 07-Jun-2017 00:18:17 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL64268
Misc. Info.: 280-0059455-030
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:13 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	331265536	1000.0	1000.0	
2	1.600	1.600	0.000	374274762	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.487	3.487	0.000	70020435	750.0	748.7	
1	3.950	3.951	-0.001	160614929	750.0	750.3	
1	4.090	4.091	-0.001	67049695	750.0	748.2	
1	5.027	5.027	0.000	54684692	750.0	751.2	
1	5.053	5.054	-0.001	55742619	750.0	742.0	
		Average of Peak Amounts =				748.1	
2	3.510	3.511	-0.001	87406129	750.0	760.2	
2	3.950	3.951	-0.001	193160522	750.0	766.4	
2	4.084	4.087	-0.003	88198812	750.0	777.7	
2	5.027	5.031	-0.004	66046116	750.0	779.8	
2	5.073	5.074	-0.001	82175931	750.0	782.5	
		Average of Peak Amounts =				773.3	
						RPD = 3.32	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.113	8.111	0.002	376220426	750.0	753.2	
1	8.163	8.164	-0.001	329159696	750.0	746.0	
1	8.437	8.437	0.000	291651767	750.0	748.6	
1	8.947	8.947	0.000	135309757	750.0	748.1	
1	9.357	9.357	0.000	931831022	750.0	749.1	
		Average of Peak Amounts =				749.0	
2	8.237	8.237	0.000	375862624	750.0	756.9	
2	8.300	8.301	-0.001	364422945	750.0	757.6	
2	8.647	8.647	0.000	304637424	750.0	757.3	
2	9.077	9.077	0.000	145734267	750.0	759.2	
2	9.537	9.537	0.000	865114672	750.0	762.6	
		Average of Peak Amounts =				758.7	
						RPD = 1.29	
S 8 Polychlorinated biphenyls, Total							
1						1497.1	
2						1532.0	
						RPD = 2.31	

Reagents:

AR_4268_L6_00015	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

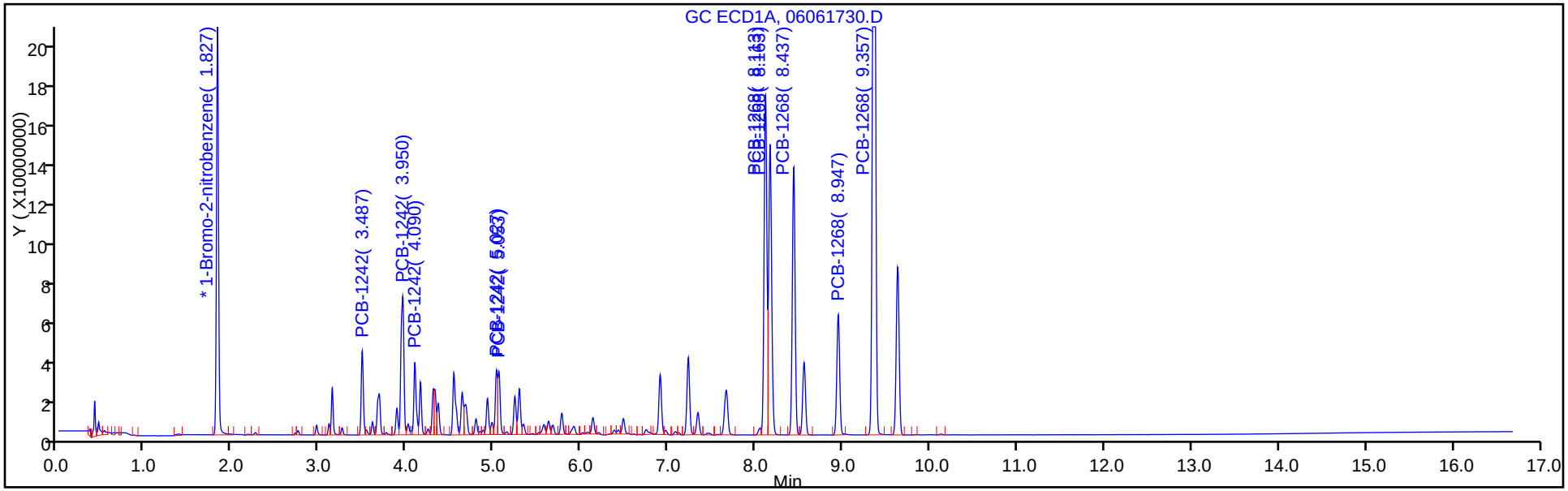
Report Date: 07-Jun-2017 06:53:13 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

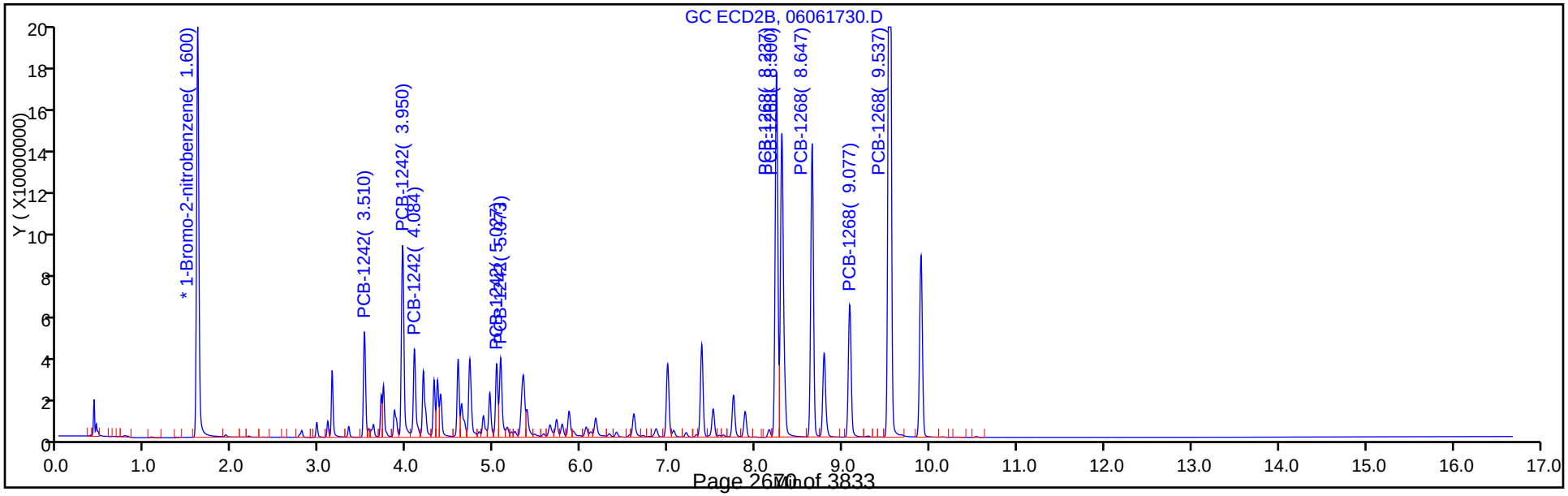
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061730.D

Injection Date:	07-Jun-2017 00:18:17	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL64268			Worklist Smp#:	30
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061731.D
Lims ID: STDL54268
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 07-Jun-2017 00:39:57 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL54268
Misc. Info.: 280-0059455-031
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:15 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:39:12

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	334569204	1000.0	1000.0	
2	1.601	1.601	0.000	393108124	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							M
1	3.487	3.487	0.000	47551350	500.0	498.6	
1	3.951	3.951	0.000	106978681	500.0	492.1	
1	4.091	4.091	0.000	45330386	500.0	496.6	
1	5.027	5.027	0.000	36710146	500.0	495.5	
1	5.054	5.054	0.000	38229137	500.0	500.9	
		Average of Peak Amounts =				496.7	
2	3.511	3.511	0.000	60026238	500.0	489.4	M
2	3.951	3.951	0.000	130260242	500.0	486.2	M
2	4.087	4.087	0.000	58486099	500.0	483.8	M
2	5.031	5.031	0.000	43289629	500.0	482.6	M
2	5.074	5.074	0.000	54294666	500.0	483.4	M
		Average of Peak Amounts =				485.1	
						RPD = 2.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.111	8.111	0.000	252241454	500.0	498.3	
1	8.164	8.164	0.000	221446416	500.0	494.3	
1	8.437	8.437	0.000	195576665	500.0	494.7	
1	8.947	8.947	0.000	91399906	500.0	496.9	
1	9.357	9.357	0.000	626046071	500.0	496.6	
		Average of Peak Amounts =				496.2	
2	8.237	8.237	0.000	256821960	500.0	486.9	
2	8.301	8.301	0.000	246814466	500.0	481.9	
2	8.647	8.647	0.000	207312245	500.0	484.9	
2	9.077	9.077	0.000	97882118	500.0	478.9	
2	9.537	9.537	0.000	594839483	500.0	495.2	
		Average of Peak Amounts =				485.6	
						RPD = 2.16	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_4268_L5_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

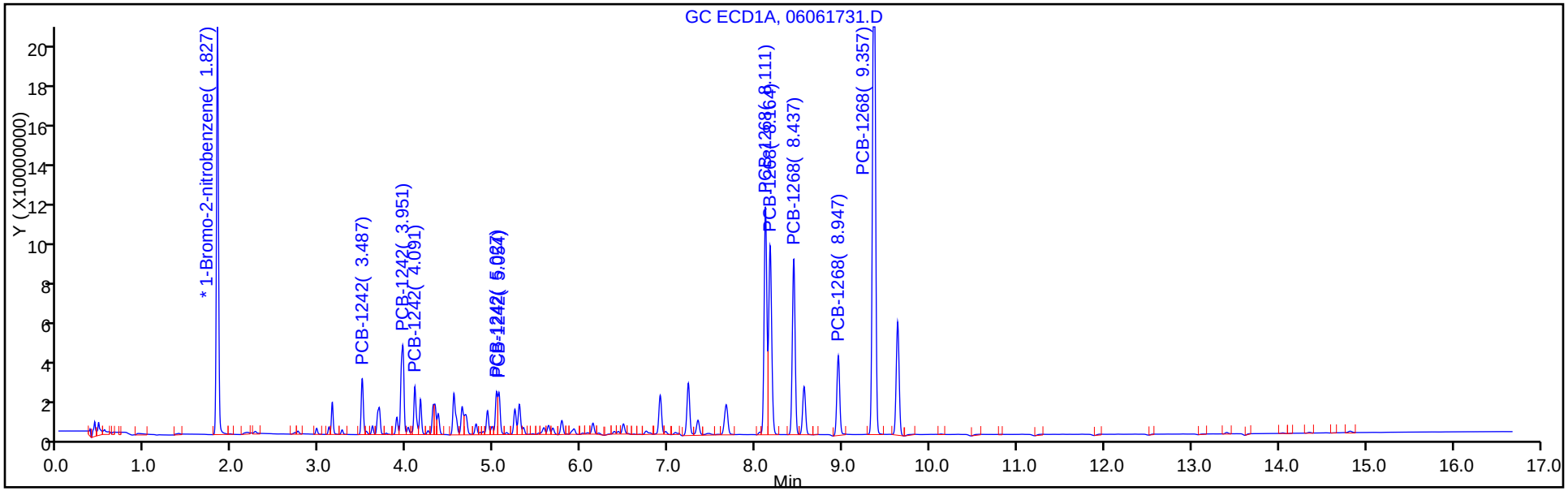
Report Date: 07-Jun-2017 06:53:15 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

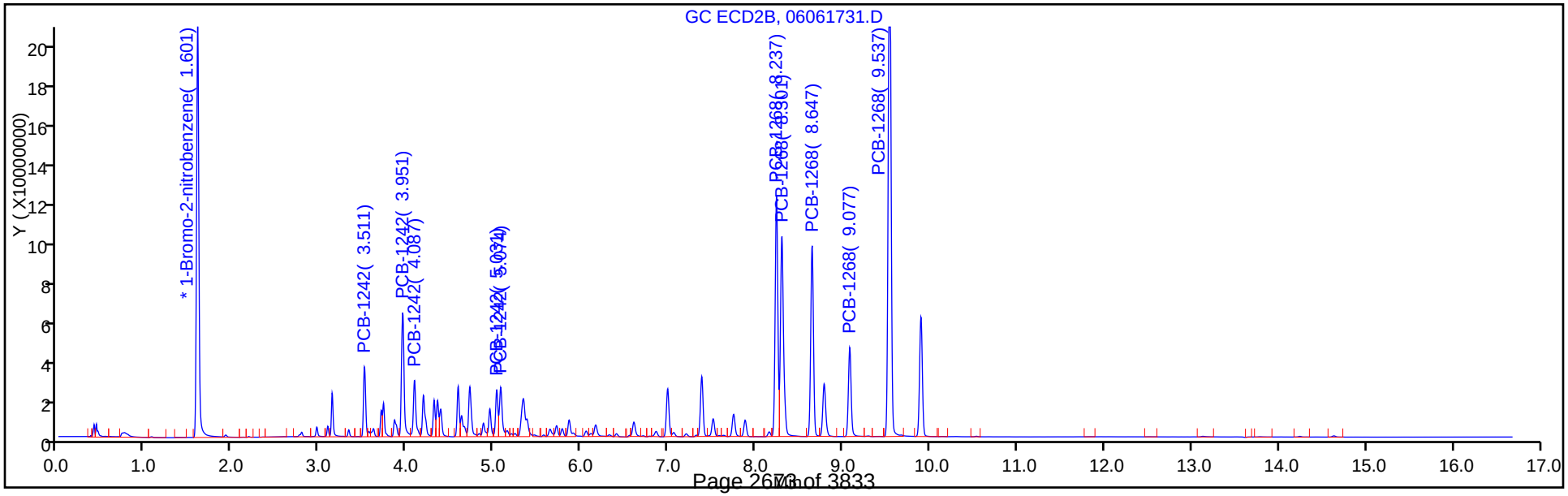
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061731.D

Injection Date:	07-Jun-2017 00:39:57	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL54268			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061732.D
Lims ID: STDL44268
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 07-Jun-2017 01:01:38 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL44268
Misc. Info.: 280-0059455-032
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:17 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.827	0.001	350069398	1000.0	1000.0	
2	1.598	1.601	-0.003	392158539	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.488	3.487	0.001	25661290	250.0	250.0	
1	3.952	3.951	0.001	56434653	250.0	244.2	
1	4.092	4.091	0.001	24410165	250.0	249.2	
1	5.028	5.027	0.001	19431100	250.0	245.0	
1	5.055	5.054	0.001	20462038	250.0	251.7	
		Average of Peak Amounts =				248.0	
2	3.512	3.511	0.001	33868899	250.0	267.2	
2	3.952	3.951	0.001	72054410	250.0	262.4	
2	4.085	4.087	-0.002	32802033	250.0	263.4	
2	5.032	5.031	0.001	22808356	250.0	249.8	
2	5.078	5.074	0.004	30128035	250.0	258.2	
		Average of Peak Amounts =				260.2	
						RPD = 4.79	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.112	8.111	0.001	128607568	250.0	240.2	
1	8.165	8.164	0.001	114090191	250.0	239.4	
1	8.438	8.437	0.001	101656959	250.0	242.2	
1	8.948	8.947	0.001	47849944	250.0	243.4	
1	9.358	9.357	0.001	323246560	250.0	242.5	
		Average of Peak Amounts =				241.5	
2	8.238	8.237	0.001	139301330	250.0	257.6	
2	8.298	8.301	-0.003	138814681	250.0	263.6	
2	8.645	8.647	-0.002	113703825	250.0	259.3	
2	9.078	9.077	0.001	54263572	250.0	258.1	
2	9.535	9.537	-0.002	297236332	250.0	242.2	
		Average of Peak Amounts =				256.1	
						RPD = 5.87	
S 8 Polychlorinated biphenyls, Total							
1						489.6	
2						516.3	
						RPD = 5.32	

Reagents:

AR_4268_L4_00020	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

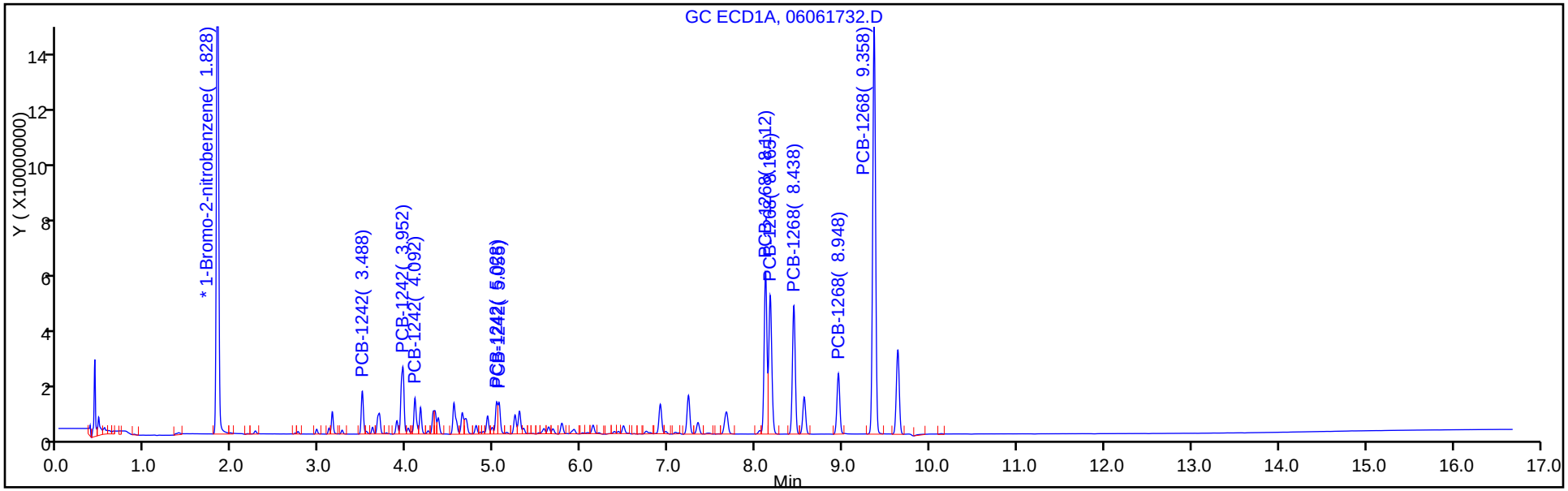
Report Date: 07-Jun-2017 06:53:18 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

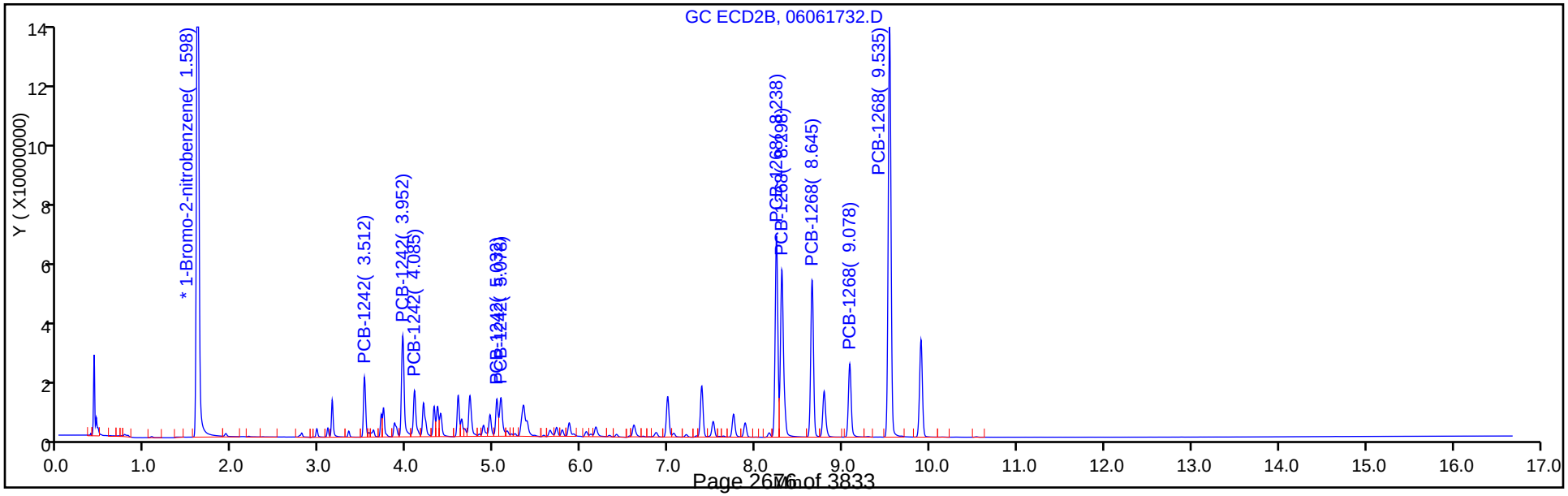
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061732.D

Injection Date:	07-Jun-2017 01:01:38	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL44268			Worklist Smp#:	32
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061733.D
Lims ID: STDL34268
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 07-Jun-2017 01:23:18 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL34268
Misc. Info.: 280-0059455-033
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:19 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.827	-0.001	341253589	1000.0	1000.0	
2	1.599	1.601	-0.002	385917675	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.486	3.487	-0.001	11134685	100.0	103.1	
1	3.952	3.951	0.001	23715179	100.0	100.8	
1	4.089	4.091	-0.002	10410653	100.0	101.7	
1	5.029	5.027	0.002	8605894	100.0	105.1	
1	5.052	5.054	-0.002	8218340	100.0	98.3	
		Average of Peak Amounts =				101.8	
2	3.512	3.511	0.001	15218261	100.0	110.0	
2	3.952	3.951	0.001	30927611	100.0	105.3	
2	4.086	4.087	-0.001	14198041	100.0	104.8	
2	5.032	5.031	0.001	9326503	100.0	97.5	
2	5.079	5.074	0.005	12794721	100.0	97.8	
		Average of Peak Amounts =				103.1	
						RPD = 1.27	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.112	8.111	0.001	54271619	100.0	101.1	
1	8.166	8.164	0.002	49772095	100.0	102.8	
1	8.436	8.437	-0.001	43210879	100.0	101.6	
1	8.949	8.947	0.002	21302708	100.0	105.5	
1	9.359	9.357	0.002	134431811	100.0	100.6	
		Average of Peak Amounts =				102.3	
2	8.239	8.237	0.002	61258487	100.0	106.4	
2	8.299	8.301	-0.002	61273778	100.0	108.0	
2	8.646	8.647	-0.001	49902329	100.0	106.6	
2	9.079	9.077	0.002	24173023	100.0	106.9	
2	9.536	9.537	-0.001	142487319	100.0	112.0	
		Average of Peak Amounts =				108.0	
						RPD = 5.39	
S 8 Polychlorinated biphenyls, Total							
1						204.1	
2						211.1	
						RPD = 3.36	

Reagents:

AR_4268_L3_00017	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

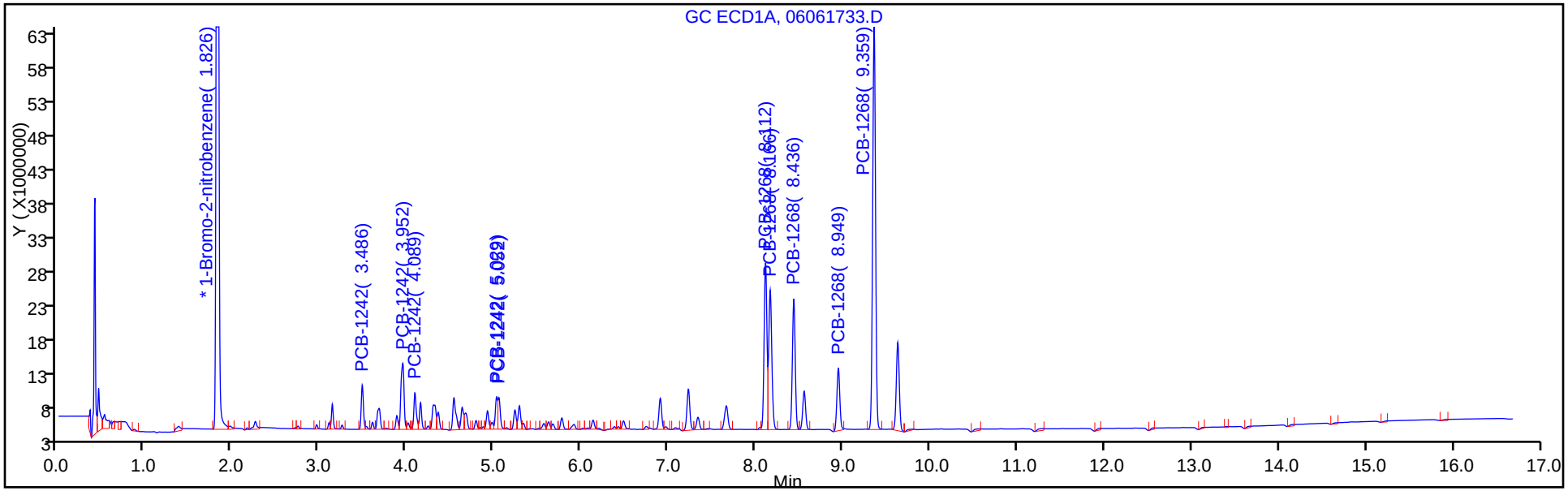
Report Date: 07-Jun-2017 06:53:19 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

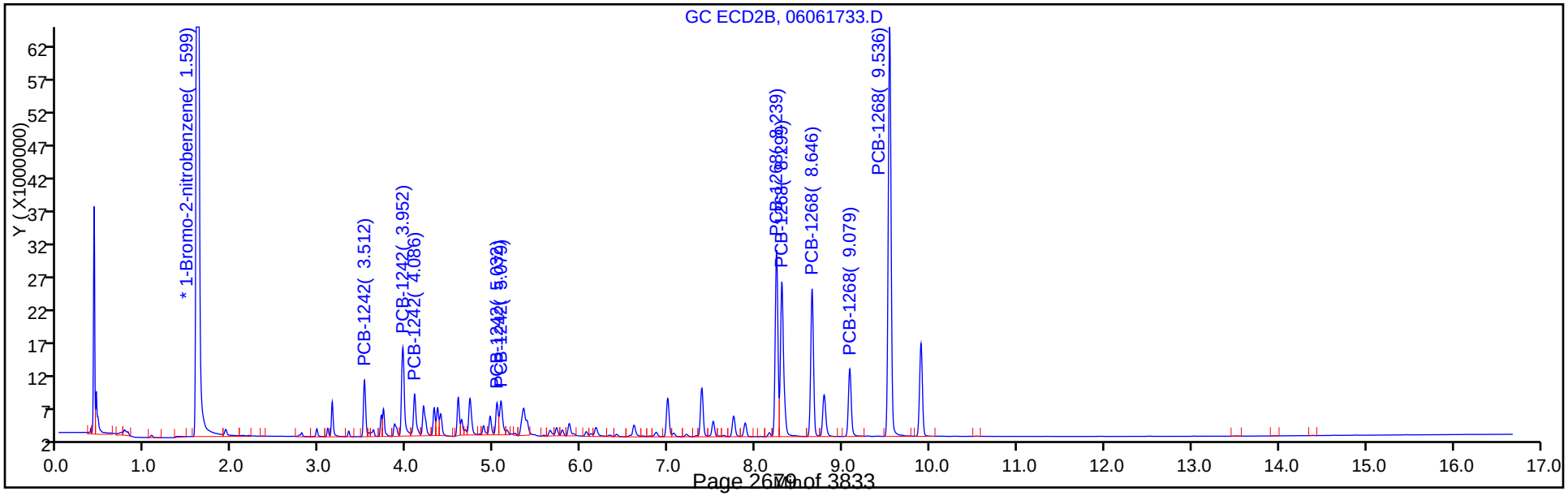
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061733.D

Injection Date:	07-Jun-2017 01:23:18	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL34268			Worklist Smp#:	33
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061734.D
Lims ID: STDL24268
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 07-Jun-2017 01:44:57 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL24268
Misc. Info.: 280-0059455-034
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:21 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.827	-0.001	340401659	1000.0	1000.0	
2	1.599	1.601	-0.002	381213212	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.486	3.487	-0.001	6334637	50.0	52.4	
1	3.953	3.951	0.002	12834381	50.0	51.0	
1	4.089	4.091	-0.002	5738481	50.0	50.4	
1	5.029	5.027	0.002	4650896	50.0	51.7	
1	5.053	5.054	-0.001	4647866	50.0	51.7	
		Average of Peak Amounts =				51.4	
2	3.513	3.511	0.002	8487710	50.0	52.5	
2	3.953	3.951	0.002	17236325	50.0	52.3	
2	4.089	4.087	0.002	8198701	50.0	53.1	
2	5.033	5.031	0.002	5702897	50.0	56.2	
2	5.079	5.074	0.005	8665327	50.0	59.5	
		Average of Peak Amounts =				54.7	
						RPD = 6.18	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.113	8.111	0.002	27715280	50.0	49.3	
1	8.166	8.164	0.002	26396914	50.0	51.0	
1	8.436	8.437	-0.001	23105572	50.0	51.2	
1	8.946	8.947	-0.001	11312963	50.0	51.3	
1	9.356	9.357	-0.001	71024384	50.0	50.9	
		Average of Peak Amounts =				50.7	
2	8.239	8.237	0.002	33504018	50.0	51.9	
2	8.299	8.301	-0.002	33651062	50.0	51.8	
2	8.646	8.647	-0.001	27314787	50.0	51.8	
2	9.079	9.077	0.002	13682052	50.0	53.5	
2	9.536	9.537	-0.001	62238620	50.0	43.0	
		Average of Peak Amounts =				50.4	
						RPD = 0.62	
S 8 Polychlorinated biphenyls, Total							
1						102.2	
2						105.1	
						RPD = 2.86	

Reagents:

AR_4268_L2_00017	Amount Added: 1.00	Units: mL		
BNB IS_00009	Amount Added: 1.00	Units: mL	Run Reagent	

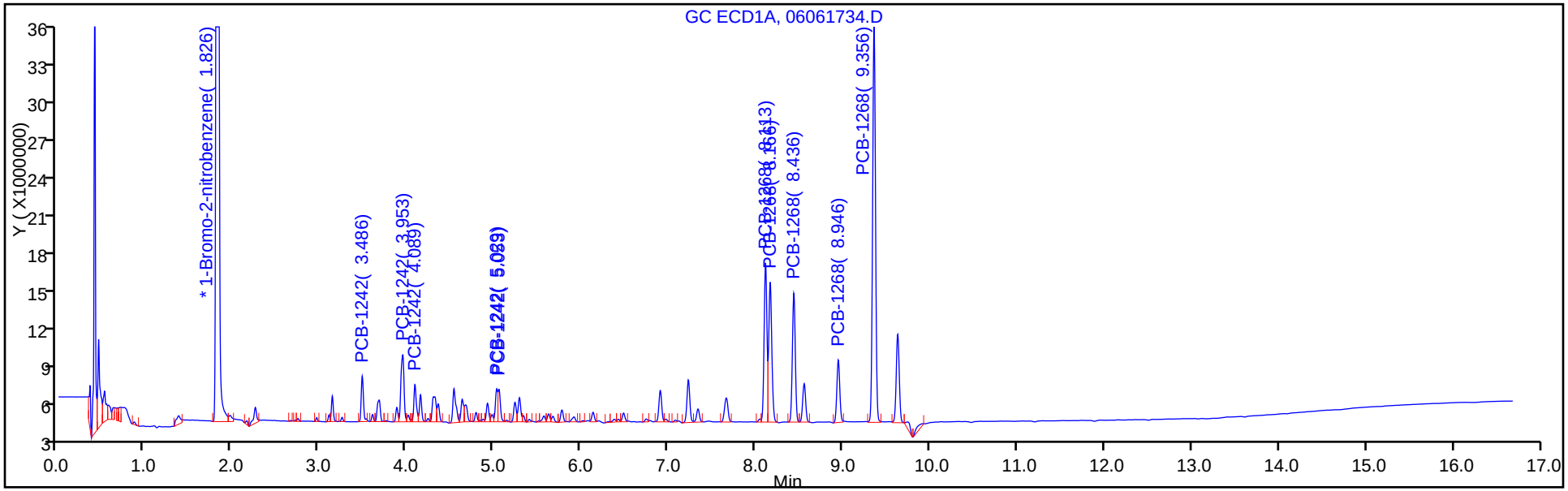
Report Date: 07-Jun-2017 06:53:21 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

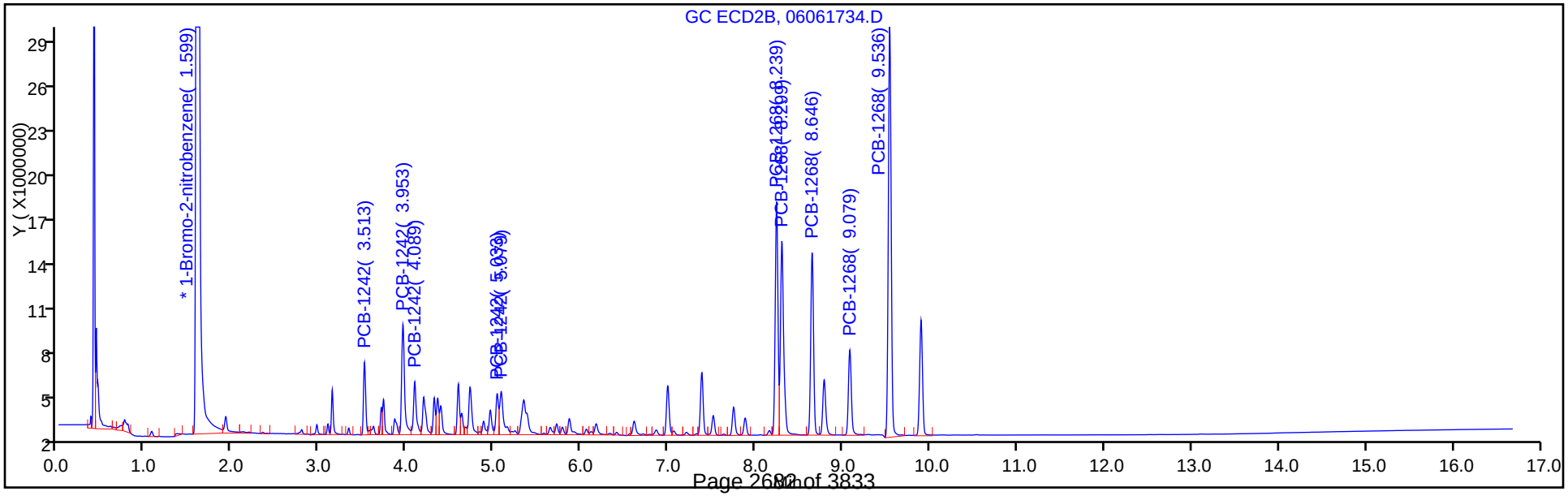
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061734.D

Injection Date:	07-Jun-2017 01:44:57	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL24268			Worklist Smp#:	34
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D
Lims ID: STDL14268
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 07-Jun-2017 02:06:36 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL14268
Misc. Info.: 280-0059455-035
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:47:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.827	-0.001	349490165	1000.0	1000.0	
2	1.599	1.601	-0.002	389549671	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.486	3.487	-0.001	3674493	25.0	23.2	
1	3.952	3.951	0.001	7351035	25.0	25.0	
1	4.089	4.091	-0.002	3494368	25.0	24.6	
1	5.029	5.027	0.002	2645013	25.0	23.5	
1	5.056	5.054	0.002	2638273	25.0	24.5	
		Average of Peak Amounts =				24.1	
2	3.512	3.511	0.001	4937680	25.0	20.4	
2	3.956	3.951	0.005	9815527	25.0	21.9	
2	4.089	4.087	0.002	4737116	25.0	21.5	
2	5.036	5.031	0.005	2914022	25.0	22.7	
2	5.082	5.074	0.008	4712376	25.0	20.4	
		Average of Peak Amounts =				21.4	
						RPD = 12.08	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.112	8.111	0.001	16180997	25.0	25.9	
1	8.166	8.164	0.002	15069585	25.0	24.9	
1	8.436	8.437	-0.001	13004037	25.0	24.8	
1	8.946	8.947	-0.001	6432094	25.0	23.7	
1	9.359	9.357	0.002	39317946	25.0	25.1	
		Average of Peak Amounts =				24.9	
2	8.239	8.237	0.002	19225655	25.0	22.3	
2	8.302	8.301	0.001	19663896	25.0	21.6	
2	8.646	8.647	-0.001	15779970	25.0	22.2	
2	9.079	9.077	0.002	7754270	25.0	21.6	
2	9.539	9.537	0.002	44047982	25.0	26.2	
		Average of Peak Amounts =				22.8	
						RPD = 8.78	
S 8 Polychlorinated biphenyls, Total							
1						49.0	
2						44.2	
						RPD = 10.39	

Reagents:

AR_4268_L1_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

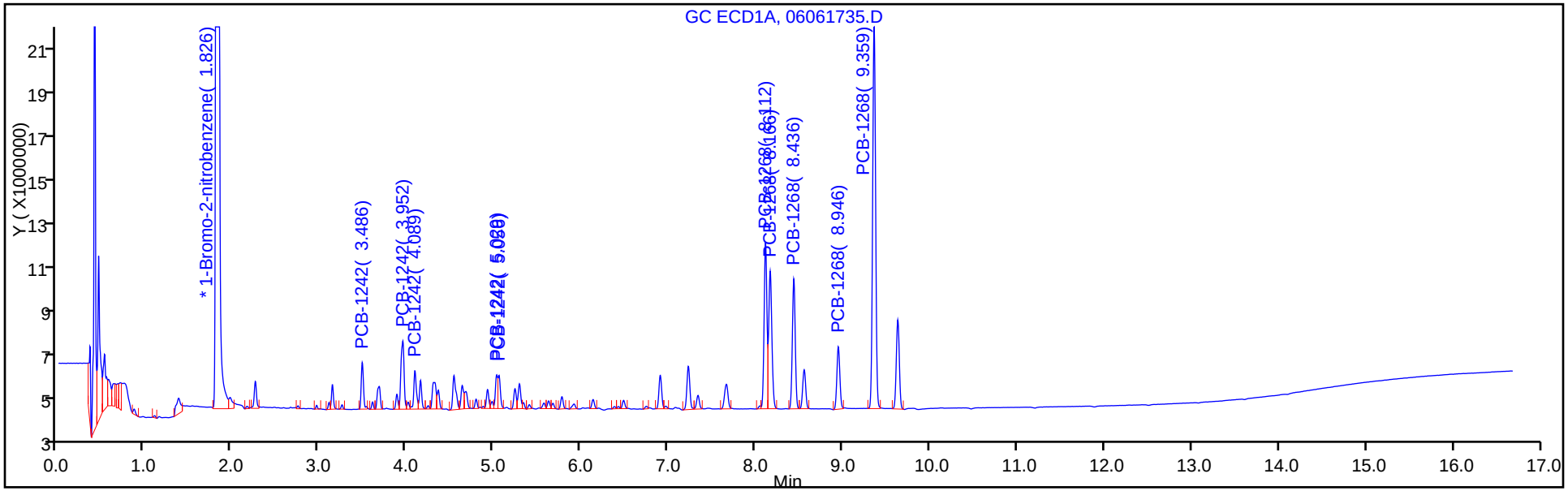
Report Date: 07-Jun-2017 06:53:23 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

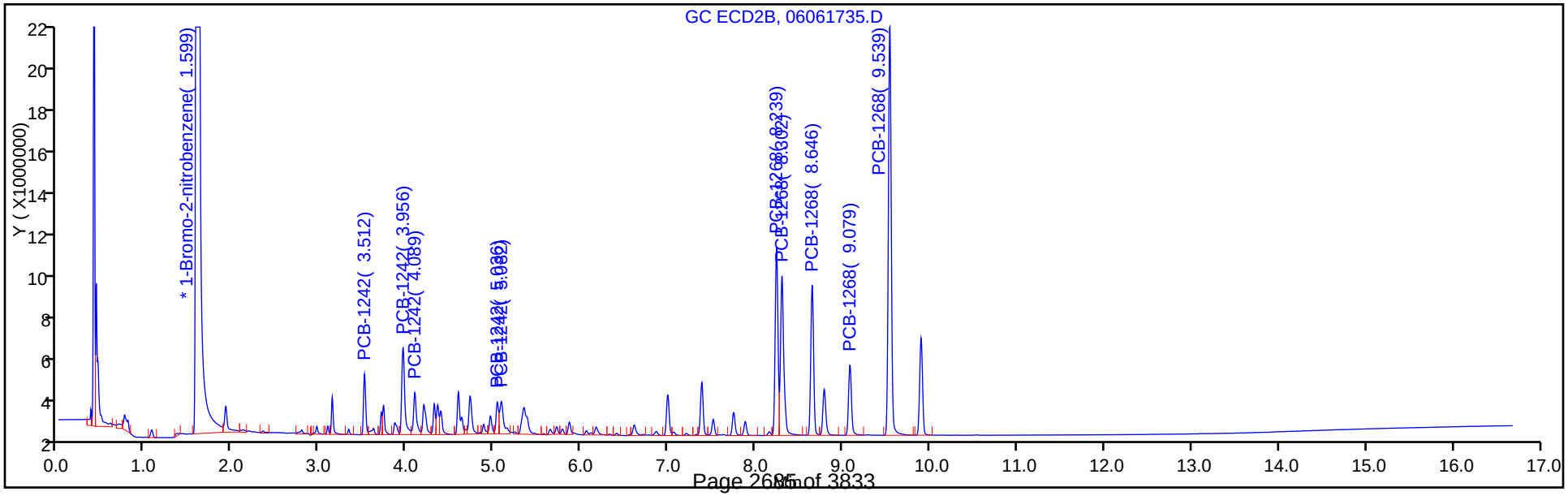
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Injection Date:	07-Jun-2017 02:06:36	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL14268			Worklist Smp#:	35
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 23:56 Calibration End Date: 06/07/2017 02:06 Calibration ID: 29402

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL14268 280-376236/35	06061735.D
Level 2	STDL24268 280-376236/34	06061734.D
Level 3	STDL34268 280-376236/33	06061733.D
Level 4	STDL44268 280-376236/32	06061732.D
Level 5	STDL54268 280-376236/31	06061731.D
Level 6	STDL64268 280-376236/30	06061730.D
Level 7	STDL74268 280-376236/29	06061729.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
PCB-1242 Peak 1	0.5070 0.3114	0.4453 0.2978	0.3943	0.3455	0.3054	Lin1	6.5997	0.2985							0.9980		0.9900
PCB-1242 Peak 2	1.0079 0.6881	0.9043 0.6573	0.8014	0.7350	0.6627	Lin1	10.734	0.6594							0.9990		0.9900
PCB-1242 Peak 3	0.4864 0.3142	0.4301 0.2927	0.3679	0.3346	0.2976	Lin1	5.8039	0.2955							0.9980		0.9900
PCB-1242 Peak 4	0.2992 0.2353	0.2992 0.2226	0.2417	0.2326	0.2202	Lin1	2.4038	0.2232							0.9990		0.9900
PCB-1242 Peak 5	0.4839 0.2927	0.4546 0.2715	0.3315	0.3073	0.2762	Lin1	6.5398	0.2722							0.9970		0.9900
PCB-1268 Peak 1	1.9741 1.3390	1.7578 1.3113	1.5873	1.4209	1.3066	Lin1	20.395	1.2999							0.9990		0.9900
PCB-1268 Peak 2	2.0191 1.2982	1.7655 1.2658	1.5877	1.4159	1.2557	Lin1	23.323	1.2544							0.9990		0.9900
PCB-1268 Peak 3	1.6203 1.0853	1.4330 1.0618	1.2931	1.1598	1.0547	Lin1	17.145	1.0521							0.9990		0.9900
PCB-1268 Peak 4	0.7962 0.5192	0.7178 0.5084	0.6264	0.5535	0.4980	Lin1	9.1065	0.5009							0.9990		0.9900
PCB-1268 Peak 5	4.5230 3.0819	3.2653 3.0016	3.6922	3.0318	3.0263	Lin1	34.764	2.9856							0.9990		0.9900

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
PCBS BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Denver Job No.: 280-97928-1 Analy Batch No.: 376236

SDG No.:

Instrument ID: SGC_P3 GC Column: CLP2 ID: 0.32(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/06/2017 23:56 Calibration End Date: 06/07/2017 02:06 Calibration ID: 29402

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDL14268 280-376236/35	06061735.D
Level 2	STDL24268 280-376236/34	06061734.D
Level 3	STDL34268 280-376236/33	06061733.D
Level 4	STDL44268 280-376236/32	06061732.D
Level 5	STDL54268 280-376236/31	06061731.D
Level 6	STDL64268 280-376236/30	06061730.D
Level 7	STDL74268 280-376236/29	06061729.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
PCB-1242 Peak 1	BNB	Lin1	4937680 87406129	8487710 111207386	15218261	33868899	60026238	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 2	BNB	Lin1	9815527 193160522	17236325 245465999	30927611	72054410	130260242	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 3	BNB	Lin1	4737116 88198812	8198701 109301278	14198041	32802033	58486099	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 4	BNB	Lin1	2914022 66046116	5702897 83124728	9326503	22808356	43289629	25.0 750	50.0 1000	100	250	500
PCB-1242 Peak 5	BNB	Lin1	4712376 82175931	8665327 101377377	12794721	30128035	54294666	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 1	BNB	Lin1	19225655 375862624	33504018 489685565	61258487	139301330	256821960	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 2	BNB	Lin1	19663896 364422945	33651062 472715160	61273778	138814681	246814466	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 3	BNB	Lin1	15779970 304637424	27314787 396502502	49902329	113703825	207312245	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 4	BNB	Lin1	7754270 145734267	13682052 189860561	24173023	54263572	97882118	25.0 750	50.0 1000	100	250	500
PCB-1268 Peak 5	BNB	Lin1	44047982 865114672	62238620 1120913687	142487319	297236332	594839483	25.0 750	50.0 1000	100	250	500

Curve Type Legend:
Lin1 = Linear 1/conc ISTD

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061729.D
Lims ID: STDL74268
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 06-Jun-2017 23:56:39 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL74268
Misc. Info.: 280-0059455-029
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:11 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	326738142	1000.0	1000.0	
2	1.600	1.600	0.000	373438498	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.487	3.487	0.000	91708535	1000.0	999.1	
1	3.950	3.951	-0.001	213025667	1000.0	1011.7	
1	4.090	4.091	-0.001	88378438	1000.0	1004.3	
1	5.027	5.027	0.000	71750055	1000.0	1003.1	
1	5.054	5.054	0.000	74299071	1000.0	1005.9	
		Average of Peak Amounts =				1004.8	
2	3.510	3.511	-0.001	111207386	1000.0	975.4	
2	3.950	3.951	-0.001	245465999	1000.0	980.5	
2	4.084	4.087	-0.003	109301278	1000.0	970.7	
2	5.027	5.031	-0.004	83124728	1000.0	986.4	
2	5.074	5.074	0.000	101377377	1000.0	973.2	
		Average of Peak Amounts =				977.3	
						RPD = 2.78	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.114	8.111	0.003	495331868	1000.0	1007.1	
1	8.167	8.164	0.003	441196713	1000.0	1016.6	
1	8.437	8.437	0.000	387907316	1000.0	1012.0	
1	8.947	8.947	0.000	178840786	1000.0	1006.1	
1	9.357	9.357	0.000	1237299243	1000.0	1010.2	
		Average of Peak Amounts =				1010.4	
2	8.237	8.237	0.000	489685565	1000.0	993.1	
2	8.300	8.301	-0.001	472715160	1000.0	990.5	
2	8.647	8.647	0.000	396502502	1000.0	992.9	
2	9.080	9.077	0.003	189860561	1000.0	996.9	
2	9.537	9.537	0.000	1120913687	1000.0	993.7	
		Average of Peak Amounts =				993.4	
						RPD = 1.70	
S 8 Polychlorinated biphenyls, Total							
1						2015.2	
2						1970.7	
						RPD = 2.23	

Reagents:

AR_4268_L7_00013	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

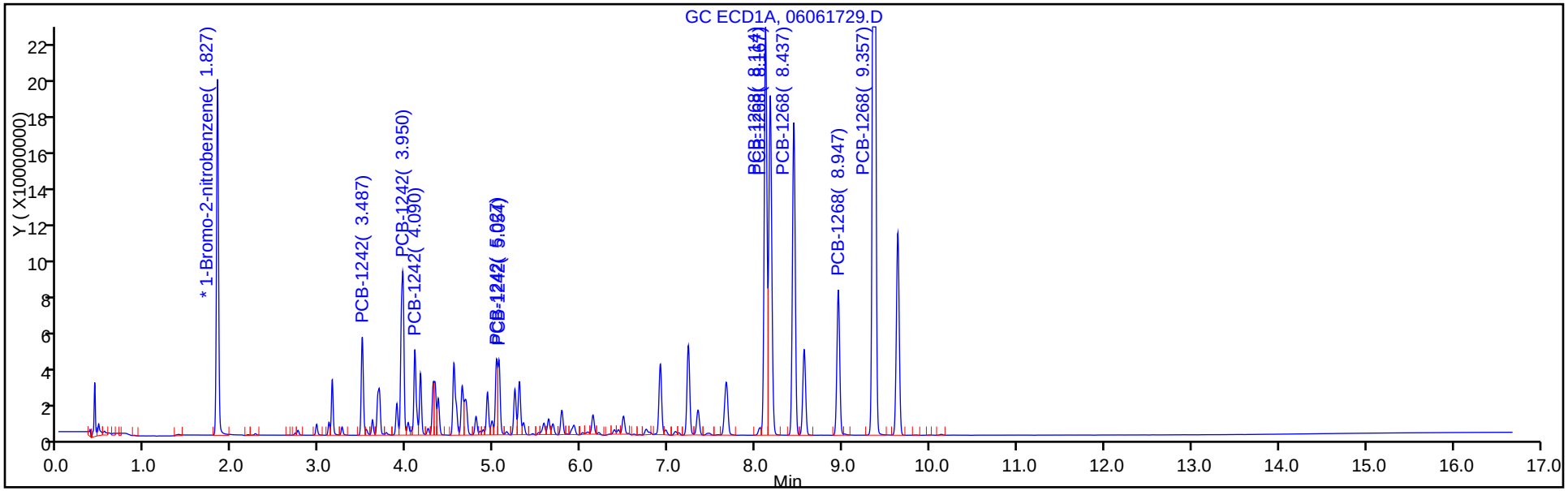
Report Date: 07-Jun-2017 06:53:12 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

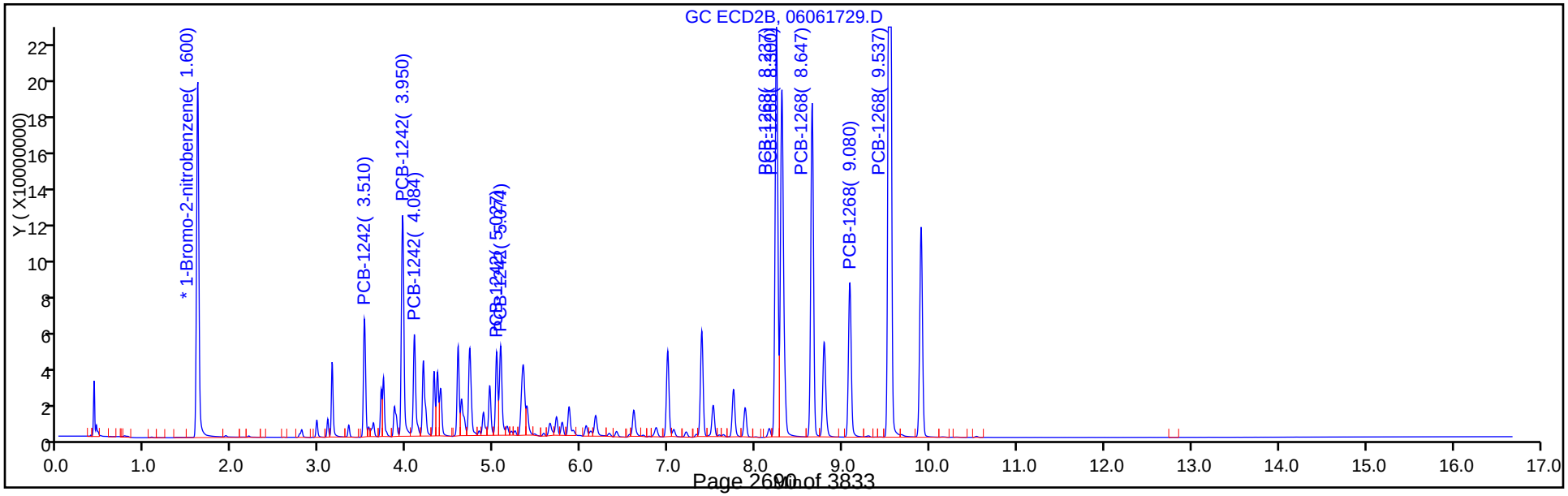
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061729.D

Injection Date:	06-Jun-2017 23:56:39	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL74268			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061730.D
Lims ID: STDL64268
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 07-Jun-2017 00:18:17 ALS Bottle#: 30 Worklist Smp#: 30
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL64268
Misc. Info.: 280-0059455-030
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:13 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	331265536	1000.0	1000.0	
2	1.600	1.600	0.000	374274762	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.487	3.487	0.000	70020435	750.0	748.7	
1	3.950	3.951	-0.001	160614929	750.0	750.3	
1	4.090	4.091	-0.001	67049695	750.0	748.2	
1	5.027	5.027	0.000	54684692	750.0	751.2	
1	5.053	5.054	-0.001	55742619	750.0	742.0	
		Average of Peak Amounts =				748.1	
2	3.510	3.511	-0.001	87406129	750.0	760.2	
2	3.950	3.951	-0.001	193160522	750.0	766.4	
2	4.084	4.087	-0.003	88198812	750.0	777.7	
2	5.027	5.031	-0.004	66046116	750.0	779.8	
2	5.073	5.074	-0.001	82175931	750.0	782.5	
		Average of Peak Amounts =				773.3	
						RPD = 3.32	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.113	8.111	0.002	376220426	750.0	753.2	
1	8.163	8.164	-0.001	329159696	750.0	746.0	
1	8.437	8.437	0.000	291651767	750.0	748.6	
1	8.947	8.947	0.000	135309757	750.0	748.1	
1	9.357	9.357	0.000	931831022	750.0	749.1	
		Average of Peak Amounts =				749.0	
2	8.237	8.237	0.000	375862624	750.0	756.9	
2	8.300	8.301	-0.001	364422945	750.0	757.6	
2	8.647	8.647	0.000	304637424	750.0	757.3	
2	9.077	9.077	0.000	145734267	750.0	759.2	
2	9.537	9.537	0.000	865114672	750.0	762.6	
		Average of Peak Amounts =				758.7	
						RPD = 1.29	
S 8 Polychlorinated biphenyls, Total							
1						1497.1	
2						1532.0	
						RPD = 2.31	

Reagents:

AR_4268_L6_00015	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

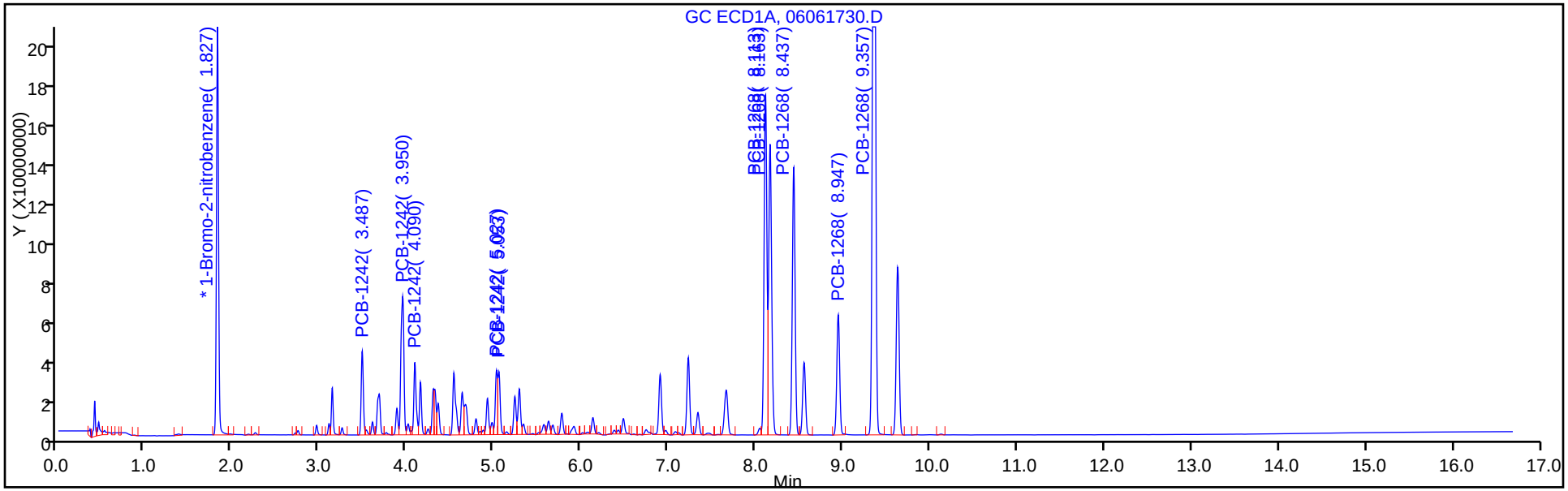
Report Date: 07-Jun-2017 06:53:14 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

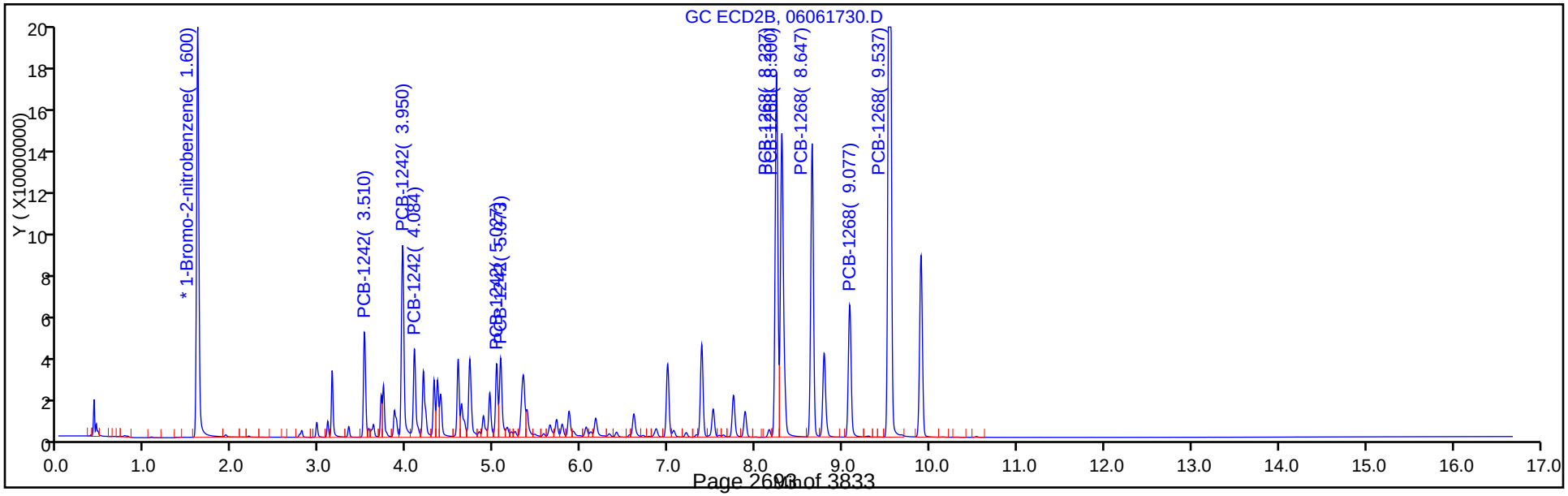
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061730.D

Injection Date:	07-Jun-2017 00:18:17	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL64268			Worklist Smp#:	30
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	30
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061731.D
Lims ID: STDL54268
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 07-Jun-2017 00:39:57 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL54268
Misc. Info.: 280-0059455-031
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:15 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:39:12

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	334569204	1000.0	1000.0	
2	1.601	1.601	0.000	393108124	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							M
1	3.487	3.487	0.000	47551350	500.0	498.6	
1	3.951	3.951	0.000	106978681	500.0	492.1	
1	4.091	4.091	0.000	45330386	500.0	496.6	
1	5.027	5.027	0.000	36710146	500.0	495.5	
1	5.054	5.054	0.000	38229137	500.0	500.9	
		Average of Peak Amounts =				496.7	
2	3.511	3.511	0.000	60026238	500.0	489.4	M
2	3.951	3.951	0.000	130260242	500.0	486.2	M
2	4.087	4.087	0.000	58486099	500.0	483.8	M
2	5.031	5.031	0.000	43289629	500.0	482.6	M
2	5.074	5.074	0.000	54294666	500.0	483.4	M
		Average of Peak Amounts =				485.1	
						RPD = 2.38	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.111	8.111	0.000	252241454	500.0	498.3	
1	8.164	8.164	0.000	221446416	500.0	494.3	
1	8.437	8.437	0.000	195576665	500.0	494.7	
1	8.947	8.947	0.000	91399906	500.0	496.9	
1	9.357	9.357	0.000	626046071	500.0	496.6	
		Average of Peak Amounts =				496.2	
2	8.237	8.237	0.000	256821960	500.0	486.9	
2	8.301	8.301	0.000	246814466	500.0	481.9	
2	8.647	8.647	0.000	207312245	500.0	484.9	
2	9.077	9.077	0.000	97882118	500.0	478.9	
2	9.537	9.537	0.000	594839483	500.0	495.2	
		Average of Peak Amounts =				485.6	
						RPD = 2.16	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_4268_L5_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

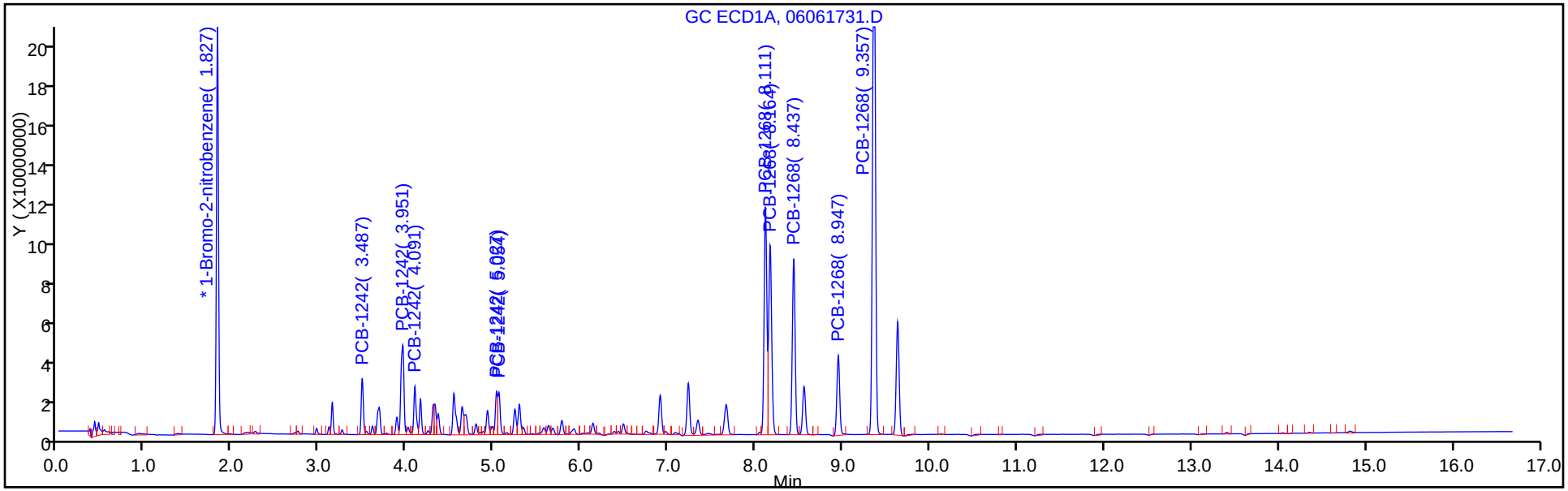
Report Date: 07-Jun-2017 06:53:16 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

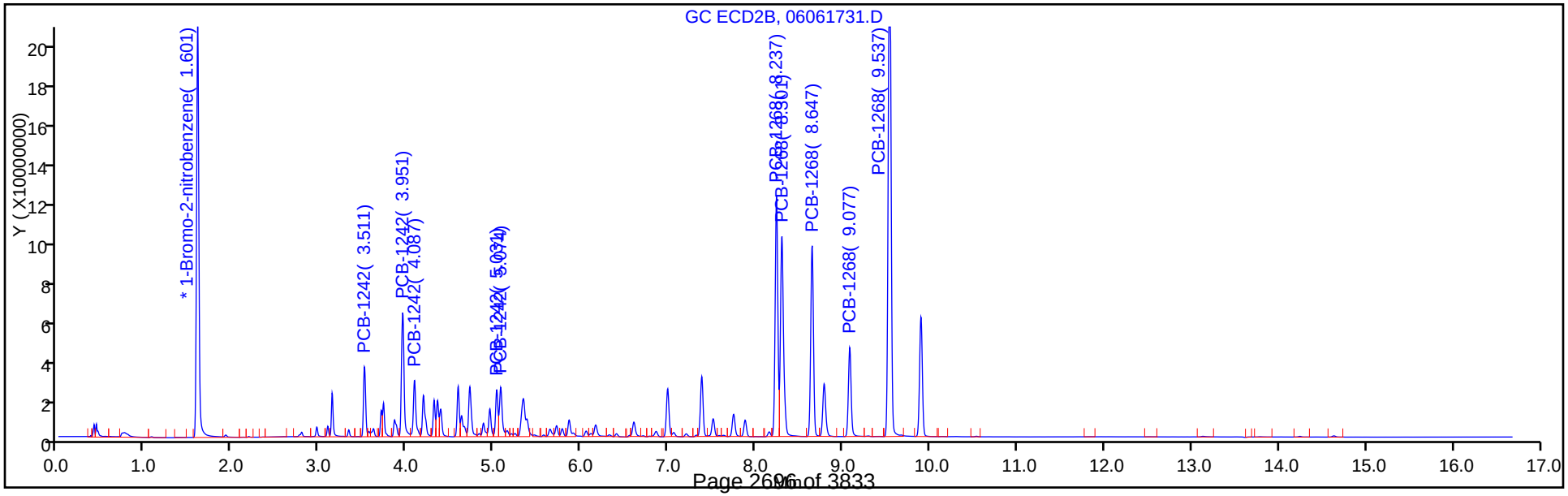
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061731.D

Injection Date:	07-Jun-2017 00:39:57	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL54268			Worklist Smp#:	31
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	31
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:53:16 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061731.D

Injection Date: 07-Jun-2017 00:39:57 Instrument ID: SGC_P3

Lims ID: STDL54268

Client ID:

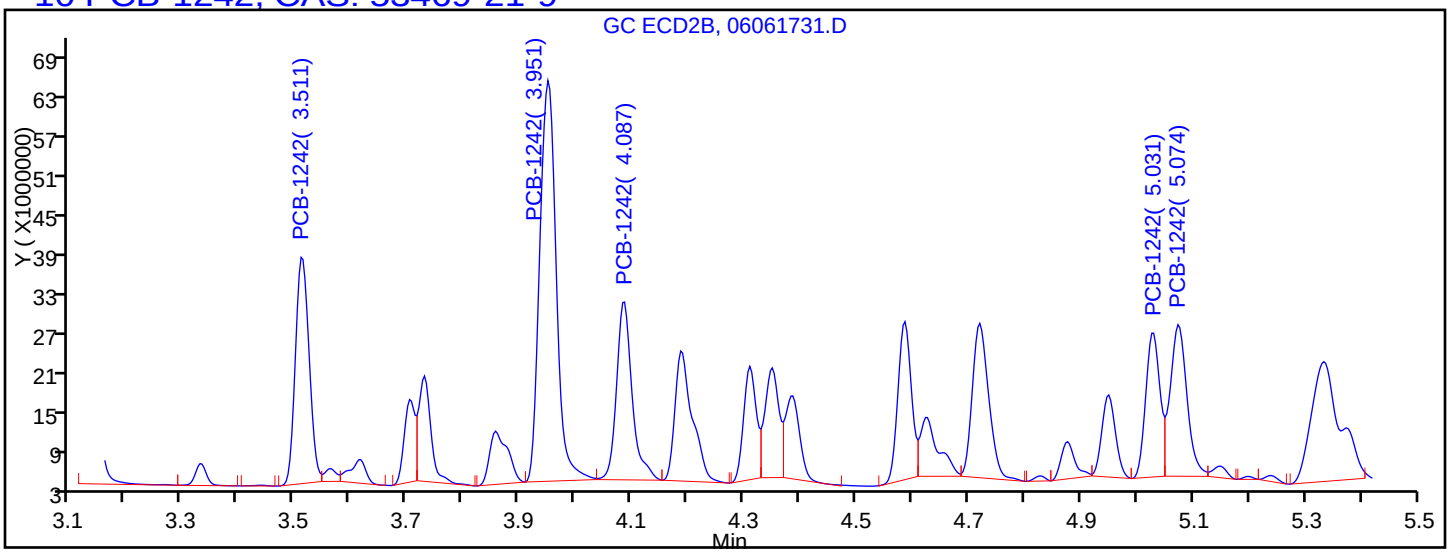
Operator ID: jax ALS Bottle#: 31 Worklist Smp#: 31

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

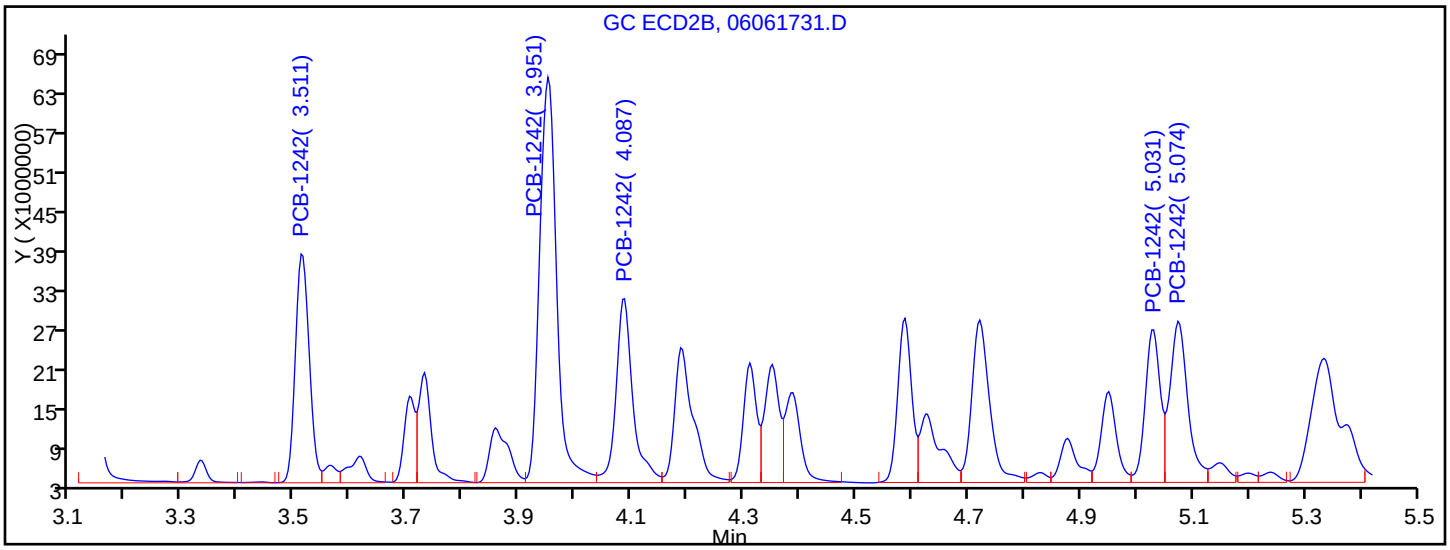
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

10 PCB-1242, CAS: 53469-21-9



Processing Integration Results

3.511	Response = 58435883
3.951	Response = 124311311
4.087	Response = 52071618
5.031	Response = 38724194
5.074	Response = 47725539



Manual Integration Results

3.511	Response = 60026238	M
3.951	Response = 130260242	M
4.087	Response = 58486099	M
5.031	Response = 43289629	M
5.074	Response = 54294666	M

Reviewer: jacksonto, 07-Jun-2017 06:40:13

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061732.D
Lims ID: STDL44268
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 07-Jun-2017 01:01:38 ALS Bottle#: 32 Worklist Smp#: 32
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL44268
Misc. Info.: 280-0059455-032
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:17 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.828	1.827	0.001	350069398	1000.0	1000.0	
2	1.598	1.601	-0.003	392158539	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.488	3.487	0.001	25661290	250.0	250.0	
1	3.952	3.951	0.001	56434653	250.0	244.2	
1	4.092	4.091	0.001	24410165	250.0	249.2	
1	5.028	5.027	0.001	19431100	250.0	245.0	
1	5.055	5.054	0.001	20462038	250.0	251.7	
		Average of Peak Amounts =				248.0	
2	3.512	3.511	0.001	33868899	250.0	267.2	
2	3.952	3.951	0.001	72054410	250.0	262.4	
2	4.085	4.087	-0.002	32802033	250.0	263.4	
2	5.032	5.031	0.001	22808356	250.0	249.8	
2	5.078	5.074	0.004	30128035	250.0	258.2	
		Average of Peak Amounts =				260.2	
						RPD = 4.79	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.112	8.111	0.001	128607568	250.0	240.2	
1	8.165	8.164	0.001	114090191	250.0	239.4	
1	8.438	8.437	0.001	101656959	250.0	242.2	
1	8.948	8.947	0.001	47849944	250.0	243.4	
1	9.358	9.357	0.001	323246560	250.0	242.5	
		Average of Peak Amounts =				241.5	
2	8.238	8.237	0.001	139301330	250.0	257.6	
2	8.298	8.301	-0.003	138814681	250.0	263.6	
2	8.645	8.647	-0.002	113703825	250.0	259.3	
2	9.078	9.077	0.001	54263572	250.0	258.1	
2	9.535	9.537	-0.002	297236332	250.0	242.2	
		Average of Peak Amounts =				256.1	
						RPD = 5.87	
S 8 Polychlorinated biphenyls, Total							
1						489.6	
2						516.3	
						RPD = 5.32	

Reagents:

AR_4268_L4_00020	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

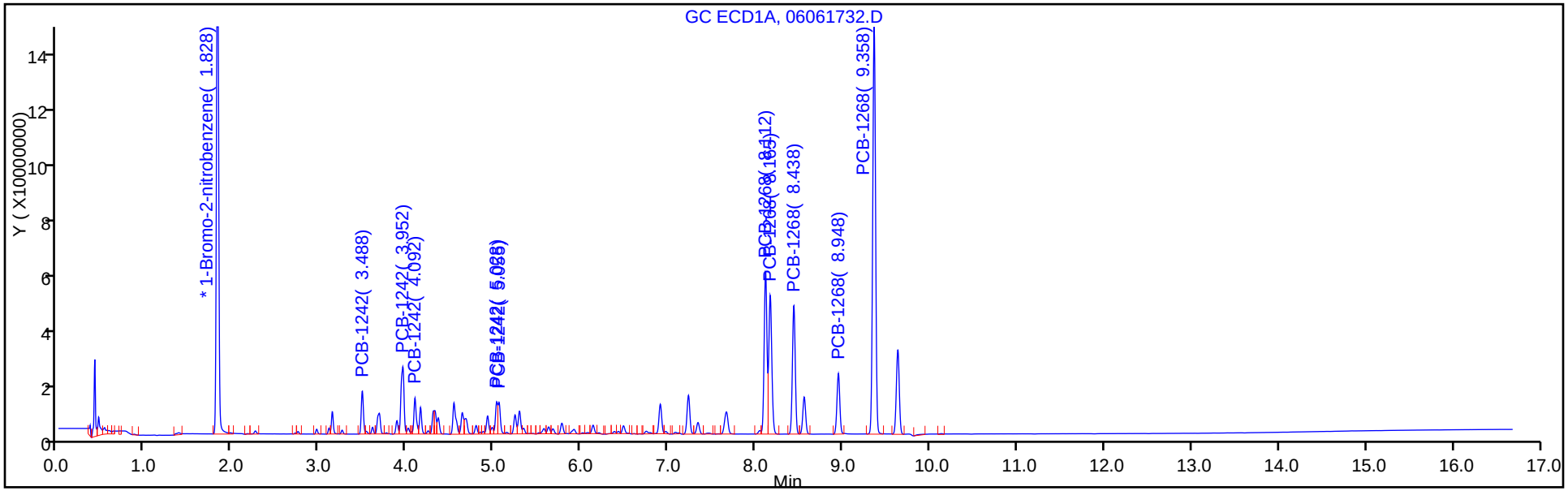
Report Date: 07-Jun-2017 06:53:18 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

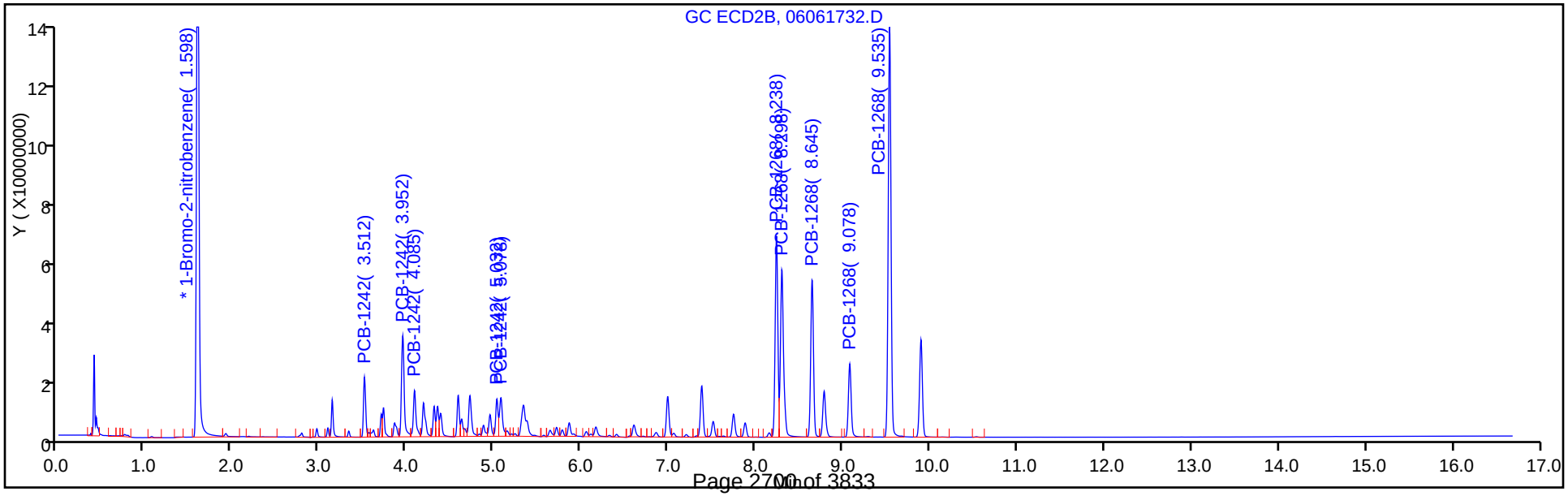
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061732.D

Injection Date:	07-Jun-2017 01:01:38	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL44268			Worklist Smp#:	32
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	32
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061733.D
Lims ID: STDL34268
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 07-Jun-2017 01:23:18 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL34268
Misc. Info.: 280-0059455-033
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:19 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.827	-0.001	341253589	1000.0	1000.0	
2	1.599	1.601	-0.002	385917675	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.486	3.487	-0.001	11134685	100.0	103.1	
1	3.952	3.951	0.001	23715179	100.0	100.8	
1	4.089	4.091	-0.002	10410653	100.0	101.7	
1	5.029	5.027	0.002	8605894	100.0	105.1	
1	5.052	5.054	-0.002	8218340	100.0	98.3	
		Average of Peak Amounts =				101.8	
2	3.512	3.511	0.001	15218261	100.0	110.0	
2	3.952	3.951	0.001	30927611	100.0	105.3	
2	4.086	4.087	-0.001	14198041	100.0	104.8	
2	5.032	5.031	0.001	9326503	100.0	97.5	
2	5.079	5.074	0.005	12794721	100.0	97.8	
		Average of Peak Amounts =				103.1	
						RPD = 1.27	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.112	8.111	0.001	54271619	100.0	101.1	
1	8.166	8.164	0.002	49772095	100.0	102.8	
1	8.436	8.437	-0.001	43210879	100.0	101.6	
1	8.949	8.947	0.002	21302708	100.0	105.5	
1	9.359	9.357	0.002	134431811	100.0	100.6	
		Average of Peak Amounts =				102.3	
2	8.239	8.237	0.002	61258487	100.0	106.4	
2	8.299	8.301	-0.002	61273778	100.0	108.0	
2	8.646	8.647	-0.001	49902329	100.0	106.6	
2	9.079	9.077	0.002	24173023	100.0	106.9	
2	9.536	9.537	-0.001	142487319	100.0	112.0	
		Average of Peak Amounts =				108.0	
						RPD = 5.39	
S 8 Polychlorinated biphenyls, Total							
1						204.1	
2						211.1	
						RPD = 3.36	

Reagents:

AR_4268_L3_00017	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

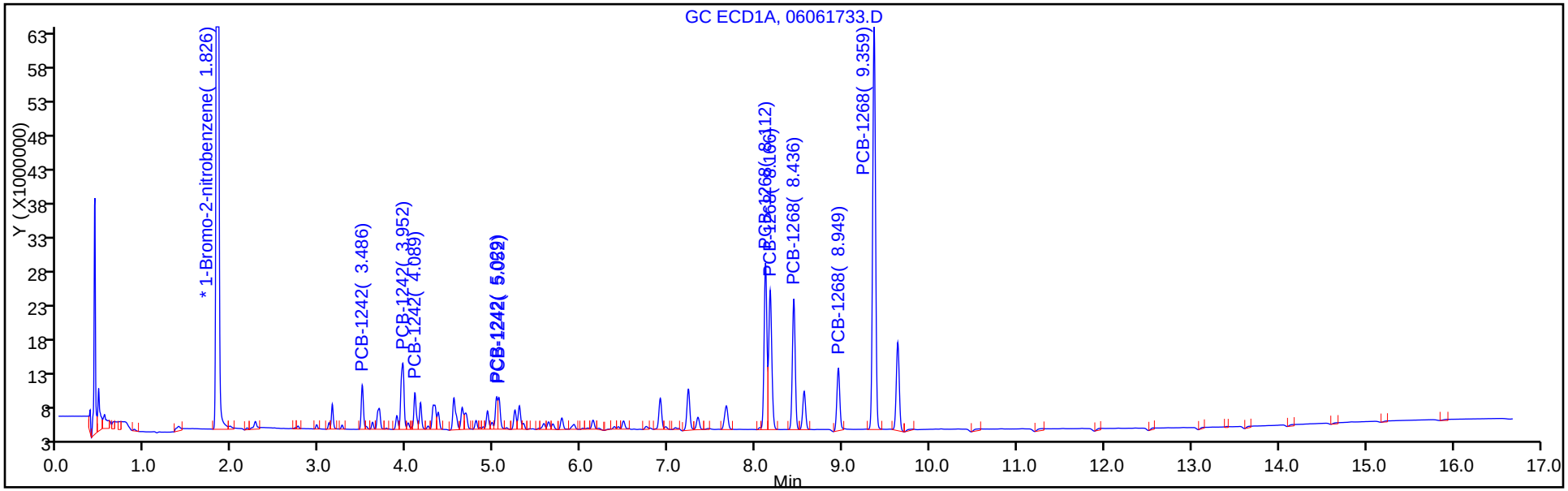
Report Date: 07-Jun-2017 06:53:20 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

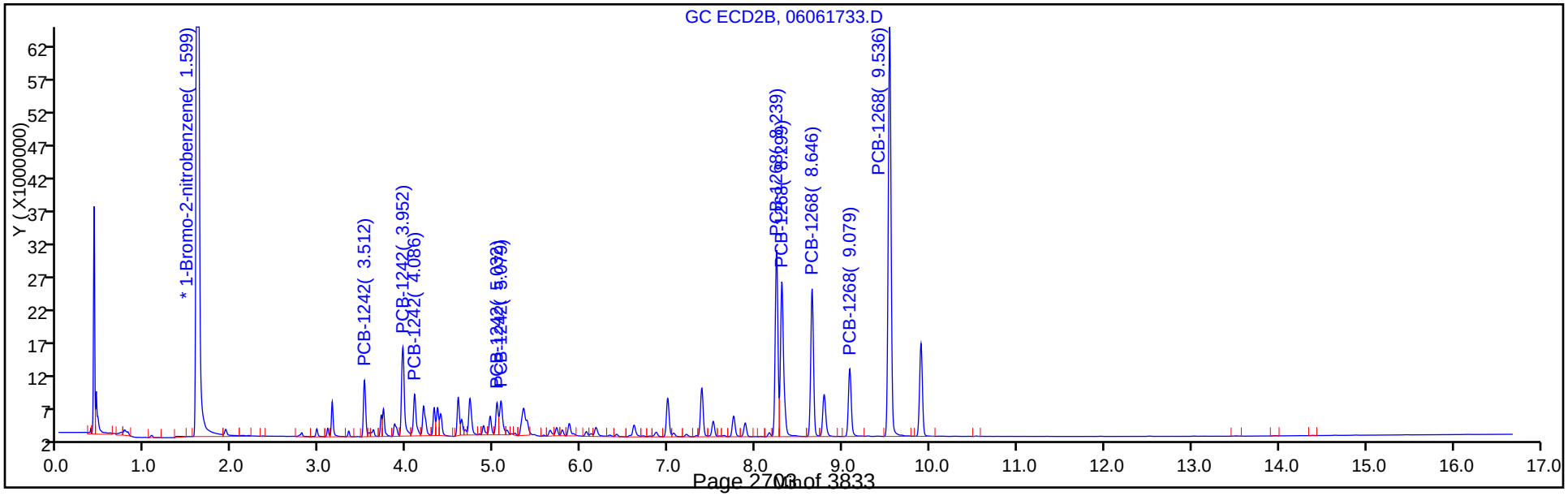
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061733.D

Injection Date:	07-Jun-2017 01:23:18	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL34268			Worklist Smp#:	33
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	33
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061734.D
Lims ID: STDL24268
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 07-Jun-2017 01:44:57 ALS Bottle#: 34 Worklist Smp#: 34
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL24268
Misc. Info.: 280-0059455-034
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:21 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.827	-0.001	340401659	1000.0	1000.0	
2	1.599	1.601	-0.002	381213212	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.486	3.487	-0.001	6334637	50.0	52.4	
1	3.953	3.951	0.002	12834381	50.0	51.0	
1	4.089	4.091	-0.002	5738481	50.0	50.4	
1	5.029	5.027	0.002	4650896	50.0	51.7	
1	5.053	5.054	-0.001	4647866	50.0	51.7	
		Average of Peak Amounts =				51.4	
2	3.513	3.511	0.002	8487710	50.0	52.5	
2	3.953	3.951	0.002	17236325	50.0	52.3	
2	4.089	4.087	0.002	8198701	50.0	53.1	
2	5.033	5.031	0.002	5702897	50.0	56.2	
2	5.079	5.074	0.005	8665327	50.0	59.5	
		Average of Peak Amounts =				54.7	
						RPD = 6.18	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.113	8.111	0.002	27715280	50.0	49.3	
1	8.166	8.164	0.002	26396914	50.0	51.0	
1	8.436	8.437	-0.001	23105572	50.0	51.2	
1	8.946	8.947	-0.001	11312963	50.0	51.3	
1	9.356	9.357	-0.001	71024384	50.0	50.9	
		Average of Peak Amounts =				50.7	
2	8.239	8.237	0.002	33504018	50.0	51.9	
2	8.299	8.301	-0.002	33651062	50.0	51.8	
2	8.646	8.647	-0.001	27314787	50.0	51.8	
2	9.079	9.077	0.002	13682052	50.0	53.5	
2	9.536	9.537	-0.001	62238620	50.0	43.0	
		Average of Peak Amounts =				50.4	
						RPD = 0.62	
S 8 Polychlorinated biphenyls, Total							
1						102.2	
2						105.1	
						RPD = 2.86	

Reagents:

AR_4268_L2_00017	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

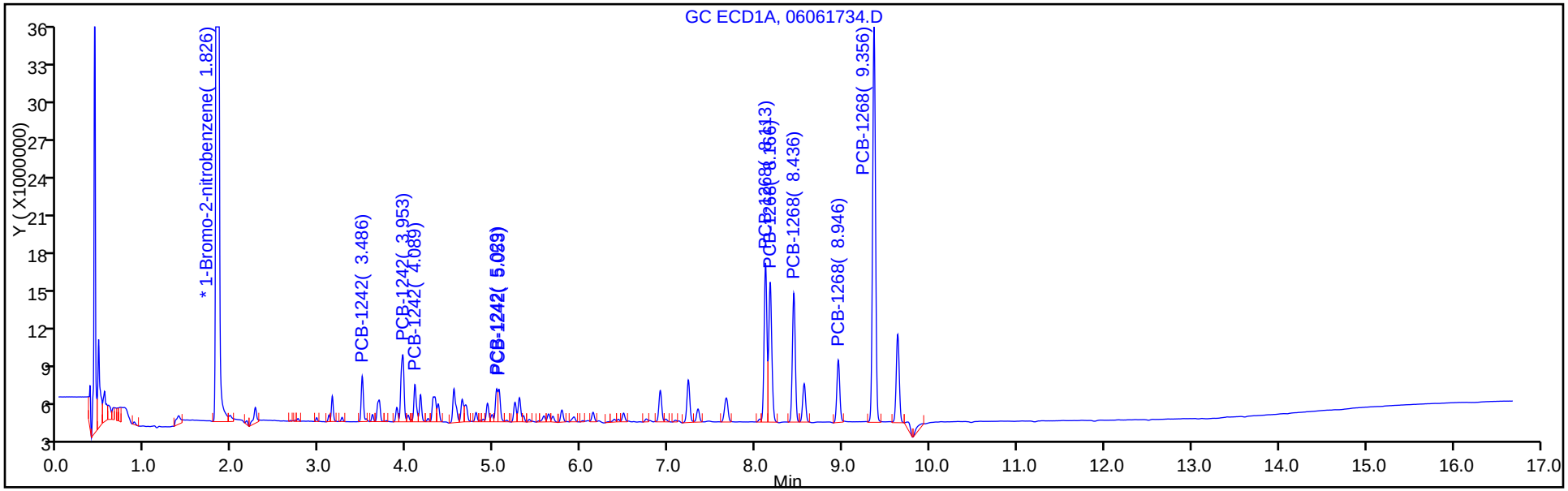
Report Date: 07-Jun-2017 06:53:21 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

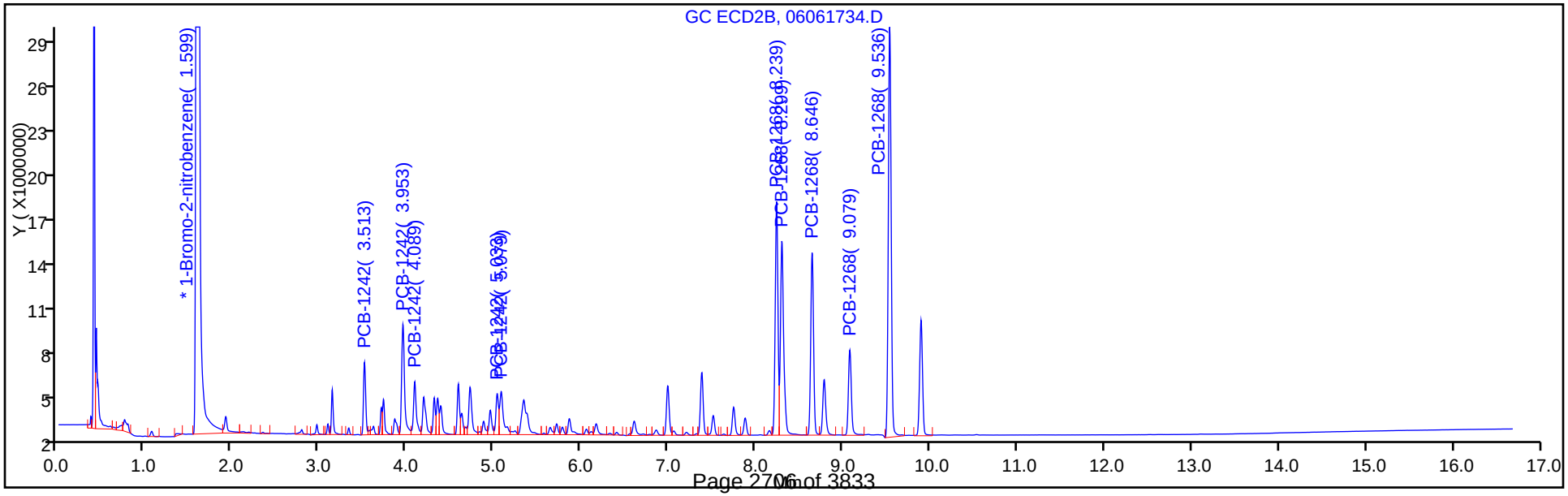
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061734.D

Injection Date:	07-Jun-2017 01:44:57	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL24268			Worklist Smp#:	34
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	34
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D
Lims ID: STDL14268
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 07-Jun-2017 02:06:36 ALS Bottle#: 35 Worklist Smp#: 35
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: STDL14268
Misc. Info.: 280-0059455-035
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub5

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:47:02

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.827	-0.001	349490165	1000.0	1000.0	
2	1.599	1.601	-0.002	389549671	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							
1	3.486	3.487	-0.001	3674493	25.0	23.2	
1	3.952	3.951	0.001	7351035	25.0	25.0	
1	4.089	4.091	-0.002	3494368	25.0	24.6	
1	5.029	5.027	0.002	2645013	25.0	23.5	
1	5.056	5.054	0.002	2638273	25.0	24.5	
		Average of Peak Amounts =				24.1	
2	3.512	3.511	0.001	4937680	25.0	20.4	
2	3.956	3.951	0.005	9815527	25.0	21.9	
2	4.089	4.087	0.002	4737116	25.0	21.5	
2	5.036	5.031	0.005	2914022	25.0	22.7	
2	5.082	5.074	0.008	4712376	25.0	20.4	
		Average of Peak Amounts =				21.4	
						RPD = 12.08	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.112	8.111	0.001	16180997	25.0	25.9	
1	8.166	8.164	0.002	15069585	25.0	24.9	
1	8.436	8.437	-0.001	13004037	25.0	24.8	
1	8.946	8.947	-0.001	6432094	25.0	23.7	
1	9.359	9.357	0.002	39317946	25.0	25.1	
		Average of Peak Amounts =				24.9	
2	8.239	8.237	0.002	19225655	25.0	22.3	
2	8.302	8.301	0.001	19663896	25.0	21.6	
2	8.646	8.647	-0.001	15779970	25.0	22.2	
2	9.079	9.077	0.002	7754270	25.0	21.6	
2	9.539	9.537	0.002	44047982	25.0	26.2	
		Average of Peak Amounts =				22.8	
						RPD = 8.78	
S 8 Polychlorinated biphenyls, Total							
1						49.0	
2						44.2	
						RPD = 10.39	

Reagents:

AR_4268_L1_00018	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

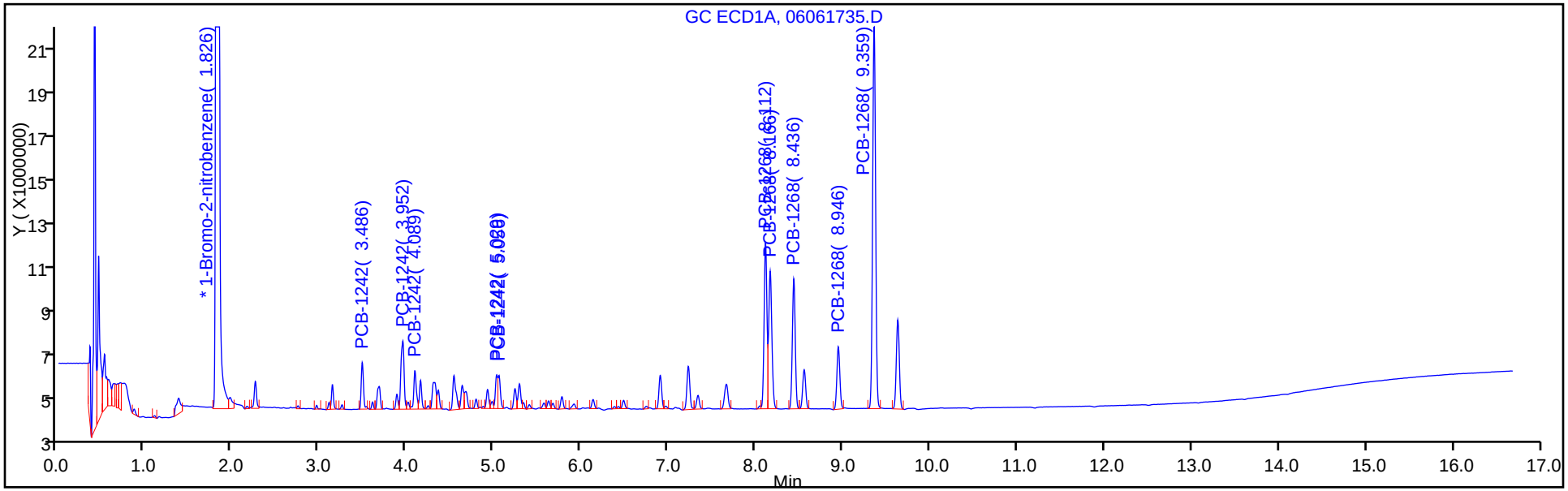
Report Date: 07-Jun-2017 06:53:23 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

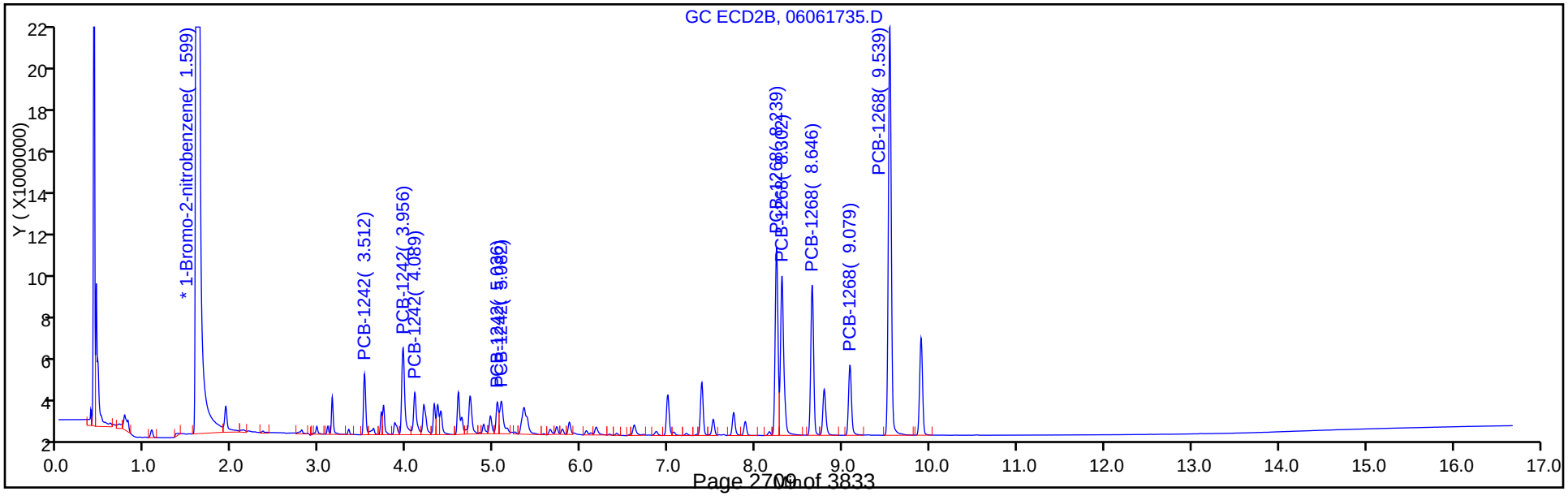
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Injection Date:	07-Jun-2017 02:06:36	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	STDL14268			Worklist Smp#:	35
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	35
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376236/36 Calibration Date: 06/07/2017 02:28

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 13:49

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 15:59

Lab File ID: 06061736.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Lin1		0.1630		254	250	1.7	20.0
PCB-1248 Peak 2	Lin1		0.4264		247	250	-1.1	20.0
PCB-1248 Peak 3	Lin1		0.4453		250	250	0.0	20.0
PCB-1248 Peak 4	Lin1		0.4447		253	250	1.0	20.0
PCB-1248 Peak 5	Lin1		0.3252		251	250	0.5	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376236/36 Calibration Date: 06/07/2017 02:28

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 13:49

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 15:59

Lab File ID: 06061736.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1248 Peak 1	3.49	3.24	3.74
PCB-1248 Peak 2	3.95	3.70	4.20
PCB-1248 Peak 3	4.30	4.05	4.55
PCB-1248 Peak 4	4.54	4.29	4.79
PCB-1248 Peak 5	5.29	5.04	5.54

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061736.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Jun-2017 02:28:13 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0059455-036
Operator ID: jax Instrument ID: SGC_P3
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:47:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.827	-0.002	350254462	1000.0	1000.0	
2	1.598	1.601	-0.003	389956483	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							
1	3.485	3.486	-0.001	14275550	250.0	254.2	
1	3.948	3.946	0.002	37339460	250.0	247.3	
1	4.302	4.302	0.000	38995407	250.0	250.0	
1	4.538	4.539	-0.001	38935476	250.0	252.6	
1	5.288	5.289	-0.001	28479069	250.0	251.2	
		Average of Peak Amounts =				251.1	
2	3.952	3.949	0.003	48844636	250.0	262.8	
2	4.585	4.586	-0.001	37170114	250.0	258.9	
2	4.722	4.719	0.003	44822000	250.0	268.1	
2	5.028	5.029	-0.001	38926573	250.0	245.5	
2	5.075	5.072	0.003	51606018	250.0	270.1	
		Average of Peak Amounts =				261.1	
						RPD = 3.91	

Reagents:

AR_1248_ICV_00011 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

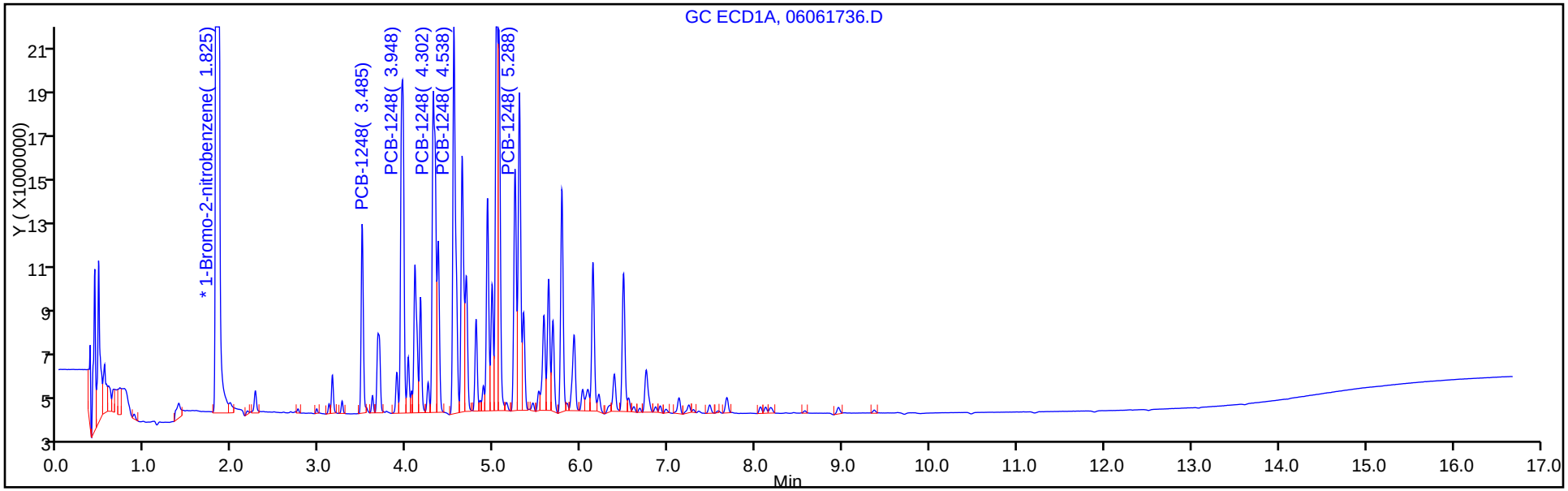
Report Date: 07-Jun-2017 06:53:25 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

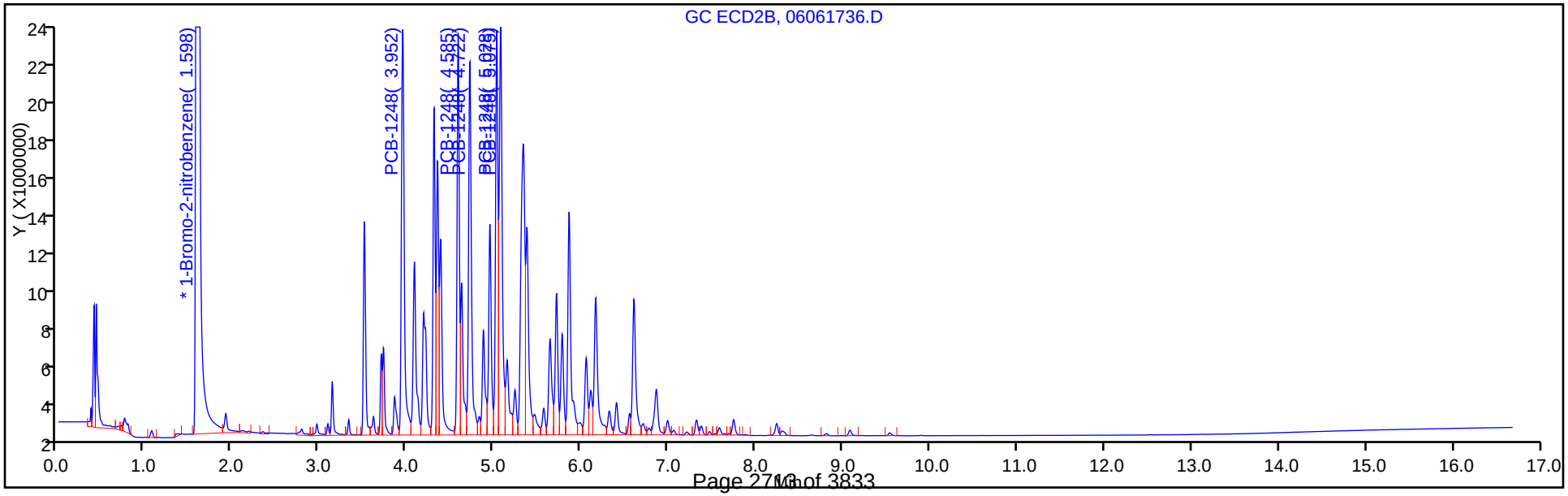
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061736.D

Injection Date:	07-Jun-2017 02:28:13	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	ICV			Worklist Smp#:	36
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376236/36 Calibration Date: 06/07/2017 02:28

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 13:49

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 15:59

Lab File ID: 06061736.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1248 Peak 1	Lin1		0.5010		263	250	5.1	20.0
PCB-1248 Peak 2	Lin1		0.3813		259	250	3.6	20.0
PCB-1248 Peak 3	Lin1		0.4598		268	250	7.2	20.0
PCB-1248 Peak 4	Lin1		0.3993		246	250	-1.8	20.0
PCB-1248 Peak 5	Lin1		0.5294		270	250	8.0	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376236/36 Calibration Date: 06/07/2017 02:28

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 13:49

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 15:59

Lab File ID: 06061736.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1248 Peak 1	3.95	3.70	4.20
PCB-1248 Peak 2	4.59	4.34	4.84
PCB-1248 Peak 3	4.72	4.47	4.97
PCB-1248 Peak 4	5.03	4.78	5.28
PCB-1248 Peak 5	5.08	4.82	5.32

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061736.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Jun-2017 02:28:13 ALS Bottle#: 36 Worklist Smp#: 36
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0059455-036
Operator ID: jax Instrument ID: SGC_P3
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:47:50

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.827	-0.002	350254462	1000.0	1000.0	
2	1.598	1.601	-0.003	389956483	1000.0	1000.0	
						RPD = 0.00	
4 PCB-1248							
1	3.485	3.486	-0.001	14275550	250.0	254.2	
1	3.948	3.946	0.002	37339460	250.0	247.3	
1	4.302	4.302	0.000	38995407	250.0	250.0	
1	4.538	4.539	-0.001	38935476	250.0	252.6	
1	5.288	5.289	-0.001	28479069	250.0	251.2	
		Average of Peak Amounts =				251.1	
2	3.952	3.949	0.003	48844636	250.0	262.8	
2	4.585	4.586	-0.001	37170114	250.0	258.9	
2	4.722	4.719	0.003	44822000	250.0	268.1	
2	5.028	5.029	-0.001	38926573	250.0	245.5	
2	5.075	5.072	0.003	51606018	250.0	270.1	
		Average of Peak Amounts =				261.1	
						RPD = 3.91	

Reagents:

AR_1248_ICV_00011 Amount Added: 1.00 Units: mL
BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

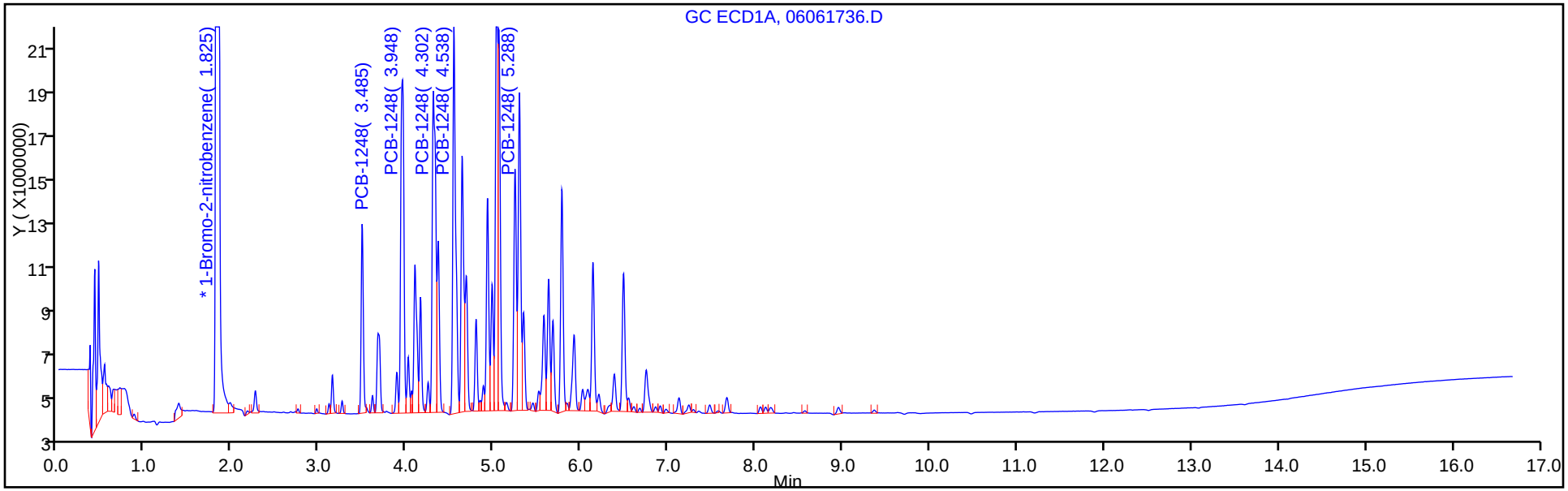
Report Date: 07-Jun-2017 06:53:26 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

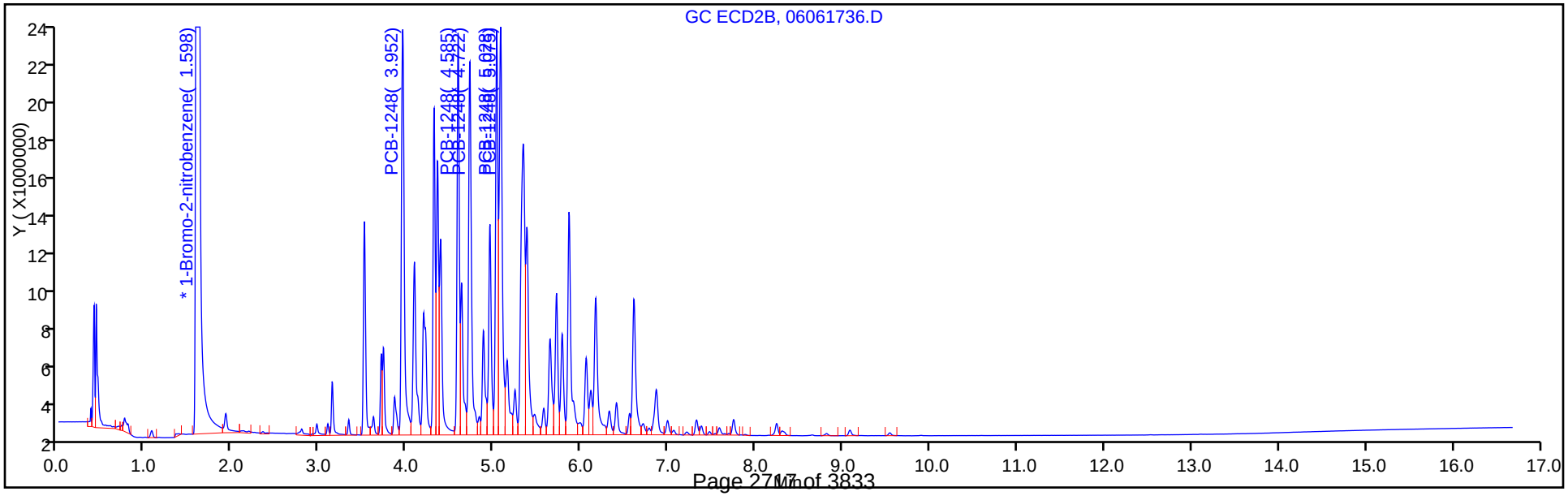
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061736.D

Injection Date:	07-Jun-2017 02:28:13	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	ICV			Worklist Smp#:	36
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	36
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376236/37 Calibration Date: 06/07/2017 02:49

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 16:21

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 18:31

Lab File ID: 06061737.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Lin1		0.1048		252	250	0.8	20.0
PCB-1221 Peak 2	Lin1		0.0735		262	250	4.7	20.0
PCB-1221 Peak 3	Lin1		0.2537		250	250	-0.2	20.0
PCB-1254 Peak 1	Lin1		0.4775		257	250	2.6	20.0
PCB-1254 Peak 2	Lin1		0.3907		253	250	1.2	20.0
PCB-1254 Peak 3	Lin1		0.6645		245	250	-2.1	20.0
PCB-1254 Peak 4	Lin1		0.2993		239	250	-4.4	20.0
PCB-1254 Peak 5	Lin1		0.6952		245	250	-2.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376236/37 Calibration Date: 06/07/2017 02:49

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 16:21

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 18:31

Lab File ID: 06061737.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1221 Peak 1	2.97	2.71	3.21
PCB-1221 Peak 2	3.11	2.86	3.36
PCB-1221 Peak 3	3.14	2.89	3.39
PCB-1254 Peak 1	5.29	5.04	5.54
PCB-1254 Peak 2	5.62	5.37	5.87
PCB-1254 Peak 3	5.77	5.53	6.03
PCB-1254 Peak 4	6.48	6.23	6.73
PCB-1254 Peak 5	6.74	6.49	6.99

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061737.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Jun-2017 02:49:50 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0059455-037
Operator ID: jax Instrument ID: SGC_P3
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.827	-0.002	352622017	1000.0	1000.0	
2	1.598	1.601	-0.003	393234638	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.965	2.963	0.002	9235162	250.0	251.9	
1	3.105	3.106	-0.001	6475917	250.0	261.8	
1	3.141	3.143	-0.002	22361733	250.0	249.5	
		Average of Peak Amounts =				254.4	
2	2.965	2.966	-0.001	13625908	250.0	253.3	
2	3.091	3.090	0.001	8392060	250.0	255.4	
2	3.141	3.143	-0.002	30724420	250.0	259.6	
		Average of Peak Amounts =				256.1	
						RPD = 0.67	
9 PCB-1254							
1	5.291	5.293	-0.002	42092565	250.0	256.6	
1	5.624	5.623	0.001	34445141	250.0	253.0	
1	5.774	5.776	-0.002	58574950	250.0	244.9	
1	6.484	6.483	0.001	26387330	250.0	239.0	
1	6.741	6.743	-0.002	61284656	250.0	244.6	
		Average of Peak Amounts =				247.6	
2	5.308	5.310	-0.002	49678127	250.0	254.1	
2	5.714	5.713	0.001	38640313	250.0	256.1	
2	5.858	5.860	-0.002	79041625	250.0	285.3	
2	6.161	6.163	-0.002	53781939	250.0	257.5	
2	6.858	6.860	-0.002	74768390	250.0	259.2	
		Average of Peak Amounts =				262.4	
						RPD = 5.82	

Reagents:

AR_2154_ICV_00011	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

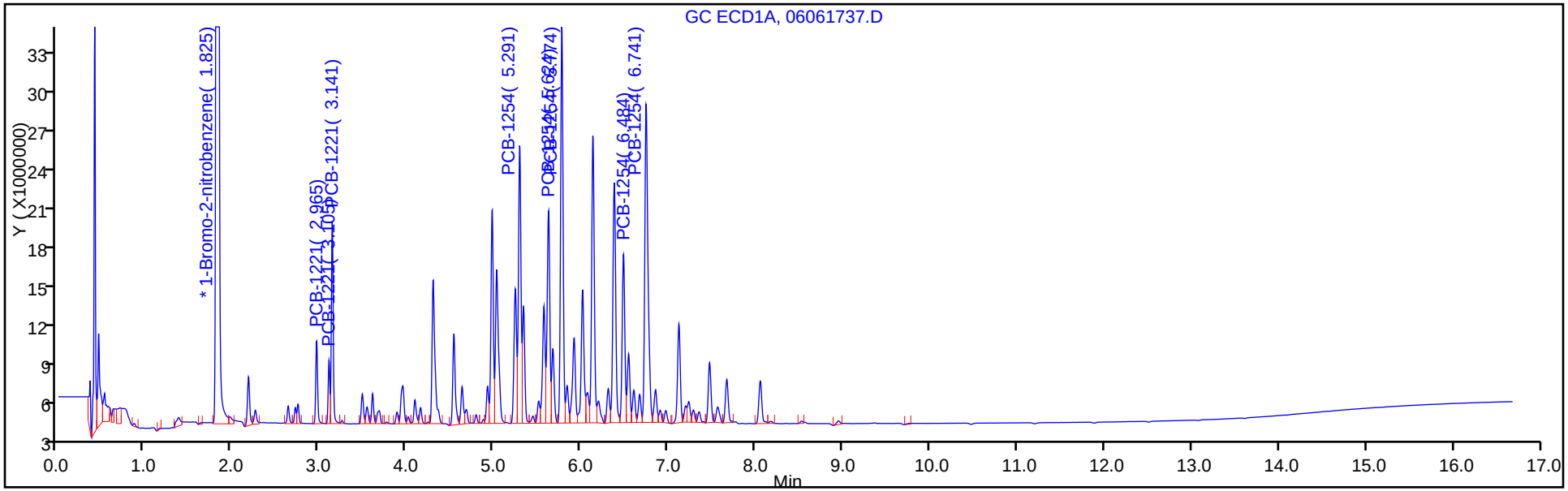
Report Date: 07-Jun-2017 06:53:28 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

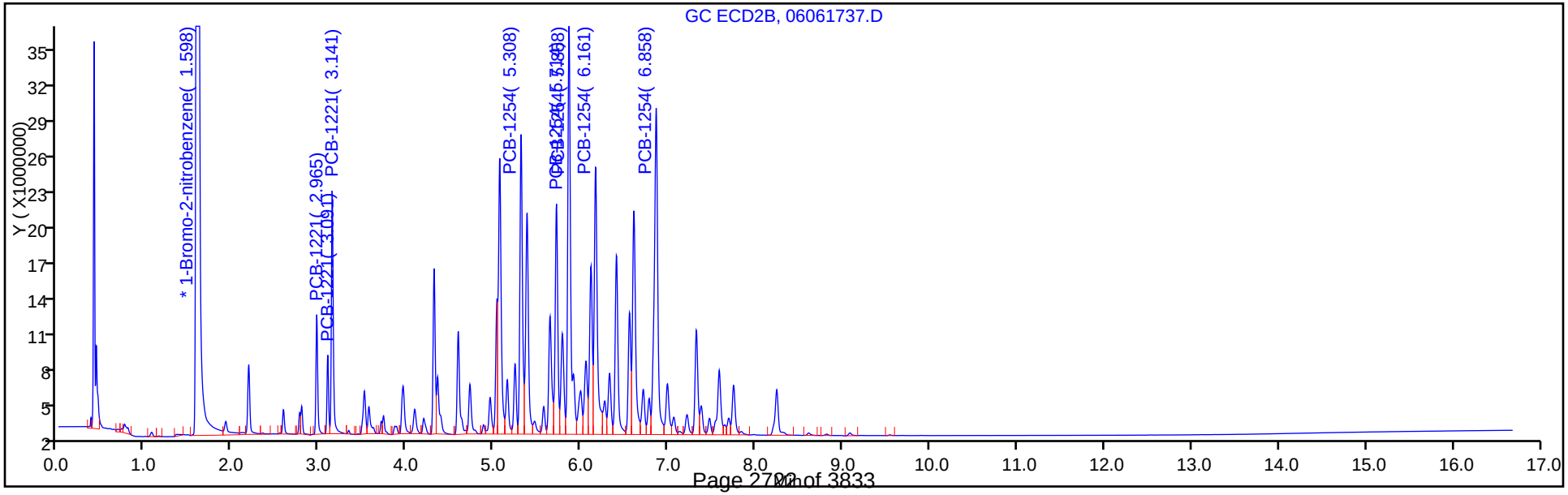
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Injection Date:	07-Jun-2017 02:49:50	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	ICV			Worklist Smp#:	37
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376236/37 Calibration Date: 06/07/2017 02:49

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 16:21

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 18:31

Lab File ID: 06061737.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1221 Peak 1	Lin1		0.1386		253	250	1.3	20.0
PCB-1221 Peak 2	Lin1		0.0854		255	250	2.2	20.0
PCB-1221 Peak 3	Lin1		0.3125		260	250	3.9	20.0
PCB-1254 Peak 1	Lin1		0.5053		254	250	1.7	20.0
PCB-1254 Peak 2	Lin1		0.3931		256	250	2.4	20.0
PCB-1254 Peak 3	Lin1		0.8040		285	250	14.1	20.0
PCB-1254 Peak 4	Lin1		0.5471		257	250	3.0	20.0
PCB-1254 Peak 5	Lin1		0.7606		259	250	3.7	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376236/37 Calibration Date: 06/07/2017 02:49

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 16:21

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 18:31

Lab File ID: 06061737.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1221 Peak 1	2.97	2.72	3.22
PCB-1221 Peak 2	3.09	2.84	3.34
PCB-1221 Peak 3	3.14	2.89	3.39
PCB-1254 Peak 1	5.31	5.06	5.56
PCB-1254 Peak 2	5.71	5.46	5.96
PCB-1254 Peak 3	5.86	5.61	6.11
PCB-1254 Peak 4	6.16	5.91	6.41
PCB-1254 Peak 5	6.86	6.61	7.11

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061737.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Jun-2017 02:49:50 ALS Bottle#: 37 Worklist Smp#: 37
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0059455-037
Operator ID: jax Instrument ID: SGC_P3
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.827	-0.002	352622017	1000.0	1000.0	
2	1.598	1.601	-0.003	393234638	1000.0	1000.0	
						RPD = 0.00	
3 PCB-1221							
1	2.965	2.963	0.002	9235162	250.0	251.9	
1	3.105	3.106	-0.001	6475917	250.0	261.8	
1	3.141	3.143	-0.002	22361733	250.0	249.5	
		Average of Peak Amounts =				254.4	
2	2.965	2.966	-0.001	13625908	250.0	253.3	
2	3.091	3.090	0.001	8392060	250.0	255.4	
2	3.141	3.143	-0.002	30724420	250.0	259.6	
		Average of Peak Amounts =				256.1	
						RPD = 0.67	
9 PCB-1254							
1	5.291	5.293	-0.002	42092565	250.0	256.6	
1	5.624	5.623	0.001	34445141	250.0	253.0	
1	5.774	5.776	-0.002	58574950	250.0	244.9	
1	6.484	6.483	0.001	26387330	250.0	239.0	
1	6.741	6.743	-0.002	61284656	250.0	244.6	
		Average of Peak Amounts =				247.6	
2	5.308	5.310	-0.002	49678127	250.0	254.1	
2	5.714	5.713	0.001	38640313	250.0	256.1	
2	5.858	5.860	-0.002	79041625	250.0	285.3	
2	6.161	6.163	-0.002	53781939	250.0	257.5	
2	6.858	6.860	-0.002	74768390	250.0	259.2	
		Average of Peak Amounts =				262.4	
						RPD = 5.82	

Reagents:

AR_2154_ICV_00011	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

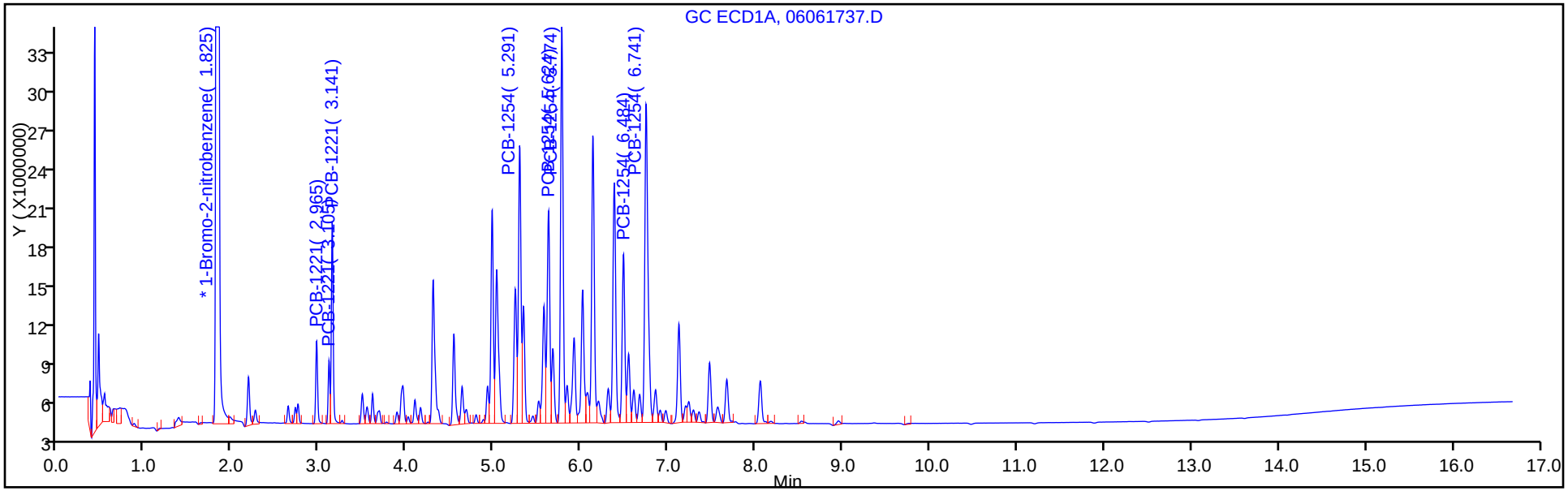
Report Date: 07-Jun-2017 06:53:29 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

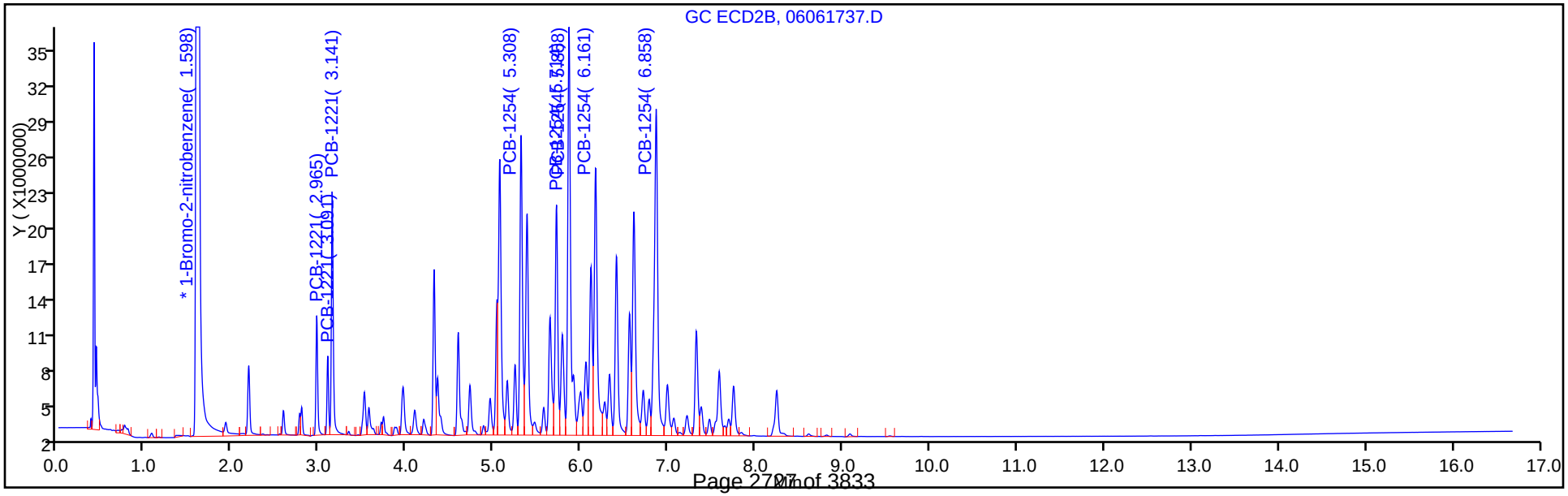
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061737.D

Injection Date:	07-Jun-2017 02:49:50	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	ICV			Worklist Smp#:	37
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	37
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376236/38 Calibration Date: 06/07/2017 03:11

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06061738.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3415		250	250	0.0	20.0
PCB-1016 Peak 2	Lin1		0.7595		244	250	-2.6	20.0
PCB-1016 Peak 3	Lin1		0.3263		249	250	-0.3	20.0
PCB-1016 Peak 4	Lin1		0.2082		246	250	-1.8	20.0
PCB-1016 Peak 5	Lin1		0.3426		249	250	-0.4	20.0
PCB-1260 Peak 1	Lin1		0.5288		254	250	1.6	20.0
PCB-1260 Peak 2	Lin1		1.003		247	250	-1.1	20.0
PCB-1260 Peak 3	Lin1		0.4654		246	250	-1.5	20.0
PCB-1260 Peak 4	Lin1		1.006		243	250	-2.8	20.0
PCB-1260 Peak 5	Lin1		0.5928		247	250	-1.0	20.0
Tetrachloro-m-xylene	Lin1		10.67		12.2	12.5	-2.8	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		10.53		12.4	12.5	-1.1	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376236/38 Calibration Date: 06/07/2017 03:11

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06061738.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.49	3.24	3.74
PCB-1016 Peak 2	3.95	3.70	4.20
PCB-1016 Peak 3	4.09	3.84	4.34
PCB-1016 Peak 4	4.15	3.91	4.41
PCB-1016 Peak 5	4.54	4.29	4.79
PCB-1260 Peak 1	6.01	5.76	6.26
PCB-1260 Peak 2	6.74	6.49	6.99
PCB-1260 Peak 3	7.23	6.98	7.48
PCB-1260 Peak 4	7.67	7.42	7.92
PCB-1260 Peak 5	8.05	7.80	8.30
Tetrachloro-m-xylene	2.75	2.50	3.00
DCB Decachlorobiphenyl (Surr)	9.63	9.38	9.88

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061738.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Jun-2017 03:11:28 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0059455-038
Operator ID: jax Instrument ID: SGC_P3
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:48:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	353177277	1000.0	1000.0	
2	1.597	1.601	-0.004	392415021	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.751	2.752	-0.001	47095268	12.5	12.2	
2	2.647	2.649	-0.002	59520712	12.5	12.9	
						RPD = 5.65	
1 PCB-1016							
1	3.487	3.486	0.001	30150603	250.0	250.1	
1	3.951	3.952	-0.001	67059557	250.0	243.6	
1	4.091	4.089	0.002	28813487	250.0	249.2	
1	4.154	4.156	-0.002	18379811	250.0	245.6	
1	4.537	4.539	-0.002	30250957	250.0	249.0	
		Average of Peak Amounts =				247.5	
2	3.511	3.512	-0.001	39142146	250.0	264.8	
2	3.951	3.952	-0.001	84456917	250.0	259.1	
2	4.087	4.086	0.001	39286347	250.0	263.0	
2	4.311	4.312	-0.001	21088945	250.0	259.4	
2	4.587	4.586	0.001	27802392	250.0	252.9	
		Average of Peak Amounts =				259.8	
						RPD = 4.87	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							M
1	6.014	6.012	0.002	46693764	250.0	254.0	M
1	6.741	6.742	-0.001	88517492	250.0	247.1	M
1	7.231	7.232	-0.001	41090358	250.0	246.2	M
1	7.667	7.666	0.001	88850114	250.0	243.0	M
1	8.051	8.049	0.002	52343202	250.0	247.4	
		Average of Peak Amounts =				247.5	
2	6.401	6.402	-0.001	67698534	250.0	257.9	
2	6.857	6.859	-0.002	101007625	250.0	255.2	
2	7.374	7.376	-0.002	46406413	250.0	256.4	
2	7.744	7.746	-0.002	99672020	250.0	256.7	
2	8.237	8.239	-0.002	76904623	250.0	258.0	
		Average of Peak Amounts =				256.8	
						RPD = 3.69	
$ 15 DCB Decachlorobiphenyl							
1	9.631	9.629	0.002	46489399	12.5	12.4	
2	9.897	9.896	0.001	49070072	12.5	12.9	
						RPD = 4.16	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1660_ICV_00011	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

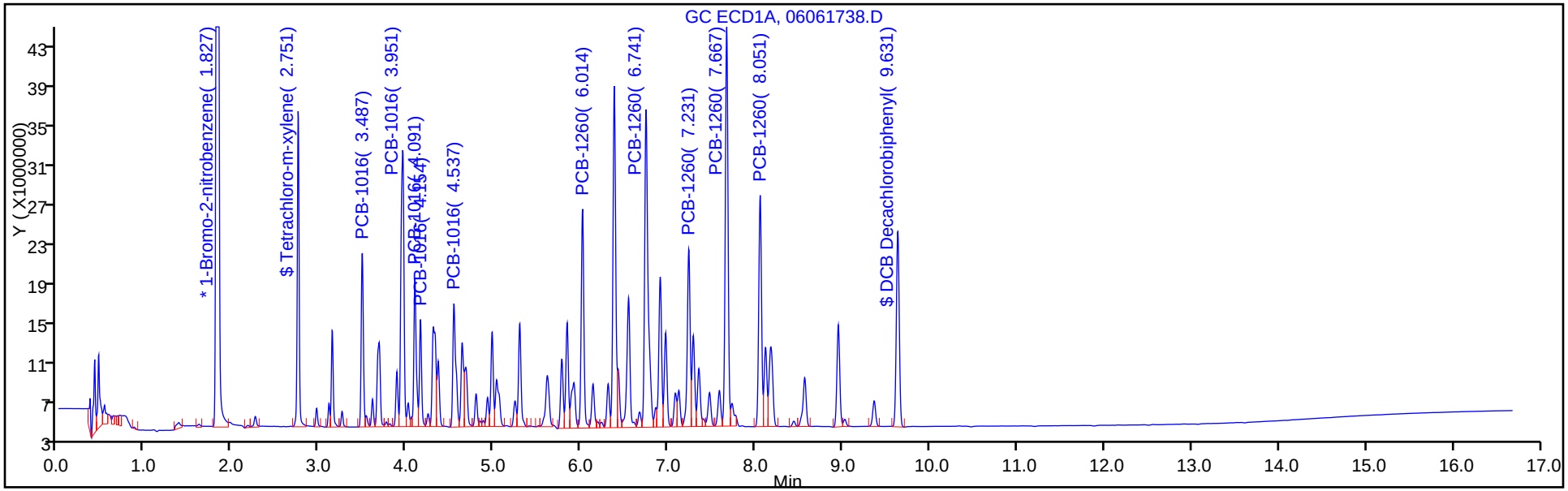
Report Date: 07-Jun-2017 06:53:31 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

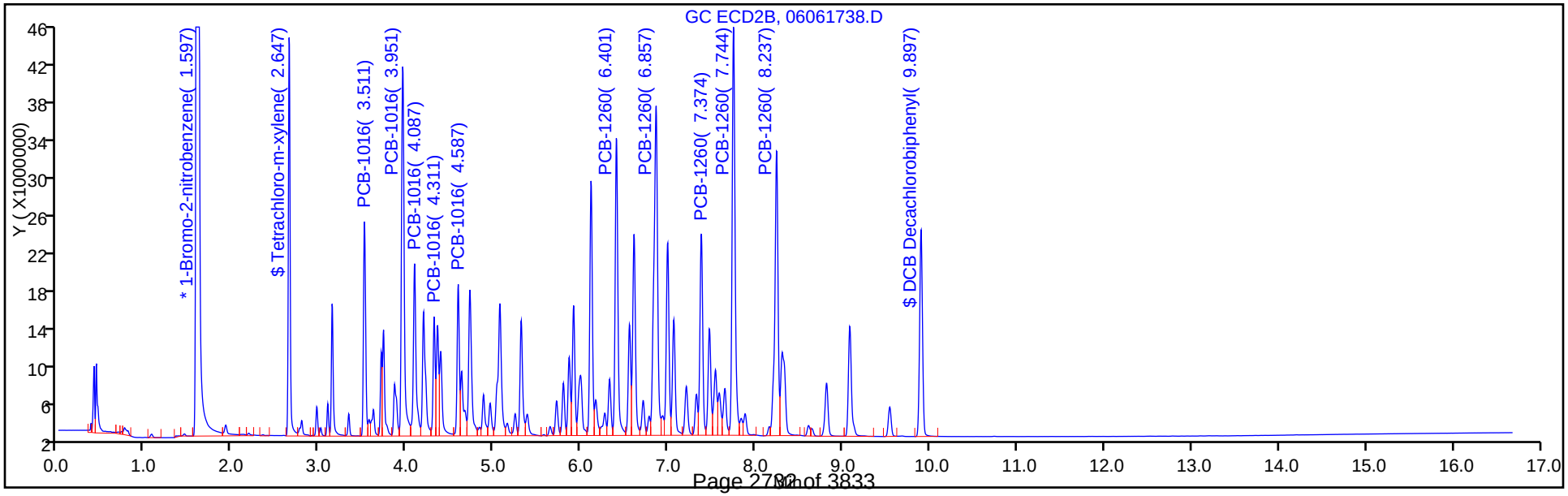
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061738.D

Injection Date:	07-Jun-2017 03:11:28	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	ICV			Worklist Smp#:	38
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 06:53:32 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061738.D

Injection Date: 07-Jun-2017 03:11:28 Instrument ID: SGC_P3

Lims ID: ICV

Client ID:

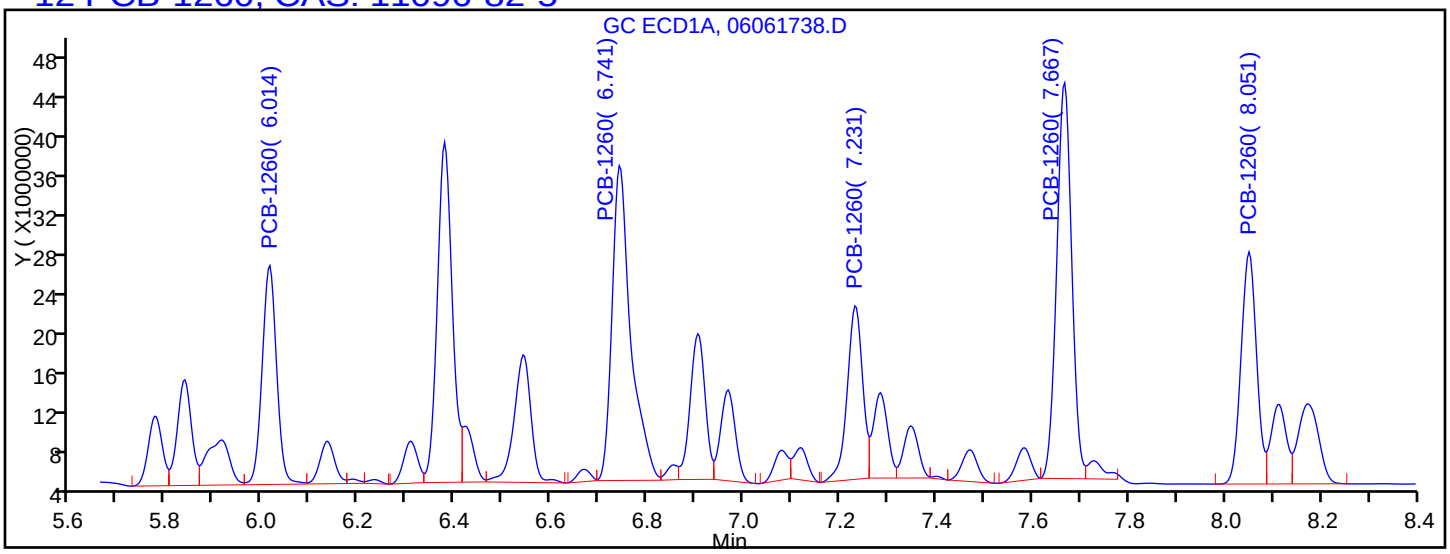
Operator ID: jax ALS Bottle#: 38 Worklist Smp#: 38

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

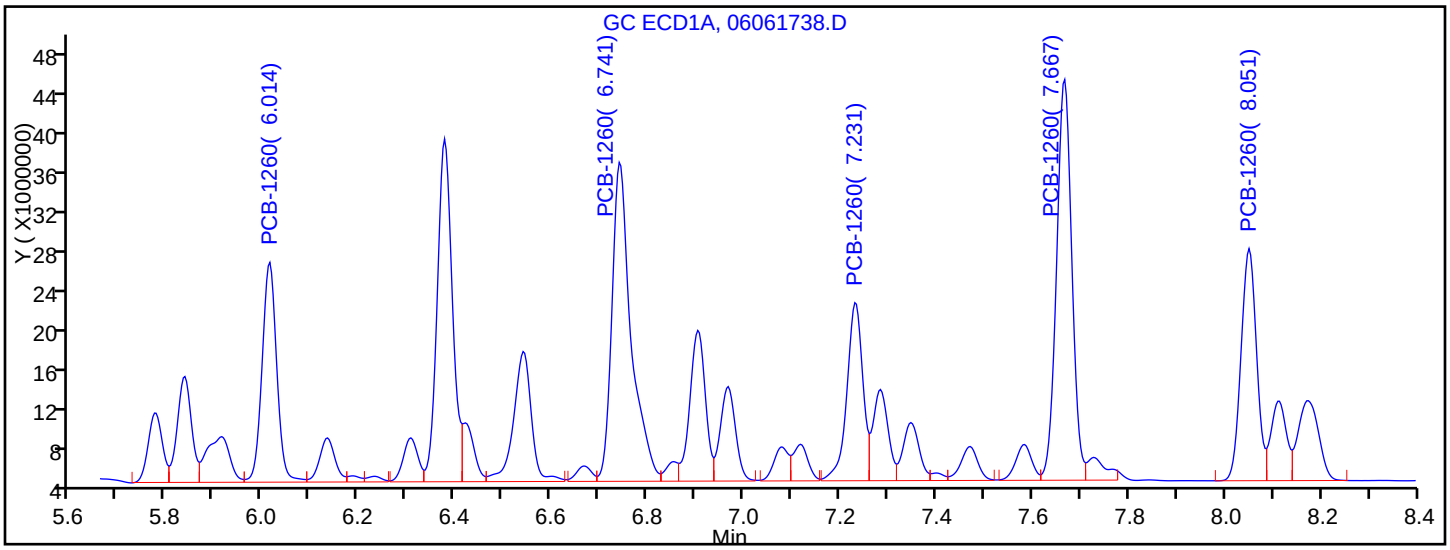
Column: CLP1 Pesticides Column 1 (0.32 mm) Detector GC ECD1A

12 PCB-1260, CAS: 11096-82-5



Processing Integration Results

6.014	Response = 45869784
6.741	Response = 85183880
7.231	Response = 38814816
7.667	Response = 86080682
8.051	Response = 52343202



Manual Integration Results

6.014	Response = 46693764	M
6.741	Response = 88517492	M
7.231	Response = 41090358	M
7.667	Response = 88850114	M
8.051	Response = 52343202	

Reviewer: jacksonto, 07-Jun-2017 06:48:23

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376236/38 Calibration Date: 06/07/2017 03:11

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06061738.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3990		265	250	5.9	20.0
PCB-1016 Peak 2	Lin1		0.8609		259	250	3.6	20.0
PCB-1016 Peak 3	Lin1		0.4005		263	250	5.2	20.0
PCB-1016 Peak 4	Lin1		0.2150		259	250	3.7	20.0
PCB-1016 Peak 5	Lin1		0.2834		253	250	1.2	20.0
PCB-1260 Peak 1	Lin1		0.6901		258	250	3.2	20.0
PCB-1260 Peak 2	Lin1		1.030		255	250	2.1	20.0
PCB-1260 Peak 3	Lin1		0.4730		256	250	2.6	20.0
PCB-1260 Peak 4	Lin1		1.016		257	250	2.7	20.0
PCB-1260 Peak 5	Lin1		0.7839		258	250	3.2	20.0
Tetrachloro-m-xylene	Lin1		12.13		12.9	12.5	2.9	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		10.00		12.9	12.5	3.1	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376236/38 Calibration Date: 06/07/2017 03:11

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06061738.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.51	3.26	3.76
PCB-1016 Peak 2	3.95	3.70	4.20
PCB-1016 Peak 3	4.09	3.84	4.34
PCB-1016 Peak 4	4.31	4.06	4.56
PCB-1016 Peak 5	4.59	4.34	4.84
PCB-1260 Peak 1	6.40	6.15	6.65
PCB-1260 Peak 2	6.86	6.61	7.11
PCB-1260 Peak 3	7.37	7.13	7.63
PCB-1260 Peak 4	7.74	7.50	8.00
PCB-1260 Peak 5	8.24	7.99	8.49
Tetrachloro-m-xylene	2.65	2.40	2.90
DCB Decachlorobiphenyl (Surr)	9.90	9.65	10.15

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061738.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Jun-2017 03:11:28 ALS Bottle#: 38 Worklist Smp#: 38
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0059455-038
Operator ID: jax Instrument ID: SGC_P3
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 06:48:38

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	353177277	1000.0	1000.0	
2	1.597	1.601	-0.004	392415021	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.751	2.752	-0.001	47095268	12.5	12.2	
2	2.647	2.649	-0.002	59520712	12.5	12.9	
						RPD = 5.65	
1 PCB-1016							
1	3.487	3.486	0.001	30150603	250.0	250.1	
1	3.951	3.952	-0.001	67059557	250.0	243.6	
1	4.091	4.089	0.002	28813487	250.0	249.2	
1	4.154	4.156	-0.002	18379811	250.0	245.6	
1	4.537	4.539	-0.002	30250957	250.0	249.0	
		Average of Peak Amounts =				247.5	
2	3.511	3.512	-0.001	39142146	250.0	264.8	
2	3.951	3.952	-0.001	84456917	250.0	259.1	
2	4.087	4.086	0.001	39286347	250.0	263.0	
2	4.311	4.312	-0.001	21088945	250.0	259.4	
2	4.587	4.586	0.001	27802392	250.0	252.9	
		Average of Peak Amounts =				259.8	
						RPD = 4.87	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							M
1	6.014	6.012	0.002	46693764	250.0	254.0	M
1	6.741	6.742	-0.001	88517492	250.0	247.1	M
1	7.231	7.232	-0.001	41090358	250.0	246.2	M
1	7.667	7.666	0.001	88850114	250.0	243.0	M
1	8.051	8.049	0.002	52343202	250.0	247.4	
		Average of Peak Amounts =				247.5	
2	6.401	6.402	-0.001	67698534	250.0	257.9	
2	6.857	6.859	-0.002	101007625	250.0	255.2	
2	7.374	7.376	-0.002	46406413	250.0	256.4	
2	7.744	7.746	-0.002	99672020	250.0	256.7	
2	8.237	8.239	-0.002	76904623	250.0	258.0	
		Average of Peak Amounts =				256.8	
						RPD = 3.69	
$ 15 DCB Decachlorobiphenyl							
1	9.631	9.629	0.002	46489399	12.5	12.4	
2	9.897	9.896	0.001	49070072	12.5	12.9	
						RPD = 4.16	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_1660_ICV_00011	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

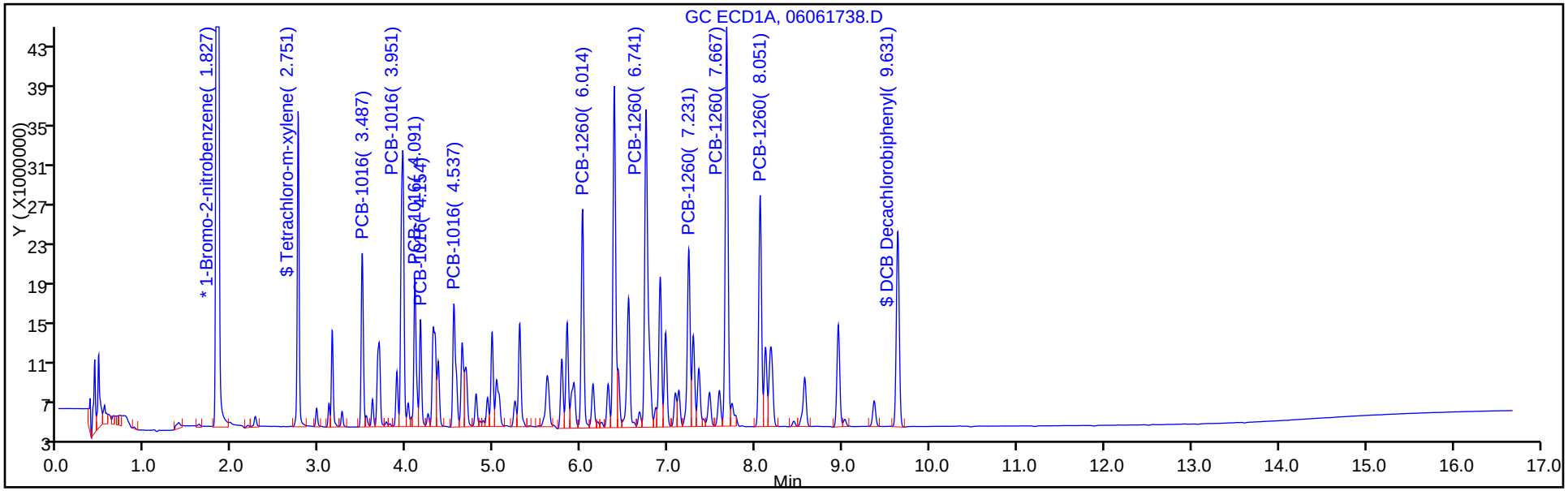
Report Date: 07-Jun-2017 06:53:32 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

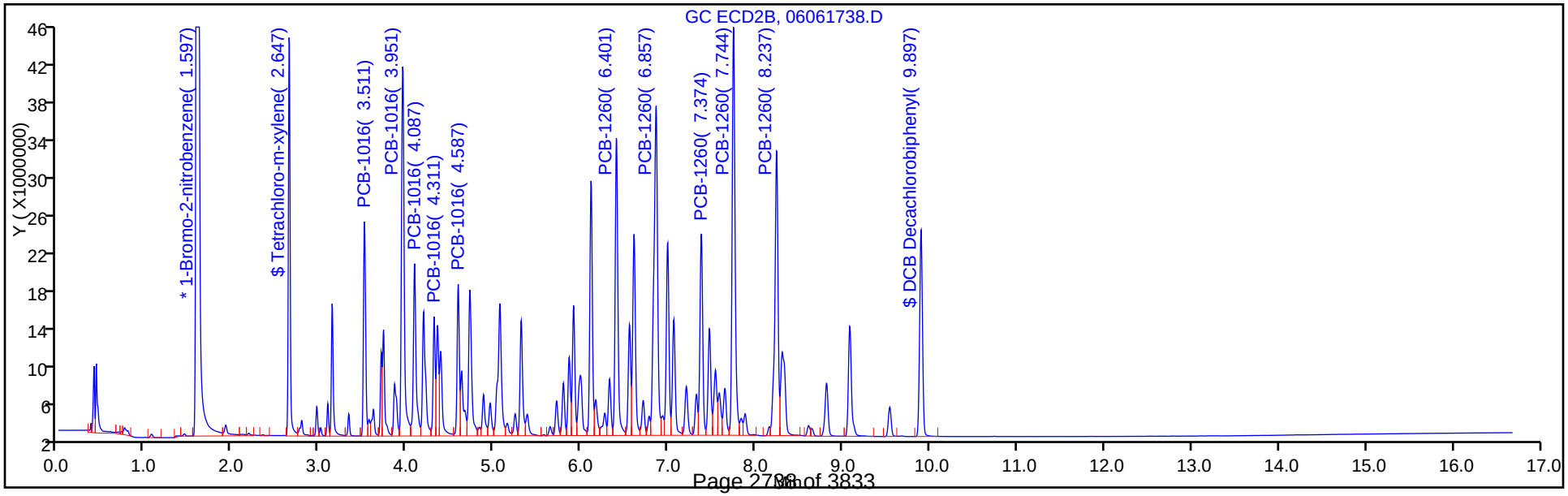
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Injection Date:	07-Jun-2017 03:11:28	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	ICV			Worklist Smp#:	38
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	38
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376236/39 Calibration Date: 06/07/2017 03:33

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 21:25

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 23:35

Lab File ID: 06061739.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1232 Peak 1	Lin1		0.2091		255	250	2.1	20.0
PCB-1232 Peak 2	Lin1		0.1763		254	250	1.5	20.0
PCB-1232 Peak 3	Lin1		0.3776		245	250	-1.8	20.0
PCB-1232 Peak 4	Lin1		0.1639		250	250	0.2	20.0
PCB-1232 Peak 5	Lin1		0.1643		249	250	-0.4	20.0
PCB-1262 Peak 1	Lin1		0.5689		248	250	-0.9	20.0
PCB-1262 Peak 2	Lin1		0.6927		248	250	-0.8	20.0
PCB-1262 Peak 3	Lin1		0.6640		251	250	0.3	20.0
PCB-1262 Peak 4	Lin1		1.336		245	250	-2.0	20.0
PCB-1262 Peak 5	Lin1		0.4832		245	250	-2.0	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376236/39 Calibration Date: 06/07/2017 03:33

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 21:25

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 23:35

Lab File ID: 06061739.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1232 Peak 1	3.14	2.89	3.39
PCB-1232 Peak 2	3.49	3.24	3.74
PCB-1232 Peak 3	3.95	3.70	4.20
PCB-1232 Peak 4	4.09	3.84	4.34
PCB-1232 Peak 5	4.54	4.29	4.79
PCB-1262 Peak 1	6.38	6.13	6.63
PCB-1262 Peak 2	6.90	6.65	7.15
PCB-1262 Peak 3	7.23	6.98	7.48
PCB-1262 Peak 4	7.67	7.42	7.92
PCB-1262 Peak 5	8.05	7.80	8.30

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061739.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Jun-2017 03:33:05 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0059455-039
Operator ID: jax Instrument ID: SGC_P3
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	352348854	1000.0	1000.0	
2	1.597	1.601	-0.004	393122135	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							
1	3.141	3.144	-0.003	18415671	250.0	255.4	
1	3.487	3.487	0.000	15526378	250.0	253.7	
1	3.951	3.950	0.001	33262296	250.0	245.4	
1	4.091	4.090	0.001	14439832	250.0	250.4	
1	4.537	4.537	0.000	14475247	250.0	248.9	
		Average of Peak Amounts =				250.8	
2	3.141	3.140	0.001	25714120	250.0	261.0	
2	3.511	3.510	0.001	21356999	250.0	259.8	
2	3.951	3.950	0.001	43123663	250.0	257.3	
2	4.087	4.087	0.000	20299068	250.0	264.3	
2	4.721	4.720	0.001	17541798	250.0	272.0	
		Average of Peak Amounts =				262.9	
						RPD = 4.71	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.377	6.377	0.000	50114282	250.0	247.8	
1	6.904	6.904	0.000	61018643	250.0	248.1	
1	7.231	7.230	0.001	58486055	250.0	250.6	
1	7.667	7.667	0.000	117712381	250.0	245.0	
1	8.051	8.050	0.001	42561718	250.0	245.0	
		Average of Peak Amounts =				247.3	
2	6.401	6.400	0.001	52963165	250.0	265.1	
2	6.987	6.990	-0.003	70418776	250.0	261.4	
2	7.374	7.377	-0.003	66797711	250.0	261.6	
2	7.744	7.744	0.000	125508430	250.0	257.0	
2	8.237	8.237	0.000	94818921	250.0	261.1	
		Average of Peak Amounts =				261.3	
						RPD = 5.49	

Reagents:

AR_3262_ICV_00011	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

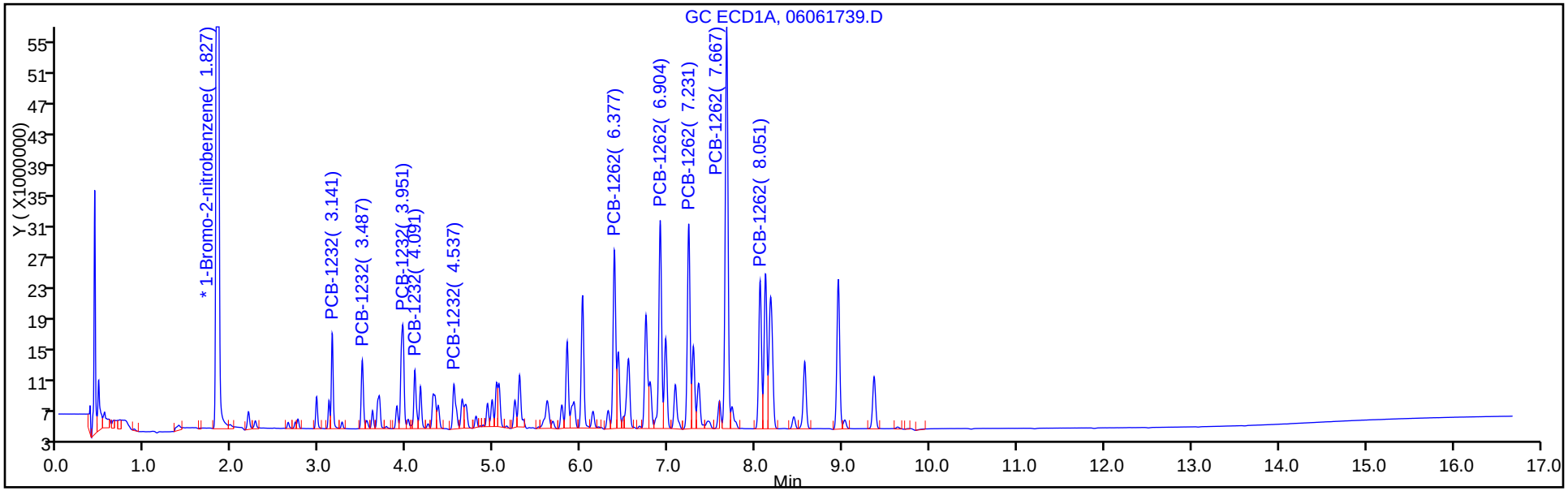
Report Date: 07-Jun-2017 06:53:35 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

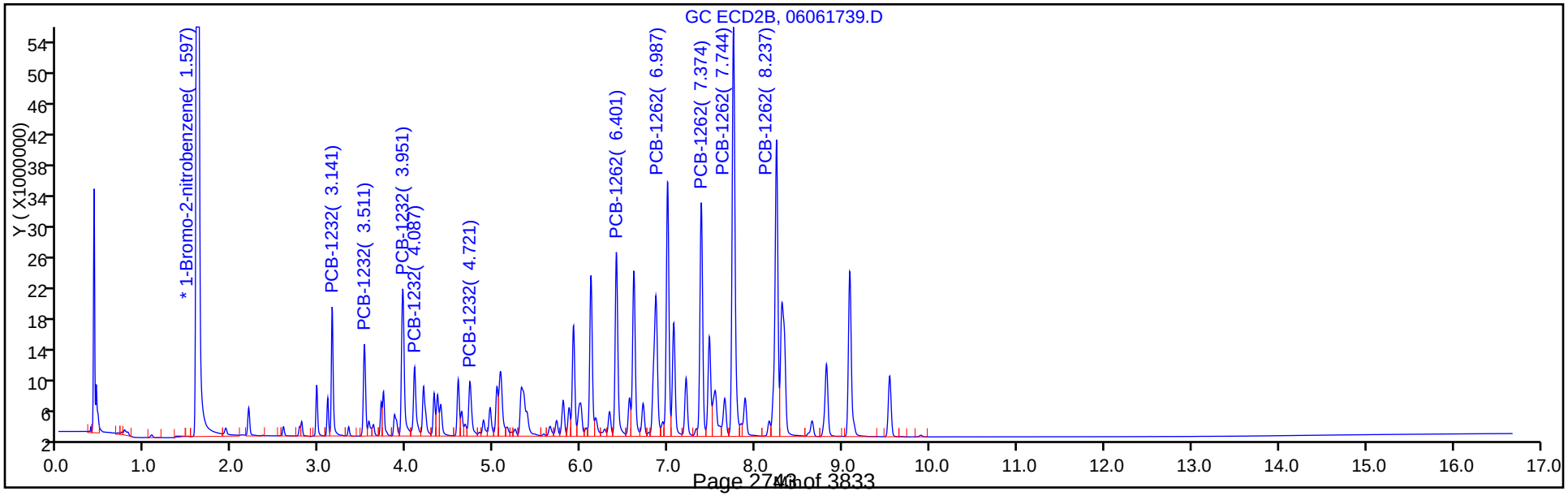
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061739.D

Injection Date:	07-Jun-2017 03:33:05	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	ICV			Worklist Smp#:	39
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376236/39 Calibration Date: 06/07/2017 03:33

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 21:25

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 23:35

Lab File ID: 06061739.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1232 Peak 1	Lin1		0.2616		261	250	4.4	20.0
PCB-1232 Peak 2	Lin1		0.2173		260	250	3.9	20.0
PCB-1232 Peak 3	Lin1		0.4388		257	250	2.9	20.0
PCB-1232 Peak 4	Lin1		0.2065		264	250	5.7	20.0
PCB-1232 Peak 5	Lin1		0.1785		272	250	8.8	20.0
PCB-1262 Peak 1	Lin1		0.5389		265	250	6.1	20.0
PCB-1262 Peak 2	Lin1		0.7165		261	250	4.6	20.0
PCB-1262 Peak 3	Lin1		0.6797		262	250	4.7	20.0
PCB-1262 Peak 4	Lin1		1.277		257	250	2.8	20.0
PCB-1262 Peak 5	Lin1		0.9648		261	250	4.4	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376236/39 Calibration Date: 06/07/2017 03:33

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 21:25

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 23:35

Lab File ID: 06061739.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1232 Peak 1	3.14	2.89	3.39
PCB-1232 Peak 2	3.51	3.26	3.76
PCB-1232 Peak 3	3.95	3.70	4.20
PCB-1232 Peak 4	4.09	3.84	4.34
PCB-1232 Peak 5	4.72	4.47	4.97
PCB-1262 Peak 1	6.40	6.15	6.65
PCB-1262 Peak 2	6.99	6.74	7.24
PCB-1262 Peak 3	7.37	7.13	7.63
PCB-1262 Peak 4	7.74	7.49	7.99
PCB-1262 Peak 5	8.24	7.99	8.49

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061739.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Jun-2017 03:33:05 ALS Bottle#: 39 Worklist Smp#: 39
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0059455-039
Operator ID: jax Instrument ID: SGC_P3
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 06:53:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	352348854	1000.0	1000.0	
2	1.597	1.601	-0.004	393122135	1000.0	1000.0	
						RPD = 0.00	
7 PCB-1232							
1	3.141	3.144	-0.003	18415671	250.0	255.4	
1	3.487	3.487	0.000	15526378	250.0	253.7	
1	3.951	3.950	0.001	33262296	250.0	245.4	
1	4.091	4.090	0.001	14439832	250.0	250.4	
1	4.537	4.537	0.000	14475247	250.0	248.9	
		Average of Peak Amounts =				250.8	
2	3.141	3.140	0.001	25714120	250.0	261.0	
2	3.511	3.510	0.001	21356999	250.0	259.8	
2	3.951	3.950	0.001	43123663	250.0	257.3	
2	4.087	4.087	0.000	20299068	250.0	264.3	
2	4.721	4.720	0.001	17541798	250.0	272.0	
		Average of Peak Amounts =				262.9	
						RPD = 4.71	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
5 PCB-1262							
1	6.377	6.377	0.000	50114282	250.0	247.8	
1	6.904	6.904	0.000	61018643	250.0	248.1	
1	7.231	7.230	0.001	58486055	250.0	250.6	
1	7.667	7.667	0.000	117712381	250.0	245.0	
1	8.051	8.050	0.001	42561718	250.0	245.0	
		Average of Peak Amounts =				247.3	
2	6.401	6.400	0.001	52963165	250.0	265.1	
2	6.987	6.990	-0.003	70418776	250.0	261.4	
2	7.374	7.377	-0.003	66797711	250.0	261.6	
2	7.744	7.744	0.000	125508430	250.0	257.0	
2	8.237	8.237	0.000	94818921	250.0	261.1	
		Average of Peak Amounts =				261.3	
						RPD = 5.49	

Reagents:

AR_3262_ICV_00011	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

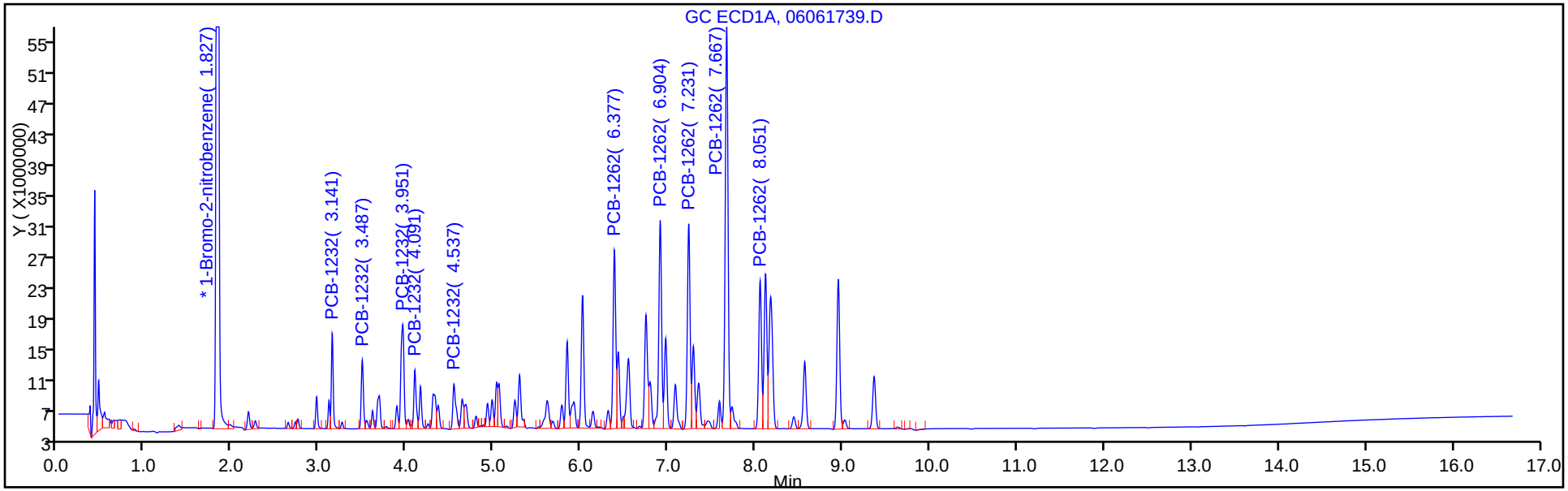
Report Date: 07-Jun-2017 06:53:36 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

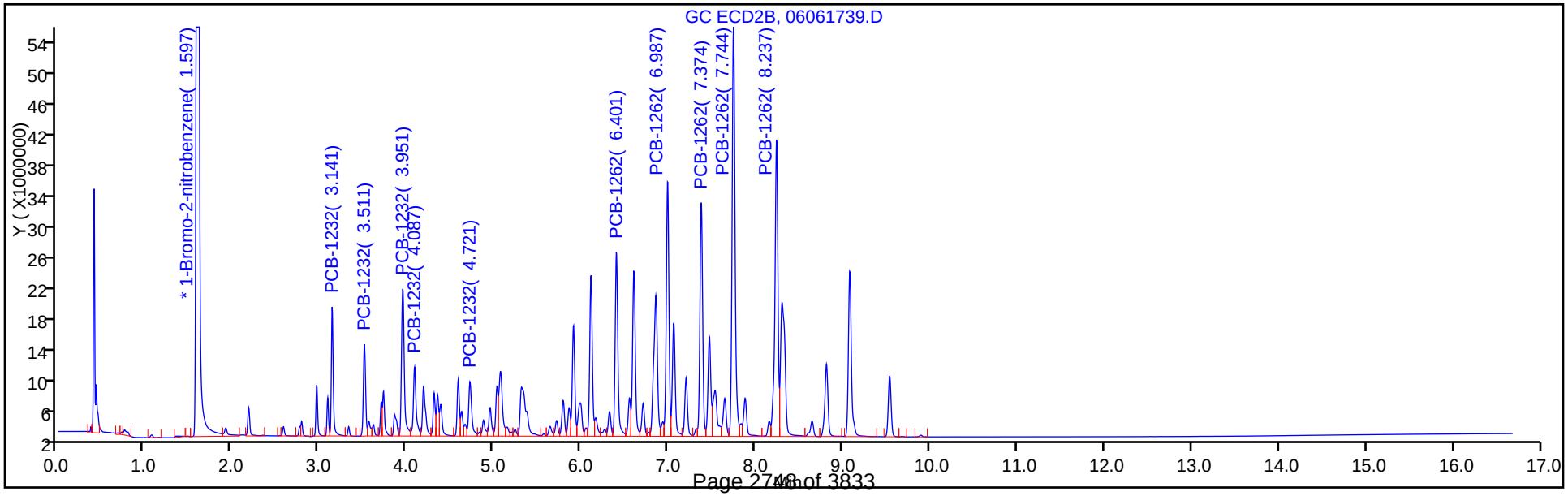
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Injection Date:	07-Jun-2017 03:33:05	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	ICV			Worklist Smp#:	39
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	39
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376236/40 Calibration Date: 06/07/2017 03:54

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 23:56

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/07/2017 02:06

Lab File ID: 06061740.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1242 Peak 1	Lin1		0.2901		247	250	-1.1	20.0
PCB-1242 Peak 2	Lin1		0.6363		241	250	-3.7	20.0
PCB-1242 Peak 3	Lin1		0.2749		245	250	-1.8	20.0
PCB-1242 Peak 4	Lin1		0.2157		238	250	-4.9	20.0
PCB-1242 Peak 5	Lin1		0.2352		253	250	1.3	20.0
PCB-1268 Peak 1	Lin1		1.450		237	250	-5.2	20.0
PCB-1268 Peak 2	Lin1		1.304		239	250	-4.2	20.0
PCB-1268 Peak 3	Lin1		1.150		240	250	-4.2	20.0
PCB-1268 Peak 4	Lin1		0.5498		245	250	-2.1	20.0
PCB-1268 Peak 5	Lin1		3.652		240	250	-4.1	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376236/40 Calibration Date: 06/07/2017 03:54

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 23:56

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/07/2017 02:06

Lab File ID: 06061740.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1242 Peak 1	3.49	3.24	3.74
PCB-1242 Peak 2	3.95	3.70	4.20
PCB-1242 Peak 3	4.09	3.84	4.34
PCB-1242 Peak 4	5.03	4.78	5.28
PCB-1242 Peak 5	5.05	4.80	5.30
PCB-1268 Peak 1	8.11	7.86	8.36
PCB-1268 Peak 2	8.17	7.91	8.41
PCB-1268 Peak 3	8.44	8.19	8.69
PCB-1268 Peak 4	8.95	8.70	9.20
PCB-1268 Peak 5	9.36	9.11	9.61

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061740.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Jun-2017 03:54:43 ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0059455-040
Operator ID: jax Instrument ID: SGC_P3
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 07:10:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 07:09:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	353734205	1000.0	1000.0	
2	1.600	1.601	-0.001	393095785	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							M
1	3.487	3.487	0.000	25650440	250.0	247.1	
1	3.950	3.951	-0.001	56273160	250.0	240.9	
1	4.090	4.091	-0.001	24307301	250.0	245.4	
1	5.027	5.027	0.000	19072399	250.0	237.6	
1	5.053	5.054	-0.001	20797009	250.0	253.2	
		Average of Peak Amounts =				244.9	
2	3.510	3.511	-0.001	33296452	250.0	261.6	M
2	3.950	3.951	-0.001	71014285	250.0	257.7	M
2	4.087	4.087	0.000	32684472	250.0	261.7	M
2	5.030	5.031	-0.001	23650766	250.0	258.8	M
2	5.077	5.074	0.003	29285976	250.0	249.7	M
		Average of Peak Amounts =				257.9	
						RPD = 5.18	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.113	8.111	0.002	128196036	250.0	236.9	
1	8.167	8.164	0.003	115310011	250.0	239.5	
1	8.437	8.437	0.000	101662501	250.0	239.6	
1	8.947	8.947	0.000	48617452	250.0	244.8	
1	9.357	9.357	0.000	322930892	250.0	239.7	
		Average of Peak Amounts =				240.1	
2	8.237	8.237	0.000	138904968	250.0	256.1	
2	8.300	8.301	-0.001	134771073	250.0	254.7	
2	8.647	8.647	0.000	112001039	250.0	254.5	
2	9.077	9.077	0.000	53587240	250.0	254.0	
2	9.537	9.537	0.000	308907286	250.0	251.6	
		Average of Peak Amounts =				254.2	
						RPD = 5.70	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_4268_ICV_00011	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

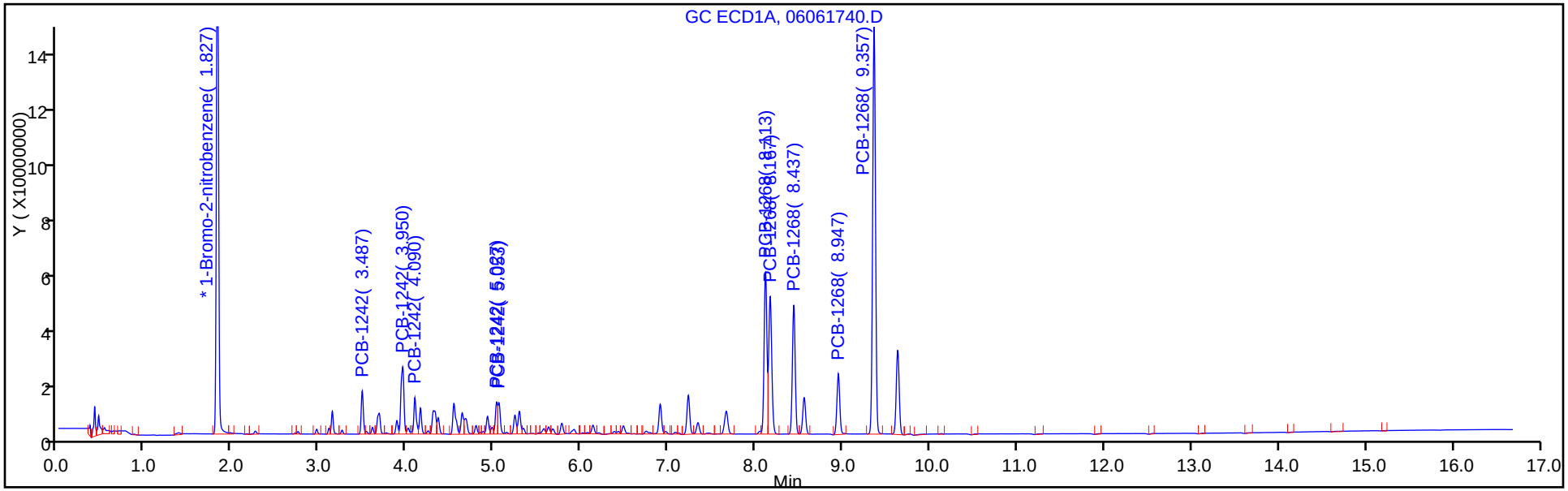
Report Date: 07-Jun-2017 07:10:24 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

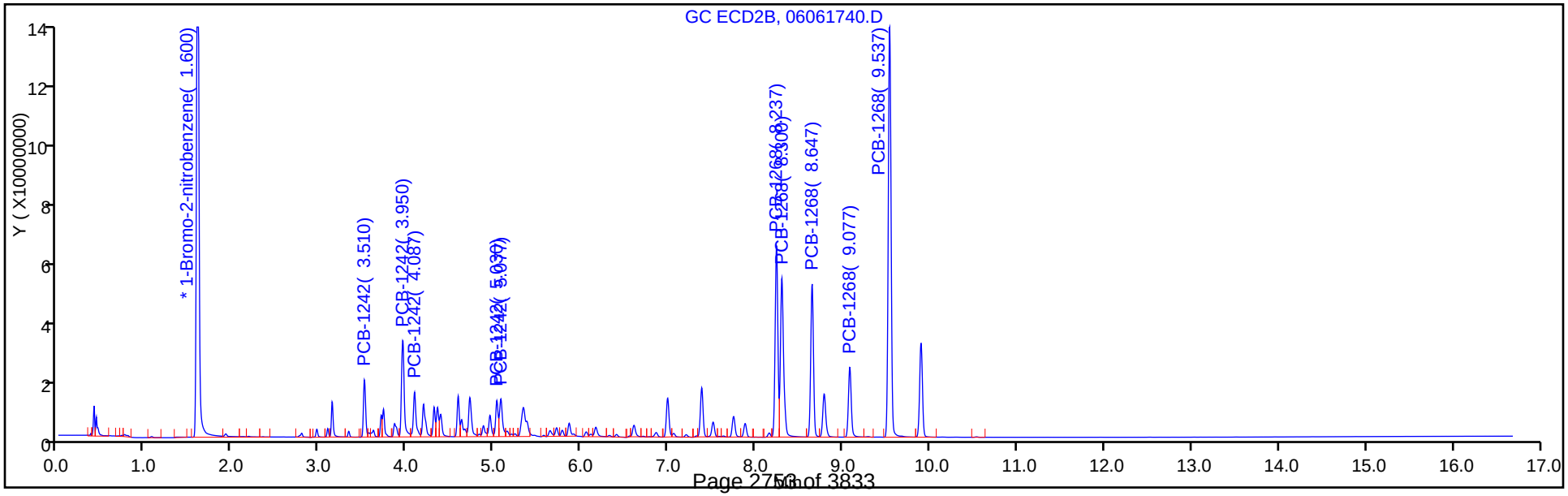
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061740.D

Injection Date:	07-Jun-2017 03:54:43	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	ICV			Worklist Smp#:	40
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376236/40 Calibration Date: 06/07/2017 03:54

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 23:56

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/07/2017 02:06

Lab File ID: 06061740.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1242 Peak 1	Lin1		0.3388		262	250	4.7	20.0
PCB-1242 Peak 2	Lin1		0.7226		258	250	3.1	20.0
PCB-1242 Peak 3	Lin1		0.3326		262	250	4.7	20.0
PCB-1242 Peak 4	Lin1		0.2407		259	250	3.5	20.0
PCB-1242 Peak 5	Lin1		0.2980		250	250	-0.1	20.0
PCB-1268 Peak 1	Lin1		1.413		256	250	2.5	20.0
PCB-1268 Peak 2	Lin1		1.371		255	250	1.9	20.0
PCB-1268 Peak 3	Lin1		1.140		255	250	1.8	20.0
PCB-1268 Peak 4	Lin1		0.5453		254	250	1.6	20.0
PCB-1268 Peak 5	Lin1		3.143		252	250	0.6	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICV 280-376236/40 Calibration Date: 06/07/2017 03:54

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 23:56

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/07/2017 02:06

Lab File ID: 06061740.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1242 Peak 1	3.51	3.26	3.76
PCB-1242 Peak 2	3.95	3.70	4.20
PCB-1242 Peak 3	4.09	3.84	4.34
PCB-1242 Peak 4	5.03	4.78	5.28
PCB-1242 Peak 5	5.08	4.82	5.32
PCB-1268 Peak 1	8.24	7.99	8.49
PCB-1268 Peak 2	8.30	8.05	8.55
PCB-1268 Peak 3	8.65	8.40	8.90
PCB-1268 Peak 4	9.08	8.83	9.33
PCB-1268 Peak 5	9.54	9.29	9.79

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061740.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 07-Jun-2017 03:54:43 ALS Bottle#: 40 Worklist Smp#: 40
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: ICV
Misc. Info.: 280-0059455-040
Operator ID: jax Instrument ID: SGC_P3
Sublist:

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 07-Jun-2017 07:10:23 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK018

First Level Reviewer: jacksonto Date: 07-Jun-2017 07:09:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.827	1.827	0.000	353734205	1000.0	1000.0	
2	1.600	1.601	-0.001	393095785	1000.0	1000.0	
						RPD = 0.00	
10 PCB-1242							M
1	3.487	3.487	0.000	25650440	250.0	247.1	
1	3.950	3.951	-0.001	56273160	250.0	240.9	
1	4.090	4.091	-0.001	24307301	250.0	245.4	
1	5.027	5.027	0.000	19072399	250.0	237.6	
1	5.053	5.054	-0.001	20797009	250.0	253.2	
		Average of Peak Amounts =				244.9	
2	3.510	3.511	-0.001	33296452	250.0	261.6	M
2	3.950	3.951	-0.001	71014285	250.0	257.7	M
2	4.087	4.087	0.000	32684472	250.0	261.7	M
2	5.030	5.031	-0.001	23650766	250.0	258.8	M
2	5.077	5.074	0.003	29285976	250.0	249.7	M
		Average of Peak Amounts =				257.9	
						RPD = 5.18	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
13 PCB-1268							
1	8.113	8.111	0.002	128196036	250.0	236.9	
1	8.167	8.164	0.003	115310011	250.0	239.5	
1	8.437	8.437	0.000	101662501	250.0	239.6	
1	8.947	8.947	0.000	48617452	250.0	244.8	
1	9.357	9.357	0.000	322930892	250.0	239.7	
		Average of Peak Amounts =				240.1	
2	8.237	8.237	0.000	138904968	250.0	256.1	
2	8.300	8.301	-0.001	134771073	250.0	254.7	
2	8.647	8.647	0.000	112001039	250.0	254.5	
2	9.077	9.077	0.000	53587240	250.0	254.0	
2	9.537	9.537	0.000	308907286	250.0	251.6	
		Average of Peak Amounts =				254.2	
						RPD = 5.70	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

AR_4268_ICV_00011	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

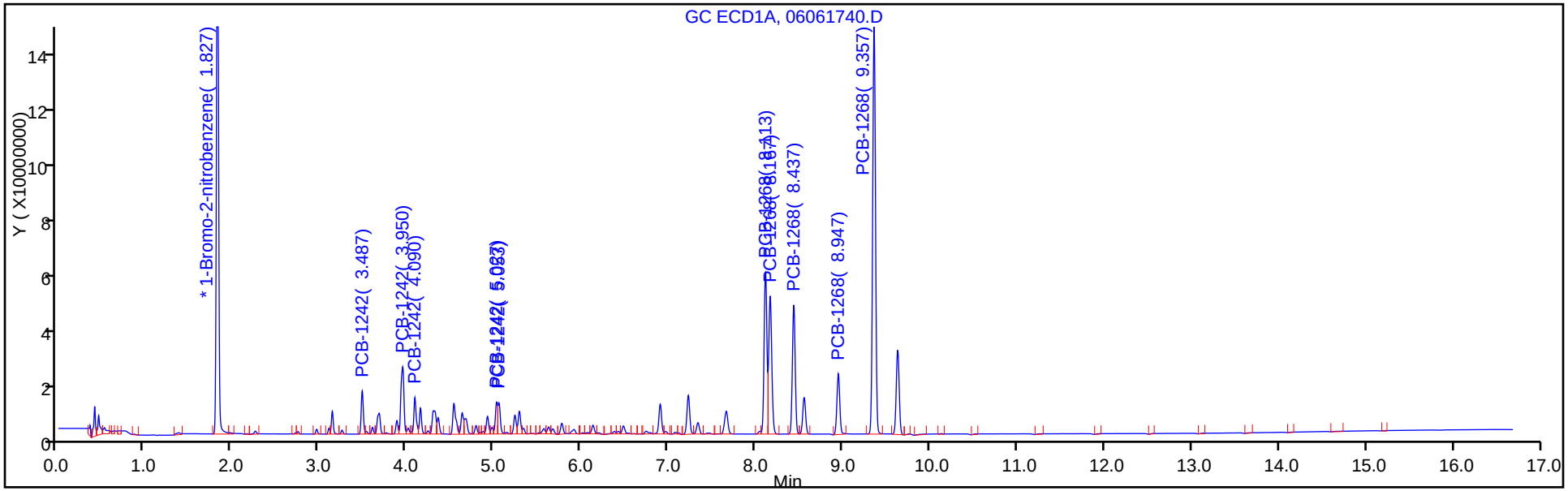
Report Date: 07-Jun-2017 07:10:24 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

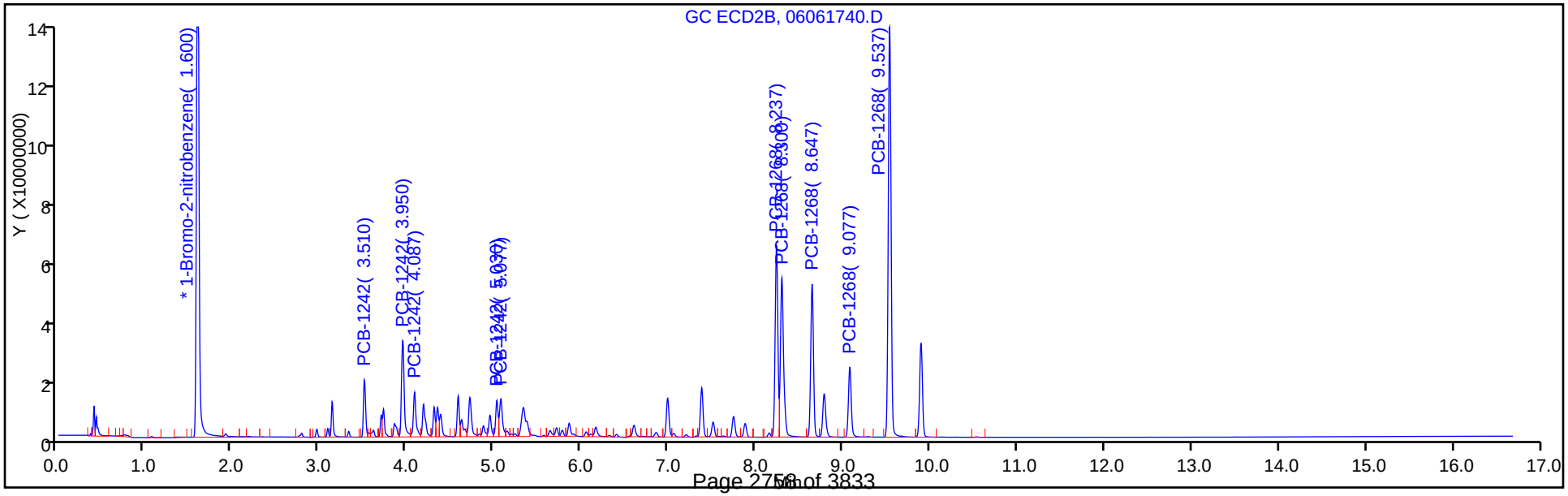
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061740.D

Injection Date:	07-Jun-2017 03:54:43	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	ICV			Worklist Smp#:	40
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	40
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Report Date: 07-Jun-2017 07:10:24 Chrom Revision: 2.2 25-Apr-2017 13:27:22

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061740.D

Injection Date: 07-Jun-2017 03:54:43 Instrument ID: SGC_P3

Lims ID: ICV

Client ID:

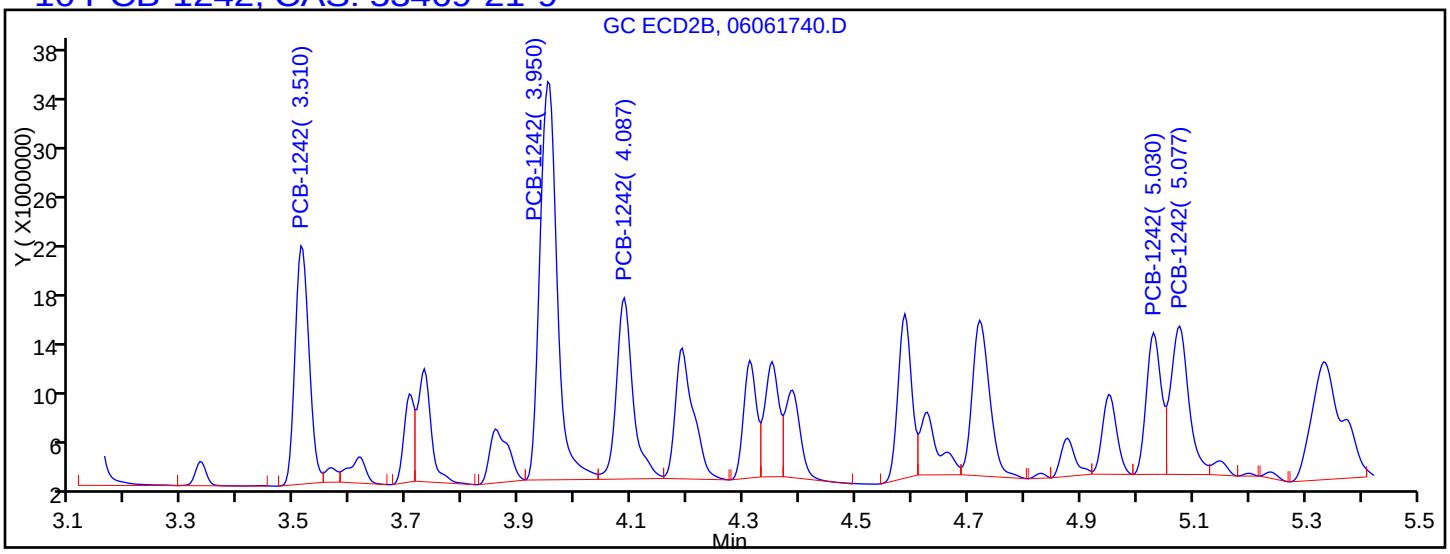
Operator ID: jax ALS Bottle#: 40 Worklist Smp#: 40

Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

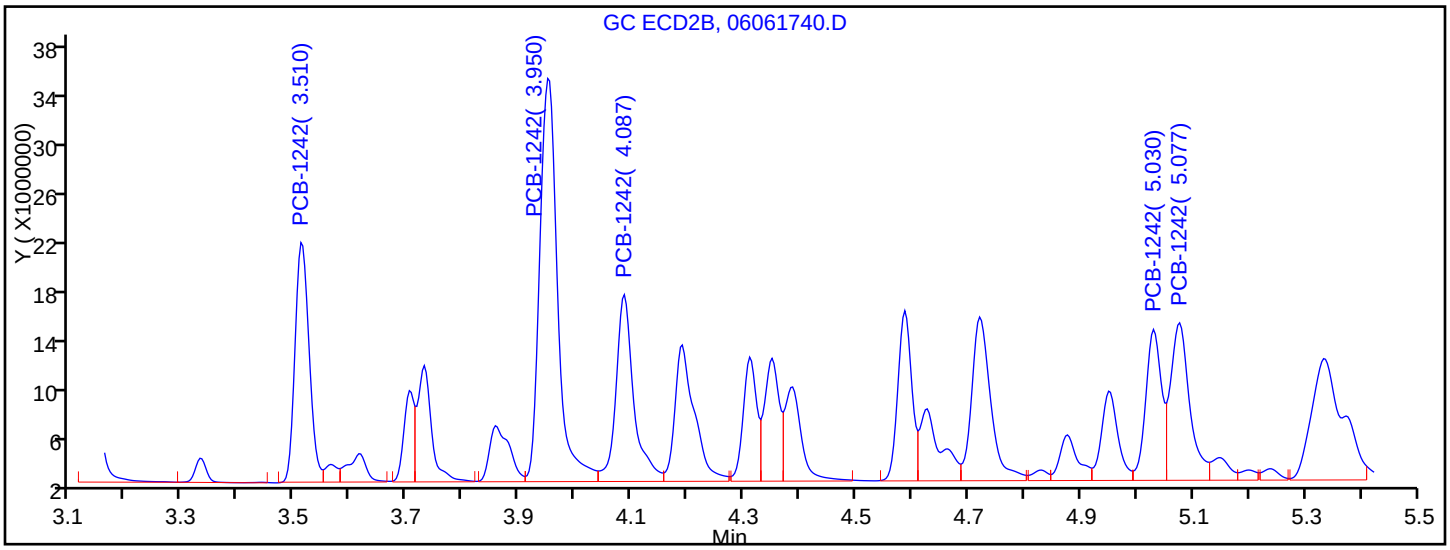
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

10 PCB-1242, CAS: 53469-21-9



Processing Integration Results

3.510	Response = 32836080
3.950	Response = 67831748
4.087	Response = 29465232
5.030	Response = 21021715
5.077	Response = 25978056



Manual Integration Results

3.510	Response = 33296452	M
3.950	Response = 71014285	M
4.087	Response = 32684472	M
5.030	Response = 23650766	M
5.077	Response = 29285976	M

Reviewer: jacksonto, 07-Jun-2017 06:49:36

Audit Action: Assigned New Baseline Audit Reason: Baseline Smoothing

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVIS 280-378729/3 Calibration Date: 06/26/2017 13:24

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06261703.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3436		520	500	3.9	20.0
PCB-1016 Peak 2	Lin1		0.7863		514	500	2.7	20.0
PCB-1016 Peak 3	Lin1		0.3295		518	500	3.5	20.0
PCB-1016 Peak 4	Lin1		0.2101		510	500	1.9	20.0
PCB-1016 Peak 5	Lin1		0.3477		523	500	4.5	20.0
PCB-1260 Peak 1	Lin1		0.5119		504	500	0.8	20.0
PCB-1260 Peak 2	Lin1		0.9918		498	500	-0.5	20.0
PCB-1260 Peak 3	Lin1		0.4637		501	500	0.2	20.0
PCB-1260 Peak 4	Lin1		1.014		496	500	-0.8	20.0
PCB-1260 Peak 5	Lin1		0.5622		477	500	-4.6	20.0
Tetrachloro-m-xylene	Lin1		10.96		25.4	25.0	1.5	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		10.46		25.2	25.0	0.8	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVIS 280-378729/3 Calibration Date: 06/26/2017 13:24

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06261703.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.48	3.23	3.73
PCB-1016 Peak 2	3.95	3.70	4.20
PCB-1016 Peak 3	4.09	3.84	4.34
PCB-1016 Peak 4	4.15	3.90	4.40
PCB-1016 Peak 5	4.53	4.28	4.78
PCB-1260 Peak 1	6.01	5.76	6.26
PCB-1260 Peak 2	6.74	6.49	6.99
PCB-1260 Peak 3	7.23	6.98	7.48
PCB-1260 Peak 4	7.66	7.41	7.91
PCB-1260 Peak 5	8.05	7.80	8.30
Tetrachloro-m-xylene	2.75	2.50	3.00
DCB Decachlorobiphenyl (Surr)	9.62	9.37	9.87

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261703.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 26-Jun-2017 13:24:26 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 280-0060129-003
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 26-Jun-2017 13:44:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.825	0.000	365008735	1000.0	1000.0	
2	1.582	1.582	0.000	410699040	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.749	2.749	0.000	99986017	25.0	25.4	
2	2.632	2.632	0.000	122277288	25.0	26.0	
						RPD = 2.54	
1 PCB-1016							
1	3.482	3.482	0.000	62711425	500.0	519.6	
1	3.945	3.945	0.000	143497865	500.0	513.7	
1	4.085	4.085	0.000	60127355	500.0	517.5	
1	4.149	4.149	0.000	38340210	500.0	509.6	
1	4.532	4.532	0.000	63453171	500.0	522.6	
		Average of Peak Amounts =				516.6	
2	3.492	3.492	0.000	78836140	500.0	531.2	
2	3.925	3.925	0.000	175163656	500.0	530.7	
2	4.062	4.062	0.000	78349561	500.0	520.2	
2	4.285	4.285	0.000	43784230	500.0	535.1	
2	4.559	4.559	0.000	58740587	500.0	529.8	
		Average of Peak Amounts =				529.4	
						RPD = 2.44	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.009	6.009	0.000	93426927	500.0	504.2	
1	6.735	6.735	0.000	181003278	500.0	497.5	
1	7.225	7.225	0.000	84624903	500.0	501.1	
1	7.659	7.659	0.000	185012563	500.0	496.2	
1	8.045	8.045	0.000	102609468	500.0	476.9	
		Average of Peak Amounts =				495.2	
2	6.369	6.369	0.000	137578202	500.0	517.4	
2	6.822	6.822	0.000	209820178	500.0	524.1	
2	7.339	7.339	0.000	95221408	500.0	519.4	
2	7.709	7.709	0.000	194760451	500.0	493.5	
2	8.202	8.202	0.000	161109769	500.0	532.0	
		Average of Peak Amounts =				517.3	
						RPD = 4.37	
$ 15 DCB Decachlorobiphenyl							
1	9.622	9.622	0.000	95433662	25.0	25.2	
2	9.859	9.859	0.000	99334733	25.0	25.7	
						RPD = 2.10	
19 1260 Res 1							
1	8.045	8.045	0.000	102609468	NR	NR	
16 1260 Res 2							
1	8.105	8.105	0.000	37255600	NR	NR	
18 1260 Res 3							
1	8.165	8.165	0.000	47790968	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

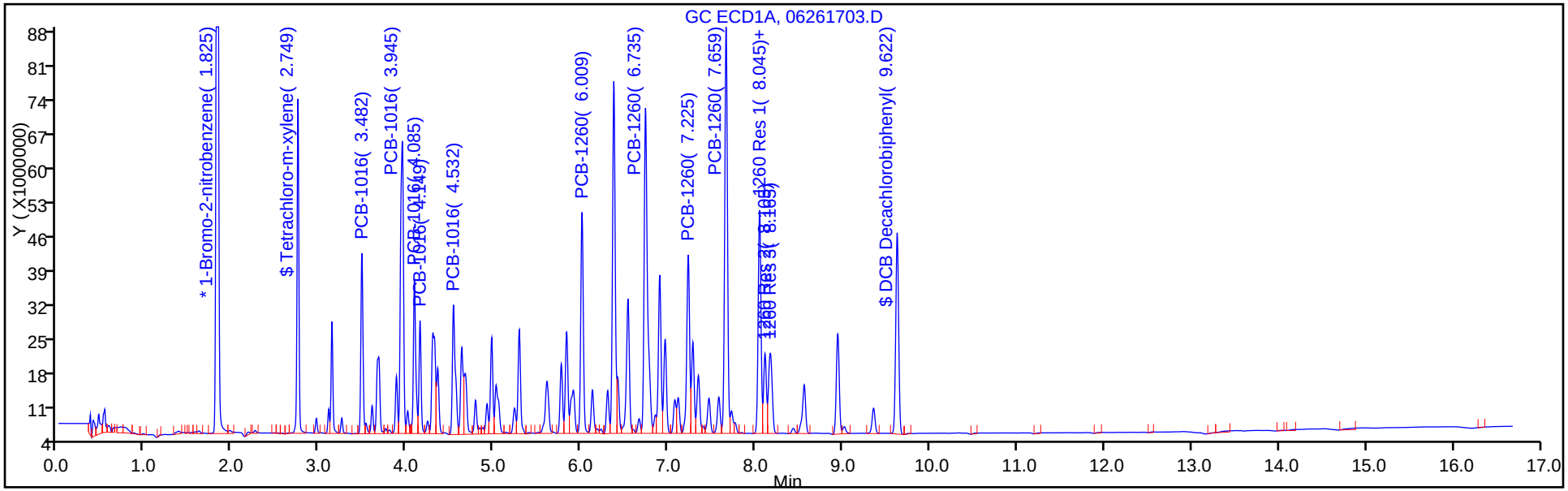
Report Date: 27-Jun-2017 10:22:09 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

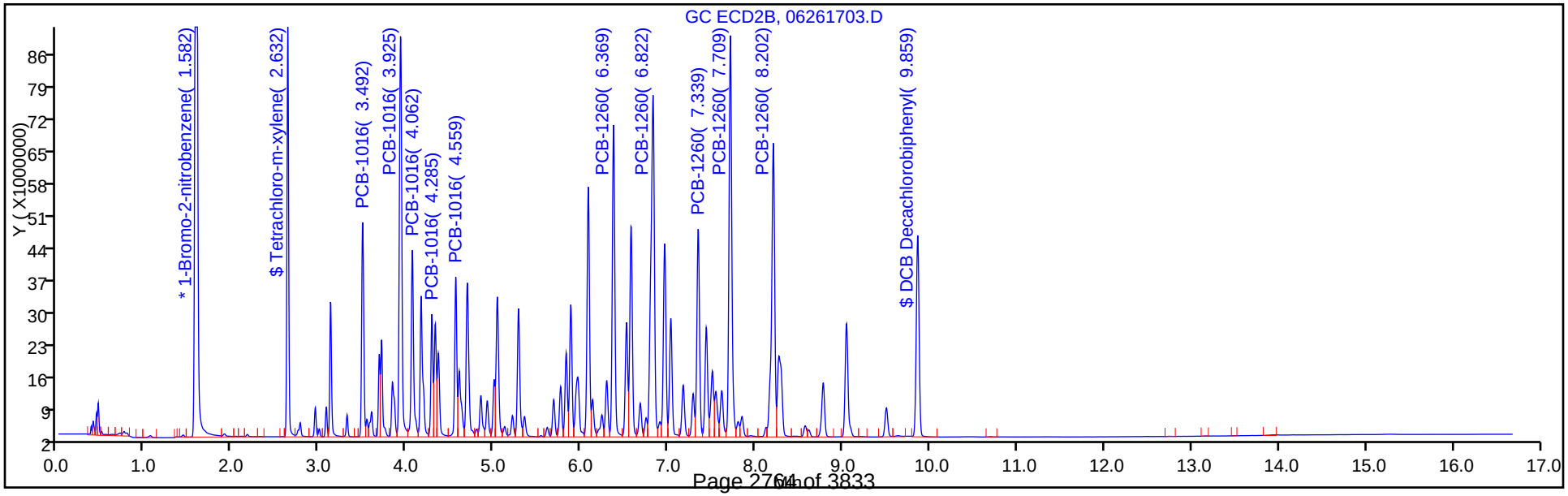
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261703.D

Injection Date:	26-Jun-2017 13:24:26	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVIS 280-378729/3 Calibration Date: 06/26/2017 13:24

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06261703.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3839		531	500	6.2	20.0
PCB-1016 Peak 2	Lin1		0.8530		531	500	6.1	20.0
PCB-1016 Peak 3	Lin1		0.3815		520	500	4.0	20.0
PCB-1016 Peak 4	Lin1		0.2132		535	500	7.0	20.0
PCB-1016 Peak 5	Lin1		0.2861		530	500	6.0	20.0
PCB-1260 Peak 1	Lin1		0.6700		517	500	3.5	20.0
PCB-1260 Peak 2	Lin1		1.022		524	500	4.8	20.0
PCB-1260 Peak 3	Lin1		0.4637		519	500	3.9	20.0
PCB-1260 Peak 4	Lin1		0.9484		493	500	-1.3	20.0
PCB-1260 Peak 5	Lin1		0.7846		532	500	6.4	20.0
Tetrachloro-m-xylene	Lin1		11.91		26.0	25.0	4.1	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		9.675		25.7	25.0	3.0	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCVIS 280-378729/3 Calibration Date: 06/26/2017 13:24

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06261703.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.49	3.24	3.74
PCB-1016 Peak 2	3.93	3.68	4.18
PCB-1016 Peak 3	4.06	3.81	4.31
PCB-1016 Peak 4	4.29	4.04	4.54
PCB-1016 Peak 5	4.56	4.31	4.81
PCB-1260 Peak 1	6.37	6.12	6.62
PCB-1260 Peak 2	6.82	6.57	7.07
PCB-1260 Peak 3	7.34	7.09	7.59
PCB-1260 Peak 4	7.71	7.46	7.96
PCB-1260 Peak 5	8.20	7.95	8.45
Tetrachloro-m-xylene	2.63	2.38	2.88
DCB Decachlorobiphenyl (Surr)	9.86	9.61	10.11

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261703.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 26-Jun-2017 13:24:26 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 280-0060129-003
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 26-Jun-2017 13:44:35

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.825	0.000	365008735	1000.0	1000.0	
2	1.582	1.582	0.000	410699040	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.749	2.749	0.000	99986017	25.0	25.4	
2	2.632	2.632	0.000	122277288	25.0	26.0	
						RPD = 2.54	
1 PCB-1016							
1	3.482	3.482	0.000	62711425	500.0	519.6	
1	3.945	3.945	0.000	143497865	500.0	513.7	
1	4.085	4.085	0.000	60127355	500.0	517.5	
1	4.149	4.149	0.000	38340210	500.0	509.6	
1	4.532	4.532	0.000	63453171	500.0	522.6	
		Average of Peak Amounts =				516.6	
2	3.492	3.492	0.000	78836140	500.0	531.2	
2	3.925	3.925	0.000	175163656	500.0	530.7	
2	4.062	4.062	0.000	78349561	500.0	520.2	
2	4.285	4.285	0.000	43784230	500.0	535.1	
2	4.559	4.559	0.000	58740587	500.0	529.8	
		Average of Peak Amounts =				529.4	
						RPD = 2.44	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.009	6.009	0.000	93426927	500.0	504.2	
1	6.735	6.735	0.000	181003278	500.0	497.5	
1	7.225	7.225	0.000	84624903	500.0	501.1	
1	7.659	7.659	0.000	185012563	500.0	496.2	
1	8.045	8.045	0.000	102609468	500.0	476.9	
		Average of Peak Amounts =				495.2	
2	6.369	6.369	0.000	137578202	500.0	517.4	
2	6.822	6.822	0.000	209820178	500.0	524.1	
2	7.339	7.339	0.000	95221408	500.0	519.4	
2	7.709	7.709	0.000	194760451	500.0	493.5	
2	8.202	8.202	0.000	161109769	500.0	532.0	
		Average of Peak Amounts =				517.3	
						RPD = 4.37	
$ 15 DCB Decachlorobiphenyl							
1	9.622	9.622	0.000	95433662	25.0	25.2	
2	9.859	9.859	0.000	99334733	25.0	25.7	
						RPD = 2.10	
19 1260 Res 1							
1	8.045	8.045	0.000	102609468	NR	NR	
16 1260 Res 2							
1	8.105	8.105	0.000	37255600	NR	NR	
18 1260 Res 3							
1	8.165	8.165	0.000	47790968	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

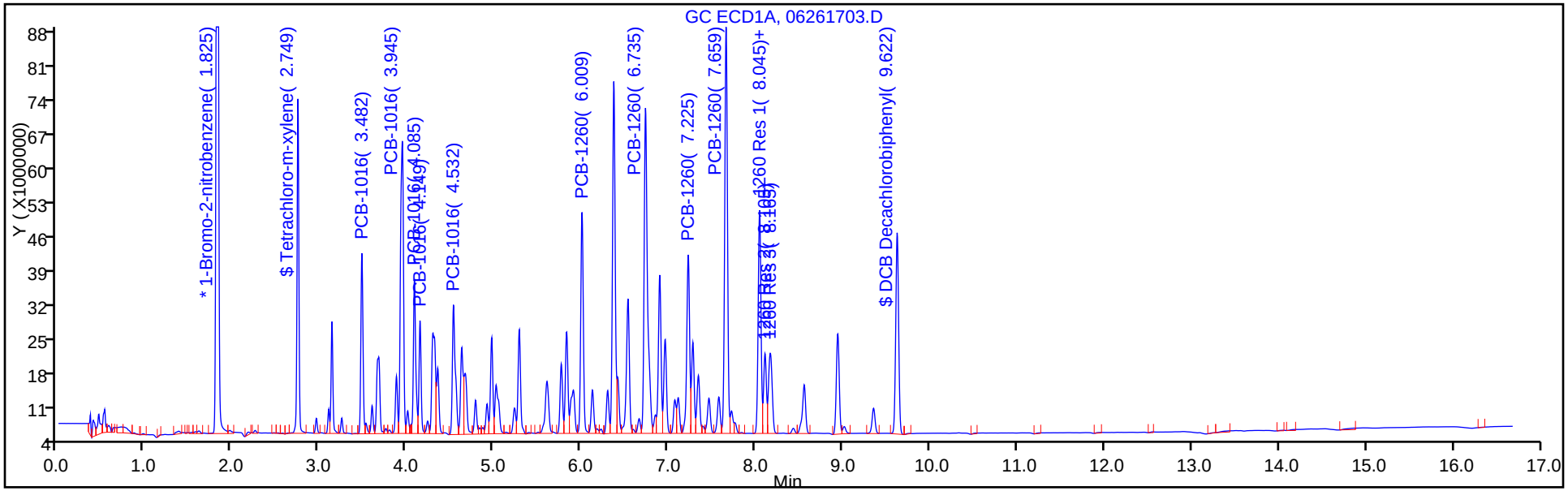
Report Date: 27-Jun-2017 10:22:10 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

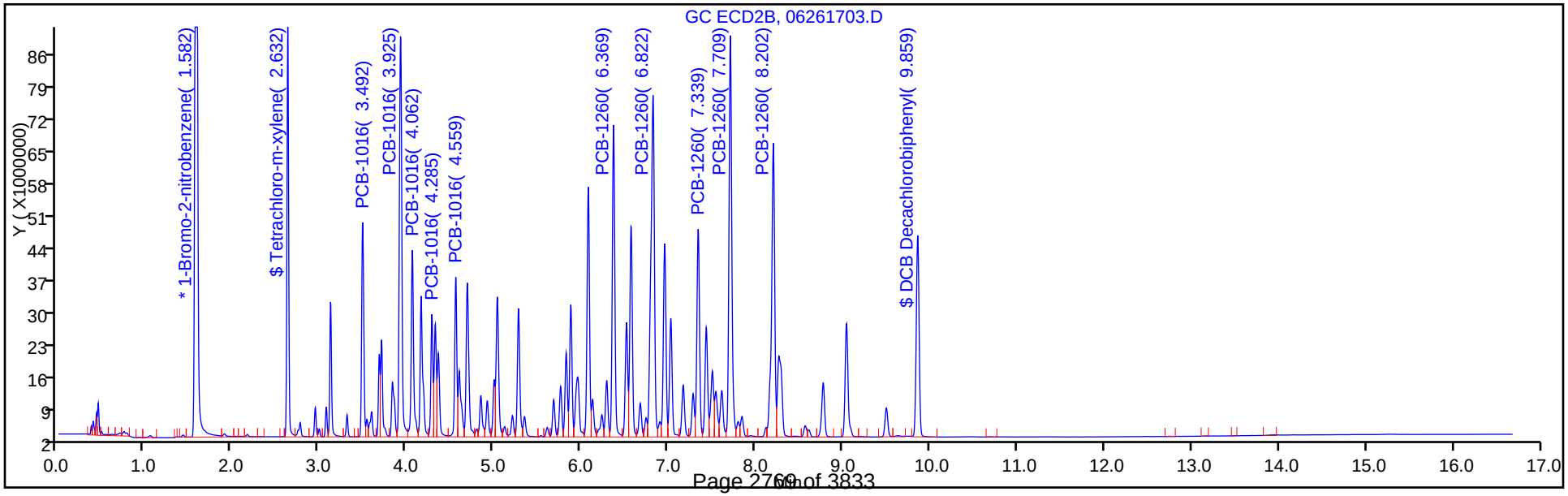
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261703.D

Injection Date:	26-Jun-2017 13:24:26	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378729/18 Calibration Date: 06/26/2017 18:50

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06261718.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3377		510	500	2.1	20.0
PCB-1016 Peak 2	Lin1		0.7762		507	500	1.4	20.0
PCB-1016 Peak 3	Lin1		0.3223		506	500	1.2	20.0
PCB-1016 Peak 4	Lin1		0.2101		510	500	1.9	20.0
PCB-1016 Peak 5	Lin1		0.3417		513	500	2.7	20.0
PCB-1260 Peak 1	Lin1		0.5048		497	500	-0.6	20.0
PCB-1260 Peak 2	Lin1		0.9801		492	500	-1.7	20.0
PCB-1260 Peak 3	Lin1		0.4618		499	500	-0.2	20.0
PCB-1260 Peak 4	Lin1		0.999		489	500	-2.2	20.0
PCB-1260 Peak 5	Lin1		0.5652		479	500	-4.1	20.0
Tetrachloro-m-xylene	Lin1		10.84		25.1	25.0	0.4	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		10.31		24.9	25.0	-0.6	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378729/18 Calibration Date: 06/26/2017 18:50

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06261718.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.48	3.23	3.73
PCB-1016 Peak 2	3.95	3.70	4.20
PCB-1016 Peak 3	4.08	3.84	4.34
PCB-1016 Peak 4	4.15	3.90	4.40
PCB-1016 Peak 5	4.53	4.28	4.78
PCB-1260 Peak 1	6.01	5.76	6.26
PCB-1260 Peak 2	6.73	6.49	6.99
PCB-1260 Peak 3	7.22	6.98	7.48
PCB-1260 Peak 4	7.66	7.41	7.91
PCB-1260 Peak 5	8.04	7.80	8.30
Tetrachloro-m-xylene	2.75	2.50	3.00
DCB Decachlorobiphenyl (Surr)	9.62	9.37	9.87

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261718.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 26-Jun-2017 18:50:23 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0060129-018
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:39 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:21:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.823	1.825	-0.002	382824670	1000.0	1000.0	
2	1.583	1.582	0.001	439606247	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.750	2.749	0.001	103742313	25.0	25.1	
2	2.633	2.632	0.001	130288886	25.0	25.9	
						RPD = 3.16	
1 PCB-1016							
1	3.483	3.482	0.001	64636853	500.0	510.4	
1	3.947	3.945	0.002	148576176	500.0	507.1	
1	4.083	4.085	-0.002	61689591	500.0	506.0	
1	4.150	4.149	0.001	40216298	500.0	509.7	
1	4.533	4.532	0.001	65404219	500.0	513.3	
		Average of Peak Amounts =				509.3	
2	3.490	3.492	-0.002	83620712	500.0	526.2	
2	3.927	3.925	0.002	185052020	500.0	523.6	
2	4.060	4.062	-0.002	82902980	500.0	514.0	
2	4.287	4.285	0.002	44564742	500.0	507.8	
2	4.560	4.559	0.001	62571163	500.0	527.2	
		Average of Peak Amounts =				519.7	
						RPD = 2.03	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.006	6.009	-0.003	96631525	500.0	497.0	
1	6.733	6.735	-0.002	187593804	500.0	491.5	
1	7.223	7.225	-0.002	88386619	500.0	499.0	
1	7.660	7.659	0.001	191234909	500.0	488.9	
1	8.043	8.045	-0.002	108180996	500.0	479.5	
		Average of Peak Amounts =				491.2	
2	6.370	6.369	0.001	144687645	500.0	508.1	
2	6.820	6.822	-0.002	219973450	500.0	513.0	
2	7.340	7.339	0.001	100418680	500.0	511.5	
2	7.706	7.709	-0.003	207539288	500.0	491.2	
2	8.203	8.202	0.001	168311230	500.0	518.8	
		Average of Peak Amounts =				508.5	
						RPD = 3.47	
$ 15 DCB Decachlorobiphenyl							
1	9.620	9.622	-0.002	98713598	25.0	24.9	
2	9.856	9.859	-0.003	104698440	25.0	25.3	
						RPD = 1.93	
S 8 Polychlorinated biphenyls, Total							
1						1000.5	
2						1028.3	
						RPD = 2.74	
19 1260 Res 1							
1		8.045			ND	ND	
16 1260 Res 2							
1		8.105			ND	ND	
18 1260 Res 3							
1		8.165			ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

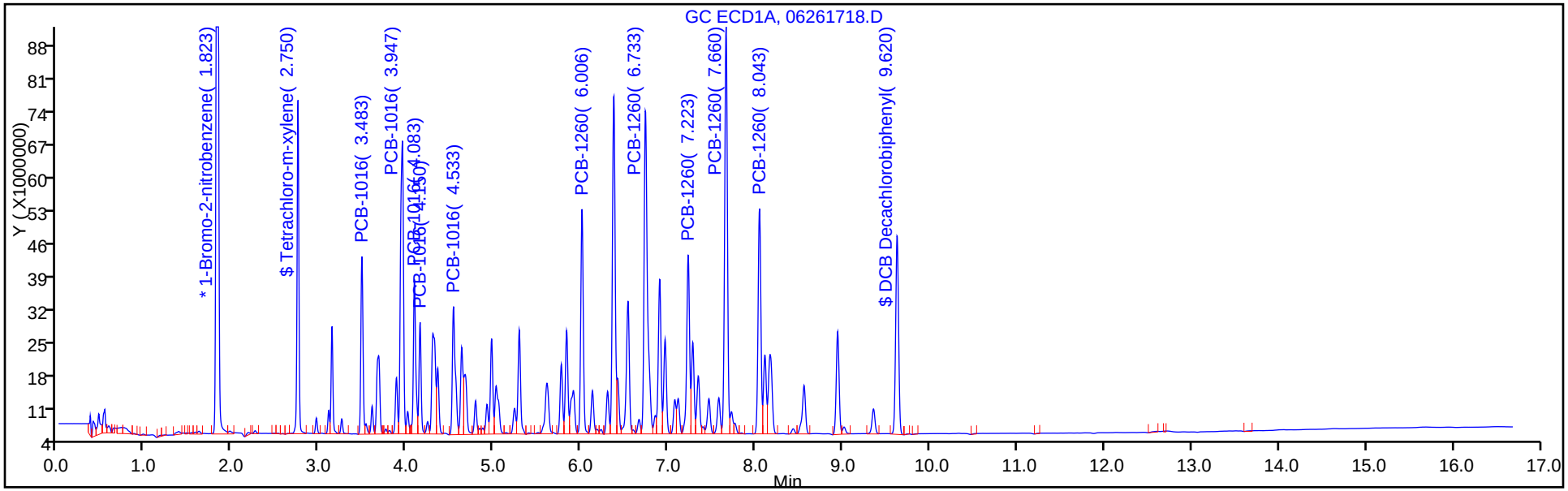
Report Date: 27-Jun-2017 10:22:40 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

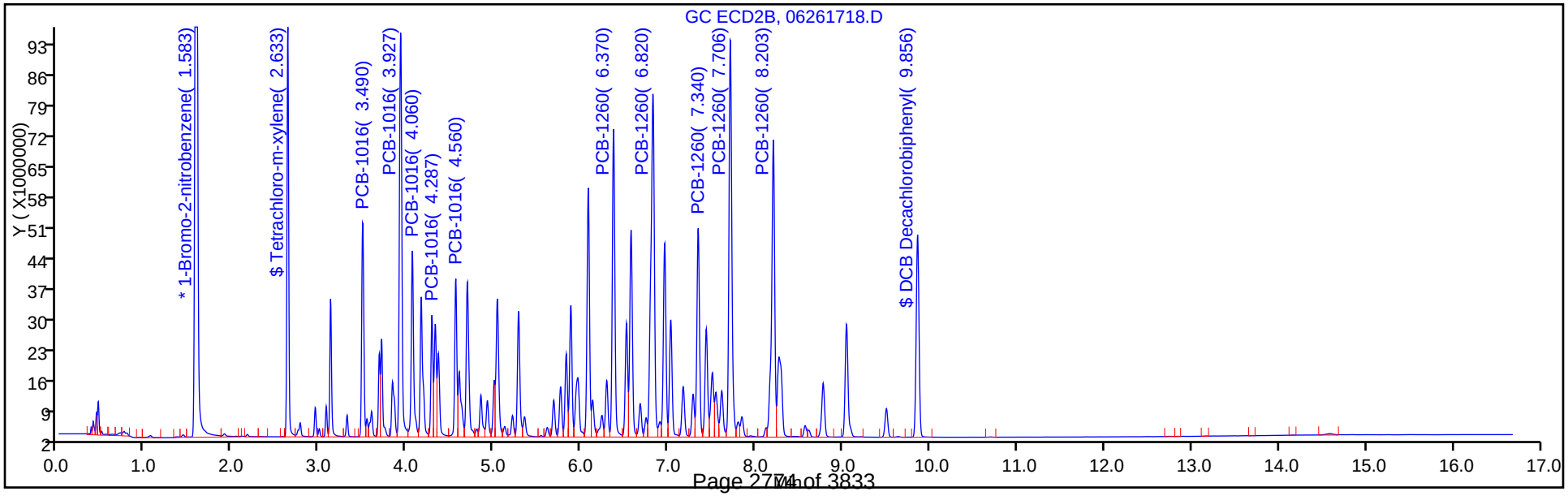
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261718.D

Injection Date:	26-Jun-2017 18:50:23	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCV			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378729/18 Calibration Date: 06/26/2017 18:50

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06261718.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3804		526	500	5.2	20.0
PCB-1016 Peak 2	Lin1		0.8419		524	500	4.7	20.0
PCB-1016 Peak 3	Lin1		0.3772		514	500	2.8	20.0
PCB-1016 Peak 4	Lin1		0.2028		508	500	1.6	20.0
PCB-1016 Peak 5	Lin1		0.2847		527	500	5.4	20.0
PCB-1260 Peak 1	Lin1		0.6583		508	500	1.6	20.0
PCB-1260 Peak 2	Lin1		1.001		513	500	2.6	20.0
PCB-1260 Peak 3	Lin1		0.4569		511	500	2.3	20.0
PCB-1260 Peak 4	Lin1		0.9442		491	500	-1.8	20.0
PCB-1260 Peak 5	Lin1		0.7657		519	500	3.8	20.0
Tetrachloro-m-xylene	Lin1		11.86		25.9	25.0	3.6	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		9.527		25.3	25.0	1.4	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378729/18 Calibration Date: 06/26/2017 18:50

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06261718.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.49	3.24	3.74
PCB-1016 Peak 2	3.93	3.68	4.18
PCB-1016 Peak 3	4.06	3.81	4.31
PCB-1016 Peak 4	4.29	4.04	4.54
PCB-1016 Peak 5	4.56	4.31	4.81
PCB-1260 Peak 1	6.37	6.12	6.62
PCB-1260 Peak 2	6.82	6.57	7.07
PCB-1260 Peak 3	7.34	7.09	7.59
PCB-1260 Peak 4	7.71	7.46	7.96
PCB-1260 Peak 5	8.20	7.95	8.45
Tetrachloro-m-xylene	2.63	2.38	2.88
DCB Decachlorobiphenyl (Surr)	9.86	9.61	10.11

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261718.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 26-Jun-2017 18:50:23 ALS Bottle#: 18 Worklist Smp#: 18
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0060129-018
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:39 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:21:25

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.823	1.825	-0.002	382824670	1000.0	1000.0	
2	1.583	1.582	0.001	439606247	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.750	2.749	0.001	103742313	25.0	25.1	
2	2.633	2.632	0.001	130288886	25.0	25.9	
						RPD = 3.16	
1 PCB-1016							
1	3.483	3.482	0.001	64636853	500.0	510.4	
1	3.947	3.945	0.002	148576176	500.0	507.1	
1	4.083	4.085	-0.002	61689591	500.0	506.0	
1	4.150	4.149	0.001	40216298	500.0	509.7	
1	4.533	4.532	0.001	65404219	500.0	513.3	
		Average of Peak Amounts =				509.3	
2	3.490	3.492	-0.002	83620712	500.0	526.2	
2	3.927	3.925	0.002	185052020	500.0	523.6	
2	4.060	4.062	-0.002	82902980	500.0	514.0	
2	4.287	4.285	0.002	44564742	500.0	507.8	
2	4.560	4.559	0.001	62571163	500.0	527.2	
		Average of Peak Amounts =				519.7	
						RPD = 2.03	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.006	6.009	-0.003	96631525	500.0	497.0	
1	6.733	6.735	-0.002	187593804	500.0	491.5	
1	7.223	7.225	-0.002	88386619	500.0	499.0	
1	7.660	7.659	0.001	191234909	500.0	488.9	
1	8.043	8.045	-0.002	108180996	500.0	479.5	
		Average of Peak Amounts =				491.2	
2	6.370	6.369	0.001	144687645	500.0	508.1	
2	6.820	6.822	-0.002	219973450	500.0	513.0	
2	7.340	7.339	0.001	100418680	500.0	511.5	
2	7.706	7.709	-0.003	207539288	500.0	491.2	
2	8.203	8.202	0.001	168311230	500.0	518.8	
		Average of Peak Amounts =				508.5	
						RPD = 3.47	
$ 15 DCB Decachlorobiphenyl							
1	9.620	9.622	-0.002	98713598	25.0	24.9	
2	9.856	9.859	-0.003	104698440	25.0	25.3	
						RPD = 1.93	
S 8 Polychlorinated biphenyls, Total							
1						1000.5	
2						1028.3	
						RPD = 2.74	
19 1260 Res 1							
1		8.045			ND	ND	
16 1260 Res 2							
1		8.105			ND	ND	
18 1260 Res 3							
1		8.165			ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

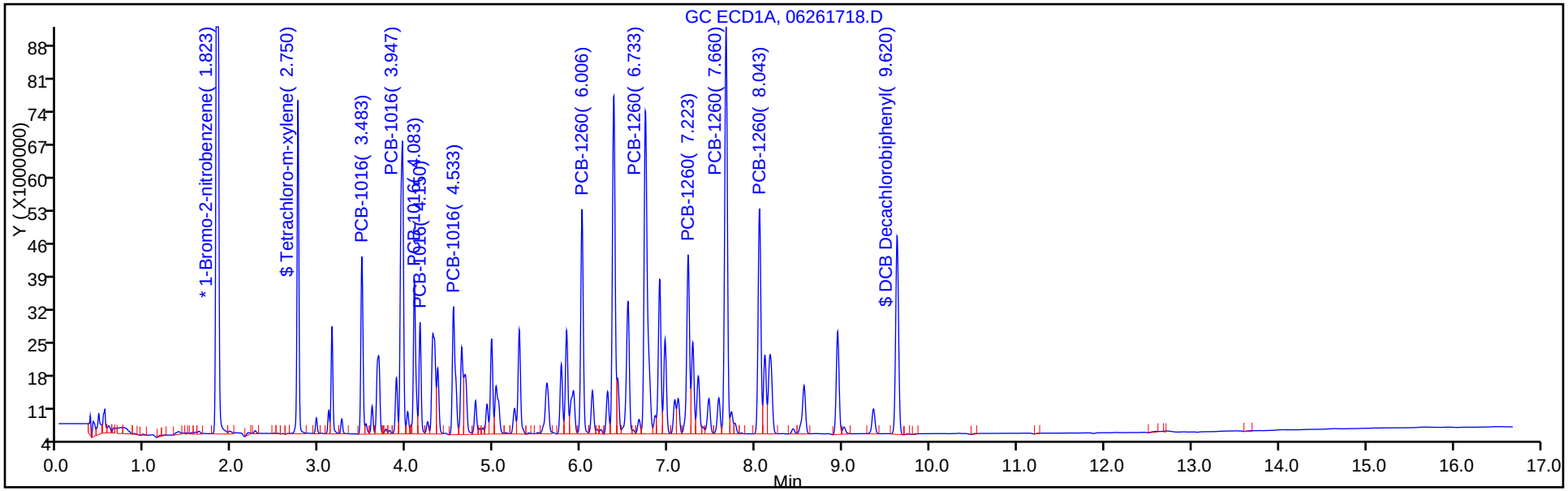
Report Date: 27-Jun-2017 10:22:40 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

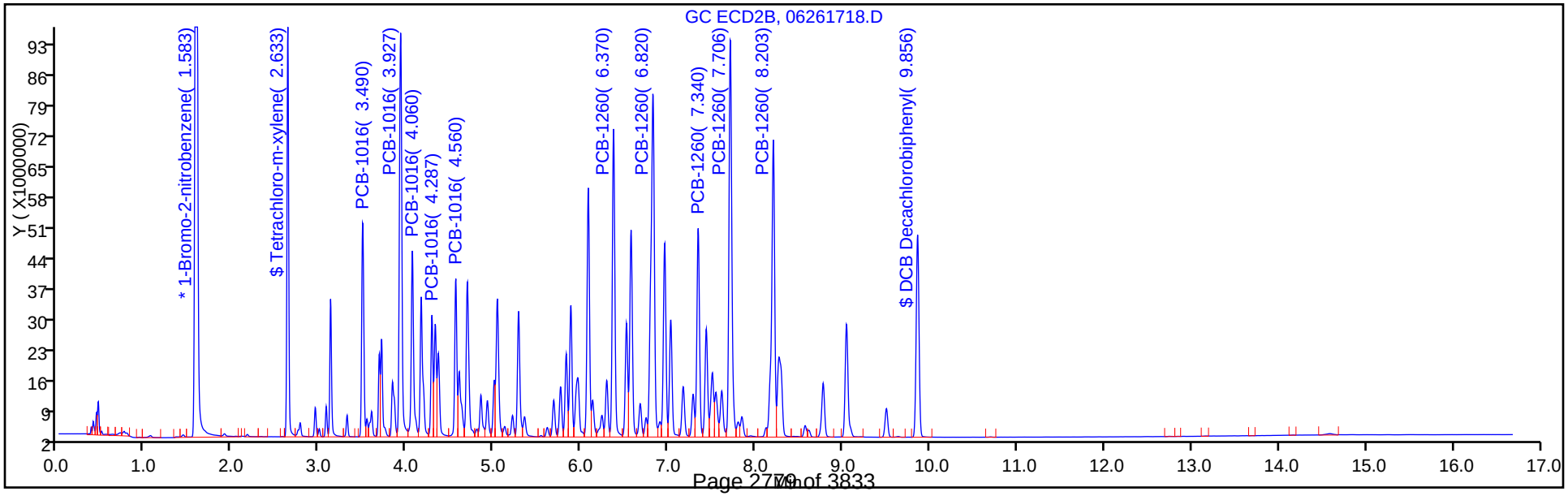
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261718.D

Injection Date:	26-Jun-2017 18:50:23	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCV			Worklist Smp#:	18
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	18
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378729/29 Calibration Date: 06/26/2017 22:49

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06261729.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3373		510	500	2.0	20.0
PCB-1016 Peak 2	Lin1		0.7699		503	500	0.6	20.0
PCB-1016 Peak 3	Lin1		0.3197		502	500	0.4	20.0
PCB-1016 Peak 4	Lin1		0.2049		497	500	-0.7	20.0
PCB-1016 Peak 5	Lin1		0.3365		505	500	1.1	20.0
PCB-1260 Peak 1	Lin1		0.4981		490	500	-1.9	20.0
PCB-1260 Peak 2	Lin1		0.9633		483	500	-3.4	20.0
PCB-1260 Peak 3	Lin1		0.4494		485	500	-2.9	20.0
PCB-1260 Peak 4	Lin1		0.9817		480	500	-3.9	20.0
PCB-1260 Peak 5	Lin1		0.5452		462	500	-7.6	20.0
Tetrachloro-m-xylene	Lin1		10.80		25.0	25.0	0.0	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		9.95		24.0	25.0	-4.2	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378729/29 Calibration Date: 06/26/2017 22:49

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP1 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06261729.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.48	3.23	3.73
PCB-1016 Peak 2	3.95	3.70	4.20
PCB-1016 Peak 3	4.08	3.84	4.34
PCB-1016 Peak 4	4.15	3.90	4.40
PCB-1016 Peak 5	4.53	4.28	4.78
PCB-1260 Peak 1	6.01	5.76	6.26
PCB-1260 Peak 2	6.73	6.49	6.99
PCB-1260 Peak 3	7.22	6.98	7.48
PCB-1260 Peak 4	7.66	7.41	7.91
PCB-1260 Peak 5	8.04	7.80	8.30
Tetrachloro-m-xylene	2.75	2.50	3.00
DCB Decachlorobiphenyl (Surr)	9.62	9.37	9.87

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261729.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 26-Jun-2017 22:49:18 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0060129-029
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:23:06 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:23:59

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.824	1.825	-0.001	394861207	1000.0	1000.0	
2	1.584	1.582	0.002	452290444	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.751	2.749	0.002	106607028	25.0	25.0	
2	2.634	2.632	0.002	134232422	25.0	25.9	
						RPD = 3.68	
1 PCB-1016							
1	3.481	3.482	-0.001	66601976	500.0	509.9	
1	3.947	3.945	0.002	152002370	500.0	502.9	
1	4.084	4.085	-0.001	63120213	500.0	501.8	
1	4.147	4.149	-0.002	40449113	500.0	496.7	
1	4.531	4.532	-0.001	66435283	500.0	505.3	
		Average of Peak Amounts =				503.3	
2	3.491	3.492	-0.001	84860066	500.0	518.7	
2	3.927	3.925	0.002	188370746	500.0	517.8	
2	4.061	4.062	-0.001	83495663	500.0	502.7	
2	4.284	4.285	-0.001	46646456	500.0	516.9	
2	4.557	4.559	-0.002	62458613	500.0	510.9	
		Average of Peak Amounts =				513.4	
						RPD = 1.99	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.007	6.009	-0.002	98343569	500.0	490.3	
1	6.734	6.735	-0.001	190174751	500.0	482.9	
1	7.224	7.225	-0.001	88725489	500.0	485.3	
1	7.661	7.659	0.002	193817733	500.0	480.3	
1	8.041	8.045	-0.004	107628367	500.0	462.2	
		Average of Peak Amounts =				480.2	
2	6.367	6.369	-0.002	144963808	500.0	494.3	
2	6.821	6.822	-0.001	220920154	500.0	500.3	
2	7.337	7.339	-0.002	99717107	500.0	493.1	
2	7.707	7.709	-0.002	205336190	500.0	471.7	
2	8.201	8.202	-0.001	168669214	500.0	504.9	
		Average of Peak Amounts =				492.9	
						RPD = 2.61	
$ 15 DCB Decachlorobiphenyl							
1	9.621	9.622	-0.001	98238904	25.0	24.0	
2	9.857	9.859	-0.002	103107635	25.0	24.2	
						RPD = 1.07	
S 8 Polychlorinated biphenyls, Total							
1						983.5	
2						1006.3	
						RPD = 2.29	
19 1260 Res 1							
1		8.045			ND	ND	
16 1260 Res 2							
1		8.105			ND	ND	
18 1260 Res 3							
1		8.165			ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

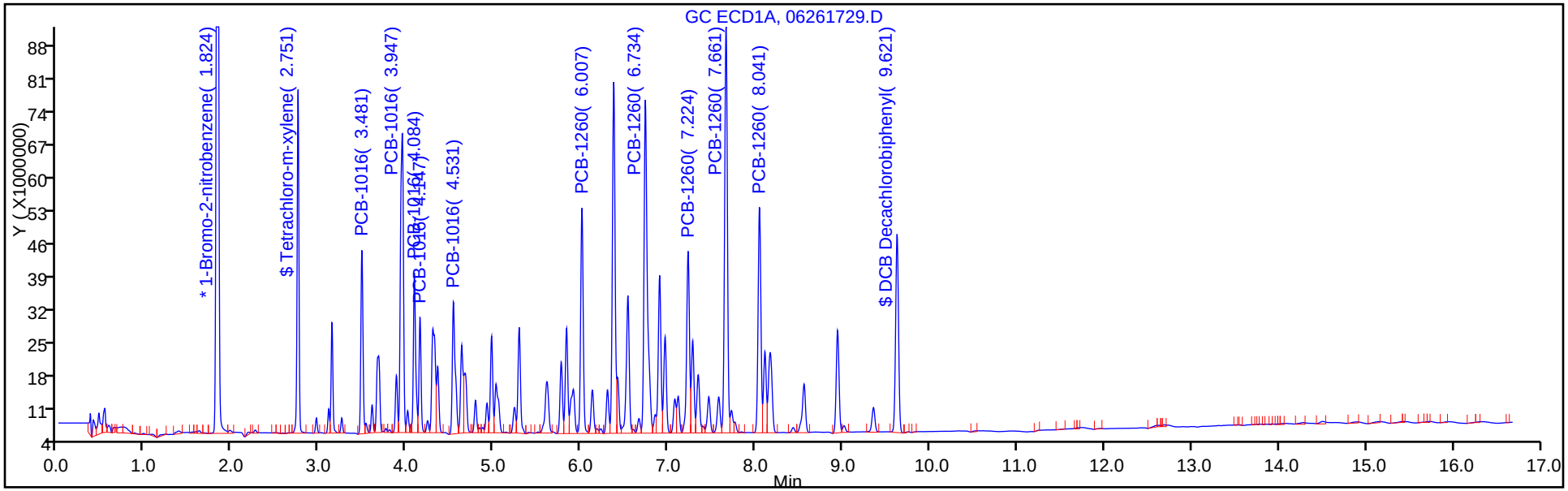
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TestAmerica Denver

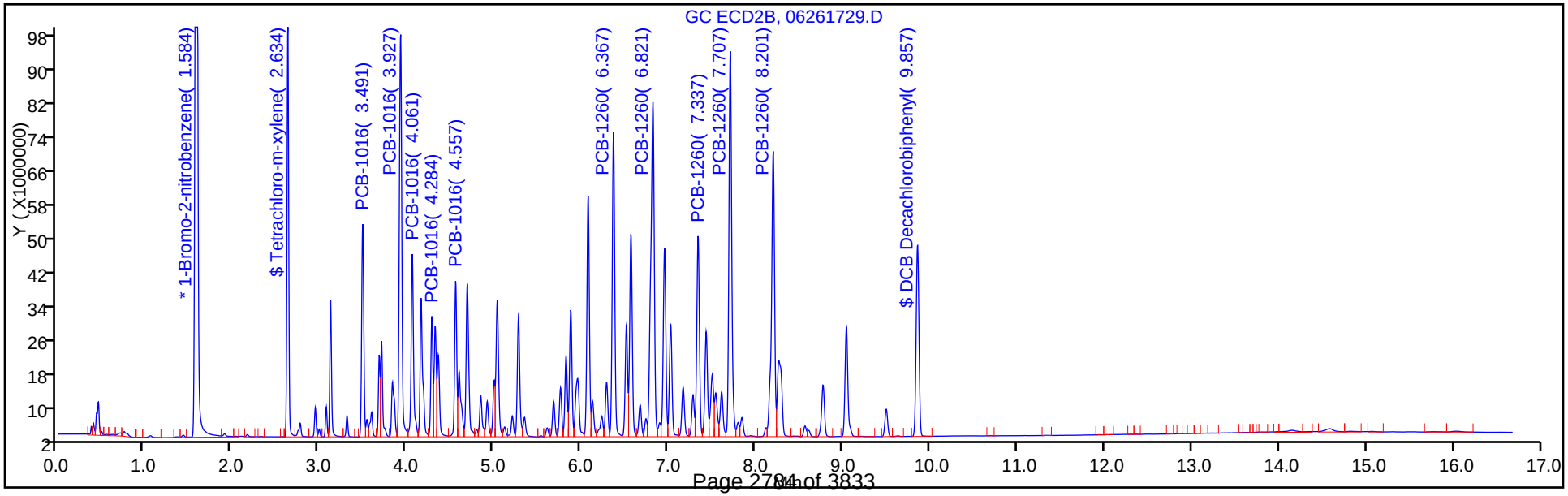
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261729.D

Injection Date:	26-Jun-2017 22:49:18	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCV			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378729/29 Calibration Date: 06/26/2017 22:49

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06261729.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
PCB-1016 Peak 1	Lin1		0.3753		519	500	3.7	20.0
PCB-1016 Peak 2	Lin1		0.8330		518	500	3.6	20.0
PCB-1016 Peak 3	Lin1		0.3692		503	500	0.5	20.0
PCB-1016 Peak 4	Lin1		0.2063		517	500	3.4	20.0
PCB-1016 Peak 5	Lin1		0.2762		511	500	2.2	20.0
PCB-1260 Peak 1	Lin1		0.6410		494	500	-1.1	20.0
PCB-1260 Peak 2	Lin1		0.9769		500	500	0.0	20.0
PCB-1260 Peak 3	Lin1		0.4409		493	500	-1.4	20.0
PCB-1260 Peak 4	Lin1		0.9080		472	500	-5.7	20.0
PCB-1260 Peak 5	Lin1		0.7458		505	500	1.0	20.0
Tetrachloro-m-xylene	Lin1		11.87		25.9	25.0	3.8	20.0
DCB Decachlorobiphenyl (Surr)	Lin1		9.119		24.2	25.0	-3.1	20.0

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: CCV 280-378729/29 Calibration Date: 06/26/2017 22:49

Instrument ID: SGC_P3 Calib Start Date: 06/06/2017 18:53

GC Column: CLP2 ID: 0.32(mm) Calib End Date: 06/06/2017 21:03

Lab File ID: 06261729.D

Analyte	RT	RT WINDOW	
		FROM	TO
PCB-1016 Peak 1	3.49	3.24	3.74
PCB-1016 Peak 2	3.93	3.68	4.18
PCB-1016 Peak 3	4.06	3.81	4.31
PCB-1016 Peak 4	4.28	4.04	4.54
PCB-1016 Peak 5	4.56	4.31	4.81
PCB-1260 Peak 1	6.37	6.12	6.62
PCB-1260 Peak 2	6.82	6.57	7.07
PCB-1260 Peak 3	7.34	7.09	7.59
PCB-1260 Peak 4	7.71	7.46	7.96
PCB-1260 Peak 5	8.20	7.95	8.45
Tetrachloro-m-xylene	2.63	2.38	2.88
DCB Decachlorobiphenyl (Surr)	9.86	9.61	10.11

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261729.D
Lims ID: CCV
Client ID:
Sample Type: CCV
Inject. Date: 26-Jun-2017 22:49:18 ALS Bottle#: 29 Worklist Smp#: 29
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: CCV
Misc. Info.: 280-0060129-029
Operator ID: jax Instrument ID: SGC_P3
Sublist: chrom-PCB_P3*sub1

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:23:06 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:23:59

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.824	1.825	-0.001	394861207	1000.0	1000.0	
2	1.584	1.582	0.002	452290444	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.751	2.749	0.002	106607028	25.0	25.0	
2	2.634	2.632	0.002	134232422	25.0	25.9	
						RPD = 3.68	
1 PCB-1016							
1	3.481	3.482	-0.001	66601976	500.0	509.9	
1	3.947	3.945	0.002	152002370	500.0	502.9	
1	4.084	4.085	-0.001	63120213	500.0	501.8	
1	4.147	4.149	-0.002	40449113	500.0	496.7	
1	4.531	4.532	-0.001	66435283	500.0	505.3	
		Average of Peak Amounts =				503.3	
2	3.491	3.492	-0.001	84860066	500.0	518.7	
2	3.927	3.925	0.002	188370746	500.0	517.8	
2	4.061	4.062	-0.001	83495663	500.0	502.7	
2	4.284	4.285	-0.001	46646456	500.0	516.9	
2	4.557	4.559	-0.002	62458613	500.0	510.9	
		Average of Peak Amounts =				513.4	
						RPD = 1.99	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.007	6.009	-0.002	98343569	500.0	490.3	
1	6.734	6.735	-0.001	190174751	500.0	482.9	
1	7.224	7.225	-0.001	88725489	500.0	485.3	
1	7.661	7.659	0.002	193817733	500.0	480.3	
1	8.041	8.045	-0.004	107628367	500.0	462.2	
		Average of Peak Amounts =				480.2	
2	6.367	6.369	-0.002	144963808	500.0	494.3	
2	6.821	6.822	-0.001	220920154	500.0	500.3	
2	7.337	7.339	-0.002	99717107	500.0	493.1	
2	7.707	7.709	-0.002	205336190	500.0	471.7	
2	8.201	8.202	-0.001	168669214	500.0	504.9	
		Average of Peak Amounts =				492.9	
						RPD = 2.61	
$ 15 DCB Decachlorobiphenyl							
1	9.621	9.622	-0.001	98238904	25.0	24.0	
2	9.857	9.859	-0.002	103107635	25.0	24.2	
						RPD = 1.07	
S 8 Polychlorinated biphenyls, Total							
1						983.5	
2						1006.3	
						RPD = 2.29	
19 1260 Res 1							
1		8.045			ND	ND	
16 1260 Res 2							
1		8.105			ND	ND	
18 1260 Res 3							
1		8.165			ND	ND	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Reagents:

AR_1660_L5_00062	Amount Added:	1.00	Units: mL	
BNB IS_00009	Amount Added:	1.00	Units: mL	Run Reagent

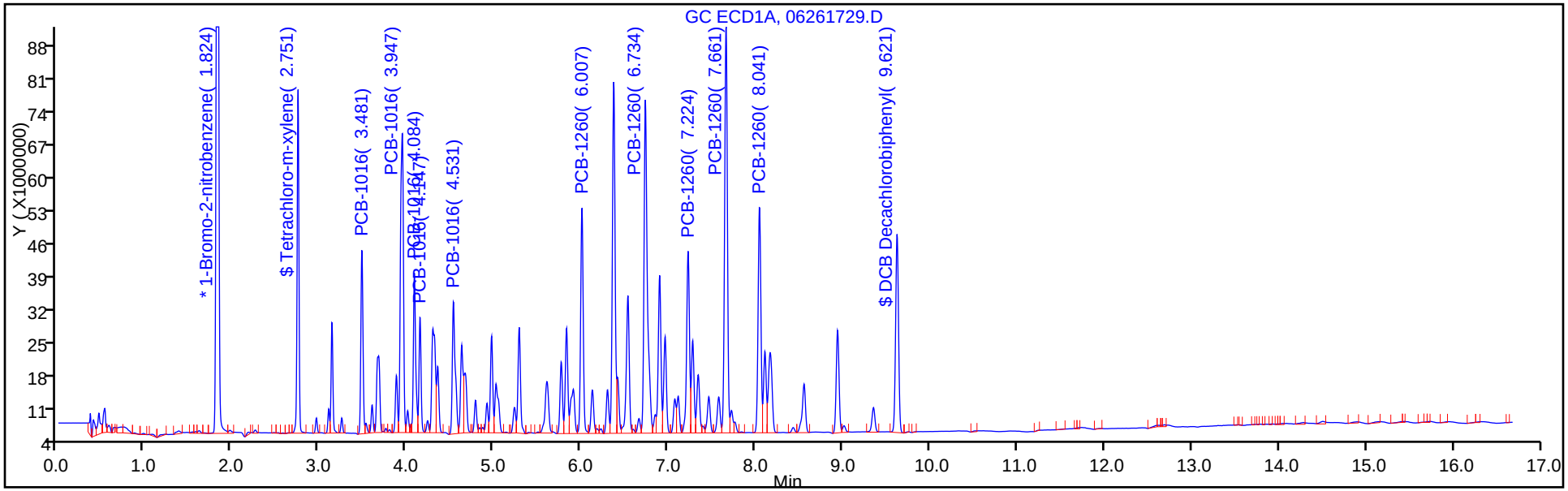
Report Date: 27-Jun-2017 10:23:08 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

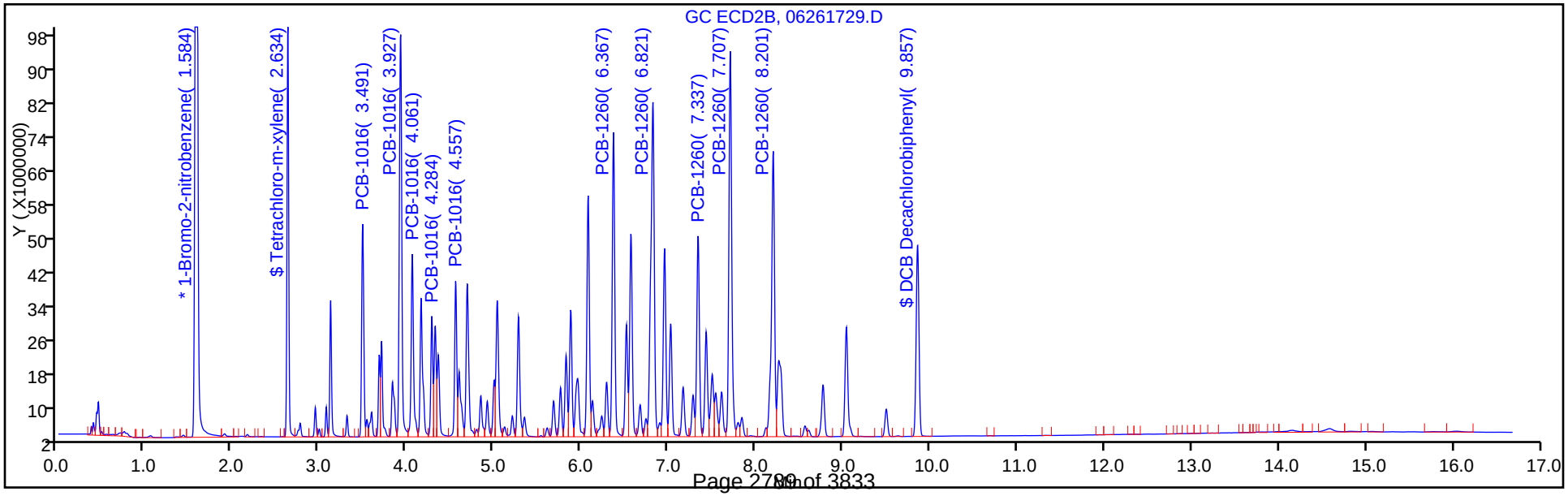
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261729.D

Injection Date:	26-Jun-2017 22:49:18	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	CCV			Worklist Smp#:	29
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	29
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 280-377615/1-A

Matrix: Solid | Lab File ID: 06261704.D

Analysis Method: 8082A | Date Collected:

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.2(g) | Date Analyzed: 06/26/2017 13:46

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	14	U	32	14	4.9
11104-28-2	Arochlor 1221	16	U	45	16	15
11141-16-5	Arochlor 1232	14	U	32	14	4.9
53469-21-9	Arochlor 1242	32	U	32	32	8.8
12672-29-6	Arochlor 1248	19	U	32	19	5.4
11097-69-1	Arochlor 1254	16	U	32	16	5.3
11096-82-5	Arochlor 1260	7.4	U	32	7.4	2.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	90		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261704.D
Lims ID: MB 280-377615/1-A
Client ID:
Sample Type: MB
Inject. Date: 26-Jun-2017 13:46:06 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: MB 280-377615/1-
Misc. Info.: 280-0060129-004
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 26-Jun-2017 14:39:34

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.826	1.825	0.001	373306045	1000.0	1000.0	
2	1.583	1.582	0.001	428982020	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.749	2.749	0.000	74291869	20.0	18.3	
2	2.633	2.632	0.001	95411756	20.0	19.2	
						RPD = 4.83	
3 PCB-1221							
1		2.959				ND	
1		3.102					
1		3.139					
2		2.952					
2		3.079					
2		3.129					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
7 PCB-1232							
1		3.144				ND	
1		3.487					
1		3.950					
1		4.090					
1		4.537					
2		3.140					
2		3.510					
2		3.950					
2		4.087					
2		4.720					
1 PCB-1016							
1		3.482				ND	
1		3.945					
1		4.085					
1		4.149					
1		4.532					
2		3.492					
2		3.925					
2		4.062					
2		4.285					
2		4.559					
4 PCB-1248							
1		3.486				ND	
1		3.946					
1		4.302					
1		4.539					
1		5.289					
2		3.949					
2		4.586					
2		4.719					
2		5.029					
2		5.072					
10 PCB-1242							
1		3.487				ND	
1		3.951					
1		4.091					
1		5.027					
1		5.054					
2		3.511					
2		3.951					
2		4.087					
2		5.031					
2		5.074					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
9 PCB-1254							
1		5.286				ND	
1		5.616					
1		5.769					
1		6.476					
1		6.736					
2		5.289					
2		5.692					
2		5.839					
2		6.142					
2		6.836					
12 PCB-1260							
1		6.009				ND	
1		6.735					
1		7.225					
1		7.659					
1		8.045					
2		6.369					
2		6.822					
2		7.339					
2		7.709					
2		8.202					
5 PCB-1262							
1		6.377				ND	
1		6.904					
1		7.230					
1		7.667					
1		8.050					
2		6.400					
2		6.990					
2		7.377					
2		7.744					
2		8.237					
13 PCB-1268							
1		8.111				ND	
1		8.164					
1		8.437					
1		8.947					
1		9.357					
2		8.237					
2		8.301					
2		8.647					
2		9.077					
2		9.537					
$ 15 DCB Decachlorobiphenyl							
1	9.623	9.622	0.001	69388441	20.0	17.7	
2	9.856	9.859	-0.003	73324536	20.0	17.9	
						RPD = 1.16	
S 8 Polychlorinated biphenyls, Total							
1		0.000				ND	
2		0.000					

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
2 PCB-5460							
1		0.000				ND	
1		12.739					
1		0.000					
1		13.802					
1		14.259					
2		0.000					
2		0.000					
2		0.000					
2		0.000					
2		0.000					
6 PCB-5432							
1		7.063				ND	
1		7.693					
1		8.203					
1		9.029					
1		9.459					
2		0.000					
2		0.000					
2		0.000					
2		0.000					
2		0.000					
11 PCB-5442							
1		9.459				ND	
1		9.923					
1		10.079					
1		10.289					
1		0.000					
2		0.000					
2		0.000					
2		0.000					
2		0.000					
2		0.000					

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

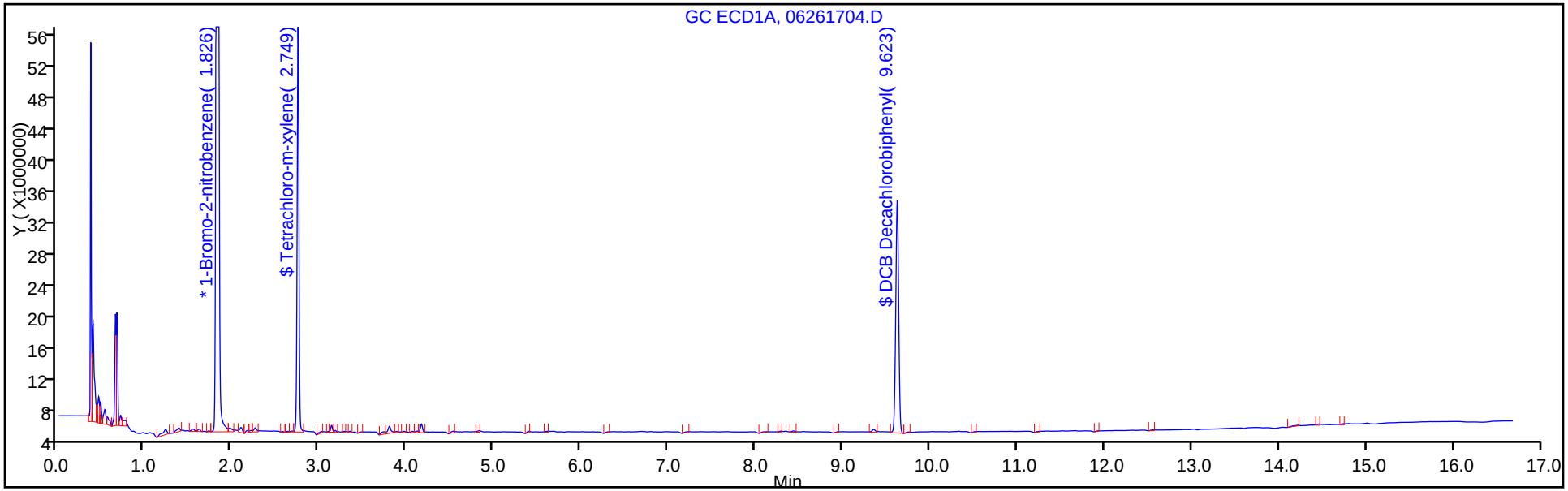
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TestAmerica Denver

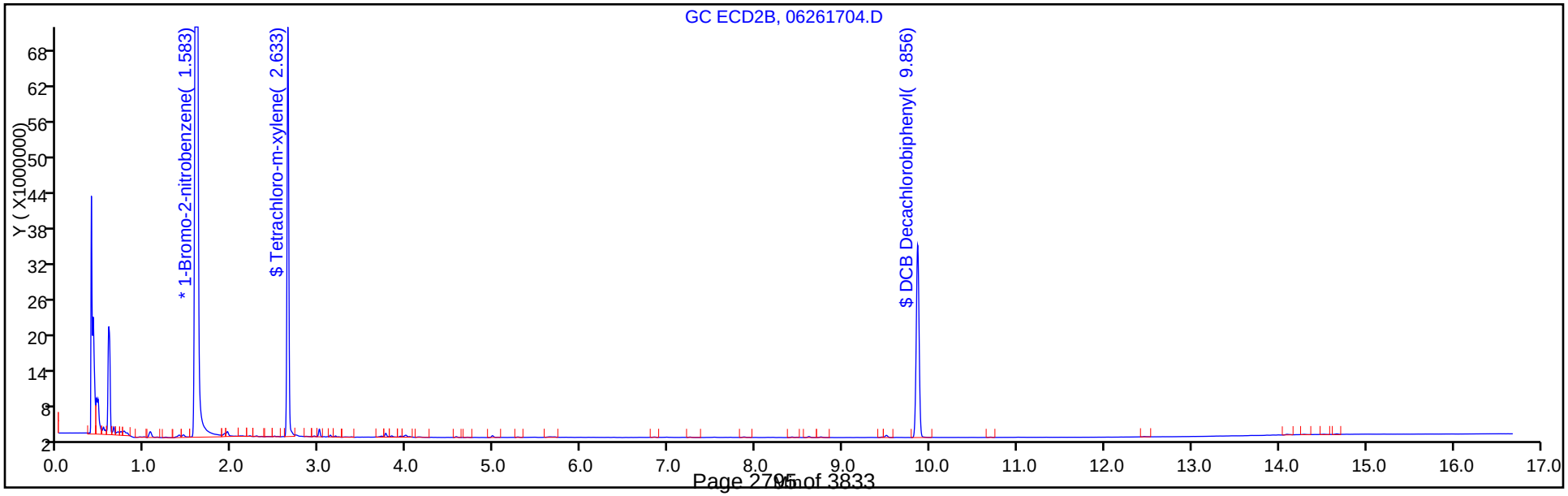
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261704.D

Injection Date:	26-Jun-2017 13:46:06	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	MB 280-377615/1-A			Worklist Smp#:	4
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261704.D				
Lims ID:	MB 280-377615/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	26-Jun-2017 13:46:06	ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 280-377615/1-				
Misc. Info.:	280-0060129-004				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:09	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	26-Jun-2017 14:39:34		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	18.3	91.65
$ 15 DCB Decachlorobiphenyl	20.0	17.7	88.65

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	19.2	96.19
$ 15 DCB Decachlorobiphenyl	20.0	17.9	89.68

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 280-377615/4-A

Matrix: Solid | Lab File ID: 06261705.D

Analysis Method: 8082A | Date Collected:

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 32.4(g) | Date Analyzed: 06/26/2017 14:07

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	61.6		31	14	4.7
11096-82-5	Arochlor 1260	60.3		31	7.1	2.5

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	92		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261705.D
Lims ID: LCS 280-377615/4-A
Client ID:
Sample Type: LCS
Inject. Date: 26-Jun-2017 14:07:50 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: LCS 280-377615/4
Misc. Info.: 280-0060129-005
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 26-Jun-2017 14:39:44

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.825	0.000	360555415	1000.0	1000.0	
2	1.581	1.582	-0.001	418833888	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.748	2.749	-0.001	72363062	20.0	18.5	
2	2.631	2.632	-0.001	95119627	20.0	19.7	
						RPD = 6.15	
1 PCB-1016							
1	3.481	3.482	-0.001	24243443	200.0	193.6	
1	3.948	3.945	0.003	52858640	200.0	186.1	
1	4.085	4.085	0.000	23131996	200.0	192.9	
1	4.158	4.149	0.009	28274659	200.0	377.0	
1	4.535	4.532	0.003	24639712	200.0	195.3	
		Average of Peak Amounts =				229.0	
2	3.491	3.492	-0.001	33093532	200.0	204.9	
2	3.928	3.925	0.003	71263533	200.0	201.2	
2	4.061	4.062	-0.001	32224461	200.0	197.3	
2	4.285	4.285	0.000	17124103	200.0	192.3	
2	4.561	4.559	0.002	24085076	200.0	201.7	
		Average of Peak Amounts =				199.5	
						RPD = 13.77	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.008	6.009	-0.001	34252557	200.0	178.8	
1	6.735	6.735	0.000	60445472	200.0	162.4	
1	7.225	7.225	0.000	33019092	200.0	191.5	
1	7.658	7.659	-0.001	71196755	200.0	189.3	
1	8.045	8.045	0.000	38825705	200.0	177.4	
		Average of Peak Amounts =				179.9	
2	6.371	6.369	0.002	53418930	200.0	186.0	
2	6.821	6.822	-0.001	75878093	200.0	174.3	
2	7.341	7.339	0.002	41271988	200.0	210.8	
2	7.708	7.709	-0.001	84429780	200.0	200.4	
2	8.205	8.202	0.003	66407899	200.0	205.8	
		Average of Peak Amounts =				195.5	
						RPD = 8.30	
$ 15 DCB Decachlorobiphenyl							
1	9.621	9.622	-0.001	68265240	20.0	18.1	
2	9.858	9.859	-0.001	73606970	20.0	18.5	
						RPD = 2.16	

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

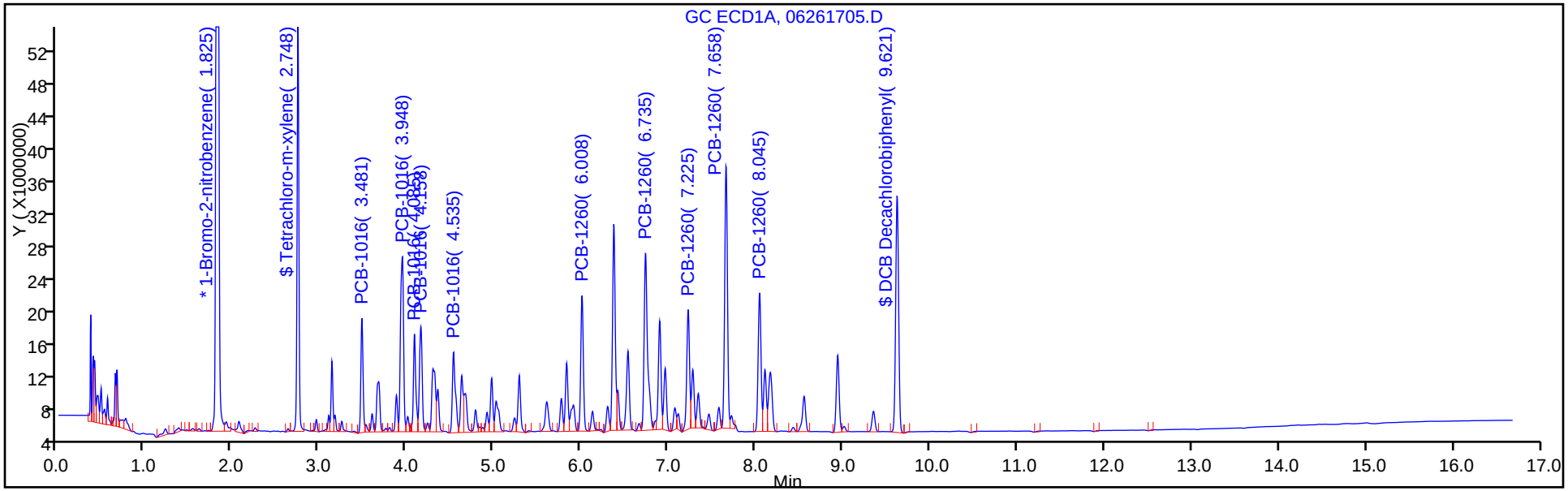
Report Date: 27-Jun-2017 10:22:14 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

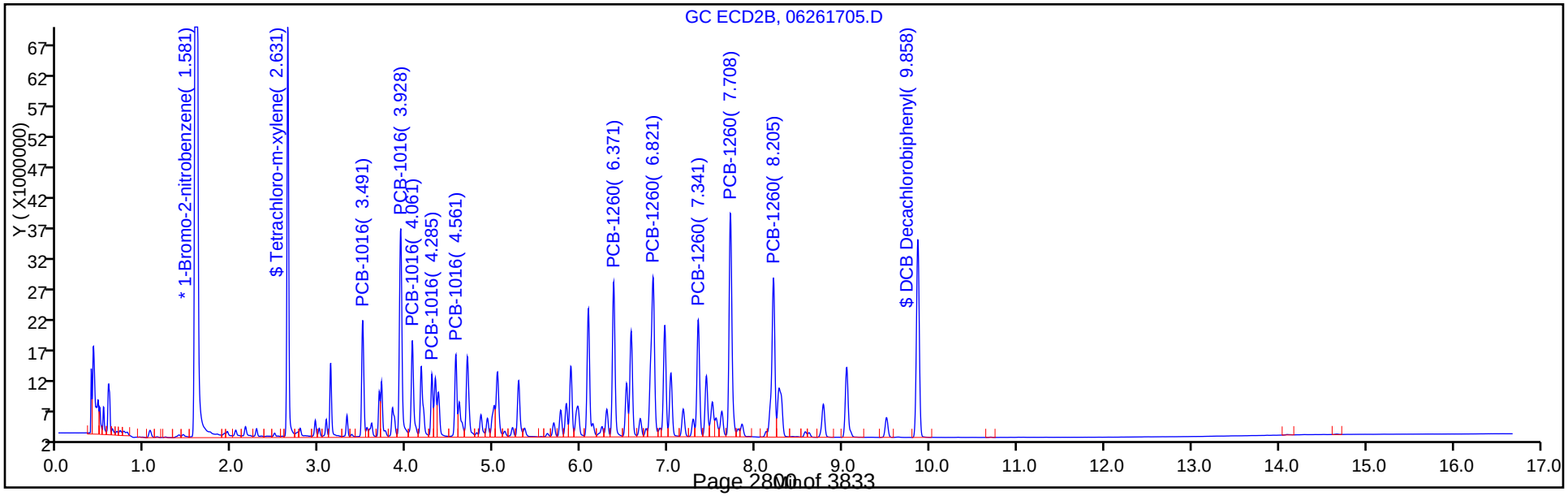
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261705.D

Injection Date:	26-Jun-2017 14:07:50	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	LCS 280-377615/4-A			Worklist Smp#:	5
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261705.D				
Lims ID:	LCS 280-377615/4-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	26-Jun-2017 14:07:50	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	LCS 280-377615/4				
Misc. Info.:	280-0060129-005				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:09	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	26-Jun-2017 14:39:44		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	18.5	92.45
$ 15 DCB Decachlorobiphenyl	20.0	18.1	90.36

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	19.7	98.31
$ 15 DCB Decachlorobiphenyl	20.0	18.5	92.33

Report Date: 27-Jun-2017 10:22:14 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261705.D

Injection Date: 26-Jun-2017 14:07:50 Instrument ID: SGC_P3

Lims ID: LCS 280-377615/4-A

Client ID:

Operator ID: jax ALS Bottle#: 5 Worklist Smp#: 5

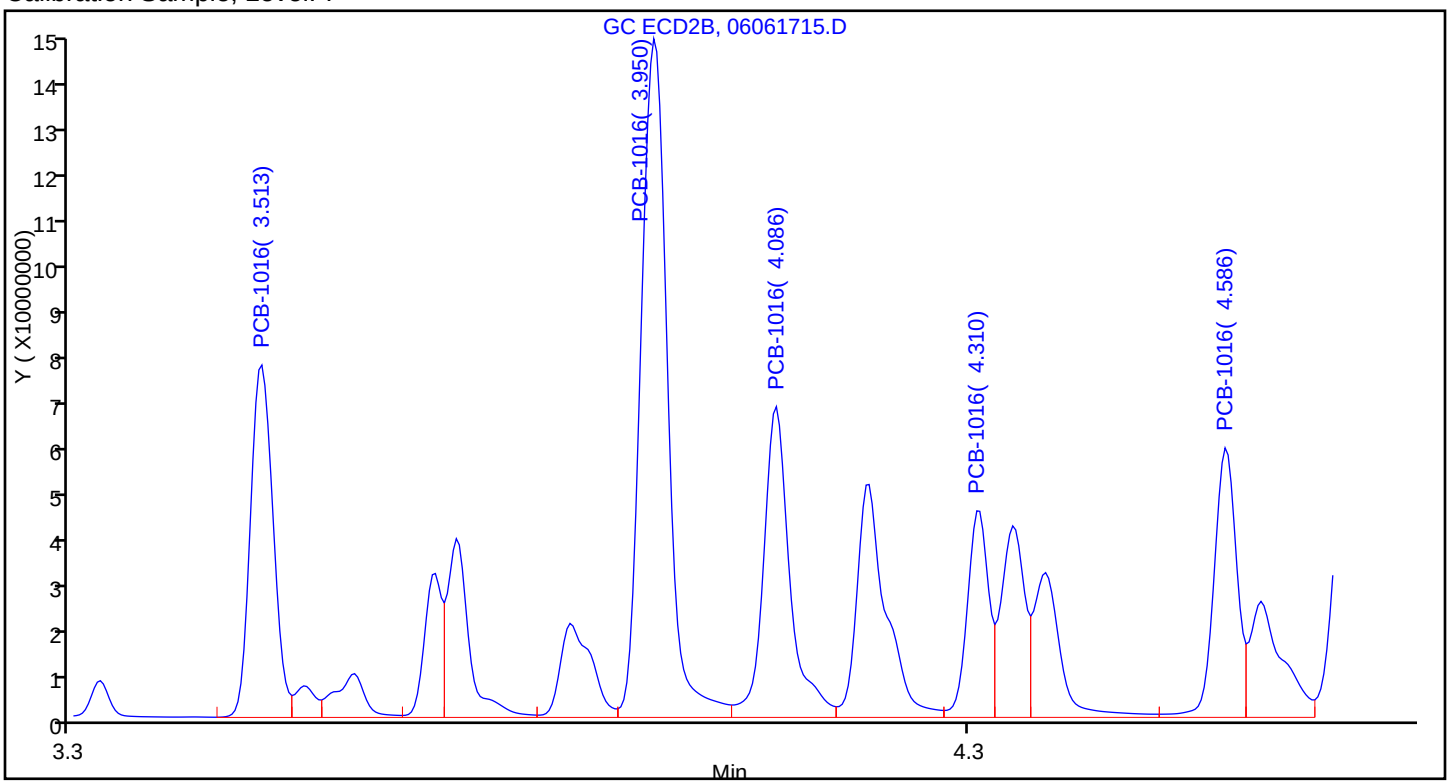
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

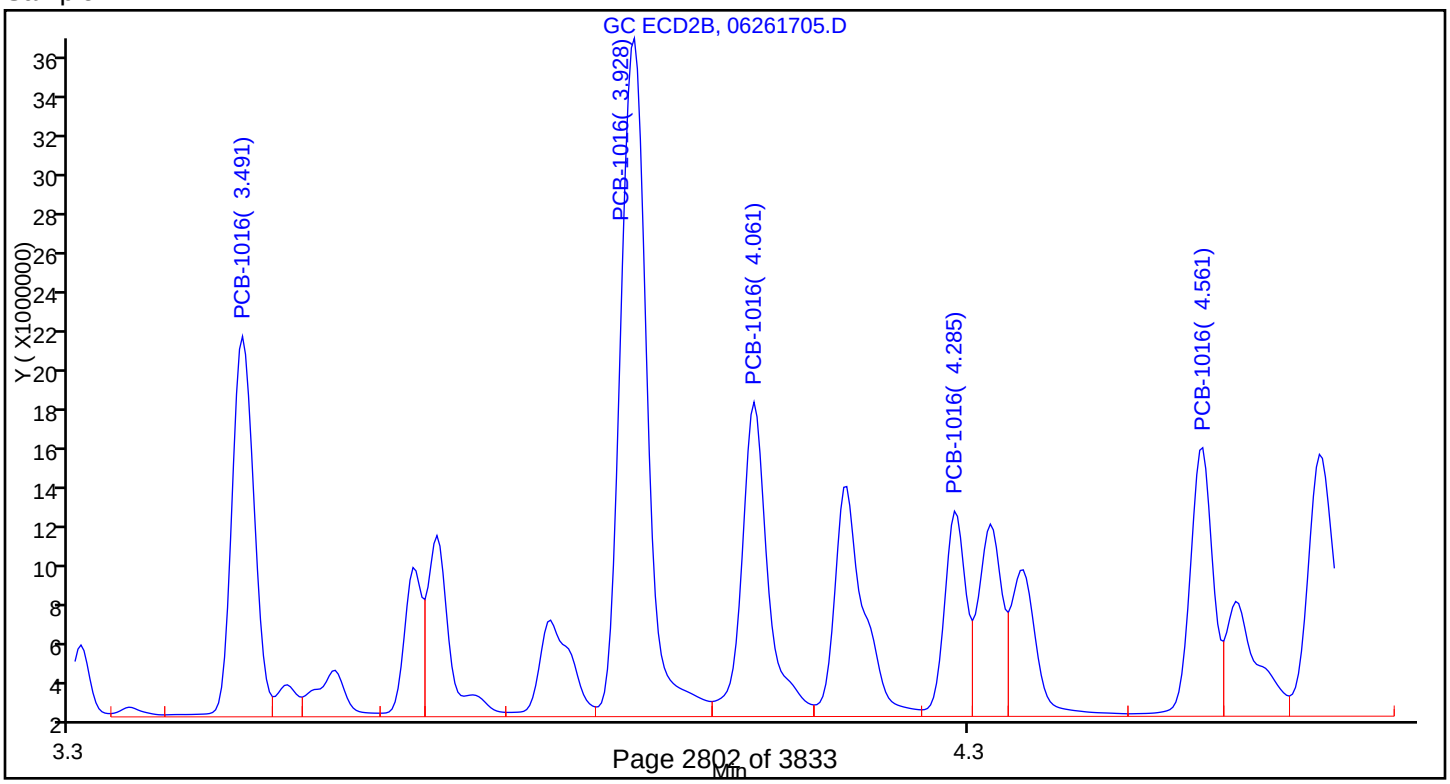
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

1 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 7



Sample



Report Date: 27-Jun-2017 10:22:14 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261705.D

Injection Date: 26-Jun-2017 14:07:50 Instrument ID: SGC_P3

Lims ID: LCS 280-377615/4-A

Client ID:

Operator ID: jax ALS Bottle#: 5 Worklist Smp#: 5

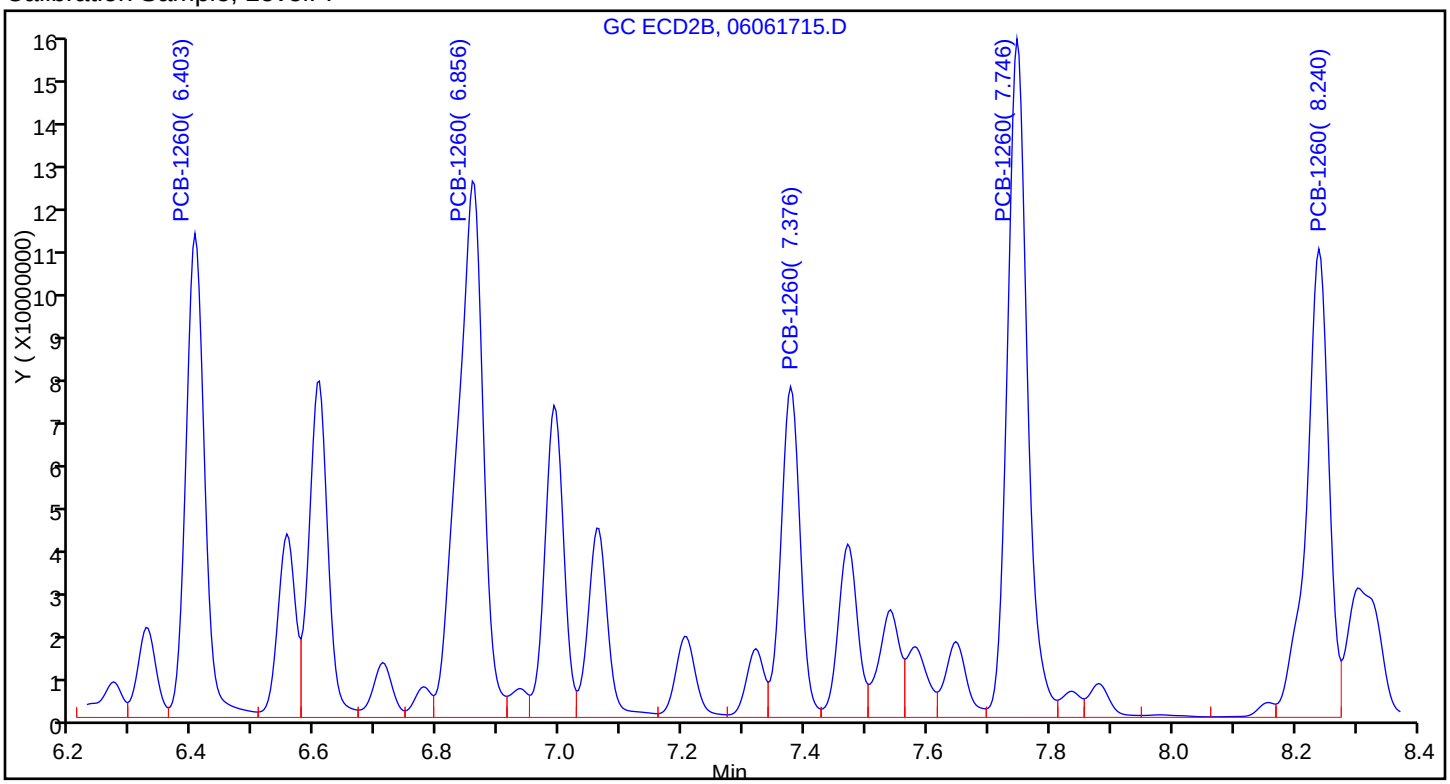
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

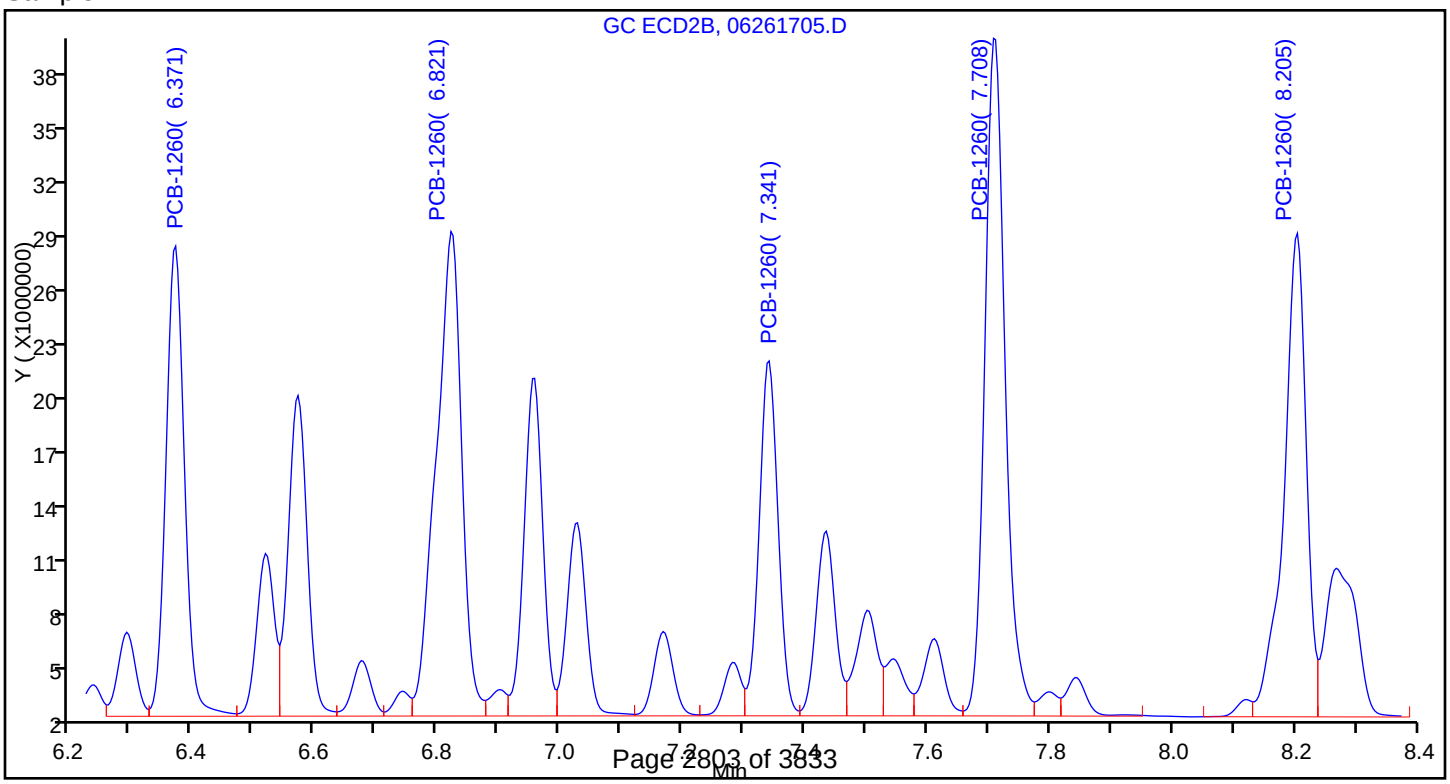
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

12 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(2-4) MS | Lab Sample ID: 280-97928-4 MS

Matrix: Solid | Lab File ID: 06261709.D

Analysis Method: 8082A | Date Collected: 06/05/2017 08:50

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 31.0(g) | Date Analyzed: 06/26/2017 15:34

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 12.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	65.9		36	17	5.6
11096-82-5	Arochlor 1260	65.8		36	8.5	2.9

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	86		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261709.D
Lims ID: 280-97928-B-4-E MS
Client ID:
Sample Type: MS
Inject. Date: 26-Jun-2017 15:34:44 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-B-4-E
Misc. Info.: 280-0060129-009
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:18:27

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.823	1.825	-0.002	350038398	1000.0	1000.0	
2	1.583	1.582	0.001	408874445	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.749	2.749	0.000	65738224	20.0	17.3	
2	2.633	2.632	0.001	85398845	20.0	18.0	
						RPD = 4.20	
1 PCB-1016							
1	3.483	3.482	0.001	21939017	200.0	179.4	
1	3.946	3.945	0.001	47576738	200.0	171.9	
1	4.086	4.085	0.001	20782763	200.0	177.5	
1	4.153	4.149	0.004	20444427	200.0	277.3	
1	4.533	4.532	0.001	22698391	200.0	184.4	
		Average of Peak Amounts =				198.1	
2	3.493	3.492	0.001	29659643	200.0	186.2	
2	3.926	3.925	0.001	63456239	200.0	182.0	
2	4.063	4.062	0.001	28437916	200.0	176.3	
2	4.286	4.285	0.001	15421584	200.0	175.8	
2	4.559	4.559	0.000	20762073	200.0	175.9	
		Average of Peak Amounts =				179.2	
						RPD = 9.99	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.006	6.009	-0.003	30787191	200.0	164.5	
1	6.736	6.735	0.001	52904599	200.0	145.6	
1	7.226	7.225	0.001	29822150	200.0	177.4	
1	7.659	7.659	0.000	63527872	200.0	173.5	
1	8.043	8.045	-0.002	35309766	200.0	165.6	
		Average of Peak Amounts =				165.3	
2	6.369	6.369	0.000	47810062	200.0	169.1	
2	6.823	6.822	0.001	68377720	200.0	159.6	
2	7.339	7.339	0.000	36997275	200.0	192.1	
2	7.709	7.709	0.000	76181936	200.0	184.0	
2	8.203	8.202	0.001	60481578	200.0	190.9	
		Average of Peak Amounts =				179.1	
						RPD = 8.02	
$ 15 DCB Decachlorobiphenyl							
1	9.623	9.622	0.001	61617270	20.0	16.8	
2	9.859	9.859	0.000	66786024	20.0	17.1	
						RPD = 2.04	

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

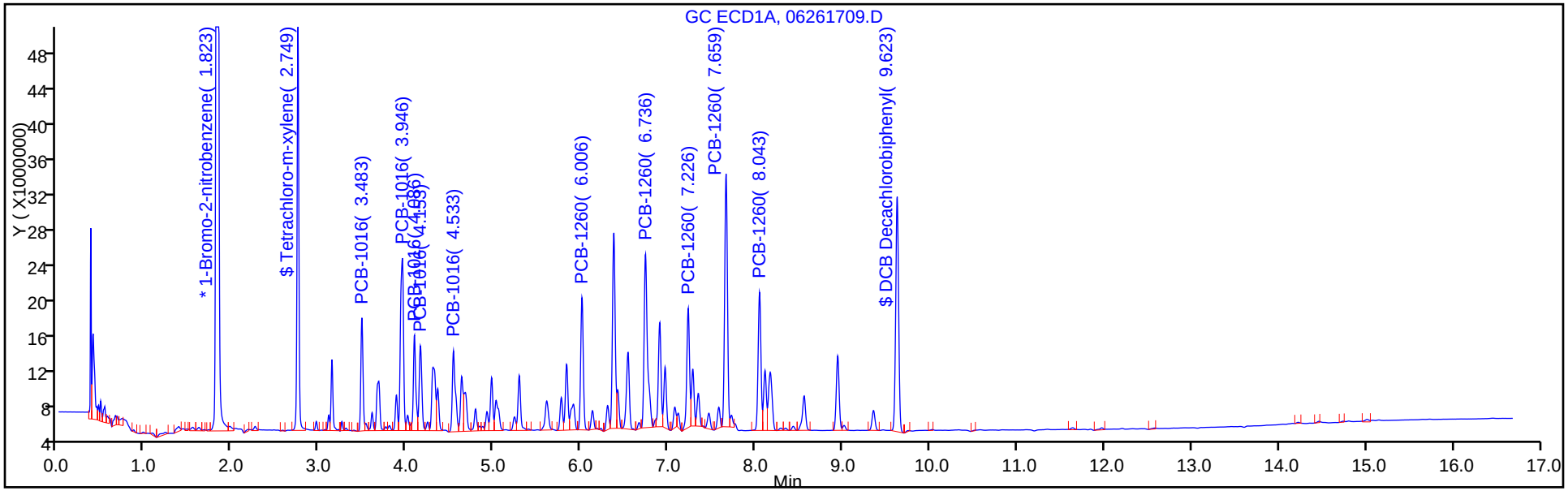
Report Date: 27-Jun-2017 10:22:22 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

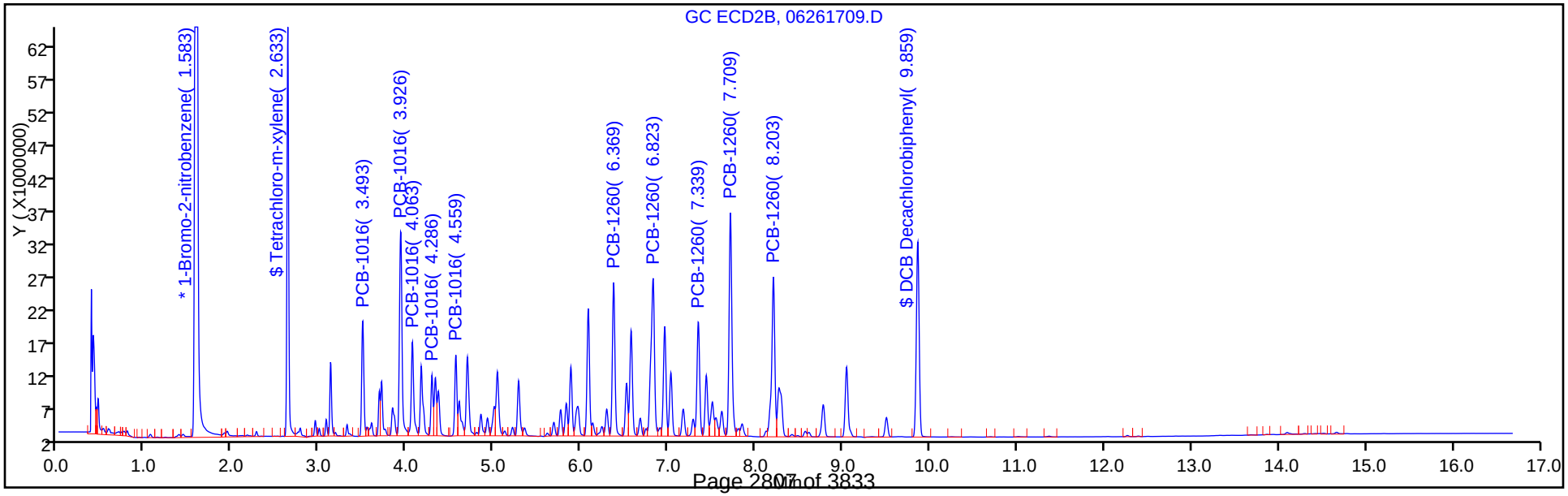
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Injection Date:	26-Jun-2017 15:34:44	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-B-4-E MS			Worklist Smp#:	9
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261709.D
Lims ID: 280-97928-B-4-E MS
Client ID:
Sample Type: MS
Inject. Date: 26-Jun-2017 15:34:44 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-B-4-E
Misc. Info.: 280-0060129-009
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:18:27

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.3	86.38
$ 15 DCB Decachlorobiphenyl	20.0	16.8	83.78

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	18.0	90.08
$ 15 DCB Decachlorobiphenyl	20.0	17.1	85.51

Report Date: 27-Jun-2017 10:22:22 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261709.D

Injection Date: 26-Jun-2017 15:34:44 Instrument ID: SGC_P3

Lims ID: 280-97928-B-4-E MS

Client ID:

Operator ID: jax ALS Bottle#: 9 Worklist Smp#: 9

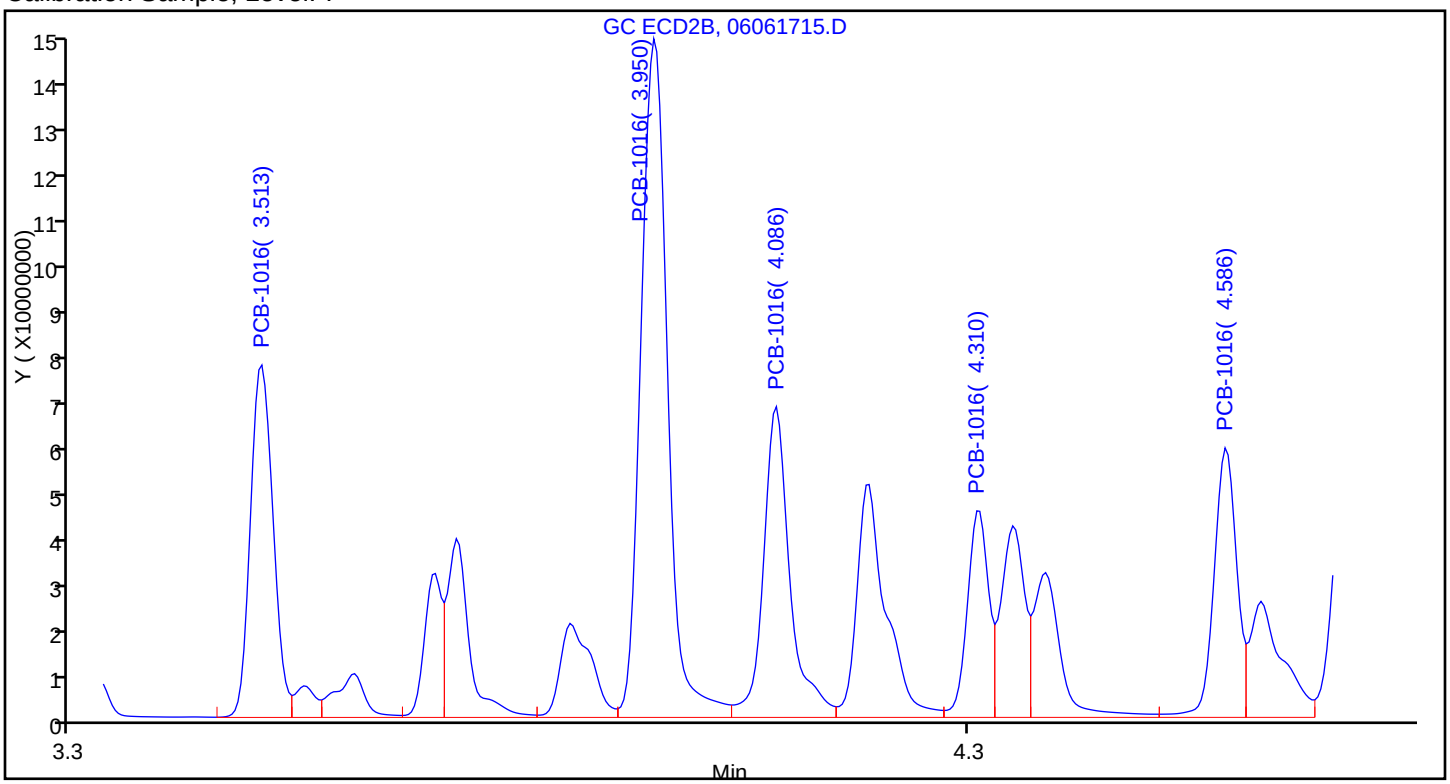
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

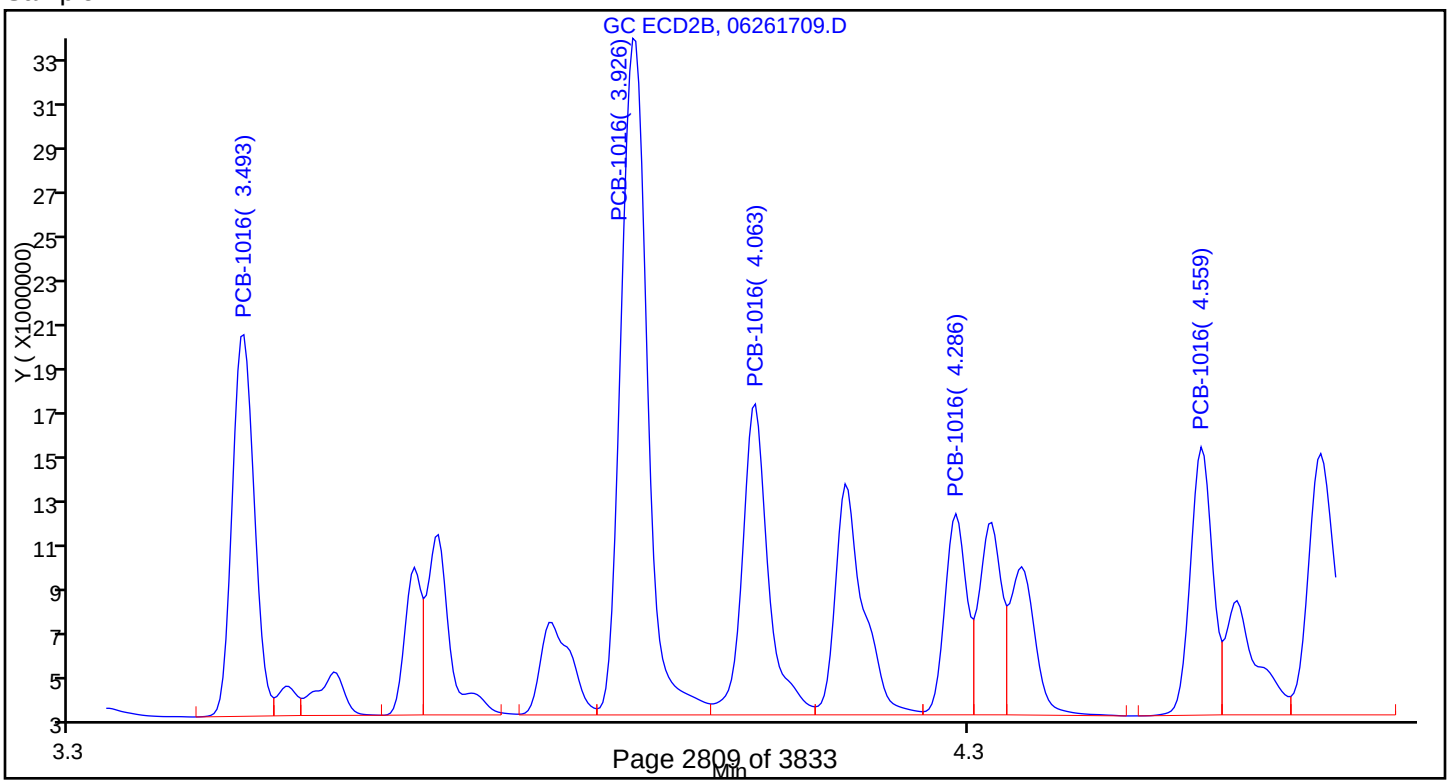
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

1 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 7



Sample



Report Date: 27-Jun-2017 10:22:22 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261709.D

Injection Date: 26-Jun-2017 15:34:44 Instrument ID: SGC_P3

Lims ID: 280-97928-B-4-E MS

Client ID:

Operator ID: jax ALS Bottle#: 9 Worklist Smp#: 9

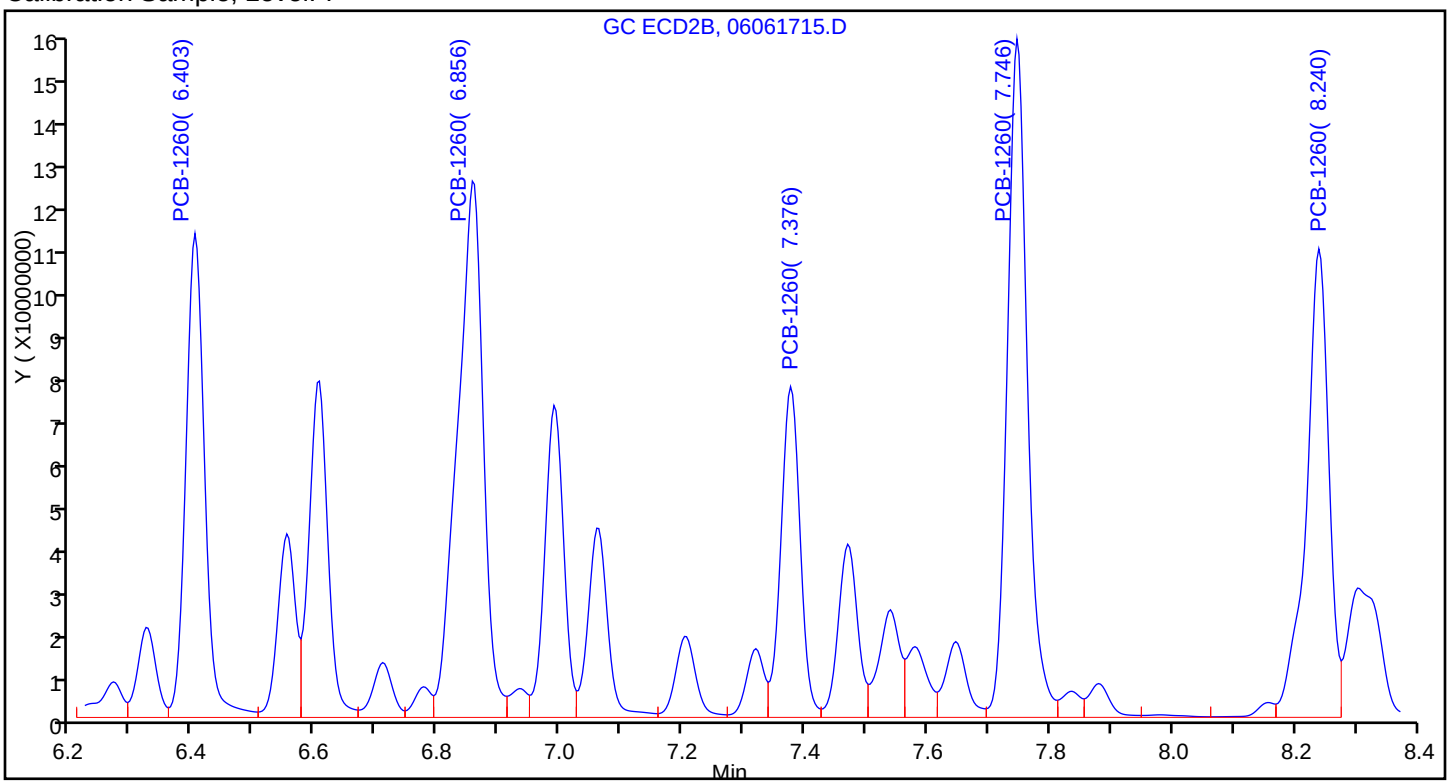
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

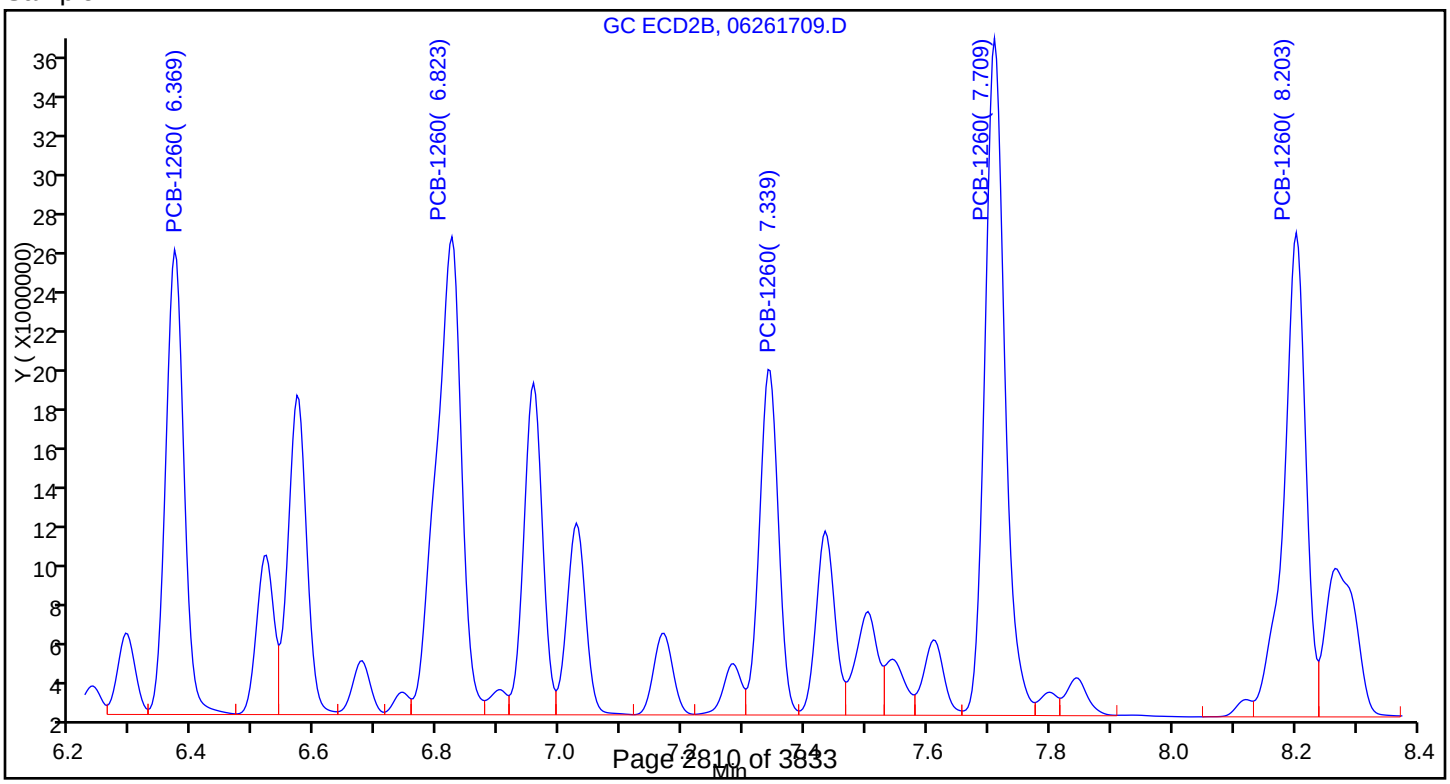
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

12 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



Sample



FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Client Sample ID: SS025-SB06(2-4) MSD | Lab Sample ID: 280-97928-4 MSD

Matrix: Solid | Lab File ID: 06261710.D

Analysis Method: 8082A | Date Collected: 06/05/2017 08:50

Extraction Method: 3546 | Date Extracted: 06/16/2017 13:00

Sample wt/vol: 32.1(g) | Date Analyzed: 06/26/2017 15:56

Con. Extract Vol.: 10(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: CLP2 ID: 0.32(mm)

% Moisture: 12.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 378729 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	LOD	DL
12674-11-2	Arochlor 1016	61.4		35	16	5.4
11096-82-5	Arochlor 1260	61.4		35	8.2	2.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
2051-24-3	DCB Decachlorobiphenyl (Surr)	81		59-130

TestAmerica Denver
Target Compound Quantitation Report

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261710.D
Lims ID: 280-97928-B-4-F MSD
Client ID:
Sample Type: MSD
Inject. Date: 26-Jun-2017 15:56:28 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 280-97928-B-4-F
Misc. Info.: 280-0060129-010
Operator ID: jax Instrument ID: SGC_P3

Method: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m
Limit Group: GCSV - 8082 - IS
Last Update: 27-Jun-2017 10:22:09 Calib Date: 07-Jun-2017 02:06:36
Integrator: Falcon
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D

Column 1 : CLP1 Pesticides Column 1 (0.32 mm) Det: GC ECD1A
Column 2 : CLP2 Pesticides Column 2 (0.32 mm) Det: GC ECD2B
Process Host: XAWRK022

First Level Reviewer: jacksonto Date: 27-Jun-2017 07:18:40

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 17 1-Bromo-2-nitrobenzene							
1	1.825	1.825	0.000	360519814	1000.0	1000.0	
2	1.581	1.582	-0.001	418991370	1000.0	1000.0	
						RPD = 0.00	
$ 14 Tetrachloro-m-xylene							
1	2.748	2.749	-0.001	64363570	20.0	16.4	
2	2.631	2.632	-0.001	83854911	20.0	17.2	
						RPD = 4.91	
1 PCB-1016							
1	3.481	3.482	-0.001	22237245	200.0	176.3	
1	3.945	3.945	0.000	47410781	200.0	166.0	
1	4.085	4.085	0.000	21036613	200.0	174.2	
1	4.158	4.149	0.009	23322157	200.0	308.6	
1	4.531	4.532	-0.001	22522763	200.0	177.1	
		Average of Peak Amounts =				200.4	
2	3.491	3.492	-0.001	29311608	200.0	178.7	
2	3.928	3.925	0.003	63419074	200.0	177.0	
2	4.061	4.062	-0.001	28214012	200.0	170.1	
2	4.285	4.285	0.000	15000952	200.0	165.8	
2	4.558	4.559	-0.001	21018371	200.0	173.5	
		Average of Peak Amounts =				173.0	
						RPD = 14.67	

Col	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
12 PCB-1260							
1	6.008	6.009	-0.001	30445592	200.0	157.4	
1	6.735	6.735	0.000	52254415	200.0	139.2	
1	7.225	7.225	0.000	29122093	200.0	167.7	
1	7.658	7.659	-0.001	62676368	200.0	165.9	
1	8.045	8.045	0.000	34242025	200.0	155.4	
		Average of Peak Amounts =				157.1	
2	6.368	6.369	-0.001	47703296	200.0	164.2	
2	6.821	6.822	-0.001	67930996	200.0	154.1	
2	7.341	7.339	0.002	36975942	200.0	186.9	
2	7.708	7.709	-0.001	75249805	200.0	176.7	
2	8.201	8.202	-0.001	59724201	200.0	183.4	
		Average of Peak Amounts =				173.1	
						RPD = 9.65	
$ 15 DCB Decachlorobiphenyl							
1	9.621	9.622	-0.001	60084437	20.0	15.8	
2	9.858	9.859	-0.001	64976017	20.0	16.2	
						RPD = 2.27	

Reagents:

BNB IS_00009 Amount Added: 1.00 Units: mL Run Reagent

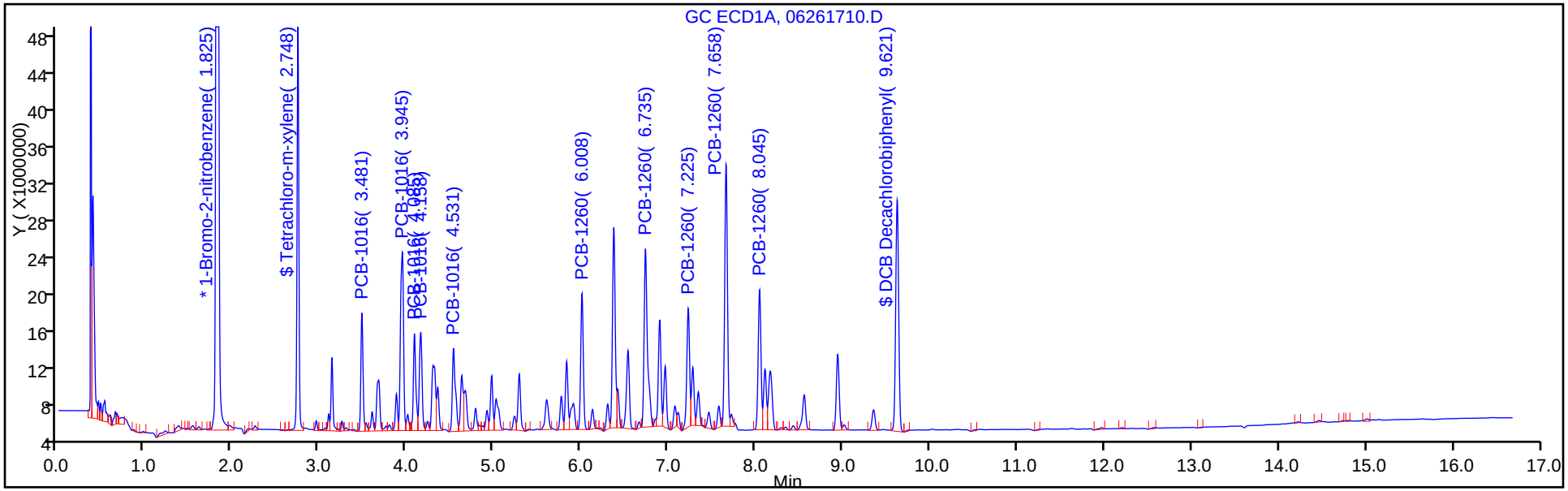
Report Date: 27-Jun-2017 10:22:24 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

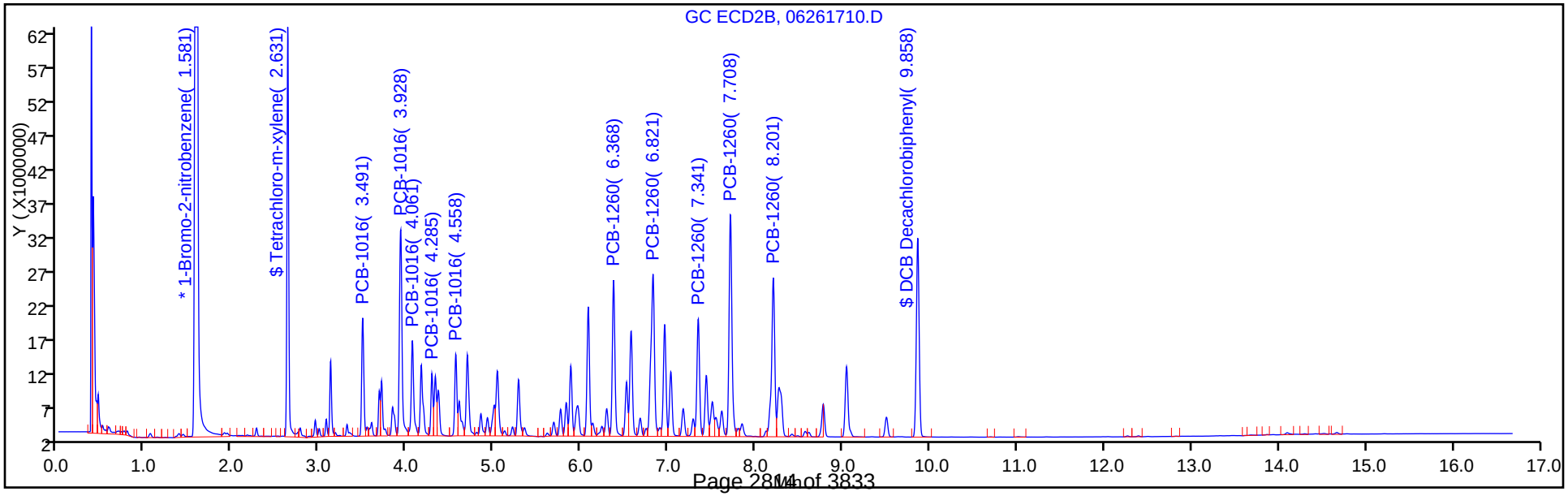
Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261710.D

Injection Date:	26-Jun-2017 15:56:28	Instrument ID:	SGC_P3	Operator ID:	jax
Lims ID:	280-97928-B-4-F MSD			Worklist Smp#:	10
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	PCB_P3	Limit Group:	GCSV - 8082 - IS		

Column: CLP1 Pesticides Column 1 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



Column: CLP2 Pesticides Column 2 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 2



TestAmerica Denver
Recovery Report

Data File:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261710.D				
Lims ID:	280-97928-B-4-F MSD				
Client ID:					
Sample Type:	MSD				
Inject. Date:	26-Jun-2017 15:56:28	ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	1.0 ul	Dil. Factor:	1.0000		
Sample Info:	280-97928-B-4-F				
Misc. Info.:	280-0060129-010				
Operator ID:	jax	Instrument ID:	SGC_P3		
Method:	\\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\PCB_P3.m				
Limit Group:	GCSV - 8082 - IS				
Last Update:	27-Jun-2017 10:22:09	Calib Date:	07-Jun-2017 02:06:36		
Integrator:	Falcon				
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\ChromNA\Denver\ChromData\SGC_P3\20170606-59455.b\06061735.D				
Column 1 :	CLP1 Pesticides Column 1 (0.32 mm)		Det: GC ECD1A		
Column 2 :	CLP2 Pesticides Column 2 (0.32 mm)		Det: GC ECD2B		
Process Host:	XAWRK022				
First Level Reviewer: jacksonto		Date:	27-Jun-2017 07:18:40		

Surrogate Recovery, Detector: GC ECD1A

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	16.4	82.02
$ 15 DCB Decachlorobiphenyl	20.0	15.8	79.14

Surrogate Recovery, Detector: GC ECD2B

Compound	Amount Added	Amount Recovered	% Rec.
$ 14 Tetrachloro-m-xylene	20.0	17.2	86.15
$ 15 DCB Decachlorobiphenyl	20.0	16.2	80.96

Report Date: 27-Jun-2017 10:22:24 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261710.D

Injection Date: 26-Jun-2017 15:56:28 Instrument ID: SGC_P3

Lims ID: 280-97928-B-4-F MSD

Client ID:

Operator ID: jax ALS Bottle#: 10 Worklist Smp#: 10

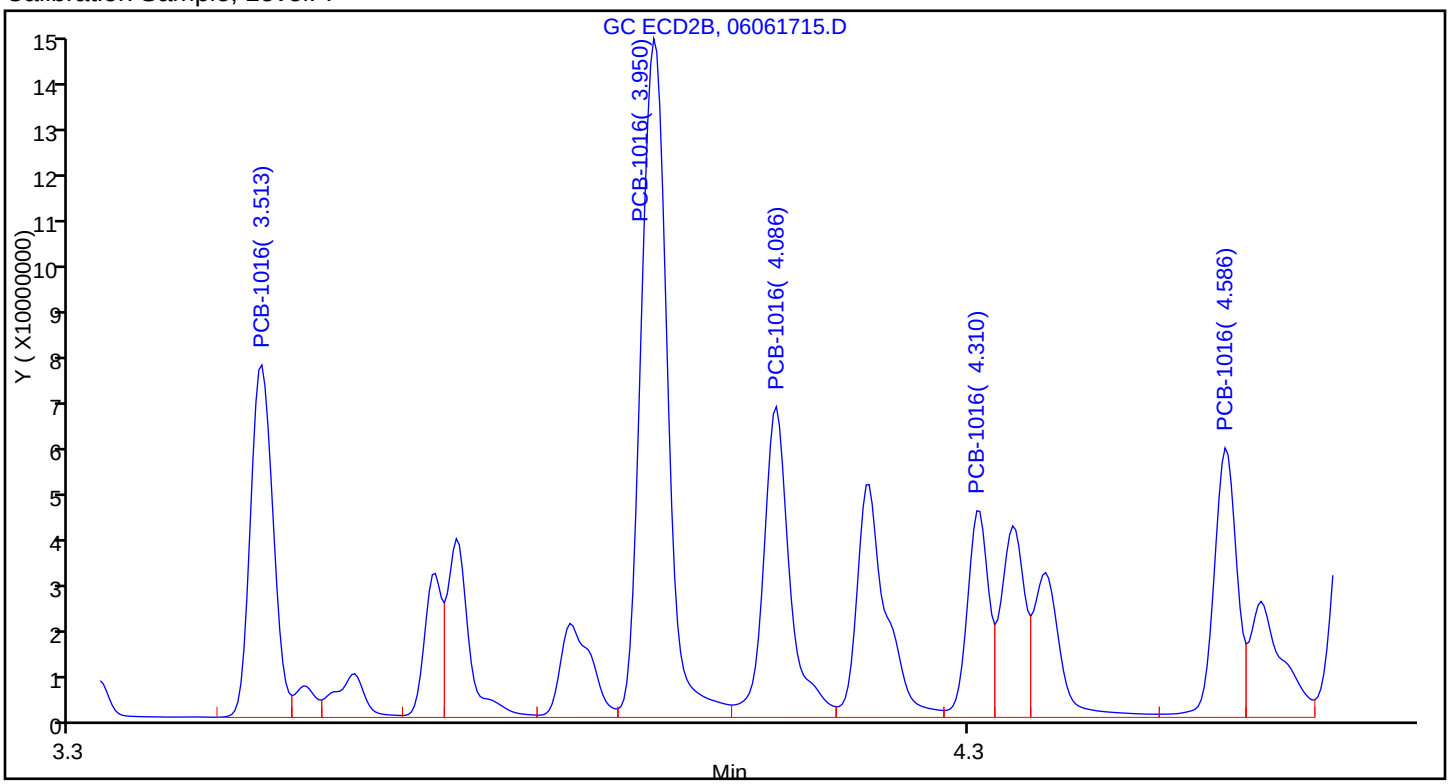
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

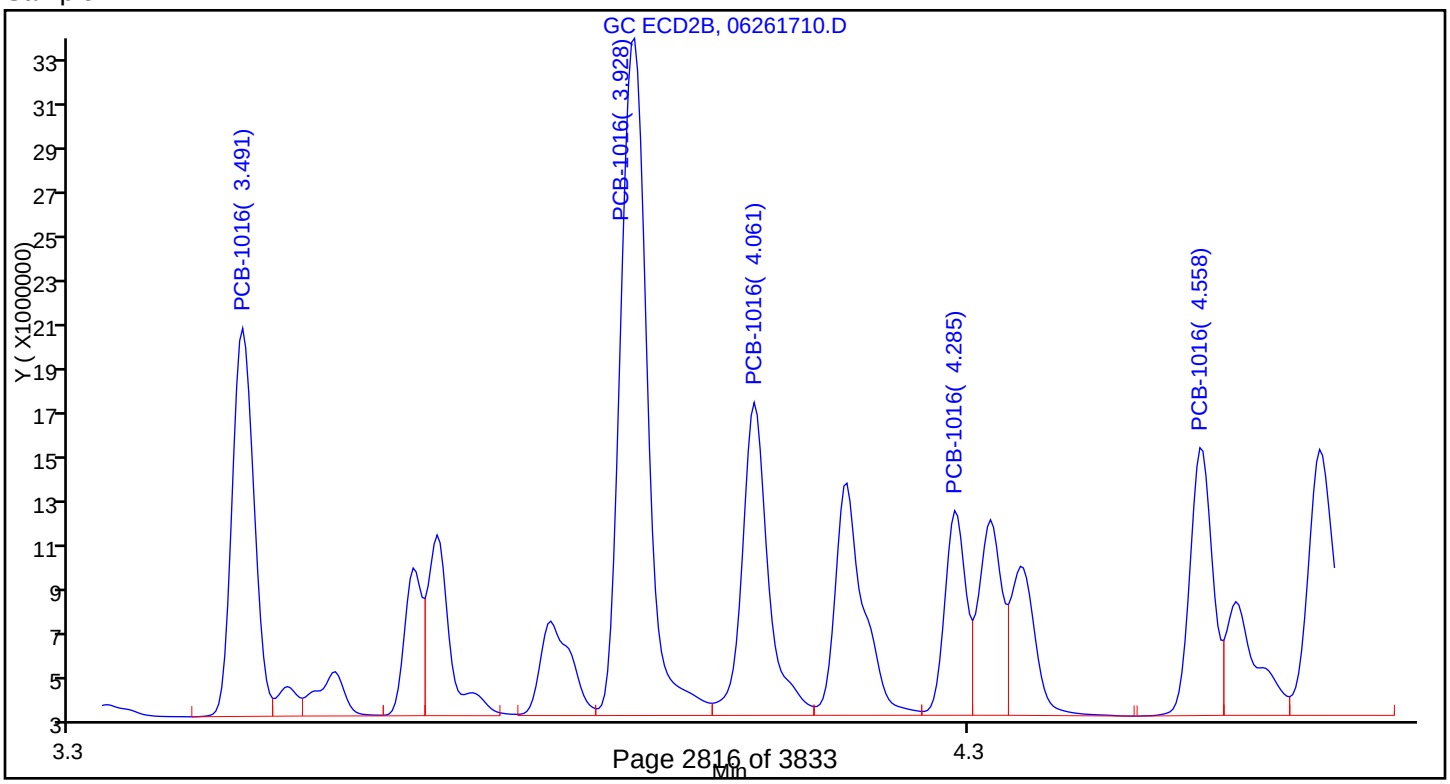
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

1 PCB-1016, CAS: 12674-11-2

Calibration Sample, Level: 7



Sample



Report Date: 27-Jun-2017 10:22:25 Chrom Revision: 2.2 20-Jun-2017 07:42:38

TestAmerica Denver

Data File: \\ChromNA\Denver\ChromData\SGC_P3\20170626-60129.b\06261710.D

Injection Date: 26-Jun-2017 15:56:28 Instrument ID: SGC_P3

Lims ID: 280-97928-B-4-F MSD

Client ID:

Operator ID: jax ALS Bottle#: 10 Worklist Smp#: 10

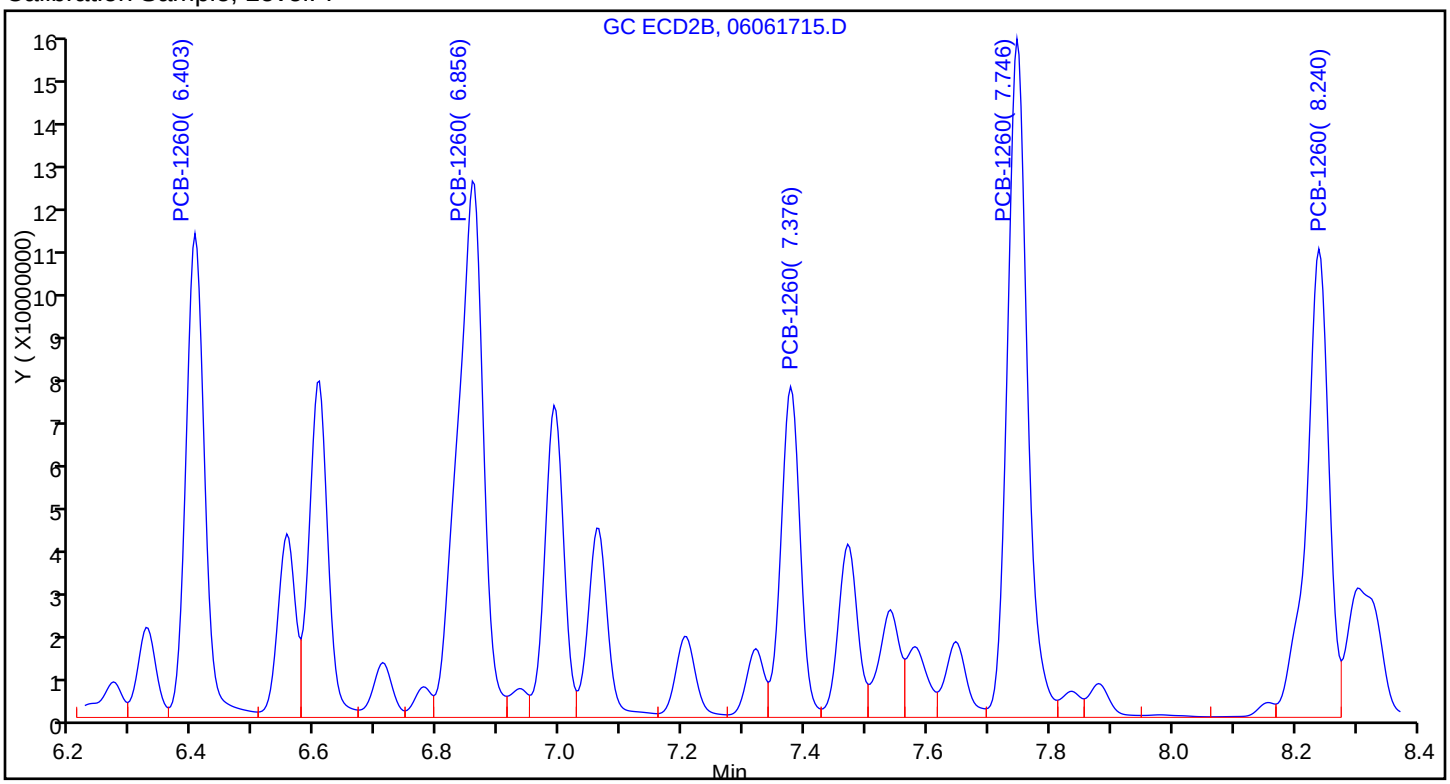
Injection Vol: 1.0 ul Dil. Factor: 1.0000

Method: PCB_P3 Limit Group: GCSV - 8082 - IS

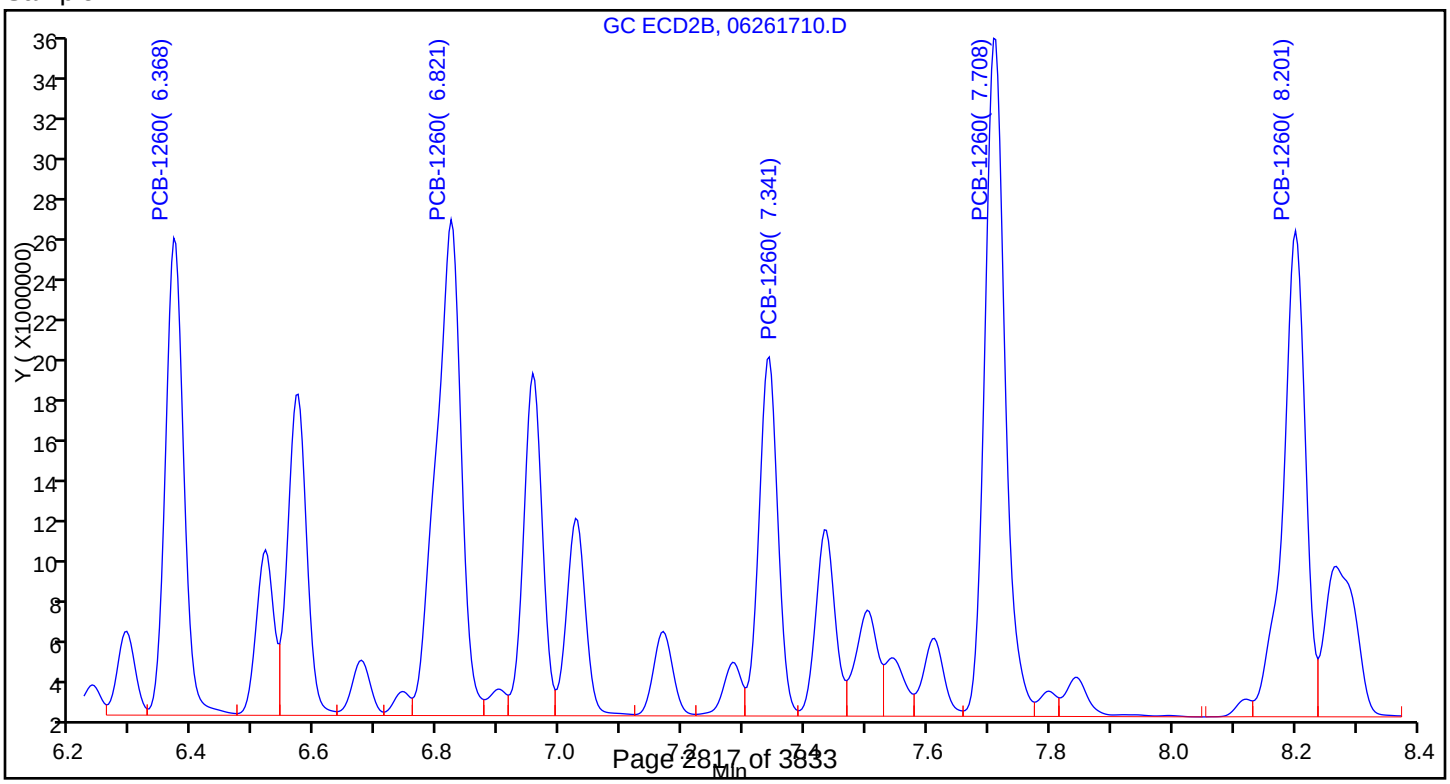
Column: CLP2 Pesticides Column 2 (0.32 mm) Detector GC ECD2B

12 PCB-1260, CAS: 11096-82-5

Calibration Sample, Level: 7



Sample



PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P3 Start Date: 06/06/2017 13:49

Analysis Batch Number: 376236 End Date: 06/07/2017 04:16

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STDL71248 280-376236/1 IC		06/06/2017 13:49	1	06061701.D	CLP1 0.32(mm)
STDL71248 280-376236/1 IC		06/06/2017 13:49	1	06061701.D	CLP2 0.32(mm)
STDL61248 280-376236/2 IC		06/06/2017 14:10	1	06061702.D	CLP1 0.32(mm)
STDL61248 280-376236/2 IC		06/06/2017 14:10	1	06061702.D	CLP2 0.32(mm)
STDL51248 280-376236/3 IC		06/06/2017 14:32	1	06061703.D	CLP1 0.32(mm)
STDL51248 280-376236/3 IC		06/06/2017 14:32	1	06061703.D	CLP2 0.32(mm)
STDL41248 280-376236/4 IC		06/06/2017 14:54	1	06061704.D	CLP1 0.32(mm)
STDL41248 280-376236/4 IC		06/06/2017 14:54	1	06061704.D	CLP2 0.32(mm)
STDL31248 280-376236/5 IC		06/06/2017 15:16	1	06061705.D	CLP1 0.32(mm)
STDL31248 280-376236/5 IC		06/06/2017 15:16	1	06061705.D	CLP2 0.32(mm)
STDL21248 280-376236/6 IC		06/06/2017 15:37	1	06061706.D	CLP1 0.32(mm)
STDL21248 280-376236/6 IC		06/06/2017 15:37	1	06061706.D	CLP2 0.32(mm)
STDL11248 280-376236/7 IC		06/06/2017 15:59	1	06061707.D	CLP1 0.32(mm)
STDL11248 280-376236/7 IC		06/06/2017 15:59	1	06061707.D	CLP2 0.32(mm)
STDL72154 280-376236/8 IC		06/06/2017 16:21	1	06061708.D	CLP1 0.32(mm)
STDL72154 280-376236/8 IC		06/06/2017 16:21	1	06061708.D	CLP2 0.32(mm)
STDL62154 280-376236/9 IC		06/06/2017 16:42	1	06061709.D	CLP1 0.32(mm)
STDL62154 280-376236/9 IC		06/06/2017 16:42	1	06061709.D	CLP2 0.32(mm)
STDL52154 280-376236/10 IC		06/06/2017 17:04	1	06061710.D	CLP1 0.32(mm)
STDL52154 280-376236/10 IC		06/06/2017 17:04	1	06061710.D	CLP2 0.32(mm)
STDL42154 280-376236/11 IC		06/06/2017 17:26	1	06061711.D	CLP1 0.32(mm)
STDL42154 280-376236/11 IC		06/06/2017 17:26	1	06061711.D	CLP2 0.32(mm)
STDL32154 280-376236/12 IC		06/06/2017 17:47	1	06061712.D	CLP1 0.32(mm)
STDL32154 280-376236/12 IC		06/06/2017 17:47	1	06061712.D	CLP2 0.32(mm)
STDL22154 280-376236/13 IC		06/06/2017 18:09	1	06061713.D	CLP1 0.32(mm)
STDL22154 280-376236/13 IC		06/06/2017 18:09	1	06061713.D	CLP2 0.32(mm)
STDL12154 280-376236/14 IC		06/06/2017 18:31	1	06061714.D	CLP1 0.32(mm)
STDL12154 280-376236/14 IC		06/06/2017 18:31	1	06061714.D	CLP2 0.32(mm)
STDL71660 280-376236/15 IC		06/06/2017 18:53	1	06061715.D	CLP1 0.32(mm)
STDL71660 280-376236/15 IC		06/06/2017 18:53	1	06061715.D	CLP2 0.32(mm)
STDL61660 280-376236/16 IC		06/06/2017 19:14	1	06061716.D	CLP1 0.32(mm)

8082A

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P3 Start Date: 06/06/2017 13:49

Analysis Batch Number: 376236 End Date: 06/07/2017 04:16

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STDL61660 280-376236/16 IC		06/06/2017 19:14	1	06061716.D	CLP2 0.32(mm)
STDL51660 280-376236/17 ICIS		06/06/2017 19:36	1	06061717.D	CLP1 0.32(mm)
STDL51660 280-376236/17 ICIS		06/06/2017 19:36	1	06061717.D	CLP2 0.32(mm)
STDL41660 280-376236/18 IC		06/06/2017 19:58	1	06061718.D	CLP1 0.32(mm)
STDL41660 280-376236/18 IC		06/06/2017 19:58	1	06061718.D	CLP2 0.32(mm)
STDL31660 280-376236/19 IC		06/06/2017 20:19	1	06061719.D	CLP1 0.32(mm)
STDL31660 280-376236/19 IC		06/06/2017 20:19	1	06061719.D	CLP2 0.32(mm)
STDL21660 280-376236/20 IC		06/06/2017 20:41	1	06061720.D	CLP1 0.32(mm)
STDL21660 280-376236/20 IC		06/06/2017 20:41	1	06061720.D	CLP2 0.32(mm)
STDL11660 280-376236/21 IC		06/06/2017 21:03	1	06061721.D	CLP1 0.32(mm)
STDL11660 280-376236/21 IC		06/06/2017 21:03	1	06061721.D	CLP2 0.32(mm)
STDL73262 280-376236/22 IC		06/06/2017 21:25	1	06061722.D	CLP1 0.32(mm)
STDL73262 280-376236/22 IC		06/06/2017 21:25	1	06061722.D	CLP2 0.32(mm)
STDL63262 280-376236/23 IC		06/06/2017 21:46	1	06061723.D	CLP1 0.32(mm)
STDL63262 280-376236/23 IC		06/06/2017 21:46	1	06061723.D	CLP2 0.32(mm)
STDL53262 280-376236/24 IC		06/06/2017 22:08	1	06061724.D	CLP1 0.32(mm)
STDL53262 280-376236/24 IC		06/06/2017 22:08	1	06061724.D	CLP2 0.32(mm)
STDL43262 280-376236/25 IC		06/06/2017 22:30	1	06061725.D	CLP1 0.32(mm)
STDL43262 280-376236/25 IC		06/06/2017 22:30	1	06061725.D	CLP2 0.32(mm)
STDL33262 280-376236/26 IC		06/06/2017 22:51	1	06061726.D	CLP1 0.32(mm)
STDL33262 280-376236/26 IC		06/06/2017 22:51	1	06061726.D	CLP2 0.32(mm)
STDL23262 280-376236/27 IC		06/06/2017 23:13	1	06061727.D	CLP1 0.32(mm)
STDL23262 280-376236/27 IC		06/06/2017 23:13	1	06061727.D	CLP2 0.32(mm)
STDL13262 280-376236/28 IC		06/06/2017 23:35	1	06061728.D	CLP1 0.32(mm)
STDL13262 280-376236/28 IC		06/06/2017 23:35	1	06061728.D	CLP2 0.32(mm)
STDL74268 280-376236/29 IC		06/06/2017 23:56	1	06061729.D	CLP1 0.32(mm)
STDL74268 280-376236/29 IC		06/06/2017 23:56	1	06061729.D	CLP2 0.32(mm)
STDL64268 280-376236/30 IC		06/07/2017 00:18	1	06061730.D	CLP1 0.32(mm)
STDL64268 280-376236/30 IC		06/07/2017 00:18	1	06061730.D	CLP2 0.32(mm)
STDL54268 280-376236/31 IC		06/07/2017 00:39	1	06061731.D	CLP1 0.32(mm)
STDL54268 280-376236/31 IC		06/07/2017 00:39	1	06061731.D	CLP2 0.32(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P3 Start Date: 06/06/2017 13:49

Analysis Batch Number: 376236 End Date: 06/07/2017 04:16

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
STDL44268 280-376236/32 IC		06/07/2017 01:01	1	06061732.D	CLP1 0.32(mm)
STDL44268 280-376236/32 IC		06/07/2017 01:01	1	06061732.D	CLP2 0.32(mm)
STDL34268 280-376236/33 IC		06/07/2017 01:23	1	06061733.D	CLP1 0.32(mm)
STDL34268 280-376236/33 IC		06/07/2017 01:23	1	06061733.D	CLP2 0.32(mm)
STDL24268 280-376236/34 IC		06/07/2017 01:44	1	06061734.D	CLP1 0.32(mm)
STDL24268 280-376236/34 IC		06/07/2017 01:44	1	06061734.D	CLP2 0.32(mm)
STDL14268 280-376236/35 IC		06/07/2017 02:06	1	06061735.D	CLP1 0.32(mm)
STDL14268 280-376236/35 IC		06/07/2017 02:06	1	06061735.D	CLP2 0.32(mm)
ICV 280-376236/36		06/07/2017 02:28	1	06061736.D	CLP1 0.32(mm)
ICV 280-376236/36		06/07/2017 02:28	1	06061736.D	CLP2 0.32(mm)
ICV 280-376236/37		06/07/2017 02:49	1	06061737.D	CLP1 0.32(mm)
ICV 280-376236/37		06/07/2017 02:49	1	06061737.D	CLP2 0.32(mm)
ICV 280-376236/38		06/07/2017 03:11	1	06061738.D	CLP1 0.32(mm)
ICV 280-376236/38		06/07/2017 03:11	1	06061738.D	CLP2 0.32(mm)
ICV 280-376236/39		06/07/2017 03:33	1	06061739.D	CLP1 0.32(mm)
ICV 280-376236/39		06/07/2017 03:33	1	06061739.D	CLP2 0.32(mm)
ICV 280-376236/40		06/07/2017 03:54	1	06061740.D	CLP1 0.32(mm)
ICV 280-376236/40		06/07/2017 03:54	1	06061740.D	CLP2 0.32(mm)
ZZZZZ		06/07/2017 04:16	1		CLP1 0.32(mm)
ZZZZZ		06/07/2017 04:16	1		CLP2 0.32(mm)

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P3 Start Date: 06/26/2017 13:24

Analysis Batch Number: 378729 End Date: 06/27/2017 09:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVIS 280-378729/3		06/26/2017 13:24	1	06261703.D	CLP1 0.32(mm)
CCVIS 280-378729/3		06/26/2017 13:24	1	06261703.D	CLP2 0.32(mm)
MB 280-377615/1-A		06/26/2017 13:46	1	06261704.D	CLP1 0.32(mm)
MB 280-377615/1-A		06/26/2017 13:46	1	06261704.D	CLP2 0.32(mm)
LCS 280-377615/4-A		06/26/2017 14:07	1	06261705.D	CLP1 0.32(mm)
LCS 280-377615/4-A		06/26/2017 14:07	1	06261705.D	CLP2 0.32(mm)
280-97928-1		06/26/2017 14:29	1	06261706.D	CLP1 0.32(mm)
280-97928-1		06/26/2017 14:29	1	06261706.D	CLP2 0.32(mm)
280-97928-3		06/26/2017 14:51	1	06261707.D	CLP1 0.32(mm)
280-97928-3		06/26/2017 14:51	1	06261707.D	CLP2 0.32(mm)
280-97928-4		06/26/2017 15:12	1	06261708.D	CLP1 0.32(mm)
280-97928-4		06/26/2017 15:12	1	06261708.D	CLP2 0.32(mm)
280-97928-4 MS		06/26/2017 15:34	1	06261709.D	CLP1 0.32(mm)
280-97928-4 MS		06/26/2017 15:34	1	06261709.D	CLP2 0.32(mm)
280-97928-4 MSD		06/26/2017 15:56	1	06261710.D	CLP1 0.32(mm)
280-97928-4 MSD		06/26/2017 15:56	1	06261710.D	CLP2 0.32(mm)
280-97928-5		06/26/2017 16:18	1	06261711.D	CLP1 0.32(mm)
280-97928-5		06/26/2017 16:18	1	06261711.D	CLP2 0.32(mm)
280-97928-6		06/26/2017 16:39	1	06261712.D	CLP1 0.32(mm)
280-97928-6		06/26/2017 16:39	1	06261712.D	CLP2 0.32(mm)
280-97928-7		06/26/2017 17:01	1	06261713.D	CLP1 0.32(mm)
280-97928-7		06/26/2017 17:01	1	06261713.D	CLP2 0.32(mm)
280-97928-8		06/26/2017 17:23	1	06261714.D	CLP1 0.32(mm)
280-97928-8		06/26/2017 17:23	1	06261714.D	CLP2 0.32(mm)
280-97928-9		06/26/2017 17:45	1	06261715.D	CLP1 0.32(mm)
280-97928-9		06/26/2017 17:45	1	06261715.D	CLP2 0.32(mm)
280-97928-10		06/26/2017 18:06	1	06261716.D	CLP1 0.32(mm)
280-97928-10		06/26/2017 18:06	1	06261716.D	CLP2 0.32(mm)
280-97928-11		06/26/2017 18:28	1	06261717.D	CLP1 0.32(mm)
280-97928-11		06/26/2017 18:28	1	06261717.D	CLP2 0.32(mm)
CCV 280-378729/18		06/26/2017 18:50	1	06261718.D	CLP1 0.32(mm)
CCV 280-378729/18		06/26/2017 18:50	1	06261718.D	CLP2 0.32(mm)
280-97928-12		06/26/2017 19:12	1	06261719.D	CLP1 0.32(mm)
280-97928-12		06/26/2017 19:12	1	06261719.D	CLP2 0.32(mm)
280-97928-14		06/26/2017 19:33	1	06261720.D	CLP1 0.32(mm)
280-97928-14		06/26/2017 19:33	1	06261720.D	CLP2 0.32(mm)
280-97928-15		06/26/2017 19:55	1	06261721.D	CLP1 0.32(mm)
280-97928-15		06/26/2017 19:55	1	06261721.D	CLP2 0.32(mm)
280-97928-16		06/26/2017 20:17	1	06261722.D	CLP1 0.32(mm)
280-97928-16		06/26/2017 20:17	1	06261722.D	CLP2 0.32(mm)
280-97928-17		06/26/2017 20:39	1	06261723.D	CLP1 0.32(mm)
280-97928-17		06/26/2017 20:39	1	06261723.D	CLP2 0.32(mm)
280-97928-18		06/26/2017 21:00	1	06261724.D	CLP1 0.32(mm)
280-97928-18		06/26/2017 21:00	1	06261724.D	CLP2 0.32(mm)
280-97928-19		06/26/2017 21:22	1	06261725.D	CLP1 0.32(mm)

8082A

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: SGC_P3 Start Date: 06/26/2017 13:24

Analysis Batch Number: 378729 End Date: 06/27/2017 09:44

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
280-97928-19		06/26/2017 21:22	1	06261725.D	CLP2 0.32(mm)
280-97928-20		06/26/2017 21:44	1	06261726.D	CLP1 0.32(mm)
280-97928-20		06/26/2017 21:44	1	06261726.D	CLP2 0.32(mm)
280-97928-21		06/26/2017 22:05	1	06261727.D	CLP1 0.32(mm)
280-97928-21		06/26/2017 22:05	1	06261727.D	CLP2 0.32(mm)
280-97928-22		06/26/2017 22:27	1	06261728.D	CLP1 0.32(mm)
280-97928-22		06/26/2017 22:27	1	06261728.D	CLP2 0.32(mm)
CCV 280-378729/29		06/26/2017 22:49	1	06261729.D	CLP1 0.32(mm)
CCV 280-378729/29		06/26/2017 22:49	1	06261729.D	CLP2 0.32(mm)
ZZZZZ		06/26/2017 23:10	1		CLP1 0.32(mm)
ZZZZZ		06/26/2017 23:10	1		CLP2 0.32(mm)
ZZZZZ		06/26/2017 23:32	1		CLP1 0.32(mm)
ZZZZZ		06/26/2017 23:32	1		CLP2 0.32(mm)
ZZZZZ		06/26/2017 23:54	1		CLP1 0.32(mm)
ZZZZZ		06/26/2017 23:54	1		CLP2 0.32(mm)
ZZZZZ		06/27/2017 00:16	1		CLP1 0.32(mm)
ZZZZZ		06/27/2017 00:16	1		CLP2 0.32(mm)
ZZZZZ		06/27/2017 00:37	1		CLP1 0.32(mm)
ZZZZZ		06/27/2017 00:37	1		CLP2 0.32(mm)
ZZZZZ		06/27/2017 01:21	1		CLP1 0.32(mm)
ZZZZZ		06/27/2017 01:21	1		CLP2 0.32(mm)
ZZZZZ		06/27/2017 01:42	1		CLP1 0.32(mm)
ZZZZZ		06/27/2017 01:42	1		CLP2 0.32(mm)
ZZZZZ		06/27/2017 02:04	1		CLP1 0.32(mm)
ZZZZZ		06/27/2017 02:04	1		CLP2 0.32(mm)
ZZZZZ		06/27/2017 02:26	1		CLP1 0.32(mm)
ZZZZZ		06/27/2017 02:26	1		CLP2 0.32(mm)
CCV 280-378729/43		06/27/2017 03:52	1		CLP1 0.32(mm)
CCV 280-378729/43		06/27/2017 03:52	1		CLP2 0.32(mm)
ZZZZZ		06/27/2017 08:17	10		CLP1 0.32(mm)
ZZZZZ		06/27/2017 08:17	10		CLP2 0.32(mm)
ZZZZZ		06/27/2017 08:39	5		CLP1 0.32(mm)
ZZZZZ		06/27/2017 08:39	5		CLP2 0.32(mm)
ZZZZZ		06/27/2017 09:01	5		CLP1 0.32(mm)
ZZZZZ		06/27/2017 09:01	5		CLP2 0.32(mm)
ZZZZZ		06/27/2017 09:22	5		CLP1 0.32(mm)
ZZZZZ		06/27/2017 09:22	5		CLP2 0.32(mm)
CCV 280-378729/48		06/27/2017 09:44	1		CLP1 0.32(mm)
CCV 280-378729/48		06/27/2017 09:44	1		CLP2 0.32(mm)

PCBS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Batch Number: 377615 Batch Start Date: 06/16/17 13:00 Batch Analyst: Bourgery, David F

Batch Method: 3546 Batch End Date: 06/23/17 10:06

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	8081/82 Surr 00094	8082 LCS 00046	AnalysisComment	
MB 280-377615/1		3546, 8082A		31.2 g	10 mL	1 mL			
LCS 280-377615/4		3546, 8082A		32.4 g	10 mL	1 mL	1 mL	8082	
280-97928-C-1	SS025-SS07	3546, 8082A	T	31.6 g	10 mL	1 mL			
280-97928-C-3	SS025-SB06(0-2)	3546, 8082A	T	31.3 g	10 mL	1 mL			
280-97928-B-4	SS025-SB06(2-4)	3546, 8082A	T	31.7 g	10 mL	1 mL		TOX	
280-97928-B-4 MS	SS025-SB06(2-4)	3546, 8082A	T	31.0 g	10 mL	1 mL	1 mL		
280-97928-B-4 MSD	SS025-SB06(2-4)	3546, 8082A	T	32.1 g	10 mL	1 mL	1 mL	82	
280-97928-C-5	SS025-SS08	3546, 8082A	T	30.5 g	10 mL	1 mL		82	
280-97928-C-6	SS025-SB07(0-2)	3546, 8082A	T	32.7 g	10 mL	1 mL			
280-97928-C-7	SS025-SB07(2-4)	3546, 8082A	T	30.5 g	10 mL	1 mL			
280-97928-C-8	SS025-SB01(0-2)	3546, 8082A	T	31.3 g	10 mL	1 mL			
280-97928-B-9	SS025-SB01(0-2) -a	3546, 8082A	T	30.2 g	10 mL	1 mL			
280-97928-A-10	SS025-SB08(0-2)	3546, 8082A	T	31.4 g	10 mL	1 mL			
280-97928-A-11	SS025-SB08(2-4)	3546, 8082A	T	32.1 g	10 mL	1 mL			
280-97928-B-12	SS025-SS09	3546, 8082A	T	31.8 g	10 mL	1 mL			
280-97928-C-14	SS025-SB09(0-2)	3546, 8082A	T	30.3 g	10 mL	1 mL			
280-97928-A-15	SS025-SB09(2-4)	3546, 8082A	T	30.4 g	10 mL	1 mL			
280-97928-B-16	SS025-SB09(4-6)	3546, 8082A	T	31.6 g	10 mL	1 mL			
280-97928-C-17	SS025-SB09(6-8)	3546, 8082A	T	31.7 g	10 mL	1 mL			
280-97928-A-18	SS025-SB10(0-2)	3546, 8082A	T	31.2 g	10 mL	1 mL			
280-97928-C-19	SS025-SB10(2-4)	3546, 8082A	T	31.0 g	10 mL	1 mL			
280-97928-B-20	SS025-SB10(4-6)	3546, 8082A	T	31.8 g	10 mL	1 mL			
280-97928-B-21	SS025-SB10(2-4) -a	3546, 8082A	T	30.7 g	10 mL	1 mL			
280-97928-B-22	SS025-SS10	3546, 8082A	T	31.7 g	10 mL	1 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

PCBS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Batch Number: 377615 Batch Start Date: 06/16/17 13:00 Batch Analyst: Bourgery, David F

Batch Method: 3546 Batch End Date: 06/23/17 10:06

Batch Notes	
Balance ID	24750402
Batch Comment	Aliquot:HA, pip: BB-8 (10.00), R2-D2 (2.00), N (2x1.00)
Analyst ID - Concentration	GLK/ELV/CDC(supervisor)
Exchange Solvent ID	Hexane_Cycl_00044
Exchange Solvent Name	Hexane
Final Concentrator Volume	10 mL
Florisil ID	FlorisilSol_00130, cart 3441026
Hexane ID	see below
MeCL2 ID	see above
MeCl2 / Acetone ID	see above
Microwave Oven ID	MARS 5
Microwave Start Time	06/16/17 1325
Microwave Stop Time	06/16/17 1357
Na2SO4 ID	0000150871_00002
Ottawa Sand ID	170485
Pipette ID	K
Person's name who did the prep	DB/HA
Solvent Lot #	MeCl2_Cycl_00341/342 / 1:1AceMeCl2_00065
Solvent Name	1:1AceMeCl2/MeCl2
SOP Number	DV-OP-0015/0007
Analyst ID - Spike Analyst	DB
Analyst ID - Spike Witness Analyst	reviewer:GLK
Water Bath ID	B
Water Bath Temperature	88 (obs @ 89)

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Denver Job Number: 280-97928-1

SDG No.:

Project: Griffiss AFB, NY - SS025

Client Sample ID	Lab Sample ID
SS025-SS07	280-97928-1
SS025-SB06(0-2)	280-97928-3
SS025-SB06(2-4)	280-97928-4
SS025-SS08	280-97928-5
SS025-SB07(0-2)	280-97928-6
SS025-SB07(2-4)	280-97928-7
SS025-SB01(0-2)	280-97928-8
SS025-SB01(0-2)-a	280-97928-9
SS025-SB08(0-2)	280-97928-10
SS025-SB08(2-4)	280-97928-11
SS025-SS09	280-97928-12
SS025-SB09(0-2)	280-97928-14
SS025-SB09(2-4)	280-97928-15
SS025-SB09(4-6)	280-97928-16
SS025-SB09(6-8)	280-97928-17
SS025-SB10(0-2)	280-97928-18
SS025-SB10(2-4)	280-97928-19
SS025-SB10(4-6)	280-97928-20
SS025-SB10(2-4)-a	280-97928-21
SS025-SS10	280-97928-22

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SS07 | Lab Sample ID: 280-97928-1

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG ID.:

Matrix: Solid | Date Sampled: 06/05/2017 08:15

Reporting Basis: DRY | Date Received: 06/06/2017 09:30

% Solids: 86.7

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	5100	56	6.7	1.7	mg/Kg		J	1	6010C
Antimony	1.7	2.2	1.7	0.82	mg/Kg	U	J	1	6010C
Arsenic	2.3	2.8	2.8	0.74	mg/Kg	J		1	6010C
Barium	18	2.2	0.33	0.12	mg/Kg			1	6010C
Beryllium	0.23	0.56	0.13	0.037	mg/Kg	J		1	6010C
Cadmium	0.080	0.56	0.17	0.046	mg/Kg	J		1	6010C
Calcium	1500	110	56	16	mg/Kg			1	6010C
Chromium	5.4	3.9	0.22	0.065	mg/Kg			1	6010C
Cobalt	3.4	1.1	0.45	0.11	mg/Kg			1	6010C
Copper	11	5.6	0.89	0.24	mg/Kg			1	6010C
Iron	9800	89	17	4.2	mg/Kg		J	1	6010C
Lead	4.2	1.0	0.89	0.35	mg/Kg			1	6010C
Magnesium	2000	33	16	4.1	mg/Kg			1	6010C
Manganese	430	5.0	0.45	0.11	mg/Kg		J	1	6010C
Nickel	7.4	4.5	0.50	0.15	mg/Kg			1	6010C
Potassium	660	330	180	46	mg/Kg			1	6010C
Selenium	3.3	3.3	3.3	0.96	mg/Kg	U		1	6010C
Silver	0.67	1.7	0.67	0.18	mg/Kg	U		1	6010C
Sodium	220	560	220	66	mg/Kg	U		1	6010C
Thallium	2.8	3.3	2.8	0.72	mg/Kg	U	J	1	6010C
Vanadium	9.8	2.2	0.39	0.10	mg/Kg			1	6010C
Zinc	26	8.9	1.7	0.44	mg/Kg			1	6010C
Mercury	18	23	18	7.5	ug/Kg	U		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB06(0-2) Lab Sample ID: 280-97928-3

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG ID.:

Matrix: Solid Date Sampled: 06/05/2017 08:35

Reporting Basis: DRY Date Received: 06/06/2017 09:30

% Solids: 90.3

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	3500	55	6.6	1.7	mg/Kg			1	6010C
Antimony	1.7	2.2	1.7	0.81	mg/Kg	U		1	6010C
Arsenic	2.1	2.8	2.8	0.73	mg/Kg	J		1	6010C
Barium	11	2.2	0.33	0.11	mg/Kg			1	6010C
Beryllium	0.17	0.55	0.13	0.036	mg/Kg	J		1	6010C
Cadmium	0.17	0.55	0.17	0.045	mg/Kg	U		1	6010C
Calcium	7500	110	55	16	mg/Kg			1	6010C
Chromium	4.0	3.9	0.22	0.064	mg/Kg			1	6010C
Cobalt	2.5	1.1	0.44	0.11	mg/Kg			1	6010C
Copper	9.0	5.5	0.88	0.24	mg/Kg			1	6010C
Iron	8000	88	17	4.2	mg/Kg			1	6010C
Lead	1.8	0.99	0.88	0.34	mg/Kg			1	6010C
Magnesium	2800	33	15	4.1	mg/Kg			1	6010C
Manganese	250	5.0	0.44	0.11	mg/Kg			1	6010C
Nickel	5.8	4.4	0.50	0.15	mg/Kg			1	6010C
Potassium	550	330	180	45	mg/Kg			1	6010C
Selenium	3.3	3.3	3.3	0.95	mg/Kg	U		1	6010C
Silver	0.66	1.7	0.66	0.18	mg/Kg	U		1	6010C
Sodium	220	550	220	65	mg/Kg	U		1	6010C
Thallium	2.8	3.3	2.8	0.72	mg/Kg	U		1	6010C
Vanadium	7.1	2.2	0.39	0.10	mg/Kg			1	6010C
Zinc	16	8.8	1.7	0.44	mg/Kg			1	6010C
Mercury	16	20	16	6.6	ug/Kg	U		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB06(2-4)
Lab Sample ID: 280-97928-4
Lab Name: TestAmerica Denver
Job No.: 280-97928-1
SDG ID.:
Matrix: Solid
Date Sampled: 06/05/2017 08:50
Reporting Basis: DRY
Date Received: 06/06/2017 09:30
% Solids: 87.8

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	2500	54	6.5	1.7	mg/Kg			1	6010C
Antimony	1.6	2.2	1.6	0.80	mg/Kg	U		1	6010C
Arsenic	1.4	2.7	2.7	0.72	mg/Kg	J		1	6010C
Barium	9.4	2.2	0.33	0.11	mg/Kg			1	6010C
Beryllium	0.11	0.54	0.13	0.036	mg/Kg	J		1	6010C
Cadmium	0.16	0.54	0.16	0.045	mg/Kg	U		1	6010C
Calcium	12000	110	54	15	mg/Kg			1	6010C
Chromium	2.9	3.8	0.22	0.063	mg/Kg	J		1	6010C
Cobalt	2.0	1.1	0.43	0.11	mg/Kg			1	6010C
Copper	6.3	5.4	0.87	0.24	mg/Kg			1	6010C
Iron	5700	87	16	4.1	mg/Kg			1	6010C
Lead	0.98	0.98	0.87	0.34	mg/Kg			1	6010C
Magnesium	2700	33	15	4.0	mg/Kg			1	6010C
Manganese	200	4.9	0.43	0.11	mg/Kg			1	6010C
Nickel	4.2	4.3	0.49	0.14	mg/Kg	J		1	6010C
Potassium	480	330	170	45	mg/Kg			1	6010C
Selenium	3.3	3.3	3.3	0.93	mg/Kg	U		1	6010C
Silver	0.65	1.6	0.65	0.17	mg/Kg	U		1	6010C
Sodium	220	540	220	64	mg/Kg	U		1	6010C
Thallium	2.7	3.3	2.7	0.71	mg/Kg	U		1	6010C
Vanadium	5.6	2.2	0.38	0.10	mg/Kg			1	6010C
Zinc	12	8.7	1.6	0.43	mg/Kg			1	6010C
Mercury	18	23	18	7.6	ug/Kg	U		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SS08 | Lab Sample ID: 280-97928-5

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG ID.:

Matrix: Solid | Date Sampled: 06/05/2017 09:35

Reporting Basis: DRY | Date Received: 06/06/2017 09:30

% Solids: 86.8

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	7500	54	6.4	1.7	mg/Kg			1	6010C
Antimony	1.6	2.1	1.6	0.78	mg/Kg	U		1	6010C
Arsenic	5.1	2.7	2.7	0.71	mg/Kg			1	6010C
Barium	24	2.1	0.32	0.11	mg/Kg			1	6010C
Beryllium	0.30	0.54	0.13	0.035	mg/Kg	J		1	6010C
Cadmium	0.079	0.54	0.16	0.044	mg/Kg	J		1	6010C
Calcium	3600	110	54	15	mg/Kg			1	6010C
Chromium	7.9	3.7	0.21	0.062	mg/Kg			1	6010C
Cobalt	5.7	1.1	0.43	0.11	mg/Kg			1	6010C
Copper	31	5.4	0.86	0.23	mg/Kg			1	6010C
Iron	17000	86	16	4.1	mg/Kg			1	6010C
Lead	4.2	0.96	0.86	0.33	mg/Kg			1	6010C
Magnesium	3700	32	15	4.0	mg/Kg			1	6010C
Manganese	950	4.8	0.43	0.11	mg/Kg			1	6010C
Nickel	12	4.3	0.48	0.14	mg/Kg			1	6010C
Potassium	850	320	170	44	mg/Kg			1	6010C
Selenium	3.2	3.2	3.2	0.92	mg/Kg	U		1	6010C
Silver	0.64	1.6	0.64	0.17	mg/Kg	U		1	6010C
Sodium	210	540	210	63	mg/Kg	U		1	6010C
Thallium	2.7	3.2	2.7	0.70	mg/Kg	U		1	6010C
Vanadium	14	2.1	0.37	0.10	mg/Kg			1	6010C
Zinc	41	8.6	1.6	0.43	mg/Kg			1	6010C
Mercury	17	22	17	7.2	ug/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB07(0-2)
Lab Sample ID: 280-97928-6
Lab Name: TestAmerica Denver
Job No.: 280-97928-1
SDG ID.:
Matrix: Solid
Date Sampled: 06/05/2017 09:45
Reporting Basis: DRY
Date Received: 06/06/2017 09:30
% Solids: 87.1

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	3300	49	5.9	1.5	mg/Kg			1	6010C
Antimony	1.5	2.0	1.5	0.72	mg/Kg	U		1	6010C
Arsenic	2.5	2.4	2.4	0.65	mg/Kg			1	6010C
Barium	12	2.0	0.29	0.10	mg/Kg			1	6010C
Beryllium	0.16	0.49	0.12	0.032	mg/Kg	J		1	6010C
Cadmium	0.058	0.49	0.15	0.040	mg/Kg	J		1	6010C
Calcium	5700	98	49	14	mg/Kg			1	6010C
Chromium	3.8	3.4	0.20	0.057	mg/Kg			1	6010C
Cobalt	2.7	0.98	0.39	0.098	mg/Kg			1	6010C
Copper	9.6	4.9	0.78	0.21	mg/Kg			1	6010C
Iron	7700	78	15	3.7	mg/Kg		Q	1	6010C
Lead	2.1	0.88	0.78	0.30	mg/Kg			1	6010C
Magnesium	2500	29	14	3.6	mg/Kg			1	6010C
Manganese	310	4.4	0.39	0.098	mg/Kg			1	6010C
Nickel	5.5	3.9	0.44	0.13	mg/Kg			1	6010C
Potassium	560	290	160	40	mg/Kg			1	6010C
Selenium	2.9	2.9	2.9	0.84	mg/Kg	U		1	6010C
Silver	0.59	1.5	0.59	0.16	mg/Kg	U		1	6010C
Sodium	200	490	200	58	mg/Kg	U		1	6010C
Thallium	0.64	2.9	2.4	0.63	mg/Kg	J		1	6010C
Vanadium	7.1	2.0	0.34	0.092	mg/Kg			1	6010C
Zinc	17	7.8	1.5	0.39	mg/Kg			1	6010C
Mercury	17	22	17	7.2	ug/Kg	U		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB07(2-4) Lab Sample ID: 280-97928-7

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG ID.:

Matrix: Solid Date Sampled: 06/05/2017 09:55

Reporting Basis: DRY Date Received: 06/06/2017 09:30

% Solids: 84.8

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	3400	59	7.0	1.8	mg/Kg			1	6010C
Antimony	1.8	2.3	1.8	0.86	mg/Kg	U		1	6010C
Arsenic	2.7	2.9	2.9	0.78	mg/Kg	J		1	6010C
Barium	13	2.3	0.35	0.12	mg/Kg			1	6010C
Beryllium	0.18	0.59	0.14	0.039	mg/Kg	J		1	6010C
Cadmium	0.18	0.59	0.18	0.048	mg/Kg	U		1	6010C
Calcium	2600	120	59	17	mg/Kg			1	6010C
Chromium	3.9	4.1	0.23	0.068	mg/Kg	J		1	6010C
Cobalt	2.9	1.2	0.47	0.12	mg/Kg			1	6010C
Copper	10	5.9	0.94	0.25	mg/Kg			1	6010C
Iron	8200	94	18	4.5	mg/Kg		Q	1	6010C
Lead	2.0	1.1	0.94	0.36	mg/Kg			1	6010C
Magnesium	2000	35	16	4.3	mg/Kg			1	6010C
Manganese	330	5.3	0.47	0.12	mg/Kg			1	6010C
Nickel	6.1	4.7	0.53	0.16	mg/Kg			1	6010C
Potassium	570	350	190	48	mg/Kg			1	6010C
Selenium	3.5	3.5	3.5	1.0	mg/Kg	U		1	6010C
Silver	0.70	1.8	0.70	0.19	mg/Kg	U		1	6010C
Sodium	230	590	230	69	mg/Kg	U		1	6010C
Thallium	2.9	3.5	2.9	0.76	mg/Kg	U		1	6010C
Vanadium	7.3	2.3	0.41	0.11	mg/Kg			1	6010C
Zinc	19	9.4	1.8	0.47	mg/Kg			1	6010C
Mercury	19	24	19	7.8	ug/Kg	U		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB01(0-2)
Lab Sample ID: 280-97928-8
Lab Name: TestAmerica Denver
Job No.: 280-97928-1
SDG ID.:
Matrix: Solid
Date Sampled: 06/05/2017 10:20
Reporting Basis: DRY
Date Received: 06/06/2017 09:30
% Solids: 88.3

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	6500	39	4.7	1.2	mg/Kg			1	6010C
Antimony	1.2	1.6	1.2	0.57	mg/Kg	U		1	6010C
Arsenic	3.5	2.0	2.0	0.52	mg/Kg			1	6010C
Barium	27	1.6	0.23	0.081	mg/Kg			1	6010C
Beryllium	0.32	0.39	0.094	0.026	mg/Kg	J		1	6010C
Cadmium	0.13	0.39	0.12	0.032	mg/Kg	J		1	6010C
Calcium	2600	78	39	11	mg/Kg			1	6010C
Chromium	7.1	2.7	0.16	0.045	mg/Kg			1	6010C
Cobalt	5.3	0.78	0.31	0.078	mg/Kg			1	6010C
Copper	19	3.9	0.63	0.17	mg/Kg			1	6010C
Iron	14000	63	12	3.0	mg/Kg		Q	1	6010C
Lead	5.7	0.70	0.63	0.24	mg/Kg			1	6010C
Magnesium	2400	23	11	2.9	mg/Kg			1	6010C
Manganese	860	3.5	0.31	0.078	mg/Kg			1	6010C
Nickel	10	3.1	0.35	0.10	mg/Kg			1	6010C
Potassium	640	230	130	32	mg/Kg			1	6010C
Selenium	2.3	2.3	2.3	0.67	mg/Kg	U		1	6010C
Silver	0.47	1.2	0.47	0.13	mg/Kg	U		1	6010C
Sodium	160	390	160	46	mg/Kg	U		1	6010C
Thallium	2.0	2.3	2.0	0.51	mg/Kg	U		1	6010C
Vanadium	12	1.6	0.27	0.074	mg/Kg			1	6010C
Zinc	36	6.3	1.2	0.31	mg/Kg			1	6010C
Mercury	22	21	16	6.8	ug/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB01(0-2)-a
Lab Sample ID: 280-97928-9
Lab Name: TestAmerica Denver
Job No.: 280-97928-1
SDG ID.:
Matrix: Solid
Date Sampled: 06/05/2017 10:20
Reporting Basis: DRY
Date Received: 06/06/2017 09:30
% Solids: 89.0

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	7000	45	5.4	1.4	mg/Kg			1	6010C
Antimony	1.3	1.8	1.3	0.65	mg/Kg	U		1	6010C
Arsenic	5.0	2.2	2.2	0.59	mg/Kg			1	6010C
Barium	45	1.8	0.27	0.093	mg/Kg			1	6010C
Beryllium	0.33	0.45	0.11	0.029	mg/Kg	J		1	6010C
Cadmium	0.11	0.45	0.13	0.037	mg/Kg	J		1	6010C
Calcium	7000	89	45	13	mg/Kg			1	6010C
Chromium	8.5	3.1	0.18	0.052	mg/Kg			1	6010C
Cobalt	5.4	0.89	0.36	0.089	mg/Kg			1	6010C
Copper	25	4.5	0.71	0.19	mg/Kg			1	6010C
Iron	18000	71	13	3.4	mg/Kg		Q	1	6010C
Lead	5.4	0.80	0.71	0.28	mg/Kg			1	6010C
Magnesium	3700	27	12	3.3	mg/Kg			1	6010C
Manganese	1200	4.0	0.36	0.089	mg/Kg			1	6010C
Nickel	12	3.6	0.40	0.12	mg/Kg			1	6010C
Potassium	870	270	140	37	mg/Kg			1	6010C
Selenium	2.7	2.7	2.7	0.77	mg/Kg	U		1	6010C
Silver	0.54	1.3	0.54	0.14	mg/Kg	U		1	6010C
Sodium	180	450	180	53	mg/Kg	U		1	6010C
Thallium	2.2	2.7	2.2	0.58	mg/Kg	U		1	6010C
Vanadium	14	1.8	0.31	0.084	mg/Kg			1	6010C
Zinc	41	7.1	1.3	0.36	mg/Kg			1	6010C
Mercury	11	22	18	7.3	ug/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB08(0-2)
Lab Sample ID: 280-97928-10
Lab Name: TestAmerica Denver
Job No.: 280-97928-1
SDG ID.:
Matrix: Solid
Date Sampled: 06/05/2017 11:05
Reporting Basis: DRY
Date Received: 06/06/2017 09:30
% Solids: 89.8

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	4000	40	4.8	1.2	mg/Kg			1	6010C
Antimony	1.2	1.6	1.2	0.58	mg/Kg	U		1	6010C
Arsenic	2.8	2.0	2.0	0.53	mg/Kg			1	6010C
Barium	13	1.6	0.24	0.083	mg/Kg			1	6010C
Beryllium	0.20	0.40	0.096	0.026	mg/Kg	J		1	6010C
Cadmium	0.050	0.40	0.12	0.033	mg/Kg	J		1	6010C
Calcium	950	80	40	11	mg/Kg			1	6010C
Chromium	4.2	2.8	0.16	0.046	mg/Kg			1	6010C
Cobalt	2.9	0.80	0.32	0.080	mg/Kg			1	6010C
Copper	9.8	4.0	0.64	0.17	mg/Kg			1	6010C
Iron	8600	64	12	3.0	mg/Kg		Q	1	6010C
Lead	1.9	0.72	0.64	0.25	mg/Kg			1	6010C
Magnesium	1700	24	11	2.9	mg/Kg			1	6010C
Manganese	300	3.6	0.32	0.080	mg/Kg			1	6010C
Nickel	6.5	3.2	0.36	0.11	mg/Kg			1	6010C
Potassium	600	240	130	33	mg/Kg			1	6010C
Selenium	2.4	2.4	2.4	0.69	mg/Kg	U		1	6010C
Silver	0.48	1.2	0.48	0.13	mg/Kg	U		1	6010C
Sodium	160	400	160	47	mg/Kg	U		1	6010C
Thallium	2.0	2.4	2.0	0.52	mg/Kg	U		1	6010C
Vanadium	7.6	1.6	0.28	0.075	mg/Kg			1	6010C
Zinc	18	6.4	1.2	0.32	mg/Kg			1	6010C
Mercury	6.4	20	15	6.4	ug/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB08(2-4) Lab Sample ID: 280-97928-11

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG ID.:

Matrix: Solid Date Sampled: 06/05/2017 11:15

Reporting Basis: DRY Date Received: 06/06/2017 09:30

% Solids: 86.4

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	8300	39	4.7	1.2	mg/Kg			1	6010C
Antimony	1.2	1.6	1.2	0.58	mg/Kg	U		1	6010C
Arsenic	3.7	2.0	2.0	0.52	mg/Kg			1	6010C
Barium	31	1.6	0.24	0.082	mg/Kg			1	6010C
Beryllium	0.53	0.39	0.094	0.026	mg/Kg			1	6010C
Cadmium	0.12	0.39	0.12	0.032	mg/Kg	J		1	6010C
Calcium	980	78	39	11	mg/Kg			1	6010C
Chromium	9.6	2.7	0.16	0.046	mg/Kg			1	6010C
Cobalt	4.9	0.78	0.31	0.078	mg/Kg			1	6010C
Copper	18	3.9	0.63	0.17	mg/Kg			1	6010C
Iron	17000	63	12	3.0	mg/Kg			1	6010C
Lead	5.8	0.71	0.63	0.24	mg/Kg			1	6010C
Magnesium	2600	24	11	2.9	mg/Kg			1	6010C
Manganese	340	3.5	0.31	0.078	mg/Kg			1	6010C
Nickel	12	3.1	0.35	0.10	mg/Kg			1	6010C
Potassium	970	240	130	32	mg/Kg			1	6010C
Selenium	2.4	2.4	2.4	0.67	mg/Kg	U		1	6010C
Silver	0.47	1.2	0.47	0.13	mg/Kg	U		1	6010C
Sodium	71	390	160	46	mg/Kg	J		1	6010C
Thallium	2.0	2.4	2.0	0.51	mg/Kg	U		1	6010C
Vanadium	19	1.6	0.27	0.074	mg/Kg			1	6010C
Zinc	37	6.3	1.2	0.31	mg/Kg			1	6010C
Mercury	20	20	16	6.6	ug/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SS09 | Lab Sample ID: 280-97928-12

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG ID.:

Matrix: Solid | Date Sampled: 06/05/2017 11:35

Reporting Basis: DRY | Date Received: 06/06/2017 09:30

% Solids: 88.2

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	3100	45	5.4	1.4	mg/Kg			1	6010C
Antimony	6.8	9.0	6.8	3.3	mg/Kg	U		5	6010C
Arsenic	5.5	11	11	3.0	mg/Kg	J	D	5	6010C
Barium	17	1.8	0.27	0.094	mg/Kg			1	6010C
Beryllium	0.17	0.45	0.11	0.030	mg/Kg	J		1	6010C
Cadmium	0.045	0.45	0.14	0.037	mg/Kg	J		1	6010C
Calcium	210000	450	230	64	mg/Kg		Q D	5	6010C
Chromium	4.9	3.2	0.18	0.052	mg/Kg			1	6010C
Cobalt	2.7	0.90	0.36	0.090	mg/Kg			1	6010C
Copper	11	4.5	0.72	0.20	mg/Kg			1	6010C
Iron	5700	72	14	3.4	mg/Kg		Q	1	6010C
Lead	3.7	4.1	3.6	1.4	mg/Kg	J	D	5	6010C
Magnesium	5100	27	13	3.3	mg/Kg			1	6010C
Manganese	270	4.1	0.36	0.090	mg/Kg			1	6010C
Nickel	9.7	18	2.0	0.60	mg/Kg	J	D	5	6010C
Potassium	620	270	140	37	mg/Kg			1	6010C
Selenium	14	14	14	3.9	mg/Kg	U		5	6010C
Silver	0.54	1.4	0.54	0.14	mg/Kg	U		1	6010C
Sodium	110	450	180	53	mg/Kg	J		1	6010C
Thallium	11	14	11	2.9	mg/Kg	U		5	6010C
Vanadium	8.7	1.8	0.32	0.085	mg/Kg			1	6010C
Zinc	26	7.2	1.4	0.36	mg/Kg			1	6010C
Mercury	15	21	16	6.8	ug/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB09(0-2)
Lab Sample ID: 280-97928-14
Lab Name: TestAmerica Denver
Job No.: 280-97928-1
SDG ID.:
Matrix: Solid
Date Sampled: 06/05/2017 13:30
Reporting Basis: DRY
Date Received: 06/06/2017 09:30
% Solids: 89.0

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	7200	40	4.8	1.2	mg/Kg			1	6010C
Antimony	1.2	1.6	1.2	0.58	mg/Kg	U		1	6010C
Arsenic	4.2	2.0	2.0	0.53	mg/Kg			1	6010C
Barium	32	1.6	0.24	0.083	mg/Kg			1	6010C
Beryllium	0.36	0.40	0.095	0.026	mg/Kg	J		1	6010C
Cadmium	0.20	0.40	0.12	0.033	mg/Kg	J		1	6010C
Calcium	48000	80	40	11	mg/Kg			1	6010C
Chromium	8.0	2.8	0.16	0.046	mg/Kg			1	6010C
Cobalt	4.9	0.80	0.32	0.080	mg/Kg			1	6010C
Copper	22	4.0	0.64	0.17	mg/Kg			1	6010C
Iron	13000	64	12	3.0	mg/Kg		Q	1	6010C
Lead	7.4	0.72	0.64	0.25	mg/Kg			1	6010C
Magnesium	3200	24	11	2.9	mg/Kg			1	6010C
Manganese	870	3.6	0.32	0.080	mg/Kg			1	6010C
Nickel	10	3.2	0.36	0.10	mg/Kg			1	6010C
Potassium	880	240	130	33	mg/Kg			1	6010C
Selenium	2.4	2.4	2.4	0.68	mg/Kg	U		1	6010C
Silver	0.48	1.2	0.48	0.13	mg/Kg	U		1	6010C
Sodium	59	400	160	47	mg/Kg	J		1	6010C
Thallium	0.92	2.4	2.0	0.52	mg/Kg	J		1	6010C
Vanadium	15	1.6	0.28	0.075	mg/Kg			1	6010C
Zinc	39	6.4	1.2	0.32	mg/Kg			1	6010C
Mercury	45	20	16	6.7	ug/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB09(2-4) Lab Sample ID: 280-97928-15

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG ID.:

Matrix: Solid Date Sampled: 06/05/2017 13:40

Reporting Basis: DRY Date Received: 06/06/2017 09:30

% Solids: 90.1

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	8000	42	5.1	1.3	mg/Kg			1	6010C
Antimony	1.3	1.7	1.3	0.62	mg/Kg	U		1	6010C
Arsenic	4.4	2.1	2.1	0.56	mg/Kg			1	6010C
Barium	47	1.7	0.25	0.088	mg/Kg			1	6010C
Beryllium	0.39	0.42	0.10	0.028	mg/Kg	J		1	6010C
Cadmium	0.22	0.42	0.13	0.035	mg/Kg	J		1	6010C
Calcium	18000	84	42	12	mg/Kg			1	6010C
Chromium	9.5	3.0	0.17	0.049	mg/Kg			1	6010C
Cobalt	5.7	0.84	0.34	0.084	mg/Kg			1	6010C
Copper	31	4.2	0.67	0.18	mg/Kg			1	6010C
Iron	17000	67	13	3.2	mg/Kg		Q	1	6010C
Lead	7.5	0.76	0.67	0.26	mg/Kg			1	6010C
Magnesium	3500	25	12	3.1	mg/Kg			1	6010C
Manganese	960	3.8	0.34	0.084	mg/Kg			1	6010C
Nickel	14	3.4	0.38	0.11	mg/Kg			1	6010C
Potassium	1000	250	130	35	mg/Kg			1	6010C
Selenium	2.5	2.5	2.5	0.73	mg/Kg	U		1	6010C
Silver	0.51	1.3	0.51	0.13	mg/Kg	U		1	6010C
Sodium	170	420	170	50	mg/Kg	U		1	6010C
Thallium	0.76	2.5	2.1	0.55	mg/Kg	J		1	6010C
Vanadium	17	1.7	0.30	0.079	mg/Kg			1	6010C
Zinc	52	6.7	1.3	0.34	mg/Kg			1	6010C
Mercury	79	23	18	7.4	ug/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB09(4-6)
Lab Sample ID: 280-97928-16
Lab Name: TestAmerica Denver
Job No.: 280-97928-1
SDG ID.:
Matrix: Solid
Date Sampled: 06/05/2017 13:50
Reporting Basis: DRY
Date Received: 06/06/2017 09:30
% Solids: 83.1

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	15000	50	6.0	1.5	mg/Kg			1	6010C
Antimony	1.5	2.0	1.5	0.73	mg/Kg	U		1	6010C
Arsenic	5.8	2.5	2.5	0.66	mg/Kg			1	6010C
Barium	47	2.0	0.30	0.10	mg/Kg			1	6010C
Beryllium	0.62	0.50	0.12	0.033	mg/Kg			1	6010C
Cadmium	0.22	0.50	0.15	0.041	mg/Kg	J		1	6010C
Calcium	3700	99	50	14	mg/Kg			1	6010C
Chromium	15	3.5	0.20	0.058	mg/Kg			1	6010C
Cobalt	9.3	0.99	0.40	0.099	mg/Kg			1	6010C
Copper	25	5.0	0.79	0.22	mg/Kg			1	6010C
Iron	23000	79	15	3.8	mg/Kg		Q	1	6010C
Lead	19	0.89	0.79	0.31	mg/Kg			1	6010C
Magnesium	3500	30	14	3.7	mg/Kg			1	6010C
Manganese	990	4.5	0.40	0.099	mg/Kg			1	6010C
Nickel	15	4.0	0.45	0.13	mg/Kg			1	6010C
Potassium	1400	300	160	41	mg/Kg			1	6010C
Selenium	3.0	3.0	3.0	0.85	mg/Kg	U		1	6010C
Silver	0.60	1.5	0.60	0.16	mg/Kg	U		1	6010C
Sodium	85	500	200	59	mg/Kg	J		1	6010C
Thallium	2.5	3.0	2.5	0.65	mg/Kg	U		1	6010C
Vanadium	27	2.0	0.35	0.093	mg/Kg			1	6010C
Zinc	67	7.9	1.5	0.40	mg/Kg			1	6010C
Mercury	38	22	17	7.1	ug/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB09(6-8)
Lab Sample ID: 280-97928-17
Lab Name: TestAmerica Denver
Job No.: 280-97928-1
SDG ID.:
Matrix: Solid
Date Sampled: 06/05/2017 14:10
Reporting Basis: DRY
Date Received: 06/06/2017 09:30
% Solids: 86.2

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	7800	44	5.2	1.4	mg/Kg			1	6010C
Antimony	1.3	1.7	1.3	0.64	mg/Kg	U		1	6010C
Arsenic	3.9	2.2	2.2	0.58	mg/Kg			1	6010C
Barium	39	1.7	0.26	0.091	mg/Kg			1	6010C
Beryllium	0.42	0.44	0.10	0.029	mg/Kg	J		1	6010C
Cadmium	0.13	0.44	0.13	0.036	mg/Kg	J		1	6010C
Calcium	1400	87	44	12	mg/Kg			1	6010C
Chromium	9.6	3.0	0.17	0.051	mg/Kg			1	6010C
Cobalt	6.1	0.87	0.35	0.087	mg/Kg			1	6010C
Copper	19	4.4	0.70	0.19	mg/Kg			1	6010C
Iron	17000	70	13	3.3	mg/Kg			1	6010C
Lead	5.1	0.78	0.70	0.27	mg/Kg			1	6010C
Magnesium	2300	26	12	3.2	mg/Kg			1	6010C
Manganese	770	3.9	0.35	0.087	mg/Kg			1	6010C
Nickel	12	3.5	0.39	0.12	mg/Kg			1	6010C
Potassium	900	260	140	36	mg/Kg			1	6010C
Selenium	0.81	2.6	2.6	0.75	mg/Kg	J		1	6010C
Silver	0.52	1.3	0.52	0.14	mg/Kg	U		1	6010C
Sodium	75	440	170	51	mg/Kg	J		1	6010C
Thallium	2.2	2.6	2.2	0.57	mg/Kg	U		1	6010C
Vanadium	19	1.7	0.30	0.082	mg/Kg			1	6010C
Zinc	36	7.0	1.3	0.35	mg/Kg			1	6010C
Mercury	17	23	18	7.4	ug/Kg	J		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB10(0-2)
Lab Sample ID: 280-97928-18
Lab Name: TestAmerica Denver
Job No.: 280-97928-1
SDG ID.:
Matrix: Solid
Date Sampled: 06/05/2017 14:35
Reporting Basis: DRY
Date Received: 06/06/2017 09:30
% Solids: 91.6

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	3300	53	6.4	1.6	mg/Kg			1	6010C
Antimony	1.6	2.1	1.6	0.78	mg/Kg	U		1	6010C
Arsenic	2.2	2.6	2.6	0.70	mg/Kg	J		1	6010C
Barium	10	2.1	0.32	0.11	mg/Kg			1	6010C
Beryllium	0.16	0.53	0.13	0.035	mg/Kg	J		1	6010C
Cadmium	0.057	0.53	0.16	0.043	mg/Kg	J		1	6010C
Calcium	1400	110	53	15	mg/Kg			1	6010C
Chromium	3.6	3.7	0.21	0.061	mg/Kg	J		1	6010C
Cobalt	2.5	1.1	0.42	0.11	mg/Kg			1	6010C
Copper	8.2	5.3	0.85	0.23	mg/Kg			1	6010C
Iron	7100	85	16	4.0	mg/Kg		Q	1	6010C
Lead	1.5	0.95	0.85	0.33	mg/Kg			1	6010C
Magnesium	1500	32	15	3.9	mg/Kg			1	6010C
Manganese	270	4.8	0.42	0.11	mg/Kg			1	6010C
Nickel	5.4	4.2	0.48	0.14	mg/Kg			1	6010C
Potassium	590	320	170	43	mg/Kg			1	6010C
Selenium	3.2	3.2	3.2	0.91	mg/Kg	U		1	6010C
Silver	0.64	1.6	0.64	0.17	mg/Kg	U		1	6010C
Sodium	210	530	210	62	mg/Kg	U		1	6010C
Thallium	2.6	3.2	2.6	0.69	mg/Kg	U		1	6010C
Vanadium	6.5	2.1	0.37	0.10	mg/Kg			1	6010C
Zinc	14	8.5	1.6	0.42	mg/Kg			1	6010C
Mercury	17	22	17	7.1	ug/Kg	U		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB10(2-4)
Lab Sample ID: 280-97928-19
Lab Name: TestAmerica Denver
Job No.: 280-97928-1
SDG ID.:
Matrix: Solid
Date Sampled: 06/05/2017 14:45
Reporting Basis: DRY
Date Received: 06/06/2017 09:30
% Solids: 92.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	2900	45	5.4	1.4	mg/Kg			1	6010C
Antimony	1.3	1.8	1.3	0.66	mg/Kg	U		1	6010C
Arsenic	2.4	2.2	2.2	0.60	mg/Kg			1	6010C
Barium	8.7	1.8	0.27	0.094	mg/Kg			1	6010C
Beryllium	0.14	0.45	0.11	0.030	mg/Kg	J		1	6010C
Cadmium	0.048	0.45	0.13	0.037	mg/Kg	J		1	6010C
Calcium	970	90	45	13	mg/Kg			1	6010C
Chromium	3.1	3.1	0.18	0.052	mg/Kg			1	6010C
Cobalt	2.2	0.90	0.36	0.090	mg/Kg			1	6010C
Copper	7.8	4.5	0.72	0.20	mg/Kg			1	6010C
Iron	6200	72	13	3.4	mg/Kg		Q	1	6010C
Lead	1.3	0.81	0.72	0.28	mg/Kg			1	6010C
Magnesium	1300	27	13	3.3	mg/Kg			1	6010C
Manganese	260	4.0	0.36	0.090	mg/Kg			1	6010C
Nickel	4.9	3.6	0.40	0.12	mg/Kg			1	6010C
Potassium	480	270	140	37	mg/Kg			1	6010C
Selenium	2.7	2.7	2.7	0.77	mg/Kg	U		1	6010C
Silver	0.54	1.3	0.54	0.14	mg/Kg	U		1	6010C
Sodium	180	450	180	53	mg/Kg	U		1	6010C
Thallium	2.2	2.7	2.2	0.58	mg/Kg	U		1	6010C
Vanadium	5.7	1.8	0.31	0.085	mg/Kg			1	6010C
Zinc	13	7.2	1.3	0.36	mg/Kg			1	6010C
Mercury	17	21	17	6.9	ug/Kg	U		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB10(4-6)
Lab Sample ID: 280-97928-20
Lab Name: TestAmerica Denver
Job No.: 280-97928-1
SDG ID.:
Matrix: Solid
Date Sampled: 06/05/2017 14:55
Reporting Basis: DRY
Date Received: 06/06/2017 09:30
% Solids: 93.6

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	3400	43	5.1	1.3	mg/Kg			1	6010C
Antimony	1.3	1.7	1.3	0.62	mg/Kg	U		1	6010C
Arsenic	2.8	2.1	2.1	0.57	mg/Kg			1	6010C
Barium	9.8	1.7	0.26	0.089	mg/Kg			1	6010C
Beryllium	0.16	0.43	0.10	0.028	mg/Kg	J		1	6010C
Cadmium	0.13	0.43	0.13	0.035	mg/Kg	U		1	6010C
Calcium	960	85	43	12	mg/Kg			1	6010C
Chromium	3.7	3.0	0.17	0.049	mg/Kg			1	6010C
Cobalt	2.5	0.85	0.34	0.085	mg/Kg			1	6010C
Copper	8.4	4.3	0.68	0.18	mg/Kg			1	6010C
Iron	7300	68	13	3.2	mg/Kg		Q	1	6010C
Lead	1.5	0.77	0.68	0.26	mg/Kg			1	6010C
Magnesium	1500	26	12	3.2	mg/Kg			1	6010C
Manganese	270	3.8	0.34	0.085	mg/Kg			1	6010C
Nickel	5.6	3.4	0.38	0.11	mg/Kg			1	6010C
Potassium	580	260	140	35	mg/Kg			1	6010C
Selenium	2.6	2.6	2.6	0.73	mg/Kg	U		1	6010C
Silver	0.51	1.3	0.51	0.14	mg/Kg	U		1	6010C
Sodium	170	430	170	50	mg/Kg	U		1	6010C
Thallium	2.1	2.6	2.1	0.55	mg/Kg	U		1	6010C
Vanadium	6.6	1.7	0.30	0.080	mg/Kg			1	6010C
Zinc	14	6.8	1.3	0.34	mg/Kg			1	6010C
Mercury	14	18	14	5.9	ug/Kg	U		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SB10(2-4)-a
Lab Sample ID: 280-97928-21
Lab Name: TestAmerica Denver
Job No.: 280-97928-1
SDG ID.:
Matrix: Solid
Date Sampled: 06/05/2017 14:45
Reporting Basis: DRY
Date Received: 06/06/2017 09:30
% Solids: 94.1

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	3100	49	5.9	1.5	mg/Kg			1	6010C
Antimony	1.5	2.0	1.5	0.72	mg/Kg	U		1	6010C
Arsenic	2.4	2.5	2.5	0.66	mg/Kg	J		1	6010C
Barium	9.1	2.0	0.30	0.10	mg/Kg			1	6010C
Beryllium	0.14	0.49	0.12	0.033	mg/Kg	J		1	6010C
Cadmium	0.15	0.49	0.15	0.040	mg/Kg	U		1	6010C
Calcium	3000	99	49	14	mg/Kg			1	6010C
Chromium	3.4	3.4	0.20	0.057	mg/Kg			1	6010C
Cobalt	2.4	0.99	0.39	0.099	mg/Kg			1	6010C
Copper	8.1	4.9	0.79	0.21	mg/Kg			1	6010C
Iron	6900	79	15	3.7	mg/Kg		Q	1	6010C
Lead	1.3	0.89	0.79	0.31	mg/Kg			1	6010C
Magnesium	1700	30	14	3.6	mg/Kg			1	6010C
Manganese	250	4.4	0.39	0.099	mg/Kg			1	6010C
Nickel	5.2	3.9	0.44	0.13	mg/Kg			1	6010C
Potassium	570	300	160	40	mg/Kg			1	6010C
Selenium	3.0	3.0	3.0	0.85	mg/Kg	U		1	6010C
Silver	0.59	1.5	0.59	0.16	mg/Kg	U		1	6010C
Sodium	200	490	200	58	mg/Kg	U		1	6010C
Thallium	2.5	3.0	2.5	0.64	mg/Kg	U		1	6010C
Vanadium	6.3	2.0	0.34	0.093	mg/Kg			1	6010C
Zinc	14	7.9	1.5	0.39	mg/Kg			1	6010C
Mercury	17	21	17	6.9	ug/Kg	U		1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: SS025-SS10 | Lab Sample ID: 280-97928-22

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG ID.:

Matrix: Solid | Date Sampled: 06/05/2017 15:20

Reporting Basis: DRY | Date Received: 06/06/2017 09:30

% Solids: 90.9

Analyte	Result	LOQ	LOD	DL	Units	C	Q	DIL	Method
Aluminum	3500	47	5.6	1.4	mg/Kg			1	6010C
Antimony	1.4	1.9	1.4	0.68	mg/Kg	U		1	6010C
Arsenic	1.8	2.3	2.3	0.62	mg/Kg	J		1	6010C
Barium	11	1.9	0.28	0.097	mg/Kg			1	6010C
Beryllium	0.16	0.47	0.11	0.031	mg/Kg	J		1	6010C
Cadmium	0.064	0.47	0.14	0.038	mg/Kg	J		1	6010C
Calcium	890	93	47	13	mg/Kg			1	6010C
Chromium	3.6	3.3	0.19	0.054	mg/Kg			1	6010C
Cobalt	2.5	0.93	0.37	0.093	mg/Kg			1	6010C
Copper	8.5	4.7	0.75	0.20	mg/Kg			1	6010C
Iron	7300	75	14	3.5	mg/Kg		Q	1	6010C
Lead	1.9	0.84	0.75	0.29	mg/Kg			1	6010C
Magnesium	1500	28	13	3.5	mg/Kg			1	6010C
Manganese	290	4.2	0.37	0.093	mg/Kg			1	6010C
Nickel	5.5	3.7	0.42	0.12	mg/Kg			1	6010C
Potassium	560	280	150	38	mg/Kg			1	6010C
Selenium	2.8	2.8	2.8	0.80	mg/Kg	U		1	6010C
Silver	0.56	1.4	0.56	0.15	mg/Kg	U		1	6010C
Sodium	190	470	190	55	mg/Kg	U		1	6010C
Thallium	2.3	2.8	2.3	0.61	mg/Kg	U		1	6010C
Vanadium	6.8	1.9	0.33	0.088	mg/Kg			1	6010C
Zinc	15	7.5	1.4	0.37	mg/Kg			1	6010C
Mercury	18	22	18	7.3	ug/Kg	U		1	7471A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP ICVH_00414 Concentration Units: ug/L

CCV Source: ICP CCVH_00540

Analyte	ICVH 280-376734/6 06/09/2017 07:18				ICVH 280-376734/7 06/09/2017 07:20				CCVH 280-376734/33 06/09/2017 08:54			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	40500		40000	101	40200		40000	101	48000		50000	96
Iron	79600		80000	100	79500		80000	99	49100		50000	98
Sodium	41700		40000	104	40800		40000	102	246000		250000	98

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP ICVH_00414 Concentration Units: ug/L

CCV Source: ICP CCVH_00540

Analyte	CCVH 280-376734/47 06/09/2017 09:29				CCVH 280-376734/61 06/09/2017 10:06				CCVH 280-376734/71 06/09/2017 10:32			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	47700		50000	95	47200		50000	94	46900		50000	94
Iron	49000		50000	98	48600		50000	97	48600		50000	97
Sodium	246000		250000	98	246000		250000	98	243000		250000	97

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP ICV_00298 Concentration Units: ug/L

CCV Source: ICP CCV_00270

Analyte	ICV 280-376734/9 06/09/2017 07:27				ICV 280-376734/10 06/09/2017 07:33				CCV 280-376734/34 06/09/2017 08:56			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	267	J	250	107	262	J	250	105	505		500	101
Antimony	265		250	106	266		250	106	1010		1000	101
Arsenic	265		250	106	254		250	102	993		1000	99
Barium	248		250	99	247		250	99	482		500	96
Beryllium	247		250	99	246		250	98	487		500	97
Cadmium	255		250	102	255		250	102	504		500	101
Calcium	1950		2000	98	1930		2000	96	4790		5000	96
Chromium	254		250	102	251		250	101	472		500	94
Cobalt	256		250	102	254		250	102	498		500	100
Iron	257		250	103	255		250	102	2470		2500	99
Lead	254		250	102	254		250	102	967		1000	97
Magnesium	10100		10000	101	9970		10000	100	20300		20000	101
Nickel	259		250	104	257		250	103	501		500	100
Potassium	20000		20000	100	19900		20000	100	48800		50000	98
Silver	253		250	101	253		250	101	511		500	102
Sodium	1990	J	2000	99	1980	J	2000	99	5020		5000	100
Vanadium	255		250	102	253		250	101	521		500	104
Zinc	251		250	100	247		250	99	512		500	102
Copper	260		250	104	262		250	105	542		500	108
Manganese	261		250	104	258		250	103	520		500	104
Selenium	512		500	102	508		500	102	1010		1000	101
Thallium	527		500	105	526		500	105	996		1000	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP ICV_00298 Concentration Units: ug/L

CCV Source: ICP CCV_00270

Analyte	CCV 280-376734/48 06/09/2017 09:32				CCV 280-376734/62 06/09/2017 10:09				CCV 280-376734/72 06/09/2017 10:34			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	530		500	106	501		500	100	489		500	98
Antimony	998		1000	100	991		1000	99	977		1000	98
Arsenic	984		1000	98	971		1000	97	963		1000	96
Barium	475		500	95	467		500	93	465		500	93
Beryllium	483		500	97	477		500	95	474		500	95
Cadmium	500		500	100	495		500	99	489		500	98
Calcium	4750		5000	95	4680		5000	94	4660		5000	93
Chromium	466		500	93	461		500	92	452		500	90
Cobalt	498		500	100	494		500	99	487		500	97
Iron	2460		2500	99	2440		2500	98	2440		2500	98
Lead	949		1000	95	946		1000	95	917		1000	92
Magnesium	20300		20000	101	19900		20000	100	19900		20000	99
Nickel	501		500	100	495		500	99	488		500	98
Potassium	48700		50000	97	47900		50000	96	47800		50000	96
Silver	513		500	103	501		500	100	500		500	100
Sodium	5020		5000	100	4980	J	5000	100	4970	J	5000	99
Vanadium	531		500	106	526		500	105	527		500	105
Zinc	519		500	104	513		500	103	514		500	103
Copper					546		500	109	550		500	110
Manganese	527		500	105	518		500	104	526		500	105
Selenium	1010		1000	101	994		1000	99	979		1000	98
Thallium	972		1000	97	968		1000	97	950		1000	95

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP LLCCV_01983 Concentration Units: ug/L

CCV Source: ICP LLCCV_01983

Analyte	ICVL 280-376734/11 06/09/2017 07:37				CCVL 280-376734/36 06/09/2017 09:02				CCVL 280-376734/50 06/09/2017 09:37			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	107	J	100	107	99.6	J	100	100	108	J	100	108
Antimony	19.8	J	20.0	99	20.8		20.0	104	17.4	J	20.0	87
Arsenic	17.5	J	15.0	116					13.3	J	15.0	89
Barium	10.2		10.0	102	9.25	J	10.0	93	9.03	J	10.0	90
Beryllium	0.990	J	1.00	99	0.940	J	1.00	94	0.930	J	1.00	93
Cadmium	5.20		5.00	104	4.74	J	5.00	95	4.97	J	5.00	99
Calcium	203	J	200	102	200	J	200	100	202	J	200	101
Chromium	10.1	J	10.0	101	9.89	J	10.0	99	9.58	J	10.0	96
Cobalt	10.4	J	10.0	104	10.2	J	10.0	102	10.2	J	10.0	102
Iron	100		100	100	126		100	126	110		100	110
Lead	9.25	J	9.00	103	11.4	J	9.00	126	9.56	J	9.00	106
Magnesium	211	J	200	105	206	J	200	103	213	J	200	107
Nickel	42.2		40.0	106	40.0		40.0	100	40.3		40.0	101
Potassium	3040		3000	101	3010		3000	100	2910	J	3000	97
Silver	10.0	J	10.0	100	10.5	J	10.0	105	10.4	J	10.0	104
Sodium	1000	J	1000	100	960	J	1000	96	952	J	1000	95
Vanadium	10.5	J	10.0	105	10.5	J	10.0	105	11.1	J	10.0	111
Zinc	21.1	J	20.0	105	20.5	J	20.0	102	20.3	J	20.0	102
Copper	15.3		15.0	102	16.3		15.0	109	16.2		15.0	108
Manganese	10.7		10.0	107	11.0		10.0	110	11.6		10.0	116
Selenium	19.2	J	20.0	96	14.7	J	20.0	73	15.0	J	20.0	75

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP LLCCV_01983 Concentration Units: ug/L

CCV Source: ICP LLCCV_01983

Analyte	CCVL 280-376734/64 06/09/2017 10:14				CCVL 280-376734/74 06/09/2017 10:40							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	98.6	J	100	99	96.4	J	100	96				
Antimony	20.8		20.0	104	18.9	J	20.0	94				
Arsenic	14.3	J	15.0	96	18.5	J	15.0	124				
Barium	8.77	J	10.0	88	9.35	J	10.0	94				
Beryllium	0.950	J	1.00	95	1.03	J	1.00	103				
Cadmium	4.87	J	5.00	97	4.94	J	5.00	99				
Calcium	202	J	200	101	190	J	200	95				
Chromium	9.74	J	10.0	97	9.45	J	10.0	95				
Cobalt	9.89	J	10.0	99	10.1	J	10.0	101				
Iron	397		100	397	103		100	103				
Lead	10.5	J	9.00	117	10.6	J	9.00	118				
Magnesium	204	J	200	102	208	J	200	104				
Nickel	39.9	J	40.0	100	39.2	J	40.0	98				
Potassium	2840	J	3000	95	2920	J	3000	97				
Silver	9.76	J	10.0	98	10.4	J	10.0	104				
Sodium	940	J	1000	94	943	J	1000	94				
Vanadium	11.1	J	10.0	111	11.4	J	10.0	114				
Zinc	19.8	J	20.0	99	20.9	J	20.0	105				
Copper	16.6		15.0	111	16.2		15.0	108				
Manganese					11.2		10.0	112				
Selenium					16.8	J	20.0	84				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP ICVH_00416 Concentration Units: ug/L

CCV Source: ICP CCVH_00540

Analyte	ICVH 280-377044/6 06/12/2017 13:28				ICVH 280-377044/7 06/12/2017 13:31				CCVH 280-377044/34 06/12/2017 15:10			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	40500		40000	101	40000		40000	100	46700		50000	93
Iron	80100		80000	100	79200		80000	99	48000		50000	96
Sodium	41100		40000	103	40800		40000	102	243000		250000	97

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP ICVH_00416 Concentration Units: ug/L

CCV Source: ICP CCVH_00540

Analyte	CCVH 280-377044/48 06/12/2017 15:46				CCVH 280-377044/62 06/12/2017 16:22				CCVH 280-377044/75 06/12/2017 16:56			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	44500		50000	89					44800		50000	90
Iron	46600		50000	93	46400		50000	93	47900		50000	96
Sodium	234000		250000	94	234000		250000	94	239000		250000	96

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP ICV_00301 Concentration Units: ug/L

CCV Source: ICP CCV_00271

Analyte	ICV 280-377044/8 06/12/2017 13:34				ICV 280-377044/9 06/12/2017 13:37				CCV 280-377044/35 06/12/2017 15:12			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Manganese	259		250	103	261		250	104	516		500	103
Aluminum	265	J	250	106	264	J	250	106	471		500	94
Antimony	254		250	102	261		250	104	939		1000	94
Barium	251		250	101	254		250	102	456		500	91
Beryllium	249		250	100	250		250	100	467		500	93
Cadmium	255		250	102	255		250	102	477		500	95
Calcium	1980		2000	99	2010		2000	100	4530		5000	91
Cobalt	253		250	101	253		250	101	477		500	95
Copper	258		250	103	258		250	103	550		500	110
Iron	266		250	106	265		250	106	2380		2500	95
Magnesium	10200		10000	102	10200		10000	102	19000		20000	95
Nickel	256		250	102	257		250	103	478		500	96
Potassium	20200		20000	101	20400		20000	102	48100		50000	96
Selenium	503		500	101	503		500	101	906		1000	91
Silver	253		250	101	255		250	102	482		500	96
Sodium	1980	J	2000	99	1990	J	2000	100				
Thallium	531		500	106	532		500	106	900		1000	90
Vanadium	252		250	101	253		250	101	521		500	104
Zinc	252		250	101	254		250	102	503		500	101

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP ICV_00301 Concentration Units: ug/L

CCV Source: ICP CCV_00271

Analyte	CCV 280-377044/49 06/12/2017 15:48				CCV 280-377044/63 06/12/2017 16:25				CCV 280-377044/76 06/12/2017 16:58			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Manganese	512		500	102	526		500	105	538		500	108
Aluminum	450		500	90	474		500	95	462		500	92
Antimony	895		1000	90					907		1000	91
Barium												
Beryllium									449		500	90
Cadmium	459		500	92	459		500	92	469		500	94
Calcium												
Cobalt	461		500	92	462		500	92	472		500	94
Copper												
Iron	2250		2500	90	2260		2500	91	2300		2500	92
Magnesium	18300		20000	91	18600		20000	93	18800		20000	94
Nickel	461		500	92	463		500	93	472		500	94
Potassium	45400		50000	91	45600		50000	91	46600		50000	93
Selenium												
Silver	463		500	93	463		500	93	472		500	94
Sodium	4610	J	5000	92	4660	J	5000	93	4700	J	5000	94
Thallium												
Vanadium	519		500	104	537		500	107				
Zinc	498		500	100	517		500	103	527		500	105

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP LLCCV_01984 Concentration Units: ug/L

CCV Source: ICP LLCCV_01984

Analyte	ICVL 280-377044/11 06/12/2017 13:46				ICVL 280-377044/12 06/12/2017 13:49				CCVL 280-377044/37 06/12/2017 15:17			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Manganese	10.6		10.0	106	10.5		10.0	105	10.7		10.0	107
Aluminum	114	J	100	114	111	J	100	111	92.3	J	100	92
Antimony	15.7	J	20.0	79	20.3		20.0	101	18.8	J	20.0	94
Barium	10.5		10.0	105	10.3		10.0	103	9.51	J	10.0	95
Beryllium	0.820	J	1.00	82	0.780	J	1.00	78				
Cadmium	5.21		5.00	104	5.08		5.00	102	4.44	J	5.00	89
Calcium	198	J	200	99	202	J	200	101	189	J	200	94
Chromium	11.0	J	10.0	110	10.6	J	10.0	106	9.00	J	10.0	90
Cobalt	10.8	J	10.0	108	10.7	J	10.0	107	9.77	J	10.0	98
Copper	16.6		15.0	111	15.3		15.0	102	16.3		15.0	109
Iron	107		100	107	108		100	108	96.5	J	100	97
Magnesium	208	J	200	104	212	J	200	106	196	J	200	98
Nickel	42.6		40.0	107	41.9		40.0	105	37.9	J	40.0	95
Potassium	2980	J	3000	99	2890	J	3000	96	3160		3000	105
Silver	8.97	J	10.0	90	9.85	J	10.0	99	9.33	J	10.0	93
Sodium	965	J	1000	97	913	J	1000	91	1290	J	1000	129
Vanadium	9.86	J	10.0	99	9.69	J	10.0	97	10.3	J	10.0	103
Zinc	20.8	J	20.0	104	20.4	J	20.0	102	20.6	J	20.0	103

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP LLCCV_01984 Concentration Units: ug/L

CCV Source: ICP LLCCV_01984

Analyte	CCVL 280-377044/51 06/12/2017 15:53				CCVL 280-377044/65 06/12/2017 16:30				CCVL 280-377044/78 06/12/2017 17:03			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Manganese	10.8		10.0	108	10.9		10.0	109	11.2		10.0	112
Aluminum	93.9	J	100	94	96.6	J	100	97	97.4	J	100	97
Antimony	14.9	J	20.0	75					18.8	J	20.0	94
Barium	8.85	J	10.0	89	8.57	J	10.0	86	8.20	J	10.0	82
Beryllium	0.870	J	1.00	87	0.890	J	1.00	89	0.940	J	1.00	94
Cadmium	4.29	J	5.00	86	4.74	J	5.00	95	4.54	J	5.00	91
Calcium	165	J	200	83	177	J	200	88	170	J	200	85
Chromium	8.72	J	10.0	87	8.40	J	10.0	84	8.28	J	10.0	83
Cobalt	9.77	J	10.0	98	9.65	J	10.0	97	9.58	J	10.0	96
Copper	16.7		15.0	111	17.1		15.0	114	18.4		15.0	123
Iron	94.6	J	100	95	91.5	J	100	91	93.2	J	100	93
Magnesium	191	J	200	96	192	J	200	96	189	J	200	95
Nickel	37.6	J	40.0	94	37.6	J	40.0	94	38.7	J	40.0	97
Potassium	2720	J	3000	91	2670	J	3000	89	2690	J	3000	90
Silver	9.10	J	10.0	91	9.69	J	10.0	97	10.2	J	10.0	102
Sodium	796	J	1000	80	765	J	1000	77	727	J	1000	73
Vanadium	10.5	J	10.0	105	10.7	J	10.0	107	11.1	J	10.0	111
Zinc					21.2	J	20.0	106	20.8	J	20.0	104

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP ICVH_00416 Concentration Units: ug/L

CCV Source: ICP CCVH_00540

Analyte	ICVH 280-377054/6 06/12/2017 21:53				ICVH 280-377054/7 06/12/2017 21:56				CCVH 280-377054/21 06/12/2017 23:05			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	79800		80000	100	79600		80000	100	49900		50000	100
Sodium	41100		40000	103	41000		40000	102	249000		250000	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP ICVH_00416 Concentration Units: ug/L

CCV Source: ICP CCVH_00540

Analyte	CCVH 280-377054/35 06/12/2017 23:48				CCVH 280-377054/49 06/13/2017 00:24				CCVH 280-377054/62 06/13/2017 01:04			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	48900		50000	98	48400		50000	97	48700		50000	97
Sodium	247000		250000	99	243000		250000	97	245000		250000	98

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP ICV_00301 Concentration Units: ug/L

CCV Source: ICP CCV_00271

Analyte	ICV 280-377054/9 06/12/2017 22:03				ICV 280-377054/10 06/12/2017 22:06				CCV 280-377054/22 06/12/2017 23:07			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	258		250	103	262		250	105	1020		1000	102
Barium	246		250	98	253		250	101	502		500	100
Beryllium	243		250	97	251		250	100	505		500	101
Calcium	1950		2000	98	2010		2000	101	5030		5000	101
Copper	253		250	101	260		250	104	509		500	102
Iron	260		250	104	270		250	108	2640		2500	106
Potassium	20000		20000	100	20500		20000	102	51000		50000	102
Selenium	519		500	104	536		500	107	1030		1000	103
Sodium	1990	J	2000	100	2060	J	2000	103	5150		5000	103
Antimony	265		250	106	270		250	108	1030		1000	103
Cadmium	256		250	103	264		250	106	512		500	102
Chromium	253		250	101	262		250	105	503		500	101
Cobalt	253		250	101	261		250	104	510		500	102
Lead	263		250	105	271		250	108	1030		1000	103
Magnesium	9880		10000	99	10200		10000	102	20500		20000	102
Manganese	250		250	100	258		250	103	512		500	102
Nickel	255		250	102	264		250	106	511		500	102
Silver	249		250	100	257		250	103	513		500	103
Vanadium	243		250	97	250		250	100	507		500	101
Zinc	244		250	98	248		250	99	508		500	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP ICV_00301 Concentration Units: ug/L

CCV Source: ICP CCV_00271

Analyte	CCV 280-377054/36 06/12/2017 23:50				CCV 280-377054/50 06/13/2017 00:26				CCV 280-377054/63 06/13/2017 01:07			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	982		1000	98	972		1000	97	1010		1000	101
Barium	495		500	99	490		500	98	488		500	98
Beryllium	494		500	99	488		500	98	490		500	98
Calcium	5000		5000	100	4960		5000	99	4900		5000	98
Copper	501		500	100	500		500	100	503		500	101
Iron	2540		2500	101	2490		2500	100	2480		2500	99
Potassium	50400		50000	101	49600		50000	99	49600		50000	99
Selenium	992		1000	99	997		1000	100	1020		1000	102
Sodium	5020		5000	100	5070		5000	101	4990	J	5000	100
Antimony	987		1000	99	992		1000	99	1010		1000	101
Cadmium	494		500	99	495		500	99	502		500	100
Chromium	491		500	98	486		500	97	490		500	98
Cobalt	497		500	99	491		500	98	499		500	100
Lead	1000		1000	100	998		1000	100	1010		1000	101
Magnesium	20100		20000	100	19900		20000	100	20200		20000	101
Manganese	502		500	100	496		500	99	502		500	100
Nickel	496		500	99	491		500	98	500		500	100
Silver	502		500	100	501		500	100	506		500	101
Vanadium	497		500	99	490		500	98	496		500	99
Zinc	541		500	108	493		500	99	501		500	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP LLCCV_01984 Concentration Units: ug/L

CCV Source: ICP LLCCV_01984

Analyte	ICVL 280-377054/11 06/12/2017 22:19				CCVL 280-377054/24 06/12/2017 23:13				CCVL 280-377054/38 06/12/2017 23:55			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	15.2	J	15.0	101	13.5	J	15.0	90	11.3	J	15.0	75
Barium	10.2		10.0	102	9.76	J	10.0	98	9.51	J	10.0	95
Beryllium	0.740	J	1.00	74	0.980	J	1.00	98	0.860	J	1.00	86
Calcium	225	J	200	113	223	J	200	112	205	J	200	102
Copper	16.6		15.0	111	16.7		15.0	111	15.7		15.0	104
Iron	108		100	108					113		100	113
Potassium	3060		3000	102	3110		3000	104	3120		3000	104
Selenium	17.0	J	20.0	85	23.3		20.0	116	22.2		20.0	111
Sodium	1050	J	1000	105	1030	J	1000	103	1020	J	1000	102
Aluminum	119	J	100	119	121	J	100	121				
Antimony	23.1		20.0	116	21.0		20.0	105	21.1		20.0	105
Cadmium	4.85	J	5.00	97	5.02		5.00	100	4.81	J	5.00	96
Chromium	10.6	J	10.0	106	10.1	J	10.0	101	10.2	J	10.0	102
Cobalt	10.7	J	10.0	107	10.0	J	10.0	100	10.2	J	10.0	102
Lead	10.9	J	9.00	121					10.7	J	9.00	119
Magnesium	208	J	200	104	224	J	200	112	207	J	200	104
Manganese	10.7		10.0	107					10.6		10.0	106
Nickel	43.1		40.0	108	41.4		40.0	103	40.7		40.0	102
Silver	9.99	J	10.0	100	10.7	J	10.0	107	10.1	J	10.0	101
Thallium	16.6	J	15.0	111	14.5	J	15.0	96	18.0	J	15.0	120
Vanadium	9.47	J	10.0	95	9.81	J	10.0	98	9.81	J	10.0	98

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP LLCCV_01984 Concentration Units: ug/L

CCV Source: ICP LLCCV_01984

Analyte	CCVL 280-377054/52 06/13/2017 00:32				CCVL 280-377054/65 06/13/2017 01:12							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	12.6	J	15.0	84								
Barium	9.84	J	10.0	98	9.27	J	10.0	93				
Beryllium	0.930	J	1.00	93	1.06	J	1.00	106				
Calcium	210	J	200	105	197	J	200	98				
Copper	15.9		15.0	106	15.9		15.0	106				
Iron	113		100	113	103		100	103				
Potassium	3160		3000	105	3120		3000	104				
Selenium	16.2	J	20.0	81	22.6		20.0	113				
Sodium	1050	J	1000	105	1030	J	1000	103				
Aluminum	115	J	100	115	118	J	100	118				
Antimony	18.8	J	20.0	94	21.6		20.0	108				
Cadmium	4.64	J	5.00	93	4.81	J	5.00	96				
Chromium	9.78	J	10.0	98	9.87	J	10.0	99				
Cobalt	10.2	J	10.0	102	10.2	J	10.0	102				
Lead	11.4	J	9.00	127	11.0	J	9.00	122				
Magnesium	201	J	200	101	209	J	200	104				
Manganese	10.6		10.0	106	10.7		10.0	107				
Nickel	41.3		40.0	103	41.1		40.0	103				
Silver	10.3	J	10.0	103	10.7	J	10.0	107				
Thallium	17.7	J	15.0	118	16.5	J	15.0	110				
Vanadium	9.59	J	10.0	96	9.71	J	10.0	97				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP ICVH_00416 Concentration Units: ug/L

CCV Source: ICP CCVH_00540

Analyte	ICVH 280-377162/6 06/13/2017 08:15				ICVH 280-377162/7 06/13/2017 08:18				CCVH 280-377162/33 06/13/2017 09:59			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	40200		40000	100	40200		40000	100	47800		50000	96
Iron	79500		80000	99	79700		80000	100	49600		50000	99
Sodium	41600		40000	104	41300		40000	103	246000		250000	98

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP ICVH_00416 Concentration Units: ug/L

CCV Source: ICP CCVH_00540

Analyte	CCVH 280-377162/48 06/13/2017 10:46				CCVH 280-377162/61 06/13/2017 11:23				CCVH 280-377162/75 06/13/2017 11:59			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	46700		50000	93	47200		50000	94	46900		50000	94
Iron	49200		50000	98	49600		50000	99	49100		50000	98
Sodium	241000		250000	96	243000		250000	97	242000		250000	97

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP ICV_00301 Concentration Units: ug/L

CCV Source: ICP CCV_00271

Analyte	ICV 280-377162/9 06/13/2017 08:32				ICV 280-377162/10 06/13/2017 08:34				CCV 280-377162/34 06/13/2017 10:02			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	272	J	250	109	268	J	250	107	518		500	104
Antimony	267		250	107	273		250	109	1020		1000	102
Arsenic	256		250	103	254		250	102	982		1000	98
Calcium	2020		2000	101	2010		2000	101	5200		5000	104
Lead	268		250	107	264		250	106	1050		1000	105
Nickel	262		250	105	262		250	105	514		500	103
Selenium	521		500	104	520		500	104	984		1000	98
Thallium	542		500	108	542		500	108	978		1000	98
Barium	255		250	102	255		250	102	511		500	102
Beryllium	250		250	100	246		250	99	483		500	97
Cadmium	262		250	105	262		250	105	512		500	102
Chromium	262		250	105	262		250	105	519		500	104
Cobalt	260		250	104	259		250	104	515		500	103
Copper	257		250	103	258		250	103	512		500	102
Iron	251		250	100	250		250	100	2480		2500	99
Magnesium	10200		10000	102	10300		10000	103	20300		20000	101
Manganese	255		250	102	255		250	102	488		500	98
Potassium	20700		20000	103	20700		20000	103	50600		50000	101
Silver	255		250	102	256		250	102	504		500	101
Sodium	2000	J	2000	100	1970	J	2000	99	5020		5000	100
Vanadium	249		250	99	249		250	99	489		500	98
Zinc	250		250	100	251		250	100	486		500	97

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP ICV_00301 Concentration Units: ug/L

CCV Source: ICP CCV_00271

Analyte	CCV 280-377162/49 06/13/2017 10:48				CCV 280-377162/62 06/13/2017 11:26				CCV 280-377162/76 06/13/2017 12:02			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	493		500	99	497		500	99	492		500	98
Antimony	968		1000	97	970		1000	97	960		1000	96
Arsenic	932		1000	93	936		1000	94	912		1000	91
Calcium	5150		5000	103	5260		5000	105	5110		5000	102
Lead	1000		1000	100	1010		1000	101	995		1000	100
Nickel	491		500	98	495		500	99	486		500	97
Selenium	945		1000	94	946		1000	95	937		1000	94
Thallium	934		1000	93	940		1000	94	918		1000	92
Barium	509		500	102	509		500	102	506		500	101
Beryllium	471		500	94	472		500	94	466		500	93
Cadmium	491		500	98	494		500	99	486		500	97
Chromium	496		500	99	501		500	100	493		500	99
Cobalt	491		500	98	496		500	99	486		500	97
Copper	498		500	100	503		500	101	501		500	100
Iron	2430		2500	97	2450		2500	98	2460		2500	99
Magnesium	19600		20000	98	19700		20000	99	19400		20000	97
Manganese	475		500	95	478		500	96	470		500	94
Potassium	49800		50000	100	49900		50000	100	49900		50000	100
Silver	491		500	98	497		500	99	489		500	98
Sodium	4960	J	5000	99	4960	J	5000	99	4910	J	5000	98
Vanadium	483		500	97	485		500	97	475		500	95
Zinc	468		500	94	474		500	95	463		500	93

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP LLCCV_01985 Concentration Units: ug/L

CCV Source: ICP LLCCV_01985

Analyte	ICVL 280-377162/11 06/13/2017 08:38				CCVL 280-377162/37 06/13/2017 10:13				CCVL 280-377162/38 06/13/2017 10:16			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	105	J	100	105	105	J	100	105	105	J	100	105
Antimony	20.3		20.0	101	21.0		20.0	105	24.8		20.0	124
Arsenic	10.6	J	15.0	70								
Calcium	190	J	200	95	193	J	200	97	195	J	200	98
Lead	7.10	J	9.00	79	6.99	J	9.00	78	7.73	J	9.00	86
Nickel	41.9		40.0	105	42.0		40.0	105	41.9		40.0	105
Selenium	14.5	J	20.0	72	25.0		20.0	125				
Thallium	18.5	J	15.0	124	18.0	J	15.0	120	17.7	J	15.0	118
Barium	10.3		10.0	103	10.4		10.0	104	10.5		10.0	105
Beryllium	0.930	J	1.00	93	0.860	J	1.00	86	0.780	J	1.00	78
Cadmium	5.59		5.00	112	5.00		5.00	100	5.29		5.00	106
Chromium	10.2	J	10.0	102	10.4	J	10.0	104	10.3	J	10.0	103
Cobalt	10.4	J	10.0	104	10.7	J	10.0	107	10.6	J	10.0	106
Copper	13.6	J	15.0	91	13.3	J	15.0	88	13.2	J	15.0	88
Iron	106		100	106	95.9	J	100	96	93.4	J	100	93
Magnesium	207	J	200	103	210	J	200	105	204	J	200	102
Manganese	10.5		10.0	105	9.96	J	10.0	100	10.1		10.0	101
Potassium	3120		3000	104	3080		3000	103	2990	J	3000	100
Silver	10.7	J	10.0	107	11.1	J	10.0	111	11.2	J	10.0	112
Sodium	959	J	1000	96	902	J	1000	90	907	J	1000	91
Vanadium	9.66	J	10.0	97	9.52	J	10.0	95	9.58	J	10.0	96
Zinc	19.6	J	20.0	98	19.4	J	20.0	97	18.9	J	20.0	95

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP LLCCV_01985 Concentration Units: ug/L

CCV Source: ICP LLCCV_01985

Analyte	CCVL 280-377162/51 06/13/2017 10:54				CCVL 280-377162/64 06/13/2017 11:31				CCVL 280-377162/79 06/13/2017 12:13			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	111	J	100	111	107	J	100	107	105	J	100	105
Antimony	18.7	J	20.0	94	22.6		20.0	113	23.4		20.0	117
Arsenic	16.6	J	15.0	111	12.8	J	15.0	85	15.8	J	15.0	106
Calcium	207	J	200	104	269	J	200	135	199	J	200	99
Lead	9.24	J	9.00	103	8.45	J	9.00	94	6.91	J	9.00	77
Nickel	42.0		40.0	105	40.4		40.0	101	42.0		40.0	105
Selenium	14.7	J	20.0	73	14.4	J	20.0	72	15.0	J	20.0	75
Thallium	14.9	J	15.0	99	15.2	J	15.0	101	18.2	J	15.0	121
Barium	10.7		10.0	107	10.8		10.0	108	10.6		10.0	106
Beryllium	0.840	J	1.00	84	0.900	J	1.00	90	0.970	J	1.00	97
Cadmium	5.39		5.00	108	5.42		5.00	108	5.33		5.00	107
Chromium	10.4	J	10.0	104	10.0	J	10.0	100	10.4	J	10.0	104
Cobalt	10.6	J	10.0	106	9.99	J	10.0	100	10.4	J	10.0	104
Copper	12.3	J	15.0	82	13.3	J	15.0	89	12.2	J	15.0	81
Iron					106		100	106				
Magnesium	212	J	200	106	209	J	200	105	200	J	200	100
Manganese	12.3		10.0	123	10.5		10.0	105	10.7		10.0	107
Potassium	3190		3000	106	3120		3000	104	3110		3000	104
Silver	11.1	J	10.0	111	11.2	J	10.0	112	11.8	J	10.0	118
Sodium	940	J	1000	94	917	J	1000	92	918	J	1000	92
Vanadium	9.74	J	10.0	97	9.85	J	10.0	99	9.09	J	10.0	91
Zinc					20.6	J	20.0	103	22.7	J	20.0	114

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: ICP LLCCV_01985 Concentration Units: ug/L

CCV Source: ICP LLCCV_01985

Analyte	CCVL 280-377162/80 06/13/2017 12:15											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	105	J	100	105								
Antimony	25.1		20.0	125								
Arsenic												
Calcium	196	J	200	98								
Lead	8.73	J	9.00	97								
Nickel	41.9		40.0	105								
Selenium	17.1	J	20.0	86								
Thallium	15.7	J	15.0	104								
Barium	10.8		10.0	108								
Beryllium	0.940	J	1.00	94								
Cadmium	5.30		5.00	106								
Chromium	10.4	J	10.0	104								
Cobalt	10.1	J	10.0	101								
Copper	13.1	J	15.0	87								
Iron												
Magnesium	201	J	200	101								
Manganese	11.0		10.0	110								
Potassium	3130		3000	104								
Silver	10.9	J	10.0	109								
Sodium	916	J	1000	92								
Vanadium	9.28	J	10.0	93								
Zinc	24.0	J	20.0	120								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: Hg Soil ICV_00517 Concentration Units: ug/L

CCV Source: Hg Soil CCV_00914

Analyte	ICV 280-377403/8 06/14/2017 14:59				CCV 280-377403/47 06/14/2017 16:26				CCV 280-377403/59 06/14/2017 16:53			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	3.91		4.00	98	5.33		5.00	107	5.08		5.00	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

ICV Source: Hg Soil ICV_00517 Concentration Units: ug/L

CCV Source: Hg Soil CCV_00914

Analyte	CCV 280-377403/71 06/14/2017 17:20				CCV 280-377403/83 06/14/2017 17:47				CCV 280-377403/88 06/14/2017 17:58			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	5.14		5.00	103	4.99		5.00	100	5.25		5.00	105

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Method: 6010C Instrument ID: MT_025

Lab Sample ID: CRI 280-376734/16 Concentration Units: ug/L

CRQL Check Standard Source: ICP CRI_00715

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	100	106	J	106	80-120
Antimony	10.0	9.87	J	99	80-120
Barium	5.00	4.93	J	99	80-120
Beryllium	1.00	0.960	J	96	80-120
Cadmium	5.00	5.19		104	80-120
Calcium	200	201	J	101	80-120
Chromium	10.0	10.2	J	102	80-120
Cobalt	5.00	5.74	J	115	80-120
Copper	10.0	10.5	J	105	80-120
Magnesium	200	209	J	105	80-120
Manganese	3.00	3.23	J	108	80-120
Nickel	10.0	11.2	J	112	80-120
Potassium	1000	978	J	98	80-120
Selenium	10.0	8.45	J	85	80-120
Sodium	1000	996	J	100	80-120
Vanadium	10.0	10.6	J	106	80-120
Zinc	10.0	11.1	J	111	80-120

Lab Sample ID: CRI 280-376734/17 Concentration Units: ug/L

CRQL Check Standard Source: AltAgAsFePbTl_00001

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	10.0	7.97	J	80	80-120
Iron	100	99.2	J	99	80-120
Lead	9.00	8.87	J	99	80-120
Silver	10.0	11.9	J	119	80-120

Lab Sample ID: CRI 280-377044/16 Concentration Units: ug/L

CRQL Check Standard Source: ICP CRI_00716

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	100	109	J	109	80-120

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Method: 6010C Instrument ID: MT_025

Lab Sample ID: CRI 280-377044/16 Concentration Units: ug/L

CRQL Check Standard Source: ICP CRI_00716

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Barium	5.00	5.16	J	103	80-120
Cadmium	5.00	5.25		105	80-120
Calcium	200	203	J	102	80-120
Chromium	10.0	11.3	J	113	80-120
Cobalt	5.00	5.57	J	111	80-120
Copper	10.0	10.6	J	106	80-120
Iron	30.0	27.3	J	91	80-120
Magnesium	200	218	J	109	80-120
Manganese	3.00	3.20	J	107	80-120
Nickel	10.0	11.2	J	112	80-120
Potassium	1000	989	J	99	80-120
Silver	10.0	8.50	J	85	80-120
Sodium	1000	897	J	90	80-120
Vanadium	10.0	10.0	J	100	80-120
Zinc	10.0	10.0	J	100	80-120

Lab Sample ID: CRI 280-377054/15 Concentration Units: ug/L

CRQL Check Standard Source: ICP CRI_00716

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	100	113	J	113	80-120
Antimony	10.0	10.8	J	108	80-120
Barium	5.00	5.23	J	105	80-120
Beryllium	1.00	0.920	J	92	80-120
Cadmium	5.00	4.67	J	93	80-120
Calcium	200	206	J	103	80-120
Chromium	10.0	10.5	J	105	80-120
Cobalt	5.00	5.57	J	111	80-120
Copper	10.0	10.6	J	106	80-120
Magnesium	200	216	J	108	80-120
Manganese	3.00	3.33	J	111	80-120
Nickel	10.0	10.7	J	107	80-120
Potassium	1000	1040	J	104	80-120
Silver	10.0	8.67	J	87	80-120
Sodium	1000	1020	J	102	80-120

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Method: 6010C Instrument ID: MT_025

Lab Sample ID: CRI 280-377054/15 Concentration Units: ug/L

CRQL Check Standard Source: ICP CRI_00716

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Vanadium	10.0	10.0	J	100	80-120
Zinc	10.0	11.8	J	118	80-120

Lab Sample ID: CRI 280-377054/19 Concentration Units: ug/L

CRQL Check Standard Source: Alt AsFePb Se_00001

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	15.0	12.9	J	86	80-120
Lead	9.00	10.6	J	118	80-120

Lab Sample ID: CRI 280-377054/20 Concentration Units: ug/L

CRQL Check Standard Source: Alt Fe Se Tl_00002

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Iron	100	99.2	J	99	80-120
Selenium	20.0	23.7		119	80-120

Lab Sample ID: CRI 280-377162/15 Concentration Units: ug/L

CRQL Check Standard Source: ICP CRI_00717

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	100	106	J	106	80-120
Barium	5.00	5.55	J	111	80-120
Beryllium	1.00	0.970	J	97	80-120
Cadmium	5.00	5.38		108	80-120
Calcium	200	198	J	99	80-120
Chromium	10.0	10.7	J	107	80-120
Cobalt	5.00	5.33	J	107	80-120
Copper	10.0	9.05	J	91	80-120

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Method: 6010C Instrument ID: MT_025

Lab Sample ID: CRI 280-377162/15 Concentration Units: ug/L

CRQL Check Standard Source: ICP CRI_00717

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Iron	30.0	25.3	J	84	80-120
Magnesium	200	206	J	103	80-120
Manganese	3.00	2.96	J	99	80-120
Nickel	10.0	10.6	J	106	80-120
Potassium	1000	1090	J	109	80-120
Silver	10.0	8.82	J	88	80-120
Sodium	1000	968	J	97	80-120
Vanadium	10.0	9.90	J	99	80-120
Zinc	10.0	8.56	J	86	80-120

Lab Sample ID: CRI 280-377162/16 Concentration Units: ug/L

CRQL Check Standard Source: Alt CRI_00083

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	10.0	9.81	J	98	80-120
Lead	9.00	9.56	J	106	80-120
Thallium	10.0	11.3	J	113	80-120

Lab Sample ID: CRI 280-377162/17 Concentration Units: ug/L

CRQL Check Standard Source: Alt As Se*_00005

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	15.0	14.1	J	94	80-120
Selenium	15.0	15.3	J	102	80-120

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 280-376734/15 06/09/2017 07:53		CCB 280-376734/35 06/09/2017 08:59		CCB 280-376734/49 06/09/2017 09:35		CCB 280-376734/63 06/09/2017 10:11	
		Found	C	Found	C	Found	C	Found	C
Aluminum	300	70	U	70	U	70	U	70	U
Antimony	20	12	U	12	U	12	U	12	U
Arsenic	25	8.47	J	5.25	J	15	U	6.54	J
Barium	10	2.0	U	2.0	U	2.0	U	2.0	U
Beryllium	1.5	1.2	U	1.2	U	1.2	U	1.2	U
Cadmium	5.0	1.8	U	1.8	U	1.8	U	1.8	U
Calcium	1000	140	U	140	U	140	U	140	U
Chromium	15	2.6	U	0.880	J	2.6	U	2.6	U
Cobalt	15	4.5	U	4.5	U	4.5	U	4.5	U
Iron	100	85	U	24.1	J	48.1	J	85	U
Lead	15	10	U	10	U	10	U	10	U
Magnesium	500	40	U	40	U	12.0	J	40	U
Nickel	40	5.0	U	5.0	U	5.0	U	5.0	U
Potassium	3000	940	U	940	U	940	U	940	U
Silver	15	3.5	U	3.5	U	3.5	U	3.5	U
Sodium	5000	350	U	350	U	350	U	350	U
Vanadium	15	4.0	U	1.22	J	4.0	U	4.0	U
Zinc	150	15	U	15	U	15	U	15	U
Copper	15	10	U	10	U	10	U	10	U
Manganese	10	1.0	U	1.0	U	0.750	J	0.300	J
Selenium	22	19	U	19	U	19	U	19	U
Thallium	40	7.46	J	19	U	19	U	19	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 280-376734/73 06/09/2017 10:37							
		Found	C	Found	C	Found	C	Found	C
Aluminum	300	70	U						
Antimony	20	12	U						
Arsenic	25	15	U						
Barium	10	2.0	U						
Beryllium	1.5	1.2	U						
Cadmium	5.0	1.8	U						
Calcium	1000	140	U						
Chromium	15	0.810	J						
Cobalt	15	4.5	U						
Iron	100	85	U						
Lead	15	10	U						
Magnesium	500	40	U						
Nickel	40	5.0	U						
Potassium	3000	940	U						
Silver	15	3.5	U						
Sodium	5000	350	U						
Vanadium	15	4.0	U						
Zinc	150	15	U						
Copper	15	10	U						
Manganese	10	1.0	U						
Selenium	22	19	U						
Thallium	40	19	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 280-377044/15 06/12/2017 13:59		CCB 280-377044/36 06/12/2017 15:15		CCB 280-377044/50 06/12/2017 15:51		CCB 280-377044/64 06/12/2017 16:27	
		Found	C	Found	C	Found	C	Found	C
Manganese	10	1.0	U	1.0	U	1.0	U	1.0	U
Aluminum	300	70	U	70	U	70	U	70	U
Antimony	20	12	U	12	U	12	U	12	U
Arsenic	25	15	U	8.41	J	15	U	15	U
Barium	10	2.0	U	2.0	U	2.0	U	2.0	U
Beryllium	1.5	1.2	U	1.2	U	1.2	U	1.2	U
Cadmium	5.0	1.8	U	1.8	U	1.8	U	1.8	U
Calcium	1000	140	U	140	U	140	U	140	U
Chromium	15	0.690	J	0.740	J	0.810	J	2.6	U
Cobalt	15	4.5	U	4.5	U	4.5	U	4.5	U
Copper	15	10	U	10	U	10	U	10	U
Iron	100	85	U	85	U	85	U	85	U
Lead	15	2.77	J	10	U	10	U	2.90	J
Magnesium	500	40	U	40	U	40	U	40	U
Nickel	40	5.0	U	5.0	U	5.0	U	5.0	U
Potassium	3000	940	U	390	J	940	U	940	U
Selenium	22	19	U	19	U	19	U	19	U
Silver	15	3.5	U	3.5	U	3.5	U	3.5	U
Sodium	5000	350	U	451	J	350	U	350	U
Thallium	40	19	U	19	U	19	U	19	U
Vanadium	15	4.0	U	4.0	U	4.0	U	4.0	U
Zinc	150	15	U	15	U	15	U	15	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 280-377044/77 06/12/2017 17:01							
		Found	C	Found	C	Found	C	Found	C
Manganese	10	1.0	U						
Aluminum	300	70	U						
Antimony	20	12	U						
Arsenic	25	15	U						
Barium	10	2.0	U						
Beryllium	1.5	1.2	U						
Cadmium	5.0	1.8	U						
Calcium	1000	140	U						
Chromium	15	2.6	U						
Cobalt	15	4.5	U						
Copper	15	10	U						
Iron	100	85	U						
Lead	15	10	U						
Magnesium	500	40	U						
Nickel	40	5.0	U						
Potassium	3000	940	U						
Selenium	22	19	U						
Silver	15	3.5	U						
Sodium	5000	350	U						
Thallium	40	19	U						
Vanadium	15	4.0	U						
Zinc	150	15	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 280-377054/14 06/12/2017 22:27		CCB 280-377054/23 06/12/2017 23:10		CCB 280-377054/37 06/12/2017 23:53		CCB 280-377054/51 06/13/2017 00:29	
		Found	C	Found	C	Found	C	Found	C
Arsenic	25	15	U	15	U	15	U	15	U
Barium	10	2.0	U	2.0	U	2.0	U	2.0	U
Beryllium	1.5	1.2	U	1.2	U	1.2	U	1.2	U
Calcium	1000	140	U	140	U	140	U	38.5	J
Copper	15	10	U	10	U	10	U	10	U
Iron	100	85	U	85	U	85	U	85	U
Potassium	3000	940	U	940	U	940	U	940	U
Selenium	22	19	U	19	U	19	U	19	U
Sodium	5000	350	U	350	U	350	U	350	U
Antimony	20	12	U	12	U	12	U	12	U
Cadmium	5.0	1.8	U	1.8	U	1.8	U	1.8	U
Chromium	15	2.6	U	2.6	U	2.6	U	2.6	U
Cobalt	15	4.5	U	4.5	U	4.5	U	4.5	U
Lead	15	10	U	10	U	10	U	10	U
Magnesium	500	40	U	40	U	40	U	40	U
Manganese	10	1.0	U	0.270	J	0.410	J	0.410	J
Nickel	40	5.0	U	5.0	U	5.0	U	5.0	U
Silver	15	3.5	U	3.5	U	3.5	U	3.5	U
Vanadium	15	4.0	U	4.0	U	4.0	U	4.0	U
Zinc	150	15	U	15	U	15	U	15	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 280-377054/64 06/13/2017 01:09							
		Found	C	Found	C	Found	C	Found	C
Arsenic	25	5.20	J						
Barium	10	2.0	U						
Beryllium	1.5	1.2	U						
Calcium	1000	140	U						
Copper	15	10	U						
Iron	100	85	U						
Potassium	3000	940	U						
Selenium	22	19	U						
Sodium	5000	350	U						
Antimony	20	12	U						
Cadmium	5.0	1.8	U						
Chromium	15	2.6	U						
Cobalt	15	4.5	U						
Lead	15	3.49	J						
Magnesium	500	40	U						
Manganese	10	1.0	U						
Nickel	40	5.0	U						
Silver	15	3.5	U						
Vanadium	15	4.0	U						
Zinc	150	15	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 280-377162/14 06/13/2017 08:49		CCB 280-377162/35 06/13/2017 10:05		CCB 280-377162/50 06/13/2017 10:51		CCB 280-377162/63 06/13/2017 11:28	
		Found	C	Found	C	Found	C	Found	C
Aluminum	300	70	U	70	U	70	U	70	U
Antimony	20	12	U	12	U	12	U	12	U
Arsenic	25	15	U	15	U	15	U	15	U
Calcium	1000	140	U	140	U	140	U	68.9	J
Lead	15	10	U	10	U	10	U	10	U
Nickel	40	5.0	U	5.0	U	5.0	U	5.0	U
Selenium	22	19	U	19	U	19	U	19	U
Thallium	40	19	U	19	U	19	U	19	U
Barium	10	2.0	U	2.0	U	2.0	U	1.13	J
Beryllium	1.5	1.2	U	1.2	U	1.2	U	1.2	U
Cadmium	5.0	1.8	U	1.8	U	1.8	U	1.8	U
Chromium	15	2.6	U	2.6	U	2.6	U	2.6	U
Cobalt	15	4.5	U	4.5	U	4.5	U	4.5	U
Copper	15	10	U	10	U	10	U	10	U
Iron	100	85	U	85	U	85	U	23.5	J
Magnesium	500	40	U	40	U	40	U	40	U
Manganese	10	1.0	U	1.0	U	0.650	J	0.570	J
Potassium	3000	940	U	940	U	940	U	940	U
Silver	15	3.5	U	1.06	J	1.28	J	1.08	J
Sodium	5000	350	U	350	U	350	U	350	U
Vanadium	15	4.0	U	4.0	U	4.0	U	4.0	U
Zinc	150	15	U	15	U	15	U	15	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 280-377162/77 06/13/2017 12:05							
		Found	C	Found	C	Found	C	Found	C
Aluminum	300	136	J						
Antimony	20	12	U						
Arsenic	25	15	U						
Calcium	1000	140	U						
Lead	15	10	U						
Nickel	40	5.0	U						
Selenium	22	19	U						
Thallium	40	19	U						
Barium	10	2.0	U						
Beryllium	1.5	1.2	U						
Cadmium	5.0	0.530	J						
Chromium	15	2.6	U						
Cobalt	15	4.5	U						
Copper	15	10	U						
Iron	100	85	U						
Magnesium	500	40	U						
Manganese	10	1.19	J						
Potassium	3000	940	U						
Silver	15	1.48	J						
Sodium	5000	350	U						
Vanadium	15	4.0	U						
Zinc	150	15	U						

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 280-377403/9 06/14/2017 15:02		CCB 280-377403/48 06/14/2017 16:29		CCB 280-377403/60 06/14/2017 16:55		CCB 280-377403/72 06/14/2017 17:22	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.080	U	0.080	U	0.080	U	0.080	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 280-377403/84 06/14/2017 17:49		CCB 280-377403/89 06/14/2017 18:00					
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.080	U	0.080	U				

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 280-376380/1-A

Instrument Code: MT_025 Batch No.: 376734

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	6.0	U		6010C_DOD5
7440-36-0	Antimony	1.5	U		6010C_DOD5
7440-39-3	Barium	0.143	J		6010C_DOD5
7440-41-7	Beryllium	0.12	U		6010C_DOD5
7440-43-9	Cadmium	0.15	U		6010C_DOD5
7440-70-2	Calcium	28.5	J		6010C_DOD5
7440-47-3	Chromium	0.0940	J		6010C_DOD5
7440-48-4	Cobalt	0.40	U		6010C_DOD5
7439-89-6	Iron	6.31	J		6010C_DOD5
7439-92-1	Lead	0.80	U		6010C_DOD5
7439-95-4	Magnesium	7.81	J		6010C_DOD5
7440-02-0	Nickel	0.45	U		6010C_DOD5
7440-09-7	Potassium	160	U		6010C_DOD5
7440-22-4	Silver	0.60	U		6010C_DOD5
7440-23-5	Sodium	200	U		6010C_DOD5
7440-62-2	Vanadium	0.35	U		6010C_DOD5
7440-66-6	Zinc	1.5	U		6010C_DOD5

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 280-376380/1-A

Instrument Code: MT_025 Batch No.: 377044

CAS No.	Analyte	Concentration	C	Q	Method
7439-96-5	Manganese	0.40	U		6010C_DOD5

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 280-376380/1-A

Instrument Code: MT_025 Batch No.: 377054

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	2.5	U		6010C_DOD5
7440-50-8	Copper	0.80	U		6010C_DOD5
7782-49-2	Selenium	3.0	U		6010C_DOD5

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 280-376380/1-A

Instrument Code: MT_025 Batch No.: 377162

CAS No.	Analyte	Concentration	C	Q	Method
7440-28-0	Thallium	2.5	U		6010C_DOD5

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Concentration Units: ug/Kg Lab Sample ID: MB 280-377156/1-A

Instrument Code: MT_034 Batch No.: 377403

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	13	U		7471A_DOD5

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICSA 280-376734/18 Instrument ID: MT_025

Lab File ID: 25A060917z.asc ICS Source: ICP ICSA_00147

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500000**	**497600**	**100**
Antimony		**-4.86**	
Arsenic		**5.38**	
Barium		**-0.140**	
Beryllium		**-0.130**	
Cadmium		**0.590**	
Calcium	**500000**	**451160**	**90**
Chromium		**1.36**	
Cobalt		**0.630**	
Iron	**200000**	**184840**	**92**
Lead		**-6.74**	
Magnesium	**500000**	**521450**	**104**
Nickel		**1.58**	
Potassium		**88.0**	
Silver		**-0.830**	
Sodium		**100**	
Vanadium		**-0.530**	
Zinc		**-0.490**	
Boron		*-3.34*	
Copper		*2.36*	
Lithium		*2.37*	
Manganese		*0.910*	
Phosphorus		*-12.3*	
Selenium		*-5.30*	
Silicon		*-32.0*	
SiO2		*-68.4*	
Thallium		*-4.15*	
Tin		*-1.22*	
Titanium		*0.320*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICSAB 280-376734/19 Instrument ID: MT_025

Lab File ID: 25A060917z.asc ICS Source: ICP ICSAB_00163

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**500000**	**498270**	**100**
Antimony	**1000**	**964**	**96**
Arsenic	**2000**	**1978**	**99**
Barium	**500**	**476**	**95**
Beryllium	**500**	**474**	**95**
Cadmium	**1000**	**1002**	**100**
Calcium	**500000**	**453210**	**91**
Chromium	**500**	**447**	**89**
Cobalt	**500**	**442**	**88**
Iron	**200000**	**184520**	**92**
Lead	**1000**	**853**	**85**
Magnesium	**500000**	**512410**	**102**
Nickel	**1000**	**884**	**88**
Potassium	**50000**	**51060**	**102**
Silver	**1000**	**1112**	**111**
Sodium	**50000**	**52102**	**104**
Vanadium	**500**	**519**	**104**
Zinc	**1000**	**993**	**99**
Boron	*2000*	*1905*	*95*
Copper	*500*	*574*	*115*
Lithium	*1000*	*1014*	*101*
Manganese	*500*	*511*	*102*
Molybdenum	*1000*	*862*	*86*
Phosphorus	*2000*	*1955*	*98*
Selenium	*5000*	*4818*	*96*
Silicon	*10000*	*9679*	*97*
SiO2	*21400*	*20713*	*97*
Strontium	*1000*	*964*	*96*
Thallium	*10000*	*8218*	*82*
Tin	*10000*	*8661*	*87*
Titanium	*1000*	*1033*	*103*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICSA 280-377044/18 Instrument ID: MT_025

Lab File ID: 25A061217.asc ICS Source: ICP ICSA_00147

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Manganese		**0.780**	
Aluminum	*500000*	*494420*	*99*
Antimony		*-10.2*	
Arsenic		*2.91*	
Barium		*-0.150*	
Beryllium		*-0.0700*	
Boron		*-5.18*	
Cadmium		*1.01*	
Calcium	*500000*	*457670*	*92*
Chromium		*2.05*	
Cobalt		*0.710*	
Copper		*1.99*	
Iron	*200000*	*182780*	*91*
Lithium		*1.43*	
Magnesium	*500000*	*526700*	*105*
Nickel		*2.75*	
Phosphorus		*-9.93*	
Potassium		*-123*	
Selenium		*-0.370*	
Silicon		*30.0*	
Silver		*-1.04*	
SiO2		*64.2*	
Sodium		*25.2*	
Thallium		*-0.0100*	
Tin		*0.520*	
Titanium		*0.330*	
Vanadium		*-1.80*	
Zinc		*-0.770*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICSAB 280-377044/19 Instrument ID: MT_025

Lab File ID: 25A061217.asc ICS Source: ICP ICSAB_00163

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Manganese	**500**	**502**	**100**
Aluminum	*500000*	*496570*	*99*
Antimony	*1000*	*981*	*98*
Arsenic	*2000*	*1970*	*99*
Barium	*500*	*490*	*98*
Beryllium	*500*	*483*	*97*
Boron	*2000*	*1884*	*94*
Cadmium	*1000*	*996*	*100*
Calcium	*500000*	*458450*	*92*
Chromium	*500*	*454*	*91*
Cobalt	*500*	*442*	*88*
Copper	*500*	*554*	*111*
Iron	*200000*	*183140*	*92*
Lead	*1000*	*870*	*87*
Lithium	*1000*	*1050*	*105*
Magnesium	*500000*	*510450*	*102*
Molybdenum	*1000*	*877*	*88*
Nickel	*1000*	*881*	*88*
Phosphorus	*2000*	*1933*	*97*
Potassium	*50000*	*52898*	*106*
Selenium	*5000*	*4801*	*96*
Silicon	*10000*	*9951*	*100*
Silver	*1000*	*1110*	*111*
SiO2	*21400*	*21294*	*100*
Sodium	*50000*	*51436*	*103*
Strontium	*1000*	*988*	*99*
Thallium	*10000*	*8345*	*83*
Tin	*10000*	*8781*	*88*
Titanium	*1000*	*1023*	*102*
Vanadium	*500*	*510*	*102*
Zinc	*1000*	*970*	*97*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICSA 280-377054/16 Instrument ID: MT_025

Lab File ID: 25B061217a.asc ICS Source: ICP ICSA_00147

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Arsenic		**-3.51**	
Barium		**-0.110**	
Beryllium		**-0.0400**	
Calcium	**500000**	**460940**	**92**
Copper		**2.54**	
Iron	**200000**	**183650**	**92**
Potassium		**-31.4**	
Selenium		**7.83**	
Sodium		**10.1**	
Aluminum	*500000*	*502800*	*101*
Antimony		*-3.83*	
Boron		*-3.30*	
Cadmium		*0.710*	
Cobalt		*0.430*	
Lead		*6.72*	
Lithium		*3.20*	
Magnesium	*500000*	*525010*	*105*
Molybdenum		*-6.98*	
Nickel		*2.46*	
Phosphorus		*-3.13*	
Silicon		*-9.28*	
Silver		*0.930*	
SiO2		*-19.9*	
Thallium		*-5.34*	
Tin		*-3.32*	
Titanium		*-0.140*	
Vanadium		*-1.06*	
Zinc		*6.47*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICSAB 280-377054/17 Instrument ID: MT_025

Lab File ID: 25B061217a.asc ICS Source: ICP ICSAB_00163

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Arsenic	**2000**	**1987**	**99**
Barium	**500**	**483**	**97**
Beryllium	**500**	**477**	**95**
Calcium	**500000**	**459750**	**92**
Copper	**500**	**530**	**106**
Iron	**200000**	**182670**	**91**
Potassium	**50000**	**51380**	**103**
Selenium	**5000**	**4782**	**96**
Sodium	**50000**	**50902**	**102**
Aluminum	*500000*	*498830*	*100*
Antimony	*1000*	*972*	*97*
Boron	*2000*	*1869*	*93*
Cadmium	*1000*	*992*	*99*
Chromium	*500*	*461*	*92*
Cobalt	*500*	*440*	*88*
Lead	*1000*	*894*	*89*
Lithium	*1000*	*1027*	*103*
Magnesium	*500000*	*519040*	*104*
Manganese	*500*	*499*	*100*
Molybdenum	*1000*	*888*	*89*
Nickel	*1000*	*879*	*88*
Phosphorus	*2000*	*1937*	*97*
Silicon	*10000*	*9896*	*99*
Silver	*1000*	*1111*	*111*
SiO2	*21400*	*21177*	*99*
Strontium	*1000*	*972*	*97*
Thallium	*10000*	*8448*	*84*
Tin	*10000*	*8893*	*89*
Titanium	*1000*	*1012*	*101*
Vanadium	*500*	*505*	*101*
Zinc	*1000*	*985*	*98*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICSA 280-377162/18 Instrument ID: MT_025

Lab File ID: 25a061317a.asc ICS Source: ICP ICSA_00147

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500000**	**490510**	**98**
Antimony		**-2.19**	
Arsenic		**-12.5**	
Calcium	**500000**	**470030**	**94**
Lead		**-2.62**	
Nickel		**2.03**	
Selenium		**-12.6**	
Thallium		**-6.21**	
Barium		*0.130*	
Beryllium		*-0.0100*	
Boron		*-2.74*	
Cadmium		*1.39*	
Chromium		*1.80*	
Cobalt		*0.160*	
Copper		*0.440*	
Iron	*200000*	*184370*	*92*
Lithium		*5.76*	
Magnesium	*500000*	*515580*	*103*
Manganese		*0.960*	
Molybdenum		*-6.81*	
Phosphorus		*-6.37*	
Potassium		*134*	
Silicon		*-4.69*	
Silver		*0.0700*	
SiO2		*-10.0*	
Sodium		*36.6*	
Tin		*0.750*	
Titanium		*-0.270*	
Vanadium		*-1.64*	
Zinc		*2.62*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Lab Sample ID: ICSAB 280-377162/19 Instrument ID: MT_025

Lab File ID: 25a061317a.asc ICS Source: ICP ICSAB_00163

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**500000**	**488880**	**98**
Antimony	**1000**	**1000**	**100**
Arsenic	**2000**	**2003**	**100**
Calcium	**500000**	**467320**	**93**
Lead	**1000**	**923**	**92**
Nickel	**1000**	**915**	**91**
Selenium	**5000**	**4794**	**96**
Thallium	**10000**	**8198**	**82**
Barium	*500*	*497*	*99*
Beryllium	*500*	*470*	*94*
Boron	*2000*	*1913*	*96*
Cadmium	*1000*	*1027*	*103*
Chromium	*500*	*489*	*98*
Cobalt	*500*	*458*	*92*
Copper	*500*	*536*	*107*
Iron	*200000*	*183450*	*92*
Lithium	*1000*	*1004*	*100*
Magnesium	*500000*	*503810*	*101*
Manganese	*500*	*483*	*97*
Molybdenum	*1000*	*943*	*94*
Phosphorus	*2000*	*1976*	*99*
Potassium	*50000*	*51760*	*104*
Silicon	*10000*	*9823*	*98*
Silver	*1000*	*1099*	*110*
SiO2	*21400*	*21021*	*98*
Sodium	*50000*	*50584*	*101*
Strontium	*1000*	*949*	*95*
Tin	*10000*	*9385*	*94*
Titanium	*1000*	*973*	*97*
Vanadium	*500*	*498*	*100*
Zinc	*1000*	*946*	*95*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: SS025-SS07 MS
Lab ID: 280-97928-1 MS
Lab Name: TestAmerica Denver
Job No.: 280-97928-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 86.7

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	7610		5100		178	1412	74-119	4	6010C
Antimony	27.9		1.7	U	44.4	63	79-114	J	6010C
Arsenic	86.6		2.3	J	88.9	95	82-111		6010C
Barium	179		18		178	91	83-113		6010C
Beryllium	4.10		0.23	J	4.44	87	83-113		6010C
Cadmium	8.19		0.080	J	8.89	91	82-113		6010C
Calcium	5190		1500		4440	82	81-116		6010C
Chromium	22.0		5.4		17.8	93	85-113		6010C
Cobalt	41.6		3.4		44.4	86	85-112		6010C
Copper	31.6		11		22.2	91	81-117		6010C
Iron	9800		9800		88.9	-16	81-118	4	6010C
Lead	40.1		4.2		44.4	81	81-112		6010C
Magnesium	6160		2000		4440	94	78-115		6010C
Manganese	452		430		44.4	59	84-114	4	6010C
Nickel	45.2		7.4		44.4	85	83-113		6010C
Potassium	5550		660		4440	110	81-116		6010C
Selenium	163		3.3	U	178	92	78-111		6010C
Silver	3.82		0.67	U	4.44	86	82-112		6010C
Sodium	4080		220	U	4440	92	83-118		6010C
Thallium	145		2.8	U	178	82	83-111	J	6010C
Vanadium	56.1		9.8		44.4	104	82-114		6010C
Zinc	65.0		26		44.4	87	82-113		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: SS025-SS07 MS
Lab ID: 280-97928-1 MS
Lab Name: TestAmerica Denver
Job No.: 280-97928-1
SDG No.:
Matrix: Solid
Concentration Units: ug/Kg
% Solids: 86.7

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	433		18	U	412	105	80-124		7471A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: SS025-SS07 MSD
Lab ID: 280-97928-1 MSD
Lab Name: TestAmerica Denver
Job No.: 280-97928-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 86.7

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	7780		188	1425	74-119	2	20	4	6010C
Antimony	32.0		47.1	68	79-114	14	20	J	6010C
Arsenic	94.7		94.2	98	82-111	9	20		6010C
Barium	197		188	95	83-113	9	20		6010C
Beryllium	4.51		4.71	91	83-113	10	20		6010C
Cadmium	9.14		9.42	96	82-113	11	20		6010C
Calcium	5670		4710	88	81-116	9	20		6010C
Chromium	24.2		18.8	100	85-113	10	20		6010C
Cobalt	46.3		47.1	91	85-112	11	20		6010C
Copper	34.3		23.5	97	81-117	8	20		6010C
Iron	9670		94.2	-157	81-118	1	20	4	6010C
Lead	44.3		47.1	85	81-112	10	20		6010C
Magnesium	6660		4710	99	78-115	8	20		6010C
Manganese	431		47.1	11	84-114	5	20	4	6010C
Nickel	49.8		47.1	90	83-113	10	20		6010C
Potassium	6050		4710	115	81-116	9	20		6010C
Selenium	179		188	95	78-111	9	20		6010C
Silver	4.21		4.71	89	82-112	10	20		6010C
Sodium	4570		4710	97	83-118	11	20		6010C
Thallium	160		188	85	83-111	10	20		6010C
Vanadium	61.4		47.1	110	82-114	9	20		6010C
Zinc	69.2		47.1	91	82-113	6	20		6010C

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: SS025-SS07 MSD
Lab ID: 280-97928-1 MSD
Lab Name: TestAmerica Denver
Job No.: 280-97928-1
SDG No.:
Matrix: Solid
Concentration Units: ug/Kg
% Solids: 86.7

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	466		444	105	80-124	7	20		7471A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: SS025-SS07 PDS | Lab ID: 280-97928-1 PDS

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Matrix: Solid | Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	5100		5100		111	2	80-120	J	6010C
Antimony	9.83		1.7	U	11.1	88	80-120		6010C
Arsenic	22.9		2.3	J	22.3	92	80-120		6010C
Barium	27.5		18		11.1	88	80-120		6010C
Beryllium	5.28		0.23	J	5.57	91	80-120		6010C
Cadmium	5.40		0.080	J	5.57	95	80-120		6010C
Calcium	3460		1500		2230	87	80-120		6010C
Chromium	10.3		5.4		5.57	87	80-120		6010C
Cobalt	8.46		3.4		5.57	91	80-120		6010C
Copper	16.5		11		5.57	93	80-120		6010C
Iron	9700		9800		111	-104	80-120	J	6010C
Lead	13.8		4.2		11.1	85	80-120		6010C
Magnesium	4010		2000		2230	91	80-120		6010C
Manganese	423		430		5.57	-50	80-120	J	6010C
Nickel	12.4		7.4		5.57	90	80-120		6010C
Potassium	2710		660		2230	92	80-120		6010C
Selenium	21.0		3.3	U	22.3	94	80-120		6010C
Silver	4.99		0.67	U	5.57	90	80-120		6010C
Sodium	2180		220	U	2230	98	80-120		6010C
Thallium	20.1		2.8	U	22.3	90	80-120		6010C
Vanadium	15.3		9.8		5.57	99	80-120		6010C
Zinc	47.0		26		22.3	93	80-120		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: SS025-SS07 PDS | Lab ID: 280-97928-1 PDS

Lab Name: TestAmerica Denver | Job No.: 280-97928-1

SDG No.:

Matrix: Solid | Concentration Units: ug/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	349		18	U	339	103	80-120		7471A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 280-376380/2-A

Lab Name: TestAmerica Denver Job No.: 280-97928-1

Sample Matrix: Solid LCS Source: ICP SPK 3A_00133

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	200	183		91	74	119		6010C
Antimony	50.0	48.0		96	79	114		6010C
Barium	200	186		93	83	113		6010C
Beryllium	5.00	4.68		94	83	113		6010C
Cadmium	10.0	9.76		98	82	113		6010C
Calcium	5000	4530		91	81	116		6010C
Chromium	20.0	18.2		91	85	113		6010C
Cobalt	50.0	46.8		94	85	112		6010C
Iron	100	102		102	81	118		6010C
Lead	50.0	44.9		90	81	112		6010C
Magnesium	5000	4730		95	78	115		6010C
Nickel	50.0	46.9		94	83	113		6010C
Potassium	5000	4750		95	81	116		6010C
Silver	5.00	4.59		92	82	112		6010C
Sodium	5000	4920		98	83	118		6010C
Vanadium	50.0	50.5		101	82	114		6010C
Zinc	50.0	48.9		98	82	113		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 280-376380/2-A

Lab Name: TestAmerica Denver Job No.: 280-97928-1

Sample Matrix: Solid LCS Source: ICP SPK 3A_00133

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Manganese	50.0	48.7		97	84	114		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 280-376380/2-A

Lab Name: TestAmerica Denver Job No.: 280-97928-1

Sample Matrix: Solid LCS Source: ICP SPK 3A_00133

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Arsenic	100	97.5		98	82	111		6010C
Copper	25.0	24.4		98	81	117		6010C
Selenium	200	191		95	78	111		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 280-376380/2-A

Lab Name: TestAmerica Denver Job No.: 280-97928-1

Sample Matrix: Solid LCS Source: ICP SPK 3A_00133

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Thallium	200	178		89	83	111		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 280-377156/2-A

Lab Name: TestAmerica Denver Job No.: 280-97928-1

Sample Matrix: Solid LCS Source: Hg Daily Spk_01942

Analyte	Solid(ug/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	333	330		99	80	124		7471A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 280-97928-1

SDG No:

Lab Name: TestAmerica Denver Job No: 280-97928-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	5100		5390		5.6	D	6010C
Antimony	1.7	U	8.4	U	NC		6010C
Arsenic	2.3	J	14	U	NC		6010C
Barium	18		18.6		NC	D	6010C
Beryllium	0.23	J	0.290	J	NC	D	6010C
Cadmium	0.080	J	0.84	U	NC		6010C
Calcium	1500		1630		NC	D	6010C
Chromium	5.4		5.82	J	NC	D	6010C
Cobalt	3.4		3.79	J	NC	D	6010C
Copper	11		12.5	J	NC	D	6010C
Iron	9800		10200		4.3	D	6010C
Lead	4.2		4.80	J	NC	D	6010C
Magnesium	2000		2140		7.6	D	6010C
Manganese	430		448		5.2	D	6010C
Nickel	7.4		8.00	J	NC	D	6010C
Potassium	660		673	J	NC	D	6010C
Selenium	3.3	U	17	U	NC		6010C
Silver	0.67	U	3.3	U	NC		6010C
Sodium	220	U	1100	U	NC		6010C
Thallium	2.8	U	14	U	NC		6010C
Vanadium	9.8		10.2	J	NC	D	6010C
Zinc	26		28.4	J	NC	D	6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 280-97928-1

SDG No:

Lab Name: TestAmerica Denver Job No: 280-97928-1

Matrix: Solid Concentration Units: ug/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Mercury	18	U	90	U	NC		7471A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Denver Job Number: 280-97928-1

SDG Number:

Matrix: Solid Instrument ID: MT_025

Method: 6010C DL Date: 12/22/2016 00:00

Prep Method: 3050B

Analyte	Wavelength/ Mass	LOQ (mg/Kg)	DL (mg/Kg)
Aluminum	167	50	1.55
Antimony	206.8	2	0.733
Arsenic	189	2.5	0.665
Barium	455.4	2	0.104
Beryllium	313	0.5	0.033
Cadmium	228.8	0.5	0.041
Calcium	317.9	100	14.1
Chromium	205.5	3.5	0.058
Cobalt	228.6	1	0.1
Copper	324.7	5	0.217
Iron	259.9	80	3.8
Lead	220.3	0.9	0.31
Magnesium	279	30	3.7
Manganese	257.6	4.5	0.1
Nickel	231.6	4	0.132
Potassium	766.4	300	41
Selenium	196	3	0.86
Silver	328	1.5	0.16
Sodium	589.5	500	59
Thallium	190.8	3	0.65
Vanadium	292.4	2	0.094
Zinc	206.2	8	0.398

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Denver Job Number: 280-97928-1

SDG Number:

Matrix: Solid Instrument ID: MT_025

Method: 6010C XMDL Date: 12/22/2016 00:00

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Aluminum		300	18
Antimony		20	5.17
Arsenic		25	4.41
Barium		10	0.82
Beryllium		1.5	0.474
Cadmium		5	0.452
Calcium		1000	34.5
Chromium		15	0.663
Cobalt		15	1.23
Copper		15	4.2
Iron		100	22
Lead		15	2.74
Magnesium		500	10.7
Manganese		10	0.264
Nickel		40	2.56
Potassium		3000	237
Selenium		22	4.86
Silver		15	0.933
Sodium		5000	117
Thallium		40	4.91
Vanadium		15	1.11
Zinc		150	4.53

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Denver Job Number: 280-97928-1

SDG Number:

Matrix: Solid Instrument ID: MT_034

Method: 7471A DL Date: 02/16/2014 00:00

Prep Method: 7471A

Analyte	Wavelength/ Mass	LOQ (ug/Kg)	DL (ug/Kg)
Mercury		17	5.53

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Denver Job Number: 280-97928-1

SDG Number:

Matrix: Solid Instrument ID: MT_034

Method: 7471A XMDL Date: 02/16/2014 00:00

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.027

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 280-97928-1

SDG No.:

ICP-AES Instrument ID: MT_025 Date: 02/14/2017

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
Aluminum	167.079													0.001157	
Aluminum	309.271														
Antimony	206.833		0.000021						-0.000010			0.009455		-0.000057	
Arsenic	189.042		-0.000026						0.000005			0.000564		-0.000020	
Barium	455.403														
Beryllium	313.042														
Bismuth	223.061		-0.000012			-0.000360						0.001346		0.000174	
Boron	208.959														
Cadmium	228.802			0.005241		-0.000082					0.000036				
Calcium	317.933										-0.000132				
Chromium	205.552						-0.000930								
Cobalt	228.616					0.000052						0.000001			
Copper	324.754													0.000010	
Iron	259.940														
Iron	271.441										0.076500				
Lead	220.353		-0.000073					-0.000040	-0.000011		-0.000742		0.000658	0.000003	
Lithium	670.784								0.000009						
Magnesium	279.079													0.000149	
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604						-0.000094		-0.000007		-0.000384			0.000021	
Phosphorus	178.284														
Potassium	766.490														
Selenium	196.090		0.000039						-0.000005					0.000013	
Silicon	288.158											-0.013955			
Silver	328.068														
Sodium	589.592														
Sodium	818.326														
Strontium	407.771								0.000067						
Sulfur	182.034		-0.000049						0.000017						

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 280-97928-1

SDG No.:

ICP-AES Instrument ID: MT_025 Date: 02/14/2017

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
Thallium	190.856		-0.000001						0.000002		0.001114	0.000274		-0.000033	
Thorium	283.730									0.000025		0.000144		0.000720	
Tin	189.989														
Titanium	334.904								0.000005			0.000255			
Uranium	370.152				0.001475				-0.000012			-0.003937		-0.000628	
Vanadium	292.402													0.000006	
Zinc	206.200							-0.000075				-0.000468			
Zirconium	339.198													-0.000036	

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 280-97928-1

SDG No.:

ICP-AES Instrument ID: MT_025 Date: 02/14/2017

Analyte	Wave Length	Li	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	SiO2	Sn	Sr
Aluminum	309.271		0.001655												
Aluminum	167.079														
Antimony	206.833						-0.000251					0.000031	0.000031	0.000093	
Arsenic	189.042				0.000879							-0.000100	-0.000100		
Barium	455.403														
Beryllium	313.042														
Bismuth	223.061														
Boron	208.959				0.036727										
Cadmium	228.802														
Calcium	317.933														
Chromium	205.552														
Cobalt	228.616			-0.000001	-0.001642		0.000125								
Copper	324.754				0.000377										
Iron	259.940														
Iron	271.441		0.000330												
Lead	220.353				-0.000474		0.000027					0.000246	0.000246		
Lithium	670.784														
Magnesium	279.079			-0.004762											
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604				0.000080										
Phosphorus	178.284				-0.001297										
Potassium	766.490														
Selenium	196.090			0.000474											
Silicon	288.158				-0.001696										
Silver	328.068			0.000114	-0.000029										
Sodium	818.326														
Sodium	589.592														
Strontium	407.771														
Sulfur	182.034			0.000590	-0.007495										

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 280-97928-1

SDG No.:

ICP-AES Instrument ID: MT_025 Date: 02/14/2017

Analyte	Wave Length	Li	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	SiO2	Sn	Sr
Thallium	190.856			0.000104											
Thorium	283.730		-0.000006		0.001202		0.000116								
Tin	189.989														
Titanium	334.904		0.000001		0.000220										
Uranium	370.152														
Vanadium	292.402			-0.000132	-0.016697										
Zinc	206.200				0.000123										
Zirconium	339.198				0.000270										

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 280-97928-1

SDG No.:

ICP-AES Instrument ID: MT_025 Date: 02/14/2017

Analyte	Wave Length	Th	Ti	Tl	U	V	Zn	Zr							
Aluminum	167.079														
Aluminum	309.271														
Antimony	206.833		0.000161		-0.001924	0.000070		-0.000720							
Arsenic	189.042														
Barium	455.403							0.000631							
Beryllium	313.042		0			0.000449									
Bismuth	223.061				-0.003000										
Boron	208.959														
Cadmium	228.802				-0.000172										
Calcium	317.933	0.000027													
Chromium	205.552														
Cobalt	228.616		0.002396		0.000180										
Copper	324.754	0.003648	-0.000473		-0.000990	-0.000078		-0.003223							
Iron	259.940														
Iron	271.441					-0.209000		-0.033							
Lead	220.353		-0.000058		0.001102			-0.000169							
Lithium	670.784														
Magnesium	279.079		0.000196		-0.006018										
Manganese	257.610				0.000099										
Molybdenum	202.030				-0.000094										
Nickel	231.604														
Phosphorus	178.284				0.000030										
Potassium	766.490														
Selenium	196.090	-0.000057			-0.000758										
Silicon	288.158														
Silver	328.068	0.000214			0.0010386			0.003966							
Sodium	589.592														
Sodium	818.326														
Strontium	407.771														
Sulfur	182.034	0.000409				-0.001026									

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Denver Job Number: 280-97928-1

SDG No.:

ICP-AES Instrument ID: MT_025 Date: 02/14/2017

Analyte	Wave Length	Th	Ti	Tl	U	V	Zn	Zr							
Thallium	190.856	-0.000005			0.000038	0.000659									
Thorium	283.730				0.026785			0.003118							
Tin	189.989	-0.000081	-0.000188		0.000171										
Titanium	334.904	0.006776			-0.000731										
Uranium	370.152		0.007353												
Vanadium	292.402	0.001165	0.000643		-0.001180										
Zinc	206.200														
Zirconium	339.198	0.044492			-0.000206										

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Denver Job No: 280-97928-1

SDG No.:

Instrument ID: MT_025 Date: 04/05/2017 13:53

Analyte	Integ. Time (Sec.)	Concentration (mg/L)	Method
Aluminum		900	6010C
Antimony		45	6010C
Arsenic		45	6010C
Barium		45	6010C
Beryllium		18	6010C
Cadmium		18	6010C
Calcium		900	6010C
Chromium		45	6010C
Cobalt		45	6010C
Copper		45	6010C
Iron		1800	6010C
Lead		180	6010C
Magnesium		1350	6010C
Manganese		18	6010C
Nickel		45	6010C
Potassium		450	6010C
Selenium		45	6010C
Silver		1.8	6010C
Sodium		9000	6010C
Thallium		45	6010C
Vanadium		45	6010C
Zinc		45	6010C

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 280-376380/1-A	06/08/2017 14:00	376380	1		100
LCS 280-376380/2-A	06/08/2017 14:00	376380	1		100
280-97928-1	06/08/2017 14:00	376380	1.035		100
280-97928-1 MS	06/08/2017 14:00	376380	1.298		100
280-97928-1 MSD	06/08/2017 14:00	376380	1.225		100
280-97928-3	06/08/2017 14:00	376380	1.003		100
280-97928-4	06/08/2017 14:00	376380	1.049		100
280-97928-5	06/08/2017 14:00	376380	1.076		100
280-97928-6	06/08/2017 14:00	376380	1.177		100
280-97928-7	06/08/2017 14:00	376380	1.004		100
280-97928-8	06/08/2017 14:00	376380	1.448		100
280-97928-9	06/08/2017 14:00	376380	1.259		100
280-97928-10	06/08/2017 14:00	376380	1.397		100
280-97928-11	06/08/2017 14:00	376380	1.476		100
280-97928-12	06/08/2017 14:00	376380	1.257		100
280-97928-14	06/08/2017 14:00	376380	1.412		100
280-97928-15	06/08/2017 14:00	376380	1.317		100
280-97928-16	06/08/2017 14:00	376380	1.211		100
280-97928-17	06/08/2017 14:00	376380	1.331		100
280-97928-18	06/08/2017 14:00	376380	1.031		100
280-97928-19	06/08/2017 14:00	376380	1.196		100
280-97928-20	06/08/2017 14:00	376380	1.255		100
280-97928-21	06/08/2017 14:00	376380	1.079		100
280-97928-22	06/08/2017 14:00	376380	1.179		100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Prep Method: 7471A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 280-377156/1-A	06/14/2017 12:49	377156	0.6		50
LCS 280-377156/2-A	06/14/2017 12:49	377156	0.6		50
280-97928-1	06/14/2017 12:49	377156	0.51		50
280-97928-1 MS	06/14/2017 12:49	377156	0.56		50
280-97928-1 MSD	06/14/2017 12:49	377156	0.52		50
280-97928-3	06/14/2017 12:49	377156	0.56		50
280-97928-4	06/14/2017 12:49	377156	0.50		50
280-97928-5	06/14/2017 12:49	377156	0.53		50
280-97928-6	06/14/2017 12:49	377156	0.53		50
280-97928-7	06/14/2017 12:49	377156	0.50		50
280-97928-8	06/14/2017 12:49	377156	0.55		50
280-97928-9	06/14/2017 12:49	377156	0.51		50
280-97928-10	06/14/2017 12:49	377156	0.58		50
280-97928-11	06/14/2017 12:49	377156	0.58		50
280-97928-12	06/14/2017 12:49	377156	0.55		50
280-97928-14	06/14/2017 12:49	377156	0.56		50
280-97928-15	06/14/2017 12:49	377156	0.50		50
280-97928-16	06/14/2017 12:49	377156	0.56		50
280-97928-17	06/14/2017 12:49	377156	0.52		50
280-97928-18	06/14/2017 12:49	377156	0.51		50
280-97928-19	06/14/2017 12:49	377156	0.52		50
280-97928-20	06/14/2017 12:49	377156	0.60		50
280-97928-21	06/14/2017 12:49	377156	0.51		50
280-97928-22	06/14/2017 12:49	377156	0.50		50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 06/09/2017 07:05 End Date: 06/09/2017 11:10

Lab Sample Id	D/F	Type	Time	Analytes																								
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Fe	K	Mg	Na	Ni	Pb	Sb	V	Zn								
ICIS 280-376734/1	1		07:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
IC 280-376734/2			07:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
IC 280-376734/3			07:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			07:13																									
ZZZZZZ			07:15																									
ICVH 280-376734/6	1		07:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICVH 280-376734/7	1		07:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ZZZZZZ			07:24																									
ICV 280-376734/9	1		07:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICV 280-376734/10	1		07:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICVL 280-376734/11	1		07:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCVH 280-376734/12			07:44																									
CCV 280-376734/13			07:47																									
ZZZZZZ			07:49																									
ICB 280-376734/15	1		07:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CRI 280-376734/16	1		07:56		X		X	X	X	X	X	X		X	X	X	X		X	X	X								
CRI 280-376734/17	1		08:04	X		X							X					X										
ICSA 280-376734/18	1		08:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
ICSAB 280-376734/19	1		08:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
LRA 280-376734/20			08:14																									
CCVH 280-376734/21			08:16																									
CCV 280-376734/22			08:19																									
CCB 280-376734/23			08:21																									
CCVL 280-376734/24			08:24																									
ZZZZZZ			08:33																									
ZZZZZZ			08:35																									
ZZZZZZ			08:38																									
ZZZZZZ			08:41																									
ZZZZZZ			08:43																									
ZZZZZZ			08:46																									
ZZZZZZ			08:49																									
ZZZZZZ			08:51																									
CCVH 280-376734/33	1		08:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCV 280-376734/34	1		08:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCB 280-376734/35	1		08:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
CCVL 280-376734/36	1		09:02	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
MB 280-376380/1-A	1	T	09:04	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
LCS 280-376380/2-A	1	T	09:07	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
280-97928-1	1	T	09:09	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
280-97928-1 SD	5	T	09:12	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
280-97928-1 MS	1	T	09:14	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								
280-97928-1 MSD	1	T	09:17	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 06/09/2017 07:05 End Date: 06/09/2017 11:10

Lab Sample Id	D/F	Type	Time	Analytes																										
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Fe	K	Mg	Na	Ni	Pb	Sb	V	Zn									
280-97928-1 PDS	1	T	09:19	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
280-97928-3	1	T	09:22	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
280-97928-4	1	T	09:24	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
280-97928-5	1	T	09:27	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCVH 280-376734/47	1		09:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCV 280-376734/48	1		09:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCB 280-376734/49	1		09:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCVL 280-376734/50	1		09:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
280-97928-6	1	T	09:40	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
280-97928-7	1	T	09:43	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
280-97928-8	1	T	09:45	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
280-97928-9	1	T	09:48	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
280-97928-10	1	T	09:50	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
280-97928-11	1	T	09:53	X					X	X	X			X		X	X	X	X	X	X									
280-97928-12	1	T	09:55	X	X		X	X		X	X	X	X	X	X	X				X	X									
280-97928-14	1	T	09:58	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
280-97928-15	1	T	10:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
280-97928-16	1	T	10:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCVH 280-376734/61	1		10:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCV 280-376734/62	1		10:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCB 280-376734/63	1		10:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCVL 280-376734/64	1		10:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
280-97928-17	1	T	10:16	X		X				X	X	X			X		X	X	X	X	X									
280-97928-18	1	T	10:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
280-97928-19	1	T	10:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
280-97928-20	1	T	10:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
280-97928-21	1	T	10:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
280-97928-22	1	T	10:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCVH 280-376734/71	1		10:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCV 280-376734/72	1		10:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCB 280-376734/73	1		10:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
CCVL 280-376734/74	1		10:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X									
ZZZZZZ			10:42																											
ZZZZZZ			10:45																											
ZZZZZZ			10:47																											
ZZZZZZ			10:50																											
ZZZZZZ			10:53																											
ZZZZZZ			10:55																											
ZZZZZZ			10:58																											
CCVH 280-376734/82			11:01																											
CCV 280-376734/83			11:03																											
CCB 280-376734/84			11:06																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 06/09/2017 07:05 End Date: 06/09/2017 11:10

Lab Sample Id	D/F	Type	Time	Analytes																												
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Fe	K	Mg	Na	Ni	Pb	Sb	V	Zn											
CCVL 280-376734/85			11:10																													

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 06/12/2017 13:14 End Date: 06/12/2017 18:06

Lab Sample Id	D/F	Type	Time	Analytes																								
				Mn																								
ICIS 280-377044/1	1		13:14	X																								
IC 280-377044/2			13:17	X																								
IC 280-377044/3			13:20	X																								
ZZZZZZ			13:22																									
ZZZZZZ			13:25																									
ICVH 280-377044/6	1		13:28	X																								
ICVH 280-377044/7	1		13:31	X																								
ICV 280-377044/8	1		13:34	X																								
ICV 280-377044/9	1		13:37	X																								
ZZZZZZ			13:41																									
ICVL 280-377044/11	1		13:46	X																								
ICVL 280-377044/12	1		13:49	X																								
CCVH 280-377044/13			13:54																									
CCV 280-377044/14			13:57																									
ICB 280-377044/15	1		13:59	X																								
CRI 280-377044/16	1		14:04	X																								
CRI 280-377044/17			14:18																									
ICSA 280-377044/18	1		14:28	X																								
ICSAB 280-377044/19	1		14:31	X																								
LRA 280-377044/20			14:34																									
CCVH 280-377044/21			14:36																									
CCV 280-377044/22			14:39																									
CCB 280-377044/23			14:41																									
CCVL 280-377044/24			14:44																									
ZZZZZZ			14:47																									
ZZZZZZ			14:49																									
ZZZZZZ			14:52																									
ZZZZZZ			14:54																									
ZZZZZZ			14:57																									
ZZZZZZ			14:59																									
ZZZZZZ			15:02																									
ZZZZZZ			15:05																									
ZZZZZZ			15:07																									
CCVH 280-377044/34	1		15:10	X																								
CCV 280-377044/35	1		15:12	X																								
CCB 280-377044/36	1		15:15	X																								
CCVL 280-377044/37	1		15:17	X																								
MB 280-376380/1-A	1	T	15:20	X																								
LCS 280-376380/2-A	1	T	15:23	X																								
280-97928-1	1	T	15:25	X																								
280-97928-1 SD	5	T	15:28	X																								
280-97928-1 MS	1	T	15:30	X																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 06/12/2017 13:14 End Date: 06/12/2017 18:06

Lab Sample Id	D/F	Type	Time	Analytes
				Mn
280-97928-1 MSD	1	T	15:33	X
280-97928-1 PDS	1	T	15:35	X
280-97928-3	1	T	15:38	X
280-97928-4	1	T	15:40	X
280-97928-5	1	T	15:43	X
CCVH 280-377044/48	1		15:46	X
CCV 280-377044/49	1		15:48	X
CCB 280-377044/50	1		15:51	X
CCVL 280-377044/51	1		15:53	X
280-97928-6	1	T	15:56	X
280-97928-7	1	T	15:58	X
280-97928-8	1	T	16:01	X
280-97928-9	1	T	16:04	X
280-97928-10	1	T	16:06	X
280-97928-11	1	T	16:09	X
ZZZZZZ			16:11	
280-97928-12	1	T	16:14	X
ZZZZZZ			16:17	
280-97928-14	1	T	16:19	X
CCVH 280-377044/62	1		16:22	X
CCV 280-377044/63	1		16:25	X
CCB 280-377044/64	1		16:27	X
CCVL 280-377044/65	1		16:30	X
280-97928-15	1	T	16:32	X
280-97928-16	1	T	16:35	X
280-97928-17	1	T	16:38	X
ZZZZZZ			16:40	
280-97928-18	1	T	16:43	X
280-97928-19	1	T	16:45	X
280-97928-20	1	T	16:48	X
280-97928-21	1	T	16:51	X
280-97928-22	1	T	16:53	X
CCVH 280-377044/75	1		16:56	X
CCV 280-377044/76	1		16:58	X
CCB 280-377044/77	1		17:01	X
CCVL 280-377044/78	1		17:03	X
ZZZZZZ			17:06	
ZZZZZZ			17:09	
ZZZZZZ			17:11	
ZZZZZZ			17:14	
ZZZZZZ			17:17	
ZZZZZZ			17:19	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 06/12/2017 13:14 End Date: 06/12/2017 18:06

Lab Sample Id	D/F	Type	Time	Analytes																								
				Mn																								
CCVH 280-377044/85			17:22																									
CCV 280-377044/86			17:24																									
CCB 280-377044/87			17:27																									
CCVL 280-377044/88			17:29																									
ZZZZZZ			17:32																									
ZZZZZZ			17:35																									
ZZZZZZ			17:37																									
ZZZZZZ			17:40																									
ZZZZZZ			17:42																									
ZZZZZZ			17:45																									
ZZZZZZ			17:47																									
ZZZZZZ			17:50																									
ZZZZZZ			17:53																									
ZZZZZZ			17:55																									
CCVH 280-377044/99			17:58																									
CCV 280-377044/100			18:01																									
CCB 280-377044/101			18:03																									
CCVL 280-377044/102			18:06																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 06/12/2017 21:41 End Date: 06/13/2017 03:26

Lab Sample Id	D/F	Type	Time	Analytes																											
				As	Ba	Be	Ca	Cu	Fe	K	Na	Se																				
ICIS 280-377054/1	1		21:41	X	X	X	X	X	X	X	X	X																				
IC 280-377054/2			21:43	X	X	X	X	X	X	X	X	X																				
IC 280-377054/3			21:46	X	X	X	X	X	X	X	X	X																				
ZZZZZZ			21:48																												
ZZZZZZ			21:51																												
ICVH 280-377054/6	1		21:53	X	X	X	X	X	X	X	X	X																				
ICVH 280-377054/7	1		21:56	X	X	X	X	X	X	X	X	X																				
ZZZZZZ			21:59																												
ICV 280-377054/9	1		22:03	X	X	X	X	X	X	X	X	X																				
ICV 280-377054/10	1		22:06	X	X	X	X	X	X	X	X	X																				
ICVL 280-377054/11	1		22:19	X	X	X	X	X	X	X	X	X																				
CCVH 280-377054/12			22:21																												
CCV 280-377054/13			22:24																												
ICB 280-377054/14	1		22:27	X	X	X	X	X	X	X	X	X																				
CRI 280-377054/15	1		22:30		X	X	X	X		X	X																				
ICSA 280-377054/16	1		22:33	X	X	X	X	X	X	X	X	X																				
ICSAB 280-377054/17	1		22:36	X	X	X	X	X	X	X	X	X																				
LRA 280-377054/18			22:38																												
CRI 280-377054/19	1		22:43	X																											
CRI 280-377054/20	1		22:58						X			X																			
CCVH 280-377054/21	1		23:05	X	X	X	X	X	X	X	X	X																				
CCV 280-377054/22	1		23:07	X	X	X	X	X	X	X	X	X																				
CCB 280-377054/23	1		23:10	X	X	X	X	X	X	X	X	X																				
CCVL 280-377054/24	1		23:13	X	X	X	X	X		X	X	X																				
MB 280-376380/1-A	1	T	23:22	X				X				X																				
LCS 280-376380/2-A	1	T	23:25	X				X				X																				
280-97928-1	1	T	23:27	X				X				X																				
280-97928-1 SD	5	T	23:30	X				X				X																				
280-97928-1 MS	1	T	23:33	X				X				X																				
280-97928-1 MSD	1	T	23:35	X				X				X																				
280-97928-1 PDS	1	T	23:37	X				X				X																				
280-97928-3	1	T	23:40	X				X				X																				
280-97928-4	1	T	23:42	X				X				X																				
280-97928-5	1	T	23:45	X				X				X																				
CCVH 280-377054/35	1		23:48	X	X	X	X	X	X	X	X	X																				
CCV 280-377054/36	1		23:50	X	X	X	X	X	X	X	X	X																				
CCB 280-377054/37	1		23:53	X	X	X	X	X	X	X	X	X																				
CCVL 280-377054/38	1		23:55	X	X	X	X	X	X	X	X	X																				
280-97928-6	1	T	23:58	X				X				X																				
280-97928-7	1	T	00:00	X				X				X																				
280-97928-8	1	T	00:03	X				X				X																				
280-97928-9	1	T	00:06	X				X				X																				

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 06/12/2017 21:41 End Date: 06/13/2017 03:26

Lab Sample Id	D/F	Type	Time	Analytes																										
				As	Ba	Be	Ca	Cu	Fe	K	Na	Se																			
280-97928-10	1	T	00:08	X				X				X																		
280-97928-11	1	T	00:11	X	X	X	X	X	X	X	X	X																		
ZZZZZZ			00:13																											
280-97928-12	1	T	00:16					X																						
ZZZZZZ			00:18																											
280-97928-14	1	T	00:21	X				X				X																		
CCVH 280-377054/49	1		00:24	X	X	X	X	X	X	X	X	X																		
CCV 280-377054/50	1		00:26	X	X	X	X	X	X	X	X	X																		
CCB 280-377054/51	1		00:29	X	X	X	X	X	X	X	X	X																		
CCVL 280-377054/52	1		00:32	X	X	X	X	X	X	X	X	X																		
280-97928-15	1	T	00:34					X				X																		
280-97928-16	1	T	00:37					X				X																		
280-97928-17	1	T	00:39		X	X	X	X	X	X	X	X																		
ZZZZZZ			00:42																											
280-97928-18	1	T	00:45					X				X																		
280-97928-19	1	T	00:47					X				X																		
280-97928-20	1	T	00:57					X				X																		
280-97928-21	1	T	00:59					X				X																		
280-97928-22	1	T	01:02					X				X																		
CCVH 280-377054/62	1		01:04	X	X	X	X	X	X	X	X	X																		
CCV 280-377054/63	1		01:07	X	X	X	X	X	X	X	X	X																		
CCB 280-377054/64	1		01:09	X	X	X	X	X	X	X	X	X																		
CCVL 280-377054/65	1		01:12		X	X	X	X	X	X	X	X																		
ZZZZZZ			01:14																											
ZZZZZZ			01:17																											
ZZZZZZ			01:20																											
ZZZZZZ			01:22																											
ZZZZZZ			01:25																											
ZZZZZZ			01:27																											
CCVH 280-377054/72			01:29																											
CCV 280-377054/73			01:32																											
CCB 280-377054/74			01:34																											
ZZZZZZ			01:37																											
ZZZZZZ			01:40																											
ZZZZZZ			01:42																											
ZZZZZZ			01:45																											
ZZZZZZ			01:47																											
ZZZZZZ			01:50																											
ZZZZZZ			01:52																											
ZZZZZZ			01:55																											
ZZZZZZ			01:58																											
ZZZZZZ			02:00																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 06/12/2017 21:41 End Date: 06/13/2017 03:26

Lab Sample Id	D/F	Type	Time	Analytes																										
				As	Ba	Be	Ca	Cu	Fe	K	Na	Se																			
ZZZZZZ			02:03																											
CCVH 280-377054/86			02:05																											
CCV 280-377054/87			02:08																											
CCB 280-377054/88			02:11																											
ZZZZZZ			02:13																											
ZZZZZZ			02:16																											
ZZZZZZ			02:18																											
ZZZZZZ			02:21																											
ZZZZZZ			02:24																											
ZZZZZZ			02:26																											
ZZZZZZ			02:29																											
ZZZZZZ			02:32																											
ZZZZZZ			02:34																											
ZZZZZZ			02:37																											
ZZZZZZ			02:39																											
CCVH 280-377054/100			02:42																											
CCV 280-377054/101			02:44																											
CCB 280-377054/102			02:47																											
ZZZZZZ			02:49																											
ZZZZZZ			02:52																											
ZZZZZZ			02:55																											
ZZZZZZ			02:57																											
ZZZZZZ			03:00																											
ZZZZZZ			03:03																											
ZZZZZZ			03:05																											
ZZZZZZ			03:08																											
ZZZZZZ			03:10																											
ZZZZZZ			03:13																											
ZZZZZZ			03:16																											
CCVH 280-377054/114			03:18																											
CCV 280-377054/115			03:21																											
CCB 280-377054/116			03:23																											
ZZZZZZ			03:26																											

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 06/13/2017 08:02 End Date: 06/13/2017 14:34

Lab Sample Id	D/F	Type	Time	Analytes							
				Al	As	Ca	Ni	Pb	Sb	Se	Tl
ICIS 280-377162/1	1		08:02	X	X	X	X	X	X	X	X
IC 280-377162/2			08:05	X	X	X	X	X	X	X	X
IC 280-377162/3			08:07	X	X	X	X	X	X	X	X
ZZZZZZ			08:10								
ZZZZZZ			08:12								
ICVH 280-377162/6	1		08:15	X	X	X	X	X	X	X	X
ICVH 280-377162/7	1		08:18	X	X	X	X	X	X	X	X
ZZZZZZ			08:27								
ICV 280-377162/9	1		08:32	X	X	X	X	X	X	X	X
ICV 280-377162/10	1		08:34	X	X	X	X	X	X	X	X
ICVL 280-377162/11	1		08:38	X	X	X	X	X	X	X	X
CCVH 280-377162/12			08:44								
CCV 280-377162/13			08:46								
ICB 280-377162/14	1		08:49	X	X	X	X	X	X	X	X
CRI 280-377162/15	1		08:52	X		X	X				
CRI 280-377162/16	1		08:59					X	X		X
CRI 280-377162/17	1		09:05		X					X	
ICSA 280-377162/18	1		09:14	X	X	X	X	X	X	X	X
ICSAB 280-377162/19	1		09:21	X	X	X	X	X	X	X	X
LRA 280-377162/20			09:24								
CCVH 280-377162/21			09:27								
CCV 280-377162/22			09:29								
CCB 280-377162/23			09:32								
CCVL 280-377162/24			09:34								
ZZZZZZ			09:38								
ZZZZZZ			09:41								
ZZZZZZ			09:43								
ZZZZZZ			09:46								
ZZZZZZ			09:49								
ZZZZZZ			09:51								
ZZZZZZ			09:54								
ZZZZZZ			09:57								
CCVH 280-377162/33	1		09:59	X	X	X	X	X	X	X	X
CCV 280-377162/34	1		10:02	X	X	X	X	X	X	X	X
CCB 280-377162/35	1		10:05	X	X	X	X	X	X	X	X
ZZZZZZ			10:08								
CCVL 280-377162/37	1		10:13	X		X	X	X	X	X	X
CCVL 280-377162/38	1		10:16	X		X	X	X	X		X
MB 280-376380/1-A	1	T	10:20								X
LCS 280-376380/2-A	1	T	10:22								X
280-97928-1	1	T	10:25								X
280-97928-1 SD	5	T	10:27								X

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 06/13/2017 08:02 End Date: 06/13/2017 14:34

Lab Sample Id	D/F	Type	Time	Analytes																										
				Al	As	Ca	Ni	Pb	Sb	Se	Tl																			
280-97928-1 MS	1	T	10:33								X																			
280-97928-1 MSD	1	T	10:36								X																			
280-97928-1 PDS	1	T	10:38								X																			
280-97928-3	1	T	10:41								X																			
280-97928-4	1	T	10:43								X																			
CCVH 280-377162/48	1		10:46	X	X	X	X	X	X	X	X																			
CCV 280-377162/49	1		10:48	X	X	X	X	X	X	X	X																			
CCB 280-377162/50	1		10:51	X	X	X	X	X	X	X	X																			
CCVL 280-377162/51	1		10:54	X	X	X	X	X	X	X	X																			
280-97928-5	1	T	10:57								X																			
280-97928-6	1	T	11:00								X																			
280-97928-7	1	T	11:03								X																			
280-97928-8	1	T	11:05								X																			
280-97928-9	1	T	11:08								X																			
280-97928-10	1	T	11:11								X																			
280-97928-11	1	T	11:15	X							X																			
ZZZZZZ			11:18																											
280-97928-12	5	T	11:21		X	X	X	X	X	X	X																			
CCVH 280-377162/61	1		11:23	X	X	X	X	X	X	X	X																			
CCV 280-377162/62	1		11:26	X	X	X	X	X	X	X	X																			
CCB 280-377162/63	1		11:28	X	X	X	X	X	X	X	X																			
CCVL 280-377162/64	1		11:31	X	X	X	X	X	X	X	X																			
280-97928-14	1	T	11:34								X																			
280-97928-15	1	T	11:36								X																			
280-97928-16	1	T	11:39								X																			
280-97928-17	1	T	11:41	X							X																			
280-97928-18	1	T	11:44								X																			
280-97928-19	1	T	11:47								X																			
280-97928-20	1	T	11:49								X																			
280-97928-21	1	T	11:52								X																			
280-97928-22	1	T	11:54								X																			
ZZZZZZ			11:57																											
CCVH 280-377162/75	1		11:59	X	X	X	X	X	X	X	X																			
CCV 280-377162/76	1		12:02	X	X	X	X	X	X	X	X																			
CCB 280-377162/77	1		12:05	X	X	X	X	X	X	X	X																			
ZZZZZZ			12:07																											
CCVL 280-377162/79	1		12:13	X	X	X	X	X	X	X	X																			
CCVL 280-377162/80	1		12:15	X		X	X	X	X	X	X																			
ZZZZZZ			12:29																											
ZZZZZZ			12:31																											
ZZZZZZ			12:34																											
ZZZZZZ			12:36																											

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: MT_025 Analysis Method: 6010C

Start Date: 06/13/2017 08:02 End Date: 06/13/2017 14:34

Lab Sample Id	D/F	Type	Time	Analytes																								
				Al	As	Ca	Ni	Pb	Sb	Se	Tl																	
ZZZZZZ			12:39																									
ZZZZZZ			12:42																									
ZZZZZZ			12:44																									
ZZZZZZ			12:47																									
ZZZZZZ			12:49																									
CCVH 280-377162/90			12:52																									
CCV 280-377162/91			12:54																									
CCB 280-377162/92			12:57																									
CCVL 280-377162/93			13:00																									
ZZZZZZ			13:19																									
ZZZZZZ			13:22																									
ZZZZZZ			13:24																									
ZZZZZZ			13:27																									
ZZZZZZ			13:30																									
ZZZZZZ			13:32																									
ZZZZZZ			13:35																									
ZZZZZZ			13:38																									
CCVH 280-377162/102			13:40																									
CCV 280-377162/103			13:43																									
CCB 280-377162/104			13:45																									
CCVL 280-377162/105			13:48																									
ZZZZZZ			13:50																									
ZZZZZZ			13:53																									
ZZZZZZ			13:56																									
ZZZZZZ			13:58																									
ZZZZZZ			14:00																									
ZZZZZZ			14:03																									
ZZZZZZ			14:05																									
ZZZZZZ			14:08																									
ZZZZZZ			14:11																									
ZZZZZZ			14:13																									
CCVH 280-377162/116			14:16																									
CCV 280-377162/117			14:18																									
CCB 280-377162/118			14:21																									
CCVL 280-377162/119			14:23																									
ZZZZZZ			14:26																									
ZZZZZZ			14:29																									
ZZZZZZ			14:31																									
ZZZZZZ			14:34																									

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: MT_034 Analysis Method: 7471A

Start Date: 06/14/2017 14:44 End Date: 06/14/2017 18:00

Lab Sample Id	D/F	Type	Time	Analytes
				Hg
STD0 280-377403/1 IC			14:44	X
STD1 280-377403/2 IC			14:46	X
STD2 280-377403/3 IC			14:48	X
STD3 280-377403/4 IC			14:50	X
STD4 280-377403/5 IC			14:53	X
STD5 280-377403/6 IC			14:55	X
STD6 280-377403/7 IC			14:57	X
ICV 280-377403/8	1		14:59	X
ICB 280-377403/9	1		15:02	X
CRA 280-377403/10			15:04	
CCV 280-377403/11			15:06	
CCB 280-377403/12			15:08	
ZZZZZZ			15:11	
ZZZZZZ			15:13	
ZZZZZZ			15:15	
ZZZZZZ			15:17	
ZZZZZZ			15:19	
ZZZZZZ			15:22	
ZZZZZZ			15:24	
ZZZZZZ			15:26	
ZZZZZZ			15:28	
ZZZZZZ			15:31	
CCV 280-377403/23			15:33	
CCB 280-377403/24			15:35	
ZZZZZZ			15:37	
ZZZZZZ			15:40	
ZZZZZZ			15:42	
ZZZZZZ			15:44	
ZZZZZZ			15:46	
ZZZZZZ			15:48	
ZZZZZZ			15:51	
ZZZZZZ			15:53	
ZZZZZZ			15:55	
ZZZZZZ			15:57	
CCV 280-377403/35			16:00	
CCB 280-377403/36			16:02	
ZZZZZZ			16:04	
ZZZZZZ			16:06	
ZZZZZZ			16:09	
ZZZZZZ			16:11	
ZZZZZZ			16:13	
ZZZZZZ			16:15	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: MT_034 Analysis Method: 7471A

Start Date: 06/14/2017 14:44 End Date: 06/14/2017 18:00

Lab Sample Id	D/F	Type	Time	Analytes
				Hg
ZZZZZZ			16:17	
ZZZZZZ			16:20	
ZZZZZZ			16:22	
ZZZZZZ			16:24	
CCV 280-377403/47	1		16:26	X
CCB 280-377403/48	1		16:29	X
ZZZZZZ			16:31	
ZZZZZZ			16:33	
ZZZZZZ			16:35	
ZZZZZZ			16:37	
ZZZZZZ			16:40	
ZZZZZZ			16:42	
ZZZZZZ			16:44	
MB 280-377156/1-A	1	T	16:46	X
LCS 280-377156/2-A	1	T	16:49	X
280-97928-1	1	T	16:51	X
CCV 280-377403/59	1		16:53	X
CCB 280-377403/60	1		16:55	X
280-97928-1 SD	5	T	16:58	X
280-97928-1 MS	1	T	17:00	X
280-97928-1 MSD	1	T	17:02	X
280-97928-1 PDS	1	T	17:04	X
280-97928-3	1	T	17:06	X
280-97928-4	1	T	17:09	X
280-97928-5	1	T	17:11	X
280-97928-6	1	T	17:13	X
280-97928-7	1	T	17:15	X
280-97928-8	1	T	17:18	X
CCV 280-377403/71	1		17:20	X
CCB 280-377403/72	1		17:22	X
280-97928-9	1	T	17:24	X
280-97928-10	1	T	17:26	X
280-97928-11	1	T	17:29	X
280-97928-12	1	T	17:31	X
280-97928-14	1	T	17:33	X
280-97928-15	1	T	17:35	X
280-97928-16	1	T	17:38	X
280-97928-17	1	T	17:40	X
280-97928-18	1	T	17:42	X
280-97928-19	1	T	17:44	X
CCV 280-377403/83	1		17:47	X
CCB 280-377403/84	1		17:49	X

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: MT_034 Analysis Method: 7471A

Start Date: 06/14/2017 14:44 End Date: 06/14/2017 18:00

Lab Sample Id	D/F	Type	Time	Analytes																								
				Hg																								
280-97928-20	1	T	17:51	X																								
280-97928-21	1	T	17:53	X																								
280-97928-22	1	T	17:56	X																								
CCV 280-377403/88	1		17:58	X																								
CCB 280-377403/89	1		18:00	X																								

Prep Types:
T = Total/NA

FORM XIII-IN

METALS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Batch Number: 376380 Batch Start Date: 06/08/17 14:00 Batch Analyst: Johnson, Sarah E

Batch Method: 3050B Batch End Date: 06/08/17 19:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	InitialAmount	FinalAmount	ICP SPK 2B 00062	ICP SPK 3A 00133	AnalysisComment
MB 280-376380/1		3050B, 6010C		CALC NOT SET TO RUN	1 g	100 mL			actual: 1.105
LCS 280-376380/2		3050B, 6010C		CALC NOT SET TO RUN	1 g	100 mL	1 mL	1 mL	actual: 1.176
280-97928-C-1	SS025-SS07	3050B, 6010C	T	CALC NOT SET TO RUN	1.035 g	100 mL			
280-97928-C-1 MS	SS025-SS07	3050B, 6010C	T	CALC NOT SET TO RUN	1.298 g	100 mL	1 mL	1 mL	
280-97928-C-1 MSD	SS025-SS07	3050B, 6010C	T	CALC NOT SET TO RUN	1.225 g	100 mL	1 mL	1 mL	
280-97928-C-3	SS025-SB06(0-2)	3050B, 6010C	T	CALC NOT SET TO RUN	1.003 g	100 mL			
280-97928-B-4	SS025-SB06(2-4)	3050B, 6010C	T	CALC NOT SET TO RUN	1.049 g	100 mL			
280-97928-C-5	SS025-SS08	3050B, 6010C	T	CALC NOT SET TO RUN	1.076 g	100 mL			
280-97928-C-6	SS025-SB07(0-2)	3050B, 6010C	T	CALC NOT SET TO RUN	1.177 g	100 mL			
280-97928-C-7	SS025-SB07(2-4)	3050B, 6010C	T	CALC NOT SET TO RUN	1.004 g	100 mL			
280-97928-C-8	SS025-SB01(0-2)	3050B, 6010C	T	CALC NOT SET TO RUN	1.448 g	100 mL			
280-97928-B-9	SS025-SB01(0-2) -a	3050B, 6010C	T	CALC NOT SET TO RUN	1.259 g	100 mL			
280-97928-A-10	SS025-SB08(0-2)	3050B, 6010C	T	CALC NOT SET TO RUN	1.397 g	100 mL			
280-97928-A-11	SS025-SB08(2-4)	3050B, 6010C	T	CALC NOT SET TO RUN	1.476 g	100 mL			
280-97928-B-12	SS025-SS09	3050B, 6010C	T	CALC NOT SET TO RUN	1.257 g	100 mL			
280-97928-C-14	SS025-SB09(0-2)	3050B, 6010C	T	CALC NOT SET TO RUN	1.412 g	100 mL			
280-97928-A-15	SS025-SB09(2-4)	3050B, 6010C	T	CALC NOT SET TO RUN	1.317 g	100 mL			
280-97928-B-16	SS025-SB09(4-6)	3050B, 6010C	T	CALC NOT SET TO RUN	1.211 g	100 mL			
280-97928-C-17	SS025-SB09(6-8)	3050B, 6010C	T	CALC NOT SET TO RUN	1.331 g	100 mL			
280-97928-A-18	SS025-SB10(0-2)	3050B, 6010C	T	CALC NOT SET TO RUN	1.031 g	100 mL			
280-97928-C-19	SS025-SB10(2-4)	3050B, 6010C	T	CALC NOT SET TO RUN	1.196 g	100 mL			

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Batch Number: 376380 Batch Start Date: 06/08/17 14:00 Batch Analyst: Johnson, Sarah E

Batch Method: 3050B Batch End Date: 06/08/17 19:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	CalcMsg	InitialAmount	FinalAmount	ICP SPK 2B 00062	ICP SPK 3A 00133	AnalysisComment
280-97928-B-20	SS025-SB10(4-6)	3050B, 6010C	T	CALC NOT SET TO RUN	1.255 g	100 mL			
280-97928-B-21	SS025-SB10(2-4) -a	3050B, 6010C	T	CALC NOT SET TO RUN	1.079 g	100 mL			
280-97928-B-22	SS025-SS10	3050B, 6010C	T	CALC NOT SET TO RUN	1.179 g	100 mL			

Batch Notes	
Balance ID	26950384
Filter Paper ID	9752724
Hydrogen Peroxide ID	0000134024-01/31
Lot # of hydrochloric acid	000151528-07/21
Lot # of Nitric Acid	0000160739-06/21
Hot Block ID	11
Oven, Bath or Block Temperature 1	90 Degrees C
Oven, Bath or Block Temperature 2	90 Degrees C
Pipette ID	MET-89
Thermometer ID	QA-30
Digestion Tube/Cup ID	1605323
Uncorrected Temperature	90 Celsius
Uncorrected Temperature 2	90 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Batch Number: 377156 Batch Start Date: 06/14/17 12:49 Batch Analyst: Henning, Christopher D

Batch Method: 7471A Batch End Date: 06/14/17 13:19

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Hg Daily Spk 01942	AnalysisComment		
MB 280-377156/1		7471A, 7471A		0.6 g	50 mL		Glass Beads: 0.55g		
LCS 280-377156/2		7471A, 7471A		0.6 g	50 mL	2 mL	Glass Beads: 0.51g		
280-97928-C-1	SS025-SS07	7471A, 7471A	T	0.51 g	50 mL				
280-97928-C-1 MS	SS025-SS07	7471A, 7471A	T	0.56 g	50 mL	2 mL			
280-97928-C-1 MSD	SS025-SS07	7471A, 7471A	T	0.52 g	50 mL	2 mL			
280-97928-C-3	SS025-SB06(0-2)	7471A, 7471A	T	0.56 g	50 mL				
280-97928-B-4	SS025-SB06(2-4)	7471A, 7471A	T	0.50 g	50 mL				
280-97928-C-5	SS025-SS08	7471A, 7471A	T	0.53 g	50 mL				
280-97928-C-6	SS025-SB07(0-2)	7471A, 7471A	T	0.53 g	50 mL				
280-97928-C-7	SS025-SB07(2-4)	7471A, 7471A	T	0.50 g	50 mL				
280-97928-C-8	SS025-SB01(0-2)	7471A, 7471A	T	0.55 g	50 mL				
280-97928-B-9	SS025-SB01(0-2) -a	7471A, 7471A	T	0.51 g	50 mL				
280-97928-A-10	SS025-SB08(0-2)	7471A, 7471A	T	0.58 g	50 mL				
280-97928-A-11	SS025-SB08(2-4)	7471A, 7471A	T	0.58 g	50 mL				
280-97928-B-12	SS025-SS09	7471A, 7471A	T	0.55 g	50 mL				
280-97928-C-14	SS025-SB09(0-2)	7471A, 7471A	T	0.56 g	50 mL				
280-97928-A-15	SS025-SB09(2-4)	7471A, 7471A	T	0.50 g	50 mL				
280-97928-B-16	SS025-SB09(4-6)	7471A, 7471A	T	0.56 g	50 mL				
280-97928-C-17	SS025-SB09(6-8)	7471A, 7471A	T	0.52 g	50 mL				
280-97928-A-18	SS025-SB10(0-2)	7471A, 7471A	T	0.51 g	50 mL				
280-97928-A-19	SS025-SB10(2-4)	7471A, 7471A	T	0.52 g	50 mL				
280-97928-A-20	SS025-SB10(4-6)	7471A, 7471A	T	0.60 g	50 mL				
280-97928-A-21	SS025-SB10(2-4) -a	7471A, 7471A	T	0.51 g	50 mL				
280-97928-A-22	SS025-SS10	7471A, 7471A	T	0.50 g	50 mL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Batch Number: 377156 Batch Start Date: 06/14/17 12:49 Batch Analyst: Henning, Christopher D

Batch Method: 7471A Batch End Date: 06/14/17 13:19

Batch Notes	
Hydroxylamine Hydrochloride ID	164843-06/13/17
Aqua Regia ID	162118-06/14/17
Balance ID	24750837
Filter ID	9782091
Lot # of hydrochloric acid	162118-06/14/17
Lot # of Nitric Acid	165099-06/14/17
Hot Block ID	13
Potassium Permanganate ID	156411-06/14/17
NaCl ID	167535-04/12/17
Oven, Bath or Block Temperature 1	93 Celsius
Oven, Bath or Block Temperature 2	92 Celsius
Pipette ID	MET70
Stannous Chloride ID	169502-06/13/17
SOP Number	DVMT0016
Syringe ID	7053757
Thermometer ID	QA-8
Digestion Tube/Cup ID	1610138
Uncorrected Temperature	93 Celsius
Uncorrected Temperature 2	92 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Sample Name: ICIS Acquired: 6/9/2017 7:05:17 Type: Cal
Method: 6500_025 Mode: IR Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00118**	**.00202**	**-.01231**	**-.00042**	**.00061**	**.02162**	**-.00651**	**-.00228**	**.00061**	**-.00086**	**-.00002**	**-.00079**
Stddev	.00000	.00001	.00039	.00006	.00039	.00003	.00076	.00020	.00022	.00016	.00011	.00021
%RSD	.20231	.62624	3.1566	14.332	62.804	.13350	11.735	8.7466	36.716	18.374	672.07	26.071
#1	-.00117	.00203	-.01258	-.00038	.00089	.02164	-.00705	-.00242	.00076	-.00097	.00006	-.00094
#2	-.00118	.00201	-.01204	-.00046	.00034	.02160	-.00597	-.00214	.00045	-.00074	-.00010	-.00064

Elem	Cu3247	Fe2599	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00601**	**-.00043**	**-.00000**	**.00666**	**-.00013**	**.00004**	**.00003**	**-.00058**	**.02335**	**.00864**	**.00157**	**-.00000**
Stddev	.00032	.00022	.00033	.00035	.00276	.00008	.00005	.00001	.00151	.00054	.00033	.00003
%RSD	5.3437	50.697	7597.7	5.3049	2150.6	200.62	183.07	2.5216	6.4499	6.2161	21.097	1097.2
#1	.00624	-.00027	.00023	.00641	-.00208	.00009	-.00001	-.00057	.02442	.00902	.00180	-.00003
#2	.00578	-.00058	-.00024	.00691	.00182	-.00002	.00007	-.00059	.02229	.00826	.00134	.00002

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00169**	**.00088**	**.00067**	**.00038**	**.00097**	**.00097**	**.00028**	**-.00916**	**.00001**	**-.00026**	**-.00040**	**.00055**
Stddev	.00038	.00011	.00009	.00012	.00010	.00010	.00010	.00006	.00003	.00005	.00015	.00000
%RSD	22.196	12.706	13.243	32.853	9.9246	9.9246	35.768	.61325	480.14	17.800	36.674	.30562
#1	-.00142	.00080	.00073	.00047	.00090	.00090	.00021	-.00920	.00003	-.00023	-.00051	.00055
#2	-.00196	.00096	.00061	.00029	.00104	.00104	.00035	-.00912	-.00002	-.00029	-.00030	.00055

Elem	V_2924	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S
Avg	**-.00038**	**.00002**	**.00010**
Stddev	.00004	.00001	.00026
%RSD	10.514	57.034	254.86
#1	-.00036	.00001	.00029
#2	-.00041	.00003	-.00008

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2326.9**	**53428.**	**4440.4**
Stddev	2.1	311.	23.2
%RSD	.09233	.58292	.52176
#1	2325.4	53649.	4456.8
#2	2328.4	53208.	4424.0

Sample Name: ICAL1 Acquired: 6/9/2017 7:07:57 Type: Cal
Method: 6500_025 Mode: IR Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.18536**	**.15397**	**.06204**	**.24852**	**5.6349**	**4.6079**	**1.2413**	**1.6506**	**.92863**	**.73916**	**.22539**	**.35736**	**3.5293**
Stddev	.00019	.00140	.00042	.00169	.0022	.0188	.0024	.0110	.00706	.00825	.00061	.00015	.0027
%RSD	.10508	.91079	.66921	.68114	.03997	.40723	.19516	.66317	.75982	1.1157	.27050	.04190	.07554
#1	.18522	.15496	.06233	.24971	5.6365	4.6212	1.2430	1.6583	.93362	.74499	.22496	.35747	3.5312
#2	.18549	.15297	.06174	.24732	5.6333	4.5947	1.2396	1.6429	.92364	.73333	.22582	.35726	3.5274

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.8822**	**.63834**	**.90993**	**.34124**	**1.4894**	**.62286**	**.08644**	**.35955**	**.15912**	**.05553**	**.18023**	**.18023**	**.15760**
Stddev	.0100	.00001	.00002	.00237	.0046	.00556	.00097	.00281	.00127	.00042	.00099	.00099	.00159
%RSD	.52970	.00108	.00190	.69509	.31230	.89297	1.1265	.78224	.79744	.75295	.54735	.54735	1.0094
#1	1.8892	.63834	.90992	.34292	1.4927	.62679	.08712	.36154	.16002	.05583	.17953	.17953	.15872
#2	1.8751	.63835	.90994	.33956	1.4861	.61892	.08575	.35756	.15823	.05523	.18092	.18092	.15647

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**9.3328**	**.29209**	**.11615**	**.15357**	**.01561**	**.28184**
Stddev	.0264	.00019	.00087	.00041	.00003	.00047
%RSD	.28271	.06521	.75102	.26952	.19255	.16652
#1	9.3515	.29223	.11676	.15328	.01559	.28151
#2	9.3142	.29196	.11553	.15387	.01564	.28217

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2292.4**	**51749.**	**4451.1**
Stddev	1.7	198.	.7
%RSD	.07300	.38268	.01658
#1	2291.2	51889.	4451.7
#2	2293.6	51609.	4450.6

Sample Name: ICAL2 Acquired: 6/9/2017 7:10:24 Type: Cal
Method: 6500_025 Mode: IR Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Al3092	Bi2230	Fe2714	Na8183	S_1820	Th2837	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.3396**	**.24573**	**.38990**	**2.0301**	**.20843**	**.43416**	**.11864**
Stddev	.0040	.00471	.00186	.0054	.00332	.00088	.00074
%RSD	.11900	1.9168	.47633	.26741	1.5938	.20169	.62027
#1	3.3368	.24906	.38859	2.0262	.21078	.43478	.11917
#2	3.3424	.24240	.39122	2.0339	.20608	.43354	.11812

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2334.9**	**52155.**	**4668.7**
Stddev	5.3	188.	10.8
%RSD	.22667	.36115	.23139
#1	2331.1	52022.	4661.1
#2	2338.6	52288.	4676.3

Sample Name: S1-4567763 Acquired: 6/9/2017 7:13:04 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0033**	**1.0029**	**2.0180**	**1.0033**	**.99979**	**.99960**	**-.00305**	**9.9835**	**1.0041**	**.99930**	**.99816**	**1.0191**	**5.0500**
Stddev	.0027	.0150	.0296	.0126	.00424	.00152	.00245	.0111	.0116	.01614	.01730	.0002	.0003
%RSD	.26530	1.4920	1.4678	1.2575	.42454	.15241	80.234	.11136	1.1537	1.6151	1.7327	.01540	.00527
#1	1.0052	1.0135	2.0390	1.0122	.99679	.99852	-.00478	9.9756	1.0122	1.0107	1.0104	1.0190	5.0502
#2	1.0014	.99233	1.9971	.99434	1.0028	1.0007	-.00132	9.9913	.99586	.98789	.98593	1.0192	5.0498
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**99.482**	**1.9906**	**39.902**	**1.0043**	**.99982**	**10.117**	**10.183**	**1.0027**	**2.0171**	**1.9900**	**.00026**	**2.0100**	**2.0199**
Stddev	.138	.0018	.108	.0026	.01908	.082	.207	.0162	.0280	.0297	.00678	.0359	.0345
%RSD	.13845	.08879	.26950	.25632	1.9088	.81516	2.0291	1.6173	1.3890	1.4914	2638.6	1.7864	1.7053
#1	99.385	1.9894	39.978	1.0061	1.0133	10.176	10.329	1.0141	2.0369	2.0110	-.00454	2.0354	2.0443
#2	99.580	1.9919	39.826	1.0025	.98633	10.059	10.037	.99120	1.9973	1.9690	.00505	1.9846	1.9956
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value													
Range													

Elem	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.8536**	**21.087**	**1.9918**	**.99941**	**.00699**	**1.0040**	**1.9968**	**.01720**	**1.0049**	**1.0006**	**1.0130**
Stddev	.0146	.031	.0238	.00258	.00034	.0009	.0239	.02279	.0001	.0037	.0004
%RSD	.14805	.14805	1.1969	.25787	4.8253	.09249	1.1987	132.51	.00965	.37387	.03823
#1	9.8640	21.109	2.0087	.99759	.00722	1.0033	2.0137	.00108	1.0048	1.0033	1.0127
#2	9.8433	21.065	1.9750	1.0012	.00675	1.0046	1.9799	.03331	1.0049	.99797	1.0133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2362.8**	**52962.**	**4652.3**
Stddev	4.7	175.	4.2
%RSD	.19777	.33001	.09125
#1	2359.5	52838.	4649.3
#2	2366.1	53086.	4655.3

Sample Name: S2-4579428 Acquired: 6/9/2017 7:15:30 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01601**	**100.27**	**.00776**	**.00525**	**.00132**	**.00044**	**2.0058**	**.00514**	**.00139**	**-.00086**	**.00115**	**.03838**	**100.46**
Stddev	.00036	.10	.00063	.00012	.00018	.00014	.0256	.00286	.00115	.00094	.00052	.00022	.09
%RSD	2.2661	.10459	8.0837	2.3548	13.983	31.323	1.2752	55.528	83.287	109.57	45.183	.57508	.08699
#1	-.01627	100.20	.00731	.00534	.00119	.00053	2.0238	.00716	.00057	-.00153	.00079	.03854	100.40
#2	-.01576	100.34	.00820	.00516	.00145	.00034	1.9877	.00312	.00220	-.00019	.00152	.03823	100.52
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.08895**	**.00112**	**.17957**	**-.00349**	**-.00344**	**503.61**	**.00373**	**.01287**	**.00243**	**10.074**	**-.01739**	**-.00830**	**-.06127**
Stddev	.00802	.00047	.01193	.00003	.00135	.55	.00090	.00557	.00158	.103	.00066	.00024	.01023
%RSD	9.0111	41.726	6.6419	.85269	39.272	.10839	24.212	43.249	64.733	1.0204	3.8236	2.8768	16.703
#1	.09462	.00079	.17114	-.00347	-.00440	503.99	.00309	.00893	.00355	10.147	-.01786	-.00847	-.05403
#2	.08328	.00144	.18800	-.00351	-.00249	503.22	.00436	.01680	.00132	10.002	-.01692	-.00813	-.06851
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.13112**	**-.00211**	**.00101**	**9.9932**	**.04076**	**.00232**	**20.160**	**.02865**	**.00191**	**.21198**
Stddev	.02190	.00008	.00009	.0117	.00011	.00009	.027	.00112	.00081	.00013
%RSD	16.703	3.9149	8.4653	.11718	.26008	3.7564	.13311	3.9220	42.712	.06004
#1	-.11563	-.00205	.00107	10.001	.04069	.00238	20.179	.02786	.00133	.21207
#2	-.14660	-.00217	.00095	9.9849	.04084	.00226	20.141	.02945	.00248	.21189
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2345.4**	**51751.**	**4616.0**
Stddev	21.8	99.	37.6
%RSD	.92817	.19117	.81558
#1	2330.0	51681.	4589.3
#2	2360.8	51821.	4642.6

Sample Name: ICVH-4569263 Acquired: 6/9/2017 7:18:10 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00488**	**40.471**	**.00504**	**.00147**	**.00019**	**-.00001**	**.52548**	**.00645**	**-.00015**	**.00060**	**.00105**	**.01054**	**79.622**
Stddev	.00032	.282	.00275	.00004	.00042	.00009	.01514	.00274	.00045	.00035	.00013	.00027	.013
%RSD	6.5144	.69728	54.512	2.9938	215.90	1069.1	2.8810	42.499	300.11	58.343	12.850	2.6051	.01614
#1	-.00510	40.671	.00310	.00144	.00049	-.00007	.53618	.00838	.00017	.00084	.00095	.01074	79.631
#2	-.00465	40.272	.00698	.00150	-.00010	.00005	.51477	.00451	-.00046	.00035	.00114	.01035	79.613
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.03792**	**.00082**	**.05066**	**-.00120**	**-.00160**	**41.653**	**-.00009**	**.00429**	**.00232**	**3.9778**	**-.00770**	**-.00241**	**-.03253**
Stddev	.06239	.00100	.01186	.00004	.00038	.474	.00015	.00123	.00334	.0827	.00118	.00603	.02599
%RSD	164.54	120.86	23.419	3.6061	23.571	1.1377	163.76	28.714	143.67	2.0799	15.328	249.68	79.894
#1	.00620	.00153	.04227	-.00117	-.00186	41.988	-.00020	.00342	.00469	4.0363	-.00687	-.00667	-.01415
#2	-.08203	.00012	.05905	-.00123	-.00133	41.318	.00001	.00516	-.00004	3.9193	-.00853	.00185	-.05091
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.06961**	**.00084**	**.00030**	**3.0430**	**.01212**	**.00359**	**5.2128**	**.00831**	**-.00075**	**.06233**
Stddev	.05562	.00115	.00008	.0109	.00028	.00158	.0565	.00016	.00027	.00252
%RSD	79.894	136.05	25.993	.35667	2.3099	43.979	1.0833	1.9508	36.368	4.0412
#1	-.03029	.00166	.00024	3.0506	.01231	.00247	5.2527	.00819	-.00056	.06055
#2	-.10894	.00003	.00035	3.0353	.01192	.00471	5.1729	.00842	-.00094	.06411
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2479.9**	**56346.**	**4965.9**
Stddev	16.6	277.	82.2
%RSD	.66759	.49086	1.6560
#1	2491.6	56541.	4907.7
#2	2468.2	56150.	5024.0

Sample Name: ICVH-4569263 Acquired: 6/9/2017 7:20:46 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00541**	**40.232**	**-.00099**	**.00003**	**-.00024**	**.00003**	**.51330**	**.00499**	**-.00004**	**.00056**	**.00112**	**.00945**	**79.480**
Stddev	.00022	.054	.00688	.00101	.00039	.00015	.00961	.00020	.00008	.00005	.00002	.00048	.040
%RSD	4.1242	.13327	697.81	3282.7	162.20	528.33	1.8727	4.0061	199.66	8.0229	1.8155	5.0371	.04993
#1	-.00525	40.270	-.00585	-.00069	-.00052	.00014	.52009	.00485	-.00009	.00060	.00113	.00979	79.452
#2	-.00557	40.194	.00388	.00075	.00004	-.00008	.50650	.00513	.00002	.00053	.00110	.00912	79.508
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.02638**	**.00051**	**.05438**	**-.00130**	**-.00188**	**40.779**	**.00046**	**.00503**	**.00151**	**3.8940**	**-.00565**	**-.00203**	**-.01930**
Stddev	.10178	.00117	.00221	.00001	.00044	.178	.00109	.00308	.00103	.0795	.00282	.00869	.01138
%RSD	385.80	227.37	4.0655	.95494	23.203	.43628	238.21	61.157	67.905	2.0422	49.908	427.81	58.991
#1	.04559	-.00031	.05594	-.00129	-.00157	40.905	.00123	.00721	.00079	3.9502	-.00365	.00411	-.01125
#2	-.09835	.00134	.05281	-.00130	-.00219	40.653	-.00031	.00286	.00224	3.8377	-.00764	-.00817	-.02735
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.04130**	**-.00246**	**.00020**	**3.0165**	**.01182**	**-.00079**	**5.1064**	**.00780**	**-.00080**	**.06240**
Stddev	.02436	.00221	.00009	.0110	.00001	.00557	.0288	.00000	.00070	.00288
%RSD	58.991	89.857	47.859	.36369	.06142	706.49	.56325	.04663	86.852	4.6179
#1	-.02407	-.00090	.00026	3.0242	.01181	.00315	5.1267	.00781	-.00130	.06036
#2	-.05853	-.00402	.00013	3.0087	.01183	-.00473	5.0860	.00780	-.00031	.06444
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2520.0**	**55816.**	**4851.2**
Stddev	33.6	526.	26.9
%RSD	1.3337	.94161	.55532
#1	2543.8	55445.	4832.1
#2	2496.3	56188.	4870.2

Sample Name: ICV-4576614 Acquired: 6/9/2017 7:24:13 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25295**	**.26273**	W **.26452**	**.25973**	**.24779**	**.24775**	**.00259**	**1.9447**	**.25895**	**.25745**	**.25622**	**.26231**
Stddev	.00023	.00276	.00318	.00026	.00036	.00008	.00021	.0072	.00040	.00049	.00029	.00017
%RSD	.09026	1.0507	1.2017	.09836	.14396	.03302	7.9863	.36786	.15426	.19186	.11234	.06490
#1	.25279	.26468	.26676	.25955	.24754	.24769	.00244	1.9396	.25923	.25780	.25601	.26243
#2	.25311	.26078	.26227	.25991	.24805	.24780	.00273	1.9497	.25866	.25711	.25642	.26219
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.25000									
Range			5.4900%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.26417**	**19.749**	**.25141**	**10.023**	**.25834**	**.24342**	**1.9799**	**.26121**	**2.0585**	**.25740**	**.00129**	W **.26766**
Stddev	.00400	.138	.00413	.111	.00057	.00025	.0039	.00091	.0094	.00074	.01197	.00730
%RSD	1.5150	.70015	1.6443	1.1066	.22235	.10100	.19536	.34877	.45529	.28707	929.22	2.7261
#1	.26700	19.652	.24849	9.9441	.25793	.24359	1.9827	.26185	2.0651	.25793	.00975	.27282
#2	.26134	19.847	.25434	10.101	.25874	.24325	1.9772	.26057	2.0519	.25688	-.00717	.26250
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn
Value	.25000											.25000
Range	5.4900%											5.4900%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.52030**	**1.9316**	**4.1336**	**.51146**	**.25099**	**.00186**	**.24931**	W **.53435**	**-.01521**	**.25390**	**.24676**	**.24719**
Stddev	.00437	.0239	.0511	.00217	.00077	.00283	.00023	.00896	.01742	.00106	.00064	.00429
%RSD	.83980	1.2371	1.2371	.42461	.30711	152.31	.09270	1.6760	114.53	.41709	.25852	1.7375
#1	.51721	1.9147	4.0975	.50992	.25045	-.00014	.24914	.54068	-.02753	.25465	.24721	.25022
#2	.52339	1.9485	4.1698	.51299	.25154	.00386	.24947	.52802	-.00289	.25315	.24631	.24415
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	None	Chk Pass	Chk Pass	Chk Pass
Value								.50000				
Range								5.4900%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2487.0**	**56605.**	**5107.2**
Stddev	8.8	788.	8.6
%RSD	.35394	1.3924	.16926
#1	2480.8	57163.	5113.3
#2	2493.3	56048.	5101.0

Sample Name: ICV-4576614 Acquired: 6/9/2017 7:27:12 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25298**	W **.26667**	W **.26521**	**.25679**	**.24838**	**.24745**	**.00106**	**1.9538**	**.25537**	**.25589**	**.25409**	**.26012**
Stddev	.00071	.00989	.00047	.00060	.00001	.00016	.00402	.0091	.00008	.00024	.00003	.00098
%RSD	.28007	3.7089	.17536	.23433	.00295	.06526	380.51	.46312	.03066	.09195	.01023	.37704
#1	.25348	.27367	.26554	.25721	.24839	.24757	.00390	1.9602	.25543	.25572	.25411	.26081
#2	.25248	.25968	.26488	.25636	.24838	.24734	-.00178	1.9474	.25532	.25606	.25407	.25942
Check ?	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.25000	.25000									
Range		5.4900%	5.4900%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25662**	**19.983**	**.25332**	**10.059**	**.26056**	**.24026**	**1.9886**	**.25921**	**2.0302**	**.25396**	**-.00396**	W **.26549**
Stddev	.00252	.065	.00254	.001	.00114	.00204	.0103	.00050	.0005	.00058	.00829	.00012
%RSD	.98105	.32315	1.0017	.01430	.43896	.84874	.51745	.19219	.02642	.22642	209.03	.04631
#1	.25840	20.029	.25511	10.060	.26137	.24171	1.9959	.25957	2.0298	.25356	.00190	.26557
#2	.25484	19.937	.25153	10.058	.25975	.23882	1.9813	.25886	2.0305	.25437	-.00983	.26540
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn
Value												.25000
Range												5.4900%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51175**	**1.9431**	**4.1582**	**.50216**	**.25104**	**-.00045**	**.25127**	**.52740**	**.02789**	**.25525**	**.25115**	**.24997**
Stddev	.00589	.0342	.0732	.00377	.00015	.00229	.00132	.00570	.04579	.00001	.00056	.00056
%RSD	1.1509	1.7605	1.7605	.75149	.06098	513.07	.52490	1.0806	164.17	.00216	.22250	.22394
#1	.51591	1.9673	4.2099	.49949	.25093	-.00207	.25220	.53143	.06026	.25525	.25154	.24957
#2	.50758	1.9189	4.1064	.50483	.25115	.00118	.25034	.52337	-.00449	.25525	.25075	.25036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2466.2**	**54816.**	**4686.0**
Stddev	6.4	325.	6.2
%RSD	.26144	.59225	.13160
#1	2470.8	54587.	4681.6
#2	2461.6	55046.	4690.3

Sample Name: ICV-4576614 Acquired: 6/9/2017 7:33:14 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25320**	**.26247**	**.25413**	**.25775**	**.24656**	**.24593**	**-.00265**	**1.9296**	**.25513**	**.25444**	**.25132**	**.26176**
Stddev	.00114	.00104	.00142	.00059	.00081	.00070	.00238	.0050	.00008	.00029	.00021	.00087
%RSD	.44925	.39596	.55813	.22939	.32702	.28558	89.952	.26104	.03286	.11351	.08206	.33325
#1	.25240	.26174	.25514	.25817	.24599	.24543	-.00096	1.9261	.25507	.25424	.25146	.26115
#2	.25401	.26320	.25313	.25733	.24713	.24643	-.00433	1.9332	.25519	.25465	.25117	.26238
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25532**	**19.924**	**.25174**	**9.9726**	**.25844**	**.23962**	**1.9841**	**.25737**	**2.0363**	**.25427**	**-.00532**	W **.26581**
Stddev	.00246	.028	.00012	.0274	.00016	.00030	.0043	.00147	.0038	.00048	.00410	.00031
%RSD	.96337	.13844	.04738	.27464	.06093	.12685	.21601	.57056	.18806	.18817	76.995	.11487
#1	.25358	19.905	.25183	9.9533	.25855	.23983	1.9871	.25633	2.0390	.25393	-.00822	.26559
#2	.25706	19.944	.25166	9.9920	.25833	.23940	1.9811	.25841	2.0336	.25461	-.00242	.26602
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn
Value												.25000
Range												5.4900%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50777**	**1.9421**	**4.1560**	**.50069**	**.24857**	**.00196**	**.24860**	**.52574**	**.02504**	**.25283**	**.24739**	**.24738**
Stddev	.00865	.0264	.0565	.00206	.00098	.00217	.00024	.00381	.02322	.00030	.00111	.00182
%RSD	1.7030	1.3583	1.3583	.41166	.39249	110.89	.09487	.72379	92.745	.11808	.44954	.73771
#1	.51388	1.9234	4.1161	.50215	.24788	.00350	.24843	.52305	.04145	.25261	.24660	.24609
#2	.50165	1.9607	4.1959	.49923	.24926	.00042	.24877	.52843	.00862	.25304	.24818	.24867
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2456.1**	**55853.**	**4848.8**
Stddev	29.7	105.	33.9
%RSD	1.2111	.18777	.69895
#1	2477.1	55928.	4872.8
#2	2435.0	55779.	4824.9

Sample Name: ICVL-4584532 Acquired: 6/9/2017 7:37:58 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01001**	**.10672**	**.01747**	**.10331**	**.01018**	**.00099**	**.10908**	**.20349**	**.00520**	**.01044**	**.01013**	**.01525**
Stddev	.00050	.00025	.00937	.00104	.00017	.00002	.00033	.00026	.00011	.00025	.00033	.00009
%RSD	5.0405	.23834	53.634	1.0057	1.6740	2.2210	.30039	.12602	2.1827	2.4397	3.2720	.57565
#1	.00965	.10654	.02409	.10405	.01006	.00101	.10932	.20367	.00528	.01026	.00990	.01519
#2	.01036	.10690	.01084	.10258	.01030	.00097	.10885	.20331	.00512	.01062	.01036	.01532
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10034**	**3.0432**	**.02071**	**.21078**	**.01071**	**.01907**	**1.0015**	**.04223**	**2.9505**	**.00925**	**.11099**	**.01978**
Stddev	.00326	.0593	.00031	.00199	.00007	.00028	.0013	.00038	.0028	.00035	.00345	.00327
%RSD	3.2508	1.9477	1.5121	.94476	.63516	1.4514	.12960	.90037	.09340	3.7702	3.1102	16.514
#1	.09803	3.0851	.02094	.20937	.01076	.01887	1.0024	.04250	2.9485	.00900	.10854	.01747
#2	.10264	3.0013	.02049	.21218	.01066	.01927	1.0006	.04196	2.9524	.00950	.11343	.02209
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01919**	**.46370**	**.99231**	**.10062**	**.01001**	**.01487**	**.01015**	F **.02018**	**.06549**	**.01054**	**.02106**	**.01469**
Stddev	.01191	.00314	.00671	.00001	.00014	.00155	.00037	.00083	.02772	.00077	.00050	.00390
%RSD	62.069	.67645	.67645	.01037	1.4177	10.395	3.6574	4.1219	42.318	7.2858	2.3967	26.540
#1	.01077	.46591	.99705	.10063	.01011	.01378	.00989	.02077	.08509	.01000	.02071	.01193
#2	.02762	.46148	.98756	.10061	.00991	.01597	.01041	.01960	.04590	.01108	.02142	.01744
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								.01500				
Range								30.000%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2342.1**	**52279.**	**4494.8**
Stddev	3.4	120.	19.4
%RSD	.14494	.22953	.43070
#1	2344.5	52194.	4481.1
#2	2339.7	52364.	4508.5

Sample Name: CCVH-4579429 Acquired: 6/9/2017 7:44:42 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00788**	**49.136**	**-.00480**	**.00167**	**.00129**	**-.00008**	**.99617**	**.00301**	**-.00012**	**-.00056**	**.00086**	**.01973**	**49.685**
Stddev	.00041	.165	.00464	.00025	.00004	.00015	.00320	.00477	.00008	.00015	.00008	.00041	.040
%RSD	5.2008	.33612	96.713	15.150	3.0983	185.01	.32117	158.45	72.393	27.540	9.5684	2.0645	.08036
#1	-.00759	49.019	-.00808	.00149	.00126	.00002	.99391	.00638	-.00018	-.00045	.00080	.01944	49.713
#2	-.00817	49.253	-.00152	.00185	.00132	-.00019	.99843	-.00036	-.00006	-.00067	.00092	.02002	49.657
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.02777**	**.00076**	**.10296**	**-.00176**	**-.00205**	**249.55**	**.00109**	**.00735**	**.00243**	**4.8029**	**-.01383**	**.00157**	**-.03620**
Stddev	.01332	.00157	.00548	.00000	.00028	.20	.00009	.00291	.00427	.0256	.00606	.00645	.00636
%RSD	47.982	204.96	5.3217	.04923	13.520	.08157	8.6642	39.566	176.10	.53324	43.822	411.03	17.580
#1	-.03719	.00187	.09908	-.00176	-.00186	249.41	.00103	.00941	.00545	4.8210	-.00955	-.00299	-.03170
#2	-.01835	-.00034	.10683	-.00176	-.00225	249.69	.00116	.00530	-.00060	4.7848	-.01812	.00613	-.04071
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.07748**	**.00051**	**.00033**	**4.9437**	**.02003**	**.00238**	**10.157**	**.01395**	**-.00037**	**.09481**
Stddev	.01362	.00073	.00004	.0193	.00048	.00078	.004	.00020	.00023	.00174
%RSD	17.580	142.50	12.481	.39101	2.3960	32.843	.04423	1.4429	61.652	1.8340
#1	-.06785	-.00000	.00036	4.9573	.02037	.00183	10.160	.01409	-.00053	.09358
#2	-.08711	.00103	.00030	4.9300	.01969	.00294	10.154	.01380	-.00021	.09604
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2295.3**	**48487.**	**4249.1**
Stddev	17.4	342.	43.5
%RSD	.75782	.70622	1.0233
#1	2283.0	48245.	4279.8
#2	2307.6	48729.	4218.3

Sample Name: CCV-4567764 Acquired: 6/9/2017 7:47:18 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50450**	**.50510**	**.99045**	**.50282**	**.49011**	**.49009**	**.00228**	**4.8847**	**.49930**	**.49750**	**.48623**	**.51803**	**2.4803**	**49.581**
Stddev	.00053	.00838	.01013	.00823	.00075	.00100	.00119	.0253	.00834	.01028	.01040	.00371	.0117	.068
%RSD	.10416	1.6595	1.0231	1.6368	.15263	.20337	52.140	.51859	1.6712	2.0665	2.1388	.71529	.47185	.13672
#1	.50413	.51102	.99761	.50864	.48959	.49080	.00311	4.8668	.50520	.50477	.49358	.52065	2.4886	49.629
#2	.50487	.49917	.98328	.49700	.49064	.48939	.00144	4.9026	.49340	.49023	.47887	.51541	2.4720	49.533
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.98988**	**20.091**	**.51067**	**.48271**	**5.0484**	**.50098**	**.99467**	**.98244**	**.01339**	**.99195**	**.99039**	**4.8578**	**10.396**	**.97769**
Stddev	.00054	.041	.00134	.01016	.0287	.00874	.00783	.01859	.00134	.02052	.00578	.0106	.023	.01769
%RSD	.05450	.20253	.26207	2.1042	.56802	1.7437	.78738	1.8920	9.9961	2.0685	.58354	.21739	.21739	1.8092
#1	.99026	20.120	.51161	.48990	5.0687	.50716	1.0002	.99559	.01434	1.0065	.99448	4.8652	10.412	.99019
#2	.98950	20.062	.50972	.47553	5.0282	.49481	.98913	.96930	.01245	.97744	.98630	4.8503	10.380	.96518
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49191**	**.00427**	**.50120**	**1.0053**	**.00468**	**.50628**	**.50907**	**.50012**
Stddev	.00080	.00081	.00232	.0123	.02830	.00233	.00306	.00415
%RSD	.16210	19.100	.46294	1.2214	605.16	.46057	.60042	.83055
#1	.49247	.00369	.50284	1.0140	.02469	.50793	.51123	.49718
#2	.49135	.00484	.49956	.99661	-.01534	.50463	.50691	.50306
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2352.9**	**52348.**	**4493.3**
Stddev	5.0	287.	9.2
%RSD	.21225	.54911	.20509
#1	2349.4	52144.	4486.7
#2	2356.4	52551.	4499.8

Sample Name: ICB Acquired: 6/9/2017 7:49:48 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00033**	**.00457**	W **.00772**	**.00133**	**.00019**	**.00011**	**-.00138**	**.00201**	**-.00003**	**.00052**	**.00053**	**-.00027**
Stddev	.00005	.00622	.00101	.00129	.00014	.00005	.00063	.00834	.00001	.00021	.00007	.00078
%RSD	13.888	136.12	13.025	97.121	76.048	46.105	45.980	414.73	20.826	40.820	13.824	287.30
#1	-.00036	.00897	.00701	.00224	.00029	.00007	-.00093	-.00389	-.00004	.00037	.00048	-.00082
#2	-.00029	.00017	.00843	.00042	.00009	.00014	-.00183	.00791	-.00003	.00067	.00058	.00028
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00750									
Low Limit			-.01500									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00036**	**.01855**	**-.00095**	**.00762**	**.00011**	**-.00008**	**-.03450**	**.00049**	**.00488**	**.00078**	**-.00367**	**.00255**
Stddev	.00335	.03126	.00059	.00633	.00000	.00068	.00318	.00016	.00214	.00020	.00813	.00059
%RSD	943.69	168.50	62.700	83.108	.82133	860.71	9.2181	32.948	43.798	25.616	221.35	23.321
#1	-.00202	.04065	-.00053	.01210	.00011	-.00056	-.03225	.00037	.00337	.00063	-.00943	.00213
#2	.00273	-.00355	-.00136	.00314	.00010	.00040	-.03675	.00060	.00639	.00092	.00208	.00296
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00965**	**-.02013**	**-.04308**	**.00036**	**.00018**	**.00082**	**-.00009**	**.00239**	**.02076**	**.00057**	**.00023**	**.00048**
Stddev	.00420	.00900	.01926	.00071	.00015	.00297	.00009	.00076	.00366	.00001	.00007	.00088
%RSD	43.567	44.705	44.705	193.80	82.531	363.44	98.360	31.673	17.639	2.6233	30.342	182.68
#1	-.00668	-.01377	-.02946	-.00014	.00007	-.00128	-.00003	.00186	.02335	.00056	.00028	.00111
#2	-.01262	-.02650	-.05670	.00086	.00028	.00292	-.00016	.00293	.01817	.00058	.00018	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2334.1**	**52006.**	**4427.4**
Stddev	14.5	54.	26.1
%RSD	.62116	.10351	.58986
#1	2323.8	52044.	4409.0
#2	2344.3	51968.	4445.9

Sample Name: ICB Acquired: 6/9/2017 7:53:31 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00017**	**.00320**	W **.00847**	**.00001**	**.00014**	**-.00003**	**.00269**	**.00773**	**-.00032**	**.00027**	**.00015**	**.00036**
Stddev	.00115	.00522	.00110	.00061	.00001	.00004	.00030	.00509	.00026	.00017	.00064	.00044
%RSD	692.08	162.96	12.927	4432.8	9.6859	115.02	11.131	65.821	80.177	61.682	431.15	120.98
#1	.00098	-.00049	.00770	-.00042	.00013	-.00006	.00290	.01132	-.00014	.00015	.00060	.00005
#2	-.00065	.00690	.00925	.00045	.00015	-.00001	.00248	.00413	-.00050	.00039	-.00031	.00068
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00750									
Low Limit			-.01500									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00097**	**.00798**	**.00162**	**.00426**	**.00005**	**-.00003**	**-.02929**	**.00057**	**.00433**	**-.00018**	**.00343**	**.00212**
Stddev	.00220	.00700	.00261	.00506	.00009	.00049	.01463	.00040	.00523	.00210	.00316	.00420
%RSD	226.70	87.722	160.87	118.78	200.21	1687.6	49.947	70.657	120.93	1165.3	92.048	197.88
#1	.00253	.01294	.00346	.00068	-.00002	.00032	-.01894	.00085	.00803	-.00166	.00567	.00510
#2	-.00059	.00303	-.00022	.00784	.00011	-.00037	-.03963	.00028	.00063	.00130	.00120	-.00085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00305**	**-.03027**	**-.06477**	**.00091**	**.00003**	**-.00020**	**.00024**	**.00746**	**.05613**	**.00048**	**.00096**	**.00076**
Stddev	.00412	.02113	.04522	.00023	.00005	.00032	.00017	.00031	.03329	.00008	.00032	.00022
%RSD	134.82	69.810	69.810	25.209	181.82	160.72	68.340	4.1161	59.312	16.494	33.198	29.436
#1	-.00596	-.01533	-.03280	.00108	-.00001	.00003	.00013	.00724	.07968	.00053	.00073	.00060
#2	-.00014	-.04521	-.09674	.00075	.00006	-.00043	.00036	.00768	.03259	.00042	.00118	.00092
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2380.2**	**52790.**	**4536.6**
Stddev	1.9	174.	7.5
%RSD	.08038	.32875	.16451
#1	2378.8	52913.	4541.9
#2	2381.5	52667.	4531.4

Sample Name: CRI-4584536 Acquired: 6/9/2017 7:56:43 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.00578**	**.10646**	W **.00556**	**.10155**	**.00493**	**.00096**	**.11218**	**.20142**	**.00519**	**.00574**	**.01022**	**.01052**
Stddev	.00003	.00085	.00481	.00122	.00001	.00009	.00162	.00094	.00033	.00022	.00026	.00017
%RSD	.48528	.79943	86.487	1.1966	.16968	9.6178	1.4402	.46580	6.3335	3.9089	2.5503	1.6278
#1	.00576	.10706	.00896	.10241	.00493	.00102	.11104	.20075	.00496	.00558	.01041	.01064
#2	.00580	.10586	.00216	.10069	.00492	.00089	.11332	.20208	.00542	.00590	.01004	.01040
Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.01000		.01000									
Range	-20.490%		-20.490%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.03701**	**.97838**	**.01136**	**.20910**	**.00323**	**.00958**	**.99636**	**.01119**	**.98053**	F **.00138**	**.09487**	**.00987**
Stddev	.00029	.01647	.00173	.00268	.00008	.00077	.00430	.00042	.00784	.00232	.00129	.00040
%RSD	.78212	1.6829	15.264	1.2837	2.4619	8.0326	.43110	3.7132	.79943	168.72	1.3558	4.0315
#1	.03680	.99003	.01013	.21100	.00329	.00904	.99939	.01090	.98607	.00302	.09578	.00958
#2	.03721	.96674	.01258	.20721	.00318	.01013	.99332	.01149	.97499	-.00027	.09396	.01015
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value	.03000									.00300		
Range	20.490%									-50.000%		

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00845**	**.45242**	**.96819**	**.01949**	**.00506**	**.00888**	**.00982**	F **.01637**	W **.04754**	**.01060**	**.01106**	**.00966**
Stddev	.00509	.00236	.00505	.00457	.00022	.00096	.00003	.00278	.01045	.00053	.00078	.00214
%RSD	60.232	.52142	.52142	23.453	4.3094	10.763	.29234	16.971	21.981	5.0199	7.0423	22.123
#1	.01205	.45076	.96462	.02272	.00522	.00821	.00984	.01834	.04015	.01022	.01051	.00815
#2	.00485	.45409	.97176	.01626	.00491	.00956	.00979	.01441	.05492	.01097	.01161	.01117
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Warn	Chk Pass	Chk Pass	Chk Pass
Value								.01000	.06000			
Range								50.000%	-20.490%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2377.4**	**53343.**	**4499.1**
Stddev	15.2	107.	38.0
%RSD	.63780	.20066	.84457
#1	2388.2	53419.	4526.0
#2	2366.7	53268.	4472.2

Sample Name: CRI- Acquired: 6/9/2017 8:04:14 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: Alt CRI Ag As Fe Pb Tl

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01189**	**.00066**	W **.00797**	**.00052**	**.00004**	**.00012**	**.00092**	**.01111**	**-.00003**	**.00046**	**.00014**	**.00028**
Stddev	.00008	.00019	.00199	.00052	.00040	.00009	.00029	.00233	.00004	.00056	.00002	.00086
%RSD	.66305	29.249	24.991	100.64	1094.7	77.597	31.461	20.991	146.34	123.21	13.201	304.16
#1	.01194	.00053	.00656	.00089	-.00025	.00019	.00071	.01276	.00000	.00006	.00015	-.00033
#2	.01183	.00080	.00938	.00015	.00032	.00005	.00112	.00946	-.00006	.00085	.00013	.00089
Check ?	Chk Fail	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00200		.00750									
Low Limit	-.01000		-.01500									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.09922**	**.02244**	**-.00037**	**.00603**	**.00013**	**-.00023**	**-.03038**	**.00002**	**.00387**	W **.00887**	**.00378**	**-.00031**
Stddev	.00081	.01328	.00300	.00121	.00001	.00039	.01426	.00050	.00014	.00108	.00510	.00514
%RSD	.81686	59.185	800.89	20.010	6.0079	169.69	46.922	2619.7	3.4990	12.150	134.96	1633.2
#1	.09979	.03183	.00174	.00688	.00012	.00005	-.02030	-.00033	.00396	.00811	.00739	-.00395
#2	.09864	.01305	-.00249	.00518	.00013	-.00051	-.04046	.00037	.00377	.00963	.00017	.00332
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit	.05000									.00450		
Low Limit	-.05000									-.00450		

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00491**	**-.01478**	**-.03164**	**.00003**	**.00015**	**.00022**	**-.00031**	W **.01329**	**.02129**	**.00044**	**.00078**	**.00026**
Stddev	.00241	.00998	.02135	.00087	.00011	.00012	.00004	.00340	.00007	.00097	.00091	.00080
%RSD	49.165	67.478	67.478	3264.5	74.009	55.988	12.915	25.600	.32492	220.39	116.80	313.76
#1	-.00662	-.02184	-.04674	-.00059	.00007	.00030	-.00028	.01088	.02133	.00113	.00013	-.00031
#2	-.00320	-.00773	-.01654	.00064	.00023	.00013	-.00034	.01569	.02124	-.00025	.00142	.00082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								.00750				
Low Limit								-.01900				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2411.5**	**52559.**	**4510.2**
Stddev	8.2	383.	17.8
%RSD	.34007	.72782	.39366
#1	2405.7	52829.	4522.8
#2	2417.3	52288.	4497.6

Sample Name: ICSA-4576193 Acquired: 6/9/2017 8:08:42 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00083**	**497.60**	**.00538**	**-.00334**	**-.00014**	**-.00013**	**.00287**	**451.16**	**.00059**	**.00063**	**.00136**
Stddev	.00057	.15	.00382	.00118	.00004	.00004	.00531	1.33	.00003	.00058	.00050
%RSD	69.423	.02917	70.931	35.295	25.789	28.578	185.34	.29451	5.8574	92.259	37.005
#1	-.00042	497.49	.00268	-.00417	-.00016	-.00016	.00662	450.22	.00062	.00105	.00171
#2	-.00123	497.70	.00808	-.00251	-.00011	-.00011	-.00089	452.10	.00057	.00022	.00100
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit											
Low Limit											

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00236**	**184.84**	**.08798**	**.00237**	**521.45**	W **.00091**	W **-.00875**	**.10026**	**.00158**	**-.01233**	W **-.00674**
Stddev	.00032	.01	.07268	.00042	4.86	.00003	.00026	.01296	.00052	.00262	.00045
%RSD	13.437	.00682	82.618	17.850	.93146	3.2300	3.0145	12.923	32.858	21.283	6.7200
#1	.00214	184.83	.03658	.00207	524.88	.00093	-.00894	.09110	.00194	-.01419	-.00642
#2	.00259	184.85	.13937	.00267	518.01	.00089	-.00856	.10942	.00121	-.01047	-.00706
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit						.00050	.00626				.00500
Low Limit						-.00050	-.00626				-.00500

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.06836**	**-.00486**	**-.00530**	**-.03195**	**-.06838**	**-.00122**	W **.00438**	W **.00817**	**.00032**	**-.00415**	**.03354**
Stddev	.00736	.01179	.01894	.04273	.09143	.00111	.00010	.00146	.00017	.00795	.01347
%RSD	10.766	242.61	357.33	133.71	133.71	91.126	2.1812	17.907	51.602	191.59	40.174
#1	-.07356	-.01319	-.01870	-.00174	-.00373	-.00043	.00445	.00920	.00044	.00147	.02401
#2	-.06315	.00348	.00809	-.06217	-.13304	-.00201	.00431	.00714	.00021	-.00977	.04306
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit							.00050	.00800			
Low Limit							-.00050	-.00800			

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	**-.00053**	**-.00049**	**.00066**
Stddev	.00024	.00011	.00029
%RSD	45.323	22.933	44.764
#1	-.00070	-.00041	.00045
#2	-.00036	-.00057	.00087
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2189.1**	**45802.**	**4584.3**
Stddev	5.2	52.	27.0
%RSD	.23575	.11422	.58912
#1	2185.5	45765.	4603.4
#2	2192.8	45839.	4565.2

Sample Name: ICSAB-4579055 Acquired: 6/9/2017 8:11:26 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.1115**	**498.27**	**1.9776**	**1.9046**	**.47585**	**.47408**	**1.0002**	**453.21**	**1.0021**	**.44191**	**.44749**	**.57405**	**184.52**	**51.060**
Stddev	.0000	.71	.0526	.0382	.00039	.00076	.0230	9.05	.0219	.01102	.01275	.00248	.01	.044
%RSD	.00049	.14197	2.6606	2.0084	.08135	.16059	2.3003	1.9963	2.1875	2.4926	2.8501	.43127	.00282	.08661
#1	1.1115	498.77	2.0148	1.9316	.47613	.47462	1.0164	446.81	1.0176	.44970	.45651	.57230	184.52	51.092
#2	1.1115	497.77	1.9404	1.8775	.47558	.47354	.98389	459.61	.98656	.43413	.43847	.57580	184.52	51.029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0135**	**512.41**	**.51125**	**.86192**	**52.102**	**.88423**	**1.9550**	**.85318**	**.94876**	**.96432**	**4.8175**	**9.6787**	**20.713**	**8.6613**
Stddev	.0006	3.86	.00245	.02468	.326	.02168	.0499	.01667	.02452	.02091	.0920	.0070	.015	.2230
%RSD	.05709	.75278	.47870	2.8634	.62644	2.4523	2.5513	1.9533	2.5846	2.1680	1.9092	.07274	.07274	2.5743
#1	1.0130	515.13	.51298	.87937	52.333	.89956	1.9903	.86496	.96609	.97910	4.8825	9.6738	20.702	8.8190
#2	1.0139	509.68	.50951	.84447	51.871	.86890	1.9198	.84139	.93142	.94954	4.7524	9.6837	20.723	8.5036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.96425**	**2.1423**	**1.0325**	**8.2177**	**.02698**	**.51937**	**.99287**	**1.0913**
Stddev	.00080	.0018	.0018	.1813	.07437	.00301	.00026	.0027
%RSD	.08323	.08455	.16963	2.2057	275.65	.58032	.02625	.24787
#1	.96368	2.1436	1.0337	8.3458	.07956	.52150	.99306	1.0932
#2	.96482	2.1410	1.0312	8.0895	-.02561	.51723	.99269	1.0894
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2231.0**	**45671.**	**4513.8**
Stddev	64.7	145.	26.3
%RSD	2.8981	.31816	.58230
#1	2185.3	45568.	4532.4
#2	2276.8	45773.	4495.2

Sample Name: LRA-4556451 Acquired: 6/9/2017 8:14:00 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00217**	**.02654**	**9.5270**	**9.6427**	**11.732**	**-.00179**	**-.03585**	**.08161**	**1.9494**	**4.7676**	**9.2598**	F **11.087**
Stddev	.00071	.02416	.3692	.3206	.332	.00018	.00114	.01995	.0700	.1585	.3370	.086
%RSD	32.686	91.029	3.8748	3.3249	2.8291	10.178	3.1679	24.443	3.5918	3.3250	3.6390	.77285
#1	-.00167	.04363	9.7881	9.8694	11.966	-.00167	-.03665	.09571	1.9989	4.8797	9.4981	11.147
#2	-.00267	.00946	9.2660	9.4160	11.497	-.00192	-.03504	.06750	1.8999	4.6555	9.0216	11.026
Check ?	None	None	Chk Pass	Chk Pass	Chk Pass	None	None	None	Chk Pass	Chk Pass	None	Chk Fail
Value												10.000
Range												10.000%

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**505.75**	**-.26675**	**-.00002**	**.05770**	**10.238**	**4.5462**	**-.06745**	**9.6784**	**.00148**	**9.3873**	**-.04087**	**.02555**
Stddev	1.09	.00424	.00116	.00402	.073	.1606	.00400	.3267	.00001	.2879	.00427	.00566
%RSD	.21568	1.5879	5776.1	6.9677	.71281	3.5337	5.9238	3.3750	.82828	3.0672	10.446	22.165
#1	506.52	-.26375	-.00084	.06054	10.186	4.6598	-.06462	9.9094	.00149	9.5909	-.04389	.02154
#2	504.98	-.26974	.00080	.05485	10.289	4.4327	-.07027	9.4474	.00148	9.1837	-.03785	.02955
Check ?	Chk Pass	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass	None	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.8117**	**47.842**	**102.38**	**.00085**	**10.045**	**.00134**	**9.9665**	**4.7291**	**.12385**	**10.346**	**9.8960**	**.00404**
Stddev	.1864	.182	.39	.00294	.089	.00124	.0629	.1615	.01079	.079	.0829	.00090
%RSD	3.8736	.38032	.38032	345.92	.88731	92.283	.63098	3.4143	8.7148	.76521	.83787	22.397
#1	4.9435	47.713	102.11	.00293	10.108	.00047	10.011	4.8433	.13149	10.402	9.9546	.00468
#2	4.6799	47.971	102.66	-.00123	9.9818	.00222	9.9220	4.6149	.11622	10.290	9.8373	.00340
Check ?	Chk Pass	Chk Pass	None	None	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2418.6**	**53607.**	**4716.4**
Stddev	28.4	71.	2.9
%RSD	1.1741	.13242	.06065
#1	2438.6	53657.	4718.4
#2	2398.5	53557.	4714.3

Sample Name: CCVH-4579429 Acquired: 6/9/2017 8:16:43 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00868**	**48.387**	**-.01093**	**.02249**	**.00277**	**.00007**	**.96691**	**.00784**	**.00042**	**-.00060**	**.00103**	**.01989**
Stddev	.00092	.091	.00268	.00262	.00047	.00017	.02770	.00281	.00067	.00029	.00026	.00021
%RSD	10.612	.18880	24.528	11.655	16.999	235.62	2.8653	35.864	158.37	49.095	25.456	1.0469
#1	-.00933	48.452	-.00904	.02434	.00311	.00019	.98650	.00982	-.00005	-.00080	.00084	.02004
#2	-.00803	48.323	-.01283	.02064	.00244	-.00005	.94732	.00585	.00090	-.00039	.00121	.01975
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.846**	**-.07160**	**.00276**	**.10779**	**-.00109**	**-.00035**	**248.32**	**.00184**	**.00628**	**-.00148**	W **4.7148**	**-.01075**
Stddev	.057	.05473	.00120	.00111	.00001	.00014	.28	.00043	.00254	.00470	.1216	.00241
%RSD	.11359	76.447	43.436	1.0341	1.1039	41.162	.11454	23.520	40.529	316.64	2.5781	22.410
#1	49.806	-.11030	.00360	.10700	-.00108	-.00025	248.52	.00215	.00448	.00184	4.8007	-.00905
#2	49.887	-.03289	.00191	.10858	-.00110	-.00045	248.12	.00154	.00807	-.00480	4.6288	-.01245
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Warn	None
Value											5.0000	
Range											-5.0000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00561**	**-.01748**	**-.03741**	**-.00058**	**.00210**	**4.9563**	**.02299**	**.00150**	**10.127**	**.01437**	**.00171**	**.09057**
Stddev	.00389	.02897	.06201	.00200	.00047	.0125	.00001	.00376	.082	.00088	.00057	.00050
%RSD	69.374	165.76	165.76	346.75	22.367	.25140	.04219	251.29	.81154	6.1255	33.361	.55526
#1	-.00286	.00301	.00644	.00084	.00243	4.9651	.02299	.00416	10.186	.01499	.00130	.09022
#2	-.00836	-.03797	-.08125	-.00199	.00177	4.9475	.02300	-.00116	10.069	.01375	.00211	.09093
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2406.3**	**51679.**	**4670.8**
Stddev	5.1	38.	29.6
%RSD	.21106	.07405	.63336
#1	2409.9	51651.	4649.9
#2	2402.7	51706.	4691.8

Sample Name: CCV-4567764 Acquired: 6/9/2017 8:19:20 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50143**	**.50001**	**.97798**	**.51393**	**.48413**	**.48727**	**-.00034**	**4.8317**	**.49725**	**.49613**	**.47596**	**.53203**	**2.4878**
Stddev	.00210	.01264	.01765	.01004	.00005	.00058	.00012	.0042	.01056	.00993	.01173	.00181	.0056
%RSD	.41944	2.5282	1.8046	1.9543	.01027	.11934	35.476	.08733	2.1230	2.0006	2.4654	.33986	.22690
#1	.50292	.50894	.99046	.52103	.48409	.48686	-.00025	4.8347	.50471	.50315	.48426	.53331	2.4838
#2	.49995	.49107	.96550	.50683	.48416	.48768	-.00042	4.8288	.48979	.48911	.46767	.53075	2.4918
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.114**	**.98338**	**20.077**	**.51712**	**.47264**	**4.9935**	**.49769**	**.99366**	**.96520**	**.00059**	**.98760**	**.98673**	**4.8607**
Stddev	.105	.00172	.058	.00257	.00954	.0255	.00986	.02000	.01917	.00733	.02017	.01543	.0083
%RSD	.21392	.17528	.28893	.49612	2.0186	.51027	1.9815	2.0126	1.9860	1238.6	2.0420	1.5633	.17068
#1	49.040	.98216	20.118	.51893	.47938	5.0115	.50467	1.0078	.97875	.00578	1.0019	.99764	4.8548
#2	49.189	.98460	20.036	.51531	.46589	4.9755	.49072	.97952	.95164	-.00459	.97334	.97583	4.8665
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.402**	**.95985**	**.48972**	**.00253**	**.50737**	**.98345**	**.02357**	**.51755**	**.51030**	**.50638**
Stddev	.018	.02796	.00008	.00032	.00280	.00935	.01957	.00346	.00116	.00015
%RSD	.17068	2.9132	.01675	12.546	.55158	.95110	83.017	.66847	.22776	.03000
#1	10.389	.97962	.48966	.00230	.50934	.99006	.00973	.52000	.51113	.50649
#2	10.414	.94007	.48977	.00275	.50539	.97683	.03741	.51511	.50948	.50627
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2406.0**	**52946.**	**4657.0**
Stddev	17.4	135.	10.2
%RSD	.72375	.25515	.21920
#1	2418.3	52851.	4664.2
#2	2393.7	53042.	4649.8

Sample Name: CCB Acquired: 6/9/2017 8:21:51 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00028**	**.00347**	**.00389**	**.00824**	**.00045**	**-.00015**	**.00114**	**.00641**	**.00003**	**.00014**	**.00020**	**.00010**	**-.00080**
Stddev	.00063	.00058	.00336	.00055	.00005	.00013	.00337	.00323	.00017	.00003	.00018	.00030	.00317
%RSD	227.15	16.595	86.450	6.6891	11.157	90.054	296.75	50.324	494.36	22.515	91.975	291.40	395.55
#1	.00073	.00387	.00626	.00863	.00041	-.00005	.00352	.00869	-.00009	.00012	.00007	.00031	-.00304
#2	-.00017	.00306	.00151	.00785	.00048	-.00024	-.00125	.00413	.00015	.00017	.00033	-.00011	.00144
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.07086**	**.00223**	**.00406**	**.00003**	**-.00024**	**-.06894**	**.00045**	**.00454**	**-.00236**	**.00309**	**.00349**	**.00041**	**-.01665**
Stddev	.02849	.00153	.00381	.00004	.00076	.01119	.00025	.00119	.00165	.00038	.00099	.00176	.00343
%RSD	40.208	68.757	93.662	119.55	315.88	16.225	54.831	26.296	69.777	12.408	28.234	431.87	20.602
#1	-.09101	.00331	.00137	.00001	.00030	-.06103	.00028	.00369	-.00353	.00337	.00419	.00165	-.01908
#2	-.05071	.00115	.00676	.00006	-.00078	-.07685	.00063	.00538	-.00120	.00282	.00279	-.00084	-.01423
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.03564**	**-.00179**	**.00028**	**-.00181**	**.00018**	**.00612**	**.02086**	**.00058**	**.00034**	**-.00139**
Stddev	.00734	.00175	.00002	.00207	.00031	.00047	.00019	.00012	.00035	.00206
%RSD	20.602	97.643	7.6019	114.78	169.35	7.6091	.91777	20.365	103.48	147.61
#1	-.04083	-.00056	.00026	-.00327	-.00004	.00579	.02100	.00050	.00059	.00006
#2	-.03044	-.00303	.00029	-.00034	.00040	.00644	.02073	.00067	.00009	-.00285
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2352.0**	**52411.**	**4452.5**
Stddev	1.9	163.	30.5
%RSD	.08005	.31081	.68429
#1	2350.6	52295.	4431.0
#2	2353.3	52526.	4474.0

Sample Name: CCVL-4584532 Acquired: 6/9/2017 8:24:30 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01001**	**.10500**	**.01576**	**.10642**	**.01016**	**.00108**	**.10540**	**.20338**	**.00520**	**.01050**	**.00997**	**.01681**
Stddev	.00002	.00407	.00309	.00113	.00017	.00008	.00237	.00027	.00003	.00050	.00019	.00020
%RSD	.22159	3.8715	19.591	1.0644	1.6947	7.6448	2.2496	.13158	.63454	4.7648	1.8736	1.2019
#1	.00999	.10787	.01794	.10722	.01004	.00113	.10707	.20357	.00523	.01085	.01010	.01667
#2	.01002	.10212	.01358	.10561	.01029	.00102	.10372	.20319	.00518	.01014	.00984	.01696
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10126**	**2.9637**	**.01975**	**.21380**	**.01085**	**.01821**	**.93185**	**.04127**	**2.9012**	**.00723**	**.10130**	**.02031**
Stddev	.00304	.0749	.00053	.00297	.00018	.00076	.00923	.00151	.0590	.00026	.00905	.00152
%RSD	3.0019	2.5273	2.6698	1.3869	1.6861	4.1991	.99007	3.6696	2.0323	3.5903	8.9366	7.4600
#1	.10341	2.9107	.01938	.21170	.01098	.01875	.93838	.04234	2.9429	.00741	.09490	.01924
#2	.09911	3.0166	.02013	.21589	.01072	.01767	.92533	.04020	2.8595	.00704	.10770	.02139
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02194**	**.45006**	**.96312**	**.09651**	**.01017**	**.01779**	**.01033**	F **.02094**	F **.07986**	**.01073**	**.02109**	**.01498**
Stddev	.00567	.00747	.01599	.00258	.00003	.00116	.00047	.00168	.04775	.00045	.00019	.00074
%RSD	25.857	1.6600	1.6600	2.6706	.34309	6.5231	4.5769	8.0025	59.788	4.1521	.91999	4.9376
#1	.01793	.45534	.97443	.09833	.01014	.01861	.01000	.02212	.04610	.01105	.02123	.01550
#2	.02595	.44478	.95182	.09469	.01019	.01697	.01067	.01975	.11362	.01042	.02095	.01445
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								.01500	.06000			
Range								30.000%	30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2418.0**	**53212.**	**4634.1**
Stddev	.4	19.	10.3
%RSD	.01654	.03585	.22208
#1	2418.3	53226.	4641.4
#2	2417.7	53199.	4626.8

Sample Name: MB 280-375528/1-A Acquired: 6/9/2017 8:33:06 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/8 Custom ID2: Custom ID3:
Comment: 375528 6010C

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00038**	**.00925**	**.00567**	**.00219**	**-.00015**	**.00010**	**.00416**	**.03914**	**-.00008**
Stddev	.00077	.00565	.00403	.00020	.00007	.00008	.00188	.00153	.00025
%RSD	202.94	61.049	71.093	9.1275	49.047	78.548	45.271	3.8994	324.91
#1	.00017	.01324	.00282	.00205	-.00010	.00015	.00549	.04022	-.00026
#2	-.00093	.00526	.00852	.00233	-.00020	.00004	.00283	.03806	.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00020**	**.00059**	**-.00055**	**.01842**	**-.02036**	**-.00097**	**.00480**	**.00019**	**-.00014**
Stddev	.00041	.00023	.00036	.00055	.03090	.00105	.00703	.00009	.00020
%RSD	211.09	38.576	65.292	3.0001	151.80	107.73	146.36	48.385	146.76
#1	.00049	.00075	-.00080	.01881	-.04221	-.00171	-.00017	.00012	-.00028
#2	-.00010	.00043	-.00030	.01803	.00149	-.00023	.00978	.00025	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00180**	**.00041**	**-.00111**	**.00070**	**.00773**	**-.00197**	**.00341**	**-.00760**	**-.01626**
Stddev	.00907	.00020	.00012	.00112	.00473	.00150	.00388	.00953	.02040
%RSD	504.78	48.715	11.147	159.86	61.241	75.924	113.84	125.49	125.49
#1	.00462	.00055	-.00120	-.00009	.01107	-.00303	.00067	-.00086	-.00183
#2	-.00821	.00027	-.00102	.00150	.00438	-.00091	.00616	-.01434	-.03069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00090**	**.00020**	**-.00022**	**.00071**	**.00437**	**.02183**	**.00111**	**.00305**	**-.00090**
Stddev	.00256	.00001	.00047	.00004	.00182	.01434	.00020	.00018	.00075
%RSD	286.04	6.0178	214.73	4.9784	41.698	65.670	17.705	5.8257	82.709
#1	.00271	.00020	-.00055	.00073	.00566	.01170	.00125	.00317	-.00143
#2	-.00092	.00021	.00011	.00068	.00308	.03197	.00097	.00292	-.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2502.9**	**55670.**	**4775.7**
Stddev	27.0	298.	88.1
%RSD	1.0804	.53523	1.8445
#1	2522.0	55460.	4713.4
#2	2483.8	55881.	4838.0

Sample Name: 280-97574-A-8-A MDLV Acquired: 6/9/2017 8:35:46 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375528 6010C

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00215**	**.02274**	**.01454**	**.00811**	**.00118**	**.00051**	**.01321**	**.09307**	**.00067**
Stddev	.00012	.00094	.00086	.00031	.00026	.00012	.00281	.00727	.00003
%RSD	5.7508	4.1506	5.9306	3.8107	21.947	24.619	21.269	7.8137	4.7113
#1	.00206	.02340	.01393	.00789	.00136	.00059	.01520	.08793	.00065
#2	.00223	.02207	.01515	.00833	.00100	.00042	.01123	.09822	.00070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00253**	**.00287**	**.00223**	**.04899**	**.29083**	**.00750**	**.01480**	**.00433**	**.00271**
Stddev	.00023	.00018	.00064	.00259	.01333	.00035	.00018	.00013	.00031
%RSD	9.1967	6.2710	28.826	5.2768	4.5820	4.6623	1.1906	3.0779	11.591
#1	.00236	.00274	.00177	.05082	.30026	.00725	.01492	.00423	.00293
#2	.00269	.00300	.00268	.04717	.28141	.00775	.01468	.00442	.00249
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02295**	**.00104**	**.01370**	**.00544**	**.01559**	**.00788**	**.00547**	**.02132**	**.04563**
Stddev	.00444	.00225	.00125	.00168	.00126	.00287	.00416	.00899	.01924
%RSD	19.344	216.96	9.1617	30.966	8.0979	36.442	75.942	42.156	42.156
#1	.02609	.00263	.01458	.00663	.01648	.00991	.00841	.01497	.03203
#2	.01981	-.00055	.01281	.00425	.01469	.00585	.00253	.02768	.05923
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00465**	**.00058**	**.01566**	**.00096**	**.01258**	**.08565**	**.00324**	**.00490**	**.00681**
Stddev	.00181	.00000	.00301	.00006	.00345	.02340	.00055	.00064	.00263
%RSD	38.834	.66446	19.190	5.8770	27.459	27.316	16.862	12.996	38.584
#1	.00338	.00058	.01779	.00092	.01014	.06910	.00363	.00445	.00866
#2	.00593	.00057	.01354	.00100	.01502	.10219	.00286	.00535	.00495
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2501.1**	**55851.**	**4767.8**
Stddev	4.8	544.	68.4
%RSD	.19170	.97467	1.4339
#1	2504.4	56236.	4719.5
#2	2497.7	55466.	4816.1

Sample Name: 280-97574-A-9-A MDLV Acquired: 6/9/2017 8:38:26 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375528 6010C

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00215**	**.02363**	**.01139**	**.00869**	**.00107**	**.00054**	**.00817**	**.08432**	**.00101**
Stddev	.00054	.00328	.00072	.00031	.00038	.00010	.00137	.00951	.00037
%RSD	25.325	13.865	6.3463	3.5695	35.398	17.761	16.793	11.274	36.391
#1	.00177	.02595	.01190	.00847	.00080	.00047	.00914	.07760	.00127
#2	.00254	.02131	.01088	.00891	.00134	.00061	.00720	.09105	.00075
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00202**	**.00309**	**.00299**	**.04080**	**.22649**	**.00838**	**.01824**	**.00436**	**.00288**
Stddev	.00013	.00003	.00028	.00207	.00599	.00031	.00742	.00002	.00006
%RSD	6.5423	1.0934	9.4341	5.0770	2.6454	3.6912	40.690	.51000	2.0314
#1	.00211	.00306	.00279	.03933	.22226	.00816	.01299	.00438	.00292
#2	.00192	.00311	.00319	.04226	.23073	.00860	.02348	.00435	.00284
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01707**	**.00270**	**.01549**	**.00509**	**.00692**	**.00808**	**.00500**	**.03004**	**.06429**
Stddev	.03029	.00049	.00440	.00159	.00055	.00166	.00448	.00380	.00813
%RSD	177.46	18.277	28.377	31.339	7.9949	20.550	89.501	12.646	12.646
#1	-.00435	.00304	.01238	.00396	.00731	.00925	.00184	.03273	.07004
#2	.03848	.00235	.01860	.00621	.00653	.00690	.00817	.02736	.05854
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00377**	**.00063**	**.01534**	**.00119**	**.01362**	**.12762**	**.00239**	**.00493**	**.00519**
Stddev	.00036	.00019	.00119	.00056	.00020	.01843	.00017	.00004	.00000
%RSD	9.6800	30.274	7.7593	46.795	1.4611	14.439	7.2936	.90729	.03442
#1	.00351	.00076	.01450	.00080	.01377	.11459	.00251	.00489	.00519
#2	.00402	.00049	.01618	.00159	.01348	.14066	.00227	.00496	.00519
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2525.5**	**55394.**	**4858.5**
Stddev	5.9	12.	78.1
%RSD	.23460	.02214	1.6080
#1	2529.7	55385.	4803.2
#2	2521.3	55402.	4913.7

Sample Name: 97574-A-10-A LOQV Acquired: 6/9/2017 8:41:06 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375528 6010C

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01992**	**.29997**	**.02979**	**.09957**	**.01015**	**.00138**	**.00074**	**.96654**	**.00487**
Stddev	.00021	.01114	.00360	.00316	.00018	.00002	.00021	.00529	.00043
%RSD	1.0764	3.7147	12.089	3.1772	1.7400	1.6524	28.896	.54700	8.7376
#1	.01977	.30785	.03233	.10180	.01002	.00139	.00059	.96280	.00518
#2	.02007	.29209	.02724	.09733	.01027	.00136	.00089	.97028	.00457
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01491**	**.01430**	**.01616**	**.14376**	**2.9946**	**.02099**	**.51050**	**.01070**	**.02820**
Stddev	.00087	.00034	.00012	.00579	.0474	.00130	.00376	.00009	.00074
%RSD	5.8690	2.3904	.73011	4.0296	1.5846	6.1997	.73611	.79473	2.6242
#1	.01553	.01454	.01607	.13966	3.0282	.02191	.50785	.01076	.02872
#2	.01429	.01406	.01624	.14785	2.9611	.02007	.51316	.01064	.02767
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.0233**	**.04011**	**.47568**	**.01751**	**.00415**	**.02078**	**.01667**	**.91881**	**1.9663**
Stddev	.0019	.00113	.01569	.00197	.00632	.00495	.00145	.00545	.0117
%RSD	.03870	2.8298	3.2980	11.249	152.11	23.815	8.6750	.59285	.59285
#1	5.0246	.04091	.48677	.01612	-.00031	.01728	.01564	.91496	1.9580
#2	5.0219	.03931	.46458	.01890	.00862	.02427	.01769	.92266	1.9745
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09239**	**.01009**	**.04139**	**.00994**	**.04228**	**-.00969**	**.01545**	**.15123**	**.01572**
Stddev	.00456	.00020	.00126	.00033	.00414	.01931	.00061	.00037	.00259
%RSD	4.9303	2.0102	3.0396	3.3043	9.8011	199.36	3.9518	.24159	16.461
#1	.09561	.01024	.04228	.00971	.03935	.00397	.01502	.15149	.01755
#2	.08917	.00995	.04050	.01018	.04521	-.02334	.01588	.15098	.01389
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2545.7**	**56005.**	**4764.2**
Stddev	20.0	316.	32.8
%RSD	.78407	.56381	.68757
#1	2531.6	55782.	4741.0
#2	2559.9	56229.	4787.3

Sample Name: MB 280-375477/1-A Acquired: 6/9/2017 8:43:44 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/8 Custom ID2: Custom ID3:
Comment: 375477 6010C SOIL

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00022**	**.02945**	W **.01062**	**.01657**	**.00133**	**.00002**	**-.00143**	F **.24201**	**-.00009**
Stddev	.00050	.00245	.00184	.00099	.00016	.00007	.00272	.00264	.00002
%RSD	225.24	8.3122	17.299	5.9581	12.257	384.02	189.58	1.0897	20.315
#1	.00013	.03118	.01192	.01587	.00122	-.00003	-.00335	.24015	-.00007
#2	-.00058	.02772	.00932	.01727	.00145	.00006	.00049	.24388	-.00010
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			.00750					.20000	
Low Limit			-.00750					-.20000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00032**	**.00171**	**.00426**	W **.05953**	**.08569**	**.00066**	**.08155**	**.00098**	**-.00033**
Stddev	.00015	.00002	.00029	.00315	.00349	.00125	.00563	.00003	.00060
%RSD	46.567	1.3597	6.8968	5.2843	4.0757	191.41	6.9014	3.5399	182.54
#1	.00042	.00173	.00446	.05731	.08322	.00154	.08553	.00101	.00010
#2	.00021	.00170	.00405	.06176	.08816	-.00023	.07757	.00096	-.00076
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.05000					
Low Limit				-.05000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.28575**	**.00207**	**.01913**	**-.00021**	**.00394**	**-.00198**	**-.00316**	**.03281**	**.07022**
Stddev	.00221	.00009	.00320	.00011	.00257	.00019	.00011	.00916	.01960
%RSD	.77357	4.4070	16.704	55.793	65.272	9.8243	3.5723	27.913	27.913
#1	.28731	.00214	.01687	-.00012	.00212	-.00211	-.00324	.02634	.05636
#2	.28418	.00201	.02139	-.00029	.00576	-.00184	-.00308	.03929	.08408
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00808**	**.00108**	**.00010**	**.00090**	**.00349**	**.00164**	**.00067**	**.00298**	**-.00095**
Stddev	.00053	.00003	.00233	.00019	.00043	.01465	.00034	.00031	.00424
%RSD	6.5304	2.3620	2339.0	20.744	12.438	894.47	50.754	10.491	447.92
#1	.00845	.00110	.00175	.00103	.00380	-.00872	.00043	.00320	-.00395
#2	.00771	.00106	-.00155	.00077	.00319	.01199	.00092	.00276	.00205
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2566.5**	**56277.**	**4850.3**
Stddev	12.3	149.	8.0
%RSD	.47919	.26426	.16435
#1	2557.8	56172.	4844.7
#2	2575.2	56382.	4856.0

Sample Name: 280-97577-A-1-A MDLV Acquired: 6/9/2017 8:46:24 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375477 6010C SOIL

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00209**	**.04637**	**.00744**	**.03098**	**.00284**	**.00035**	**.00980**	**.41972**	**.00100**
Stddev	.00047	.00284	.00680	.00214	.00004	.00010	.00177	.00475	.00067
%RSD	22.344	6.1276	91.429	6.9237	1.3588	29.931	18.029	1.1312	67.326
#1	.00176	.04837	.01224	.03249	.00286	.00042	.00855	.42308	.00052
#2	.00242	.04436	.00263	.02946	.00281	.00027	.01104	.41637	.00148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00165**	**.00304**	**.00579**	**.07762**	**.33833**	**.01211**	**.10036**	**.00174**	**.00163**
Stddev	.00041	.00030	.00031	.00088	.00200	.00090	.00446	.00003	.00010
%RSD	24.663	9.9895	5.3090	1.1343	.59261	7.4493	4.4391	1.4379	6.0118
#1	.00194	.00325	.00601	.07824	.33691	.01275	.10351	.00173	.00156
#2	.00136	.00282	.00558	.07700	.33974	.01147	.09721	.00176	.00169
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.31775**	**.00338**	**.10908**	**.00627**	**.07544**	**.00984**	**.00616**	**.14081**	**.30133**
Stddev	.00218	.00000	.00269	.00037	.00167	.00230	.00304	.00285	.00611
%RSD	.68465	.04993	2.4632	5.9225	2.2080	23.330	49.287	2.0261	2.0261
#1	.31929	.00338	.11098	.00654	.07662	.00822	.00402	.13879	.29701
#2	.31621	.00338	.10718	.00601	.07426	.01147	.00831	.14283	.30565
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01417**	**.00123**	**.08876**	**.00289**	**.01753**	**.10529**	**.00334**	**.01101**	**.00599**
Stddev	.00054	.00006	.00217	.00064	.00528	.01236	.00073	.00052	.00024
%RSD	3.8307	5.1336	2.4426	22.171	30.145	11.739	21.971	4.6989	4.0339
#1	.01378	.00127	.09029	.00244	.01379	.11403	.00386	.01138	.00616
#2	.01455	.00118	.08723	.00335	.02126	.09655	.00282	.01065	.00582
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2537.7**	**56833.**	**5012.2**
Stddev	28.2	510.	27.2
%RSD	1.1098	.89688	.54237
#1	2557.6	56473.	5031.5
#2	2517.8	57194.	4993.0

Sample Name: 280-97577-A-2-A MDLV Acquired: 6/9/2017 8:49:04 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375477 6010C SOIL

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00160**	**.04336**	**.01431**	**.02970**	**.00364**	**.00040**	**.01518**	**.62342**	**.00076**
Stddev	.00044	.00169	.00395	.00228	.00026	.00018	.00205	.00057	.00013
%RSD	27.358	3.8865	27.626	7.6916	7.1746	45.483	13.477	.09162	16.512
#1	.00191	.04455	.01152	.03132	.00382	.00053	.01373	.62302	.00067
#2	.00129	.04217	.01711	.02809	.00345	.00027	.01663	.62382	.00085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00160**	**.00328**	**.00750**	**.09696**	**.41478**	**.00933**	**.16370**	**.00156**	**.00164**
Stddev	.00025	.00009	.00066	.00124	.02750	.00221	.00090	.00008	.00017
%RSD	15.498	2.8893	8.7995	1.2829	6.6300	23.729	.54843	5.0087	10.303
#1	.00142	.00321	.00704	.09608	.39533	.00776	.16433	.00161	.00152
#2	.00177	.00335	.00797	.09784	.43423	.01089	.16306	.00150	.00176
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.59349**	**.00383**	**.10840**	**.00598**	**.07705**	**.00729**	**.00658**	**.09416**	**.20151**
Stddev	.00003	.00038	.00053	.00125	.00482	.00087	.00282	.01409	.03015
%RSD	.00579	9.8564	.49048	20.827	6.2547	11.879	42.857	14.961	14.961
#1	.59351	.00356	.10878	.00686	.08046	.00790	.00459	.08420	.18019
#2	.59346	.00410	.10802	.00510	.07364	.00668	.00858	.10412	.22282
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01354**	**.00188**	**.08688**	**.00261**	**.01372**	**.09937**	**.00347**	**.01177**	**.00429**
Stddev	.00235	.00001	.00082	.00027	.00256	.00534	.00077	.00013	.00095
%RSD	17.353	.77233	.94388	10.422	18.646	5.3733	22.162	1.1152	22.072
#1	.01520	.00187	.08746	.00280	.01191	.09559	.00293	.01168	.00362
#2	.01188	.00189	.08630	.00242	.01553	.10314	.00402	.01187	.00496
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2603.3**	**57026.**	**5014.9**
Stddev	12.0	313.	27.1
%RSD	.46115	.54971	.54112
#1	2594.8	56804.	4995.7
#2	2611.8	57247.	5034.0

Sample Name: 280-97577-A-3-A LOQV Acquired: 6/9/2017 8:51:44 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 375477 6010C SOIL

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01699**	**.50854**	**.02739**	**.11400**	**.01980**	**.00480**	**.00063**	**1.1886**	**.00519**
Stddev	.00066	.01183	.00264	.00186	.00009	.00008	.00244	.0033	.00010
%RSD	3.8779	2.3256	9.6345	1.6272	.43827	1.6832	385.64	.28028	2.0012
#1	.01652	.51690	.02925	.11532	.01974	.00474	-.00109	1.1910	.00512
#2	.01745	.50018	.02552	.11269	.01986	.00486	.00236	1.1863	.00526
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00983**	**.03388**	**.05649**	**.83298**	**2.9967**	**.05039**	**.37392**	**.04894**	**.02324**
Stddev	.00019	.00010	.00016	.00668	.0308	.00034	.00008	.00018	.00028
%RSD	1.9539	.29364	.27685	.80190	1.0288	.67668	.02161	.37785	1.1868
#1	.00997	.03395	.05638	.82825	3.0185	.05063	.37398	.04881	.02344
#2	.00970	.03381	.05660	.83770	2.9749	.05015	.37386	.04907	.02305
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.3769**	**.04134**	**.49495**	**.00985**	**.00982**	**.02085**	**.02310**	**.96196**	**2.0586**
Stddev	.0129	.00162	.01003	.00143	.00960	.00394	.00424	.01065	.0228
%RSD	.23906	3.9084	2.0267	14.530	97.784	18.881	18.342	1.1071	1.1071
#1	5.3678	.04249	.50204	.00884	.01660	.02363	.02609	.96949	2.0747
#2	5.3860	.04020	.48785	.01087	.00303	.01807	.02010	.95443	2.0425
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10214**	**.01083**	**.15120**	**.01098**	**.03190**	**-.01101**	**.02176**	**.08207**	**.03133**
Stddev	.00439	.00007	.00178	.00026	.00081	.02174	.00025	.00111	.00028
%RSD	4.2999	.62913	1.1787	2.3280	2.5354	197.47	1.1381	1.3528	.88899
#1	.10524	.01088	.14993	.01080	.03248	-.02639	.02194	.08128	.03153
#2	.09903	.01079	.15246	.01116	.03133	.00436	.02159	.08285	.03113
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2595.2**	**57202.**	**5092.2**
Stddev	3.6	633.	74.8
%RSD	.13944	1.1070	1.4694
#1	2592.7	56755.	5145.1
#2	2597.8	57650.	5039.3

Sample Name: CCVH-4579429 Acquired: 6/9/2017 8:54:21 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00926**	**48.042**	**.00859**	**.00114**	**.00035**	**.00019**	**.97415**	**.00202**	**-.00001**	**-.00063**	**.00072**	**.01836**
Stddev	.00002	.167	.00484	.00036	.00002	.00006	.01854	.00361	.00009	.00016	.00008	.00033
%RSD	.20434	.34841	56.373	31.934	6.7984	34.312	1.9031	178.42	1614.8	25.447	10.940	1.7779
#1	-.00927	48.161	.01201	.00139	.00037	.00023	.98726	-.00053	-.00007	-.00074	.00078	.01860
#2	-.00925	47.924	.00516	.00088	.00033	.00014	.96104	.00457	.00006	-.00051	.00066	.01813
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.100**	**-.02423**	**.00073**	**.09877**	**-.00189**	**-.00197**	**245.65**	**.00135**	**.00698**	**.00049**	W **4.7279**	**-.00699**
Stddev	.053	.00708	.00088	.00401	.00005	.00015	1.39	.00057	.00140	.00202	.1030	.00292
%RSD	.10852	29.213	121.22	4.0626	2.5369	7.4108	.56688	42.450	20.011	409.74	2.1787	41.786
#1	49.063	-.01923	.00135	.10160	-.00192	-.00187	246.64	.00175	.00797	.00192	4.8007	-.00905
#2	49.138	-.02924	.00010	.09593	-.00186	-.00208	244.67	.00094	.00599	-.00093	4.6551	-.00492
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Warn	None
Value											5.0000	
Range											-5.0000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00811**	**-.04813**	**-.10299**	**-.00219**	**.00052**	**4.9668**	**.02233**	**.00416**	**10.238**	**.01409**	**-.00034**	**.09041**
Stddev	.00142	.00563	.01204	.00097	.00001	.0180	.00055	.00276	.054	.00052	.00001	.00049
%RSD	17.542	11.689	11.689	44.470	1.5186	.36267	2.4662	66.453	.52385	3.7018	2.8866	.53925
#1	-.00911	-.05210	-.11150	-.00150	.00053	4.9795	.02272	.00220	10.276	.01372	-.00034	.09007
#2	-.00710	-.04415	-.09448	-.00287	.00051	4.9540	.02195	.00611	10.200	.01446	-.00035	.09076
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2550.3**	**55332.**	**5140.2**
Stddev	1.4	74.	25.9
%RSD	.05300	.13381	.50471
#1	2551.3	55385.	5121.9
#2	2549.4	55280.	5158.6

Sample Name: CCV-4567764 Acquired: 6/9/2017 8:56:56 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51140**	**.50514**	**.99341**	**.51644**	**.48240**	**.48682**	**.00199**	**4.7925**	**.50356**	**.49835**	**.47240**	**.54186**	**2.4723**
Stddev	.00043	.01367	.02826	.00985	.00060	.00008	.00310	.0089	.01070	.00940	.01050	.00133	.0122
%RSD	.08484	2.7059	2.8444	1.9068	.12519	.01568	155.51	.18462	2.1247	1.8867	2.2237	.24458	.49244
#1	.51171	.51481	1.0134	.52340	.48197	.48687	.00419	4.7988	.51113	.50500	.47983	.54279	2.4809
#2	.51109	.49548	.97343	.50948	.48283	.48676	-.00020	4.7863	.49600	.49170	.46497	.54092	2.4637
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.789**	**.97994**	**20.259**	**.51996**	**.46941**	**5.0180**	**.50053**	**1.0121**	**.96658**	**.00187**	**1.0100**	**1.0077**	**4.8216**
Stddev	.032	.00145	.012	.00078	.00762	.0087	.01125	.0221	.01620	.00079	.0246	.0172	.0195
%RSD	.06516	.14780	.05745	.14933	1.6233	.17363	2.2483	2.1831	1.6762	42.158	2.4363	1.7087	.40413
#1	48.811	.98097	20.251	.51941	.47480	5.0118	.50849	1.0277	.97804	.00131	1.0274	1.0199	4.8354
#2	48.766	.97892	20.268	.52051	.46402	5.0242	.49257	.99650	.95513	.00243	.99263	.99554	4.8079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.318**	**.95941**	**.48999**	**.00705**	**.50985**	**.99614**	**-.01717**	**.52052**	**.51233**	**.50866**
Stddev	.042	.02030	.00092	.00105	.00001	.02032	.01050	.00023	.00064	.00137
%RSD	.40413	2.1156	.18830	14.930	.00196	2.0398	61.137	.04324	.12552	.26940
#1	10.348	.97377	.48934	.00779	.50984	1.0105	-.02460	.52068	.51279	.50769
#2	10.289	.94506	.49064	.00630	.50985	.98177	-.00975	.52036	.51188	.50963
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2557.4**	**56128.**	**5114.1**
Stddev	9.8	159.	13.7
%RSD	.38441	.28376	.26747
#1	2564.3	56241.	5104.4
#2	2550.4	56015.	5123.8

Sample Name: CCB Acquired: 6/9/2017 8:59:25 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00030**	**.00125**	**.00525**	**.00062**	**-.00018**	**.00037**	**-.00359**	**.00672**	**.00016**	**.00024**	**.00088**	**-.00023**	**.02408**
Stddev	.00004	.00061	.00166	.00044	.00040	.00021	.00116	.00374	.00005	.00051	.00013	.00018	.03070
%RSD	13.971	48.591	31.509	71.347	224.99	55.355	32.465	55.614	32.179	211.68	14.145	78.965	127.49
#1	.00027	.00168	.00408	.00031	-.00046	.00023	-.00276	.00408	.00019	.00060	.00080	-.00035	.00237
#2	.00033	.00082	.00642	.00093	.00010	.00052	-.00441	.00936	.00012	-.00012	.00097	-.00010	.04579
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01620**	**.00168**	**.00706**	**.00012**	**-.00040**	**.05012**	**.00003**	**.00192**	**-.00045**	**-.00116**	**.00008**	**-.00709**	**-.01932**
Stddev	.07859	.00315	.00257	.00005	.00037	.15471	.00039	.00751	.00124	.00032	.00072	.00286	.00829
%RSD	485.25	187.86	36.452	44.392	92.635	308.66	1194.2	392.03	277.43	27.258	895.36	40.295	42.925
#1	-.07177	-.00055	.00524	.00016	-.00067	-.05927	-.00024	.00722	.00043	-.00093	.00059	-.00507	-.01345
#2	.03938	.00391	.00888	.00008	-.00014	.15952	.00031	-.00339	-.00133	-.00138	-.00043	-.00912	-.02518
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.04134**	**.00009**	**.00046**	**-.00180**	**.00040**	**.00143**	**.01022**	**.00122**	**.00016**	**-.00058**
Stddev	.01774	.00134	.00018	.00055	.00031	.00207	.01813	.00001	.00010	.00213
%RSD	42.925	1506.0	38.328	30.441	78.292	144.57	177.49	.91095	63.748	369.20
#1	-.02879	.00103	.00034	-.00218	.00018	-.00003	.02304	.00121	.00009	-.00208
#2	-.05388	-.00086	.00059	-.00141	.00062	.00290	-.00261	.00123	.00024	.00093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2518.4**	**56120.**	**4915.9**
Stddev	3.2	55.	16.5
%RSD	.12725	.09752	.33475
#1	2520.6	56081.	4904.3
#2	2516.1	56158.	4927.5

Sample Name: CCVL-4584532 Acquired: 6/9/2017 9:02:05 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01045**	**.09961**	F **.02254**	**.10138**	**.00925**	**.00094**	**.10631**	**.19980**	**.00474**	**.01018**	**.00989**	**.01630**
Stddev	.00017	.00506	.00389	.00259	.00005	.00013	.00178	.00562	.00017	.00047	.00019	.00007
%RSD	1.6522	5.0768	17.241	2.5563	.55189	14.071	1.6754	2.8142	3.5846	4.5929	1.9580	.45196
#1	.01033	.10318	.02529	.10321	.00929	.00084	.10505	.20378	.00462	.01051	.01003	.01636
#2	.01057	.09603	.01979	.09954	.00921	.00103	.10757	.19582	.00486	.00985	.00975	.01625
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.12609**	**3.0143**	**.01934**	**.20616**	**.01098**	**.01762**	**.96023**	**.04001**	**2.8558**	**.01135**	**.08731**	**.02076**
Stddev	.00129	.0200	.00058	.00158	.00006	.00035	.00660	.00143	.0746	.00022	.00347	.00436
%RSD	1.0247	.66218	3.0111	.76452	.51817	1.9707	.68730	3.5860	2.6107	1.9292	3.9749	20.998
#1	.12701	3.0001	.01893	.20505	.01102	.01787	.96489	.04102	2.9086	.01151	.08486	.02384
#2	.12518	3.0284	.01976	.20728	.01094	.01738	.95556	.03899	2.8031	.01120	.08977	.01768
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01469**	**.46769**	**1.0009**	**.09363**	**.01009**	**.01571**	**.01023**	**.01707**	F **.03425**	**.01048**	**.02049**	**.01522**
Stddev	.00303	.01067	.0228	.00242	.00003	.00170	.00025	.00150	.00283	.00053	.00039	.00207
%RSD	20.660	2.2809	2.2809	2.5892	.30902	10.853	2.4150	8.8023	8.2640	5.0076	1.9248	13.587
#1	.01254	.46015	.98472	.09535	.01011	.01691	.01006	.01601	.03625	.01011	.02077	.01668
#2	.01683	.47524	1.0170	.09192	.01007	.01450	.01041	.01813	.03225	.01086	.02021	.01376
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2579.3**	**56558.**	**5001.2**
Stddev	4.7	10.	73.9
%RSD	.18310	.01730	1.4767
#1	2582.6	56565.	4948.9
#2	2576.0	56551.	5053.4

Sample Name: MB 280-376380/1-A Acquired: 6/9/2017 9:04:43 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/8 Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00014**	**.01553**	**.00506**	**.01476**	**.00143**	**.00018**	**.00105**	F **.28525**	**-.00003**
Stddev	.00042	.00297	.00876	.00034	.00001	.00005	.00034	.00371	.00009
%RSD	301.54	19.098	173.27	2.3359	.45683	24.976	32.250	1.3020	324.42
#1	-.00016	.01344	.01125	.01500	.00143	.00021	.00129	.28788	.00004
#2	.00044	.01763	-.00114	.01452	.00143	.00015	.00081	.28263	-.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								.20000	
Low Limit								-.20000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00044**	**.00094**	**.00137**	W **.06308**	**-.00204**	**.00074**	**.07814**	**.00090**	**.00035**
Stddev	.00048	.00054	.00012	.00085	.00053	.00087	.00336	.00002	.00033
%RSD	108.09	57.418	9.0428	1.3507	25.749	118.79	4.3031	2.1818	93.895
#1	.00010	.00056	.00145	.06368	-.00241	.00135	.07577	.00089	.00059
#2	.00078	.00132	.00128	.06248	-.00167	.00012	.08052	.00092	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.05000					
Low Limit				-.05000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.30759**	**.00081**	**.01893**	**.00032**	**.01962**	**-.00055**	**-.00007**	**.02583**	**.05527**
Stddev	.00416	.00008	.00173	.00048	.00134	.00007	.00067	.00907	.01941
%RSD	1.3532	9.5376	9.1438	150.41	6.8371	13.100	1001.3	35.112	35.112
#1	.31053	.00086	.02015	.00065	.01867	-.00050	.00041	.01942	.04155
#2	.30465	.00075	.01770	-.00002	.02056	-.00060	-.00054	.03224	.06899
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00929**	**.00090**	**.00119**	**.00047**	**.00249**	**.01421**	**.00083**	**.00377**	**-.00096**
Stddev	.00033	.00004	.00084	.00002	.00017	.02043	.00005	.00086	.00110
%RSD	3.5927	4.0298	70.788	3.6969	7.0223	143.69	5.6943	22.846	114.12
#1	.00905	.00088	.00059	.00048	.00237	.02866	.00080	.00438	-.00173
#2	.00952	.00093	.00178	.00046	.00261	-.00023	.00086	.00316	-.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2577.3**	**57745.**	**5169.5**
Stddev	7.2	223.	6.1
%RSD	.27836	.38604	.11882
#1	2582.3	57903.	5173.8
#2	2572.2	57587.	5165.1

Sample Name: LCS 280-376380/2-A Acquired: 6/9/2017 9:07:21 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04589**	**1.8265**	**.97258**	**1.0312**	**1.8606**	**.04678**	**1.9577**	**45.297**	**.09761**
Stddev	.00008	.0422	.01389	.0143	.0002	.00001	.0395	.002	.00181
%RSD	.16718	2.3117	1.4284	1.3815	.01175	.03002	2.0163	.00374	1.8543
#1	.04583	1.8563	.98240	1.0413	1.8604	.04679	1.9857	45.298	.09889
#2	.04594	1.7966	.96275	1.0212	1.8608	.04677	1.9298	45.296	.09633
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.46839**	W **.18219**	**.26685**	**1.0220**	**47.504**	**.94411**	**47.345**	**.49548**	**.87771**
Stddev	.00970	.00442	.00044	.0031	.011	.00348	.119	.00025	.01967
%RSD	2.0706	2.4276	.16389	.30567	.02414	.36809	.25107	.05007	2.2414
#1	.47525	.18532	.26654	1.0242	47.496	.94657	47.261	.49566	.89163
#2	.46153	.17906	.26716	1.0198	47.512	.94165	47.429	.49530	.86380
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.21000							
Low Limit		.19000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.226**	**.46900**	**9.7886**	**.44918**	**1.8991**	**.47960**	**1.8940**	**2.9240**	**6.2573**
Stddev	.069	.00914	.1921	.01133	.0322	.00628	.0345	.0421	.0901
%RSD	.13964	1.9480	1.9630	2.5232	1.6954	1.3095	1.8225	1.4399	1.4399
#1	49.274	.47546	9.9244	.45720	1.9218	.48404	1.9184	2.8942	6.1936
#2	49.177	.46254	9.6527	.44117	1.8763	.47516	1.8696	2.9537	6.3210
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8075**	**.93807**	**.98715**	**.98741**	**1.8221**	**2.0305**	**.50473**	**.48899**	**.49943**
Stddev	.0472	.00034	.00351	.00029	.0386	.0054	.00150	.00001	.00212
%RSD	2.6106	.03600	.35597	.02959	2.1183	.26793	.29747	.00135	.42360
#1	1.8409	.93831	.98467	.98721	1.8494	2.0266	.50579	.48900	.49793
#2	1.7741	.93783	.98964	.98762	1.7948	2.0343	.50367	.48899	.50093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2501.6**	**54225.**	**4981.4**
Stddev	4.0	69.	9.3
%RSD	.15859	.12705	.18610
#1	2498.8	54274.	4988.0
#2	2504.4	54176.	4974.9

Sample Name: 280-97928-C-1-A Acquired: 6/9/2017 9:09:46 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00127**	**45.760**	**.02917**	**.02020**	**.15919**	**.00207**	**-.00021**	**13.695**	**.00072**
Stddev	.00081	.009	.00667	.00074	.00080	.00011	.00124	.065	.00001
%RSD	64.053	.02031	22.856	3.6595	.50155	5.3429	580.69	.47732	1.7961
#1	-.00070	45.754	.02445	.02073	.15863	.00215	-.00109	13.649	.00073
#2	-.00185	45.767	.03388	.01968	.15975	.00200	.00066	13.741	.00071
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03027**	**.04879**	**.10904**	**88.085**	**5.8986**	**.07450**	**17.840**	**3.8663**	**.00005**
Stddev	.00062	.00152	.00008	.028	.0101	.00237	.032	.0033	.00038
%RSD	2.0412	3.1094	.07252	.03196	.17105	3.1799	.17998	.08549	733.06
#1	.03071	.04987	.10910	88.065	5.9057	.07618	17.817	3.8640	.00032
#2	.02983	.04772	.10899	88.105	5.8914	.07283	17.863	3.8686	-.00022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.29658**	**.06633**	**3.5040**	**.03805**	**.64033**	**-.00295**	**-.00214**	**2.9719**	**6.3600**
Stddev	.00013	.00175	.0902	.00161	.01042	.00330	.00427	.0510	.1090
%RSD	.04411	2.6405	2.5735	4.2363	1.6270	112.01	199.43	1.7147	1.7147
#1	.29668	.06757	3.5678	.03919	.64770	-.00528	-.00517	3.0080	6.4371
#2	.29649	.06510	3.4403	.03691	.63296	-.00061	.00088	2.9359	6.2828
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00833**	**.03738**	**.01794**	**.34356**	**.00382**	**.01424**	**.08818**	**.23580**	**.01399**
Stddev	.00118	.00015	.00182	.00448	.00079	.00920	.00027	.00179	.00102
%RSD	14.186	.41163	10.149	1.3040	20.635	64.615	.30952	.76072	7.2631
#1	.00916	.03727	.01923	.34039	.00438	.02075	.08837	.23453	.01327
#2	.00749	.03749	.01665	.34673	.00326	.00774	.08799	.23707	.01470
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2702.1**	**58411.**	**5459.9**
Stddev	2.9	240.	9.8
%RSD	.10904	.41151	.17908
#1	2704.2	58581.	5466.8
#2	2700.0	58241.	5453.0

Sample Name: 280-97928-C-1-A SD@5 Acquired: 6/9/2017 9:12:20 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00041**	**9.6645**	**.01188**	**.00528**	**.03333**	**.00052**	**-.00147**	**2.9324**	**.00031**
Stddev	.00049	.0124	.00681	.00041	.00061	.00014	.00300	.0237	.00013
%RSD	119.46	.12880	57.347	7.7599	1.8263	26.184	203.77	.80727	42.935
#1	-.00075	9.6557	.01669	.00499	.03290	.00042	-.00360	2.9157	.00021
#2	-.00006	9.6733	.00706	.00557	.03376	.00061	.00065	2.9492	.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00680**	**.01045**	**.02196**	**18.379**	**1.2073**	**.01614**	**3.8393**	**.81164**	**-.00034**
Stddev	.00028	.00012	.00043	.054	.0301	.00041	.0144	.00024	.00118
%RSD	4.1186	1.1144	1.9737	.29389	2.4900	2.5481	.37551	.03001	347.67
#1	.00700	.01053	.02227	18.341	1.1861	.01585	3.8495	.81181	.00050
#2	.00661	.01036	.02166	18.417	1.2286	.01643	3.8291	.81147	-.00117
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00253**	**.01435**	**.73573**	**.00862**	**.12870**	**-.00657**	**.00026**	**.60367**	**1.2918**
Stddev	.02936	.00018	.02042	.00102	.00919	.00031	.00070	.03102	.0664
%RSD	1162.4	1.2369	2.7749	11.845	7.1396	4.6894	272.03	5.1391	5.1391
#1	-.01824	.01423	.75016	.00935	.13520	-.00679	-.00024	.62560	1.3388
#2	.02329	.01448	.72129	.00790	.12221	-.00635	.00075	.58173	1.2449
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00183**	**.00825**	**.00435**	**.06956**	**.00410**	**.01189**	**.01829**	**.05096**	**.00267**
Stddev	.00053	.00028	.00055	.00012	.00010	.00402	.00036	.00035	.00024
%RSD	28.900	3.4237	12.590	.16646	2.5022	33.811	1.9881	.68271	9.1383
#1	.00221	.00805	.00397	.06964	.00403	.01473	.01855	.05072	.00284
#2	.00146	.00844	.00474	.06947	.00418	.00904	.01804	.05121	.00250
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2629.9**	**57791.**	**5210.2**
Stddev	11.6	86.	6.9
%RSD	.44195	.14907	.13163
#1	2638.1	57852.	5205.4
#2	2621.7	57730.	5215.1

Sample Name: 280-97928-C-1-B MS Acquired: 6/9/2017 9:14:55 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04300**	**85.627**	**.93733**	**.93388**	**2.0124**	**.04610**	**1.8234**	**58.373**	**.09220**
Stddev	.00099	.457	.01339	.01412	.0078	.00008	.0272	.307	.00179
%RSD	2.2965	.53403	1.4284	1.5115	.38684	.17882	1.4925	.52676	1.9454
#1	.04370	85.303	.94680	.94386	2.0069	.04616	1.8427	58.155	.09347
#2	.04230	85.950	.92786	.92390	2.0179	.04604	1.8042	58.590	.09093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.46823**	**.24721**	**.38111**	**110.31**	**62.473**	**.97919**	**69.352**	**4.9486**	**.79686**
Stddev	.00803	.00434	.00033	.35	.216	.00355	.265	.0238	.01258
%RSD	1.7159	1.7564	.08700	.31815	.34540	.36239	.38159	.47984	1.5791
#1	.47391	.25028	.38087	110.07	62.320	.97668	69.539	4.9654	.80576
#2	.46255	.24414	.38134	110.56	62.625	.98170	69.165	4.9318	.78796
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**45.897**	**.50819**	**12.833**	**.45145**	**2.5465**	**.31369**	**1.7490**	**7.6093**	**16.284**
Stddev	.255	.00902	.210	.00617	.0289	.00512	.0264	.0128	.027
%RSD	.55618	1.7746	1.6356	1.3676	1.1342	1.6315	1.5089	.16774	.16774
#1	46.078	.51457	12.982	.45582	2.5669	.31731	1.7677	7.6183	16.303
#2	45.717	.50182	12.685	.44708	2.5261	.31007	1.7303	7.6003	16.265
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.6114**	**.93732**	**.89462**	**1.5855**	**1.6380**	**1.9256**	**.63135**	**.73178**	**.40154**
Stddev	.0368	.00248	.00188	.0099	.0266	.0408	.00283	.00516	.00186
%RSD	2.2830	.26483	.21069	.62322	1.6246	2.1174	.44891	.70476	.46369
#1	1.6374	.93557	.89596	1.5925	1.6569	1.9544	.63336	.73543	.40022
#2	1.5854	.93908	.89329	1.5785	1.6192	1.8967	.62935	.72814	.40285
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2673.4**	**57135.**	**5463.1**
Stddev	7.1	300.	50.5
%RSD	.26437	.52430	.92357
#1	2678.4	56924.	5498.8
#2	2668.4	57347.	5427.4

Sample Name: 280-97928-C-1-C MSD Acquired: 6/9/2017 9:17:19 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04468**	**82.668**	**.98243**	**.98517**	**2.0873**	**.04785**	**1.9067**	**60.182**	**.09703**
Stddev	.00050	.208	.02970	.01703	.0057	.00008	.0328	.123	.00111
%RSD	1.1241	.25192	3.0228	1.7290	.27098	.16885	1.7215	.20494	1.1491
#1	.04433	82.521	1.0034	.99722	2.0833	.04791	1.9299	60.094	.09782
#2	.04504	82.815	.96143	.97313	2.0913	.04779	1.8834	60.269	.09624
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49165**	**.25736**	**.39338**	**102.69**	**64.285**	**1.0179**	**70.757**	**4.5841**	**.84422**
Stddev	.00849	.00546	.00331	.32	.230	.0017	.101	.0022	.01867
%RSD	1.7268	2.1228	.84074	.31479	.35846	.16601	.14253	.04720	2.2114
#1	.49765	.26123	.39572	102.46	64.122	1.0168	70.686	4.5857	.85742
#2	.48564	.25350	.39104	102.92	64.448	1.0191	70.828	4.5826	.83102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.550**	**.52869**	**13.165**	**.47088**	**2.5418**	**.33932**	**1.8357**	**6.7897**	**14.530**
Stddev	.390	.00946	.208	.01000	.0604	.00304	.0346	.0007	.001
%RSD	.80244	1.7890	1.5766	2.1239	2.3744	.89704	1.8870	.01029	.01029
#1	48.275	.53538	13.312	.47795	2.5844	.34147	1.8601	6.7892	14.529
#2	48.826	.52201	13.018	.46381	2.4991	.33717	1.8112	6.7902	14.531
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.7000**	**.97866**	**.94060**	**1.6970**	**1.7234**	**2.0275**	**.65255**	**.73500**	**.43643**
Stddev	.0337	.00236	.00545	.0067	.0326	.0272	.00198	.00268	.00172
%RSD	1.9805	.24138	.57911	.39311	1.8925	1.3433	.30347	.36479	.39320
#1	1.7238	.97699	.94446	1.7017	1.7465	2.0467	.65395	.73310	.43521
#2	1.6762	.98033	.93675	1.6923	1.7004	2.0082	.65115	.73690	.43764
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2639.7**	**57278.**	**5510.9**
Stddev	.5	501.	17.0
%RSD	.01892	.87412	.30914
#1	2640.1	57632.	5498.9
#2	2639.4	56924.	5523.0

Sample Name: 280-97928-C-1-A PDS Acquired: 6/9/2017 9:19:43 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04478**	**45.781**	**.21363**	**.11619**	**.24686**	**.04734**	**-.00209**	**31.048**	**.04844**
Stddev	.00033	.021	.00248	.00166	.00034	.00024	.00002	.052	.00124
%RSD	.73175	.04542	1.1615	1.4318	.13887	.50159	.96124	.16825	2.5648
#1	.04455	45.767	.21538	.11736	.24710	.04717	-.00210	31.011	.04932
#2	.04502	45.796	.21187	.11501	.24662	.04751	-.00208	31.085	.04757
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07591**	**.09244**	**.16278**	**87.043**	**24.360**	**.16348**	**35.964**	**3.8086**	**.04272**
Stddev	.00180	.00196	.00105	.208	.115	.00250	.022	.0010	.00102
%RSD	2.3701	2.1218	.64509	.23919	.47217	1.5323	.06241	.02758	2.3840
#1	.07718	.09383	.16352	86.895	24.278	.16525	35.948	3.8079	.04344
#2	.07463	.09105	.16203	87.190	24.441	.16171	35.980	3.8094	.04200
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.590**	**.11156**	**5.3881**	**.12338**	**.63284**	**.08824**	**.18355**	**7.4809**	**16.009**
Stddev	.517	.00185	.0891	.00268	.00806	.00007	.00806	.0030	.006
%RSD	2.6397	1.6540	1.6546	2.1684	1.2734	.07502	4.3928	.04025	.04025
#1	19.224	.11287	5.4512	.12527	.63854	.08829	.17785	7.4788	16.005
#2	19.955	.11026	5.3251	.12149	.62714	.08820	.18925	7.4831	16.014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09711**	**.08326**	**.21906**	**.39298**	**.18030**	**.53938**	**.13768**	**.42187**	**.06554**
Stddev	.00110	.00007	.00021	.00889	.00268	.01996	.00023	.00040	.00188
%RSD	1.1375	.07838	.09443	2.2630	1.4887	3.7009	.16677	.09561	2.8680
#1	.09789	.08321	.21920	.39927	.18220	.55349	.13785	.42159	.06421
#2	.09633	.08331	.21891	.38669	.17840	.52526	.13752	.42216	.06687
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2668.6**	**57796.**	**5401.1**
Stddev	.7	157.	52.3
%RSD	.02487	.27149	.96870
#1	2668.1	57907.	5438.1
#2	2669.0	57686.	5364.1

Sample Name: 280-97928-C-3-A Acquired: 6/9/2017 9:22:14 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00077**	**31.999**	**.02402**	**.01613**	**.09535**	**.00153**	**-.00299**	**67.664**	**.00030**
Stddev	.00030	.189	.00052	.00023	.00024	.00010	.00184	.155	.00006
%RSD	38.892	.58975	2.1698	1.4501	.25008	6.6896	61.635	.22975	19.020
#1	-.00056	32.132	.02439	.01630	.09518	.00146	-.00430	67.774	.00026
#2	-.00099	31.865	.02365	.01597	.09551	.00160	-.00169	67.554	.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02237**	**.03590**	**.08576**	**72.267**	**4.9648**	**.05832**	**25.482**	**2.3220**	**-.00035**
Stddev	.00122	.00059	.00007	.299	.0078	.00011	.024	.0027	.00040
%RSD	5.4417	1.6449	.08377	.41361	.15802	.19482	.09510	.11687	116.30
#1	.02323	.03632	.08571	72.479	4.9704	.05824	25.500	2.3239	-.00006
#2	.02151	.03548	.08581	72.056	4.9593	.05840	25.465	2.3200	-.00063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.30562**	**.05256**	**2.6224**	**.01605**	**.10982**	**-.00623**	**.00000**	**3.6251**	**7.7577**
Stddev	.00166	.00194	.0558	.00030	.00424	.00489	.00493	.0486	.1041
%RSD	.54381	3.6957	2.1279	1.8716	3.8614	78.490	178100.	1.3414	1.3414
#1	.30680	.05394	2.6618	.01626	.11281	-.00277	-.00349	3.6595	7.8313
#2	.30445	.05119	2.5829	.01584	.10682	-.00969	.00349	3.5907	7.6841
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00801**	**.09889**	**.02096**	**.29378**	**.00479**	**.00015**	**.06423**	**.14450**	**.03168**
Stddev	.00062	.00026	.00050	.00160	.00092	.01829	.00011	.00206	.00197
%RSD	7.7922	.26109	2.3741	.54493	19.124	11924.	.17419	1.4290	6.2296
#1	.00845	.09907	.02060	.29491	.00543	-.01278	.06431	.14304	.03307
#2	.00757	.09870	.02131	.29265	.00414	.01309	.06416	.14596	.03028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2628.2**	**56475.**	**5212.1**
Stddev	10.1	85.	16.2
%RSD	.38572	.15029	.31125
#1	2621.1	56535.	5200.7
#2	2635.4	56415.	5223.6

Sample Name: 280-97928-B-4-A Acquired: 6/9/2017 9:24:47 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00137**	**23.012**	**.02598**	**.01596**	**.08697**	**.00097**	**-.00089**	**111.01**	**.00016**
Stddev	.00034	.022	.00112	.00005	.00001	.00020	.00136	.26	.00001
%RSD	24.496	.09753	4.2968	.32919	.00997	20.288	154.00	.23457	9.4976
#1	-.00113	23.028	.02677	.01592	.08698	.00111	-.00185	111.19	.00017
#2	-.00161	22.996	.02519	.01600	.08696	.00083	.00008	110.82	.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01818**	**.02688**	**.06279**	**52.293**	**4.4020**	**.04054**	**24.917**	**1.8718**	**-.00064**
Stddev	.00044	.00130	.00043	.546	.0242	.00077	.039	.0034	.00004
%RSD	2.4272	4.8287	.69184	1.0446	.54977	1.8924	.15598	.18019	5.8222
#1	.01849	.02780	.06310	52.679	4.4191	.04000	24.945	1.8742	-.00061
#2	.01787	.02596	.06249	51.906	4.3849	.04108	24.890	1.8694	-.00067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.43264**	**.03846**	**2.5258**	**.00906**	**.11479**	**-.00441**	**-.01033**	**3.0891**	**6.6107**
Stddev	.00246	.00191	.0574	.00279	.00340	.00108	.00350	.0046	.0098
%RSD	.56846	4.9693	2.2721	30.837	2.9625	24.503	33.874	.14874	.14874
#1	.43090	.03981	2.5664	.01104	.11719	-.00517	-.01280	3.0923	6.6176
#2	.43438	.03710	2.4852	.00709	.11239	-.00364	-.00785	3.0858	6.6037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00932**	**.11270**	**.01807**	**.26330**	**.00632**	**.00710**	**.05140**	**.11006**	**.03184**
Stddev	.00118	.00013	.00163	.00024	.00289	.01138	.00025	.00154	.00170
%RSD	12.676	.11180	9.0392	.09281	45.692	160.13	.48920	1.3978	5.3341
#1	.01015	.11279	.01923	.26312	.00837	-.00094	.05158	.11115	.03064
#2	.00848	.11262	.01692	.26347	.00428	.01515	.05122	.10898	.03305
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2628.2**	**57006.**	**5307.2**
Stddev	12.9	65.	38.5
%RSD	.48909	.11382	.72564
#1	2637.3	57051.	5280.0
#2	2619.1	56960.	5334.4

Sample Name: 280-97928-C-5-A Acquired: 6/9/2017 9:27:21 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00185**	**69.986**	**.04443**	**.02322**	**.22299**	**.00277**	**-.00008**	**33.196**	**.00074**
Stddev	.00008	.505	.00480	.00001	.00177	.00004	.00289	.148	.00012
%RSD	4.1251	.72189	10.792	.04559	.79411	1.2694	3454.3	.44576	16.716
#1	-.00191	69.629	.04104	.02321	.22174	.00275	.00196	33.091	.00083
#2	-.00180	70.343	.04782	.02323	.22424	.00280	-.00213	33.301	.00065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05301**	**.07352**	**.29992**	**158.21**	**7.9036**	**.13230**	**35.029**	**8.3988**	**-.00097**
Stddev	.00107	.00156	.00331	.52	.0655	.00079	.059	.0949	.00021
%RSD	2.0201	2.1172	1.1021	.32961	.82866	.60066	.16910	1.1302	21.101
#1	.05377	.07462	.30226	157.85	7.8573	.13173	35.070	8.4659	-.00112
#2	.05225	.07242	.29758	158.58	7.9499	.13286	34.987	8.3317	-.00083
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.30220**	**.11372**	**3.7007**	**.03903**	**.64140**	**-.00760**	**-.00442**	**2.6894**	**5.7553**
Stddev	.01820	.00313	.0630	.00163	.00454	.00434	.00357	.0289	.0618
%RSD	6.0240	2.7504	1.7029	4.1641	.70735	57.111	80.851	1.0744	1.0744
#1	.31507	.11594	3.7453	.03788	.64461	-.01067	-.00189	2.6689	5.7115
#2	.28933	.11151	3.6562	.04018	.63819	-.00453	-.00694	2.7098	5.7990
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00957**	**.06509**	**.02385**	**.29796**	**.00554**	**.03499**	**.12751**	**.38439**	**.02478**
Stddev	.00020	.00017	.00105	.00452	.00035	.00087	.00131	.00040	.00078
%RSD	2.0678	.26823	4.4092	1.5159	6.4033	2.4722	1.0237	.10393	3.1400
#1	.00943	.06497	.02460	.30116	.00579	.03560	.12844	.38410	.02423
#2	.00971	.06522	.02311	.29477	.00529	.03438	.12659	.38467	.02534
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2773.9**	**59456.**	**5557.6**
Stddev	6.1	250.	40.1
%RSD	.22157	.42108	.72219
#1	2769.6	59633.	5586.0
#2	2778.2	59279.	5529.2

Sample Name: CCVH-4579429 Acquired: 6/9/2017 9:29:59 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00921**	**47.709**	**.00088**	**.00194**	**.00029**	**.00015**	**.96417**	**.01734**	**.00047**	**-.00060**	**.00053**	**.01771**
Stddev	.00046	.113	.00185	.00110	.00015	.00001	.02517	.00244	.00021	.00017	.00004	.00055
%RSD	4.9951	.23765	209.51	56.864	51.545	6.2345	2.6100	14.095	44.431	28.043	6.7632	3.1067
#1	-.00888	47.789	.00219	.00116	.00019	.00016	.98196	.01562	.00062	-.00072	.00056	.01733
#2	-.00953	47.629	-.00042	.00272	.00040	.00015	.94637	.01907	.00032	-.00048	.00050	.01810
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.045**	**.00083**	**.00119**	**.10830**	**-.00108**	**-.00181**	**246.11**	**.00185**	**.00845**	**-.00013**	W **4.6327**	**-.00508**
Stddev	.101	.02778	.00090	.00311	.00016	.00071	.09	.00012	.00171	.00040	.1274	.00638
%RSD	.20615	3338.4	75.496	2.8699	15.126	39.109	.03821	6.7002	20.228	316.94	2.7495	125.56
#1	49.116	.02047	.00183	.10610	-.00096	-.00231	246.17	.00176	.00966	-.00041	4.7227	-.00959
#2	48.973	-.01881	.00056	.11049	-.00119	-.00131	246.04	.00194	.00724	.00016	4.5426	-.00057
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Warn	None
Value											5.0000	
Range											-5.0000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01019**	**-.05301**	**-.11343**	**-.00161**	**.00043**	**4.9782**	**.02219**	**.00715**	**10.186**	**.01331**	**.00100**	**.08588**
Stddev	.00193	.00896	.01917	.00155	.00021	.0076	.00037	.00031	.025	.00059	.00095	.00074
%RSD	18.930	16.902	16.902	95.930	47.685	.15324	1.6731	4.3696	.24567	4.4629	94.359	.85837
#1	-.01155	-.04667	-.09987	-.00052	.00028	4.9728	.02193	.00693	10.204	.01373	.00167	.08640
#2	-.00882	-.05934	-.12699	-.00271	.00057	4.9836	.02246	.00737	10.169	.01289	.00033	.08536
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2511.1**	**53860.**	**5029.6**
Stddev	.9	251.	5.9
%RSD	.03781	.46590	.11811
#1	2510.5	54037.	5033.8
#2	2511.8	53682.	5025.4

Sample Name: CCV-4567764 Acquired: 6/9/2017 9:32:35 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51285**	**.52977**	**.98425**	**.51401**	**.47475**	**.48268**	**.00443**	**4.7533**	**.50023**	**.49843**	**.46567**	F **.55662**
Stddev	.00034	.01042	.01685	.01021	.00072	.00048	.00093	.0057	.01134	.01027	.01068	.00535
%RSD	.06576	1.9677	1.7122	1.9866	.15091	.09960	20.962	.12031	2.2665	2.0595	2.2939	.96166
#1	.51261	.53714	.99617	.52123	.47424	.48302	.00377	4.7574	.50825	.50569	.47322	.56041
#2	.51309	.52240	.97234	.50679	.47526	.48234	.00509	4.7493	.49222	.49117	.45811	.55284
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value												.50000
Range												10.490%

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4638**	**48.690**	**.97297**	**20.273**	**.52748**	**.46155**	**5.0163**	**.50110**	**1.0033**	**.94900**	**-.00240**	**.99834**
Stddev	.0055	.087	.00649	.079	.00320	.01198	.0194	.00970	.0165	.01926	.00807	.01968
%RSD	.22393	.17813	.66753	.38850	.60685	2.5951	.38703	1.9366	1.6483	2.0295	335.95	1.9715
#1	2.4677	48.629	.96838	20.329	.52975	.47002	5.0025	.50796	1.0150	.96262	-.00810	1.0123
#2	2.4599	48.752	.97756	20.218	.52522	.45308	5.0300	.49423	.99157	.93538	.00330	.98442
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0058**	**4.8178**	**10.310**	**.94731**	**.48445**	**.00251**	**.51239**	**.97198**	**.03412**	**.53100**	**.51910**	**.50575**
Stddev	.0157	.0257	.055	.02156	.00063	.00030	.00306	.01850	.01137	.00452	.00470	.00433
%RSD	1.5567	.53433	.53433	2.2761	.13077	11.979	.59747	1.9032	33.316	.85111	.90566	.85598
#1	1.0169	4.7996	10.271	.96255	.48400	.00272	.51456	.98506	.02608	.53420	.52242	.50881
#2	.99472	4.8360	10.349	.93206	.48489	.00230	.51023	.95890	.04216	.52781	.51577	.50269
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2540.5**	**54758.**	**4985.3**
Stddev	14.3	473.	5.4
%RSD	.56393	.86341	.10874
#1	2550.7	54423.	4989.1
#2	2530.4	55092.	4981.5

Sample Name: CCB Acquired: 6/9/2017 9:35:14 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00050**	**.00605**	**.00340**	**.00113**	**-.00018**	**.00017**	**-.00071**	**.02438**	**.00026**	**-.00003**	**.00012**	**-.00060**	**.04814**
Stddev	.00089	.00032	.00035	.00046	.00022	.00007	.00116	.01550	.00017	.00013	.00020	.00010	.03460
%RSD	176.46	5.3277	10.358	40.358	124.91	38.195	164.64	63.602	64.995	390.02	175.60	17.424	71.876
#1	.00113	.00628	.00365	.00145	-.00033	.00022	-.00153	.03534	.00038	-.00012	.00026	-.00053	.07260
#2	-.00012	.00582	.00315	.00081	-.00002	.00012	.00012	.01341	.00014	.00006	-.00003	-.00068	.02367
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01518**	**-.00077**	**.01198**	**.00075**	**.00019**	**-.04564**	**.00045**	**.00122**	**.00178**	**-.00213**	**.00010**	**-.00626**	**-.00246**
Stddev	.00659	.00139	.00924	.00013	.00109	.02377	.00015	.00176	.00220	.00748	.00176	.00098	.03213
%RSD	43.403	180.77	77.126	17.775	563.70	52.082	34.400	143.66	123.30	351.79	1711.1	15.647	1307.1
#1	.01052	.00021	.01852	.00085	.00097	-.02883	.00056	.00247	.00023	.00316	.00135	-.00557	-.02518
#2	.01983	-.00175	.00545	.00066	-.00058	-.06245	.00034	-.00002	.00334	-.00742	-.00114	-.00695	.02026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00526**	**-.00086**	**.00027**	**.00133**	**.00044**	**.00477**	**.00404**	**.00090**	**.00134**	**-.00015**
Stddev	.06876	.00287	.00004	.00153	.00008	.00442	.00138	.00015	.00028	.00010
%RSD	1307.1	333.26	14.234	114.37	18.939	92.656	34.133	16.916	20.996	64.419
#1	-.05388	.00117	.00025	.00241	.00049	.00790	.00307	.00101	.00154	-.00022
#2	.04336	-.00289	.00030	.00026	.00038	.00164	.00502	.00079	.00114	-.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2563.7**	**56171.**	**4968.8**
Stddev	11.2	147.	117.2
%RSD	.43673	.26097	2.3587
#1	2555.8	56274.	4885.9
#2	2571.6	56067.	5051.7

Sample Name: CCVL-4584532 Acquired: 6/9/2017 9:37:53 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01043**	**.10754**	**.01330**	**.09876**	**.00903**	**.00093**	**.10433**	**.20162**	**.00497**	**.01023**	**.00958**	**.01618**	**.11040**	**2.9138**
Stddev	.00086	.00477	.00617	.00246	.00015	.00001	.00231	.00497	.00005	.00028	.00042	.00042	.00020	.0369
%RSD	8.2048	4.4392	46.362	2.4953	1.6514	.89529	2.2177	2.4631	.92019	2.7440	4.3561	2.5999	.18119	1.2676
#1	.00983	.11091	.00894	.10051	.00893	.00092	.10597	.19811	.00494	.01043	.00987	.01647	.11054	2.8877
#2	.01104	.10416	.01766	.09702	.00914	.00094	.10269	.20513	.00500	.01003	.00928	.01588	.11026	2.9399
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01831**	**.21329**	**.01160**	**.01755**	**.95219**	**.04031**	**2.8181**	**.00956**	**.09372**	**.01741**	**.01501**	**.45051**	**.96410**	**.09437**
Stddev	.00082	.00258	.00002	.00110	.00300	.00159	.0811	.00010	.00047	.00374	.00301	.01233	.02638	.00189
%RSD	4.5002	1.2103	.15428	6.2672	.31524	3.9443	2.8777	1.0774	.49854	21.491	20.082	2.7359	2.7359	2.0034
#1	.01890	.21146	.01161	.01832	.95432	.04143	2.8755	.00963	.09405	.02005	.01714	.44180	.94544	.09570
#2	.01773	.21511	.01159	.01677	.95007	.03919	2.7608	.00948	.09339	.01476	.01288	.45923	.98275	.09303
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00988**	**.01380**	**.01025**	**.01763**	**.05307**	**.01108**	**.02033**	**.01433**
Stddev	.00008	.00110	.00005	.00353	.00821	.00069	.00053	.00098
%RSD	.78096	7.9463	.49429	20.049	15.470	6.1886	2.6157	6.8179
#1	.00994	.01303	.01022	.02013	.04726	.01060	.01995	.01502
#2	.00983	.01458	.01029	.01513	.05887	.01157	.02070	.01364
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2551.0**	**56345.**	**5108.8**
Stddev	9.3	6.	13.3
%RSD	.36308	.01026	.26104
#1	2557.5	56341.	5099.4
#2	2544.4	56349.	5118.3

Sample Name: 280-97928-C-6-A Acquired: 6/9/2017 9:40:32 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00096**	**34.212**	**.02792**	**.01824**	**.12155**	**.00169**	**-.00273**	**58.514**	**.00059**
Stddev	.00018	.130	.00489	.00007	.00089	.00013	.00365	.217	.00013
%RSD	18.742	.38124	17.505	.36127	.73026	7.9302	133.83	.37024	21.943
#1	-.00109	34.119	.03138	.01820	.12093	.00178	-.00015	58.361	.00050
#2	-.00083	34.304	.02446	.01829	.12218	.00160	-.00531	58.667	.00068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02742**	**.03876**	**.10533**	**78.745**	**5.7103**	**.05884**	**25.454**	**3.1431**	**-.00087**
Stddev	.00056	.00105	.00009	.186	.0087	.00189	.021	.0031	.00011
%RSD	2.0308	2.7016	.08701	.23622	.15275	3.2080	.08251	.09773	13.254
#1	.02781	.03950	.10526	78.613	5.7165	.05751	25.469	3.1409	-.00095
#2	.02702	.03802	.10539	78.876	5.7041	.06018	25.439	3.1452	-.00079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.42628**	**.05645**	**3.1902**	**.02107**	**.14249**	**-.00160**	**-.00383**	**3.0916**	**6.6160**
Stddev	.01945	.00152	.0678	.00122	.01458	.00017	.00467	.0656	.1403
%RSD	4.5623	2.6916	2.1244	5.7854	10.229	10.630	121.99	2.1205	2.1205
#1	.44003	.05752	3.2382	.02193	.15280	-.00172	-.00053	3.0452	6.5168
#2	.41253	.05537	3.1423	.02020	.13219	-.00148	-.00713	3.1380	6.7152
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00813**	**.09497**	**.02402**	**.31681**	**.00592**	**-.01491**	**.07261**	**.17543**	**.03678**
Stddev	.00062	.00055	.00247	.00022	.00127	.03192	.00004	.00030	.00068
%RSD	7.6836	.58279	10.279	.06945	21.363	214.05	.05573	.17002	1.8438
#1	.00769	.09458	.02227	.31665	.00503	.00766	.07264	.17564	.03630
#2	.00857	.09537	.02576	.31696	.00682	-.03749	.07259	.17521	.03726
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2676.9**	**57853.**	**5405.9**
Stddev	9.8	97.	2.8
%RSD	.36456	.16805	.05224
#1	2683.8	57921.	5407.9
#2	2670.0	57784.	5403.9

Sample Name: 280-97928-C-7-A Acquired: 6/9/2017 9:43:05 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00131**	**28.925**	**.02515**	**.01378**	**.11209**	**.00153**	**-.00101**	**22.463**	**.00037**
Stddev	.00113	.012	.00292	.00026	.00014	.00004	.00469	.024	.00012
%RSD	86.583	.04311	11.605	1.9006	.12839	2.8718	463.32	.10885	33.535
#1	-.00211	28.916	.02308	.01359	.11199	.00156	-.00432	22.446	.00046
#2	-.00051	28.933	.02721	.01396	.11220	.00149	.00230	22.480	.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02475**	**.03317**	**.09470**	**69.946**	**4.8357**	**.05067**	**16.763**	**2.8582**	**-.00113**
Stddev	.00074	.00033	.00060	.023	.0058	.00088	.050	.0047	.00022
%RSD	2.9904	1.0100	.63166	.03225	.11964	1.7446	.29734	.16615	19.708
#1	.02527	.03340	.09427	69.930	4.8398	.05005	16.798	2.8615	-.00097
#2	.02423	.03293	.09512	69.962	4.8316	.05130	16.728	2.8548	-.00129
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.57596**	**.05187**	**2.6709**	**.01739**	**.07428**	**-.00426**	**-.00232**	**2.0568**	**4.4015**
Stddev	.00395	.00058	.0432	.00053	.00375	.00406	.01278	.0515	.1103
%RSD	.68584	1.1207	1.6157	3.0398	5.0444	95.223	551.48	2.5056	2.5056
#1	.57316	.05228	2.7015	.01701	.07163	-.00139	-.01135	2.0932	4.4795
#2	.57875	.05146	2.6404	.01776	.07693	-.00713	.00672	2.0203	4.3235
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00732**	**.04526**	**.01935**	**.23621**	**.00691**	**.01790**	**.06198**	**.15836**	**.02917**
Stddev	.00060	.00006	.00121	.00073	.00246	.02591	.00055	.00050	.00025
%RSD	8.2276	.14198	6.2429	.30768	35.582	144.74	.89282	.31292	.85992
#1	.00775	.04521	.02020	.23569	.00517	-.00042	.06159	.15801	.02900
#2	.00690	.04530	.01849	.23672	.00865	.03622	.06238	.15871	.02935
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2713.3**	**58652.**	**5405.8**
Stddev	1.4	70.	99.1
%RSD	.05317	.11932	1.8331
#1	2714.3	58603.	5475.9
#2	2712.3	58702.	5335.7

Sample Name: 280-97928-C-8-A Acquired: 6/9/2017 9:45:38 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00215**	**82.518**	**.03989**	**.02145**	**.34792**	**.00407**	**-.00108**	**32.826**	**.00160**
Stddev	.00015	.040	.00460	.00022	.00109	.00008	.00128	.011	.00005
%RSD	6.7762	.04819	11.522	1.0339	.31472	1.8861	119.00	.03383	3.2841
#1	-.00204	82.490	.04314	.02161	.34714	.00412	-.00198	32.833	.00156
#2	-.00225	82.546	.03664	.02129	.34869	.00402	-.00017	32.818	.00164
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06762**	**.09057**	**.26248**	**179.92**	**8.1703**	**.20564**	**30.881**	W **10.924**	**.00028**
Stddev	.00165	.00208	.00064	.03	.0844	.00053	.121	.041	.00014
%RSD	2.4362	2.3007	.24419	.01893	1.0335	.25712	.39036	.37874	51.261
#1	.06878	.09204	.26293	179.90	8.1106	.20601	30.966	10.954	.00018
#2	.06645	.08910	.26202	179.95	8.2300	.20526	30.796	10.895	.00038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.34028**	**.13032**	**4.0887**	**.07243**	**.44076**	**-.00828**	**-.00330**	**2.9300**	**6.2702**
Stddev	.00738	.00399	.0979	.00067	.01149	.00337	.01393	.0051	.0109
%RSD	2.1697	3.0633	2.3956	.92093	2.6060	40.734	421.48	.17360	.17360
#1	.34550	.13314	4.1579	.07196	.44888	-.00590	.00654	2.9336	6.2779
#2	.33506	.12749	4.0194	.07290	.43264	-.01067	-.01315	2.9264	6.2625
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00893**	**.10115**	**.03178**	**.65406**	**.00884**	**.05844**	**.15050**	**.46237**	**.03325**
Stddev	.00120	.00028	.00079	.00003	.00092	.00436	.00089	.00148	.00282
%RSD	13.405	.27611	2.5007	.00485	10.428	7.4588	.59333	.31941	8.4891
#1	.00808	.10095	.03235	.65409	.00819	.05535	.15114	.46342	.03525
#2	.00978	.10135	.03122	.65404	.00949	.06152	.14987	.46133	.03126
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2747.8**	**59076.**	**5544.3**
Stddev	30.8	92.	39.9
%RSD	1.1192	.15618	.71954
#1	2726.0	59011.	5516.0
#2	2769.5	59141.	5572.5

Sample Name: 280-97928-B-9-A Acquired: 6/9/2017 9:48:15 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00265**	**78.538**	**.06982**	**.02605**	**.49977**	**.00375**	**-.00452**	**78.478**	**.00122**
Stddev	.00017	.478	.00466	.00120	.00169	.00013	.00102	.202	.00036
%RSD	6.2981	.60832	6.6786	4.6102	.33788	3.5616	22.500	.25730	29.280
#1	-.00277	78.876	.07312	.02690	.50096	.00366	-.00380	78.621	.00097
#2	-.00253	78.200	.06652	.02520	.49857	.00385	-.00523	78.336	.00148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06075**	**.09473**	**.31031**	**197.35**	**9.7173**	**.18570**	**41.796**	W **13.432**	**.00181**
Stddev	.00201	.00274	.00202	1.07	.0262	.00119	.064	.104	.00043
%RSD	3.3048	2.8883	.65161	.54004	.26993	.64268	.15301	.77534	23.745
#1	.06217	.09667	.30888	198.10	9.7359	.18486	41.751	13.359	.00211
#2	.05933	.09280	.31174	196.60	9.6988	.18655	41.842	13.506	.00150
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.57501**	**.13384**	**4.6113**	**.06058**	**.58977**	**-.01043**	**-.00778**	**3.5081**	**7.5073**
Stddev	.00458	.00319	.1331	.00233	.01602	.00002	.00187	.1166	.2496
%RSD	.79707	2.3806	2.8870	3.8493	2.7157	.17554	24.015	3.3246	3.3246
#1	.57825	.13609	4.7054	.06223	.60110	-.01044	-.00646	3.5906	7.6838
#2	.57177	.13159	4.5171	.05893	.57845	-.01041	-.00910	3.4256	7.3309
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00870**	**.16785**	**.03709**	**.84978**	**.00733**	**.04386**	**.15686**	**.45648**	**.05462**
Stddev	.00013	.00059	.00086	.00942	.00106	.03181	.00015	.00145	.00497
%RSD	1.5485	.35327	2.3201	1.1091	14.423	72.525	.09764	.31873	9.1046
#1	.00879	.16827	.03648	.85644	.00808	.06635	.15697	.45751	.05111
#2	.00860	.16743	.03770	.84311	.00658	.02137	.15675	.45545	.05814
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2857.7**	**61246.**	**5746.4**
Stddev	26.6	112.	59.7
%RSD	.93209	.18224	1.0381
#1	2876.5	61325.	5704.3
#2	2838.8	61167.	5788.6

Sample Name: 280-97928-A-10-A Acquired: 6/9/2017 9:50:53 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00160**	**49.902**	**.03271**	**.02048**	**.15894**	**.00253**	**-.00142**	**11.918**	**.00063**
Stddev	.00008	.009	.00446	.00179	.00005	.00003	.00387	.004	.00000
%RSD	5.2179	.01733	13.623	8.7477	.03301	1.3517	271.44	.03542	.07070
#1	-.00154	49.896	.02956	.02175	.15898	.00250	.00131	11.921	.00063
#2	-.00166	49.908	.03586	.01921	.15891	.00255	-.00416	11.915	.00063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03625**	**.05251**	**.13451**	**107.54**	**7.5019**	**.07980**	**20.866**	**3.8105**	**-.00049**
Stddev	.00071	.00227	.00247	.22	.0100	.00281	.049	.0096	.00063
%RSD	1.9717	4.3280	1.8356	.20654	.13281	3.5192	.23396	.25237	129.06
#1	.03676	.05412	.13625	107.70	7.5089	.08178	20.901	3.8173	-.00093
#2	.03575	.05090	.13276	107.38	7.4949	.07781	20.832	3.8037	-.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.40031**	**.08166**	**2.8982**	**.02393**	**.05426**	**-.00366**	**-.00542**	**3.5459**	**7.5881**
Stddev	.01366	.00243	.0711	.00197	.00100	.00133	.00000	.0284	.0607
%RSD	3.4127	2.9804	2.4532	8.2288	1.8401	36.219	.04725	.80044	.80044
#1	.40997	.08338	2.9485	.02532	.05496	-.00272	-.00542	3.5659	7.6311
#2	.39065	.07994	2.8479	.02253	.05355	-.00460	-.00542	3.5258	7.5452
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01016**	**.03324**	**.02571**	**.42311**	**.00549**	**.00252**	**.09598**	**.21969**	**.03895**
Stddev	.00190	.00015	.00351	.00508	.00397	.03744	.00071	.00118	.00042
%RSD	18.737	.45152	13.672	1.2007	72.395	1483.0	.74433	.53602	1.0665
#1	.01150	.03314	.02819	.42670	.00830	-.02395	.09648	.21885	.03866
#2	.00881	.03335	.02322	.41952	.00268	.02900	.09547	.22052	.03924
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2770.6**	**59375.**	**5553.7**
Stddev	2.5	14.	15.3
%RSD	.08936	.02343	.27596
#1	2772.3	59385.	5564.6
#2	2768.8	59365.	5542.9

Sample Name: 280-97928-A-11-A Acquired: 6/9/2017 9:53:25 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00294**	**105.76**	**.04518**	**.02658**	**.36790**	**.00647**	**-.00202**	**11.574**	**.00148**
Stddev	.00016	.29	.00418	.00139	.00110	.00014	.00272	.016	.00000
%RSD	5.3865	.26949	9.2609	5.2288	.29823	2.1311	135.00	.13461	.10689
#1	-.00283	105.96	.04223	.02757	.36868	.00657	-.00009	11.585	.00148
#2	-.00305	105.56	.04814	.02560	.36713	.00637	-.00394	11.563	.00148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06304**	**.12190**	**.24281**	**220.81**	**11.598**	**.22077**	**33.081**	**4.2279**	**.00091**
Stddev	.00146	.00291	.00067	1.19	.054	.00092	.052	.0063	.00020
%RSD	2.3143	2.3908	.27460	.54045	.46974	.41537	.15686	.14870	21.371
#1	.06407	.12396	.24234	221.65	11.637	.22142	33.118	4.2323	.00078
#2	.06201	.11984	.24328	219.97	11.560	.22013	33.044	4.2235	.00105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.78949**	**.15143**	**3.9217**	**.07352**	**.57444**	**-.01143**	**-.00506**	**3.2641**	**6.9851**
Stddev	.00954	.00372	.0947	.00130	.00289	.00045	.00125	.0231	.0495
%RSD	1.2082	2.4547	2.4150	1.7653	.50353	3.9174	24.687	.70862	.70862
#1	.78275	.15406	3.9887	.07444	.57240	-.01175	-.00594	3.2477	6.9501
#2	.79624	.14880	3.8548	.07260	.57649	-.01112	-.00418	3.2804	7.0201
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01084**	**.06214**	**.05312**	**.95521**	**.00145**	**.01812**	**.23997**	**.47783**	**.05061**
Stddev	.00018	.00021	.00155	.00006	.00109	.01568	.00099	.00154	.00082
%RSD	1.7034	.33517	2.9119	.00610	75.246	86.536	.41190	.32254	1.6212
#1	.01098	.06229	.05202	.95517	.00068	.02921	.23927	.47674	.05119
#2	.01071	.06199	.05421	.95525	.00223	.00703	.24067	.47892	.05003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**3028.5**	**62966.**	**5838.5**
Stddev	8.1	19.	18.0
%RSD	.26785	.03091	.30843
#1	3034.3	62952.	5825.8
#2	3022.8	62980.	5851.3

Sample Name: 280-97928-B-12-A Acquired: 6/9/2017 9:55:56 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00152**	**34.905**	**.02769**	**.03516**	**.18411**	**.00190**	**.00844**	F **1777.3**	**.00050**
Stddev	.00007	.025	.00592	.00017	.00084	.00004	.00327	24.4	.00009
%RSD	4.4702	.07216	21.360	.48986	.45519	1.9025	38.691	1.3735	18.593
#1	-.00147	34.887	.02351	.03503	.18352	.00192	.00613	1760.0	.00057
#2	-.00157	34.923	.03188	.03528	.18471	.00187	.01075	1794.5	.00044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02939**	**.05452**	**.12077**	**63.526**	**6.9258**	**.08201**	**56.994**	**2.7613**	**-.00093**
Stddev	.00109	.00142	.00089	.379	.0014	.00046	.075	.0064	.00005
%RSD	3.7019	2.6096	.73440	.59647	.02023	.56393	.13240	.23169	5.6378
#1	.03016	.05553	.12139	63.794	6.9268	.08169	57.047	2.7658	-.00097
#2	.02862	.05352	.12014	63.258	6.9248	.08234	56.940	2.7568	-.00089
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.1979**	**.08063**	**2.5271**	**.03872**	**1.9463**	**-.00708**	**.00855**	**2.9570**	**6.3280**
Stddev	.0010	.00133	.0765	.00047	.0628	.00211	.00993	.0191	.0408
%RSD	.08428	1.6527	3.0280	1.2036	3.2238	29.805	116.18	.64552	.64552
#1	1.1986	.08157	2.5812	.03839	1.9907	-.00857	.01557	2.9435	6.2991
#2	1.1972	.07969	2.4730	.03904	1.9019	-.00559	.00153	2.9705	6.3569
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00040**	**1.5816**	**.01544**	**.33952**	**.01022**	**-.00576**	**.09646**	**.28753**	**.01775**
Stddev	.00199	.0035	.00109	.00069	.00293	.01522	.00117	.00058	.00327
%RSD	498.54	.21912	7.0281	.20178	28.623	264.49	1.2170	.20066	18.421
#1	.00101	1.5791	.01467	.34000	.01229	-.01652	.09729	.28794	.01544
#2	-.00181	1.5840	.01621	.33903	.00815	.00501	.09563	.28712	.02007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2472.6**	**51414.**	**5265.9**
Stddev	.8	105.	25.1
%RSD	.03077	.20347	.47698
#1	2473.2	51340.	5283.7
#2	2472.1	51488.	5248.2

Sample Name: 280-97928-C-14-A Acquired: 6/9/2017 9:58:35 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00159**	**90.544**	**.04681**	**.03423**	**.40642**	**.00455**	**.00235**	W **604.34**	**.00252**
Stddev	.00025	.496	.00367	.00306	.00044	.00014	.00158	3.79	.00012
%RSD	15.436	.54779	7.8416	8.9496	.10941	2.9940	67.398	.62639	4.6603
#1	-.00142	90.895	.04421	.03640	.40673	.00464	.00123	607.01	.00243
#2	-.00176	90.194	.04941	.03207	.40610	.00445	.00347	601.66	.00260
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06209**	**.09999**	**.28779**	**166.63**	**11.015**	**.17582**	**40.717**	W **10.185**	**.00151**
Stddev	.00178	.00329	.00058	1.06	.068	.00209	.176	.045	.00107
%RSD	2.8621	3.2905	.20255	.63682	.61795	1.1860	.43206	.44175	70.454
#1	.06335	.10231	.28821	167.38	11.063	.17729	40.841	10.217	.00076
#2	.06084	.09766	.28738	165.88	10.967	.17434	40.592	10.153	.00227
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.74346**	**.13161**	**6.5942**	**.09297**	**1.7278**	**-.01214**	**-.01037**	**3.3947**	**7.2647**
Stddev	.01339	.00489	.2273	.00354	.0808	.00254	.00515	.0150	.0321
%RSD	1.8004	3.7182	3.4462	3.8057	4.6745	20.940	49.644	.44192	.44192
#1	.75293	.13507	6.7549	.09547	1.7849	-.01393	-.01401	3.4053	7.2874
#2	.73400	.12815	6.4335	.09047	1.6707	-.01034	-.00673	3.3841	7.2420
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00764**	**.64857**	**.02637**	**.62266**	**.00650**	**-.01383**	**.19265**	**.49405**	**.01437**
Stddev	.00253	.00185	.00220	.00446	.00389	.00286	.00075	.00219	.00111
%RSD	33.041	.28552	8.3574	.71649	59.797	20.705	.38874	.44286	7.7181
#1	.00943	.64988	.02481	.62581	.00925	-.01586	.19318	.49560	.01516
#2	.00586	.64726	.02793	.61950	.00375	-.01181	.19212	.49251	.01359
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2727.1**	**57170.**	**5654.0**
Stddev	14.8	30.	15.7
%RSD	.54188	.05257	.27842
#1	2737.5	57148.	5642.8
#2	2716.6	57191.	5665.1

Sample Name: 280-97928-A-15-A Acquired: 6/9/2017 10:01:18 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00388**	**95.163**	**.05235**	**.03510**	**.56220**	**.00460**	**-.00606**	**216.69**	**.00266**
Stddev	.00021	.210	.00689	.00001	.00036	.00006	.00140	.36	.00027
%RSD	5.3821	.22023	13.160	.02356	.06389	1.2966	23.121	.16715	10.105
#1	-.00402	95.015	.05722	.03509	.56195	.00464	-.00507	216.43	.00247
#2	-.00373	95.311	.04747	.03511	.56245	.00456	-.00705	216.95	.00284
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06775**	**.11290**	**.38553**	**199.77**	**11.945**	**.21675**	**41.108**	W **10.719**	**.00113**
Stddev	.00118	.00189	.00048	.15	.009	.00097	.090	.078	.00080
%RSD	1.7416	1.6771	.12448	.07566	.07394	.44533	.21867	.72720	70.799
#1	.06858	.11424	.38587	199.66	11.939	.21607	41.172	10.664	.00170
#2	.06692	.11156	.38519	199.88	11.952	.21744	41.044	10.775	.00057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.55165**	**.16897**	**5.4186**	**.08901**	**.96130**	**-.01194**	**-.00422**	**3.0376**	**6.5004**
Stddev	.00244	.00092	.0730	.00006	.00767	.00416	.00346	.0050	.0107
%RSD	.44182	.54395	1.3471	.07162	.79819	34.824	81.983	.16453	.16453
#1	.55337	.16962	5.4702	.08906	.96672	-.01488	-.00177	3.0341	6.4929
#2	.54992	.16832	5.3670	.08897	.95587	-.00900	-.00666	3.0411	6.5080
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00945**	**.35887**	**.22701**	**.73816**	**.00727**	**.02899**	**.20193**	**.61569**	**.04259**
Stddev	.00041	.00021	.00195	.00421	.00040	.02753	.00124	.00192	.00092
%RSD	4.3224	.05975	.86084	.57003	5.4711	94.955	.61597	.31241	2.1545
#1	.00916	.35902	.22840	.73518	.00699	.04846	.20281	.61705	.04194
#2	.00974	.35871	.22563	.74113	.00755	.00953	.20105	.61433	.04323
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2851.0**	**59452.**	**5791.5**
Stddev	17.5	109.	72.2
%RSD	.61246	.18292	1.2465
#1	2863.4	59375.	5842.6
#2	2838.7	59529.	5740.5

Sample Name: 280-97928-B-16-A Acquired: 6/9/2017 10:03:55 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00180**	**146.04**	**.05884**	**.03328**	**.46849**	**.00620**	**-.00419**	**37.244**	**.00217**
Stddev	.00051	.29	.00247	.00062	.00080	.00010	.00062	.060	.00020
%RSD	28.193	.19568	4.1960	1.8748	.17155	1.5646	14.917	.16026	9.0815
#1	-.00215	145.84	.05709	.03372	.46792	.00627	-.00374	37.202	.00231
#2	-.00144	146.24	.06058	.03284	.46906	.00613	-.00463	37.286	.00203
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09346**	**.14956**	**.26999**	**231.09**	**13.770**	**.21685**	**35.650**	**9.3862**	**.00169**
Stddev	.00188	.00446	.00130	.11	.016	.00351	.113	.0313	.00039
%RSD	2.0126	2.9847	.48305	.04729	.11710	1.6186	.31699	.33346	23.281
#1	.09479	.15271	.26907	231.16	13.759	.21436	35.729	9.4083	.00141
#2	.09213	.14640	.27091	231.01	13.782	.21933	35.570	9.3641	.00197
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.85135**	**.15531**	**4.9995**	**.18850**	**1.1738**	**-.00686**	**-.00206**	**4.3091**	**9.2215**
Stddev	.00952	.00447	.1417	.00435	.0313	.00010	.00047	.0558	.1193
%RSD	1.1185	2.8793	2.8338	2.3101	2.6644	1.4662	22.741	1.2940	1.2940
#1	.85809	.15847	5.0996	.19158	1.1959	-.00693	-.00239	4.2697	9.1372
#2	.84462	.15215	4.8993	.18542	1.1516	-.00679	-.00173	4.3486	9.3059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01404**	**.09962**	**.03585**	**.56146**	**.00702**	**.04759**	**.26804**	**.67662**	**.02231**
Stddev	.00112	.00009	.00093	.00168	.00545	.01277	.00001	.00281	.00146
%RSD	8.0042	.08893	2.5900	.29936	77.650	26.831	.00283	.41603	6.5431
#1	.01483	.09956	.03519	.56265	.00317	.03856	.26805	.67861	.02334
#2	.01324	.09969	.03651	.56027	.01088	.05662	.26804	.67463	.02127
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2760.4**	**58840.**	**5724.5**
Stddev	30.0	261.	29.7
%RSD	1.0866	.44277	.51939
#1	2781.6	58656.	5745.5
#2	2739.2	59024.	5703.5

Sample Name: CCVH-4579429 Acquired: 6/9/2017 10:06:31 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01025**	**47.242**	**-.00831**	**.00111**	**.00029**	**.00011**	W **.93678**	**.02713**	**.00027**	**-.00077**	**.00065**	**.01705**
Stddev	.00058	.116	.00187	.00047	.00004	.00009	.02986	.00337	.00065	.00014	.00038	.00036
%RSD	5.6199	.24532	22.460	42.310	15.025	76.189	3.1871	12.431	239.08	18.125	58.307	2.0875
#1	-.00984	47.324	-.00963	.00078	.00026	.00018	.95789	.02474	-.00019	-.00087	.00038	.01680
#2	-.01066	47.160	-.00699	.00144	.00032	.00005	.91566	.02951	.00073	-.00067	.00092	.01730
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							-5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.638**	**-.03006**	**.00291**	**.10172**	**-.00008**	**-.00165**	**246.18**	**.00114**	**.00631**	**.00042**	W **4.5126**	**-.00495**
Stddev	.049	.03660	.00213	.00489	.00041	.00069	.22	.00028	.00047	.00349	.1374	.00476
%RSD	.10061	121.75	73.239	4.8030	478.45	42.015	.09017	24.597	7.5008	825.60	3.0459	96.170
#1	48.673	-.05594	.00140	.10517	.00020	-.00214	246.34	.00094	.00664	.00289	4.6098	-.00831
#2	48.604	-.00418	.00441	.09826	-.00037	-.00116	246.02	.00134	.00597	-.00204	4.4154	-.00158
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Warn	None
Value											5.0000	
Range											-5.0000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00353**	**-.04283**	**-.09166**	**-.00200**	**.00052**	**4.9292**	**.02241**	**.00661**	**10.058**	**.01414**	**.00010**	**.08056**
Stddev	.01371	.01453	.03110	.00118	.00020	.0252	.00052	.00189	.064	.00021	.00018	.00189
%RSD	387.88	33.931	33.931	59.030	39.062	.51103	2.3090	28.649	.64088	1.5186	175.02	2.3400
#1	.00616	-.03255	-.06966	-.00116	.00067	4.9471	.02278	.00795	10.104	.01429	.00023	.08189
#2	-.01323	-.05311	-.11365	-.00283	.00038	4.9114	.02205	.00527	10.012	.01399	-.00002	.07923
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2568.5**	**54518.**	**5044.1**
Stddev	7.4	236.	3.6
%RSD	.28831	.43342	.07176
#1	2573.7	54351.	5046.7
#2	2563.3	54685.	5041.6

Sample Name: CCV-4567764 Acquired: 6/9/2017 10:09:06 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50147**	**.50064**	**.97055**	**.50646**	**.46711**	**.47654**	**.00087**	**4.6771**	**.49530**	**.49404**	**.46123**	**.54602**	**2.4416**
Stddev	.00085	.01600	.01670	.01256	.00140	.00032	.00278	.0131	.01297	.01276	.01207	.00383	.0094
%RSD	.16913	3.1950	1.7208	2.4806	.30078	.06802	318.07	.28020	2.6182	2.5820	2.6178	.70223	.38301
#1	.50207	.51195	.98236	.51534	.46612	.47631	.00284	4.6679	.50447	.50306	.46977	.54873	2.4350
#2	.50087	.48933	.95874	.49758	.46811	.47677	-.00109	4.6864	.48613	.48502	.45269	.54331	2.4482
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**47.857**	**.95601**	**19.932**	**.51812**	**.45774**	**4.9755**	**.49535**	**.99923**	**.94585**	**-.00215**	**.99089**	**.99426**	**4.7420**
Stddev	.019	.00444	.031	.00196	.01291	.0103	.01041	.01857	.02623	.00713	.02263	.01055	.0081
%RSD	.03953	.46454	.15644	.37887	2.8203	.20649	2.1015	1.8581	2.7729	331.39	2.2837	1.0612	.17093
#1	47.870	.95916	19.954	.51951	.46687	4.9828	.50272	1.0124	.96440	.00289	1.0069	1.0017	4.7362
#2	47.843	.95287	19.910	.51673	.44861	4.9683	.48799	.98610	.92730	-.00720	.97489	.98680	4.7477
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.148**	**.93294**	**.47772**	**.00551**	**.50549**	**.96771**	**-.02654**	**.52633**	**.51332**	**.50486**
Stddev	.017	.02430	.00014	.00081	.00151	.02154	.05015	.00306	.00272	.00249
%RSD	.17093	2.6047	.02926	14.603	.29876	2.2254	188.97	.58047	.53044	.49225
#1	10.136	.95012	.47762	.00608	.50656	.98294	-.06200	.52849	.51525	.50311
#2	10.160	.91576	.47782	.00494	.50443	.95249	.00892	.52417	.51140	.50662
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2593.5**	**55914.**	**5157.0**
Stddev	12.7	145.	5.8
%RSD	.48801	.26020	.11177
#1	2584.6	56017.	5161.1
#2	2602.5	55811.	5152.9

Sample Name: CCB Acquired: 6/9/2017 10:11:36 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00009**	**.00144**	**.00654**	**.00107**	**-.00047**	**.00023**	**.00412**	**.01122**	**.00025**	**.00004**	**-.00036**	**-.00046**	**.00611**
Stddev	.00006	.00037	.00074	.00029	.00016	.00000	.00450	.00681	.00001	.00027	.00018	.00025	.00018
%RSD	69.176	25.916	11.353	27.321	34.253	.76873	109.07	60.702	3.8119	656.42	50.054	54.012	2.9470
#1	.00013	.00117	.00601	.00087	-.00035	.00022	.00730	.00640	.00025	.00023	-.00049	-.00029	.00624
#2	.00005	.00170	.00706	.00128	-.00058	.00023	.00094	.01604	.00026	-.00015	-.00023	-.00064	.00599
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.07873**	**.00050**	**.00890**	**.00030**	**-.00001**	**-.06731**	**-.00002**	**.00437**	**.00043**	**-.00797**	**.00027**	**-.00836**	**-.04096**
Stddev	.03776	.00013	.00376	.00005	.00037	.00015	.00046	.00287	.00073	.00397	.00315	.00820	.03081
%RSD	47.967	25.439	42.270	18.007	6896.9	.22051	1900.2	65.564	171.75	49.832	1151.4	98.098	75.224
#1	-.05203	.00059	.01157	.00034	.00026	-.06742	.00030	.00640	.00094	-.01078	.00250	-.01416	-.01917
#2	-.10543	.00041	.00624	.00026	-.00027	-.06721	-.00035	.00235	-.00009	-.00516	-.00195	-.00256	-.06275
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.08765**	**-.00054**	**.00024**	**.00068**	**.00050**	**.00418**	**.00168**	**.00080**	**.00023**	**-.00042**
Stddev	.06594	.00263	.00005	.00170	.00009	.00094	.02104	.00024	.00028	.00021
%RSD	75.224	483.93	22.309	249.53	18.259	22.556	1254.1	30.016	121.87	49.423
#1	-.04103	.00132	.00020	-.00052	.00043	.00351	-.01320	.00097	.00043	-.00056
#2	-.13428	-.00240	.00028	.00188	.00056	.00485	.01655	.00063	.00003	-.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2569.6**	**56788.**	**5135.6**
Stddev	.7	195.	7.3
%RSD	.02821	.34353	.14223
#1	2570.1	56926.	5140.8
#2	2569.1	56650.	5130.4

Sample Name: CCVL-4584532 Acquired: 6/9/2017 10:14:15 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00976**	**.09857**	**.01434**	**.09751**	**.00877**	**.00095**	**.10481**	**.20168**	**.00487**	**.00989**	**.00974**	**.01661**
Stddev	.00012	.00336	.00469	.00252	.00001	.00000	.00198	.00155	.00037	.00008	.00020	.00058
%RSD	1.1803	3.4040	32.723	2.5873	.08889	.33873	1.8897	.76935	7.5904	.80069	2.1001	3.4851
#1	.00967	.10094	.01766	.09930	.00877	.00095	.10621	.20058	.00514	.00995	.00960	.01620
#2	.00984	.09620	.01102	.09573	.00878	.00095	.10341	.20277	.00461	.00984	.00989	.01702
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.39678**	**2.8380**	**.02016**	**.20397**	F **.01320**	**.01725**	**.94047**	**.03994**	**2.8189**	**.01053**	**.09253**	**.02082**
Stddev	.00611	.0070	.00106	.00298	.00014	.00064	.00254	.00114	.1027	.00237	.00466	.00049
%RSD	1.5404	.24587	5.2668	1.4600	1.0465	3.6884	.27038	2.8419	3.6417	22.496	5.0308	2.3478
#1	.39245	2.8429	.01941	.20186	.01310	.01770	.93867	.04075	2.8915	.01221	.09583	.02047
#2	.40110	2.8331	.02091	.20608	.01330	.01680	.94227	.03914	2.7463	.00886	.08924	.02117
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.10000				.01000							
Range	30.000%				30.000%							

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01194**	**.44349**	**.94908**	**.09191**	**.00992**	**.01468**	**.01029**	**.01826**	**.07150**	**.01106**	**.01977**	**.01536**
Stddev	.00395	.01121	.02399	.00064	.00003	.00388	.00005	.00306	.02307	.00052	.00030	.00115
%RSD	33.064	2.5282	2.5282	.69557	.35013	26.439	.45299	16.769	32.266	4.6780	1.5326	7.4714
#1	.01473	.43557	.93211	.09237	.00995	.01194	.01033	.02042	.08782	.01143	.01998	.01454
#2	.00915	.45142	.96604	.09146	.00990	.01742	.01026	.01609	.05519	.01069	.01955	.01617
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.02000											
Range	-30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2628.7**	**57852.**	**5187.5**
Stddev	2.2	100.	57.9
%RSD	.08479	.17247	1.1166
#1	2630.3	57922.	5146.5
#2	2627.2	57781.	5228.4

Sample Name: 280-97928-C-17-A Acquired: 6/9/2017 10:16:53 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00379**	**93.174**	**.04514**	**.02495**	**.41963**	**.00477**	**-.00494**	**14.863**	**.00151**
Stddev	.00022	.568	.00163	.00111	.00149	.00001	.00354	.062	.00004
%RSD	5.8707	.60909	3.6161	4.4298	.35554	.14490	71.645	.41874	2.7720
#1	-.00364	92.773	.04399	.02574	.41857	.00476	-.00244	14.819	.00154
#2	-.00395	93.575	.04630	.02417	.42068	.00477	-.00745	14.907	.00148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07039**	**.11057**	**.23102**	**199.87**	**9.6866**	**.23565**	**26.707**	**8.4167**	**.00142**
Stddev	.00229	.00320	.00084	.37	.0486	.00104	.117	.0494	.00015
%RSD	3.2584	2.8940	.36272	.18691	.50181	.44214	.43679	.58695	10.282
#1	.07201	.11283	.23161	199.61	9.6523	.23492	26.790	8.3818	.00131
#2	.06877	.10830	.23042	200.14	9.7210	.23639	26.625	8.4516	.00152
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.74278**	**.13929**	**3.5279**	**.05839**	**.21100**	**-.00568**	**-.00413**	**4.4339**	**9.4886**
Stddev	.00902	.00422	.0971	.00252	.00050	.00103	.00637	.0395	.0845
%RSD	1.2149	3.0282	2.7531	4.3200	.23896	18.188	154.34	.89088	.89088
#1	.74916	.14228	3.5966	.06017	.21135	-.00495	.00038	4.4060	9.4288
#2	.73640	.13631	3.4592	.05660	.21064	-.00641	-.00863	4.4619	9.5484
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00869**	**.05620**	**.04439**	**1.2826**	**.00620**	**.02730**	**.22123**	**.41820**	**.05151**
Stddev	.00008	.00025	.00035	.0086	.00210	.00762	.00022	.00131	.00142
%RSD	.93056	.44724	.79741	.66884	33.790	27.915	.10077	.31405	2.7558
#1	.00863	.05602	.04464	1.2765	.00768	.02191	.22139	.41913	.05051
#2	.00874	.05638	.04414	1.2887	.00472	.03268	.22107	.41727	.05252
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2926.9**	**62920.**	**5962.4**
Stddev	16.9	417.	57.3
%RSD	.57709	.66201	.96082
#1	2938.9	63215.	6003.0
#2	2915.0	62626.	5921.9

Sample Name: 280-97928-A-18-A Acquired: 6/9/2017 10:19:31 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00134**	**31.420**	**.02089**	**.01585**	**.09614**	**.00152**	**.00290**	**12.933**	**.00054**
Stddev	.00082	.158	.00606	.00019	.00063	.00001	.00228	.011	.00015
%RSD	60.958	.50339	29.020	1.2266	.65963	.51943	78.753	.08128	28.159
#1	-.00192	31.532	.02518	.01571	.09658	.00151	.00128	12.940	.00043
#2	-.00076	31.308	.01660	.01599	.09569	.00152	.00451	12.926	.00064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02325**	**.03428**	**.08133**	**66.741**	**5.5650**	**.04971**	**14.128**	**2.4041**	**-.00025**
Stddev	.00088	.00024	.00125	.220	.0105	.00089	.035	.0013	.00005
%RSD	3.7785	.69414	1.5397	.32909	.18891	1.7969	.24989	.05318	20.748
#1	.02387	.03444	.08045	66.897	5.5724	.05034	14.153	2.4032	-.00021
#2	.02263	.03411	.08222	66.586	5.5575	.04908	14.103	2.4050	-.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.22655**	**.05147**	**2.1810**	**.01446**	**.08478**	**-.00189**	**-.00214**	**3.5868**	**7.6758**
Stddev	.01250	.00116	.0542	.00066	.00478	.00123	.00026	.0156	.0334
%RSD	5.5157	2.2497	2.4856	4.5386	5.6368	64.954	12.281	.43546	.43546
#1	.23539	.05229	2.2193	.01493	.08140	-.00275	-.00195	3.5979	7.6995
#2	.21772	.05065	2.1426	.01400	.08816	-.00102	-.00233	3.5758	7.6522
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00831**	**.03290**	**.01850**	**.28479**	**.00362**	**.00487**	**.06141**	**.13246**	**.02586**
Stddev	.00051	.00001	.00099	.00092	.00272	.00765	.00056	.00025	.00076
%RSD	6.1764	.03961	5.3387	.32413	75.128	157.05	.90834	.18823	2.9300
#1	.00868	.03291	.01780	.28544	.00554	-.00054	.06181	.13263	.02533
#2	.00795	.03289	.01920	.28413	.00170	.01028	.06102	.13228	.02640
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2736.5**	**59470.**	**5448.1**
Stddev	8.5	117.	26.3
%RSD	.30886	.19741	.48207
#1	2730.5	59387.	5429.5
#2	2742.4	59553.	5466.7

Sample Name: 280-97928-C-19-A Acquired: 6/9/2017 10:22:03 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00067**	**32.651**	**.02718**	**.01567**	**.09646**	**.00151**	**.00095**	**10.732**	**.00053**
Stddev	.00036	.044	.00395	.00072	.00089	.00007	.00000	.086	.00020
%RSD	54.096	.13541	14.548	4.6060	.91868	4.5619	.06542	.79853	38.074
#1	-.00093	32.620	.02439	.01618	.09583	.00146	.00095	10.672	.00039
#2	-.00041	32.683	.02998	.01516	.09709	.00156	.00095	10.793	.00068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02478**	**.03491**	**.08357**	**69.124**	**5.2906**	**.05121**	**14.295**	**2.4835**	**-.00001**
Stddev	.00057	.00099	.00192	.199	.0025	.00083	.007	.0104	.00048
%RSD	2.3154	2.8232	2.2994	.28773	.04714	1.6174	.05143	.41802	3373.1
#1	.02519	.03561	.08493	68.983	5.2924	.05180	14.300	2.4908	.00032
#2	.02438	.03422	.08221	69.264	5.2889	.05063	14.290	2.4761	-.00035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.33503**	**.05432**	**2.3818**	**.01472**	**.03487**	**-.00998**	**.00584**	**2.6142**	**5.5945**
Stddev	.01069	.00281	.0443	.00116	.00430	.00178	.00103	.0225	.0481
%RSD	3.1897	5.1818	1.8596	7.8674	12.339	17.790	17.603	.85940	.85940
#1	.32747	.05631	2.4131	.01554	.03791	-.01124	.00511	2.5983	5.5605
#2	.34259	.05233	2.3505	.01390	.03182	-.00873	.00656	2.6301	5.6285
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00597**	**.03083**	**.01861**	**.26500**	**.00023**	**-.00843**	**.06378**	**.14124**	**.02532**
Stddev	.00197	.00027	.00197	.00249	.00024	.00921	.00011	.00004	.00171
%RSD	33.074	.87686	10.571	.94116	106.67	109.27	.17516	.02682	6.7586
#1	.00457	.03064	.01722	.26324	.00040	-.00192	.06370	.14121	.02653
#2	.00737	.03102	.02000	.26676	.00006	-.01494	.06386	.14126	.02411
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2738.8**	**58683.**	**5409.3**
Stddev	5.3	19.	34.1
%RSD	.19391	.03307	.63057
#1	2735.0	58669.	5433.4
#2	2742.5	58697.	5385.1

Sample Name: 280-97928-B-20-A Acquired: 6/9/2017 10:24:36 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00146**	**40.121**	**.03251**	**.01759**	**.11468**	**.00186**	**.00171**	**11.277**	**.00040**
Stddev	.00007	.145	.00151	.00026	.00004	.00004	.00253	.007	.00006
%RSD	5.0706	.36075	4.6425	1.4818	.03506	2.2256	147.71	.06346	15.797
#1	-.00151	40.224	.03357	.01740	.11471	.00183	.00350	11.271	.00036
#2	-.00141	40.019	.03144	.01777	.11465	.00189	-.00008	11.282	.00044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02990**	**.04308**	**.10466**	**85.679**	**6.7709**	**.06339**	**17.639**	**3.0433**	**-.00103**
Stddev	.00091	.00100	.00193	.509	.0494	.00092	.096	.0062	.00079
%RSD	3.0365	2.3199	1.8432	.59395	.72949	1.4544	.54332	.20293	76.225
#1	.03055	.04378	.10602	86.039	6.8058	.06404	17.571	3.0390	-.00047
#2	.02926	.04237	.10330	85.319	6.7360	.06274	17.707	3.0477	-.00159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.26466**	**.06595**	**2.6841**	**.01801**	**.01179**	**-.00497**	**-.00548**	**3.6958**	**7.9090**
Stddev	.00264	.00255	.0804	.00179	.00792	.00279	.00125	.0329	.0704
%RSD	.99751	3.8701	2.9950	9.9366	67.169	56.036	22.859	.88975	.88975
#1	.26279	.06775	2.7410	.01927	.01739	-.00694	-.00459	3.7191	7.9588
#2	.26653	.06414	2.6273	.01674	.00619	-.00300	-.00637	3.6726	7.8593
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00996**	**.03537**	**.02835**	**.32642**	**.00519**	**.00646**	**.07790**	**.16572**	**.03618**
Stddev	.00027	.00022	.00085	.00270	.00538	.01283	.00055	.00095	.00021
%RSD	2.6771	.63279	2.9911	.82591	103.64	198.64	.70110	.57245	.57022
#1	.01015	.03553	.02775	.32452	.00139	.01553	.07751	.16505	.03633
#2	.00977	.03521	.02895	.32833	.00899	-.00261	.07829	.16639	.03604
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2739.2**	**59508.**	**5575.7**
Stddev	7.9	779.	12.4
%RSD	.28771	1.3097	.22188
#1	2733.7	60060.	5567.0
#2	2744.8	58957.	5584.4

Sample Name: 280-97928-B-21-A Acquired: 6/9/2017 10:27:09 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00078**	**31.494**	**.02463**	**.01644**	**.09216**	**.00146**	**.00150**	**30.937**	**.00039**
Stddev	.00012	.043	.00461	.00047	.00052	.00002	.00063	.056	.00026
%RSD	14.785	.13576	18.714	2.8587	.56080	1.3048	41.854	.18251	66.274
#1	-.00086	31.464	.02788	.01677	.09253	.00148	.00106	30.977	.00058
#2	-.00070	31.525	.02137	.01610	.09180	.00145	.00194	30.897	.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02409**	**.03445**	**.08797**	**69.788**	**5.8065**	**.05140**	**17.023**	**2.4659**	**-.00073**
Stddev	.00063	.00122	.00038	.250	.0445	.00259	.024	.0039	.00038
%RSD	2.5979	3.5411	.43171	.35773	.76688	5.0354	.14343	.15872	52.009
#1	.02453	.03531	.08824	69.964	5.8380	.04957	17.040	2.4687	-.00046
#2	.02364	.03359	.08770	69.611	5.7750	.05323	17.006	2.4632	-.00100
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.38728**	**.05272**	**2.3567**	**.01276**	**.08441**	**-.00700**	**-.00799**	**3.3976**	**7.2709**
Stddev	.00728	.00120	.0642	.00073	.00210	.00251	.00644	.0024	.0051
%RSD	1.8805	2.2791	2.7233	5.7303	2.4919	35.895	80.548	.06978	.06978
#1	.39243	.05357	2.4020	.01225	.08293	-.00878	-.01255	3.3993	7.2745
#2	.38213	.05187	2.3113	.01328	.08590	-.00522	-.00344	3.3959	7.2673
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00774**	**.06165**	**.01792**	**.26260**	**.00972**	**-.01046**	**.06351**	**.13750**	**.03092**
Stddev	.00138	.00021	.00230	.00362	.00210	.00852	.00031	.00058	.00128
%RSD	17.845	.33425	12.814	1.3796	21.567	81.393	.48405	.41977	4.1387
#1	.00872	.06150	.01630	.26004	.01121	-.00444	.06329	.13791	.03183
#2	.00676	.06179	.01955	.26516	.00824	-.01649	.06373	.13710	.03002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2759.9**	**58664.**	**5324.1**
Stddev	2.6	136.	124.4
%RSD	.09526	.23241	2.3365
#1	2758.1	58567.	5236.1
#2	2761.8	58760.	5412.0

Sample Name: 280-97928-B-22-A Acquired: 6/9/2017 10:29:42 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00043**	**37.183**	**.01973**	**.01641**	**.12083**	**.00175**	**-.00127**	**9.5912**	**.00069**
Stddev	.00036	.139	.00034	.00030	.00011	.00003	.00554	.0558	.00019
%RSD	83.368	.37492	1.7289	1.8007	.08902	1.5861	435.27	.58235	27.697
#1	-.00018	37.085	.01997	.01662	.12076	.00177	-.00519	9.5517	.00055
#2	-.00068	37.282	.01949	.01620	.12091	.00173	.00265	9.6307	.00082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02713**	**.03895**	**.09433**	**77.974**	**5.9630**	**.05879**	**16.101**	**2.8770**	**-.00064**
Stddev	.00031	.00077	.00116	.045	.0985	.00107	.036	.0056	.00025
%RSD	1.1272	1.9851	1.2290	.05719	1.6528	1.8216	.22478	.19301	38.709
#1	.02734	.03950	.09515	77.942	5.8933	.05954	16.127	2.8810	-.00046
#2	.02691	.03841	.09351	78.005	6.0326	.05803	16.076	2.8731	-.00081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.22357**	**.05927**	**2.4681**	**.02047**	**.20579**	**-.00536**	**-.00380**	**2.6686**	**5.7107**
Stddev	.00127	.00153	.0665	.00107	.01033	.00100	.00330	.0217	.0465
%RSD	.56980	2.5749	2.6961	5.2411	5.0206	18.615	86.708	.81380	.81380
#1	.22447	.06035	2.5152	.02123	.21310	-.00607	-.00613	2.6532	5.6778
#2	.22267	.05819	2.4211	.01972	.19849	-.00466	-.00147	2.6839	5.7436
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00750**	**.02900**	**.01982**	**.29963**	**.00392**	**-.01314**	**.07279**	**.16141**	**.02211**
Stddev	.00128	.00012	.00064	.00243	.00226	.02722	.00064	.00100	.00277
%RSD	17.012	.39927	3.2468	.80971	57.653	207.12	.87792	.61683	12.547
#1	.00660	.02891	.01937	.30135	.00232	.00611	.07234	.16070	.02015
#2	.00840	.02908	.02028	.29792	.00552	-.03239	.07324	.16211	.02408
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2794.0**	**59924.**	**5675.2**
Stddev	12.5	255.	35.9
%RSD	.44751	.42487	.63308
#1	2802.8	60104.	5700.6
#2	2785.1	59744.	5649.8

Sample Name: CCVH-4579429 Acquired: 6/9/2017 10:32:17 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00892**	**46.937**	**-.00386**	**.00073**	**.00069**	**.00010**	W **.92893**	**.01042**	**.00049**	**-.00048**	**.00018**	**.01635**
Stddev	.00066	.108	.00154	.00048	.00039	.00006	.02366	.00358	.00029	.00029	.00057	.00055
%RSD	7.3800	.23059	39.802	65.039	55.838	59.261	2.5473	34.311	59.464	61.287	319.79	3.3824
#1	-.00939	46.861	-.00495	.00040	.00042	.00006	.94566	.01295	.00069	-.00027	.00058	.01674
#2	-.00845	47.014	-.00278	.00107	.00096	.00015	.91219	.00789	.00028	-.00068	-.00022	.01595
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							-5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.590**	**-.01509**	**-.00039**	**.10877**	**-.00133**	**-.00210**	**242.99**	**.00181**	**.00777**	**-.00097**	W **4.4769**	**-.01159**
Stddev	.037	.02392	.00159	.00022	.00017	.00015	.55	.00050	.00033	.00004	.1074	.00393
%RSD	.07683	158.53	408.24	.20177	12.603	7.3201	.22676	27.359	4.2905	3.9322	2.3988	33.946
#1	48.616	-.03200	-.00151	.10861	-.00121	-.00221	243.38	.00216	.00800	-.00100	4.5529	-.01437
#2	48.563	.00182	.00073	.10893	-.00144	-.00199	242.60	.00146	.00753	-.00095	4.4010	-.00881
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Warn	None
Value											5.0000	
Range											-5.0000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00775**	**-.06073**	**-.12997**	**-.00229**	**.00057**	**4.9674**	**.02239**	**.00563**	**10.128**	**.01428**	**-.00011**	**.07479**
Stddev	.00263	.00241	.00516	.00049	.00002	.0124	.00061	.00195	.038	.00066	.00044	.00224
%RSD	33.949	3.9672	3.9672	21.427	4.3007	.24922	2.7173	34.639	.37360	4.6579	381.03	2.9891
#1	-.00589	-.06244	-.13361	-.00194	.00055	4.9761	.02282	.00701	10.154	.01381	-.00042	.07637
#2	-.00961	-.05903	-.12632	-.00263	.00058	4.9586	.02196	.00425	10.101	.01475	.00019	.07321
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2568.9**	**53802.**	**5019.2**
Stddev	11.9	97.	24.3
%RSD	.46176	.17982	.48364
#1	2560.5	53870.	5036.4
#2	2577.3	53733.	5002.1

Sample Name: CCV-4567764 Acquired: 6/9/2017 10:34:52 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50037**	**.48915**	**.96254**	**.50300**	**.46530**	**.47367**	**.00141**	**4.6636**	**.48946**	**.48707**	**.45155**	**.54996**
Stddev	.00267	.01791	.02313	.01164	.00152	.00314	.00075	.0197	.01400	.01183	.01327	.00249
%RSD	.53356	3.6623	2.4035	2.3151	.32563	.66194	53.121	.42322	2.8594	2.4278	2.9382	.45248
#1	.49848	.50181	.97890	.51123	.46637	.47589	.00088	4.6776	.49935	.49543	.46093	.54820
#2	.50225	.47648	.94618	.49477	.46422	.47145	.00195	4.6497	.47956	.47871	.44217	.55172
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4384**	**47.833**	**.95088**	**19.856**	**.52632**	F **.44610**	**4.9740**	**.48789**	**.99294**	**.91677**	**.00258**	**.97724**
Stddev	.0037	.089	.00316	.044	.00474	.01215	.0059	.01278	.01599	.02544	.00553	.01954
%RSD	.15303	.18561	.33201	.22110	.90053	2.7230	.11913	2.6196	1.6104	2.7747	214.61	2.0000
#1	2.4410	47.895	.95311	19.825	.52967	.45469	4.9699	.49693	1.0042	.93476	-.00133	.99106
#2	2.4357	47.770	.94864	19.887	.52297	.43751	4.9782	.47886	.98163	.89879	.00649	.96342
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value						.50000						
Range						-10.490%						

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.97881**	**4.7144**	**10.089**	**.92037**	**.47523**	**.00928**	**.50620**	**.95003**	**-.02565**	**.52719**	**.51427**	**.50182**
Stddev	.01694	.0306	.066	.02249	.00177	.00652	.00048	.02597	.03291	.00065	.00013	.00173
%RSD	1.7311	.65002	.65002	2.4435	.37172	70.279	.09492	2.7337	128.31	.12423	.02468	.34420
#1	.99079	4.7361	10.135	.93627	.47648	.01388	.50586	.96839	-.04893	.52765	.51418	.50305
#2	.96683	4.6927	10.042	.90447	.47398	.00467	.50654	.93167	-.00238	.52672	.51436	.50060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2645.4**	**56012.**	**5064.7**
Stddev	2.1	55.	19.3
%RSD	.07857	.09906	.38014
#1	2643.9	56051.	5078.3
#2	2646.8	55973.	5051.0

Sample Name: CCB Acquired: 6/9/2017 10:37:21 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00046**	**.00020**	**.00329**	**.00047**	**-.00016**	**.00014**	**-.00153**	**.00756**	**.00018**	**.00028**	**.00081**	**-.00109**	**.00078**
Stddev	.00013	.00031	.00125	.00033	.00007	.00003	.00087	.00596	.00007	.00007	.00019	.00043	.00025
%RSD	28.912	161.07	37.807	70.025	41.228	22.843	56.965	78.863	39.667	24.728	23.240	39.396	31.475
#1	.00036	-.00003	.00241	.00070	-.00021	.00012	-.00214	.00334	.00013	.00032	.00068	-.00079	.00061
#2	.00055	.00042	.00417	.00024	-.00012	.00016	-.00091	.01177	.00024	.00023	.00095	-.00140	.00095
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.02875**	**.00121**	**.00184**	**.00015**	**.00015**	**-.07059**	**-.00010**	**.00156**	**.00088**	**-.00655**	**.00105**	**-.00482**	**-.04041**
Stddev	.03905	.00008	.00013	.00000	.00028	.02528	.00016	.00106	.00138	.00412	.00420	.00013	.02534
%RSD	135.80	6.8674	6.8867	2.8648	194.79	35.807	158.29	68.039	157.15	62.951	401.57	2.7131	62.697
#1	-.05636	.00126	.00193	.00015	.00035	-.05272	-.00021	.00081	-.00010	-.00363	-.00192	-.00472	-.02250
#2	-.00114	.00115	.00175	.00014	-.00005	-.08846	.00001	.00231	.00185	-.00946	.00402	-.00491	-.05833
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.08648**	**.00196**	**.00022**	**-.00038**	**.00020**	**.00275**	**.01533**	**.00102**	**-.00035**	**-.00105**
Stddev	.05422	.00147	.00011	.00172	.00026	.00200	.02398	.00048	.00003	.00001
%RSD	62.697	75.033	51.120	456.35	129.76	72.814	156.50	47.048	9.4129	1.0684
#1	-.04814	.00092	.00029	.00084	.00038	.00416	-.00163	.00136	-.00038	-.00106
#2	-.12482	.00301	.00014	-.00159	.00002	.00133	.03229	.00068	-.00033	-.00105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2608.3**	**56462.**	**5240.3**
Stddev	14.1	49.	21.2
%RSD	.54019	.08649	.40543
#1	2618.3	56497.	5225.3
#2	2598.3	56428.	5255.4

Sample Name: CCVL-4584532 Acquired: 6/9/2017 10:40:00 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01044**	**.09643**	**.01854**	**.09775**	**.00935**	**.00103**	**.10215**	**.19036**	**.00494**	**.01009**	**.00945**	**.01619**
Stddev	.00053	.00285	.00343	.00376	.00009	.00000	.00058	.00230	.00004	.00009	.00075	.00077
%RSD	5.1202	2.9524	18.486	3.8428	.91286	.29455	.56568	1.2096	.89522	.93872	7.9011	4.7682
#1	.01082	.09845	.01612	.10041	.00941	.00103	.10256	.18873	.00498	.01016	.00997	.01564
#2	.01007	.09442	.02097	.09510	.00929	.00103	.10174	.19198	.00491	.01002	.00892	.01674
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10256**	**2.9209**	**.02046**	**.20843**	**.01123**	**.01800**	**.94253**	**.03919**	**2.8149**	**.01064**	**.08350**	**.01886**
Stddev	.00059	.0239	.00188	.01244	.00031	.00037	.01390	.00221	.0777	.00290	.00737	.00385
%RSD	.57958	.81811	9.1839	5.9691	2.7507	2.0523	1.4748	5.6500	2.7591	27.288	8.8299	20.424
#1	.10214	2.9378	.02178	.19963	.01101	.01826	.93270	.04075	2.8698	.01269	.08871	.02159
#2	.10298	2.9040	.01913	.21723	.01145	.01774	.95235	.03762	2.7600	.00859	.07828	.01614
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01679**	**.44628**	**.95505**	**.09174**	**.00976**	**.01285**	**.01024**	F **.02132**	F **.09473**	**.01136**	**.02094**	**.01445**
Stddev	.00118	.02540	.05435	.00447	.00004	.00189	.00015	.00050	.00595	.00054	.00069	.00134
%RSD	7.0086	5.6912	5.6912	4.8763	.45670	14.676	1.4786	2.3330	6.2776	4.7424	3.3175	9.3027
#1	.01596	.42832	.91661	.09490	.00979	.01152	.01013	.02167	.09894	.01174	.02143	.01540
#2	.01762	.46424	.99348	.08858	.00972	.01418	.01035	.02097	.09053	.01098	.02045	.01350
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								.01500	.06000			
Range								30.000%	30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2639.2**	**56268.**	**5015.1**
Stddev	2.6	161.	36.6
%RSD	.09962	.28640	.73027
#1	2637.4	56154.	5041.0
#2	2641.1	56382.	4989.2

Sample Name: MB 280-376484/1-A Acquired: 6/9/2017 10:42:39 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/8 Custom ID2: Custom ID3:
Comment: 376484 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00009**	**.00378**	**.00492**	**.00094**	**-.00037**	**.00018**	**.00438**	**.07607**	**-.00003**
Stddev	.00005	.00275	.00208	.00137	.00017	.00007	.00393	.00146	.00013
%RSD	60.441	72.739	42.164	144.81	45.760	36.143	89.815	1.9179	535.90
#1	.00012	.00573	.00345	.00191	-.00025	.00023	.00716	.07503	.00007
#2	.00005	.00184	.00639	-.00002	-.00049	.00013	.00160	.07710	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00033**	**.00028**	**-.00045**	W **.05413**	**-.02298**	**.00078**	**.01213**	**.00048**	**-.00008**
Stddev	.00018	.00039	.00030	.00008	.01860	.00054	.00376	.00000	.00054
%RSD	56.239	139.34	65.172	.15149	80.940	69.483	31.000	.25102	695.89
#1	.00046	.00056	-.00024	.05418	-.00983	.00116	.00947	.00048	.00030
#2	.00020	.00000	-.00066	.05407	-.03614	.00040	.01479	.00048	-.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.05000					
Low Limit				-.05000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.03906**	**.00034**	**.00423**	**.00087**	**.02677**	**-.00157**	**-.00461**	**-.03066**	**-.06561**
Stddev	.00254	.00013	.00120	.00107	.00224	.00129	.00154	.01406	.03009
%RSD	6.4982	38.044	28.285	123.50	8.3767	82.029	33.467	45.854	45.854
#1	-.04085	.00025	.00508	.00163	.02518	-.00248	-.00570	-.04060	-.08688
#2	-.03726	.00043	.00339	.00011	.02836	-.00066	-.00352	-.02072	-.04434
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00034**	**.00021**	**-.00062**	**.00044**	**.00453**	**-.02282**	**.00039**	**.00948**	**-.00253**
Stddev	.00089	.00005	.00006	.00040	.00067	.01884	.00021	.00183	.00069
%RSD	261.91	22.576	9.5378	90.272	14.811	82.573	53.411	19.300	27.072
#1	-.00029	.00025	-.00058	.00072	.00500	-.03615	.00024	.01077	-.00205
#2	.00097	.00018	-.00066	.00016	.00405	-.00950	.00053	.00818	-.00302
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2648.0**	**57232.**	**5308.1**
Stddev	20.6	192.	52.7
%RSD	.77796	.33604	.99198
#1	2633.4	57368.	5270.8
#2	2662.5	57096.	5345.3

Sample Name: LCS 280-376484/2-A Acquired: 6/9/2017 10:45:18 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376484 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04693**	**1.8206**	**.97863**	**.99370**	**1.8544**	**.04703**	**1.9584**	**45.032**	**.09935**
Stddev	.00055	.0428	.01216	.01697	.0067	.00007	.0404	.150	.00195
%RSD	1.1741	2.3501	1.2428	1.7082	.36210	.15548	2.0617	.33357	1.9585
#1	.04732	1.8508	.98723	1.0057	1.8592	.04698	1.9869	45.138	.10072
#2	.04654	1.7903	.97003	.98169	1.8497	.04708	1.9298	44.926	.09797
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47488**	F **.17940**	F **.28011**	**1.0159**	**47.916**	**.94763**	**48.852**	**.51634**	F **.86193**
Stddev	.00852	.00428	.00067	.0076	.172	.00330	.041	.00083	.01835
%RSD	1.7949	2.3838	.23946	.74923	.35954	.34790	.08338	.16010	2.1285
#1	.48091	.18243	.28058	1.0213	48.038	.94996	48.881	.51693	.87491
#2	.46885	.17638	.27964	1.0106	47.794	.94530	48.824	.51576	.84896
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit		.22000	.28000						1.1000
Low Limit		.18000	.21500						.90000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.539**	**.47437**	**10.013**	F **.44487**	**1.8751**	**.48497**	**1.9180**	**9.1543**	**19.590**
Stddev	.078	.00930	.188	.01158	.0411	.00415	.0206	.0168	.036
%RSD	.15840	1.9599	1.8792	2.6032	2.1921	.85547	1.0718	.18363	.18363
#1	49.595	.48094	10.146	.45306	1.9041	.48791	1.9325	9.1424	19.565
#2	49.484	.46779	9.8800	.43668	1.8460	.48204	1.9035	9.1662	19.616
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit				.55000					
Low Limit				.44500					

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.7958**	**.94080**	**1.0255**	**1.0150**	**1.8078**	**2.0387**	**.53094**	**.51304**	**.50777**
Stddev	.0367	.00213	.0021	.0030	.0355	.0364	.00163	.00128	.00069
%RSD	2.0417	.22596	.20703	.29368	1.9614	1.7837	.30774	.24923	.13582
#1	1.8218	.94231	1.0270	1.0171	1.8329	2.0644	.53210	.51395	.50825
#2	1.7699	.93930	1.0240	1.0129	1.7828	2.0130	.52979	.51214	.50728
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2528.8**	**53353.**	**5027.6**
Stddev	17.7	154.	10.2
%RSD	.69824	.28949	.20282
#1	2516.3	53462.	5020.4
#2	2541.3	53244.	5034.8

Sample Name: 280-97978-C-1-A Acquired: 6/9/2017 10:47:43 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376484 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00083**	**-.00648**	**-.00921**	**4.7177**	**.01263**	**.00010**	**.00044**	**258.56**	**.00129**
Stddev	.00044	.00187	.00443	.1613	.00020	.00006	.00003	1.06	.00038
%RSD	53.221	28.841	48.127	3.4193	1.5687	61.547	7.3220	.41094	29.210
#1	.00114	-.00781	-.01235	4.8317	.01277	.00005	.00042	259.31	.00103
#2	.00052	-.00516	-.00608	4.6036	.01249	.00014	.00046	257.81	.00156
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00054**	**.00190**	**.00505**	**.87580**	**22.482**	**.71906**	W **778.91**	**.46921**	**.00892**
Stddev	.00012	.00003	.00008	.00698	.411	.00037	4.56	.00073	.00032
%RSD	21.680	1.3336	1.6011	.79661	1.8270	.05206	.58516	.15566	3.5559
#1	-.00045	.00191	.00510	.87086	22.191	.71932	775.69	.46973	.00915
#2	-.00062	.00188	.00499	.88073	22.772	.71879	782.13	.46870	.00870
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							500.00		
Low Limit							-.40000		

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **4327.4**	**.02275**	**.14038**	**-.00404**	F **2593.0**	**-.00329**	**-.00605**	**9.6947**	**20.747**
Stddev	13.0	.00114	.01344	.00079	76.5	.00266	.00311	.0224	.048
%RSD	.30062	4.9975	9.5768	19.658	2.9520	80.758	51.352	.23105	.23105
#1	4336.6	.02355	.14989	-.00347	2647.1	-.00517	-.00386	9.7105	20.780
#2	4318.2	.02194	.13087	-.00460	2538.9	-.00141	-.00825	9.6788	20.713
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00451**	**2.9021**	**.00028**	**.00030**	**.00835**	**-.00907**	**-.00121**	**.02794**	**-.00104**
Stddev	.00122	.0080	.00199	.00047	.00124	.01106	.00028	.00045	.00045
%RSD	27.102	.27608	713.07	159.25	14.882	121.90	22.832	1.5946	43.022
#1	-.00365	2.9078	.00168	.00063	.00923	-.01689	-.00102	.02826	-.00135
#2	-.00537	2.8965	-.00113	-.00004	.00747	-.00125	-.00141	.02763	-.00072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2168.3**	**44363.**	**4751.7**
Stddev	15.6	285.	32.0
%RSD	.72079	.64266	.67314
#1	2157.3	44564.	4729.1
#2	2179.4	44161.	4774.3

Sample Name: 280-97978-C-1-A SD@5 Acquired: 6/9/2017 10:50:29 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376484 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00043**	**-.00715**	**.00182**	**1.0166**	**.00238**	**.00011**	**.00243**	**53.677**	**.00111**
Stddev	.00004	.00113	.00312	.0357	.00042	.00007	.00247	.109	.00006
%RSD	8.5432	15.853	171.23	3.5069	17.722	65.433	101.37	.20280	5.7350
#1	.00040	-.00635	.00403	1.0418	.00268	.00006	.00069	53.754	.00116
#2	.00045	-.00795	-.00038	.99142	.00208	.00016	.00418	53.600	.00107
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00093**	**.00095**	**.00385**	**.18597**	**4.5350**	**.13922**	**157.43**	**.09763**	**.00142**
Stddev	.00001	.00032	.00058	.00463	.0377	.00046	.28	.00028	.00004
%RSD	.80233	33.687	15.013	2.4906	.83124	.32690	.18037	.28471	2.8993
#1	-.00092	.00118	.00426	.18924	4.5616	.13954	157.63	.09783	.00145
#2	-.00093	.00073	.00345	.18269	4.5083	.13890	157.23	.09743	.00139
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **854.23**	**.00521**	**.02887**	**-.00294**	F **638.43**	**-.00483**	**.00015**	**1.9316**	**4.1336**
Stddev	.21	.00012	.00166	.00007	22.43	.00385	.00321	.0495	.1059
%RSD	.02405	2.3474	5.7596	2.4775	3.5138	79.819	2153.2	2.5608	2.5608
#1	854.38	.00512	.03004	-.00299	654.30	-.00755	-.00212	1.9666	4.2085
#2	854.09	.00530	.02769	-.00288	622.57	-.00210	.00242	1.8966	4.0588
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00431**	**.58230**	**-.00204**	**-.00016**	**.00265**	**-.01503**	**-.00112**	**.00529**	**-.00065**
Stddev	.00165	.00091	.00105	.00004	.00152	.00382	.00026	.00125	.00102
%RSD	38.217	.15592	51.395	24.335	57.365	25.412	23.489	23.624	155.43
#1	-.00315	.58295	-.00278	-.00019	.00373	-.01233	-.00093	.00617	.00006
#2	-.00548	.58166	-.00130	-.00014	.00158	-.01773	-.00130	.00441	-.00137
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2437.2**	**50541.**	**5015.0**
Stddev	.9	197.	38.1
%RSD	.03492	.38923	.75975
#1	2437.8	50401.	4988.1
#2	2436.6	50680.	5042.0

Sample Name: 280-97978-C-1-B MS Acquired: 6/9/2017 10:53:10 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376484 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05308**	**1.5578**	**1.0158**	**5.6245**	**1.8489**	**.04474**	**1.8726**	**301.26**	**.10229**
Stddev	.00018	.0578	.0267	.1648	.0029	.00006	.0605	.10	.00311
%RSD	.33729	3.7099	2.6336	2.9300	.15412	.13838	3.2324	.03185	3.0391
#1	.05296	1.5987	1.0347	5.7410	1.8469	.04479	1.9154	301.19	.10448
#2	.05321	1.5170	.99685	5.5080	1.8509	.04470	1.8298	301.32	.10009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.42202**	**.16511**	**.28391**	**1.7549**	**74.831**	**1.7105**	W **817.88**	**.96278**	**.79934**
Stddev	.01393	.00613	.00014	.0090	.220	.0007	4.25	.00160	.02621
%RSD	3.3006	3.7122	.04818	.51321	.29395	.04255	.51997	.16576	3.2791
#1	.43187	.16945	.28401	1.7612	74.675	1.7110	814.87	.96391	.81788
#2	.41217	.16078	.28382	1.7485	74.986	1.7100	820.89	.96165	.78081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							500.00		
Low Limit							-.40000		

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **4406.8**	**.44197**	**10.918**	**.36273**	F **2594.4**	**.48903**	**2.1683**	**18.873**	**40.388**
Stddev	5.1	.01433	.389	.01213	60.0	.01064	.0774	.026	.056
%RSD	.11592	3.2423	3.5627	3.3448	2.3124	2.1767	3.5698	.13788	.13788
#1	4410.4	.45211	11.193	.37131	2636.8	.49656	2.2230	18.891	40.427
#2	4403.2	.43184	10.643	.35415	2552.0	.48150	2.1136	18.855	40.349
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.5674**	**3.8664**	**1.0366**	**1.0157**	**1.3462**	**1.9121**	**.52878**	**.52354**	**.50309**
Stddev	.0588	.0054	.0072	.0017	.0518	.0174	.00291	.00047	.00054
%RSD	3.7497	.14021	.69798	.16456	3.8494	.91035	.55043	.09057	.10698
#1	1.6089	3.8626	1.0417	1.0169	1.3828	1.8998	.53084	.52387	.50347
#2	1.5258	3.8702	1.0315	1.0146	1.3095	1.9244	.52672	.52320	.50271
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2171.2**	**44446.**	**4837.2**
Stddev	8.4	105.	34.9
%RSD	.38772	.23537	.72202
#1	2165.2	44520.	4812.5
#2	2177.1	44372.	4861.9

Sample Name: 280-97978-C-1-C MSD Acquired: 6/9/2017 10:55:47 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376484 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05468**	**1.6111**	**1.0512**	**5.8261**	**1.9074**	**.04635**	**1.9320**	**311.42**	**.10539**
Stddev	.00143	.0492	.0311	.1635	.0019	.00018	.0629	1.29	.00352
%RSD	2.6207	3.0564	2.9594	2.8071	.10173	.39754	3.2534	.41523	3.3411
#1	.05569	1.6459	1.0732	5.9417	1.9088	.04648	1.9765	312.33	.10788
#2	.05366	1.5763	1.0292	5.7105	1.9060	.04622	1.8876	310.50	.10290
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.43661**	**.17079**	**.28960**	**1.8080**	**77.903**	**1.7713**	W **847.29**	**.99316**	**.82907**
Stddev	.01343	.00613	.00041	.0093	.115	.0025	2.44	.00240	.02878
%RSD	3.0764	3.5883	.14256	.51249	.14714	.14148	.28789	.24154	3.4711
#1	.44610	.17512	.28990	1.8145	77.822	1.7695	845.56	.99146	.84942
#2	.42711	.16646	.28931	1.8014	77.984	1.7731	849.01	.99485	.80872
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							500.00		
Low Limit							-.40000		

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **4559.2**	**.45919**	**11.278**	**.37452**	F **2676.5**	**.50370**	**2.2458**	**19.537**	**41.810**
Stddev	9.1	.01386	.384	.00735	57.6	.01338	.0562	.125	.267
%RSD	.19853	3.0181	3.4048	1.9625	2.1505	2.6561	2.5027	.63977	.63977
#1	4565.6	.46899	11.550	.37972	2717.2	.51316	2.2856	19.626	41.999
#2	4552.8	.44939	11.007	.36932	2635.8	.49424	2.2061	19.449	41.620
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.6237**	**4.0066**	**1.0669**	**1.0493**	**1.3942**	**2.0205**	**.54204**	**.53571**	**.51575**
Stddev	.0585	.0008	.0035	.0010	.0463	.0135	.00096	.00299	.00195
%RSD	3.6001	.02122	.32975	.09781	3.3189	.66940	.17748	.55856	.37878
#1	1.6650	4.0072	1.0644	1.0500	1.4269	2.0301	.54272	.53359	.51713
#2	1.5823	4.0060	1.0694	1.0485	1.3614	2.0110	.54136	.53782	.51437
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2135.9**	**44189.**	**4850.6**
Stddev	7.8	285.	64.8
%RSD	.36299	.64483	1.3361
#1	2130.4	44391.	4804.7
#2	2141.4	43988.	4896.4

Sample Name: 280-97978-C-2-A Acquired: 6/9/2017 10:58:24 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376484 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00055**	**.00020**	**.00562**	**.01743**	**.00061**	**.00016**	**.00256**	**.22006**	**.00007**
Stddev	.00013	.00077	.00239	.00175	.00016	.00002	.00084	.02264	.00013
%RSD	23.560	378.34	42.551	10.065	25.285	15.099	32.668	10.286	200.02
#1	.00064	-.00034	.00731	.01867	.00050	.00015	.00197	.23607	-.00003
#2	.00046	.00075	.00393	.01619	.00072	.00018	.00315	.20405	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00010**	**.00054**	**-.00005**	**.00510**	**.41732**	**.00135**	**.17683**	**.00029**	**.00022**
Stddev	.00001	.00009	.00056	.00356	.05325	.00009	.02501	.00008	.00071
%RSD	13.487	16.712	1037.6	69.727	12.759	6.5555	14.141	27.742	318.78
#1	.00009	.00060	-.00045	.00259	.45497	.00129	.19452	.00035	.00072
#2	.00011	.00048	.00034	.00761	.37967	.00141	.15915	.00024	-.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.1947**	**.00001**	**.00114**	**.00315**	**.63758**	**.00015**	**-.00010**	**.23587**	**.50477**
Stddev	.3104	.00058	.00053	.00003	.09581	.00160	.00906	.01258	.02691
%RSD	14.143	5670.2	46.619	.97345	15.027	1076.4	8869.5	5.3318	5.3318
#1	2.4142	.00042	.00152	.00317	.70532	.00128	.00630	.22698	.48574
#2	1.9752	-.00040	.00077	.00312	.56983	-.00098	-.00651	.24477	.52380
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00067**	**.00281**	**.00053**	**-.00003**	**.00208**	**-.00403**	**.00003**	**.00343**	**-.00166**
Stddev	.00090	.00032	.00040	.00062	.00383	.02230	.00056	.00023	.00107
%RSD	134.17	11.261	76.440	2205.9	183.91	553.60	2129.4	6.7446	64.465
#1	-.00003	.00303	.00081	.00041	-.00063	.01174	-.00037	.00327	-.00242
#2	-.00130	.00259	.00024	-.00047	.00479	-.01980	.00042	.00359	-.00090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2659.8**	**57613.**	**5352.5**
Stddev	3.1	729.	16.8
%RSD	.11504	1.2661	.31371
#1	2661.9	58129.	5340.7
#2	2657.6	57098.	5364.4

Sample Name: CCVH-4579429 Acquired: 6/9/2017 11:01:03 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00950**	**46.935**	**.00145**	**.01419**	**.00023**	**.00020**	**.95550**	**.01109**	**.00030**	**-.00069**	**.00103**	**.01685**	**48.547**
Stddev	.00010	.047	.00370	.00100	.00067	.00002	.02280	.00492	.00025	.00014	.00061	.00005	.183
%RSD	1.0841	.10002	254.36	7.0280	294.92	9.3594	2.3867	44.379	83.366	19.926	59.201	.32561	.37736
#1	-.00957	46.968	.00407	.01349	-.00025	.00021	.97162	.01456	.00012	-.00079	.00147	.01689	48.417
#2	-.00943	46.902	-.00116	.01490	.00070	.00018	.93937	.00761	.00047	-.00059	.00060	.01681	48.676
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.15298**	**.00127**	**.20316**	**-.00174**	**-.00198**	**245.01**	**.00165**	**.00941**	**.00239**	**4.9257**	**-.01139**	**-.00566**	**-.04905**
Stddev	.02078	.00006	.10954	.00010	.00009	.26	.00027	.00499	.00009	.1320	.00025	.00096	.00332
%RSD	13.581	4.4262	53.918	5.6943	4.5152	.10411	16.482	52.971	3.6211	2.6797	2.1606	17.019	6.7694
#1	.13829	.00131	.12570	-.00181	-.00205	245.19	.00145	.01294	.00245	5.0191	-.01121	-.00498	-.04670
#2	.16768	.00123	.28061	-.00167	-.00192	244.83	.00184	.00589	.00233	4.8324	-.01156	-.00634	-.05140
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.10496**	**-.00165**	**.00052**	**4.9978**	**.02313**	**.00593**	**10.244**	**.01397**	**.00016**	**.07933**
Stddev	.00711	.00066	.00001	.0178	.00000	.00045	.031	.00033	.00031	.00099
%RSD	6.7694	40.066	2.5622	.35656	.01559	7.5510	.29912	2.3405	197.35	1.2434
#1	-.09994	-.00211	.00051	5.0104	.02313	.00561	10.265	.01374	.00037	.08002
#2	-.10999	-.00118	.00053	4.9852	.02313	.00624	10.222	.01421	-.00006	.07863
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2573.8**	**54563.**	**5142.4**
Stddev	8.3	422.	120.2
%RSD	.32351	.77271	2.3376
#1	2579.7	54265.	5227.4
#2	2567.9	54861.	5057.4

Sample Name: CCV-4567764 Acquired: 6/9/2017 11:03:38 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49779**	**.49474**	**.95820**	**.51980**	**.46647**	**.47144**	**.00051**	**4.6409**	**.49498**	**.49222**	**.45929**	W **.55122**
Stddev	.00015	.01398	.00927	.01027	.00367	.00232	.00126	.0130	.01163	.01178	.01108	.00167
%RSD	.03032	2.8267	.96786	1.9763	.78686	.49151	246.05	.28009	2.3494	2.3939	2.4131	.30297
#1	.49790	.50463	.96476	.52707	.46907	.47308	-.00038	4.6501	.50320	.50055	.46712	.55240
#2	.49769	.48485	.95164	.51254	.46388	.46980	.00140	4.6318	.48676	.48389	.45145	.55004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
Value												.50000
Range												10.000%

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4101**	**47.864**	**.95273**	**20.027**	**.52695**	**.45201**	**5.2480**	**.49470**	**1.0061**	**.92867**	**.27051**	**.98287**
Stddev	.0203	.294	.00483	.023	.00071	.01087	.0160	.00998	.0282	.01677	.01577	.01856
%RSD	.84066	.61326	.50680	.11326	.13547	2.4038	.30462	2.0179	2.8044	1.8058	5.8294	1.8879
#1	2.4244	48.072	.95614	20.010	.52746	.45969	5.2593	.50176	1.0261	.94053	.28166	.99599
#2	2.3958	47.657	.94931	20.043	.52645	.44432	5.2367	.48764	.98616	.91681	.25936	.96975
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.98473**	**4.6858**	**10.028**	**.93328**	**.47570**	**.00409**	**.51221**	**.95372**	**.01073**	**.53269**	**.52434**	**.50614**
Stddev	.01120	.0614	.131	.02663	.00314	.00260	.00004	.02030	.00191	.00089	.00072	.00165
%RSD	1.1375	1.3105	1.3105	2.8531	.65921	63.531	.00744	2.1288	17.787	.16629	.13690	.32623
#1	.99266	4.7292	10.121	.95211	.47792	.00225	.51224	.96807	.01208	.53332	.52485	.50731
#2	.97681	4.6424	9.9348	.91445	.47349	.00593	.51218	.93936	.00938	.53207	.52383	.50497
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2608.3**	**55104.**	**5184.5**
Stddev	10.4	54.	16.6
%RSD	.39903	.09811	.32073
#1	2600.9	55142.	5172.8
#2	2615.7	55066.	5196.3

Sample Name: CCB Acquired: 6/9/2017 11:06:07 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00060**	**.01855**	**.00270**	**.01023**	**.00001**	**.00045**	**.00116**	**.01149**	**.00055**	**-.00007**	**.00022**	**-.00123**
Stddev	.00055	.02710	.00918	.00104	.00012	.00006	.00076	.00331	.00062	.00058	.00031	.00018
%RSD	92.107	146.07	339.87	10.203	854.08	13.930	65.425	28.794	114.02	870.86	137.06	14.555
#1	.00099	.03772	.00919	.01096	.00010	.00040	.00062	.00915	.00099	.00034	.00044	-.00110
#2	.00021	-.00061	-.00379	.00949	-.00007	.00049	.00169	.01382	.00011	-.00047	.00001	-.00136
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00236**	**.13942**	**.00359**	**.01040**	**.00005**	**.00027**	**.22366**	**.00008**	**.00370**	**.00248**	F **.56628**	**-.00127**
Stddev	.00084	.02265	.00122	.00135	.00001	.00053	.01890	.00016	.00154	.00118	.51596	.00211
%RSD	35.682	16.247	33.812	12.960	27.755	195.63	8.4517	215.52	41.596	47.563	91.115	165.68
#1	.00295	.15543	.00445	.01136	.00006	.00065	.23703	.00019	.00479	.00332	.93112	-.00276
#2	.00176	.12340	.00274	.00945	.00004	-.00010	.21029	-.00004	.00261	.00165	.20143	.00022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit											.10000	
Low Limit											-.20000	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00328**	**-.03217**	**-.06884**	**.00042**	**.00020**	**-.00033**	**.00004**	**.00515**	**.01565**	**.00077**	**.00036**	**-.00055**
Stddev	.00864	.02251	.04817	.00121	.00011	.00062	.00032	.00081	.01849	.00026	.00009	.00148
%RSD	263.89	69.972	69.972	286.35	55.807	189.16	790.87	15.645	118.12	34.363	25.402	266.13
#1	.00284	-.01625	-.03478	.00128	.00028	.00011	-.00019	.00572	.00258	.00058	.00030	-.00160
#2	-.00939	-.04808	-.10289	-.00043	.00012	-.00077	.00027	.00458	.02872	.00095	.00043	.00049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2587.8**	**55782.**	**5051.1**
Stddev	22.5	321.	20.2
%RSD	.86954	.57518	.40006
#1	2571.9	55555.	5036.8
#2	2603.7	56009.	5065.4

Sample Name: CCVL-4584532 Acquired: 6/9/2017 11:10:53 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01040**	**.10467**	**.01876**	**.10890**	**.00902**	**.00106**	**.11089**	**.19090**	**.00518**	**.01064**	**.00986**	**.01586**
Stddev	.00030	.00134	.00022	.00076	.00009	.00007	.00050	.00139	.00000	.00005	.00020	.00084
%RSD	2.9245	1.2842	1.1564	.70018	.99852	6.1466	.45287	.72604	.07495	.46973	2.0562	5.2840
#1	.01062	.10372	.01892	.10944	.00908	.00111	.11124	.18992	.00518	.01068	.00972	.01645
#2	.01019	.10562	.01861	.10836	.00895	.00102	.11053	.19188	.00518	.01061	.01000	.01527
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09983**	**2.9294**	**.02017**	**.21723**	**.01097**	**.01776**	**1.1488**	**.04146**	**2.9480**	**.01043**	F **.26988**	**.02066**
Stddev	.00222	.0494	.00020	.00325	.00009	.00017	.0060	.00008	.0012	.00076	.00415	.00160
%RSD	2.2256	1.6878	1.0026	1.4974	.78497	.93806	.52249	.19377	.03914	7.3194	1.5382	7.7216
#1	.09826	2.8944	.02003	.21493	.01103	.01764	1.1530	.04140	2.9488	.01097	.27282	.01953
#2	.10140	2.9643	.02032	.21953	.01091	.01788	1.1446	.04152	2.9472	.00989	.26694	.02178
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01722**	**.43585**	**.93272**	**.09624**	**.00986**	**.01548**	**.01063**	**.01909**	**.04381**	**.01142**	**.02096**	**.01566**
Stddev	.00190	.00384	.00822	.00224	.00008	.00001	.00010	.00369	.00454	.00023	.00019	.00042
%RSD	11.053	.88172	.88172	2.3271	.80119	.08652	.93993	19.338	10.359	1.9874	.89997	2.7032
#1	.01857	.43857	.93854	.09466	.00991	.01547	.01070	.01648	.04701	.01125	.02082	.01596
#2	.01588	.43313	.92691	.09783	.00980	.01549	.01056	.02170	.04060	.01158	.02109	.01536
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2619.0**	**57339.**	**5214.1**
Stddev	20.8	249.	20.0
%RSD	.79371	.43512	.38374
#1	2633.7	57163.	5200.0
#2	2604.3	57516.	5228.2

Sample Name: MB 280-376418/1-A Acquired: 6/9/2017 11:13:31 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: 6/8 Custom ID2: Custom ID3:
Comment: 376418 6010b

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00052**	**.00610**	**.00674**	**.00686**	**-.00008**	**.00018**	**.00338**	**.05074**	**-.00017**
Stddev	.00045	.00043	.00481	.00109	.00013	.00007	.00479	.00365	.00012
%RSD	86.671	7.0589	71.466	15.864	159.34	38.492	141.80	7.1883	72.364
#1	.00084	.00580	.00333	.00763	-.00017	.00013	.00676	.04816	-.00025
#2	.00020	.00641	.01014	.00609	.00001	.00023	-.00001	.05332	-.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00060**	**.00006**	**-.00074**	F **.10007**	**.07540**	**.00181**	**.01799**	**.00069**	**.00008**
Stddev	.00020	.00019	.00004	.00181	.01969	.00276	.00244	.00005	.00037
%RSD	33.684	315.07	5.9248	1.8058	26.115	152.59	13.560	7.5260	495.14
#1	.00074	.00019	-.00071	.10135	.06148	-.00014	.01972	.00072	.00034
#2	.00046	-.00007	-.00078	.09879	.08932	.00376	.01627	.00065	-.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.10000					
Low Limit				-.10000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.14302**	**.00005**	**.00609**	**.00006**	F **.15550**	**-.00139**	**-.00650**	**.01014**	**.02171**
Stddev	.00414	.00027	.00247	.00147	.00206	.00255	.00526	.01002	.02144
%RSD	2.8958	588.03	40.525	2256.6	1.3226	183.55	80.884	98.778	98.778
#1	.14595	.00024	.00434	.00110	.15695	-.00320	-.00278	.01723	.03687
#2	.14009	-.00015	.00783	-.00097	.15404	.00041	-.01023	.00306	.00655
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None
High Limit					.10000				
Low Limit					-.10000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00063**	**.00026**	**.00095**	**.00057**	**.00524**	**-.00610**	**.00111**	**.00132**	**-.00011**
Stddev	.00009	.00023	.00313	.00022	.00082	.00961	.00006	.00010	.00102
%RSD	13.680	89.619	328.90	38.952	15.689	157.41	5.6263	7.7783	910.80
#1	-.00057	.00010	-.00126	.00073	.00583	.00069	.00116	.00139	-.00084
#2	-.00069	.00043	.00317	.00041	.00466	-.01290	.00107	.00125	.00061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2583.6**	**56398.**	**5061.7**
Stddev	2.7	571.	2.5
%RSD	.10455	1.0129	.05029
#1	2585.5	56802.	5063.5
#2	2581.7	55994.	5059.9

Sample Name: LCS 280-376418/2-A Acquired: 6/9/2017 11:16:10 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment: 376418 6010b

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04930**	**1.8916**	**1.0226**	**1.0433**	**1.9481**	**.04887**	**2.0444**	**46.834**	**.10384**
Stddev	.00039	.0372	.0137	.0206	.0015	.00003	.0493	.129	.00221
%RSD	.80111	1.9640	1.3412	1.9755	.07837	.05423	2.4139	.27580	2.1261
#1	.04958	1.9179	1.0323	1.0579	1.9470	.04885	2.0793	46.925	.10540
#2	.04902	1.8653	1.0129	1.0287	1.9492	.04889	2.0095	46.742	.10228
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49447**	W **.18969**	F **.28742**	**1.0088**	**49.849**	**.98254**	**49.992**	**.52994**	**.91324**
Stddev	.00749	.00422	.00141	.0027	.013	.00233	.285	.00388	.01866
%RSD	1.5153	2.2263	.49210	.27120	.02619	.23714	.56988	.73195	2.0431
#1	.49977	.19268	.28842	1.0069	49.859	.98419	50.193	.53268	.92644
#2	.48917	.18671	.28642	1.0108	49.840	.98089	49.790	.52720	.90005
Check ?	Chk Pass	Chk Warn	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.21000	.28000						
Low Limit		.19000	.21500						

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.660**	**.49412**	**10.384**	**.46656**	**2.0958**	**.51145**	**2.0050**	**9.5883**	**20.519**
Stddev	.554	.01076	.207	.01186	.0450	.01023	.0403	.0010	.002
%RSD	1.0724	2.1768	1.9917	2.5414	2.1470	2.0002	2.0074	.01091	.01091
#1	52.052	.50172	10.530	.47494	2.1277	.51868	2.0335	9.5876	20.517
#2	51.268	.48651	10.238	.45818	2.0640	.50421	1.9766	9.5891	20.521
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8896**	**.98349**	**1.0613**	**1.0541**	**1.8878**	**2.1476**	**.54198**	**.52193**	**.52591**
Stddev	.0362	.00102	.0073	.0042	.0450	.0378	.00495	.00375	.00089
%RSD	1.9163	.10393	.68512	.39625	2.3835	1.7594	.91323	.71755	.16842
#1	1.9152	.98276	1.0665	1.0570	1.9196	2.1743	.54548	.52458	.52528
#2	1.8640	.98421	1.0562	1.0511	1.8559	2.1209	.53848	.51928	.52654
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2537.1**	**55108.**	**5093.1**
Stddev	9.8	516.	89.4
%RSD	.38485	.93662	1.7556
#1	2544.0	54744.	5029.8
#2	2530.2	55473.	5156.3

Sample Name: 280-97880-B-1-A Acquired: 6/9/2017 11:18:35 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment: 376418 6010b

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00023**	**.01448**	**.00446**	**.01002**	**.01430**	**.00021**	**.00023**	**12.072**	**.00024**
Stddev	.00038	.00129	.00348	.00080	.00015	.00016	.00014	.017	.00025
%RSD	166.84	8.8921	78.114	7.9757	1.0801	76.108	58.919	.14165	104.30
#1	.00004	.01539	.00200	.01058	.01441	.00033	.00014	12.060	.00006
#2	-.00050	.01357	.00692	.00945	.01419	.00010	.00033	12.084	.00041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**.00080**	**.00339**	**.01681**	**.74196**	**.00082**	**1.9586**	**.00062**	**.00080**
Stddev	.00013	.00021	.00011	.00456	.00330	.00082	.0384	.00052	.00017
%RSD	1332.3	26.357	3.2849	27.129	.44422	100.28	1.9598	84.402	21.138
#1	-.00010	.00065	.00331	.01359	.74429	.00024	1.9315	.00025	.00092
#2	.00008	.00094	.00347	.02004	.73963	.00140	1.9858	.00099	.00068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.3258**	**-.00035**	**.00300**	**.00172**	**2.2388**	**-.00072**	**-.00843**	**2.4678**	**5.2810**
Stddev	.0025	.00055	.00027	.00077	.0766	.00220	.00348	.0003	.0006
%RSD	.04759	155.41	8.8304	44.912	3.4192	307.35	41.253	.01107	.01107
#1	5.3240	.00003	.00319	.00118	2.2930	.00084	-.01089	2.4676	5.2806
#2	5.3276	-.00074	.00282	.00227	2.1847	-.00227	-.00597	2.4680	5.2815
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00013**	**.06557**	**-.00016**	**.00093**	**.00296**	**.00828**	**.00100**	**.00236**	**-.00050**
Stddev	.00004	.00001	.00053	.00097	.00468	.01397	.00032	.00166	.00328
%RSD	32.748	.01570	326.20	104.67	157.82	168.63	32.387	70.612	655.30
#1	.00010	.06558	-.00054	.00024	.00627	.01816	.00077	.00118	-.00282
#2	.00017	.06557	.00021	.00161	-.00034	-.00159	.00123	.00353	.00182
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2617.5**	**55963.**	**5062.7**
Stddev	18.7	296.	8.4
%RSD	.71513	.52867	.16627
#1	2604.2	55754.	5068.7
#2	2630.7	56172.	5056.8

Sample Name: 280-97931-F-3-A Acquired: 6/9/2017 11:21:13 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment: 376418 6010b

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00024**	**.00952**	**-.00184**	**.46946**	**.73811**	**.00023**	**.00194**	**30.491**	**.00072**
Stddev	.00183	.00093	.00254	.01846	.00189	.00021	.00063	.090	.00022
%RSD	776.18	9.7896	138.39	3.9316	.25571	94.512	32.522	.29669	31.112
#1	-.00153	.01018	-.00364	.48251	.73678	.00008	.00238	30.427	.00088
#2	.00106	.00887	-.00004	.45641	.73945	.00038	.00149	30.555	.00056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00126**	**.00038**	**.00515**	**1.4682**	W **127.85**	**.31119**	**34.666**	**.33432**	**-.00019**
Stddev	.00026	.00044	.00020	.0050	.53	.00060	.123	.00107	.00090
%RSD	20.380	113.67	3.9007	.33962	.41774	.19191	.35613	.32144	482.27
#1	-.00144	.00069	.00529	1.4717	127.47	.31162	34.753	.33508	.00045
#2	-.00108	.00008	.00501	1.4647	128.23	.31077	34.579	.33356	-.00083
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1244.3**	**.00030**	**.74526**	**-.00339**	**.33001**	**-.00352**	**-.00049**	**21.040**	**45.026**
Stddev	3.4	.00019	.03039	.00020	.00705	.01030	.00499	.132	.283
%RSD	.27604	61.212	4.0780	5.9650	2.1377	292.23	1027.5	.62885	.62885
#1	1241.9	.00017	.76675	-.00324	.33500	-.01081	-.00401	20.947	44.826
#2	1246.7	.00043	.72377	-.00353	.32502	.00376	.00304	21.134	45.226
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00037**	**.30208**	**.00016**	**.00159**	**.00447**	**.01522**	**.00030**	**.00213**	**-.00039**
Stddev	.00189	.00117	.00542	.00034	.00068	.01829	.00042	.00037	.00202
%RSD	518.50	.38795	3336.9	21.639	15.329	120.15	139.88	17.460	514.96
#1	.00097	.30125	-.00367	.00184	.00495	.02816	.00000	.00187	-.00182
#2	-.00170	.30291	.00399	.00135	.00398	.00229	.00060	.00240	.00104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2312.7**	**47951.**	**4902.1**
Stddev	3.1	45.	76.2
%RSD	.13497	.09435	1.5551
#1	2314.9	47919.	4956.0
#2	2310.4	47983.	4848.2

Sample Name: 280-97931-F-3-Asd@5 Acquired: 6/9/2017 11:23:55 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment: 376418 6010b

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00031**	**.00210**	**-.00230**	**.10115**	**.15051**	**.00035**	**-.00216**	**6.2952**	**-.00027**
Stddev	.00061	.00065	.00115	.00280	.00006	.00001	.00207	.0058	.00007
%RSD	197.47	30.937	50.209	2.7689	.04172	3.6995	95.730	.09154	26.663
#1	.00074	.00255	-.00148	.10313	.15047	.00036	-.00070	6.2993	-.00022
#2	-.00012	.00164	-.00312	.09917	.15056	.00034	-.00363	6.2911	-.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00039**	**.00002**	**.00268**	**.31105**	**25.624**	**.06355**	**7.1680**	**.06810**	**-.00039**
Stddev	.00017	.00024	.00047	.00418	.079	.00103	.0120	.00018	.00010
%RSD	43.590	1171.0	17.654	1.3445	.30709	1.6198	.16763	.26246	24.481
#1	-.00027	.00019	.00302	.30809	25.680	.06282	7.1765	.06798	-.00032
#2	-.00051	-.00015	.00235	.31401	25.569	.06428	7.1595	.06823	-.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**251.03**	**.00023**	**.14778**	**.00043**	**.13718**	**-.00439**	**-.00103**	**4.2067**	**9.0023**
Stddev	1.97	.00006	.00900	.00103	.00399	.00014	.00528	.0129	.0276
%RSD	.78277	26.955	6.0869	237.29	2.9097	3.2144	512.66	.30678	.30678
#1	252.42	.00019	.15414	-.00029	.14000	-.00429	.00270	4.1976	8.9828
#2	249.64	.00028	.14142	.00116	.13436	-.00449	-.00477	4.2158	9.0219
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00041**	**.06126**	**-.00050**	**.00027**	**.00536**	**.00048**	**.00064**	**.00240**	**-.00074**
Stddev	.00117	.00017	.00145	.00039	.00044	.02394	.00069	.00033	.00185
%RSD	285.29	.27255	290.48	145.08	8.1747	4981.9	107.16	13.930	252.05
#1	-.00042	.06138	-.00152	.00054	.00567	.01741	.00016	.00217	-.00205
#2	.00123	.06114	.00053	-.00001	.00505	-.01645	.00113	.00264	.00058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2414.5**	**51048.**	**4814.8**
Stddev	19.6	128.	29.6
%RSD	.81336	.25057	.61391
#1	2428.4	51138.	4793.9
#2	2400.6	50957.	4835.7

Sample Name: 280-97931-F-3-B MS Acquired: 6/9/2017 11:26:32 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment: 376418 6010b

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05285**	**1.8259**	**1.0718**	**1.5129**	**2.7552**	**.04953**	W **2.0277**	**79.305**	**.10803**
Stddev	.00057	.0391	.0097	.0286	.0013	.00039	.0411	.070	.00201
%RSD	1.0778	2.1391	.90673	1.8921	.04840	.79647	2.0252	.08832	1.8615
#1	.05245	1.8535	1.0787	1.5332	2.7543	.04981	2.0567	79.355	.10945
#2	.05326	1.7983	1.0649	1.4927	2.7562	.04925	1.9987	79.255	.10661
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48438**	**.18941**	**.29894**	**2.6370**	W **187.00**	**1.3318**	**86.404**	**.88875**	**.91664**
Stddev	.00846	.00319	.00088	.0028	.34	.0028	.091	.00106	.01849
%RSD	1.7456	1.6862	.29533	.10673	.18162	.20966	.10551	.11933	2.0170
#1	.49036	.19167	.29957	2.6390	187.24	1.3338	86.339	.88950	.92971
#2	.47840	.18715	.29832	2.6350	186.76	1.3298	86.468	.88800	.90356
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1365.8**	**.48518**	**11.827**	**.43715**	**2.4531**	**.51894**	**2.0675**	**32.083**	**68.657**
Stddev	2.8	.00896	.240	.00650	.0388	.01004	.0469	.181	.387
%RSD	.20545	1.8459	2.0330	1.4872	1.5818	1.9341	2.2682	.56328	.56328
#1	1367.8	.49152	11.997	.44174	2.4805	.52603	2.1007	32.211	68.931
#2	1363.8	.47885	11.657	.43255	2.4256	.51184	2.0344	31.955	68.384
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8455**	**1.3136**	**1.0955**	**1.0880**	**1.6661**	**2.1290**	**.56343**	**.55330**	**.53769**
Stddev	.0355	.0013	.0030	.0022	.0325	.0108	.00303	.00164	.00124
%RSD	1.9215	.09977	.27656	.19795	1.9503	.50712	.53859	.29711	.22992
#1	1.8705	1.3145	1.0976	1.0895	1.6891	2.1367	.56557	.55446	.53856
#2	1.8204	1.3126	1.0933	1.0865	1.6431	2.1214	.56128	.55214	.53681
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2267.4**	**46994.**	**4665.8**
Stddev	1.1	170.	77.3
%RSD	.05036	.36221	1.6562
#1	2266.6	47115.	4611.1
#2	2268.3	46874.	4720.4

Sample Name: 280-97931-F-3-C MSD Acquired: 6/9/2017 11:29:03 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment: 376418 6010b

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05257**	**1.7889**	**1.0561**	**1.4949**	**2.7721**	**.04977**	**1.9953**	**79.503**	**.10620**
Stddev	.00125	.0526	.0259	.0385	.0004	.00026	.0541	.070	.00292
%RSD	2.3720	2.9383	2.4522	2.5755	.01613	.52177	2.7132	.08849	2.7536
#1	.05169	1.8260	1.0744	1.5221	2.7724	.04995	2.0335	79.453	.10826
#2	.05345	1.7517	1.0378	1.4677	2.7717	.04958	1.9570	79.553	.10413
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47521**	**.18587**	**.29661**	**2.5452**	W **189.15**	**1.3372**	**86.299**	**.88784**	**.89889**
Stddev	.01504	.00599	.00222	.0042	.04	.0072	.294	.00236	.02845
%RSD	3.1657	3.2217	.74713	.16475	.02210	.53705	.34033	.26633	3.1655
#1	.48584	.19011	.29818	2.5481	189.18	1.3423	86.507	.88952	.91901
#2	.46457	.18164	.29504	2.5422	189.12	1.3321	86.092	.88617	.87877
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1385.3**	**.47460**	**11.594**	**.43091**	**2.4109**	**.51402**	**2.0283**	**32.227**	**68.966**
Stddev	2.0	.01302	.340	.01385	.0605	.01013	.0459	.000	.001
%RSD	.14627	2.7438	2.9340	3.2152	2.5089	1.9707	2.2646	.00142	.00142
#1	1386.8	.48380	11.834	.44071	2.4536	.52118	2.0608	32.228	68.967
#2	1383.9	.46539	11.353	.42112	2.3681	.50685	1.9958	32.227	68.966
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8003**	**1.3215**	**1.0889**	**1.0814**	**1.6445**	**2.1538**	**.55785**	**.55110**	**.53535**
Stddev	.0616	.0004	.0017	.0022	.0397	.0009	.00188	.00005	.00368
%RSD	3.4225	.03315	.15121	.20491	2.4162	.04098	.33719	.00954	.68790
#1	1.8439	1.3211	1.0901	1.0830	1.6726	2.1532	.55918	.55106	.53274
#2	1.7567	1.3218	1.0878	1.0799	1.6164	2.1544	.55652	.55114	.53795
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2296.4**	**47591.**	**4781.1**
Stddev	15.5	183.	13.0
%RSD	.67418	.38491	.27104
#1	2285.4	47462.	4790.3
#2	2307.3	47721.	4772.0

Sample Name: CCVH-4579429 Acquired: 6/9/2017 11:31:34 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00991**	**47.881**	**-.00841**	**.00718**	**.00067**	**.00023**	**.96192**	**.02453**	**.00028**	**-.00090**	**.00046**	**.01739**
Stddev	.00079	.004	.00154	.00001	.00008	.00019	.03308	.00211	.00001	.00047	.00020	.00077
%RSD	7.9998	.00788	18.271	.16290	11.928	82.735	3.4389	8.6107	4.5208	52.179	43.166	4.4560
#1	-.01047	47.879	-.00732	.00717	.00062	.00009	.98531	.02603	.00027	-.00057	.00032	.01684
#2	-.00935	47.884	-.00949	.00719	.00073	.00036	.93853	.02304	.00029	-.00124	.00060	.01794
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.161**	**.47405**	**.00101**	**.11893**	**-.00198**	**-.00189**	**246.60**	**.00137**	**.01015**	**.00130**	W **4.7498**	**-.00878**
Stddev	.007	.06284	.00089	.01194	.00002	.00038	.72	.00019	.00060	.00283	.1557	.00192
%RSD	.01433	13.255	88.035	10.042	1.1854	20.320	.29046	13.695	5.8766	217.98	3.2789	21.915
#1	49.166	.51849	.00038	.12737	-.00199	-.00216	247.10	.00150	.01057	.00330	4.8599	-.00742
#2	49.156	.42962	.00164	.11048	-.00196	-.00162	246.09	.00124	.00973	-.00070	4.6397	-.01014
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Warn	None
Value											5.0000	
Range											-5.0000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01336**	**-.03775**	**-.08079**	**-.00196**	**.00071**	**5.1007**	**.02367**	**.00823**	**10.370**	**.01478**	**.00045**	**.08063**
Stddev	.00423	.01296	.02774	.00036	.00021	.0082	.00026	.00181	.000	.00051	.00038	.00021
%RSD	31.691	34.330	34.330	18.590	30.321	.16102	1.0810	22.018	.00289	3.4819	85.087	.25456
#1	-.01635	-.02859	-.06118	-.00222	.00086	5.1065	.02385	.00695	10.370	.01442	.00018	.08048
#2	-.01037	-.04692	-.10040	-.00170	.00056	5.0949	.02349	.00951	10.370	.01514	.00072	.08077
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2478.5**	**53031.**	**4952.6**
Stddev	2.2	46.	21.6
%RSD	.08931	.08679	.43570
#1	2480.1	53063.	4937.4
#2	2477.0	52998.	4967.9

Sample Name: CCV-4567764 Acquired: 6/9/2017 11:34:09 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50395**	**.50728**	**.97101**	**.51238**	**.47608**	**.47793**	**-.00148**	**4.7372**	**.49770**	**.49639**	**.46558**	F **.55665**
Stddev	.00330	.03247	.02497	.00777	.00105	.00056	.00064	.0069	.00988	.01000	.00998	.00433
%RSD	.65548	6.4000	2.5711	1.5169	.21963	.11695	43.679	.14574	1.9849	2.0142	2.1425	.77868
#1	.50161	.53024	.98867	.51788	.47534	.47754	-.00102	4.7323	.50469	.50346	.47263	.55359
#2	.50629	.48433	.95336	.50689	.47682	.47833	-.00193	4.7421	.49072	.48932	.45853	.55972
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value												.50000
Range												10.490%

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4289**	**48.581**	**.96810**	**20.025**	**.52752**	**.46046**	**5.2873**	**.49705**	**1.0005**	**.93731**	**.07597**	**.98754**
Stddev	.0114	.092	.00381	.066	.00107	.01093	.0317	.00989	.0267	.01740	.01288	.01764
%RSD	.46838	.18837	.39336	.33193	.20308	2.3738	.59909	1.9888	2.6739	1.8560	16.950	1.7865
#1	2.4369	48.516	.97080	19.978	.52676	.46818	5.3097	.50404	1.0194	.94961	.08508	1.0000
#2	2.4208	48.645	.96541	20.072	.52827	.45273	5.2649	.49006	.98159	.92501	.06686	.97506
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.97373**	**4.7944**	**10.260**	**.93629**	**.48367**	**.00528**	**.51390**	**.96229**	**-.00963**	**.53281**	**.51810**	**.50866**
Stddev	.02467	.0028	.006	.02179	.00026	.00146	.00008	.01667	.01173	.00074	.00124	.00296
%RSD	2.5338	.05915	.05915	2.3271	.05299	27.643	.01652	1.7323	121.83	.13899	.23982	.58149
#1	.99117	4.7924	10.256	.95169	.48385	.00425	.51384	.97408	-.00133	.53334	.51898	.50657
#2	.95628	4.7964	10.264	.92088	.48349	.00632	.51396	.95050	-.01792	.53229	.51723	.51075
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2521.6**	**53428.**	**4893.5**
Stddev	4.0	339.	74.8
%RSD	.15948	.63387	1.5295
#1	2518.8	53667.	4840.6
#2	2524.5	53189.	4946.5

Sample Name: CCB Acquired: 6/9/2017 11:36:38 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00063**	**-.00028**	**.00663**	**.00457**	**.00123**	**.00038**	**-.00132**	**.00818**	**-.00005**	**.00013**	**.00011**	**-.00130**
Stddev	.00009	.00017	.00222	.00068	.00030	.00007	.00275	.00707	.00010	.00005	.00026	.00080
%RSD	15.152	62.459	33.397	14.787	24.322	18.672	208.48	86.362	215.81	39.498	239.12	61.601
#1	.00069	-.00040	.00507	.00504	.00144	.00043	-.00326	.01318	-.00011	.00017	-.00008	-.00186
#2	.00056	-.00015	.00820	.00409	.00102	.00033	.00062	.00319	.00002	.00010	.00029	-.00073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01326**	**.15949**	**.00148**	**.00753**	**.00017**	**-.00037**	**.15474**	**.00048**	**.00296**	**.00059**	W **.07131**	**.00126**
Stddev	.00200	.08001	.00084	.00606	.00004	.00001	.01028	.00019	.00211	.00165	.00729	.00025
%RSD	15.073	50.164	56.850	80.493	24.928	2.0140	6.6404	40.150	71.445	280.85	10.225	19.767
#1	.01185	.21607	.00088	.00324	.00020	-.00038	.16200	.00062	.00445	-.00058	.07647	.00109
#2	.01467	.10292	.00207	.01181	.00014	-.00036	.14747	.00034	.00146	.00175	.06616	.00144
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit											.05000	
Low Limit											-.20000	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00422**	**-.02852**	**-.06104**	**-.00064**	**.00022**	**-.00123**	**.00037**	**.00340**	**.01329**	**.00104**	**.00188**	**-.00233**
Stddev	.00015	.02062	.04412	.00002	.00005	.00026	.00003	.00334	.00244	.00009	.00012	.00114
%RSD	3.6196	72.284	72.284	2.4619	24.534	20.926	7.5063	98.204	18.379	8.4945	6.5319	49.069
#1	-.00411	-.04310	-.09224	-.00065	.00025	-.00105	.00035	.00104	.01157	.00110	.00179	-.00152
#2	-.00433	-.01394	-.02984	-.00063	.00018	-.00141	.00039	.00577	.01502	.00098	.00196	-.00314
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2482.2**	**54400.**	**4866.9**
Stddev	40.5	261.	54.9
%RSD	1.6304	.48021	1.1283
#1	2510.8	54585.	4828.1
#2	2453.6	54215.	4905.8

Sample Name: CCVL-4584532 Acquired: 6/9/2017 11:39:17 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01093**	**.10039**	**.01854**	**.10210**	**.01171**	F **.00147**	**.10616**	F **.27865**	**.00493**	**.01035**	**.00989**	**.01659**
Stddev	.00050	.00354	.00403	.00243	.00319	.00054	.00102	.08003	.00007	.00066	.00002	.00042
%RSD	4.5962	3.5294	21.753	2.3781	27.249	36.601	.96513	28.719	1.3308	6.3750	.15694	2.5430
#1	.01129	.10290	.02139	.10382	.01396	.00185	.10544	.33524	.00488	.01081	.00990	.01629
#2	.01058	.09789	.01569	.10038	.00945	.00109	.10689	.22206	.00497	.00988	.00988	.01689
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.00100		.20000				
Range						30.000%		30.000%				

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.14112**	**3.2925**	**.02201**	**.21298**	**.01114**	**.01820**	F **2.2787**	**.04055**	**2.8494**	**.00701**	F **.16337**	**.01855**
Stddev	.04701	.1996	.00133	.01170	.00004	.00013	1.5286	.00076	.0718	.00042	.00401	.00277
%RSD	33.310	6.0616	6.0272	5.4931	.33394	.70032	67.083	1.8817	2.5192	5.9640	2.4556	14.927
#1	.17436	3.4336	.02107	.22126	.01117	.01829	3.3596	.04109	2.9001	.00731	.16620	.02051
#2	.10788	3.1514	.02295	.20471	.01111	.01811	1.1978	.04001	2.7986	.00672	.16053	.01659
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value	.10000						1.0000				.10000	
Range	30.000%						30.000%				30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01519**	**.47449**	**1.0154**	**.09492**	**.01116**	**.01463**	**.01062**	**.01880**	F **.08383**	**.01147**	**.02201**	**.01565**
Stddev	.00195	.04949	.1059	.00446	.00145	.00021	.00015	.00400	.00296	.00019	.00086	.00093
%RSD	12.806	10.429	10.429	4.6948	13.005	1.4136	1.3832	21.298	3.5306	1.6447	3.9283	5.9178
#1	.01382	.50948	1.0903	.09807	.01219	.01448	.01051	.01597	.08592	.01160	.02140	.01631
#2	.01657	.43950	.94053	.09177	.01013	.01478	.01072	.02163	.08174	.01133	.02262	.01500
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2490.4**	**53737.**	**4771.2**
Stddev	14.7	468.	46.1
%RSD	.58927	.87062	.96699
#1	2480.1	54067.	4803.9
#2	2500.8	53406.	4738.6

Sample Name: 280-97837-A-3-A@5 Acquired: 6/9/2017 11:41:55 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: 6/7 Custom ID2: Custom ID3:
Comment: 376275 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00162**	**.03338**	**.00679**	**.03598**	**.01808**	**.00032**	**.00034**	**49.145**	**.00070**
Stddev	.00071	.00175	.00798	.00149	.00017	.00001	.00347	.091	.00007
%RSD	43.758	5.2282	117.62	4.1451	.96420	3.2627	1016.4	.18444	9.7028
#1	-.00112	.03462	.00114	.03704	.01821	.00032	-.00211	49.081	.00065
#2	-.00212	.03215	.01243	.03493	.01796	.00033	.00280	49.209	.00074
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00047**	**.05231**	**.00091**	**.08203**	**1.4133**	**.00733**	**10.697**	W **13.964**	**-.00090**
Stddev	.00040	.00178	.00030	.00237	.0872	.00017	.060	.063	.00026
%RSD	85.880	3.3956	32.961	2.8927	6.1732	2.3192	.55783	.44820	28.531
#1	.00018	.05357	.00112	.08036	1.4750	.00721	10.740	14.008	-.00108
#2	.00075	.05105	.00070	.08371	1.3516	.00745	10.655	13.919	-.00072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.680**	**.01011**	**.00938**	**.00200**	**14.303**	**-.00256**	**-.00736**	**3.1527**	**6.7468**
Stddev	.007	.00025	.00371	.00064	.587	.00432	.00678	.0267	.0570
%RSD	.02758	2.5035	39.499	32.077	4.1035	168.95	92.103	.84566	.84566
#1	24.685	.01029	.00676	.00154	14.718	.00050	-.01216	3.1715	6.7871
#2	24.675	.00993	.01201	.00245	13.888	-.00561	-.00257	3.1338	6.7064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00031**	**.35696**	**.00116**	**.00082**	**.00827**	**.00777**	**.00365**	**.00371**	**.00081**
Stddev	.00029	.00097	.00029	.00016	.00294	.00967	.00025	.00052	.00083
%RSD	94.084	.27314	24.983	18.860	35.503	124.45	6.8633	13.947	102.08
#1	-.00010	.35627	.00095	.00093	.00619	.00093	.00383	.00408	.00139
#2	-.00051	.35765	.00136	.00071	.01034	.01461	.00348	.00334	.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2483.2**	**53680.**	**4914.9**
Stddev	2.5	57.	27.0
%RSD	.10186	.10539	.54868
#1	2481.4	53720.	4895.8
#2	2485.0	53640.	4933.9

Sample Name: 280-97837-A-3-A@10 Acquired: 6/9/2017 11:44:36 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment: 376275 6010c

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00057**	**.01249**	**.00672**	**.01938**	**.00867**	**.00008**	**.00043**	**24.640**	**-.00003**
Stddev	.00026	.00135	.00051	.00159	.00006	.00006	.00366	.069	.00014
%RSD	45.032	10.811	7.5565	8.1803	.74272	69.807	845.88	.27802	498.82
#1	-.00039	.01344	.00636	.02050	.00863	.00013	-.00216	24.688	-.00012
#2	-.00075	.01153	.00708	.01826	.00872	.00004	.00302	24.591	.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00009**	**.02615**	**.00066**	**.03736**	**.78334**	**.00346**	**5.3971**	**7.1001**	**-.00113**
Stddev	.00021	.00142	.00001	.00322	.04453	.00152	.0042	.0446	.00031
%RSD	225.33	5.4344	1.1577	8.6222	5.6850	44.010	.07800	.62866	27.192
#1	.00024	.02715	.00067	.03509	.81483	.00239	5.3942	7.0686	-.00091
#2	-.00006	.02514	.00066	.03964	.75185	.00454	5.4001	7.1317	-.00135
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.962**	**.00486**	**.00280**	**.00034**	**7.0914**	**.00084**	**-.00146**	**1.5373**	**3.2899**
Stddev	.281	.00038	.00445	.00172	.2757	.00035	.00037	.0405	.0866
%RSD	2.3484	7.7572	159.08	512.45	3.8875	41.778	25.240	2.6318	2.6318
#1	12.161	.00512	-.00035	.00155	7.2864	.00059	-.00172	1.5659	3.3511
#2	11.764	.00459	.00594	-.00088	6.8965	.00109	-.00120	1.5087	3.2287
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00035**	**.17850**	**-.00152**	**.00019**	**.00537**	**.00518**	**.00198**	**.00238**	**.00020**
Stddev	.00120	.00019	.00216	.00009	.00599	.07151	.00114	.00058	.00082
%RSD	342.73	.10892	142.61	49.357	111.60	1380.1	57.530	24.171	403.50
#1	.00050	.17864	.00001	.00012	.00113	-.04538	.00278	.00279	-.00038
#2	-.00120	.17837	-.00305	.00025	.00960	.05575	.00117	.00197	.00078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2490.2**	**54023.**	**4892.3**
Stddev	2.7	160.	17.1
%RSD	.10939	.29691	.34998
#1	2488.3	54136.	4880.2
#2	2492.1	53909.	4904.4

Sample Name: 280-97809-A-4-B@100 Acquired: 6/9/2017 11:47:17 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: 6/7 Custom ID2: Custom ID3:
Comment: 375992 6010b

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00110**	**.05112**	**-.00273**	**.01892**	**.00110**	**.00028**	**.00197**	**1.0988**	**.00059**
Stddev	.00053	.00233	.00728	.00141	.00010	.00001	.00264	.0006	.00004
%RSD	48.195	4.5657	266.91	7.4260	9.2137	3.9092	134.46	.05515	6.4671
#1	-.00147	.05277	-.00787	.01991	.00117	.00027	.00384	1.0992	.00061
#2	-.00073	.04947	.00242	.01793	.00103	.00029	.00010	1.0984	.00056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00023**	**.00095**	**.00196**	**.26174**	**10.436**	**-.00130**	**.28054**	W **11.142**	**.00037**
Stddev	.00056	.00030	.00015	.00068	.060	.00011	.00033	.126	.00022
%RSD	241.88	31.434	7.5392	.26086	.57333	8.6035	.11760	1.1289	60.706
#1	.00062	.00074	.00185	.26126	10.393	-.00122	.28031	11.231	.00021
#2	-.00016	.00116	.00206	.26223	10.478	-.00138	.28078	11.053	.00053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.289**	**.00033**	**.09487**	**.00562**	**74.266**	**-.00077**	**-.00482**	**.07915**	**.16937**
Stddev	.201	.00034	.00282	.00297	2.738	.00029	.01131	.03038	.06501
%RSD	1.4046	103.16	2.9761	52.808	3.6873	37.238	234.58	38.383	38.383
#1	14.430	.00009	.09687	.00772	76.202	-.00056	-.01282	.10063	.21534
#2	14.147	.00058	.09287	.00352	72.330	-.00097	.00318	.05766	.12340
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **20.364**	**.00561**	**-.00136**	**.00171**	**.00878**	**.03845**	**.00307**	**.00985**	**-.00096**
Stddev	.729	.00004	.00144	.00008	.00046	.01389	.00007	.00072	.00047
%RSD	3.5796	.73215	106.16	4.5542	5.2425	36.124	2.1911	7.3324	48.419
#1	20.879	.00564	-.00237	.00176	.00910	.02863	.00303	.01036	-.00063
#2	19.848	.00558	-.00034	.00165	.00845	.04827	.00312	.00934	-.00130
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.20000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2518.9**	**55121.**	**5012.8**
Stddev	27.1	138.	17.7
%RSD	1.0763	.25071	.35269
#1	2538.1	55218.	5025.3
#2	2499.8	55023.	5000.2

Sample Name: 280-97809-A-5-B@2 Acquired: 6/9/2017 11:50:00 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment: 375992 6010b

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00310**	**9.0630**	**.02896**	**.45126**	**.58381**	**.00069**	**-.00112**	W **576.01**	**.00802**
Stddev	.00069	.0281	.00243	.01445	.00089	.00007	.00027	6.88	.00021
%RSD	22.166	.31009	8.3926	3.2013	.15228	10.438	24.451	1.1948	2.5611
#1	.00358	9.0829	.03068	.46148	.58443	.00064	-.00093	571.15	.00816
#2	.00261	9.0431	.02724	.44105	.58318	.00074	-.00131	580.88	.00787
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01174**	**.14793**	**.30417**	**33.363**	**11.351**	**.03577**	**238.52**	**2.7206**	**.03886**
Stddev	.00034	.00548	.00058	.038	.157	.00055	.97	.0142	.00130
%RSD	2.8819	3.7062	.18989	.11323	1.3811	1.5284	.40868	.52040	3.3457
#1	.01198	.15181	.30376	33.390	11.241	.03616	237.83	2.7306	.03978
#2	.01150	.14406	.30457	33.337	11.462	.03538	239.21	2.7105	.03794
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **507.94**	**.36872**	**8.6652**	**1.3516**	W **183.65**	**.03320**	**.02696**	**20.678**	**44.252**
Stddev	.58	.01311	.3068	.0472	6.48	.00560	.00276	.014	.030
%RSD	.11462	3.5568	3.5400	3.4949	3.5259	16.853	10.220	.06693	.06693
#1	508.35	.37799	8.8821	1.3850	188.23	.03716	.02891	20.688	44.273
#2	507.52	.35945	8.4483	1.3182	179.07	.02924	.02501	20.669	44.231
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				180.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **3.4280**	**.81877**	**.00307**	**.40388**	**.00340**	**.01065**	**.03283**	**8.1899**	**.14059**
Stddev	.1257	.00147	.00103	.00103	.00070	.02622	.00038	.0422	.00143
%RSD	3.6662	.17988	33.439	.25591	20.510	246.18	1.1694	.51471	1.0141
#1	3.5169	.81981	.00379	.40315	.00290	-.00789	.03256	8.1601	.14159
#2	3.3391	.81773	.00234	.40461	.00389	.02919	.03310	8.2197	.13958
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.20000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2317.5**	**49329.**	**4626.3**
Stddev	.6	296.	63.9
%RSD	.02459	.59951	1.3804
#1	2317.1	49538.	4671.4
#2	2318.0	49120.	4581.1

Sample Name: MB 280-376209/1-C Acquired: 6/9/2017 11:52:40 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: 6/7 Custom ID2: Custom ID3:
Comment: 376284 200.7 fg

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00026**	**.00267**	**.00321**	**.00211**	**.00032**	**.00021**	**.00233**	W **.19155**	**-.00008**
Stddev	.00004	.00008	.00530	.00011	.00019	.00002	.00335	.05503	.00005
%RSD	14.498	2.9784	164.95	5.0337	58.420	11.614	143.44	28.730	67.247
#1	.00028	.00272	.00696	.00219	.00019	.00023	.00470	.23047	-.00004
#2	.00023	.00261	-.00053	.00204	.00046	.00019	-.00003	.15264	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								.10000	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00008**	**.00021**	**-.00089**	W **.08025**	**.17048**	**.00086**	**.04542**	**.00178**	**-.00054**
Stddev	.00009	.00013	.00081	.00474	.04224	.00142	.01443	.00031	.00023
%RSD	112.45	64.302	91.549	5.9081	24.775	165.43	31.759	17.226	43.019
#1	.00002	.00030	-.00031	.07690	.20034	-.00015	.05562	.00200	-.00038
#2	.00014	.00011	-.00146	.08360	.14061	.00186	.03522	.00156	-.00071
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.05000					
Low Limit				-.05000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.26547**	**-.00010**	**.00606**	**.00104**	W **.09122**	**-.00021**	**.00089**	**-.00712**	**-.01524**
Stddev	.04037	.00015	.00186	.00032	.00269	.00523	.00326	.00954	.02042
%RSD	15.206	140.35	30.629	30.708	2.9504	2496.3	367.40	133.97	133.97
#1	.29402	-.00000	.00737	.00126	.08932	.00349	-.00142	-.00038	-.00080
#2	.23693	-.00021	.00475	.00081	.09312	-.00391	.00320	-.01387	-.02968
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	None
High Limit					.05000				
Low Limit					-.05000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00059**	**.00039**	**.00034**	**.00049**	**.00556**	**-.00095**	**.00103**	**.00212**	**.00086**
Stddev	.00100	.00006	.00143	.00023	.00087	.07920	.00011	.00058	.00277
%RSD	169.88	16.114	417.45	46.783	15.662	8330.6	10.493	27.273	322.29
#1	.00129	.00044	-.00067	.00066	.00617	.05505	.00095	.00171	.00281
#2	-.00012	.00035	.00135	.00033	.00494	-.05695	.00111	.00253	-.00110
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2520.6**	**55385.**	**4763.5**
Stddev	11.8	456.	24.3
%RSD	.46955	.82399	.51067
#1	2529.0	55062.	4746.3
#2	2512.2	55707.	4780.7

Sample Name: LCS 280-376209/2-C Acquired: 6/9/2017 11:55:19 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment: 376284 200.7 fg

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04912**	**1.8852**	**1.0056**	**1.0354**	**1.9244**	**.04823**	**2.0205**	**46.611**	**.10317**
Stddev	.00030	.0393	.0158	.0220	.0069	.00042	.0427	.132	.00199
%RSD	.61697	2.0827	1.5711	2.1265	.35873	.87380	2.1115	.28340	1.9301
#1	.04891	1.9130	1.0168	1.0510	1.9196	.04793	2.0506	46.518	.10458
#2	.04934	1.8574	.99442	1.0198	1.9293	.04853	1.9903	46.704	.10177
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49153**	W **.18715**	F **.28365**	**1.0030**	**49.851**	**.97945**	**50.575**	**.52959**	F **.89680**
Stddev	.01155	.00398	.00190	.0008	.045	.00382	.125	.00256	.01808
%RSD	2.3491	2.1289	.67118	.08259	.08950	.38971	.24740	.48328	2.0158
#1	.49970	.18996	.28500	1.0024	49.819	.97676	50.663	.53140	.90959
#2	.48337	.18433	.28231	1.0036	49.882	.98215	50.486	.52778	.88402
Check ?	Chk Pass	Chk Warn	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit		.21000	.28000						1.1000
Low Limit		.19000	.21500						.90000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.728**	**.48879**	**10.357**	**.45972**	**2.0256**	**.50577**	**1.9848**	**9.6086**	**20.562**
Stddev	.242	.01103	.208	.01265	.0338	.00688	.0401	.0909	.195
%RSD	.46697	2.2573	2.0091	2.7517	1.6689	1.3599	2.0191	.94627	.94627
#1	51.557	.49659	10.504	.46866	2.0495	.51063	2.0131	9.5443	20.425
#2	51.898	.48099	10.210	.45077	2.0017	.50091	1.9564	9.6728	20.700
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8680**	**.97130**	**1.0498**	**1.0441**	**1.8705**	**2.1140**	**.53940**	**.53488**	**.52092**
Stddev	.0353	.00212	.0068	.0024	.0381	.0031	.00230	.00368	.00149
%RSD	1.8897	.21872	.64782	.23403	2.0357	.14722	.42671	.68748	.28678
#1	1.8930	.96980	1.0546	1.0458	1.8974	2.1118	.54102	.53748	.51987
#2	1.8431	.97280	1.0450	1.0424	1.8436	2.1162	.53777	.53228	.52198
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2461.6**	**50269.**	**4573.4**
Stddev	9.3	70.	3.6
%RSD	.37934	.13957	.07787
#1	2455.0	50220.	4570.9
#2	2468.2	50319.	4575.9

Sample Name: 280-97774-E-4-B@2 Acquired: 6/9/2017 11:57:43 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment: 376284 200.7 fg

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00053**	**.00553**	**.00511**	**.04507**	**.00692**	**.00024**	**.00235**	**3.0746**	**.00025**
Stddev	.00000	.00007	.00010	.00174	.00015	.00003	.00183	.0031	.00028
%RSD	.79581	1.2106	1.9230	3.8557	2.1452	14.240	77.639	.10216	110.85
#1	.00054	.00558	.00517	.04630	.00703	.00022	.00365	3.0768	.00005
#2	.00053	.00549	.00504	.04385	.00682	.00027	.00106	3.0724	.00044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00017**	**.00041**	**.00006**	**.02733**	**1.5165**	**-.00006**	**1.0072**	**.04086**	**.00008**
Stddev	.00012	.00006	.00072	.00337	.0110	.00026	.0018	.00026	.00050
%RSD	71.755	14.315	1313.0	12.349	.72385	414.30	.17963	.64672	594.48
#1	.00008	.00046	.00057	.02972	1.5088	-.00025	1.0059	.04068	.00044
#2	.00025	.00037	-.00046	.02494	1.5243	.00012	1.0084	.04105	-.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.3105**	**.00087**	**.00462**	**.00139**	**1.2742**	**.00303**	**-.00867**	**1.1340**	**2.4268**
Stddev	.0154	.00017	.00531	.00309	.0274	.00136	.01003	.0396	.0847
%RSD	.35609	19.799	115.05	222.37	2.1477	44.930	115.73	3.4909	3.4909
#1	4.3214	.00075	.00837	-.00080	1.2935	.00207	-.00157	1.1620	2.4867
#2	4.2997	.00099	.00086	.00357	1.2548	.00399	-.01576	1.1060	2.3669
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00073**	**.01517**	**.00130**	**.00001**	**.00507**	**.00698**	**.00024**	**.00262**	**.00029**
Stddev	.00021	.00020	.00054	.00008	.00126	.01335	.00049	.00032	.00313
%RSD	28.507	1.3209	41.667	545.54	24.858	191.37	203.40	12.358	1083.9
#1	.00058	.01503	.00091	.00007	.00418	-.00246	-.00011	.00239	-.00192
#2	.00087	.01531	.00168	-.00004	.00596	.01642	.00059	.00285	.00250
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2519.9**	**54638.**	**4918.9**
Stddev	11.7	149.	8.2
%RSD	.46565	.27260	.16628
#1	2511.6	54743.	4913.2
#2	2528.2	54532.	4924.7

Sample Name: 280-97776-E-6-B@2 Acquired: 6/9/2017 12:00:20 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment: 376284 200.7 fg

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**.00231**	**-.00152**	**2.2162**	**.01727**	**.00015**	**-.00090**	**275.89**	**.00235**
Stddev	.00017	.00058	.01228	.0649	.00050	.00007	.00102	.63	.00018
%RSD	363.03	25.084	807.09	2.9283	2.9161	50.792	112.58	.22675	7.8584
#1	-.00017	.00272	.00716	2.2621	.01763	.00020	-.00018	276.33	.00248
#2	.00007	.00190	-.01021	2.1703	.01692	.00009	-.00162	275.44	.00222
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00039**	**.01113**	**.00667**	**.01251**	**18.951**	**.03466**	**226.28**	**.22494**	**.00174**
Stddev	.00039	.00057	.00082	.00666	.098	.00206	.59	.00014	.00094
%RSD	101.30	5.0843	12.353	53.239	.51477	5.9305	.25893	.06159	54.042
#1	.00011	.01153	.00725	.01722	19.020	.03611	226.69	.22503	.00107
#2	.00067	.01073	.00608	.00780	18.882	.03321	225.87	.22484	.00240
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**57.681**	**.00887**	**.02383**	**-.00352**	F **452.65**	**.00118**	**.04676**	**10.451**	**22.366**
Stddev	.594	.00024	.00179	.00108	11.86	.00258	.00335	.017	.036
%RSD	1.0293	2.7198	7.4981	30.580	2.6200	218.11	7.1621	.16301	.16301
#1	58.101	.00904	.02256	-.00428	461.04	-.00064	.04913	10.439	22.340
#2	57.261	.00870	.02509	-.00276	444.26	.00300	.04439	10.463	22.391
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00316**	**.67587**	**-.00191**	**.00021**	**.00322**	**.01245**	**-.00017**	**.03430**	**.00039**
Stddev	.00241	.00208	.00140	.00046	.00105	.04598	.00037	.00037	.00001
%RSD	76.334	.30719	73.461	224.77	32.665	369.20	213.53	1.0798	3.5731
#1	-.00145	.67734	-.00092	.00053	.00248	.04497	.00009	.03404	.00038
#2	-.00486	.67440	-.00290	-.00012	.00397	-.02006	-.00044	.03456	.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2387.7**	**51414.**	**4973.0**
Stddev	7.3	92.	16.4
%RSD	.30396	.17930	.33004
#1	2382.5	51479.	4984.6
#2	2392.8	51348.	4961.4

Sample Name: 280-97776-E-7-B@2 Acquired: 6/9/2017 12:02:55 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment: 376284 200.7 fg

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00046**	**.00172**	**.00058**	**.02533**	**.01055**	**.00034**	**-.00142**	**3.1461**	**.00027**
Stddev	.00021	.00078	.00254	.00004	.00014	.00006	.00025	.0284	.00010
%RSD	45.881	45.572	440.27	.17706	1.2919	16.354	17.833	.90215	36.758
#1	.00061	.00117	-.00122	.02529	.01045	.00030	-.00124	3.1662	.00020
#2	.00031	.00228	.00237	.02536	.01064	.00038	-.00160	3.1261	.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00017**	**.00034**	**.00018**	**.01500**	**1.4777**	**-.00049**	**1.0783**	**.00029**	**.00039**
Stddev	.00004	.00016	.00008	.00323	.0010	.00060	.0026	.00007	.00017
%RSD	24.802	46.516	42.358	21.538	.06797	122.77	.24007	24.850	45.010
#1	.00020	.00023	.00023	.01729	1.4784	-.00006	1.0801	.00034	.00026
#2	.00014	.00045	.00012	.01272	1.4769	-.00091	1.0764	.00024	.00051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.1649**	**.00011**	**.00484**	**.00130**	**1.6426**	**-.00134**	**-.00210**	**1.7003**	**3.6385**
Stddev	.0062	.00021	.00106	.00002	.0778	.00414	.00552	.0147	.0314
%RSD	.14884	188.90	21.918	1.3266	4.7364	310.05	263.16	.86407	.86407
#1	4.1693	.00026	.00559	.00128	1.5876	.00159	-.00600	1.7106	3.6608
#2	4.1606	-.00004	.00409	.00131	1.6976	-.00427	.00180	1.6899	3.6163
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00015**	**.02347**	**.00218**	**.00036**	**.00375**	**-.03114**	**.00053**	**.00323**	**.00047**
Stddev	.00088	.00008	.00005	.00051	.00401	.01654	.00013	.00001	.00046
%RSD	586.15	.35830	2.3785	139.94	107.17	53.113	23.892	.45060	98.203
#1	.00047	.02353	.00222	.00072	.00091	-.04283	.00061	.00322	.00079
#2	-.00077	.02341	.00215	.00000	.00658	-.01944	.00044	.00324	.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2585.3**	**56258.**	**5275.4**
Stddev	.3	6.	27.4
%RSD	.01068	.01069	.51875
#1	2585.1	56254.	5294.7
#2	2585.5	56263.	5256.0

Sample Name: CCVH-4579429 Acquired: 6/9/2017 12:05:33 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00978**	**47.110**	**-.00198**	**.00416**	**.00037**	**.00014**	**.96503**	**.00915**	**.00042**	**-.00098**	**.00049**	**.01761**	**48.467**
Stddev	.00068	.270	.00455	.00033	.00033	.00005	.03079	.00103	.00005	.00029	.00063	.00057	.122
%RSD	6.9663	.57308	229.87	7.8423	89.381	36.225	3.1901	11.221	11.144	29.344	128.09	3.2308	.25100
#1	-.01026	46.919	.00124	.00393	.00014	.00017	.98680	.00987	.00039	-.00118	.00094	.01720	48.553
#2	-.00930	47.301	-.00520	.00439	.00061	.00010	.94326	.00842	.00046	-.00078	.00005	.01801	48.381
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04022**	**.00275**	**.11081**	**-.00199**	**-.00198**	**242.14**	**.00123**	**.00697**	**-.00161**	**4.7764**	**-.00880**	**-.00586**	**-.05304**
Stddev	.03636	.00162	.00650	.00005	.00038	.30	.00081	.00068	.00187	.0909	.00327	.01054	.03598
%RSD	90.397	59.043	5.8638	2.3218	18.984	.12403	66.166	9.7912	116.37	1.9026	37.183	179.96	67.834
#1	.01451	.00390	.10621	-.00203	-.00224	241.93	.00065	.00649	-.00028	4.8407	-.01111	.00160	-.02760
#2	.06593	.00160	.11540	-.00196	-.00171	242.35	.00180	.00746	-.00293	4.7122	-.00648	-.01331	-.07849
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.11351**	**-.00276**	**.00036**	**5.0462**	**.02285**	**.00373**	**10.309**	**.01439**	**.00006**	**.08206**
Stddev	.07700	.00054	.00001	.0254	.00081	.00183	.004	.00047	.00070	.00145
%RSD	67.834	19.478	3.3566	.50290	3.5421	49.082	.03502	3.2384	1232.6	1.7696
#1	-.05907	-.00314	.00037	5.0641	.02342	.00502	10.312	.01406	-.00044	.08309
#2	-.16796	-.00238	.00035	5.0282	.02228	.00244	10.307	.01472	.00055	.08104
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2509.9**	**53932.**	**5047.1**
Stddev	7.0	269.	58.6
%RSD	.27999	.49806	1.1612
#1	2505.0	53742.	5088.5
#2	2514.9	54122.	5005.6

Sample Name: CCV-4567764 Acquired: 6/9/2017 12:08:08 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49967**	**.48853**	**.95730**	**.50646**	**.46813**	**.46893**	**.00083**	**4.9575**	**.49555**	**.49341**	**.46337**	W **.55127**
Stddev	.00045	.01201	.01199	.01174	.00153	.00355	.00167	.4385	.01141	.01238	.01090	.00096
%RSD	.09066	2.4577	1.2527	2.3178	.32669	.75716	200.62	8.8447	2.3030	2.5099	2.3526	.17429
#1	.49999	.49702	.96578	.51476	.46705	.46641	-.00035	5.2675	.50362	.50217	.47108	.55195
#2	.49935	.48004	.94882	.49816	.46921	.47144	.00201	4.6474	.48748	.48465	.45566	.55059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
Value												.50000
Range												10.000%

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4306**	**47.981**	**.95162**	**19.836**	**.52350**	**.45812**	**5.3329**	**.49371**	**.99183**	**.93062**	**.06443**	**.98253**
Stddev	.0613	.248	.00131	.061	.00136	.00871	.4959	.01029	.00658	.01842	.00582	.01502
%RSD	2.5220	.51593	.13787	.30600	.25927	1.9016	9.2984	2.0846	.66367	1.9789	9.0262	1.5291
#1	2.4739	47.806	.95069	19.879	.52446	.46428	5.6835	.50098	.99649	.94364	.06032	.99315
#2	2.3872	48.156	.95255	19.793	.52254	.45196	4.9822	.48643	.98718	.91759	.06854	.97191
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.97519**	**4.6664**	**9.9861**	**.93535**	**.47625**	**.00463**	**.51148**	**.95382**	**.02560**	**.53170**	**.51562**	**.50234**
Stddev	.03241	.0105	.0225	.02500	.00243	.00090	.00043	.00879	.00549	.00293	.00407	.00010
%RSD	3.3232	.22533	.22533	2.6724	.50988	19.546	.08326	.92188	21.445	.55115	.78881	.01936
#1	.99811	4.6739	10.002	.95303	.47454	.00527	.51178	.96004	.02171	.53378	.51849	.50227
#2	.95228	4.6590	9.9702	.91768	.47797	.00399	.51118	.94760	.02948	.52963	.51274	.50241
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2542.2**	**54188.**	**4868.4**
Stddev	11.7	221.	32.5
%RSD	.46200	.40747	.66723
#1	2533.9	54032.	4845.4
#2	2550.5	54344.	4891.4

Sample Name: CCB Acquired: 6/9/2017 12:10:38 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00062**	**.00152**	**.00268**	**.00326**	W **.00242**	**.00031**	**.00304**	**.00526**	**.00025**	**.00014**	**.00031**	**-.00066**
Stddev	.00004	.00050	.00245	.00061	.00023	.00002	.00378	.00070	.00002	.00015	.00012	.00018
%RSD	6.4415	32.718	91.466	18.631	9.6721	7.8645	124.44	13.246	7.7416	103.83	37.933	26.662
#1	.00059	.00187	.00441	.00368	.00259	.00032	.00036	.00575	.00027	.00025	.00039	-.00079
#2	.00064	.00117	.00095	.00283	.00226	.00029	.00571	.00477	.00024	.00004	.00022	-.00054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					.00200							
Low Limit					-.00200							

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.08536**	**.14604**	**-.00089**	**.00538**	**.00054**	**-.00054**	**-.01448**	**.00032**	**.00267**	**-.00069**	**.04552**	**-.00014**
Stddev	.00335	.00684	.00179	.00636	.00008	.00046	.01230	.00008	.00024	.00305	.00582	.00151
%RSD	3.9287	4.6853	202.32	118.11	15.343	85.009	84.952	26.310	9.0320	442.01	12.778	1075.1
#1	.08773	.15087	.00038	.00987	.00060	-.00021	-.00578	.00026	.00284	.00147	.04141	.00093
#2	.08299	.14120	-.00215	.00089	.00049	-.00086	-.02318	.00037	.00250	-.00285	.04963	-.00121
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.05000											
Low Limit	-.05000											

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00479**	**-.03155**	**-.06751**	**.00141**	**.00028**	**.00058**	**.00002**	**.00709**	**.01316**	**.00036**	**.00083**	**-.00205**
Stddev	.00048	.00359	.00768	.00052	.00011	.00177	.00012	.00009	.03925	.00045	.00002	.00014
%RSD	9.9470	11.381	11.381	37.015	39.252	305.51	527.38	1.3239	298.20	123.28	2.9049	6.6173
#1	-.00446	-.02901	-.06207	.00178	.00036	-.00067	.00011	.00702	-.01459	.00005	.00085	-.00215
#2	-.00513	-.03408	-.07294	.00104	.00020	.00183	-.00006	.00716	.04092	.00068	.00081	-.00196
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2540.0**	**55345.**	**4926.0**
Stddev	1.3	87.	16.7
%RSD	.05178	.15671	.33936
#1	2539.1	55283.	4937.8
#2	2540.9	55406.	4914.1

Sample Name: CCVL-4584532 Acquired: 6/9/2017 12:13:16 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00967**	**.10241**	**.01597**	**.10207**	**.00918**	F **.00134**	**.10743**	**.21689**	**.00521**	**.01027**	**.01000**	**.01587**
Stddev	.00015	.00696	.00400	.00232	.00007	.00001	.00413	.03242	.00056	.00019	.00014	.00070
%RSD	1.5487	6.7953	25.071	2.2703	.73668	.60097	3.8433	14.947	10.818	1.8544	1.3665	4.3922
#1	.00978	.10733	.01880	.10371	.00923	.00135	.11034	.23982	.00561	.01040	.00990	.01636
#2	.00957	.09749	.01314	.10043	.00913	.00134	.10451	.19397	.00482	.01013	.01009	.01538
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.00100						
Range						30.000%						

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.12059**	**2.9146**	**.01954**	**.21981**	**.01113**	**.01835**	**1.0699**	**.04035**	**2.8852**	**.00798**	F **.15758**	**.01796**
Stddev	.02147	.0372	.00208	.02553	.00023	.00046	.0871	.00160	.0802	.00268	.03651	.00333
%RSD	17.805	1.2776	10.650	11.615	2.0301	2.4850	8.1405	3.9580	2.7809	33.634	23.169	18.534
#1	.13577	2.8883	.02101	.20176	.01097	.01803	1.1315	.04148	2.9419	.00988	.18340	.02032
#2	.10541	2.9409	.01807	.23787	.01128	.01867	1.0083	.03922	2.8284	.00608	.13177	.01561
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01281**	**.44000**	**.94160**	**.09440**	**.01020**	**.01666**	**.01069**	F **.02025**	**.06436**	**.01122**	**.01973**	**.01376**
Stddev	.00421	.00733	.01568	.00161	.00027	.00021	.00010	.00320	.02649	.00033	.00078	.00175
%RSD	32.866	1.6651	1.6651	1.7093	2.6358	1.2441	.93679	15.818	41.158	2.8971	3.9709	12.747
#1	.00983	.44518	.95268	.09554	.01039	.01651	.01076	.02251	.04563	.01099	.01917	.01252
#2	.01579	.43482	.93051	.09326	.01001	.01680	.01062	.01798	.08309	.01145	.02028	.01500
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.02000							.01500				
Range	-30.000%							30.000%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2575.7**	**56393.**	**5096.1**
Stddev	4.1	184.	23.2
%RSD	.16063	.32652	.45558
#1	2572.8	56263.	5112.5
#2	2578.7	56524.	5079.7

Sample Name: 280-97774-E-5-B@2 Acquired: 6/9/2017 12:15:54 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment: 376284 200.7 fg

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00045**	**.00232**	**.04231**	W **20.880**	**.07514**	**.00031**	**-.00058**	W **650.94**	**.00090**
Stddev	.00019	.00160	.00632	.666	.00051	.00001	.00246	23.25	.00040
%RSD	42.477	69.129	14.933	3.1880	.67746	4.5799	421.55	3.5725	43.871
#1	-.00032	.00345	.03784	21.350	.07478	.00030	.00116	634.49	.00062
#2	-.00059	.00119	.04678	20.409	.07550	.00032	-.00233	667.38	.00118
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit				10.000				500.00	
Low Limit				-.20000				-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00076**	**.00581**	**.00235**	**.01580**	**9.0950**	**.01770**	**61.705**	**.00068**	**.00253**
Stddev	.00074	.00038	.00022	.00055	.0266	.00196	.000	.00002	.00063
%RSD	97.065	6.6014	9.1544	3.4588	.29288	11.044	.00020	2.7568	25.025
#1	.00128	.00608	.00220	.01541	9.0762	.01632	61.706	.00069	.00298
#2	.00024	.00554	.00250	.01618	9.1139	.01909	61.705	.00067	.00208
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.1369**	**.01114**	**.01187**	**-.00367**	F **257.61**	**-.00545**	**.15513**	**4.5501**	**9.7373**
Stddev	.0212	.00043	.00324	.00104	8.78	.00620	.01089	.0437	.0935
%RSD	.26096	3.8656	27.272	28.243	3.4068	113.73	7.0230	.95976	.95976
#1	8.1219	.01144	.01415	-.00441	263.82	-.00107	.14742	4.5810	9.8034
#2	8.1520	.01083	.00958	-.00294	251.40	-.00984	.16283	4.5193	9.6712
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00411**	**1.5068**	**-.00242**	**-.00032**	**.01308**	**.02968**	**-.00006**	**.01070**	**-.00147**
Stddev	.00119	.0023	.00024	.00085	.00180	.02079	.00011	.00001	.00284
%RSD	28.918	.15407	10.117	264.70	13.733	70.035	192.80	.09259	192.67
#1	-.00495	1.5051	-.00225	.00028	.01181	.01498	-.00014	.01070	-.00348
#2	-.00327	1.5084	-.00259	-.00092	.01435	.04438	.00002	.01071	.00053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2351.3**	**50829.**	**4977.8**
Stddev	15.3	31.	52.7
%RSD	.65152	.06007	1.0592
#1	2340.5	50808.	5015.1
#2	2362.1	50851.	4940.5

Sample Name: 97774-E-5-Bsd@10 Acquired: 6/9/2017 12:18:34 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment: 376284 200.7 fg

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00045**	**.00150**	**.01009**	**4.4332**	**.01535**	**.00017**	**-.00170**	**139.13**	**.00042**
Stddev	.00026	.00030	.00023	.1210	.00014	.00001	.00057	.57	.00020
%RSD	57.395	20.071	2.2509	2.7302	.91800	6.7754	33.663	.41202	47.192
#1	-.00027	.00129	.00993	4.5188	.01525	.00017	-.00130	138.72	.00056
#2	-.00063	.00171	.01025	4.3476	.01545	.00018	-.00211	139.53	.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**.00163**	**.00081**	**.00676**	**1.8714**	**.00364**	**13.174**	**.00029**	**-.00050**
Stddev	.00019	.00012	.00012	.00230	.0271	.00218	.033	.00001	.00010
%RSD	287.54	7.2933	15.109	33.969	1.4476	60.028	.25070	2.7712	19.390
#1	-.00007	.00155	.00090	.00839	1.8905	.00209	13.198	.00029	-.00057
#2	.00020	.00172	.00073	.00514	1.8522	.00518	13.151	.00030	-.00043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.7147**	**.00213**	**.00281**	**-.00135**	**51.974**	**-.00017**	**.02742**	**.93057**	**1.9914**
Stddev	.0157	.00004	.00451	.00141	1.384	.00087	.00233	.01848	.0395
%RSD	.91614	1.6632	160.33	103.88	2.6638	523.50	8.4930	1.9854	1.9854
#1	1.7036	.00216	.00600	-.00036	52.953	.00045	.02577	.94363	2.0194
#2	1.7258	.00211	-.00038	-.00235	50.995	-.00078	.02906	.91750	1.9635
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00091**	**.31600**	**.00009**	**-.00037**	**.00510**	**-.03221**	**.00082**	**.00341**	**-.00177**
Stddev	.00082	.00118	.00065	.00029	.00267	.01942	.00022	.00073	.00046
%RSD	89.683	.37187	712.86	79.554	52.415	60.299	26.103	21.504	25.888
#1	.00149	.31516	-.00037	-.00057	.00698	-.01848	.00067	.00289	-.00209
#2	.00033	.31683	.00055	-.00016	.00321	-.04594	.00098	.00393	-.00144
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2496.5**	**54562.**	**5059.7**
Stddev	5.2	89.	30.6
%RSD	.20845	.16337	.60423
#1	2492.8	54499.	5081.4
#2	2500.1	54625.	5038.1

Sample Name: 97774-E-5-C MS@2 Acquired: 6/9/2017 12:21:10 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment: 376284 200.7 fg

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02438**	**.87782**	**.53331**	W **20.934**	**1.0073**	**.02267**	**.97752**	W **657.15**	**.05116**
Stddev	.00007	.03033	.01383	.632	.0010	.00011	.02946	1.01	.00177
%RSD	.29146	3.4552	2.5929	3.0170	.09661	.50454	3.0142	.15440	3.4517
#1	.02433	.89927	.54309	21.380	1.0080	.02275	.99836	656.43	.05241
#2	.02443	.85638	.52353	20.487	1.0066	.02258	.95669	657.86	.04991
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit				10.000				500.00	
Low Limit				-.20000				-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.22697**	**.09319**	**.14096**	**.47201**	**33.641**	**.50393**	**84.063**	**.25042**	**.43174**
Stddev	.00722	.00319	.00141	.00089	.031	.00211	.003	.00001	.01507
%RSD	3.1791	3.4282	1.0003	.18906	.09348	.41785	.00412	.00344	3.4910
#1	.23207	.09545	.14196	.47138	33.663	.50244	84.060	.25043	.44239
#2	.22187	.09093	.13996	.47264	33.619	.50541	84.065	.25041	.42108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**33.207**	**.23677**	**5.0320**	**.20614**	F **253.30**	**.24232**	**1.1122**	**9.0867**	**19.446**
Stddev	.185	.00828	.1619	.00460	7.90	.00756	.0376	.0537	.115
%RSD	.55780	3.4987	3.2168	2.2319	3.1183	3.1194	3.3821	.59061	.59061
#1	33.338	.24263	5.1465	.20939	258.88	.24766	1.1388	9.1247	19.527
#2	33.076	.23091	4.9176	.20288	247.71	.23697	1.0856	9.0488	19.364
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.87342**	**1.9459**	**.49880**	**.50247**	**.83487**	**.99779**	**.25885**	**.24996**	**.25099**
Stddev	.02926	.0050	.00143	.00198	.02915	.02709	.00059	.00003	.00040
%RSD	3.3499	.25844	.28616	.39498	3.4919	2.7149	.22839	.01048	.16021
#1	.89411	1.9495	.49779	.50387	.85548	1.0169	.25927	.24994	.25070
#2	.85273	1.9424	.49981	.50107	.81425	.97864	.25843	.24998	.25127
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2300.8**	**49612.**	**4845.1**
Stddev	11.6	157.	18.7
%RSD	.50355	.31620	.38531
#1	2292.6	49501.	4831.9
#2	2308.9	49722.	4858.3

Sample Name: 97774-E-5-D MSD@2 Acquired: 6/9/2017 12:23:43 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment: 376284 200.7 fg

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02526**	**.90179**	**.55773**	W **21.930**	**1.0447**	**.02349**	**1.0270**	W **669.17**	**.05337**
Stddev	.00020	.02905	.01379	.485	.0021	.00004	.0256	2.71	.00100
%RSD	.80155	3.2215	2.4732	2.2102	.20253	.15161	2.4967	.40477	1.8706
#1	.02541	.92233	.56749	22.272	1.0462	.02352	1.0451	671.08	.05408
#2	.02512	.88125	.54798	21.587	1.0432	.02347	1.0089	667.25	.05266
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit				10.000				500.00	
Low Limit				-.20000				-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.23584**	**.09737**	**.14832**	**.48573**	**34.865**	**.52326**	**86.886**	**.25861**	**.44823**
Stddev	.00560	.00305	.00045	.00487	.066	.00088	.103	.00052	.01097
%RSD	2.3752	3.1350	.30135	1.0025	.18963	.16808	.11813	.20107	2.4470
#1	.23980	.09953	.14800	.48918	34.912	.52388	86.958	.25898	.45599
#2	.23188	.09521	.14863	.48229	34.819	.52264	86.813	.25824	.44048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**34.275**	**.24553**	**5.2842**	**.21590**	F **265.82**	**.25352**	**1.1689**	**9.4189**	**20.156**
Stddev	.393	.00716	.1529	.00405	6.12	.00004	.0275	.0366	.078
%RSD	1.1458	2.9180	2.8926	1.8736	2.3037	.01512	2.3509	.38862	.38862
#1	34.552	.25060	5.3922	.21876	270.15	.25350	1.1884	9.4448	20.212
#2	33.997	.24047	5.1761	.21304	261.49	.25355	1.1495	9.3930	20.101
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.89930**	**2.0171**	**.51947**	**.51865**	**.86611**	**1.0310**	**.26814**	**.25713**	**.25787**
Stddev	.02527	.0045	.00210	.00234	.02315	.0002	.00064	.00256	.00211
%RSD	2.8098	.22487	.40499	.45125	2.6731	.02140	.23852	.99411	.81950
#1	.91716	2.0203	.52096	.52030	.88248	1.0311	.26859	.25533	.25638
#2	.88143	2.0139	.51799	.51699	.84974	1.0308	.26768	.25894	.25937
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2335.0**	**50418.**	**4929.1**
Stddev	6.2	211.	.7
%RSD	.26526	.41778	.01425
#1	2330.6	50567.	4928.6
#2	2339.4	50269.	4929.6

Sample Name: 97774-E-5-Bpds@2 Acquired: 6/9/2017 12:26:16 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment: 376284 200.7 fg

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01660**	**.92638**	**.25626**	W **21.397**	**.17495**	**.04827**	**.00512**	W **656.14**	**.05439**
Stddev	.00015	.02843	.01541	.630	.00034	.00003	.00210	6.91	.00181
%RSD	.91066	3.0686	6.0115	2.9446	.19409	.06645	40.982	1.0532	3.3208
#1	.01670	.94648	.26715	21.842	.17471	.04825	.00363	651.25	.05567
#2	.01649	.90628	.24537	20.951	.17519	.04829	.00660	661.02	.05311
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit				10.000				500.00	
Low Limit				-.20000				-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04949**	**.05270**	**.06379**	**1.0135**	**30.141**	**.11996**	**81.521**	**.05472**	**.04774**
Stddev	.00153	.00167	.00051	.0145	.082	.00209	.035	.00004	.00225
%RSD	3.0826	3.1687	.80126	1.4294	.27308	1.7437	.04279	.07869	4.7081
#1	.05056	.05388	.06343	1.0032	30.082	.11848	81.496	.05475	.04933
#2	.04841	.05152	.06415	1.0237	30.199	.12144	81.545	.05469	.04615
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**29.366**	**.06021**	**2.2022**	**.08514**	F **262.88**	**.09878**	**.36558**	**9.4027**	**20.122**
Stddev	.076	.00179	.0788	.00024	8.17	.00286	.02479	.0283	.061
%RSD	.25786	2.9683	3.5768	.27944	3.1070	2.8931	6.7823	.30081	.30081
#1	29.419	.06147	2.2579	.08531	268.66	.10080	.38311	9.3827	20.079
#2	29.312	.05894	2.1465	.08497	257.11	.09676	.34805	9.4227	20.165
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.08627**	**1.5603**	**.21579**	**.05348**	**.18718**	**.52661**	**.05688**	**.21365**	**.05644**
Stddev	.00315	.0065	.00313	.00075	.00919	.04820	.00050	.00230	.00061
%RSD	3.6548	.41396	1.4502	1.3996	4.9095	9.1531	.87529	1.0760	1.0872
#1	.08850	1.5558	.21358	.05401	.19368	.56069	.05653	.21202	.05601
#2	.08404	1.5649	.21800	.05295	.18068	.49252	.05723	.21527	.05687
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2383.8**	**52095.**	**5155.6**
Stddev	9.9	144.	21.8
%RSD	.41594	.27621	.42353
#1	2376.7	52196.	5140.2
#2	2390.8	51993.	5171.1

Sample Name: CCVH-4579429 Acquired: 6/9/2017 12:28:56 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00941**	**47.616**	**.00465**	**.08167**	**.00042**	**.00019**	**.96736**	**.15714**	**.00032**	**-.00088**	**.00076**	**.01737**	**48.816**
Stddev	.00033	.054	.00306	.00631	.00010	.00008	.03372	.04908	.00001	.00018	.00008	.00068	.035
%RSD	3.4769	.11252	65.848	7.7225	24.878	40.256	3.4854	31.236	3.3670	20.073	11.200	3.9143	.07166
#1	-.00964	47.578	.00249	.08613	.00049	.00014	.99120	.19185	.00031	-.00100	.00070	.01689	48.791
#2	-.00917	47.654	.00682	.07721	.00034	.00025	.94352	.12243	.00033	-.00075	.00082	.01785	48.841
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04623**	**.00075**	**.11934**	**-.00196**	**-.00216**	**246.30**	**.00105**	**.00589**	**-.00120**	**4.8134**	**-.01174**	**-.01061**	**-.04399**
Stddev	.00560	.00019	.00852	.00007	.00009	.32	.00075	.00013	.00006	.1442	.00831	.00247	.00131
%RSD	12.122	24.647	7.1365	3.3291	4.2915	.12985	71.030	2.2929	4.7603	2.9948	70.758	23.311	2.9875
#1	.05020	.00062	.11331	-.00201	-.00223	246.08	.00158	.00579	-.00124	4.9153	-.00587	-.01235	-.04492
#2	.04227	.00088	.12536	-.00191	-.00210	246.53	.00052	.00598	-.00116	4.7114	-.01762	-.00886	-.04306
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.09413**	**-.00181**	**.00073**	**5.0481**	**.02277**	**.00284**	**10.287**	**.01509**	**.00019**	**.08324**
Stddev	.00281	.00034	.00017	.0012	.00004	.00229	.008	.00029	.00061	.00175
%RSD	2.9875	18.878	23.758	.02284	.17971	80.471	.08253	1.9356	330.52	2.0989
#1	-.09612	-.00205	.00085	5.0489	.02275	.00446	10.293	.01488	-.00025	.08448
#2	-.09215	-.00157	.00060	5.0472	.02280	.00122	10.281	.01530	.00062	.08201
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2579.4**	**54560.**	**5140.5**
Stddev	1.3	370.	17.9
%RSD	.05197	.67797	.34749
#1	2580.3	54822.	5153.2
#2	2578.4	54299.	5127.9

Sample Name: CCV-4567764 Acquired: 6/9/2017 12:31:31 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50388**	**.49271**	**.96676**	F **.56023**	**.47065**	**.47186**	**-.00020**	**4.7080**	**.49491**	**.49400**	**.46467**	F **.55808**
Stddev	.00128	.01133	.02267	.01085	.00146	.00149	.00184	.0286	.01107	.01081	.01061	.00270
%RSD	.25488	2.2991	2.3451	1.9372	.31002	.31529	923.03	.60683	2.2358	2.1890	2.2844	.48335
#1	.50479	.50072	.98279	.56791	.46962	.47081	.00110	4.7282	.50273	.50165	.47218	.55998
#2	.50297	.48470	.95073	.55256	.47168	.47292	-.00150	4.6878	.48709	.48635	.45717	.55617
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value				.50000								.50000
Range				10.490%								10.490%

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4044**	**47.832**	**.95875**	**19.705**	**.51791**	**.46030**	**5.1058**	**.49580**	**.99492**	**.93401**	**.06533**	**.98046**
Stddev	.0167	.132	.00497	.031	.00153	.01039	.1340	.01009	.01998	.02327	.00231	.02237
%RSD	.69505	.27686	.51828	.15498	.29449	2.2562	2.6252	2.0342	2.0081	2.4912	3.5319	2.2812
#1	2.4162	47.738	.95524	19.726	.51899	.46765	5.2006	.50293	1.0090	.95047	.06696	.99628
#2	2.3926	47.925	.96227	19.683	.51683	.45296	5.0110	.48867	.98079	.91756	.06370	.96465
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.96299**	**4.6577**	**9.9675**	**.93616**	**.48006**	**.00508**	**.50848**	**.95804**	**.01500**	**.52631**	**.50222**	**.50100**
Stddev	.02251	.0090	.0193	.01771	.00015	.00098	.00115	.01343	.01329	.00191	.00323	.00130
%RSD	2.3375	.19380	.19380	1.8919	.03121	19.316	.22577	1.4021	88.578	.36198	.64238	.26002
#1	.97891	4.6641	9.9811	.94868	.47995	.00577	.50930	.96754	.02439	.52766	.50450	.50008
#2	.94707	4.6513	9.9538	.92363	.48017	.00438	.50767	.94854	.00560	.52497	.49994	.50193
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2525.8**	**56886.**	**5227.3**
Stddev	38.4	112.	14.9
%RSD	1.5214	.19683	.28497
#1	2553.0	56807.	5237.9
#2	2498.6	56966.	5216.8

Sample Name: CCB Acquired: 6/9/2017 12:34:00 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00062**	**-.00081**	**.00519**	W **.04289**	**.00190**	**.00036**	**.00171**	**.01411**	**-.00002**	**.00003**	**.00039**	**-.00086**
Stddev	.00037	.00042	.00489	.00157	.00016	.00010	.00203	.00263	.00005	.00044	.00015	.00004
%RSD	59.182	51.851	94.132	3.6655	8.5352	27.841	118.82	18.671	217.18	1277.5	37.332	4.5274
#1	.00036	-.00111	.00865	.04400	.00201	.00043	.00027	.01597	-.00006	.00034	.00029	-.00089
#2	.00089	-.00051	.00174	.04178	.00178	.00029	.00314	.01225	.00001	-.00028	.00050	-.00083
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01500								
Low Limit				-.01500								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.09450**	**.08011**	**.00164**	**.01147**	**.00047**	**.00012**	**-.02019**	**.00011**	**.00082**	**-.00099**	W **.05399**	**-.00431**
Stddev	.00130	.05300	.00011	.00396	.00008	.00018	.01773	.00019	.00165	.00184	.00006	.00054
%RSD	1.3773	66.160	6.8301	34.489	16.842	155.00	87.804	165.02	200.53	186.39	.12018	12.486
#1	.09542	.11759	.00172	.00867	.00041	-.00001	-.00765	-.00002	-.00034	-.00229	.05404	-.00469
#2	.09358	.04264	.00156	.01427	.00052	.00024	-.03272	.00024	.00199	.00031	.05394	-.00393
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit	.05000										.05000	
Low Limit	-.05000										-.20000	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00285**	**-.00792**	**-.01695**	**-.00045**	**.00023**	**.00293**	**.00010**	**.00373**	**-.04031**	**.00053**	**.00060**	**-.00418**
Stddev	.00852	.00597	.01277	.00133	.00017	.00047	.00030	.00254	.00238	.00030	.00048	.00026
%RSD	299.54	75.342	75.342	295.89	71.945	16.196	304.78	68.188	5.9168	56.371	79.749	6.2319
#1	.00318	-.00370	-.00792	.00049	.00035	.00327	-.00012	.00553	-.03862	.00075	.00026	-.00400
#2	-.00887	-.01214	-.02598	-.00139	.00011	.00260	.00032	.00193	-.04199	.00032	.00094	-.00437
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2570.3**	**55470.**	**4933.0**
Stddev	12.2	139.	16.0
%RSD	.47547	.25123	.32490
#1	2579.0	55371.	4921.7
#2	2561.7	55568.	4944.4

Sample Name: CCVL-4584532 Acquired: 6/9/2017 12:36:39 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: lackeyca Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01046**	**.10456**	F **.02296**	F **.13347**	**.00968**	**.00108**	**.10745**	**.19694**	**.00493**	**.01044**	**.00956**	**.01636**
Stddev	.00024	.00371	.00223	.00379	.00020	.00003	.00443	.00318	.00005	.00034	.00019	.00060
%RSD	2.3342	3.5448	9.7339	2.8402	2.0149	2.4419	4.1196	1.6153	1.0939	3.2122	2.0303	3.6714
#1	.01063	.10194	.02454	.13615	.00954	.00110	.11058	.19469	.00489	.01068	.00970	.01594
#2	.01029	.10718	.02138	.13079	.00982	.00106	.10432	.19919	.00496	.01020	.00942	.01679
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500	.10000								
Range			30.000%	30.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09922**	**2.9981**	**.01868**	**.21215**	**.01088**	**.01731**	**1.0028**	**.04061**	**2.8695**	**.01072**	F **.13616**	**.02135**
Stddev	.00236	.0469	.00025	.00091	.00003	.00090	.0095	.00127	.0937	.00053	.00403	.00220
%RSD	2.3747	1.5659	1.3422	.43024	.27973	5.2195	.94381	3.1187	3.2644	4.9260	2.9620	10.317
#1	.10089	3.0313	.01885	.21280	.01090	.01795	.99612	.04151	2.9357	.01109	.13901	.01979
#2	.09755	2.9649	.01850	.21151	.01086	.01667	1.0095	.03972	2.8033	.01034	.13331	.02291
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01120**	**.44603**	**.95450**	**.09371**	**.00996**	**.01615**	**.01017**	**.01673**	**.05292**	**.01090**	**.02082**	**.01385**
Stddev	.00091	.00739	.01582	.00539	.00022	.00223	.00001	.00017	.00675	.00009	.00023	.00130
%RSD	8.1088	1.6576	1.6576	5.7479	2.1869	13.780	.10232	1.0457	12.764	.85060	1.1042	9.3961
#1	.01184	.45126	.96569	.09752	.01012	.01772	.01018	.01685	.04815	.01097	.02066	.01477
#2	.01055	.44080	.94331	.08990	.00981	.01457	.01016	.01660	.05770	.01084	.02098	.01293
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.02000											
Range	-30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2567.5**	**56162.**	**5024.8**
Stddev	2.9	214.	6.1
%RSD	.11482	.38079	.12224
#1	2569.6	56313.	5029.1
#2	2565.4	56011.	5020.4

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ICP Data Review Checklist

LIMS Batch Number(s): 376734 + 752	Filename(s): 25Z060917.pdf	Instrument ID (circle one): ICP25 ICP26
Analyst/1st Reviewer/Date: CR 6/9/17		Method (circle): 200.7 6010B 6010C
		QC Type (circle): Standard DoD Q4 DoD Q5 QAPP_____ Other_____
Matrix (circle): Water Solid Leachate		Circle: Total TR PD Dissolved

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
A. Calibration/Instrument Run QC					
1. Instrument calibrated per lab SOP?	✓			✓	
2. Reanalysis of Calibration Standards before samples: 95-105% recovery	✓			✓	
3. ICB/CCB: run before samples, 10% frequency, & closing Result < ½ RL (routine) Result < LOD/2x MDL (DoD or special project)	✓			✓	If no, list details:
4. ICV/CCV: frequency initial, 10%, & closing 90-110% recovery, 5% RSD (6010) 95-105% recovery, 3% RSD (200.7)	✓			✓	If no, list details:
5. ICVL/CCVL: 70-130% recovery (6010C)	✓			✓	If no, list details:
6. ICSA/ICSAB: run before samples ICSA detections for non-spiked elements < 2x RL (<LOD/2x MDL for DoD or special project) ICSAB for spiked elements 80-120% *If no, list analytes:*	✓			✓	☐ Results outside limits due to contamination. ☐ Concentration of affected analyte in sample is less than RL.
7. RL-level check standard (CRI): 50-150% (routine) 80-120% recovery (DoD or special projects)	✓			✓	If no, list details:
B. Client Sample and QC Sample Results					
1. Samples with target element concentrations > 90% linear range diluted and reanalyzed? (200.7)	✓			✓	Comments:
2. Were all hits reported from a run with interfering elements < linear range? (L Flags investigated?)	✓			✓	Comments:
3. Internal standard (IS) response ± 30% of ICB IS? *If no, list details:*	✓			✓	☐ High IS response. Sample(s) rerun at dilution. ☐ Low IS response. Sample(s) rerun at dilution.
C. Preparation/Matrix QC					
1. Method Blank: one per preparation batch result < ½ RL (routine)	✓			✓	☐ No analyte > RL in associated samples ☐ Sample results >10x blank ☐ Insufficient sample for reanalysis
2. LCS: one per preparation batch 80-120% recovery or historical (routine) 85-115% recovery or historical (200.7); project limits (other)	✓			✓	☐ Insufficient sample for reanalysis ☐ LCS %R > QC limits & samples < RL
3. MS/MSD or MS/Dup frequency: a pair per batch (routine) a pair per 10 samples (200.7)	✓			✓	☐ Insufficient sample – LCS/LCSD analyzed
C. Preparation/Matrix QC (cont.)					
4. MS/MSD recovery & RPD: 75-125% recovery or historical (routine) 70-130% recovery or historical (200.7) 20% RPD project limits (other)	✓			✓	☐ LCS acceptable – matrix effects ☐ Native analyte > 4x spike level ☐ Matrix effect and native analyte > 4x spike

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Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
5. If TCLP MS <50% and sample result 80-100% of toxicity characteristic limit, was MSA run?	✓			✓	Comments:
6. Serial dilution: present for each prep batch (routine) Required if MS/MSD fail (DoDV5) run at 5x dilution of parent sample ≤ 10% difference	✓			✓	☐ Sample result < 50 x MDL
7. Post digestion spike: Required if MS/MSD fail (DoD and 6010C) or by client request 75-125% recovery	✓			✓	
D. Raw Data & TALS Data Entry					
1. TALS Sample List Tab	✓			✓	
a. LIMS Sample IDs / Containers are correct	✓			✓	
b. Method and matrix are correct	✓			✓	
c. Date and time are correct	✓			✓	
d. Dilutions are correct	✓			✓	
e. Correct suffix designated; e.g., DU, (where applicable)	✓			✓	
2. TALS Sample Results Tab	✓			✓	
a. All reported analytes are marked Primary or Secondary	✓			✓	
b. All unused data are marked Rejected or Accepted. Unused data are clearly identified with reason not used	✓			✓	
c. Out of control QC is clearly identified	✓			✓	
d. Any data that has a qualifier is reviewed with appropriate action taken (NCM if needed)	✓			✓	
e. The attached data file includes the filename, instrument, and analyst initials	✓			✓	
3. TALS Worksheet Tab is complete and correct	✓			✓	
4. TALS Reagent Tab is complete and correct	✓			✓	
5. TALS QC Links Tab is correct	✓			✓	
6. TALS Batch Information Screen documentation is complete	✓			✓	
7. TALS Status set to appropriate review level	✓			✓	
E. Final Report and NCMs (2nd level review only)					
1. Were all job/project requirements met?				✓	
2. Results for samples and QC correct on final report?				✓	
3. Are all necessary scanned documents in TALS?				✓	
4. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?				✓	
5. Raw Data PDF attached as document				✓	

Comments: _____

2nd Reviewer: _____ Review Date: 6/9/17

Sample Name: ICIS Acquired: 6/12/2017 13:14:54 Type: Cal
Method: 6500_025 Mode: IR Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00098**	**.00230**	**-.01745**	**-.00028**	**.00103**	**.03594**	**-.00809**	**-.00221**	**.00055**	**-.00106**	**-.00011**	**-.00105**
Stddev	.00006	.00021	.00004	.00024	.00013	.00110	.00092	.00060	.00016	.00012	.00004	.00050
%RSD	6.0311	9.1377	.22231	83.866	12.579	3.0502	11.388	27.337	28.682	11.569	35.063	47.744
#1	-.00102	.00215	-.01748	-.00011	.00094	.03516	-.00744	-.00179	.00044	-.00115	-.00014	-.00141
#2	-.00093	.00244	-.01742	-.00045	.00113	.03671	-.00874	-.00264	.00066	-.00097	-.00009	-.00070

Elem	Cu3247	Fe2599	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00611**	**-.00064**	**.00040**	**.01974**	**.00089**	**.00010**	**.00012**	**-.00100**	**.10689**	**-.01993**	**.00182**	**.00008**
Stddev	.00012	.00033	.00038	.00082	.00170	.00004	.00001	.00015	.00150	.00054	.00007	.00029
%RSD	2.0252	51.802	94.314	4.1782	191.35	39.510	8.8600	14.658	1.4027	2.6874	3.7455	342.10
#1	.00602	-.00040	.00067	.02032	.00208	.00013	.00013	-.00089	.10795	-.02030	.00187	-.00012
#2	.00620	-.00087	.00013	.01916	-.00031	.00007	.00012	-.00110	.10583	-.01955	.00177	.00029

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00243**	**.00247**	**.00081**	**.00056**	**.00035**	**.00035**	**.00036**	**-.01093**	**.00006**	**-.00031**	**-.00027**	**.00078**
Stddev	.00001	.00011	.00006	.00031	.00008	.00008	.00025	.00004	.00009	.00001	.00016	.00015
%RSD	.28596	4.3968	7.4666	54.304	21.541	21.541	69.735	.37335	141.07	2.7636	61.039	19.880
#1	-.00243	.00239	.00077	.00078	.00040	.00040	.00018	-.01096	.00012	-.00032	-.00015	.00067
#2	-.00242	.00255	.00086	.00035	.00030	.00030	.00053	-.01090	.00000	-.00030	-.00039	.00089

Elem	V_2924	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S
Avg	**-.00041**	**.00004**	**-.00126**
Stddev	.00019	.00001	.00026
%RSD	46.961	26.249	20.452
#1	-.00054	.00003	-.00144
#2	-.00027	.00004	-.00108

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2183.2**	**44785.**	**2346.9**
Stddev	2.2	12.	1.4
%RSD	.10277	.02725	.06044
#1	2181.6	44777.	2345.9
#2	2184.8	44794.	2347.9

Sample Name: ICAL1 Acquired: 6/12/2017 13:17:34 Type: Cal
Method: 6500_025 Mode: IR Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.20205**	**.14744**	**.06540**	**.26737**	**6.1928**	**4.5109**	**1.1368**	**1.7742**	**1.0014**	**.76141**	**.25904**	**.30158**	**4.9224**
Stddev	.00083	.00161	.00082	.00209	.0147	.0113	.0031	.0127	.0089	.00732	.00070	.00010	.0084
%RSD	.41151	1.0921	1.2518	.78299	.23661	.25118	.26858	.71531	.88575	.96152	.26939	.03270	.16996
#1	.20264	.14857	.06598	.26885	6.2032	4.5189	1.1390	1.7832	1.0076	.76659	.25953	.30165	4.9165
#2	.20146	.14630	.06482	.26589	6.1824	4.5029	1.1347	1.7652	.99508	.75624	.25855	.30151	4.9283

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.6706**	**.72740**	**1.0617**	**.34798**	**2.1520**	**.67259**	**.08915**	**.36682**	**.16679**	**.05782**	**.17042**	**.17042**	**.16430**
Stddev	.0047	.00122	.0004	.00352	.0065	.00560	.00030	.00218	.00140	.00015	.00033	.00033	.00075
%RSD	.17493	.16748	.04058	1.0125	.30077	.83264	.33182	.59302	.83933	.25278	.19265	.19265	.45396
#1	2.6739	.72827	1.0620	.35047	2.1566	.67655	.08936	.36836	.16778	.05792	.17019	.17019	.16483
#2	2.6673	.72654	1.0614	.34549	2.1474	.66863	.08894	.36528	.16580	.05772	.17065	.17065	.16378

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**9.9997**	**.33198**	**.11890**	**.19047**	**.01840**	**.29091**
Stddev	.0518	.00045	.00129	.00017	.00001	.00238
%RSD	.51781	.13685	1.0886	.08979	.03213	.81668
#1	10.036	.33166	.11982	.19059	.01841	.29259
#2	9.9630	.33230	.11798	.19035	.01840	.28923

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2151.1**	**43181.**	**2361.8**
Stddev	1.3	21.	7.1
%RSD	.06184	.04959	.29997
#1	2150.2	43196.	2356.8
#2	2152.0	43165.	2366.8

Sample Name: ICAL2 Acquired: 6/12/2017 13:20:01 Type: Cal
Method: 6500_025 Mode: IR Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Al3092	Bi2230	Fe2714	Na8183	S_1820	Th2837	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.2928**	**.25684**	**.34911**	**3.3244**	**.21696**	**.49096**	**.13393**
Stddev	.0231	.00323	.00067	.0195	.00295	.00027	.00059
%RSD	.70159	1.2567	.19263	.58590	1.3610	.05451	.44207
#1	3.2765	.25912	.34864	3.3106	.21905	.49077	.13351
#2	3.3091	.25456	.34959	3.3381	.21488	.49115	.13435

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2128.8**	**42616.**	**2355.9**
Stddev	7.3	144.	29.8
%RSD	.34358	.33737	1.2636
#1	2123.7	42717.	2377.0
#2	2134.0	42514.	2334.9

Sample Name: S1-4580816 Acquired: 6/12/2017 13:22:36 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99761**	**.99020**	**1.9609**	**.98527**	**.99642**	**.99697**	**-.00807**	**9.9222**	**.98534**	**.98421**	**.98116**	**1.0029**	**4.9614**
Stddev	.00207	.01693	.0277	.01631	.00071	.00045	.00251	.0340	.01767	.02078	.01942	.0006	.0049
%RSD	.20779	1.7098	1.4127	1.6557	.07128	.04514	31.101	.34255	1.7935	2.1117	1.9796	.06105	.09945
#1	.99614	1.0022	1.9805	.99680	.99592	.99728	-.00984	9.8982	.99784	.99891	.99489	1.0033	4.9649
#2	.99907	.97822	1.9413	.97373	.99692	.99665	-.00629	9.9462	.97284	.96951	.96742	1.0025	4.9579
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**99.661**	**1.9907**	**39.706**	**1.0001**	**.98120**	**10.171**	**10.242**	**.98503**	**1.9775**	**1.9591**	**-.01126**	**1.9684**	**1.9575**
Stddev	.084	.0063	.024	.0013	.01855	.018	.192	.01951	.0365	.0330	.00357	.0463	.0307
%RSD	.08411	.31643	.06011	.12884	1.8901	.17825	1.8741	1.9810	1.8477	1.6834	31.733	2.3528	1.5679
#1	99.602	1.9951	39.689	1.0010	.99432	10.159	10.107	.99883	2.0034	1.9824	-.01379	2.0011	1.9792
#2	99.720	1.9862	39.723	.99920	.96809	10.184	10.378	.97123	1.9517	1.9358	-.00873	1.9356	1.9358
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value													
Range													

Elem	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.9410**	**21.274**	**1.9652**	**.99907**	**.00927**	**1.0022**	**1.9523**	**.02650**	**1.0037**	**1.0003**	**.99645**
Stddev	.1288	.276	.0389	.00005	.00140	.0013	.0369	.01368	.0056	.0004	.00547
%RSD	1.2951	1.2951	1.9769	.00527	15.142	.12458	1.8928	51.622	.56199	.04088	.54917
#1	9.8500	21.079	1.9927	.99910	.01027	1.0031	1.9784	.01682	1.0076	1.0006	1.0003
#2	10.032	21.469	1.9377	.99903	.00828	1.0013	1.9261	.03617	.99966	1.0000	.99258
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2151.3**	**44035.**	**2420.6**
Stddev	16.4	49.	4.9
%RSD	.76353	.11137	.20174
#1	2162.9	44000.	2424.0
#2	2139.7	44070.	2417.1

Sample Name: S2-4579428 Acquired: 6/12/2017 13:25:59 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.02100**	**99.425**	**-.01199**	**.00494**	**.00145**	**-.00014**	**1.9824**	**.01293**	**.00091**	**-.00193**	**.00129**	**.03127**	**99.479**
Stddev	.00029	.335	.00704	.00049	.00024	.00007	.0057	.01004	.00006	.00012	.00022	.00046	.753
%RSD	1.3959	.33736	58.713	9.9339	16.452	47.854	.28629	77.680	6.4655	6.4610	16.735	1.4580	.75645
#1	-.02121	99.187	-.01697	.00528	.00162	-.00019	1.9864	.00583	.00095	-.00201	.00144	.03160	98.946
#2	-.02079	99.662	-.00701	.00459	.00128	-.00009	1.9783	.02003	.00087	-.00184	.00114	.03095	100.01
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10208**	**.00454**	**.20129**	**-.00372**	**-.00327**	**498.59**	**.00280**	**.01000**	**.00256**	**9.9766**	**-.02380**	**-.02012**	**-.00702**
Stddev	.00475	.00267	.00803	.00007	.00011	1.89	.00062	.00967	.00155	.0031	.00397	.01111	.00906
%RSD	4.6555	58.929	3.9887	1.9455	3.2335	.37848	22.252	96.744	60.772	.03103	16.680	55.218	129.08
#1	.09872	.00643	.19561	-.00377	-.00334	497.26	.00236	.01684	.00365	9.9744	-.02661	-.02798	-.00061
#2	.10544	.00265	.20696	-.00367	-.00319	499.93	.00325	.00316	.00146	9.9788	-.02099	-.01227	-.01343
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01503**	**-.00474**	**.00108**	**9.9774**	**.04512**	**.00319**	**20.090**	**.02698**	**.00309**	**.14884**
Stddev	.01940	.00083	.00009	.0049	.00047	.00341	.017	.00087	.00049	.00377
%RSD	129.08	17.550	8.2269	.04860	1.0396	106.87	.08413	3.2252	15.744	2.5325
#1	-.00131	-.00533	.00102	9.9740	.04479	.00560	20.102	.02637	.00343	.14618
#2	-.02874	-.00415	.00115	9.9808	.04545	.00078	20.078	.02760	.00275	.15151
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2139.0**	**42606.**	**2392.1**
Stddev	2.2	39.	7.0
%RSD	.10146	.09063	.29439
#1	2137.5	42633.	2387.1
#2	2140.6	42578.	2397.1

Sample Name: ICVH-4589660 Acquired: 6/12/2017 13:28:34 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00778**	**40.519**	**-.00550**	**.00043**	**.00007**	**-.00017**	**.51221**	**.00066**	**.00002**	**.00059**	**.00161**	**.00881**	**80.070**
Stddev	.00005	.070	.00180	.00012	.00067	.00012	.01132	.00961	.00018	.00066	.00000	.00017	.336
%RSD	.66207	.17288	32.716	28.658	915.40	72.107	2.2094	1459.8	814.74	110.81	.02729	1.9648	.41937
#1	-.00781	40.470	-.00423	.00035	.00055	-.00008	.52021	.00745	.00015	.00013	.00161	.00869	79.832
#2	-.00774	40.569	-.00677	.00052	-.00040	-.00026	.50421	-.00614	-.00010	.00106	.00161	.00893	80.307
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01671**	**.00105**	**.05670**	**-.00125**	**-.00068**	**41.143**	**.00048**	**.00119**	**.00047**	**3.9249**	**-.00670**	**-.00833**	**.01002**
Stddev	.00142	.00196	.00390	.00002	.00031	.211	.00008	.00174	.00186	.0841	.00384	.00092	.03458
%RSD	8.4860	185.45	6.8771	1.4265	44.867	.51228	17.061	146.19	392.12	2.1424	57.248	11.015	345.27
#1	-.01571	.00244	.05946	-.00126	-.00047	40.994	.00053	.00241	.00179	3.9844	-.00942	-.00768	-.01444
#2	-.01771	-.00033	.05394	-.00123	-.00090	41.292	.00042	-.00004	-.00084	3.8655	-.00399	-.00898	.03447
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02143**	**.00031**	**.00034**	**3.0485**	**.01270**	**-.00023**	**5.2152**	**.00693**	**-.00086**	**.04657**
Stddev	.07401	.00080	.00001	.0106	.00016	.00552	.0612	.00011	.00055	.00424
%RSD	345.27	255.03	1.4927	.34627	1.2367	2398.4	1.1728	1.5587	64.085	9.1053
#1	-.03090	.00088	.00034	3.0559	.01281	.00367	5.1720	.00700	-.00047	.04358
#2	.07377	-.00025	.00035	3.0410	.01258	-.00413	5.2585	.00685	-.00124	.04957
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2228.6**	**44456.**	**2417.6**
Stddev	2.8	396.	32.2
%RSD	.12723	.89176	1.3336
#1	2226.6	44736.	2394.8
#2	2230.6	44175.	2440.4

Sample Name: ICVH-4589660 Acquired: 6/12/2017 13:31:10 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00624**	**40.035**	**-.00079**	**-.00025**	**-.00002**	**-.00008**	**.49874**	**.00169**	**.00025**	**.00037**	**.00129**	**.00849**	**79.181**
Stddev	.00052	.065	.01286	.00038	.00018	.00000	.02113	.00410	.00012	.00004	.00006	.00102	.305
%RSD	8.2882	.16135	1621.3	148.57	1050.1	4.3764	4.2365	242.42	49.211	10.760	4.6165	11.978	.38500
#1	-.00660	40.081	-.00989	.00001	.00011	-.00008	.51368	.00459	.00033	.00034	.00133	.00921	79.396
#2	-.00587	39.989	.00830	-.00052	-.00015	-.00008	.48380	-.00121	.00016	.00040	.00125	.00777	78.965
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.09691**	**.00222**	**.05961**	**-.00125**	**-.00063**	**40.812**	**.00027**	**.00268**	**.00241**	**3.8193**	**-.00868**	**-.00776**	**.05557**
Stddev	.07774	.00062	.00087	.00004	.00003	.121	.00003	.00543	.00188	.1433	.00444	.01176	.01505
%RSD	80.222	28.096	1.4618	2.9034	4.3262	.29612	9.5050	202.94	77.781	3.7519	51.163	151.42	27.080
#1	-.15189	.00178	.06022	-.00128	-.00061	40.726	.00025	.00652	.00374	3.9206	-.01182	.00055	.04493
#2	-.04194	.00266	.05899	-.00123	-.00065	40.897	.00029	-.00116	.00109	3.7180	-.00554	-.01608	.06621
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11893**	**-.00177**	**.00026**	**3.0037**	**.01298**	**-.00135**	**5.1613**	**.00758**	**-.00017**	**.04524**
Stddev	.03221	.00094	.00007	.0199	.00008	.00144	.0038	.00024	.00000	.00264
%RSD	27.080	52.975	29.073	.66323	.58377	106.72	.07296	3.2142	.41532	5.8347
#1	.09615	-.00243	.00031	3.0178	.01304	-.00236	5.1587	.00776	-.00017	.04337
#2	.14170	-.00111	.00020	2.9896	.01293	-.00033	5.1640	.00741	-.00017	.04711
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2261.2**	**44270.**	**2401.6**
Stddev	6.1	450.	4.0
%RSD	.26998	1.0166	.16476
#1	2265.5	43952.	2404.4
#2	2256.8	44588.	2398.8

Sample Name: ICV-4589565 Acquired: 6/12/2017 13:34:46 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25259**	W **.26472**	**.25818**	**.25401**	**.25128**	**.24891**	**.00326**	**1.9769**	**.25492**	**.25289**	**.25233**	**.25783**
Stddev	.00004	.00350	.00231	.00198	.00104	.00015	.00191	.0115	.00122	.00204	.00142	.00022
%RSD	.01518	1.3213	.89316	.77930	.41312	.06215	58.444	.58167	.47871	.80856	.56449	.08541
#1	.25256	.26720	.25655	.25541	.25054	.24880	.00461	1.9687	.25578	.25434	.25334	.25767
#2	.25261	.26225	.25981	.25261	.25201	.24902	.00191	1.9850	.25406	.25145	.25132	.25798
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.25000										
Range		5.4900%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.26557**	**20.209**	**.25292**	**10.153**	**.25874**	**.23826**	**1.9801**	**.25598**	**2.0181**	**.25949**	**-.03102**	**.25389**
Stddev	.00250	.052	.00379	.028	.00062	.00019	.0028	.00293	.0158	.00212	.00682	.00347
%RSD	.93998	.25674	1.4978	.27508	.23964	.08092	.14022	1.1455	.78448	.81817	21.992	1.3673
#1	.26380	20.172	.25024	10.133	.25830	.23839	1.9821	.25805	2.0293	.26099	-.03584	.25635
#2	.26733	20.246	.25560	10.173	.25918	.23812	1.9782	.25390	2.0069	.25799	-.02620	.25144
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value	.25000											
Range	5.4900%											

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50329**	**2.0084**	**4.2980**	**.50057**	**.25340**	**.00164**	**.24765**	W **.53106**	**.03068**	**.25229**	**.25245**	**.24856**
Stddev	.00346	.0185	.0396	.00561	.00097	.00044	.00053	.00025	.02202	.00072	.00205	.00059
%RSD	.68716	.92089	.92089	1.1209	.38304	26.514	.21291	.04676	71.765	.28607	.81303	.23562
#1	.50084	2.0215	4.3260	.50454	.25271	.00133	.24728	.53089	.01511	.25178	.25099	.24815
#2	.50573	1.9953	4.2700	.49660	.25409	.00195	.24803	.53124	.04625	.25280	.25390	.24898
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	None	Chk Pass	Chk Pass	Chk Pass
Value								.50000				
Range								5.4900%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2238.3**	**46051.**	**2509.5**
Stddev	6.6	168.	8.2
%RSD	.29499	.36489	.32834
#1	2233.6	46170.	2503.7
#2	2243.0	45932.	2515.3

Sample Name: ICV-4589565 Acquired: 6/12/2017 13:37:36 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25475**	W **.26437**	**.25096**	**.25629**	**.25381**	**.24989**	**.00054**	**2.0061**	**.25517**	**.25321**	**.25066**	**.25778**
Stddev	.00071	.00436	.00380	.00505	.00125	.00072	.00344	.0080	.00401	.00369	.00382	.00065
%RSD	.27819	1.6485	1.5133	1.9691	.49279	.29001	633.70	.39986	1.5696	1.4590	1.5229	.25060
#1	.25425	.26745	.24827	.25986	.25292	.24938	.00298	2.0005	.25800	.25583	.25336	.25824
#2	.25525	.26128	.25364	.25272	.25469	.25040	-.00189	2.0118	.25234	.25060	.24796	.25733
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.25000										
Range		5.4900%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.26499**	**20.388**	**.25461**	**10.222**	**.26099**	**.23666**	**1.9900**	**.25655**	**2.0161**	**.25496**	**-.02969**	**.26109**
Stddev	.01482	.087	.00216	.036	.00056	.00369	.0218	.00337	.0355	.00486	.00206	.00273
%RSD	5.5913	.42513	.84995	.35468	.21472	1.5590	1.0939	1.3143	1.7588	1.9060	6.9521	1.0449
#1	.27547	20.326	.25308	10.248	.26139	.23926	1.9746	.25894	2.0412	.25840	-.03115	.26302
#2	.25451	20.449	.25614	10.197	.26059	.23405	2.0054	.25417	1.9910	.25152	-.02823	.25916
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value	.25000											
Range	5.4900%											

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50320**	**2.0028**	**4.2860**	**.49824**	**.25547**	**-.00110**	**.24861**	W **.53242**	**.04353**	**.25331**	**.25396**	**.24823**
Stddev	.00317	.0056	.0120	.00561	.00105	.00312	.00170	.01361	.02654	.00111	.00127	.00226
%RSD	.62938	.27907	.27907	1.1263	.41102	283.67	.68309	2.5565	60.954	.43676	.50078	.90975
#1	.50543	1.9989	4.2776	.50221	.25621	-.00331	.24981	.54204	.06230	.25409	.25485	.24982
#2	.50096	2.0068	4.2945	.49428	.25472	.00111	.24741	.52280	.02477	.25252	.25306	.24663
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	None	Chk Pass	Chk Pass	Chk Pass
Value								.50000				
Range								5.4900%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2188.0**	**44281.**	**2425.9**
Stddev	.4	150.	46.1
%RSD	.01901	.33858	1.9022
#1	2187.7	44175.	2458.6
#2	2188.3	44387.	2393.3

Sample Name: ICVL-4589022 Acquired: 6/12/2017 13:41:28 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00968**	**.10756**	F **.00967**	**.10031**	**.01005**	**.00094**	**.11092**	**.20336**	**.00517**	**.01093**	**.01037**	**.01531**
Stddev	.00052	.00010	.00202	.00105	.00028	.00016	.00444	.00372	.00035	.00055	.00094	.00027
%RSD	5.3729	.08968	20.911	1.0467	2.7602	16.675	4.0023	1.8306	6.8088	5.0763	9.0414	1.7875
#1	.01005	.10749	.01110	.10105	.01025	.00083	.11406	.20600	.00492	.01132	.00971	.01512
#2	.00932	.10762	.00824	.09957	.00985	.00105	.10778	.20073	.00541	.01054	.01103	.01550
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10918**	**2.9698**	**.02089**	**.20885**	**.01048**	**.01917**	**.97872**	**.04278**	**2.9177**	**.01137**	**.07067**	**.02327**
Stddev	.00266	.0015	.00298	.00619	.00001	.00006	.01591	.00101	.0018	.00042	.01221	.00469
%RSD	2.4389	.05049	14.247	2.9659	.09149	.29394	1.6257	2.3641	.06164	3.7031	17.271	20.148
#1	.11106	2.9708	.02300	.21323	.01049	.01921	.96747	.04350	2.9190	.01107	.07930	.01995
#2	.10730	2.9687	.01879	.20447	.01048	.01913	.98997	.04207	2.9165	.01167	.06204	.02658
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01354**	**.44441**	**.95103**	**.10132**	**.01018**	**.01434**	**.00999**	F **.02008**	**.05170**	**.00985**	**.02042**	**.01883**
Stddev	.00353	.01846	.03950	.00026	.00003	.00417	.00014	.00118	.01916	.00018	.00047	.00213
%RSD	26.079	4.1535	4.1535	.25760	.27868	29.056	1.3685	5.8773	37.056	1.8493	2.2945	11.320
#1	.01603	.45746	.97897	.10150	.01020	.01140	.00990	.01925	.06525	.00998	.02009	.02034
#2	.01104	.43136	.92310	.10114	.01016	.01729	.01009	.02092	.03815	.00972	.02076	.01733
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.02000							.01500				
Range	-30.000%							30.000%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2131.3**	**42910.**	**2314.4**
Stddev	1.2	49.	9.4
%RSD	.05695	.11345	.40686
#1	2132.2	42876.	2321.1
#2	2130.4	42944.	2307.8

Sample Name: ICVL-4589022 Acquired: 6/12/2017 13:46:59 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00897**	**.11357**	**.01055**	**.10154**	**.01048**	**.00082**	**.11108**	**.19832**	**.00521**	**.01078**	**.01095**	**.01660**
Stddev	.00066	.00089	.00989	.00016	.00005	.00009	.00019	.02036	.00018	.00034	.00012	.00037
%RSD	7.3558	.78038	93.677	.15350	.49283	11.310	.16899	10.269	3.4156	3.1584	1.0651	2.2264
#1	.00943	.11420	.01755	.10143	.01052	.00089	.11121	.18392	.00533	.01054	.01103	.01686
#2	.00850	.11294	.00356	.10165	.01044	.00076	.11094	.21272	.00508	.01102	.01087	.01634
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10706**	**2.9841**	**.02248**	**.20820**	**.01064**	**.01974**	**.96535**	**.04261**	**2.9345**	F **.01350**	F **.06357**	**.01574**
Stddev	.00027	.0483	.00255	.00163	.00003	.00038	.01038	.00086	.0023	.00082	.00115	.00686
%RSD	.24883	1.6196	11.349	.78200	.26344	1.9097	1.0754	2.0141	.07942	6.1050	1.8076	43.597
#1	.10724	2.9499	.02068	.20705	.01062	.02000	.97270	.04321	2.9328	.01408	.06439	.02060
#2	.10687	3.0182	.02428	.20936	.01066	.01947	.95801	.04200	2.9361	.01292	.06276	.01089
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass
Value										.00900	.10000	
Range										30.000%	-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.00959**	**.47927**	**1.0256**	**.10080**	**.00996**	**.01507**	**.01000**	**.01708**	**.06991**	**.00986**	**.02080**	**.01936**
Stddev	.00698	.09482	.2029	.00068	.00018	.00155	.00055	.00040	.02611	.00018	.00095	.00146
%RSD	72.809	19.784	19.784	.67452	1.7656	10.309	5.5315	2.3565	37.344	1.8343	4.5659	7.5651
#1	.01453	.41223	.88217	.10128	.00983	.01617	.01039	.01680	.08837	.00998	.02013	.01832
#2	.00465	.54632	1.1691	.10032	.01008	.01397	.00961	.01737	.05145	.00973	.02147	.02039
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.02000											
Range	-30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2181.6**	**41744.**	**2196.7**
Stddev	29.5	67.	7.6
%RSD	1.3513	.16085	.34479
#1	2160.7	41697.	2202.1
#2	2202.4	41792.	2191.3

Sample Name: ICVL-4589022 Acquired: 6/12/2017 13:49:31 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00985**	**.11076**	F **.00862**	**.10076**	**.01025**	**.00078**	**.11009**	**.20189**	**.00508**	**.01071**	**.01056**	**.01525**
Stddev	.00054	.00233	.01170	.00083	.00002	.00009	.00038	.01108	.00045	.00041	.00038	.00016
%RSD	5.4730	2.0997	135.75	.82335	.19118	12.084	.34605	5.4890	8.7837	3.8617	3.6223	1.0501
#1	.00947	.11240	.00035	.10018	.01026	.00085	.10982	.19405	.00539	.01041	.01029	.01536
#2	.01023	.10912	.01689	.10135	.01023	.00071	.11036	.20973	.00476	.01100	.01084	.01514
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10835**	**2.8868**	**.02096**	**.21163**	**.01046**	**.01901**	**.91320**	**.04187**	**2.9180**	F **.01388**	**.07106**	**.02027**
Stddev	.00470	.1462	.00147	.00753	.00008	.00070	.00416	.00021	.0179	.00080	.00195	.00471
%RSD	4.3368	5.0651	6.9915	3.5560	.80828	3.6831	.45522	.49533	.61368	5.7296	2.7403	23.236
#1	.11167	2.7834	.01993	.21695	.01041	.01951	.91614	.04201	2.9307	.01332	.06968	.01694
#2	.10503	2.9902	.02200	.20631	.01052	.01852	.91026	.04172	2.9053	.01445	.07243	.02359
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value										.00900		
Range										30.000%		

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.00993**	**.50261**	**1.0756**	**.09985**	**.01025**	**.01300**	**.00999**	F **.02144**	**.06191**	**.00969**	**.02039**	F **.01958**
Stddev	.00470	.02694	.0577	.00147	.00018	.00031	.00002	.00422	.03237	.00008	.00028	.00323
%RSD	47.286	5.3598	5.3598	1.4754	1.7391	2.4025	.23314	19.706	52.278	.85138	1.3690	16.486
#1	.01325	.48356	1.0348	.10089	.01038	.01322	.01000	.01845	.08480	.00975	.02059	.01729
#2	.00661	.52166	1.1163	.09880	.01012	.01278	.00997	.02442	.03902	.00963	.02019	.02186
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value	.02000							.01500				.01500
Range	-30.000%							30.000%				30.000%

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2218.0**	**44355.**	**2362.2**
Stddev	7.9	26.	.1
%RSD	.35756	.05812	.00542
#1	2212.4	44337.	2362.3
#2	2223.6	44374.	2362.1

Sample Name: CCVH-4579429 Acquired: 6/12/2017 13:54:39 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01044**	**48.812**	**-.00710**	**.00136**	**.00072**	**.00015**	**.99174**	**-.00313**	**.00035**	**-.00076**	**.00099**	**.01577**	**48.994**
Stddev	.00024	.130	.00631	.00083	.00047	.00010	.01463	.00018	.00003	.00025	.00013	.00082	.050
%RSD	2.2671	.26630	88.881	60.997	65.122	63.788	1.4751	5.6846	7.7907	32.158	12.779	5.2108	.10226
#1	-.01060	48.904	-.00264	.00078	.00106	.00008	.98139	-.00326	.00037	-.00094	.00108	.01519	49.030
#2	-.01027	48.720	-.01156	.00195	.00039	.00022	1.0021	-.00301	.00033	-.00059	.00090	.01635	48.959
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.10659**	**.00097**	**.09796**	**-.00201**	**-.00104**	**247.79**	**.00122**	**.00363**	**.00034**	**4.8891**	**-.01240**	**-.00960**	**.02767**
Stddev	.02939	.00187	.00565	.00000	.00045	.90	.00038	.00355	.00119	.0727	.00206	.00292	.02231
%RSD	27.573	193.76	5.7654	.23414	43.535	.36452	30.860	97.795	350.42	1.4865	16.641	30.466	80.645
#1	-.12737	.00229	.09396	-.00201	-.00136	248.43	.00149	.00112	-.00050	4.8377	-.01386	-.00753	.01189
#2	-.08581	-.00036	.10195	-.00200	-.00072	247.15	.00096	.00614	.00118	4.9405	-.01094	-.01167	.04345
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05921**	**-.00375**	**.00048**	**4.9276**	**.02266**	**.00557**	**10.058**	**.01394**	**-.00017**	**.07066**
Stddev	.04775	.00090	.00004	.0204	.00057	.00274	.017	.00102	.00038	.00564
%RSD	80.645	23.888	8.8842	.41353	2.5347	49.132	.16464	7.3167	224.28	7.9790
#1	.02545	-.00438	.00045	4.9131	.02307	.00364	10.070	.01322	-.00044	.06667
#2	.09298	-.00312	.00051	4.9420	.02226	.00751	10.046	.01466	.00010	.07465
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2187.7**	**43502.**	**2403.9**
Stddev	7.8	141.	3.1
%RSD	.35604	.32333	.13099
#1	2193.2	43403.	2406.2
#2	2182.2	43601.	2401.7

Sample Name: CCV-4580817 Acquired: 6/12/2017 13:57:14 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50358**	**.50609**	**.97995**	**.50154**	**.49964**	**.49734**	**-.00197**	**4.9571**	**.49690**	**.49567**	**.48818**	**.50176**	**2.4827**
Stddev	.00186	.01327	.02644	.01147	.00216	.00170	.00011	.0326	.01178	.01184	.01311	.00091	.0010
%RSD	.37004	2.6228	2.6985	2.2876	.43219	.34127	5.5562	.65694	2.3703	2.3890	2.6855	.18140	.03909
#1	.50489	.51548	.99865	.50965	.49811	.49614	-.00204	4.9341	.50523	.50405	.49745	.50111	2.4834
#2	.50226	.49671	.96125	.49343	.50116	.49854	-.00189	4.9802	.48857	.48730	.47891	.50240	2.4820
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.289**	**1.0045**	**20.106**	**.50354**	**.48557**	**5.0126**	**.49653**	**.99165**	**.99786**	**-.03952**	**.99144**	**.99379**	**4.9376**
Stddev	.274	.0040	.036	.00132	.01255	.0155	.01176	.03023	.02407	.00824	.02614	.01250	.0524
%RSD	.54506	.39557	.17726	.26130	2.5840	.30956	2.3678	3.0486	2.4121	20.854	2.6361	1.2580	1.0604
#1	50.095	1.0017	20.131	.50447	.49444	5.0017	.50484	1.0130	1.0149	-.04535	1.0099	1.0026	4.9006
#2	50.483	1.0073	20.080	.50260	.47670	5.0236	.48821	.97027	.98084	-.03369	.97296	.98495	4.9746
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.566**	**.98701**	**.49972**	**.00235**	**.49895**	**1.0053**	**.04012**	**.50066**	**.49830**	**.49842**
Stddev	.112	.02597	.00280	.00093	.00088	.0170	.01181	.00134	.00178	.00447
%RSD	1.0604	2.6310	.56068	39.679	.17709	1.6907	29.439	.26787	.35788	.89774
#1	10.487	1.0054	.49774	.00169	.49958	1.0173	.04847	.50161	.49956	.49525
#2	10.646	.96864	.50170	.00301	.49833	.99324	.03177	.49971	.49704	.50158
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2221.3**	**44628.**	**2415.1**
Stddev	15.5	82.	18.1
%RSD	.69836	.18293	.74994
#1	2232.2	44686.	2427.9
#2	2210.3	44570.	2402.2

Sample Name: ICB Acquired: 6/12/2017 13:59:44 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00065**	**-.00083**	**-.00297**	**.00004**	**-.00046**	**-.00017**	**-.00195**	**.00145**	**.00008**	**.00046**	**.00069**	**-.00091**	**.00564**
Stddev	.00063	.00024	.01026	.00051	.00003	.00000	.00174	.00967	.00003	.00019	.00034	.00035	.00500
%RSD	97.723	28.696	345.03	1226.4	6.6310	.12071	88.947	666.64	40.255	41.216	49.163	38.259	88.710
#1	-.00110	-.00099	-.01023	.00040	-.00044	-.00017	-.00072	.00829	.00006	.00060	.00093	-.00116	.00917
#2	-.00020	-.00066	.00428	-.00032	-.00048	-.00017	-.00318	-.00539	.00011	.00033	.00045	-.00066	.00210
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.12437**	**-.00004**	**.00173**	**.00003**	**.00044**	**-.11013**	**.00084**	**.00197**	**.00277**	**-.05076**	**-.00509**	**-.00389**	**.03803**
Stddev	.02338	.00130	.00634	.00003	.00055	.00598	.00002	.00393	.00256	.01218	.00173	.00247	.00271
%RSD	18.802	3116.8	366.54	91.042	127.16	5.4311	2.6246	199.45	92.465	24.000	33.934	63.351	7.1395
#1	-.10784	.00088	-.00275	.00005	.00004	-.11436	.00083	.00475	.00458	-.05938	-.00631	-.00215	.03611
#2	-.14091	-.00096	.00621	.00001	.00083	-.10590	.00086	-.00081	.00096	-.04215	-.00387	-.00563	.03995
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.08138**	**-.00133**	**.00015**	**.00044**	**.00002**	**.00085**	**-.00794**	**.00042**	**-.00012**	**.00714**
Stddev	.00581	.00086	.00020	.00176	.00020	.00362	.03463	.00045	.00001	.00019
%RSD	7.1395	64.868	133.97	403.58	959.32	428.34	436.38	106.10	5.6975	2.7010
#1	.07727	-.00072	.00029	.00168	-.00012	-.00172	-.03242	.00074	-.00013	.00701
#2	.08548	-.00194	.00001	-.00081	.00016	.00341	.01655	.00011	-.00012	.00728
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2237.7**	**45712.**	**2421.4**
Stddev	6.7	27.	23.8
%RSD	.30048	.05962	.98273
#1	2242.5	45731.	2438.2
#2	2233.0	45693.	2404.5

Sample Name: CRI-4589026 Acquired: 6/12/2017 14:04:56 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00850**	**.10886**	W **.01320**	**.10321**	**.00516**	W **.00065**	**.11471**	**.20312**	**.00525**	**.00557**	**.01129**	**.01059**
Stddev	.00023	.00031	.00075	.00013	.00032	.00006	.00090	.00581	.00023	.00012	.00038	.00056
%RSD	2.7356	.28127	5.7069	.12888	6.2292	9.2289	.78342	2.8590	4.3816	2.1403	3.3622	5.2942
#1	.00867	.10908	.01373	.10331	.00494	.00061	.11407	.19901	.00509	.00566	.01102	.01019
#2	.00834	.10864	.01266	.10312	.00539	.00070	.11534	.20723	.00541	.00549	.01156	.01099
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01000			.00100						
Range			20.490%			-20.490%						

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02734**	**.98895**	**.01003**	**.21831**	**.00320**	**.01045**	**.89692**	**.01121**	**1.0052**	F **.00591**	W **.05433**	W **.00644**
Stddev	.00087	.07954	.00184	.00902	.00008	.00037	.02055	.00041	.0020	.00018	.00389	.00712
%RSD	3.1982	8.0425	18.394	4.1334	2.3842	3.5355	2.2909	3.6606	.19789	3.0642	7.1568	110.47
#1	.02673	.93271	.01133	.22469	.00315	.01071	.91145	.01150	1.0038	.00604	.05708	.01147
#2	.02796	1.0452	.00872	.21193	.00325	.01019	.88239	.01092	1.0067	.00578	.05158	.00141
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Warn	Chk Warn
Value										.00300	.10000	.01000
Range										50.000%	-20.490%	-20.490%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.00091**	**.48572**	**1.0394**	**.01749**	**.00526**	**.00914**	**.00997**	W **.01358**	**.05755**	**.01001**	**.01004**	F **.01542**
Stddev	.00855	.00949	.0203	.00148	.00005	.00083	.00026	.00263	.01336	.00067	.00051	.00537
%RSD	938.18	1.9534	1.9534	8.4418	.87169	9.0424	2.6224	19.342	23.220	6.6554	5.0967	34.822
#1	-.00514	.49243	1.0538	.01645	.00522	.00856	.01015	.01543	.04810	.01048	.00968	.01922
#2	.00696	.47901	1.0251	.01854	.00529	.00972	.00978	.01172	.06700	.00954	.01040	.01163
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value	.01000							.01000				.01000
Range	-50.000%							20.490%				50.000%

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2224.0**	**44747.**	**2395.0**
Stddev	10.9	220.	7.2
%RSD	.48804	.49059	.30018
#1	2231.7	44903.	2400.1
#2	2216.4	44592.	2390.0

Sample Name: cri-4590017 Acquired: 6/12/2017 14:18:30 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00066**	**.00080**	**.00047**	**-.00176**	**.00002**	**-.00017**	**.00289**	**.00725**	**.00001**	**.00023**	**.00009**	**-.00009**
Stddev	.00101	.00034	.00623	.00123	.00015	.00007	.00223	.00500	.00009	.00007	.00026	.00019
%RSD	153.00	42.006	1313.3	70.067	646.28	41.058	77.224	68.947	1116.7	30.871	304.37	210.54
#1	-.00138	.00056	-.00393	-.00089	-.00008	-.00023	.00131	.01078	-.00005	.00028	-.00010	.00004
#2	.00005	.00104	.00488	-.00263	.00013	-.00012	.00447	.00371	.00007	.00018	.00027	-.00022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00147**	**-.08311**	**-.00072**	**-.00049**	**-.00008**	**.00040**	**-.16621**	**.00067**	**-.00029**	F **.01298**	**-.04434**	**.00276**
Stddev	.00662	.05728	.00273	.00082	.00002	.00002	.00701	.00053	.00462	.00039	.00252	.00400
%RSD	451.29	68.925	377.75	167.65	30.880	4.6024	4.2202	77.971	1575.3	2.9806	5.6746	145.29
#1	.00321	-.12361	-.00265	-.00108	-.00006	.00042	-.16125	.00030	-.00356	.01270	-.04612	.00559
#2	-.00614	-.04260	.00121	.00009	-.00009	.00039	-.17117	.00105	.00297	.01325	-.04256	-.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit										.01000		
Low Limit										-.01000		

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.01385**	**.01367**	**.02925**	**-.00019**	**.00005**	**-.00110**	**-.00054**	**.00088**	**-.02788**	**-.00000**	**.00013**	F **.01715**
Stddev	.00573	.07048	.15083	.00025	.00015	.00108	.00062	.00038	.06270	.00012	.00020	.00028
%RSD	41.347	515.59	515.59	132.93	330.63	97.984	113.48	42.962	224.89	5107.1	150.83	1.6430
#1	.00980	-.03617	-.07740	-.00001	.00015	-.00034	-.00098	.00115	-.07221	.00009	.00028	.01695
#2	.01789	.06351	.13590	-.00037	-.00006	-.00186	-.00011	.00061	.01645	-.00009	-.00001	.01735
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit	.00750											.00900
Low Limit	-.01500											-.01500

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2148.2**	**43314.**	**2276.1**
Stddev	10.1	19.	.1
%RSD	.47016	.04360	.00233
#1	2155.4	43327.	2276.0
#2	2141.1	43301.	2276.1

Sample Name: ICSA-4576193 Acquired: 6/12/2017 14:28:52 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00104**	**494.42**	**.00291**	**-.00518**	**-.00015**	**-.00007**	**-.00034**	**457.67**	W **.00101**	**.00071**	W **.00205**
Stddev	.00003	4.36	.00747	.00007	.00069	.00009	.00775	3.81	.00014	.00015	.00035
%RSD	2.6137	.88264	257.06	1.2712	444.48	128.35	2271.7	.83166	13.826	21.039	17.154
#1	-.00102	491.34	-.00238	-.00514	-.00064	-.00001	-.00582	454.98	.00092	.00081	.00180
#2	-.00106	497.51	.00819	-.00523	.00033	-.00013	.00514	460.37	.00111	.00060	.00230
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn
High Limit									.00080		.00186
Low Limit									-.00080		-.00186

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00199**	**182.78**	**-.12304**	**.00143**	**526.70**	W **.00078**	W **-.00819**	**.02515**	W **.00275**	**-.00993**	F **-.01235**
Stddev	.00023	1.07	.00584	.00038	.42	.00001	.00003	.05186	.00044	.00087	.00023
%RSD	11.580	.58431	4.7478	26.457	.07975	1.2021	.35442	206.15	15.935	8.7761	1.8422
#1	.00183	182.02	-.11891	.00169	526.99	.00078	-.00816	-.01151	.00306	-.00932	-.01251
#2	.00215	183.53	-.12717	.00116	526.40	.00077	-.00821	.06182	.00244	-.01055	-.01219
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail
High Limit						.00050	.00626		.00258		.00800
Low Limit						-.00050	-.00626		-.00258		-.00800

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.14293**	W **-.01021**	**-.00037**	**.02999**	**.06419**	**.00052**	W **.00450**	W **.01257**	**.00033**	**-.00001**	**.04224**
Stddev	.01219	.00049	.00824	.01730	.03701	.00052	.00004	.00157	.00036	.01015	.01022
%RSD	8.5306	4.7970	2235.0	57.667	57.667	100.53	.90756	12.513	107.54	141780.	24.184
#1	-.15156	-.01056	-.00620	.01776	.03801	.00015	.00453	.01368	.00008	.00717	.03502
#2	-.13431	-.00987	.00546	.04222	.09036	.00089	.00447	.01145	.00059	-.00718	.04946
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit		.00628					.00050	.00800			
Low Limit		-.00628					-.00050	-.00800			

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	**-.00180**	**-.00077**	**.00465**
Stddev	.00087	.00153	.00275
%RSD	48.487	198.94	59.195
#1	-.00119	.00031	.00270
#2	-.00242	-.00185	.00659
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1979.9**	**38094.**	**2333.4**
Stddev	2.8	11.	12.2
%RSD	.14302	.02914	.52113
#1	1981.9	38101.	2342.0
#2	1977.9	38086.	2324.8

Sample Name: ICSAB-4579055 Acquired: 6/12/2017 14:31:33 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.1101**	**496.57**	**1.9704**	**1.8841**	**.49047**	**.48287**	**.99938**	**458.45**	**.99626**	**.44175**	**.45359**	**.55421**	**183.14**	**52.898**
Stddev	.0026	1.60	.0527	.0445	.00109	.00080	.03211	1.09	.02926	.01233	.01385	.00146	.26	.199
%RSD	.23065	.32295	2.6732	2.3626	.22270	.16574	3.2132	.23713	2.9368	2.7915	3.0537	.26313	.14314	.37701
#1	1.1119	495.44	2.0076	1.9156	.48970	.48231	1.0221	457.68	1.0170	.45047	.46338	.55524	182.96	52.757
#2	1.1083	497.71	1.9332	1.8526	.49124	.48344	.97667	459.21	.97558	.43303	.44379	.55317	183.33	53.039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0496**	**510.45**	**.50233**	**.87744**	**51.436**	**.88104**	**1.9327**	**.86955**	**.89904**	**.98097**	**4.8005**	**9.9506**	**21.294**	**8.7810**
Stddev	.0056	2.13	.00095	.02611	.137	.02500	.0602	.02897	.01804	.03636	.1207	.0225	.048	.2539
%RSD	.53722	.41697	.18870	2.9763	.26691	2.8377	3.1134	3.3316	2.0070	3.7064	2.5143	.22603	.22603	2.8917
#1	1.0457	511.95	.50300	.89591	51.533	.89872	1.9752	.89004	.91180	1.0067	4.8858	9.9665	21.328	8.9605
#2	1.0536	508.94	.50166	.85897	51.339	.86336	1.8901	.84907	.88628	.95526	4.7151	9.9347	21.260	8.6014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.98787**	**2.1076**	**1.0228**	**8.3450**	**.00316**	**.50985**	**.96957**	**1.0624**
Stddev	.00209	.0107	.0020	.1883	.00892	.00295	.00442	.0001
%RSD	.21152	.50950	.19238	2.2560	282.47	.57926	.45571	.00467
#1	.98640	2.1152	1.0242	8.4782	-.00315	.51194	.97270	1.0624
#2	.98935	2.1000	1.0214	8.2119	.00946	.50777	.96645	1.0623
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**1999.9**	**38174.**	**2296.0**
Stddev	16.7	325.	10.7
%RSD	.83665	.85150	.46668
#1	1988.1	37944.	2288.4
#2	2011.7	38404.	2303.6

Sample Name: LRA-4556451 Acquired: 6/12/2017 14:34:02 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00268**	**.07409**	**9.4659**	**9.5945**	**12.002**	**-.00103**	**-.03825**	**.09478**	**1.9488**	**4.7931**	**9.3859**	**10.704**	**499.64**
Stddev	.00089	.02258	.2472	.2488	.018	.00028	.00135	.01071	.0565	.1376	.3058	.027	1.14
%RSD	33.110	30.477	2.6115	2.5927	.14921	27.520	3.5360	11.302	2.8981	2.8700	3.2583	.25241	.22732
#1	-.00331	.09006	9.6406	9.7704	11.989	-.00123	-.03729	.10235	1.9888	4.8903	9.6022	10.723	498.83
#2	-.00206	.05813	9.2911	9.4186	12.014	-.00083	-.03920	.08720	1.9089	4.6958	9.1697	10.685	500.44
Check ?	None	None	Chk Pass	Chk Pass	Chk Pass	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.15915**	**-.00043**	**.06243**	**10.097**	**4.6243**	**-.02149**	**9.7011**	**-.00681**	**9.5417**	**-.09370**	**.01129**	**4.8000**	**47.850**
Stddev	.14545	.00074	.00341	.117	.1500	.02265	.2781	.00442	.2820	.00482	.00455	.1381	.253
%RSD	91.397	174.82	5.4567	1.1565	3.2428	105.39	2.8666	64.973	2.9557	5.1441	40.323	2.8762	.52898
#1	-.05629	-.00095	.06484	10.180	4.7304	-.00548	9.8977	-.00994	9.7411	-.09029	.01451	4.8976	47.671
#2	-.26200	.00010	.06002	10.015	4.5183	-.03751	9.5044	-.00368	9.3422	-.09711	.00807	4.7023	48.029
Check ?	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**102.40**	**.00152**	**10.153**	**.01280**	**9.8240**	**4.8544**	**.11944**	**10.057**	**9.7492**	**.00818**
Stddev	.54	.00145	.015	.00641	.0256	.1290	.05653	.024	.0439	.00170
%RSD	.52898	95.546	.14455	50.026	.26112	2.6568	47.329	.24095	.44995	20.842
#1	102.02	.00255	10.143	.01733	9.8421	4.9456	.07947	10.074	9.7803	.00938
#2	102.78	.00049	10.164	.00827	9.8058	4.7632	.15942	10.040	9.7182	.00697
Check ?	None	None	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2169.6**	**43406.**	**2380.4**
Stddev	1.2	62.	9.3
%RSD	.05460	.14216	.39211
#1	2170.4	43362.	2373.8
#2	2168.7	43449.	2387.0

Sample Name: CCVH-4579429 Acquired: 6/12/2017 14:36:34 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01131**	**47.802**	**-.00587**	**.01881**	**.00167**	**.00003**	W **.94952**	**.00588**	**.00038**	**-.00081**	**.00155**	**.01549**
Stddev	.00014	.030	.00009	.00225	.00033	.00044	.02988	.00514	.00043	.00005	.00074	.00010
%RSD	1.2235	.06183	1.6069	11.962	19.760	1350.8	3.1465	87.459	114.98	6.6141	47.561	.62914
#1	-.01121	47.823	-.00580	.02041	.00191	.00035	.97064	.00951	.00069	-.00084	.00207	.01542
#2	-.01141	47.781	-.00593	.01722	.00144	-.00028	.92839	.00224	.00007	-.00077	.00103	.01556
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							-5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.029**	**-.24207**	**-.00306**	**.10865**	**-.00134**	**-.00028**	**243.35**	**.00154**	**.00239**	**.00142**	W **4.5546**	**-.01115**
Stddev	.027	.04685	.00032	.00161	.00002	.00025	.26	.00025	.00083	.00029	.1405	.00050
%RSD	.05553	19.356	10.575	1.4798	1.3832	89.627	.10553	16.350	34.758	20.405	3.0842	4.5121
#1	48.010	-.27520	-.00329	.10751	-.00132	-.00046	243.54	.00136	.00180	.00122	4.6539	-.01150
#2	48.047	-.20894	-.00283	.10979	-.00135	-.00010	243.17	.00172	.00297	.00163	4.4553	-.01079
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Warn	None
Value											5.0000	
Range											-5.0000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00407**	**.01970**	**.04216**	**-.00417**	**.00144**	**4.8807**	**.02372**	**.00280**	**9.9582**	**.01434**	**-.00015**	**.06603**
Stddev	.00454	.00936	.02004	.00104	.00008	.0138	.00030	.00444	.0032	.00077	.00075	.00107
%RSD	111.46	47.525	47.525	24.843	5.2918	.28225	1.2703	158.80	.03184	5.3642	483.23	1.6199
#1	-.00086	.01308	.02799	-.00344	.00150	4.8905	.02351	.00594	9.9560	.01380	.00037	.06679
#2	-.00728	.02632	.05633	-.00490	.00139	4.8710	.02393	-.00034	9.9605	.01488	-.00068	.06527
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2203.5**	**43520.**	**2410.3**
Stddev	1.0	142.	18.3
%RSD	.04687	.32528	.75777
#1	2202.8	43620.	2397.4
#2	2204.3	43420.	2423.3

Sample Name: CCV-4580817 Acquired: 6/12/2017 14:39:11 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48867**	**.48733**	**.93233**	**.49804**	**.48047**	**.48362**	**-.00024**	**4.7897**	**.48295**	**.48343**	**.46052**	**.51162**	**2.4355**
Stddev	.00006	.01182	.02223	.00993	.00293	.00211	.00070	.0074	.01030	.01010	.01275	.00055	.0205
%RSD	.01166	2.4263	2.3843	1.9941	.61049	.43568	285.95	.15421	2.1319	2.0889	2.7686	.10706	.84319
#1	.48871	.49569	.94805	.50506	.47839	.48213	-.00074	4.7949	.49023	.49057	.46953	.51123	2.4500
#2	.48863	.47896	.91661	.49102	.48254	.48511	.00025	4.7845	.47567	.47629	.45150	.51201	2.4210
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.641**	**.98981**	**19.266**	**.49792**	**.46050**	**4.7739**	**.48153**	**.96550**	**.93909**	**-.05592**	**.96176**	**.95291**	**4.8987**
Stddev	.154	.00252	.036	.00029	.01060	.0105	.01261	.01684	.01945	.00227	.01771	.03497	.0786
%RSD	.31726	.25469	.18543	.05760	2.3008	.22012	2.6188	1.7437	2.0713	4.0568	1.8410	3.6701	1.6039
#1	48.532	.98803	19.291	.49813	.46800	4.7813	.49045	.97740	.95285	-.05432	.97428	.97764	4.8431
#2	48.750	.99159	19.241	.49772	.45301	4.7664	.47261	.95359	.92534	-.05753	.94924	.92818	4.9543
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.483**	**.92949**	**.48504**	**.00433**	**.49062**	**.95767**	**-.00665**	**.49868**	**.48780**	**.49201**
Stddev	.168	.01929	.00231	.00311	.00125	.01897	.02301	.00042	.00057	.00126
%RSD	1.6039	2.0752	.47567	71.763	.25534	1.9804	345.93	.08348	.11769	.25701
#1	10.364	.94312	.48341	.00213	.49150	.97108	-.02292	.49897	.48740	.49112
#2	10.602	.91585	.48667	.00653	.48973	.94426	.00962	.49838	.48821	.49291
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2232.5**	**44121.**	**2434.8**
Stddev	1.5	123.	10.4
%RSD	.06566	.27949	.42725
#1	2233.6	44034.	2442.1
#2	2231.5	44208.	2427.4

Sample Name: CCB Acquired: 6/12/2017 14:41:41 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00044**	**.00128**	**.00050**	**.00705**	**.00008**	**.00020**	**.00074**	**.00981**	**.00018**	**.00019**	**.00049**	**-.00082**	**.00176**
Stddev	.00094	.00052	.00150	.00024	.00013	.00003	.00170	.00041	.00032	.00009	.00003	.00025	.01089
%RSD	213.31	40.787	298.68	3.4095	158.40	17.527	229.93	4.1918	183.02	44.303	6.4514	30.476	618.01
#1	.00022	.00165	-.00056	.00722	.00017	.00022	.00194	.01010	-.00005	.00013	.00047	-.00100	-.00594
#2	-.00111	.00091	.00157	.00688	-.00001	.00017	-.00046	.00952	.00041	.00025	.00052	-.00064	.00947
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.22250**	**.00041**	**.00625**	**-.00002**	**.00110**	**-.25451**	**.00036**	**.00229**	**.00216**	**-.06014**	**.00207**	**-.00465**	**-.00334**
Stddev	.05015	.00203	.00085	.00004	.00031	.00676	.00017	.00045	.00009	.00247	.00039	.00421	.02115
%RSD	22.541	498.90	13.537	157.00	28.158	2.6557	46.600	19.564	4.1794	4.1073	18.786	90.587	633.06
#1	-.25797	-.00103	.00685	.00000	.00131	-.25929	.00048	.00197	.00222	-.06189	.00235	-.00762	-.01830
#2	-.18704	.00184	.00565	-.00005	.00088	-.24973	.00024	.00260	.00209	-.05839	.00180	-.00167	.01162
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00715**	**.00024**	**.00010**	**-.00091**	**.00047**	**.00179**	**.01055**	**-.00004**	**-.00023**	**.00396**
Stddev	.04527	.00365	.00022	.00459	.00016	.00335	.03273	.00068	.00014	.00190
%RSD	633.06	1532.9	215.50	502.03	33.974	186.62	310.14	1708.2	59.519	48.018
#1	-.03916	.00282	.00026	.00233	.00058	-.00057	-.01259	-.00052	-.00033	.00530
#2	.02486	-.00235	-.00005	-.00416	.00036	.00416	.03370	.00044	-.00013	.00262
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2236.1**	**44834.**	**2424.1**
Stddev	2.2	78.	10.1
%RSD	.09739	.17357	.41780
#1	2234.5	44889.	2417.0
#2	2237.6	44779.	2431.3

Sample Name: CCVL-4589022 Acquired: 6/12/2017 14:44:21 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00944**	**.09811**	**.01444**	**.09973**	**.00943**	**.00102**	**.10254**	**.19093**	**.00478**	**.01016**	**.00988**	**.01568**
Stddev	.00043	.00738	.00362	.00294	.00020	.00007	.00429	.01104	.00045	.00076	.00069	.00022
%RSD	4.5429	7.5195	25.079	2.9484	2.1411	7.1270	4.1846	5.7818	9.3634	7.4772	7.0218	1.3930
#1	.00974	.10332	.01188	.10181	.00929	.00097	.10557	.18313	.00509	.01070	.01037	.01552
#2	.00913	.09289	.01700	.09765	.00957	.00107	.09950	.19874	.00446	.00963	.00939	.01583
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10572**	**2.7656**	**.02314**	**.19289**	**.01021**	**.01812**	**.73733**	**.03942**	**2.7013**	**.01090**	F **.03766**	**.01782**
Stddev	.00077	.0163	.00146	.00727	.00007	.00079	.01389	.00215	.0993	.00134	.00356	.00089
%RSD	.73003	.58755	6.2911	3.7682	.72714	4.3711	1.8831	5.4538	3.6769	12.342	9.4503	4.9832
#1	.10517	2.7541	.02211	.18775	.01027	.01868	.74715	.04094	2.7716	.01185	.04018	.01719
#2	.10626	2.7771	.02417	.19803	.01016	.01756	.72751	.03790	2.6311	.00995	.03515	.01845
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.00160**	**.45213**	**.96756**	**.08987**	**.00982**	**.01328**	**.00996**	**.01581**	F **.04102**	**.01007**	**.01953**	F **.01961**
Stddev	.00642	.03791	.08113	.00241	.00030	.00095	.00008	.00244	.01866	.00007	.00009	.00377
%RSD	402.38	8.3855	8.3855	2.6788	3.1000	7.1646	.75396	15.441	45.493	.70951	.47062	19.227
#1	-.00295	.42532	.91019	.09157	.01004	.01395	.00991	.01409	.02782	.01012	.01960	.01695
#2	.00614	.47894	1.0249	.08816	.00961	.01261	.01002	.01754	.05422	.01002	.01947	.02228
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
Value	.02000								.06000			.01500
Range	-30.000%								-30.000%			30.000%

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2230.4**	**44585.**	**2380.3**
Stddev	1.6	130.	1.6
%RSD	.07307	.29236	.06869
#1	2229.3	44492.	2381.5
#2	2231.6	44677.	2379.2

Sample Name: MB 280-376423/1-A Acquired: 6/12/2017 14:47:00 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/9 Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **-.00026**	**.00804**	W **-.00791**	W **.00536**	**.00034**	**.00019**	**-.00272**	**.02671**	**-.00001**
Stddev	.00079	.00176	.00580	.00006	.00016	.00008	.00052	.01161	.00018
%RSD	301.80	21.848	73.278	1.0322	48.186	42.763	19.024	43.485	1484.4
#1	.00030	.00929	-.00381	.00540	.00022	.00013	-.00235	.01850	.00012
#2	-.00082	.00680	-.01201	.00532	.00045	.00025	-.00309	.03492	-.00014
Check ?	Chk Fail	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.01000		.00900	.00392					
Low Limit	-.00010		-.00500	-.00500					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00042**	**.00052**	**-.00039**	W **.03371**	**-.15315**	**-.00116**	**.01474**	**.00017**	**.00013**
Stddev	.00016	.00042	.00001	.00546	.03331	.00240	.00099	.00006	.00006
%RSD	37.425	80.692	2.4944	16.202	21.752	206.35	6.7409	36.251	45.373
#1	.00053	.00082	-.00038	.03757	-.17670	.00053	.01404	.00021	.00017
#2	.00031	.00022	-.00039	.02985	-.12959	-.00286	.01544	.00012	.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01710					
Low Limit				-.05000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.13579**	**.00100**	**.00354**	**.00222**	F **-.04105**	**.00085**	W **-.00845**	**-.00384**	**-.00822**
Stddev	.00103	.00009	.00076	.00022	.00381	.00099	.00365	.00147	.00315
%RSD	.75916	8.6487	21.371	10.071	9.2708	116.76	43.251	38.308	38.308
#1	-.13652	.00106	.00408	.00238	-.03835	.00154	-.01103	-.00280	-.00600
#2	-.13506	.00094	.00301	.00206	-.04374	.00015	-.00586	-.00488	-.01045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Warn	Chk Pass	None
High Limit					.01000		.00500		
Low Limit					-.01000		-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00027**	**.00034**	**-.00155**	**.00034**	**.00295**	**-.00104**	**.00033**	**.00103**	**.00432**
Stddev	.00357	.00008	.00072	.00015	.00384	.02540	.00016	.00044	.00130
%RSD	1304.0	24.287	46.238	44.838	130.13	2441.6	49.229	42.214	30.169
#1	-.00280	.00028	-.00104	.00045	.00024	-.01900	.00021	.00072	.00524
#2	.00225	.00040	-.00205	.00023	.00567	.01692	.00044	.00134	.00340
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2222.2**	**45029.**	**2375.1**
Stddev	4.1	29.	1.4
%RSD	.18326	.06331	.05805
#1	2225.1	45009.	2374.1
#2	2219.3	45049.	2376.1

Sample Name: LCS 280-376423/2-A Acquired: 6/12/2017 14:49:40 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04880**	**1.9205**	**1.0180**	**1.0112**	**1.9960**	**.05029**	**2.0557**	**48.449**	**.10358**
Stddev	.00074	.0496	.0255	.0223	.0093	.00019	.0509	.175	.00283
%RSD	1.5111	2.5824	2.5001	2.2014	.46486	.37103	2.4772	.36092	2.7319
#1	.04933	1.9555	1.0360	1.0270	1.9894	.05016	2.0918	48.325	.10558
#2	.04828	1.8854	.99996	.99548	2.0025	.05042	2.0197	48.572	.10158
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49075**	W **.18996**	**.27975**	**1.0237**	**51.700**	**1.0448**	**50.015**	**.51762**	**.90585**
Stddev	.01055	.00521	.00027	.0137	.180	.0008	.132	.00137	.01969
%RSD	2.1501	2.7402	.09656	1.3410	.34845	.07302	.26351	.26559	2.1741
#1	.49821	.19364	.27994	1.0335	51.573	1.0453	50.109	.51859	.91977
#2	.48329	.18628	.27956	1.0140	51.827	1.0442	49.922	.51665	.89192
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.21000							
Low Limit		.19000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**52.971**	**.48957**	**10.339**	**.47501**	**1.8766**	**.50957**	**2.0247**	**9.7721**	**20.912**
Stddev	.178	.01164	.250	.01332	.0297	.01151	.0452	.0203	.044
%RSD	.33647	2.3783	2.4163	2.8043	1.5843	2.2586	2.2323	.20805	.20805
#1	53.097	.49780	10.515	.48443	1.8976	.51771	2.0567	9.7577	20.881
#2	52.845	.48134	10.162	.46559	1.8556	.50144	1.9928	9.7865	20.943
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8584**	**1.0095**	**1.0496**	**1.0152**	**1.9401**	**2.1646**	**.52732**	**.50734**	**.51179**
Stddev	.0463	.0057	.0053	.0008	.0442	.0491	.00051	.00219	.00011
%RSD	2.4920	.56155	.50911	.08418	2.2768	2.2704	.09743	.43248	.02163
#1	1.8912	1.0055	1.0533	1.0158	1.9713	2.1299	.52769	.50889	.51187
#2	1.8257	1.0135	1.0458	1.0146	1.9088	2.1994	.52696	.50579	.51171
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2267.7**	**44475.**	**2344.3**
Stddev	2.4	124.	23.6
%RSD	.10559	.27798	1.0067
#1	2266.0	44388.	2327.7
#2	2269.4	44563.	2361.0

Sample Name: 280-97836-D-1-A Acquired: 6/12/2017 14:52:06 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00151**	**1.8439**	**.00251**	**.01181**	**.06164**	**.00017**	**.00119**	**14.634**	**.00033**
Stddev	.00062	.0710	.00084	.00018	.00036	.00018	.00116	.032	.00017
%RSD	41.196	3.8492	33.377	1.5173	.58883	109.24	98.212	.21974	50.801
#1	-.00107	1.8941	.00310	.01168	.06139	.00029	.00036	14.657	.00021
#2	-.00195	1.7937	.00192	.01193	.06190	.00004	.00201	14.611	.00045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00075**	**.00328**	**.01597**	**2.3980**	**1.7876**	**.00491**	**3.6093**	**.05733**	**.00529**
Stddev	.00027	.00087	.00026	.0310	.0585	.00203	.0056	.00004	.00053
%RSD	35.739	26.545	1.5969	1.2910	3.2727	41.369	.15661	.07339	9.9318
#1	.00093	.00390	.01579	2.4199	1.7463	.00347	3.6133	.05736	.00491
#2	.00056	.00267	.01615	2.3761	1.8290	.00634	3.6053	.05730	.00566
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.0743**	**.00212**	**.05116**	**.03451**	**2.7278**	**.00299**	**-.00750**	**8.4443**	**18.071**
Stddev	.0110	.00031	.00581	.00106	.0829	.00193	.00199	.1090	.233
%RSD	.21582	14.545	11.367	3.0598	3.0376	64.391	26.463	1.2906	1.2906
#1	5.0820	.00233	.05527	.03376	2.7864	.00436	-.00610	8.5213	18.236
#2	5.0665	.00190	.04704	.03526	2.6693	.00163	-.00891	8.3672	17.906
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00046**	**.21782**	**.00241**	**.08647**	**.00162**	**.05075**	**.00344**	**.10483**	**.00473**
Stddev	.00228	.00111	.00021	.00235	.00298	.00485	.00031	.00009	.00263
%RSD	490.28	.50851	8.5327	2.7200	184.17	9.5642	9.1072	.08784	55.614
#1	.00208	.21861	.00226	.08481	.00372	.04732	.00366	.10489	.00659
#2	-.00115	.21704	.00256	.08814	-.00049	.05418	.00322	.10476	.00287
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2353.2**	**46320.**	**2614.0**
Stddev	.6	53.	1.4
%RSD	.02449	.11379	.05511
#1	2353.7	46357.	2615.0
#2	2352.8	46282.	2612.9

Sample Name: 280-97910-D-1-B Acquired: 6/12/2017 14:54:42 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00029**	**.13467**	**.00158**	**.03895**	**.01765**	**-.00004**	**-.00063**	**17.071**	**-.00006**
Stddev	.00035	.00618	.00403	.00113	.00013	.00005	.00008	.115	.00021
%RSD	118.10	4.5875	254.54	2.9004	.75106	145.75	13.540	.67406	351.93
#1	-.00005	.13904	.00443	.03975	.01774	-.00007	-.00069	17.153	.00009
#2	-.00054	.13030	-.00127	.03815	.01755	.00000	-.00057	16.990	-.00020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00045**	**.00125**	**.00596**	**.14348**	**1.1138**	**.00292**	**1.6254**	**.02686**	**.00101**
Stddev	.00003	.00006	.00080	.00450	.0401	.00016	.0101	.00010	.00050
%RSD	7.7509	4.9141	13.385	3.1380	3.6003	5.3873	.62351	.37692	49.527
#1	.00042	.00129	.00652	.14666	1.0854	.00281	1.6326	.02693	.00066
#2	.00047	.00121	.00539	.14030	1.1421	.00303	1.6183	.02679	.00137
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4529**	**.00056**	**.15641**	**.01116**	**2.9258**	**.00063**	**-.01514**	**1.1228**	**2.4027**
Stddev	.0078	.00003	.00619	.00094	.1084	.00172	.00683	.0418	.0895
%RSD	.31878	4.9607	3.9583	8.4109	3.7065	274.12	45.120	3.7266	3.7266
#1	2.4584	.00054	.16079	.01182	3.0024	-.00059	-.01997	1.1524	2.4660
#2	2.4474	.00058	.15203	.01050	2.8491	.00184	-.01031	1.0932	2.3394
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00092**	**.04243**	**-.00084**	**.00242**	**.00190**	**-.03304**	**.00124**	**.05856**	**.00433**
Stddev	.00012	.00006	.00007	.00045	.00043	.01309	.00017	.00153	.00016
%RSD	12.577	.13136	8.0606	18.551	22.772	39.605	14.042	2.6103	3.7454
#1	-.00083	.04247	-.00079	.00274	.00221	-.04229	.00112	.05748	.00445
#2	-.00100	.04239	-.00089	.00211	.00159	-.02379	.00137	.05964	.00422
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2380.3**	**47005.**	**2604.2**
Stddev	15.6	43.	12.9
%RSD	.65398	.09151	.49394
#1	2369.3	46975.	2595.1
#2	2391.3	47036.	2613.3

Sample Name: 280-97910-D-2-B Acquired: 6/12/2017 14:57:19 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00079**	**.13946**	**-.00701**	**.00585**	**.00440**	**-.00001**	**-.00166**	**10.932**	**.00015**
Stddev	.00046	.00608	.00953	.00118	.00046	.00014	.00011	.036	.00003
%RSD	58.038	4.3590	136.09	20.222	10.565	2414.5	6.4248	.32966	17.193
#1	-.00046	.14376	-.00026	.00669	.00407	.00010	-.00173	10.907	.00017
#2	-.00111	.13516	-.01375	.00501	.00473	-.00011	-.00158	10.958	.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00039**	**.00090**	**.00232**	**.03372**	**-.07036**	**-.00115**	**2.0361**	**.00973**	**.00037**
Stddev	.00021	.00031	.00119	.00656	.07717	.00026	.0058	.00001	.00007
%RSD	54.661	34.084	51.224	19.440	109.68	22.731	.28521	.09080	17.802
#1	.00024	.00068	.00148	.03836	-.12492	-.00096	2.0320	.00973	.00041
#2	.00054	.00111	.00316	.02909	-.01579	-.00133	2.0402	.00974	.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.06478**	**.00025**	**.02344**	**.00505**	**.50720**	**-.00295**	**-.00429**	**.38685**	**.82786**
Stddev	.00218	.00017	.00091	.00137	.02671	.00070	.00779	.11796	.25243
%RSD	3.3625	68.144	3.8772	27.043	5.2653	23.802	181.72	30.492	30.492
#1	-.06632	.00013	.02408	.00409	.52608	-.00345	.00122	.30344	.64936
#2	-.06324	.00037	.02280	.00602	.48832	-.00245	-.00979	.47026	1.0064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**.01606**	**-.00078**	**.00048**	**.00081**	**.00630**	**.00123**	**.00827**	**.00433**
Stddev	.00100	.00025	.00384	.00021	.00011	.03324	.00059	.00051	.00064
%RSD	4745.4	1.5653	493.57	44.555	13.605	527.45	47.773	6.2060	14.805
#1	.00068	.01588	-.00350	.00063	.00073	.02981	.00165	.00863	.00388
#2	-.00073	.01624	.00194	.00033	.00088	-.01720	.00081	.00791	.00478
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2263.5**	**43651.**	**2582.9**
Stddev	2.3	77.	67.5
%RSD	.10011	.17526	2.6151
#1	2261.9	43597.	2630.7
#2	2265.1	43705.	2535.2

Sample Name: 280-97956-H-1-A Acquired: 6/12/2017 14:59:56 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00013**	**.16167**	**.09741**	W **17.706**	**3.9550**	**-.00013**	**-.00740**	**122.71**	**.00144**
Stddev	.00067	.00550	.00462	.535	.0127	.00007	.00145	.16	.00030
%RSD	502.70	3.4040	4.7447	3.0220	.32162	51.960	19.552	.12952	20.635
#1	-.00034	.16556	.10068	18.084	3.9460	-.00018	-.00638	122.60	.00165
#2	.00061	.15778	.09414	17.327	3.9640	-.00008	-.00843	122.83	.00123
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.20000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06504**	**.10334**	**.00496**	**17.175**	F **958.16**	**.03717**	**247.93**	**.19137**	**.02514**
Stddev	.00134	.00396	.00016	.050	1.53	.00119	1.24	.00059	.00052
%RSD	2.0630	3.8330	3.2800	.29213	.15957	3.1894	.49855	.30876	2.0586
#1	.06599	.10614	.00507	17.211	957.07	.03634	248.81	.19179	.02551
#2	.06409	.10054	.00484	17.140	959.24	.03801	247.06	.19095	.02478
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					500.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **4611.7**	**.28687**	**17.203**	**-.00428**	**60.822**	**.00337**	**.00545**	**10.467**	**22.400**
Stddev	12.0	.00981	.582	.00093	2.069	.00195	.00330	.075	.161
%RSD	.25943	3.4200	3.3847	21.702	3.4022	57.715	60.665	.72070	.72070
#1	4603.2	.29380	17.615	-.00494	62.285	.00475	.00778	10.414	22.285
#2	4620.1	.27993	16.791	-.00363	59.359	.00200	.00311	10.520	22.514
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.12898**	**2.0417**	**-.00235**	**.05911**	**.00272**	**.02517**	**.38517**	**.05681**	**.02532**
Stddev	.00224	.0075	.00026	.00038	.00182	.05012	.00045	.00008	.00126
%RSD	1.7402	.36819	10.949	.64938	66.887	199.07	.11592	.14154	4.9691
#1	.13057	2.0364	-.00217	.05938	.00144	-.01026	.38549	.05675	.02443
#2	.12739	2.0470	-.00253	.05884	.00401	.06061	.38485	.05687	.02621
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1869.3**	**34658.**	**2247.3**
Stddev	14.6	247.	57.9
%RSD	.77896	.71367	2.5782
#1	1859.0	34483.	2206.3
#2	1879.6	34833.	2288.2

Sample Name: 280-97956-H-1-Asd@5 Acquired: 6/12/2017 15:02:34 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00038**	**.03400**	**.01205**	**3.6828**	**.75345**	**.00015**	**-.00121**	**24.182**	**.00077**
Stddev	.00085	.00159	.01070	.0985	.00488	.00018	.00587	.124	.00009
%RSD	221.65	4.6778	88.788	2.6748	.64730	120.97	483.41	.51402	11.138
#1	-.00098	.03512	.01961	3.7524	.75000	.00002	-.00537	24.094	.00071
#2	.00022	.03287	.00448	3.6131	.75690	.00028	.00294	24.270	.00083
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01192**	**.02082**	**.00391**	**3.3796**	W **181.25**	**.00857**	**47.069**	**.03704**	**.00562**
Stddev	.00029	.00045	.00017	.0476	.83	.00061	.051	.00022	.00056
%RSD	2.4462	2.1501	4.3462	1.4079	.45654	7.1279	.10836	.58525	9.9914
#1	.01213	.02114	.00403	3.3460	180.67	.00901	47.105	.03688	.00602
#2	.01171	.02051	.00379	3.4133	181.84	.00814	47.033	.03719	.00523
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **881.07**	**.05836**	**3.2700**	**.00270**	**11.352**	**-.00352**	**-.00810**	**2.0232**	**4.3297**
Stddev	5.45	.00216	.1083	.00280	.298	.00342	.01100	.0240	.0513
%RSD	.61840	3.6954	3.3132	103.83	2.6209	97.221	135.72	1.1855	1.1855
#1	877.22	.05989	3.3466	.00468	11.563	-.00594	-.01588	2.0062	4.2934
#2	884.92	.05684	3.1934	.00072	11.142	-.00110	-.00033	2.0402	4.3659
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02417**	**.39408**	**-.00277**	**.01163**	**-.00092**	**-.00656**	**.07463**	**.01080**	**.00902**
Stddev	.00299	.00209	.00255	.00008	.00310	.05785	.00102	.00073	.00045
%RSD	12.375	.52918	92.109	.72279	338.39	882.49	1.3654	6.7555	5.0236
#1	.02628	.39261	-.00096	.01157	.00128	-.04746	.07391	.01131	.00934
#2	.02205	.39556	-.00457	.01169	-.00311	.03435	.07535	.01028	.00870
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2194.7**	**41387.**	**2549.6**
Stddev	4.3	69.	31.2
%RSD	.19786	.16679	1.2238
#1	2191.6	41435.	2571.6
#2	2197.8	41338.	2527.5

Sample Name: 280-97956-H-1-B MS Acquired: 6/12/2017 15:05:14 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05695**	**1.8963**	W **2.4137**	**1.1738**	W **18.403**	**5.9289**	**.04825**	**1.9865**	**166.19**
Stddev	.00069	.0694	.0109	.0328	.591	.0043	.00010	.0703	.09
%RSD	1.2136	3.6589	.45138	2.7909	3.2112	.07317	.21453	3.5368	.05527
#1	.05646	1.9454	2.4214	1.1970	18.821	5.9259	.04832	2.0361	166.25
#2	.05744	1.8473	2.4060	1.1507	17.985	5.9320	.04818	1.9368	166.12
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			500.00		10.000				
Low Limit			3.2000		-.20000				

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11026**	**.52496**	**.27974**	**.29936**	**17.845**	F **992.75**	**1.1267**	**291.97**	**.72171**
Stddev	.00308	.01995	.00840	.00170	.026	2.40	.0001	.88	.00176
%RSD	2.7916	3.7997	3.0019	.56629	.14552	.24184	.01336	.30103	.24421
#1	.11243	.53906	.28568	.29816	17.863	994.45	1.1266	292.60	.72296
#2	.10808	.51085	.27380	.30056	17.826	991.05	1.1268	291.35	.72046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						500.00			
Low Limit						-6.0000			

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.89996**	W **4654.8**	**.74023**	W **27.384**	**.40980**	**61.846**	**.51873**	**2.0088**	**18.829**
Stddev	.03052	1.2	.02363	.938	.01468	2.173	.02333	.0672	.137
%RSD	3.3916	.02549	3.1918	3.4252	3.5826	3.5132	4.4980	3.3467	.72567
#1	.92154	4653.9	.75693	28.048	.42018	63.382	.53522	2.0563	18.926
#2	.87838	4655.6	.72352	26.721	.39942	60.309	.50223	1.9613	18.733
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00		20.000					
Low Limit		11.000		-6.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**40.294**	**1.8515**	**3.0513**	**.88869**	**1.1056**	**1.4915**	**2.1133**	**.93474**	**.58806**
Stddev	.292	.0634	.0004	.00306	.0027	.0445	.0243	.00110	.00187
%RSD	.72567	3.4223	.01220	.34428	.24592	2.9846	1.1511	.11766	.31793
#1	40.501	1.8963	3.0510	.89085	1.1075	1.5230	2.0961	.93551	.58938
#2	40.088	1.8067	3.0516	.88652	1.1037	1.4600	2.1305	.93396	.58673
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391
Line	339.198 { 99}
Units	ppm
Avg	**.28227**
Stddev	.00747
%RSD	2.6459
#1	.28755
#2	.27699
Check ?	Chk Pass
High Limit	
Low Limit	

Sample Name: 280-97956-H-1-B MS Acquired: 6/12/2017 15:05:14 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1888.9**	**35356.**	**2405.2**
Stddev	12.1	90.	9.7
%RSD	.64166	.25536	.40422
#1	1880.4	35420.	2398.3
#2	1897.5	35292.	2412.0

Sample Name: 280-97956-H-1-C MSD Acquired: 6/12/2017 15:07:44 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06009**	**1.9960**	W **2.4839**	**1.2282**	W **18.821**	**6.0730**	**.05105**	W **2.1074**	**170.02**
Stddev	.00006	.0494	.0210	.0258	.449	.0077	.00014	.0573	.22
%RSD	.10803	2.4762	.84468	2.1042	2.3852	.12618	.27184	2.7172	.12791
#1	.06014	2.0309	2.4988	1.2465	19.138	6.0784	.05095	2.1479	170.18
#2	.06004	1.9610	2.4691	1.2100	18.503	6.0675	.05115	2.0669	169.87
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit			500.00		10.000			2.0000	
Low Limit			3.2000		-.20000			-.20000	

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11680**	**.55644**	**.29278**	**.32076**	**18.119**	F **1009.5**	**1.1900**	**300.30**	**.75955**
Stddev	.00308	.01409	.00836	.00260	.070	.3	.0008	.72	.00273
%RSD	2.6370	2.5320	2.8557	.80948	.38356	.03343	.06688	.23982	.35890
#1	.11898	.56641	.29869	.32260	18.070	1009.3	1.1894	300.81	.76147
#2	.11462	.54648	.28687	.31892	18.168	1009.8	1.1906	299.80	.75762
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						500.00			
Low Limit						-6.0000			

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.91887**	W **4742.6**	**.77761**	W **28.393**	**.42829**	**62.993**	**.52708**	**2.1336**	**19.078**
Stddev	.02323	.4	.01870	.690	.01108	1.746	.00830	.0549	.019
%RSD	2.5282	.00812	2.4048	2.4309	2.5868	2.7723	1.5744	2.5755	.10055
#1	.93530	4742.3	.79083	28.881	.43612	64.227	.53295	2.1724	19.065
#2	.90244	4742.9	.76439	27.905	.42046	61.758	.52121	2.0947	19.092
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00		20.000					
Low Limit		11.000		-6.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**40.827**	**1.8794**	**3.1282**	**.90827**	**1.1246**	**1.5708**	**2.2214**	**.98465**	**.62465**
Stddev	.041	.0528	.0010	.00194	.0044	.0360	.0879	.00375	.00071
%RSD	.10055	2.8109	.03040	.21407	.39235	2.2892	3.9572	.38091	.11300
#1	40.798	1.9167	3.1276	.90965	1.1277	1.5962	2.2836	.98730	.62515
#2	40.856	1.8420	3.1289	.90690	1.1215	1.5454	2.1592	.98200	.62415
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391
Line	339.198 { 99}
Units	ppm
Avg	**.22860**
Stddev	.00168
%RSD	.73339
#1	.22741
#2	.22978
Check ?	Chk Pass
High Limit	
Low Limit	

Sample Name: 280-97956-H-1-C MSD Acquired: 6/12/2017 15:07:44 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**1870.9**	**34789.**	**2354.3**
Stddev	2.6	96.	7.7
%RSD	.13895	.27563	.32695
#1	1869.1	34721.	2348.9
#2	1872.8	34857.	2359.8

Sample Name: CCVH-4579429 Acquired: 6/12/2017 15:10:15 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01249**	**46.688**	**-.00714**	**.05958**	**.00158**	**.00019**	W **.92663**	**.02390**	**.00053**	**-.00094**	**.00112**	**.01361**
Stddev	.00012	.134	.00402	.00744	.00052	.00011	.02162	.00720	.00006	.00004	.00014	.00082
%RSD	.93409	.28767	56.303	12.490	32.529	57.549	2.3335	30.127	10.978	4.3761	12.912	6.0450
#1	-.01241	46.593	-.00430	.06485	.00122	.00026	.94192	.02899	.00049	-.00091	.00102	.01303
#2	-.01257	46.783	-.00999	.05432	.00195	.00011	.91134	.01881	.00057	-.00097	.00122	.01419
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							-5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**47.992**	**1.7488**	**.00422**	**.14332**	**-.00213**	**-.00075**	**243.08**	**.00194**	**.01501**	**.00532**	F **4.3141**	**-.01182**
Stddev	.565	.2535	.00222	.00109	.00004	.00015	.38	.00050	.00940	.00275	.1134	.00132
%RSD	1.1764	14.496	52.652	.75805	2.1011	19.350	.15734	25.512	62.605	51.647	2.6285	11.195
#1	48.392	1.9280	.00265	.14408	-.00210	-.00086	243.35	.00159	.00836	.00338	4.3943	-.01276
#2	47.593	1.5695	.00579	.14255	-.00216	-.00065	242.81	.00229	.02165	.00727	4.2340	-.01089
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Fail	None
Value											5.0000	
Range											-10.490%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01368**	**-.01600**	**-.03425**	**-.00239**	**.00096**	**5.0001**	**.02548**	**.00267**	**10.150**	**.01294**	**-.00132**	**.04951**
Stddev	.00650	.00542	.01161	.00042	.00022	.0112	.00025	.00124	.085	.00022	.00006	.00024
%RSD	47.523	33.885	33.885	17.602	22.565	.22353	.99449	46.530	.83333	1.7202	4.4863	.48915
#1	-.00908	-.01984	-.04246	-.00268	.00111	5.0080	.02565	.00179	10.210	.01278	-.00137	.04968
#2	-.01827	-.01217	-.02604	-.00209	.00081	4.9922	.02530	.00354	10.091	.01309	-.00128	.04934
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2262.3**	**43081.**	**2485.5**
Stddev	3.1	79.	17.6
%RSD	.13575	.18349	.70632
#1	2264.5	43136.	2497.9
#2	2260.1	43025.	2473.1

Sample Name: CCV-4580817 Acquired: 6/12/2017 15:12:51 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48179**	**.47130**	F **.88419**	**.51556**	**.45555**	**.46745**	**-.00262**	**4.5329**	**.47668**	**.47695**	F **.43444**	**.54975**
Stddev	.00122	.01553	.03649	.01334	.00072	.00024	.00006	.0046	.01309	.01358	.01253	.00392
%RSD	.25294	3.2950	4.1274	2.5876	.15783	.05162	2.1729	.10118	2.7467	2.8467	2.8844	.71327
#1	.48265	.48228	.91000	.52499	.45504	.46762	-.00258	4.5296	.48594	.48655	.44330	.55252
#2	.48093	.46031	.85838	.50612	.45606	.46728	-.00267	4.5361	.46742	.46735	.42558	.54698
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value			1.0000								.50000	
Range			-10.490%								-10.490%	

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.3753**	**48.133**	**.97481**	**19.010**	**.51648**	F **.43382**	F **5.6312**	**.47762**	**.94099**	F **.87459**	**-.03850**	**.93868**
Stddev	.0126	.043	.00563	.045	.00022	.01341	.0394	.01384	.01926	.01956	.00790	.02799
%RSD	.53168	.08848	.57759	.23524	.04180	3.0906	.69971	2.8972	2.0473	2.2366	20.523	2.9817
#1	2.3664	48.103	.97879	19.042	.51663	.44330	5.6590	.48740	.95461	.88842	-.04409	.95847
#2	2.3843	48.163	.97083	18.979	.51633	.42434	5.6033	.46783	.92737	.86076	-.03292	.91889
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass
Value						.50000	5.0000			1.0000		
Range						-10.490%	10.490%			-10.490%		

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.90647**	**4.8369**	**10.351**	F **.87706**	**.46916**	**.00598**	**.50376**	W **.89992**	**.00529**	**.52094**	**.50284**	**.49849**
Stddev	.02010	.0040	.008	.02996	.00004	.00045	.00076	.02329	.01789	.00235	.00107	.00538
%RSD	2.2175	.08180	.08180	3.4158	.00750	7.5379	.15169	2.5881	338.21	.45152	.21203	1.0801
#1	.92069	4.8341	10.345	.89825	.46918	.00630	.50430	.91639	-.00736	.51927	.50360	.50229
#2	.89226	4.8397	10.357	.85588	.46913	.00566	.50322	.88345	.01794	.52260	.50209	.49468
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None	Chk Pass	Chk Warn	None	Chk Pass	Chk Pass	Chk Pass
Value				1.0000				1.0000				
Range				-10.490%				-10.000%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2202.5**	**41906.**	**2366.8**
Stddev	10.7	123.	11.3
%RSD	.48618	.29354	.47769
#1	2210.0	41993.	2374.8
#2	2194.9	41819.	2358.8

Sample Name: CCB Acquired: 6/12/2017 15:15:20 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00073**	**.00058**	W **.00841**	W **.02841**	**.00033**	**.00027**	**.00047**	**-.00512**	**-.00030**	**.00041**	**.00074**	**.00039**
Stddev	.00006	.00049	.00303	.00074	.00056	.00011	.00040	.00065	.00025	.00022	.00002	.00044
%RSD	8.2006	85.000	36.052	2.6119	169.31	41.168	84.313	12.612	81.171	53.546	2.1335	111.09
#1	.00068	.00093	.01055	.02788	-.00007	.00019	.00019	-.00558	-.00048	.00025	.00075	.00070
#2	.00077	.00023	.00627	.02893	.00073	.00035	.00075	-.00466	-.00013	.00056	.00073	.00008
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00750	.01500								
Low Limit			-.01500	-.01500								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00604**	**.38962**	**-.00049**	**.00639**	**-.00002**	**.00069**	W **.45144**	**.00015**	**.00429**	**.00157**	**-.04805**	**.00006**
Stddev	.00235	.00185	.00083	.00053	.00002	.00097	.03752	.00020	.00309	.00214	.00552	.00872
%RSD	38.902	.47590	171.60	8.2449	74.573	141.55	8.3111	132.05	72.172	135.68	11.490	14637.
#1	.00438	.38831	.00010	.00602	-.00003	-.00000	.47797	.00029	.00647	.00309	-.04415	.00622
#2	.00770	.39093	-.00108	.00676	-.00001	.00138	.42491	.00001	.00210	.00006	-.05196	-.00610
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							.35000					
Low Limit							-.35000					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01077**	**.05071**	**.10851**	**-.00230**	**.00014**	**-.00044**	**-.00015**	**.00268**	**.01198**	**.00045**	**.00043**	**.00102**
Stddev	.00685	.05951	.12734	.00005	.00012	.00250	.00014	.00083	.01339	.00076	.00018	.00046
%RSD	63.649	117.35	117.35	2.0694	90.528	563.57	95.902	30.825	111.72	169.57	41.211	44.604
#1	-.01561	.09278	.19856	-.00233	.00022	.00133	-.00025	.00209	.00252	-.00009	.00056	.00070
#2	-.00592	.00863	.01847	-.00226	.00005	-.00221	-.00005	.00326	.02145	.00099	.00031	.00135
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2203.9**	**41657.**	**2303.3**
Stddev	53.8	124.	.0
%RSD	2.4404	.29667	.00058
#1	2165.9	41744.	2303.3
#2	2241.9	41569.	2303.3

Sample Name: CCVL-4589022 Acquired: 6/12/2017 15:17:58 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00933**	**.09229**	**.01379**	**.11276**	**.00951**	F **.00131**	**.09745**	**.18857**	**.00444**	**.00977**	**.00900**	**.01631**
Stddev	.00117	.00642	.00062	.00735	.00014	.00012	.00719	.00309	.00019	.00053	.00084	.00130
%RSD	12.504	6.9562	4.5038	6.5210	1.4504	9.5584	7.3818	1.6385	4.2462	5.4370	9.3117	7.9846
#1	.01015	.09683	.01335	.11796	.00961	.00122	.10253	.19076	.00457	.01014	.00959	.01724
#2	.00851	.08775	.01423	.10757	.00941	.00139	.09236	.18639	.00430	.00939	.00841	.01539
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.00100						
Range						30.000%						

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09651**	**3.1642**	**.01723**	**.19646**	**.01073**	**.01692**	**1.2901**	**.03785**	**2.6226**	F **.01338**	F **.02847**	**.01877**
Stddev	.00444	.0390	.00124	.00705	.00020	.00148	.0289	.00241	.1401	.00109	.00449	.00041
%RSD	4.6010	1.2321	7.1698	3.5884	1.8639	8.7363	2.2410	6.3553	5.3416	8.1498	15.776	2.1740
#1	.09965	3.1918	.01811	.19147	.01088	.01796	1.2697	.03955	2.7217	.01261	.03165	.01905
#2	.09337	3.1366	.01636	.20144	.01059	.01587	1.3106	.03615	2.5236	.01415	.02530	.01848
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass
Value										.00900	.10000	
Range										30.000%	-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01437**	**.47306**	**1.0124**	**.08382**	**.00938**	**.01411**	**.00970**	**.01563**	**.07187**	**.01026**	**.02064**	F **.02063**
Stddev	.00491	.01306	.0279	.00615	.00013	.00032	.00010	.00343	.01203	.00060	.00004	.00473
%RSD	34.184	2.7613	2.7613	7.3319	1.4379	2.2412	.99789	21.959	16.737	5.8635	.20116	22.922
#1	.01784	.46382	.99259	.08816	.00929	.01433	.00977	.01806	.08038	.00984	.02061	.02397
#2	.01090	.48230	1.0321	.07947	.00948	.01388	.00963	.01320	.06336	.01069	.02067	.01729
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value												.01500
Range												30.000%

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2289.2**	**42826.**	**2347.6**
Stddev	17.7	1064.	12.3
%RSD	.77450	2.4833	.52253
#1	2276.7	42074.	2356.2
#2	2301.8	43578.	2338.9

Sample Name: MB 280-376380/1-A Acquired: 6/12/2017 15:20:36 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/8 Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00058**	**.01351**	**-.00196**	**.03033**	**.00151**	**.00018**	**-.00264**	F **.26646**	**-.00002**
Stddev	.00018	.00019	.00286	.00114	.00038	.00009	.00051	.00200	.00055
%RSD	31.345	1.3891	145.91	3.7532	25.292	49.935	19.281	.75179	2390.0
#1	-.00070	.01365	.00006	.03114	.00178	.00012	-.00299	.26505	.00037
#2	-.00045	.01338	-.00399	.02953	.00124	.00024	-.00228	.26788	-.00041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								.20000	
Low Limit								-.20000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00029**	**.00094**	**.00036**	W **.07005**	**.16332**	**.00177**	**.07730**	**.00091**	**.00063**
Stddev	.00000	.00004	.00067	.00064	.04187	.00186	.00009	.00007	.00024
%RSD	.19044	4.5172	186.14	.90933	25.639	105.42	.11038	7.8308	37.772
#1	.00029	.00091	.00083	.07050	.19293	.00045	.07736	.00086	.00080
#2	.00029	.00097	-.00011	.06960	.13371	.00309	.07724	.00096	.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.05000					
Low Limit				-.05000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.55033**	**.00094**	**.01375**	**.00315**	**-.03439**	**-.00333**	W **-.00987**	**.07845**	**.16788**
Stddev	.01742	.00018	.00472	.00093	.00719	.00172	.00188	.07213	.15436
%RSD	3.1658	19.565	34.349	29.629	20.907	51.664	19.016	91.946	91.946
#1	.53801	.00107	.01709	.00249	-.03947	-.00455	-.00854	.02744	.05873
#2	.56265	.00081	.01041	.00381	-.02930	-.00211	-.01120	.12945	.27703
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	None
High Limit	.50000						.00750		
Low Limit	-.50000						-.00750		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00984**	**.00104**	**-.00233**	**.00073**	**.00274**	**.01661**	**-.00007**	**.00375**	**.00422**
Stddev	.00150	.00007	.00254	.00098	.00368	.05714	.00041	.00046	.00336
%RSD	15.260	6.8245	108.82	135.17	134.40	344.03	621.89	12.392	79.462
#1	.01090	.00099	-.00412	.00142	.00534	.05701	-.00035	.00408	.00660
#2	.00878	.00109	-.00054	.00003	.00014	-.02380	.00022	.00342	.00185
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2288.8**	**43801.**	**2430.8**
Stddev	.3	1.	2.2
%RSD	.01431	.00206	.09198
#1	2289.0	43800.	2432.4
#2	2288.6	43801.	2429.2

Sample Name: LCS 280-376380/2-A Acquired: 6/12/2017 15:23:15 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.04205**	**1.7149**	**.86447**	**.97366**	F **1.7185**	**.04392**	**1.7739**	**41.868**	**.09059**
Stddev	.00016	.0601	.03068	.02730	.0013	.00019	.0442	.076	.00264
%RSD	.37518	3.5065	3.5490	2.8043	.07808	.43810	2.4893	.18102	2.9187
#1	.04194	1.7574	.88617	.99297	1.7175	.04378	1.8051	41.922	.09246
#2	.04216	1.6724	.84278	.95435	1.7194	.04405	1.7427	41.815	.08872
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass
High Limit	.05700				2.2400				
Low Limit	.04350				1.7400				

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.44069**	F **.16240**	**.26653**	**.97033**	**45.984**	**.91669**	F **44.383**	**.48665**	F **.78629**
Stddev	.01355	.00477	.00042	.01682	.030	.00165	.103	.00051	.02523
%RSD	3.0738	2.9353	.15618	1.7331	.06437	.18036	.23229	.10497	3.2088
#1	.45026	.16577	.26682	.95844	45.963	.91552	44.456	.48701	.80413
#2	.43111	.15903	.26623	.98222	46.005	.91786	44.310	.48629	.76845
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail
High Limit		.22000					55.000		1.1000
Low Limit		.18000					45.000		.86000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.172**	**.43878**	**9.0593**	F **.40368**	**1.5820**	**.44849**	**1.6925**	**2.8653**	**6.1317**
Stddev	.815	.01538	.2614	.00972	.0477	.01424	.0426	.0390	.0834
%RSD	1.6909	3.5062	2.8855	2.4089	3.0128	3.1756	2.5164	1.3603	1.3603
#1	47.596	.44966	9.2442	.41055	1.6157	.45856	1.7226	2.8377	6.0727
#2	48.748	.42790	8.8745	.39680	1.5483	.43842	1.6624	2.8928	6.1907
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit				.55000					
Low Limit				.43000					

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **1.6216**	F **.88112**	**.96967**	**.96394**	F **1.6411**	**1.9791**	**.50090**	**.47749**	**.47326**
Stddev	.0444	.00091	.00777	.00453	.0472	.0121	.00345	.00218	.00269
%RSD	2.7373	.10294	.80136	.46980	2.8760	.61376	.68867	.45708	.56919
#1	1.6530	.88176	.97517	.96715	1.6744	1.9877	.50334	.47903	.47136
#2	1.5902	.88048	.96418	.96074	1.6077	1.9705	.49846	.47594	.47517
Check ?	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.2000	1.1000			2.2000				
Low Limit	1.6800	.89000			1.6800				

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2192.2**	**41209.**	**2359.5**
Stddev	5.2	63.	5.8
%RSD	.23636	.15376	.24586
#1	2188.5	41254.	2355.4
#2	2195.9	41164.	2363.6

Sample Name: 280-97928-C-1-A Acquired: 6/12/2017 15:25:42 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00156**	**43.478**	**.02344**	**.02812**	**.15013**	**.00181**	**-.00654**	**12.657**	**.00092**
Stddev	.00074	.014	.00656	.00106	.00022	.00001	.00155	.014	.00029
%RSD	47.266	.03268	27.975	3.7742	.14930	.60879	23.737	.11319	31.444
#1	-.00104	43.488	.02808	.02887	.14997	.00180	-.00544	12.667	.00071
#2	-.00208	43.468	.01881	.02737	.15029	.00181	-.00764	12.647	.00112
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02855**	**.04398**	**.11141**	**83.850**	**5.9060**	**.07006**	**16.787**	**3.8209**	**.00114**
Stddev	.00122	.00131	.00033	.051	.0645	.00061	.001	.0118	.00017
%RSD	4.2884	2.9744	.29675	.06078	1.0926	.87299	.00531	.30771	15.285
#1	.02942	.04490	.11118	83.886	5.9517	.06963	16.788	3.8292	.00126
#2	.02769	.04305	.11165	83.814	5.8604	.07049	16.786	3.8126	.00101
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.41076**	**.06190**	**3.2236**	**.03582**	**.47477**	**-.00894**	**-.00533**	**4.7545**	**10.175**
Stddev	.03367	.00257	.1210	.00162	.01134	.00448	.00059	.0610	.130
%RSD	8.1971	4.1576	3.7532	4.5244	2.3886	50.123	11.077	1.2823	1.2823
#1	.43456	.06372	3.3091	.03696	.48279	-.01211	-.00574	4.7976	10.267
#2	.38695	.06008	3.1380	.03467	.46675	-.00577	-.00491	4.7114	10.082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00781**	**.03562**	**.02425**	**.37363**	**.00497**	**.01664**	**.08742**	**.23080**	**.01781**
Stddev	.00161	.00028	.00291	.01013	.00130	.01345	.00148	.00240	.00356
%RSD	20.559	.79771	12.003	2.7116	26.081	80.850	1.6902	1.0403	19.990
#1	.00668	.03542	.02220	.38079	.00589	.02615	.08846	.22910	.01529
#2	.00895	.03582	.02631	.36646	.00405	.00713	.08637	.23250	.02033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2418.7**	**44811.**	**2605.0**
Stddev	2.1	88.	4.7
%RSD	.08632	.19545	.17876
#1	2417.2	44873.	2608.3
#2	2420.2	44749.	2601.7

Sample Name: 280-97928-C-1-A SD@5 Acquired: 6/12/2017 15:28:16 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00060**	**9.2550**	**.00046**	**.01341**	**.03102**	**.00052**	**.00114**	**2.6699**	**.00015**
Stddev	.00021	.0436	.00215	.00040	.00060	.00015	.00265	.0072	.00013
%RSD	35.293	.47071	466.98	3.0143	1.9298	28.042	233.07	.26991	81.757
#1	-.00045	9.2859	-.00106	.01370	.03144	.00063	.00301	2.6749	.00006
#2	-.00075	9.2242	.00198	.01313	.03059	.00042	-.00074	2.6648	.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00640**	**.00981**	**.02367**	**17.129**	**1.2049**	**.01407**	**3.5816**	**.80367**	**.00077**
Stddev	.00048	.00052	.00066	.015	.0789	.00320	.0235	.00229	.00009
%RSD	7.5310	5.2584	2.7689	.08714	6.5473	22.758	.65605	.28477	11.529
#1	.00674	.01018	.02320	17.119	1.2607	.01181	3.5982	.80529	.00083
#2	.00606	.00945	.02413	17.140	1.1491	.01634	3.5650	.80205	.00071
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06740**	**.01360**	**.67624**	**.00894**	**.04787**	**-.00395**	**-.00491**	**1.0515**	**2.2503**
Stddev	.00036	.00074	.02510	.00174	.00310	.00413	.00573	.0364	.0779
%RSD	.53575	5.4581	3.7118	19.454	6.4751	104.66	116.85	3.4599	3.4599
#1	.06714	.01413	.69399	.01017	.04568	-.00103	-.00085	1.0258	2.1952
#2	.06765	.01308	.65849	.00771	.05006	-.00687	-.00896	1.0773	2.3053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00120**	**.00732**	**.00484**	**.07655**	**.00071**	**-.03746**	**.01800**	**.05023**	**.00727**
Stddev	.00018	.00002	.00105	.00334	.00027	.01277	.00092	.00014	.00010
%RSD	15.325	.26579	21.624	4.3612	37.567	34.106	5.1322	.27580	1.3212
#1	.00107	.00730	.00410	.07891	.00090	-.02842	.01865	.05033	.00734
#2	.00134	.00733	.00558	.07419	.00052	-.04649	.01735	.05013	.00720
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2329.9**	**43564.**	**2459.6**
Stddev	6.9	142.	.4
%RSD	.29501	.32641	.01653
#1	2334.8	43463.	2459.9
#2	2325.0	43664.	2459.3

Sample Name: 280-97928-C-1-B MS Acquired: 6/12/2017 15:30:52 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04026**	**82.116**	**.84787**	**.90327**	**1.8624**	**.04384**	**1.6802**	**54.619**	**.08851**
Stddev	.00072	.038	.01687	.01293	.0041	.00037	.0349	.143	.00100
%RSD	1.7981	.04576	1.9899	1.4314	.22228	.84156	2.0792	.26247	1.1330
#1	.04077	82.142	.85980	.91242	1.8654	.04411	1.7049	54.720	.08922
#2	.03975	82.089	.83594	.89413	1.8595	.04358	1.6555	54.517	.08780
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.45833**	**.22808**	**.40229**	**108.25**	**61.172**	**.96185**	**66.881**	**5.0878**	**.73488**
Stddev	.00536	.00437	.00129	.02	.169	.00223	.008	.0097	.01042
%RSD	1.1688	1.9173	.32155	.01424	.27642	.23189	.01259	.19089	1.4184
#1	.46212	.23117	.40138	108.26	61.292	.96343	66.887	5.0946	.74225
#2	.45454	.22498	.40321	108.24	61.053	.96028	66.875	5.0809	.72751
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**46.231**	**.49797**	**12.391**	**.41247**	**2.1725**	**.29802**	**1.6125**	**9.0770**	**19.425**
Stddev	.294	.00738	.224	.00414	.0413	.00131	.0257	.0637	.136
%RSD	.63630	1.4827	1.8046	1.0027	1.9029	.43799	1.5971	.70188	.70188
#1	46.023	.50320	12.549	.41540	2.2018	.29894	1.6307	9.0319	19.328
#2	46.439	.49275	12.232	.40955	2.1433	.29709	1.5943	9.1220	19.521
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.4908**	**.88617**	**.91815**	**1.6581**	**1.5174**	**1.8911**	**.65616**	**.74718**	**.39305**
Stddev	.0255	.00149	.00118	.0143	.0347	.0080	.00137	.00204	.00603
%RSD	1.7092	.16817	.12892	.86006	2.2851	.42127	.20818	.27346	1.5347
#1	1.5088	.88722	.91899	1.6682	1.5420	1.8855	.65713	.74863	.38879
#2	1.4727	.88512	.91731	1.6480	1.4929	1.8967	.65520	.74574	.39732
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2337.9**	**42574.**	**2542.0**
Stddev	5.2	13.	1.9
%RSD	.22064	.03042	.07364
#1	2341.6	42584.	2540.7
#2	2334.3	42565.	2543.4

Sample Name: 280-97928-C-1-C MSD Acquired: 6/12/2017 15:33:17 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04119**	**77.021**	**.86370**	**.92224**	**1.8990**	**.04459**	**1.7068**	**55.000**	**.08955**
Stddev	.00029	.023	.01636	.02195	.0086	.00020	.0410	.168	.00238
%RSD	.70644	.03027	1.8936	2.3797	.45188	.43800	2.4017	.30456	2.6621
#1	.04139	77.037	.87527	.93775	1.8930	.04445	1.7358	54.881	.09124
#2	.04098	77.005	.85214	.90672	1.9051	.04473	1.6779	55.118	.08787
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.45971**	**.22739**	**.40623**	**98.466**	**61.470**	**.97418**	**66.117**	**4.5767**	**.74176**
Stddev	.01136	.00552	.00317	.251	.235	.00400	.114	.0097	.02093
%RSD	2.4708	2.4287	.77932	.25528	.38282	.41029	.17278	.21114	2.8217
#1	.46774	.23129	.40847	98.644	61.304	.97135	66.198	4.5835	.75656
#2	.45167	.22348	.40399	98.289	61.636	.97701	66.036	4.5699	.72696
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**47.067**	**.49393**	**12.219**	**.41126**	**2.0959**	**.30874**	**1.6279**	**7.3183**	**15.661**
Stddev	.192	.01216	.296	.00829	.0454	.01007	.0359	.0690	.148
%RSD	.40883	2.4618	2.4256	2.0159	2.1645	3.2628	2.2059	.94304	.94304
#1	46.931	.50253	12.429	.41712	2.1280	.31586	1.6533	7.3671	15.766
#2	47.203	.48533	12.010	.40540	2.0639	.30162	1.6025	7.2695	15.557
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.4992**	**.90587**	**.92810**	**1.6953**	**1.5184**	**1.9669**	**.65760**	**.72685**	**.41513**
Stddev	.0371	.00214	.00014	.0074	.0312	.0445	.00138	.00050	.00252
%RSD	2.4775	.23600	.01505	.43900	2.0560	2.2639	.20938	.06822	.60802
#1	1.5254	.90436	.92800	1.7006	1.5405	1.9355	.65858	.72650	.41692
#2	1.4729	.90738	.92820	1.6900	1.4963	1.9984	.65663	.72720	.41335
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2406.7**	**44669.**	**2696.7**
Stddev	9.5	155.	8.8
%RSD	.39669	.34600	.32668
#1	2413.5	44779.	2690.5
#2	2400.0	44560.	2702.9

Sample Name: 280-97928-C-1-A PDS Acquired: 6/12/2017 15:35:42 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01513**	**43.063**	**.19039**	**.11196**	**.22956**	**.04563**	**-.00458**	**28.808**	**.04548**
Stddev	.00023	.017	.01055	.00273	.00028	.00014	.00007	.085	.00151
%RSD	1.4992	.03893	5.5436	2.4373	.12052	.30573	1.5608	.29530	3.3220
#1	.01497	43.051	.19785	.11389	.22975	.04553	-.00453	28.868	.04655
#2	.01529	43.075	.18292	.11003	.22936	.04573	-.00463	28.748	.04442
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07129**	**.08162**	**.16696**	**83.557**	**24.074**	**.15455**	**34.214**	**3.7959**	**.03681**
Stddev	.00340	.00286	.00089	.166	.066	.00037	.067	.0149	.00138
%RSD	4.7669	3.5048	.53201	.19811	.27406	.24069	.19586	.39336	3.7416
#1	.07370	.08364	.16759	83.674	24.121	.15481	34.262	3.8065	.03778
#2	.06889	.07959	.16633	83.439	24.028	.15429	34.167	3.7853	.03583
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.943**	**.10386**	**4.9626**	**.11075**	**.46021**	**.07791**	**.16381**	**8.9872**	**19.233**
Stddev	.283	.00332	.1585	.00690	.02089	.00733	.00001	.0287	.061
%RSD	1.4190	3.1956	3.1932	6.2289	4.5391	9.4109	.00909	.31969	.31969
#1	20.143	.10621	5.0747	.11563	.47498	.08310	.16380	8.9669	19.189
#2	19.743	.10151	4.8506	.10587	.44544	.07273	.16382	9.0075	19.276
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.08492**	**.07874**	**.22131**	**.43231**	**.16241**	**.49577**	**.13862**	**.42445**	**.06583**
Stddev	.00359	.00028	.00012	.00508	.00122	.01983	.00128	.00331	.00062
%RSD	4.2287	.34989	.05290	1.1742	.74864	3.9992	.92357	.78013	.94114
#1	.08746	.07893	.22140	.43590	.16155	.48175	.13952	.42679	.06539
#2	.08238	.07854	.22123	.42872	.16327	.50979	.13771	.42211	.06626
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2420.3**	**43891.**	**2568.7**
Stddev	8.0	95.	5.3
%RSD	.32867	.21598	.20683
#1	2414.7	43824.	2565.0
#2	2425.9	43958.	2572.5

Sample Name: 280-97928-C-3-A Acquired: 6/12/2017 15:38:15 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00132**	**30.175**	**.01353**	**.02053**	**.08842**	**.00134**	**-.00519**	**61.005**	**.00049**
Stddev	.00063	.028	.00268	.00041	.00085	.00013	.00086	.393	.00036
%RSD	47.800	.09172	19.812	1.9880	.96037	9.8954	16.522	.64376	73.544
#1	-.00087	30.155	.01164	.02024	.08782	.00143	-.00459	60.727	.00074
#2	-.00177	30.194	.01543	.02082	.08902	.00124	-.00580	61.283	.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02071**	**.03181**	**.08988**	**68.302**	**4.9656**	**.05352**	**23.719**	**2.2851**	**.00052**
Stddev	.00025	.00109	.00017	.531	.0036	.00138	.058	.0093	.00000
%RSD	1.1948	3.4153	.19026	.77703	.07229	2.5787	.24576	.40824	.89361
#1	.02088	.03258	.09000	67.926	4.9631	.05449	23.761	2.2917	.00051
#2	.02053	.03104	.08976	68.677	4.9681	.05254	23.678	2.2785	.00052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.26843**	**.04846**	**2.4171**	**.01864**	**.01444**	**-.00577**	**-.00696**	**5.9950**	**12.829**
Stddev	.01233	.00047	.0888	.00508	.01069	.00122	.00178	.0537	.115
%RSD	4.5917	.96211	3.6760	27.259	73.997	21.053	25.601	.89527	.89527
#1	.25972	.04879	2.4800	.02223	.02200	-.00663	-.00822	6.0330	12.911
#2	.27715	.04813	2.3543	.01505	.00688	-.00491	-.00570	5.9571	12.748
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00638**	**.09113**	**.02614**	**.35003**	**.00159**	**-.03019**	**.06486**	**.14233**	**.03477**
Stddev	.00054	.00008	.00182	.00280	.00063	.02861	.00003	.00064	.00159
%RSD	8.4038	.08599	6.9468	.79894	39.324	94.754	.04035	.45201	4.5640
#1	.00600	.09107	.02486	.34806	.00115	-.05042	.06484	.14188	.03365
#2	.00676	.09118	.02743	.35201	.00204	-.00996	.06488	.14279	.03589
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2378.9**	**43670.**	**2586.1**
Stddev	7.5	209.	23.2
%RSD	.31356	.47811	.89782
#1	2384.2	43522.	2602.6
#2	2373.6	43818.	2569.7

Sample Name: 280-97928-B-4-A Acquired: 6/12/2017 15:40:49 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00133**	**21.971**	**.01001**	**.01980**	**.08148**	**.00105**	**-.00217**	**101.10**	**.00051**
Stddev	.00038	.063	.00459	.00017	.00019	.00011	.00024	.37	.00015
%RSD	28.502	.28725	45.869	.83565	.23249	10.066	10.925	.36957	29.922
#1	-.00106	21.926	.01326	.01992	.08161	.00112	-.00201	101.37	.00062
#2	-.00159	22.016	.00676	.01968	.08135	.00097	-.00234	100.84	.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01694**	**.02458**	**.06675**	**49.835**	**4.3451**	**.03780**	**23.582**	**1.8722**	**.00071**
Stddev	.00048	.00116	.00024	.396	.0697	.00283	.056	.0065	.00031
%RSD	2.8572	4.7117	.35216	.79373	1.6036	7.4920	.23558	.34499	43.900
#1	.01728	.02540	.06658	50.115	4.2958	.03579	23.621	1.8768	.00049
#2	.01660	.02377	.06691	49.556	4.3943	.03980	23.543	1.8677	.00093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.37167**	**.03683**	**2.3631**	**.01299**	**.01923**	**-.00177**	**-.00837**	**4.6947**	**10.047**
Stddev	.01860	.00172	.0770	.00003	.00785	.00272	.00389	.1852	.396
%RSD	5.0043	4.6724	3.2593	.19912	40.806	153.90	46.516	3.9446	3.9446
#1	.38482	.03805	2.4175	.01297	.02478	.00016	-.01112	4.8256	10.327
#2	.35852	.03561	2.3086	.01300	.01368	-.00370	-.00562	4.5638	9.7664
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00559**	**.10434**	**.01636**	**.29855**	**.00408**	**-.00105**	**.05143**	**.10952**	**.03752**
Stddev	.00199	.00013	.00122	.02291	.00252	.00618	.00007	.00082	.00345
%RSD	35.558	.12665	7.4450	7.6747	61.729	587.96	.12678	.74489	9.1944
#1	.00700	.10444	.01722	.31476	.00586	.00332	.05148	.10894	.03508
#2	.00419	.10425	.01550	.28235	.00230	-.00542	.05139	.11010	.03996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2402.4**	**42515.**	**2483.1**
Stddev	19.1	4.	7.0
%RSD	.79454	.00948	.28161
#1	2415.9	42517.	2478.1
#2	2388.9	42512.	2488.0

Sample Name: 280-97928-C-5-A Acquired: 6/12/2017 15:43:23 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00201**	**69.013**	**.03735**	**.02499**	**.21353**	**.00285**	**-.00546**	**31.568**	**.00079**
Stddev	.00000	.195	.00640	.00031	.00040	.00012	.00144	.091	.00008
%RSD	.23773	.28214	17.124	1.2413	.18916	4.0468	26.347	.28690	10.272
#1	-.00202	69.151	.04187	.02521	.21381	.00276	-.00444	31.632	.00073
#2	-.00201	68.875	.03283	.02477	.21324	.00293	-.00648	31.504	.00085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05194**	**.06761**	**.32923**	**158.61**	**8.1298**	**.13253**	**34.508**	**8.8462**	**.00028**
Stddev	.00247	.00304	.00121	.27	.0354	.00205	.010	.0732	.00030
%RSD	4.7514	4.5025	.36718	.17152	.43544	1.5460	.02951	.82763	104.07
#1	.05368	.06976	.33008	158.41	8.1047	.13398	34.516	8.8980	.00049
#2	.05019	.06546	.32838	158.80	8.1548	.13108	34.501	8.7944	.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.26093**	**.11085**	**3.5476**	**.03779**	**.50222**	**-.01192**	**-.01047**	**5.1077**	**10.930**
Stddev	.01096	.00482	.1482	.00172	.01466	.00849	.00563	.0956	.205
%RSD	4.2017	4.3447	4.1787	4.5576	2.9188	71.177	53.789	1.8712	1.8712
#1	.25318	.11425	3.6524	.03901	.51259	-.01793	-.00649	5.0401	10.786
#2	.26868	.10744	3.4428	.03657	.49186	-.00592	-.01445	5.1753	11.075
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00639**	**.06315**	**.03387**	**.35566**	**.00325**	**.02480**	**.13536**	**.40088**	**.02931**
Stddev	.00396	.00001	.00110	.00442	.00679	.01408	.00094	.00325	.00072
%RSD	61.968	.02030	3.2591	1.2430	209.06	56.752	.69475	.81165	2.4617
#1	.00919	.06314	.03308	.35879	-.00155	.01485	.13603	.40319	.02880
#2	.00359	.06316	.03465	.35254	.00805	.03476	.13470	.39858	.02982
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2441.9**	**44858.**	**2675.0**
Stddev	26.6	157.	7.9
%RSD	1.0882	.34946	.29555
#1	2460.7	44747.	2669.4
#2	2423.1	44969.	2680.6

Sample Name: CCVH-4579429 Acquired: 6/12/2017 15:46:03 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01456**	F **44.494**	**-.00454**	**.00555**	**.00131**	**.00013**	F **.85689**	**-.00329**	**.00028**	**-.00075**	**.00047**	**.01215**
Stddev	.00062	.016	.00437	.00120	.00007	.00038	.03119	.00465	.00016	.00018	.00016	.00065
%RSD	4.2466	.03540	96.275	21.569	5.5806	283.37	3.6396	141.33	56.689	24.040	33.269	5.3476
#1	-.01500	44.505	-.00145	.00470	.00125	.00040	.87895	-.00657	.00017	-.00088	.00036	.01261
#2	-.01413	44.483	-.00764	.00639	.00136	-.00013	.83484	-.00000	.00039	-.00062	.00058	.01169
Check ?	None	Chk Fail	None	None	None	None	Chk Fail	None	None	None	None	None
Value		50.000					1.0000					
Range		-10.490%					-10.490%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**46.584**	**.04219**	**-.00012**	**.12555**	**-.00192**	**-.00042**	**234.16**	**.00078**	**.00519**	**.00288**	F **3.8557**	**-.01289**
Stddev	.253	.06548	.00169	.00051	.00007	.00025	.35	.00081	.00090	.00112	.1381	.00462
%RSD	.54330	155.22	1382.6	.40488	3.4701	58.385	.15102	103.35	17.268	38.718	3.5818	35.869
#1	46.763	-.00412	-.00131	.12591	-.00187	-.00025	234.41	.00021	.00582	.00209	3.9534	-.01616
#2	46.405	.08849	.00107	.12519	-.00197	-.00059	233.91	.00136	.00456	.00367	3.7581	-.00962
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Fail	None
Value											5.0000	
Range											-10.490%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00852**	**.00917**	**.01963**	**-.00340**	**.00042**	**4.9178**	**.02697**	**.00003**	**9.7711**	**.01268**	**-.00015**	**.03582**
Stddev	.00585	.05102	.10918	.00301	.00006	.0276	.00058	.00151	.0576	.00033	.00106	.00208
%RSD	68.622	556.11	556.11	88.581	13.011	.56156	2.1540	5970.2	.58926	2.6301	721.43	5.8170
#1	-.01265	-.02690	-.05757	-.00552	.00046	4.9374	.02738	-.00104	9.8118	.01244	-.00089	.03434
#2	-.00439	.04525	.09684	-.00127	.00039	4.8983	.02656	.00109	9.7303	.01291	.00060	.03729
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2273.0**	**40336.**	**2319.7**
Stddev	53.7	85.	.6
%RSD	2.3641	.20976	.02798
#1	2235.0	40276.	2319.2
#2	2311.0	40396.	2320.1

Sample Name: CCV-4580817 Acquired: 6/12/2017 15:48:38 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.46324**	**.45009**	F **.84390**	**.46693**	F **.42341**	F **.44267**	**-.00065**	F **4.2483**	**.45907**	**.46137**	F **.40485**	F **.56262**
Stddev	.00045	.01297	.01987	.01248	.00069	.00047	.00173	.0252	.01126	.01177	.00952	.00128
%RSD	.09672	2.8815	2.3546	2.6736	.16333	.10599	265.68	.59408	2.4530	2.5511	2.3517	.22667
#1	.46356	.45926	.85795	.47576	.42390	.44234	.00057	4.2304	.46703	.46969	.41159	.56352
#2	.46293	.44092	.82985	.45811	.42292	.44300	-.00187	4.2661	.45110	.45305	.39812	.56171
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Fail	None	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Fail
Value			1.0000		.50000	.50000		5.0000			.50000	.50000
Range			-10.490%		-10.490%	-10.490%		-10.490%			-10.490%	10.490%

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2.2478**	**45.389**	**.91417**	**18.278**	**.51160**	F **.40181**	**4.6071**	**.46139**	**.90529**	F **.81157**	**-.06723**	W **.89539**
Stddev	.0298	.057	.00042	.033	.00064	.00979	.0335	.01178	.02638	.02047	.00798	.03228
%RSD	1.3246	.12643	.04557	.18132	.12533	2.4375	.72690	2.5532	2.9141	2.5224	11.871	3.6051
#1	2.2689	45.348	.91446	18.254	.51206	.40874	4.6308	.46972	.92394	.82605	-.07287	.91821
#2	2.2267	45.429	.91387	18.301	.51115	.39489	4.5834	.45306	.88663	.79710	-.06158	.87256
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Warn
Value	2.5000					.50000				1.0000		1.0000
Range	-10.000%					-10.490%				-10.490%		-10.000%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.85208**	**4.6214**	**9.8898**	F **.81747**	F **.44203**	**.00445**	**.49467**	F **.84060**	**.01275**	**.51888**	**.49762**	**.48283**
Stddev	.01231	.0396	.0847	.01925	.00070	.00201	.00076	.02263	.03539	.00001	.00045	.00098
%RSD	1.4445	.85659	.85659	2.3553	.15735	45.198	.15361	2.6923	277.67	.00173	.09030	.20306
#1	.86078	4.5934	9.8299	.83108	.44153	.00303	.49520	.85660	.03777	.51889	.49794	.48214
#2	.84338	4.6494	9.9497	.80385	.44252	.00587	.49413	.82460	-.01228	.51888	.49730	.48352
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Fail	None	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
Value	1.0000			1.0000	.50000			1.0000				
Range	-10.490%			-10.490%	-10.490%			-10.490%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2346.6**	**43137.**	**2521.3**
Stddev	5.6	196.	15.3
%RSD	.23934	.45330	.60623
#1	2350.5	43275.	2510.5
#2	2342.6	42999.	2532.1

Sample Name: CCB Acquired: 6/12/2017 15:51:08 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00061**	**.00106**	**-.00708**	**.00441**	**-.00006**	**-.00004**	**.00018**	**-.00419**	**.00011**	**.00041**	**.00081**	**-.00116**	**.00429**
Stddev	.00071	.00076	.00048	.00012	.00036	.00019	.00167	.00612	.00005	.00028	.00027	.00008	.00703
%RSD	117.00	71.987	6.7288	2.7893	611.10	491.48	943.95	146.16	42.992	68.293	32.786	6.5593	163.91
#1	.00010	.00052	-.00742	.00450	.00020	.00009	.00136	-.00851	.00014	.00061	.00100	-.00110	-.00068
#2	.00111	.00160	-.00674	.00433	-.00031	-.00017	-.00101	.00014	.00007	.00021	.00062	-.00121	.00926
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.09643**	**-.00034**	**.00295**	**-.00002**	**.00081**	**-.16937**	**.00085**	**.00269**	**.00200**	**-.06502**	**-.00020**	**-.00844**	**.00466**
Stddev	.03380	.00193	.00170	.00002	.00010	.01388	.00002	.00073	.00169	.00284	.00036	.00219	.00481
%RSD	35.055	574.01	57.771	79.361	12.578	8.1964	2.6575	27.127	84.449	4.3743	179.94	25.922	103.34
#1	-.12033	.00103	.00174	-.00001	.00074	-.15955	.00083	.00217	.00081	-.06704	-.00046	-.00689	.00806
#2	-.07253	-.00170	.00415	-.00003	.00089	-.17918	.00086	.00320	.00320	-.06301	.00005	-.00999	.00125
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00997**	**-.00069**	**.00012**	**-.00050**	**.00053**	**.00376**	**.00328**	**.00039**	**-.00009**	**.00480**
Stddev	.01030	.00064	.00016	.00042	.00006	.00203	.00379	.00060	.00002	.00254
%RSD	103.34	91.646	135.47	84.621	11.420	54.063	115.25	155.18	20.164	52.967
#1	.01725	-.00114	.00001	-.00020	.00057	.00232	.00061	.00081	-.00011	.00300
#2	.00268	-.00024	.00024	-.00080	.00049	.00520	.00596	-.00004	-.00008	.00659
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2304.8**	**42632.**	**2435.9**
Stddev	12.3	282.	1.7
%RSD	.53510	.66183	.06785
#1	2313.6	42831.	2434.7
#2	2296.1	42432.	2437.1

Sample Name: CCVL-4589022 Acquired: 6/12/2017 15:53:47 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00910**	**.09385**	F **.00887**	**.09258**	**.00885**	**.00087**	**.09475**	**.16525**	**.00429**	**.00977**	**.00872**	**.01666**
Stddev	.00000	.00376	.00449	.00440	.00037	.00015	.00285	.01125	.00027	.00042	.00027	.00005
%RSD	.02635	4.0105	50.628	4.7536	4.2036	17.192	3.0128	6.8074	6.4039	4.2909	3.1372	.28133
#1	.00910	.09651	.01204	.09569	.00858	.00076	.09677	.17321	.00449	.01006	.00891	.01663
#2	.00910	.09119	.00569	.08947	.00911	.00097	.09273	.15730	.00410	.00947	.00852	.01669
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09458**	**2.7240**	**.01789**	**.19104**	**.01076**	**.01593**	**.79603**	**.03755**	**2.5666**	**.00974**	F **.00748**	**.01494**
Stddev	.00154	.0284	.00106	.00143	.00011	.00064	.01938	.00132	.1217	.00114	.00106	.00365
%RSD	1.6280	1.0419	5.9020	.74613	1.0182	4.0457	2.4352	3.5109	4.7408	11.653	14.152	24.447
#1	.09349	2.7441	.01864	.19205	.01084	.01638	.80974	.03848	2.6527	.00894	.00673	.01236
#2	.09567	2.7040	.01715	.19004	.01068	.01547	.78232	.03662	2.4806	.01055	.00823	.01752
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.00499**	**.46807**	**1.0017**	**.08011**	**.00897**	**.01571**	**.00980**	**.01300**	**.06267**	**.01054**	F **.02630**	**.01783**
Stddev	.00227	.01397	.0299	.00071	.00014	.00084	.00009	.00058	.01068	.00107	.00151	.00278
%RSD	45.598	2.9848	2.9848	.88372	1.5482	5.3315	.87825	4.4891	17.051	10.178	5.7506	15.608
#1	.00338	.45819	.98053	.07961	.00907	.01630	.00986	.01342	.07022	.00978	.02523	.01980
#2	.00660	.47795	1.0228	.08061	.00887	.01512	.00974	.01259	.05511	.01130	.02737	.01586
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value	.02000										.02000	
Range	-30.000%										30.000%	

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2300.8**	**42515.**	**2387.7**
Stddev	2.6	41.	5.5
%RSD	.11308	.09686	.22911
#1	2302.7	42486.	2391.6
#2	2299.0	42544.	2383.8

Sample Name: 280-97928-C-6-A Acquired: 6/12/2017 15:56:24 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00140**	**32.236**	**.02108**	**.01940**	**.11337**	**.00156**	**-.00854**	**53.517**	**.00046**
Stddev	.00009	.225	.00215	.00169	.00001	.00004	.00335	.324	.00029
%RSD	6.3960	.69937	10.184	8.6891	.00519	2.3806	39.229	.60595	62.186
#1	-.00134	32.395	.02260	.02059	.11337	.00159	-.01091	53.746	.00026
#2	-.00147	32.076	.01956	.01820	.11337	.00154	-.00617	53.287	.00067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02622**	**.03423**	**.11019**	**75.027**	**5.5188**	**.05597**	**24.228**	**3.1693**	**.00021**
Stddev	.00080	.00158	.00002	.556	.0173	.00059	.046	.0042	.00030
%RSD	3.0495	4.6267	.01743	.74063	.31378	1.0586	.18859	.13180	139.98
#1	.02678	.03535	.11020	75.420	5.5311	.05639	24.260	3.1723	.00042
#2	.02565	.03311	.11018	74.634	5.5066	.05555	24.196	3.1664	.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.29517**	**.05370**	**2.9976**	**.02183**	**.04957**	**-.00752**	**-.01171**	**4.7468**	**10.158**
Stddev	.01531	.00167	.0969	.00034	.01048	.00114	.00086	.0112	.024
%RSD	5.1876	3.1116	3.2339	1.5679	21.142	15.227	7.3669	.23685	.23685
#1	.30599	.05488	3.0662	.02159	.05697	-.00671	-.01110	4.7388	10.141
#2	.28434	.05251	2.9291	.02207	.04216	-.00833	-.01232	4.7547	10.175
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00590**	**.08845**	**.02578**	**.35985**	**.00343**	**.01785**	**.07448**	**.17466**	**.03623**
Stddev	.00112	.00033	.00083	.00504	.00241	.00001	.00020	.00041	.00125
%RSD	18.955	.37546	3.2289	1.4019	70.339	.04335	.27101	.23416	3.4492
#1	.00669	.08869	.02636	.36341	.00173	.01786	.07434	.17437	.03535
#2	.00511	.08822	.02519	.35628	.00514	.01785	.07462	.17495	.03711
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2431.1**	**43926.**	**2598.5**
Stddev	8.6	97.	.8
%RSD	.35345	.22038	.03140
#1	2437.2	43994.	2599.1
#2	2425.0	43857.	2598.0

Sample Name: 280-97928-C-7-A Acquired: 6/12/2017 15:58:59 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00180**	**26.870**	**.01302**	**.01512**	**.10169**	**.00126**	**-.00520**	**20.281**	**.00030**
Stddev	.00041	.208	.00120	.00027	.00150	.00012	.00379	.156	.00016
%RSD	22.713	.77281	9.2018	1.8013	1.4705	9.8519	72.836	.77058	55.537
#1	-.00209	27.017	.01217	.01531	.10275	.00135	-.00252	20.392	.00041
#2	-.00151	26.723	.01387	.01493	.10063	.00117	-.00788	20.170	.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02262**	**.02981**	**.09980**	**65.688**	**4.5602**	**.04777**	**15.731**	**2.8442**	**.00012**
Stddev	.00056	.00111	.00077	.746	.0533	.00114	.020	.0107	.00012
%RSD	2.4773	3.7153	.77475	1.1359	1.1684	2.3920	.12755	.37665	103.68
#1	.02301	.03059	.10034	66.215	4.5979	.04858	15.745	2.8517	.00003
#2	.02222	.02903	.09925	65.160	4.5225	.04696	15.716	2.8366	.00020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.40517**	**.04875**	**2.4697**	**.01860**	**-.02005**	**-.00681**	**-.01454**	**2.5695**	**5.4988**
Stddev	.01138	.00131	.0760	.00214	.00481	.00091	.00513	.0674	.1442
%RSD	2.8096	2.6856	3.0787	11.525	23.976	13.342	35.280	2.6231	2.6231
#1	.41322	.04968	2.5234	.02012	-.02345	-.00745	-.01817	2.6172	5.6007
#2	.39712	.04783	2.4159	.01709	-.01665	-.00616	-.01092	2.5219	5.3968
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00675**	**.04173**	**.02340**	**.25016**	**.00216**	**-.02211**	**.06069**	**.15602**	**.03376**
Stddev	.00115	.00017	.00011	.00864	.00068	.02557	.00036	.00061	.00097
%RSD	16.980	.40652	.48824	3.4550	31.477	115.65	.58854	.38980	2.8701
#1	.00594	.04185	.02348	.25628	.00264	-.00403	.06095	.15559	.03444
#2	.00756	.04161	.02332	.24405	.00168	-.04019	.06044	.15645	.03307
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2427.3**	**44505.**	**2583.9**
Stddev	27.4	215.	21.0
%RSD	1.1271	.48219	.81293
#1	2446.6	44353.	2569.1
#2	2407.9	44656.	2598.8

Sample Name: 280-97928-C-8-A Acquired: 6/12/2017 16:01:33 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00353**	**77.383**	**.03969**	**.02081**	**.31955**	**.00376**	**-.00555**	**29.995**	**.00142**
Stddev	.00007	.184	.01156	.00149	.00159	.00004	.00026	.207	.00033
%RSD	1.9698	.23776	29.125	7.1581	.49693	1.0053	4.7163	.69099	22.873
#1	-.00358	77.253	.04786	.01976	.31843	.00378	-.00537	29.849	.00119
#2	-.00348	77.513	.03152	.02186	.32068	.00373	-.00574	30.142	.00165
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06349**	**.07996**	**.27254**	**172.08**	**7.8259**	**.19795**	**29.279**	W **10.960**	**.00076**
Stddev	.00332	.00306	.00066	1.38	.0256	.00384	.058	.077	.00063
%RSD	5.2229	3.8286	.24058	.80036	.32730	1.9413	.19654	.69921	82.797
#1	.06584	.08213	.27300	171.11	7.8078	.19523	29.320	10.906	.00032
#2	.06115	.07780	.27207	173.05	7.8440	.20066	29.239	11.015	.00121
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.20787**	**.12270**	**3.8060**	**.06635**	**.28681**	**-.01304**	**-.00826**	**4.3999**	**9.4158**
Stddev	.00332	.00444	.1367	.00037	.00077	.00168	.00634	.1197	.2561
%RSD	1.5990	3.6156	3.5915	.55163	.26956	12.908	76.758	2.7196	2.7196
#1	.21022	.12583	3.9027	.06661	.28627	-.01185	-.01274	4.3153	9.2347
#2	.20552	.11956	3.7094	.06610	.28736	-.01423	-.00378	4.4845	9.5968
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00897**	**.09435**	**.03986**	**.68422**	**.00683**	**.04570**	**.15258**	**.46039**	**.03842**
Stddev	.00073	.00051	.00236	.00804	.00153	.00873	.00089	.00078	.00416
%RSD	8.0911	.54522	5.9101	1.1755	22.444	19.092	.58271	.17031	10.831
#1	.00948	.09399	.04152	.67853	.00575	.03953	.15195	.45984	.03548
#2	.00846	.09471	.03819	.68990	.00791	.05187	.15321	.46095	.04136
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2522.6**	**44286.**	**2608.8**
Stddev	73.0	380.	27.2
%RSD	2.8919	.85693	1.0441
#1	2471.1	44555.	2628.1
#2	2574.2	44018.	2589.6

Sample Name: 280-97928-B-9-A Acquired: 6/12/2017 16:04:11 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00380**	**72.786**	**.05026**	**.02600**	**.45547**	**.00364**	**-.01113**	**70.823**	**.00108**
Stddev	.00043	.086	.00631	.00156	.00210	.00011	.00364	.263	.00025
%RSD	11.413	.11797	12.561	6.0038	.46126	2.9354	32.749	.37068	23.048
#1	-.00410	72.725	.04579	.02710	.45398	.00371	-.01371	70.638	.00126
#2	-.00349	72.846	.05472	.02489	.45695	.00356	-.00855	71.009	.00090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05690**	**.08528**	**.32168**	**187.49**	**9.2662**	**.17583**	**39.276**	W **13.510**	**.00214**
Stddev	.00211	.00227	.00000	.31	.1268	.00014	.119	.063	.00045
%RSD	3.7101	2.6564	.00008	.16705	1.3686	.08216	.30339	.46494	21.056
#1	.05839	.08688	.32168	187.27	9.1765	.17594	39.360	13.466	.00182
#2	.05540	.08368	.32168	187.71	9.3558	.17573	39.192	13.554	.00245
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.41258**	**.12790**	**4.3224**	**.05737**	**.43173**	**-.01483**	**-.01082**	**5.2013**	**11.131**
Stddev	.00009	.00350	.1077	.00168	.01961	.00139	.00145	.0488	.105
%RSD	.02144	2.7394	2.4921	2.9225	4.5411	9.3727	13.437	.93910	.93910
#1	.41252	.13038	4.3986	.05855	.44559	-.01581	-.00979	5.2359	11.205
#2	.41265	.12543	4.2463	.05618	.41786	-.01385	-.01184	5.1668	11.057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00856**	**.15616**	**.04421**	**.88193**	**.00687**	**.04934**	**.15790**	**.44317**	**.05659**
Stddev	.00128	.00066	.00104	.02003	.00365	.05218	.00057	.00161	.00291
%RSD	14.990	.42567	2.3470	2.2716	53.107	105.76	.36071	.36395	5.1370
#1	.00765	.15569	.04348	.89609	.00429	.08624	.15750	.44203	.05865
#2	.00947	.15663	.04495	.86776	.00946	.01244	.15831	.44431	.05454
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2583.8**	**47475.**	**2847.6**
Stddev	13.5	217.	2.8
%RSD	.52410	.45657	.09677
#1	2593.4	47628.	2845.7
#2	2574.2	47322.	2849.6

Sample Name: 280-97928-A-10-A Acquired: 6/12/2017 16:06:49 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00243**	**46.981**	**.02768**	**.02028**	**.14745**	**.00222**	**-.00326**	**10.936**	**.00037**
Stddev	.00058	.048	.00112	.00020	.00040	.00018	.00017	.011	.00004
%RSD	23.906	.10120	4.0555	.96617	.27295	8.2156	5.3569	.09987	9.6839
#1	-.00202	47.014	.02847	.02042	.14774	.00210	-.00338	10.944	.00040
#2	-.00284	46.947	.02688	.02014	.14717	.00235	-.00314	10.928	.00035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03410**	**.04738**	**.13915**	**102.36**	**7.2829**	**.07774**	**19.729**	**3.8096**	**.00082**
Stddev	.00138	.00129	.00006	.05	.0595	.00278	.061	.0014	.00073
%RSD	4.0571	2.7209	.04259	.04934	.81748	3.5802	.31003	.03690	87.980
#1	.03508	.04829	.13919	102.33	7.3250	.07577	19.685	3.8086	.00031
#2	.03312	.04647	.13910	102.40	7.2408	.07971	19.772	3.8106	.00134
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.24478**	**.07857**	**2.7077**	**.02545**	**-.01682**	**-.00724**	**-.00394**	**5.3122**	**11.368**
Stddev	.01371	.00265	.0892	.00191	.00092	.00199	.00121	.0933	.200
%RSD	5.6013	3.3719	3.2929	7.4849	5.4586	27.527	30.690	1.7554	1.7554
#1	.25447	.08044	2.7708	.02680	-.01747	-.00865	-.00309	5.2463	11.227
#2	.23508	.07669	2.6447	.02410	-.01617	-.00583	-.00480	5.3781	11.509
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00831**	**.03099**	**.03120**	**.46916**	**.00781**	**-.00205**	**.09675**	**.21754**	**.04522**
Stddev	.00143	.00008	.00098	.00271	.00002	.01285	.00152	.00089	.00105
%RSD	17.242	.26232	3.1522	.57662	.29037	627.52	1.5714	.40877	2.3158
#1	.00932	.03093	.03050	.46725	.00779	-.01113	.09567	.21691	.04448
#2	.00729	.03105	.03189	.47108	.00782	.00704	.09782	.21816	.04596
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2513.7**	**44860.**	**2616.1**
Stddev	17.5	102.	7.1
%RSD	.69440	.22720	.26966
#1	2501.4	44932.	2621.1
#2	2526.1	44788.	2611.1

Sample Name: 280-97928-A-11-A Acquired: 6/12/2017 16:09:23 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00375**	**99.540**	**.03699**	**.02627**	**.34181**	**.00614**	**-.01002**	**10.684**	**.00146**
Stddev	.00139	.352	.00215	.00088	.00038	.00009	.00142	.006	.00002
%RSD	36.997	.35373	5.8008	3.3649	.11172	1.5426	14.148	.06048	1.4338
#1	-.00473	99.789	.03547	.02690	.34154	.00620	-.00902	10.679	.00147
#2	-.00277	99.292	.03851	.02565	.34208	.00607	-.01102	10.688	.00144
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06022**	**.10894**	**.25530**	**211.74**	**11.346**	**.21362**	**31.506**	**4.2724**	**.00151**
Stddev	.00168	.00320	.00241	.13	.145	.00200	.088	.0119	.00085
%RSD	2.7975	2.9372	.94461	.06309	1.2781	.93493	.27808	.27841	56.461
#1	.06141	.11120	.25700	211.83	11.449	.21504	31.568	4.2808	.00211
#2	.05903	.10668	.25359	211.64	11.244	.21221	31.444	4.2640	.00091
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.63080**	**.14561**	**3.6873**	**.07029**	**.41274**	**-.01612**	**-.00911**	**5.3955**	**11.546**
Stddev	.00043	.00389	.1027	.00252	.01675	.00205	.00030	.0062	.013
%RSD	.06874	2.6747	2.7851	3.5807	4.0585	12.721	3.3457	.11486	.11486
#1	.63111	.14837	3.7599	.07207	.42458	-.01467	-.00932	5.3999	11.556
#2	.63050	.14286	3.6147	.06851	.40089	-.01757	-.00889	5.3911	11.537
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00727**	**.05864**	**.06490**	**1.0088**	**.00521**	**.01448**	**.24566**	**.47991**	**.05366**
Stddev	.00105	.00023	.00018	.0123	.00246	.02261	.00140	.00400	.00049
%RSD	14.386	.39941	.27283	1.2208	47.291	156.12	.57087	.83426	.91308
#1	.00801	.05880	.06502	1.0175	.00347	-.00151	.24665	.48274	.05401
#2	.00653	.05847	.06477	1.0000	.00695	.03047	.24467	.47708	.05332
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2728.2**	**49094.**	**2953.9**
Stddev	18.6	167.	.2
%RSD	.68041	.34024	.00548
#1	2741.3	48976.	2953.8
#2	2715.1	49212.	2954.0

Sample Name: 280-97928-A-11-A @5 Acquired: 6/12/2017 16:11:55 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 5x

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00025**	**23.223**	**.00283**	**.00748**	**.07869**	**.00153**	**-.00410**	**2.4465**	**.00028**
Stddev	.00010	.055	.00557	.00006	.00037	.00008	.00124	.0202	.00019
%RSD	38.674	.23850	196.98	.79963	.46585	5.3890	30.314	.82504	65.956
#1	-.00018	23.262	-.00111	.00744	.07895	.00159	-.00322	2.4608	.00041
#2	-.00032	23.184	.00676	.00752	.07843	.00148	-.00498	2.4322	.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01422**	**.02535**	**.05790**	**49.364**	**2.5206**	**.04939**	**7.3836**	**.99440**	**.00124**
Stddev	.00132	.00079	.00061	.489	.0154	.00081	.0088	.00530	.00032
%RSD	9.2981	3.1225	1.0465	.98976	.60936	1.6457	.11913	.53262	25.507
#1	.01515	.02591	.05833	49.710	2.5098	.04882	7.3898	.99815	.00146
#2	.01328	.02479	.05747	49.019	2.5315	.04997	7.3774	.99066	.00102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.04548**	**.03414**	**.84504**	**.01831**	**.02923**	**-.00646**	**-.00542**	**1.2876**	**2.7554**
Stddev	.00415	.00126	.02953	.00275	.00500	.00684	.00473	.0224	.0480
%RSD	9.1288	3.6772	3.4945	15.001	17.095	105.87	87.284	1.7403	1.7403
#1	-.04842	.03503	.86593	.02025	.03277	-.01129	-.00877	1.2717	2.7215
#2	-.04255	.03325	.82416	.01637	.02570	-.00162	-.00208	1.3034	2.7893
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00162**	**.01358**	**.01604**	**.23001**	**.00235**	**.01361**	**.05580**	**.11074**	**.01228**
Stddev	.00034	.00001	.00097	.00458	.00221	.03360	.00044	.00066	.00227
%RSD	20.897	.04598	6.0514	1.9890	93.898	246.84	.79115	.59816	18.473
#1	.00186	.01358	.01536	.23325	.00392	.03737	.05612	.11121	.01067
#2	.00138	.01358	.01673	.22678	.00079	-.01015	.05549	.11027	.01388
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2442.3**	**43942.**	**2539.2**
Stddev	6.3	161.	4.1
%RSD	.25996	.36658	.16063
#1	2446.8	44056.	2536.3
#2	2437.8	43828.	2542.1

Sample Name: 280-97928-B-12-A Acquired: 6/12/2017 16:14:31 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00185**	**35.531**	**.02132**	**.03740**	**.18438**	**.00184**	**-.00092**	F **1761.4**	**-.00004**
Stddev	.00026	.118	.00030	.00255	.00020	.00018	.00128	14.4	.00020
%RSD	13.856	.33263	1.4049	6.8276	.10991	9.8396	139.39	.81773	481.82
#1	-.00203	35.614	.02153	.03920	.18424	.00197	-.00182	1751.2	.00010
#2	-.00167	35.447	.02111	.03559	.18453	.00171	-.00001	1771.6	-.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02989**	**.05318**	**.13589**	**65.676**	**7.5883**	**.08161**	**58.188**	**3.0097**	**-.00043**
Stddev	.00104	.00272	.00066	.287	.0210	.00266	.019	.0022	.00019
%RSD	3.4900	5.1083	.48763	.43760	.27640	3.2560	.03333	.07455	43.266
#1	.03063	.05511	.13636	65.879	7.5735	.07973	58.202	3.0113	-.00056
#2	.02915	.05126	.13542	65.472	7.6031	.08349	58.175	3.0081	-.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.3057**	**.08242**	**2.5121**	**.04529**	**1.6210**	**-.00726**	**.00155**	**5.7483**	**12.301**
Stddev	.0052	.00243	.1050	.00258	.0753	.00058	.00014	.0396	.085
%RSD	.39767	2.9445	4.1800	5.6978	4.6480	7.9998	8.9641	.68888	.68888
#1	1.3020	.08413	2.5864	.04347	1.6743	-.00767	.00165	5.7763	12.361
#2	1.3094	.08070	2.4379	.04712	1.5677	-.00685	.00145	5.7203	12.241
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00132**	**1.5786**	**.01871**	**.42310**	**.00466**	**-.01570**	**.10746**	**.31083**	**.02419**
Stddev	.00024	.0060	.00011	.00865	.00268	.01913	.00094	.00065	.00349
%RSD	18.003	.37879	.59352	2.0450	57.601	121.85	.87926	.20782	14.448
#1	-.00149	1.5828	.01863	.42922	.00655	-.00217	.10813	.31129	.02172
#2	-.00115	1.5744	.01879	.41699	.00276	-.02923	.10679	.31037	.02666
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2205.0**	**38830.**	**2493.0**
Stddev	20.8	51.	10.5
%RSD	.94258	.13185	.42142
#1	2219.7	38794.	2485.5
#2	2190.3	38866.	2500.4

Sample Name: 280-97928-B-12-A @2 Acquired: 6/12/2017 16:17:11 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 2x

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**18.376**	**.00905**	**.02068**	**.09471**	**.00098**	**-.00242**	W **941.69**	**-.00010**
Stddev	.00028	.170	.00095	.00059	.00028	.00017	.00496	7.80	.00013
%RSD	822.48	.92442	10.523	2.8366	.29190	17.575	205.51	.82790	132.08
#1	.00016	18.496	.00972	.02109	.09491	.00086	-.00593	936.18	-.00019
#2	-.00023	18.255	.00838	.02026	.09452	.00110	.00109	947.21	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01600**	**.02777**	**.07218**	**33.215**	**3.8299**	**.04345**	**30.584**	**1.5716**	**-.00067**
Stddev	.00026	.00158	.00054	.121	.0351	.00036	.146	.0083	.00000
%RSD	1.6393	5.6903	.74428	.36463	.91662	.82459	.47669	.52831	.49972
#1	.01618	.02889	.07256	33.129	3.8050	.04370	30.687	1.5775	-.00067
#2	.01581	.02665	.07180	33.301	3.8547	.04319	30.481	1.5658	-.00066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.60547**	**.04390**	**1.2977**	**.02293**	**.73579**	**-.00853**	**-.00700**	**2.8656**	**6.1324**
Stddev	.00347	.00072	.0459	.00100	.03359	.00141	.00592	.0929	.1989
%RSD	.57314	1.6510	3.5373	4.3743	4.5658	16.468	84.655	3.2427	3.2427
#1	.60792	.04442	1.3302	.02222	.75955	-.00754	-.01118	2.9313	6.2730
#2	.60301	.04339	1.2653	.02364	.71204	-.00953	-.00281	2.7999	5.9918
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00033**	**.81399**	**.01251**	**.21132**	**.00570**	**-.06127**	**.05472**	**.16804**	**.01253**
Stddev	.00437	.00227	.00246	.00348	.00392	.00684	.00154	.00102	.00256
%RSD	1339.4	.27908	19.657	1.6477	68.636	11.164	2.8103	.60610	20.462
#1	-.00276	.81239	.01077	.21378	.00847	-.06610	.05581	.16876	.01072
#2	.00342	.81560	.01425	.20886	.00294	-.05643	.05363	.16732	.01435
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2280.7**	**38812.**	**2398.1**
Stddev	3.7	59.	8.6
%RSD	.16230	.15093	.35939
#1	2278.0	38771.	2404.2
#2	2283.3	38854.	2392.0

Sample Name: 280-97928-C-14-A Acquired: 6/12/2017 16:19:51 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00246**	**88.225**	**.04486**	**.03561**	**.38843**	**.00437**	**-.00707**	W **581.39**	**.00254**
Stddev	.00068	.406	.00260	.00073	.00083	.00014	.00049	1.50	.00016
%RSD	27.722	.46046	5.7849	2.0527	.21409	3.3143	6.8825	.25785	6.3269
#1	-.00294	88.512	.04303	.03613	.38901	.00447	-.00742	582.45	.00266
#2	-.00198	87.938	.04670	.03509	.38784	.00427	-.00673	580.33	.00243
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06177**	**.09460**	**.31885**	**167.65**	**11.411**	**.17758**	**40.474**	W **10.921**	**.00240**
Stddev	.00174	.00237	.00003	.13	.003	.00243	.072	.022	.00010
%RSD	2.8218	2.5006	.00957	.08016	.02334	1.3708	.17797	.20472	4.2269
#1	.06300	.09627	.31887	167.55	11.409	.17930	40.525	10.905	.00233
#2	.06054	.09293	.31883	167.74	11.412	.17586	40.423	10.937	.00248
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.68158**	**.13125**	**6.5544**	**.09116**	**1.4552**	**-.01911**	**-.01144**	**7.0071**	**14.995**
Stddev	.00308	.00280	.1404	.00022	.0194	.00067	.00350	.0305	.065
%RSD	.45203	2.1299	2.1424	.23969	1.3310	3.5192	30.640	.43586	.43586
#1	.67941	.13322	6.6537	.09131	1.4689	-.01864	-.01392	7.0287	15.041
#2	.68376	.12927	6.4551	.09100	1.4415	-.01959	-.00896	6.9855	14.949
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00763**	**.62759**	**.03800**	**.74390**	**.00652**	**.01270**	**.21017**	**.52280**	**.02609**
Stddev	.00231	.00182	.00175	.00477	.00083	.03523	.00045	.00219	.00357
%RSD	30.318	.28932	4.5941	.64111	12.713	277.47	.21276	.41857	13.668
#1	.00599	.62887	.03677	.74728	.00711	.03761	.21048	.52125	.02862
#2	.00926	.62631	.03924	.74053	.00594	-.01221	.20985	.52434	.02357
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2488.3**	**43344.**	**2787.9**
Stddev	6.7	72.	16.3
%RSD	.26866	.16499	.58427
#1	2493.0	43395.	2776.4
#2	2483.5	43294.	2799.5

Sample Name: CCVH-4579429 Acquired: 6/12/2017 16:22:28 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01540**	F **43.906**	**-.00419**	**.00111**	**.00126**	**.00016**	F **.84983**	**.06507**	**.00042**	**-.00112**	**.00101**	**.01091**
Stddev	.00141	.210	.00077	.00042	.00011	.00018	.03097	.01526	.00007	.00040	.00041	.00035
%RSD	9.1605	.47835	18.442	37.656	8.5994	115.64	3.6447	23.455	16.671	35.380	40.641	3.1753
#1	-.01640	44.054	-.00364	.00141	.00133	.00029	.87173	.07587	.00037	-.00084	.00072	.01066
#2	-.01440	43.757	-.00474	.00082	.00118	.00003	.82793	.05428	.00047	-.00140	.00131	.01115
Check ?	None	Chk Fail	None	None	None	None	Chk Fail	None	None	None	None	None
Value		50.000					1.0000					
Range		-10.490%					-10.490%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**46.417**	**-.03268**	**.00074**	**.13254**	**-.00169**	**-.00128**	**233.80**	**.00168**	**.00086**	**.00170**	F **3.7945**	**-.00952**
Stddev	.255	.03398	.00036	.00827	.00036	.00045	1.48	.00029	.00651	.00039	.1707	.00728
%RSD	.54941	103.98	47.787	6.2423	21.483	35.372	.63435	17.009	753.88	22.729	4.4988	76.443
#1	46.598	-.00865	.00049	.13839	-.00143	-.00160	234.84	.00148	-.00374	.00143	3.9152	-.01467
#2	46.237	-.05671	.00100	.12669	-.00194	-.00096	232.75	.00188	.00547	.00198	3.6738	-.00437
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Fail	None
Value											5.0000	
Range											-10.490%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01013**	**.01913**	**.04095**	**-.00294**	**.00042**	**5.0095**	**.02857**	**.00216**	**9.8991**	**.01207**	**-.00080**	**.02635**
Stddev	.00045	.06188	.13243	.00028	.00019	.0244	.00059	.00338	.0091	.00038	.00022	.00800
%RSD	4.4804	323.44	323.44	9.3868	45.554	.48784	2.0707	156.14	.09235	3.1438	28.023	30.373
#1	-.01045	-.02463	-.05270	-.00314	.00028	5.0268	.02899	-.00023	9.8926	.01180	-.00064	.02069
#2	-.00981	.06289	.13459	-.00275	.00055	4.9922	.02815	.00455	9.9055	.01234	-.00095	.03201
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2276.5**	**40241.**	**2411.5**
Stddev	1.6	87.	4.5
%RSD	.07077	.21598	.18455
#1	2277.6	40302.	2414.6
#2	2275.3	40179.	2408.3

Sample Name: CCV-4580817 Acquired: 6/12/2017 16:25:04 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.46287**	**.47415**	F **.83025**	**.46498**	F **.41936**	F **.44128**	**-.00448**	F **4.1916**	**.45910**	**.46207**	F **.39882**	F **.57724**
Stddev	.00069	.01295	.02605	.01112	.00111	.00112	.00081	.0162	.01254	.01338	.01026	.00381
%RSD	.14818	2.7316	3.1374	2.3908	.26391	.25456	18.052	.38554	2.7316	2.8948	2.5732	.66054
#1	.46335	.48331	.84867	.47284	.41858	.44048	-.00505	4.2031	.46797	.47152	.40608	.57993
#2	.46238	.46499	.81183	.45712	.42015	.44207	-.00391	4.1802	.45023	.45261	.39156	.57454
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Fail	None	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Fail
Value			1.0000		.50000	.50000		5.0000			.50000	.50000
Range			-10.490%		-10.490%	-10.490%		-10.490%			-10.490%	10.490%

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.2627**	**45.611**	**.91901**	**18.565**	**.52571**	F **.39579**	**4.6551**	**.46273**	**.91334**	F **.80070**	**-.07436**	F **.89091**
Stddev	.0122	.193	.00346	.040	.00198	.01044	.0067	.01193	.03024	.02427	.00719	.02306
%RSD	.53803	.42259	.37670	.21794	.37626	2.6375	.14472	2.5793	3.3113	3.0315	9.6671	2.5887
#1	2.2541	45.475	.91656	18.594	.52711	.40317	4.6599	.47117	.93472	.81787	-.07944	.90721
#2	2.2713	45.747	.92145	18.537	.52431	.38840	4.6504	.45429	.89195	.78354	-.06928	.87460
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Fail
Value						.50000				1.0000		1.0000
Range						-10.490%				-10.490%		-10.490%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.83898**	**4.6368**	**9.9228**	F **.80573**	F **.43845**	**.00335**	**.50539**	F **.82366**	**.00492**	**.53713**	**.51727**	**.49035**
Stddev	.03365	.0164	.0351	.02200	.00154	.00304	.00153	.02163	.01319	.00016	.00408	.00155
%RSD	4.0114	.35377	.35377	2.7303	.35028	90.884	.30227	2.6257	268.30	.03009	.78847	.31676
#1	.86278	4.6252	9.8980	.82129	.43737	.00550	.50647	.83895	.01424	.53724	.52015	.49145
#2	.81518	4.6484	9.9476	.79017	.43954	.00120	.50431	.80836	-.00441	.53701	.51439	.48925
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Fail	None	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
Value	1.0000			1.0000	.50000			1.0000				
Range	-10.490%			-10.490%	-10.490%			-10.490%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2306.4**	**40968.**	**2378.6**
Stddev	9.0	127.	21.9
%RSD	.38810	.31089	.92172
#1	2300.0	40878.	2394.1
#2	2312.7	41058.	2363.1

Sample Name: CCB Acquired: 6/12/2017 16:27:34 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00041**	**.00113**	**.00336**	**.00121**	**.00036**	**.00001**	**.00044**	**.01301**	**-.00013**	**.00008**	**.00046**	**-.00045**	**.00369**
Stddev	.00028	.00055	.00497	.00120	.00054	.00002	.00367	.00055	.00029	.00004	.00010	.00071	.00748
%RSD	69.333	48.796	148.04	99.099	149.34	132.95	833.00	4.2527	232.38	56.064	20.640	157.44	202.44
#1	.00061	.00074	.00687	.00036	-.00002	.00002	.00304	.01261	-.00033	.00011	.00053	-.00095	.00898
#2	.00021	.00153	-.00016	.00206	.00074	.00000	-.00216	.01340	.00008	.00005	.00039	.00005	-.00159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.09621**	**-.00047**	**.00093**	**.00010**	**.00090**	**-.19085**	**.00049**	**.00026**	**.00290**	**-.06811**	**-.00123**	**-.00094**	**-.03816**
Stddev	.00476	.00069	.00284	.00009	.00062	.00249	.00008	.00351	.00154	.00448	.00015	.00572	.05492
%RSD	4.9462	146.62	305.99	89.187	68.789	1.3060	16.494	1361.8	53.151	6.5711	12.552	606.06	143.92
#1	-.09284	.00002	.00294	.00016	.00134	-.19262	.00055	.00274	.00399	-.07128	-.00134	-.00499	-.07700
#2	-.09957	-.00096	-.00108	.00004	.00046	-.18909	.00043	-.00222	.00181	-.06495	-.00112	.00310	.00067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.08167**	**-.00115**	**.00028**	**-.00182**	**.00033**	**.00158**	**-.00124**	**.00020**	**.00038**	**.00431**
Stddev	.11753	.00008	.00002	.00054	.00053	.00085	.02305	.00012	.00024	.00069
%RSD	143.92	6.9295	7.5449	29.865	162.86	54.131	1863.0	61.619	64.161	15.940
#1	-.16477	-.00109	.00026	-.00144	-.00005	.00097	-.01754	.00028	.00055	.00383
#2	.00144	-.00120	.00029	-.00221	.00071	.00218	.01506	.00011	.00021	.00480
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2326.2**	**42254.**	**2397.0**
Stddev	9.7	115.	12.5
%RSD	.41614	.27312	.52300
#1	2333.1	42173.	2405.9
#2	2319.4	42336.	2388.2

Sample Name: CCVL-4589022 Acquired: 6/12/2017 16:30:12 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00969**	**.09659**	F **.01017**	**.09019**	**.00857**	**.00089**	**.09428**	**.17673**	**.00474**	**.00965**	**.00840**	**.01708**
Stddev	.00017	.00436	.00699	.00304	.00003	.00005	.00461	.00110	.00051	.00094	.00022	.00003
%RSD	1.7594	4.5159	68.760	3.3759	.37502	5.6069	4.8849	.62216	10.676	9.7268	2.6539	.15143
#1	.00981	.09967	.01511	.09234	.00860	.00092	.09754	.17751	.00510	.01031	.00824	.01706
#2	.00957	.09350	.00522	.08804	.00855	.00085	.09102	.17596	.00438	.00898	.00856	.01710
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09146**	**2.6739**	**.01824**	**.19160**	**.01091**	**.01536**	**.76515**	**.03762**	**2.5781**	**.01025**	F **.00986**	F **.01371**
Stddev	.00378	.0426	.00197	.00261	.00016	.00095	.00182	.00081	.1057	.00310	.01028	.00105
%RSD	4.1288	1.5939	10.803	1.3610	1.4971	6.1970	.23808	2.1523	4.1001	30.277	104.20	7.6534
#1	.08879	2.7041	.01685	.19345	.01102	.01604	.76644	.03820	2.6529	.01244	.01713	.01445
#2	.09413	2.6438	.01963	.18976	.01079	.01469	.76386	.03705	2.5034	.00806	.00260	.01297
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail
Value											.10000	.02000
Range											-30.000%	-30.000%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.00441**	**.46332**	**.99151**	**.07731**	**.00922**	**.01391**	**.01030**	**.01213**	F **.07905**	**.01069**	**.02121**	**.01642**
Stddev	.00128	.06068	.12986	.00223	.00005	.00262	.00016	.00048	.02269	.00051	.00013	.00269
%RSD	29.136	13.098	13.098	2.8799	.49868	18.818	1.5432	3.9839	28.708	4.7935	.63142	16.403
#1	.00531	.50623	1.0833	.07888	.00925	.01206	.01019	.01179	.09510	.01105	.02112	.01452
#2	.00350	.42041	.89969	.07573	.00919	.01576	.01041	.01248	.06300	.01033	.02131	.01833
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.02000								.06000			
Range	-30.000%								30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2343.0**	**42424.**	**2400.5**
Stddev	.2	18.	7.2
%RSD	.00689	.04248	.30098
#1	2342.9	42437.	2405.6
#2	2343.1	42411.	2395.4

Sample Name: 280-97928-A-15-A Acquired: 6/12/2017 16:32:51 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00475**	**93.057**	**.05119**	**.03461**	**.53910**	**.00449**	**-.00846**	**205.78**	**.00298**
Stddev	.00057	.362	.00268	.00027	.00369	.00019	.00651	1.22	.00003
%RSD	12.019	.38874	5.2344	.79262	.68499	4.3186	77.022	.59242	1.1281
#1	-.00516	92.802	.05309	.03481	.53649	.00435	-.00385	204.92	.00295
#2	-.00435	93.313	.04930	.03442	.54171	.00463	-.01306	206.64	.00300
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06765**	**.10413**	**.43375**	**201.52**	**12.114**	**.21803**	**40.608**	W **11.420**	**.00253**
Stddev	.00205	.00391	.00150	1.99	.105	.00561	.028	.042	.00004
%RSD	3.0359	3.7549	.34508	.98606	.86554	2.5751	.06886	.36387	1.4221
#1	.06910	.10690	.43269	200.11	12.040	.21406	40.628	11.449	.00256
#2	.06620	.10137	.43480	202.92	12.188	.22200	40.588	11.391	.00251
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.42490**	**.16647**	**5.3291**	**.08506**	**.77005**	**-.01714**	**-.00669**	**5.0082**	**10.718**
Stddev	.00322	.00465	.1933	.00420	.01032	.00624	.00413	.0216	.046
%RSD	.75847	2.7927	3.6275	4.9341	1.3400	36.395	61.663	.43056	.43056
#1	.42718	.16976	5.4658	.08803	.77734	-.02155	-.00961	4.9929	10.685
#2	.42262	.16319	5.1924	.08209	.76275	-.01273	-.00377	5.0234	10.750
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00971**	**.35075**	**.24754**	**.82201**	**.00609**	**.00767**	**.21874**	**.64363**	**.04455**
Stddev	.00102	.00103	.00338	.00688	.00452	.03024	.00029	.00146	.00007
%RSD	10.535	.29459	1.3662	.83682	74.090	394.09	.13274	.22629	.15532
#1	.00899	.35002	.24993	.81714	.00290	.02906	.21895	.64466	.04460
#2	.01043	.35148	.24515	.82687	.00929	-.01371	.21853	.64261	.04450
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2657.9**	**47334.**	**2947.1**
Stddev	18.8	41.	29.9
%RSD	.70877	.08677	1.0145
#1	2671.2	47363.	2968.3
#2	2644.6	47305.	2926.0

Sample Name: 280-97928-B-16-A Acquired: 6/12/2017 16:35:27 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00255**	**140.00**	**.04078**	**.03304**	**.43850**	**.00609**	**-.01131**	**34.700**	**.00204**
Stddev	.00008	.52	.00062	.00241	.00052	.00014	.00005	.024	.00003
%RSD	3.2707	.36788	1.5141	7.2886	.11755	2.2442	.44620	.06842	1.3367
#1	-.00261	140.36	.04122	.03475	.43887	.00619	-.01127	34.717	.00206
#2	-.00249	139.63	.04035	.03134	.43814	.00599	-.01135	34.684	.00202
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09083**	**.13424**	**.29294**	**227.70**	**13.722**	**.21317**	**34.921**	W **10.004**	**.00201**
Stddev	.00324	.00503	.00152	.26	.030	.00094	.117	.038	.00034
%RSD	3.5702	3.7453	.51780	.11491	.22198	.44006	.33541	.37814	17.169
#1	.09312	.13779	.29401	227.52	13.744	.21383	35.003	9.9769	.00225
#2	.08854	.13068	.29186	227.89	13.701	.21250	34.838	10.030	.00176
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.71552**	**.15157**	**4.8110**	**.17372**	**.92996**	**-.01637**	**-.00778**	**7.6341**	**16.337**
Stddev	.01233	.00523	.1621	.00490	.02882	.00008	.00175	.0549	.118
%RSD	1.7231	3.4503	3.3683	2.8208	3.0987	.46552	22.492	.71945	.71945
#1	.70680	.15527	4.9256	.17718	.95033	-.01632	-.00654	7.5953	16.254
#2	.72424	.14787	4.6964	.17025	.90958	-.01643	-.00901	7.6730	16.420
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01221**	**.09444**	**.04973**	**.65213**	**.00755**	**.07861**	**.28438**	**.70689**	**.02532**
Stddev	.00007	.00001	.00295	.00509	.00224	.04916	.00086	.00088	.00425
%RSD	.59427	.01015	5.9284	.78005	29.742	62.530	.30348	.12478	16.796
#1	.01226	.09445	.04765	.64854	.00596	.11337	.28377	.70752	.02231
#2	.01216	.09444	.05182	.65573	.00913	.04385	.28499	.70627	.02832
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2451.2**	**42617.**	**2587.3**
Stddev	3.7	27.	10.1
%RSD	.15205	.06280	.39086
#1	2448.6	42598.	2594.5
#2	2453.9	42636.	2580.2

Sample Name: 280-97928-C-17-A Acquired: 6/12/2017 16:38:04 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00424**	**87.827**	**.03029**	**.02401**	**.38362**	**.00456**	**-.01297**	**13.565**	**.00134**
Stddev	.00029	.100	.00501	.00031	.00106	.00008	.00041	.013	.00018
%RSD	6.7391	.11397	16.553	1.2789	.27652	1.6709	3.1730	.09561	13.081
#1	-.00444	87.897	.03384	.02379	.38287	.00462	-.01327	13.556	.00122
#2	-.00404	87.756	.02675	.02422	.38438	.00451	-.01268	13.574	.00147
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06639**	**.09588**	**.25202**	**194.67**	**9.5566**	**.22758**	**25.741**	**8.7804**	**.00161**
Stddev	.00208	.00273	.00156	.33	.0979	.00348	.059	.0063	.00062
%RSD	3.1269	2.8469	.61826	.16817	1.0246	1.5308	.23117	.07120	38.278
#1	.06786	.09781	.25312	194.44	9.6258	.23005	25.783	8.7760	.00205
#2	.06492	.09395	.25092	194.91	9.4874	.22512	25.699	8.7848	.00118
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.57733**	**.13180**	**3.3175**	**.05275**	**.11148**	**-.01468**	**-.00540**	**6.9400**	**14.852**
Stddev	.04074	.00464	.1059	.00029	.00190	.00439	.00339	.0064	.014
%RSD	7.0569	3.5171	3.1915	.55098	1.7010	29.910	62.722	.09186	.09186
#1	.60614	.13508	3.3924	.05296	.11014	-.01778	-.00779	6.9445	14.861
#2	.54852	.12852	3.2427	.05255	.11282	-.01158	-.00300	6.9355	14.842
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00768**	**.05327**	**.06122**	**1.3636**	**.00735**	**.01834**	**.23116**	**.43697**	**.05432**
Stddev	.00033	.00147	.00117	.0028	.00105	.02739	.00119	.00103	.00330
%RSD	4.3485	2.7503	1.9146	.20841	14.321	149.34	.51325	.23640	6.0819
#1	.00792	.05224	.06205	1.3616	.00809	-.00103	.23200	.43770	.05198
#2	.00744	.05431	.06040	1.3656	.00660	.03771	.23032	.43624	.05666
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2646.3**	**44899.**	**2708.8**
Stddev	10.8	48.	11.4
%RSD	.40826	.10643	.42017
#1	2653.9	44932.	2716.9
#2	2638.7	44865.	2700.8

Sample Name: 280-97928-C-17-A @5 Acquired: 6/12/2017 16:40:42 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 5x

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k **-.00161**	k **19.999**	k **.01034**	**.00431**	k **.08711**	k **.00122**	k **.00419**	**3.0746**	k **.00033**
Stddev	.00048	.025	.00865	.00086	.00051	.00016	.00074	.0038	.00031
%RSD	29.586	.12529	83.638	19.906	.58022	12.876	17.642	.12499	92.942
#1	k -.00128	k 20.017	k .01646	.00492	.08747	k .00134	k .00471	3.0773	k .00011
#2	k -.00195	k 19.982	k .00423	.00371	k .08675	k .00111	k .00367	3.0718	k .00055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k **.01643**	**.02261**	k **.05614**	k **43.753**	**2.0354**	**.05095**	k **5.9146**	**1.9949**	k **.00064**
Stddev	.00034	.00158	.00008	.007	.0708	.00253	.0053	.0043	.00029
%RSD	2.0414	6.9869	.13622	.01679	3.4776	4.9605	.08881	.21556	44.993
#1	k .01667	.02373	k .05619	k 43.758	1.9853	.05274	k 5.9109	1.9979	k .00084
#2	k .01620	.02150	k .05609	k 43.748	2.0854	.04917	k 5.9184	1.9918	k .00044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.07731**	k **.03136**	**.75892**	k **.01541**	k **-.03695**	k **-.01035**	k **-.00929**	k **1.5834**	k **3.3884**
Stddev	.01173	.00183	.02835	.00129	.00862	.00423	.00245	.0573	.1226
%RSD	15.175	5.8448	3.7350	8.3766	23.319	40.824	26.408	3.6167	3.6167
#1	-.06901	k .03266	.77897	k .01632	k -.03086	k -.00737	k -.01102	k 1.5429	k 3.3018
#2	-.08560	k .03007	.73888	k .01449	k -.04304	k -.01334	k -.00755	k 1.6239	k 3.4751
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k **-.00027**	**.01188**	k **.04287**	k **.30326**	k **.00349**	k **-.01718**	k **.05219**	k **.09702**	k **.01548**
Stddev	.00012	.00012	.00087	.01022	.00225	.04048	.00052	.00104	.00416
%RSD	42.585	.99089	2.0228	3.3690	64.480	235.64	.99642	1.0765	26.875
#1	k -.00019	.01196	k .04225	k .29604	k .00509	k .01145	k .05256	k .09628	k .01254
#2	k -.00036	.01180	k .04348	k .31049	k .00190	k -.04581	k .05182	k .09775	k .01842
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2399.3**	**43116.**	**2504.2**
Stddev	7.2	86.	19.2
%RSD	.29839	.19995	.76653
#1	2404.4	43177.	2490.6
#2	2394.3	43055.	2517.8

Sample Name: 280-97928-A-18-A Acquired: 6/12/2017 16:43:18 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00025**	**30.309**	**.01643**	**.01526**	**.09063**	**.00133**	**-.00532**	**11.818**	**.00029**
Stddev	.00028	.003	.00361	.00003	.00000	.00002	.00063	.013	.00028
%RSD	110.82	.01095	21.963	.18381	.00302	1.6317	11.935	.11073	97.174
#1	-.00005	30.311	.01387	.01528	.09063	.00134	-.00577	11.809	.00049
#2	-.00045	30.306	.01898	.01524	.09063	.00131	-.00487	11.827	.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02253**	**.03108**	**.09023**	**64.761**	**5.6803**	**.04843**	**13.734**	**2.5043**	**.00035**
Stddev	.00004	.00020	.00037	.501	.0575	.00108	.006	.0010	.00044
%RSD	.17477	.64240	.40956	.77424	1.0132	2.2350	.04164	.03985	124.38
#1	.02250	.03123	.09050	65.115	5.6396	.04920	13.730	2.5036	.00066
#2	.02256	.03094	.08997	64.406	5.7210	.04767	13.738	2.5050	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07645**	**.05026**	**2.0859**	**.01329**	**-.00315**	**-.00984**	**-.01325**	**6.3744**	**13.641**
Stddev	.00251	.00054	.0440	.00179	.00563	.00013	.00478	.0593	.127
%RSD	3.2778	1.0753	2.1088	13.450	178.47	1.3151	36.070	.92988	.92988
#1	.07467	.05064	2.1170	.01202	.00083	-.00993	-.00987	6.4163	13.731
#2	.07822	.04987	2.0548	.01455	-.00714	-.00975	-.01663	6.3324	13.551
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00654**	**.03055**	**.02048**	**.34952**	**.00502**	**.01461**	**.06572**	**.13857**	**.03372**
Stddev	.00241	.00029	.00291	.00420	.00006	.01929	.00059	.00017	.00083
%RSD	36.830	.94095	14.190	1.2030	1.1088	132.01	.89840	.11929	2.4499
#1	.00824	.03035	.01843	.34655	.00498	.00097	.06613	.13845	.03431
#2	.00484	.03075	.02254	.35250	.00506	.02825	.06530	.13869	.03314
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2355.3**	**42373.**	**2473.5**
Stddev	5.3	194.	4.5
%RSD	.22667	.45798	.18187
#1	2359.1	42511.	2470.3
#2	2351.6	42236.	2476.7

Sample Name: 280-97928-C-19-A Acquired: 6/12/2017 16:45:52 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00156**	**35.172**	**.01788**	**.01570**	**.10242**	**.00161**	**-.00622**	**11.110**	**.00027**
Stddev	.00034	.030	.00354	.00007	.00037	.00002	.00232	.008	.00018
%RSD	21.925	.08462	19.802	.42528	.36217	1.3297	37.313	.06935	64.695
#1	-.00132	35.193	.01537	.01575	.10269	.00163	-.00786	11.116	.00015
#2	-.00181	35.151	.02038	.01565	.10216	.00160	-.00458	11.105	.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02627**	**.03493**	**.10296**	**76.225**	**5.9386**	**.05596**	**15.255**	**2.8784**	**.00051**
Stddev	.00047	.00111	.00012	.146	.1076	.00186	.026	.0066	.00037
%RSD	1.7711	3.1838	.11848	.19186	1.8115	3.3229	.17277	.22750	72.324
#1	.02660	.03572	.10288	76.329	6.0147	.05728	15.273	2.8830	.00077
#2	.02594	.03415	.10305	76.122	5.8625	.05465	15.236	2.8737	.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.23004**	**.05837**	**2.5389**	**.01844**	**-.04577**	**-.00750**	**-.00840**	**4.7299**	**10.122**
Stddev	.01745	.00116	.0607	.00199	.00658	.00155	.00263	.0253	.054
%RSD	7.5860	1.9824	2.3887	10.769	14.387	20.640	31.317	.53479	.53479
#1	.21770	.05918	2.5818	.01704	-.04111	-.00640	-.01025	4.7478	10.160
#2	.24238	.05755	2.4961	.01985	-.05042	-.00859	-.00654	4.7120	10.084
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00772**	**.03222**	**.02497**	**.34138**	**.00150**	**.01116**	**.07592**	**.16122**	**.03787**
Stddev	.00007	.00002	.00038	.00387	.00104	.02839	.00049	.00102	.00417
%RSD	.85345	.06263	1.5246	1.1344	68.894	254.35	.64694	.63105	11.014
#1	.00768	.03221	.02470	.33864	.00077	.03124	.07627	.16050	.04082
#2	.00777	.03224	.02524	.34412	.00224	-.00891	.07557	.16194	.03492
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2496.5**	**44534.**	**2397.4**
Stddev	4.4	130.	11.9
%RSD	.17585	.29082	.49518
#1	2499.6	44443.	2389.0
#2	2493.4	44626.	2405.8

Sample Name: 280-97928-B-20-A Acquired: 6/12/2017 16:48:26 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00153**	**38.160**	**.02370**	**.01792**	**.10642**	**.00192**	**-.00498**	**10.260**	**.00042**
Stddev	.00023	.234	.01125	.00008	.00029	.00015	.00084	.014	.00019
%RSD	15.339	.61368	47.471	.44505	.26977	7.7105	16.814	.13814	45.137
#1	-.00136	38.325	.01575	.01798	.10621	.00182	-.00439	10.270	.00056
#2	-.00169	37.994	.03166	.01787	.10662	.00203	-.00557	10.250	.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02826**	**.03900**	**.11542**	**83.739**	**6.6554**	**.06012**	**16.770**	**3.1443**	**.00059**
Stddev	.00112	.00110	.00033	.278	.0153	.00097	.011	.0091	.00036
%RSD	3.9724	2.8152	.28179	.33244	.23056	1.6086	.06595	.29042	60.955
#1	.02905	.03977	.11565	83.936	6.6446	.06080	16.778	3.1508	.00085
#2	.02747	.03822	.11519	83.542	6.6663	.05944	16.763	3.1378	.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09166**	**.06374**	**2.5393**	**.02045**	**-.06312**	**-.00234**	**-.00480**	**5.7619**	**12.330**
Stddev	.00600	.00302	.0951	.00014	.00154	.00077	.00372	.0687	.147
%RSD	6.5501	4.7352	3.7435	.69914	2.4331	32.692	77.523	1.1918	1.1918
#1	.08742	.06587	2.6065	.02055	-.06203	-.00288	-.00743	5.7134	12.227
#2	.09591	.06161	2.4721	.02035	-.06420	-.00180	-.00217	5.8105	12.434
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00540**	**.03319**	**.03215**	**.36662**	**-.00086**	**-.00069**	**.08307**	**.17055**	**.03992**
Stddev	.00087	.00000	.00015	.00653	.00449	.06041	.00023	.00101	.00033
%RSD	16.146	.00778	.46873	1.7817	524.87	8749.4	.27306	.59415	.81656
#1	.00602	.03319	.03205	.36200	-.00403	-.04341	.08291	.17127	.04016
#2	.00479	.03318	.03226	.37124	.00232	.04203	.08323	.16984	.03969
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2542.7**	**45150.**	**2683.6**
Stddev	7.3	136.	5.0
%RSD	.28710	.30222	.18650
#1	2547.9	45054.	2680.1
#2	2537.6	45247.	2687.2

Sample Name: 280-97928-B-21-A Acquired: 6/12/2017 16:51:00 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00124**	**30.417**	**.01425**	**.01560**	**.08744**	**.00131**	**-.00576**	**28.499**	**.00039**
Stddev	.00025	.124	.00791	.00018	.00010	.00021	.00057	.069	.00033
%RSD	19.839	.40784	55.530	1.1549	.11709	16.127	9.8476	.24084	85.465
#1	-.00142	30.329	.01985	.01573	.08736	.00146	-.00616	28.451	.00015
#2	-.00107	30.504	.00866	.01547	.08751	.00116	-.00536	28.548	.00062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02326**	**.03067**	**.09577**	**68.456**	**5.7374**	**.04940**	**16.428**	**2.5525**	**-.00026**
Stddev	.00024	.00081	.00015	.051	.0419	.00241	.011	.0015	.00084
%RSD	1.0256	2.6572	.16113	.07462	.73103	4.8700	.06923	.05928	320.78
#1	.02343	.03125	.09566	68.493	5.7670	.04770	16.436	2.5536	.00033
#2	.02309	.03009	.09588	68.420	5.7077	.05111	16.420	2.5514	-.00085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.21984**	**.05187**	**2.2465**	**.01314**	**-.01440**	**-.00712**	**-.00397**	**5.4276**	**11.615**
Stddev	.00306	.00143	.0772	.00008	.00211	.00114	.00029	.0362	.077
%RSD	1.3935	2.7589	3.4369	.59626	14.636	16.077	7.2317	.66696	.66696
#1	.22201	.05288	2.3011	.01308	-.01589	-.00631	-.00417	5.4020	11.560
#2	.21768	.05086	2.1919	.01319	-.01291	-.00793	-.00376	5.4532	11.670
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00701**	**.05850**	**.02097**	**.31021**	**.00421**	**.01519**	**.06803**	**.14266**	**.03418**
Stddev	.00104	.00007	.00143	.00845	.00043	.00577	.00007	.00023	.00212
%RSD	14.872	.12655	6.8222	2.7225	10.242	37.988	.11013	.16311	6.2129
#1	.00775	.05845	.01996	.31618	.00391	.01926	.06809	.14249	.03569
#2	.00628	.05855	.02198	.30424	.00452	.01111	.06798	.14282	.03268
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2413.8**	**43728.**	**2632.4**
Stddev	11.9	257.	9.6
%RSD	.49352	.58763	.36390
#1	2422.2	43910.	2639.1
#2	2405.3	43547.	2625.6

Sample Name: 280-97928-B-22-A Acquired: 6/12/2017 16:53:34 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00081**	**37.713**	**.02040**	**.01701**	**.11790**	**.00189**	**-.00754**	**9.3064**	**.00048**
Stddev	.00028	.132	.00143	.00076	.00038	.00021	.00213	.0296	.00012
%RSD	34.331	.35056	6.9861	4.4602	.32493	11.260	28.270	.31833	24.132
#1	-.00100	37.619	.01940	.01755	.11763	.00204	-.00905	9.3274	.00056
#2	-.00061	37.806	.02141	.01647	.11817	.00174	-.00603	9.2855	.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02810**	**.03658**	**.11034**	**80.598**	**6.2831**	**.05776**	**16.367**	**3.1435**	**.00016**
Stddev	.00154	.00098	.00032	.351	.0456	.00002	.026	.0030	.00026
%RSD	5.4844	2.6908	.29245	.43584	.72570	.04093	.15692	.09667	167.74
#1	.02919	.03728	.11056	80.846	6.2508	.05778	16.385	3.1456	.00034
#2	.02701	.03588	.11011	80.350	6.3153	.05774	16.349	3.1413	-.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06511**	**.06071**	**2.4574**	**.02347**	**.10957**	**-.00643**	**-.00806**	**4.6799**	**10.015**
Stddev	.00010	.00096	.0846	.00123	.00448	.00081	.00313	.1815	.388
%RSD	.15256	1.5785	3.4413	5.2268	4.0844	12.529	38.788	3.8776	3.8776
#1	.06518	.06139	2.5172	.02434	.11273	-.00700	-.01027	4.8083	10.290
#2	.06504	.06004	2.3976	.02260	.10640	-.00586	-.00585	4.5516	9.7405
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00640**	**.02861**	**.02601**	**.37371**	**.00420**	**.01608**	**.08194**	**.17910**	**.03464**
Stddev	.00162	.00017	.00091	.00785	.00166	.00805	.00101	.00005	.00554
%RSD	25.253	.58306	3.5076	2.1011	39.564	50.084	1.2318	.02683	16.003
#1	.00754	.02872	.02666	.36816	.00538	.01038	.08122	.17913	.03856
#2	.00525	.02849	.02537	.37927	.00303	.02177	.08265	.17907	.03072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2435.1**	**42867.**	**2521.6**
Stddev	29.1	32.	25.8
%RSD	1.1942	.07516	1.0239
#1	2414.6	42844.	2539.9
#2	2455.7	42890.	2503.4

Sample Name: CCVH-4579429 Acquired: 6/12/2017 16:56:08 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01633**	W **44.833**	**-.00318**	**.00103**	**.00132**	**.00018**	F **.86550**	**-.00810**	**.00035**	**-.00063**	**.00074**	**.01165**
Stddev	.00019	.017	.00549	.00070	.00043	.00002	.03029	.00050	.00015	.00042	.00025	.00039
%RSD	1.1889	.03758	172.59	68.354	32.258	11.531	3.4994	6.1605	43.396	66.640	34.561	3.3769
#1	-.01647	44.821	.00070	.00153	.00102	.00016	.88692	-.00846	.00024	-.00093	.00056	.01138
#2	-.01619	44.844	-.00707	.00053	.00163	.00019	.84409	-.00775	.00046	-.00033	.00091	.01193
Check ?	None	Chk Warn	None	None	None	None	Chk Fail	None	None	None	None	None
Value		50.000					1.0000					
Range		-10.000%					-10.490%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**47.937**	**-.11149**	**-.00093**	**.14654**	**-.00223**	**-.00092**	**239.13**	**.00145**	**.00025**	**.00019**	F **3.8516**	**-.00934**
Stddev	.098	.10961	.00023	.00408	.00011	.00025	.55	.00035	.00356	.00192	.1434	.00057
%RSD	.20365	98.315	24.454	2.7852	4.7670	27.501	.23153	23.816	1429.3	1001.4	3.7220	6.1195
#1	47.868	-.03398	-.00077	.14366	-.00216	-.00074	238.74	.00121	-.00227	.00155	3.9530	-.00974
#2	48.006	-.18899	-.00110	.14943	-.00231	-.00110	239.52	.00169	.00277	-.00116	3.7502	-.00893
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Fail	None
Value											5.0000	
Range											-10.490%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01196**	**-.01009**	**-.02159**	**-.00018**	**.00035**	**5.1534**	**.02938**	**-.00009**	**10.217**	**.01242**	**-.00090**	**.02250**
Stddev	.00714	.02474	.05294	.00026	.00004	.0166	.00072	.00367	.019	.00073	.00177	.00199
%RSD	59.701	245.21	245.21	141.00	11.296	.32176	2.4411	4236.6	.18255	5.8613	195.77	8.8482
#1	-.01701	.00740	.01584	-.00000	.00038	5.1651	.02989	-.00268	10.230	.01191	-.00215	.02390
#2	-.00691	-.02758	-.05902	-.00037	.00032	5.1417	.02888	.00251	10.204	.01294	.00035	.02109
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2257.2**	**39729.**	**2356.0**
Stddev	4.8	59.	2.8
%RSD	.21234	.14779	.11918
#1	2253.8	39770.	2358.0
#2	2260.6	39687.	2354.0

Sample Name: CCV-4580817 Acquired: 6/12/2017 16:58:43 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47164**	**.46162**	F **.85057**	**.47324**	F **.42926**	W **.44877**	**-.00281**	F **4.2600**	**.46898**	**.47211**	F **.40261**	F **.59814**
Stddev	.00079	.01077	.02359	.01239	.00147	.00034	.00120	.0084	.01339	.01294	.01130	.00082
%RSD	.16809	2.3325	2.7732	2.6186	.34293	.07664	42.773	.19707	2.8560	2.7412	2.8078	.13713
#1	.47108	.46924	.86725	.48200	.43031	.44901	-.00196	4.2540	.47845	.48126	.41061	.59872
#2	.47220	.45401	.83389	.46448	.42822	.44853	-.00366	4.2659	.45950	.46296	.39462	.59756
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Warn	None	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Fail
Value			1.0000		.50000	.50000		5.0000			.50000	.50000
Range			-10.490%		-10.490%	-10.000%		-10.490%			-10.490%	10.490%

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.3021**	**46.572**	**.93684**	**18.754**	**.53835**	F **.39944**	**4.6961**	**.47181**	**.93547**	F **.80658**	**-.07685**	**.90722**
Stddev	.0265	.065	.00219	.008	.00168	.01125	.0069	.01336	.02287	.02482	.00174	.02761
%RSD	1.1528	.13946	.23426	.04438	.31198	2.8153	.14714	2.8325	2.4450	3.0775	2.2621	3.0436
#1	2.3208	46.618	.93839	18.759	.53954	.40740	4.7010	.48126	.95164	.82414	-.07808	.92674
#2	2.2833	46.526	.93528	18.748	.53716	.39149	4.6912	.46236	.91930	.78903	-.07562	.88769
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass
Value						.50000				1.0000		
Range						-10.490%				-10.490%		

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.86057**	**4.7464**	**10.157**	F **.81122**	W **.44790**	**.00784**	**.51619**	F **.83194**	**-.04712**	F **.55389**	**.52735**	**.49807**
Stddev	.03706	.0026	.006	.02300	.00181	.00020	.00127	.02126	.00951	.00362	.00055	.00330
%RSD	4.3060	.05427	.05427	2.8356	.40480	2.4975	.24626	2.5557	20.177	.65395	.10373	.66327
#1	.88677	4.7482	10.161	.82749	.44919	.00798	.51709	.84698	-.05384	.55645	.52774	.50041
#2	.83436	4.7446	10.153	.79495	.44662	.00770	.51529	.81691	-.04039	.55133	.52697	.49574
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Warn	None	Chk Pass	Chk Fail	None	Chk Fail	Chk Pass	Chk Pass
Value	1.0000			1.0000	.50000			1.0000		.50000		
Range	-10.490%			-10.490%	-10.000%			-10.490%		10.490%		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2253.1**	**40607.**	**2353.7**
Stddev	13.3	23.	16.2
%RSD	.59068	.05654	.68650
#1	2262.5	40591.	2342.3
#2	2243.7	40623.	2365.1

Sample Name: CCB Acquired: 6/12/2017 17:01:13 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00008**	**-.00039**	**-.00294**	**-.00096**	**.00016**	**.00002**	**.00055**	**.00021**	**-.00009**	**.00021**	**.00053**	**-.00041**	**.00306**
Stddev	.00062	.00040	.00719	.00005	.00062	.00019	.00287	.00125	.00020	.00010	.00008	.00150	.00480
%RSD	761.28	101.93	244.64	5.5748	385.92	822.71	524.81	582.95	218.53	46.140	15.681	367.09	156.99
#1	-.00052	-.00068	.00215	-.00099	-.00028	.00016	.00257	-.00067	.00005	.00014	.00059	.00065	-.00034
#2	.00036	-.00011	-.00803	-.00092	.00060	-.00011	-.00148	.00110	-.00023	.00028	.00047	-.00146	.00645
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.09484**	**-.00120**	**.00366**	**.00004**	**.00158**	**-.26855**	**.00004**	**.00211**	**.00192**	**-.06934**	**-.00217**	**-.01411**	**.00386**
Stddev	.05695	.00156	.00254	.00011	.00117	.00143	.00003	.00127	.00248	.00756	.00005	.00084	.01055
%RSD	60.048	129.84	69.341	290.80	74.070	.53342	85.879	60.246	129.48	10.905	2.3560	5.9365	273.08
#1	-.13511	-.00231	.00546	.00012	.00240	-.26754	.00006	.00121	.00016	-.06400	-.00220	-.01351	.01132
#2	-.05457	-.00010	.00187	-.00004	.00075	-.26957	.00002	.00301	.00367	-.07469	-.00213	-.01470	-.00360
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00827**	**-.00127**	**.00008**	**.00052**	**-.00014**	**.00098**	**-.00899**	**-.00006**	**.00044**	**.00552**
Stddev	.02257	.00072	.00011	.00257	.00011	.00304	.03036	.00049	.00020	.00147
%RSD	273.08	56.777	144.25	494.06	79.292	309.16	337.75	749.15	46.403	26.608
#1	.02423	-.00177	-.00000	.00234	-.00022	.00313	.01248	-.00041	.00058	.00448
#2	-.00770	-.00076	.00016	-.00130	-.00006	-.00117	-.03045	.00028	.00029	.00656
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2388.8**	**42905.**	**2507.7**
Stddev	5.6	74.	32.5
%RSD	.23329	.17196	1.2978
#1	2392.7	42957.	2530.7
#2	2384.8	42852.	2484.7

Sample Name: CCVL-4589022 Acquired: 6/12/2017 17:03:52 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01020**	**.09740**	F **.00931**	**.09243**	**.00820**	**.00094**	**.09707**	**.17010**	**.00454**	**.00958**	**.00828**	**.01843**
Stddev	.00017	.00445	.00479	.00381	.00064	.00001	.00063	.00738	.00039	.00013	.00045	.00048
%RSD	1.7073	4.5715	51.430	4.1233	7.8122	.65958	.65246	4.3376	8.6646	1.3721	5.4891	2.6061
#1	.01032	.10055	.00593	.09513	.00774	.00094	.09751	.16488	.00482	.00967	.00860	.01809
#2	.01007	.09425	.01270	.08974	.00865	.00095	.09662	.17532	.00427	.00949	.00796	.01877
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09324**	**2.6861**	**.01541**	**.18912**	**.01118**	**.01614**	**.72665**	**.03871**	**2.6549**	F **.01371**	F **.00316**	**.01881**
Stddev	.00567	.0282	.00228	.00582	.00001	.00143	.00992	.00178	.0922	.00214	.01098	.00238
%RSD	6.0823	1.0498	14.787	3.0798	.11381	8.8757	1.3651	4.5962	3.4742	15.641	347.00	12.646
#1	.08923	2.6661	.01702	.18501	.01117	.01715	.71964	.03997	2.7202	.01219	.01093	.02049
#2	.09725	2.7060	.01380	.19324	.01118	.01513	.73367	.03745	2.5897	.01522	-.00460	.01712
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass
Value										.00900	.10000	
Range										30.000%	-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.00890**	**.46908**	**1.0038**	**.07828**	**.00914**	**.01550**	**.01034**	**.01315**	**.06695**	**.01107**	**.02084**	**.01859**
Stddev	.00612	.00778	.0166	.00465	.00007	.00098	.00019	.00059	.01905	.00021	.00106	.00252
%RSD	68.845	1.6579	1.6579	5.9433	.73513	6.3097	1.8580	4.4838	28.448	1.9160	5.0776	13.567
#1	.00456	.47458	1.0156	.08157	.00909	.01481	.01047	.01357	.08042	.01092	.02009	.02038
#2	.01323	.46358	.99207	.07499	.00918	.01619	.01020	.01273	.05348	.01122	.02159	.01681
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.02000											
Range	-30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2383.9**	**42804.**	**2480.7**
Stddev	2.0	9.	.5
%RSD	.08482	.02205	.02031
#1	2385.4	42811.	2480.4
#2	2382.5	42797.	2481.1

Sample Name: MB 280-376612/1-A Acquired: 6/12/2017 17:06:30 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/9 Custom ID2: Custom ID3:
Comment: 376612 SOIL 6010B (Cu)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00036**	**.02591**	**-.00106**	**-.00042**	**.00258**	**.00029**	**-.00103**	F **.23046**	**-.00015**
Stddev	.00123	.00146	.00079	.00107	.00045	.00005	.00347	.00048	.00014
%RSD	339.69	5.6338	74.525	255.12	17.363	17.573	336.31	.20843	88.972
#1	-.00051	.02694	-.00162	.00034	.00226	.00026	-.00349	.23079	-.00025
#2	.00123	.02487	-.00050	-.00117	.00290	.00033	.00142	.23012	-.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								.20000	
Low Limit								-.20000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00022**	**.00109**	**.00191**	W **.07810**	**-.07841**	**-.00097**	**.07435**	**.00072**	**.00166**
Stddev	.00000	.00047	.00052	.00573	.06120	.00202	.00111	.00003	.00024
%RSD	2.0220	43.128	27.160	7.3333	78.053	208.55	1.4963	3.7100	14.486
#1	.00022	.00143	.00228	.07405	-.12169	-.00239	.07356	.00070	.00183
#2	.00022	.00076	.00154	.08215	-.03514	.00046	.07513	.00074	.00149
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.05000					
Low Limit				-.05000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00967**	**.00116**	**.02067**	W **.00540**	W **-.06248**	W **-.00510**	**-.00693**	**.02666**	**.05706**
Stddev	.01351	.00062	.00037	.00152	.00406	.00188	.00619	.02871	.06143
%RSD	139.69	53.143	1.8086	28.141	6.5008	36.929	89.354	107.67	107.67
#1	.00012	.00159	.02093	.00433	-.06535	-.00643	-.00255	.04696	.10050
#2	.01922	.00072	.02040	.00648	-.05961	-.00377	-.01131	.00636	.01362
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Warn	Chk Pass	Chk Pass	None
High Limit				.00450	.05000	.00500			
Low Limit				-.00300	-.05000	-.00500			

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01032**	**.00076**	**-.00040**	**.00079**	**.00075**	**.00323**	**.00000**	**.00246**	**.00638**
Stddev	.00036	.00001	.00104	.00032	.00164	.00096	.00043	.00015	.00064
%RSD	3.4443	.87722	261.85	40.620	218.14	29.874	49374.	6.2213	10.071
#1	.01007	.00075	-.00113	.00102	-.00041	.00255	-.00030	.00235	.00593
#2	.01057	.00076	.00034	.00057	.00191	.00391	.00030	.00257	.00684
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2362.6**	**42861.**	**2484.7**
Stddev	4.2	279.	17.7
%RSD	.17602	.65002	.71154
#1	2359.7	43058.	2472.2
#2	2365.5	42664.	2497.2

Sample Name: LCS 280-376612/2-A Acquired: 6/12/2017 17:09:10 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376612 SOIL 6010B (Cu)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04362**	**1.7658**	**.88336**	**.94454**	F **1.7303**	**.04505**	**1.8058**	**42.235**	**.09449**
Stddev	.00070	.0497	.03356	.02467	.0056	.00045	.0465	.106	.00286
%RSD	1.6028	2.8160	3.7997	2.6122	.32396	.99293	2.5753	.25177	3.0217
#1	.04313	1.8009	.90710	.96198	1.7263	.04474	1.8386	42.159	.09651
#2	.04412	1.7306	.85963	.92709	1.7342	.04537	1.7729	42.310	.09247
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass
High Limit					2.2400				
Low Limit					1.7400				

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.46069**	F **.16110**	F **.30304**	**.98127**	**47.576**	**.94597**	**46.642**	**.53434**	F **.77994**
Stddev	.01240	.00480	.00030	.02008	.186	.00391	.123	.00064	.02015
%RSD	2.6909	2.9781	.10056	2.0463	.39071	.41373	.26331	.12061	2.5839
#1	.46946	.16449	.30282	.96707	47.444	.94320	46.729	.53480	.79419
#2	.45193	.15770	.30326	.99547	47.707	.94874	46.556	.53389	.76569
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit		.22000	.27500						1.1000
Low Limit		.18000	.22000						.86000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.228**	**.46258**	**9.6699**	F **.39706**	**1.5697**	**.46819**	**1.7409**	**1.2650**	**2.7071**
Stddev	.034	.01470	.2687	.00927	.0524	.01605	.0466	.0138	.0296
%RSD	.06797	3.1778	2.7782	2.3341	3.3355	3.4280	2.6759	1.0915	1.0915
#1	50.203	.47298	9.8599	.40361	1.6067	.47954	1.7738	1.2748	2.7280
#2	50.252	.45219	9.4800	.39051	1.5327	.45684	1.7079	1.2552	2.6862
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit				.55000					
Low Limit				.43000					

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **1.6266**	**.90202**	**1.0566**	**1.0503**	F **1.6295**	**2.0850**	F **.55191**	**.52164**	**.50562**
Stddev	.0563	.00302	.0029	.0024	.0361	.0030	.00062	.00078	.00116
%RSD	3.4642	.33491	.27709	.22497	2.2167	.14373	.11202	.14931	.22852
#1	1.6664	.89989	1.0587	1.0520	1.6550	2.0829	.55235	.52109	.50481
#2	1.5867	.90416	1.0546	1.0486	1.6039	2.0871	.55147	.52219	.50644
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit	2.2000				2.2000		.55000		
Low Limit	1.6800				1.6800		.44000		

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2253.5**	**40310.**	**2379.2**
Stddev	.1	21.	16.2
%RSD	.00622	.05107	.68034
#1	2253.6	40324.	2390.6
#2	2253.4	40295.	2367.7

Sample Name: 280-97995-A-1-A Acquired: 6/12/2017 17:11:36 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376612 SOIL 6010B (Cu)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00593**	**10.343**	**.00683**	**.03131**	**.35909**	**.00022**	**.05473**	**24.034**	**.00305**
Stddev	.00185	.050	.00502	.00273	.00043	.00015	.00169	.074	.00019
%RSD	31.178	.48226	73.539	8.7258	.11865	67.559	3.0870	.30677	6.2701
#1	.00724	10.378	.01038	.03324	.35939	.00011	.05592	23.981	.00318
#2	.00462	10.307	.00328	.02937	.35879	.00032	.05353	24.086	.00291
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01122**	**.05873**	**.79096**	**31.278**	**5.8633**	**.00858**	**6.5223**	**.49910**	**.00881**
Stddev	.00033	.00199	.00060	.025	.0966	.00157	.0009	.00051	.00039
%RSD	2.9518	3.3895	.07635	.08089	1.6480	18.337	.01342	.10267	4.3748
#1	.01146	.06014	.79139	31.296	5.9316	.00970	6.5229	.49946	.00908
#2	.01099	.05732	.79054	31.260	5.7950	.00747	6.5217	.49874	.00854
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.1291**	**.06115**	W **21.585**	**.06429**	**10.088**	**-.00203**	**.01673**	**2.1147**	**4.5255**
Stddev	.0059	.00188	.564	.00123	.293	.00563	.00079	.0718	.1538
%RSD	.52123	3.0798	2.6119	1.9209	2.9047	277.20	4.7431	3.3978	3.3978
#1	1.1333	.06249	21.984	.06516	10.295	.00195	.01617	2.1655	4.6342
#2	1.1250	.05982	21.186	.06341	9.8804	-.00602	.01730	2.0639	4.4167
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			20.000						
Low Limit			-6.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04955**	**.12241**	**.00422**	**.54813**	**.00345**	**-.02041**	**.03453**	**1.7361**	**.01356**
Stddev	.00284	.00013	.00262	.00086	.00320	.03271	.00012	.0030	.00030
%RSD	5.7374	.11017	62.232	.15719	92.803	160.21	.33373	.17252	2.2207
#1	.05156	.12232	.00236	.54874	.00571	.00271	.03461	1.7340	.01335
#2	.04754	.12251	.00607	.54752	.00119	-.04354	.03445	1.7382	.01377
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2322.6**	**41604.**	**2423.5**
Stddev	7.3	293.	9.7
%RSD	.31592	.70463	.40138
#1	2327.8	41811.	2430.4
#2	2317.4	41397.	2416.6

Sample Name: 280-97995-A-1-A SD@5 Acquired: 6/12/2017 17:14:43 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376612 SOIL 6010B (Cu)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00147**	**1.9950**	**-.00384**	**.00516**	**.07369**	**.00011**	**.00857**	**4.8921**	**.00048**
Stddev	.00046	.0869	.00260	.00039	.00017	.00007	.00193	.0331	.00020
%RSD	31.532	4.3562	67.727	7.5961	.23071	61.707	22.473	.67677	43.040
#1	.00180	2.0565	-.00200	.00543	.07357	.00016	.00993	4.8687	.00062
#2	.00114	1.9336	-.00568	.00488	.07381	.00006	.00721	4.9155	.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00258**	**.01231**	**.15938**	**6.3467**	**1.0394**	**.00171**	**1.3359**	**.10182**	**.00289**
Stddev	.00003	.00055	.00166	.0294	.0176	.00373	.0131	.00077	.00003
%RSD	1.0113	4.4584	1.0433	.46256	1.6897	218.30	.97731	.75867	1.0516
#1	.00260	.01269	.16056	6.3259	1.0519	-.00093	1.3267	.10237	.00291
#2	.00256	.01192	.15821	6.3674	1.0270	.00434	1.3452	.10128	.00287
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00715**	**.01276**	**4.3016**	**.01727**	**1.9464**	**-.00359**	**-.01588**	**.42798**	**.91587**
Stddev	.00758	.00073	.1391	.00349	.0734	.00032	.00288	.01121	.02398
%RSD	105.98	5.6875	3.2336	20.182	3.7722	8.8612	18.167	2.6183	2.6183
#1	.00179	.01327	4.4000	.01974	1.9983	-.00336	-.01384	.43590	.93283
#2	.01251	.01225	4.2033	.01481	1.8944	-.00381	-.01792	.42005	.89891
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00911**	**.02499**	**.00118**	**.11266**	**-.00019**	**-.02163**	**.00672**	**.34909**	**.00665**
Stddev	.00210	.00034	.00371	.00196	.00124	.03339	.00041	.00050	.00201
%RSD	23.033	1.3802	314.49	1.7376	662.13	154.34	6.1514	.14374	30.295
#1	.01060	.02475	-.00144	.11404	.00069	.00198	.00643	.34944	.00522
#2	.00763	.02524	.00380	.11127	-.00106	-.04524	.00701	.34873	.00807
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2379.9**	**42670.**	**2445.3**
Stddev	5.0	3.	12.9
%RSD	.21128	.00652	.52568
#1	2376.3	42672.	2436.2
#2	2383.4	42668.	2454.4

Sample Name: 280-97995-A-1-B MS Acquired: 6/12/2017 17:17:18 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376612 SOIL 6010B (Cu)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06175**	**17.446**	**.85755**	**.93746**	**2.0942**	**.04387**	**1.8321**	**68.203**	**.09537**
Stddev	.00017	.030	.01662	.01488	.0008	.00018	.0389	.022	.00171
%RSD	.28201	.17159	1.9384	1.5872	.03815	.40271	2.1245	.03172	1.7906
#1	.06163	17.425	.86930	.94798	2.0936	.04374	1.8596	68.187	.09658
#2	.06188	17.467	.84580	.92694	2.0947	.04399	1.8046	68.218	.09416
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.45959**	**.22561**	**1.1736**	**36.448**	**52.543**	**.92520**	**53.130**	**1.1123**	**.75331**
Stddev	.00869	.00490	.0029	.122	.147	.00429	.064	.0021	.01303
%RSD	1.8913	2.1729	.24414	.33434	.28013	.46361	.12086	.19270	1.7297
#1	.46574	.22907	1.1756	36.362	52.439	.92217	53.175	1.1138	.76252
#2	.45345	.22214	1.1716	36.535	52.647	.92823	53.084	1.1108	.74409
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.191**	**.50819**	W **31.930**	**.45491**	**13.383**	**.43709**	**1.6956**	**3.9380**	**8.4272**
Stddev	.068	.01189	.561	.00793	.260	.00817	.0298	.0419	.0896
%RSD	.13214	2.3390	1.7574	1.7425	1.9428	1.8680	1.7565	1.0633	1.0633
#1	51.239	.51659	32.327	.46052	13.567	.44287	1.7167	3.9676	8.4906
#2	51.143	.49978	31.533	.44931	13.199	.43132	1.6746	3.9083	8.3639
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			20.000						
Low Limit			-6.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.4894**	**1.0199**	**.13751**	**1.0054**	**1.5452**	**2.0026**	**.58427**	**2.4523**	**.06227**
Stddev	.0312	.0002	.00244	.0014	.0366	.0232	.00258	.0127	.00060
%RSD	2.0928	.02228	1.7766	.14022	2.3689	1.1566	.44125	.51836	.95579
#1	1.5114	1.0200	.13924	1.0044	1.5711	1.9862	.58610	2.4613	.06185
#2	1.4673	1.0197	.13578	1.0064	1.5193	2.0190	.58245	2.4433	.06269
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2310.6**	**40997.**	**2460.2**
Stddev	4.3	256.	4.5
%RSD	.18612	.62378	.18138
#1	2313.7	40816.	2463.4
#2	2307.6	41177.	2457.1

Sample Name: 280-97995-A-1-C MSD Acquired: 6/12/2017 17:19:41 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376612 SOIL 6010B (Cu)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05390**	**19.397**	**.87450**	**.94276**	**2.1742**	**.04460**	**1.8334**	**71.806**	**.09581**
Stddev	.00030	.088	.03497	.02073	.0072	.00024	.0465	.233	.00207
%RSD	.54950	.45326	3.9994	2.1990	.33014	.54150	2.5375	.32382	2.1653
#1	.05411	19.459	.89923	.95741	2.1793	.04477	1.8663	71.970	.09728
#2	.05369	19.335	.84977	.92810	2.1691	.04443	1.8005	71.642	.09434
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.46306**	**.22438**	**1.2863**	**38.826**	**53.925**	**.94589**	**54.236**	**1.1692**	**.75832**
Stddev	.01202	.00626	.0050	.029	.093	.00127	.151	.0025	.02168
%RSD	2.5948	2.7880	.39162	.07542	.17224	.13387	.27755	.21425	2.8587
#1	.47156	.22880	1.2899	38.847	53.991	.94500	54.342	1.1709	.77365
#2	.45457	.21995	1.2828	38.806	53.860	.94679	54.129	1.1674	.74299
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**52.158**	**.51089**	W **33.558**	**.48898**	**13.906**	**.43913**	**1.7120**	**5.0354**	**10.776**
Stddev	.184	.01432	.925	.00843	.354	.00701	.0367	.0365	.078
%RSD	.35233	2.8038	2.7570	1.7246	2.5437	1.5973	2.1451	.72440	.72440
#1	52.288	.52102	34.212	.49494	14.156	.44409	1.7379	5.0612	10.831
#2	52.028	.50076	32.904	.48301	13.656	.43417	1.6860	5.0096	10.721
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			20.000						
Low Limit			-6.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.5196**	**1.0527**	**.15110**	**1.0391**	**1.5547**	**2.0199**	**.60129**	**2.8046**	**.06809**
Stddev	.0435	.0026	.00150	.0064	.0396	.0268	.00403	.0032	.00200
%RSD	2.8650	.25023	.99109	.61731	2.5504	1.3258	.67035	.11520	2.9390
#1	1.5504	1.0546	.15216	1.0437	1.5827	2.0010	.60414	2.8069	.06951
#2	1.4888	1.0508	.15004	1.0346	1.5267	2.0389	.59844	2.8023	.06668
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2297.7**	**40539.**	**2444.1**
Stddev	1.1	11.	3.0
%RSD	.04923	.02641	.12420
#1	2298.5	40546.	2441.9
#2	2296.9	40531.	2446.2

Sample Name: CCVH-4579429 Acquired: 6/12/2017 17:22:04 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01640**	W **44.834**	**-.00223**	**.00332**	**.00171**	**.00012**	F **.86016**	**-.00200**	**.00071**	**-.00093**	**.00104**	**.01246**
Stddev	.00072	.099	.00272	.00096	.00094	.00004	.03280	.00720	.00017	.00007	.00013	.00056
%RSD	4.3874	.22020	122.03	29.023	54.862	32.461	3.8131	360.77	23.998	8.0122	12.530	4.4839
#1	-.01589	44.904	-.00031	.00264	.00237	.00009	.88335	.00309	.00083	-.00098	.00113	.01207
#2	-.01691	44.764	-.00415	.00400	.00104	.00014	.83697	-.00709	.00059	-.00088	.00094	.01286
Check ?	None	Chk Warn	None	None	None	None	Chk Fail	None	None	None	None	None
Value		50.000					1.0000					
Range		-10.000%					-10.490%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**47.713**	**-.06738**	**-.00022**	**.15342**	**-.00242**	**-.00099**	**238.40**	**.00147**	**.00689**	**.00117**	F **3.8298**	**-.01232**
Stddev	.076	.02088	.00044	.00570	.00012	.00018	.00	.00026	.00131	.00158	.1430	.00663
%RSD	.15908	30.983	202.91	3.7144	5.0295	18.195	.00120	17.749	19.074	135.06	3.7338	53.790
#1	47.659	-.08214	-.00053	.15745	-.00251	-.00112	238.40	.00165	.00781	.00005	3.9309	-.01700
#2	47.766	-.05262	.00009	.14939	-.00234	-.00086	238.40	.00128	.00596	.00229	3.7287	-.00763
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Fail	None
Value											5.0000	
Range											-10.490%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01351**	**-.02071**	**-.04433**	**-.00421**	**.00055**	**5.1446**	**.02918**	**.00075**	**10.142**	**.01287**	**-.00010**	**.02321**
Stddev	.00006	.01774	.03797	.00043	.00003	.0057	.00013	.00272	.066	.00036	.00057	.00154
%RSD	.45577	85.651	85.651	10.261	6.3519	.11063	.43092	361.75	.65012	2.8290	591.82	6.6415
#1	-.01355	-.03326	-.07118	-.00390	.00052	5.1486	.02909	.00268	10.188	.01261	.00030	.02212
#2	-.01347	-.00817	-.01748	-.00451	.00057	5.1406	.02927	-.00117	10.095	.01313	-.00050	.02430
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2230.9**	**39281.**	**2312.9**
Stddev	5.5	19.	2.8
%RSD	.24877	.04712	.12198
#1	2226.9	39294.	2310.9
#2	2234.8	39268.	2314.9

Sample Name: CCV-4580817 Acquired: 6/12/2017 17:24:39 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47033**	**.46335**	F **.84787**	**.47660**	F **.42578**	F **.44682**	**-.00206**	F **4.2392**	**.47003**	**.47391**	F **.40191**	F **.60274**
Stddev	.00184	.00826	.02427	.00973	.00085	.00077	.00608	.0045	.01067	.01082	.01273	.00385
%RSD	.39157	1.7832	2.8630	2.0416	.19861	.17292	295.63	.10642	2.2698	2.2828	3.1667	.63823
#1	.47163	.46919	.86503	.48348	.42518	.44628	-.00635	4.2360	.47758	.48156	.41091	.60546
#2	.46903	.45750	.83070	.46972	.42638	.44737	.00224	4.2424	.46249	.46626	.39291	.60002
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Fail	None	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Fail
Value			1.0000		.50000	.50000		5.0000			.50000	.50000
Range			-10.490%		-10.490%	-10.490%		-10.490%			-10.490%	10.490%

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.2920**	**46.243**	**.93097**	**18.723**	**.53717**	F **.40191**	**4.6587**	**.47332**	**.93699**	F **.80199**	**-.07778**	**.91093**
Stddev	.0003	.078	.00103	.040	.00168	.01162	.0250	.01244	.01784	.01081	.01066	.02256
%RSD	.01189	.16768	.11015	.21391	.31313	2.8910	.53649	2.6284	1.9041	1.3474	13.708	2.4769
#1	2.2922	46.188	.93025	18.752	.53836	.41013	4.6764	.48211	.94960	.80963	-.08532	.92689
#2	2.2918	46.298	.93170	18.695	.53599	.39370	4.6410	.46452	.92437	.79435	-.07024	.89498
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass
Value						.50000				1.0000		
Range						-10.490%				-10.490%		

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.85886**	**4.7070**	**10.073**	F **.81420**	F **.44516**	**.00501**	**.51662**	F **.82965**	**.00041**	**.54950**	**.52274**	**.50111**
Stddev	.03082	.0101	.022	.02292	.00068	.00167	.00131	.02826	.02497	.00072	.00700	.00172
%RSD	3.5883	.21472	.21472	2.8151	.15176	33.303	.25435	3.4066	6152.9	.13069	1.3395	.34282
#1	.88065	4.7142	10.088	.83041	.44468	.00383	.51755	.84964	-.01725	.55001	.52769	.50233
#2	.83707	4.6999	10.058	.79799	.44564	.00619	.51569	.80967	.01806	.54900	.51779	.49990
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Fail	None	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
Value	1.0000			1.0000	.50000			1.0000				
Range	-10.490%			-10.490%	-10.490%			-10.490%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2294.9**	**41295.**	**2426.7**
Stddev	18.0	51.	5.4
%RSD	.78403	.12443	.22155
#1	2307.7	41332.	2430.5
#2	2282.2	41259.	2422.9

Sample Name: CCB Acquired: 6/12/2017 17:27:09 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00093**	**.00064**	**-.00284**	**.00071**	**.00072**	**.00001**	**-.00104**	**.00290**	**-.00022**	**.00017**	**.00088**	**-.00041**
Stddev	.00010	.00015	.00583	.00071	.00071	.00013	.00173	.00922	.00028	.00023	.00014	.00004
%RSD	11.296	23.272	205.46	99.562	99.786	1488.2	165.64	317.93	127.07	133.31	16.246	9.1247
#1	.00100	.00075	.00129	.00021	.00021	-.00009	-.00227	.00942	-.00041	.00001	.00098	-.00038
#2	.00085	.00054	-.00696	.00121	.00122	.00010	.00018	-.00362	-.00002	.00034	.00078	-.00043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00903**	**-.05648**	**.00004**	**.00781**	**-.00006**	**.00115**	**-.26214**	**.00056**	**-.00051**	W **.00465**	**-.07907**	**-.00048**
Stddev	.00306	.07283	.00091	.00330	.00009	.00113	.00307	.00036	.00191	.00183	.00751	.00420
%RSD	33.927	128.95	2145.1	42.270	149.62	98.722	1.1698	65.198	373.68	39.486	9.4932	870.86
#1	.00687	-.10798	-.00060	.00548	-.00013	.00035	-.26431	.00030	.00084	.00594	-.08438	-.00345
#2	.01120	-.00498	.00068	.01015	.00000	.00195	-.25997	.00081	-.00186	.00335	-.07376	.00249
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit										.00450		
Low Limit										-.00450		

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01481**	**.03464**	**.07413**	**-.00071**	**.00014**	**-.00004**	**.00040**	**-.00004**	**.00459**	**.00060**	**.00064**	**.00402**
Stddev	.00261	.01012	.02165	.00123	.00022	.00214	.00028	.00230	.00051	.00004	.00007	.00020
%RSD	17.627	29.204	29.204	173.81	149.23	5901.5	69.431	5472.8	11.211	7.4113	11.104	5.0230
#1	-.01665	.02749	.05882	-.00157	-.00001	-.00155	.00060	.00159	.00496	.00063	.00069	.00416
#2	-.01296	.04179	.08944	.00016	.00030	.00148	.00021	-.00167	.00423	.00057	.00059	.00388
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2274.7**	**40607.**	**2309.9**
Stddev	2.1	47.	8.2
%RSD	.09086	.11626	.35486
#1	2276.2	40573.	2315.7
#2	2273.3	40640.	2304.1

Sample Name: CCVL-4589022 Acquired: 6/12/2017 17:29:47 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01002**	**.11035**	F **.00807**	**.09309**	**.00890**	**.00101**	**.09744**	**.16352**	**.00463**	**.00988**	**.00868**	**.01861**
Stddev	.00027	.00420	.00023	.00404	.00022	.00000	.00320	.00481	.00054	.00054	.00039	.00050
%RSD	2.6791	3.8032	2.8168	4.3433	2.4759	.46325	3.2890	2.9431	11.710	5.4283	4.5434	2.7011
#1	.01021	.11332	.00823	.09595	.00875	.00101	.09971	.16692	.00502	.01026	.00896	.01897
#2	.00983	.10739	.00791	.09023	.00906	.00100	.09518	.16012	.00425	.00950	.00840	.01826
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09649**	**2.6879**	**.01799**	**.19459**	**.01095**	**.01570**	F **.69317**	**.03821**	**2.6716**	**.01057**	F **.00168**	**.01449**
Stddev	.00825	.0221	.00188	.00272	.00009	.00067	.00456	.00120	.0982	.00145	.00599	.00007
%RSD	8.5500	.82135	10.467	1.3992	.85773	4.2406	.65745	3.1341	3.6737	13.756	357.03	.48176
#1	.09065	2.6723	.01666	.19651	.01102	.01617	.69640	.03905	2.7410	.01160	.00592	.01453
#2	.10232	2.7035	.01932	.19266	.01088	.01523	.68995	.03736	2.6022	.00954	-.00256	.01444
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value							1.0000				.10000	
Range							-30.000%				-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.00415**	**.45962**	**.98358**	**.07952**	**.00906**	**.01559**	**.00985**	**.01448**	F **.08929**	**.01114**	**.02067**	F **.02168**
Stddev	.00652	.03419	.07317	.00384	.00009	.00231	.00016	.00538	.01256	.00112	.00026	.00186
%RSD	156.98	7.4387	7.4387	4.8311	.94550	14.842	1.6100	37.151	14.067	10.019	1.2740	8.5940
#1	.00876	.48379	1.0353	.08224	.00912	.01395	.00996	.01829	.09817	.01193	.02085	.02300
#2	-.00046	.43544	.93184	.07681	.00900	.01723	.00974	.01068	.08041	.01035	.02048	.02037
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
Value	.02000								.06000			.01500
Range	-30.000%								30.000%			30.000%

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2401.2**	**43193.**	**2485.8**
Stddev	2.2	230.	15.7
%RSD	.09324	.53140	.63320
#1	2402.8	43030.	2496.9
#2	2399.7	43355.	2474.7

Sample Name: MB 280-376583/1-A Acquired: 6/12/2017 17:32:26 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: 6/9 Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00024**	**.00311**	**-.00020**	**-.00003**	**.00056**	**.00015**	**.00182**	**.01149**	**-.00003**
Stddev	.00008	.00019	.00364	.00024	.00065	.00005	.00180	.00021	.00017
%RSD	34.076	6.1355	1826.6	702.51	117.69	34.774	99.159	1.8455	613.19
#1	.00018	.00297	.00238	-.00021	.00009	.00018	.00054	.01134	.00009
#2	.00030	.00324	-.00277	.00014	.00102	.00011	.00309	.01164	-.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00022**	**.00064**	**.00102**	**.02793**	**-.14463**	**-.00138**	**.00737**	**.00018**	**.00074**
Stddev	.00002	.00022	.00019	.00283	.03687	.00391	.00453	.00000	.00024
%RSD	10.365	34.806	18.917	10.122	25.492	283.36	61.435	1.8139	31.983
#1	-.00021	.00079	.00116	.02993	-.11856	-.00414	.00417	.00018	.00057
#2	-.00024	.00048	.00089	.02594	-.17070	.00138	.01057	.00018	.00091
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.23178**	**.00054**	**.00040**	**.00332**	W **-.06573**	**-.00065**	W **-.01026**	**.04936**	**.10563**
Stddev	.00199	.00021	.00318	.00235	.00131	.00123	.00553	.03852	.08244
%RSD	.86019	39.592	786.41	70.750	1.9917	189.53	53.904	78.045	78.045
#1	-.23037	.00069	-.00185	.00166	-.06666	.00022	-.00635	.02212	.04734
#2	-.23318	.00039	.00266	.00499	-.06481	-.00152	-.01417	.07660	.16392
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	None
High Limit					.05000		.00750		
Low Limit					-.05000		-.00750		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00050**	**.00011**	**.00013**	**.00053**	**.00279**	**.00993**	**.00034**	**.00089**	**.00391**
Stddev	.00282	.00005	.00187	.00013	.00333	.06226	.00035	.00077	.00042
%RSD	564.74	43.481	1431.4	24.057	119.17	627.04	103.89	86.244	10.867
#1	.00249	.00014	-.00119	.00062	.00044	.05395	.00009	.00144	.00361
#2	-.00149	.00008	.00145	.00044	.00515	-.03410	.00059	.00035	.00421
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2351.8**	**42388.**	**2428.7**
Stddev	7.7	30.	8.7
%RSD	.32754	.07183	.35752
#1	2357.3	42410.	2434.9
#2	2346.4	42367.	2422.6

Sample Name: LCS 280-376583/2-A Acquired: 6/12/2017 17:35:04 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04315**	**1.7813**	**.88858**	**.97023**	F **1.7215**	**.04484**	**1.8090**	F **41.790**	**.09479**
Stddev	.00095	.0550	.03485	.02338	.0080	.00010	.0473	.218	.00268
%RSD	2.1971	3.0895	3.9222	2.4098	.46385	.22336	2.6142	.52235	2.8313
#1	.04382	1.8202	.91322	.98677	1.7272	.04477	1.8425	41.944	.09669
#2	.04248	1.7424	.86394	.95370	1.7159	.04491	1.7756	41.635	.09289
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None	Chk Fail	Chk Pass
High Limit					2.2499			55.500	
Low Limit					1.7900			44.750	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.46091**	F **.16089**	F **.30411**	**.93666**	**47.110**	**.93802**	**46.671**	**.53289**	F **.78506**
Stddev	.01312	.00457	.00112	.00145	.173	.00262	.142	.00208	.02144
%RSD	2.8460	2.8422	.36827	.15436	.36629	.27934	.30453	.39001	2.7315
#1	.47019	.16412	.30332	.93564	47.232	.93987	46.771	.53436	.80022
#2	.45164	.15766	.30490	.93768	46.988	.93617	46.570	.53142	.76989
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit		.22000	.28000						1.1000
Low Limit		.18000	.21500						.90000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.720**	**.46144**	**9.6456**	F **.39879**	**1.5693**	**.46950**	**1.7681**	**9.4311**	**20.183**
Stddev	.472	.01201	.2709	.00947	.0524	.00993	.0315	.0208	.044
%RSD	.95015	2.6027	2.8083	2.3746	3.3399	2.1142	1.7810	.22048	.22048
#1	49.385	.46993	9.8371	.40549	1.6063	.47652	1.7904	9.4164	20.151
#2	50.054	.45295	9.4540	.39210	1.5322	.46249	1.7458	9.4458	20.214
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit				.55000					
Low Limit				.44500					

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **1.6306**	F **.89526**	**1.0615**	**1.0487**	F **1.6350**	**2.0902**	**.55173**	**.52602**	**.50292**
Stddev	.0395	.00458	.0019	.0037	.0476	.0330	.00054	.00286	.00031
%RSD	2.4213	.51103	.17531	.34795	2.9132	1.5772	.09843	.54406	.06230
#1	1.6585	.89850	1.0628	1.0513	1.6687	2.0669	.55212	.52804	.50269
#2	1.6027	.89203	1.0602	1.0461	1.6013	2.1135	.55135	.52400	.50314
Check ?	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.2600	1.1100			2.2000				
Low Limit	1.7000	.90000			1.7600				

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2259.9**	**40314.**	**2400.3**
Stddev	4.0	41.	2.7
%RSD	.17880	.10224	.11364
#1	2262.7	40343.	2398.4
#2	2257.0	40285.	2402.2

Sample Name: 97964-H-1-A @2 Acquired: 6/12/2017 17:37:31 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00039**	**.17330**	**.01673**	**8.0277**	**.10025**	**.00011**	**-.00385**	**31.879**	**.00018**
Stddev	.00082	.00843	.00531	.3400	.00011	.00024	.00142	.063	.00024
%RSD	212.29	4.8624	31.759	4.2348	.11416	230.07	36.837	.19648	131.99
#1	.00097	.17926	.02049	8.2681	.10017	.00028	-.00485	31.923	.00035
#2	-.00019	.16734	.01297	7.7873	.10033	-.00007	-.00285	31.834	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01153**	**.07704**	**.00604**	**1.9982**	W **317.42**	**.07832**	**32.665**	**.02650**	**.00156**
Stddev	.00085	.00363	.00078	.0030	1.25	.00208	.046	.00017	.00002
%RSD	7.3999	4.7094	12.833	.14811	.39523	2.6531	.14138	.63040	.99878
#1	.01213	.07960	.00549	2.0003	318.31	.07979	32.633	.02662	.00157
#2	.01093	.07447	.00659	1.9961	316.54	.07685	32.698	.02638	.00155
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1029.9**	**.04990**	**2.0900**	**-.00145**	**24.881**	**-.00168**	**-.00212**	**13.071**	**27.972**
Stddev	.4	.00212	.0967	.00494	1.128	.00090	.00992	.009	.019
%RSD	.03428	4.2439	4.6260	341.35	4.5333	53.543	468.85	.06636	.06636
#1	1030.1	.05140	2.1584	-.00494	25.678	-.00104	-.00913	13.065	27.959
#2	1029.6	.04840	2.0216	.00204	24.083	-.00231	.00490	13.077	27.985
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01288**	**.69078**	**.00045**	**.05561**	**.00583**	**-.00495**	**.05089**	**.00846**	**.02226**
Stddev	.00240	.00091	.00089	.00024	.00113	.04667	.00034	.00140	.00154
%RSD	18.617	.13226	198.43	.43442	19.309	941.81	.66808	16.537	6.9224
#1	.01457	.69143	-.00018	.05544	.00503	-.03795	.05113	.00945	.02117
#2	.01118	.69013	.00108	.05578	.00663	.02804	.05065	.00747	.02335
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2107.4**	**37041.**	**2328.6**
Stddev	2.1	267.	2.5
%RSD	.10042	.72068	.10817
#1	2105.9	37230.	2330.4
#2	2108.9	36852.	2326.9

Sample Name: 97964-H-1-A SD@10 Acquired: 6/12/2017 17:40:11 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00049**	**.05044**	**.00305**	**1.7318**	**.02067**	**.00006**	**.00144**	**6.4722**	**-.00009**
Stddev	.00057	.00081	.00700	.0623	.00039	.00024	.00023	.0113	.00013
%RSD	117.07	1.6110	229.43	3.5996	1.8791	368.52	16.032	.17512	150.41
#1	.00008	.05101	-.00190	1.7758	.02094	-.00010	.00161	6.4802	.00001
#2	.00089	.04986	.00801	1.6877	.02039	.00023	.00128	6.4642	-.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00250**	**.01609**	**.00295**	**.41999**	**62.642**	**.01526**	**6.7988**	**.00528**	**.00151**
Stddev	.00006	.00040	.00076	.00047	.225	.00063	.0108	.00009	.00021
%RSD	2.4075	2.4711	25.860	.11300	.35935	4.1555	.15914	1.6302	13.660
#1	.00254	.01637	.00349	.41965	62.801	.01571	6.8064	.00535	.00136
#2	.00246	.01581	.00241	.42032	62.483	.01482	6.7911	.00522	.00165
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**208.41**	**.01035**	**.41915**	**.00410**	**4.8723**	**.00044**	**-.00814**	**2.6677**	**5.7088**
Stddev	.87	.00052	.01083	.00094	.1827	.00117	.01031	.0150	.0320
%RSD	.41623	5.0041	2.5830	22.941	3.7492	267.55	126.71	.56121	.56121
#1	209.02	.00998	.42681	.00477	5.0015	-.00039	-.01542	2.6571	5.6861
#2	207.80	.01071	.41149	.00344	4.7432	.00127	-.00085	2.6782	5.7314
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00188**	**.13974**	**-.00193**	**.01096**	**.00162**	**.01964**	**.01018**	**.00220**	**.00879**
Stddev	.00090	.00055	.00054	.00030	.00238	.03678	.00040	.00059	.00267
%RSD	48.059	.39403	28.213	2.7628	146.64	187.28	3.9333	26.726	30.395
#1	.00124	.14013	-.00154	.01074	.00331	-.00637	.00990	.00179	.01068
#2	.00252	.13935	-.00231	.01117	-.00006	.04565	.01047	.00262	.00690
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2273.6**	**40702.**	**2424.0**
Stddev	2.4	167.	59.3
%RSD	.10697	.41030	2.4474
#1	2275.4	40820.	2382.0
#2	2271.9	40584.	2465.9

Sample Name: 97964-H-1-B MS @2 Acquired: 6/12/2017 17:42:47 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02302**	**1.0405**	**.47862**	**8.5897**	**.94114**	**.02179**	**.84996**	**52.241**	**.04709**
Stddev	.00017	.0376	.01237	.2652	.00187	.00020	.02767	.137	.00227
%RSD	.74788	3.6086	2.5842	3.0873	.19840	.91379	3.2558	.26209	4.8207
#1	.02315	1.0670	.48737	8.7772	.94246	.02194	.86953	52.338	.04870
#2	.02290	1.0139	.46988	8.4022	.93982	.02165	.83039	52.145	.04549
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.23026**	**.15147**	**.15683**	**2.4952**	W **338.73**	**.54617**	**54.666**	**.28976**	**.37817**
Stddev	.00843	.00475	.00091	.0082	1.09	.00314	.016	.00001	.01291
%RSD	3.6619	3.1383	.58144	.32935	.32248	.57524	.03010	.00459	3.4127
#1	.23623	.15483	.15619	2.5010	339.50	.54840	54.677	.28975	.38729
#2	.22430	.14811	.15748	2.4894	337.95	.54395	54.654	.28977	.36904
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1049.0**	**.26832**	**6.9944**	**.18587**	**25.966**	**.22521**	**.84705**	**13.941**	**29.833**
Stddev	1.7	.01002	.2413	.00586	.862	.01014	.02141	.025	.053
%RSD	.16624	3.7359	3.4496	3.1514	3.3197	4.5045	2.5275	.17654	.17654
#1	1050.3	.27541	7.1651	.19002	26.576	.23238	.86219	13.958	29.870
#2	1047.8	.26124	6.8238	.18173	25.357	.21803	.83191	13.923	29.796
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.77492**	**1.1268**	**.52391**	**.56941**	**.69368**	**1.0102**	**.32622**	**.27328**	**.26349**
Stddev	.03217	.0036	.00031	.00087	.02149	.0482	.00086	.00075	.00043
%RSD	4.1519	.31558	.05877	.15351	3.0983	4.7742	.26452	.27443	.16496
#1	.79768	1.1294	.52370	.57002	.70887	1.0443	.32683	.27381	.26379
#2	.75217	1.1243	.52413	.56879	.67848	.97614	.32561	.27275	.26318
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2112.5**	**37357.**	**2377.4**
Stddev	2.0	239.	6.4
%RSD	.09507	.64015	.27028
#1	2111.1	37526.	2382.0
#2	2114.0	37188.	2372.9

Sample Name: 97964-H-1-C MSD @2 Acquired: 6/12/2017 17:45:22 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02203**	**.96570**	**.46277**	**8.3388**	**.93313**	**.02160**	**.82479**	**51.318**	**.04595**
Stddev	.00022	.04391	.01907	.3117	.00156	.00004	.03794	.184	.00176
%RSD	.98711	4.5469	4.1202	3.7379	.16746	.18883	4.5994	.35903	3.8298
#1	.02218	.99675	.47625	8.5592	.93202	.02157	.85162	51.187	.04720
#2	.02188	.93466	.44928	8.1184	.93423	.02163	.79797	51.448	.04471
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.22270**	**.13949**	**.15078**	**2.3449**	W **332.61**	**.53530**	**53.330**	**.28234**	**.36803**
Stddev	.00900	.00605	.00015	.0145	.50	.00211	.144	.00136	.01712
%RSD	4.0391	4.3341	.10194	.61865	.14981	.39428	.27011	.48043	4.6513
#1	.22907	.14377	.15089	2.3552	332.25	.53679	53.432	.28330	.38014
#2	.21634	.13522	.15067	2.3347	332.96	.53380	53.229	.28138	.35593
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1029.1**	**.25898**	**6.7850**	**.17838**	**24.646**	**.22052**	**.82584**	**13.482**	**28.851**
Stddev	1.2	.01010	.2755	.00548	1.074	.01190	.04590	.045	.096
%RSD	.11565	3.8996	4.0603	3.0731	4.3594	5.3971	5.5585	.33405	.33405
#1	1028.3	.26612	6.9798	.18226	25.405	.22893	.85830	13.514	28.920
#2	1029.9	.25184	6.5902	.17450	23.886	.21210	.79338	13.450	28.783
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.75115**	**1.1076**	**.51001**	**.54992**	**.68623**	**.98601**	**.31750**	**.26929**	**.25401**
Stddev	.03457	.0029	.00411	.00026	.02550	.00848	.00001	.00053	.00091
%RSD	4.6027	.26522	.80518	.04718	3.7157	.86037	.00398	.19589	.35688
#1	.77559	1.1055	.51291	.55010	.70426	.99200	.31751	.26966	.25336
#2	.72670	1.1096	.50710	.54974	.66820	.98001	.31750	.26892	.25465
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2093.6**	**36885.**	**2334.7**
Stddev	2.1	112.	1.7
%RSD	.10174	.30407	.07270
#1	2092.1	36964.	2333.5
#2	2095.1	36806.	2335.9

Sample Name: 280-97964-H-2-A @2 Acquired: 6/12/2017 17:47:56 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00018**	**.13208**	**.01630**	**8.2775**	**.17443**	**.00017**	**-.00093**	**40.051**	**.00029**
Stddev	.00057	.00467	.00325	.3737	.00043	.00006	.00035	.141	.00037
%RSD	322.40	3.5332	19.926	4.5151	.24425	37.302	37.156	.35165	129.08
#1	-.00058	.13538	.01860	8.5418	.17412	.00013	-.00069	39.951	.00055
#2	.00023	.12878	.01401	8.0132	.17473	.00022	-.00117	40.150	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00598**	**.08172**	**.00579**	**2.7050**	W **241.47**	**.07032**	**35.128**	**.03871**	**.00060**
Stddev	.00016	.00345	.00082	.0210	.14	.00131	.118	.00015	.00001
%RSD	2.6055	4.2223	14.178	.77534	.05919	1.8646	.33470	.39382	2.3554
#1	.00609	.08416	.00521	2.6902	241.37	.07125	35.211	.03881	.00059
#2	.00587	.07928	.00638	2.7199	241.57	.06939	35.045	.03860	.00061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **714.60**	**.03221**	**.93364**	**-.00069**	**18.480**	**-.00027**	**-.01244**	**12.262**	**26.240**
Stddev	1.59	.00133	.04067	.00019	.890	.00789	.00563	.032	.068
%RSD	.22286	4.1360	4.3564	28.104	4.8179	2958.3	45.221	.25902	.25902
#1	713.47	.03315	.96240	-.00055	19.109	.00531	-.01642	12.239	26.192
#2	715.73	.03126	.90488	-.00083	17.850	-.00584	-.00846	12.284	26.288
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00273**	**1.0385**	**-.00087**	**.03814**	**.00213**	**.01985**	**.01311**	**.00683**	**.01640**
Stddev	.00131	.0001	.00202	.00047	.00037	.00238	.00003	.00042	.00506
%RSD	47.915	.01157	231.85	1.2451	17.517	12.012	.24220	6.1829	30.839
#1	.00181	1.0384	.00056	.03848	.00239	.01817	.01313	.00653	.01282
#2	.00366	1.0386	-.00230	.03780	.00186	.02154	.01309	.00712	.01998
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2218.1**	**36839.**	**2312.0**
Stddev	.4	17.	19.9
%RSD	.01774	.04627	.86165
#1	2217.8	36851.	2326.0
#2	2218.3	36827.	2297.9

Sample Name: 280-97964-H-3-A@5 Acquired: 6/12/2017 17:50:35 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K) 5x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00018**	**.34842**	**.00726**	**4.7984**	**.10846**	**.00032**	**-.00029**	**15.845**	**.00023**
Stddev	.00070	.01798	.00579	.2140	.00062	.00005	.00569	.084	.00003
%RSD	385.63	5.1597	79.731	4.4606	.57331	15.543	1985.4	.53240	14.958
#1	.00068	.36113	.01135	4.9497	.10890	.00028	.00374	15.904	.00021
#2	-.00032	.33571	.00317	4.6470	.10802	.00035	-.00431	15.785	.00026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00290**	**.02665**	**.00550**	**.35650**	W **333.58**	**.21963**	**24.112**	**.01898**	**.00093**
Stddev	.00008	.00167	.00004	.01635	.76	.00169	.130	.00012	.00117
%RSD	2.8646	6.2745	.66389	4.5852	.22854	.77029	.53986	.62601	125.99
#1	.00296	.02783	.00552	.34495	334.12	.22083	24.204	.01906	.00010
#2	.00284	.02547	.00547	.36806	333.04	.21844	24.020	.01890	.00176
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1057.3**	**.03591**	**1.9613**	**.00223**	**8.4010**	**.00249**	**-.00831**	**3.6008**	**7.7057**
Stddev	2.1	.00195	.0915	.00097	.4156	.00134	.01210	.0124	.0265
%RSD	.19817	5.4182	4.6656	43.280	4.9469	53.575	145.75	.34389	.34389
#1	1058.8	.03729	2.0260	.00155	8.6949	.00344	-.01686	3.6096	7.7245
#2	1055.8	.03454	1.8966	.00291	8.1071	.00155	.00025	3.5921	7.6870
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00209**	**.34282**	**-.00038**	**.02097**	**.00171**	**.04444**	**.01242**	**.01153**	**.01900**
Stddev	.00009	.00126	.00031	.00009	.00299	.00015	.00054	.00037	.00086
%RSD	4.1354	.36858	81.168	.40592	174.56	.33210	4.3151	3.1844	4.5347
#1	.00215	.34371	-.00060	.02103	.00383	.04433	.01280	.01127	.01961
#2	.00203	.34192	-.00016	.02091	-.00040	.04454	.01204	.01179	.01840
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2137.7**	**37557.**	**2398.8**
Stddev	5.4	232.	20.3
%RSD	.25467	.61895	.84638
#1	2133.9	37392.	2413.1
#2	2141.6	37721.	2384.4

Sample Name: 280-97964-H-4-A Acquired: 6/12/2017 17:53:14 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**.12379**	**.01086**	W **10.780**	**.15636**	**.00018**	**-.00332**	**134.47**	**.00117**
Stddev	.00105	.00441	.00161	.441	.00019	.00018	.00381	.38	.00005
%RSD	17277.	3.5659	14.853	4.0948	.12415	100.33	114.56	.28391	4.1088
#1	.00074	.12691	.01200	11.092	.15650	.00031	-.00063	134.20	.00121
#2	-.00075	.12066	.00972	10.468	.15622	.00005	-.00602	134.74	.00114
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.20000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01438**	**.08272**	**.05504**	**2.9450**	W **362.40**	**.07903**	**69.190**	**.15312**	**.00274**
Stddev	.00054	.00380	.00038	.0014	1.27	.00021	.112	.00075	.00025
%RSD	3.7863	4.5942	.69129	.04912	.34991	.26409	.16162	.49039	9.2534
#1	.01476	.08541	.05531	2.9439	361.51	.07918	69.269	.15365	.00292
#2	.01399	.08003	.05477	2.9460	363.30	.07888	69.111	.15259	.00256
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1043.6**	**.06360**	**2.0231**	**.00220**	**33.584**	**.00319**	**-.00474**	**20.927**	**44.783**
Stddev	3.4	.00252	.0982	.00016	1.521	.00353	.00547	.063	.135
%RSD	.32476	3.9668	4.8513	7.2299	4.5282	110.63	115.28	.30212	.30212
#1	1041.2	.06538	2.0925	.00231	34.659	.00569	-.00088	20.882	44.687
#2	1046.0	.06182	1.9537	.00209	32.508	.00070	-.00861	20.971	44.879
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01001**	**2.2995**	**-.00332**	**.04612**	**.00040**	**-.01340**	**.02134**	**.16258**	**.01322**
Stddev	.00299	.0060	.00264	.00089	.00355	.03717	.00028	.00070	.00022
%RSD	29.906	.26255	79.747	1.9328	896.69	277.47	1.3040	.42771	1.6459
#1	.00789	2.2952	-.00519	.04675	-.00211	.01289	.02153	.16307	.01337
#2	.01212	2.3037	-.00145	.04549	.00290	-.03968	.02114	.16208	.01306
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2059.9**	**36579.**	**2324.1**
Stddev	1.2	207.	21.8
%RSD	.05640	.56574	.93861
#1	2060.7	36725.	2339.5
#2	2059.1	36432.	2308.6

Sample Name: 280-97964-H-5-A @2 Acquired: 6/12/2017 17:55:53 Type: Unk
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00014**	**.58563**	**.00792**	**5.5628**	**.10393**	**.00064**	**-.00172**	**56.386**	**.00035**
Stddev	.00002	.03148	.01387	.2503	.00326	.00034	.00157	.575	.00029
%RSD	11.562	5.3756	175.07	4.4990	3.1380	52.733	91.573	1.0195	82.721
#1	.00013	.60789	.01773	5.7397	.10624	.00088	-.00061	55.980	.00056
#2	.00015	.56337	-.00188	5.3858	.10163	.00040	-.00283	56.792	.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01805**	**.08816**	**.01685**	**3.7951**	W **299.24**	**.06868**	**32.128**	**.05779**	**.00179**
Stddev	.00072	.00466	.00101	.0275	2.68	.00037	.202	.00043	.00048
%RSD	4.0042	5.2845	6.0026	.72576	.89423	.54536	.63018	.74196	26.806
#1	.01856	.09146	.01614	3.8146	297.35	.06894	32.271	.05809	.00213
#2	.01754	.08487	.01757	3.7756	301.13	.06841	31.985	.05749	.00145
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **862.00**	**.07593**	**2.9779**	**.01382**	**18.460**	**.00270**	**-.00990**	**10.960**	**23.453**
Stddev	8.54	.00456	.1562	.00273	.985	.00377	.00011	.050	.107
%RSD	.99049	6.0051	5.2467	19.753	5.3351	139.54	1.0634	.45775	.45775
#1	855.96	.07915	3.0883	.01189	19.157	.00536	-.00997	10.924	23.377
#2	868.03	.07271	2.8674	.01575	17.764	.00004	-.00983	10.995	23.529
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01218**	**.73433**	**-.00056**	**.06430**	**.00258**	**-.02159**	**.05296**	**.02799**	**.01855**
Stddev	.00035	.00506	.00026	.00089	.00002	.00196	.00006	.00010	.00342
%RSD	2.9021	.68871	46.908	1.3795	.90833	9.0933	.11420	.36712	18.435
#1	.01243	.73075	-.00075	.06493	.00260	-.02021	.05301	.02807	.02097
#2	.01193	.73790	-.00038	.06367	.00257	-.02298	.05292	.02792	.01613
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2149.0**	**37658.**	**2379.4**
Stddev	4.9	18.	7.4
%RSD	.22870	.04857	.30994
#1	2145.6	37646.	2374.2
#2	2152.5	37671.	2384.7

Sample Name: CCVH-4579429 Acquired: 6/12/2017 17:58:34 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01652**	W **44.914**	**-.00938**	**.03816**	**.00224**	**-.00008**	F **.86229**	**.00953**	**.00057**	**-.00080**	**.00085**	**.01055**
Stddev	.00055	.304	.00047	.00303	.00008	.00000	.03068	.01804	.00019	.00039	.00025	.00135
%RSD	3.3266	.67587	5.0296	7.9388	3.3631	4.7558	3.5581	189.29	33.478	48.770	29.017	12.820
#1	-.01691	45.128	-.00904	.04031	.00219	-.00008	.88398	-.00323	.00044	-.00108	.00102	.01150
#2	-.01614	44.699	-.00971	.03602	.00230	-.00008	.84059	.02228	.00071	-.00052	.00068	.00959
Check ?	None	Chk Warn	None	None	None	None	Chk Fail	None	None	None	None	None
Value		50.000					1.0000					
Range		-10.000%					-10.490%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.096**	**.78856**	**.00014**	**.15051**	**-.00235**	**-.00184**	**239.70**	**.00165**	**.01089**	**.00185**	F **3.8018**	**-.01170**
Stddev	.197	.19626	.00046	.00178	.00007	.00033	1.19	.00010	.00230	.00031	.1249	.00076
%RSD	.41030	24.889	329.54	1.1854	2.8277	17.780	.49539	6.0902	21.101	16.729	3.2859	6.5005
#1	47.956	.92734	-.00018	.14925	-.00230	-.00161	240.54	.00172	.00926	.00207	3.8901	-.01223
#2	48.236	.64978	.00046	.15177	-.00240	-.00207	238.86	.00158	.01251	.00163	3.7135	-.01116
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Fail	None
Value											5.0000	
Range											-10.490%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00658**	**.18082**	**.38696**	**-.00171**	**.00051**	**5.1957**	**.02933**	**-.00028**	**10.220**	**.01180**	**-.00011**	**.01909**
Stddev	.00571	.01083	.02317	.00093	.00005	.0191	.00031	.00356	.006	.00036	.00071	.00236
%RSD	86.683	5.9880	5.9880	54.474	10.702	.36702	1.0424	1252.1	.05572	3.0093	647.26	12.352
#1	-.00255	.18848	.40335	-.00105	.00055	5.2092	.02955	.00223	10.224	.01155	.00039	.02075
#2	-.01062	.17317	.37058	-.00237	.00047	5.1822	.02912	-.00280	10.216	.01205	-.00061	.01742
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2222.8**	**38825.**	**2288.8**
Stddev	3.0	203.	29.8
%RSD	.13334	.52201	1.3023
#1	2224.9	38681.	2267.7
#2	2220.7	38968.	2309.9

Sample Name: CCV-4580817 Acquired: 6/12/2017 18:01:10 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47252**	**.46558**	F **.84094**	**.49656**	F **.42990**	W **.44860**	**-.00219**	F **4.2463**	**.46580**	**.47067**	F **.39984**	F **.59979**
Stddev	.00101	.01878	.03230	.01555	.00035	.00205	.00040	.0192	.01517	.01491	.01253	.00122
%RSD	.21361	4.0344	3.8411	3.1307	.08044	.45801	18.066	.45216	3.2563	3.1689	3.1326	.20315
#1	.47181	.47886	.86378	.50755	.42965	.45005	-.00247	4.2599	.47652	.48121	.40870	.60065
#2	.47324	.45230	.81810	.48557	.43014	.44715	-.00191	4.2327	.45507	.46012	.39099	.59893
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Warn	None	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Fail
Value			1.0000		.50000	.50000		5.0000			.50000	.50000
Range			-10.490%		-10.490%	-10.000%		-10.490%			-10.490%	10.490%

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.2939**	**47.076**	**.94382**	**18.844**	**.53937**	F **.39628**	**5.1955**	**.46896**	**.93296**	F **.79754**	**-.08246**	**.90095**
Stddev	.0085	.148	.00211	.017	.00044	.01221	.0491	.01602	.03412	.02277	.00418	.03604
%RSD	.36893	.31361	.22341	.09065	.08102	3.0802	.94598	3.4162	3.6568	2.8552	5.0728	4.0008
#1	2.2879	46.972	.94531	18.856	.53968	.40491	5.2303	.48029	.95709	.81364	-.08541	.92644
#2	2.2999	47.181	.94233	18.832	.53906	.38765	5.1608	.45763	.90884	.78143	-.07950	.87546
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass
Value						.50000				1.0000		
Range						-10.490%				-10.490%		

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.85341**	**5.0148**	**10.732**	F **.81142**	W **.44837**	**.00472**	**.51606**	F **.82911**	**.02849**	W **.55150**	**.52684**	**.50221**
Stddev	.02312	.0549	.118	.02464	.00003	.00114	.00028	.03013	.00132	.00092	.00282	.00038
%RSD	2.7094	1.0957	1.0957	3.0369	.00755	24.034	.05518	3.6344	4.6187	.16769	.53491	.07660
#1	.86976	5.0537	10.815	.82885	.44840	.00553	.51585	.85042	.02942	.55084	.52883	.50193
#2	.83706	4.9760	10.649	.79400	.44835	.00392	.51626	.80780	.02756	.55215	.52484	.50248
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Warn	None	Chk Pass	Chk Fail	None	Chk Warn	Chk Pass	Chk Pass
Value	1.0000			1.0000	.50000			1.0000		.50000		
Range	-10.490%			-10.490%	-10.000%			-10.490%		10.000%		

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2275.6**	**39412.**	**2278.1**
Stddev	48.4	3.	20.6
%RSD	2.1255	.00788	.90414
#1	2241.4	39410.	2292.6
#2	2309.8	39414.	2263.5

Sample Name: CCB Acquired: 6/12/2017 18:03:40 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00024**	**.00071**	**.00103**	W **.01937**	**.00042**	**.00010**	**-.00184**	**.00177**	**-.00021**	**.00046**	**.00043**	**-.00010**
Stddev	.00000	.00003	.00441	.00080	.00024	.00007	.00001	.00047	.00030	.00011	.00018	.00054
%RSD	.93770	4.8469	426.17	4.1491	58.295	72.271	.50893	26.775	141.09	22.710	42.347	561.69
#1	.00024	.00069	.00415	.01994	.00059	.00015	-.00184	.00210	-.00000	.00054	.00030	.00029
#2	.00025	.00073	-.00208	.01880	.00025	.00005	-.00183	.00143	-.00042	.00039	.00055	-.00048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01500								
Low Limit				-.01500								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01217**	**.23810**	**-.00045**	**.00858**	**.00005**	**.00110**	**.12439**	**.00071**	**.00279**	**.00234**	**-.06937**	**.00017**
Stddev	.00433	.04629	.00099	.00475	.00007	.00078	.01104	.00055	.00115	.00328	.00614	.00417
%RSD	35.577	19.440	222.58	55.331	144.85	70.840	8.8739	77.021	41.323	140.36	8.8572	2471.0
#1	.01523	.27083	-.00115	.01193	.00009	.00164	.13219	.00110	.00197	.00002	-.07371	-.00278
#2	.00911	.20537	.00026	.00522	-.00000	.00055	.11658	.00032	.00360	.00466	-.06503	.00312
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01347**	**.03494**	**.07477**	**-.00204**	**.00020**	**.00018**	**.00016**	**.00250**	**-.02090**	**.00049**	**.00007**	W **.00799**
Stddev	.00580	.06997	.14974	.00001	.00026	.00061	.00070	.00309	.04066	.00080	.00017	.00141
%RSD	43.016	200.28	200.28	.53696	129.18	335.23	443.03	123.35	194.60	163.69	253.76	17.606
#1	-.00937	.08441	.18065	-.00204	.00038	.00062	.00065	.00032	-.04965	.00106	-.00005	.00898
#2	-.01757	-.01454	-.03112	-.00203	.00002	-.00025	-.00034	.00469	.00786	-.00008	.00019	.00699
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit												.00750
Low Limit												-.00900

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2270.6**	**41179.**	**2341.4**
Stddev	1.9	118.	16.2
%RSD	.08278	.28601	.69149
#1	2269.2	41263.	2352.9
#2	2271.9	41096.	2330.0

Sample Name: CCVL-4589022 Acquired: 6/12/2017 18:06:18 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01015**	**.09900**	**.01417**	**.10941**	**.00970**	**.00090**	**.09795**	**.16584**	**.00461**	**.00954**	**.00837**	**.01885**
Stddev	.00107	.00988	.00347	.00563	.00021	.00038	.00102	.00576	.00006	.00025	.00092	.00015
%RSD	10.524	9.9784	24.508	5.1441	2.1419	42.553	1.0456	3.4758	1.3693	2.6658	11.005	.80124
#1	.00939	.10598	.01171	.11339	.00955	.00117	.09867	.16176	.00466	.00936	.00902	.01896
#2	.01090	.09201	.01662	.10543	.00984	.00063	.09722	.16991	.00457	.00972	.00772	.01875
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10891**	**3.0661**	**.02111**	**.19553**	**.01143**	**.01590**	**1.0449**	**.03907**	**2.6842**	F **.01258**	F **.01113**	F **.01307**
Stddev	.00064	.0678	.00324	.00682	.00000	.00035	.0020	.00144	.0775	.00065	.01390	.00108
%RSD	.58797	2.2125	15.351	3.4864	.00815	2.1902	.19291	3.6822	2.8878	5.1320	124.92	8.2985
#1	.10936	3.1140	.02340	.20035	.01143	.01615	1.0463	.04009	2.7391	.01212	.02096	.01384
#2	.10845	3.0181	.01882	.19071	.01143	.01566	1.0435	.03806	2.6294	.01303	.00130	.01230
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Fail
Value										.00900	.10000	.02000
Range										30.000%	-30.000%	-30.000%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01186**	**.52558**	**1.1247**	**.08040**	**.00900**	**.01558**	**.01042**	**.01703**	**.06770**	**.01101**	**.02081**	**.01590**
Stddev	.00791	.01877	.0402	.00073	.00001	.00093	.00008	.00524	.00818	.00003	.00229	.00035
%RSD	66.720	3.5708	3.5708	.90194	.11520	5.9548	.81509	30.794	12.079	.29413	10.990	2.1977
#1	.01745	.53885	1.1531	.08091	.00900	.01623	.01036	.02073	.07348	.01099	.02243	.01614
#2	.00626	.51231	1.0963	.07988	.00899	.01492	.01048	.01332	.06192	.01103	.01919	.01565
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.02000											
Range	-30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2343.0**	**40504.**	**2297.8**
Stddev	46.8	21.	6.6
%RSD	1.9981	.05219	.28711
#1	2309.9	40489.	2302.5
#2	2376.1	40519.	2293.2

Sample Name: CCVH-4579429 Acquired: 6/12/2017 18:34:21 Type: QC
Method: 6500_025 Mode: CONC Corr. Factor: 1.000000
User: rhoadesc Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01335**	F **67.088**	**-.01565**	**.00272**	**.00658**	**.00026**	W **.89756**	**.00466**	**-.00015**	**-.00053**	**.00069**	**.01554**
Stddev	.00037	.641	.00087	.00003	.00005	.00000	.00619	.01109	.00011	.00017	.00038	.00037
%RSD	2.7606	.95491	5.5912	1.0936	.81144	.61882	.68927	237.99	70.315	31.348	54.662	2.3828
#1	-.01361	66.635	-.01626	.00274	.00654	.00026	.90194	.01250	-.00008	-.00064	.00095	.01580
#2	-.01309	67.541	-.01503	.00270	.00661	.00026	.89319	-.00318	-.00023	-.00041	.00042	.01527
Check ?	None	Chk Fail	None	None	None	None	Chk Warn	None	None	None	None	None
Value		50.000					1.0000					
Range		10.490%					-5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **70.974**	**.04776**	**.00311**	**.07617**	**-.00175**	**.00044**	F **328.38**	**.00116**	**.00423**	**.00750**	F **4.2748**	**-.01175**
Stddev	.215	.01893	.00035	.00412	.00012	.00021	2.72	.00007	.00320	.00208	.0105	.00108
%RSD	.30342	39.636	11.302	5.4117	7.1212	47.921	.82873	6.0956	75.699	27.780	.24538	9.2336
#1	70.822	.06114	.00336	.07325	-.00166	.00029	326.45	.00111	.00197	.00897	4.2674	-.01098
#2	71.127	.03437	.00286	.07908	-.00183	.00058	330.30	.00121	.00649	.00602	4.2823	-.01252
Check ?	Chk Fail	None	None	None	None	None	Chk Fail	None	None	None	Chk Fail	None
Value	50.000						250.00				5.0000	
Range	10.490%						10.490%				-10.490%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01762**	**.01814**	**.03882**	**-.00259**	**.00132**	F **3.4048**	**.01661**	**.00509**	F **8.0848**	**.01154**	**.00033**	**.23639**
Stddev	.00608	.00664	.01421	.00266	.00010	.0049	.00081	.00055	.0366	.00058	.00025	.00383
%RSD	34.536	36.593	36.593	102.34	7.5899	.14509	4.8743	10.890	.45320	5.0506	76.932	1.6201
#1	-.01332	.01345	.02878	-.00072	.00139	3.4013	.01718	.00548	8.1107	.01113	.00015	.23368
#2	-.02192	.02284	.04887	-.00447	.00125	3.4083	.01603	.00470	8.0589	.01195	.00051	.23910
Check ?	None	None	None	None	None	Chk Fail	None	None	Chk Fail	None	None	None
Value						5.0000			10.000			
Range						-10.490%			-10.490%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2356.3**	**43718.**	**1664.3**
Stddev	14.0	123.	8.3
%RSD	.59314	.28211	.49784
#1	2366.2	43805.	1670.2
#2	2346.5	43631.	1658.4

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ICP Data Review Checklist

LIMS Batch Number(s): 377044	Filename(s): 25AC61217.pdf	Instrument ID (circle one): ICP25 ICP26
Analyst/1st Reviewer/Date: CR 6/13/17		Method (circle): 200.7 6010B 6010C
		QC Type (circle): Standard DoD QA DoD QS QAPP_____ Other_____
Matrix (circle): Water Solid Leachate		Circle: Total TR PD Dissolved

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
A. Calibration/Instrument Run QC					
1. Instrument calibrated per lab SOP?	✓			✓	
2. Reanalysis of Calibration Standards before samples: 95-105% recovery	✓			✓	
3. ICB/CCB: run before samples, 10% frequency, & closing Result < ½ RL (routine) Result < LOD/2x MDL (DoD or special project)	✓			✓	If no, list details:
4. ICV/CCV: frequency initial, 10%, & closing 90-110% recovery, 5% RSD (6010) 95-105% recovery, 3% RSD (200.7)	✓			✓	If no, list details:
5. ICVL/CCVL: 70-130% recovery (6010C)	✓			✓	If no, list details:
6. ICSA/ICSAB: run before samples ICSA detections for non-spiked < 2x RL (<LOD/2x MDL for DoD or special project) ICSAB for spiked elements 80-120% *If no, list analytes:*	✓			✓	☐ Results outside limits due to contamination. ☐ Concentration of affected analyte in sample is less than RL.
7. RL-level check standard (CRI): 50-150% (routine) 80-120% recovery (DoD or special projects)	✓			✓	If no, list details:
B. Client Sample and QC Sample Results					
1. Samples with target element concentrations > 90% linear range diluted and reanalyzed? (200.7)	✓			✓	Comments:
2. Were all hits reported from a run with interfering elements < linear range? (L Flags investigated?)	✓			✓	Comments:
3. Internal standard (IS) response ± 30% of ICB IS? *If no, list details:*	✓			✓	☐ High IS response. Sample(s) rerun at dilution. ☐ Low IS response. Sample(s) rerun at dilution.
C. Preparation/Matrix QC					
1. Method Blank: one per preparation batch result < ½ RL (routine)	✓			✓	☐ No analyte > RL in associated samples ☐ Sample results >10x blank ☐ Insufficient sample for reanalysis
2. LCS: one per preparation batch 80-120% recovery or historical (routine) 85-115% recovery or historical (200.7); project limits (other)	✓			✓	☐ Insufficient sample for reanalysis ☐ LCS %R > QC limits & samples < RL
3. MS/MSD or MS/Dup frequency: a pair per batch (routine) a pair per 10 samples (200.7)	✓			✓	☐ Insufficient sample – LCS/LCSD analyzed
C. Preparation/Matrix QC (cont.)					
4. MS/MSD recovery & RPD: 75-125% recovery or historical (routine) 70-130% recovery or historical (200.7) 20% RPD project limits (other)	✓			✓	☐ LCS acceptable – matrix effects ☐ Native analyte > 4x spike level ☐ Matrix effect and native analyte > 4x spike

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Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
5. If TCLP MS <50% and sample result 80-100% of toxicity characteristic limit, was MSA run?	✓			✓	Comments:
6. Serial dilution: present for each prep batch (routine) Required if MS/MSD fail (DoDV5) run at 5x dilution of parent sample ≤ 10% difference	✓			✓	☐ Sample result < 50 x MDL
7. Post digestion spike: Required if MS/MSD fail (DoD and 6010C) or by client request 75-125% recovery	✓			✓	
D. Raw Data & TALS Data Entry	✓			✓	
1. TALS Sample List Tab	✓			✓	
a. LIMS Sample IDs / Containers are correct	✓			✓	
b. Method and matrix are correct	✓			✓	
c. Date and time are correct	✓			✓	
d. Dilutions are correct	✓			✓	
e. Correct suffix designated; e.g., DU, (where applicable)	✓			✓	
2. TALS Sample Results Tab	✓			✓	
a. All reported analytes are marked Primary or Secondary	✓			✓	
b. All unused data are marked Rejected or Accepted. Unused data are clearly identified with reason not used	✓			✓	
c. Out of control QC is clearly identified	✓			✓	
d. Any data that has a qualifier is reviewed with appropriate action taken (NCM if needed)	✓			✓	
e. The attached data file includes the filename, instrument, and analyst initials	✓			✓	
3. TALS Worksheet Tab is complete and correct	✓			✓	
4. TALS Reagent Tab is complete and correct	✓			✓	
5. TALS QC Links Tab is correct	✓			✓	
6. TALS Batch Information Screen documentation is complete	✓			✓	
7. TALS Status set to appropriate review level	✓			✓	
E. Final Report and NCMs (2nd level review only)				✓	
1. Were all job/project requirements met?				✓	
2. Results for samples and QC correct on final report?				✓	
3. Are all necessary scanned documents in TALS?				✓	
4. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?				✓	
5. Raw Data PDF attached as document				✓	

Comments: Only reporting Mn From job 9792$, prep 376380

2nd Reviewer: _____ Review Date: 6/13/17

Sample Name: ICIS Acquired: 6/12/2017 21:41:04 Type: Cal
Method: 6500_025(v3) Mode: IR Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00134**	**.00168**	**-.01258**	**-.00028**	**.00067**	**.00944**	**-.00056**	**-.00255**	**.00849**	**-.00058**	**.00016**	**-.00040**
Stddev	.00011	.00022	.00035	.00021	.00003	.00081	.00049	.00048	.00044	.00009	.00009	.00001
%RSD	8.3355	13.410	2.7559	75.357	4.4488	8.6147	87.954	18.646	5.1731	16.068	55.962	1.6255
#1	-.00126	.00152	-.01234	-.00043	.00065	.00887	-.00021	-.00288	.00818	-.00051	.00022	-.00039
#2	-.00142	.00184	-.01283	-.00013	.00069	.01002	-.00090	-.00221	.00880	-.00065	.00010	-.00040

Elem	Cu3247	Fe2599	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00567**	**-.00083**	**-.00005**	**-.00631**	**-.00365**	**.00013**	**-.00007**	**-.00038**	**-.00214**	**-.00650**	**.00182**	**-.00002**
Stddev	.00020	.00008	.00007	.00109	.00142	.00001	.00002	.00037	.00227	.00018	.00016	.00016
%RSD	3.5234	9.3955	127.31	17.245	38.908	10.106	31.036	98.501	105.68	2.7512	8.7650	791.28
#1	.00553	-.00077	-.00010	-.00554	-.00265	.00012	-.00008	-.00064	-.00054	-.00663	.00171	-.00013
#2	.00581	-.00088	-.00001	-.00708	-.00465	.00014	-.00005	-.00012	-.00375	-.00637	.00194	.00009

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00150**	**.00055**	**-.00001**	**.00030**	**.00088**	**.00088**	**.00018**	**-.00771**	**-.00029**	**-.00013**	**-.00027**	**.00064**
Stddev	.00032	.00013	.00003	.00013	.00020	.00020	.00000	.00082	.00008	.00012	.00004	.00012
%RSD	21.416	24.129	505.16	42.848	22.417	22.417	.62099	10.649	26.000	89.446	15.506	19.339
#1	-.00128	.00045	-.00003	.00039	.00074	.00074	.00018	-.00713	-.00024	-.00005	-.00024	.00055
#2	-.00173	.00064	.00002	.00021	.00102	.00102	.00018	-.00829	-.00035	-.00022	-.00030	.00072

Elem	V_2924	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S
Avg	**-.00030**	**.00001**	**-.00052**
Stddev	.00003	.00000	.00057
%RSD	9.3534	33.965	109.29
#1	-.00032	.00001	-.00012
#2	-.00028	.00001	-.00092

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2735.1**	**52420.**	**5977.8**
Stddev	.6	248.	10.9
%RSD	.02082	.47277	.18192
#1	2734.7	52245.	5970.1
#2	2735.5	52596.	5985.5

Sample Name: ICAL1 Acquired: 6/12/2017 21:43:43 Type: Cal
Method: 6500_025(v3) Mode: IR Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.23081**	**.12879**	**.05732**	**.24335**	**5.2135**	**5.4605**	**1.5130**	**1.6304**	**.93401**	**.74967**	**.27809**	**.53105**	**2.8171**
Stddev	.00017	.00259	.00099	.00410	.0002	.0048	.0018	.0320	.02005	.01718	.00052	.00058	.0029
%RSD	.07530	2.0147	1.7214	1.6845	.00397	.08742	.11558	1.9608	2.1471	2.2917	.18849	.10850	.10129
#1	.23069	.13062	.05802	.24625	5.2133	5.4639	1.5142	1.6530	.94819	.76182	.27846	.53145	2.8151
#2	.23093	.12696	.05662	.24045	5.2136	5.4571	1.5117	1.6078	.91983	.73752	.27772	.53064	2.8191

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.4318**	**.79298**	**1.0636**	**.35605**	**1.2699**	**.62726**	**.08200**	**.42408**	**.15173**	**.05150**	**.22519**	**.22519**	**.15392**
Stddev	.0043	.00154	.0021	.00745	.0032	.01393	.00187	.00826	.00330	.00072	.00031	.00031	.00283
%RSD	.30359	.19446	.19653	2.0913	.25621	2.2214	2.2851	1.9470	2.1748	1.3987	.13913	.13913	1.8373
#1	1.4287	.79407	1.0651	.36131	1.2676	.63711	.08332	.42992	.15406	.05201	.22496	.22496	.15592
#2	1.4349	.79189	1.0621	.35078	1.2722	.61741	.08067	.41824	.14940	.05099	.22541	.22541	.15192

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**8.6508**	**.32831**	**.10001**	**.19717**	**.01839**	**.32555**
Stddev	.0169	.00019	.00249	.00026	.00001	.00017
%RSD	.19523	.05726	2.4881	.13145	.04439	.05250
#1	8.6388	.32844	.10177	.19735	.01840	.32568
#2	8.6627	.32817	.09825	.19698	.01838	.32543

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2651.4**	**50184.**	**5875.3**
Stddev	3.1	11.	26.0
%RSD	.11844	.02146	.44334
#1	2649.2	50177.	5893.7
#2	2653.6	50192.	5856.9

Sample Name: ICAL2 Acquired: 6/12/2017 21:46:08 Type: Cal
Method: 6500_025(v3) Mode: IR Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Al3092	Bi2230	Fe2714	Na8183	S_1820	Th2837	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.6930**	**.22570**	**.57020**	**1.9162**	**.18955**	**.49090**	**.12790**
Stddev	.0156	.00603	.00147	.0091	.00473	.00095	.00012
%RSD	.42323	2.6717	.25697	.47483	2.4967	.19293	.09096
#1	3.6819	.22996	.56916	1.9098	.19289	.49157	.12798
#2	3.7040	.22143	.57123	1.9227	.18620	.49023	.12782

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2582.7**	**48170.**	**5784.2**
Stddev	2.0	193.	115.5
%RSD	.07784	.40156	1.9966
#1	2584.1	48034.	5865.8
#2	2581.2	48307.	5702.5

Sample Name: S1-4580816 Acquired: 6/12/2017 21:48:47 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0011**	**1.0024**	**1.9766**	**.99213**	**.99701**	**.99567**	**-.00273**	**10.010**	**.99164**	**.99007**	**.98880**	**1.0010**	**5.0045**
Stddev	.0009	.0242	.0625	.02405	.00310	.00425	.00097	.010	.02484	.02795	.02855	.0057	.0057
%RSD	.09132	2.4095	3.1635	2.4237	.31134	.42657	35.526	.09496	2.5049	2.8228	2.8871	.57440	.11463
#1	1.0017	1.0195	2.0208	1.0091	.99920	.99867	-.00205	10.016	1.0092	1.0098	1.0090	1.0051	5.0004
#2	1.0004	.98532	1.9324	.97512	.99481	.99266	-.00342	10.003	.97408	.97031	.96861	.99694	5.0085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**100.02**	**1.9970**	**40.021**	**.99899**	**.99166**	**10.077**	**.98957**	**1.9808**	**1.9874**	**-.00830**	**1.9898**	**1.9804**	**10.024**
Stddev	.08	.0021	.031	.00085	.02830	.006	.02527	.0586	.0530	.00236	.0488	.0543	.016
%RSD	.08489	.10431	.07807	.08520	2.8538	.06308	2.5531	2.9597	2.6682	28.449	2.4501	2.7440	.16350
#1	100.08	1.9984	40.043	.99839	1.0117	10.081	1.0074	2.0223	2.0249	-.00997	2.0243	2.0188	10.013
#2	99.960	1.9955	39.999	.99959	.97165	10.072	.97171	1.9394	1.9500	-.00663	1.9553	1.9420	10.036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**21.452**	**1.9763**	**.99882**	**.01234**	**.99803**	**1.9874**	**.00715**	**.99930**	**1.0027**	**.99409**
Stddev	.035	.0524	.00291	.00115	.00118	.0524	.00526	.00341	.0017	.00237
%RSD	.16350	2.6494	.29099	9.3450	.11820	2.6393	73.566	.34098	.17350	.23817
#1	21.427	2.0133	1.0009	.01315	.99720	2.0245	.01088	.99689	1.0015	.99576
#2	21.477	1.9393	.99676	.01152	.99887	1.9503	.00343	1.0017	1.0039	.99241
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2639.0**	**49684.**	**5750.6**
Stddev	11.3	142.	26.7
%RSD	.42639	.28485	.46348
#1	2631.1	49784.	5769.4
#2	2647.0	49584.	5731.8

Sample Name: S2-4579428 Acquired: 6/12/2017 21:51:12 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00384**	**99.332**	**-.01174**	**.00415**	**.00052**	**.00055**	**1.9466**	**.01609**	**.00111**	**-.00189**	**.00086**	**.02193**	**100.14**
Stddev	.00027	.669	.00630	.00048	.00006	.00005	.0764	.00045	.00044	.00023	.00044	.00066	.75
%RSD	7.1239	.67330	53.643	11.487	12.491	9.0368	3.9265	2.8134	39.883	12.092	50.958	3.0165	.74632
#1	-.00365	99.805	-.01619	.00381	.00047	.00059	2.0006	.01641	.00080	-.00206	.00116	.02146	100.67
#2	-.00403	98.859	-.00728	.00449	.00056	.00052	1.8925	.01577	.00142	-.00173	.00055	.02240	99.614
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00057**	**.00264**	**.07509**	**-.00435**	**-.00283**	**496.27**	**.00260**	**.01348**	**.00289**	**9.9063**	**.00502**	**.00165**	**-.04727**
Stddev	.05793	.00099	.00021	.00003	.00111	2.02	.00073	.00088	.00161	.3955	.00455	.00304	.01326
%RSD	10240.	37.533	.27947	.79463	39.353	.40711	28.128	6.5070	55.898	3.9922	90.572	184.48	28.050
#1	-.04153	.00194	.07524	-.00432	-.00204	497.70	.00312	.01286	.00403	10.186	.00180	-.00050	-.03789
#2	.04040	.00334	.07494	-.00437	-.00361	494.84	.00209	.01410	.00175	9.6267	.00823	.00379	-.05664
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.10116**	**.00011**	**.00086**	**9.8450**	**.04383**	**.00261**	**19.830**	**.02474**	**.00666**	**.12433**
Stddev	.02837	.00171	.00003	.0279	.00064	.00018	.062	.00081	.00034	.00043
%RSD	28.050	1555.4	3.8085	.28363	1.4596	6.9309	.31184	3.2805	5.0696	.34325
#1	-.08109	-.00110	.00088	9.8647	.04337	.00274	19.874	.02532	.00642	.12403
#2	-.12122	.00132	.00084	9.8252	.04428	.00248	19.786	.02417	.00689	.12464
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2623.5**	**49109.**	**5935.7**
Stddev	.8	88.	28.2
%RSD	.03150	.18017	.47457
#1	2622.9	49171.	5915.8
#2	2624.1	49046.	5955.6

Sample Name: ICVH-4589660 Acquired: 6/12/2017 21:53:50 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00128**	**40.297**	**-.00609**	**.00022**	**.00027**	**.00007**	W **.53545**	**.01287**	**-.00020**	**.00047**	**.00094**	**.00658**
Stddev	.00025	.181	.00751	.00103	.00016	.00005	.00514	.00035	.00007	.00009	.00046	.00029
%RSD	19.086	.44983	123.34	475.71	58.856	71.212	.96065	2.7105	37.328	18.444	48.708	4.3432
#1	-.00111	40.425	-.00078	.00095	.00039	.00004	.53909	.01312	-.00015	.00053	.00062	.00637
#2	-.00146	40.169	-.01141	-.00051	.00016	.00011	.53181	.01263	-.00025	.00041	.00127	.00678
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							.50000					
Range							5.4900%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**79.813**	**.05063**	**.00253**	**.02146**	**-.00130**	**-.00077**	**41.088**	**.00096**	**.00852**	**.00077**	**4.0435**	**.00626**
Stddev	.480	.07794	.00095	.00373	.00004	.00041	.004	.00005	.00083	.00114	.0907	.00151
%RSD	.60112	153.94	37.608	17.401	3.3483	53.101	.01064	4.8690	9.7851	148.42	2.2424	24.123
#1	80.152	-.00448	.00320	.01882	-.00127	-.00106	41.091	.00092	.00911	-.00004	4.1076	.00733
#2	79.474	.10575	.00185	.02410	-.00133	-.00048	41.085	.00099	.00793	.00157	3.9794	.00520
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00315**	**-.02853**	**-.06104**	**.00336**	**.00025**	**2.9927**	**.01328**	**.00027**	**5.2044**	**.00641**	**.00272**	**.03674**
Stddev	.00178	.01849	.03956	.00308	.00006	.0013	.00042	.00005	.0391	.00034	.00054	.00095
%RSD	56.560	64.813	64.813	91.701	22.232	.04423	3.1788	17.246	.75187	5.3182	19.927	2.5868
#1	-.00189	-.04160	-.08902	.00554	.00029	2.9917	.01358	.00024	5.1767	.00665	.00234	.03607
#2	-.00442	-.01545	-.03307	.00118	.00021	2.9936	.01298	.00030	5.2320	.00617	.00311	.03741
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2737.7**	**52094.**	**6083.0**
Stddev	3.0	524.	23.9
%RSD	.10980	1.0053	.39210
#1	2735.6	52465.	6066.2
#2	2739.8	51724.	6099.9

Sample Name: ICVH-4589660 Acquired: 6/12/2017 21:56:26 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00108**	**40.310**	**-.00121**	**.00065**	**-.00003**	**.00007**	**.52182**	**.00884**	**.00009**	**.00094**	**.00081**	**.00693**	**79.625**
Stddev	.00009	.174	.00003	.00022	.00015	.00001	.01869	.00157	.00006	.00001	.00002	.00018	.238
%RSD	8.3183	.43235	2.2476	33.331	426.77	21.183	3.5824	17.792	66.250	1.0859	2.6912	2.6000	.29886
#1	-.00114	40.433	-.00119	.00081	-.00014	.00006	.53504	.00995	.00014	.00094	.00083	.00706	79.794
#2	-.00102	40.187	-.00123	.00050	.00007	.00008	.50860	.00773	.00005	.00095	.00080	.00680	79.457
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.02261**	**-.00039**	**.02370**	**-.00122**	**-.00169**	**40.980**	**.00042**	**.00278**	**.00012**	**3.9608**	**.00485**	**-.00029**	**-.00916**
Stddev	.01828	.00194	.00030	.00005	.00028	.212	.00042	.00134	.00045	.1353	.00132	.00533	.00581
%RSD	80.843	495.54	1.2728	4.0114	16.271	.51722	98.699	48.071	372.11	3.4168	27.211	1853.4	63.436
#1	-.03553	.00098	.02348	-.00125	-.00150	41.130	.00072	.00184	-.00020	4.0565	.00579	.00348	-.01326
#2	-.00968	-.00176	.02391	-.00118	-.00189	40.830	.00013	.00373	.00044	3.8651	.00392	-.00405	-.00505
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01959**	**-.00069**	**.00013**	**2.9917**	**.01329**	**.00438**	**5.2340**	**.00676**	**.00236**	**.03756**
Stddev	.01243	.00020	.00017	.0145	.00049	.00279	.0092	.00103	.00069	.00032
%RSD	63.436	28.550	133.02	.48567	3.7075	63.766	.17658	15.175	29.334	.84825
#1	-.02838	-.00055	.00025	3.0020	.01364	.00636	5.2405	.00749	.00285	.03734
#2	-.01080	-.00083	.00001	2.9815	.01294	.00241	5.2275	.00603	.00187	.03779
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2739.1**	**51800.**	**5967.8**
Stddev	5.3	65.	32.7
%RSD	.19199	.12566	.54859
#1	2742.8	51754.	5944.6
#2	2735.4	51846.	5990.9

Sample Name: ICV-4589565 Acquired: 6/12/2017 21:59:02 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25540**	W **.27249**	**.25408**	**.25263**	**.25150**	**.24815**	**.00203**	**2.0086**	**.25239**	**.25055**	**.25009**	**.25655**
Stddev	.00244	.00635	.00089	.00658	.00060	.00068	.00039	.0045	.00682	.00735	.00709	.00097
%RSD	.95523	2.3314	.35085	2.6054	.23796	.27220	19.267	.22358	2.7029	2.9347	2.8363	.37718
#1	.25713	.27699	.25345	.25728	.25192	.24862	.00231	2.0054	.25722	.25575	.25511	.25723
#2	.25368	.26800	.25471	.24797	.25107	.24767	.00176	2.0118	.24757	.24535	.24508	.25586
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.25000										
Range		5.4900%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.28633**	**20.478**	**.26264**	**10.224**	**.25702**	W **.23596**	**2.0580**	**.25303**	**1.9955**	**.25851**	**-.00589**	**.25813**
Stddev	.00489	.048	.00008	.060	.00075	.00642	.0116	.00850	.0505	.00613	.00154	.00865
%RSD	1.7086	.23512	.03038	.58264	.29274	2.7205	.56178	3.3578	2.5323	2.3721	26.175	3.3491
#1	.28979	20.512	.26259	10.266	.25756	.24050	2.0498	.25903	2.0313	.26285	-.00698	.26424
#2	.28287	20.444	.26270	10.181	.25649	.23143	2.0662	.24702	1.9598	.25418	-.00480	.25201
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value	.25000					.25000						
Range	10.490%					-5.4900%						

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51676**	**1.9914**	**4.2615**	**.49985**	**.25197**	**.00552**	**.24512**	W **.53588**	**.02973**	**.24823**	**.25308**	**.24499**
Stddev	.00683	.0023	.0050	.01123	.00048	.00056	.00021	.01320	.01978	.00129	.00013	.00038
%RSD	1.3216	.11634	.11634	2.2476	.18927	10.139	.08679	2.4632	66.534	.52133	.04967	.15377
#1	.52159	1.9930	4.2650	.50780	.25230	.00591	.24527	.54522	.04372	.24914	.25299	.24473
#2	.51194	1.9897	4.2580	.49191	.25163	.00512	.24497	.52655	.01574	.24731	.25317	.24526
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	None	Chk Pass	Chk Pass	Chk Pass
Value								.50000				
Range								5.4900%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2747.0**	**52211.**	**5952.9**
Stddev	4.6	140.	25.7
%RSD	.16659	.26750	.43129
#1	2743.7	52113.	5934.8
#2	2750.2	52310.	5971.1

Sample Name: ICV-4589565 Acquired: 6/12/2017 22:03:43 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.24914**	W **.27187**	**.25827**	**.25721**	**.24592**	**.24292**	**.00281**	**1.9506**	**.25644**	**.25339**	**.25275**	**.25260**
Stddev	.00103	.00068	.00766	.00043	.00143	.00132	.00088	.0046	.00055	.00015	.00072	.00010
%RSD	.41165	.24980	2.9663	.16824	.58350	.54247	31.353	.23312	.21623	.05733	.28513	.03942
#1	.24841	.27235	.26368	.25690	.24491	.24199	.00343	1.9474	.25683	.25328	.25326	.25267
#2	.24986	.27138	.25285	.25751	.24694	.24385	.00219	1.9538	.25605	.25349	.25224	.25253
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.25000										
Range		5.4900%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.26014**	**19.996**	**.25200**	**9.8829**	**.25037**	**.24028**	**1.9911**	**.25525**	**2.0208**	**.26318**	**-.00608**	W **.26514**
Stddev	.00310	.103	.00237	.0257	.00036	.00080	.0061	.00098	.0040	.00129	.00206	.00236
%RSD	1.1900	.51607	.93946	.26059	.14273	.33369	.30721	.38332	.19938	.48910	33.819	.88940
#1	.26233	19.923	.25032	9.8647	.25011	.24084	1.9867	.25455	2.0179	.26227	-.00754	.26680
#2	.25795	20.069	.25367	9.9011	.25062	.23971	1.9954	.25594	2.0236	.26409	-.00463	.26347
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Warn
Value												.25000
Range												5.4900%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51904**	**1.9288**	**4.1276**	**.50739**	**.24678**	**.00318**	**.23967**	W **.54343**	**-.01924**	**.24272**	**.24411**	**.23890**
Stddev	.00681	.0124	.0265	.00013	.00133	.00057	.00034	.00051	.01231	.00022	.00054	.00186
%RSD	1.3123	.64301	.64301	.02589	.53998	18.044	.14249	.09433	64.011	.08958	.21928	.77897
#1	.52385	1.9200	4.1088	.50730	.24584	.00359	.23943	.54379	-.01053	.24288	.24373	.23759
#2	.51422	1.9375	4.1463	.50749	.24772	.00278	.23992	.54307	-.02794	.24257	.24448	.24022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	None	Chk Pass	Chk Pass	Chk Pass
Value								.50000				
Range								5.4900%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2846.4**	**54536.**	**6217.6**
Stddev	2.7	176.	21.7
%RSD	.09378	.32332	.34879
#1	2848.3	54661.	6202.3
#2	2844.5	54412.	6233.0

Sample Name: ICV-4589565 Acquired: 6/12/2017 22:06:03 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25674**	F **.28362**	**.26219**	W **.26581**	**.25301**	**.25070**	**.00153**	**2.0105**	W **.26401**	**.26064**	**.26165**	**.25963**
Stddev	.00123	.00427	.00572	.00089	.00136	.00138	.00226	.0040	.00008	.00111	.00030	.00043
%RSD	.48089	1.5038	2.1816	.33486	.53672	.54912	147.29	.19935	.03069	.42634	.11455	.16693
#1	.25761	.28664	.25814	.26644	.25205	.24972	-.00006	2.0077	.26395	.25986	.26144	.25932
#2	.25586	.28060	.26623	.26518	.25397	.25167	.00313	2.0134	.26407	.26143	.26186	.25993
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
Value		.25000		.25000					.25000			
Range		10.490%		5.4900%					5.4900%			

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.27010**	**20.491**	**.26111**	**10.158**	**.25805**	**.24676**	**2.0599**	W **.26393**	**2.0902**	W **.27081**	**-.01736**	W **.26975**
Stddev	.00224	.058	.00060	.022	.00042	.00002	.0170	.00103	.0052	.00029	.00025	.00211
%RSD	.82824	.28220	.22911	.21722	.16171	.00803	.82703	.39016	.24855	.10814	1.4271	.78269
#1	.27168	20.450	.26069	10.174	.25834	.24678	2.0719	.26466	2.0938	.27101	-.01754	.26826
#2	.26852	20.531	.26153	10.143	.25775	.24675	2.0479	.26321	2.0865	.27060	-.01719	.27124
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	None	Chk Warn
Value	.25000							.25000		.25000		.25000
Range	5.4900%							5.4900%		5.4900%		5.4900%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.53587**	**1.9620**	**4.1987**	**.52117**	**.25390**	**.00338**	**.24725**	F **.55371**	**.01821**	**.25024**	**.24849**	**.24700**
Stddev	.00573	.0106	.0226	.00150	.00076	.00005	.00055	.00156	.00119	.00035	.00147	.00183
%RSD	1.0689	.53904	.53904	.28721	.29878	1.5507	.22342	.28227	6.5598	.13859	.59061	.74102
#1	.53992	1.9695	4.2147	.52222	.25337	.00341	.24764	.55260	.01906	.25049	.24745	.24570
#2	.53182	1.9545	4.1827	.52011	.25444	.00334	.24686	.55481	.01737	.25000	.24952	.24829
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
Value	.50000							.50000				
Range	5.4900%							10.490%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2776.2**	**53365.**	**6205.8**
Stddev	5.1	2.	39.2
%RSD	.18424	.00338	.63178
#1	2772.6	53366.	6233.5
#2	2779.8	53364.	6178.0

Sample Name: ICVL-4589022 Acquired: 6/12/2017 22:19:05 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00999**	**.11897**	**.01519**	**.10312**	**.01023**	**.00074**	**.12092**	**.22521**	**.00485**	**.01067**	**.01059**	**.01664**
Stddev	.00023	.00042	.00376	.00101	.00012	.00011	.00298	.00854	.00039	.00022	.00016	.00027
%RSD	2.3137	.34893	24.752	.97877	1.1844	14.503	2.4633	3.7932	7.9789	2.0705	1.5177	1.6305
#1	.01016	.11868	.01785	.10383	.01014	.00067	.11881	.23125	.00512	.01051	.01071	.01645
#2	.00983	.11927	.01253	.10240	.01032	.00082	.12302	.21917	.00457	.01083	.01048	.01684
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10768**	**3.0639**	**.02028**	**.20815**	**.01073**	**.01933**	**1.0508**	**.04306**	**2.9789**	**.01087**	**.10260**	**.02313**
Stddev	.00092	.0369	.00015	.00107	.00003	.00023	.0020	.00001	.0172	.00031	.00003	.00084
%RSD	.85148	1.2052	.74219	.51501	.28437	1.1644	.19265	.02749	.57765	2.8545	.02916	3.6345
#1	.10833	3.0900	.02017	.20739	.01075	.01949	1.0494	.04307	2.9911	.01109	.10258	.02372
#2	.10703	3.0378	.02038	.20890	.01071	.01917	1.0522	.04305	2.9667	.01065	.10262	.02253
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01698**	**.46523**	**.99559**	**.10218**	**.01012**	**.01586**	**.00957**	**.01664**	**.05182**	**.00947**	F **.02844**	**.01744**
Stddev	.00343	.00616	.01318	.00120	.00015	.00045	.00001	.00308	.01756	.00037	.00043	.00143
%RSD	20.207	1.3234	1.3234	1.1788	1.4842	2.8643	.12394	18.510	33.888	3.8777	1.4969	8.1815
#1	.01455	.46087	.98627	.10133	.01023	.01618	.00956	.01882	.03940	.00921	.02814	.01643
#2	.01940	.46958	1.0049	.10303	.01001	.01554	.00958	.01446	.06424	.00973	.02874	.01845
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.02000	
Range											30.000%	

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2735.7**	**51879.**	**5918.6**
Stddev	3.7	551.	35.6
%RSD	.13461	1.0620	.60176
#1	2738.3	52269.	5893.5
#2	2733.1	51489.	5943.8

Sample Name: CCVH-4579429 Acquired: 6/12/2017 22:21:43 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00152**	**49.008**	**-.00219**	**.00228**	**-.00008**	**.00004**	**.99512**	**.00218**	**.00014**	**-.00093**	**.00061**	**.01274**	**48.910**
Stddev	.00029	.045	.01133	.00093	.00011	.00007	.03967	.00857	.00008	.00019	.00021	.00028	.025
%RSD	19.349	.09225	518.26	40.945	128.17	149.98	3.9864	392.28	55.105	19.995	34.662	2.1824	.05009
#1	-.00131	48.976	.00582	.00162	-.00001	-.00000	1.0232	-.00387	.00020	-.00080	.00046	.01254	48.893
#2	-.00173	49.040	-.01019	.00294	-.00016	.00009	.96707	.00824	.00009	-.00106	.00076	.01293	48.927
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.02903**	**.00168**	**.03902**	**-.00219**	**-.00214**	**245.73**	**.00129**	**.00574**	**.00270**	**4.8124**	**.00662**	**.00317**	**-.02238**
Stddev	.12578	.00121	.00456	.00001	.00048	1.19	.00037	.00474	.00204	.1508	.00393	.00770	.01206
%RSD	433.27	72.140	11.676	.27441	22.237	.48371	28.836	82.471	75.470	3.1333	59.383	243.16	53.888
#1	-.11797	.00253	.04224	-.00220	-.00180	244.89	.00155	.00909	.00414	4.9191	.00940	.00861	-.01385
#2	.05991	.00082	.03580	-.00219	-.00247	246.57	.00102	.00239	.00126	4.7058	.00384	-.00228	-.03090
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.04789**	**.00210**	**.00024**	**4.8895**	**.02103**	**.00113**	**10.094**	**.01269**	**.00198**	**.05466**
Stddev	.02580	.00156	.00008	.0287	.00013	.00010	.050	.00033	.00074	.00099
%RSD	53.888	74.432	35.253	.58714	.62634	9.0428	.49853	2.6107	37.450	1.8051
#1	-.02964	.00321	.00018	4.9098	.02093	.00106	10.130	.01293	.00250	.05535
#2	-.06613	.00100	.00030	4.8692	.02112	.00121	10.059	.01246	.00146	.05396
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2626.6**	**48816.**	**5770.7**
Stddev	2.6	5.	49.4
%RSD	.09878	.01067	.85618
#1	2628.4	48812.	5805.6
#2	2624.8	48819.	5735.7

Sample Name: CCV-4580817 Acquired: 6/12/2017 22:24:17 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50519**	**.54658**	**.99988**	**.50942**	**.49346**	**.49517**	**.00160**	**4.9756**	**.50520**	**.50535**	**.49850**	**.49988**	**2.4980**
Stddev	.00082	.01053	.01850	.00946	.00165	.00135	.00053	.0162	.00934	.00991	.01152	.00091	.0012
%RSD	.16159	1.9262	1.8501	1.8564	.33532	.27329	33.405	.32449	1.8496	1.9605	2.3114	.18191	.04752
#1	.50577	.55403	1.0130	.51611	.49229	.49421	.00122	4.9642	.51181	.51236	.50665	.50052	2.4989
#2	.50461	.53914	.98680	.50273	.49463	.49613	.00197	4.9870	.49860	.49834	.49036	.49923	2.4972
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.031**	**1.0085**	**20.306**	**.50412**	**.49619**	**5.0567**	**.50611**	**1.0100**	**1.0185**	**-.00871**	**1.0131**	**1.0219**	**4.9878**
Stddev	.112	.0048	.034	.00061	.00984	.0069	.00940	.0149	.0177	.00632	.0230	.0167	.0046
%RSD	.22481	.48019	.16506	.12009	1.9822	.13590	1.8564	1.4759	1.7359	72.542	2.2693	1.6321	.09263
#1	49.952	1.0051	20.330	.50454	.50315	5.0615	.51275	1.0205	1.0310	-.01318	1.0294	1.0337	4.9845
#2	50.111	1.0119	20.282	.50369	.48924	5.0518	.49947	.99944	1.0060	-.00424	.99686	1.0101	4.9910
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.674**	**1.0058**	**.49567**	**.00885**	**.49750**	**1.0479**	**.00541**	**.50004**	**.50590**	**.49148**
Stddev	.010	.0214	.00192	.00215	.00136	.0082	.02020	.00132	.00174	.00072
%RSD	.09263	2.1290	.38724	24.235	.27351	.78027	373.45	.26383	.34309	.14705
#1	10.667	1.0210	.49431	.01037	.49847	1.0536	.01970	.50097	.50712	.49097
#2	10.681	.99070	.49703	.00734	.49654	1.0421	-.00888	.49911	.50467	.49200
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2664.0**	**49916.**	**5866.2**
Stddev	2.3	289.	8.9
%RSD	.08806	.57967	.15133
#1	2665.7	49711.	5872.5
#2	2662.4	50120.	5859.9

Sample Name: ICB Acquired: 6/12/2017 22:27:58 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00015**	**.00545**	**-.00363**	**-.00023**	**.00008**	**.00006**	**.00566**	**.00189**	**-.00025**	**-.00033**	**.00015**	**.00103**	**.00324**
Stddev	.00006	.00159	.00326	.00040	.00018	.00018	.00620	.00089	.00011	.00033	.00007	.00059	.00227
%RSD	38.964	29.182	89.821	176.40	228.31	284.68	109.57	46.997	41.546	99.213	45.980	57.781	70.185
#1	-.00020	.00657	-.00593	.00006	.00020	-.00006	.01004	.00126	-.00018	-.00010	.00010	.00061	.00485
#2	-.00011	.00432	-.00132	-.00051	-.00005	.00019	.00127	.00251	-.00033	-.00056	.00020	.00145	.00163
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01930**	**.00273**	**.00134**	**.00011**	**-.00005**	**.00822**	**.00084**	**.00223**	**.00141**	**-.00547**	**-.00208**	**-.00083**	**.00149**
Stddev	.02483	.00161	.00266	.00001	.00095	.01272	.00024	.00255	.00040	.00158	.00346	.00365	.00874
%RSD	128.67	59.073	198.59	8.3946	1760.9	154.76	29.134	114.53	28.081	28.815	166.52	441.30	585.48
#1	-.00174	.00159	-.00054	.00011	-.00073	-.00078	.00101	.00042	.00113	-.00436	-.00452	.00175	.00768
#2	-.03686	.00387	.00322	.00010	.00062	.01721	.00067	.00403	.00169	-.00659	.00037	-.00341	-.00469
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00320**	**-.00007**	**.00003**	**-.00232**	**.00007**	**.00391**	**.03307**	**-.00050**	**.00114**	**.00108**
Stddev	.01871	.00085	.00003	.00170	.00001	.00238	.00643	.00036	.00053	.00081
%RSD	585.48	1178.6	122.42	73.499	18.735	60.970	19.452	72.566	46.696	74.700
#1	.01643	.00053	.00000	-.00111	.00008	.00222	.03762	-.00076	.00076	.00051
#2	-.01003	-.00067	.00005	-.00352	.00006	.00559	.02852	-.00024	.00152	.00165
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2585.5**	**48784.**	**5501.2**
Stddev	15.2	289.	34.0
%RSD	.58967	.59269	.61883
#1	2574.7	48988.	5525.3
#2	2596.3	48579.	5477.1

Sample Name: CRI-4589026 Acquired: 6/12/2017 22:30:35 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00867**	**.11260**	F **.00463**	**.09991**	**.00523**	**.00092**	**.11859**	**.20617**	**.00467**	**.00557**	**.01054**	**.01058**
Stddev	.00004	.00287	.00613	.00239	.00038	.00010	.00588	.00082	.00018	.00044	.00035	.00054
%RSD	.51823	2.5496	132.30	2.3908	7.2837	10.968	4.9608	.39893	3.9145	7.9672	3.2753	5.1363
#1	.00864	.11463	.00897	.10160	.00496	.00085	.12275	.20559	.00480	.00588	.01078	.01096
#2	.00870	.11057	.00030	.09822	.00550	.00099	.11443	.20675	.00454	.00526	.01029	.01019
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01000									
Range			-50.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.04048**	**1.0377**	W **.01325**	**.21586**	**.00333**	**.00876**	**1.0218**	**.01065**	**.97871**	F **.00594**	**.08918**	**.01082**
Stddev	.00148	.0254	.00044	.00328	.00007	.00048	.0016	.00025	.02884	.00092	.00207	.00266
%RSD	3.6616	2.4455	3.3369	1.5194	2.2422	5.4502	.16006	2.3549	2.9471	15.579	2.3235	24.625
#1	.04152	1.0557	.01294	.21818	.00327	.00910	1.0207	.01082	.99911	.00659	.08771	.01271
#2	.03943	1.0198	.01356	.21354	.00338	.00842	1.0230	.01047	.95832	.00528	.09064	.00894
Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value	.03000		.01000							.00300		
Range	20.490%		20.490%							50.000%		

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.00777**	**.45374**	**.97100**	**.01991**	**.00515**	**.00931**	**.00979**	W **.01336**	F **.10531**	**.01004**	**.01179**	**.00921**
Stddev	.00303	.02055	.04398	.00105	.00008	.00067	.00001	.00224	.00897	.00032	.00099	.00080
%RSD	38.976	4.5295	4.5295	5.2895	1.5907	7.2485	.09340	16.732	8.5151	3.1427	8.4212	8.6692
#1	.00563	.46827	1.0021	.02065	.00521	.00979	.00979	.01494	.11165	.01026	.01109	.00865
#2	.00991	.43920	.93990	.01916	.00509	.00883	.00978	.01178	.09897	.00981	.01249	.00978
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.01000							.01000	.06000			
Range	-20.490%							20.490%	50.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2683.5**	**50483.**	**5505.5**
Stddev	.2	652.	17.3
%RSD	.00628	1.2922	.31342
#1	2683.4	50021.	5517.7
#2	2683.6	50944.	5493.3

Sample Name: ICSA-4576193 Acquired: 6/12/2017 22:33:14 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00093**	**502.80**	**-.00351**	**-.00330**	**-.00011**	**-.00004**	**.00112**	**460.94**	**.00071**	**.00043**	W **.00275**
Stddev	.00024	.75	.00284	.00107	.00021	.00010	.00270	2.16	.00039	.00038	.00048
%RSD	25.829	.14963	80.940	32.278	193.72	256.81	241.87	.46875	54.644	89.403	17.343
#1	.00110	503.33	-.00150	-.00405	.00004	-.00011	.00302	462.47	.00043	.00016	.00308
#2	.00076	502.26	-.00551	-.00255	-.00025	.00003	-.00079	459.42	.00098	.00069	.00241
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit											.00186
Low Limit											-.00186

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00254**	**183.65**	**-.03140**	**.00320**	**525.01**	W **.00120**	W **-.00698**	**.01006**	**.00246**	**-.00313**	W **.00672**
Stddev	.00003	.41	.04801	.00036	.71	.00001	.00069	.00564	.00030	.00251	.00070
%RSD	1.0288	.22231	152.91	11.366	.13515	.57398	9.8493	56.048	12.345	80.083	10.482
#1	.00252	183.94	-.06535	.00346	525.51	.00121	-.00747	.00608	.00268	-.00490	.00622
#2	.00256	183.36	.00255	.00294	524.51	.00120	-.00650	.01405	.00225	-.00136	.00722
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit						.00050	.00626				.00500
Low Limit						-.00050	-.00626				-.00500

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.11958**	**-.00383**	**.00783**	**-.00928**	**-.01985**	**-.00332**	W **.00430**	**.00523**	**-.00014**	**-.00534**	**.05823**
Stddev	.01171	.00398	.00198	.00202	.00433	.00030	.00005	.00221	.00051	.00983	.06215
%RSD	9.7926	104.02	25.327	21.819	21.819	9.1626	1.2055	42.236	369.97	184.22	106.72
#1	-.11130	-.00101	.00923	-.00785	-.01679	-.00311	.00434	.00679	-.00050	-.01229	.01429
#2	-.12786	-.00665	.00643	-.01071	-.02292	-.00354	.00427	.00367	.00022	.00161	.10218
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							.00050				
Low Limit							-.00050				

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	**-.00106**	**.00647**	**.00443**
Stddev	.00046	.00114	.00080
%RSD	43.317	17.583	18.012
#1	-.00074	.00728	.00387
#2	-.00139	.00567	.00500
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2412.1**	**43058.**	**5628.0**
Stddev	1.5	45.	28.8
%RSD	.06042	.10388	.51138
#1	2413.1	43026.	5607.6
#2	2411.0	43089.	5648.3

Sample Name: ICSAB-4579055 Acquired: 6/12/2017 22:36:00 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.1114**	**498.83**	**1.9872**	**1.8692**	**.48263**	**.47653**	**1.0004**	**459.75**	**.99175**	**.43951**	**.46061**	**.52951**	**182.67**	**51.380**
Stddev	.0058	1.55	.0579	.0506	.00061	.00088	.0362	.59	.03047	.01279	.01521	.00229	.19	.171
%RSD	.52363	.31049	2.9130	2.7062	.12694	.18425	3.6182	.12823	3.0721	2.9106	3.3019	.43291	.10366	.33270
#1	1.1155	499.92	2.0281	1.9050	.48306	.47715	1.0260	459.33	1.0133	.44855	.47137	.53113	182.80	51.501
#2	1.1073	497.73	1.9463	1.8335	.48219	.47591	.97483	460.17	.97021	.43046	.44986	.52789	182.54	51.259
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0274**	**519.04**	**.49873**	**.88761**	**50.902**	**.87920**	**1.9373**	**.89354**	**.87654**	**.97203**	**4.7824**	**9.8958**	**21.177**	**8.8927**
Stddev	.0019	10.11	.00392	.03063	.444	.02729	.0605	.02397	.02153	.02650	.1132	.0024	.005	.2768
%RSD	.18060	1.9474	.78574	3.4503	.87296	3.1044	3.1244	2.6830	2.4561	2.7262	2.3676	.02378	.02378	3.1129
#1	1.0261	526.18	.50150	.90927	51.216	.89850	1.9801	.91049	.89177	.99077	4.8625	9.8975	21.181	9.0885
#2	1.0287	511.89	.49596	.86596	50.587	.85990	1.8945	.87659	.86132	.95329	4.7023	9.8941	21.173	8.6970
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.97209**	**2.0816**	**1.0121**	**8.4475**	**.06097**	**.50479**	**.98464**	**1.0337**
Stddev	.00316	.0130	.0056	.2205	.03161	.00315	.00826	.0011
%RSD	.32546	.62396	.55009	2.6103	51.848	.62390	.83876	.10574
#1	.97432	2.0907	1.0160	8.6035	.03862	.50702	.99048	1.0329
#2	.96985	2.0724	1.0081	8.2916	.08332	.50256	.97880	1.0344
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2382.3**	**42493.**	**5595.1**
Stddev	4.1	322.	11.6
%RSD	.17131	.75864	.20687
#1	2385.2	42265.	5586.9
#2	2379.4	42721.	5603.2

Sample Name: LRA-4556451 Acquired: 6/12/2017 22:38:33 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00034**	**.23233**	**9.7685**	**9.6621**	**12.143**	**-.00040**	**-.03547**	**.16858**	**1.9750**	**4.8623**	**9.7555**	**10.497**	**502.06**
Stddev	.00065	.03568	.2904	.2418	.140	.00002	.00129	.02697	.0591	.1483	.3072	.078	1.42
%RSD	188.32	15.357	2.9733	2.5022	1.1561	5.7228	3.6431	16.000	2.9937	3.0497	3.1492	.74394	.28233
#1	.00080	.25756	9.9739	9.8331	12.242	-.00042	-.03455	.18765	2.0168	4.9671	9.9727	10.552	501.06
#2	-.00011	.20710	9.5631	9.4912	12.043	-.00039	-.03638	.14950	1.9332	4.7574	9.5382	10.441	503.06
Check ?	None	None	Chk Pass	Chk Pass	Chk Pass	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.12316**	**.00237**	**.07324**	**10.196**	**4.7802**	**.02252**	**9.8610**	**-.00233**	**9.9985**	**-.07773**	**.04557**	**4.8736**	**49.077**
Stddev	.03442	.00091	.01624	.038	.1488	.00013	.3009	.00292	.2751	.00480	.00096	.1310	.268
%RSD	27.948	38.533	22.171	.37722	3.1126	.58560	3.0516	125.73	2.7513	6.1788	2.1068	2.6874	.54687
#1	-.14750	.00301	.08472	10.223	4.8854	.02243	10.074	-.00026	10.193	-.08113	.04624	4.9662	48.887
#2	-.09882	.00172	.06176	10.168	4.6750	.02262	9.6482	-.00439	9.8040	-.07434	.04489	4.7810	49.267
Check ?	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**105.02**	**-.00140**	**10.172**	**.00689**	**9.8294**	**5.0755**	**.20114**	**10.002**	**9.9332**	**.01089**
Stddev	.57	.00094	.059	.00182	.0722	.1476	.02115	.052	.0320	.00129
%RSD	.54687	67.146	.58188	26.494	.73474	2.9075	10.513	.51647	.32186	11.810
#1	104.62	-.00206	10.130	.00818	9.8805	5.1799	.21610	10.039	9.9558	.01180
#2	105.43	-.00073	10.213	.00560	9.7784	4.9712	.18619	9.9655	9.9106	.00998
Check ?	None	None	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2579.6**	**48280.**	**5498.4**
Stddev	5.0	35.	8.3
%RSD	.19552	.07202	.15150
#1	2576.0	48256.	5504.2
#2	2583.1	48305.	5492.5

Sample Name: cri- Acquired: 6/12/2017 22:43:24 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**.00971**	**.01285**	**.00922**	**.00079**	**-.00007**	**.00110**	**.00872**	**-.00007**
Stddev	.00057	.00019	.00562	.00057	.00029	.00025	.00094	.00246	.00034
%RSD	3814.0	1.9860	43.784	6.1811	36.764	341.48	84.893	28.231	472.75
#1	.00039	.00957	.01682	.00962	.00099	-.00025	.00044	.00698	-.00032
#2	-.00042	.00985	.00887	.00881	.00058	.00010	.00176	.01046	.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**.00068**	**.00069**	**.12377**	**.12621**	**.02510**	**.00800**	**.00049**	**.00042**
Stddev	.00027	.00012	.00116	.00368	.00061	.00131	.00358	.00002	.00021
%RSD	790.99	18.361	168.66	2.9703	.48295	5.2022	44.703	4.0850	49.709
#1	.00023	.00059	-.00013	.12637	.12578	.02418	.01053	.00047	.00057
#2	-.00016	.00077	.00151	.12117	.12664	.02603	.00547	.00050	.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.04755**	**.00042**	**.00193**	**.01064**	**-.00113**	**.00095**	**.03126**	**-.01293**	**-.02767**
Stddev	.00780	.00001	.00208	.00135	.01644	.00112	.00246	.01673	.03579
%RSD	16.410	2.6662	108.14	12.702	1457.7	117.74	7.8745	129.36	129.36
#1	-.04203	.00041	.00045	.01159	.01050	.00175	.03300	-.00110	-.00236
#2	-.05307	.00042	.00340	.00968	-.01276	.00016	.02952	-.02476	-.05298
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00172**	**.00037**	**-.00063**	**.00045**	**.01951**	**-.01688**	**.00036**	**.00168**	**.00259**
Stddev	.00065	.00009	.00130	.00072	.00187	.00623	.00045	.00063	.00130
%RSD	37.681	24.172	206.82	159.32	9.5688	36.926	123.92	37.696	49.994
#1	.00126	.00031	.00029	-.00006	.01819	-.02128	.00068	.00123	.00351
#2	.00218	.00044	-.00155	.00096	.02083	-.01247	.00005	.00213	.00168
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2683.9**	**51151.**	**5829.5**
Stddev	.3	427.	5.7
%RSD	.01185	.83479	.09771
#1	2684.2	50849.	5825.4
#2	2683.7	51453.	5833.5

Sample Name: cri- Acquired: 6/12/2017 22:58:35 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00044**	**.00115**	**-.00348**	**.00064**	**-.00019**	**-.00010**	**.00541**	**-.00143**	**-.00036**
Stddev	.00037	.00050	.00939	.00068	.00061	.00007	.00202	.00347	.00030
%RSD	85.037	43.238	270.09	106.27	314.31	67.926	37.358	243.35	84.430
#1	-.00018	.00150	-.01011	.00016	-.00063	-.00005	.00684	-.00388	-.00014
#2	-.00071	.00080	.00316	.00112	.00024	-.00015	.00398	.00103	-.00057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00008**	**.00023**	**.00097**	**.09916**	**-.00260**	**.00320**	**-.00186**	**.00008**	**.00001**
Stddev	.00031	.00012	.00052	.00298	.03785	.00172	.00517	.00008	.00014
%RSD	384.73	51.290	54.106	3.0035	1454.5	53.604	278.46	108.92	1867.4
#1	.00030	.00014	.00060	.09705	-.02937	.00199	-.00551	.00014	.00011
#2	-.00014	.00031	.00134	.10127	.02416	.00442	.00180	.00002	-.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.05587**	**.00005**	**.00078**	**-.00036**	**-.00760**	**.00342**	**.02370**	**-.02677**	**-.05729**
Stddev	.01522	.00019	.00168	.00165	.00654	.00223	.00416	.00662	.01417
%RSD	27.251	401.43	216.54	458.15	86.094	65.288	17.571	24.740	24.740
#1	-.06663	-.00009	.00197	-.00153	-.01222	.00500	.02076	-.02209	-.04727
#2	-.04510	.00018	-.00041	.00081	-.00297	.00184	.02665	-.03146	-.06732
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00047**	**.00011**	**-.00210**	**.00039**	**.01909**	**.06233**	**-.00038**	**.00120**	**.00033**
Stddev	.00135	.00019	.00064	.00008	.00025	.00644	.00009	.00006	.00218
%RSD	289.27	173.63	30.552	20.435	1.3145	10.327	24.407	4.7582	656.72
#1	.00049	.00025	-.00255	.00045	.01927	.05778	-.00045	.00116	-.00121
#2	-.00142	-.00003	-.00165	.00034	.01891	.06688	-.00032	.00124	.00187
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2656.9**	**50353.**	**5674.0**
Stddev	8.1	84.	8.8
%RSD	.30538	.16625	.15467
#1	2662.7	50293.	5680.2
#2	2651.2	50412.	5667.8

Sample Name: CCVH-4579429 Acquired: 6/12/2017 23:05:19 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00087**	**49.929**	**-.00603**	**.00135**	**.00055**	**.00018**	**1.0481**	**.00174**	**-.00011**	**-.00059**	**.00030**	**.01297**	**49.869**
Stddev	.00007	.118	.00227	.00050	.00020	.00014	.0004	.00367	.00011	.00051	.00015	.00030	.144
%RSD	7.5199	.23558	37.725	37.373	35.875	76.103	.03435	210.57	93.448	86.363	50.302	2.3485	.28948
#1	-.00092	50.013	-.00764	.00171	.00069	.00008	1.0483	-.00085	-.00019	-.00023	.00040	.01276	49.971
#2	-.00083	49.846	-.00442	.00099	.00041	.00027	1.0478	.00434	-.00004	-.00095	.00019	.01319	49.767
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00442**	**.00267**	**.03345**	**-.00216**	**-.00178**	**249.36**	**.00131**	**.00593**	**.00172**	**5.0814**	**.00261**	**.00621**	**-.03086**
Stddev	.06104	.00238	.00504	.00006	.00050	.74	.00013	.00495	.00108	.0186	.00503	.00444	.00521
%RSD	1381.4	89.187	15.058	2.5478	28.206	.29858	9.7118	83.499	62.539	.36657	192.50	71.512	16.889
#1	-.03874	.00099	.03701	-.00212	-.00142	249.89	.00140	.00943	.00248	5.0682	-.00094	.00935	-.03455
#2	.04758	.00436	.02988	-.00220	-.00213	248.84	.00122	.00243	.00096	5.0945	.00617	.00307	-.02718
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.06605**	**-.00245**	**.00033**	**4.9829**	**.02165**	**.00571**	**10.320**	**.01236**	**.00983**	**.05775**
Stddev	.01116	.00064	.00010	.0116	.00028	.00101	.005	.00052	.00007	.00002
%RSD	16.889	26.090	29.145	.23176	1.2931	17.680	.04539	4.2094	.73219	.03929
#1	-.07394	-.00200	.00026	4.9911	.02185	.00500	10.316	.01199	.00978	.05777
#2	-.05816	-.00290	.00040	4.9748	.02145	.00643	10.323	.01273	.00988	.05774
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2570.0**	**47821.**	**5562.3**
Stddev	1.7	174.	18.0
%RSD	.06623	.36300	.32432
#1	2571.2	47944.	5549.6
#2	2568.8	47699.	5575.1

Sample Name: CCV-4580817 Acquired: 6/12/2017 23:07:53 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51297**	F **.56037**	**1.0195**	**.51804**	**.50168**	**.50485**	**.00253**	**5.0349**	**.51216**	**.50968**	**.50328**	**.50909**
Stddev	.00023	.01420	.0165	.00974	.00116	.00046	.00340	.0026	.01025	.01180	.01139	.00259
%RSD	.04414	2.5346	1.6173	1.8807	.23122	.09071	134.66	.05236	2.0022	2.3161	2.2629	.50859
#1	.51281	.57042	1.0312	.52493	.50251	.50517	.00012	5.0331	.51941	.51803	.51134	.51092
#2	.51313	.55033	1.0079	.51115	.50086	.50452	.00493	5.0368	.50491	.50134	.49523	.50726
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.6405**	**51.038**	**1.0306**	**20.453**	**.51225**	**.49997**	**5.1465**	**.51062**	**1.0380**	**1.0315**	**-.01345**	**1.0263**
Stddev	.0001	.185	.0053	.020	.00041	.01064	.0259	.01081	.0170	.0186	.00270	.0218
%RSD	.00318	.36257	.51862	.09691	.07962	2.1289	.50351	2.1172	1.6357	1.8071	20.097	2.1214
#1	2.6405	51.169	1.0344	20.439	.51196	.50750	5.1648	.51826	1.0500	1.0447	-.01154	1.0417
#2	2.6406	50.907	1.0268	20.467	.51253	.49245	5.1282	.50298	1.0260	1.0183	-.01536	1.0109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0340**	**5.0382**	**10.782**	**1.0143**	**.50577**	**.00917**	**.50587**	**1.0698**	**.00605**	**.50683**	**.50825**	**.49502**
Stddev	.0288	.0143	.031	.0210	.00138	.00107	.00183	.0174	.00826	.00015	.00091	.00172
%RSD	2.7875	.28439	.28439	2.0681	.27295	11.654	.36101	1.6301	136.48	.02871	.17952	.34769
#1	1.0544	5.0281	10.760	1.0291	.50675	.00993	.50458	1.0821	.01190	.50693	.50761	.49624
#2	1.0136	5.0484	10.803	.99944	.50480	.00842	.50716	1.0574	.00021	.50673	.50890	.49380
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2664.9**	**50083.**	**5794.7**
Stddev	6.8	67.	59.1
%RSD	.25612	.13367	1.0200
#1	2660.1	50130.	5752.9
#2	2669.7	50036.	5836.5

Sample Name: CCB Acquired: 6/12/2017 23:10:22 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**.01160**	**.00206**	**.00044**	**.00014**	**.00002**	**.00265**	**.00088**	**-.00028**	**.00000**	**.00026**	**.00073**	**.00203**
Stddev	.00036	.01489	.00132	.00070	.00019	.00006	.00262	.00105	.00001	.00033	.00010	.00006	.00028
%RSD	1139.1	128.38	64.247	157.27	132.17	394.61	98.945	118.88	3.4787	12001.	37.227	8.0679	13.750
#1	.00028	.02212	.00300	.00093	.00001	.00006	.00451	.00014	-.00028	.00023	.00033	.00078	.00222
#2	-.00022	.00107	.00113	-.00005	.00027	-.00003	.00080	.00162	-.00029	-.00023	.00020	.00069	.00183
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10558**	**.00187**	**.00552**	**.00027**	**.00019**	**-.00211**	**.00002**	**.00061**	**.00083**	**-.00685**	**.00153**	**.00469**	**-.02813**
Stddev	.03713	.00107	.00116	.00014	.00017	.00625	.00015	.00090	.00024	.00396	.00688	.00462	.00886
%RSD	35.171	57.232	20.942	50.916	92.711	295.91	673.36	146.45	28.730	57.714	449.98	98.612	31.500
#1	.07932	.00112	.00470	.00017	.00031	.00231	.00012	-.00002	.00066	-.00965	-.00333	.00796	-.02187
#2	.13184	.00263	.00633	.00036	.00006	-.00653	-.00008	.00125	.00099	-.00406	.00639	.00142	-.03440
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.06020**	**.00139**	**.00018**	**.00092**	**-.00005**	**.00394**	**.01938**	**-.00007**	**.00116**	**.00161**
Stddev	.01896	.00213	.00010	.00280	.00021	.00031	.01638	.00023	.00051	.00106
%RSD	31.500	153.64	59.167	304.57	394.08	7.9841	84.523	349.27	44.244	65.819
#1	-.04679	-.00012	.00025	-.00106	-.00021	.00371	.03097	.00010	.00152	.00086
#2	-.07361	.00290	.00010	.00290	.00010	.00416	.00780	-.00023	.00080	.00235
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2657.4**	**50739.**	**5761.9**
Stddev	10.7	275.	8.3
%RSD	.40419	.54172	.14341
#1	2665.0	50933.	5767.7
#2	2649.8	50544.	5756.0

Sample Name: CCVL-4589022 Acquired: 6/12/2017 23:13:01 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01072**	**.12129**	**.01347**	**.10051**	**.00976**	**.00098**	**.11708**	**.22335**	**.00502**	**.01000**	**.01011**	**.01672**
Stddev	.00106	.00458	.00399	.00494	.00024	.00008	.00572	.00050	.00011	.00082	.00054	.00008
%RSD	9.8473	3.7784	29.593	4.9132	2.4528	8.2718	4.8882	.22598	2.1887	8.2045	5.3871	.46589
#1	.00997	.12453	.01065	.10400	.00959	.00104	.12112	.22299	.00510	.01058	.01049	.01666
#2	.01147	.11805	.01629	.09702	.00993	.00093	.11303	.22371	.00494	.00942	.00972	.01677
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.48945**	**3.1094**	**.02231**	**.22448**	F **.01453**	**.01815**	**1.0260**	**.04139**	**2.8924**	F **.01182**	**.09692**	**.02103**
Stddev	.00010	.0224	.00025	.01706	.00046	.00054	.0143	.00172	.1046	.00419	.01364	.00417
%RSD	.02004	.72019	1.1200	7.6012	3.1489	2.9933	1.3913	4.1530	3.6176	35.447	14.077	19.810
#1	.48938	3.0936	.02213	.21241	.01421	.01854	1.0361	.04260	2.9664	.01479	.10657	.02397
#2	.48952	3.1252	.02249	.23654	.01486	.01777	1.0159	.04017	2.8184	.00886	.08727	.01808
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value	.10000				.01000					.00900		
Range	30.000%				30.000%					30.000%		

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02329**	**.46748**	**1.0004**	**.09912**	**.01017**	**.01937**	**.00989**	**.01446**	F **.13353**	**.00981**	F **.03725**	**.01492**
Stddev	.00458	.00800	.0171	.00521	.00007	.00546	.00024	.00234	.06075	.00095	.00044	.00038
%RSD	19.656	1.7115	1.7115	5.2562	.64539	28.209	2.4393	16.201	45.498	9.6975	1.1860	2.5350
#1	.02653	.47314	1.0125	.10280	.01022	.01551	.00972	.01611	.09057	.00914	.03756	.01465
#2	.02006	.46183	.98831	.09544	.01012	.02324	.01006	.01280	.17649	.01048	.03693	.01518
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass
Value									.06000		.02000	
Range									30.000%		30.000%	

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2679.4**	**50958.**	**5777.8**
Stddev	1.2	118.	26.6
%RSD	.04546	.23178	.46072
#1	2680.3	51042.	5796.6
#2	2678.6	50875.	5759.0

Sample Name: MB 280-376380/1-A Acquired: 6/12/2017 23:22:51 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: 6/8 Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00013**	**.01757**	**.00051**	**.01607**	**.00173**	**-.00009**	**.00249**	F **.29503**	**-.00047**
Stddev	.00009	.00018	.00140	.00054	.00000	.00005	.00215	.00551	.00002
%RSD	64.621	1.0508	272.14	3.3506	.00983	53.395	85.990	1.8680	4.4524
#1	.00007	.01744	-.00047	.01645	.00173	-.00006	.00098	.29113	-.00046
#2	.00019	.01770	.00150	.01568	.00173	-.00013	.00401	.29893	-.00049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								.20000	
Low Limit								-.20000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00024**	**.00050**	**.00175**	W **.07201**	**.04565**	**.00282**	**.07599**	**.00107**	**-.00016**
Stddev	.00036	.00022	.00006	.00188	.05452	.00058	.00045	.00002	.00032
%RSD	150.00	43.407	3.5939	2.6054	119.44	20.654	.59299	1.8891	203.25
#1	.00001	.00065	.00170	.07068	.08420	.00324	.07631	.00109	.00007
#2	-.00049	.00035	.00179	.07334	.00710	.00241	.07567	.00106	-.00039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.05000					
Low Limit				-.05000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.35868**	**.00134**	**.01980**	**.00267**	**.02047**	**-.00001**	**.00239**	**.03190**	**.06826**
Stddev	.00427	.00030	.00085	.00049	.00150	.00080	.00240	.02152	.04605
%RSD	1.1917	22.290	4.2870	18.487	7.3262	5669.1	100.44	67.454	67.454
#1	.35566	.00155	.01920	.00302	.01941	.00055	.00069	.01668	.03570
#2	.36171	.00113	.02040	.00232	.02153	-.00058	.00409	.04711	.10082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01098**	**.00082**	**.00124**	**-.00000**	**.00103**	**-.00832**	**-.00032**	**.00504**	**.00265**
Stddev	.00116	.00004	.00048	.00021	.00123	.01428	.00032	.00058	.00009
%RSD	10.548	4.3979	38.632	7756.0	118.77	171.64	100.43	11.519	3.4545
#1	.01016	.00080	.00090	.00015	.00190	.00178	-.00055	.00463	.00259
#2	.01180	.00085	.00158	-.00015	.00017	-.01842	-.00009	.00545	.00272
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2707.3**	**52135.**	**5902.8**
Stddev	3.9	45.	25.3
%RSD	.14557	.08598	.42843
#1	2710.1	52167.	5920.7
#2	2704.5	52104.	5884.9

Sample Name: LCS 280-376380/2-A Acquired: 6/12/2017 23:25:29 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04933**	**2.0146**	**.97527**	**1.0199**	**1.9070**	**.04749**	**1.9888**	**46.746**	**.09585**
Stddev	.00038	.0641	.03664	.0267	.0065	.00031	.0655	.064	.00268
%RSD	.78009	3.1800	3.7572	2.6222	.34175	.65756	3.2922	.13630	2.7973
#1	.04961	2.0599	1.0012	1.0388	1.9024	.04727	2.0351	46.701	.09775
#2	.04906	1.9693	.94936	1.0010	1.9116	.04771	1.9425	46.791	.09395
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.46539**	W **.18689**	**.24404**	**1.0297**	**48.351**	**.97225**	**47.585**	**.47887**	**.90434**
Stddev	.01419	.00720	.00103	.0022	.105	.00205	.238	.00179	.03095
%RSD	3.0494	3.8511	.42261	.21562	.21775	.21080	.50107	.37479	3.4223
#1	.47542	.19197	.24477	1.0281	48.277	.97080	47.754	.48014	.92622
#2	.45535	.18180	.24331	1.0312	48.426	.97370	47.416	.47760	.88245
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.21000							
Low Limit		.19000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.208**	**.46573**	**9.8672**	**.46992**	**1.9077**	**.47953**	**1.9093**	**2.9951**	**6.4095**
Stddev	.355	.01431	.2935	.01371	.0848	.02187	.0514	.0251	.0536
%RSD	.72080	3.0715	2.9746	2.9172	4.4428	4.5604	2.6897	.83694	.83694
#1	49.458	.47585	10.075	.47961	1.9676	.49499	1.9456	2.9774	6.3715
#2	48.957	.45562	9.6597	.46023	1.8477	.46407	1.8730	3.0128	6.4474
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8714**	**.95753**	**.95889**	**.96520**	**1.9325**	**2.0432**	**.48135**	**.48486**	**.47185**
Stddev	.0597	.00421	.00736	.00433	.0577	.0591	.00157	.00391	.00291
%RSD	3.1894	.43928	.76769	.44840	2.9876	2.8921	.32711	.80590	.61723
#1	1.9136	.95456	.96409	.96826	1.9734	2.0850	.48246	.48762	.46979
#2	1.8292	.96051	.95368	.96214	1.8917	2.0014	.48023	.48209	.47391
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2614.3**	**49113.**	**5864.8**
Stddev	2.5	330.	35.2
%RSD	.09643	.67267	.60099
#1	2612.5	48880.	5889.7
#2	2616.1	49347.	5839.8

Sample Name: 280-97928-C-1-A Acquired: 6/12/2017 23:27:54 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00074**	**46.549**	**.02022**	**.01982**	**.16540**	**.00183**	**.00059**	**14.242**	**.00063**
Stddev	.00003	.192	.00675	.00077	.00054	.00005	.00129	.034	.00006
%RSD	3.6490	.41209	33.410	3.9086	.32763	2.6416	219.85	.23586	10.185
#1	-.00072	46.685	.01544	.02037	.16578	.00186	-.00032	14.266	.00068
#2	-.00076	46.414	.02499	.01928	.16502	.00180	.00150	14.218	.00059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03025**	**.05036**	**.10199**	**87.310**	**6.2648**	**.07499**	**18.050**	**3.7513**	**.00049**
Stddev	.00114	.00228	.00046	.065	.0617	.00184	.129	.0141	.00017
%RSD	3.7727	4.5234	.45197	.07392	.98437	2.4551	.71725	.37612	35.521
#1	.03106	.05197	.10167	87.356	6.3084	.07629	18.142	3.7613	.00062
#2	.02944	.04875	.10232	87.264	6.2212	.07369	17.959	3.7413	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.35228**	**.06600**	**3.5301**	**.03971**	**.64463**	**.00758**	**-.00141**	**3.6316**	**7.7716**
Stddev	.00863	.00258	.1184	.00243	.00580	.00449	.00963	.0246	.0526
%RSD	2.4508	3.9049	3.3550	6.1177	.90036	59.207	683.07	.67683	.67683
#1	.34618	.06782	3.6139	.04143	.64873	.01076	.00540	3.6490	7.8088
#2	.35839	.06418	3.4464	.03799	.64052	.00441	-.00822	3.6142	7.7344
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01145**	**.03810**	**.01867**	**.35246**	**.00474**	**.03808**	**.08348**	**.23730**	**.01573**
Stddev	.00011	.00022	.00003	.00808	.00319	.03591	.00058	.00072	.00015
%RSD	.94947	.58338	.14478	2.2916	67.279	94.299	.70052	.30186	.98066
#1	.01138	.03826	.01865	.34675	.00249	.06347	.08307	.23680	.01562
#2	.01153	.03795	.01869	.35817	.00700	.01269	.08389	.23781	.01584
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2840.3**	**52903.**	**6216.5**
Stddev	7.7	448.	21.0
%RSD	.26967	.84656	.33766
#1	2834.9	52586.	6231.4
#2	2845.7	53219.	6201.7

Sample Name: 280-97928-C-1-A SD@5 Acquired: 6/12/2017 23:30:27 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00072**	**9.9593**	**.00631**	**.00495**	**.03511**	**.00035**	**.00439**	**3.0794**	**-.00026**
Stddev	.00006	.0266	.00107	.00059	.00014	.00011	.00137	.0052	.00014
%RSD	8.0031	.26675	17.044	11.897	.41026	30.726	31.130	.16795	55.337
#1	-.00077	9.9781	.00707	.00537	.03521	.00027	.00342	3.0758	-.00016
#2	-.00068	9.9405	.00555	.00453	.03501	.00043	.00535	3.0831	-.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00693**	**.01109**	**.02242**	**18.706**	**1.3861**	**.01893**	**3.9477**	**.80355**	**.00014**
Stddev	.00051	.00004	.00042	.002	.0165	.00012	.0158	.00255	.00007
%RSD	7.4279	.33199	1.8570	.01247	1.1924	.65070	.40004	.31718	49.576
#1	.00729	.01112	.02271	18.704	1.3978	.01884	3.9588	.80535	.00019
#2	.00656	.01106	.02212	18.708	1.3744	.01902	3.9365	.80175	.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04776**	**.01544**	**.76782**	**.01119**	**.14047**	**.00334**	**-.00456**	**.79554**	**1.7024**
Stddev	.00811	.00061	.02423	.00021	.00165	.00088	.00571	.02425	.0519
%RSD	16.984	3.9216	3.1559	1.8485	1.1711	26.313	125.17	3.0485	3.0485
#1	.05349	.01587	.78496	.01134	.14164	.00396	-.00859	.81268	1.7391
#2	.04202	.01501	.75069	.01104	.13931	.00272	-.00052	.77839	1.6657
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00200**	**.00820**	**.00228**	**.07404**	**.00102**	**.04108**	**.01704**	**.05329**	**.00540**
Stddev	.00087	.00012	.00028	.00189	.00261	.01697	.00035	.00086	.00151
%RSD	43.506	1.4840	12.285	2.5475	256.19	41.301	2.0834	1.6146	27.906
#1	.00139	.00829	.00248	.07537	-.00083	.05308	.01729	.05390	.00646
#2	.00262	.00812	.00208	.07270	.00286	.02908	.01678	.05269	.00433
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2755.9**	**51668.**	**5911.8**
Stddev	1.5	279.	2.2
%RSD	.05328	.53911	.03682
#1	2756.9	51471.	5910.2
#2	2754.8	51865.	5913.3

Sample Name: 280-97928-C-1-B MS Acquired: 6/12/2017 23:33:01 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04784**	**89.366**	**.97452**	**.95447**	**2.1207**	**.04810**	**1.9051**	**62.823**	**.09373**
Stddev	.00034	.230	.02087	.01953	.0069	.00003	.0340	.239	.00192
%RSD	.70559	.25736	2.1411	2.0461	.32369	.06319	1.7860	.38102	2.0499
#1	.04808	89.203	.98928	.96828	2.1159	.04812	1.9292	62.653	.09509
#2	.04760	89.528	.95977	.94066	2.1256	.04807	1.8811	62.992	.09237
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48267**	**.26814**	**.35561**	**112.81**	**65.903**	**1.0298**	**72.518**	**4.9394**	**.86475**
Stddev	.01042	.00779	.00125	.19	.237	.0011	.032	.0001	.01863
%RSD	2.1593	2.9040	.35019	.16899	.35921	.10342	.04369	.00094	2.1548
#1	.49004	.27365	.35649	112.68	65.736	1.0290	72.495	4.9394	.87792
#2	.47530	.26264	.35473	112.94	66.070	1.0305	72.540	4.9394	.85157
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**47.592**	**.52565**	**13.472**	**.49469**	**2.6567**	**.33456**	**1.8348**	**8.7053**	**18.629**
Stddev	.199	.01226	.323	.00995	.0457	.00847	.0282	.0745	.160
%RSD	.41737	2.3331	2.4008	2.0107	1.7199	2.5326	1.5375	.85621	.85621
#1	47.451	.53432	13.701	.50172	2.6890	.34055	1.8547	8.6526	18.517
#2	47.732	.51697	13.243	.48766	2.6244	.32856	1.8148	8.7580	18.742
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.7380**	**.97861**	**.89065**	**1.6017**	**1.7880**	**1.9820**	**.62293**	**.75584**	**.39272**
Stddev	.0384	.00348	.00253	.0030	.0338	.0319	.00175	.00181	.00046
%RSD	2.2090	.35564	.28452	.18548	1.8922	1.6084	.28084	.23885	.11839
#1	1.7652	.97615	.89244	1.5996	1.8119	2.0046	.62416	.75712	.39239
#2	1.7109	.98107	.88886	1.6038	1.7641	1.9595	.62169	.75456	.39305
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2794.4**	**51050.**	**6197.4**
Stddev	8.5	142.	38.1
%RSD	.30468	.27909	.61535
#1	2788.3	51151.	6224.4
#2	2800.4	50949.	6170.4

Sample Name: 280-97928-C-1-C MSD Acquired: 6/12/2017 23:35:24 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05018**	**84.596**	**1.0059**	**.98978**	**2.1704**	**.04970**	**1.9732**	**63.665**	**.09728**
Stddev	.00061	.121	.0112	.01481	.0020	.00028	.0320	.072	.00236
%RSD	1.2077	.14264	1.1136	1.4958	.09049	.56688	1.6200	.11263	2.4284
#1	.05060	84.681	1.0138	1.0002	2.1690	.04989	1.9958	63.716	.09895
#2	.04975	84.511	.99797	.97931	2.1718	.04950	1.9506	63.614	.09561
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49954**	**.27407**	**.36376**	**103.11**	**66.584**	**1.0533**	**72.841**	**4.5082**	**.90013**
Stddev	.00964	.00709	.00059	.04	.061	.0038	.126	.0072	.01975
%RSD	1.9307	2.5883	.16196	.04311	.09218	.36471	.17248	.16032	2.1942
#1	.50636	.27908	.36417	103.08	66.628	1.0560	72.930	4.5134	.91410
#2	.49272	.26905	.36334	103.15	66.541	1.0506	72.752	4.5031	.88616
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.470**	**.53822**	**13.599**	**.50893**	**2.6447**	**.35594**	**1.8992**	**7.4688**	**15.983**
Stddev	.344	.01079	.256	.00966	.0528	.00813	.0134	.0206	.044
%RSD	.69441	2.0047	1.8840	1.8972	1.9968	2.2840	.70294	.27622	.27622
#1	49.227	.54585	13.780	.51575	2.6820	.36169	1.9086	7.4542	15.952
#2	49.713	.53059	13.418	.50210	2.6074	.35019	1.8898	7.4833	16.014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8108**	**1.0063**	**.92600**	**1.6861**	**1.8659**	**2.0042**	**.63135**	**.74721**	**.42208**
Stddev	.0371	.0004	.00004	.0050	.0299	.0168	.00257	.00055	.00069
%RSD	2.0508	.04158	.00417	.29394	1.6043	.83806	.40781	.07328	.16401
#1	1.8371	1.0060	.92597	1.6896	1.8871	2.0161	.62953	.74683	.42257
#2	1.7846	1.0065	.92602	1.6826	1.8447	1.9923	.63317	.74760	.42159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2775.8**	**51309.**	**6170.1**
Stddev	11.1	52.	41.1
%RSD	.39962	.10168	.66655
#1	2768.0	51272.	6141.0
#2	2783.6	51345.	6199.2

Sample Name: 280-97928-C-1-A PDS Acquired: 6/12/2017 23:37:46 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04138**	**46.600**	**.20515**	**.11312**	**.25431**	**.04777**	**.00376**	**32.108**	**.04669**
Stddev	.00010	.084	.00956	.00276	.00099	.00017	.00090	.140	.00166
%RSD	.25009	.17925	4.6617	2.4355	.38912	.35754	24.056	.43572	3.5542
#1	.04131	46.541	.21191	.11507	.25361	.04765	.00312	32.009	.04786
#2	.04145	46.659	.19838	.11117	.25501	.04789	.00440	32.207	.04552
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07459**	**.09495**	**.14831**	**86.664**	**24.936**	**.16935**	**36.022**	**3.6778**	**.04423**
Stddev	.00219	.00289	.00004	.254	.065	.00027	.162	.0102	.00133
%RSD	2.9385	3.0400	.02933	.29357	.26138	.16102	.44890	.27797	2.9962
#1	.07614	.09699	.14834	86.484	24.890	.16954	36.136	3.6850	.04516
#2	.07304	.09291	.14828	86.844	24.982	.16916	35.907	3.6705	.04329
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.586**	**.10957**	**5.3880**	**.12885**	**.64948**	**.09990**	**.18808**	**8.3723**	**17.917**
Stddev	.126	.00363	.1720	.00341	.01170	.00028	.00691	.0011	.002
%RSD	.64232	3.3171	3.1915	2.6460	1.8010	.27921	3.6736	.01271	.01271
#1	19.675	.11214	5.5096	.13126	.65775	.09970	.19296	8.3716	17.915
#2	19.497	.10700	5.2664	.12644	.64121	.10010	.18319	8.3731	17.918
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10103**	**.08390**	**.20091**	**.39207**	**.19374**	**.52493**	**.12840**	**.41345**	**.06711**
Stddev	.00440	.00063	.00127	.00109	.00121	.00965	.00103	.00230	.00014
%RSD	4.3589	.74629	.63269	.27741	.62567	1.8383	.80194	.55540	.20142
#1	.10415	.08346	.20181	.39284	.19460	.51810	.12913	.41183	.06721
#2	.09792	.08434	.20001	.39131	.19289	.53175	.12767	.41507	.06702
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2831.8**	**53265.**	**6254.9**
Stddev	12.4	337.	37.1
%RSD	.43857	.63211	.59321
#1	2840.6	53027.	6281.2
#2	2823.0	53503.	6228.7

Sample Name: 280-97928-C-3-A Acquired: 6/12/2017 23:40:16 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00042**	**32.590**	**.01938**	**.01589**	**.10043**	**.00149**	**.00239**	**71.228**	**.00036**
Stddev	.00037	.270	.00478	.00251	.00050	.00008	.00335	.278	.00038
%RSD	88.538	.82873	24.650	15.781	.49480	5.5896	139.99	.39031	105.56
#1	-.00068	32.781	.01600	.01766	.10078	.00155	.00002	71.425	.00062
#2	-.00016	32.399	.02276	.01412	.10007	.00143	.00476	71.032	.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02228**	**.03814**	**.08174**	**71.678**	**5.3112**	**.06435**	**25.885**	**2.2422**	**-.00058**
Stddev	.00138	.00075	.00055	.035	.0023	.00145	.029	.0037	.00071
%RSD	6.1887	1.9602	.67513	.04874	.04278	2.2553	.11289	.16608	120.98
#1	.02326	.03867	.08213	71.703	5.3096	.06538	25.905	2.2449	-.00109
#2	.02131	.03761	.08135	71.654	5.3128	.06333	25.864	2.2396	-.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.40038**	**.05228**	**2.6697**	**.01991**	**.10429**	**.00352**	**.00012**	**4.0069**	**8.5748**
Stddev	.00152	.00246	.0668	.00095	.00465	.00100	.01235	.0474	.1013
%RSD	.37852	4.6973	2.5033	4.7773	4.4565	28.307	10372.	1.1819	1.1819
#1	.40145	.05402	2.7170	.01924	.10101	.00282	.00885	3.9734	8.5031
#2	.39931	.05054	2.6225	.02059	.10758	.00423	-.00861	4.0404	8.6464
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00861**	**.10126**	**.01730**	**.29145**	**.00686**	**.04148**	**.06032**	**.14508**	**.03174**
Stddev	.00038	.00025	.00171	.00369	.00218	.00041	.00058	.00164	.00160
%RSD	4.4645	.24961	9.8690	1.2644	31.744	.98215	.95365	1.1291	5.0408
#1	.00889	.10144	.01610	.28884	.00532	.04120	.06072	.14624	.03288
#2	.00834	.10108	.01851	.29405	.00840	.04177	.05991	.14393	.03061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2789.6**	**52357.**	**6169.4**
Stddev	6.0	217.	36.7
%RSD	.21542	.41400	.59444
#1	2785.4	52510.	6143.5
#2	2793.9	52204.	6195.3

Sample Name: 280-97928-B-4-A Acquired: 6/12/2017 23:42:50 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00071**	**23.608**	**.01326**	**.01578**	**.09205**	**.00098**	**.00137**	**117.56**	**.00004**
Stddev	.00112	.043	.00116	.00049	.00020	.00002	.00208	.36	.00067
%RSD	157.59	.18335	8.7854	3.1169	.21614	1.7584	151.61	.30943	1682.9
#1	.00008	23.638	.01408	.01613	.09219	.00096	.00285	117.82	-.00044
#2	-.00150	23.577	.01244	.01543	.09191	.00099	-.00010	117.31	.00052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01770**	**.02812**	**.05825**	**52.050**	**4.6723**	**.04415**	**25.300**	**1.8079**	**-.00085**
Stddev	.00043	.00118	.00061	.127	.0144	.00074	.099	.0064	.00010
%RSD	2.4344	4.1827	1.0539	.24367	.30752	1.6716	.39067	.35639	12.151
#1	.01800	.02896	.05782	52.140	4.6621	.04467	25.370	1.8124	-.00078
#2	.01739	.02729	.05868	51.961	4.6825	.04363	25.230	1.8033	-.00092
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50590**	**.03917**	**2.5442**	**.01312**	**.10457**	**-.00111**	**-.00149**	**3.6152**	**7.7365**
Stddev	.00454	.00166	.1052	.00115	.00744	.00350	.00160	.0464	.0993
%RSD	.89787	4.2353	4.1342	8.7701	7.1119	315.74	107.42	1.2831	1.2831
#1	.50268	.04034	2.6186	.01230	.10983	.00137	-.00262	3.6480	7.8067
#2	.50911	.03800	2.4698	.01393	.09931	-.00358	-.00036	3.5824	7.6663
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00971**	**.11515**	**.01926**	**.26037**	**.00880**	**-.03534**	**.04742**	**.10978**	**.03251**
Stddev	.00168	.00021	.00240	.00303	.00102	.05104	.00093	.00083	.00167
%RSD	17.277	.18129	12.463	1.1628	11.595	144.45	1.9652	.75209	5.1300
#1	.01090	.11530	.01756	.26252	.00807	.00076	.04808	.11037	.03369
#2	.00852	.11501	.02095	.25823	.00952	-.07143	.04676	.10920	.03133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2759.2**	**52267.**	**6154.4**
Stddev	3.4	135.	30.9
%RSD	.12305	.25768	.50277
#1	2756.8	52171.	6132.5
#2	2761.6	52362.	6176.3

Sample Name: 280-97928-C-5-A Acquired: 6/12/2017 23:45:23 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00012**	**75.430**	**.04754**	**.02482**	**.24477**	**.00270**	**.00017**	**36.671**	**.00070**
Stddev	.00016	.140	.00250	.00120	.00029	.00005	.00579	.122	.00007
%RSD	130.45	.18589	5.2564	4.8481	.11945	1.7681	3361.9	.33184	10.105
#1	.00024	75.530	.04931	.02568	.24497	.00267	.00427	36.757	.00065
#2	.00001	75.331	.04577	.02397	.24456	.00274	-.00392	36.585	.00075
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05522**	**.08025**	**.28635**	**165.03**	**8.8422**	**.14783**	**37.401**	**8.5293**	**-.00070**
Stddev	.00161	.00376	.00132	.03	.0048	.00040	.140	.0756	.00017
%RSD	2.9237	4.6867	.46230	.01776	.05424	.26918	.37521	.88590	24.355
#1	.05636	.08291	.28729	165.05	8.8388	.14811	37.302	8.4759	-.00082
#2	.05408	.07759	.28542	165.01	8.8456	.14755	37.500	8.5828	-.00058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.39776**	**.11787**	**3.8784**	**.04317**	**.68608**	**.00816**	**.00773**	**3.8907**	**8.3261**
Stddev	.00199	.00536	.1432	.00124	.02480	.00045	.01443	.0255	.0546
%RSD	.49994	4.5455	3.6920	2.8631	3.6150	5.4722	186.59	.65554	.65554
#1	.39917	.12165	3.9796	.04405	.70362	.00848	.01794	3.9087	8.3647
#2	.39636	.11408	3.7771	.04230	.66855	.00785	-.00247	3.8727	8.2875
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00988**	**.07009**	**.02237**	**.32296**	**.00619**	**.03418**	**.12623**	**.40482**	**.02803**
Stddev	.00067	.00029	.00151	.00229	.00813	.00536	.00041	.00322	.00051
%RSD	6.8029	.41600	6.7593	.70845	131.29	15.682	.32443	.79478	1.8228
#1	.00941	.06989	.02130	.32458	.00044	.03797	.12594	.40255	.02839
#2	.01036	.07030	.02343	.32135	.01194	.03039	.12652	.40710	.02767
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2874.7**	**54083.**	**6458.2**
Stddev	5.6	777.	36.7
%RSD	.19320	1.4372	.56793
#1	2878.6	54632.	6432.3
#2	2870.8	53533.	6484.2

Sample Name: CCVH-4579429 Acquired: 6/12/2017 23:48:01 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00132**	**49.045**	**-.00918**	**.00202**	**.00017**	**.00019**	**.98483**	**.01903**	**-.00001**	**-.00092**	**.00052**	**.01150**	**48.925**
Stddev	.00042	.182	.00511	.00009	.00037	.00016	.02296	.00036	.00016	.00051	.00031	.00053	.459
%RSD	31.664	.37192	55.674	4.5467	213.78	82.314	2.3312	1.9125	1732.5	55.159	59.425	4.6017	.93787
#1	-.00161	49.174	-.01279	.00208	.00043	.00030	1.0011	.01928	.00010	-.00128	.00030	.01187	49.250
#2	-.00102	48.916	-.00556	.00195	-.00009	.00008	.96859	.01877	-.00012	-.00056	.00074	.01112	48.601
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.12425**	**.00685**	**.04536**	**-.00086**	**-.00220**	**246.54**	**.00105**	**.00877**	**.00160**	**4.8029**	**.00545**	**-.00060**	**-.02072**
Stddev	.00300	.00049	.00842	.00025	.00018	.03	.00011	.00266	.00209	.1249	.00186	.00965	.02946
%RSD	2.4154	7.1864	18.560	29.538	8.1404	.01043	10.054	30.309	130.80	2.5994	34.062	1596.7	142.16
#1	.12638	.00650	.03941	-.00068	-.00233	246.56	.00098	.01065	.00307	4.8911	.00676	-.00743	-.04155
#2	.12213	.00719	.05131	-.00104	-.00208	246.52	.00113	.00689	.00012	4.7146	.00414	.00622	.00011
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.04435**	**-.00009**	**.00043**	**4.8565**	**.02163**	**.00395**	**10.023**	**.01291**	**.00348**	**.05415**
Stddev	.06304	.00137	.00009	.0123	.00029	.00074	.023	.00049	.00017	.00136
%RSD	142.16	1541.2	19.774	.25272	1.3317	18.676	.22925	3.7601	4.9350	2.5199
#1	-.08893	-.00106	.00049	4.8652	.02184	.00447	10.040	.01325	.00336	.05512
#2	.00023	.00088	.00037	4.8478	.02143	.00343	10.007	.01257	.00360	.05319
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2647.2**	**49446.**	**5795.1**
Stddev	2.0	65.	5.6
%RSD	.07553	.13220	.09732
#1	2648.6	49400.	5791.1
#2	2645.8	49492.	5799.1

Sample Name: CCV-4580817 Acquired: 6/12/2017 23:50:35 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50224**	F **.56180**	**.98172**	**.49924**	**.49512**	**.49423**	**.00368**	**4.9991**	**.49443**	**.49700**	**.49077**	**.50139**
Stddev	.00180	.01874	.03178	.01162	.00002	.00013	.00083	.0045	.01542	.01629	.01605	.00160
%RSD	.35923	3.3354	3.2376	2.3277	.00457	.02604	22.544	.09069	3.1183	3.2785	3.2703	.31876
#1	.50351	.57505	1.0042	.50746	.49510	.49414	.00310	4.9959	.50533	.50853	.50212	.50252
#2	.50096	.54855	.95925	.49102	.49513	.49432	.00427	5.0023	.48352	.48548	.47942	.50026
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5363**	**50.401**	**1.0094**	**20.067**	**.50220**	**.48793**	**5.0188**	**.49597**	**1.0089**	**1.0046**	**-.00325**	**.98687**
Stddev	.0075	.098	.0065	.069	.00234	.01572	.0322	.01449	.0299	.0273	.00927	.02637
%RSD	.29650	.19522	.64106	.34395	.46601	3.2227	.64221	2.9221	2.9629	2.7156	284.90	2.6724
#1	2.5416	50.332	1.0048	20.116	.50386	.49904	5.0416	.50621	1.0301	1.0239	-.00981	1.0055
#2	2.5310	50.471	1.0139	20.018	.50055	.47681	4.9960	.48572	.98781	.98528	.00330	.96822
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99238**	**4.9403**	**10.572**	**.99187**	**.49473**	**.00941**	**.49500**	**1.0196**	**-.01081**	**.49694**	**.54135**	**.49242**
Stddev	.02617	.0153	.033	.02692	.00066	.00127	.00269	.0356	.01396	.00272	.00106	.00199
%RSD	2.6368	.31053	.31053	2.7136	.13361	13.480	.54383	3.4887	129.17	.54647	.19537	.40508
#1	1.0109	4.9511	10.595	1.0109	.49427	.00851	.49690	1.0447	-.00094	.49886	.54210	.49101
#2	.97387	4.9294	10.549	.97284	.49520	.01031	.49310	.99442	-.02068	.49502	.54060	.49383
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2716.8**	**50867.**	**5900.2**
Stddev	5.3	63.	7.4
%RSD	.19604	.12439	.12536
#1	2713.1	50822.	5905.4
#2	2720.6	50912.	5894.9

Sample Name: CCB Acquired: 6/12/2017 23:53:04 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00042**	**.01811**	**.00026**	**.00068**	**.00010**	**.00001**	**.00487**	**.00140**	**-.00027**	**.00008**	**-.00009**	**.00085**	**.01927**
Stddev	.00028	.00073	.00297	.00063	.00025	.00011	.00004	.00065	.00002	.00018	.00002	.00039	.00091
%RSD	66.022	4.0500	1143.3	93.692	250.15	886.63	.89038	46.660	5.6079	213.36	16.392	45.853	4.6988
#1	.00062	.01863	.00236	.00023	-.00008	-.00007	.00490	.00186	-.00028	.00021	-.00008	.00113	.01863
#2	.00023	.01759	-.00184	.00112	.00027	.00009	.00484	.00094	-.00026	-.00004	-.00010	.00058	.01991
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09032**	**.00376**	**.00243**	**.00041**	**-.00012**	**-.00738**	**-.00010**	**.00358**	**.00249**	**-.01152**	**.00421**	**.00052**	**-.00620**
Stddev	.09267	.00088	.00122	.00016	.00007	.02184	.00056	.00180	.00001	.00236	.00044	.00058	.01504
%RSD	102.60	23.381	50.198	40.230	61.283	295.77	580.89	50.168	.24534	20.524	10.404	112.75	242.42
#1	.02479	.00438	.00156	.00052	-.00007	-.02283	-.00049	.00231	.00249	-.01319	.00452	.00093	-.01684
#2	.15584	.00314	.00329	.00029	-.00017	.00806	.00030	.00485	.00249	-.00985	.00390	.00010	.00443
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01328**	**-.00123**	**.00013**	**.00133**	**.00017**	**.00176**	**.03822**	**-.00066**	**.00133**	**.00185**
Stddev	.03219	.00200	.00004	.00130	.00004	.00033	.03248	.00030	.00062	.00096
%RSD	242.42	162.32	28.080	97.564	24.252	18.667	84.970	45.151	46.653	51.783
#1	-.03603	-.00265	.00016	.00226	.00014	.00199	.01526	-.00045	.00177	.00253
#2	.00948	.00018	.00011	.00041	.00020	.00153	.06119	-.00088	.00089	.00118
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2697.6**	**51406.**	**5848.3**
Stddev	9.3	102.	72.3
%RSD	.34558	.19840	1.2369
#1	2691.0	51334.	5899.4
#2	2704.2	51478.	5797.1

Sample Name: CCVL-4589022 Acquired: 6/12/2017 23:55:43 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01006**	F **.17693**	**.01130**	**.09803**	**.00951**	**.00086**	**.11592**	**.20492**	**.00481**	**.01023**	**.01020**	**.01566**
Stddev	.00023	.07812	.00098	.00551	.00006	.00007	.00512	.00543	.00039	.00052	.00067	.00059
%RSD	2.2994	44.152	8.6977	5.6237	.65807	8.2791	4.4146	2.6495	8.1610	5.0972	6.5315	3.7357
#1	.00990	.23217	.01200	.10193	.00955	.00081	.11954	.20876	.00509	.01060	.01067	.01525
#2	.01022	.12169	.01061	.09413	.00946	.00091	.11230	.20108	.00453	.00986	.00973	.01608
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000										
Range		30.000%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11287**	**3.1154**	**.02118**	**.20725**	**.01056**	**.01852**	**1.0154**	**.04072**	**2.8689**	**.01074**	**.09293**	**.02109**
Stddev	.00152	.0597	.00083	.00610	.00004	.00144	.0023	.00188	.1145	.00200	.00332	.00108
%RSD	1.3441	1.9160	3.8981	2.9451	.38338	7.7576	.22467	4.6091	3.9923	18.626	3.5689	5.1203
#1	.11394	3.0732	.02060	.20294	.01059	.01954	1.0138	.04205	2.9498	.01215	.09527	.02185
#2	.11180	3.1576	.02176	.21157	.01053	.01750	1.0170	.03939	2.7879	.00933	.09058	.02033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02219**	**.45043**	**.96392**	**.09780**	**.01003**	**.01552**	**.00936**	**.01795**	**.07472**	**.00981**	**.02008**	**.01894**
Stddev	.00552	.00015	.00033	.00675	.00004	.00103	.00019	.00465	.00529	.00062	.00015	.00044
%RSD	24.858	.03407	.03407	6.9016	.35972	6.6193	1.9930	25.905	7.0744	6.2885	.74698	2.3260
#1	.02609	.45032	.96369	.10258	.01001	.01625	.00949	.02124	.07846	.00937	.01998	.01925
#2	.01829	.45054	.96415	.09303	.01006	.01480	.00922	.01466	.07098	.01025	.02019	.01863
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2772.5**	**53478.**	**6052.7**
Stddev	16.1	251.	28.1
%RSD	.58033	.46899	.46410
#1	2761.1	53655.	6032.8
#2	2783.9	53300.	6072.6

Sample Name: 280-97928-C-6-A Acquired: 6/12/2017 23:58:21 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00067**	**35.386**	**.02601**	**.01656**	**.12987**	**.00172**	**-.00116**	**63.011**	**.00023**
Stddev	.00062	.129	.00277	.00025	.00014	.00021	.00405	.203	.00028
%RSD	92.833	.36564	10.659	1.5119	.10888	12.279	348.79	.32242	124.89
#1	-.00111	35.294	.02797	.01674	.12997	.00157	-.00403	62.867	.00003
#2	-.00023	35.477	.02405	.01638	.12977	.00187	.00170	63.154	.00042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02738**	**.04158**	**.09815**	**79.350**	**6.1251**	**.06675**	**26.303**	**3.0689**	**-.00011**
Stddev	.00021	.00179	.00087	.405	.0076	.00210	.094	.0123	.00042
%RSD	.76583	4.3038	.88698	.51074	.12422	3.1485	.35731	.40193	368.48
#1	.02753	.04284	.09876	79.063	6.1197	.06823	26.369	3.0776	-.00041
#2	.02723	.04031	.09753	79.636	6.1305	.06526	26.236	3.0601	.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.52268**	**.05865**	**3.3208**	**.02347**	**.13900**	**.00632**	**-.00200**	**3.4606**	**7.4056**
Stddev	.04617	.00161	.0971	.00266	.00722	.00379	.00249	.0161	.0345
%RSD	8.8328	2.7447	2.9229	11.318	5.1944	59.938	124.90	.46574	.46574
#1	.49003	.05978	3.3894	.02535	.14410	.00900	-.00023	3.4720	7.4300
#2	.55532	.05751	3.2522	.02159	.13389	.00364	-.00376	3.4492	7.3812
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01011**	**.09849**	**.01994**	**.31871**	**.00343**	**.03575**	**.06805**	**.17665**	**.03616**
Stddev	.00028	.00009	.00259	.00158	.00283	.00287	.00005	.00068	.00193
%RSD	2.7419	.08939	13.002	.49521	82.673	8.0185	.07930	.38497	5.3499
#1	.00991	.09855	.02177	.31983	.00142	.03373	.06809	.17713	.03479
#2	.01030	.09842	.01810	.31759	.00543	.03778	.06801	.17616	.03752
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2832.1**	**53383.**	**6279.9**
Stddev	2.0	157.	116.2
%RSD	.06968	.29394	1.8496
#1	2830.7	53272.	6362.1
#2	2833.5	53494.	6197.8

Sample Name: 280-97928-C-7-A Acquired: 6/13/2017 0:00:55 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00081**	**29.411**	**.02273**	**.01390**	**.11688**	**.00130**	**.00301**	**23.733**	**.00018**
Stddev	.00082	.155	.00160	.00013	.00034	.00022	.00135	.055	.00015
%RSD	101.60	.52737	7.0268	.90017	.29265	16.900	44.913	.23158	85.770
#1	-.00139	29.521	.02160	.01381	.11712	.00114	.00205	23.772	.00007
#2	-.00023	29.301	.02386	.01398	.11664	.00146	.00397	23.694	.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02416**	**.03488**	**.08800**	**69.163**	**5.1125**	**.05562**	**16.945**	**2.7389**	**-.00027**
Stddev	.00079	.00102	.00038	.191	.0070	.00001	.056	.0058	.00026
%RSD	3.2586	2.9200	.43339	.27574	.13741	.02445	.33023	.21112	94.993
#1	.02472	.03560	.08773	69.298	5.1075	.05561	16.984	2.7430	-.00046
#2	.02360	.03416	.08827	69.028	5.1175	.05563	16.905	2.7348	-.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.62425**	**.05144**	**2.7020**	**.02233**	**.06767**	**.00579**	**.00456**	**2.1353**	**4.5696**
Stddev	.01473	.00169	.0856	.00182	.01843	.00132	.00310	.0228	.0489
%RSD	2.3604	3.2855	3.1691	8.1411	27.236	22.842	67.932	1.0697	1.0697
#1	.61383	.05263	2.7625	.02361	.08071	.00485	.00237	2.1192	4.5351
#2	.63467	.05024	2.6414	.02104	.05464	.00673	.00675	2.1515	4.6042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00839**	**.04632**	**.01526**	**.23222**	**.00618**	**.04872**	**.05709**	**.16026**	**.02896**
Stddev	.00148	.00005	.00020	.00191	.00184	.02595	.00053	.00055	.00011
%RSD	17.701	.11358	1.3257	.82165	29.817	53.258	.93103	.34034	.39048
#1	.00944	.04635	.01511	.23357	.00748	.03037	.05671	.15987	.02904
#2	.00734	.04628	.01540	.23087	.00488	.06706	.05746	.16064	.02888
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2884.6**	**54780.**	**6416.3**
Stddev	7.9	9.	9.8
%RSD	.27381	.01663	.15310
#1	2890.2	54773.	6409.3
#2	2879.0	54786.	6423.2

Sample Name: 280-97928-C-8-A Acquired: 6/13/2017 0:03:28 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00063**	**85.047**	**.04427**	**.02070**	**.36888**	**.00399**	**-.00177**	**35.007**	**.00138**
Stddev	.00024	.298	.00809	.00217	.00096	.00001	.00063	.110	.00007
%RSD	37.872	.35018	18.280	10.477	.26060	.31165	35.371	.31382	5.4078
#1	-.00080	85.258	.04999	.02224	.36956	.00399	-.00221	35.085	.00133
#2	-.00046	84.836	.03855	.01917	.36820	.00400	-.00133	34.929	.00143
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06757**	**.09710**	**.23854**	**179.21**	**8.6528**	**.21654**	**31.601**	W **10.460**	**.00046**
Stddev	.00205	.00391	.00062	.56	.0012	.00166	.179	.041	.00000
%RSD	3.0377	4.0257	.25913	.31233	.01426	.76753	.56624	.39406	.88115
#1	.06902	.09986	.23898	179.61	8.6537	.21536	31.728	10.489	.00046
#2	.06612	.09433	.23810	178.82	8.6520	.21771	31.475	10.431	.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.41995**	**.13165**	**4.2107**	**.08009**	**.45943**	**.01096**	**.00763**	**3.4354**	**7.3518**
Stddev	.00709	.00542	.1321	.00311	.00784	.00241	.00764	.0530	.1135
%RSD	1.6891	4.1132	3.1362	3.8791	1.7075	22.016	100.19	1.5434	1.5434
#1	.42497	.13548	4.3041	.08229	.46498	.01267	.01304	3.4729	7.4321
#2	.41493	.12782	4.1173	.07790	.45389	.00926	.00222	3.3979	7.2716
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00693**	**.10418**	**.02872**	**.65114**	**.01101**	**.08661**	**.14032**	**.45767**	**.03448**
Stddev	.00146	.00013	.00026	.00952	.00125	.01036	.00143	.00423	.00113
%RSD	21.112	.12715	.91323	1.4625	11.339	11.966	1.0157	.92519	3.2731
#1	.00796	.10428	.02890	.65788	.01190	.07928	.14133	.46066	.03368
#2	.00589	.10409	.02853	.64441	.01013	.09394	.13932	.45468	.03528
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2950.3**	**55070.**	**6513.1**
Stddev	12.5	350.	37.6
%RSD	.42391	.63470	.57701
#1	2959.2	54823.	6486.6
#2	2941.5	55317.	6539.7

Sample Name: 280-97928-B-9-A Acquired: 6/13/2017 0:06:05 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00058**	**80.429**	**.05554**	**.02580**	**.52487**	**.00375**	**-.00370**	**83.482**	**.00129**
Stddev	.00059	.062	.00294	.00064	.00013	.00001	.00179	.101	.00016
%RSD	101.56	.07761	5.2927	2.4932	.02395	.28253	48.449	.12097	12.599
#1	-.00016	80.385	.05762	.02625	.52496	.00376	-.00243	83.553	.00141
#2	-.00099	80.473	.05347	.02534	.52478	.00374	-.00496	83.410	.00118
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06048**	**.10030**	**.28307**	**196.89**	**10.310**	**.19457**	**42.881**	W **13.203**	**.00147**
Stddev	.00193	.00266	.00167	.19	.011	.00169	.154	.040	.00020
%RSD	3.1846	2.6537	.58964	.09490	.10940	.86967	.35811	.30247	13.415
#1	.06184	.10218	.28425	197.02	10.302	.19576	42.990	13.232	.00133
#2	.05911	.09842	.28189	196.76	10.318	.19337	42.772	13.175	.00161
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.66601**	**.13463**	**4.7082**	**.06519**	**.62497**	**.01124**	**-.00301**	**4.1144**	**8.8047**
Stddev	.01420	.00468	.1530	.00180	.03132	.00023	.00318	.0001	.0001
%RSD	2.1318	3.4759	3.2499	2.7560	5.0117	2.0600	105.58	.00153	.00153
#1	.65597	.13794	4.8164	.06646	.64712	.01107	-.00525	4.1144	8.8048
#2	.67604	.13132	4.6000	.06392	.60282	.01140	-.00076	4.1143	8.8046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01244**	**.17236**	**.03362**	**.82985**	**.01316**	**.05378**	**.14570**	**.44906**	**.05595**
Stddev	.00251	.00016	.00311	.00375	.00007	.04383	.00039	.00057	.00146
%RSD	20.149	.09393	9.2607	.45216	.55996	81.492	.26886	.12704	2.6170
#1	.01421	.17248	.03583	.83251	.01321	.02279	.14598	.44865	.05492
#2	.01067	.17225	.03142	.82720	.01311	.08477	.14543	.44946	.05699
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**3033.9**	**56727.**	**6712.1**
Stddev	19.0	209.	5.7
%RSD	.62766	.36773	.08559
#1	3047.3	56580.	6708.0
#2	3020.4	56875.	6716.1

Sample Name: 280-97928-A-10-A Acquired: 6/13/2017 0:08:43 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00022**	**51.303**	**.03477**	**.02101**	**.16902**	**.00234**	**-.00026**	**12.734**	**.00054**
Stddev	.00008	.145	.00381	.00058	.00051	.00010	.00084	.032	.00000
%RSD	36.503	.28340	10.948	2.7540	.29940	4.2272	322.38	.25316	.06895
#1	-.00016	51.406	.03746	.02060	.16938	.00241	-.00086	12.757	.00054
#2	-.00028	51.200	.03207	.02142	.16866	.00227	.00033	12.711	.00054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03647**	**.05573**	**.12346**	**107.00**	**8.0360**	**.08730**	**21.478**	**3.6678**	**-.00008**
Stddev	.00081	.00192	.00063	.35	.0137	.00136	.012	.0045	.00004
%RSD	2.2122	3.4431	.51205	.32286	.17099	1.5547	.05501	.12220	48.025
#1	.03704	.05708	.12391	107.25	8.0457	.08826	21.469	3.6647	-.00011
#2	.03590	.05437	.12301	106.76	8.0263	.08634	21.486	3.6710	-.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.45446**	**.08321**	**2.9863**	**.02719**	**.06532**	**.00421**	**-.00348**	**4.1874**	**8.9610**
Stddev	.00679	.00244	.0859	.00260	.00224	.00112	.00125	.0324	.0693
%RSD	1.4932	2.9269	2.8758	9.5460	3.4365	26.510	35.851	.77348	.77348
#1	.45926	.08493	3.0471	.02903	.06374	.00500	-.00436	4.2103	9.0101
#2	.44967	.08149	2.9256	.02536	.06691	.00342	-.00260	4.1645	8.9120
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00839**	**.03407**	**.02075**	**.42345**	**.00302**	**.02725**	**.08906**	**.21752**	**.03834**
Stddev	.00216	.00014	.00075	.00508	.00311	.04060	.00073	.00212	.00088
%RSD	25.717	.40919	3.6143	1.1987	103.17	148.99	.81570	.97460	2.3074
#1	.00991	.03417	.02022	.42704	.00522	-.00146	.08854	.21602	.03771
#2	.00686	.03397	.02128	.41986	.00082	.05597	.08957	.21902	.03896
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2930.8**	**55164.**	**6455.9**
Stddev	3.1	355.	10.0
%RSD	.10447	.64434	.15414
#1	2928.6	55416.	6463.0
#2	2932.9	54913.	6448.9

Sample Name: 280-97928-A-11-A Acquired: 6/13/2017 0:11:15 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00173**	**110.25**	**.04678**	**.02800**	**.39594**	**.00673**	**-.00045**	**12.496**	**.00121**
Stddev	.00048	.01	.00463	.00081	.00027	.00017	.00383	.012	.00015
%RSD	27.948	.01036	9.8918	2.9080	.06751	2.5779	847.19	.09815	12.503
#1	-.00207	110.25	.04351	.02858	.39613	.00660	.00226	12.487	.00132
#2	-.00139	110.26	.05006	.02742	.39575	.00685	-.00316	12.504	.00111
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06489**	**.13303**	**.22683**	**222.22**	**12.343**	**.23797**	**34.390**	**4.1151**	**.00171**
Stddev	.00164	.00382	.00255	.10	.054	.00094	.128	.0101	.00011
%RSD	2.5200	2.8692	1.1240	.04683	.43954	.39323	.37349	.24634	6.2354
#1	.06605	.13573	.22863	222.30	12.304	.23863	34.480	4.1223	.00179
#2	.06373	.13033	.22503	222.15	12.381	.23731	34.299	4.1080	.00164
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.90178**	**.15703**	**4.1139**	**.07896**	**.60800**	**.01405**	**.00446**	**3.3647**	**7.2004**
Stddev	.00970	.00344	.1136	.00219	.01517	.00046	.00021	.0046	.0099
%RSD	1.0758	2.1901	2.7621	2.7791	2.4946	3.2875	4.6275	.13756	.13756
#1	.89492	.15946	4.1942	.08051	.61873	.01438	.00461	3.3680	7.2074
#2	.90864	.15459	4.0335	.07741	.59728	.01372	.00431	3.3614	7.1934
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01236**	**.06502**	**.04944**	**.93764**	**.00714**	**.08155**	**.22785**	**.47774**	**.04914**
Stddev	.00066	.00021	.00037	.00375	.00253	.02135	.00127	.00113	.00134
%RSD	5.3244	.31864	.74606	.40046	35.486	26.181	.55901	.23699	2.7319
#1	.01189	.06488	.04918	.94030	.00535	.09664	.22875	.47854	.05009
#2	.01283	.06517	.04970	.93499	.00894	.06645	.22695	.47694	.04819
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**3198.3**	**59686.**	**7176.0**
Stddev	1.4	1.	12.5
%RSD	.04362	.00214	.17404
#1	3199.3	59687.	7167.2
#2	3197.3	59685.	7184.9

Sample Name: 280-97928-A-11-A @5 Acquired: 6/13/2017 0:13:45 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 5x

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00028**	**25.293**	**.00621**	**.00626**	**.09093**	**.00146**	**.00121**	**2.8908**	**-.00008**
Stddev	.00093	.111	.00174	.00113	.00025	.00008	.00521	.0079	.00019
%RSD	334.26	.43993	27.949	18.043	.27421	5.5899	430.49	.27476	248.89
#1	-.00093	25.214	.00498	.00546	.09075	.00152	.00489	2.8852	.00006
#2	.00038	25.372	.00744	.00706	.09111	.00140	-.00247	2.8964	-.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01553**	**.03113**	**.05137**	**51.129**	**2.8899**	**.05625**	**8.0209**	**.94776**	**.00008**
Stddev	.00039	.00148	.00074	.078	.0230	.00188	.0152	.00217	.00041
%RSD	2.4948	4.7519	1.4404	.15339	.79466	3.3437	.18891	.22859	490.40
#1	.01580	.03218	.05190	51.074	2.9061	.05758	8.0316	.94930	.00038
#2	.01525	.03008	.05085	51.185	2.8736	.05492	8.0102	.94623	-.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.19229**	**.03702**	**.93861**	**.02029**	**.12606**	**.00788**	**-.00118**	**.91122**	**1.9500**
Stddev	.00796	.00053	.02993	.00127	.00696	.00040	.00351	.02729	.0584
%RSD	4.1386	1.4385	3.1890	6.2506	5.5236	5.0642	296.70	2.9950	2.9950
#1	.18666	.03739	.95978	.01939	.13099	.00760	-.00367	.93052	1.9913
#2	.19792	.03664	.91745	.02118	.12114	.00816	.00130	.89192	1.9087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00307**	**.01488**	**.01146**	**.21565**	**.00294**	**.02927**	**.05085**	**.11086**	**.01371**
Stddev	.00164	.00002	.00107	.00068	.00093	.01804	.00063	.00125	.00011
%RSD	53.255	.11152	9.3703	.31411	31.635	61.651	1.2366	1.1287	.83094
#1	.00191	.01489	.01222	.21613	.00359	.01651	.05040	.10997	.01363
#2	.00423	.01487	.01070	.21517	.00228	.04203	.05129	.11174	.01379
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2852.1**	**54199.**	**6371.0**
Stddev	6.9	47.	6.7
%RSD	.24060	.08705	.10510
#1	2847.2	54232.	6366.3
#2	2856.9	54166.	6375.8

Sample Name: 280-97928-B-12-A Acquired: 6/13/2017 0:16:19 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00047**	**39.125**	**.02190**	**.03861**	**.21085**	**.00205**	**.01145**	F **2041.3**	**.00014**
Stddev	.00001	.180	.00365	.00300	.00099	.00005	.00346	15.4	.00019
%RSD	2.0566	.45922	16.666	7.7730	.46808	2.2067	30.180	.75227	136.88
#1	-.00046	39.252	.02448	.04074	.21155	.00202	.00901	2052.2	.00000
#2	-.00048	38.998	.01932	.03649	.21016	.00208	.01390	2030.4	.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03163**	**.06254**	**.11819**	**67.996**	**7.9502**	**.09339**	**63.116**	**2.8719**	**-.00029**
Stddev	.00162	.00316	.00136	.237	.0834	.00411	.286	.0112	.00073
%RSD	5.1152	5.0541	1.1509	.34875	1.0492	4.4019	.45288	.38926	253.21
#1	.03277	.06477	.11915	68.164	8.0092	.09630	63.318	2.8798	.00023
#2	.03048	.06030	.11723	67.829	7.8912	.09048	62.914	2.8640	-.00081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.4069**	**.08873**	**2.7960**	**.05231**	**2.2055**	**-.00833**	**.00874**	**4.2194**	**9.0296**
Stddev	.0089	.00333	.1272	.00197	.1036	.00548	.00342	.0180	.0385
%RSD	.63247	3.7534	4.5479	3.7738	4.6952	65.811	39.137	.42651	.42651
#1	1.4132	.09108	2.8859	.05371	2.2787	-.01220	.01116	4.2322	9.0568
#2	1.4006	.08637	2.7061	.05092	2.1323	-.00445	.00632	4.2067	9.0024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00187**	**1.7740**	**.01631**	**.36935**	**.00373**	**-.03598**	**.09773**	**.30774**	**.02404**
Stddev	.00102	.0073	.00219	.00521	.00578	.03655	.00097	.00361	.00164
%RSD	54.565	.41242	13.455	1.4117	155.16	101.60	.99681	1.1738	6.8236
#1	.00260	1.7792	.01786	.37304	.00782	-.06182	.09704	.31030	.02288
#2	.00115	1.7688	.01475	.36567	-.00036	-.01013	.09842	.30519	.02520
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2563.4**	**47188.**	**6154.4**
Stddev	2.2	43.	13.8
%RSD	.08653	.09092	.22352
#1	2565.0	47219.	6144.7
#2	2561.9	47158.	6164.2

Sample Name: 280-97928-B-12-A @2 Acquired: 6/13/2017 0:18:57 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 2x

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00039**	**20.098**	**.01277**	**.01930**	**.10900**	**.00119**	**.00888**	F **1093.7**	**-.00034**
Stddev	.00132	.003	.00126	.00067	.00057	.00000	.00444	3.4	.00041
%RSD	335.07	.01733	9.8599	3.4641	.52206	.11518	49.989	.30866	120.98
#1	.00054	20.096	.01188	.01978	.10940	.00119	.01202	1091.3	-.00005
#2	-.00132	20.101	.01366	.01883	.10860	.00119	.00574	1096.1	-.00063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01695**	**.03382**	**.06331**	**36.054**	**4.1035**	**.05254**	**33.470**	**1.5087**	**-.00118**
Stddev	.00068	.00040	.00029	.042	.0245	.00006	.072	.0040	.00053
%RSD	4.0220	1.1758	.45117	.11770	.59745	.11525	.21588	.26368	44.793
#1	.01743	.03410	.06311	36.084	4.0862	.05250	33.522	1.5115	-.00081
#2	.01647	.03354	.06352	36.024	4.1209	.05259	33.419	1.5059	-.00155
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.81022**	**.04727**	**1.4522**	**.02754**	**1.0825**	**-.00587**	**.00130**	**2.2051**	**4.7189**
Stddev	.01704	.00184	.0483	.00064	.0336	.00471	.00173	.0683	.1461
%RSD	2.1027	3.9008	3.3222	2.3139	3.0998	80.116	133.17	3.0961	3.0961
#1	.79817	.04858	1.4863	.02709	1.1062	-.00920	.00008	2.2534	4.8222
#2	.82227	.04597	1.4181	.02799	1.0588	-.00255	.00253	2.1568	4.6156
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00032**	**.91525**	**.00867**	**.19298**	**.00279**	**-.01089**	**.05050**	**.16545**	**.00985**
Stddev	.00257	.00096	.00146	.00109	.00070	.03173	.00128	.00082	.00196
%RSD	812.11	.10470	16.854	.56640	25.232	291.47	2.5312	.49725	19.876
#1	-.00214	.91593	.00970	.19220	.00229	-.03333	.05140	.16603	.00847
#2	.00150	.91458	.00764	.19375	.00328	.01155	.04960	.16487	.01124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2585.8**	**47519.**	**5939.2**
Stddev	1.0	185.	2.7
%RSD	.03740	.38922	.04561
#1	2586.4	47389.	5937.3
#2	2585.1	47650.	5941.1

Sample Name: 280-97928-C-14-A Acquired: 6/13/2017 0:21:36 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00095**	**96.579**	**.05259**	**.03619**	**.44882**	**.00473**	**.00022**	W **675.20**	**.00207**
Stddev	.00034	.150	.00826	.00065	.00162	.00006	.00101	10.14	.00034
%RSD	35.413	.15566	15.699	1.7954	.36180	1.2329	466.13	1.5013	16.478
#1	-.00071	96.472	.05843	.03665	.44767	.00477	-.00050	668.03	.00183
#2	-.00118	96.685	.04675	.03573	.44997	.00469	.00093	682.36	.00231
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06475**	**.11184**	**.27342**	**172.14**	**12.153**	**.19639**	**43.530**	W **10.233**	**.00237**
Stddev	.00345	.00432	.00176	.36	.037	.00193	.157	.036	.00055
%RSD	5.3300	3.8655	.64275	.21066	.30158	.98508	.36087	.34941	23.227
#1	.06719	.11490	.27467	171.89	12.127	.19502	43.641	10.258	.00276
#2	.06231	.10878	.27218	172.40	12.179	.19776	43.419	10.208	.00198
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.94214**	**.13805**	**7.0618**	**.10519**	**1.8966**	**.00143**	**.00320**	**4.7221**	**10.105**
Stddev	.00580	.00669	.3100	.00578	.0918	.00047	.00542	.0839	.180
%RSD	.61571	4.8458	4.3899	5.4991	4.8393	33.068	169.19	1.7777	1.7777
#1	.94625	.14278	7.2810	.10928	1.9615	.00177	.00704	4.7814	10.232
#2	.93804	.13332	6.8426	.10110	1.8317	.00110	-.00063	4.6627	9.9782
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00626**	**.69815**	**.02256**	**.65901**	**.00581**	**.05635**	**.18803**	**.51034**	**.01638**
Stddev	.00119	.00241	.00148	.00053	.00155	.01300	.00121	.00495	.00085
%RSD	18.950	.34589	6.5634	.08022	26.718	23.061	.64086	.97080	5.1964
#1	.00710	.69645	.02361	.65939	.00471	.06554	.18889	.51384	.01578
#2	.00542	.69986	.02152	.65864	.00691	.04716	.18718	.50683	.01698
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2864.3**	**52329.**	**6744.8**
Stddev	3.7	99.	45.3
%RSD	.13068	.18870	.67218
#1	2867.0	52259.	6776.8
#2	2861.7	52398.	6712.7

Sample Name: CCVH-4579429 Acquired: 6/13/2017 0:24:19 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00173**	**48.358**	**-.00724**	**.00166**	**.00026**	**.00032**	**.98289**	**.21332**	**-.00008**	**-.00140**	**.00065**	**.01182**	**48.407**
Stddev	.00109	.047	.00739	.00097	.00003	.00001	.03750	.03561	.00003	.00045	.00027	.00019	.235
%RSD	62.944	.09762	102.19	58.152	10.361	2.4583	3.8149	16.694	30.471	32.246	41.756	1.6162	.48526
#1	-.00250	48.324	-.01247	.00098	.00028	.00032	1.0094	.23850	-.00010	-.00172	.00046	.01196	48.573
#2	-.00096	48.391	-.00201	.00234	.00024	.00033	.95637	.18814	-.00007	-.00108	.00084	.01169	48.241
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07075**	**.00401**	**.04516**	**-.00059**	**-.00157**	**242.97**	**.00096**	**.00965**	**.00130**	**4.8223**	**.00434**	**-.00140**	**-.03167**
Stddev	.05260	.00021	.01268	.00032	.00015	1.30	.00004	.00523	.00199	.1783	.00408	.01401	.00494
%RSD	74.347	5.2453	28.077	55.393	9.6274	.53419	4.2063	54.154	153.11	3.6967	93.967	999.61	15.590
#1	.03356	.00387	.05413	-.00036	-.00168	243.89	.00093	.00596	-.00011	4.9483	.00146	-.01131	-.02818
#2	.10795	.00416	.03620	-.00081	-.00147	242.05	.00099	.01335	.00271	4.6962	.00722	.00850	-.03516
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.06778**	**.00170**	**.00046**	**4.8171**	**.02123**	**.00000**	**10.016**	**.01188**	**.00266**	**.05328**
Stddev	.01057	.00185	.00000	.0056	.00061	.00448	.009	.00013	.00001	.00183
%RSD	15.590	109.08	.60401	.11653	2.8675	138590.	.08748	1.1351	.48270	3.4418
#1	-.06031	.00300	.00045	4.8211	.02166	-.00316	10.022	.01197	.00267	.05198
#2	-.07525	.00039	.00046	4.8131	.02080	.00317	10.010	.01178	.00265	.05457
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2688.6**	**49973.**	**5919.4**
Stddev	1.1	18.	20.5
%RSD	.04235	.03515	.34685
#1	2687.8	49961.	5904.9
#2	2689.4	49986.	5934.0

Sample Name: CCV-4580817 Acquired: 6/13/2017 0:26:53 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50101**	F **.55794**	**.97162**	**.50117**	**.49014**	**.48825**	**.00380**	**4.9629**	**.49516**	**.49093**	**.48581**	**.49981**
Stddev	.00287	.02105	.04380	.01719	.00005	.00030	.00014	.0021	.01721	.01753	.01735	.00182
%RSD	.57275	3.7729	4.5083	3.4306	.01029	.06189	3.6199	.04156	3.4752	3.5717	3.5709	.36417
#1	.50304	.57282	1.0026	.51333	.49010	.48804	.00389	4.9614	.50733	.50333	.49807	.50110
#2	.49898	.54305	.94064	.48902	.49017	.48847	.00370	4.9643	.48299	.47853	.47354	.49852
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4899**	**49.615**	**1.0030**	**19.905**	**.49606**	**.48423**	**5.0715**	**.49123**	**1.0082**	**.99776**	**-.00227**	**.99212**
Stddev	.0068	.061	.0056	.015	.00026	.01744	.0130	.01622	.0328	.03090	.00449	.03479
%RSD	.27187	.12340	.55794	.07686	.05201	3.6016	.25687	3.3021	3.2506	3.0966	197.73	3.5071
#1	2.4947	49.572	.99908	19.915	.49624	.49657	5.0807	.50270	1.0313	1.0196	.00090	1.0167
#2	2.4852	49.658	1.0070	19.894	.49587	.47190	5.0623	.47976	.98500	.97592	-.00544	.96751
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99748**	**4.8470**	**10.373**	**.98232**	**.48941**	**.00888**	**.48945**	**1.0138**	**-.00275**	**.49017**	**.49307**	**.48519**
Stddev	.02811	.0120	.026	.03611	.00069	.00172	.00069	.0314	.02298	.00074	.00228	.00048
%RSD	2.8177	.24663	.24663	3.6758	.14059	19.393	.14084	3.0956	835.31	.15062	.46233	.09918
#1	1.0173	4.8385	10.354	1.0078	.48892	.01010	.48994	1.0360	-.01900	.48965	.49469	.48553
#2	.97760	4.8554	10.391	.95679	.48990	.00766	.48896	.99160	.01350	.49069	.49146	.48485
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2723.7**	**51613.**	**6024.6**
Stddev	2.4	14.	15.7
%RSD	.08928	.02629	.26001
#1	2722.0	51623.	6035.7
#2	2725.4	51604.	6013.6

Sample Name: CCB Acquired: 6/13/2017 0:29:22 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00021**	**.00646**	**-.00448**	**.00044**	**-.00008**	**.00012**	**.00517**	**.03847**	**-.00026**	**.00053**	**.00039**	**.00060**	**.00472**
Stddev	.00047	.00125	.00830	.00057	.00046	.00007	.00164	.00249	.00022	.00010	.00021	.00086	.00286
%RSD	222.82	19.335	185.21	128.53	543.53	60.744	31.683	6.4713	83.751	18.893	54.216	142.09	60.595
#1	-.00055	.00557	.00139	.00004	.00024	.00017	.00633	.04023	-.00011	.00046	.00054	.00121	.00674
#2	.00012	.00734	-.01034	.00084	-.00041	.00007	.00402	.03671	-.00041	.00060	.00024	-.00000	.00270
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07885**	**.00318**	**.00200**	**.00041**	**-.00035**	**.04479**	**.00031**	**.00255**	**.00234**	**-.01022**	**.00273**	**-.00095**	**-.02376**
Stddev	.04886	.00354	.00564	.00008	.00020	.01342	.00045	.00045	.00188	.00314	.00521	.00221	.00229
%RSD	61.967	111.51	282.33	19.503	55.894	29.967	145.56	17.431	80.422	30.739	191.00	232.55	9.6490
#1	.04430	.00568	.00598	.00036	-.00049	.05428	.00062	.00287	.00101	-.01244	.00641	.00061	-.02214
#2	.11340	.00067	-.00199	.00047	-.00021	.03530	-.00001	.00224	.00367	-.00800	-.00096	-.00251	-.02538
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.05085**	**.00130**	**.00013**	**.00082**	**.00022**	**.00311**	**.00553**	**-.00038**	**.00042**	**.00066**
Stddev	.00491	.00180	.00015	.00104	.00029	.00402	.00240	.00051	.00011	.00064
%RSD	9.6490	138.55	113.47	126.26	132.91	129.59	43.453	134.83	26.509	97.695
#1	-.04738	.00003	.00024	.00155	.00042	.00595	.00723	-.00002	.00050	.00111
#2	-.05432	.00257	.00003	.00009	.00001	.00026	.00383	-.00073	.00034	.00020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2714.6**	**52036.**	**5963.2**
Stddev	4.9	110.	7.2
%RSD	.17916	.21128	.12145
#1	2711.2	51958.	5968.4
#2	2718.1	52114.	5958.1

Sample Name: CCVL-4589022 Acquired: 6/13/2017 0:32:00 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01034**	**.11520**	**.01257**	**.09954**	**.00984**	**.00093**	**.11806**	**.20976**	**.00464**	**.01015**	**.00978**	**.01592**	**.11317**	**3.1583**
Stddev	.00013	.00286	.00364	.00238	.00046	.00008	.00000	.00141	.00009	.00038	.00052	.00021	.00153	.0466
%RSD	1.2608	2.4831	29.001	2.3918	4.6808	8.5470	.00416	.67095	1.9124	3.7154	5.3430	1.3391	1.3520	1.4766
#1	.01025	.11722	.01514	.10123	.00952	.00087	.11805	.20876	.00470	.01041	.01015	.01577	.11208	3.1913
#2	.01043	.11318	.00999	.09786	.01017	.00099	.11806	.21075	.00457	.00988	.00941	.01607	.11425	3.1254
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02319**	**.20143**	**.01056**	**.01845**	**1.0531**	**.04127**	**2.9293**	**.01140**	**.08700**	**.01877**	**.01618**	**.46772**	**1.0009**	**.09880**
Stddev	.00036	.00182	.00003	.00040	.0020	.00105	.0939	.00022	.00335	.00170	.00496	.01019	.0218	.00468
%RSD	1.5328	.90290	.29971	2.1444	.19366	2.5473	3.2055	1.9480	3.8480	9.0509	30.635	2.1778	2.1778	4.7336
#1	.02344	.20271	.01053	.01873	1.0517	.04201	2.9957	.01124	.08463	.01757	.01267	.47492	1.0163	.10211
#2	.02294	.20014	.01058	.01817	1.0545	.04052	2.8629	.01156	.08936	.01997	.01968	.46052	.98550	.09549
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00997**	**.01434**	**.00986**	**.01770**	**.07303**	**.00959**	**.02075**	**.01524**
Stddev	.00005	.00190	.00009	.00372	.02584	.00008	.00006	.00143
%RSD	.52189	13.284	.94339	21.013	35.377	.83270	.28654	9.4020
#1	.01001	.01299	.00993	.02033	.09130	.00954	.02079	.01626
#2	.00993	.01568	.00980	.01507	.05476	.00965	.02071	.01423
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2759.4**	**52789.**	**6029.8**
Stddev	2.5	67.	18.9
%RSD	.09216	.12720	.31329
#1	2761.2	52742.	6016.4
#2	2757.6	52837.	6043.1

Sample Name: 280-97928-A-15-A Acquired: 6/13/2017 0:34:39 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00072**	**103.05**	**.05459**	**.03749**	**.62640**	**.00481**	**.00036**	**242.22**	**.00304**
Stddev	.00012	.12	.00105	.00080	.00045	.00011	.00084	.19	.00009
%RSD	16.358	.11199	1.9189	2.1223	.07155	2.2979	234.58	.07858	2.9660
#1	-.00081	102.96	.05533	.03693	.62608	.00489	.00095	242.35	.00310
#2	-.00064	103.13	.05385	.03806	.62671	.00474	-.00024	242.08	.00297
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07119**	**.12650**	**.36829**	**207.99**	**13.260**	**.24300**	**44.001**	W **10.777**	**.00271**
Stddev	.00215	.00521	.00169	.40	.062	.00118	.083	.025	.00068
%RSD	3.0156	4.1198	.45880	.19387	.46783	.48702	.18807	.22974	25.161
#1	.07271	.13018	.36948	207.70	13.216	.24384	44.060	10.759	.00320
#2	.06967	.12281	.36709	208.27	13.303	.24216	43.943	10.794	.00223
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.72657**	**.17628**	**5.8212**	**.10091**	**1.0645**	**.01369**	**-.00036**	**4.0310**	**8.6264**
Stddev	.01686	.00625	.1618	.00211	.0348	.00315	.00154	.0538	.1151
%RSD	2.3210	3.5451	2.7788	2.0867	3.2729	23.034	426.67	1.3338	1.3338
#1	.71465	.18070	5.9356	.10239	1.0891	.01592	-.00145	4.0691	8.7078
#2	.73850	.17186	5.7068	.09942	1.0399	.01146	.00073	3.9930	8.5451
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00757**	**.39126**	**.22565**	**.76762**	**.00996**	**.05441**	**.19914**	**.63231**	**.04204**
Stddev	.00241	.00093	.00194	.00089	.00158	.00740	.00022	.00134	.00040
%RSD	31.871	.23838	.85888	.11551	15.902	13.606	.11005	.21158	.96082
#1	.00927	.39060	.22702	.76825	.00884	.05965	.19899	.63136	.04232
#2	.00586	.39192	.22428	.76700	.01108	.04918	.19930	.63326	.04175
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**3007.5**	**55984.**	**6996.8**
Stddev	16.8	121.	67.0
%RSD	.55701	.21672	.95815
#1	3019.3	56070.	6949.4
#2	2995.6	55898.	7044.2

Sample Name: 280-97928-B-16-A Acquired: 6/13/2017 0:37:15 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00060**	**154.58**	**.05587**	**.03425**	**.50599**	**.00647**	**-.00165**	**40.551**	**.00204**
Stddev	.00069	.22	.00549	.00092	.00133	.00005	.00144	.041	.00004
%RSD	116.09	.14469	9.8302	2.6817	.26216	.71494	87.453	.10030	2.1599
#1	.00109	154.42	.05975	.03490	.50506	.00651	-.00267	40.522	.00207
#2	.00011	154.74	.05198	.03360	.50693	.00644	-.00063	40.580	.00201
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09655**	**.16386**	**.25041**	**234.09**	**14.770**	**.23406**	**37.688**	**9.3947**	**.00155**
Stddev	.00254	.00394	.00085	.67	.015	.00046	.244	.1418	.00079
%RSD	2.6299	2.4038	.33975	.28767	.09983	.19751	.64705	1.5092	50.659
#1	.09835	.16665	.25102	233.62	14.781	.23439	37.860	9.4949	.00211
#2	.09476	.16108	.24981	234.57	14.760	.23373	37.515	9.2944	.00100
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0041**	**.16124**	**5.2981**	**.21376**	**1.2572**	**.01841**	**.00227**	**5.1886**	**11.104**
Stddev	.0132	.00484	.1654	.00368	.0298	.00022	.00335	.0171	.037
%RSD	1.3115	3.0018	3.1218	1.7197	2.3735	1.2182	147.93	.33003	.33003
#1	1.0134	.16466	5.4150	.21636	1.2783	.01857	-.00010	5.1765	11.078
#2	.99477	.15782	5.1811	.21116	1.2361	.01826	.00464	5.2008	11.130
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01380**	**.10415**	**.03423**	**.57433**	**.00775**	**.13623**	**.25651**	**.69025**	**.02208**
Stddev	.00034	.00020	.00084	.00023	.00295	.03061	.00019	.00327	.00125
%RSD	2.4938	.19418	2.4431	.03962	38.099	22.470	.07330	.47303	5.6694
#1	.01404	.10401	.03364	.57449	.00984	.15788	.25664	.69255	.02296
#2	.01355	.10429	.03482	.57417	.00566	.11459	.25637	.68794	.02119
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2884.7**	**52458.**	**6415.2**
Stddev	7.6	408.	48.5
%RSD	.26281	.77861	.75649
#1	2890.1	52169.	6449.6
#2	2879.3	52747.	6380.9

Sample Name: 280-97928-C-17-A Acquired: 6/13/2017 0:39:50 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00165**	**95.666**	**.03165**	**.02467**	**.44229**	**.00478**	**-.00161**	**15.771**	**.00132**
Stddev	.00054	.024	.00250	.00150	.00178	.00013	.00182	.021	.00013
%RSD	32.512	.02519	7.8970	6.0746	.40146	2.6273	113.52	.13338	9.7850
#1	-.00203	95.649	.03342	.02573	.44103	.00487	-.00032	15.756	.00123
#2	-.00127	95.683	.02988	.02361	.44354	.00469	-.00289	15.786	.00141
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06990**	**.11696**	**.21357**	**198.93**	**10.288**	**.25068**	**27.475**	**8.1746**	**.00168**
Stddev	.00309	.00533	.00044	.77	.064	.00408	.129	.0563	.00020
%RSD	4.4150	4.5604	.20465	.38514	.62073	1.6281	.46889	.68850	11.675
#1	.07209	.12074	.21388	199.47	10.333	.25357	27.566	8.1348	.00181
#2	.06772	.11319	.21326	198.38	10.243	.24779	27.384	8.2144	.00154
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.86407**	**.13980**	**3.6499**	**.06077**	**.23404**	**.01155**	**.00930**	**4.7670**	**10.201**
Stddev	.00429	.00554	.1291	.00370	.00631	.00269	.01019	.0189	.041
%RSD	.49604	3.9615	3.5374	6.0890	2.6970	23.256	109.54	.39701	.39701
#1	.86104	.14372	3.7412	.06339	.23850	.00965	.01651	4.7804	10.230
#2	.86710	.13588	3.5586	.05816	.22957	.01345	.00210	4.7537	10.173
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00874**	**.05753**	**.04192**	**1.2475**	**.00749**	**.06908**	**.20843**	**.42044**	**.05039**
Stddev	.00078	.00004	.00099	.0055	.00449	.01969	.00015	.00016	.00166
%RSD	8.9514	.07302	2.3528	.43698	59.899	28.499	.07362	.03729	3.2912
#1	.00929	.05756	.04122	1.2513	.01066	.08300	.20832	.42055	.04921
#2	.00818	.05750	.04262	1.2436	.00432	.05516	.20854	.42033	.05156
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**3087.0**	**57601.**	**7008.3**
Stddev	4.4	83.	23.4
%RSD	.14187	.14446	.33440
#1	3090.1	57542.	7024.8
#2	3083.9	57660.	6991.7

Sample Name: 280-97928-C-17-A @5 Acquired: 6/13/2017 0:42:27 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 5x

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k **-.00004**	k **21.633**	k **.00334**	**.00595**	**.09947**	k **.00098**	k **.00926**	**3.5947**	k **-.00003**
Stddev	.00017	.077	.00501	.00023	.00061	.00010	.00186	.0096	.00002
%RSD	398.70	.35482	150.17	3.8534	.61595	10.128	20.045	.26601	84.558
#1	k .00008	k 21.687	k .00688	.00578	.09990	k .00091	k .01057	3.5879	k -.00004
#2	k -.00017	k 21.578	k -.00021	.00611	.09904	k .00105	k .00795	3.6014	k -.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k **.01721**	**.02656**	k **.04826**	k **44.958**	**2.3866**	**.05732**	k **6.3744**	**1.8829**	k **.00018**
Stddev	.00100	.00074	.00045	.047	.0080	.00136	.0244	.0087	.00087
%RSD	5.8349	2.7862	.94033	.10368	.33688	2.3783	.38317	.45996	489.99
#1	k .01792	.02709	k .04794	k 44.925	2.3809	.05829	k 6.3916	1.8890	k .00079
#2	k .01650	.02604	k .04858	k 44.991	2.3923	.05636	k 6.3571	1.8768	k -.00044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.20185**	k **.03375**	**.84130**	k **.01638**	k **.03856**	k **.00177**	k **.00055**	k **1.0447**	k **2.2357**
Stddev	.01127	.00092	.02096	.00101	.00321	.00094	.00315	.0031	.0067
%RSD	5.5845	2.7227	2.4916	6.1543	8.3309	52.980	574.52	.29924	.29924
#1	.19388	k .03440	.85612	k .01709	k .03629	k .00243	k -.00168	k 1.0425	k 2.2310
#2	.20982	k .03310	.82648	k .01566	k .04083	k .00111	k .00278	k 1.0470	k 2.2405
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k **.00355**	**.01297**	k **.03970**	k **.28289**	k **.00394**	k **-.00982**	k **.04653**	k **.09685**	k **.00996**
Stddev	.00066	.00018	.00074	.00579	.00201	.02447	.00075	.00151	.00050
%RSD	18.456	1.3884	1.8550	2.0478	50.897	249.16	1.6038	1.5608	4.9978
#1	k .00401	.01284	k .03918	k .28698	k .00536	k -.02713	k .04706	k .09792	k .00961
#2	k .00309	.01310	k .04022	k .27879	k .00252	k .00748	k .04600	k .09578	k .01031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2853.3**	**54099.**	**6358.4**
Stddev	10.2	456.	24.7
%RSD	.35799	.84254	.38805
#1	2860.6	53776.	6340.9
#2	2846.1	54421.	6375.8

Sample Name: 280-97928-A-18-A Acquired: 6/13/2017 0:45:00 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00080**	**32.228**	**.02441**	**.01601**	**.10135**	**.00139**	**-.00203**	**13.649**	**-.00009**
Stddev	.00040	.123	.00084	.00022	.00008	.00000	.00020	.020	.00031
%RSD	49.850	.38171	3.4578	1.3900	.07449	.04318	9.9271	.14863	368.03
#1	-.00052	32.315	.02500	.01616	.10130	.00139	-.00189	13.664	-.00031
#2	-.00109	32.141	.02381	.01585	.10140	.00139	-.00217	13.635	.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02353**	**.03629**	**.07726**	**66.173**	**5.9773**	**.05415**	**14.651**	**2.3469**	**-.00062**
Stddev	.00062	.00173	.00036	.296	.0128	.00234	.028	.0117	.00046
%RSD	2.6221	4.7606	.46454	.44748	.21418	4.3228	.18906	.49874	74.786
#1	.02397	.03751	.07751	66.383	5.9863	.05580	14.670	2.3387	-.00095
#2	.02309	.03507	.07700	65.964	5.9682	.05249	14.631	2.3552	-.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.33429**	**.05197**	**2.2636**	**.01778**	**.09010**	**.00474**	**.00525**	**4.4918**	**9.6124**
Stddev	.00235	.00141	.0712	.00099	.00483	.00286	.00391	.0273	.0584
%RSD	.70241	2.7092	3.1434	5.5442	5.3659	60.355	74.603	.60717	.60717
#1	.33263	.05296	2.3139	.01708	.09352	.00676	.00248	4.5110	9.6536
#2	.33595	.05097	2.2133	.01848	.08668	.00272	.00801	4.4725	9.5711
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00857**	**.03355**	**.01743**	**.29718**	**.00546**	**.02307**	**.05819**	**.13465**	**.02783**
Stddev	.00032	.00012	.00012	.00787	.00072	.02467	.00032	.00038	.00230
%RSD	3.7433	.36396	.70889	2.6476	13.190	106.93	.54715	.28435	8.2717
#1	.00834	.03346	.01752	.29162	.00597	.00563	.05796	.13492	.02620
#2	.00879	.03363	.01735	.30275	.00495	.04052	.05841	.13438	.02946
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2892.6**	**54506.**	**6438.5**
Stddev	3.2	171.	68.0
%RSD	.11125	.31392	1.0568
#1	2894.9	54385.	6390.4
#2	2890.3	54627.	6486.6

Sample Name: 280-97928-C-19-A Acquired: 6/13/2017 0:47:34 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**37.886**	**.01473**	**.01603**	**.11596**	**.00165**	**.00168**	**12.876**	**.00029**
Stddev	.00006	.162	.00088	.00067	.00027	.00013	.00065	.085	.00007
%RSD	574.73	.42877	5.9544	4.1972	.23708	8.1428	38.689	.65839	24.227
#1	.00003	38.001	.01535	.01650	.11615	.00175	.00214	12.816	.00034
#2	-.00005	37.772	.01411	.01555	.11576	.00156	.00122	12.935	.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02729**	**.04158**	**.08673**	**77.541**	**6.4623**	**.06425**	**16.436**	**2.6971**	**.00000**
Stddev	.00100	.00201	.00092	.338	.0196	.00012	.044	.0051	.00036
%RSD	3.6531	4.8275	1.0650	.43637	.30281	.18523	.26661	.19024	8695.0
#1	.02799	.04300	.08739	77.780	6.4761	.06416	16.467	2.7007	.00026
#2	.02658	.04016	.08608	77.302	6.4485	.06433	16.405	2.6935	-.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50816**	**.06087**	**2.7526**	**.01940**	**.03109**	**.00292**	**.00282**	**3.9358**	**8.4227**
Stddev	.01096	.00206	.0855	.00009	.00157	.00070	.00227	.0678	.1452
%RSD	2.1570	3.3871	3.1051	.47883	5.0389	24.038	80.662	1.7238	1.7238
#1	.50041	.06233	2.8130	.01933	.02999	.00342	.00443	3.9838	8.5253
#2	.51591	.05941	2.6922	.01947	.03220	.00242	.00121	3.8878	8.3200
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00720**	**.03603**	**.01885**	**.30657**	**.00476**	**.02864**	**.06782**	**.15941**	**.02951**
Stddev	.00057	.00016	.00001	.00679	.00337	.00084	.00007	.00019	.00262
%RSD	7.9150	.44851	.06298	2.2133	70.899	2.9236	.09650	.12165	8.8751
#1	.00680	.03592	.01884	.31137	.00237	.02923	.06787	.15927	.03136
#2	.00760	.03615	.01886	.30177	.00714	.02804	.06777	.15954	.02766
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2859.7**	**53688.**	**6475.5**
Stddev	1.3	165.	22.8
%RSD	.04564	.30693	.35159
#1	2858.8	53571.	6459.4
#2	2860.7	53804.	6491.6

Sample Name: 280-97928-B-20-A Acquired: 6/13/2017 0:57:01 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00075**	**41.888**	**.02451**	**.01868**	**.12098**	**.00195**	**.00346**	**11.966**	**.00018**
Stddev	.00035	.168	.00431	.00075	.00043	.00004	.00197	.002	.00008
%RSD	46.956	.40210	17.573	4.0169	.35464	2.1211	56.791	.01546	42.915
#1	-.00050	41.769	.02755	.01815	.12068	.00192	.00485	11.968	.00013
#2	-.00100	42.007	.02146	.01921	.12128	.00198	.00207	11.965	.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03084**	**.04863**	**.09881**	**86.271**	**7.2715**	**.06993**	**18.351**	**2.9956**	**-.00036**
Stddev	.00067	.00063	.00039	.087	.0478	.00085	.037	.0059	.00021
%RSD	2.1652	1.3042	.39196	.10051	.65803	1.2209	.20390	.19571	58.136
#1	.03131	.04908	.09854	86.209	7.2377	.06933	18.324	2.9914	-.00021
#2	.03037	.04818	.09909	86.332	7.3053	.07054	18.377	2.9997	-.00051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.37367**	**.07028**	**2.9372**	**.02161**	**.00938**	**.00492**	**.00185**	**4.3422**	**9.2924**
Stddev	.01007	.00040	.0313	.00135	.00022	.00450	.00252	.0736	.1574
%RSD	2.6957	.57407	1.0666	6.2664	2.3739	91.338	135.77	1.6940	1.6940
#1	.36655	.07056	2.9593	.02257	.00954	.00174	.00007	4.2902	9.1810
#2	.38080	.06999	2.9150	.02065	.00923	.00810	.00363	4.3942	9.4037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00998**	**.03699**	**.02608**	**.33195**	**.00570**	**.02795**	**.07527**	**.16881**	**.03676**
Stddev	.00017	.00038	.00011	.00368	.00026	.01842	.00060	.00036	.00098
%RSD	1.6734	1.0378	.43128	1.1074	4.4737	65.905	.80334	.21425	2.6556
#1	.01010	.03672	.02600	.33455	.00588	.04098	.07485	.16907	.03745
#2	.00987	.03726	.02616	.32935	.00552	.01493	.07570	.16856	.03607
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2903.0**	**54552.**	**6488.7**
Stddev	12.7	121.	16.1
%RSD	.43593	.22149	.24745
#1	2894.1	54637.	6500.1
#2	2912.0	54466.	6477.4

Sample Name: 280-97928-B-21-A Acquired: 6/13/2017 0:59:33 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00021**	**32.857**	**.01539**	**.01649**	**.09921**	**.00138**	**.00312**	**33.107**	**.00041**
Stddev	.00024	.042	.00562	.00019	.00001	.00001	.00007	.077	.00014
%RSD	115.45	.12884	36.512	1.1741	.00951	.72654	2.1271	.23191	35.118
#1	-.00038	32.887	.01936	.01636	.09922	.00137	.00317	33.162	.00031
#2	-.00004	32.827	.01141	.01663	.09921	.00139	.00307	33.053	.00051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02437**	**.03724**	**.08208**	**70.262**	**6.3862**	**.05950**	**17.735**	**2.4029**	**-.00124**
Stddev	.00081	.00115	.00054	.384	.0103	.00151	.052	.0044	.00087
%RSD	3.3181	3.1014	.66021	.54656	.16089	2.5359	.29250	.18497	69.893
#1	.02494	.03806	.08246	70.533	6.3935	.05844	17.771	2.4061	-.00186
#2	.02380	.03642	.08170	69.990	6.3789	.06057	17.698	2.3998	-.00063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49401**	**.05426**	**2.4719**	**.01693**	**.06568**	**.00443**	**-.00048**	**4.2769**	**9.1525**
Stddev	.00506	.00243	.0835	.00101	.00663	.00325	.00307	.0351	.0751
%RSD	1.0246	4.4778	3.3787	5.9483	10.102	73.433	646.81	.82103	.82103
#1	.49759	.05598	2.5310	.01764	.07037	.00673	.00170	4.3017	9.2057
#2	.49043	.05254	2.4129	.01622	.06099	.00213	-.00265	4.2521	9.0994
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00938**	**.06507**	**.01413**	**.26717**	**.00575**	**.04994**	**.06025**	**.13946**	**.02966**
Stddev	.00089	.00028	.00117	.00267	.00365	.00966	.00033	.00018	.00134
%RSD	9.4660	.42816	8.2867	.99829	63.583	19.334	.54128	.13067	4.5029
#1	.00875	.06527	.01496	.26905	.00316	.04312	.06002	.13933	.02872
#2	.01000	.06487	.01331	.26528	.00833	.05677	.06048	.13959	.03061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2869.2**	**53721.**	**6428.7**
Stddev	.3	23.	9.4
%RSD	.00981	.04363	.14647
#1	2869.0	53737.	6435.4
#2	2869.4	53704.	6422.1

Sample Name: 280-97928-B-22-A Acquired: 6/13/2017 1:02:07 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00047**	**40.977**	**.02456**	**.01789**	**.13635**	**.00182**	**.00131**	**10.842**	**.00038**
Stddev	.00000	.141	.00791	.00089	.00039	.00001	.00066	.008	.00008
%RSD	1.0400	.34308	32.193	4.9612	.28694	.57841	50.305	.07195	22.355
#1	-.00046	41.077	.01897	.01852	.13608	.00182	.00178	10.847	.00044
#2	-.00047	40.878	.03016	.01726	.13663	.00181	.00084	10.836	.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02979**	**.04488**	**.09157**	**82.763**	**6.7586**	**.06832**	**17.520**	**2.9346**	**-.00059**
Stddev	.00105	.00127	.00033	.041	.0379	.00055	.040	.0052	.00025
%RSD	3.5140	2.8332	.36232	.04979	.56087	.80976	.22927	.17834	43.140
#1	.03053	.04578	.09180	82.733	6.7854	.06871	17.549	2.9383	-.00041
#2	.02905	.04398	.09134	82.792	6.7318	.06793	17.492	2.9309	-.00077
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.35600**	**.06500**	**2.7512**	**.02345**	**.22810**	**.00813**	**.00065**	**3.7891**	**8.1087**
Stddev	.00953	.00188	.0713	.00223	.00232	.00044	.00577	.0015	.0032
%RSD	2.6768	2.8932	2.5903	9.4976	1.0183	5.4610	891.22	.03982	.03982
#1	.34927	.06633	2.8016	.02503	.22974	.00844	-.00343	3.7902	8.1110
#2	.36274	.06367	2.7008	.02188	.22646	.00782	.00473	3.7880	8.1064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00972**	**.03216**	**.01705**	**.32364**	**.00638**	**.04980**	**.07260**	**.17135**	**.02422**
Stddev	.00116	.00013	.00145	.00478	.00241	.00705	.00019	.00169	.00083
%RSD	11.892	.39927	8.4889	1.4783	37.702	14.158	.25890	.98591	3.4339
#1	.01054	.03225	.01807	.32702	.00808	.04482	.07247	.17255	.02481
#2	.00890	.03207	.01602	.32025	.00468	.05479	.07273	.17016	.02363
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2936.1**	**55339.**	**6614.9**
Stddev	14.4	27.	24.8
%RSD	.48989	.04909	.37517
#1	2946.2	55319.	6632.4
#2	2925.9	55358.	6597.3

Sample Name: CCVH-4579429 Acquired: 6/13/2017 1:04:40 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00180**	**48.673**	**-.01378**	**.00116**	**.00032**	**.00013**	**1.0172**	**.00748**	**.00030**	**-.00129**	**.00033**	**.01278**	**48.689**
Stddev	.00079	.077	.00525	.00012	.00015	.00011	.0398	.00588	.00028	.00054	.00035	.00086	.057
%RSD	43.727	.15877	38.144	10.499	48.751	87.907	3.9169	78.631	95.744	42.237	106.20	6.7235	.11659
#1	-.00236	48.618	-.01749	.00107	.00043	.00005	1.0453	.00332	.00050	-.00090	.00058	.01218	48.729
#2	-.00125	48.727	-.01006	.00124	.00021	.00021	.98900	.01163	.00010	-.00167	.00008	.01339	48.648
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09891**	**.00412**	**.04043**	**-.00163**	**-.00165**	**244.94**	**.00112**	**.00390**	**.00358**	**4.9057**	**.00281**	**-.00646**	**-.03101**
Stddev	.00919	.00115	.00124	.00002	.00015	.11	.00017	.00183	.00048	.1510	.00136	.00181	.01455
%RSD	9.2894	27.959	3.0610	1.2398	9.0047	.04593	15.610	47.034	13.280	3.0775	48.299	27.989	46.910
#1	.09242	.00331	.04130	-.00162	-.00176	244.86	.00124	.00520	.00391	5.0125	.00185	-.00518	-.02072
#2	.10541	.00494	.03955	-.00165	-.00155	245.02	.00099	.00260	.00324	4.7989	.00377	-.00774	-.04130
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.06636**	**-.00032**	**.00031**	**4.8976**	**.02108**	**.00192**	**10.254**	**.01224**	**.00186**	**.05521**
Stddev	.03113	.00122	.00001	.0059	.00012	.00187	.031	.00032	.00140	.00096
%RSD	46.910	379.26	2.7599	.12104	.58491	97.674	.30487	2.6313	75.256	1.7368
#1	-.04435	-.00118	.00032	4.9018	.02117	.00059	10.276	.01246	.00087	.05589
#2	-.08837	.00054	.00031	4.8934	.02100	.00324	10.232	.01201	.00285	.05453
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2712.6**	**50459.**	**6091.5**
Stddev	2.0	5.	13.9
%RSD	.07195	.01025	.22792
#1	2711.2	50463.	6101.3
#2	2714.0	50456.	6081.7

Sample Name: CCV-4580817 Acquired: 6/13/2017 1:07:14 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50621**	F **.56804**	**1.0118**	**.50812**	**.48836**	**.49015**	**-.00039**	**4.8955**	**.50229**	**.49852**	**.49035**	**.50276**
Stddev	.00218	.01922	.0163	.01107	.00043	.00025	.00059	.0012	.01267	.01401	.01455	.00199
%RSD	.43081	3.3835	1.6155	2.1795	.08866	.05032	150.41	.02362	2.5218	2.8113	2.9664	.39646
#1	.50775	.58163	1.0233	.51595	.48806	.48997	.00002	4.8947	.51125	.50843	.50064	.50417
#2	.50467	.55445	1.0002	.50029	.48867	.49032	-.00081	4.8963	.49333	.48861	.48006	.50135
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4784**	**49.610**	**1.0021**	**20.163**	**.50175**	**.48772**	**4.9851**	**.50017**	**1.0292**	**1.0093**	**-.00620**	**1.0107**
Stddev	.0003	.183	.0025	.115	.00113	.01258	.0016	.01391	.0193	.0203	.00450	.0292
%RSD	.01080	.36953	.24602	.56800	.22525	2.5796	.03228	2.7820	1.8751	2.0148	72.467	2.8859
#1	2.4782	49.480	1.0004	20.244	.50255	.49662	4.9863	.51001	1.0429	1.0237	-.00302	1.0314
#2	2.4786	49.740	1.0039	20.082	.50095	.47883	4.9840	.49034	1.0156	.99496	-.00938	.99010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0245**	**4.8799**	**10.443**	**.99183**	**.49243**	**.00855**	**.49699**	**1.0476**	**.04850**	**.49610**	**.50136**	**.48695**
Stddev	.0329	.0091	.019	.02782	.00103	.00021	.00099	.0231	.03997	.00358	.00350	.00162
%RSD	3.2133	.18552	.18552	2.8046	.20829	2.4201	.19825	2.2015	82.411	.72244	.69831	.33353
#1	1.0478	4.8863	10.457	1.0115	.49171	.00869	.49768	1.0639	.07676	.49864	.50383	.48810
#2	1.0012	4.8735	10.429	.97216	.49316	.00840	.49629	1.0313	.02024	.49357	.49888	.48580
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2749.2**	**52207.**	**6183.0**
Stddev	3.4	80.	32.2
%RSD	.12422	.15303	.52069
#1	2751.6	52151.	6205.8
#2	2746.8	52264.	6160.3

Sample Name: CCB Acquired: 6/13/2017 1:09:42 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00032**	F **.09260**	**.00520**	**.00083**	**-.00007**	**.00011**	**.00545**	**-.00243**	**-.00011**	**.00037**	**.00046**	**.00026**
Stddev	.00003	.12497	.00404	.00034	.00003	.00006	.00206	.00542	.00042	.00014	.00028	.00087
%RSD	10.022	134.97	77.724	40.498	43.198	59.373	37.808	223.17	386.18	36.437	61.019	338.65
#1	-.00034	.00423	.00806	.00106	-.00005	.00015	.00399	-.00627	-.00041	.00028	.00026	.00087
#2	-.00029	.18096	.00234	.00059	-.00009	.00006	.00691	.00140	.00019	.00047	.00066	-.00036
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.07000										
Low Limit		-.07000										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00522**	**.10362**	**.00239**	**-.00032**	**.00021**	**.00068**	**.01637**	**.00069**	**.00770**	**.00349**	**-.00664**	**.00025**
Stddev	.00382	.09324	.00068	.00238	.00013	.00096	.00735	.00024	.00601	.00170	.00317	.00062
%RSD	73.067	89.979	28.335	739.29	58.468	141.12	44.906	35.416	78.009	48.661	47.673	248.18
#1	.00792	.16955	.00286	.00136	.00030	.00000	.01117	.00051	.00345	.00469	-.00888	.00069
#2	.00252	.03769	.00191	-.00201	.00013	.00135	.02157	.00086	.01195	.00229	-.00440	-.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00087**	**-.01843**	**-.03944**	**.00130**	**.00017**	**-.00111**	**.00006**	**.00167**	**.02546**	**-.00016**	**.00095**	**.00040**
Stddev	.00175	.00754	.01614	.00149	.00001	.00014	.00005	.00382	.01619	.00074	.00046	.00074
%RSD	202.51	40.913	40.913	114.48	7.9393	12.423	74.954	228.41	63.593	468.83	48.696	185.08
#1	-.00211	-.02376	-.05085	.00236	.00018	-.00121	.00010	.00437	.03691	.00036	.00128	-.00012
#2	.00037	-.01310	-.02803	.00025	.00016	-.00102	.00003	-.00103	.01401	-.00068	.00062	.00092
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2732.4**	**52094.**	**6061.5**
Stddev	.2	8.	10.5
%RSD	.00706	.01609	.17394
#1	2732.3	52100.	6054.0
#2	2732.6	52088.	6068.9

Sample Name: CCVL-4589022 Acquired: 6/13/2017 1:12:20 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01074**	**.11771**	F **.00512**	**.09911**	**.00927**	**.00106**	**.11762**	**.19664**	**.00481**	**.01019**	**.00987**	**.01589**
Stddev	.00066	.00471	.00536	.00358	.00011	.00002	.00045	.00604	.00028	.00039	.00055	.00025
%RSD	6.1251	4.0045	104.53	3.6090	1.2396	1.5925	.38542	3.0729	5.7664	3.8721	5.5869	1.5738
#1	.01027	.12105	.00891	.10164	.00935	.00104	.11730	.19236	.00501	.01047	.01026	.01572
#2	.01120	.11438	.00134	.09658	.00919	.00107	.11794	.20091	.00462	.00991	.00948	.01607
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10349**	**3.1151**	**.02417**	**.20893**	**.01068**	**.01840**	**1.0319**	**.04113**	**2.9400**	**.01096**	**.09364**	**.02155**
Stddev	.00018	.0485	.00076	.00004	.00008	.00046	.0021	.00109	.1153	.00276	.00098	.00120
%RSD	.17459	1.5553	3.1394	.01893	.78473	2.4945	.20672	2.6554	3.9205	25.204	1.0448	5.5871
#1	.10362	3.1493	.02364	.20896	.01074	.01873	1.0304	.04190	3.0215	.01292	.09433	.02240
#2	.10336	3.0808	.02471	.20890	.01062	.01808	1.0334	.04036	2.8584	.00901	.09295	.02070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02257**	**.47936**	**1.0258**	**.09874**	**.01008**	**.01416**	**.01010**	**.01645**	F **.10193**	**.00971**	**.02122**	**.01865**
Stddev	.00345	.02360	.0505	.00541	.00002	.00093	.00009	.00012	.00435	.00006	.00038	.00021
%RSD	15.276	4.9222	4.9222	5.4809	.18096	6.5525	.91257	.70727	4.2703	.59289	1.7958	1.1439
#1	.02501	.46268	.99014	.10257	.01009	.01350	.01003	.01636	.10501	.00975	.02095	.01850
#2	.02014	.49605	1.0615	.09492	.01007	.01482	.01016	.01653	.09886	.00967	.02149	.01880
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2739.9**	**51257.**	**5863.1**
Stddev	8.4	111.	32.3
%RSD	.30725	.21740	.55161
#1	2733.9	51336.	5886.0
#2	2745.8	51178.	5840.3

Sample Name: MB 280-376612/1-A Acquired: 6/13/2017 1:14:58 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: 6/9 Custom ID2: Custom ID3:
Comment: 376612 SOIL 6010B (Cu)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00014**	**.03540**	**-.00013**	**-.00025**	**.00242**	**-.00002**	**.00224**	F **.26594**	**-.00050**
Stddev	.00066	.00136	.00286	.00007	.00030	.00013	.00511	.00342	.00012
%RSD	467.92	3.8461	2146.2	26.915	12.328	700.78	228.42	1.2870	23.756
#1	-.00061	.03636	-.00215	-.00020	.00263	-.00011	-.00138	.26836	-.00042
#2	.00032	.03444	.00189	-.00029	.00221	.00007	.00585	.26352	-.00058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								.20000	
Low Limit								-.20000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00008**	**.00063**	**.00244**	W **.07084**	**.11690**	W **.00509**	W **.10245**	**.00344**	**-.00010**
Stddev	.00005	.00002	.00010	.00015	.00513	.00058	.02654	.00362	.00036
%RSD	68.793	2.9500	3.9870	.21433	4.3883	11.375	25.906	105.14	348.09
#1	-.00012	.00065	.00237	.07094	.11327	.00468	.08368	.00088	-.00035
#2	-.00004	.00062	.00251	.07073	.12053	.00550	.12122	.00600	.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass
High Limit				.05000		.00500	.10000		
Low Limit				-.05000		-.00500	-.10000		

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.30963**	**.00072**	**.02291**	**.00219**	**.00517**	**-.00125**	**-.00585**	**.01373**	**.02938**
Stddev	.00684	.00047	.00138	.00084	.00156	.00054	.00297	.01449	.03102
%RSD	2.2091	64.663	6.0400	38.094	30.166	43.340	50.816	105.56	105.56
#1	.31446	.00039	.02389	.00160	.00406	-.00163	-.00795	.02398	.05132
#2	.30479	.00105	.02193	.00279	.00627	-.00087	-.00375	.00348	.00745
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01572**	**.00075**	**.00174**	**.00021**	**.00444**	**.00635**	**.00024**	**.00363**	**.00118**
Stddev	.00161	.00002	.00136	.00067	.00202	.01691	.00035	.00094	.00132
%RSD	10.234	2.7626	78.328	314.71	45.629	266.41	150.21	25.844	111.96
#1	.01459	.00077	.00270	-.00026	.00301	-.00561	-.00001	.00297	.00211
#2	.01686	.00074	.00077	.00068	.00587	.01830	.00049	.00430	.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2750.7**	**52193.**	**6092.6**
Stddev	1.3	785.	34.8
%RSD	.04831	1.5035	.57037
#1	2749.8	52748.	6117.1
#2	2751.6	51638.	6068.0

Sample Name: LCS 280-376612/2-A Acquired: 6/13/2017 1:17:37 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376612 SOIL 6010B (Cu)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05223**	**2.2168**	**1.0633**	**1.0287**	**1.9915**	**.04997**	**2.1566**	**48.672**	**.10357**
Stddev	.00004	.0449	.0141	.0189	.0021	.00009	.0411	.059	.00196
%RSD	.07383	2.0244	1.3211	1.8330	.10662	.18292	1.9043	.12145	1.8924
#1	.05225	2.2485	1.0732	1.0420	1.9900	.05004	2.1857	48.630	.10495
#2	.05220	2.1850	1.0533	1.0154	1.9930	.04991	2.1276	48.713	.10218
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49656**	**.19985**	**.25747**	**1.0542**	**50.561**	**1.0156**	**50.656**	**.50521**	**.96904**
Stddev	.00696	.00348	.00199	.0038	.020	.0014	.022	.00053	.01448
%RSD	1.4022	1.7398	.77147	.35944	.03973	.14153	.04356	.10571	1.4943
#1	.50149	.20231	.25607	1.0515	50.547	1.0146	50.671	.50559	.97928
#2	.49164	.19739	.25888	1.0569	50.575	1.0166	50.640	.50483	.95880
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.661**	**.49926**	**10.849**	**.50371**	**2.0729**	**.52755**	**2.1059**	**1.3162**	**2.8167**
Stddev	.175	.00896	.194	.00901	.0328	.00957	.0563	.0075	.0161
%RSD	.33904	1.7942	1.7875	1.7891	1.5841	1.8138	2.6712	.57308	.57308
#1	51.785	.50559	10.986	.51009	2.0961	.53432	2.1457	1.3215	2.8281
#2	51.537	.49292	10.712	.49734	2.0497	.52079	2.0662	1.3109	2.8053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0102**	**1.0085**	**1.0190**	**1.0255**	**2.1021**	**2.1526**	**.50447**	**.51045**	**.49186**
Stddev	.0466	.0010	.0003	.0014	.0331	.0041	.00051	.00078	.00192
%RSD	2.3201	.10017	.02797	.13257	1.5733	.18887	.10179	.15302	.39015
#1	2.0432	1.0078	1.0192	1.0265	2.1255	2.1555	.50484	.50989	.49050
#2	1.9773	1.0092	1.0188	1.0246	2.0787	2.1497	.50411	.51100	.49322
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2645.4**	**49715.**	**5988.4**
Stddev	3.6	33.	31.3
%RSD	.13578	.06561	.52346
#1	2642.9	49692.	5966.2
#2	2648.0	49739.	6010.5

Sample Name: 280-97995-A-1-A Acquired: 6/13/2017 1:20:01 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376612 SOIL 6010B (Cu)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00607**	**11.111**	**.00869**	**.03386**	**.41220**	**.00021**	**.07352**	**27.643**	**.00331**
Stddev	.00026	.019	.00000	.00079	.00008	.00001	.00286	.007	.00008
%RSD	4.3615	.17264	.03912	2.3351	.01969	3.0413	3.8836	.02712	2.4049
#1	.00589	11.124	.00869	.03442	.41214	.00022	.07554	27.638	.00337
#2	.00626	11.097	.00868	.03331	.41226	.00021	.07150	27.649	.00325
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01170**	**.06998**	**.66497**	**33.414**	**6.4473**	**.01394**	**6.9970**	**.46740**	**.01028**
Stddev	.00052	.00230	.00297	.008	.0422	.00075	.0053	.00028	.00039
%RSD	4.4692	3.2871	.44661	.02363	.65375	5.3892	.07500	.06067	3.7812
#1	.01207	.07160	.66707	33.408	6.4771	.01447	7.0007	.46760	.01056
#2	.01133	.06835	.66287	33.419	6.4175	.01340	6.9933	.46720	.01001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.4368**	**.06433**	W **23.651**	**.07682**	**12.549**	**.00868**	**.01206**	**2.0494**	**4.3856**
Stddev	.0194	.00166	.624	.00039	.347	.00102	.00905	.0618	.1323
%RSD	1.3471	2.5873	2.6389	.50523	2.7668	11.712	75.050	3.0156	3.0156
#1	1.4505	.06550	24.093	.07710	12.794	.00939	.00566	2.0057	4.2921
#2	1.4231	.06315	23.210	.07655	12.303	.00796	.01847	2.0931	4.4791
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			20.000						
Low Limit			-6.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06243**	**.13549**	**.00047**	**.51951**	**-.00068**	**.00317**	**.03025**	**1.6665**	**.01594**
Stddev	.00041	.00004	.00230	.00024	.00110	.01985	.00108	.0053	.00091
%RSD	.65113	.02667	488.75	.04582	160.95	626.98	3.5751	.31934	5.7112
#1	.06272	.13552	.00210	.51968	.00009	.01720	.03101	1.6702	.01529
#2	.06214	.13547	-.00116	.51934	-.00146	-.01087	.02948	1.6627	.01658
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2782.9**	**52641.**	**6186.7**
Stddev	16.2	37.	28.8
%RSD	.58180	.06980	.46600
#1	2794.3	52667.	6207.0
#2	2771.4	52615.	6166.3

Sample Name: 280-97995-A-1-A SD@5 Acquired: 6/13/2017 1:22:32 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376612 SOIL 6010B (Cu)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00085**	**2.4937**	**.00068**	**.00585**	**.08441**	**.00001**	**.01785**	**5.7010**	**.00036**
Stddev	.00009	.0914	.00703	.00009	.00060	.00009	.00046	.0186	.00016
%RSD	10.265	3.6632	1029.3	1.4982	.70838	1103.0	2.5868	.32658	45.156
#1	.00091	2.5582	-.00429	.00591	.08484	-.00006	.01818	5.7142	.00047
#2	.00079	2.4291	.00566	.00578	.08399	.00007	.01753	5.6879	.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00203**	**.01391**	**.13694**	**6.9625**	**1.3281**	**.00566**	**1.4528**	**.09827**	**.00209**
Stddev	.00051	.00050	.00084	.0212	.0160	.00409	.0082	.00006	.00036
%RSD	25.007	3.5804	.61368	.30450	1.2069	72.250	.56288	.05835	17.175
#1	.00239	.01426	.13753	6.9775	1.3167	.00277	1.4586	.09831	.00234
#2	.00167	.01356	.13634	6.9476	1.3394	.00855	1.4470	.09823	.00183
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.29590**	**.01312**	**4.7620**	**.01893**	**2.4889**	**-.00058**	**-.00167**	**.37809**	**.80910**
Stddev	.00323	.00055	.1534	.00263	.0899	.00377	.00216	.02109	.04513
%RSD	1.0921	4.2277	3.2210	13.888	3.6114	647.73	129.76	5.5783	5.5783
#1	.29362	.01351	4.8704	.02078	2.5525	.00209	-.00320	.39300	.84102
#2	.29819	.01273	4.6535	.01707	2.4253	-.00325	-.00014	.36317	.77719
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01262**	**.02790**	**-.00092**	**.10643**	**.00082**	**.05391**	**.00622**	**.34469**	**.00472**
Stddev	.00013	.00026	.00019	.00272	.00176	.00477	.00070	.00042	.00036
%RSD	1.0517	.92199	21.099	2.5527	213.78	8.8464	11.315	.12164	7.7307
#1	.01271	.02809	-.00106	.10835	-.00042	.05728	.00573	.34439	.00446
#2	.01252	.02772	-.00078	.10451	.00207	.05054	.00672	.34498	.00498
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2781.0**	**52603.**	**6047.9**
Stddev	7.0	111.	18.0
%RSD	.25006	.21110	.29818
#1	2785.9	52682.	6035.2
#2	2776.1	52525.	6060.7

Sample Name: 280-97995-A-1-B MS Acquired: 6/13/2017 1:25:07 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376612 SOIL 6010B (Cu)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06616**	**19.086**	**1.0246**	**.99469**	**2.4086**	**.04855**	W **2.1176**	**78.882**	**.10138**
Stddev	.00020	.191	.0287	.02500	.0129	.00043	.0538	.530	.00252
%RSD	.30556	1.0013	2.7979	2.5135	.53684	.87870	2.5404	.67196	2.4857
#1	.06602	19.222	1.0449	1.0124	2.4177	.04885	2.1556	79.257	.10317
#2	.06630	18.951	1.0044	.97701	2.3994	.04825	2.0795	78.507	.09960
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48336**	**.27200**	**.97523**	**39.178**	**56.094**	**1.0025**	**57.047**	**1.0436**	**.91223**
Stddev	.01300	.00644	.00322	.240	.242	.0033	.169	.0024	.01944
%RSD	2.6904	2.3688	.32997	.61379	.43098	.33145	.29683	.23417	2.1316
#1	.49255	.27656	.97751	39.348	56.265	1.0049	57.167	1.0453	.92597
#2	.47416	.26744	.97296	39.008	55.923	1.0002	56.927	1.0419	.89848
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**52.440**	**.53222**	W **34.691**	**.56225**	**16.424**	**.47198**	**1.9928**	**3.9610**	**8.4765**
Stddev	.170	.01320	.919	.01185	.370	.01620	.0379	.0237	.0506
%RSD	.32474	2.4807	2.6482	2.1082	2.2537	3.4314	1.9046	.59723	.59723
#1	52.320	.54155	35.340	.57063	16.686	.48344	2.0196	3.9777	8.5123
#2	52.561	.52288	34.041	.55387	16.162	.46053	1.9659	3.9443	8.4407
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			20.000						
Low Limit			-6.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.7866**	**1.1464**	**.11949**	**.95078**	**1.9533**	**2.0334**	**.52748**	**2.3770**	**.05476**
Stddev	.0452	.0074	.00137	.00061	.0531	.0024	.00280	.0039	.00051
%RSD	2.5306	.64375	1.1467	.06462	2.7193	.11956	.53090	.16283	.92773
#1	1.8186	1.1517	.11852	.95035	1.9909	2.0351	.52946	2.3797	.05512
#2	1.7547	1.1412	.12046	.95121	1.9157	2.0317	.52550	2.3743	.05440
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2684.8**	**50723.**	**6188.5**
Stddev	3.8	40.	13.5
%RSD	.14153	.07908	.21888
#1	2682.1	50694.	6178.9
#2	2687.5	50751.	6198.1

Sample Name: 280-97995-A-1-C MSD Acquired: 6/13/2017 1:27:29 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376612 SOIL 6010B (Cu)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k **.06177**	k **21.395**	k **1.0476**	**1.0215**	**2.5128**	k **.04979**	kW **2.1690**	**83.297**	k **.10949**
Stddev	.00062	.057	.0244	.0197	.0018	.00004	.0415	.027	.00266
%RSD	.99810	.26612	2.3278	1.9232	.06979	.08374	1.9118	.03266	2.4267
#1	k .06133	k 21.355	k 1.0648	1.0354	2.5140	k .04976	k 2.1983	83.316	k .11136
#2	k .06221	k 21.436	k 1.0303	1.0076	2.5115	k .04981	k 2.1397	83.278	k .10761
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k **.49414**	k **.27474**	k **1.0664**	k **41.506**	**57.782**	**1.0202**	k **58.216**	k **1.0908**	k **.93500**
Stddev	.01023	.00683	.0022	.046	.116	.0037	.269	.0047	.01961
%RSD	2.0695	2.4842	.20810	.11013	.20051	.36641	.46254	.43008	2.0971
#1	k .50137	k .27957	k 1.0648	k 41.473	57.700	1.0176	k 58.025	k 1.0875	k .94886
#2	k .48691	k .26992	k 1.0679	k 41.538	57.864	1.0229	k 58.406	k 1.0941	k .92114
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**53.590**	k **.54569**	W **37.207**	k **.61776**	k **17.512**	k **.49240**	k **2.0520**	k **5.1775**	k **11.080**
Stddev	.293	.01056	.840	.01134	.339	.01309	.0360	.0134	.029
%RSD	.54707	1.9346	2.2570	1.8363	1.9379	2.6579	1.7525	.25832	.25832
#1	53.797	k .55315	37.800	k .62578	k 17.752	k .50165	k 2.0774	k 5.1680	k 11.060
#2	53.382	k .53822	36.613	k .60974	k 17.272	k .48314	k 2.0266	k 5.1869	k 11.100
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			20.000						
Low Limit			-6.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8534**	**1.1842**	k **.21659**	k **.97675**	k **1.9731**	k **2.0331**	k **.52197**	k **2.6912**	k **.06514**
Stddev	.0383	.0001	.00147	.00190	.0362	.0471	.00204	.0065	.00109
%RSD	2.0669	.00550	.67815	.19420	1.8364	2.3167	.39125	.23975	1.6801
#1	1.8805	1.1842	k .21556	k .97541	k 1.9987	k 1.9997	k .52053	k 2.6867	k .06436
#2	1.8263	1.1841	k .21763	k .97809	k 1.9474	k 2.0664	k .52342	k 2.6958	k .06591
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2740.1**	**51453.**	**6170.9**
Stddev	11.4	298.	39.9
%RSD	.41748	.57997	.64654
#1	2748.2	51664.	6199.1
#2	2732.0	51242.	6142.7

Sample Name: CCVH-4579429 Acquired: 6/13/2017 1:29:50 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00168**	**49.034**	**-.00751**	**.00269**	**.00032**	**.00020**	**1.0080**	**.02311**	**-.00001**	**-.00126**	**.00031**	**.01394**	**48.682**
Stddev	.00012	.144	.00450	.00052	.00007	.00002	.0265	.00331	.00012	.00041	.00005	.00010	.146
%RSD	6.8886	.29413	59.837	19.189	20.754	7.4802	2.6282	14.327	1161.3	32.585	16.320	.69097	.29966
#1	-.00177	49.136	-.00433	.00306	.00037	.00019	1.0267	.02545	.00008	-.00155	.00035	.01401	48.785
#2	-.00160	48.932	-.01069	.00233	.00027	.00021	.98924	.02077	-.00010	-.00097	.00028	.01387	48.579
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11184**	**.00530**	**.04550**	**-.00198**	**-.00111**	**245.18**	**.00181**	**.00729**	**.00218**	**4.8665**	**.00634**	**-.00126**	**-.02660**
Stddev	.03289	.00172	.00404	.00000	.00011	.56	.00055	.00337	.00071	.1762	.00078	.00339	.01568
%RSD	29.407	32.402	8.8830	.17644	9.6818	.22860	30.434	46.249	32.431	3.6205	12.362	268.67	58.936
#1	.13510	.00409	.04836	-.00198	-.00103	245.57	.00219	.00491	.00168	4.9911	.00689	-.00366	-.01551
#2	.08859	.00651	.04264	-.00197	-.00118	244.78	.00142	.00968	.00267	4.7419	.00579	.00114	-.03769
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.05692**	**-.00097**	**.00053**	**4.9186**	**.02122**	**.00258**	**10.278**	**.01255**	**.00172**	**.05487**
Stddev	.03355	.00085	.00012	.0098	.00001	.00077	.078	.00073	.00037	.00172
%RSD	58.936	87.015	22.523	.19844	.04705	29.897	.75525	5.8526	21.447	3.1259
#1	-.03320	-.00038	.00061	4.9255	.02121	.00312	10.223	.01203	.00146	.05608
#2	-.08065	-.00157	.00044	4.9117	.02122	.00203	10.333	.01307	.00198	.05365
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2645.9**	**49161.**	**5951.3**
Stddev	8.1	17.	42.8
%RSD	.30514	.03360	.71880
#1	2640.2	49149.	5921.1
#2	2651.7	49173.	5981.6

Sample Name: CCV-4580817 Acquired: 6/13/2017 1:32:24 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50837**	F **.58060**	**1.0107**	**.50939**	**.48774**	**.49583**	**.00418**	**4.9150**	**.50225**	**.49861**	**.48938**	**.49876**
Stddev	.00079	.01864	.0346	.01556	.00151	.00097	.00116	.0122	.01460	.01389	.01553	.00198
%RSD	.15565	3.2098	3.4252	3.0546	.30938	.19480	27.843	.24887	2.9063	2.7865	3.1743	.39651
#1	.50781	.59377	1.0352	.52039	.48880	.49652	.00336	4.9236	.51257	.50844	.50037	.50016
#2	.50893	.56742	.98625	.49839	.48667	.49515	.00500	4.9063	.49193	.48879	.47840	.49736
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5016**	**50.055**	**1.0171**	**20.302**	**.50734**	**.48490**	**5.0680**	**.50014**	**1.0321**	**1.0099**	**-.00867**	**1.0090**
Stddev	.0129	.038	.0053	.021	.00067	.01521	.0506	.01438	.0289	.0249	.00587	.0301
%RSD	.51702	.07576	.51866	.10368	.13150	3.1371	.99843	2.8759	2.8046	2.4647	67.711	2.9791
#1	2.5107	50.082	1.0209	20.317	.50781	.49566	5.1038	.51031	1.0525	1.0275	-.01283	1.0302
#2	2.4925	50.028	1.0134	20.287	.50687	.47415	5.0323	.48997	1.0116	.99234	-.00452	.98771
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0280**	**4.9136**	**10.515**	**.98816**	**.50010**	**.00659**	**.50396**	**1.0551**	**.04432**	**.50131**	**.51410**	**.48044**
Stddev	.0359	.0111	.024	.02825	.00099	.00035	.00243	.0297	.02949	.00177	.00158	.00163
%RSD	3.4929	.22605	.22605	2.8590	.19803	5.3390	.48278	2.8182	66.544	.35285	.30659	.33857
#1	1.0534	4.9058	10.498	1.0081	.50080	.00634	.50568	1.0761	.02347	.50256	.51298	.47929
#2	1.0026	4.9215	10.532	.96818	.49940	.00684	.50224	1.0341	.06518	.50006	.51521	.48159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2685.2**	**50245.**	**5909.9**
Stddev	.0	42.	20.9
%RSD	.00153	.08317	.35304
#1	2685.2	50216.	5895.2
#2	2685.3	50275.	5924.7

Sample Name: CCB Acquired: 6/13/2017 1:34:52 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**.00306**	**-.00305**	**.00157**	**-.00001**	**.00016**	**.00175**	**-.00290**	**-.00050**	**.00012**	**.00021**	**.00157**	**.00503**
Stddev	.00011	.00070	.00357	.00015	.00018	.00012	.00126	.00291	.00026	.00009	.00031	.00029	.00215
%RSD	433.62	22.932	116.74	9.3670	1187.1	72.399	72.108	100.41	52.200	77.926	145.30	18.317	42.849
#1	.00011	.00256	-.00558	.00147	.00011	.00025	.00086	-.00495	-.00069	.00005	.00043	.00177	.00350
#2	-.00005	.00355	-.00053	.00168	-.00014	.00008	.00264	-.00084	-.00032	.00018	-.00001	.00137	.00655
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02925**	**.00268**	**.02305**	**.00068**	**.00051**	**.01491**	**.00031**	**.00475**	**.00114**	**-.00527**	**.00089**	**.00081**	**.01505**
Stddev	.01036	.00192	.02607	.00079	.00025	.02102	.00048	.00168	.00147	.00133	.00068	.00350	.01229
%RSD	35.414	71.396	113.11	115.81	48.555	140.95	155.59	35.407	129.19	25.221	76.804	429.62	81.633
#1	.03658	.00133	.04148	.00125	.00069	.02977	.00065	.00356	.00010	-.00621	.00040	-.00166	.02374
#2	.02193	.00404	.00461	.00012	.00034	.00005	-.00003	.00594	.00218	-.00433	.00137	.00329	.00636
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03221**	**.00083**	**.00017**	**.00092**	**.00031**	**.00117**	**.00319**	**-.00026**	**.00172**	**.00198**
Stddev	.02629	.00015	.00015	.00172	.00037	.00338	.02240	.00056	.00054	.00213
%RSD	81.633	17.878	88.439	185.72	121.77	290.38	702.47	211.97	31.408	107.98
#1	.05080	.00073	.00006	.00214	.00057	-.00123	-.01265	-.00066	.00210	.00348
#2	.01362	.00094	.00028	-.00029	.00004	.00356	.01903	.00013	.00134	.00047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2695.1**	**50238.**	**5861.5**
Stddev	21.5	247.	21.8
%RSD	.79630	.49131	.37144
#1	2680.0	50063.	5846.1
#2	2710.3	50412.	5876.9

Sample Name: CCVL-4589022 Acquired: 6/13/2017 1:37:29 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00997**	**.12011**	**.01470**	**.10025**	**.00964**	**.00102**	**.11514**	**.19945**	**.00462**	**.01015**	**.00987**	**.01572**
Stddev	.00022	.00447	.00460	.00409	.00023	.00002	.00099	.00591	.00039	.00026	.00046	.00093
%RSD	2.2455	3.7198	31.296	4.0806	2.4057	1.6209	.85864	2.9624	8.5326	2.5360	4.6846	5.9133
#1	.01013	.12327	.01796	.10315	.00947	.00101	.11584	.19527	.00490	.01034	.01020	.01506
#2	.00981	.11695	.01145	.09736	.00980	.00103	.11444	.20362	.00434	.00997	.00955	.01637
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10829**	**3.1215**	**.02396**	**.20777**	**.01085**	**.01864**	**1.0451**	**.04093**	**2.9497**	**.01042**	**.08363**	**.02092**
Stddev	.00278	.0002	.00160	.00156	.00017	.00145	.0118	.00122	.1106	.00189	.00051	.00332
%RSD	2.5682	.00690	6.6678	.74941	1.5547	7.8078	1.1267	2.9775	3.7481	18.180	.61167	15.878
#1	.10633	3.1216	.02509	.20887	.01097	.01966	1.0535	.04179	3.0279	.01176	.08399	.02327
#2	.11026	3.1213	.02283	.20667	.01073	.01761	1.0368	.04007	2.8716	.00908	.08326	.01858
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02453**	**.46149**	**.98759**	**.09870**	**.01027**	**.01386**	**.00964**	F **.02018**	**.06008**	**.00929**	**.02133**	**.01752**
Stddev	.00344	.01080	.02311	.00204	.00017	.00259	.00002	.00091	.04093	.00032	.00004	.00223
%RSD	14.023	2.3398	2.3398	2.0671	1.6958	18.674	.21866	4.5208	68.118	3.4478	.18229	12.715
#1	.02210	.45386	.97125	.10014	.01015	.01569	.00965	.02083	.03114	.00906	.02131	.01594
#2	.02696	.46913	1.0039	.09726	.01040	.01203	.00962	.01954	.08902	.00951	.02136	.01909
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								.01500				
Range								30.000%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2742.1**	**51725.**	**5972.1**
Stddev	2.2	132.	39.2
%RSD	.07844	.25515	.65645
#1	2743.6	51632.	5999.8
#2	2740.6	51819.	5944.4

Sample Name: MB 280-376583/1-A Acquired: 6/13/2017 1:40:05 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: 6/9 Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00013**	**.00427**	**.00381**	**.00071**	**.00036**	**.00012**	**.00300**	**.01927**	**-.00042**
Stddev	.00115	.00087	.00395	.00031	.00005	.00005	.00117	.00070	.00029
%RSD	907.33	20.507	103.64	43.742	12.913	43.737	38.912	3.6362	68.253
#1	.00094	.00488	.00102	.00092	.00033	.00016	.00218	.01976	-.00022
#2	-.00069	.00365	.00660	.00049	.00040	.00008	.00383	.01877	-.00063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00016**	**.00019**	**.00258**	**.01832**	**.00270**	**.00352**	**.09760**	**.00236**	**-.00027**
Stddev	.00008	.00025	.00199	.00355	.00550	.00087	.13119	.00297	.00067
%RSD	52.746	132.42	76.888	19.387	203.39	24.774	134.41	125.85	247.90
#1	-.00021	.00001	.00399	.01581	.00659	.00290	.19037	.00446	.00020
#2	-.00010	.00037	.00118	.02084	-.00118	.00414	.00484	.00026	-.00074
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06478**	**-.00003**	**.00226**	**.00419**	**-.00328**	**.00142**	**.00047**	**.01038**	**.02221**
Stddev	.00571	.00003	.00203	.00144	.00177	.00023	.00182	.00050	.00107
%RSD	8.8098	81.446	90.108	34.408	53.824	15.819	390.88	4.8019	4.8019
#1	.06882	-.00001	.00082	.00317	-.00203	.00158	.00175	.01073	.02297
#2	.06075	-.00005	.00370	.00521	-.00453	.00126	-.00082	.01003	.02146
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00119**	**-.00002**	W **.00542**	**.00179**	**.00504**	**.02683**	**.00135**	**.00686**	**.00109**
Stddev	.00024	.00006	.00754	.00253	.00450	.01229	.00149	.00544	.00114
%RSD	20.040	262.23	139.12	141.30	89.339	45.812	110.29	79.280	104.47
#1	.00102	-.00006	.01076	.00358	.00823	.01814	.00240	.01071	.00190
#2	.00136	.00002	.00009	.00000	.00186	.03553	.00030	.00302	.00029
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500						
Low Limit			-.00500						

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2724.8**	**51377.**	**5999.2**
Stddev	12.3	535.	7.7
%RSD	.45020	1.0419	.12816
#1	2716.1	51756.	5993.8
#2	2733.5	50999.	6004.7

Sample Name: LCS 280-376583/2-A Acquired: 6/13/2017 1:42:43 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05297**	**2.2017**	**1.0758**	**1.0558**	**1.9787**	**.05019**	**2.1547**	**48.164**	**.10304**
Stddev	.00054	.0395	.0146	.0182	.0018	.00001	.0432	.035	.00228
%RSD	1.0239	1.7923	1.3564	1.7225	.08897	.01009	2.0044	.07313	2.2154
#1	.05335	2.2296	1.0861	1.0686	1.9775	.05019	2.1852	48.189	.10465
#2	.05259	2.1738	1.0655	1.0429	1.9799	.05018	2.1242	48.139	.10143
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49048**	**.19649**	**.25832**	**1.0247**	**50.460**	**1.0185**	**50.509**	**.50414**	**.95845**
Stddev	.00889	.00443	.00095	.0021	.053	.0004	.112	.00009	.02002
%RSD	1.8133	2.2538	.36922	.20915	.10532	.04023	.22142	.01793	2.0890
#1	.49677	.19962	.25899	1.0262	50.422	1.0182	50.588	.50420	.97261
#2	.48419	.19336	.25764	1.0231	50.497	1.0188	50.430	.50407	.94429
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.428**	**.49124**	**10.760**	**.50028**	**2.0683**	**.53050**	**2.1272**	**9.8557**	**21.091**
Stddev	.208	.01023	.237	.01041	.0129	.01582	.0428	.0125	.027
%RSD	.40396	2.0833	2.2008	2.0805	.62487	2.9816	2.0099	.12683	.12683
#1	51.281	.49847	10.927	.50764	2.0775	.54168	2.1575	9.8469	21.072
#2	51.575	.48400	10.592	.49292	2.0592	.51931	2.0970	9.8645	21.110
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9896**	**1.0054**	**1.0181**	**1.0269**	**2.0937**	**2.1109**	**.50384**	**.51337**	**.49908**
Stddev	.0466	.0010	.0027	.0019	.0453	.0099	.00160	.00311	.00409
%RSD	2.3412	.09746	.26396	.18331	2.1629	.47090	.31819	.60609	.82044
#1	2.0225	1.0047	1.0200	1.0282	2.1258	2.1038	.50498	.51557	.49619
#2	1.9566	1.0061	1.0162	1.0255	2.0617	2.1179	.50271	.51117	.50198
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2688.9**	**50596.**	**6128.3**
Stddev	5.3	142.	8.4
%RSD	.19812	.28080	.13650
#1	2692.7	50697.	6122.3
#2	2685.2	50496.	6134.2

Sample Name: 97964-H-1-A @2 Acquired: 6/13/2017 1:45:07 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00109**	**.22382**	**.02664**	**9.1080**	**.11901**	**-.00007**	**.00069**	**38.118**	**.00012**
Stddev	.00103	.01161	.00614	.3414	.00065	.00024	.00182	.144	.00015
%RSD	93.972	5.1874	23.051	3.7481	.54789	334.70	262.98	.37899	121.31
#1	-.00182	.23203	.02230	9.3494	.11948	-.00024	.00198	38.220	.00023
#2	-.00037	.21561	.03098	8.8667	.11855	.00010	-.00060	38.016	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01266**	**.09741**	**.00700**	**2.2630**	W **347.11**	**.09052**	**36.651**	**.02636**	**.00131**
Stddev	.00098	.00472	.00014	.0188	1.03	.00037	.147	.00005	.00018
%RSD	7.7425	4.8457	2.0017	.83238	.29740	.40476	.40041	.17926	13.556
#1	.01335	.10075	.00710	2.2763	347.84	.09077	36.754	.02639	.00118
#2	.01197	.09408	.00690	2.2497	346.38	.09026	36.547	.02632	.00143
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1102.4**	**.05362**	**2.4125**	**.00190**	**32.453**	**.00347**	**.00892**	**14.208**	**30.406**
Stddev	1.1	.00230	.1082	.00137	1.419	.00185	.00302	.020	.043
%RSD	.10268	4.2894	4.4842	72.175	4.3710	53.340	33.795	.14056	.14056
#1	1103.2	.05525	2.4890	.00093	33.456	.00216	.00679	14.222	30.436
#2	1101.6	.05200	2.3360	.00286	31.450	.00477	.01106	14.194	30.375
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01738**	**.80579**	**-.00448**	**.05667**	**.00401**	**.01564**	**.04788**	**.01089**	**.01847**
Stddev	.00205	.00126	.00284	.00035	.00096	.01231	.00006	.00002	.00143
%RSD	11.803	.15678	63.274	.61204	24.010	78.686	.11871	.15177	7.7473
#1	.01883	.80668	-.00248	.05691	.00469	.02434	.04792	.01090	.01746
#2	.01593	.80490	-.00649	.05642	.00333	.00694	.04784	.01088	.01949
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2488.2**	**45819.**	**6006.0**
Stddev	3.5	81.	30.6
%RSD	.13934	.17676	.50920
#1	2490.6	45761.	5984.4
#2	2485.7	45876.	6027.6

Sample Name: 97964-H-1-A SD@10 Acquired: 6/13/2017 1:47:45 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00031**	**.05020**	**.00261**	**2.0094**	**.02446**	**.00004**	**-.00156**	**8.0051**	**-.00003**
Stddev	.00017	.00093	.00233	.0715	.00063	.00011	.00420	.0263	.00044
%RSD	52.896	1.8532	89.362	3.5556	2.5576	270.08	269.65	.32829	1295.8
#1	-.00020	.05086	.00425	2.0599	.02402	.00011	.00141	8.0237	.00028
#2	-.00043	.04955	.00096	1.9589	.02490	-.00004	-.00452	7.9865	-.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00256**	**.02060**	**.00455**	**.47737**	**71.598**	**.02121**	**7.8637**	**.00561**	**.00018**
Stddev	.00032	.00074	.00076	.00321	.142	.00142	.0054	.00008	.00010
%RSD	12.564	3.5708	16.781	.67267	.19805	6.6977	.06849	1.4878	52.392
#1	.00278	.02112	.00509	.47510	71.699	.02221	7.8675	.00567	.00025
#2	.00233	.02008	.00401	.47964	71.498	.02020	7.8599	.00555	.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**228.93**	**.01212**	**.49511**	**.00207**	**6.5640**	**.00103**	**-.00087**	**2.9707**	**6.3572**
Stddev	1.26	.00033	.01388	.00150	.2719	.00334	.00183	.0252	.0539
%RSD	.55126	2.6862	2.8042	72.592	4.1424	325.82	210.13	.84789	.84789
#1	229.83	.01235	.50493	.00313	6.7562	-.00134	-.00216	2.9885	6.3953
#2	228.04	.01189	.48529	.00101	6.3717	.00339	.00042	2.9529	6.3191
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00401**	**.16616**	**-.00437**	**.01102**	**-.00121**	**.04655**	**.00940**	**.00329**	**.00363**
Stddev	.00284	.00059	.00152	.00012	.00216	.02384	.00011	.00056	.00008
%RSD	70.899	.35296	34.710	1.0517	179.41	51.211	1.2222	17.046	2.3144
#1	.00200	.16658	-.00544	.01093	-.00274	.06340	.00932	.00369	.00369
#2	.00601	.16575	-.00330	.01110	.00032	.02969	.00948	.00290	.00357
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2631.1**	**49503.**	**6063.6**
Stddev	14.6	41.	8.2
%RSD	.55394	.08236	.13457
#1	2641.4	49531.	6057.9
#2	2620.8	49474.	6069.4

Sample Name: 97964-H-1-B MS @2 Acquired: 6/13/2017 1:50:20 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02761**	**1.2509**	**.57573**	**9.3711**	**1.0981**	**.02483**	**1.0172**	**60.880**	**.05187**
Stddev	.00025	.0418	.00996	.2836	.0092	.00026	.0356	.491	.00149
%RSD	.91082	3.3377	1.7292	3.0263	.83458	1.0397	3.4987	.80733	2.8700
#1	.02778	1.2804	.58277	9.5717	1.1045	.02501	1.0423	61.228	.05293
#2	.02743	1.2214	.56869	9.1706	1.0916	.02465	.99199	60.533	.05082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.24695**	**.18555**	**.13506**	**2.6460**	W **362.31**	**.59945**	**59.697**	**.27633**	**.46516**
Stddev	.00959	.00607	.00033	.0164	2.50	.00128	.244	.00074	.01752
%RSD	3.8817	3.2719	.24067	.61811	.68868	.21322	.40867	.26708	3.7664
#1	.25373	.18984	.13483	2.6575	364.07	.60036	59.870	.27686	.47754
#2	.24017	.18126	.13529	2.6344	360.55	.59855	59.525	.27581	.45277
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1095.5**	**.28646**	**7.8597**	**.23248**	**32.526**	**.25793**	**1.0450**	**14.664**	**31.381**
Stddev	6.7	.01031	.2645	.00521	1.096	.00570	.0527	.104	.222
%RSD	.61536	3.5978	3.3646	2.2427	3.3692	2.2100	5.0424	.70782	.70782
#1	1100.3	.29375	8.0467	.23617	33.301	.26197	1.0823	14.737	31.538
#2	1090.7	.27917	7.6727	.22879	31.751	.25390	1.0078	14.591	31.224
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.95007**	**1.2879**	**.50809**	**.56254**	**.89858**	**1.0764**	**.30070**	**.27251**	**.25874**
Stddev	.03457	.0085	.00134	.00033	.02385	.0011	.00162	.00412	.00269
%RSD	3.6389	.65871	.26457	.05952	2.6544	.10569	.53754	1.5114	1.0402
#1	.97452	1.2939	.50714	.56278	.91545	1.0772	.30184	.27542	.26065
#2	.92562	1.2819	.50904	.56231	.88172	1.0756	.29955	.26960	.25684
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2472.8**	**45495.**	**6003.3**
Stddev	9.8	138.	17.2
%RSD	.39734	.30319	.28567
#1	2465.8	45397.	5991.1
#2	2479.7	45593.	6015.4

Sample Name: 97964-H-1-C MSD @2 Acquired: 6/13/2017 1:52:52 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02753**	**1.1983**	**.56003**	**9.1499**	**1.0565**	**.02410**	**.99752**	**58.385**	**.05074**
Stddev	.00071	.0342	.00650	.2490	.0027	.00014	.02254	.208	.00152
%RSD	2.5774	2.8565	1.1604	2.7209	.25311	.57494	2.2601	.35565	2.9996
#1	.02804	1.2225	.56462	9.3260	1.0584	.02420	1.0135	58.532	.05182
#2	.02703	1.1741	.55543	8.9739	1.0546	.02400	.98158	58.238	.04966
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.23977**	**.17087**	**.13086**	**2.5424**	W **348.97**	**.57712**	**57.580**	**.26722**	**.45276**
Stddev	.00718	.00444	.00137	.0128	.66	.00059	.301	.00065	.01358
%RSD	2.9965	2.6011	1.0473	.50415	.18844	.10249	.52285	.24230	2.9998
#1	.24485	.17401	.13183	2.5515	349.44	.57754	57.793	.26768	.46236
#2	.23469	.16772	.12989	2.5333	348.51	.57670	57.367	.26677	.44316
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1057.3**	**.27705**	**7.6457**	**.22863**	**31.174**	**.25239**	**1.0218**	**14.024**	**30.012**
Stddev	.9	.00978	.2118	.00493	.871	.00376	.0313	.051	.108
%RSD	.08950	3.5288	2.7702	2.1573	2.7929	1.4892	3.0631	.36075	.36075
#1	1057.9	.28396	7.7954	.23212	31.790	.25505	1.0440	14.060	30.088
#2	1056.6	.27013	7.4959	.22515	30.558	.24973	.99972	13.988	29.935
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.92397**	**1.2372**	**.48955**	**.53482**	**.88284**	**1.0179**	**.28911**	**.26151**	**.25217**
Stddev	.03045	.0030	.00012	.00223	.03565	.0173	.00112	.00343	.00229
%RSD	3.2950	.24543	.02533	.41634	4.0384	1.7038	.38775	1.3098	.90990
#1	.94550	1.2394	.48946	.53639	.90805	1.0302	.28990	.26393	.25379
#2	.90244	1.2351	.48964	.53325	.85763	1.0057	.28831	.25909	.25054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2477.6**	**45664.**	**6022.1**
Stddev	14.1	49.	3.3
%RSD	.57072	.10788	.05551
#1	2467.6	45699.	6019.7
#2	2487.6	45630.	6024.5

Sample Name: 280-97964-H-2-A @2 Acquired: 6/13/2017 1:55:23 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00019**	**.16832**	**.01151**	**9.0213**	**.19681**	**.00001**	**.00219**	**46.119**	**.00036**
Stddev	.00101	.00457	.00460	.3070	.00116	.00005	.00395	.093	.00005
%RSD	540.36	2.7156	39.947	3.4032	.58936	421.50	180.45	.20070	14.013
#1	-.00053	.17155	.00826	9.2384	.19763	-.00002	.00498	46.185	.00040
#2	.00090	.16508	.01476	8.8042	.19599	.00004	-.00060	46.054	.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00657**	**.10022**	**.00608**	**2.9479**	W **257.18**	**.07852**	**38.332**	**.03689**	**.00032**
Stddev	.00049	.00357	.00074	.0076	.27	.00262	.113	.00000	.00006
%RSD	7.4242	3.5632	12.129	.25939	.10328	3.3398	.29456	.00824	18.874
#1	.00691	.10275	.00556	2.9425	257.37	.07667	38.412	.03688	.00037
#2	.00622	.09770	.00661	2.9533	257.00	.08038	38.252	.03689	.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **741.27**	**.03396**	**1.0258**	**.00293**	**23.078**	**.00174**	**.01173**	**12.947**	**27.707**
Stddev	.59	.00176	.0428	.00102	.915	.00322	.00522	.043	.092
%RSD	.07941	5.1739	4.1739	34.958	3.9652	185.25	44.451	.33281	.33281
#1	740.86	.03521	1.0561	.00366	23.725	-.00054	.01542	12.917	27.642
#2	741.69	.03272	.99556	.00221	22.431	.00401	.00805	12.978	27.772
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00196**	**1.1721**	**-.00415**	**.03744**	**.00035**	**.00592**	**.01259**	**.00954**	**.00989**
Stddev	.00096	.0016	.00095	.00055	.00383	.02540	.00037	.00008	.00007
%RSD	48.892	.13675	22.990	1.4642	1104.2	429.15	2.9756	.86042	.66405
#1	.00128	1.1733	-.00482	.03783	-.00236	.02388	.01233	.00960	.00994
#2	.00264	1.1710	-.00347	.03705	.00305	-.01204	.01286	.00948	.00985
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2484.5**	**45574.**	**5818.1**
Stddev	9.2	7.	16.6
%RSD	.37152	.01593	.28484
#1	2477.9	45579.	5806.4
#2	2491.0	45569.	5829.9

Sample Name: 280-97964-H-3-A@5 Acquired: 6/13/2017 1:58:02 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K) 5x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00017**	**.45183**	**.01382**	**5.4070**	**.12886**	**.00007**	**.00598**	**18.980**	**.00007**
Stddev	.00070	.02009	.00368	.2107	.00088	.00003	.00254	.052	.00026
%RSD	414.99	4.4461	26.621	3.8977	.68068	47.534	42.544	.27401	385.01
#1	.00033	.46603	.01642	5.5561	.12948	.00005	.00418	19.017	.00025
#2	-.00066	.43762	.01121	5.2580	.12824	.00010	.00778	18.943	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00327**	**.03297**	**.00601**	**.39153**	W **369.19**	**.25008**	**27.210**	**.01912**	**.00046**
Stddev	.00014	.00129	.00018	.00118	1.21	.00193	.049	.00003	.00036
%RSD	4.2231	3.9279	3.0059	.30020	.32768	.77138	.18187	.15943	77.825
#1	.00337	.03388	.00613	.39236	370.04	.24871	27.245	.01910	.00071
#2	.00317	.03205	.00588	.39070	368.33	.25144	27.175	.01914	.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1145.1**	**.03945**	**2.2605**	**-.00104**	**10.997**	**.00052**	**.00960**	**3.9786**	**8.5143**
Stddev	2.5	.00064	.0995	.00171	.496	.00201	.00042	.0233	.0498
%RSD	.22087	1.6212	4.4004	163.66	4.5076	384.72	4.3436	.58522	.58522
#1	1146.9	.03990	2.3308	.00016	11.348	.00194	.00931	3.9622	8.4790
#2	1143.3	.03899	2.1901	-.00225	10.647	-.00090	.00990	3.9951	8.5495
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00370**	**.40058**	**-.00433**	**.02130**	**.00042**	**.03978**	**.01211**	**.00777**	**.01685**
Stddev	.00266	.00075	.00107	.00046	.00036	.00563	.00018	.00063	.00209
%RSD	71.770	.18785	24.758	2.1830	87.782	14.140	1.4626	8.1218	12.399
#1	.00182	.40111	-.00509	.02163	.00067	.04376	.01224	.00821	.01537
#2	.00558	.40005	-.00357	.02097	.00016	.03581	.01199	.00732	.01833
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2470.3**	**45299.**	**5859.0**
Stddev	3.5	91.	40.7
%RSD	.14293	.20198	.69431
#1	2467.8	45234.	5830.3
#2	2472.8	45363.	5887.8

Sample Name: 280-97964-H-4-A Acquired: 6/13/2017 2:00:41 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00088**	**.15544**	**.01168**	W **11.720**	**.17703**	**.00006**	**-.00070**	**154.74**	**.00059**
Stddev	.00101	.00615	.00166	.484	.00051	.00009	.00648	.15	.00010
%RSD	115.34	3.9556	14.185	4.1295	.28821	157.36	920.68	.09890	16.253
#1	-.00159	.15978	.01285	12.062	.17667	.00013	.00388	154.63	.00065
#2	-.00016	.15109	.01051	11.378	.17739	-.00001	-.00529	154.85	.00052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.20000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01554**	**.10030**	**.04817**	**3.1906**	W **381.35**	**.08716**	**74.850**	**.14472**	**.00274**
Stddev	.00036	.00546	.00114	.0043	.23	.00072	.530	.00109	.00027
%RSD	2.3238	5.4482	2.3719	.13562	.06064	.82820	.70853	.75623	9.7742
#1	.01579	.10416	.04898	3.1936	381.51	.08767	75.225	.14550	.00293
#2	.01528	.09643	.04736	3.1875	381.18	.08665	74.475	.14395	.00255
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1078.0**	**.06693**	**2.2400**	**.00089**	**42.173**	**.00155**	**.00145**	**21.906**	**46.878**
Stddev	.1	.00356	.1050	.00217	1.949	.00054	.00388	.034	.073
%RSD	.01102	5.3225	4.6857	243.90	4.6219	34.642	268.05	.15645	.15645
#1	1077.9	.06945	2.3143	.00242	43.551	.00117	-.00130	21.930	46.930
#2	1078.1	.06441	2.1658	-.00064	40.795	.00194	.00419	21.882	46.827
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00894**	**2.5868**	**-.00233**	**.04563**	**.00745**	**.02936**	**.01945**	**.15925**	**.01358**
Stddev	.00086	.0028	.00269	.00009	.00648	.03161	.00090	.00409	.00017
%RSD	9.5919	.10751	115.35	.20558	86.943	107.66	4.6528	2.5656	1.2573
#1	.00955	2.5887	-.00424	.04569	.00287	.05172	.02009	.16214	.01346
#2	.00833	2.5848	-.00043	.04556	.01203	.00701	.01881	.15636	.01371
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2454.5**	**45186.**	**5959.1**
Stddev	21.9	63.	17.6
%RSD	.89064	.13909	.29454
#1	2439.0	45141.	5946.7
#2	2469.9	45230.	5971.5

Sample Name: 280-97964-H-5-A @2 Acquired: 6/13/2017 2:03:19 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00017**	**.76660**	**.02202**	**6.1875**	**.11356**	**.00005**	**.00230**	**66.386**	**.00041**
Stddev	.00076	.05096	.00578	.2085	.00071	.00003	.00819	.256	.00028
%RSD	454.99	6.6476	26.250	3.3692	.62643	59.703	356.53	.38548	68.265
#1	.00037	.80263	.01793	6.3349	.11407	.00008	.00808	66.567	.00061
#2	-.00070	.73056	.02611	6.0401	.11306	.00003	-.00349	66.205	.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01990**	**.10951**	**.01622**	**4.1874**	W **324.10**	**.07374**	**35.324**	**.05592**	**.00256**
Stddev	.00153	.00449	.00024	.0112	.45	.00056	.112	.00004	.00200
%RSD	7.6700	4.0959	1.5012	.26789	.13919	.76135	.31809	.06341	78.082
#1	.02098	.11269	.01639	4.1794	324.41	.07335	35.404	.05595	.00397
#2	.01882	.10634	.01605	4.1953	323.78	.07414	35.245	.05590	.00115
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **910.03**	**.08304**	**3.3820**	**.02141**	**23.667**	**-.00084**	**.00599**	**11.769**	**25.186**
Stddev	1.39	.00259	.1239	.00012	.881	.00080	.00397	.015	.032
%RSD	.15314	3.1203	3.6637	.57734	3.7241	95.545	66.211	.12690	.12690
#1	911.02	.08488	3.4696	.02132	24.291	-.00140	.00880	11.780	25.208
#2	909.05	.08121	3.2944	.02150	23.044	-.00027	.00319	11.758	25.163
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01753**	**.83940**	**-.00376**	**.06382**	**.00848**	**.03152**	**.04895**	**.03128**	**.01433**
Stddev	.00216	.00122	.00108	.00013	.00719	.01873	.00046	.00117	.00141
%RSD	12.309	.14577	28.638	.20785	84.713	59.422	.94668	3.7435	9.8448
#1	.01906	.84026	-.00452	.06373	.01356	.01828	.04928	.03045	.01533
#2	.01601	.83853	-.00300	.06392	.00340	.04476	.04862	.03211	.01334
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2466.8**	**46356.**	**6051.0**
Stddev	8.9	132.	.2
%RSD	.35948	.28540	.00379
#1	2460.5	46262.	6051.1
#2	2473.1	46449.	6050.8

Sample Name: CCVH-4579429 Acquired: 6/13/2017 2:05:58 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00116**	**50.384**	**-.01276**	**.03181**	**.00012**	**.00011**	**1.0323**	**.02906**	**.00010**	**-.00101**	**.00035**	**.01563**
Stddev	.00004	.151	.00542	.00439	.00046	.00001	.0405	.00860	.00006	.00009	.00038	.00021
%RSD	3.3632	.30045	42.505	13.810	392.16	12.956	3.9275	29.579	59.876	9.1040	108.03	1.3394
#1	-.00118	50.491	-.01659	.03492	-.00021	.00010	1.0610	.03514	.00006	-.00094	.00062	.01548
#2	-.00113	50.277	-.00892	.02871	.00045	.00012	1.0037	.02298	.00015	-.00107	.00008	.01578
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.332**	**1.0749**	**.00399**	**.04410**	**-.00174**	**-.00196**	**251.19**	**.00133**	**.00714**	**.00145**	**4.9170**	**.00473**
Stddev	.110	.1505	.00111	.00030	.00003	.00003	.05	.00009	.00498	.00002	.1856	.00483
%RSD	.22392	14.004	27.800	.68036	1.6655	1.5423	.02096	6.8028	69.698	1.1607	3.7743	102.10
#1	49.411	1.1814	.00320	.04432	-.00172	-.00194	251.23	.00139	.01066	.00144	5.0482	.00814
#2	49.254	.96847	.00477	.04389	-.00176	-.00198	251.16	.00126	.00362	.00146	4.7858	.00131
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00451**	**.13646**	**.29203**	**-.00181**	**.00059**	**5.0255**	**.02014**	**.00170**	W **10.529**	**.01271**	**.00358**	**.06058**
Stddev	.00271	.04262	.09122	.00035	.00012	.0162	.00023	.00040	.020	.00085	.00037	.00204
%RSD	60.059	31.235	31.235	19.345	20.929	.32279	1.1413	23.785	.18786	6.6647	10.215	3.3724
#1	-.00259	.16660	.35653	-.00206	.00068	5.0370	.02031	.00141	10.515	.01331	.00384	.06203
#2	-.00642	.10632	.22753	-.00156	.00051	5.0140	.01998	.00198	10.543	.01211	.00332	.05914
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Warn	None	None	None
Value									10.000			
Range									5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2633.7**	**49222.**	**5894.6**
Stddev	4.2	165.	23.0
%RSD	.15811	.33599	.39055
#1	2630.7	49105.	5878.3
#2	2636.6	49339.	5910.9

Sample Name: CCV-4580817 Acquired: 6/13/2017 2:08:31 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51550**	F **.60274**	**1.0410**	**.54153**	**.49131**	**.50093**	**.00381**	**4.9482**	**.51836**	**.51257**	**.50187**	**.50729**
Stddev	.00100	.01523	.0131	.00886	.00075	.00242	.00250	.0112	.00979	.00919	.00962	.00232
%RSD	.19443	2.5265	1.2599	1.6360	.15190	.48277	65.445	.22550	1.8891	1.7926	1.9178	.45699
#1	.51620	.61350	1.0503	.54779	.49183	.50264	.00558	4.9561	.52529	.51907	.50867	.50893
#2	.51479	.59197	1.0318	.53526	.49078	.49922	.00205	4.9403	.51144	.50607	.49506	.50565
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5286**	**50.636**	**1.0306**	**20.613**	**.51521**	**.49689**	**5.4734**	**.51175**	**1.0634**	**1.0328**	**-.00800**	**1.0392**
Stddev	.0029	.125	.0021	.016	.00182	.01053	.0423	.00999	.0225	.0166	.00233	.0167
%RSD	.11461	.24689	.20109	.07949	.35265	2.1197	.77209	1.9527	2.1153	1.6057	29.169	1.6054
#1	2.5265	50.725	1.0321	20.602	.51393	.50433	5.5033	.51882	1.0793	1.0446	-.00635	1.0510
#2	2.5306	50.548	1.0292	20.625	.51650	.48944	5.4435	.50469	1.0475	1.0211	-.00965	1.0274
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0626**	**5.1520**	**11.025**	**1.0148**	**.50506**	**.00582**	**.51194**	W **1.1024**	**.01841**	**.50822**	**.52085**	**.48729**
Stddev	.0138	.0424	.091	.0138	.00062	.00057	.00066	.0235	.03467	.00011	.00125	.00592
%RSD	1.2946	.82228	.82228	1.3646	.12226	9.7591	.12886	2.1340	188.37	.02105	.24049	1.2144
#1	1.0724	5.1220	10.961	1.0246	.50550	.00622	.51147	1.1190	.04293	.50814	.51996	.49148
#2	1.0529	5.1819	11.089	1.0050	.50463	.00542	.51241	1.0857	-.00611	.50830	.52173	.48311
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	None	Chk Pass	Chk Pass	Chk Pass
Value								1.0000				
Range								10.000%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2670.7**	**49904.**	**5880.0**
Stddev	2.5	254.	14.8
%RSD	.09294	.50988	.25214
#1	2668.9	50084.	5890.5
#2	2672.4	49724.	5869.5

Sample Name: CCB Acquired: 6/13/2017 2:11:00 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00052**	**.01825**	**-.01092**	**.01390**	**-.00005**	**.00007**	**.00494**	**.01829**	**-.00031**	**-.00024**	**.00028**	**.00097**
Stddev	.00002	.00074	.00162	.00032	.00010	.00008	.00169	.00295	.00024	.00001	.00010	.00020
%RSD	3.0144	4.0653	14.818	2.2717	185.28	117.75	34.276	16.107	76.901	3.3038	34.322	20.611
#1	-.00050	.01878	-.00977	.01412	.00002	.00001	.00374	.02038	-.00014	-.00023	.00021	.00083
#2	-.00053	.01773	-.01206	.01368	-.00012	.00013	.00613	.01621	-.00048	-.00024	.00035	.00112
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02699**	**.26181**	**.00482**	**.00570**	**.00027**	**.00060**	W **.35145**	**-.00003**	**.00017**	**.00262**	**-.00738**	**.00548**
Stddev	.00057	.00641	.00036	.00488	.00005	.00059	.00744	.00030	.00493	.00051	.01740	.00147
%RSD	2.1170	2.4483	7.4338	85.527	18.181	98.349	2.1156	911.42	2860.1	19.681	235.66	26.723
#1	.02739	.26634	.00456	.00915	.00030	.00102	.34619	.00018	-.00331	.00298	.00492	.00652
#2	.02658	.25728	.00507	.00225	.00024	.00018	.35671	-.00024	.00366	.00225	-.01968	.00445
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							.35000					
Low Limit							-.35000					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00026**	**.03233**	**.06919**	**.00050**	**.00026**	**-.00126**	**.00016**	**.00473**	**.01987**	**.00006**	**.00145**	**.00176**
Stddev	.00274	.00536	.01147	.00079	.00002	.00075	.00014	.00202	.01458	.00008	.00066	.00049
%RSD	1041.4	16.573	16.573	158.51	8.9649	59.747	85.808	42.823	73.360	122.31	45.601	27.700
#1	.00220	.02854	.06108	-.00006	.00028	-.00179	.00026	.00330	.00956	.00012	.00192	.00142
#2	-.00168	.03612	.07730	.00105	.00025	-.00073	.00006	.00616	.03018	.00001	.00098	.00211
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2752.0**	**52201.**	**6068.7**
Stddev	1.9	73.	46.6
%RSD	.06915	.13941	.76804
#1	2753.4	52253.	6101.7
#2	2750.7	52150.	6035.8

Sample Name: CCVL-4589022 Acquired: 6/13/2017 2:13:38 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00973**	F **.16134**	**.01615**	**.11129**	**.00977**	**.00093**	**.11962**	**.20098**	**.00488**	**.01019**	**.00980**	**.01702**
Stddev	.00014	.00800	.00111	.00356	.00039	.00003	.00195	.00028	.00003	.00050	.00031	.00044
%RSD	1.4426	4.9590	6.8947	3.2025	4.0116	3.5540	1.6289	.14092	.57271	4.9474	3.1359	2.5826
#1	.00983	.16699	.01694	.11381	.00950	.00096	.12100	.20118	.00490	.01055	.01002	.01671
#2	.00964	.15568	.01537	.10877	.01005	.00091	.11824	.20078	.00486	.00983	.00959	.01733
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000										
Range		30.000%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.16206**	**3.3162**	**.02511**	**.21741**	**.01111**	**.01839**	**1.2771**	**.04097**	**2.9573**	**.01078**	**.09600**	**.02145**
Stddev	.00109	.0208	.00072	.00271	.00009	.00001	.0015	.00151	.1199	.00176	.00418	.00208
%RSD	.67337	.62675	2.8765	1.2472	.78051	.04759	.11768	3.6943	4.0530	16.350	4.3592	9.6815
#1	.16129	3.3309	.02562	.21933	.01105	.01839	1.2760	.04204	3.0420	.01202	.09304	.01998
#2	.16284	3.3015	.02460	.21550	.01117	.01840	1.2781	.03990	2.8725	.00953	.09896	.02292
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.10000											
Range	30.000%											

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02043**	**.51068**	**1.0929**	**.09696**	**.01036**	**.01503**	**.00972**	**.01774**	F **.09013**	**.00955**	**.02141**	**.01500**
Stddev	.00720	.00824	.0176	.00737	.00012	.00076	.00009	.00260	.00452	.00024	.00065	.00104
%RSD	35.228	1.6127	1.6127	7.6020	1.1535	5.0773	.88010	14.635	5.0200	2.5564	3.0211	6.9376
#1	.01534	.50486	1.0804	.10217	.01045	.01449	.00966	.01590	.08693	.00937	.02095	.01574
#2	.02551	.51650	1.1053	.09175	.01028	.01557	.00978	.01957	.09333	.00972	.02187	.01427
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2748.5**	**51805.**	**6076.9**
Stddev	1.9	388.	16.3
%RSD	.06966	.74876	.26745
#1	2749.8	52079.	6065.4
#2	2747.1	51531.	6088.4

Sample Name: 280-97964-H-6-A @5 Acquired: 6/13/2017 2:16:16 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K) 5x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00113**	**.81953**	**.18607**	**4.4782**	**.02575**	**.00007**	**.00600**	**10.821**	**-.00027**
Stddev	.00023	.05812	.00086	.1769	.00049	.00005	.00031	.012	.00025
%RSD	20.518	7.0919	.46412	3.9498	1.8896	80.240	5.1464	.11173	92.783
#1	-.00096	.86062	.18668	4.6033	.02540	.00011	.00579	10.830	-.00009
#2	-.00129	.77843	.18546	4.3532	.02609	.00003	.00622	10.813	-.00045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00190**	**.14898**	**.00685**	**.46359**	W **276.71**	**.09927**	**17.150**	**.02063**	**.00061**
Stddev	.00045	.00788	.00015	.00321	.27	.00194	.048	.00008	.00005
%RSD	23.527	5.2924	2.1834	.69182	.09906	1.9559	.27805	.41106	8.2303
#1	.00222	.15456	.00696	.46586	276.91	.09789	17.184	.02057	.00064
#2	.00159	.14341	.00674	.46133	276.52	.10064	17.116	.02069	.00057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **763.92**	**.01384**	**2.1772**	**.00189**	**21.728**	**.00147**	**-.00469**	**5.0817**	**10.875**
Stddev	.57	.00038	.0992	.00232	.995	.00440	.00481	.0429	.092
%RSD	.07514	2.7640	4.5582	122.59	4.5789	300.06	102.52	.84339	.84339
#1	763.51	.01411	2.2474	.00353	22.432	-.00165	-.00809	5.0514	10.810
#2	764.32	.01357	2.1071	.00025	21.025	.00458	-.00129	5.1120	10.940
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07209**	**.16453**	**-.00328**	**.07776**	**.00558**	**.03289**	**.02672**	**.00596**	**.01545**
Stddev	.00414	.00006	.00165	.00012	.00239	.01373	.00080	.00051	.00165
%RSD	5.7462	.03770	50.201	.14988	42.862	41.760	2.9809	8.5456	10.700
#1	.07502	.16457	-.00211	.07767	.00727	.02318	.02729	.00631	.01428
#2	.06916	.16449	-.00444	.07784	.00389	.04260	.02616	.00560	.01662
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2535.8**	**46605.**	**6031.4**
Stddev	19.4	80.	22.7
%RSD	.76695	.17184	.37717
#1	2522.1	46662.	6047.4
#2	2549.6	46549.	6015.3

Sample Name: 280-97964-H-7-A @5 Acquired: 6/13/2017 2:18:57 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K) 5x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00017**	**.19986**	**.05879**	**5.3588**	**.08986**	**.00005**	**.00389**	**9.2799**	**-.00017**
Stddev	.00087	.01064	.00244	.2033	.00022	.00010	.00210	.0708	.00004
%RSD	510.52	5.3222	4.1446	3.7943	.24715	189.97	53.939	.76285	24.136
#1	-.00079	.20739	.06051	5.5026	.09002	-.00002	.00241	9.3299	-.00019
#2	.00045	.19234	.05707	5.2151	.08971	.00013	.00538	9.2298	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00237**	**.05500**	**.00563**	**.46898**	W **220.36**	**.13637**	**18.818**	**.01730**	**.00038**
Stddev	.00027	.00287	.00012	.00245	.92	.00399	.082	.00013	.00001
%RSD	11.535	5.2096	2.0444	.52173	.41833	2.9238	.43549	.77482	3.1276
#1	.00218	.05703	.00571	.47071	221.01	.13919	18.876	.01739	.00039
#2	.00257	.05297	.00555	.46725	219.71	.13355	18.760	.01720	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **861.53**	**.01308**	**1.1367**	**.00185**	**23.934**	**.00342**	**.00880**	**7.1340**	**15.267**
Stddev	2.35	.00037	.0576	.00177	1.145	.00329	.00267	.0516	.110
%RSD	.27324	2.8016	5.0642	95.689	4.7857	96.226	30.366	.72354	.72354
#1	863.20	.01282	1.1774	.00310	24.744	.00109	.01069	7.1705	15.345
#2	859.87	.01334	1.0960	.00060	23.124	.00574	.00691	7.0975	15.189
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**.35073**	**-.00267**	**.01424**	**.00317**	**.01399**	**.00932**	**.00678**	**.00594**
Stddev	.00247	.00133	.00342	.00041	.00033	.01085	.00067	.00082	.00069
%RSD	13972.	.37928	127.86	2.9114	10.392	77.561	7.2267	12.119	11.662
#1	.00173	.35167	-.00509	.01454	.00340	.02166	.00884	.00736	.00545
#2	-.00176	.34979	-.00026	.01395	.00294	.00632	.00979	.00620	.00643
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2531.0**	**46493.**	**5978.9**
Stddev	6.2	134.	47.5
%RSD	.24514	.28891	.79393
#1	2526.7	46398.	5945.4
#2	2535.4	46588.	6012.5

Sample Name: 280-97964-H-8-A @2 Acquired: 6/13/2017 2:21:36 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00079**	**.22202**	**.04767**	W **11.217**	**.09261**	**.00001**	**-.00053**	**39.922**	**.00060**
Stddev	.00012	.00795	.00512	.309	.00070	.00010	.00177	.260	.00005
%RSD	15.078	3.5819	10.749	2.7533	.75069	763.34	332.98	.65045	8.5094
#1	-.00071	.22764	.04404	11.435	.09310	-.00006	-.00179	40.106	.00057
#2	-.00088	.21639	.05129	10.998	.09211	.00009	.00072	39.738	.00064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.20000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00955**	**.09863**	**.00716**	**1.7743**	W **388.31**	**.13097**	**52.403**	**.02883**	**.00077**
Stddev	.00058	.00316	.00002	.0170	2.38	.00210	.227	.00009	.00053
%RSD	6.0653	3.2063	.23881	.95999	.61412	1.6063	.43372	.29676	68.819
#1	.00996	.10086	.00717	1.7863	389.99	.13246	52.564	.02877	.00040
#2	.00914	.09639	.00715	1.7622	386.62	.12948	52.242	.02889	.00114
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1408.0**	**.04358**	**2.3603**	**-.00016**	**30.326**	**.00189**	**.00666**	**13.390**	**28.654**
Stddev	7.6	.00181	.0779	.00139	.994	.00095	.00984	.002	.004
%RSD	.53985	4.1496	3.2983	858.72	3.2793	50.446	147.73	.01307	.01307
#1	1413.4	.04486	2.4153	-.00114	31.029	.00256	.01362	13.391	28.657
#2	1402.7	.04230	2.3052	.00082	29.623	.00121	-.00030	13.388	28.651
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00413**	**.77805**	**-.00674**	**.03584**	**-.00253**	**.06988**	**.03367**	**.00999**	**.01618**
Stddev	.00251	.00487	.00048	.00050	.00012	.01247	.00058	.00004	.00100
%RSD	60.813	.62597	7.0885	1.3956	4.6343	17.845	1.7240	.35213	6.1905
#1	.00235	.78150	-.00708	.03619	-.00245	.06107	.03408	.01001	.01547
#2	.00591	.77461	-.00640	.03549	-.00261	.07870	.03326	.00996	.01689
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2425.3**	**44204.**	**5881.1**
Stddev	.4	104.	20.8
%RSD	.01675	.23496	.35394
#1	2425.6	44130.	5866.4
#2	2425.0	44277.	5895.9

Sample Name: 280-97964-H-9-A @5 Acquired: 6/13/2017 2:24:15 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K) 5x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00012**	**.57025**	**.06264**	**5.1213**	**.06334**	**.00011**	**.00525**	**11.962**	**.00007**
Stddev	.00110	.02499	.00335	.1529	.00008	.00001	.00277	.005	.00032
%RSD	906.21	4.3814	5.3491	2.9846	.12561	12.915	52.721	.04163	488.46
#1	-.00090	.58792	.06027	5.2294	.06339	.00010	.00329	11.958	.00029
#2	.00066	.55259	.06501	5.0133	.06328	.00012	.00721	11.965	-.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00110**	**.06109**	**.00600**	**.33046**	W **282.30**	**.14518**	**20.270**	**.07674**	**.00010**
Stddev	.00015	.00287	.00031	.00030	.55	.00211	.072	.00009	.00066
%RSD	13.240	4.6999	5.1767	.09170	.19329	1.4502	.35746	.11252	646.23
#1	.00121	.06312	.00578	.33025	281.91	.14369	20.321	.07680	.00057
#2	.00100	.05906	.00622	.33068	282.68	.14667	20.219	.07668	-.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **821.02**	**.01135**	**2.2076**	**.00097**	**17.433**	**.00546**	**.00437**	**5.9307**	**12.692**
Stddev	1.85	.00031	.0731	.00083	.630	.00206	.00877	.0492	.105
%RSD	.22580	2.7077	3.3111	85.050	3.6114	37.622	200.69	.83029	.83029
#1	819.70	.01157	2.2593	.00156	17.878	.00692	.01057	5.8959	12.617
#2	822.33	.01114	2.1559	.00039	16.988	.00401	-.00183	5.9655	12.766
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00034**	**.27308**	**-.00528**	**.01434**	**.00389**	**.04087**	**.01639**	**.00355**	**.00982**
Stddev	.00064	.00066	.00050	.00043	.00553	.01108	.00031	.00100	.00116
%RSD	187.87	.24337	9.5166	3.0280	142.08	27.111	1.9082	28.238	11.830
#1	.00011	.27261	-.00492	.01403	-.00002	.04870	.01661	.00426	.01064
#2	-.00080	.27355	-.00564	.01465	.00780	.03303	.01617	.00284	.00900
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2526.0**	**46635.**	**6016.9**
Stddev	2.3	20.	28.0
%RSD	.09183	.04320	.46610
#1	2524.4	46621.	6036.8
#2	2527.6	46650.	5997.1

Sample Name: 280-97964-H-10-A @2 Acquired: 6/13/2017 2:26:54 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376583 200.7 (Ca K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**.29027**	**.08254**	**6.5649**	**.09501**	**.00025**	**.00411**	**45.533**	**.00044**
Stddev	.00002	.01342	.00962	.2582	.00037	.00021	.00480	.418	.00006
%RSD	52.766	4.6231	11.651	3.9338	.38427	80.969	116.62	.91754	13.948
#1	.00006	.29976	.08934	6.7475	.09475	.00011	.00750	45.828	.00048
#2	.00003	.28078	.07574	6.3823	.09527	.00040	.00072	45.238	.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01045**	**.10526**	**.00763**	**3.2877**	W **238.65**	**.05279**	**34.974**	**.03593**	**.00045**
Stddev	.00086	.00522	.00026	.0019	.46	.00153	.022	.00009	.00012
%RSD	8.1933	4.9616	3.3934	.05753	.19473	2.8915	.06259	.25519	26.320
#1	.01106	.10895	.00745	3.2890	238.98	.05387	34.989	.03600	.00053
#2	.00985	.10156	.00782	3.2863	238.32	.05171	34.958	.03587	.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **602.85**	**.04113**	**2.0784**	**.01745**	**26.877**	**.01544**	**.00500**	**11.864**	**25.390**
Stddev	.49	.00183	.0925	.00027	1.187	.00222	.00110	.078	.166
%RSD	.08207	4.4385	4.4499	1.5497	4.4179	14.365	21.979	.65480	.65480
#1	602.50	.04242	2.1438	.01764	27.716	.01388	.00423	11.919	25.507
#2	603.20	.03984	2.0130	.01726	26.037	.01701	.00578	11.809	25.272
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00695**	**.84860**	**-.00377**	**.05717**	**.00556**	**.02077**	**.03727**	**.03782**	**.00917**
Stddev	.00093	.00552	.00185	.00026	.00331	.03682	.00026	.00018	.00168
%RSD	13.360	.65044	49.184	.45261	59.512	177.31	.69505	.46449	18.378
#1	.00760	.85251	-.00246	.05698	.00790	-.00527	.03745	.03769	.00798
#2	.00629	.84470	-.00508	.05735	.00322	.04681	.03708	.03794	.01036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2512.4**	**46514.**	**5989.9**
Stddev	3.5	190.	25.0
%RSD	.13910	.40882	.41696
#1	2509.9	46649.	6007.6
#2	2514.9	46380.	5972.2

Sample Name: MB 280-376581/1-A Acquired: 6/13/2017 2:29:32 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: 6/9 Custom ID2: Custom ID3:
Comment: 376581 200.7 (Ca K)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00087**	**.00744**	**-.00346**	**.02457**	**-.00017**	**-.00012**	**-.00037**	**.02382**	**-.00014**
Stddev	.00090	.00044	.00272	.00246	.00014	.00014	.00274	.00158	.00013
%RSD	104.14	5.9036	78.609	10.030	80.051	121.02	743.24	6.6321	93.417
#1	-.00023	.00713	-.00154	.02631	-.00027	-.00002	.00157	.02494	-.00005
#2	-.00150	.00775	-.00538	.02282	-.00008	-.00021	-.00231	.02271	-.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00023**	**.00000**	**.00113**	W **.05335**	**1.2821**	**.00359**	**.00890**	**.00054**	**-.00015**
Stddev	.00053	.00044	.00069	.00127	.0078	.00366	.00147	.00010	.00003
%RSD	233.12	13256.	60.983	2.3751	.60915	101.95	16.513	17.997	22.059
#1	.00061	.00031	.00161	.05245	1.2877	.00100	.00994	.00047	-.00013
#2	-.00015	-.00031	.00064	.05425	1.2766	.00619	.00786	.00061	-.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.05000					
Low Limit				-.05000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **1.0949**	**.00007**	**.00215**	**.00108**	**.02198**	**-.00255**	**.00133**	**.11225**	**.24022**
Stddev	.0789	.00009	.00204	.00087	.00134	.00322	.00479	.01719	.03679
%RSD	7.2018	136.91	94.801	80.668	6.1126	126.53	359.75	15.316	15.316
#1	1.1507	.00000	.00071	.00170	.02293	-.00027	-.00206	.12441	.26623
#2	1.0392	.00013	.00359	.00046	.02103	-.00482	.00472	.10010	.21420
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit	1.0000								
Low Limit	-1.0000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00146**	**.00039**	**-.00162**	**.00017**	**.00173**	**.02719**	**-.00033**	**.00253**	**-.00009**
Stddev	.00080	.00014	.00007	.00051	.00090	.01923	.00001	.00004	.00050
%RSD	54.627	35.220	4.4097	307.54	51.796	70.729	3.8194	1.7176	570.64
#1	.00089	.00049	-.00157	-.00020	.00110	.04079	-.00032	.00256	.00027
#2	.00202	.00029	-.00167	.00053	.00236	.01359	-.00034	.00250	-.00044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2760.1**	**52434.**	**6113.3**
Stddev	.8	142.	3.2
%RSD	.03046	.27173	.05255
#1	2760.7	52333.	6111.1
#2	2759.5	52535.	6115.6

Sample Name: LCS 280-376581/2-A Acquired: 6/13/2017 2:32:10 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376581 200.7 (Ca K)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05539**	F **2.3594**	F **1.1080**	F **1.1054**	**2.0607**	**.05249**	**2.2495**	**49.879**	**.10822**
Stddev	.00004	.0580	.0189	.0238	.0051	.00007	.0373	.143	.00208
%RSD	.07991	2.4579	1.7062	2.1568	.24912	.12536	1.6578	.28665	1.9251
#1	.05535	2.4004	1.1214	1.1223	2.0643	.05244	2.2758	49.980	.10970
#2	.05542	2.3184	1.0947	1.0886	2.0571	.05254	2.2231	49.778	.10675
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit		2.2299	1.1050	1.1050					
Low Limit		1.7300	.87500	.86000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51105**	**.20577**	**.26913**	F **1.7751**	**53.018**	**1.0748**	**52.653**	**.53317**	**.99730**
Stddev	.01249	.00493	.00005	.0047	.059	.0063	.121	.00192	.02092
%RSD	2.4438	2.3974	.01674	.26449	.11184	.59009	.22919	.36003	2.0981
#1	.51988	.20926	.26916	1.7784	53.060	1.0793	52.738	.53453	1.0121
#2	.50221	.20228	.26910	1.7718	52.977	1.0703	52.568	.53182	.98250
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				1.1500					
Low Limit				.89000					

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**53.422**	**.51283**	F **11.255**	**.51963**	**2.1661**	W **.54904**	**2.2064**	**10.587**	**22.656**
Stddev	.243	.01224	.271	.01159	.0340	.01585	.0451	.041	.087
%RSD	.45542	2.3871	2.4104	2.2296	1.5674	2.8861	2.0425	.38525	.38525
#1	53.250	.52148	11.447	.52782	2.1901	.56025	2.2382	10.558	22.595
#2	53.594	.50417	11.064	.51143	2.1421	.53784	2.1745	10.616	22.718
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None	Chk Warn	Chk Pass	Chk Pass	None
High Limit			11.100			.54000			
Low Limit			9.1000			.44000			

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0630**	**1.0568**	**1.0653**	**1.0739**	**2.1984**	**2.2684**	**.52700**	**.54807**	**.51764**
Stddev	.0592	.0010	.0029	.0024	.0429	.0360	.00188	.00037	.00166
%RSD	2.8722	.09102	.26885	.22502	1.9531	1.5883	.35612	.06803	.32120
#1	2.1049	1.0575	1.0673	1.0756	2.2288	2.2939	.52833	.54833	.51882
#2	2.0211	1.0561	1.0632	1.0722	2.1680	2.2430	.52568	.54781	.51647
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2638.7**	**49468.**	**6018.3**
Stddev	3.2	99.	11.6
%RSD	.11968	.20081	.19266
#1	2636.5	49398.	6010.1
#2	2641.0	49539.	6026.5

Sample Name: 97957-H-1-A @2 Acquired: 6/13/2017 2:34:33 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376581 200.7 (Ca K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00015**	**.36403**	**.15817**	**4.3164**	**.27216**	**.00002**	**.00223**	**36.176**	**.00009**
Stddev	.00029	.01191	.00609	.1388	.00074	.00002	.00433	.067	.00006
%RSD	187.63	3.2714	3.8513	3.2162	.27080	67.608	194.08	.18402	68.662
#1	.00005	.37245	.16248	4.4146	.27268	.00004	-.00083	36.224	.00005
#2	-.00036	.35561	.15387	4.2182	.27164	.00001	.00530	36.129	.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02789**	**.09200**	**.01245**	**4.7730**	W **338.13**	**.02918**	**30.389**	**.23738**	**.00419**
Stddev	.00121	.00375	.00047	.0051	.47	.00224	.163	.00153	.00005
%RSD	4.3511	4.0811	3.7432	.10747	.13984	7.6605	.53622	.64445	1.2704
#1	.02874	.09466	.01212	4.7766	338.47	.03076	30.504	.23846	.00415
#2	.02703	.08935	.01277	4.7694	337.80	.02760	30.274	.23630	.00423
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1206.1**	**.11169**	**5.9657**	**.00081**	**25.133**	**.02425**	**.00763**	**14.653**	**31.358**
Stddev	.7	.00488	.2058	.00200	.901	.00268	.00689	.078	.168
%RSD	.06161	4.3696	3.4493	245.60	3.5843	11.066	90.345	.53452	.53452
#1	1205.6	.11514	6.1112	-.00060	25.770	.02614	.01250	14.598	31.239
#2	1206.6	.10824	5.8202	.00223	24.496	.02235	.00276	14.708	31.476
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03074**	**.27118**	**-.00389**	**.03508**	**.00034**	**.03389**	**.03714**	**.15231**	**.05140**
Stddev	.00008	.00057	.00457	.00053	.00476	.02061	.00026	.00186	.00001
%RSD	.25269	.21042	117.54	1.5084	1392.5	60.796	.70047	1.2198	.01883
#1	.03079	.27158	-.00712	.03470	.00371	.04846	.03733	.15100	.05141
#2	.03068	.27077	-.00066	.03545	-.00302	.01932	.03696	.15362	.05140
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2441.0**	**44721.**	**5908.9**
Stddev	19.4	31.	21.2
%RSD	.79490	.07022	.35920
#1	2427.3	44744.	5923.9
#2	2454.8	44699.	5893.9

Sample Name: 97957-H-1-A SD@10 Acquired: 6/13/2017 2:37:10 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376581 200.7 (Ca K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00059**	**.08405**	**.02844**	**.91643**	**.05460**	**.00015**	**.00557**	**7.3637**	**-.00007**
Stddev	.00017	.00351	.01082	.03511	.00035	.00002	.00357	.0014	.00021
%RSD	27.969	4.1707	38.046	3.8314	.64671	15.755	64.089	.01895	295.44
#1	-.00048	.08653	.03610	.94126	.05485	.00013	.00305	7.3628	-.00022
#2	-.00071	.08157	.02079	.89161	.05435	.00016	.00810	7.3647	.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00563**	**.01849**	**.00571**	**.97065**	**68.221**	**.00723**	**6.3349**	**.04780**	**.00053**
Stddev	.00035	.00107	.00048	.00584	.432	.00090	.0298	.00008	.00010
%RSD	6.1929	5.8051	8.3321	.60183	.63271	12.433	.47108	.17706	19.443
#1	.00587	.01925	.00605	.96652	67.916	.00786	6.3560	.04786	.00060
#2	.00538	.01774	.00538	.97478	68.526	.00659	6.3138	.04774	.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**243.46**	**.02333**	**1.1654**	**.00302**	**4.8892**	**.00762**	**-.00194**	**3.0034**	**6.4273**
Stddev	1.31	.00095	.0515	.00186	.1951	.00075	.00555	.0422	.0902
%RSD	.53914	4.0823	4.4216	61.366	3.9894	9.9002	285.30	1.4039	1.4039
#1	242.53	.02400	1.2018	.00171	5.0271	.00816	.00198	3.0332	6.4911
#2	244.39	.02265	1.1289	.00434	4.7512	.00709	-.00586	2.9736	6.3635
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00714**	**.05522**	**-.00296**	**.00673**	**.00431**	**.04429**	**.00710**	**.03946**	**.00986**
Stddev	.00094	.00058	.00171	.00029	.00121	.01818	.00046	.00099	.00127
%RSD	13.157	1.0552	57.690	4.3141	28.086	41.046	6.4828	2.4974	12.861
#1	.00647	.05481	-.00417	.00652	.00517	.05714	.00743	.03876	.01076
#2	.00780	.05563	-.00175	.00693	.00346	.03143	.00678	.04016	.00896
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2618.5**	**48945.**	**6061.0**
Stddev	.2	45.	39.7
%RSD	.00931	.09128	.65497
#1	2618.3	48913.	6089.1
#2	2618.7	48976.	6032.9

Sample Name: 97957-H-1-B MS @2 Acquired: 6/13/2017 2:39:45 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376581 200.7 (Ca K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02713**	**1.4180**	**.70784**	**4.7761**	**1.2512**	**.02486**	**1.0151**	**59.871**	**.05184**
Stddev	.00020	.0411	.01971	.1131	.0020	.00011	.0291	.042	.00170
%RSD	.74798	2.8972	2.7846	2.3679	.15921	.42864	2.8710	.06968	3.2712
#1	.02728	1.4470	.72177	4.8561	1.2526	.02479	1.0357	59.901	.05304
#2	.02699	1.3889	.69390	4.6962	1.2498	.02494	.99445	59.842	.05064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.26377**	**.18738**	**.13938**	**5.2284**	W **364.02**	**.53670**	**54.643**	**.48976**	**.46777**
Stddev	.00849	.00574	.00141	.0040	.42	.00283	.053	.00023	.01248
%RSD	3.2179	3.0643	1.0098	.07755	.11563	.52640	.09705	.04683	2.6681
#1	.26978	.19144	.14037	5.2313	364.32	.53470	54.681	.48993	.47659
#2	.25777	.18332	.13838	5.2255	363.72	.53870	54.606	.48960	.45894
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1233.8**	**.34877**	**11.381**	**.23549**	**25.448**	**.27655**	**.84855**	**12.229**	**26.171**
Stddev	2.1	.00922	.352	.00641	.715	.00909	.02539	.024	.052
%RSD	.17227	2.6443	3.0946	2.7240	2.8109	3.2873	2.9921	.19984	.19984
#1	1235.3	.35530	11.630	.24003	25.954	.28297	.86650	12.212	26.134
#2	1232.3	.34225	11.132	.23096	24.942	.27012	.83060	12.247	26.208
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.96873**	**.77194**	**.47549**	**.54916**	**.89832**	**1.0639**	**.29306**	**.41692**	**.28533**
Stddev	.02765	.00079	.00347	.00114	.02759	.0169	.00083	.00065	.00092
%RSD	2.8540	.10265	.72897	.20801	3.0715	1.5849	.28160	.15586	.32367
#1	.98828	.77250	.47794	.54996	.91783	1.0520	.29364	.41646	.28468
#2	.94918	.77138	.47304	.54835	.87881	1.0758	.29247	.41738	.28599
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2376.0**	**43643.**	**5705.3**
Stddev	2.8	180.	1.4
%RSD	.11883	.41134	.02432
#1	2378.0	43770.	5704.4
#2	2374.0	43516.	5706.3

Sample Name: CCVH-4579429 Acquired: 6/13/2017 2:42:16 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00178**	**50.065**	**-.00606**	**.01834**	**.00022**	**.00019**	**1.0398**	**.02003**	**-.00021**	**-.00118**	**.00066**	**.01519**
Stddev	.00019	.201	.00644	.00214	.00014	.00009	.0329	.00366	.00010	.00026	.00001	.00017
%RSD	10.547	.40136	106.41	11.652	63.184	46.441	3.1683	18.270	46.202	22.376	1.4162	1.1311
#1	-.00165	49.923	-.00150	.01985	.00012	.00013	1.0631	.02262	-.00014	-.00137	.00065	.01507
#2	-.00191	50.207	-.01061	.01683	.00032	.00025	1.0165	.01744	-.00028	-.00099	.00066	.01531
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.963**	**1.1643**	**.00380**	**.04018**	**-.00203**	**-.00162**	**250.05**	**.00093**	**.01215**	**.00241**	**4.8830**	**.00462**
Stddev	.064	.1303	.00023	.00137	.00000	.00008	.50	.00036	.00044	.00020	.0859	.00442
%RSD	.13044	11.190	5.9623	3.4127	.14018	5.2180	.19954	38.932	3.6120	8.3254	1.7586	95.680
#1	48.918	1.2564	.00396	.03921	-.00204	-.00156	249.70	.00118	.01246	.00226	4.9437	.00149
#2	49.008	1.0722	.00364	.04115	-.00203	-.00168	250.40	.00067	.01184	.00255	4.8223	.00774
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00266**	**.05441**	**.11643**	**-.00007**	**.00053**	**5.0352**	**.02020**	**.00101**	W **10.573**	**.01276**	**.00285**	**.06024**
Stddev	.00367	.00101	.00217	.00034	.00013	.0052	.00050	.00473	.013	.00005	.00003	.00152
%RSD	138.00	1.8647	1.8647	479.05	25.097	.10404	2.4730	467.47	.12035	.40374	.93470	2.5166
#1	-.00526	.05513	.11797	-.00031	.00062	5.0389	.01984	.00436	10.564	.01272	.00286	.05916
#2	-.00006	.05369	.11490	.00017	.00044	5.0315	.02055	-.00233	10.582	.01280	.00283	.06131
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Warn	None	None	None
Value									10.000			
Range									5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2596.5**	**47744.**	**5779.5**
Stddev	2.8	95.	58.8
%RSD	.10837	.19921	1.0179
#1	2598.5	47676.	5821.1
#2	2594.5	47811.	5737.9

Sample Name: CCV-4580817 Acquired: 6/13/2017 2:44:50 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.52120**	F **.62323**	**1.0520**	**.53309**	**.49832**	**.50645**	**.00444**	**5.0202**	**.51907**	**.51533**	**.50428**	**.51288**
Stddev	.00100	.01386	.0243	.01091	.00172	.00174	.00282	.0189	.01163	.01267	.01352	.00004
%RSD	.19121	2.2239	2.3140	2.0471	.34477	.34398	63.412	.37672	2.2415	2.4578	2.6816	.00684
#1	.52190	.63303	1.0692	.54081	.49953	.50768	.00245	5.0068	.52730	.52429	.51384	.51286
#2	.52049	.61343	1.0347	.52538	.49710	.50521	.00643	5.0336	.51084	.50638	.49472	.51291
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5706**	**51.662**	**1.0512**	**20.849**	**.52341**	**.49737**	F **5.6585**	**.51449**	**1.0671**	**1.0381**	**-.00266**	**1.0458**
Stddev	.0156	.092	.0028	.038	.00039	.01332	.0589	.01110	.0241	.0156	.00202	.0250
%RSD	.60695	.17828	.26609	.18161	.07465	2.6791	1.0410	2.1566	2.2594	1.4979	75.927	2.3872
#1	2.5816	51.727	1.0531	20.876	.52369	.50679	5.7002	.52233	1.0842	1.0491	-.00408	1.0634
#2	2.5595	51.597	1.0492	20.823	.52314	.48795	5.6169	.50664	1.0501	1.0271	-.00123	1.0281
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							5.0000					
Range							10.490%					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0614**	**5.1375**	**10.994**	**1.0154**	**.51208**	**.00744**	**.52069**	F **1.1107**	**.04286**	**.51323**	**.52795**	**.49402**
Stddev	.0404	.0251	.054	.0195	.00121	.00032	.00064	.0277	.00404	.00101	.00264	.00179
%RSD	3.8047	.48771	.48771	1.9170	.23640	4.3342	.12346	2.4960	9.4338	.19687	.49922	.36146
#1	1.0900	5.1198	10.956	1.0292	.51293	.00721	.52114	1.1303	.04000	.51252	.52608	.49529
#2	1.0329	5.1552	11.032	1.0017	.51122	.00767	.52023	1.0911	.04572	.51395	.52981	.49276
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
Value								1.0000				
Range								10.490%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2642.1**	**49222.**	**5801.4**
Stddev	9.0	77.	11.4
%RSD	.33977	.15711	.19728
#1	2648.5	49168.	5793.3
#2	2635.8	49277.	5809.5

Sample Name: CCB Acquired: 6/13/2017 2:47:19 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00068**	**.00482**	**-.00370**	**.00914**	**-.00000**	**.00011**	**.00382**	**.00296**	**-.00034**	**.00001**	**-.00004**	**.00121**
Stddev	.00071	.00053	.00121	.00048	.00013	.00015	.00182	.00284	.00019	.00006	.00009	.00032
%RSD	104.44	10.955	32.668	5.2239	2994.8	136.56	47.675	96.003	55.472	413.53	256.26	26.925
#1	-.00117	.00519	-.00285	.00948	.00008	.00021	.00253	.00095	-.00021	-.00003	-.00010	.00098
#2	-.00018	.00445	-.00456	.00880	-.00009	.00000	.00511	.00497	-.00048	.00006	.00003	.00144
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.10304**	**.34851**	**.00376**	**.01315**	**.00084**	**.00086**	W **.36404**	**-.00014**	**.00289**	**.00224**	**.00136**	**-.00175**
Stddev	.00290	.07219	.00170	.00552	.00002	.00001	.00855	.00046	.00329	.00097	.00629	.00013
%RSD	2.8138	20.713	45.185	41.984	2.9339	1.1622	2.3475	338.87	113.79	43.340	462.37	7.2968
#1	.10509	.39955	.00256	.00925	.00086	.00086	.37008	-.00047	.00522	.00293	-.00309	-.00166
#2	.10099	.29747	.00496	.01705	.00083	.00087	.35800	.00019	.00057	.00155	.00581	-.00184
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000						.35000					
Low Limit	-.10000						-.35000					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00481**	**.01086**	**.02323**	**.00059**	**.00017**	**-.00189**	**.00038**	**.00002**	**.03468**	**.00001**	**.00127**	**.00196**
Stddev	.00439	.01622	.03470	.00128	.00003	.00226	.00012	.00207	.01664	.00007	.00063	.00102
%RSD	91.282	149.39	149.39	217.09	17.502	119.95	30.716	8624.5	47.976	1345.4	49.679	51.867
#1	.00171	.02232	.04777	-.00032	.00015	-.00029	.00047	-.00144	.02292	-.00004	.00083	.00124
#2	.00792	-.00061	-.00131	.00150	.00020	-.00348	.00030	.00149	.04645	.00005	.00172	.00268
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2651.6**	**50021.**	**5749.3**
Stddev	1.1	43.	35.5
%RSD	.04131	.08507	.61664
#1	2652.4	49991.	5724.2
#2	2650.8	50051.	5774.3

Sample Name: CCVL-4589022 Acquired: 6/13/2017 2:49:57 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01012**	F **.13599**	**.01342**	**.10791**	**.01090**	**.00124**	**.12309**	F **.26830**	**.00460**	**.00998**	**.00974**	**.01755**
Stddev	.00005	.00732	.00475	.00459	.00147	.00031	.00899	.09484	.00031	.00051	.00020	.00019
%RSD	.50089	5.3829	35.372	4.2499	13.512	25.299	7.3024	35.348	6.8067	5.1214	2.0672	1.1088
#1	.01009	.14117	.01678	.11115	.00986	.00102	.12945	.20124	.00483	.01034	.00988	.01769
#2	.01016	.13082	.01007	.10467	.01195	.00147	.11674	.33536	.00438	.00962	.00960	.01741
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000						.20000				
Range		30.000%						30.000%				

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.21784**	**3.8695**	F **.02773**	**.21038**	**.01126**	**.01847**	F **2.7034**	**.04095**	**2.9766**	F **.01183**	**.09814**	**.01691**
Stddev	.02720	.6779	.00162	.00126	.00004	.00133	1.9454	.00117	.1268	.00001	.00073	.00084
%RSD	12.488	17.518	5.8334	.59954	.38277	7.2260	71.961	2.8620	4.2608	.04498	.73896	4.9456
#1	.19861	3.3901	.02887	.21127	.01129	.01942	1.3278	.04178	3.0663	.01183	.09865	.01750
#2	.23708	4.3488	.02659	.20949	.01123	.01753	4.0790	.04012	2.8869	.01183	.09763	.01632
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value	.10000		.02000				1.0000			.00900		
Range	30.000%		30.000%				30.000%			30.000%		

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02154**	**.52474**	**1.1229**	**.09838**	**.01170**	**.01535**	**.00984**	F **.01967**	**.07798**	**.00960**	**.02292**	**.01626**
Stddev	.00438	.00812	.0174	.00412	.00171	.00072	.00007	.00391	.04212	.00021	.00021	.00145
%RSD	20.333	1.5466	1.5466	4.1846	14.651	4.6883	.75104	19.886	54.018	2.1923	.93197	8.9176
#1	.02463	.53048	1.1352	.10130	.01049	.01484	.00979	.02244	.10776	.00975	.02307	.01523
#2	.01844	.51900	1.1107	.09547	.01292	.01586	.00990	.01691	.04819	.00945	.02277	.01729
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								.01500				
Range								30.000%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2711.5**	**51071.**	**5859.8**
Stddev	1.7	195.	66.3
%RSD	.06239	.38169	1.1308
#1	2712.7	50933.	5812.9
#2	2710.3	51209.	5906.6

Sample Name: 97957-H-1-C MSD @2 Acquired: 6/13/2017 2:52:35 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376581 200.7 (Ca K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02746**	**1.4068**	**.69148**	**4.9315**	**1.2476**	**.02457**	**.98936**	**61.483**	**.05095**
Stddev	.00077	.0552	.03029	.1734	.0031	.00012	.03193	.110	.00164
%RSD	2.8055	3.9218	4.3811	3.5164	.24938	.49960	3.2274	.17963	3.2201
#1	.02800	1.4458	.71290	5.0541	1.2498	.02466	1.0119	61.561	.05211
#2	.02691	1.3678	.67006	4.8088	1.2454	.02448	.96678	61.405	.04979
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25749**	**.18321**	**.13669**	**5.5129**	W **382.28**	**.53257**	**55.768**	**.49768**	**.45185**
Stddev	.00984	.00821	.00036	.0032	1.45	.00035	.192	.00155	.01620
%RSD	3.8226	4.4824	.26281	.05849	.38051	.06501	.34383	.31227	3.5856
#1	.26445	.18902	.13695	5.5152	383.31	.53233	55.903	.49878	.46331
#2	.25053	.17741	.13644	5.5107	381.25	.53282	55.632	.49658	.44039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1297.2**	**.34583**	**11.402**	**.22669**	**25.666**	**.27469**	**.81167**	**12.077**	**25.845**
Stddev	2.8	.01368	.439	.00977	1.016	.01193	.02541	.009	.020
%RSD	.21517	3.9545	3.8465	4.3079	3.9573	4.3421	3.1305	.07810	.07810
#1	1299.2	.35550	11.712	.23360	26.384	.28312	.82964	12.084	25.859
#2	1295.3	.33616	11.091	.21979	24.948	.26625	.79370	12.070	25.830
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.94257**	**.77909**	**.46844**	**.53809**	**.87823**	**1.0210**	**.28833**	**.41216**	**.28550**
Stddev	.04027	.00135	.00036	.00088	.03314	.0027	.00058	.00029	.00256
%RSD	4.2720	.17349	.07665	.16439	3.7735	.25977	.20178	.06990	.89755
#1	.97105	.78004	.46869	.53872	.90166	1.0191	.28874	.41195	.28731
#2	.91410	.77813	.46818	.53746	.85479	1.0229	.28792	.41236	.28369
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2369.1**	**43135.**	**5560.3**
Stddev	7.1	42.	3.4
%RSD	.29974	.09631	.06082
#1	2364.1	43105.	5562.7
#2	2374.1	43164.	5557.9

Sample Name: 280-97957-H-2-A @2 Acquired: 6/13/2017 2:55:08 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376581 200.7 (Ca K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00023**	**.37535**	**.30242**	**4.7418**	**.07581**	**.00009**	**.00117**	**19.475**	**-.00036**
Stddev	.00057	.01745	.00721	.2007	.00017	.00002	.00366	.020	.00009
%RSD	244.30	4.6487	2.3853	4.2329	.22146	23.247	312.85	.10455	26.341
#1	.00017	.38769	.30752	4.8837	.07593	.00007	.00375	19.460	-.00029
#2	-.00063	.36301	.29732	4.5999	.07569	.00010	-.00142	19.489	-.00042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04549**	**.11880**	**.01137**	**2.8928**	W **396.63**	**.00941**	**20.214**	**.11788**	**.00402**
Stddev	.00222	.00648	.00021	.0085	1.13	.00011	.123	.00018	.00104
%RSD	4.8690	5.4582	1.8618	.29278	.28603	1.1225	.60980	.14970	25.881
#1	.04706	.12338	.01152	2.8987	395.83	.00933	20.301	.11800	.00475
#2	.04393	.11421	.01122	2.8868	397.43	.00948	20.127	.11775	.00328
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1418.6**	**.15525**	**5.5783**	**.00214**	**97.675**	**.07467**	**.01272**	**12.770**	**27.328**
Stddev	6.7	.00845	.2781	.00144	4.294	.00311	.00103	.121	.259
%RSD	.47111	5.4401	4.9857	67.541	4.3966	4.1604	8.0703	.94723	.94723
#1	1413.8	.16122	5.7749	.00316	100.71	.07247	.01345	12.684	27.145
#2	1423.3	.14927	5.3816	.00112	94.638	.07686	.01199	12.856	27.511
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02898**	**.10740**	**-.00502**	**.06362**	**.00125**	**.04833**	**.07767**	**.16561**	**.10855**
Stddev	.00204	.00018	.00250	.00074	.00234	.03398	.00022	.00111	.00051
%RSD	7.0488	.16371	49.732	1.1688	187.23	70.308	.27707	.66991	.47206
#1	.03043	.10728	-.00325	.06415	-.00041	.02430	.07782	.16640	.10891
#2	.02754	.10753	-.00678	.06310	.00291	.07236	.07752	.16483	.10819
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2393.4**	**43846.**	**5771.7**
Stddev	6.7	33.	34.9
%RSD	.28060	.07417	.60520
#1	2388.6	43869.	5796.4
#2	2398.1	43823.	5747.0

Sample Name: 280-97957-H-3-A Acquired: 6/13/2017 2:57:46 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376581 200.7 (Ca K)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00068**	**.10114**	**.07555**	**3.7963**	**2.7714**	**.00025**	**.00229**	**46.901**	**.00061**
Stddev	.00038	.03527	.01311	.1186	.0008	.00018	.00161	.007	.00039
%RSD	56.005	34.877	17.353	3.1251	.02988	71.526	70.154	.01499	63.259
#1	.00041	.07620	.06628	3.8802	2.7720	.00038	.00115	46.896	.00034
#2	.00095	.12608	.08482	3.7125	2.7708	.00013	.00343	46.906	.00089
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07742**	**.07081**	**.32851**	**6.1806**	W **408.69**	**.19741**	**42.903**	**.06596**	**.03509**
Stddev	.00274	.00249	.00127	.0133	.61	.00051	.053	.00038	.00079
%RSD	3.5424	3.5190	.38664	.21445	.14885	.25690	.12309	.58340	2.2538
#1	.07936	.07257	.32940	6.1899	408.26	.19777	42.941	.06623	.03565
#2	.07548	.06905	.32761	6.1712	409.12	.19705	42.866	.06568	.03453
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2532.5**	**.30524**	**1.6481**	**.02246**	**22.608**	**-.00053**	**.01417**	**29.487**	**63.103**
Stddev	5.7	.01064	.0344	.00174	.861	.00387	.00449	.102	.218
%RSD	.22665	3.4871	2.0883	7.7694	3.8082	727.56	31.684	.34568	.34568
#1	2528.4	.31276	1.6725	.02369	23.217	.00221	.01099	29.415	62.949
#2	2536.6	.29771	1.6238	.02123	21.999	-.00327	.01734	29.560	63.257
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00849**	**1.7195**	**.00022**	**.01727**	**.00456**	**.07422**	**.03014**	**.27714**	**.42612**
Stddev	.00304	.0025	.00021	.00040	.00556	.00983	.00122	.00079	.00173
%RSD	35.754	.14607	93.098	2.2954	121.95	13.244	4.0480	.28341	.40539
#1	.00635	1.7177	.00037	.01699	.00063	.08118	.03100	.27770	.42490
#2	.01064	1.7212	.00008	.01755	.00849	.06727	.02928	.27659	.42734
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2296.9**	**41664.**	**5656.3**
Stddev	9.1	30.	26.8
%RSD	.39438	.07128	.47410
#1	2303.3	41643.	5675.3
#2	2290.5	41685.	5637.4

Sample Name: 280-97957-H-4-A @5 Acquired: 6/13/2017 3:00:24 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376581 200.7 (Ca K) 5x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00099**	**.23722**	**.09328**	**3.1002**	**.07557**	**.00009**	**.00318**	**10.714**	**-.00027**
Stddev	.00068	.00575	.00860	.1185	.00067	.00003	.00141	.005	.00003
%RSD	68.394	2.4240	9.2218	3.8233	.88202	34.977	44.133	.05102	11.408
#1	-.00147	.24128	.09937	3.1840	.07604	.00007	.00219	10.710	-.00025
#2	-.00051	.23315	.08720	3.0164	.07510	.00012	.00418	10.718	-.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01512**	**.07473**	**.00844**	**1.3535**	W **186.42**	**.00819**	**12.831**	**.04092**	**.00204**
Stddev	.00002	.00307	.00010	.0017	.04	.00089	.108	.00012	.00053
%RSD	.15826	4.1050	1.2066	.12280	.01971	10.909	.84178	.29712	25.959
#1	.01514	.07690	.00851	1.3523	186.39	.00882	12.907	.04100	.00167
#2	.01510	.07256	.00837	1.3547	186.45	.00755	12.755	.04083	.00242
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **633.71**	**.05643**	**3.4351**	**.00093**	**11.123**	**.01793**	**-.00426**	**9.2356**	**19.764**
Stddev	.59	.00231	.1400	.00103	.455	.00529	.00307	.0342	.073
%RSD	.09249	4.0974	4.0759	110.59	4.0865	29.518	72.033	.37057	.37057
#1	634.12	.05806	3.5341	.00166	11.444	.02167	-.00643	9.2598	19.816
#2	633.29	.05479	3.3361	.00020	10.801	.01419	-.00209	9.2114	19.712
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03566**	**.09707**	**-.00254**	**.02819**	**.00306**	**-.00017**	**.02714**	**.06215**	**.02147**
Stddev	.00007	.00032	.00031	.00009	.00186	.00855	.00021	.00009	.00120
%RSD	.18696	.32767	12.205	.33122	60.803	5050.2	.78914	.15248	5.5813
#1	.03571	.09729	-.00232	.02826	.00174	.00587	.02699	.06209	.02232
#2	.03561	.09684	-.00276	.02813	.00437	-.00621	.02729	.06222	.02062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2493.6**	**45874.**	**5784.7**
Stddev	10.6	203.	34.4
%RSD	.42418	.44193	.59389
#1	2501.1	45731.	5760.4
#2	2486.1	46017.	5809.0

Sample Name: 280-97957-H-5-A @5 Acquired: 6/13/2017 3:03:04 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376581 200.7 (Ca K) 5x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00007**	**.14420**	**.08765**	W **10.073**	**.06185**	**.00012**	**.00151**	**7.1315**	**-.00036**
Stddev	.00083	.00898	.00341	.392	.00018	.00002	.00382	.0394	.00005
%RSD	1217.5	6.2308	3.8930	3.8905	.28486	18.917	253.54	.55255	13.817
#1	-.00066	.13785	.08524	10.350	.06173	.00014	.00420	7.1593	-.00033
#2	.00052	.15055	.09006	9.7958	.06197	.00011	-.00119	7.1036	-.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.20000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01859**	**.05206**	**.01374**	**1.1781**	W **184.54**	**.00888**	**11.446**	**.02601**	**.00137**
Stddev	.00007	.00194	.00044	.0052	.13	.00039	.009	.00009	.00062
%RSD	.39171	3.7315	3.1668	.43943	.07105	4.4194	.08019	.36194	45.186
#1	.01864	.05343	.01343	1.1745	184.63	.00916	11.452	.02608	.00093
#2	.01854	.05068	.01405	1.1818	184.45	.00860	11.439	.02594	.00181
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **658.15**	**.07022**	**2.5635**	**.00136**	**10.402**	**.00556**	**.00204**	**6.8308**	**14.618**
Stddev	.29	.00238	.1030	.00359	.421	.00051	.00298	.0075	.016
%RSD	.04476	3.3892	4.0166	263.30	4.0447	9.1290	146.08	.10979	.10979
#1	657.94	.07190	2.6363	.00390	10.700	.00592	.00415	6.8361	14.629
#2	658.36	.06853	2.4907	-.00118	10.105	.00520	-.00007	6.8255	14.606
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02043**	**.07664**	**-.00338**	**.07112**	**.00078**	**.03475**	**.03193**	**.04802**	**.05952**
Stddev	.00114	.00001	.00311	.00005	.00229	.01427	.00026	.00013	.00474
%RSD	5.5974	.00757	91.935	.06410	293.65	41.053	.80722	.26452	7.9597
#1	.01962	.07663	-.00558	.07115	-.00084	.04484	.03175	.04793	.06286
#2	.02124	.07664	-.00118	.07108	.00240	.02466	.03211	.04811	.05617
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2496.4**	**45870.**	**5787.9**
Stddev	14.0	140.	24.7
%RSD	.56190	.30517	.42682
#1	2506.4	45969.	5770.5
#2	2486.5	45771.	5805.4

Sample Name: 280-97957-H-6-A @5 Acquired: 6/13/2017 3:05:42 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376581 200.7 (Ca K) 5x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00018**	**.23696**	**.09795**	**2.8829**	**.07830**	**-.00009**	**.00237**	**21.144**	**-.00029**
Stddev	.00066	.00891	.00017	.0986	.00002	.00007	.00530	.018	.00019
%RSD	361.41	3.7614	.17709	3.4214	.02948	78.640	223.49	.08725	66.564
#1	.00028	.24326	.09783	2.9526	.07828	-.00004	-.00138	21.131	-.00042
#2	-.00065	.23066	.09808	2.8131	.07832	-.00014	.00612	21.157	-.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01438**	**.06739**	**.03913**	**3.5968**	W **195.56**	**.01380**	**17.057**	**.13975**	**.00171**
Stddev	.00046	.00262	.00076	.0118	.04	.00031	.033	.00009	.00028
%RSD	3.2145	3.8876	1.9480	.32927	.01829	2.2352	.19386	.06472	16.301
#1	.01471	.06924	.03967	3.5884	195.59	.01358	17.081	.13981	.00191
#2	.01406	.06554	.03859	3.6052	195.54	.01402	17.034	.13968	.00152
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **632.18**	**.05723**	**3.7820**	**.00193**	**13.267**	**.01101**	**.00746**	**8.9566**	**19.167**
Stddev	.33	.00209	.1331	.00156	.544	.00035	.00441	.0117	.025
%RSD	.05196	3.6539	3.5191	80.659	4.0991	3.1451	59.120	.13062	.13062
#1	631.95	.05871	3.8761	.00303	13.652	.01126	.00434	8.9483	19.149
#2	632.41	.05575	3.6879	.00083	12.882	.01077	.01058	8.9649	19.185
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02806**	**.12227**	**-.00431**	**.02327**	**.00188**	**.02396**	**.01666**	**.12483**	**.01892**
Stddev	.00218	.00012	.00029	.00120	.00234	.01161	.00039	.00169	.00213
%RSD	7.7862	.10168	6.7651	5.1610	124.54	48.472	2.3362	1.3539	11.239
#1	.02961	.12235	-.00452	.02412	.00022	.03217	.01639	.12602	.01742
#2	.02652	.12218	-.00411	.02242	.00353	.01575	.01694	.12363	.02043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2466.2**	**45162.**	**5641.4**
Stddev	16.2	26.	22.1
%RSD	.65788	.05758	.39107
#1	2454.7	45181.	5625.8
#2	2477.6	45144.	5657.0

Sample Name: 280-97957-H-7-A @2 Acquired: 6/13/2017 3:08:20 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376581 200.7 (Ca K) 2x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00062**	**.38577**	**.21156**	**8.9005**	**.19070**	**.00011**	**.00339**	**40.107**	**.00005**
Stddev	.00013	.01438	.01740	.3121	.00142	.00006	.00643	.243	.00016
%RSD	21.897	3.7274	8.2236	3.5070	.74473	58.746	189.66	.60630	346.90
#1	-.00052	.39593	.22387	9.1212	.19170	.00006	-.00116	40.279	.00016
#2	-.00071	.37560	.19926	8.6798	.18970	.00015	.00794	39.935	-.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03416**	**.12705**	**.01490**	**5.2193**	W **403.27**	**.02219**	**32.329**	**.24034**	**.00574**
Stddev	.00203	.00521	.00021	.0228	1.78	.00076	.112	.00149	.00050
%RSD	5.9312	4.0988	1.4334	.43701	.44068	3.4091	.34519	.61878	8.7032
#1	.03559	.13073	.01505	5.2354	404.53	.02272	32.408	.24139	.00539
#2	.03273	.12337	.01475	5.2032	402.01	.02165	32.250	.23928	.00609
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1375.7**	**.12195**	**6.6378**	**.00344**	**22.975**	**.03367**	**.00540**	**16.736**	**35.815**
Stddev	7.9	.00522	.2502	.00082	.806	.00143	.00135	.027	.057
%RSD	.57776	4.2783	3.7691	23.848	3.5100	4.2561	24.907	.15875	.15875
#1	1381.4	.12564	6.8147	.00402	23.545	.03468	.00445	16.717	35.775
#2	1370.1	.11826	6.4609	.00286	22.405	.03266	.00635	16.755	35.855
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04992**	**.25704**	**-.00399**	**.06407**	**-.00204**	**-.00263**	**.06272**	**.20664**	**.05548**
Stddev	.00234	.00096	.00227	.00056	.00198	.00096	.00090	.00059	.00071
%RSD	4.6793	.37435	56.850	.87976	97.172	36.534	1.4295	.28642	1.2840
#1	.05157	.25772	-.00239	.06447	-.00344	-.00331	.06336	.20622	.05498
#2	.04827	.25636	-.00560	.06367	-.00064	-.00195	.06209	.20706	.05598
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2349.7**	**42379.**	**5548.1**
Stddev	8.0	116.	21.6
%RSD	.34092	.27277	.38959
#1	2344.0	42461.	5563.4
#2	2355.3	42297.	5532.8

Sample Name: 280-97957-H-11-A @5 Acquired: 6/13/2017 3:10:57 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376581 200.7 (Ca K) 5x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00098**	**.23805**	**.12909**	**3.2496**	**.05321**	**.00002**	**.00206**	**13.075**	**.00018**
Stddev	.00017	.01400	.00585	.1078	.00051	.00001	.00491	.030	.00000
%RSD	16.850	5.8830	4.5325	3.3159	.96186	47.982	238.36	.22748	2.4273
#1	-.00086	.24795	.13322	3.3258	.05285	.00003	.00553	13.096	.00018
#2	-.00110	.22814	.12495	3.1734	.05358	.00001	-.00141	13.054	.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01017**	**.07035**	**.00773**	**2.5894**	W **188.71**	**.01487**	**19.794**	**.12177**	**.00149**
Stddev	.00046	.00305	.00062	.0037	.54	.00128	.004	.00013	.00091
%RSD	4.5230	4.3371	8.0496	.14255	.28355	8.6180	.02066	.11047	61.246
#1	.01050	.07251	.00729	2.5868	189.09	.01396	19.797	.12167	.00214
#2	.00985	.06819	.00817	2.5920	188.33	.01578	19.791	.12186	.00085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **580.41**	**.04117**	**3.2659**	**.00152**	**9.6623**	**.00417**	**.00281**	**7.9305**	**16.971**
Stddev	.97	.00157	.1205	.00105	.3109	.00120	.00515	.0001	.000
%RSD	.16677	3.8199	3.6894	68.911	3.2181	28.741	183.15	.00190	.00190
#1	581.09	.04228	3.3511	.00226	9.8822	.00502	-.00083	7.9306	16.972
#2	579.72	.04006	3.1807	.00078	9.4424	.00332	.00646	7.9304	16.971
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01593**	**.06980**	**-.00273**	**.02582**	**-.00281**	**.02882**	**.01608**	**.05881**	**.00570**
Stddev	.00073	.00015	.00276	.00013	.00091	.00868	.00012	.00039	.00121
%RSD	4.5632	.21278	101.07	.49433	32.229	30.122	.72810	.66078	21.256
#1	.01542	.06991	-.00469	.02573	-.00217	.02268	.01600	.05853	.00656
#2	.01645	.06970	-.00078	.02591	-.00345	.03496	.01616	.05908	.00484
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2515.5**	**45542.**	**5684.3**
Stddev	39.8	198.	12.7
%RSD	1.5804	.43541	.22274
#1	2487.4	45682.	5693.3
#2	2543.6	45402.	5675.4

Sample Name: 280-97957-H-12-A @5 Acquired: 6/13/2017 3:13:36 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376581 200.7 (Ca K) 5x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00068**	**.18995**	**.02337**	**2.5118**	**.10115**	**-.00003**	**.00345**	**26.208**	**-.00021**
Stddev	.00116	.00860	.00535	.1145	.00075	.00013	.00488	.044	.00007
%RSD	171.27	4.5290	22.904	4.5591	.73849	482.31	141.49	.16848	32.647
#1	.00014	.19604	.01958	2.5928	.10168	.00007	-.00000	26.177	-.00026
#2	-.00150	.18387	.02715	2.4309	.10062	-.00012	.00690	26.240	-.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01340**	**.05801**	**.00766**	**4.7025**	W **174.53**	**.01311**	**13.723**	**.14729**	**.00133**
Stddev	.00111	.00269	.00028	.0070	.15	.00201	.066	.00038	.00085
%RSD	8.2800	4.6326	3.6167	.14927	.08564	15.323	.48326	.25923	63.743
#1	.01418	.05991	.00785	4.7075	174.63	.01169	13.770	.14756	.00073
#2	.01261	.05611	.00746	4.6976	174.42	.01453	13.676	.14702	.00193
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **544.95**	**.04924**	**4.1966**	**.00190**	**13.100**	**.00677**	**.00511**	**9.3225**	**19.950**
Stddev	.14	.00260	.1954	.00065	.641	.00080	.00714	.0301	.064
%RSD	.02625	5.2907	4.6561	34.083	4.8951	11.845	139.76	.32234	.32234
#1	545.05	.05108	4.3347	.00144	13.554	.00734	.00006	9.3012	19.905
#2	544.85	.04739	4.0584	.00236	12.647	.00621	.01016	9.3437	19.996
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03661**	**.13683**	**-.00283**	**.02227**	**-.00201**	**-.02606**	**.01342**	**.06940**	**.00501**
Stddev	.00076	.00062	.00103	.00056	.00169	.00756	.00007	.00090	.00063
%RSD	2.0671	.45623	36.294	2.5262	84.060	28.997	.49610	1.2970	12.478
#1	.03714	.13727	-.00210	.02266	-.00320	-.02072	.01337	.06876	.00457
#2	.03607	.13639	-.00355	.02187	-.00081	-.03141	.01347	.07004	.00545
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2534.9**	**46828.**	**5887.5**
Stddev	14.0	97.	4.3
%RSD	.55164	.20745	.07228
#1	2525.1	46760.	5890.5
#2	2544.8	46897.	5884.5

Sample Name: 280-97957-H-13-A @5 Acquired: 6/13/2017 3:16:14 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376581 200.7 (Ca K) 5x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00068**	**.18801**	**.16941**	**3.2996**	**.06152**	**.00004**	**.00362**	**46.153**	**.00024**
Stddev	.00078	.00633	.00219	.1248	.00028	.00003	.00407	.095	.00019
%RSD	114.07	3.3671	1.2919	3.7809	.45840	62.827	112.16	.20640	78.689
#1	-.00123	.19248	.17095	3.3879	.06172	.00006	.00075	46.086	.00011
#2	-.00013	.18353	.16786	3.2114	.06132	.00002	.00650	46.221	.00038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00902**	**.06050**	**.00694**	**3.6985**	W **250.21**	**.01928**	**28.766**	**.17488**	**.00271**
Stddev	.00027	.00275	.00016	.0018	.53	.00168	.115	.00052	.00060
%RSD	3.0013	4.5511	2.3408	.04908	.21108	8.7374	.40113	.29798	22.222
#1	.00921	.06244	.00705	3.6998	249.84	.02048	28.848	.17525	.00314
#2	.00883	.05855	.00682	3.6972	250.58	.01809	28.684	.17452	.00229
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **819.40**	**.04126**	**3.7230**	**.00248**	**16.128**	**.01190**	**.00449**	**9.9800**	**21.357**
Stddev	2.85	.00263	.1522	.00066	.661	.00299	.00037	.0062	.013
%RSD	.34779	6.3842	4.0880	26.744	4.0988	25.170	8.1230	.06175	.06175
#1	817.38	.04312	3.8306	.00295	16.595	.01402	.00424	9.9756	21.348
#2	821.41	.03940	3.6154	.00201	15.660	.00978	.00475	9.9843	21.366
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01787**	**.20038**	**-.00252**	**.03676**	**.00264**	**.04473**	**.02819**	**.03688**	**.00681**
Stddev	.00289	.00003	.00142	.00038	.00101	.02404	.00081	.00031	.00019
%RSD	16.191	.01732	56.484	1.0297	38.286	53.752	2.8812	.83605	2.8374
#1	.01992	.20035	-.00352	.03703	.00336	.06173	.02876	.03667	.00695
#2	.01583	.20040	-.00151	.03650	.00193	.02773	.02761	.03710	.00667
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2476.5**	**45856.**	**5943.4**
Stddev	10.7	40.	16.3
%RSD	.43305	.08806	.27352
#1	2468.9	45884.	5931.9
#2	2484.1	45827.	5954.9

Sample Name: CCVH-4579429 Acquired: 6/13/2017 3:18:52 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00187**	**50.746**	**-.00638**	**.01995**	**-.00002**	**.00028**	**1.0339**	**.01734**	**.00032**	**-.00105**	**.00083**	**.01475**
Stddev	.00037	.016	.01005	.00047	.00007	.00006	.0391	.00200	.00019	.00011	.00006	.00058
%RSD	19.485	.03131	157.58	2.3746	341.65	22.683	3.7802	11.537	58.200	10.048	7.2296	3.9002
#1	-.00213	50.735	-.01349	.01962	.00003	.00032	1.0615	.01876	.00045	-.00098	.00079	.01434
#2	-.00162	50.757	.00073	.02029	-.00007	.00023	1.0062	.01593	.00019	-.00113	.00087	.01515
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.692**	**1.1871**	**.00209**	**.04804**	**-.00176**	**-.00203**	**253.53**	**.00151**	**.00966**	**.00189**	**4.8799**	**.00221**
Stddev	.116	.1543	.00287	.00008	.00015	.00021	.23	.00007	.00280	.00069	.1605	.00062
%RSD	.23426	12.995	137.50	.17313	8.7003	10.389	.09069	4.3485	28.944	36.173	3.2881	28.246
#1	49.775	1.2962	.00006	.04810	-.00187	-.00218	253.69	.00156	.00768	.00141	4.9934	.00177
#2	49.610	1.0780	.00411	.04798	-.00165	-.00188	253.37	.00147	.01164	.00238	4.7664	.00265
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00018**	**.17432**	**.37305**	**.00025**	**.00039**	**5.0583**	**.02055**	**-.00130**	W **10.635**	**.01283**	**.00397**	**.06076**
Stddev	.00061	.00141	.00302	.00053	.00001	.0138	.00028	.00684	.074	.00082	.00016	.00061
%RSD	331.43	.81012	.81012	215.30	3.1234	.27341	1.3695	527.44	.69353	6.3614	4.0651	1.0059
#1	-.00062	.17333	.37092	-.00013	.00038	5.0681	.02035	.00354	10.687	.01340	.00409	.06120
#2	.00025	.17532	.37519	.00062	.00040	5.0485	.02075	-.00613	10.583	.01225	.00386	.06033
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Warn	None	None	None
Value									10.000			
Range									5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2634.0**	**48715.**	**5820.3**
Stddev	6.2	49.	2.7
%RSD	.23517	.10133	.04683
#1	2629.6	48680.	5822.3
#2	2638.3	48750.	5818.4

Sample Name: CCV-4580817 Acquired: 6/13/2017 3:21:26 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51848**	F **.63589**	**1.0361**	**.53126**	**.49402**	**.50591**	**.00055**	**4.9656**	**.51518**	**.50888**	**.49819**	**.50851**
Stddev	.00059	.01568	.0394	.01179	.00065	.00181	.00131	.0165	.01167	.01240	.01404	.00068
%RSD	.11360	2.4659	3.8062	2.2200	.13222	.35740	239.12	.33255	2.2644	2.4359	2.8190	.13286
#1	.51807	.64698	1.0640	.53960	.49448	.50719	.00147	4.9773	.52343	.51765	.50812	.50899
#2	.51890	.62480	1.0083	.52292	.49356	.50463	-.00038	4.9539	.50693	.50012	.48826	.50803
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5547**	**51.474**	**1.0473**	**20.747**	**.52178**	**.49207**	F **5.7502**	**.50981**	**1.0621**	**1.0282**	**.00759**	**1.0408**
Stddev	.0024	.015	.0023	.075	.00157	.01361	.0459	.01312	.0232	.0276	.00780	.0203
%RSD	.09580	.02893	.22190	.36300	.30133	2.7658	.79860	2.5738	2.1802	2.6884	102.77	1.9539
#1	2.5564	51.463	1.0456	20.800	.52289	.50169	5.7827	.51909	1.0784	1.0478	.00207	1.0551
#2	2.5529	51.484	1.0489	20.693	.52066	.48244	5.7178	.50053	1.0457	1.0087	.01310	1.0264
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							5.0000					
Range							10.490%					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0547**	**5.4029**	**11.562**	**1.0048**	**.51372**	**.00730**	**.52091**	F **1.1104**	**.03006**	**.51041**	**.52538**	**.49025**
Stddev	.0319	.0571	.122	.0295	.00034	.00037	.00100	.0244	.02855	.00334	.00569	.00219
%RSD	3.0211	1.0564	1.0564	2.9377	.06623	5.0522	.19172	2.1987	94.962	.65400	1.0839	.44594
#1	1.0772	5.3626	11.476	1.0257	.51396	.00756	.52162	1.1276	.05024	.51277	.52940	.49179
#2	1.0322	5.4433	11.649	.98396	.51348	.00704	.52020	1.0931	.00988	.50805	.52135	.48870
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
Value								1.0000				
Range								10.490%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2633.7**	**49027.**	**5737.9**
Stddev	6.5	159.	17.1
%RSD	.24535	.32438	.29886
#1	2638.2	48915.	5725.7
#2	2629.1	49140.	5750.0

Sample Name: CCB Acquired: 6/13/2017 3:23:55 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00011**	**.00775**	**-.00029**	**.00952**	**-.00004**	**.00009**	**.00348**	**.00428**	**-.00031**	**.00011**	**.00026**	**.00185**
Stddev	.00001	.00064	.00885	.00053	.00004	.00006	.00229	.00358	.00003	.00001	.00028	.00012
%RSD	11.596	8.2157	3030.2	5.5702	83.108	68.507	65.819	83.601	8.6612	8.9630	106.69	6.2850
#1	-.00010	.00730	-.00655	.00990	-.00007	.00013	.00186	.00681	-.00029	.00011	.00046	.00177
#2	-.00012	.00820	.00597	.00915	-.00002	.00004	.00510	.00175	-.00033	.00010	.00007	.00193
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.05550**	**.44198**	**.00311**	**.00321**	**.00054**	**.00092**	W **.42516**	**.00041**	**.00332**	**.00207**	**-.00116**	**.00033**
Stddev	.00268	.01305	.00219	.00252	.00004	.00018	.01180	.00040	.00065	.00107	.00603	.00083
%RSD	4.8251	2.9518	70.574	78.426	6.8461	19.232	2.7744	97.862	19.466	51.582	519.85	251.54
#1	.05740	.45120	.00466	.00499	.00057	.00079	.43351	.00070	.00286	.00282	.00311	.00092
#2	.05361	.43275	.00156	.00143	.00052	.00104	.41682	.00013	.00377	.00131	-.00543	-.00026
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.05000						.35000					
Low Limit	-.05000						-.35000					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00210**	**.12247**	F **.26209**	**-.00077**	**.00015**	**-.00236**	**-.00014**	**.00393**	**.03043**	**-.00043**	**.00129**	**.00103**
Stddev	.00203	.02588	.05539	.00241	.00002	.00183	.00035	.00456	.00639	.00006	.00028	.00011
%RSD	96.527	21.132	21.132	312.33	10.442	77.402	244.51	116.05	20.995	12.839	22.006	10.722
#1	-.00067	.14077	.30126	-.00248	.00014	-.00107	-.00039	.00070	.03495	-.00047	.00109	.00095
#2	-.00353	.10417	.22293	.00093	.00016	-.00366	.00010	.00715	.02591	-.00039	.00149	.00110
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.25000									
Low Limit			-.50000									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2679.0**	**50436.**	**5765.4**
Stddev	1.9	70.	12.4
%RSD	.07156	.13807	.21430
#1	2677.6	50486.	5756.6
#2	2680.3	50387.	5774.1

Sample Name: CCVL-4589022 Acquired: 6/13/2017 3:26:33 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00996**	F **.21083**	**.01273**	**.12569**	**.00988**	**.00106**	**.12090**	**.20398**	**.00508**	**.01058**	**.01083**	**.01763**
Stddev	.00103	.07601	.00620	.01804	.00011	.00015	.00522	.00207	.00041	.00039	.00056	.00039
%RSD	10.367	36.054	48.669	14.352	1.1055	13.953	4.3160	1.0164	8.0063	3.7308	5.2096	2.2136
#1	.00923	.15708	.00835	.11294	.00996	.00096	.12459	.20544	.00479	.01030	.01043	.01791
#2	.01069	.26458	.01711	.13845	.00981	.00117	.11721	.20251	.00536	.01086	.01122	.01736
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000										
Range		30.000%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.15320**	**3.4437**	**.02304**	**.22107**	**.01147**	**.01858**	F **1.4931**	**.04141**	**2.9973**	**.01160**	F **.17294**	**.02280**
Stddev	.00063	.0414	.00027	.00760	.00009	.00086	.0027	.00082	.1126	.00011	.09169	.00246
%RSD	.40856	1.2012	1.1900	3.4375	.79180	4.6337	.18206	1.9723	3.7578	.94877	53.020	10.794
#1	.15364	3.4144	.02323	.21570	.01154	.01919	1.4950	.04198	3.0770	.01168	.10810	.02106
#2	.15276	3.4729	.02285	.22645	.01141	.01797	1.4912	.04083	2.9177	.01152	.23777	.02453
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value	.10000						1.0000				.10000	
Range	30.000%						30.000%				30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02560**	**.55647**	**1.1908**	**.09816**	**.01032**	**.01257**	**.00981**	**.01442**	F **.11563**	**.00972**	**.02245**	**.01603**
Stddev	.00344	.02609	.0558	.00005	.00015	.00065	.00013	.00322	.00684	.00045	.00003	.00194
%RSD	13.424	4.6893	4.6893	.04819	1.4859	5.1788	1.3099	22.360	5.9191	4.6028	.12325	12.118
#1	.02803	.53802	1.1514	.09820	.01021	.01303	.00972	.01669	.12047	.01004	.02247	.01740
#2	.02317	.57492	1.2303	.09813	.01042	.01211	.00990	.01214	.11079	.00941	.02243	.01465
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2746.0**	**50797.**	**5772.2**
Stddev	19.5	180.	21.3
%RSD	.71015	.35424	.36861
#1	2732.2	50925.	5757.2
#2	2759.8	50670.	5787.2

Sample Name: MB 280-376732/1-A Acquired: 6/13/2017 3:29:11 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 6010C soil Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00035**	**.01275**	**-.00582**	**.01683**	**.00127**	**-.00004**	**.00417**	F **.21854**	**-.00026**
Stddev	.00025	.00095	.00415	.00083	.00005	.00004	.00033	.00050	.00019
%RSD	71.787	7.4318	71.413	4.9560	3.9992	97.417	7.8909	.22810	73.025
#1	-.00053	.01208	-.00288	.01742	.00123	-.00001	.00394	.21819	-.00039
#2	-.00017	.01342	-.00876	.01624	.00130	-.00007	.00441	.21889	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								.20000	
Low Limit								-.20000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**.00062**	**.00205**	**.04505**	**.36407**	**.00322**	**.05810**	**.00053**	**.00049**
Stddev	.00008	.00005	.00038	.00004	.02008	.00321	.00550	.00003	.00003
%RSD	134.65	7.7413	18.572	.09528	5.5161	99.452	9.4595	6.2320	6.9219
#1	.00000	.00066	.00232	.04502	.37827	.00549	.05422	.00055	.00047
#2	.00011	.00059	.00178	.04508	.34987	.00096	.06199	.00051	.00052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.59797**	**.00023**	**.01338**	**.00211**	**.00011**	**.00475**	W **-.00789**	**.06742**	**.14429**
Stddev	.01187	.00012	.00119	.00123	.00097	.00376	.00017	.00074	.00159
%RSD	1.9848	50.639	8.8560	58.199	894.90	79.130	2.1885	1.0987	1.0987
#1	.60637	.00015	.01254	.00298	.00079	.00741	-.00801	.06690	.14317
#2	.58958	.00031	.01422	.00124	-.00058	.00209	-.00777	.06795	.14541
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	None
High Limit	.50000						.00750		
Low Limit	-.50000						-.00750		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00939**	**.00064**	**-.00030**	**-.00005**	**.00334**	**.00767**	**-.00015**	**.00249**	**.00154**
Stddev	.00047	.00003	.00117	.00030	.00435	.03079	.00027	.00099	.00059
%RSD	5.0185	3.9559	383.21	660.53	129.99	401.43	177.49	39.645	38.365
#1	.00973	.00063	.00052	.00017	.00027	-.01410	.00004	.00180	.00112
#2	.00906	.00066	-.00113	-.00026	.00642	.02945	-.00035	.00319	.00196
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2743.2**	**52177.**	**5985.8**
Stddev	1.9	62.	32.1
%RSD	.06799	.11968	.53691
#1	2741.8	52221.	5963.0
#2	2744.5	52132.	6008.5

Sample Name: LCS 280-376732/2-A Acquired: 6/13/2017 3:31:49 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 6010C soil Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05221**	**2.3170**	**1.0633**	F **1.1003**	**1.9754**	**.05023**	**2.1580**	**48.124**	**.10342**
Stddev	.00033	.0558	.0218	.0199	.0010	.00017	.0483	.080	.00186
%RSD	.62714	2.4099	2.0515	1.8123	.05131	.33501	2.2403	.16697	1.7995
#1	.05245	2.3565	1.0788	1.1144	1.9761	.05011	2.1922	48.181	.10473
#2	.05198	2.2775	1.0479	1.0862	1.9746	.05035	2.1238	48.067	.10210
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit				1.1000					
Low Limit				.81000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49318**	**.19851**	**.25784**	**1.0826**	**51.208**	**1.0369**	**50.092**	**.50631**	**.96061**
Stddev	.00955	.00405	.00018	.0010	.054	.0006	.068	.00028	.02435
%RSD	1.9374	2.0401	.07007	.09118	.10613	.06167	.13495	.05523	2.5352
#1	.49993	.20137	.25797	1.0819	51.169	1.0374	50.140	.50651	.97783
#2	.48642	.19564	.25771	1.0833	51.246	1.0364	50.044	.50611	.94339
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.818**	**.49520**	**10.761**	**.50028**	**2.0212**	**.52950**	**2.0827**	**3.0199**	**6.4625**
Stddev	.120	.00972	.231	.01079	.0432	.01454	.0401	.0141	.0301
%RSD	.23214	1.9621	2.1499	2.1561	2.1391	2.7451	1.9248	.46596	.46596
#1	51.733	.50207	10.924	.50791	2.0518	.53978	2.1110	3.0099	6.4412
#2	51.903	.48833	10.597	.49265	1.9906	.51922	2.0543	3.0298	6.4838
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9953**	**1.0153**	**1.0260**	**1.0384**	**2.1289**	F **2.2140**	**.50501**	**.51127**	**.49338**
Stddev	.0432	.0037	.0008	.0019	.0425	.0051	.00072	.00015	.00063
%RSD	2.1632	.36255	.08286	.18049	1.9955	.22862	.14162	.02956	.12722
#1	2.0258	1.0127	1.0266	1.0398	2.1589	2.2104	.50552	.51138	.49382
#2	1.9647	1.0179	1.0254	1.0371	2.0988	2.2175	.50451	.51117	.49293
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						2.2000			
Low Limit						1.7000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2604.0**	**48992.**	**5840.2**
Stddev	4.9	58.	3.7
%RSD	.18701	.11933	.06413
#1	2600.5	49033.	5837.6
#2	2607.4	48951.	5842.9

Sample Name: 280-98030-D-1-A Acquired: 6/13/2017 3:34:14 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 6010C soil Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00097**	**3.7617**	**.00055**	**.00759**	**.05957**	**.00014**	**-.00208**	**.44141**	**.00004**
Stddev	.00050	.0031	.00087	.00001	.00013	.00005	.00122	.00723	.00003
%RSD	51.127	.08170	157.11	.12486	.21474	33.418	58.556	1.6374	89.258
#1	-.00062	3.7595	.00116	.00758	.05966	.00017	-.00294	.43630	.00006
#2	-.00132	3.7639	-.00006	.00760	.05948	.00011	-.00122	.44652	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00079**	**.02168**	**.03363**	**13.081**	**.69941**	**.00585**	**.27481**	**.09792**	**.00194**
Stddev	.00008	.00005	.00033	.008	.00058	.00176	.00293	.00044	.00032
%RSD	10.407	.22527	.97171	.06026	.08362	30.052	1.0668	.45117	16.626
#1	.00073	.02171	.03386	13.087	.69900	.00461	.27688	.09823	.00217
#2	.00084	.02164	.03340	13.076	.69983	.00709	.27274	.09761	.00172
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.70173**	**.00557**	**.31158**	**.28432**	**.38316**	**.00198**	**.00979**	**3.3261**	**7.1179**
Stddev	.17676	.00017	.00516	.00920	.01832	.00427	.00833	.0020	.0042
%RSD	25.190	3.0234	1.6552	3.2364	4.7821	215.50	85.008	.05882	.05882
#1	.57674	.00545	.31523	.29082	.39612	.00500	.00391	3.3275	7.1208
#2	.82673	.00569	.30793	.27781	.37020	-.00104	.01568	3.3247	7.1149
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03510**	**.00574**	**.01852**	**2.3275**	**-.00019**	**.01335**	**.04975**	**.05413**	**.05878**
Stddev	.00250	.00019	.00114	.0095	.00292	.02437	.00027	.00160	.00327
%RSD	7.1284	3.3642	6.1632	.40801	1576.6	182.49	.54324	2.9539	5.5653
#1	.03687	.00560	.01772	2.3342	.00188	.03058	.04994	.05300	.05647
#2	.03333	.00588	.01933	2.3208	-.00225	-.00388	.04956	.05526	.06109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2762.2**	**52035.**	**5937.9**
Stddev	4.5	65.	1.5
%RSD	.16399	.12482	.02519
#1	2765.4	52081.	5939.0
#2	2759.0	51989.	5936.9

Sample Name: 280-98030-D-1-A SD@5 Acquired: 6/13/2017 3:36:50 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 6010C soil Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00050**	**.89688**	**-.00167**	**.00515**	**.01190**	**.00003**	**.00267**	**.09690**	**-.00027**
Stddev	.00008	.02466	.00348	.00039	.00008	.00006	.00033	.00418	.00009
%RSD	16.189	2.7497	208.21	7.5624	.66846	182.77	12.472	4.3187	32.309
#1	-.00045	.91432	.00079	.00542	.01196	-.00001	.00290	.09394	-.00033
#2	-.00056	.87944	-.00413	.00487	.01184	.00007	.00243	.09986	-.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00037**	**.00445**	**.00765**	**2.6334**	**.25026**	**.00317**	**.05369**	**.01995**	**.00071**
Stddev	.00003	.00066	.00044	.0005	.02150	.00048	.00051	.00003	.00010
%RSD	6.8909	14.827	5.7821	.01950	8.5932	15.123	.94615	.16201	14.115
#1	.00039	.00491	.00734	2.6338	.23505	.00351	.05333	.01992	.00078
#2	.00035	.00398	.00796	2.6331	.26546	.00283	.05405	.01997	.00064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.21572**	**.00163**	**.06475**	**.05990**	**.07763**	**.00206**	**.00417**	**.71048**	**1.5204**
Stddev	.00415	.00050	.00491	.00105	.00171	.00311	.00408	.00708	.0152
%RSD	1.9246	30.403	7.5877	1.7578	2.1992	150.94	97.843	.99719	.99719
#1	.21278	.00128	.06823	.06064	.07884	.00426	.00128	.71549	1.5311
#2	.21866	.00199	.06128	.05916	.07642	-.00014	.00705	.70547	1.5097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00724**	**.00112**	**.00228**	**.47135**	**.00198**	**-.00112**	**.00994**	**.01231**	**.01330**
Stddev	.00168	.00017	.00191	.00625	.00634	.04230	.00018	.00052	.00155
%RSD	23.232	14.859	83.945	1.3268	320.70	3777.8	1.8590	4.2615	11.665
#1	.00605	.00124	.00093	.47577	-.00251	.02879	.00981	.01268	.01220
#2	.00843	.00100	.00363	.46693	.00646	-.03103	.01007	.01194	.01440
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2740.1**	**51488.**	**5880.1**
Stddev	3.3	24.	7.5
%RSD	.11963	.04647	.12708
#1	2737.8	51471.	5885.4
#2	2742.5	51505.	5874.9

Sample Name: 280-98030-D-1-B MS Acquired: 6/13/2017 3:39:26 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 6010C soil Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05133**	**8.4814**	**.91489**	**.98631**	**1.9804**	**.04912**	W **2.0749**	**47.098**	**.09953**
Stddev	.00087	.0626	.02821	.01804	.0019	.00008	.0614	.066	.00256
%RSD	1.6960	.73864	3.0829	1.8293	.09528	.16130	2.9586	.14115	2.5686
#1	.05194	8.4371	.93484	.99907	1.9790	.04918	2.1183	47.051	.10134
#2	.05071	8.5256	.89495	.97356	1.9817	.04907	2.0315	47.145	.09772
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47785**	**.20906**	**.27590**	**11.687**	**50.307**	**1.0035**	**49.650**	**.55996**	**.88255**
Stddev	.01196	.00519	.00056	.040	.109	.0055	.076	.00109	.02062
%RSD	2.5035	2.4820	.20416	.33851	.21592	.55184	.15240	.19473	2.3358
#1	.48631	.21273	.27629	11.659	50.230	.99962	49.704	.56073	.89713
#2	.46939	.20539	.27550	11.715	50.384	1.0075	49.597	.55919	.86798
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.880**	**.48349**	**10.564**	**.71353**	**2.3159**	**.45087**	**1.8771**	**5.6341**	**12.057**
Stddev	.327	.01096	.282	.01531	.0738	.00725	.0314	.0049	.010
%RSD	.64199	2.2664	2.6667	2.1459	3.1878	1.6076	1.6710	.08672	.08672
#1	51.111	.49124	10.763	.72436	2.3681	.45599	1.8993	5.6306	12.049
#2	50.649	.47574	10.365	.70271	2.2637	.44574	1.8549	5.6375	12.064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8789**	**.99791**	**1.0151**	**2.2683**	**2.0435**	**2.0988**	**.53523**	**.54863**	**.58145**
Stddev	.0506	.00181	.0059	.0055	.0406	.0021	.00252	.00306	.00201
%RSD	2.6942	.18133	.58130	.24242	1.9884	.10089	.47166	.55771	.34587
#1	1.9147	.99663	1.0193	2.2721	2.0722	2.0973	.53702	.55079	.58287
#2	1.8431	.99919	1.0109	2.2644	2.0147	2.1003	.53345	.54646	.58003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2631.8**	**48899.**	**5878.1**
Stddev	7.9	76.	49.1
%RSD	.29830	.15643	.83602
#1	2626.2	48845.	5912.9
#2	2637.3	48953.	5843.4

Sample Name: 280-98030-D-1-C MSD Acquired: 6/13/2017 3:41:49 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 6010C soil Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05090**	**8.9874**	**.89986**	**.97208**	**1.9701**	**.04896**	W **2.0357**	**46.766**	**.09804**
Stddev	.00085	.0633	.03254	.02174	.0107	.00017	.0449	.242	.00202
%RSD	1.6682	.70379	3.6161	2.2365	.54520	.34528	2.2067	.51760	2.0566
#1	.05030	8.9427	.92287	.98746	1.9625	.04884	2.0675	46.595	.09947
#2	.05150	9.0322	.87685	.95671	1.9777	.04908	2.0040	46.937	.09661
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47096**	**.20870**	**.27558**	**13.757**	**50.051**	**.99690**	**49.144**	**.55677**	**.86285**
Stddev	.01372	.00652	.00050	.031	.004	.00279	.203	.00249	.02391
%RSD	2.9134	3.1226	.18076	.22663	.00835	.27942	.41279	.44718	2.7708
#1	.48066	.21331	.27593	13.735	50.049	.99494	49.287	.55853	.87976
#2	.46126	.20409	.27523	13.779	50.054	.99887	49.000	.55501	.84595
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.934**	**.47713**	**10.430**	**.72087**	**2.3033**	**.43437**	**1.8175**	**6.2786**	**13.436**
Stddev	.305	.01402	.273	.01849	.0591	.00844	.0329	.0040	.009
%RSD	.59953	2.9377	2.6167	2.5645	2.5671	1.9420	1.8117	.06336	.06336
#1	51.150	.48704	10.623	.73394	2.3451	.44033	1.8408	6.2758	13.430
#2	50.718	.46722	10.237	.70780	2.2615	.42840	1.7942	6.2814	13.442
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8373**	**.99587**	**1.0079**	**2.4140**	**2.0097**	**2.0818**	**.53522**	**.55798**	**.58712**
Stddev	.0506	.00647	.0050	.0096	.0459	.0118	.00131	.00050	.00923
%RSD	2.7524	.64948	.49163	.39718	2.2830	.56868	.24509	.09005	1.5716
#1	1.8730	.99130	1.0114	2.4208	2.0422	2.0734	.53615	.55762	.58059
#2	1.8015	1.0004	1.0044	2.4072	1.9773	2.0902	.53430	.55833	.59364
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2644.2**	**49441.**	**5889.9**
Stddev	1.9	92.	28.9
%RSD	.07075	.18523	.48996
#1	2642.8	49377.	5910.3
#2	2645.5	49506.	5869.5

Sample Name: 280-98030-D-1-A PDS Acquired: 6/13/2017 3:44:12 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 6010C soil Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04514**	**4.6651**	**.21078**	**.10893**	**.15470**	**.04994**	**-.00553**	**19.513**	**.05019**
Stddev	.00084	.0127	.00974	.00356	.00055	.00002	.00192	.067	.00168
%RSD	1.8559	.27297	4.6220	3.2700	.35436	.03998	34.796	.34249	3.3552
#1	.04573	4.6561	.21767	.11145	.15509	.04992	-.00689	19.560	.05138
#2	.04455	4.6741	.20390	.10641	.15431	.04995	-.00417	19.466	.04900
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04965**	**.06937**	**.08438**	**13.498**	**20.583**	**.10523**	**20.435**	**.14554**	**.04848**
Stddev	.00191	.00167	.00032	.024	.047	.00021	.008	.00035	.00255
%RSD	3.8493	2.4041	.37669	.17908	.22889	.19826	.03763	.23778	5.2675
#1	.05100	.07055	.08415	13.515	20.550	.10509	20.440	.14578	.05028
#2	.04830	.06819	.08460	13.481	20.617	.10538	20.429	.14529	.04667
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**21.095**	**.05452**	**2.3749**	**.36415**	**.38038**	**.10839**	**.20480**	**8.3901**	**17.955**
Stddev	.292	.00147	.0862	.01284	.00162	.00143	.00680	.0098	.021
%RSD	1.3860	2.6876	3.6309	3.5261	.42504	1.3194	3.3179	.11743	.11743
#1	20.889	.05556	2.4359	.37323	.38152	.10940	.20960	8.3970	17.970
#2	21.302	.05348	2.3139	.35507	.37924	.10738	.19999	8.3831	17.940
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.13314**	**.05641**	**.21893**	**2.3872**	**.21745**	**.54310**	**.09983**	**.25644**	**.11599**
Stddev	.00612	.00042	.00023	.0058	.01001	.01477	.00137	.00157	.00106
%RSD	4.5992	.74637	.10281	.24294	4.6029	2.7204	1.3690	.61125	.91382
#1	.13747	.05671	.21909	2.3913	.22453	.55355	.10080	.25755	.11524
#2	.12881	.05611	.21877	2.3831	.21038	.53266	.09887	.25533	.11674
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2705.5**	**50567.**	**5947.7**
Stddev	1.7	220.	5.0
%RSD	.06276	.43601	.08485
#1	2706.7	50723.	5951.2
#2	2704.3	50411.	5944.1

Sample Name: 280-98030-D-2-A Acquired: 6/13/2017 3:47:31 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 6010C soil Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00012**	**27.677**	**.00844**	**.00691**	**.03656**	**.00040**	**-.00355**	**.34755**	**-.00016**
Stddev	.00085	.122	.00709	.00072	.00065	.00004	.00415	.00560	.00002
%RSD	742.03	.44068	84.014	10.393	1.7720	11.059	116.86	1.6121	11.630
#1	-.00049	27.763	.01346	.00742	.03702	.00043	-.00062	.35152	-.00014
#2	.00072	27.590	.00343	.00640	.03610	.00037	-.00648	.34359	-.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00050**	**.08404**	**.01963**	**68.375**	**.51824**	**.01628**	**.57244**	**.08365**	**.00192**
Stddev	.00006	.00308	.00075	.182	.09680	.00242	.00600	.00072	.00027
%RSD	11.997	3.6632	3.8218	.26550	18.678	14.878	1.0477	.85759	14.115
#1	.00046	.08622	.02016	68.503	.58668	.01457	.57668	.08416	.00211
#2	.00055	.08187	.01910	68.246	.44979	.01799	.56820	.08314	.00173
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49086**	**.00567**	**.78669**	**.03237**	**.37802**	**.00589**	**.00298**	**3.7988**	**8.1295**
Stddev	.01894	.00025	.02767	.00004	.01608	.00239	.00109	.0114	.0244
%RSD	3.8588	4.4511	3.5174	.12451	4.2534	40.604	36.556	.29951	.29951
#1	.50425	.00585	.80625	.03234	.38939	.00759	.00376	3.8069	8.1467
#2	.47747	.00549	.76712	.03240	.36665	.00420	.00221	3.7908	8.1123
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00991**	**.00644**	**.02741**	**2.1332**	**.00280**	**.01365**	**.07287**	**.03485**	**.18468**
Stddev	.00154	.00004	.00088	.0123	.00241	.00687	.00086	.00108	.00426
%RSD	15.562	.68287	3.1947	.57755	86.281	50.319	1.1840	3.1083	2.3079
#1	.01100	.00647	.02803	2.1419	.00109	.01851	.07348	.03561	.18167
#2	.00882	.00641	.02679	2.1245	.00450	.00879	.07226	.03408	.18770
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2736.4**	**50630.**	**5864.7**
Stddev	3.2	335.	72.2
%RSD	.11591	.66100	1.2314
#1	2738.7	50393.	5813.6
#2	2734.2	50867.	5915.8

Sample Name: 280-98030-A-3-A Acquired: 6/13/2017 3:50:05 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 6010C soil Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k **-.00121**	k **10.708**	k **.00847**	**.01339**	**.14904**	k **.00049**	k **.00684**	**2.4560**	k **.00016**
Stddev	.00015	.039	.00250	.00012	.00010	.00002	.00445	.0057	.00003
%RSD	12.078	.36046	29.465	.90226	.06976	3.1144	65.074	.23222	16.102
#1	k -.00131	k 10.681	k .00670	.01330	.14897	k .00050	k .00999	2.4520	k .00018
#2	k -.00111	k 10.735	k .01023	.01347	.14912	k .00048	k .00369	2.4600	k .00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k **.01064**	**.05366**	k **.08378**	k **40.626**	**1.5191**	**.01078**	k **2.1531**	**.24704**	k **.01768**
Stddev	.00046	.00198	.00002	.030	.0141	.00019	.0089	.00021	.00088
%RSD	4.3407	3.6909	.02719	.07366	.92743	1.8076	.41160	.08517	4.9538
#1	k .01097	.05506	k .08376	k 40.604	1.5291	.01064	k 2.1594	.24719	k .01830
#2	k .01032	.05226	k .08379	k 40.647	1.5092	.01091	k 2.1469	.24689	k .01706
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.54956**	k **.02335**	**.73589**	k **.30233**	k **1.7820**	k **.00542**	k **-.00173**	k **2.5003**	k **5.3506**
Stddev	.00490	.00090	.02656	.01101	.0494	.00088	.00801	.0192	.0410
%RSD	.89172	3.8558	3.6089	3.6409	2.7716	16.289	464.54	.76585	.76585
#1	.55303	k .02399	.75467	k .31011	k 1.8170	k .00480	k -.00739	k 2.4868	k 5.3217
#2	.54609	k .02272	.71711	k .29454	k 1.7471	k .00605	k .00394	k 2.5138	k 5.3796
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k **.01555**	**.04271**	k **.03943**	k **1.5178**	k **.00041**	k **-.03497**	k **.06469**	k **.07703**	k **.02211**
Stddev	.00197	.00022	.00103	.0027	.00100	.01186	.00008	.00037	.00245
%RSD	12.634	.50783	2.6013	.18148	243.05	33.921	.12235	.48118	11.079
#1	k .01694	.04256	k .04016	k 1.5197	k -.00030	k -.04335	k .06474	k .07676	k .02038
#2	k .01416	.04287	k .03871	k 1.5159	k .00112	k -.02658	k .06463	k .07729	k .02384
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2755.7**	**51734.**	**5913.2**
Stddev	1.1	64.	11.0
%RSD	.03891	.12456	.18572
#1	2754.9	51780.	5920.9
#2	2756.4	51689.	5905.4

Sample Name: 280-98030-C-4-A Acquired: 6/13/2017 3:52:38 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 6010C soil Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00136**	**1.0660**	**-.00633**	**.00337**	**.06183**	**.00012**	**-.00760**	**.70531**	**.00031**
Stddev	.00033	.0411	.00189	.00003	.00041	.00012	.00183	.00123	.00021
%RSD	23.934	3.8576	29.895	1.0058	.65513	94.705	24.092	.17478	67.708
#1	-.00113	1.0951	-.00767	.00339	.06211	.00021	-.00630	.70444	.00045
#2	-.00159	1.0369	-.00500	.00335	.06154	.00004	-.00889	.70618	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00035**	**.00670**	**.01915**	**3.7785**	**.20546**	**.00477**	**.18937**	**.07203**	**.00108**
Stddev	.00059	.00002	.00029	.0196	.05620	.00075	.00188	.00011	.00001
%RSD	166.29	.29209	1.5352	.51915	27.355	15.811	.99153	.15676	.91409
#1	.00077	.00669	.01894	3.7646	.24520	.00423	.19070	.07195	.00109
#2	-.00006	.00672	.01936	3.7923	.16572	.00530	.18804	.07211	.00107
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.39803**	**.00200**	**.11950**	**.02923**	**.37929**	**.00434**	**-.00316**	**1.2023**	**2.5730**
Stddev	.02291	.00020	.00246	.00195	.00468	.00384	.00431	.0066	.0142
%RSD	5.7566	10.208	2.0609	6.6833	1.2332	88.510	136.74	.55182	.55182
#1	.38183	.00214	.12124	.03061	.38259	.00162	-.00010	1.2070	2.5830
#2	.41423	.00185	.11775	.02785	.37598	.00705	-.00621	1.1976	2.5630
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00902**	**.00526**	**.00677**	**2.4427**	**.00700**	**-.01578**	**.00942**	**.02377**	**.01851**
Stddev	.00014	.00006	.00097	.0027	.00403	.01151	.00012	.00089	.00019
%RSD	1.5619	1.0814	14.352	.11181	57.652	72.973	1.2612	3.7531	1.0036
#1	.00892	.00530	.00746	2.4407	.00415	-.02392	.00951	.02440	.01864
#2	.00912	.00522	.00609	2.4446	.00985	-.00764	.00934	.02314	.01838
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2710.0**	**51450.**	**5891.2**
Stddev	1.4	36.	77.3
%RSD	.05179	.07018	1.3122
#1	2711.0	51476.	5945.8
#2	2709.1	51425.	5836.5

Sample Name: CCVH-4579429 Acquired: 6/13/2017 3:55:13 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00140**	**50.112**	**-.00595**	**.00387**	**.00027**	**.00014**	**1.0170**	**.00126**	**-.00007**	**-.00125**	**.00057**	**.01527**
Stddev	.00068	.192	.01263	.00056	.00047	.00011	.0431	.00461	.00029	.00002	.00045	.00057
%RSD	48.774	.38279	212.24	14.563	171.85	76.621	4.2409	365.90	419.78	1.8922	77.644	3.7458
#1	-.00092	50.248	-.01488	.00427	.00060	.00007	1.0475	.00452	-.00027	-.00123	.00089	.01486
#2	-.00188	49.977	.00298	.00348	-.00006	.00022	.98646	-.00200	.00013	-.00127	.00026	.01567
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.754**	**.17519**	**.00131**	**.04006**	**-.00202**	**-.00253**	**249.85**	**.00140**	**.00578**	**.00217**	W **4.7431**	**.00340**
Stddev	.350	.10605	.00080	.00024	.00003	.00057	.06	.00055	.00461	.00008	.1690	.00213
%RSD	.71781	60.537	60.501	.60264	1.3209	22.361	.02567	39.133	79.740	3.7013	3.5626	62.688
#1	49.001	.10020	.00075	.03988	-.00204	-.00293	249.81	.00101	.00904	.00211	4.8626	.00491
#2	48.507	.25018	.00188	.04023	-.00200	-.00213	249.90	.00179	.00252	.00223	4.6236	.00189
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Warn	None
Value											5.0000	
Range											-5.0000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00658**	**-.02368**	**-.05068**	**-.00108**	**.00029**	**5.0072**	**.02051**	**-.00177**	W **10.502**	**.01283**	**.00031**	**.06177**
Stddev	.01324	.00667	.01428	.00012	.00007	.0254	.00003	.00011	.009	.00006	.00056	.00607
%RSD	201.09	28.168	28.168	10.796	22.569	.50743	.15078	6.0156	.08349	.43112	181.26	9.8276
#1	-.01595	-.02840	-.06078	-.00099	.00034	5.0251	.02053	-.00169	10.508	.01279	.00071	.05748
#2	.00278	-.01897	-.04059	-.00116	.00025	4.9892	.02048	-.00184	10.496	.01287	-.00009	.06606
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Warn	None	None	None
Value									10.000			
Range									5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2587.0**	**47386.**	**5599.0**
Stddev	3.8	146.	3.9
%RSD	.14757	.30912	.06903
#1	2589.7	47282.	5601.7
#2	2584.3	47489.	5596.3

Sample Name: CCV-4580817 Acquired: 6/13/2017 3:57:46 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51067**	F **.60206**	**1.0293**	**.51087**	**.48942**	**.49829**	**-.00090**	**4.9240**	**.50522**	**.50137**	**.49071**	**.50123**
Stddev	.00057	.01796	.0146	.01162	.00094	.00116	.00005	.0004	.01353	.01352	.01324	.00205
%RSD	.11086	2.9837	1.4172	2.2739	.19185	.23363	5.7415	.00738	2.6786	2.6970	2.6982	.40938
#1	.51107	.61477	1.0396	.51909	.49008	.49747	-.00094	4.9243	.51479	.51093	.50007	.50268
#2	.51027	.58936	1.0190	.50266	.48875	.49911	-.00087	4.9238	.49565	.49181	.48135	.49978
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5137**	**50.812**	**1.0404**	**20.392**	**.51137**	**.48403**	**5.1974**	**.50137**	**1.0401**	**1.0147**	**-.00993**	**1.0239**
Stddev	.0062	.083	.0012	.049	.00098	.01114	.0246	.01195	.0143	.0204	.00363	.0264
%RSD	.24628	.16327	.11893	.23899	.19107	2.3021	.47262	2.3827	1.3769	2.0082	36.594	2.5785
#1	2.5093	50.870	1.0396	20.426	.51206	.49191	5.2147	.50982	1.0503	1.0291	-.00736	1.0425
#2	2.5181	50.753	1.0413	20.357	.51068	.47615	5.1800	.49292	1.0300	1.0003	-.01249	1.0052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0305**	**4.9975**	**10.695**	**.98879**	**.50562**	**.00737**	**.50830**	**1.0823**	**.00380**	**.50103**	**.51924**	**.48627**
Stddev	.0289	.0086	.019	.02908	.00026	.00031	.00055	.0244	.00712	.00227	.00288	.00125
%RSD	2.8014	.17314	.17314	2.9414	.05161	4.1855	.10795	2.2581	187.48	.45366	.55537	.25763
#1	1.0509	5.0036	10.708	1.0094	.50543	.00715	.50869	1.0996	.00883	.50264	.52128	.48715
#2	1.0101	4.9914	10.682	.96822	.50580	.00759	.50791	1.0651	-.00124	.49942	.51720	.48538
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2660.8**	**49522.**	**5633.8**
Stddev	6.4	54.	23.7
%RSD	.23937	.10867	.42013
#1	2656.3	49560.	5617.0
#2	2665.3	49484.	5650.5

Sample Name: CCB Acquired: 6/13/2017 4:00:14 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00048**	**.00324**	**-.00163**	**.00170**	**.00008**	**.00003**	**.00126**	**.00052**	**-.00039**	**.00003**	**.00011**	**.00135**	**-.00005**
Stddev	.00014	.00094	.00607	.00070	.00016	.00005	.00193	.00005	.00003	.00018	.00007	.00049	.00178
%RSD	28.845	28.989	372.91	41.199	195.38	135.42	152.96	9.7798	7.7826	524.11	62.417	36.442	3532.2
#1	-.00058	.00390	.00266	.00120	-.00003	.00000	-.00010	.00048	-.00041	-.00009	.00006	.00170	-.00131
#2	-.00038	.00257	-.00592	.00219	.00019	.00007	.00262	.00056	-.00037	.00016	.00016	.00100	.00121
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10446**	**.00184**	**.00086**	**.00014**	**-.00019**	**.09250**	**.00050**	**.00449**	**.00272**	**-.00224**	**-.00130**	**-.00226**	**-.00188**
Stddev	.04095	.00147	.00018	.00001	.00021	.00443	.00009	.00369	.00053	.01022	.00064	.00181	.00697
%RSD	39.205	79.789	21.263	4.8075	108.66	4.7875	17.041	82.213	19.492	456.96	49.353	80.130	371.25
#1	.13342	.00080	.00073	.00014	-.00004	.08937	.00057	.00188	.00309	.00499	-.00085	-.00354	.00305
#2	.07550	.00288	.00099	.00013	-.00034	.09563	.00044	.00711	.00234	-.00947	-.00175	-.00098	-.00680
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00402**	**.00078**	**.00004**	**-.00217**	**-.00047**	**.00081**	**.02972**	**-.00037**	**.00133**	**.00152**
Stddev	.01491	.00130	.00014	.00080	.00013	.00431	.01328	.00019	.00024	.00024
%RSD	371.25	166.42	358.12	36.777	28.915	530.87	44.686	50.850	17.611	15.827
#1	.00653	-.00014	-.00006	-.00160	-.00037	.00386	.02033	-.00024	.00150	.00169
#2	-.01456	.00170	.00014	-.00273	-.00056	-.00224	.03912	-.00051	.00117	.00135
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2662.6**	**50004.**	**5697.8**
Stddev	2.5	89.	9.7
%RSD	.09261	.17880	.17062
#1	2660.9	50067.	5690.9
#2	2664.4	49940.	5704.7

Sample Name: CCVL-4589022 Acquired: 6/13/2017 4:02:53 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00970**	F **.13142**	F **.00720**	**.10135**	**.00989**	**.00100**	**.11970**	**.20346**	**.00451**	**.01075**	**.01012**	**.01630**
Stddev	.00014	.00442	.00221	.00311	.00039	.00011	.00261	.00129	.00004	.00009	.00108	.00054
%RSD	1.4572	3.3610	30.699	3.0641	3.9867	10.616	2.1834	.63526	.79535	.80389	10.716	3.3279
#1	.00980	.13454	.00876	.10355	.01017	.00092	.12154	.20255	.00453	.01081	.01089	.01668
#2	.00960	.12830	.00564	.09916	.00961	.00107	.11785	.20438	.00448	.01069	.00936	.01591
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000	.01500									
Range		30.000%	-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11178**	**3.2349**	**.02377**	**.21114**	**.01102**	**.01807**	**1.1083**	**.04093**	**2.9661**	**.00979**	**.08249**	**.02185**
Stddev	.00393	.0674	.00013	.00153	.00000	.00055	.0233	.00109	.0926	.00266	.00338	.00162
%RSD	3.5174	2.0847	.54857	.72284	.02532	3.0616	2.1032	2.6669	3.1228	27.132	4.0928	7.3960
#1	.11456	3.2826	.02386	.21222	.01102	.01846	1.1248	.04170	3.0316	.01167	.08487	.02299
#2	.10900	3.1872	.02367	.21006	.01103	.01768	1.0918	.04016	2.9006	.00791	.08010	.02070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01697**	**.46424**	**.99348**	**.09542**	**.01032**	**.01391**	**.00989**	**.01877**	**.05921**	**.00961**	**.02191**	**.01593**
Stddev	.01160	.00445	.00952	.00494	.00013	.00214	.00025	.00410	.01915	.00096	.00006	.00248
%RSD	68.391	.95837	.95837	5.1786	1.2195	15.371	2.5686	21.824	32.348	9.9826	.29477	15.583
#1	.02517	.46110	.98675	.09891	.01041	.01542	.00971	.01587	.07275	.00893	.02186	.01418
#2	.00876	.46739	1.0002	.09192	.01023	.01240	.01007	.02166	.04567	.01029	.02195	.01769
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2667.9**	**50253.**	**5712.7**
Stddev	5.0	59.	52.2
%RSD	.18804	.11694	.91414
#1	2671.4	50295.	5675.8
#2	2664.3	50212.	5749.7

Sample Name: 280-98030-A-5-A Acquired: 6/13/2017 4:05:32 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 6010C soil Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00033**	**2.1655**	**.00111**	**.00404**	**.02058**	**.00002**	**.00212**	**.94920**	**.00003**
Stddev	.00001	.0771	.00567	.00076	.00001	.00016	.00049	.00167	.00006
%RSD	3.8543	3.5586	512.43	18.768	.05837	717.93	23.256	.17590	202.44
#1	-.00032	2.2199	-.00290	.00351	.02057	.00014	.00247	.94802	.00007
#2	-.00034	2.1110	.00512	.00458	.02059	-.00009	.00177	.95038	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00043**	**.00625**	**.00992**	**3.4121**	**.33032**	**.00344**	**.23539**	**.05519**	**.00084**
Stddev	.00076	.00001	.00004	.0056	.00025	.00055	.00192	.00018	.00003
%RSD	176.83	.17783	.40382	.16318	.07634	16.116	.81531	.32888	3.2355
#1	.00096	.00626	.00995	3.4081	.33014	.00304	.23403	.05532	.00086
#2	-.00011	.00624	.00989	3.4160	.33050	.00383	.23675	.05506	.00082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.38671**	**.00291**	**.21618**	**.04863**	**.23689**	**-.00154**	**-.00266**	**2.0732**	**4.4365**
Stddev	.00841	.00008	.00610	.00165	.01237	.00418	.01241	.0563	.1205
%RSD	2.1735	2.6768	2.8206	3.4014	5.2230	271.65	466.24	2.7152	2.7152
#1	.39265	.00296	.22049	.04980	.24563	-.00449	-.01144	2.1130	4.5217
#2	.38076	.00285	.21187	.04746	.22814	.00142	.00611	2.0333	4.3514
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00895**	**.00760**	**.00613**	**1.1326**	**-.00205**	**-.01040**	**.01688**	**.02508**	**.01889**
Stddev	.00196	.00022	.00130	.0087	.00064	.02951	.00035	.00069	.00106
%RSD	21.883	2.9167	21.205	.76675	31.099	283.66	2.0643	2.7624	5.6368
#1	.01033	.00775	.00705	1.1387	-.00250	-.03127	.01713	.02557	.01813
#2	.00756	.00744	.00521	1.1264	-.00160	.01046	.01663	.02459	.01964
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2690.9**	**50672.**	**5743.4**
Stddev	5.5	168.	34.0
%RSD	.20473	.33214	.59227
#1	2694.8	50553.	5719.3
#2	2687.0	50791.	5767.5

Sample Name: 280-98030-A-6-A Acquired: 6/13/2017 4:08:08 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 6010C soil Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00094**	**21.434**	**.00576**	**.00487**	**.03286**	**.00024**	**.00165**	**1.5887**	**-.00006**
Stddev	.00057	.017	.00019	.00044	.00058	.00001	.00107	.0010	.00013
%RSD	61.290	.08039	3.2307	9.0427	1.7682	2.1877	64.895	.06017	222.16
#1	-.00053	21.422	.00589	.00518	.03245	.00023	.00240	1.5880	-.00015
#2	-.00134	21.446	.00563	.00456	.03328	.00024	.00089	1.5894	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00066**	**.04295**	**.01312**	**4.0329**	**.62607**	**.00972**	**.55564**	**.02694**	**.00191**
Stddev	.00042	.00120	.00031	.0014	.03256	.00104	.00185	.00015	.00017
%RSD	63.493	2.7828	2.3821	.03580	5.2002	10.681	.33279	.55801	9.0645
#1	.00037	.04380	.01334	4.0339	.60305	.01045	.55434	.02705	.00179
#2	.00096	.04211	.01290	4.0319	.64909	.00899	.55695	.02683	.00204
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.31283**	**.00591**	**1.0522**	**.02576**	**.29977**	**-.00044**	**.00244**	**6.8136**	**14.581**
Stddev	.00789	.00051	.0286	.00048	.00797	.00018	.00058	.0250	.053
%RSD	2.5210	8.6927	2.7211	1.8685	2.6596	40.392	23.739	.36673	.36673
#1	.31840	.00555	1.0725	.02610	.30541	-.00032	.00285	6.8313	14.619
#2	.30725	.00627	1.0320	.02542	.29413	-.00057	.00203	6.7959	14.543
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00845**	**.01656**	**.01055**	**1.1111**	**-.00075**	**-.01086**	**.01466**	**.02142**	**.05758**
Stddev	.00051	.00011	.00026	.0030	.00201	.00746	.00013	.00113	.00040
%RSD	5.9940	.64485	2.4752	.26787	268.21	68.691	.88213	5.2612	.68796
#1	.00809	.01648	.01037	1.1090	.00067	-.01614	.01457	.02221	.05730
#2	.00881	.01663	.01074	1.1132	-.00217	-.00559	.01475	.02062	.05786
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2751.1**	**51515.**	**5935.8**
Stddev	3.7	62.	35.2
%RSD	.13538	.12016	.59310
#1	2753.7	51559.	5960.7
#2	2748.4	51471.	5910.9

Sample Name: MB 280-376922/1-A Acquired: 6/13/2017 4:10:43 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376922 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00044**	**.01161**	**-.00517**	**.00099**	**-.00025**	**-.00003**	**.00273**	**.00455**	**-.00019**
Stddev	.00023	.00358	.00714	.00019	.00011	.00007	.00382	.00071	.00014
%RSD	51.547	30.831	138.18	19.670	43.406	268.90	140.01	15.499	76.525
#1	-.00061	.00908	-.00012	.00085	-.00017	.00002	.00542	.00405	-.00009
#2	-.00028	.01414	-.01022	.00112	-.00033	-.00008	.00003	.00505	-.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00014**	**.00018**	**.00143**	**.01112**	**.13161**	**.00122**	**.00041**	**.00016**	**-.00038**
Stddev	.00027	.00069	.00027	.00033	.01148	.00192	.00339	.00004	.00052
%RSD	191.57	376.91	18.778	2.9904	8.7212	158.15	820.95	24.260	138.05
#1	.00005	.00067	.00162	.01088	.12349	-.00014	-.00198	.00018	-.00001
#2	-.00033	-.00031	.00124	.01135	.13972	.00257	.00281	.00013	-.00075
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06326**	**.00014**	**.00403**	**.00227**	**-.00022**	**.00013**	**.00162**	**-.00256**	**-.00547**
Stddev	.00971	.00028	.00321	.00251	.00348	.00497	.00255	.00117	.00251
%RSD	15.356	196.04	79.637	110.75	1568.8	3735.9	157.26	45.954	45.954
#1	.07013	.00034	.00630	.00404	-.00268	.00365	-.00018	-.00339	-.00725
#2	.05639	-.00006	.00176	.00049	.00224	-.00338	.00342	-.00173	-.00369
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00038**	**.00006**	**-.00176**	**.00018**	**.00059**	**.01759**	**-.00077**	**.00149**	**-.00035**
Stddev	.00151	.00004	.00072	.00001	.00398	.04202	.00052	.00038	.00024
%RSD	395.30	65.983	41.148	3.3924	675.24	238.87	67.524	25.291	67.468
#1	.00145	.00008	-.00227	.00017	.00340	.04730	-.00113	.00123	-.00052
#2	-.00069	.00003	-.00125	.00018	-.00223	-.01212	-.00040	.00176	-.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2705.7**	**50812.**	**5801.5**
Stddev	4.0	218.	44.9
%RSD	.14878	.42958	.77310
#1	2702.8	50966.	5769.8
#2	2708.5	50657.	5833.2

Sample Name: LCS 280-376922/2-A Acquired: 6/13/2017 4:13:21 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376922 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05324**	F **2.3020**	**1.0780**	**1.0510**	**1.9820**	**.05072**	**2.1622**	**48.323**	**.10376**
Stddev	.00047	.0689	.0334	.0250	.0001	.00006	.0586	.066	.00261
%RSD	.87790	2.9924	3.0943	2.3769	.00323	.11559	2.7093	.13642	2.5126
#1	.05357	2.3507	1.1016	1.0687	1.9820	.05076	2.2036	48.370	.10560
#2	.05291	2.2533	1.0545	1.0334	1.9821	.05068	2.1208	48.277	.10192
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit		2.2299							
Low Limit		1.7300							

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49191**	**.19756**	**.25815**	**1.0273**	**51.466**	**1.0395**	**51.297**	**.51295**	**.96030**
Stddev	.01379	.00527	.00011	.0051	.036	.0007	.031	.00012	.02596
%RSD	2.8043	2.6658	.04227	.49772	.07084	.06761	.06072	.02301	2.7037
#1	.50166	.20128	.25822	1.0309	51.492	1.0390	51.275	.51304	.97866
#2	.48215	.19383	.25807	1.0236	51.440	1.0400	51.319	.51287	.94194
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**52.194**	**.49380**	**10.821**	**.50317**	**1.9992**	**.53018**	**2.1244**	**10.052**	**21.512**
Stddev	.438	.01423	.280	.01189	.0530	.01172	.0332	.019	.040
%RSD	.83979	2.8809	2.5847	2.3631	2.6503	2.2101	1.5640	.18799	.18799
#1	51.884	.50386	11.019	.51158	2.0367	.53847	2.1479	10.066	21.541
#2	52.504	.48374	10.623	.49476	1.9618	.52190	2.1009	10.039	21.483
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9871**	**1.0215**	**1.0339**	**1.0438**	**2.1339**	**2.1927**	**.50681**	**.52280**	**.50093**
Stddev	.0554	.0004	.0057	.0004	.0517	.0315	.00319	.00296	.00189
%RSD	2.7881	.03488	.54699	.04086	2.4253	1.4354	.62971	.56670	.37657
#1	2.0263	1.0218	1.0379	1.0441	2.1705	2.1705	.50907	.52489	.50226
#2	1.9479	1.0213	1.0299	1.0435	2.0973	2.2150	.50455	.52070	.49959
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2593.1**	**47809.**	**5628.8**
Stddev	14.0	69.	28.5
%RSD	.53904	.14395	.50698
#1	2583.2	47858.	5608.6
#2	2603.0	47760.	5648.9

Sample Name: 680-139654-J-1-A Acquired: 6/13/2017 4:15:45 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376922 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00033**	**8.4393**	**.33729**	**4.8910**	**.13491**	**.00016**	**.00551**	W **597.01**	**.00035**
Stddev	.00010	.0157	.02474	.2374	.00097	.00007	.00139	1.87	.00009
%RSD	29.884	.18576	7.3364	4.8538	.71607	42.217	25.303	.31249	26.704
#1	-.00040	8.4282	.35478	5.0588	.13423	.00020	.00650	598.33	.00041
#2	-.00026	8.4504	.31979	4.7231	.13560	.00011	.00452	595.69	.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00808**	**1.1276**	**.06085**	**29.059**	W **475.91**	**.11598**	**66.850**	**.48064**	**.00661**
Stddev	.00015	.0637	.00006	.059	.35	.00069	.231	.00202	.00045
%RSD	1.7998	5.6474	.09870	.20372	.07435	.59364	.34482	.41953	6.8267
#1	.00818	1.1727	.06090	29.017	475.66	.11549	67.013	.48207	.00629
#2	.00798	1.0826	.06081	29.101	476.16	.11646	66.687	.47922	.00693
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2901.5**	**.50742**	**.51984**	**.00239**	F **1909.3**	**.16645**	**.00038**	**15.653**	**33.498**
Stddev	1.2	.02646	.02849	.00093	83.3	.00514	.00536	.018	.038
%RSD	.04167	5.2146	5.4800	38.881	4.3637	3.0860	1419.4	.11373	.11373
#1	2902.4	.52612	.53999	.00173	1968.2	.17008	.00417	15.666	33.525
#2	2900.7	.48871	.49970	.00305	1850.4	.16282	-.00341	15.641	33.471
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03460**	W **10.372**	**-.00347**	**.02258**	**-.00137**	**.03756**	**.01809**	**2.7158**	**.00330**
Stddev	.00589	.107	.00166	.00114	.00292	.02455	.00033	.0123	.00066
%RSD	17.034	1.0318	47.695	5.0482	214.03	65.362	1.8497	.45128	19.866
#1	.03877	10.296	-.00230	.02338	-.00343	.02020	.01832	2.7245	.00284
#2	.03043	10.447	-.00464	.02177	.00070	.05493	.01785	2.7072	.00376
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		10.000							
Low Limit		-.02000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2275.1**	**40889.**	**5544.1**
Stddev	4.7	21.	15.7
%RSD	.20870	.05193	.28338
#1	2271.7	40904.	5555.2
#2	2278.4	40874.	5533.0

Sample Name: 680-139654-J-1-ASD@5 Acquired: 6/13/2017 4:18:32 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376922 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00121**	**1.7680**	**.06929**	**1.0807**	**.02713**	**.00001**	**-.00001**	**125.62**	**-.00035**
Stddev	.00068	.0598	.01484	.0361	.00038	.00000	.00416	.90	.00005
%RSD	56.314	3.3829	21.414	3.3400	1.3846	4.6383	69446.	.71915	13.130
#1	-.00169	1.8103	.07978	1.1062	.02739	.00001	-.00295	126.26	-.00039
#2	-.00073	1.7257	.05880	1.0551	.02686	.00001	.00294	124.99	-.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00131**	**.24350**	**.01689**	**6.0497**	**96.183**	**.02362**	**14.097**	**.09974**	**.00034**
Stddev	.00025	.00929	.00063	.0131	.426	.00055	.059	.00021	.00034
%RSD	19.136	3.8142	3.7067	.21599	.44298	2.3391	.41533	.21395	102.10
#1	.00113	.25007	.01734	6.0590	96.485	.02401	14.139	.09989	.00058
#2	.00149	.23693	.01645	6.0405	95.882	.02323	14.056	.09959	.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **580.26**	**.11091**	**.11352**	**.00209**	F **428.49**	**.04093**	**-.00826**	**3.1473**	**6.7353**
Stddev	3.16	.00353	.00126	.00119	14.16	.00612	.00347	.0195	.0418
%RSD	.54465	3.1800	1.1122	56.909	3.3044	14.943	41.981	.62059	.62059
#1	582.50	.11340	.11263	.00125	438.50	.04525	-.00581	3.1611	6.7648
#2	578.03	.10841	.11441	.00293	418.48	.03660	-.01071	3.1335	6.7057
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00508**	**2.0881**	**-.00386**	**.00399**	**.00145**	**.04987**	**.00410**	**.57181**	**.00060**
Stddev	.00024	.0117	.00017	.00030	.00429	.02083	.00016	.00280	.00022
%RSD	4.7410	.55883	4.4160	7.5600	296.27	41.780	3.9261	.48902	37.270
#1	.00491	2.0963	-.00374	.00420	.00448	.06460	.00422	.57379	.00075
#2	.00525	2.0798	-.00398	.00378	-.00159	.03513	.00399	.56984	.00044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2446.7**	**44581.**	**5509.4**
Stddev	.2	88.	49.0
%RSD	.00721	.19845	.88909
#1	2446.5	44518.	5474.7
#2	2446.8	44643.	5544.0

Sample Name: 680-139654-J-1-B MS Acquired: 6/13/2017 4:21:09 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376922 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05526**	**10.268**	**1.3727**	**5.5385**	**2.0204**	**.04740**	**1.9118**	W **609.16**	**.09833**
Stddev	.00062	.059	.0442	.2170	.0008	.00006	.0804	1.03	.00459
%RSD	1.1207	.57335	3.2176	3.9188	.04085	.13256	4.2028	.16934	4.6639
#1	.05569	10.309	1.4039	5.6920	2.0210	.04735	1.9686	608.43	.10158
#2	.05482	10.226	1.3414	5.3851	2.0198	.04744	1.8550	609.89	.09509
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.43149**	**1.2516**	**.30077**	**28.576**	F **505.72**	**1.1325**	**109.33**	**.92682**	**.85564**
Stddev	.01892	.0551	.00170	.064	.80	.0052	.43	.00378	.03826
%RSD	4.3851	4.3986	.56405	.22485	.15752	.45873	.39125	.40764	4.4714
#1	.44487	1.2905	.30196	28.621	506.28	1.1288	109.64	.92949	.88269
#2	.41811	1.2126	.29957	28.530	505.16	1.1361	109.03	.92414	.82858
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					500.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2820.9**	**.91551**	**11.477**	**.41048**	F **1855.3**	**.62579**	**2.1166**	**23.824**	**50.983**
Stddev	.2	.04152	.485	.01704	66.4	.02833	.0939	.006	.014
%RSD	.00793	4.5347	4.2272	4.1511	3.5796	4.5267	4.4356	.02719	.02719
#1	2821.1	.94486	11.820	.42253	1902.3	.64582	2.1830	23.819	50.973
#2	2820.8	.88615	11.134	.39843	1808.3	.60576	2.0503	23.828	50.993
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.6957**	W **10.783**	**.99494**	**1.0139**	**1.5684**	**1.9955**	**.50630**	**3.0480**	**.47445**
Stddev	.0768	.084	.00337	.0046	.0606	.0002	.00306	.0142	.00014
%RSD	4.5283	.78125	.33879	.45641	3.8609	.01193	.60427	.46542	.03042
#1	1.7500	10.842	.99732	1.0172	1.6112	1.9953	.50847	3.0581	.47455
#2	1.6414	10.723	.99256	1.0107	1.5256	1.9957	.50414	3.0380	.47435
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		10.000							
Low Limit		-.02000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2260.9**	**40839.**	**5448.7**
Stddev	11.6	32.	2.6
%RSD	.51195	.07940	.04729
#1	2252.7	40816.	5450.5
#2	2269.1	40862.	5446.8

Sample Name: 680-139654-J-1-C MSD Acquired: 6/13/2017 4:23:49 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376922 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05838**	**10.778**	**1.4231**	**5.7430**	**2.1121**	**.04972**	**1.9824**	W **645.07**	**.10207**
Stddev	.00003	.002	.0601	.2380	.0064	.00022	.0886	7.31	.00438
%RSD	.05481	.02209	4.2247	4.1436	.30498	.44917	4.4701	1.1329	4.2942
#1	.05841	10.779	1.4656	5.9112	2.1167	.04988	2.0451	639.91	.10517
#2	.05836	10.776	1.3805	5.5747	2.1076	.04957	1.9198	650.24	.09897
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.44880**	**1.3037**	**.31462**	**29.838**	F **530.21**	**1.1890**	**114.03**	**.96700**	**.89063**
Stddev	.01955	.0641	.00145	.098	1.09	.0045	.40	.00386	.04260
%RSD	4.3556	4.9163	.46164	.32796	.20481	.38216	.34780	.39921	4.7829
#1	.46262	1.3490	.31565	29.907	530.98	1.1922	114.31	.96973	.92076
#2	.43497	1.2584	.31360	29.768	529.44	1.1857	113.75	.96427	.86051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					500.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2952.5**	**.95042**	**11.913**	**.42621**	F **1919.6**	**.65404**	**2.1850**	**24.875**	**53.233**
Stddev	3.5	.03969	.552	.01546	72.2	.02004	.1051	.041	.088
%RSD	.11757	4.1757	4.6327	3.6276	3.7629	3.0643	4.8110	.16527	.16527
#1	2955.0	.97848	12.303	.43714	1970.6	.66821	2.2593	24.904	53.296
#2	2950.1	.92236	11.523	.41527	1868.5	.63987	2.1106	24.846	53.171
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.7785**	W **11.307**	**1.0399**	**1.0616**	**1.6173**	**2.0804**	**.52839**	**3.1742**	**.50107**
Stddev	.0790	.091	.0054	.0038	.0694	.0264	.00240	.0192	.00042
%RSD	4.4449	.80151	.51628	.35388	4.2923	1.2678	.45495	.60372	.08353
#1	1.8344	11.243	1.0437	1.0643	1.6664	2.0617	.53009	3.1877	.50137
#2	1.7226	11.371	1.0361	1.0590	1.5682	2.0990	.52669	3.1606	.50077
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		10.000							
Low Limit		-.02000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2241.0**	**40477.**	**5434.8**
Stddev	4.9	61.	2.9
%RSD	.21922	.14975	.05285
#1	2237.5	40434.	5436.9
#2	2244.5	40520.	5432.8

Sample Name: CCVH-4579429 Acquired: 6/13/2017 4:26:28 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00045**	**49.891**	**-.00914**	**.01753**	**.00068**	**.00025**	**1.0336**	**.19174**	**.00010**	**-.00115**	**.00048**	**.01472**
Stddev	.00014	.127	.00014	.00263	.00017	.00004	.0258	.04634	.00028	.00001	.00039	.00070
%RSD	30.215	.25421	1.5637	15.021	24.449	17.835	2.4933	24.171	287.06	.50158	79.989	4.7334
#1	-.00035	49.802	-.00924	.01939	.00079	.00028	1.0518	.22451	.00029	-.00116	.00076	.01521
#2	-.00054	49.981	-.00904	.01567	.00056	.00022	1.0153	.15897	-.00010	-.00115	.00021	.01423
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.383**	**1.4357**	**.00620**	**.05979**	**-.00189**	**-.00148**	**249.47**	**.00141**	**.01024**	**.00069**	W **5.3699**	**.00800**
Stddev	.262	.1836	.00211	.00279	.00004	.00029	.55	.00058	.00550	.00064	.1534	.00172
%RSD	.54246	12.785	34.025	4.6730	2.2087	19.544	.22144	40.750	53.741	93.402	2.8567	21.476
#1	48.198	1.5655	.00471	.05782	-.00186	-.00168	249.08	.00101	.01413	.00114	5.4784	.00678
#2	48.569	1.3059	.00770	.06177	-.00192	-.00127	249.86	.00182	.00635	.00023	5.2615	.00921
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Warn	None
Value											5.0000	
Range											5.0000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00264**	**-.01848**	**-.03955**	**.00169**	**.00355**	**4.9953**	**.01978**	**.00652**	**10.463**	**.01250**	**.00255**	**.05903**
Stddev	.00257	.01742	.03728	.00091	.00080	.0093	.00038	.00115	.001	.00032	.00020	.00004
%RSD	97.318	94.254	94.254	53.694	22.435	.18703	1.9059	17.655	.00847	2.5545	7.9586	.06233
#1	-.00082	-.00616	-.01319	.00105	.00411	5.0019	.02004	.00733	10.462	.01272	.00241	.05906
#2	-.00445	-.03080	-.06591	.00233	.00299	4.9886	.01951	.00571	10.464	.01227	.00270	.05901
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2614.2**	**47683.**	**5635.8**
Stddev	16.2	331.	29.1
%RSD	.62094	.69396	.51633
#1	2602.7	47917.	5615.2
#2	2625.7	47449.	5656.3

Sample Name: CCV-4580817 Acquired: 6/13/2017 4:29:02 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50716**	F **.60564**	**1.0140**	**.51915**	**.48646**	**.49803**	**.00024**	**4.9071**	**.50501**	**.50231**	**.49148**	**.49939**
Stddev	.00125	.01768	.0070	.01241	.00198	.00251	.00125	.0027	.01137	.01330	.01444	.00177
%RSD	.24702	2.9196	.69324	2.3899	.40637	.50454	523.16	.05569	2.2513	2.6487	2.9383	.35406
#1	.50804	.61815	1.0190	.52792	.48506	.49625	.00113	4.9091	.51305	.51172	.50169	.50064
#2	.50627	.59314	1.0091	.51037	.48785	.49981	-.00065	4.9052	.49698	.49290	.48127	.49814
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5023**	**51.070**	**1.0398**	**20.278**	**.51035**	**.48549**	F **5.7672**	**.50201**	**1.0436**	**1.0107**	**.43091**	**1.0237**
Stddev	.0020	.436	.0042	.037	.00121	.01068	.0133	.01204	.0302	.0243	.00220	.0221
%RSD	.07918	.85429	.39991	.18007	.23745	2.1998	.23124	2.3993	2.8985	2.3997	.51025	2.1542
#1	2.5037	50.761	1.0369	20.304	.51120	.49304	5.7577	.51053	1.0650	1.0279	.42936	1.0393
#2	2.5009	51.378	1.0427	20.253	.50949	.47794	5.7766	.49350	1.0222	.99359	.43247	1.0081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							5.0000					
Range							10.490%					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0416**	**4.9416**	**10.575**	**.99055**	**.50480**	**.00560**	**.50877**	**1.0811**	**.01693**	**.50006**	**.51346**	**.48430**
Stddev	.0239	.0223	.048	.02909	.00313	.00187	.00189	.0239	.02613	.00349	.00327	.00039
%RSD	2.2952	.45106	.45106	2.9371	.62028	33.387	.37203	2.2068	154.37	.69769	.63692	.08137
#1	1.0586	4.9259	10.541	1.0111	.50258	.00692	.51011	1.0979	.03540	.50253	.51577	.48458
#2	1.0247	4.9574	10.609	.96998	.50701	.00427	.50743	1.0642	-.00155	.49759	.51115	.48403
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2635.7**	**49462.**	**5729.7**
Stddev	.5	150.	16.1
%RSD	.02084	.30293	.28028
#1	2636.0	49356.	5741.0
#2	2635.3	49568.	5718.3

Sample Name: CCB Acquired: 6/13/2017 4:31:31 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00023**	**.00298**	**-.00535**	**.00746**	**.00024**	**.00016**	**.00506**	**.01982**	**-.00043**	**.00043**	**.00005**	**.00100**
Stddev	.00013	.00016	.00371	.00054	.00047	.00012	.00086	.00103	.00005	.00012	.00000	.00078
%RSD	55.976	5.4938	69.262	7.2465	190.86	74.414	16.938	5.1738	12.738	28.522	8.5727	77.506
#1	-.00014	.00310	-.00273	.00708	.00058	.00025	.00566	.01910	-.00047	.00034	.00005	.00155
#2	-.00033	.00287	-.00797	.00784	-.00009	.00008	.00445	.02055	-.00039	.00051	.00005	.00045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00374**	**.46139**	**.00203**	**.00339**	**.00020**	**.00018**	F **.56872**	**.00024**	**.00470**	**.00349**	F **.34268**	**-.00071**
Stddev	.00153	.05759	.00156	.00129	.00000	.00018	.02698	.00012	.00280	.00108	.01483	.00485
%RSD	40.996	12.481	76.915	38.008	1.0067	99.604	4.7436	52.421	59.601	30.922	4.3264	681.82
#1	.00482	.50211	.00092	.00431	.00020	.00031	.58779	.00033	.00667	.00272	.35316	.00272
#2	.00266	.42067	.00313	.00248	.00020	.00005	.54964	.00015	.00272	.00425	.33220	-.00414
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.50000				.10000	
Low Limit							-.50000				-.20000	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00283**	**-.01781**	**-.03811**	**.00092**	**.00045**	**-.00142**	**.00007**	**.00129**	**.01231**	**-.00062**	**.00134**	**.00074**
Stddev	.00011	.00956	.02046	.00034	.00008	.00045	.00003	.00163	.01850	.00071	.00013	.00027
%RSD	4.0154	53.683	53.683	36.453	18.670	31.976	42.025	125.88	150.27	114.37	9.6929	36.922
#1	.00275	-.01105	-.02364	.00116	.00051	-.00110	.00005	.00014	.02539	-.00112	.00144	.00094
#2	.00291	-.02457	-.05257	.00068	.00039	-.00174	.00009	.00244	-.00077	-.00012	.00125	.00055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2634.8**	**49721.**	**5586.4**
Stddev	4.3	401.	13.4
%RSD	.16407	.80647	.24039
#1	2637.9	49437.	5576.9
#2	2631.8	50004.	5595.9

Sample Name: CCVL-4589022 Acquired: 6/13/2017 4:34:08 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01011**	F **.13074**	**.01176**	**.10485**	**.00992**	**.00109**	**.11668**	**.20900**	**.00465**	**.01022**	**.00996**	**.01701**
Stddev	.00022	.00644	.00068	.00529	.00054	.00014	.00225	.00485	.00008	.00000	.00115	.00017
%RSD	2.1534	4.9293	5.8118	5.0436	5.4755	12.391	1.9304	2.3206	1.6753	.00121	11.511	.98618
#1	.00995	.13529	.01127	.10859	.00954	.00119	.11828	.20557	.00471	.01022	.01077	.01713
#2	.01026	.12618	.01224	.10111	.01030	.00100	.11509	.21243	.00460	.01022	.00915	.01690
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000										
Range		30.000%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10132**	**3.5178**	**.02543**	**.21230**	**.01076**	**.01780**	F **1.5216**	**.04018**	**2.9573**	**.00931**	F **.39348**	**.02056**
Stddev	.00152	.0390	.00056	.00058	.00001	.00102	.0056	.00200	.1259	.00081	.02308	.00162
%RSD	1.4966	1.1077	2.2087	.27138	.06620	5.7560	.36473	4.9743	4.2576	8.7341	5.8644	7.8740
#1	.10239	3.4902	.02503	.21189	.01077	.01853	1.5177	.04160	3.0464	.00874	.40980	.01942
#2	.10025	3.5453	.02582	.21271	.01076	.01708	1.5255	.03877	2.8683	.00989	.37716	.02171
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value							1.0000				.10000	
Range							30.000%				30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01740**	**.46648**	**.99828**	**.09676**	**.01047**	**.01235**	**.01004**	**.01927**	F **.08594**	**.00954**	**.02149**	**.01638**
Stddev	.00176	.02367	.05066	.00301	.00010	.00078	.00012	.00501	.00130	.00033	.00058	.00149
%RSD	10.113	5.0750	5.0750	3.1146	.91025	6.3114	1.1851	25.980	1.5079	3.4343	2.6782	9.1220
#1	.01615	.48322	1.0341	.09889	.01040	.01180	.00996	.02281	.08502	.00977	.02108	.01744
#2	.01864	.44974	.96245	.09463	.01053	.01291	.01012	.01573	.08686	.00930	.02190	.01532
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2712.6**	**51017.**	**5578.5**
Stddev	6.5	211.	59.4
%RSD	.24091	.41320	1.0641
#1	2717.2	51166.	5536.6
#2	2708.0	50868.	5620.5

Sample Name: MB 280-376728/1-A Acquired: 6/13/2017 4:36:46 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00066**	**.00470**	**.00008**	**.00532**	**-.00017**	**-.00001**	**.00499**	**.01926**	**-.00029**
Stddev	.00039	.00107	.00498	.00100	.00027	.00014	.00399	.00283	.00001
%RSD	58.680	22.663	6244.2	18.699	156.59	1034.5	80.023	14.696	3.7296
#1	-.00094	.00395	-.00344	.00603	-.00037	-.00011	.00782	.02126	-.00028
#2	-.00039	.00545	.00360	.00462	.00002	.00009	.00217	.01725	-.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00017**	**.00043**	**.00198**	**.01577**	**.36531**	**.00244**	**.00398**	**.00021**	**-.00016**
Stddev	.00005	.00034	.00016	.00112	.05260	.00261	.00774	.00001	.00025
%RSD	29.674	79.839	7.8424	7.1245	14.399	107.11	194.30	5.2245	151.37
#1	-.00013	.00067	.00209	.01657	.40250	.00429	.00945	.00022	.00001
#2	-.00020	.00019	.00187	.01498	.32811	.00059	-.00149	.00021	-.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47905**	**-.00006**	**.00579**	**.00209**	F **.25212**	**.00151**	**-.00356**	**-.01406**	**-.03009**
Stddev	.00558	.00071	.00094	.00239	.00470	.00535	.00521	.00128	.00274
%RSD	1.1647	1226.7	16.293	114.26	1.8640	355.58	146.44	9.1220	9.1220
#1	.47510	-.00056	.00646	.00040	.25544	.00529	-.00724	-.01315	-.02815
#2	.48299	.00044	.00512	.00378	.24879	-.00228	.00013	-.01497	-.03203
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None
High Limit					.10000				
Low Limit					-.10000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00120**	**.00022**	**-.00168**	**.00009**	**.00453**	**-.04009**	**-.00011**	**.00198**	**.00096**
Stddev	.00028	.00018	.00153	.00034	.00228	.00608	.00033	.00018	.00122
%RSD	23.726	85.436	91.068	398.88	50.181	15.159	302.02	8.8701	127.13
#1	.00140	.00035	-.00277	.00032	.00614	-.03579	.00012	.00210	.00010
#2	.00100	.00009	-.00060	-.00015	.00293	-.04439	-.00034	.00185	.00182
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2696.4**	**50623.**	**5775.6**
Stddev	3.6	76.	19.5
%RSD	.13345	.14969	.33817
#1	2693.9	50570.	5761.8
#2	2699.0	50677.	5789.4

Sample Name: LCS 280-376728/2-A Acquired: 6/13/2017 4:39:23 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05371**	F **2.3146**	**1.0798**	**1.0533**	**1.9739**	**.05051**	**2.1574**	**48.071**	**.10378**
Stddev	.00080	.0461	.0200	.0094	.0022	.00004	.0343	.079	.00156
%RSD	1.4811	1.9903	1.8487	.88962	.11371	.07461	1.5910	.16498	1.5051
#1	.05427	2.3472	1.0940	1.0600	1.9723	.05049	2.1816	48.015	.10488
#2	.05314	2.2821	1.0657	1.0467	1.9755	.05054	2.1331	48.127	.10268
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit		2.2299							
Low Limit		1.7300							

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49390**	**.19798**	**.25686**	**1.0136**	**51.542**	**1.0390**	**51.057**	**.50895**	**.95896**
Stddev	.00913	.00388	.00083	.0016	.018	.0065	.058	.00028	.01705
%RSD	1.8487	1.9603	.32472	.16163	.03574	.62836	.11429	.05484	1.7777
#1	.50036	.20073	.25745	1.0124	51.529	1.0437	51.098	.50875	.97102
#2	.48744	.19524	.25627	1.0147	51.555	1.0344	51.016	.50915	.94691
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**52.000**	**.49339**	**10.836**	**.50109**	**2.2271**	**.52848**	**2.1315**	**9.9859**	**21.370**
Stddev	.095	.00763	.196	.00813	.0462	.01110	.0294	.0358	.077
%RSD	.18291	1.5473	1.8060	1.6224	2.0745	2.0995	1.3778	.35853	.35853
#1	51.933	.49878	10.975	.50684	2.2597	.53633	2.1523	9.9606	21.316
#2	52.067	.48799	10.698	.49534	2.1944	.52064	2.1107	10.011	21.424
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9888**	**1.0118**	**1.0272**	**1.0361**	**2.1436**	**2.1533**	**.50457**	**.52208**	**.49705**
Stddev	.0385	.0029	.0032	.0001	.0442	.0102	.00228	.00032	.00125
%RSD	1.9365	.29158	.30896	.01415	2.0617	.47301	.45224	.06116	.25206
#1	2.0160	1.0097	1.0249	1.0362	2.1749	2.1461	.50619	.52230	.49616
#2	1.9616	1.0139	1.0294	1.0360	2.1124	2.1605	.50296	.52185	.49793
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2575.6**	**47966.**	**5671.9**
Stddev	.9	74.	21.0
%RSD	.03338	.15512	.37095
#1	2576.2	48019.	5686.8
#2	2575.0	47914.	5657.1

Sample Name: 280-98044-G-1-B Acquired: 6/13/2017 4:41:47 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**.02299**	**-.00175**	**.07839**	**.03474**	**.00004**	**.00265**	**65.836**	**.00004**
Stddev	.00003	.00287	.00651	.00259	.00025	.00013	.00007	.105	.00018
%RSD	145.72	12.495	371.12	3.2989	.72836	287.11	2.6846	.15926	450.98
#1	-.00004	.02502	-.00636	.08022	.03492	-.00005	.00270	65.762	.00016
#2	.00000	.02096	.00285	.07656	.03456	.00013	.00260	65.911	-.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00062**	**.00097**	**.00380**	**.03124**	**5.2456**	**.02411**	**18.905**	**.00205**	**.00319**
Stddev	.00031	.00025	.00026	.00048	.0694	.00072	.023	.00000	.00050
%RSD	49.510	25.463	6.7309	1.5425	1.3227	2.9667	.11911	.22311	15.617
#1	.00084	.00114	.00398	.03090	5.1965	.02360	18.920	.00205	.00354
#2	.00040	.00079	.00362	.03158	5.2947	.02461	18.889	.00205	.00284
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**16.127**	**.00005**	**.01614**	**.00223**	**16.297**	**-.00244**	**.00051**	**4.3938**	**9.4028**
Stddev	.213	.00005	.00083	.00309	.466	.00179	.00530	.0135	.0289
%RSD	1.3225	92.539	5.1443	138.59	2.8563	73.136	1036.3	.30701	.30701
#1	16.277	.00008	.01673	.00441	16.626	-.00370	.00426	4.3843	9.3824
#2	15.976	.00002	.01555	.00004	15.968	-.00118	-.00324	4.4034	9.4232
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00019**	**.21561**	**-.00309**	**.00053**	**.00793**	**.02658**	**-.00005**	**.00456**	**.00135**
Stddev	.00039	.00062	.00224	.00011	.00353	.01590	.00039	.00054	.00039
%RSD	204.22	.28631	72.468	21.752	44.515	59.804	709.44	11.780	29.014
#1	.00008	.21518	-.00151	.00045	.00543	.03783	-.00033	.00494	.00107
#2	-.00046	.21605	-.00467	.00061	.01043	.01534	.00022	.00418	.00163
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2644.6**	**49109.**	**5684.1**
Stddev	9.0	18.	20.0
%RSD	.33999	.03737	.35120
#1	2650.9	49122.	5670.0
#2	2638.2	49096.	5698.2

Sample Name: 280-98044-G-2-B Acquired: 6/13/2017 4:44:23 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00051**	**.00803**	**-.00785**	**.35871**	**.04594**	**.00001**	**.00507**	**71.362**	**-.00007**
Stddev	.00001	.00089	.00632	.01227	.00006	.00006	.00489	.020	.00010
%RSD	2.3868	11.063	80.490	3.4208	.13111	426.58	96.473	.02796	135.65
#1	-.00052	.00740	-.01232	.36738	.04589	-.00003	.00853	71.376	-.00000
#2	-.00050	.00865	-.00338	.35003	.04598	.00006	.00161	71.348	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00088**	**.00115**	**.00518**	**.01747**	**6.4231**	**.01933**	**20.787**	**.06450**	**.00260**
Stddev	.00007	.00031	.00019	.00292	.0160	.00213	.085	.00048	.00057
%RSD	7.7547	27.119	3.7255	16.734	.24852	11.036	.40704	.73895	21.769
#1	.00093	.00136	.00504	.01540	6.4118	.01782	20.847	.06484	.00300
#2	.00084	.00093	.00532	.01953	6.4344	.02084	20.727	.06417	.00220
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**28.546**	**.00447**	**.01272**	**.00142**	**19.820**	**.00015**	**-.00553**	**4.2996**	**9.2012**
Stddev	.187	.00091	.00517	.00290	.701	.00039	.00567	.0003	.0005
%RSD	.65648	20.271	40.622	204.30	3.5344	262.50	102.64	.00586	.00586
#1	28.414	.00383	.00907	-.00063	20.315	.00042	-.00152	4.2998	9.2016
#2	28.679	.00511	.01638	.00347	19.324	-.00013	-.00954	4.2995	9.2008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00074**	**.30339**	**-.00205**	**.00034**	**.00462**	**.00341**	**-.00088**	**.00378**	**.00163**
Stddev	.00050	.00031	.00007	.00009	.00048	.01699	.00005	.00040	.00288
%RSD	67.124	.10365	3.2995	27.775	10.478	497.66	6.0801	10.529	176.51
#1	-.00110	.30317	-.00200	.00040	.00496	-.00860	-.00085	.00350	-.00040
#2	-.00039	.30361	-.00210	.00027	.00428	.01542	-.00092	.00406	.00367
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2622.8**	**48825.**	**5749.3**
Stddev	.5	164.	11.7
%RSD	.02003	.33634	.20431
#1	2622.4	48941.	5757.6
#2	2623.1	48709.	5741.0

Sample Name: 280-98044-G-3-B Acquired: 6/13/2017 4:46:58 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00052**	**.03152**	**.00368**	**1.3731**	**.09357**	**-.00002**	**.00622**	**88.063**	**-.00013**
Stddev	.00077	.00068	.01392	.0429	.00063	.00008	.00363	.207	.00035
%RSD	147.79	2.1555	378.15	3.1211	.67688	319.48	58.335	.23521	274.09
#1	-.00107	.03200	.01352	1.4034	.09312	-.00008	.00366	88.210	.00012
#2	.00002	.03104	-.00616	1.3428	.09402	.00003	.00879	87.917	-.00038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00329**	**.00161**	**.01219**	**.06351**	**13.250**	**.02290**	**27.322**	**.09289**	**.00329**
Stddev	.00021	.00001	.00050	.00402	.026	.00025	.023	.00032	.00094
%RSD	6.4365	.31605	4.1096	6.3331	.19622	1.0739	.08497	.34235	28.632
#1	.00344	.00161	.01254	.06067	13.269	.02272	27.339	.09311	.00396
#2	.00314	.00161	.01183	.06636	13.232	.02307	27.306	.09266	.00263
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**76.031**	**.02073**	**.03469**	**.00140**	**24.015**	**.00160**	**-.00001**	**4.5028**	**9.6359**
Stddev	.788	.00082	.00059	.00178	.862	.00371	.00439	.0089	.0190
%RSD	1.0361	3.9406	1.7016	126.92	3.5877	232.44	74880.	.19705	.19705
#1	75.474	.02131	.03511	.00014	24.624	-.00103	.00310	4.5090	9.6494
#2	76.588	.02016	.03427	.00267	23.405	.00422	-.00311	4.4965	9.6225
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00061**	**.54783**	**-.00365**	**.00056**	**.00295**	**.01571**	**-.00043**	**.01240**	**.00198**
Stddev	.00162	.00163	.00091	.00044	.00323	.00900	.00044	.00005	.00048
%RSD	265.82	.29712	24.862	78.342	109.39	57.289	102.34	.38248	24.144
#1	-.00054	.54898	-.00430	.00086	.00067	.02207	-.00012	.01237	.00232
#2	.00176	.54668	-.00301	.00025	.00524	.00934	-.00073	.01244	.00164
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2594.7**	**48391.**	**5765.1**
Stddev	8.0	23.	22.5
%RSD	.30784	.04811	.38957
#1	2600.4	48374.	5749.2
#2	2589.1	48407.	5780.9

Sample Name: 280-98044-G-4-B Acquired: 6/13/2017 4:49:33 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00107**	**.04306**	**-.00023**	**.04791**	**.06290**	**.00010**	**.00262**	**87.786**	**-.00022**
Stddev	.00023	.00264	.00581	.00149	.00031	.00009	.00316	.101	.00037
%RSD	22.046	6.1249	2493.4	3.1168	.49119	86.734	120.56	.11486	168.00
#1	-.00090	.04493	.00388	.04897	.06312	.00004	.00039	87.715	-.00048
#2	-.00123	.04120	-.00434	.04685	.06268	.00017	.00485	87.858	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00027**	**.00050**	**.00278**	**.06383**	**3.8071**	**.00920**	**15.894**	**.00976**	**-.00023**
Stddev	.00006	.00017	.00076	.00139	.0140	.00021	.070	.00003	.00038
%RSD	21.831	33.379	27.365	2.1784	.36757	2.2968	.43868	.31746	161.75
#1	.00031	.00038	.00224	.06285	3.7972	.00935	15.944	.00978	.00003
#2	.00023	.00061	.00332	.06481	3.8170	.00905	15.845	.00974	-.00050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.558**	**.00062**	**.01535**	**.00162**	**8.5776**	**-.00538**	**.00150**	**4.2919**	**9.1846**
Stddev	.180	.00033	.00074	.00135	.2947	.00241	.00131	.0236	.0506
%RSD	.76432	53.758	4.8514	83.579	3.4352	44.840	87.620	.55089	.55089
#1	23.685	.00086	.01482	.00066	8.7860	-.00708	.00243	4.2751	9.1488
#2	23.430	.00039	.01587	.00258	8.3692	-.00367	.00057	4.3086	9.2203
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00062**	**.18549**	**-.00352**	**.00069**	**.00490**	**.00103**	**-.00080**	**.01154**	**.00038**
Stddev	.00069	.00014	.00001	.00060	.00411	.02749	.00148	.00044	.00218
%RSD	111.13	.07299	.18454	87.033	84.031	2670.5	185.27	3.8324	573.36
#1	-.00111	.18558	-.00352	.00112	.00781	.02047	-.00185	.01185	-.00116
#2	-.00013	.18539	-.00352	.00027	.00199	-.01841	.00025	.01122	.00192
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2641.7**	**49356.**	**5836.8**
Stddev	14.7	115.	14.0
%RSD	.55746	.23337	.23987
#1	2652.1	49275.	5826.9
#2	2631.3	49438.	5846.7

Sample Name: 280-98050-K-1-E Acquired: 6/13/2017 4:52:09 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00015**	**.01052**	**.00046**	**.01400**	**.09200**	**.00001**	**.00522**	**20.625**	**-.00015**
Stddev	.00044	.00012	.00678	.00022	.00036	.00005	.00066	.004	.00030
%RSD	287.97	1.1014	1471.0	1.5401	.39612	351.12	12.666	.01787	199.46
#1	-.00046	.01044	-.00434	.01415	.09175	.00005	.00569	20.622	-.00036
#2	.00016	.01061	.00526	.01385	.09226	-.00002	.00475	20.627	.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00017**	**.00076**	**.00290**	**.01839**	**1.1807**	**.00404**	**5.1303**	**.01291**	**.00009**
Stddev	.00027	.00008	.00095	.00194	.0366	.00122	.0120	.00007	.00075
%RSD	160.40	10.975	32.684	10.566	3.0971	30.258	.23313	.52484	824.29
#1	.00002	.00070	.00223	.01702	1.2066	.00318	5.1388	.01295	-.00044
#2	-.00036	.00081	.00357	.01977	1.1549	.00491	5.1218	.01286	.00062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.279**	**.00052**	**.07150**	**.00140**	**1.3841**	**.00178**	**.00022**	**12.815**	**27.424**
Stddev	.107	.00039	.00471	.00184	.0387	.00224	.00383	.000	.001
%RSD	.40552	73.766	6.5852	131.99	2.7933	125.56	1705.8	.00303	.00303
#1	26.355	.00025	.07483	.00270	1.4115	.00020	.00293	12.815	27.424
#2	26.204	.00080	.06817	.00009	1.3568	.00337	-.00248	12.815	27.425
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00009**	**.25224**	**.00020**	**.00016**	**.00127**	**-.01000**	**-.00016**	**.00242**	**.00267**
Stddev	.00050	.00049	.00093	.00020	.00079	.02808	.00036	.00025	.00127
%RSD	569.93	.19494	470.58	123.24	62.312	280.83	231.18	10.479	47.659
#1	.00027	.25190	-.00046	.00030	.00071	-.02986	.00010	.00224	.00356
#2	-.00044	.25259	.00086	.00002	.00183	.00986	-.00041	.00260	.00177
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2665.5**	**49798.**	**5812.2**
Stddev	20.5	12.	26.1
%RSD	.76749	.02431	.44871
#1	2679.9	49806.	5793.8
#2	2651.0	49789.	5830.7

Sample Name: 280-98050-K-1-E SD@5 Acquired: 6/13/2017 4:54:46 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00038**	**.01753**	**.00073**	**.00393**	**.01894**	**.00018**	**.00084**	**4.2780**	**-.00017**
Stddev	.00044	.00147	.00125	.00118	.00011	.00005	.00003	.0027	.00009
%RSD	113.82	8.3662	170.02	29.919	.57680	26.866	3.8357	.06396	55.242
#1	-.00069	.01857	-.00015	.00476	.01887	.00015	.00081	4.2800	-.00010
#2	-.00007	.01649	.00162	.00310	.01902	.00021	.00086	4.2761	-.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00015**	**.00009**	**.00137**	**.05423**	**.44736**	**.00279**	**1.0613**	**.00309**	**-.00044**
Stddev	.00014	.00008	.00036	.00238	.04029	.00087	.0059	.00000	.00055
%RSD	97.927	88.028	26.026	4.3823	9.0070	31.279	.55953	.04343	126.36
#1	.00005	.00014	.00111	.05255	.41887	.00341	1.0571	.00309	-.00005
#2	.00025	.00003	.00162	.05591	.47585	.00217	1.0655	.00309	-.00083
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.4774**	**.00045**	**.01542**	**.00126**	**.36821**	**.00040**	**.00043**	**2.5683**	**5.4962**
Stddev	.0007	.00019	.00027	.00032	.01042	.00268	.00031	.0231	.0495
%RSD	.01205	41.467	1.7355	25.493	2.8294	667.33	71.915	.90059	.90059
#1	5.4779	.00032	.01561	.00149	.37558	-.00149	.00066	2.5520	5.4612
#2	5.4770	.00058	.01524	.00104	.36085	.00229	.00021	2.5847	5.5312
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00033**	**.05242**	**-.00109**	**.00006**	**.00397**	**.03555**	**.00022**	**.00466**	**.00111**
Stddev	.00026	.00021	.00153	.00004	.00701	.01430	.00065	.00009	.00104
%RSD	79.184	.40310	140.74	69.839	176.39	40.227	298.86	1.9616	93.778
#1	-.00015	.05227	-.00001	.00009	.00893	.02544	-.00024	.00459	.00185
#2	-.00051	.05257	-.00217	.00003	-.00098	.04566	.00067	.00472	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2720.5**	**50666.**	**5841.8**
Stddev	18.8	47.	11.3
%RSD	.69017	.09274	.19285
#1	2733.8	50632.	5849.7
#2	2707.3	50699.	5833.8

Sample Name: 280-98050-K-1-F MS Acquired: 6/13/2017 4:57:23 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05301**	**2.2818**	**1.0827**	**1.0566**	**2.0589**	**.05053**	W **2.1490**	**68.652**	**.10324**
Stddev	.00072	.0454	.0219	.0160	.0120	.00007	.0547	.359	.00187
%RSD	1.3608	1.9913	2.0177	1.5166	.58018	.14413	2.5467	.52232	1.8114
#1	.05250	2.3139	1.0981	1.0679	2.0505	.05058	2.1877	68.399	.10456
#2	.05352	2.2496	1.0672	1.0452	2.0674	.05048	2.1103	68.906	.10191
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48822**	**.19657**	**.25884**	**1.0014**	**52.135**	**1.0388**	**55.982**	**.52131**	**.94900**
Stddev	.01007	.00547	.00002	.0080	.254	.0066	.141	.00171	.02347
%RSD	2.0617	2.7804	.00649	.79849	.48652	.63914	.25234	.32792	2.4729
#1	.49534	.20044	.25885	.99577	51.956	1.0341	56.082	.52252	.96560
#2	.48110	.19271	.25883	1.0071	52.314	1.0435	55.882	.52011	.93241
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**78.155**	**.48971**	**10.910**	**.49624**	**3.4947**	**.52838**	**2.1241**	**23.335**	**49.937**
Stddev	.298	.01133	.234	.00556	.0682	.01447	.0296	.033	.071
%RSD	.38180	2.3143	2.1410	1.1202	1.9506	2.7381	1.3927	.14126	.14126
#1	78.366	.49773	11.075	.50017	3.5429	.53861	2.1450	23.312	49.887
#2	77.944	.48170	10.745	.49231	3.4465	.51815	2.1032	23.359	49.987
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9700**	**1.2785**	**1.0330**	**1.0420**	**2.1039**	**2.1667**	**.50617**	**.52156**	**.49451**
Stddev	.0375	.0042	.0044	.0032	.0393	.0060	.00111	.00065	.00274
%RSD	1.9046	.32778	.42320	.30394	1.8655	.27517	.21989	.12490	.55502
#1	1.9965	1.2755	1.0361	1.0442	2.1317	2.1709	.50696	.52110	.49256
#2	1.9435	1.2815	1.0299	1.0397	2.0762	2.1625	.50538	.52202	.49645
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2612.1**	**48470.**	**5841.1**
Stddev	7.9	137.	70.9
%RSD	.30334	.28299	1.2133
#1	2617.7	48373.	5891.2
#2	2606.5	48567.	5791.0

Sample Name: 280-98050-K-1-G MSD Acquired: 6/13/2017 4:59:46 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05301**	**2.3199**	**1.0920**	**1.0619**	**2.0760**	**.05079**	W **2.1505**	**69.231**	**.10395**
Stddev	.00013	.0578	.0205	.0211	.0010	.00020	.0550	.161	.00282
%RSD	.24208	2.4904	1.8750	1.9908	.04917	.39661	2.5556	.23195	2.7162
#1	.05292	2.3608	1.1065	1.0769	2.0767	.05065	2.1894	69.345	.10594
#2	.05310	2.2791	1.0776	1.0470	2.0753	.05093	2.1116	69.118	.10195
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48958**	**.19790**	**.25885**	**1.0125**	**52.601**	**1.0502**	**56.444**	**.52622**	**.95531**
Stddev	.01157	.00450	.00017	.0001	.115	.0027	.060	.00001	.02431
%RSD	2.3633	2.2750	.06654	.01175	.21828	.25399	.10700	.00195	2.5442
#1	.49776	.20109	.25897	1.0124	52.520	1.0521	56.402	.52623	.97250
#2	.48140	.19472	.25873	1.0126	52.683	1.0483	56.487	.52622	.93812
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**78.828**	**.49133**	**10.951**	**.49660**	**3.5354**	**.53145**	**2.1454**	**23.518**	**50.330**
Stddev	.132	.01417	.251	.01079	.1501	.00371	.0374	.012	.026
%RSD	.16718	2.8834	2.2925	2.1720	4.2458	.69830	1.7455	.05164	.05164
#1	78.735	.50135	11.128	.50423	3.6415	.53407	2.1719	23.527	50.348
#2	78.921	.48131	10.773	.48897	3.4292	.52883	2.1190	23.510	50.311
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9848**	**1.2861**	**1.0422**	**1.0538**	**2.1174**	**2.2038**	**.51218**	**.52890**	**.49914**
Stddev	.0448	.0033	.0022	.0017	.0420	.0191	.00029	.00068	.00194
%RSD	2.2583	.25611	.21315	.15925	1.9844	.86584	.05745	.12830	.38778
#1	2.0165	1.2838	1.0438	1.0550	2.1471	2.1903	.51239	.52842	.50051
#2	1.9531	1.2884	1.0406	1.0526	2.0877	2.2173	.51197	.52938	.49777
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2572.0**	**48025.**	**5730.4**
Stddev	3.3	8.	13.0
%RSD	.12820	.01619	.22736
#1	2569.6	48031.	5739.7
#2	2574.3	48020.	5721.2

Sample Name: CCVH-4579429 Acquired: 6/13/2017 5:02:10 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00091**	**50.082**	**-.00207**	**.00511**	**.00069**	**.00026**	**1.0382**	**.02795**	**.00008**	**-.00123**	**.00071**	**.01472**
Stddev	.00061	.029	.00063	.00139	.00058	.00000	.0348	.00526	.00006	.00035	.00019	.00000
%RSD	67.263	.05851	30.345	27.229	85.150	.17608	3.3571	18.828	74.921	28.435	27.304	.01395
#1	-.00048	50.103	-.00251	.00610	.00110	.00026	1.0628	.03168	.00012	-.00099	.00057	.01472
#2	-.00135	50.062	-.00162	.00413	.00027	.00026	1.0135	.02423	.00004	-.00148	.00084	.01472
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.705**	**.23878**	**.00515**	**.04361**	**-.00205**	**-.00083**	**251.02**	**.00167**	**.00588**	**.00083**	**4.9480**	**.00637**
Stddev	.184	.05241	.00193	.00824	.00010	.00015	.46	.00051	.00046	.00308	.1197	.00041
%RSD	.37750	21.950	37.392	18.904	4.8525	17.931	.18370	30.313	7.8470	371.63	2.4192	6.4788
#1	48.574	.27584	.00651	.03778	-.00198	-.00094	251.35	.00202	.00620	-.00135	5.0326	.00607
#2	48.835	.20172	.00379	.04944	-.00212	-.00073	250.69	.00131	.00555	.00301	4.8633	.00666
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00344**	**-.00836**	**-.01789**	**.00035**	**.00089**	**5.0332**	**.02009**	**.00342**	W **10.574**	**.01299**	**.00216**	**.05753**
Stddev	.01291	.02632	.05633	.00073	.00007	.0132	.00012	.00453	.049	.00056	.00021	.00268
%RSD	375.02	314.92	314.92	210.25	7.3340	.26285	.61639	132.57	.46217	4.2774	9.7018	4.6547
#1	.01257	.01025	.02194	-.00017	.00084	5.0425	.02018	.00021	10.539	.01260	.00201	.05563
#2	-.00569	-.02697	-.05772	.00087	.00093	5.0238	.02000	.00662	10.608	.01339	.00230	.05942
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Warn	None	None	None
Value									10.000			
Range									5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2624.2**	**47886.**	**5653.1**
Stddev	12.8	168.	29.7
%RSD	.48901	.35025	.52457
#1	2633.3	47768.	5632.1
#2	2615.1	48005.	5674.0

Sample Name: CCV-4580817 Acquired: 6/13/2017 5:04:43 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51205**	F **.62121**	**1.0321**	**.51222**	**.48716**	**.50135**	**-.00074**	**4.9261**	**.50554**	**.50162**	**.48803**	**.50003**
Stddev	.00140	.01964	.0285	.01277	.00345	.00297	.00076	.0113	.01415	.01362	.01392	.00125
%RSD	.27336	3.1610	2.7616	2.4935	.70824	.59172	102.69	.22928	2.7985	2.7142	2.8515	.24990
#1	.51304	.63510	1.0523	.52125	.48472	.49926	-.00020	4.9341	.51555	.51125	.49787	.50091
#2	.51106	.60733	1.0119	.50318	.48960	.50345	-.00128	4.9182	.49554	.49200	.47819	.49915
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5178**	**50.840**	**1.0411**	**20.685**	**.51865**	**.48415**	**5.3918**	**.50213**	**1.0573**	**1.0101**	**.10471**	**1.0285**
Stddev	.0014	.314	.0035	.130	.00310	.01264	.0750	.01239	.0304	.0198	.03498	.0222
%RSD	.05694	.61847	.33589	.63059	.59836	2.6114	1.3907	2.4685	2.8768	1.9577	33.408	2.1622
#1	2.5168	50.618	1.0436	20.777	.52084	.49309	5.4448	.51090	1.0788	1.0241	.12945	1.0442
#2	2.5188	51.063	1.0387	20.593	.51645	.47521	5.3387	.49337	1.0358	.99613	.07997	1.0128
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0463**	**5.0240**	**10.751**	**.98731**	**.50911**	**.00560**	**.51569**	W **1.1035**	**.03967**	**.50508**	**.52958**	**.48588**
Stddev	.0216	.0240	.051	.02558	.00275	.00308	.00420	.0217	.04405	.00477	.00581	.00269
%RSD	2.0665	.47769	.47769	2.5911	.54040	55.024	.81378	1.9659	111.04	.94488	1.0968	.55262
#1	1.0616	5.0070	10.715	1.0054	.50716	.00778	.51866	1.1189	.00852	.50845	.53368	.48398
#2	1.0310	5.0409	10.788	.96922	.51105	.00342	.51272	1.0882	.07082	.50170	.52547	.48778
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	None	Chk Pass	Chk Pass	Chk Pass
Value								1.0000				
Range								10.000%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2656.4**	**48952.**	**5651.5**
Stddev	11.2	966.	92.3
%RSD	.42127	1.9729	1.6340
#1	2664.3	48270.	5716.8
#2	2648.5	49635.	5586.2

Sample Name: CCB Acquired: 6/13/2017 5:07:12 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00032**	**.00406**	**-.00141**	**.00188**	**-.00031**	**.00006**	**.00454**	**.01160**	**-.00043**	**.00009**	**.00002**	**.00125**
Stddev	.00007	.00197	.00703	.00014	.00040	.00004	.00405	.00383	.00034	.00016	.00050	.00029
%RSD	22.838	48.471	498.09	7.3848	129.93	65.243	89.164	32.976	79.347	182.36	2399.2	22.744
#1	-.00027	.00545	.00356	.00178	-.00060	.00009	.00168	.01431	-.00067	-.00003	.00037	.00146
#2	-.00037	.00267	-.00638	.00198	-.00003	.00003	.00740	.00890	-.00019	.00021	-.00033	.00105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00096**	**.15252**	**.00415**	**.00131**	**.00024**	**.00034**	**.20078**	**-.00004**	**.00395**	**.00071**	W **.08666**	**-.00306**
Stddev	.00365	.02511	.00121	.00462	.00007	.00033	.00956	.00002	.00609	.00009	.01255	.00577
%RSD	380.95	16.465	29.300	353.70	30.763	98.644	4.7608	41.715	154.32	12.260	14.477	188.53
#1	.00354	.17028	.00329	-.00196	.00029	.00058	.19402	-.00006	.00825	.00078	.09553	-.00714
#2	-.00162	.13476	.00501	.00457	.00019	.00010	.20754	-.00003	-.00036	.00065	.07779	.00102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit											.05000	
Low Limit											-.20000	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00800**	**-.01507**	**-.03226**	**.00018**	**.00026**	**-.00364**	**.00024**	**.00467**	**.04177**	**.00029**	**.00108**	**.00105**
Stddev	.00917	.00732	.01567	.00032	.00016	.00044	.00031	.00519	.00008	.00024	.00005	.00047
%RSD	114.60	48.568	48.568	175.15	61.314	12.192	128.71	111.18	.20155	84.239	4.7573	45.126
#1	-.00152	-.00990	-.02118	-.00004	.00037	-.00332	.00002	.00100	.04183	.00046	.00104	.00072
#2	-.01448	-.02025	-.04334	.00040	.00015	-.00395	.00047	.00834	.04171	.00012	.00111	.00139
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2647.8**	**49789.**	**5635.1**
Stddev	6.4	283.	77.3
%RSD	.24337	.56854	1.3722
#1	2652.3	49989.	5580.4
#2	2643.2	49589.	5689.8

Sample Name: CCVL-4589022 Acquired: 6/13/2017 5:09:49 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00995**	F **.13051**	**.01467**	**.10154**	**.00962**	**.00100**	**.11537**	**.20988**	**.00468**	**.01007**	**.00975**	**.01689**
Stddev	.00051	.00475	.00030	.00312	.00035	.00019	.00557	.00257	.00025	.00057	.00009	.00013
%RSD	5.0925	3.6382	2.0755	3.0702	3.6746	19.432	4.8264	1.2238	5.3054	5.7048	.94035	.74755
#1	.01031	.13387	.01445	.10375	.00937	.00114	.11931	.20806	.00486	.01048	.00969	.01698
#2	.00959	.12715	.01488	.09934	.00987	.00086	.11143	.21170	.00451	.00967	.00982	.01680
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000										
Range		30.000%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10007**	**3.2553**	**.02194**	**.22277**	**.01100**	**.01811**	**1.2150**	**.04159**	**2.9852**	**.01153**	F **.15311**	**.01862**
Stddev	.00200	.0261	.00185	.00379	.00001	.00119	.0185	.00152	.0961	.00132	.01168	.00181
%RSD	1.9946	.80299	8.4472	1.7001	.06751	6.5878	1.5247	3.6567	3.2184	11.480	7.6304	9.7252
#1	.10148	3.2369	.02325	.22545	.01099	.01895	1.2281	.04266	3.0532	.01247	.14485	.01734
#2	.09866	3.2738	.02063	.22009	.01101	.01726	1.2019	.04051	2.9173	.01060	.16137	.01990
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.02792**	**.46929**	**1.0043**	**.09544**	**.01039**	**.01325**	**.01024**	F **.02061**	F **.08258**	**.00948**	**.02193**	**.01504**
Stddev	.00736	.00751	.0161	.00405	.00003	.00077	.00019	.00046	.01404	.00006	.00002	.00036
%RSD	26.352	1.6013	1.6013	4.2468	.29647	5.7990	1.8127	2.2459	17.007	.66012	.10434	2.3752
#1	.02272	.47460	1.0156	.09830	.01042	.01379	.01038	.02093	.09251	.00953	.02192	.01529
#2	.03313	.46397	.99291	.09257	.01037	.01271	.01011	.02028	.07265	.00944	.02195	.01478
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.02000							.01500	.06000			
Range	30.000%							30.000%	30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2693.3**	**49941.**	**5688.5**
Stddev	7.9	378.	12.0
%RSD	.29248	.75734	.21106
#1	2687.8	49673.	5697.0
#2	2698.9	50208.	5680.0

Sample Name: 280-98050-K-2-C Acquired: 6/13/2017 5:12:27 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00074**	**.00651**	**.00526**	**.00929**	**.10254**	**-.00000**	**.00446**	**16.810**	**-.00018**
Stddev	.00012	.00080	.01020	.00046	.00022	.00004	.00075	.042	.00010
%RSD	16.090	12.245	193.84	4.9482	.21256	1864.1	16.869	.24738	52.596
#1	-.00082	.00594	.01247	.00962	.10270	.00002	.00393	16.839	-.00025
#2	-.00065	.00707	-.00195	.00897	.10239	-.00003	.00499	16.781	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00038**	**-.00026**	**.00260**	**.03705**	**.89471**	**.00447**	**3.2740**	**.01770**	**.00039**
Stddev	.00027	.00006	.00090	.00389	.00888	.00045	.0013	.00004	.00002
%RSD	69.962	22.255	34.526	10.488	.99269	10.017	.03813	.23065	5.2883
#1	-.00019	-.00022	.00197	.03980	.88843	.00416	3.2731	.01772	.00038
#2	-.00057	-.00030	.00324	.03430	.90099	.00479	3.2748	.01767	.00041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**28.407**	**-.00009**	**.06310**	**.00153**	**.73286**	**-.00088**	**.00328**	**11.687**	**25.011**
Stddev	.438	.00002	.00390	.00049	.02988	.00226	.00249	.021	.046
%RSD	1.5432	20.315	6.1798	31.695	4.0766	258.13	76.099	.18359	.18359
#1	28.097	-.00010	.06585	.00119	.75398	.00072	.00504	11.703	25.044
#2	28.717	-.00008	.06034	.00188	.71173	-.00247	.00151	11.672	24.979
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00020**	**.22919**	**-.00104**	**.00049**	**.00309**	**.02826**	**-.00044**	**.00266**	**.00152**
Stddev	.00046	.00028	.00010	.00003	.00013	.00266	.00016	.00092	.00041
%RSD	226.63	.12017	9.9678	5.2676	4.1410	9.4217	36.792	34.529	27.031
#1	-.00012	.22939	-.00097	.00051	.00299	.02638	-.00055	.00201	.00123
#2	.00053	.22900	-.00111	.00047	.00318	.03015	-.00033	.00331	.00181
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2686.0**	**50180.**	**5912.1**
Stddev	5.5	2.	1.2
%RSD	.20651	.00477	.02075
#1	2690.0	50181.	5911.2
#2	2682.1	50178.	5913.0

Sample Name: 280-98050-K-3-C Acquired: 6/13/2017 5:15:03 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00116**	**.00851**	**.00418**	**.01147**	**.12094**	**-.00003**	**.00132**	**19.456**	**-.00018**
Stddev	.00039	.00036	.00418	.00005	.00101	.00008	.00251	.100	.00033
%RSD	33.764	4.2126	99.795	.46830	.83307	243.12	189.39	.51358	183.37
#1	-.00143	.00877	.00123	.01151	.12022	.00002	-.00045	19.385	.00005
#2	-.00088	.00826	.00714	.01144	.12165	-.00009	.00310	19.527	-.00041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00025**	**.00063**	**.00276**	**.01081**	**.90741**	**.00191**	**3.4775**	**.06700**	**.00093**
Stddev	.00019	.00014	.00015	.00221	.11655	.00171	.0076	.00044	.00018
%RSD	78.099	22.470	5.3363	20.451	12.845	89.431	.21866	.65551	18.872
#1	-.00039	.00053	.00287	.00925	.82500	.00070	3.4829	.06731	.00106
#2	-.00011	.00073	.00266	.01238	.98983	.00311	3.4722	.06669	.00081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**31.867**	**-.00013**	**.12400**	**.00191**	**.90659**	**-.00237**	**-.00248**	**11.810**	**25.274**
Stddev	.084	.00013	.00434	.00020	.03336	.00398	.00163	.028	.061
%RSD	.26214	97.739	3.5000	10.712	3.6802	167.83	65.595	.24118	.24118
#1	31.807	-.00022	.12707	.00206	.93018	-.00519	-.00133	11.790	25.231
#2	31.926	-.00004	.12093	.00177	.88300	.00044	-.00364	11.830	25.317
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00010**	**.25706**	**-.00250**	**.00014**	**.00104**	**.02732**	**.00009**	**.00308**	**.00187**
Stddev	.00193	.00043	.00010	.00058	.00791	.00325	.00074	.00108	.00154
%RSD	1874.1	.16870	3.8400	410.82	758.71	11.910	853.41	35.004	82.260
#1	-.00126	.25675	-.00257	.00055	.00664	.02962	-.00044	.00232	.00078
#2	.00147	.25736	-.00243	-.00027	-.00455	.02502	.00061	.00384	.00296
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2653.4**	**49307.**	**5765.0**
Stddev	4.7	62.	3.8
%RSD	.17650	.12542	.06604
#1	2650.0	49263.	5767.7
#2	2656.7	49351.	5762.3

Sample Name: 280-98050-K-4-C Acquired: 6/13/2017 5:17:38 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00116**	**.00945**	**.00338**	**.01281**	**.12080**	**.00001**	**.00432**	**19.504**	**-.00012**
Stddev	.00009	.00049	.00050	.00051	.00086	.00009	.00464	.067	.00005
%RSD	7.5815	5.1401	14.847	3.9545	.70927	802.00	107.22	.34171	45.420
#1	-.00110	.00911	.00303	.01245	.12019	.00008	.00105	19.457	-.00008
#2	-.00122	.00980	.00374	.01317	.12140	-.00006	.00760	19.551	-.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00037**	**.00043**	**.00290**	**.01529**	**.95611**	**.00416**	**3.5366**	**.09586**	**.00103**
Stddev	.00029	.00051	.00049	.00019	.01310	.00052	.0044	.00047	.00068
%RSD	78.163	118.34	16.724	1.2216	1.3700	12.572	.12331	.49176	66.200
#1	-.00016	.00080	.00256	.01516	.94685	.00379	3.5397	.09620	.00151
#2	-.00057	.00007	.00325	.01543	.96537	.00453	3.5335	.09553	.00055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**32.157**	**-.00033**	**.12858**	**.00185**	**.94172**	**.00093**	**.00514**	**11.818**	**25.291**
Stddev	.141	.00032	.00791	.00070	.05223	.00309	.00622	.010	.021
%RSD	.43739	96.561	6.1546	37.729	5.5466	332.09	121.01	.08383	.08383
#1	32.058	-.00011	.13417	.00135	.97866	.00311	.00074	11.811	25.276
#2	32.257	-.00056	.12298	.00234	.90479	-.00125	.00954	11.825	25.306
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00046**	**.25782**	**-.00214**	**.00004**	**.00148**	**.01467**	**.00018**	**.00381**	**.00097**
Stddev	.00185	.00107	.00065	.00021	.00126	.01638	.00021	.00025	.00063
%RSD	404.92	.41664	30.286	562.22	84.872	111.67	115.52	6.4824	64.876
#1	.00085	.25706	-.00168	.00019	.00237	.00309	.00003	.00363	.00052
#2	-.00176	.25858	-.00260	-.00011	.00059	.02626	.00033	.00398	.00141
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2692.7**	**49254.**	**5747.7**
Stddev	16.2	436.	45.9
%RSD	.60224	.88609	.79804
#1	2704.1	48945.	5780.1
#2	2681.2	49562.	5715.3

Sample Name: 280-98050-K-5-C Acquired: 6/13/2017 5:20:15 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00086**	**.00837**	**.00523**	**.00860**	**.12801**	**.00012**	**-.00121**	**20.206**	**-.00014**
Stddev	.00111	.00038	.00112	.00004	.00060	.00005	.00032	.062	.00000
%RSD	128.61	4.5348	21.315	.50346	.46578	39.133	26.538	.30759	2.3868
#1	-.00164	.00864	.00444	.00863	.12759	.00015	-.00143	20.162	-.00014
#2	-.00008	.00810	.00602	.00856	.12843	.00009	-.00098	20.250	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00038**	**.00059**	**.00329**	**.02016**	**.93274**	**.00412**	**4.2978**	**.08706**	**.00058**
Stddev	.00013	.00049	.00036	.00377	.10349	.00057	.0096	.00009	.00046
%RSD	33.014	83.229	10.985	18.723	11.095	13.859	.22318	.09786	78.581
#1	-.00029	.00024	.00303	.01749	1.0059	.00452	4.2910	.08700	.00090
#2	-.00047	.00094	.00354	.02282	.85957	.00371	4.3046	.08712	.00026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**27.977**	**.00018**	**.06249**	**.00081**	**.82395**	**-.00155**	**.00703**	**11.579**	**24.778**
Stddev	.358	.00025	.00340	.00004	.00580	.00231	.00279	.003	.007
%RSD	1.2810	143.65	5.4364	4.6234	.70393	149.63	39.754	.02829	.02829
#1	27.724	.00036	.06489	.00083	.82806	-.00318	.00505	11.581	24.783
#2	28.231	-.00000	.06009	.00078	.81985	.00009	.00900	11.576	24.773
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00115**	**.27760**	**-.00058**	**.00007**	**.00239**	**.04341**	**-.00050**	**.02005**	**.00168**
Stddev	.00099	.00079	.00004	.00022	.00067	.02100	.00015	.00000	.00103
%RSD	85.964	.28450	6.1853	303.91	28.171	48.372	30.375	.00940	61.448
#1	.00185	.27704	-.00056	.00023	.00287	.02856	-.00061	.02005	.00241
#2	.00045	.27816	-.00061	-.00008	.00192	.05826	-.00039	.02005	.00095
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2680.7**	**49702.**	**5863.3**
Stddev	14.4	56.	29.2
%RSD	.53841	.11174	.49782
#1	2690.9	49742.	5883.9
#2	2670.5	49663.	5842.6

Sample Name: 280-98050-K-6-C Acquired: 6/13/2017 5:22:52 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00103**	**.01226**	**.00158**	**.00721**	**.03936**	**.00003**	**-.00049**	**13.788**	**.00025**
Stddev	.00009	.00090	.00213	.00054	.00022	.00004	.00055	.035	.00002
%RSD	8.6232	7.3719	134.77	7.4926	.55336	126.74	112.09	.25489	9.8349
#1	-.00096	.01290	.00308	.00683	.03952	.00000	-.00089	13.763	.00026
#2	-.00109	.01162	.00007	.00760	.03921	.00006	-.00010	13.813	.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00062**	**.00041**	**.00251**	**.09272**	**.81745**	**.00569**	**8.6064**	**.00051**	**.00016**
Stddev	.00050	.00016	.00030	.00011	.00972	.00070	.0037	.00000	.00018
%RSD	80.201	39.051	11.907	.12198	1.1888	12.322	.04353	.65136	115.32
#1	-.00027	.00052	.00272	.09264	.82432	.00519	8.6091	.00051	.00003
#2	-.00098	.00029	.00230	.09280	.81057	.00618	8.6038	.00051	.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**20.325**	**-.00002**	**.14785**	**.00278**	**.40150**	**-.00120**	**.00010**	**22.670**	**48.514**
Stddev	.393	.00044	.00928	.00010	.01418	.00234	.00254	.026	.056
%RSD	1.9321	2428.6	6.2751	3.5985	3.5322	194.07	2512.4	.11521	.11521
#1	20.603	-.00033	.15442	.00285	.41153	.00045	-.00170	22.652	48.474
#2	20.047	.00029	.14129	.00271	.39147	-.00286	.00190	22.689	48.554
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00020**	**.13912**	**-.00326**	**-.00002**	**.00508**	**.02404**	**.00789**	**.00170**	**.00093**
Stddev	.00033	.00008	.00010	.00060	.00157	.00748	.00017	.00057	.00205
%RSD	165.38	.05513	3.0754	3179.4	30.901	31.115	2.1428	33.734	220.25
#1	-.00043	.13918	-.00333	-.00044	.00619	.02933	.00777	.00211	.00238
#2	.00003	.13907	-.00319	.00040	.00397	.01875	.00801	.00130	-.00052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2695.6**	**49908.**	**5816.0**
Stddev	2.2	29.	47.1
%RSD	.08061	.05793	.80938
#1	2694.1	49887.	5849.3
#2	2697.2	49928.	5782.7

Sample Name: 280-98081-E-1-A Acquired: 6/13/2017 5:25:29 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00079**	**.00941**	**.00196**	**.02636**	**.00782**	**-.00001**	**.00306**	**35.265**	**.00010**
Stddev	.00011	.00031	.00648	.00006	.00000	.00004	.00218	.036	.00023
%RSD	14.528	3.2459	329.98	.20905	.02068	533.00	71.051	.10131	239.58
#1	-.00071	.00962	.00655	.02632	.00782	.00002	.00460	35.290	-.00007
#2	-.00087	.00919	-.00262	.02640	.00782	-.00004	.00152	35.240	.00026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00098**	**.00444**	**.00307**	**.04445**	**6.0009**	**.01579**	**19.173**	**.00050**	**.00428**
Stddev	.00047	.00064	.00054	.00003	.0451	.00334	.004	.00009	.00004
%RSD	47.662	14.371	17.668	.06870	.75076	21.169	.01907	17.985	1.0024
#1	-.00065	.00490	.00345	.04447	5.9690	.01815	19.170	.00056	.00431
#2	-.00131	.00399	.00268	.04443	6.0327	.01342	19.175	.00043	.00425
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.616**	**.00001**	**.26643**	**.00225**	**6.7503**	**-.00150**	**.00501**	**26.760**	**57.266**
Stddev	.138	.00013	.01456	.00105	.1870	.00068	.00187	.006	.014
%RSD	.51887	2365.8	5.4660	46.716	2.7697	45.335	37.436	.02366	.02366
#1	26.519	.00010	.27673	.00151	6.8825	-.00198	.00633	26.756	57.257
#2	26.714	-.00009	.25613	.00300	6.6181	-.00102	.00368	26.764	57.276
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00139**	**.20703**	**-.00274**	**.00000**	**.00602**	**.02525**	**.03924**	**.00270**	**.00075**
Stddev	.00031	.00033	.00190	.00078	.00148	.01362	.00060	.00061	.00178
%RSD	22.524	.16069	69.378	19518.	24.560	53.934	1.5192	22.579	236.49
#1	-.00161	.20680	-.00409	-.00055	.00707	.03488	.03882	.00314	.00201
#2	-.00117	.20727	-.00140	.00056	.00498	.01562	.03966	.00227	-.00051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2668.6**	**49729.**	**5925.6**
Stddev	.8	38.	11.2
%RSD	.02848	.07586	.18922
#1	2668.1	49703.	5917.7
#2	2669.1	49756.	5933.6

Sample Name: 280-98081-E-2-A Acquired: 6/13/2017 5:28:05 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00043**	**.00606**	**-.00001**	**.00033**	**.00043**	**.00003**	**.00098**	**.04603**	**-.00043**
Stddev	.00080	.00080	.00031	.00118	.00020	.00008	.00311	.02094	.00013
%RSD	184.38	13.270	4598.9	362.59	46.918	294.22	316.61	45.504	29.570
#1	.00013	.00663	.00021	.00116	.00058	.00008	-.00122	.06084	-.00034
#2	-.00100	.00549	-.00023	-.00051	.00029	-.00003	.00318	.03122	-.00052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00017**	**.00030**	**.00183**	**.01897**	**.10142**	**.00542**	**.00329**	**.00017**	**-.00006**
Stddev	.00013	.00011	.00027	.00139	.04113	.00059	.00705	.00011	.00000
%RSD	72.938	37.095	14.616	7.3143	40.560	10.939	214.39	64.260	7.5676
#1	-.00008	.00038	.00164	.01995	.13050	.00584	-.00170	.00009	-.00006
#2	-.00026	.00022	.00202	.01799	.07233	.00500	.00828	.00025	-.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.21998**	**.00036**	**.00128**	**.00073**	**.04308**	**-.00107**	**.00512**	**.02245**	**.04804**
Stddev	.05377	.00072	.00175	.00118	.00045	.00087	.00066	.02408	.05154
%RSD	24.441	200.91	136.53	161.35	1.0343	81.175	12.993	107.27	107.27
#1	.25800	.00086	.00004	.00157	.04339	-.00046	.00465	.03948	.08448
#2	.18196	-.00015	.00252	-.00010	.04276	-.00169	.00559	.00542	.01160
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00088**	**.00036**	**-.00184**	**.00004**	**.00303**	**.00669**	**-.00054**	**.00227**	**.00027**
Stddev	.00185	.00034	.00337	.00031	.00446	.02579	.00057	.00060	.00048
%RSD	210.29	92.510	183.50	750.17	147.29	385.30	104.76	26.167	174.88
#1	-.00043	.00060	-.00422	.00026	.00618	-.01154	-.00014	.00185	-.00006
#2	.00219	.00013	.00055	-.00018	-.00013	.02493	-.00095	.00269	.00061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2686.9**	**50270.**	**5771.2**
Stddev	3.4	237.	27.0
%RSD	.12560	.47055	.46706
#1	2684.5	50438.	5790.3
#2	2689.3	50103.	5752.2

Sample Name: 280-98081-E-3-A Acquired: 6/13/2017 5:30:44 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00130**	**.00563**	**.00186**	**.02664**	**.00772**	**-.00007**	**-.00147**	**48.952**	**.00012**
Stddev	.00036	.00113	.00389	.00044	.00022	.00003	.00055	.191	.00046
%RSD	27.546	20.113	208.52	1.6541	2.8025	38.950	37.017	.38966	385.76
#1	-.00156	.00483	.00461	.02633	.00757	-.00009	-.00186	48.817	.00044
#2	-.00105	.00643	-.00088	.02695	.00787	-.00005	-.00109	49.087	-.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00037**	**.00471**	**.00308**	**.02357**	**7.0121**	**.01330**	**24.999**	**.00020**	**.00250**
Stddev	.00027	.00005	.00016	.00229	.0692	.00171	.106	.00002	.00027
%RSD	73.067	1.0690	5.2978	9.6964	.98652	12.835	.42526	8.1691	10.778
#1	-.00056	.00475	.00319	.02196	6.9632	.01450	25.074	.00021	.00231
#2	-.00018	.00468	.00296	.02519	7.0610	.01209	24.924	.00018	.00269
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.791**	**.00028**	**.04135**	**.00343**	**8.1106**	**-.00210**	**.00744**	**24.504**	**52.438**
Stddev	.051	.00051	.00213	.00005	.2546	.00040	.00082	.039	.084
%RSD	.25686	183.47	5.1526	1.3909	3.1396	19.137	10.988	.16050	.16050
#1	19.827	-.00008	.04286	.00340	8.2907	-.00182	.00801	24.532	52.498
#2	19.755	.00064	.03985	.00347	7.9305	-.00239	.00686	24.476	52.379
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00009**	**.30498**	**-.00234**	**.00019**	**.00259**	**.04144**	**.02640**	**.00258**	**.00025**
Stddev	.00155	.00103	.00059	.00020	.00287	.01471	.00022	.00106	.00050
%RSD	1758.7	.33714	25.187	101.89	110.94	35.502	.83794	40.960	201.54
#1	.00101	.30426	-.00192	.00005	.00461	.05184	.02656	.00333	-.00011
#2	-.00119	.30571	-.00275	.00033	.00056	.03104	.02625	.00183	.00061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2634.9**	**48776.**	**5764.1**
Stddev	4.6	3.	46.8
%RSD	.17538	.00710	.81155
#1	2638.2	48773.	5797.1
#2	2631.6	48778.	5731.0

Sample Name: 280-98081-E-4-A Acquired: 6/13/2017 5:33:20 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00079**	**.00798**	**-.00435**	**.02015**	**.01422**	**.00007**	**.00112**	**30.511**	**.00010**
Stddev	.00104	.00011	.00457	.00014	.00009	.00001	.00087	.015	.00025
%RSD	131.42	1.4153	104.97	.71503	.63877	18.550	77.706	.05043	253.58
#1	-.00153	.00790	-.00758	.02005	.01415	.00006	.00050	30.501	-.00008
#2	-.00006	.00806	-.00112	.02025	.01428	.00008	.00174	30.522	.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00074**	**.00696**	**.00352**	**.02381**	**5.5238**	**.01906**	**17.763**	**.00032**	**.00219**
Stddev	.00001	.00013	.00000	.00265	.0917	.00411	.021	.00007	.00001
%RSD	2.0011	1.8607	.00644	11.144	1.6595	21.545	.11917	21.275	.66053
#1	-.00073	.00706	.00352	.02568	5.5886	.01616	17.748	.00037	.00220
#2	-.00075	.00687	.00352	.02193	5.4589	.02197	17.778	.00027	.00218
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**29.223**	**-.00085**	**.02598**	**.00335**	**9.1806**	**-.00303**	**.00139**	**23.373**	**50.019**
Stddev	.640	.00060	.00251	.00138	.2677	.00032	.00245	.042	.091
%RSD	2.1893	70.658	9.6699	41.027	2.9163	10.703	176.67	.18099	.18099
#1	28.771	-.00042	.02775	.00238	9.3699	-.00280	-.00035	23.403	50.083
#2	29.676	-.00127	.02420	.00432	8.9913	-.00326	.00312	23.343	49.955
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00117**	**.14062**	**-.00292**	**.00001**	**.00477**	**.00732**	**.02120**	**.01264**	**.00041**
Stddev	.00161	.00014	.00188	.00019	.00532	.03720	.00049	.00070	.00063
%RSD	137.58	.09689	64.178	1594.6	111.62	508.04	2.2965	5.5580	156.26
#1	.00003	.14072	-.00425	.00014	.00853	-.01898	.02154	.01314	-.00004
#2	.00231	.14052	-.00160	-.00012	.00100	.03363	.02085	.01214	.00085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2701.8**	**49612.**	**5873.1**
Stddev	29.1	186.	7.3
%RSD	1.0754	.37524	.12420
#1	2681.3	49744.	5867.9
#2	2722.4	49480.	5878.2

Sample Name: 280-98081-E-5-A Acquired: 6/13/2017 5:35:56 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00075**	**.00495**	**-.00184**	**.02329**	**.01227**	**.00002**	**.00221**	**49.583**	**.00040**
Stddev	.00010	.00094	.00774	.00098	.00004	.00012	.00116	.119	.00024
%RSD	13.827	18.921	420.01	4.2222	.28567	765.03	52.644	.24099	59.511
#1	-.00068	.00562	.00363	.02398	.01225	-.00007	.00138	49.499	.00057
#2	-.00083	.00429	-.00731	.02259	.01230	.00010	.00303	49.668	.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00067**	**.00401**	**.00341**	**.04897**	**7.2881**	**.01763**	**29.076**	**.00032**	**.00212**
Stddev	.00026	.00045	.00014	.00176	.0684	.00091	.011	.00005	.00011
%RSD	38.820	11.313	4.0428	3.5942	.93887	5.1883	.03849	14.970	4.9640
#1	-.00085	.00433	.00332	.04773	7.3365	.01828	29.084	.00029	.00205
#2	-.00049	.00369	.00351	.05022	7.2398	.01698	29.068	.00036	.00220
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.282**	**-.00014**	**.02413**	**.00094**	**10.562**	**-.00172**	**-.00151**	**21.537**	**46.090**
Stddev	.254	.00022	.00032	.00233	.355	.00054	.00054	.012	.026
%RSD	.96569	158.73	1.3067	247.24	3.3568	31.245	35.826	.05605	.05605
#1	26.103	.00002	.02435	.00259	10.813	-.00210	-.00190	21.529	46.071
#2	26.462	-.00029	.02391	-.00071	10.311	-.00134	-.00113	21.546	46.108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00123**	**.25353**	**-.00204**	**-.00006**	**.00158**	**.00704**	**.01322**	**.00296**	**.00344**
Stddev	.00050	.00089	.00003	.00012	.00004	.01941	.00078	.00044	.00053
%RSD	40.886	.35294	1.4946	196.41	2.5798	275.68	5.8866	14.934	15.287
#1	-.00158	.25289	-.00202	.00002	.00161	.02077	.01267	.00328	.00382
#2	-.00087	.25416	-.00207	-.00015	.00155	-.00669	.01377	.00265	.00307
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2667.1**	**49621.**	**5871.0**
Stddev	10.4	159.	28.2
%RSD	.39105	.32134	.47961
#1	2674.5	49734.	5890.9
#2	2659.7	49508.	5851.0

Sample Name: CCVH-4579429 Acquired: 6/13/2017 5:38:31 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00111**	**49.856**	**-.00199**	**.00166**	**.00001**	**.00031**	**1.0253**	**.01792**	**.00024**	**-.00119**	**.00055**	**.01634**
Stddev	.00067	.117	.00275	.00075	.00017	.00007	.0338	.00680	.00018	.00041	.00014	.00047
%RSD	60.487	.23499	137.88	45.304	2601.8	24.013	3.3012	37.928	72.171	34.652	24.813	2.8908
#1	-.00158	49.939	-.00005	.00113	.00013	.00036	1.0492	.02273	.00037	-.00148	.00065	.01601
#2	-.00063	49.773	-.00394	.00219	-.00012	.00025	1.0013	.01312	.00012	-.00090	.00045	.01668
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.109**	**.07464**	**.00467**	**.03818**	**-.00203**	**-.00136**	**249.08**	**.00161**	**.00841**	**.00232**	**4.7816**	**.00394**
Stddev	.099	.00079	.00168	.00765	.00006	.00050	.91	.00015	.00209	.00024	.1467	.00829
%RSD	.20640	1.0528	35.922	20.051	2.9863	36.521	.36698	9.4594	24.827	10.244	3.0678	210.28
#1	48.179	.07409	.00348	.03276	-.00199	-.00101	249.73	.00150	.00988	.00248	4.8853	.00981
#2	48.039	.07520	.00585	.04359	-.00207	-.00172	248.44	.00172	.00693	.00215	4.6779	-.00192
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00436**	**-.02010**	**-.04302**	**-.00064**	**.00043**	**5.0152**	**.01911**	**.00245**	W **10.543**	**.01291**	**.00173**	**.05904**
Stddev	.01297	.00362	.00774	.00212	.00000	.0160	.00022	.00346	.031	.00006	.00084	.00336
%RSD	297.56	17.993	17.993	331.06	.61156	.31952	1.1696	141.08	.29747	.49621	48.479	5.6848
#1	.00481	-.02266	-.04850	-.00214	.00042	5.0266	.01895	.00489	10.521	.01286	.00114	.06142
#2	-.01353	-.01755	-.03755	.00086	.00043	5.0039	.01927	.00001	10.565	.01295	.00232	.05667
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Warn	None	None	None
Value									10.000			
Range									5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2622.4**	**48128.**	**5747.9**
Stddev	6.2	190.	29.8
%RSD	.23628	.39419	.51882
#1	2626.7	47994.	5726.8
#2	2618.0	48262.	5769.0

Sample Name: CCV-4580817 Acquired: 6/13/2017 5:41:04 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50952**	F **.61910**	**1.0346**	**.50980**	**.48289**	**.49911**	**.00140**	**4.8546**	**.50594**	**.50018**	**.48584**	**.49830**
Stddev	.00030	.02209	.0323	.01547	.00093	.00029	.00370	.0100	.01527	.01640	.01830	.00120
%RSD	.05898	3.5679	3.1214	3.0352	.19230	.05841	264.28	.20650	3.0178	3.2792	3.7660	.24133
#1	.50973	.63472	1.0575	.52074	.48223	.49890	.00402	4.8475	.51673	.51178	.49878	.49915
#2	.50930	.60348	1.0118	.49886	.48354	.49931	-.00122	4.8617	.49514	.48858	.47290	.49745
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5098**	**50.662**	**1.0380**	**20.600**	**.51614**	**.47999**	**5.2550**	**.50177**	**1.0472**	**1.0048**	**.02963**	**1.0252**
Stddev	.0124	.018	.0009	.030	.00108	.01538	.0095	.01729	.0291	.0302	.00256	.0310
%RSD	.49504	.03545	.08675	.14613	.20914	3.2041	.18037	3.4466	2.7807	3.0092	8.6270	3.0235
#1	2.5186	50.675	1.0387	20.621	.51691	.49086	5.2483	.51400	1.0678	1.0262	.02782	1.0472
#2	2.5010	50.650	1.0374	20.579	.51538	.46911	5.2617	.48954	1.0266	.98347	.03144	1.0033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0620**	**4.9177**	**10.524**	**.98433**	**.50892**	**.00737**	**.51581**	F **1.1184**	**.04085**	**.50390**	**.52783**	**.47585**
Stddev	.0130	.0415	.089	.03357	.00013	.00034	.00223	.0355	.01256	.00211	.00199	.00193
%RSD	1.2203	.84433	.84433	3.4109	.02564	4.6240	.43234	3.1757	30.751	.41925	.37748	.40512
#1	1.0712	4.8883	10.461	1.0081	.50902	.00761	.51739	1.1435	.03196	.50539	.52642	.47449
#2	1.0528	4.9471	10.587	.96058	.50883	.00713	.51424	1.0933	.04973	.50241	.52924	.47721
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
Value								1.0000				
Range								10.490%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2640.3**	**48880.**	**5712.6**
Stddev	21.4	22.	7.4
%RSD	.81204	.04507	.12924
#1	2625.1	48895.	5707.4
#2	2655.4	48864.	5717.8

Sample Name: CCB Acquired: 6/13/2017 5:43:33 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00034**	**.00382**	**.00430**	**.00091**	**-.00036**	**.00027**	**.00667**	**.00783**	**-.00039**	**-.00014**	**.00033**	**.00225**	**.02819**
Stddev	.00018	.00225	.00132	.00055	.00029	.00026	.00271	.00230	.00005	.00053	.00009	.00035	.00157
%RSD	54.099	58.879	30.659	60.545	79.736	94.924	40.617	29.384	12.815	391.75	27.924	15.546	5.5616
#1	-.00021	.00541	.00523	.00129	-.00016	.00045	.00858	.00946	-.00036	.00024	.00040	.00250	.02708
#2	-.00047	.00223	.00337	.00052	-.00057	.00009	.00475	.00621	-.00043	-.00051	.00027	.00200	.02929
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10756**	**.00373**	**.00147**	**.00030**	**-.00018**	**.13260**	**.00064**	**.00231**	**.00174**	**.03077**	**-.00110**	**-.00481**	**-.00551**
Stddev	.10333	.00143	.00136	.00002	.00043	.01343	.00024	.00115	.00055	.00113	.00437	.00299	.02728
%RSD	96.061	38.329	92.727	8.1145	233.30	10.127	38.232	49.551	31.766	3.6879	396.30	62.174	495.36
#1	.18063	.00272	.00051	.00029	-.00049	.14209	.00081	.00312	.00135	.02997	.00199	-.00270	.01378
#2	.03450	.00474	.00243	.00032	.00012	.12310	.00047	.00150	.00213	.03157	-.00419	-.00693	-.02480
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01179**	**.00005**	**.00025**	**-.00187**	**.00020**	**.00125**	**-.03172**	**-.00018**	**.00143**	**.00154**
Stddev	.05839	.00009	.00011	.00205	.00017	.00093	.03362	.00028	.00038	.00199
%RSD	495.36	178.43	45.103	109.66	86.891	74.557	106.00	159.89	26.505	128.87
#1	.02950	.00011	.00017	-.00042	.00008	.00059	-.05549	.00002	.00170	.00014
#2	-.05307	-.00001	.00033	-.00332	.00032	.00191	-.00794	-.00038	.00116	.00294
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2644.0**	**49324.**	**5649.7**
Stddev	15.5	383.	37.1
%RSD	.58675	.77721	.65637
#1	2633.1	49595.	5676.0
#2	2655.0	49053.	5623.5

Sample Name: CCVL-4589022 Acquired: 6/13/2017 5:46:11 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00974**	**.12965**	F **.00907**	**.10189**	**.00986**	**.00104**	**.12059**	**.20139**	**.00477**	**.01006**	**.00954**	**.01808**
Stddev	.00064	.00406	.00674	.00425	.00014	.00012	.00452	.00358	.00037	.00056	.00045	.00005
%RSD	6.5373	3.1332	74.386	4.1722	1.4606	11.073	3.7455	1.7757	7.7031	5.5578	4.7140	.29042
#1	.00929	.13252	.00430	.10489	.00975	.00112	.12379	.20392	.00503	.00967	.00986	.01804
#2	.01019	.12678	.01384	.09888	.00996	.00096	.11740	.19886	.00451	.01046	.00922	.01811
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10557**	**3.2074**	**.02446**	**.21087**	**.01092**	**.01781**	**1.1655**	**.04091**	**3.0066**	**.01112**	**.11414**	**.02099**
Stddev	.00138	.0095	.00156	.00558	.00013	.00027	.0162	.00124	.1024	.00082	.01495	.00151
%RSD	1.3062	.29561	6.3614	2.6454	1.2039	1.5258	1.3888	3.0402	3.4047	7.3752	13.102	7.1969
#1	.10655	3.2142	.02556	.21482	.01083	.01800	1.1540	.04179	3.0790	.01170	.12472	.02206
#2	.10460	3.2007	.02336	.20693	.01102	.01762	1.1769	.04003	2.9342	.01054	.10357	.01992
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02578**	**.47447**	**1.0154**	**.09685**	**.01043**	**.01437**	**.01009**	F **.01978**	F **.10591**	**.00955**	**.02237**	**.01601**
Stddev	.00329	.01517	.0325	.00048	.00023	.00033	.00021	.00129	.00909	.00038	.00025	.00152
%RSD	12.741	3.1969	3.1969	.49609	2.1880	2.2616	2.1223	6.5174	8.5789	4.0201	1.1146	9.5084
#1	.02811	.48520	1.0383	.09719	.01027	.01460	.01025	.02069	.11233	.00982	.02255	.01709
#2	.02346	.46375	.99242	.09651	.01060	.01414	.00994	.01887	.09948	.00928	.02219	.01493
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								.01500	.06000			
Range								30.000%	30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2673.7**	**49377.**	**5693.1**
Stddev	6.5	6.	12.3
%RSD	.24267	.01227	.21640
#1	2678.3	49381.	5684.4
#2	2669.1	49373.	5701.8

Sample Name: 280-98081-E-6-A Acquired: 6/13/2017 5:48:49 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00100**	**.00785**	**.00367**	**.02333**	**.01245**	**.00027**	**.00072**	**41.398**	**.00039**
Stddev	.00011	.00036	.00192	.00027	.00026	.00033	.00213	.136	.00039
%RSD	10.646	4.6094	52.344	1.1633	2.0667	123.48	296.94	.32793	98.670
#1	-.00108	.00759	.00231	.02352	.01263	.00050	-.00079	41.302	.00012
#2	-.00093	.00810	.00503	.02314	.01227	.00003	.00223	41.494	.00067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00053**	**.00677**	**.00352**	**.02869**	**6.3050**	**.01540**	**24.741**	**.00018**	**.00191**
Stddev	.00001	.00001	.00011	.03243	.0218	.00464	.017	.00005	.00030
%RSD	1.6454	.17309	3.1172	113.02	.34525	30.144	.06850	27.153	15.696
#1	-.00052	.00676	.00360	.05163	6.2896	.01868	24.753	.00014	.00212
#2	-.00054	.00678	.00344	.00576	6.3204	.01212	24.729	.00021	.00170
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**20.963**	**.00003**	**.03266**	**.00107**	**10.357**	**-.00162**	**.00061**	**25.773**	**55.154**
Stddev	.441	.00046	.00134	.00103	.308	.00371	.00873	.095	.202
%RSD	2.1032	1372.1	4.0999	96.039	2.9704	229.66	1440.5	.36677	.36677
#1	20.651	-.00029	.03172	.00180	10.574	-.00424	.00678	25.706	55.011
#2	21.275	.00036	.03361	.00034	10.139	.00101	-.00557	25.840	55.297
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00072**	**.19521**	**-.00058**	**-.00017**	**.00318**	**-.01801**	**.02602**	**.00265**	**.00163**
Stddev	.00069	.00003	.00030	.00017	.00104	.01084	.00010	.00040	.00029
%RSD	96.651	.01649	52.064	98.049	32.627	60.180	.36736	15.176	17.629
#1	.00023	.19519	-.00079	-.00005	.00391	-.01034	.02595	.00293	.00142
#2	.00120	.19523	-.00037	-.00029	.00244	-.02567	.02608	.00237	.00183
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2620.9**	**48781.**	**5717.9**
Stddev	15.4	48.	51.7
%RSD	.58937	.09905	.90469
#1	2631.8	48747.	5754.5
#2	2609.9	48815.	5681.3

Sample Name: 280-98081-E-7-A Acquired: 6/13/2017 5:51:24 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00083**	**.01081**	**.00223**	**.02144**	**.01213**	**.00007**	**.00205**	**41.024**	**-.00001**
Stddev	.00009	.00056	.00484	.00054	.00009	.00019	.00058	.041	.00015
%RSD	10.564	5.1742	216.87	2.5202	.73916	263.40	28.336	.10102	1028.9
#1	-.00089	.01041	.00565	.02183	.01220	-.00006	.00247	41.053	.00009
#2	-.00077	.01120	-.00119	.02106	.01207	.00020	.00164	40.995	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00064**	**.00698**	**.00276**	**.06726**	**6.2759**	**.01664**	**24.779**	**.00050**	**.00147**
Stddev	.00006	.00056	.00032	.01312	.0510	.00100	.009	.00001	.00053
%RSD	9.1121	7.9853	11.458	19.513	.81328	6.0136	.03829	1.3327	36.444
#1	-.00060	.00737	.00298	.05798	6.2398	.01593	24.786	.00050	.00184
#2	-.00068	.00658	.00253	.07654	6.3120	.01734	24.773	.00049	.00109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**20.511**	**-.00046**	**.03236**	**.00116**	**10.361**	**.00032**	**.00082**	**25.655**	**54.902**
Stddev	.237	.00017	.00427	.00147	.306	.00006	.00252	.028	.059
%RSD	1.1533	37.138	13.202	126.66	2.9558	18.699	307.20	.10728	.10728
#1	20.344	-.00034	.03538	.00220	10.577	.00028	.00261	25.636	54.860
#2	20.679	-.00058	.02934	.00012	10.144	.00036	-.00096	25.675	54.943
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00086**	**.19401**	**-.00276**	**-.00009**	**-.00106**	**-.00103**	**.02565**	**.00273**	**.00241**
Stddev	.00167	.00051	.00006	.00036	.00077	.02679	.00116	.00048	.00180
%RSD	193.74	.26379	2.2410	409.27	72.405	2592.7	4.5229	17.712	74.794
#1	.00032	.19365	-.00281	.00017	-.00160	.01791	.02483	.00307	.00369
#2	-.00205	.19437	-.00272	-.00035	-.00052	-.01997	.02647	.00239	.00114
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2622.0**	**48688.**	**5727.7**
Stddev	5.7	15.	12.8
%RSD	.21782	.03183	.22266
#1	2626.0	48699.	5718.7
#2	2617.9	48677.	5736.7

Sample Name: 280-98081-E-9-A Acquired: 6/13/2017 5:54:00 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00091**	**.00702**	**-.00075**	**.02653**	**.00804**	**.00006**	**-.00016**	**49.924**	**.00017**
Stddev	.00061	.00095	.00277	.00020	.00001	.00001	.00167	.213	.00003
%RSD	67.455	13.583	368.54	.77042	.17233	16.916	1068.0	.42597	20.064
#1	-.00134	.00635	-.00271	.02668	.00803	.00007	.00103	49.774	.00019
#2	-.00048	.00770	.00121	.02639	.00805	.00006	-.00134	50.075	.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00072**	**.00471**	**.00317**	**.00798**	**7.1898**	**.01387**	**25.600**	**.00016**	**.00267**
Stddev	.00024	.00022	.00061	.00118	.0232	.00082	.020	.00001	.00009
%RSD	33.509	4.6364	19.063	14.738	.32326	5.9051	.07866	4.2345	3.5421
#1	-.00055	.00455	.00360	.00714	7.2062	.01445	25.615	.00016	.00260
#2	-.00089	.00486	.00275	.00881	7.1734	.01329	25.586	.00017	.00274
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.951**	**-.00008**	**.04405**	**.00036**	**8.2791**	**-.00086**	**-.00482**	**25.178**	**53.882**
Stddev	.183	.00008	.00273	.00124	.2809	.00033	.00682	.020	.042
%RSD	.91572	96.283	6.1937	340.71	3.3935	38.781	141.56	.07885	.07885
#1	20.080	-.00014	.04597	.00124	8.4777	-.00062	.00000	25.164	53.852
#2	19.822	-.00003	.04212	-.00051	8.0804	-.00110	-.00965	25.192	53.912
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00088**	**.31447**	**-.00377**	**.00014**	**-.00001**	**.06290**	**.02624**	**.00394**	**.00004**
Stddev	.00177	.00146	.00333	.00022	.00233	.00271	.00026	.00042	.00126
%RSD	201.69	.46529	88.184	158.08	25372.	4.3138	.97389	10.627	3412.6
#1	-.00213	.31344	-.00613	.00029	.00164	.06482	.02642	.00424	.00093
#2	.00037	.31551	-.00142	-.00002	-.00166	.06098	.02605	.00365	-.00085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2636.7**	**48961.**	**5819.4**
Stddev	13.3	176.	8.1
%RSD	.50606	.35888	.13949
#1	2646.1	49085.	5813.7
#2	2627.2	48836.	5825.1

Sample Name: 280-98055-C-1-B Acquired: 6/13/2017 5:56:35 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00139**	**.00387**	**-.00755**	**2.2660**	**.00769**	**.00004**	**.00437**	**120.19**	**.00136**
Stddev	.00005	.00021	.00010	.1027	.00027	.00013	.00068	.07	.00014
%RSD	3.8305	5.4851	1.3504	4.5300	3.5668	351.51	15.557	.06195	10.404
#1	-.00135	.00402	-.00762	2.3386	.00749	.00013	.00485	120.24	.00146
#2	-.00142	.00372	-.00748	2.1934	.00788	-.00005	.00389	120.13	.00126
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00186**	**.00063**	**.00738**	**.26172**	**14.751**	**.38506**	**454.50**	**.12326**	**.00398**
Stddev	.00037	.00013	.00070	.00330	.131	.00190	.53	.00042	.00082
%RSD	19.668	20.549	9.5390	1.2607	.88587	.49363	.11660	.34316	20.564
#1	-.00211	.00072	.00688	.25939	14.659	.38640	454.88	.12355	.00456
#2	-.00160	.00054	.00788	.26406	14.843	.38372	454.13	.12296	.00340
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1579.8**	**.00268**	**.03530**	**.00033**	F **1273.4**	**-.00905**	**.00036**	**13.347**	**28.563**
Stddev	.4	.00003	.00327	.00132	50.7	.00534	.01146	.099	.211
%RSD	.02752	.98228	9.2680	399.68	3.9779	59.001	3155.2	.73836	.73836
#1	1580.1	.00266	.03299	.00126	1309.2	-.01282	-.00774	13.417	28.712
#2	1579.5	.00270	.03761	-.00060	1237.6	-.00527	.00846	13.277	28.413
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00207**	**1.7237**	**-.00405**	**-.00002**	**.00224**	**-.01804**	**-.00282**	**.00267**	**.00131**
Stddev	.00279	.0019	.00118	.00036	.00407	.03253	.00002	.00141	.00038
%RSD	135.09	.11037	29.105	2318.4	181.63	180.36	.62270	52.943	28.833
#1	-.00404	1.7251	-.00488	.00024	.00511	-.04104	-.00283	.00167	.00104
#2	-.00009	1.7224	-.00321	-.00027	-.00064	.00497	-.00280	.00367	.00158
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2342.3**	**42259.**	**5540.7**
Stddev	.5	69.	9.4
%RSD	.02062	.16336	.17031
#1	2342.6	42308.	5534.0
#2	2342.0	42210.	5547.4

Sample Name: 280-98055-C-2-B Acquired: 6/13/2017 5:59:22 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376728 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00081**	**.00109**	**-.01195**	**5.2547**	**.00840**	**.00014**	**.00032**	**246.00**	**.00118**
Stddev	.00030	.00038	.00242	.1597	.00003	.00011	.00381	.17	.00006
%RSD	37.657	34.810	20.283	3.0384	.39290	81.426	1206.9	.06896	4.7160
#1	-.00059	.00135	-.01024	5.3676	.00842	.00006	-.00238	246.12	.00114
#2	-.00102	.00082	-.01367	5.1418	.00838	.00022	.00301	245.88	.00122
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00289**	**.00097**	**.00624**	**2.0987**	**24.445**	**.77716**	W **678.26**	**.48038**	**.00708**
Stddev	.00065	.00026	.00018	.0089	.161	.00324	5.45	.00220	.00017
%RSD	22.349	26.270	2.9434	.42529	.66045	.41678	.80414	.45763	2.4197
#1	-.00335	.00079	.00637	2.1050	24.331	.77487	682.11	.48194	.00720
#2	-.00243	.00115	.00611	2.0924	24.559	.77945	674.40	.47883	.00696
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							500.00		
Low Limit							-.40000		

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **4200.0**	**.00291**	**.18498**	**.00086**	F **2396.1**	**-.00909**	**.01051**	**23.285**	**49.829**
Stddev	3.8	.00038	.00850	.00314	71.8	.00237	.00013	.029	.062
%RSD	.08965	13.056	4.5931	363.25	2.9950	26.125	1.2601	.12469	.12469
#1	4202.7	.00264	.19099	.00308	2446.9	-.01077	.01060	23.264	49.785
#2	4197.4	.00318	.17898	-.00136	2345.4	-.00741	.01041	23.305	49.873
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00798**	**3.1117**	**-.00403**	**.00040**	**.00450**	**.07683**	**-.00400**	**.00265**	**.00157**
Stddev	.00208	.0024	.00240	.00048	.00328	.07713	.00012	.00072	.00007
%RSD	26.132	.07543	59.440	121.65	72.872	100.39	2.9725	27.243	4.4179
#1	-.00650	3.1133	-.00234	.00074	.00218	.02229	-.00408	.00316	.00162
#2	-.00945	3.1100	-.00573	.00006	.00683	.13137	-.00392	.00214	.00152
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2170.7**	**38194.**	**5253.3**
Stddev	23.1	113.	20.9
%RSD	1.0639	.29701	.39780
#1	2154.3	38114.	5268.0
#2	2187.0	38274.	5238.5

Sample Name: MB 280-376620/1-A Acquired: 6/13/2017 6:02:07 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00183**	**.00464**	**-.00470**	**.00896**	**-.00041**	**-.00013**	**.00413**	W **.10009**	**-.00012**
Stddev	.00079	.00091	.00101	.00023	.00027	.00001	.00120	.01216	.00027
%RSD	43.134	19.666	21.543	2.5814	66.622	4.3864	29.175	12.150	228.81
#1	-.00239	.00529	-.00542	.00913	-.00061	-.00014	.00328	.10869	.00007
#2	-.00127	.00399	-.00399	.00880	-.00022	-.00013	.00498	.09149	-.00031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								.10000	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**.00004**	**.00221**	**.03110**	**.42322**	**.00364**	W **.19726**	**.00033**	**-.00029**
Stddev	.00016	.00033	.00043	.00042	.02893	.00247	.09325	.00010	.00010
%RSD	641.32	810.42	19.282	1.3470	6.8360	68.033	47.274	29.002	34.083
#1	.00014	-.00019	.00252	.03140	.40276	.00189	.26319	.00040	-.00036
#2	-.00009	.00027	.00191	.03080	.44368	.00538	.13132	.00026	-.00022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							.10000		
Low Limit							-.10000		

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **2.3394**	**-.00023**	**.00155**	**-.00031**	F **.68374**	**-.00023**	**.00380**	**.01697**	**.03631**
Stddev	.2894	.00047	.00335	.00068	.05469	.00002	.01244	.02288	.04896
%RSD	12.372	201.84	215.57	222.73	7.9992	7.0200	327.54	134.84	134.84
#1	2.5440	.00010	-.00081	.00018	.72242	-.00024	-.00500	.00079	.00169
#2	2.1347	-.00057	.00392	-.00079	.64507	-.00022	.01259	.03314	.07093
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None
High Limit	1.0000				.10000				
Low Limit	-1.0000				-.10000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00133**	**.00117**	**-.00250**	**.00010**	**.00291**	F **.08678**	**-.00004**	**.00173**	**.00208**
Stddev	.00074	.00015	.00001	.00028	.00419	.01130	.00030	.00053	.00218
%RSD	55.549	12.799	.56686	291.20	143.72	13.024	679.44	30.556	105.15
#1	-.00081	.00128	-.00249	.00029	-.00005	.07879	-.00026	.00210	.00362
#2	-.00185	.00107	-.00251	-.00010	.00587	.09477	.00017	.00135	.00053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.06000			
Low Limit						-.06000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2727.4**	**51055.**	**5777.6**
Stddev	5.7	82.	45.9
%RSD	.21054	.16099	.79503
#1	2731.5	50997.	5745.2
#2	2723.4	51113.	5810.1

Sample Name: LCS 280-376620/2-A Acquired: 6/13/2017 6:04:46 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05404**	F **2.3968**	F **1.1293**	**1.0727**	**1.9738**	**.05158**	**2.2379**	**47.864**	**.10574**
Stddev	.00023	.0566	.0251	.0220	.0080	.00021	.0472	.091	.00269
%RSD	.41727	2.3622	2.2190	2.0518	.40804	.40125	2.1106	.18971	2.5455
#1	.05388	2.4368	1.1470	1.0883	1.9681	.05143	2.2713	47.800	.10764
#2	.05420	2.3568	1.1115	1.0572	1.9795	.05173	2.2045	47.928	.10383
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit		2.2299	1.1050						
Low Limit		1.7300	.87500						

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49802**	**.19830**	**.26096**	**1.0214**	**51.906**	**1.0645**	**52.022**	**.52367**	**.95348**
Stddev	.01141	.00504	.00010	.0030	.140	.0002	.190	.00167	.02402
%RSD	2.2910	2.5404	.03744	.29154	.26875	.01957	.36544	.31896	2.5191
#1	.50609	.20186	.26103	1.0193	51.807	1.0643	52.156	.52485	.97047
#2	.48995	.19473	.26090	1.0235	52.004	1.0646	51.887	.52249	.93650
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**53.059**	**.50041**	F **11.123**	**.50834**	**2.4449**	W **.54118**	**2.2240**	**10.044**	**21.494**
Stddev	.458	.01180	.268	.00814	.0626	.01129	.0298	.071	.152
%RSD	.86246	2.3587	2.4061	1.6005	2.5603	2.0861	1.3386	.70939	.70939
#1	52.735	.50875	11.312	.51409	2.4891	.54917	2.2451	9.9938	21.387
#2	53.382	.49206	10.934	.50258	2.4006	.53320	2.2030	10.095	21.602
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None	Chk Warn	Chk Pass	Chk Pass	None
High Limit			11.100			.54000			
Low Limit			9.1000			.44000			

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9925**	**1.0451**	**1.0615**	**1.0731**	F **2.2452**	**2.2495**	**.51553**	**.53881**	**.49702**
Stddev	.0446	.0066	.0020	.0033	.0420	.0564	.00268	.00496	.00072
%RSD	2.2405	.62716	.19110	.30492	1.8713	2.5089	.52034	.91989	.14457
#1	2.0241	1.0405	1.0629	1.0755	2.2749	2.2894	.51743	.54232	.49753
#2	1.9610	1.0497	1.0600	1.0708	2.2155	2.2096	.51364	.53531	.49652
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					2.2000				
Low Limit					1.7600				

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2618.3**	**48295.**	**5863.2**
Stddev	1.5	327.	5.8
%RSD	.05546	.67611	.09836
#1	2619.3	48064.	5867.3
#2	2617.3	48526.	5859.2

Sample Name: 280-97963-C-1-A Acquired: 6/13/2017 6:07:09 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00115**	**.52622**	**-.00159**	**.16975**	**.01277**	**.00020**	**.00741**	**56.233**	**.00020**
Stddev	.00020	.01469	.00235	.00614	.00101	.00003	.00198	.174	.00008
%RSD	17.837	2.7908	148.14	3.6153	7.8959	13.118	26.750	.30929	40.490
#1	-.00100	.53661	-.00325	.17409	.01348	.00022	.00601	56.110	.00014
#2	-.00129	.51584	.00008	.16541	.01205	.00018	.00881	56.356	.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00068**	**.00222**	**.00501**	**.12668**	**6.2091**	**.00373**	**12.040**	**.04205**	**.00014**
Stddev	.00001	.00057	.00023	.00486	.0485	.00006	.072	.00021	.00057
%RSD	1.3643	25.499	4.6227	3.8336	.78082	1.6730	.59603	.50835	412.84
#1	.00069	.00262	.00485	.12324	6.2434	.00369	12.091	.04220	-.00026
#2	.00068	.00182	.00518	.13011	6.1749	.00378	11.990	.04190	.00054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.571**	**.00290**	**.15743**	**.00023**	**.86588**	**.00330**	**.00223**	**3.9352**	**8.4213**
Stddev	.052	.00054	.00518	.00022	.02439	.00323	.00202	.0141	.0302
%RSD	.22846	18.680	3.2899	96.737	2.8164	98.035	90.946	.35923	.35923
#1	22.607	.00328	.16109	.00007	.88312	.00101	.00079	3.9252	8.3999
#2	22.534	.00252	.15377	.00039	.84863	.00558	.00366	3.9452	8.4427
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00138**	**.12816**	**-.00203**	**.00410**	**.00584**	**.01872**	**.00031**	**.01298**	**.00121**
Stddev	.00043	.00024	.00101	.00049	.00388	.00263	.00028	.00063	.00118
%RSD	31.381	.18409	49.757	11.858	66.400	14.050	89.155	4.8241	97.141
#1	-.00169	.12799	-.00132	.00444	.00859	.01686	.00012	.01254	.00038
#2	-.00108	.12833	-.00275	.00375	.00310	.02058	.00051	.01342	.00204
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2635.1**	**49024.**	**5805.1**
Stddev	5.0	246.	18.9
%RSD	.18907	.50178	.32643
#1	2638.6	48850.	5791.7
#2	2631.6	49198.	5818.5

Sample Name: 280-97963-C-2-A Acquired: 6/13/2017 6:09:46 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00147**	**.01311**	**.01247**	**.69249**	**.01355**	**.00009**	**.00319**	**93.375**	**-.00000**
Stddev	.00044	.00074	.00588	.02174	.00022	.00007	.00152	.284	.00006
%RSD	29.941	5.6769	47.134	3.1391	1.6288	79.799	47.701	.30430	2218.1
#1	-.00116	.01258	.00832	.70786	.01339	.00014	.00211	93.174	-.00005
#2	-.00178	.01364	.01663	.67711	.01370	.00004	.00426	93.576	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00010**	**.00076**	**.00434**	**.23530**	**6.8930**	**.00438**	**16.953**	**.09870**	**.00050**
Stddev	.00024	.00040	.00021	.00025	.0025	.00228	.062	.00063	.00010
%RSD	238.50	52.604	4.8229	.10614	.03679	52.030	.36658	.63354	20.658
#1	-.00007	.00048	.00419	.23548	6.8912	.00599	16.997	.09914	.00057
#2	.00027	.00104	.00449	.23512	6.8948	.00277	16.909	.09826	.00042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**36.983**	**.00545**	**.14472**	**.00014**	**36.667**	**-.00079**	**-.01001**	**7.9040**	**16.915**
Stddev	.195	.00032	.00651	.00192	1.216	.00071	.00878	.0423	.091
%RSD	.52661	5.8000	4.4960	1347.3	3.3158	89.753	87.718	.53528	.53528
#1	37.120	.00567	.14932	-.00122	37.526	-.00129	-.01622	7.9339	16.979
#2	36.845	.00523	.14012	.00150	35.807	-.00029	-.00380	7.8741	16.851
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00061**	**1.2193**	**-.00421**	**-.00032**	**.00391**	**.05026**	**-.00026**	**.00266**	**.00208**
Stddev	.00218	.0038	.00080	.00016	.00387	.01190	.00084	.00056	.00077
%RSD	357.54	.31310	18.980	50.478	98.963	23.680	328.80	21.133	36.939
#1	.00215	1.2166	-.00478	-.00043	.00665	.05868	.00034	.00306	.00262
#2	-.00093	1.2220	-.00365	-.00021	.00117	.04185	-.00085	.00227	.00153
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2608.4**	**48211.**	**5782.9**
Stddev	4.3	47.	20.4
%RSD	.16340	.09820	.35263
#1	2611.4	48177.	5797.3
#2	2605.4	48244.	5768.4

Sample Name: 280-97963-C-3-A Acquired: 6/13/2017 6:12:21 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00108**	**.00985**	**.02327**	**.13858**	**.02695**	**.00003**	**.00396**	**154.09**	**.00017**
Stddev	.00026	.00105	.00484	.00334	.00035	.00002	.00076	.64	.00022
%RSD	24.193	10.665	20.808	2.4121	1.3073	54.100	19.098	.41478	128.59
#1	-.00089	.01059	.02669	.14095	.02670	.00004	.00449	153.64	.00033
#2	-.00126	.00910	.01984	.13622	.02720	.00002	.00342	154.55	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00052**	**.00042**	**.00431**	**1.0051**	**9.4095**	**.03285**	**9.8654**	**.12605**	**-.00021**
Stddev	.00007	.00030	.00003	.0041	.0779	.00341	.0436	.00065	.00074
%RSD	13.334	72.723	.63823	.40634	.82768	10.371	.44194	.51267	356.94
#1	.00057	.00063	.00433	1.0080	9.3544	.03044	9.8963	.12651	.00032
#2	.00047	.00020	.00429	1.0022	9.4645	.03526	9.8346	.12560	-.00073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**15.753**	**.00434**	**.08032**	**-.00075**	**8.3756**	**-.00592**	**-.00065**	**6.9743**	**14.925**
Stddev	.370	.00082	.00547	.00230	.2277	.00463	.00181	.0021	.004
%RSD	2.3456	18.932	6.8125	307.64	2.7183	78.210	277.13	.02980	.02980
#1	15.492	.00376	.08419	-.00237	8.5366	-.00919	.00063	6.9728	14.922
#2	16.015	.00492	.07645	.00088	8.2146	-.00265	-.00193	6.9757	14.928
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**.58775**	**-.00391**	**.00034**	**.00462**	**.03827**	**.00948**	**.00276**	**.00217**
Stddev	.00172	.00211	.00046	.00055	.00482	.02303	.00037	.00010	.00167
%RSD	13989.	.35888	11.657	159.37	104.17	60.162	3.8604	3.4977	77.085
#1	.00123	.58626	-.00423	.00073	.00122	.05456	.00922	.00269	.00335
#2	-.00120	.58924	-.00358	-.00004	.00803	.02199	.00973	.00283	.00099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2621.3**	**48396.**	**5819.8**
Stddev	2.1	324.	77.9
%RSD	.07885	.67012	1.3393
#1	2619.8	48166.	5874.9
#2	2622.7	48625.	5764.7

Sample Name: CCVH-4579429 Acquired: 6/13/2017 6:14:56 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00019**	**51.284**	**-.00442**	**.00490**	**.00031**	**.00023**	W **1.0648**	**.06641**	**.00010**	**-.00131**	**-.00006**	**.01759**
Stddev	.00015	.206	.00784	.00029	.00001	.00015	.0321	.01187	.00018	.00003	.00026	.00033
%RSD	75.880	.40178	177.53	5.9661	2.9078	67.663	3.0109	17.878	175.18	2.0054	410.28	1.8869
#1	.00029	51.138	-.00996	.00470	.00031	.00034	1.0874	.07480	.00022	-.00133	.00012	.01782
#2	.00009	51.429	.00113	.00511	.00032	.00012	1.0421	.05801	-.00002	-.00129	-.00025	.01735
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.058**	**.16855**	**.00479**	**.05151**	**-.00196**	**-.00151**	**255.01**	**.00125**	**.00884**	**.00009**	**5.0613**	**.00290**
Stddev	.142	.07588	.00144	.01568	.00009	.00001	.90	.00052	.00492	.00002	.1705	.00168
%RSD	.28978	45.018	30.011	30.443	4.6339	.81181	.35311	41.587	55.688	22.172	3.3687	57.987
#1	48.958	.11489	.00377	.06260	-.00202	-.00150	254.37	.00088	.01232	.00008	5.1819	.00408
#2	49.159	.22220	.00580	.04042	-.00190	-.00152	255.65	.00162	.00536	.00011	4.9408	.00171
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00180**	**-.04328**	**-.09261**	**.00005**	**.00065**	**5.1923**	**.01931**	**.00562**	W **10.976**	**.01408**	**.00130**	**.06020**
Stddev	.00694	.02519	.05391	.00011	.00002	.0043	.00020	.00017	.099	.00046	.00044	.00090
%RSD	385.21	58.206	58.206	219.98	2.7158	.08306	1.0137	3.0454	.89911	3.2894	33.485	1.4939
#1	.00311	-.06109	-.13073	.00013	.00067	5.1892	.01945	.00550	11.046	.01441	.00100	.05956
#2	-.00671	-.02547	-.05450	-.00003	.00064	5.1953	.01917	.00574	10.906	.01375	.00161	.06083
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Warn	None	None	None
Value									10.000			
Range									5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2597.0**	**47309.**	**5740.4**
Stddev	2.3	3.	40.6
%RSD	.08716	.00586	.70644
#1	2598.6	47308.	5769.1
#2	2595.4	47311.	5711.8

Sample Name: CCV-4580817 Acquired: 6/13/2017 6:17:29 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51550**	F **.65807**	**1.0681**	**.52557**	**.48917**	**.51451**	**.00315**	**4.9028**	**.52143**	**.51428**	**.49896**	**.49957**
Stddev	.00010	.01498	.0160	.00947	.00225	.00197	.00336	.0238	.00987	.00901	.01026	.00194
%RSD	.01970	2.2765	1.4991	1.8018	.45982	.38287	106.57	.48576	1.8935	1.7511	2.0568	.38909
#1	.51557	.66866	1.0794	.53227	.48758	.51311	.00078	4.8860	.52841	.52065	.50622	.50094
#2	.51543	.64748	1.0568	.51887	.49076	.51590	.00552	4.9196	.51445	.50791	.49171	.49820
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5862**	**51.485**	**1.0715**	**20.883**	**.53048**	**.49108**	**5.4999**	**.51602**	**1.0884**	**1.0322**	**.23643**	**1.0585**
Stddev	.0066	.247	.0038	.013	.00094	.01056	.0189	.00986	.0224	.0178	.00192	.0267
%RSD	.25511	.48004	.35498	.06073	.17799	2.1503	.34388	1.9103	2.0590	1.7218	.81236	2.5225
#1	2.5816	51.310	1.0689	20.892	.53114	.49855	5.5133	.52299	1.1042	1.0448	.23507	1.0774
#2	2.5909	51.659	1.0742	20.874	.52981	.48361	5.4865	.50905	1.0725	1.0197	.23779	1.0396
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0838**	**5.0483**	**10.803**	**1.0062**	**.52562**	**.00581**	**.53157**	F **1.1610**	**.02789**	**.51212**	**.54492**	**.48649**
Stddev	.0027	.0183	.039	.0226	.00199	.00140	.00226	.0278	.04512	.00160	.00039	.00010
%RSD	.24875	.36180	.36180	2.2432	.37923	24.093	.42528	2.3922	161.75	.31169	.07244	.02063
#1	1.0857	5.0354	10.776	1.0221	.52421	.00482	.53317	1.1806	-.00401	.51324	.54464	.48656
#2	1.0819	5.0612	10.831	.99023	.52703	.00681	.52997	1.1413	.05979	.51099	.54519	.48642
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
Value								1.0000				
Range								10.490%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2662.9**	**48679.**	**5743.4**
Stddev	17.1	195.	28.7
%RSD	.64301	.40149	.49994
#1	2650.8	48817.	5723.1
#2	2675.0	48541.	5763.7

Sample Name: CCB Acquired: 6/13/2017 6:19:58 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00148**	**.00450**	**.00099**	**.00219**	**.00005**	**.00022**	**.00717**	**.01864**	**-.00027**	**.00003**	**.00007**	**.00257**
Stddev	.00054	.00141	.00349	.00017	.00008	.00002	.00514	.00481	.00003	.00008	.00010	.00092
%RSD	36.572	31.271	353.11	7.6766	147.08	10.716	71.734	25.782	10.315	234.26	156.63	35.782
#1	-.00186	.00549	.00346	.00207	-.00000	.00023	.01080	.02204	-.00025	-.00002	-.00001	.00192
#2	-.00109	.00350	-.00148	.00231	.00011	.00020	.00353	.01524	-.00029	.00009	.00014	.00322
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00815**	**.06641**	W **.00766**	**.02622**	**.00022**	**-.00007**	**.29456**	**.00039**	**.00030**	**.00048**	F **.17692**	**.00003**
Stddev	.00200	.01989	.00097	.00056	.00001	.00012	.01603	.00078	.00475	.00238	.01072	.00103
%RSD	24.479	29.953	12.644	2.1388	4.2305	154.94	5.4409	202.10	1599.3	494.23	6.0586	3980.2
#1	.00674	.08048	.00698	.02583	.00022	.00001	.30589	.00094	.00365	.00217	.18449	-.00070
#2	.00956	.05235	.00835	.02662	.00021	-.00016	.28323	-.00017	-.00306	-.00120	.16934	.00075
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			.00500								.10000	
Low Limit			-.01000								-.20000	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00095**	**.00397**	**.00849**	**-.00004**	**.00026**	**-.00282**	**.00007**	**.00299**	**.01327**	**.00030**	**.00088**	**.00063**
Stddev	.00627	.00267	.00572	.00025	.00004	.00325	.00024	.00047	.03652	.00041	.00019	.00188
%RSD	658.87	67.426	67.426	625.59	15.143	114.97	352.43	15.686	275.23	140.07	21.482	299.69
#1	-.00348	.00208	.00444	-.00022	.00029	-.00512	.00024	.00266	.03909	.00059	.00074	-.00070
#2	.00538	.00586	.01254	.00014	.00023	-.00053	-.00010	.00332	-.01255	.00000	.00101	.00195
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2687.0**	**49673.**	**5786.2**
Stddev	6.6	5.	54.5
%RSD	.24421	.01013	.94147
#1	2691.7	49677.	5824.7
#2	2682.4	49670.	5747.7

Sample Name: CCVL-4589022 Acquired: 6/13/2017 6:22:36 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00909**	F **.13031**	**.01763**	**.10206**	**.00975**	**.00114**	**.12250**	**.21382**	**.00478**	**.01041**	**.00959**	**.01835**
Stddev	.00026	.00733	.00961	.00403	.00013	.00009	.00128	.00046	.00036	.00031	.00021	.00018
%RSD	2.8715	5.6254	54.513	3.9513	1.3062	8.1076	1.0445	.21568	7.4369	3.0261	2.1465	.99114
#1	.00891	.13550	.02442	.10492	.00966	.00107	.12341	.21349	.00503	.01063	.00974	.01848
#2	.00928	.12513	.01083	.09921	.00984	.00120	.12160	.21414	.00453	.01019	.00945	.01823
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000										
Range		30.000%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10561**	**3.2037**	**.02117**	**.22848**	**.01116**	**.01741**	F **1.3131**	**.04169**	**3.0303**	F **.01272**	F **.22309**	**.02366**
Stddev	.00152	.0245	.00292	.00294	.00013	.00042	.0090	.00129	.1280	.00134	.00450	.00024
%RSD	1.4361	.76326	13.808	1.2849	1.1230	2.3934	.68273	3.0881	4.2237	10.546	2.0187	1.0217
#1	.10453	3.1864	.01910	.23055	.01125	.01771	1.3195	.04260	3.1208	.01177	.22628	.02349
#2	.10668	3.2210	.02323	.22640	.01107	.01712	1.3068	.04078	2.9398	.01367	.21991	.02383
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass
Value							1.0000			.00900	.10000	
Range							30.000%			30.000%	30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02491**	**.47366**	**1.0136**	**.09844**	**.01069**	**.01070**	**.01066**	F **.02044**	F **.12787**	**.01004**	**.02245**	**.01659**
Stddev	.00293	.00736	.0158	.00430	.00009	.00143	.00006	.00189	.01487	.00054	.00084	.00086
%RSD	11.771	1.5542	1.5542	4.3643	.82071	13.343	.60899	9.2269	11.632	5.3600	3.7269	5.2009
#1	.02698	.46846	1.0025	.10147	.01076	.00969	.01061	.02178	.13839	.01042	.02186	.01598
#2	.02283	.47887	1.0248	.09540	.01063	.01170	.01071	.01911	.11735	.00966	.02304	.01720
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								.01500	.06000			
Range								30.000%	30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2704.5**	**50074.**	**5776.6**
Stddev	2.6	118.	28.2
%RSD	.09766	.23517	.48847
#1	2706.3	49991.	5796.6
#2	2702.6	50157.	5756.7

Sample Name: 280-97963-C-4-A Acquired: 6/13/2017 6:25:14 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00118**	**.07992**	**.00858**	**.65312**	**.01817**	**.00013**	**.00245**	**137.26**	**.00036**
Stddev	.00017	.00323	.00122	.02057	.00014	.00004	.00427	.04	.00001
%RSD	14.022	4.0388	14.224	3.1493	.76825	27.760	174.01	.02697	3.1831
#1	-.00106	.08220	.00944	.66767	.01807	.00011	-.00057	137.28	.00035
#2	-.00129	.07763	.00771	.63858	.01827	.00016	.00547	137.23	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00674**	**.00084**	**.00447**	**.41836**	**2.9396**	**.01006**	**10.836**	**.56024**	**-.00045**
Stddev	.00039	.00014	.00068	.00245	.0378	.00050	.032	.00046	.00007
%RSD	5.7718	16.781	15.283	.58549	1.2848	4.9261	.29073	.08219	15.817
#1	.00701	.00094	.00495	.41663	2.9663	.00971	10.858	.56056	-.00050
#2	.00646	.00074	.00398	.42009	2.9129	.01041	10.814	.55991	-.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.736**	**.02643**	**.08532**	**.00119**	**12.339**	**-.00276**	**-.00847**	**6.0445**	**12.935**
Stddev	.099	.00090	.00512	.00051	.436	.00759	.00791	.0376	.081
%RSD	.50051	3.4236	6.0009	43.062	3.5330	274.88	93.443	.62241	.62241
#1	19.666	.02707	.08894	.00156	12.647	-.00813	-.01406	6.0179	12.878
#2	19.806	.02579	.08170	.00083	12.031	.00261	-.00287	6.0711	12.992
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00201**	**.62970**	**-.00293**	**.00155**	**.00310**	**.02727**	**.00017**	**.00307**	**.00290**
Stddev	.00412	.00163	.00186	.00008	.00046	.02423	.00011	.00022	.00033
%RSD	205.01	.25873	63.639	5.3986	14.730	88.856	64.745	7.1302	11.545
#1	-.00492	.62855	-.00424	.00149	.00278	.04441	.00009	.00322	.00266
#2	.00090	.63085	-.00161	.00161	.00342	.01014	.00024	.00291	.00313
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2612.2**	**48364.**	**5852.8**
Stddev	4.7	258.	38.8
%RSD	.17825	.53398	.66287
#1	2615.5	48546.	5825.4
#2	2608.9	48181.	5880.2

Sample Name: 280-97963-C-5-A Acquired: 6/13/2017 6:27:48 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00110**	**.00897**	**.01289**	**.02363**	**.03938**	**-.00003**	**.00014**	**118.76**	**-.00016**
Stddev	.00010	.00013	.01048	.00172	.00014	.00015	.00160	.21	.00002
%RSD	9.2379	1.4816	81.352	7.2714	.36479	594.13	1165.4	.17442	12.959
#1	-.00103	.00887	.00547	.02484	.03928	.00008	-.00099	118.91	-.00014
#2	-.00117	.00906	.02030	.02241	.03948	-.00013	.00126	118.62	-.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00240**	**.00045**	**.00375**	**1.7074**	**.58052**	**.01340**	**5.6466**	**.05885**	**-.00022**
Stddev	.00036	.00011	.00112	.0100	.05904	.00166	.0042	.00005	.00074
%RSD	15.145	25.341	29.781	.58687	10.171	12.409	.07424	.08790	334.53
#1	.00214	.00053	.00296	1.7145	.53877	.01223	5.6496	.05888	.00030
#2	.00265	.00037	.00453	1.7003	.62227	.01458	5.6437	.05881	-.00074
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.6317**	**.01084**	**.04922**	**.00015**	**8.4777**	**-.00213**	**.00036**	**4.3587**	**9.3276**
Stddev	.0259	.00062	.00004	.00159	.3304	.00376	.00644	.0111	.0238
%RSD	.46040	5.6991	.08704	1031.2	3.8969	176.37	1766.2	.25462	.25462
#1	5.6134	.01128	.04919	.00128	8.7113	.00053	-.00419	4.3665	9.3444
#2	5.6501	.01040	.04925	-.00097	8.2441	-.00479	.00492	4.3508	9.3108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00016**	**.50801**	**-.00304**	**.00002**	**.00598**	**.02666**	**-.00090**	**.00247**	**.00266**
Stddev	.00143	.00120	.00200	.00013	.00089	.03403	.00080	.00045	.00233
%RSD	910.88	.23640	65.770	535.08	14.847	127.67	88.308	18.149	87.580
#1	-.00117	.50886	-.00446	-.00007	.00661	.05072	-.00034	.00215	.00101
#2	.00086	.50716	-.00163	.00012	.00535	.00259	-.00147	.00279	.00431
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2610.9**	**48532.**	**5798.5**
Stddev	5.4	248.	3.6
%RSD	.20537	.51184	.06219
#1	2614.7	48708.	5796.0
#2	2607.1	48356.	5801.1

Sample Name: 280-97963-C-6-A Acquired: 6/13/2017 6:30:23 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00064**	**.07431**	**.00252**	**.02005**	**.01369**	**.00015**	**.00131**	**96.296**	**.00574**
Stddev	.00029	.00283	.00194	.00053	.00010	.00003	.00082	.121	.00020
%RSD	44.860	3.8081	77.212	2.6380	.74843	22.158	62.110	.12607	3.5160
#1	-.00044	.07631	.00114	.02042	.01376	.00012	.00074	96.210	.00589
#2	-.00085	.07231	.00389	.01967	.01361	.00017	.00189	96.382	.00560
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**.00090**	**.00419**	**.31574**	**.77215**	**.01191**	**8.5283**	**.06053**	**-.00040**
Stddev	.00005	.00024	.00011	.00273	.06771	.00116	.0297	.00005	.00036
%RSD	265.54	26.399	2.6411	.86432	8.7685	9.7143	.34777	.08976	90.429
#1	.00002	.00073	.00411	.31381	.82002	.01272	8.5493	.06049	-.00066
#2	-.00006	.00106	.00427	.31767	.72427	.01109	8.5073	.06057	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.2802**	**.00602**	**.34945**	**-.00154**	**17.042**	**-.00634**	**-.00196**	**4.5127**	**9.6573**
Stddev	.0405	.00070	.01850	.00051	.569	.00276	.00658	.0146	.0311
%RSD	.43586	11.597	5.2952	33.379	3.3402	43.561	335.48	.32242	.32242
#1	9.2516	.00652	.36253	-.00190	17.445	-.00830	.00269	4.5024	9.6352
#2	9.3088	.00553	.33636	-.00118	16.640	-.00439	-.00661	4.5230	9.6793
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00090**	**.88786**	**-.00116**	**.00069**	**-.00008**	**.00014**	**.00446**	**.00982**	**.00051**
Stddev	.00087	.00103	.00206	.00049	.00540	.01162	.00027	.00021	.00213
%RSD	96.531	.11568	176.88	70.558	6542.7	8400.5	6.1343	2.1796	419.01
#1	-.00151	.88713	.00029	.00103	-.00390	-.00808	.00427	.00966	-.00100
#2	-.00029	.88859	-.00262	.00035	.00374	.00835	.00466	.00997	.00201
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2600.6**	**48153.**	**5776.8**
Stddev	1.6	104.	17.4
%RSD	.06159	.21590	.30173
#1	2599.4	48227.	5789.1
#2	2601.7	48080.	5764.5

Sample Name: 280-97963-C-7-A Acquired: 6/13/2017 6:32:58 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00115**	**.00808**	**.00016**	**.04595**	**.01687**	**.00001**	**.00090**	**188.19**	**-.00015**
Stddev	.00061	.00002	.00529	.00168	.00053	.00016	.00175	.08	.00031
%RSD	53.104	.22588	3353.0	3.6561	3.1325	1881.7	195.13	.04241	201.21
#1	-.00159	.00809	.00390	.04713	.01724	-.00010	-.00034	188.24	.00006
#2	-.00072	.00807	-.00358	.04476	.01649	.00012	.00213	188.13	-.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00016**	**.00075**	**.00430**	**.28218**	**.86580**	**.00644**	**10.351**	**.12208**	**-.00132**
Stddev	.00002	.00035	.00024	.00133	.12250	.00353	.040	.00028	.00070
%RSD	14.283	45.994	5.6659	.47120	14.149	54.788	.38443	.23068	52.993
#1	.00017	.00100	.00412	.28312	.95242	.00893	10.379	.12228	-.00182
#2	.00014	.00051	.00447	.28124	.77917	.00394	10.322	.12189	-.00083
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.389**	**.00730**	**.14936**	**-.00012**	**9.5021**	**-.00460**	**-.00776**	**8.0669**	**17.263**
Stddev	.377	.00030	.01123	.00148	.3224	.00396	.00985	.0206	.044
%RSD	1.9419	4.0416	7.5180	1231.3	3.3927	86.055	126.85	.25525	.25525
#1	19.655	.00751	.15730	.00092	9.7300	-.00740	-.00080	8.0524	17.232
#2	19.123	.00709	.14142	-.00116	9.2741	-.00180	-.01472	8.0815	17.294
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00120**	**.88205**	**-.00268**	**.00058**	**.00542**	**.01541**	**-.00056**	**.00286**	**.00115**
Stddev	.00006	.00043	.00093	.00033	.00116	.03011	.00026	.00067	.00156
%RSD	4.9354	.04870	34.581	56.417	21.360	195.38	46.861	23.292	135.91
#1	-.00116	.88174	-.00203	.00081	.00460	-.00588	-.00038	.00239	.00225
#2	-.00124	.88235	-.00334	.00035	.00624	.03670	-.00075	.00333	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2559.5**	**47551.**	**5701.0**
Stddev	3.6	41.	26.4
%RSD	.13943	.08696	.46326
#1	2562.0	47580.	5719.7
#2	2556.9	47521.	5682.3

Sample Name: 280-97963-C-8-A Acquired: 6/13/2017 6:35:33 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00097**	**.01900**	**.01342**	**.96317**	**.02780**	**-.00001**	**.00172**	**143.46**	**-.00039**
Stddev	.00047	.01092	.00019	.03818	.00029	.00003	.00217	.27	.00026
%RSD	48.674	57.466	1.4236	3.9643	1.0453	220.93	126.19	.19102	66.285
#1	-.00064	.01128	.01355	.99017	.02801	-.00003	.00019	143.65	-.00021
#2	-.00131	.02672	.01328	.93617	.02760	.00001	.00326	143.26	-.00057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01496**	**.00046**	**.00508**	**4.9756**	**4.6384**	**.01309**	**10.666**	**.87675**	**-.00107**
Stddev	.00028	.00061	.00004	.0284	.0116	.00137	.035	.00202	.00080
%RSD	1.9016	131.75	.76110	.56979	.24898	10.453	.32541	.23002	74.665
#1	.01476	.00003	.00505	4.9956	4.6302	.01406	10.691	.87818	-.00163
#2	.01516	.00089	.00511	4.9555	4.6466	.01213	10.642	.87533	-.00050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**38.004**	**.06132**	**.13095**	**.00005**	**6.3265**	**-.00214**	**-.00390**	**6.1736**	**13.211**
Stddev	.282	.00178	.00404	.00021	.1620	.00304	.00728	.0089	.019
%RSD	.74306	2.8958	3.0844	423.82	2.5612	142.20	186.57	.14371	.14371
#1	37.804	.06257	.13381	.00020	6.4411	.00001	.00125	6.1799	13.225
#2	38.203	.06006	.12809	-.00010	6.2119	-.00428	-.00905	6.1673	13.198
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00031**	**.39312**	**-.00253**	**.00001**	**.00381**	**.00271**	**-.00025**	**.00329**	**.00131**
Stddev	.00009	.00030	.00107	.00020	.00191	.02570	.00028	.00032	.00032
%RSD	30.477	.07635	42.370	1713.1	50.210	949.54	114.22	9.5810	24.290
#1	-.00024	.39333	-.00177	.00016	.00246	-.01547	-.00005	.00307	.00154
#2	-.00037	.39291	-.00329	-.00013	.00516	.02088	-.00045	.00351	.00109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2602.5**	**47732.**	**5709.6**
Stddev	32.4	69.	12.8
%RSD	1.2444	.14359	.22408
#1	2579.6	47683.	5700.6
#2	2625.4	47780.	5718.7

Sample Name: 280-97963-C-9-A Acquired: 6/13/2017 6:38:07 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00154**	**.01333**	**.02832**	**1.2182**	**.06268**	**.00002**	**.00119**	**173.96**	**-.00051**
Stddev	.00014	.00008	.01434	.0224	.00013	.00006	.00131	.04	.00020
%RSD	8.8894	.61116	50.642	1.8361	.20906	311.25	110.00	.02378	39.530
#1	-.00164	.01327	.03846	1.2340	.06278	.00006	.00026	173.94	-.00036
#2	-.00144	.01338	.01818	1.2023	.06259	-.00002	.00212	173.99	-.00065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01712**	**.00087**	**.00532**	**8.6980**	**6.6615**	**.01204**	**10.124**	**1.2674**	**-.00146**
Stddev	.00042	.00028	.00003	.0230	.0095	.00187	.008	.0031	.00019
%RSD	2.4643	32.483	.63314	.26393	.14316	15.486	.08307	.24805	13.077
#1	.01742	.00067	.00534	8.6818	6.6683	.01336	10.118	1.2696	-.00159
#2	.01682	.00107	.00529	8.7142	6.6548	.01072	10.130	1.2652	-.00132
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**73.083**	**.06969**	**.15675**	**-.00163**	**9.2982**	**-.00232**	**-.00237**	**6.6727**	**14.279**
Stddev	.457	.00170	.00090	.00002	.2038	.00020	.00537	.0058	.012
%RSD	.62489	2.4406	.57126	1.3977	2.1921	8.6309	227.19	.08704	.08704
#1	72.760	.07089	.15738	-.00161	9.4424	-.00218	.00143	6.6768	14.288
#2	73.406	.06849	.15612	-.00164	9.1541	-.00247	-.00617	6.6685	14.271
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00162**	**.17974**	**-.00232**	**.00009**	**.00250**	**-.01114**	**.00001**	**.00335**	**.00050**
Stddev	.00209	.00024	.00091	.00019	.00053	.00084	.00009	.00001	.00015
%RSD	129.19	.13243	39.289	214.76	21.076	7.5329	677.82	.42337	29.798
#1	-.00310	.17957	-.00296	-.00005	.00287	-.01055	.00008	.00334	.00040
#2	-.00014	.17990	-.00167	.00022	.00213	-.01173	-.00005	.00336	.00061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2579.9**	**47393.**	**5804.7**
Stddev	9.0	96.	23.0
%RSD	.35016	.20326	.39554
#1	2586.3	47325.	5820.9
#2	2573.5	47461.	5788.5

Sample Name: 280-97963-C-10-A Acquired: 6/13/2017 6:40:41 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00204**	**.01172**	**.02063**	**.04151**	**.05390**	**.00011**	**.00363**	**184.22**	**-.00014**
Stddev	.00003	.00139	.00408	.00095	.00054	.00012	.00048	.02	.00015
%RSD	1.2682	11.892	19.773	2.2892	.99963	102.39	13.349	.01137	111.95
#1	-.00203	.01270	.02351	.04218	.05428	.00020	.00328	184.21	-.00025
#2	-.00206	.01073	.01775	.04084	.05352	.00003	.00397	184.24	-.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00192**	**.00088**	**.01177**	**7.4638**	**.90242**	**.00346**	**10.667**	**.73756**	**-.00101**
Stddev	.00047	.00018	.00020	.0148	.05159	.00112	.015	.00097	.00066
%RSD	24.406	20.514	1.6851	.19770	5.7172	32.380	.13702	.13172	65.097
#1	.00225	.00101	.01191	7.4534	.86594	.00426	10.677	.73825	-.00054
#2	.00159	.00075	.01163	7.4742	.93890	.00267	10.657	.73687	-.00147
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.4300**	**.01076**	**.08213**	**-.00305**	**6.2548**	**-.00460**	**-.00213**	**6.8061**	**14.565**
Stddev	.0116	.00027	.00205	.00087	.1381	.00331	.00181	.0058	.012
%RSD	.12342	2.5066	2.4958	28.596	2.2074	72.009	84.706	.08559	.08559
#1	9.4218	.01095	.08358	-.00243	6.3525	-.00226	-.00086	6.8102	14.574
#2	9.4382	.01057	.08068	-.00367	6.1572	-.00694	-.00341	6.8020	14.556
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00117**	**.87340**	**-.00128**	**-.00012**	**.00198**	**.00423**	**.00016**	**.00246**	**.00381**
Stddev	.00057	.00180	.00110	.00002	.00145	.00855	.00009	.00099	.00120
%RSD	48.793	.20647	85.963	16.639	73.017	201.88	58.696	40.313	31.553
#1	-.00157	.87212	-.00050	-.00011	.00096	-.00181	.00009	.00316	.00296
#2	-.00077	.87467	-.00205	-.00014	.00300	.01028	.00022	.00176	.00465
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2585.2**	**47615.**	**5664.2**
Stddev	.0	8.	43.8
%RSD	.00103	.01616	.77280
#1	2585.2	47621.	5633.2
#2	2585.1	47610.	5695.1

Sample Name: 280-97963-C-11-A Acquired: 6/13/2017 6:43:17 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00190**	**.02629**	**-.00364**	**.00211**	**-.00001**	**.00006**	**.00588**	**.22541**	**-.00018**
Stddev	.00005	.00126	.00597	.00053	.00013	.00003	.00206	.01312	.00019
%RSD	2.7141	4.7896	163.75	25.240	1978.5	60.798	34.957	5.8219	108.27
#1	-.00187	.02540	-.00786	.00249	-.00010	.00003	.00733	.23469	-.00032
#2	-.00194	.02718	.00058	.00173	.00009	.00008	.00443	.21613	-.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00030**	**.00031**	**.00352**	**.02888**	**.17130**	**.00327**	**.01423**	**.00054**	**.00023**
Stddev	.00029	.00043	.00076	.00292	.02539	.00402	.00172	.00010	.00012
%RSD	96.159	139.77	21.625	10.099	14.822	122.86	12.088	17.714	50.580
#1	-.00010	.00061	.00405	.03094	.18925	.00043	.01544	.00061	.00031
#2	-.00050	.00000	.00298	.02682	.15334	.00612	.01301	.00048	.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.54771**	**.00074**	**.00435**	**-.00035**	**.04846**	**-.00107**	**.00117**	**.52181**	**1.1167**
Stddev	.01632	.00004	.00390	.00059	.00826	.00656	.00280	.03746	.0801
%RSD	2.9802	5.7212	89.642	169.24	17.052	614.21	238.61	7.1781	7.1781
#1	.55925	.00077	.00159	-.00076	.05430	-.00571	-.00081	.54829	1.1733
#2	.53617	.00071	.00711	.00007	.04262	.00357	.00316	.49532	1.0600
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00059**	**.00078**	**-.00266**	**.00025**	**.00153**	**.04003**	**-.00035**	**.00247**	**.00242**
Stddev	.00087	.00007	.00117	.00062	.00014	.03566	.00040	.00022	.00041
%RSD	148.18	8.9598	43.905	251.12	8.8678	89.092	113.93	8.8405	17.062
#1	-.00003	.00073	-.00349	.00068	.00143	.06525	-.00007	.00231	.00213
#2	.00120	.00083	-.00184	-.00019	.00162	.01481	-.00063	.00262	.00271
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2720.3**	**50049.**	**5824.5**
Stddev	2.5	146.	7.8
%RSD	.09350	.29107	.13398
#1	2718.5	49946.	5818.9
#2	2722.1	50152.	5830.0

Sample Name: 280-97989-D-1-A Acquired: 6/13/2017 6:45:56 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00152**	**.00695**	**.00426**	**.31349**	**.19187**	**.00011**	**.00420**	**85.262**	**.00026**
Stddev	.00032	.00021	.00097	.00940	.00049	.00005	.00260	.233	.00012
%RSD	20.981	3.0239	22.742	2.9972	.25350	43.527	61.980	.27283	44.027
#1	-.00175	.00709	.00357	.32014	.19221	.00014	.00604	85.426	.00018
#2	-.00130	.00680	.00494	.30685	.19152	.00007	.00236	85.097	.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00012**	**.00030**	**.00400**	**1.0595**	**4.2461**	**.07655**	**27.925**	**.39311**	**.00577**
Stddev	.00028	.00015	.00060	.0098	.0281	.00214	.067	.00079	.00011
%RSD	243.16	50.606	14.974	.92409	.66079	2.7902	.23815	.20205	1.9701
#1	-.00032	.00019	.00357	1.0665	4.2263	.07806	27.972	.39367	.00585
#2	.00008	.00041	.00442	1.0526	4.2660	.07504	27.878	.39255	.00569
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**36.869**	**.00028**	**.02010**	**.00019**	**15.564**	**-.00238**	**.00315**	**14.600**	**31.244**
Stddev	.351	.00061	.00070	.00113	.418	.00127	.00033	.031	.066
%RSD	.95094	220.69	3.5049	582.59	2.6875	53.422	10.625	.21131	.21131
#1	37.117	.00071	.01960	-.00060	15.860	-.00148	.00338	14.622	31.291
#2	36.622	-.00016	.02059	.00099	15.268	-.00328	.00291	14.578	31.197
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00074**	**.77263**	**-.00531**	**.00028**	**.00489**	**.03573**	**-.00057**	**.00179**	**.00147**
Stddev	.00195	.00130	.00137	.00016	.00120	.04521	.00048	.00039	.00019
%RSD	262.15	.16830	25.849	55.825	24.502	126.55	83.661	21.578	13.173
#1	.00063	.77355	-.00628	.00017	.00574	.06769	-.00023	.00152	.00134
#2	-.00212	.77171	-.00434	.00039	.00404	.00376	-.00091	.00206	.00161
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2643.1**	**48424.**	**5902.5**
Stddev	16.8	82.	3.8
%RSD	.63397	.16846	.06469
#1	2631.2	48366.	5905.2
#2	2654.9	48481.	5899.8

Sample Name: 280-97989-D-2-A Acquired: 6/13/2017 6:48:31 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00138**	**.00443**	**.00718**	**.11895**	**.08286**	**.00006**	**-.00326**	**76.395**	**.00044**
Stddev	.00014	.00116	.00344	.00295	.00001	.00007	.00277	.249	.00018
%RSD	9.9958	26.169	47.924	2.4830	.01497	130.26	85.034	.32643	40.391
#1	-.00128	.00525	.00962	.12103	.08285	.00011	-.00521	76.218	.00056
#2	-.00147	.00361	.00475	.11686	.08287	.00000	-.00130	76.571	.00031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00007**	**.00056**	**.00390**	**.04479**	**5.5082**	**.09965**	**24.586**	**.12955**	**.00084**
Stddev	.00021	.00024	.00085	.00363	.0608	.00187	.099	.00008	.00039
%RSD	285.51	42.119	21.651	8.1130	1.1041	1.8799	.40122	.06042	45.621
#1	-.00022	.00039	.00450	.04736	5.4652	.09832	24.516	.12950	.00057
#2	.00007	.00072	.00331	.04222	5.5512	.10097	24.656	.12961	.00112
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.361**	**.00014**	**.01837**	**.00074**	**12.744**	**-.00699**	**.00054**	**10.759**	**23.024**
Stddev	.210	.00057	.00035	.00049	.278	.00432	.01012	.028	.059
%RSD	.90067	413.46	1.8871	65.777	2.1775	61.748	1880.5	.25813	.25813
#1	23.509	.00054	.01813	.00039	12.941	-.00394	-.00662	10.739	22.982
#2	23.212	-.00027	.01862	.00108	12.548	-.01005	.00770	10.779	23.066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00129**	**1.2494**	**-.00399**	**.00038**	**.00118**	**.04163**	**-.00066**	**.00205**	**.00177**
Stddev	.00027	.0035	.00338	.00014	.00074	.01821	.00020	.00057	.00153
%RSD	20.587	.27659	84.613	37.739	62.569	43.744	30.861	27.583	86.823
#1	-.00110	1.2470	-.00160	.00048	.00066	.02876	-.00052	.00165	.00068
#2	-.00148	1.2519	-.00638	.00028	.00170	.05451	-.00080	.00245	.00285
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2642.9**	**48823.**	**5898.4**
Stddev	5.4	162.	36.3
%RSD	.20337	.33143	.61481
#1	2646.7	48937.	5924.0
#2	2639.1	48709.	5872.7

Sample Name: CCVH-4579429 Acquired: 6/13/2017 6:51:06 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**51.507**	**-.00149**	**.00261**	**.00020**	**.00027**	W **1.0730**	**.03871**	**-.00019**	**-.00127**	**.00037**	**.01768**
Stddev	.00095	.167	.00305	.00051	.00005	.00011	.0223	.00344	.00012	.00060	.00006	.00035
%RSD	6435.4	.32334	204.67	19.554	23.709	39.856	2.0807	8.8965	67.155	47.579	15.033	1.9889
#1	.00068	51.389	.00067	.00224	.00017	.00019	1.0888	.04115	-.00010	-.00169	.00033	.01743
#2	-.00065	51.625	-.00365	.00297	.00024	.00035	1.0573	.03628	-.00027	-.00084	.00041	.01793
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.010**	**.10654**	**.00409**	**.04442**	**-.00195**	**-.00112**	**254.61**	**.00087**	**.00773**	**-.00101**	**4.9207**	**.00463**
Stddev	.279	.02006	.00049	.00269	.00005	.00006	.03	.00030	.00215	.00004	.1117	.00189
%RSD	.57001	18.826	12.087	6.0611	2.7827	5.3136	.01124	35.028	27.757	4.1154	2.2697	40.892
#1	48.812	.09235	.00374	.04251	-.00199	-.00108	254.63	.00108	.00925	-.00098	4.9997	.00597
#2	49.207	.12072	.00444	.04632	-.00191	-.00116	254.59	.00065	.00622	-.00104	4.8418	.00329
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00111**	**-.03022**	**-.06468**	**-.00009**	**.00069**	**5.1953**	**.01914**	**.00255**	W **10.965**	**.01398**	**.00175**	**.06622**
Stddev	.00378	.01635	.03499	.00009	.00005	.0012	.00023	.00044	.068	.00061	.00006	.00120
%RSD	339.75	54.094	54.094	99.155	7.3822	.02234	1.1940	17.063	.62137	4.3553	3.2622	1.8144
#1	-.00379	-.01866	-.03994	-.00003	.00073	5.1961	.01898	.00224	11.013	.01441	.00171	.06537
#2	.00156	-.04178	-.08941	-.00015	.00066	5.1945	.01930	.00286	10.917	.01355	.00179	.06707
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Warn	None	None	None
Value									10.000			
Range									5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2626.5**	**48158.**	**5813.0**
Stddev	3.9	71.	.5
%RSD	.14765	.14845	.00940
#1	2629.3	48108.	5813.3
#2	2623.8	48209.	5812.6

Sample Name: CCV-4580817 Acquired: 6/13/2017 6:53:40 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51726**	F **.64159**	**1.0675**	**.51644**	**.48560**	**.51327**	**.00250**	**4.8953**	**.51333**	**.50648**	**.48776**	**.50230**
Stddev	.00124	.01867	.0218	.01346	.00266	.00265	.00088	.0447	.01503	.01449	.01420	.00126
%RSD	.23921	2.9101	2.0430	2.6072	.54855	.51546	35.168	.91307	2.9273	2.8606	2.9108	.25121
#1	.51814	.65479	1.0830	.52596	.48371	.51140	.00312	4.8637	.52396	.51672	.49780	.50319
#2	.51639	.62839	1.0521	.50691	.48748	.51514	.00188	4.9269	.50270	.49623	.47772	.50141
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5657**	**51.374**	**1.0705**	**20.924**	**.53054**	**.48261**	**5.3151**	**.50709**	**1.0775**	**1.0186**	**.03393**	**1.0472**
Stddev	.0133	.089	.0069	.040	.00115	.01422	.0420	.01357	.0304	.0290	.00400	.0305
%RSD	.51914	.17378	.63958	.19127	.21767	2.9457	.79056	2.6762	2.8189	2.8433	11.789	2.9158
#1	2.5563	51.311	1.0656	20.952	.53136	.49266	5.2854	.51669	1.0989	1.0391	.03110	1.0688
#2	2.5752	51.437	1.0753	20.895	.52973	.47256	5.3448	.49750	1.0560	.99811	.03676	1.0256
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0948**	**5.0692**	**10.848**	**.98346**	**.52521**	**.00409**	**.53340**	F **1.1552**	**.04509**	**.51242**	**.54778**	**.48437**
Stddev	.0409	.0588	.126	.02729	.00198	.00281	.00203	.0281	.00864	.00015	.00326	.00187
%RSD	3.7333	1.1598	1.1598	2.7751	.37763	68.663	.38041	2.4303	19.169	.02984	.59463	.38541
#1	1.1237	5.0276	10.759	1.0028	.52381	.00608	.53483	1.1751	.03898	.51231	.55008	.48305
#2	1.0659	5.1108	10.937	.96416	.52661	.00210	.53196	1.1354	.05120	.51253	.54548	.48569
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
Value								1.0000				
Range								10.490%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2638.7**	**48072.**	**5744.0**
Stddev	3.2	52.	4.8
%RSD	.12244	.10919	.08378
#1	2636.5	48034.	5740.6
#2	2641.0	48109.	5747.4

Sample Name: CCB Acquired: 6/13/2017 6:56:10 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00050**	W **.06428**	**-.00070**	**.00171**	**-.00031**	**.00026**	**.00591**	**.02636**	**.00022**	**.00048**	**.00025**	**.00256**
Stddev	.00072	.05356	.00105	.00215	.00007	.00005	.00425	.00475	.00044	.00015	.00003	.00053
%RSD	143.88	83.323	150.03	125.91	20.972	17.684	71.916	18.031	194.60	30.284	13.552	20.823
#1	-.00101	.02641	.00004	.00019	-.00027	.00029	.00291	.02300	-.00008	.00038	.00023	.00294
#2	.00001	.10216	-.00144	.00323	-.00036	.00023	.00892	.02972	.00053	.00059	.00027	.00219
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05000										
Low Limit		-.05000										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00539**	**.10472**	**.00284**	**.00360**	**.00015**	**.00036**	**.15011**	**.00051**	**.00230**	**.00313**	W **.05014**	**-.00010**
Stddev	.00086	.04981	.00162	.00722	.00005	.00112	.00199	.00035	.00569	.00056	.03142	.00177
%RSD	15.920	47.564	56.955	200.35	32.403	312.17	1.3250	68.745	247.66	17.810	62.663	1703.9
#1	.00599	.06950	.00170	.00871	.00018	-.00043	.15152	.00026	-.00172	.00274	.02792	-.00136
#2	.00478	.13994	.00399	-.00150	.00011	.00115	.14871	.00076	.00632	.00353	.07235	.00115
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit											.05000	
Low Limit											-.20000	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00204**	**-.00365**	**-.00781**	**.00099**	**.00033**	**-.00222**	**-.00006**	**.00249**	**.02684**	**-.00031**	**.00165**	**.00018**
Stddev	.00052	.02937	.06285	.00250	.00011	.00042	.00046	.00236	.01820	.00053	.00010	.00229
%RSD	25.705	805.11	805.11	253.35	31.676	18.829	780.69	94.540	67.822	170.00	6.0469	1246.0
#1	.00241	-.02441	-.05225	-.00078	.00041	-.00251	-.00038	.00416	.01397	.00006	.00158	.00180
#2	.00167	.01712	.03663	.00276	.00026	-.00192	.00026	.00083	.03971	-.00068	.00172	-.00143
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2659.0**	**49163.**	**5665.8**
Stddev	3.2	187.	41.9
%RSD	.11876	.38058	.73973
#1	2656.8	49295.	5695.4
#2	2661.2	49031.	5636.2

Sample Name: CCVL-4589022 Acquired: 6/13/2017 6:58:49 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00901**	F **.14439**	**.01566**	**.10281**	**.00951**	**.00110**	**.12302**	**.20630**	**.00483**	**.01012**	**.01001**	**.01842**
Stddev	.00110	.00753	.00166	.00315	.00035	.00004	.00207	.00042	.00045	.00010	.00005	.00078
%RSD	12.194	5.2185	10.575	3.0661	3.6543	4.0617	1.6844	.20225	9.3543	1.0164	.50184	4.2536
#1	.00979	.14971	.01683	.10504	.00976	.00113	.12449	.20600	.00515	.01020	.01005	.01787
#2	.00823	.13906	.01449	.10058	.00926	.00107	.12156	.20659	.00451	.01005	.00998	.01898
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000										
Range		30.000%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10778**	**3.2240**	F **.02694**	**.21161**	**.01125**	**.01825**	**1.1722**	**.04125**	**3.0810**	**.01037**	**.12140**	**.01948**
Stddev	.00287	.0906	.00100	.00099	.00013	.00096	.0092	.00087	.0987	.00054	.00413	.00021
%RSD	2.6625	2.8089	3.7226	.46618	1.1427	5.2758	.78511	2.1031	3.2018	5.2220	3.4036	1.0686
#1	.10575	3.1600	.02764	.21092	.01134	.01893	1.1657	.04186	3.1508	.00999	.12432	.01934
#2	.10981	3.2880	.02623	.21231	.01116	.01757	1.1787	.04064	3.0113	.01075	.11848	.01963
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.02000									
Range			30.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01617**	**.47755**	**1.0219**	**.09988**	**.01080**	**.01409**	**.01048**	F **.02241**	**.06754**	**.01024**	**.02339**	**.01826**
Stddev	.00087	.01758	.0376	.00333	.00025	.00199	.00060	.00109	.02127	.00029	.00024	.00146
%RSD	5.3958	3.6807	3.6807	3.3293	2.3269	14.155	5.7269	4.8571	31.497	2.8118	1.0384	8.0182
#1	.01555	.48998	1.0485	.10224	.01062	.01550	.01006	.02318	.05250	.01044	.02356	.01930
#2	.01678	.46512	.99535	.09753	.01097	.01268	.01091	.02164	.08258	.01003	.02322	.01723
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								.01500				
Range								30.000%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2710.9**	**50153.**	**5848.9**
Stddev	10.3	316.	76.5
%RSD	.38030	.63105	1.3085
#1	2718.2	49929.	5903.0
#2	2703.6	50377.	5794.8

Sample Name: 280-97989-D-3-A Acquired: 6/13/2017 7:01:26 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00106**	**.01568**	**.01178**	**.19116**	**.11509**	**.00006**	**.00134**	**63.568**	**.00014**
Stddev	.00092	.00071	.00019	.00493	.00093	.00005	.00382	.165	.00002
%RSD	86.281	4.5293	1.5736	2.5788	.80451	88.985	284.16	.25902	15.834
#1	-.00171	.01518	.01191	.19465	.11444	.00002	-.00136	63.451	.00016
#2	-.00041	.01618	.01165	.18768	.11574	.00009	.00404	63.684	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00047**	**.00144**	**.00429**	**.12123**	**3.7552**	**.05593**	**18.963**	**.02150**	**.00241**
Stddev	.00037	.00007	.00054	.00595	.0352	.00427	.058	.00003	.00022
%RSD	79.435	4.7428	12.718	4.9102	.93619	7.6262	.30457	.13772	9.0540
#1	-.00020	.00149	.00390	.12543	3.7304	.05291	19.004	.02152	.00225
#2	-.00073	.00139	.00467	.11702	3.7801	.05895	18.922	.02148	.00256
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.316**	**.00061**	**.03003**	**.00012**	**5.8910**	**-.00295**	**.00370**	**12.665**	**27.104**
Stddev	.066	.00084	.00390	.00236	.0779	.00080	.00254	.002	.005
%RSD	.26254	139.08	12.981	1909.2	1.3228	27.005	68.668	.01821	.01821
#1	25.269	.00001	.03278	-.00154	5.9461	-.00239	.00190	12.664	27.100
#2	25.363	.00120	.02727	.00179	5.8359	-.00351	.00550	12.667	27.107
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00108**	**.60396**	**-.00460**	**.00008**	**.00536**	**.01590**	**.00065**	**.00212**	**.00073**
Stddev	.00050	.00127	.00225	.00003	.00112	.00179	.00006	.00044	.00310
%RSD	46.124	.21078	48.916	41.114	20.964	11.245	9.0499	20.858	422.35
#1	-.00073	.60305	-.00301	.00005	.00616	.01463	.00070	.00181	-.00146
#2	-.00144	.60486	-.00619	.00010	.00457	.01716	.00061	.00244	.00293
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2633.5**	**48333.**	**5778.9**
Stddev	5.4	23.	17.2
%RSD	.20485	.04669	.29764
#1	2637.3	48317.	5791.0
#2	2629.7	48349.	5766.7

Sample Name: 280-97989-D-4-A Acquired: 6/13/2017 7:04:01 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00134**	**.00869**	**.00500**	**.13031**	**.06722**	**.00011**	**.00162**	**74.969**	**.00019**
Stddev	.00012	.00246	.00272	.00380	.00012	.00001	.00713	.180	.00011
%RSD	8.9461	28.263	54.288	2.9147	.17194	13.355	440.55	.23983	56.611
#1	-.00142	.01043	.00308	.13300	.06714	.00010	-.00342	74.841	.00026
#2	-.00125	.00695	.00693	.12763	.06730	.00012	.00666	75.096	.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00016**	**.00064**	**.00421**	**.17704**	**4.3692**	**.04904**	**24.184**	**.09849**	**.00146**
Stddev	.00052	.00062	.00024	.00170	.0981	.00135	.042	.00029	.00053
%RSD	326.69	97.406	5.5927	.96225	2.2450	2.7591	.17294	.29651	36.397
#1	.00021	.00108	.00437	.17583	4.2998	.05000	24.214	.09870	.00183
#2	-.00053	.00020	.00404	.17824	4.4386	.04808	24.155	.09828	.00108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.872**	**.00074**	**.02324**	**-.00018**	**12.061**	**-.00531**	**-.00229**	**10.834**	**23.186**
Stddev	.070	.00019	.00254	.00177	.400	.00077	.01034	.016	.035
%RSD	.30439	25.388	10.912	970.89	3.3194	14.595	450.80	.14964	.14964
#1	22.823	.00088	.02503	-.00143	12.344	-.00586	.00502	10.823	23.161
#2	22.921	.00061	.02145	.00107	11.778	-.00476	-.00960	10.846	23.210
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00173**	**.72319**	**-.00129**	**.00018**	**.00511**	**.01356**	**-.00019**	**.00251**	**.00110**
Stddev	.00151	.00206	.00117	.00023	.00086	.04009	.00033	.00023	.00014
%RSD	87.360	.28538	90.603	125.22	16.764	295.56	170.44	9.0267	12.432
#1	.00066	.72173	-.00212	.00035	.00572	.04191	-.00042	.00267	.00101
#2	.00280	.72465	-.00046	.00002	.00451	-.01478	.00004	.00235	.00120
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2627.7**	**48224.**	**5754.0**
Stddev	4.2	153.	33.3
%RSD	.16111	.31824	.57945
#1	2624.7	48116.	5777.6
#2	2630.7	48333.	5730.5

Sample Name: 280-97989-D-5-A Acquired: 6/13/2017 7:06:35 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00144**	**.01733**	**-.00200**	**.13370**	**.08749**	**.00003**	**.00285**	**81.097**	**.00015**
Stddev	.00035	.01333	.01107	.00489	.00034	.00001	.00242	.235	.00016
%RSD	23.977	76.925	552.65	3.6569	.38701	44.758	84.944	.28929	110.14
#1	-.00169	.02675	.00582	.13715	.08773	.00002	.00114	80.931	.00026
#2	-.00120	.00790	-.00983	.13024	.08725	.00004	.00456	81.263	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00008**	**.00160**	**.00416**	**.05591**	**4.3532**	**.05593**	**26.997**	**.00343**	**.00082**
Stddev	.00022	.00015	.00133	.00028	.0307	.00082	.074	.00004	.00065
%RSD	284.94	9.3651	31.957	.50139	.70476	1.4625	.27379	1.3107	79.483
#1	.00008	.00170	.00322	.05611	4.3315	.05535	27.050	.00339	.00128
#2	-.00023	.00149	.00510	.05571	4.3749	.05651	26.945	.00346	.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.840**	**.00089**	**.02294**	**.00047**	**12.991**	**-.00274**	**.00537**	**11.735**	**25.112**
Stddev	.212	.00041	.00517	.00195	.432	.00003	.00188	.122	.262
%RSD	.89121	45.804	22.543	412.78	3.3249	1.0239	35.058	1.0430	1.0430
#1	23.690	.00118	.02659	.00185	13.297	-.00276	.00404	11.648	24.927
#2	23.990	.00060	.01928	-.00090	12.686	-.00272	.00670	11.821	25.297
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00019**	**.78836**	**-.00434**	**-.00027**	**.00305**	**-.01244**	**.00009**	**.00285**	**.00143**
Stddev	.00317	.00236	.00289	.00063	.00005	.03983	.00031	.00021	.00140
%RSD	1706.3	.29918	66.618	236.13	1.7112	320.27	324.91	7.3273	97.749
#1	.00206	.78669	-.00230	-.00071	.00301	-.04060	-.00012	.00270	.00044
#2	-.00243	.79003	-.00639	.00018	.00308	.01573	.00031	.00300	.00242
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2613.8**	**48595.**	**5798.3**
Stddev	1.0	91.	30.0
%RSD	.03727	.18649	.51712
#1	2613.1	48531.	5777.1
#2	2614.5	48660.	5819.5

Sample Name: 280-97989-D-6-A Acquired: 6/13/2017 7:09:11 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00079**	**.00802**	**.00617**	**.13405**	**.06920**	**.00021**	**.00118**	**77.268**	**-.00015**
Stddev	.00052	.00207	.00231	.00435	.00036	.00033	.00240	.687	.00026
%RSD	65.607	25.756	37.491	3.2439	.52213	155.99	203.14	.88857	175.38
#1	-.00115	.00949	.00453	.13713	.06946	-.00002	-.00052	77.753	-.00034
#2	-.00042	.00656	.00781	.13098	.06895	.00045	.00288	76.782	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00009**	**.00026**	**.00359**	**.19412**	**4.6094**	**.05443**	**25.077**	**.10202**	**.00130**
Stddev	.00023	.00010	.00009	.02375	.0543	.00108	.002	.00033	.00038
%RSD	256.39	37.274	2.3845	12.237	1.1777	1.9921	.00690	.32411	28.759
#1	.00007	.00019	.00365	.17733	4.6477	.05366	25.076	.10225	.00157
#2	-.00025	.00033	.00353	.21092	4.5710	.05519	25.078	.10179	.00104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.004**	**.00105**	**.02542**	**.00039**	**12.519**	**-.00451**	**-.00063**	**11.216**	**24.003**
Stddev	.071	.00004	.00350	.00051	.437	.00797	.01222	.080	.171
%RSD	.29457	4.0807	13.781	131.52	3.4880	176.55	1932.4	.71288	.71288
#1	24.054	.00108	.02789	.00075	12.828	.00112	-.00927	11.273	24.124
#2	23.954	.00102	.02294	.00003	12.211	-.01015	.00801	11.160	23.882
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00138**	**.74892**	**-.00371**	**.00022**	**.00598**	**-.02630**	**-.00135**	**.00147**	**.00182**
Stddev	.00067	.00459	.00003	.00011	.00032	.01350	.00043	.00057	.00008
%RSD	48.471	.61283	.73434	52.652	5.2926	51.334	31.908	38.791	4.5067
#1	-.00186	.75216	-.00372	.00013	.00621	-.01675	-.00165	.00107	.00188
#2	-.00091	.74567	-.00369	.00030	.00576	-.03584	-.00104	.00187	.00176
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2634.9**	**48562.**	**5786.7**
Stddev	7.7	192.	84.8
%RSD	.29238	.39591	1.4649
#1	2640.3	48426.	5726.7
#2	2629.4	48698.	5846.6

Sample Name: 280-98040-C-1-A Acquired: 6/13/2017 7:11:46 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00132**	**1.5015**	**-.00300**	**2.8449**	**.06032**	**.00079**	**.00421**	**422.08**	**.00122**
Stddev	.00044	.0802	.00281	.1423	.00026	.00004	.00241	.74	.00010
%RSD	32.923	5.3424	93.502	5.0031	.43295	4.5671	57.202	.17585	7.8981
#1	-.00102	1.5582	-.00102	2.9455	.06050	.00076	.00251	422.60	.00129
#2	-.00163	1.4448	-.00499	2.7442	.06013	.00082	.00592	421.55	.00116
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00040**	**.02044**	**.07744**	**33.590**	**34.215**	**.22689**	**298.17**	**4.7857**	**.00447**
Stddev	.00018	.00191	.00159	.090	.039	.00143	1.21	.0183	.00012
%RSD	45.379	9.3320	2.0478	.26853	.11354	.63069	.40741	.38267	2.7391
#1	.00053	.02179	.07856	33.654	34.188	.22790	299.03	4.7987	.00439
#2	.00027	.01909	.07631	33.526	34.243	.22588	297.31	4.7728	.00456
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **962.15**	**.07923**	**.16624**	**.00263**	F **834.02**	**-.00778**	**-.00627**	**20.804**	**44.521**
Stddev	1.37	.00413	.01363	.00079	42.79	.00241	.00645	.012	.025
%RSD	.14242	5.2177	8.1979	30.078	5.1301	30.999	103.00	.05694	.05694
#1	963.12	.08216	.17588	.00319	864.28	-.00607	-.01083	20.812	44.539
#2	961.18	.07631	.15661	.00207	803.77	-.00948	-.00170	20.796	44.503
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01421**	**8.3724**	**-.00209**	**.02868**	**.00586**	**.00028**	**.00609**	**.54085**	**.00408**
Stddev	.00120	.0584	.00057	.00206	.00051	.02127	.00038	.00203	.00008
%RSD	8.4663	.69750	27.526	7.1700	8.6749	7633.6	6.2803	.37455	1.9549
#1	.01336	8.3311	-.00168	.03013	.00550	-.01476	.00636	.54228	.00403
#2	.01506	8.4137	-.00249	.02723	.00622	.01532	.00582	.53941	.00414
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2360.2**	**43076.**	**5661.9**
Stddev	.2	86.	1.4
%RSD	.01046	.19869	.02391
#1	2360.1	43137.	5660.9
#2	2360.4	43016.	5662.8

Sample Name: 280-98040-C-1-A SD@5 Acquired: 6/13/2017 7:14:34 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00130**	**.00081**	**-.00260**	**.00455**	**-.00030**	**.00010**	**.00466**	**.16120**	**-.00036**
Stddev	.00009	.00006	.00170	.00025	.00012	.00018	.00302	.05802	.00001
%RSD	6.9733	7.7041	65.258	5.4347	40.322	184.51	64.890	35.991	3.0093
#1	-.00137	.00086	-.00380	.00472	-.00039	-.00003	.00679	.20222	-.00035
#2	-.00124	.00077	-.00140	.00437	-.00022	.00023	.00252	.12018	-.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00017**	**.00055**	**.00281**	**.01304**	**.14625**	**.00410**	**.05448**	**.00100**	**.00000**
Stddev	.00032	.00003	.00104	.00116	.01334	.00103	.00944	.00011	.00021
%RSD	188.37	5.4865	37.022	8.9308	9.1193	25.129	17.332	10.819	5846.4
#1	-.00006	.00057	.00208	.01386	.15569	.00482	.06116	.00108	-.00015
#2	.00040	.00052	.00355	.01222	.13682	.00337	.04780	.00093	.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.56605**	**.00072**	**.00375**	**.00179**	**.18878**	**-.00356**	**.00219**	**-.01459**	**-.03122**
Stddev	.12399	.00024	.01016	.00012	.01618	.00050	.00208	.01873	.04009
%RSD	21.905	33.226	270.61	6.6302	8.5690	14.078	94.813	128.41	128.41
#1	.65372	.00055	-.00343	.00170	.20022	-.00391	.00072	-.00134	-.00287
#2	.47837	.00088	.01094	.00187	.17734	-.00320	.00366	-.02784	-.05957
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00092**	**.00285**	**-.00427**	**-.00021**	**.00715**	**.00939**	**-.00019**	**.00052**	**.00151**
Stddev	.00028	.00095	.00132	.00029	.00172	.01256	.00003	.00075	.00028
%RSD	29.968	33.208	30.944	137.48	24.129	133.79	17.586	144.20	18.521
#1	.00073	.00352	-.00334	-.00001	.00836	.01826	-.00017	-.00001	.00171
#2	.00112	.00218	-.00521	-.00041	.00593	.00051	-.00022	.00105	.00131
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2657.3**	**49163.**	**5644.8**
Stddev	1.1	178.	48.1
%RSD	.04079	.36183	.85207
#1	2658.1	49289.	5678.8
#2	2656.6	49037.	5610.8

Sample Name: 280-98040-C-1-B MS Acquired: 6/13/2017 7:17:13 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05633**	**4.4487**	**1.1120**	**3.8046**	**2.0113**	**.05087**	W **2.0557**	**475.41**	**.10284**
Stddev	.00085	.0083	.0744	.1891	.0013	.00015	.1117	6.10	.00589
%RSD	1.5030	.18586	6.6926	4.9714	.06665	.28672	5.4313	1.2825	5.7289
#1	.05693	4.4429	1.1646	3.9383	2.0122	.05097	2.1347	479.72	.10701
#2	.05573	4.4546	1.0594	3.6709	2.0103	.05076	1.9768	471.10	.09868
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.44358**	**.19802**	**.32848**	**35.149**	**88.009**	**1.3087**	**353.23**	**5.3240**	**.88366**
Stddev	.02303	.01033	.00193	.063	.041	.0033	1.69	.0265	.04783
%RSD	5.1911	5.2170	.58672	.17846	.04682	.25179	.47753	.49760	5.4125
#1	.45987	.20532	.32984	35.193	88.038	1.3110	354.43	5.3427	.91748
#2	.42730	.19071	.32711	35.105	87.980	1.3064	352.04	5.3052	.84984
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1030.1**	**.52301**	**11.368**	**.43885**	F **835.65**	**.51209**	**2.2230**	**32.336**	**69.200**
Stddev	2.1	.02705	.623	.02235	42.79	.02917	.1200	.031	.067
%RSD	.20694	5.1716	5.4789	5.0935	5.1202	5.6954	5.3970	.09681	.09681
#1	1031.6	.54213	11.808	.45465	865.90	.53272	2.3079	32.359	69.247
#2	1028.6	.50388	10.927	.42304	805.39	.49147	2.1382	32.314	69.153
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.7756**	**9.5684**	**1.0590**	**1.0966**	**1.8203**	**2.2288**	**.51750**	**1.0627**	**.49238**
Stddev	.1034	.0137	.0081	.0054	.0840	.0224	.00362	.0070	.00145
%RSD	5.8236	.14354	.76780	.48878	4.6147	1.0055	.70027	.65661	.29530
#1	1.8487	9.5781	1.0648	1.1004	1.8797	2.2447	.52006	1.0676	.49135
#2	1.7025	9.5587	1.0533	1.0928	1.7609	2.2130	.51494	1.0577	.49341
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2300.5**	**41430.**	**5438.2**
Stddev	13.3	36.	26.9
%RSD	.57900	.08782	.49452
#1	2291.1	41456.	5457.2
#2	2309.9	41404.	5419.2

Sample Name: 280-98040-C-1-C MSD Acquired: 6/13/2017 7:19:59 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05646**	**4.4433**	**1.1956**	**3.8803**	**2.0364**	**.05155**	W **2.2017**	**460.38**	**.10884**
Stddev	.00035	.0419	.0566	.1009	.0048	.00002	.0642	.55	.00319
%RSD	.61964	.94370	4.7370	2.6001	.23479	.04174	2.9157	.11956	2.9304
#1	.05622	4.4729	1.2356	3.9516	2.0398	.05156	2.2471	459.99	.11109
#2	.05671	4.4136	1.1555	3.8090	2.0331	.05153	2.1563	460.77	.10658
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47274**	**.21110**	**.32969**	**33.849**	**87.455**	**1.3167**	**337.96**	**5.0905**	**.94492**
Stddev	.01413	.00654	.00377	.006	.323	.0055	6.05	.1008	.02877
%RSD	2.9894	3.0991	1.1443	.01764	.36893	.41635	1.7904	1.9793	3.0444
#1	.48273	.21572	.32702	33.853	87.683	1.3206	333.69	5.0193	.96527
#2	.46274	.20647	.33235	33.845	87.227	1.3128	342.24	5.1618	.92458
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **991.91**	**.55051**	**12.121**	**.46288**	F **845.05**	**.55030**	**2.3563**	**31.893**	**68.250**
Stddev	1.02	.01606	.365	.01222	23.05	.01486	.0615	.004	.009
%RSD	.10280	2.9176	3.0141	2.6404	2.7272	2.7003	2.6087	.01274	.01274
#1	992.63	.56187	12.379	.47153	861.35	.56081	2.3997	31.890	68.244
#2	991.19	.53915	11.863	.45424	828.76	.53980	2.3128	31.896	68.257
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8891**	**9.1982**	**1.0603**	**1.1056**	**1.9301**	**2.2352**	**.52120**	**1.0283**	**.50279**
Stddev	.0576	.0525	.0276	.0236	.0415	.0558	.01213	.0311	.00164
%RSD	3.0481	.57039	2.6003	2.1336	2.1492	2.4962	2.3280	3.0257	.32520
#1	1.9298	9.2353	1.0408	1.0889	1.9595	2.1957	.51262	1.0063	.50394
#2	1.8483	9.1611	1.0798	1.1223	1.9008	2.2746	.52978	1.0503	.50163
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2341.6**	**43479.**	**5414.1**
Stddev	2.9	897.	13.4
%RSD	.12492	2.0619	.24690
#1	2339.5	44113.	5404.7
#2	2343.7	42845.	5423.6

Sample Name: 280-98041-K-1-A Acquired: 6/13/2017 7:22:42 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00173**	**.04648**	**.10745**	W **24.682**	**1.5824**	**.00009**	**.00193**	**188.02**	**.00042**
Stddev	.00081	.00421	.01377	1.019	.0022	.00003	.00167	.14	.00008
%RSD	46.696	9.0607	12.811	4.1300	.13918	29.781	86.503	.07636	18.231
#1	-.00116	.04946	.11718	25.403	1.5808	.00011	.00075	187.92	.00037
#2	-.00231	.04350	.09771	23.962	1.5840	.00007	.00312	188.12	.00047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.20000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01408**	**.03094**	**.00844**	**14.355**	W **145.23**	**.00711**	**152.06**	**2.9756**	**.00034**
Stddev	.00086	.00217	.00084	.028	.37	.00179	.26	.0030	.00041
%RSD	6.1124	7.0266	9.9399	.19389	.25465	25.208	.16945	.10079	123.57
#1	.01469	.03247	.00903	14.375	144.97	.00584	152.24	2.9777	.00063
#2	.01348	.02940	.00785	14.335	145.49	.00838	151.88	2.9735	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **894.61**	**.06928**	**2.6043**	**-.00083**	**11.265**	**-.00216**	**-.00039**	**23.605**	**50.514**
Stddev	.75	.00362	.1134	.00322	.470	.00376	.00701	.013	.027
%RSD	.08383	5.2198	4.3536	385.99	4.1721	174.32	1803.8	.05394	.05394
#1	894.08	.07183	2.6845	-.00311	11.598	-.00481	-.00535	23.614	50.533
#2	895.14	.06672	2.5242	.00144	10.933	.00050	.00457	23.596	50.495
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00042**	**2.2922**	**-.00653**	**.04800**	**.01155**	**.00072**	**.04952**	**.00379**	**.00888**
Stddev	.00181	.0012	.00003	.00048	.00640	.02286	.00009	.00064	.00144
%RSD	429.65	.05169	.43399	1.0001	55.400	3162.4	.17496	16.843	16.252
#1	-.00086	2.2913	-.00655	.04834	.00702	.01689	.04958	.00424	.00990
#2	.00170	2.2930	-.00651	.04766	.01607	-.01544	.04946	.00334	.00786
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2384.1**	**43376.**	**5719.2**
Stddev	8.4	4.	7.1
%RSD	.35135	.00984	.12499
#1	2378.2	43373.	5714.2
#2	2390.0	43379.	5724.3

Sample Name: CCVH-4579429 Acquired: 6/13/2017 7:25:21 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**51.951**	**-.00482**	**.05354**	**.00085**	**.00033**	W **1.0563**	**.15242**	**.00004**	**-.00119**	**-.00002**	**.01933**
Stddev	.00054	.057	.00117	.00449	.00001	.00009	.0267	.00595	.00023	.00012	.00017	.00011
%RSD	2465.1	.10959	24.232	8.3875	1.5073	26.129	2.5307	3.9040	614.41	10.090	690.90	.54914
#1	-.00036	51.991	-.00399	.05672	.00086	.00027	1.0752	.15663	-.00013	-.00127	.00009	.01941
#2	.00040	51.911	-.00564	.05037	.00084	.00039	1.0374	.14822	.00020	-.00110	-.00014	.01926
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.060**	**.35762**	**.00638**	**.11788**	**-.00056**	**-.00148**	**256.01**	**.00102**	**.01168**	**.00039**	**5.0188**	**.00390**
Stddev	.071	.06368	.00007	.01319	.00030	.00070	.40	.00001	.00041	.00194	.1990	.00349
%RSD	.14378	17.808	1.0737	11.188	54.490	47.137	.15771	.90494	3.5221	495.90	3.9648	89.583
#1	49.110	.40265	.00633	.12720	-.00034	-.00198	256.29	.00102	.01139	-.00098	5.1595	.00143
#2	49.010	.31259	.00643	.10855	-.00077	-.00099	255.72	.00103	.01198	.00176	4.8781	.00637
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00344**	**.09738**	**.20839**	**.00091**	**.00257**	**5.1910**	**.01888**	**.00166**	W **11.017**	**.01376**	**.00100**	**.06363**
Stddev	.01226	.03826	.08188	.00141	.00037	.0161	.00038	.00470	.042	.00047	.00021	.00109
%RSD	356.59	39.292	39.292	156.12	14.566	.30945	2.0304	282.55	.37910	3.3986	20.949	1.7061
#1	.01211	.12443	.26628	-.00009	.00283	5.2023	.01860	.00499	11.046	.01343	.00114	.06286
#2	-.00523	.07032	.15049	.00191	.00231	5.1796	.01915	-.00166	10.987	.01409	.00085	.06439
Check ?	None	None	None	None	None	Chk Pass	None	None	Chk Warn	None	None	None
Value									10.000			
Range									5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2576.8**	**46651.**	**5613.9**
Stddev	5.9	126.	41.2
%RSD	.22928	.27110	.73357
#1	2572.6	46561.	5584.7
#2	2581.0	46740.	5643.0

Sample Name: CCV-4580817 Acquired: 6/13/2017 7:27:56 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51941**	F **.65036**	**1.0789**	W **.55094**	**.48498**	**.51803**	**.00440**	**4.9644**	**.51491**	**.50752**	**.48642**	**.50351**
Stddev	.00259	.02218	.0269	.01488	.00025	.00117	.00186	.0076	.01408	.01415	.01514	.00184
%RSD	.49825	3.4106	2.4927	2.7011	.05162	.22594	42.312	.15268	2.7337	2.7885	3.1126	.36564
#1	.52124	.66605	1.0979	.56147	.48516	.51720	.00308	4.9698	.52486	.51752	.49713	.50481
#2	.51758	.63468	1.0599	.54042	.48481	.51885	.00572	4.9591	.50495	.49751	.47572	.50221
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.50000		.50000								
Range		10.490%		10.000%								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5934**	**51.884**	**1.0759**	**21.024**	**.53303**	**.47975**	F **5.6662**	**.50776**	**1.0785**	**1.0175**	**.19603**	**1.0490**
Stddev	.0153	.020	.0021	.058	.00116	.01524	.0549	.01539	.0311	.0273	.00427	.0287
%RSD	.59047	.03912	.19749	.27658	.21726	3.1770	.96919	3.0317	2.8791	2.6849	2.1801	2.7377
#1	2.6043	51.869	1.0774	21.066	.53385	.49053	5.7051	.51865	1.1005	1.0368	.19905	1.0693
#2	2.5826	51.898	1.0744	20.983	.53221	.46898	5.6274	.49688	1.0565	.99819	.19301	1.0287
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							5.0000					
Range							10.490%					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0942**	**5.1420**	**11.004**	**.98574**	**.52963**	**.00547**	**.53524**	F **1.1662**	**.01913**	**.51130**	**.54492**	**.48421**
Stddev	.0179	.0410	.088	.02748	.00145	.00047	.00201	.0322	.00279	.00255	.00451	.00077
%RSD	1.6371	.79765	.79765	2.7878	.27412	8.5942	.37600	2.7622	14.561	.49931	.82830	.15892
#1	1.1068	5.1130	10.942	1.0052	.52861	.00514	.53666	1.1889	.02110	.51310	.54811	.48476
#2	1.0815	5.1710	11.066	.96631	.53066	.00581	.53382	1.1434	.01716	.50949	.54173	.48367
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
Value								1.0000				
Range								10.490%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2642.0**	**48125.**	**5648.9**
Stddev	7.1	141.	14.6
%RSD	.26849	.29235	.25910
#1	2636.9	48025.	5659.3
#2	2647.0	48224.	5638.6

Sample Name: CCB Acquired: 6/13/2017 7:30:25 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00220**	**.03519**	**-.00030**	W **.03683**	**.00007**	**.00018**	**.00445**	**.05863**	**.00004**	**.00074**	**-.00013**	**.00291**
Stddev	.00043	.04156	.00246	.02275	.00022	.00006	.00590	.00461	.00040	.00037	.00026	.00074
%RSD	19.394	118.12	819.62	61.779	324.73	35.169	132.54	7.8623	971.26	49.455	196.79	25.303
#1	-.00190	.06458	.00144	.05292	-.00009	.00023	.00863	.06189	.00032	.00100	.00005	.00343
#2	-.00250	.00580	-.00204	.02074	.00022	.00014	.00028	.05537	-.00024	.00048	-.00031	.00239
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01500								
Low Limit				-.01500								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00742**	**.14905**	W **.00572**	W **.05053**	**.00093**	**.00099**	W **.37165**	**.00086**	**.00734**	**.00334**	F **.73833**	**.00104**
Stddev	.00277	.01689	.00094	.02238	.00029	.00074	.00692	.00044	.01271	.00247	.80452	.00032
%RSD	37.320	11.330	16.365	44.292	31.554	74.501	1.8625	50.950	173.22	73.907	108.97	30.336
#1	.00937	.13711	.00505	.03470	.00072	.00152	.37655	.00117	.01633	.00508	1.3072	.00082
#2	.00546	.16099	.00638	.06635	.00114	.00047	.36676	.00055	-.00165	.00159	.16945	.00127
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit			.00500	.04000			.35000				.10000	
Low Limit			-.01000	-.04000			-.35000				-.20000	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00368**	**.01360**	**.02910**	**.00149**	**.00096**	**-.00344**	**.00010**	**.00648**	**.02979**	**-.00055**	**.00085**	**.00235**
Stddev	.00713	.02471	.05287	.00257	.00009	.00051	.00008	.00299	.00834	.00012	.00003	.00088
%RSD	193.57	181.67	181.67	173.12	9.8332	14.930	76.286	46.219	28.001	21.899	4.0003	37.345
#1	-.00136	-.00387	-.00828	.00331	.00102	-.00381	.00005	.00859	.03569	-.00064	.00088	.00297
#2	.00872	.03107	.06649	-.00033	.00089	-.00308	.00015	.00436	.02389	-.00047	.00083	.00173
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2686.4**	**49529.**	**5690.8**
Stddev	1.8	126.	17.3
%RSD	.06737	.25359	.30361
#1	2685.1	49441.	5678.6
#2	2687.6	49618.	5703.0

Sample Name: CCVL-4589022 Acquired: 6/13/2017 7:33:03 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00858**	F **.13630**	F **.02138**	**.11584**	**.00991**	**.00101**	**.12291**	**.24573**	**.00506**	**.01035**	**.00979**	**.01806**
Stddev	.00014	.00310	.01120	.00447	.00042	.00001	.00456	.00867	.00058	.00074	.00051	.00003
%RSD	1.6086	2.2771	52.413	3.8574	4.2094	1.0665	3.7077	3.5286	11.479	7.1360	5.2324	.16658
#1	.00867	.13849	.02930	.11900	.00962	.00100	.12613	.25187	.00547	.01088	.01016	.01808
#2	.00848	.13410	.01345	.11268	.01021	.00101	.11969	.23960	.00465	.00983	.00943	.01804
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000	.01500									
Range		30.000%	30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.86128**	**3.2679**	F **.02780**	**.23854**	F **.01600**	**.01850**	F **1.3594**	**.04204**	**3.0742**	**.01029**	F **.21995**	**.02069**
Stddev	.00152	.0748	.00104	.00142	.00005	.00055	.0001	.00135	.1067	.00008	.00749	.00331
%RSD	.17614	2.2894	3.7297	.59384	.28738	2.9758	.00732	3.2149	3.4723	.77895	3.4033	16.024
#1	.86235	3.2150	.02853	.23954	.01603	.01889	1.3593	.04299	3.1497	.01035	.22524	.02303
#2	.86021	3.3208	.02707	.23754	.01597	.01811	1.3594	.04108	2.9987	.01023	.21465	.01834
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value	.10000		.02000		.01000		1.0000				.10000	
Range	30.000%		30.000%		30.000%		30.000%				30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02587**	**.48794**	**1.0442**	**.09693**	**.01140**	**.01318**	**.01012**	F **.02045**	F **.08384**	**.00907**	**.02294**	**.01584**
Stddev	.00243	.01649	.0353	.00415	.00020	.00024	.00002	.00666	.00798	.00012	.00035	.00113
%RSD	9.3905	3.3795	3.3795	4.2798	1.7401	1.8257	.19185	32.565	9.5227	1.3494	1.5369	7.1467
#1	.02415	.49960	1.0692	.09986	.01154	.01301	.01013	.02516	.08949	.00915	.02269	.01664
#2	.02759	.47628	1.0192	.09399	.01126	.01335	.01010	.01574	.07820	.00898	.02319	.01504
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value								.01500	.06000			
Range								30.000%	30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2723.6**	**50336.**	**5867.7**
Stddev	4.2	49.	42.1
%RSD	.15409	.09745	.71797
#1	2726.5	50301.	5897.5
#2	2720.6	50371.	5837.9

TestAmerica Denver

ICP Data Review Checklist

TestAmerica

LIMS Batch Number(s): 370355/54	Filename(s): 25B061217	Instrument ID (circle one): ICP25 ICP25
Analyst(s)/ Reviewer/Date: BJD 6/13/17		Method (circle): 200.7 6010B 6010C
		QC Type (circle): Standard DoD Q4 DoD Q5 QAPP Other
Matrix (circle): Water Solid Leachate		Circle: Total TR FD Dissolved

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
A. Calibration/Instrument Run QC					
1. Instrument calibrated per lab SOP?	✓			✓	
2. Reanalysis of Calibration Standards before samples: 95-105% recovery	✓			✓	
3. ICB/CCB: run before samples, 10% frequency, & closing Result ≤ ½ RL (routine) Result ≤ LOD/2x MDL (DoD or special project)	✓			✓	If no, list details:
4. ICV/CCV: frequency initial, 10%, & closing 90-110% recovery, 5% RSD (6010) 95-105% recovery, 3% RSD (200.7)	✓			✓	If no, list details:
5. ICVL/CCVL: 70-130% recovery (6010C)	✓			✓	If no, list details:
6. ICSA/ICSAB: run before samples ICSA detections for non-spiked elements ≤ | 2x RL | (≤LOD/2x MDL for DoD or special project) ICSAB for spiked elements 80-120% If no, list analytes:	✓			✓	☐ Results outside limits due to contamination. ☐ Concentration of affected analyte in sample is less than RL.
7. RL level check standard (CRI): 50-150% (routine) 80-120% recovery (DoD or special projects)	✓			✓	If no, list details:
B. Client Sample and QC Sample Results					
1. Samples with target element concentrations > 90% linear range diluted and reanalyzed? (200.7)	✓			✓	Comments:
2. Were all hits reported from a run with interfering elements < linear range? (L Flags investigated?)	✓			✓	Comments:
3. Internal standard (IS) response ± 30% of ICB IS? If no, list details:	✓			✓	☐ High IS response. Sample(s) rerun at dilution. ☐ Low IS response. Sample(s) rerun at dilution.
C. Preparation/Matrix QC					
1. Method Blank: one per preparation batch result < ½ RL (routine)		✓		✓	☐ No analyte > RL in associated samples ☐ Sample results >10x blank ☐ Insufficient sample for reanalysis
2. LCS: one per preparation batch 80-120% recovery or historical (routine) 85-115% recovery or historical (200.7); project limits (other)		✓		✓	☐ Insufficient sample for reanalysis ☐ LCS %R > QC limits & samples < RL
3. MS/MSD or MS/Dup frequency: a pair per batch (routine) a pair per 10 samples (200.7)	✓			✓	☐ Insufficient sample – LCS/LCSD analyzed
C. Preparation/Matrix QC (cont.)					
4. MS/MSD recovery & RPD: 75-125% recovery or historical (routine) 70-130% recovery or historical (200.7) 20% RPD project limits (other)		✓		✓	☐ LCS acceptable – matrix effects ☐ Native analyte > 4x spike level ☐ Matrix effect and native analyte > 4x spike

TestAmerica Denver

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
5. If TCLP MS <50% and sample result 80-106% of toxicity characteristic limit, was MSA run?	✓			✓	Comments:
6. Serial dilution: present for each prep batch (routine) Required if MS/MSD fail (DoD/Q5) run at 5x dilution of parent sample ≤ 10% difference	✓			✓	☐ Sample result < 50 x MDL
7. Post digestion spike: Required if MS/MSD fail (DoD and 6010C) or by client request 75-125% recovery	✓			✓	
D. Raw Data & TALS Data Entry					
1. TALS Sample List Tab	✓			✓	
a. LIMS Sample IDs / Containers are correct	✓			✓	
b. Method and matrix are correct	✓			✓	
c. Date and time are correct	✓			✓	
d. Dilutions are correct	✓			✓	
e. Correct suffix designated; e.g., DU, (where applicable)	✓			✓	
2. TALS Sample Results Tab	✓			✓	
a. All reported analytes are marked Primary or Secondary	✓			✓	
b. All unused data are marked Rejected or Accepted. Unused data are clearly identified with reason not used	✓			✓	
c. Out of control QC is clearly identified	✓			✓	
d. Any data that has a qualifier is reviewed with appropriate action taken (NCM if needed)	✓			✓	
e. The attached data file includes the filename, instrument, and analyst initials	✓			✓	
3. TALS Worksheet Tab is complete and correct	✓			✓	
4. TALS Reagent Tab is complete and correct	✓			✓	
5. TALS QC Links Tab is correct	✓			✓	
6. TALS Batch Information Screen documentation is complete	✓			✓	
7. TALS Status set to appropriate review level	✓			✓	
E. Final Report and NCMs (2nd level review only)					
1. Were all job/project requirements met?				✓	
2. Results for samples and QC correct on final report?				✓	
3. Are all necessary scanned documents in TALS?				✓	
4. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?				✓	
5. Raw Data PDF attached as document				✓	

Comments:

2nd Reviewer: [signature]

Review Date: 6/13/17

Sample Name: ICIS Acquired: 6/13/2017 8:02:50 Type: Cal
Method: 6500_025(v3) Mode: IR Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00163**	**.00212**	**-.01349**	**-.00028**	**.00075**	**.00772**	**-.00005**	**-.00229**	**.01042**	**-.00153**	**.00013**	**-.00024**
Stddev	.00011	.00002	.00055	.00000	.00019	.00217	.00016	.00053	.00075	.00012	.00021	.00001
%RSD	6.8339	.74036	4.0809	.02381	25.132	28.145	294.35	23.215	7.1891	7.5336	159.36	5.1713
#1	-.00171	.00211	-.01310	-.00028	.00062	.00618	.00006	-.00266	.01095	-.00145	-.00002	-.00025
#2	-.00155	.00213	-.01388	-.00028	.00088	.00926	-.00017	-.00191	.00989	-.00161	.00029	-.00023

Elem	Cu3247	Fe2599	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00675**	**-.00013**	**-.00004**	**-.00507**	**-.00115**	**.00011**	**.00007**	**-.00037**	**.01536**	**-.00807**	**.00203**	**-.00006**
Stddev	.00016	.00009	.00022	.00048	.00185	.00013	.00012	.00027	.00174	.00157	.00005	.00019
%RSD	2.4274	64.726	496.29	9.5426	161.49	117.44	166.49	72.435	11.349	19.458	2.6886	304.85
#1	.00687	-.00007	.00011	-.00473	-.00246	.00021	.00016	-.00018	.01413	-.00918	.00199	.00007
#2	.00664	-.00019	-.00020	-.00542	.00016	.00002	-.00001	-.00056	.01660	-.00696	.00207	-.00020

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00085**	**.00127**	**-.00012**	**.00045**	**.00028**	**.00028**	**.00014**	**-.00802**	**-.00053**	**.00001**	**-.00027**	**.00096**
Stddev	.00053	.00003	.00014	.00001	.00009	.00009	.00006	.00007	.00012	.00002	.00006	.00033
%RSD	62.713	2.0828	118.05	3.0849	33.028	33.028	42.069	.85432	22.101	110.41	21.343	34.301
#1	-.00047	.00126	-.00002	.00044	.00021	.00021	.00010	-.00797	-.00061	.00003	-.00031	.00120
#2	-.00122	.00129	-.00022	.00046	.00034	.00034	.00018	-.00807	-.00045	.00000	-.00023	.00073

Elem	V_2924	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S
Avg	**-.00039**	**.00003**	**-.00032**
Stddev	.00014	.00001	.00004
%RSD	36.034	28.714	13.008
#1	-.00049	.00004	-.00029
#2	-.00029	.00003	-.00035

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2558.0**	**47771.**	**5652.8**
Stddev	1.7	344.	12.6
%RSD	.06621	.71926	.22291
#1	2559.2	48014.	5643.9
#2	2556.8	47528.	5661.7

Sample Name: ICAL1 Acquired: 6/13/2017 8:05:29 Type: Cal
Method: 6500_025(v3) Mode: IR Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.23973**	**.16346**	**.06230**	**.25151**	**5.0597**	**5.6763**	**1.4578**	**1.6885**	**.95341**	**.74296**	**.27943**	**.54259**	**2.8854**
Stddev	.00050	.00293	.00163	.00405	.0136	.0075	.0008	.0305	.01669	.01591	.00051	.00002	.0019
%RSD	.20836	1.7903	2.6153	1.6101	.26957	.13127	.05696	1.8071	1.7507	2.1418	.18373	.00379	.06410
#1	.24008	.16553	.06345	.25438	5.0500	5.6710	1.4573	1.7101	.96521	.75421	.27979	.54260	2.8841
#2	.23938	.16139	.06115	.24865	5.0693	5.6816	1.4584	1.6670	.94161	.73170	.27906	.54257	2.8867

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.5506**	**.82398**	**1.1378**	**.34990**	**1.3092**	**.64070**	**.08914**	**.42853**	**.15959**	**.05601**	**.23065**	**.23065**	**.15232**
Stddev	.0004	.00446	.0059	.00540	.0041	.01166	.00224	.00764	.00274	.00104	.00038	.00038	.00270
%RSD	.02894	.54112	.52134	1.5427	.31490	1.8196	2.5181	1.7830	1.7177	1.8557	.16535	.16535	1.7724
#1	1.5503	.82713	1.1420	.35372	1.3063	.64895	.09073	.43393	.16153	.05675	.23038	.23038	.15423
#2	1.5509	.82083	1.1336	.34608	1.3121	.63246	.08755	.42313	.15765	.05528	.23092	.23092	.15042

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**9.2049**	**.35880**	**.11453**	**.20446**	**.02005**	**.31562**
Stddev	.0141	.00212	.00152	.00099	.00025	.00061
%RSD	.15283	.59098	1.3247	.48218	1.2431	.19302
#1	9.1950	.36030	.11561	.20516	.02023	.31605
#2	9.2149	.35730	.11346	.20377	.01988	.31519

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2507.7**	**45750.**	**5536.2**
Stddev	3.7	232.	5.0
%RSD	.14566	.50728	.08994
#1	2505.1	45586.	5532.7
#2	2510.2	45914.	5539.7

Sample Name: ICAL2 Acquired: 6/13/2017 8:07:54 Type: Cal
Method: 6500_025(v3) Mode: IR Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Al3092	Bi2230	Fe2714	Na8183	S_1820	Th2837	U_3701
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.9211**	**.24457**	**.56793**	**1.9849**	**.18849**	**.52843**	**.14126**
Stddev	.0127	.00597	.00001	.0033	.00398	.00023	.00038
%RSD	.32295	2.4411	.00120	.16517	2.1131	.04418	.26739
#1	3.9300	.24879	.56794	1.9872	.19130	.52859	.14152
#2	3.9121	.24035	.56793	1.9826	.18567	.52826	.14099

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2510.8**	**45823.**	**5712.2**
Stddev	2.6	151.	18.0
%RSD	.10508	.33023	.31442
#1	2512.7	45930.	5699.5
#2	2508.9	45716.	5724.9

Sample Name: S1-4580816 Acquired: 6/13/2017 8:10:34 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0020**	**1.0045**	**2.0016**	**1.0076**	**1.0065**	**1.0021**	**-.00792**	**10.047**	**1.0037**	**1.0046**	**1.0096**	**1.0072**	**5.0240**
Stddev	.0022	.0150	.0135	.0085	.0019	.0041	.00030	.027	.0139	.0146	.0140	.0007	.0290
%RSD	.22009	1.4985	.67235	.84175	.18725	.41303	3.7658	.26807	1.3822	1.4527	1.3873	.07049	.57778
#1	1.0036	1.0152	2.0111	1.0136	1.0078	1.0050	-.00813	10.066	1.0135	1.0150	1.0195	1.0067	5.0445
#2	1.0004	.99390	1.9921	1.0016	1.0052	.99913	-.00771	10.028	.99388	.99432	.99973	1.0077	5.0034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**100.35**	**1.9897**	**39.865**	**.99515**	**1.0107**	**10.136**	**10.461**	**1.0056**	**2.0120**	**2.0150**	**-.01874**	**2.0120**	**2.0089**
Stddev	.20	.0071	.033	.00058	.0143	.016	.158	.0144	.0129	.0219	.00122	.0353	.0347
%RSD	.19460	.35536	.08204	.05806	1.4110	.15463	1.5086	1.4306	.63922	1.0859	6.5235	1.7556	1.7294
#1	100.49	1.9947	39.842	.99556	1.0208	10.147	10.350	1.0158	2.0211	2.0304	-.01788	2.0370	2.0334
#2	100.21	1.9847	39.888	.99474	1.0006	10.125	10.573	.99544	2.0029	1.9995	-.01960	1.9870	1.9843
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value													
Range													

Elem	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.9208**	**21.231**	**2.0205**	**.99954**	**.01603**	**.99242**	**1.9859**	**-.01522**	**.99574**	**.99690**	**1.0099**
Stddev	.0524	.112	.0303	.00402	.00105	.00152	.0254	.00735	.00233	.00201	.0035
%RSD	.52854	.52854	1.4997	.40202	6.5420	.15352	1.2809	48.307	.23414	.20155	.34463
#1	9.9579	21.310	2.0419	1.0024	.01677	.99350	2.0039	-.01002	.99739	.99548	1.0123
#2	9.8837	21.151	1.9991	.99670	.01529	.99134	1.9679	-.02042	.99409	.99832	1.0074
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value											
Range											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2551.8**	**46807.**	**5709.5**
Stddev	9.4	48.	19.3
%RSD	.36936	.10247	.33812
#1	2558.4	46773.	5695.9
#2	2545.1	46841.	5723.2

Sample Name: S2-4579428 Acquired: 6/13/2017 8:12:58 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00371**	**99.709**	**-.00904**	**.00641**	**.00064**	**.00078**	**1.9830**	**.00464**	**.00102**	**-.00159**	**.00080**	**.03179**	**100.49**
Stddev	.00012	.153	.00054	.00082	.00052	.00010	.0541	.00157	.00024	.00012	.00029	.00053	.01
%RSD	3.2352	.15295	6.0192	12.763	81.213	13.239	2.7291	33.776	23.748	7.6971	35.995	1.6824	.00871
#1	.00379	99.601	-.00866	.00583	.00100	.00086	2.0213	.00575	.00085	-.00150	.00101	.03141	100.50
#2	.00362	99.817	-.00943	.00699	.00027	.00071	1.9448	.00354	.00120	-.00168	.00060	.03217	100.49
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.17803**	**.00360**	**.06704**	**-.00369**	**-.00357**	**499.77**	**.00189**	**.01110**	**.00026**	**10.046**	**.00895**	**-.01463**	**-.03222**
Stddev	.05723	.00040	.00392	.00015	.00070	.56	.00135	.00457	.00434	.260	.00189	.00479	.00266
%RSD	32.147	11.135	5.8400	3.9600	19.490	.11161	71.245	41.139	1700.3	2.5920	21.110	32.769	8.2436
#1	.13756	.00388	.06428	-.00359	-.00406	500.16	.00284	.01433	.00332	10.230	.00761	-.01802	-.03410
#2	.21849	.00331	.06981	-.00380	-.00308	499.37	.00094	.00787	-.00281	9.8615	.01029	-.01124	-.03034
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.06895**	**.00140**	**.00098**	**9.8728**	**.03500**	**.00374**	**19.765**	**.02706**	**.00332**	**.18486**
Stddev	.00568	.00052	.00003	.0457	.00031	.00216	.032	.00088	.00033	.00313
%RSD	8.2436	37.250	3.2708	.46252	.89320	57.632	.16369	3.2489	9.9088	1.6920
#1	-.07297	.00176	.00095	9.9051	.03477	.00526	19.788	.02768	.00356	.18707
#2	-.06493	.00103	.00100	9.8405	.03522	.00222	19.742	.02644	.00309	.18265
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2494.8**	**45263.**	**5568.3**
Stddev	5.0	216.	10.4
%RSD	.19960	.47698	.18628
#1	2498.4	45110.	5575.6
#2	2491.3	45416.	5560.9

Sample Name: ICVH-4589660 Acquired: 6/13/2017 8:15:38 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00078**	**40.190**	**-.00093**	**.00130**	**.00058**	**.00018**	**.51966**	**-.00069**	**.00032**	**.00052**	**.00078**	**.00838**	**79.513**
Stddev	.00056	.208	.00139	.00009	.00013	.00016	.01423	.00070	.00008	.00036	.00041	.00037	.473
%RSD	72.569	.51859	148.57	7.0986	21.840	86.236	2.7384	100.87	24.863	69.215	52.808	4.4487	.59549
#1	.00118	40.338	-.00192	.00137	.00049	.00007	.52972	-.00119	.00026	.00078	.00049	.00812	79.848
#2	.00038	40.043	.00005	.00124	.00067	.00030	.50959	-.00020	.00038	.00027	.00107	.00865	79.178
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06198**	**.00116**	**.02080**	**-.00119**	**-.00153**	**41.583**	**-.00019**	**.00558**	**-.00230**	**3.9326**	**.00660**	**-.00209**	**-.00476**
Stddev	.01653	.00160	.00050	.00001	.00040	.261	.00026	.00418	.00139	.1192	.00427	.00544	.00032
%RSD	26.667	138.01	2.3970	.75031	25.913	.62680	139.55	74.969	60.415	3.0319	64.695	260.32	6.6208
#1	.05029	.00003	.02044	-.00120	-.00125	41.767	-.00000	.00854	-.00328	4.0169	.00963	.00176	-.00454
#2	.07367	.00229	.02115	-.00118	-.00181	41.399	-.00037	.00262	-.00132	3.8483	.00358	-.00593	-.00499
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01019**	**.00026**	**.00017**	**2.9697**	**.00960**	**.00198**	**5.1321**	**.00742**	**.00186**	**.05203**
Stddev	.00067	.00025	.00008	.0065	.00009	.00023	.0206	.00009	.00062	.00032
%RSD	6.6208	99.125	50.138	.21874	.96146	11.625	.40170	1.2260	33.402	.61959
#1	-.00972	.00008	.00023	2.9743	.00953	.00181	5.1176	.00736	.00142	.05226
#2	-.01067	.00044	.00011	2.9651	.00966	.00214	5.1467	.00749	.00229	.05180
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2588.2**	**47438.**	**5577.4**
Stddev	8.4	64.	20.5
%RSD	.32462	.13387	.36794
#1	2594.2	47483.	5562.9
#2	2582.3	47393.	5591.9

Sample Name: ICVH-4589660 Acquired: 6/13/2017 8:18:14 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00026**	**40.193**	**-.00531**	**.00108**	**.00049**	**.00015**	**.52008**	**-.00149**	**.00039**	**.00067**	**.00089**	**.00872**	**79.697**
Stddev	.00078	.213	.00006	.00007	.00005	.00005	.01106	.00138	.00015	.00036	.00007	.00017	.025
%RSD	297.34	.52893	1.1757	6.8948	10.737	35.397	2.1261	92.841	39.297	54.479	7.4318	1.9293	.03130
#1	-.00029	40.042	-.00526	.00114	.00052	.00011	.52790	-.00246	.00050	.00093	.00094	.00861	79.714
#2	.00082	40.343	-.00535	.00103	.00045	.00019	.51226	-.00051	.00028	.00041	.00085	.00884	79.679
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02861**	**.00051**	**.01606**	**-.00108**	**-.00191**	**41.272**	**.00003**	**.00557**	**-.00190**	**3.9645**	**.00793**	**-.00849**	**.00762**
Stddev	.02585	.00290	.01098	.00005	.00125	.167	.00051	.00086	.00066	.0981	.00483	.00539	.00266
%RSD	90.350	569.00	68.393	4.4783	65.201	.40405	1719.9	15.459	34.658	2.4743	60.853	63.527	34.833
#1	.01033	.00256	.02383	-.00111	-.00280	41.154	-.00033	.00618	-.00144	4.0339	.00452	-.01231	.00950
#2	.04689	-.00154	.00829	-.00105	-.00103	41.390	.00039	.00496	-.00237	3.8952	.01135	-.00468	.00575
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01631**	**.00043**	**.00018**	**2.9692**	**.00987**	**.00464**	**5.0970**	**.00743**	**.00119**	**.05351**
Stddev	.00568	.00069	.00013	.0131	.00023	.00255	.0109	.00056	.00008	.00204
%RSD	34.833	162.06	69.329	.44259	2.3742	54.876	.21457	7.5368	6.7370	3.8068
#1	.02033	.00091	.00027	2.9785	.01004	.00644	5.0893	.00704	.00124	.05207
#2	.01230	-.00006	.00009	2.9599	.00971	.00284	5.1047	.00783	.00113	.05495
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2574.3**	**46957.**	**5509.2**
Stddev	15.4	92.	95.8
%RSD	.59764	.19557	1.7380
#1	2563.4	47022.	5576.9
#2	2585.2	46892.	5441.5

Sample Name: ICV-4589565 Acquired: 6/13/2017 8:27:38 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25537**	F **.28091**	**.26310**	**.26221**	**.25553**	**.25025**	**.00006**	**2.0261**	**.26237**	**.26089**	**.26266**	**.25728**
Stddev	.00064	.00046	.00281	.00172	.00037	.00049	.00226	.0042	.00020	.00139	.00107	.00093
%RSD	.25153	.16476	1.0665	.65717	.14382	.19655	3846.2	.20644	.07484	.53454	.40587	.36274
#1	.25491	.28124	.26509	.26099	.25527	.25060	.00166	2.0291	.26251	.26188	.26342	.25662
#2	.25582	.28059	.26112	.26343	.25579	.24990	-.00154	2.0232	.26223	.25991	.26191	.25794
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.25000										
Range		10.490%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.31247**	**20.680**	**.25702**	**10.254**	**.25586**	**.24754**	**2.0138**	**.26290**	**2.0477**	W **.26707**	**-.02107**	W **.27098**
Stddev	.00172	.009	.00082	.002	.00025	.00187	.0046	.00001	.0004	.00210	.00980	.00349
%RSD	.54962	.04439	.32085	.01985	.09803	.75662	.22792	.00404	.01998	.78684	46.491	1.2891
#1	.31368	20.687	.25760	10.255	.25604	.24886	2.0106	.26291	2.0480	.26856	-.01414	.26851
#2	.31125	20.674	.25643	10.252	.25569	.24621	2.0171	.26289	2.0474	.26559	-.02800	.27345
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	None	Chk Warn
Value	.25000									.25000		.25000
Range	10.490%									5.4900%		5.4900%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51902**	**1.9901**	**4.2587**	**.52478**	**.25122**	**.00752**	**.24250**	W **.54708**	**-.05532**	**.24807**	**.24850**	**.24642**
Stddev	.00211	.0601	.1286	.00077	.00021	.00033	.00043	.00595	.00440	.00260	.00071	.00075
%RSD	.40708	3.0200	3.0200	.14680	.08321	4.4261	.17557	1.0868	7.9477	1.0497	.28564	.30521
#1	.51753	2.0326	4.3497	.52532	.25107	.00729	.24280	.54287	-.05843	.24991	.24800	.24589
#2	.52052	1.9476	4.1678	.52424	.25137	.00776	.24220	.55128	-.05221	.24622	.24900	.24695
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	None	Chk Pass	Chk Pass	Chk Pass
Value								.50000				
Range								5.4900%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2578.0**	**48065.**	**5682.5**
Stddev	3.2	419.	3.3
%RSD	.12417	.87203	.05851
#1	2575.7	48362.	5684.8
#2	2580.3	47769.	5680.1

Sample Name: ICV-4589565 Acquired: 6/13/2017 8:32:33 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25487**	W **.27176**	**.25643**	**.26223**	**.25517**	**.24953**	**.00151**	**2.0231**	**.26193**	**.26007**	**.26217**	**.25732**
Stddev	.00147	.00125	.00160	.00197	.00084	.00005	.00253	.0008	.00033	.00026	.00098	.00099
%RSD	.57517	.46122	.62361	.74980	.32786	.01865	167.50	.04198	.12479	.09934	.37388	.38413
#1	.25591	.27265	.25756	.26084	.25576	.24950	-.00028	2.0225	.26170	.26025	.26286	.25801
#2	.25383	.27088	.25530	.26362	.25458	.24956	.00330	2.0237	.26216	.25989	.26148	.25662
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.25000										
Range		5.4900%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25099**	**20.659**	**.25725**	**10.248**	**.25490**	**.24673**	**1.9955**	**.26182**	**2.0467**	W **.26766**	**-.02394**	W **.26740**
Stddev	.00083	.066	.00067	.013	.00080	.00103	.0090	.00021	.0100	.00099	.00060	.00672
%RSD	.33190	.32042	.26117	.12762	.31353	.41695	.45084	.08053	.48746	.36873	2.5065	2.5147
#1	.25158	20.706	.25772	10.257	.25547	.24746	2.0018	.26168	2.0396	.26696	-.02351	.26265
#2	.25040	20.612	.25677	10.239	.25434	.24601	1.9891	.26197	2.0537	.26835	-.02436	.27216
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	None	Chk Warn
Value										.25000		.25000
Range										5.4900%		5.4900%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.52101**	**2.0318**	**4.3480**	**.52519**	**.24931**	**.00232**	**.24219**	W **.54183**	**-.02149**	**.24856**	**.24960**	**.24779**
Stddev	.00896	.0116	.0249	.00191	.00000	.00184	.00114	.00058	.03344	.00017	.00087	.00151
%RSD	1.7201	.57143	.57143	.36297	.00007	79.284	.47134	.10621	155.59	.06857	.34698	.60943
#1	.52735	2.0400	4.3656	.52384	.24931	.00363	.24299	.54142	-.04513	.24869	.25021	.24672
#2	.51467	2.0236	4.3305	.52653	.24931	.00102	.24138	.54224	.00215	.24844	.24899	.24886
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	None	Chk Pass	Chk Pass	Chk Pass
Value								.50000				
Range								5.4900%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2525.0**	**46891.**	**5399.0**
Stddev	14.1	257.	33.2
%RSD	.55809	.54899	.61503
#1	2515.1	47073.	5375.5
#2	2535.0	46709.	5422.5

Sample Name: ICV-4589565 Acquired: 6/13/2017 8:34:43 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25562**	W **.26841**	**.25425**	**.26232**	**.25485**	**.24647**	**-.00095**	**2.0134**	**.26218**	**.25892**	**.26176**	**.25806**
Stddev	.00020	.00289	.00964	.00110	.00029	.00036	.00153	.0041	.00035	.00007	.00101	.00089
%RSD	.07942	1.0769	3.7910	.41935	.11490	.14405	161.12	.20500	.13265	.02878	.38761	.34380
#1	.25548	.27046	.24743	.26154	.25465	.24622	-.00204	2.0163	.26194	.25887	.26105	.25743
#2	.25576	.26637	.26106	.26310	.25506	.24672	.00013	2.0105	.26243	.25898	.26248	.25869
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.25000										
Range		5.4900%										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25020**	**20.692**	**.25630**	**10.292**	**.25542**	**.24741**	**1.9739**	**.26193**	**2.0476**	W **.26423**	**-.03280**	W **.27289**
Stddev	.00183	.000	.00019	.006	.00069	.00097	.0112	.00139	.0164	.00065	.00077	.00890
%RSD	.73022	.00005	.07368	.06276	.26976	.39089	.56858	.52906	.80207	.24728	2.3401	3.2614
#1	.24891	20.692	.25616	10.297	.25590	.24672	1.9818	.26095	2.0360	.26469	-.03334	.27918
#2	.25149	20.692	.25643	10.288	.25493	.24809	1.9659	.26291	2.0592	.26376	-.03226	.26659
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	None	Chk Warn
Value										.25000		.25000
Range										5.4900%		5.4900%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51963**	**2.0081**	**4.2973**	**.52347**	**.24854**	**.00584**	**.24252**	W **.54174**	**-.01778**	**.24868**	**.25111**	**.24633**
Stddev	.00045	.0101	.0216	.00292	.00011	.00128	.00059	.00015	.02102	.00038	.00169	.00128
%RSD	.08691	.50239	.50239	.55839	.04583	21.997	.24264	.02829	118.26	.15226	.67466	.52093
#1	.51931	2.0152	4.3125	.52140	.24846	.00675	.24211	.54185	-.00291	.24894	.25231	.24724
#2	.51995	2.0009	4.2820	.52554	.24862	.00493	.24294	.54164	-.03264	.24841	.24991	.24543
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Warn	None	Chk Pass	Chk Pass	Chk Pass
Value								.50000				
Range								5.4900%				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2570.4**	**46621.**	**5352.8**
Stddev	71.7	213.	19.4
%RSD	2.7914	.45714	.36177
#1	2519.6	46471.	5366.5
#2	2621.1	46772.	5339.1

Sample Name: ICVL-4590576 Acquired: 6/13/2017 8:38:32 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01067**	**.10545**	**.01056**	**.10383**	**.01031**	**.00093**	**.11711**	**.18975**	**.00559**	**.01035**	**.01024**	**.01361**
Stddev	.00043	.00073	.00544	.00095	.00001	.00007	.00039	.00044	.00021	.00017	.00026	.00051
%RSD	4.0095	.69687	51.556	.91929	.05434	7.0525	.33541	.23132	3.7372	1.6126	2.5325	3.7165
#1	.01037	.10493	.00671	.10315	.01030	.00089	.11683	.19006	.00544	.01047	.01006	.01397
#2	.01098	.10597	.01441	.10450	.01031	.00098	.11739	.18944	.00573	.01023	.01042	.01326
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10583**	**3.1206**	**.02190**	**.20670**	**.01046**	**.01935**	**.95934**	**.04191**	**2.9153**	**.00710**	**.07039**	**.02027**
Stddev	.00442	.0337	.00064	.00328	.00011	.00050	.01282	.00032	.0005	.00025	.00392	.00248
%RSD	4.1772	1.0792	2.9332	1.5882	1.0557	2.5715	1.3363	.75321	.01850	3.5226	5.5637	12.249
#1	.10896	3.1444	.02236	.20902	.01039	.01970	.95028	.04169	2.9157	.00728	.06762	.02202
#2	.10271	3.0968	.02145	.20438	.01054	.01899	.96841	.04213	2.9150	.00692	.07316	.01851
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01447**	**.49380**	**1.0567**	**.10216**	**.00989**	**.01664**	**.00903**	**.01853**	F **.03322**	**.00966**	**.01962**	**.01650**
Stddev	.00810	.00402	.0086	.00089	.00009	.00256	.00009	.00225	.00428	.00005	.00147	.00114
%RSD	55.962	.81438	.81438	.87505	.91710	15.368	.96254	12.162	12.875	.56540	7.4776	6.9234
#1	.00875	.49095	1.0506	.10279	.00983	.01484	.00897	.02013	.03019	.00962	.01859	.01569
#2	.02020	.49664	1.0628	.10153	.00996	.01845	.00909	.01694	.03624	.00969	.02066	.01731
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2633.0**	**49824.**	**5651.9**
Stddev	5.0	82.	25.8
%RSD	.18836	.16446	.45628
#1	2629.5	49882.	5633.7
#2	2636.5	49766.	5670.1

Sample Name: CCVH-4579429 Acquired: 6/13/2017 8:44:15 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00208**	**48.507**	**-.01002**	**.00183**	**.00047**	**.00016**	**1.0048**	**-.01018**	**.00095**	**-.00089**	**-.00024**	**.01467**	**49.671**
Stddev	.00004	.053	.00498	.00171	.00024	.00012	.0208	.00250	.00000	.00012	.00034	.00068	.060
%RSD	1.7735	.10880	49.766	93.516	51.272	78.394	2.0700	24.522	.06542	13.597	144.22	4.6558	.12102
#1	.00210	48.545	-.01354	.00304	.00065	.00007	.99011	-.00841	.00095	-.00098	.00000	.01516	49.628
#2	.00205	48.470	-.00649	.00062	.00030	.00025	1.0195	-.01195	.00095	-.00080	-.00048	.01419	49.713
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.08578**	**.00483**	**.03526**	**-.00211**	**-.00184**	**245.84**	**.00079**	**.00666**	**-.00213**	**4.9941**	**.00554**	**-.00447**	**-.01350**
Stddev	.05999	.00374	.00111	.00009	.00046	.81	.00089	.00016	.00081	.1418	.00077	.00186	.00043
%RSD	69.932	77.427	3.1427	4.1481	24.963	.32967	112.56	2.4537	37.993	2.8385	13.880	41.500	3.1558
#1	.12820	.00748	.03447	-.00217	-.00217	245.27	.00016	.00655	-.00156	4.8939	.00500	-.00578	-.01320
#2	.04336	.00219	.03604	-.00205	-.00152	246.42	.00143	.00678	-.00270	5.0944	.00608	-.00316	-.01380
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.02890**	**.00038**	**.00026**	**4.8433**	**.01719**	**.00244**	**9.9052**	**.01388**	**.00021**	**.08312**
Stddev	.00091	.00197	.00043	.0149	.00028	.00248	.0228	.00083	.00080	.00415
%RSD	3.1558	521.66	161.86	.30714	1.6431	101.62	.23057	5.9736	379.83	4.9967
#1	-.02825	.00177	.00056	4.8328	.01699	.00419	9.8890	.01447	.00077	.08605
#2	-.02954	-.00102	-.00004	4.8539	.01739	.00069	9.9213	.01329	-.00035	.08018
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2510.8**	**44502.**	**5278.3**
Stddev	16.1	191.	3.0
%RSD	.64033	.42945	.05707
#1	2499.4	44637.	5280.5
#2	2522.1	44367.	5276.2

Sample Name: CCV-4580817 Acquired: 6/13/2017 8:46:49 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49974**	**.50949**	**.97292**	**.50417**	**.50100**	**.48301**	**.00015**	**5.0479**	**.50231**	**.50177**	**.50080**	**.50295**	**2.4532**
Stddev	.00048	.00554	.00636	.00596	.00127	.00096	.00199	.0009	.00685	.00670	.00725	.00205	.0026
%RSD	.09674	1.0883	.65348	1.1820	.25407	.19796	1292.7	.01775	1.3641	1.3355	1.4479	.40768	.10530
#1	.49939	.51341	.97742	.50838	.50010	.48234	.00156	5.0486	.50716	.50651	.50592	.50440	2.4550
#2	.50008	.50557	.96843	.49995	.50190	.48369	-.00125	5.0473	.49747	.49703	.49567	.50150	2.4513
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.051**	**.98462**	**19.816**	**.48754**	**.49996**	**5.0048**	**.50243**	**.99331**	**1.0146**	**-.02028**	**.99522**	**.98377**	**4.8835**
Stddev	.165	.00250	.006	.00024	.00824	.0032	.00767	.01434	.0130	.00586	.01733	.02562	.0084
%RSD	.33036	.25435	.02884	.04918	1.6473	.06303	1.5269	1.4433	1.2850	28.922	1.7418	2.6045	.17287
#1	49.934	.98639	19.820	.48737	.50578	5.0026	.50786	1.0034	1.0238	-.01613	1.0075	1.0019	4.8895
#2	50.168	.98285	19.812	.48771	.49413	5.0071	.49701	.98317	1.0054	-.02443	.98297	.96565	4.8775
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.451**	**1.0153**	**.48094**	**.01064**	**.47719**	**.99564**	**.00278**	**.48691**	**.48149**	**.49747**
Stddev	.018	.0191	.00034	.00165	.00040	.00953	.01558	.00026	.00182	.00415
%RSD	.17287	1.8841	.07116	15.471	.08313	.95761	560.28	.05313	.37709	.83386
#1	10.463	1.0289	.48070	.01181	.47747	1.0024	-.00824	.48673	.48021	.49454
#2	10.438	1.0018	.48119	.00948	.47691	.98890	.01380	.48709	.48277	.50041
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2569.6**	**47587.**	**5600.8**
Stddev	3.7	73.	32.7
%RSD	.14448	.15244	.58334
#1	2572.2	47638.	5577.7
#2	2567.0	47536.	5623.9

Sample Name: ICB Acquired: 6/13/2017 8:49:18 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00070**	**.00089**	**-.00721**	**.00015**	**.00055**	**.00000**	**.00083**	**-.01089**	**.00026**	**.00021**	**-.00033**	**-.00127**	**-.00510**
Stddev	.00053	.00066	.00611	.00033	.00009	.00011	.00375	.00137	.00023	.00015	.00066	.00003	.00218
%RSD	76.269	74.493	84.669	219.37	15.939	4098.7	449.53	12.576	87.082	73.437	200.59	2.0363	42.739
#1	.00032	.00042	-.00290	-.00008	.00061	.00008	-.00182	-.01185	.00010	.00010	.00014	-.00129	-.00664
#2	.00108	.00135	-.01153	.00038	.00048	-.00008	.00349	-.00992	.00042	.00032	-.00079	-.00125	-.00356
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11606**	**.00111**	**.00561**	**.00005**	**.00067**	**-.05654**	**-.00076**	**.00339**	**-.00265**	**-.03916**	**.00229**	**-.00423**	**-.00067**
Stddev	.01538	.00207	.00174	.00003	.00001	.01295	.00047	.00077	.00038	.00707	.00376	.00224	.02578
%RSD	13.250	185.94	30.958	50.559	2.1900	22.909	61.520	22.615	14.454	18.047	164.58	53.056	3832.3
#1	.10519	-.00035	.00683	.00004	.00066	-.04738	-.00109	.00393	-.00238	-.03417	-.00037	-.00264	.01755
#2	.12694	.00257	.00438	.00007	.00068	-.06570	-.00043	.00285	-.00292	-.04416	.00494	-.00582	-.01890
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00144**	**.00298**	**.00026**	**.00337**	**-.00044**	**.00202**	**.00604**	**-.00020**	**-.00075**	**-.00105**
Stddev	.05516	.00091	.00011	.00225	.00002	.00079	.00489	.00041	.00024	.00108
%RSD	3832.3	30.643	43.267	66.746	4.0401	39.129	81.016	205.03	31.622	102.33
#1	.03757	.00233	.00018	.00178	-.00043	.00257	.00950	-.00049	-.00058	-.00181
#2	-.04045	.00363	.00034	.00496	-.00046	.00146	.00258	.00009	-.00091	-.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2566.5**	**48255.**	**5589.2**
Stddev	20.3	286.	22.1
%RSD	.79088	.59199	.39475
#1	2580.8	48457.	5604.8
#2	2552.1	48053.	5573.6

Sample Name: CRI-4590580 Acquired: 6/13/2017 8:52:22 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00882**	**.10596**	F **.00350**	**.10163**	**.00555**	**.00097**	**.11771**	**.19818**	**.00538**	**.00533**	**.01070**	**.00905**
Stddev	.00055	.00055	.00449	.00086	.00051	.00008	.00313	.00218	.00018	.00015	.00031	.00143
%RSD	6.2491	.51637	128.33	.84141	9.2408	8.4243	2.6587	1.0989	3.2598	2.8377	2.9421	15.759
#1	.00843	.10558	.00667	.10224	.00591	.00102	.11993	.19664	.00550	.00544	.01092	.00804
#2	.00921	.10635	.00032	.10103	.00519	.00091	.11550	.19972	.00526	.00523	.01047	.01006
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01000									
Range			-50.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02528**	**1.0923**	**.01148**	**.20573**	**.00296**	**.00962**	**.96806**	**.01059**	**.98887**	F **.00097**	**.08045**	W **.01382**
Stddev	.00135	.0501	.00029	.00316	.00011	.00028	.01373	.00023	.00586	.00061	.00548	.00308
%RSD	5.3242	4.5836	2.5128	1.5364	3.8622	2.8973	1.4182	2.2073	.59241	62.877	6.8086	22.286
#1	.02623	1.0569	.01127	.20349	.00304	.00982	.97776	.01075	.99301	.00054	.07658	.01600
#2	.02433	1.1277	.01168	.20796	.00288	.00942	.95835	.01042	.98473	.00140	.08433	.01164
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Warn
Value										.00300		.01000
Range										-50.000%		20.490%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.00325**	**.48573**	**1.0395**	**.02109**	**.00507**	W **.01380**	**.00899**	W **.01304**	W **.03606**	**.00990**	**.00856**	**.00958**
Stddev	.00544	.03710	.0794	.00059	.00002	.00173	.00003	.00201	.03562	.00096	.00041	.00225
%RSD	167.35	7.6389	7.6389	2.8174	.31740	12.530	.33758	15.396	98.777	9.6629	4.8447	23.532
#1	-.00060	.45950	.98332	.02067	.00508	.01502	.00897	.01446	.01087	.00922	.00827	.00798
#2	.00710	.51197	1.0956	.02151	.00506	.01258	.00901	.01162	.06124	.01058	.00886	.01117
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass
Value	.01000					.01000		.01000	.06000			
Range	-50.000%					20.490%		20.490%	-20.490%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2581.4**	**48032.**	**5371.6**
Stddev	8.5	320.	12.5
%RSD	.32939	.66531	.23297
#1	2575.4	47806.	5380.5
#2	2587.4	48258.	5362.8

Sample Name: CRI- Acquired: 6/13/2017 8:59:11 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: Alt CRI As Pb Sb Se Tl

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00036**	**-.00167**	W **.00759**	**-.00032**	**.00029**	**.00001**	**.00087**	**-.01611**	**.00041**	**.00035**	**.00023**	**-.00220**
Stddev	.00016	.00046	.00267	.00103	.00027	.00002	.00104	.00682	.00002	.00024	.00048	.00023
%RSD	45.271	27.542	35.207	318.18	95.170	160.50	119.28	42.347	5.9990	70.267	212.70	10.580
#1	.00047	-.00199	.00570	-.00105	.00009	-.00000	.00160	-.02093	.00039	.00017	-.00011	-.00236
#2	.00024	-.00134	.00948	.00040	.00048	.00002	.00014	-.01129	.00043	.00052	.00057	-.00203
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00750									
Low Limit			-.01500									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00623**	**.06707**	**.00021**	**-.00302**	**-.00001**	**-.00003**	**-.07548**	**-.00094**	**.00305**	W **.00956**	**-.03409**	W **.00981**
Stddev	.00235	.01210	.00010	.00179	.00002	.00034	.00492	.00080	.00088	.00149	.00263	.00375
%RSD	37.746	18.034	47.488	59.080	253.55	1105.6	6.5141	85.116	28.727	15.573	7.7291	38.221
#1	-.00789	.05852	.00014	-.00429	-.00002	-.00027	-.07200	-.00150	.00367	.01062	-.03222	.00716
#2	-.00456	.07563	.00028	-.00176	.00001	.00021	-.07895	-.00037	.00243	.00851	-.03595	.01246
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn
High Limit										.00450		.00600
Low Limit										-.00450		-.00600

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00144**	**.02049**	**.04386**	**.00128**	**.00008**	**.00397**	**-.00033**	W **.01126**	**-.02244**	**.00014**	**-.00028**	**-.00053**
Stddev	.00861	.00189	.00405	.00030	.00009	.00020	.00032	.00419	.00146	.00012	.00021	.00053
%RSD	599.62	9.2400	9.2400	23.754	105.48	4.9972	97.190	37.176	6.4888	85.892	76.061	100.00
#1	-.00465	.01915	.04099	.00150	.00015	.00383	-.00056	.01422	-.02141	.00005	-.00013	-.00091
#2	.00752	.02183	.04672	.00107	.00002	.00411	-.00010	.00830	-.02347	.00022	-.00043	-.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								.00750				
Low Limit								-.01900				

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2629.0**	**49539.**	**5716.6**
Stddev	15.8	38.	27.3
%RSD	.60091	.07675	.47693
#1	2617.9	49512.	5735.9
#2	2640.2	49566.	5697.4

Sample Name: CRI- Acquired: 6/13/2017 9:05:54 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: Alt CRI As Se .015

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00056**	**-.00116**	W **.01407**	**-.00127**	**.00016**	**-.00006**	**-.00022**	**-.01118**	**.00016**	**.00026**	**.00014**	**-.00179**
Stddev	.00047	.00015	.00031	.00095	.00063	.00005	.00101	.00264	.00039	.00059	.00054	.00002
%RSD	84.347	12.507	2.2359	74.706	387.74	87.018	462.64	23.637	238.29	232.23	382.30	1.0448
#1	.00022	-.00127	.01385	-.00194	.00061	-.00002	-.00093	-.01305	-.00011	-.00016	-.00024	-.00180
#2	.00089	-.00106	.01429	-.00060	-.00028	-.00009	.00049	-.00931	.00044	.00068	.00052	-.00178
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00750									
Low Limit			-.01500									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00962**	**.06454**	**.00066**	**.00300**	**-.00008**	**.00002**	**-.09702**	**.00019**	**.00385**	**-.00203**	**-.02407**	**.00237**
Stddev	.00059	.02039	.00144	.00011	.00005	.00036	.01064	.00007	.00058	.00231	.00183	.00165
%RSD	6.1098	31.593	218.61	3.7510	71.922	1897.6	10.966	35.446	15.144	113.88	7.5961	69.646
#1	-.00920	.07895	.00168	.00308	-.00004	-.00023	-.10455	.00024	.00426	-.00366	-.02536	.00354
#2	-.01003	.05012	-.00036	.00292	-.00011	.00027	-.08950	.00014	.00344	-.00040	-.02278	.00120
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.01534**	**-.00087**	**-.00186**	**.00194**	**.00012**	**.00462**	**-.00064**	**.00066**	**-.02184**	**-.00003**	**.00048**	**-.00018**
Stddev	.00724	.00063	.00135	.00173	.00012	.00009	.00031	.00255	.00793	.00007	.00033	.00056
%RSD	47.233	72.608	72.608	88.994	103.02	1.8678	48.443	389.22	36.314	208.26	69.830	307.91
#1	.02046	-.00042	-.00091	.00316	.00021	.00468	-.00086	.00246	-.02744	.00002	.00071	.00022
#2	.01022	-.00132	-.00282	.00072	.00003	.00456	-.00042	-.00115	-.01623	-.00008	.00024	-.00058
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00750											
Low Limit	-.01500											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2565.1**	**47815.**	**5433.0**
Stddev	3.6	220.	31.6
%RSD	.14046	.46112	.58145
#1	2567.7	47971.	5455.4
#2	2562.6	47659.	5410.7

Sample Name: ICSA-4576193 Acquired: 6/13/2017 9:14:28 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00007**	**490.51**	W **-.01245**	**-.00274**	**.00013**	**-.00001**	**.00138**	**470.03**	W **.00139**	**.00016**	**.00180**
Stddev	.00058	.84	.00944	.00123	.00061	.00005	.00088	3.25	.00036	.00052	.00042
%RSD	819.63	.17092	75.834	44.924	462.34	536.81	63.413	.69050	26.049	323.42	23.364
#1	-.00034	489.91	-.01913	-.00361	-.00030	-.00005	.00200	467.73	.00114	.00053	.00210
#2	.00048	491.10	-.00578	-.00187	.00056	.00003	.00076	472.32	.00165	-.00021	.00150
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit			.00882						.00080		
Low Limit			-.00882						-.00080		

Elem	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00044**	**184.37**	**.13394**	W **.00576**	**515.58**	W **.00096**	W **-.00681**	**.03658**	**.00203**	**-.00637**	**-.00262**
Stddev	.00088	.26	.09370	.00079	2.00	.00010	.00052	.03499	.00077	.00080	.00111
%RSD	201.54	.14269	69.953	13.761	.38889	10.778	7.6552	95.648	37.655	12.631	42.360
#1	.00106	184.19	.06769	.00632	514.16	.00089	-.00718	.01184	.00258	-.00580	-.00340
#2	-.00019	184.56	.20019	.00520	517.00	.00104	-.00644	.06132	.00149	-.00694	-.00183
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.00522		.00050	.00626				
Low Limit				-.00522		-.00050	-.00626				

Elem	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.13316**	**-.00219**	W **-.01255**	**-.00469**	**-.01003**	**.00075**	W **.00414**	**.00506**	**-.00027**	**-.00621**	**.01876**
Stddev	.00132	.00513	.00075	.00124	.00266	.00264	.00010	.00227	.00083	.00633	.00828
%RSD	.99428	233.60	5.9734	26.538	26.538	351.44	2.3886	44.945	302.14	102.00	44.141
#1	-.13223	-.00582	-.01202	-.00381	-.00815	.00262	.00407	.00666	-.00086	-.00173	.01291
#2	-.13410	.00143	-.01309	-.00557	-.01191	-.00111	.00421	.00345	.00031	-.01069	.02462
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	None	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00972				.00050				
Low Limit			-.00972				-.00050				

Elem	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	**-.00164**	**.00262**	**.00103**
Stddev	.00023	.00092	.00253
%RSD	14.223	34.990	246.47
#1	-.00181	.00327	-.00076
#2	-.00148	.00197	.00281
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2392.9**	**42301.**	**5612.4**
Stddev	4.3	66.	3.0
%RSD	.17848	.15630	.05310
#1	2396.0	42254.	5614.5
#2	2389.9	42348.	5610.3

Sample Name: ICSAB-4579055 Acquired: 6/13/2017 9:21:46 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0991**	**488.88**	**2.0033**	**1.9126**	**.49724**	**.47017**	**1.0089**	**467.32**	**1.0272**	**.45774**	**.48915**	**.53560**	**183.45**	**51.760**
Stddev	.0023	.81	.0166	.0042	.00034	.00122	.0073	2.88	.0034	.00102	.00056	.00238	.10	.087
%RSD	.20593	.16634	.82755	.22152	.06747	.26042	.72866	.61659	.33415	.22338	.11358	.44426	.05195	.16875
#1	1.1007	488.31	2.0150	1.9156	.49700	.46931	1.0141	469.36	1.0296	.45702	.48954	.53728	183.39	51.698
#2	1.0975	489.46	1.9916	1.9096	.49747	.47104	1.0037	465.29	1.0248	.45847	.48875	.53391	183.52	51.821
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0043**	**503.81**	**.48266**	**.94307**	**50.584**	**.91450**	**1.9756**	**.92259**	**.93186**	**1.0003**	**4.7943**	**9.8227**	**21.021**	**9.3852**
Stddev	.0040	1.53	.00055	.00103	.154	.00008	.0079	.00336	.01913	.0061	.0189	.0009	.002	.0044
%RSD	.39716	.30463	.11371	.10932	.30416	.00894	.40141	.36431	2.0528	.60765	.39474	.00913	.00913	.04648
#1	1.0015	502.72	.48227	.94234	50.693	.91456	1.9700	.92021	.94539	1.0046	4.8077	9.8233	21.022	9.3821
#2	1.0071	504.89	.48304	.94380	50.475	.91445	1.9812	.92497	.91834	.99599	4.7809	9.8220	21.019	9.3883
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.94931**	**2.0182**	**.97277**	**8.1978**	**.00052**	**.49822**	**.94568**	**1.0754**
Stddev	.00136	.0014	.00267	.0037	.03178	.00103	.00590	.0055
%RSD	.14377	.07027	.27456	.04500	6064.3	.20740	.62351	.51299
#1	.94834	2.0172	.97088	8.1952	.02300	.49749	.94151	1.0715
#2	.95027	2.0192	.97466	8.2004	-.02195	.49895	.94985	1.0793
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2355.5**	**41913.**	**5465.6**
Stddev	4.2	20.	43.5
%RSD	.17891	.04772	.79613
#1	2358.5	41927.	5434.8
#2	2352.6	41899.	5496.4

Sample Name: LRA-4556451 Acquired: 6/13/2017 9:24:18 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00079**	**.12053**	**9.2716**	**9.4011**	**12.325**	**-.00110**	**-.03784**	**.19491**	**1.9282**	**4.7514**	**9.6858**	**10.471**	**497.78**
Stddev	.00050	.03582	.2875	.2749	.036	.00014	.00090	.04172	.0673	.1700	.3576	.011	2.09
%RSD	62.579	29.721	3.1009	2.9245	.29323	12.714	2.3773	21.408	3.4925	3.5774	3.6919	.10524	.41985
#1	.00115	.14586	9.4749	9.5955	12.350	-.00120	-.03721	.22441	1.9758	4.8716	9.9387	10.479	499.26
#2	.00044	.09520	9.0683	9.2067	12.299	-.00101	-.03848	.16540	1.8805	4.6312	9.4330	10.464	496.31
Check ?	None	None	Chk Pass	Chk Pass	Chk Pass	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.09760**	**.00187**	**.07903**	**9.5684**	**4.7642**	**-.06192**	**9.6250**	**.00180**	**9.8215**	**-.09103**	**.04832**	**4.6359**	**47.664**
Stddev	.04723	.00021	.01062	.0106	.1744	.00335	.3422	.00245	.3527	.00102	.00192	.1510	.002
%RSD	48.395	11.210	13.443	.11073	3.6604	5.4069	3.5557	135.73	3.5914	1.1197	3.9793	3.2562	.00425
#1	-.06420	.00202	.08654	9.5759	4.8875	-.05955	9.8670	.00007	10.071	-.09031	.04968	4.7427	47.665
#2	-.13099	.00173	.07152	9.5609	4.6408	-.06428	9.3830	.00354	9.5721	-.09175	.04696	4.5292	47.663
Check ?	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**102.00**	**-.00130**	**9.7799**	**-.00705**	**9.2659**	**4.6781**	**.14872**	**9.6772**	**9.3309**	**.00779**
Stddev	.00	.00154	.0551	.00075	.0144	.1648	.01414	.0109	.0018	.00051
%RSD	.00425	118.25	.56287	10.666	.15544	3.5219	9.5072	.11295	.01877	6.5766
#1	102.00	-.00021	9.8188	-.00652	9.2761	4.7946	.15871	9.6849	9.3322	.00815
#2	102.00	-.00240	9.7409	-.00758	9.2557	4.5616	.13872	9.6695	9.3297	.00743
Check ?	None	None	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2591.2**	**47708.**	**5519.3**
Stddev	51.8	196.	12.4
%RSD	2.0005	.41166	.22439
#1	2554.6	47846.	5528.1
#2	2627.9	47569.	5510.6

Sample Name: CCVH-4579429 Acquired: 6/13/2017 9:27:01 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00173**	**47.481**	**-.00708**	**.01473**	**.00457**	**-.00000**	**.95620**	**.00578**	**.00074**	**-.00032**	**.00129**	**.01470**
Stddev	.00017	.054	.00260	.00133	.00077	.00002	.02928	.00282	.00015	.00038	.00025	.00073
%RSD	9.8538	.11285	36.719	9.0209	16.800	687.16	3.0621	48.855	20.518	118.45	19.677	4.9962
#1	.00185	47.519	-.00892	.01567	.00511	.00001	.97690	.00778	.00063	-.00059	.00147	.01522
#2	.00161	47.443	-.00524	.01379	.00403	-.00002	.93549	.00378	.00084	-.00005	.00111	.01418
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.242**	**-.02286**	**.00387**	**.04580**	**-.00021**	**.00034**	**243.87**	**.00187**	**.00900**	**-.00055**	**4.8643**	**.00445**
Stddev	.155	.00503	.00111	.00205	.00015	.00090	.06	.00010	.00466	.00060	.0982	.00244
%RSD	.31573	21.997	28.733	4.4752	72.323	265.63	.02519	5.4180	51.732	109.25	2.0177	54.755
#1	49.352	-.01930	.00309	.04435	-.00010	-.00030	243.92	.00195	.01230	-.00013	4.9337	.00273
#2	49.132	-.02641	.00466	.04725	-.00031	.00097	243.83	.00180	.00571	-.00098	4.7949	.00618
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00755**	**.01305**	**.02793**	**.00087**	**.00353**	W **4.6997**	**.02015**	**.00584**	**9.5399**	**.01395**	**.00186**	**.08126**
Stddev	.00016	.00608	.01300	.00053	.00073	.0110	.00038	.00273	.0815	.00077	.00064	.00497
%RSD	2.1159	46.544	46.544	60.165	20.722	.23476	1.8762	46.816	.85451	5.4948	34.351	6.1219
#1	-.00744	.00876	.01874	.00050	.00405	4.7075	.02042	.00777	9.5976	.01449	.00232	.08478
#2	-.00767	.01735	.03713	.00124	.00301	4.6919	.01988	.00391	9.4823	.01341	.00141	.07774
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Pass	None	None	None
Value						5.0000						
Range						-5.0000%						

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2572.1**	**47604.**	**5653.5**
Stddev	1.2	67.	8.0
%RSD	.04675	.14049	.14090
#1	2571.3	47556.	5647.9
#2	2573.0	47651.	5659.1

Sample Name: CCV-4580817 Acquired: 6/13/2017 9:29:36 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49413**	**.50397**	**.95666**	**.50666**	**.50415**	**.47802**	**.00021**	**5.1179**	**.49657**	**.49923**	**.50193**	**.50016**	**2.4742**
Stddev	.00114	.00967	.00681	.00834	.00174	.00007	.00145	.0044	.00908	.01028	.01037	.00100	.0068
%RSD	.23064	1.9184	.71197	1.6453	.34531	.01488	700.30	.08602	1.8288	2.0592	2.0654	.20013	.27547
#1	.49494	.51081	.96147	.51255	.50292	.47797	.00124	5.1210	.50300	.50650	.50926	.49945	2.4790
#2	.49333	.49713	.95184	.50076	.50538	.47807	-.00082	5.1148	.49015	.49196	.49460	.50086	2.4693
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.798**	**.96998**	**19.702**	**.48024**	**.50092**	**4.9755**	**.49848**	**.98433**	**1.0126**	**-.02953**	**.98203**	**.96009**	**4.9169**
Stddev	.050	.00397	.022	.00005	.00966	.0237	.00933	.01772	.0140	.00330	.02505	.01962	.0163
%RSD	.10054	.40936	.11106	.01122	1.9275	.47619	1.8708	1.8005	1.3772	11.171	2.5507	2.0434	.33119
#1	49.763	.97278	19.687	.48020	.50775	4.9923	.50507	.99686	1.0225	-.03186	.99974	.97396	4.9285
#2	49.834	.96717	19.718	.48028	.49409	4.9588	.49188	.97180	1.0028	-.02720	.96431	.94621	4.9054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.522**	**1.0146**	**.47512**	**.01312**	**.46765**	**.95285**	**-.04512**	**.48601**	**.47488**	**.49667**
Stddev	.035	.0153	.00204	.00125	.00043	.02384	.03788	.00289	.00382	.00249
%RSD	.33119	1.5038	.43014	9.5124	.09276	2.5024	83.965	.59409	.80427	.50065
#1	10.547	1.0254	.47367	.01400	.46734	.96971	-.07190	.48397	.47218	.49491
#2	10.498	1.0038	.47656	.01224	.46795	.93599	-.01833	.48805	.47758	.49843
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2641.1**	**48805.**	**5672.9**
Stddev	6.3	60.	27.6
%RSD	.23839	.12322	.48645
#1	2645.6	48763.	5692.5
#2	2636.7	48848.	5653.4

Sample Name: CCB Acquired: 6/13/2017 9:32:05 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00085**	**.01116**	**-.00163**	**.00545**	**.00055**	**.00005**	**.00013**	**-.00601**	**.00010**	**.00021**	**.00071**	**-.00229**	**.01594**
Stddev	.00056	.00073	.00563	.00130	.00010	.00005	.00130	.00800	.00012	.00020	.00051	.00045	.00095
%RSD	65.733	6.5490	345.25	23.881	18.663	119.14	1007.1	133.09	117.29	96.751	72.475	19.603	5.9397
#1	.00046	.01168	-.00561	.00637	.00062	.00008	-.00079	-.00035	.00002	.00035	.00034	-.00261	.01527
#2	.00125	.01064	.00235	.00453	.00048	.00001	.00105	-.01167	.00019	.00007	.00107	-.00197	.01661
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03474**	**.00070**	**.01756**	**.00043**	**.00050**	**-.10667**	**.00011**	**.00499**	**-.00057**	**-.03017**	**-.00100**	**-.00295**	**.01036**
Stddev	.04344	.00064	.00073	.00004	.00046	.02213	.00027	.00012	.00031	.00263	.00254	.00170	.00509
%RSD	125.04	91.359	4.1303	9.7988	92.652	20.746	242.05	2.4210	53.561	8.7278	252.55	57.507	49.156
#1	.06545	.00025	.01704	.00040	.00017	-.09102	-.00008	.00507	-.00079	-.02831	.00079	-.00175	.01396
#2	.00402	.00116	.01807	.00046	.00083	-.12232	.00031	.00490	-.00035	-.03203	-.00280	-.00415	.00676
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02217**	**.00182**	**.00065**	**.00649**	**-.00026**	**-.00326**	**-.05634**	**-.00012**	**-.00032**	**-.00024**
Stddev	.01090	.00020	.00008	.00204	.00024	.00272	.03234	.00023	.00053	.00117
%RSD	49.156	10.878	11.630	31.508	93.339	83.518	57.406	197.02	166.40	498.12
#1	.02987	.00197	.00070	.00504	-.00009	-.00133	-.07921	.00005	-.00069	-.00107
#2	.01446	.00168	.00060	.00793	-.00043	-.00518	-.03347	-.00028	.00006	.00059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2670.6**	**50100.**	**5646.1**
Stddev	.2	13.	17.1
%RSD	.00730	.02529	.30272
#1	2670.5	50109.	5634.0
#2	2670.7	50091.	5658.2

Sample Name: CCVL-4590576 Acquired: 6/13/2017 9:34:43 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01067**	**.10365**	**.01665**	**.10220**	**.01077**	**.00076**	**.10960**	**.21636**	**.00542**	**.01016**	**.01022**	**.01359**
Stddev	.00067	.00342	.00927	.00272	.00024	.00011	.00019	.00193	.00036	.00017	.00017	.00010
%RSD	6.3130	3.2979	55.657	2.6595	2.2340	15.207	.17143	.89118	6.6627	1.6367	1.6560	.74252
#1	.01020	.10606	.02320	.10412	.01060	.00084	.10973	.21772	.00567	.01004	.01034	.01351
#2	.01115	.10123	.01010	.10028	.01094	.00067	.10947	.21499	.00516	.01027	.01010	.01366
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.13232**	**3.0285**	**.02044**	**.20631**	**.01061**	**.01912**	**.91204**	**.04020**	**2.8277**	**.00801**	F **.06603**	**.01992**
Stddev	.00621	.0152	.00286	.00778	.00004	.00043	.00621	.00125	.0706	.00047	.01046	.00308
%RSD	4.6907	.50266	13.980	3.7728	.41340	2.2474	.68058	3.0997	2.4981	5.8170	15.834	15.444
#1	.13671	3.0393	.01842	.21182	.01057	.01942	.91643	.04108	2.8776	.00834	.07343	.01775
#2	.12793	3.0177	.02246	.20081	.01064	.01881	.90765	.03932	2.7777	.00768	.05864	.02210
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value	.10000										.10000	
Range	30.000%										-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01879**	**.47825**	**1.0235**	**.10180**	**.00998**	F **.01975**	**.00892**	**.01726**	**.04575**	**.00889**	**.01990**	**.01562**
Stddev	.00335	.01961	.0420	.00082	.00002	.00034	.00009	.00024	.01927	.00033	.00062	.00049
%RSD	17.826	4.1005	4.1005	.80409	.21165	1.7088	1.0319	1.3945	42.112	3.6713	3.0996	3.1644
#1	.01642	.46439	.99379	.10238	.00996	.01951	.00885	.01709	.05937	.00912	.02034	.01527
#2	.02116	.49212	1.0531	.10122	.00999	.01999	.00898	.01743	.03213	.00866	.01946	.01597
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value						.01500						
Range						30.000%						

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2667.2**	**50194.**	**5739.5**
Stddev	1.2	429.	29.5
%RSD	.04429	.85422	.51414
#1	2668.0	50497.	5718.6
#2	2666.3	49891.	5760.3

Sample Name: MB 280-375528/1-A Acquired: 6/13/2017 9:38:39 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: 6/8 Custom ID2: Custom ID3:
Comment: 375528 6010C (As Tl)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00142**	**.01224**	**.00032**	**.00271**	**.00066**	**-.00015**	**.00140**	**.00864**	**.00032**
Stddev	.00007	.00094	.00335	.00059	.00010	.00002	.00370	.00207	.00028
%RSD	5.0788	7.7212	1045.4	21.842	15.608	12.853	264.21	24.007	89.469
#1	.00147	.01157	-.00205	.00229	.00059	-.00017	.00402	.01011	.00012
#2	.00137	.01290	.00269	.00313	.00073	-.00014	-.00122	.00717	.00051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00027**	**-.00013**	**-.00213**	**.02283**	**.04142**	**.00196**	**.00931**	**.00027**	**.00003**
Stddev	.00005	.00020	.00023	.00160	.04378	.00000	.00429	.00002	.00026
%RSD	18.347	157.40	11.020	7.0146	105.70	.08656	46.065	8.2574	873.93
#1	.00023	.00001	-.00196	.02170	.01046	.00196	.00627	.00029	-.00015
#2	.00030	-.00027	-.00230	.02397	.07238	.00196	.01234	.00025	.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.10067**	**-.00064**	**.00373**	**-.00187**	**-.01720**	**.00016**	W **-.01076**	**.01227**	**.02626**
Stddev	.00297	.00053	.00012	.00236	.00005	.00176	.00233	.02550	.05458
%RSD	2.9496	83.339	3.2904	126.63	.26659	1116.6	21.643	207.87	207.87
#1	-.10277	-.00102	.00382	-.00020	-.01723	-.00108	-.01241	-.00577	-.01234
#2	-.09857	-.00026	.00364	-.00354	-.01717	.00140	-.00912	.03030	.06485
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	None
High Limit							.00750		
Low Limit							-.00750		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00018**	**.00021**	**.00446**	**-.00033**	**.00004**	**-.04296**	**.00070**	**.00157**	**.00021**
Stddev	.00019	.00007	.00203	.00013	.00853	.01026	.00060	.00039	.00096
%RSD	103.98	35.042	45.491	39.582	23329.	23.886	85.044	24.946	459.02
#1	.00005	.00026	.00590	-.00024	.00606	-.05022	.00028	.00129	-.00047
#2	.00031	.00016	.00303	-.00042	-.00599	-.03571	.00113	.00184	.00089
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2690.3**	**50828.**	**5777.6**
Stddev	1.5	105.	9.1
%RSD	.05527	.20649	.15679
#1	2691.4	50754.	5784.0
#2	2689.3	50902.	5771.2

Sample Name: 280-97574-A-8-A MDLV Acquired: 6/13/2017 9:41:17 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 375528 6010C (As Tl)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00288**	**.02730**	**.01248**	**.00874**	**.00179**	**.00040**	**.00881**	**.08161**	**.00134**
Stddev	.00063	.00053	.00021	.00025	.00003	.00012	.00160	.00049	.00003
%RSD	21.979	1.9419	1.6675	2.8125	1.6533	29.285	18.226	.60074	2.2026
#1	.00243	.02767	.01233	.00892	.00177	.00031	.00767	.08196	.00132
#2	.00332	.02692	.01263	.00857	.00181	.00048	.00994	.08127	.00136
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00235**	**.00295**	**.00112**	**.05471**	**.31058**	**.00891**	**.01687**	**.00416**	**.00260**
Stddev	.00041	.00001	.00026	.00047	.03778	.00023	.00307	.00000	.00059
%RSD	17.306	.20804	23.281	.86240	12.164	2.6035	18.177	.07556	22.584
#1	.00264	.00294	.00130	.05437	.33729	.00907	.01904	.00417	.00301
#2	.00206	.00295	.00093	.05504	.28386	.00875	.01470	.00416	.00218
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00600**	**.00175**	**.01914**	**.00281**	**-.01718**	**.01252**	**-.00154**	**.03416**	**.07311**
Stddev	.01034	.00135	.00241	.00009	.00746	.00278	.00057	.00542	.01159
%RSD	172.28	76.870	12.612	3.1109	43.446	22.217	37.208	15.851	15.851
#1	.00131	.00271	.02085	.00275	-.01190	.01055	-.00113	.03034	.06492
#2	-.01331	.00080	.01744	.00287	-.02246	.01448	-.00194	.03799	.08131
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00399**	**.00065**	**.01602**	**.00036**	**.01256**	**.08352**	**.00267**	**.00445**	**.00538**
Stddev	.00114	.00009	.00252	.00002	.00505	.01984	.00006	.00068	.00039
%RSD	28.524	14.385	15.747	6.8842	40.205	23.751	2.0945	15.362	7.3365
#1	.00319	.00058	.01780	.00034	.01613	.06949	.00263	.00493	.00566
#2	.00480	.00071	.01424	.00038	.00899	.09755	.00271	.00396	.00510
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2677.2**	**50810.**	**5784.3**
Stddev	1.8	430.	14.9
%RSD	.06631	.84717	.25706
#1	2676.0	51114.	5794.8
#2	2678.5	50506.	5773.8

Sample Name: 280-97574-A-9-A MDLV Acquired: 6/13/2017 9:43:56 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 375528 6010C (As Tl)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00301**	**.02626**	**.00933**	**.00875**	**.00213**	**.00043**	**.01101**	**.08110**	**.00140**
Stddev	.00039	.00040	.00325	.00156	.00014	.00012	.00143	.00036	.00026
%RSD	12.996	1.5358	34.832	17.850	6.5047	28.320	12.983	.43929	18.769
#1	.00274	.02655	.00703	.00986	.00223	.00052	.01202	.08135	.00159
#2	.00329	.02598	.01163	.00765	.00203	.00034	.01000	.08085	.00122
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00193**	**.00300**	**.00107**	**.05376**	**.30698**	**.01008**	**.01771**	**.00433**	**.00315**
Stddev	.00021	.00032	.00036	.00047	.01543	.00068	.00269	.00001	.00025
%RSD	10.724	10.512	33.907	.87418	5.0270	6.7770	15.167	.17607	7.9470
#1	.00208	.00322	.00081	.05409	.29607	.00959	.01961	.00434	.00333
#2	.00178	.00278	.00133	.05342	.31789	.01056	.01581	.00433	.00297
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.02771**	**.00215**	**.02203**	**.00211**	**-.01579**	**.01119**	**.00376**	**.03501**	**.07492**
Stddev	.00331	.00012	.00130	.00009	.00138	.00079	.00559	.00709	.01518
%RSD	11.940	5.7388	5.8940	4.1190	8.7478	7.0343	148.66	20.263	20.263
#1	-.03005	.00206	.02111	.00217	-.01481	.01175	-.00019	.02999	.06418
#2	-.02537	.00223	.02295	.00205	-.01676	.01064	.00771	.04002	.08565
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00315**	**.00065**	**.02053**	**.00083**	**.00871**	**.08930**	**.00215**	**.00679**	**.00682**
Stddev	.00048	.00002	.00117	.00025	.00208	.00122	.00024	.00059	.00032
%RSD	15.170	3.0352	5.6885	29.733	23.942	1.3695	11.363	8.6791	4.7593
#1	.00349	.00066	.01970	.00101	.00723	.09017	.00198	.00637	.00659
#2	.00281	.00063	.02135	.00066	.01018	.08844	.00233	.00721	.00705
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2607.6**	**49262.**	**5500.1**
Stddev	3.6	78.	31.8
%RSD	.13898	.15854	.57750
#1	2610.2	49206.	5477.6
#2	2605.1	49317.	5522.6

Sample Name: 97574-A-10-A LOQV Acquired: 6/13/2017 9:46:35 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 375528 6010C (As Tl)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02141**	**.30755**	**.02366**	**.09952**	**.01087**	**.00150**	**.00084**	**1.0703**	**.00520**
Stddev	.00131	.01134	.00109	.00462	.00050	.00000	.00000	.0109	.00017
%RSD	6.1391	3.6867	4.6060	4.6388	4.6176	.09977	.24014	1.0218	3.2418
#1	.02048	.31557	.02443	.10278	.01122	.00150	.00084	1.0780	.00532
#2	.02234	.29953	.02288	.09626	.01051	.00150	.00084	1.0625	.00508
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01483**	**.01556**	**.01382**	**.14255**	**3.0986**	**.02028**	**.51605**	**.01017**	**.02971**
Stddev	.00045	.00076	.00066	.00084	.0080	.00006	.00543	.00007	.00038
%RSD	3.0412	4.8559	4.7947	.59150	.25947	.29105	1.0531	.64972	1.2924
#1	.01515	.01609	.01429	.14314	3.1042	.02024	.51220	.01012	.02999
#2	.01451	.01502	.01335	.14195	3.0929	.02033	.51989	.01021	.02944
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.1070**	**.04044**	**.47644**	**.01461**	**-.03836**	**.01635**	**.01679**	**1.0116**	**2.1649**
Stddev	.0097	.00020	.01464	.00130	.00606	.00121	.00144	.0147	.0314
%RSD	.19081	.48891	3.0727	8.8934	15.795	7.3927	8.5938	1.4504	1.4504
#1	5.1139	.04058	.48680	.01553	-.04264	.01549	.01577	1.0220	2.1871
#2	5.1001	.04030	.46609	.01370	-.03407	.01720	.01781	1.0013	2.1427
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10052**	**.01006**	**.04528**	**.00900**	**.04200**	**-.03840**	**.01437**	**.14466**	**.01577**
Stddev	.00384	.00003	.00014	.00026	.00149	.01462	.00081	.00167	.00099
%RSD	3.8170	.28108	.31102	2.8769	3.5524	38.077	5.6550	1.1570	6.2554
#1	.10323	.01004	.04538	.00919	.04305	-.02806	.01494	.14348	.01647
#2	.09781	.01008	.04518	.00882	.04094	-.04873	.01379	.14585	.01508
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2606.0**	**48988.**	**5485.1**
Stddev	7.4	291.	121.3
%RSD	.28535	.59410	2.2115
#1	2600.7	49194.	5399.4
#2	2611.2	48782.	5570.9

Sample Name: MB 280-375477/1-A Acquired: 6/13/2017 9:49:12 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: 6/8 Custom ID2: Custom ID3:
Comment: 375477 6010C SOIL (As Tl)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00084**	**.03172**	**-.00443**	**.01708**	**.00220**	**-.00004**	**.00171**	F **.24912**	**.00027**
Stddev	.00093	.00080	.00129	.00043	.00019	.00001	.00080	.00918	.00016
%RSD	110.19	2.5194	29.127	2.5072	8.5184	18.691	46.794	3.6858	58.062
#1	.00150	.03228	-.00352	.01738	.00207	-.00003	.00114	.25561	.00038
#2	.00019	.03115	-.00534	.01677	.00233	-.00004	.00227	.24263	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								.20000	
Low Limit								-.20000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00017**	**.00219**	**.00517**	W **.06246**	**.06657**	**.00028**	F **.27051**	**.00338**	**.00006**
Stddev	.00022	.00005	.00426	.00091	.03592	.00060	.27046	.00346	.00013
%RSD	128.16	2.4400	82.291	1.4618	53.965	210.84	99.980	102.45	201.67
#1	.00002	.00223	.00818	.06311	.09197	.00070	.46175	.00582	-.00003
#2	.00033	.00215	.00216	.06182	.04117	-.00014	.07927	.00093	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit				.05000			.20000		
Low Limit				-.05000			-.20000		

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.24429**	**.00132**	**.01349**	**-.00054**	**-.03254**	W **.00582**	**.00233**	**.06686**	**.14309**
Stddev	.01119	.00019	.00246	.00060	.00910	.00114	.00366	.00721	.01542
%RSD	4.5789	14.621	18.207	111.13	27.973	19.561	157.12	10.778	10.778
#1	.23638	.00118	.01175	-.00097	-.02610	.00663	-.00026	.07196	.15400
#2	.25220	.00145	.01522	-.00012	-.03897	.00502	.00491	.06177	.13218
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	None
High Limit						.00500			
Low Limit						-.00500			

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00791**	**.00094**	W **.00871**	**.00226**	**.00341**	**-.04794**	**.00278**	**.00395**	**.00096**
Stddev	.00129	.00003	.00246	.00350	.00499	.01658	.00353	.00295	.00298
%RSD	16.312	2.7163	28.247	155.04	146.27	34.585	126.99	74.541	310.96
#1	.00700	.00092	.01045	.00473	.00694	-.05966	.00528	.00603	.00307
#2	.00882	.00095	.00697	-.00022	-.00012	-.03621	.00028	.00187	-.00115
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500						
Low Limit			-.00500						

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2678.3**	**51214.**	**5489.8**
Stddev	4.0	293.	24.5
%RSD	.14941	.57199	.44641
#1	2681.2	51421.	5507.1
#2	2675.5	51007.	5472.5

Sample Name: 280-97577-A-1-A MDLV Acquired: 6/13/2017 9:51:50 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 375477 6010C SOIL (As Tl)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00260**	**.04814**	**.00573**	**.03009**	**.00392**	**.00015**	**.00978**	**.42843**	**.00118**
Stddev	.00007	.00242	.00173	.00099	.00005	.00010	.00016	.00497	.00009
%RSD	2.6033	5.0346	30.201	3.2987	1.3298	69.542	1.6871	1.1602	7.7094
#1	.00265	.04985	.00696	.03079	.00396	.00008	.00990	.42492	.00112
#2	.00255	.04643	.00451	.02938	.00389	.00022	.00966	.43195	.00124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00163**	**.00277**	**.00351**	**.07259**	**.44814**	**.01205**	**.09316**	**.00154**	**.00209**
Stddev	.00019	.00042	.00057	.00199	.02204	.00119	.00150	.00006	.00036
%RSD	11.726	15.288	16.092	2.7472	4.9177	9.8491	1.6133	3.6029	17.001
#1	.00176	.00307	.00391	.07401	.43256	.01121	.09210	.00158	.00235
#2	.00149	.00247	.00311	.07118	.46373	.01289	.09422	.00150	.00184
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.27831**	**.00294**	**.11366**	**.00318**	**.04009**	**.01196**	**.00126**	**.15887**	**.33999**
Stddev	.01498	.00069	.00181	.00190	.00820	.00334	.00344	.00731	.01564
%RSD	5.3832	23.378	1.5953	59.849	20.452	27.895	272.35	4.5998	4.5998
#1	.28890	.00342	.11495	.00452	.04589	.01432	-.00117	.16404	.35105
#2	.26771	.00245	.11238	.00183	.03429	.00960	.00370	.15371	.32893
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01757**	**.00132**	**.08790**	**.00163**	**.00724**	**.04343**	**.00228**	**.01099**	**.00759**
Stddev	.00019	.00004	.00164	.00060	.00082	.00603	.00057	.00052	.00211
%RSD	1.0716	2.8951	1.8713	36.677	11.305	13.888	25.030	4.7531	27.765
#1	.01770	.00135	.08907	.00120	.00782	.03916	.00188	.01136	.00610
#2	.01743	.00129	.08674	.00205	.00666	.04769	.00269	.01062	.00908
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2660.7**	**50296.**	**5697.7**
Stddev	7.7	4.	16.2
%RSD	.29032	.00735	.28409
#1	2655.2	50293.	5709.1
#2	2666.1	50298.	5686.2

Sample Name: 280-97577-A-2-A MDLV Acquired: 6/13/2017 9:54:28 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 375477 6010C SOIL (As TI)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00307**	**.04255**	**.00804**	**.03025**	**.00457**	**.00014**	**.00969**	**.64928**	**.00123**
Stddev	.00008	.00214	.00430	.00082	.00004	.00010	.00036	.00687	.00001
%RSD	2.4546	5.0214	53.434	2.7045	.80685	74.304	3.7666	1.0585	.56761
#1	.00302	.04406	.01108	.03083	.00460	.00006	.00943	.64442	.00123
#2	.00312	.04103	.00500	.02967	.00454	.00021	.00995	.65414	.00122
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00157**	**.00289**	**.00537**	**.11650**	**.51471**	**.00951**	**.16407**	**.00157**	**.00193**
Stddev	.00007	.00005	.00038	.00274	.04767	.00240	.00037	.00007	.00021
%RSD	4.5388	1.8767	7.0677	2.3528	9.2612	25.204	.22413	4.5041	10.785
#1	.00162	.00293	.00510	.11844	.54842	.00782	.16433	.00162	.00207
#2	.00152	.00285	.00564	.11456	.48100	.01121	.16381	.00152	.00178
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.72571**	**.00378**	**.11233**	**.00470**	**.03508**	**.01267**	**.00444**	**.14315**	**.30633**
Stddev	.00686	.00063	.00267	.00265	.00749	.00362	.00120	.01183	.02531
%RSD	.94500	16.719	2.3751	56.277	21.345	28.580	27.131	8.2618	8.2618
#1	.72086	.00422	.11422	.00658	.02979	.01524	.00529	.13478	.28844
#2	.73056	.00333	.11045	.00283	.04038	.01011	.00359	.15151	.32423
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01824**	**.00177**	**.08525**	**.00207**	**.01371**	**.07150**	**.00205**	**.01116**	**.00551**
Stddev	.00052	.00004	.00230	.00072	.00202	.01955	.00027	.00048	.00019
%RSD	2.8454	2.1767	2.6935	34.915	14.720	27.344	13.114	4.2818	3.4865
#1	.01861	.00174	.08687	.00258	.01514	.05768	.00186	.01150	.00538
#2	.01788	.00180	.08362	.00156	.01228	.08533	.00224	.01082	.00565
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2683.0**	**50424.**	**5713.9**
Stddev	7.3	180.	45.8
%RSD	.27159	.35770	.80174
#1	2688.2	50551.	5681.5
#2	2677.8	50296.	5746.3

Sample Name: 280-97577-A-3-A LOQV Acquired: 6/13/2017 9:57:06 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 375477 6010C SOIL (As Tl)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01830**	**.50730**	**.02168**	**.11020**	**.02239**	**.00467**	**-.00133**	**1.2670**	**.00500**
Stddev	.00075	.02161	.00261	.00383	.00047	.00005	.00349	.0145	.00033
%RSD	4.1087	4.2597	12.060	3.4801	2.0918	1.0551	262.72	1.1440	6.5578
#1	.01883	.52258	.02352	.11291	.02272	.00463	-.00380	1.2568	.00523
#2	.01777	.49202	.01983	.10749	.02205	.00470	.00114	1.2773	.00477
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00961**	**.03517**	**.05217**	**.83941**	**3.2025**	**.05151**	**.37086**	**.04571**	**.02500**
Stddev	.00031	.00127	.00020	.00491	.0071	.00005	.00177	.00029	.00019
%RSD	3.2509	3.6178	.39260	.58501	.22139	.09067	.47641	.64104	.77508
#1	.00983	.03607	.05203	.84288	3.1975	.05155	.37211	.04592	.02513
#2	.00939	.03427	.05232	.83594	3.2075	.05148	.36961	.04551	.02486
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.3988**	**.04133**	**.47797**	**.00747**	**-.02575**	**.02261**	**.02574**	**.99463**	**2.1285**
Stddev	.0193	.00167	.01587	.00002	.00671	.00171	.00457	.02298	.0492
%RSD	.35698	4.0514	3.3205	.20522	26.073	7.5429	17.775	2.3101	2.3101
#1	5.3852	.04251	.48919	.00746	-.02101	.02382	.02897	1.0109	2.1633
#2	5.4124	.04014	.46675	.00749	-.03050	.02140	.02250	.97839	2.0937
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11008**	**.01065**	**.14315**	**.00941**	**.03042**	**-.03636**	**.01923**	**.07741**	**.03144**
Stddev	.00484	.00007	.00215	.00002	.00195	.03654	.00083	.00036	.00283
%RSD	4.3967	.66958	1.4998	.18076	6.4154	100.49	4.3364	.47034	8.9943
#1	.11350	.01070	.14163	.00942	.02904	-.01052	.01864	.07716	.03344
#2	.10666	.01060	.14466	.00939	.03180	-.06220	.01982	.07767	.02944
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2616.4**	**49365.**	**5582.5**
Stddev	4.5	40.	2.1
%RSD	.17360	.08106	.03679
#1	2619.6	49337.	5583.9
#2	2613.1	49394.	5581.0

Sample Name: CCVH-4579429 Acquired: 6/13/2017 9:59:43 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00050**	**47.770**	**-.00942**	**.00230**	**.00057**	**.00015**	**.95524**	**-.01003**	**.00055**	**-.00092**	**.00004**	**.01107**
Stddev	.00018	.006	.00213	.00066	.00008	.00000	.02431	.00151	.00024	.00007	.00031	.00079
%RSD	36.320	.01331	22.593	28.936	14.731	1.6358	2.5445	15.089	43.392	7.6886	719.34	7.1134
#1	.00063	47.765	-.01092	.00277	.00051	.00014	.97243	-.00896	.00038	-.00087	.00026	.01163
#2	.00037	47.774	-.00791	.00183	.00063	.00015	.93805	-.01110	.00072	-.00097	-.00018	.01052
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.629**	**-.02774**	**.00099**	**.03698**	**-.00216**	**-.00166**	**245.51**	**.00109**	**.00201**	**-.00387**	**4.9452**	**-.00149**
Stddev	.028	.00417	.00094	.00015	.00010	.00051	.19	.00073	.00027	.00183	.0961	.00031
%RSD	.05575	15.020	95.529	.39883	4.4967	30.878	.07641	66.374	13.503	47.315	1.9438	20.928
#1	49.610	-.03068	.00165	.03709	-.00223	-.00202	245.38	.00058	.00182	-.00517	5.0132	-.00127
#2	49.649	-.02479	.00032	.03688	-.00209	-.00130	245.64	.00161	.00221	-.00258	4.8772	-.00171
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00351**	**.00606**	**.01296**	**.00044**	**.00040**	W **4.7009**	**.01847**	**.00274**	W **9.4307**	**.01242**	**.00102**	**.08272**
Stddev	.01298	.00262	.00560	.00094	.00010	.0089	.00002	.00577	.0657	.00098	.00005	.00229
%RSD	369.99	43.235	43.235	214.61	24.136	.18873	.08978	210.51	.69708	7.8738	4.5144	2.7667
#1	-.01268	.00421	.00900	-.00023	.00033	4.7072	.01846	.00682	9.4772	.01311	.00106	.08111
#2	.00567	.00791	.01693	.00111	.00047	4.6946	.01848	-.00134	9.3842	.01173	.00099	.08434
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2518.9**	**46542.**	**5385.9**
Stddev	2.6	6.	21.4
%RSD	.10191	.01265	.39648
#1	2517.1	46546.	5400.9
#2	2520.7	46538.	5370.8

Sample Name: CCV-4580817 Acquired: 6/13/2017 10:02:49 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50383**	**.51773**	**.98240**	**.51107**	**.51094**	**.48302**	**-.00345**	**5.1976**	**.51205**	**.51484**	**.51874**	**.51245**	**2.4841**
Stddev	.00010	.00278	.00615	.00036	.00096	.00101	.00129	.0023	.00028	.00181	.00120	.00152	.0049
%RSD	.02015	.53651	.62593	.07110	.18746	.20984	37.407	.04453	.05446	.35152	.23086	.29748	.19842
#1	.50390	.51969	.97805	.51133	.51026	.48373	-.00254	5.1959	.51225	.51612	.51959	.51352	2.4876
#2	.50376	.51576	.98675	.51081	.51162	.48230	-.00437	5.1992	.51186	.51356	.51789	.51137	2.4806
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.573**	**.97397**	**20.260**	**.48769**	**.51719**	**5.0169**	**.51364**	**1.0056**	**1.0516**	**-.03929**	**1.0194**	**.98448**	**4.9533**
Stddev	.055	.00172	.027	.00026	.00127	.0002	.00054	.0006	.0001	.00988	.0045	.00283	.0519
%RSD	.10964	.17694	.13307	.05337	.24564	.00450	.10474	.05894	.00764	25.150	.44351	.28795	1.0481
#1	50.612	.97275	20.279	.48787	.51809	5.0171	.51402	1.0060	1.0516	-.04628	1.0226	.98648	4.9166
#2	50.534	.97519	20.241	.48751	.51629	5.0168	.51326	1.0052	1.0515	-.03230	1.0162	.98247	4.9900
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.600**	**1.0532**	**.47821**	**.01054**	**.47273**	**.97785**	**.00024**	**.48927**	**.48613**	**.50713**
Stddev	.111	.0013	.00012	.00070	.00033	.00363	.00919	.00132	.00085	.00179
%RSD	1.0481	.12329	.02480	6.6567	.07065	.37118	3779.5	.26881	.17434	.35258
#1	10.521	1.0522	.47812	.01005	.47297	.97528	-.00625	.48834	.48553	.50840
#2	10.679	1.0541	.47829	.01104	.47250	.98042	.00674	.49020	.48673	.50587
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2570.4**	**47309.**	**5331.5**
Stddev	11.1	23.	6.3
%RSD	.43088	.04914	.11756
#1	2562.6	47292.	5335.9
#2	2578.2	47325.	5327.1

Sample Name: CCB Acquired: 6/13/2017 10:05:42 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00106**	**-.00014**	**-.00628**	**.00038**	**.00048**	**.00002**	**.00133**	**-.01419**	**.00032**	**.00070**	**-.00008**	**-.00215**	**-.00469**
Stddev	.00016	.00050	.00743	.00069	.00030	.00002	.00202	.00326	.00003	.00017	.00022	.00017	.00061
%RSD	15.050	358.67	118.41	181.52	62.001	119.11	151.34	22.936	9.1594	23.701	270.66	7.7482	13.005
#1	.00095	.00021	-.00102	-.00011	.00069	.00004	-.00009	-.01650	.00030	.00059	.00008	-.00203	-.00512
#2	.00117	-.00049	-.01153	.00086	.00027	.00000	.00276	-.01189	.00034	.00082	-.00024	-.00226	-.00426
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03366**	**.00113**	**.00327**	**.00006**	**.00018**	**-.09043**	**-.00018**	**.00154**	**-.00139**	**-.03227**	**.00073**	**-.00278**	**-.01088**
Stddev	.01576	.00233	.00061	.00002	.00030	.00601	.00042	.00162	.00254	.00608	.00319	.00333	.02119
%RSD	46.811	206.42	18.483	29.454	167.17	6.6483	229.92	105.31	182.83	18.829	435.31	119.98	194.81
#1	.04480	-.00052	.00285	.00007	.00039	-.08618	-.00049	.00039	.00041	-.03657	.00299	-.00514	.00411
#2	.02252	.00278	.00370	.00005	-.00003	-.09468	.00012	.00269	-.00318	-.02797	-.00152	-.00042	-.02586
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.02327**	**.00045**	**.00005**	**.00232**	**-.00037**	**.00424**	**-.02200**	**.00023**	**-.00009**	**.00141**
Stddev	.04534	.00114	.00005	.00005	.00014	.00130	.01542	.00012	.00076	.00026
%RSD	194.81	252.01	105.86	2.1094	38.677	30.743	70.087	53.304	849.34	18.380
#1	.00879	-.00035	.00001	.00229	-.00047	.00516	-.03290	.00032	.00045	.00160
#2	-.05534	.00126	.00008	.00236	-.00027	.00332	-.01110	.00014	-.00063	.00123
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2648.3**	**50049.**	**5638.0**
Stddev	.6	139.	48.2
%RSD	.02226	.27762	.85516
#1	2648.8	49950.	5603.9
#2	2647.9	50147.	5672.1

Sample Name: CCVL-4590576 Acquired: 6/13/2017 10:08:36 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01103**	**.10093**	F **.00863**	**.09793**	**.01079**	**.00092**	**.10940**	**.20529**	**.00511**	**.00995**	**.01025**	**.01364**
Stddev	.00062	.00284	.00147	.00194	.00018	.00019	.00127	.00461	.00015	.00073	.00019	.00026
%RSD	5.5945	2.8171	17.078	1.9839	1.7113	20.952	1.1570	2.2444	2.9220	7.3794	1.8855	1.9233
#1	.01146	.10295	.00968	.09930	.01092	.00078	.11029	.20203	.00521	.01047	.01039	.01345
#2	.01059	.09892	.00759	.09656	.01066	.00105	.10850	.20855	.00500	.00943	.01011	.01382
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.15021**	**3.0867**	**.02142**	**.20562**	**.01067**	**.01837**	**.93027**	**.04084**	**2.8199**	**.00813**	F **.06605**	**.02059**
Stddev	.00285	.0419	.00068	.00049	.00009	.00070	.00789	.00074	.1012	.00202	.00151	.00127
%RSD	1.9000	1.3580	3.1813	.23997	.88996	3.7996	.84861	1.8144	3.5884	24.828	2.2823	6.1634
#1	.15223	3.1163	.02093	.20527	.01074	.01887	.92469	.04136	2.8915	.00956	.06712	.01970
#2	.14819	3.0570	.02190	.20597	.01060	.01788	.93585	.04031	2.7484	.00670	.06499	.02149
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value	.10000										.10000	
Range	30.000%										-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01549**	**.51088**	**1.0933**	**.10162**	**.00977**	F **.02095**	**.00888**	**.01558**	F **.02198**	**.00972**	**.02123**	**.01743**
Stddev	.00066	.03125	.0669	.00235	.00016	.00270	.00036	.00214	.02442	.00013	.00015	.00049
%RSD	4.2805	6.1174	6.1174	2.3152	1.6355	12.883	4.1081	13.704	111.08	1.3191	.71017	2.8088
#1	.01503	.53298	1.1406	.10328	.00965	.02285	.00914	.01407	.00472	.00981	.02134	.01778
#2	.01596	.48878	1.0460	.09995	.00988	.01904	.00862	.01709	.03925	.00963	.02112	.01709
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value						.01500			.06000			
Range						30.000%			-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2688.3**	**50906.**	**5756.0**
Stddev	6.7	50.	33.9
%RSD	.24856	.09790	.58852
#1	2693.1	50941.	5779.9
#2	2683.6	50871.	5732.0

Sample Name: CCVL-4590576 Acquired: 6/13/2017 10:13:45 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01109**	**.10533**	F **.00809**	**.10124**	**.01039**	**.00086**	**.11091**	**.19347**	**.00500**	**.01067**	**.01042**	**.01327**
Stddev	.00035	.00146	.00843	.00066	.00012	.00018	.00272	.00046	.00003	.00031	.00027	.00021
%RSD	3.1931	1.3822	104.28	.65177	1.1468	21.546	2.4516	.23636	.61599	2.9258	2.6093	1.5808
#1	.01134	.10430	.01405	.10171	.01048	.00099	.10899	.19315	.00502	.01089	.01061	.01312
#2	.01084	.10636	.00212	.10078	.01031	.00073	.11283	.19379	.00498	.01044	.01022	.01342
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09587**	**3.0790**	**.02279**	**.20959**	**.00996**	**.01921**	**.90204**	**.04198**	**2.8863**	**.00699**	F **.06272**	**.02100**
Stddev	.00103	.0028	.00116	.00633	.00001	.00052	.00145	.00019	.0014	.00014	.00717	.00096
%RSD	1.0713	.09001	5.1026	3.0188	.05103	2.6888	.16097	.46341	.04954	1.9630	11.437	4.5773
#1	.09660	3.0771	.02361	.21406	.00996	.01957	.90101	.04184	2.8874	.00689	.06779	.02168
#2	.09514	3.0810	.02197	.20511	.00996	.01884	.90307	.04212	2.8853	.00708	.05765	.02032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02503**	**.49919**	**1.0683**	**.10543**	**.00945**	F **.01988**	**.00868**	**.01801**	F **.03012**	**.00952**	**.01941**	**.01361**
Stddev	.00021	.00696	.0149	.00119	.00002	.00283	.00065	.00264	.01578	.00000	.00005	.00022
%RSD	.83396	1.3945	1.3945	1.1300	.21026	14.231	7.4655	14.655	52.409	.03477	.26537	1.5945
#1	.02488	.49426	1.0577	.10628	.00944	.01788	.00914	.01987	.04128	.00952	.01944	.01346
#2	.02518	.50411	1.0788	.10459	.00947	.02188	.00822	.01614	.01896	.00952	.01937	.01376
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value						.01500			.06000			
Range						30.000%			-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2599.1**	**48627.**	**5447.0**
Stddev	7.7	224.	35.5
%RSD	.29733	.46164	.65208
#1	2604.6	48468.	5472.1
#2	2593.7	48785.	5421.9

Sample Name: CCVL-4590576 Acquired: 6/13/2017 10:16:10 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01119**	**.10503**	F **.00720**	**.10031**	**.01045**	**.00078**	**.10931**	**.19508**	**.00529**	**.01061**	**.01032**	**.01318**
Stddev	.00006	.00098	.00171	.00116	.00027	.00006	.00518	.00364	.00034	.00039	.00051	.00038
%RSD	.53357	.93546	23.725	1.1573	2.6229	7.3819	4.7380	1.8637	6.4265	3.6681	4.9511	2.8463
#1	.01123	.10573	.00840	.10113	.01064	.00082	.11297	.19765	.00553	.01033	.01068	.01292
#2	.01114	.10434	.00599	.09949	.01026	.00074	.10565	.19251	.00505	.01088	.00996	.01345
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09339**	**2.9922**	**.02056**	**.20353**	**.01011**	**.01934**	**.90660**	**.04188**	**2.8865**	**.00773**	F **.06217**	**.02484**
Stddev	.00002	.0095	.00206	.00018	.00005	.00021	.00884	.00022	.0031	.00118	.00421	.00145
%RSD	.01896	.31885	10.007	.08927	.52135	1.0638	.97562	.53161	.10684	15.318	6.7655	5.8218
#1	.09338	2.9989	.02202	.20366	.01015	.01949	.91285	.04204	2.8843	.00689	.05919	.02382
#2	.09340	2.9854	.01911	.20340	.01007	.01920	.90034	.04173	2.8887	.00856	.06514	.02586
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01312**	**.47724**	**1.0213**	**.10574**	**.00959**	**.01863**	**.00895**	**.01771**	**.04638**	**.00958**	**.01891**	**.01692**
Stddev	.00586	.01517	.0325	.00146	.00016	.00057	.00004	.00077	.02181	.00002	.00026	.00235
%RSD	44.711	3.1784	3.1784	1.3850	1.6878	3.0680	.39982	4.3551	47.021	.17848	1.3958	13.876
#1	.01726	.46651	.99833	.10471	.00971	.01903	.00898	.01717	.03096	.00959	.01909	.01858
#2	.00897	.48796	1.0442	.10678	.00948	.01822	.00893	.01826	.06180	.00957	.01872	.01526
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.02000											
Range	-30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2584.6**	**48241.**	**5308.8**
Stddev	5.9	55.	8.7
%RSD	.22900	.11410	.16481
#1	2588.8	48279.	5314.9
#2	2580.4	48202.	5302.6

Sample Name: MB 280-376380/1-A Acquired: 6/13/2017 10:20:03 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: 6/8 Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00069**	**.01413**	**-.00296**	**.01551**	**.00220**	**-.00006**	**-.00257**	F **.30993**	**-.00003**
Stddev	.00016	.00004	.00202	.00103	.00019	.00005	.00115	.00108	.00003
%RSD	23.670	.27709	68.365	6.6717	8.5159	89.957	44.515	.34806	130.15
#1	.00081	.01410	-.00153	.01477	.00233	-.00009	-.00176	.30917	-.00000
#2	.00058	.01416	-.00439	.01624	.00207	-.00002	-.00338	.31069	-.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								.20000	
Low Limit								-.20000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**.00020**	**-.00117**	W **.06135**	**-.02220**	**.00204**	**.07291**	**.00092**	**-.00041**
Stddev	.00025	.00023	.00010	.00076	.07060	.00054	.00371	.00008	.00007
%RSD	551.61	111.02	8.5433	1.2329	318.06	26.568	5.0931	8.8933	17.625
#1	.00022	.00004	-.00110	.06081	.02772	.00242	.07029	.00086	-.00046
#2	-.00013	.00037	-.00124	.06188	-.07211	.00165	.07554	.00098	-.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.05000					
Low Limit				-.05000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25114**	**.00089**	**.01869**	**-.00012**	**-.00955**	**.00159**	**.00050**	**.07140**	**.15279**
Stddev	.00174	.00097	.00068	.00097	.00089	.00093	.00549	.01718	.03676
%RSD	.69204	108.99	3.6186	805.11	9.2717	58.519	1103.8	24.061	24.061
#1	.25237	.00158	.01917	.00057	-.01018	.00225	.00438	.08355	.17879
#2	.24991	.00020	.01822	-.00081	-.00892	.00093	-.00338	.05925	.12680
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01132**	**.00076**	W **.00552**	**-.00035**	**.00021**	**-.04624**	**-.00010**	**.00400**	**.00091**
Stddev	.00137	.00004	.00327	.00027	.00089	.05657	.00018	.00050	.00130
%RSD	12.093	5.8368	59.110	77.554	428.83	122.35	173.45	12.458	142.00
#1	.01229	.00073	.00322	-.00054	-.00042	-.00624	.00002	.00365	.00183
#2	.01035	.00079	.00783	-.00016	.00084	-.08624	-.00023	.00436	-.00000
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500						
Low Limit			-.00500						

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2637.1**	**50552.**	**5562.1**
Stddev	69.1	411.	17.5
%RSD	2.6202	.81264	.31453
#1	2685.9	50262.	5574.5
#2	2588.2	50843.	5549.7

Sample Name: LCS 280-376380/2-A Acquired: 6/13/2017 10:22:42 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05017**	**1.8349**	**.94501**	**1.0137**	**1.9461**	**.04602**	**1.8981**	**48.265**	**.09605**
Stddev	.00128	.0451	.00896	.0199	.0088	.00012	.0311	.204	.00142
%RSD	2.5557	2.4600	.94862	1.9590	.45405	.26595	1.6383	.42262	1.4785
#1	.04926	1.8668	.95135	1.0277	1.9524	.04611	1.9201	48.409	.09706
#2	.05107	1.8030	.93867	.99963	1.9399	.04594	1.8761	48.120	.09505
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.46962**	**.19290**	**.24673**	**.99897**	**48.078**	**.91968**	**47.628**	**.46371**	**.93893**
Stddev	.01157	.00521	.00669	.00496	.270	.00098	1.249	.01231	.02319
%RSD	2.4629	2.6992	2.7114	.49678	.56190	.10650	2.6230	2.6537	2.4698
#1	.47780	.19658	.24200	1.0025	48.269	.92037	46.745	.45501	.95533
#2	.46144	.18922	.25146	.99547	47.887	.91898	48.511	.47241	.92253
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.411**	**.46703**	**9.6389**	**.47859**	**1.9234**	**.47358**	**1.8240**	**2.9805**	**6.3783**
Stddev	.271	.01368	.2237	.00943	.0392	.01071	.0402	.0069	.0148
%RSD	.56028	2.9284	2.3210	1.9703	2.0366	2.2611	2.2052	.23194	.23194
#1	48.219	.47670	9.7970	.48526	1.9511	.48115	1.8524	2.9854	6.3888
#2	48.603	.45736	9.4807	.47192	1.8957	.46601	1.7955	2.9756	6.3679
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9308**	**.90453**	**.93315**	**.91646**	**1.7765**	**1.8424**	**.47567**	**.46803**	**.48709**
Stddev	.0532	.00379	.02317	.02725	.0369	.0757	.01342	.01200	.00443
%RSD	2.7570	.41870	2.4828	2.9730	2.0779	4.1081	2.8221	2.5641	.90919
#1	1.9684	.90720	.91677	.89719	1.8026	1.7889	.46618	.45955	.49022
#2	1.8931	.90185	.94954	.93572	1.7504	1.8959	.48516	.47652	.48395
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2560.1**	**46867.**	**5413.0**
Stddev	16.5	274.	6.9
%RSD	.64609	.58494	.12756
#1	2548.4	47061.	5408.1
#2	2571.8	46673.	5417.9

Sample Name: 280-97928-C-1-A Acquired: 6/13/2017 10:25:07 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00056**	**44.485**	**.02713**	**.01797**	**.17004**	**.00188**	**-.00314**	**14.727**	**.00107**
Stddev	.00040	.054	.00488	.00131	.00003	.00000	.00047	.066	.00006
%RSD	71.544	.12182	17.977	7.3134	.02015	.14704	14.850	.44988	5.5995
#1	.00084	44.524	.03058	.01889	.17006	.00188	-.00281	14.774	.00112
#2	.00028	44.447	.02368	.01704	.17001	.00188	-.00347	14.680	.00103
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03053**	**.05127**	**.10029**	**87.576**	**6.2522**	**.07132**	**17.748**	**3.5818**	**-.00016**
Stddev	.00150	.00203	.00113	.033	.0011	.00019	.018	.0008	.00002
%RSD	4.9137	3.9515	1.1238	.03783	.01770	.26697	.09931	.02148	14.920
#1	.03159	.05270	.10109	87.599	6.2515	.07119	17.761	3.5823	-.00014
#2	.02947	.04984	.09949	87.553	6.2530	.07145	17.736	3.5812	-.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.27200**	**.06492**	**3.4319**	**.03656**	**.61661**	**.00672**	**-.00718**	**3.4875**	**7.4631**
Stddev	.00213	.00210	.1154	.00104	.01824	.00221	.00091	.0490	.1050
%RSD	.78293	3.2345	3.3634	2.8492	2.9575	32.897	12.616	1.4063	1.4063
#1	.27050	.06641	3.5135	.03730	.62950	.00516	-.00654	3.5221	7.5374
#2	.27351	.06344	3.3503	.03583	.60371	.00829	-.00782	3.4528	7.3889
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01020**	**.03643**	**.02061**	**.32536**	**.00587**	**.00702**	**.08221**	**.24089**	**.01480**
Stddev	.00066	.00012	.00081	.00189	.00447	.01686	.00022	.00143	.00005
%RSD	6.4996	.31743	3.9243	.58054	76.254	240.18	.26794	.59162	.36237
#1	.00974	.03635	.02004	.32670	.00903	.01894	.08205	.23988	.01476
#2	.01067	.03651	.02119	.32402	.00270	-.00490	.08237	.24190	.01484
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2796.8**	**52035.**	**5969.4**
Stddev	2.7	219.	77.5
%RSD	.09775	.42161	1.2990
#1	2798.7	52190.	5914.5
#2	2794.9	51880.	6024.2

Sample Name: 280-97928-C-1-A SD@5 Acquired: 6/13/2017 10:27:39 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00053**	**9.3348**	**.00092**	**.00386**	**.03590**	**.00022**	**.00069**	**3.0981**	**.00018**
Stddev	.00011	.0424	.00589	.00039	.00054	.00003	.00506	.0021	.00033
%RSD	20.113	.45455	640.97	10.199	1.5147	12.317	736.68	.06770	181.43
#1	.00045	9.3048	.00509	.00414	.03629	.00024	-.00289	3.0966	-.00005
#2	.00060	9.3648	-.00325	.00358	.03552	.00020	.00426	3.0996	.00041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00632**	**.01064**	**.01832**	**17.769**	**1.3329**	**.01340**	**3.7592**	**.73979**	**-.00023**
Stddev	.00013	.00016	.00064	.010	.0094	.00113	.0052	.00249	.00084
%RSD	2.0192	1.4994	3.5034	.05370	.70809	8.4473	.13761	.33642	359.80
#1	.00641	.01076	.01786	17.776	1.3262	.01420	3.7628	.74155	.00036
#2	.00623	.01053	.01877	17.763	1.3395	.01259	3.7555	.73803	-.00083
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.04272**	**.01395**	**.71842**	**.00530**	**.09233**	**.00021**	**-.00392**	**.91132**	**1.9502**
Stddev	.00001	.00025	.01484	.00145	.00944	.00232	.00574	.02569	.0550
%RSD	.02239	1.7958	2.0658	27.428	10.227	1088.4	146.34	2.8187	2.8187
#1	-.04271	.01412	.72892	.00428	.09900	.00186	-.00798	.92948	1.9891
#2	-.04273	.01377	.70793	.00633	.08565	-.00143	.00014	.89315	1.9113
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00219**	**.00760**	**.00897**	**.06736**	**.00107**	**-.02197**	**.01652**	**.04746**	**.00237**
Stddev	.00040	.00019	.00071	.00121	.00068	.01295	.00018	.00071	.00015
%RSD	18.096	2.5420	7.8963	1.7960	63.437	58.953	1.0618	1.4857	6.1604
#1	.00247	.00774	.00847	.06821	.00059	-.01281	.01664	.04696	.00227
#2	.00191	.00747	.00948	.06650	.00154	-.03113	.01639	.04796	.00248
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2725.9**	**50828.**	**5781.7**
Stddev	1.6	174.	33.6
%RSD	.05726	.34289	.58057
#1	2727.0	50705.	5758.0
#2	2724.8	50952.	5805.4

Sample Name: 280-97928-C-1-B MS Acquired: 6/13/2017 10:33:51 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04834**	**85.870**	**.92282**	**.93847**	**2.1911**	**.04656**	**1.8221**	**64.905**	**.09404**
Stddev	.00031	1.495	.01442	.00615	.0335	.00110	.0157	1.005	.00110
%RSD	.64649	1.7409	1.5625	.65533	1.5284	2.3723	.86272	1.5482	1.1724
#1	.04856	86.927	.93301	.94282	2.2148	.04735	1.8332	65.616	.09481
#2	.04812	84.813	.91262	.93412	2.1674	.04578	1.8110	64.195	.09326
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48286**	**.27197**	**.36283**	**112.93**	**65.647**	**.98840**	**71.523**	**4.7433**	**.88155**
Stddev	.00384	.00269	.00102	2.00	.950	.01869	.447	.0363	.00751
%RSD	.79569	.98989	.28040	1.7719	1.4469	1.8914	.62541	.76556	.85218
#1	.48557	.27387	.36211	114.35	66.319	1.0016	71.207	4.7176	.88686
#2	.48014	.27006	.36355	111.52	64.976	.97519	71.839	4.7690	.87624
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**47.430**	**.52187**	**13.093**	**.49346**	**2.6903**	**.33010**	**1.7492**	**7.8149**	**16.724**
Stddev	.384	.00605	.111	.00699	.0372	.00985	.0032	.1962	.420
%RSD	.81048	1.1596	.84909	1.4169	1.3814	2.9853	.18319	2.5110	2.5110
#1	47.701	.52615	13.171	.49840	2.7166	.33707	1.7515	7.9537	17.021
#2	47.158	.51759	13.014	.48851	2.6640	.32314	1.7470	7.6762	16.427
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.7745**	**.93677**	**.85128**	**1.4990**	**1.6354**	**1.8068**	**.60920**	**.71448**	**.40917**
Stddev	.0223	.01685	.00873	.0131	.0178	.0379	.00430	.00482	.00693
%RSD	1.2544	1.7992	1.0253	.87161	1.0909	2.0964	.70601	.67466	1.6945
#1	1.7902	.94869	.84511	1.4898	1.6480	1.7800	.60616	.71107	.41408
#2	1.7587	.92485	.85745	1.5083	1.6227	1.8336	.61224	.71789	.40427
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2789.0**	**51009.**	**6140.3**
Stddev	17.3	502.	19.9
%RSD	.61883	.98448	.32357
#1	2801.2	51364.	6126.3
#2	2776.8	50654.	6154.4

Sample Name: 280-97928-C-1-C MSD Acquired: 6/13/2017 10:36:13 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05008**	**80.698**	**.96086**	**.97588**	**2.2223**	**.04747**	**1.8818**	**65.457**	**.09706**
Stddev	.00006	.158	.01610	.01146	.0028	.00008	.0227	.073	.00169
%RSD	.12597	.19635	1.6760	1.1739	.12407	.16987	1.2076	.11152	1.7386
#1	.05003	80.810	.97225	.98398	2.2203	.04753	1.8978	65.508	.09825
#2	.05012	80.586	.94947	.96778	2.2242	.04742	1.8657	65.405	.09586
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49592**	**.27709**	**.36168**	**102.75**	**66.016**	**1.0037**	**70.841**	**4.2587**	**.91658**
Stddev	.00796	.00484	.00043	.04	.027	.0020	.031	.0073	.01309
%RSD	1.6042	1.7485	.11913	.03845	.04093	.19972	.04356	.17222	1.4278
#1	.50155	.28051	.36199	102.78	65.996	1.0051	70.819	4.2639	.92584
#2	.49030	.27366	.36138	102.72	66.035	1.0023	70.863	4.2536	.90733
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.522**	**.53247**	**13.206**	**.50732**	**2.6400**	**.35066**	**1.8107**	**6.8567**	**14.673**
Stddev	.160	.00774	.200	.00966	.0432	.00682	.0237	.0751	.161
%RSD	.33021	1.4533	1.5115	1.9036	1.6358	1.9446	1.3113	1.0961	1.0961
#1	48.635	.53794	13.347	.51415	2.6705	.35548	1.8275	6.9098	14.787
#2	48.409	.52699	13.065	.50050	2.6094	.34583	1.7939	6.8036	14.560
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8444**	**.95700**	**.87377**	**1.5540**	**1.7036**	**1.8204**	**.60855**	**.69879**	**.43043**
Stddev	.0389	.00160	.00069	.0005	.0201	.0063	.00038	.00202	.00140
%RSD	2.1109	.16675	.07906	.02950	1.1804	.34528	.06283	.28858	.32522
#1	1.8719	.95588	.87426	1.5537	1.7178	1.8160	.60828	.69737	.42944
#2	1.8169	.95813	.87329	1.5544	1.6893	1.8249	.60882	.70022	.43142
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2730.5**	**50189.**	**6012.1**
Stddev	12.7	67.	28.0
%RSD	.46407	.13438	.46565
#1	2739.4	50141.	5992.3
#2	2721.5	50237.	6031.9

Sample Name: 280-97928-C-1-A PDS Acquired: 6/13/2017 10:38:34 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04829**	**44.633**	**.19707**	**.11381**	**.26340**	**.04637**	**-.00449**	**33.412**	**.04783**
Stddev	.00020	.053	.00428	.00268	.00192	.00011	.00333	.034	.00124
%RSD	.41724	.11977	2.1722	2.3588	.72824	.24443	74.094	.10287	2.5831
#1	.04815	44.671	.20009	.11570	.26475	.04645	-.00214	33.437	.04871
#2	.04843	44.595	.19404	.11191	.26204	.04629	-.00684	33.388	.04696
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07527**	**.09711**	**.14654**	**86.598**	**25.045**	**.16149**	**36.032**	**3.5215**	**.04648**
Stddev	.00215	.00266	.00050	.065	.032	.00007	.062	.0037	.00123
%RSD	2.8533	2.7370	.33861	.07511	.12649	.04500	.17315	.10397	2.6535
#1	.07679	.09899	.14619	86.644	25.067	.16144	36.076	3.5241	.04735
#2	.07375	.09524	.14689	86.552	25.023	.16154	35.988	3.5189	.04561
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.932**	**.10979**	**5.2763**	**.12912**	**.62118**	**.10111**	**.17487**	**8.9142**	**19.076**
Stddev	.094	.00243	.1581	.00616	.02011	.00250	.00277	.0437	.093
%RSD	.47405	2.2108	2.9957	4.7679	3.2369	2.4711	1.5864	.48999	.48999
#1	19.998	.11151	5.3881	.13347	.63539	.10287	.17683	8.9450	19.142
#2	19.865	.10808	5.1646	.12476	.60696	.09934	.17291	8.8833	19.010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10832**	**.08085**	**.19959**	**.38294**	**.18074**	**.44370**	**.12692**	**.39936**	**.06787**
Stddev	.00331	.00048	.00069	.00580	.00485	.00636	.00028	.00012	.00150
%RSD	3.0600	.59440	.34391	1.5143	2.6840	1.4331	.22019	.02959	2.2063
#1	.11066	.08119	.20008	.38704	.18417	.44819	.12672	.39944	.06682
#2	.10597	.08051	.19911	.37884	.17731	.43920	.12712	.39928	.06893
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2757.8**	**51102.**	**5971.8**
Stddev	12.2	88.	14.8
%RSD	.44254	.17304	.24728
#1	2749.2	51040.	5961.3
#2	2766.4	51165.	5982.2

Sample Name: 280-97928-C-3-A Acquired: 6/13/2017 10:41:06 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00068**	**30.777**	**.01195**	**.01508**	**.10142**	**.00127**	**-.00455**	**73.698**	**.00081**
Stddev	.00000	.207	.00637	.00017	.00046	.00005	.00099	.268	.00015
%RSD	.38473	.67129	53.325	1.1380	.45760	4.2968	21.638	.36341	17.941
#1	.00069	30.924	.01645	.01496	.10174	.00123	-.00386	73.888	.00091
#2	.00068	30.631	.00744	.01520	.10109	.00131	-.00525	73.509	.00071
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02226**	**.03829**	**.07740**	**71.937**	**5.0550**	**.05690**	**25.441**	**2.1303**	**-.00096**
Stddev	.00040	.00072	.00025	.408	.0435	.00155	.057	.0055	.00041
%RSD	1.7776	1.8896	.32679	.56725	.86012	2.7219	.22331	.25649	43.048
#1	.02254	.03880	.07757	72.225	5.0243	.05800	25.481	2.1341	-.00067
#2	.02198	.03777	.07722	71.648	5.0858	.05581	25.400	2.1264	-.00125
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.26705**	**.05132**	**2.5916**	**.01883**	**.07694**	**-.00010**	**-.00906**	**2.7771**	**5.9430**
Stddev	.00596	.00241	.0664	.00027	.00748	.00135	.00257	.0157	.0337
%RSD	2.2314	4.7050	2.5640	1.4238	9.7197	1368.3	28.328	.56672	.56672
#1	.26283	.05303	2.6386	.01902	.07165	-.00105	-.00725	2.7883	5.9669
#2	.27126	.04962	2.5446	.01864	.08223	.00086	-.01088	2.7660	5.9192
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00952**	**.09604**	**.02020**	**.24678**	**-.00064**	**-.01095**	**.05799**	**.13517**	**.03169**
Stddev	.00302	.00040	.00220	.00153	.00289	.01524	.00003	.00074	.00018
%RSD	31.683	.41681	10.897	.62027	453.95	139.18	.05853	.54591	.58251
#1	.01166	.09633	.01865	.24570	.00141	-.00017	.05801	.13569	.03156
#2	.00739	.09576	.02176	.24786	-.00268	-.02173	.05796	.13465	.03182
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2790.8**	**50785.**	**5955.9**
Stddev	4.1	70.	12.8
%RSD	.14638	.13862	.21482
#1	2787.9	50735.	5946.9
#2	2793.7	50835.	5965.0

Sample Name: 280-97928-B-4-A Acquired: 6/13/2017 10:43:38 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**22.222**	**.01383**	**.01276**	**.09396**	**.00092**	**-.00065**	**121.28**	**.00069**
Stddev	.00084	.070	.00265	.00020	.00011	.00009	.00007	.28	.00003
%RSD	7391.5	.31530	19.176	1.5318	.11415	9.2583	10.723	.23303	3.8594
#1	.00058	22.272	.01571	.01290	.09403	.00086	-.00060	121.48	.00067
#2	-.00061	22.173	.01196	.01263	.09388	.00098	-.00069	121.08	.00071
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01768**	**.02854**	**.05583**	**52.190**	**4.5867**	**.04489**	**24.837**	**1.7172**	**-.00078**
Stddev	.00064	.00034	.00093	.290	.0796	.00041	.081	.0032	.00000
%RSD	3.6217	1.1767	1.6572	.55595	1.7358	.91955	.32796	.18583	.01035
#1	.01813	.02878	.05648	52.395	4.5304	.04459	24.894	1.7194	-.00078
#2	.01723	.02830	.05518	51.985	4.6430	.04518	24.779	1.7149	-.00078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.38885**	**.03839**	**2.4969**	**.00808**	**.07318**	**.00393**	**-.01808**	**2.5426**	**5.4413**
Stddev	.01647	.00148	.0761	.00073	.00602	.00213	.00269	.0166	.0355
%RSD	4.2358	3.8444	3.0481	9.0861	8.2235	54.082	14.862	.65155	.65155
#1	.37721	.03943	2.5507	.00860	.07743	.00544	-.01618	2.5544	5.4663
#2	.40050	.03735	2.4430	.00756	.06892	.00243	-.01998	2.5309	5.4162
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01144**	**.10931**	**.01926**	**.22563**	**.00271**	**-.04589**	**.04579**	**.10160**	**.03123**
Stddev	.00216	.00045	.00033	.00107	.00221	.01605	.00023	.00212	.00118
%RSD	18.877	.41518	1.7051	.47294	81.502	34.977	.49197	2.0843	3.7726
#1	.01296	.10963	.01949	.22638	.00115	-.05724	.04563	.10310	.03040
#2	.00991	.10899	.01903	.22487	.00428	-.03454	.04595	.10011	.03207
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2777.1**	**52304.**	**6215.8**
Stddev	.7	36.	11.4
%RSD	.02645	.06871	.18286
#1	2777.7	52278.	6207.8
#2	2776.6	52329.	6223.9

Sample Name: CCVH-4579429 Acquired: 6/13/2017 10:46:12 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00030**	**46.738**	**-.00296**	**.00040**	**.00041**	**.00002**	**.95353**	**.03049**	**.00031**	**-.00072**	**.00008**	**.01051**
Stddev	.00083	.144	.00585	.00026	.00022	.00005	.01305	.00385	.00010	.00014	.00035	.00054
%RSD	275.39	.30867	197.54	64.143	53.372	260.92	1.3690	12.614	33.566	19.226	423.07	5.1114
#1	-.00028	46.840	.00118	.00022	.00026	-.00002	.96276	.02777	.00038	-.00081	-.00016	.01089
#2	.00089	46.636	-.00710	.00058	.00057	.00006	.94430	.03320	.00023	-.00062	.00033	.01013
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.192**	**.11820**	**.00413**	**.03727**	**-.00130**	**-.00149**	**240.64**	**.00134**	**.00972**	**-.00167**	**5.0064**	**.00284**
Stddev	.161	.08067	.00343	.00952	.00023	.00033	.75	.00043	.00301	.00261	.1023	.00135
%RSD	.32719	68.244	82.875	25.536	17.896	22.387	.31321	32.132	30.938	156.05	2.0431	47.536
#1	49.305	.06116	.00171	.03054	-.00114	-.00172	240.11	.00164	.01184	-.00351	5.0787	.00188
#2	49.078	.17524	.00656	.04400	-.00147	-.00125	241.17	.00103	.00759	.00017	4.9340	.00379
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01201**	**.00918**	**.01964**	**.00022**	**.00027**	W **4.6326**	**.01902**	**.00503**	W **9.3161**	**.01218**	**-.00018**	**.07614**
Stddev	.00802	.01147	.02454	.00014	.00002	.0035	.00032	.00401	.0329	.00067	.00044	.00452
%RSD	66.828	124.93	124.93	65.202	7.4735	.07484	1.6849	79.600	.35314	5.4736	245.20	5.9305
#1	-.01768	.00107	.00229	.00012	.00028	4.6350	.01880	.00220	9.2928	.01170	.00013	.07934
#2	-.00633	.01729	.03699	.00032	.00025	4.6301	.01925	.00787	9.3393	.01265	-.00049	.07295
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2660.1**	**49078.**	**5775.7**
Stddev	19.8	350.	9.3
%RSD	.74522	.71257	.16110
#1	2646.0	49325.	5782.3
#2	2674.1	48831.	5769.1

Sample Name: CCV-4580817 Acquired: 6/13/2017 10:48:46 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49073**	**.49311**	**.93178**	**.49144**	**.50919**	**.47144**	**-.00023**	**5.1476**	**.49125**	**.49101**	**.49552**	**.49827**	**2.4338**
Stddev	.00157	.01337	.01446	.01169	.00268	.00275	.00312	.0372	.01223	.01203	.01312	.00182	.0125
%RSD	.31967	2.7120	1.5514	2.3785	.52645	.58386	1333.2	.72169	2.4901	2.4504	2.6478	.36543	.51422
#1	.49184	.50257	.94200	.49971	.51108	.47339	-.00244	5.1739	.49990	.49952	.50479	.49956	2.4426
#2	.48962	.48366	.92156	.48317	.50729	.46950	.00197	5.1214	.48260	.48250	.48624	.49698	2.4249
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.768**	**.95636**	**19.578**	**.47474**	**.49604**	**4.9564**	**.49103**	**.97150**	**1.0045**	**-.04293**	**.96826**	**.94492**	**4.8421**
Stddev	.162	.00731	.006	.00008	.01087	.0168	.01310	.02886	.0192	.00517	.02503	.02177	.0220
%RSD	.32596	.76402	.03026	.01625	2.1911	.33913	2.6677	2.9706	1.9108	12.047	2.5851	2.3042	.45334
#1	49.882	.96152	19.583	.47479	.50372	4.9683	.50029	.99191	1.0180	-.03928	.98596	.96032	4.8576
#2	49.653	.95119	19.574	.47468	.48835	4.9445	.48176	.95109	.99090	-.04659	.95056	.92953	4.8266
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.362**	**1.0079**	**.46763**	**.01196**	**.46049**	**.93447**	**-.03045**	**.48309**	**.46767**	**.50345**
Stddev	.047	.0236	.00184	.00193	.00021	.02492	.01047	.00158	.00015	.00296
%RSD	.45334	2.3444	.39284	16.137	.04649	2.6667	34.383	.32722	.03118	.58838
#1	10.395	1.0246	.46893	.01060	.46065	.95209	-.02305	.48421	.46777	.50554
#2	10.329	.99118	.46633	.01333	.46034	.91685	-.03785	.48197	.46757	.50135
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2703.9**	**50860.**	**5882.3**
Stddev	10.8	2.	1.3
%RSD	.39872	.00336	.02274
#1	2711.5	50861.	5883.2
#2	2696.3	50859.	5881.3

Sample Name: CCB Acquired: 6/13/2017 10:51:15 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00128**	**.00891**	**-.00246**	**.00074**	**.00072**	**-.00004**	**.00050**	**-.00268**	**.00031**	**.00025**	**-.00033**	**-.00317**	**.01153**
Stddev	.00055	.00177	.00455	.00091	.00003	.00003	.00066	.00690	.00008	.00003	.00014	.00038	.00105
%RSD	43.107	19.905	185.26	122.42	4.5176	63.144	130.41	257.87	27.696	12.500	41.525	11.975	9.0875
#1	.00166	.01016	.00076	.00010	.00070	-.00006	.00004	-.00756	.00037	.00023	-.00043	-.00290	.01079
#2	.00089	.00765	-.00567	.00138	.00074	-.00002	.00097	.00220	.00025	.00028	-.00023	-.00344	.01227
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.08003**	**.00465**	**.01009**	**.00065**	**.00009**	**-.07815**	**-.00047**	**.00405**	**-.00329**	**-.03786**	**.00251**	**-.00064**	**.00304**
Stddev	.02021	.00068	.00161	.00008	.00022	.00753	.00033	.00071	.00021	.00855	.00440	.00397	.00906
%RSD	25.251	14.668	15.919	12.855	240.66	9.6334	70.926	17.425	6.2743	22.583	174.94	624.17	297.85
#1	.06574	.00514	.00895	.00071	-.00006	-.07283	-.00023	.00355	-.00344	-.03182	-.00060	.00217	-.00336
#2	.09432	.00417	.01122	.00059	.00025	-.08347	-.00070	.00455	-.00315	-.04391	.00562	-.00344	.00944
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00651**	**.00172**	**.00013**	**.00516**	**-.00036**	**.00268**	**-.03848**	**-.00029**	**-.00075**	**-.00073**
Stddev	.01938	.00164	.00007	.00016	.00047	.00446	.02462	.00001	.00078	.00049
%RSD	297.85	94.916	53.376	3.0854	129.56	165.95	63.979	3.9247	104.23	67.540
#1	-.00720	.00057	.00018	.00504	-.00069	.00584	-.05589	-.00030	-.00130	-.00038
#2	.02021	.00288	.00008	.00527	-.00003	-.00047	-.02107	-.00028	-.00020	-.00108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2690.6**	**51558.**	**5820.0**
Stddev	13.8	41.	40.3
%RSD	.51320	.07892	.69259
#1	2700.3	51586.	5791.5
#2	2680.8	51529.	5848.5

Sample Name: CCVL-4590576 Acquired: 6/13/2017 10:54:49 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01110**	**.11098**	**.01658**	**.10169**	**.01073**	**.00084**	**.11588**	**.20744**	**.00539**	**.01062**	**.01044**	**.01233**
Stddev	.00022	.00108	.00208	.00008	.00003	.00002	.00529	.00615	.00029	.00000	.00035	.00011
%RSD	1.9741	.97217	12.523	.08308	.24009	2.2981	4.5613	2.9634	5.3468	.04370	3.3317	.87554
#1	.01095	.11174	.01805	.10164	.01071	.00086	.11214	.21179	.00559	.01063	.01020	.01225
#2	.01126	.11022	.01512	.10175	.01075	.00083	.11962	.20310	.00519	.01062	.01069	.01241
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.31850**	**3.1887**	**.02280**	**.21195**	**.01226**	**.01989**	**.94021**	**.04203**	**2.9288**	**.00924**	F **.06543**	**.01870**
Stddev	.00630	.0360	.00081	.00235	.00008	.00031	.00583	.00032	.0006	.00017	.01616	.00063
%RSD	1.9778	1.1283	3.5599	1.1067	.64963	1.5453	.62045	.75538	.02107	1.8581	24.702	3.3852
#1	.31404	3.1632	.02223	.21029	.01232	.01968	.94433	.04225	2.9284	.00936	.05400	.01826
#2	.32295	3.2141	.02338	.21361	.01221	.02011	.93609	.04180	2.9292	.00911	.07686	.01915
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value	.10000										.10000	
Range	30.000%										-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01466**	**.48111**	**1.0296**	**.10725**	**.00962**	**.01929**	**.00915**	**.01485**	F **.04118**	**.00974**	F **.02779**	**.01610**
Stddev	.00256	.00061	.0013	.00255	.00007	.00197	.00050	.00499	.04438	.00029	.00049	.00103
%RSD	17.471	.12612	.12612	2.3762	.75314	10.188	5.4783	33.601	107.76	2.9272	1.7515	6.3850
#1	.01285	.48068	1.0287	.10905	.00957	.01790	.00951	.01132	.07256	.00994	.02744	.01538
#2	.01648	.48154	1.0305	.10544	.00967	.02068	.00880	.01838	.00980	.00954	.02813	.01683
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass
Value									.06000		.02000	
Range									-30.000%		30.000%	

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2702.1**	**50490.**	**5697.3**
Stddev	4.9	183.	41.3
%RSD	.18061	.36195	.72426
#1	2705.5	50619.	5726.5
#2	2698.6	50361.	5668.1

Sample Name: 280-97928-C-5-A Acquired: 6/13/2017 10:57:27 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00037**	**72.501**	**.05058**	**.02258**	**.25274**	**.00262**	**-.00240**	**38.152**	**.00139**
Stddev	.00013	.164	.00215	.00157	.00168	.00005	.00178	.087	.00011
%RSD	35.237	.22574	4.2566	6.9363	.66572	1.8762	74.280	.22756	8.2411
#1	.00028	72.617	.04906	.02369	.25393	.00258	-.00366	38.213	.00131
#2	.00046	72.385	.05211	.02147	.25155	.00265	-.00114	38.091	.00147
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05541**	**.08089**	**.28771**	**167.05**	**8.7617**	**.13963**	**36.841**	**8.0504**	**-.00097**
Stddev	.00189	.00269	.00009	.78	.0233	.00184	.361	.2434	.00025
%RSD	3.4047	3.3220	.03070	.46928	.26646	1.3158	.97985	3.0228	26.129
#1	.05674	.08279	.28765	167.61	8.7783	.13833	37.096	8.2225	-.00114
#2	.05407	.07899	.28777	166.50	8.7452	.14093	36.586	7.8783	-.00079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.30918**	**.11679**	**3.8020**	**.03877**	**.67108**	**.01291**	**-.00066**	**2.9589**	**6.3321**
Stddev	.00370	.00260	.0924	.00044	.01415	.00239	.01003	.0098	.0209
%RSD	1.1956	2.2283	2.4310	1.1407	2.1084	18.531	1524.9	.32970	.32970
#1	.31180	.11863	3.8673	.03908	.68108	.01460	-.00775	2.9658	6.3468
#2	.30657	.11495	3.7366	.03846	.66107	.01122	.00644	2.9520	6.3173
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01036**	**.06708**	**.01970**	**.28229**	**.00600**	**.01667**	**.12178**	**.37775**	**.02686**
Stddev	.00083	.00026	.00131	.00025	.00219	.03934	.00064	.00268	.00018
%RSD	7.9859	.38163	6.6652	.08700	36.567	236.00	.52290	.70864	.67790
#1	.01095	.06726	.02063	.28247	.00755	.04448	.12223	.37965	.02673
#2	.00977	.06690	.01877	.28212	.00445	-.01115	.12133	.37586	.02699
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2943.1**	**53588.**	**6156.0**
Stddev	20.4	1504.	.7
%RSD	.69178	2.8071	.01172
#1	2957.5	52524.	6156.5
#2	2928.7	54652.	6155.5

Sample Name: 280-97928-C-6-A Acquired: 6/13/2017 11:00:46 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00016**	**33.899**	**.02511**	**.01734**	**.13538**	**.00142**	**.00016**	**65.617**	**.00104**
Stddev	.00103	.019	.01355	.00108	.00077	.00005	.00163	.069	.00003
%RSD	657.14	.05472	53.963	6.2033	.57017	3.7109	1031.3	.10459	2.6335
#1	.00089	33.912	.03470	.01658	.13592	.00138	.00131	65.665	.00102
#2	-.00057	33.886	.01553	.01810	.13483	.00146	-.00100	65.568	.00106
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02891**	**.04321**	**.09649**	**80.468**	**6.0274**	**.06169**	**25.946**	**2.9380**	**-.00025**
Stddev	.00008	.00074	.00026	.214	.0039	.00049	.082	.0050	.00026
%RSD	.26889	1.7052	.26442	.26577	.06543	.79231	.31502	.16933	104.64
#1	.02897	.04373	.09631	80.620	6.0302	.06134	25.888	2.9345	-.00006
#2	.02886	.04269	.09667	80.317	6.0246	.06203	26.003	2.9415	-.00043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.40818**	**.05976**	**3.3642**	**.02018**	**.11512**	**.00404**	**-.01445**	**2.8052**	**6.0031**
Stddev	.01061	.00015	.0053	.00105	.00459	.00049	.00470	.0103	.0221
%RSD	2.6002	.25752	.15653	5.2171	3.9875	12.014	32.544	.36802	.36802
#1	.41568	.05965	3.3679	.01944	.11836	.00439	-.01777	2.7979	5.9875
#2	.40067	.05987	3.3604	.02093	.11187	.00370	-.01112	2.8125	6.0188
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00784**	**.09478**	**.02243**	**.28734**	**.00656**	**-.03223**	**.06805**	**.16982**	**.03461**
Stddev	.00264	.00064	.00238	.00053	.00285	.00076	.00001	.00187	.00207
%RSD	33.642	.67959	10.602	.18433	43.518	2.3637	.01834	1.1017	5.9714
#1	.00971	.09523	.02411	.28697	.00454	-.03276	.06804	.16850	.03315
#2	.00598	.09432	.02074	.28772	.00857	-.03169	.06806	.17115	.03607
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2840.7**	**53626.**	**6350.0**
Stddev	25.3	237.	34.2
%RSD	.89137	.44158	.53871
#1	2858.6	53794.	6325.8
#2	2822.8	53459.	6374.2

Sample Name: 280-97928-C-7-A Acquired: 6/13/2017 11:03:17 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00053**	**28.253**	**.01985**	**.01419**	**.12156**	**.00128**	**-.00210**	**24.584**	**.00076**
Stddev	.00009	.134	.00387	.00005	.00095	.00001	.00428	.200	.00001
%RSD	16.074	.47429	19.515	.36278	.78103	1.0715	203.73	.81359	1.1045
#1	.00059	28.158	.01711	.01423	.12089	.00129	.00092	24.442	.00075
#2	.00047	28.348	.02259	.01415	.12223	.00127	-.00512	24.725	.00076
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02492**	**.03568**	**.08686**	**69.585**	**5.1543**	**.05177**	**16.876**	**2.6317**	**-.00023**
Stddev	.00040	.00078	.00128	.349	.0832	.00089	.058	.0100	.00010
%RSD	1.6002	2.1968	1.4740	.50099	1.6147	1.7213	.34480	.37935	43.072
#1	.02520	.03624	.08777	69.339	5.0955	.05240	16.917	2.6387	-.00030
#2	.02464	.03513	.08595	69.832	5.2132	.05114	16.835	2.6246	-.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.55545**	**.05127**	**2.6429**	**.01748**	**.03644**	**.00239**	**-.00497**	**2.0352**	**4.3554**
Stddev	.01227	.00142	.0755	.00012	.00696	.00065	.00736	.0152	.0326
%RSD	2.2081	2.7738	2.8567	.71480	19.113	27.153	148.22	.74860	.74860
#1	.54678	.05228	2.6962	.01757	.04136	.00285	-.01017	2.0245	4.3324
#2	.56412	.05027	2.5895	.01739	.03151	.00193	.00024	2.0460	4.3785
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01001**	**.04482**	**.01943**	**.21317**	**.00205**	**-.03118**	**.05571**	**.15222**	**.03084**
Stddev	.00018	.00026	.00022	.00255	.00261	.00479	.00004	.00156	.00018
%RSD	1.7613	.57486	1.1510	1.1962	127.04	15.349	.06555	1.0239	.57806
#1	.01013	.04464	.01959	.21497	.00390	-.02779	.05574	.15332	.03097
#2	.00988	.04500	.01928	.21137	.00021	-.03456	.05568	.15112	.03072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2869.8**	**53628.**	**6303.4**
Stddev	1.8	91.	30.6
%RSD	.06263	.17002	.48476
#1	2871.1	53693.	6325.0
#2	2868.5	53564.	6281.8

Sample Name: 280-97928-C-8-A Acquired: 6/13/2017 11:05:51 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00059**	**81.513**	**.04156**	**.01921**	**.38265**	**.00376**	**-.00333**	**36.460**	**.00208**
Stddev	.00008	.107	.00973	.00040	.00023	.00013	.00242	.028	.00020
%RSD	13.044	.13161	23.405	2.1014	.05962	3.5838	72.616	.07755	9.5702
#1	.00053	81.589	.04844	.01949	.38282	.00366	-.00504	36.480	.00222
#2	.00064	81.437	.03468	.01892	.38249	.00385	-.00162	36.440	.00194
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06812**	**.09788**	**.23888**	**181.86**	**8.6481**	**.20766**	**31.292**	W **10.117**	**.00009**
Stddev	.00178	.00356	.00063	.12	.0659	.00232	.072	.002	.00073
%RSD	2.6102	3.6364	.26483	.06779	.76189	1.1165	.23109	.01995	816.06
#1	.06937	.10039	.23933	181.77	8.6947	.20930	31.343	10.119	.00060
#2	.06686	.09536	.23843	181.94	8.6015	.20602	31.241	10.116	-.00042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.31357**	**.13149**	**4.1117**	**.07731**	**.45073**	**.01590**	**.00025**	**2.8430**	**6.0839**
Stddev	.01417	.00437	.1122	.00263	.00733	.00441	.00408	.0114	.0243
%RSD	4.5177	3.3215	2.7280	3.4032	1.6260	27.762	1600.0	.40007	.40007
#1	.32359	.13458	4.1910	.07917	.44555	.01902	-.00263	2.8349	6.0667
#2	.30355	.12840	4.0324	.07545	.45591	.01278	.00314	2.8510	6.1011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00980**	**.10019**	**.02714**	**.59355**	**.00469**	**.03945**	**.13663**	**.43385**	**.03189**
Stddev	.00052	.00019	.00077	.00136	.00006	.01047	.00058	.00048	.00021
%RSD	5.3179	.19178	2.8363	.22930	1.2704	26.545	.42269	.11024	.64901
#1	.01017	.10033	.02769	.59258	.00474	.03205	.13622	.43419	.03203
#2	.00944	.10005	.02660	.59451	.00465	.04686	.13704	.43351	.03174
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2908.9**	**54330.**	**6458.9**
Stddev	13.7	158.	49.3
%RSD	.47001	.29082	.76287
#1	2918.6	54219.	6493.7
#2	2899.3	54442.	6424.0

Sample Name: 280-97928-B-9-A Acquired: 6/13/2017 11:08:29 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00088**	**76.773**	**.06602**	**.02520**	**.54089**	**.00350**	**-.00476**	**86.472**	**.00203**
Stddev	.00008	.064	.00578	.00046	.00020	.00005	.00038	.233	.00008
%RSD	8.7089	.08390	8.7546	1.8125	.03688	1.4112	8.0540	.26998	4.0087
#1	.00083	76.727	.06194	.02552	.54075	.00353	-.00449	86.637	.00209
#2	.00094	76.818	.07011	.02487	.54103	.00346	-.00503	86.307	.00197
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06174**	**.10250**	**.28363**	**197.58**	**10.201**	**.18615**	**42.490**	W **12.543**	**.00212**
Stddev	.00104	.00258	.00080	1.48	.057	.00104	.206	.191	.00021
%RSD	1.6825	2.5154	.28315	.74699	.56205	.55879	.48520	1.5206	9.7108
#1	.06247	.10432	.28420	198.62	10.242	.18688	42.635	12.677	.00197
#2	.06100	.10068	.28306	196.53	10.161	.18541	42.344	12.408	.00226
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.54782**	**.13723**	**4.6695**	**.06371**	**.60827**	**.01424**	**-.00360**	**2.9663**	**6.3479**
Stddev	.01796	.00481	.1077	.00096	.00229	.00122	.00136	.0029	.0061
%RSD	3.2789	3.5073	2.3055	1.5006	.37668	8.5843	37.729	.09604	.09604
#1	.56052	.14063	4.7456	.06439	.60989	.01338	-.00264	2.9683	6.3522
#2	.53512	.13383	4.5934	.06304	.60665	.01510	-.00457	2.9643	6.3435
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01122**	**.16380**	**.03354**	**.76088**	**.00425**	**.00892**	**.14269**	**.42896**	**.05434**
Stddev	.00070	.00017	.00034	.00522	.00433	.01082	.00039	.00195	.00151
%RSD	6.2639	.10386	1.0036	.68621	101.76	121.36	.27098	.45356	2.7872
#1	.01172	.16368	.03331	.76457	.00119	.01657	.14296	.43033	.05327
#2	.01073	.16392	.03378	.75719	.00731	.00127	.14242	.42758	.05541
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2927.8**	**54785.**	**6515.7**
Stddev	15.2	312.	20.4
%RSD	.52011	.56996	.31323
#1	2938.5	54565.	6501.3
#2	2917.0	55006.	6530.2

Sample Name: 280-97928-A-10-A Acquired: 6/13/2017 11:11:51 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**49.199**	**.02575**	**.01993**	**.17317**	**.00211**	**-.00184**	**13.232**	**.00129**
Stddev	.00033	.203	.00318	.00196	.00023	.00007	.00140	.050	.00041
%RSD	1010.2	.41257	12.360	9.8127	.13457	3.3249	76.151	.37785	31.971
#1	-.00026	49.342	.02800	.01855	.17333	.00206	-.00283	13.267	.00158
#2	.00020	49.055	.02350	.02132	.17301	.00216	-.00085	13.196	.00100
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03784**	**.05896**	**.12185**	**108.02**	**7.8191**	**.08369**	**21.406**	**3.5392**	**-.00013**
Stddev	.00022	.00090	.00078	.29	.0584	.00307	.034	.0004	.00045
%RSD	.58296	1.5208	.64256	.26740	.74649	3.6638	.15906	.01203	343.64
#1	.03799	.05959	.12240	108.23	7.7778	.08585	21.430	3.5395	-.00045
#2	.03768	.05832	.12129	107.82	7.8603	.08152	21.382	3.5389	.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.37310**	**.08554**	**3.0024**	**.02524**	**.03140**	**.00935**	**-.00818**	**2.9552**	**6.3242**
Stddev	.00064	.00015	.0117	.00217	.00784	.00398	.00330	.0065	.0139
%RSD	.17200	.17782	.39040	8.6152	24.968	42.523	40.344	.21961	.21961
#1	.37355	.08565	3.0107	.02371	.02585	.00654	-.00585	2.9506	6.3143
#2	.37265	.08543	2.9941	.02678	.03694	.01216	-.01051	2.9598	6.3340
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01000**	**.03262**	**.02455**	**.37813**	**.00175**	**-.02634**	**.08799**	**.21167**	**.03731**
Stddev	.00090	.00023	.00328	.00529	.00070	.04564	.00008	.00087	.00028
%RSD	8.9521	.71701	13.373	1.3984	39.850	173.24	.08856	.41075	.75688
#1	.00937	.03246	.02223	.37439	.00224	.00593	.08793	.21229	.03751
#2	.01064	.03279	.02688	.38187	.00125	-.05861	.08804	.21106	.03711
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2900.6**	**52017.**	**6060.2**
Stddev	47.9	27.	9.1
%RSD	1.6506	.05115	.15003
#1	2866.7	52036.	6053.8
#2	2934.4	51998.	6066.7

Sample Name: 280-97928-A-11-A Acquired: 6/13/2017 11:15:57 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Al Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00070**	**106.32**	**.04732**	**.02794**	**.40953**	**.00624**	**-.00226**	**12.963**	**.00171**
Stddev	.00014	.01	.00836	.00014	.00016	.00002	.00354	.000	.00003
%RSD	20.580	.00934	17.659	.50551	.03872	.28252	156.30	.00213	1.6601
#1	-.00060	106.32	.04141	.02784	.40964	.00625	-.00476	12.963	.00169
#2	-.00080	106.31	.05323	.02804	.40942	.00623	.00024	12.963	.00173
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06724**	**.14007**	**.22503**	**223.84**	**12.422**	**.22913**	**33.960**	**3.9594**	**.00188**
Stddev	.00049	.00016	.00026	.48	.033	.00168	.112	.0088	.00091
%RSD	.72951	.11314	.11650	.21666	.26201	.73189	.32922	.22321	48.641
#1	.06759	.14018	.22485	223.50	12.445	.22794	33.881	3.9532	.00253
#2	.06690	.13996	.22522	224.18	12.399	.23031	34.039	3.9657	.00123
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.80584**	**.16127**	**4.1298**	**.07615**	**.59921**	**.01365**	**-.00714**	**3.1413**	**6.7223**
Stddev	.00402	.00051	.0045	.00021	.00027	.00138	.00299	.0009	.0019
%RSD	.49833	.31902	.10805	.27294	.04585	10.126	41.932	.02784	.02784
#1	.80868	.16163	4.1330	.07629	.59940	.01268	-.00502	3.1407	6.7210
#2	.80300	.16090	4.1266	.07600	.59901	.01463	-.00926	3.1419	6.7237
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01318**	**.06256**	**.04733**	**.88245**	**.00501**	**.02911**	**.22448**	**.45669**	**.04962**
Stddev	.00015	.00011	.00104	.00096	.00198	.03590	.00127	.00050	.00144
%RSD	1.1365	.17323	2.1988	.10835	39.562	123.32	.56651	.10992	2.9088
#1	.01329	.06248	.04659	.88177	.00361	.05450	.22358	.45704	.04860
#2	.01308	.06263	.04806	.88313	.00641	.00373	.22538	.45633	.05064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**3140.2**	**58350.**	**6968.1**
Stddev	6.0	41.	10.5
%RSD	.18952	.07029	.15002
#1	3144.4	58379.	6975.5
#2	3136.0	58321.	6960.7

Sample Name: 280-97928-B-12-A Acquired: 6/13/2017 11:18:27 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00004**	**37.056**	**.01699**	**.03673**	**.21657**	**.00198**	**.00645**	F **2110.2**	**.00040**
Stddev	.00000	.116	.00801	.00082	.00006	.00000	.00075	25.3	.00021
%RSD	3.8791	.31326	47.157	2.2402	.02726	.00504	11.562	1.1996	52.922
#1	-.00004	37.139	.01132	.03731	.21653	.00198	.00697	2128.1	.00025
#2	-.00005	36.974	.02265	.03615	.21661	.00198	.00592	2092.3	.00054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								1000.0	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03154**	**.06463**	**.11555**	**68.309**	**7.9260**	**.08845**	**62.288**	**2.7648**	**.00046**
Stddev	.00133	.00192	.00089	.120	.0540	.00402	.000	.0027	.00045
%RSD	4.2069	2.9737	.77247	.17523	.68186	4.5472	.00029	.09756	98.052
#1	.03248	.06599	.11618	68.224	7.8878	.08561	62.288	2.7629	.00078
#2	.03060	.06327	.11491	68.394	7.9642	.09130	62.288	2.7667	.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.3563**	**.08817**	**2.7156**	**.04803**	**2.2332**	**.00041**	**.00386**	**3.3445**	**7.1573**
Stddev	.0075	.00416	.1127	.00064	.1061	.00497	.00460	.0241	.0517
%RSD	.55416	4.7211	4.1501	1.3393	4.7508	1201.6	119.04	.72179	.72179
#1	1.3510	.09111	2.7952	.04758	2.3082	-.00310	.00712	3.3275	7.1208
#2	1.3616	.08522	2.6359	.04849	2.1582	.00393	.00061	3.3616	7.1938
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00158**	**1.6877**	**.01800**	**.33670**	**.00594**	**-.06061**	**.09524**	**.29508**	**.02043**
Stddev	.00018	.0047	.00175	.00294	.00647	.01639	.00014	.00018	.00377
%RSD	11.468	.27852	9.7442	.87267	108.93	27.046	.14258	.06240	18.444
#1	-.00171	1.6911	.01676	.33462	.00136	-.04902	.09534	.29495	.01777
#2	-.00145	1.6844	.01924	.33877	.01052	-.07221	.09515	.29521	.02310
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2503.9**	**45540.**	**6022.2**
Stddev	1.6	420.	1.5
%RSD	.06389	.92286	.02496
#1	2502.7	45837.	6021.2
#2	2505.0	45243.	6023.3

Sample Name: 280-97928-B-12-A @5 Acquired: 6/13/2017 11:21:05 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 5x

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00031**	**7.6767**	**.01217**	**.00794**	**.04632**	**.00033**	**-.00011**	**468.79**	**.00029**
Stddev	.00041	.2148	.01203	.00089	.00132	.00002	.00195	13.31	.00034
%RSD	131.34	2.7982	98.856	11.218	2.8512	7.2849	1737.8	2.8399	119.88
#1	.00002	7.5248	.00366	.00857	.04538	.00031	-.00149	459.38	.00004
#2	.00061	7.8286	.02068	.00731	.04725	.00035	.00127	478.20	.00053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00738**	**.01486**	**.02400**	**14.458**	**1.8977**	**.01976**	**14.096**	**.60861**	**-.00160**
Stddev	.00002	.00043	.00076	.166	.0220	.00000	.208	.00749	.00010
%RSD	.30413	2.8854	3.1837	1.1513	1.1580	.00553	1.4733	1.2299	6.3592
#1	.00740	.01516	.02346	14.340	1.8821	.01976	13.949	.60332	-.00152
#2	.00737	.01456	.02454	14.575	1.9132	.01976	14.243	.61390	-.00167
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.24489**	**.02159**	**.61193**	**.00811**	**.40656**	**-.00080**	**-.01352**	**.70193**	**1.5021**
Stddev	.00760	.00025	.02186	.00221	.01134	.00573	.00024	.00222	.0048
%RSD	3.1042	1.1802	3.5718	27.232	2.7901	716.32	1.7675	.31677	.31677
#1	.23952	.02177	.62739	.00967	.41458	.00325	-.01335	.70350	1.5055
#2	.25027	.02141	.59648	.00655	.39854	-.00485	-.01369	.70036	1.4988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00035**	**.35104**	**.00775**	**.07108**	**-.00184**	**-.02979**	**.02081**	**.06600**	**.00489**
Stddev	.00054	.00633	.00124	.00012	.00395	.02253	.00003	.00061	.00032
%RSD	151.96	1.8040	15.972	.17273	214.80	75.612	.15821	.92341	6.5179
#1	.00073	.34656	.00688	.07100	.00095	-.04572	.02083	.06557	.00512
#2	-.00003	.35552	.00863	.07117	-.00463	-.01386	.02078	.06643	.00467
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2547.6**	**47370.**	**5681.7**
Stddev	5.4	93.	29.2
%RSD	.21322	.19713	.51447
#1	2543.8	47436.	5702.4
#2	2551.5	47304.	5661.0

Sample Name: CCVH-4579429 Acquired: 6/13/2017 11:23:45 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00066**	**47.234**	**-.00494**	**.00021**	**.00095**	**.00003**	W **.94637**	**.18811**	**.00070**	**-.00088**	**.00093**	**.01169**
Stddev	.00006	.066	.00571	.00086	.00002	.00005	.03788	.01893	.00067	.00045	.00094	.00028
%RSD	8.2981	.14001	115.50	408.28	1.6126	165.90	4.0023	10.064	95.668	51.142	101.77	2.4124
#1	.00070	47.281	-.00091	.00082	.00096	-.00001	.97316	.20150	.00023	-.00056	.00026	.01149
#2	.00062	47.187	-.00898	-.00040	.00094	.00007	.91959	.17472	.00118	-.00120	.00159	.01189
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							-5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.614**	**.22983**	**.00486**	**.03953**	**-.00124**	**-.00239**	**243.11**	**.00194**	**.02400**	**-.00114**	**4.9426**	**.00517**
Stddev	.066	.00435	.00113	.00645	.00004	.00018	.23	.00086	.01573	.00074	.1319	.00079
%RSD	.13353	1.8945	23.326	16.308	3.4964	7.5927	.09293	44.482	65.512	64.640	2.6688	15.189
#1	49.661	.22675	.00406	.03497	-.00121	-.00226	243.27	.00133	.01288	-.00062	5.0359	.00462
#2	49.567	.23291	.00566	.04409	-.00127	-.00251	242.95	.00255	.03513	-.00167	4.8493	.00573
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00988**	**-.01778**	**-.03804**	**.00087**	**.00051**	W **4.6487**	**.01823**	**-.00131**	W **9.3854**	**.01266**	**.00096**	**.07649**
Stddev	.00795	.00581	.01242	.00075	.00001	.0183	.00033	.00457	.0133	.00020	.00093	.00367
%RSD	80.466	32.658	32.658	86.569	2.5602	.39459	1.7831	349.65	.14217	1.5426	96.626	4.7986
#1	-.01550	-.01367	-.02926	.00140	.00050	4.6617	.01800	-.00454	9.3759	.01280	.00030	.07909
#2	-.00426	-.02188	-.04683	.00034	.00052	4.6357	.01846	.00193	9.3948	.01252	.00161	.07390
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2511.0**	**46483.**	**5390.8**
Stddev	30.5	158.	14.5
%RSD	1.2153	.33932	.26815
#1	2489.4	46371.	5401.0
#2	2532.6	46594.	5380.6

Sample Name: CCV-4580817 Acquired: 6/13/2017 11:26:19 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49673**	**.49733**	**.93638**	**.49582**	**.50858**	**.47221**	**.00194**	**5.2632**	**.49447**	**.49634**	**.50067**	**.50343**	**2.4480**
Stddev	.00211	.01502	.03488	.01237	.00176	.00191	.00119	.0295	.01331	.01420	.01480	.00114	.0094
%RSD	.42498	3.0200	3.7252	2.4956	.34622	.40539	61.403	.55951	2.6917	2.8602	2.9566	.22641	.38305
#1	.49822	.50795	.96104	.50457	.50734	.47085	.00278	5.2423	.50388	.50638	.51114	.50424	2.4414
#2	.49523	.48671	.91171	.48707	.50983	.47356	.00110	5.2840	.48506	.48631	.49021	.50263	2.4546
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.927**	**.96547**	**19.746**	**.47810**	**.50132**	**4.9637**	**.49462**	**.97485**	**1.0080**	**-.03926**	**.97044**	**.94637**	**4.8452**
Stddev	.258	.00324	.010	.00075	.01425	.0183	.01358	.02907	.0348	.00190	.02742	.02815	.0305
%RSD	.51691	.33585	.05142	.15584	2.8415	.36845	2.7449	2.9824	3.4568	4.8425	2.8256	2.9743	.63024
#1	49.745	.96317	19.753	.47863	.51140	4.9767	.50422	.99541	1.0326	-.04060	.98983	.96627	4.8236
#2	50.110	.96776	19.739	.47757	.49125	4.9508	.48502	.95430	.98336	-.03791	.95105	.92646	4.8668
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.369**	**1.0117**	**.46960**	**.01189**	**.46436**	**.93978**	**-.02390**	**.48475**	**.47414**	**.50645**
Stddev	.065	.0277	.00204	.00042	.00185	.02349	.02317	.00091	.00240	.00134
%RSD	.63024	2.7384	.43453	3.5500	.39856	2.4994	96.960	.18761	.50535	.26520
#1	10.323	1.0313	.46816	.01159	.46567	.95639	-.00751	.48539	.47584	.50740
#2	10.415	.99207	.47104	.01219	.46306	.92317	-.04028	.48410	.47245	.50550
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2573.1**	**48442.**	**5627.3**
Stddev	1.7	1.	43.9
%RSD	.06732	.00270	.77941
#1	2574.3	48442.	5658.3
#2	2571.8	48441.	5596.3

Sample Name: CCB Acquired: 6/13/2017 11:28:48 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00108**	**.00591**	**-.00425**	**.00007**	**.00113**	**.00007**	**-.00102**	**.06886**	**.00031**	**.00043**	**.00017**	**-.00328**
Stddev	.00008	.00015	.00610	.00051	.00010	.00008	.00451	.00455	.00013	.00028	.00022	.00049
%RSD	7.1458	2.5999	143.64	721.86	8.9275	116.19	443.10	6.6129	42.609	64.421	130.93	14.952
#1	.00103	.00602	-.00856	-.00029	.00120	.00012	-.00420	.06564	.00040	.00023	.00001	-.00293
#2	.00114	.00580	.00007	.00043	.00106	.00001	.00217	.07208	.00021	.00062	.00032	-.00363
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02351**	**.16615**	W **.00650**	**.00533**	**.00057**	**.00035**	**-.08071**	**.00050**	**.00358**	**-.00169**	**-.03443**	**.00117**
Stddev	.00211	.01301	.00100	.00059	.00006	.00024	.00922	.00040	.00096	.00123	.00745	.00211
%RSD	8.9918	7.8329	15.430	11.056	10.273	67.575	11.426	79.152	26.893	72.985	21.639	180.47
#1	.02202	.15695	.00579	.00491	.00053	.00052	-.08723	.00022	.00290	-.00082	-.03970	-.00032
#2	.02501	.17535	.00721	.00575	.00061	.00019	-.07419	.00078	.00426	-.00257	-.02916	.00266
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500									
Low Limit			-.01000									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00540**	**.00909**	**.01946**	**.00177**	**.00020**	**.00523**	**-.00087**	**.00105**	**-.03963**	**.00004**	**.00039**	**.00152**
Stddev	.00066	.01268	.02713	.00149	.00019	.00055	.00066	.00349	.00786	.00071	.00048	.00150
%RSD	12.278	139.41	139.41	84.197	95.027	10.575	75.551	331.69	19.827	1707.0	124.57	98.545
#1	-.00493	.01806	.03864	.00072	.00007	.00484	-.00134	.00352	-.04518	.00055	.00005	.00258
#2	-.00587	.00013	.00028	.00283	.00034	.00563	-.00041	-.00142	-.03407	-.00046	.00073	.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2580.3**	**48945.**	**5438.9**
Stddev	5.1	131.	59.3
%RSD	.19811	.26778	1.0906
#1	2583.9	48852.	5480.9
#2	2576.6	49038.	5397.0

Sample Name: CCVL-4590576 Acquired: 6/13/2017 11:31:25 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01119**	**.10738**	**.01275**	**.09782**	**.01077**	**.00090**	**.10640**	F **.26910**	**.00542**	**.00999**	**.01000**	**.01330**
Stddev	.00050	.00438	.00588	.00310	.00056	.00005	.00768	.00459	.00043	.00029	.00080	.00010
%RSD	4.4809	4.0753	46.099	3.1714	5.1875	5.7912	7.2172	1.7060	7.9387	2.8595	8.0086	.78892
#1	.01084	.11047	.00860	.10002	.01038	.00094	.11183	.26585	.00573	.01019	.01057	.01338
#2	.01155	.10428	.01691	.09563	.01117	.00087	.10097	.27235	.00512	.00979	.00943	.01323
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								.20000				
Range								30.000%				

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10620**	**3.1241**	**.02290**	**.20924**	**.01049**	**.01903**	**.91725**	**.04038**	**2.8277**	**.00845**	F **.06053**	**.02256**
Stddev	.00265	.0415	.00084	.00191	.00006	.00011	.01367	.00109	.0931	.00089	.00088	.00319
%RSD	2.4938	1.3285	3.6685	.91096	.56200	.58300	1.4903	2.6908	3.2943	10.482	1.4477	14.149
#1	.10433	3.0947	.02230	.20789	.01054	.01911	.90758	.04115	2.8936	.00782	.05991	.02482
#2	.10807	3.1534	.02349	.21059	.01045	.01895	.92691	.03961	2.7618	.00908	.06115	.02031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01442**	**.48813**	**1.0446**	**.09937**	**.00963**	**.01819**	**.00891**	**.01516**	F **.02855**	**.00985**	**.02058**	**.01736**
Stddev	.00151	.01184	.0253	.00509	.00007	.00251	.00001	.00476	.01793	.00020	.00010	.00107
%RSD	10.470	2.4253	2.4253	5.1220	.70754	13.812	.15136	31.369	62.810	2.0341	.48564	6.1542
#1	.01549	.47976	1.0267	.10297	.00968	.01642	.00892	.01853	.04123	.00971	.02050	.01660
#2	.01335	.49650	1.0625	.09577	.00958	.01997	.00890	.01180	.01587	.01000	.02065	.01811
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2641.2**	**49985.**	**5647.0**
Stddev	13.3	238.	39.8
%RSD	.50329	.47672	.70489
#1	2650.6	49817.	5618.8
#2	2631.8	50154.	5675.1

Sample Name: 280-97928-C-14-A Acquired: 6/13/2017 11:34:02 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00080**	**92.856**	**.05008**	**.03389**	**.46439**	**.00439**	**.00152**	W **693.28**	**.00233**
Stddev	.00008	.013	.01607	.00058	.00063	.00018	.00339	6.38	.00008
%RSD	10.591	.01404	32.087	1.7016	.13523	4.1268	223.21	.92007	3.4325
#1	.00074	92.847	.06144	.03430	.46483	.00452	.00391	697.79	.00227
#2	.00086	92.865	.03871	.03348	.46395	.00426	-.00088	688.77	.00239
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06498**	**.11365**	**.26950**	**173.30**	**12.007**	**.18568**	**42.493**	**9.7371**	**.00176**
Stddev	.00177	.00381	.00017	.47	.025	.00006	.062	.0303	.00076
%RSD	2.7209	3.3486	.06147	.27159	.21005	.03389	.14555	.31100	43.035
#1	.06623	.11634	.26938	172.97	12.024	.18564	42.450	9.7585	.00122
#2	.06373	.11096	.26961	173.63	11.989	.18573	42.537	9.7156	.00230
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.75847**	**.13772**	**6.8272**	**.10037**	**1.8747**	**.00671**	**-.00153**	**3.4992**	**7.4883**
Stddev	.00918	.00478	.2241	.00326	.0464	.00171	.00372	.0182	.0390
%RSD	1.2108	3.4683	3.2821	3.2460	2.4754	25.415	243.82	.52022	.52022
#1	.76496	.14110	6.9857	.10267	1.9075	.00792	-.00416	3.5121	7.5158
#2	.75197	.13434	6.6688	.09807	1.8419	.00551	.00111	3.4863	7.4607
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00783**	**.67323**	**.02131**	**.58141**	**.01160**	**.01873**	**.18237**	**.48449**	**.01366**
Stddev	.00137	.00021	.00001	.00264	.00605	.00701	.00008	.00150	.00103
%RSD	17.506	.03174	.03236	.45442	52.154	37.425	.04523	.30972	7.5271
#1	.00880	.67308	.02130	.57954	.00732	.01378	.18243	.48555	.01293
#2	.00686	.67339	.02131	.58328	.01587	.02369	.18231	.48343	.01439
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2745.0**	**50218.**	**6320.2**
Stddev	.7	224.	54.4
%RSD	.02528	.44674	.86016
#1	2745.5	50376.	6281.7
#2	2744.5	50059.	6358.6

Sample Name: 280-97928-A-15-A Acquired: 6/13/2017 11:36:45 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**96.619**	**.05097**	**.03448**	**.63089**	**.00446**	**-.00232**	**245.46**	**.00313**
Stddev	.00060	.343	.00572	.00100	.00116	.00002	.00136	.43	.00053
%RSD	1807.5	.35520	11.222	2.8877	.18342	.53990	58.852	.17408	16.822
#1	.00039	96.376	.05501	.03518	.63007	.00444	-.00328	245.16	.00350
#2	-.00046	96.862	.04692	.03378	.63171	.00447	-.00135	245.76	.00276
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07048**	**.12676**	**.36274**	**204.28**	**12.942**	**.22786**	**42.272**	W **10.051**	**.00184**
Stddev	.00113	.00357	.00240	.52	.034	.00076	.131	.011	.00029
%RSD	1.6059	2.8193	.66030	.25681	.26133	.33152	.30921	.10526	15.611
#1	.07128	.12929	.36443	204.66	12.966	.22839	42.364	10.044	.00204
#2	.06968	.12423	.36104	203.91	12.919	.22732	42.179	10.059	.00164
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.56528**	**.17420**	**5.5358**	**.09781**	**1.0368**	**.01232**	**-.00927**	**3.0546**	**6.5368**
Stddev	.00162	.00450	.1224	.00049	.0299	.00341	.01321	.0105	.0226
%RSD	.28593	2.5823	2.2113	.50481	2.8810	27.654	142.49	.34498	.34498
#1	.56414	.17738	5.6224	.09746	1.0580	.00991	.00007	3.0471	6.5208
#2	.56643	.17102	5.4493	.09816	1.0157	.01473	-.01861	3.0620	6.5527
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00986**	**.36507**	**.20776**	**.68150**	**.00904**	**.01189**	**.18743**	**.58707**	**.03957**
Stddev	.00351	.00078	.00225	.00396	.00201	.01173	.00183	.00045	.00081
%RSD	35.641	.21353	1.0844	.58154	22.287	98.662	.97642	.07653	2.0415
#1	.00738	.36452	.20936	.68430	.00762	.00359	.18873	.58676	.03900
#2	.01235	.36562	.20617	.67870	.01046	.02018	.18614	.58739	.04014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2969.0**	**54959.**	**6705.2**
Stddev	13.7	177.	7.1
%RSD	.46050	.32251	.10639
#1	2978.6	55085.	6700.2
#2	2959.3	54834.	6710.3

Sample Name: 280-97928-B-16-A Acquired: 6/13/2017 11:39:20 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00078**	**143.06**	**.04835**	**.03350**	**.50857**	**.00594**	**-.00556**	**40.787**	**.00231**
Stddev	.00018	.58	.00008	.00035	.00114	.00006	.00080	.150	.00006
%RSD	23.563	.40565	.17126	1.0347	.22359	1.0313	14.410	.36796	2.8009
#1	.00091	142.65	.04829	.03375	.50777	.00589	-.00613	40.681	.00236
#2	.00065	143.47	.04840	.03326	.50938	.00598	-.00499	40.894	.00226
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09291**	**.16107**	**.24130**	**227.54**	**14.342**	**.21900**	**35.667**	**8.7148**	**.00247**
Stddev	.00311	.00587	.00015	1.13	.057	.00294	.186	.0331	.00053
%RSD	3.3445	3.6423	.06238	.49627	.39487	1.3437	.52107	.38025	21.441
#1	.09511	.16522	.24140	226.74	14.302	.21691	35.798	8.7382	.00284
#2	.09071	.15692	.24119	228.34	14.382	.22108	35.535	8.6913	.00209
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.85924**	**.15474**	**4.9419**	**.20288**	**1.1989**	**.01419**	**-.00513**	**3.9567**	**8.4674**
Stddev	.00454	.00608	.1780	.00647	.0274	.00080	.00710	.0488	.1043
%RSD	.52805	3.9294	3.6017	3.1872	2.2889	5.6498	138.48	1.2321	1.2321
#1	.86244	.15904	5.0678	.20746	1.2183	.01363	-.00011	3.9223	8.3936
#2	.85603	.15044	4.8161	.19831	1.1795	.01476	-.01015	3.9912	8.5412
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01370**	**.09693**	**.02692**	**.49654**	**.00427**	**.04048**	**.24190**	**.63034**	**.02145**
Stddev	.00090	.00067	.00054	.00005	.00230	.00446	.00208	.00371	.00025
%RSD	6.5502	.68756	1.9916	.01039	53.805	11.022	.85921	.58787	1.1437
#1	.01434	.09646	.02654	.49650	.00264	.04363	.24337	.63296	.02128
#2	.01307	.09740	.02730	.49657	.00589	.03732	.24043	.62772	.02163
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2864.4**	**52481.**	**6415.9**
Stddev	3.2	137.	38.4
%RSD	.11259	.26191	.59906
#1	2866.6	52384.	6443.1
#2	2862.1	52578.	6388.7

Sample Name: 280-97928-C-17-A Acquired: 6/13/2017 11:41:54 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Al Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00044**	**90.001**	**.03273**	**.02432**	**.44899**	**.00447**	**-.00721**	**16.161**	**.00199**
Stddev	.00011	.673	.00290	.00138	.00212	.00003	.00071	.128	.00031
%RSD	24.972	.74830	8.8473	5.6642	.47260	.67855	9.8105	.79325	15.501
#1	-.00036	90.477	.03068	.02529	.45049	.00449	-.00771	16.252	.00221
#2	-.00052	89.525	.03478	.02334	.44749	.00445	-.00671	16.071	.00178
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06981**	**.11594**	**.21006**	**196.29**	**10.004**	**.23384**	**26.251**	**7.5724**	**.00241**
Stddev	.00256	.00279	.00275	2.01	.042	.00329	.296	.0621	.00057
%RSD	3.6602	2.4078	1.3102	1.0233	.42454	1.4080	1.1280	.82036	23.639
#1	.07161	.11792	.21201	197.71	10.034	.23617	26.460	7.6163	.00282
#2	.06800	.11397	.20811	194.87	9.9736	.23151	26.041	7.5285	.00201
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.68513**	**.13587**	**3.4358**	**.05541**	**.19107**	**.01175**	**-.00545**	**3.3524**	**7.1741**
Stddev	.00071	.00355	.1073	.00001	.00702	.00217	.00580	.0045	.0097
%RSD	.10357	2.6131	3.1239	.01258	3.6740	18.475	106.55	.13546	.13546
#1	.68463	.13838	3.5117	.05541	.19603	.01328	-.00134	3.3556	7.1809
#2	.68563	.13336	3.3599	.05542	.18610	.01021	-.00955	3.3492	7.1672
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00923**	**.05367**	**.03423**	**1.1101**	**.00475**	**-.00430**	**.19637**	**.38267**	**.04822**
Stddev	.00150	.00035	.00364	.0131	.00010	.01656	.00221	.00076	.00161
%RSD	16.203	.64456	10.645	1.1751	2.1525	385.40	1.1259	.19975	3.3323
#1	.01029	.05392	.03681	1.1194	.00468	-.01601	.19793	.38321	.04936
#2	.00817	.05343	.03165	1.1009	.00482	.00741	.19480	.38213	.04709
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**3088.5**	**57935.**	**6637.8**
Stddev	24.1	158.	26.5
%RSD	.78111	.27250	.39884
#1	3105.6	57824.	6619.0
#2	3071.5	58047.	6656.5

Sample Name: 280-97928-A-18-A Acquired: 6/13/2017 11:44:29 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00047**	**30.040**	**.01814**	**.01558**	**.10165**	**.00117**	**-.00256**	**13.889**	**.00076**
Stddev	.00019	.282	.01271	.00015	.00106	.00007	.00102	.156	.00007
%RSD	40.673	.93769	70.050	.97475	1.0400	5.8683	39.843	1.1236	9.3965
#1	.00034	30.240	.02713	.01547	.10240	.00122	-.00328	14.000	.00071
#2	.00061	29.841	.00915	.01568	.10090	.00112	-.00184	13.779	.00081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02314**	**.03584**	**.07275**	**65.266**	**5.8492**	**.05009**	**14.087**	**2.2009**	**-.00019**
Stddev	.00060	.00148	.00085	1.024	.0475	.00343	.169	.0241	.00039
%RSD	2.5983	4.1281	1.1726	1.5693	.81192	6.8559	1.2005	1.0967	208.37
#1	.02356	.03688	.07335	65.991	5.8828	.05252	14.206	2.2179	-.00047
#2	.02271	.03479	.07214	64.542	5.8156	.04766	13.967	2.1838	.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.18893**	**.05019**	**2.1360**	**.01489**	**.04647**	**.00724**	**-.00310**	**2.7931**	**5.9773**
Stddev	.02084	.00130	.0608	.00072	.01390	.00197	.00379	.0036	.0077
%RSD	11.029	2.5834	2.8466	4.8576	29.904	27.182	122.36	.12910	.12910
#1	.17420	.05110	2.1790	.01540	.05629	.00863	-.00042	2.7957	5.9828
#2	.20366	.04927	2.0930	.01438	.03664	.00585	-.00578	2.7906	5.9718
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00860**	**.03123**	**.01926**	**.23674**	**.00325**	**-.04823**	**.05518**	**.12457**	**.02395**
Stddev	.00130	.00024	.00037	.00294	.00132	.00680	.00037	.00122	.00016
%RSD	15.077	.76997	1.9410	1.2403	40.732	14.101	.67952	.98086	.65115
#1	.00768	.03140	.01952	.23882	.00231	-.05304	.05545	.12543	.02383
#2	.00952	.03106	.01899	.23467	.00418	-.04342	.05492	.12370	.02406
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2844.8**	**53165.**	**6174.5**
Stddev	12.3	214.	50.7
%RSD	.43406	.40253	.82093
#1	2853.5	53014.	6138.6
#2	2836.0	53317.	6210.3

Sample Name: 280-97928-C-19-A Acquired: 6/13/2017 11:47:04 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00060**	**35.207**	**.01786**	**.01568**	**.11615**	**.00140**	**-.00124**	**12.977**	**.00073**
Stddev	.00033	.062	.00442	.00008	.00026	.00015	.00271	.003	.00018
%RSD	54.613	.17743	24.765	.51621	.22343	10.572	218.03	.02179	24.100
#1	.00037	35.163	.02099	.01563	.11633	.00151	-.00316	12.979	.00061
#2	.00083	35.252	.01474	.01574	.11596	.00130	.00067	12.975	.00086
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02661**	**.04117**	**.08280**	**75.981**	**6.2155**	**.06068**	**15.587**	**2.4993**	**-.00006**
Stddev	.00068	.00076	.00033	.128	.0035	.00285	.046	.0083	.00075
%RSD	2.5604	1.8349	.39670	.16781	.05592	4.6916	.29451	.33020	1253.8
#1	.02709	.04171	.08303	75.891	6.2131	.06269	15.620	2.5051	.00047
#2	.02613	.04064	.08257	76.071	6.2180	.05866	15.555	2.4934	-.00059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.36006**	**.05887**	**2.5784**	**.01471**	**.00342**	**.00356**	**-.00746**	**2.7897**	**5.9699**
Stddev	.00157	.00232	.0773	.00092	.00109	.00020	.00205	.0444	.0949
%RSD	.43510	3.9362	2.9981	6.2537	32.038	5.6920	27.395	1.5900	1.5900
#1	.35896	.06051	2.6331	.01536	.00264	.00342	-.00891	2.8210	6.0370
#2	.36117	.05723	2.5238	.01406	.00419	.00371	-.00602	2.7583	5.9028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01035**	**.03304**	**.02004**	**.26016**	**.00304**	**-.03895**	**.06409**	**.14326**	**.02794**
Stddev	.00237	.00012	.00143	.00140	.00233	.00342	.00001	.00171	.00013
%RSD	22.894	.35175	7.1275	.53768	76.715	8.7694	.02155	1.1957	.46416
#1	.01202	.03312	.02105	.26115	.00139	-.03653	.06410	.14447	.02803
#2	.00867	.03295	.01903	.25918	.00469	-.04136	.06408	.14205	.02785
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2867.5**	**54049.**	**6347.7**
Stddev	12.4	22.	44.4
%RSD	.43263	.04108	.69914
#1	2876.3	54065.	6379.1
#2	2858.7	54033.	6316.4

Sample Name: 280-97928-B-20-A Acquired: 6/13/2017 11:49:37 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00027**	**38.768**	**.02440**	**.01825**	**.12336**	**.00167**	**-.00083**	**12.249**	**.00093**
Stddev	.00033	.014	.00050	.00063	.00024	.00001	.00006	.057	.00008
%RSD	121.01	.03682	2.0469	3.4752	.19168	.78724	6.9846	.46350	8.7318
#1	.00050	38.758	.02475	.01870	.12353	.00168	-.00079	12.209	.00099
#2	.00004	38.778	.02405	.01781	.12319	.00166	-.00087	12.289	.00088
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02941**	**.04643**	**.09443**	**84.472**	**6.9841**	**.06601**	**17.317**	**2.7498**	**.00003**
Stddev	.00033	.00148	.00002	.109	.0333	.00100	.014	.0023	.00019
%RSD	1.1070	3.1925	.02530	.12904	.47628	1.5151	.07946	.08391	595.49
#1	.02964	.04747	.09444	84.395	7.0076	.06672	17.327	2.7515	.00017
#2	.02918	.04538	.09441	84.549	6.9606	.06531	17.307	2.7482	-.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.23018**	**.06601**	**2.6590**	**.01338**	**-.02753**	**.00271**	**-.01015**	**2.7989**	**5.9897**
Stddev	.00830	.00125	.0664	.00223	.00744	.00404	.00106	.0344	.0736
%RSD	3.6045	1.8961	2.4954	16.696	27.020	149.29	10.469	1.2279	1.2279
#1	.22432	.06690	2.7059	.01496	-.02227	-.00015	-.01090	2.7746	5.9377
#2	.23605	.06513	2.6121	.01180	-.03280	.00557	-.00940	2.8232	6.0417
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00973**	**.03398**	**.02644**	**.27221**	**-.00030**	**-.02439**	**.06959**	**.15164**	**.03477**
Stddev	.00034	.00009	.00148	.00359	.00212	.02461	.00139	.00015	.00050
%RSD	3.4602	.25521	5.5814	1.3197	695.31	100.91	1.9935	.10187	1.4394
#1	.00997	.03392	.02749	.27475	-.00180	-.04179	.07057	.15175	.03441
#2	.00949	.03404	.02540	.26967	.00119	-.00699	.06861	.15153	.03512
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2856.5**	**53622.**	**6265.3**
Stddev	7.6	50.	13.6
%RSD	.26747	.09258	.21688
#1	2851.1	53587.	6274.9
#2	2861.9	53657.	6255.7

Sample Name: 280-97928-B-21-A Acquired: 6/13/2017 11:52:11 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00067**	**30.666**	**.01879**	**.01494**	**.10141**	**.00140**	**-.00094**	**34.273**	**.00040**
Stddev	.00038	.032	.00261	.00069	.00108	.00038	.00305	.456	.00006
%RSD	57.119	.10360	13.879	4.5849	1.0694	27.447	323.25	1.3292	13.945
#1	.00094	30.689	.01694	.01543	.10218	.00167	.00121	34.595	.00036
#2	.00040	30.644	.02063	.01446	.10064	.00113	-.00310	33.951	.00044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02424**	**.03624**	**.07734**	**69.383**	**6.1086**	**.05492**	**16.830**	**2.2208**	**-.00061**
Stddev	.00040	.00061	.00092	.076	.0167	.00137	.022	.0065	.00048
%RSD	1.6493	1.6858	1.1875	.10986	.27313	2.4948	.12871	.29338	77.802
#1	.02452	.03667	.07799	69.437	6.0968	.05395	16.845	2.2254	-.00095
#2	.02395	.03581	.07669	69.330	6.1204	.05588	16.814	2.2162	-.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.42662**	**.05200**	**2.3310**	**.01378**	**.04217**	**.00330**	**-.01284**	**2.8258**	**6.0472**
Stddev	.09286	.00093	.0640	.00015	.00898	.00257	.00203	.0239	.0511
%RSD	21.767	1.7940	2.7446	1.0579	21.299	77.989	15.790	.84521	.84521
#1	.49229	.05266	2.3762	.01389	.04852	.00511	-.01141	2.8089	6.0111
#2	.36096	.05134	2.2858	.01368	.03582	.00148	-.01427	2.8427	6.0834
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00808**	**.06092**	**.01727**	**.22098**	**.00159**	**-.04277**	**.05638**	**.12580**	**.02918**
Stddev	.00249	.00030	.00072	.00548	.00088	.02177	.00006	.00098	.00003
%RSD	30.744	.49804	4.1420	2.4795	55.388	50.898	.11428	.77805	.11982
#1	.00984	.06113	.01777	.22486	.00221	-.02738	.05642	.12649	.02920
#2	.00633	.06070	.01676	.21711	.00096	-.05817	.05633	.12511	.02915
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2833.6**	**53453.**	**6242.1**
Stddev	6.6	.	59.0
%RSD	.23391	.00070	.94456
#1	2838.3	53453.	6283.8
#2	2828.9	53453.	6200.4

Sample Name: 280-97928-B-22-A Acquired: 6/13/2017 11:54:44 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376380 6010C SOIL Q5 (Tl)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00051**	**38.426**	**.01769**	**.01637**	**.13776**	**.00158**	**-.00089**	**11.074**	**.00110**
Stddev	.00036	.102	.00108	.00022	.00097	.00007	.00303	.049	.00017
%RSD	70.596	.26576	6.1036	1.3637	.70166	4.3892	340.70	.44284	15.194
#1	.00076	38.498	.01693	.01653	.13844	.00163	.00125	11.109	.00098
#2	.00025	38.354	.01845	.01621	.13707	.00153	-.00303	11.040	.00122
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02856**	**.04358**	**.08805**	**81.625**	**6.6581**	**.06364**	**16.765**	**2.7231**	**-.00032**
Stddev	.00088	.00099	.00019	.312	.0273	.00154	.045	.0070	.00054
%RSD	3.0651	2.2717	.21051	.38260	.41065	2.4146	.26579	.25546	168.92
#1	.02918	.04428	.08818	81.846	6.6388	.06472	16.797	2.7280	-.00070
#2	.02794	.04288	.08792	81.405	6.6774	.06255	16.734	2.7182	.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.21084**	**.06104**	**2.5444**	**.02064**	**.18559**	**.00551**	**.00000**	**2.7330**	**5.8487**
Stddev	.00628	.00225	.0691	.00128	.00276	.00044	.00324	.0139	.0298
%RSD	2.9793	3.6845	2.7144	6.2256	1.4873	8.0513	122370.	.50892	.50892
#1	.21528	.06263	2.5932	.02155	.18754	.00520	.00229	2.7429	5.8697
#2	.20639	.05944	2.4956	.01973	.18364	.00583	-.00229	2.7232	5.8276
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01130**	**.02979**	**.01974**	**.27723**	**.00338**	**-.02251**	**.06889**	**.15670**	**.02406**
Stddev	.00316	.00014	.00002	.00267	.00501	.00029	.00107	.00049	.00064
%RSD	28.002	.46748	.12366	.96480	148.31	1.3080	1.5526	.31086	2.6484
#1	.00906	.02989	.01976	.27912	.00692	-.02230	.06964	.15636	.02451
#2	.01354	.02969	.01973	.27534	-.00016	-.02272	.06813	.15705	.02361
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2864.3**	**54219.**	**6313.9**
Stddev	11.3	148.	1.6
%RSD	.39334	.27262	.02574
#1	2872.3	54115.	6315.0
#2	2856.4	54324.	6312.7

Sample Name: 280-97837-A-3-A @5 Acquired: 6/13/2017 11:57:17 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: 6/7 Custom ID2: Custom ID3:
Comment: 376275 6010C (Se) 5x

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00207**	**.03364**	**.00622**	**.03654**	**.02021**	**-.00011**	**.00365**	**53.993**	**.00059**
Stddev	.00023	.00036	.00543	.00119	.00034	.00001	.00487	1.113	.00001
%RSD	10.987	1.0613	87.303	3.2682	1.6884	8.2240	133.29	2.0613	2.0015
#1	.00190	.03389	.00238	.03739	.01997	-.00012	.00709	53.206	.00060
#2	.00223	.03339	.01006	.03570	.02045	-.00010	.00021	54.780	.00058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00015**	**.06393**	**-.00139**	**.12691**	**1.3625**	**.00957**	**11.346**	W **13.312**	**-.00101**
Stddev	.00025	.00114	.00041	.00934	.0623	.00119	.200	.289	.00031
%RSD	167.71	1.7862	29.900	7.3615	4.5717	12.404	1.7600	2.1710	30.071
#1	-.00033	.06474	-.00168	.13351	1.4066	.01041	11.205	13.108	-.00080
#2	.00003	.06312	-.00109	.12030	1.3185	.00873	11.487	13.517	-.00123
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								10.000	
Low Limit								-.02000	

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.531**	**.01140**	**.00182**	**-.00237**	**17.696**	**-.00066**	**-.00459**	**3.3109**	**7.0854**
Stddev	.508	.00073	.00042	.00097	.184	.00019	.00550	.0677	.1448
%RSD	2.0716	6.4204	23.030	40.892	1.0391	28.047	119.74	2.0433	2.0433
#1	24.172	.01088	.00152	-.00306	17.826	-.00079	-.00070	3.2631	6.9830
#2	24.891	.01192	.00212	-.00169	17.566	-.00053	-.00847	3.3588	7.1877
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00111**	**.34694**	**.00345**	**.00002**	**.01518**	**-.02220**	**.00169**	**.00142**	**-.00037**
Stddev	.00031	.00783	.00005	.00040	.00006	.01864	.00050	.00018	.00135
%RSD	28.160	2.2567	1.5799	2447.3	.38236	83.949	29.294	12.754	362.64
#1	.00089	.34140	.00349	-.00026	.01514	-.03538	.00134	.00154	-.00133
#2	.00133	.35247	.00341	.00030	.01522	-.00902	.00204	.00129	.00058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2606.4**	**49409.**	**5748.6**
Stddev	11.9	147.	11.6
%RSD	.45473	.29756	.20242
#1	2598.0	49513.	5756.9
#2	2614.8	49305.	5740.4

Sample Name: CCVH-4579429 Acquired: 6/13/2017 11:59:59 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**46.869**	**-.00861**	**.00200**	**.00040**	**.00008**	W **.93208**	**.01502**	**.00059**	**-.00093**	**.00023**	**.01065**
Stddev	.00059	.067	.00758	.00084	.00014	.00008	.03447	.00389	.00001	.00019	.00018	.00046
%RSD	2866.4	.14258	88.077	41.838	34.127	99.633	3.6977	25.900	.97117	21.021	78.022	4.3000
#1	.00044	46.822	-.00325	.00259	.00030	.00013	.95645	.01777	.00059	-.00079	.00010	.01032
#2	-.00040	46.916	-.01397	.00141	.00049	.00002	.90771	.01227	.00058	-.00106	.00036	.01097
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							-5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.057**	**.04287**	**.00233**	**.03502**	**.00075**	**-.00145**	**241.84**	**.00100**	**.00404**	**-.00065**	**4.9010**	**.00068**
Stddev	.002	.00884	.00064	.00142	.00020	.00008	.07	.00019	.00389	.00193	.1420	.00302
%RSD	.00423	20.621	27.568	4.0473	26.246	5.1917	.02840	18.743	96.321	296.19	2.8967	442.65
#1	49.056	.04912	.00278	.03401	.00089	-.00139	241.80	.00113	.00679	.00071	5.0014	-.00145
#2	49.059	.03662	.00187	.03602	.00061	-.00150	241.89	.00087	.00129	-.00202	4.8007	.00282
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00814**	**.00617**	**.01320**	**.00053**	**.00039**	W **4.5800**	**.01833**	**-.00082**	W **9.1929**	**.01200**	**-.00020**	**.07843**
Stddev	.00660	.00433	.00927	.00227	.00004	.0127	.00009	.00206	.0543	.00088	.00012	.00208
%RSD	81.036	70.271	70.271	426.86	11.038	.27794	.47020	252.09	.59059	7.3125	57.869	2.6566
#1	-.01281	.00923	.01976	-.00107	.00036	4.5890	.01839	-.00228	9.2313	.01262	-.00012	.07990
#2	-.00348	.00310	.00664	.00214	.00042	4.5710	.01827	.00064	9.1545	.01138	-.00029	.07695
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2550.8**	**47816.**	**5513.8**
Stddev	6.9	120.	35.7
%RSD	.27046	.25124	.64710
#1	2555.7	47731.	5539.0
#2	2545.9	47901.	5488.6

Sample Name: CCV-4580817 Acquired: 6/13/2017 12:02:33 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48907**	**.49163**	**.91225**	**.48735**	**.50561**	**.46620**	**.00182**	**5.1080**	**.48599**	**.48581**	**.49278**	**.50148**	**2.4637**
Stddev	.00024	.01287	.01553	.00930	.00044	.00064	.00394	.0142	.01232	.01304	.01217	.00060	.0078
%RSD	.05009	2.6183	1.7025	1.9083	.08767	.13763	216.49	.27809	2.5346	2.6837	2.4702	.11907	.31527
#1	.48890	.50073	.92323	.49393	.50593	.46665	.00461	5.1180	.49470	.49503	.50139	.50190	2.4692
#2	.48924	.48253	.90127	.48078	.50530	.46574	-.00097	5.0980	.47728	.47659	.48417	.50106	2.4582
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.919**	**.95842**	**19.449**	**.46963**	**.49381**	**4.9088**	**.48642**	**.96094**	**.99524**	**-.02679**	**.96043**	**.93735**	**4.8087**
Stddev	.280	.00037	.064	.00003	.01291	.0009	.01233	.02046	.02317	.00961	.02668	.01384	.0136
%RSD	.56084	.03909	.32711	.00543	2.6142	.01874	2.5352	2.1294	2.3276	35.873	2.7778	1.4766	.28226
#1	50.117	.95868	19.494	.46961	.50294	4.9095	.49514	.97541	1.0116	-.01999	.97929	.94713	4.7991
#2	49.721	.95815	19.404	.46965	.48468	4.9082	.47770	.94647	.97886	-.03358	.94156	.92756	4.8183
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.291**	**1.0007**	**.46515**	**.01022**	**.45404**	**.91808**	**-.01412**	**.47475**	**.46305**	**.50251**
Stddev	.029	.0319	.00048	.00275	.00080	.02426	.03011	.00013	.00212	.00024
%RSD	.28226	3.1833	.10322	26.901	.17711	2.6430	213.23	.02756	.45891	.04868
#1	10.270	1.0232	.46549	.01216	.45347	.93524	-.03541	.47484	.46455	.50268
#2	10.311	.97818	.46481	.00827	.45461	.90092	.00717	.47466	.46154	.50234
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2595.9**	**49080.**	**5510.1**
Stddev	.3	200.	24.2
%RSD	.00976	.40741	.43877
#1	2596.1	48938.	5493.0
#2	2595.7	49221.	5527.2

Sample Name: CCB Acquired: 6/13/2017 12:05:02 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00148**	F **.13641**	**-.00183**	**.00065**	**.00063**	**.00005**	**-.00063**	**-.00616**	**.00053**	**.00048**	**.00021**	**-.00220**
Stddev	.00076	.18672	.00263	.00150	.00000	.00003	.00260	.00087	.00072	.00099	.00076	.00063
%RSD	51.224	136.88	143.84	230.45	.11010	56.495	413.03	14.066	137.06	203.53	358.69	28.789
#1	.00094	.26844	.00003	.00171	.00063	.00003	-.00246	-.00677	.00104	.00118	.00075	-.00265
#2	.00201	.00438	-.00369	-.00041	.00064	.00007	.00121	-.00554	.00002	-.00021	-.00033	-.00175
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.07000										
Low Limit		-.07000										

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02095**	**.10311**	**.00253**	**.00575**	W **.00119**	**.00092**	**-.10032**	**.00060**	**.01099**	**-.00063**	**-.02323**	**.00010**
Stddev	.00202	.08622	.00037	.00231	.00005	.00011	.00545	.00080	.01101	.00271	.03505	.00516
%RSD	9.6178	83.618	14.568	40.159	4.5908	11.754	5.4337	133.31	100.18	430.16	150.92	5192.1
#1	.02238	.16408	.00227	.00739	.00115	.00100	-.09646	.00117	.01877	.00128	.00156	-.00355
#2	.01953	.04215	.00279	.00412	.00123	.00084	-.10417	.00003	.00321	-.00254	-.04801	.00375
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					.00100							
Low Limit					-.01000							

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00572**	**.01283**	**.02745**	**.00153**	**.00016**	**.00510**	**-.00053**	**.00075**	**-.04784**	**.00006**	**.00092**	**.00165**
Stddev	.00415	.00856	.01832	.00123	.00005	.00195	.00053	.00260	.01179	.00017	.00110	.00173
%RSD	72.596	66.755	66.755	80.378	27.724	38.235	99.597	348.68	24.652	284.93	119.09	105.00
#1	-.00278	.01888	.04041	.00240	.00020	.00648	-.00016	-.00109	-.03950	-.00006	.00170	.00042
#2	-.00866	.00677	.01449	.00066	.00013	.00372	-.00090	.00258	-.05618	.00018	.00015	.00287
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2700.6**	**49824.**	**5488.8**
Stddev	14.1	33.	12.0
%RSD	.52250	.06526	.21874
#1	2690.6	49847.	5497.3
#2	2710.5	49801.	5480.3

Sample Name: CCVL-4590576 Acquired: 6/13/2017 12:07:41 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01106**	**.10245**	**.01164**	**.09684**	**.01089**	**.00083**	**.10732**	**.21477**	**.00506**	**.01001**	**.00989**	**.01227**
Stddev	.00017	.00311	.00231	.00355	.00001	.00011	.00543	.00260	.00007	.00042	.00040	.00013
%RSD	1.5160	3.0316	19.835	3.6626	.06983	13.147	5.0607	1.2090	1.3543	4.1465	4.0418	1.0466
#1	.01118	.10464	.01001	.09935	.01089	.00075	.11116	.21293	.00511	.01031	.01017	.01218
#2	.01094	.10025	.01327	.09434	.01088	.00090	.10348	.21660	.00501	.00972	.00961	.01237
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.18742**	**3.1707**	**.02300**	**.20000**	**.01081**	**.01822**	**.91638**	**.04023**	**2.7971**	**.00728**	F **.05938**	**.02396**
Stddev	.00191	.0283	.00253	.00223	.00010	.00065	.01950	.00152	.0754	.00041	.01058	.00016
%RSD	1.0170	.89101	10.988	1.1152	.91484	3.5815	2.1280	3.7773	2.6956	5.6275	17.825	.66619
#1	.18608	3.1906	.02122	.19842	.01074	.01868	.93017	.04130	2.8504	.00757	.05190	.02407
#2	.18877	3.1507	.02479	.20158	.01088	.01776	.90259	.03915	2.7437	.00699	.06686	.02385
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value	.10000										.10000	
Range	30.000%										-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01060**	**.48861**	**1.0456**	**.10245**	**.00936**	F **.02062**	**.00856**	**.01435**	F **-.00405**	**.00959**	**.02140**	**.01462**
Stddev	.00484	.00728	.0156	.00261	.00016	.00203	.00018	.00234	.03990	.00006	.00067	.00165
%RSD	45.627	1.4892	1.4892	2.5455	1.6768	9.8534	2.1378	16.319	984.49	.57579	3.1186	11.306
#1	.01403	.49376	1.0566	.10429	.00947	.02206	.00844	.01601	-.03227	.00955	.02187	.01579
#2	.00718	.48347	1.0346	.10061	.00925	.01918	.00869	.01269	.02416	.00963	.02093	.01345
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.02000					.01500			.06000			
Range	-30.000%					30.000%			-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2745.1**	**52421.**	**5923.4**
Stddev	4.6	275.	8.2
%RSD	.16734	.52402	.13898
#1	2748.4	52616.	5917.6
#2	2741.9	52227.	5929.2

Sample Name: CCVL-4590576 Acquired: 6/13/2017 12:13:11 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01175**	**.10505**	**.01584**	**.09960**	**.01056**	**.00097**	**.10797**	**.19874**	**.00533**	**.01036**	**.01043**	**.01217**
Stddev	.00030	.00045	.00226	.00149	.00023	.00006	.00022	.00055	.00001	.00042	.00024	.00021
%RSD	2.5383	.42395	14.289	1.4957	2.1920	6.3275	.20451	.27500	.12382	4.0617	2.3061	1.7594
#1	.01196	.10474	.01424	.09855	.01040	.00093	.10813	.19835	.00532	.01006	.01026	.01232
#2	.01154	.10537	.01744	.10066	.01072	.00101	.10782	.19913	.00533	.01066	.01060	.01202
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.15028**	**3.1143**	**.02185**	**.19959**	**.01069**	**.01919**	**.91789**	**.04202**	**2.8973**	**.00691**	F **.06302**	**.02339**
Stddev	.00569	.0465	.00233	.00407	.00009	.00019	.01011	.00044	.0020	.00016	.01135	.00043
%RSD	3.7871	1.4941	10.652	2.0397	.86407	.96943	1.1018	1.0557	.06841	2.3570	18.011	1.8322
#1	.14625	3.0814	.02349	.20247	.01075	.01932	.91074	.04171	2.8987	.00702	.05499	.02309
#2	.15430	3.1472	.02020	.19671	.01062	.01906	.92504	.04233	2.8959	.00679	.07104	.02370
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value	.10000										.10000	
Range	30.000%										-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01499**	**.49054**	**1.0498**	**.10437**	**.00950**	F **.02055**	**.00853**	**.01820**	F **-.01252**	**.00909**	**.02274**	**.01489**
Stddev	.00046	.02012	.0431	.00196	.00004	.00050	.00017	.00014	.00234	.00012	.00126	.00035
%RSD	3.0418	4.1026	4.1026	1.8784	.40140	2.4467	2.0472	.76152	18.719	1.3483	5.5287	2.3437
#1	.01531	.50477	1.0802	.10299	.00952	.02091	.00865	.01830	-.01417	.00917	.02363	.01464
#2	.01467	.47631	1.0193	.10576	.00947	.02020	.00841	.01810	-.01086	.00900	.02185	.01513
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value						.01500			.06000			
Range						30.000%			-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2686.1**	**51610.**	**5708.9**
Stddev	13.8	313.	20.3
%RSD	.51330	.60687	.35606
#1	2695.8	51389.	5694.5
#2	2676.3	51832.	5723.2

Sample Name: CCVL-4590576 Acquired: 6/13/2017 12:15:37 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01088**	**.10489**	F **.00934**	**.09960**	**.01077**	**.00094**	**.11097**	**.19562**	**.00530**	**.01014**	**.01043**	**.01307**
Stddev	.00005	.00040	.00898	.00108	.00014	.00004	.00141	.00224	.00016	.00031	.00008	.00005
%RSD	.47131	.37949	96.157	1.0835	1.2709	3.9444	1.2685	1.1466	2.9315	3.0964	.74754	.40298
#1	.01084	.10517	.00299	.09883	.01087	.00097	.10998	.19403	.00519	.00992	.01049	.01304
#2	.01091	.10461	.01569	.10036	.01068	.00091	.11197	.19720	.00541	.01036	.01038	.01311
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.19959**	**3.1327**	**.02531**	**.20120**	**.01098**	**.01959**	**.91578**	**.04185**	**2.8973**	**.00873**	F **.06283**	**.02509**
Stddev	.00295	.0302	.00104	.00035	.00005	.00003	.00037	.00011	.0048	.00090	.00766	.00179
%RSD	1.4789	.96289	4.1274	.17245	.45772	.16937	.04093	.26148	.16515	10.298	12.200	7.1251
#1	.19750	3.1541	.02457	.20096	.01102	.01961	.91551	.04177	2.9007	.00809	.05741	.02383
#2	.20167	3.1114	.02605	.20145	.01094	.01957	.91604	.04193	2.8939	.00937	.06825	.02636
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value	.10000										.10000	
Range	30.000%										-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01713**	**.47003**	**1.0059**	**.10315**	**.00958**	**.01858**	**.00824**	**.01565**	F **.00420**	**.00928**	**.02403**	**.01709**
Stddev	.00055	.00475	.0102	.00163	.00013	.00177	.00020	.00225	.00707	.00035	.00001	.00263
%RSD	3.2229	1.0105	1.0105	1.5822	1.3803	9.5025	2.4726	14.352	168.18	3.8179	.05619	15.375
#1	.01674	.46667	.99868	.10200	.00967	.01983	.00810	.01406	-.00079	.00903	.02404	.01895
#2	.01752	.47339	1.0131	.10431	.00949	.01733	.00838	.01724	.00920	.00953	.02402	.01524
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2677.9**	**50648.**	**5709.8**
Stddev	1.7	72.	5.9
%RSD	.06233	.14178	.10417
#1	2676.7	50698.	5714.0
#2	2679.1	50597.	5705.6

Sample Name: MB 280-376423/1-A Acquired: 6/13/2017 12:29:14 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: 6/9 Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00090**	**.00289**	**-.00107**	**-.00055**	**.00045**	**-.00020**	**.00440**	**.00669**	**.00038**
Stddev	.00001	.00049	.00176	.00073	.00016	.00001	.00250	.00020	.00022
%RSD	1.5872	17.106	163.52	133.47	35.997	5.7389	56.766	3.0168	58.172
#1	.00089	.00324	.00017	-.00107	.00033	-.00019	.00617	.00683	.00022
#2	.00091	.00254	-.00232	-.00003	.00056	-.00021	.00263	.00654	.00053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**.00017**	**-.00338**	W **.01805**	**.09192**	**.00111**	**.00609**	W **.00032**	**-.00110**
Stddev	.00013	.00028	.00028	.00245	.07046	.00114	.00625	.00001	.00038
%RSD	351.71	163.81	8.4173	13.552	76.650	102.98	102.74	2.7234	34.159
#1	-.00006	-.00003	-.00358	.01632	.04210	.00030	.01051	.00032	-.00083
#2	.00013	.00037	-.00318	.01978	.14174	.00191	.00166	.00033	-.00137
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit				.01710				.00023	
Low Limit				-.05000				-.00500	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.04358**	**-.00038**	**.00490**	**-.00006**	F **-.04439**	**-.00002**	**-.00464**	F **.02524**	**.05401**
Stddev	.00003	.00004	.00368	.00085	.00354	.00207	.00593	.00767	.01641
%RSD	.06209	11.081	75.076	1371.7	7.9684	12549.	127.81	30.381	30.381
#1	-.04356	-.00035	.00750	.00054	-.04689	-.00148	-.00045	.03066	.06561
#2	-.04360	-.00041	.00230	-.00066	-.04189	.00145	-.00883	.01982	.04241
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	None
High Limit					.01000			.01000	
Low Limit					-.01000			-.01000	

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00078**	**.00011**	W **.00577**	**-.00044**	**.00235**	**-.04073**	**-.00010**	**.00242**	**-.00160**
Stddev	.00142	.00011	.00090	.00021	.00184	.00218	.00106	.00010	.00074
%RSD	181.78	100.46	15.669	47.471	78.318	5.3551	1062.9	4.0398	45.916
#1	-.00178	.00003	.00641	-.00029	.00105	-.03919	-.00085	.00235	-.00213
#2	.00022	.00019	.00513	-.00059	.00365	-.04228	.00065	.00249	-.00108
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00000						
Low Limit			-.00500						

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2722.5**	**51198.**	**5834.7**
Stddev	7.7	41.	53.2
%RSD	.28341	.07972	.91222
#1	2717.0	51169.	5797.1
#2	2727.9	51227.	5872.3

Sample Name: LCS 280-376423/2-A Acquired: 6/13/2017 12:31:53 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05544**	**1.9967**	**1.0366**	**1.0434**	**2.1875**	**.05126**	**2.0968**	**53.328**	**.10734**
Stddev	.00045	.0322	.0206	.0170	.0080	.00021	.0281	.209	.00142
%RSD	.81108	1.6146	1.9840	1.6289	.36333	.41786	1.3398	.39171	1.3223
#1	.05576	2.0195	1.0512	1.0554	2.1818	.05111	2.1167	53.180	.10835
#2	.05512	1.9739	1.0221	1.0314	2.1931	.05141	2.0769	53.476	.10634
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51464**	W **.21292**	**.26964**	**1.0409**	**53.556**	**1.0223**	**52.577**	**.50282**	**1.0153**
Stddev	.00955	.00350	.00052	.0021	.305	.0064	.063	.00009	.0201
%RSD	1.8548	1.6450	.19240	.20074	.57011	.62995	.12068	.01765	1.9807
#1	.52139	.21539	.27001	1.0423	53.340	1.0178	52.621	.50289	1.0295
#2	.50789	.21044	.26927	1.0394	53.772	1.0269	52.532	.50276	1.0010
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.21000							
Low Limit		.19000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**53.668**	**.51492**	**10.780**	**.53047**	**2.1213**	**.52084**	**2.0551**	**9.9220**	**21.233**
Stddev	.416	.01093	.175	.00339	.0366	.00789	.0326	.0062	.013
%RSD	.77601	2.1230	1.6237	.63988	1.7248	1.5147	1.5885	.06257	.06257
#1	53.962	.52265	10.904	.53287	2.1472	.52642	2.0782	9.9264	21.243
#2	53.373	.50719	10.656	.52807	2.0954	.51527	2.0321	9.9176	21.224
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.1026**	**1.0105**	**1.0069**	**.97181**	**1.9458**	**2.0140**	**.51764**	**.50181**	**.53929**
Stddev	.0393	.0033	.0010	.00328	.0305	.0239	.00258	.00239	.00118
%RSD	1.8682	.32466	.09744	.33787	1.5686	1.1848	.49812	.47625	.21803
#1	2.1304	1.0082	1.0062	.97413	1.9674	2.0308	.51946	.50012	.54012
#2	2.0749	1.0128	1.0076	.96949	1.9242	1.9971	.51582	.50350	.53846
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2576.4**	**48327.**	**5671.2**
Stddev	3.2	43.	20.9
%RSD	.12438	.08860	.36805
#1	2578.7	48297.	5686.0
#2	2574.2	48357.	5656.5

Sample Name: 280-97836-D-1-A Acquired: 6/13/2017 12:34:18 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00126**	**1.8506**	**.00171**	**.00901**	**.06970**	**.00007**	**.00219**	**16.161**	**.00045**
Stddev	.00092	.0445	.00418	.00059	.00202	.00007	.00330	.096	.00022
%RSD	72.479	2.4074	245.34	6.5533	2.9023	100.44	150.81	.59644	47.759
#1	.00191	1.8821	.00466	.00943	.06827	.00002	.00453	16.229	.00030
#2	.00062	1.8191	-.00125	.00859	.07113	.00011	-.00015	16.093	.00060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00091**	**.00232**	**.01373**	**2.4161**	**2.1678**	**.00496**	**3.8085**	**.05569**	**.00527**
Stddev	.00027	.00011	.00020	.0034	.0571	.00076	.0281	.00000	.00021
%RSD	29.471	4.6838	1.4396	.14225	2.6358	15.387	.73840	.00697	4.0040
#1	.00072	.00240	.01387	2.4136	2.1274	.00442	3.8284	.05570	.00512
#2	.00110	.00224	.01359	2.4185	2.2082	.00549	3.7886	.05569	.00542
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.4606**	**.00138**	**.05641**	**.03700**	**3.1319**	**.00643**	**-.00666**	**8.1764**	**17.498**
Stddev	.0592	.00061	.00303	.00219	.0639	.00443	.00440	.0673	.144
%RSD	1.0841	44.056	5.3671	5.9238	2.0392	68.858	66.063	.82255	.82255
#1	5.4187	.00095	.05856	.03545	3.1771	.00956	-.00355	8.2240	17.599
#2	5.5024	.00181	.05427	.03855	3.0868	.00330	-.00977	8.1289	17.396
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00200**	**.21438**	**.00558**	**.07691**	**.00300**	**-.00320**	**.00341**	**.10346**	**.00221**
Stddev	.00054	.00012	.00195	.00017	.00119	.01465	.00036	.00113	.00114
%RSD	27.092	.05705	34.859	.22700	39.762	457.15	10.486	1.0963	51.376
#1	.00238	.21429	.00696	.07679	.00216	-.01356	.00367	.10426	.00141
#2	.00162	.21447	.00421	.07704	.00385	.00715	.00316	.10266	.00302
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2720.6**	**50965.**	**5800.7**
Stddev	9.0	12.	19.7
%RSD	.32992	.02339	.34007
#1	2727.0	50973.	5786.7
#2	2714.3	50957.	5814.6

Sample Name: 280-97910-D-1-B Acquired: 6/13/2017 12:36:52 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00100**	**.12942**	**-.00619**	**.03787**	**.02018**	**-.00009**	**.00002**	**18.974**	**.00015**
Stddev	.00011	.00294	.00896	.00134	.00010	.00001	.00091	.073	.00019
%RSD	11.171	2.2729	144.81	3.5455	.47542	8.0046	5901.5	.38484	124.48
#1	.00107	.13150	-.01252	.03881	.02012	-.00008	-.00063	18.922	.00029
#2	.00092	.12734	.00015	.03692	.02025	-.00009	.00066	19.026	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00046**	**.00070**	**.00313**	**.14482**	**1.4421**	**-.00109**	**1.7392**	**.02648**	**.00041**
Stddev	.00025	.00040	.00033	.00122	.0046	.00121	.0136	.00013	.00012
%RSD	54.287	57.408	10.467	.83954	.31864	111.58	.78169	.47475	30.645
#1	.00029	.00098	.00336	.14396	1.4389	-.00023	1.7488	.02657	.00049
#2	.00064	.00042	.00290	.14568	1.4454	-.00195	1.7296	.02640	.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.7818**	**-.00010**	**.16661**	**.00857**	**3.3750**	**.00188**	**-.00383**	**1.1183**	**2.3932**
Stddev	.0232	.00027	.00591	.00012	.1053	.00266	.00619	.0104	.0223
%RSD	.83325	277.20	3.5500	1.3680	3.1204	141.16	161.56	.93156	.93156
#1	2.7654	.00009	.17079	.00849	3.4495	.00000	-.00820	1.1257	2.4089
#2	2.7982	-.00029	.16242	.00865	3.3005	.00376	.00055	1.1109	2.3774
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00036**	**.04278**	**.00530**	**.00194**	**.00257**	**-.04802**	**.00021**	**.06194**	**.00147**
Stddev	.00101	.00014	.00253	.00100	.00003	.00035	.00066	.00083	.00237
%RSD	282.57	.32279	47.781	51.644	1.1125	.72450	316.39	1.3452	161.05
#1	-.00036	.04268	.00709	.00123	.00259	-.04778	.00067	.06253	.00314
#2	.00107	.04288	.00351	.00265	.00255	-.04827	-.00026	.06135	-.00020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2710.1**	**51187.**	**5910.5**
Stddev	6.8	11.	13.3
%RSD	.25225	.02181	.22538
#1	2714.9	51179.	5919.9
#2	2705.3	51195.	5901.1

Sample Name: 280-97910-D-2-B Acquired: 6/13/2017 12:39:28 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00111**	**.14819**	**.00534**	**.00418**	**.00561**	**-.00012**	**.00137**	**12.306**	**.00042**
Stddev	.00012	.00349	.00230	.00069	.00044	.00011	.00294	.075	.00014
%RSD	10.613	2.3549	43.150	16.619	7.9075	96.767	215.15	.60702	33.317
#1	.00119	.15066	.00697	.00467	.00529	-.00020	-.00071	12.253	.00052
#2	.00103	.14573	.00371	.00369	.00592	-.00004	.00344	12.359	.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00073**	**.00011**	**-.00132**	**.04113**	**.17224**	**.00254**	**2.1467**	**.00948**	**.00055**
Stddev	.00025	.00043	.00065	.00163	.00038	.00227	.0038	.00002	.00035
%RSD	34.965	388.61	49.529	3.9581	.21928	89.306	.17510	.24260	64.204
#1	.00091	.00041	-.00178	.03998	.17197	.00415	2.1440	.00950	.00080
#2	.00055	-.00019	-.00086	.04228	.17250	.00094	2.1493	.00946	.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09474**	**.00060**	**.02954**	**-.00018**	**.60412**	**.00597**	**-.00321**	**.41216**	**.88203**
Stddev	.00219	.00061	.00045	.00178	.03029	.00204	.00048	.02828	.06052
%RSD	2.3101	101.95	1.5075	1013.7	5.0138	34.133	14.923	6.8619	6.8619
#1	.09629	.00017	.02985	.00108	.62554	.00741	-.00354	.43216	.92482
#2	.09319	.00103	.02922	-.00143	.58270	.00453	-.00287	.39216	.83923
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00121**	**.01608**	**.00530**	**-.00025**	**.00035**	**-.01797**	**.00080**	**.00945**	**.00157**
Stddev	.00072	.00004	.00017	.00050	.00012	.02188	.00063	.00088	.00121
%RSD	59.077	.27524	3.2885	195.33	34.835	121.78	78.121	9.3207	77.584
#1	.00071	.01612	.00542	-.00060	.00027	-.00250	.00125	.00882	.00242
#2	.00172	.01605	.00518	.00010	.00044	-.03344	.00036	.01007	.00071
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2619.0**	**49301.**	**5584.0**
Stddev	10.8	35.	62.5
%RSD	.41096	.07016	1.1188
#1	2626.7	49326.	5628.2
#2	2611.4	49277.	5539.9

Sample Name: 280-97956-H-1-A Acquired: 6/13/2017 12:42:06 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00164**	**.16900**	**.08827**	W **17.868**	**4.3940**	**.00001**	**-.00316**	**138.31**	**.00176**
Stddev	.00014	.00686	.00284	.572	.0081	.00003	.00123	.34	.00050
%RSD	8.4173	4.0575	3.2142	3.2026	.18473	330.06	38.869	.24833	28.402
#1	.00174	.17385	.09028	18.273	4.3997	.00003	-.00229	138.56	.00211
#2	.00155	.16415	.08626	17.464	4.3882	-.00001	-.00403	138.07	.00141
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.20000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06733**	**.11563**	**.00267**	**17.689**	F **984.37**	**.03524**	**261.91**	**.18157**	**.02737**
Stddev	.00255	.00473	.00014	.065	6.87	.00260	1.21	.00121	.00035
%RSD	3.7915	4.0926	5.0970	.36810	.69788	7.3719	.46107	.66474	1.2849
#1	.06913	.11898	.00276	17.735	989.23	.03708	262.76	.18243	.02712
#2	.06552	.11229	.00257	17.643	979.51	.03340	261.06	.18072	.02762
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					500.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **4695.4**	**.29763**	**17.577**	**-.00543**	**67.696**	**.00034**	**.00557**	**10.668**	**22.830**
Stddev	12.8	.01189	.712	.00123	2.347	.00115	.00752	.008	.017
%RSD	.27301	3.9960	4.0487	22.730	3.4667	337.22	135.14	.07617	.07617
#1	4704.5	.30604	18.080	-.00456	69.356	-.00047	.00025	10.674	22.843
#2	4686.4	.28922	17.074	-.00630	66.037	.00115	.01089	10.663	22.818
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.14323**	**2.0677**	**.00068**	**.05513**	**.00076**	**-.00211**	**.36799**	**.05794**	**.02640**
Stddev	.00614	.0065	.00161	.00045	.00056	.01037	.00024	.00211	.00149
%RSD	4.2877	.31310	235.99	.82298	74.214	492.08	.06386	3.6414	5.6421
#1	.14757	2.0723	-.00046	.05545	.00036	-.00944	.36816	.05943	.02535
#2	.13888	2.0631	.00182	.05481	.00115	.00522	.36782	.05645	.02745
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2055.1**	**36668.**	**4987.3**
Stddev	9.7	140.	32.9
%RSD	.47238	.38222	.65911
#1	2048.2	36569.	4964.1
#2	2062.0	36767.	5010.5

Sample Name: 280-97956-H-1-Asd@5 Acquired: 6/13/2017 12:44:43 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00143**	**.03719**	**.01471**	**3.9103**	**.79084**	**-.00005**	**.00241**	**25.605**	**.00079**
Stddev	.00014	.00032	.00149	.0095	.00818	.00009	.00373	.263	.00014
%RSD	9.5499	.85153	10.154	.24234	1.0349	184.68	154.72	1.0282	18.148
#1	.00133	.03697	.01577	3.9036	.78505	.00001	.00505	25.419	.00090
#2	.00152	.03742	.01366	3.9170	.79662	-.00011	-.00023	25.791	.00069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01304**	**.02445**	**.00121**	**3.3030**	W **178.57**	**.00558**	**48.744**	**.03493**	**.00556**
Stddev	.00039	.00051	.00123	.0514	2.26	.00216	.459	.00033	.00028
%RSD	2.9721	2.0882	101.06	1.5548	1.2675	38.707	.94213	.94451	5.0446
#1	.01331	.02409	.00208	3.2667	176.97	.00406	48.419	.03470	.00536
#2	.01276	.02481	.00035	3.3393	180.17	.00711	49.069	.03516	.00576
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **840.54**	**.06376**	**3.5278**	**-.00292**	**13.545**	**-.00349**	**-.00068**	**1.9730**	**4.2222**
Stddev	10.15	.00017	.0095	.00106	.065	.00399	.00536	.0202	.0432
%RSD	1.2081	.26455	.26937	36.245	.47655	114.18	793.21	1.0239	1.0239
#1	833.36	.06364	3.5210	-.00367	13.499	-.00067	-.00447	1.9587	4.1917
#2	847.72	.06388	3.5345	-.00217	13.591	-.00632	.00311	1.9873	4.2528
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03013**	**.37190**	**.00312**	**.00984**	**.00175**	**-.03892**	**.06885**	**.01052**	**.00548**
Stddev	.00032	.00422	.00221	.00005	.00566	.01039	.00046	.00018	.00051
%RSD	1.0523	1.1345	70.889	.49956	322.95	26.698	.66946	1.7018	9.2372
#1	.03036	.36891	.00468	.00980	-.00225	-.04627	.06918	.01040	.00584
#2	.02991	.37488	.00156	.00987	.00576	-.03158	.06852	.01065	.00512
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2469.2**	**45026.**	**5665.9**
Stddev	6.6	.	10.4
%RSD	.26568	.00018	.18388
#1	2473.9	45026.	5673.3
#2	2464.6	45026.	5658.5

Sample Name: 280-97956-H-1-B MS Acquired: 6/13/2017 12:47:21 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06168**	**2.1431**	W **2.4915**	**1.2047**	W **18.782**	**6.5175**	**.04938**	W **2.0019**	**186.42**
Stddev	.00086	.0440	.0005	.0187	.336	.0049	.00003	.0344	.21
%RSD	1.3873	2.0510	.02133	1.5528	1.7905	.07544	.06007	1.7193	.11216
#1	.06229	2.1741	2.4911	1.2179	19.019	6.5140	.04940	2.0263	186.57
#2	.06108	2.1120	2.4919	1.1914	18.544	6.5210	.04936	1.9776	186.28
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit			500.00		10.000			2.0000	
Low Limit			3.2000		-.20000			-.20000	

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11251**	**.54789**	**.32104**	**.26996**	**18.222**	F **1008.9**	**1.0792**	**306.03**	**.67664**
Stddev	.00228	.01193	.00756	.00016	.009	3.3	.0022	.43	.00049
%RSD	2.0226	2.1766	2.3534	.05939	.04919	.32273	.20796	.14069	.07259
#1	.11412	.55632	.32639	.26984	18.216	1011.2	1.0776	306.33	.67699
#2	.11090	.53945	.31570	.27007	18.229	1006.6	1.0808	305.72	.67630
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						500.00			
Low Limit						-6.0000			

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0328**	W **4669.2**	**.77144**	W **28.195**	**.47038**	**70.456**	**.51965**	**2.0358**	**19.099**
Stddev	.0214	3.1	.01655	.585	.01263	1.481	.01136	.0584	.113
%RSD	2.0667	.06706	2.1454	2.0742	2.6853	2.1025	2.1855	2.8673	.58959
#1	1.0479	4667.0	.78314	28.609	.47932	71.503	.52768	2.0771	19.178
#2	1.0177	4671.4	.75973	27.782	.46145	69.409	.51162	1.9945	19.019
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00		20.000					
Low Limit		11.000		-6.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**40.871**	W **2.1157**	**3.0404**	**.82338**	**1.0191**	**1.5010**	**1.9050**	**.88134**	**.57462**
Stddev	.241	.0406	.0016	.00109	.0002	.0299	.0147	.00355	.00332
%RSD	.58959	1.9179	.05276	.13221	.02132	1.9908	.77276	.40249	.57707
#1	41.041	2.1444	3.0415	.82261	1.0193	1.5221	1.9154	.88385	.57696
#2	40.701	2.0870	3.0393	.82415	1.0190	1.4798	1.8946	.87884	.57227
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000							
Low Limit		-.20000							

Elem	Zr3391
Line	339.198 { 99}
Units	ppm
Avg	**.28857**
Stddev	.00321
%RSD	1.1136
#1	.28630
#2	.29084
Check ?	Chk Pass
High Limit	
Low Limit	

Sample Name: 280-97956-H-1-B MS Acquired: 6/13/2017 12:47:21 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2108.3**	**38048.**	**5272.3**
Stddev	6.9	63.	22.3
%RSD	.32737	.16433	.42203
#1	2103.4	38004.	5256.6
#2	2113.2	38093.	5288.1

Sample Name: 280-97956-H-1-C MSD Acquired: 6/13/2017 12:49:50 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06497**	**2.0548**	W **2.4108**	**1.2597**	W **18.927**	**6.7089**	**.05180**	W **2.0892**	**191.05**
Stddev	.00018	.0552	.0251	.0273	.415	.0039	.00007	.0530	.02
%RSD	.27017	2.6876	1.0415	2.1672	2.1938	.05749	.14243	2.5385	.00978
#1	.06509	2.0938	2.3931	1.2790	19.220	6.7116	.05175	2.1267	191.06
#2	.06485	2.0157	2.4286	1.2404	18.633	6.7061	.05185	2.0517	191.04
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit			500.00		10.000			2.0000	
Low Limit			3.2000		-.20000			-.20000	

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11765**	**.56860**	**.33133**	**.28622**	**18.357**	F **1026.4**	**1.1362**	**312.77**	**.70347**
Stddev	.00238	.01340	.00838	.00275	.033	1.8	.0033	.36	.00123
%RSD	2.0258	2.3568	2.5288	.96136	.17927	.17846	.29410	.11354	.17515
#1	.11934	.57808	.33725	.28817	18.380	1027.7	1.1386	313.02	.70434
#2	.11596	.55913	.32541	.28428	18.334	1025.1	1.1339	312.52	.70260
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						500.00			
Low Limit						-6.0000			

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0419**	W **4748.5**	**.79664**	W **28.753**	**.49252**	**71.179**	**.52791**	**2.1305**	**19.293**
Stddev	.0270	2.5	.01953	.696	.01675	1.637	.01167	.0617	.012
%RSD	2.5943	.05256	2.4517	2.4219	3.4017	2.2998	2.2098	2.8969	.05963
#1	1.0610	4750.2	.81045	29.245	.50437	72.337	.53616	2.1742	19.285
#2	1.0228	4746.7	.78283	28.260	.48067	70.021	.51966	2.0869	19.301
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00		20.000					
Low Limit		11.000		-6.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**41.287**	W **2.1414**	**3.1202**	**.83183**	**1.0263**	**1.5694**	**2.0470**	**.91557**	**.59598**
Stddev	.025	.0530	.0026	.00194	.0025	.0400	.0484	.00157	.00556
%RSD	.05963	2.4760	.08469	.23381	.24428	2.5511	2.3650	.17105	.93301
#1	41.269	2.1789	3.1220	.83320	1.0280	1.5977	2.0812	.91668	.59204
#2	41.304	2.1040	3.1183	.83045	1.0245	1.5411	2.0128	.91446	.59991
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.0000							
Low Limit		-.20000							

Elem	Zr3391
Line	339.198 { 99}
Units	ppm
Avg	**.23281**
Stddev	.00044
%RSD	.18727
#1	.23312
#2	.23250
Check ?	Chk Pass
High Limit	
Low Limit	

Sample Name: 280-97956-H-1-C MSD Acquired: 6/13/2017 12:49:50 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376423 200.7 (Al As)

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2095.6**	**37950.**	**5262.6**
Stddev	2.7	98.	5.5
%RSD	.12916	.25818	.10489
#1	2093.6	38019.	5258.7
#2	2097.5	37881.	5266.5

Sample Name: CCVH-4579429 Acquired: 6/13/2017 12:52:19 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00024**	**46.582**	**-.00356**	**.05466**	**.00341**	**.00019**	W **.92955**	**.09307**	**.00066**	**-.00114**	**.00014**	**.00939**
Stddev	.00057	.127	.00393	.00431	.00047	.00000	.02853	.01397	.00036	.00005	.00007	.00028
%RSD	238.44	.27282	110.22	7.8948	13.678	.63177	3.0692	15.009	54.677	4.2904	49.422	3.0240
#1	-.00016	46.671	-.00634	.05771	.00374	.00019	.94972	.10294	.00040	-.00118	.00009	.00959
#2	.00064	46.492	-.00079	.05160	.00308	.00019	.90937	.08319	.00091	-.00111	.00019	.00919
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							-5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.908**	**2.8595**	**.00502**	**.16128**	**-.00165**	**-.00133**	**245.25**	**.00159**	**.02126**	**-.00052**	**4.9677**	**.00344**
Stddev	.171	.3800	.00287	.01206	.00001	.00062	.26	.00087	.00016	.00036	.1564	.00239
%RSD	.34952	13.289	57.099	7.4754	.60696	46.447	.10666	54.583	.73829	69.390	3.1483	69.440
#1	48.787	3.1282	.00705	.15275	-.00164	-.00089	245.43	.00221	.02137	-.00027	5.0783	.00175
#2	49.029	2.5908	.00300	.16980	-.00165	-.00177	245.06	.00098	.02115	-.00078	4.8572	.00513
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00968**	**.02153**	**.04607**	**.00137**	**.00196**	W **4.5884**	**.02003**	**.00479**	W **9.2812**	**.01251**	**.00159**	**.07708**
Stddev	.00163	.03247	.06948	.00131	.00019	.0035	.00080	.00281	.0820	.00050	.00017	.00391
%RSD	16.831	150.80	150.80	95.593	9.8276	.07665	4.0002	58.736	.88331	4.0302	10.911	5.0723
#1	-.00853	.04449	.09520	.00230	.00209	4.5909	.01946	.00677	9.3391	.01287	.00147	.07432
#2	-.01084	-.00143	-.00305	.00045	.00182	4.5860	.02059	.00280	9.2232	.01216	.00172	.07984
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2582.0**	**47510.**	**5558.4**
Stddev	9.1	7.	26.2
%RSD	.35159	.01577	.47081
#1	2588.4	47515.	5576.9
#2	2575.5	47505.	5539.9

Sample Name: CCV-4580817 Acquired: 6/13/2017 12:54:54 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48699**	**.48646**	**.91322**	**.51585**	**.50801**	**.46830**	**-.00097**	**5.1178**	**.48413**	**.48795**	**.49515**	**.49544**
Stddev	.00080	.01756	.02846	.01389	.00008	.00092	.00010	.0064	.01292	.01491	.01460	.00100
%RSD	.16354	3.6088	3.1167	2.6928	.01600	.19596	10.365	.12469	2.6681	3.0562	2.9492	.20105
#1	.48755	.49888	.93335	.52568	.50795	.46895	-.00090	5.1223	.49327	.49850	.50548	.49614
#2	.48642	.47405	.89310	.50603	.50807	.46765	-.00104	5.1133	.47500	.47741	.48483	.49473
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4038**	**50.557**	**.95629**	**19.619**	**.47137**	**.49808**	F **6.0942**	**.48693**	**.96037**	**.99297**	**-.01797**	**.94781**
Stddev	.0106	.019	.00632	.041	.00165	.01519	.0653	.01342	.02166	.02738	.00553	.02276
%RSD	.44204	.03674	.66049	.21044	.34979	3.0491	1.0712	2.7564	2.2559	2.7575	30.801	2.4013
#1	2.4113	50.570	.96075	19.648	.47253	.50882	6.1404	.49642	.97569	1.0123	-.02188	.96390
#2	2.3963	50.544	.95182	19.589	.47020	.48734	6.0481	.47744	.94505	.97361	-.01406	.93172
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							5.0000					
Range							10.490%					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.91328**	**4.8172**	**10.309**	**1.0034**	**.46351**	**.01510**	**.45503**	**.91256**	**-.00564**	**.48071**	**.46368**	**.49675**
Stddev	.02135	.0077	.016	.0364	.00092	.00115	.00130	.02386	.04688	.00231	.00479	.00119
%RSD	2.3377	.15918	.15918	3.6225	.19956	7.6044	.28586	2.6144	831.39	.48118	1.0337	.23986
#1	.92838	4.8226	10.320	1.0291	.46416	.01591	.45595	.92943	.02751	.48234	.46707	.49591
#2	.89818	4.8117	10.297	.97767	.46285	.01428	.45411	.89569	-.03879	.47907	.46029	.49759
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2624.3**	**49003.**	**5597.4**
Stddev	5.4	167.	40.2
%RSD	.20585	.34109	.71792
#1	2620.5	49121.	5625.8
#2	2628.1	48885.	5568.9

Sample Name: CCB Acquired: 6/13/2017 12:57:22 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00104**	**.00430**	**.00162**	W **.02401**	**.00172**	**.00007**	**.00526**	**.00697**	**.00032**	**-.00003**	**.00032**	**-.00366**
Stddev	.00031	.00013	.00021	.00115	.00011	.00008	.00201	.00333	.00013	.00032	.00004	.00135
%RSD	30.194	2.9669	13.102	4.7726	6.3871	119.72	38.162	47.700	41.069	1216.9	11.948	36.919
#1	.00082	.00440	.00177	.02482	.00180	.00012	.00384	.00462	.00023	.00020	.00029	-.00271
#2	.00126	.00421	.00147	.02320	.00164	.00001	.00668	.00933	.00042	-.00025	.00035	-.00462
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01500								
Low Limit				-.01500								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00188**	**.81852**	W **.00549**	W **.04607**	**.00018**	**.00045**	F **.66753**	**.00009**	**.00897**	**-.00177**	**-.01497**	**.00524**
Stddev	.00007	.05193	.00258	.02144	.00002	.00003	.00430	.00072	.00278	.00077	.00650	.00079
%RSD	3.7523	6.3437	46.988	46.545	10.875	7.6935	.64352	773.65	30.992	43.457	43.402	15.139
#1	-.00193	.85524	.00731	.03091	.00020	.00048	.67056	-.00042	.01094	-.00122	-.01037	.00580
#2	-.00183	.78181	.00367	.06123	.00017	.00043	.66449	.00061	.00701	-.00231	-.01956	.00468
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500	.04000			.50000					
Low Limit			-.01000	-.04000			-.50000					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00148**	**.01134**	**.02427**	**.00058**	**.00047**	**.00678**	**.00005**	**.00351**	**-.03237**	**.00015**	**-.00068**	**-.00030**
Stddev	.00148	.01400	.02997	.00031	.00007	.00189	.00010	.00319	.03637	.00021	.00089	.00285
%RSD	99.565	123.48	123.48	53.037	14.221	27.938	180.98	90.992	112.35	137.83	131.95	947.31
#1	-.00044	.02124	.04546	.00080	.00051	.00812	-.00002	.00576	-.05809	.00000	-.00005	.00171
#2	-.00253	.00144	.00308	.00036	.00042	.00544	.00012	.00125	-.00665	.00030	-.00131	-.00231
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2712.1**	**51083.**	**5733.3**
Stddev	17.9	121.	33.7
%RSD	.65823	.23645	.58823
#1	2724.7	50997.	5757.1
#2	2699.5	51168.	5709.4

Sample Name: CCVL-4590576 Acquired: 6/13/2017 13:00:00 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01104**	**.09969**	**.01392**	**.11383**	F **.03018**	F **.00153**	**.10723**	F **.79681**	**.00491**	**.01016**	**.00995**	**.01149**
Stddev	.00043	.00423	.00633	.00300	.02690	.00097	.00620	.83452	.00027	.00034	.00018	.00039
%RSD	3.9287	4.2410	45.487	2.6354	89.116	63.664	5.7812	104.73	5.5523	3.3383	1.8521	3.4310
#1	.01074	.10268	.00944	.11595	.04920	.00221	.11162	1.3869	.00511	.01040	.01008	.01177
#2	.01135	.09670	.01840	.11171	.01116	.00084	.10285	.20672	.00472	.00992	.00982	.01122
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					.01000	.00100		.20000				
Range					30.000%	30.000%		30.000%				

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.21815**	F **6.6683**	F **.03071**	**.22294**	**.00978**	**.01893**	**16.275**	**.03941**	**2.7631**	**.00900**	**.07828**	**.02018**
Stddev	.16466	4.3118	.00775	.00590	.00008	.00031	20.258	.00201	.1156	.00090	.01300	.00160
%RSD	75.477	64.661	25.243	2.6472	.79231	1.6311	124.47	5.0957	4.1844	10.036	16.610	7.9350
#1	.33458	9.7172	.03619	.22712	.00984	.01915	30.599	.04083	2.8448	.00837	.08748	.02132
#2	.10172	3.6194	.02523	.21877	.00973	.01871	1.9506	.03799	2.6813	.00964	.06909	.01905
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.10000	3.0000	.02000									
Range	30.000%	30.000%	30.000%									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01747**	**.53601**	**1.1471**	**.09840**	F **.01865**	**.01929**	**.00850**	**.01854**	F **.00644**	**.00917**	**.01830**	**.01646**
Stddev	.00541	.07808	.1671	.00442	.01275	.00143	.00001	.00139	.00639	.00037	.00025	.00258
%RSD	30.959	14.568	14.568	4.4964	68.339	7.4340	.16393	7.5107	99.286	4.0786	1.3614	15.694
#1	.02129	.59122	1.2652	.10153	.02767	.01828	.00849	.01755	.01096	.00944	.01812	.01828
#2	.01365	.48079	1.0289	.09527	.00964	.02031	.00851	.01952	.00192	.00891	.01847	.01463
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value					.01000				.06000			
Range					30.000%				-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2698.3**	**51416.**	**5846.2**
Stddev	13.5	215.	43.0
%RSD	.49948	.41824	.73627
#1	2688.8	51568.	5876.7
#2	2707.8	51264.	5815.8

Sample Name: MB 280-376922/1-A Acquired: 6/13/2017 13:19:52 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: 6/12 Custom ID2: Custom ID3:
Comment: 376922 6010B (Al)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00098**	**.00259**	W **.00784**	**.00475**	**.00048**	**-.00009**	**.00067**	**-.00654**	**.00025**
Stddev	.00031	.00094	.00054	.00008	.00011	.00002	.00128	.00045	.00002
%RSD	31.768	36.348	6.8608	1.6059	23.040	24.418	191.82	6.8991	8.5998
#1	.00076	.00193	.00746	.00469	.00056	-.00007	-.00024	-.00622	.00024
#2	.00120	.00326	.00822	.00480	.00040	-.00010	.00157	-.00685	.00027
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00750						
Low Limit			-.00750						

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**-.00011**	**-.00349**	**.00208**	**.32732**	**.00226**	**.00377**	**.00008**	**-.00006**
Stddev	.00011	.00004	.00033	.00031	.02416	.00093	.00566	.00003	.00048
%RSD	240.62	39.745	9.3583	14.865	7.3817	41.112	150.05	34.851	823.87
#1	-.00012	-.00014	-.00326	.00230	.34440	.00292	-.00023	.00010	-.00040
#2	.00003	-.00008	-.00372	.00186	.31023	.00161	.00777	.00006	.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09982**	**.00001**	**.00586**	**-.00267**	**-.03424**	**.00035**	**-.00551**	**.02469**	**.05284**
Stddev	.01554	.00040	.00352	.00002	.00446	.00359	.00257	.00818	.01751
%RSD	15.567	7482.8	60.125	.69899	13.014	1031.7	46.595	33.132	33.132
#1	.11081	-.00028	.00835	-.00268	-.03109	.00289	-.00370	.01891	.04046
#2	.08883	.00029	.00337	-.00265	-.03739	-.00219	-.00733	.03048	.06523
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00112**	**.00009**	**.00374**	**-.00028**	**.00440**	**-.01663**	**.00014**	**.00031**	**.00166**
Stddev	.00128	.00003	.00060	.00033	.00093	.02051	.00009	.00101	.00317
%RSD	113.86	31.765	16.049	114.81	21.250	123.34	62.876	322.84	191.11
#1	.00022	.00011	.00332	-.00005	.00506	-.03114	.00021	-.00040	.00390
#2	.00203	.00007	.00417	-.00051	.00374	-.00213	.00008	.00103	-.00058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2711.4**	**51461.**	**5850.6**
Stddev	11.3	175.	25.5
%RSD	.41576	.34077	.43603
#1	2719.3	51337.	5868.6
#2	2703.4	51585.	5832.6

Sample Name: LCS 280-376922/2-A Acquired: 6/13/2017 13:22:30 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376922 6010B (Al)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05208**	**1.8790**	**.97735**	**1.0237**	**2.0526**	**.04733**	**1.9584**	**50.006**	**.10063**
Stddev	.00054	.0450	.02196	.0205	.0014	.00007	.0454	.082	.00245
%RSD	1.0407	2.3959	2.2473	2.0032	.06744	.15304	2.3154	.16458	2.4302
#1	.05170	1.9108	.99288	1.0382	2.0536	.04728	1.9905	50.064	.10236
#2	.05246	1.8471	.96182	1.0092	2.0516	.04738	1.9264	49.948	.09890
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48056**	**.19941**	**.25293**	**.96295**	**50.476**	**.96193**	**49.341**	**.47074**	**.98136**
Stddev	.01068	.00464	.00115	.00394	.079	.00135	.149	.00121	.02543
%RSD	2.2223	2.3250	.45550	.40944	.15674	.14010	.30294	.25708	2.5913
#1	.48811	.20269	.25375	.96573	50.532	.96289	49.447	.47159	.99934
#2	.47301	.19613	.25212	.96016	50.420	.96098	49.235	.46988	.96338
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.608**	**.48234**	**10.121**	**.49667**	**2.0431**	**.49950**	**1.9195**	**9.5820**	**20.506**
Stddev	.054	.01141	.223	.00868	.0372	.01176	.0357	.0746	.160
%RSD	.10763	2.3649	2.2025	1.7483	1.8213	2.3547	1.8597	.77834	.77834
#1	50.570	.49040	10.279	.50281	2.0694	.50782	1.9448	9.6348	20.618
#2	50.647	.47427	9.9637	.49053	2.0168	.49119	1.8943	9.5293	20.393
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0223**	**.93464**	**.94263**	**.93257**	**1.8104**	**1.9105**	**.48891**	**.47005**	**.51518**
Stddev	.0473	.00156	.00582	.00179	.0354	.0402	.00291	.00046	.00252
%RSD	2.3375	.16716	.61691	.19220	1.9534	2.1020	.59480	.09710	.49000
#1	2.0557	.93575	.94675	.93384	1.8354	1.8821	.49097	.47038	.51696
#2	1.9889	.93354	.93852	.93130	1.7854	1.9389	.48685	.46973	.51339
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2593.9**	**48368.**	**5735.5**
Stddev	6.8	31.	.3
%RSD	.26142	.06461	.00552
#1	2589.1	48346.	5735.3
#2	2598.7	48390.	5735.8

Sample Name: 680-139654-J-1-A Acquired: 6/13/2017 13:24:54 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376922 6010B (Al)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00073**	**7.8405**	**.31261**	**4.7129**	**.14158**	**-.00001**	**.00023**	W **618.96**	**.00125**
Stddev	.00071	.0152	.02032	.2431	.00070	.00001	.00351	6.73	.00003
%RSD	97.258	.19344	6.4998	5.1580	.49595	74.178	1551.9	1.0871	2.0253
#1	.00123	7.8512	.32697	4.8848	.14208	-.00002	.00271	623.72	.00127
#2	.00023	7.8298	.29824	4.5410	.14109	-.00001	-.00225	614.20	.00124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00727**	**1.1312**	**.05540**	**27.748**	W **469.74**	**.10762**	**63.813**	**.44011**	**.00659**
Stddev	.00056	.0678	.00053	.113	1.98	.00246	.317	.00187	.00045
%RSD	7.7171	5.9941	.95430	.40844	.42144	2.2833	.49633	.42561	6.7988
#1	.00767	1.1791	.05577	27.829	471.14	.10935	64.037	.44144	.00691
#2	.00687	1.0832	.05503	27.668	468.34	.10588	63.589	.43879	.00627
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2799.1**	**.49104**	**.50114**	**-.00082**	F **1973.6**	**.16339**	**.00399**	**15.165**	**32.453**
Stddev	10.9	.02650	.03258	.00001	87.2	.00151	.00553	.044	.094
%RSD	.38909	5.3967	6.5021	.85512	4.4200	.92398	138.83	.28920	.28920
#1	2806.8	.50978	.52418	-.00082	2035.3	.16446	.00790	15.196	32.520
#2	2791.4	.47230	.47810	-.00081	1911.9	.16232	.00007	15.134	32.387
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03581**	**9.4820**	**.00348**	**.02079**	**-.00093**	**.00439**	**.01788**	**2.4517**	**.00218**
Stddev	.00309	.0224	.00266	.00071	.00002	.00751	.00010	.0097	.00054
%RSD	8.6370	.23666	76.424	3.4106	2.2846	171.10	.55822	.39466	24.851
#1	.03800	9.4662	.00536	.02028	-.00095	-.00092	.01795	2.4585	.00180
#2	.03362	9.4979	.00160	.02129	-.00092	.00970	.01781	2.4448	.00256
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2312.1**	**41832.**	**5596.5**
Stddev	8.7	38.	6.2
%RSD	.37465	.09099	.10992
#1	2306.0	41859.	5600.8
#2	2318.2	41805.	5592.1

Sample Name: 680-139654-J-1-ASD@5 Acquired: 6/13/2017 13:27:41 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376922 6010B (Al)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00076**	**1.4247**	**.05965**	**1.0448**	**.02893**	**-.00013**	**-.00014**	**129.05**	**.00070**
Stddev	.00007	.0486	.00319	.0260	.00012	.00005	.00031	.17	.00016
%RSD	8.7439	3.4145	5.3525	2.4860	.41773	40.410	213.03	.12932	23.221
#1	.00071	1.4591	.06191	1.0631	.02885	-.00009	.00007	129.17	.00058
#2	.00080	1.3903	.05740	1.0264	.02902	-.00016	-.00036	128.94	.00081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00073**	**.24440**	**.01032**	**5.6808**	**93.487**	**.02508**	**13.272**	**.08957**	**.00051**
Stddev	.00011	.00720	.00015	.0167	.012	.00059	.024	.00009	.00124
%RSD	14.545	2.9463	1.4632	.29319	.01246	2.3544	.18112	.10039	240.31
#1	.00065	.24949	.01043	5.6926	93.496	.02549	13.289	.08963	.00139
#2	.00080	.23931	.01022	5.6690	93.479	.02466	13.255	.08951	-.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **549.46**	**.10796**	**.10223**	**-.00394**	F **447.72**	**.03901**	**-.00738**	**2.9965**	**6.4126**
Stddev	1.15	.00195	.00981	.00007	12.99	.00445	.00200	.0090	.0193
%RSD	.21015	1.8097	9.5986	1.8175	2.9019	11.419	27.027	.30142	.30142
#1	548.64	.10934	.10917	-.00399	456.90	.04216	-.00879	3.0029	6.4263
#2	550.27	.10657	.09529	-.00389	438.53	.03586	-.00597	2.9902	6.3989
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00831**	**1.8799**	**.00375**	**.00412**	**.00588**	**-.03412**	**.00352**	**.49964**	**-.00036**
Stddev	.00084	.0027	.00261	.00036	.00071	.01805	.00013	.00066	.00011
%RSD	10.085	.14094	69.649	8.6611	12.045	52.896	3.6488	.13257	30.886
#1	.00890	1.8780	.00560	.00386	.00638	-.02136	.00343	.49917	-.00028
#2	.00771	1.8817	.00190	.00437	.00538	-.04689	.00361	.50011	-.00044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2521.4**	**46804.**	**5806.7**
Stddev	2.4	202.	17.5
%RSD	.09502	.43193	.30164
#1	2519.7	46947.	5819.0
#2	2523.1	46661.	5794.3

Sample Name: 680-139654-J-1-B MS Acquired: 6/13/2017 13:30:18 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376922 6010B (Al)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05517**	**9.5892**	**1.2912**	**5.5249**	**2.1338**	**.04494**	**1.7730**	W **653.48**	**.09781**
Stddev	.00088	.0275	.0607	.1962	.0036	.00021	.0672	2.37	.00377
%RSD	1.5966	.28673	4.7012	3.5515	.16714	.47109	3.7876	.36256	3.8568
#1	.05455	9.5697	1.3341	5.6636	2.1363	.04509	1.8205	655.16	.10048
#2	.05580	9.6086	1.2483	5.3861	2.1313	.04479	1.7255	651.81	.09514
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.43102**	**1.3022**	**.30156**	**27.577**	F **502.56**	**1.0554**	**106.13**	**.86274**	**.90022**
Stddev	.01731	.0546	.00035	.038	.23	.0012	.33	.00139	.03846
%RSD	4.0158	4.1909	.11461	.13923	.04638	.10953	.31523	.16154	4.2722
#1	.44326	1.3408	.30180	27.604	502.39	1.0562	106.37	.86373	.92741
#2	.41878	1.2636	.30131	27.550	502.72	1.0546	105.90	.86176	.87302
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					500.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2748.2**	**.91315**	**11.060**	**.41430**	F **1977.1**	**.61611**	**1.9589**	**23.301**	**49.865**
Stddev	2.0	.03561	.453	.01305	66.7	.01741	.0818	.033	.070
%RSD	.07305	3.8993	4.0957	3.1504	3.3730	2.8258	4.1751	.14080	.14080
#1	2749.6	.93833	11.381	.42353	2024.2	.62842	2.0168	23.325	49.915
#2	2746.8	.88798	10.740	.40507	1929.9	.60380	1.9011	23.278	49.816
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.7818**	W **10.021**	**.92634**	**.91424**	**1.3446**	**1.7297**	**.49438**	**2.7708**	**.50032**
Stddev	.0808	.104	.00039	.00303	.0512	.0156	.00208	.0064	.00221
%RSD	4.5370	1.0399	.04222	.33108	3.8099	.90111	.41976	.23060	.44076
#1	1.8389	9.9469	.92606	.91638	1.3808	1.7407	.49585	2.7753	.50188
#2	1.7246	10.094	.92661	.91210	1.3083	1.7187	.49291	2.7663	.49876
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		10.000							
Low Limit		-.02000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2295.9**	**41790.**	**5601.2**
Stddev	22.2	188.	40.0
%RSD	.96696	.45024	.71338
#1	2280.2	41923.	5629.5
#2	2311.6	41657.	5573.0

Sample Name: 680-139654-J-1-C MSD Acquired: 6/13/2017 13:32:57 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376922 6010B (Al)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05715**	**9.8623**	**1.3205**	**5.6883**	**2.2189**	**.04634**	**1.8381**	W **672.37**	**.10106**
Stddev	.00095	.0388	.0551	.1871	.0048	.00016	.0675	7.52	.00349
%RSD	1.6639	.39322	4.1731	3.2891	.21616	.33915	3.6724	1.1185	3.4500
#1	.05648	9.8897	1.3594	5.8206	2.2223	.04645	1.8859	677.69	.10353
#2	.05783	9.8348	1.2815	5.5560	2.2155	.04623	1.7904	667.05	.09860
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.44530**	**1.3432**	**.31324**	**28.485**	F **521.22**	**1.0940**	**108.99**	**.88405**	**.93241**
Stddev	.01597	.0527	.00211	.118	2.38	.0025	.66	.00518	.03788
%RSD	3.5869	3.9198	.67320	.41565	.45591	.23179	.60714	.58629	4.0629
#1	.45659	1.3804	.31473	28.569	522.90	1.0923	109.46	.88771	.95920
#2	.43400	1.3060	.31175	28.401	519.54	1.0958	108.52	.88038	.90563
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					500.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2842.8**	**.93973**	**11.464**	**.42749**	F **2034.9**	**.63490**	**2.0363**	**24.197**	**51.782**
Stddev	5.7	.03524	.443	.01819	57.9	.01473	.0795	.109	.234
%RSD	.20097	3.7499	3.8616	4.2551	2.8438	2.3196	3.9062	.45194	.45194
#1	2846.8	.96465	11.777	.44035	2075.8	.64532	2.0926	24.275	51.948
#2	2838.7	.91481	11.151	.41463	1994.0	.62449	1.9801	24.120	51.617
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8355**	W **10.359**	**.94492**	**.94215**	**1.3709**	**1.8202**	**.50979**	**2.8234**	**.51992**
Stddev	.0696	.224	.01036	.00657	.0376	.0135	.00311	.0197	.00092
%RSD	3.7903	2.1670	1.0959	.69729	2.7449	.73916	.61054	.69723	.17614
#1	1.8847	10.518	.95224	.94679	1.3975	1.8297	.51199	2.8373	.52057
#2	1.7863	10.200	.93760	.93750	1.3443	1.8107	.50758	2.8095	.51927
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		10.000							
Low Limit		-.02000							

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2313.7**	**42431.**	**5682.4**
Stddev	7.8	261.	58.9
%RSD	.33888	.61552	1.0364
#1	2308.2	42246.	5640.7
#2	2319.3	42615.	5724.0

Sample Name: MB 280-376732/1-A Acquired: 6/13/2017 13:35:36 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: 6/12 Custom ID2: Custom ID3:
Comment: 376732 SOIL 6010C Q5 (Al Fe Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00123**	**.00961**	**.00031**	**.03073**	**.00260**	**-.00008**	**-.00063**	F **.49107**	**.00030**
Stddev	.00063	.00029	.00459	.00061	.00030	.00007	.00091	.02199	.00006
%RSD	51.150	2.9727	1467.6	1.9812	11.697	85.558	144.32	4.4770	21.230
#1	.00079	.00940	.00356	.03116	.00238	-.00012	.00001	.50662	.00025
#2	.00168	.00981	-.00294	.03030	.00281	-.00003	-.00127	.47552	.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								.20000	
Low Limit								-.20000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00019**	**.00040**	**-.00239**	W **.05013**	W **2.3265**	W **.00696**	**.09045**	**.00067**	**.00040**
Stddev	.00012	.00029	.00033	.00260	.1301	.00215	.00147	.00004	.00024
%RSD	62.457	72.695	13.602	5.1786	5.5929	30.806	1.6252	6.3620	60.043
#1	.00011	.00020	-.00262	.05197	2.4185	.00848	.08941	.00069	.00057
#2	.00027	.00061	-.00216	.04830	2.2345	.00545	.09149	.00064	.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit				.05000	1.5000	.00500			
Low Limit				-.05000	-1.5000	-.00500			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **2.1981**	**.00042**	**.02056**	**.00059**	F **.67074**	W **.00825**	**.00173**	**.07905**	**.16916**
Stddev	.1154	.00015	.00064	.00113	.02847	.00115	.00285	.02040	.04366
%RSD	5.2482	34.801	3.1315	192.32	4.2444	13.992	165.12	25.807	25.807
#1	2.2796	.00032	.02011	.00139	.69087	.00744	-.00029	.09347	.20003
#2	2.1165	.00052	.02102	-.00021	.65061	.00907	.00374	.06462	.13829
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Warn	Chk Pass	Chk Pass	None
High Limit	1.0000				.10000	.00500			
Low Limit	-1.0000				-.10000	-.00500			

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01048**	**.00466**	W **.00757**	**.00000**	**.00260**	**-.04048**	**.00009**	**.00222**	**.00133**
Stddev	.00123	.00034	.00014	.00027	.00054	.00089	.00014	.00031	.00024
%RSD	11.751	7.3501	1.8340	13046.	20.723	2.1898	146.71	14.055	18.069
#1	.01135	.00490	.00767	.00019	.00222	-.03985	.00019	.00244	.00116
#2	.00961	.00442	.00747	-.00019	.00298	-.04111	-.00000	.00200	.00150
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500						
Low Limit			-.00500						

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2733.5**	**52241.**	**5978.7**
Stddev	2.2	15.	23.9
%RSD	.08004	.02943	.39970
#1	2735.1	52230.	5995.6
#2	2732.0	52251.	5961.8

Sample Name: LCS 280-376732/2-A Acquired: 6/13/2017 13:38:13 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 SOIL 6010C Q5 (Al Fe Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05120**	**1.8608**	**.94171**	**1.0642**	**2.0556**	**.04666**	**1.9319**	**50.177**	**.09929**
Stddev	.00093	.0509	.01879	.0207	.0010	.00015	.0463	.025	.00271
%RSD	1.8246	2.7377	1.9953	1.9416	.05084	.31286	2.3972	.05043	2.7296
#1	.05186	1.8968	.95500	1.0788	2.0549	.04656	1.9647	50.195	.10121
#2	.05054	1.8248	.92843	1.0495	2.0563	.04676	1.8992	50.159	.09738
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47727**	**.19840**	**.25380**	**1.0254**	**50.968**	**.95564**	**47.987**	**.46059**	**.97804**
Stddev	.01210	.00621	.00151	.0059	.121	.00097	.021	.00010	.02694
%RSD	2.5344	3.1309	.59514	.57394	.23820	.10109	.04431	.02069	2.7547
#1	.48582	.20279	.25487	1.0296	50.882	.95633	48.002	.46066	.99709
#2	.46872	.19401	.25274	1.0213	51.054	.95496	47.972	.46053	.95899
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.362**	**.47712**	**10.006**	**.49261**	**2.4994**	**.48832**	**1.8483**	**2.8939**	**6.1929**
Stddev	.031	.01188	.245	.01198	.0899	.02030	.0469	.0115	.0246
%RSD	.06182	2.4902	2.4446	2.4328	3.5974	4.1564	2.5402	.39761	.39761
#1	50.340	.48552	10.179	.50109	2.5630	.50267	1.8815	2.9020	6.2103
#2	50.384	.46872	9.8335	.48414	2.4359	.47396	1.8151	2.8858	6.1755
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0165**	**.92355**	**.92795**	**.91632**	**1.7645**	**1.8261**	**.48002**	**.45479**	**.51469**
Stddev	.0603	.00054	.00018	.00096	.0420	.0008	.00003	.00174	.00383
%RSD	2.9902	.05866	.01928	.10501	2.3778	.04393	.00690	.38188	.74503
#1	2.0591	.92317	.92808	.91564	1.7942	1.8255	.48004	.45602	.51198
#2	1.9738	.92393	.92783	.91700	1.7348	1.8267	.48000	.45356	.51740
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2613.1**	**49796.**	**5847.0**
Stddev	2.7	176.	16.9
%RSD	.10308	.35409	.28857
#1	2611.2	49920.	5835.1
#2	2615.0	49671.	5858.9

Sample Name: CCVH-4579429 Acquired: 6/13/2017 13:40:37 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00025**	**46.182**	**-.00668**	**.01357**	**.00217**	**.00005**	W **.94062**	**.24338**	**.00079**	**-.00055**	**.00099**	**.00812**
Stddev	.00016	.074	.00409	.00213	.00021	.00002	.02842	.01445	.00006	.00020	.00041	.00075
%RSD	61.790	.16081	61.210	15.707	9.7722	33.004	3.0219	5.9375	7.8155	35.936	41.633	9.2478
#1	-.00014	46.234	-.00957	.01507	.00232	.00007	.96072	.25359	.00083	-.00041	.00128	.00759
#2	-.00036	46.129	-.00379	.01206	.00202	.00004	.92052	.23316	.00074	-.00069	.00070	.00866
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							-5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.019**	**.88899**	**.00710**	**.07851**	**-.00167**	**-.00083**	**241.52**	**.00144**	**.00998**	**.00111**	F **6.0571**	**.00593**
Stddev	.105	.07840	.00240	.00768	.00006	.00047	.25	.00067	.00344	.00136	.2395	.00162
%RSD	.21357	8.8187	33.827	9.7801	3.8160	57.137	.10355	46.846	34.422	122.20	3.9543	27.294
#1	49.093	.94442	.00540	.08394	-.00172	-.00116	241.34	.00096	.01241	.00207	6.2265	.00479
#2	48.945	.83355	.00880	.07308	-.00163	-.00049	241.70	.00191	.00755	.00015	5.8878	.00708
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Fail	None
Value											5.0000	
Range											10.490%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00030**	**-.00082**	**-.00175**	**.00209**	**.00378**	W **4.5526**	**.01996**	**.00157**	W **9.1914**	**.01178**	**.00225**	**.07523**
Stddev	.00472	.02577	.05514	.00103	.00046	.0107	.00034	.00282	.0820	.00057	.00003	.00170
%RSD	1562.0	3155.5	3155.5	49.399	12.158	.23608	1.6885	178.91	.89214	4.7949	1.5083	2.2640
#1	-.00304	.01740	.03725	.00136	.00411	4.5602	.02020	-.00042	9.2493	.01138	.00223	.07403
#2	.00364	-.01904	-.04074	.00281	.00346	4.5450	.01972	.00357	9.1334	.01218	.00228	.07644
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2662.8**	**49719.**	**5898.3**
Stddev	11.3	157.	5.2
%RSD	.42270	.31667	.08771
#1	2654.8	49608.	5894.7
#2	2670.8	49830.	5902.0

Sample Name: CCV-4580817 Acquired: 6/13/2017 13:43:09 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48681**	**.48990**	**.92046**	**.50097**	**.51104**	**.46724**	**-.00222**	**5.2677**	**.49135**	**.49017**	**.49892**	**.49847**
Stddev	.00175	.01673	.02282	.01257	.00026	.00017	.00491	.0111	.01249	.01309	.01313	.00054
%RSD	.35968	3.4153	2.4796	2.5098	.04994	.03608	220.84	.21063	2.5417	2.6701	2.6311	.10750
#1	.48557	.50173	.93660	.50986	.51086	.46712	-.00569	5.2598	.50018	.49943	.50820	.49809
#2	.48805	.47807	.90432	.49208	.51122	.46736	.00125	5.2755	.48252	.48092	.48964	.49885
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.3879**	**50.191**	**.96168**	**19.476**	**.46759**	**.50313**	F **5.8728**	**.49185**	**.97774**	**1.0051**	**.68825**	**.96339**
Stddev	.0020	.031	.00328	.039	.00085	.01379	.0696	.01375	.03219	.0225	.04726	.03095
%RSD	.08407	.06119	.34138	.20087	.18160	2.7411	1.1855	2.7957	3.2924	2.2387	6.8669	3.2127
#1	2.3865	50.212	.95935	19.503	.46819	.51288	5.9221	.50157	1.0005	1.0210	.72167	.98528
#2	2.3893	50.169	.96400	19.448	.46699	.49338	5.8236	.48212	.95498	.98922	.65484	.94151
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							5.0000					
Range							10.490%					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.93387**	**4.7999**	**10.272**	**1.0165**	**.46342**	**.01297**	**.45200**	**.91027**	**-.03209**	**.48137**	**.45949**	**.50319**
Stddev	.03092	.0222	.048	.0248	.00033	.00329	.00149	.02991	.05744	.00086	.00352	.00121
%RSD	3.3106	.46246	.46246	2.4364	.07171	25.375	.32908	3.2855	178.98	.17879	.76527	.24013
#1	.95573	4.7842	10.238	1.0340	.46319	.01064	.45305	.93142	.00852	.48198	.46197	.50234
#2	.91201	4.8156	10.305	.99895	.46366	.01529	.45094	.88913	-.07271	.48076	.45700	.50405
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2696.5**	**50971.**	**5902.7**
Stddev	5.0	24.	11.0
%RSD	.18432	.04630	.18579
#1	2693.0	50988.	5910.4
#2	2700.1	50955.	5894.9

Sample Name: CCB Acquired: 6/13/2017 13:45:37 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00151**	**.00271**	**.00112**	**.00758**	**.00130**	**.00006**	**.00210**	W **.10542**	**.00035**	**.00025**	**-.00009**	**-.00396**
Stddev	.00023	.00045	.00463	.00129	.00001	.00002	.00293	.00383	.00026	.00017	.00007	.00001
%RSD	15.298	16.545	413.77	17.034	.90433	38.359	139.42	3.6328	74.109	67.919	72.503	.27315
#1	.00135	.00302	.00439	.00849	.00129	.00007	.00418	.10813	.00017	.00013	-.00004	-.00395
#2	.00168	.00239	-.00215	.00667	.00131	.00004	.00003	.10271	.00054	.00037	-.00014	-.00396
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								.10000				
Low Limit								-.13500				

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01023**	**.46675**	**.00318**	**.02219**	**.00022**	**.00026**	F **.69176**	**-.00053**	**.00376**	**-.00108**	F **.49642**	**.00392**
Stddev	.00186	.03496	.00345	.00046	.00003	.00069	.01832	.00013	.00322	.00024	.02245	.00203
%RSD	18.193	7.4902	108.56	2.0697	12.530	261.01	2.6481	25.309	85.657	22.250	4.5217	51.626
#1	.01155	.49147	.00562	.02252	.00024	.00075	.70471	-.00043	.00148	-.00125	.51229	.00536
#2	.00892	.44203	.00074	.02187	.00020	-.00022	.67881	-.00062	.00603	-.00091	.48055	.00249
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.50000				.10000	
Low Limit							-.50000				-.20000	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00571**	**.02280**	**.04879**	**.00178**	W **.00203**	**.00482**	**-.00018**	**.00467**	**-.02816**	**-.00000**	**-.00001**	**.00116**
Stddev	.00065	.00393	.00840	.00390	.00009	.00045	.00027	.00172	.00403	.00010	.00015	.00145
%RSD	11.331	17.219	17.219	219.19	4.5307	9.3321	147.41	36.906	14.298	11191.	2053.1	124.53
#1	-.00525	.02557	.05473	-.00098	.00210	.00514	-.00037	.00345	-.02532	-.00007	-.00011	.00014
#2	-.00617	.02002	.04285	.00454	.00197	.00450	.00001	.00589	-.03101	.00007	.00010	.00218
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					.00120							
Low Limit					-.00120							

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2718.5**	**51972.**	**5905.8**
Stddev	8.8	135.	22.0
%RSD	.32523	.26015	.37277
#1	2712.2	51877.	5921.4
#2	2724.7	52068.	5890.2

Sample Name: CCVL-4590576 Acquired: 6/13/2017 13:48:14 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01106**	**.10245**	**.01228**	**.10420**	**.01105**	**.00096**	**.10502**	F **.27042**	**.00510**	**.00996**	**.01032**	**.01239**
Stddev	.00023	.00294	.00321	.00327	.00007	.00008	.00550	.00552	.00003	.00025	.00005	.00040
%RSD	2.0686	2.8707	26.137	3.1345	.65352	8.0826	5.2411	2.0416	.64728	2.5209	.45735	3.2370
#1	.01090	.10453	.01455	.10651	.01100	.00101	.10891	.27432	.00512	.01013	.01029	.01210
#2	.01122	.10037	.01001	.10189	.01110	.00090	.10113	.26652	.00508	.00978	.01036	.01267
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								.20000				
Range								30.000%				

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09891**	**3.4719**	**.02368**	**.21241**	**.00985**	**.01907**	F **1.4942**	**.04004**	**2.8139**	**.00972**	F **.48282**	**.02594**
Stddev	.00072	.0430	.00081	.00490	.00008	.00063	.0039	.00188	.0750	.00139	.01317	.00315
%RSD	.72468	1.2376	3.4186	2.3056	.79833	3.3278	.26195	4.6846	2.6655	14.327	2.7267	12.150
#1	.09942	3.4415	.02425	.21587	.00991	.01952	1.4969	.04137	2.8669	.01071	.49213	.02816
#2	.09840	3.5023	.02311	.20894	.00980	.01862	1.4914	.03871	2.7608	.00874	.47351	.02371
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value							1.0000				.10000	
Range							30.000%				30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01423**	**.50046**	**1.0710**	**.10196**	**.01054**	**.01790**	**.00869**	**.01601**	F **.02245**	**.00944**	**.01883**	**.01549**
Stddev	.00812	.02053	.0439	.00580	.00011	.00065	.00016	.00363	.02430	.00047	.00019	.00029
%RSD	57.028	4.1022	4.1022	5.6855	1.0445	3.6498	1.8881	22.682	108.26	4.9516	1.0071	1.8839
#1	.01997	.48594	1.0399	.10606	.01046	.01744	.00881	.01857	.00526	.00911	.01870	.01569
#2	.00849	.51498	1.1021	.09786	.01061	.01836	.00858	.01344	.03963	.00977	.01896	.01528
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2739.2**	**52095.**	**5898.7**
Stddev	3.2	104.	4.7
%RSD	.11542	.20028	.08023
#1	2741.5	52169.	5895.3
#2	2737.0	52021.	5902.0

Sample Name: 280-98030-D-1-A Acquired: 6/13/2017 13:50:51 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 SOIL 6010C Q5 (Al Fe Na)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00025**	W **3.0413**	**.00423**	**.00761**	**.06032**	**.00005**	**-.00708**	**.45929**	**.00060**
Stddev	.00010	.0059	.00131	.00079	.00084	.00001	.00143	.00257	.00010
%RSD	40.236	.19241	30.861	10.393	1.3937	20.744	20.166	.55942	16.124
#1	.00032	3.0372	.00515	.00817	.05973	.00006	-.00607	.45748	.00066
#2	.00018	3.0454	.00331	.00705	.06091	.00005	-.00809	.46111	.00053
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00							
Low Limit		3.2000							

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00127**	**.02016**	**.02889**	**12.267**	**.71731**	**.00512**	**.25777**	**.08738**	**.00177**
Stddev	.00026	.00063	.00028	.060	.07780	.00058	.00363	.00013	.00008
%RSD	20.429	3.1035	.95435	.48585	10.846	11.369	1.4068	.15088	4.4975
#1	.00109	.02061	.02870	12.225	.77232	.00554	.26034	.08728	.00182
#2	.00146	.01972	.02909	12.309	.66230	.00471	.25521	.08747	.00171
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.59631**	**.00536**	**.28804**	**.27899**	**.71617**	**.00574**	**-.00597**	**1.7693**	**3.7862**
Stddev	.01516	.00096	.00782	.01085	.03372	.00286	.00513	.0354	.0757
%RSD	2.5417	17.978	2.7136	3.8904	4.7091	49.715	85.969	1.9999	1.9999
#1	.60703	.00604	.29357	.28667	.74002	.00776	-.00234	1.7943	3.8398
#2	.58559	.00468	.28252	.27132	.69232	.00372	-.00960	1.7442	3.7327
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03725**	**.00507**	**.02228**	**1.9220**	**.00093**	**-.06102**	**.04751**	**.04701**	**.05438**
Stddev	.00059	.00002	.00081	.0124	.00620	.00082	.00081	.00038	.00093
%RSD	1.5940	.32536	3.6205	.64242	665.34	1.3408	1.7095	.81469	1.7136
#1	.03767	.00506	.02171	1.9307	-.00345	-.06044	.04808	.04728	.05372
#2	.03683	.00508	.02285	1.9133	.00531	-.06160	.04693	.04674	.05504
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2774.5**	**52696.**	**5992.1**
Stddev	1.0	32.	4.5
%RSD	.03531	.06093	.07507
#1	2775.2	52673.	5989.0
#2	2773.8	52718.	5995.3

Sample Name: 280-98030-D-1-A SD@5 Acquired: 6/13/2017 13:53:25 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 SOIL 6010C Q5 (Al Fe Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00032**	**.63677**	**.00049**	**.00492**	**.01286**	**-.00005**	**.00297**	**.10951**	**.00032**
Stddev	.00024	.02931	.00118	.00046	.00024	.00002	.00134	.00956	.00007
%RSD	75.577	4.6025	237.90	9.2429	1.8866	36.424	45.273	8.7332	21.244
#1	.00015	.65749	.00132	.00525	.01304	-.00004	.00392	.11627	.00037
#2	.00049	.61604	-.00034	.00460	.01269	-.00006	.00202	.10275	.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00013**	**.00430**	**.00283**	**2.4773**	**.38624**	**.00459**	**.05714**	**.01785**	**.00057**
Stddev	.00049	.00005	.00021	.0005	.02474	.00154	.00056	.00000	.00035
%RSD	382.22	1.1817	7.5074	.01855	6.4059	33.526	.98445	.00739	60.605
#1	.00047	.00434	.00298	2.4770	.36875	.00568	.05674	.01785	.00081
#2	-.00022	.00426	.00268	2.4777	.40374	.00350	.05754	.01785	.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.30767**	**.00096**	**.06324**	**.05474**	**.32086**	**.00221**	**-.00332**	**.38024**	**.81371**
Stddev	.00011	.00010	.00427	.00348	.00515	.00116	.00326	.01021	.02184
%RSD	.03625	10.593	6.7500	6.3635	1.6054	52.309	98.306	2.6845	2.6845
#1	.30775	.00088	.06626	.05720	.32450	.00303	-.00562	.38746	.82916
#2	.30759	.00103	.06023	.05227	.31722	.00139	-.00101	.37302	.79827
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00644**	**.00136**	**.00770**	**.38974**	**.00384**	**-.02401**	**.00998**	**.01050**	**.00987**
Stddev	.00087	.00011	.00232	.00245	.00191	.02480	.00021	.00055	.00018
%RSD	13.479	8.1818	30.175	.62900	49.661	103.32	2.0582	5.1977	1.8736
#1	.00705	.00144	.00605	.39147	.00519	-.00647	.01013	.01089	.00973
#2	.00582	.00128	.00934	.38801	.00249	-.04155	.00984	.01012	.01000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2770.5**	**52527.**	**5994.5**
Stddev	16.1	46.	14.4
%RSD	.57993	.08667	.23994
#1	2759.2	52495.	5984.3
#2	2781.9	52559.	6004.6

Sample Name: 280-98030-D-1-B MS Acquired: 6/13/2017 13:56:01 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 SOIL 6010C Q5 (Al Fe Na)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05069**	**7.9648**	**.83967**	**.96235**	**2.0789**	**.04616**	**1.8841**	**49.183**	**.09780**
Stddev	.00041	.0784	.01789	.01666	.0152	.00045	.0343	.295	.00193
%RSD	.80912	.98405	2.1308	1.7309	.73178	.97209	1.8181	.59927	1.9695
#1	.05098	7.9094	.85232	.97413	2.0681	.04584	1.9084	48.975	.09916
#2	.05040	8.0202	.82702	.95057	2.0897	.04648	1.8599	49.391	.09644
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47130**	**.21404**	**.27173**	**11.230**	**49.958**	**.94134**	**47.146**	**.51018**	**.90800**
Stddev	.00902	.00411	.00210	.078	.264	.00324	.718	.00844	.01785
%RSD	1.9138	1.9213	.77207	.69835	.52785	.34451	1.5224	1.6541	1.9657
#1	.47768	.21695	.27322	11.174	49.771	.93905	47.654	.51614	.92062
#2	.46492	.21114	.27025	11.285	50.144	.94364	46.638	.50421	.89538
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.392**	**.47564**	**10.008**	**.71360**	**2.5890**	**.42941**	**1.7028**	**6.5973**	**14.118**
Stddev	.339	.00806	.189	.00952	.0561	.00687	.0331	.0035	.007
%RSD	.68572	1.6937	1.8867	1.3342	2.1671	1.6004	1.9428	.05314	.05314
#1	49.152	.48134	10.141	.72034	2.6286	.43426	1.7262	6.5948	14.113
#2	49.631	.46994	9.8741	.70687	2.5493	.42455	1.6794	6.5998	14.124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9376**	**.91022**	**.92443**	**2.1698**	**1.7336**	**1.7628**	**.50969**	**.48574**	**.61459**
Stddev	.0310	.00808	.00699	.0759	.0275	.0730	.00842	.00482	.00208
%RSD	1.5991	.88733	.75645	3.4987	1.5862	4.1433	1.6522	.99295	.33852
#1	1.9595	.90451	.92938	2.2235	1.7530	1.8144	.51564	.48915	.61312
#2	1.9157	.91593	.91949	2.1161	1.7141	1.7111	.50374	.48233	.61606
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2715.1**	**51230.**	**6223.4**
Stddev	10.4	276.	13.5
%RSD	.38285	.53905	.21626
#1	2707.8	51425.	6232.9
#2	2722.5	51034.	6213.8

Sample Name: 280-98030-D-1-C MSD Acquired: 6/13/2017 13:58:23 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 SOIL 6010C Q5 (Al Fe Na)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04985**	**8.4132**	**.82379**	**.95347**	**2.0609**	**.04538**	**1.8616**	**48.862**	**.09673**
Stddev	.00056	.0285	.01978	.02008	.0005	.00016	.0470	.077	.00224
%RSD	1.1189	.33846	2.4012	2.1065	.02321	.34706	2.5269	.15704	2.3175
#1	.05025	8.3931	.83778	.96767	2.0606	.04527	1.8948	48.808	.09831
#2	.04946	8.4333	.80981	.93927	2.0612	.04549	1.8283	48.916	.09514
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.46620**	**.21409**	**.27396**	**13.131**	**49.480**	**.92622**	**47.471**	**.51439**	**.89415**
Stddev	.01065	.00489	.00203	.003	.031	.00154	.108	.00126	.02245
%RSD	2.2837	2.2824	.74153	.02162	.06276	.16619	.22790	.24427	2.5105
#1	.47373	.21755	.27540	13.129	49.458	.92514	47.548	.51528	.91003
#2	.45867	.21064	.27253	13.133	49.502	.92731	47.395	.51350	.87828
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.597**	**.47243**	**9.9344**	**.72061**	**2.5870**	**.41586**	**1.6740**	**6.9462**	**14.865**
Stddev	.103	.00956	.2309	.01798	.0550	.00825	.0392	.0251	.054
%RSD	.21280	2.0243	2.3246	2.4950	2.1256	1.9846	2.3399	.36074	.36074
#1	48.670	.47919	10.098	.73332	2.6258	.42170	1.7017	6.9639	14.903
#2	48.524	.46567	9.7712	.70789	2.5481	.41003	1.6463	6.9284	14.827
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9090**	**.90160**	**.92381**	**2.3110**	**1.7142**	**1.7661**	**.51693**	**.50568**	**.62139**
Stddev	.0520	.00078	.00298	.0073	.0383	.0572	.00096	.00650	.00138
%RSD	2.7218	.08632	.32211	.31507	2.2333	3.2376	.18571	1.2855	.22275
#1	1.9458	.90105	.92591	2.3059	1.7413	1.7257	.51761	.51027	.62041
#2	1.8723	.90215	.92170	2.3162	1.6871	1.8066	.51625	.50108	.62236
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2708.5**	**50781.**	**6080.5**
Stddev	2.8	120.	27.0
%RSD	.10492	.23632	.44415
#1	2710.5	50696.	6099.6
#2	2706.5	50865.	6061.4

Sample Name: 280-98030-D-1-A PDS Acquired: 6/13/2017 14:00:46 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 SOIL 6010C Q5 (Al Fe Na)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04982**	**4.0025**	**.19608**	**.11126**	**.16243**	**.04685**	**-.00223**	**20.576**	**.04993**
Stddev	.00008	.0145	.01061	.00346	.00085	.00009	.00007	.045	.00186
%RSD	.16229	.36285	5.4118	3.1128	.52477	.19123	3.0657	.21935	3.7292
#1	.04988	3.9922	.20358	.11371	.16303	.04692	-.00228	20.608	.05125
#2	.04977	4.0127	.18857	.10881	.16183	.04679	-.00218	20.544	.04861
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04981**	**.06953**	**.07910**	**12.896**	**20.574**	**.10208**	**19.833**	**.13216**	**.05356**
Stddev	.00080	.00221	.00033	.030	.010	.00053	.007	.00005	.00136
%RSD	1.6076	3.1763	.41283	.23068	.04779	.51575	.03359	.03484	2.5369
#1	.05037	.07110	.07887	12.917	20.567	.10171	19.828	.13213	.05452
#2	.04924	.06797	.07933	12.875	20.581	.10245	19.837	.13219	.05260
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**20.457**	**.05452**	**2.2682**	**.36433**	**.50607**	**.10870**	**.18761**	**6.8490**	**14.657**
Stddev	.177	.00113	.0661	.00880	.00239	.00042	.00221	.0325	.070
%RSD	.86713	2.0809	2.9137	2.4164	.47129	.38821	1.1793	.47440	.47440
#1	20.332	.05533	2.3149	.37056	.50776	.10900	.18917	6.8720	14.706
#2	20.583	.05372	2.2214	.35811	.50439	.10840	.18604	6.8260	14.608
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.14381**	**.05123**	**.20712**	**1.9956**	**.18640**	**.44681**	**.09720**	**.23328**	**.11583**
Stddev	.00496	.00011	.00139	.0045	.00100	.00361	.00021	.00108	.00086
%RSD	3.4476	.21111	.66901	.22303	.53663	.80843	.21375	.46163	.73996
#1	.14731	.05131	.20810	1.9988	.18710	.44426	.09705	.23404	.11644
#2	.14030	.05115	.20614	1.9925	.18569	.44937	.09735	.23252	.11522
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2744.8**	**51544.**	**6057.6**
Stddev	.2	162.	45.0
%RSD	.00899	.31395	.74319
#1	2745.0	51659.	6089.4
#2	2744.6	51430.	6025.7

Sample Name: 280-98030-D-2-A Acquired: 6/13/2017 14:03:19 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 SOIL 6010C Q5 (Al Fe Na)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00106**	**26.346**	**.00127**	**.00780**	**.04261**	**.00010**	**-.00664**	**.35206**	**.00058**
Stddev	.00063	.192	.00342	.00015	.00102	.00006	.00111	.00312	.00010
%RSD	59.523	.72716	268.19	1.9712	2.3834	65.941	16.713	.88681	17.689
#1	.00061	26.481	-.00114	.00769	.04190	.00005	-.00586	.35427	.00066
#2	.00150	26.210	.00369	.00790	.04333	.00014	-.00743	.34986	.00051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00059**	**.08646**	**.01443**	**68.377**	**.71382**	**.01711**	**.58086**	**.07926**	**.00214**
Stddev	.00004	.00317	.00031	.160	.04579	.00016	.00152	.00065	.00009
%RSD	7.3585	3.6652	2.1695	.23394	6.4143	.94702	.26165	.81388	4.0907
#1	.00062	.08871	.01465	68.491	.74620	.01700	.58193	.07880	.00208
#2	.00056	.08422	.01421	68.264	.68144	.01723	.57978	.07971	.00220
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.39838**	**.00564**	**.74524**	**.03148**	**.52586**	**.00956**	**.00292**	**6.8242**	**14.604**
Stddev	.01243	.00030	.02757	.00118	.00868	.00036	.00054	.1779	.381
%RSD	3.1207	5.3836	3.7001	3.7477	1.6504	3.7806	18.494	2.6068	2.6068
#1	.40717	.00586	.76474	.03232	.53200	.00931	.00330	6.9500	14.873
#2	.38959	.00543	.72574	.03065	.51972	.00982	.00254	6.6984	14.335
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01077**	**.00688**	**.02545**	**2.1272**	**.00057**	**-.00539**	**.07192**	**.03012**	**.19803**
Stddev	.00057	.00043	.00048	.0144	.00032	.01325	.00038	.00005	.00684
%RSD	5.2729	6.2568	1.8712	.67463	56.395	245.65	.53111	.17136	3.4526
#1	.01037	.00658	.02579	2.1171	.00080	.00398	.07165	.03016	.19320
#2	.01117	.00718	.02511	2.1374	.00034	-.01476	.07219	.03008	.20287
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2751.1**	**51725.**	**6083.0**
Stddev	3.6	341.	33.8
%RSD	.13042	.65845	.55579
#1	2753.6	51966.	6059.1
#2	2748.6	51485.	6106.9

Sample Name: 280-98030-A-3-A Acquired: 6/13/2017 14:05:53 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 SOIL 6010C Q5 (Al Fe Na)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00071**	**10.154**	**.01105**	**.01313**	**.15775**	**.00033**	**-.00545**	**2.5807**	**.00066**
Stddev	.00004	.023	.00185	.00044	.00016	.00008	.00206	.0060	.00034
%RSD	4.9342	.22202	16.760	3.3528	.10129	24.912	37.725	.23340	51.183
#1	.00074	10.138	.01236	.01344	.15763	.00038	-.00690	2.5850	.00042
#2	.00069	10.170	.00974	.01282	.15786	.00027	-.00400	2.5765	.00090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00688**	**.05456**	**.08043**	**39.219**	**1.7209**	**.01312**	**2.0809**	**.22840**	**.01804**
Stddev	.00020	.00215	.00070	.072	.0503	.00010	.0135	.00026	.00105
%RSD	2.8897	3.9351	.86716	.18454	2.9227	.76242	.64919	.11368	5.8094
#1	.00702	.05608	.08092	39.168	1.6853	.01319	2.0905	.22859	.01878
#2	.00674	.05305	.07994	39.270	1.7565	.01305	2.0714	.22822	.01730
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.53602**	**.02261**	**.70057**	**.29800**	**1.9916**	**.00689**	**-.00674**	**3.4399**	**7.3613**
Stddev	.01572	.00035	.02501	.01008	.0665	.00398	.00107	.1392	.2978
%RSD	2.9327	1.5473	3.5701	3.3836	3.3409	57.749	15.929	4.0460	4.0460
#1	.54713	.02286	.71826	.30513	2.0386	.00407	-.00750	3.5383	7.5719
#2	.52490	.02236	.68289	.29087	1.9445	.00970	-.00598	3.3414	7.1507
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01564**	**.03883**	**.01568**	**1.4232**	**.00113**	**-.03524**	**.06274**	**.06904**	**.02394**
Stddev	.00110	.00010	.00167	.0137	.00202	.00811	.00047	.00152	.00200
%RSD	7.0141	.24532	10.639	.96535	178.56	23.001	.75316	2.2069	8.3698
#1	.01641	.03877	.01686	1.4135	.00256	-.04098	.06241	.07012	.02536
#2	.01486	.03890	.01450	1.4329	-.00030	-.02951	.06308	.06797	.02252
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2816.4**	**53759.**	**6210.6**
Stddev	8.8	116.	41.2
%RSD	.31207	.21599	.66267
#1	2822.6	53841.	6239.7
#2	2810.2	53677.	6181.5

Sample Name: 280-98030-C-4-A Acquired: 6/13/2017 14:08:26 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 SOIL 6010C Q5 (Al Fe Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00082**	**.92674**	**.00120**	**.00290**	**.06659**	**-.00006**	**-.00513**	**.73250**	**.00084**
Stddev	.00092	.03469	.00341	.00054	.00056	.00003	.00094	.00732	.00022
%RSD	112.18	3.7431	285.29	18.714	.83367	54.186	18.368	.99999	26.763
#1	.00017	.95127	.00361	.00328	.06698	-.00004	-.00579	.73768	.00100
#2	.00147	.90221	-.00122	.00252	.06619	-.00008	-.00446	.72732	.00068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00111**	**.00788**	**.01493**	**3.6822**	**.35340**	**.00460**	**.18465**	**.06846**	**.00128**
Stddev	.00032	.00129	.00038	.0143	.00871	.00059	.00351	.00160	.00035
%RSD	29.258	16.367	2.5427	.38799	2.4646	12.836	1.8996	2.3399	27.373
#1	.00134	.00697	.01466	3.6721	.35955	.00502	.18217	.06959	.00153
#2	.00088	.00879	.01520	3.6923	.34724	.00418	.18713	.06733	.00104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.34664**	**.00222**	**.11743**	**.02442**	**.48463**	**.00041**	**-.00874**	**2.8654**	**6.1320**
Stddev	.00399	.00017	.00204	.00161	.02172	.00096	.00290	.1239	.2651
%RSD	1.1514	7.8740	1.7347	6.6084	4.4819	230.72	33.168	4.3226	4.3226
#1	.34382	.00234	.11887	.02556	.49999	-.00026	-.01079	2.9530	6.3194
#2	.34947	.00209	.11599	.02328	.46927	.00109	-.00669	2.7778	5.9446
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01067**	**.00508**	**.01389**	**2.3358**	**.00266**	**-.04418**	**.01036**	**.01976**	**.02534**
Stddev	.00068	.00004	.00129	.0035	.00145	.01818	.00019	.00035	.00303
%RSD	6.3932	.80888	9.2564	.14968	54.375	41.144	1.8664	1.7772	11.974
#1	.01115	.00511	.01298	2.3383	.00164	-.03133	.01049	.01951	.02319
#2	.01019	.00505	.01480	2.3334	.00368	-.05703	.01022	.02001	.02748
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2792.1**	**53160.**	**6081.9**
Stddev	16.7	52.	3.7
%RSD	.59777	.09794	.06125
#1	2803.9	53196.	6084.6
#2	2780.3	53123.	6079.3

Sample Name: 280-98030-A-5-A Acquired: 6/13/2017 14:11:01 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 SOIL 6010C Q5 (Al Fe Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00077**	**2.0285**	**.00335**	**.00330**	**.02413**	**-.00008**	**-.00397**	**.98498**	**.00075**
Stddev	.00077	.0729	.00117	.00062	.00019	.00007	.00420	.00061	.00016
%RSD	100.75	3.5924	34.996	18.741	.78435	81.324	105.83	.06237	21.047
#1	.00131	2.0800	.00252	.00374	.02426	-.00004	-.00693	.98541	.00064
#2	.00022	1.9770	.00418	.00286	.02399	-.00013	-.00100	.98454	.00086
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00012**	**.00650**	**.00455**	**3.3555**	**.51416**	**.00714**	**.24014**	**.05321**	**.00090**
Stddev	.00016	.00040	.00009	.0209	.04633	.00109	.00019	.00078	.00020
%RSD	136.63	6.1861	1.9368	.62401	9.0106	15.308	.07963	1.4644	22.103
#1	.00023	.00678	.00461	3.3407	.48140	.00791	.24000	.05266	.00076
#2	.00000	.00621	.00449	3.3704	.54692	.00636	.24028	.05376	.00104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.33014**	**.00202**	**.20902**	**.04541**	**.33116**	**.00451**	**-.00600**	**3.8631**	**8.2669**
Stddev	.01574	.00039	.00743	.00157	.00078	.00495	.00289	.0746	.1597
%RSD	4.7679	19.457	3.5529	3.4539	.23482	109.63	48.077	1.9315	1.9315
#1	.34127	.00230	.21427	.04652	.33171	.00801	-.00396	3.9158	8.3798
#2	.31901	.00174	.20377	.04430	.33061	.00101	-.00804	3.8103	8.1540
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01287**	**.00734**	**.01165**	**1.2393**	**.00307**	**-.04275**	**.01670**	**.02312**	**.04261**
Stddev	.00182	.00086	.00001	.0094	.00395	.00049	.00089	.00083	.00319
%RSD	14.144	11.692	.06412	.75784	128.83	1.1393	5.3370	3.6107	7.4774
#1	.01416	.00795	.01165	1.2326	.00027	-.04240	.01607	.02371	.04487
#2	.01158	.00674	.01166	1.2459	.00587	-.04309	.01733	.02253	.04036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2774.5**	**52581.**	**6004.8**
Stddev	.3	3.	23.6
%RSD	.01023	.00603	.39282
#1	2774.7	52583.	6021.5
#2	2774.3	52578.	5988.1

Sample Name: 280-98030-A-6-A Acquired: 6/13/2017 14:13:36 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376732 SOIL 6010C Q5 (Al Fe Na)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**24.778**	**-.00026**	**.00683**	**.04246**	**.00010**	**-.00377**	**1.6678**	**.00042**
Stddev	.00031	.017	.00276	.00101	.00120	.00006	.00181	.0087	.00036
%RSD	901.42	.06769	1071.3	14.821	2.8247	61.938	47.965	.52016	85.246
#1	.00018	24.767	.00170	.00754	.04162	.00005	-.00506	1.6739	.00017
#2	-.00025	24.790	-.00221	.00611	.04331	.00014	-.00249	1.6616	.00068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00027**	**.04493**	**.00896**	**4.1053**	**.85303**	**.01269**	**.61247**	**.02832**	**.00097**
Stddev	.00008	.00127	.00019	.0018	.04686	.00194	.00705	.00027	.00011
%RSD	28.022	2.8172	2.1599	.04447	5.4932	15.305	1.1503	.93969	11.311
#1	.00022	.04583	.00909	4.1066	.81990	.01132	.60748	.02851	.00089
#2	.00032	.04404	.00882	4.1040	.88617	.01407	.61745	.02814	.00105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.28649**	**.00626**	**.99051**	**.02204**	**.37525**	**.00032**	**.00450**	**16.279**	**34.838**
Stddev	.01679	.00045	.02497	.00048	.00814	.00044	.00227	.036	.077
%RSD	5.8613	7.2595	2.5206	2.1699	2.1705	139.30	50.519	.22216	.22216
#1	.27462	.00658	1.0082	.02170	.38101	.00063	.00611	16.305	34.893
#2	.29837	.00594	.97286	.02238	.36949	.00000	.00289	16.254	34.783
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00939**	**.01664**	**.01716**	**1.4177**	**.00268**	**-.07201**	**.01664**	**.01623**	**.07768**
Stddev	.00222	.00049	.00050	.0010	.00410	.01876	.00040	.00008	.00277
%RSD	23.682	2.9288	2.8957	.07409	152.88	26.054	2.3848	.47678	3.5690
#1	.01096	.01630	.01681	1.4185	-.00022	-.08528	.01636	.01628	.07572
#2	.00782	.01699	.01752	1.4170	.00558	-.05874	.01692	.01618	.07964
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2812.0**	**52212.**	**6047.1**
Stddev	3.6	95.	13.3
%RSD	.12884	.18103	.21945
#1	2809.4	52278.	6056.5
#2	2814.6	52145.	6037.8

Sample Name: CCVH-4579429 Acquired: 6/13/2017 14:16:10 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**47.018**	**-.00461**	**.00181**	**.00109**	**.00008**	W **.93849**	**-.00183**	**.00074**	**-.00091**	**.00021**	**.00928**
Stddev	.00035	.063	.00771	.00210	.00003	.00006	.02889	.00031	.00020	.00018	.00016	.00046
%RSD	1831.6	.13351	167.34	116.27	2.5520	71.513	3.0783	16.894	26.395	19.398	75.377	4.9646
#1	.00026	47.063	.00084	.00329	.00111	.00004	.95892	-.00205	.00060	-.00079	.00033	.00961
#2	-.00023	46.974	-.01006	.00032	.00107	.00012	.91806	-.00161	.00088	-.00104	.00010	.00896
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							-5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.191**	**.28830**	**.00879**	**.03205**	**-.00197**	**-.00203**	**243.46**	**.00112**	**.00697**	**-.00185**	**5.1743**	**.00456**
Stddev	.339	.01046	.00011	.00108	.00010	.00001	.28	.00092	.00092	.00060	.1282	.00485
%RSD	.68976	3.6294	1.2609	3.3667	4.9044	.50551	.11341	81.806	13.244	32.372	2.4778	106.39
#1	49.431	.29570	.00886	.03129	-.00190	-.00203	243.27	.00177	.00632	-.00227	5.2650	.00113
#2	48.952	.28090	.00871	.03281	-.00204	-.00204	243.66	.00047	.00762	-.00143	5.0837	.00799
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00040**	**-.00570**	**-.01219**	**.00250**	**.00024**	W **4.5922**	**.01968**	**.00259**	W **9.2082**	**.01228**	**.00011**	**.07619**
Stddev	.00279	.01201	.02569	.00179	.00003	.0095	.00001	.00112	.0449	.00067	.00071	.00020
%RSD	697.64	210.79	210.79	71.718	11.364	.20644	.03373	43.241	.48710	5.4285	629.78	.25605
#1	.00157	.00279	.00598	.00376	.00026	4.5855	.01967	.00338	9.1765	.01275	-.00039	.07633
#2	-.00237	-.01419	-.03036	.00123	.00022	4.5989	.01968	.00180	9.2399	.01181	.00062	.07605
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2652.7**	**49389.**	**5810.8**
Stddev	21.6	65.	9.7
%RSD	.81327	.13227	.16757
#1	2637.5	49435.	5817.7
#2	2668.0	49343.	5803.9

Sample Name: CCV-4580817 Acquired: 6/13/2017 14:18:43 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48922**	**.53089**	**.91756**	**.49117**	**.51257**	**.46876**	**-.00039**	**5.1244**	**.48870**	**.49192**	**.49802**	**.50219**	**2.4126**
Stddev	.00159	.02847	.03559	.01686	.00076	.00021	.00450	.0180	.01709	.01640	.01850	.00178	.0098
%RSD	.32495	5.3620	3.8783	3.4336	.14855	.04497	1162.0	.35129	3.4971	3.3340	3.7144	.35464	.40781
#1	.49034	.51076	.94273	.50309	.51310	.46891	-.00357	5.1371	.50078	.50352	.51110	.50093	2.4196
#2	.48809	.55102	.89240	.47924	.51203	.46861	.00279	5.1117	.47661	.48032	.48494	.50345	2.4057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.288**	**.96513**	**19.557**	**.47081**	**.49984**	**5.0448**	**.49296**	**.97225**	**1.0030**	**.08479**	**.95683**	**.93004**	**4.7777**
Stddev	.005	.00323	.057	.00192	.01886	.0231	.01703	.02624	.0296	.04989	.03176	.03632	.0338
%RSD	.00896	.33456	.29238	.40776	3.7741	.45838	3.4552	2.6991	2.9526	58.835	3.3197	3.9054	.70680
#1	50.285	.96741	19.597	.47217	.51318	5.0612	.50500	.99080	1.0240	.04951	.97929	.95573	4.7538
#2	50.292	.96284	19.516	.46945	.48650	5.0285	.48091	.95369	.98209	.12006	.93437	.90436	4.8016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.224**	**1.0177**	**.46115**	**.01259**	**.45636**	**.91137**	**-.03504**	**.48484**	**.46653**	**.50401**
Stddev	.072	.0355	.00016	.00178	.00343	.02297	.04763	.00226	.00160	.00141
%RSD	.70680	3.4889	.03368	14.143	.75121	2.5201	135.93	.46514	.34303	.27887
#1	10.173	1.0428	.46104	.01384	.45878	.92761	-.06872	.48643	.46766	.50302
#2	10.275	.99255	.46126	.01133	.45393	.89513	-.00136	.48324	.46540	.50501
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2722.7**	**51229.**	**5972.9**
Stddev	5.3	251.	34.3
%RSD	.19611	.48941	.57469
#1	2726.5	51052.	5948.6
#2	2718.9	51406.	5997.2

Sample Name: CCB Acquired: 6/13/2017 14:21:11 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00093**	**.00606**	**-.00013**	**.00172**	**.00100**	**-.00003**	**.00115**	**-.01161**	**.00055**	**.00023**	**.00002**	**-.00321**
Stddev	.00001	.00053	.00068	.00001	.00016	.00006	.00249	.00097	.00019	.00018	.00047	.00024
%RSD	.94300	8.7416	506.20	.36838	15.870	181.41	217.66	8.3604	33.735	79.536	2251.4	7.3765
#1	.00094	.00569	.00034	.00172	.00088	.00001	-.00062	-.01230	.00042	.00010	.00035	-.00304
#2	.00093	.00643	-.00061	.00172	.00111	-.00008	.00291	-.01092	.00068	.00036	-.00031	-.00337
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01399**	**.23656**	W **.00589**	**.00265**	**.00017**	**.00013**	**.02708**	**-.00021**	**.00390**	**-.00258**	**.03961**	**.00091**
Stddev	.00003	.02588	.00087	.00350	.00002	.00008	.01227	.00013	.00273	.00143	.00094	.00222
%RSD	.24945	10.941	14.823	131.86	12.279	63.158	45.312	64.129	70.091	55.414	2.3673	244.41
#1	.01401	.25486	.00527	.00018	.00016	.00007	.01841	-.00011	.00197	-.00359	.04027	.00248
#2	.01396	.21826	.00651	.00513	.00019	.00018	.03576	-.00030	.00583	-.00157	.03895	-.00066
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500									
Low Limit			-.01000									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00340**	**.01823**	**.03901**	**.00091**	**.00016**	**.00447**	**.00044**	**.00068**	**-.02085**	**.00068**	**-.00097**	**.00210**
Stddev	.00458	.00219	.00468	.00128	.00007	.00305	.00037	.00344	.03910	.00004	.00005	.00076
%RSD	134.46	11.997	11.997	140.56	46.933	68.200	84.685	503.55	187.55	6.4067	4.7238	36.341
#1	-.00664	.01668	.03570	.00182	.00021	.00231	.00070	-.00175	.00680	.00065	-.00100	.00264
#2	-.00017	.01977	.04232	.00001	.00010	.00662	.00018	.00312	-.04850	.00071	-.00093	.00156
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2750.3**	**52239.**	**5992.0**
Stddev	5.1	250.	40.3
%RSD	.18489	.47926	.67242
#1	2753.9	52416.	5963.5
#2	2746.7	52062.	6020.5

Sample Name: CCVL-4590576 Acquired: 6/13/2017 14:23:49 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01150**	**.10362**	**.01229**	**.09914**	**.01083**	**.00082**	**.10820**	**.20499**	**.00534**	**.01004**	**.01017**	**.01224**
Stddev	.00011	.00163	.00143	.00417	.00025	.00006	.00229	.00718	.00032	.00010	.00061	.00066
%RSD	.95801	1.5684	11.647	4.2105	2.3404	7.4546	2.1199	3.5022	6.0757	.99183	6.0211	5.3718
#1	.01143	.10477	.01127	.10209	.01101	.00077	.10658	.19991	.00556	.00997	.01060	.01271
#2	.01158	.10247	.01330	.09618	.01065	.00086	.10983	.21006	.00511	.01011	.00973	.01178
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11973**	**3.2911**	**.02435**	**.20532**	**.01011**	**.01921**	**1.0325**	**.04055**	**2.8412**	**.00735**	F **.13269**	**.02071**
Stddev	.00420	.0666	.00051	.00554	.00002	.00105	.0228	.00093	.0749	.00002	.00835	.00151
%RSD	3.5102	2.0233	2.0958	2.7003	.21976	5.4831	2.2085	2.3044	2.6366	.30378	6.2898	7.2780
#1	.11675	3.3382	.02399	.20924	.01010	.01996	1.0163	.04121	2.8942	.00737	.13859	.01964
#2	.12270	3.2440	.02471	.20140	.01013	.01847	1.0486	.03989	2.7882	.00734	.12679	.02177
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01474**	**.48564**	**1.0393**	**.10087**	**.00957**	**.01929**	**.00940**	**.01596**	**.04255**	**.01031**	**.01820**	**.01464**
Stddev	.00776	.00603	.0129	.00271	.00012	.00132	.00107	.00205	.03927	.00010	.00096	.00037
%RSD	52.678	1.2414	1.2414	2.6827	1.2102	6.8616	11.351	12.821	92.299	.95244	5.2648	2.5181
#1	.02022	.48991	1.0484	.10279	.00949	.01835	.00864	.01452	.07032	.01038	.01887	.01490
#2	.00925	.48138	1.0302	.09896	.00965	.02022	.01015	.01741	.01478	.01024	.01752	.01438
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2758.4**	**52507.**	**6025.9**
Stddev	2.6	183.	8.7
%RSD	.09472	.34946	.14498
#1	2756.6	52637.	6019.7
#2	2760.3	52377.	6032.1

Sample Name: MB 280-376620/1-A Acquired: 6/13/2017 14:26:25 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: 6/12 Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00070**	**.00500**	**-.00672**	**.00066**	**.00072**	**-.00003**	**-.00007**	**-.00645**	**.00023**
Stddev	.00070	.00029	.00109	.00015	.00020	.00002	.00040	.00053	.00006
%RSD	99.446	5.7139	16.215	22.336	27.549	72.499	586.92	8.2734	27.596
#1	.00021	.00479	-.00595	.00077	.00058	-.00004	.00022	-.00683	.00027
#2	.00120	.00520	-.00749	.00056	.00086	-.00001	-.00035	-.00608	.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00007**	**-.00013**	**-.00313**	**.02567**	**.22777**	W **.00570**	**.00322**	**.00018**	**.00033**
Stddev	.00013	.00002	.00042	.00396	.00862	.00360	.00791	.00004	.00013
%RSD	184.81	18.640	13.386	15.443	3.7849	63.137	245.64	20.404	40.357
#1	-.00017	-.00014	-.00283	.02287	.23387	.00824	-.00237	.00016	.00043
#2	.00002	-.00011	-.00343	.02847	.22168	.00315	.00881	.00021	.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						.00500			
Low Limit						-.00500			

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00164**	**-.00007**	**.00408**	**-.00182**	**.03001**	**.00221**	**-.00275**	**.01946**	**.04164**
Stddev	.00079	.00012	.00158	.00006	.00454	.00447	.00663	.01318	.02820
%RSD	47.837	170.16	38.650	3.3099	15.117	202.29	240.69	67.727	67.727
#1	.00220	.00001	.00519	-.00186	.03321	.00537	-.00744	.02878	.06159
#2	.00109	-.00016	.00296	-.00177	.02680	-.00095	.00193	.01014	.02170
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00075**	**.00006**	W **.00560**	**.00022**	**.00203**	W **-.05182**	**.00079**	**.00039**	**-.00034**
Stddev	.00089	.00010	.00011	.00022	.00392	.02656	.00056	.00033	.00164
%RSD	118.10	171.19	1.9981	96.807	192.77	51.253	71.059	84.377	478.31
#1	.00138	.00013	.00552	.00007	-.00074	-.03304	.00118	.00016	.00082
#2	.00012	-.00001	.00568	.00038	.00480	-.07060	.00039	.00063	-.00150
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500			.05000			
Low Limit			-.00500			-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2775.5**	**52702.**	**6031.2**
Stddev	8.8	19.	.3
%RSD	.31671	.03545	.00535
#1	2769.3	52716.	6030.9
#2	2781.7	52689.	6031.4

Sample Name: LCS 280-376620/2-A Acquired: 6/13/2017 14:29:03 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05256**	**1.8794**	**.98700**	**1.0294**	**2.0680**	**.04750**	**1.9710**	**50.279**	**.10196**
Stddev	.00042	.0465	.01912	.0192	.0036	.00027	.0492	.082	.00213
%RSD	.80825	2.4751	1.9371	1.8658	.17394	.57290	2.4967	.16233	2.0870
#1	.05226	1.9123	1.0005	1.0430	2.0706	.04769	2.0058	50.337	.10347
#2	.05286	1.8465	.97348	1.0158	2.0655	.04731	1.9362	50.222	.10046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48553**	**.20105**	**.25837**	**.97304**	**50.686**	**.96689**	**49.431**	**.47181**	**.98879**
Stddev	.01244	.00482	.00033	.00668	.078	.00351	.074	.00134	.02424
%RSD	2.5621	2.3951	.12663	.68602	.15399	.36275	.15015	.28329	2.4515
#1	.49433	.20446	.25860	.97776	50.741	.96937	49.483	.47275	1.0059
#2	.47674	.19765	.25814	.96832	50.631	.96441	49.378	.47086	.97164
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.682**	**.48627**	**10.254**	**.50042**	**2.1604**	**.50372**	**1.9519**	**9.6318**	**20.612**
Stddev	.328	.01182	.239	.01181	.0461	.00874	.0475	.0036	.008
%RSD	.64684	2.4317	2.3355	2.3607	2.1363	1.7344	2.4322	.03741	.03741
#1	50.913	.49463	10.423	.50878	2.1930	.50990	1.9855	9.6344	20.618
#2	50.450	.47791	10.084	.49207	2.1277	.49755	1.9184	9.6293	20.607
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0353**	**.93440**	**.95242**	**.93604**	**1.8208**	**1.8969**	**.48971**	**.46866**	**.52236**
Stddev	.0433	.00303	.00102	.00368	.0400	.0009	.00152	.00107	.00025
%RSD	2.1273	.32423	.10663	.39289	2.1979	.04791	.30988	.22829	.04843
#1	2.0659	.93654	.95314	.93864	1.8491	1.8976	.49078	.46942	.52218
#2	2.0047	.93226	.95171	.93344	1.7925	1.8963	.48863	.46791	.52254
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2661.8**	**50236.**	**6030.7**
Stddev	6.6	41.	22.1
%RSD	.24902	.08137	.36566
#1	2657.2	50207.	6015.1
#2	2666.5	50265.	6046.3

Sample Name: 280-97963-C-1-A Acquired: 6/13/2017 14:31:26 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00108**	**.40935**	**.00657**	**.16127**	**.01377**	**.00001**	**.00210**	**58.911**	**.00134**
Stddev	.00018	.00264	.00338	.00548	.00012	.00006	.00385	.062	.00076
%RSD	17.013	.64445	51.461	3.3981	.84221	477.74	183.40	.10579	56.508
#1	.00121	.40749	.00418	.16515	.01369	.00005	-.00062	58.955	.00081
#2	.00095	.41122	.00896	.15740	.01385	-.00003	.00482	58.867	.00188
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00130**	**.00183**	**-.00136**	**.11522**	**6.0179**	**.00528**	**11.334**	**.03744**	**.00152**
Stddev	.00080	.00015	.00056	.00342	.0193	.00282	.011	.00013	.00051
%RSD	61.945	7.9388	41.057	2.9677	.31980	53.421	.10038	.34474	33.272
#1	.00073	.00172	-.00097	.11280	6.0043	.00727	11.342	.03753	.00116
#2	.00186	.00193	-.00176	.11764	6.0315	.00328	11.326	.03735	.00188
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**21.597**	**.00223**	**.15915**	**-.00049**	**.64866**	**-.00262**	**-.00644**	**3.7483**	**8.0213**
Stddev	.366	.00057	.00437	.00085	.02512	.00377	.00593	.0076	.0162
%RSD	1.6931	25.472	2.7437	172.51	3.8731	143.86	92.161	.20162	.20162
#1	21.339	.00183	.15606	.00011	.63090	.00005	-.01064	3.7429	8.0099
#2	21.856	.00263	.16223	-.00109	.66643	-.00529	-.00224	3.7536	8.0328
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00177**	**.11310**	**.00528**	**.00301**	**.00439**	**-.02196**	**.00056**	**.01060**	**-.00086**
Stddev	.00363	.00046	.00164	.00004	.00178	.02103	.00030	.00014	.00015
%RSD	205.45	.40863	31.089	1.2852	40.559	95.787	53.786	1.3092	17.799
#1	-.00080	.11343	.00644	.00298	.00565	-.03683	.00078	.01050	-.00075
#2	.00433	.11277	.00412	.00304	.00313	-.00708	.00035	.01069	-.00097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2737.1**	**51674.**	**6060.7**
Stddev	4.2	155.	27.5
%RSD	.15502	.29900	.45295
#1	2740.1	51565.	6080.1
#2	2734.1	51783.	6041.3

Sample Name: 280-97963-C-2-A Acquired: 6/13/2017 14:34:02 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00117**	**.00707**	**.00782**	**.65577**	**.01499**	**-.00023**	**-.00149**	**97.862**	**.00068**
Stddev	.00074	.00030	.00085	.01979	.00003	.00003	.00007	.327	.00019
%RSD	63.435	4.2341	10.839	3.0178	.17814	15.063	4.4505	.33365	28.225
#1	.00064	.00729	.00722	.66977	.01501	-.00025	-.00145	98.092	.00081
#2	.00169	.00686	.00842	.64178	.01498	-.00020	-.00154	97.631	.00054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00029**	**.00044**	**-.00173**	**.21993**	**6.6883**	**.00477**	**15.915**	**.08777**	**.00072**
Stddev	.00013	.00001	.00009	.00265	.0782	.00005	.030	.00047	.00034
%RSD	46.201	1.6965	5.1794	1.2055	1.1694	1.0050	.18940	.53938	46.658
#1	.00019	.00044	-.00167	.22181	6.7436	.00481	15.936	.08811	.00048
#2	.00038	.00043	-.00180	.21806	6.6330	.00474	15.894	.08744	.00096
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**35.751**	**.00533**	**.14197**	**-.00344**	**37.847**	**-.00058**	**-.00791**	**7.5136**	**16.079**
Stddev	.401	.00015	.00065	.00172	1.233	.00076	.00139	.0119	.025
%RSD	1.1226	2.7361	.45645	49.913	3.2573	131.88	17.547	.15814	.15814
#1	36.035	.00543	.14243	-.00222	38.719	-.00111	-.00889	7.5052	16.061
#2	35.467	.00523	.14151	-.00465	36.975	-.00004	-.00693	7.5220	16.097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00037**	**1.0761**	**.00420**	**-.00057**	**.00482**	**-.06404**	**-.00001**	**.00068**	**-.00171**
Stddev	.00012	.0062	.00069	.00002	.00174	.00375	.00003	.00044	.00050
%RSD	31.902	.57722	16.333	3.2920	36.138	5.8571	607.39	64.895	29.411
#1	-.00028	1.0805	.00469	-.00059	.00606	-.06138	.00002	.00037	-.00135
#2	-.00045	1.0717	.00372	-.00056	.00359	-.06669	-.00003	.00099	-.00206
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2686.1**	**50801.**	**6033.4**
Stddev	8.0	90.	15.5
%RSD	.29880	.17698	.25759
#1	2680.4	50864.	6022.4
#2	2691.8	50737.	6044.4

Sample Name: 280-97963-C-3-A Acquired: 6/13/2017 14:36:37 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00097**	**.00693**	**.01446**	**.13034**	**.02895**	**-.00009**	**.00361**	**161.05**	**.00074**
Stddev	.00027	.00045	.00562	.00293	.00019	.00005	.00299	.10	.00015
%RSD	27.730	6.5482	38.839	2.2514	.65484	56.007	82.790	.05921	20.017
#1	.00078	.00726	.01049	.13241	.02881	-.00005	.00573	161.12	.00085
#2	.00116	.00661	.01843	.12826	.02908	-.00012	.00150	160.98	.00064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00086**	**.00038**	**-.00168**	**.94856**	**9.1759**	**.02505**	**9.2711**	**.11292**	**-.00066**
Stddev	.00004	.00019	.00070	.00314	.0024	.00146	.0162	.00007	.00015
%RSD	4.7737	51.380	41.782	.33069	.02654	5.8156	.17478	.05996	23.213
#1	.00089	.00052	-.00118	.95077	9.1776	.02402	9.2825	.11297	-.00055
#2	.00084	.00024	-.00218	.94634	9.1742	.02608	9.2596	.11287	-.00077
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**15.522**	**.00434**	**.07946**	**-.00267**	**8.4625**	**-.00035**	**-.00412**	**6.6472**	**14.225**
Stddev	.078	.00059	.00710	.00038	.2934	.00101	.00415	.0001	.000
%RSD	.50515	13.683	8.9411	14.312	3.4674	287.06	100.78	.00197	.00197
#1	15.577	.00476	.08448	-.00294	8.6700	-.00107	-.00118	6.6472	14.225
#2	15.466	.00392	.07444	-.00240	8.2550	.00036	-.00705	6.6473	14.225
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00132**	**.52215**	**.00660**	**-.00071**	**.00170**	**-.07233**	**.00903**	**.00082**	**-.00103**
Stddev	.00179	.00039	.00166	.00006	.00178	.00246	.00066	.00050	.00047
%RSD	135.12	.07513	25.176	8.5683	104.81	3.4005	7.3493	60.783	45.253
#1	.00006	.52243	.00543	-.00066	.00044	-.07059	.00856	.00047	-.00136
#2	.00259	.52187	.00778	-.00075	.00296	-.07407	.00950	.00117	-.00070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2659.2**	**50382.**	**6013.4**
Stddev	3.3	56.	28.7
%RSD	.12433	.11160	.47712
#1	2661.5	50422.	5993.1
#2	2656.8	50342.	6033.7

Sample Name: 280-97963-C-4-A Acquired: 6/13/2017 14:39:12 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00088**	**.06164**	**.00141**	**.62745**	**.01926**	**-.00016**	**.00210**	**143.83**	**.00080**
Stddev	.00029	.00045	.00186	.01271	.00013	.00001	.00163	.15	.00038
%RSD	32.566	.73695	131.61	2.0257	.68951	5.6237	77.787	.10174	47.899
#1	.00068	.06196	.00010	.63644	.01917	-.00015	.00094	143.73	.00107
#2	.00109	.06132	.00272	.61846	.01936	-.00016	.00325	143.93	.00053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00659**	**.00058**	**-.00150**	**.39147**	**3.0338**	**.01011**	**10.241**	**.49952**	**-.00102**
Stddev	.00029	.00016	.00115	.00149	.0159	.00179	.038	.00060	.00061
%RSD	4.3282	27.857	76.585	.38010	.52532	17.692	.36966	.12067	59.823
#1	.00679	.00046	-.00069	.39042	3.0451	.00884	10.214	.49910	-.00145
#2	.00638	.00069	-.00232	.39252	3.0225	.01137	10.268	.49995	-.00059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.676**	**.02650**	**.08005**	**-.00430**	**12.823**	**-.00279**	**-.00742**	**5.7730**	**12.354**
Stddev	.128	.00064	.00002	.00058	.307	.00175	.00414	.0491	.105
%RSD	.64918	2.4271	.02099	13.527	2.3923	62.612	55.795	.84961	.84961
#1	19.766	.02696	.08004	-.00389	13.040	-.00155	-.01034	5.8077	12.428
#2	19.585	.02605	.08007	-.00471	12.606	-.00403	-.00449	5.7383	12.280
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00023**	**.55529**	**.00476**	**.00096**	**.00450**	**-.01936**	**.00086**	**.00090**	**-.00147**
Stddev	.00237	.00141	.00001	.00080	.00154	.02021	.00059	.00049	.00149
%RSD	1022.3	.25433	.19386	83.313	34.286	104.36	68.469	53.773	101.47
#1	-.00190	.55429	.00476	.00153	.00559	-.03365	.00127	.00056	-.00253
#2	.00144	.55629	.00477	.00040	.00341	-.00507	.00044	.00125	-.00042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2637.1**	**49776.**	**5912.2**
Stddev	8.4	190.	7.7
%RSD	.31913	.38160	.13013
#1	2643.0	49911.	5906.8
#2	2631.1	49642.	5917.6

Sample Name: 280-97963-C-5-A Acquired: 6/13/2017 14:41:46 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00090**	**.00388**	**.00730**	**.02361**	**.04228**	**-.00013**	**.00124**	**124.70**	**.00030**
Stddev	.00061	.00024	.00835	.00097	.00041	.00008	.00175	.10	.00008
%RSD	67.839	6.2590	114.29	4.1000	.95995	60.029	140.92	.08142	25.983
#1	.00047	.00371	.01320	.02429	.04199	-.00019	.00248	124.63	.00036
#2	.00134	.00406	.00140	.02292	.04257	-.00008	.00000	124.77	.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00248**	**.00018**	**-.00225**	**1.5976**	**.72273**	**.01027**	**5.3473**	**.05291**	**.00012**
Stddev	.00021	.00023	.00010	.0129	.03033	.00080	.0300	.00034	.00016
%RSD	8.4019	128.66	4.4975	.80826	4.1961	7.8353	.56081	.65074	136.63
#1	.00263	.00002	-.00218	1.5885	.74417	.01084	5.3685	.05315	.00000
#2	.00233	.00034	-.00232	1.6067	.70129	.00970	5.3260	.05266	.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.2425**	**.01071**	**.04524**	**-.00152**	**8.7609**	**-.00049**	**-.00398**	**4.1709**	**8.9257**
Stddev	.0094	.00002	.00040	.00089	.3015	.00099	.00898	.0059	.0125
%RSD	.17987	.15146	.89386	58.343	3.4411	202.55	225.84	.14018	.14018
#1	5.2358	.01073	.04552	-.00215	8.9740	.00021	.00237	4.1668	8.9169
#2	5.2492	.01070	.04495	-.00089	8.5477	-.00118	-.01033	4.1750	8.9346
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00212**	**.44936**	**.00618**	**-.00080**	**.00502**	**-.06716**	**.00018**	**.00120**	**-.00177**
Stddev	.00148	.00209	.00233	.00031	.00627	.01345	.00043	.00085	.00138
%RSD	69.811	.46473	37.600	39.050	124.99	20.022	246.84	70.543	78.085
#1	-.00317	.44788	.00783	-.00058	.00945	-.07667	.00048	.00180	-.00079
#2	-.00108	.45084	.00454	-.00102	.00058	-.05766	-.00013	.00060	-.00275
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2653.2**	**50155.**	**5914.8**
Stddev	6.1	7.	.3
%RSD	.22851	.01395	.00534
#1	2657.5	50160.	5915.1
#2	2648.9	50150.	5914.6

Sample Name: 280-97963-C-6-A Acquired: 6/13/2017 14:44:22 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00093**	**.05950**	**.00396**	**.01935**	**.01501**	**-.00015**	**-.00133**	**100.48**	**.00584**
Stddev	.00018	.00193	.00184	.00049	.00011	.00009	.00121	.04	.00029
%RSD	19.198	3.2439	46.372	2.5519	.76237	59.124	90.795	.03682	5.0281
#1	.00106	.06087	.00266	.01970	.01509	-.00021	-.00048	100.50	.00563
#2	.00080	.05814	.00526	.01900	.01493	-.00009	-.00219	100.45	.00605
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00024**	**.00086**	**-.00157**	**.29448**	**.82063**	**.01258**	**7.9784**	**.05374**	**.00019**
Stddev	.00006	.00022	.00044	.00693	.03089	.00007	.0033	.00014	.00120
%RSD	25.480	25.947	27.780	2.3528	3.7647	.58021	.04114	.26944	623.75
#1	.00019	.00070	-.00126	.28958	.79878	.01253	7.9807	.05384	.00104
#2	.00028	.00101	-.00188	.29938	.84247	.01263	7.9760	.05363	-.00065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.7521**	**.00571**	**.32149**	**-.00428**	**17.622**	**-.00051**	**-.00938**	**4.2864**	**9.1730**
Stddev	.0209	.00002	.00702	.00140	.533	.00576	.00101	.0318	.0681
%RSD	.23823	.26572	2.1836	32.714	3.0224	1123.8	10.815	.74252	.74252
#1	8.7373	.00570	.32645	-.00329	17.999	-.00458	-.01010	4.3089	9.2211
#2	8.7668	.00572	.31652	-.00527	17.246	.00356	-.00866	4.2639	9.1248
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00104**	**.78052**	**.00490**	**.00053**	**.00352**	**-.03078**	**.00469**	**.00779**	**.00026**
Stddev	.00022	.00181	.00112	.00024	.00014	.00779	.00002	.00007	.00069
%RSD	21.562	.23252	22.949	44.269	4.0360	25.302	.52355	.91438	265.35
#1	.00120	.77924	.00410	.00037	.00362	-.02527	.00471	.00774	.00075
#2	.00088	.78180	.00569	.00070	.00342	-.03628	.00467	.00784	-.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2673.7**	**50732.**	**5987.9**
Stddev	10.6	175.	133.1
%RSD	.39521	.34457	2.2236
#1	2681.2	50855.	5893.8
#2	2666.3	50608.	6082.1

Sample Name: CCVH-4579429 Acquired: 6/13/2017 14:46:57 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00000**	**46.957**	**-.00644**	**.00205**	**.00036**	**-.00004**	**.95149**	**.04512**	**.00057**	**-.00088**	**.00028**	**.00940**
Stddev	.00029	.071	.00796	.00043	.00009	.00002	.01446	.01053	.00034	.00016	.00044	.00027
%RSD	14957.	.15157	123.72	20.872	26.290	53.302	1.5202	23.340	60.134	18.388	154.23	2.9209
#1	-.00020	46.907	-.01207	.00235	.00029	-.00002	.96171	.05256	.00081	-.00077	.00060	.00921
#2	.00020	47.008	-.00081	.00174	.00042	-.00005	.94126	.03767	.00033	-.00100	-.00003	.00960
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.429**	**.22549**	**.00250**	**.03548**	**-.00209**	**-.00189**	**244.25**	**.00083**	**.00608**	**-.00080**	**5.1626**	**-.00326**
Stddev	.216	.02543	.00051	.00004	.00003	.00030	.84	.00009	.00154	.00029	.0810	.00354
%RSD	.43692	11.277	20.320	.11865	1.5055	15.824	.34408	10.867	25.328	36.764	1.5690	108.45
#1	49.582	.20751	.00214	.03551	-.00211	-.00168	243.66	.00090	.00717	-.00059	5.2199	-.00576
#2	49.276	.24348	.00285	.03545	-.00206	-.00210	244.85	.00077	.00499	-.00101	5.1053	-.00076
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00758**	**-.01919**	**-.04106**	**.00013**	**.00075**	W **4.6249**	**.01907**	**.00025**	W **9.3108**	**.01169**	**.00035**	**.07595**
Stddev	.00127	.00552	.01182	.00042	.00008	.0100	.00007	.00159	.0326	.00019	.00003	.00218
%RSD	16.765	28.779	28.779	311.22	10.735	.21649	.36388	635.55	.34993	1.6049	8.3225	2.8688
#1	-.00668	-.01528	-.03270	.00043	.00080	4.6319	.01912	-.00088	9.2878	.01155	.00037	.07441
#2	-.00848	-.02309	-.04941	-.00016	.00069	4.6178	.01903	.00138	9.3339	.01182	.00033	.07749
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2648.3**	**49497.**	**5909.0**
Stddev	.3	150.	10.1
%RSD	.01211	.30285	.17114
#1	2648.5	49603.	5916.2
#2	2648.0	49391.	5901.9

Sample Name: CCV-4580817 Acquired: 6/13/2017 14:49:31 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48814**	**.49417**	**.93559**	**.49567**	**.50890**	**.46712**	**-.00386**	**5.1194**	**.49408**	**.49633**	**.50376**	**.49923**	**2.3918**
Stddev	.00053	.01089	.01019	.00535	.00118	.00076	.00283	.0036	.00867	.00964	.00967	.00019	.0034
%RSD	.10869	2.2045	1.0890	1.0798	.23155	.16289	73.390	.07095	1.7548	1.9427	1.9200	.03893	.14100
#1	.48776	.50187	.94279	.49945	.50973	.46766	-.00186	5.1220	.50021	.50315	.51060	.49909	2.3942
#2	.48851	.48647	.92838	.49188	.50807	.46658	-.00586	5.1169	.48795	.48952	.49692	.49937	2.3894
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.037**	**.96507**	**19.573**	**.47214**	**.50542**	**5.0193**	**.49749**	**.99014**	**1.0160**	**.01512**	**.96858**	**.94207**	**4.7605**
Stddev	.095	.00060	.063	.00076	.00882	.0087	.00819	.01433	.0217	.00776	.01605	.02071	.0141
%RSD	.18941	.06243	.32143	.16197	1.7453	.17371	1.6458	1.4473	2.1340	51.352	1.6568	2.1988	.29650
#1	50.104	.96549	19.618	.47268	.51166	5.0255	.50328	1.0003	1.0313	.02061	.97993	.95672	4.7506
#2	49.970	.96464	19.529	.47159	.49919	5.0132	.49170	.98001	1.0007	.00963	.95724	.92742	4.7705
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.188**	**1.0228**	**.46175**	**.01174**	**.45694**	**.92503**	**-.03199**	**.48291**	**.46650**	**.50146**
Stddev	.030	.0164	.00106	.00256	.00085	.02124	.00343	.00080	.00167	.00266
%RSD	.29650	1.6050	.22997	21.800	.18707	2.2965	10.732	.16518	.35717	.52958
#1	10.166	1.0344	.46250	.01355	.45755	.94005	-.03441	.48348	.46768	.50334
#2	10.209	1.0111	.46100	.00993	.45634	.91001	-.02956	.48235	.46532	.49958
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2690.7**	**50757.**	**5968.9**
Stddev	8.3	110.	15.5
%RSD	.30680	.21730	.25904
#1	2696.5	50835.	5979.9
#2	2684.9	50679.	5958.0

Sample Name: CCB Acquired: 6/13/2017 14:51:59 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00129**	**.00156**	**.00223**	**.00086**	**.00077**	**.00001**	**.00218**	**.01188**	**.00009**	**-.00003**	**.00002**	**-.00292**
Stddev	.00070	.00077	.00780	.00109	.00021	.00004	.00164	.00248	.00011	.00018	.00008	.00009
%RSD	54.046	49.589	350.17	127.09	26.629	275.45	75.250	20.838	125.01	597.89	406.15	3.2498
#1	.00079	.00211	-.00329	.00163	.00063	.00004	.00102	.01013	.00001	-.00016	-.00003	-.00285
#2	.00178	.00101	.00774	.00009	.00092	-.00001	.00334	.01363	.00017	.00010	.00007	-.00299
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00546**	**.25475**	W **.00545**	**.00195**	**.00006**	**.00005**	**-.00175**	**-.00029**	**.00391**	**-.00127**	**.01003**	**.00339**
Stddev	.00264	.03412	.00124	.00458	.00004	.00017	.01516	.00003	.00485	.00052	.00332	.00315
%RSD	48.396	13.395	22.711	234.81	74.321	334.18	865.14	9.1586	123.89	40.491	33.088	93.003
#1	-.00359	.23062	.00633	-.00129	.00009	-.00007	.00897	-.00027	.00049	-.00091	.01237	.00562
#2	-.00733	.27888	.00458	.00519	.00003	.00017	-.01248	-.00030	.00734	-.00164	.00768	.00116
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500									
Low Limit			-.01000									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00315**	**.00851**	**.01820**	**-.00082**	**.00030**	**.00530**	**-.00017**	**.00260**	**-.03982**	**.00015**	**-.00059**	**-.00176**
Stddev	.00043	.02165	.04633	.00040	.00012	.00094	.00007	.00046	.01016	.00084	.00030	.00135
%RSD	13.506	254.52	254.52	48.638	41.560	17.667	40.962	17.667	25.514	559.88	50.097	76.672
#1	-.00285	.02381	.05096	-.00110	.00038	.00596	-.00012	.00293	-.03263	-.00045	-.00038	-.00271
#2	-.00345	-.00680	-.01456	-.00054	.00021	.00463	-.00022	.00228	-.04700	.00075	-.00080	-.00081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2692.7**	**51213.**	**5822.1**
Stddev	2.7	102.	16.8
%RSD	.10080	.19978	.28826
#1	2694.7	51141.	5834.0
#2	2690.8	51285.	5810.2

Sample Name: CCVL-4590576 Acquired: 6/13/2017 14:54:37 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01129**	**.10286**	**.01606**	**.10014**	**.01095**	**.00086**	**.10882**	**.21082**	**.00539**	**.01036**	**.01008**	**.01231**
Stddev	.00016	.00463	.00293	.00346	.00006	.00006	.00512	.00078	.00044	.00041	.00031	.00081
%RSD	1.4248	4.5032	18.265	3.4582	.59061	6.5856	4.7070	.37022	8.0718	3.9850	3.1176	6.6102
#1	.01141	.10614	.01399	.10259	.01100	.00090	.11245	.21137	.00570	.01065	.01030	.01174
#2	.01118	.09959	.01814	.09769	.01090	.00082	.10520	.21027	.00508	.01007	.00986	.01289
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10207**	**3.2569**	**.02383**	**.20276**	**.01009**	**.01882**	**1.0127**	**.04013**	**2.8633**	**.00838**	**.10039**	**.02460**
Stddev	.00023	.0299	.00155	.00428	.00003	.00118	.0084	.00200	.0850	.00102	.00317	.00294
%RSD	.22222	.91910	6.5180	2.1092	.25469	6.2848	.82516	4.9758	2.9673	12.229	3.1585	11.969
#1	.10190	3.2781	.02273	.20579	.01007	.01965	1.0067	.04154	2.9234	.00766	.10264	.02252
#2	.10223	3.2358	.02493	.19974	.01010	.01798	1.0186	.03872	2.8032	.00910	.09815	.02669
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01153**	**.49896**	**1.0678**	**.10250**	**.00965**	**.01854**	**.00843**	**.01392**	F **.03458**	**.00981**	**.01863**	**.01642**
Stddev	.00528	.00910	.0195	.00297	.00006	.00074	.00025	.00476	.01426	.00008	.00071	.00044
%RSD	45.797	1.8243	1.8243	2.8943	.63402	3.9803	2.9191	34.184	41.220	.85000	3.8184	2.6806
#1	.01527	.50540	1.0815	.10460	.00970	.01906	.00860	.01055	.04466	.00987	.01914	.01673
#2	.00780	.49252	1.0540	.10040	.00961	.01802	.00826	.01728	.02450	.00976	.01813	.01610
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.02000								.06000			
Range	-30.000%								-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2731.7**	**51679.**	**5907.5**
Stddev	1.1	83.	27.1
%RSD	.04130	.16039	.45846
#1	2730.9	51738.	5888.3
#2	2732.5	51621.	5926.6

Sample Name: 280-97963-C-7-A Acquired: 6/13/2017 14:57:14 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00128**	**.05346**	**.00093**	**.04431**	**.01823**	**-.00013**	**.00183**	**196.16**	**.00098**
Stddev	.00017	.06343	.00133	.00133	.00041	.00001	.00304	.02	.00095
%RSD	13.184	118.65	143.56	3.0105	2.2474	10.476	166.45	.00825	96.731
#1	.00140	.09831	.00187	.04525	.01794	-.00012	.00398	196.17	.00165
#2	.00116	.00861	-.00001	.04337	.01852	-.00014	-.00032	196.15	.00031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00086**	**.00095**	**-.00159**	**.25714**	**1.0705**	**.00659**	**9.7217**	**.10828**	**-.00058**
Stddev	.00060	.00081	.00025	.00150	.0413	.00209	.0175	.00010	.00026
%RSD	69.549	85.563	15.406	.58293	3.8594	31.769	.17995	.09460	44.016
#1	.00128	.00152	-.00142	.25820	1.0997	.00807	9.7340	.10835	-.00040
#2	.00044	.00037	-.00177	.25608	1.0413	.00511	9.7093	.10820	-.00076
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.104**	**.00693**	**.15677**	**.00018**	**9.8115**	**-.00136**	**-.01209**	**7.6438**	**16.358**
Stddev	.073	.00072	.00947	.00137	.3581	.00057	.00377	.0078	.017
%RSD	.38465	10.435	6.0428	755.25	3.6495	42.097	31.146	.10250	.10250
#1	19.156	.00744	.16347	-.00079	10.065	-.00177	-.00943	7.6494	16.370
#2	19.052	.00642	.15007	.00115	9.5583	-.00096	-.01476	7.6383	16.346
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00150**	**.77369**	**.00644**	**-.00030**	**.00336**	**-.03949**	**.00020**	**.00146**	**-.00003**
Stddev	.00076	.00000	.00144	.00005	.00127	.02600	.00034	.00059	.00080
%RSD	50.387	.00019	22.297	15.368	37.742	65.845	169.27	40.130	3072.6
#1	.00204	.77369	.00542	-.00027	.00425	-.02110	-.00004	.00105	-.00059
#2	.00097	.77369	.00745	-.00033	.00246	-.05787	.00045	.00187	.00054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2677.4**	**50301.**	**6045.1**
Stddev	9.8	69.	27.9
%RSD	.36560	.13736	.46145
#1	2684.3	50350.	6064.8
#2	2670.5	50252.	6025.3

Sample Name: 280-97963-C-8-A Acquired: 6/13/2017 14:59:49 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00066**	**.00574**	**.00526**	**.92421**	**.02885**	**-.00012**	**-.00239**	**150.26**	**.00061**
Stddev	.00041	.00164	.00500	.03034	.00007	.00012	.00239	.48	.00005
%RSD	62.218	28.562	95.134	3.2830	.25251	103.29	99.813	.31890	8.6238
#1	.00037	.00690	.00172	.94566	.02890	-.00020	-.00408	149.92	.00064
#2	.00096	.00458	.00880	.90275	.02880	-.00003	-.00070	150.60	.00057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01459**	**.00058**	**-.00288**	**4.6427**	**4.6342**	**.01368**	**9.9518**	**.77581**	**-.00105**
Stddev	.00049	.00015	.00074	.0147	.0167	.00070	.0442	.00118	.00005
%RSD	3.3377	25.557	25.563	.31611	.36030	5.1062	.44397	.15240	4.8151
#1	.01494	.00047	-.00340	4.6323	4.6460	.01318	9.9830	.77665	-.00108
#2	.01425	.00068	-.00236	4.6530	4.6224	.01417	9.9205	.77497	-.00101
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**35.935**	**.05918**	**.12822**	**-.00300**	**6.5106**	**.00484**	**-.00727**	**5.8380**	**12.493**
Stddev	.588	.00138	.00345	.00015	.2289	.00068	.00680	.0410	.088
%RSD	1.6358	2.3307	2.6929	5.1272	3.5164	14.012	93.584	.70173	.70173
#1	35.519	.06015	.13066	-.00289	6.6725	.00436	-.00246	5.8090	12.431
#2	36.351	.05820	.12578	-.00311	6.3487	.00532	-.01208	5.8669	12.555
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00053**	**.34521**	**.00696**	**-.00061**	**.00224**	**-.05107**	**.00033**	**.00094**	**-.00233**
Stddev	.00007	.00051	.00239	.00027	.00379	.02208	.00002	.00035	.00223
%RSD	13.237	.14738	34.271	43.727	168.95	43.247	6.3093	37.836	95.906
#1	.00058	.34485	.00865	-.00080	.00492	-.06668	.00034	.00119	-.00391
#2	.00048	.34557	.00528	-.00042	-.00044	-.03545	.00031	.00069	-.00075
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2667.7**	**50776.**	**6106.2**
Stddev	1.6	206.	14.9
%RSD	.06104	.40644	.24459
#1	2666.5	50631.	6116.8
#2	2668.8	50922.	6095.7

Sample Name: 280-97963-C-9-A Acquired: 6/13/2017 15:02:22 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00038**	**.00846**	**.02667**	**1.1524**	**.06643**	**-.00013**	**.00029**	**182.52**	**.00061**
Stddev	.00038	.00015	.00661	.0286	.00016	.00006	.00274	.08	.00008
%RSD	99.194	1.7398	24.789	2.4829	.23832	48.716	933.71	.04261	12.630
#1	.00065	.00835	.03134	1.1726	.06654	-.00017	-.00165	182.46	.00056
#2	.00011	.00856	.02199	1.1322	.06632	-.00009	.00223	182.57	.00067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01638**	**.00059**	**-.00138**	**8.1139**	**6.5411**	**.01239**	**9.4346**	**1.1160**	**-.00123**
Stddev	.00052	.00004	.00039	.0097	.0696	.00009	.0082	.0005	.00011
%RSD	3.1885	6.0803	28.158	.11997	1.0644	.69017	.08687	.04356	8.7047
#1	.01675	.00061	-.00111	8.1208	6.4918	.01245	9.4288	1.1163	-.00115
#2	.01601	.00056	-.00165	8.1070	6.5903	.01233	9.4404	1.1156	-.00130
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**68.423**	**.06654**	**.14947**	**-.00352**	**9.6358**	**.00260**	**-.01434**	**6.2982**	**13.478**
Stddev	.056	.00249	.00570	.00072	.2733	.00116	.00254	.0136	.029
%RSD	.08129	3.7491	3.8151	20.433	2.8367	44.694	17.683	.21628	.21628
#1	68.462	.06831	.15351	-.00403	9.8291	.00178	-.01255	6.3079	13.499
#2	68.384	.06478	.14544	-.00301	9.4425	.00342	-.01614	6.2886	13.458
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00027**	**.15733**	**.00576**	**-.00076**	**.00443**	**-.04366**	**.00036**	**.00199**	**.00260**
Stddev	.00114	.00046	.00110	.00008	.00068	.01812	.00062	.00043	.00216
%RSD	419.17	.29246	19.108	10.737	15.293	41.507	173.42	21.826	83.099
#1	-.00053	.15701	.00653	-.00070	.00491	-.05647	-.00008	.00168	.00107
#2	.00107	.15766	.00498	-.00081	.00395	-.03084	.00080	.00230	.00412
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2642.4**	**50056.**	**6038.4**
Stddev	1.5	119.	4.3
%RSD	.05676	.23854	.07184
#1	2643.5	50140.	6035.3
#2	2641.3	49972.	6041.5

Sample Name: 280-97963-C-10-A Acquired: 6/13/2017 15:04:55 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00129**	**.00605**	**.01571**	**.03793**	**.05730**	**-.00009**	**.00195**	**194.41**	**.00065**
Stddev	.00046	.00039	.00105	.00069	.00002	.00000	.00397	.46	.00001
%RSD	35.473	6.4472	6.7013	1.8156	.02987	2.3509	203.72	.23472	1.7411
#1	.00097	.00633	.01646	.03841	.05732	-.00009	.00475	194.73	.00066
#2	.00162	.00578	.01497	.03744	.05729	-.00009	-.00086	194.09	.00064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00201**	**.00030**	**-.00149**	**7.0284**	**.97453**	**.00592**	**10.135**	**.66049**	**-.00074**
Stddev	.00015	.00001	.00000	.0056	.00208	.00091	.051	.00286	.00058
%RSD	7.5904	3.5836	.31782	.07988	.21343	15.312	.50363	.43347	79.103
#1	.00190	.00031	-.00149	7.0245	.97306	.00528	10.171	.66252	-.00115
#2	.00212	.00029	-.00150	7.0324	.97600	.00656	10.099	.65847	-.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.9940**	**.01007**	**.07890**	**-.00114**	**6.4300**	**-.00231**	**-.00169**	**6.5033**	**13.917**
Stddev	.0622	.00085	.00014	.00246	.2293	.00068	.00022	.0539	.115
%RSD	.69144	8.4005	.17507	215.65	3.5662	29.553	13.049	.82893	.82893
#1	9.0379	.01067	.07900	.00060	6.5922	-.00279	-.00185	6.5415	13.999
#2	8.9500	.00947	.07881	-.00288	6.2679	-.00182	-.00154	6.4652	13.836
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00087**	**.77076**	**.00565**	**-.00071**	**.00405**	**-.06289**	**-.00001**	**.00086**	**-.00105**
Stddev	.00081	.00237	.00047	.00007	.00330	.00693	.00064	.00088	.00132
%RSD	93.203	.30696	8.3346	10.180	81.510	11.021	4473.3	102.72	125.65
#1	-.00145	.77244	.00598	-.00076	.00639	-.06779	-.00047	.00023	-.00012
#2	-.00030	.76909	.00531	-.00066	.00172	-.05799	.00044	.00148	-.00198
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2648.6**	**49597.**	**5893.3**
Stddev	6.7	24.	14.6
%RSD	.25269	.04919	.24728
#1	2653.3	49614.	5883.0
#2	2643.9	49580.	5903.6

Sample Name: 280-97963-C-11-A Acquired: 6/13/2017 15:07:29 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00087**	**.01763**	**-.00057**	**.00232**	**.00076**	**-.00002**	**-.00116**	**.23326**	**.00050**
Stddev	.00011	.00053	.00303	.00048	.00018	.00011	.00121	.01279	.00017
%RSD	12.194	3.0338	529.99	20.722	23.907	490.26	104.45	5.4840	34.580
#1	.00095	.01801	.00157	.00266	.00063	-.00010	-.00030	.24230	.00038
#2	.00080	.01726	-.00271	.00198	.00089	.00006	-.00202	.22421	.00062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00006**	**-.00008**	**-.00207**	**.01378**	**.14765**	**.00153**	**.01069**	**.00028**	**.00019**
Stddev	.00009	.00043	.00067	.00007	.05320	.00346	.00041	.00000	.00087
%RSD	161.42	515.25	32.623	.51802	36.033	226.29	3.8322	1.5089	449.08
#1	.00001	-.00038	-.00159	.01373	.11003	-.00092	.01098	.00028	.00081
#2	-.00012	.00022	-.00254	.01383	.18527	.00398	.01040	.00028	-.00042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.34088**	**-.00021**	**.00356**	**-.00103**	**-.00055**	**.00304**	**-.00805**	**.52853**	**1.1311**
Stddev	.01239	.00053	.00266	.00036	.00330	.00119	.00331	.00112	.0024
%RSD	3.6350	256.39	74.545	35.097	604.19	38.958	41.071	.21114	.21114
#1	.33212	.00017	.00544	-.00129	-.00288	.00221	-.00571	.52932	1.1328
#2	.34964	-.00058	.00169	-.00078	.00179	.00388	-.01039	.52775	1.1294
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00236**	**.00074**	**.00537**	**-.00056**	**.00095**	**-.05459**	**.00074**	**.00031**	**-.00064**
Stddev	.00180	.00005	.00254	.00009	.00252	.00556	.00004	.00093	.00034
%RSD	76.000	7.0675	47.247	16.590	264.78	10.181	5.5307	301.47	52.890
#1	.00109	.00077	.00717	-.00063	-.00083	-.05852	.00071	-.00035	-.00088
#2	.00364	.00070	.00358	-.00050	.00274	-.05066	.00077	.00097	-.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2742.5**	**51957.**	**5937.4**
Stddev	6.2	84.	33.7
%RSD	.22585	.16102	.56838
#1	2738.1	51897.	5961.3
#2	2746.8	52016.	5913.5

Sample Name: 280-97989-D-1-A Acquired: 6/13/2017 15:10:07 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00147**	**.00329**	**.00485**	**.29924**	**.19886**	**-.00016**	**-.00192**	**88.484**	**.00072**
Stddev	.00066	.00019	.00377	.00842	.00042	.00002	.00412	.034	.00006
%RSD	45.130	5.8938	77.851	2.8137	.21277	12.146	214.41	.03896	8.7846
#1	.00194	.00343	.00752	.30519	.19856	-.00018	.00099	88.509	.00068
#2	.00100	.00315	.00218	.29329	.19916	-.00015	-.00484	88.460	.00077
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**.00023**	**-.00183**	**.97603**	**4.1936**	**.07174**	**26.149**	**.34782**	**.00573**
Stddev	.00016	.00016	.00009	.00828	.0102	.00182	.033	.00069	.00045
%RSD	305.00	67.114	4.9902	.84871	.24373	2.5338	.12525	.19962	7.8422
#1	.00016	.00012	-.00189	.98189	4.2008	.07046	26.172	.34831	.00605
#2	-.00006	.00035	-.00176	.97017	4.1864	.07303	26.126	.34733	.00542
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**34.889**	**-.00011**	**.02220**	**-.00156**	**16.033**	**.00019**	**-.00310**	**13.868**	**29.678**
Stddev	.409	.00011	.00149	.00014	.483	.00229	.00556	.011	.024
%RSD	1.1723	103.17	6.7143	9.1668	3.0134	1191.7	178.94	.08217	.08217
#1	35.178	-.00019	.02326	-.00146	16.374	.00182	.00082	13.860	29.661
#2	34.600	-.00003	.02115	-.00166	15.691	-.00143	-.00703	13.877	29.696
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00048**	**.67613**	**.00504**	**.00012**	**.00240**	**-.02506**	**-.00074**	**.00088**	**.00019**
Stddev	.00029	.00022	.00066	.00012	.00120	.02939	.00066	.00074	.00280
%RSD	60.118	.03293	13.098	98.075	49.745	117.28	89.029	84.563	1461.9
#1	-.00069	.67597	.00550	.00004	.00156	-.04584	-.00121	.00035	.00217
#2	-.00028	.67629	.00457	.00021	.00325	-.00428	-.00027	.00140	-.00179
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2629.3**	**49541.**	**5857.8**
Stddev	1.9	63.	7.5
%RSD	.07057	.12668	.12824
#1	2627.9	49585.	5852.5
#2	2630.6	49496.	5863.1

Sample Name: 280-97989-D-2-A Acquired: 6/13/2017 15:12:41 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00126**	**.00135**	**.00056**	**.11354**	**.08825**	**-.00012**	**-.00028**	**80.750**	**.00075**
Stddev	.00037	.00025	.01591	.00374	.00016	.00002	.00462	.013	.00029
%RSD	29.037	18.478	2817.8	3.2940	.18104	15.281	1623.6	.01667	38.783
#1	.00152	.00153	-.01068	.11619	.08813	-.00011	-.00355	80.760	.00096
#2	.00100	.00117	.01181	.11090	.08836	-.00014	.00298	80.741	.00055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00013**	**.00022**	**-.00283**	**.02674**	**5.4891**	**.09551**	**23.289**	**.11514**	**.00059**
Stddev	.00028	.00010	.00040	.00043	.0723	.00002	.061	.00038	.00014
%RSD	216.26	46.070	14.275	1.6033	1.3177	.01598	.26210	.32780	22.817
#1	.00007	.00015	-.00312	.02643	5.5403	.09550	23.332	.11541	.00069
#2	-.00033	.00030	-.00255	.02704	5.4380	.09552	23.246	.11488	.00050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.685**	**.00016**	**.01979**	**-.00293**	**13.181**	**.00076**	**-.01219**	**10.256**	**21.947**
Stddev	.002	.00040	.00391	.00052	.452	.00411	.00184	.016	.034
%RSD	.00711	251.79	19.781	17.874	3.4295	541.95	15.048	.15476	.15476
#1	22.687	.00045	.01702	-.00330	13.501	.00367	-.01349	10.244	21.923
#2	22.684	-.00013	.02256	-.00256	12.862	-.00215	-.01090	10.267	21.971
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00129**	**1.0936**	**.00489**	**-.00053**	**.00294**	**-.02884**	**.00017**	**.00061**	**.00008**
Stddev	.00086	.0022	.00007	.00042	.00048	.00876	.00015	.00013	.00215
%RSD	66.552	.20299	1.4809	80.532	16.199	30.390	85.695	21.441	2663.1
#1	-.00190	1.0920	.00494	-.00083	.00328	-.02264	.00007	.00051	-.00144
#2	-.00068	1.0952	.00484	-.00023	.00260	-.03504	.00028	.00070	.00160
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2677.1**	**50170.**	**5906.7**
Stddev	10.9	91.	39.5
%RSD	.40569	.18189	.66916
#1	2669.4	50106.	5878.7
#2	2684.8	50235.	5934.6

Sample Name: 280-97989-D-3-A Acquired: 6/13/2017 15:15:17 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00108**	**.00477**	**.00473**	**.18145**	**.12081**	**-.00023**	**.00093**	**66.425**	**.00076**
Stddev	.00015	.00004	.00186	.00457	.00109	.00017	.00091	.119	.00002
%RSD	14.060	.76435	39.224	2.5163	.90151	73.251	98.710	.17986	3.1176
#1	.00119	.00479	.00342	.18468	.12158	-.00035	.00157	66.510	.00078
#2	.00097	.00474	.00605	.17822	.12004	-.00011	.00028	66.341	.00074
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00024**	**.00151**	**-.00236**	**.10632**	**3.9448**	**.05221**	**17.821**	**.01907**	**.00224**
Stddev	.00015	.00006	.00053	.00114	.0058	.00250	.038	.00001	.00092
%RSD	65.565	4.2357	22.640	1.0728	.14610	4.7924	.21143	.03524	41.061
#1	-.00013	.00146	-.00198	.10551	3.9407	.05044	17.848	.01907	.00159
#2	-.00034	.00155	-.00273	.10712	3.9489	.05398	17.795	.01908	.00289
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.927**	**.00047**	**.03199**	**-.00190**	**6.1027**	**-.00234**	**-.01113**	**11.900**	**25.466**
Stddev	.187	.00004	.00089	.00205	.1567	.00321	.01116	.019	.041
%RSD	.78049	8.5721	2.7739	108.10	2.5674	137.06	100.27	.16029	.16029
#1	23.795	.00044	.03136	-.00045	6.2135	-.00461	-.01902	11.886	25.437
#2	24.059	.00050	.03262	-.00335	5.9919	-.00007	-.00324	11.913	25.495
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00190**	**.52921**	**.00302**	**-.00082**	**.00182**	**-.00193**	**.00031**	**-.00023**	**.00120**
Stddev	.00040	.00178	.00121	.00036	.00510	.00018	.00027	.00001	.00072
%RSD	21.135	.33675	40.042	43.381	280.48	9.2394	89.278	4.2372	59.995
#1	-.00162	.53047	.00217	-.00107	.00543	-.00205	.00011	-.00023	.00171
#2	-.00218	.52795	.00388	-.00057	-.00179	-.00180	.00050	-.00022	.00069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2689.5**	**50453.**	**6002.1**
Stddev	3.6	53.	17.0
%RSD	.13455	.10520	.28310
#1	2687.0	50491.	5990.1
#2	2692.1	50416.	6014.1

Sample Name: CCVH-4579429 Acquired: 6/13/2017 15:17:52 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00037**	**47.003**	**-.01042**	**.00237**	**.00087**	**.00002**	W **.93624**	**.05620**	**.00068**	**-.00098**	**-.00005**	**.00795**
Stddev	.00059	.055	.00401	.00100	.00026	.00003	.03115	.00166	.00034	.00012	.00059	.00027
%RSD	158.62	.11695	38.456	42.226	30.091	169.24	3.3273	2.9543	50.287	11.868	1316.3	3.4135
#1	-.00005	46.964	-.00759	.00166	.00105	-.00000	.95827	.05503	.00044	-.00090	.00038	.00776
#2	.00079	47.042	-.01326	.00307	.00068	.00004	.91421	.05738	.00093	-.00107	-.00047	.00814
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							-5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.392**	**.29572**	**.00555**	**.03880**	**-.00212**	**-.00137**	**243.42**	**.00090**	**.00615**	**-.00084**	**5.1075**	**.00367**
Stddev	.340	.02906	.00085	.00416	.00005	.00000	1.08	.00030	.00457	.00041	.1754	.00447
%RSD	.68833	9.8272	15.388	10.735	2.2188	.15943	.44489	32.685	74.331	49.310	3.4352	121.73
#1	49.152	.31627	.00495	.04174	-.00208	-.00137	242.65	.00070	.00939	-.00055	5.2315	.00684
#2	49.633	.27517	.00616	.03585	-.00215	-.00137	244.18	.00111	.00292	-.00113	4.9834	.00051
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00816**	**-.00199**	**-.00425**	**.00007**	**.00057**	W **4.5998**	**.01902**	**-.00057**	W **9.2231**	**.01195**	**.00065**	**.07790**
Stddev	.01121	.01593	.03409	.00145	.00001	.0083	.00002	.00726	.0653	.00012	.00015	.00036
%RSD	137.34	802.26	802.26	2158.8	1.5719	.18058	.12868	1281.7	.70837	.98340	22.986	.46644
#1	-.01609	.00928	.01985	-.00095	.00057	4.6057	.01900	.00456	9.1769	.01203	.00054	.07764
#2	-.00024	-.01325	-.02835	.00109	.00058	4.5939	.01903	-.00570	9.2693	.01187	.00075	.07816
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2641.5**	**49377.**	**5864.9**
Stddev	6.3	97.	3.9
%RSD	.23834	.19627	.06602
#1	2637.1	49308.	5867.6
#2	2646.0	49446.	5862.1

Sample Name: CCV-4580817 Acquired: 6/13/2017 15:20:26 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49086**	**.50313**	**.93285**	**.50052**	**.51219**	**.47009**	**.00001**	**5.1493**	**.49853**	**.50166**	**.50849**	**.50092**	**2.3980**
Stddev	.00161	.00995	.00872	.00532	.00127	.00041	.00194	.0078	.00820	.00743	.00734	.00150	.0076
%RSD	.32741	1.9786	.93437	1.0624	.24795	.08666	16526.	.15097	1.6444	1.4805	1.4441	.30002	.31919
#1	.49200	.51017	.93902	.50428	.51309	.47038	-.00136	5.1548	.50432	.50691	.51368	.50199	2.4034
#2	.48973	.49609	.92669	.49676	.51129	.46980	.00138	5.1438	.49273	.49641	.50330	.49986	2.3926
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.356**	**.96418**	**19.808**	**.47448**	**.50981**	**5.0801**	**.50059**	**.98983**	**1.0233**	**-.00429**	**.96796**	**.94159**	**4.8149**
Stddev	.001	.00079	.027	.00012	.00865	.0188	.00860	.01472	.0112	.00522	.01514	.00836	.0468
%RSD	.00259	.08143	.13617	.02567	1.6959	.36947	1.7171	1.4875	1.0953	121.66	1.5639	.88812	.97247
#1	50.357	.96473	19.827	.47439	.51592	5.0934	.50666	1.0002	1.0312	-.00060	.97866	.94750	4.7818
#2	50.355	.96362	19.789	.47456	.50370	5.0668	.49451	.97942	1.0154	-.00798	.95725	.93568	4.8481
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.304**	**1.0306**	**.46405**	**.01390**	**.45977**	**.93170**	**-.03557**	**.48656**	**.47495**	**.50503**
Stddev	.100	.0180	.00008	.00099	.00029	.00856	.00572	.00131	.00123	.00089
%RSD	.97247	1.7438	.01633	7.1404	.06348	.91910	16.069	.26912	.25836	.17685
#1	10.233	1.0434	.46410	.01460	.45998	.93775	-.03962	.48748	.47582	.50566
#2	10.375	1.0179	.46399	.01319	.45957	.92564	-.03153	.48563	.47408	.50440
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2630.8**	**49415.**	**5874.0**
Stddev	12.2	112.	31.6
%RSD	.46193	.22681	.53784
#1	2639.4	49495.	5896.3
#2	2622.2	49336.	5851.7

Sample Name: CCB Acquired: 6/13/2017 15:22:54 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00083**	**.00189**	**-.00095**	**.00093**	**.00085**	**.00001**	**-.00136**	**.00831**	**.00039**	**.00021**	**.00028**	**-.00340**	**-.00060**
Stddev	.00036	.00006	.00089	.00023	.00011	.00017	.00023	.00485	.00004	.00001	.00018	.00019	.00279
%RSD	43.211	3.4373	93.544	24.621	12.871	1136.3	16.760	58.401	10.742	3.9725	62.819	5.4715	464.30
#1	.00108	.00184	-.00157	.00077	.00093	.00013	-.00120	.00488	.00042	.00020	.00016	-.00353	-.00257
#2	.00058	.00194	-.00032	.00109	.00077	-.00010	-.00152	.01174	.00036	.00022	.00041	-.00327	.00137
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.24183**	**.00486**	**.00156**	**.00010**	**.00031**	**.00080**	**-.00034**	**.00100**	**-.00256**	**-.00132**	**-.00105**	**-.00327**	**.02478**
Stddev	.03839	.00025	.00177	.00010	.00015	.01030	.00062	.00376	.00065	.00073	.00310	.00622	.00430
%RSD	15.875	5.0899	112.99	106.26	48.349	1285.4	183.06	375.79	25.193	55.425	294.47	190.09	17.355
#1	.26898	.00503	.00031	.00017	.00021	-.00648	-.00077	.00366	-.00211	-.00081	-.00325	-.00767	.02174
#2	.21468	.00468	.00281	.00002	.00042	.00808	.00010	-.00166	-.00302	-.00184	.00114	.00113	.02782
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05302**	**.00058**	**.00022**	**.00578**	**-.00019**	**.00280**	**-.01230**	**.00019**	**.00004**	**.00068**
Stddev	.00920	.00036	.00001	.00064	.00005	.00055	.00861	.00001	.00029	.00042
%RSD	17.355	63.089	6.0079	11.011	24.009	19.796	70.015	6.8427	718.46	61.711
#1	.04652	.00032	.00023	.00533	-.00022	.00241	-.00621	.00020	.00025	.00098
#2	.05953	.00083	.00021	.00623	-.00016	.00320	-.01839	.00018	-.00016	.00038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2661.4**	**50308.**	**5708.4**
Stddev	2.0	203.	24.7
%RSD	.07498	.40324	.43249
#1	2662.8	50452.	5725.9
#2	2660.0	50165.	5691.0

Sample Name: CCVL-4590576 Acquired: 6/13/2017 15:25:32 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01073**	**.10649**	**.01528**	**.09977**	**.01115**	**.00085**	**.10629**	**.21759**	**.00532**	**.01004**	**.01023**	**.01251**
Stddev	.00058	.00399	.00390	.00106	.00001	.00002	.00066	.00271	.00048	.00057	.00033	.00004
%RSD	5.3737	3.7431	25.553	1.0608	.04708	2.0096	.61976	1.2440	8.9750	5.6349	3.2680	.30878
#1	.01113	.10931	.01252	.10052	.01115	.00087	.10675	.21568	.00565	.01044	.01047	.01248
#2	.01032	.10367	.01804	.09903	.01114	.00084	.10582	.21951	.00498	.00964	.00999	.01253
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09765**	**3.3851**	**.02475**	**.20648**	**.00999**	**.01911**	**1.0023**	**.04035**	**2.8708**	**.00745**	**.09708**	**.02090**
Stddev	.00230	.0698	.00165	.00394	.00009	.00169	.0158	.00052	.0814	.00204	.01531	.00330
%RSD	2.3582	2.0614	6.6800	1.9100	.90399	8.8663	1.5730	1.2928	2.8350	27.412	15.769	15.769
#1	.09928	3.4345	.02358	.20927	.00992	.02031	1.0134	.04072	2.9283	.00600	.10790	.02323
#2	.09602	3.3358	.02592	.20370	.01005	.01791	.99112	.03998	2.8132	.00889	.08625	.01857
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01672**	**.49311**	**1.0553**	**.10302**	**.00952**	F **.02062**	**.00840**	**.01534**	F **.02234**	**.00992**	**.02024**	**.01624**
Stddev	.00276	.02129	.0456	.00536	.00007	.00196	.00019	.00087	.01110	.00020	.00062	.00029
%RSD	16.532	4.3177	4.3177	5.2003	.71666	9.4881	2.2317	5.6508	49.681	2.0309	3.0755	1.7679
#1	.01868	.47805	1.0230	.10681	.00948	.02200	.00827	.01472	.03019	.01006	.01980	.01644
#2	.01477	.50816	1.0875	.09923	.00957	.01924	.00853	.01595	.01450	.00978	.02068	.01604
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value						.01500			.06000			
Range						30.000%			-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2691.1**	**50760.**	**5739.4**
Stddev	1.4	112.	26.5
%RSD	.05375	.21994	.46218
#1	2690.1	50681.	5758.1
#2	2692.2	50839.	5720.6

Sample Name: 280-97989-D-4-A Acquired: 6/13/2017 15:28:09 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00170**	**.00561**	**-.00486**	**.12426**	**.07087**	**-.00010**	**.00058**	**79.134**	**.00092**
Stddev	.00031	.00193	.00408	.00372	.00028	.00008	.00189	.224	.00023
%RSD	18.408	34.400	83.984	2.9947	.39875	81.027	326.14	.28299	24.821
#1	.00148	.00697	-.00774	.12689	.07067	-.00015	.00192	78.976	.00076
#2	.00193	.00424	-.00197	.12162	.07107	-.00004	-.00076	79.293	.00108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00007**	**.00003**	**-.00042**	**.15897**	**4.3822**	**.04739**	**22.686**	**.08774**	**.00120**
Stddev	.00003	.00004	.00145	.00042	.0694	.00333	.506	.00039	.00007
%RSD	50.144	122.38	341.64	.26705	1.5838	7.0304	2.2302	.44015	5.5998
#1	.00004	.00006	-.00145	.15927	4.3331	.04503	23.043	.08746	.00115
#2	.00009	.00000	.00060	.15867	4.4313	.04974	22.328	.08801	.00124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.293**	**.00021**	**.01850**	**-.00229**	**12.598**	**.00101**	**-.00318**	**10.333**	**22.112**
Stddev	.148	.00058	.00084	.00008	.444	.00259	.00417	.050	.108
%RSD	.66614	277.21	4.5633	3.2967	3.5251	255.04	131.16	.48802	.48802
#1	22.398	-.00020	.01910	-.00234	12.912	-.00081	-.00613	10.297	22.035
#2	22.188	.00062	.01790	-.00223	12.284	.00284	-.00023	10.368	22.188
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00011**	**.63780**	**.01205**	**.00044**	**.00076**	**-.00035**	**.00073**	**.00105**	**-.00060**
Stddev	.00011	.00077	.01149	.00123	.00014	.00763	.00154	.00124	.00030
%RSD	102.22	.12141	95.291	277.70	18.381	2164.9	211.65	118.45	50.380
#1	-.00019	.63725	.00393	-.00043	.00086	.00504	-.00036	.00017	-.00039
#2	-.00003	.63835	.02017	.00132	.00066	-.00575	.00182	.00192	-.00082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2685.2**	**50104.**	**5730.2**
Stddev	1.8	1054.	12.7
%RSD	.06621	2.1026	.22174
#1	2686.5	49359.	5721.2
#2	2684.0	50849.	5739.1

Sample Name: 280-97989-D-5-A Acquired: 6/13/2017 15:30:44 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00072**	**.00344**	**.00001**	**.12816**	**.09341**	**-.00016**	**-.00080**	**85.173**	**.00082**
Stddev	.00016	.00080	.00822	.00274	.00024	.00006	.00121	.341	.00023
%RSD	22.281	23.194	61178.	2.1355	.25913	39.827	150.91	.40051	27.635
#1	.00061	.00400	-.00580	.13010	.09324	-.00012	.00005	84.932	.00098
#2	.00084	.00287	.00582	.12623	.09358	-.00021	-.00166	85.414	.00066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00049**	**.00157**	**-.00221**	**.04218**	**4.4675**	**.05212**	**25.521**	**.00296**	**.00077**
Stddev	.00002	.00085	.00012	.00355	.0019	.00040	.055	.00002	.00063
%RSD	3.3604	54.021	5.5175	8.4096	.04218	.76872	.21581	.54821	80.945
#1	-.00050	.00217	-.00230	.03967	4.4688	.05183	25.560	.00297	.00122
#2	-.00048	.00097	-.00213	.04468	4.4662	.05240	25.482	.00295	.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.849**	**.00082**	**.02043**	**-.00154**	**13.680**	**-.00296**	**-.00261**	**11.139**	**23.838**
Stddev	.382	.00091	.00071	.00029	.480	.00284	.00033	.025	.054
%RSD	1.6732	111.45	3.4779	18.857	3.5081	96.153	12.484	.22515	.22515
#1	23.119	.00146	.01993	-.00134	14.019	-.00095	-.00238	11.122	23.800
#2	22.579	.00017	.02093	-.00175	13.341	-.00497	-.00284	11.157	23.876
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00084**	**.69512**	**.00653**	**-.00058**	**.00833**	**-.06363**	**.00064**	**.00123**	**.00024**
Stddev	.00051	.00247	.00096	.00034	.00213	.06541	.00075	.00099	.00142
%RSD	59.986	.35476	14.724	58.684	25.613	102.81	116.60	80.603	584.47
#1	-.00049	.69337	.00721	-.00082	.00682	-.10988	.00011	.00194	-.00076
#2	-.00120	.69686	.00585	-.00034	.00984	-.01737	.00117	.00053	.00125
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2653.8**	**50220.**	**5976.9**
Stddev	.7	196.	57.2
%RSD	.02467	.38980	.95761
#1	2654.3	50082.	6017.4
#2	2653.3	50358.	5936.5

Sample Name: 280-97989-D-6-A Acquired: 6/13/2017 15:33:20 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00112**	**.00278**	**-.00473**	**.12910**	**.07418**	**-.00022**	**-.00279**	**82.074**	**.00073**
Stddev	.00008	.00041	.00447	.00409	.00005	.00001	.00327	.161	.00031
%RSD	7.4003	14.778	94.570	3.1655	.06117	5.7248	117.19	.19598	41.960
#1	.00118	.00307	-.00789	.13199	.07421	-.00021	-.00511	81.960	.00095
#2	.00106	.00249	-.00157	.12621	.07415	-.00023	-.00048	82.187	.00051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00011**	**.00059**	**-.00219**	**.15577**	**4.6664**	**.05059**	**23.650**	**.09067**	**.00130**
Stddev	.00006	.00036	.00017	.00523	.0228	.00213	.032	.00025	.00001
%RSD	55.002	60.673	7.5462	3.3585	.48930	4.2106	.13648	.27577	1.0180
#1	.00007	.00034	-.00231	.15947	4.6502	.05209	23.673	.09085	.00129
#2	.00016	.00084	-.00207	.15207	4.6825	.04908	23.627	.09049	.00131
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.257**	**.00087**	**.02672**	**-.00356**	**13.045**	**.00097**	**-.00634**	**10.701**	**22.900**
Stddev	.260	.00022	.00291	.00188	.471	.00198	.00157	.024	.052
%RSD	1.1180	25.744	10.904	52.842	3.6124	203.79	24.799	.22652	.22652
#1	23.074	.00103	.02466	-.00490	13.378	.00238	-.00523	10.718	22.937
#2	23.441	.00071	.02878	-.00223	12.712	-.00043	-.00745	10.684	22.864
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00066**	**.65825**	**.00459**	**-.00051**	**.00110**	**-.05177**	**-.00031**	**-.00042**	**-.00061**
Stddev	.00030	.00198	.00122	.00026	.00218	.00314	.00038	.00020	.00233
%RSD	46.187	.30022	26.522	51.299	197.77	6.0719	122.80	46.997	383.94
#1	.00044	.65685	.00373	-.00069	.00264	-.05400	-.00004	-.00057	-.00225
#2	.00087	.65965	.00545	-.00032	-.00044	-.04955	-.00058	-.00028	.00104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2638.8**	**49748.**	**5855.7**
Stddev	4.2	50.	26.2
%RSD	.16020	.10040	.44793
#1	2641.8	49712.	5874.2
#2	2635.8	49783.	5837.1

Sample Name: 280-98040-C-1-A Acquired: 6/13/2017 15:35:55 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00064**	**1.2655**	**-.00802**	**2.7207**	**.06582**	**.00054**	**-.00000**	**451.01**	**.00162**
Stddev	.00052	.0650	.01001	.1337	.00008	.00006	.00249	7.26	.00031
%RSD	81.698	5.1382	124.90	4.9142	.12765	11.845	195480.	1.6097	19.192
#1	.00027	1.3115	-.01510	2.8152	.06576	.00049	.00176	445.87	.00184
#2	.00101	1.2195	-.00094	2.6261	.06588	.00058	-.00176	456.14	.00140
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00012**	**.02173**	**.07062**	**31.730**	**34.113**	**.20684**	**282.72**	**4.2872**	**.00584**
Stddev	.00001	.00088	.00090	.010	.058	.00363	1.81	.0245	.00032
%RSD	4.1567	4.0599	1.2768	.03067	.16946	1.7538	.63970	.57115	5.4822
#1	.00012	.02235	.07125	31.737	34.072	.20427	284.00	4.3045	.00562
#2	.00012	.02111	.06998	31.723	34.154	.20940	281.44	4.2699	.00607
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **911.54**	**.07708**	**.16238**	**.00054**	F **874.76**	**-.00128**	**-.00479**	**20.319**	**43.483**
Stddev	1.03	.00420	.00573	.00196	42.79	.00675	.00300	.017	.037
%RSD	.11286	5.4449	3.5311	359.30	4.8915	527.51	62.598	.08606	.08606
#1	912.27	.08005	.16643	-.00084	905.02	.00349	-.00267	20.307	43.457
#2	910.81	.07411	.15832	.00193	844.50	-.00605	-.00691	20.332	43.510
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01572**	**7.3508**	**.00374**	**.03013**	**.00422**	**-.03446**	**.00715**	**.46544**	**.00404**
Stddev	.00125	.0171	.00209	.00094	.00369	.03303	.00048	.00500	.00188
%RSD	7.9314	.23293	55.805	3.1083	87.289	95.850	6.6592	1.0753	46.476
#1	.01660	7.3387	.00227	.03079	.00683	-.01110	.00749	.46898	.00537
#2	.01484	7.3629	.00522	.02946	.00162	-.05781	.00681	.46190	.00271
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2380.1**	**44296.**	**5661.5**
Stddev	1.5	177.	24.1
%RSD	.06453	.39954	.42542
#1	2381.1	44171.	5678.5
#2	2379.0	44421.	5644.4

Sample Name: 280-98040-C-1-A SD@5 Acquired: 6/13/2017 15:38:44 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00059**	**.34953**	**.00064**	**.59477**	**.01442**	**-.00003**	**-.00072**	**94.122**	**.00092**
Stddev	.00004	.01309	.00834	.01862	.00034	.00001	.00575	.119	.00004
%RSD	6.6864	3.7462	1305.5	3.1302	2.3790	34.517	796.71	.12648	4.2833
#1	.00061	.35879	.00654	.60794	.01418	-.00002	-.00479	94.206	.00089
#2	.00056	.34027	-.00526	.58161	.01467	-.00004	.00334	94.038	.00095
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**.00446**	**.01257**	**6.5937**	**6.9811**	**.04631**	**57.146**	**.88106**	**.00044**
Stddev	.00007	.00049	.00066	.0289	.0177	.00054	.140	.00219	.00055
%RSD	1308.5	10.969	5.2234	.43849	.25382	1.1630	.24582	.24907	124.11
#1	.00004	.00481	.01210	6.6141	6.9686	.04669	57.245	.88261	.00005
#2	-.00005	.00411	.01303	6.5732	6.9937	.04593	57.047	.87951	.00083
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**184.19**	**.01692**	**.03604**	**-.00303**	W **181.49**	**-.00098**	**-.00643**	**4.3078**	**9.2187**
Stddev	.15	.00094	.00244	.00114	5.61	.00557	.00202	.0293	.0626
%RSD	.08137	5.5670	6.7786	37.634	3.0922	567.34	31.380	.67895	.67895
#1	184.09	.01759	.03777	-.00223	185.45	.00296	-.00786	4.3285	9.2630
#2	184.30	.01625	.03431	-.00384	177.52	-.00492	-.00500	4.2871	9.1744
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					180.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00320**	**1.4995**	**.00396**	**.00930**	**.00362**	**-.03496**	**.00036**	**.09846**	**.00183**
Stddev	.00166	.0029	.00290	.00048	.00277	.01534	.00020	.00125	.00057
%RSD	51.919	.19323	73.335	5.1164	76.652	43.873	56.956	1.2664	31.009
#1	.00437	1.5016	.00191	.00896	.00558	-.02412	.00050	.09758	.00143
#2	.00202	1.4975	.00602	.00964	.00166	-.04581	.00021	.09934	.00223
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2573.3**	**48161.**	**5721.4**
Stddev	15.0	211.	7.3
%RSD	.58098	.43778	.12836
#1	2562.7	48012.	5726.6
#2	2583.9	48310.	5716.2

Sample Name: 280-98040-C-1-B MS Acquired: 6/13/2017 15:41:18 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05445**	**3.9369**	**.98843**	**3.7077**	**2.1205**	**.04693**	**1.8477**	W **506.35**	**.09970**
Stddev	.00066	.0035	.04630	.1540	.0085	.00015	.0898	1.96	.00423
%RSD	1.2176	.08969	4.6838	4.1550	.39905	.32756	4.8618	.38743	4.2441
#1	.05492	3.9394	1.0212	3.8166	2.1264	.04704	1.9113	504.97	.10269
#2	.05398	3.9344	.95569	3.5987	2.1145	.04682	1.7842	507.74	.09671
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.43835**	**.20609**	**.32529**	**33.308**	**85.974**	**1.1829**	**333.61**	**4.7778**	**.93352**
Stddev	.01919	.01180	.00461	.109	.045	.0018	2.73	.0359	.04354
%RSD	4.3778	5.7253	1.4171	.32769	.05195	.15500	.81879	.75194	4.6645
#1	.45192	.21444	.32855	33.385	86.005	1.1842	335.54	4.8032	.96431
#2	.42478	.19775	.32203	33.231	85.942	1.1817	331.68	4.7524	.90273
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **980.48**	**.51289**	**10.630**	**.43590**	F **895.11**	**.48850**	**1.9533**	**30.785**	**65.880**
Stddev	2.65	.02320	.474	.02165	37.72	.02328	.0981	.006	.014
%RSD	.27061	4.5228	4.4621	4.9670	4.2141	4.7654	5.0202	.02069	.02069
#1	982.36	.52929	10.965	.45121	921.78	.50496	2.0226	30.789	65.889
#2	978.61	.49649	10.295	.42059	868.44	.47204	1.8839	30.780	65.870
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8579**	**8.4293**	**.93704**	**.94788**	**1.4766**	**1.8295**	**.49440**	**.91550**	**.51436**
Stddev	.0764	.0069	.00765	.00625	.0723	.0088	.00488	.00732	.00363
%RSD	4.1117	.08242	.81617	.65911	4.8948	.48015	.98773	.79930	.70490
#1	1.9119	8.4244	.94245	.95230	1.5277	1.8233	.49785	.92067	.51692
#2	1.8039	8.4342	.93163	.94347	1.4255	1.8358	.49094	.91032	.51180
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2354.9**	**43523.**	**5606.7**
Stddev	12.6	93.	44.6
%RSD	.53536	.21397	.79523
#1	2346.0	43457.	5638.3
#2	2363.8	43588.	5575.2

Sample Name: 280-98040-C-1-C MSD Acquired: 6/13/2017 15:47:21 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05573**	**4.0336**	**1.0588**	**3.7895**	**2.1777**	**.04788**	**1.9822**	**489.71**	**.10633**
Stddev	.00080	.0147	.0189	.0695	.0033	.00004	.0360	.51	.00201
%RSD	1.4368	.36321	1.7892	1.8338	.15293	.09336	1.8185	.10514	1.8922
#1	.05629	4.0440	1.0722	3.8387	2.1801	.04791	2.0077	489.35	.10775
#2	.05516	4.0233	1.0454	3.7404	2.1754	.04785	1.9567	490.08	.10491
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.46505**	**.21813**	**.32960**	**32.038**	**86.104**	**1.2011**	**320.77**	**4.6194**	**.99185**
Stddev	.00915	.00555	.00061	.088	.120	.0005	1.52	.0022	.02068
%RSD	1.9682	2.5422	.18437	.27419	.13935	.04148	.47346	.04698	2.0848
#1	.47152	.22206	.32917	32.100	86.189	1.2014	321.84	4.6178	1.0065
#2	.45858	.21421	.33003	31.976	86.020	1.2007	319.69	4.6209	.97722
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **947.07**	**.54138**	**11.322**	**.46413**	F **901.90**	**.52129**	**2.1012**	**30.187**	**64.600**
Stddev	1.47	.01050	.245	.01111	16.23	.01552	.0533	.019	.040
%RSD	.15572	1.9391	2.1662	2.3944	1.7999	2.9764	2.5371	.06242	.06242
#1	948.11	.54881	11.495	.47199	913.38	.53226	2.1389	30.173	64.571
#2	946.03	.53396	11.149	.45627	890.42	.51032	2.0635	30.200	64.628
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9625**	**8.2030**	**.96099**	**.96607**	**1.5605**	**1.8572**	**.50234**	**.89565**	**.53281**
Stddev	.0372	.0754	.00174	.00041	.0294	.0536	.00046	.00111	.00057
%RSD	1.8948	.91953	.18058	.04205	1.8820	2.8872	.09252	.12353	.10637
#1	1.9888	8.2563	.95976	.96578	1.5812	1.8193	.50267	.89644	.53241
#2	1.9362	8.1496	.96222	.96636	1.5397	1.8952	.50201	.89487	.53321
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2435.3**	**45804.**	**5972.3**
Stddev	11.9	121.	31.3
%RSD	.48779	.26509	.52352
#1	2426.9	45890.	5950.2
#2	2443.7	45718.	5994.4

Sample Name: 280-98041-K-1-A Acquired: 6/13/2017 15:50:05 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376620 6010B (Al As Na)

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00100**	**.03326**	**.09910**	W **24.768**	**1.6734**	**-.00011**	**-.00115**	**197.29**	**.00148**
Stddev	.00061	.00037	.01057	.266	.0086	.00010	.00360	.95	.00033
%RSD	60.688	1.1094	10.668	1.0726	.51353	91.731	313.44	.48307	22.333
#1	.00144	.03352	.09162	24.956	1.6795	-.00018	-.00370	197.97	.00172
#2	.00057	.03300	.10657	24.580	1.6673	-.00004	.00140	196.62	.00125
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.20000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01428**	**.03236**	**.00154**	**13.509**	W **141.35**	**.00679**	**142.93**	**2.6681**	**.00120**
Stddev	.00054	.00066	.00051	.097	.85	.00013	.60	.0076	.00130
%RSD	3.7742	2.0321	33.181	.71737	.60194	1.9353	.41817	.28439	107.79
#1	.01466	.03282	.00190	13.577	141.95	.00688	142.51	2.6627	.00212
#2	.01390	.03189	.00118	13.440	140.75	.00669	143.35	2.6734	.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **847.00**	**.06876**	**2.5224**	**-.00410**	**12.519**	**.00000**	**-.01128**	**22.221**	**47.553**
Stddev	5.56	.00103	.0376	.00191	.115	.00042	.00484	.128	.273
%RSD	.65696	1.4999	1.4891	46.484	.92098	62214.	42.888	.57379	.57379
#1	850.94	.06948	2.5489	-.00545	12.601	.00030	-.01470	22.311	47.746
#2	843.07	.06803	2.4958	-.00275	12.438	-.00029	-.00786	22.131	47.361
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00157**	**2.0464**	**.00306**	**.04117**	**.00502**	**-.03887**	**.04771**	**.00239**	**.00948**
Stddev	.00069	.0146	.00120	.00010	.00573	.03940	.00113	.00038	.00060
%RSD	43.776	.71455	39.228	.24929	114.03	101.35	2.3679	16.039	6.3674
#1	.00108	2.0568	.00391	.04109	.00907	-.01101	.04691	.00266	.00906
#2	.00205	2.0361	.00221	.04124	.00097	-.06673	.04851	.00212	.00991
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2505.5**	**46777.**	**6183.5**
Stddev	8.9	65.	70.1
%RSD	.35375	.13951	1.1332
#1	2511.8	46823.	6134.0
#2	2499.3	46731.	6233.1

Sample Name: CCVH-4579429 Acquired: 6/13/2017 15:52:43 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00038**	**46.272**	**-.01160**	**.05454**	**.00147**	**.00015**	**.96296**	**.16368**	**.00088**	**-.00102**	**-.00011**	**.00875**
Stddev	.00088	.067	.00080	.00359	.00027	.00006	.00814	.00772	.00025	.00042	.00018	.00157
%RSD	233.62	.14440	6.9058	6.5734	18.446	41.579	.84536	4.7143	28.170	41.353	162.05	17.908
#1	.00100	46.225	-.01103	.05708	.00166	.00011	.96871	.16913	.00070	-.00132	.00002	.00764
#2	-.00025	46.319	-.01216	.05201	.00128	.00019	.95720	.15822	.00105	-.00072	-.00024	.00985
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.734**	**.56284**	**.00461**	**.13364**	**.00002**	**-.00174**	**240.79**	**.00102**	**.01132**	**-.00178**	W **5.4096**	**.00465**
Stddev	.412	.04545	.00012	.00944	.00013	.00017	.50	.00005	.00006	.00002	.0668	.00154
%RSD	.84517	8.0756	2.5484	7.0613	583.36	9.7144	.20591	4.7835	.51239	1.2464	1.2353	33.108
#1	49.026	.59499	.00453	.14031	.00011	-.00162	241.14	.00105	.01128	-.00180	5.4568	.00356
#2	48.443	.53070	.00470	.12696	-.00007	-.00186	240.44	.00099	.01137	-.00177	5.3623	.00574
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Warn	None
Value											5.0000	
Range											5.0000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00198**	**.12576**	**.26912**	**.00063**	**.00269**	W **4.6076**	**.01872**	**.00244**	W **9.3063**	**.01253**	**.00081**	**.07490**
Stddev	.00201	.01981	.04239	.00091	.00001	.0332	.00012	.00313	.0561	.00070	.00030	.00323
%RSD	101.82	15.752	15.752	144.82	.26388	.72092	.62014	128.24	.60295	5.5627	37.762	4.3102
#1	-.00055	.13977	.29910	-.00002	.00269	4.5841	.01880	.00023	9.2666	.01302	.00059	.07718
#2	-.00340	.11175	.23915	.00127	.00268	4.6311	.01864	.00465	9.3459	.01204	.00102	.07261
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2675.2**	**50538.**	**6170.8**
Stddev	8.6	1009.	3.3
%RSD	.32082	1.9973	.05312
#1	2681.3	51252.	6173.1
#2	2669.2	49824.	6168.5

Sample Name: CCV-4580817 Acquired: 6/13/2017 15:55:17 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47605**	**.49788**	**.91940**	**.52500**	**.49378**	**.45556**	**-.00129**	**5.0332**	**.48968**	**.49171**	**.49792**	**.48486**
Stddev	.00151	.00336	.01004	.00391	.00104	.00178	.00012	.0001	.00382	.00454	.00373	.00153
%RSD	.31735	.67476	1.0917	.74490	.21047	.38984	9.5290	.00195	.77959	.92372	.74902	.31463
#1	.47498	.50025	.92649	.52777	.49305	.45431	-.00138	5.0331	.49238	.49492	.50056	.48594
#2	.47711	.49550	.91230	.52224	.49452	.45682	-.00121	5.0333	.48698	.48850	.49528	.48378
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.3441**	**48.763**	**.93484**	**19.242**	**.46185**	**.49721**	**5.2218**	**.49166**	**.97748**	**1.0056**	**.17921**	**.96042**
Stddev	.0109	.102	.00129	.032	.00114	.00347	.0467	.00275	.00642	.0053	.01372	.00434
%RSD	.46294	.20940	.13797	.16874	.24634	.69889	.89479	.55832	.65730	.52935	7.6542	.45184
#1	2.3364	48.691	.93575	19.265	.46266	.49967	5.2548	.49360	.98202	1.0093	.18891	.96349
#2	2.3518	48.835	.93392	19.219	.46105	.49475	5.1888	.48972	.97294	1.0018	.16951	.95735
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.93694**	**4.7328**	**10.128**	**1.0081**	**.45238**	**.01322**	F **.44652**	**.92202**	**-.02022**	**.47192**	**.45691**	**.48822**
Stddev	.00599	.0639	.137	.0071	.00185	.00314	.00024	.00331	.00451	.00144	.00354	.00547
%RSD	.63917	1.3502	1.3502	.70529	.40795	23.792	.05351	.35847	22.279	.30497	.77537	1.1196
#1	.94117	4.6876	10.032	1.0131	.45108	.01544	.44669	.91968	-.01704	.47294	.45941	.48436
#2	.93270	4.7780	10.225	1.0031	.45369	.01099	.44635	.92436	-.02341	.47090	.45440	.49209
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value							.50000					
Range							-10.490%					

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2717.8**	**50917.**	**5931.1**
Stddev	2.2	83.	9.4
%RSD	.07941	.16308	.15911
#1	2716.3	50858.	5937.8
#2	2719.3	50976.	5924.4

Sample Name: CCB Acquired: 6/13/2017 15:57:45 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00141**	**.00060**	**-.00593**	W **.02336**	**.00106**	**.00005**	**.00027**	**.04390**	**.00041**	**-.00020**	**.00022**	**-.00288**
Stddev	.00006	.00116	.00600	.00149	.00030	.00009	.00389	.00023	.00016	.00065	.00008	.00037
%RSD	4.3779	192.31	101.17	6.3632	28.196	191.89	1419.6	.52489	38.360	317.05	36.666	12.993
#1	.00145	.00142	-.00169	.02441	.00127	.00012	.00303	.04406	.00053	.00025	.00027	-.00314
#2	.00137	-.00022	-.01017	.02231	.00085	-.00002	-.00248	.04374	.00030	-.00066	.00016	-.00261
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01500								
Low Limit				-.01500								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00431**	**.26014**	**.00453**	**.03423**	**.00058**	**.00047**	**.20709**	**-.00064**	**.00306**	**-.00394**	F **.12408**	**.00203**
Stddev	.00400	.01659	.00086	.00553	.00006	.00020	.00921	.00016	.00443	.00350	.00739	.00282
%RSD	92.655	6.3788	19.033	16.161	10.095	42.791	4.4498	25.163	144.78	88.867	5.9569	139.07
#1	.00714	.24841	.00514	.03814	.00062	.00033	.20057	-.00075	-.00007	-.00642	.12930	.00003
#2	.00149	.27187	.00392	.03032	.00054	.00061	.21360	-.00053	.00620	-.00146	.11885	.00402
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit											.10000	
Low Limit											-.20000	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00475**	**.01911**	**.04089**	**-.00060**	**.00104**	**.00576**	**-.00021**	**.00262**	**-.04536**	**.00073**	**-.00086**	**-.00002**
Stddev	.00504	.00160	.00342	.00210	.00008	.00110	.00026	.00036	.00432	.00098	.00030	.00041
%RSD	106.16	8.3726	8.3726	350.53	7.4996	19.089	125.69	13.670	9.5262	135.02	34.759	1672.0
#1	-.00831	.02024	.04331	.00089	.00099	.00654	-.00002	.00287	-.04230	.00142	-.00108	-.00032
#2	-.00118	.01798	.03847	-.00209	.00110	.00499	-.00039	.00236	-.04841	.00003	-.00065	.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2753.2**	**52029.**	**5940.8**
Stddev	.4	373.	7.8
%RSD	.01533	.71666	.13165
#1	2753.5	51765.	5935.3
#2	2752.9	52292.	5946.4

Sample Name: CCVL-4590576 Acquired: 6/13/2017 16:00:24 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01097**	**.10366**	**.01159**	**.11742**	F **.01877**	F **.00155**	**.10769**	F **1.8094**	**.00557**	**.01018**	**.01035**	**.01143**
Stddev	.00005	.00169	.00468	.00286	.01209	.00110	.00109	2.2517	.00020	.00026	.00001	.00103
%RSD	.41398	1.6293	40.363	2.4324	64.409	70.725	1.0167	124.45	3.6000	2.5871	.08629	9.0371
#1	.01094	.10486	.00828	.11943	.01022	.00077	.10846	.21720	.00571	.00999	.01035	.01216
#2	.01100	.10247	.01490	.11540	.02731	.00232	.10691	3.4016	.00543	.01036	.01034	.01070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					.01000	.00100		.20000				
Range					30.000%	30.000%		30.000%				

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.30094**	**3.6875**	F **.02703**	**.22378**	**.01014**	**.01879**	**5.7015**	**.04052**	**2.8844**	**.00716**	F **.19774**	**.02370**
Stddev	.27426	.6748	.00325	.00342	.00011	.00024	6.0269	.00017	.0307	.00019	.00789	.00403
%RSD	91.134	18.301	12.028	1.5268	1.1134	1.2521	105.71	.42587	1.0648	2.6716	3.9899	16.992
#1	.10701	3.2103	.02473	.22136	.01022	.01896	1.4398	.04064	2.9061	.00703	.20332	.02655
#2	.49487	4.1646	.02933	.22619	.01006	.01863	9.9631	.04040	2.8626	.00730	.19216	.02086
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value	.10000		.02000								.10000	
Range	30.000%		30.000%								30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01163**	**.59292**	**1.2689**	**.10241**	F **.03411**	**.01854**	**.00859**	**.01617**	F **.02230**	**.01000**	**.01837**	**.01517**
Stddev	.00698	.16103	.3446	.00068	.03452	.00041	.00018	.00037	.01951	.00018	.00097	.00003
%RSD	59.970	27.158	27.158	.66874	101.20	2.2024	2.0763	2.2882	87.484	1.7536	5.2762	.21875
#1	.00670	.47906	1.0252	.10289	.00970	.01825	.00846	.01591	.03609	.00987	.01906	.01520
#2	.01657	.70678	1.5125	.10193	.05851	.01883	.00871	.01644	.00850	.01012	.01768	.01515
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.02000				.01000				.06000			
Range	-30.000%				30.000%				-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2845.3**	**54443.**	**6195.3**
Stddev	25.5	147.	232.0
%RSD	.89523	.27075	3.7442
#1	2863.3	54547.	6031.3
#2	2827.3	54338.	6359.4

Sample Name: 97905-1 Acquired: 6/13/2017 16:03:01 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: Bottle check

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00091**	**-.00020**	**.00677**	**.04031**	**.00852**	**-.00003**	**.00113**	**49.380**	**.00070**
Stddev	.00053	.00062	.00089	.00045	.00009	.00001	.00074	.092	.00028
%RSD	58.931	311.33	13.213	1.1205	1.0290	17.424	65.248	.18614	40.844
#1	.00129	.00024	.00614	.04063	.00846	-.00003	.00061	49.445	.00050
#2	.00053	-.00064	.00740	.03999	.00858	-.00004	.00165	49.315	.00090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00024**	**.00144**	**-.00268**	**-.00408**	**7.6418**	**.01191**	**25.037**	**.00030**	**.00167**
Stddev	.00005	.00029	.00083	.00096	.0295	.00027	.024	.00000	.00008
%RSD	19.465	19.957	31.140	23.546	.38624	2.2776	.09735	1.5834	5.0777
#1	-.00021	.00164	-.00327	-.00476	7.6626	.01172	25.020	.00030	.00161
#2	-.00027	.00123	-.00209	-.00340	7.6209	.01210	25.054	.00029	.00173
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.447**	**-.00090**	**.03401**	**-.00012**	**10.375**	**-.00024**	**-.00737**	**24.669**	**52.792**
Stddev	.356	.00026	.00141	.00178	.239	.00157	.00315	.058	.124
%RSD	1.8287	29.087	4.1322	1438.3	2.3072	663.38	42.761	.23393	.23393
#1	19.698	-.00109	.03501	.00113	10.544	-.00135	-.00514	24.710	52.879
#2	19.196	-.00072	.03302	-.00138	10.206	.00088	-.00960	24.628	52.705
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00079**	**.23409**	**.00391**	**-.00078**	**.00282**	**-.04725**	**.02917**	**-.00047**	**.00016**
Stddev	.00199	.00030	.00011	.00015	.00028	.02698	.00002	.00043	.00054
%RSD	251.69	.12693	2.9028	19.659	9.7996	57.093	.07881	91.024	338.57
#1	.00062	.23430	.00383	-.00089	.00301	-.02817	.02919	-.00017	.00054
#2	-.00220	.23388	.00399	-.00068	.00262	-.06632	.02915	-.00078	-.00022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2792.3**	**52574.**	**6230.1**
Stddev	20.8	142.	13.7
%RSD	.74498	.27015	.21911
#1	2807.0	52675.	6239.7
#2	2777.6	52474.	6220.4

Sample Name: 97905-2 Acquired: 6/13/2017 16:05:36 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: Bottle check

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.00093**	F **-.00257**	F **-.00125**	F **.00838**	F **.00044**	F **-.00011**	F **.00215**	F **.03103**	F **.00003**	F **.00036**	F **-.00016**	F **-.00288**
Stddev	.00009	.00045	.00077	.00003	.00023	.00007	.00094	.00363	.00029	.00030	.00001	.00015
%RSD	9.1286	17.592	61.724	.36817	51.932	61.475	43.482	11.699	911.17	85.041	5.5828	5.2709
#1	.00099	-.00289	-.00179	.00840	.00061	-.00006	.00281	.03360	.00023	.00014	-.00017	-.00277
#2	.00087	-.00225	-.00070	.00836	.00028	-.00016	.00149	.02846	-.00017	.00057	-.00015	-.00298
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	.01000	.10000	.01500	.10000	.01000	.00100	.10000	.20000	.00500	.01000	.01000	.01500
Range	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **-.00552**	F **.27611**	F **.00316**	F **.01594**	F **.00014**	F **.00027**	F **.10666**	F **-.00002**	F **.00229**	F **-.00124**	F **.02556**	F **.00211**
Stddev	.00207	.00894	.00229	.00239	.00002	.00053	.01619	.00103	.00072	.00133	.01204	.00178
%RSD	37.470	3.2374	72.513	14.963	17.674	193.08	15.180	4329.7	31.526	107.87	47.094	84.451
#1	-.00406	.28243	.00477	.01763	.00012	-.00010	.11811	.00071	.00178	-.00218	.01705	.00337
#2	-.00698	.26979	.00154	.01425	.00016	.00065	.09521	-.00076	.00280	-.00029	.03407	.00085
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	.10000	3.0000	.02000	.20000	.01000	.02000	1.0000	.04000	3.0000	.00900	.10000	.02000
Range	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **-.00469**	F **.03607**	F **.07718**	F **-.00236**	F **.00043**	F **.00503**	F **-.00057**	F **.00164**	F **-.04287**	F **-.00028**	F **-.00152**	F **-.00081**
Stddev	.00291	.00849	.01817	.00042	.00001	.00112	.00013	.00206	.05057	.00071	.00067	.00063
%RSD	62.031	23.545	23.545	17.900	1.7236	22.345	22.300	125.21	117.97	248.44	43.997	77.936
#1	-.00263	.04207	.09003	-.00206	.00043	.00583	-.00048	.00019	-.07863	.00022	-.00105	-.00036
#2	-.00675	.03006	.06433	-.00266	.00042	.00424	-.00065	.00310	-.00711	-.00079	-.00199	-.00126
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
Value	.02000	.50000	1.0700	.10000	.01000	.01500	.01000	.01500	.06000	.01000	.02000	.01500
Range	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%	-30.000%

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2818.5**	**52909.**	**6119.4**
Stddev	2.7	57.	21.1
%RSD	.09689	.10824	.34423
#1	2816.6	52869.	6134.3
#2	2820.5	52950.	6104.5

Sample Name: 98081-1 Acquired: 6/13/2017 16:08:15 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: Bottle check

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00056**	**-.00142**	**.00230**	**.03352**	**.00898**	**-.00006**	**.00382**	**36.550**	**.00030**
Stddev	.00052	.00005	.00249	.00082	.00041	.00002	.00147	.010	.00015
%RSD	91.822	3.2451	108.28	2.4337	4.5280	36.519	38.436	.02638	51.237
#1	.00020	-.00139	.00054	.03409	.00869	-.00005	.00278	36.556	.00041
#2	.00093	-.00146	.00405	.03294	.00927	-.00008	.00486	36.543	.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00067**	**.00435**	**-.00180**	**-.00492**	**5.9533**	**.01348**	**18.851**	**.00017**	**.00463**
Stddev	.00018	.00044	.00035	.00034	.0156	.00180	.080	.00005	.00023
%RSD	27.677	10.013	19.539	6.9492	.26275	13.386	.42682	31.566	4.9815
#1	-.00054	.00405	-.00155	-.00516	5.9423	.01220	18.794	.00020	.00447
#2	-.00080	.00466	-.00205	-.00468	5.9644	.01475	18.908	.00013	.00480
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.153**	**-.00017**	**.26663**	**-.00163**	**7.2863**	**-.00134**	**-.00428**	**25.565**	**54.708**
Stddev	.289	.00009	.00090	.00103	.2247	.00071	.00437	.083	.177
%RSD	1.1051	51.166	.33656	63.028	3.0835	52.518	102.10	.32301	.32301
#1	25.948	-.00011	.26726	-.00090	7.4452	-.00084	-.00119	25.623	54.833
#2	26.357	-.00023	.26599	-.00236	7.1275	-.00184	-.00737	25.506	54.583
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00105**	**.18502**	**.00280**	**-.00041**	**.00370**	**-.02439**	**.03701**	**.00016**	**.00026**
Stddev	.00140	.00030	.00165	.00016	.00107	.00439	.00082	.00006	.00127
%RSD	133.14	.15985	58.815	38.058	28.979	18.010	2.2205	39.732	495.56
#1	-.00204	.18523	.00164	-.00053	.00446	-.02749	.03643	.00020	.00116
#2	-.00006	.18481	.00397	-.00030	.00294	-.02128	.03759	.00011	-.00064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2760.9**	**51426.**	**6022.3**
Stddev	.9	6.	10.9
%RSD	.03193	.01204	.18147
#1	2761.5	51431.	6030.0
#2	2760.3	51422.	6014.5

Sample Name: 98081-5 Acquired: 6/13/2017 16:10:50 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: Bottle check

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00131**	**-.00108**	**.00560**	**.02961**	**.01349**	**-.00005**	**.00279**	**51.752**	**.00060**
Stddev	.00003	.00040	.00933	.00044	.00020	.00003	.00102	.213	.00039
%RSD	2.3711	37.449	166.60	1.5018	1.4785	72.958	36.673	.41178	64.524
#1	.00129	-.00079	-.00100	.02992	.01363	-.00007	.00206	51.602	.00088
#2	.00133	-.00137	.01219	.02929	.01335	-.00002	.00351	51.903	.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00036**	**.00401**	**-.00129**	**-.00421**	**7.3193**	**.01370**	**28.921**	**.00017**	**.00246**
Stddev	.00022	.00011	.00007	.00010	.0218	.00272	.009	.00002	.00029
%RSD	60.456	2.8038	5.7845	2.4224	.29732	19.853	.03157	10.475	11.642
#1	-.00021	.00409	-.00124	-.00414	7.3039	.01177	28.915	.00018	.00225
#2	-.00052	.00393	-.00134	-.00428	7.3347	.01562	28.928	.00016	.00266
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.550**	**-.00050**	**.02559**	**-.00184**	**11.743**	**.00049**	**-.00903**	**20.687**	**44.270**
Stddev	.098	.00013	.00096	.00300	.223	.00417	.00382	.094	.202
%RSD	.38464	25.309	3.7526	162.72	1.9015	845.16	42.340	.45584	.45584
#1	25.480	-.00059	.02627	.00028	11.901	.00344	-.01173	20.620	44.127
#2	25.619	-.00041	.02491	-.00396	11.585	-.00245	-.00633	20.754	44.413
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00123**	**.22732**	**.00248**	**-.00036**	**.00324**	**-.04120**	**.01219**	**.00091**	**-.00010**
Stddev	.00067	.00095	.00114	.00041	.00292	.00114	.00040	.00056	.00130
%RSD	54.619	.41779	46.116	112.87	90.235	2.7789	3.2522	61.734	1258.4
#1	-.00075	.22665	.00167	-.00065	.00117	-.04039	.01191	.00051	-.00103
#2	-.00170	.22799	.00329	-.00007	.00530	-.04201	.01247	.00131	.00082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2756.3**	**51108.**	**6060.7**
Stddev	15.2	32.	32.5
%RSD	.55303	.06297	.53693
#1	2767.1	51130.	6083.7
#2	2745.6	51085.	6037.7

Sample Name: 98081-7 Acquired: 6/13/2017 16:13:25 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: Bottle check

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00091**	**.00135**	**.00144**	**.02912**	**.01293**	**-.00008**	**.00448**	**42.688**	**.00079**
Stddev	.00029	.00503	.00378	.00406	.00006	.00002	.00003	.090	.00038
%RSD	32.278	372.02	262.44	13.940	.43559	28.739	.74637	.20985	48.024
#1	.00112	.00491	.00412	.03199	.01297	-.00010	.00446	42.625	.00052
#2	.00070	-.00220	-.00123	.02625	.01289	-.00007	.00451	42.752	.00106
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00054**	**.00643**	**-.00177**	**-.00503**	**6.2938**	**.01275**	**24.414**	**.00001**	**.00181**
Stddev	.00034	.00011	.00062	.00219	.0582	.00291	.050	.00010	.00014
%RSD	62.545	1.7152	35.337	43.540	.92513	22.796	.20343	992.51	7.6549
#1	-.00030	.00651	-.00221	-.00657	6.2526	.01480	24.378	-.00006	.00171
#2	-.00078	.00635	-.00133	-.00348	6.3349	.01069	24.449	.00008	.00191
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**20.326**	**-.00058**	**.03562**	**-.00213**	**11.405**	**-.00033**	**-.00252**	**24.486**	**52.400**
Stddev	.369	.00016	.00544	.00114	.397	.00171	.00551	.131	.281
%RSD	1.8141	28.524	15.285	53.322	3.4766	524.31	218.86	.53684	.53684
#1	20.065	-.00069	.03947	-.00293	11.685	.00088	.00138	24.393	52.201
#2	20.587	-.00046	.03177	-.00133	11.124	-.00154	-.00641	24.579	52.599
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00008**	**.17383**	**.00281**	**-.00042**	**.00334**	**-.06148**	**.02477**	**-.00071**	**.00105**
Stddev	.00127	.00134	.00163	.00002	.00303	.03601	.00016	.00002	.00028
%RSD	1610.5	.76931	58.127	5.7509	90.660	58.564	.63037	3.2059	26.667
#1	-.00098	.17289	.00396	-.00044	.00549	-.08695	.02466	-.00072	.00085
#2	.00082	.17478	.00165	-.00041	.00120	-.03602	.02488	-.00069	.00125
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2802.2**	**51146.**	**6032.2**
Stddev	10.3	109.	45.4
%RSD	.36730	.21313	.75252
#1	2794.9	51223.	6064.3
#2	2809.5	51069.	6000.1

Sample Name: CCVH-4579429 Acquired: 6/13/2017 16:16:01 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00017**	**46.326**	**-.01187**	**.00528**	**.00031**	**.00014**	**.96901**	**.01217**	**.00052**	**-.00098**	**.00042**	**.00939**
Stddev	.00014	.170	.00196	.00152	.00006	.00007	.00522	.00658	.00046	.00029	.00012	.00009
%RSD	82.157	.36761	16.502	28.775	18.356	50.271	.53842	54.040	87.364	29.826	27.602	.98444
#1	-.00007	46.206	-.01048	.00635	.00027	.00019	.97270	.01682	.00020	-.00119	.00034	.00945
#2	-.00026	46.447	-.01325	.00420	.00035	.00009	.96532	.00752	.00085	-.00077	.00050	.00932
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.852**	**.12578**	**.00164**	**.03688**	**-.00172**	**-.00115**	**240.45**	**.00044**	**.00831**	**-.00056**	**5.2439**	**.00504**
Stddev	.103	.01530	.00091	.00206	.00007	.00022	.89	.00046	.00564	.00017	.0036	.00223
%RSD	.21147	12.161	55.280	5.5928	4.0203	19.395	.37095	103.25	67.846	30.592	.06786	44.261
#1	48.779	.13660	.00100	.03834	-.00167	-.00099	239.82	.00012	.00432	-.00068	5.2464	.00346
#2	48.925	.11497	.00228	.03543	-.00177	-.00131	241.08	.00077	.01229	-.00044	5.2414	.00662
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00396**	**-.00123**	**-.00264**	**.00145**	**.00042**	W **4.6065**	**.01850**	**.00454**	W **9.3087**	**.01235**	**.00160**	**.07541**
Stddev	.00019	.01092	.02336	.00013	.00006	.0263	.00004	.00021	.0359	.00012	.00049	.00196
%RSD	4.7462	886.44	886.44	8.8216	14.643	.57170	.20247	4.6031	.38604	.93111	30.740	2.5951
#1	-.00383	.00649	.01389	.00154	.00046	4.5879	.01848	.00468	9.2833	.01227	.00125	.07679
#2	-.00410	-.00895	-.01916	.00136	.00037	4.6251	.01853	.00439	9.3341	.01244	.00195	.07402
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2700.7**	**50203.**	**6068.4**
Stddev	9.4	13.	24.4
%RSD	.34887	.02518	.40287
#1	2707.4	50212.	6085.7
#2	2694.0	50194.	6051.1

Sample Name: CCV-4580817 Acquired: 6/13/2017 16:18:35 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49034**	**.53567**	**.95416**	**.50977**	**.50930**	**.47060**	**-.00278**	**5.1009**	**.50357**	**.50527**	**.51077**	**.50635**	**2.4108**
Stddev	.00079	.00902	.01349	.00774	.00081	.00194	.00621	.0104	.00679	.00707	.00752	.00066	.0115
%RSD	.16134	1.6846	1.4141	1.5191	.16000	.41276	223.34	.20317	1.3477	1.3998	1.4720	.13115	.47551
#1	.49090	.54205	.96370	.51525	.50987	.47197	-.00717	5.1083	.50837	.51027	.51608	.50682	2.4189
#2	.48978	.52929	.94462	.50430	.50872	.46923	.00161	5.0936	.49877	.50027	.50545	.50588	2.4027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.908**	**.96355**	**19.638**	**.47363**	**.51322**	**4.9995**	**.50341**	**1.0105**	**1.0273**	**.01417**	**.98750**	**.96060**	**4.7973**
Stddev	.040	.00668	.027	.00147	.00708	.0045	.00514	.0068	.0122	.00009	.01242	.01690	.0340
%RSD	.08070	.69278	.13875	.31059	1.3792	.08908	1.0211	.67380	1.1860	.64384	1.2581	1.7596	.70799
#1	49.937	.95883	19.657	.47467	.51823	4.9963	.50704	1.0153	1.0359	.01424	.99628	.97255	4.7733
#2	49.880	.96827	19.619	.47259	.50822	5.0026	.49977	1.0057	1.0187	.01411	.97871	.94865	4.8214
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.266**	**1.0373**	**.46622**	**.01188**	**.45832**	**.94249**	**-.00787**	**.48401**	**.46389**	**.50183**
Stddev	.073	.0131	.00069	.00235	.00003	.00973	.01058	.00076	.00096	.00045
%RSD	.70799	1.2613	.14874	19.763	.00650	1.0329	134.45	.15727	.20772	.09028
#1	10.215	1.0466	.46671	.01354	.45830	.94937	-.01535	.48347	.46457	.50215
#2	10.318	1.0281	.46573	.01022	.45834	.93560	-.00039	.48455	.46321	.50151
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2746.1**	**51927.**	**6150.3**
Stddev	6.0	94.	8.8
%RSD	.21686	.18158	.14380
#1	2741.8	51994.	6156.5
#2	2750.3	51861.	6144.0

Sample Name: CCB Acquired: 6/13/2017 16:21:03 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00113**	**.00106**	**-.00105**	**.00441**	**.00050**	**.00004**	**.00048**	**-.00501**	**.00029**	**-.00005**	**-.00000**	**-.00378**	**.00358**
Stddev	.00018	.00025	.00593	.00167	.00031	.00001	.00241	.00396	.00009	.00021	.00000	.00009	.00020
%RSD	15.985	23.868	563.12	37.793	62.553	20.853	498.36	78.950	32.363	407.69	169.57	2.3612	5.5023
#1	.00126	.00124	-.00524	.00559	.00028	.00004	.00219	-.00781	.00022	.00010	-.00001	-.00372	.00344
#2	.00100	.00088	.00314	.00323	.00072	.00005	-.00122	-.00221	.00035	-.00020	.00000	-.00384	.00371
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.19399**	**.00404**	**.00606**	**.00007**	**.00038**	**-.01679**	**-.00020**	**.00448**	**-.00264**	**.00917**	**.00120**	**-.00311**	**.01886**
Stddev	.01978	.00187	.00097	.00003	.00041	.00393	.00023	.00669	.00216	.00781	.00421	.00228	.02133
%RSD	10.198	46.243	16.045	47.163	107.48	23.398	115.70	149.37	82.007	85.212	350.32	73.542	113.06
#1	.20797	.00272	.00675	.00005	.00067	-.01957	-.00004	.00921	-.00111	.00364	.00418	-.00149	.03395
#2	.18000	.00536	.00537	.00009	.00009	-.01401	-.00036	-.00025	-.00417	.01469	-.00178	-.00472	.00378
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04037**	**.00118**	**.00027**	**.00527**	**-.00046**	**-.00080**	**-.02618**	**.00048**	**.00090**	**-.00072**
Stddev	.04564	.00039	.00008	.00031	.00007	.00319	.01667	.00025	.00005	.00122
%RSD	113.06	32.773	30.219	5.7905	14.456	397.20	63.673	52.004	5.8386	168.52
#1	.07264	.00091	.00033	.00548	-.00041	-.00306	-.03797	.00030	.00094	.00014
#2	.00810	.00146	.00021	.00505	-.00051	.00145	-.01439	.00065	.00087	-.00159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2755.2**	**52408.**	**6021.1**
Stddev	8.0	32.	27.7
%RSD	.29064	.06199	.45949
#1	2749.6	52431.	6040.7
#2	2760.9	52385.	6001.6

Sample Name: CCVL-4590576 Acquired: 6/13/2017 16:23:41 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01071**	**.10218**	F **.00988**	**.10514**	**.01067**	**.00081**	**.11059**	**.19823**	**.00528**	**.01026**	**.01031**	**.01263**
Stddev	.00018	.00200	.00033	.00025	.00031	.00004	.00451	.00300	.00015	.00028	.00005	.00026
%RSD	1.7167	1.9585	3.3062	.23737	2.9375	4.7179	4.0813	1.5142	2.9045	2.7287	.47686	2.0776
#1	.01058	.10360	.01011	.10532	.01045	.00084	.11378	.19611	.00539	.01046	.01028	.01282
#2	.01084	.10077	.00964	.10497	.01090	.00078	.10740	.20035	.00518	.01006	.01035	.01245
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11103**	**3.2577**	**.02320**	**.20264**	**.00991**	**.01903**	**1.0042**	**.04105**	**2.9113**	**.00750**	**.10512**	**.02473**
Stddev	.00176	.0318	.00023	.00032	.00003	.00076	.0226	.00058	.0514	.00010	.00366	.00173
%RSD	1.5843	.97633	.99781	.15564	.30652	3.9766	2.2464	1.4013	1.7668	1.2813	3.4790	7.0069
#1	.10979	3.2802	.02304	.20242	.00993	.01957	1.0202	.04145	2.9476	.00743	.10771	.02350
#2	.11227	3.2352	.02336	.20286	.00989	.01850	.98829	.04064	2.8749	.00756	.10254	.02595
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01283**	**.50132**	**1.0728**	**.10278**	**.00972**	**.01811**	**.00860**	**.01512**	F **.01406**	**.00982**	**.01850**	**.01574**
Stddev	.00329	.00803	.0172	.00475	.00003	.00131	.00027	.00027	.04657	.00023	.00008	.00031
%RSD	25.631	1.6014	1.6014	4.6243	.31602	7.2325	3.1535	1.7844	331.16	2.3593	.45051	1.9468
#1	.01515	.50700	1.0850	.10614	.00975	.01718	.00879	.01493	.04699	.00966	.01845	.01596
#2	.01050	.49564	1.0607	.09942	.00970	.01903	.00841	.01531	-.01887	.00998	.01856	.01553
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.02000								.06000			
Range	-30.000%								-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2784.4**	**52652.**	**6066.8**
Stddev	5.3	116.	82.4
%RSD	.19025	.22097	1.3575
#1	2780.6	52734.	6125.0
#2	2788.1	52570.	6008.5

Sample Name: MB 280-376705/1-C Acquired: 6/13/2017 16:26:19 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: 6/12 Custom ID2: Custom ID3:
Comment: 376720 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00041**	**.00416**	**-.00320**	**.00394**	**.00036**	**-.00009**	**-.00070**	**.00225**	**.00067**
Stddev	.00040	.00028	.00738	.00000	.00004	.00003	.00148	.00410	.00012
%RSD	97.248	6.7410	230.84	.07992	10.236	34.897	211.92	182.67	18.243
#1	.00069	.00435	.00202	.00394	.00039	-.00007	.00035	.00515	.00076
#2	.00013	.00396	-.00841	.00394	.00034	-.00012	-.00175	-.00066	.00059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00018**	**-.00005**	**-.00243**	**.01444**	**.21506**	**.00351**	**-.00059**	**.00007**	**-.00004**
Stddev	.00025	.00015	.00036	.00050	.02609	.00066	.00416	.00011	.00037
%RSD	136.52	334.91	15.002	3.4458	12.132	18.686	699.81	161.87	1039.5
#1	.00001	-.00016	-.00217	.01409	.23351	.00398	-.00353	.00014	.00023
#2	.00036	.00006	-.00269	.01480	.19661	.00305	.00234	-.00001	-.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01141**	**-.00071**	**.00428**	**-.00034**	**.00999**	**.00118**	**-.00612**	**-.00366**	**-.00783**
Stddev	.00531	.00004	.00362	.00044	.00109	.00181	.00204	.01530	.03274
%RSD	46.566	5.0204	84.560	128.92	10.870	153.77	33.298	418.04	418.04
#1	-.01517	-.00068	.00172	-.00066	.01076	.00246	-.00756	-.01448	-.03098
#2	-.00765	-.00073	.00684	-.00003	.00922	-.00010	-.00468	.00716	.01532
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**.00027**	**.00445**	**-.00044**	**.00224**	**-.03559**	**.00021**	**.00018**	**-.00023**
Stddev	.00055	.00007	.00160	.00070	.00085	.04400	.00069	.00037	.00037
%RSD	1533.7	27.665	36.020	159.38	38.046	123.64	334.81	205.78	158.46
#1	-.00035	.00032	.00332	-.00093	.00284	-.06670	.00069	.00044	-.00049
#2	.00042	.00022	.00559	.00006	.00164	-.00447	-.00028	-.00008	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2791.3**	**52813.**	**6062.6**
Stddev	13.3	584.	18.1
%RSD	.47655	1.1049	.29869
#1	2800.7	52401.	6049.8
#2	2781.9	53226.	6075.4

Sample Name: LCS 280-376705/2-C Acquired: 6/13/2017 16:28:57 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376720 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05210**	**1.9042**	**.99314**	**1.0157**	**2.0893**	**.04805**	**2.0047**	**50.377**	**.10232**
Stddev	.00083	.0382	.01249	.0183	.0012	.00001	.0413	.049	.00194
%RSD	1.6013	2.0050	1.2578	1.8047	.05807	.02904	2.0581	.09811	1.8911
#1	.05269	1.9312	1.0020	1.0287	2.0885	.04806	2.0339	50.342	.10369
#2	.05151	1.8772	.98431	1.0028	2.0902	.04804	1.9755	50.412	.10096
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49325**	**.20440**	**.25853**	**.98896**	**51.009**	**.97928**	**48.948**	**.47555**	**1.0065**
Stddev	.00853	.00364	.00148	.00182	.111	.00338	.213	.00151	.0186
%RSD	1.7297	1.7792	.57408	.18387	.21803	.34467	.43577	.31857	1.8452
#1	.49929	.20697	.25958	.99024	50.930	.97690	49.099	.47662	1.0196
#2	.48722	.20183	.25748	.98767	51.087	.98167	48.798	.47448	.99336
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.045**	**.49271**	**10.290**	**.50296**	**2.1158**	**.50762**	**1.9413**	**9.6359**	**20.621**
Stddev	.223	.00742	.188	.00655	.0338	.00784	.0402	.0050	.011
%RSD	.43672	1.5054	1.8264	1.3018	1.5984	1.5446	2.0694	.05232	.05232
#1	50.887	.49796	10.423	.50759	2.1397	.51317	1.9697	9.6324	20.613
#2	51.202	.48747	10.157	.49833	2.0918	.50208	1.9129	9.6395	20.629
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0580**	**.95013**	**.96413**	**.94347**	**1.8379**	**1.8810**	**.49632**	**.46462**	**.52395**
Stddev	.0384	.00083	.00298	.00386	.0394	.0009	.00065	.00276	.00115
%RSD	1.8677	.08746	.30875	.40926	2.1460	.04588	.13125	.59485	.22006
#1	2.0852	.94955	.96624	.94621	1.8657	1.8804	.49678	.46658	.52477
#2	2.0308	.95072	.96203	.94074	1.8100	1.8816	.49586	.46267	.52314
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2674.8**	**50601.**	**6114.6**
Stddev	1.0	63.	20.7
%RSD	.03834	.12520	.33785
#1	2675.5	50556.	6100.0
#2	2674.0	50646.	6129.2

Sample Name: 280-98011-C-1-C Acquired: 6/13/2017 16:31:20 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376720 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00143**	**.01476**	**.00312**	**.01982**	**.04981**	**-.00017**	**-.00233**	**17.958**	**.00090**
Stddev	.00011	.01299	.00032	.00168	.00035	.00003	.00205	.085	.00019
%RSD	7.6961	88.001	10.212	8.4649	.69952	19.127	87.985	.47373	20.808
#1	.00135	.00558	.00289	.01863	.05006	-.00015	-.00088	18.018	.00104
#2	.00151	.02394	.00335	.02100	.04957	-.00019	-.00377	17.898	.00077
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00011**	**.00012**	**-.00275**	**.04061**	**2.3848**	**.01083**	**4.4338**	**.00037**	**.00187**
Stddev	.00012	.00007	.00027	.00109	.0466	.00002	.0366	.00005	.00037
%RSD	113.42	58.394	9.7471	2.6920	1.9521	.15955	.82461	13.971	19.471
#1	.00002	.00007	-.00294	.04139	2.3519	.01082	4.4596	.00041	.00162
#2	.00019	.00018	-.00256	.03984	2.4177	.01085	4.4079	.00034	.00213
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.8998**	**-.00036**	**.01228**	**.00040**	**4.3926**	**.00121**	**-.00064**	**5.6376**	**12.065**
Stddev	.0163	.00013	.00766	.00107	.0503	.00068	.00191	.0403	.086
%RSD	.23655	35.328	62.369	267.57	1.1459	56.475	299.00	.71541	.71541
#1	6.9114	-.00027	.00687	.00115	4.4282	.00073	.00071	5.6662	12.126
#2	6.8883	-.00045	.01770	-.00036	4.3570	.00170	-.00199	5.6091	12.004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00302**	**.09531**	**.00709**	**-.00018**	**.00428**	**-.06244**	**.00057**	**.00153**	**.00112**
Stddev	.00162	.00082	.00187	.00005	.00047	.02899	.00040	.00052	.00013
%RSD	53.793	.86506	26.367	29.187	11.053	46.424	69.762	34.235	11.760
#1	.00187	.09589	.00842	-.00014	.00461	-.08294	.00029	.00190	.00122
#2	.00417	.09472	.00577	-.00022	.00394	-.04194	.00085	.00116	.00103
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2748.0**	**52404.**	**6146.5**
Stddev	3.1	145.	6.0
%RSD	.11434	.27729	.09824
#1	2750.2	52301.	6142.2
#2	2745.8	52507.	6150.8

Sample Name: 280-98011-C-2-C Acquired: 6/13/2017 16:33:56 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376720 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00068**	**.00105**	**.00186**	**.12594**	**.09877**	**-.00009**	**-.00109**	**123.19**	**.00125**
Stddev	.00024	.00084	.00328	.00611	.00031	.00004	.00028	.19	.00001
%RSD	35.083	79.834	176.70	4.8553	.31806	41.595	25.543	.15389	.43547
#1	.00084	.00164	.00418	.13027	.09855	-.00006	-.00129	123.33	.00125
#2	.00051	.00046	-.00046	.12162	.09899	-.00012	-.00090	123.06	.00124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00065**	**.00010**	**-.00112**	**.05224**	**4.0425**	**.06012**	**44.129**	**.00628**	**-.00024**
Stddev	.00015	.00013	.00021	.00073	.0499	.00035	.098	.00002	.00018
%RSD	23.858	131.11	18.901	1.3929	1.2348	.57737	.22284	.32842	72.121
#1	-.00054	.00019	-.00097	.05173	4.0072	.05987	44.199	.00629	-.00037
#2	-.00076	.00001	-.00127	.05276	4.0777	.06036	44.060	.00626	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**206.69**	**.00110**	**.01702**	**-.00024**	F **207.70**	**-.00195**	**-.00392**	**6.5904**	**14.104**
Stddev	.59	.00074	.00417	.00004	6.09	.00043	.00621	.0039	.008
%RSD	.28763	66.726	24.495	14.704	2.9327	22.090	158.37	.05880	.05880
#1	207.11	.00162	.01407	-.00022	212.01	-.00226	-.00831	6.5932	14.109
#2	206.27	.00058	.01997	-.00027	203.40	-.00165	.00047	6.5877	14.098
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00104**	**.96107**	**.00323**	**-.00052**	**.00378**	**-.03314**	**-.00003**	**.00034**	**.00077**
Stddev	.00028	.00271	.00016	.00021	.00525	.04551	.00000	.00061	.00111
%RSD	26.998	.28234	4.8412	40.573	138.84	137.30	7.8808	177.86	144.12
#1	-.00124	.96299	.00312	-.00037	.00750	-.06532	-.00003	.00077	-.00001
#2	-.00084	.95916	.00334	-.00067	.00007	-.00097	-.00002	-.00009	.00155
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2628.4**	**49331.**	**6072.3**
Stddev	6.1	20.	5.7
%RSD	.23356	.04033	.09348
#1	2632.8	49317.	6076.3
#2	2624.1	49345.	6068.3

Sample Name: 280-98011-C-3-C Acquired: 6/13/2017 16:36:32 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376720 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00085**	**-.00088**	**-.01002**	**.31792**	**.03864**	**-.00011**	**-.00087**	**201.51**	**.00147**
Stddev	.00007	.00119	.00513	.00922	.00020	.00003	.00362	.44	.00001
%RSD	8.0918	134.98	51.195	2.8996	.52841	30.908	416.26	.21779	.80047
#1	.00090	-.00004	-.00639	.32444	.03879	-.00009	-.00342	201.82	.00148
#2	.00080	-.00172	-.01365	.31140	.03850	-.00014	.00169	201.20	.00146
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00115**	**.00062**	**.00148**	**.01756**	**9.1168**	**.23812**	**139.21**	**.01002**	**.00107**
Stddev	.00051	.00029	.00032	.00264	.0068	.00118	.25	.00006	.00007
%RSD	44.289	46.154	21.604	15.028	.07460	.49446	.17607	.55236	6.5986
#1	-.00151	.00042	.00171	.01943	9.1120	.23895	139.04	.01006	.00112
#2	-.00079	.00082	.00126	.01570	9.1216	.23728	139.39	.00999	.00102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **650.77**	**.00208**	**.00729**	**-.00453**	F **663.79**	**-.00058**	**.03472**	**2.4909**	**5.3306**
Stddev	.41	.00063	.00454	.00139	18.89	.00279	.00228	.0271	.0580
%RSD	.06245	30.488	62.337	30.703	2.8458	478.80	6.5698	1.0873	1.0873
#1	650.48	.00163	.01050	-.00355	677.15	-.00256	.03310	2.5101	5.3716
#2	651.06	.00253	.00408	-.00551	650.43	.00139	.03633	2.4718	5.2896
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00318**	**2.2477**	**.00202**	**-.00080**	**.00084**	**-.00367**	**-.00081**	**.00202**	**.00077**
Stddev	.00318	.0042	.00056	.00019	.00412	.02163	.00049	.00045	.00190
%RSD	99.889	.18692	27.472	23.647	492.73	588.61	60.367	22.453	246.86
#1	-.00543	2.2507	.00163	-.00093	.00375	.01162	-.00046	.00170	-.00057
#2	-.00093	2.2447	.00242	-.00066	-.00208	-.01897	-.00116	.00234	.00211
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2492.9**	**46581.**	**5996.9**
Stddev	3.6	363.	7.0
%RSD	.14502	.77966	.11660
#1	2490.3	46838.	6001.8
#2	2495.4	46324.	5991.9

Sample Name: 280-98011-C-4-C Acquired: 6/13/2017 16:39:14 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376720 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00052**	**.00269**	**-.00060**	**.18161**	**.05713**	**-.00010**	**-.00091**	**79.663**	**.00109**
Stddev	.00048	.00104	.00015	.00519	.00023	.00003	.00007	.108	.00005
%RSD	90.581	38.718	25.967	2.8556	.40234	35.507	7.5886	.13557	4.2663
#1	.00019	.00343	-.00071	.18527	.05729	-.00007	-.00095	79.740	.00106
#2	.00086	.00196	-.00049	.17794	.05696	-.00012	-.00086	79.587	.00112
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00033**	**.00025**	**-.00157**	**.02468**	**3.1702**	**.03076**	**34.162**	**.00113**	**.00007**
Stddev	.00036	.00017	.00009	.00017	.0153	.00102	.056	.00009	.00010
%RSD	109.85	66.760	5.7114	.70004	.48303	3.3148	.16314	7.8015	148.07
#1	-.00058	.00013	-.00150	.02456	3.1810	.03004	34.201	.00107	-.00000
#2	-.00007	.00037	-.00163	.02480	3.1594	.03148	34.122	.00120	.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**77.109**	**-.00001**	**.01099**	**-.00120**	**58.828**	**.00380**	**-.00422**	**4.0950**	**8.7633**
Stddev	.147	.00047	.00118	.00109	1.096	.00423	.00386	.0038	.0081
%RSD	.19108	9322.8	10.756	90.701	1.8632	111.45	91.413	.09219	.09219
#1	77.005	.00033	.01183	-.00198	59.603	.00679	-.00149	4.0977	8.7691
#2	77.214	-.00034	.01016	-.00043	58.053	.00080	-.00695	4.0923	8.7576
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00111**	**.81230**	**.00621**	**-.00071**	**-.00165**	**-.06554**	**-.00024**	**.00193**	**.00208**
Stddev	.00124	.00130	.00058	.00039	.00058	.00618	.00030	.00031	.00115
%RSD	111.77	.15958	9.3603	54.760	35.149	9.4291	126.17	16.115	55.004
#1	.00199	.81322	.00662	-.00043	-.00206	-.06991	-.00003	.00214	.00127
#2	.00023	.81139	.00579	-.00098	-.00124	-.06117	-.00046	.00171	.00289
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2621.5**	**49734.**	**5977.3**
Stddev	7.5	281.	22.1
%RSD	.28793	.56460	.36963
#1	2616.2	49535.	5961.6
#2	2626.8	49933.	5992.9

Sample Name: 280-98011-C-5-C Acquired: 6/13/2017 16:41:51 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376720 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00101**	**.00243**	**-.00249**	**.19290**	**.06063**	**-.00003**	**-.00423**	**85.329**	**.00088**
Stddev	.00112	.00164	.00640	.00447	.00010	.00008	.00148	.317	.00013
%RSD	111.18	67.513	257.36	2.3185	.16545	252.09	35.126	.37208	15.079
#1	.00022	.00127	-.00702	.19606	.06056	.00003	-.00318	85.553	.00098
#2	.00180	.00358	.00204	.18974	.06070	-.00009	-.00528	85.104	.00079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00007**	**.00019**	**-.00167**	**.02072**	**3.1866**	**.03592**	**36.416**	**.00108**	**.00011**
Stddev	.00005	.00064	.00029	.00139	.0144	.00090	.206	.00006	.00064
%RSD	77.970	329.92	17.328	6.6852	.45017	2.5138	.56504	5.1317	598.80
#1	-.00011	.00065	-.00187	.01974	3.1765	.03528	36.562	.00104	.00056
#2	-.00003	-.00026	-.00146	.02170	3.1968	.03656	36.271	.00112	-.00035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**81.986**	**-.00007**	**.00883**	**-.00257**	**62.669**	**-.00388**	**-.00305**	**4.3445**	**9.2973**
Stddev	.246	.00003	.00362	.00336	1.274	.00302	.00062	.0076	.0163
%RSD	.30035	40.642	40.979	130.94	2.0326	77.927	20.166	.17513	.17513
#1	82.160	-.00005	.01139	-.00494	63.570	-.00174	-.00349	4.3499	9.3088
#2	81.812	-.00009	.00627	-.00019	61.768	-.00602	-.00262	4.3392	9.2858
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00078**	**.86601**	**.00554**	**-.00047**	**.00301**	**-.06035**	**-.00017**	**.00070**	**-.00054**
Stddev	.00200	.00175	.00387	.00005	.00109	.02383	.00132	.00004	.00013
%RSD	257.58	.20230	69.842	10.012	36.251	39.489	789.02	5.6680	24.224
#1	-.00219	.86725	.00281	-.00044	.00378	-.04350	.00077	.00073	-.00045
#2	.00064	.86477	.00828	-.00050	.00224	-.07720	-.00110	.00067	-.00063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2592.8**	**49425.**	**5901.5**
Stddev	.5	178.	25.9
%RSD	.01821	.36082	.43966
#1	2593.1	49299.	5919.9
#2	2592.4	49551.	5883.2

Sample Name: CCVH-4579429 Acquired: 6/13/2017 16:44:26 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00085**	**47.224**	**-.00580**	**.00393**	**.00103**	**.00013**	**.96069**	**.03036**	**.00061**	**-.00111**	**.00002**	**.00967**
Stddev	.00051	.068	.00419	.00023	.00026	.00001	.01562	.00688	.00020	.00034	.00022	.00007
%RSD	59.161	.14407	72.166	5.8775	25.252	8.8869	1.6254	22.651	33.520	30.552	1121.3	.69969
#1	.00121	47.176	-.00876	.00410	.00121	.00014	.97173	.03522	.00047	-.00135	-.00014	.00971
#2	.00050	47.273	-.00284	.00377	.00084	.00012	.94964	.02549	.00076	-.00087	.00018	.00962
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.587**	**.27681**	**.00268**	**.04620**	**-.00205**	**-.00202**	**244.61**	**.00102**	**.00681**	**-.00094**	**5.2285**	**.00371**
Stddev	.053	.00675	.00005	.00492	.00017	.00011	.47	.00011	.00108	.00048	.1535	.00348
%RSD	.10625	2.4385	1.9051	10.659	8.5194	5.3499	.19248	10.752	15.789	51.417	2.9352	93.904
#1	49.625	.28158	.00264	.04968	-.00192	-.00194	244.94	.00094	.00605	-.00060	5.3370	.00125
#2	49.550	.27203	.00272	.04271	-.00217	-.00209	244.28	.00109	.00757	-.00128	5.1200	.00617
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00859**	**.01355**	**.02900**	**.00006**	**.00077**	W **4.6711**	**.01865**	**.00182**	W **9.3991**	**.01187**	**.00029**	**.07655**
Stddev	.00202	.00554	.01185	.00076	.00015	.0089	.00015	.00256	.0844	.00009	.00086	.00145
%RSD	23.477	40.845	40.845	1247.7	18.989	.19125	.78836	140.52	.89798	.73118	295.96	1.8999
#1	-.01001	.01747	.03738	.00060	.00087	4.6774	.01875	.00001	9.4587	.01181	.00090	.07758
#2	-.00716	.00964	.02063	-.00047	.00067	4.6648	.01855	.00364	9.3394	.01194	-.00032	.07552
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2623.8**	**48799.**	**5780.0**
Stddev	2.1	149.	8.9
%RSD	.08133	.30547	.15374
#1	2622.3	48694.	5786.3
#2	2625.3	48905.	5773.8

Sample Name: CCV-4580817 Acquired: 6/13/2017 16:47:00 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49373**	**.49992**	**.93607**	**.49899**	**.50740**	**.46863**	**-.00177**	F **6.0088**	**.49504**	**.49718**	**.50257**	**.50756**
Stddev	.00259	.01272	.02428	.01404	.00912	.00926	.00216	1.2102	.01184	.01171	.01273	.00173
%RSD	.52409	2.5435	2.5933	2.8141	1.7970	1.9765	122.17	20.141	2.3918	2.3546	2.5322	.34050
#1	.49556	.50891	.95323	.50892	.50095	.46208	-.00330	6.8646	.50341	.50545	.51157	.50878
#2	.49190	.49092	.91890	.48906	.51384	.47518	-.00024	5.1531	.48667	.48890	.49357	.50634
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								5.0000				
Range								10.490%				

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4679**	**49.729**	**.96158**	**19.710**	**.47442**	**.50530**	**8.0478**	**.49762**	**.99782**	**1.0116**	**.05246**	**.98258**
Stddev	.0686	.991	.02002	.002	.00022	.01300	2.9240	.01014	.01769	.0248	.00220	.02432
%RSD	2.7788	1.9926	2.0820	.00819	.04618	2.5728	36.333	2.0376	1.7733	2.4465	4.2018	2.4755
#1	2.5164	49.028	.94742	19.709	.47457	.51449	10.115	.50479	1.0103	1.0291	.05090	.99978
#2	2.4194	50.430	.97574	19.711	.47426	.49611	5.9802	.49045	.98531	.99407	.05401	.96538
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.94776**	**4.7865**	**10.243**	**1.0181**	**.47364**	**.01157**	**.46037**	**.93175**	**-.01533**	**.48151**	**.46526**	**.49993**
Stddev	.02582	.0573	.123	.0216	.00404	.00208	.00080	.01502	.03663	.00032	.00037	.00874
%RSD	2.7247	1.1961	1.1961	2.1208	.85294	17.955	.17324	1.6120	238.98	.06617	.07934	1.7491
#1	.96602	4.7460	10.156	1.0333	.47649	.01303	.45981	.94237	-.04123	.48174	.46500	.49375
#2	.92950	4.8270	10.330	1.0028	.47078	.01010	.46093	.92113	.01058	.48129	.46552	.50611
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2721.1**	**51381.**	**6065.8**
Stddev	19.5	57.	65.9
%RSD	.71622	.11051	1.0856
#1	2734.9	51421.	6112.4
#2	2707.3	51340.	6019.2

Sample Name: CCB Acquired: 6/13/2017 16:49:29 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00084**	**.00349**	**.00480**	**.00064**	**.00068**	**.00016**	**.00069**	**.00973**	**.00026**	**.00033**	**-.00002**	**-.00325**	**-.00016**
Stddev	.00032	.00065	.00609	.00045	.00028	.00004	.00075	.00084	.00018	.00014	.00010	.00040	.00089
%RSD	38.391	18.781	127.02	70.263	41.744	26.287	108.06	8.6341	69.034	43.246	437.09	12.425	543.56
#1	.00107	.00395	.00049	.00096	.00088	.00013	.00016	.00914	.00039	.00043	-.00009	-.00354	.00046
#2	.00061	.00302	.00911	.00032	.00048	.00019	.00122	.01032	.00013	.00023	.00005	-.00297	-.00079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.15969**	**.00203**	**.01175**	**.00009**	**.00035**	**.01933**	**-.00019**	**.00451**	**-.00279**	**.02644**	**.00431**	**-.00694**	**.02052**
Stddev	.05826	.00131	.00330	.00000	.00015	.00501	.00009	.00153	.00096	.00361	.00346	.00274	.00346
%RSD	36.484	64.395	28.076	.03689	43.089	25.911	49.560	34.058	34.360	13.652	80.356	39.570	16.846
#1	.11850	.00296	.01408	.00009	.00046	.02287	-.00012	.00342	-.00211	.02389	.00676	-.00888	.02296
#2	.20089	.00111	.00942	.00009	.00024	.01579	-.00026	.00559	-.00347	.02899	.00186	-.00499	.01808
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04391**	**.00157**	**.00036**	**.00448**	**-.00015**	**.00405**	**-.02455**	**-.00016**	**.00166**	**-.00030**
Stddev	.00740	.00245	.00002	.00155	.00045	.00070	.00485	.00016	.00015	.00071
%RSD	16.846	155.88	5.7984	34.552	300.57	17.300	19.756	103.50	9.0043	237.64
#1	.04914	-.00016	.00035	.00557	.00017	.00355	-.02798	-.00004	.00156	.00020
#2	.03868	.00330	.00037	.00338	-.00047	.00454	-.02112	-.00027	.00177	-.00080
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2719.1**	**51264.**	**5882.5**
Stddev	8.2	61.	22.2
%RSD	.30079	.11887	.37799
#1	2724.9	51221.	5898.3
#2	2713.4	51307.	5866.8

Sample Name: CCVL-4590576 Acquired: 6/13/2017 16:52:08 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01114**	**.10273**	**.01373**	**.10053**	**.01056**	**.00094**	**.10827**	**.20621**	**.00526**	**.00996**	**.01007**	**.01242**
Stddev	.00007	.00177	.00304	.00357	.00022	.00005	.00717	.00048	.00002	.00009	.00036	.00097
%RSD	.62372	1.7230	22.160	3.5542	2.0882	5.7413	6.6249	.23094	.31449	.94573	3.5431	7.8485
#1	.01119	.10398	.01588	.10306	.01071	.00091	.11334	.20654	.00524	.01003	.01033	.01310
#2	.01109	.10148	.01158	.09800	.01040	.00098	.10320	.20587	.00527	.00990	.00982	.01173
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11525**	**3.2224**	**.02332**	**.20959**	**.01011**	**.01963**	**1.0387**	**.04080**	**2.8784**	**.00915**	**.12321**	**.02394**
Stddev	.00202	.0918	.00113	.00057	.00011	.00048	.0062	.00139	.0723	.00007	.00611	.00195
%RSD	1.7487	2.8490	4.8287	.27429	1.0407	2.4625	.59387	3.4013	2.5133	.77593	4.9565	8.1625
#1	.11382	3.1574	.02253	.20999	.01004	.01998	1.0431	.04178	2.9296	.00920	.11889	.02532
#2	.11667	3.2873	.02412	.20918	.01018	.01929	1.0343	.03982	2.8273	.00910	.12753	.02256
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01412**	**.51081**	**1.0931**	**.10231**	**.00978**	**.01918**	**.00876**	**.01658**	F **.02868**	**.00966**	**.01877**	**.01659**
Stddev	.00360	.02604	.0557	.00316	.00004	.00263	.00023	.00165	.02715	.00015	.00081	.00178
%RSD	25.538	5.0987	5.0987	3.0916	.38426	13.721	2.6399	9.9673	94.684	1.5801	4.2957	10.708
#1	.01667	.52922	1.1325	.10455	.00975	.01732	.00892	.01541	.04788	.00956	.01934	.01784
#2	.01157	.49239	1.0537	.10007	.00980	.02104	.00859	.01774	.00948	.00977	.01820	.01533
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2744.1**	**51535.**	**5893.2**
Stddev	2.2	117.	27.9
%RSD	.08081	.22685	.47411
#1	2745.7	51618.	5873.5
#2	2742.6	51452.	5913.0

Sample Name: 280-98011-G-6-G Acquired: 6/13/2017 16:54:45 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376720 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00134**	**.00204**	**.00033**	**.12016**	**.06221**	**-.00006**	**-.00542**	**148.36**	**.00120**
Stddev	.00018	.00034	.00425	.00246	.00029	.00009	.00017	.80	.00012
%RSD	13.141	16.411	1295.8	2.0480	.47075	144.31	3.0806	.54118	9.7849
#1	.00122	.00181	-.00268	.12190	.06242	-.00012	-.00530	148.92	.00128
#2	.00147	.00228	.00334	.11842	.06200	.00000	-.00554	147.79	.00112
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**-.00042**	**-.00146**	**.02160**	**2.4616**	**.02477**	**51.844**	**.01389**	**.00170**
Stddev	.00003	.00019	.00061	.00035	.0027	.00146	.065	.00004	.00009
%RSD	81.532	45.818	41.768	1.6161	.11176	5.9129	.12456	.32067	5.4194
#1	.00006	-.00056	-.00190	.02185	2.4636	.02581	51.890	.01386	.00163
#2	.00002	-.00029	-.00103	.02136	2.4597	.02373	51.799	.01392	.00176
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**130.91**	**.00093**	**.01480**	**-.00206**	**173.21**	**-.00007**	**-.00287**	**6.0852**	**13.022**
Stddev	.65	.00062	.00091	.00175	2.93	.00347	.01035	.0290	.062
%RSD	.50026	66.723	6.1404	84.714	1.6895	5074.4	360.43	.47717	.47717
#1	130.45	.00137	.01415	-.00330	175.28	.00239	-.01019	6.1057	13.066
#2	131.38	.00049	.01544	-.00083	171.14	-.00252	.00445	6.0647	12.978
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00015**	**.67848**	**.00624**	**-.00051**	**.00400**	**-.02112**	**-.00057**	**.00025**	**-.00111**
Stddev	.00080	.00283	.00090	.00023	.00228	.03942	.00002	.00005	.00201
%RSD	552.71	.41783	14.477	45.704	56.974	186.65	2.9255	20.489	180.59
#1	-.00042	.68049	.00560	-.00067	.00561	.00675	-.00056	.00028	.00031
#2	.00071	.67648	.00688	-.00034	.00239	-.04899	-.00058	.00021	-.00253
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2538.4**	**47830.**	**5769.0**
Stddev	7.4	117.	71.3
%RSD	.28986	.24474	1.2364
#1	2533.2	47747.	5718.5
#2	2543.6	47913.	5819.4

Sample Name: 280-98011-G-6-Gsd@5 Acquired: 6/13/2017 16:57:21 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376720 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00142**	**-.00027**	**-.00099**	**.02557**	**.01276**	**-.00007**	**-.00101**	**30.259**	**.00054**
Stddev	.00031	.00013	.00048	.00035	.00006	.00004	.00220	.082	.00005
%RSD	22.055	50.088	48.144	1.3591	.45910	61.686	217.90	.27150	9.1624
#1	.00120	-.00017	-.00133	.02533	.01280	-.00004	-.00256	30.201	.00057
#2	.00164	-.00036	-.00066	.02582	.01272	-.00010	.00055	30.317	.00050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**-.00000**	**-.00217**	**.00968**	**.70663**	**.00840**	**10.844**	**.00291**	**.00041**
Stddev	.00018	.00060	.00036	.00034	.04202	.00038	.029	.00008	.00007
%RSD	352.30	28323.	16.665	3.5265	5.9463	4.5838	.26647	2.7273	16.026
#1	.00018	.00042	-.00243	.00944	.67692	.00867	10.864	.00286	.00036
#2	-.00008	-.00042	-.00192	.00992	.73634	.00812	10.823	.00297	.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**27.080**	**-.00029**	**.00498**	**-.00163**	**35.091**	**.00197**	**-.00643**	**1.2259**	**2.6234**
Stddev	.404	.00021	.00236	.00016	.829	.00413	.00007	.0027	.0057
%RSD	1.4936	73.425	47.345	9.7370	2.3637	210.15	1.1605	.21771	.21771
#1	26.794	-.00014	.00331	-.00174	35.677	-.00096	-.00649	1.2278	2.6275
#2	27.366	-.00044	.00664	-.00152	34.504	.00489	-.00638	1.2240	2.6194
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00096**	**.13787**	**.00588**	**-.00060**	**.00165**	**-.03734**	**.00012**	**.00017**	**-.00074**
Stddev	.00004	.00054	.00037	.00002	.00148	.05197	.00004	.00093	.00023
%RSD	4.0148	.38868	6.3083	3.6209	89.626	139.18	29.527	558.71	30.718
#1	.00099	.13749	.00614	-.00059	.00060	-.07410	.00014	-.00049	-.00090
#2	.00093	.13824	.00561	-.00062	.00269	-.00059	.00009	.00082	-.00058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2672.7**	**50492.**	**5804.5**
Stddev	4.4	31.	50.4
%RSD	.16520	.06177	.86822
#1	2669.6	50470.	5840.1
#2	2675.9	50514.	5768.8

Sample Name: 280-98011-G-6-H MS Acquired: 6/13/2017 16:59:57 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376720 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05434**	**1.8906**	**1.0402**	**1.1454**	**2.2136**	**.04836**	W **2.0326**	**206.78**	**.10644**
Stddev	.00028	.0406	.0202	.0169	.0015	.00035	.0388	.14	.00161
%RSD	.51602	2.1446	1.9437	1.4746	.06617	.73197	1.9108	.06956	1.5158
#1	.05414	1.9193	1.0544	1.1574	2.2125	.04861	2.0600	206.68	.10758
#2	.05454	1.8619	1.0259	1.1335	2.2146	.04811	2.0051	206.88	.10530
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49209**	**.20810**	**.26711**	**1.0412**	**55.377**	**1.0263**	**104.43**	**.49422**	**1.0261**
Stddev	.00774	.00444	.00097	.0016	.146	.0024	.08	.00040	.0161
%RSD	1.5726	2.1359	.36428	.15116	.26318	.23894	.07767	.08006	1.5701
#1	.49756	.21124	.26780	1.0423	55.273	1.0246	104.37	.49450	1.0375
#2	.48662	.20495	.26642	1.0401	55.480	1.0280	104.49	.49394	1.0147
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**186.92**	**.49319**	**10.849**	**.50194**	W **187.14**	**.52166**	**1.9900**	**16.275**	**34.828**
Stddev	1.03	.00792	.183	.00786	2.77	.00791	.0284	.002	.004
%RSD	.55074	1.6050	1.6834	1.5662	1.4785	1.5159	1.4245	.01293	.01293
#1	186.19	.49878	10.978	.50750	189.09	.52725	2.0100	16.273	34.824
#2	187.64	.48759	10.719	.49638	185.18	.51607	1.9699	16.276	34.831
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					180.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2.0588**	**1.6812**	**.97934**	**.95457**	**1.7732**	**1.9439**	**.50652**	**.47709**	**.53343**
Stddev	.0362	.0051	.00190	.00189	.0263	.0095	.00170	.00054	.00079
%RSD	1.7599	.30329	.19402	.19768	1.4846	.49030	.33569	.11343	.14742
#1	2.0844	1.6776	.98068	.95324	1.7918	1.9506	.50772	.47671	.53287
#2	2.0332	1.6848	.97799	.95591	1.7546	1.9371	.50532	.47747	.53398
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.20000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2504.5**	**47131.**	**5719.9**
Stddev	14.6	96.	19.5
%RSD	.58191	.20336	.34152
#1	2494.2	47199.	5733.7
#2	2514.8	47064.	5706.1

Sample Name: 280-98011-G-6-I MSD Acquired: 6/13/2017 17:02:20 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376720 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05417**	**1.8862**	**1.0391**	**1.1534**	**2.2121**	**.04851**	W **2.0294**	**204.69**	**.10648**
Stddev	.00103	.0292	.0215	.0139	.0020	.00011	.0271	.18	.00179
%RSD	1.8941	1.5495	2.0697	1.2041	.09187	.22888	1.3364	.08710	1.6848
#1	.05344	1.9069	1.0543	1.1633	2.2135	.04843	2.0486	204.81	.10775
#2	.05489	1.8655	1.0239	1.1436	2.2106	.04859	2.0102	204.56	.10521
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49480**	**.20858**	**.26462**	**1.0008**	**55.190**	**1.0354**	**103.17**	**.49455**	**1.0365**
Stddev	.00792	.00482	.00059	.0063	.039	.0007	.01	.00087	.0148
%RSD	1.5998	2.3108	.22254	.62637	.07097	.07066	.01350	.17619	1.4238
#1	.50040	.21199	.26504	.99634	55.162	1.0359	103.18	.49393	1.0470
#2	.48920	.20517	.26421	1.0052	55.217	1.0348	103.16	.49516	1.0261
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**185.90**	**.49561**	**10.858**	**.50097**	W **185.32**	**.51903**	**1.9965**	**16.248**	**34.771**
Stddev	.75	.00720	.124	.00916	2.55	.00893	.0238	.042	.091
%RSD	.40529	1.4530	1.1464	1.8286	1.3746	1.7197	1.1911	.26063	.26063
#1	185.37	.50070	10.946	.50745	187.12	.52534	2.0133	16.278	34.835
#2	186.44	.49052	10.770	.49449	183.52	.51272	1.9797	16.218	34.707
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					180.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2.0729**	**1.6872**	**.98063**	**.96227**	**1.7781**	**1.9662**	**.50780**	**.47065**	**.53541**
Stddev	.0359	.0019	.00160	.00061	.0188	.0054	.00110	.00027	.00133
%RSD	1.7331	.11246	.16328	.06341	1.0551	.27675	.21721	.05704	.24924
#1	2.0983	1.6858	.98176	.96270	1.7914	1.9624	.50702	.47046	.53635
#2	2.0475	1.6885	.97950	.96184	1.7649	1.9701	.50858	.47084	.53446
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.20000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2509.5**	**47825.**	**5885.9**
Stddev	3.3	210.	11.5
%RSD	.13269	.43931	.19496
#1	2511.9	47974.	5894.0
#2	2507.2	47677.	5877.7

Sample Name: 280-98011-C-7-C Acquired: 6/13/2017 17:04:43 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376720 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00131**	**-.00231**	**-.00503**	**.50558**	**.03019**	**-.00010**	**-.00144**	**222.67**	**.00170**
Stddev	.00031	.00061	.01555	.01392	.00041	.00002	.00064	.49	.00023
%RSD	23.659	26.474	308.93	2.7536	1.3716	18.380	44.500	.21816	13.515
#1	.00109	-.00188	-.01602	.51542	.03048	-.00012	-.00099	222.32	.00186
#2	.00152	-.00274	.00596	.49574	.02990	-.00009	-.00190	223.01	.00153
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00077**	**.00001**	**.00022**	**.04632**	**5.1995**	**.12180**	**191.20**	**.11494**	**.00104**
Stddev	.00004	.00028	.00009	.00070	.0647	.00101	.38	.00024	.00062
%RSD	4.6246	4301.0	40.181	1.5173	1.2444	.82983	.19833	.20852	59.267
#1	-.00074	-.00019	.00016	.04582	5.1537	.12251	191.47	.11511	.00148
#2	-.00079	.00021	.00029	.04681	5.2452	.12108	190.93	.11477	.00061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **699.53**	**.00319**	**.01924**	**-.00186**	F **751.65**	**-.00332**	**-.00546**	**3.5344**	**7.5637**
Stddev	2.00	.00019	.00421	.00045	25.37	.00277	.00835	.0112	.0239
%RSD	.28642	6.0040	21.861	24.279	3.3756	83.526	152.97	.31566	.31566
#1	698.12	.00333	.02222	-.00154	769.59	-.00528	.00045	3.5265	7.5468
#2	700.95	.00305	.01627	-.00218	733.71	-.00136	-.01136	3.5423	7.5805
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00170**	**2.6709**	**.00254**	**-.00003**	**-.00018**	**-.02252**	**-.00140**	**.00084**	**.00054**
Stddev	.00156	.0089	.00148	.00001	.00222	.01002	.00040	.00002	.00320
%RSD	91.452	.33247	58.332	25.355	1220.6	44.503	28.391	2.5479	587.83
#1	-.00281	2.6646	.00359	-.00002	-.00175	-.02960	-.00168	.00083	-.00172
#2	-.00060	2.6771	.00149	-.00003	.00139	-.01543	-.00112	.00086	.00281
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2452.0**	**45579.**	**5734.6**
Stddev	2.6	8.	28.2
%RSD	.10696	.01764	.49254
#1	2450.2	45574.	5754.6
#2	2453.9	45585.	5714.7

Sample Name: 280-98011-C-8-B Acquired: 6/13/2017 17:07:24 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376720 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00168**	**-.00188**	**-.00239**	**.30711**	**.03724**	**-.00013**	**-.00059**	**186.36**	**.00109**
Stddev	.00020	.00108	.00748	.00959	.00057	.00008	.00373	.08	.00042
%RSD	11.979	57.559	312.94	3.1214	1.5205	59.531	633.61	.04547	38.314
#1	.00153	-.00111	-.00768	.31388	.03684	-.00008	.00205	186.30	.00138
#2	.00182	-.00264	.00290	.30033	.03764	-.00019	-.00323	186.42	.00079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00078**	**.00007**	**.00118**	**.03816**	**5.9074**	**.07872**	**82.284**	**.00168**	**.00093**
Stddev	.00010	.00025	.00034	.00224	.0263	.00235	.029	.00001	.00068
%RSD	12.832	368.00	28.711	5.8624	.44488	2.9886	.03550	.45472	73.353
#1	-.00085	.00025	.00141	.03658	5.8888	.07705	82.264	.00168	.00045
#2	-.00071	-.00011	.00094	.03975	5.9260	.08038	82.305	.00167	.00141
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**290.94**	**.00202**	**.26286**	**-.00352**	F **305.98**	**-.00272**	**.00581**	**3.7750**	**8.0786**
Stddev	.61	.00036	.01233	.00119	11.52	.00468	.00051	.0179	.0384
%RSD	.20806	17.850	4.6926	33.855	3.7660	172.04	8.8453	.47476	.47476
#1	290.51	.00177	.27158	-.00268	314.13	-.00602	.00617	3.7624	8.0515
#2	291.36	.00228	.25413	-.00437	297.83	.00059	.00545	3.7877	8.1057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00257**	**1.5638**	**.00453**	**-.00074**	**-.00138**	**-.03490**	**.00034**	**.00173**	**.00006**
Stddev	.00188	.0012	.00089	.00027	.00163	.01912	.00047	.00027	.00144
%RSD	73.163	.07775	19.743	36.612	117.95	54.777	138.09	15.635	2317.3
#1	-.00389	1.5629	.00516	-.00055	-.00023	-.02138	.00001	.00154	-.00096
#2	-.00124	1.5646	.00389	-.00093	-.00253	-.04841	.00068	.00193	.00108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2526.4**	**47453.**	**5831.6**
Stddev	12.4	69.	3.4
%RSD	.48938	.14497	.05824
#1	2517.6	47404.	5834.0
#2	2535.1	47501.	5829.2

Sample Name: 280-97990-F-1-B Acquired: 6/13/2017 17:10:00 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376720 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00115**	**.00637**	**-.00543**	**.20822**	**.07619**	**-.00012**	**-.00244**	**146.05**	**.00081**
Stddev	.00023	.00007	.00095	.00742	.00029	.00004	.00181	.12	.00018
%RSD	20.331	1.0533	17.565	3.5634	.38305	29.016	74.282	.08366	22.800
#1	.00098	.00642	-.00476	.21347	.07640	-.00015	-.00116	146.14	.00068
#2	.00132	.00632	-.00610	.20298	.07599	-.00010	-.00372	145.96	.00094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**.00025**	**-.00016**	**.01888**	**6.8074**	**.03910**	**26.720**	**.11380**	**.00231**
Stddev	.00028	.00031	.00075	.00138	.0338	.00163	.031	.00023	.00058
%RSD	514.93	122.66	475.34	7.2945	.49592	4.1630	.11560	.20267	25.206
#1	.00014	.00003	.00037	.01791	6.8313	.04025	26.742	.11396	.00273
#2	-.00025	.00047	-.00069	.01986	6.7836	.03794	26.698	.11363	.00190
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**175.19**	**.00182**	**.07675**	**-.00153**	**136.87**	**-.00277**	**-.00542**	**3.8909**	**8.3264**
Stddev	.59	.00003	.00220	.00073	4.45	.00461	.00312	.0169	.0362
%RSD	.33711	1.5131	2.8650	47.681	3.2512	166.49	57.617	.43466	.43466
#1	174.77	.00184	.07831	-.00101	140.01	-.00603	-.00321	3.8789	8.3008
#2	175.61	.00180	.07520	-.00204	133.72	.00049	-.00763	3.9028	8.3520
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00256**	**1.8908**	**.00521**	**-.00033**	**.00159**	**-.04785**	**.00074**	**.00716**	**-.00090**
Stddev	.00304	.0002	.00047	.00050	.00116	.02924	.00001	.00075	.00064
%RSD	118.42	.01188	9.0769	152.92	73.374	61.111	1.7205	10.432	71.239
#1	-.00042	1.8910	.00555	-.00068	.00241	-.02717	.00074	.00664	-.00136
#2	-.00471	1.8907	.00488	.00003	.00076	-.06852	.00073	.00769	-.00045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2586.4**	**48725.**	**5910.3**
Stddev	.3	101.	20.3
%RSD	.01230	.20756	.34357
#1	2586.2	48653.	5895.9
#2	2586.6	48796.	5924.6

Sample Name: 280-97990-F-2-B Acquired: 6/13/2017 17:12:35 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376720 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00169**	**.00717**	**-.00090**	**.20172**	**.06132**	**-.00003**	**-.00002**	**150.36**	**.00059**
Stddev	.00009	.00132	.00303	.00573	.00072	.00006	.00572	.22	.00038
%RSD	5.3656	18.392	335.05	2.8382	1.1785	189.10	23569.	.14955	64.710
#1	.00162	.00810	-.00304	.20577	.06183	-.00008	.00402	150.52	.00085
#2	.00175	.00623	.00124	.19767	.06081	.00001	-.00407	150.20	.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00012**	**-.00003**	**.00064**	**.01942**	**6.7486**	**.03631**	**27.045**	**.04024**	**.00256**
Stddev	.00007	.00011	.00058	.00025	.0526	.00089	.039	.00024	.00105
%RSD	55.496	427.33	91.181	1.2820	.77953	2.4462	.14596	.60112	41.095
#1	.00008	-.00010	.00105	.01925	6.7858	.03693	27.018	.04007	.00331
#2	.00017	.00005	.00023	.01960	6.7114	.03568	27.073	.04041	.00182
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**169.96**	**.00212**	**.02948**	**-.00338**	**142.28**	**-.00213**	**-.00152**	**3.9651**	**8.4854**
Stddev	.23	.00059	.00256	.00243	4.35	.00221	.00263	.0063	.0136
%RSD	.13377	27.864	8.6773	71.892	3.0585	103.99	172.66	.16027	.16027
#1	169.80	.00253	.03129	-.00510	145.36	-.00056	-.00338	3.9696	8.4950
#2	170.12	.00170	.02767	-.00166	139.21	-.00369	.00034	3.9607	8.4758
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00166**	**1.9627**	**.00370**	**-.00040**	**.00061**	**-.02264**	**.00168**	**.00754**	**.00023**
Stddev	.00348	.0055	.00233	.00009	.00278	.00043	.00126	.00052	.00025
%RSD	209.88	.28149	62.942	23.484	453.85	1.8868	75.233	6.9116	108.09
#1	.00080	1.9588	.00205	-.00046	.00258	-.02234	.00079	.00717	.00041
#2	-.00412	1.9666	.00535	-.00033	-.00135	-.02294	.00257	.00791	.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2587.6**	**49092.**	**5945.6**
Stddev	3.7	305.	66.7
%RSD	.14194	.62067	1.1219
#1	2585.0	49308.	5898.4
#2	2590.2	48877.	5992.8

Sample Name: CCVH-4579429 Acquired: 6/13/2017 17:15:10 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00058**	**46.907**	**-.00360**	**.00484**	**.00088**	**.00010**	**.96480**	**.06795**	**.00092**	**-.00061**	**.00023**	**.00976**
Stddev	.00006	.156	.00378	.00297	.00037	.00009	.01813	.00480	.00025	.00074	.00071	.00033
%RSD	10.107	.33304	105.06	61.336	41.639	83.372	1.8790	7.0650	27.244	120.50	302.38	3.3716
#1	.00062	46.797	-.00627	.00694	.00062	.00017	.97762	.07134	.00109	-.00009	.00074	.00952
#2	.00054	47.018	-.00092	.00274	.00114	.00004	.95198	.06455	.00074	-.00114	-.00027	.00999
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.322**	**.19580**	**.00290**	**.04849**	**-.00215**	**-.00081**	**243.68**	**.00121**	**.01612**	**-.00109**	F **6.7591**	**.00318**
Stddev	.232	.00458	.00170	.00817	.00008	.00078	.46	.00136	.01899	.00230	2.0973	.00187
%RSD	.47093	2.3391	58.585	16.849	3.7654	96.668	.18972	112.52	117.80	211.78	31.029	58.697
#1	49.486	.19256	.00170	.05427	-.00210	-.00026	243.35	.00216	.02954	.00054	8.2421	.00450
#2	49.158	.19904	.00410	.04272	-.00221	-.00136	244.00	.00025	.00269	-.00271	5.2761	.00186
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Fail	None
Value											5.0000	
Range											10.490%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00224**	**-.00660**	**-.01413**	**.00199**	**.00130**	W **4.6325**	**.01893**	**.00415**	W **9.3446**	**.01240**	**-.00013**	**.07543**
Stddev	.00815	.00860	.01840	.00542	.00012	.0009	.00061	.00051	.0151	.00035	.00078	.00139
%RSD	363.06	130.20	130.20	272.31	9.3839	.01863	3.2191	12.371	.16118	2.8114	608.64	1.8363
#1	.00352	-.01268	-.02714	.00583	.00139	4.6319	.01936	.00452	9.3552	.01216	-.00068	.07641
#2	-.00801	-.00052	-.00112	-.00184	.00122	4.6332	.01850	.00379	9.3339	.01265	.00043	.07445
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2710.7**	**49781.**	**5914.6**
Stddev	10.3	266.	35.2
%RSD	.38084	.53381	.59436
#1	2718.0	49969.	5939.4
#2	2703.4	49593.	5889.7

Sample Name: CCV-4580817 Acquired: 6/13/2017 17:17:45 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49203**	**.50263**	**.94359**	**.50286**	**.51342**	**.47129**	**.00034**	**5.1424**	**.49801**	**.50078**	**.50655**	**.50690**	**2.4640**
Stddev	.00115	.01234	.01855	.00747	.00205	.00103	.00035	.0298	.00995	.01059	.01216	.00118	.0129
%RSD	.23306	2.4544	1.9661	1.4861	.39957	.21898	103.70	.57883	1.9988	2.1144	2.4002	.23217	.52528
#1	.49284	.51136	.95671	.50815	.51488	.47202	.00058	5.1634	.50505	.50826	.51515	.50774	2.4731
#2	.49122	.49391	.93047	.49758	.51197	.47056	.00009	5.1213	.49097	.49329	.49796	.50607	2.4548
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.228**	**.96749**	**19.659**	**.47454**	**.50882**	**5.1309**	**.49909**	**.99763**	**1.0176**	**.06164**	**.98035**	**.94961**	**4.8182**
Stddev	.200	.00661	.097	.00087	.01040	.0262	.00932	.01416	.0240	.00242	.02122	.01941	.0215
%RSD	.39820	.68352	.49143	.18258	2.0438	.51118	1.8666	1.4192	2.3549	3.9242	2.1642	2.0438	.44510
#1	50.369	.97217	19.727	.47516	.51618	5.1495	.50568	1.0076	1.0345	.05993	.99536	.96333	4.8030
#2	50.086	.96281	19.590	.47393	.50147	5.1124	.49250	.98762	1.0006	.06335	.96535	.93588	4.8334
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.311**	**1.0293**	**.46846**	**.01276**	**.46034**	**.93473**	**-.05684**	**.48743**	**.46816**	**.50607**
Stddev	.046	.0194	.00141	.00111	.00022	.00892	.01583	.00093	.00012	.00200
%RSD	.44510	1.8828	.30044	8.6961	.04697	.95474	27.840	.19159	.02473	.39447
#1	10.278	1.0430	.46945	.01198	.46049	.94104	-.04565	.48809	.46808	.50466
#2	10.343	1.0156	.46746	.01355	.46019	.92842	-.06803	.48677	.46825	.50748
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2734.8**	**51853.**	**6103.6**
Stddev	11.7	9.	23.9
%RSD	.42727	.01640	.39220
#1	2743.0	51847.	6086.7
#2	2726.5	51859.	6120.5

Sample Name: CCB Acquired: 6/13/2017 17:20:14 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00105**	**.00240**	**-.00342**	**.00129**	**.00044**	**.00008**	**.00144**	**.01050**	**.00038**	**-.00003**	**-.00012**	**-.00380**
Stddev	.00008	.00091	.00436	.00072	.00000	.00002	.00261	.00033	.00011	.00007	.00029	.00015
%RSD	7.7975	38.157	127.55	55.718	.88308	27.606	180.71	3.1690	30.358	197.50	242.54	4.0407
#1	.00111	.00304	-.00034	.00078	.00044	.00009	.00329	.01073	.00030	-.00008	-.00032	-.00369
#2	.00099	.00175	-.00650	.00180	.00045	.00006	-.00040	.01026	.00046	.00001	.00008	-.00390
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02480**	**.15182**	**.00290**	**.01106**	**.00024**	**-.00009**	**.02837**	**.00022**	**.00414**	**-.00142**	W **.05503**	**-.00231**
Stddev	.00350	.01080	.00062	.00119	.00002	.00030	.00323	.00021	.00007	.00223	.00419	.00307
%RSD	14.094	7.1156	21.428	10.794	10.032	328.73	11.371	93.817	1.7757	157.38	7.6045	133.15
#1	.02727	.14418	.00334	.01190	.00026	-.00030	.02609	.00007	.00409	-.00300	.05207	-.00448
#2	.02233	.15945	.00246	.01021	.00022	.00012	.03066	.00037	.00419	.00016	.05799	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit											.05000	
Low Limit											-.20000	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00148**	**.01575**	**.03370**	**.00246**	**.00039**	**.00532**	**-.00028**	**.00159**	**-.01457**	**.00020**	**.00040**	**-.00032**
Stddev	.00021	.00844	.01807	.00137	.00003	.00054	.00009	.00584	.01039	.00079	.00103	.00053
%RSD	14.269	53.601	53.601	55.575	7.6608	10.214	31.547	366.46	71.280	393.18	258.17	164.43
#1	.00133	.02172	.04648	.00343	.00037	.00494	-.00022	.00572	-.00723	-.00036	.00113	-.00069
#2	.00163	.00978	.02093	.00149	.00041	.00570	-.00034	-.00254	-.02192	.00076	-.00033	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2743.7**	**52157.**	**5990.8**
Stddev	1.7	67.	5.4
%RSD	.06288	.12791	.09080
#1	2742.5	52205.	5994.6
#2	2744.9	52110.	5986.9

Sample Name: CCVL-4590576 Acquired: 6/13/2017 17:22:53 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01075**	**.10452**	**.01122**	**.09952**	**.01100**	**.00074**	**.10821**	**.22642**	**.00551**	**.00985**	**.00974**	**.01278**
Stddev	.00034	.00332	.00023	.00351	.00012	.00002	.00350	.00503	.00025	.00064	.00021	.00093
%RSD	3.1670	3.1793	2.0675	3.5254	1.0490	2.8023	3.2382	2.2216	4.6156	6.5277	2.1401	7.2706
#1	.01051	.10687	.01138	.10200	.01091	.00075	.11068	.22286	.00569	.01030	.00989	.01344
#2	.01100	.10217	.01106	.09704	.01108	.00072	.10573	.22997	.00533	.00940	.00960	.01212
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.41559**	**3.2747**	**.02395**	**.21179**	**.01154**	**.01940**	**1.0501**	**.04035**	**2.8523**	**.00817**	F **.14577**	**.02388**
Stddev	.00185	.0399	.00024	.00207	.00004	.00022	.0012	.00145	.1034	.00105	.00598	.00432
%RSD	.44556	1.2174	1.0225	.97772	.30617	1.1194	.11090	3.5975	3.6257	12.794	4.1041	18.077
#1	.41690	3.3029	.02413	.21033	.01156	.01955	1.0510	.04138	2.9255	.00744	.15000	.02693
#2	.41428	3.2465	.02378	.21326	.01151	.01925	1.0493	.03933	2.7792	.00891	.14154	.02082
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value	.10000										.10000	
Range	30.000%										30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01540**	**.48500**	**1.0379**	**.10202**	**.00961**	**.01883**	**.00907**	**.01579**	F **.03555**	**.00953**	F **.02651**	**.01599**
Stddev	.00261	.00521	.0111	.00164	.00012	.00082	.00003	.00230	.02245	.00010	.00046	.00252
%RSD	16.916	1.0738	1.0738	1.6068	1.2281	4.3300	.31120	14.555	63.161	1.0946	1.7441	15.784
#1	.01725	.48132	1.0300	.10317	.00970	.01825	.00905	.01417	.05143	.00945	.02684	.01777
#2	.01356	.48868	1.0458	.10086	.00953	.01940	.00909	.01742	.01967	.00960	.02618	.01420
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass
Value									.06000		.02000	
Range									-30.000%		30.000%	

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2757.8**	**51700.**	**5937.3**
Stddev	16.8	224.	2.0
%RSD	.60813	.43335	.03319
#1	2769.6	51541.	5935.9
#2	2745.9	51858.	5938.7

Sample Name: MB 280-376722/1-A Acquired: 6/13/2017 17:25:31 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: 6/12 Custom ID2: Custom ID3:
Comment: 376722 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00115**	**.00223**	**.00263**	**.00089**	**.00107**	**-.00017**	**-.00137**	**.00800**	**.00048**
Stddev	.00048	.00098	.00425	.00041	.00012	.00000	.00159	.00418	.00001
%RSD	41.624	43.804	161.45	46.358	11.479	1.2307	116.53	52.251	1.0830
#1	.00149	.00154	.00564	.00118	.00115	-.00017	-.00249	.00505	.00048
#2	.00081	.00292	-.00037	.00059	.00098	-.00017	-.00024	.01096	.00048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00017**	**-.00010**	**-.00291**	W **.09950**	**.24092**	**.00494**	**.01374**	W **.00028**	**.00050**
Stddev	.00016	.00028	.00119	.00225	.00709	.00273	.00408	.00001	.00008
%RSD	92.047	289.09	40.857	2.2582	2.9436	55.196	29.715	2.2898	15.731
#1	.00006	.00010	-.00207	.10109	.23591	.00301	.01085	.00027	.00044
#2	.00028	-.00029	-.00374	.09791	.24593	.00687	.01662	.00028	.00056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit				.01710				.00023	
Low Limit				-.05000				-.00500	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01509**	**-.00058**	**.00366**	**-.00146**	F **.03756**	**.00257**	W **-.00906**	**.00666**	**.01425**
Stddev	.01501	.00031	.00368	.00317	.00340	.00090	.00385	.02629	.05626
%RSD	99.517	52.801	100.62	216.75	9.0601	35.083	42.531	394.84	394.84
#1	.00447	-.00080	.00627	-.00371	.03516	.00321	-.01179	-.01193	-.02553
#2	.02570	-.00036	.00106	.00078	.03997	.00194	-.00634	.02525	.05403
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Warn	Chk Pass	None
High Limit					.01000		.00500		
Low Limit					-.01000		-.00500		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00082**	**.00019**	W **.00655**	**-.00039**	**.00115**	**-.04450**	**.00027**	**.00083**	**.00048**
Stddev	.00023	.00009	.00063	.00023	.00282	.00441	.00072	.00023	.00129
%RSD	28.518	49.366	9.6954	59.313	246.40	9.9048	262.62	27.041	270.63
#1	.00065	.00026	.00610	-.00022	.00314	-.04138	-.00024	.00099	.00139
#2	.00098	.00012	.00699	-.00055	-.00085	-.04762	.00078	.00067	-.00043
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00000						
Low Limit			-.00500						

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2718.5**	**51801.**	**5935.7**
Stddev	7.3	24.	51.8
%RSD	.26785	.04708	.87303
#1	2723.7	51784.	5899.0
#2	2713.4	51818.	5972.3

Sample Name: LCS 280-376722/2-A Acquired: 6/13/2017 17:28:10 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376722 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05297**	**1.9721**	**1.0060**	**1.0335**	**2.1139**	**.04840**	**2.0301**	**51.280**	**.10425**
Stddev	.00015	.0194	.0245	.0106	.0007	.00005	.0247	.046	.00129
%RSD	.28470	.98356	2.4325	1.0299	.03433	.11132	1.2167	.08876	1.2375
#1	.05287	1.9858	1.0233	1.0410	2.1134	.04844	2.0476	51.312	.10516
#2	.05308	1.9584	.98872	1.0259	2.1144	.04837	2.0127	51.248	.10334
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50233**	**.20920**	**.26124**	**.98637**	**51.772**	**.99283**	**50.064**	**.48177**	**1.0287**
Stddev	.00645	.00336	.00021	.00284	.061	.00293	.170	.00128	.0169
%RSD	1.2842	1.6081	.07891	.28811	.11781	.29537	.34036	.26485	1.6426
#1	.50690	.21158	.26139	.98436	51.729	.99491	50.185	.48268	1.0407
#2	.49777	.20682	.26110	.98838	51.815	.99076	49.944	.48087	1.0168
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.687**	**.50159**	**10.488**	**.51542**	**2.1575**	**.51642**	**1.9609**	**9.7884**	**20.947**
Stddev	.031	.00620	.155	.00698	.0158	.00311	.0104	.0074	.016
%RSD	.05906	1.2353	1.4771	1.3541	.73077	.60254	.52935	.07569	.07569
#1	51.709	.50597	10.598	.52035	2.1687	.51862	1.9682	9.7936	20.958
#2	51.666	.49721	10.379	.51048	2.1464	.51422	1.9535	9.7831	20.936
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.1072**	**.95864**	**.97264**	**.95741**	**1.8798**	**1.9591**	**.50160**	**.47566**	**.52823**
Stddev	.0224	.00055	.00485	.00357	.0134	.0160	.00297	.00325	.00568
%RSD	1.0647	.05780	.49885	.37302	.71133	.81642	.59280	.68338	1.0761
#1	2.1230	.95825	.97607	.95993	1.8892	1.9704	.50370	.47796	.53225
#2	2.0913	.95904	.96921	.95488	1.8703	1.9478	.49950	.47336	.52421
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2604.1**	**49329.**	**5851.3**
Stddev	30.1	327.	17.3
%RSD	1.1546	.66227	.29559
#1	2625.4	49098.	5863.5
#2	2582.9	49560.	5839.0

Sample Name: 280-97924-A-1-D Acquired: 6/13/2017 17:30:34 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376722 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00114**	**1.0627**	**.00380**	**.00714**	**.01123**	**.00002**	**.00085**	**2.0384**	**.00053**
Stddev	.00001	.0225	.00225	.00154	.00035	.00006	.00107	.0123	.00039
%RSD	.92058	2.1168	59.276	21.549	3.0874	342.13	125.22	.60252	74.044
#1	.00113	1.0786	.00540	.00823	.01147	.00006	.00010	2.0297	.00025
#2	.00114	1.0468	.00221	.00605	.01098	-.00002	.00161	2.0471	.00081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00077**	**.00176**	**.00156**	**1.5658**	**.71622**	**.00587**	**.90573**	**.03832**	**.00078**
Stddev	.00011	.00024	.00053	.0021	.02920	.00202	.00614	.00022	.00023
%RSD	13.618	13.749	33.877	.13468	4.0770	34.393	.67783	.57004	29.963
#1	.00085	.00193	.00194	1.5643	.73686	.00444	.91008	.03847	.00094
#2	.00070	.00159	.00119	1.5673	.69557	.00729	.90139	.03816	.00061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.0463**	**.00095**	**.04842**	**.00029**	**.52827**	**.00419**	**.00133**	**1.6890**	**3.6144**
Stddev	.0435	.00014	.00018	.00055	.01124	.00002	.00235	.0052	.0111
%RSD	1.0750	14.751	.37847	192.21	2.1270	.51792	176.07	.30650	.30650
#1	4.0156	.00105	.04855	-.00010	.53621	.00421	-.00033	1.6853	3.6065
#2	4.0771	.00085	.04829	.00067	.52032	.00418	.00300	1.6926	3.6222
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00138**	**.00781**	**.00650**	**.03319**	**.00245**	**-.05469**	**.00470**	**.05716**	**.00311**
Stddev	.00038	.00002	.00146	.00109	.00201	.01747	.00043	.00009	.00047
%RSD	27.628	.23886	22.440	3.2728	82.059	31.946	9.1490	.16453	14.956
#1	.00111	.00780	.00753	.03396	.00387	-.06705	.00500	.05723	.00344
#2	.00165	.00782	.00546	.03242	.00103	-.04234	.00440	.05710	.00278
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2769.5**	**52551.**	**6083.9**
Stddev	6.5	113.	88.2
%RSD	.23420	.21436	1.4500
#1	2774.1	52472.	6146.3
#2	2764.9	52631.	6021.5

Sample Name: 280-98037-H-1-B Acquired: 6/13/2017 17:33:09 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376722 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00148**	**6.2995**	**.09264**	**5.1909**	**.23453**	**.00012**	**-.00352**	**205.05**	**.00177**
Stddev	.00000	.0473	.00800	.0945	.00050	.00007	.00006	.49	.00001
%RSD	.24052	.75140	8.6368	1.8213	.21106	61.775	1.7408	.23957	.34582
#1	.00148	6.3330	.09829	5.2577	.23418	.00007	-.00356	205.40	.00176
#2	.00147	6.2660	.08698	5.1240	.23488	.00017	-.00347	204.70	.00177
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04233**	**.57774**	**.81178**	**8.2933**	F **694.79**	**.12747**	**70.943**	**.32011**	**.03888**
Stddev	.00111	.01616	.00374	.0171	1.90	.00148	.341	.00138	.00112
%RSD	2.6127	2.7973	.46082	.20640	.27294	1.1626	.48115	.43235	2.8747
#1	.04311	.58917	.81443	8.3054	696.13	.12852	71.184	.32109	.03967
#2	.04155	.56631	.80914	8.2812	693.45	.12643	70.701	.31913	.03809
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					500.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1328.6**	**.15443**	**8.5284**	**.00518**	**166.50**	**.01765**	**.00905**	**14.186**	**30.359**
Stddev	.9	.00458	.2268	.00016	4.09	.00426	.00961	.047	.100
%RSD	.06465	2.9633	2.6593	3.1001	2.4571	24.148	106.14	.32835	.32835
#1	1328.0	.15767	8.6888	.00507	169.39	.01464	.00226	14.153	30.288
#2	1329.2	.15119	8.3681	.00530	163.60	.02067	.01585	14.219	30.429
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06354**	**1.1292**	**.00422**	**.44954**	**-.00040**	**-.00426**	**.08495**	**.23599**	**.03977**
Stddev	.00259	.0014	.00095	.00188	.00170	.04215	.00001	.00039	.00078
%RSD	4.0699	.12816	22.518	.41924	427.16	988.43	.00909	.16677	1.9601
#1	.06537	1.1282	.00489	.45088	-.00160	-.03407	.08495	.23627	.04032
#2	.06171	1.1302	.00355	.44821	.00080	.02554	.08496	.23571	.03922
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2348.7**	**43531.**	**5715.5**
Stddev	5.2	47.	15.6
%RSD	.22323	.10740	.27218
#1	2345.0	43498.	5704.5
#2	2352.4	43564.	5726.5

Sample Name: 280-98037-H-1-Bsd@5 Acquired: 6/13/2017 17:35:44 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376722 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00107**	**1.1781**	**.01609**	**1.0801**	**.04656**	**-.00002**	**-.00239**	**40.545**	**.00066**
Stddev	.00032	.0387	.00242	.0342	.00076	.00007	.00376	.165	.00030
%RSD	30.423	3.2826	15.011	3.1675	1.6319	383.47	157.37	.40757	45.745
#1	.00130	1.2054	.01438	1.1043	.04603	-.00006	.00027	40.429	.00087
#2	.00084	1.1507	.01780	1.0559	.04710	.00003	-.00504	40.662	.00044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00795**	**.11212**	**.15934**	**1.6328**	W **138.06**	**.02750**	**14.399**	**.06281**	**.00744**
Stddev	.00056	.00449	.00038	.0124	.80	.00021	.050	.00015	.00038
%RSD	7.0181	4.0028	.23593	.76256	.57654	.74628	.34733	.23898	5.1521
#1	.00835	.11529	.15960	1.6240	137.50	.02735	14.435	.06292	.00771
#2	.00756	.10894	.15907	1.6416	138.62	.02764	14.364	.06270	.00717
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**260.98**	**.03008**	**1.6303**	**.00019**	**32.009**	**.00405**	**-.00510**	**2.8738**	**6.1499**
Stddev	1.77	.00077	.0529	.00073	1.038	.00167	.01356	.0269	.0575
%RSD	.67694	2.5562	3.2454	376.23	3.2416	41.155	265.84	.93492	.93492
#1	259.73	.03062	1.6678	-.00032	32.743	.00523	-.01469	2.8548	6.1093
#2	262.23	.02954	1.5929	.00071	31.275	.00287	.00449	2.8928	6.1906
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01341**	**.22102**	**.00359**	**.08843**	**.00148**	**-.05739**	**.01656**	**.04630**	**.01022**
Stddev	.00116	.00198	.00010	.00021	.00081	.00868	.00059	.00082	.00266
%RSD	8.6190	.89528	2.7645	.23844	54.924	15.129	3.5517	1.7718	26.054
#1	.01259	.21962	.00366	.08858	.00090	-.05125	.01615	.04688	.01210
#2	.01422	.22242	.00352	.08828	.00205	-.06353	.01698	.04572	.00834
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2640.0**	**49421.**	**6049.5**
Stddev	5.9	34.	40.9
%RSD	.22477	.06944	.67601
#1	2644.2	49445.	6078.4
#2	2635.9	49396.	6020.6

Sample Name: 280-98037-H-1-C MS Acquired: 6/13/2017 17:38:18 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376722 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05804**	**7.5429**	**1.1165**	**6.2029**	**2.3668**	**.04911**	**1.9490**	**261.87**	**.10565**
Stddev	.00095	.0095	.0431	.1459	.0074	.00002	.0520	.63	.00319
%RSD	1.6382	.12613	3.8633	2.3518	.31441	.04943	2.6676	.24085	3.0209
#1	.05871	7.5496	1.1470	6.3061	2.3616	.04913	1.9857	261.43	.10791
#2	.05737	7.5362	1.0860	6.0998	2.3721	.04909	1.9122	262.32	.10340
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50633**	**.53725**	**.61546**	**8.7859**	F **768.59**	**1.1334**	**122.38**	**.80843**	**.97271**
Stddev	.01462	.01910	.00147	.0411	1.47	.0029	.65	.00443	.03245
%RSD	2.8881	3.5549	.23884	.46723	.19158	.25324	.52770	.54778	3.3363
#1	.51667	.55076	.61650	8.7568	767.55	1.1314	122.84	.81156	.99565
#2	.49598	.52375	.61442	8.8149	769.63	1.1355	121.93	.80529	.94976
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					500.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1440.6**	**.60202**	**18.810**	**.46792**	**165.08**	**.50588**	**2.0060**	**21.168**	**45.300**
Stddev	4.5	.01690	.544	.00985	4.47	.01727	.0631	.034	.072
%RSD	.31536	2.8079	2.8901	2.1060	2.7062	3.4145	3.1463	.15931	.15931
#1	1437.4	.61397	19.194	.47488	168.24	.51809	2.0506	21.192	45.351
#2	1443.8	.59007	18.425	.46095	161.92	.49366	1.9614	21.144	45.249
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9313**	**2.1638**	**.92629**	**1.1557**	**1.5378**	**1.9335**	**.57773**	**.66368**	**.53875**
Stddev	.0557	.0068	.00057	.0044	.0383	.0061	.00283	.00358	.00087
%RSD	2.8819	.31437	.06116	.38394	2.4917	.31742	.48954	.53934	.16127
#1	1.9707	2.1590	.92589	1.1589	1.5649	1.9291	.57973	.66621	.53936
#2	1.8920	2.1686	.92669	1.1526	1.5107	1.9378	.57573	.66114	.53813
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2353.3**	**42931.**	**5681.8**
Stddev	4.1	416.	35.1
%RSD	.17592	.96945	.61851
#1	2350.4	42637.	5706.7
#2	2356.2	43225.	5657.0

Sample Name: 280-98037-H-1-D MSD Acquired: 6/13/2017 17:40:46 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376722 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05734**	**7.6150**	**1.1460**	**6.3710**	**2.3798**	**.04887**	**1.9854**	**264.33**	**.10804**
Stddev	.00001	.0962	.0013	.0992	.0038	.00004	.0384	.79	.00279
%RSD	.01028	1.2637	.11015	1.5571	.16072	.08177	1.9320	.29901	2.5826
#1	.05734	7.6830	1.1469	6.4412	2.3825	.04890	2.0125	264.89	.11001
#2	.05735	7.5470	1.1452	6.3009	2.3771	.04884	1.9582	263.77	.10606
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.51650**	**.53558**	**.60369**	**8.7838**	F **778.04**	**1.1386**	**122.72**	**.80923**	**.97298**
Stddev	.00976	.01190	.00257	.0288	2.64	.0041	.20	.00086	.02009
%RSD	1.8899	2.2210	.42555	.32772	.33922	.35643	.16269	.10628	2.0650
#1	.52340	.54399	.60551	8.8042	779.90	1.1414	122.86	.80984	.98718
#2	.50959	.52717	.60187	8.7635	776.17	1.1357	122.58	.80862	.95877
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					500.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1455.2**	**.61457**	**19.236**	**.47540**	**169.88**	**.50634**	**2.0582**	**21.001**	**44.943**
Stddev	2.7	.01376	.367	.00965	3.07	.01011	.0311	.009	.019
%RSD	.18638	2.2388	1.9059	2.0296	1.8054	1.9966	1.5111	.04251	.04251
#1	1457.1	.62430	19.495	.48222	172.05	.51349	2.0802	21.008	44.956
#2	1453.2	.60484	18.976	.46857	167.71	.49920	2.0363	20.995	44.929
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9441**	**2.1764**	**.91345**	**1.1250**	**1.5599**	**1.8954**	**.57767**	**.65779**	**.52980**
Stddev	.0436	.0027	.00228	.0020	.0225	.0403	.00276	.00263	.00352
%RSD	2.2417	.12508	.24924	.18039	1.4430	2.1290	.47827	.40018	.66380
#1	1.9749	2.1783	.91506	1.1264	1.5758	1.8668	.57962	.65593	.52731
#2	1.9133	2.1745	.91184	1.1235	1.5440	1.9239	.57571	.65966	.53229
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2364.3**	**43820.**	**5792.6**
Stddev	8.3	40.	32.5
%RSD	.35291	.09174	.56040
#1	2358.4	43792.	5769.6
#2	2370.2	43849.	5815.5

Sample Name: CCVH-4579429 Acquired: 6/13/2017 17:43:15 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00068**	**46.916**	**-.01060**	**.01853**	**.00109**	**.00005**	**.97241**	**.12652**	**.00054**	**-.00113**	**.00028**	**.00971**
Stddev	.00034	.085	.00362	.00135	.00023	.00008	.01426	.01377	.00024	.00045	.00001	.00059
%RSD	49.767	.18040	34.167	7.3099	21.362	140.21	1.4668	10.886	44.678	40.069	3.0543	6.0760
#1	.00044	46.856	-.00804	.01948	.00125	.00011	.98249	.13626	.00037	-.00081	.00027	.01013
#2	.00091	46.975	-.01316	.01757	.00093	.00000	.96232	.11678	.00071	-.00145	.00028	.00929
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.002**	**2.1283**	**.00257**	**.07412**	**-.00179**	**-.00110**	**245.20**	**.00055**	**.01599**	**.00086**	W **5.2970**	**.00505**
Stddev	.136	.2969	.00037	.00182	.00005	.00020	.97	.00005	.00387	.00409	.1093	.00290
%RSD	.27685	13.948	14.517	2.4559	3.0245	18.237	.39450	9.3373	24.186	472.86	2.0637	57.495
#1	48.906	2.3382	.00230	.07540	-.00175	-.00124	244.52	.00058	.01873	-.00203	5.3743	.00710
#2	49.098	1.9184	.00283	.07283	-.00183	-.00096	245.88	.00051	.01326	.00376	5.2197	.00299
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Warn	None
Value											5.0000	
Range											5.0000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00887**	**.02499**	**.05347**	**.00025**	**.00151**	W **4.6559**	**.01924**	**.00471**	W **9.4491**	**.01267**	**.00025**	**.08076**
Stddev	.00114	.01121	.02399	.00001	.00020	.0110	.00052	.00107	.0125	.00042	.00011	.00347
%RSD	12.894	44.857	44.857	2.4938	13.042	.23604	2.7116	22.642	.13234	3.2858	46.300	4.2906
#1	-.00806	.01706	.03651	.00024	.00165	4.6636	.01961	.00547	9.4403	.01296	.00017	.07831
#2	-.00967	.03291	.07044	.00025	.00137	4.6481	.01887	.00396	9.4580	.01237	.00033	.08321
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2765.3**	**51824.**	**6308.4**
Stddev	4.3	16.	40.0
%RSD	.15370	.03142	.63354
#1	2768.3	51835.	6336.7
#2	2762.3	51812.	6280.1

Sample Name: CCV-4580817 Acquired: 6/13/2017 17:45:49 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49748**	**.50997**	**.96447**	**.51728**	**.51678**	**.48084**	**-.00008**	**5.1621**	**.50214**	**.50626**	**.51054**	**.51175**	**2.4857**
Stddev	.00046	.00785	.01028	.00855	.00166	.00012	.00168	.0294	.00819	.00883	.00828	.00079	.0058
%RSD	.09258	1.5390	1.0654	1.6521	.32066	.02508	2052.2	.56880	1.6302	1.7433	1.6218	.15385	.23423
#1	.49716	.51552	.97173	.52332	.51796	.48075	-.00127	5.1828	.50793	.51250	.51640	.51119	2.4816
#2	.49781	.50442	.95720	.51123	.51561	.48092	.00111	5.1413	.49635	.50002	.50469	.51230	2.4899
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.037**	**.97986**	**19.712**	**.47890**	**.51426**	**5.2773**	**.50511**	**1.0161**	**1.0281**	**.03160**	**.99574**	**.96938**	**4.8371**
Stddev	.004	.00116	.014	.00081	.00880	.0033	.00828	.0129	.0174	.00289	.01670	.02521	.0106
%RSD	.00774	.11882	.07248	.16858	1.7108	.06209	1.6390	1.2666	1.6963	9.1492	1.6767	2.6005	.21910
#1	51.035	.97904	19.722	.47948	.52048	5.2797	.51096	1.0252	1.0404	.02955	1.0075	.98720	4.8296
#2	51.040	.98069	19.702	.47833	.50804	5.2750	.49925	1.0070	1.0158	.03364	.98393	.95155	4.8446
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.351**	**1.0338**	**.47616**	**.01211**	**.46357**	**.94907**	**-.00233**	**.48902**	**.46606**	**.51032**
Stddev	.023	.0176	.00032	.00061	.00136	.01708	.00753	.00426	.00056	.00105
%RSD	.21910	1.7071	.06647	5.0476	.29379	1.7993	323.59	.87176	.11972	.20650
#1	10.335	1.0463	.47593	.01255	.46453	.96114	.00300	.49203	.46645	.50958
#2	10.367	1.0213	.47638	.01168	.46261	.93700	-.00765	.48600	.46566	.51107
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2795.1**	**52931.**	**6279.0**
Stddev	12.8	15.	2.3
%RSD	.45745	.02797	.03648
#1	2804.2	52920.	6277.4
#2	2786.1	52941.	6280.6

Sample Name: CCB Acquired: 6/13/2017 17:48:17 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00055**	**-.00033**	**.00317**	**.00749**	**.00009**	**.00004**	**.00215**	**-.00162**	**.00034**	**-.00001**	**-.00007**	**-.00317**	**.00016**
Stddev	.00043	.00078	.00035	.00111	.00014	.00002	.00200	.00167	.00020	.00025	.00030	.00083	.00202
%RSD	78.131	234.98	11.176	14.830	152.17	34.514	93.123	102.59	58.403	2721.5	450.84	26.247	1263.2
#1	.00024	.00022	.00292	.00828	-.00001	.00006	.00356	-.00280	.00048	.00016	.00015	-.00375	-.00127
#2	.00085	-.00088	.00342	.00671	.00020	.00003	.00073	-.00045	.00020	-.00018	-.00028	-.00258	.00159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.52178**	**.00233**	**.00322**	**.00018**	**.00041**	**.13798**	**-.00064**	**.00384**	**-.00141**	**.01875**	**.00335**	**-.00500**	**.02343**
Stddev	.01188	.00089	.00710	.00001	.00006	.00411	.00026	.00143	.00060	.00117	.00170	.00327	.00790
%RSD	2.2760	38.031	220.85	5.7269	14.946	2.9753	40.232	37.347	42.791	6.2541	50.598	65.457	33.693
#1	.51338	.00296	-.00181	.00018	.00037	.14088	-.00082	.00485	-.00098	.01958	.00215	-.00269	.02902
#2	.53018	.00171	.00824	.00017	.00046	.13507	-.00046	.00282	-.00183	.01792	.00455	-.00732	.01785
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05015**	**.00076**	**.00037**	**.00531**	**-.00030**	**.00441**	**-.04600**	**.00025**	**-.00083**	**.00013**
Stddev	.01690	.00177	.00010	.00059	.00003	.00024	.01683	.00022	.00050	.00128
%RSD	33.693	232.08	27.267	11.024	10.204	5.4485	36.577	89.208	59.661	954.55
#1	.06210	.00202	.00044	.00490	-.00032	.00424	-.05790	.00041	-.00119	-.00077
#2	.03820	-.00049	.00030	.00573	-.00027	.00458	-.03410	.00009	-.00048	.00104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2815.2**	**53205.**	**6224.8**
Stddev	3.5	30.	18.9
%RSD	.12513	.05656	.30305
#1	2817.7	53184.	6238.1
#2	2812.7	53226.	6211.4

Sample Name: CCVL-4590576 Acquired: 6/13/2017 17:50:55 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01086**	**.10244**	**.01127**	**.10460**	**.01066**	**.00083**	**.10764**	**.20241**	**.00517**	**.01018**	**.01010**	**.01203**
Stddev	.00030	.00347	.00637	.00304	.00015	.00004	.00250	.00554	.00000	.00006	.00002	.00082
%RSD	2.7360	3.3901	56.488	2.9079	1.4263	4.6661	2.3179	2.7392	.03969	.62854	.17356	6.8514
#1	.01107	.10490	.01577	.10675	.01077	.00081	.10941	.19849	.00516	.01014	.01011	.01261
#2	.01065	.09999	.00677	.10245	.01055	.00086	.10588	.20633	.00517	.01023	.01009	.01145
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11125**	**3.5734**	**.02073**	**.20322**	**.01001**	**.01941**	**1.1215**	**.04040**	**2.8767**	**.00874**	**.12034**	**.02185**
Stddev	.00023	.0010	.00050	.00686	.00008	.00108	.0047	.00179	.0655	.00204	.00100	.00111
%RSD	.20632	.02645	2.4161	3.3747	.75180	5.5809	.41850	4.4258	2.2763	23.359	.83135	5.0920
#1	.11141	3.5741	.02038	.20807	.00996	.02018	1.1248	.04167	2.9230	.01019	.12105	.02264
#2	.11109	3.5727	.02109	.19837	.01007	.01865	1.1181	.03914	2.8304	.00730	.11963	.02106
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01590**	**.48512**	**1.0382**	**.10271**	**.00979**	**.01879**	**.00896**	**.01665**	F **.02220**	**.00992**	**.01888**	**.01610**
Stddev	.00229	.02629	.0563	.00172	.00022	.00041	.00016	.00115	.02074	.00013	.00017	.00145
%RSD	14.390	5.4198	5.4198	1.6769	2.2414	2.1630	1.7500	6.8830	93.436	1.3383	.90249	9.0376
#1	.01428	.50371	1.0779	.10392	.00994	.01850	.00885	.01746	.03687	.00982	.01876	.01712
#2	.01751	.46653	.99837	.10149	.00963	.01907	.00908	.01584	.00753	.01001	.01900	.01507
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2844.7**	**53937.**	**6191.3**
Stddev	10.6	68.	22.0
%RSD	.37168	.12515	.35525
#1	2837.3	53985.	6206.9
#2	2852.2	53889.	6175.8

Sample Name: 280-98037-H-2-B Acquired: 6/13/2017 17:53:32 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376722 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00144**	**.30613**	**.26567**	**3.4957**	**.11127**	**.00001**	**-.00494**	**147.92**	**.00107**
Stddev	.00026	.00954	.00459	.0812	.00001	.00003	.00112	.77	.00009
%RSD	17.738	3.1175	1.7264	2.3234	.01116	257.95	22.640	.52076	7.9932
#1	.00162	.31288	.26243	3.5531	.11128	.00003	-.00573	147.38	.00113
#2	.00126	.29938	.26891	3.4382	.11127	-.00001	-.00415	148.47	.00101
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02820**	**.15764**	**.02598**	**23.703**	W **455.05**	**.04969**	**48.855**	**.12193**	**.12120**
Stddev	.00083	.00551	.00067	.067	1.91	.00162	.070	.00034	.00278
%RSD	2.9263	3.4935	2.5718	.28258	.42032	3.2511	.14368	.27948	2.2936
#1	.02878	.16154	.02646	23.656	453.69	.05083	48.905	.12217	.12317
#2	.02761	.15375	.02551	23.751	456.40	.04855	48.805	.12169	.11924
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **886.55**	**.10316**	**2.8451**	**-.00347**	**163.18**	**.03147**	**-.00483**	**13.365**	**28.602**
Stddev	4.00	.00145	.0866	.00143	3.93	.00120	.00639	.110	.234
%RSD	.45145	1.4027	3.0424	41.248	2.4066	3.8202	132.45	.81954	.81954
#1	883.72	.10418	2.9063	-.00246	165.95	.03062	-.00935	13.288	28.436
#2	889.38	.10214	2.7839	-.00448	160.40	.03232	-.00031	13.443	28.768
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02264**	**.70777**	**.00295**	**.07468**	**-.00114**	**-.00957**	**.12949**	**.09128**	**.07568**
Stddev	.00125	.00157	.00344	.00049	.00513	.00302	.00060	.00107	.00274
%RSD	5.5238	.22251	116.52	.65399	448.94	31.500	.46596	1.1695	3.6241
#1	.02176	.70665	.00538	.07502	-.00477	-.01171	.12991	.09052	.07762
#2	.02352	.70888	.00052	.07433	.00248	-.00744	.12906	.09203	.07374
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2482.7**	**45728.**	**6001.4**
Stddev	5.5	81.	31.5
%RSD	.22111	.17720	.52541
#1	2478.8	45785.	6023.7
#2	2486.5	45671.	5979.1

Sample Name: 280-98037-H-3-B Acquired: 6/13/2017 17:56:10 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376722 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00125**	**.47312**	**.08154**	**4.0297**	**.12220**	**.00002**	**-.00591**	**273.84**	**.00150**
Stddev	.00031	.01629	.00258	.1177	.00019	.00002	.00147	.06	.00029
%RSD	24.852	3.4428	3.1685	2.9212	.15474	116.37	24.928	.02360	19.501
#1	.00147	.48464	.07971	4.1129	.12233	.00004	-.00487	273.88	.00170
#2	.00103	.46160	.08336	3.9464	.12206	.00000	-.00695	273.79	.00129
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01469**	**.18807**	**.06155**	**2.6298**	W **492.28**	**.03115**	**78.583**	**.32372**	**.02739**
Stddev	.00081	.00670	.00017	.0120	.85	.00202	.211	.00074	.00082
%RSD	5.4823	3.5647	.27315	.45686	.17338	6.4879	.26867	.22849	2.9987
#1	.01526	.19281	.06144	2.6213	492.88	.02972	78.732	.32424	.02797
#2	.01412	.18333	.06167	2.6383	491.67	.03258	78.434	.32319	.02681
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **796.88**	**.05458**	**3.3971**	**.00339**	F **252.11**	**.01228**	**.00240**	**18.504**	**39.599**
Stddev	1.79	.00114	.0979	.00131	7.18	.00117	.01135	.063	.134
%RSD	.22507	2.0850	2.8817	38.603	2.8490	9.5188	473.52	.33898	.33898
#1	798.15	.05539	3.4664	.00431	257.19	.01145	.01042	18.460	39.504
#2	795.61	.05378	3.3279	.00246	247.03	.01310	-.00563	18.549	39.694
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05200**	**1.3419**	**.00257**	**.11841**	**-.00050**	**-.01864**	**.04864**	**.10403**	**.01469**
Stddev	.00134	.0010	.00029	.00041	.00230	.02326	.00038	.00035	.00105
%RSD	2.5681	.07369	11.332	.34216	460.11	124.79	.78869	.33495	7.1621
#1	.05295	1.3426	.00237	.11812	-.00212	-.03509	.04891	.10379	.01544
#2	.05106	1.3412	.00278	.11869	.00113	-.00219	.04837	.10428	.01395
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2449.4**	**45800.**	**5998.6**
Stddev	15.4	95.	5.5
%RSD	.63074	.20742	.09090
#1	2438.5	45733.	6002.4
#2	2460.3	45867.	5994.7

Sample Name: 280-98042-H-1-A Acquired: 6/13/2017 17:58:49 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376722 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00135**	**.41420**	**4.2288**	W **38.954**	**.21161**	**.00008**	**-.00924**	**54.123**	**.00144**
Stddev	.00009	.01374	.1234	.901	.00000	.00003	.00090	.031	.00025
%RSD	6.9092	3.3161	2.9171	2.3123	.00103	42.149	9.7945	.05680	17.137
#1	.00128	.42391	4.3160	39.591	.21161	.00010	-.00988	54.145	.00162
#2	.00141	.40449	4.1416	38.318	.21162	.00005	-.00860	54.101	.00127
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.20000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01323**	**.36286**	**.31473**	**1.2254**	F **613.27**	**.47848**	**128.07**	**.09481**	**.00521**
Stddev	.00058	.01199	.00099	.0065	1.74	.00271	.48	.00031	.00038
%RSD	4.4198	3.3047	.31470	.53399	.28418	.56631	.37744	.32355	7.2067
#1	.01364	.37134	.31403	1.2300	614.51	.48040	128.41	.09460	.00547
#2	.01282	.35438	.31543	1.2207	612.04	.47657	127.73	.09503	.00494
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					500.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1678.0**	**.05141**	**3.3278**	**-.00003**	F **309.45**	**.08675**	**.01794**	**42.115**	**90.127**
Stddev	5.6	.00029	.1046	.00073	7.87	.00695	.00074	.006	.013
%RSD	.33587	.55568	3.1439	2485.7	2.5419	8.0167	4.1013	.01387	.01387
#1	1682.0	.05161	3.4018	-.00054	315.01	.09167	.01742	42.119	90.135
#2	1674.0	.05121	3.2538	.00048	303.89	.08184	.01846	42.111	90.118
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00374**	**2.7658**	**.00181**	**.18528**	**.00132**	**-.03625**	**.07775**	**.18835**	**.01230**
Stddev	.00160	.0086	.00122	.00066	.00431	.02039	.00108	.00043	.00091
%RSD	42.716	.31276	67.483	.35658	327.55	56.237	1.3862	.23031	7.4309
#1	.00487	2.7720	.00267	.18574	-.00173	-.05067	.07851	.18866	.01165
#2	.00261	2.7597	.00094	.18481	.00436	-.02184	.07698	.18804	.01294
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2388.4**	**44142.**	**5948.7**
Stddev	.9	158.	11.8
%RSD	.03755	.35867	.19834
#1	2389.0	44030.	5940.3
#2	2387.8	44254.	5957.0

Sample Name: 280-98042-H-2-A Acquired: 6/13/2017 18:01:27 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376722 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00135**	**1.4409**	**2.5641**	W **15.623**	**.96541**	**.00037**	**.00181**	W **645.10**	**-.00030**
Stddev	.00145	.0597	.1045	.627	.00224	.00004	.00421	6.91	.00059
%RSD	106.69	4.1394	4.0751	4.0161	.23192	9.8032	232.32	1.0716	198.15
#1	.00238	1.4831	2.6380	16.067	.96699	.00035	-.00117	649.98	-.00071
#2	.00033	1.3987	2.4902	15.179	.96383	.00040	.00479	640.21	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit				10.000				500.00	
Low Limit				-.20000				-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02748**	**.38669**	**1.6448**	**20.746**	F **1198.8**	**.16359**	**32.337**	**.25095**	**.02147**
Stddev	.00176	.01644	.0043	.026	2.2	.00069	.139	.00142	.00014
%RSD	6.4217	4.2508	.26313	.12471	.17972	.42126	.42957	.56402	.67539
#1	.02873	.39832	1.6479	20.764	1200.3	.16310	32.435	.25195	.02157
#2	.02624	.37507	1.6418	20.727	1197.3	.16408	32.238	.24995	.02136
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					500.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **3809.0**	**.06489**	**2.2058**	**-.00180**	**127.01**	**.13945**	**.00506**	**25.549**	**54.675**
Stddev	2.8	.00351	.0948	.00209	5.46	.00081	.00378	.042	.089
%RSD	.07411	5.4153	4.2967	116.14	4.3005	.58414	74.719	.16342	.16342
#1	3811.0	.06738	2.2728	-.00032	130.87	.13887	.00774	25.520	54.612
#2	3807.0	.06241	2.1387	-.00327	123.15	.14003	.00239	25.579	54.738
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.23131**	**6.8051**	**.00526**	**.31222**	**.00079**	**-.06049**	**.15959**	**.21622**	**.04323**
Stddev	.00611	.0830	.00176	.00140	.00163	.03338	.00050	.00023	.00088
%RSD	2.6407	1.2201	33.515	.44828	204.94	55.185	.31224	.10479	2.0293
#1	.23563	6.8638	.00651	.31321	.00194	-.08409	.15995	.21638	.04385
#2	.22699	6.7464	.00401	.31123	-.00036	-.03688	.15924	.21606	.04261
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2180.4**	**39742.**	**5646.9**
Stddev	15.5	202.	5.3
%RSD	.71050	.50834	.09395
#1	2169.4	39600.	5643.2
#2	2191.3	39885.	5650.7

Sample Name: 280-98042-H-3-A Acquired: 6/13/2017 18:04:16 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376722 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00069**	**1.4438**	**.38094**	W **20.663**	**.35136**	**.00015**	**-.00563**	**128.75**	**.00153**
Stddev	.00036	.0472	.02129	.431	.00081	.00011	.00009	.19	.00002
%RSD	52.280	3.2708	5.5892	2.0860	.22991	73.486	1.6456	.14565	1.5873
#1	.00043	1.4772	.39600	20.968	.35193	.00023	-.00556	128.88	.00154
#2	.00094	1.4104	.36589	20.358	.35079	.00007	-.00570	128.62	.00151
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.20000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02095**	**.30538**	**.00993**	**1.9063**	F **1290.4**	**.89903**	**90.143**	**.10255**	**.00933**
Stddev	.00091	.00924	.00045	.0084	2.3	.00131	.056	.00053	.00054
%RSD	4.3487	3.0261	4.4897	.44262	.17653	.14599	.06244	.52151	5.7501
#1	.02160	.31192	.01024	1.9123	1292.0	.89996	90.182	.10293	.00970
#2	.02031	.29885	.00961	1.9003	1288.7	.89810	90.103	.10217	.00895
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					500.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **4285.6**	**.14509**	**11.781**	**.00061**	**135.31**	**.05403**	**.01260**	**26.606**	**56.937**
Stddev	2.1	.00373	.313	.00170	3.24	.00055	.00134	.046	.099
%RSD	.04971	2.5695	2.6575	280.93	2.3980	1.0165	10.604	.17444	.17444
#1	4287.1	.14773	12.002	.00181	137.60	.05364	.01166	26.573	56.866
#2	4284.1	.14246	11.560	-.00060	133.01	.05442	.01355	26.639	57.007
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06052**	**1.7806**	**.00369**	**.22946**	**-.00283**	**-.01484**	**.12933**	**.02603**	**.05324**
Stddev	.00113	.0027	.00276	.00181	.00059	.01925	.00031	.00045	.00155
%RSD	1.8711	.15046	74.725	.79095	20.731	129.71	.23805	1.7242	2.9161
#1	.06133	1.7825	.00174	.23074	-.00241	-.00123	.12955	.02634	.05433
#2	.05972	1.7787	.00564	.22818	-.00324	-.02845	.12912	.02571	.05214
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2203.7**	**39861.**	**5704.1**
Stddev	6.6	5.	5.7
%RSD	.30098	.01363	.09914
#1	2199.1	39865.	5700.1
#2	2208.4	39857.	5708.1

Sample Name: 280-98042-H-4-A Acquired: 6/13/2017 18:06:52 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376722 200.7

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00132**	**2.3164**	W **2.7935**	**1.0125**	W **21.650**	**.16899**	**.00035**	**-.00105**	**112.86**
Stddev	.00049	.0732	.0044	.0366	.614	.00029	.00004	.00217	.18
%RSD	37.368	3.1615	.15735	3.6125	2.8343	.17183	10.641	206.09	.16049
#1	.00167	2.3681	2.7966	1.0383	22.084	.16920	.00033	.00048	112.99
#2	.00097	2.2646	2.7904	.98662	21.216	.16879	.00038	-.00259	112.73
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			500.00		10.000				
Low Limit			3.2000		-.20000				

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00120**	**.01675**	**.48074**	**.00543**	**2.4272**	F **1480.7**	**.73162**	**104.82**	**.10717**
Stddev	.00021	.00087	.01664	.00010	.0128	3.8	.00217	.05	.00003
%RSD	17.652	5.1700	3.4609	1.9296	.52863	.25744	.29711	.04878	.02380
#1	.00135	.01736	.49250	.00535	2.4363	1483.4	.73316	104.79	.10718
#2	.00105	.01614	.46897	.00550	2.4181	1478.0	.73008	104.86	.10715
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						500.00			
Low Limit						-6.0000			

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00340**	W **4557.7**	**.09049**	**9.6674**	**-.00354**	**114.88**	**.02481**	**.00149**	**31.556**
Stddev	.00037	2.4	.00238	.3066	.00090	3.70	.00373	.00350	.116
%RSD	10.936	.05344	2.6249	3.1715	25.520	3.2199	15.028	234.79	.36845
#1	.00366	4556.0	.09217	9.8842	-.00418	117.49	.02217	.00396	31.474
#2	.00314	4559.4	.08881	9.4506	-.00290	112.26	.02744	-.00098	31.638
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00							
Low Limit		11.000							

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**67.529**	**.02909**	**1.7499**	**.00388**	**.26029**	**.00302**	**-.01147**	**.19006**	**.05440**
Stddev	.249	.00119	.0022	.00146	.00073	.00236	.02544	.00077	.00050
%RSD	.36845	4.1047	.12286	37.531	.27943	78.038	221.85	.40369	.92829
#1	67.353	.02993	1.7484	.00285	.26080	.00469	.00652	.18952	.05476
#2	67.705	.02824	1.7514	.00491	.25977	.00135	-.02946	.19060	.05404
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391
Line	339.198 { 99}
Units	ppm
Avg	**.04057**
Stddev	.00122
%RSD	3.0085
#1	.04143
#2	.03971
Check ?	Chk Pass
High Limit	
Low Limit	

Sample Name: 280-98042-H-4-A Acquired: 6/13/2017 18:06:52 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376722 200.7

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2186.6**	**39737.**	**5662.1**
Stddev	5.9	49.	14.1
%RSD	.26997	.12344	.24874
#1	2182.4	39772.	5652.1
#2	2190.8	39702.	5672.0

Sample Name: 280-98042-H-5-A Acquired: 6/13/2017 18:09:28 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376722 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00139**	**.09954**	**-.00772**	**1.7288**	**.29601**	**-.00001**	**.00156**	**317.09**	**.00007**
Stddev	.00086	.00526	.00088	.0625	.00097	.00009	.00160	1.47	.00013
%RSD	61.811	5.2794	11.338	3.6136	.32887	1425.1	102.77	.46468	181.39
#1	.00200	.10326	-.00710	1.7729	.29670	.00006	.00043	316.04	.00016
#2	.00078	.09583	-.00834	1.6846	.29532	-.00007	.00269	318.13	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00105**	**.00042**	**.00192**	**2.4015**	W **274.41**	**.00727**	**6.0214**	**.05834**	**.00624**
Stddev	.00009	.00041	.00003	.0109	.72	.00080	.0001	.00017	.00086
%RSD	8.9543	97.605	1.7091	.45530	.26156	10.955	.00151	.28456	13.766
#1	-.00098	.00071	.00189	2.4092	274.92	.00784	6.0215	.05845	.00685
#2	-.00112	.00013	.00194	2.3937	273.90	.00671	6.0214	.05822	.00563
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **766.94**	**.00241**	**.05524**	**-.00162**	**73.220**	**.00063**	**-.00365**	**3.8252**	**8.1859**
Stddev	2.15	.00028	.00075	.00190	2.409	.00154	.00093	.0881	.1885
%RSD	.27977	11.769	1.3524	117.12	3.2902	246.11	25.411	2.3022	2.3022
#1	768.46	.00261	.05577	-.00297	74.924	-.00046	-.00300	3.8875	8.3192
#2	765.42	.00221	.05472	-.00028	71.517	.00171	-.00431	3.7629	8.0527
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00050**	**2.9175**	**.00291**	**-.00081**	**.00219**	**-.05577**	**-.00032**	**.01957**	**.00035**
Stddev	.00032	.0088	.00007	.00006	.00060	.05239	.00007	.00059	.00040
%RSD	62.817	.30128	2.4628	6.9348	27.497	93.947	20.224	3.0099	114.50
#1	-.00028	2.9237	.00296	-.00077	.00177	-.01872	-.00028	.01999	.00063
#2	-.00073	2.9113	.00286	-.00084	.00262	-.09282	-.00037	.01916	.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2500.6**	**45993.**	**5991.1**
Stddev	14.2	3.	1.6
%RSD	.56834	.00581	.02589
#1	2490.6	45991.	5990.0
#2	2510.7	45995.	5992.2

Sample Name: 280-98042-H-6-A Acquired: 6/13/2017 18:12:15 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376722 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00189**	**1.5190**	**.77144**	W **23.246**	**.40239**	**.00001**	**-.00200**	**70.772**	**.00119**
Stddev	.00097	.0690	.02783	.885	.00019	.00007	.00047	.306	.00009
%RSD	51.540	4.5405	3.6074	3.8061	.04635	570.64	23.528	.43301	7.8454
#1	.00120	1.5677	.79112	23.872	.40253	.00006	-.00167	70.989	.00113
#2	.00258	1.4702	.75176	22.620	.40226	-.00004	-.00233	70.556	.00126
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.20000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01488**	**.29166**	**.02560**	**9.1304**	F **1159.8**	**.59943**	**97.469**	**.11307**	**.00409**
Stddev	.00114	.01307	.00093	.0393	4.6	.00020	.335	.00019	.00028
%RSD	7.6537	4.4799	3.6415	.43007	.39784	.03417	.34399	.17164	6.7446
#1	.01568	.30090	.02626	9.1582	1163.0	.59929	97.707	.11321	.00390
#2	.01407	.28242	.02494	9.1026	1156.5	.59958	97.232	.11294	.00429
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					500.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **3677.8**	**.10854**	**8.5463**	**-.00128**	**93.661**	**.04024**	**.01203**	**30.387**	**65.027**
Stddev	1.3	.00457	.3650	.00103	4.128	.00382	.00847	.044	.094
%RSD	.03655	4.2069	4.2703	80.087	4.4076	9.4964	70.428	.14486	.14486
#1	3678.8	.11177	8.8044	-.00056	96.581	.04294	.00604	30.355	64.961
#2	3676.9	.10531	8.2883	-.00201	90.742	.03753	.01802	30.418	65.094
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02732**	**1.3094**	**.00156**	**.16332**	**.00006**	**.01363**	**.17317**	**.03815**	**.03133**
Stddev	.00031	.0023	.00265	.00065	.00246	.00262	.00167	.00098	.00049
%RSD	1.1237	.17872	169.64	.39790	3800.5	19.199	.96320	2.5652	1.5782
#1	.02710	1.3110	-.00031	.16378	-.00168	.01178	.17435	.03746	.03098
#2	.02754	1.3077	.00343	.16286	.00180	.01548	.17199	.03884	.03168
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2256.2**	**40944.**	**5736.4**
Stddev	11.8	112.	11.8
%RSD	.52280	.27307	.20508
#1	2247.8	40865.	5728.1
#2	2264.5	41023.	5744.8

Sample Name: CCVH-4579429 Acquired: 6/13/2017 18:14:51 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00016**	**46.431**	**-.01240**	**.06715**	**.00039**	**.00015**	**.96066**	**.03468**	**.00054**	**-.00081**	**.00027**	**.01048**
Stddev	.00015	.122	.00222	.00596	.00016	.00013	.02049	.00463	.00027	.00007	.00008	.00024
%RSD	90.536	.26224	17.922	8.8742	40.739	88.408	2.1333	13.342	49.947	8.4208	29.127	2.2959
#1	.00026	46.517	-.01083	.07137	.00028	.00006	.97515	.03795	.00073	-.00086	.00021	.01065
#2	.00006	46.345	-.01397	.06294	.00051	.00024	.94617	.03141	.00035	-.00076	.00032	.01031
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.442**	**4.3908**	**.00180**	**.04232**	**-.00203**	**-.00172**	**243.24**	**.00081**	**.01156**	**.00143**	**5.2399**	**.00275**
Stddev	.028	.6555	.00212	.00351	.00009	.00001	.15	.00035	.00443	.00070	.1479	.00533
%RSD	.05872	14.929	117.73	8.2983	4.5244	.86538	.06298	43.089	38.336	49.224	2.8222	193.80
#1	48.422	4.8543	.00330	.04480	-.00209	-.00173	243.35	.00105	.01469	.00193	5.3444	.00651
#2	48.462	3.9273	.00030	.03984	-.00196	-.00171	243.14	.00056	.00842	.00093	5.1353	-.00102
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01145**	**.48888**	**1.0462**	**-.00056**	**.00104**	W **4.6169**	**.01895**	**.00264**	W **9.3632**	**.01189**	**.00063**	**.07594**
Stddev	.00152	.04697	.1005	.00084	.00003	.0118	.00028	.00460	.0206	.00104	.00012	.00266
%RSD	13.315	9.6074	9.6074	149.73	2.6255	.25562	1.4775	174.36	.21975	8.7550	18.988	3.5021
#1	-.01252	.52209	1.1173	.00003	.00106	4.6253	.01915	-.00061	9.3777	.01263	.00072	.07782
#2	-.01037	.45566	.97512	-.00115	.00103	4.6086	.01875	.00590	9.3486	.01116	.00055	.07406
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2732.9**	**50922.**	**6196.5**
Stddev	3.5	34.	24.4
%RSD	.12755	.06660	.39425
#1	2730.4	50946.	6213.7
#2	2735.4	50898.	6179.2

Sample Name: CCV-4580817 Acquired: 6/13/2017 18:17:25 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48953**	**.50028**	**.93398**	**.53336**	**.50703**	**.47416**	**.00089**	**5.0612**	**.48920**	**.49262**	**.49881**	**.50143**
Stddev	.00067	.01608	.01708	.01139	.00167	.00131	.00175	.0120	.01214	.01213	.01499	.00295
%RSD	.13608	3.2136	1.8288	2.1347	.32888	.27583	195.81	.23644	2.4809	2.4630	3.0060	.58818
#1	.48906	.51165	.94606	.54141	.50821	.47509	.00213	5.0697	.49778	.50120	.50942	.49934
#2	.49001	.48891	.92191	.52531	.50585	.47324	-.00034	5.0528	.48062	.48404	.48821	.50352
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4029**	**51.172**	**.96773**	**19.415**	**.47132**	**.49934**	F **6.0147**	**.49090**	**.98568**	**1.0025**	**.06001**	**.96955**
Stddev	.0078	.029	.00223	.003	.00142	.01337	.0222	.01244	.02234	.0245	.00569	.02302
%RSD	.32665	.05759	.23009	.01336	.30023	2.6778	.36993	2.5340	2.2668	2.4429	9.4855	2.3743
#1	2.3974	51.193	.96931	19.413	.47232	.50879	6.0305	.49970	1.0015	1.0199	.05599	.98583
#2	2.4085	51.151	.96616	19.417	.47032	.48988	5.9990	.48210	.96988	.98523	.06404	.95327
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value							5.0000					
Range							10.490%					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.93631**	F **5.6745**	F **12.143**	**1.0070**	**.46866**	**.01251**	**.45900**	**.92203**	**-.06799**	**.47968**	**.45952**	**.49983**
Stddev	.01948	.0466	.100	.0229	.00104	.00122	.00164	.02284	.00929	.00099	.00505	.00298
%RSD	2.0801	.82219	.82219	2.2732	.22087	9.7512	.35718	2.4768	13.672	.20658	1.0980	.59603
#1	.95009	5.6415	12.073	1.0232	.46939	.01165	.46016	.93817	-.07456	.48038	.46309	.49773
#2	.92254	5.7075	12.214	.99082	.46793	.01337	.45784	.90588	-.06141	.47898	.45596	.50194
Check ?	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value		5.0000	10.700									
Range		10.490%	10.490%									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2767.1**	**52098.**	**6151.5**
Stddev	3.7	19.	8.7
%RSD	.13247	.03569	.14158
#1	2764.5	52111.	6157.7
#2	2769.7	52085.	6145.4

Sample Name: CCB Acquired: 6/13/2017 18:19:53 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00091**	**-.00108**	**-.00077**	W **.03073**	**.00020**	**-.00005**	**-.00141**	**-.00679**	**.00029**	**.00012**	**.00039**	**-.00346**
Stddev	.00054	.00037	.00966	.00099	.00002	.00023	.00297	.00432	.00005	.00013	.00016	.00045
%RSD	59.467	33.792	1255.4	3.2118	8.1822	507.36	211.19	63.625	16.311	107.60	40.781	12.908
#1	.00130	-.00134	-.00760	.03143	.00019	.00012	.00069	-.00373	.00032	.00022	.00050	-.00315
#2	.00053	-.00082	.00606	.03003	.00022	-.00021	-.00351	-.00984	.00025	.00003	.00028	-.00378
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01500								
Low Limit				-.01500								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00084**	W **1.4978**	**.00018**	**.00262**	**.00002**	**-.00005**	F **.77828**	**-.00044**	**.00478**	**-.00245**	**.03250**	**.00280**
Stddev	.00181	.0063	.00197	.00058	.00002	.00066	.01363	.00004	.00270	.00028	.00482	.00045
%RSD	215.73	.42161	1094.7	22.232	101.16	1343.6	1.7513	10.193	56.490	11.345	14.819	16.122
#1	.00044	1.4933	-.00121	.00221	.00004	.00042	.78792	-.00047	.00287	-.00265	.02909	.00312
#2	-.00212	1.5022	.00157	.00304	.00001	-.00052	.76864	-.00040	.00669	-.00226	.03590	.00248
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.94000					.50000					
Low Limit		-.94000					-.50000					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00799**	W **.15822**	F **.33858**	**.00206**	**.00015**	**.00583**	**-.00063**	**.00467**	**-.02812**	**.00016**	**-.00060**	**-.00022**
Stddev	.00159	.00433	.00926	.00115	.00004	.00069	.00028	.00160	.02265	.00027	.00023	.00104
%RSD	19.895	2.7354	2.7354	55.687	29.543	11.806	44.434	34.266	80.553	172.12	37.857	469.98
#1	-.00687	.16128	.34513	.00287	.00012	.00534	-.00083	.00581	-.04413	-.00003	-.00076	-.00096
#2	-.00912	.15516	.33203	.00125	.00018	.00632	-.00043	.00354	-.01210	.00035	-.00044	.00052
Check ?	Chk Pass	Chk Warn	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.13000	.25000									
Low Limit		-.13000	-.50000									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2772.2**	**52609.**	**6104.7**
Stddev	.7	30.	16.3
%RSD	.02694	.05765	.26739
#1	2772.7	52588.	6093.1
#2	2771.7	52631.	6116.2

Sample Name: CCVL-4590576 Acquired: 6/13/2017 18:22:31 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01030**	**.10148**	**.01391**	**.12234**	**.01051**	**.00091**	**.10857**	**.19460**	**.00514**	**.01029**	**.01007**	**.01205**
Stddev	.00005	.00287	.00176	.00365	.00007	.00007	.00052	.00447	.00042	.00053	.00035	.00003
%RSD	.51031	2.8266	12.642	2.9810	.69231	7.4201	.48021	2.2975	8.1847	5.1399	3.4290	.25698
#1	.01026	.10350	.01266	.12491	.01056	.00087	.10820	.19776	.00544	.01067	.01031	.01207
#2	.01034	.09945	.01515	.11976	.01046	.00096	.10894	.19144	.00484	.00992	.00983	.01203
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09927**	F **4.2955**	**.02000**	**.20099**	**.00997**	**.01821**	F **1.7316**	**.04047**	**2.8145**	**.00997**	**.11855**	**.02007**
Stddev	.00094	.0065	.00046	.00431	.00003	.00032	.0461	.00123	.0630	.00170	.00332	.00248
%RSD	.94635	.15060	2.2793	2.1433	.30179	1.7611	2.6630	3.0504	2.2385	17.021	2.7977	12.375
#1	.09861	4.3001	.02032	.20404	.00995	.01844	1.7642	.04134	2.8591	.01117	.11621	.02182
#2	.09994	4.2909	.01967	.19794	.00999	.01799	1.6990	.03960	2.7700	.00877	.12090	.01831
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		3.0000					1.0000					
Range		30.000%					30.000%					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01110**	**.56655**	**1.2124**	**.09931**	**.00961**	**.01917**	**.00817**	**.01593**	F **.03391**	**.00962**	**.01834**	**.01626**
Stddev	.00066	.04632	.0991	.00322	.00006	.00119	.00014	.00120	.00477	.00034	.00029	.00019
%RSD	5.9373	8.1764	8.1764	3.2468	.57500	6.2319	1.6657	7.5369	14.070	3.5505	1.6032	1.1871
#1	.01064	.53379	1.1423	.10159	.00965	.01833	.00827	.01678	.03054	.00986	.01813	.01613
#2	.01157	.59930	1.2825	.09703	.00957	.02002	.00807	.01508	.03729	.00938	.01854	.01640
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.02000								.06000			
Range	-30.000%								-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2843.5**	**53917.**	**6194.7**
Stddev	4.0	201.	28.2
%RSD	.14215	.37235	.45546
#1	2846.4	53775.	6214.7
#2	2840.7	54059.	6174.8

Sample Name: MB 280-376953/1-A Acquired: 6/13/2017 18:25:09 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: 6/13 Custom ID2: Custom ID3:
Comment: 376953 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00082**	**.00093**	**.00049**	**.02147**	**-.00022**	**-.00010**	**.00225**	**-.01099**	**.00057**
Stddev	.00006	.00010	.00258	.00127	.00022	.00004	.00266	.00501	.00028
%RSD	6.9074	11.242	530.89	5.8920	98.382	40.629	118.33	45.615	49.358
#1	.00086	.00101	.00231	.02237	-.00037	-.00007	.00413	-.01453	.00077
#2	.00078	.00086	-.00134	.02058	-.00007	-.00013	.00037	-.00744	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00013**	**-.00028**	**-.00333**	**.00666**	**1.0677**	**-.00185**	**.00029**	**.00005**	**.00012**
Stddev	.00054	.00010	.00017	.00157	.0392	.00007	.00049	.00004	.00031
%RSD	428.66	36.386	5.1940	23.615	3.6676	3.7897	171.28	71.116	257.28
#1	-.00026	-.00020	-.00321	.00778	1.0954	-.00180	.00064	.00008	.00034
#2	.00051	-.00035	-.00346	.00555	1.0400	-.00190	-.00006	.00003	-.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.58145**	**-.00059**	**.00340**	**-.00035**	**.01877**	**.00380**	**-.00419**	**.08479**	**.18144**
Stddev	.00609	.00026	.00307	.00069	.00083	.00218	.00192	.03749	.08022
%RSD	1.0477	43.412	90.354	196.95	4.4105	57.400	45.928	44.212	44.212
#1	.57714	-.00041	.00557	-.00083	.01936	.00534	-.00283	.11129	.23817
#2	.58576	-.00078	.00123	.00014	.01819	.00226	-.00554	.05828	.12472
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit	.50000								
Low Limit	-.50000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00138**	**.00019**	W **.00517**	**-.00026**	**.00200**	**-.04519**	**.00036**	**-.00043**	**.00017**
Stddev	.00075	.00004	.00075	.00025	.00282	.00391	.00009	.00133	.00029
%RSD	54.540	19.236	14.543	96.601	140.66	8.6422	23.955	307.71	177.20
#1	.00085	.00017	.00464	-.00008	.00001	-.04796	.00042	-.00138	-.00004
#2	.00192	.00022	.00570	-.00043	.00399	-.04243	.00030	.00051	.00037
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500						
Low Limit			-.00500						

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2817.6**	**53744.**	**6240.9**
Stddev	3.9	9.	9.6
%RSD	.13709	.01704	.15386
#1	2820.3	53750.	6234.2
#2	2814.8	53737.	6247.7

Sample Name: LCS 280-376953/2-A Acquired: 6/13/2017 18:27:47 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376953 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05276**	**1.9196**	**1.0092**	**1.0340**	**2.1014**	**.04889**	**2.0155**	**50.718**	**.10257**
Stddev	.00026	.0346	.0082	.0148	.0078	.00007	.0215	.141	.00174
%RSD	.49001	1.8026	.81176	1.4275	.37316	.14166	1.0682	.27808	1.7001
#1	.05294	1.9440	1.0150	1.0444	2.1069	.04894	2.0307	50.817	.10381
#2	.05257	1.8951	1.0034	1.0235	2.0958	.04884	2.0003	50.618	.10134
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49523**	**.20511**	**.26221**	**.98409**	**52.341**	**.99198**	**49.561**	**.48001**	**1.0011**
Stddev	.00927	.00350	.00266	.00233	.201	.00523	.180	.00122	.0191
%RSD	1.8709	1.7077	1.0132	.23710	.38443	.52724	.36245	.25409	1.9083
#1	.50178	.20758	.26409	.98574	52.483	.99568	49.688	.48087	1.0146
#2	.48868	.20263	.26033	.98244	52.199	.98828	49.434	.47914	.98756
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.537**	**.49414**	**10.367**	**.50891**	**2.1160**	**.51133**	**1.9523**	**9.7319**	**20.826**
Stddev	.188	.00868	.164	.00630	.0219	.00879	.0331	.0386	.083
%RSD	.36471	1.7560	1.5844	1.2371	1.0365	1.7189	1.6967	.39660	.39660
#1	51.404	.50027	10.483	.51337	2.1315	.51755	1.9758	9.7046	20.768
#2	51.670	.48800	10.251	.50446	2.1005	.50512	1.9289	9.7592	20.885
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0422**	**.96300**	**.96716**	**.94701**	**1.8580**	**1.9330**	**.49605**	**.46807**	**.52749**
Stddev	.0374	.00358	.00426	.00257	.0238	.0049	.00049	.00450	.00062
%RSD	1.8331	.37207	.44020	.27114	1.2800	.25195	.09940	.96157	.11762
#1	2.0687	.96554	.97017	.94883	1.8748	1.9365	.49640	.47125	.52705
#2	2.0157	.96047	.96415	.94520	1.8412	1.9296	.49570	.46489	.52792
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2702.2**	**50784.**	**6126.0**
Stddev	.1	17.	15.1
%RSD	.00517	.03266	.24690
#1	2702.1	50796.	6115.3
#2	2702.3	50772.	6136.7

Sample Name: LCSD 280-376953/3-A Acquired: 6/13/2017 18:30:10 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376953 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05151**	**1.8985**	**.98254**	**1.0323**	**2.0727**	**.04805**	**2.0056**	**49.862**	**.10115**
Stddev	.00049	.0364	.01806	.0153	.0074	.00001	.0387	.158	.00182
%RSD	.95489	1.9172	1.8383	1.4796	.35826	.03108	1.9291	.31698	1.8009
#1	.05116	1.9243	.99531	1.0431	2.0779	.04806	2.0330	49.974	.10244
#2	.05186	1.8728	.96976	1.0215	2.0674	.04803	1.9783	49.750	.09986
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48896**	**.20240**	**.25780**	**.97377**	**51.393**	**.98139**	**48.822**	**.47350**	**.99809**
Stddev	.00939	.00426	.00057	.00617	.053	.00560	.113	.00083	.02220
%RSD	1.9211	2.1048	.22246	.63354	.10400	.57031	.23180	.17584	2.2245
#1	.49560	.20541	.25820	.97813	51.431	.98535	48.902	.47408	1.0138
#2	.48232	.19939	.25739	.96940	51.355	.97743	48.742	.47291	.98239
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.077**	**.48757**	**10.250**	**.50129**	**2.1140**	**.50923**	**1.9330**	**9.7119**	**20.783**
Stddev	.021	.01060	.175	.00966	.0448	.00980	.0328	.0227	.049
%RSD	.04149	2.1742	1.7117	1.9278	2.1182	1.9251	1.6990	.23368	.23368
#1	51.092	.49507	10.375	.50812	2.1457	.51616	1.9562	9.7279	20.818
#2	51.062	.48008	10.126	.49445	2.0824	.50230	1.9098	9.6958	20.749
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0353**	**.95369**	**.95546**	**.94762**	**1.8391**	**1.9360**	**.48950**	**.46308**	**.52288**
Stddev	.0458	.00060	.00039	.00051	.0306	.0214	.00257	.00032	.00098
%RSD	2.2489	.06293	.04044	.05337	1.6628	1.1064	.52601	.06833	.18708
#1	2.0677	.95411	.95574	.94726	1.8607	1.9512	.49132	.46330	.52219
#2	2.0029	.95326	.95519	.94798	1.8175	1.9209	.48768	.46286	.52358
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2711.0**	**51057.**	**6177.6**
Stddev	9.0	81.	10.0
%RSD	.33281	.15795	.16192
#1	2704.6	51000.	6184.7
#2	2717.4	51114.	6170.5

Sample Name: 280-98146-A-6-G Acquired: 6/13/2017 18:32:35 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376953 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00008**	**.07305**	**-.00336**	**.02596**	**.03272**	**-.00018**	**-.00065**	**34.520**	**.00074**
Stddev	.00005	.00275	.00042	.00117	.00015	.00007	.00022	.127	.00004
%RSD	59.836	3.7658	12.635	4.4905	.45684	37.666	33.435	.36818	5.6029
#1	.00011	.07499	-.00306	.02679	.03261	-.00023	-.00049	34.430	.00077
#2	.00004	.07110	-.00366	.02514	.03282	-.00014	-.00080	34.610	.00071
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00235**	**.00024**	**.00052**	**.27782**	**2.9721**	**.00429**	**12.074**	**.02301**	**3.5297**
Stddev	.00019	.00023	.00028	.00077	.0234	.00366	.004	.00017	.1115
%RSD	8.0611	98.623	53.595	.27574	.78771	85.339	.02996	.75424	3.1584
#1	.00248	.00040	.00072	.27727	2.9555	.00688	12.076	.02313	3.6086
#2	.00222	.00007	.00033	.27836	2.9886	.00170	12.071	.02288	3.4509
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.033**	**.00051**	**.03405**	**-.00212**	**11.942**	**.00197**	**-.00704**	**2.6437**	**5.6576**
Stddev	.194	.00019	.00012	.00013	.361	.00083	.00180	.0211	.0452
%RSD	.84325	36.173	.35242	6.1868	3.0207	42.066	25.521	.79970	.79970
#1	22.895	.00038	.03414	-.00221	12.198	.00138	-.00831	2.6587	5.6896
#2	23.170	.00065	.03397	-.00202	11.687	.00255	-.00577	2.6288	5.6256
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00168**	**.05614**	**.00286**	**.00388**	**.00029**	**-.07324**	**-.01280**	**.02219**	**-.00109**
Stddev	.00018	.00023	.00112	.00051	.00238	.02823	.00214	.00047	.00131
%RSD	11.023	.40788	39.323	13.105	815.78	38.549	16.689	2.1043	120.11
#1	.00155	.05598	.00365	.00352	.00198	-.09321	-.01129	.02252	-.00016
#2	.00181	.05630	.00206	.00424	-.00139	-.05328	-.01431	.02186	-.00202
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2771.7**	**52481.**	**6222.8**
Stddev	8.5	93.	22.2
%RSD	.30535	.17650	.35660
#1	2777.7	52415.	6238.5
#2	2765.7	52546.	6207.1

Sample Name: 280-98146-A-6-Gsd@5 Acquired: 6/13/2017 18:35:10 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376953 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00045**	**.01503**	**-.00266**	**.01497**	**.00660**	**-.00012**	**.00313**	**6.9734**	**.00028**
Stddev	.00009	.00088	.00451	.00011	.00020	.00004	.00226	.0438	.00008
%RSD	18.787	5.8843	169.59	.73645	3.0295	29.045	72.375	.62754	29.793
#1	.00051	.01566	.00053	.01489	.00674	-.00015	.00153	7.0043	.00022
#2	.00039	.01441	-.00585	.01505	.00646	-.00010	.00472	6.9425	.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00034**	**-.00008**	**-.00255**	**.06338**	**1.0441**	**-.00020**	**2.4827**	**.00482**	**.69916**
Stddev	.00014	.00016	.00037	.00584	.0069	.00045	.0052	.00004	.02667
%RSD	42.057	192.37	14.666	9.2206	.66152	225.88	.20759	.79955	3.8151
#1	.00024	-.00020	-.00229	.06751	1.0392	-.00052	2.4864	.00485	.71802
#2	.00045	.00003	-.00282	.05925	1.0490	.00012	2.4791	.00479	.68030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.7725**	**-.00064**	**.01049**	**-.00189**	**2.2939**	**.00000**	**-.00808**	**.55308**	**1.1836**
Stddev	.0113	.00031	.00163	.00092	.0859	.00075	.00838	.00488	.0104
%RSD	.23670	48.659	15.563	48.726	3.7452	18020.	103.66	.88241	.88241
#1	4.7805	-.00042	.01164	-.00254	2.3546	.00053	-.00216	.55653	1.1910
#2	4.7645	-.00086	.00933	-.00124	2.2331	-.00053	-.01401	.54962	1.1762
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00053**	**.01138**	**.00521**	**.00047**	**.00100**	**-.01543**	**-.00266**	**.00477**	**.00210**
Stddev	.00399	.00010	.00032	.00036	.00011	.01080	.00048	.00016	.00071
%RSD	758.03	.88842	6.1448	76.729	10.981	69.984	17.853	3.4205	33.827
#1	-.00229	.01131	.00498	.00021	.00108	-.00780	-.00233	.00465	.00260
#2	.00335	.01145	.00543	.00072	.00093	-.02307	-.00300	.00488	.00160
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2812.8**	**52257.**	**6027.5**
Stddev	33.4	162.	29.3
%RSD	1.1875	.31071	.48535
#1	2789.1	52372.	6006.8
#2	2836.4	52142.	6048.2

Sample Name: 280-98146-A-6-H MS Acquired: 6/13/2017 18:37:46 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376953 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05089**	**1.9494**	**.97206**	**.99628**	**2.1056**	**.04824**	**1.9492**	**83.322**	**.09940**
Stddev	.00098	.0500	.01415	.01988	.0008	.00002	.0425	.069	.00254
%RSD	1.9266	2.5654	1.4554	1.9951	.03939	.03473	2.1790	.08225	2.5582
#1	.05020	1.9847	.98206	1.0103	2.1050	.04825	1.9792	83.273	.10119
#2	.05158	1.9140	.96205	.98223	2.1062	.04823	1.9191	83.370	.09760
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48185**	**.19983**	**.26280**	**1.2116**	**53.476**	**.98553**	**59.449**	**.49251**	**4.4583**
Stddev	.01278	.00618	.00213	.0049	.085	.00150	.088	.00093	.1169
%RSD	2.6517	3.0904	.81102	.40142	.15901	.15250	.14824	.18880	2.6210
#1	.49089	.20420	.26431	1.2150	53.416	.98446	59.511	.49317	4.5409
#2	.47282	.19546	.26129	1.2081	53.536	.98659	59.387	.49185	4.3756
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**72.749**	**.47808**	**10.093**	**.48337**	**13.598**	**.49418**	**1.8714**	**12.233**	**26.179**
Stddev	.249	.01254	.239	.00970	.295	.01575	.0416	.002	.003
%RSD	.34246	2.6229	2.3689	2.0071	2.1729	3.1863	2.2232	.01292	.01292
#1	72.926	.48695	10.262	.49023	13.807	.50532	1.9009	12.234	26.181
#2	72.573	.46921	9.9243	.47651	13.389	.48305	1.8420	12.232	26.177
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9812**	**1.0093**	**.95245**	**.94595**	**1.7687**	**1.9185**	**.47679**	**.47890**	**.52034**
Stddev	.0545	.0009	.00375	.00274	.0364	.0358	.00381	.00412	.00229
%RSD	2.7527	.08878	.39400	.28977	2.0557	1.8672	.79958	.85945	.43956
#1	2.0198	1.0086	.95511	.94789	1.7944	1.9439	.47949	.48181	.51872
#2	1.9426	1.0099	.94980	.94402	1.7430	1.8932	.47410	.47599	.52196
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2650.6**	**50077.**	**6092.2**
Stddev	2.6	82.	3.6
%RSD	.09762	.16426	.05920
#1	2648.8	50019.	6094.7
#2	2652.5	50135.	6089.6

Sample Name: 280-98146-A-6-I MSD Acquired: 6/13/2017 18:40:10 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376953 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05240**	**2.0645**	**1.0154**	**1.0682**	**2.1289**	**.04912**	W **2.0533**	**84.510**	**.10493**
Stddev	.00002	.0207	.0053	.0064	.0036	.00003	.0201	.175	.00109
%RSD	.02929	1.0022	.52546	.59850	.16765	.06287	.98029	.20658	1.0349
#1	.05239	2.0792	1.0191	1.0727	2.1264	.04909	2.0676	84.387	.10569
#2	.05241	2.0499	1.0116	1.0636	2.1314	.04914	2.0391	84.633	.10416
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50118**	**.20698**	**.26703**	**1.2278**	**54.251**	**.99545**	**61.964**	**.50376**	**4.5515**
Stddev	.00519	.00263	.00052	.0065	.160	.00266	.017	.00045	.0518
%RSD	1.0353	1.2683	.19488	.53099	.29543	.26720	.02692	.08862	1.1388
#1	.50485	.20883	.26666	1.2232	54.138	.99357	61.953	.50344	4.5881
#2	.49752	.20512	.26740	1.2324	54.364	.99733	61.976	.50407	4.5148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**73.431**	**.49809**	**10.716**	**.50388**	**14.311**	**.52008**	**2.0091**	**12.422**	**26.582**
Stddev	.486	.00456	.080	.00113	.100	.00795	.0220	.072	.154
%RSD	.66159	.91455	.74872	.22440	.69982	1.5291	1.0944	.57919	.57919
#1	73.087	.50131	10.773	.50468	14.381	.52571	2.0246	12.371	26.474
#2	73.774	.49487	10.660	.50308	14.240	.51446	1.9935	12.473	26.691
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2.0710**	**1.0197**	**.97388**	**.96111**	**1.8746**	**1.9371**	**.48542**	**.49767**	**.52685**
Stddev	.0253	.0040	.00155	.00044	.0214	.0267	.00106	.00158	.00219
%RSD	1.2202	.39098	.15869	.04593	1.1392	1.3795	.21847	.31757	.41550
#1	2.0889	1.0169	.97497	.96142	1.8897	1.9182	.48467	.49879	.52531
#2	2.0532	1.0226	.97279	.96080	1.8595	1.9560	.48617	.49655	.52840
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.20000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2674.2**	**50288.**	**6100.9**
Stddev	11.3	33.	9.9
%RSD	.42178	.06567	.16189
#1	2682.2	50265.	6107.9
#2	2666.2	50311.	6093.9

Sample Name: CCVH-4579429 Acquired: 6/13/2017 18:42:33 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00025**	**46.553**	**-.00503**	**.01377**	**.00094**	**.00015**	W **.94546**	**.01231**	**.00079**	**-.00076**	**.01568**	**.01050**
Stddev	.00019	.178	.01201	.00043	.00009	.00008	.03220	.00457	.00012	.00022	.00087	.00001
%RSD	78.077	.38176	238.96	3.1181	10.072	50.352	3.4062	37.143	15.186	28.368	5.5379	.11153
#1	.00011	46.428	.00347	.01407	.00100	.00021	.96824	.01554	.00071	-.00061	.01630	.01049
#2	.00038	46.679	-.01352	.01347	.00087	.00010	.92269	.00908	.00087	-.00092	.01507	.01051
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							-5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.355**	**.46287**	**.00213**	**.04385**	**.01023**	**.00303**	**242.52**	**.00054**	**.00606**	**-.00035**	**5.0099**	**.00892**
Stddev	.337	.01182	.00070	.00906	.00000	.00021	1.31	.00026	.00104	.00183	.1661	.00148
%RSD	.66972	2.5546	32.901	20.667	.04581	6.8243	.53905	47.730	17.190	521.13	3.3144	16.619
#1	50.116	.47123	.00164	.05025	.01024	.00317	241.59	.00072	.00533	.00094	5.1273	.00997
#2	50.593	.45451	.00263	.03744	.01023	.00288	243.44	.00036	.00680	-.00164	4.8925	.00787
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00648**	**.03697**	**.07913**	**.00014**	**.00059**	W **4.6276**	**.01877**	**.00107**	W **9.3522**	**.01222**	**.00081**	**.07892**
Stddev	.00268	.00195	.00417	.00342	.00012	.0230	.00036	.00143	.0417	.00014	.00010	.00132
%RSD	41.331	5.2658	5.2658	2404.2	19.710	.49795	1.8969	133.81	.44555	1.1396	12.240	1.6679
#1	-.00459	.03560	.07618	-.00228	.00067	4.6439	.01852	.00006	9.3817	.01212	.00074	.07799
#2	-.00838	.03835	.08207	.00256	.00050	4.6113	.01902	.00208	9.3228	.01232	.00088	.07985
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2715.5**	**50273.**	**6107.6**
Stddev	6.0	21.	8.1
%RSD	.21922	.04154	.13182
#1	2711.3	50258.	6113.3
#2	2719.7	50288.	6101.9

Sample Name: CCV-4580817 Acquired: 6/13/2017 18:45:07 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48985**	**.49731**	**.93151**	**.50450**	**.50591**	**.47375**	**-.00344**	**5.0703**	**.48916**	**.49423**	**.49946**	**.50257**	**2.5613**
Stddev	.00025	.01094	.02721	.01239	.00347	.00216	.00151	.0426	.01027	.01146	.01385	.00046	.0096
%RSD	.05013	2.2007	2.9213	2.4554	.68673	.45596	43.941	.84025	2.1005	2.3192	2.7729	.09056	.37612
#1	.48967	.50505	.95075	.51326	.50345	.47222	-.00450	5.0402	.49642	.50234	.50925	.50289	2.5545
#2	.49002	.48957	.91227	.49574	.50836	.47528	-.00237	5.1004	.48189	.48613	.48967	.50225	2.5682
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.197**	**.96545**	**19.542**	**.47454**	**.50162**	**5.1035**	**.49165**	**.98544**	**1.0071**	**-.00842**	**.96800**	**.93306**	**4.8210**
Stddev	.279	.00328	.018	.00017	.01243	.0033	.01078	.02135	.0221	.00108	.02045	.01982	.0433
%RSD	.55654	.33939	.09452	.03483	2.4777	.06480	2.1926	2.1667	2.1916	12.875	2.1123	2.1242	.89815
#1	49.999	.96313	19.555	.47465	.51041	5.1059	.49928	1.0005	1.0227	-.00918	.98246	.94707	4.7904
#2	50.394	.96776	19.529	.47442	.49283	5.1012	.48403	.97034	.99146	-.00765	.95354	.91904	4.8516
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.317**	**1.0074**	**.46854**	**.01273**	**.45849**	**.92280**	**-.02632**	**.48210**	**.47135**	**.50086**
Stddev	.093	.0241	.00245	.00082	.00037	.01992	.00591	.00073	.00257	.00530
%RSD	.89815	2.3885	.52234	6.4512	.08030	2.1590	22.446	.15196	.54573	1.0582
#1	10.251	1.0244	.46681	.01331	.45823	.93689	-.03050	.48262	.47317	.49712
#2	10.382	.99040	.47027	.01215	.45875	.90872	-.02214	.48158	.46953	.50461
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2757.9**	**51535.**	**6050.6**
Stddev	6.3	68.	54.5
%RSD	.22892	.13252	.90107
#1	2753.4	51584.	6089.2
#2	2762.3	51487.	6012.1

Sample Name: CCB Acquired: 6/13/2017 18:47:36 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00140**	**-.00065**	**.00211**	**.01125**	**.00031**	**-.00004**	**-.00127**	**-.01445**	**.00047**	**-.00002**	**.00062**	**-.00404**	**.00149**
Stddev	.00029	.00059	.00371	.00022	.00006	.00004	.00071	.00596	.00009	.00029	.00011	.00011	.00120
%RSD	20.657	90.872	175.63	1.9259	18.524	98.206	55.878	41.272	18.905	1557.4	17.472	2.6101	80.288
#1	.00160	-.00023	-.00051	.01109	.00027	-.00001	-.00077	-.01023	.00053	.00018	.00070	-.00397	.00064
#2	.00119	-.00107	.00473	.01140	.00035	-.00007	-.00178	-.01867	.00041	-.00022	.00055	-.00412	.00233
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.36803**	**.00186**	**.00407**	**.00002**	**.00058**	**.10323**	**-.00017**	**.00249**	**-.00072**	**-.00946**	**.00254**	**-.00505**	**.04170**
Stddev	.05686	.00113	.00467	.00000	.00025	.01366	.00010	.00113	.00040	.00121	.00235	.00335	.00618
%RSD	15.449	60.500	114.83	10.979	43.281	13.230	62.367	45.476	55.510	12.811	92.497	66.465	14.820
#1	.40823	.00106	.00076	.00002	.00040	.11289	-.00024	.00169	-.00100	-.00860	.00088	-.00267	.03733
#2	.32782	.00266	.00737	.00003	.00075	.09357	-.00009	.00329	-.00044	-.01031	.00419	-.00742	.04607
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.08923**	**.00146**	**.00024**	**.00617**	**-.00068**	**.00121**	**-.03028**	**-.00001**	**.00012**	**.00010**
Stddev	.01322	.00153	.00007	.00152	.00016	.00004	.02132	.00013	.00027	.00082
%RSD	14.820	104.88	28.136	24.668	23.207	3.6986	70.415	1894.8	227.70	836.08
#1	.07988	.00254	.00029	.00509	-.00079	.00118	-.01520	.00008	-.00007	-.00048
#2	.09858	.00038	.00020	.00724	-.00057	.00124	-.04535	-.00010	.00031	.00068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2739.9**	**51759.**	**5965.8**
Stddev	1.5	128.	26.8
%RSD	.05344	.24729	.44975
#1	2741.0	51669.	5984.8
#2	2738.9	51850.	5946.8

Sample Name: CCVL-4590576 Acquired: 6/13/2017 18:50:14 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01092**	**.10193**	**.01559**	**.10597**	**.01044**	**.00094**	**.10834**	**.19278**	**.00507**	**.01018**	**.00992**	**.01176**
Stddev	.00024	.00277	.00643	.00199	.00001	.00007	.00001	.00200	.00010	.00031	.00072	.00024
%RSD	2.2034	2.7145	41.227	1.8819	.09780	7.4341	.01037	1.0391	1.9890	3.0107	7.2570	1.9993
#1	.01109	.10389	.02013	.10738	.01045	.00099	.10834	.19420	.00514	.01039	.01043	.01193
#2	.01075	.09997	.01104	.10456	.01043	.00090	.10833	.19137	.00500	.00996	.00941	.01160
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09210**	**3.4509**	**.02049**	**.19704**	**.00990**	**.01919**	**1.1017**	**.04064**	**2.8147**	**.01002**	**.08470**	**.02274**
Stddev	.00112	.0092	.00066	.00446	.00001	.00094	.0112	.00154	.0720	.00015	.00388	.00266
%RSD	1.2146	.26682	3.2033	2.2611	.13499	4.9113	1.0178	3.7850	2.5584	1.4586	4.5859	11.694
#1	.09131	3.4575	.02003	.20019	.00989	.01986	1.0937	.04172	2.8657	.00992	.08745	.02462
#2	.09289	3.4444	.02095	.19389	.00991	.01852	1.1096	.03955	2.7638	.01013	.08196	.02086
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01585**	**.46740**	**1.0002**	**.09953**	**.00958**	F **.02067**	**.00843**	**.01651**	F **.00554**	**.00979**	**.01838**	**.01515**
Stddev	.00228	.01422	.0304	.00117	.00019	.00302	.00003	.00253	.06335	.00016	.00018	.00157
%RSD	14.382	3.0427	3.0427	1.1765	1.9738	14.589	.41362	15.343	1144.3	1.6703	.96411	10.349
#1	.01424	.45734	.97871	.10036	.00945	.02280	.00841	.01830	-.03926	.00990	.01850	.01404
#2	.01746	.47745	1.0218	.09870	.00971	.01854	.00846	.01472	.05033	.00967	.01825	.01626
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value						.01500			.06000			
Range						30.000%			-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2831.6**	**52116.**	**5991.0**
Stddev	1.2	208.	30.1
%RSD	.04282	.39834	.50185
#1	2830.7	52263.	6012.3
#2	2832.4	51969.	5969.8

Sample Name: 280-98106-H-1-A Acquired: 6/13/2017 18:52:51 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376953 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00310**	**4.1766**	**.26083**	**8.8540**	**.36456**	**.00029**	**-.00207**	**67.718**	**.00175**
Stddev	.00078	.0303	.00505	.2522	.00107	.00012	.00244	.339	.00013
%RSD	25.317	.72485	1.9361	2.8480	.29439	42.538	117.64	.50132	7.3902
#1	.00254	4.1552	.25725	9.0324	.36380	.00020	-.00379	67.478	.00184
#2	.00365	4.1980	.26440	8.6757	.36532	.00037	-.00035	67.958	.00166
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06536**	**1.1685**	**.22265**	**57.184**	F **765.36**	**.07703**	**45.572**	**.32435**	**.01463**
Stddev	.00277	.0421	.00278	.052	1.17	.00118	.002	.00011	.00095
%RSD	4.2357	3.6027	1.2481	.09148	.15270	1.5379	.00338	.03253	6.4919
#1	.06732	1.1983	.22462	57.147	764.53	.07619	45.574	.32443	.01530
#2	.06340	1.1387	.22069	57.221	766.19	.07786	45.571	.32428	.01396
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					500.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1938.3**	**.31580**	W **20.933**	**.05776**	F **1372.5**	**.08851**	**.00702**	**29.154**	**62.389**
Stddev	12.3	.01010	.706	.00243	40.2	.00724	.00594	.146	.313
%RSD	.63263	3.1988	3.3721	4.1990	2.9258	8.1815	84.553	.50229	.50229
#1	1929.6	.32294	21.432	.05947	1400.9	.09363	.01122	29.050	62.168
#2	1946.9	.30866	20.434	.05604	1344.1	.08339	.00282	29.257	62.611
Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		20.000		200.00				
Low Limit	11.000		-6.0000		-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.16973**	**.54701**	**.00241**	**.30358**	**-.00110**	**.01715**	**.09112**	**.63709**	**.01551**
Stddev	.00555	.00279	.00098	.00043	.00252	.01177	.00007	.00234	.00015
%RSD	3.2708	.50929	40.580	.14112	229.36	68.604	.08093	.36789	.97537
#1	.17365	.54504	.00172	.30388	.00068	.00883	.09107	.63875	.01562
#2	.16580	.54898	.00310	.30328	-.00288	.02548	.09117	.63543	.01540
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2401.7**	**43519.**	**5852.8**
Stddev	.3	11.	14.4
%RSD	.01237	.02524	.24682
#1	2401.5	43527.	5863.0
#2	2401.9	43511.	5842.6

Sample Name: 280-98106-H-2-A Acquired: 6/13/2017 18:55:26 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376953 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00090**	**.33803**	**.02254**	**3.5613**	**.17501**	**-.00008**	**-.00097**	W **978.71**	**.00168**
Stddev	.00055	.01273	.01000	.1338	.00026	.00010	.00174	4.02	.00029
%RSD	61.426	3.7664	44.389	3.7556	.14681	120.28	179.34	.41049	17.096
#1	.00129	.34703	.02961	3.6559	.17483	-.00001	.00026	975.87	.00147
#2	.00051	.32903	.01546	3.4667	.17519	-.00016	-.00220	981.55	.00188
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01423**	**.10940**	**.40699**	**14.314**	W **412.18**	**.10846**	**102.75**	**5.9508**	**.00837**
Stddev	.00086	.00524	.00032	.005	2.84	.00155	.46	.0210	.00068
%RSD	6.0294	4.7866	.07945	.03524	.68973	1.4296	.44540	.35379	8.0983
#1	.01484	.11311	.40722	14.317	410.17	.10737	103.08	5.9657	.00885
#2	.01362	.10570	.40676	14.310	414.19	.10956	102.43	5.9360	.00789
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **667.34**	**.10533**	**9.1367**	**.00091**	**174.35**	**.00629**	**.00839**	**23.298**	**49.858**
Stddev	.51	.00404	.3924	.00080	6.72	.00008	.00364	.068	.146
%RSD	.07684	3.8394	4.2951	88.162	3.8543	1.2420	43.331	.29314	.29314
#1	667.70	.10819	9.4142	.00034	179.10	.00634	.01096	23.347	49.962
#2	666.97	.10247	8.8592	.00147	169.60	.00623	.00582	23.250	49.755
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00119**	**3.0279**	**.00354**	**.05433**	**.00234**	**-.04103**	**.01145**	**.16698**	**.00394**
Stddev	.00444	.0009	.00106	.00078	.00611	.05098	.00132	.00081	.00088
%RSD	372.26	.03110	29.830	1.4279	261.51	124.24	11.497	.48750	22.239
#1	-.00195	3.0272	.00429	.05488	-.00198	-.00498	.01238	.16756	.00332
#2	.00433	3.0285	.00279	.05378	.00665	-.07708	.01052	.16641	.00456
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2371.5**	**44437.**	**5917.6**
Stddev	4.1	7.	8.6
%RSD	.17229	.01641	.14580
#1	2368.6	44442.	5923.7
#2	2374.3	44432.	5911.5

Sample Name: 280-98106-H-3-A Acquired: 6/13/2017 18:58:10 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376953 200.7

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00150**	**2.3797**	W **2.7391**	**.48139**	**8.7301**	**.38409**	**.00023**	**-.00283**	**48.073**
Stddev	.00041	.0741	.0375	.01316	.2141	.00004	.00014	.00230	.021
%RSD	27.578	3.1131	1.3683	2.7344	2.4521	.00999	59.487	81.541	.04269
#1	.00179	2.4321	2.7656	.49070	8.8815	.38411	.00032	-.00120	48.087
#2	.00121	2.3273	2.7126	.47208	8.5788	.38406	.00013	-.00445	48.058
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			500.00						
Low Limit			3.2000						

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00112**	**.06116**	**.45415**	**.04450**	**4.9190**	F **775.60**	**.11677**	**42.595**	**.11660**
Stddev	.00011	.00220	.01478	.00004	.0133	.69	.00241	.002	.00021
%RSD	10.202	3.5933	3.2540	.07933	.27008	.08864	2.0668	.00416	.18126
#1	.00120	.06272	.46460	.04452	4.9096	775.12	.11506	42.594	.11645
#2	.00104	.05961	.44370	.04447	4.9284	776.09	.11847	42.597	.11675
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						500.00			
Low Limit						-6.0000			

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00910**	W **2137.9**	**.18377**	W **30.624**	**.00867**	**57.163**	**.12130**	**.00887**	**42.784**
Stddev	.00062	6.3	.00484	.890	.00120	1.783	.00247	.00972	.117
%RSD	6.7827	.29378	2.6360	2.9073	13.818	3.1182	2.0381	109.64	.27369
#1	.00954	2133.4	.18720	31.253	.00951	58.423	.12305	.00199	42.702
#2	.00867	2142.3	.18035	29.994	.00782	55.902	.11955	.01575	42.867
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00		20.000					
Low Limit		11.000		-6.0000					

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**91.559**	**.09567**	**.49202**	**.00234**	**.27010**	**.00186**	**.00330**	**.05331**	**.24014**
Stddev	.251	.00013	.00097	.00200	.00038	.00268	.01152	.00027	.00157
%RSD	.27369	.13776	.19658	85.195	.14074	144.70	349.33	.51324	.65197
#1	91.382	.09576	.49133	.00093	.27037	.00375	.01144	.05350	.23903
#2	91.736	.09558	.49270	.00376	.26983	-.00004	-.00485	.05312	.24124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391
Line	339.198 { 99}
Units	ppm
Avg	**.04978**
Stddev	.00016
%RSD	.31179
#1	.04967
#2	.04989
Check ?	Chk Pass
High Limit	
Low Limit	

Sample Name: 280-98106-H-3-A Acquired: 6/13/2017 18:58:10 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376953 200.7

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2365.0**	**42639.**	**5696.7**
Stddev	16.6	131.	6.6
%RSD	.70370	.30662	.11639
#1	2353.2	42731.	5701.3
#2	2376.7	42546.	5692.0

Sample Name: 280-98106-G-4-A Acquired: 6/13/2017 19:00:46 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376953 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00053**	**1.0576**	**.45007**	**5.8281**	**.27565**	**.00034**	**.00238**	**22.431**	**.00077**
Stddev	.00028	.0374	.01594	.1957	.00095	.00015	.00570	.113	.00044
%RSD	53.386	3.5356	3.5421	3.3585	.34436	43.998	239.49	.50191	58.042
#1	.00033	1.0841	.46134	5.9665	.27498	.00044	-.00165	22.352	.00108
#2	.00073	1.0312	.43879	5.6896	.27632	.00023	.00641	22.511	.00045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07318**	**.33867**	**.01400**	**7.2098**	F **610.16**	**.05656**	**27.977**	**.06818**	**.00772**
Stddev	.00268	.01335	.00085	.0151	2.95	.00022	.153	.00012	.00093
%RSD	3.6641	3.9420	6.0841	.20959	.48295	.39603	.54803	.17300	12.009
#1	.07507	.34811	.01340	7.1991	608.08	.05672	28.086	.06810	.00837
#2	.07128	.32923	.01461	7.2205	612.24	.05640	27.869	.06827	.00706
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					500.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1860.5**	**.20957**	**19.145**	**.00759**	**43.676**	**.04576**	**.00249**	**1.9208**	**4.1106**
Stddev	9.1	.00770	.704	.00164	1.594	.00217	.00324	.0288	.0617
%RSD	.48747	3.6735	3.6753	21.649	3.6504	4.7378	130.37	1.5010	1.5010
#1	1854.1	.21501	19.643	.00875	44.803	.04423	.00478	1.9412	4.1542
#2	1866.9	.20412	18.648	.00642	42.549	.04729	.00019	1.9004	4.0669
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.16590**	**.28625**	**.00276**	**.22476**	**-.00074**	**-.00929**	**.08399**	**.23570**	**.06472**
Stddev	.00286	.00111	.00044	.00055	.00043	.02296	.00007	.00017	.00148
%RSD	1.7221	.38613	16.029	.24635	58.126	247.29	.07824	.07225	2.2842
#1	.16792	.28547	.00308	.22516	-.00043	.00695	.08394	.23558	.06576
#2	.16387	.28703	.00245	.22437	-.00104	-.02552	.08403	.23582	.06367
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2430.7**	**43731.**	**5779.1**
Stddev	1.1	31.	78.1
%RSD	.04694	.06997	1.3511
#1	2431.5	43709.	5834.3
#2	2429.9	43753.	5723.9

Sample Name: 280-98106-H-5-A Acquired: 6/13/2017 19:03:21 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376953 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00125**	**1.3308**	**.47554**	**9.8464**	**.44492**	**.00021**	**-.00644**	**44.309**	**.00147**
Stddev	.00039	.0389	.01861	.2432	.00168	.00004	.00097	.167	.00016
%RSD	31.082	2.9252	3.9131	2.4702	.37686	20.848	15.028	.37781	10.913
#1	.00153	1.3583	.48870	10.018	.44611	.00024	-.00712	44.428	.00159
#2	.00098	1.3033	.46238	9.6745	.44374	.00018	-.00576	44.191	.00136
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06533**	**.56470**	**.04956**	**7.0107**	F **927.98**	**.29406**	**60.924**	**.07840**	**.01671**
Stddev	.00158	.01652	.00041	.0181	2.47	.00010	.085	.00003	.00018
%RSD	2.4182	2.9262	.81925	.25841	.26656	.03414	.13870	.03277	1.0659
#1	.06645	.57639	.04984	7.0235	929.73	.29413	60.864	.07838	.01683
#2	.06422	.55302	.04927	6.9978	926.24	.29399	60.983	.07842	.01658
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					500.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2300.0**	**.21160**	**19.741**	**.00975**	**64.661**	**.06892**	**.02118**	**46.377**	**99.246**
Stddev	1.9	.00504	.606	.00059	1.729	.00447	.00420	.007	.016
%RSD	.08105	2.3842	3.0721	6.0709	2.6738	6.4815	19.819	.01616	.01616
#1	2301.3	.21517	20.170	.00933	65.883	.06577	.01821	46.382	99.257
#2	2298.6	.20804	19.312	.01016	63.438	.07208	.02414	46.371	99.234
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00								
Low Limit	11.000								

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.19527**	**.62164**	**.00222**	**.22674**	**.00004**	**-.02541**	**.04057**	**.26322**	**.00717**
Stddev	.00499	.00090	.00225	.00062	.00416	.01109	.00027	.00208	.00085
%RSD	2.5555	.14541	101.55	.27521	9754.1	43.651	.67688	.79194	11.909
#1	.19880	.62228	.00381	.22630	-.00290	-.03325	.04037	.26175	.00656
#2	.19174	.62100	.00063	.22718	.00299	-.01757	.04076	.26470	.00777
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2331.1**	**42390.**	**5771.0**
Stddev	5.0	6.	28.7
%RSD	.21599	.01460	.49649
#1	2327.6	42395.	5750.8
#2	2334.7	42386.	5791.3

Sample Name: 280-98106-H-6-A Acquired: 6/13/2017 19:05:56 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376953 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00063**	**1.2708**	**3.9034**	W **10.457**	**.59051**	**.00010**	**-.00426**	**71.460**	**.00244**
Stddev	.00041	.0538	.1874	.400	.00134	.00003	.00443	.016	.00009
%RSD	64.110	4.2335	4.8012	3.8277	.22625	34.294	104.16	.02192	3.6552
#1	.00035	1.3089	4.0359	10.740	.58957	.00013	-.00739	71.449	.00237
#2	.00092	1.2328	3.7709	10.174	.59146	.00008	-.00112	71.471	.00250
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.20000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03842**	**1.5315**	**.17014**	**7.6591**	F **996.91**	**.58299**	**61.792**	**.20827**	**.08155**
Stddev	.00207	.0662	.00004	.0055	.72	.00256	.275	.00083	.00332
%RSD	5.3953	4.3198	.02388	.07194	.07269	.43905	.44509	.39976	4.0717
#1	.03988	1.5783	.17017	7.6552	996.39	.58118	61.986	.20886	.08390
#2	.03695	1.4847	.17011	7.6630	997.42	.58480	61.597	.20769	.07920
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					500.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2061.8**	**.20344**	**18.173**	**.01803**	F **230.82**	**.28623**	**.02113**	**47.840**	**102.38**
Stddev	6.7	.00972	.753	.00074	9.30	.01230	.00889	.116	.25
%RSD	.32410	4.7770	4.1433	4.0993	4.0281	4.2982	42.094	.24307	.24307
#1	2057.1	.21031	18.706	.01855	237.40	.29493	.01484	47.757	102.20
#2	2066.6	.19657	17.641	.01750	224.25	.27753	.02742	47.922	102.55
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00				200.00				
Low Limit	11.000				-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.13908**	**.88772**	**.00115**	**.23041**	**.00136**	**-.03786**	**.02936**	**.52212**	**.00530**
Stddev	.00402	.00110	.00068	.00123	.00166	.01081	.00022	.00442	.00202
%RSD	2.8900	.12405	58.939	.53205	122.34	28.539	.73557	.84623	38.072
#1	.14192	.88694	.00067	.23128	.00253	-.04550	.02921	.52525	.00672
#2	.13623	.88850	.00163	.22954	.00018	-.03022	.02952	.51900	.00387
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2361.2**	**42867.**	**5843.2**
Stddev	12.9	186.	15.9
%RSD	.54591	.43394	.27256
#1	2352.0	42735.	5854.4
#2	2370.3	42998.	5831.9

Sample Name: 280-98106-H-7-A Acquired: 6/13/2017 19:08:31 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376953 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00094**	**.08014**	**.06807**	**.60750**	**.02991**	**-.00014**	**-.00107**	**108.20**	**.00052**
Stddev	.00003	.00171	.01392	.01954	.00017	.00001	.00353	.03	.00001
%RSD	3.5464	2.1377	20.443	3.2156	.56948	6.4708	330.17	.03234	2.4284
#1	.00092	.08136	.07791	.62131	.03003	-.00013	-.00357	108.17	.00053
#2	.00096	.07893	.05823	.59369	.02979	-.00014	.00143	108.22	.00051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00399**	**.01589**	**.00639**	**.68246**	**72.696**	**.01486**	**12.043**	**.05719**	**.01570**
Stddev	.00010	.00020	.00044	.00097	.249	.00105	.017	.00005	.00112
%RSD	2.4507	1.2514	6.8596	.14199	.34273	7.0991	.14452	.09252	7.1182
#1	.00392	.01603	.00608	.68315	72.872	.01411	12.031	.05722	.01649
#2	.00406	.01575	.00670	.68178	72.520	.01560	12.055	.05715	.01491
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**139.24**	**.01518**	**.17041**	**-.00232**	**63.726**	**.06987**	**-.00732**	**5.7257**	**12.253**
Stddev	.13	.00078	.00623	.00134	2.035	.00172	.00730	.0134	.029
%RSD	.09214	5.1526	3.6571	58.017	3.1934	2.4674	99.710	.23335	.23335
#1	139.15	.01573	.17482	-.00327	65.165	.07108	-.01248	5.7351	12.273
#2	139.33	.01463	.16600	-.00137	62.287	.06865	-.00216	5.7162	12.233
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00145**	**.43627**	**.00475**	**.00538**	**.00164**	**-.02872**	**.01142**	**.01857**	**.00655**
Stddev	.00102	.00163	.00103	.00008	.00392	.00810	.00007	.00037	.00041
%RSD	70.141	.37364	21.629	1.4568	239.16	28.199	.62404	1.9783	6.2039
#1	.00217	.43743	.00403	.00532	-.00113	-.03445	.01147	.01831	.00626
#2	.00073	.43512	.00548	.00543	.00442	-.02299	.01137	.01883	.00684
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2692.5**	**50478.**	**6201.9**
Stddev	9.7	195.	1.0
%RSD	.35871	.38535	.01638
#1	2685.7	50616.	6201.2
#2	2699.3	50341.	6202.6

Sample Name: 280-98106-H-8-A Acquired: 6/13/2017 19:11:06 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376953 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00069**	**1.3967**	**3.9860**	W **13.234**	**.24820**	**.00006**	**.00154**	**74.402**	**.00163**
Stddev	.00008	.0478	.1263	.437	.00037	.00004	.00008	.152	.00018
%RSD	12.341	3.4199	3.1688	3.3022	.14895	54.745	5.0278	.20491	11.334
#1	.00075	1.4304	4.0753	13.543	.24794	.00009	.00149	74.510	.00150
#2	.00063	1.3629	3.8967	12.925	.24846	.00004	.00160	74.294	.00176
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				10.000					
Low Limit				-.20000					

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02669**	**.57818**	**.02109**	**3.9865**	F **835.26**	**.10811**	**62.983**	**.50120**	**.00585**
Stddev	.00120	.02188	.00002	.0044	2.29	.00147	.060	.00018	.00073
%RSD	4.4909	3.7846	.07535	.11004	.27436	1.3579	.09458	.03613	12.463
#1	.02754	.59366	.02110	3.9896	836.88	.10915	62.941	.50107	.00636
#2	.02585	.56271	.02108	3.9834	833.64	.10707	63.025	.50132	.00533
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					500.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **1577.9**	**.09309**	W **21.578**	**.00138**	F **255.26**	**.10102**	**.00660**	**38.518**	**82.429**
Stddev	2.6	.00428	.814	.00354	8.72	.00604	.00554	.201	.431
%RSD	.16200	4.5938	3.7735	256.72	3.4165	5.9749	84.039	.52249	.52249
#1	1579.7	.09612	22.154	.00389	261.43	.10529	.01052	38.376	82.125
#2	1576.1	.09007	21.003	-.00113	249.10	.09675	.00268	38.661	82.734
Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	500.00		20.000		200.00				
Low Limit	11.000		-6.0000		-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06138**	**.72312**	**.00328**	**.15569**	**-.00033**	**-.04645**	**.09691**	**.10406**	**.01884**
Stddev	.00154	.00183	.00344	.00060	.00221	.00448	.00024	.00055	.00254
%RSD	2.5135	.25245	104.92	.38729	671.69	9.6505	.24844	.52781	13.498
#1	.06247	.72441	.00572	.15526	-.00189	-.04328	.09708	.10445	.01704
#2	.06029	.72183	.00085	.15611	.00123	-.04962	.09674	.10367	.02063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2390.3**	**43435.**	**5829.1**
Stddev	5.7	234.	6.4
%RSD	.23647	.53795	.11030
#1	2386.3	43600.	5833.6
#2	2394.2	43270.	5824.5

Sample Name: 280-98106-H-9-A Acquired: 6/13/2017 19:13:43 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376953 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00079**	**1.4423**	**.01832**	**1.0006**	**.03388**	**.00002**	**-.00010**	**71.056**	**.00072**
Stddev	.00024	.0351	.00181	.0194	.00005	.00010	.00028	.070	.00023
%RSD	29.912	2.4307	9.8915	1.9410	.14241	414.91	290.62	.09889	32.657
#1	.00096	1.4671	.01704	1.0144	.03392	.00010	-.00029	71.105	.00055
#2	.00062	1.4175	.01960	.98690	.03385	-.00005	.00010	71.006	.00088
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00955**	**.08204**	**.03617**	**1.0489**	W **159.63**	**.01994**	**19.095**	**.04977**	**.02300**
Stddev	.00019	.00193	.00037	.0030	.33	.00049	.001	.00004	.00140
%RSD	1.9497	2.3467	1.0206	.28320	.20440	2.4477	.00274	.08025	6.0736
#1	.00968	.08341	.03643	1.0510	159.86	.01960	19.096	.04980	.02399
#2	.00942	.08068	.03591	1.0468	159.40	.02029	19.095	.04974	.02201
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					100.00				
Low Limit					-6.0000				

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**292.25**	**.03359**	**1.0456**	**.00042**	**50.096**	**.00311**	**-.00511**	**3.1685**	**6.7805**
Stddev	.33	.00073	.0239	.00176	1.049	.00160	.00144	.0155	.0332
%RSD	.11124	2.1599	2.2858	422.14	2.0945	51.290	28.221	.49000	.49000
#1	292.48	.03410	1.0625	.00166	50.838	.00198	-.00612	3.1795	6.8040
#2	292.02	.03308	1.0287	-.00083	49.354	.00424	-.00409	3.1575	6.7570
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01037**	**.34672**	**.00554**	**.06719**	**.00400**	**-.05416**	**.05573**	**.05767**	**.02950**
Stddev	.00047	.00068	.00127	.00005	.00151	.01985	.00006	.00180	.00059
%RSD	4.4857	.19697	22.992	.07398	37.836	36.654	.10139	3.1135	1.9909
#1	.01070	.34720	.00464	.06715	.00293	-.04012	.05577	.05894	.02992
#2	.01004	.34623	.00644	.06722	.00507	-.06819	.05569	.05640	.02909
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2606.3**	**48435.**	**6033.7**
Stddev	2.6	112.	8.5
%RSD	.09790	.23106	.14022
#1	2604.5	48514.	6039.7
#2	2608.1	48356.	6027.7

Sample Name: CCVH-4579429 Acquired: 6/13/2017 19:16:17 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00043**	**46.594**	**-.01156**	**.02769**	**.00049**	**.00016**	W **.94437**	**.00886**	**.00069**	**-.00073**	**.00037**	**.01002**
Stddev	.00011	.209	.00159	.00231	.00007	.00002	.02462	.00427	.00029	.00007	.00062	.00059
%RSD	26.505	.44750	13.736	8.3586	14.743	12.764	2.6067	48.216	41.867	9.3736	167.45	5.8701
#1	.00035	46.447	-.01268	.02933	.00055	.00018	.96178	.01188	.00089	-.00068	.00081	.01044
#2	.00051	46.741	-.01044	.02606	.00044	.00015	.92697	.00584	.00049	-.00078	-.00007	.00960
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							-5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.599**	**2.1099**	**.00197**	**.04450**	**-.00207**	**-.00145**	**242.48**	**.00091**	**.00842**	**.00014**	**5.0655**	**.00355**
Stddev	.045	.2347	.00182	.00219	.00004	.00027	1.24	.00017	.00530	.00295	.1632	.00017
%RSD	.09300	11.125	92.455	4.9158	2.1272	18.350	.51058	18.785	62.966	2089.1	3.2222	4.6973
#1	48.567	2.2759	.00068	.04604	-.00210	-.00164	241.61	.00103	.01217	.00223	5.1809	.00344
#2	48.631	1.9440	.00325	.04295	-.00204	-.00126	243.36	.00079	.00467	-.00195	4.9501	.00367
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00739**	**.14595**	**.31233**	**-.00042**	**.00049**	W **4.5869**	**.01880**	**-.00011**	W **9.3595**	**.01224**	**.00071**	**.07835**
Stddev	.00180	.01223	.02618	.00058	.00010	.0027	.00035	.00174	.0107	.00028	.00042	.00157
%RSD	24.310	8.3820	8.3820	137.87	20.797	.05849	1.8804	1543.8	.11468	2.3125	59.371	1.9997
#1	-.00612	.15460	.33084	-.00083	.00057	4.5888	.01905	.00112	9.3671	.01245	.00101	.07724
#2	-.00866	.13730	.29381	-.00001	.00042	4.5850	.01855	-.00134	9.3519	.01204	.00041	.07945
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2719.0**	**50690.**	**6121.0**
Stddev	.7	200.	53.2
%RSD	.02529	.39514	.86874
#1	2718.5	50549.	6158.6
#2	2719.5	50832.	6083.4

Sample Name: CCV-4580817 Acquired: 6/13/2017 19:18:51 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48599**	**.48748**	**.92513**	**.50546**	**.50237**	**.46979**	**-.00106**	**4.9918**	**.48139**	**.48616**	**.49132**	**.49770**	**2.3721**
Stddev	.00025	.01573	.02549	.01179	.00025	.00070	.00261	.0042	.01363	.01391	.01516	.00467	.0123
%RSD	.05101	3.2275	2.7551	2.3322	.04901	.14956	245.09	.08498	2.8321	2.8612	3.0857	.93841	.51976
#1	.48581	.49861	.94316	.51380	.50254	.47029	.00078	4.9888	.49103	.49600	.50204	.50100	2.3808
#2	.48616	.47635	.90711	.49713	.50220	.46930	-.00291	4.9948	.47175	.47633	.48060	.49439	2.3634
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.226**	**.96429**	**19.321**	**.46946**	**.49141**	**5.3983**	**.48462**	**.96501**	**.98603**	**.03114**	**.94885**	**.91532**	**5.0830**
Stddev	.072	.00185	.023	.00072	.01541	.0182	.01325	.02275	.03196	.00781	.02508	.01512	.0452
%RSD	.14435	.19167	.11785	.15383	3.1365	.33681	2.7349	2.3571	3.2411	25.068	2.6428	1.6520	.89012
#1	50.174	.96298	19.337	.46997	.50231	5.4112	.49399	.98109	1.0086	.02562	.96659	.92602	5.0510
#2	50.277	.96559	19.305	.46895	.48051	5.3855	.47524	.94892	.96343	.03666	.93112	.90463	5.1150
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.878**	**.98874**	**.46506**	**.01161**	**.45648**	**.91500**	**-.04375**	**.47340**	**.45925**	**.49246**
Stddev	.097	.02787	.00053	.00073	.00019	.02303	.02595	.00028	.00054	.00288
%RSD	.89012	2.8185	.11359	6.2934	.04057	2.5171	59.327	.05886	.11737	.58555
#1	10.809	1.0084	.46469	.01109	.45661	.93128	-.06210	.47320	.45963	.49450
#2	10.946	.96904	.46544	.01213	.45635	.89871	-.02539	.47360	.45887	.49042
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2767.8**	**51418.**	**6100.9**
Stddev	3.2	329.	25.8
%RSD	.11567	.64078	.42219
#1	2770.0	51651.	6082.7
#2	2765.5	51185.	6119.1

Sample Name: CCB Acquired: 6/13/2017 19:21:20 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00120**	**-.00110**	**-.00624**	W **.01769**	**.00002**	**.00000**	**.00088**	**-.01189**	**.00069**	**-.00018**	**.00023**	**-.00335**
Stddev	.00031	.00081	.00013	.00082	.00024	.00006	.00066	.00242	.00001	.00012	.00016	.00049
%RSD	25.544	74.242	2.0543	4.6494	1510.2	1555.7	75.423	20.384	1.6853	66.295	70.810	14.559
#1	.00098	-.00052	-.00633	.01828	.00019	.00005	.00041	-.01018	.00070	-.00010	.00035	-.00369
#2	.00142	-.00167	-.00615	.01711	-.00016	-.00004	.00134	-.01360	.00068	-.00027	.00012	-.00300
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.01500								
Low Limit				-.01500								

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00265**	**.92765**	**.00207**	**.00199**	**.00004**	**.00050**	W **.39346**	**-.00025**	**.00435**	**.00005**	**.02866**	W **.00606**
Stddev	.00214	.01888	.00074	.00121	.00005	.00068	.00171	.00037	.00195	.00040	.00333	.00137
%RSD	80.563	2.0358	35.724	60.778	113.47	137.82	.43528	147.50	44.892	752.70	11.633	22.656
#1	-.00114	.94100	.00155	.00284	.00001	.00098	.39467	-.00051	.00573	-.00023	.02630	.00703
#2	-.00416	.91429	.00260	.00113	.00007	.00001	.39225	.00001	.00297	.00033	.03102	.00509
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit							.35000					.00600
Low Limit							-.35000					-.00600

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00009**	**.10263**	W **.21962**	**-.00077**	**.00021**	**.00650**	**-.00024**	**.00081**	**-.06000**	**.00013**	**-.00062**	**-.00110**
Stddev	.00755	.00288	.00615	.00221	.00003	.00259	.00004	.00062	.07195	.00020	.00050	.00053
%RSD	8403.3	2.8018	2.8018	286.99	16.629	39.869	15.357	76.370	119.92	155.60	80.329	48.706
#1	.00543	.10059	.21527	-.00233	.00023	.00833	-.00022	.00125	-.11088	.00028	-.00098	-.00148
#2	-.00525	.10466	.22397	.00079	.00018	.00466	-.00027	.00037	-.00912	-.00001	-.00027	-.00072
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.13000									
Low Limit			-.13000									

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2795.2**	**52846.**	**6150.8**
Stddev	1.9	173.	4.1
%RSD	.06792	.32718	.06674
#1	2793.9	52968.	6153.7
#2	2796.6	52724.	6147.9

Sample Name: CCVL-4590576 Acquired: 6/13/2017 19:23:59 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01025**	**.09791**	F **.02047**	**.10939**	**.01066**	**.00090**	**.10722**	**.19297**	**.00531**	**.00964**	**.00996**	**.01261**
Stddev	.00022	.00360	.00227	.00364	.00016	.00009	.00373	.00019	.00011	.00043	.00041	.00046
%RSD	2.1746	3.6770	11.091	3.3265	1.4661	10.282	3.4743	.09855	2.1024	4.4627	4.0959	3.6649
#1	.01041	.10046	.01886	.11196	.01055	.00084	.10986	.19284	.00524	.00994	.01025	.01294
#2	.01009	.09537	.02207	.10681	.01077	.00097	.10459	.19311	.00539	.00933	.00967	.01228
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09467**	F **3.9064**	**.02071**	**.19751**	**.00976**	**.01841**	F **1.3900**	**.03914**	**2.7373**	**.00743**	**.12295**	**.01838**
Stddev	.00347	.0173	.00040	.00422	.00006	.00113	.0104	.00148	.1074	.00064	.00461	.00184
%RSD	3.6634	.44385	1.9458	2.1378	.66455	6.1237	.74908	3.7926	3.9231	8.6702	3.7507	9.9912
#1	.09222	3.8941	.02043	.20050	.00981	.01921	1.3826	.04019	2.8133	.00697	.12621	.01709
#2	.09712	3.9187	.02100	.19453	.00972	.01761	1.3974	.03809	2.6614	.00788	.11969	.01968
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		3.0000					1.0000					
Range		30.000%					30.000%					

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01483**	**.55944**	**1.1972**	**.09913**	**.00973**	F **.01968**	**.00830**	**.01615**	F **-.00211**	**.00940**	**.01773**	**.01625**
Stddev	.00522	.01087	.0233	.00392	.00004	.00117	.00012	.00597	.02036	.00001	.00027	.00256
%RSD	35.225	1.9433	1.9433	3.9552	.43184	5.9235	1.4183	36.951	964.92	.13316	1.5095	15.737
#1	.01114	.56712	1.2136	.10190	.00970	.02050	.00822	.02037	-.01651	.00941	.01792	.01806
#2	.01852	.55175	1.1807	.09636	.00975	.01885	.00839	.01193	.01229	.00939	.01754	.01445
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value						.01500			.06000			
Range						30.000%			-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2853.9**	**54029.**	**6213.8**
Stddev	3.8	68.	15.8
%RSD	.13288	.12569	.25352
#1	2856.5	53981.	6224.9
#2	2851.2	54077.	6202.6

Sample Name: MB 280-376897/1-A Acquired: 6/13/2017 19:26:37 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: 6/13 Custom ID2: Custom ID3:
Comment: 376897 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00153**	**.00036**	**-.00171**	**.01142**	**.00016**	**-.00009**	**.00252**	**-.00544**	**.00010**
Stddev	.00004	.00030	.00259	.00050	.00002	.00000	.00146	.00146	.00005
%RSD	2.4713	83.690	152.14	4.3492	10.335	5.2936	57.994	26.797	52.473
#1	.00156	.00015	.00013	.01107	.00018	-.00009	.00149	-.00441	.00006
#2	.00150	.00058	-.00354	.01177	.00015	-.00010	.00355	-.00647	.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00009**	**-.00003**	**-.00319**	**.00131**	**.78006**	**.00242**	**.00554**	**.00002**	**-.00002**
Stddev	.00009	.00015	.00026	.00569	.01374	.00003	.00160	.00004	.00022
%RSD	101.99	463.20	8.1243	433.00	1.7619	1.1493	28.899	163.03	865.64
#1	.00002	-.00014	-.00301	-.00271	.77034	.00240	.00667	.00005	.00013
#2	.00015	.00007	-.00338	.00534	.78978	.00244	.00441	-.00000	-.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.33678**	**-.00023**	**.00782**	**.00021**	**.02688**	**-.00126**	W **-.00978**	**.04442**	**.09505**
Stddev	.01366	.00016	.00013	.00000	.00353	.00042	.00641	.00241	.00516
%RSD	4.0573	69.004	1.6638	1.0002	13.132	33.717	65.580	5.4311	5.4311
#1	.32712	-.00034	.00791	.00020	.02438	-.00156	-.01432	.04612	.09870
#2	.34645	-.00012	.00773	.00021	.02938	-.00096	-.00525	.04271	.09140
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	None
High Limit							.00750		
Low Limit							-.00750		

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00008**	**.00016**	W **.00598**	**-.00056**	**.00022**	W **-.05193**	**.00025**	**.00025**	**-.00108**
Stddev	.00027	.00006	.00219	.00014	.00236	.00293	.00065	.00019	.00029
%RSD	318.51	37.923	36.659	24.216	1062.5	5.6397	256.47	76.654	26.545
#1	-.00011	.00020	.00753	-.00066	-.00145	-.04986	-.00021	.00039	-.00129
#2	.00028	.00012	.00443	-.00047	.00189	-.05400	.00071	.00012	-.00088
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500			.05000			
Low Limit			-.00500			-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2824.6**	**53688.**	**6185.8**
Stddev	9.8	214.	1.0
%RSD	.34565	.39874	.01663
#1	2831.5	53537.	6185.1
#2	2817.6	53840.	6186.5

Sample Name: LCS 280-376897/2-A Acquired: 6/13/2017 19:29:16 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376897 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05333**	**1.9141**	**.99822**	**1.0344**	**2.0790**	**.04856**	**2.0025**	**50.329**	**.10157**
Stddev	.00047	.0401	.00734	.0173	.0087	.00027	.0327	.190	.00209
%RSD	.87585	2.0970	.73556	1.6743	.41688	.54771	1.6342	.37771	2.0536
#1	.05300	1.9425	1.0034	1.0467	2.0728	.04837	2.0257	50.195	.10304
#2	.05366	1.8858	.99303	1.0222	2.0851	.04875	1.9794	50.463	.10009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48811**	**.20141**	**.25827**	**1.0095**	**51.886**	**.98272**	**49.590**	**.47621**	**.98851**
Stddev	.01062	.00396	.00001	.0046	.041	.00338	.091	.00061	.01966
%RSD	2.1753	1.9647	.00395	.45235	.07927	.34434	.18400	.12710	1.9889
#1	.49562	.20420	.25828	1.0063	51.856	.98033	49.655	.47664	1.0024
#2	.48061	.19861	.25826	1.0127	51.915	.98511	49.526	.47579	.97461
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.542**	**.48756**	**10.311**	**.50052**	**2.1123**	**.50960**	**1.9612**	**9.7936**	**20.958**
Stddev	.204	.00968	.204	.00728	.0248	.00565	.0214	.0932	.199
%RSD	.39621	1.9855	1.9786	1.4540	1.1751	1.1091	1.0891	.95137	.95137
#1	51.397	.49440	10.455	.50567	2.1299	.51360	1.9763	9.7277	20.817
#2	51.686	.48071	10.166	.49538	2.0948	.50561	1.9461	9.8594	21.099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0266**	**.95737**	**.96101**	**.94404**	**1.8416**	**1.8918**	**.49011**	**.47219**	**.52383**
Stddev	.0426	.00320	.00448	.00129	.0261	.0023	.00266	.00239	.00355
%RSD	2.1007	.33469	.46644	.13615	1.4175	.12364	.54199	.50515	.67835
#1	2.0567	.95510	.96418	.94495	1.8600	1.8935	.49199	.47388	.52132
#2	1.9965	.95963	.95784	.94313	1.8231	1.8902	.48824	.47050	.52634
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2720.0**	**50319.**	**6058.2**
Stddev	.5	94.	4.7
%RSD	.01852	.18619	.07778
#1	2720.4	50385.	6061.5
#2	2719.7	50253.	6054.9

Sample Name: 280-98084-B-1-A Acquired: 6/13/2017 19:31:40 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376897 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00055**	**.06239**	**.00071**	**.03119**	**.10795**	**-.00009**	**-.00198**	**63.257**	**.00098**
Stddev	.00026	.00128	.00325	.00033	.00026	.00006	.00048	.127	.00031
%RSD	46.726	2.0486	460.76	1.0485	.24112	64.097	24.183	.20041	32.214
#1	.00037	.06330	-.00160	.03096	.10777	-.00013	-.00232	63.167	.00075
#2	.00073	.06149	.00301	.03142	.10814	-.00005	-.00164	63.346	.00120
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00038**	**.00133**	**.01055**	**.24656**	**4.3136**	**.00872**	**11.513**	**.11907**	**-.00005**
Stddev	.00011	.00019	.00004	.00068	.0335	.00102	.029	.00004	.00011
%RSD	29.853	14.276	.38166	.27640	.77607	11.650	.25363	.03065	218.45
#1	-.00030	.00120	.01058	.24704	4.2899	.00800	11.534	.11905	.00003
#2	-.00046	.00146	.01052	.24607	4.3373	.00944	11.493	.11910	-.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.4438**	**.00026**	**7.6685**	**-.00084**	**8.9860**	**-.00048**	**-.00375**	**13.958**	**29.869**
Stddev	.0022	.00005	.1848	.00157	.2543	.00221	.00063	.012	.027
%RSD	.04062	21.433	2.4094	186.02	2.8304	457.04	16.785	.08884	.08884
#1	5.4454	.00022	7.7991	-.00196	9.1658	-.00205	-.00330	13.966	29.888
#2	5.4423	.00029	7.5378	.00027	8.8061	.00108	-.00419	13.949	29.851
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00008**	**.21489**	**.00499**	**.00101**	**.00324**	**-.06584**	**.00009**	**.08085**	**.00180**
Stddev	.00094	.00025	.00084	.00004	.00160	.00004	.00060	.00040	.00046
%RSD	1205.4	.11487	16.843	4.2528	49.490	.06816	671.90	.49545	25.440
#1	.00074	.21506	.00440	.00098	.00437	-.06581	-.00033	.08113	.00212
#2	-.00059	.21471	.00559	.00104	.00211	-.06587	.00051	.08056	.00148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2805.9**	**52721.**	**6287.5**
Stddev	1.0	90.	7.9
%RSD	.03479	.17156	.12611
#1	2806.5	52785.	6293.2
#2	2805.2	52657.	6281.9

Sample Name: 280-98089-A-1-B Acquired: 6/13/2017 19:34:15 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376897 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00143**	**.25134**	**.00531**	**.26086**	**.03214**	**-.00013**	**.00250**	W **520.31**	**.00132**
Stddev	.00078	.01323	.00042	.01247	.00002	.00005	.00076	5.48	.00031
%RSD	54.272	5.2644	7.8707	4.7821	.05665	41.557	30.510	1.0530	23.887
#1	.00198	.26069	.00501	.26968	.03213	-.00017	.00304	516.43	.00154
#2	.00088	.24198	.00561	.25203	.03215	-.00009	.00196	524.18	.00110
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00834**	**.00552**	**.01184**	**.08179**	**34.130**	**.04228**	**169.65**	**8.4493**	**.02062**
Stddev	.00041	.00040	.00097	.00078	.201	.00152	1.10	.0614	.00083
%RSD	4.8785	7.2720	8.2007	.95756	.58992	3.5869	.64588	.72689	4.0031
#1	.00863	.00580	.01116	.08124	33.988	.04121	170.42	8.4927	.02120
#2	.00806	.00524	.01253	.08234	34.273	.04336	168.87	8.4059	.02004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**147.29**	**.22989**	**.00821**	**-.00047**	F **733.99**	**-.00442**	**.00040**	**2.4475**	**5.2377**
Stddev	.58	.00955	.00277	.00098	33.71	.00115	.00308	.0106	.0226
%RSD	.39284	4.1524	33.731	206.13	4.5924	25.894	770.34	.43124	.43124
#1	146.88	.23664	.00625	.00022	757.82	-.00361	.00258	2.4400	5.2217
#2	147.69	.22314	.01017	-.00116	710.15	-.00523	-.00178	2.4550	5.2536
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00290**	**1.2639**	**.00579**	**-.00040**	**.00602**	**-.06173**	**-.00042**	**.03026**	**-.00027**
Stddev	.00172	.0019	.00184	.00009	.00055	.01283	.00011	.00003	.00039
%RSD	59.184	.15028	31.802	22.504	9.1157	20.777	24.784	.09802	145.04
#1	-.00169	1.2625	.00710	-.00034	.00563	-.07080	-.00050	.03028	.00001
#2	-.00412	1.2652	.00449	-.00047	.00641	-.05266	-.00035	.03024	-.00055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2552.8**	**47158.**	**5949.8**
Stddev	3.0	82.	69.3
%RSD	.11699	.17369	1.1646
#1	2550.7	47100.	5998.8
#2	2554.9	47216.	5900.8

Sample Name: 280-98089-A-1-Bsd@5 Acquired: 6/13/2017 19:37:01 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376897 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00141**	**.05198**	**-.00373**	**.06103**	**.00695**	**-.00012**	**-.00057**	**108.27**	**.00085**
Stddev	.00046	.00253	.00349	.00236	.00025	.00006	.00257	.51	.00027
%RSD	32.992	4.8630	93.464	3.8623	3.6487	50.190	453.88	.47019	32.129
#1	.00174	.05377	-.00619	.06270	.00713	-.00016	-.00239	108.63	.00066
#2	.00108	.05019	-.00126	.05936	.00677	-.00008	.00125	107.91	.00105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00157**	**.00162**	**.00038**	**.01532**	**7.3625**	**.00824**	**34.297**	**1.7693**	**.00370**
Stddev	.00023	.00038	.00055	.00178	.0386	.00170	.019	.0016	.00052
%RSD	14.722	23.580	144.40	11.616	.52415	20.605	.05429	.08936	14.014
#1	.00140	.00135	.00077	.01658	7.3898	.00944	34.310	1.7705	.00407
#2	.00173	.00189	-.00001	.01406	7.3352	.00704	34.283	1.7682	.00333
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**30.242**	**.04872**	**.00831**	**-.00121**	**150.56**	**.00092**	**-.01288**	**.51733**	**1.1071**
Stddev	.393	.00145	.00159	.00148	5.07	.00080	.00085	.00010	.0002
%RSD	1.2985	2.9737	19.110	122.19	3.3707	87.150	6.5968	.01957	.01957
#1	30.519	.04974	.00944	-.00226	154.15	.00149	-.01348	.51725	1.1069
#2	29.964	.04770	.00719	-.00016	146.97	.00035	-.01228	.51740	1.1072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00033**	**.25654**	**.00532**	**-.00023**	**.00484**	**-.04049**	**-.00071**	**.00722**	**-.00126**
Stddev	.00226	.00003	.00042	.00034	.00064	.01304	.00051	.00019	.00233
%RSD	677.60	.01197	7.9052	146.20	13.192	32.215	71.676	2.6919	184.52
#1	-.00127	.25656	.00561	-.00047	.00530	-.04971	-.00035	.00709	-.00291
#2	.00194	.25651	.00502	.00001	.00439	-.03127	-.00106	.00736	.00038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2698.3**	**50984.**	**6094.5**
Stddev	1.5	180.	34.1
%RSD	.05679	.35272	.55874
#1	2697.2	51111.	6070.4
#2	2699.4	50857.	6118.6

Sample Name: 280-98089-A-1-C MS Acquired: 6/13/2017 19:39:36 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376897 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05493**	**2.0174**	**1.0198**	**1.2661**	**2.1461**	**.04755**	**1.9902**	W **565.26**	**.10365**
Stddev	.00072	.0871	.0426	.0353	.0006	.00050	.0524	.79	.00334
%RSD	1.3083	4.3183	4.1771	2.7891	.02789	1.0537	2.6314	.14032	3.2262
#1	.05544	2.0790	1.0499	1.2910	2.1456	.04791	2.0273	564.70	.10602
#2	.05443	1.9558	.98967	1.2411	2.1465	.04720	1.9532	565.82	.10129
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47544**	**.20156**	**.27732**	**1.0348**	**86.360**	**1.0632**	**217.80**	**8.8047**	**.99641**
Stddev	.01858	.00760	.00250	.0105	.082	.0049	1.33	.0573	.03558
%RSD	3.9084	3.7689	.90151	1.0162	.09505	.46136	.61242	.65124	3.5705
#1	.48858	.20693	.27909	1.0422	86.418	1.0667	218.74	8.8452	1.0216
#2	.46230	.19619	.27556	1.0273	86.302	1.0597	216.85	8.7641	.97126
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**196.67**	**.69349**	**10.817**	**.47296**	F **750.46**	**.50463**	**2.0372**	**12.292**	**26.306**
Stddev	.50	.02656	.359	.01753	21.50	.01348	.0656	.022	.046
%RSD	.25618	3.8295	3.3231	3.7072	2.8647	2.6708	3.2198	.17618	.17618
#1	196.32	.71226	11.071	.48536	765.66	.51416	2.0836	12.308	26.339
#2	197.03	.67471	10.563	.46056	735.26	.49510	1.9908	12.277	26.273
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9407**	**2.2388**	**.96617**	**.95411**	**1.6519**	**1.9248**	**.49644**	**.48706**	**.52649**
Stddev	.0743	.0044	.00907	.00682	.0574	.0060	.00401	.00136	.00052
%RSD	3.8310	.19624	.93922	.71438	3.4736	.31204	.80683	.27898	.09964
#1	1.9933	2.2419	.97258	.95893	1.6925	1.9290	.49927	.48802	.52686
#2	1.8881	2.2357	.95975	.94930	1.6114	1.9205	.49361	.48610	.52612
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2495.0**	**46241.**	**5803.6**
Stddev	33.8	15.	6.3
%RSD	1.3538	.03185	.10872
#1	2471.1	46251.	5808.0
#2	2518.9	46230.	5799.1

Sample Name: 280-98089-A-1-D MSD Acquired: 6/13/2017 19:42:09 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376897 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05467**	**2.0247**	**1.0125**	**1.2678**	**2.1077**	**.04690**	**1.9824**	W **569.34**	**.10276**
Stddev	.00007	.0546	.0159	.0259	.0022	.00027	.0468	.68	.00240
%RSD	.11900	2.6971	1.5747	2.0424	.10380	.56591	2.3605	.12023	2.3402
#1	.05462	2.0633	1.0238	1.2861	2.1062	.04671	2.0155	568.86	.10446
#2	.05472	1.9861	1.0013	1.2495	2.1093	.04709	1.9493	569.82	.10106
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47623**	**.20174**	**.27359**	**1.0350**	**86.177**	**1.0413**	**219.90**	**8.8659**	**1.0011**
Stddev	.01098	.00526	.00140	.0049	.200	.0031	.22	.0126	.0256
%RSD	2.3055	2.6086	.51338	.47206	.23157	.29801	.10013	.14258	2.5606
#1	.48400	.20546	.27458	1.0315	86.036	1.0391	220.06	8.8570	1.0193
#2	.46847	.19802	.27260	1.0384	86.318	1.0435	219.75	8.8748	.98300
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**198.12**	**.70108**	**10.794**	**.46669**	F **772.36**	**.51626**	**2.0308**	**12.254**	**26.223**
Stddev	.27	.01843	.273	.00719	17.92	.01673	.0575	.006	.012
%RSD	.13658	2.6290	2.5263	1.5397	2.3198	3.2410	2.8315	.04616	.04616
#1	197.92	.71411	10.987	.47178	785.03	.52809	2.0715	12.258	26.231
#2	198.31	.68805	10.601	.46161	759.69	.50443	1.9902	12.250	26.214
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9597**	**2.2494**	**.95150**	**.94439**	**1.6462**	**1.8359**	**.48802**	**.47956**	**.52388**
Stddev	.0407	.0055	.00110	.00082	.0362	.0223	.00085	.00135	.00002
%RSD	2.0751	.24535	.11563	.08642	2.1974	1.2172	.17334	.28054	.00321
#1	1.9884	2.2455	.95072	.94496	1.6718	1.8201	.48862	.47861	.52387
#2	1.9309	2.2533	.95228	.94381	1.6206	1.8517	.48742	.48051	.52390
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2500.0**	**47287.**	**5944.5**
Stddev	1.4	273.	45.1
%RSD	.05683	.57725	.75857
#1	2501.0	47480.	5976.3
#2	2499.0	47094.	5912.6

Sample Name: CCVH-4579429 Acquired: 6/13/2017 19:44:43 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00067**	**46.753**	**-.00233**	**.01031**	**.00048**	**.00014**	W **.94807**	**.16001**	**.00057**	**-.00091**	**.00076**	**.01014**
Stddev	.00035	.054	.00468	.00122	.00047	.00007	.02364	.01769	.00001	.00053	.00015	.00027
%RSD	52.899	.11515	200.91	11.817	98.129	51.521	2.4938	11.058	.96193	58.608	20.070	2.6893
#1	.00091	46.715	-.00564	.01117	.00015	.00009	.96479	.17252	.00057	-.00053	.00087	.00994
#2	.00042	46.791	.00098	.00945	.00081	.00019	.93135	.14750	.00057	-.00129	.00065	.01033
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							-5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.722**	**.46061**	**.00225**	**.07566**	**-.00015**	**-.00181**	**243.09**	**.00078**	**.00708**	**-.00046**	**5.2206**	**.00429**
Stddev	.079	.02933	.00366	.00666	.00033	.00090	.13	.00006	.00274	.00101	.1848	.00073
%RSD	.16147	6.3674	162.59	8.7970	215.47	49.426	.05463	8.0909	38.760	218.46	3.5397	16.974
#1	48.777	.48135	.00484	.08036	.00008	-.00118	243.00	.00082	.00514	.00025	5.3513	.00480
#2	48.666	.43987	-.00034	.07095	-.00039	-.00245	243.19	.00074	.00902	-.00118	5.0900	.00378
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00464**	**.01806**	**.03866**	**.00137**	**.00108**	W **4.6138**	**.01896**	**-.00014**	W **9.3125**	**.01161**	**.00040**	**.07897**
Stddev	.00086	.00678	.01451	.00039	.00017	.0084	.00019	.00005	.0339	.00015	.00075	.00121
%RSD	18.584	37.530	37.530	28.713	16.072	.18149	.97983	34.876	.36363	1.2760	189.52	1.5276
#1	-.00525	.02286	.04892	.00164	.00120	4.6198	.01883	-.00010	9.3365	.01171	-.00013	.07982
#2	-.00403	.01327	.02840	.00109	.00096	4.6079	.01909	-.00017	9.2886	.01150	.00093	.07811
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2725.5**	**50373.**	**5999.5**
Stddev	.6	183.	38.6
%RSD	.02349	.36254	.64343
#1	2726.0	50244.	6026.8
#2	2725.1	50503.	5972.2

Sample Name: CCV-4580817 Acquired: 6/13/2017 19:47:18 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48990**	**.49740**	**.92694**	**.49489**	**.50567**	**.47482**	**-.00021**	**5.0930**	**.48440**	**.49038**	**.49346**	**.49928**	**2.3995**
Stddev	.00041	.01687	.02019	.00743	.00257	.00159	.00129	.0345	.01105	.01207	.01179	.00011	.0042
%RSD	.08437	3.3912	2.1777	1.5006	.50867	.33490	627.77	.67669	2.2810	2.4622	2.3885	.02154	.17409
#1	.49019	.50933	.94121	.50014	.50385	.47370	-.00112	5.0686	.49222	.49892	.50180	.49920	2.3966
#2	.48961	.48547	.91266	.48964	.50749	.47595	.00071	5.1174	.47659	.48185	.48513	.49935	2.4025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.046**	**.96486**	**19.588**	**.47435**	**.49522**	**5.0806**	**.48886**	**.97322**	**.99917**	**.10032**	**.96499**	**.92942**	**4.7803**
Stddev	.362	.00056	.063	.00101	.01378	.0071	.01101	.02154	.02211	.00425	.02705	.03162	.0367
%RSD	.72321	.05770	.32202	.21216	2.7818	.13953	2.2515	2.2136	2.2132	4.2393	2.8030	3.4016	.76863
#1	49.790	.96525	19.632	.47506	.50496	5.0856	.49664	.98845	1.0148	.10333	.98412	.95178	4.7543
#2	50.302	.96447	19.543	.47363	.48548	5.0756	.48108	.95799	.98353	.09732	.94587	.90706	4.8063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.230**	**1.0000**	**.46880**	**.01149**	**.46029**	**.91807**	**-.02546**	**.48012**	**.46978**	**.50113**
Stddev	.079	.0311	.00083	.00185	.00053	.01982	.02834	.00077	.00063	.00429
%RSD	.76863	3.1134	.17663	16.084	.11491	2.1592	111.29	.16136	.13515	.85532
#1	10.174	1.0221	.46821	.01279	.46067	.93209	-.04550	.47957	.47023	.49810
#2	10.285	.97803	.46938	.01018	.45992	.90405	-.00543	.48066	.46933	.50416
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2751.1**	**51204.**	**6049.7**
Stddev	14.7	27.	54.1
%RSD	.53348	.05308	.89495
#1	2761.4	51223.	6088.0
#2	2740.7	51185.	6011.5

Sample Name: CCB Acquired: 6/13/2017 19:49:46 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00084**	**-.00135**	**-.00439**	**.00718**	**.00056**	**-.00011**	**.00103**	**.00546**	**.00033**	**.00015**	**.00010**	**-.00381**
Stddev	.00022	.00043	.00317	.00071	.00051	.00010	.00285	.00438	.00020	.00030	.00028	.00002
%RSD	26.424	32.044	72.227	9.9273	90.395	92.191	277.18	80.220	60.348	204.09	276.14	.43451
#1	.00100	-.00104	-.00663	.00769	.00092	-.00018	-.00099	.00236	.00019	.00036	-.00010	-.00382
#2	.00068	-.00165	-.00215	.00668	.00020	-.00004	.00304	.00855	.00047	-.00006	.00029	-.00380
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00752**	**.26431**	**-.00003**	**.00819**	**.00028**	**.00036**	**.04771**	**.00008**	**.00456**	**-.00022**	W **.06780**	**.00168**
Stddev	.00094	.00592	.00107	.00221	.00009	.00047	.01900	.00033	.00364	.00177	.00783	.00094
%RSD	12.506	2.2406	4193.3	26.990	32.558	130.41	39.826	426.50	79.773	792.60	11.546	55.901
#1	-.00685	.26012	-.00078	.00976	.00022	.00003	.03427	.00031	.00199	.00103	.07334	.00101
#2	-.00818	.26849	.00073	.00663	.00034	.00069	.06114	-.00016	.00713	-.00148	.06227	.00234
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit											.05000	
Low Limit											-.20000	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00669**	**.02834**	**.06064**	**.00245**	**.00026**	**.00542**	**-.00060**	**.00280**	**-.03186**	**.00076**	**-.00112**	**-.00008**
Stddev	.00336	.00482	.01031	.00046	.00005	.00126	.00003	.00009	.01743	.00042	.00001	.00264
%RSD	50.197	16.996	16.996	18.610	19.261	23.355	5.2705	3.1786	54.708	55.842	.90665	3408.2
#1	-.00906	.03174	.06792	.00277	.00022	.00631	-.00062	.00273	-.04418	.00046	-.00113	.00179
#2	-.00431	.02493	.05335	.00213	.00029	.00452	-.00058	.00286	-.01953	.00106	-.00111	-.00194
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2741.5**	**51784.**	**5920.6**
Stddev	.6	183.	27.0
%RSD	.02319	.35268	.45550
#1	2742.0	51913.	5901.5
#2	2741.1	51655.	5939.6

Sample Name: CCVL-4590576 Acquired: 6/13/2017 19:52:25 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01068**	**.10405**	**.01508**	**.10356**	**.01064**	**.00092**	**.10582**	**.20303**	**.00524**	**.01034**	**.00985**	**.01220**
Stddev	.00007	.00275	.00026	.00005	.00003	.00001	.00365	.00077	.00000	.00025	.00041	.00042
%RSD	.62182	2.6420	1.7139	.04899	.24976	.84118	3.4521	.37685	.08557	2.3722	4.1162	3.4649
#1	.01073	.10599	.01490	.10360	.01065	.00091	.10841	.20357	.00524	.01051	.01014	.01250
#2	.01064	.10210	.01526	.10353	.01062	.00092	.10324	.20249	.00523	.01017	.00956	.01190
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09943**	**3.3020**	**.02139**	**.20469**	**.01020**	**.01850**	**1.0338**	**.04054**	**2.8363**	**.00845**	F **.14630**	**.02153**
Stddev	.00100	.0259	.00021	.00155	.00004	.00082	.0020	.00049	.0550	.00041	.00434	.00344
%RSD	1.0068	.78279	.99284	.75910	.42232	4.4154	.19567	1.1994	1.9403	4.7916	2.9653	15.975
#1	.10014	3.3203	.02154	.20579	.01023	.01908	1.0352	.04089	2.8752	.00874	.14324	.02396
#2	.09872	3.2838	.02124	.20360	.01017	.01792	1.0324	.04020	2.7974	.00817	.14937	.01910
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01741**	**.47004**	**1.0059**	**.10155**	**.00967**	F **.01980**	**.00867**	**.01809**	F **-.00240**	**.00967**	**.01754**	**.01590**
Stddev	.00307	.00097	.0021	.00354	.00020	.00084	.00018	.00375	.00280	.00056	.00047	.00156
%RSD	17.620	.20675	.20675	3.4853	2.0836	4.2238	2.1255	20.712	116.24	5.8126	2.6528	9.7992
#1	.01957	.47073	1.0074	.10405	.00981	.01921	.00854	.02074	-.00438	.01006	.01787	.01700
#2	.01524	.46935	1.0044	.09905	.00953	.02039	.00880	.01544	-.00043	.00927	.01722	.01480
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value						.01500			.06000			
Range						30.000%			-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2815.8**	**53239.**	**6137.6**
Stddev	7.2	159.	71.9
%RSD	.25457	.29798	1.1713
#1	2820.9	53351.	6086.8
#2	2810.8	53127.	6188.4

Sample Name: 280-98089-A-2-B Acquired: 6/13/2017 19:55:03 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376897 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00099**	**.03275**	**.00155**	**.27853**	**.01161**	**-.00020**	**.00035**	W **523.43**	**.00110**
Stddev	.00036	.00035	.00180	.00872	.00025	.00001	.00507	2.03	.00023
%RSD	36.353	1.0665	116.05	3.1299	2.1386	4.1497	1442.1	.38815	21.133
#1	.00125	.03299	.00028	.28469	.01179	-.00020	.00394	524.86	.00126
#2	.00074	.03250	.00283	.27237	.01144	-.00019	-.00323	521.99	.00094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00118**	**.00791**	**.00304**	**.01854**	**33.903**	**.03888**	**170.95**	**.98023**	**.01083**
Stddev	.00027	.00039	.00071	.00057	.223	.00010	.17	.00010	.00088
%RSD	23.028	4.8743	23.188	3.0906	.65834	.25787	.10213	.01066	8.1053
#1	.00098	.00818	.00254	.01814	33.746	.03895	170.83	.98016	.01145
#2	.00137	.00764	.00354	.01895	34.061	.03881	171.07	.98031	.01021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**148.08**	**.07356**	**.01049**	**-.00449**	F **743.42**	**-.00559**	**-.00724**	**5.4738**	**11.714**
Stddev	.36	.00290	.00142	.00322	28.06	.00023	.01462	.0095	.020
%RSD	.24211	3.9361	13.551	71.652	3.7742	4.1360	201.89	.17287	.17287
#1	147.83	.07561	.01150	-.00222	763.26	-.00576	-.01757	5.4671	11.700
#2	148.34	.07151	.00949	-.00677	723.58	-.00543	.00310	5.4805	11.728
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00219**	**1.2780**	**.00244**	**-.00020**	**-.00196**	**-.02959**	**-.00112**	**.01246**	**.00149**
Stddev	.00084	.0000	.00230	.00012	.00135	.06245	.00006	.00172	.00016
%RSD	38.428	.00071	94.346	62.194	68.719	211.01	5.0383	13.792	10.525
#1	-.00278	1.2780	.00407	-.00011	-.00101	-.07375	-.00108	.01367	.00161
#2	-.00159	1.2780	.00081	-.00029	-.00292	.01456	-.00116	.01124	.00138
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2536.2**	**47335.**	**5922.2**
Stddev	4.4	224.	3.5
%RSD	.17359	.47376	.05884
#1	2533.0	47494.	5919.7
#2	2539.3	47177.	5924.6

Sample Name: 280-98089-B-3-B Acquired: 6/13/2017 19:57:44 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376897 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00117**	**.05981**	**-.00690**	**.27188**	**.01363**	**.00000**	**.00004**	W **524.12**	**.00184**
Stddev	.00024	.00255	.00137	.00937	.00025	.00001	.00149	3.29	.00014
%RSD	20.689	4.2648	19.822	3.4447	1.8543	778.35	4047.4	.62831	7.7062
#1	.00134	.06161	-.00787	.27851	.01345	.00001	.00109	526.45	.00194
#2	.00100	.05801	-.00593	.26526	.01381	-.00000	-.00102	521.79	.00174
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								500.00	
Low Limit								-.40000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00025**	**.04473**	**.00870**	**.10450**	**34.460**	**.03033**	**176.83**	**.22201**	**.00163**
Stddev	.00008	.00224	.00001	.00122	.046	.00159	.45	.00041	.00028
%RSD	30.700	5.0040	.07965	1.1677	.13466	5.2293	.25714	.18273	17.351
#1	.00020	.04631	.00870	.10537	34.427	.03145	177.15	.22230	.00183
#2	.00030	.04315	.00871	.10364	34.493	.02921	176.51	.22173	.00143
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**139.42**	**.09886**	**.01412**	**-.00417**	F **755.66**	**-.00446**	**-.01043**	**8.0167**	**17.156**
Stddev	.48	.00311	.00598	.00159	29.68	.00431	.00316	.0210	.045
%RSD	.34399	3.1476	42.389	38.011	3.9276	96.638	30.257	.26226	.26226
#1	139.76	.10106	.00989	-.00530	776.65	-.00141	-.01266	8.0316	17.188
#2	139.09	.09666	.01835	-.00305	734.67	-.00750	-.00820	8.0018	17.124
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					200.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00462**	**1.2810**	**.00495**	**-.00063**	**-.00045**	**-.08497**	**-.00159**	**.09234**	**.00010**
Stddev	.00162	.0006	.00044	.00025	.00306	.02941	.00049	.00145	.00168
%RSD	35.012	.05105	8.9490	39.478	680.23	34.607	30.760	1.5668	1607.5
#1	-.00348	1.2814	.00526	-.00045	-.00262	-.06418	-.00124	.09132	.00129
#2	-.00577	1.2805	.00463	-.00081	.00172	-.10577	-.00193	.09336	-.00108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2523.3**	**47144.**	**5859.7**
Stddev	1.2	22.	19.6
%RSD	.04707	.04573	.33507
#1	2522.5	47129.	5845.8
#2	2524.2	47159.	5873.6

Sample Name: 280-98102-A-2-A Acquired: 6/13/2017 20:00:25 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376897 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00081**	**.28960**	**-.00366**	**.02291**	**.10306**	**.00000**	**.00080**	**28.879**	**.00035**
Stddev	.00080	.00935	.00276	.00167	.00047	.00001	.00126	.169	.00004
%RSD	99.018	3.2281	75.385	7.2677	.45243	130.42	158.10	.58553	11.278
#1	.00138	.29621	-.00171	.02409	.10339	.00001	.00169	28.999	.00038
#2	.00024	.28299	-.00561	.02173	.10273	.00000	-.00009	28.760	.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00067**	**.00045**	**.00138**	**.13265**	**5.1635**	**.00821**	**11.356**	**.00657**	**.00021**
Stddev	.00038	.00025	.00030	.00092	.0591	.00054	.040	.00003	.00040
%RSD	56.483	56.443	21.922	.69155	1.1452	6.6132	.35562	.51969	190.70
#1	.00040	.00062	.00159	.13330	5.2054	.00859	11.384	.00659	.00049
#2	.00093	.00027	.00116	.13200	5.1217	.00783	11.327	.00654	-.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**62.284**	**.00135**	**.01351**	**-.00106**	**38.837**	**.00625**	**-.00882**	**2.9904**	**6.3994**
Stddev	.006	.00026	.00058	.00200	1.311	.00093	.00005	.0006	.0013
%RSD	.00976	19.469	4.3011	187.67	3.3744	14.958	.60247	.02022	.02022
#1	62.289	.00153	.01392	-.00247	39.764	.00559	-.00878	2.9908	6.4003
#2	62.280	.00116	.01310	.00035	37.910	.00691	-.00885	2.9900	6.3985
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00165**	**.55207**	**.00610**	**.01006**	**-.00052**	**-.06716**	**.00071**	**.00064**	**.00019**
Stddev	.00219	.00088	.00314	.00025	.00178	.00327	.00003	.00059	.00033
%RSD	133.16	.15952	51.508	2.4432	344.44	4.8634	3.5506	92.522	173.57
#1	.00010	.55270	.00388	.01023	.00074	-.06485	.00069	.00022	-.00004
#2	.00319	.55145	.00832	.00989	-.00177	-.06947	.00073	.00105	.00042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2736.5**	**51502.**	**6097.4**
Stddev	.6	158.	98.7
%RSD	.02056	.30675	1.6182
#1	2736.1	51391.	6027.6
#2	2736.9	51614.	6167.2

Sample Name: 280-98102-A-4-A Acquired: 6/13/2017 20:03:01 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376897 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00100**	**1.7833**	**-.00477**	**.02145**	**.07466**	**.00001**	**.00236**	**11.410**	**.00036**
Stddev	.00060	.0616	.00293	.00090	.00024	.00014	.00195	.104	.00008
%RSD	60.007	3.4567	61.541	4.2113	.32385	1201.7	82.370	.91554	22.532
#1	.00142	1.8269	-.00269	.02209	.07483	-.00009	.00099	11.484	.00031
#2	.00058	1.7397	-.00684	.02081	.07449	.00011	.00374	11.336	.00042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00041**	**.00152**	**.00427**	**.69594**	**5.7033**	**.00726**	**4.1534**	**.00634**	**.00103**
Stddev	.00035	.00005	.00011	.00774	.0167	.00197	.0079	.00006	.00109
%RSD	85.985	3.4211	2.6008	1.1128	.29322	27.085	.19108	.94766	106.13
#1	.00016	.00148	.00419	.70142	5.7151	.00587	4.1590	.00630	.00026
#2	.00066	.00155	.00434	.69047	5.6915	.00865	4.1478	.00638	.00180
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**17.135**	**.00188**	**.01914**	**-.00088**	**4.1809**	**.00167**	**-.00877**	**5.6681**	**12.130**
Stddev	.343	.00022	.00004	.00137	.1167	.00146	.00247	.0483	.103
%RSD	2.0015	11.526	.18886	155.24	2.7910	87.577	28.152	.85279	.85279
#1	17.378	.00203	.01911	-.00186	4.2634	.00064	-.01051	5.7023	12.203
#2	16.893	.00172	.01916	.00009	4.0984	.00270	-.00702	5.6339	12.057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00055**	**.32976**	**.00516**	**.07849**	**-.00161**	**-.04668**	**.00302**	**.00411**	**.00331**
Stddev	.00059	.00310	.00050	.00047	.00461	.04348	.00052	.00057	.00157
%RSD	108.06	.93859	9.7846	.60320	286.30	93.146	17.222	13.763	47.530
#1	-.00013	.33194	.00480	.07883	.00165	-.01593	.00338	.00371	.00220
#2	-.00096	.32757	.00552	.07816	-.00487	-.07742	.00265	.00451	.00442
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2761.4**	**51505.**	**6062.5**
Stddev	3.5	118.	32.4
%RSD	.12815	.23006	.53375
#1	2763.9	51589.	6039.7
#2	2758.9	51421.	6085.4

Sample Name: 280-98102-A-6-A Acquired: 6/13/2017 20:05:37 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376897 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00122**	**1.4835**	**-.00320**	**.02144**	**.07199**	**-.00013**	**.00473**	**11.413**	**.00022**
Stddev	.00070	.0203	.00226	.00042	.00006	.00002	.00110	.003	.00005
%RSD	57.156	1.3655	70.746	1.9635	.08288	16.692	23.200	.02793	23.708
#1	.00171	1.4978	-.00479	.02174	.07204	-.00014	.00551	11.411	.00018
#2	.00073	1.4692	-.00160	.02114	.07195	-.00011	.00396	11.415	.00026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00098**	**.00131**	**.00435**	**.52944**	**5.5584**	**.00801**	**4.1296**	**.00554**	**.00141**
Stddev	.00015	.00041	.00024	.00267	.0198	.00124	.0147	.00007	.00021
%RSD	15.547	30.962	5.4385	.50499	.35527	15.512	.35529	1.2814	14.655
#1	.00087	.00102	.00452	.53133	5.5444	.00889	4.1400	.00549	.00155
#2	.00109	.00160	.00419	.52755	5.5723	.00713	4.1192	.00559	.00126
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**17.254**	**.00144**	**.01634**	**-.00147**	**4.2661**	**.00405**	**-.00647**	**5.0414**	**10.789**
Stddev	.113	.00036	.00258	.00088	.0888	.00224	.00041	.0053	.011
%RSD	.65662	24.951	15.760	59.784	2.0821	55.206	6.3137	.10435	.10435
#1	17.174	.00119	.01816	-.00209	4.3289	.00563	-.00618	5.0451	10.797
#2	17.334	.00169	.01452	-.00085	4.2033	.00247	-.00676	5.0377	10.781
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**.32992**	**.00572**	**.07080**	**.00282**	**-.01880**	**.00201**	**.00380**	**.00004**
Stddev	.00226	.00033	.00046	.00010	.00185	.02936	.00027	.00021	.00020
%RSD	6957.5	.09883	8.0367	.13630	65.866	156.18	13.201	5.5908	442.94
#1	-.00157	.32969	.00604	.07073	.00150	-.03955	.00220	.00395	-.00009
#2	.00163	.33015	.00539	.07087	.00413	.00196	.00182	.00365	.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2746.8**	**51300.**	**5965.8**
Stddev	8.0	251.	4.6
%RSD	.29269	.48852	.07722
#1	2752.5	51123.	5969.1
#2	2741.1	51477.	5962.6

Sample Name: 280-98102-A-8-A Acquired: 6/13/2017 20:08:48 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376897 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00068**	**.00318**	**-.00133**	**.00460**	**.00088**	**-.00005**	**.00076**	**.00246**	**.00033**
Stddev	.00029	.00088	.00351	.00112	.00011	.00006	.00758	.00177	.00009
%RSD	41.796	27.859	264.57	24.332	12.664	116.44	1002.9	71.918	26.093
#1	.00048	.00380	-.00381	.00539	.00080	-.00009	-.00460	.00371	.00027
#2	.00089	.00255	.00116	.00381	.00096	-.00001	.00611	.00121	.00039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00014**	**.00026**	**-.00354**	**.00738**	**.33552**	**.00286**	**.00599**	**.00006**	**.00034**
Stddev	.00023	.00016	.00005	.00141	.04692	.00201	.00273	.00012	.00073
%RSD	166.05	60.892	1.3008	19.077	13.985	70.189	45.607	206.34	216.71
#1	-.00030	.00037	-.00357	.00837	.30234	.00144	.00792	-.00003	-.00018
#2	.00002	.00015	-.00351	.00638	.36870	.00427	.00406	.00014	.00086
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06045**	**-.00051**	**.00470**	**-.00136**	**.05450**	**.00184**	**-.00379**	**.04391**	**.09397**
Stddev	.01124	.00004	.00009	.00071	.00011	.00081	.00069	.03601	.07707
%RSD	18.592	8.6815	1.9834	51.880	.19709	44.200	18.176	82.019	82.019
#1	.05250	-.00054	.00477	-.00187	.05457	.00241	-.00428	.01844	.03947
#2	.06840	-.00048	.00464	-.00086	.05442	.00126	-.00330	.06937	.14846
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00092**	**.00031**	**.00417**	**-.00033**	**.00028**	**-.03763**	**.00025**	**.00059**	**.00011**
Stddev	.00012	.00012	.00166	.00032	.00295	.05622	.00035	.00075	.00088
%RSD	13.166	38.582	39.833	95.497	1052.5	149.39	139.19	126.21	828.58
#1	.00100	.00040	.00535	-.00055	-.00180	-.07738	.00050	.00112	.00073
#2	.00083	.00023	.00300	-.00011	.00236	.00212	.00000	.00006	-.00052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2795.5**	**52622.**	**6078.4**
Stddev	1.3	147.	.9
%RSD	.04534	.27978	.01490
#1	2796.4	52726.	6077.8
#2	2794.6	52518.	6079.1

Sample Name: 280-98102-A-10-A Acquired: 6/13/2017 20:11:27 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376897 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00079**	**.39016**	**.00065**	**.02101**	**.10208**	**-.00007**	**.00093**	**17.827**	**.00041**
Stddev	.00049	.01020	.00040	.00036	.00085	.00001	.00519	.108	.00024
%RSD	62.040	2.6134	61.368	1.6922	.83564	9.3502	558.60	.60674	60.386
#1	.00044	.39737	.00037	.02076	.10147	-.00007	-.00274	17.751	.00023
#2	.00114	.38295	.00094	.02126	.10268	-.00007	.00460	17.904	.00058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00069**	**.00011**	**.00080**	**.22785**	**3.5663**	**.00557**	**4.9486**	**.00403**	**.00143**
Stddev	.00016	.00005	.00039	.00002	.0075	.00264	.0124	.00000	.00005
%RSD	24.047	46.807	48.374	.01092	.20979	47.459	.25159	.02408	3.1692
#1	.00080	.00014	.00108	.22784	3.5610	.00370	4.9398	.00403	.00140
#2	.00057	.00007	.00053	.22787	3.5716	.00743	4.9574	.00403	.00146
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.692**	**.00152**	**.01954**	**-.00338**	**3.3831**	**.00521**	**-.00541**	**2.4535**	**5.2506**
Stddev	.116	.00026	.00370	.00119	.0983	.00312	.00049	.0366	.0784
%RSD	.43492	17.415	18.939	35.323	2.9049	59.896	9.0484	1.4922	1.4922
#1	26.774	.00133	.01693	-.00253	3.4526	.00300	-.00575	2.4794	5.3060
#2	26.610	.00170	.02216	-.00422	3.3136	.00741	-.00506	2.4277	5.1952
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00010**	**.35042**	**.00309**	**.02402**	**.00301**	**-.02449**	**.00080**	**.00284**	**.00109**
Stddev	.00220	.00182	.00254	.00000	.00152	.03096	.00073	.00181	.00155
%RSD	2163.4	.51992	81.960	.00985	50.466	126.45	90.819	63.671	142.77
#1	.00145	.34913	.00489	.02401	.00408	-.04638	.00132	.00156	-.00001
#2	-.00166	.35171	.00130	.02402	.00193	-.00259	.00029	.00411	.00218
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2763.8**	**51480.**	**6034.6**
Stddev	1.1	130.	62.9
%RSD	.03874	.25260	1.0425
#1	2764.6	51572.	6079.0
#2	2763.1	51388.	5990.1

Sample Name: 280-98102-A-12-A Acquired: 6/13/2017 20:14:04 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376897 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00041**	**1.9267**	**.00239**	**.02063**	**.04438**	**.00010**	**.00055**	**5.2730**	**.00014**
Stddev	.00002	.0515	.00314	.00009	.00021	.00006	.00022	.0061	.00003
%RSD	5.9144	2.6749	131.41	.43885	.47574	61.510	40.405	.11538	19.830
#1	.00039	1.9631	.00461	.02057	.04423	.00015	.00039	5.2687	.00016
#2	.00042	1.8903	.00017	.02070	.04453	.00006	.00071	5.2773	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00183**	**.00143**	**.00111**	**.68638**	**5.0808**	**.00245**	**1.3132**	**.10764**	**.00037**
Stddev	.00003	.00018	.00047	.00689	.0515	.00114	.0027	.00013	.00002
%RSD	1.8477	12.342	42.929	1.0040	1.0136	46.348	.20270	.11878	6.2053
#1	.00186	.00130	.00077	.69125	5.1172	.00165	1.3113	.10755	.00039
#2	.00181	.00155	.00144	.68151	5.0443	.00325	1.3151	.10773	.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49079**	**.00096**	**.09208**	**-.00188**	**.58792**	**.00313**	**-.00616**	**5.6800**	**12.155**
Stddev	.00300	.00013	.00246	.00049	.02098	.00046	.00619	.0240	.051
%RSD	.61194	13.395	2.6768	26.028	3.5692	14.699	100.54	.42281	.42281
#1	.49291	.00106	.09382	-.00153	.57308	.00281	-.01054	5.6970	12.192
#2	.48867	.00087	.09034	-.00222	.60276	.00346	-.00178	5.6631	12.119
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00017**	**.04802**	**.00578**	**.06087**	**-.00136**	**-.03887**	**.00347**	**.00489**	**.00207**
Stddev	.00177	.00016	.00120	.00015	.00383	.00600	.00025	.00049	.00041
%RSD	1047.9	.32676	20.789	.25420	282.28	15.444	7.2564	10.069	19.702
#1	.00142	.04813	.00663	.06076	-.00407	-.04312	.00365	.00454	.00236
#2	-.00108	.04791	.00493	.06097	.00135	-.03463	.00329	.00524	.00178
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2787.0**	**52192.**	**6025.9**
Stddev	5.7	124.	39.5
%RSD	.20349	.23741	.65565
#1	2791.1	52280.	6053.9
#2	2783.0	52105.	5998.0

Sample Name: CCVH-4579429 Acquired: 6/13/2017 20:16:40 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00114**	**47.372**	**-.00469**	**.00186**	**.00033**	**.00009**	W **.93836**	**.04619**	**.00053**	**-.00094**	**.00079**	**.01022**
Stddev	.00013	.114	.00073	.00074	.00031	.00005	.02499	.01977	.00005	.00047	.00023	.00073
%RSD	11.452	.24073	15.562	39.682	93.524	51.158	2.6637	42.806	9.9714	49.842	29.311	7.1800
#1	.00105	47.292	-.00520	.00239	.00055	.00006	.95603	.06017	.00049	-.00128	.00063	.01073
#2	.00123	47.453	-.00417	.00134	.00011	.00013	.92068	.03221	.00057	-.00061	.00095	.00970
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							-5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.788**	**.29965**	**.00131**	**.06181**	**-.00147**	**-.00172**	**245.26**	**.00064**	**.00851**	**-.00054**	**5.0136**	**.00637**
Stddev	.209	.02775	.00042	.00895	.00030	.00006	.63	.00001	.00539	.00234	.1638	.00344
%RSD	.42787	9.2600	31.850	14.484	20.216	3.4347	.25708	2.1698	63.331	429.96	3.2662	54.043
#1	48.641	.28003	.00101	.05548	-.00168	-.00168	244.81	.00065	.01231	.00111	5.1294	.00881
#2	48.936	.31927	.00160	.06814	-.00126	-.00176	245.70	.00063	.00470	-.00220	4.8978	.00394
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00852**	**.00296**	**.00633**	**-.00012**	**.00059**	W **4.6494**	**.01866**	**.00335**	W **9.4178**	**.01270**	**.00051**	**.07785**
Stddev	.00166	.00093	.00199	.00250	.00002	.0069	.00010	.00272	.0380	.00004	.00011	.00130
%RSD	19.467	31.430	31.430	2113.9	3.1585	.14871	.55269	81.348	.40360	.31374	21.675	1.6730
#1	-.00969	.00362	.00774	.00165	.00060	4.6543	.01873	.00527	9.4447	.01267	.00043	.07878
#2	-.00735	.00230	.00493	-.00188	.00058	4.6445	.01858	.00142	9.3910	.01272	.00058	.07693
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2665.6**	**48475.**	**5744.0**
Stddev	21.2	77.	1.1
%RSD	.79461	.15947	.01858
#1	2650.6	48530.	5744.8
#2	2680.6	48421.	5743.3

Sample Name: CCV-4580817 Acquired: 6/13/2017 20:19:13 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49040**	**.50767**	**.93805**	**.49373**	**.50511**	**.47424**	**-.00142**	**5.0602**	**.49100**	**.49916**	**.50368**	**.50024**	**2.4017**
Stddev	.00063	.01081	.01692	.00605	.00106	.00061	.00119	.0022	.00845	.00916	.00882	.00042	.0011
%RSD	.12841	2.1302	1.8041	1.2257	.21030	.12814	83.694	.04386	1.7200	1.8342	1.7514	.08473	.04525
#1	.49085	.51531	.95002	.49800	.50436	.47381	-.00226	5.0618	.49697	.50563	.50992	.50054	2.4009
#2	.48996	.50002	.92609	.48945	.50586	.47467	-.00058	5.0587	.48503	.49268	.49745	.49994	2.4025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.207**	**.97103**	**19.754**	**.47750**	**.50104**	**5.0520**	**.49637**	**.98839**	**1.0104**	**.06070**	**.96981**	**.94147**	**4.7850**
Stddev	.150	.00437	.102	.00169	.00756	.0165	.00948	.01739	.0166	.01015	.01694	.02284	.0012
%RSD	.29833	.45045	.51870	.35458	1.5082	.32687	1.9104	1.7591	1.6428	16.730	1.7470	2.4261	.02546
#1	50.101	.96794	19.826	.47870	.50638	5.0403	.50307	1.0007	1.0222	.06788	.98179	.95762	4.7858
#2	50.313	.97413	19.681	.47631	.49569	5.0637	.48966	.97610	.99868	.05352	.95783	.92532	4.7841
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.240**	**1.0139**	**.46971**	**.01077**	**.46309**	**.93256**	**-.02007**	**.48025**	**.47396**	**.49981**
Stddev	.003	.0151	.00105	.00013	.00295	.01446	.00903	.00184	.00307	.00321
%RSD	.02546	1.4871	.22369	1.2185	.63623	1.5507	44.998	.38215	.64840	.64198
#1	10.242	1.0245	.46897	.01086	.46517	.94278	-.02645	.48155	.47613	.49754
#2	10.238	1.0032	.47045	.01068	.46100	.92233	-.01368	.47895	.47179	.50207
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2719.6**	**50158.**	**5912.9**
Stddev	6.0	48.	.2
%RSD	.21883	.09545	.00284
#1	2723.8	50124.	5912.8
#2	2715.4	50192.	5913.0

Sample Name: CCB Acquired: 6/13/2017 20:21:41 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00096**	**.00381**	**.00082**	**.00317**	**.00018**	**.00017**	**-.00166**	**.01061**	**.00026**	**.00029**	**.00011**	**-.00333**
Stddev	.00027	.00020	.00021	.00063	.00015	.00009	.00245	.00444	.00021	.00023	.00018	.00007
%RSD	28.369	5.2128	25.351	19.774	85.217	54.214	147.27	41.855	83.856	77.954	171.40	2.1030
#1	.00077	.00367	.00068	.00361	.00029	.00024	.00007	.00747	.00041	.00013	.00024	-.00338
#2	.00115	.00395	.00097	.00272	.00007	.00011	-.00339	.01375	.00010	.00046	-.00002	-.00328
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00227**	**.20487**	**.00207**	**.01602**	**.00018**	**.00040**	**.04434**	**-.00057**	**.00213**	**-.00085**	W **.09140**	**-.00198**
Stddev	.00031	.01110	.00122	.00712	.00004	.00013	.01782	.00001	.00012	.00020	.02100	.00414
%RSD	13.749	5.4161	58.959	44.463	23.561	32.949	40.178	2.1761	5.4671	23.490	22.979	209.75
#1	-.00249	.19703	.00293	.02105	.00021	.00049	.03174	-.00056	.00221	-.00099	.07655	-.00491
#2	-.00205	.21272	.00120	.01098	.00015	.00031	.05694	-.00058	.00205	-.00071	.10626	.00095
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit											.05000	
Low Limit											-.20000	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00382**	**.00866**	**.01854**	**.00097**	**.00031**	**.00462**	**-.00022**	**.00252**	**-.00836**	**.00026**	**-.00071**	**-.00021**
Stddev	.00748	.00262	.00560	.00259	.00016	.00115	.00010	.00272	.01476	.00031	.00046	.00195
%RSD	195.99	30.190	30.190	265.87	50.843	24.969	47.312	108.22	176.55	115.93	64.416	932.81
#1	-.00911	.00681	.01458	.00281	.00020	.00544	-.00015	.00059	-.01880	.00048	-.00103	-.00159
#2	.00147	.01051	.02250	-.00086	.00043	.00381	-.00030	.00444	.00208	.00005	-.00039	.00117
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2690.4**	**50511.**	**5796.5**
Stddev	.6	169.	22.3
%RSD	.02225	.33455	.38422
#1	2690.9	50391.	5780.8
#2	2690.0	50630.	5812.3

Sample Name: CCVL-4590576 Acquired: 6/13/2017 20:24:20 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01093**	**.10645**	F **.01988**	**.09768**	**.01048**	**.00101**	**.10752**	F **.26666**	**.00494**	**.01029**	**.01006**	**.01246**
Stddev	.00011	.00381	.00060	.00243	.00030	.00000	.00838	.00280	.00005	.00071	.00042	.00016
%RSD	.96901	3.5824	3.0219	2.4887	2.8426	.44445	7.7906	1.0512	1.1120	6.9226	4.1446	1.2630
#1	.01100	.10915	.01945	.09940	.01069	.00101	.11344	.26864	.00498	.01080	.01036	.01235
#2	.01085	.10376	.02030	.09596	.01027	.00101	.10160	.26467	.00490	.00979	.00977	.01257
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500					.20000				
Range			30.000%					30.000%				

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09867**	**3.3166**	**.02096**	**.23840**	**.01084**	**.01833**	**1.1549**	**.04005**	**2.7609**	**.00636**	F **.23508**	**.01736**
Stddev	.00261	.0196	.00140	.00340	.00017	.00000	.0230	.00110	.0795	.00195	.00313	.00297
%RSD	2.6461	.58931	6.7031	1.4275	1.6073	.00552	1.9900	2.7500	2.8806	30.649	1.3302	17.118
#1	.10051	3.3028	.01996	.24081	.01096	.01833	1.1712	.04083	2.8171	.00774	.23729	.01526
#2	.09682	3.3304	.02195	.23600	.01071	.01833	1.1387	.03927	2.7046	.00498	.23287	.01946
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01250**	**.49013**	**1.0489**	**.10042**	**.01018**	**.01884**	**.00865**	**.01603**	F **.01969**	**.00959**	**.01905**	**.01648**
Stddev	.00066	.00810	.0173	.00356	.00002	.00044	.00037	.00208	.01520	.00007	.00053	.00058
%RSD	5.2797	1.6536	1.6536	3.5456	.14735	2.3496	4.2756	12.976	77.215	.76947	2.7767	3.5425
#1	.01203	.48439	1.0366	.10293	.01019	.01853	.00839	.01456	.03044	.00964	.01867	.01689
#2	.01296	.49586	1.0611	.09790	.01017	.01915	.00892	.01751	.00894	.00954	.01942	.01607
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.02000								.06000			
Range	-30.000%								-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2764.0**	**51387.**	**5886.4**
Stddev	6.4	119.	33.4
%RSD	.23176	.23106	.56782
#1	2768.5	51471.	5910.1
#2	2759.4	51303.	5862.8

Sample Name: MB 280-376758/1-A Acquired: 6/13/2017 20:26:57 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: 6/13 Custom ID2: Custom ID3:
Comment: 376758 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00067**	**.00425**	**-.00219**	**.00182**	**.00022**	**-.00004**	**.00519**	**.07308**	**.00024**
Stddev	.00022	.00128	.00166	.00015	.00044	.00013	.00142	.00119	.00030
%RSD	33.141	30.134	75.783	8.0056	198.10	299.16	27.252	1.6300	124.64
#1	.00051	.00516	-.00102	.00172	-.00009	.00005	.00620	.07223	.00046
#2	.00082	.00335	-.00336	.00192	.00054	-.00014	.00419	.07392	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**.00017**	**-.00289**	**.00517**	**.28349**	**.00066**	**.03208**	**.00066**	**.00061**
Stddev	.00014	.00029	.00072	.00046	.08586	.00044	.00218	.00012	.00051
%RSD	339.85	170.28	25.073	8.8714	30.287	66.561	6.7886	17.940	84.491
#1	.00014	.00037	-.00340	.00550	.22278	.00035	.03362	.00074	.00097
#2	-.00006	-.00003	-.00238	.00485	.34420	.00097	.03054	.00057	.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.13014**	**-.00022**	**.00815**	**-.00057**	F **.11987**	**.00186**	**-.00692**	**.01753**	**.03751**
Stddev	.01109	.00029	.00518	.00149	.01823	.00173	.00612	.00793	.01697
%RSD	8.5225	132.60	63.514	262.43	15.212	93.186	88.442	45.249	45.249
#1	.13798	-.00042	.01181	-.00162	.13276	.00308	-.00259	.01192	.02551
#2	.12230	-.00001	.00449	.00048	.10697	.00063	-.01125	.02314	.04951
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	None
High Limit					.10000				
Low Limit					-.10000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00159**	**.00049**	**.00488**	**-.00015**	**.00532**	**-.03186**	**.00035**	**-.00048**	**.00205**
Stddev	.00082	.00004	.00006	.00028	.00422	.01413	.00032	.00016	.00004
%RSD	51.354	8.1517	1.2286	184.98	79.291	44.348	89.735	34.138	1.8145
#1	.00101	.00046	.00484	.00005	.00234	-.02187	.00058	-.00060	.00208
#2	.00217	.00051	.00492	-.00035	.00831	-.04185	.00013	-.00036	.00202
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2760.0**	**51931.**	**5875.2**
Stddev	4.8	112.	9.4
%RSD	.17364	.21481	.15959
#1	2763.4	51852.	5881.9
#2	2756.6	52010.	5868.6

Sample Name: LCS 280-376758/2-A Acquired: 6/13/2017 20:29:36 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376758 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05277**	**1.9575**	**1.0012**	**1.0282**	**2.0674**	**.04856**	**2.0080**	**50.269**	**.10212**
Stddev	.00012	.0273	.0106	.0145	.0059	.00032	.0223	.156	.00161
%RSD	.22317	1.3948	1.0593	1.4093	.28318	.64980	1.1084	.31036	1.5730
#1	.05269	1.9768	1.0087	1.0385	2.0632	.04834	2.0237	50.158	.10326
#2	.05285	1.9382	.99368	1.0180	2.0715	.04879	1.9922	50.379	.10099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49173**	**.20265**	**.25695**	**.99352**	**51.579**	**.98634**	**49.718**	**.47835**	**.99093**
Stddev	.00914	.00385	.00003	.00441	.250	.00541	.078	.00018	.01694
%RSD	1.8586	1.9000	.01321	.44420	.48495	.54828	.15628	.03808	1.7100
#1	.49819	.20537	.25692	.99040	51.402	.98251	49.773	.47822	1.0029
#2	.48527	.19993	.25697	.99664	51.755	.99016	49.663	.47848	.97895
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.363**	**.49100**	**10.343**	**.50075**	**2.1920**	**.50712**	**1.9656**	**9.7151**	**20.790**
Stddev	.246	.00773	.157	.00917	.0263	.00900	.0183	.0219	.047
%RSD	.47919	1.5735	1.5138	1.8314	1.2023	1.7743	.93048	.22577	.22577
#1	51.537	.49646	10.454	.50723	2.2107	.51348	1.9786	9.6995	20.757
#2	51.189	.48553	10.233	.49426	2.1734	.50076	1.9527	9.7306	20.823
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0473**	**.95856**	**.95853**	**.94833**	**1.8691**	**1.9092**	**.48744**	**.47920**	**.52322**
Stddev	.0314	.00277	.00116	.00066	.0233	.0081	.00002	.00166	.00105
%RSD	1.5316	.28857	.12087	.06931	1.2456	.42375	.00432	.34593	.20158
#1	2.0695	.95660	.95935	.94786	1.8855	1.9149	.48745	.48037	.52396
#2	2.0251	.96051	.95771	.94879	1.8526	1.9035	.48742	.47803	.52247
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2649.1**	**49425.**	**5813.4**
Stddev	1.4	184.	17.4
%RSD	.05152	.37316	.29846
#1	2648.1	49556.	5825.7
#2	2650.0	49295.	5801.1

Sample Name: 280-98046-C-1-A Acquired: 6/13/2017 20:32:01 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376758 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00130**	**.00249**	**-.00128**	**.07451**	**.02831**	**-.00008**	**.00344**	**146.12**	**.00063**
Stddev	.00021	.00144	.00693	.00133	.00075	.00010	.00229	.02	.00005
%RSD	16.474	57.827	542.90	1.7782	2.6575	126.16	66.535	.01117	7.3911
#1	.00145	.00147	-.00617	.07545	.02885	-.00015	.00182	146.13	.00060
#2	.00114	.00350	.00362	.07358	.02778	-.00001	.00505	146.11	.00067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00023**	**.00027**	**-.00057**	**.01216**	**3.6047**	**.06138**	**31.199**	**.00057**	**.01483**
Stddev	.00070	.00012	.00091	.00152	.0142	.00073	.094	.00004	.00043
%RSD	302.17	42.348	158.64	12.462	.39287	1.1847	.30286	6.9022	2.8777
#1	.00026	.00019	.00007	.01109	3.5947	.06189	31.132	.00054	.01513
#2	-.00072	.00035	-.00122	.01323	3.6147	.06086	31.265	.00059	.01453
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**115.19**	**.00056**	**.01070**	**-.00196**	**172.14**	**-.00267**	**.00158**	**5.4711**	**11.708**
Stddev	.11	.00004	.00263	.00302	2.59	.00404	.00295	.0044	.009
%RSD	.09749	6.6812	24.601	154.35	1.5070	151.45	187.12	.08091	.08091
#1	115.27	.00054	.00884	.00018	173.98	-.00552	.00366	5.4742	11.715
#2	115.11	.00059	.01256	-.00410	170.31	.00019	-.00051	5.4679	11.701
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00280**	**1.3999**	**.00545**	**-.00013**	**.00463**	**-.04816**	**-.00041**	**.00243**	**.00081**
Stddev	.00312	.0029	.00061	.00021	.00016	.00828	.00003	.00049	.00039
%RSD	111.14	.21056	11.167	163.44	3.5507	17.189	6.6658	20.022	47.558
#1	-.00060	1.3978	.00502	.00002	.00475	-.04231	-.00039	.00277	.00054
#2	-.00501	1.4019	.00588	-.00028	.00451	-.05401	-.00043	.00208	.00108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2598.5**	**48406.**	**5802.8**
Stddev	7.3	25.	10.7
%RSD	.28265	.05141	.18383
#1	2603.6	48389.	5795.3
#2	2593.3	48424.	5810.4

Sample Name: 280-98046-C-1-Asd@5 Acquired: 6/13/2017 20:34:37 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376758 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00046**	**.00022**	**.00234**	**.01630**	**.00616**	**-.00006**	**.00460**	**29.976**	**.00020**
Stddev	.00006	.00097	.00052	.00077	.00027	.00005	.00244	.156	.00006
%RSD	13.246	447.11	22.150	4.7296	4.3977	92.658	52.989	.52140	31.746
#1	.00042	.00090	.00271	.01685	.00597	-.00002	.00632	29.865	.00025
#2	.00050	-.00047	.00197	.01576	.00635	-.00010	.00288	30.086	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00031**	**-.00004**	**-.00235**	**-.00162**	**.92569**	**.01118**	**6.4999**	**.00024**	**.00207**
Stddev	.00014	.00026	.00072	.00277	.02594	.00095	.0263	.00006	.00047
%RSD	44.686	642.92	30.695	171.59	2.8026	8.4672	.40538	25.933	22.707
#1	.00041	-.00023	-.00286	-.00358	.94404	.01051	6.5186	.00019	.00241
#2	.00021	.00014	-.00184	.00034	.90735	.01185	6.4813	.00028	.00174
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.223**	**-.00024**	**.00789**	**-.00289**	**33.317**	**-.00171**	**-.01213**	**1.1314**	**2.4212**
Stddev	.686	.00040	.00627	.00002	1.201	.00180	.00505	.0051	.0110
%RSD	2.8304	165.50	79.514	.55334	3.6032	104.90	41.614	.45248	.45248
#1	23.738	.00004	.01232	-.00288	34.166	-.00298	-.01570	1.1350	2.4289
#2	24.708	-.00052	.00345	-.00291	32.468	-.00044	-.00856	1.1278	2.4134
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00119**	**.28558**	**.00581**	**-.00032**	**.00371**	**-.03695**	**.00065**	**.00125**	**.00127**
Stddev	.00133	.00015	.00115	.00015	.00074	.01071	.00008	.00045	.00281
%RSD	111.80	.05286	19.819	45.521	19.871	28.979	12.219	35.599	220.98
#1	.00212	.28548	.00663	-.00043	.00319	-.04453	.00059	.00157	-.00072
#2	.00025	.28569	.00500	-.00022	.00424	-.02938	.00071	.00094	.00326
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2706.6**	**50028.**	**5761.5**
Stddev	27.5	6.	29.8
%RSD	1.0149	.01243	.51788
#1	2687.1	50023.	5782.6
#2	2726.0	50032.	5740.4

Sample Name: 280-98046-C-1-B MS Acquired: 6/13/2017 20:37:13 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376758 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05379**	**1.8967**	**1.0281**	**1.1010**	**2.1116**	**.04870**	**1.9921**	**196.06**	**.10307**
Stddev	.00149	.0485	.0184	.0244	.0110	.00030	.0355	1.11	.00251
%RSD	2.7729	2.5571	1.7920	2.2180	.51843	.61760	1.7795	.56582	2.4398
#1	.05484	1.9310	1.0411	1.1182	2.1038	.04849	2.0171	195.28	.10484
#2	.05274	1.8624	1.0151	1.0837	2.1193	.04891	1.9670	196.85	.10129
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48068**	**.19983**	**.25793**	**.98566**	**55.654**	**1.0575**	**80.331**	**.47799**	**1.0132**
Stddev	.01070	.00482	.00030	.00959	.408	.0053	.140	.00060	.0246
%RSD	2.2267	2.4124	.11726	.97247	.73234	.49604	.17442	.12628	2.4266
#1	.48825	.20324	.25814	.97888	55.366	1.0538	80.430	.47842	1.0306
#2	.47311	.19642	.25771	.99244	55.942	1.0612	80.232	.47756	.99579
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**164.85**	**.48033**	**10.672**	**.48688**	**173.92**	**.51196**	**1.9931**	**15.478**	**33.124**
Stddev	.48	.01057	.236	.00789	3.68	.01070	.0513	.108	.232
%RSD	.29162	2.2000	2.2156	1.6204	2.1169	2.0905	2.5755	.69997	.69997
#1	164.51	.48780	10.839	.49246	176.52	.51953	2.0294	15.402	32.960
#2	165.19	.47286	10.505	.48130	171.31	.50439	1.9568	15.555	33.287
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2.0298**	**2.3806**	**.96712**	**.96960**	**1.7683**	**1.9171**	**.49518**	**.47472**	**.53057**
Stddev	.0515	.0175	.00193	.00076	.0309	.0245	.00240	.00394	.00068
%RSD	2.5380	.73537	.19990	.07866	1.7475	1.2768	.48469	.82905	.12757
#1	2.0662	2.3683	.96849	.97014	1.7902	1.9344	.49688	.47750	.53009
#2	1.9933	2.3930	.96576	.96906	1.7465	1.8998	.49348	.47193	.53105
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.20000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2560.5**	**47661.**	**5798.8**
Stddev	3.4	17.	83.4
%RSD	.13235	.03588	1.4377
#1	2562.9	47673.	5857.8
#2	2558.1	47649.	5739.9

Sample Name: 280-98046-C-1-C MSD Acquired: 6/13/2017 20:39:36 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376758 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05377**	**1.9069**	**1.0366**	**1.0990**	**2.1046**	**.04843**	**1.9961**	**194.43**	**.10328**
Stddev	.00013	.0287	.0246	.0193	.0014	.00005	.0454	.19	.00151
%RSD	.24797	1.5062	2.3693	1.7569	.06908	.10013	2.2719	.09736	1.4581
#1	.05386	1.9272	1.0540	1.1126	2.1036	.04839	2.0282	194.56	.10434
#2	.05368	1.8866	1.0193	1.0853	2.1056	.04846	1.9641	194.29	.10221
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48340**	**.20136**	**.25808**	**.97769**	**55.621**	**1.0585**	**80.588**	**.47887**	**1.0043**
Stddev	.00903	.00463	.00076	.00527	.039	.0008	.185	.00201	.0225
%RSD	1.8688	2.2984	.29496	.53927	.06937	.08035	.22972	.41881	2.2401
#1	.48979	.20463	.25862	.97396	55.594	1.0579	80.719	.48029	1.0202
#2	.47701	.19809	.25754	.98141	55.648	1.0591	80.457	.47745	.98841
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**162.99**	**.48365**	**10.724**	**.49081**	**174.17**	**.51243**	**2.0019**	**15.307**	**32.756**
Stddev	.21	.00981	.191	.01135	3.22	.00685	.0243	.028	.060
%RSD	.12970	2.0277	1.7813	2.3125	1.8462	1.3377	1.2117	.18235	.18235
#1	162.84	.49058	10.859	.49884	176.44	.51728	2.0190	15.287	32.714
#2	163.14	.47671	10.589	.48279	171.89	.50758	1.9847	15.326	32.798
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2.0175**	**2.3654**	**.96884**	**.95708**	**1.7819**	**1.9094**	**.49497**	**.48082**	**.52364**
Stddev	.0450	.0038	.00199	.00302	.0258	.0025	.00192	.00190	.00027
%RSD	2.2299	.16132	.20503	.31595	1.4481	.12960	.38805	.39525	.05076
#1	2.0493	2.3627	.97024	.95922	1.8001	1.9112	.49633	.48217	.52383
#2	1.9857	2.3681	.96743	.95494	1.7636	1.9077	.49361	.47948	.52345
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.20000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2561.9**	**47473.**	**5799.0**
Stddev	.7	223.	4.6
%RSD	.02540	.46916	.07873
#1	2562.4	47316.	5802.2
#2	2561.4	47631.	5795.7

Sample Name: 280-98046-C-2-A Acquired: 6/13/2017 20:41:59 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376758 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00045**	**-.00008**	**.00093**	**.07477**	**.02846**	**.00003**	**.00321**	**146.57**	**.00059**
Stddev	.00055	.00034	.01346	.00296	.00021	.00023	.00110	.88	.00022
%RSD	122.51	415.57	1440.1	3.9529	.74840	806.34	34.221	.60038	37.303
#1	.00083	-.00033	.01045	.07686	.02861	-.00013	.00399	145.95	.00075
#2	.00006	.00016	-.00858	.07268	.02831	.00019	.00243	147.20	.00044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**-.00011**	**-.00115**	**.02702**	**3.7614**	**.06334**	**31.135**	**.00046**	**.01517**
Stddev	.00008	.00034	.00017	.00232	.0005	.00045	.005	.00002	.00009
%RSD	522.44	319.35	14.607	8.5859	.01276	.70311	.01694	5.0579	.59788
#1	.00008	.00013	-.00127	.02866	3.7617	.06302	31.139	.00044	.01524
#2	-.00004	-.00035	-.00103	.02538	3.7611	.06365	31.131	.00048	.01511
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**115.27**	**.00071**	**.01576**	**-.00403**	**169.56**	**.00119**	**.00636**	**5.4951**	**11.760**
Stddev	.37	.00028	.00019	.00024	4.96	.00340	.00589	.0109	.023
%RSD	.32002	38.946	1.2117	5.9500	2.9261	286.43	92.625	.19906	.19906
#1	115.54	.00051	.01562	-.00386	173.07	-.00122	.01053	5.4874	11.743
#2	115.01	.00090	.01589	-.00420	166.05	.00359	.00220	5.5029	11.776
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00025**	**1.4031**	**.00455**	**-.00021**	**.00455**	**-.04733**	**-.00052**	**.00032**	**.00210**
Stddev	.00303	.0075	.00176	.00010	.00359	.00926	.00055	.00080	.00014
%RSD	1232.3	.53646	38.793	46.985	78.769	19.560	105.56	250.73	6.6310
#1	-.00239	1.3977	.00579	-.00027	.00709	-.05387	-.00091	-.00025	.00200
#2	.00190	1.4084	.00330	-.00014	.00202	-.04078	-.00013	.00088	.00220
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2613.3**	**48471.**	**5815.4**
Stddev	8.8	13.	27.0
%RSD	.33810	.02713	.46364
#1	2607.0	48481.	5834.4
#2	2619.5	48462.	5796.3

Sample Name: CCVH-4579429 Acquired: 6/13/2017 20:44:36 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00068**	**47.036**	**-.00309**	**.00325**	**.00039**	**.00014**	W **.94092**	**.06013**	**.00065**	**-.00099**	**.00007**	**.01098**
Stddev	.00010	.098	.01075	.00004	.00061	.00004	.01811	.00045	.00010	.00017	.00017	.00010
%RSD	15.113	.20763	348.39	1.1005	157.97	29.921	1.9252	.75171	15.074	17.057	260.09	.90836
#1	.00076	46.967	.00452	.00328	-.00005	.00011	.95373	.05981	.00072	-.00111	.00019	.01091
#2	.00061	47.105	-.01069	.00322	.00082	.00017	.92812	.06045	.00058	-.00087	-.00005	.01106
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							-5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.843**	**.25024**	**.00064**	**.05310**	**-.00195**	**-.00164**	**243.41**	**.00071**	**.00898**	**-.00014**	**5.0205**	**.00431**
Stddev	.046	.04304	.00131	.00223	.00009	.00021	.78	.00003	.00334	.00217	.1231	.00551
%RSD	.09384	17.198	204.98	4.1984	4.5969	12.890	.31865	4.5449	37.150	1501.9	2.4512	127.87
#1	48.876	.21981	.00157	.05468	-.00188	-.00149	242.86	.00069	.00662	.00139	5.1075	.00041
#2	48.811	.28067	-.00029	.05153	-.00201	-.00179	243.95	.00074	.01134	-.00168	4.9335	.00820
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00536**	**.00865**	**.01851**	**.00057**	**.00125**	W **4.6464**	**.01862**	**.00367**	W **9.4398**	**.01258**	**-.00004**	**.08156**
Stddev	.00317	.00340	.00727	.00066	.00017	.0057	.00058	.00074	.0118	.00061	.00066	.00100
%RSD	59.185	39.256	39.256	115.80	13.579	.12251	3.1174	20.166	.12509	4.8237	1712.6	1.2243
#1	-.00312	.00625	.01337	.00103	.00137	4.6505	.01903	.00315	9.4481	.01215	-.00050	.08227
#2	-.00760	.01105	.02365	.00010	.00113	4.6424	.01821	.00419	9.4314	.01301	.00043	.08086
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2657.0**	**48775.**	**5805.3**
Stddev	.1	175.	26.3
%RSD	.00373	.35948	.45380
#1	2656.9	48899.	5823.9
#2	2657.0	48651.	5786.7

Sample Name: CCV-4580817 Acquired: 6/13/2017 20:47:10 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49260**	**.51040**	**.94624**	**.49114**	**.50399**	**.47497**	**.00049**	**5.0763**	**.48836**	**.49545**	**.49807**	**.50039**	**2.4243**
Stddev	.00147	.01088	.01058	.00873	.00136	.00018	.00105	.0125	.01073	.01067	.01103	.00175	.0020
%RSD	.29933	2.1320	1.1176	1.7776	.26920	.03772	214.87	.24698	2.1968	2.1537	2.2155	.35014	.08170
#1	.49364	.51809	.95372	.49731	.50303	.47484	.00123	5.0852	.49595	.50299	.50587	.50163	2.4257
#2	.49155	.50270	.93876	.48497	.50495	.47510	-.00025	5.0675	.48077	.48790	.49026	.49916	2.4229
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.411**	**.97453**	**19.800**	**.47982**	**.49781**	**5.1009**	**.49528**	**.98480**	**1.0061**	**.06049**	**.96958**	**.94111**	**4.7993**
Stddev	.219	.00213	.053	.00055	.01030	.0083	.00987	.01819	.0203	.00134	.02125	.02033	.0034
%RSD	.43497	.21845	.26934	.11436	2.0693	.16218	1.9933	1.8468	2.0178	2.2181	2.1922	2.1598	.07141
#1	50.256	.97302	19.837	.48021	.50509	5.0951	.50226	.99766	1.0205	.06144	.98461	.95549	4.8018
#2	50.566	.97603	19.762	.47943	.49052	5.1068	.48830	.97194	.99176	.05954	.95455	.92674	4.7969
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.271**	**1.0081**	**.47088**	**.01488**	**.46611**	**.94032**	**-.07792**	**.48388**	**.47641**	**.49872**
Stddev	.007	.0269	.00095	.00120	.00076	.01207	.00531	.00203	.00157	.00060
%RSD	.07141	2.6708	.20187	8.0905	.16279	1.2839	6.8111	.41976	.33007	.11990
#1	10.276	1.0271	.47021	.01573	.46665	.94885	-.07417	.48532	.47753	.49915
#2	10.265	.98906	.47156	.01403	.46558	.93178	-.08167	.48244	.47530	.49830
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2690.6**	**49697.**	**5826.9**
Stddev	4.0	16.	36.4
%RSD	.14811	.03130	.62448
#1	2693.4	49708.	5852.6
#2	2687.8	49686.	5801.2

Sample Name: CCB Acquired: 6/13/2017 20:49:39 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00170**	**.00104**	**-.00527**	**.00325**	**.00040**	**.00010**	**.00142**	**.01539**	**.00042**	**.00010**	**.00053**	**-.00322**	**-.00366**
Stddev	.00003	.00047	.00597	.00004	.00025	.00006	.00033	.00237	.00003	.00035	.00015	.00012	.00007
%RSD	1.5648	44.899	113.28	1.1199	61.662	65.934	23.046	15.386	7.7536	335.08	27.950	3.7469	1.9931
#1	.00169	.00071	-.00950	.00322	.00023	.00005	.00165	.01707	.00040	.00035	.00064	-.00314	-.00361
#2	.00172	.00137	-.00105	.00327	.00058	.00014	.00119	.01372	.00045	-.00014	.00043	-.00331	-.00372
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.21641**	**.00052**	**.01094**	**.00009**	**.00001**	**.02354**	**.00016**	**.00593**	**-.00244**	**.03456**	**.00310**	**-.00001**	**.01577**
Stddev	.03223	.00076	.00121	.00002	.00018	.00116	.00060	.00058	.00210	.00383	.00101	.00309	.01252
%RSD	14.891	146.22	11.042	26.084	2939.0	4.9124	379.87	9.7160	85.980	11.081	32.438	30499.	79.402
#1	.23920	.00106	.01009	.00011	.00013	.02272	-.00027	.00553	-.00096	.03727	.00381	-.00219	.02463
#2	.19362	-.00002	.01180	.00007	-.00012	.02435	.00058	.00634	-.00392	.03185	.00239	.00217	.00692
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03375**	**-.00070**	**.00042**	**.00527**	**-.00038**	**.00103**	**-.04393**	**-.00026**	**-.00061**	**.00157**
Stddev	.02680	.00075	.00003	.00077	.00032	.00400	.01069	.00029	.00012	.00054
%RSD	79.402	107.45	6.1397	14.525	84.571	386.42	24.323	114.33	20.059	34.567
#1	.05270	-.00017	.00044	.00473	-.00060	-.00179	-.03638	-.00005	-.00069	.00119
#2	.01480	-.00123	.00040	.00581	-.00015	.00386	-.05149	-.00046	-.00052	.00195
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2693.8**	**50498.**	**5746.2**
Stddev	4.6	221.	39.1
%RSD	.17175	.43798	.68088
#1	2697.0	50654.	5718.5
#2	2690.5	50342.	5773.8

Sample Name: CCVL-4590576 Acquired: 6/13/2017 20:52:18 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01059**	**.10605**	**.01554**	**.09790**	**.01087**	**.00097**	**.10831**	**.21741**	**.00509**	**.01045**	**.01018**	**.01267**
Stddev	.00084	.00359	.00399	.00179	.00017	.00009	.00142	.00520	.00035	.00044	.00051	.00026
%RSD	7.9301	3.3866	25.696	1.8333	1.5763	9.3321	1.3104	2.3895	6.8660	4.2142	4.9959	2.0813
#1	.01118	.10859	.01837	.09917	.01075	.00091	.10932	.22109	.00533	.01076	.01054	.01248
#2	.00999	.10351	.01272	.09663	.01099	.00103	.10731	.21374	.00484	.01013	.00982	.01285
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09641**	**3.2974**	**.02101**	**.21580**	**.01008**	**.01841**	**1.0598**	**.04070**	**2.8067**	**.00847**	F **.14166**	**.02083**
Stddev	.00412	.0013	.00003	.00489	.00001	.00056	.0010	.00184	.0743	.00067	.01286	.00091
%RSD	4.2698	.03804	.15745	2.2661	.09251	3.0553	.08981	4.5113	2.6476	7.9444	9.0764	4.3706
#1	.09350	3.2965	.02099	.21926	.01009	.01881	1.0605	.04200	2.8592	.00895	.15075	.02147
#2	.09932	3.2983	.02103	.21234	.01008	.01802	1.0591	.03940	2.7542	.00800	.13257	.02018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02037**	**.48005**	**1.0273**	**.10206**	**.00997**	**.01808**	**.00870**	**.01600**	F **.00530**	**.00961**	**.01841**	**.01636**
Stddev	.00422	.00419	.0090	.00272	.00015	.00005	.00027	.00107	.02314	.00038	.00012	.00031
%RSD	20.707	.87358	.87358	2.6679	1.4989	.28322	3.0536	6.6938	436.29	4.0009	.66060	1.8711
#1	.02335	.48302	1.0337	.10398	.01008	.01812	.00851	.01524	.02167	.00988	.01833	.01657
#2	.01739	.47709	1.0210	.10013	.00987	.01804	.00889	.01675	-.01106	.00934	.01850	.01614
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2753.8**	**51431.**	**5871.0**
Stddev	7.7	79.	21.9
%RSD	.27949	.15392	.37240
#1	2748.4	51375.	5886.4
#2	2759.3	51487.	5855.5

Sample Name: MB 280-376906/1-A Acquired: 6/13/2017 20:54:55 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: 6/13 Custom ID2: Custom ID3:
Comment: 376906 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00053**	**.00665**	**-.00366**	**.00199**	**.00051**	**.00001**	**.00007**	W **.04104**	**.00044**
Stddev	.00052	.00104	.00521	.00011	.00039	.00001	.00142	.00506	.00001
%RSD	97.974	15.586	142.28	5.4886	76.256	87.647	1911.7	12.321	2.8783
#1	.00016	.00739	.00002	.00206	.00078	.00002	.00108	.03747	.00045
#2	.00091	.00592	-.00735	.00191	.00023	.00001	-.00093	.04462	.00043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								.02706	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00037**	**.00011**	**-.00300**	W **.05105**	**.16593**	**-.00046**	W **.01931**	W **.00032**	**.00039**
Stddev	.00007	.00012	.00023	.00243	.01326	.00140	.00365	.00002	.00015
%RSD	18.433	111.58	7.6002	4.7576	7.9894	305.03	18.890	6.4617	39.238
#1	.00042	.00020	-.00284	.04933	.17531	-.00145	.02189	.00034	.00028
#2	.00033	.00002	-.00317	.05276	.15656	.00053	.01673	.00031	.00050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Warn	Chk Warn	Chk Pass
High Limit				.01710			.01504	.00023	
Low Limit				-.05000			-.05000	-.00500	

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04420**	**-.00054**	**.00743**	**-.00084**	F **.05097**	**.00177**	**-.00238**	F **.02949**	**.06311**
Stddev	.02391	.00034	.00277	.00312	.01314	.00032	.00114	.00594	.01272
%RSD	54.100	63.411	37.308	370.87	25.772	18.359	47.869	20.154	20.154
#1	.02729	-.00079	.00939	-.00304	.06026	.00154	-.00158	.03370	.07211
#2	.06110	-.00030	.00547	.00136	.04168	.00199	-.00319	.02529	.05412
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	None
High Limit					.01000			.01000	
Low Limit					-.01000			-.01000	

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.00310**	**.00051**	W **.00686**	**-.00074**	**-.00068**	**-.03505**	**.00077**	**.00140**	**.00142**
Stddev	.00002	.00001	.00168	.00018	.00340	.01694	.00055	.00051	.00062
%RSD	.74228	1.1650	24.411	23.876	502.62	48.327	70.863	36.344	43.456
#1	.00308	.00052	.00568	-.00062	-.00308	-.02307	.00039	.00175	.00186
#2	.00311	.00051	.00805	-.00087	.00173	-.04702	.00116	.00104	.00098
Check ?	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.00305		.00000						
Low Limit	-.05000		-.00500						

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2745.4**	**51158.**	**5850.2**
Stddev	3.0	20.	23.7
%RSD	.11107	.04002	.40501
#1	2743.2	51144.	5867.0
#2	2747.5	51173.	5833.5

Sample Name: LCS 280-376906/2-A Acquired: 6/13/2017 20:57:33 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376906 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05230**	**1.9355**	**.98670**	**1.0146**	**2.0669**	**.04864**	**1.9624**	**50.263**	**.09962**
Stddev	.00013	.0399	.01009	.0228	.0016	.00017	.0472	.034	.00197
%RSD	.24545	2.0609	1.0221	2.2443	.07613	.35585	2.4047	.06834	1.9774
#1	.05239	1.9637	.99383	1.0307	2.0658	.04852	1.9958	50.287	.10101
#2	.05221	1.9073	.97957	.99845	2.0680	.04876	1.9290	50.238	.09823
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48289**	**.19916**	**.25444**	**.98756**	**51.712**	**.99120**	**49.542**	**.47820**	**.98902**
Stddev	.01097	.00496	.00098	.00151	.090	.00066	.187	.00161	.01985
%RSD	2.2726	2.4918	.38667	.15240	.17406	.06616	.37776	.33744	2.0070
#1	.49065	.20267	.25374	.98649	51.648	.99166	49.674	.47934	1.0031
#2	.47513	.19565	.25513	.98862	51.776	.99073	49.409	.47706	.97498
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.438**	**.48328**	**10.095**	**.49302**	**2.0798**	**.50341**	**1.9094**	**9.8269**	**21.030**
Stddev	.361	.01303	.227	.01453	.0563	.00958	.0484	.0303	.065
%RSD	.70253	2.6964	2.2463	2.9470	2.7091	1.9022	2.5338	.30824	.30824
#1	51.694	.49249	10.255	.50330	2.1197	.51018	1.9436	9.8055	20.984
#2	51.183	.47406	9.9346	.48275	2.0400	.49663	1.8752	9.8483	21.075
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0329**	**.96301**	**.96052**	**.96317**	**1.8463**	**1.8863**	**.48925**	**.47690**	**.52981**
Stddev	.0505	.00160	.00633	.00273	.0359	.0095	.00122	.00164	.00060
%RSD	2.4838	.16649	.65854	.28371	1.9452	.50157	.24861	.34374	.11260
#1	2.0686	.96188	.96499	.96511	1.8717	1.8930	.49011	.47806	.52939
#2	1.9972	.96414	.95604	.96124	1.8209	1.8796	.48839	.47574	.53024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2634.7**	**48873.**	**5730.3**
Stddev	3.5	38.	4.8
%RSD	.13121	.07814	.08462
#1	2637.1	48846.	5733.8
#2	2632.2	48900.	5726.9

Sample Name: 280-98057-A-1-A Acquired: 6/13/2017 20:59:57 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376906 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00124**	**.03261**	**.00298**	**.04585**	**.01925**	**-.00006**	**-.00008**	**7.9649**	**.00030**
Stddev	.00001	.00124	.00241	.00027	.00028	.00002	.00118	.0399	.00018
%RSD	1.0604	3.8098	80.706	.57992	1.4571	29.697	1505.9	.50098	59.853
#1	.00123	.03349	.00469	.04566	.01945	-.00007	-.00091	7.9367	.00018
#2	.00125	.03173	.00128	.04604	.01905	-.00004	.00076	7.9931	.00043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00011**	**.00594**	**.00559**	**.10902**	**6.8349**	**-.00047**	**1.2819**	**.00453**	**.00392**
Stddev	.00027	.00005	.00042	.00018	.0211	.00065	.0010	.00003	.00038
%RSD	236.03	.92619	7.5795	.16621	.30827	139.53	.07752	.61232	9.6791
#1	-.00030	.00590	.00529	.10914	6.8200	-.00093	1.2826	.00455	.00419
#2	.00008	.00598	.00589	.10889	6.8498	-.00001	1.2812	.00451	.00365
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.694**	**-.00030**	**1.5385**	**.00144**	**6.9911**	**.00161**	**.00293**	**3.1385**	**6.7163**
Stddev	.062	.00080	.0236	.00074	.1412	.00060	.00823	.0271	.0580
%RSD	.42318	266.93	1.5352	51.006	2.0197	37.490	280.61	.86322	.86322
#1	14.650	.00027	1.5552	.00197	7.0909	.00204	.00875	3.1193	6.6753
#2	14.738	-.00087	1.5218	.00092	6.8912	.00118	-.00289	3.1576	6.7573
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00035**	**.07591**	**.00612**	**.00044**	**.00376**	**-.05246**	**.00033**	**.05384**	**.00203**
Stddev	.00091	.00006	.00054	.00022	.00362	.01679	.00009	.00067	.00036
%RSD	259.70	.08376	8.7855	50.703	96.167	31.995	27.731	1.2494	17.709
#1	-.00029	.07596	.00650	.00060	.00632	-.06433	.00026	.05432	.00178
#2	.00099	.07587	.00574	.00028	.00120	-.04059	.00039	.05337	.00229
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2725.1**	**50839.**	**5869.6**
Stddev	4.3	87.	14.8
%RSD	.15931	.17169	.25208
#1	2728.2	50778.	5880.1
#2	2722.0	50901.	5859.1

Sample Name: 280-98057-A-1-Asd@5 Acquired: 6/13/2017 21:02:34 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376906 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00102**	**.00571**	**.00376**	**.01152**	**.00400**	**-.00012**	**.00309**	**1.6244**	**-.00015**
Stddev	.00008	.00011	.00203	.00038	.00002	.00005	.00362	.0097	.00009
%RSD	7.4568	1.9006	53.920	3.3261	.57716	38.256	117.07	.59526	64.424
#1	.00096	.00563	.00519	.01179	.00398	-.00015	.00565	1.6313	-.00008
#2	.00107	.00578	.00232	.01125	.00402	-.00009	.00053	1.6176	-.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00028**	**.00142**	**-.00130**	**.02171**	**1.5114**	**.00160**	**.26455**	**.00093**	**.00056**
Stddev	.00016	.00007	.00012	.00201	.0594	.00125	.00090	.00008	.00060
%RSD	56.826	4.8512	9.2274	9.2608	3.9283	78.294	.34007	8.0412	106.93
#1	.00039	.00147	-.00122	.02313	1.5534	.00071	.26392	.00099	.00098
#2	.00016	.00137	-.00139	.02029	1.4694	.00248	.26519	.00088	.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.8607**	**-.00012**	**.30684**	**-.00164**	**1.3790**	**.00138**	**-.00489**	**.64532**	**1.3810**
Stddev	.0017	.00011	.00930	.00129	.0553	.00140	.00321	.01405	.0301
%RSD	.06001	95.612	3.0321	78.591	4.0103	101.27	65.509	2.1779	2.1779
#1	2.8595	-.00019	.31342	-.00256	1.4181	.00039	-.00716	.65526	1.4023
#2	2.8619	-.00004	.30026	-.00073	1.3399	.00237	-.00263	.63538	1.3597
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00030**	**.01539**	**.00396**	**-.00014**	**.00112**	**-.01504**	**.00011**	**.01159**	**-.00252**
Stddev	.00026	.00003	.00088	.00003	.00034	.00945	.00073	.00046	.00259
%RSD	89.386	.18161	22.100	24.077	30.353	62.826	696.15	3.9460	102.82
#1	.00048	.01537	.00334	-.00012	.00136	-.00836	-.00041	.01127	-.00435
#2	.00011	.01541	.00458	-.00017	.00088	-.02172	.00062	.01191	-.00069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2737.4**	**50817.**	**5792.3**
Stddev	1.6	47.	2.9
%RSD	.05756	.09172	.05020
#1	2738.5	50784.	5794.4
#2	2736.3	50850.	5790.2

Sample Name: 280-98057-A-1-B MS Acquired: 6/13/2017 21:05:11 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376906 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05340**	**1.9736**	**.99111**	**1.0694**	**2.0919**	**.04910**	**1.9807**	**58.094**	**.10082**
Stddev	.00034	.0375	.01894	.0169	.0184	.00048	.0309	.587	.00213
%RSD	.63994	1.9000	1.9111	1.5797	.88115	.97379	1.5602	1.0108	2.1132
#1	.05316	2.0001	1.0045	1.0814	2.0789	.04876	2.0025	57.678	.10233
#2	.05364	1.9471	.97772	1.0575	2.1050	.04944	1.9588	58.509	.09931
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48649**	**.20650**	**.26775**	**1.1379**	**58.191**	**.99267**	**51.099**	**.48600**	**.99952**
Stddev	.01044	.00410	.00089	.0146	.696	.01319	.206	.00179	.02182
%RSD	2.1468	1.9869	.33172	1.2846	1.1957	1.3286	.40361	.36884	2.1835
#1	.49388	.20940	.26838	1.1275	57.699	.98334	51.245	.48727	1.0149
#2	.47911	.20360	.26712	1.1482	58.683	1.0020	50.953	.48473	.98408
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**65.352**	**.48575**	**11.825**	**.49817**	**9.1988**	**.51649**	**1.9432**	**13.015**	**27.852**
Stddev	.888	.00968	.223	.00969	.1649	.01059	.0244	.128	.273
%RSD	1.3586	1.9936	1.8839	1.9451	1.7924	2.0503	1.2554	.98065	.98065
#1	64.724	.49260	11.982	.50502	9.3153	.52398	1.9605	12.925	27.659
#2	65.980	.47891	11.667	.49132	9.0822	.50900	1.9260	13.105	28.045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2.0462**	**1.0388**	**.96568**	**.97197**	**1.8447**	**1.9472**	**.49383**	**.53033**	**.53102**
Stddev	.0397	.0104	.00167	.00113	.0282	.0049	.00265	.00353	.00401
%RSD	1.9418	1.0042	.17340	.11621	1.5271	.25308	.53738	.66613	.75573
#1	2.0743	1.0315	.96687	.97277	1.8646	1.9507	.49571	.53283	.52819
#2	2.0181	1.0462	.96450	.97117	1.8248	1.9438	.49196	.52783	.53386
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.20000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2601.0**	**48295.**	**5727.1**
Stddev	6.8	83.	76.0
%RSD	.26309	.17190	1.3269
#1	2605.9	48236.	5780.9
#2	2596.2	48353.	5673.4

Sample Name: 280-98057-A-1-C MSD Acquired: 6/13/2017 21:07:34 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376906 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05483**	**2.0391**	**1.0375**	**1.0945**	**2.1544**	**.05070**	W **2.0570**	**59.870**	**.10421**
Stddev	.00007	.0420	.0204	.0202	.0082	.00014	.0374	.249	.00217
%RSD	.12889	2.0579	1.9646	1.8472	.38019	.27251	1.8208	.41614	2.0795
#1	.05488	2.0688	1.0519	1.1088	2.1602	.05079	2.0834	60.047	.10574
#2	.05478	2.0094	1.0231	1.0802	2.1486	.05060	2.0305	59.694	.10268
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50228**	**.21241**	**.27616**	**1.1144**	**60.026**	**1.0236**	**52.554**	**.50063**	**1.0184**
Stddev	.00909	.00382	.00226	.0145	.209	.0008	.307	.00222	.0214
%RSD	1.8104	1.7983	.81813	1.3043	.34760	.07348	.58343	.44400	2.0982
#1	.50871	.21511	.27776	1.1247	60.173	1.0231	52.771	.50220	1.0335
#2	.49585	.20971	.27456	1.1041	59.878	1.0241	52.338	.49906	1.0033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**67.019**	**.50196**	**12.238**	**.51181**	**9.5244**	**.52073**	**2.0051**	**13.420**	**28.719**
Stddev	.113	.00885	.235	.01038	.1715	.00550	.0439	.033	.070
%RSD	.16890	1.7629	1.9194	2.0277	1.8003	1.0566	2.1879	.24400	.24400
#1	67.099	.50822	12.404	.51915	9.6457	.52462	2.0361	13.397	28.670
#2	66.939	.49570	12.072	.50447	9.4032	.51684	1.9741	13.443	28.769
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2.0825**	**1.0740**	**.99786**	**.99241**	**1.9050**	**1.9697**	**.50866**	**.54948**	**.54224**
Stddev	.0451	.0030	.00629	.00437	.0304	.0004	.00408	.00413	.00131
%RSD	2.1638	.28340	.63075	.44005	1.5976	.02118	.80171	.75248	.24088
#1	2.1144	1.0761	1.0023	.99550	1.9265	1.9694	.51155	.55241	.54132
#2	2.0507	1.0718	.99341	.98932	1.8835	1.9700	.50578	.54656	.54317
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.20000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2616.3**	**48539.**	**5756.0**
Stddev	7.4	140.	8.8
%RSD	.28259	.28848	.15354
#1	2621.5	48440.	5749.7
#2	2611.0	48638.	5762.2

Sample Name: CCVH-4579429 Acquired: 6/13/2017 21:09:57 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00089**	**47.510**	**-.00685**	**.00519**	**.00130**	**.00020**	W **.94782**	**.02834**	**.00026**	**-.00121**	**.00047**	**.01063**
Stddev	.00001	.017	.00033	.00003	.00004	.00011	.03013	.00025	.00009	.00053	.00029	.00005
%RSD	1.2240	.03663	4.8022	.52899	2.7863	55.712	3.1788	.88949	33.725	43.425	61.880	.47818
#1	.00088	47.522	-.00708	.00521	.00127	.00027	.96913	.02816	.00033	-.00084	.00026	.01066
#2	.00090	47.498	-.00661	.00517	.00132	.00012	.92652	.02852	.00020	-.00158	.00067	.01059
Check ?	None	Chk Pass	None	None	None	None	Chk Warn	None	None	None	None	None
Value							1.0000					
Range							-5.0000%					

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.089**	**.27371**	**.00270**	**.04088**	**-.00126**	**-.00115**	**245.32**	**.00120**	**.01004**	**.00034**	**4.9385**	**.00297**
Stddev	.065	.00611	.00065	.00784	.00005	.00026	.47	.00051	.00198	.00018	.1679	.00324
%RSD	.13173	2.2332	24.193	19.182	3.5899	22.531	.19329	42.453	19.719	53.340	3.3989	108.97
#1	49.135	.26939	.00316	.04643	-.00123	-.00133	244.98	.00157	.00864	.00047	5.0572	.00068
#2	49.043	.27803	.00224	.03534	-.00130	-.00096	245.66	.00084	.01144	.00021	4.8198	.00527
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00503**	**.01594**	**.03410**	**.00079**	**.00097**	W **4.6638**	**.01841**	**.00365**	W **9.3829**	**.01295**	**.00055**	**.08371**
Stddev	.00020	.01647	.03525	.00060	.00003	.0131	.00038	.00404	.0560	.00006	.00004	.00410
%RSD	3.9055	103.37	103.37	76.810	2.9675	.28010	2.0837	110.85	.59683	.49806	7.9061	4.8983
#1	-.00489	.00429	.00918	.00121	.00099	4.6731	.01868	.00650	9.4225	.01290	.00052	.08081
#2	-.00517	.02758	.05903	.00036	.00095	4.6546	.01814	.00079	9.3433	.01299	.00059	.08661
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2650.9**	**48749.**	**5775.7**
Stddev	4.8	357.	16.9
%RSD	.18269	.73250	.29310
#1	2647.5	48496.	5787.6
#2	2654.3	49001.	5763.7

Sample Name: CCV-4580817 Acquired: 6/13/2017 21:12:31 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49543**	**.50921**	**.94191**	**.49312**	**.50626**	**.47711**	**-.00115**	**5.0904**	**.48828**	**.49527**	**.49787**	**.50463**	**2.4209**
Stddev	.00004	.01424	.01818	.01035	.00243	.00225	.00239	.0226	.01175	.01149	.01279	.00315	.0077
%RSD	.00743	2.7968	1.9302	2.0995	.47992	.47070	208.82	.44433	2.4073	2.3192	2.5683	.62394	.31727
#1	.49546	.51928	.95477	.50044	.50454	.47552	.00055	5.0744	.49659	.50340	.50691	.50685	2.4155
#2	.49541	.49914	.92906	.48580	.50798	.47870	-.00284	5.1064	.47997	.48715	.48883	.50240	2.4264
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.881**	**.98759**	**19.897**	**.48244**	**.49567**	**5.0868**	**.49369**	**.98472**	**1.0080**	**.01657**	**.96487**	**.93585**	**4.8274**
Stddev	.252	.00273	.022	.00121	.01380	.0098	.01023	.02369	.0253	.00989	.01738	.01892	.0238
%RSD	.49451	.27607	.10917	.25151	2.7841	.19208	2.0730	2.4054	2.5057	59.694	1.8012	2.0217	.49327
#1	50.703	.98567	19.912	.48329	.50543	5.0799	.50092	1.0015	1.0258	.00958	.97716	.94923	4.8106
#2	51.059	.98952	19.881	.48158	.48592	5.0938	.48645	.96798	.99013	.02357	.95259	.92248	4.8443
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.331**	**1.0082**	**.47459**	**.01355**	**.46792**	**.93964**	**-.04330**	**.48491**	**.47616**	**.50391**
Stddev	.051	.0248	.00343	.00187	.00186	.02390	.02469	.00071	.00013	.00184
%RSD	.49327	2.4614	.72226	13.774	.39698	2.5434	57.029	.14540	.02830	.36501
#1	10.295	1.0257	.47216	.01487	.46924	.95654	-.02584	.48541	.47606	.50261
#2	10.367	.99061	.47701	.01223	.46661	.92274	-.06076	.48441	.47625	.50522
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2677.4**	**49506.**	**5757.0**
Stddev	1.1	69.	12.5
%RSD	.04085	.13981	.21699
#1	2678.1	49555.	5765.9
#2	2676.6	49457.	5748.2

Sample Name: CCB Acquired: 6/13/2017 21:15:00 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00101**	**.00412**	**-.00325**	**.00199**	**.00045**	**.00014**	**.00190**	**.00198**	**.00041**	**.00056**	**.00048**	**-.00255**	**-.00557**
Stddev	.00082	.00178	.00330	.00024	.00015	.00004	.00206	.00604	.00025	.00055	.00014	.00088	.00135
%RSD	81.035	43.266	101.46	12.169	33.957	26.613	108.58	305.93	61.155	97.788	29.084	34.581	24.132
#1	.00043	.00539	-.00558	.00182	.00056	.00012	.00336	-.00230	.00023	.00095	.00038	-.00193	-.00653
#2	.00158	.00286	-.00092	.00216	.00034	.00017	.00044	.00625	.00059	.00017	.00058	-.00318	-.00462
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.16692**	**.00098**	**.01120**	**.00013**	**.00046**	**.00318**	**-.00015**	**.00631**	**-.00109**	**.01043**	**.00185**	**-.01135**	**.00056**
Stddev	.08998	.00287	.00310	.00001	.00067	.00414	.00048	.00086	.00086	.00327	.00289	.00682	.00661
%RSD	53.904	293.50	27.639	6.3561	143.78	130.19	317.07	13.572	78.738	31.340	155.97	60.079	1171.9
#1	.10330	.00301	.01339	.00013	.00093	.00025	-.00049	.00692	-.00048	.01275	-.00019	-.00653	.00524
#2	.23054	-.00105	.00901	.00012	-.00001	.00611	.00019	.00571	-.00169	.00812	.00389	-.01617	-.00411
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00121**	**.00188**	**.00029**	**.00633**	**-.00040**	**.00084**	**-.05467**	**.00081**	**.00188**	**.00191**
Stddev	.01415	.00087	.00007	.00178	.00000	.00186	.02066	.00024	.00057	.00130
%RSD	1171.9	46.331	24.255	28.201	.90472	222.18	37.798	30.071	30.624	68.234
#1	.01121	.00249	.00034	.00507	-.00041	-.00048	-.04006	.00098	.00147	.00284
#2	-.00880	.00126	.00024	.00759	-.00040	.00215	-.06928	.00064	.00228	.00099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2683.7**	**49799.**	**5647.5**
Stddev	12.8	22.	24.6
%RSD	.47628	.04357	.43527
#1	2674.7	49784.	5630.2
#2	2692.7	49815.	5664.9

Sample Name: CCVL-4590576 Acquired: 6/13/2017 21:17:38 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01071**	**.10560**	**.01780**	**.09714**	**.01107**	**.00091**	**.11191**	**.20117**	**.00515**	**.01012**	**.01016**	**.01243**
Stddev	.00016	.00358	.00054	.00304	.00075	.00002	.00641	.00480	.00035	.00058	.00033	.00028
%RSD	1.5176	3.3931	3.0342	3.1275	6.7940	1.7958	5.7238	2.3877	6.8564	5.7072	3.2036	2.2208
#1	.01082	.10813	.01742	.09929	.01054	.00090	.11644	.19777	.00540	.01053	.01039	.01224
#2	.01059	.10307	.01818	.09500	.01160	.00092	.10738	.20456	.00490	.00971	.00993	.01263
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09803**	**3.3785**	**.02115**	**.21093**	**.01027**	**.01865**	**1.0304**	**.04057**	**2.8054**	**.00950**	**.09290**	**.01849**
Stddev	.00488	.0044	.00028	.00346	.00003	.00034	.0059	.00118	.0934	.00146	.01148	.00358
%RSD	4.9814	.13028	1.3402	1.6406	.24898	1.8374	.57316	2.9154	3.3306	15.311	12.357	19.376
#1	.09458	3.3816	.02095	.21338	.01026	.01889	1.0346	.04141	2.8715	.01053	.10101	.01596
#2	.10148	3.3754	.02135	.20849	.01029	.01840	1.0262	.03973	2.7393	.00847	.08478	.02103
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01785**	**.48486**	**1.0376**	**.09967**	**.01005**	**.01854**	**.00888**	**.01876**	F **.00867**	**.00996**	**.01841**	**.01784**
Stddev	.00761	.00679	.0145	.00439	.00008	.00151	.00004	.00559	.01875	.00000	.00144	.00040
%RSD	42.654	1.4011	1.4011	4.4058	.79885	8.1170	.49257	29.770	216.22	.04488	7.8428	2.2656
#1	.02323	.48006	1.0273	.10277	.01000	.01961	.00891	.02271	-.00459	.00996	.01944	.01813
#2	.01246	.48967	1.0479	.09656	.01011	.01748	.00885	.01481	.02193	.00995	.01739	.01756
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2773.6**	**51480.**	**5898.1**
Stddev	3.1	36.	1.0
%RSD	.11187	.07005	.01768
#1	2775.8	51455.	5898.9
#2	2771.4	51506.	5897.4

Sample Name: 280-98059-B-1-A Acquired: 6/13/2017 21:20:15 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376906 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00132**	**25.108**	**.00238**	**2.0585**	**.04054**	**-.00006**	**.00130**	**222.61**	**.00054**
Stddev	.00043	.248	.00361	.0467	.00091	.00005	.00164	1.53	.00040
%RSD	32.553	.98923	151.36	2.2695	2.2386	83.004	126.59	.68591	73.486
#1	.00163	25.284	-.00017	2.0915	.04118	-.00010	.00246	223.69	.00026
#2	.00102	24.932	.00494	2.0254	.03989	-.00003	.00014	221.53	.00082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00124**	**.06130**	**.02830**	**.47939**	**3.4859**	**.01848**	**9.1633**	**.18283**	**.02033**
Stddev	.00034	.00140	.00125	.00135	.0530	.00100	.0038	.00006	.00000
%RSD	27.851	2.2782	4.4294	.28074	1.5213	5.4302	.04183	.03123	.02123
#1	.00099	.06229	.02919	.47844	3.5234	.01919	9.1660	.18279	.02034
#2	.00148	.06031	.02741	.48035	3.4484	.01777	9.1606	.18287	.02033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**35.506**	**.03233**	**.19969**	**.00181**	W **192.09**	**.00131**	**-.02130**	**.70781**	**1.5147**
Stddev	.419	.00129	.00038	.00086	4.05	.00031	.01295	.00997	.0213
%RSD	1.1788	4.0044	.18945	47.591	2.1070	23.400	60.785	1.4087	1.4087
#1	35.210	.03324	.19996	.00243	194.95	.00109	-.01215	.71486	1.5298
#2	35.802	.03141	.19942	.00120	189.23	.00153	-.03046	.70075	1.4996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					180.00				
Low Limit					-.20000				

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00064**	**.33860**	**.00403**	**.00200**	**.00187**	**-.05501**	**.00303**	**.02207**	**.00281**
Stddev	.00017	.00195	.00003	.00004	.00071	.02880	.00086	.00067	.00048
%RSD	26.852	.57551	.66888	1.8925	37.816	52.349	28.427	3.0364	17.039
#1	.00052	.33998	.00405	.00203	.00237	-.03465	.00365	.02255	.00315
#2	.00076	.33722	.00402	.00197	.00137	-.07537	.00242	.02160	.00247
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2600.0**	**48342.**	**5932.5**
Stddev	.7	259.	26.5
%RSD	.02519	.53534	.44678
#1	2600.4	48525.	5913.7
#2	2599.5	48159.	5951.2

Sample Name: 280-98102-A-1-A Acquired: 6/13/2017 21:22:49 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376906 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00111**	**5.0035**	**.00080**	**.02305**	**.15338**	**.00027**	**.00018**	**29.195**	**.00053**
Stddev	.00001	.0173	.00962	.00146	.00020	.00003	.00177	.172	.00009
%RSD	1.0803	.34524	1196.2	6.3269	.12934	9.6843	1003.6	.58997	17.635
#1	.00112	4.9913	.00760	.02408	.15324	.00025	.00142	29.073	.00047
#2	.00110	5.0157	-.00600	.02201	.15352	.00029	-.00107	29.317	.00060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00125**	**.00334**	**.00617**	**3.0955**	**5.8686**	**.00962**	**11.847**	**.07072**	**.00116**
Stddev	.00037	.00050	.00023	.0139	.0741	.00060	.054	.00021	.00015
%RSD	29.699	14.880	3.7450	.44900	1.2621	6.2519	.45188	.29854	13.303
#1	.00099	.00369	.00601	3.0856	5.8163	.00920	11.885	.07087	.00127
#2	.00152	.00299	.00633	3.1053	5.9210	.01005	11.810	.07058	.00105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**61.158**	**.00371**	**.06872**	**.00340**	**36.898**	**-.00032**	**-.00157**	**10.655**	**22.801**
Stddev	.780	.00008	.00078	.00231	1.276	.00094	.00012	.020	.042
%RSD	1.2758	2.2251	1.1357	67.823	3.4592	291.30	7.6463	.18554	.18554
#1	60.606	.00377	.06817	.00177	37.801	-.00098	-.00149	10.641	22.771
#2	61.710	.00366	.06927	.00503	35.996	.00034	-.00166	10.668	22.831
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00078**	**.56668**	**.00789**	**.08422**	**.00351**	**-.03708**	**.00861**	**.01656**	**.00263**
Stddev	.00109	.00426	.00008	.00095	.00790	.01471	.00042	.00065	.00019
%RSD	139.68	.75227	1.0305	1.1310	225.10	39.663	4.8935	3.9435	7.3435
#1	-.00001	.56367	.00795	.08354	-.00208	-.02668	.00831	.01703	.00250
#2	-.00155	.56970	.00784	.08489	.00910	-.04747	.00890	.01610	.00277
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2697.8**	**49945.**	**5868.4**
Stddev	2.6	209.	39.0
%RSD	.09533	.41888	.66418
#1	2696.0	50093.	5895.9
#2	2699.6	49797.	5840.8

Sample Name: 280-98102-A-3-A Acquired: 6/13/2017 21:25:22 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376906 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00079**	**32.753**	**.00585**	**.02894**	**.51896**	**.00208**	**-.00372**	**20.383**	**.00102**
Stddev	.00020	.070	.00580	.00118	.00124	.00007	.00060	.054	.00011
%RSD	25.498	.21351	99.034	4.0654	.23890	3.5890	16.114	.26520	11.156
#1	.00093	32.802	.00995	.02977	.51983	.00214	-.00414	20.421	.00094
#2	.00065	32.703	.00175	.02811	.51808	.00203	-.00330	20.345	.00110
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01227**	**.02378**	**.05536**	**25.411**	**12.730**	**.02550**	**11.128**	**.25665**	**-.00010**
Stddev	.00008	.00086	.00022	.051	.051	.00150	.002	.00023	.00009
%RSD	.64921	3.6223	.40323	.20024	.39784	5.8823	.01781	.08904	95.398
#1	.01233	.02439	.05552	25.447	12.765	.02444	11.129	.25649	-.00017
#2	.01222	.02317	.05521	25.375	12.694	.02656	11.126	.25681	-.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**17.472**	**.02053**	**.33462**	**.02934**	**4.1677**	**.00327**	**.00126**	**46.777**	**100.10**
Stddev	.046	.00120	.00516	.00254	.1056	.00064	.00771	.102	.22
%RSD	.26503	5.8241	1.5427	8.6574	2.5326	19.673	612.34	.21849	.21849
#1	17.439	.02138	.33827	.03114	4.2424	.00373	.00671	46.849	100.26
#2	17.504	.01969	.33097	.02755	4.0931	.00282	-.00419	46.705	99.948
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00186**	**.62305**	**.01577**	**.15792**	**.00405**	**-.01823**	**.05445**	**.14437**	**.00685**
Stddev	.00052	.00097	.00101	.00061	.00211	.01844	.00047	.00125	.00105
%RSD	28.107	.15551	6.3943	.38883	52.114	101.13	.86670	.86246	15.278
#1	.00223	.62373	.01505	.15835	.00554	-.03127	.05411	.14349	.00759
#2	.00149	.62236	.01648	.15748	.00256	-.00519	.05478	.14525	.00611
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2741.0**	**50481.**	**5992.7**
Stddev	8.6	157.	14.1
%RSD	.31386	.31091	.23546
#1	2734.9	50592.	5982.7
#2	2747.1	50370.	6002.6

Sample Name: 280-98102-A-5-A Acquired: 6/13/2017 21:27:56 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376906 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00081**	**34.753**	**.01106**	**.02756**	**.51104**	**.00212**	**-.00500**	**19.967**	**.00075**
Stddev	.00057	.207	.00054	.00107	.00132	.00012	.00032	.034	.00010
%RSD	69.757	.59604	4.8497	3.8789	.25751	5.5512	6.4316	.16984	13.536
#1	.00041	34.607	.01144	.02831	.51011	.00204	-.00478	19.943	.00082
#2	.00122	34.900	.01068	.02680	.51197	.00221	-.00523	19.991	.00068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01250**	**.02528**	**.05703**	**26.955**	**12.905**	**.02335**	**11.174**	**.25242**	**-.00002**
Stddev	.00062	.00012	.00014	.112	.079	.00098	.025	.00055	.00031
%RSD	4.9940	.45968	.24192	.41490	.61400	4.1893	.22722	.21838	1615.7
#1	.01294	.02520	.05713	26.876	12.849	.02404	11.192	.25281	.00020
#2	.01206	.02536	.05693	27.034	12.961	.02266	11.156	.25203	-.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**17.215**	**.02224**	**.34308**	**.03159**	**4.1075**	**.00050**	**-.00414**	**48.225**	**103.20**
Stddev	.042	.00051	.01069	.00184	.0798	.00092	.00390	.183	.39
%RSD	.24331	2.2805	3.1163	5.8153	1.9427	186.20	94.125	.37964	.37964
#1	17.185	.02260	.35064	.03289	4.1639	-.00016	-.00689	48.096	102.92
#2	17.244	.02188	.33552	.03029	4.0511	.00115	-.00138	48.355	103.48
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00280**	**.61006**	**.01892**	**.15729**	**.00218**	**-.03100**	**.05583**	**.15168**	**.00770**
Stddev	.00242	.00290	.00108	.00228	.00248	.00614	.00012	.00138	.00003
%RSD	86.413	.47502	5.6969	1.4526	113.49	19.806	.20615	.90849	.42191
#1	.00109	.60801	.01815	.15890	.00394	-.02665	.05575	.15266	.00768
#2	.00452	.61211	.01968	.15567	.00043	-.03534	.05591	.15071	.00773
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2726.7**	**49883.**	**5883.7**
Stddev	16.0	265.	21.9
%RSD	.58719	.53129	.37287
#1	2738.0	49695.	5899.2
#2	2715.4	50070.	5868.2

Sample Name: 280-98102-A-7-A Acquired: 6/13/2017 21:30:29 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376906 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00120**	**.00734**	**.00026**	**.00328**	**.00081**	**.00003**	**.00102**	**.00920**	**.00021**
Stddev	.00074	.00002	.00115	.00027	.00015	.00004	.00008	.00295	.00023
%RSD	61.555	.29166	437.45	8.2985	18.913	125.31	7.4470	32.063	113.48
#1	.00068	.00736	-.00055	.00347	.00092	.00000	.00107	.01128	.00004
#2	.00172	.00733	.00107	.00309	.00070	.00006	.00096	.00711	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**.00002**	**-.00339**	**.05223**	**.22147**	**-.00025**	**.00450**	**.00028**	**-.00030**
Stddev	.00012	.00032	.00023	.00231	.01716	.00132	.00220	.00005	.00002
%RSD	209.41	1828.1	6.8314	4.4166	7.7482	518.57	48.876	16.395	7.2999
#1	.00014	.00024	-.00356	.05386	.23361	.00068	.00606	.00032	-.00031
#2	-.00003	-.00021	-.00323	.05060	.20934	-.00118	.00295	.00025	-.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01270**	**.00023**	**.00283**	**-.00127**	**.01192**	**.00185**	**-.00283**	**.02583**	**.05527**
Stddev	.00262	.00028	.00466	.00181	.00645	.00060	.00136	.00062	.00133
%RSD	20.620	118.34	164.63	142.30	54.110	32.176	47.894	2.4143	2.4143
#1	.01085	.00043	.00613	.00001	.01648	.00228	-.00379	.02539	.05433
#2	.01455	.00004	-.00046	-.00255	.00736	.00143	-.00187	.02627	.05621
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00033**	**.00036**	**.00447**	**-.00034**	**.00304**	**-.01344**	**-.00028**	**.00073**	**-.00017**
Stddev	.00115	.00004	.00065	.00025	.00262	.02340	.00031	.00070	.00164
%RSD	351.85	10.293	14.645	74.022	86.224	174.08	112.19	94.976	958.08
#1	.00049	.00039	.00401	-.00051	.00490	.00310	-.00049	.00024	.00099
#2	-.00114	.00034	.00493	-.00016	.00119	-.02999	-.00006	.00122	-.00133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2726.5**	**50817.**	**5697.0**
Stddev	4.5	170.	1.7
%RSD	.16442	.33499	.03064
#1	2729.6	50697.	5698.3
#2	2723.3	50937.	5695.8

Sample Name: 280-98102-A-9-A Acquired: 6/13/2017 21:33:06 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376906 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00064**	**6.8798**	**-.00315**	**.02158**	**.20854**	**.00033**	**.00047**	**20.103**	**.00037**
Stddev	.00018	.0463	.00774	.00043	.00062	.00001	.00067	.050	.00027
%RSD	28.505	.67294	245.73	1.9743	.29840	4.1990	140.85	.24882	73.331
#1	.00051	6.9125	.00232	.02188	.20898	.00032	.00000	20.139	.00018
#2	.00077	6.8471	-.00862	.02128	.20810	.00034	.00094	20.068	.00056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00195**	**.00498**	**.00934**	**4.6894**	**4.9440**	**.00745**	**6.1947**	**.07860**	**.00108**
Stddev	.00025	.00022	.00109	.0022	.0139	.00007	.0396	.00013	.00082
%RSD	12.693	4.4686	11.710	.04697	.28141	.97442	.63924	.15917	76.160
#1	.00213	.00482	.01012	4.6878	4.9539	.00750	6.2227	.07869	.00165
#2	.00178	.00514	.00857	4.6910	4.9342	.00740	6.1667	.07851	.00050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**27.110**	**.00412**	**.10498**	**.00404**	**3.3716**	**.00229**	**-.00199**	**12.536**	**26.828**
Stddev	.205	.00043	.00366	.00203	.1039	.00294	.00188	.071	.152
%RSD	.75761	10.354	3.4905	50.096	3.0809	128.42	94.510	.56495	.56495
#1	26.965	.00443	.10757	.00547	3.4450	.00021	-.00066	12.586	26.935
#2	27.255	.00382	.10239	.00261	3.2981	.00438	-.00331	12.486	26.720
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00040**	**.40131**	**.00601**	**.08854**	**.00133**	**-.02992**	**.01199**	**.02385**	**.00280**
Stddev	.00247	.00060	.00007	.00006	.00127	.00137	.00061	.00181	.00131
%RSD	625.30	.14886	1.2153	.06264	95.961	4.5724	5.0996	7.5746	46.732
#1	.00135	.40174	.00596	.08858	.00223	-.03089	.01242	.02257	.00187
#2	-.00215	.40089	.00607	.08850	.00043	-.02895	.01155	.02513	.00372
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2764.1**	**50987.**	**6003.8**
Stddev	3.0	172.	29.4
%RSD	.10985	.33744	.48933
#1	2766.2	51108.	5983.0
#2	2761.9	50865.	6024.6

Sample Name: 280-98102-A-11-A Acquired: 6/13/2017 21:35:39 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376906 200.7

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k **.00060**	k **44.226**	k **.00757**	**.03346**	**1.2936**	k **.00400**	k **.00122**	**29.370**	k **.00210**
Stddev	.00071	.014	.00016	.00034	.0005	.00005	.00045	.027	.00016
%RSD	119.13	.03180	2.0948	1.0216	.03707	1.1415	36.869	.09316	7.6382
#1	k .00110	k 44.216	k .00768	.03370	1.2939	k .00397	k .00091	29.351	k .00221
#2	k .00009	k 44.236	k .00746	.03322	1.2932	k .00403	k .00154	29.389	k .00199
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k **.03773**	k **.03291**	k **.06959**	k **41.327**	**16.691**	**.02731**	k **10.649**	**1.8225**	k **.00003**
Stddev	.00149	.00123	.00104	.094	.053	.00099	.016	.0010	.00032
%RSD	3.9550	3.7383	1.4918	.22654	.31930	3.6314	.14593	.05411	994.77
#1	k .03879	k .03378	k .07032	k 41.261	16.653	.02661	k 10.660	1.8232	k -.00019
#2	k .03668	k .03204	k .06885	k 41.393	16.728	.02801	k 10.638	1.8218	k .00026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.45636**	k **.03653**	**1.0448**	k **.05058**	k **1.0094**	k **-.00196**	k **.00348**	W **54.985**	**117.67**
Stddev	.01072	.00130	.0355	.00201	.0212	.00028	.00025	.043	.09
%RSD	2.3490	3.5588	3.4021	3.9753	2.1023	14.311	7.0528	.07804	.07804
#1	.44878	k .03745	1.0700	k .05201	k 1.0244	k -.00176	k .00365	55.016	117.73
#2	.46394	k .03561	1.0197	k .04916	k .99443	k -.00216	k .00331	54.955	117.60
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								50.000	
Low Limit								-1.0000	

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	k **.00304**	**.30551**	k **.04509**	k **.33124**	k **.00169**	k **-.03068**	k **.08105**	k **.20217**	k **.00736**
Stddev	.00037	.00056	.00167	.00593	.00314	.02021	.00016	.00010	.00071
%RSD	12.044	.18373	3.7114	1.7898	186.02	65.877	.19302	.04785	9.6587
#1	k .00330	.30511	k .04391	k .33543	k -.00053	k -.04498	k .08116	k .20224	k .00686
#2	k .00278	.30591	k .04628	k .32705	k .00391	k -.01639	k .08094	k .20210	k .00787
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2811.0**	**51938.**	**6124.4**
Stddev	3.3	18.	33.1
%RSD	.11664	.03500	.54050
#1	2808.6	51926.	6147.8
#2	2813.3	51951.	6101.0

Sample Name: 280-98032-F-1-E Acquired: 6/13/2017 21:38:12 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376906 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00107**	**.06763**	**.00482**	**.08275**	**.08403**	**-.00008**	**-.00138**	**54.708**	**.00095**
Stddev	.00032	.00193	.00160	.00209	.00053	.00008	.00114	.186	.00039
%RSD	30.439	2.8588	33.226	2.5280	.62895	101.47	82.257	.33908	41.453
#1	.00130	.06627	.00595	.08423	.08440	-.00013	-.00219	54.839	.00122
#2	.00084	.06900	.00369	.08127	.08366	-.00002	-.00058	54.577	.00067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00011**	**.00095**	**.00129**	**.11724**	**6.3547**	**.02957**	**8.1058**	**.00335**	**.00259**
Stddev	.00019	.00008	.00023	.00189	.0069	.00189	.0410	.00012	.00013
%RSD	175.22	8.2640	17.955	1.6110	.10851	6.4043	.50621	3.4395	5.0499
#1	-.00024	.00100	.00146	.11858	6.3596	.03091	8.1348	.00343	.00249
#2	.00003	.00089	.00113	.11591	6.3498	.02823	8.0768	.00326	.00268
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**44.050**	**.00009**	**.26517**	**-.00231**	**23.155**	**-.00124**	**-.00927**	**13.972**	**29.901**
Stddev	.366	.00026	.00632	.00315	.753	.00116	.00712	.098	.210
%RSD	.83186	299.40	2.3844	136.31	3.2525	93.545	76.850	.70379	.70379
#1	44.309	.00027	.26964	-.00008	23.688	-.00206	-.00423	14.042	30.050
#2	43.791	-.00010	.26070	-.00453	22.623	-.00042	-.01431	13.903	29.752
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**.35556**	**.00464**	**.00153**	**-.00089**	**-.04393**	**.00627**	**.01799**	**.00263**
Stddev	.00067	.00090	.00204	.00039	.00231	.07867	.00021	.00011	.00069
%RSD	2086.4	.25327	43.967	25.486	259.38	179.10	3.3594	.63076	26.142
#1	.00044	.35619	.00320	.00125	.00074	.01170	.00642	.01791	.00214
#2	-.00050	.35492	.00608	.00180	-.00252	-.09956	.00612	.01807	.00311
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2686.2**	**49951.**	**5846.8**
Stddev	2.2	120.	21.0
%RSD	.08158	.23998	.35894
#1	2684.7	49866.	5832.0
#2	2687.8	50036.	5861.7

Sample Name: 280-98032-G-2-E Acquired: 6/13/2017 21:40:47 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376906 200.7

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00093**	**.04201**	**.00274**	**.06111**	**.10199**	**-.00007**	**.00171**	**68.513**	**.00033**
Stddev	.00059	.00063	.00219	.00279	.00034	.00002	.00239	.070	.00019
%RSD	62.811	1.4902	79.737	4.5690	.33791	22.811	139.79	.10269	56.944
#1	.00052	.04157	.00120	.06308	.10223	-.00009	.00340	68.464	.00020
#2	.00135	.04246	.00429	.05913	.10174	-.00006	.00002	68.563	.00047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00023**	**.00070**	**.00065**	**.32261**	**5.7529**	**.02429**	**8.6721**	**.08181**	**-.00032**
Stddev	.00041	.00046	.00002	.00049	.0769	.00106	.0602	.00041	.00003
%RSD	177.81	65.388	3.1288	.15203	1.3366	4.3836	.69475	.49603	7.7797
#1	.00006	.00102	.00067	.32226	5.6985	.02505	8.7147	.08209	-.00031
#2	-.00052	.00038	.00064	.32296	5.8072	.02354	8.6295	.08152	-.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**36.518**	**.00048**	**.48824**	**-.00240**	**14.851**	**.00232**	**-.00561**	**12.917**	**27.643**
Stddev	.247	.00029	.01704	.00178	.513	.00121	.00340	.036	.077
%RSD	.67605	60.798	3.4902	74.330	3.4565	52.112	60.698	.27695	.27695
#1	36.692	.00027	.50029	-.00114	15.214	.00317	-.00802	12.892	27.589
#2	36.343	.00068	.47619	-.00366	14.488	.00146	-.00320	12.942	27.697
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00188**	**.37614**	**.00411**	**.00107**	**.00242**	**-.04146**	**.00149**	**.01096**	**-.00014**
Stddev	.00044	.00071	.00007	.00043	.00076	.03975	.00017	.00080	.00196
%RSD	23.462	.18992	1.8201	40.425	31.355	95.863	11.143	7.2657	1400.8
#1	.00157	.37564	.00416	.00138	.00296	-.06957	.00160	.01039	-.00153
#2	.00219	.37665	.00405	.00076	.00189	-.01336	.00137	.01152	.00125
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2683.0**	**49707.**	**5815.7**
Stddev	2.2	155.	10.5
%RSD	.08245	.31146	.18022
#1	2684.5	49598.	5808.3
#2	2681.4	49817.	5823.1

Sample Name: CCVH-4579429 Acquired: 6/13/2017 21:43:22 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00132**	**47.320**	**-.00631**	**.00231**	**.00050**	**.00012**	**.95877**	**.02623**	**.00050**	**-.00079**	**.00026**	**.01177**
Stddev	.00076	.194	.00418	.00055	.00000	.00005	.02828	.00463	.00001	.00036	.00028	.00015
%RSD	57.478	.41071	66.271	23.896	.65656	37.528	2.9494	17.650	2.7883	45.842	110.51	1.2752
#1	.00078	47.183	-.00927	.00271	.00051	.00015	.97877	.02950	.00049	-.00054	.00006	.01167
#2	.00185	47.458	-.00335	.00192	.00050	.00009	.93878	.02296	.00051	-.00105	.00046	.01188
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.539**	**.19764**	**.00222**	**.03829**	**-.00189**	**-.00253**	**244.76**	**.00099**	**.00728**	**.00028**	**4.9405**	**.00324**
Stddev	.071	.05203	.00074	.00002	.00003	.00039	.47	.00085	.00053	.00151	.1137	.00196
%RSD	.14654	26.327	33.389	.05235	1.8060	15.402	.19197	86.053	7.3037	546.48	2.3012	60.431
#1	48.489	.16085	.00275	.03827	-.00191	-.00226	245.09	.00039	.00766	-.00079	5.0209	.00462
#2	48.590	.23444	.00170	.03830	-.00186	-.00281	244.42	.00159	.00691	.00134	4.8601	.00185
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00632**	**.00037**	**.00079**	**-.00006**	**.00054**	W **4.6672**	**.01806**	**.00251**	W **9.4302**	**.01277**	**.00045**	**.07978**
Stddev	.00390	.01361	.02912	.00048	.00003	.0127	.00005	.00028	.0513	.00011	.00002	.00039
%RSD	61.733	3668.8	3668.8	781.78	6.2057	.27166	.29000	11.166	.54359	.87975	3.5831	.49350
#1	-.00356	-.00925	-.01979	-.00040	.00052	4.6762	.01810	.00231	9.3940	.01285	.00044	.08006
#2	-.00907	.00999	.02138	.00028	.00056	4.6583	.01802	.00271	9.4665	.01269	.00046	.07950
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Warn	None	None	None
Value						5.0000			10.000			
Range						-5.0000%			-5.0000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2657.0**	**48561.**	**5721.4**
Stddev	1.2	275.	2.7
%RSD	.04532	.56588	.04755
#1	2656.1	48367.	5719.5
#2	2657.8	48755.	5723.4

Sample Name: CCV-4580817 Acquired: 6/13/2017 21:45:56 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48807**	**.54594**	**.93297**	**.48469**	**.49686**	**.46898**	**-.00209**	**4.9854**	**.48432**	**.49003**	**.49355**	**.49636**	**2.4394**
Stddev	.00259	.02886	.00795	.00673	.00051	.00099	.00390	.0091	.00875	.00783	.00771	.00207	.0020
%RSD	.53068	5.2871	.85241	1.3879	.10243	.21158	186.57	.18212	1.8075	1.5986	1.5623	.41693	.08378
#1	.48990	.56635	.93859	.48945	.49722	.46828	-.00484	4.9918	.49051	.49556	.49900	.49783	2.4409
#2	.48623	.52553	.92735	.47994	.49650	.46968	.00067	4.9790	.47813	.48449	.48810	.49490	2.4380
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.112**	**.96962**	**19.718**	**.47644**	**.49117**	**4.9645**	**.48879**	**.96817**	**.99508**	**.02176**	**.95839**	**.93312**	**4.7353**
Stddev	.002	.00054	.041	.00023	.01049	.0004	.00778	.01139	.01701	.01060	.01819	.01041	.0124
%RSD	.00447	.05579	.20705	.04896	2.1354	.00870	1.5924	1.1768	1.7092	48.691	1.8976	1.1151	.26143
#1	50.114	.97000	19.747	.47661	.49858	4.9648	.49429	.97622	1.0071	.02926	.97125	.94047	4.7265
#2	50.111	.96924	19.690	.47628	.48375	4.9642	.48329	.96011	.98305	.01427	.94553	.92576	4.7440
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.133**	**.99590**	**.46715**	**.01487**	**.46160**	**.92886**	**-.05611**	**.47771**	**.49467**	**.49272**
Stddev	.026	.01954	.00086	.00058	.00127	.01251	.00075	.00185	.00062	.00030
%RSD	.26143	1.9616	.18385	3.9110	.27530	1.3467	1.3292	.38655	.12607	.06090
#1	10.115	1.0097	.46655	.01446	.46250	.93771	-.05558	.47640	.49423	.49293
#2	10.152	.98208	.46776	.01528	.46070	.92002	-.05664	.47901	.49511	.49251
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2735.0**	**49699.**	**5730.4**
Stddev	4.4	23.	13.6
%RSD	.16081	.04626	.23725
#1	2731.9	49682.	5740.0
#2	2738.2	49715.	5720.8

Sample Name: CCB Acquired: 6/13/2017 21:48:25 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00055**	**.01031**	**-.00165**	**.00124**	**.00048**	**.00005**	**-.00051**	**-.00152**	**.00034**	**.00020**	**.00016**	**-.00290**	**.00654**
Stddev	.00031	.00176	.00371	.00039	.00019	.00006	.00101	.00782	.00024	.00022	.00019	.00044	.00164
%RSD	55.494	17.028	224.54	31.360	39.952	113.02	196.59	515.39	70.289	107.98	123.91	15.170	25.048
#1	.00033	.00907	-.00428	.00096	.00062	.00010	-.00123	.00401	.00051	.00005	.00002	-.00321	.00538
#2	.00077	.01155	.00097	.00151	.00035	.00001	.00020	-.00705	.00017	.00036	.00029	-.00259	.00770
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.31408**	**.00317**	**.00842**	**.00021**	**.00048**	**.00159**	**-.00002**	**.00511**	**-.00032**	**.00708**	**.00038**	**-.00255**	**.05739**
Stddev	.08902	.00101	.00066	.00002	.00044	.01723	.00007	.00226	.00010	.00629	.00121	.00096	.00746
%RSD	28.342	31.721	7.7849	10.703	92.751	1085.3	302.23	44.269	30.529	88.885	313.66	37.503	13.001
#1	.25114	.00246	.00888	.00022	.00079	.01377	.00003	.00671	-.00025	.00263	.00124	-.00187	.05211
#2	.37703	.00388	.00796	.00019	.00016	-.01059	-.00007	.00351	-.00039	.01153	-.00047	-.00323	.06266
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.12281**	**.00100**	**.00021**	**.00514**	**-.00055**	**-.00006**	**-.03129**	**.00078**	**.00206**	**-.00032**
Stddev	.01597	.00098	.00001	.00003	.00021	.00205	.03841	.00001	.00036	.00096
%RSD	13.001	98.272	5.5410	.54939	38.156	3393.4	122.76	1.8635	17.484	297.69
#1	.11152	.00031	.00022	.00512	-.00070	.00139	-.05845	.00079	.00231	.00036
#2	.13410	.00170	.00020	.00516	-.00040	-.00151	-.00413	.00077	.00180	-.00100
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2741.1**	**50938.**	**5762.1**
Stddev	10.3	110.	24.6
%RSD	.37645	.21499	.42646
#1	2733.8	50860.	5744.8
#2	2748.4	51015.	5779.5

Sample Name: CCVL-4590576 Acquired: 6/13/2017 21:51:03 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01026**	**.10784**	**.01070**	**.09799**	**.01059**	**.00097**	**.11062**	**.19723**	**.00526**	**.01030**	**.01011**	**.01239**	**.10791**	**3.3398**
Stddev	.00006	.00379	.00925	.00316	.00009	.00002	.00217	.00104	.00001	.00019	.00025	.00008	.00137	.0045
%RSD	.54536	3.5140	86.432	3.2283	.81315	1.8142	1.9581	.52753	.20877	1.8569	2.4312	.65078	1.2690	.13561
#1	.01029	.11052	.01724	.10023	.01053	.00099	.10909	.19649	.00527	.01044	.01029	.01233	.10695	3.3430
#2	.01022	.10516	.00416	.09575	.01065	.00096	.11215	.19796	.00526	.01017	.00994	.01245	.10888	3.3366
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02285**	**.20884**	**.01034**	**.01851**	**1.0286**	**.04124**	**2.8236**	**.00929**	**.09927**	**.01988**	**.01658**	**.48829**	**1.0449**	**.09908**
Stddev	.00113	.00070	.00013	.00028	.0048	.00131	.0773	.00095	.00543	.00284	.00107	.00455	.0097	.00462
%RSD	4.9554	.33465	1.2905	1.5234	.46884	3.1799	2.7364	10.182	5.4650	14.270	6.4573	.93217	.93217	4.6601
#1	.02365	.20933	.01024	.01871	1.0252	.04217	2.8782	.00995	.10311	.02188	.01583	.48507	1.0381	.10234
#2	.02205	.20834	.01043	.01831	1.0320	.04032	2.7689	.00862	.09544	.01787	.01734	.49151	1.0518	.09581
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value														
Range														

Elem	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00992**	**.01820**	**.00887**	**.01877**	**.04661**	**.00986**	**.01928**	**.01519**
Stddev	.00009	.00133	.00021	.00145	.02184	.00015	.00114	.00234
%RSD	.87491	7.3014	2.3654	7.7447	46.853	1.4898	5.8965	15.387
#1	.00986	.01726	.00872	.01774	.06206	.00997	.01848	.01353
#2	.00999	.01914	.00902	.01979	.03117	.00976	.02008	.01684
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2797.3**	**52161.**	**5948.1**
Stddev	.0	66.	28.6
%RSD	.00108	.12717	.48163
#1	2797.4	52208.	5968.3
#2	2797.3	52114.	5927.8

Sample Name: MB 280-376712/1-A Acquired: 6/13/2017 21:53:40 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: 6/13 Custom ID2: Custom ID3:
Comment: 376712 6010c s

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00071**	**.00483**	**.00288**	**.00148**	**.00093**	**-.00005**	**.00033**	W **.17120**	**.00033**
Stddev	.00054	.00013	.00905	.00061	.00009	.00002	.00096	.00037	.00010
%RSD	77.043	2.5964	314.60	41.357	9.7411	36.744	292.71	.21642	28.773
#1	.00032	.00474	.00927	.00105	.00099	-.00006	-.00035	.17094	.00026
#2	.00109	.00492	-.00352	.00192	.00086	-.00004	.00101	.17146	.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								.10000	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00018**	**.00030**	**-.00217**	**.04417**	**.23178**	**.00180**	**.05791**	**.00046**	**.00016**
Stddev	.00007	.00033	.00085	.00042	.01421	.00031	.00121	.00003	.00004
%RSD	39.305	107.72	39.452	.94151	6.1307	17.350	2.0907	7.0382	27.749
#1	.00013	.00007	-.00277	.04388	.22173	.00158	.05876	.00048	.00012
#2	.00023	.00053	-.00156	.04447	.24183	.00203	.05705	.00044	.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.13646**	**.00050**	**.01559**	**-.00079**	**-.00149**	**.00167**	**-.00659**	**.02466**	**.05277**
Stddev	.00631	.00035	.00170	.00010	.00010	.00106	.00801	.00297	.00635
%RSD	4.6212	70.499	10.921	12.075	6.7413	63.317	121.64	12.032	12.032
#1	.14092	.00075	.01680	-.00072	-.00142	.00241	-.01225	.02256	.04828
#2	.13200	.00025	.01439	-.00086	-.00156	.00092	-.00092	.02676	.05726
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00738**	**.00058**	**.00358**	**-.00055**	**.00274**	W **-.05456**	**.00018**	**.00078**	**.00031**
Stddev	.00028	.00019	.00118	.00026	.00385	.02333	.00041	.00051	.00200
%RSD	3.7373	32.456	33.108	47.846	140.77	42.769	225.89	65.374	647.14
#1	.00719	.00045	.00274	-.00074	.00546	-.03806	-.00011	.00114	-.00110
#2	.00758	.00072	.00442	-.00037	.00001	-.07106	.00047	.00042	.00172
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
High Limit						.05000			
Low Limit						-.05000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2777.5**	**51635.**	**5933.0**
Stddev	8.7	51.	25.5
%RSD	.31341	.09970	.42960
#1	2771.3	51671.	5915.0
#2	2783.6	51599.	5951.0

Sample Name: LCS 280-376712/2-A Acquired: 6/13/2017 21:56:18 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376712 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.10030**	F **3.7776**	F **1.9262**	F **.00311**	F **3.9746**	F **.09293**	**3.8248**	F **96.155**	F **.19539**
Stddev	.00055	.0113	.0455	.00087	.0124	.00084	.1063	.508	.00591
%RSD	.55179	.29851	2.3632	27.888	.31324	.90626	2.7794	.52842	3.0269
#1	.10069	3.7697	1.9584	.00372	3.9834	.09352	3.8999	96.515	.19957
#2	.09991	3.7856	1.8940	.00250	3.9658	.09233	3.7496	95.796	.19120
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	None	Chk Fail	Chk Fail
High Limit	.05700	2.3200	1.1000	1.1000	2.2400	.05700		57.000	.11000
Low Limit	.04350	1.6400	.85000	.81000	1.7400	.04200		41.000	.08700

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.92915**	F **.38436**	F **.50023**	F **1.8878**	F **99.259**	F **1.9050**	F **96.066**	F **.92425**	F **-.00092**
Stddev	.02843	.01224	.00071	.0152	.341	.0061	.346	.00291	.00007
%RSD	3.0600	3.1847	.14130	.80451	.34366	.32169	.36015	.31482	8.1343
#1	.94926	.39302	.50073	1.8985	99.500	1.9093	96.310	.92631	-.00087
#2	.90905	.37570	.49973	1.8771	99.018	1.9006	95.821	.92219	-.00097
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit	.55000	.22000	.27500	1.2000	55.000	1.1000	55.000	.55000	1.1000
Low Limit	.43500	.18000	.22000	.87000	44.500	.90000	45.000	.44000	.86000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **98.673**	F **.92964**	F **19.906**	F **.95054**	**.00625**	F **-.00358**	F **3.7588**	F **.01060**	**.02268**
Stddev	.017	.03034	.441	.02921	.00383	.00302	.0841	.01025	.02193
%RSD	.01685	3.2641	2.2136	3.0730	61.239	84.511	2.2375	96.675	96.675
#1	98.685	.95110	20.218	.97119	.00354	-.00572	3.8183	.01784	.03818
#2	98.661	.90819	19.595	.92988	.00895	-.00144	3.6994	.00335	.00718
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	None	Chk Fail	Chk Fail	Chk Fail	None
High Limit	56.000	.55000	11.200	.55000		.55000	2.2000	7.0000	
Low Limit	45.000	.43500	8.0000	.43000		.41000	1.6600	1.0000	

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.00595**	F **1.8565**	F **1.8577**	F **.00722**	F **3.4985**	F **3.7466**	F **.95415**	F **.92267**	F **.03104**
Stddev	.00125	.0061	.0065	.00047	.0809	.0063	.00377	.00354	.00194
%RSD	21.025	.32628	.35130	6.4605	2.3117	.16955	.39541	.38373	6.2496
#1	.00506	1.8608	1.8623	.00755	3.5557	3.7511	.95682	.92517	.02966
#2	.00683	1.8523	1.8531	.00689	3.4413	3.7421	.95148	.92017	.03241
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit	2.2000	1.1000	1.2000	1.1000	2.2000	2.2000	.55000	.57000	.60000
Low Limit	1.6800	.89000	.80000	.88000	1.6800	1.7000	.44000	.38000	.40000

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2590.0**	**48090.**	**5811.0**
Stddev	9.7	6.	44.6
%RSD	.37276	.01219	.76697
#1	2583.1	48086.	5779.5
#2	2596.8	48094.	5842.5

Sample Name: 280-98008-A-1-A Acquired: 6/13/2017 21:58:44 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376712 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.43253**	**84.614**	**.05968**	**.03532**	**1.5802**	**.00418**	**.04122**	**64.810**	**.18519**
Stddev	.00139	.187	.00223	.00193	.0045	.00001	.00012	.237	.00383
%RSD	.32124	.22056	3.7382	5.4613	.28583	.14211	.28883	.36523	2.0699
#1	.43351	84.746	.06125	.03668	1.5833	.00418	.04130	64.978	.18790
#2	.43155	84.482	.05810	.03395	1.5770	.00419	.04114	64.643	.18248
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000								
Low Limit	-.02000								

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06807**	**5.0345**	**7.2830**	**159.84**	**8.6776**	**.14892**	**23.365**	**2.6765**	**.02725**
Stddev	.00178	.1302	.0059	.81	.0587	.00094	.053	.0078	.00052
%RSD	2.6135	2.5853	.08114	.50918	.67607	.63091	.22891	.29161	1.8943
#1	.06933	5.1266	7.2788	160.41	8.7191	.14958	23.403	2.6820	.02762
#2	.06682	4.9425	7.2872	159.26	8.6361	.14825	23.327	2.6709	.02689
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.81946**	**.52401**	**10.045**	**1.2074**	**3.3877**	**.02521**	**.01885**	**3.4855**	**7.4591**
Stddev	.00489	.01194	.223	.0196	.0883	.00511	.00452	.0624	.1336
%RSD	.59711	2.2788	2.2158	1.6211	2.6075	20.289	23.989	1.7912	1.7912
#1	.81600	.53245	10.202	1.2212	3.4501	.02159	.02205	3.5297	7.5535
#2	.82292	.51556	9.8874	1.1936	3.3252	.02882	.01566	3.4414	7.3646
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.16415**	**.29790**	**.03120**	**.58934**	**.00525**	**.03385**	**.16984**	**2.4666**	**.02635**
Stddev	.00300	.00064	.00011	.00418	.00449	.01099	.00136	.0074	.00051
%RSD	1.8261	.21514	.34587	.70878	85.541	32.471	.80227	.30106	1.9482
#1	.16627	.29836	.03113	.59229	.00842	.04162	.17081	2.4718	.02672
#2	.16203	.29745	.03128	.58639	.00207	.02608	.16888	2.4613	.02599
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2853.7**	**51932.**	**6320.3**
Stddev	10.0	113.	25.7
%RSD	.35008	.21712	.40609
#1	2860.7	51853.	6302.1
#2	2846.6	52012.	6338.4

Sample Name: 280-98008-A-1-Asd@5 Acquired: 6/13/2017 22:01:12 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376712 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09225**	**18.224**	**.01647**	**.00707**	**.33596**	**.00084**	**.01239**	**13.939**	**.03925**
Stddev	.00015	.035	.00174	.00073	.00100	.00002	.00010	.002	.00091
%RSD	.16427	.19203	10.573	10.379	.29884	1.9404	.83176	.01307	2.3233
#1	.09236	18.248	.01524	.00759	.33667	.00085	.01232	13.940	.03989
#2	.09215	18.199	.01770	.00655	.33525	.00083	.01246	13.938	.03861
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01441**	**1.0874**	**1.5158**	**33.547**	**1.9147**	**.03178**	**5.1472**	**.57479**	**.00559**
Stddev	.00013	.0343	.0093	.075	.0065	.00140	.0010	.00003	.00016
%RSD	.92118	3.1529	.61546	.22406	.33959	4.4023	.02003	.00595	2.9314
#1	.01432	1.1117	1.5224	33.600	1.9101	.03079	5.1479	.57482	.00570
#2	.01451	1.0632	1.5092	33.493	1.9193	.03277	5.1465	.57477	.00547
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11854**	**.11409**	**2.1238**	**.26529**	**.71319**	**.00141**	**-.00558**	**.78597**	**1.6820**
Stddev	.01526	.00367	.0714	.00528	.02723	.00176	.00706	.01455	.0312
%RSD	12.871	3.2190	3.3627	1.9912	3.8174	124.24	126.43	1.8517	1.8517
#1	.12933	.11669	2.1743	.26903	.73244	.00265	-.01058	.77567	1.6599
#2	.10775	.11150	2.0733	.26156	.69394	.00017	-.00059	.79626	1.7040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03393**	**.06394**	**.01022**	**.12762**	**-.00010**	**-.01643**	**.03591**	**.52973**	**.00718**
Stddev	.00187	.00040	.00174	.00146	.00253	.01506	.00033	.00064	.00107
%RSD	5.5069	.62106	16.975	1.1437	2481.6	91.646	.91502	.12063	14.870
#1	.03525	.06422	.01145	.12659	-.00189	-.02708	.03568	.52928	.00793
#2	.03260	.06365	.00900	.12865	.00168	-.00578	.03615	.53019	.00642
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2814.7**	**51253.**	**6003.7**
Stddev	3.0	239.	31.3
%RSD	.10503	.46580	.52094
#1	2812.6	51422.	5981.6
#2	2816.8	51085.	6025.8

Sample Name: 280-98008-A-1-B MS Acquired: 6/13/2017 22:03:44 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376712 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.32329**	**104.10**	**1.8235**	**.02615**	**4.8884**	**.09306**	W **3.5566**	**132.51**	**.26917**
Stddev	.00128	.25	.0127	.00014	.0128	.00043	.0500	.37	.00372
%RSD	.39495	.23760	.69481	.54299	.26186	.46071	1.4060	.27618	1.3815
#1	.32419	104.27	1.8325	.02604	4.8975	.09337	3.5920	132.77	.27180
#2	.32239	103.92	1.8146	.02625	4.8794	.09276	3.5212	132.26	.26654
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit	.10000						2.0000		
Low Limit	-.02000						-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.92607**	**3.8517**	**6.6237**	**148.59**	**99.572**	**1.9973**	**116.07**	**2.9553**	**.01070**
Stddev	.01275	.0636	.0758	.71	.248	.0026	1.68	.0296	.00002
%RSD	1.3772	1.6524	1.1437	.47722	.24887	.13193	1.4511	1.0002	.21103
#1	.93509	3.8967	6.6773	149.09	99.747	1.9991	117.26	2.9762	.01071
#2	.91705	3.8067	6.5701	148.09	99.396	1.9954	114.88	2.9344	.01068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**92.479**	**1.2915**	W **25.211**	**1.6190**	**2.2738**	**.01199**	**3.4360**	**3.5069**	**7.5047**
Stddev	.510	.0155	.371	.0221	.0378	.00600	.0355	.0214	.0459
%RSD	.55177	1.2033	1.4723	1.3623	1.6634	50.060	1.0322	.61112	.61112
#1	92.839	1.3025	25.473	1.6346	2.3006	.01624	3.4611	3.5220	7.5371
#2	92.118	1.2805	24.948	1.6034	2.2471	.00775	3.4109	3.4917	7.4722
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			20.000						
Low Limit			-6.0000						

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.08291**	**1.9757**	**1.6460**	**.50336**	**3.0982**	**3.5424**	**1.0332**	**2.8822**	**.05463**
Stddev	.00024	.0040	.0184	.00659	.0269	.0222	.0095	.0292	.00014
%RSD	.29336	.20095	1.1204	1.3099	.86699	.62708	.91907	1.0126	.24938
#1	.08308	1.9785	1.6590	.49869	3.1172	3.5581	1.0399	2.9029	.05473
#2	.08274	1.9729	1.6330	.50802	3.0792	3.5267	1.0265	2.8616	.05454
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2809.8**	**51097.**	**6241.7**
Stddev	3.5	205.	18.9
%RSD	.12538	.40053	.30260
#1	2812.3	50952.	6228.3
#2	2807.3	51242.	6255.0

Sample Name: 280-98008-A-1-C MSD Acquired: 6/13/2017 22:06:08 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376712 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.25679**	**72.508**	**1.1669**	**.02026**	**3.3090**	**.05973**	W **2.2940**	**87.538**	**.18123**
Stddev	.00030	.044	.0203	.00131	.0012	.00009	.0466	.014	.00316
%RSD	.11600	.06129	1.7376	6.4639	.03505	.14593	2.0307	.01646	1.7450
#1	.25658	72.477	1.1812	.02119	3.3082	.05979	2.3269	87.528	.18346
#2	.25700	72.540	1.1526	.01934	3.3098	.05967	2.2610	87.549	.17899
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit	.10000						2.0000		
Low Limit	-.02000						-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.60556**	**2.8021**	**2.7062**	**99.281**	**63.283**	**1.2793**	**75.748**	**2.1674**	**.00829**
Stddev	.01115	.0526	.0003	.208	.108	.0019	.100	.0045	.00041
%RSD	1.8407	1.8761	.01245	.20937	.17090	.15278	.13219	.20917	4.9241
#1	.61344	2.8393	2.7060	99.134	63.207	1.2779	75.677	2.1642	.00858
#2	.59768	2.7649	2.7064	99.428	63.359	1.2807	75.818	2.1706	.00801
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**59.414**	**.91923**	**16.684**	**1.0720**	**1.6974**	**.00760**	**2.2254**	**2.8293**	**6.0548**
Stddev	.408	.01654	.313	.0184	.0388	.00020	.0256	.0576	.1233
%RSD	.68742	1.7994	1.8744	1.7116	2.2837	2.6683	1.1522	2.0369	2.0369
#1	59.125	.93093	16.905	1.0849	1.7248	.00745	2.2435	2.7886	5.9675
#2	59.703	.90754	16.463	1.0590	1.6700	.00774	2.2072	2.8701	6.1420
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.06258**	**1.2629**	**1.0522**	**.41104**	**2.0656**	**2.2625**	**.67162**	**1.8844**	**.03337**
Stddev	.00390	.0013	.0032	.00352	.0357	.0077	.00050	.0000	.00204
%RSD	6.2325	.10619	.30446	.85727	1.7257	.33954	.07478	.00127	6.1123
#1	.06534	1.2619	1.0500	.40855	2.0908	2.2571	.67126	1.8844	.03193
#2	.05982	1.2638	1.0545	.41353	2.0404	2.2680	.67197	1.8844	.03481
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2803.4**	**50990.**	**6273.9**
Stddev	11.4	229.	31.0
%RSD	.40709	.44908	.49482
#1	2811.5	51152.	6295.9
#2	2795.4	50828.	6252.0

Sample Name: 280-98008-A-1-Apds Acquired: 6/13/2017 22:08:32 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376712 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.46688**	**83.433**	**.24113**	**.12742**	**1.6344**	**.04928**	**.04152**	**81.643**	**.22790**
Stddev	.00012	.268	.01518	.00264	.0052	.00011	.00388	.255	.00544
%RSD	.02489	.32167	6.2957	2.0699	.31481	.22592	9.3367	.31275	2.3889
#1	.46679	83.623	.25187	.12928	1.6380	.04936	.04426	81.824	.23175
#2	.46696	83.243	.23040	.12555	1.6308	.04920	.03878	81.462	.22405
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000								
Low Limit	-.02000								

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11111**	**4.9587**	**7.0503**	**155.92**	**27.802**	**.24229**	**41.536**	**2.6416**	**.07069**
Stddev	.00328	.1258	.0171	.43	.074	.00125	.067	.0054	.00239
%RSD	2.9502	2.5360	.24279	.27269	.26542	.51670	.16188	.20550	3.3848
#1	.11342	5.0476	7.0624	156.22	27.854	.24318	41.583	2.6455	.07238
#2	.10879	4.8698	7.0382	155.62	27.750	.24141	41.488	2.6378	.06899
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**20.900**	**.55362**	**11.780**	**1.2570**	**3.3726**	**.11520**	**.20385**	**7.9589**	**17.032**
Stddev	.147	.01171	.266	.0266	.0693	.00208	.00410	.0219	.047
%RSD	.70116	2.1151	2.2582	2.1181	2.0563	1.8037	2.0129	.27518	.27518
#1	20.796	.56190	11.968	1.2758	3.4216	.11667	.20095	7.9743	17.065
#2	21.003	.54534	11.592	1.2382	3.3236	.11373	.20675	7.9434	16.999
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.25351**	**.33611**	**.21304**	**.62185**	**.17660**	**.47572**	**.21141**	**2.5696**	**.07870**
Stddev	.00451	.00066	.00097	.00831	.00206	.02940	.00008	.0114	.00041
%RSD	1.7778	.19714	.45707	1.3356	1.1686	6.1807	.03756	.44184	.52373
#1	.25669	.33658	.21235	.62773	.17806	.45493	.21135	2.5776	.07899
#2	.25032	.33564	.21373	.61598	.17514	.49651	.21146	2.5615	.07841
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2849.3**	**51665.**	**6321.6**
Stddev	3.0	13.	22.5
%RSD	.10406	.02512	.35613
#1	2847.2	51656.	6305.7
#2	2851.4	51674.	6337.5

Sample Name: 280-98008-A-3-A Acquired: 6/13/2017 22:10:59 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376712 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09485**	**124.06**	**.06647**	**.01531**	**.71136**	**.00543**	**-.00098**	**21.074**	**.00388**
Stddev	.00049	.18	.00197	.00037	.00168	.00012	.00252	.021	.00014
%RSD	.51462	.14743	2.9677	2.4381	.23593	2.1438	256.53	.09870	3.6680
#1	.09519	124.19	.06507	.01557	.71255	.00535	.00080	21.089	.00398
#2	.09450	123.93	.06786	.01504	.71017	.00551	-.00276	21.059	.00378
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09030**	**1.7403**	**2.0183**	**209.74**	**9.6125**	**.23090**	**29.897**	**3.4361**	**.00033**
Stddev	.00157	.0372	.0001	.36	.0579	.00139	.055	.0086	.00030
%RSD	1.7412	2.1347	.00711	.17328	.60193	.60038	.18503	.25170	90.341
#1	.09141	1.7666	2.0182	210.00	9.6534	.23188	29.936	3.4423	.00012
#2	.08918	1.7140	2.0184	209.48	9.5716	.22991	29.858	3.4300	.00055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.44925**	**.51624**	**6.9863**	**.16727**	**.71259**	**.01589**	**-.00691**	**5.1757**	**11.076**
Stddev	.00384	.01031	.1367	.00427	.01048	.00502	.00628	.0850	.182
%RSD	.85384	1.9970	1.9567	2.5552	1.4706	31.606	90.877	1.6422	1.6422
#1	.45196	.52353	7.0830	.17029	.72000	.01944	-.00247	5.2358	11.205
#2	.44654	.50895	6.8896	.16425	.70518	.01234	-.01135	5.1156	10.947
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00581**	**.10547**	**.05398**	**.29633**	**.00360**	**.01442**	**.16776**	**.77240**	**.05991**
Stddev	.00236	.00022	.00367	.00827	.00055	.02397	.00011	.00131	.00156
%RSD	40.586	.20793	6.8009	2.7908	15.354	166.22	.06555	.17000	2.6065
#1	.00415	.10562	.05138	.30218	.00399	-.00253	.16784	.77333	.05880
#2	.00748	.10531	.05657	.29049	.00321	.03137	.16769	.77147	.06101
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2934.4**	**52974.**	**6376.8**
Stddev	1.9	15.	4.6
%RSD	.06466	.02822	.07196
#1	2935.8	52964.	6373.5
#2	2933.1	52985.	6380.0

Sample Name: 280-98008-A-4-A Acquired: 6/13/2017 22:13:27 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376712 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .12363	101.65	.09801	.02273	.69027	.00553	-.00310	331.85	.09985
Stddev	.00118	.10	.00297	.00104	.00056	.00008	.00121	2.05	.00305
%RSD	.95450	.10114	3.0310	4.5791	.08125	1.4468	38.880	.61633	3.0536
#1	.12280	101.73	.10011	.02346	.69067	.00559	-.00225	330.41	.10201
#2	.12447	101.58	.09591	.02199	.68988	.00547	-.00395	333.30	.09770
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000								
Low Limit	-.02000								

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07526	3.8147	4.2325	162.83	9.4688	.20442	25.380	3.0032	.00398
Stddev	.00260	.1221	.0049	.75	.0657	.00247	.030	.0076	.00068
%RSD	3.4589	3.1994	.11505	.45844	.69332	1.2087	.11712	.25151	17.008
#1	.07710	3.9010	4.2290	163.35	9.5152	.20267	25.401	3.0086	.00446
#2	.07342	3.7284	4.2359	162.30	9.4224	.20617	25.359	2.9979	.00350
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.62799	.54700	4.9809	.36977	1.3877	.01350	.00245	3.5204	7.5336
Stddev	.00887	.01729	.1369	.00984	.0379	.00222	.00523	.0041	.0088
%RSD	1.4130	3.1612	2.7484	2.6607	2.7295	16.433	213.51	.11712	.11712
#1	.62172	.55922	5.0777	.37673	1.4145	.01193	.00615	3.5233	7.5398
#2	.63427	.53477	4.8841	.36282	1.3610	.01507	-.00125	3.5174	7.5273
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01244	.52830	.04177	.43433	.00530	-.01886	.15444	1.4944	.04797
Stddev	.00217	.00039	.00245	.01049	.00334	.07635	.00095	.0065	.00075
%RSD	17.427	.07310	5.8604	2.4160	63.033	404.87	.61353	.43747	1.5553
#1	.01398	.52803	.04004	.44175	.00766	.03513	.15511	1.4990	.04850
#2	.01091	.52857	.04350	.42691	.00294	-.07284	.15377	1.4897	.04745
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	2779.9	50431.	6341.8
Stddev	5.3	232.	30.9
%RSD	.19202	.46060	.48722
#1	2783.6	50595.	6363.7
#2	2776.1	50266.	6320.0

Sample Name: 280-98008-A-6-A Acquired: 6/13/2017 22:16:01 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376712 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .**11128**	**99.956**	**.10840**	**.02313**	**.62968**	**.00541**	**-.00016**	**416.49**	**.08198**
Stddev	.00025	.093	.00175	.00066	.00022	.00003	.00494	.99	.00225
%RSD	.22550	.09320	1.6137	2.8548	.03507	.54367	3047.2	.23885	2.7463
#1	.11146	99.890	.10964	.02359	.62984	.00539	-.00365	417.20	.08357
#2	.11110	100.02	.10716	.02266	.62953	.00543	.00333	415.79	.08039
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.10000								
Low Limit	-.02000								

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07485**	**3.2164**	**3.4802**	**162.03**	**9.7751**	**.20755**	**26.258**	**3.0036**	**.00260**
Stddev	.00233	.0859	.0051	.57	.0028	.00030	.026	.0008	.00029
%RSD	3.1160	2.6696	.14773	.35206	.02884	.14309	.10062	.02657	11.297
#1	.07650	3.2771	3.4838	162.43	9.7771	.20776	26.240	3.0042	.00239
#2	.07320	3.1556	3.4766	161.62	9.7731	.20734	26.277	3.0030	.00281
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.66736**	**.51443**	**5.0646**	**.35621**	**1.4239**	**.00910**	**.00175**	**3.7520**	**8.0294**
Stddev	.00022	.01363	.1365	.00778	.0409	.00187	.00247	.0368	.0788
%RSD	.03243	2.6495	2.6948	2.1833	2.8723	20.521	140.75	.98094	.98094
#1	.66751	.52407	5.1611	.36171	1.4528	.00778	.00001	3.7781	8.0851
#2	.66721	.50479	4.9681	.35071	1.3950	.01042	.00350	3.7260	7.9737
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01609**	**.62865**	**.03907**	**.41535**	**-.00092**	**-.04223**	**.14852**	**1.4084**	**.05131**
Stddev	.00040	.00005	.00084	.00026	.00402	.00751	.00050	.0020	.00156
%RSD	2.4822	.00801	2.1383	.06296	437.85	17.796	.33692	.14246	3.0373
#1	.01581	.62861	.03967	.41554	-.00376	-.04754	.14817	1.4070	.05021
#2	.01638	.62868	.03848	.41517	.00193	-.03691	.14888	1.4098	.05241
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2778.8**	**49774.**	**6206.0**
Stddev	1.0	85.	8.9
%RSD	.03777	.17024	.14382
#1	2779.5	49834.	6199.7
#2	2778.0	49714.	6212.3

Sample Name: CCVH-4579429 Acquired: 6/13/2017 22:18:34 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00118**	**47.513**	**-.00990**	**.00192**	**.00057**	**.00006**	**.96413**	**.22237**	**.00073**	**-.00112**	**.00093**	**.01360**
Stddev	.00026	.037	.00276	.00006	.00025	.00005	.02799	.07909	.00033	.00012	.00005	.00014
%RSD	21.748	.07826	27.875	2.9262	42.899	79.003	2.9035	35.565	44.827	10.935	5.7824	1.0484
#1	.00137	47.487	-.00795	.00188	.00075	.00003	.98393	.27829	.00050	-.00103	.00089	.01370
#2	.00100	47.540	-.01186	.00196	.00040	.00009	.94434	.16645	.00096	-.00121	.00097	.01350
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.879**	**.12900**	**.00435**	**.03998**	**-.00128**	**-.00159**	**246.69**	**.00094**	**.00506**	**.00122**	**4.9503**	**.00418**
Stddev	.008	.06670	.00180	.00299	.00015	.00030	.25	.00053	.00052	.00062	.1632	.00576
%RSD	.01617	51.703	41.227	7.4756	11.439	18.693	.10241	56.476	10.211	50.593	3.2972	138.00
#1	48.873	.08184	.00309	.04209	-.00118	-.00138	246.87	.00056	.00542	.00165	5.0658	.00010
#2	48.885	.17616	.00562	.03787	-.00139	-.00181	246.51	.00131	.00469	.00078	4.8349	.00825
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00243**	**.00843**	**.01804**	**-.00009**	**.00066**	W **4.7327**	**.01803**	**.00183**	**9.5521**	**.01229**	**.00104**	**.08021**
Stddev	.00255	.00805	.01722	.00046	.00010	.0217	.00010	.00054	.0689	.00016	.00014	.00133
%RSD	104.62	95.501	95.501	516.45	14.648	.45812	.57007	29.389	.72124	1.3149	13.658	1.6611
#1	-.00423	.01412	.03021	.00024	.00073	4.7480	.01811	.00221	9.6008	.01218	.00114	.08115
#2	-.00063	.00274	.00586	-.00041	.00059	4.7173	.01796	.00145	9.5034	.01241	.00094	.07927
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Pass	None	None	None
Value						5.0000						
Range						-5.0000%						

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2736.5**	**48023.**	**5650.7**
Stddev	1.8	457.	22.4
%RSD	.06462	.95091	.39636
#1	2735.3	47700.	5666.5
#2	2737.8	48346.	5634.9

Sample Name: CCV-4580817 Acquired: 6/13/2017 22:21:07 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49340**	**.52257**	**.96858**	**.49474**	**.50140**	**.47645**	**.00123**	**5.0303**	**.49242**	**.49735**	**.49831**	**.50188**	**2.4256**
Stddev	.00149	.01372	.02307	.00895	.00066	.00024	.00278	.0167	.01113	.01195	.00979	.00168	.0018
%RSD	.30150	2.6250	2.3814	1.8085	.13133	.04981	226.37	.33211	2.2604	2.4029	1.9638	.33456	.07220
#1	.49235	.53227	.98489	.50107	.50187	.47662	.00319	5.0422	.50029	.50580	.50522	.50069	2.4268
#2	.49445	.51287	.95227	.48842	.50094	.47628	-.00074	5.0185	.48454	.48890	.49139	.50306	2.4243
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.501**	**.98167**	**19.885**	**.48179**	**.49768**	**5.0156**	**.49632**	**1.0016**	**1.0128**	**-.00610**	**.97618**	**.96531**	**4.7765**
Stddev	.026	.00205	.014	.00019	.01186	.0031	.01043	.0210	.0197	.00176	.02043	.01892	.0474
%RSD	.05212	.20843	.07183	.04022	2.3833	.06249	2.1022	2.1002	1.9479	28.931	2.0926	1.9598	.99340
#1	50.520	.98022	19.875	.48193	.50606	5.0133	.50370	1.0165	1.0267	-.00734	.99063	.97868	4.7430
#2	50.483	.98312	19.895	.48165	.48929	5.0178	.48895	.98671	.99882	-.00485	.96174	.95193	4.8101
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.222**	**1.0129**	**.47546**	**.01130**	**.46925**	**.96309**	**-.02601**	**.48250**	**.48215**	**.49663**
Stddev	.102	.0211	.00015	.00172	.00058	.01991	.01521	.00003	.00117	.00057
%RSD	.99340	2.0847	.03100	15.205	.12271	2.0678	58.503	.00573	.24325	.11396
#1	10.150	1.0279	.47556	.01251	.46885	.97717	-.01525	.48248	.48132	.49703
#2	10.294	.99799	.47535	.01008	.46966	.94900	-.03676	.48252	.48298	.49623
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2763.8**	**51122.**	**6058.4**
Stddev	4.3	105.	19.8
%RSD	.15654	.20484	.32750
#1	2766.9	51196.	6072.4
#2	2760.8	51048.	6044.3

Sample Name: CCB Acquired: 6/13/2017 22:23:35 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00088**	**.00288**	**-.00240**	**.00053**	**.00050**	**.00008**	**-.00257**	**-.00822**	**.00013**	**.00017**	**.00027**	**-.00191**	**.00238**
Stddev	.00025	.00001	.00113	.00068	.00032	.00002	.00336	.00108	.00001	.00012	.00040	.00015	.00139
%RSD	28.054	.23496	47.035	127.73	63.881	27.625	130.80	13.174	11.084	70.783	147.91	8.1094	58.403
#1	.00070	.00288	-.00160	.00101	.00027	.00010	-.00019	-.00745	.00014	.00009	.00055	-.00180	.00336
#2	.00105	.00287	-.00320	.00005	.00072	.00006	-.00494	-.00898	.00012	.00026	-.00001	-.00202	.00140
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.20297**	**.00281**	**.00655**	**.00005**	**.00052**	**-.03777**	**-.00045**	**.00577**	**-.00280**	**-.01037**	**.00166**	**-.00528**	**.02629**
Stddev	.07102	.00193	.00808	.00007	.00008	.00405	.00015	.00025	.00141	.00893	.00008	.00604	.00193
%RSD	34.992	68.694	123.24	149.60	15.044	10.734	33.219	4.3819	50.508	86.137	4.6468	114.21	7.3568
#1	.25319	.00418	.01227	.00010	.00057	-.03490	-.00035	.00595	-.00180	-.01669	.00161	-.00955	.02492
#2	.15275	.00145	.00084	-.00000	.00046	-.04063	-.00056	.00559	-.00380	-.00405	.00172	-.00102	.02766
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05626**	**.00169**	**.00014**	**.00416**	**-.00039**	**-.00088**	**-.00925**	**-.00001**	**-.00044**	**.00086**
Stddev	.00414	.00144	.00017	.00017	.00019	.00236	.02084	.00026	.00002	.00152
%RSD	7.3568	85.524	119.06	3.9985	47.190	267.48	225.26	3198.8	5.2342	176.06
#1	.05333	.00271	.00026	.00404	-.00026	-.00255	.00548	-.00019	-.00045	.00194
#2	.05918	.00067	.00002	.00427	-.00052	.00079	-.02399	.00018	-.00042	-.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2714.6**	**50469.**	**5759.4**
Stddev	.6	98.	33.3
%RSD	.02055	.19474	.57781
#1	2715.0	50539.	5782.9
#2	2714.2	50400.	5735.9

Sample Name: CCVL-4590576 Acquired: 6/13/2017 22:26:12 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01100**	**.11447**	**.01671**	**.09936**	**.01048**	**.00088**	**.11065**	**.20074**	**.00529**	**.01067**	**.00994**	**.01425**
Stddev	.00010	.00425	.00065	.00187	.00015	.00010	.00365	.00120	.00014	.00069	.00057	.00066
%RSD	.94676	3.7137	3.9194	1.8839	1.4089	11.925	3.3006	.59701	2.6475	6.5048	5.7314	4.6043
#1	.01093	.11747	.01625	.10068	.01038	.00080	.11324	.19990	.00539	.01116	.01035	.01379
#2	.01108	.11146	.01717	.09804	.01059	.00095	.10807	.20159	.00519	.01018	.00954	.01472
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10016**	**3.3561**	**.02460**	**.21875**	**.01051**	**.01858**	**.98940**	**.04176**	**2.8834**	**.00804**	**.08523**	**.01758**
Stddev	.00155	.0319	.00095	.00755	.00012	.00097	.00279	.00123	.0720	.00067	.00780	.00043
%RSD	1.5425	.95065	3.8668	3.4532	1.1402	5.2196	.28246	2.9534	2.4975	8.3764	9.1493	2.4505
#1	.09907	3.3335	.02393	.22409	.01059	.01927	.99138	.04264	2.9343	.00852	.09074	.01789
#2	.10125	3.3786	.02527	.21341	.01042	.01790	.98743	.04089	2.8325	.00756	.07972	.01728
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01763**	**.47709**	**1.0210**	**.09994**	**.01003**	F **.02103**	**.00914**	F **.01981**	F **-.00533**	**.00969**	**.01997**	**.01606**
Stddev	.00294	.01155	.0247	.00190	.00003	.00241	.00003	.00313	.00560	.00006	.00023	.00484
%RSD	16.703	2.4216	2.4216	1.9052	.26235	11.452	.36284	15.796	105.18	.61695	1.1764	30.161
#1	.01971	.46892	1.0035	.10129	.01005	.01933	.00917	.01759	-.00929	.00965	.02014	.01263
#2	.01555	.48526	1.0385	.09860	.01001	.02274	.00912	.02202	-.00136	.00973	.01981	.01948
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value						.01500		.01500	.06000			
Range						30.000%		30.000%	-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2780.8**	**50861.**	**5864.3**
Stddev	27.6	68.	25.7
%RSD	.99244	.13461	.43893
#1	2761.3	50910.	5882.5
#2	2800.3	50813.	5846.1

Sample Name: MB 280-376575/1-A Acquired: 6/13/2017 22:28:49 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: 6/13 Custom ID2: Custom ID3:
Comment: 376575 6010c s

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00096**	**.02931**	**.00066**	**.01511**	**.00154**	**-.00008**	**.00078**	F **.27051**	**.00047**
Stddev	.00012	.00162	.00055	.00012	.00042	.00001	.00459	.00406	.00003
%RSD	12.324	5.5214	82.720	.79984	27.084	6.9251	585.57	1.4998	5.7413
#1	.00088	.03045	.00105	.01520	.00125	-.00008	.00403	.27338	.00045
#2	.00105	.02816	.00028	.01502	.00183	-.00009	-.00246	.26764	.00049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								.20000	
Low Limit								-.20000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00000**	**.00141**	**-.00089**	W **.07411**	**.25358**	**.00121**	**.06986**	**.00129**	**.00028**
Stddev	.00001	.00040	.00001	.00072	.02307	.00241	.00176	.00000	.00030
%RSD	132.41	28.562	1.3295	.97144	9.0980	199.41	2.5180	.24108	107.42
#1	-.00000	.00113	-.00088	.07360	.26989	-.00050	.07110	.00128	.00007
#2	-.00001	.00170	-.00090	.07462	.23727	.00291	.06861	.00129	.00049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.05000					
Low Limit				-.05000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.23473**	**.00078**	**.02306**	**.00034**	**-.00262**	**.00126**	**.00013**	**.06730**	**.14402**
Stddev	.01512	.00043	.00074	.00248	.01568	.00128	.01549	.00482	.01033
%RSD	6.4429	54.495	3.1998	735.99	599.42	101.70	11765.	7.1692	7.1692
#1	.24542	.00108	.02254	-.00142	-.01371	.00216	-.01082	.07071	.15133
#2	.22403	.00048	.02358	.00209	.00847	.00035	.01109	.06389	.13672
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01154**	**.00089**	W **.00551**	**.00007**	**.00067**	**-.03133**	**.00029**	**.00262**	**-.00081**
Stddev	.00085	.00014	.00075	.00001	.00119	.01235	.00111	.00038	.00131
%RSD	7.3991	15.597	13.630	16.868	178.17	39.409	389.87	14.668	162.22
#1	.01214	.00099	.00604	.00008	.00151	-.02260	-.00050	.00290	.00012
#2	.01093	.00079	.00498	.00006	-.00017	-.04006	.00107	.00235	-.00173
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500						
Low Limit			-.00500						

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2772.9**	**51998.**	**5998.4**
Stddev	7.6	159.	30.7
%RSD	.27401	.30656	.51148
#1	2778.3	52111.	6020.1
#2	2767.5	51885.	5976.7

Sample Name: LCS 280-376575/2-A Acquired: 6/13/2017 22:31:26 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376575 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.09692**	F **3.6659**	F **1.8821**	F **.01520**	F **3.8269**	F **.09018**	**3.7157**	F **92.895**	F **.18899**
Stddev	.00009	.0145	.0505	.00000	.0198	.00059	.0954	.504	.00578
%RSD	.08915	.39654	2.6844	.01375	.51782	.64941	2.5676	.54298	3.0570
#1	.09686	3.6557	1.9178	.01520	3.8129	.08977	3.7832	92.539	.19307
#2	.09698	3.6762	1.8464	.01520	3.8409	.09059	3.6482	93.252	.18490
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	None	Chk Fail	Chk Fail
High Limit	.05700	2.3200	1.1000	1.1000	2.2400	.05700		57.000	.11000
Low Limit	.04350	1.6400	.85000	.81000	1.7400	.04200		41.000	.08700

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.89738**	F **.36946**	F **.47965**	F **1.8389**	F **96.140**	F **1.8449**	F **93.784**	F **.90134**	F **-.00191**
Stddev	.02543	.01127	.00301	.0082	.661	.0104	.208	.00280	.00019
%RSD	2.8337	3.0508	.62745	.44690	.68786	.56666	.22179	.31111	10.053
#1	.91536	.37743	.48177	1.8331	95.673	1.8375	93.931	.90333	-.00205
#2	.87940	.36149	.47752	1.8447	96.608	1.8523	93.637	.89936	-.00178
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit	.55000	.22000	.27500	1.2000	55.000	1.1000	55.000	.55000	1.1000
Low Limit	.43500	.18000	.22000	.87000	44.500	.90000	45.000	.44000	.86000

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **95.507**	F **.89697**	F **19.342**	F **.91874**	**-.00801**	F **.00015**	F **3.6793**	F **.06294**	**.13468**
Stddev	.318	.02685	.551	.02901	.00068	.00157	.1058	.00472	.01009
%RSD	.33303	2.9939	2.8499	3.1573	8.5481	1069.5	2.8763	7.4930	7.4930
#1	95.282	.91596	19.731	.93925	-.00850	.00126	3.7542	.05960	.12755
#2	95.732	.87798	18.952	.89823	-.00753	-.00097	3.6045	.06627	.14182
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	None	Chk Fail	Chk Fail	Chk Fail	None
High Limit	56.000	.55000	11.200	.55000		.55000	2.2000	7.0000	
Low Limit	45.000	.43500	8.0000	.43000		.41000	1.6600	1.0000	

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.00889**	F **1.8084**	F **1.8075**	F **.00661**	F **3.4341**	F **3.6172**	F **.92794**	F **.90785**	F **.03124**
Stddev	.00042	.0128	.0012	.00005	.0907	.0113	.00331	.00145	.00145
%RSD	4.6893	.70554	.06433	.72622	2.6414	.31185	.35658	.15949	4.6445
#1	.00919	1.7994	1.8083	.00664	3.4982	3.6252	.93028	.90683	.03022
#2	.00860	1.8175	1.8066	.00657	3.3700	3.6092	.92560	.90887	.03227
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit	2.2000	1.1000	1.2000	1.1000	2.2000	2.2000	.55000	.57000	.60000
Low Limit	1.6800	.89000	.80000	.88000	1.6800	1.7000	.44000	.38000	.40000

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2572.7**	**47394.**	**5690.5**
Stddev	7.4	28.	36.9
%RSD	.28634	.05888	.64906
#1	2567.5	47375.	5716.6
#2	2577.9	47414.	5664.4

Sample Name: 280-97958-A-1-A Acquired: 6/13/2017 22:33:52 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376575 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00007**	**107.58**	**.06125**	**.01391**	**1.9220**	**.00821**	**-.00311**	**21.924**	**.00054**
Stddev	.00009	1.37	.00438	.00015	.0198	.00017	.00094	.230	.00002
%RSD	143.35	1.2691	7.1566	1.1096	1.0276	2.0507	30.033	1.0471	3.0067
#1	-.00013	106.61	.05815	.01380	1.9081	.00809	-.00245	21.762	.00053
#2	.00000	108.54	.06435	.01402	1.9360	.00833	-.00378	22.087	.00055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10759**	**.20500**	**.08887**	**221.11**	**7.3285**	**.07591**	**16.177**	**2.1077**	**-.00002**
Stddev	.00260	.00540	.00120	2.19	.0236	.00190	.047	.0044	.00027
%RSD	2.4193	2.6358	1.3452	.98876	.32182	2.5057	.28916	.21052	1247.1
#1	.10943	.20882	.08971	219.56	7.3452	.07457	16.210	2.1109	.00017
#2	.10575	.20118	.08802	222.65	7.3118	.07726	16.144	2.1046	-.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.4136**	**.14445**	**1.0143**	**.11410**	**.61886**	**.01393**	**-.00067**	**3.0537**	**6.5349**
Stddev	.0131	.00387	.0246	.00201	.01551	.00605	.00511	.0473	.1012
%RSD	.92524	2.6776	2.4300	1.7649	2.5057	43.423	766.93	1.5485	1.5485
#1	1.4044	.14718	1.0317	.11553	.62983	.01820	.00295	3.0203	6.4634
#2	1.4229	.14171	.99689	.11268	.60790	.00965	-.00428	3.0871	6.6065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00984**	**.36081**	**.05676**	**.29075**	**.00624**	**-.03989**	**.32683**	**.40417**	**.08043**
Stddev	.00319	.00332	.00135	.00019	.00220	.00318	.00132	.00112	.00052
%RSD	32.383	.92119	2.3742	.06656	35.267	7.9723	.40404	.27706	.64279
#1	.00759	.35846	.05771	.29089	.00468	-.03764	.32777	.40338	.08007
#2	.01209	.36316	.05581	.29062	.00780	-.04213	.32590	.40496	.08080
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2870.5**	**51891.**	**6194.2**
Stddev	12.8	14.	74.2
%RSD	.44468	.02664	1.1982
#1	2879.6	51881.	6246.7
#2	2861.5	51901.	6141.7

Sample Name: 280-97958-A-1-Asd@5 Acquired: 6/13/2017 22:36:22 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376575 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00093**	**23.930**	**.01437**	**.00250**	**.42022**	**.00183**	**.00603**	**4.9267**	**.00044**
Stddev	.00017	.119	.00587	.00141	.00177	.00004	.00010	.0043	.00019
%RSD	17.949	.49555	40.837	56.164	.42139	2.4201	1.6822	.08828	42.937
#1	.00105	23.847	.01852	.00151	.41897	.00186	.00596	4.9236	.00031
#2	.00081	24.014	.01022	.00350	.42148	.00180	.00611	4.9298	.00058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02412**	**.04540**	**.01765**	**49.527**	**1.7632**	**.01888**	**3.6830**	**.46630**	**.00027**
Stddev	.00033	.00110	.00016	.171	.0021	.00003	.0032	.00043	.00048
%RSD	1.3861	2.4120	.92802	.34520	.11699	.16470	.08664	.09201	176.11
#1	.02435	.04618	.01753	49.406	1.7617	.01886	3.6807	.46599	-.00007
#2	.02388	.04463	.01776	49.648	1.7646	.01891	3.6852	.46660	.00061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.28663**	**.03173**	**.22511**	**.02593**	**.10813**	**.00453**	**-.00283**	**.69335**	**1.4838**
Stddev	.02011	.00120	.00756	.00019	.00586	.00105	.00105	.00822	.0176
%RSD	7.0149	3.7717	3.3562	.73037	5.4189	23.213	37.078	1.1850	1.1850
#1	.30085	.03258	.23045	.02606	.11227	.00527	-.00209	.68754	1.4713
#2	.27242	.03089	.21977	.02579	.10398	.00378	-.00357	.69916	1.4962
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00346**	**.08065**	**.01615**	**.06288**	**.00629**	**.01070**	**.07115**	**.09059**	**.01920**
Stddev	.00097	.00046	.00084	.00030	.00001	.03175	.00020	.00137	.00089
%RSD	28.085	.56660	5.2220	.47833	.11984	296.73	.28390	1.5128	4.6189
#1	.00415	.08033	.01555	.06267	.00628	.03316	.07129	.08962	.01857
#2	.00277	.08097	.01675	.06310	.00630	-.01175	.07101	.09156	.01983
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2828.8**	**51335.**	**5978.1**
Stddev	3.8	139.	47.8
%RSD	.13370	.27148	.79944
#1	2826.1	51434.	6011.9
#2	2831.5	51237.	5944.3

Sample Name: 280-97958-A-1-B MS Acquired: 6/13/2017 22:38:56 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376575 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09632**	**108.25**	**1.8782**	**.01296**	**6.1181**	**.09662**	W **3.6278**	**112.07**	**.18447**
Stddev	.00012	.28	.0276	.00219	.0089	.00012	.0843	.06	.00428
%RSD	.12864	.25917	1.4692	16.890	.14512	.12202	2.3241	.05048	2.3191
#1	.09624	108.06	1.8977	.01451	6.1243	.09653	3.6874	112.11	.18749
#2	.09641	108.45	1.8587	.01142	6.1118	.09670	3.5681	112.03	.18144
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.97178**	**.52707**	**.55674**	**161.57**	**99.468**	**1.8898**	**107.57**	**2.3165**	**-.00173**
Stddev	.02164	.01333	.00093	.20	.028	.0025	.22	.0005	.00007
%RSD	2.2269	2.5291	.16722	.12350	.02819	.13357	.20659	.02187	4.2156
#1	.98708	.53650	.55739	161.43	99.448	1.8880	107.73	2.3168	-.00178
#2	.95648	.51765	.55608	161.71	99.488	1.8916	107.41	2.3161	-.00168
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**95.205**	**.98716**	**18.981**	**.98959**	**.78045**	**.00908**	**3.5354**	**2.7402**	**5.8640**
Stddev	.344	.02168	.379	.02093	.02078	.00020	.0728	.0237	.0508
%RSD	.36145	2.1967	1.9967	2.1151	2.6627	2.2479	2.0588	.86626	.86626
#1	95.449	1.0025	19.249	1.0044	.79514	.00893	3.5869	2.7234	5.8281
#2	94.962	.97182	18.713	.97479	.76575	.00922	3.4840	2.7570	5.9000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01033**	**2.1710**	**1.8235**	**.23229**	**3.2047**	**3.6273**	**1.1317**	**1.2406**	**.10970**
Stddev	.00190	.0008	.0015	.00020	.0581	.0882	.0025	.0006	.00262
%RSD	18.342	.03796	.08279	.08624	1.8136	2.4325	.22216	.05165	2.3853
#1	.01167	2.1704	1.8224	.23243	3.2458	3.5649	1.1300	1.2411	.10785
#2	.00899	2.1715	1.8246	.23214	3.1636	3.6897	1.1335	1.2402	.11155
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2807.0**	**50731.**	**6170.3**
Stddev	1.7	262.	12.9
%RSD	.06220	.51591	.20904
#1	2805.8	50546.	6179.5
#2	2808.3	50916.	6161.2

Sample Name: 280-97958-A-1-C MSD Acquired: 6/13/2017 22:41:20 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376575 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09327**	**124.37**	**1.8378**	**.01105**	**5.8977**	**.09568**	W **3.5587**	**111.60**	**.18157**
Stddev	.00041	.20	.0179	.00067	.0140	.00019	.0527	.20	.00232
%RSD	.43614	.16388	.97551	6.0557	.23775	.19968	1.4800	.17919	1.2752
#1	.09355	124.23	1.8505	.01058	5.8878	.09555	3.5959	111.46	.18321
#2	.09298	124.51	1.8252	.01153	5.9076	.09582	3.5214	111.74	.17993
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.97021**	**.57389**	**.55775**	**184.88**	**97.657**	**1.8655**	**106.79**	**2.5231**	**-.00225**
Stddev	.01481	.01024	.00079	.09	.128	.0040	.01	.0009	.00011
%RSD	1.5267	1.7846	.14165	.04999	.13117	.21657	.00587	.03481	4.7899
#1	.98069	.58114	.55831	184.82	97.566	1.8627	106.78	2.5225	-.00218
#2	.95974	.56665	.55719	184.95	97.747	1.8684	106.79	2.5238	-.00233
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**93.389**	**.98894**	**18.617**	**.98215**	**.73744**	**.01060**	**3.4650**	**2.5940**	**5.5511**
Stddev	.556	.01387	.259	.01392	.00506	.00248	.0487	.0098	.0210
%RSD	.59588	1.4023	1.3893	1.4172	.68578	23.419	1.4055	.37833	.37833
#1	92.995	.99875	18.800	.99199	.74102	.01236	3.4995	2.5870	5.5362
#2	93.782	.97914	18.434	.97231	.73387	.00884	3.4306	2.6009	5.5659
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01097**	**2.1455**	**1.7902**	**.21579**	**3.1417**	**3.5314**	**1.1701**	**1.2645**	**.11801**
Stddev	.00011	.0014	.0016	.00081	.0434	.0186	.0009	.0053	.00254
%RSD	.99379	.06642	.09089	.37638	1.3814	.52723	.07316	.41877	2.1546
#1	.01089	2.1445	1.7913	.21521	3.1724	3.5446	1.1707	1.2608	.11621
#2	.01105	2.1465	1.7890	.21636	3.1110	3.5183	1.1695	1.2683	.11981
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2813.6**	**50880.**	**6305.5**
Stddev	4.8	258.	7.4
%RSD	.16906	.50653	.11736
#1	2817.0	51063.	6300.3
#2	2810.3	50698.	6310.8

Sample Name: 280-97958-A-1-Apds Acquired: 6/13/2017 22:43:45 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376575 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04576**	**106.60**	**.24089**	**.10151**	**1.9856**	**.05184**	**-.00097**	**39.638**	**.04582**
Stddev	.00010	.08	.00604	.00117	.0029	.00016	.00283	.005	.00119
%RSD	.21315	.07848	2.5071	1.1572	.14513	.30381	291.46	.01265	2.5992
#1	.04569	106.66	.24516	.10234	1.9876	.05196	.00103	39.642	.04667
#2	.04582	106.54	.23662	.10068	1.9835	.05173	-.00297	39.634	.04498
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.14920**	**.24604**	**.13654**	**217.73**	**26.062**	**.16794**	**34.187**	**2.1090**	**.04395**
Stddev	.00357	.00776	.00030	.56	.074	.00268	.055	.0008	.00145
%RSD	2.3954	3.1524	.22168	.25561	.28382	1.5963	.16041	.03841	3.3008
#1	.15172	.25153	.13675	217.33	26.114	.16983	34.149	2.1084	.04497
#2	.14667	.24056	.13633	218.12	26.009	.16604	34.226	2.1095	.04292
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**21.013**	**.18490**	**2.8150**	**.20067**	**.61590**	**.10205**	**.17169**	**7.4367**	**15.915**
Stddev	.130	.00608	.0734	.00619	.02187	.00748	.00849	.0266	.057
%RSD	.61946	3.2896	2.6082	3.0829	3.5503	7.3278	4.9469	.35818	.35818
#1	20.921	.18920	2.8669	.20505	.63136	.10733	.17770	7.4556	15.955
#2	21.105	.18060	2.7631	.19630	.60043	.09676	.16569	7.4179	15.874
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10260**	**.40048**	**.23438**	**.33554**	**.17220**	**.46763**	**.36910**	**.57912**	**.13295**
Stddev	.00170	.00012	.00059	.00148	.00053	.00145	.00032	.00209	.00111
%RSD	1.6574	.02881	.25228	.44231	.30984	.30938	.08611	.36175	.83624
#1	.10380	.40040	.23480	.33659	.17258	.46865	.36932	.58060	.13374
#2	.10140	.40056	.23396	.33449	.17182	.46660	.36887	.57764	.13217
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2878.5**	**52256.**	**6328.7**
Stddev	2.7	190.	11.4
%RSD	.09379	.36431	.18043
#1	2880.4	52390.	6320.7
#2	2876.6	52121.	6336.8

Sample Name: 280-97958-A-2-A Acquired: 6/13/2017 22:46:12 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376575 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00047**	**89.752**	**.03261**	**.00592**	**.63837**	**.00462**	**-.00176**	**5.9219**	**.00060**
Stddev	.00042	.267	.00447	.00036	.00231	.00012	.00303	.0051	.00041
%RSD	90.247	.29779	13.721	6.1194	.36165	2.6062	172.18	.08582	68.728
#1	-.00077	89.563	.03577	.00566	.63673	.00454	-.00390	5.9183	.00089
#2	-.00017	89.941	.02945	.00618	.64000	.00471	.00038	5.9255	.00031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03245**	**.12898**	**.04115**	**118.28**	**3.5153**	**.06838**	**6.5939**	**1.3013**	**.00036**
Stddev	.00085	.00374	.00119	.06	.0454	.00144	.0009	.0032	.00027
%RSD	2.6272	2.9031	2.8839	.05190	1.2920	2.1128	.01337	.24965	76.469
#1	.03306	.13163	.04199	118.33	3.5474	.06940	6.5946	1.3036	.00016
#2	.03185	.12633	.04031	118.24	3.4832	.06736	6.5933	1.2990	.00055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.59871**	**.04468**	**.71357**	**.08077**	**.41292**	**.00830**	**-.00309**	**3.4264**	**7.3325**
Stddev	.01042	.00136	.02302	.00068	.00365	.00264	.00052	.0602	.1289
%RSD	1.7397	3.0347	3.2262	.84011	.88331	31.744	16.956	1.7579	1.7579
#1	.59135	.04564	.72985	.08125	.41550	.00644	-.00346	3.4690	7.4236
#2	.60608	.04372	.69729	.08029	.41034	.01017	-.00272	3.3838	7.2413
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00905**	**.16625**	**.04731**	**.28227**	**.00654**	**-.03467**	**.27545**	**.14253**	**.05211**
Stddev	.00089	.00141	.00161	.00103	.00216	.03636	.00013	.00027	.00106
%RSD	9.8219	.84677	3.3988	.36580	33.068	104.89	.04850	.18669	2.0395
#1	.00968	.16525	.04617	.28154	.00807	-.06038	.27536	.14234	.05135
#2	.00842	.16724	.04845	.28300	.00501	-.00895	.27555	.14272	.05286
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2846.2**	**51162.**	**6122.6**
Stddev	5.1	108.	3.7
%RSD	.18073	.21075	.06004
#1	2842.6	51086.	6125.2
#2	2849.9	51239.	6120.0

Sample Name: 280-97958-A-3-A Acquired: 6/13/2017 22:48:45 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376575 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00111**	**110.67**	**.11339**	**.00475**	**2.1215**	**.00534**	**-.00206**	**27.740**	**.18527**
Stddev	.00010	.68	.00440	.00066	.0070	.00017	.00059	.088	.00460
%RSD	9.0332	.61825	3.8763	13.946	.32838	3.2369	28.567	.31556	2.4824
#1	.00118	110.19	.11650	.00521	2.1165	.00522	-.00248	27.678	.18852
#2	.00104	111.16	.11028	.00428	2.1264	.00547	-.00165	27.802	.18202
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03072**	**.48472**	**.15165**	**382.18**	**3.5212**	**.05141**	**8.2662**	**2.9386**	**.00332**
Stddev	.00116	.01298	.00057	1.35	.0227	.00226	.0384	.0056	.00048
%RSD	3.7898	2.6775	.37779	.35354	.64470	4.3886	.46408	.18972	14.466
#1	.03154	.49390	.15125	381.22	3.5372	.05301	8.2934	2.9426	.00366
#2	.02990	.47554	.15206	383.13	3.5051	.04981	8.2391	2.9347	.00298
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49920**	**.04794**	**1.8724**	**.28547**	**.88676**	**.03089**	**.00762**	**2.9836**	**6.3849**
Stddev	.01782	.00007	.0558	.00610	.01125	.00149	.00119	.0372	.0795
%RSD	3.5696	.13935	2.9812	2.1360	1.2689	4.8324	15.571	1.2451	1.2451
#1	.48660	.04789	1.9119	.28978	.89472	.02983	.00846	2.9573	6.3287
#2	.51180	.04798	1.8329	.28116	.87880	.03194	.00678	3.0099	6.4411
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02215**	**.96043**	**.08412**	**.50677**	**.00658**	**.06995**	**.70692**	**.71182**	**.10578**
Stddev	.00188	.00544	.00397	.00043	.00439	.00204	.00034	.00219	.00025
%RSD	8.4857	.56674	4.7243	.08397	66.762	2.9132	.04864	.30775	.24053
#1	.02082	.95658	.08693	.50707	.00347	.06851	.70668	.71337	.10560
#2	.02348	.96427	.08131	.50647	.00968	.07139	.70716	.71027	.10596
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2761.7**	**49728.**	**5974.6**
Stddev	4.8	95.	32.0
%RSD	.17218	.19121	.53482
#1	2758.3	49660.	5997.2
#2	2765.0	49795.	5952.0

Sample Name: 280-97958-A-5-A Acquired: 6/13/2017 22:51:15 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376575 6010c s

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00325**	**86.149**	**.23453**	**.00110**	**.81337**	**.00829**	**-.00121**	**6.1482**	**.01094**
Stddev	.00083	.188	.00766	.00044	.00151	.00009	.00010	.0371	.00044
%RSD	25.664	.21844	3.2679	40.021	.18543	1.0359	8.5296	.60399	3.9839
#1	.00384	86.282	.23995	.00141	.81443	.00835	-.00113	6.1744	.01125
#2	.00266	86.016	.22911	.00079	.81230	.00823	-.00128	6.1219	.01063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05728**	**1.0154**	**1.4259**	W **802.13**	**3.2498**	**.05851**	**6.6038**	**5.0772**	**.03484**
Stddev	.00286	.0397	.0061	.55	.0596	.00020	.0231	.0230	.00177
%RSD	4.9850	3.9070	.42515	.06864	1.8336	.34497	.34930	.45325	5.0700
#1	.05930	1.0434	1.4301	802.52	3.2919	.05865	6.6201	5.0934	.03609
#2	.05526	.98734	1.4216	801.74	3.2076	.05837	6.5875	5.0609	.03360
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				500.00					
Low Limit				40.000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8313**	**.24719**	**1.0861**	**.61343**	**3.0790**	**.07591**	**.01771**	**2.6681**	**5.7096**
Stddev	.0478	.01005	.0346	.02212	.0873	.00415	.00208	.0233	.0499
%RSD	2.6122	4.0662	3.1818	3.6055	2.8364	5.4644	11.733	.87413	.87413
#1	1.8651	.25429	1.1105	.62907	3.1407	.07884	.01918	2.6516	5.6744
#2	1.7974	.24008	1.0616	.59779	3.0172	.07297	.01624	2.6846	5.7449
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11820**	**.19482**	**.08739**	**.35058**	**.00176**	**.18908**	**1.0223**	**4.2421**	**.09776**
Stddev	.00597	.00066	.00339	.00365	.00016	.04579	.0053	.0215	.00185
%RSD	5.0472	.34066	3.8821	1.0400	8.9079	24.218	.51996	.50633	1.8895
#1	.12242	.19529	.08499	.35316	.00165	.22146	1.0261	4.2573	.09906
#2	.11398	.19435	.08979	.34800	.00187	.15670	1.0186	4.2270	.09645
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2814.1**	**50972.**	**6228.0**
Stddev	3.8	168.	29.6
%RSD	.13457	.32911	.47475
#1	2811.4	50853.	6248.9
#2	2816.8	51090.	6207.1

Sample Name: CCVH-4579429 Acquired: 6/13/2017 22:53:49 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00119**	**47.457**	**-.00721**	**.00069**	**.00107**	**.00009**	**.97290**	**-.00698**	**.00031**	**-.00103**	**.00036**	**.01249**	**48.836**
Stddev	.00080	.045	.00445	.00036	.00009	.00004	.02566	.00277	.00015	.00032	.00014	.00076	.133
%RSD	67.412	.09568	61.696	52.414	8.6271	46.967	2.6378	39.727	47.210	31.469	37.103	6.0533	.27269
#1	.00062	47.425	-.00407	.00044	.00100	.00013	.99105	-.00894	.00021	-.00080	.00027	.01196	48.930
#2	.00175	47.489	-.01036	.00095	.00113	.00006	.95476	-.00502	.00041	-.00126	.00046	.01302	48.741
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.14183**	**.00099**	**.04101**	**-.00082**	**-.00160**	**247.07**	**.00174**	**.00782**	**-.00214**	**4.9304**	**.00909**	**-.00913**	**-.00427**
Stddev	.00602	.00059	.00337	.00007	.00005	.75	.00007	.00125	.00094	.1221	.00275	.00865	.03762
%RSD	4.2451	59.335	8.2088	9.0612	3.0954	.30233	3.8430	15.932	43.706	2.4754	30.218	94.795	881.35
#1	.13757	.00140	.04339	-.00077	-.00157	246.54	.00169	.00871	-.00280	5.0167	.00715	-.00301	-.03087
#2	.14609	.00057	.03863	-.00087	-.00164	247.60	.00178	.00694	-.00148	4.8441	.01103	-.01525	.02233
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00914**	**.00039**	**.00060**	**4.7633**	**.01717**	**.00249**	**9.6740**	**.01318**	**.00132**	**.08504**
Stddev	.08051	.00119	.00010	.0115	.00009	.00495	.0329	.00012	.00022	.00001
%RSD	881.35	301.99	17.374	.24165	.51460	198.36	.34019	.87634	16.460	.00779
#1	-.06607	-.00045	.00067	4.7714	.01723	.00599	9.6507	.01327	.00116	.08504
#2	.04780	.00123	.00052	4.7551	.01711	-.00100	9.6973	.01310	.00147	.08503
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2668.4**	**48250.**	**5793.3**
Stddev	1.2	115.	17.7
%RSD	.04459	.23843	.30586
#1	2669.2	48331.	5805.8
#2	2667.5	48168.	5780.8

Sample Name: CCV-4580817 Acquired: 6/13/2017 22:56:22 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49842**	**.54532**	**.97239**	**.49511**	**.50283**	**.47836**	**-.00126**	**5.0439**	**.49531**	**.49683**	**.49585**	**.50348**	**2.5098**
Stddev	.00243	.01871	.02364	.00931	.00211	.00116	.00494	.0234	.01210	.01403	.01331	.00152	.0046
%RSD	.48705	3.4311	2.4314	1.8798	.41907	.24343	393.23	.46441	2.4428	2.8242	2.6847	.30241	.18479
#1	.50014	.55855	.98911	.50169	.50134	.47753	.00224	5.0273	.50387	.50675	.50527	.50456	2.5131
#2	.49670	.53209	.95567	.48853	.50432	.47918	-.00475	5.0604	.48675	.48691	.48644	.50240	2.5065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.961**	**.98728**	**20.287**	**.49162**	**.49294**	**5.0743**	**.49615**	**1.0048**	**1.0137**	**-.01426**	**.98086**	**.97595**	**4.8321**
Stddev	.311	.00317	.093	.00183	.01290	.0030	.01202	.0258	.0209	.01289	.02605	.01217	.0051
%RSD	.60991	.32110	.45962	.37317	2.6164	.05955	2.4218	2.5680	2.0651	90.436	2.6557	1.2472	.10626
#1	50.741	.98503	20.353	.49292	.50206	5.0765	.50465	1.0230	1.0285	-.02338	.99928	.98456	4.8285
#2	51.181	.98952	20.221	.49032	.48382	5.0722	.48766	.98656	.99894	-.00514	.96244	.96734	4.8357
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.341**	**1.0022**	**.48066**	**.01011**	**.47845**	**.98468**	**.02511**	**.48750**	**.49345**	**.49464**
Stddev	.011	.0224	.00146	.00175	.00210	.01846	.02903	.00240	.00080	.00045
%RSD	.10626	2.2384	.30369	17.335	.43983	1.8748	115.59	.49192	.16182	.09086
#1	10.333	1.0181	.47962	.00887	.47993	.99774	.00459	.48920	.49402	.49496
#2	10.348	.98637	.48169	.01135	.47696	.97163	.04564	.48581	.49289	.49432
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2709.6**	**49533.**	**5798.8**
Stddev	4.8	305.	49.2
%RSD	.17730	.61653	.84818
#1	2713.0	49318.	5833.6
#2	2706.2	49749.	5764.1

Sample Name: CCB Acquired: 6/13/2017 22:58:50 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00061**	**.00514**	**.00276**	**.00114**	**.00044**	**.00002**	**-.00152**	**-.00997**	**.00041**	**.00009**	**.00036**	**-.00101**	**.01440**
Stddev	.00019	.00006	.00940	.00078	.00027	.00002	.00005	.00157	.00016	.00007	.00019	.00026	.00185
%RSD	30.115	1.1054	341.09	68.514	60.553	119.58	3.0603	15.709	39.697	81.210	53.117	26.158	12.815
#1	.00048	.00518	.00940	.00170	.00025	.00003	-.00148	-.00886	.00030	.00014	.00050	-.00119	.01570
#2	.00075	.00510	-.00389	.00059	.00063	.00000	-.00155	-.01107	.00053	.00004	.00022	-.00082	.01309
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.21502**	**.00402**	**.00409**	**.00014**	**.00004**	**-.07282**	**-.00028**	**.00142**	**-.00147**	**-.01252**	**.00302**	**-.00980**	**.02145**
Stddev	.03189	.00058	.00108	.00004	.00054	.00427	.00002	.00246	.00133	.00363	.00268	.00208	.03770
%RSD	14.833	14.553	26.371	26.267	1253.1	5.8674	6.3252	173.67	90.376	28.975	88.597	21.183	175.73
#1	.23757	.00443	.00485	.00016	-.00034	-.07584	-.00027	-.00032	-.00053	-.01509	.00492	-.01127	.04811
#2	.19247	.00360	.00333	.00011	.00042	-.06980	-.00030	.00316	-.00241	-.00996	.00113	-.00833	-.00520
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04591**	**.00147**	**.00011**	**.00385**	**-.00004**	**.00282**	**-.04356**	**.00002**	**-.00025**	**.00022**
Stddev	.08068	.00052	.00002	.00342	.00028	.00180	.06256	.00046	.00025	.00131
%RSD	175.73	35.225	13.549	88.815	777.76	63.730	143.62	2325.4	99.629	601.23
#1	.10296	.00110	.00013	.00143	-.00023	.00155	.00068	.00034	-.00042	.00115
#2	-.01114	.00183	.00010	.00628	.00016	.00409	-.08779	-.00030	-.00007	-.00071
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2706.8**	**49742.**	**5711.9**
Stddev	2.5	86.	3.4
%RSD	.09354	.17385	.05918
#1	2708.6	49804.	5714.3
#2	2705.0	49681.	5709.5

Sample Name: CCVL-4590576 Acquired: 6/13/2017 23:01:28 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01044**	**.11396**	**.01480**	**.09840**	**.01082**	**.00084**	**.11715**	**.20072**	**.00535**	**.01041**	**.01020**	**.01466**
Stddev	.00050	.00436	.00146	.00257	.00022	.00007	.00250	.00011	.00029	.00072	.00075	.00032
%RSD	4.8139	3.8283	9.8868	2.6127	2.0379	8.7616	2.1341	.05320	5.4844	6.9642	7.3163	2.1903
#1	.01080	.11705	.01377	.10022	.01097	.00089	.11891	.20064	.00556	.01092	.01073	.01443
#2	.01009	.11088	.01584	.09659	.01066	.00079	.11538	.20079	.00514	.00990	.00967	.01489
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11147**	**3.3742**	**.02335**	**.22238**	**.01079**	**.01861**	**.98111**	**.04183**	**2.8878**	**.01124**	**.08302**	**.02313**
Stddev	.00075	.0353	.00304	.00009	.00005	.00056	.00075	.00132	.0968	.00138	.00815	.00081
%RSD	.66938	1.0467	13.010	.04036	.44329	3.0011	.07631	3.1445	3.3518	12.230	9.8125	3.5060
#1	.11199	3.3992	.02549	.22232	.01082	.01901	.98058	.04276	2.9563	.01222	.08878	.02256
#2	.11094	3.3492	.02120	.22245	.01075	.01822	.98164	.04090	2.8194	.01027	.07726	.02370
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01743**	**.47657**	**1.0199**	**.09984**	**.01029**	**.01587**	**.00875**	**.01927**	F **.03446**	**.00972**	**.02058**	**.01662**
Stddev	.00363	.00991	.0212	.00441	.00010	.00156	.00003	.00044	.00635	.00062	.00100	.00075
%RSD	20.803	2.0796	2.0796	4.4145	.98309	9.8141	.29761	2.3095	18.435	6.3896	4.8792	4.5182
#1	.01486	.48358	1.0349	.10296	.01022	.01697	.00877	.01895	.03896	.01016	.02129	.01609
#2	.01999	.46957	1.0049	.09673	.01037	.01477	.00873	.01958	.02997	.00928	.01987	.01715
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2758.2**	**50435.**	**5766.1**
Stddev	4.5	160.	32.6
%RSD	.16378	.31714	.56472
#1	2755.0	50322.	5743.1
#2	2761.4	50548.	5789.2

Sample Name: MB 280-377014/1-A Acquired: 6/13/2017 23:04:04 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00066**	W **.07516**	**.00112**	**-.00004**	**.00151**	**-.00003**	**-.00046**	**.04234**	**.00031**
Stddev	.00080	.01436	.00417	.00063	.00055	.00031	.00015	.01184	.00014
%RSD	119.93	19.101	373.29	1699.2	36.650	1027.6	32.393	27.974	43.258
#1	.00123	.06501	.00406	-.00048	.00112	-.00025	-.00057	.03396	.00041
#2	.00010	.08531	-.00183	.00041	.00190	.00019	-.00036	.05071	.00022
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.05000							
Low Limit		-.05000							

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00025**	**.00066**	**-.00080**	F **.36315**	**.17720**	**.00400**	**.02384**	**.00470**	**.00007**
Stddev	.00003	.00045	.00020	.38939	.10455	.00011	.00686	.00040	.00019
%RSD	13.563	67.204	25.485	107.23	59.000	2.8654	28.785	8.4544	291.40
#1	.00028	.00035	-.00095	.08781	.10328	.00408	.02870	.00498	.00020
#2	.00023	.00098	-.00066	.63849	.25113	.00392	.01899	.00441	-.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.10000					
Low Limit				-.10000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05751**	**-.00007**	**.00403**	**-.00097**	**.00343**	**.00242**	**-.00647**	**.01576**	**.03373**
Stddev	.12832	.00015	.00195	.00169	.00487	.00230	.00651	.02217	.04745
%RSD	223.12	196.99	48.336	175.27	142.10	95.087	100.61	140.68	140.68
#1	-.03322	-.00018	.00541	-.00216	-.00002	.00404	-.01108	.03144	.06729
#2	.14825	.00003	.00266	.00023	.00688	.00079	-.00187	.00008	.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00236**	**.00067**	W **.00641**	**.00013**	**.00347**	**-.03793**	**.00151**	W **.01080**	**-.00026**
Stddev	.00027	.00042	.00206	.00047	.00392	.04141	.00038	.00116	.00267
%RSD	11.521	63.583	32.123	360.96	112.82	109.16	25.446	10.769	1036.0
#1	.00255	.00037	.00786	.00046	.00624	-.06721	.00178	.01162	.00163
#2	.00217	.00096	.00495	-.00020	.00070	-.00865	.00124	.00998	-.00215
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit			.00500					.01000	
Low Limit			-.00500					-.01000	

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2781.0**	**51299.**	**5893.3**
Stddev	11.2	283.	120.8
%RSD	.40116	.55188	2.0491
#1	2788.9	51099.	5807.9
#2	2773.1	51499.	5978.7

Sample Name: LCS 280-377014/2-A Acquired: 6/13/2017 23:06:42 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05401**	**2.0352**	**1.0410**	**1.0245**	**2.0682**	**.04939**	**2.0707**	**50.109**	**.10357**
Stddev	.00019	.0487	.0286	.0192	.0051	.00028	.0453	.199	.00294
%RSD	.35565	2.3932	2.7465	1.8746	.24605	.55772	2.1867	.39790	2.8392
#1	.05415	2.0696	1.0612	1.0380	2.0646	.04919	2.1027	49.968	.10565
#2	.05388	2.0007	1.0208	1.0109	2.0718	.04958	2.0386	50.250	.10149
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49303**	**.20105**	**.26312**	**1.0214**	**52.359**	**1.0153**	**51.079**	**.49580**	**.97760**
Stddev	.01087	.00464	.00161	.0024	.003	.0011	.152	.00097	.02503
%RSD	2.2040	2.3080	.61143	.23393	.00658	.10822	.29762	.19569	2.5603
#1	.50072	.20433	.26426	1.0197	52.361	1.0161	51.186	.49649	.99530
#2	.48535	.19777	.26198	1.0231	52.357	1.0145	50.971	.49512	.95991
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**52.786**	**.49356**	**10.492**	**.50381**	**2.0411**	**.52051**	**2.0416**	**9.7351**	**20.833**
Stddev	.298	.01178	.227	.00578	.0484	.01431	.0284	.0269	.058
%RSD	.56393	2.3867	2.1667	1.1473	2.3734	2.7483	1.3893	.27657	.27657
#1	52.576	.50189	10.652	.50790	2.0753	.53062	2.0616	9.7161	20.792
#2	52.997	.48523	10.331	.49973	2.0068	.51039	2.0215	9.7541	20.874
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0277**	**.99237**	**.99865**	**.98943**	**1.9664**	**2.0079**	**.50052**	**.50220**	**.52398**
Stddev	.0467	.00366	.00002	.00142	.0391	.0052	.00301	.00030	.00001
%RSD	2.3018	.36920	.00178	.14317	1.9874	.26001	.60093	.06023	.00188
#1	2.0607	.98978	.99867	.99043	1.9940	2.0042	.50265	.50198	.52398
#2	1.9947	.99496	.99864	.98843	1.9388	2.0116	.49839	.50241	.52397
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2665.9**	**48873.**	**5898.2**
Stddev	5.1	50.	1.7
%RSD	.19144	.10260	.02925
#1	2669.5	48908.	5897.0
#2	2662.3	48837.	5899.4

Sample Name: 280-98187-B-1-A Acquired: 6/13/2017 23:09:04 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00165**	**24.107**	**.00091**	**.01609**	**.03459**	**.00059**	**-.00426**	**5.6657**	**.00028**
Stddev	.00010	.095	.00547	.00034	.00014	.00003	.00172	.0459	.00005
%RSD	5.7734	.39513	601.87	2.1164	.39045	4.4103	40.258	.81052	18.076
#1	.00158	24.174	.00478	.01585	.03450	.00057	-.00305	5.6982	.00024
#2	.00171	24.039	-.00296	.01633	.03469	.00061	-.00547	5.6333	.00031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00128**	**.08091**	**.01830**	**151.25**	**1.0171**	**.00571**	**1.5140**	**.14271**	**.00377**
Stddev	.00040	.00318	.00028	1.24	.0396	.00139	.0009	.00095	.00025
%RSD	31.293	3.9308	1.5035	.82088	3.8979	24.348	.05985	.66399	6.6007
#1	.00156	.08316	.01811	152.12	.98902	.00670	1.5133	.14204	.00395
#2	.00100	.07866	.01849	150.37	1.0451	.00473	1.5146	.14338	.00360
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.597**	**.01234**	**1.7802**	**.00162**	**3.4808**	**.01403**	**.00543**	**11.547**	**24.711**
Stddev	.090	.00100	.0645	.00152	.1152	.00443	.00784	.126	.270
%RSD	.38324	8.0766	3.6257	93.649	3.3084	31.545	144.41	1.0930	1.0930
#1	23.661	.01305	1.8259	.00055	3.5622	.01716	.01098	11.636	24.902
#2	23.533	.01164	1.7346	.00270	3.3993	.01090	-.00011	11.458	24.520
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00364**	**.02377**	**.02587**	**.67882**	**.00134**	**.03055**	**.05338**	**.06635**	**.46606**
Stddev	.00095	.00012	.00267	.00327	.00482	.04715	.00024	.00011	.00271
%RSD	25.979	.49801	10.315	.48221	360.34	154.31	.44253	.16950	.58130
#1	.00297	.02385	.02399	.67651	-.00207	.06389	.05321	.06627	.46798
#2	.00431	.02368	.02776	.68114	.00474	-.00278	.05354	.06643	.46415
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2735.3**	**49809.**	**5879.1**
Stddev	11.4	340.	34.3
%RSD	.41699	.68231	.58339
#1	2727.2	50049.	5854.8
#2	2743.3	49568.	5903.3

Sample Name: 280-98187-B-2-A Acquired: 6/13/2017 23:11:37 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**12.992**	**.00293**	**.01125**	**.03576**	**.00023**	**-.00134**	**3.4399**	**.00045**
Stddev	.00120	.003	.00301	.00027	.00028	.00005	.00495	.0181	.00044
%RSD	6719.2	.02134	102.77	2.4348	.79000	21.651	370.30	.52760	97.926
#1	-.00083	12.990	.00080	.01106	.03596	.00027	-.00484	3.4527	.00014
#2	.00087	12.993	.00506	.01144	.03556	.00020	.00217	3.4271	.00077
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00006**	**.04720**	**.01083**	**49.418**	**.68151**	**.00237**	**.53156**	**.17696**	**.00705**
Stddev	.00054	.00090	.00033	.176	.00673	.00029	.00338	.00038	.00054
%RSD	855.08	1.9140	3.0331	.35537	.98777	12.115	.63579	.21677	7.6645
#1	.00032	.04784	.01060	49.294	.68627	.00217	.53395	.17723	.00743
#2	-.00045	.04656	.01107	49.542	.67675	.00258	.52917	.17669	.00667
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.1786**	**.00175**	**.25730**	**.00494**	**1.2432**	**.00189**	**-.00071**	**11.309**	**24.200**
Stddev	.0021	.00018	.00496	.00012	.0358	.00154	.00306	.078	.168
%RSD	.06499	10.541	1.9275	2.3436	2.8764	81.747	434.09	.69280	.69280
#1	3.1772	.00162	.26080	.00502	1.2685	.00298	.00146	11.364	24.319
#2	3.1801	.00188	.25379	.00485	1.2179	.00080	-.00287	11.253	24.082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00069**	**.01665**	**.01114**	**.84338**	**.00079**	**-.01821**	**.03350**	**.01324**	**.19457**
Stddev	.00286	.00019	.00245	.01071	.00488	.00235	.00066	.00013	.00207
%RSD	412.66	1.1671	21.990	1.2697	614.87	12.881	1.9574	.95438	1.0632
#1	-.00133	.01679	.01288	.85095	.00424	-.01987	.03397	.01333	.19604
#2	.00272	.01651	.00941	.83581	-.00266	-.01655	.03304	.01315	.19311
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2756.5**	**50015.**	**5872.4**
Stddev	4.6	47.	4.7
%RSD	.16535	.09359	.08008
#1	2759.8	50048.	5875.7
#2	2753.3	49982.	5869.1

Sample Name: 280-98187-A-3-B Acquired: 6/13/2017 23:14:11 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00030**	**.13119**	**-.00632**	**.00918**	**.05877**	**-.00005**	**-.00087**	**5.8223**	**.00039**
Stddev	.00062	.00196	.00490	.00042	.00086	.00002	.00358	.0268	.00002
%RSD	202.18	1.4907	77.602	4.5569	1.4613	41.606	409.37	.46097	6.3911
#1	.00074	.13257	-.00285	.00889	.05938	-.00006	-.00340	5.8412	.00041
#2	-.00013	.12980	-.00978	.00948	.05817	-.00003	.00166	5.8033	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00189**	**.00042**	**.00034**	**1.2980**	**.78733**	**.00513**	**.64667**	**.11875**	**.00135**
Stddev	.00024	.00010	.00019	.0056	.02124	.00061	.00039	.00026	.00064
%RSD	12.469	23.928	54.493	.43173	2.6981	11.887	.06072	.21889	47.510
#1	.00173	.00035	.00047	1.3020	.77230	.00470	.64695	.11893	.00180
#2	.00206	.00049	.00021	1.2940	.80235	.00557	.64639	.11856	.00090
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.3307**	**.00502**	**.02420**	**-.00278**	**1.8598**	**.00287**	**-.00434**	**1.8806**	**4.0245**
Stddev	.0166	.00042	.00113	.00169	.0492	.00231	.00995	.0105	.0225
%RSD	.71178	8.4268	4.6700	60.793	2.6464	80.537	229.35	.55783	.55783
#1	2.3425	.00532	.02500	-.00159	1.8946	.00451	.00270	1.8880	4.0403
#2	2.3190	.00472	.02341	-.00398	1.8250	.00124	-.01138	1.8732	4.0086
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00014**	**.02160**	**.00233**	**.00436**	**.00491**	**-.01915**	**-.00034**	**.01013**	**.00175**
Stddev	.00112	.00012	.00305	.00026	.00432	.01434	.00046	.00018	.00064
%RSD	805.08	.57698	130.77	5.9737	88.057	74.895	138.34	1.7587	36.295
#1	-.00093	.02168	.00018	.00417	.00185	-.00901	-.00066	.01026	.00220
#2	.00065	.02151	.00449	.00454	.00797	-.02929	-.00001	.01001	.00130
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2764.9**	**49889.**	**5719.8**
Stddev	.1	91.	37.4
%RSD	.00491	.18174	.65444
#1	2764.8	49824.	5693.3
#2	2765.0	49953.	5746.3

Sample Name: 280-98187-B-4-A Acquired: 6/13/2017 23:16:48 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00014**	**2.0418**	**-.00122**	**.00915**	**.02684**	**-.00003**	**.00002**	**1.8683**	**.00033**
Stddev	.00004	.0657	.00327	.00184	.00001	.00003	.00059	.0117	.00006
%RSD	25.943	3.2173	267.84	20.064	.03878	122.29	2516.7	.62391	19.291
#1	.00017	2.0883	.00109	.01045	.02683	-.00005	-.00039	1.8601	.00028
#2	.00012	1.9954	-.00353	.00786	.02685	-.00000	.00044	1.8766	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00062**	**.00460**	**.00169**	**10.269**	**.28962**	**.00242**	**.18441**	**.11850**	**.00233**
Stddev	.00054	.00024	.00008	.024	.09871	.00282	.00468	.00015	.00077
%RSD	87.060	5.2891	4.6195	.22988	34.083	116.57	2.5381	.13013	33.047
#1	.00024	.00477	.00175	10.252	.21982	.00042	.18772	.11861	.00287
#2	.00101	.00443	.00164	10.285	.35941	.00441	.18110	.11839	.00178
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.4895**	**.00952**	**.04784**	**-.00089**	**1.2208**	**.00378**	**-.00440**	**3.8720**	**8.2861**
Stddev	.0048	.00000	.00784	.00157	.0344	.00068	.00484	.0181	.0387
%RSD	.19224	.03124	16.392	175.37	2.8212	18.123	109.94	.46676	.46676
#1	2.4929	.00952	.05338	.00021	1.2452	.00426	-.00783	3.8848	8.3135
#2	2.4862	.00952	.04229	-.00200	1.1965	.00329	-.00098	3.8592	8.2588
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00135**	**.00711**	**.00469**	**.10689**	**.00316**	**-.02773**	**.00228**	**.03878**	**.02259**
Stddev	.00140	.00005	.00070	.00004	.00094	.01200	.00022	.00167	.00110
%RSD	103.10	.73802	15.015	.03405	29.663	43.259	9.5805	4.2942	4.8764
#1	.00037	.00715	.00419	.10692	.00382	-.03622	.00243	.03760	.02337
#2	.00234	.00707	.00519	.10687	.00250	-.01925	.00212	.03995	.02181
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2757.0**	**50368.**	**5780.3**
Stddev	3.5	35.	3.9
%RSD	.12735	.06977	.06760
#1	2754.5	50393.	5783.1
#2	2759.5	50343.	5777.6

Sample Name: 280-98187-B-9-A Acquired: 6/13/2017 23:19:22 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00021**	**.23838**	**-.00113**	**.01148**	**.02561**	**.00004**	**.00075**	**.67092**	**.00058**
Stddev	.00038	.01216	.00208	.00091	.00031	.00006	.00120	.00176	.00005
%RSD	181.54	5.1012	183.24	7.8975	1.2212	146.60	159.05	.26248	8.8827
#1	-.00047	.24698	-.00260	.01212	.02539	-.00000	-.00009	.67217	.00062
#2	.00006	.22978	.00034	.01083	.02583	.00008	.00160	.66968	.00054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00049**	**.00129**	**.00057**	**1.0674**	**.47409**	**.00048**	**.43997**	**.01546**	**.00072**
Stddev	.00006	.00046	.00014	.0079	.01471	.00103	.00394	.00017	.00057
%RSD	12.380	35.918	25.098	.74145	3.1031	216.67	.89589	1.1077	79.975
#1	.00045	.00096	.00068	1.0618	.48450	-.00025	.44276	.01558	.00112
#2	.00054	.00161	.00047	1.0730	.46369	.00120	.43718	.01534	.00031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0869**	**.00114**	**.03200**	**.00064**	**1.0449**	**.00175**	**-.00098**	**1.9543**	**4.1822**
Stddev	.0048	.00052	.00449	.00320	.0357	.00069	.00150	.0223	.0478
%RSD	.22835	45.558	14.023	502.44	3.4126	39.634	152.73	1.1422	1.1422
#1	2.0903	.00151	.03518	.00290	1.0701	.00126	.00008	1.9701	4.2160
#2	2.0835	.00077	.02883	-.00162	1.0197	.00224	-.00204	1.9385	4.1484
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00198**	**.00822**	**.00494**	**.00195**	**.00359**	**-.02643**	**.00172**	**.01712**	**.00258**
Stddev	.00139	.00012	.00006	.00011	.00346	.02277	.00003	.00034	.00033
%RSD	69.883	1.4552	1.2254	5.7621	96.290	86.172	1.7494	1.9758	12.618
#1	.00296	.00830	.00490	.00203	.00604	-.04253	.00174	.01735	.00235
#2	.00100	.00813	.00499	.00187	.00115	-.01032	.00170	.01688	.00281
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2796.6**	**51805.**	**6023.5**
Stddev	5.6	99.	19.4
%RSD	.20022	.19078	.32286
#1	2800.6	51875.	6037.2
#2	2792.7	51735.	6009.7

Sample Name: 280-98187-B-11-A Acquired: 6/13/2017 23:22:00 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00028**	**.01008**	**-.00152**	**.00071**	**.00074**	**-.00008**	**.00221**	**.00628**	**.00022**
Stddev	.00069	.00442	.00467	.00009	.00001	.00003	.00426	.00527	.00018
%RSD	242.54	43.806	307.80	13.146	1.9867	36.287	192.19	83.957	81.263
#1	-.00077	.01320	-.00482	.00077	.00075	-.00006	-.00079	.01001	.00009
#2	.00020	.00696	.00178	.00064	.00073	-.00011	.00522	.00255	.00035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00041**	**.00014**	**-.00185**	**.04780**	**.08353**	**.00143**	**.01247**	**.00040**	**.00005**
Stddev	.00003	.00026	.00046	.00951	.03865	.00061	.00818	.00001	.00067
%RSD	6.7745	179.95	24.898	19.895	46.267	42.299	65.586	3.3359	1476.1
#1	.00039	.00033	-.00218	.05452	.05620	.00186	.01826	.00039	-.00043
#2	.00043	-.00004	-.00153	.04107	.11085	.00100	.00669	.00041	.00052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.06047**	**-.00028**	**.00236**	**.00019**	**-.01557**	**.00060**	**-.00838**	**.03996**	**.08552**
Stddev	.00324	.00023	.00252	.00022	.00333	.00174	.00713	.01386	.02966
%RSD	5.3652	80.527	106.78	117.35	21.396	287.71	85.113	34.680	34.680
#1	-.05817	-.00044	.00058	.00035	-.01792	-.00063	-.00334	.04976	.10649
#2	-.06276	-.00012	.00414	.00003	-.01321	.00183	-.01343	.03016	.06455
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00145**	**.00021**	**.00496**	**-.00018**	**.00050**	**-.05355**	**-.00010**	**.00056**	**.00033**
Stddev	.00072	.00007	.00007	.00026	.00129	.01240	.00026	.00036	.00028
%RSD	49.311	32.426	1.3182	146.76	259.93	23.147	256.87	64.625	84.315
#1	.00196	.00026	.00492	-.00037	.00141	-.06232	.00008	.00031	.00013
#2	.00094	.00016	.00501	.00001	-.00042	-.04479	-.00029	.00082	.00053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2773.9**	**51365.**	**5897.8**
Stddev	3.4	15.	.1
%RSD	.12088	.02860	.00217
#1	2776.3	51375.	5897.7
#2	2771.6	51354.	5897.9

Sample Name: 280-98187-B-12-A Acquired: 6/13/2017 23:24:38 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00004**	**.39150**	**.00311**	**.01024**	**.01408**	**-.00009**	**.00169**	**.77849**	**.00059**
Stddev	.00060	.01765	.00374	.00087	.00003	.00003	.00201	.00389	.00022
%RSD	1486.0	4.5077	120.15	8.5383	.21554	29.593	119.10	.49983	36.483
#1	.00038	.40398	.00047	.01086	.01406	-.00010	.00027	.78124	.00074
#2	-.00046	.37903	.00576	.00962	.01411	-.00007	.00311	.77573	.00044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00059**	**.00027**	**.00112**	**.97123**	**.29344**	**.00175**	**.36614**	**.01494**	**-.00009**
Stddev	.00027	.00011	.00019	.00572	.02462	.00380	.00505	.00007	.00066
%RSD	45.495	41.674	16.775	.58870	8.3890	216.91	1.3790	.48951	731.88
#1	.00040	.00019	.00125	.97528	.27603	-.00093	.36971	.01499	-.00056
#2	.00078	.00035	.00098	.96719	.31084	.00444	.36257	.01488	.00038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.2152**	**.00072**	**.03907**	**.00106**	**1.8822**	**.00657**	**-.00639**	**1.5448**	**3.3060**
Stddev	.0018	.00016	.00527	.00019	.0642	.00007	.00133	.0139	.0298
%RSD	.08124	22.071	13.490	18.305	3.4087	1.0467	20.864	.90161	.90161
#1	2.2164	.00061	.04280	.00120	1.9275	.00662	-.00545	1.5547	3.3270
#2	2.2139	.00084	.03534	.00093	1.8368	.00652	-.00733	1.5350	3.2849
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00192**	**.00610**	**.00358**	**.00149**	**.00054**	**-.02612**	**.00058**	**.02330**	**.00481**
Stddev	.00145	.00008	.00110	.00021	.00255	.02300	.00014	.00014	.00099
%RSD	75.291	1.3797	30.588	14.240	476.31	88.049	23.720	.58491	20.534
#1	.00090	.00604	.00281	.00164	-.00127	-.00986	.00068	.02340	.00411
#2	.00295	.00616	.00436	.00134	.00234	-.04238	.00048	.02321	.00550
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2770.6**	**50687.**	**5787.6**
Stddev	3.5	7.	23.4
%RSD	.12772	.01331	.40438
#1	2773.1	50683.	5771.1
#2	2768.1	50692.	5804.2

Sample Name: 280-98187-B-14-A Acquired: 6/13/2017 23:27:15 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**.39800**	**.00229**	**.00933**	**.01382**	**-.00004**	**-.00198**	**.73210**	**.00030**
Stddev	.00026	.01259	.00450	.00084	.00009	.00002	.00070	.00002	.00056
%RSD	1063.6	3.1625	197.01	8.9676	.64662	48.630	35.455	.00231	185.63
#1	-.00016	.40690	.00547	.00992	.01388	-.00002	-.00148	.73209	-.00009
#2	.00021	.38910	-.00090	.00874	.01375	-.00005	-.00248	.73211	.00070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00007**	**.00081**	**.00019**	**.95101**	**.35820**	**.00125**	**.36231**	**.01469**	**-.00026**
Stddev	.00014	.00010	.00014	.00143	.04808	.00211	.00079	.00001	.00016
%RSD	191.41	12.145	70.651	.15071	13.423	169.04	.21823	.07723	59.733
#1	.00017	.00074	.00029	.95000	.39220	.00274	.36287	.01470	-.00037
#2	-.00003	.00088	.00010	.95202	.32421	-.00024	.36175	.01468	-.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.1073**	**.00079**	**.01377**	**.00014**	**1.8507**	**.00273**	**-.00454**	**1.4872**	**3.1827**
Stddev	.0218	.00037	.00073	.00047	.0507	.00318	.00431	.0063	.0134
%RSD	1.0361	47.151	5.2958	325.27	2.7398	116.67	94.944	.42195	.42195
#1	2.1227	.00053	.01325	.00047	1.8866	.00048	-.00759	1.4828	3.1732
#2	2.0918	.00105	.01429	-.00019	1.8149	.00498	-.00149	1.4917	3.1922
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00116**	**.00587**	**.00239**	**.00153**	**.00163**	**-.00754**	**.00059**	**.02196**	**.00498**
Stddev	.00149	.00005	.00010	.00007	.00255	.01669	.00012	.00030	.00182
%RSD	128.39	.82386	4.3438	4.6433	156.33	221.22	20.751	1.3432	36.525
#1	.00011	.00584	.00246	.00158	-.00017	-.01934	.00067	.02217	.00369
#2	.00221	.00591	.00232	.00148	.00344	.00426	.00050	.02175	.00626
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2768.0**	**50705.**	**5868.7**
Stddev	4.7	111.	15.3
%RSD	.16987	.21837	.25992
#1	2771.3	50783.	5857.9
#2	2764.7	50627.	5879.4

Sample Name: CCVH-4579429 Acquired: 6/13/2017 23:29:52 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00143**	**48.224**	**-.00709**	**.00044**	**.00006**	**.00019**	**.99306**	**-.00782**	**.00043**	**-.00090**	**.00013**	**.01518**	**48.362**
Stddev	.00038	.060	.00312	.00092	.00048	.00018	.02349	.00815	.00028	.00011	.00002	.00023	.299
%RSD	26.822	.12363	44.028	211.18	822.10	97.302	2.3653	104.15	63.849	12.160	18.325	1.4962	.61778
#1	.00170	48.266	-.00930	.00109	-.00028	.00031	1.0097	-.00206	.00024	-.00097	.00011	.01534	48.151
#2	.00116	48.182	-.00488	-.00021	.00040	.00006	.97645	-.01359	.00063	-.00082	.00014	.01502	48.573
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.13682**	**.00089**	**.02809**	**-.00176**	**-.00214**	**248.96**	**.00097**	**.00782**	**-.00226**	**4.9221**	**.00252**	**-.00621**	**-.01245**
Stddev	.00805	.00413	.00334	.00016	.00076	.93	.00045	.00117	.00208	.1166	.00559	.00778	.00546
%RSD	5.8813	462.55	11.893	8.9778	35.479	.37288	46.832	15.014	91.970	2.3695	221.72	125.33	43.893
#1	.13113	.00381	.03045	-.00187	-.00160	248.30	.00065	.00865	-.00373	5.0045	-.00143	-.01171	-.00858
#2	.14252	-.00203	.02573	-.00165	-.00268	249.61	.00129	.00699	-.00079	4.8396	.00648	-.00071	-.01631
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.02663**	**.00125**	**.00036**	**4.8186**	**.01718**	**-.00019**	**9.7897**	**.01259**	**.00021**	**.08276**
Stddev	.01169	.00110	.00005	.0011	.00028	.00209	.0146	.00040	.00011	.00020
%RSD	43.893	88.371	14.563	.02357	1.6260	1081.8	.14944	3.1606	52.742	.23705
#1	-.01837	.00202	.00040	4.8178	.01698	.00129	9.7793	.01231	.00028	.08290
#2	-.03490	.00047	.00033	4.8194	.01738	-.00167	9.8000	.01287	.00013	.08262
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2623.3**	**47444.**	**5662.0**
Stddev	3.7	70.	3.0
%RSD	.13981	.14800	.05322
#1	2625.9	47494.	5659.9
#2	2620.7	47394.	5664.1

Sample Name: CCV-4580817 Acquired: 6/13/2017 23:32:26 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49665**	**.52541**	**.96897**	**.49081**	**.49840**	**.48311**	**-.00125**	**5.0108**	**.49304**	**.49326**	**.48703**	**.50082**	**2.4309**
Stddev	.00076	.01709	.02437	.01177	.00203	.00142	.00255	.0140	.01269	.01250	.01428	.00046	.0026
%RSD	.15261	3.2528	2.5145	2.3980	.40676	.29314	204.15	.27920	2.5741	2.5348	2.9314	.09099	.10553
#1	.49718	.53749	.98620	.49913	.49697	.48211	.00055	5.0009	.50202	.50210	.49713	.50050	2.4291
#2	.49611	.51332	.95175	.48248	.49984	.48411	-.00306	5.0207	.48407	.48442	.47693	.50114	2.4327
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.953**	**.99970**	**20.226**	**.49082**	**.48465**	**5.0543**	**.49246**	**.99258**	**1.0044**	**-.01959**	**.98368**	**.98265**	**4.8549**
Stddev	.121	.00519	.027	.00083	.01216	.0007	.01150	.02215	.0246	.02110	.02664	.02571	.0087
%RSD	.23662	.51924	.13435	.17000	2.5088	.01450	2.3357	2.2318	2.4476	107.67	2.7085	2.6168	.17899
#1	50.868	.99603	20.245	.49141	.49325	5.0548	.50059	1.0082	1.0218	-.00468	1.0025	1.0008	4.8488
#2	51.039	1.0034	20.207	.49023	.47606	5.0538	.48432	.97692	.98703	-.03451	.96484	.96446	4.8610
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.389**	**.98868**	**.48600**	**.00991**	**.47923**	**.99175**	**-.02079**	**.48835**	**.49582**	**.49646**
Stddev	.019	.02732	.00051	.00239	.00024	.01719	.00792	.00064	.00340	.00338
%RSD	.17899	2.7632	.10517	24.079	.05052	1.7335	38.117	.13200	.68570	.68092
#1	10.376	1.0080	.48564	.00823	.47906	1.0039	-.01519	.48881	.49342	.49885
#2	10.403	.96936	.48637	.01160	.47940	.97959	-.02639	.48790	.49823	.49407
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2689.8**	**48678.**	**5715.5**
Stddev	2.3	23.	13.5
%RSD	.08523	.04710	.23656
#1	2691.4	48694.	5725.1
#2	2688.2	48662.	5706.0

Sample Name: CCB Acquired: 6/13/2017 23:34:54 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00017**	**.01187**	**.00604**	**.00068**	**.00049**	**-.00005**	**-.00044**	**-.01445**	**.00051**	**.00008**	**.00051**	**-.00150**	**.00179**
Stddev	.00007	.00033	.00922	.00083	.00027	.00012	.00024	.00046	.00013	.00007	.00043	.00044	.00004
%RSD	40.581	2.7616	152.48	121.63	55.988	252.02	55.303	3.1525	24.879	93.166	83.214	29.150	1.9903
#1	-.00012	.01210	.01256	.00010	.00029	.00004	-.00026	-.01412	.00060	.00013	.00081	-.00119	.00181
#2	-.00022	.01164	-.00047	.00127	.00068	-.00014	-.00061	-.01477	.00042	.00003	.00021	-.00181	.00176
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.18880**	**.00358**	**.00412**	**.00011**	**.00048**	**-.05776**	**-.00014**	**.00236**	**-.00133**	**-.02105**	**-.00280**	**-.00154**	**.02673**
Stddev	.01687	.00166	.00640	.00005	.00008	.00842	.00002	.00226	.00059	.01779	.00171	.00606	.00011
%RSD	8.9327	46.477	155.30	45.053	15.768	14.580	12.321	95.585	44.334	84.509	60.920	392.18	.39887
#1	.20073	.00240	.00865	.00015	.00054	-.06371	-.00013	.00396	-.00091	-.03364	-.00159	.00274	.02665
#2	.17688	.00476	-.00040	.00008	.00043	-.05180	-.00015	.00077	-.00174	-.00847	-.00401	-.00583	.02680
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05720**	**-.00128**	**.00018**	**.00581**	**-.00110**	**.00096**	**-.03770**	**-.00034**	**-.00048**	**.00033**
Stddev	.00023	.00058	.00003	.00117	.00056	.00100	.01407	.00096	.00041	.00115
%RSD	.39887	45.086	13.670	20.149	51.066	105.03	37.316	285.87	85.244	350.32
#1	.05704	-.00087	.00020	.00664	-.00070	.00167	-.02775	.00034	-.00019	.00114
#2	.05736	-.00169	.00017	.00498	-.00149	.00025	-.04764	-.00101	-.00077	-.00049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2730.2**	**50069.**	**5844.0**
Stddev	6.5	19.	6.2
%RSD	.23858	.03773	.10526
#1	2725.6	50083.	5839.7
#2	2734.8	50056.	5848.4

Sample Name: CCVL-4590576 Acquired: 6/13/2017 23:37:32 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00984**	**.11380**	**.01388**	**.09653**	**.01073**	**.00098**	**.11221**	**.20396**	**.00534**	**.01048**	**.01042**	**.01324**
Stddev	.00045	.00457	.00151	.00235	.00038	.00009	.00443	.00213	.00004	.00055	.00053	.00018
%RSD	4.5981	4.0194	10.897	2.4335	3.5396	9.0396	3.9506	1.0433	.72469	5.2463	5.0740	1.3214
#1	.00952	.11703	.01495	.09820	.01099	.00104	.11534	.20547	.00531	.01087	.01079	.01337
#2	.01016	.11056	.01281	.09487	.01046	.00091	.10908	.20246	.00537	.01009	.01005	.01312
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10364**	**3.3930**	**.02406**	**.21309**	**.01058**	**.01809**	**1.0135**	**.04026**	**2.8442**	**.00943**	F **.06244**	**.01767**
Stddev	.00285	.0404	.00117	.00150	.00006	.00108	.0121	.00106	.1004	.00096	.00921	.00364
%RSD	2.7477	1.1903	4.8545	.70608	.59439	5.9729	1.1896	2.6436	3.5292	10.148	14.750	20.617
#1	.10565	3.3644	.02324	.21415	.01054	.01885	1.0050	.04101	2.9152	.01010	.06895	.02024
#2	.10162	3.4216	.02489	.21202	.01063	.01733	1.0220	.03950	2.7732	.00875	.05593	.01509
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01387**	**.49865**	**1.0671**	**.09830**	**.01010**	**.01859**	**.00903**	**.01657**	**.05566**	**.00977**	**.02142**	**.01487**
Stddev	.00438	.01865	.0399	.00190	.00009	.00026	.00015	.00070	.04723	.00003	.00065	.00107
%RSD	31.580	3.7396	3.7396	1.9309	.90307	1.4242	1.6349	4.2232	84.860	.30626	3.0327	7.1855
#1	.01697	.51183	1.0953	.09965	.01003	.01841	.00892	.01706	.08906	.00975	.02188	.01412
#2	.01077	.48546	1.0389	.09696	.01016	.01878	.00913	.01607	.02226	.00979	.02096	.01563
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.02000											
Range	-30.000%											

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2775.3**	**50602.**	**5902.7**
Stddev	1.6	40.	20.0
%RSD	.05685	.07869	.33807
#1	2774.1	50630.	5916.8
#2	2776.4	50574.	5888.6

Sample Name: 280-98187-B-16-A Acquired: 6/13/2017 23:40:09 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Line	328.068 {103}	167.079 {502}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00028**	W **2.5787**	W **2.5226**	**-.00306**	**.04293**	**.06000**	**.00030**	**.00309**	**11.824**
Stddev	.00083	.0677	.0082	.00667	.00013	.00001	.00004	.00151	.031
%RSD	298.26	2.6254	.32547	217.89	.30227	.01793	13.112	48.880	.26211
#1	-.00031	2.6266	2.5285	.00166	.04284	.05999	.00027	.00416	11.802
#2	.00087	2.5308	2.5168	-.00778	.04302	.06000	.00033	.00202	11.846
Check ?	Chk Pass	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		2.5000	500.00						
Low Limit		-.20000	3.2000						

Elem	Cd2288	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Line	228.802 {447}	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00373**	**.00865**	**.00080**	**.00003**	**.08146**	**7.3447**	**.00558**	**4.2986**	**.14626**
Stddev	.00038	.00007	.00009	.00050	.00072	.0322	.00041	.0103	.00030
%RSD	10.110	.78803	10.907	1594.2	.87804	.43876	7.3161	.23910	.20386
#1	.00400	.00870	.00086	.00039	.08197	7.3219	.00530	4.3059	.14647
#2	.00346	.00860	.00074	-.00032	.08096	7.3675	.00587	4.2914	.14605
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Line	202.030 {467}	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00046**	**18.946**	**.01201**	**.01911**	**-.00092**	**22.612**	**-.00062**	**-.00556**	**3.2500**
Stddev	.00016	.429	.00029	.00284	.00034	.612	.00016	.00376	.0128
%RSD	35.662	2.2618	2.3734	14.888	37.215	2.7078	26.366	67.545	.39332
#1	-.00035	18.643	.01222	.01710	-.00117	23.045	-.00051	-.00291	3.2590
#2	-.00058	19.249	.01181	.02112	-.00068	22.179	-.00074	-.00822	3.2410
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.9550**	**.00145**	**.05321**	**.00501**	**-.00039**	**.00321**	**-.02542**	**.00043**	**.04596**
Stddev	.0274	.00101	.00022	.00149	.00034	.00117	.04544	.00018	.00025
%RSD	.39332	69.651	.40917	29.692	86.943	36.314	178.74	41.568	.54737
#1	6.9743	.00217	.05306	.00396	-.00062	.00239	.00671	.00030	.04578
#2	6.9356	.00074	.05336	.00606	-.00015	.00404	-.05755	.00056	.04614
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Zr3391
Line	339.198 { 99}
Units	ppm
Avg	**.00250**
Stddev	.00117
%RSD	46.922
#1	.00167
#2	.00333
Check ?	Chk Pass
High Limit	
Low Limit	

Sample Name: 280-98187-B-16-A Acquired: 6/13/2017 23:40:09 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2780.3**	**50595.**	**5989.3**
Stddev	18.9	102.	3.7
%RSD	.67937	.20195	.06156
#1	2793.7	50523.	5991.9
#2	2767.0	50667.	5986.7

Sample Name: 280-98187-B-24-A Acquired: 6/13/2017 23:42:43 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**.00313**	**-.00431**	**-.00044**	**.00063**	**-.00012**	**-.00022**	**.00234**	**.00040**
Stddev	.00077	.00055	.00087	.00052	.00017	.00001	.00141	.00322	.00010
%RSD	2022.0	17.704	20.227	119.45	26.541	4.4962	647.86	137.33	25.272
#1	-.00051	.00352	-.00369	-.00007	.00075	-.00013	.00078	.00462	.00033
#2	.00058	.00274	-.00492	-.00081	.00051	-.00012	-.00122	.00007	.00047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00032**	**-.00015**	**-.00115**	**.00644**	**.15220**	**.00249**	**.00319**	**.00019**	**-.00002**
Stddev	.00067	.00005	.00049	.00129	.02253	.00017	.00272	.00011	.00042
%RSD	206.52	29.609	42.458	20.001	14.804	6.6581	85.076	59.204	1783.4
#1	-.00015	-.00018	-.00149	.00735	.16813	.00237	.00127	.00011	-.00032
#2	.00079	-.00012	-.00080	.00553	.13627	.00260	.00512	.00027	.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.06987**	**-.00014**	**.00220**	**-.00108**	**-.01773**	**.00402**	**-.00364**	**.00124**	**.00266**
Stddev	.00537	.00033	.00046	.00020	.00596	.00000	.00420	.01678	.03591
%RSD	7.6791	228.64	21.000	18.064	33.613	.10885	115.28	1348.8	1348.8
#1	-.07367	.00009	.00188	-.00094	-.02195	.00402	-.00067	.01311	.02806
#2	-.06608	-.00037	.00253	-.00122	-.01352	.00403	-.00661	-.01062	-.02273
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00087**	**.00022**	**.00335**	**-.00060**	**.00068**	**-.02925**	**.00014**	**.00219**	**-.00043**
Stddev	.00118	.00002	.00234	.00022	.00219	.01870	.00012	.00061	.00026
%RSD	136.69	9.2842	69.855	36.736	323.58	63.951	88.967	27.692	59.966
#1	.00003	.00023	.00169	-.00045	.00223	-.01602	.00022	.00176	-.00025
#2	.00170	.00021	.00500	-.00076	-.00087	-.04247	.00005	.00262	-.00061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2741.3**	**50538.**	**5861.8**
Stddev	9.5	271.	14.0
%RSD	.34580	.53676	.23798
#1	2748.0	50730.	5871.6
#2	2734.6	50346.	5851.9

Sample Name: 280-98187-A-27-A Acquired: 6/13/2017 23:45:21 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00010**	**26.317**	**.00171**	**.01525**	**.04258**	**.00028**	**-.00301**	**1.4677**	**.00075**
Stddev	.00034	.047	.00114	.00051	.00043	.00014	.00074	.0015	.00018
%RSD	350.48	.17671	66.430	3.3189	1.0038	50.180	24.514	.10305	24.659
#1	-.00033	26.284	.00251	.01489	.04228	.00038	-.00249	1.4667	.00062
#2	.00014	26.350	.00091	.01560	.04288	.00018	-.00353	1.4688	.00088
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00147**	**.05013**	**.01459**	**37.418**	**1.1322**	**.00938**	**.57951**	**.10846**	**.01309**
Stddev	.00052	.00202	.00100	.058	.0181	.00014	.00379	.00032	.00035
%RSD	35.640	4.0306	6.8253	.15518	1.5986	1.5319	.65481	.29508	2.6522
#1	.00184	.05156	.01530	37.377	1.1194	.00948	.58219	.10869	.01333
#2	.00110	.04870	.01389	37.459	1.1450	.00928	.57682	.10824	.01284
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.3284**	**.01697**	**.87843**	**.00422**	**2.3398**	**.00294**	**.00510**	**16.511**	**35.334**
Stddev	.0040	.00075	.03156	.00065	.0760	.00127	.00040	.111	.237
%RSD	.17334	4.4043	3.5931	15.513	3.2496	43.209	7.8939	.66983	.66983
#1	2.3255	.01750	.90075	.00376	2.3936	.00384	.00539	16.433	35.167
#2	2.3312	.01644	.85611	.00469	2.2861	.00204	.00482	16.589	35.501
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00272**	**.01319**	**.01043**	**.52883**	**.00227**	**.01021**	**.04735**	**.07483**	**.15285**
Stddev	.00059	.00009	.00051	.00429	.00431	.04152	.00063	.00041	.00094
%RSD	21.766	.66430	4.8663	.81097	190.11	406.62	1.3381	.55205	.61398
#1	.00314	.01313	.01079	.52580	.00532	.03957	.04780	.07454	.15351
#2	.00230	.01325	.01007	.53186	-.00078	-.01915	.04690	.07512	.15218
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2750.6**	**49765.**	**5864.7**
Stddev	10.8	5.	32.0
%RSD	.39151	.00921	.54534
#1	2758.2	49762.	5887.4
#2	2743.0	49768.	5842.1

Sample Name: 280-98140-B-1-A Acquired: 6/13/2017 23:47:54 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00020**	**.02328**	**-.00125**	**.03481**	**.14009**	**-.00006**	**-.00351**	**64.339**	**.00043**
Stddev	.00009	.00030	.00275	.00001	.00030	.00003	.00003	.107	.00004
%RSD	47.998	1.2754	220.77	.01636	.21170	49.627	.97280	.16569	9.7002
#1	.00026	.02307	-.00319	.03481	.13988	-.00008	-.00349	64.264	.00046
#2	.00013	.02349	.00070	.03482	.14030	-.00004	-.00354	64.415	.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00046**	**.00203**	**.00023**	**.04333**	**5.4176**	**.02401**	**12.964**	**.00145**	**.00234**
Stddev	.00007	.00011	.00036	.00391	.0181	.00296	.063	.00003	.00000
%RSD	15.484	5.6012	158.09	9.0216	.33322	12.330	.48373	1.8636	.10818
#1	-.00051	.00211	-.00003	.04609	5.4049	.02611	13.008	.00143	.00233
#2	-.00041	.00195	.00048	.04056	5.4304	.02192	12.919	.00147	.00234
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.341**	**-.00005**	**.00801**	**-.00367**	**8.2706**	**.00017**	**.00832**	**21.186**	**45.339**
Stddev	.118	.00075	.00085	.00088	.2231	.00515	.00454	.015	.032
%RSD	.52952	1612.7	10.668	24.114	2.6972	3011.9	54.512	.06956	.06956
#1	22.257	.00048	.00740	-.00429	8.4284	-.00347	.01153	21.197	45.361
#2	22.424	-.00058	.00861	-.00304	8.1129	.00381	.00511	21.176	45.317
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00030**	**.51295**	**.00137**	**.00040**	**.00294**	**-.01389**	**.00324**	**.00240**	**.00120**
Stddev	.00065	.00097	.00061	.00045	.00053	.00605	.00002	.00065	.00028
%RSD	219.29	.18883	44.757	112.74	18.156	43.568	.63743	27.157	23.359
#1	-.00076	.51226	.00180	.00072	.00331	-.00961	.00325	.00286	.00101
#2	.00016	.51363	.00094	.00008	.00256	-.01817	.00322	.00194	.00140
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2662.1**	**48287.**	**5704.3**
Stddev	1.9	206.	20.5
%RSD	.07284	.42686	.35909
#1	2663.4	48142.	5718.8
#2	2660.7	48433.	5689.8

Sample Name: 280-98140-B-2-A Acquired: 6/13/2017 23:50:29 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00020**	**.00683**	**-.00170**	**.02365**	**.09017**	**.00000**	**-.00110**	**78.595**	**.00041**
Stddev	.00040	.00096	.00125	.00043	.00003	.00016	.00114	.088	.00036
%RSD	202.79	13.977	73.651	1.8116	.02843	3553.0	103.56	.11181	86.713
#1	.00048	.00751	-.00081	.02395	.09019	-.00011	-.00029	78.533	.00016
#2	-.00009	.00616	-.00258	.02335	.09015	.00012	-.00190	78.657	.00067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00049**	**.00253**	**.00018**	**.02199**	**3.2717**	**.01655**	**11.146**	**.00027**	**-.00085**
Stddev	.00017	.00038	.00107	.00094	.0683	.00218	.029	.00001	.00066
%RSD	35.311	14.943	592.76	4.2967	2.0872	13.168	.25748	2.5780	77.643
#1	-.00037	.00226	.00094	.02266	3.2234	.01501	11.166	.00028	-.00132
#2	-.00061	.00279	-.00058	.02133	3.3200	.01809	11.125	.00027	-.00038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**29.471**	**-.00012**	**.00806**	**-.00165**	**14.891**	**-.00361**	**-.00168**	**12.723**	**27.228**
Stddev	.081	.00085	.00100	.00062	.444	.00116	.00341	.037	.079
%RSD	.27556	728.95	12.437	37.574	2.9797	31.984	203.25	.28881	.28881
#1	29.529	-.00072	.00877	-.00121	15.205	-.00443	-.00409	12.697	27.172
#2	29.414	.00049	.00735	-.00209	14.578	-.00280	.00073	12.749	27.283
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00120**	**.38255**	**.00250**	**-.00032**	**.00305**	**-.05229**	**.00280**	**.00417**	**.00165**
Stddev	.00073	.00010	.00040	.00023	.00246	.01830	.00056	.00078	.00046
%RSD	60.703	.02723	16.091	71.561	80.488	35.002	19.856	18.678	27.882
#1	-.00069	.38248	.00278	-.00016	.00479	-.03935	.00319	.00472	.00132
#2	-.00172	.38262	.00221	-.00048	.00132	-.06524	.00241	.00362	.00197
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2658.8**	**48541.**	**5651.4**
Stddev	5.9	158.	17.6
%RSD	.22325	.32531	.31061
#1	2663.0	48652.	5639.0
#2	2654.6	48429.	5663.8

Sample Name: 280-98140-B-3-A Acquired: 6/13/2017 23:53:05 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00067**	**.00479**	**.00015**	**.01984**	**.14233**	**-.00013**	**-.00182**	**41.533**	**.00041**
Stddev	.00064	.00097	.00043	.00042	.00142	.00011	.00418	.233	.00001
%RSD	96.334	20.242	294.60	2.1219	.99759	87.538	229.70	.56167	3.4759
#1	.00112	.00548	.00045	.01954	.14133	-.00005	.00114	41.368	.00040
#2	.00021	.00411	-.00016	.02014	.14333	-.00020	-.00477	41.698	.00042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00046**	**.00273**	**-.00093**	**.01881**	**2.4684**	**.01310**	**6.1522**	**.00030**	**.00062**
Stddev	.00014	.00019	.00050	.00175	.0092	.00127	.0014	.00001	.00023
%RSD	30.514	6.9752	54.272	9.2968	.37401	9.6659	.02315	3.9239	37.260
#1	-.00055	.00286	-.00129	.01757	2.4619	.01400	6.1512	.00029	.00078
#2	-.00036	.00260	-.00057	.02005	2.4749	.01220	6.1532	.00031	.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.779**	**-.00037**	**.01166**	**-.00169**	**9.1331**	**-.00208**	**-.00297**	**12.666**	**27.105**
Stddev	.079	.00059	.00018	.00090	.2981	.00264	.00040	.021	.046
%RSD	.34882	156.55	1.5831	53.357	3.2640	126.77	13.413	.16878	.16878
#1	22.723	-.00079	.01179	-.00105	9.3439	-.00022	-.00269	12.651	27.072
#2	22.835	.00004	.01153	-.00233	8.9223	-.00394	-.00325	12.681	27.137
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00196**	**.22647**	**.00391**	**-.00041**	**.00100**	**-.04687**	**.00286**	**.00131**	**.00164**
Stddev	.00181	.00113	.00072	.00018	.00247	.00816	.00053	.00020	.00048
%RSD	92.644	.49936	18.382	44.568	246.53	17.420	18.415	14.970	29.075
#1	.00324	.22567	.00340	-.00054	.00275	-.04109	.00249	.00117	.00197
#2	.00067	.22727	.00441	-.00028	-.00074	-.05264	.00323	.00145	.00130
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2736.1**	**48700.**	**5724.6**
Stddev	5.9	59.	48.9
%RSD	.21439	.12143	.85449
#1	2732.0	48659.	5759.2
#2	2740.3	48742.	5690.1

Sample Name: 280-98140-B-4-A Acquired: 6/13/2017 23:55:40 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00009**	**.02435**	**.00018**	**.01773**	**.19627**	**-.00014**	**-.00199**	**67.178**	**.00073**
Stddev	.00025	.00075	.00779	.00022	.00076	.00002	.00364	.120	.00013
%RSD	286.38	3.0982	4330.5	1.2303	.38733	16.181	183.32	.17800	18.447
#1	.00009	.02488	-.00533	.01789	.19573	-.00012	-.00456	67.093	.00063
#2	-.00026	.02382	.00569	.01758	.19681	-.00015	.00059	67.262	.00082
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00014**	**.00334**	**-.00060**	**.03003**	**2.9147**	**.01774**	**10.385**	**.00210**	**-.00092**
Stddev	.00029	.00050	.00021	.00083	.0838	.00238	.036	.00005	.00002
%RSD	208.67	14.958	34.454	2.7519	2.8764	13.424	.34970	2.2693	2.2307
#1	.00007	.00370	-.00075	.03062	2.8554	.01942	10.411	.00207	-.00091
#2	-.00034	.00299	-.00046	.02945	2.9740	.01605	10.359	.00214	-.00094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**27.180**	**-.00061**	**.00969**	**-.00004**	**11.137**	**-.00303**	**-.00833**	**13.498**	**28.887**
Stddev	.286	.00016	.00295	.00178	.321	.00253	.00405	.037	.079
%RSD	1.0506	26.674	30.407	3972.3	2.8861	83.353	48.666	.27267	.27267
#1	26.978	-.00072	.00761	-.00131	11.364	-.00482	-.01120	13.472	28.831
#2	27.382	-.00049	.01177	.00122	10.910	-.00125	-.00546	13.524	28.942
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00087**	**.47933**	**.00237**	**.00070**	**.00226**	**-.02205**	**.00311**	**.00256**	**-.00056**
Stddev	.00148	.00051	.00196	.00046	.00113	.03756	.00004	.00028	.00039
%RSD	169.43	.10743	82.812	65.820	50.141	170.36	1.3896	10.927	70.035
#1	-.00017	.47897	.00376	.00102	.00146	-.04861	.00314	.00275	-.00084
#2	.00192	.47970	.00098	.00037	.00306	.00451	.00308	.00236	-.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2736.2**	**50181.**	**6016.6**
Stddev	9.1	88.	22.6
%RSD	.33144	.17602	.37535
#1	2729.8	50119.	6032.6
#2	2742.7	50244.	6000.7

Sample Name: CCVH-4579429 Acquired: 6/13/2017 23:58:16 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00139**	**48.168**	**-.00796**	**-.00046**	**.00037**	**.00003**	**.96812**	**.00781**	**.00043**	**-.00117**	**.00049**	**.01474**	**48.657**
Stddev	.00048	.312	.00094	.00082	.00021	.00021	.03417	.00109	.00035	.00051	.00030	.00025	.188
%RSD	34.388	.64857	11.871	179.55	57.198	756.27	3.5295	14.013	81.922	43.864	62.317	1.6665	.38617
#1	.00105	47.948	-.00729	-.00103	.00022	-.00012	.99228	.00859	.00068	-.00154	.00070	.01491	48.524
#2	.00172	48.389	-.00863	.00012	.00052	.00017	.94396	.00704	.00018	-.00081	.00027	.01456	48.790
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.18729**	**.00303**	**.02996**	**-.00198**	**-.00178**	**247.68**	**.00057**	**.00355**	**-.00137**	**4.8140**	**.00933**	**-.00848**	**-.00138**
Stddev	.06592	.00024	.00256	.00006	.00020	2.18	.00038	.00113	.00205	.1624	.00227	.00051	.01774
%RSD	35.195	7.8791	8.5518	3.2729	11.495	.87905	67.029	31.850	150.44	3.3741	24.328	6.0041	1288.2
#1	.14068	.00320	.03178	-.00203	-.00192	246.14	.00030	.00434	.00009	4.9289	.00773	-.00884	-.01392
#2	.23390	.00287	.02815	-.00194	-.00163	249.22	.00083	.00275	-.00282	4.6992	.01094	-.00812	.01117
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00295**	**.00102**	**.00037**	**4.7778**	**.01673**	**.00181**	**9.7488**	**.01257**	**.00039**	**.08416**
Stddev	.03796	.00026	.00006	.0136	.00020	.00262	.0545	.00038	.00077	.00270
%RSD	1288.2	25.777	16.452	.28364	1.1866	144.30	.55885	3.0101	196.70	3.2076
#1	-.02979	.00120	.00033	4.7874	.01688	-.00004	9.7873	.01284	.00094	.08225
#2	.02390	.00083	.00042	4.7682	.01659	.00367	9.7102	.01230	-.00015	.08607
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2658.3**	**48116.**	**5847.8**
Stddev	8.9	137.	44.6
%RSD	.33428	.28566	.76254
#1	2652.0	48213.	5879.3
#2	2664.6	48019.	5816.2

Sample Name: CCV-4580817 Acquired: 6/14/2017 0:00:50 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49804**	**.53221**	**.97381**	**.49597**	**.49734**	**.48046**	**.00229**	**4.9879**	**.49559**	**.49683**	**.49070**	**.50152**	**2.4169**
Stddev	.00044	.01530	.02875	.00732	.00381	.00252	.00148	.0450	.01096	.01123	.01200	.00156	.0044
%RSD	.08844	2.8748	2.9518	1.4763	.76595	.52515	64.709	.90166	2.2119	2.2602	2.4458	.31019	.18305
#1	.49773	.54303	.99414	.50115	.49465	.47867	.00124	4.9561	.50334	.50478	.49919	.50262	2.4138
#2	.49835	.52139	.95348	.49079	.50004	.48224	.00333	5.0197	.48783	.48889	.48222	.50042	2.4201
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.860**	**.99459**	**20.149**	**.48959**	**.48860**	**5.0571**	**.49559**	**1.0045**	**1.0077**	**-.03310**	**.99078**	**.98535**	**4.8042**
Stddev	.441	.00594	.051	.00092	.01250	.0268	.01044	.0233	.0272	.00046	.01805	.03178	.0113
%RSD	.86710	.59692	.25136	.18880	2.5589	.53034	2.1067	2.3200	2.7015	1.3781	1.8216	3.2250	.23518
#1	50.548	.99039	20.185	.49024	.49744	5.0381	.50297	1.0210	1.0269	-.03278	1.0035	1.0078	4.7962
#2	51.171	.99878	20.113	.48894	.47976	5.0761	.48820	.98804	.98841	-.03342	.97802	.96288	4.8122
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.281**	**1.0000**	**.48367**	**.00908**	**.47968**	**.99454**	**-.02658**	**.48525**	**.49300**	**.49250**
Stddev	.024	.0262	.00304	.00120	.00060	.02248	.03485	.00042	.00017	.00046
%RSD	.23518	2.6208	.62931	13.268	.12473	2.2600	131.11	.08730	.03533	.09285
#1	10.264	1.0186	.48152	.00993	.48011	1.0104	-.00194	.48555	.49287	.49218
#2	10.298	.98149	.48583	.00823	.47926	.97864	-.05122	.48495	.49312	.49282
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2681.8**	**48845.**	**5783.2**
Stddev	.8	98.	45.0
%RSD	.02985	.19989	.77779
#1	2682.3	48776.	5815.0
#2	2681.2	48914.	5751.4

Sample Name: CCB Acquired: 6/14/2017 0:03:18 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00025**	**.00073**	**.00011**	**.00064**	**.00066**	**.00006**	**-.00388**	**-.00336**	**.00057**	**-.00013**	**.00008**	**-.00105**	**-.00036**
Stddev	.00006	.00144	.00318	.00003	.00010	.00002	.00024	.00605	.00007	.00048	.00051	.00064	.00059
%RSD	24.640	199.00	2884.4	4.8067	14.841	40.121	6.2628	179.94	11.935	361.57	664.03	61.160	163.99
#1	.00020	.00175	-.00214	.00062	.00059	.00007	-.00370	.00092	.00052	-.00048	.00044	-.00060	.00006
#2	.00029	-.00030	.00236	.00066	.00073	.00004	-.00405	-.00764	.00062	.00021	-.00028	-.00151	-.00078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.21962**	**.00435**	**.00260**	**.00013**	**-.00003**	**-.05925**	**-.00003**	**.00290**	**-.00153**	**-.03339**	**.00056**	**-.00978**	**.02540**
Stddev	.02959	.00097	.00501	.00009	.00077	.01640	.00024	.00008	.00119	.00090	.00349	.00751	.01757
%RSD	13.474	22.285	192.52	68.677	3043.6	27.670	787.38	2.7327	78.094	2.6903	625.51	76.821	69.150
#1	.19870	.00504	-.00094	.00019	-.00057	-.04766	.00014	.00295	-.00068	-.03403	-.00191	-.00447	.01298
#2	.24055	.00367	.00614	.00007	.00052	-.07085	-.00020	.00284	-.00237	-.03276	.00302	-.01509	.03782
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05436**	**.00163**	**.00029**	**.00350**	**-.00047**	**.00294**	**.00106**	**-.00029**	**.00012**	**-.00014**
Stddev	.03759	.00029	.00010	.00183	.00020	.00092	.02061	.00016	.00000	.00299
%RSD	69.150	18.052	34.170	52.435	43.738	31.374	1936.1	56.130	.32052	2115.5
#1	.02778	.00183	.00022	.00479	-.00061	.00229	-.01351	-.00018	.00012	.00197
#2	.08094	.00142	.00035	.00220	-.00032	.00359	.01564	-.00041	.00012	-.00226
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2671.2**	**49221.**	**5689.9**
Stddev	1.9	64.	2.0
%RSD	.07000	.13047	.03526
#1	2669.9	49266.	5691.4
#2	2672.5	49175.	5688.5

Sample Name: CCVL-4590576 Acquired: 6/14/2017 0:05:56 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01012**	**.10849**	**.01537**	**.09687**	**.01052**	**.00084**	**.11028**	**.19921**	**.00537**	**.01039**	**.01030**	**.01466**
Stddev	.00017	.00336	.00038	.00404	.00005	.00005	.00374	.00248	.00015	.00052	.00062	.00039
%RSD	1.7154	3.0935	2.5040	4.1665	.52016	5.8808	3.3878	1.2441	2.8427	4.9720	5.9864	2.6346
#1	.01000	.11086	.01564	.09972	.01056	.00080	.11292	.19746	.00548	.01075	.01074	.01494
#2	.01025	.10611	.01509	.09401	.01048	.00087	.10763	.20097	.00526	.01002	.00986	.01439
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09512**	**3.3564**	**.02063**	**.21122**	**.01043**	**.01801**	**.98483**	**.04066**	**2.8502**	**.00752**	F **.06627**	**.02116**
Stddev	.00166	.0225	.00006	.00139	.00003	.00083	.00217	.00201	.0891	.00054	.00397	.00253
%RSD	1.7479	.67057	.30994	.65798	.24109	4.5969	.22024	4.9342	3.1248	7.1600	5.9914	11.942
#1	.09630	3.3723	.02058	.21023	.01045	.01860	.98330	.04208	2.9132	.00790	.06907	.01937
#2	.09395	3.3405	.02067	.21220	.01042	.01743	.98636	.03924	2.7872	.00714	.06346	.02295
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01587**	**.48161**	**1.0306**	**.09760**	**.01019**	**.01864**	**.00878**	**.01637**	F **.03809**	**.01042**	**.01949**	**.01524**
Stddev	.00305	.01551	.0332	.00368	.00007	.00190	.00008	.00220	.05002	.00054	.00008	.00354
%RSD	19.251	3.2208	3.2208	3.7665	.65200	10.216	.88715	13.434	131.32	5.2285	.42187	23.211
#1	.01371	.47064	1.0072	.10020	.01024	.01729	.00873	.01793	.07346	.01080	.01955	.01774
#2	.01803	.49257	1.0541	.09500	.01015	.01999	.00884	.01482	.00272	.01003	.01943	.01274
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2742.2**	**50279.**	**5793.2**
Stddev	10.5	38.	13.4
%RSD	.38282	.07598	.23127
#1	2749.6	50306.	5802.7
#2	2734.8	50252.	5783.7

Sample Name: 280-98062-B-1-D Acquired: 6/14/2017 0:08:33 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00017**	**.00321**	**-.00010**	**.03194**	**.06849**	**-.00004**	**-.00060**	**68.957**	**.00079**
Stddev	.00056	.00025	.00030	.00013	.00003	.00005	.00309	.028	.00047
%RSD	335.91	7.7822	297.89	.39829	.04642	150.68	517.16	.04073	59.443
#1	.00057	.00304	-.00031	.03203	.06847	-.00007	-.00278	68.977	.00112
#2	-.00023	.00339	.00011	.03185	.06851	.00000	.00159	68.937	.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00028**	**.00116**	**-.00050**	**.00910**	**2.5642**	**.02117**	**12.356**	**.00624**	**-.00015**
Stddev	.00018	.00058	.00049	.00118	.0139	.00061	.069	.00008	.00007
%RSD	65.295	49.709	98.826	12.969	.54242	2.9002	.55798	1.3351	48.728
#1	.00041	.00075	-.00085	.00993	2.5543	.02160	12.405	.00629	-.00020
#2	.00015	.00156	-.00015	.00826	2.5740	.02073	12.307	.00618	-.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**27.950**	**-.00060**	**.00917**	**-.00221**	**28.010**	**.00046**	**-.00161**	**11.672**	**24.979**
Stddev	.638	.00012	.00201	.00057	.665	.00082	.00873	.018	.038
%RSD	2.2832	19.378	21.933	25.744	2.3726	178.22	542.45	.15137	.15137
#1	27.499	-.00052	.00775	-.00261	28.479	-.00012	.00456	11.660	24.952
#2	28.402	-.00068	.01059	-.00181	27.540	.00104	-.00778	11.685	25.006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00099**	**.44344**	**.00569**	**-.00076**	**.00133**	**-.04772**	**.00435**	**.00101**	**-.00089**
Stddev	.00062	.00103	.00430	.00000	.00099	.01822	.00037	.00094	.00019
%RSD	62.546	.23265	75.626	.40065	74.037	38.183	8.3908	93.600	21.370
#1	.00055	.44416	.00265	-.00076	.00064	-.03484	.00461	.00034	-.00102
#2	.00142	.44271	.00873	-.00076	.00203	-.06061	.00409	.00168	-.00076
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2659.7**	**48017.**	**5693.6**
Stddev	10.3	87.	21.8
%RSD	.38794	.18213	.38221
#1	2652.4	47955.	5678.2
#2	2667.0	48078.	5709.0

Sample Name: 280-98062-B-1-D SD@5 Acquired: 6/14/2017 0:11:08 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00032**	**.00505**	**.00206**	**.00615**	**.01387**	**-.00008**	**.00246**	**13.917**	**.00029**
Stddev	.00045	.00777	.00139	.00113	.00047	.00005	.00158	.033	.00029
%RSD	139.64	153.96	67.420	18.447	3.3830	59.828	64.312	.23744	99.798
#1	.00000	.01054	.00108	.00695	.01421	-.00005	.00134	13.941	.00049
#2	.00064	-.00045	.00303	.00535	.01354	-.00012	.00358	13.894	.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00039**	**.00022**	**-.00064**	**.01248**	**.70322**	**.00506**	**2.5603**	**.00146**	**.00001**
Stddev	.00040	.00020	.00018	.00089	.00906	.00013	.0151	.00000	.00037
%RSD	103.55	89.000	28.351	7.1667	1.2886	2.4869	.59089	.05265	3854.2
#1	-.00067	.00008	-.00077	.01312	.70963	.00515	2.5710	.00146	-.00025
#2	-.00010	.00037	-.00051	.01185	.69682	.00497	2.5496	.00146	.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.3210**	**.00048**	**.00518**	**-.00187**	**5.4586**	**-.00036**	**-.00319**	**2.3281**	**4.9821**
Stddev	.0041	.00031	.00220	.00059	.1960	.00134	.00416	.0183	.0391
%RSD	.07761	64.247	42.535	31.545	3.5904	366.69	130.64	.78424	.78424
#1	5.3181	.00026	.00674	-.00145	5.5972	.00058	-.00613	2.3152	4.9544
#2	5.3239	.00069	.00362	-.00228	5.3200	-.00131	-.00024	2.3410	5.0097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00082**	**.09063**	**.00281**	**-.00057**	**.00340**	**-.03046**	**.00033**	**.00026**	**-.00053**
Stddev	.00144	.00047	.00040	.00009	.00167	.02814	.00010	.00050	.00123
%RSD	174.66	.51673	14.220	15.112	49.015	92.382	31.194	193.79	233.37
#1	.00184	.09096	.00252	-.00051	.00222	-.05036	.00041	.00061	-.00140
#2	-.00019	.09030	.00309	-.00063	.00458	-.01056	.00026	-.00010	.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2737.5**	**49854.**	**5800.2**
Stddev	8.7	82.	18.1
%RSD	.31940	.16480	.31207
#1	2731.3	49913.	5813.0
#2	2743.7	49796.	5787.4

Sample Name: 280-98062-B-1-E MS Acquired: 6/14/2017 0:13:43 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05334**	**1.9867**	**1.0339**	**1.0397**	**2.0798**	**.04869**	W **2.0152**	**119.26**	**.10135**
Stddev	.00027	.0413	.0215	.0188	.0001	.00002	.0383	.01	.00172
%RSD	.50205	2.0815	2.0761	1.8109	.00348	.03780	1.8995	.01215	1.6985
#1	.05316	2.0159	1.0491	1.0530	2.0797	.04871	2.0423	119.27	.10257
#2	.05353	1.9574	1.0188	1.0264	2.0798	.04868	1.9881	119.25	.10013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47796**	**.19757**	**.25702**	**.96368**	**53.814**	**1.0199**	**62.550**	**.49212**	**.95800**
Stddev	.01045	.00485	.00205	.00046	.141	.0001	.214	.00122	.02346
%RSD	2.1860	2.4564	.79812	.04802	.26270	.00725	.34155	.24862	2.4493
#1	.48534	.20101	.25847	.96335	53.714	1.0199	62.701	.49299	.97459
#2	.47057	.19414	.25557	.96401	53.914	1.0200	62.399	.49126	.94140
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**78.983**	**.47804**	**10.433**	**.48706**	**31.780**	**.50944**	**1.9977**	**21.655**	**46.342**
Stddev	.214	.01123	.182	.01283	.551	.00267	.0534	.069	.147
%RSD	.27079	2.3495	1.7482	2.6339	1.7345	.52497	2.6749	.31715	.31715
#1	78.832	.48598	10.562	.49613	32.170	.51133	2.0355	21.704	46.446
#2	79.134	.47010	10.304	.47799	31.390	.50755	1.9599	21.607	46.238
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9743**	**1.4359**	**.98784**	**.98077**	**1.8858**	**1.9848**	**.49844**	**.49530**	**.51059**
Stddev	.0482	.0002	.00088	.00126	.0311	.0534	.00036	.00057	.00119
%RSD	2.4425	.01217	.08959	.12832	1.6514	2.6895	.07266	.11584	.23327
#1	2.0084	1.4358	.98721	.98166	1.9079	2.0225	.49819	.49489	.51144
#2	1.9402	1.4360	.98846	.97988	1.8638	1.9470	.49870	.49571	.50975
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2628.6**	**47501.**	**5869.3**
Stddev	10.9	79.	2.2
%RSD	.41516	.16709	.03797
#1	2620.9	47445.	5870.9
#2	2636.4	47557.	5867.8

Sample Name: 280-98062-B-1-F MSD Acquired: 6/14/2017 0:16:06 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05553**	**2.0718**	**1.0745**	**1.0915**	**2.2100**	**.05175**	W **2.1217**	**126.99**	**.10674**
Stddev	.00077	.0532	.0320	.0224	.0016	.00021	.0486	.12	.00226
%RSD	1.3929	2.5695	2.9814	2.0546	.07094	.40694	2.2885	.09163	2.1143
#1	.05608	2.1094	1.0971	1.1074	2.2111	.05160	2.1560	127.07	.10834
#2	.05499	2.0341	1.0518	1.0757	2.2089	.05190	2.0874	126.91	.10515
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50047**	**.20731**	**.27000**	**1.0335**	**57.032**	**1.0800**	**65.588**	**.51690**	**1.0054**
Stddev	.01243	.00609	.00233	.0009	.018	.0009	.305	.00179	.0250
%RSD	2.4842	2.9354	.86212	.08980	.03182	.08036	.46448	.34554	2.4891
#1	.50926	.21161	.27164	1.0341	57.045	1.0794	65.803	.51816	1.0231
#2	.49168	.20300	.26835	1.0328	57.020	1.0807	65.372	.51564	.98774
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**84.114**	**.50131**	**10.975**	**.50810**	**33.672**	**.53090**	**2.1041**	**23.037**	**49.299**
Stddev	.013	.01083	.267	.01349	.667	.01386	.0468	.064	.137
%RSD	.01567	2.1603	2.4319	2.6553	1.9806	2.6099	2.2242	.27738	.27738
#1	84.123	.50897	11.163	.51764	34.143	.54070	2.1372	22.992	49.202
#2	84.105	.49365	10.786	.49856	33.200	.52111	2.0710	23.082	49.395
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **2.0575**	**1.5264**	**1.0386**	**1.0275**	**1.9744**	**2.0836**	**.52310**	**.51796**	**.53907**
Stddev	.0479	.0028	.0055	.0037	.0444	.0091	.00282	.00058	.00040
%RSD	2.3274	.18228	.52442	.35741	2.2469	.43495	.53995	.11118	.07357
#1	2.0914	1.5244	1.0424	1.0301	2.0057	2.0900	.52510	.51837	.53935
#2	2.0237	1.5283	1.0347	1.0249	1.9430	2.0772	.52110	.51755	.53879
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	2.0000								
Low Limit	-.20000								

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2635.9**	**47833.**	**5884.6**
Stddev	10.6	99.	15.9
%RSD	.40274	.20773	.26990
#1	2628.4	47763.	5873.4
#2	2643.4	47904.	5895.9

Sample Name: 280-98062-B-1-D PDS Acquired: 6/14/2017 0:18:28 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04831**	**1.0010**	**.20084**	**.13482**	**.16797**	**.04881**	**-.00152**	**86.346**	**.04957**
Stddev	.00064	.0391	.00533	.00226	.00093	.00042	.00111	.370	.00194
%RSD	1.3159	3.9111	2.6521	1.6750	.55642	.85510	72.889	.42808	3.9221
#1	.04876	1.0287	.20460	.13642	.16863	.04910	-.00073	86.607	.05094
#2	.04786	.97334	.19707	.13323	.16731	.04851	-.00230	86.084	.04819
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04713**	**.04918**	**.05077**	**.99756**	**23.140**	**.12058**	**31.437**	**.05562**	**.04811**
Stddev	.00192	.00134	.00019	.00408	.026	.00250	.161	.00029	.00209
%RSD	4.0646	2.7268	.37835	.40895	.11286	2.0718	.51283	.52000	4.3454
#1	.04848	.05013	.05091	1.0004	23.158	.12234	31.551	.05583	.04958
#2	.04577	.04823	.05064	.99468	23.121	.11881	31.323	.05542	.04663
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**47.168**	**.04682**	**2.0364**	**.09546**	**27.270**	**.09806**	**.19409**	**16.208**	**34.686**
Stddev	.465	.00113	.0567	.00237	.834	.00246	.00906	.128	.273
%RSD	.98575	2.4230	2.7846	2.4827	3.0576	2.5039	4.6680	.78751	.78751
#1	47.496	.04762	2.0765	.09714	27.859	.09980	.20050	16.299	34.879
#2	46.839	.04602	1.9963	.09378	26.680	.09633	.18768	16.118	34.493
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09891**	**.48167**	**.19687**	**.04990**	**.20045**	**.46622**	**.05333**	**.19740**	**.05850**
Stddev	.00438	.00205	.00052	.00065	.00970	.01381	.00090	.00169	.00073
%RSD	4.4315	.42602	.26436	1.3125	4.8387	2.9625	1.6849	.85744	1.2553
#1	.10201	.48312	.19723	.05037	.20731	.47598	.05270	.19859	.05902
#2	.09582	.48022	.19650	.04944	.19359	.45645	.05397	.19620	.05798
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2682.5**	**48702.**	**5843.2**
Stddev	11.2	268.	12.8
%RSD	.41736	.55066	.21953
#1	2674.5	48513.	5834.1
#2	2690.4	48892.	5852.3

Sample Name: 280-98062-B-2-C Acquired: 6/14/2017 0:21:00 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00015**	**.01247**	**-.00143**	**.00260**	**.00204**	**.00001**	**-.00007**	**.15395**	**.00050**
Stddev	.00025	.00143	.00069	.00005	.00010	.00007	.00239	.00029	.00019
%RSD	163.13	11.493	47.914	1.9180	4.6776	577.05	3594.8	.18542	37.781
#1	.00002	.01348	-.00095	.00263	.00210	-.00004	.00163	.15375	.00063
#2	-.00033	.01146	-.00192	.00256	.00197	.00006	-.00176	.15416	.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00037**	**.00075**	**-.00107**	**.01343**	**.19146**	**.00230**	**.05098**	**.00127**	**.00063**
Stddev	.00002	.00030	.00083	.00127	.01901	.00050	.00133	.00000	.00031
%RSD	5.4648	39.497	77.623	9.4805	9.9310	21.933	2.6158	.12385	50.322
#1	.00036	.00096	-.00048	.01253	.20490	.00194	.05192	.00127	.00040
#2	.00038	.00054	-.00166	.01433	.17801	.00265	.05004	.00127	.00085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11973**	**-.00011**	**.01000**	**.00016**	**.02450**	**-.00013**	**.00025**	**.04614**	**.09873**
Stddev	.01588	.00070	.00119	.00095	.00215	.00043	.00051	.00569	.01217
%RSD	13.264	612.86	11.865	597.54	8.7828	325.10	202.35	12.324	12.324
#1	.13096	-.00061	.00916	.00083	.02297	-.00043	-.00011	.04212	.09013
#2	.10850	.00038	.01083	-.00051	.02602	.00017	.00062	.05016	.10734
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00258**	**.00130**	**.00641**	**.00025**	**.00308**	**-.02755**	**.00067**	**.00557**	**-.00061**
Stddev	.00052	.00023	.00319	.00005	.00080	.01923	.00056	.00041	.00174
%RSD	20.285	17.451	49.746	19.072	25.905	69.809	83.850	7.3349	284.09
#1	.00295	.00146	.00867	.00029	.00251	-.04115	.00027	.00586	-.00184
#2	.00221	.00114	.00416	.00022	.00364	-.01395	.00106	.00529	.00062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2782.5**	**51470.**	**5915.1**
Stddev	.5	176.	28.4
%RSD	.01629	.34144	.47965
#1	2782.9	51346.	5895.1
#2	2782.2	51594.	5935.2

Sample Name: 280-98171-B-1-B Acquired: 6/14/2017 0:23:37 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00014**	**.00402**	**.00519**	**.06708**	**.11360**	**-.00009**	**-.00037**	**48.508**	**.00051**
Stddev	.00061	.00047	.00341	.00130	.00010	.00001	.00025	.131	.00017
%RSD	425.30	11.600	65.821	1.9418	.08994	6.5444	68.536	.26963	33.253
#1	.00029	.00435	.00277	.06801	.11367	-.00009	-.00055	48.601	.00039
#2	-.00058	.00369	.00760	.06616	.11352	-.00008	-.00019	48.416	.00063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00014**	**.00065**	**-.00053**	**.00388**	**4.5157**	**.03892**	**10.410**	**.00273**	**.00314**
Stddev	.00015	.00007	.00033	.00005	.0496	.00065	.032	.00005	.00032
%RSD	100.61	10.099	62.078	1.2652	1.0984	1.6714	.30698	1.8994	10.256
#1	-.00025	.00061	-.00076	.00384	4.4806	.03846	10.432	.00269	.00336
#2	-.00004	.00070	-.00029	.00391	4.5508	.03938	10.387	.00276	.00291
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**29.421**	**-.00067**	**.01056**	**-.00050**	**7.8906**	**-.00296**	**-.00952**	**14.277**	**30.552**
Stddev	.422	.00056	.00330	.00116	.2444	.00074	.00530	.044	.095
%RSD	1.4333	83.675	31.259	233.31	3.0974	25.015	55.706	.31028	.31028
#1	29.719	-.00027	.01289	.00032	8.0634	-.00243	-.00577	14.308	30.619
#2	29.123	-.00106	.00822	-.00131	7.7178	-.00348	-.01327	14.246	30.485
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00183**	**.52367**	**.00360**	**-.00035**	**.00248**	**-.04486**	**.00744**	**.00351**	**.00106**
Stddev	.00031	.00018	.00106	.00038	.00405	.02022	.00014	.00100	.00037
%RSD	16.735	.03457	29.392	107.19	162.86	45.082	1.9216	28.595	34.486
#1	.00161	.52380	.00435	-.00062	.00534	-.03056	.00754	.00280	.00080
#2	.00204	.52354	.00285	-.00009	-.00038	-.05916	.00734	.00422	.00132
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2741.9**	**50120.**	**5929.8**
Stddev	1.7	517.	15.3
%RSD	.06109	1.0315	.25800
#1	2743.1	49754.	5919.0
#2	2740.7	50485.	5940.6

Sample Name: 280-98171-B-2-B Acquired: 6/14/2017 0:26:11 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377014 6010C Q5

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**.01341**	**.00095**	**.02844**	**.03485**	**.00000**	**-.00273**	**90.262**	**.00043**
Stddev	.00003	.00211	.00384	.00036	.00020	.00004	.00205	.084	.00001
%RSD	96.789	15.727	403.46	1.2689	.56846	3285.6	74.961	.09295	3.2831
#1	-.00005	.01192	-.00177	.02870	.03499	.00003	-.00418	90.322	.00042
#2	-.00001	.01491	.00367	.02819	.03471	-.00003	-.00128	90.203	.00044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00060**	**.00833**	**.00005**	**.01766**	**2.2275**	**.02490**	**16.324**	**.00037**	**.00054**
Stddev	.00008	.00042	.00014	.00316	.0475	.00223	.006	.00006	.00034
%RSD	13.248	5.0611	265.96	17.879	2.1339	8.9624	.03453	15.950	62.854
#1	-.00066	.00863	.00015	.01543	2.1939	.02332	16.328	.00042	.00030
#2	-.00055	.00803	-.00005	.01989	2.2611	.02648	16.320	.00033	.00077
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**27.065**	**.00061**	**.01108**	**-.00110**	**36.730**	**-.00212**	**.00492**	**10.576**	**22.632**
Stddev	.163	.00048	.00173	.00063	1.206	.00597	.00180	.003	.006
%RSD	.60069	78.906	15.598	57.637	3.2820	281.87	36.522	.02816	.02816
#1	26.950	.00027	.01231	-.00065	37.583	-.00634	.00365	10.574	22.628
#2	27.180	.00095	.00986	-.00155	35.878	.00210	.00619	10.578	22.637
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00033**	**.69301**	**.00249**	**-.00035**	**.00350**	**-.05473**	**.00278**	**.00608**	**-.00034**
Stddev	.00066	.00036	.00062	.00011	.00484	.02473	.00026	.00001	.00084
%RSD	203.67	.05206	24.903	31.106	138.42	45.186	9.3057	.16184	248.68
#1	-.00079	.69276	.00205	-.00042	.00692	-.03725	.00260	.00609	-.00093
#2	.00014	.69327	.00293	-.00027	.00007	-.07222	.00296	.00608	.00026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2672.6**	**49215.**	**5920.4**
Stddev	2.4	36.	5.4
%RSD	.08843	.07246	.09171
#1	2674.2	49241.	5916.6
#2	2670.9	49190.	5924.2

Sample Name: CCVH-4579429 Acquired: 6/14/2017 0:28:48 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00085**	**48.197**	**-.00517**	**.00129**	**.00035**	**.00019**	**.99561**	**.00750**	**.00040**	**-.00102**	**.00024**	**.01439**	**48.491**
Stddev	.00022	.082	.00383	.00112	.00012	.00009	.02527	.00084	.00024	.00033	.00024	.00082	.107
%RSD	26.170	.17103	74.166	86.594	35.596	44.555	2.5378	11.180	60.522	32.419	99.200	5.6826	.22072
#1	.00101	48.138	-.00246	.00050	.00044	.00025	1.0135	.00809	.00057	-.00125	.00007	.01381	48.567
#2	.00069	48.255	-.00787	.00209	.00026	.00013	.97774	.00690	.00023	-.00078	.00041	.01496	48.416
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.14046**	**.00009**	**.03391**	**-.00193**	**-.00157**	**248.55**	**.00081**	**.00666**	**-.00061**	**4.9408**	**.00286**	**-.01251**	**-.00101**
Stddev	.01462	.00136	.00517	.00009	.00053	.10	.00028	.00083	.00028	.1102	.00107	.00256	.00533
%RSD	10.408	1526.2	15.242	4.3994	33.449	.04065	34.924	12.391	45.200	2.2312	37.457	20.486	529.50
#1	.13012	-.00087	.03757	-.00199	-.00195	248.48	.00061	.00725	-.00042	5.0188	.00211	-.01432	-.00477
#2	.15079	.00105	.03026	-.00187	-.00120	248.62	.00101	.00608	-.00081	4.8629	.00362	-.01070	.00276
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00215**	**.00073**	**.00047**	**4.7976**	**.01706**	**-.00002**	**9.8256**	**.01345**	**.00028**	**.08528**
Stddev	.01141	.00255	.00008	.0045	.00001	.00451	.0459	.00035	.00090	.00126
%RSD	529.50	351.91	17.274	.09366	.07561	19043.	.46701	2.6043	318.58	1.4831
#1	-.01022	.00253	.00041	4.8008	.01705	-.00321	9.7932	.01321	.00092	.08439
#2	.00591	-.00108	.00053	4.7945	.01707	.00316	9.8581	.01370	-.00036	.08618
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2668.0**	**48222.**	**5780.1**
Stddev	4.0	50.	22.1
%RSD	.15099	.10279	.38148
#1	2665.1	48257.	5795.7
#2	2670.8	48187.	5764.5

Sample Name: CCV-4580817 Acquired: 6/14/2017 0:31:22 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49826**	**.52463**	**.96826**	**.49167**	**.50087**	**.48078**	**-.00374**	**4.9974**	**.48927**	**.48946**	**.48479**	**.50151**	**2.4119**
Stddev	.00113	.01741	.02726	.01235	.00070	.00086	.00064	.0132	.01546	.01504	.01574	.00246	.0102
%RSD	.22754	3.3180	2.8152	2.5125	.13996	.17926	17.020	.26322	3.1607	3.0733	3.2470	.49089	.42473
#1	.49906	.53694	.98754	.50041	.50136	.48018	-.00419	5.0067	.50020	.50009	.49592	.50325	2.4192
#2	.49746	.51232	.94899	.48294	.50037	.48139	-.00329	4.9881	.47833	.47882	.47366	.49977	2.4047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.107**	**1.0038**	**20.070**	**.48822**	**.48204**	**5.0773**	**.48916**	**.99083**	**.99700**	**-.02490**	**.98245**	**.97582**	**4.8197**
Stddev	.158	.0036	.039	.00162	.01600	.0107	.01474	.03691	.02837	.00371	.02999	.03357	.0075
%RSD	.30909	.35975	.19294	.33208	3.3198	.21114	3.0132	3.7249	2.8458	14.914	3.0522	3.4406	.15615
#1	50.995	1.0013	20.097	.48937	.49336	5.0849	.49958	1.0169	1.0171	-.02227	1.0037	.99956	4.8144
#2	51.218	1.0064	20.043	.48707	.47073	5.0697	.47874	.96473	.97694	-.02752	.96125	.95208	4.8250
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.314**	**.98273**	**.48362**	**.00946**	**.47763**	**.98304**	**-.03485**	**.48382**	**.48665**	**.49267**
Stddev	.016	.02927	.00137	.00271	.00139	.02319	.03432	.00075	.00133	.00206
%RSD	.15615	2.9785	.28423	28.632	.29165	2.3595	98.494	.15404	.27327	.41828
#1	10.303	1.0034	.48265	.00754	.47861	.99944	-.01058	.48434	.48571	.49121
#2	10.325	.96203	.48459	.01137	.47664	.96663	-.05912	.48329	.48759	.49413
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2710.2**	**49125.**	**5769.3**
Stddev	3.7	154.	14.2
%RSD	.13679	.31417	.24532
#1	2707.6	49016.	5779.3
#2	2712.9	49234.	5759.3

Sample Name: CCB Acquired: 6/14/2017 0:33:51 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00018**	**-.00181**	**.00276**	**.00064**	**.00028**	**.00007**	**.00068**	**-.00730**	**.00041**	**.00032**	**.00058**	**-.00168**	**-.00052**
Stddev	.00009	.00024	.00822	.00168	.00004	.00006	.00220	.00403	.00014	.00009	.00018	.00010	.00470
%RSD	50.941	13.322	297.41	261.80	13.602	84.908	326.00	55.137	35.259	29.031	30.037	5.6742	905.04
#1	.00024	-.00198	.00858	.00183	.00025	.00011	-.00088	-.00446	.00031	.00039	.00071	-.00175	.00281
#2	.00011	-.00164	-.00305	-.00055	.00030	.00003	.00223	-.01015	.00051	.00026	.00046	-.00161	-.00385
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.23569**	**.00273**	**.00234**	**.00008**	**-.00013**	**-.07473**	**-.00011**	**.00288**	**-.00075**	**-.02178**	**.00214**	**-.00315**	**.01857**
Stddev	.04373	.00043	.00155	.00003	.00016	.00033	.00049	.00211	.00046	.00392	.00162	.00298	.00600
%RSD	18.555	15.671	65.987	37.772	118.90	.43996	450.41	73.347	61.000	18.003	75.516	94.629	32.310
#1	.20477	.00303	.00125	.00006	-.00002	-.07497	.00024	.00437	-.00107	-.01900	.00329	-.00104	.02281
#2	.26661	.00242	.00344	.00010	-.00024	-.07450	-.00046	.00139	-.00043	-.02455	.00100	-.00525	.01432
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03973**	**.00037**	**.00018**	**.00490**	**-.00073**	**.00125**	**-.05957**	**.00052**	**-.00062**	**-.00009**
Stddev	.01284	.00115	.00018	.00088	.00043	.00497	.00039	.00091	.00019	.00049
%RSD	32.310	312.64	101.35	17.858	58.499	397.41	.65572	175.31	31.369	524.82
#1	.04881	.00118	.00030	.00429	-.00043	-.00227	-.05985	.00117	-.00048	-.00044
#2	.03065	-.00044	.00005	.00552	-.00103	.00477	-.05930	-.00012	-.00075	.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2716.5**	**50287.**	**5799.4**
Stddev	5.4	86.	9.9
%RSD	.19929	.17036	.16990
#1	2712.6	50226.	5806.3
#2	2720.3	50347.	5792.4

Sample Name: CCVL-4590576 Acquired: 6/14/2017 0:36:29 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01053**	**.10680**	**.01499**	**.09661**	**.01038**	**.00084**	**.11149**	**.19662**	**.00524**	**.01008**	**.01003**	**.01405**
Stddev	.00064	.00422	.00019	.00419	.00039	.00004	.00549	.00242	.00007	.00010	.00035	.00023
%RSD	6.1010	3.9476	1.2357	4.3356	3.7137	5.2468	4.9251	1.2287	1.2447	.99460	3.5090	1.6418
#1	.01008	.10978	.01486	.09957	.01065	.00081	.11537	.19833	.00519	.01001	.01027	.01389
#2	.01099	.10382	.01512	.09364	.01011	.00087	.10761	.19491	.00529	.01015	.00978	.01421
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09604**	**3.3359**	**.02245**	**.21676**	**.01043**	**.01818**	**.97863**	**.04000**	**2.8543**	**.00901**	F **.06006**	**.01794**
Stddev	.00123	.0395	.00052	.00588	.00006	.00108	.02266	.00188	.0908	.00030	.00232	.00135
%RSD	1.2756	1.1854	2.3118	2.7141	.61731	5.9302	2.3154	4.6919	3.1805	3.3814	3.8589	7.5314
#1	.09690	3.3639	.02281	.22092	.01038	.01894	.99465	.04133	2.9185	.00879	.05842	.01890
#2	.09517	3.3080	.02208	.21260	.01047	.01742	.96261	.03867	2.7901	.00922	.06170	.01699
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.01065**	**.45098**	**.96510**	**.09876**	**.01013**	**.01944**	**.00921**	**.01411**	F **.00956**	**.00957**	**.02082**	**.01483**
Stddev	.00060	.00840	.01798	.00499	.00002	.00038	.00021	.00416	.00156	.00078	.00017	.00149
%RSD	5.6205	1.8633	1.8633	5.0503	.22861	1.9556	2.3095	29.446	16.297	8.1877	.81673	10.013
#1	.01107	.45693	.97782	.10229	.01012	.01971	.00936	.01705	.00846	.01013	.02094	.01589
#2	.01023	.44504	.95239	.09524	.01015	.01917	.00906	.01117	.01067	.00902	.02069	.01378
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.02000								.06000			
Range	-30.000%								-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2828.6**	**51271.**	**5901.0**
Stddev	24.9	219.	.5
%RSD	.87876	.42706	.00765
#1	2811.0	51116.	5900.7
#2	2846.2	51426.	5901.3

Sample Name: MB 280-377020/1-A Acquired: 6/14/2017 0:39:07 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377020 6010C Q5 soil

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00053**	**.01131**	**-.00360**	**.01745**	**.00091**	**.00002**	**.00031**	W **.17030**	**.00027**
Stddev	.00034	.00078	.00061	.00017	.00026	.00015	.00042	.00231	.00020
%RSD	64.214	6.8541	16.964	.95567	28.241	1003.1	136.37	1.3586	71.691
#1	-.00029	.01076	-.00317	.01757	.00110	.00012	.00061	.16867	.00014
#2	-.00077	.01186	-.00403	.01733	.00073	-.00009	.00001	.17194	.00041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								.10000	
Low Limit								-.10000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00025**	**.00050**	**-.00133**	**.03378**	**.20132**	**.00037**	**.05066**	**.00034**	**-.00033**
Stddev	.00022	.00024	.00041	.00272	.03241	.00123	.00176	.00006	.00090
%RSD	88.003	47.338	30.477	8.0513	16.098	334.71	3.4818	16.530	276.81
#1	-.00041	.00067	-.00162	.03186	.17840	.00123	.05190	.00030	.00031
#2	-.00010	.00033	-.00105	.03571	.22423	-.00050	.04941	.00038	-.00096
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11297**	**-.00001**	**.01814**	**-.00070**	**-.01173**	**-.00021**	**-.00561**	**.07966**	**.17048**
Stddev	.01389	.00009	.00294	.00100	.00053	.00005	.00802	.03076	.06583
%RSD	12.299	1509.7	16.189	142.96	4.4934	24.695	143.12	38.613	38.613
#1	.10314	.00006	.02021	.00001	-.01210	-.00018	-.01128	.10141	.21702
#2	.12279	-.00007	.01606	-.00140	-.01136	-.00025	.00007	.05791	.12393
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01171**	**.00072**	**.00480**	**.00047**	**.00291**	F **-.06603**	**.00024**	**.00053**	**-.00072**
Stddev	.00025	.00004	.00078	.00050	.00099	.01257	.00060	.00003	.00069
%RSD	2.1448	4.8879	16.237	106.83	34.100	19.033	250.28	6.4871	95.963
#1	.01153	.00075	.00535	.00012	.00361	-.07492	.00066	.00050	-.00120
#2	.01188	.00070	.00425	.00083	.00221	-.05715	-.00018	.00055	-.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.06000			
Low Limit						-.06000			

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2862.6**	**53169.**	**6198.7**
Stddev	2.9	321.	10.0
%RSD	.10143	.60380	.16134
#1	2864.6	53396.	6191.6
#2	2860.5	52942.	6205.7

Sample Name: LCS 280-377020/2-A Acquired: 6/14/2017 0:41:47 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377020 6010C Q5 soil

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05031**	**1.9378**	**.96534**	**1.0117**	**1.9178**	**.04602**	**1.9453**	**46.315**	**.09642**
Stddev	.00072	.0477	.03241	.0218	.0007	.00003	.0416	.041	.00273
%RSD	1.4301	2.4625	3.3576	2.1564	.03876	.07332	2.1393	.08779	2.8287
#1	.04980	1.9716	.98826	1.0271	1.9173	.04599	1.9747	46.286	.09835
#2	.05082	1.9041	.94242	.99626	1.9183	.04604	1.9159	46.344	.09449
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.46190**	W **.18789**	**.24548**	**.94296**	**48.708**	**.95155**	**47.038**	**.46175**	**.90947**
Stddev	.01215	.00488	.00046	.00931	.026	.00066	.174	.00114	.02254
%RSD	2.6303	2.5982	.18669	.98778	.05372	.06977	.36994	.24655	2.4788
#1	.47050	.19135	.24515	.94954	48.690	.95202	46.915	.46095	.92542
#2	.45331	.18444	.24580	.93637	48.727	.95108	47.161	.46256	.89353
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.21000							
Low Limit		.19000							

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.325**	**.46271**	**9.8153**	**.47211**	**1.8837**	**.47604**	**1.8881**	**2.8306**	**6.0576**
Stddev	.137	.01108	.2444	.01033	.0503	.00813	.0421	.0281	.0602
%RSD	.27768	2.3952	2.4897	2.1888	2.6721	1.7084	2.2283	.99362	.99362
#1	49.229	.47055	9.9881	.47942	1.9193	.48179	1.9179	2.8107	6.0150
#2	49.422	.45488	9.6425	.46480	1.8481	.47029	1.8584	2.8505	6.1001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8885**	**.92801**	**.93206**	**.92509**	**1.8608**	**1.8871**	**.46614**	**.46142**	**.48014**
Stddev	.0505	.00093	.00673	.00308	.0475	.0064	.00079	.00161	.00036
%RSD	2.6736	.10000	.72241	.33343	2.5534	.34053	.17050	.34820	.07468
#1	1.9242	.92867	.92730	.92291	1.8944	1.8826	.46558	.46029	.48039
#2	1.8528	.92736	.93682	.92727	1.8272	1.8917	.46670	.46256	.47988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2680.0**	**49606.**	**6101.2**
Stddev	1.4	392.	17.5
%RSD	.05283	.78987	.28623
#1	2679.0	49883.	6113.5
#2	2681.0	49329.	6088.8

Sample Name: 280-98187-K-5-A Acquired: 6/14/2017 0:44:12 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377020 6010C Q5 soil

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00026**	**1.9500**	**.00231**	**.00272**	**.02549**	**-.00003**	**-.00297**	**.79093**	**.00023**
Stddev	.00045	.0683	.00030	.00001	.00059	.00007	.00099	.00054	.00028
%RSD	172.25	3.5015	12.890	.43662	2.3190	214.44	33.397	.06813	122.40
#1	.00006	1.9983	.00210	.00273	.02507	.00002	-.00367	.79131	.00003
#2	-.00058	1.9017	.00252	.00271	.02591	-.00008	-.00227	.79055	.00042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00092**	**.00965**	**.01418**	**5.2779**	**.53264**	**.00563**	**.32352**	**.04731**	**.00196**
Stddev	.00010	.00001	.00001	.0061	.00988	.00003	.00953	.00041	.00018
%RSD	10.797	.11848	.04498	.11611	1.8553	.50900	2.9462	.85949	8.9878
#1	.00085	.00965	.01417	5.2823	.52566	.00565	.33026	.04760	.00209
#2	.00099	.00964	.01418	5.2736	.53963	.00561	.31678	.04703	.00184
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.29346**	**.00429**	**.25649**	**.12286**	**.46022**	**.00054**	**-.00380**	**1.8550**	**3.9697**
Stddev	.01553	.00020	.01222	.00690	.01453	.00025	.00412	.0546	.1167
%RSD	5.2903	4.5890	4.7651	5.6166	3.1561	46.058	108.45	2.9407	2.9407
#1	.30444	.00443	.26514	.12774	.47049	.00037	-.00089	1.8164	3.8871
#2	.28248	.00415	.24785	.11798	.44995	.00072	-.00671	1.8936	4.0522
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01075**	**.00621**	**.00747**	**.97416**	**.00594**	**-.02159**	**.02590**	**.07136**	**.02020**
Stddev	.00294	.00000	.00016	.00246	.00103	.01541	.00011	.00018	.00022
%RSD	27.384	.04924	2.1444	.25234	17.309	71.367	.40843	.25706	1.1026
#1	.01283	.00621	.00735	.97590	.00667	-.03248	.02583	.07123	.02035
#2	.00866	.00622	.00758	.97242	.00521	-.01069	.02598	.07149	.02004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2888.7**	**53393.**	**6307.4**
Stddev	8.6	244.	24.7
%RSD	.29828	.45715	.39166
#1	2882.6	53220.	6290.0
#2	2894.8	53566.	6324.9

Sample Name: 280-98187-K-5-A SD@5 Acquired: 6/14/2017 0:46:49 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377020 6010C Q5 soil

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00034**	**.44768**	**.00406**	**.00213**	**.00566**	**.00008**	**.00263**	**.20012**	**.00049**
Stddev	.00043	.03052	.00285	.00118	.00005	.00001	.00064	.00425	.00027
%RSD	125.78	6.8180	70.189	55.146	.86158	6.9388	24.367	2.1225	55.155
#1	-.00065	.46926	.00204	.00296	.00563	.00009	.00218	.19712	.00069
#2	-.00004	.42610	.00607	.00130	.00570	.00008	.00309	.20312	.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00102**	**.00232**	**.00121**	**1.0777**	**.22475**	**.00221**	**.10000**	**.01005**	**.00185**
Stddev	.00018	.00020	.00009	.0061	.01941	.00114	.00138	.00012	.00070
%RSD	17.667	8.6802	7.8685	.56783	8.6346	51.366	1.3792	1.2048	37.907
#1	.00115	.00247	.00127	1.0734	.23847	.00302	.09902	.01013	.00235
#2	.00089	.00218	.00114	1.0821	.21102	.00141	.10097	.00996	.00136
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04852**	**.00151**	**.06746**	**.02353**	**.10686**	**.00682**	**.00227**	**.37862**	**.81025**
Stddev	.00276	.00027	.00861	.00214	.04291	.00278	.00049	.01283	.02747
%RSD	5.6984	17.607	12.756	9.0864	40.157	40.682	21.413	3.3898	3.3898
#1	.04656	.00170	.07354	.02504	.13721	.00486	.00192	.38770	.82967
#2	.05047	.00132	.06137	.02202	.07652	.00879	.00261	.36955	.79083
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00422**	**.00189**	**.00591**	**.19712**	**.00209**	**-.01011**	**.00560**	**.01491**	**.00551**
Stddev	.00318	.00016	.00094	.00343	.00019	.01069	.00080	.00029	.00032
%RSD	75.323	8.7060	15.872	1.7422	8.9403	105.71	14.373	1.9597	5.7207
#1	.00647	.00177	.00657	.19955	.00222	-.01767	.00503	.01511	.00574
#2	.00197	.00200	.00525	.19469	.00195	-.00255	.00617	.01470	.00529
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2796.8**	**51623.**	**5925.1**
Stddev	10.3	34.	15.8
%RSD	.36801	.06492	.26674
#1	2804.0	51646.	5913.9
#2	2789.5	51599.	5936.3

Sample Name: 280-98187-K-5-B MS Acquired: 6/14/2017 0:49:27 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377020 6010C Q5 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04933**	**6.7368**	**.89962**	**.94243**	**1.9380**	**.04632**	**1.9360**	**47.311**	**.09653**
Stddev	.00012	.0396	.02059	.01053	.0055	.00009	.0231	.001	.00113
%RSD	.24490	.58708	2.2887	1.1171	.28455	.20502	1.1938	.00244	1.1711
#1	.04924	6.7089	.91418	.94988	1.9341	.04626	1.9523	47.310	.09733
#2	.04942	6.7648	.88506	.93499	1.9419	.04639	1.9196	47.311	.09573
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.46577**	**.19787**	**.26087**	**7.5020**	**49.161**	**.94898**	**47.895**	**.52223**	**.87713**
Stddev	.00600	.00253	.00041	.0048	.056	.00183	.060	.00132	.01164
%RSD	1.2888	1.2806	.15707	.06444	.11415	.19241	.12475	.25348	1.3274
#1	.47002	.19966	.26116	7.4986	49.201	.94769	47.853	.52129	.88536
#2	.46153	.19608	.26058	7.5055	49.122	.95027	47.937	.52316	.86890
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.290**	**.46855**	**10.064**	**.60790**	**2.4342**	**.44625**	**1.8091**	**6.6072**	**14.139**
Stddev	.035	.00617	.140	.00658	.0396	.00708	.0159	.0688	.147
%RSD	.07189	1.3168	1.3920	1.0823	1.6285	1.5859	.87805	1.0406	1.0406
#1	49.265	.47291	10.163	.61255	2.4623	.45125	1.8203	6.5586	14.035
#2	49.315	.46418	9.9653	.60325	2.4062	.44125	1.7978	6.6558	14.243
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8368**	**.92990**	**.92526**	**1.6439**	**1.8442**	**1.8614**	**.49591**	**.54136**	**.53799**
Stddev	.0301	.00297	.00525	.0090	.0125	.0253	.00012	.00155	.00053
%RSD	1.6379	.31937	.56702	.54789	.67889	1.3614	.02375	.28552	.09866
#1	1.8581	.92780	.92155	1.6375	1.8530	1.8793	.49599	.54245	.53837
#2	1.8155	.93200	.92897	1.6502	1.8353	1.8435	.49583	.54027	.53762
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2710.7**	**49026.**	**5870.3**
Stddev	.3	38.	2.2
%RSD	.01177	.07795	.03704
#1	2711.0	49053.	5868.8
#2	2710.5	48999.	5871.8

Sample Name: 280-98187-K-5-C MSD Acquired: 6/14/2017 0:51:51 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377020 6010C Q5 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05006**	**5.3932**	**.91970**	**.93965**	**1.9199**	**.04564**	**1.9332**	**46.606**	**.09616**
Stddev	.00094	.0158	.01998	.01017	.0036	.00035	.0226	.105	.00149
%RSD	1.8820	.29214	2.1726	1.0826	.18718	.77002	1.1675	.22611	1.5463
#1	.04939	5.4044	.93383	.94684	1.9224	.04589	1.9491	46.681	.09721
#2	.05073	5.3821	.90557	.93246	1.9173	.04539	1.9172	46.532	.09511
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.46204**	**.19450**	**.25791**	**5.6253**	**48.764**	**.93870**	**47.600**	**.49502**	**.88180**
Stddev	.00559	.00244	.00153	.0243	.039	.00170	.076	.00046	.00958
%RSD	1.2108	1.2554	.59205	.43101	.07991	.18061	.15897	.09353	1.0865
#1	.46600	.19622	.25899	5.6425	48.791	.93989	47.653	.49535	.88857
#2	.45809	.19277	.25683	5.6082	48.736	.93750	47.546	.49469	.87502
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.978**	**.46542**	**9.9750**	**.57713**	**2.2963**	**.45362**	**1.8210**	**5.5626**	**11.904**
Stddev	.449	.00524	.1314	.00656	.0450	.00145	.0237	.0186	.040
%RSD	.91662	1.1269	1.3174	1.1365	1.9590	.31866	1.3003	.33340	.33340
#1	49.296	.46913	10.068	.58177	2.3282	.45464	1.8377	5.5495	11.876
#2	48.661	.46171	9.8820	.57250	2.2645	.45259	1.8042	5.5757	11.932
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.8439**	**.92048**	**.92718**	**1.4420**	**1.8406**	**1.8661**	**.48447**	**.52836**	**.51945**
Stddev	.0218	.00261	.00282	.0024	.0353	.0331	.00194	.00200	.00419
%RSD	1.1835	.28382	.30445	.16504	1.9187	1.7710	.40028	.37928	.80692
#1	1.8593	.92232	.92519	1.4436	1.8656	1.8895	.48584	.52977	.52242
#2	1.8285	.91863	.92918	1.4403	1.8156	1.8428	.48310	.52694	.51649
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2703.5**	**49102.**	**5945.7**
Stddev	6.7	51.	20.8
%RSD	.24809	.10367	.35010
#1	2708.2	49138.	5931.0
#2	2698.7	49066.	5960.4

Sample Name: 280-98187-K-5-A PDS Acquired: 6/14/2017 0:54:13 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377020 6010C Q5 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04845**	W **2.8353**	**.20202**	**.10374**	**.12397**	**.04794**	**-.00239**	**20.230**	**.04999**
Stddev	.00043	.0194	.00531	.00357	.00058	.00007	.00119	.064	.00137
%RSD	.88129	.68277	2.6277	3.4402	.46778	.13999	49.771	.31666	2.7403
#1	.04814	2.8490	.20577	.10627	.12356	.04790	-.00155	20.185	.05096
#2	.04875	2.8216	.19826	.10122	.12438	.04799	-.00323	20.275	.04902
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00							
Low Limit		3.2000							

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04906**	**.05747**	**.06702**	**6.0819**	**20.687**	**.10074**	**20.470**	**.09531**	**.04841**
Stddev	.00163	.00156	.00039	.0156	.002	.00027	.031	.00050	.00183
%RSD	3.3296	2.7197	.58368	.25618	.01203	.26801	.15155	.52170	3.7854
#1	.05022	.05858	.06675	6.0709	20.689	.10093	20.492	.09496	.04971
#2	.04791	.05637	.06730	6.0929	20.685	.10055	20.448	.09566	.04711
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**21.554**	**.05284**	**2.2680**	**.21284**	**.46252**	**.10098**	**.19356**	**6.5153**	**13.943**
Stddev	.252	.00191	.0670	.00580	.01549	.00532	.00935	.1036	.222
%RSD	1.1684	3.6083	2.9552	2.7267	3.3498	5.2721	4.8295	1.5895	1.5895
#1	21.376	.05419	2.3154	.21695	.47347	.10474	.20017	6.5886	14.099
#2	21.732	.05149	2.2206	.20874	.45156	.09721	.18695	6.4421	13.786
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11079**	**.05450**	**.19911**	**1.0226**	**.20223**	**.48528**	**.07532**	**.26702**	**.07636**
Stddev	.00347	.00002	.00364	.0030	.00650	.00623	.00043	.00047	.00018
%RSD	3.1315	.03846	1.8293	.29021	3.2149	1.2832	.57295	.17662	.23064
#1	.11324	.05449	.20169	1.0205	.20682	.48088	.07563	.26668	.07649
#2	.10833	.05452	.19653	1.0247	.19763	.48969	.07502	.26735	.07624
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2763.1**	**49973.**	**5955.7**
Stddev	8.0	218.	27.4
%RSD	.29051	.43589	.45971
#1	2757.4	50127.	5975.0
#2	2768.8	49819.	5936.3

Sample Name: 280-98187-D-6-A Acquired: 6/14/2017 0:56:46 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377020 6010C Q5 soil

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00000**	**1.1367**	**.00241**	**.00249**	**.01114**	**.00007**	**-.00565**	**.22878**	**.00053**
Stddev	.00011	.0420	.00429	.00008	.00014	.00002	.00323	.00466	.00022
%RSD	20298.	3.6945	177.58	3.1761	1.2983	36.171	57.065	2.0390	41.853
#1	-.00008	1.1663	.00545	.00255	.01124	.00009	-.00337	.22548	.00037
#2	.00008	1.1070	-.00062	.00244	.01104	.00005	-.00794	.23208	.00068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00062**	**.00760**	**.00088**	**3.2816**	**.25461**	**.00200**	**.10699**	**.04574**	**.00057**
Stddev	.00005	.00047	.00061	.0207	.06689	.00190	.00046	.00019	.00074
%RSD	8.1847	6.1254	69.289	.63095	26.270	95.054	.42715	.40797	129.89
#1	.00058	.00793	.00045	3.2670	.30191	.00334	.10667	.04588	.00110
#2	.00065	.00727	.00131	3.2963	.20732	.00066	.10732	.04561	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11322**	**.00129**	**.11001**	**.01394**	**.03574**	**-.00280**	**-.00645**	**1.6774**	**3.5896**
Stddev	.00053	.00039	.00307	.00156	.00098	.00089	.00781	.0478	.1023
%RSD	.46772	30.096	2.7929	11.163	2.7372	31.569	121.03	2.8505	2.8505
#1	.11285	.00102	.11218	.01284	.03505	-.00218	-.00093	1.7112	3.6619
#2	.11360	.00157	.10784	.01504	.03643	-.00343	-.01198	1.6436	3.5172
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01029**	**.00243**	**.01314**	**1.8662**	**-.00023**	**-.04428**	**.01617**	**.00682**	**.03760**
Stddev	.00144	.00005	.00027	.0047	.00040	.00617	.00008	.00068	.00158
%RSD	14.023	2.2264	2.0733	.25402	171.02	13.926	.47601	10.026	4.2086
#1	.01131	.00247	.01334	1.8629	.00005	-.03992	.01612	.00634	.03648
#2	.00927	.00239	.01295	1.8696	-.00052	-.04864	.01623	.00730	.03872
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2859.1**	**52452.**	**6090.0**
Stddev	7.5	260.	2.8
%RSD	.26376	.49553	.04588
#1	2864.5	52268.	6091.9
#2	2853.8	52635.	6088.0

Sample Name: 280-98187-D-7-A Acquired: 6/14/2017 0:59:23 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377020 6010C Q5 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00048**	**6.6249**	**.00458**	**.00667**	**.02840**	**.00020**	**-.00069**	**1.7428**	**.00061**
Stddev	.00014	.0605	.00597	.00029	.00033	.00004	.00245	.0074	.00006
%RSD	29.787	.91258	130.38	4.3117	1.1647	20.075	355.12	.42453	10.495
#1	-.00038	6.6677	.00880	.00687	.02817	.00023	-.00242	1.7480	.00056
#2	-.00058	6.5822	.00036	.00646	.02864	.00017	.00104	1.7376	.00065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00135**	**.02441**	**.00634**	**16.046**	**.76522**	**.00487**	**.70127**	**.14074**	**.00141**
Stddev	.00004	.00056	.00004	.040	.03055	.00096	.00876	.00005	.00055
%RSD	3.0102	2.2737	.63030	.24771	3.9927	19.630	1.2494	.03702	39.241
#1	.00138	.02480	.00632	16.074	.78683	.00420	.69507	.14070	.00180
#2	.00132	.02402	.00637	16.018	.74362	.00555	.70746	.14078	.00102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.15447**	**.00416**	**.38431**	**.03678**	**.32817**	**.00523**	**.00222**	**3.0713**	**6.5725**
Stddev	.01793	.00026	.01434	.00102	.00964	.00090	.00243	.1012	.2165
%RSD	11.604	6.3429	3.7324	2.7772	2.9368	17.155	109.27	3.2933	3.2933
#1	.16715	.00435	.39445	.03606	.33498	.00460	.00394	3.1428	6.7256
#2	.14180	.00398	.37417	.03750	.32135	.00586	.00051	2.9997	6.4195
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01229**	**.00685**	**.01613**	**1.2089**	**.00338**	**-.04330**	**.02969**	**.05471**	**.04274**
Stddev	.00105	.00009	.00130	.0176	.00070	.00531	.00043	.00004	.00062
%RSD	8.5246	1.2911	8.0584	1.4531	20.627	12.268	1.4594	.08184	1.4477
#1	.01155	.00679	.01705	1.1965	.00289	-.04706	.02999	.05467	.04318
#2	.01304	.00691	.01521	1.2213	.00388	-.03955	.02938	.05474	.04231
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2795.8**	**51211.**	**6171.0**
Stddev	11.2	108.	2.7
%RSD	.40100	.21180	.04333
#1	2803.8	51288.	6169.1
#2	2787.9	51134.	6172.9

Sample Name: 280-98187-D-8-A Acquired: 6/14/2017 1:01:57 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377020 6010C Q5 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**17.934**	**.00574**	**.00342**	**.03477**	**.00021**	**-.00410**	**1.1608**	**.00055**
Stddev	.00046	.059	.00067	.00017	.00037	.00008	.00123	.0128	.00016
%RSD	9185.5	.32990	11.648	4.9001	1.0744	36.411	30.002	1.1058	29.922
#1	-.00033	17.892	.00622	.00331	.03451	.00016	-.00497	1.1518	.00043
#2	.00032	17.976	.00527	.00354	.03503	.00026	-.00323	1.1699	.00067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00106**	**.03949**	**.00818**	**26.705**	**.59750**	**.00828**	**.56579**	**.06426**	**.00100**
Stddev	.00077	.00134	.00024	.168	.02614	.00085	.00343	.00002	.00049
%RSD	73.301	3.4018	2.9107	.62725	4.3757	10.249	.60562	.03505	49.486
#1	.00160	.04044	.00835	26.586	.57901	.00888	.56821	.06424	.00065
#2	.00051	.03854	.00801	26.823	.61598	.00768	.56336	.06428	.00135
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.18122**	**.00527**	**.42466**	**.03605**	**.07382**	**.00333**	**-.00196**	**6.3959**	**13.687**
Stddev	.01107	.00089	.01111	.00145	.00250	.00228	.00514	.0655	.140
%RSD	6.1079	16.895	2.6157	4.0300	3.3884	68.637	262.06	1.0240	1.0240
#1	.17340	.00590	.43251	.03708	.07205	.00494	.00167	6.3496	13.588
#2	.18905	.00464	.41680	.03502	.07558	.00171	-.00560	6.4423	13.786
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01138**	**.00936**	**.02287**	**1.5145**	**.00043**	**-.01977**	**.05464**	**.02528**	**.08541**
Stddev	.00045	.00013	.00055	.0027	.00313	.04244	.00042	.00057	.00111
%RSD	3.9509	1.3875	2.4143	.17882	721.17	214.67	.76088	2.2359	1.3032
#1	.01106	.00927	.02326	1.5164	.00264	.01024	.05493	.02568	.08620
#2	.01169	.00945	.02248	1.5125	-.00178	-.04978	.05434	.02488	.08462
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2782.7**	**50304.**	**5925.3**
Stddev	5.2	187.	55.5
%RSD	.18644	.37209	.93675
#1	2779.1	50171.	5964.5
#2	2786.4	50436.	5886.0

Sample Name: CCVH-4579429 Acquired: 6/14/2017 1:04:31 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00134**	**48.115**	**-.00350**	**.00024**	**.00042**	**-.00003**	**.97752**	**-.00685**	**.00057**	**-.00118**	**.00028**	**.01423**	**48.657**
Stddev	.00140	.191	.00044	.00148	.00011	.00005	.03011	.00329	.00034	.00054	.00006	.00002	.161
%RSD	104.59	.39591	12.470	613.39	26.350	161.87	3.0804	48.059	59.393	45.472	20.166	.14455	.33029
#1	.00035	47.981	-.00319	.00129	.00034	.00000	.99881	-.00918	.00080	-.00080	.00032	.01424	48.543
#2	.00233	48.250	-.00380	-.00081	.00050	-.00007	.95623	-.00452	.00033	-.00156	.00024	.01421	48.770
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.15174**	**.00240**	**.03048**	**-.00190**	**-.00176**	**248.50**	**.00055**	**.00479**	**.00015**	**4.8824**	**.00595**	**-.00914**	**-.00365**
Stddev	.00380	.00047	.00609	.00002	.00052	1.74	.00038	.00226	.00070	.0990	.00215	.00292	.00149
%RSD	2.5016	19.497	19.990	1.2909	29.581	.69860	68.624	47.062	456.73	2.0274	36.087	31.944	40.939
#1	.14906	.00207	.03479	-.00189	-.00212	247.27	.00082	.00639	.00065	4.9524	.00443	-.01121	-.00259
#2	.15443	.00273	.02617	-.00192	-.00139	249.73	.00028	.00320	-.00034	4.8124	.00747	-.00708	-.00470
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00781**	**.00183**	**.00028**	**4.7815**	**.01795**	**-.00027**	**9.7606**	**.01341**	**.00082**	**.08327**
Stddev	.00320	.00240	.00009	.0009	.00019	.00074	.0483	.00019	.00127	.00169
%RSD	40.939	131.32	33.242	.01908	1.0563	271.69	.49539	1.4009	154.62	2.0311
#1	-.00555	.00013	.00022	4.7822	.01782	-.00080	9.7948	.01328	-.00008	.08207
#2	-.01007	.00352	.00035	4.7809	.01808	.00025	9.7264	.01355	.00172	.08446
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2660.8**	**48007.**	**5767.3**
Stddev	2.3	204.	38.8
%RSD	.08457	.42460	.67239
#1	2662.4	48151.	5794.7
#2	2659.2	47863.	5739.9

Sample Name: CCV-4580817 Acquired: 6/14/2017 1:07:06 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49633**	**.52641**	**.96280**	**.49399**	**.49768**	**.48023**	**-.00156**	**4.9701**	**.49449**	**.49496**	**.49174**	**.50035**	**2.4015**
Stddev	.00098	.01138	.02562	.00877	.00263	.00300	.00306	.0230	.00958	.01008	.01169	.00025	.0197
%RSD	.19701	2.1619	2.6607	1.7757	.52796	.62395	195.65	.46335	1.9381	2.0374	2.3770	.04967	.81975
#1	.49564	.53446	.98092	.50020	.49583	.47812	.00060	4.9538	.50127	.50209	.50001	.50018	2.3876
#2	.49702	.51836	.94469	.48779	.49954	.48235	-.00372	4.9864	.48772	.48783	.48348	.50053	2.4155
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.779**	**.99551**	**20.074**	**.48836**	**.48776**	**5.0057**	**.49391**	**.99579**	**1.0044**	**-.02438**	**.98685**	**.96987**	**4.8069**
Stddev	.357	.00373	.018	.00063	.01160	.0323	.00963	.02170	.0216	.00981	.01527	.01280	.0462
%RSD	.70303	.37435	.08955	.12836	2.3792	.64440	1.9490	2.1794	2.1558	40.226	1.5478	1.3198	.96188
#1	50.526	.99287	20.062	.48792	.49597	4.9829	.50072	1.0111	1.0197	-.03132	.99765	.97892	4.7742
#2	51.031	.99814	20.087	.48881	.47955	5.0286	.48710	.98045	.98911	-.01745	.97605	.96082	4.8396
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.287**	**.99452**	**.48258**	**.01196**	**.47854**	**.98829**	**-.03081**	**.48461**	**.48769**	**.49098**
Stddev	.099	.02552	.00374	.00049	.00011	.02031	.00913	.00125	.00406	.00216
%RSD	.96188	2.5662	.77461	4.0755	.02308	2.0554	29.620	.25710	.83347	.43966
#1	10.217	1.0126	.47994	.01230	.47846	1.0026	-.03726	.48373	.49056	.48946
#2	10.357	.97648	.48523	.01161	.47862	.97392	-.02436	.48549	.48481	.49251
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2691.8**	**49105.**	**5797.4**
Stddev	.5	18.	77.6
%RSD	.01921	.03754	1.3380
#1	2692.2	49118.	5852.3
#2	2691.5	49092.	5742.6

Sample Name: CCB Acquired: 6/14/2017 1:09:35 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00077**	**.00294**	**-.00286**	**.00133**	**.00013**	**.00002**	**-.00038**	**-.01529**	**.00046**	**.00033**	**.00030**	**-.00161**	**.00235**
Stddev	.00010	.00020	.01074	.00007	.00000	.00005	.00206	.00257	.00006	.00027	.00035	.00037	.00045
%RSD	12.627	6.9243	375.64	5.2545	1.5259	198.77	536.60	16.833	13.047	81.879	117.06	22.996	18.971
#1	.00084	.00308	-.01045	.00138	.00014	.00006	.00107	-.01347	.00042	.00052	.00005	-.00187	.00204
#2	.00070	.00279	.00473	.00128	.00013	-.00001	-.00184	-.01711	.00051	.00014	.00054	-.00135	.00267
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.15307**	**.00057**	**.00471**	**-.00000**	**-.00025**	**-.05633**	**-.00090**	**.00356**	**-.00069**	**-.02577**	**.00216**	**-.00209**	**.01575**
Stddev	.00110	.00037	.00731	.00001	.00073	.00129	.00005	.00375	.00059	.00478	.00322	.00362	.01059
%RSD	.71540	64.379	155.18	290.67	296.70	2.2898	5.8011	105.29	85.882	18.559	149.51	173.40	67.229
#1	.15384	.00031	-.00046	-.00001	-.00076	-.05542	-.00086	.00091	-.00027	-.02915	.00444	.00047	.00827
#2	.15229	.00083	.00988	.00000	.00027	-.05724	-.00094	.00621	-.00111	-.02239	-.00012	-.00465	.02324
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03371**	**.00092**	**.00021**	**.00543**	**-.00068**	**.00144**	**-.03246**	**.00001**	**-.00040**	**.00115**
Stddev	.02267	.00114	.00001	.00303	.00019	.00206	.04070	.00006	.00020	.00058
%RSD	67.229	124.35	6.2235	55.774	28.166	142.82	125.38	433.84	49.250	50.367
#1	.01769	.00011	.00020	.00329	-.00082	-.00001	-.00368	-.00003	-.00054	.00074
#2	.04974	.00172	.00022	.00758	-.00055	.00290	-.06124	.00005	-.00026	.00156
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2691.3**	**49468.**	**5647.4**
Stddev	18.2	245.	19.6
%RSD	.67586	.49456	.34686
#1	2678.4	49641.	5633.6
#2	2704.2	49295.	5661.3

Sample Name: CCVL-4590576 Acquired: 6/14/2017 1:12:14 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01028**	**.11162**	**.01323**	**.09911**	**.01019**	**.00091**	**.11733**	**.19640**	**.00550**	**.01024**	**.01016**	**.01406**
Stddev	.00034	.00328	.00313	.00126	.00009	.00012	.00025	.00157	.00028	.00030	.00010	.00054
%RSD	3.3514	2.9426	23.661	1.2725	.91507	13.231	.20883	.79924	5.0037	2.9002	.94650	3.8159
#1	.01003	.11394	.01544	.10000	.01026	.00083	.11750	.19751	.00531	.01003	.01023	.01444
#2	.01052	.10930	.01101	.09822	.01013	.00100	.11715	.19529	.00570	.01045	.01009	.01369
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10138**	**3.3388**	**.02278**	**.21555**	**.01040**	**.01828**	**.96768**	**.04054**	**2.9006**	**.00715**	F **.05860**	**.02151**
Stddev	.00158	.0118	.00044	.00068	.00001	.00088	.00359	.00010	.0405	.00036	.00026	.00287
%RSD	1.5545	.35202	1.9211	.31513	.07801	4.8335	.37130	.23605	1.3964	5.0937	.44412	13.360
#1	.10027	3.3471	.02309	.21507	.01039	.01891	.97022	.04061	2.9292	.00741	.05878	.02354
#2	.10250	3.3304	.02247	.21603	.01040	.01766	.96514	.04048	2.8719	.00690	.05841	.01948
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01539**	**.48022**	**1.0277**	**.10135**	**.01026**	**.01809**	**.00899**	**.01869**	**.04963**	**.00962**	**.01963**	**.01572**
Stddev	.00459	.01466	.0314	.00211	.00015	.00034	.00017	.00157	.00120	.00005	.00018	.00030
%RSD	29.795	3.0530	3.0530	2.0822	1.4165	1.8835	1.8419	8.3807	2.4218	.53830	.93029	1.9155
#1	.01864	.46985	1.0055	.10284	.01036	.01785	.00887	.01980	.04878	.00966	.01950	.01550
#2	.01215	.49059	1.0499	.09986	.01015	.01833	.00911	.01758	.05048	.00958	.01976	.01593
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2801.3**	**50915.**	**5818.2**
Stddev	8.2	297.	62.1
%RSD	.29307	.58306	1.0669
#1	2807.1	51125.	5774.3
#2	2795.5	50705.	5862.1

Sample Name: 280-98187-D-10-A Acquired: 6/14/2017 1:14:52 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377020 6010C Q5 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00096**	**3.6493**	**-.00006**	**.00531**	**.29409**	**.00020**	**-.00150**	**3.7813**	**.00117**
Stddev	.00028	.0046	.00105	.00027	.00037	.00007	.00398	.0016	.00016
%RSD	28.863	.12584	1825.0	5.1385	.12481	36.079	265.30	.04240	13.994
#1	.00076	3.6461	.00068	.00512	.29435	.00026	.00131	3.7824	.00106
#2	.00116	3.6526	-.00080	.00550	.29383	.00015	-.00431	3.7801	.00129
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00199**	**.00365**	**.02523**	**7.0480**	**.68474**	**.00195**	**.82064**	**.05233**	**.00126**
Stddev	.00018	.00011	.00022	.0134	.05811	.00050	.00231	.00002	.00009
%RSD	8.8439	3.0731	.87880	.18938	8.4858	25.846	.28097	.03974	7.0711
#1	.00211	.00357	.02539	7.0574	.72583	.00160	.81901	.05235	.00120
#2	.00187	.00373	.02508	7.0385	.64365	.00231	.82227	.05232	.00132
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.22163**	**.00799**	**.82992**	**.15422**	**5.7915**	**.00264**	**-.00059**	**2.2020**	**4.7122**
Stddev	.00531	.00027	.01819	.00360	.1061	.00076	.00783	.0169	.0362
%RSD	2.3972	3.3565	2.1915	2.3344	1.8317	28.777	1326.5	.76749	.76749
#1	.22538	.00780	.84278	.15676	5.8665	.00211	.00495	2.2139	4.7378
#2	.21787	.00818	.81706	.15167	5.7165	.00318	-.00613	2.1900	4.6866
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01356**	**.04185**	**.00457**	**.07012**	**.00224**	**-.04920**	**.01374**	**.06482**	**.00864**
Stddev	.00117	.00003	.00017	.00089	.00177	.02848	.00037	.00024	.00060
%RSD	8.6170	.07858	3.6964	1.2706	79.337	57.879	2.6951	.36737	6.9563
#1	.01274	.04183	.00469	.07075	.00349	-.02907	.01400	.06499	.00907
#2	.01439	.04188	.00446	.06949	.00098	-.06934	.01347	.06465	.00822
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2876.1**	**53100.**	**6152.5**
Stddev	3.8	220.	18.4
%RSD	.13072	.41362	.29950
#1	2873.4	52945.	6139.5
#2	2878.7	53256.	6165.5

Sample Name: 280-98187-D-13-A Acquired: 6/14/2017 1:17:26 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377020 6010C Q5 soil

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00024**	**1.3548**	**-.00221**	**.00055**	**.01142**	**-.00005**	**-.00416**	**.28167**	**.00047**
Stddev	.00021	.0399	.00614	.00074	.00015	.00002	.00149	.00215	.00025
%RSD	87.438	2.9423	278.26	133.93	1.3527	37.975	35.841	.76223	53.499
#1	.00009	1.3830	.00214	.00108	.01153	-.00004	-.00522	.28016	.00029
#2	.00039	1.3266	-.00655	.00003	.01131	-.00006	-.00311	.28319	.00064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00042**	**.00922**	**.00133**	**1.4648**	**.20793**	**.00235**	**.10049**	**.03974**	**.00084**
Stddev	.00044	.00011	.00061	.0040	.00951	.00012	.00077	.00025	.00059
%RSD	102.81	1.2222	45.697	.27157	4.5752	5.2092	.76474	.61971	69.961
#1	.00073	.00930	.00090	1.4620	.20120	.00227	.10103	.03991	.00126
#2	.00012	.00914	.00176	1.4676	.21466	.00244	.09995	.03956	.00043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.22278**	**.00117**	**.07914**	**.03123**	**.27735**	**-.00119**	**-.00492**	**.53239**	**1.1393**
Stddev	.00540	.00028	.00655	.00312	.00295	.00352	.00116	.00568	.0122
%RSD	2.4224	24.056	8.2763	9.9873	1.0647	296.15	23.469	1.0672	1.0672
#1	.22659	.00137	.08378	.03344	.27527	.00130	-.00411	.52837	1.1307
#2	.21896	.00097	.07451	.02903	.27944	-.00368	-.00574	.53641	1.1479
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01167**	**.00235**	**.00764**	**2.2632**	**.00233**	**-.05112**	**.01107**	**.00701**	**.04694**
Stddev	.00147	.00004	.00084	.0107	.00187	.02231	.00008	.00005	.00053
%RSD	12.618	1.8432	11.042	.47452	80.199	43.634	.75189	.67502	1.1353
#1	.01271	.00238	.00824	2.2708	.00101	-.06689	.01101	.00697	.04732
#2	.01063	.00232	.00705	2.2556	.00365	-.03535	.01113	.00704	.04656
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2875.3**	**52645.**	**6110.1**
Stddev	4.6	205.	23.2
%RSD	.15844	.39017	.37960
#1	2872.1	52500.	6126.5
#2	2878.5	52790.	6093.7

Sample Name: 280-98187-D-17-A Acquired: 6/14/2017 1:20:03 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377020 6010C Q5 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00022**	**67.429**	**.05702**	**.01735**	**.25606**	**.00101**	**-.00604**	**1.1686**	**.00103**
Stddev	.00027	.248	.01539	.00172	.00007	.00003	.00091	.0013	.00040
%RSD	122.42	.36717	26.982	9.9313	.02563	3.1417	15.052	.11029	38.507
#1	-.00041	67.254	.06790	.01857	.25602	.00099	-.00668	1.1676	.00075
#2	-.00003	67.604	.04614	.01613	.25611	.00103	-.00539	1.1695	.00131
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00523**	**.28504**	**.06890**	W **602.28**	**3.9773**	**.01508**	**1.7236**	**.07020**	**.02271**
Stddev	.00027	.01017	.00061	.51	.0254	.00185	.0108	.00020	.00029
%RSD	5.1057	3.5669	.88746	.08509	.63893	12.272	.62551	.28567	1.2585
#1	.00542	.29223	.06934	601.92	3.9593	.01377	1.7312	.07034	.02291
#2	.00504	.27785	.06847	602.65	3.9952	.01639	1.7160	.07006	.02251
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				500.00					
Low Limit				40.000					

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.46924**	**.01263**	**1.9589**	**.05947**	**13.011**	**.04740**	**.01570**	**4.6719**	**9.9979**
Stddev	.02220	.00057	.0699	.00189	.449	.00405	.00719	.0239	.0512
%RSD	4.7309	4.5008	3.5684	3.1780	3.4520	8.5376	45.809	.51262	.51262
#1	.45354	.01303	2.0083	.06081	13.328	.04453	.01062	4.6550	9.9616
#2	.48493	.01222	1.9094	.05814	12.693	.05026	.02079	4.6888	10.034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01408**	**.09359**	**.04715**	**1.2261**	**-.00009**	**.14848**	**.18720**	**.11221**	**.39170**
Stddev	.00176	.00017	.00265	.0105	.00113	.00580	.00110	.00039	.00180
%RSD	12.476	.17743	5.6173	.85690	1264.9	3.9079	.58686	.35083	.45888
#1	.01284	.09348	.04902	1.2336	-.00088	.15258	.18798	.11249	.39297
#2	.01532	.09371	.04528	1.2187	.00071	.14438	.18642	.11194	.39043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**3016.3**	**55107.**	**6826.4**
Stddev	16.1	172.	124.0
%RSD	.53306	.31228	1.8169
#1	3027.7	54986.	6914.1
#2	3005.0	55229.	6738.7

Sample Name: 280-98187-D-18-A Acquired: 6/14/2017 1:22:39 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377020 6010C Q5 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00026**	**25.431**	**.01259**	**.01137**	**.08490**	**.00065**	**-.00349**	**2.2733**	**.00337**
Stddev	.00019	.070	.00481	.00094	.00008	.00006	.00026	.0033	.00035
%RSD	71.668	.27474	38.251	8.3102	.09573	8.8026	7.4332	.14324	10.265
#1	-.00040	25.481	.01599	.01203	.08496	.00069	-.00331	2.2710	.00362
#2	-.00013	25.382	.00918	.01070	.08485	.00061	-.00367	2.2756	.00313
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00637**	**.05117**	**.04048**	**25.712**	**1.6468**	**.00481**	**1.1964**	**.05169**	**.00333**
Stddev	.00015	.00111	.00009	.046	.0461	.00170	.0116	.00004	.00089
%RSD	2.3670	2.1727	.22928	.17805	2.7985	35.407	.97044	.06924	26.717
#1	.00648	.05195	.04042	25.745	1.6793	.00360	1.2046	.05171	.00270
#2	.00626	.05038	.04055	25.680	1.6142	.00601	1.1882	.05166	.00396
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.32377**	**.02347**	**1.4741**	**.59203**	**9.5109**	**.00357**	**.00278**	**4.4268**	**9.4733**
Stddev	.00519	.00098	.0459	.01477	.2080	.00086	.00204	.0172	.0368
%RSD	1.6020	4.1894	3.1102	2.4952	2.1874	23.995	73.241	.38802	.38802
#1	.32743	.02416	1.5065	.60247	9.6580	.00418	.00422	4.4146	9.4473
#2	.32010	.02277	1.4417	.58158	9.3638	.00296	.00134	4.4389	9.4993
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01286**	**.03039**	**.01402**	**.63263**	**.00393**	**-.08182**	**.04596**	**.04045**	**.03079**
Stddev	.00064	.00008	.00165	.00483	.00033	.00283	.00039	.00064	.00173
%RSD	4.9854	.26619	11.763	.76288	8.3604	3.4604	.85647	1.5729	5.6074
#1	.01331	.03033	.01285	.62922	.00370	-.08383	.04568	.04090	.03201
#2	.01240	.03044	.01519	.63604	.00416	-.07982	.04624	.04000	.02957
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**3168.5**	**58931.**	**6935.1**
Stddev	.7	41.	24.0
%RSD	.02130	.07021	.34619
#1	3168.9	58960.	6918.1
#2	3168.0	58902.	6952.0

Sample Name: 280-98187-D-19-A Acquired: 6/14/2017 1:25:12 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377020 6010C Q5 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00268**	**8.9249**	**.01491**	**.01181**	**.14873**	**.00025**	**.00096**	**2.5824**	**.00295**
Stddev	.00027	.0299	.00243	.00007	.00136	.00006	.00078	.0234	.00002
%RSD	10.117	.33481	16.319	.58423	.91670	24.246	80.840	.90793	.77055
#1	.00249	8.9460	.01663	.01186	.14969	.00030	.00041	2.5989	.00293
#2	.00287	8.9038	.01319	.01176	.14776	.00021	.00152	2.5658	.00296
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00622**	**.03358**	**.07758**	**23.563**	**1.9588**	**.00430**	**2.1166**	**.11080**	**.00501**
Stddev	.00038	.00078	.00059	.088	.0518	.00011	.0033	.00038	.00058
%RSD	6.0773	2.3159	.75563	.37178	2.6441	2.6034	.15424	.33895	11.475
#1	.00649	.03413	.07716	23.625	1.9954	.00438	2.1190	.11053	.00461
#2	.00595	.03303	.07799	23.501	1.9222	.00423	2.1143	.11106	.00542
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.50620**	**.02524**	**2.2950**	**.57675**	**6.7214**	**.00964**	**.00477**	**3.3421**	**7.1521**
Stddev	.00378	.00060	.0577	.01444	.1451	.00301	.00343	.0049	.0105
%RSD	.74637	2.3806	2.5146	2.5030	2.1588	31.211	71.988	.14698	.14698
#1	.50888	.02566	2.3358	.58695	6.8240	.00751	.00234	3.3456	7.1595
#2	.50353	.02482	2.2542	.56654	6.6188	.01177	.00719	3.3386	7.1447
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.03126**	**.02233**	**.01035**	**.89620**	**-.00176**	**-.02409**	**.07648**	**.26097**	**.02119**
Stddev	.00264	.00021	.00074	.00497	.00243	.01553	.00022	.00267	.00087
%RSD	8.4343	.92464	7.1302	.55416	138.28	64.443	.29353	1.0250	4.1185
#1	.03312	.02247	.00983	.89269	-.00347	-.03507	.07632	.26286	.02181
#2	.02939	.02218	.01087	.89971	-.00004	-.01311	.07664	.25908	.02057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2788.7**	**51181.**	**5990.1**
Stddev	.8	116.	18.1
%RSD	.03029	.22760	.30152
#1	2789.3	51264.	6002.8
#2	2788.1	51099.	5977.3

Sample Name: 280-98187-D-20-A Acquired: 6/14/2017 1:27:44 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377020 6010C Q5 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00041**	**4.8238**	**.00537**	**.00666**	**.05401**	**.00006**	**-.00542**	**1.1389**	**.00108**
Stddev	.00042	.0202	.00360	.00029	.00057	.00003	.00016	.0078	.00014
%RSD	103.75	.41789	67.110	4.3172	1.0493	39.799	2.8669	.68146	13.070
#1	.00011	4.8096	.00282	.00687	.05361	.00008	-.00553	1.1444	.00098
#2	.00071	4.8381	.00792	.00646	.05442	.00005	-.00531	1.1334	.00117
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00227**	**.03075**	**.01913**	**20.573**	**.94818**	**.00405**	**.78821**	**.11282**	**.00426**
Stddev	.00015	.00079	.00069	.036	.02377	.00118	.00087	.00025	.00038
%RSD	6.7329	2.5690	3.6174	.17657	2.5068	29.123	.11060	.22593	8.9891
#1	.00238	.03131	.01864	20.599	.93138	.00488	.78759	.11300	.00453
#2	.00216	.03019	.01962	20.547	.96499	.00321	.78882	.11264	.00399
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.16282**	**.01264**	**.82223**	**.49060**	**1.1863**	**.01132**	**-.00307**	**4.3271**	**9.2600**
Stddev	.00920	.00046	.02754	.01185	.0467	.00149	.00173	.0415	.0887
%RSD	5.6496	3.6331	3.3489	2.4147	3.9378	13.133	56.208	.95814	.95814
#1	.15631	.01296	.84170	.49897	1.2193	.01237	-.00185	4.3564	9.3228
#2	.16932	.01231	.80276	.48222	1.1532	.01027	-.00429	4.2978	9.1973
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02215**	**.01376**	**.01422**	**1.8519**	**.00138**	**-.06136**	**.07697**	**.08059**	**.04712**
Stddev	.00199	.00009	.00223	.0113	.00020	.04734	.00068	.00049	.00236
%RSD	8.9953	.62227	15.710	.60869	14.451	77.153	.88349	.60247	5.0036
#1	.02074	.01382	.01264	1.8598	.00124	-.02788	.07648	.08025	.04545
#2	.02356	.01369	.01580	1.8439	.00152	-.09483	.07745	.08093	.04879
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2787.5**	**51660.**	**5898.4**
Stddev	.4	304.	24.5
%RSD	.01343	.58843	.41545
#1	2787.3	51445.	5881.1
#2	2787.8	51875.	5915.7

Sample Name: 280-98187-D-21-A Acquired: 6/14/2017 1:30:18 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377020 6010C Q5 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00015**	**4.8346**	**.00678**	**.00424**	**.03920**	**.00006**	**-.00791**	**.56231**	**.00045**
Stddev	.00028	.0343	.00166	.00031	.00070	.00000	.00275	.00072	.00034
%RSD	193.48	.71019	24.511	7.2848	1.7783	.78549	34.755	.12764	75.409
#1	-.00034	4.8589	.00796	.00446	.03970	.00006	-.00596	.56180	.00069
#2	.00005	4.8103	.00561	.00403	.03871	.00006	-.00985	.56281	.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00096**	**.03283**	**.01011**	**21.960**	**.42057**	**.00199**	**.32234**	**.09569**	**.00274**
Stddev	.00029	.00102	.00020	.097	.01338	.00031	.00202	.00033	.00035
%RSD	29.992	3.0967	2.0005	.44129	3.1804	15.814	.62719	.34250	12.902
#1	.00116	.03355	.01026	22.029	.41112	.00221	.32377	.09592	.00299
#2	.00076	.03211	.00997	21.892	.43003	.00177	.32091	.09546	.00249
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.21794**	**.00455**	**.59968**	**.14314**	**.64775**	**.00475**	**.00425**	**3.6433**	**7.7966**
Stddev	.00628	.00039	.02346	.00400	.01275	.00026	.00398	.0905	.1936
%RSD	2.8804	8.4840	3.9127	2.7969	1.9680	5.4781	93.682	2.4832	2.4832
#1	.21350	.00428	.61627	.14597	.65676	.00457	.00143	3.7073	7.9335
#2	.22238	.00483	.58309	.14031	.63873	.00493	.00706	3.5793	7.6597
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01429**	**.01998**	**.02199**	**2.4665**	**.00244**	**-.05747**	**.06474**	**.02708**	**.08334**
Stddev	.00080	.00004	.00089	.0069	.00207	.01549	.00055	.00016	.00099
%RSD	5.6008	.19445	4.0436	.28050	84.627	26.958	.84931	.60898	1.1878
#1	.01372	.01995	.02262	2.4714	.00098	-.04652	.06513	.02719	.08404
#2	.01485	.02000	.02136	2.4616	.00390	-.06843	.06436	.02696	.08264
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2803.8**	**51358.**	**5882.4**
Stddev	1.2	239.	27.7
%RSD	.04179	.46584	.47135
#1	2803.0	51528.	5862.8
#2	2804.6	51189.	5902.0

Sample Name: 280-98187-D-22-A Acquired: 6/14/2017 1:32:53 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377020 6010C Q5 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00007**	W **2.9814**	**.01176**	**.00313**	**.03227**	**.00010**	**-.00445**	**.59038**	**.00068**
Stddev	.00002	.0291	.00251	.00116	.00031	.00011	.00020	.00950	.00008
%RSD	35.480	.97516	21.356	37.114	.96045	112.31	4.4257	1.6097	12.333
#1	-.00009	2.9608	.01353	.00395	.03249	.00018	-.00459	.59709	.00062
#2	-.00005	3.0019	.00998	.00231	.03205	.00002	-.00431	.58366	.00073
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		500.00							
Low Limit		3.2000							

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00096**	**.02242**	**.01665**	**15.059**	**.54617**	**.00360**	**.34107**	**.08363**	**.00289**
Stddev	.00004	.00122	.00008	.009	.02325	.00199	.00268	.00071	.00014
%RSD	4.4550	5.4187	.46079	.05823	4.2561	55.218	.78515	.85235	4.9605
#1	.00093	.02328	.01670	15.065	.52973	.00500	.33918	.08413	.00299
#2	.00100	.02156	.01659	15.053	.56260	.00219	.34296	.08313	.00279
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.12046**	**.00465**	**.35544**	**.23352**	**.37239**	**.00519**	**-.00297**	**2.9720**	**6.3601**
Stddev	.00505	.00039	.01333	.00732	.01390	.00355	.00164	.0411	.0879
%RSD	4.1937	8.2909	3.7504	3.1341	3.7328	68.271	55.294	1.3815	1.3815
#1	.12404	.00493	.36487	.23870	.38222	.00269	-.00181	3.0010	6.4222
#2	.11689	.00438	.34601	.22835	.36256	.00770	-.00413	2.9430	6.2980
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01524**	**.00623**	**.02459**	**2.0543**	**.00191**	**-.05278**	**.06346**	**.02997**	**.06047**
Stddev	.00382	.00001	.00067	.0065	.00064	.00131	.00060	.00086	.00505
%RSD	25.056	.09103	2.7227	.31859	33.522	2.4739	.94328	2.8584	8.3558
#1	.01795	.00623	.02507	2.0589	.00146	-.05186	.06388	.03058	.05690
#2	.01254	.00622	.02412	2.0497	.00236	-.05371	.06304	.02937	.06404
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2792.6**	**51385.**	**5932.3**
Stddev	.2	475.	5.9
%RSD	.00696	.92467	.10027
#1	2792.7	51049.	5928.1
#2	2792.5	51721.	5936.5

Sample Name: 280-98187-D-23-A Acquired: 6/14/2017 1:35:28 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377020 6010C Q5 soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00054**	**42.631**	**.03352**	**.08512**	**.21399**	**.00225**	**-.00367**	**10.041**	**.00306**
Stddev	.00068	.166	.00082	.00167	.00126	.00001	.00315	.025	.00002
%RSD	125.52	.38966	2.4369	1.9648	.59061	.50817	85.846	.25323	.57389
#1	.00103	42.748	.03410	.08631	.21489	.00224	-.00144	10.059	.00304
#2	.00006	42.513	.03294	.08394	.21310	.00226	-.00589	10.023	.00307
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01105**	**.14162**	**.07949**	**83.823**	**11.687**	**.02390**	**6.1281**	**.14617**	**.00811**
Stddev	.00071	.00434	.00072	.167	.123	.00348	.0103	.00028	.00003
%RSD	6.3897	3.0671	.90410	.19940	1.0541	14.545	.16866	.18935	.31085
#1	.01155	.14469	.07898	83.941	11.774	.02636	6.1354	.14636	.00813
#2	.01055	.13855	.08000	83.705	11.600	.02144	6.1208	.14597	.00809
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.42771**	**.03896**	**2.2995**	**.31427**	**10.065**	**.00812**	**.00648**	**3.6520**	**7.8153**
Stddev	.01286	.00166	.0713	.00518	.289	.00261	.00562	.0119	.0255
%RSD	3.0055	4.2495	3.1011	1.6494	2.8717	32.164	86.800	.32599	.32599
#1	.41862	.04013	2.3499	.31793	10.269	.00997	.01045	3.6604	7.8333
#2	.43680	.03779	2.2490	.31060	9.8605	.00628	.00250	3.6436	7.7973
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01646**	**.05922**	**.01745**	**.63312**	**.00434**	**-.04542**	**.13041**	**.23748**	**.04029**
Stddev	.00098	.00030	.00255	.00110	.00372	.01964	.00073	.00240	.00076
%RSD	5.9528	.50822	14.611	.17349	85.607	43.245	.55763	1.0095	1.8950
#1	.01716	.05943	.01925	.63389	.00171	-.05931	.12989	.23917	.03975
#2	.01577	.05900	.01565	.63234	.00697	-.03153	.13092	.23578	.04083
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2848.9**	**51721.**	**6066.2**
Stddev	2.8	157.	10.0
%RSD	.09658	.30298	.16407
#1	2846.9	51610.	6059.1
#2	2850.8	51832.	6073.2

Sample Name: CCVH-4579429 Acquired: 6/14/2017 1:37:59 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00242**	**47.945**	**-.00256**	**.00177**	**.00029**	**.00011**	**.97076**	**-.00721**	**.00058**	**-.00079**	**.00031**	**.01500**	**48.464**
Stddev	.00004	.200	.00034	.00010	.00024	.00015	.03406	.00349	.00028	.00029	.00031	.00054	.208
%RSD	1.5820	.41634	13.436	5.7461	84.235	135.55	3.5084	48.440	48.873	36.199	100.98	3.5745	.42945
#1	.00240	47.804	-.00280	.00184	.00012	.00000	.99484	-.00474	.00038	-.00099	.00009	.01538	48.317
#2	.00245	48.086	-.00231	.00170	.00046	.00022	.94668	-.00968	.00078	-.00059	.00052	.01462	48.611
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11899**	**.00311**	**.03086**	**-.00195**	**-.00183**	**248.19**	**.00057**	**.00667**	**-.00021**	**4.8557**	**.00467**	**-.01305**	**.00112**
Stddev	.01523	.00107	.00350	.00002	.00069	.83	.00001	.00112	.00133	.1819	.00336	.00180	.01044
%RSD	12.797	34.402	11.335	1.0478	37.758	.33614	1.7837	16.782	643.30	3.7468	71.968	13.793	931.49
#1	.12976	.00235	.03334	-.00196	-.00134	247.60	.00058	.00746	.00074	4.9843	.00229	-.01178	.00850
#2	.10822	.00386	.02839	-.00193	-.00231	248.78	.00057	.00587	-.00115	4.7270	.00704	-.01432	-.00626
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00240**	**.00091**	**.00029**	**4.7772**	**.01736**	**.00388**	**9.7747**	**.01280**	**.00062**	**.08109**
Stddev	.02234	.00422	.00009	.0142	.00013	.00748	.0669	.00034	.00013	.00519
%RSD	931.49	463.45	29.866	.29762	.73618	192.70	.68441	2.6670	20.630	6.4004
#1	.01819	.00389	.00035	4.7872	.01745	-.00141	9.8220	.01256	.00071	.07742
#2	-.01340	-.00207	.00023	4.7671	.01727	.00917	9.7274	.01304	.00053	.08476
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2699.8**	**48409.**	**5823.9**
Stddev	8.6	182.	31.7
%RSD	.31717	.37608	.54510
#1	2693.8	48280.	5846.3
#2	2705.9	48538.	5801.4

Sample Name: CCV-4580817 Acquired: 6/14/2017 1:40:33 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49877**	**.54367**	**.95619**	**.48718**	**.50224**	**.48298**	**.00152**	**5.0010**	**.48773**	**.49271**	**.49004**	**.50407**	**2.4366**
Stddev	.00133	.01143	.04241	.01557	.00332	.00140	.00169	.0070	.01357	.01347	.01444	.00084	.0114
%RSD	.26703	2.1024	4.4349	3.1964	.66150	.28902	111.39	.13936	2.7830	2.7337	2.9473	.16627	.46832
#1	.49971	.55176	.98618	.49819	.50459	.48397	.00032	5.0059	.49733	.50223	.50025	.50467	2.4447
#2	.49783	.53559	.92621	.47617	.49990	.48200	.00271	4.9961	.47814	.48319	.47982	.50348	2.4285
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.005**	**1.0035**	**19.972**	**.48822**	**.48621**	**5.1191**	**.49192**	**.98845**	**.99881**	**-.03190**	**.97361**	**.96076**	**4.8266**
Stddev	.207	.0113	.048	.00108	.01476	.0533	.01488	.02733	.02770	.00256	.02536	.02847	.0509
%RSD	.40546	1.1218	.23943	.22147	3.0363	1.0420	3.0248	2.7649	2.7728	8.0175	2.6049	2.9633	1.0552
#1	51.152	1.0114	20.005	.48898	.49665	5.1568	.50244	1.0078	1.0184	-.03010	.99154	.98089	4.8626
#2	50.859	.99551	19.938	.48745	.47577	5.0814	.48140	.96912	.97923	-.03371	.95567	.94063	4.7906
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.329**	**.99237**	**.48427**	**.01249**	**.47835**	**.97263**	**-.05268**	**.48493**	**.48759**	**.49532**
Stddev	.109	.03027	.00188	.00058	.00090	.01794	.04251	.00215	.00022	.00146
%RSD	1.0552	3.0503	.38825	4.6184	.18903	1.8442	80.695	.44346	.04488	.29564
#1	10.406	1.0138	.48560	.01290	.47899	.98531	-.02262	.48645	.48775	.49635
#2	10.252	.97097	.48294	.01208	.47771	.95994	-.08274	.48341	.48744	.49428
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2725.6**	**50261.**	**5951.5**
Stddev	6.2	94.	61.4
%RSD	.22586	.18616	1.0309
#1	2721.3	50327.	5908.1
#2	2730.0	50195.	5994.8

Sample Name: CCB Acquired: 6/14/2017 1:43:01 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00043**	**.01405**	**-.00123**	**.00002**	**.00041**	**.00009**	**.00139**	**-.01054**	**.00048**	**.00074**	**.00071**	**-.00176**
Stddev	.00089	.00100	.00052	.00057	.00048	.00015	.00126	.00158	.00003	.00014	.00001	.00044
%RSD	204.11	7.1211	41.990	2521.6	117.93	165.74	91.284	14.980	5.9877	18.592	1.0845	25.162
#1	-.00019	.01476	-.00160	.00042	.00074	.00020	.00228	-.01166	.00050	.00084	.00070	-.00145
#2	.00106	.01334	-.00087	-.00038	.00007	-.00002	.00049	-.00943	.00046	.00064	.00071	-.00207
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.06079**	**.11112**	**.00194**	**.00695**	**.00003**	**.00006**	**-.07221**	**-.00024**	**.00488**	**.00024**	**-.02288**	**.00189**
Stddev	.01137	.01851	.00272	.00030	.00010	.00001	.00745	.00000	.00025	.00130	.00121	.00096
%RSD	18.706	16.657	140.41	4.3078	321.59	18.199	10.315	1.0399	5.1015	538.62	5.2839	50.814
#1	.06884	.12421	.00001	.00674	.00010	.00007	-.06694	-.00024	.00506	-.00068	-.02374	.00121
#2	.05275	.09803	.00386	.00716	-.00004	.00005	-.07747	-.00023	.00471	.00116	-.02203	.00257
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.05000											
Low Limit	-.05000											

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00162**	**.02489**	**.05326**	**.00157**	**.00015**	**.00482**	**.00022**	**.00269**	**-.02858**	**.00029**	**.00037**	**.00001**
Stddev	.00873	.01412	.03022	.00362	.00010	.00223	.00002	.00330	.02463	.00032	.00059	.00048
%RSD	540.14	56.743	56.743	230.95	65.201	46.401	9.2352	122.91	86.168	108.73	160.68	4510.2
#1	-.00779	.01490	.03189	-.00099	.00021	.00640	.00021	.00503	-.04600	.00007	.00079	-.00033
#2	.00456	.03487	.07463	.00412	.00008	.00324	.00024	.00035	-.01117	.00052	-.00005	.00035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2728.0**	**50162.**	**5835.8**
Stddev	6.2	159.	13.3
%RSD	.22902	.31721	.22750
#1	2732.4	50274.	5845.1
#2	2723.6	50049.	5826.4

Sample Name: CCVL-4590576 Acquired: 6/14/2017 1:45:41 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01073**	**.11751**	**.01347**	**.09642**	**.01073**	**.00100**	**.11023**	**.19806**	**.00531**	**.01057**	**.01026**	**.01374**
Stddev	.00051	.00620	.00257	.00286	.00012	.00001	.00282	.00107	.00035	.00012	.00023	.00045
%RSD	4.7804	5.2782	19.068	2.9631	1.1039	1.4519	2.5601	.54042	6.6655	1.1501	2.2633	3.2530
#1	.01110	.12190	.01165	.09844	.01081	.00101	.11223	.19881	.00556	.01065	.01043	.01342
#2	.01037	.11313	.01528	.09440	.01065	.00099	.10824	.19730	.00506	.01048	.01010	.01405
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.14459**	**3.3573**	**.02394**	**.21733**	**.01054**	**.01884**	**.98263**	**.04120**	**2.8226**	**.00899**	F **.05871**	**.01983**
Stddev	.00901	.0068	.00003	.00605	.00010	.00086	.00804	.00165	.0874	.00023	.00247	.00192
%RSD	6.2306	.20233	.11576	2.7843	.97484	4.5853	.81806	4.0060	3.0964	2.5534	4.2150	9.7009
#1	.13822	3.3525	.02392	.22161	.01061	.01946	.97695	.04236	2.8844	.00882	.05696	.02119
#2	.15096	3.3621	.02396	.21305	.01046	.01823	.98832	.04003	2.7608	.00915	.06046	.01847
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value	.10000										.10000	
Range	30.000%										-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01582**	**.48761**	**1.0435**	**.09784**	**.01028**	**.01788**	**.00991**	**.01832**	F **.03207**	**.01018**	**.02017**	**.01673**
Stddev	.00262	.00027	.0006	.00451	.00007	.00219	.00017	.00237	.02019	.00110	.00022	.00341
%RSD	16.581	.05630	.05630	4.6135	.66824	12.269	1.7265	12.956	62.967	10.786	1.1133	20.385
#1	.01767	.48780	1.0439	.10103	.01024	.01943	.01003	.01664	.01779	.00941	.02033	.01914
#2	.01396	.48741	1.0431	.09465	.01033	.01633	.00979	.01999	.04634	.01096	.02001	.01432
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2780.5**	**51325.**	**5849.6**
Stddev	5.9	207.	44.2
%RSD	.21326	.40314	.75508
#1	2784.6	51179.	5818.3
#2	2776.3	51472.	5880.8

Sample Name: MB 280-376911/1-A Acquired: 6/14/2017 1:48:19 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376911 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00050**	**.01075**	**-.00290**	**.00021**	**.00141**	**-.00005**	**-.00020**	**.01857**	**.00004**
Stddev	.00036	.00100	.00727	.00011	.00008	.00005	.00110	.00212	.00011
%RSD	71.769	9.3069	250.96	55.085	6.0064	101.54	540.83	11.397	245.63
#1	.00025	.01146	.00224	.00029	.00135	-.00002	.00058	.01707	-.00003
#2	.00076	.01005	-.00804	.00013	.00147	-.00009	-.00098	.02006	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00009**	**.00039**	**-.00218**	**.03646**	**.11538**	**.00051**	**-.00018**	**.00016**	**.00015**
Stddev	.00011	.00007	.00051	.00143	.06550	.00106	.00017	.00003	.00017
%RSD	122.63	18.865	23.498	3.9295	56.766	206.66	95.882	20.554	116.72
#1	-.00016	.00044	-.00181	.03545	.06907	.00127	-.00006	.00019	.00003
#2	-.00001	.00034	-.00254	.03748	.16170	-.00024	-.00030	.00014	.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.05372**	**-.00030**	**.00645**	**-.00065**	**-.00474**	**-.00067**	**-.00526**	**.01572**	**.03365**
Stddev	.00941	.00006	.00356	.00263	.00900	.00133	.00747	.00349	.00747
%RSD	17.517	18.822	55.253	404.51	189.95	199.29	142.06	22.206	22.206
#1	-.04706	-.00034	.00896	-.00251	-.01110	-.00161	-.01054	.01819	.03893
#2	-.06037	-.00026	.00393	.00121	.00163	.00027	.00002	.01326	.02837
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00109**	**.00023**	**.00379**	**-.00046**	**.00177**	**-.02155**	**.00011**	**.00244**	**.00088**
Stddev	.00126	.00006	.00043	.00026	.00656	.01022	.00033	.00001	.00208
%RSD	115.84	28.496	11.390	55.417	370.09	47.416	287.81	.36086	235.55
#1	.00020	.00018	.00410	-.00065	-.00287	-.02877	.00035	.00244	-.00059
#2	.00198	.00027	.00349	-.00028	.00641	-.01432	-.00012	.00245	.00235
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2801.4**	**51530.**	**5943.1**
Stddev	6.2	26.	51.2
%RSD	.22187	.05128	.86090
#1	2797.0	51511.	5979.2
#2	2805.8	51549.	5906.9

Sample Name: LCS 280-376911/2-A Acquired: 6/14/2017 1:50:58 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376911 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05088**	**1.9570**	**.98148**	**.97926**	**1.9721**	**.04709**	**1.9736**	**47.779**	**.09843**
Stddev	.00026	.0302	.01649	.00927	.0121	.00023	.0300	.271	.00169
%RSD	.51323	1.5437	1.6802	.94642	.61556	.48951	1.5198	.56646	1.7216
#1	.05070	1.9783	.99314	.98582	1.9635	.04693	1.9948	47.587	.09963
#2	.05107	1.9356	.96982	.97271	1.9807	.04726	1.9524	47.970	.09723
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47227**	**.19238**	**.24619**	**.95879**	**50.045**	**.97131**	**48.346**	**.46901**	**.93508**
Stddev	.00792	.00347	.00026	.00459	.193	.00418	.087	.00037	.01686
%RSD	1.6766	1.8023	.10430	.47900	.38654	.43015	.17949	.07894	1.8030
#1	.47787	.19484	.24638	.95554	49.908	.96836	48.407	.46927	.94700
#2	.46667	.18993	.24601	.96204	50.182	.97426	48.284	.46875	.92316
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.015**	**.47212**	**9.9904**	**.48139**	**1.9218**	**.48798**	**1.9240**	**9.3451**	**19.999**
Stddev	.216	.00727	.1406	.00585	.0178	.00700	.0163	.0382	.082
%RSD	.43155	1.5407	1.4077	1.2148	.92574	1.4353	.84897	.40847	.40847
#1	49.862	.47726	10.090	.48553	1.9344	.49293	1.9356	9.3181	19.941
#2	50.167	.46698	9.8909	.47726	1.9092	.48303	1.9125	9.3721	20.056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9405**	**.94437**	**.94367**	**.93576**	**1.8752**	**1.8984**	**.47465**	**.47592**	**.49609**
Stddev	.0413	.00509	.00533	.00095	.0163	.0205	.00013	.00169	.00253
%RSD	2.1265	.53882	.56479	.10101	.86733	1.0804	.02835	.35481	.50969
#1	1.9697	.94078	.94744	.93510	1.8867	1.8839	.47455	.47712	.49430
#2	1.9114	.94797	.93990	.93643	1.8637	1.9129	.47474	.47473	.49787
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2677.5**	**48878.**	**5836.0**
Stddev	6.8	88.	10.6
%RSD	.25434	.18101	.18140
#1	2682.3	48815.	5843.5
#2	2672.6	48940.	5828.5

Sample Name: 280-98060-H-2-A Acquired: 6/14/2017 1:53:22 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376911 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00041**	**.01044**	**-.00200**	**.00098**	**.00097**	**-.00001**	**.00142**	**.02731**	**.00040**
Stddev	.00033	.00095	.00087	.00100	.00015	.00003	.00035	.00101	.00007
%RSD	78.475	9.0889	43.379	101.52	15.468	271.47	24.571	3.6810	17.797
#1	.00018	.00977	-.00261	.00169	.00087	-.00003	.00167	.02660	.00045
#2	.00064	.01111	-.00139	.00028	.00108	.00001	.00118	.02802	.00035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00035**	**.00014**	**-.00159**	**.02961**	**.16179**	**.00375**	**.01680**	**.00032**	**.00044**
Stddev	.00013	.00019	.00041	.00020	.02184	.00161	.00080	.00004	.00022
%RSD	35.690	131.23	25.529	.66737	13.497	42.873	4.7419	11.411	50.872
#1	.00044	.00027	-.00188	.02975	.17723	.00262	.01624	.00029	.00060
#2	.00026	.00001	-.00131	.02947	.14635	.00489	.01737	.00034	.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.02904**	**.00017**	**.00660**	**-.00053**	**-.02807**	**.00322**	**-.00266**	**.02257**	**.04831**
Stddev	.01748	.00005	.00249	.00072	.00626	.00231	.00317	.00876	.01875
%RSD	60.181	30.284	37.686	134.60	22.296	71.864	119.27	38.822	38.822
#1	-.01668	.00013	.00836	-.00003	-.02364	.00486	-.00042	.02877	.06157
#2	-.04140	.00020	.00484	-.00104	-.03250	.00158	-.00490	.01638	.03505
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00056**	**.00052**	**.00478**	**.00024**	**.00319**	**-.03472**	**-.00000**	**.00109**	**-.00111**
Stddev	.00078	.00000	.00322	.00070	.00184	.03740	.00097	.00114	.00054
%RSD	138.86	.00926	67.357	290.27	57.736	107.71	75108.	104.38	48.678
#1	.00001	.00052	.00706	-.00025	.00189	-.06116	-.00069	.00189	-.00149
#2	.00111	.00052	.00250	.00073	.00449	-.00828	.00069	.00029	-.00073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2807.0**	**51656.**	**6029.8**
Stddev	3.8	34.	4.6
%RSD	.13409	.06589	.07673
#1	2809.6	51632.	6033.1
#2	2804.3	51680.	6026.6

Sample Name: 280-98060-H-3-A Acquired: 6/14/2017 1:56:01 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376911 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00032**	**.00785**	**.00186**	**.05905**	**.22557**	**-.00004**	**.00141**	**87.996**	**.00054**
Stddev	.00017	.00023	.00123	.00280	.00106	.00008	.00292	.612	.00014
%RSD	53.613	2.9208	66.553	4.7498	.46774	219.80	207.13	.69561	25.777
#1	.00045	.00769	.00273	.06103	.22483	-.00009	.00347	87.563	.00044
#2	.00020	.00801	.00098	.05707	.22632	.00002	-.00066	88.429	.00063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00022**	**.00049**	**.00236**	**.02806**	**4.5313**	**.02098**	**10.458**	**.00099**	**-.00020**
Stddev	.00018	.00046	.00041	.00048	.0632	.00300	.047	.00002	.00028
%RSD	79.364	93.025	17.369	1.7280	1.3950	14.279	.45021	1.5704	141.14
#1	-.00010	.00082	.00207	.02772	4.5760	.01886	10.492	.00098	-.00040
#2	-.00035	.00017	.00264	.02841	4.4866	.02309	10.425	.00100	-.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.467**	**.00022**	**.03209**	**-.00145**	**11.175**	**-.00134**	**-.00389**	**12.963**	**27.740**
Stddev	.404	.00058	.00376	.00085	.409	.00498	.00266	.020	.043
%RSD	2.0733	265.70	11.727	58.334	3.6635	372.60	68.330	.15498	.15498
#1	19.181	-.00019	.03475	-.00205	11.464	.00219	-.00201	12.948	27.710
#2	19.752	.00063	.02943	-.00085	10.885	-.00486	-.00577	12.977	27.770
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00016**	**.53511**	**.00392**	**-.00001**	**.00203**	**-.00465**	**.01191**	**.00364**	**.00312**
Stddev	.00254	.00452	.00075	.00005	.00054	.03399	.00043	.00085	.00076
%RSD	1634.7	.84437	19.018	515.19	26.468	730.59	3.6413	23.419	24.484
#1	.00164	.53191	.00340	.00002	.00165	.01938	.01222	.00424	.00258
#2	-.00195	.53830	.00445	-.00004	.00241	-.02869	.01160	.00303	.00366
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2711.1**	**49765.**	**5929.4**
Stddev	8.7	5.	52.7
%RSD	.32237	.01101	.88847
#1	2717.3	49761.	5966.6
#2	2704.9	49769.	5892.1

Sample Name: 280-98060-H-4-A Acquired: 6/14/2017 1:58:37 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376911 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00093**	**.00729**	**.00390**	**.11522**	**.64739**	**.00004**	**-.00078**	**277.87**	**.00059**
Stddev	.00062	.00059	.00325	.00317	.00267	.00005	.00021	.53	.00003
%RSD	66.798	8.0759	83.338	2.7518	.41231	127.89	27.646	.19061	5.4401
#1	.00049	.00771	.00620	.11746	.64928	.00000	-.00093	278.25	.00057
#2	.00137	.00687	.00160	.11298	.64550	.00008	-.00063	277.50	.00061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00020**	**.00082**	**.00870**	**.04894**	**16.293**	**.04439**	**25.195**	**.00052**	**-.00138**
Stddev	.00010	.00019	.00040	.00783	.005	.00014	.052	.00004	.00014
%RSD	48.879	23.481	4.6420	16.000	.02981	.31820	.20554	8.5373	10.431
#1	-.00027	.00068	.00898	.05447	16.297	.04449	25.158	.00049	-.00128
#2	-.00013	.00096	.00841	.04340	16.290	.04429	25.231	.00055	-.00148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**21.957**	**.00169**	**.04603**	**-.00168**	**6.5224**	**-.00165**	**-.00796**	**14.054**	**30.077**
Stddev	.289	.00007	.00140	.00237	.2073	.00189	.00079	.020	.043
%RSD	1.3166	4.3521	3.0319	141.33	3.1782	114.29	9.9660	.14423	.14423
#1	22.162	.00164	.04505	-.00000	6.6690	-.00299	-.00740	14.040	30.046
#2	21.753	.00174	.04702	-.00335	6.3758	-.00032	-.00852	14.069	30.107
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00020**	**1.0490**	**.00374**	**-.00038**	**.00129**	**-.03564**	**.00710**	**.01443**	**.00094**
Stddev	.00025	.0015	.00167	.00024	.00215	.03462	.00072	.00002	.00057
%RSD	125.42	.14705	44.763	63.690	167.08	97.137	10.163	.14484	60.653
#1	.00002	1.0501	.00492	-.00021	.00281	-.06013	.00761	.01441	.00134
#2	.00038	1.0479	.00255	-.00055	-.00023	-.01116	.00659	.01444	.00054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2614.6**	**48557.**	**5929.1**
Stddev	10.0	208.	1.4
%RSD	.38333	.42887	.02338
#1	2621.7	48705.	5930.0
#2	2607.5	48410.	5928.1

Sample Name: 280-98060-V-5-A Acquired: 6/14/2017 2:01:13 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376911 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00057**	**.00269**	**.00325**	**.15677**	**.15600**	**-.00001**	**-.00046**	**106.07**	**.00052**
Stddev	.00015	.00021	.00872	.00622	.00057	.00001	.00688	.24	.00020
%RSD	27.064	7.7830	268.48	3.9672	.36376	162.44	1483.9	.22430	38.331
#1	.00046	.00254	-.00292	.16117	.15560	-.00002	.00440	105.90	.00066
#2	.00067	.00284	.00941	.15238	.15640	.00000	-.00533	106.24	.00038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**.00053**	**.01684**	**.01913**	**5.1646**	**.02641**	**15.766**	**.00038**	**-.00066**
Stddev	.00016	.00006	.00002	.00066	.0668	.00241	.033	.00005	.00077
%RSD	392.66	11.218	.14707	3.4261	1.2941	9.1303	.20714	12.980	116.97
#1	-.00007	.00057	.01682	.01959	5.2118	.02470	15.789	.00041	-.00120
#2	.00015	.00049	.01686	.01867	5.1173	.02811	15.743	.00034	-.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**27.637**	**.00049**	**.00714**	**-.00199**	**1.6474**	**-.00084**	**-.01148**	**10.201**	**21.830**
Stddev	.016	.00063	.00109	.00074	.0583	.00077	.00207	.035	.075
%RSD	.05829	128.79	15.278	37.214	3.5374	91.366	18.064	.34163	.34163
#1	27.626	.00093	.00637	-.00147	1.6886	-.00030	-.01295	10.225	21.882
#2	27.649	.00004	.00791	-.00251	1.6062	-.00138	-.01002	10.176	21.777
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00043**	**.74224**	**.00315**	**-.00049**	**.00365**	**-.06885**	**.00500**	**.01981**	**.00132**
Stddev	.00133	.00163	.00185	.00016	.00034	.02250	.00009	.00002	.00055
%RSD	309.64	.22025	58.549	33.469	9.4088	32.683	1.8898	.12225	41.658
#1	-.00051	.74109	.00185	-.00060	.00389	-.05294	.00507	.01983	.00171
#2	.00137	.74340	.00446	-.00037	.00341	-.08476	.00493	.01980	.00093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2670.7**	**48957.**	**5813.3**
Stddev	6.3	292.	25.6
%RSD	.23748	.59550	.44042
#1	2666.2	48751.	5831.4
#2	2675.2	49163.	5795.2

Sample Name: 280-98060-V-5-A SD@5 Acquired: 6/14/2017 2:03:50 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376911 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00137**	**-.00143**	**-.00141**	**.03102**	**.03193**	**-.00010**	**.00376**	**21.690**	**.00015**
Stddev	.00013	.00006	.00041	.00094	.00014	.00004	.00470	.034	.00011
%RSD	9.4659	4.3000	29.202	3.0410	.42287	35.599	124.93	.15899	75.083
#1	.00146	-.00139	-.00112	.03169	.03202	-.00013	.00709	21.665	.00007
#2	.00128	-.00148	-.00170	.03036	.03183	-.00008	.00044	21.714	.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00012**	**.00029**	**.00187**	**.00785**	**1.1305**	**.00714**	**3.3131**	**.00008**	**-.00017**
Stddev	.00032	.00037	.00002	.00085	.0080	.00256	.0045	.00005	.00002
%RSD	272.91	128.06	.85565	10.871	.70439	35.804	.13459	60.815	11.205
#1	-.00034	.00054	.00186	.00846	1.1249	.00534	3.3100	.00004	-.00019
#2	.00011	.00003	.00188	.00725	1.1361	.00895	3.3163	.00011	-.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.3860**	**-.00012**	**.00469**	**-.00124**	**.30626**	**.00194**	**-.00779**	**2.0693**	**4.4284**
Stddev	.0160	.00062	.00144	.00112	.01544	.00168	.00166	.0057	.0122
%RSD	.29628	499.74	30.630	90.132	5.0405	86.492	21.361	.27502	.27502
#1	5.3973	.00031	.00570	-.00045	.31718	.00075	-.00896	2.0653	4.4198
#2	5.3747	-.00056	.00367	-.00204	.29535	.00313	-.00661	2.0734	4.4370
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00018**	**.15135**	**.00326**	**-.00038**	**.00283**	**-.02615**	**.00164**	**.00357**	**.00230**
Stddev	.00142	.00045	.00151	.00044	.00165	.00064	.00070	.00037	.00013
%RSD	770.64	.29697	46.341	113.84	58.390	2.4424	42.720	10.226	5.7993
#1	-.00082	.15103	.00433	-.00069	.00166	-.02660	.00213	.00383	.00240
#2	.00119	.15167	.00219	-.00007	.00400	-.02570	.00114	.00331	.00221
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2757.0**	**50672.**	**5841.3**
Stddev	1.5	176.	5.8
%RSD	.05377	.34655	.09996
#1	2758.1	50796.	5845.4
#2	2756.0	50548.	5837.2

Sample Name: 280-98060-V-5-B MS Acquired: 6/14/2017 2:06:26 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376911 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05240**	**1.9674**	**1.0112**	**1.1702**	**2.1631**	**.04811**	W **2.0049**	**157.30**	**.10179**
Stddev	.00066	.0305	.0301	.0125	.0006	.00003	.0268	.13	.00136
%RSD	1.2555	1.5499	2.9802	1.0699	.02939	.07138	1.3366	.08470	1.3385
#1	.05193	1.9890	1.0325	1.1791	2.1626	.04808	2.0239	157.39	.10275
#2	.05287	1.9459	.98986	1.1614	2.1635	.04813	1.9860	157.20	.10083
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit							2.0000		
Low Limit							-.20000		

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47596**	**.19660**	**.27545**	**.95738**	**56.436**	**1.0180**	**65.644**	**.47658**	**.95808**
Stddev	.00759	.00364	.00108	.00062	.061	.0027	.081	.00040	.01222
%RSD	1.5942	1.8521	.39110	.06497	.10873	.26643	.12363	.08436	1.2754
#1	.48132	.19918	.27621	.95782	56.479	1.0199	65.701	.47687	.96672
#2	.47059	.19403	.27468	.95694	56.392	1.0161	65.586	.47630	.94944
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**79.050**	**.47628**	**10.439**	**.48738**	**3.8245**	**.50699**	**1.9644**	**20.053**	**42.914**
Stddev	.475	.00679	.177	.00310	.0476	.00981	.0298	.025	.053
%RSD	.60073	1.4255	1.6970	.63676	1.2446	1.9349	1.5184	.12334	.12334
#1	78.715	.48108	10.564	.48957	3.8582	.51393	1.9855	20.071	42.951
#2	79.386	.47148	10.313	.48518	3.7909	.50005	1.9433	20.036	42.876
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9721**	**1.7319**	**.96678**	**.96122**	**1.8606**	**1.9495**	**.49163**	**.50209**	**.50753**
Stddev	.0321	.0011	.00027	.00094	.0278	.0140	.00301	.00133	.00189
%RSD	1.6288	.06125	.02844	.09753	1.4951	.71874	.61138	.26497	.37246
#1	1.9948	1.7312	.96697	.96188	1.8802	1.9594	.49376	.50303	.50886
#2	1.9494	1.7327	.96659	.96055	1.8409	1.9396	.48951	.50115	.50619
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2588.1**	**46975.**	**5683.6**
Stddev	2.8	54.	11.3
%RSD	.10702	.11505	.19830
#1	2590.1	47014.	5675.6
#2	2586.2	46937.	5691.6

Sample Name: 280-98060-V-5-C MSD Acquired: 6/14/2017 2:08:51 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376911 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05260**	**1.9533**	**.99377**	**1.1543**	**2.1376**	**.04729**	**1.9889**	**153.27**	**.10051**
Stddev	.00072	.0379	.00462	.0148	.0058	.00020	.0304	.43	.00171
%RSD	1.3753	1.9427	.46455	1.2844	.27119	.42484	1.5279	.27904	1.6965
#1	.05311	1.9802	.99703	1.1648	2.1335	.04715	2.0104	152.96	.10172
#2	.05209	1.9265	.99050	1.1438	2.1417	.04744	1.9675	153.57	.09930
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47042**	**.19435**	**.27188**	**.95235**	**55.780**	**1.0081**	**64.453**	**.47042**	**.94349**
Stddev	.00868	.00264	.00142	.01260	.116	.0072	.076	.00114	.01655
%RSD	1.8447	1.3567	.52050	1.3236	.20852	.71047	.11774	.24325	1.7539
#1	.47656	.19622	.27288	.94344	55.697	1.0030	64.507	.47123	.95519
#2	.46429	.19249	.27088	.96126	55.862	1.0132	64.399	.46961	.93179
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**77.507**	**.47041**	**10.331**	**.48302**	**3.7479**	**.49874**	**1.9414**	**19.609**	**41.964**
Stddev	.366	.00670	.142	.00485	.0455	.00901	.0203	.088	.188
%RSD	.47240	1.4249	1.3709	1.0039	1.2145	1.8057	1.0478	.44812	.44812
#1	77.248	.47515	10.432	.48645	3.7800	.50510	1.9558	19.547	41.831
#2	77.766	.46567	10.231	.47959	3.7157	.49237	1.9270	19.671	42.097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9438**	**1.6914**	**.95745**	**.94522**	**1.8368**	**1.9290**	**.48440**	**.49470**	**.49651**
Stddev	.0307	.0051	.00068	.00117	.0263	.0144	.00246	.00078	.00615
%RSD	1.5812	.30116	.07067	.12417	1.4308	.74615	.50840	.15837	1.2379
#1	1.9655	1.6878	.95792	.94605	1.8554	1.9392	.48614	.49525	.49216
#2	1.9220	1.6950	.95697	.94439	1.8182	1.9188	.48265	.49414	.50085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2581.9**	**47411.**	**5695.7**
Stddev	4.4	185.	4.1
%RSD	.17004	.39100	.07120
#1	2578.8	47542.	5698.6
#2	2585.0	47280.	5692.8

Sample Name: 280-98060-V-5-A PDS Acquired: 6/14/2017 2:11:14 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376911 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04876**	**1.0092**	**.20039**	**.26317**	**.25709**	**.04824**	**-.00059**	**126.44**	**.04992**
Stddev	.00074	.0323	.00719	.00700	.00108	.00023	.00184	.30	.00107
%RSD	1.5156	3.2052	3.5887	2.6582	.42188	.47614	314.12	.23374	2.1358
#1	.04929	1.0321	.20548	.26812	.25786	.04808	-.00189	126.65	.05068
#2	.04824	.98638	.19531	.25823	.25632	.04841	.00072	126.23	.04917
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04708**	**.04910**	**.06878**	**.97449**	**25.943**	**.12797**	**35.504**	**.04869**	**.04856**
Stddev	.00165	.00132	.00078	.01382	.142	.00103	.078	.00009	.00104
%RSD	3.4987	2.6939	1.1314	1.4184	.54629	.80840	.21969	.19171	2.1434
#1	.04824	.05003	.06934	.96471	25.843	.12870	35.559	.04876	.04930
#2	.04591	.04816	.06823	.98426	26.043	.12724	35.449	.04863	.04782
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**47.727**	**.04781**	**2.0727**	**.09633**	**1.7075**	**.10228**	**.18787**	**15.098**	**32.311**
Stddev	.416	.00209	.0625	.00284	.0575	.00236	.00471	.002	.004
%RSD	.87071	4.3659	3.0169	2.9504	3.3684	2.3106	2.5067	.01295	.01295
#1	48.021	.04929	2.1169	.09834	1.7481	.10061	.18454	15.100	32.314
#2	47.433	.04633	2.0285	.09432	1.6668	.10395	.19120	15.097	32.308
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09878**	**.79694**	**.19543**	**.04952**	**.19382**	**.47049**	**.05366**	**.21160**	**.05536**
Stddev	.00238	.00059	.00077	.00031	.00930	.01539	.00008	.00054	.00213
%RSD	2.4060	.07445	.39157	.61671	4.7970	3.2720	.15659	.25678	3.8424
#1	.10046	.79653	.19489	.04930	.20039	.48137	.05360	.21198	.05386
#2	.09710	.79736	.19598	.04974	.18724	.45960	.05372	.21122	.05687
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2640.4**	**48406.**	**5749.4**
Stddev	1.2	4.	16.0
%RSD	.04442	.00846	.27741
#1	2639.5	48409.	5738.1
#2	2641.2	48404.	5760.7

Sample Name: CCVH-4579429 Acquired: 6/14/2017 2:13:48 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00161**	**47.890**	**-.00357**	**.00254**	**.00030**	**.00022**	**.97634**	**.04960**	**.00060**	**-.00061**	**.00012**	**.01318**
Stddev	.00048	.142	.00585	.00180	.00008	.00008	.01726	.00831	.00028	.00036	.00008	.00077
%RSD	29.647	.29683	163.94	70.748	25.074	39.423	1.7682	16.763	46.530	59.296	63.460	5.8763
#1	.00195	47.789	-.00770	.00381	.00036	.00028	.98855	.05548	.00040	-.00036	.00007	.01373
#2	.00127	47.990	.00057	.00127	.00025	.00016	.96414	.04372	.00079	-.00087	.00018	.01264
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.306**	**.21157**	**.00191**	**.05238**	**-.00190**	**-.00103**	**248.91**	**.00148**	**.01555**	**-.00141**	**4.8707**	**.00347**
Stddev	.162	.08703	.00054	.01279	.00005	.00034	.75	.00032	.00135	.00170	.1150	.00283
%RSD	.33549	41.134	28.499	24.427	2.4330	32.923	.30269	21.642	8.6999	121.02	2.3603	81.418
#1	48.421	.27311	.00153	.04333	-.00193	-.00079	248.37	.00125	.01651	-.00020	4.9520	.00147
#2	48.192	.15003	.00230	.06142	-.00186	-.00127	249.44	.00170	.01459	-.00261	4.7895	.00547
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00919**	**.02186**	**.04677**	**.00174**	**.00069**	W **4.7433**	**.01732**	**.00686**	**9.6852**	**.01298**	**-.00000**	**.08247**
Stddev	.00448	.00282	.00603	.00157	.00004	.0037	.00007	.00044	.0147	.00056	.00009	.00053
%RSD	48.717	12.896	12.896	90.290	6.2664	.07828	.37732	6.3938	.15228	4.2925	1786.2	.64184
#1	-.01235	.01986	.04251	.00286	.00072	4.7459	.01727	.00717	9.6748	.01258	-.00007	.08210
#2	-.00602	.02385	.05104	.00063	.00066	4.7407	.01736	.00655	9.6957	.01337	.00006	.08284
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Pass	None	None	None
Value						5.0000						
Range						-5.0000%						

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2705.0**	**48530.**	**5777.3**
Stddev	.3	250.	39.4
%RSD	.00991	.51579	.68148
#1	2704.8	48353.	5805.1
#2	2705.2	48707.	5749.5

Sample Name: CCV-4580817 Acquired: 6/14/2017 2:16:22 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49016**	**.52037**	**.95355**	**.48989**	**.49448**	**.47031**	**-.00092**	**4.9937**	**.48585**	**.49213**	**.48980**	**.49707**	**2.3757**
Stddev	.00021	.01436	.02131	.00960	.00119	.00195	.00034	.0169	.00940	.01002	.01121	.00228	.0106
%RSD	.04297	2.7604	2.2352	1.9606	.23972	.41443	37.303	.33749	1.9345	2.0355	2.2882	.45911	.44473
#1	.49001	.53052	.96862	.49669	.49364	.46893	-.00116	4.9818	.49249	.49922	.49773	.49868	2.3682
#2	.49031	.51021	.93848	.48310	.49532	.47169	-.00068	5.0056	.47920	.48505	.48188	.49545	2.3832
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.126**	**.98028**	**19.655**	**.47930**	**.48803**	**5.0093**	**.49021**	**.98364**	**.99691**	**-.03312**	**.97041**	**.95247**	**4.7172**
Stddev	.154	.00165	.004	.00000	.01192	.0413	.01037	.01604	.02043	.00292	.01456	.01696	.0075
%RSD	.30710	.16855	.01984	.00048	2.4419	.82417	2.1150	1.6306	2.0488	8.8168	1.5003	1.7803	.15981
#1	50.017	.97911	19.658	.47930	.49645	5.0385	.49754	.99498	1.0114	-.03105	.98071	.96446	4.7119
#2	50.235	.98145	19.652	.47930	.47960	4.9801	.48288	.97230	.98247	-.03518	.96012	.94048	4.7225
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.095**	**.98967**	**.47112**	**.01526**	**.46757**	**.96160**	**-.05002**	**.47709**	**.47701**	**.48872**
Stddev	.016	.02885	.00149	.00032	.00019	.01834	.01822	.00162	.00110	.00035
%RSD	.15981	2.9151	.31656	2.1224	.04080	1.9068	36.433	.33977	.22987	.07200
#1	10.083	1.0101	.47007	.01503	.46771	.97457	-.03713	.47595	.47623	.48897
#2	10.106	.96927	.47218	.01549	.46744	.94864	-.06291	.47824	.47778	.48847
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2751.3**	**50709.**	**5993.7**
Stddev	.8	21.	1.1
%RSD	.02972	.04134	.01770
#1	2750.7	50694.	5994.5
#2	2751.8	50724.	5993.0

Sample Name: CCB Acquired: 6/14/2017 2:18:50 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00138**	**.00244**	**.00298**	**.00144**	**.00054**	**.00009**	**.00347**	**.02437**	**.00030**	**-.00004**	**.00040**	**-.00254**	**-.00161**
Stddev	.00022	.00125	.00322	.00098	.00008	.00005	.00290	.00006	.00007	.00067	.00012	.00029	.00255
%RSD	15.753	51.181	108.33	67.700	14.962	57.699	83.543	.24592	22.614	1796.1	30.519	11.573	158.66
#1	.00153	.00156	.00526	.00213	.00048	.00013	.00142	.02441	.00025	.00043	.00048	-.00275	.00020
#2	.00123	.00333	.00070	.00075	.00060	.00005	.00552	.02433	.00035	-.00051	.00031	-.00234	-.00341
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.20106**	**.00412**	**.01664**	**.00012**	**.00081**	**-.06621**	**-.00020**	**.00644**	**-.00108**	**-.03052**	**.00249**	**-.00603**	**.02386**
Stddev	.08493	.00078	.00278	.00009	.00060	.01158	.00026	.00036	.00146	.00480	.00103	.00530	.00386
%RSD	42.240	18.878	16.684	74.005	74.187	17.495	128.22	5.5280	135.01	15.731	41.205	87.802	16.164
#1	.26111	.00467	.01468	.00018	.00039	-.05802	-.00039	.00669	-.00005	-.03391	.00176	-.00229	.02113
#2	.14101	.00357	.01860	.00005	.00124	-.07440	-.00002	.00619	-.00212	-.02713	.00322	-.00978	.02659
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05106**	**.00094**	**.00052**	**.00646**	**-.00073**	**.00123**	**-.04426**	**.00025**	**-.00044**	**.00233**
Stddev	.00825	.00007	.00013	.00128	.00019	.00419	.01610	.00031	.00066	.00012
%RSD	16.164	7.2582	25.006	19.885	25.978	339.40	36.385	122.72	147.99	5.2573
#1	.04523	.00089	.00061	.00555	-.00086	.00420	-.03287	.00003	-.00091	.00225
#2	.05690	.00099	.00043	.00736	-.00059	-.00173	-.05565	.00047	.00002	.00242
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2739.1**	**50831.**	**5885.2**
Stddev	3.0	5.	18.9
%RSD	.11026	.00955	.32091
#1	2741.2	50834.	5898.6
#2	2737.0	50827.	5871.9

Sample Name: CCVL-4590576 Acquired: 6/14/2017 2:21:28 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01040**	**.11266**	F **.00910**	**.09592**	**.01079**	**.00102**	**.11128**	**.25916**	**.00557**	**.01043**	**.00994**	**.01383**
Stddev	.00035	.00633	.00037	.00245	.00014	.00006	.00592	.00483	.00019	.00046	.00089	.00013
%RSD	3.3807	5.6199	4.0387	2.5568	1.2967	6.1544	5.3235	1.8651	3.3210	4.4484	8.9910	.94413
#1	.01016	.11713	.00936	.09765	.01069	.00106	.11547	.26258	.00570	.01076	.01057	.01373
#2	.01065	.10818	.00884	.09419	.01088	.00098	.10709	.25575	.00544	.01010	.00931	.01392
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.01500									
Range			-30.000%									

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09827**	**3.3758**	**.02269**	**.22613**	**.01055**	**.01773**	**1.0146**	**.04081**	**2.8271**	**.00990**	F **.06603**	**.02101**
Stddev	.00015	.0657	.00078	.00426	.00006	.00023	.0008	.00157	.1064	.00275	.00538	.00118
%RSD	.15744	1.9452	3.4518	1.8836	.54678	1.2698	.08095	3.8472	3.7630	27.823	8.1528	5.6352
#1	.09816	3.4222	.02324	.22311	.01059	.01789	1.0152	.04192	2.9024	.01185	.06984	.02184
#2	.09838	3.3293	.02213	.22914	.01051	.01757	1.0140	.03970	2.7519	.00795	.06222	.02017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01546**	**.48341**	**1.0345**	**.10062**	**.01054**	**.01864**	**.00959**	**.01833**	**.04986**	**.01007**	**.01996**	**.01649**
Stddev	.00736	.02538	.0543	.00802	.00009	.00169	.00050	.00120	.02715	.00007	.00089	.00047
%RSD	47.613	5.2506	5.2506	7.9700	.83540	9.0524	5.1701	6.5556	54.448	.68790	4.4677	2.8666
#1	.01025	.50135	1.0729	.10629	.01048	.01984	.00924	.01748	.03067	.01012	.01933	.01683
#2	.02066	.46546	.99608	.09495	.01060	.01745	.00994	.01918	.06906	.01003	.02059	.01616
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2788.9**	**50846.**	**5816.8**
Stddev	16.2	448.	52.2
%RSD	.58174	.88150	.89746
#1	2777.4	51163.	5853.7
#2	2800.4	50530.	5779.8

Sample Name: 280-98060-F-6-A Acquired: 6/14/2017 2:24:06 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376911 6010C Q4

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00022**	**28.567**	**.01199**	**.03203**	**1.5537**	**.00165**	**-.00823**	**202.84**	**.00109**
Stddev	.00038	.164	.00412	.00016	.0095	.00009	.00105	1.43	.00026
%RSD	168.88	.57270	34.381	.48439	.60870	5.2680	12.810	.70625	23.382
#1	.00049	28.683	.00907	.03214	1.5604	.00171	-.00749	203.85	.00128
#2	-.00004	28.451	.01490	.03192	1.5470	.00159	-.00898	201.83	.00091
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01149**	**.02257**	**.01312**	**20.568**	**11.089**	**.06899**	**30.776**	**.66049**	**.00069**
Stddev	.00038	.00077	.00054	.136	.091	.00088	.084	.00173	.00010
%RSD	3.3112	3.4257	4.0891	.66332	.81653	1.2820	.27259	.26268	14.638
#1	.01176	.02312	.01350	20.665	11.153	.06962	30.835	.66171	.00062
#2	.01122	.02202	.01274	20.472	11.025	.06837	30.717	.65926	.00077
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**41.204**	**.01961**	**.47277**	**.01471**	**5.8914**	**.00004**	**.00021**	W **58.896**	**126.04**
Stddev	.014	.00004	.01401	.00218	.1051	.00176	.00271	.613	1.31
%RSD	.03312	.19043	2.9638	14.826	1.7840	4558.6	1269.2	1.0405	1.0405
#1	41.214	.01958	.48267	.01625	5.9658	-.00120	-.00170	59.330	126.97
#2	41.195	.01964	.46286	.01317	5.8171	.00128	.00213	58.463	125.11
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit								50.000	
Low Limit								-1.0000	

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00031**	**.97636**	**.01837**	**.57362**	**.00684**	**-.02619**	**.05294**	**.06030**	**.01325**
Stddev	.00025	.00491	.00161	.00278	.00080	.06645	.00001	.00013	.00077
%RSD	82.639	.50333	8.7609	.48468	11.682	253.69	.02661	.21953	5.7879
#1	-.00049	.97983	.01951	.57559	.00741	-.07318	.05295	.06021	.01271
#2	-.00013	.97288	.01723	.57166	.00628	.02079	.05293	.06039	.01379
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2697.4**	**48998.**	**6011.6**
Stddev	6.2	33.	48.4
%RSD	.23068	.06744	.80484
#1	2701.8	48975.	5977.4
#2	2693.0	49022.	6045.8

Sample Name: 280-98060-H-7-A Acquired: 6/14/2017 2:26:40 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 376911 6010C Q4

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00010**	**.01050**	**.00613**	**.06121**	**.22208**	**.00000**	**-.00370**	**87.268**	**.00055**
Stddev	.00014	.00166	.00164	.00263	.00128	.00004	.00153	.357	.00004
%RSD	144.44	15.799	26.695	4.2963	.57699	1206.8	41.273	.40878	6.4449
#1	.00000	.01168	.00728	.06307	.22299	.00003	-.00262	87.521	.00052
#2	-.00020	.00933	.00497	.05935	.22118	-.00003	-.00478	87.016	.00057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00030**	**.00040**	**.00156**	**.01588**	**4.5287**	**.02057**	**10.446**	**.00021**	**-.00009**
Stddev	.00044	.00044	.00053	.00042	.0172	.00224	.017	.00011	.00033
%RSD	147.83	108.17	34.090	2.6327	.38025	10.907	.16420	53.316	352.66
#1	.00001	.00010	.00118	.01558	4.5165	.01899	10.458	.00028	-.00033
#2	-.00061	.00071	.00193	.01617	4.5408	.02216	10.434	.00013	.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.831**	**-.00048**	**.03134**	**-.00161**	**11.258**	**-.00036**	**-.00778**	**12.879**	**27.561**
Stddev	.305	.00003	.00276	.00240	.305	.00174	.00613	.031	.067
%RSD	1.5372	5.9852	8.8164	149.38	2.7082	479.61	78.704	.24237	.24237
#1	20.047	-.00046	.02938	.00009	11.474	-.00160	-.00345	12.901	27.608
#2	19.616	-.00050	.03329	-.00331	11.042	.00087	-.01211	12.857	27.514
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00092**	**.53002**	**.00296**	**-.00015**	**.00330**	**-.04659**	**.01266**	**.00275**	**-.00011**
Stddev	.00102	.00239	.00131	.00003	.00249	.01103	.00036	.00093	.00059
%RSD	110.16	.45100	44.249	19.336	75.675	23.670	2.8225	33.759	536.01
#1	-.00165	.53171	.00204	-.00013	.00506	-.03879	.01240	.00210	-.00052
#2	-.00020	.52833	.00389	-.00017	.00153	-.05438	.01291	.00341	.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2689.7**	**49489.**	**5861.5**
Stddev	3.3	19.	1.5
%RSD	.12225	.03831	.02572
#1	2687.4	49503.	5862.5
#2	2692.1	49476.	5860.4

Sample Name: MB 280-377019/1-A Acquired: 6/14/2017 2:29:16 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377019 6010B soil

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00060**	**.01214**	**-.00227**	**.00126**	**.00109**	**-.00011**	**.00188**	F **.21345**	**.00044**
Stddev	.00045	.00032	.01120	.00161	.00003	.00005	.00284	.00863	.00047
%RSD	74.448	2.6254	492.68	127.59	2.8242	41.133	150.59	4.0423	105.82
#1	.00029	.01191	.00565	.00240	.00107	-.00014	-.00012	.21955	.00011
#2	.00092	.01236	-.01019	.00012	.00111	-.00008	.00389	.20735	.00077
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								.20000	
Low Limit								-.20000	

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00017**	**.00039**	**-.00049**	**.02522**	**.12944**	**.00188**	**.06256**	**.00055**	**-.00007**
Stddev	.00003	.00011	.00007	.00024	.02396	.00181	.00464	.00005	.00080
%RSD	18.080	28.147	13.907	.96239	18.510	96.179	7.4126	8.6546	1186.1
#1	-.00015	.00047	-.00044	.02539	.14638	.00317	.05928	.00051	.00050
#2	-.00020	.00031	-.00054	.02505	.11250	.00060	.06583	.00058	-.00063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.15573**	**.00029**	**.01583**	**.00009**	**-.02406**	**-.00079**	**-.00190**	**.06485**	**.13877**
Stddev	.01555	.00016	.00235	.00129	.00662	.00213	.00721	.01468	.03143
%RSD	9.9835	53.654	14.830	1397.4	27.533	270.49	380.21	22.646	22.646
#1	.16672	.00040	.01748	-.00082	-.01938	-.00230	.00320	.05446	.11655
#2	.14474	.00018	.01417	.00100	-.02874	.00072	-.00699	.07523	.16099
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00865**	**.00077**	**.00431**	**-.00017**	**.00148**	**-.03306**	**-.00013**	**.00082**	**.00056**
Stddev	.00038	.00009	.00188	.00018	.00464	.00120	.00015	.00029	.00069
%RSD	4.3674	11.156	43.487	101.83	312.75	3.6402	117.86	34.876	123.08
#1	.00838	.00083	.00564	-.00005	.00477	-.03221	-.00002	.00062	.00007
#2	.00892	.00071	.00299	-.00030	-.00180	-.03391	-.00024	.00102	.00105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2773.4**	**51123.**	**5829.8**
Stddev	.6	44.	34.9
%RSD	.02186	.08647	.59798
#1	2772.9	51154.	5854.4
#2	2773.8	51092.	5805.1

Sample Name: LCS 280-377019/2-A Acquired: 6/14/2017 2:31:54 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377019 6010B soil

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	167.079 {502}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.05014**	**1.9713**	**.97866**	**.96133**	**1.9560**	**.04660**	**1.9585**	**47.464**	**.09830**
Stddev	.00098	.0373	.02124	.01844	.0104	.00056	.0287	.239	.00189
%RSD	1.9552	1.8933	2.1704	1.9177	.52941	1.2045	1.4673	.50459	1.9214
#1	.04945	1.9977	.99368	.97437	1.9487	.04620	1.9788	47.295	.09963
#2	.05083	1.9449	.96364	.94830	1.9634	.04700	1.9382	47.633	.09696
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	259.940 {130}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.47155**	**.19199**	**.24881**	**.96626**	**49.692**	**.96310**	**47.979**	**.46590**	**.92859**
Stddev	.00838	.00303	.00144	.00896	.262	.00584	.011	.00054	.02010
%RSD	1.7762	1.5789	.57853	.92706	.52800	.60685	.02317	.11594	2.1648
#1	.47747	.19413	.24780	.95993	49.507	.95896	47.971	.46628	.94280
#2	.46563	.18985	.24983	.97260	49.878	.96723	47.987	.46552	.91437
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.605**	**.47107**	**9.9483**	**.48102**	**1.9181**	**.48641**	**1.8858**	**3.3515**	**7.1723**
Stddev	.381	.00882	.1608	.01165	.0319	.00802	.0334	.0130	.0278
%RSD	.75361	1.8719	1.6159	2.4225	1.6630	1.6485	1.7732	.38778	.38778
#1	50.875	.47730	10.062	.48926	1.9407	.49208	1.9094	3.3423	7.1526
#2	50.335	.46483	9.8346	.47278	1.8955	.48074	1.8621	3.3607	7.1919
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	None
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.9440**	**.93217**	**.93837**	**.92794**	**1.8604**	**1.8761**	**.46979**	**.46936**	**.48861**
Stddev	.0409	.00375	.00189	.00030	.0277	.0347	.00129	.00013	.00362
%RSD	2.1053	.40268	.20156	.03283	1.4885	1.8475	.27398	.02714	.74082
#1	1.9729	.92951	.93970	.92816	1.8800	1.8516	.47070	.46927	.48605
#2	1.9151	.93482	.93703	.92773	1.8408	1.9006	.46888	.46945	.49117
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2643.5**	**48619.**	**5725.6**
Stddev	2.7	115.	.1
%RSD	.10174	.23676	.00259
#1	2641.6	48700.	5725.7
#2	2645.4	48537.	5725.5

Sample Name: 280-98131-A-2-E Acquired: 6/14/2017 2:34:18 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377019 6010B soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00154**	**148.38**	**.02986**	**.00838**	**2.3937**	**.00951**	**-.00451**	**29.230**	**.00325**
Stddev	.00046	.00	.00223	.00048	.0091	.00000	.00252	.140	.00027
%RSD	29.729	.00260	7.4758	5.7486	.37951	.04135	55.839	.47818	8.2976
#1	-.00187	148.38	.02828	.00872	2.4001	.00951	-.00273	29.329	.00306
#2	-.00122	148.37	.03144	.00803	2.3873	.00951	-.00629	29.132	.00345
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.11296**	**.17590**	**.28657**	**225.32**	**24.268**	**.12831**	**34.170**	**3.2917**	**-.00052**
Stddev	.00293	.00417	.00075	.40	.024	.00008	.026	.0086	.00057
%RSD	2.5973	2.3691	.26270	.17774	.10051	.05987	.07629	.25967	109.86
#1	.11504	.17885	.28603	225.60	24.285	.12825	34.189	3.2977	-.00012
#2	.11089	.17295	.28710	225.04	24.251	.12836	34.152	3.2856	-.00093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.309**	**.16595**	**2.0392**	**.10332**	**.08245**	**.01170**	**.00108**	**2.6636**	**5.7001**
Stddev	.335	.00387	.0282	.00258	.00136	.00030	.00192	.0376	.0804
%RSD	1.3799	2.3312	1.3842	2.4930	1.6448	2.5976	177.45	1.4112	1.4112
#1	24.072	.16868	2.0592	.10515	.08341	.01149	.00244	2.6902	5.7570
#2	24.546	.16321	2.0193	.10150	.08150	.01192	-.00028	2.6370	5.6433
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01226**	**.76101**	**.05991**	**1.6027**	**.00473**	**-.03664**	**.27815**	**.67914**	**.03172**
Stddev	.00166	.00021	.00067	.0036	.00486	.00301	.00109	.00233	.00046
%RSD	13.568	.02786	1.1119	.22408	102.69	8.2097	.39351	.34253	1.4376
#1	.01108	.76116	.06038	1.6052	.00817	-.03877	.27892	.68079	.03204
#2	.01344	.76086	.05943	1.6001	.00130	-.03451	.27738	.67750	.03140
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2972.0**	**52722.**	**6399.1**
Stddev	.9	13.	31.5
%RSD	.03062	.02523	.49265
#1	2971.3	52713.	6376.8
#2	2972.6	52731.	6421.4

Sample Name: 280-98131-A-2-E SD@5 Acquired: 6/14/2017 2:36:48 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377019 6010B soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**32.774**	**.00052**	**.00253**	**.52476**	**.00198**	**.00025**	**6.5502**	**.00090**
Stddev	.00056	.021	.00462	.00020	.00115	.00019	.00176	.0104	.00017
%RSD	1156.1	.06526	886.40	8.0161	.21950	9.4082	719.30	.15813	18.338
#1	-.00035	32.789	.00379	.00239	.52395	.00211	-.00100	6.5429	.00102
#2	.00045	32.758	-.00275	.00267	.52557	.00185	.00149	6.5575	.00079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02525**	**.03862**	**.05995**	**50.389**	**5.4876**	**.03066**	**7.6005**	**.72085**	**-.00016**
Stddev	.00080	.00113	.00034	.172	.0285	.00129	.0152	.00064	.00020
%RSD	3.1873	2.9234	.56151	.34141	.51889	4.2186	.20009	.08936	124.66
#1	.02582	.03942	.05972	50.268	5.4674	.03158	7.6113	.72131	-.00002
#2	.02469	.03782	.06019	50.511	5.5077	.02975	7.5898	.72040	-.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.9829**	**.03716**	**.44236**	**.02397**	**-.01318**	**.00194**	**-.00626**	**.58689**	**1.2560**
Stddev	.0253	.00103	.01911	.00106	.00067	.00218	.00343	.01735	.0371
%RSD	.50692	2.7759	4.3208	4.4300	5.0477	112.15	54.724	2.9567	2.9567
#1	4.9650	.03789	.45588	.02322	-.01271	.00040	-.00868	.57462	1.2297
#2	5.0008	.03643	.42885	.02472	-.01365	.00348	-.00384	.59916	1.2822
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00328**	**.16820**	**.01524**	**.34726**	**.00302**	**-.03392**	**.06025**	**.14788**	**.00571**
Stddev	.00275	.00018	.00191	.00008	.00162	.00393	.00050	.00086	.00116
%RSD	83.685	.10708	12.512	.02352	53.666	11.573	.82745	.58327	20.260
#1	.00134	.16832	.01389	.34732	.00187	-.03670	.06060	.14849	.00490
#2	.00522	.16807	.01659	.34720	.00417	-.03115	.05990	.14727	.00653
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2848.9**	**51982.**	**6080.3**
Stddev	8.6	196.	23.1
%RSD	.30141	.37667	.37953
#1	2855.0	52121.	6064.0
#2	2842.8	51844.	6096.6

Sample Name: 280-98131-A-2-F MS Acquired: 6/14/2017 2:39:22 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377019 6010B soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04497**	**257.24**	**.85094**	**.66914**	**4.5505**	**.05272**	**1.6736**	**71.738**	**.08896**
Stddev	.00046	1.60	.02193	.01138	.0075	.00014	.0365	.221	.00191
%RSD	1.0129	.62143	2.5776	1.7013	.16521	.26084	2.1826	.30780	2.1430
#1	.04464	258.37	.86645	.67719	4.5559	.05282	1.6994	71.894	.09031
#2	.04529	256.11	.83543	.66109	4.5452	.05263	1.6478	71.582	.08761
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.53146**	**.41593**	**.55102**	**265.71**	**81.197**	**1.0278**	**83.478**	**3.8520**	**.75869**
Stddev	.01029	.00934	.00083	1.39	.370	.0038	.092	.0005	.01760
%RSD	1.9359	2.2447	.15029	.52395	.45520	.37381	.10976	.01282	2.3200
#1	.53874	.42253	.55043	266.69	81.458	1.0305	83.543	3.8523	.77113
#2	.52419	.40933	.55160	264.73	80.936	1.0251	83.413	3.8516	.74624
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**66.662**	**.59873**	**10.287**	**.51407**	**1.7832**	**.22151**	**1.6077**	**7.3196**	**15.664**
Stddev	.528	.01260	.228	.00802	.0376	.00544	.0361	.0238	.051
%RSD	.79253	2.1040	2.2196	1.5593	2.1101	2.4545	2.2445	.32516	.32516
#1	67.035	.60764	10.449	.51974	1.8098	.22535	1.6332	7.3365	15.700
#2	66.288	.58982	10.126	.50840	1.7566	.21766	1.5821	7.3028	15.628
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.5769**	**1.6133**	**.91158**	**2.8916**	**1.4850**	**1.7027**	**.87478**	**1.1621**	**.42628**
Stddev	.0287	.0052	.00094	.0024	.0216	.0397	.00136	.0000	.00015
%RSD	1.8227	.32271	.10335	.08326	1.4539	2.3301	.15598	.00277	.03493
#1	1.5972	1.6170	.91224	2.8933	1.5003	1.7308	.87382	1.1621	.42638
#2	1.5565	1.6096	.91091	2.8899	1.4697	1.6746	.87574	1.1621	.42617
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2922.0**	**51739.**	**6519.0**
Stddev	3.2	157.	97.3
%RSD	.10899	.30392	1.4921
#1	2924.2	51850.	6450.2
#2	2919.7	51628.	6587.8

Sample Name: 280-98131-A-2-G MSD Acquired: 6/14/2017 2:41:43 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377019 6010B soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.04611**	**263.01**	**.87939**	**.68828**	**4.6671**	**.05269**	**1.7109**	**74.296**	**.09126**
Stddev	.00050	.35	.01185	.00939	.0081	.00006	.0362	.194	.00146
%RSD	1.0940	.13165	1.3470	1.3647	.17468	.11069	2.1180	.26160	1.6013
#1	.04575	262.77	.88776	.69492	4.6614	.05273	1.7365	74.159	.09229
#2	.04647	263.26	.87101	.68164	4.6729	.05265	1.6853	74.434	.09023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.54078**	**.43065**	**.57873**	**267.28**	**83.550**	**1.0472**	**86.410**	**4.0271**	**.77993**
Stddev	.00950	.00694	.00114	.48	.165	.0050	.009	.0032	.01268
%RSD	1.7562	1.6122	.19662	.17801	.19738	.47403	.00998	.07966	1.6256
#1	.54749	.43556	.57793	266.94	83.433	1.0437	86.416	4.0293	.78890
#2	.53406	.42574	.57953	267.62	83.666	1.0507	86.404	4.0248	.77097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**69.135**	**.61082**	**10.715**	**.52385**	**1.7980**	**.21857**	**1.6504**	**7.9407**	**16.993**
Stddev	.293	.00957	.169	.00774	.0190	.00301	.0274	.0468	.100
%RSD	.42373	1.5669	1.5792	1.4774	1.0572	1.3782	1.6609	.58869	.58869
#1	68.927	.61759	10.834	.52932	1.8115	.22070	1.6697	7.9737	17.064
#2	69.342	.60405	10.595	.51838	1.7846	.21644	1.6310	7.9076	16.922
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.6179**	**1.6891**	**.93205**	**3.0431**	**1.5206**	**1.7333**	**.90425**	**1.2107**	**.44134**
Stddev	.0278	.0010	.00027	.0044	.0223	.0287	.00139	.0006	.00122
%RSD	1.7210	.06070	.02929	.14496	1.4660	1.6541	.15412	.05215	.27546
#1	1.6376	1.6884	.93186	3.0400	1.5363	1.7535	.90524	1.2112	.44048
#2	1.5982	1.6898	.93224	3.0462	1.5048	1.7130	.90327	1.2103	.44220
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2908.9**	**51295.**	**6514.7**
Stddev	6.7	137.	17.6
%RSD	.23044	.26624	.27091
#1	2904.2	51198.	6527.2
#2	2913.7	51391.	6502.2

Sample Name: 280-98131-A-4-D Acquired: 6/14/2017 2:44:05 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377019 6010B soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00081**	**165.69**	**.02138**	**.01120**	**2.4016**	**.01081**	**-.00625**	**31.516**	**.00169**
Stddev	.00015	.42	.00415	.00124	.0028	.00000	.00140	.051	.00020
%RSD	18.082	.25167	19.408	11.091	.11547	.00247	22.428	.16129	11.764
#1	-.00091	165.39	.02432	.01208	2.3997	.01081	-.00526	31.480	.00183
#2	-.00070	165.98	.01845	.01033	2.4036	.01081	-.00724	31.552	.00155
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10927**	**.20682**	**.25552**	**243.02**	**25.991**	**.13771**	**39.497**	**5.0526**	**-.00140**
Stddev	.00230	.00504	.00080	.49	.007	.00067	.073	.0149	.00026
%RSD	2.1055	2.4351	.31254	.20142	.02697	.48919	.18390	.29410	18.828
#1	.11090	.21039	.25608	242.67	25.996	.13818	39.549	5.0631	-.00159
#2	.10765	.20326	.25495	243.36	25.986	.13723	39.446	5.0421	-.00121
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	818.326 { 41}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**28.456**	**.16703**	**2.3900**	**.09857**	**.58260**	**.01884**	**.00074**	**2.9312**	**6.2727**
Stddev	.279	.00328	.0534	.00168	.01008	.00402	.01012	.0046	.0099
%RSD	.97929	1.9667	2.2326	1.7094	1.7307	21.329	1376.1	.15777	.15777
#1	28.259	.16935	2.4277	.09976	.58973	.01600	.00789	2.9279	6.2657
#2	28.653	.16470	2.3522	.09738	.57547	.02168	-.00642	2.9344	6.2797
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01440**	**.82057**	**.06194**	**1.1417**	**.00477**	**-.01617**	**.33711**	**.62409**	**.03582**
Stddev	.00193	.00192	.00372	.0026	.00274	.03586	.00129	.00231	.00159
%RSD	13.368	.23455	6.0120	.22817	57.549	221.72	.38144	.37015	4.4347
#1	.01304	.81921	.06457	1.1435	.00283	-.04153	.33802	.62572	.03469
#2	.01576	.82193	.05930	1.1398	.00670	.00918	.33620	.62245	.03694
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2990.3**	**53814.**	**6586.0**
Stddev	15.9	83.	2.3
%RSD	.53019	.15485	.03522
#1	3001.5	53873.	6584.3
#2	2979.1	53756.	6587.6

Sample Name: CCVH-4579429 Acquired: 6/14/2017 2:46:34 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00170**	**47.702**	**.00269**	**.00212**	**.00132**	**.00006**	**.97433**	**.00677**	**.00043**	**-.00082**	**.00010**	**.01260**
Stddev	.00021	.089	.00297	.00117	.00040	.00006	.01724	.00922	.00031	.00030	.00013	.00165
%RSD	12.466	.18621	110.15	55.216	30.071	115.56	1.7689	136.10	70.444	36.713	139.83	13.067
#1	.00155	47.639	.00479	.00129	.00160	.00001	.98652	.01329	.00065	-.00104	.00019	.01377
#2	.00185	47.765	.00060	.00294	.00104	.00010	.96215	.00025	.00022	-.00061	.00000	.01144
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None
Value												
Range												

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.439**	**.19036**	**.00243**	**.03998**	**-.00076**	**-.00185**	**249.20**	**.00097**	**.01038**	**.00014**	**4.9173**	**.00246**
Stddev	.140	.09790	.00082	.00424	.00027	.00083	.15	.00009	.00146	.00012	.0943	.00268
%RSD	.28900	51.431	33.801	10.615	35.322	45.116	.06211	9.7104	14.099	84.984	1.9186	108.91
#1	48.340	.12113	.00301	.03698	-.00057	-.00244	249.09	.00091	.01142	.00006	4.9840	.00056
#2	48.538	.25958	.00185	.04298	-.00095	-.00126	249.31	.00104	.00935	.00022	4.8506	.00435
Check ?	Chk Pass	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None
Value												
Range												

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01673**	**-.00794**	**-.01699**	**.00127**	**.00072**	W **4.7444**	**.01777**	**.00380**	**9.6152**	**.01283**	**.00123**	**.07994**
Stddev	.00591	.01346	.02879	.00140	.00012	.0108	.00002	.00146	.0031	.00025	.00008	.00337
%RSD	35.320	169.47	169.47	110.41	16.810	.22676	.09837	38.488	.03236	1.9171	6.2480	4.2095
#1	-.02090	-.01745	-.03735	.00226	.00080	4.7520	.01776	.00483	9.6174	.01300	.00128	.07756
#2	-.01255	.00157	.00337	.00028	.00063	4.7368	.01778	.00277	9.6130	.01265	.00117	.08232
Check ?	None	None	None	None	None	Chk Warn	None	None	Chk Pass	None	None	None
Value						5.0000						
Range						-5.0000%						

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2674.9**	**48511.**	**5728.6**
Stddev	8.0	39.	15.9
%RSD	.30047	.07997	.27776
#1	2669.2	48483.	5717.3
#2	2680.5	48538.	5739.8

Sample Name: CCV-4580817 Acquired: 6/14/2017 2:49:08 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49747**	**.53194**	**.95276**	**.48912**	**.49766**	**.47316**	**.00121**	**4.9735**	**.48889**	**.49168**	**.48879**	**.50131**	**2.4064**
Stddev	.00128	.01554	.02905	.01143	.00087	.00219	.00319	.0196	.01217	.01175	.01224	.00204	.0181
%RSD	.25684	2.9220	3.0490	2.3371	.17475	.46306	262.52	.39493	2.4887	2.3894	2.5042	.40764	.75087
#1	.49838	.54293	.97330	.49721	.49827	.47471	.00347	4.9873	.49750	.49999	.49745	.50276	2.4192
#2	.49657	.52095	.93222	.48104	.49704	.47161	-.00104	4.9596	.48029	.48338	.48014	.49987	2.3936
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.614**	**.98875**	**20.024**	**.48393**	**.48480**	**5.0418**	**.48987**	**.98474**	**1.0022**	**-.03642**	**.97349**	**.95895**	**4.7469**
Stddev	.107	.01032	.039	.00136	.01190	.0305	.01239	.02056	.0190	.00019	.02510	.02352	.0435
%RSD	.21199	1.0439	.19656	.28177	2.4546	.60545	2.5292	2.0882	1.8929	.52903	2.5783	2.4528	.91706
#1	50.689	.99605	20.052	.48489	.49321	5.0634	.49864	.99928	1.0156	-.03656	.99124	.97558	4.7776
#2	50.538	.98145	19.996	.48296	.47638	5.0202	.48111	.97020	.98882	-.03629	.95574	.94231	4.7161
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.158**	**.99643**	**.47578**	**.01060**	**.47117**	**.96095**	**-.03966**	**.47982**	**.48482**	**.49354**
Stddev	.093	.02225	.00298	.00051	.00109	.02614	.02919	.00127	.00421	.00512
%RSD	.91706	2.2334	.62667	4.7971	.23128	2.7200	73.602	.26549	.86905	1.0374
#1	10.224	1.0122	.47789	.01024	.47194	.97943	-.01902	.47892	.48780	.49716
#2	10.092	.98069	.47367	.01096	.47040	.94247	-.06031	.48072	.48184	.48992
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2724.5**	**49696.**	**5780.9**
Stddev	.2	144.	52.8
%RSD	.00835	.28986	.91402
#1	2724.7	49594.	5743.6
#2	2724.4	49797.	5818.3

Sample Name: CCB Acquired: 6/14/2017 2:51:37 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00081**	**.00146**	**.00212**	**.00069**	**.00049**	**.00018**	**-.00243**	**-.01323**	**.00016**	**.00028**	**.00025**	**-.00205**	**-.00002**
Stddev	.00035	.00024	.00395	.00051	.00015	.00006	.00609	.00030	.00009	.00015	.00015	.00042	.00094
%RSD	43.252	16.439	186.53	73.398	29.746	33.019	250.79	2.2475	59.898	54.691	60.383	20.690	4628.2
#1	.00105	.00163	-.00068	.00105	.00059	.00014	.00188	-.01302	.00022	.00017	.00036	-.00175	.00065
#2	.00056	.00129	.00491	.00033	.00039	.00022	-.00674	-.01344	.00009	.00039	.00014	-.00235	-.00069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.18495**	**.00171**	**.00753**	**.00015**	**.00036**	**-.07448**	**.00022**	**.00250**	**-.00145**	**-.03533**	**.00372**	**-.00146**	**.03487**
Stddev	.01324	.00047	.00202	.00004	.00074	.00394	.00007	.00472	.00132	.01051	.00274	.00966	.01050
%RSD	7.1581	27.224	26.834	29.100	206.71	5.2921	32.198	188.69	91.591	29.758	73.707	660.72	30.095
#1	.19431	.00204	.00610	.00018	-.00017	-.07169	.00027	-.00084	-.00051	-.04277	.00178	-.00829	.02745
#2	.17559	.00138	.00896	.00012	.00089	-.07727	.00017	.00584	-.00238	-.02790	.00566	.00537	.04230
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit													
Low Limit													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07463**	**.00124**	**.00029**	**.00631**	**-.00042**	**.00253**	**-.04068**	**-.00048**	**-.00087**	**.00115**
Stddev	.02246	.00039	.00001	.00068	.00009	.00298	.00549	.00004	.00038	.00088
%RSD	30.095	31.373	1.8143	10.723	21.975	117.76	13.492	8.5549	43.122	77.146
#1	.05875	.00096	.00030	.00583	-.00049	.00042	-.03679	-.00051	-.00114	.00177
#2	.09051	.00151	.00029	.00679	-.00036	.00464	-.04456	-.00045	-.00060	.00052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit										
Low Limit										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2735.0**	**50705.**	**5745.3**
Stddev	9.2	113.	13.1
%RSD	.33500	.22190	.22797
#1	2728.5	50626.	5754.6
#2	2741.5	50785.	5736.0

Sample Name: CCVL-4590576 Acquired: 6/14/2017 2:54:15 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01083**	**.10778**	**.01300**	**.09641**	**.01054**	**.00077**	**.11554**	**.19586**	**.00559**	**.01016**	**.00995**	**.01276**
Stddev	.00001	.00529	.00233	.00314	.00025	.00010	.00028	.00178	.00001	.00017	.00035	.00028
%RSD	.09796	4.9073	17.919	3.2523	2.3424	12.646	.23834	.91108	.16998	1.6665	3.4753	2.1929
#1	.01084	.11152	.01465	.09863	.01037	.00070	.11535	.19460	.00558	.01028	.01019	.01295
#2	.01082	.10404	.01135	.09420	.01072	.00084	.11574	.19712	.00559	.01004	.00971	.01256
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value												
Range												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.09558**	**3.3537**	**.02237**	**.20802**	**.01031**	**.01801**	**.96654**	**.04060**	**2.8480**	**.00812**	F **.05796**	**.02320**
Stddev	.00138	.0330	.00075	.00240	.00004	.00060	.01205	.00170	.0828	.00056	.00228	.00205
%RSD	1.4479	.98367	3.3624	1.1534	.38331	3.3164	1.2464	4.1869	2.9054	6.9004	3.9309	8.8229
#1	.09460	3.3304	.02291	.20972	.01034	.01843	.95802	.04180	2.9065	.00773	.05957	.02465
#2	.09656	3.3770	.02184	.20633	.01029	.01759	.97506	.03940	2.7895	.00852	.05634	.02175
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value											.10000	
Range											-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.00982**	**.48494**	**1.0378**	**.09717**	**.01013**	**.01826**	**.00883**	**.01664**	F **.00781**	**.01024**	**.01932**	**.01608**
Stddev	.00107	.01872	.0401	.00518	.00002	.00121	.00002	.00076	.03731	.00018	.00067	.00090
%RSD	10.915	3.8594	3.8594	5.3323	.21811	6.6002	.18518	4.5525	477.86	1.7885	3.4599	5.6238
#1	.01057	.47171	1.0095	.10083	.01012	.01911	.00882	.01610	-.01857	.01011	.01885	.01544
#2	.00906	.49818	1.0661	.09351	.01015	.01741	.00885	.01718	.03419	.01037	.01980	.01672
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.02000								.06000			
Range	-30.000%								-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2863.3**	**52657.**	**6074.4**
Stddev	3.3	234.	50.3
%RSD	.11671	.44416	.82733
#1	2861.0	52822.	6109.9
#2	2865.7	52491.	6038.8

Sample Name: 280-98145-B-1-B Acquired: 6/14/2017 2:56:52 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377019 6010B soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**133.19**	**.02913**	**.05323**	**1.4284**	**.00592**	**-.01323**	**178.61**	**.00284**
Stddev	.00025	.32	.00093	.00115	.0029	.00014	.00031	.27	.00000
%RSD	407.68	.23990	3.1889	2.1618	.20101	2.3590	2.3189	.15121	.13365
#1	.00024	133.42	.02848	.05405	1.4304	.00602	-.01345	178.81	.00283
#2	-.00012	132.96	.02979	.05242	1.4264	.00583	-.01302	178.42	.00284
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.08991**	**.11028**	**.34650**	**247.10**	**38.820**	**.09757**	**68.330**	**6.0278**	**.00148**
Stddev	.00287	.00373	.00204	.52	.033	.00032	.037	.0121	.00026
%RSD	3.1920	3.3835	.58965	.20990	.08385	.32695	.05480	.20057	17.692
#1	.09194	.11292	.34795	247.46	38.843	.09735	68.304	6.0364	.00130
#2	.08788	.10764	.34506	246.73	38.797	.09780	68.357	6.0193	.00167
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.0212**	**.08658**	**6.9470**	**.18543**	**3.8413**	**.01867**	**-.00535**	**3.4800**	**7.4471**
Stddev	.0170	.00218	.1945	.00515	.0936	.00361	.00053	.0261	.0558
%RSD	.33836	2.5195	2.7995	2.7797	2.4358	19.353	9.8197	.74917	.74917
#1	5.0332	.08812	7.0845	.18908	3.9075	.02123	-.00572	3.4615	7.4077
#2	5.0092	.08504	6.8094	.18179	3.7752	.01612	-.00498	3.4984	7.4866
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01146**	**1.4485**	**.07278**	**4.7618**	**.00782**	**-.01084**	**.51387**	**.99485**	**.19590**
Stddev	.00049	.0032	.00176	.0071	.00148	.00668	.00109	.00396	.00187
%RSD	4.2574	.22444	2.4116	.14980	18.971	61.638	.21260	.39786	.95667
#1	.01111	1.4508	.07402	4.7567	.00886	-.01557	.51310	.99205	.19723
#2	.01180	1.4462	.07154	4.7668	.00677	-.00612	.51465	.99765	.19458
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**3049.0**	**54374.**	**6811.4**
Stddev	13.9	195.	36.7
%RSD	.45612	.35820	.53882
#1	3058.9	54512.	6837.4
#2	3039.2	54236.	6785.5

Sample Name: 280-98145-B-2-B Acquired: 6/14/2017 2:59:27 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377019 6010B soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00151**	**165.31**	**.03501**	**.09247**	**2.0148**	**.00623**	**-.00898**	**161.34**	**.00322**
Stddev	.00064	.43	.00315	.00351	.0033	.00004	.00164	.15	.00007
%RSD	42.248	.26158	9.0047	3.8002	.16489	.66647	18.254	.09482	2.1572
#1	.00197	165.62	.03724	.09496	2.0172	.00620	-.01014	161.45	.00317
#2	.00106	165.01	.03278	.08999	2.0125	.00626	-.00782	161.24	.00327
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.08819**	**.11870**	**.28566**	**245.35**	**65.877**	**.09054**	**41.247**	**5.2135**	**-.00001**
Stddev	.00280	.00273	.00098	.16	.255	.00051	.011	.0023	.00002
%RSD	3.1762	2.2985	.34356	.06471	.38769	.56824	.02648	.04493	183.19
#1	.09017	.12062	.28635	245.24	66.058	.09018	41.239	5.2152	-.00002
#2	.08621	.11677	.28496	245.47	65.696	.09091	41.255	5.2119	.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.6209**	**.07205**	**10.226**	**.28046**	**2.8832**	**.01318**	**-.01085**	**3.7708**	**8.0695**
Stddev	.0062	.00247	.248	.00345	.0734	.00184	.00173	.0115	.0246
%RSD	.17070	3.4308	2.4276	1.2289	2.5456	13.972	15.962	.30458	.30458
#1	3.6165	.07380	10.402	.28290	2.9351	.01188	-.01208	3.7789	8.0869
#2	3.6253	.07030	10.051	.27802	2.8313	.01448	-.00963	3.7627	8.0522
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01582**	**2.4895**	**.08934**	**4.5643**	**.00907**	**-.06095**	**.64277**	**1.0060**	**.25478**
Stddev	.00172	.0076	.00281	.0042	.00003	.00110	.00243	.0008	.00026
%RSD	10.876	.30731	3.1434	.09264	.36971	1.8091	.37740	.08130	.10056
#1	.01704	2.4949	.09132	4.5673	.00909	-.06173	.64448	1.0054	.25496
#2	.01460	2.4841	.08735	4.5613	.00905	-.06017	.64105	1.0066	.25460
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2994.6**	**53164.**	**6687.4**
Stddev	2.9	157.	34.8
%RSD	.09560	.29593	.52084
#1	2996.6	53275.	6662.7
#2	2992.5	53052.	6712.0

Sample Name: 280-98145-B-3-B Acquired: 6/14/2017 3:01:56 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377019 6010B soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00060**	**169.70**	**.03511**	**.07957**	**1.8655**	**.00654**	**-.00807**	**138.81**	**.00334**
Stddev	.00047	.13	.00690	.00091	.0010	.00006	.00429	.05	.00003
%RSD	79.041	.07775	19.646	1.1468	.05367	.86731	53.241	.03381	.82869
#1	.00093	169.79	.03023	.08021	1.8662	.00658	-.01110	138.78	.00336
#2	.00026	169.61	.03999	.07892	1.8648	.00650	-.00503	138.84	.00332
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07881**	**.13657**	**.50838**	**217.43**	**32.887**	**.09349**	**45.018**	**4.9617**	**.00109**
Stddev	.00164	.00366	.00054	.14	.040	.00064	.167	.0089	.00017
%RSD	2.0790	2.6777	.10674	.06475	.12066	.68365	.37002	.17849	15.312
#1	.07996	.13916	.50877	217.53	32.859	.09303	45.136	4.9680	.00097
#2	.07765	.13398	.50800	217.33	32.915	.09394	44.901	4.9555	.00121
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.8530**	**.08256**	**9.7941**	**.25781**	**4.0767**	**.01843**	**-.01265**	**3.5415**	**7.5788**
Stddev	.0140	.00220	.2520	.00408	.0935	.00651	.00100	.0045	.0095
%RSD	.23860	2.6627	2.5727	1.5809	2.2935	35.325	7.8963	.12552	.12552
#1	5.8431	.08412	9.9723	.26069	4.1428	.01383	-.01195	3.5383	7.5720
#2	5.8628	.08101	9.6160	.25493	4.0106	.02304	-.01336	3.5446	7.5855
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01196**	**2.0752**	**.05875**	**2.9132**	**.00352**	**-.02035**	**.52731**	**1.1402**	**.09217**
Stddev	.00062	.0025	.00214	.0048	.00102	.01344	.00012	.0015	.00020
%RSD	5.1422	.11999	3.6497	.16532	29.073	66.067	.02310	.13053	.21945
#1	.01153	2.0770	.06026	2.9166	.00424	-.02986	.52723	1.1391	.09232
#2	.01240	2.0735	.05723	2.9098	.00279	-.01084	.52740	1.1412	.09203
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2974.5**	**52681.**	**6690.6**
Stddev	10.3	34.	19.4
%RSD	.34640	.06368	.28961
#1	2981.8	52705.	6704.3
#2	2967.3	52657.	6676.9

Sample Name: 280-98145-B-4-B Acquired: 6/14/2017 3:04:26 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377019 6010B soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00121**	**183.81**	**.04176**	**.09415**	**2.2192**	**.00670**	**-.00752**	**217.66**	**.00383**
Stddev	.00062	.23	.00407	.00308	.0040	.00013	.00375	.21	.00030
%RSD	50.919	.12617	9.7359	3.2741	.18194	1.9145	49.813	.09469	7.8294
#1	.00078	183.65	.03888	.09633	2.2164	.00679	-.00487	217.51	.00362
#2	.00165	183.98	.04463	.09197	2.2221	.00661	-.01017	217.80	.00404
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.08857**	**.12689**	**.36840**	**249.71**	**40.423**	**.10268**	**47.357**	**5.3837**	**.00112**
Stddev	.00169	.00179	.00237	.38	.126	.00164	.018	.0099	.00027
%RSD	1.9091	1.4070	.64461	.15257	.31266	1.6012	.03703	.18408	23.887
#1	.08976	.12815	.37008	249.44	40.334	.10152	47.369	5.3907	.00131
#2	.08737	.12563	.36672	249.98	40.513	.10385	47.345	5.3767	.00093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.5646**	**.08521**	**10.800**	**.33382**	**3.6139**	**.01433**	**-.00001**	**3.9057**	**8.3582**
Stddev	.0158	.00112	.196	.00426	.0603	.00153	.00712	.0087	.0186
%RSD	.61598	1.3181	1.8163	1.2758	1.6683	10.703	61431.	.22207	.22207
#1	2.5534	.08601	10.939	.33683	3.6565	.01541	.00502	3.9118	8.3713
#2	2.5757	.08442	10.661	.33081	3.5713	.01324	-.00505	3.8996	8.3450
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01475**	**2.8490**	**.08075**	**4.2663**	**.00187**	**-.02165**	**.65886**	**.94468**	**.18668**
Stddev	.00082	.0060	.00006	.0086	.00450	.05326	.00024	.00140	.00065
%RSD	5.5532	.21083	.07706	.20114	240.20	245.98	.03588	.14862	.34631
#1	.01533	2.8448	.08070	4.2724	.00506	.01601	.65870	.94368	.18713
#2	.01417	2.8532	.08079	4.2603	-.00131	-.05932	.65903	.94567	.18622
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2929.9**	**51494.**	**6566.5**
Stddev	5.1	186.	3.9
%RSD	.17564	.36115	.05907
#1	2933.5	51363.	6569.3
#2	2926.2	51626.	6563.8

Sample Name: 280-98145-B-5-B Acquired: 6/14/2017 3:06:55 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377019 6010B soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00024**	**243.76**	**.04352**	**.04074**	**2.2751**	**.00947**	**-.00726**	**132.18**	**.00329**
Stddev	.00015	.26	.00434	.00094	.0030	.00004	.00629	.23	.00013
%RSD	62.732	.10790	9.9838	2.3107	.13332	.42461	86.537	.17208	4.1058
#1	.00014	243.57	.04044	.04008	2.2730	.00950	-.00282	132.02	.00338
#2	.00035	243.94	.04659	.04141	2.2773	.00945	-.01171	132.34	.00319
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.10289**	**.16759**	**.38579**	**297.91**	**32.832**	**.14466**	**54.228**	**6.2139**	**.00008**
Stddev	.00186	.00414	.00169	.80	.086	.00237	.010	.0070	.00036
%RSD	1.8117	2.4715	.43856	.26949	.26112	1.6415	.01935	.11237	442.33
#1	.10421	.17052	.38698	297.34	32.771	.14298	54.235	6.2090	-.00017
#2	.10158	.16466	.38459	298.48	32.892	.14633	54.221	6.2188	.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.7092**	**.10632**	**8.6328**	**.20996**	**1.9193**	**.01244**	**-.00048**	**3.7557**	**8.0373**
Stddev	.0053	.00269	.1536	.00207	.0259	.00195	.00277	.0273	.0585
%RSD	.19531	2.5306	1.7791	.98580	1.3510	15.640	573.28	.72751	.72751
#1	2.7130	.10822	8.7414	.21142	1.9377	.01382	.00148	3.7364	7.9959
#2	2.7055	.10442	8.5242	.20850	1.9010	.01107	-.00244	3.7750	8.0786
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01546**	**2.1277**	**.09917**	**3.6486**	**.00871**	**-.03560**	**.70961**	**.89649**	**.33454**
Stddev	.00351	.0039	.00037	.0013	.00116	.00397	.00231	.00003	.00025
%RSD	22.701	.18321	.37237	.03644	13.338	11.149	.32580	.00326	.07619
#1	.01794	2.1305	.09891	3.6496	.00789	-.03841	.71124	.89651	.33436
#2	.01298	2.1249	.09943	3.6477	.00953	-.03280	.70798	.89647	.33472
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**3059.9**	**54125.**	**6740.9**
Stddev	25.1	65.	5.8
%RSD	.82105	.12025	.08625
#1	3077.7	54171.	6736.8
#2	3042.2	54079.	6745.1

Sample Name: 280-98145-B-6-B Acquired: 6/14/2017 3:09:28 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377019 6010B soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00149**	**197.73**	**.05455**	**.04862**	**2.1369**	**.00785**	**-.00854**	**189.38**	**.00345**
Stddev	.00013	.17	.01009	.00261	.0060	.00012	.00228	.54	.00007
%RSD	8.6532	.08736	18.505	5.3650	.27975	1.5616	26.696	.28627	1.8943
#1	-.00140	197.85	.06169	.05047	2.1412	.00794	-.00693	189.76	.00349
#2	-.00159	197.61	.04741	.04678	2.1327	.00777	-.01015	189.00	.00340
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.08961**	**.14056**	**.51689**	**261.70**	**34.830**	**.10628**	**51.903**	**5.7005**	**.00114**
Stddev	.00306	.00466	.00029	.53	.027	.00210	.027	.0146	.00048
%RSD	3.4179	3.3158	.05560	.20393	.07830	1.9781	.05188	.25674	42.169
#1	.09177	.14386	.51709	262.08	34.849	.10777	51.922	5.6901	.00080
#2	.08744	.13726	.51669	261.33	34.811	.10479	51.884	5.7108	.00148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.6601**	**.08086**	**11.214**	**.23936**	**2.6119**	**.01149**	**-.00601**	**3.7675**	**8.0624**
Stddev	.0062	.00291	.312	.00723	.0666	.00326	.00065	.0244	.0523
%RSD	.09254	3.5950	2.7819	3.0194	2.5508	28.406	10.855	.64814	.64814
#1	6.6644	.08291	11.434	.24447	2.6590	.00919	-.00555	3.7848	8.0994
#2	6.6557	.07880	10.993	.23425	2.5648	.01380	-.00647	3.7502	8.0255
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01330**	**2.7368**	**.32418**	**3.8224**	**.00335**	**-.11657**	**.62396**	**1.0564**	**.34123**
Stddev	.00413	.0015	.00169	.0035	.00387	.01619	.00143	.0010	.00600
%RSD	31.072	.05537	.52157	.09274	115.30	13.887	.22972	.09062	1.7592
#1	.01622	2.7379	.32298	3.8249	.00609	-.10513	.62295	1.0571	.34548
#2	.01038	2.7357	.32537	3.8199	.00062	-.12802	.62497	1.0558	.33699
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**3119.9**	**55078.**	**6959.3**
Stddev	7.7	95.	29.5
%RSD	.24527	.17244	.42408
#1	3125.3	55145.	6938.4
#2	3114.5	55011.	6980.2

Sample Name: 280-98145-B-7-B Acquired: 6/14/2017 3:12:03 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377019 6010B soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00094**	**173.76**	**.04086**	**.06664**	**2.1361**	**.00644**	**-.00754**	**147.71**	**.00414**
Stddev	.00016	.09	.00039	.00182	.0040	.00015	.00320	.09	.00015
%RSD	17.016	.04962	.94765	2.7259	.18693	2.2705	42.420	.06031	3.5111
#1	.00082	173.82	.04058	.06793	2.1389	.00634	-.00981	147.77	.00424
#2	.00105	173.70	.04113	.06536	2.1333	.00655	-.00528	147.65	.00404
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.08906**	**.12719**	**.35329**	**241.13**	**35.835**	**.09718**	**42.353**	**5.2275**	**.00133**
Stddev	.00273	.00366	.00076	.00	.038	.00078	.065	.0036	.00003
%RSD	3.0627	2.8751	.21614	.00102	.10591	.80497	.15286	.06786	2.3663
#1	.09098	.12977	.35275	241.13	35.808	.09773	42.399	5.2300	.00131
#2	.08713	.12460	.35383	241.13	35.862	.09663	42.308	5.2250	.00135
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.0835**	**.08402**	**11.359**	**.34821**	**2.4057**	**.01376**	**-.00652**	**3.8548**	**8.2492**
Stddev	.0171	.00226	.289	.00931	.0624	.00131	.00343	.0402	.0859
%RSD	.81897	2.6926	2.5468	2.6738	2.5937	9.5311	52.632	1.0419	1.0419
#1	2.0956	.08562	11.563	.35479	2.4498	.01469	-.00410	3.8832	8.3100
#2	2.0714	.08242	11.154	.34162	2.3616	.01283	-.00895	3.8264	8.1884
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01344**	**2.5198**	**.08168**	**4.1600**	**.00211**	**-.03378**	**.62522**	**.88162**	**.21600**
Stddev	.00124	.0041	.00231	.0034	.00123	.01507	.00121	.00081	.00123
%RSD	9.2541	.16337	2.8243	.08083	58.370	44.611	.19339	.09141	.56851
#1	.01256	2.5227	.08331	4.1624	.00124	-.04443	.62437	.88219	.21513
#2	.01431	2.5168	.08005	4.1576	.00297	-.02312	.62608	.88105	.21687
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**3037.0**	**54336.**	**6779.6**
Stddev	16.8	29.	15.8
%RSD	.55170	.05387	.23311
#1	3048.8	54315.	6768.4
#2	3025.1	54357.	6790.8

Sample Name: 280-98145-B-8-B Acquired: 6/14/2017 3:14:32 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377019 6010B soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**151.46**	**.03236**	**.04712**	**2.0134**	**.00534**	**-.00972**	**197.45**	**.00274**
Stddev	.00015	.03	.01927	.00066	.0010	.00016	.00274	.00	.00032
%RSD	466.76	.02170	59.567	1.4098	.04894	3.0252	28.142	.00003	11.732
#1	-.00007	151.43	.01873	.04759	2.0141	.00523	-.00779	197.45	.00252
#2	.00013	151.48	.04599	.04665	2.0127	.00545	-.01166	197.45	.00297
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.07861**	**.13019**	**.30836**	**215.45**	**30.823**	**.09484**	**52.534**	**4.7635**	**.00107**
Stddev	.00231	.00383	.00100	.09	.036	.00021	.009	.0053	.00007
%RSD	2.9368	2.9417	.32543	.04022	.11669	.21915	.01794	.11186	6.3075
#1	.08025	.13290	.30907	215.51	30.798	.09499	52.541	4.7673	.00102
#2	.07698	.12749	.30765	215.39	30.849	.09470	52.528	4.7598	.00112
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.6040**	**.08351**	**8.9907**	**.21626**	**2.3023**	**.01089**	**-.01121**	**4.0761**	**8.7228**
Stddev	.0011	.00203	.2016	.00475	.0502	.00397	.00943	.0164	.0352
%RSD	.03107	2.4332	2.2421	2.1944	2.1820	36.469	84.088	.40307	.40307
#1	3.6048	.08495	9.1332	.21961	2.3378	.01369	-.00454	4.0645	8.6980
#2	3.6032	.08207	8.8482	.21290	2.2668	.00808	-.01788	4.0877	8.7477
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01388**	**2.3966**	**.08053**	**5.0559**	**.00375**	**-.06062**	**.56559**	**.90101**	**.21245**
Stddev	.00064	.0056	.00174	.0094	.00207	.01720	.00087	.00024	.00036
%RSD	4.6052	.23457	2.1645	.18525	55.130	28.376	.15403	.02617	.16920
#1	.01433	2.3926	.08176	5.0626	.00229	-.07279	.56620	.90118	.21220
#2	.01343	2.4006	.07929	5.0493	.00521	-.04846	.56497	.90084	.21271
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**2949.5**	**53045.**	**6666.8**
Stddev	9.8	188.	6.9
%RSD	.33204	.35357	.10400
#1	2956.4	53178.	6671.7
#2	2942.5	52913.	6661.9

Sample Name: 280-98145-B-9-B Acquired: 6/14/2017 3:17:01 Type: Unk
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment: 377019 6010B soil

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Line	328.068 {103}	309.271 {109}	189.042 {478}	208.959 {461}	455.403 { 74}	313.042 {108}	223.061 {451}	317.933 {106}	228.802 {447}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00050**	**184.35**	**.04691**	**.06162**	**2.2410**	**.00681**	**-.01218**	**196.16**	**.00387**
Stddev	.00012	.59	.00450	.00004	.0101	.00001	.00031	.73	.00044
%RSD	23.561	.32162	9.5859	.07206	.45237	.14986	2.5548	.37223	11.492
#1	.00058	183.93	.04373	.06159	2.2338	.00682	-.01240	195.64	.00418
#2	.00041	184.77	.05009	.06165	2.2482	.00680	-.01196	196.67	.00355
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2055	Cu3247	Fe2714	K_7664	Li6707	Mg2790	Mn2576	Mo2020
Line	228.616 {447}	205.560 {464}	324.754 {104}	271.441 {124}	766.490 { 44}	670.784 { 50}	279.079 {121}2	257.610 {131}	202.030 {467}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.08980**	**.17644**	**.41763**	**259.30**	**30.878**	**.12380**	**51.159**	**5.4011**	**.01526**
Stddev	.00252	.00446	.00050	.46	.183	.00005	.098	.0151	.00063
%RSD	2.8107	2.5268	.11906	.17713	.59219	.04219	.19226	.27981	4.1522
#1	.09158	.17960	.41799	258.97	30.748	.12377	51.229	5.3905	.01571
#2	.08801	.17329	.41728	259.62	31.007	.12384	51.090	5.4118	.01481
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881	SiO2
Line	589.592 { 57}	231.604 {446}	178.284 {489}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}	288.158 {117}	288.158 {117}2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.7817**	**.11401**	**11.144**	**.25389**	**2.9502**	**.01186**	**-.00942**	**3.5334**	**7.5614**
Stddev	.0448	.00225	.260	.00477	.0795	.00368	.00111	.0353	.0756
%RSD	.66114	1.9753	2.3336	1.8800	2.6956	31.036	11.757	.99975	.99975
#1	6.7500	.11561	11.327	.25727	3.0065	.00926	-.00864	3.5584	7.6149
#2	6.8134	.11242	10.960	.25052	2.8940	.01447	-.01021	3.5084	7.5080
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Line	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}	190.856 {477}	370.152 { 91}	292.402 {115}	206.200 {163}	339.198 { 99}
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01424**	**2.4509**	**.10430**	**5.1737**	**.00853**	**-.03995**	**.65903**	**1.1849**	**.27091**
Stddev	.00267	.0133	.00182	.0050	.00189	.00557	.00061	.0013	.00102
%RSD	18.757	.54427	1.7472	.09613	22.167	13.943	.09216	.10955	.37712
#1	.01612	2.4414	.10559	5.1773	.00719	-.04389	.65946	1.1840	.27163
#2	.01235	2.4603	.10302	5.1702	.00987	-.03601	.65860	1.1858	.27018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Int. Std.	Y_2243	Y_3600	Y_3774
Line	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S
Avg	**3028.5**	**53564.**	**6843.5**
Stddev	15.4	107.	32.3
%RSD	.50937	.19915	.47251
#1	3039.4	53488.	6866.4
#2	3017.6	53639.	6820.7

Sample Name: CCVH-4579429 Acquired: 6/14/2017 3:19:32 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3092	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00167**	**47.734**	**-.00671**	**.00063**	**.00172**	**.00002**	**.98681**	**.10237**	**.00065**	**-.00093**	**.00066**	**.01364**	**48.840**
Stddev	.00061	.057	.00005	.00001	.00012	.00007	.01745	.01868	.00003	.00062	.00019	.00011	.021
%RSD	36.265	.11895	.76434	1.0653	7.0394	316.48	1.7678	18.247	5.2187	66.880	28.603	.79359	.04275
#1	.00124	47.694	-.00667	.00063	.00181	.00007	.99915	.11558	.00063	-.00137	.00053	.01357	48.825
#2	.00210	47.774	-.00674	.00064	.00164	-.00003	.97448	.08916	.00068	-.00049	.00080	.01372	48.854
Check ?	None	Chk Pass	None	None	None	None	Chk Pass	None	None	None	None	None	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na8183	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.18603**	**.00329**	**.04505**	**-.00040**	**-.00162**	**250.89**	**.00052**	**.00823**	**-.00179**	**4.9403**	**.00555**	**-.00492**	**.01176**
Stddev	.06708	.00059	.00360	.00033	.00038	.97	.00102	.00081	.00003	.0588	.00326	.00291	.02076
%RSD	36.060	17.821	7.9796	82.579	23.725	.38805	194.58	9.8663	1.7297	1.1899	58.700	59.170	176.60
#1	.13860	.00370	.04760	-.00017	-.00189	250.20	.00124	.00765	-.00181	4.9819	.00324	-.00698	-.00292
#2	.23346	.00287	.04251	-.00064	-.00135	251.57	-.00020	.00880	-.00177	4.8988	.00785	-.00286	.02644
Check ?	None	None	None	None	None	Chk Pass	None	None	None	Chk Pass	None	None	None
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02516**	**.00058**	**.00156**	**4.7849**	**.01922**	**.00332**	**9.7896**	**.01369**	**.00157**	**.08090**
Stddev	.04443	.00052	.00028	.0082	.00001	.00693	.0199	.00047	.00044	.00474
%RSD	176.60	90.613	17.742	.17225	.04634	209.04	.20310	3.4447	28.166	5.8634
#1	-.00626	.00095	.00176	4.7907	.01922	.00822	9.8036	.01403	.00188	.07754
#2	.05657	.00021	.00137	4.7791	.01921	-.00159	9.7755	.01336	.00125	.08425
Check ?	None	None	None	Chk Pass	None	None	Chk Pass	None	None	None
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2679.0**	**48153.**	**5752.5**
Stddev	14.8	58.	15.3
%RSD	.55233	.12035	.26543
#1	2689.4	48194.	5763.3
#2	2668.5	48112.	5741.7

Sample Name: CCV-4580817 Acquired: 6/14/2017 3:22:05 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49690**	**.54482**	**.96980**	**.49387**	**.50212**	**.47456**	**-.00314**	**5.0239**	**.49490**	**.49815**	**.49386**	**.49934**	**2.4042**
Stddev	.00255	.01282	.02772	.00854	.00106	.00121	.00094	.0047	.00941	.00949	.00844	.00261	.0045
%RSD	.51236	2.3533	2.8581	1.7292	.21159	.25474	29.897	.09395	1.9004	1.9060	1.7093	.52272	.18754
#1	.49871	.55389	.98940	.49991	.50137	.47371	-.00247	5.0206	.50155	.50486	.49983	.49750	2.4010
#2	.49510	.53575	.95020	.48783	.50287	.47542	-.00380	5.0273	.48825	.49143	.48789	.50119	2.4074
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**51.327**	**.99318**	**20.311**	**.49016**	**.49084**	**5.0647**	**.49713**	**1.0096**	**1.0174**	**-.03438**	**.98491**	**.98458**	**4.8003**
Stddev	.014	.00298	.034	.00138	.00855	.0121	.01001	.0135	.0178	.00906	.02610	.02089	.0056
%RSD	.02646	.30040	.16536	.28134	1.7428	.23981	2.0146	1.3350	1.7515	26.365	2.6504	2.1221	.11745
#1	51.318	.99107	20.335	.49113	.49689	5.0733	.50421	1.0191	1.0300	-.02797	1.0034	.99935	4.7963
#2	51.337	.99529	20.287	.48918	.48479	5.0561	.49004	1.0001	1.0048	-.04079	.96646	.96980	4.8043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value													
Range													

Elem	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.273**	**1.0043**	**.47890**	**.01100**	**.47813**	**.99202**	**-.00527**	**.48797**	**.49608**	**.49396**
Stddev	.012	.0193	.00134	.00113	.00129	.02494	.03333	.00118	.00071	.00162
%RSD	.11745	1.9184	.28040	10.294	.27019	2.5145	632.69	.24179	.14224	.32741
#1	10.264	1.0179	.47795	.01181	.47905	1.0097	-.02884	.48881	.49658	.49510
#2	10.281	.99069	.47985	.01020	.47722	.97438	.01830	.48714	.49558	.49281
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value										
Range										

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2709.5**	**49088.**	**5720.1**
Stddev	.8	47.	7.2
%RSD	.02849	.09614	.12596
#1	2709.0	49055.	5725.2
#2	2710.1	49122.	5715.0

Sample Name: CCB Acquired: 6/14/2017 3:24:34 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00006**	**.00163**	**-.00501**	**.00072**	**.00043**	**.00008**	**.00066**	**-.00967**	**.00064**	**.00001**	**-.00002**	**-.00206**
Stddev	.00041	.00037	.00151	.00066	.00021	.00002	.00042	.00199	.00027	.00004	.00043	.00047
%RSD	671.16	22.679	30.160	91.776	48.068	23.061	63.281	20.561	42.235	565.20	2278.3	22.600
#1	-.00035	.00189	-.00608	.00119	.00029	.00007	.00095	-.00826	.00083	.00003	-.00032	-.00239
#2	.00023	.00136	-.00395	.00025	.00058	.00010	.00036	-.01108	.00045	-.00002	.00028	-.00173
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00459**	**.18487**	W **.00583**	**.00309**	**.00001**	**-.00020**	**-.09375**	**.00012**	**.00384**	**-.00123**	**-.02954**	**.00135**
Stddev	.00044	.00162	.00052	.00139	.00005	.00004	.01546	.00032	.00157	.00235	.00519	.00080
%RSD	9.6614	.87481	8.8672	45.026	348.65	19.689	16.487	264.27	40.913	191.11	17.560	59.178
#1	-.00427	.18601	.00546	.00210	.00005	-.00022	-.10467	.00034	.00273	.00043	-.03321	.00079
#2	-.00490	.18373	.00619	.00407	-.00002	-.00017	-.08282	-.00010	.00495	-.00289	-.02587	.00192
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.00500									
Low Limit			-.01000									

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00982**	**.01532**	**.03279**	**.00061**	**.00006**	**.00401**	**-.00042**	**.00318**	**-.03387**	**-.00057**	**-.00026**	**.00118**
Stddev	.00307	.01440	.03082	.00104	.00013	.00180	.00013	.00275	.00546	.00034	.00070	.00224
%RSD	31.225	94.000	94.000	172.18	205.22	44.828	30.982	86.286	16.130	59.693	274.31	189.34
#1	-.00766	.00514	.01099	-.00013	-.00003	.00274	-.00033	.00124	-.03773	-.00033	-.00075	-.00040
#2	-.01199	.02551	.05458	.00135	.00016	.00528	-.00051	.00513	-.03000	-.00081	.00024	.00277
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit												
Low Limit												

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2692.3**	**49532.**	**5638.5**
Stddev	.9	2.	7.9
%RSD	.03444	.00366	.14052
#1	2691.7	49531.	5632.9
#2	2693.0	49533.	5644.1

Sample Name: CCVL-4590576 Acquired: 6/14/2017 3:27:12 Type: QC
Method: 6500_025(v3) Mode: CONC Corr. Factor: 1.000000
User: broanderl Prep Date: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al1670	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288	Co2286	Cr2055	Cu3247
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01061**	F **.13995**	**.01364**	**.09920**	**.01244**	**.00094**	**.11307**	F **.33783**	**.00530**	**.01111**	**.01023**	**.01457**
Stddev	.00017	.01492	.00646	.00193	.00073	.00006	.00164	.02848	.00011	.00043	.00067	.00037
%RSD	1.5573	10.662	47.344	1.9476	5.8872	6.6550	1.4547	8.4315	2.0339	3.8262	6.5508	2.5189
#1	.01072	.15050	.01821	.10057	.01295	.00090	.11423	.35797	.00538	.01141	.01070	.01483
#2	.01049	.12940	.00907	.09784	.01192	.00099	.11190	.31769	.00522	.01081	.00975	.01431
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value		.10000						.20000				
Range		30.000%						30.000%				

Elem	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.31204**	**3.3026**	**.02496**	**.23387**	**.01265**	**.01820**	**1.0034**	**.04176**	**2.9010**	**.00972**	F **.06519**	**.01954**
Stddev	.04210	.0763	.00078	.00652	.00057	.00057	.0258	.00066	.0732	.00063	.00969	.00047
%RSD	13.491	2.3112	3.1075	2.7862	4.5070	3.1483	2.5743	1.5812	2.5238	6.4912	14.868	2.4297
#1	.34181	3.3566	.02551	.23848	.01305	.01860	1.0216	.04223	2.9528	.01017	.05834	.01988
#2	.28227	3.2486	.02441	.22926	.01224	.01779	.98510	.04129	2.8492	.00927	.07204	.01921
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value	.10000										.10000	
Range	30.000%										-30.000%	

Elem	Se1960	Si2881	SiO2	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_3701	V_2924	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01407**	**.49206**	**1.0530**	**.10043**	**.01196**	**.01904**	**.01071**	**.01710**	F **.02426**	**.01034**	**.02041**	**.01509**
Stddev	.00871	.01547	.0331	.00320	.00027	.00148	.00050	.00318	.01127	.00021	.00039	.00109
%RSD	61.854	3.1442	3.1442	3.1903	2.2529	7.7755	4.6242	18.572	46.443	2.0404	1.8985	7.2269
#1	.02023	.50300	1.0764	.10270	.01215	.01799	.01106	.01935	.01629	.01019	.02014	.01586
#2	.00792	.48112	1.0296	.09816	.01177	.02009	.01036	.01486	.03223	.01049	.02069	.01432
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value									.06000			
Range									-30.000%			

Int. Std.	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S
Avg	**2787.6**	**50938.**	**5818.7**
Stddev	9.2	241.	10.9
%RSD	.33176	.47400	.18674
#1	2781.0	51109.	5826.4
#2	2794.1	50767.	5811.0

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ICP Data Review Checklist

LIMS Batch Number(s): 317162	Filename(s): 25a060 254061217	Instrument ID (circle one): ICP25 ICP26
Analyst/1st Reviewer/Date: SP 6/13/17		Method (circle): 200.7 6010B 6010C
Matrix (circle): Water Solid Leachate		QC Type (circle): Standard DoD Q4 DoD Q5 QAPP Other
		Circle: Total TR PD Dissolved

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
A. Calibration/Instrument Run QC					
1. Instrument calibrated per lab SOP?	✓			✓	
2. Reanalysis of Calibration Standards before samples: 95-105% recovery	✓			✓	
3. ICB/CCB: run before samples, 10% frequency, & closing Result < ½ RL (routine) Result < LOD/2x MDL (DoD or special project)	✓			✓	If no, list details:
4. ICV/CCV: frequency initial, 10%, & closing 90-110% recovery, 5% RSD (6010) 95-105% recovery, 3% RSD (200.7)	✓			✓	If no, list details:
5. ICVL/CCVL: 70-130% recovery (6010C)	✓			✓	If no, list details:
6. ICSA/ICSAB: run before samples ICSA detections for non-spiked ◁ 2x RL | (<LOD/2x MDL for DoD or special project) ICSAB for spiked elements 80-120% *If no, list analytes:*	✓			✓	☐ Results outside limits due to contamination. ☐ Concentration of affected analyte in sample is less than RL.
7. RL-level check standard (CRI): 50-150% (routine) 80-120% recovery (DoD or special projects)	✓			✓	If no, list details:
B. Client Sample and QC Sample Results					
1. Samples with target element concentrations > 90% linear range diluted and reanalyzed? (2007)	✓			✓	Comments:
2. Were all hits reported from a run with interfering elements < linear range? (L Flags investigated?)	✓			✓	Comments:
3. Internal standard (IS) response ± 30% of ICB IS? *If no, list details:*	✓			✓	☐ High IS response. Sample(s) rerun at dilution. ☐ Low IS response. Sample(s) rerun at dilution.
C. Preparation/Matrix QC					
1. Method Blank: one per preparation batch result < ½ RL (routine)	✓			✓	☐ No analyte > RL in associated samples ☐ Sample results >10x blank ☐ Insufficient sample for reanalysis
2. LCS: one per preparation batch 80-120% recovery or historical (routine) 85-115% recovery or historical (200.7); project limits (other)	✓			✓	☐ Insufficient sample for reanalysis ☐ LCS %R > QC limits & samples < RL
3. MS/MSD or MS/Dup frequency: a pair per batch (routine) a pair per 10 samples (200.7)	✓			✓	☐ Insufficient sample – LCS/LCSD analyzed
C. Preparation/Matrix QC (cont.)					
4. MS/MSD recovery & RPD: 75-125% recovery or historical (routine) 70-130% recovery or historical (200.7) 20% RPD project limits (other)	✓			✓	☐ LCS acceptable – matrix effects ☐ Native analyte > 4x spike level ☐ Matrix effect and native analyte > 4x spike

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
5. If TCLP MS <50% and sample result 80-100% of toxicity characteristic limit, was MSA run?	✓			✓	Comments:
6. Serial dilution: present for each prep batch (routine) Required if MS/MSD fail (DoDV5) run at 5x dilution of parent sample ≤ 10% difference	✓			✓	☐ Sample result < 50 x MDL
7. Post digestion spike: Required if MS/MSD fail (DoD and 6010C) or by client request 75-125% recovery	✓			✓	
D. Raw Data & TALS Data Entry	✓			✓	
1. TALS Sample List Tab	✓			✓	
a. LIMS Sample IDs / Containers are correct	✓			✓	
b. Method and matrix are correct	✓			✓	
c. Date and time are correct	✓			✓	
d. Dilutions are correct	✓			✓	
e. Correct suffix designated; e.g., DU, (where applicable)	✓			✓	
2. TALS Sample Results Tab	✓			✓	
a. All reported analytes are marked Primary or Secondary	✓			✓	
b. All unused data are marked Rejected or Accepted. Unused data are clearly identified with reason not used	✓			✓	
c. Out of control QC is clearly identified	✓			✓	
d. Any data that has a qualifier is reviewed with appropriate action taken (NCM if needed)	✓			✓	
e. The attached data file includes the filename, instrument, and analyst initials	✓			✓	
3. TALS Worksheet Tab is complete and correct	✓			✓	
4. TALS Reagent Tab is complete and correct	✓			✓	
5. TALS QC Links Tab is correct	✓			✓	
6. TALS Batch Information Screen documentation is complete	✓			✓	
7. TALS Status set to appropriate review level	✓			✓	
E. Final Report and NCMs (2nd level review only)				✓	
1. Were all job/project requirements met?				✓	
2. Results for samples and QC correct on final report?				✓	
3. Are all necessary scanned documents in TALS?				✓	
4. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?				✓	
5. Raw Data PDF attached as document				✓	

Comments: _____

2nd Reviewer: _____ Review Date: 6/14/17

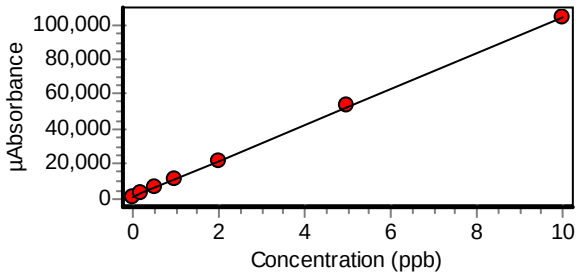
Report Generated By CETAC QuickTrace
Analyst: henningc
Worksheet file: C:\Program Files\QuickTrace\Worksheets\2017\6-Jun\170614ba.wsz
Date Started: 6/14/2017 1:08:01 PM
Comment:

Results

Sample Name	Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags	Wt.	Vol.	ODF
Std0	STD	06/14/17 02:44:08 pm	0.000	585	1.28		1.00	1.00	1.00
Std1 4593180	STD	06/14/17 02:46:21 pm	0.200	2726	2.26		1.00	1.00	1.00
Std2 4593181	STD	06/14/17 02:48:35 pm	0.500	5879	1.58		1.00	1.00	1.00
Std3 4593182	STD	06/14/17 02:50:50 pm	1.000	11240	0.93		1.00	1.00	1.00
Std4 4593183	STD	06/14/17 02:53:05 pm	2.000	21678	1.38		1.00	1.00	1.00
Std5 4593184	STD	06/14/17 02:55:21 pm	5.000	53449	1.20		1.00	1.00	1.00
Std6 4593185	STD	06/14/17 02:57:37 pm	10.000	103703	1.09		1.00	1.00	1.00

Calibration

Equation: A = 863.431 + 10332.410C
R2: 0.99985
SEE: 500.5530
Flags:



ICV 4593178	ICV	06/14/17 02:59:59 pm	3.912	41287	1.12		1.00	1.00	1.00
% Recovery 97.81									
ICB	ICB	06/14/17 03:02:12 pm	-0.041	442	1.07		1.00	1.00	1.00
CRA 4593179	CRDL	06/14/17 03:04:25 pm	0.174	2657	2.02		1.00	1.00	1.00
% Recovery 86.78									

Sample Name	Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags	Wt.	Vol.	ODF
CCV 4593177	CCV	06/14/17 03:06:41 pm	4.893	51419	1.55		1.00	1.00	1.00
% Recovery 97.86									
CCB	CCB	06/14/17 03:08:54 pm	-0.031	546	1.20		1.00	1.00	1.00
MB 280-377154/1-A	UNK	06/14/17 03:11:06 pm	-0.050	342	4.08		1.00	1.00	1.00
LCS 280-377154/2-A	UNK	06/14/17 03:13:18 pm	3.877	40918	2.02		1.00	1.00	1.00
280-97920-B-1-D	UNK	06/14/17 03:15:31 pm	0.068	1563	0.59		1.00	1.00	1.00
280-97920-B-1-D SD@5	UNK	06/14/17 03:17:44 pm	-0.015	705	0.71		1.00	1.00	1.00
280-97920-B-1-E MS	UNK	06/14/17 03:19:57 pm	4.146	43698	0.64		1.00	1.00	1.00
280-97920-B-1-F MSD	UNK	06/14/17 03:22:11 pm	4.116	43387	0.69		1.00	1.00	1.00
280-97920-B-1-D PDS	UNK	06/14/17 03:24:25 pm	3.025	32122	0.36		1.00	1.00	1.00
280-97968-A-2-I	UNK	06/14/17 03:26:39 pm	0.141	2325	0.65		1.00	1.00	1.00
280-97968-A-4-G	UNK	06/14/17 03:28:54 pm	0.054	1425	0.83		1.00	1.00	1.00
280-98131-A-2-H	UNK	06/14/17 03:31:08 pm	0.167	2590	0.71		1.00	1.00	1.00
CCV 4593177	CCV	06/14/17 03:33:24 pm	5.063	53172	1.80		1.00	1.00	1.00
% Recovery 101.25									
CCB	CCB	06/14/17 03:35:37 pm	-0.042	432	5.01	s	1.00	1.00	1.00
280-98131-A-4-E	UNK	06/14/17 03:37:52 pm	0.085	1737	0.67		1.00	1.00	1.00
280-97995-A-1-D	UNK	06/14/17 03:40:08 pm	2.590	27624	0.45		1.00	1.00	1.00
MB 280-377150/1-A	UNK	06/14/17 03:42:19 pm	-0.032	530	1.84		1.00	1.00	1.00

Sample Name	Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags	Wt.	Vol.	ODF
LCS 280-377150/2-A	UNK	06/14/17 03:44:32 pm	3.804	40165	0.61		1.00	1.00	1.00
280-98030-B-1-B	UNK	06/14/17 03:46:44 pm	0.179	2713	1.01		1.00	1.00	1.00
280-98030-B-2-B	UNK	06/14/17 03:48:57 pm	0.091	1802	0.57		1.00	1.00	1.00
280-98030-A-3-D	UNK	06/14/17 03:51:10 pm	0.300	3960	0.57		1.00	1.00	1.00
280-98030-C-4-D	UNK	06/14/17 03:53:23 pm	-0.004	823	0.41		1.00	1.00	1.00
280-98030-A-5-D	UNK	06/14/17 03:55:37 pm	0.030	1169	0.52		1.00	1.00	1.00
280-98030-A-6-D	UNK	06/14/17 03:57:50 pm	0.174	2660	0.65		1.00	1.00	1.00
CCV 4593177 % Recovery 104.17	CCV	06/14/17 04:00:06 pm	5.209	54681	0.92		1.00	1.00	1.00
CCB	CCB	06/14/17 04:02:19 pm	-0.052	326	4.08		1.00	1.00	1.00
280-98187-I-5-D	UNK	06/14/17 04:04:33 pm	0.082	1714	0.44		1.00	1.00	1.00
280-98187-I-5-D SD@5	UNK	06/14/17 04:06:48 pm	-0.014	724	1.38		1.00	1.00	1.00
280-98187-I-5-E MS	UNK	06/14/17 04:09:03 pm	4.125	43486	0.55		1.00	1.00	1.00
280-98187-I-5-F MSD	UNK	06/14/17 04:11:18 pm	4.181	44066	0.53		1.00	1.00	1.00
280-98187-I-5-D PDS	UNK	06/14/17 04:13:30 pm	3.007	31933	0.41		1.00	1.00	1.00
280-98187-A-6-D	UNK	06/14/17 04:15:42 pm	0.019	1057	0.35		1.00	1.00	1.00
280-98187-B-7-B	UNK	06/14/17 04:17:54 pm	0.018	1046	1.33		1.00	1.00	1.00
280-98187-A-8-D	UNK	06/14/17 04:20:07 pm	0.170	2618	0.47		1.00	1.00	1.00

Sample Name	Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags	Wt.	Vol.	ODF
280-98187-B-10-B	UNK	06/14/17 04:22:20 pm	0.358	4565	0.95		1.00	1.00	1.00
280-98187-D-13-C	UNK	06/14/17 04:24:33 pm	-0.008	778	0.94		1.00	1.00	1.00
CCV 4593177	CCV	06/14/17 04:26:49 pm	5.333	55969	1.22		1.00	1.00	1.00
% Recovery 106.66									
CCB	CCB	06/14/17 04:29:02 pm	-0.043	420	0.47		1.00	1.00	1.00
280-98187-D-17-C	UNK	06/14/17 04:31:16 pm	1.123	12464	0.93		1.00	1.00	1.00
280-98187-D-18-C	UNK	06/14/17 04:33:29 pm	0.637	7445	0.77		1.00	1.00	1.00
280-98187-D-19-C	UNK	06/14/17 04:35:43 pm	1.103	12257	0.69		1.00	1.00	1.00
280-98187-D-20-C	UNK	06/14/17 04:37:58 pm	0.380	4791	0.65		1.00	1.00	1.00
280-98187-D-21-C	UNK	06/14/17 04:40:13 pm	0.147	2385	0.58		1.00	1.00	1.00
280-98187-D-22-C	UNK	06/14/17 04:42:28 pm	0.238	3323	0.62		1.00	1.00	1.00
280-98187-D-23-C	UNK	06/14/17 04:44:40 pm	0.784	8965	0.60		1.00	1.00	1.00
MB 280-377156/1-A	UNK	06/14/17 04:46:53 pm	-0.033	525	5.52	s	1.00	1.00	1.00
LCS 280-377156/2-A	UNK	06/14/17 04:49:05 pm	3.962	41803	0.77		1.00	1.00	1.00
280-97928-C-1-G	UNK	06/14/17 04:51:18 pm	0.051	1392	0.63		1.00	1.00	1.00
CCV 4593177	CCV	06/14/17 04:53:34 pm	5.079	53341	0.70		1.00	1.00	1.00
% Recovery 101.58									
CCB	CCB	06/14/17 04:55:47 pm	-0.043	423	1.04		1.00	1.00	1.00
280-97928-C-1-G SD@5	UNK	06/14/17 04:58:00 pm	-0.018	679	0.45		1.00	1.00	1.00

Sample Name	Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags	Wt.	Vol.	ODF
280-97928-C-1-H MS	UNK	06/14/17 05:00:13 pm	4.200	44261	0.50		1.00	1.00	1.00
280-97928-C-1-I MSD	UNK	06/14/17 05:02:26 pm	4.201	44271	0.86		1.00	1.00	1.00
280-97928-C-1-G PDS	UNK	06/14/17 05:04:40 pm	3.088	32769	0.44		1.00	1.00	1.00
280-97928-C-3-C	UNK	06/14/17 05:06:54 pm	0.021	1078	0.60		1.00	1.00	1.00
280-97928-B-4-C	UNK	06/14/17 05:09:09 pm	0.002	885	0.40		1.00	1.00	1.00
280-97928-C-5-C	UNK	06/14/17 05:11:24 pm	0.152	2432	0.66		1.00	1.00	1.00
280-97928-C-6-C	UNK	06/14/17 05:13:39 pm	0.031	1187	0.60		1.00	1.00	1.00
280-97928-C-7-C	UNK	06/14/17 05:15:52 pm	0.014	1008	0.46		1.00	1.00	1.00
280-97928-C-8-C	UNK	06/14/17 05:18:05 pm	0.218	3116	0.40		1.00	1.00	1.00
CCV 4593177 % Recovery 102.74	CCV	06/14/17 05:20:20 pm	5.137	53943	0.79		1.00	1.00	1.00
CCB	CCB	06/14/17 05:22:33 pm	-0.038	474	1.79		1.00	1.00	1.00
280-97928-B-9-C	UNK	06/14/17 05:24:46 pm	0.100	1897	0.52		1.00	1.00	1.00
280-97928-A-10-C	UNK	06/14/17 05:26:59 pm	0.067	1551	0.47		1.00	1.00	1.00
280-97928-A-11-C	UNK	06/14/17 05:29:12 pm	0.204	2976	0.43		1.00	1.00	1.00
280-97928-B-12-C	UNK	06/14/17 05:31:25 pm	0.143	2340	0.69		1.00	1.00	1.00
280-97928-C-14-C	UNK	06/14/17 05:33:39 pm	0.447	5483	0.51		1.00	1.00	1.00
280-97928-A-15-C	UNK	06/14/17 05:35:53 pm	0.714	8241	0.59		1.00	1.00	1.00

Sample Name	Type	Date/Time	Conc (ppb)	µAbs	%RSD	Flags	Wt.	Vol.	ODF
280-97928-B-16-C	UNK	06/14/17 05:38:07 pm	0.353	4510	0.66		1.00	1.00	1.00
280-97928-C-17-C	UNK	06/14/17 05:40:21 pm	0.153	2444	0.88		1.00	1.00	1.00
280-97928-A-18-C	UNK	06/14/17 05:42:36 pm	0.015	1017	0.30		1.00	1.00	1.00
280-97928-A-19-B	UNK	06/14/17 05:44:51 pm	0.009	952	0.62		1.00	1.00	1.00
CCV 4593177	CCV	06/14/17 05:47:07 pm	4.985	52371	1.03		1.00	1.00	1.00
% Recovery 99.70									
CCB	CCB	06/14/17 05:49:20 pm	-0.038	470	0.70		1.00	1.00	1.00
280-97928-A-20-B	UNK	06/14/17 05:51:33 pm	0.018	1046	0.95		1.00	1.00	1.00
280-97928-A-21-B	UNK	06/14/17 05:53:46 pm	0.004	901	0.73		1.00	1.00	1.00
280-97928-A-22-B	UNK	06/14/17 05:56:00 pm	0.046	1336	0.85		1.00	1.00	1.00
CCV 4593177	CCV	06/14/17 05:58:15 pm	5.245	55053	0.68		1.00	1.00	1.00
% Recovery 104.89									
CCB	CCB	06/14/17 06:00:28 pm	-0.041	437	0.70		1.00	1.00	1.00

Analysis Parameters

Instrument M-7500 Mercury Analyzer

Conditions

Gas flow (mL/min)	Sample Uptake (s)	Rinse (s)	Read delay (s)	Replicates (#)	Replicate time (s)	Pump speed (%)	Wavelength (nm)
100	35.00	90.00	60.00	4	1.50	50	253.65

ASX Pump Rate (%)
35

Instrumental Zero

Zero before first sample: No

Zero periodically: Yes

Before each calibration.

Baseline Correction

#1 Start time (s)	#1 End time (s)	#2 Start time (s)	#2 End time (s)
20.00	24.00		

Standby Mode

Enabled: Yes

Standby Options: pump off, gas off

Autodilution

Enabled: No

Condition:

Tube # range:

If no autodilution tubes remaining

Calibration

Settings

Algorithm	Through blank	Weighted fit	Cal. Type	Racalibration rate	Reslope rate	Reslope standard
Linear	No	No	Normal	0	0	N/A

Limits

Calibration slope		Reslope		Coeff. of Determination
Lower (%)	Upper (%)	Lower (%)	Upper (%)	
20	150	75	125	0.99500

Error action: Flag and continue

QC

GLP Override: Yes

QC Tests

CCB

Concentration (ppb)
0.1000

Failure flag: Q

Error action for manually inserted QC: Stop analysis

ICB

Concentration (ppb)
0.0500

Failure flag: Z

Error action for manually inserted QC: Stop analysis

CCV

Concentration (ppb)	Low Limit %	High Limit %
5.0000	80.0000	120.0000

Failure flag: Q

Error action for manually inserted QC: Stop analysis

ICV

Concentration (ppb)	Low Limit %	High Limit %
4.0000	94.6000	110.4000

Failure flag: Q

Error action for manually inserted QC: Stop analysis

CRDL

Concentration (ppb)	Low Limit %	High Limit %
0.2000	50.0000	150.0000

Failure flag: Y

Error action for manually inserted QC: Stop analysis

TestAmerica *Denver*

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Hg Data Review Checklist

LIMS Batch Number: 377403	Filename: 170614 6a	Instrument ID (circle one): 033 (034)
Analyst/1st Reviewer/Date: Chris Henning 06/15/17	Method (circle): 245.1 7470A (7471A)	QC Type (circle): (Standard) DoD Q4 (DoD Q5) QAPP_____ Other_____
Matrix (circle): Water (Solid) Leachate		Circle: (Total) PD Dissolved

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
A. Calibration/Instrument Run QC					
1. Calibrated with at least 5 standards and a blank	/			/	
2. Linearity and intercept: r ≥ 0.995 |x-intercept| < RL or < ½ RL (special projects)	/			/	
4. ICV: run before samples 95-105% recovery (245.1) 90-110% recovery (7470A/7471A)	/			/	If no, list details:
5. CCV: run before samples, 10% frequency & closing 90-110% recovery (245.1 & 7470A) 80-120% recovery (7471A)	/			/	If no, list details:
6. ICB/CCB: run before samples, 10% frequency, & closing Result < ½ RL (routine) Result < LOD (DoD or special project)	/			/	If no, list details:
7. RL-level check standard 50-150% recovery (routine) 80-120% recovery (DoD)	/			/	If no, list details:
B. Client Sample and QC Sample Results					
1. Samples with results > linear range diluted and reanalyzed?			/	/	Comments:
C. Preparation/Matrix QC					
1. Method Blank: one per preparation batch result < ½ RL (routine)	/			/	☐ No analyte > RL in associated samples ☐ Sample results >10x blank ☐ Insufficient sample for reanalysis
2. LCS one per preparation batch Historical (routine) 85-115% recovery (245.1) Other (DoD or client specific)	/			/	☐ Insufficient sample for reanalysis ☐ LCS %R > QC limits & samples < RL
3. MS/MSD or MS/Dup frequency: a pair per batch (routine) a pair per 10 samples (245.1)	/			/	☐ Insufficient sample
4. MS/MSD recovery & RPD: 75-125% or historical 70-130% (245.1) 20% RPD	/			/	☐ LCS acceptable – matrix effects ☐ Native analyte > 4x spike level ☐ Matrix effect and native analyte > 4x spike
5. If TCLP MS <50% and sample result 80-100% of toxicity characteristic limit, was MSA run?			/	/	Comments:
6. Serial dilution: Required only for DoD and only if MS/MSD fail run at 5x dilution of parent sample ≤ 10% difference *If no, list details:*	/			/	☐ Sample result < 50 x RL

Review Items	Yes	No	NA	2nd Rev	If No, why is data reportable?
C. Preparation/Matrix QC (continued)					
7. Post digestion spike: Required only for DoD and only if MS/MSD fail 80-120% recovery *If no, list details:*	/			/	
D. Raw Data & TALS Data Entry					
1. TALS Sample List Tab					
a. LIMS Sample IDs / Containers are correct	/			/	
b. Method and matrix are correct	/			/	
c. Date and time match raw data	/			/	
d. Dilutions are correct	/			/	
e. Correct suffix designated (where applicable)			/	/	
2. TALS Sample Results Tab					
a. All reported analytes are marked Primary or Secondary	/			/	
b. All unused data are marked Rejected or Accepted. Unused data are clearly identified with reason not used	/			/	
c. Out of control QC is clearly identified			/	/	
d. Any data that has a qualifier is commented on with appropriate action taken (NCM if needed)			/	/	
e. The attached data file includes the filename, instrument, and analyst initials	/			/	
3. TALS Worksheet Tab is complete and correct	/			/	
4. TALS Reagent Tab is complete and correct	/			/	
5. TALS QC Links Tab is correct	/			/	
6. TALS Batch Information Screen documentation is complete	/			/	
7. TALS Status set to appropriate review level	/			/	
E. Final Report and NCMs (2nd level review only)					
1. Were all job/project requirements met?				/	
2. Results for samples and QC correct on final report?				/	
3. Are all necessary scanned documents in TALS?				/	
4. NCMs reviewed for applicability, correct references to batches, grammar/typographical errors?				/	
5. Raw Data PDF attached as document				/	

Comments: Some samples of job 98187 lack % moisture at the time of first level review. Samples left at batched status.

2nd Reviewer: Cara Lackey Review Date: ~~12~~ 6/15/17

CL 6/15/17

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-97928-1

SDG No.:

Project: Griffiss AFB, NY - SS025

Client Sample ID	Lab Sample ID
SS025-SS07	280-97928-1
SS025-SB06(0-2)	280-97928-3
SS025-SB06(2-4)	280-97928-4
SS025-SS08	280-97928-5
SS025-SB07(0-2)	280-97928-6
SS025-SB07(2-4)	280-97928-7
SS025-SB01(0-2)	280-97928-8
SS025-SB01(0-2)-a	280-97928-9
SS025-SB08(0-2)	280-97928-10
SS025-SB08(2-4)	280-97928-11
SS025-SS09	280-97928-12
SS025-SB09(0-2)	280-97928-14
SS025-SB09(2-4)	280-97928-15
SS025-SB09(4-6)	280-97928-16
SS025-SB09(6-8)	280-97928-17
SS025-SB10(0-2)	280-97928-18
SS025-SB10(2-4)	280-97928-19
SS025-SB10(4-6)	280-97928-20
SS025-SB10(2-4)-a	280-97928-21
SS025-SS10	280-97928-22

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job Number: 280-97928-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture LOQ Date: 11/01/2009 00:00

Analyte	Wavelength/ Mass	LOQ (%)	
Percent Moisture		0.1	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 06/08/2017 11:05 End Date: 06/08/2017 11:05

Lab Sample Id	D/F	Type	Time	Analytes																								
				Moist																								
ZZZZZZ			11:05																									
ZZZZZZ			11:05																									
ZZZZZZ			11:05																									
ZZZZZZ			11:05																									
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ZZZZZZ			11:05																									
ZZZZZZ			11:05																									
280-97928-1	1	T	11:05	X																								
280-97928-3	1	T	11:05	X																								
280-97928-4	1	T	11:05	X																								
280-97928-5	1	T	11:05	X																								
280-97928-6	1	T	11:05	X																								
280-97928-7	1	T	11:05	X																								
280-97928-8	1	T	11:05	X																								
280-97928-9	1	T	11:05	X																								
280-97928-10	1	T	11:05	X																								
280-97928-11	1	T	11:05	X																								
280-97928-12	1	T	11:05	X																								
280-97928-14	1	T	11:05	X																								
280-97928-14 DU	1	T	11:05	X																								
280-97928-15	1	T	11:05	X																								
280-97928-16	1	T	11:05	X																								
280-97928-17	1	T	11:05	X																								
280-97928-18	1	T	11:05	X																								
280-97928-19	1	T	11:05	X																								
280-97928-20	1	T	11:05	X																								
280-97928-21	1	T	11:05	X																								
280-97928-22	1	T	11:05	X																								
ZZZZZZ			11:05																									
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FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 06/08/2017 11:05 End Date: 06/08/2017 11:05

Lab Sample Id	D/F	Type	Time	Analytes																								
				Moist																								
ZZZZZZ			11:05																									
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Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Batch Number: 376574 Batch Start Date: 06/08/17 11:01 Batch Analyst: McElroy, John B

Batch Method: Moisture Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	DISH#	DishWeight	SampleMassWet	SampleMassDry		
280-97928-C-1	SS025-SS07	Moisture	T	10	1.28 g	15.63 g	13.72 g		
280-97928-C-3	SS025-SB06(0-2)	Moisture	T	11	1.31 g	16.14 g	14.70 g		
280-97928-B-4	SS025-SB06(2-4)	Moisture	T	12	1.30 g	16.37 g	14.53 g		
280-97928-C-5	SS025-SS08	Moisture	T	13	1.30 g	16.49 g	14.49 g		
280-97928-C-6	SS025-SB07(0-2)	Moisture	T	14	1.30 g	15.53 g	13.69 g		
280-97928-C-7	SS025-SB07(2-4)	Moisture	T	15	1.31 g	16.48 g	14.17 g		
280-97928-C-8	SS025-SB01(0-2)	Moisture	T	16	1.28 g	15.86 g	14.15 g		
280-97928-B-9	SS025-SB01(0-2) -a	Moisture	T	17	1.30 g	15.77 g	14.18 g		
280-97928-A-10	SS025-SB08(0-2)	Moisture	T	18	1.29 g	15.96 g	14.47 g		
280-97928-A-11	SS025-SB08(2-4)	Moisture	T	19	1.30 g	15.66 g	13.70 g		
280-97928-B-12	SS025-SS09	Moisture	T	20	1.30 g	16.79 g	14.96 g		
280-97928-C-14	SS025-SB09(0-2)	Moisture	T	21	1.30 g	15.80 g	14.21 g		
280-97928-C-14 DU	SS025-SB09(0-2)	Moisture	T	22	1.30 g	15.73 g	14.39 g		
280-97928-A-15	SS025-SB09(2-4)	Moisture	T	23	1.29 g	15.99 g	14.53 g		
280-97928-B-16	SS025-SB09(4-6)	Moisture	T	24	1.31 g	16.11 g	13.61 g		
280-97928-C-17	SS025-SB09(6-8)	Moisture	T	25	1.30 g	15.53 g	13.57 g		
280-97928-A-18	SS025-SB10(0-2)	Moisture	T	26	1.29 g	16.58 g	15.30 g		
280-97928-A-19	SS025-SB10(2-4)	Moisture	T	27	1.29 g	16.11 g	15.06 g		
280-97928-A-20	SS025-SB10(4-6)	Moisture	T	28	1.31 g	16.05 g	15.10 g		
280-97928-B-21	SS025-SB10(2-4) -a	Moisture	T	29	1.30 g	16.02 g	15.15 g		
280-97928-B-22	SS025-SS10	Moisture	T	30	1.31 g	16.09 g	14.75 g		

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Denver Job No.: 280-97928-1

SDG No.:

Batch Number: 376574 Batch Start Date: 06/08/17 11:01 Batch Analyst: McElroy, John B

Batch Method: Moisture Batch End Date:

Batch Notes	
Balance ID	24950432 No Unit
Batch Comment	JM trained by PH
Date and Time Samples in Desiccator	6/9/17 0945 JM
Date and Time Samples out of Desiccator	6/9/17 1143 JM
Date samples were placed in the oven	6/8/17 JM
Oven Temp In	103 Degrees C
Time samples were place in the oven	1228 JM
Date samples were removed from oven	6/9/17 JM
Oven Temp Out	103 Degrees C
Time Samples were removed from oven	0945 JM
Oven ID	F
Thermometer ID	227-694
Uncorrected In Temperature	103 Celsius
Uncorrected Out Temperature	103 Celsius

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

bhate ENVIRONMENT & INFRASTRUCTURE
1608 13th Avenue South, Suite 300
Birmingham, Alabama 35205
Tel: 205-918-0000
Fax: 205-918-0050

2-11, SC-41, 1288, 1100
TRR-7200 Transfer Riff Grid 17

Page 1 of 2

Chain of Custody and Analytical Request

Project No: AFCGSA3-0012-00AA-2020.0003

GOC Number(s): 06-05-2017-01

LIMS Number:

TH# 280-97928-23

Facility Base I.D.:	Former Griffiss Air Force Base
Project Site Name:	Site SS025 Supplemental Investigation
Client Name:	Air Force Civil Engineer Center (AFCEC)
Collected by:	Dustin McNeil / ~~Stephen Liberatore~~ Jonathan Greaux

Sample Analysis Requested [5] | Quality Assurance Samples [6]

Lab/Sample ID / Field Sample ID (20 Characters Max)	Date Collected (dd/mm/yyyy)	Time Collected (Military)	Sample Depth (Beginning - ending)	SA Code [2]	Sample Number [3]	Sample Matrix [4]	Number of containers	VOC (8260B)	PAH (8270D SIM)	PCB Pest (8082A 8081B)	TAL Metals (6010C 7471B)						Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
SS025-SS007	06/05/2017	0815	2' - 3"	N	1	SO	6	X	X	X	X									
SS025-TB002	06/05/2017	0815	-	TB	1	WQ	2	X												
SS025-SS006(0-2)	06/05/2017	0835	0' - 2'	N	1	SO	6	X	X	X	X									
SS025-SS006(2-4)	06/05/2017	0850	2' - 4'	N	1	SO	6	X	X	X	X									
SS025-SS005	06/05/2017	0935	2' - 3"	N	1	SO	6	X	X	X	X									
SS025-SS004(0-2)	06/05/2017	0945	0' - 2'	N	1	SO	6	X	X	X	X									
SS025-SS004(2-4)	06/05/2017	0955	2' - 4'	N	1	SO	6	X	X	X	X									
SS025-SS001(0-2)	06/05/2017	1020	0' - 2'	N	1	SO	6	X	X	X	X									
SS025-SS001(0-2)-FD	06/05/2017	1020	0' - 2'	FD	1	SO	6	X	X	X	X									
SS025-SS008(0-2)	06/05/2017	1105	0' - 2'	N	1	SO	6	X	X	X	X									
SS025-SS008(2-4)	06/05/2017	1115	2' - 4"	N	1	SO	6	X	X	X	X									

280-97928 Chain of Custody

COMMENTS: 4 Cooler Shipment. VOCs, Trip Blank, Ambient Blank + COC in Cooler #1

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received By (Signed)	Date	Time
1.		6/5/17	1743		6/6/17	0935
2.						
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: Shipped To:
Method of Shipment: Airbill Number:
Analytical Lab: Delivery Location:
Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number - date collected - Custody number (e.g. 060502-1999-01)

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

bhate ENVIRONMENT & INFRASTRUCTURE
1608 13th Avenue South, Suite 300
Birmingham Alabama 35205
Tel: 205-918-4000
Fax: 205-918-4050

Chain of Custody and Analytical Request

Project No: AFCESA300120.00AA2020.0003

COC Number (1): 06-05-2017-02

LIMS Number:

TA# 28015823

Facility/Base I.D.: Former Griffiss Air Force Base

Project/Site Name: Site SS025 Supplemental Investigation

Client Name: Air Force Civil Engineer Center (AFCEC)

Collected by: Dustin McNeil / ~~Stephen Liberatore~~ Jonathan Gerous

Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	VOC (8260B)	PAH (8270D SIM)	PCB/Pest (8082A 8081B)	TAL Metals (6010C 7471A)					Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	(Lab use only)
SS025-SS09	06/05/2017	1135	2' - 3"	N	1	SO	6	X	X	X	X								
SS025-AB-060517	06/05/2017	1150	-	AB	1	WQ	2		X										
SS025-SB09(0-2)	06/05/2017	1330	0' - 2'	N	1	SO	6	X	X	X	X								
SS025-SB09(2-4)	06/05/2017	1340	2' - 4'	N	1	SO	6	X	X	X	X								
SS025-SB09(4-6)	06/05/2017	1350	4' - 6'	N	1	SO	6	X	X	X	X								
SS025-SB09(6-8)	06/05/2017	1410	6' - 8'	N	1	SO	6	X	X	X	X								
SS025-SB10(0-2)	06/05/2017	1435	0' - 2'	N	1	SO	6	X	X	X	X								
SS025-SB10(2-4)	06/05/2017	1445	2' - 4'	N	1	SO	6	X	X	X	X								
SS025-SB10(4-6)	06/05/2017	1455	4' - 6'	N	1	SO	6	X	X	X	X								
SS025-SB10(2-4)-a	06/05/2017	1445	2' - 4'	FD	1	SO	6	X	X	X	X								
SS025-SS10	06/05/17	1520	2" - 3"	N	1	SO	6	X	X	X	X								

Sample Analysis Requested (5) | Quality Assurance Samples (6)

COMMENTS: 4 Cooler shipment. VOCs, Trip Blank, Ambient Blank + COC in Cooler #1

Custody Transfers Prior to Receipt by Laboratory

	Relinquished By (Signed)	Date	Time	Received By (Signed)	Date	Time
1.	D. Metl	6/5/17	1715	Reed Pett	6-6-17	0930
2.						
3.						

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: _____ Shipped No.: _____

Method of Shipment: _____ Airbill Number: _____

Analytical Lab: _____ Delivery Location: _____

Lab Recipient: _____ Delivery Date/Time: _____

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

Login Sample Receipt Checklist

Client: Bhate Environmental

Job Number: 280-97928-1

Login Number: 97928
List Number: 1
Creator: Pottruff, Reed W

List Source: TestAmerica Denver

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Refer to Job Narrative for details.
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX C
DATA VALIDATION REPORTS

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Data Validation Report

This report contains the results of the review and validation of the specified data package performed by Marcia Olive, Bhate Environmental Associates, Inc., Denver, Colorado.

Introduction

This data validation report covers samples taken from Griffiss Air Force Base, New York, on May 31, 2017. Eleven soil samples, one field duplicate, and associated quality control blanks were collected from Site SS025 (T-9 Storage Area) for site closure activities. All analyses were performed by TestAmerica Laboratories, Inc., Denver, Colorado. The specific samples included in this validation were:

Sample Identification	Matrix	Collection Date	Analyses (USEPA Method Number)
SS025-SS01	Soil	5/31/17	Volatile Organic Compounds (VOCs, by SW8260B), Polycyclic Aromatic Hydrocarbons (PAHs, by SW8270D Selective Ion Monitoring [SIM]), Pesticides/Polychlorinated Biphenyls (PCBs, by SW8081B/8082A), Target Analyte List (TAL) Metals (by SW6010C/7471A)
SS025-SS02			
SS025-SB02 (0-2)			
SS025-SS03			
SS025-SB03 (0-2)			
SS025-SS04			
SS025-SB04 (0-2)			
SS025-SS05			
SS025-SB05 (0-2)			
SS025-SB05 (2-4)			
SS025-SS06			
SS025-SS06-a			

Notes: -a = duplicate sample, USEPA = U.S. Environmental Protection Agency

TestAmerica Denver holds both Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP) and New York National Environmental Laboratory Accreditation Program (NELAP) certifications for Method 8260B. The reporting limits for all analytes are much lower by 8260B compared to 8260C.

This data was validated against the laboratory's quality assurance (QA)/quality control (QC) limits using the guidelines and practices published in the *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (USEPA, August 2014), *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review* (USEPA, August 2014) and per requirements of the DoD Quality Systems Manual (QSM), Version 5.0, as specified in the project-specific Quality Assurance Project Plan (QAPP).

Sample Handling and Holding Times

The samples were properly preserved and transferred under chain-of-custody to the laboratory for analysis and analyzed within the required holding times.

Method Blank

Calcium, chromium, iron, and magnesium were detected in method blank 375991/1-A. All these compounds were greater than 5 times the blank concentration, in the associated samples, and required no qualification.

Blank Spike Sample (Laboratory Control Sample)/Surrogates

The laboratory control sample (LCS) recovery of isopropyl ether was above control limits. This analyte was not detected in the associated samples and required no qualification.

The volatile surrogate recovery of 4-bromofluorobenzene was slightly below control limits in sample SS025-SB05(0-2). The sample was re-analyzed with similar results and matrix interference was confirmed. Therefore, the compounds associated with this surrogate were qualified as estimated non-detected, "UJ".

Multiple samples reported volatile surrogate recoveries of dibromofluoromethane and/or 1,2-dichloroethane-d4 slightly above control limits. No associated analytes reported detections in those samples and required no qualification.

The semi-volatile surrogates were diluted out of sample SS025-SS05. The method blank and LCS surrogates were within control limits and using professional judgment the sample did not require qualification.

The pesticide surrogate tetrachloro-m-xylene was recovered (177%) above control limits on the confirmatory column for sample SS025-SS03. Only Endosulfan I was detected in this sample and flagged as estimated, "J", to indicate a potentially high bias. DCB Decachlorobiphenyl was recovered (212%) above control limits on the primary column for sample SS025-SS06-a. Due to a potential high bias, numerous non-target peaks, and baseline rise; the two detected compounds, 4,4'-DDE and 4,4'-DDT, were qualified as estimated, "J".

Matrix Spike/Matrix Spike Duplicate

The matrix spike (MS)/matrix spike duplicate (MSD) recoveries for 4,4'-DDD, 4,4'-DDE, and gamma-chlordane were below control limits in parent sample SS025-SS01 used for the MS. The relative percent difference (RPD) for toxaphene exceeded control limits in parent sample SS025-SS03. These compounds have been qualified as estimated, "UJ/J", in the parent samples.

The MS/MSD recoveries for antimony, calcium, iron, manganese, potassium, and aluminum were outside control limits. Control limits did not apply to iron, manganese, and aluminum since the sample concentration exceeded the spike concentration by a factor of four or more. The remaining metals were qualified as estimated, "J/UJ", in the parent sample SS025-SS01.

Project Specific Quality Assurance/Quality Control

The RPD between the sample and duplicate was outside control limits for multiple PAH compounds. These compounds have been qualified as estimated, "J", in both sample and duplicate.

Acetone and methylene chloride were reported in the trip blank. When detected in the samples at a concentration of less than 10 times the blank result these analytes were qualified as non-detects and flagged, "UB", at the reported value.

In batch 376356, one of the continuing calibration blanks (CCBs) reported a detection of sodium. Associated sample SS025-SS01 reported a detection for sodium less than 5 times the blank concentration. It was considered an artifact of blank contamination and flagged, "UB".

Calibration Verification Data

In batch 376040, the continuing calibration verification (CCV) for chloroethane and isopropyl ether were above control limits. In batch 376196, the CCV for vinyl acetate, isopropyl ether, and methyl tert-butyl ether were above control limits. These compounds were not detected in the associated samples and required no qualification. Additionally, in batch 376196, the CCV for bromomethane was slightly below control limits. This compound is classified as a poor performer and per National Function Guidelines (NFGs) was within the allowable ±30% difference range. Using professional judgment, no qualification was necessary.

In batch 376356, the CCV for arsenic, zinc, iron, lead, and vanadium were above control limits and in batch 376450, the CCV for cadmium, iron, lead, aluminum, magnesium, manganese, and zinc were above QC limits. These compounds were qualified as estimated, "J", in the associated samples.

Overall Assessment of Data

All analyses were performed, and the data met the required QC criteria except where noted. The data is 100% complete. Where a dilution was required, elevated reporting limits are reported.

Sample Identification	Compound	Qualifier (µg/kg) Metals (mg/kg)	Reason Code
SS025-SS01	Acetone	8.6 UB	TB
	4,4'-DDD	1.9 UJ	MS/MSD <
	4,4'-DDE	1.4 J	MS/MSD <
	gamma-Chlordane	0.78 UJ	MS/MSD <
	Sodium	68 UB	CCB
	Arsenic	6.2 J	CCV
	Cadmium	0.20 J	CCV
	Iron	16,000 J	CCV
	Lead	9.6 J	CCV
	Zinc	42 J	CCV
	Antimony	1.7 UJ	MS/MSD <
	Calcium	10,000 J	MS/MSD <
	Potassium	1,100 J	MS/MSD >
SS025-SS02	Acetone	12 UB	TB
	Arsenic	4.3 J	CCV
	Cadmium	0.14 J	CCV
	Iron	13,000 J	CCV
	Lead	7.7 J	CCV
	Zinc	38 J	CCV

Sample Identification	Compound	Qualifier (µg/kg) Metals (mg/kg)	Reason Code
SS025-SB02 (0-2)	Acetone	8.9 UB	TB
	Arsenic	3.4 J	CCV
	Cadmium	0.083 J	CCV
	Iron	8,400 J	CCV
	Lead	3.2 J	CCV
	Zinc	20 J	CCV
SS025-SS03	Acetone	16 UB	TB
	Toxaphene	43 UJ	RPD >
	Endosulfan I	0.55 J	Surr >
	Arsenic	6.2 J	CCV
	Cadmium	0.20 J	CCV
	Iron	21,000 J	CCV
	Lead	9.3 J	CCV
	Zinc	59 J	CCV
SS025-SB03 (0-2)	Acetone	7.6 UB	TB
	Aluminum	3,400 J	CCV
	Iron	6,800 J	CCV
	Lead	1.8 J	CCV
	Magnesium	1,800 J	CCV
	Manganese	230 J	CCV
	Vanadium	5.7 J	CCV
	Zinc	13 J	CCV
SS025-SS04	Aluminum	5,500 J	CCV
	Iron	10,000 J	CCV
	Lead	5.3 J	CCV
	Magnesium	2,000 J	CCV
	Manganese	400 J	CCV
	Vanadium	9.5 J	CCV
	Zinc	29 J	CCV
SS025-SB04(0-2)	Aluminum	4,500 J	CCV
	Iron	8,200 J	CCV
	Lead	2.1 J	CCV
	Magnesium	1,700 J	CCV
	Manganese	260 J	CCV
	Vanadium	7.2 J	CCV
	Zinc	17 J	CCV
SS025-SS05	Aluminum	6,400 J	CCV
	Iron	12,000 J	CCV
	Lead	5.5 J	CCV
	Magnesium	2,100 J	CCV
	Manganese	520 J	CCV
	Vanadium	10 J	CCV
	Zinc	31 J	CCV

Sample Identification	Compound	Qualifier (µg/kg) Metals (mg/kg)	Reason Code
SS025-SB05(0-2)	1,2-Dichlorobenzene	1.4 UJ	Surr <
	1,2,3-Trichlorobenzene	1.4 UJ	Surr <
	1,2,4-Trichlorobenzene	1.4 UJ	Surr <
	1,2,4-Trimethylbenzene	1.4 UJ	Surr <
	1,3-Dichlorobenzene	1.4 UJ	Surr <
	1,3,5-Trimethylbenzene	1.4 UJ	Surr <
	1,4-Dichlorobenzene	1.4 UJ	Surr <
	2-Chlorotoluene	1.4 UJ	Surr <
	4-Chlorotoluene	1.4 UJ	Surr <
	4-Isopropyltoluene	1.4 UJ	Surr <
	Benzene	1.4 UJ	Surr <
	Bromobenzene	1.4 UJ	Surr <
	Chlorobenzene	1.4 UJ	Surr <
	Ethylbenzene	1.4 UJ	Surr <
	Isopropylbenzene	1.4 UJ	Surr <
	Naphthalene	1.4 UJ	Surr <
	n-Butylbenzene	1.4 UJ	Surr <
	n-Propylbenzene	1.4 UJ	Surr <
	sec-Butylbenzene	1.4 UJ	Surr <
	tert-Butylbenzene	1.4 UJ	Surr <
	Toluene	1.4 UJ	Surr <
	Total Xylenes	0.90 UJ	Surr <
	Aluminum	11,000 J	CCV
	Iron	17,000 J	CCV
	Lead	15 J	CCV
	Magnesium	2,900 J	CCV
	Manganese	730 J	CCV
	Vanadium	19 J	CCV
	Zinc	52 J	CCV
SS025-SB05(2-4)	Aluminum	10,000 J	CCV
	Iron	27,000 J	CCV
	Lead	5.5 J	CCV
	Magnesium	4,000 J	CCV
	Manganese	570 J	CCV
	Vanadium	18 J	CCV
	Zinc	60 J	CCV

Sample Identification	Compound	Qualifier (µg/kg) Metals (mg/kg)	Reason Code
SS025-SS06	Acetone	7.6 UB	TB
	Anthracene	5.3 J	FD RPD
	Benzo(a)anthracene	26 J	FD RPD
	Benzo(a)pyrene	29 J	FD RPD
	Benzo(b)fluoranthene	40 J	FD RPD
	Benzo(g,h,i)perylene	16 J	FD RPD
	Benzo(k)fluoranthene	14 J	FD RPD
	Chrysene	31 J	FD RPD
	Dibenz(a,h)anthracene	5.3 J	FD RPD
	Indeno(1,2,3-cd)pyrene	19 J	FD RPD
	Phenanthrene	22 J	FD RPD
	Aluminum	7,800 J	CCV
	Iron	13,000 J	CCV
	Lead	7.8 J	CCV
	Magnesium	2,000 J	CCV
	Manganese	640 J	CCV
	Vanadium	13 J	CCV
	Zinc	37 J	CCV
SS025-SS06-a	Anthracene	2.7 J	FD RPD
	Benzo(a)anthracene	53 J	FD RPD
	Benzo(a)pyrene	81 J	FD RPD
	Benzo(b)fluoranthene	100 J	FD RPD
	Benzo(g,h,i)perylene	48 J	FD RPD
	Benzo(k)fluoranthene	32 J	FD RPD
	Chrysene	66 J	FD RPD
	Dibenz(a,h)anthracene	14 J	FD RPD
	Indeno(1,2,3-cd)pyrene	55 J	FD RPD
	Phenanthrene	13 J	FD RPD
	4,4'-DDE	1.0 J	Surr >
	4,4'-DDT	1.1 J	Surr >
	Aluminum	7,500 J	CCV
	Iron	13,000 J	CCV
	Lead	8.2 J	CCV
	Magnesium	2,000 J	CCV
	Manganese	620 J	CCV
	Vanadium	13 J	CCV
	Zinc	36 J	CCV

Notes: µg/kg – micrograms per kilogram, mg/kg = milligrams per kilogram, MS/MSD (<) (>) = Matrix spike and matrix spike duplicate (below) (above) control limits, RPD > = MS/MSD relative percent difference above control limits, surr > = surrogate above control limits, FD RPD = field duplicate RPD outside control limits, surr < = surrogate below control limits, CCB = continuing calibration blank outside control limits, CCV = continuing calibration verification outside control limits, TB = Trip blank contamination

Data Validation Report

This report contains the results of the review and validation of the specified data package performed by Marcia Olive, Bhate Environmental Associates, Inc., Denver, Colorado.

Introduction

This data validation report covers samples taken from Griffiss Air Force Base, New York, on June 5, 2017. Eighteen soil samples, two field duplicates, and associated quality control blanks were collected from Site SS025 (T-9 Storage Area) for site closure activities. All analyses were performed by TestAmerica Laboratories, Inc., Denver, Colorado. The specific samples included in this validation were:

Sample Identificaiton	Matrix	Collection Date	Analyses (USEPA Method Number)
SS025-SS07	Soil	6/5/17	Volatile Organic Compounds (VOCs, by SW8260B), Polycyclic Aromatic Hydrocarbons (PAHs, by SW8270D Selective Ion Monitoring [SIM]), Pesticides/Polychlorinated Biphenyls (PCBs, by SW8081B/8082A), Target Analyte List (TAL) Metals (by SW6010C/7471A)
SS025-SB06 (0-2)			
SS025-SB06 (2-4)			
SS025-SS08			
SS025-SB07 (0-2)			
SS025-SB07 (2-4)			
SS025-SB01 (0-2)			
SS025-SB01 (0-2)-a			
SS025-SB08 (0-2)			
SS025-SB08 (2-4)			
SS025-SS09			
SS025-SB09 (0-2)			
SS025-SB09 (2-4)			
SS025-SB09 (4-6)			
SS025-SB09 (6-8)			
SS025-SB10 (0-2)			
SS025-SB10 (2-4)			
SS025-SB10 (4-6)			
SS025-SB10 (2-4)-a			
SS025-SS10			
Notes: -a = duplicate sample, USEPA = U.S. Environmental Protection Agency TestAmerica Denver holds both Department of Defense (DoD) Environmental Laboratory Accreditation Program (ELAP) and New York National Environmental Laboratory Accreditation Program (NELAP) certifications for Method 8260B. The reporting limits for all analytes are much lower by 8260B compared to 8260C.			

This data was validated against the laboratory's quality assurance (QA)/quality control (QC) limits using the guidelines and practices published in the *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (USEPA, August 2014), *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review* (USEPA, August 2014) and per requirements of the DoD Quality Systems Manual (QSM), Version 5.0, as specified in the project-specific Quality Assurance Project Plan (QAPP).

Sample Handling and Holding Times

The samples were properly preserved and transferred under chain-of-custody to the laboratory for analysis and analyzed within the required holding times. Sample SS025-SB10 (4-6) arrived with two broken terracore containers. Due to insufficient sample volume, the soil jar was used for this analysis and reported elevated reporting limits.

Method Blank

Acetone and/or methylene chloride were detected in multiple volatile method blanks. When these compounds were less than 10 times the blank concentration they were qualified as non-detects, "UB", and considered artifacts of blank contamination. Benzo(a)anthracene, fluoranthene, phenanthrene, and pyrene were detected in the method blank associated with the dilution analysis of SS025-SB01 (0-2) and SS025-SB01 (0-2)-a. The sample concentrations were well above the blank concentrations and therefore were not affected by blank contamination. Barium, calcium, chromium, iron, and magnesium were detected in the method blank but all sample concentrations were well above 5 times the blank concentration and required no qualification.

Blank Spike Sample (Laboratory Control Sample)/Surrogates

The laboratory control sample recoveries of chloromethane, dichlorodifluoromethane, and vinyl chloride were above control limits. No samples were associated with this batch LCS and required no qualification.

The semi-volatile surrogate recovery of nitrobenzene-d5 was below control limits for sample SS025-SB06 (2-4). Terphenyl-d14 was below control limits for SS025-SB07 (2-4). The samples were not re-extracted and re-run as it would have been performed beyond hold time. Therefore, all semi-volatile compounds were qualified as estimated, "J/UJ".

Nitrobenzene-d5 was diluted out of samples SS025-SB01 (0-2) and SS025-SB01 (0-2)-a. While the remaining two surrogates were within control limits for the latter sample, the remaining two were above control limits in the former sample. All detected semi-volatiles were qualified as estimated, "J", in sample SS025-SB01 (0-2).

The pesticide surrogate, DCB Decachlorobiphenyl (DCBP) was diluted out of the dilution analysis of SS025-SB01 (0-2). The remaining surrogate was within control limits and the sample data required no qualification. DCBP was recovered above control limits for SS025-SB01 (0-2)-a. The detected compounds were qualified as estimated, "J". DCBP was recovered below control limits on the primary column for samples SS025-SS07, SS025-SB07 (2-4), SS025-SB09 (2-4), and SS025-SB09 (6-8). The recoveries were within the National Functional Guidelines (NFGs) inclusive range of 30% - 150% and therefore required no qualification.

DCBP failed the surrogate recovery low for the PCB analysis of SS025-SB09 (4-6). All compounds were qualified as estimated, "J/UJ". DCBP (206.7%) was recovered above control limits on the primary column for sample SS025-SB01 (0-2). The detected compound (Arochlor 1260) was qualified as estimated, "J".

Matrix Spike/Matrix Spike Duplicate

The matrix spike (MS) recoveries for all pesticides, minus toxaphene, were below control limits in parent sample SS025-SB06 (0-2). The relative percent differences (RPDs) exceeded control limits (with the exception of toxaphene). These compounds have been qualified as estimated, "UJ/J", in the parent samples.

The MS and/or matrix spike duplicate (MSD) recoveries for aluminum, antimony, iron, manganese, and thallium were outside control limits. Control limits did not apply to iron, manganese, and aluminum since the sample concentration exceeded the spike concentration by a factor of four or more. Antimony and thallium were qualified as estimated, "J/UJ", in the parent sample SS025-SS07.

Project Specific Quality Assurance/Quality Control

Two field duplicates were collected with this data package. The RPD between sample SS025-SB01 (0-2) and duplicate was outside project defined control limits for calcium and mercury; all other compounds were within control limits when adjusted for the dilution factor. The RPD for calcium was outside control limits for sample SS025-SB10 (2-4) and it's duplicate. These compounds have been qualified as estimated, "J", in both sample and duplicate.

Fluoranthene, phenanthrene, and pyrene were reported in the ambient blank in trace amounts. All samples reported detections much higher and were not affected by the blank results. Therefore, no qualification was necessary.

The internal standard, 1,4-dichlorobenzene-d4, responded below the lower acceptance limit for sample SS025-SB08 (2-4). The sample was reanalyzed with similar results. The target compounds associated with this standard were qualified as estimated non-detected, "UJ".

In batches 376734, 376044, 377054, and 377162, multiple continuing calibration blanks reported various metals detections. Those samples reporting detections less than 5 times the blank concentration were considered artifacts of blank contamination and flagged, "UB".

Calibration Verification Data

In batch 376989, the initial calibration verification (ICV) percent difference (%D) for dichlorodifluoromethane, 2-hexanone, and acetone were above control limits. In batch 378395, the continuing calibration verification (CCV) %D for bromomethane, dichlorofluoromethane, and carbon disulfide were above control limits. These batches were not associated with any samples and required no qualification. The CCV for bromomethane (%D = -21.3%) in batch 377520 was below control limits. Bromomethane is classified as a poor performer and per NFGs was within the allowable $\pm$30% difference range and did not require qualification. Additionally, the closing CCV for this sample was not analyzed due to an instrument malfunction. The instrument did perform within DoD Version 5.0 criteria once restarted on the same tune parameters the next day.
In batches 376734, 377044, 377054, and 377162, the CCV for multiple metals were outside control limits. These compounds were qualified as estimated, "UJ/J", in the associated samples (see table below).

Overall Assessment of Data

All analyses were performed, and the data met the required QC criteria except where noted. The data is 100% complete. When a dilution was required, elevated reporting limits were reported.

Sample Identification	Compound	Qualifier (ug/kg) Metals (mg/kg)	Reason Code
SS025-SS07	Acetone	13 UB	MB
	Antimony	1.7 UJ	MS/MSD <
	Thallium	2.8 UJ	MS <
	Copper	11 J	CCV
	Calcium	1,500 J	CCV
	Beryllium	0.23 J	CCV
	Iron	9,800 J	CCV
	Aluminum	5,100 J	CCV
	Magnesium	2,000 J	CCV
	Lead	4.2 J	CCV
	Arsenic	2.3 UB	CCB
	Potassium	660 UB	CCB
SS025-SB06 (0-2)	4,4'-DDD	1.8 UJ	MS < /RPD >
	4,4'-DDE	0.43 J	MS < /RPD >
	4,4'-DDT	1.8 UJ	MS < /RPD >
	Aldrin	0.71 UJ	MS < /RPD >
	Alpha-BHC	0.71 UJ	MS < /RPD >
	Alpha-Chlordane	0.71 UJ	MS < /RPD >
	Beta-BHC	1.8 UJ	MS < /RPD >
	Delta-BHC	1.1 UJ	MS < /RPD >
	Dieldrin	0.71 UJ	MS < /RPD >
	Endosulfan I	0.71 UJ	MS < /RPD >
	Endosulfan II	0.71 UJ	MS < /RPD >
	Endosulfan sulfate	0.71 UJ	MS < /RPD >
	Endrin	0.71 UJ	MS < /RPD >
	Endrin aldehyde	0.71 UJ	MS < /RPD >
	Gamma-BHC	1.1 UJ	MS < /RPD >
	Gamma-Chlordane	0.71 UJ	MS < /RPD >
	Heptachlor	0.71 UJ	MS < /RPD >
	Heptachlor epoxide	1.1 UJ	MS < /RPD >
	Methoxyclor	1.1 UJ	MS < /RPD >
	Iron	8,000 J	CCV
	Calcium	7,500 J	CCV
	Copper	9.0 J	CCV
	Aluminum	3,500 J	CCV
	Magnesium	2,800 J	CCV
	Lead	1.8 J	CCV
	Beryllium	0.17 J	CCV
	Arsenic	2.1 UB	CCB
	Chromium	4.0 UB	CCB
	Potassium	550 UB	CCB

Sample Identification	Compound	Qualifier (ug/kg) Metals (mg/kg)	Reason Code
SS025-SB06 (2-4)	1-Methylnaphthalene	0.54 UJ	Surr <
	2-Methylnaphthalene	0.72 UJ	Surr <
	Acenaphthene	0.29 UJ	Surr <
	Acenaphthylene	0.72 UJ	Surr <
	Anthracene	2.7 UJ	Surr <
	Benzo(a)anthracene	2.7 UJ	Surr <
	Benzo(a)pyrene	2.7 UJ	Surr <
	Benzo(b)fluoranthene	2.7 UJ	Surr <
	Bezno(g,h,i)perylene	2.7 UJ	Surr <
	Bezno(k)fluoranthene	2.7 UJ	Surr <
	Chrysene	2.7 UJ	Surr <
	Dibenz(a,h)anthracene	2.7 UJ	Surr <
	Fluoranthene	1.4 J	Surr <
	Fluorene	0.72 UJ	Surr <
	Indeno(1,2,3-cd)pyrene	2.7 UJ	Surr <
	Naphthalene	0.72 UJ	Surr <
	Phenanthrene	2.7 UJ	Surr <
	Pyrene	2.7 UJ	Surr <
	Iron	5,700 J	CCV
	Calcium	12,000 J	CCV
	Copper	6.3 J	CCV
	Aluminum	2,500 J	CCV
	Magnesium	2,700 J	CCV
	Lead	0.98 J	CCV
	Beryllium	0.11 J	CCV
	Arsenic	1.4 UB	CCB
	Chromium	2.9 UB	CCB
	Potassium	480 UB	CCB
	Vanadium	5.6 UB	CCB
SS025-SS08	Acetone	7.8 UB	MB
	Iron	17,000 J	CCV
	Calcium	3,600 J	CCV
	Copper	31 J	CCV
	Aluminum	7,500 J	CCV
	Magnesium	3,700 J	CCV
	Arsenic	5.1 UB*	CCV/CCB
	Selenium	3.2 UJ	CCV
	Beryllium	0.3 J	CCV
	Manganese	950 J	CCV
	Potassium	850 UB	CCB

Sample Identification	Compound	Qualifier (ug/kg) Metals (mg/kg)	Reason Code
SS025-SB07 (0-2)	Aluminum	3,300 J	CCV
	Copper	9.6 J	CCV
	Antimony	1.5 UJ	CCV
	Arsenic	2.5 J	CCV
	Vanadium	7.1 J	CCV
	Manganese	310 J	CCV
	Beryllium	0.16 J	CCV
	Lead	2.1 J	CCV
	Thallium	0.64 J	CCV
	Selenium	2.9 UJ	CCV
	Chromium	3.8 UB	CCB
SS025-SB07 (2-4)	1-Methylnaphthalene	0.56 UJ	Surr <
	2-Methylnaphthalene	0.75 UJ	Surr <
	Acenaphthene	0.30 UJ	Surr <
	Acenaphthylene	0.75 UJ	Surr <
	Anthracene	2.8 UJ	Surr <
	Benzo(a)anthracene	2.8 UJ	Surr <
	Benzo(a)pyrene	2.8 UJ	Surr <
	Benzo(b)fluoranthene	2.8 UJ	Surr <
	Bezno(g,h,i)perylene	2.8 UJ	Surr <
	Bezno(k)fluoranthene	2.8 UJ	Surr <
	Chrysene	2.8 UJ	Surr <
	Dibenz(a,h)anthracene	2.8 UJ	Surr <
	Fluoranthene	2.8 UJ	Surr <
	Fluorene	0.75 UJ	Surr <
	Indeno(1,2,3-cd)pyrene	2.8 UJ	Surr <
	Naphthalene	0.75 UJ	Surr <
	Phenanthrene	2.8 UJ	Surr <
	Pyrene	2.8 UJ	Surr <
	Aluminum	3,400 J	CCV
	Copper	10 J	CCV
	Antimony	1.8 UJ	CCV
	Arsenic	2.7 J	CCV
	Vanadium	7.3 J	CCV
	Manganese	330 J	CCV
	Beryllium	0.18 J	CCV
	Lead	2.0 J	CCV
	Selenium	3.5 UJ	CCV
	Chromium	3.9 UB	CCB

Sample Identification	Compound	Qualifier (ug/kg) Metals (mg/kg)	Reason Code
SS025-SB01 (0-2)	Acetone	12 UB	MB
	Arochlor 1260	17 J	Surr >
	1-Methylnaphthalene	94 J	Surr >
	2-Methylnaphthalene	150 J	Surr >
	Acenaphthene	600 J	Surr >
	Acenaphthylene	280 J	Surr >
	Anthracene	1,100 J	Surr >
	Benzo(a)anthracene	2,300 J	Surr >
	Benzo(a)pyrene	2,000 J	Surr >
	Benzo(b)fluoranthene	2,800 J	Surr >
	Bezno(g,h,i)perylene	1,100 J	Surr >
	Bezno(k)fluoranthene	1,100 J	Surr >
	Chrysene	2,700 J	Surr >
	Dibenz(a,h)anthracene	350 J	Surr >
	Fluoranthene	5,500 J	Surr >
	Fluorene	590 J	Surr >
	Indeno(1,2,3-cd)pyrene	1,000 J	Surr >
	Naphthalene	410 J	Surr >
	Phenanthrene	4,400 J	Surr >
	Pyrene	4,700 J	Surr >
	Calcium	2,600 J	FD RPD
	Mercury	22 J	FD RPD
	Antimony	1.2 UJ	CCV
	Arsenic	3.5 J	CCV
	Vanadium	12 J	CCV
	Manganese	860 J	CCV
	Aluminum	6,500 J	CCV
	Copper	19 J	CCV
	Beryllium	0.32 J	CCV
	Lead	5.7 J	CCV
	Selenium	2.3 UJ	CCV
SS025-SB01 (0-2)-a	Acetone	16 UB	MB
	4,4'-DDE	1.3 J	Surr >
	4,4'-DDT	4.6 J	Surr >
	Calcium	7,000 J	FD RPD
	Mercury	11 J	FD RPD
	Antimony	1.3 UJ	CCV
	Arsenic	5.0 J	CCV
	Vanadium	14 J	CCV
	Manganese	1,200 J	CCV
	Aluminum	7,000 J	CCV
	Copper	25 J	CCV
	Beryllium	0.33 J	CCV
	Lead	5.4 J	CCV
	Selenium	2.7 UJ	CCV

Sample Identification	Compound	Qualifier (ug/kg) Metals (mg/kg)	Reason Code
SS025-SB08 (0-2)	Antimony	1.2 UJ	CCV
	Arsenic	2.8 J	CCV
	Vanadium	7.6 J	CCV
	Manganese	300 J	CCV
	Aluminum	4,000 J	CCV
	Copper	9.8 J	CCV
	Beryllium	0.2 J	CCV
	Lead	1.9 J	CCV
	Selenium	2.4 UJ	CCV
SS025-SB08 (2-4)	1,2-Dichlorobenzene	1.4 UJ	IS
	1,3-Dichlorobenzene	1.4 UJ	IS
	1,4-Dichlorobenzene	1.4 UJ	IS
	1,2-Didbromo-3-chloropropane	1.4 UJ	IS
	1,2,3-Trichlorobenzene	1.4 UJ	IS
	1,2,4-Trichlorobenzene	1.4 UJ	IS
	Antimony	1.2 UJ	CCV
	Arsenic	3.7 J	CCV
	Vanadium	19 J	CCV
	Manganese	340 J	CCV
	Aluminum	8,300 J	CCV
	Copper	18 J	CCV
	Beryllium	0.53 J	CCV
	Lead	5.8 J	CCV
	Selenium	2.4 UJ	CCV
SS025-SS09	Acetone	48 UB	MB
	Antimony	6.8 UJ	CCV
	Arsenic	5.5 J	CCV
	Vanadium	8.7 J	CCV
	Manganese	270 J	CCV
	Aluminum	3,100 J	CCV
	Copper	11 J	CCV
	Beryllium	0.17 J	CCV
	Lead	3.7 J	CCV
	Selenium	14 UJ	CCV
SS025-SB09 (0-2)	Acetone	20 UB	MB
	Antimony	1.2 UJ	CCV
	Arsenic	4.2 J	CCV
	Vanadium	15 J	CCV
	Manganese	870 J	CCV
	Aluminum	7,200 J	CCV
	Copper	22 J	CCV
	Beryllium	0.36 J	CCV
	Lead	7.4 J	CCV
	Thallium	0.92 J	CCV
	Calcium	48,000 J	CCV
	Selenium	2.4 UJ	CCV

Sample Identification	Compound	Qualifier (ug/kg) Metals (mg/kg)	Reason Code
SS025-SB09 (2-4)	Antimony	1.3 UJ	CCV
	Arsenic	4.4 J	CCV
	Vanadium	17 J	CCV
	Manganese	960 J	CCV
	Aluminum	8,000 J	CCV
	Barium	47 J	CCV
	Chromium	9.5 J	CCV
	Copper	31 J	CCV
	Sodium	170 UJ	CCV
	Beryllium	0.39 J	CCV
	Lead	7.5 UB*	CCV/CCB
	Thallium	0.76 J	CCV
	Calcium	18,000 J	CCV
	Selenium	2.5 UJ	CCV
SS025-SB09 (4-6)	Arochlor 1016	17 UJ	Surr <
	Arochlor 1221	19 UJ	Surr <
	Arochlor 1232	17 UJ	Surr <
	Arochlor 1242	38 UJ	Surr <
	Arochlor 1248	23 UJ	Surr <
	Arochlor 1254	19 UJ	Surr <
	Arochlor 1260	14 J	Surr <
	Aluminum	15,000 J	CCV
	Antimony	1.5 UJ	CCV
	Arsenic	5.8 J	CCV
	Vanadium	27 J	CCV
	Manganese	990 J	CCV
	Barium	47 J	CCV
	Beryllium	0.62 J	CCV
	Calcium	3,700 J	CCV
	Chromium	15 J	CCV
	Copper	25 J	CCV
	Sodium	85 J	CCV
	Selenium	3.0 UJ	CCV
	Lead	19 J	CCV
SS025-SB09 (6-8)	Aluminum	7,800 J	CCV
	Iron	17,000 J	CCV
	Lead	5.1 UB*	CCV/CCB
	Vanadium	19 J	CCV
	Copper	19 J	CCV
	Barium	39 J	CCV
	Beryllium	0.42 J	CCV
	Calcium	1,400 J	CCV
	Chromium	9.6 J	CCV
	Sodium	75 J	CCV
	Arsenic	3.9 UB*	CCV/CCB
	Selenium	0.81 J	CCV

Sample Identification	Compound	Qualifier (ug/kg) Metals (mg/kg)	Reason Code
SS025-SB10 (0-2)	Aluminum	3,300 J	CCV
	Iron	7,100 J	CCV
	Lead	1.5 UB*	CCV/CCB
	Vanadium	6.5 J	CCV
	Copper	8.2 J	CCV
	Barium	10 J	CCV
	Beryllium	0.16 J	CCV
	Calcium	1,400 J	CCV
	Chromium	3.6 J	CCV
	Sodium	210 UJ	CCV
	Arsenic	2.2 UB*	CCV/CCB
	Selenium	3.2 UJ	CCV
SS025-SB10 (2-4)	Calcium	970 J	FD RPD/CCV
	Aluminum	2,900 J	CCV
	Iron	6,200 J	CCV
	Lead	1.3 UB*	CCV/CCB
	Vanadium	5.7 J	CCV
	Copper	7.8 J	CCV
	Barium	8.7 J	CCV
	Beryllium	0.14 J	CCV
	Chromium	3.1 J	CCV
	Sodium	180 UJ	CCV
	Arsenic	2.4 UB*	CCV/CCB
	Selenium	2.7 UJ	CCV
SS025-SB10 (4-6)	Methylene Chloride	760 UB	MB
	Iron	7,300 J	CCV
	Lead	1.5 UB*	CCV/CCB
	Vanadium	6.6 J	CCV
	Copper	8.4 J	CCV
	Aluminum	3,400 J	CCV
	Barium	9.8 J	CCV
	Beryllium	0.16 J	CCV
	Calcium	960 J	CCV
	Chromium	3.7 J	CCV
	Sodium	170 UJ	CCV
	Arsenic	2.8 UB*	CCV/CCB
	Selenium	2.6 UJ	CCV
SS025-SB10 (2-4)-a	Calcium	3,000 J	FD RPD/CCV
	Iron	6,900 J	CCV
	Lead	1.3 UB*	CCV/CCB
	Vanadium	6.3 J	CCV
	Copper	8.1 J	CCV
	Aluminum	3,100 J	CCV
	Barium	9.1 J	CCV
	Beryllium	0.14 J	CCV
	Chromium	3.4 J	CCV
	Sodium	200 UJ	CCV
	Arsenic	2.4 UB*	CCV/CCB
	Selenium	3.0 UJ	CCV

Sample Identification	Compound	Qualifier (ug/kg) Metals (mg/kg)	Reason Code
SS025-SS10	Acetone	35 UB	MB
	Calcium	890 J	CCV
	Iron	7,300 J	CCV
	Lead	1.9 UB*	CCV/CCB
	Vanadium	6.8 J	CCV
	Copper	8.5 J	CCV
	Aluminum	3,500 J	CCV
	Barium	11 J	CCV
	Beryllium	0.16 J	CCV
	Chromium	3.6 J	CCV
	Sodium	190 UJ	CCV
	Arsenic	1.8 UB*	CCV/CCB
	Selenium	2.8 UJ	CCV

Notes: µg/kg – micrograms per kilogram, mg/kg = milligrams per kilogram, MS < = Matrix spike below control limits, MSD < = Matrix Spike duplicate below control limits, RPD > = relative percent difference between MS & MSD is above control limits, surr > = surrogate above control limits, IS = Internal standard outside limits, FD RPD = field duplicate RPD outside control limits, surr < = surrogate below control limits, CCV = continuing calibration verification outside control limits, MB = Method blank contamination, CCB = continuing calibration blank contamination

*The UB qualifier takes precedence over any other applied qualifier

APPENDIX D
HUMAN HEALTH RISK ASSESSMENT

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BASELINE HUMAN HEALTH RISK ASSESSMENT
SITE T-9 STORAGE AREA OF CONCERN (SS025)
FORMER GRIFFISS AIR FORCE BASE
ROME, NEW YORK

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ACRONYMS AND ABBREVIATIONS

AAF	Absorption adjustment factors
ADAF	Age Dependent Adjustment Factor
AFB	Air Force Base
AFRPA	Air Force Real Property Agency
AOC	Area of Concern
ASL	Above Screening Level
AST	Aboveground storage tank
AT	Averaging time
ATSDR	Agency for Toxicity Substances and Disease Registry
BSL	Below Screening Level
cc	Cubic centimeter
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
cm	Centimeters
cm^2/s	Square centimeters per second
COC	Chemical of concern
COPC	Chemicals of potential concern
CSF	Cancer slope factor
CSM	Conceptual Site Model
CTE	Central Tendency Exposure
DAF	Dermal absorption fraction
DOD	Department of Defense
EN	Essential Nutrient
EPC	Exposure Point Concentration
FFA	Federal Facility Agreement
ft bgs	Feet below ground surface
FPM	FPM Remediations, Inc.
g/cm^3	Grams per cubic centimeter
g-C/g-soil	Grams carbon per grams soil
g/day	Grams per day
g/m^2-hr	Grams per square meter-hour
g/m^2-s	Grams per square meter-second
GI	Gastrointestinal
GIABs	Gastrointestinal Absorption Factor
GLDC	Griffiss Local Development Corporation

HHRA	Human Health Risk Assessment
HI	Hazard Index
HQ	Hazard Quotient
ICs	Institutional Controls
IRP	Installation Restoration Program
IRIS	Integrated Risk Information System
IUR	Inhalation unit risk
kg	Kilograms
kg/g	Kilogram/gram (conversion factor)
kg/m^3	Kilograms per cubic meter
$kg\text{-}soil/m^3\text{-}air$	Kilograms of soil per cubic meter of air
L/kg	Liters per kilogram
LOAEL	Lowest-observed-adverse-effect-level
LRA	Local Reuse Agency
LUC	Land Use Control
m^2	Square meter
m/s	Meters per second
m^3/kg	Cubic meters per kilogram
mg/cm^2	Milligrams per square centimeter
mg/day	Milligrams per day
mg/kg	Milligrams/kilogram
mg/kg-day	Milligram/kilogram body weight per day
mg/m^3	Milligrams per cubic meter
$\mu g/m^3$	Micrograms per cubic meter
MCE	Maximum Concentration Exceeds Screening Level
MCN	Maximum Concentration Below Screening Level
MMOA	Mutagenic mode of action
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
ND	Non-detect
NFA	No Further Action
NOAA	National Oceanic Atmospheric Administration
NOAEL	No-observed-adverse-effect-level
NPL	National Priority List
NSL	No Screening Level
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OSWER	Office of Solid Waste and Emergency Response

PAH	Polynuclear aromatic hydrocarbons
PCBs	Polychlorinated biphenyls
PEF	Particulate Emission Factor
PM	Particulate Matter
PPRTV	Provisional Peer Reviewed Toxicity Value
RAGS	Risk Assessment Guidance for Superfund
RfC	Reference Concentration
RfD	Reference Dose (oral)
RI	Remedial Investigation
RME	Reasonable Maximum Exposure
ROD	Record of Decision
RPF	Relative Potency Factor
RSL	Regional Screening Level
SARA	Superfund Amendments and Reauthorization Act of 1986
TAL	Target Analyte List
TCL	Target Compound List
UCL	Upper Confidence Limit on the Mean
USAF	United States Air Force
USEPA	United States Environmental Protection Agency
VF	Volatilization Factor
VOCs	Volatile Organic Compounds
WOE	Weight of Evidence

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EXECUTIVE SUMMARY

This Baseline Human Health Risk Assessment (HHRA) for the Former Griffiss Air Force Base (AFB) evaluates Site SS-025 (the "Site"), located in Rome, New York. The baseline HHRA evaluated cancer risks and non-cancer health hazards in the absence of the current Land Use Control (LUC). The LUC maintains use as non-residential, consistent with the Site's Record of Decision (ROD). The LUC prevents development of the Site for residential land use.

The goal of the Baseline HHRA is to evaluate the cancer risks and non-cancer hazards to the Reasonably Maximally Exposed Individual. The Reasonable Maximum Exposure (RME) is defined as the highest exposure that is reasonably expected to occur at a site, in the absence of current LUCs/Institutional Controls (ICs). RMEs are estimated for individual pathways (United States Environmental Protection Agency [USEPA], December 1989 – Risk Assessment Guidance for Superfund [RAGS] Part A). The Baseline HHRA evaluates exposures under an assumption of future residential land use. The receptors evaluated include: a future resident (adult and child) and a construction worker. The assessment assumes the future receptors may be exposed to soils at depths of 0 to 2 feet below ground surface (ft bgs) and 0 ft bgs to the water table. The exposures include direct contact with the soil at both depths in the event the soil is brought to the surface and not managed.

The risk assessment results for each receptor are summarized in the Table below:

	Cancer Risks		**Non-cancer Hazard**	
	Soil Depth		**Soil Depth**	
	0 to 2 ft bgs	**0 ft bgs to Water Table**	**0 to 2 ft bgs**	**0 ft bgs to Water Table**
Receptors				
Future Resident				
Adult/Child (combined) *	3.5 E-05	3.5 E-05		
Young Child			1.1	1.1
Adult			0.1	0.2
Future Construction Worker (Adult)	4.3E-08	4.2E-08	0.2	0.2
*Non-cancer hazards were not calculated since the young child is the most sensitive receptor.				

In general, the concentrations of chemicals of potential concern (COPCs) are comparable for both depths for both receptors. Evaluation of the data indicates minor differences in chemical concentrations based on depths. These slight differences result in slight differences in calculated cancer risks and non-cancer hazards.

All cancer risks are within or below the risk range established under the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) of 1×10^{-6} (one in a million) to 1×10^{-4} (one in ten thousand). The cancer risks for the future resident were within this risk range while those for the future construction worker were below the goal of protection of 1×10^{-6}. The non-

cancer hazard is evaluated based on the goal of protection of a Hazard Index (HI) equal or less than 1 e.g., HI = 1. The HI for the young child was 1.1, for the adult was 0.1 and 0.2, respectively and the target organ Hazard Quotient (HQ) was less than 1 for both adult and young child. The non-cancer hazards for the future construction worker (adult) receptors are below the goal of protection of an HQ or an HI = 1.

1 INTRODUCTION

This document provides the Baseline Human Health Risk Assessment (HHRA) for the Former Griffiss Air Force Base (AFB) Site 25 (SS025), located in Rome, New York (the "Site"). The Baseline HHRA is being conducted under the authority of the United States Environmental Protection Agency (USEPA), pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (USEPA, 1990), and the Superfund Amendments and Reauthorization Act of 1986 (SARA). The Baseline HHRA is required to support Site decisions under Superfund law regarding the removal of Land Use Controls (LUCs).

The Baseline HHRA is a baseline evaluation assuming no Institutional Controls (ICs), such as the current LUCs to prevent use of the Site for residential use, and no remedial actions at the Site. The Baseline HHRA evaluated future exposures to Site soils at depths of 0 to 2 feet below ground surface (ft bgs) and 0 ft bgs to the Water Table. The assessment quantified potential health risks from exposure to chemicals collected in 2017 at both depths including chemicals on the Target Compound List (TCL), Target Analyte List (TAL), polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs) evaluated as commercial Aroclor mixtures (e.g., Aroclor 1016), and Volatile Organic Compounds (VOCs).

The Baseline HHRA evaluated exposures to the Reasonably Maximally Exposed Individual under both current and future conditions. Evaluation of exposures to the RME individual provide the basis for decisions under CERCLA, including the decision regarding removing the current LUC to allow future residential development of the property.

1.1 Baseline Human Health Risk Assessment

The Baseline HHRA follows the four steps of the risk assessment process listed below:

- Hazard Identification – identifies contaminants at the Site that can pose a risk to human health under current and future land use conditions. This step, including data collection and analysis, involves gathering data to define the nature and extent of contamination and using the sample data to select chemicals of potential concern (COPCs). The COPCs are evaluated in the remaining steps of the Baseline HHRA listed in the bullets below.
- Exposure Assessment – identifies possible exposure pathways such as ingestion of soil, inhalation of particulates, or dermal contact with soil. The exposure assessment includes an estimation of human chemical intake, or dose, for each receptor based on default Superfund exposure assumptions representing residential and construction worker receptors (USEPA, 2014).
- Dose Response – evaluates the chemical toxicity of each COPC including the evaluation of cancer and non-cancer toxicity for each COPC.
- Risk Characterization – describes the likelihood and degree of chemical exposure and the possible adverse health effects associated with the exposure(s) including a discussion of the uncertainties.

The Baseline HHRA was performed in accordance with guidance, policies, and guidelines provided by the USEPA, including but not limited to:

- *Risk Assessment Guidance for Superfund* (RAGS) - Parts A, B, D, E and F (USEPA, December 1989, December 1991a, December 2001, July 2004, and January 2009, respectively).
- *Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions* (USEPA, April 1991).
- *Guidance for Data Useability in Risk Assessment* (Parts A and B) (USEPA, December 1991 and May 1992a).
- *Guidelines for Exposure Assessment* (USEPA, May 1992b).
- *Land Use in the CERCLA Remedy Selection Process* (USEPA, May 1995).
- *EPA Risk Characterization Program* (USEPA, March 1995).
- *Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites* (USEPA, December 2002a).
- *Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites* (USEPA, December 2002b).
- *Human Health Toxicity Values in Superfund Risk Assessments* (USEPA, December 2003).
- *Guidelines for Carcinogen Risk Assessment* (USEPA, March 2005a).
- *Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens* (USEPA, March 2005b).
- *Exposure Factors Handbook: 2011 Edition* (USEPA, September 2011).
- *Recommendations for Default Value for Relative Bioavailability of Arsenic in Soil* (USEPA, December 2012).
- *Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors* (USEPA, February 2014).
- *ProUCL Version 5.1 Technical Guide Statistical Software for Environmental Applications for Data Sets with and without Nondetect Observations* (USEPA, October 2015).
- Regional Screening Levels (USEPA, May 2019).

1.2 Site Overview and Historical Perspective

The following site information was obtained from the *2015 Third Five-Year Review Former Griffiss Air Force Base* (FPM Remediations, Inc. [FPM]/Cape, June 2015). The information was obtained from the webpage link: https://semspub.epa.gov/work/02/350524.pdf. A site map is provided in Appendix A of this Baseline HHRA report.

Pursuant to Section 105 of CERCLA, the Former Griffiss AFB was included on the National Priority List (NPL) on July 15, 1987. On August 21, 1990, the United States Air Force, (USAF), USEPA, and

New York State Department of Environmental Conservation (NYSDEC) entered into a Federal Facility Agreement (FFA) under Section 120 of CERCLA. The Department of Defense (DOD) Installation Restoration Program (IRP) at the Former Griffiss AFB includes the investigation and clean-up of sites with CERCLA hazardous substance releases as well as the petroleum site being addressed under NYSDEC.

The Site is located in Rome, NY, in the County of Oneida, NY. The Site (Site T-9 Area of Concern [AOC]) is located near the east-central portion of the Former Griffiss AFB, at the intersection between Brooks Road and Selfridge Street, and covers about 30,000 square ft (Parcel F1). The Site was used for parking heavy equipment and storing herbicides and petroleum-based paving products. The Site, the Former Griffiss AFB, contained a 550-gallon kerosene aboveground storage tank (AST) 009-2. It was reported that former AST 009-2 leaked on several occasions and stained soils were observed at the AST location. Figure 12 of the Third Five Year Review (FPM/Cape, June 2015) illustrates the SS-025 Site (T-9 AOC) and identifies deed restrictions, as well as the LUC/ICs, as required by the Record of Decision (ROD) for the Site (Air Force Real Property Agency [AFRPA], June 2001).

In 1991, AST-009-2 was replaced with AST 009-3, a mobile 275-gallon kerosene tank, in the same location, but was relocated adjacent to Building 8 later. In December 1996, AST 009-3 was removed from Building 8. Also, trucks carrying asphalt were reportedly rinsed with kerosene and the rinsate was discharged onto the ground at Site T-9. On May 7, 1997, NYSDEC Spill #9702173 was assigned to the former location of AST-009-2 and -3 due to contaminated soil identified during a site assessment conducted by PEER Consultants, P.C. in the Fall of 1996.

As part of the Remedial Investigation (RI), a baseline risk assessment was performed to evaluate the current and future Site use, evaluating only industrial use, and potential risks to human health and the environment associated with chemicals of concern (COCs) found in the soils and groundwater at the Site. Receptors evaluated in the baseline risk assessment included landscape, industrial, utility, and construction workers. Total carcinogenic risks associated with exposure by these workers to contaminants in the soil or groundwater were all within the lower end of the acceptable risk range (1×10^{-6}) established under the NCP. The Hazard Index (HI), for non-cancer health hazards, was below the goal of protection of an HI = 1 for human exposure scenarios under an industrial land use assumption.

The ROD for the SS-025 Site (T-9 AOC) was issued by the USAF in June 2001 and signed by the USEPA in September 2001. Based on the previous investigations and environmental conditions at the Site, the selected remedy for the SS-025 Site (T-9 AOC) is No Further Action (NFA) for soils with LUC/ICs for industrial/commercial use and groundwater use restrictions. Groundwater was deferred to the NYSDEC Petroleum Spills Program.

The ROD for Site T-9 (including Site SS-025) stated that:

- The property will be designated for industrial/commercial use unless permission is obtained from the USEPA, NYSDEC, and the New York State Department of Health (NYSDOH);

- The owner or occupant of the property shall not extract, utilize, consume, or permit to be extracted, any water from the subsurface aquifer within the boundary of the property unless such owner or occupant obtains prior written approval from the NYSDOH; and
- The groundwater at the site requires further investigation under the NYSDEC Spills Program.

1.3 Land-Reuse Zoning

The land-reuse zoning for the Former Griffiss AFB is illustrated in Figure 3 of the ROD (AFRPA, June 2001). The Former Griffiss Local Development Corporation (GLDC), which is the Former Local Reuse Agency (LRA), designated Parcel F1, which includes the SS-025 Site (T-9 AOC), for industrial (light industrial development) use. The City of Rome adopted the LRA's zoning designation in 1998.

As discussed in the Third Five Year Review for the Site (FPM/Cape, June 2015), annual LUC/IC inspections have been performed at the site to ensure that the LUC/ICs continue to be implemented. The confirmation of the LUC/ICs was obtained through on-site inspections and LUC/IC confirmation forms signed by the owner/occupant of the property.

1.4 Baseline HHRA Purpose

The purpose of this Baseline HHRA is to evaluate whether exposures to COPCs on Site SS-025, in the absence of a LUC, by future residents, poses a risk above the NCP risk range of 10-6 to 10-4 (one in a million to one in ten thousand) and/or the goal of protection of a Hazard Quotient (HQ) = 1 for an individual chemical or a HI for several chemicals = 1 (e.g., HQ or HI = 1). The Baseline HHRA also evaluated future exposures to a construction worker who may be exposed to soils at depths from the surface to the Water Table during future development of the property. The Baseline HHRA for these receptors evaluated future exposures and whether exposures posed unacceptable cancer risks and non-cancer hazards.

The remaining sections of this report provide information on the analyses conducted during each step of the Baseline HHRA. This report is organized according to the four steps of the risk assessment process (Section 1.1).

2 HAZARD IDENTIFICATION

The purpose of the hazard identification section of the Baseline HHRA is:

- to evaluate the nature and extent of chemicals present at the Site, and
- to identify COPCs for further quantitative evaluation in the Baseline HHRA.

This Baseline HHRA focuses on the assessment of current and future risks, both cancer risks and non-cancer hazards, to human health associated with Site exposures at both depths, surface soil (0 to 2 ft bgs) and soils from the surface to the Water Table. Soils collected from the Site, at both depths, were quantitatively evaluated as a potential exposure media. The future exposure assessment, conducted in this Baseline HHRA, assumes future residential land use and no management of soils brought to the surface during excavation or other activities where future residents may be exposed. The assessment also evaluated a future construction worker exposed during digging, etc.

Sampling was conducted by the USAF on the property from May 31, 2017, to June 5, 2017. The samples were collected at depths from 0 to 2 ft bgs and 0 ft bgs to the Water Table. Samples were collected for TCL, TAL, PCBs, PAHs, and VOCs.

The samples were collected and analyzed under a Quality Assurance Project Plan. The data was evaluated and determined the data meet the quality assurance/quality control criteria and are appropriate for inclusion in the Baseline HHRA. The RAGS Part D Data Useability Worksheet is included in Appendix B of this Baseline HHRA.

2.1 Conceptual Site Model

The Conceptual Site Model (CSM) summarizes the sources of chemical contaminants, transport of contaminated media, routes of exposures, and receptors under current and future conditions. The CSM is presented in Appendix C - RAGS Part D Table 1 (USEPA, December 2001). The selection of exposure pathways and the rationale for inclusion of each pathway, using either quantitative or qualitative methods are as follows:

- Future Resident: The CSM identifies exposures to a future resident living on the Site who may be exposed to soils at both depths, under a future residential scenario. The assessment includes both a child (0 to 6 years) and an adult (older than 18 years) exposed for a total of 26 years (6 years as a child and 20 years as an adult) and a combined adult/child for the cancer assessment. Routes of exposure include inhalation, ingestion, and dermal contact with COPCs.
- Future Construction Worker: Exposures to a future construction worker were also evaluated in the assessment. The future construction worker is assumed to be an adult exposed to soils at both depths during future construction on the Site.

2.2 Selection of COPCs

Analytical data collected from soils at both depths is the basis for the COPC determination.

The selection of COPCs were based on the following criteria:

- Known human carcinogens or chemicals classified as "carcinogenic to humans" regardless of whether the concentration exceeds the screening level (USEPA, December 1989).
- Maximum detected chemical concentrations greater than the residential soil screening level available in the May 2019 USEPA Regional Screening Level (RSL) table (USEPA, May 2019). The screening concentration is based on residential exposures associated with a cancer risk of 1×10^{-6} (or 1 in a million).
- Maximum detected concentration is greater than the concentration associated with HQ = 0.1 to address potential exposures to multiple chemicals with the same non-cancer health effects.
- The lower of the cancer risk and non-cancer hazard concentration were used to identify COPCs.

The criteria for excluding chemicals as COPCs include:

- Maximum soil concentration is below the RSL (described above) provided that the chemical is not a known human carcinogen or carcinogenic to humans.
- Essential nutrients (e.g., potassium, calcium, etc.).
- Chemicals detected in less than 5% of samples provided they are not classified as known human carcinogens or carcinogenic to humans.
- Chemicals lacking toxicity values are excluded from further quantitative evaluation but are discussed in the Uncertainty Section of the Risk Characterization (Section 5.3).

Appendix C - RAGS Part D Table 2 provides the determination of the status of the COPCs. Consistent with USEPA guidance (USEPA, December 2001), information provided in Appendix C - RAGS Part D Table 2 includes the minimum and maximum concentrations of chemicals identified in Site sampling including data qualifiers. The Table includes information on location of the maximum concentration, frequency of detection, RSL, and the screening conclusions rationale e.g., COPC or non-COPC.

A total of 136 chemicals were screened. The Table below summarizes the results of the screening and the classification groups of the individual chemicals.

Screening Criteria	**Number of Chemicals**
Known Human Carcinogens	2
Non-detect, Below Screening Levels (ND, BSL)	71
Chemicals not detected in sampling that are Above Screening Levels (ND, ASL)	5
No Screening Level (NSL)	15
Maximum Concentration Exceeds Screening Level (MCE)	10
Maximum Concentration Below Screening Level (MCN)	29
Essential Nutrient (EN)	4
Total	136

The identified COPCs are listed below by chemical category. The listed COPCs will be further evaluated and the calculated cancer risks and non-cancer hazards for these chemicals will be discussed in the Risk Characterization section of this Baseline HHRA (Section 5).

Chemicals of Potential Concern
PAHs
Benzo(a)anthracene
Benzo(a)pyrene
Benzo(b)fluoranthene
Dibenzo(a,h)anthracene
Metals
Aluminum
Arsenic (inorganic)
Chromium (VI)
Cobalt
Iron
Manganese (non-diet)
Volatile Organic Compounds*
Benzene
Trichloroethylene
* Benzene and trichloroethylene were identified as COPCs based on the classification of each chemical as known human carcinogens.

Chromium III was screened out as a COPC based on comparison of the maximum concentration to the RSL concentration. In the absence of data on the valence of chromium, the chemical was also assessed assuming all results are chromium VI, in the selection of COPCs. Based on the classification of chromium VI as a Known Human Carcinogen, and the maximum concentration of chromium in soil, chromium VI was identified as a COPC assuming all data is chromium VI. This potential overestimate of cancer risks will be discussed in the Risk Characterization section of this Baseline HHRA (Section 5).

The screening level assessment also identified five chemicals with the maximum non-detect concentrations above the RSL concentration. This exceedance of the screening level based on a non-detect concentration indicates a potential underestimate in risk. This potential uncertainty will be discussed in the Uncertainty Section of the Risk Characterization (Section 5.3).

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3 EXPOSURE ASSESSMENT

This section of the Baseline HHRA evaluates potential exposures for human receptors that will be used to estimate the cancer risks and non-cancer health hazards from exposures to COPCs at the Site. USEPA guidance (USEPA; December 1989, February 1992, May 1992b, May 1992c, and March 1995) provides the framework to be used in exposure assessments at Superfund Sites. The exposure assessment includes the identification of potentially exposed individuals, development of exposure scenarios, analysis of potential exposure pathways, and estimation of exposure point concentrations (EPCs) where the receptor may contact contaminated soils at both depths by the future resident and construction worker.

Information on receptor activities and concentrations in soil are used to estimate potential exposure doses under current and reasonably foreseeable land use conditions. This assessment assumes future residential exposures. The exposure assessment evaluates pathways by which receptors can be exposed to the COPCs in soil in the future. Groundwater exposures will be investigated under the NYSDEC Spills Program and will not be addressed in this Baseline HHRA.

The quantification of exposure is based on exposure factors including concentrations in soil at both depths, the potential exposure frequency (number of days per year), amount of soil consumed during activities (milligrams of soil ingested per body weight in kilograms per day or mg/kg-day), and the duration of exposure (number of years). The exposure assessment is based on site-specific parameters that can reasonably be expected at the Site, under a future residential scenario. The estimated exposures are presented in units of mg/kg-day.

USEPA guidance and policy call for an evaluation of cancer risks and non-cancer health hazards to the Reasonably Maximally Exposed Individual defined as “the maximum exposure that is reasonably expected to occur at the site” (USEPA, December 1989 and 1990). An estimate for the Reasonably Maximally Exposed Individual is obtained by determining estimates of likely "high-end" exposure factors and then combining these high-end factors with average exposure factors to develop a point estimate, or single exposure value, for the Reasonably Maximally Exposed Individual. A combination of USEPA recommended exposure values and site-specific values are used as input parameters in this assessment (USEPA, February 2014).

Decisions to take remedial action at a Site are based on exposures to the Reasonably Maximally Exposed Individual. If the risk range for the Reasonably Maximally Exposed Individual is exceeded, a Central Tendency Exposure (CTE) scenario is evaluated. The CTE evaluation provides additional information to the risk manager; however, consistent with the NCP, decisions regarding remedial action are based on the risks to the Reasonably Maximally Exposed Individual.

3.1 Exposure Point Concentrations

Individual EPCs were developed for each COPC at both depths (Appendix C - RAGS Part D Tables 3.1 and 3.2). The EPCs were calculated using ProUCL Version 5.1 (USEPA, October 2015). The ProUCL computer program was developed for the USEPA to calculate EPCs that represent COPC exposures at Superfund sites. The EPC represents a 95% Upper Confidence Limit (UCL) on the

Mean for each COPC. The maximum concentrations were used where statistical analysis is not calculated based on a small number of samples or limited number of detections. The results of the EPC calculations are summarized in Appendix C - RAGS Part D Tables 3.1 and 3.2. The Tables include information on the sample concentrations, including the arithmetic mean, 95% UCL concentration, and maximum concentration along with the recommended EPC based on the computer output. The ProUCL outputs are provided in Appendix D.

The concentrations for benzene and trichloroethylene are based on the maximum concentration in soils at both depths. The maximum concentration was used based on the finding that all samples are non-detects at both depths.

Comparison of the EPCs at both depths (Appendix C - Tables 3.1 and 3.2) indicate the concentrations are comparable. The sample results from each depth will be used to calculate the exposure dose and the cancer risks and non-cancer hazards associated with the dose.

3.2 Exposure Receptors and Scenarios

The focus of this risk assessment was the evaluation of exposures at the Site for receptors who may come into direct contact with potentially contaminated soil at both depths. The Exposure Factors used in this assessment were primarily obtained from the *Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors* (USEPA, February 2014). In the absence of default exposure factors, site specific exposure values were developed based on best professional judgment.

Receptors include:

- Future Resident: Future residents are the most sensitive receptors based on potential exposures to a young child (i.e. 6 years and younger). The assessment assumed exposures to an adult/child for the cancer assessment and to the young child (6 years and younger) for the non-cancer assessment. If future land use changes, the risk quantified in this assessment will likely be protective of all other potential receptors. The future resident is assumed to be exposed to contamination at both depths assuming the resident may dig in the upper 2 ft of soil on their property and/or be exposed to soil brought to the surface during construction activities where contaminated soils are not managed.

  The Baseline HHRA evaluated the following exposure pathways: incidental ingestion of soil, dermal contact with soil, and inhalation of volatiles and fugitive dust. The exposures included the young child (6 years and younger) and adults (18 years and older) exposed for 350 days/year for a period of 26 years (6 years as a child and 20 years as an adult).

  Adults and children exhibit different ingestion rates for soil. For example, the soil ingestion rate for a child resident is 200 milligrams per day (mg/day) while the adult rate is 100 mg/day. The ingestion rate assumes exposures to both soil and dust tracked into the residence. To account for changes in intake rates as the receptor ages, age adjusted intake equations are used for the adult/child in the cancer assessment. The calculations of exposure dose include adjustments for body weight and skin surface area based on age

(e.g., child and adult) as described in Section 3.5 and listed in Appendix C - Tables 4.1 and 4.2. The exposure assumptions for inhalation are provided in Appendix C - Table 4.3.

- Future Construction Worker: The future construction worker is assumed to be exposed to soils at both depths during future construction work on the property. The exposure pathway assumes the construction worker wears no protective equipment to prevent exposure. Exposures are assumed to be short-term during the construction activities such as digging, tilling, etc. for a period of less than 1 year.

  The activities for this receptor typically involve on-site exposure to soils at both depths during construction. The construction worker is expected to have an elevated soil ingestion rate (330 mg/day) and is assumed to be exposed to contaminants via the following pathways: incidental ingestion of soil, dermal contact with contaminants in soil, and inhalation of volatiles and fugitive dust based on modeling.

  This receptor is limited to a subchronic exposure with a duration of 1 year and less. Other unique aspects of this scenario are that the Particulate Emission Factor (PEF) is based on mechanical disturbance of the soil. Exposure to volatiles are addressed using a Volatilization Factor (VF). These values are discussed in Section 3.3.

  The exposure assumptions are provided in Appendix C – Tables 4.4 through 4.6.

3.3 Exposure Models

Consistent with the *Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites* (USEPA, December 2002a), exposure to particulates and volatiles were evaluated in the Exposure Assessment. This equation relates the contaminant concentration in soil with the concentration of respirable particles in the air due to fugitive dust emissions. The variables used in the modeling include the PEF and the VF. Inhalation of contaminants adsorbed to respirable particles (PM10) were assessed using a default PEF equal to 1.36×10^9 cubic meters per kilogram (m^3/kg).

The model equations incorporate a soil-to-air VF. The VF relates the concentration of a contaminant in soil to the concentration of the contaminant in air resulting from volatilization. A VF is available for benzo(a)anthracene (i.e., 4.41×10^6), trichloroethylene (2.2×10^3), and benzene (3.54×10^3).

Equation 5-3 of the Supplemental Guidance (USEPA, December 2002a) was used to evaluate inhalation of volatiles and particulates emitted from soil. The following tables summarize the information used in these modeling calculations.

Volatilization factors for particulate emissions from soil to outdoor air are summarized below.

Parameter Code	Parameter Definition	Value	Units	Rationale/Reference
VF_p	Volatilization factor for particulate emissions	Chemical specific	kg-soil/m^3-air	Calculated

Parameter Code	Parameter Definition	Value	Units	Rationale/Reference
Q/C	Inverse of the mean concentration at the center of square source	62.55	$(g/m^2\text{-}s)/(kg/m^3)$	USEPA, July 1996
V	Fraction of Vegetative Cover	0.5	m^2/m^2	USEPA, 2018
U_m	Mean Annual Wind Speed	2.68	m/s	NOAA, 1998
U_t	Equivalent Threshold Value of Windspeed	11.32	m/s	USEPA, December 2002a
$F_{(x)}$	Windspeed Distribution Function from Cowherd et. al, 1985	0.194	unitless	USEPA, December 2002a
0.036	Empirical constant	0.036	$g/m^2\text{-}hr$	USEPA, December 2002a
Notes: $kg\text{-}soil/m^3\text{-}air$ = kilograms of soil per cubic meter of air; $g/m^2\text{-}s$ = grams per square meter-second; kg/m^3 = kilograms per cubic meter; m^2 = square meter; m/s = meters per second; $g/m^2\text{-}hr$ = grams per square meter-hour; NOAA = National Oceanic Atmospheric Administration				

Volatilization factors for air emissions from soil to outdoor air are summarized below.

Parameter Code	Parameter Definition	Value	Units	Rationale/Reference
$VF_{ss\text{-}i}$	Surface soils volatilization factor for infinite sources	Chemical specific	$kg\text{-}soil/m^3\text{-}air$	Calculated
$VF_{ss\text{-}m}$	Surface soils volatilization factor for finite (mass limit) sources	Chemical specific	$kg\text{-}soil/m^3\text{-}air$	Calculated
Q/C	Inverse of the mean concentration at the center of square source	62.55	$(g/m^2\text{-}s)/(kg/m^3)$	USEPA, December 2002a
D_A	Apparent diffusivity	Calculated	cm^2/s	Calculated
τ	Averaging time for vapor flux			
	Child	1.89E+08	seconds	Calculated
	Adult	6.31E+08	seconds	Calculated
ρ_s	Dry Soil Bulk Density in the Vadose Zone	1.62	g/cm^3	USEPA, July 2004
H	Dimensionless Henry's law constant	Chemical specific	unitless	USEPA, December 2002a
K_{oc}	Organic carbon adsorption coefficient	Chemical specific	L/kg	USEPA, December 2002a
D^a	Diffusivity in air	Chemical specific	cm^2/s	USEPA, December 2002a
D^w	Diffusivity in water	Chemical specific	cm^2/s	USEPA, December 2002a

Parameter Code	Parameter Definition	Value	Units	Rationale/Reference
f_{oc}	Fractional Organic Carbon Content in the Vadose Zone	0.002	g-C/g-soil	USEPA, July 2004
ϑ_T	Total Soil Porosity in the Vadose Zone	0.39	cc/cc	USEPA, July 2004
ϑ_{ws}	Volumetric Water Content in the Vadose Zone	0.049	cc/cc	USEPA, July 2004
ϑ_{as}	Volumetric Air Content in the Vadose Zone	0.341	cc/cc	Calculated
d_s	Lower Depth of Surficial Soil Zone			
	0 to 2 ft bgs	60.96	cm	Site-specific
	0 ft bgs to Water Table	161.85	cm	Site-specific
Notes: cm^2/s = square centimeters per second; g/cm^3 = grams per cubic centimeter; L/kg = liters per kilogram; g-C/g-soil = grams carbon per grams soil; cc = cubic centimeter; cm = centimeters				

3.4 Exposure Equations

Chemical intake is expressed in terms of dose units of mg/kg-day. In general, quantitative exposure estimates involve the following steps:

- Determining EPCs, the concentrations of COPCs in environmental media at the point of human exposure (Section 3.1);
- Identifying the applicable human exposure models and input parameters (exposure frequency, duration, etc.); and
- Estimating human intakes based on using exposure equations for ingestion, dermal contact, and inhalation.

The primary source for the exposure equations is USEPA's RAGS, Parts A, B, D, E, and F (USEPA, December 1989, December 1991a, December 2001, July 2004, and January 2009, respectively).

3.4.1 Soil Ingestion

The generalized equation for calculating soil chemical intakes is:

$$\text{Intake (I) (mg/kg-day)} = \frac{C \times CR \times EF \times ED \times CF}{BW \times AT}$$

Where:

I = *Intake* - the amount of chemical at the exchange boundary (mg/kg-day)
C = *EPC* - the chemical concentration contacted over the exposure period at the exposure point (*e.g.*, mg/kg-soil)
CR = *Contact Rate* - the amount of affected medium contacted per unit time or event (*e.g.*, soil ingestion rate in grams per day [g/day])
EF = *Exposure frequency* - describes how often exposure occurs (days/year)

ED = *Exposure duration* - describes how long exposure occurs in years
CF = *Conversion factor* – kilograms per gram (kg/g)
BW = *Body weight* - the average body weight over the exposure period (kilograms [kg])
AT = *Averaging times (ATs)* - the period over which exposure is averaged (days)
The cancer and non-cancer ATs are:
Carcinogenicity AT is 70 years x 365 days/year, and
Non-cancer AT is 26 years x 365 days/year for all ages for the resident; 6 years x 365 days/year for the young child; 20 years x 365 days/year for the adult; and 1 year x 365 days for the construction worker

3.4.2 Equations for Calculating Dermal Chemical Intakes

For soil dermal contact, absorbed doses are used (USEPA, July 2004). Dermal intake (the amount absorbed into the body) is calculated as:

$$\text{Intake (mg/kg-day)} = \frac{C_{soil} \times DA \times AF \times SA \times EF \times ED \times CF}{BW \times AT}$$

Where:

C_{soil} = Concentration of COPCs in soil (milligram per kilogram [mg/kg])
DA = Dermal absorption factor (unitless)
AF = Soil adherence factor (milligrams per square centimeter [mg/cm^2])
SA = Skin surface area exposed (cm^2/exposure event)
EF = Exposure frequency (exposure events/year)
ED = Exposure duration (years)
CF = Conversion factor (10^{-6} kg/mg)
BW = Body weight (kg)
AT = Averaging times are the period over which exposure is averaged (days)
The cancer and non-cancer ATs are:
Carcinogenicity AT is 70 years x 365 days/year, and
Non-cancer AT is 26 years x 365 days/year for all ages for the resident; 6 years x 365 days/year for the young child; 20 years x 365 days/year for the adult; and 1 year x 365 days for the construction worker

The dermal absorption factors are provided in Section 3.6.

3.4.3 Inhalation Exposures

$$\text{EC (micrograms per cubic meter [}\mu g/m^3\text{])} = \frac{CA \times ET \times EF \times ED}{AT \times ED}$$

Where:

EC = exposure concentration in $\mu g/m^3$
CA = contaminant concentration in air ($\mu g/m^3$)
ET = exposure time (hours/day)
EF = exposure frequency (days/year)

ED = exposure duration (years)

AT = Averaging times are the period over which exposure is averaged (days)
The cancer and non-cancer ATs are:
Carcinogenicity AT is 70 years x 365 days/year x 24 hours/day, and
Non-cancer AT is 26 years x 365 days/year x 24 hours/day for all ages for the resident; 6 years X 365 days/year x 24 hours/day for the young child; 20 years x 365 days/year x 24 hours/day for the adult; and 1 year x 365 days x 24 hours/day for the construction worker

Appendix C - RAGS Part D Tables 4.1 to 4.3 provide the specific exposure equations and parameters.

3.5 Exposure Parameters

Exposure parameters (e.g., contact rate, exposure frequency, exposure duration, body weight) describe the exposures of a receptor for a given exposure scenario. These values are input parameters for the exposure equations used to estimate chemical intake (USEPA, February 2014). Exposures to the future construction worker were based on assumptions for the worker exposed during the construction of a building. The exposure frequency and duration were adjusted to reflect the construction activities e.g., 1 year or less to complete the project.

Appendix C - RAGS Part D Tables 4.1 to 4.6 provide exposure assumptions for the individual receptors used to calculate cancer risk and non-cancer hazards.

3.6 Dermal Absorption Fractions

The dermal absorption fraction (DAF) accounts for absorption of chemicals through the skin. The DAFs for COPCs were compiled from RAGS Part E, Exhibit 3-4 (USEPA, July 2004). The DAFs used for the chemicals are listed below:

Chemicals of Potential Concern	Dermal Absorption Factors
PAHs	
Benz(a)anthracene	0.13
Benzo(a)pyrene	0.13
Benzo(b)fluoranthene	0.13
Dibenzo(a,h)anthracene	0.13
Metals	
Aluminum	Not Applicable
Arsenic (inorganic)	0.03
Chromium (VI)	Not Applicable
Cobalt	Not Applicable
Iron	Not Applicable
Manganese (non-diet)	Not Applicable
Volatile Organic Compounds	
Benzene	Not Applicable
Trichloroethylene	Not Applicable

3.7 Bioavailability

Absorption adjustment factors (AAFs) are used in risk assessment to account for differences in bioavailability between exposed humans and studies in laboratory animals used in deriving toxicity values. A bioavailability factor of 0.6 was applied for arsenic exposures (USEPA, December 2012). Bioavailability factors for the remaining chemicals are equal to 1.

4 TOXICITY ASSESSMENT – DOSE-RESPONSE

The toxicity assessment determines the types of adverse health effects potentially associated with exposures to COPCs at the Site and the relationship between the magnitude of exposure (dose) and severity of adverse effects (response). Toxicity relationships are developed using animal studies and theoretical concepts about what might occur in humans or where data is available based on human epidemiological evidence.

The result of a toxicity assessment is the development of toxicity values for both cancer and non-cancer health effects that are combined with exposure information (Section 3) to calculate cancer risks and non-cancer hazards. The calculated cancer risks and non-cancer hazards are then presented in the Risk Characterization Section (Section 5) with associated uncertainties. The calculated cancer risks and non-cancer hazards from the assessment are compared to the criteria identified in the NCP to support decisions regarding the LUC.

4.1 Toxicity Hierarchy

In December 2003, the Office of Solid Waste and Emergency Response (OSWER, now referred to as the Office of Land and Emergency Management) issued a directive (USEPA, December 2003) outlining the hierarchy of toxicity values to be used in a risk assessment. The toxicity values for COPCs come from the following sources.

- Tier 1: Integrated Risk Information System (IRIS), which represents the USEPA's consensus database for cancer and non-cancer toxicity information.
- Tier 2: USEPA's Provisional Peer Reviewed Toxicity Values (PPRTVs) developed by the USEPA's National Center for Environmental Assessment in the Office of Research and Development.
- Tier 3: Other sources of toxicity information such as the Agency for Toxicity Substances and Disease Registry (ATSDR) Toxicological Profiles, and other resources evaluated through the Superfund Technical Support Center and identified as appropriate for inclusion in the Baseline HHRA.

Appendix C provides the RAGS Part D Tables 5.1 through 5.4 and 6.1 and 6.2 that identify relevant endpoints and toxicity benchmarks. Tables 5.1 through 5.4 provide non-cancer toxicity values (i.e., reference doses [RfDs], and reference concentrations (RfCs, both chronic and subchronic). Tables 6.1 and 6.2 provide cancer toxicity information (e.g., cancer slope factors [CSFs], and inhalation unit risks [IURs]). Each table identifies the sources of the toxicity information consistent with the toxicity hierarchy Tiers listed above.

4.2 Non-cancer Health Effects

Non-cancer toxicity is evaluated using an oral RfD and/or an inhalation RfC. The following sections define the terms RfD and RfC and their derivation.

4.2.1 Oral Reference Dose

The RfD, in units of mg/kg-day, represents "an estimate (with uncertainty spanning perhaps an order of magnitude or greater) of a daily exposure level for the human population, including sensitive subpopulations, that is likely to be without an appreciable risk of deleterious effects during a lifetime". RfDs are derived by first identifying the highest dose level that does not cause observable adverse effects (the no-observed-adverse-effect-level, or NOAEL). If a NOAEL was not identified, a lowest observed-adverse-effect-level, or LOAEL, may be used. This dose level is then divided by uncertainty factors to calculate an RfD. There are four standard uncertainty factors that can be used when calculating an RfD:

- An up-to-10-fold factor to account for the variation in sensitivity among members of the human population.
- An up-to-10-fold factor to account for the uncertainty involved in extrapolating from animal data to humans.
- An up-to-10-fold factor to account for the uncertainty involved in extrapolating from less than chronic NOAELs to chronic NOAELs.
- An up-to-10-fold factor to account for the uncertainty involved in extrapolating from LOAELs to NOAELs.

Appendix C - RAGS Part D – Table 5.1 provides the chronic toxicity oral RfD values used to assess non-cancer toxicity for the future resident. Table 5.3 provides the subchronic RfDs that are used in the calculation of non-cancer hazards for the construction worker.

4.2.2 Inhalation Toxicity Concentrations

RfCs provide the non-toxicity values for inhalation. The RfC is "an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime". Non-cancer toxicity values can be derived from a NOAEL, LOAEL, or benchmark concentration, with uncertainty factors, described above to reflect limitations of the data used. The RfC is expressed in units of milligrams per cubic meter (mg/m^3).

Appendix C - RAGS Part D - Tables 5.1 through 5.4 provide toxicity data and non-cancer health effects associated with each COPC. The non-cancer health endpoint (i.e., the target organ) associated with each derived toxicity value for each chemical was calculated. Table 5.2 provides the chronic inhalation RfCs while Table 5.4 provides the subchronic RfCs.

The subchronic toxicity values for the COPCs are used in the calculation of the non-cancer HQ for the construction worker. The exposure frequency and duration for the construction worker are less than 1 year requiring evaluation of non-cancer hazards using subchronic values. Chemicals lacking subchronic RfCs are discussed in the Uncertainty Section of Section 5.

4.2.3 Interpretation of Non-Cancer Assessments

The potential for non-cancer health effects is evaluated by comparing an exposure level over a specified time period (i.e., lifetime) with a RfD (expressed in the same units) derived for a similar exposure period (i.e. chronic). This ratio of exposure to toxicity is referred to as the HQ. A target organ HQ ≤ 1 indicates that a receptor's dose of a single contaminant is less than the RfD, and that toxic non-cancer health effects from that chemical are unlikely. A determination that the HQ is greater than 1 indicates the potential for non-cancer health effects depending on the magnitude of the HQ.

The potential for non-cancer health effects is evaluated by comparing an exposure level over a specified time frame (e.g., chronic or subchronic) with the RfC. The HI is generated by adding the HQs for the individual COPCs that affect the same target organ or act through the same mechanism of action within a medium or across all media to which an individual may reasonably be exposed. An HI ≤ 1 indicates that, based on the sum of all HQs from different contaminants and exposure routes, adverse toxic non-cancer health effects from all contaminants are unlikely. An HI > 1 indicates that a site related exposure may present a hazard to human health and it is important to evaluate toxicity by target organ based on the critical effect used in the development of the toxicity value.. Those chemicals posing effects on the same target organ with an HI > 1 require further discussion in the Risk Characterization section of the Baseline HHRA.

Chemicals lacking non-cancer toxicity information are qualitatively evaluated in the Risk Characterization and the Uncertainty Sections (Section 5).

4.3 Carcinogenic Effects

Chemicals with the potential to cause cancer are classified based on the weight of evidence (WOE) for each chemical. The WOE is used to characterize the extent to which the available human epidemiology and animal studies indicate that a chemical may cause cancer in humans. The WOE includes classifications such as known human carcinogens, likely to be carcinogenic to humans, possible human carcinogen, not classifiable as to carcinogenicity, or not carcinogenic to humans (USEPA, March 2005a).

The cancer slope factor, or CSF, is a plausible upper bound estimate of carcinogenic potency used to calculate cancer risk from exposure to carcinogens, by relating estimates of lifetime average chemical intake to the incremental probability of an individual developing cancer over a lifetime. The CSFs developed by the USEPA are plausible upper bound estimates, which means that the USEPA is reasonably confident that the actual cancer risk will not exceed the estimated risk calculated using the CSF.

An IUR is used to assess exposures through inhalation. The IUR is an upper-bound excess lifetime cancer risk estimated to result from continuous exposure to an agent at a concentration in air in units of micrograms per cubic meter $(\mu g/m^3)^{-1}$.

Appendix C - RAGS Part D - Tables 6.1 and 6.2 provide dose-response information in the form of the CSF for the ingestion and dermal contact routes and the IUR for exposure via inhalation,

where toxicity information is available. The Tables also provide the WOE and the CSF and IUR for each chemical with adequate information.

For PAHs, a Relative Potency Factor (RPF) was applied (USEPA, July 1993). The RPF reflects the toxicity based on the base chemical, benzo(a)pyrene.

For carcinogens, cancer risks are generally expressed as the incremental probability of an individual developing cancer over a lifetime from exposure to the carcinogen. The upper-bound excess lifetime cancer risk is estimated by multiplying the lifetime exposure estimated in the exposure assessment by the CSF or IUR identified in the toxicity assessment. These risks represent probabilities usually expressed in scientific notation. An excess lifetime cancer risk of 1×10^{-6} indicates that an individual experiencing the reasonable maximum exposure (RME) estimated in the exposure assessment has a 1 in 1,000,000 probability of developing cancer from Site-related exposure(s).

The NCP, the regulation that implements the Superfund law, defines the range for determining whether action is necessary as an individual excess lifetime cancer risk of 1 in a million (1×10^{-6}) to 1 in 10,000 (1×10^{-4}). The decision to take remedial action is based on the cancer risk to the Reasonably Maximally Exposed Individual. Risks to the average or CTE individual are calculated when the risks exceed the risk range but this information is not used in the evaluation of the need for remedial action.

4.4 COPCs with a Mutagenic Mode of Action

The *Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens* (USEPA, March 2005b) recommends the application of Age Dependent Adjustment Factors (ADAFs) for chemicals identified with a mutagenic mode of action (MMOA). The ADAFs are:

- Ages 0-2: ADAF = 10
- Ages 2-6: ADAF = 3
- Ages 6-16: ADAF = 3
- Ages >16: ADAF = 1

The COPCs with a MMOA include: chromium VI; the PAHs including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene; and the VOC trichlorethylene. The assessment applied ADAFs consistent with the Supplemental Guidance (USEPA, March 2005b). For chemicals such as trichloroethylene, the recommendations in the IRIS file for evaluating the MMOA were followed. The following sections provide the general calculations for assessing exposures for future residents and construction workers. The exposure assumptions are the standard default exposure assumptions used for non-MMOA chemicals (USEPA, February 2014).

4.4.1 MMOA Calculation for Ingestion of Soil

The calculation of exposures for ingestion are provided below.

$$CDI_{res\text{-}soil\text{-}mu\text{-}ing}\left(\frac{mg}{kg\text{-}day}\right)=\frac{C_{soil}\left(\frac{mg}{kg}\right)\times IFSM_{res\text{-}adj}\left(\frac{166{,}833\ mg}{kg}\right)\times RBA\times\left(\frac{10^{-6}\ kg}{1\ mg}\right)}{AT_{res}\left(\frac{365\ days}{year}\times LT\left(70\ years\right)\right)}$$

where:

$$IFSM_{res\text{-}adj}\left(\frac{166{,}833\ mg}{kg}\right)=\left(\begin{array}{l}\frac{ED_{0\text{-}2}\left(2\ years\right)\times EF_{0\text{-}2}\left(\frac{350\ days}{year}\right)\times IRS_{0\text{-}2}\left(\frac{200\ mg}{day}\right)\times 10}{BW_{0\text{-}2}\left(15\ kg\right)}+\\ \frac{ED_{2\text{-}6}\left(4\ years\right)\times EF_{2\text{-}6}\left(\frac{350\ days}{year}\right)\times IRS_{2\text{-}6}\left(\frac{200\ mg}{day}\right)\times 3}{BW_{0\text{-}2}\left(15\ kg\right)}+\\ \frac{ED_{6\text{-}16}\left(10\ years\right)\times EF_{6\text{-}16}\left(\frac{350\ days}{year}\right)\times IRS_{6\text{-}16}\left(\frac{100\ mg}{day}\right)\times 3}{BW_{6\text{-}16}\left(80\ kg\right)}+\\ \frac{ED_{16\text{-}26}\left(10\ years\right)\times EF_{16\text{-}26}\left(\frac{350\ days}{year}\right)\times IRS_{16\text{-}26}\left(\frac{100\ mg}{day}\right)\times 1}{BW_{16\text{-}26}\left(80\ kg\right)}\end{array}\right)$$

4.4.2 MMOA Calculation for Dermal Exposure to Soil

The calculation of exposures for dermal contact with soil are provided below.

$$CDI_{res\text{-}soil\text{-}mu\text{-}der}\left(\frac{mg}{kg\text{-}day}\right)=\frac{C_{soil}\left(\frac{mg}{kg}\right)\times DFSM_{res\text{-}adj}\left(\frac{428{,}260\ mg}{kg}\right)\times ABS_{d}\times\left(\frac{10^{-6}\ kg}{1\ mg}\right)}{AT_{res}\left(\frac{365\ days}{year}\times LT\left(70\ years\right)\right)}$$

where:

$$DFSM_{res\text{-}adj}\left(\frac{428{,}260\ mg}{kg}\right)=\left(\begin{array}{l}\frac{ED_{0\text{-}2}\left(2\ years\right)\times EF_{0\text{-}2}\left(\frac{350\ days}{year}\right)\times AF_{0\text{-}2}\left(\frac{0.2\ mg}{cm^2}\right)\times SA_{0\text{-}2}\left(\frac{2{,}373\ cm^2}{day}\right)\times 10}{BW_{0\text{-}2}\left(15\ kg\right)}+\\ \frac{ED_{2\text{-}6}\left(4\ years\right)\times EF_{2\text{-}6}\left(\frac{350\ days}{year}\right)\times AF_{2\text{-}6}\left(\frac{0.2\ mg}{cm^2}\right)\times SA_{2\text{-}6}\left(\frac{2{,}373\ cm^2}{day}\right)\times 3}{BW_{2\text{-}6}\left(15\ kg\right)}+\\ \frac{ED_{6\text{-}16}\left(10\ years\right)\times EF_{6\text{-}16}\left(\frac{350\ days}{year}\right)\times AF_{6\text{-}16}\left(\frac{0.07\ mg}{cm^2}\right)\times SA_{6\text{-}16}\left(\frac{6{,}032\ cm^2}{day}\right)\times 3}{BW_{6\text{-}16}\left(80\ kg\right)}+\\ \frac{ED_{16\text{-}26}\left(10\ years\right)\times EF_{16\text{-}26}\left(\frac{350\ days}{year}\right)\times AF_{16\text{-}26}\left(\frac{0.07\ mg}{cm^2}\right)\times SA_{16\text{-}26}\left(\frac{6{,}032\ cm^2}{day}\right)\times 1}{BW_{16\text{-}26}\left(80\ kg\right)}\end{array}\right)$$

4.4.3 MMOA Calculation for Inhalation Exposure to Soil

The calculation of exposures for inhalation of soil particulates and vapors are provided below.

$$CDI_{res\text{-}soil\text{-}mu\text{-}inh}\left(\mu g/m^3\right)=\frac{\left(\begin{array}{l}\left(ED_{0\text{-}2}\left(2\text{ years}\right)\times EF_{0\text{-}2}\left(\frac{350\text{ days}}{\text{year}}\right)\times ET_{0\text{-}2}\left(\frac{24\text{ hours}}{\text{day}}\right)\times 10\right)+\\ \left(ED_{2\text{-}6}\left(4\text{ years}\right)\times EF_{2\text{-}6}\left(\frac{350\text{ days}}{\text{year}}\right)\times ET_{2\text{-}6}\left(\frac{24\text{ hours}}{\text{day}}\right)\times 3\right)+\\ \left(ED_{6\text{-}16}\left(10\text{ years}\right)\times EF_{6\text{-}16}\left(\frac{350\text{ days}}{\text{year}}\right)\times ET_{6\text{-}16}\left(\frac{24\text{ hours}}{\text{day}}\right)\times 3\right)+\\ \left(ED_{16\text{-}26}\left(10\text{ years}\right)\times EF_{16\text{-}26}\left(\frac{350\text{ days}}{\text{year}}\right)\times ET_{16\text{-}26}\left(\frac{24\text{ hours}}{\text{day}}\right)\times 1\right)\end{array}\right)}{AT_{res}\left(\frac{365\text{ days}}{\text{year}}\times LT\left(70\text{ years}\right)\right)\times\left(\frac{1\text{ mg}}{1000\ \mu g}\right)}\times C_{soil}\left(\frac{mg}{kg}\right)\times\left(\frac{1\text{ day}}{24\text{ hours}}\right)\times\left(\frac{1}{VF_s\left(\frac{m^3}{kg}\right)}+\frac{1}{PEF_w\left(\frac{m^3}{kg}\right)}\right)\times$$

4.4.4 MMOA Calculation for Trichloroethylene

The cancer risks from exposure to trichloroethylene were evaluated consistent with the process outlined in the IRIS chemical file.

4.5 Gastrointestinal Absorption Factors

Gastrointestinal Absorption Factor (GIABs) values are used to convert oral slope factors (administered dose) to dermal slope factors (administered dose) by factoring out the percentage eliminated in bodily waste. GIABs were applied consistent with the RAGS Part E Guidance regarding dermal assessment (USEPA, July 2004).

4.6 Subchronic Toxicity Values

Only a limited number of chemicals had subchronic toxicity values for inclusion in the non-cancer hazard assessment for the construction worker. Subchronic toxicity values were applied consistent with the RAGS Part A Guidance (USEPA, December 2001). Specifically, the May 2019 Subchronic Toxicity Supporting Table does not provide information for inorganic arsenic nor trichloroethylene and therefore are not assessed for the construction worker.

5 RISK CHARACTERIZATION

The final step in a Baseline HHRA combines exposure and toxicity information to provide a quantitative assessment of Site cancer risks and non-cancer hazards. Exposures are evaluated based on the potential risk for developing cancer and the non-cancer health hazards (Sections 3 and 4, respectively).

The calculated cancer risks and non-cancer hazards are provided based on sampling depths for the future resident and construction worker. A current assessment was not conducted since the area is currently vacant.

5.1 Calculated Cancer Risks and Non-cancer Health Hazards-Future Resident

5.1.1 Future Resident Exposures to Depths 0 to 2 ft bgs

Appendix C - Table 7.1 provides the cancer risks and non-cancer (child) hazards from exposure to soils under a future residential land use based on soils at depths of 0 to 2 ft bgs. The total cancer risk was 3.5×10^{-5} and the non-cancer HI was 1.1. The cancer risk is within the risk range established under the NCP and the non-cancer HI slightly exceeded the goal of protection of an HI = 1.

Appendix C - Table 7.1a provides the cancer risks and non-cancer (adult) hazards from exposure to soils under a future residential land use based on soils at depths of 0 to 2 ft bgs. The non-cancer HI for the future adult resident was less than the goal of protection of an HI = 1 for potential exposures at depths of 0 to 2 ft bgs.

Appendix C - Table 9.1 provides the calculated cancer risks across exposure pathways and the non-cancer health hazards across pathways with associated health effects for each chemical. The cancer assessment indicates the risks are within the risk range established under the NCP. The main chemicals exceeding the risk range were chromium VI (2.4×10^{-5}), inorganic arsenic (6×10^{-6}), and benzo(a)pyrene (3.5×10^{-6}). The total non-cancer HI was 1.1 which slightly exceeds the goal of protection of an HI = 1. Consistent with the Supplemental Chemical Mixtures Guidelines (USEPA, August 2000), the assessment also evaluated non-cancer hazards based on target organ associated with toxicity values and this HQ was less than 1. The highest HI for impacts was 0.4 for the nervous system from exposures to manganese. The next highest HI for impacts on the gastrointestinal (GI) tract was 0.3 from exposure to iron and chromium VI.

5.1.2 Future Resident Exposures to Depths of 0 ft bgs to the Water Table

Appendix C - Table 7.2 provides the cancer risks and non-cancer (child) hazards from exposure to soils under a future residential land use based on soils at depths of 0 ft bgs to the Water Table. The total cancer risk was 3.5×10^{-5} and the non-cancer HI was 1.1. The cancer risk is within the risk range established under the NCP and the non-cancer HI slightly exceeded the goal of protection of an HI = 1.

Appendix C - Table 7.2a provides the cancer risks and non-cancer (adult) hazards from exposure to soils under a future residential land use based on soils at depths of 0 ft bgs to the Water Table. The non-cancer HI for the future adult resident was less than the goal of protection of an HI = 1 for potential exposures at depths of 0 ft bgs to the Water Table.

Appendix C - Table 9.2 provides the calculated cancer risks across exposure pathways and the non-cancer health hazards across pathways with associated health effects for each chemical based on soils at depths of 0 ft bgs to the Water Table. The cancer assessment indicates the risks are within the risk range established under the NCP. The main chemicals driving the risk range were chromium VI (2.6×10^{-5}), inorganic arsenic (5.8×10^{-6}), and benzo(a)pyrene (2.5×10^{-6}). The total non-cancer HI was 1.1 which slightly exceeds the goal of protection of an HI = 1. Consistent with the Supplemental Chemical Mixtures Guidelines (USEPA, August 2000), the assessment also evaluated non-cancer risk based on target organ associated with toxicity values and this HQ was less than 1. The highest HI for impacts was 0.4 for the nervous system from exposures to manganese. The next highest HI for impacts on the GI tract was 0.3 from exposure to iron and chromium VI. The remaining HI target organs were below 0.1 mg/kg.

5.2 Calculated Cancer Risks and Non-cancer Health Hazards-Construction Worker

5.2.1 Future Construction Worker Exposures to Depths 0 to 2 ft bgs

Appendix C - Table 7.3 provides the cancer risks and non-cancer hazards from exposure to soils under future construction worker exposures based on soils at depths of 0 to 2 ft bgs. The total cancer risk was 4.3×10^{-8} and the non-cancer HI was 0.2. The cancer risk is below the risk range established under the NCP and the non-cancer HI is below the goal of protection of an HI = 1.

Appendix C - Table 9.3 provides the calculated cancer risks across exposure pathways and the non-cancer health hazards across pathways with associated health effects for each chemical. The Table also provides an analysis of the non-cancer hazards. The cancer assessment indicates the risks are within the risk range established under the NCP. Based on the results with the cancer risk below the risk range and the non-cancer HI below 1, further analysis of the results is not necessary.

5.2.2 Future Construction Worker Exposures-0 ft bgs to the Water Table

Appendix C - Table 7.4 provides the cancer risks and non-cancer hazards from exposure to soils under a future construction worker scenario based on soils at depths of 0 ft bgs to the Water Table. The total cancer risk was 4.2×10^{-8} and the non-cancer HI was 0.2. The cancer risk is below the risk range established under the NCP and the non-cancer HI is below the goal of protection of an HI = 1.

Appendix C - Table 9.4 provides the calculated cancer risks across exposure pathways and the non-cancer health hazards across pathways with associated health effects for each chemical. The Table also provides an analysis of the non-cancer hazards. The cancer assessment indicates the risks are within the risk range established under the NCP. Based on the results with the cancer

risk below the risk range and the non-cancer HI below 1, further analysis of the results is not necessary.

5.3 Uncertainty

The process of evaluating human health cancer risks and non-cancer health hazards involves multiple steps. As in any risk assessment, the estimates of potential health effects (cancer risks and non-cancer health hazards) have numerous associated uncertainties. The primary areas of uncertainty and limitations are qualitatively discussed here. The main areas of uncertainty in this Baseline HHRA include the environmental data used to conduct the risk assessment, the exposure parameter assumptions, the toxicological information used in the assessment, and the risk characterization when there is a mixture of chemicals present at a site. In general, the main sources of uncertainty include:

- Environmental chemistry sampling and analysis
- Environmental parameter measurement
- Fate and transport modeling
- Exposure parameter estimation
- Toxicological data

Uncertainty in environmental sampling arises in part from the potentially uneven distribution of chemicals in the media sampled. Consequently, there is significant uncertainty as to the actual levels present. Environmental chemistry-analysis error can stem from several sources including the errors inherent in the analytical methods and characteristics of the matrix being sampled.

Uncertainties in the exposure assessment are related to estimates of how often an individual would contact the COPC, the time period over which such exposures would occur, and in the models used to estimate the concentrations of the COPCs at the point of exposure. The Baseline HHRA assumes that concentrations of contaminants remain constant for the duration of exposure, which is most likely not the case.

Uncertainties in toxicological data occur in extrapolating both from animals to humans and from high to low doses of exposure, as well as from the difficulties in assessing the toxicity of a mixture of chemicals. These uncertainties are addressed by making exposure assumptions consistent with the RME concerning risk and exposure parameters throughout the assessment. As a result, the risk assessment provides upper-bound estimates of the risks to populations near the site, and is unlikely to underestimate actual risks related to the Site.

For the dermal exposure to soil pathway, there are also uncertainties, such as: a) not all chemicals have scientifically established dermal absorption values for soil and therefore may be left out of the quantitative assessment, b) sometimes soil to skin adherence factors do not match exactly with site conditions, and c) exposed skin surface area and exposure frequency may change seasonally, which may not be adequately accounted for in the exposure parameters used to represent the RME scenario.

Additional sources of uncertainty identified in this Baseline HHRA include the following:

- Chromium: The assumption that the concentration of chromium is 100% chromium VI may overestimate cancer risks and non-cancer hazards. In the environment, the potential exists that exposures may include concentrations of various species of chromium.
- Lack of toxicity information: Seventeen chemicals were not screened in the selection of COPCs based on a lack of toxicity information. This may result in a potential underestimate of cancer risks and non-cancer hazards.
- Screening Level Above Detection Limit: Five chemicals had detection limits above the screening levels that did not allow for the evaluation of potential risks. This may lead to an underestimate in risks.
- Subchronic Toxicity Information: Only a limited number of chemicals had subchronic toxicity values for inclusion in the non-cancer hazard assessment for the construction worker. As noted in Section 4.6 and Table 5.3, the May 2019 Subchronic Toxicity Supporting Table does not provide information for inorganic arsenic nor trichloroethylene and are therefore not assessed for the construction worker. Lack of subchronic toxicity values for COPCs may lead to an underestimate in the non-cancer health assessment.
- Bioavailability: Data on bioavailability of chemicals is limited to arsenic. USEPA's guidance (USEPA, December 2012) indicates: "… recent bioavailability studies conducted in animal models show that bioavailability of arsenic in soil is typically less than that of highly water soluble forms of arsenic (e.g., sodium arsenate dissolved in water). This suggests that bioavailability of arsenic in soil will typically be less than that of arsenic dissolved in drinking water (i.e., [relative bioavailability] RBA <100%)." This assessment used the default value of 60% that may over estimate risks based on the species of arsenic in soil.

6 SUMMARY AND CONCLUSIONS

The results of the risk assessment indicate that the risks to the receptors (future resident and construction worker) are within the risk range and below the goal of protection of a HI = 1 based on total non-cancer hazards or target organ non-cancer hazards.

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APPENDIX A
FIGURES

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Former Griffiss AFB Site Location Map

Figure 1

Human Health Risk Assessment
Site SS025: T-9 Storage Area
Former Griffiss Air Force Base, Rome, New York

DRAWN BY:	DATE:	SCALE:	PROJECT NO:
MRM	7/25/2017	As Shown	AFCGSA3.0012.00AA.2020.0003

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SS025 - T-9 Storage Area
Sample Locations

Figure 2

Human Health Risk Assessment
SS025: T-9 Storage Area
Former Griffiss Air Force Base, Rome, New York

DRAWN BY: MRM

DATE: 7/25/2017

SCALE: As Shown

PROJECT NO: AFCGSA3.0012.00AA.2020.0003

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APPENDIX B
DATA USEABILITY WORKSHEET

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DATA USEABILITY WORKSHEET
SS025 Griffiss AFB
Medium: Soil

Activity	Comment
Field Sampling	
Discuss sampling problems and field conditions that affect data useability.	No problems affected data useability.
Are samples representative of receptor exposure for this medium (e.g. sample depth, grab vs composite, filtered vs unfiltered, low flow, etc.)?	Yes. Soil samples are representative of receptor exposure for this medium.
Assess the effect of field QC results on data useability.	A trip blank detected the common laboratory contaminants acetone and methylene chloride of which acetone was qualified "UB" in some samples since it was present at less than 10x the blank concentration. Fluoranthene, phenanthrene, and pyrene were detected in an ambient blank but all sample results were much higher than the blank concentrations (>5x) and required no qualification.
Summarize the effect of field sampling issues on the risk assessment, if applicable.	There are no field sampling issues that should affect the risk assessment.
Analytical Techniques	
Were the analytical methods appropriate for quantitative risk assessment?	Yes. Samples were analyzed for organic compounds according to the Contract Laboratory Program (CLP) Statement of Work (SOW) for Organic Superfund Methods Multi-Media, Multi-Concentration, SOM02.4. The exception was for VOCs; TestAmerica Laboratory holds both DoD ELAP and NY NELAP certifications, along with reporting lower reporting limits for all analytes, for Method 8260B. Therefore, this method was utilized instead of Method 8260C. Inorganic soil samples were analyzed according to CLP SOW for Inorganic Superfund Methods Multi-Media, Multi-Concertation, ISM02.4. Additionally, samples were analyzed for organic and inorganic compounds in accordance with DoD ELAP certification and/or New York NELAP certification.
Were detection limits adequate?	Yes. The detection limits were less than the screening criteria with the exception of thallium. Thallium was non-detect in 29 samples. Three samples reported detections.
Summarize the effect of analytical technique issues on the risk assessment, if applicable.	There are no analytical technique issues that should affect the risk assessment.
Data Quality Objectives	
Precision - How were duplicates handled?	Relative percent differences (RPDs) were calculated for the duplicate pairs. When the RPDs were greater than the project defined RPD of 50%, the analyte was qualified as estimated, "J", in both samples.
Accuracy - How were split samples handled?	Split samples were not collected.
Representativeness - Indicate any problems associated with data representativeness (e.g., trip blank or rinsate blank contamination, chain of custody problems, etc.).	Analytes qualified with a UB due to blank contamination were considered non-detects during the risk assessment.
Completeness - Indicate any problems associated	No problems were associated with data completeness.

DATA USEABILITY WORKSHEET
SS025 Griffiss AFB
Medium: Soil

Activity	Comment
with data completeness (e.g., incorrect sample analysis, incomplete sample records, problems with field procedures, etc.).	
Comparability - Indicate any problems associated with data comparability.	No problems were associated with data comparability.
Were the DQOs specified in the QAPP satisfied?	Yes.
Summarize the effect of DQO issues on the risk assessment, if applicable.	There are no DQO issues to affect risk assessment.
Data Validation and Interpretation	
What are the data validation requirements?	For organic samples, validation checks included the following items: holding times, instrument performance checks, initial and continuing calibrations, blanks, laboratory control samples, matrix spike/matrix spike duplicates, internal standards, field duplicates, and overall assessment of data. For inorganic samples, validation checks included holding times, calibration, blanks, interference checks, laboratory control samples, lab duplicate samples, matrix spike samples, ICP serial dilution, field duplicates, and perform an overall assessment of the data.
What method or guidance was used to validate the data?	USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, August 2014; USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review, August 2014; and the Uniform Federal Policy-Quality Assurance Project Plan [UFP-QAPP], Supplemental Investigation at Sites SS017: Lot 69, DP022: Building 222, and SS025: T-9 Storage Area, Former Griffiss Air Force Base, Rome, New York (February 2017).
Was the data validation method consistent with guidance? Discuss any discrepancies.	Yes. The data validation method was consistent with regional guidance.
Were all data qualifiers defined? Discuss those which were not.	Yes. All data qualifiers were defined.
Which qualifiers represent useable data?	UB, J, and UJ
Which qualifiers represent unusable data?	R; but no data were rejected.
How are tentatively identified compounds handled?	No TICS were reported.
Summarize the effect of data validation and interpretation issues on the risk assessment, if applicable.	All data, both qualified and unqualified, were used in the risk assessment.
Additional notes:	None.

APPENDIX C
RAGS PART D TABLES

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RAGS Part D - Table 1 Conceptual Site Model
Selection of Exposure Pathways
Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Future Residential Land Use	Soil *	Ambient air vapors	Breathing zone based on modeling	Resident	Child (for non-cancer), and Age-adjusted for Cancer Assessment	Outdoor inhalation of vapors from soil	Quantitative	The assessment evaluated future residential use of the property. The assessment considered future residents are exposed to soils at depths of 0 ft bgs to 2 ft and depths of 0 ft bgs to the Water Table. Potential soil exposures include ingestion, dermal contact, and inhalation of soil particulates and vapors from soil. Under a future scenario, soil exposures consider the potential for soils at both depths to be brought to the surface where exposures may occur without appropriate management. Exposure of future residents to soils is considered a potentially complete exposure pathway. This exposure scenario will be quantitatively evaluated in the risk assessment for the adult/child adjusted for cancer and the young child separately for non-cancer as the child is the most sensitive receptor.
		Ambient particulates				Outdoor inhalation of particulates from soil	Quantitative	
		Soil	Soil from 0 to 2 feet below ground surface (ft bgs) and 0 ft bgs to the Water Table			Dermal contact with soil	Quantitative	
						Incidental ingestion of soil at both depths	Quantitative	
		Ambient air vapors	Breathing zone based on modeling	Construction worker	Adult	Outdoor inhalation of vapors from soil	Quantitative	Under a future scenario, if the property is developed for residential land use, the potential exists that a construction worker may be exposed to contaminated soils from 0 to 2 ft bgs and/or 0 ft bgs to the Water Table. The assessment will quantitatively evaluate potential soil exposures through direct contact (ingestion and dermal contact) and inhalation of vapors and particulates by a construction worker.
		Ambient particulates				Outdoor inhalation of particulates from soil	Quantitative	
		Soil	Soil from 0 ft bgs to 2 ft bgs and 0 ft bgs to the Water Table			Dermal contact with soil	Quantitative	
						Incidental ingestion of soil at both depths	Quantitative	

* Soil concentrations were used to calculate ambient air vapors and ambient particulates depending on information for the individual chemicals. The calculations include particulate emission factors and volatilization factors for individual chemicals from the Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites (USEPA, 2002a).

RAGS Part D Table 2 - Chemicals of Potential Concern

Occurrence, Distribution, and Selection of Chemicals of Potential Concern (0 to Water Table)

Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Medium: Soil (0 ft bgs to the Water Table - All Data)
Exposure Medium: Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency (%)	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (N/C) (4)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
Soil and breathing zone (0 ft. bgs to Water Table)	630-20-6	1,1,1,2-Tetrachloroethane	< 0.0012	< 0.08	mg/kg		0	0.0012-0.08	< 0.08		2.0 C			N	ND, BSL
	71-55-6	1,1,1-Trichloroethane	< 0.0012	< 0.04	mg/kg		0	0.0012-0.04	< 0.04		810 N			N	ND, BSL
	79-34-5	1,1,2,2-Tetrachloroethane	< 0.0012	< 0.08	mg/kg		0	0.0012-0.08	< 0.08		0.6 C			N	ND, BSL
	79-00-5	1,1,2-Trichloroethane	< 0.0025	< 0.08	mg/kg		0	0.0025-0.08	< 0.08		0.15 N			N	ND, BSL
	75-34-3	1,1-Dichloroethane	< 0.00062	< 0.16	mg/kg		0	0.00062-0.16	< 0.16		3.6 C			N	ND, BSL
	75-35-4	1,1-Dichloroethene	< 0.0012	< 0.16	mg/kg		0	0.0012-0.16	< 0.16		23 N			N	ND, BSL
	563-58-6	1,1-Dichloropropene	< 0.0012	< 0.16	mg/kg		0	0.0012-0.16	< 0.16		NA			N	NSL
	87-61-6	1,2,3-Trichlorobenzene	< 0.0012	< 0.06	mg/kg		0	0.0012-0.08	< 0.06		6.3 NC			N	ND, BSL
	96-18-4	1,2,3-Trichloropropane	<0.0025	< 0.16	mg/kg		0	0.0025-0.16	< 0.16		0.0051 C			N	ND, ASL
	120-82-1	1,2,4-Trichlorobenzene	< 0.0012	< 0.16	mg/kg		0	0.0012-0.16	< 0.16		5.8 N			N	ND, BSL
	95-63-6	1,2,4-Trimethylbenzene	< 0.0012	< 0.08	mg/kg		0	0.0012-0.08	< 0.08		30 N			N	ND, BSL
	96-12-8	1,2-Dibromo-3-Chloropropane	< 0.0012	< 0.032	mg/kg		0	0.0012-0.32	< 0.032		0.0053 C			N	ND, ASL
	106-93-4	1,2-Dibromoethane	< 0.0012	< 0.08	mg/kg		0	0.0012-0.08	< 0.08		0.036 C			N	ND, ASL
	95-50-1	1,2-Dichlorobenzene	< 0.0012	< 0.32	mg/kg		0	0.0012-0.32	< 0.32		180 N			N	ND, BSL
	107-06-2	1,2-Dichloroethane	< 0.0012	< 0.08	mg/kg		0	0.0012-0.08	< 0.08		0.46 C			N	ND, BSL
	540-59-0	1,2-Dichloroethene, Total	< 0.0012	< 0.08	mg/kg		0	0.0012-0.08	< 0.08		16 N			N	ND, BSL
	78-87-5	1,2-Dichloropropane	< 0.0012	<0.16	mg/kg		0	0.0012-0.16	<0.16		1.6 N			N	ND, BSL
	108-67-8	1,3,5-Trimethylbenzene	< 0.0012	< 0.08	mg/kg		0	0.0012-0.08	< 0.08		27 N			N	ND, BSL
	541-73-1	1,3-Dichlorobenzene	< 0.0012	<0.16	mg/kg		0	0.0012-0.16	<0.16		NA			N	NSL
	142-28-9	1,3-Dichloropropane	< 0.0012	<0.08	mg/kg		0	0.0012-0.08	<0.08		160 NC			N	ND, BSL
	106-46-7	1,4-Dichlorobenzene	< 0.0012	<0.08	mg/kg		0	0.0012-0.08	<0.08		2.6 C			N	ND, BSL
	594-20-7	2,2-Dichloropropane	< 0.0012	<0.08	mg/kg		0	0.0012-0.08	<0.08		NA			N	NSL
	78-93-3	2-Butanone (MEK)	<0.005	<0.64	mg/kg		0	0.005-0.64	<0.64		2,700 N			N	ND, BSL
	95-49-8	2-Chlorotoluene	< 0.0012	<0.08	mg/kg		0	0.0012-0.08	<0.08		160 N			N	ND, BSL
	591-78-6	2-Hexanone	<0.0099	<0.64	mg/kg		0	0.0099-0.64	<0.64		20 N			N	ND, BSL
	106-43-4	4-Chlorotoluene	< 0.0012	<0.08	mg/kg		0	0.0012-0.08	<0.08		160 N			N	ND, BSL
	99-87-6	4-Isopropyltoluene	0.0016(J)	0.0016(J)	mg/kg	SS08	3.4	0.0012-0.08	0.0016		NA			N	NSL
	108-10-1	4-Methyl-2-pentanone (MIBK)	<0.0099	<0.64	mg/kg		0	0.0099-0.64	<0.64		3,300 N			N	ND, BSL
	67-64-1	Acetone	<0.0076	<1.3	mg/kg		0	0.0076-1.3	<1.3		6,100 N			N	ND, BSL
	71-43-2	Benzene	< 0.0012	<0.16	mg/kg		0	0.0012-0.16	<0.16		1.2 C			Y	KHC
	108-86-1	Bromobenzene	< 0.0012	<0.04	mg/kg		0	0.0012-0.04	<0.04		29 N			N	ND, BSL
	74-97-5	Bromochloromethane	<0.00062	<0.16	mg/kg		0	0.00062-0.16	<0.16		15 N			N	ND, BSL
	75-27-4	Bromodichloromethane	<0.00062	<0.08	mg/kg		0	0.00062-0.08	<0.08		0.29 N			N	ND, BSL

RAGS Part D Table 2 - Chemicals of Potential Concern

Occurrence, Distribution, and Selection of Chemicals of Potential Concern (0 to Water Table)

Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Medium: Soil (0 ft bgs to the Water Table - All Data)
Exposure Medium: Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency (%)	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (N/C) (4)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
	75-25-2	Bromoform	<0.00062	<0.16	mg/kg		0	0.00062-0.16	<0.16		19 N			N	ND, BSL
	74-83-9	Bromomethane	< 0.0012	<0.16	mg/kg		0	0.0012-0.16	<0.16		0.68 N			N	ND, BSL
	75-15-0	Carbon disulfide	< 0.0012	<0.16	mg/kg		0	0.0012-0.16	<0.16		77 N			N	ND, BSL
	56-23-5	Carbon tetrachloride	< 0.0012	<0.04	mg/kg		0	0.0012-0.04	<0.04		0.65 C			N	ND, BSL
	108-90-7	Chlorobenzene	< 0.0012	<0.08	mg/kg		0	0.0012-0.08	<0.08		28 N			N	ND, BSL
	75-00-3	Chloroethane	<0.0025	<0.16	mg/kg		0	0.0025-0.16	<0.16		1,400 N			N	ND, BSL
	67-66-3	Chloroform	<0.00062	<0.16	mg/kg		0	0.00062-0.16	<0.16		0.32 C			N	ND, BSL
	74-87-3	Chloromethane	< 0.0012	<0.16	mg/kg		0	0.0012-0.16	<0.16		11 N			N	ND, BSL
	156-59-2	cis-1,2-Dichloroethene	< 0.0012	<0.08	mg/kg		0	0.0012-0.08	<0.08		16 N			N	ND, BSL
	10061-01-5	cis-1,3-Dichloropropene	<0.0025	<0.08	mg/kg		0	0.0025-0.08	<0.08		NA			N	NSL
	124-48-1	Dibromochloromethane	< 0.0012	<0.08	mg/kg		0	0.0012-0.08	<0.08		8.3 C			N	ND, BSL
	74-95-3	Dibromomethane	<0.0025	<0.08	mg/kg		0	0.0025-0.08	<0.08		2.4 N			N	ND, BSL
	75-71-8	Dichlorodifluoromethane	< 0.0012	<0.08	mg/kg		0	0.0012-0.08	<0.08		8.7 N			N	ND, BSL
	100-41-4	Ethylbenzene	< 0.0012	<0.08	mg/kg		0	0.0012-0.08	<0.08		5.8 C			N	ND, BSL
	87-68-3	Hexachlorobutadiene	< 0.0012	<0.16	mg/kg		0	0.0012-0.16	<0.16		1.2 C			N	ND, BSL
	108-20-3	Isopropyl ether	<0.0062	<0.8	mg/kg		0	0.0062-0.8	<0.8		NA			N	NSL
Soil and breathing zone (0 ft. bgs to Water Table)	98-82-8	Isopropylbenzene	<0.0062	<0.08	mg/kg		0	0.0012-0.08	<0.08		NA			N	NSL
	74-88-4	Methyl iodide	0.022(J)	0.022(J)	mg/kg	SB10	3.4	0.0012-0.0017	0.022		NA			N	NSL
	1634-04-4	Methyl tert-butyl ether	<0.00062	<0.16	mg/kg		0	0.00062-0.16	<0.16		47 C			N	ND, BSL
	75-09-2	Methylene Chloride	<0.0025	<0.76	mg/kg		0	0.0025-0.76	<0.76		35 N			N	ND, BSL
	104-51-8	n-Butylbenzene	< 0.0012	<0.08	mg/kg		0	0.0012-0.08	<0.08		5.8 C			N	ND, BSL
	103-65-1	N-Propylbenzene	< 0.0012	<0.16	mg/kg		0	0.0012-0.16	<0.16		380 N			N	ND, BSL
	135-98-8	sec-Butylbenzene	< 0.0012	<0.08	mg/kg		0	0.0012-0.08	<0.08		780 N			N	ND, BSL
	100-42-5	Styrene	< 0.0012	<0.08	mg/kg		0	0.0012-0.08	<0.08		600 N			N	ND, BSL
	98-06-6	tert-Butylbenzene	< 0.0012	<0.08	mg/kg		0	0.0012-0.08	<0.08		780 N			N	ND, BSL
	127-18-4	Tetrachloroethene	< 0.0012	<0.08	mg/kg		0	0.0012-0.08	<0.08		8.1 N			N	ND, BSL
	108-88-3	Toluene	< 0.0012	<0.08	mg/kg		0	0.0012-0.08	<0.08		490 N			N	ND, BSL
	156-60-5	trans-1,2-Dichloroethene	<0.00062	<0.16	mg/kg		0	0.00062-0.16	<0.16		160 N			N	ND, BSL
	10061-02-6	trans-1,3-Dichloropropene	< 0.0012	<0.16	mg/kg		0	0.0012-0.16	<0.16		NA			N	NSL
	79-01-6	Trichloroethene	<0.00062	<0.08	mg/kg		0	0.00062-0.08	<0.08		0.41 N			Y	KHC
	75-69-4	Trichlorofluoromethane	0.0015(J)	0.0015(J)	mg/kg	SS02	3.4	0.0025-0.16	0.0015		2,300 N			N	MCN
	108-05-4	Vinyl acetate	<0.0025	<0.16	mg/kg		0	0.0025-0.16	<0.16		91 N			N	ND, BSL
	75-01-4	Vinyl chloride	<0.0025	<0.08	mg/kg		0	0.0025-0.08	<0.08		0.059 C			N	ND, ASL

RAGS Part D Table 2 - Chemicals of Potential Concern

Occurrence, Distribution, and Selection of Chemicals of Potential Concern (0 to Water Table)

Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Medium: Soil (0 ft bgs to the Water Table - All Data)
Exposure Medium: Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency (%)	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (N/C) (4)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
	1330-20-7	Xylenes (total)	0.0035(J)	0.0039(J)	mg/kg	SS03	6.9	0.00078-0.08	0.0039		58 N			N	MCN
Soil breathing zone (0 Ft. bgs to Water Table)	90-12-0	1-Methylnaphthalene	0.00038 (J)	0.075 (J)	mg/kg	SS05	52	0.0005-0.00066	0.075		18 C			N	MCN
	91-57-6	2-Methylnaphthalene	0.00048 (J)	0.093 (J)	mg/kg	SS05	55	0.00067-0.00081	0.093		24 N			N	MCN
	83-32-9	Acenaphthene	0.00043 (J)	0.355 (J)	mg/kg	SB01	52	0.00027-0.00036	0.355		360 N			N	MCN
	208-96-8	Acenaphthylene	0.00028 (J)	0.1805 (J)	mg/kg	SB01	76	0.00068-0.0008	0.1805		NA			N	NSL
	120-12-7	Anthracene	0.00084 (J)	0.655 (J)	mg/kg	SB01	62	0.0025-0.003	0.655		1,800 N			N	MCN
	56-55-3	Benzo[a]anthracene	0.0013(J)	1.4 (J)	mg/kg	SB01	66	0.0025-0.003	1.4		1.1 C			Y	MCE
	50-32-8	Benzo[a]pyrene	0.00085 (J)	1.22 (J)	mg/kg	SB01	69	0.0025-0.003	1.22		0.11 C			Y	MCE
	205-99-2	Benzo[b]fluoranthene	0.0017 (J)	1.71 (J)	mg/kg	SB01	69	0.0025-0.003	1.71		1.1 C			Y	MCE
	191-24-2	Benzo[g,h,i]perylene	0.0017 (J)	0.67 (J)	mg/kg	SB01	66	0.0025-0.003	0.67		NA			N	NSL
	207-08-9	Benzo[k]fluoranthene	0.0016 (J)	0.66 (J)	mg/kg	SB01	62	0.0025-0.003	0.66		11 C			N	MCN
	218-01-9	Chrysene	0.0011 (J)	1.64 (J)	mg/kg	SB01	72	0.0025-0.003	1.64		110 C			N	MCN
	53-70-3	Dibenz(a,h)anthracene	0.0015 (J)	0.212 (J)	mg/kg	SB01	45	0.0025-0.003	0.212		0.11 C			Y	MCE
	206-44-0	Fluoranthene	0.0013 (J)	3.3 (J)	mg/kg	SB01	76	0.0025-0.003	3.3		240 N			N	MCN
	86-73-7	Fluorene	0.00048 (J)	0.6	mg/kg	SS05	66	0.00067-0.00081	0.6		240 N			N	MCN
	193-39-5	Indeno[1,2,3-cd]pyrene	0.0011 (J)	0.61 (J)	mg/kg	SB01	62	0.0025-0.003	0.61		1.1 C			N	MCN
	91-20-3	Naphthalene	0.00034 (J)	0.246 (J)	mg/kg	SB01	48	0.00067-0.00089	0.246		3.8 C			N	MCN
	85-01-8	Phenanthrene	0.0019 (J)	3	mg/kg	SS05	66	0.0025-0.003	3		NA			N	NSL
	129-00-0	Pyrene	0.0013 (J)	2.85 (J)	mg/kg	SB01	69	0.0025-0.003	2.85		180 N			N	MCN
	72-54-8	4,4'-DDD	<0.0017	<0.0022	mg/kg		0	0.0017-0.0022	<0.0022		0.19 N			N	ND, BSL
	53-70-3	4,4'-DDE	0.00036 (J)	0.00865 (J)	mg/kg	SB01	31	0.00068-0.00088	0.00865		2 C			N	MCN
	50-29-3	4,4'-DDT	0.00068 (J)	0.0283 (J)	mg/kg	SB01	24	0.0017-0.019	0.0283		1.9 C			N	MCN
	309-00-2	Aldrin	<0.0068	<0.0088	mg/kg		0	0.00068-0.00088	<0.0088		0.039 C			N	ND, BSL
	319-84-6	alpha-BHC	<0.0068	<0.00088	mg/kg		0	0.00068-0.00088	<0.00088		0.086 C			N	ND, BSL
	5103-71-9	alpha-Chlordane	0.0049 (J)	0.0049 (J)	mg/kg	SB09	3.4	0.00068-0.00088	0.0049		1.7 C			N	ND, BSL
	319-85-7	beta-BHC	<0.0017	<0.0022	mg/kg		0	0.0017-0.0022	<0.0022		3 C			N	ND, BSL
	319-86-8	delta-BHC	<0.001	<0.0013	mg/kg		0	0.001-0.0013	<0.0013		NA			N	NSL
	60-57-1	Dieldrin	0.002	0.0029	mg/kg	SB09	10	0.00068-0.00088	0.0029		0.034 C			N	MCN
	959-98-8	Endosulfan I	0.00055 (J)	0.00055 (J)	mg/kg	SS03	3.4	0.00068-0.0008	0.00055		47 N			N	ND, BSL
	33213-65-9	Endosulfan II	0.0003525 (J)	0.0003525 (J)	mg/kg	SB01	3.4	0.00068-0.00088	0.0003525		47 N			N	ND, BSL
	1031-07-8	Endosulfan sulfate	<0.00068	<0.00088	mg/kg		0	0.00068-0.00088	<0.00088		38 N			N	ND, BSL
	72-20-8	Endrin	<0.00068	<0.00088	mg/kg		0	0.00068-0.00088	<0.00088		1.9 N			N	ND, BSL
	7421-93-4	Endrin aldehyde	<0.00068	<0.00088	mg/kg		0	0.00068-0.00088	<0.00088		NA			N	NSL

RAGS Part D Table 2 - Chemicals of Potential Concern

Occurrence, Distribution, and Selection of Chemicals of Potential Concern (0 to Water Table)

Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Medium: Soil (0 ft bgs to the Water Table - All Data)
Exposure Medium: Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency (%)	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (N/C) (4)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
	58-89-9	gamma-BHC (Lindane)	<0.001	<0.0013	mg/kg		0	0.001-0.0013	<0.0013		0.57 C			N	ND, BSL
	5103-74-2	gamma-Chlordane	0.0031 (J)	0.0031 (J)	mg/kg	SB09	3.4	0.00068-0.00088	0.0031		1.7 C			N	ND, BSL
	76-44-8	Heptachlor	< 0.00068	<0.00088	mg/kg		0	0.00068-0.00088	<0.00088		0.13 C			N	ND, BSL
	1024-57-3	Heptachlor epoxide	<0.001	<0.011	mg/kg		0	0.001-0.011	<0.011		0.07 C			N	ND, BSL
	72-43-5	Methoxychlor	0.001225 (J)	0.001225 (J)	mg/kg	SB01	3.4	0.001-0.0013	0.001225 (J)		32 N			N	MCN
	8001-35-2	Toxaphene	<0.033	<0.043	mg/kg		0	0.033-0.043	<0.043		0.49 C			N	ND, BSL
Soil breathing zone (0 Ft. bgs to Water Table)	12674-11-2	Arochlor 1016	<0.015	<0.02	mg/kg		0	0.015-0.02	<0.02		0.4 N			N	ND, BSL
	11104-28-2	Arochlor 1221	<0.017	<0.022	mg/kg		0	0.017-0.022	<0.022		0.2 C			N	ND, BSL
	11141-16-5	Arochlor 1232	<0.015	<0.02	mg/kg		0	0.015-0.02	<0.02		0.17 C			N	ND, BSL
	53469-21-9	Arochlor 1242	<0.033	<0.043	mg/kg		0	0.033-0.043	<0.043		0.23 C			N	ND, BSL
	12672-29-6	Arochlor 1248	<0.02	<0.026	mg/kg		0	0.02-0.026	<0.026		0.23 C			N	ND, BSL
	11097-69-1	Arochlor 1254	<0.017	<0.022	mg/kg		0	0.017-0.022	<0.022		0.23 C			N	ND, BSL
	11096-82-5	Arochlor 1260	0.0038 (J)	0.095	mg/kg	SS09	24	0.0078-0.01	0.095		0.24 C			N	MCN
	7429-90-5	Aluminum	2,500 (J)	15,000 (J)	mg/kg	SB09	100		15,000		7,700 N			Y	MCE
	7440-36-0	Antimony	<1.2	<6.8	mg/kg		0	1.2-6.8	<6.8		3.1 N			N	ND, ASL
	7440-38-2	Arsenic	2.2 (J)	6.9	mg/kg	SB05	69	1.4-5.1	6.9		0.68 C			Y	MCE
	7440-39-3	Barium	8.9 (J)	51	mg/kg	SB05	100		51		1,500 N			N	MCN
	7440-41-7	Beryllium	0.11 (J)	0.62 (J)	mg/kg	SB09	100		0.62		16 N			N	MCN
	7440-43-9	Cadmium	0.045 (J)	0.26 (J)	mg/kg	SB05	86	0.13-0.18	0.26		7.1 N			N	MCN
	7440-70-2	Calcium	890 (J)	210,000	mg/kg	SS09	100		210,000		NA			N	EN
	16065-83-1	Chromium (III)	3.25 (J)	15 (J)	mg/kg	SS09	86	2.9-4	15		12,000 N			N	MCN
	18540-29-9	Chromium (VI)	3.25 (J)	15 (J)	mg/kg	SS09	86	2.9-4	15		0.3 C			Y	MCE
	7440-48-4	Cobalt	2	9.3	mg/kg	SB05	100		9.3		2.3 N			Y	MCE
	7440-50-8	Copper	6.3 (J)	52	mg/kg	SB05	100		52		310 N			N	MCN
	7439-89-6	Iron	5,700 (J)	27,000 (J)	mg/kg	SB05	100		27,000		5,500 N			Y	MCE
	7439-92-1	Lead	0.98 (J)	19 (J)	mg/kg	SB09	79	1.3-7.5	19		200			N	MCN
	7439-95-4	Magnesium	1,500	5,100	mg/kg	SS09	100		5,100		NA			N	EN
	7439-96-5	Manganese	200	1,200	mg/kg	SS03	100		1,200		180 N			Y	MCE
	7439-97-6	Mercury	0.0064 (J)	0.079	mg/kg	SB09	62	0.014-0.019	0.079		1.1 N			N	MCN
	7440-02-0	Nickel	4.2 (J)	17	mg/kg	SB05	100		17		150 N			N	MCN
	7440-09-27	Potassium	525	1,400	mg/kg	SB09	86	480-850	1,400		NA			N	EN
	7782-49-2	Selenium	0.81 (J)	1.21 (J)	mg/kg	SS06	10	2.4-14	1.21		39 N			N	MCN
	7440-22-4	Silver	<0.47	<0.7	mg/kg		0	0.47-0.7	<0.7		39 N			N	ND. BSL

RAGS Part D Table 2 - Chemicals of Potential Concern

Occurrence, Distribution, and Selection of Chemicals of Potential Concern (0 to Water Table)

Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Medium: Soil (0 ft bgs to the Water Table - All Data)
Exposure Medium: Soil

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier) (1)	Maximum Concentration (Qualifier) (1)	Units	Location of Maximum Concentration	Detection Frequency (%)	Range of Detection Limits	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (N/C) (4)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (5)
	7440-23-5	Sodium	59 (J)	110 (J)	mg/kg	SS09	17	68-230	110		NA			N	EN
	7440-28-0	Thallium	0.64 (J)	0.92 (J)	mg/kg	SB09	10	2-11	0.92		0.078* N			N	NSL
	7440-62-2	Vanadium	5.7 (J)	27 (J)	mg/kg	SB09	97	5.6-5.6	27		39 N			N	MCN
	7440-66-6	Zinc	12	67	mg/kg	SB09	100		67		2,300 N			N	MCN

Footnote Instructions:

(1) J: Estimated value that is below reporting limit and above method detection limit.

(2) Maximum detected concentration.

(3) This information is not included in the risk assessment. Background is addressed in the feasibility study (FS).

(4) Screening toxicity values, developed based on a target risk (TR) of 1×10^{-6} and a hazard quotient (HQ) of 0.1, were obtained from EPA regional screening level (RSL) tables (USEPA, May 2019).

(5) Define the codes used for the "Rationale for Selection or Deletion". C: Carcinogenic N: Non-carcinogenic NA: Not Applicable

EN: Essential nutrient. NSL: Screening level not available. MCN: Maximum detected concentration below screening level.

ND: Chemical not detected. MCE: Maximum detected concentration exceeded screening level. KHC: Known Human Carcinogen

ASL: Detected concentration above screening level. ND, ASL: Not Detected but maximum concentration greater than screening level. BSL: Below Screening level

*There is uncertainty associated with the toxicity value used to calculate the screening level, therefore this is not a COPC.

Table 3.1 - RAGS Part D Tables (Calculation of Exposure Point Concentrations)

Exposure Point Concentration Summary for Future Resident (Soil depth 0 to 2 ft bgs)

Reasonable Maximum Exposure

Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil (depth 0 to 2 feet bgs)

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution) (1)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic (2)	Rationale
Soil from 0 to 2 ft bgs	Benzene	mg/kg			0.16	0.16	mg/kg	Maximum	Maximum concentration
	Benzo[a]anthracene	mg/kg	0.13	0.471 (NP)	1.4 (J)	0.471	mg/kg	95% UCL - Non Parametric	ProUCL Recommended statistic
	Benzo[a]pyrene	mg/kg	0.12	0.405 (NP)	1.22 (J)	0.405	mg/kg	95% UCL - Non Parametric	ProUCL Recommended statistic
	Benzo[b]fluoranthene	mg/kg	0.16	0.559 (NP)	1.71 (J)	0.559	mg/kg	95% UCL - Non Parametric	ProUCL Recommended statistic
	Dibenz(a,h)anthracene	mg/kg	0.02	0.0701 (NP)	0.212 (J)	0.0701	mg/kg	95% UCL - Non Parametric	ProUCL Recommended statistic
	Aluminum	mg/kg	5,780	6,736 (N)	11,000	6,736	mg/kg	95% UCL - Normal Data	ProUCL Recommended statistic
	Arsenic	mg/kg	3.29	4.043 (NP)	6.2 (J)	4.043	mg/kg	95% UCL - Non Parametric	ProUCL Recommended statistic
	Chromium (VI)	mg/kg	6.12	7.28 (NP)	12	7.28	mg/kg	95% UCL - Non Parametric	ProUCL Recommended statistic
	Cobalt	mg/kg	4.09	4.782 (N)	9.3	4.782	mg/kg	95% UCL - Normal Data	ProUCL Recommended statistic
	Iron	mg/kg	11,280	12,941 (N)	21,000 (J)	12,941	mg/kg	95% UCL - Normal Data	ProUCL Recommended statistic
	Manganese	mg/kg	524	676.1 (T)	1,200	676.1	mg/kg	95% UCL - Log transformed data	ProUCL Recommended statistic
	Trichlorethylene	mg/kg			0.08	0.08	mg/kg	Maximum	Maximum concentration

Footnote Instructions:

Average of duplicate samples was used in calculating the arithmetic mean, 95% UCL, and maximum concentrations.

J: Estimated value

mg/kg - milligrams/kilogram

UCL = Upper Confidence Limit

(1) Definition of codes describing the type of distribution for the "95% UCL" term.

N: Normal

NP: Non parametric

T: Transformed (lognormal)

(2) Define the codes used for the "EPC Statistic".

95% UCL - N: 95% UCL of normal data

95% UCL - NP: Mean of nonparametric data

95% UCL - T: 95% UCL of log-transformed data

Appendix 1 - Table 3.2

Physical Chemical Properties for Chemicals of Potential Concern

Site SS-025, Former Griffiss Air Force Base, Rome, New York

COPC	CAS No.	Dimensionless Henry's Law Constant (H`) (unitless)	Dimensional Henry's Law Constant (H) (atm-m^3/mole)	Vapor Pressure (VP) mm Hg	Diffusivity in Air (D_{ia}) (cm^2/s)	Diffusivity in Water D_{iw} (cm^2/s)	Soil Water Partition Coefficient (K_d) (L/kg)	Organic Carbon Adsorption Coefficient (K_{oc}) (L/kg)	Is COPC Volatile?
Polycyclic Aromatic Hydrocarbons (PAHs)									
Benz[a]anthracene	56-55-3	4.9E-04	1.2E-05	2.1E-07	2.6E-02	6.7E-06	NA	1.8E+05	**Yes**
Benzo[a]pyrene	50-32-8	1.9E-05	4.6E-07	5.5E-09	4.8E-02	5.6E-06	NA	5.9E+05	No
Benzo[b]fluoranthene	205-99-2	2.7E-05	6.6E-07	5.0E-07	4.8E-02	5.6E-06	NA	6.0E+05	No
Dibenz[a,h]anthracene	53-70-3	5.8E-06	1.4E-07	9.6E-10	4.5E-02	5.2E-06	NA	1.9E+06	No
Metals									
Aluminum	7429-90-5	NA	NA	NA	NA	NA	1.5E+03	NA	No
Arsenic, Inorganic	7440-38-2	NA	NA	NA	NA	NA	2.9E+01	NA	No
Chromium (VI)	18540-29-9	NA	NA	NA	NA	NA	1.9E+01	NA	No
Cobalt	7440-48-4	NA	NA	NA	NA	NA	4.5E+01	NA	No
Iron	7439-89-6	NA	NA	NA	NA	NA	2.5E+01	NA	No
Manganese (Non-diet)	7439-96-5	NA	NA	NA	NA	NA	6.5E+01	NA	No

Notes:

NA: Not available. COPC: Chemical of Potential Concern.

Source: USEPA, May 2019. Regional Screening Level (RSL) Chemical-specific Parameters Supporting Table.

Per USEPA, a chemical is considered volatile if its dimensional Henry's Law Constant is greater than or equal to 1×10^{-5} atm-m^3/mole or vapor pressure greater than or equal to 1 mm Hg.

Table 3.2 - RAGS Part D Table (Calculation of Exposure Point Concentration)

Exposure Point Concentration (Soil Depth of 0 ft bgs to Water Table)

Reasonable Maximum Exposure

Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil (0 ft bgs to Water Table)

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution) (1)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic (2)	Rationale
Soil from 0 ft bgs to water table	Benzene	mg/kg			0.16	0.16	mg/kg	Maximum	Maximum concentration
	Benzo[a]anthracene	mg/kg	0.10	0.331 (NP)	1.4 (J)	0.331	mg/kg	95% UCL - Non-Parametric	ProUCL Recommended statistic
	Benzo[a]pyrene	mg/kg	0.08	0.285 (NP)	1.22 (J)	0.285	mg/kg	95% UCL - Non-Parametric	ProUCL Recommended statistic
	Benzo[b]fluoranthene	mg/kg	0.12	0.394 (NP)	1.71 (J)	0.394	mg/kg	95% UCL - Non-Parametric	ProUCL Recommended statistic
	Dibenz(a,h)anthracene	mg/kg	0.02	0.0195 (NP)	0.212 (J)	0.0195	mg/kg	95% UCL - Non-Parametric	ProUCL Recommended statistic
	Aluminum	mg/kg	6,103	7,086 (N)*	15,000 (J)	7,086	mg/kg	95% UCL - Normal Data	ProUCL Recommended statistic
	Arsenic	mg/kg	3.26	3.928 (NP)	6.9	3.928	mg/kg	95% UCL - Non-Parametric	ProUCL Recommended statistic
	Chromium (VI)	mg/kg	6.50	7.737 (NP)	15 (J)	7.737	mg/kg	95% UCL - Non-Parametric	ProUCL Recommended statistic
	Cobalt	mg/kg	4.31	4.974 (N)*	9.3	4.974	mg/kg	95% UCL - Normal Data	ProUCL Recommended statistic
	Iron	mg/kg	12,219	14,025 (N)*	27,000 (J)	14,025	mg/kg	95% UCL - Normal Data	ProUCL Recommended statistic
	Manganese	mg/kg	523	762 (NP)	1,200	762	mg/kg	95% UCL - Non-Parametric	ProUCL Recommended statistic
	Trichlorethylene	mg/kg			0.08	0.08	mg/kg	Maximum	Maximum concentration

Footnote Instructions:

Average of duplicate samples was used in calculating the arithmetic mean, 95% UCL, and maximum concentrations.

*: Adjusted for skewness

J: Estimated value

mg/kg - milligrams/kilogram

UCL = Upper Confidence Limit

N: Normal distribution

NP: Non parametric (distribution free)

(2) Define the codes used for the "EPC Statistic".

95% UCL - N: 95% UCL of normal data

95% UCL - NP: Mean of nonparametric data

Table 4.1 - RAGS Part D - Tables - Ingestion

Values Used for Daily Intake Calculations for Soil Ingestion Pathway for Carcinogenic and Non-Carcinogenic Chemicals - Future Resident

Reasonable Maximum Exposure - Ingestion

Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil (Depths 0 ft bgs - 2 feet and 0 ft bgs - Water Table)

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion of soil	Resident Exposed at both Depths	Child	Soil at both depths	$Intake_{c\text{-}soil\text{-}ing}$	Soil intake via ingestion	Chemical specific	mg/kg-day	Calculated	$Intake_{C-soil-ing} = \frac{EPC \times EF_c \times ED_c \times IRS_c \times RBA}{BW_c \times AT_c \times 365 \times 10^6}$
				EPC	Exposure point concentration	Chemical specific	mg/kg	RAGS Tables 3.1 & 3.2	
				EF_c	Exposure frequency	350	days/year	USEPA, 1991	
				ED_c	Exposure duration	6	year	USEPA, 1991	
				IRS_c	Soil ingestion rate	200	mg/day	USEPA, 1991	
				BW_c	Body weight	15	kg	USEPA, 1991	
				AT_{nc}	Averaging time (non-carcinogens)	6	year	Equal to ED	$Intake_{C-soil-ing} = \frac{EPC \times EF_c \times ED_c \times IRS_c \times RBA}{BW_c \times AT_{nc} \times 365 \times 10^6}$
				AT_c	Averaging time (carcinogens)	70	years	USEPA, 1989	
				365	Converts AT_{nc} in years to days	365	days/year	NA	
				RBA	Relative bioavailability	Chemicl Specific	%	USEPA, 2012	
				10^6	Converts soil in kg to mg	10^6	mg/kg	NA	
		Adult		$Intake_{a\text{-}soil\text{-}ing}$	Soil intake via ingestion	Chemical specific	mg/kg-day	Calculated	$Intake_{a-soil-ing} = \frac{EPC \times EF_a \times ED_a \times IRS_a \times RBA}{BW_a \times AT_c \times 365 \times 10^6}$
				EPC	Exposure point concentration	Chemical specific	mg/kg	RAGS Tables 3.1 & 3.2	
				EF_a	Exposure frequency	350	days/year	USEPA, 1991	
				ED_a	Exposure duration	20	year	USEPA, 2014	
				IRS_a	Soil ingestion rate	100	mg/day	USEPA, 1991	
				BW_a	Body weight	80	kg	USEPA, 2011	
				AT_{nc}	Averaging time (non-carcinogens)	20	year	Equal to ED	$Intake_{a-soil-ing} = \frac{EPC \times EF_a \times ED_a \times IRS_a \times RBA}{BW_a \times AT_{nc} \times 365 \times 10^6}$
				AT_c	Averaging time (carcinogens)	70	year	USEPA, 1989	
				365	Converts AT_{nc} in years to days	365	days/year	NA	
				RBA	Relative Bioavailability	Chemical specific	%	USEPA, 2012	
				10^6	Converts soil in kg to mg	10^6	mg/kg	NA	
				Note: parameters not defined here are available above.					
		Age-adjusted for Cancer Assessment		$Intake_{aa\text{-}soil\text{-}ing}$	Soil intake via ingestion	Chemical specific	mg/kg-day	Calculated	$CDI_{aa\text{-}soil\text{-}c\text{-}Irg}\left(\frac{mg}{kg\text{-}day}\right) = \frac{C_{soil}\left(\frac{mg}{kg}\right) \times IFS_{raa\text{-}adj}\left(\frac{36{,}750\ mg}{kg}\right) \times RBA \times \frac{10^{-6}\ kg}{1\ mg}}{AT_{raa}\left(\frac{366\ days}{year} \times LT\ (70\ years)\right)}$ where: $IFS_{raa\text{-}adj}\left(\frac{36{,}750\ mg}{kg}\right) = \left(\frac{EC_{rae\text{-}c}\ (8\ years) \times EF_{rae\text{-}c}\left(\frac{350\ days}{year}\right) \times IR3_{ae\text{-}c}\left(\frac{200\ mg}{day}\right)}{BW_{ae\text{-}c}\ (15\ kg)} + \frac{(ED_{ae}\ (26\ years) - ED_{rae\text{-}c}\ (8\ years)) \times EF_{rae\text{-}a}\left(\frac{350\ days}{year}\right) \times IRS_{rae\text{-}a}\left(\frac{100\ mg}{day}\right)}{BW_{rae\text{-}a}\ (80\ kg)}\right)$
				EPC	Exposure point concentration	Chemical specific	mg/kg	RAGS Tables 3.1 & 3.2	
				IRS_{aa}	Ingestion rate	36,750	mg-soil/ kg-body weight	Calculated	
				ED_{aa}	Exposure duration	26	years	USEPA, 2011	
				AT_c	Averaging time (carcinogens)	70	years	USEPA, 1989	
				365	Converts AT_{nc} in years to days	365	days/year	NA	
				10^6	Converts soil in kg to mg	10^6	mg/kg	NA	
				Note: parameters not defined here are available above.					

Footnote Instructions:

USEPA, 1989. Risk Assessment Guidance for Superfund. Volume I: Human Health Evaluation Manual NA: Not applicable

USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors. OSWER Directive 9285.6-03.

USEPA, 2011. Exposure Factors Handbook 2011 Edition (Final).

USEPA, 2012. OSWER Directive 9200.1-113, Recommendations for Default Value for Relative Bioavailability of Arsenic in Soil.

USEPA, 2014. OSWER Directive 9200.1-120, Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors.

Table 4.2 - RAGS Part D Tables - Dermal Exposure

Values Used for Daily Intake Calculations for Dermal Contact with Soil Pathway for Carcinogenic and Non-Carcinogenic Chemicals - Future Resident

Reasonable Maximum Exposure - Dermal Exposure

Site SS025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil (depths of 0 bgs to 2 Ft. and 0 ft bgs to water table)

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Dermal contact with soil	Resident	Child	Soil from 0 to 2 ft bgs and Soil from 0 ft bgs to water table	$Intake_{c\text{-}soil\text{-}dc}$	Soil intake via dermal contact	Chemical specific	mg/kg-day	Calculated	$Intake_{C-soil-dc} = \frac{EPC \times EF_c \times ED_c \times SA_c \times AF_c \times ABS_d}{BW_c \times AT_c \times 365 \times 10^6}$
				EPC	Exposure point concentration	Chemical specific	mg/kg	RAGS Tables 3.1 & 3.2	
				EF_c	Exposure frequency	350	days/year	USEPA, 1991	
				ED_c	Exposure duration	6	year	USEPA, 1991	
				SA_c	Skin surface area for contact with soil	2,373	cm^2/day	USEPA, 2011	
				AF_c	Soil to skin adherence factor	0.2	mg/cm^2	USEPA, 2002	
				ABS_d	Dermal absorption factor	Chemical specific	unitless	USEPA, 2004	
				BW_c	Body weight	15	kg	USEPA, 1991	
				AT_{nc}	Averaging time (non-carcinogens)	6	year	Equal to ED	
				AT_c	Averaging time (carcinogens)	70	year	USEPA, 1989	
				365	Converts AT_{nc} in years to days	365	days/year	NA	
				10^6	Converts soil in kg to mg	10^6	mg/kg	NA	
		Adult		$Intake_{a\text{-}soil\text{-}dc}$	Soil intake via dermal contact	Chemical specific	mg/kg-day	Calculated	$Intake_{a-soil-dc} = \frac{EPC \times EF_a \times ED_a \times SA_a \times AF_a \times ABS_d}{BW_a \times AT_c \times 365 \times 10^6}$
				EPC	Exposure point concentration	Chemical specific	mg/kg	RAGS Tables 3.1 & 3.2	
				EF_a	Exposure frequency	350	days/year	USEPA, 1991	
				ED_a	Exposure duration	20	year	USEPA, 2014	
				SA_a	Skin surface area for contact with soil	6,032	cm^2/day	USEPA, 2011	
				AF_a	Soil to skin adherence factor	0.07	mg/cm^2	USEPA, 2002	
				ABS_d	Dermal absorption factor	Chemical specific	unitless	USEPA, 2004	
				BW_a	Body weight	80	kg	USEPA, 2011	
				AT_{nc}	Averaging time (non-carcinogens)	20	year	Equal to ED	
				AT_c	Averaging time (carcinogens)	70	year	USEPA, 1989	
				365	Converts AT_{nc} in years to days	365	days/year	NA	
				10^6	Converts soil in kg to mg	10^6	mg/kg	NA	
		Adjusted Adult and Child		$Intake_{aa\text{-}soil\text{-}dc}$	Soil intake via dermal contact	Calculated Chemical specific Values	mg/kg-day	Calculated	$CDI_{res\text{-}soil\text{-}ca\text{-}ing}\left(\frac{mg}{kg\text{-}day}\right) = \frac{C_{soil}\left(\frac{mg}{kg}\right) \times IFS_{res\text{-}adj}\left(\frac{36{,}750\ mg}{kg}\right) \times RBA \times \left(\frac{10^{-6}\ kg}{1\ mg}\right)}{AT_{res}\left(\frac{365\ days}{year} \times LT\ (70\ years)\right)}$ where: $IFS_{res\text{-}adj}\left(\frac{36{,}750\ mg}{kg}\right) = \left(\frac{ED_{res\text{-}c}\ (6\ years) \times EF_{res\text{-}c}\left(\frac{350\ days}{year}\right) \times IRS_{res\text{-}c}\left(\frac{200\ mg}{day}\right)}{BW_{res\text{-}c}\ (15\ kg)} + \frac{(ED_{res}\ (26\ years) - ED_{res\text{-}c}\ (6\ years)) \times EF_{res\text{-}a}\left(\frac{350\ days}{year}\right) \times IRS_{res\text{-}a}\left(\frac{100\ mg}{day}\right)}{BW_{res\text{-}a}\ (80\ kg)}\right)$
				EPC	Exposure point concentration	Chemical specific Values from Table 3.1 & 3.2	mg/kg	RAGS Tables 3.1 & 3.2	
				DF_{aa}	Dermal factor	103,390	mg-soil/ kg-body weight	Calculated	
				ABS_d	Dermal absorption factor	Chemical specific	unitless	USEPA, 2004	
				AT_{nc}	Averaging time (non-carcinogens)	26	year	Calculated	
				AT_c	Averaging time (carcinogens)	70	year	USEPA, 1989	
				365	Converts AT_{nc} in years to days	365	days/year	NA	
				10^6	Converts soil in kg to mg	10^6	mg/kg	NA	
				Note parameters not defined here are available above.					

Footnote Instructions:

USEPA, 1989. Risk Assessment Guidance for Superfund. Volume I: Human Health Evaluation Manual

USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors. OSWER Directive 9285.6-03.

USEPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004. Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. OSWER 9285.7-02EP.

USEPA, 2011. Exposure Factors Handbook 2011 Edition (Final).

USEPA, 2014. OSWER Directive 9200.1-120, Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors.

NA= Not applicable.

Table 4.3 - Risk Assessment Guidance for Superfund Tables - Exposure Assumptions for Inhalation of Carcinogenic and Non-carcinogenoic Chemicals

Values Used for Outdoor Vapor Inhalation Pathway Calculations for Non-Carcinogenic and Carcinogenic Chemicals - Future Resident

Reasonable Maximum Exposure

Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Medium: Soil 0 ft bgs to 2 ft and 0 ft. bgs to Water Table
Exposure Medium: Ambient air

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation of vapors	Resident	Child	Breathing zone	EC	Exposure concentration	Chemical specific	mg/m^3	Calculated	
				CA	Ambient air exposure point concentration	Chemical specific	mg/m^3	Calculated	$EC = \frac{CA \times ET_{oc} \times ED_c \times EF_c}{AT_c \times 365 \times 24}$
				CS	Soil exposure point concentration	Chemical specific	mg/kg	RAGS Tables 3.1 & 3.2	
				ET_{oc}	Outdoor exposure time	24	hours/day	USEPA, 2014	
				ED_c	Exposure duration	6	year	USEPA, 1991	
				EF_c	Exposure frequency	350	days/year	USEPA, 1991	$EC = \frac{CA \times ET_{oc} \times ED_c \times EF_c}{AT_{nc} \times 365 \times 24}$
				AT_{nc}	Averaging time (non-carcinogens)	6	year	Equal to ED	
				AT_c	Averaging time (carcinogens)	70	year	USEPA, 1989	
				365	Converts AT_{nc} in years to days	365	days/year	NA	
				24	Converts day to hours	24	hours/day	NA	$CA = CS \times VF_{ss}$
				VF_{ss}	Volatilization factor for air emissions	Chemical specific	kg-soil/m^3-air	Calculated	
		Adult		EC	Exposure concentration	Chemical specific	mg/m^3	Calculated	
				CA	Ambient air exposure point concentration	Chemical specific	mg/m^3	Calculated	$EC = \frac{CA \times ET_{oa} \times ED_a \times EF_a}{AT_c \times 365 \times 24}$
				CS	Soil exposure point concentration	Chemical specific	mg/kg	RAGS Tables 3.1 & 3.2	
				ET_{oa}	Outdoor exposure time	24	hours/day	USEPA, 2014	
				ED_a	Exposure duration	20	year	USEPA, 2014	
				EF_a	Exposure frequency	350	days/year	USEPA, 1991	$EC = \frac{CA \times ET_{oa} \times ED_a \times EF_a}{AT_{nc} \times 365 \times 24}$
				AT_{nc}	Averaging time (non-carcinogens)	6	year	Equal to ED	
				AT_c	Averaging time (carcinogens)	70	year	USEPA, 1989	
				365	Converts AT_{nc} in years to days	365	days/year	NA	
				24	Converts day to hours	24	hours/day	NA	$CA = CS \times VF_{ss}$
				VF_{ss}	Volatilization factor for air emissions	Chemical specific	kg-soil/m^3-air	Calculated	
				Note: parameters not defined here are available above.					
Age Adjusted Adult/Child				EC	Exposure concentration	Calculated Chemical specific Concentration in Air	mg/m^3	Calculated	
				CA	Ambient air exposure point concentration	Calculated Chemical specific Concentration in Air	mg/m^3	Calculated	$EC = \frac{CA \times ET_{oaa} \times ED_{aa} \times EF_{aa}}{AT_c \times 365 \times 24}$
				CS	Soil exposure point concentration	Chemical specific	mg/kg	RAGS Tables 3.1 & 3.2	
				ET_{oaa}	Outdoor exposure time	24	hours/day	USEPA, 2014	
				ED_{aa}	Exposure duration	26	year	USEPA, 2011	$CA = CS \times VF_{ss}$
				EF_{aa}	Exposure frequency	350	days/year	USEPA, 1991	
				AT_c	Averaging time (carcinogens)	70	year	USEPA, 1989	
				365	Converts AT_{nc} in years to days	365	days/year	NA	$ED_{aa} = ED_c + ED_a$
				25,550	Converts AT_c in years to days	365	days/year	NA	
				24	Converts day to hours	24	hours/day	NA	
				VF_{ss}	Volatilization factor for surface soils	Chemical specific	kg-soil/m^3-air	Calculated	

Footnote Instructions:

USEPA, 1989. Risk Assessment Guidance for Superfund. Volume I: Human Health Evaluation Manual. NA= Not applicable.

USEPA, 1991. Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors. OSWER Directive 9285.6-03.

USEPA, 2011. Exposure Factors Handbook 2011 Edition (Final).

USEPA, 2014. OSWER Directive 9200.1-120, Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors.

Table 4.3a

Values Used for Vapor Inhalation Pathway Calculations for Non-Carcinogenic Chemicals - Resident Scenarios 1 and 2

Reasonable Maximum Exposure - Air Exposures - Volatilization factor for air emissions from soil to outdoor air

Site SS025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Ambient air

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Volatilization factor for air emissions from soil to outdoor air				VF_{ss-i}	Surface soils volatilization factor for infinite sources	Chemical specific	kg-soil/m^3-air	Calculated	$VF_{ss-i} = \left[Q/C \times \frac{\left(3.14 \times D_A \times \tau\right)^{1/2}}{\left(2 \times \rho_s \times D_A\right)} \times 10^{-4} \right]^{-1}$
				VF_{ss-m}	Surface soils volatilization factor for finite (mass limit) sources	Chemical specific	kg-soil/m^3-air	Calculated	
				Q/C	Inverse of the mean concentration at the center of square source	62.55	(g/m^2-s)/(kg/m^3)	USEPA, 1996	
				D_A	Apparent diffusivity	Calculated	cm^2/s	Calculated	
				τ	Averaging time for vapor flux				
					Child	1.89E+08	seconds	Calculated	
					Adult	6.31E+08	seconds	Calculated	
					Age-adjusted	8.20E+08	seconds	Calculated	
				ρ_s	Dry Soil Bulk Density in the Vadose Zone	1.62	g/cm^3	USEPA, 2004	$D_A = \frac{\left(\theta_{as}^{10/3} \times D^a \times H + \theta_{ws}^{10/3} \times D^w\right) / \theta_T^2}{\rho_s \times K_{oc} \times f_{oc} + \theta_{ws} + \theta_{as} \times H}$
				H	Dimension less Herny's law constant	Chemical specific	unitless	SRC, 2013; USEPA, 2012	
				K_{oc}	Organic carbon adsorption coefficient	Chemical specific	L/kg	SRC, 2013	
				D^a	Diffusivity in air	Chemical specific	cm^2/s	USEPA, 2001	
				D^w	Diffusivity in water	Chemical specific	cm^2/s	USEPA, 2001	$VF_{ss-m} = \left[Q/C \times \frac{\tau}{\rho_s \times d_s \times 10000} \right]^{-1}$
				f_{oc}	Fractional Organic Carbon Content in the Vadose Zone	0.002	g-C/g-soil	USEPA, 2004	
				θ_T	Total Soil Porosity in the Vadose Zone	0.39	cc/cc	USEPA, 2004	
				θ_{ws}	Volumetric Water Content in the Vadose Zone	0.049	cc/cc	USEPA, 2004	
				θ_{as}	Volumetric Air Content in the Vadose Zone	0.341	cc/cc	Calculated	Minimum of the two volatilization factors is used.
				d_s	Lower Depth of Surficial Soil Zone				
					0 to 2 ft bgs	60.96	cm	Site-specific	
					0 ft bgs to Water Table	237.74	cm	Site-specific	

Footnote Instructions:

USEPA, 1996. Soil Screening Guidance: User's Guide.

USEPA, 2001. WATER9. Version 1.0.0. Office of Air Quality Planning and Standards, Research Triangle Park, NC.

USEPA, 2004. User's Guide for Evaluating Subsurface Vapor Intrusion Into Buildings.

USEPA, 2012. Estimation Programs Interface (EPI) Suite.

Syracuse Research Corporation (SRC), 2013. Physical Properties Database.

Table 4.4 - Risk Assessment Guidance for Superfund Tables - Exposure Assumptions for Inhalation of Carcinogenic and Non-carcinogenic Chemicals

Values Used for Outdoor Vapor Inhalation Pathway Calculations for Non-Carcinogenic and Carcinogenic Chemicals - Future Resident

Reasonable Maximum Exposure

Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Medium: Soil 0 ft bgs to 2 ft and 0 ft bgs to Water Table
Exposure Medium: Ambient air

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/Reference	Intake Equation/Model Name
Inhalation of particulates	Resident	Child	Breathing zone	EC	Exposure concentration	Chemical specific	mg/m^3	Calculated	$EC = \frac{CA \times ET_{oc} \times ED_c \times EF_c}{AT_c \times 365 \times 24}$
				CA	Ambient air exposure point concentration	Chemical specific	mg/m^3	Calculated	
				CS	Soil exposure point concentration	Chemical specific	mg/kg	RAGS Tables 3.1 & 3.2	
				ET_{oc}	Outdoor exposure time	24	hours/day	USEPA, 2014	$EC = \frac{CA \times ET_{oc} \times ED_c \times EF_c}{AT_{nc} \times 365 \times 24}$
				ED_c	Exposure duration	6	year	USEPA, 1991	
				EF_c	Exposure frequency	350	days/year	USEPA, 1991	
				AT_{nc}	Averaging time (non-carcinogens)	6	year	Equal to ED	
				AT_c	Averaging time (carcinogens)	70	year	USEPA, 1989	
				365	Converts AT_{nc} in years to days	365	days/year	NA	$CA = CS \times VF_p$
				24	Converts day to hours	24	hours/day	NA	
				VF_p	Volatilization factor for particulate emissions	Chemical specific	kg-soil/m^3-air	Calculated	
		Adult		EC	Exposure concentration	Chemical specific	mg/m^3	Calculated	$EC = \frac{CA \times ET_{oa} \times ED_a \times EF_a}{AT_c \times 365 \times 24}$
				CA	Ambient air exposure point concentration	Chemical specific	mg/m^3	Calculated	
				CS	Soil exposure point concentration	Chemical specific	mg/kg	RAGS Tables 3.1 & 3.2	
				ET_{oa}	Outdoor exposure time	24	hours/day	USEPA, 2014	$EC = \frac{CA \times ET_{oa} \times ED_a \times EF_a}{AT_{nc} \times 365 \times 24}$
				ED_a	Exposure duration	20	year	USEPA, 2014	
				EF_a	Exposure frequency	350	days/year	USEPA, 1991	
				AT_{nc}	Averaging time (non-carcinogens)	6	year	Equal to ED	
				AT_c	Averaging time (carcinogens)	70	year	USEPA, 1989	
				365	Converts AT_{nc} in years to days	365	days/year	NA	$CA = CS \times VF_p$
				24	Converts day to hours	24	hours/day	NA	
				VF_p	Volatilization factor for particulate emissions	Chemical specific	kg-soil/m^3-air	Calculated	
				Note: parameters not defined here are available above.					
Inhalation of Particulates		Age Adjusted Adult/Child		EC	Exposure concentration	Calculated Chemical specific Concentration in Air	mg/m^3	Calculated	$EC = \frac{CA \times ET_{oaa} \times ED_{aa} \times EF_{aa}}{AT_c \times 365 \times 24}$
				CA	Ambient air exposure point concentration	Calculated Chemical specific Concentration in Air	mg/m^3	Calculated	
				CS	Soil exposure point concentration	Chemical specific	mg/kg	RAGS Tables 3.1 & 3.2	
				ET_{oaa}	Outdoor exposure time	24	hours/day	USEPA, 2014	$CA = CS \times VF_p$
				ED_{aa}	Exposure duration	26	year	USEPA, 2011	
				EF_{aa}	Exposure frequency	350	days/year	USEPA, 1991	
				AT_c	Averaging time (carcinogens)	70	year	USEPA, 1989	$ED_{aa} = ED_c + ED_a$
				365	Converts AT_{nc} in years to days	365	days/year	NA	
				25,550	Converts AT_c in years to days	365	days/year	NA	
				24	Converts day to hours	24	hours/day	NA	
				VF_p	Volatilization factor for particulate emissions	Chemical specific	kg-soil/m^3-air	Calculated	

Footnote Instructions:

USEPA, 1989. Risk assessment guidance for Superfund. Volume I: Human health evaluation manual

USEPA, 1991. Human health evaluation manual, supplemental guidance: "Standard default exposure factors. OSWER Directive 9285.6-03.

USEPA, 2011. Exposure Factors Handbook 2011 Edition (Final).

USEPA, 2014. OSWER Directive 9200.1-120, Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors

NA= Not applicable.

Table 4.5 - Risk Assessment Guidance for Superfund Part D Tables - Cancer and Non-Carcinogenic Exposure Assumptions for Construction Worker

Values Used for Daily Intake Calculations for Ingestion of and Dermal Contact with Soil Pathway for Carcinogenic and Non-Carcinogenic Chemicals - Construction Worker

Reasonable Maximum Exposure

Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Soil (0 ft bgs to 2 ft bgs and 0 ft bgs to Water Table)

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion of soil	Construction worker	Adult	Soil from 0 ft bgs to 2 ft bgs and 0 ft bgs to the water table	$Intake_{cw-soil-ing}$	Soil intake via ingestion	Chemical specific	mg/kg-day	Calculated	$Intake_{cw-soil-ing} = \frac{EPC \times EF_{cw} \times ED_{cw} \times IRS_{cw}}{BW_{cw} \times AT_c \times 365 \times 10^6}$
				EPC	Exposure point concentration	Chemical specific	mg/kg	RAGS Tables 3.1 & 3.2	
				EF_{cw}	Exposure frequency	30	days/year	Professional judgment	
				ED_{cw}	Exposure duration	1	year	USEPA, 2002	
				IRS_{cw}	Soil ingestion rate	330	mg/day	USEPA, 2002	
				BW_{cw}	Body weight	80	kg	USEPA, 2011	
				AT_{nc}	Averaging time (non-carcinogens)	1	year	Equal to ED	$Intake_{cw-soil-ing} = \frac{EPC \times EF_{cw} \times ED_{cw} \times IRS_{cw}}{BW_{cw} \times AT_{nc} \times 365 \times 10^6}$
				AT_c	Averaging time for carcinogens	70	year	USEPA, 1989	
				365	Converts AT_{nc} in years to days	365	days/year	NA	
				10^6	Converts soil in kg to mg	10^6	mg/kg	NA	
Dermal contact with soil				$Intake_{cw-soil-dc}$	Soil intake via dermal contact	Chemical specific	mg/kg-day	Calculated	$Intake_{cw-soil-dc} = \frac{EPC \times EF_{cw} \times ED_{cw} \times SA_{cw} \times AF_{cw} \times ABS_d}{BW_{cw} \times AT_{nc} \times 365 \times 10^6}$
				EPC	Exposure point concentration	Chemical specific	mg/kg	RAGS Tables 3.1 & 3.2	
				EF_{cw}	Exposure frequency	30	days/year	Professional judgment	
				ED_{cw}	Exposure duration	1	year	USEPA, 2002	
				SA_{cw}	Skin surface area for contact with soil	3,527	cm^2/day	USEPA, 2011	
				AF_{CW}	Soil to skin adherence factor	0.3	mg/cm^2	USEPA, 2002	
				ABS_d	Dermal absorption factor	Chemical specific	unitless	USEPA, 2004	
				BW_{cw}	Body weight	80	kg	USEPA, 2011	$Intake_{cw-soil-dc} = \frac{EPC \times EF_{cw} \times ED_{cw} \times SA_{cw} \times AF_{cw} \times ABS_d}{BW_{cw} \times AT_c \times 365 \times 10^6}$
				AT_{nc}	Averaging time (non-carcinogens)	1	year	Equals to ED	
				AT_c	Averaging time for carcinogens	70	year	USEPA, 1989	
				365	Converts AT_{nc} in years to days	365	days/year	NA	
				10^6	Converts soil in kg to mg	10^6	mg/kg	NA	
Volatilization factor for particulate emissions from soil to outdoor air				VF_p	Volatilization factor for particulates	Chemical specific	kg-soil/m^3-air	Calculated	$VF_p = \left[Q/C \times \frac{3600}{0.036 \times (1-V) \times (U_m/U_t)^2 \times F(x)} \right]^{-1}$
				Q/C	Inverse of the mean concentration at the center of square source	62.55	(g/m^2-s)/(kg/m^3)	USEPA, 1996	
				V	Fraction of Vegetative Cover	0.5	m^2/m^2	USEPA, 2002	
				U_m	Mean Annual Wind Speed	2.68	m/s	NOAA, 1998	
				U_t	Equivalent Threshold Value of Windspeed	11.32	m/s	USEPA, 1996	
				$F_{(x)}$	Windspeed Distribution Function from Cowherd et. al, 1985	0.194	unitless	USEPA, 2002	
				0.036	Empirical constant	0.036	g/m^2-hr	USEPA, 2019	

Footnote Instructions:

USEPA, 1989. Risk Assessment Guidance for Superfund. Volume I: Human Health Evaluation Manual.

USEPA, 1996. Soil Screening Guidance: User's Guide.

NOAA, 1998. National Oceanic and Atmospheric Administration.

USEPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004. Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. OSWER 9285.7-02EP.

USEPA, 2011. Exposure Factors Handbook 2011 Edition (Final).

USEPA, 2019. Regional Screening Level (RSL) User's Guide.

Table 4.6 - Risk Assessment Guidance for Superfund Part D Tables - Cancer and Non-Carcinogenic Exposure Assumptions for Construction Worker

Values Used for Outdoor Vapor Inhalation Pathway Calculations for Carcinogenic and Non-Carcinogenic Chemicals - Construction Worker

Reasonable Maximum Exposure

Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Medium: Soil
Exposure Medium: Ambient air

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Inhalation of vapors	Construction worker	Adult	Breathing zone	EC	Exposure concentration	Chemical specific	mg/m^3	Calculated	$EC = \frac{CA \times ET_{ocw} \times ED_{cw} \times EF_{cw}}{AT_c \times 365 \times 24}$
				CA	Ambient air exposure point concentration	Chemical specific	mg/m^3	Calculated	
				CS	Soil exposure point concentration	Chemical specific	mg/kg	RAGS Tables 3.1 & 3.2	
				ET_{ocw}	Outdoor exposure time	8	hours/day	USEPA, 2014	
				ED_{cw}	Exposure duration	1	year	USEPA, 2002	$EC = \frac{CA \times ET_{ocw} \times ED_{cw} \times EF_{cw}}{AT_{nc} \times 365 \times 24}$
				EF_{cw}	Exposure frequency	30	days/year	Professional judgment	
				AT_{nc}	Averaging time (non-carcinogens)	1	year	Equal to ED	
				AT_c	Averaging time (carcinogens)	70	year	USEPA, 1989	$CA = CS \times VF_{ss}$
				365	Converts AT_{nc} in years to days	365	days/year	NA	
				24	Converts day to hours	24	hours/day	NA	
				VF_{ss}	Volatilization factor for surface soils	Chemical specific	$kg\text{-}soil/m^3\text{-}air$	Calculated	
Volatilization factor for air emissions from soil to outdoor air				$VF_{ss\text{-}i}$	Surface soils volatilization factor for infinite sources	Chemical specific	$kg\text{-}soil/m^3\text{-}air$	Calculated	$VF_{ss-i} = \left[Q/C \times \frac{(3.14 \times D_A \times \tau)^{1/2}}{(2 \times \rho_s \times D_A)} \times 10^{-4} \right]^{-1}$
				$VF_{ss\text{-}m}$	Surface soils volatilization factor for finite (mass limit) sources	Chemical specific	$kg\text{-}soil/m^3\text{-}air$	Calculated	
				Q/C	Inverse of the mean concentration at the center of square source	62.55	$(g/m^2\text{-}s)/(kg/m^3)$	USEPA, 1996	
				D_A	Apparent diffusivity	Calculated	cm^2/s	Calculated	$D_A = \frac{(\theta_{as}^{10/3} \times D^a \times H + \theta_{ws}^{10/3} \times D^w)/\theta_T^2}{\rho_s \times K_{oc} \times f_{oc} + \theta_{ws} + \theta_{as} \times H}$
				t	Averaging time for vapor flux	3.15E+07	seconds	Calculated	
				r_s	Dry Soil Bulk Density in the Vadose Zone	1.62	g/cm^3	USEPA, 2004	
				H	Dimensionless Herny's law constant	Chemical specific	unitless	SRC, 2013; USEPA, 2012	$VF_{ss-m} = \left[Q/C \times \frac{\tau}{\rho_s \times d_s \times 10000} \right]^{-1}$
				K_{oc}	Organic carbon adsorption coefficient	Chemical specific	L/kg	SRC, 2013	
				D^a	Diffusivity in air	Chemical specific	cm^2/s	USEPA, 2001	
				D^w	Diffusivity in water	Chemical specific	cm^2/s	USEPA, 2001	
				f_{oc}	Fractional Organic Carbon Content in the Vadose Zone	0.002	g-C/g-soil	USEPA, 2004	
				q_T	Total Soil Porosity in the Vadose Zone	0.39	cc/cc	USEPA, 2004	
				q_{ws}	Volumetric Water Content in the Vadose Zone	0.049	cc/cc	USEPA, 2004	
				q_{as}	Volumetric Air Content in the Vadose Zone	0.341	cc/cc	Calculated	Minimum of the two volatilization factors is used.
				d_s	Average depth to water table	161.85	cm	Site-specific	

Footnote Instructions:

NA = Not Applicable

USEPA, 1989. Risk Assessment Guidance for Superfund. Volume I: Human Health Evaluation Manual.

USEPA, 1996. Soil Screening Guidance: User's Guide.

USEPA, 2001. WATER9. Version 1.0.0. Office of Air Quality Planning and Standards, Research Triangle Park, NC.

USEPA, 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004. User's Guide for Evaluating Subsurface Vapor Intrusion Into Buildings.

USEPA, 2012. Estimation Programs Interface (EPI) Suite.

Syracuse Research Corporation (SRC), 2013. Physical Properties Database.

USEPA, 2014. OSWER Directive 9200.1-120, Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors.

Table 5.1 - Risk Assessment Guidance for Superfund Part D Tables

Non-Cancer Toxicity Data - Oral and Dermal

Site SS-025, Former Griffiss Air Force Base, Rome, New York

Chemical of Potential Concern	Chronic/ Subchronic	Oral RfD		Oral Absorption Efficiency for Dermal	Absorbed RfD for Dermal		Dermal Absorption Fraction (ABS_d)	Primary Target Organ(s)	Combined Uncertainty/Modifying Factors (MF)	RfD: Target Organ(s)	
		Value	Units	(1)	Value	Units				Source(s)	Date(s) (MM/DD/YYYY)
Polycyclic Aromatic Hydrocarbons (PAHs)											
Benzo[a]anthracene	Not Assessed	NA	N/A	1	NA	N/A	0.13	NA	NA	NA	NA
Benzo[a]pyrene	Chronic	3E-04	mg/kg-day	1	3E-04	mg/kg-day	0.13	Developmental toxicity (Nervous system)	300	IRIS	01/2017
Benzo[b]fluoranthene	Not Assessed	NA	N/A	1	NA	N/A	0.13	NA	NA	NA	NA
Dibenz(a,h)anthracene	Not Assessed	NA	N/A	1	NA	N/A	0.13	NA	NA	NA	NA
Volatile Chemicals											
Benzene	Chronic	4.00E-03	mg/kg-day	1	4.00E-03	mg/kg-day	NA	Immune System	300	IRIS	3/1/1988
Trichloroethylene	Chronic	5.00E+04	mg/kg-day	1	5.00E+04	mg/kg-day	NA	Developmental, Immune	10	IRIS	9/28/2011
Metals											
Aluminum	Chronic	1E+00	mg/kg-day	1	1E+00	mg/kg-day	1	Nervous system and morphological developmental	100	PPRTV	10/23/2006
Arsenic	Chronic	3E-04	mg/kg-day	1	3E-04	mg/kg-day	0.03	Skin and blood vessels	3/1	IRIS	2/10/1988
Chromium (VI)	Chronic	3.0E-03	mg/kg-day	0.025	7.5E-05	mg/kg-day	NA	Gastrointestinal tract	300/3	IRIS	9/3/1998
Cobalt	Chronic	3.0E-04	mg/kg-day	1	3.0E-04	mg/kg-day	NA	Thyroid	300	PPRTV	8/25/2008
Iron	Chronic	7.0E-01	mg/kg-day	1	7.0E-01	mg/kg-day	NA	Gastrointestinal tract	None	PPRTV	9/11/2006
Manganese	Chronic	2.4E-02	mg/kg-day	0.04	9.6E-04	mg/kg-day	NA	Central nervous system	1/1 (additional MF of 3 to account for non-dietary exposure)	IRIS	11/1/1995

Footnote Instructions:

(1): Oral Absorption Efficiency for Dermal was obtained from USEPA RAGS Part E (USEPA, 2004).

Refer to Section 4 of the Risk Assessment text for the derivation of the "Oral Absorption Efficiency for Dermal". N/A: Not applicable

IRIS: Integrated Risk Information System PPRTV: Provisional Peer Reviewed Toxicity Values

NA: Value not available from Supplemental Guidance for Dermal Risk Assessment, Part E of Risk Assessment Guidance for Superfund, Human Health Evaluation Manual (Volume I) Dermal Guidance (USEPA, 2004).

Table 5.2 - Risk Assessment Guidance for Superfund Part D Tables
Non-Cancer Toxicity Data - Inhalation
Site SS-025, Former Griffiss Air Force Base, Rome, New York

Chemical of Potential Concern	Chronic/ Subchronic	Inhalation RfC		Extrapolated RfD		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	RfC: Target Organ(s)	
		Value	Units	Value	Units			Source(s)	Date(s) (MM/DD/YYYY)
Polycyclic Aromatic Hydrocarbons (PAHs)									
Benzo[a]anthracene	Not Assessed	NA	N/A	N/A	N/A	NA	NA	NA	NA
Benzo[a]pyrene	Chronic	2.0E-06	mg/m^3	N/A	N/A	Developmental toxicity (Reproductive system)	3,000	IRIS	January 2017
Benzo[b]fluoranthene	Not Assessed	NA	N/A	N/A	N/A	NA	NA	NA	NA
Dibenz(a,h)anthracene	Not Assessed	NA	N/A	N/A	N/A	NA	NA	NA	NA
Volatile Chemicals									
Benzene	Chronic	3.0E-02	mg/m^3	N/A	N/A	Decreased lymphocyte count	300	IRIS	4/17/2003
Trichloroethylene	Chronic	0.002	mg/m^3	N/A	N/A	Increased fetal cardiac malformations	100/10	IRIS	9/28/2011
Metals									
Aluminum	Chronic	5.0E-03	mg/m^3	N/A	N/A	Brain (psychomotor and cognitive impairment effects)	300	PPRTV	10/23/2006
Arsenic (inorganic)	Chronic	1.5E-05	mg/m^3	N/A	N/A	Development, cardiovascular system, nervous system, respiratory system, and skin	NA	CalEPA	2/10/1988
Chromium (VI)	Chronic	1.0E-04	mg/m^3	N/A	N/A	Respiratory system	300/1	IRIS	9/3/1998
Cobalt	Chronic	6.0E-06	mg/m^3	N/A	N/A	Respiratory tract and lung	300	PPRTV	8/25/2008
Iron	NA	NA	NA	N/A	N/A	NA	NA	NA	NA
Manganese	Chronic	5.0E-05	mg/m^3	N/A	N/A	Nervous system	1000/1	IRIS	12/1/1993

Footnote Instructions:

Note that the inhalation hazard quotient (HQ) will be calculated using concentration based "Inhalation RfC". Therefore, dose based "Extrapolated RfD" is not required.

NA: Value not available from Tiered toxicity values (see USEPA, 2003).

IRIS: Integrated Risk Information System

PPRTV: Provisional Peer Reviewed Toxicity Values

CalEPA: California Environmental Protection Agency

N/A: Not applicable

Table 5.3 - Risk Assessment Guidance for Superfund Part D Tables

Non-Cancer Toxicity Data - Oral Reference Dose Values for Construction Worker

Site SS-025, Former Griffiss Air Force Base, Rome, New York

Chemical of Potential Concern	Chronic/ Subchronic	Oral RfD		Oral Absorption Efficiency for Dermal (1)	Absorbed RfD for Dermal		Dermal Absorption Fraction (ABS_d)	Primary Target Organ(s)	Combined Uncertainty/ Modifying Factors	RfD:Target Organ(s)	
		Value	Units		Value	Units				Source(s)	Date(s) (MM/DD/YYYY)
Polycyclic Aromatic Hydrocarbons (PAHs)											
Benzo[a]anthracene	Not Assessed	NA	N/A	1	NA	N/A	0.13	NA	NA	NA	NA
Benzo[a]pyrene	Not Assessed	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
Benzo[b]fluoranthene	Not Assessed	NA	N/A	1	NA	N/A	0.13	NA	NA	NA	NA
Dibenz(a,h)anthracene	Not Assessed	NA	N/A	1	NA	N/A	0.13	NA	NA	NA	NA
Volatile Chemicals											
Benzene	Subchronic	1E-02	mg/kg-day	1	NA	mg/kg-day	NA	Decreased lymphocyte count	100	PPRTV	9/29/2009
Trichloroethylene	Subchronic	5.00E-04	mg/kg-day	NA	NA	mg/kg-day	NA	Development, neurological	NA	ATSDR	NA
Metals											
Aluminum	Subchronic	1E+00	mg/kg-day	1	NA	mg/kg-day	NA	Neurological	100	ATSDR	6/1/2008
Arsenic (Inorganic)	Subchronic	5E-03	mg/kg-day	1	NA	mg/kg-day	NA	Hyperpigmentation and hyperkeratosis	10	PPRTV ARCHIVE	NA
Chromium (VI)	Subchronic	5.0E-03	mg/kg-day	0.025	1.3E-04	mg/kg-day	NA	Microcytic, hypochromic anemia	100	ATSDR	9/1/2012
Cobalt	Subchronic	3.0E-03	mg/kg-day	1	3.0E-03	mg/kg-day	NA	Decreased iodine uptake	300	PPRTV	8/25/2008
Iron	Subchronic	NA	mg/kg-day	1	NA	mg/kg-day	NA	NA	NA	NA	NA
Manganese	Subchronic	NA	mg/kg-day	NA	NA	mg/kg-day	NA	NA	NA	NA	NA

Footnote Instructions:

(1): Oral Absorption Efficiency from RAGS Part E.

Refer to Section 4 of the Risk Assessment text for the derivation of the "Oral Absorption Efficiency for Dermal".

NA: Value not available.

N/A: Not applicable

ATSDR: Agency for Toxicity Substances and Disease Registry

IRIS: Integrated Risk Information System

PPRTV: Provisional Peer Reviewed Toxicity Values

PPRTV archive for Arsenic (inorganic) is no longer available. Therefore, toxicity value was not used.

For trichloroethylene, subchronic toxicity value was not used because the document is no longer available.

Table 5.4 - Risk Assessment Guidance for Superfund Part D Tables

Non-Cancer Toxicity Data - Inhalation RfCs for Subchronic Values for Construction Worker

Site SS-025, Former Griffiss Air Force Base, Rome, New York

Chemical of Potential Concern	Chronic/ Subchronic	Subchronic Inhalation RfC		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	Subchronic RfC: Target Organ(s)	
		Value	Units			Source(s)	Date(s) (MM/DD/YYYY)
Polycyclic Aromatic Hydrocarbons (PAHs)							
Benzo[a]anthracene	Not Assessed	NA	N/A	NA	NA	NA	NA
Benzo[a]pyrene	Not Assessed	NA	NA	NA	NA	NA	NA
Benzo[b]fluoranthene	Not Assessed	NA	N/A	NA	NA	NA	NA
Dibenz(a,h)anthracene	Not Assessed	NA	N/A	NA	NA	NA	NA
Volatile Chemicals							
Benzene	Subchronic	8.00E-02	mg/m^3	Decreased lymphocyte count	100	PPRTV	9/29/2019
Trichloroethylene	Subchronic	2.15E-03	mg/m^3	Cardiac malformations in rat fetus/decreased thymus weight in adult mice	NA	ATSDR	NA
Metals							
Aluminum	NA	NA	NA	NA	NA	NA	NA
Arsenic (Inorganic)	NA	NA	NA	NA	NA	NA	NA
Benzene	Subchronic	8.00E-02	mg/m^3	Decreased lymphocyte count	100	PPRTV	9/29/2019
Chromium (VI)	Subchronic	3.0E-04	mg/m^3	LOAEL	30	ATSDR	9/1/2012
Cobalt	Subchronic	3.0E-03	mg/m^3	Irritation, decreased lung function	300	PPRTV	8/25/2008
Iron	NA	NA	NA	NA	NA	NA	NA
Manganese	NA	NA	NA	NA	NA	NA	NA

Footnote Instructions:

NA: Value not available in RSL.

N/A: Not applicable

ATSDR: Agency for Toxicity Substances and Disease Registry

IRIS: Integrated Risk Information System

PPRTV: Provisional Peer Reviewed Toxicity Values

For trichloroethylene, subchronic toxicity value was not used because the document is no longer available

Table 6.1 - Risk Assessment Guidance for Superfund Part D Tables

Cancer Toxicity Data - Oral and Dermal

Site SS025, Former Griffiss Air Force Base, Rome, New York

Chemical of Potential Concern	Oral Cancer Slope Factor		Oral Absorption Efficiency for Dermal	Absorbed Cancer Slope Factor for Dermal		Dermal Absorption Fraction (ABS_d)	Weight of Evidence/ Cancer Guideline Description	Oral CSF	
	Value	Units	(1)	Value	Units			Source(s)	Date(s) (MM/DD/YYYY)
Polycyclic Aromatic Hydrocarbons (PAHs)									
Benzo[a]anthracene	1.00E-01	$(mg/kg\text{-}day)^{-1}$	1	1.00E-01	$(mg/kg\text{-}day)^{-1}$	0.13	B2-Based on Relative Potency Factor (RPF)	RPF	1993
Benzo[a]pyrene	1.00E+00	$(mg/kg\text{-}day)^{-1}$	1	1.00E+00	$(mg/kg\text{-}day)^{-1}$	0.13	A-Carcinogenic to humans	IRIS	01/2017
Benzo[b]fluoranthene	1.00E-01	$(mg/kg\text{-}day)^{-1}$	1	1.00E-01	$(mg/kg\text{-}day)^{-1}$	0.13	B2 (Probable human carcinogen - based on sufficient evidence of carcinogenicity in animals)	IRIS and RPF	12/09/90
Dibenz(a,h)anthracene	1.00E+00	$(mg/kg\text{-}day)^{-1}$	1	1.00E+00	$(mg/kg\text{-}day)^{-1}$	0.13	B2 (Probable human carcinogen - based on sufficient evidence of carcinogenicity in animals)	IRIS and RPF	12/01/90
Volatile Chemicals									
Benzene	0.055	$(mg/kg\text{-}day)^{-1}$	1	0.055	$(mg/kg\text{-}day)^{-1}$	NA	Known Human Carcinogen	IRIS	4/17/2003
Trichloroethylene	0.046	$(mg/kg\text{-}day)^{-1}$	1	NA	$(mg/kg\text{-}day)^{-1}$	NA	Known Human Carcinogen	IRIS	9/28/2011
Metals									
Aluminum	NA	N/A	NA	NA	N/A	1	NA	NA	NA
Arsenic	1.50E+00	$(mg/kg\text{-}day)^{-1}$	1	1.50E+00	$(mg/kg\text{-}day)^{-1}$	0.03	A-Human carcinogen	IRIS	2/10/1988
Chromium (VI)	5.00E-01	$(mg/kg\text{-}day)^{-1}$	0.025	2.00E+01	$(mg/kg\text{-}day)^{-1}$	NA	C-Possible human carcinogen	CalEPA	7/1/2011
Cobalt	NA	N/A	NA	NA	N/A	NA	NA	NA	NA
Iron	NA	N/A	NA	NA	N/A	NA	NA	NA	NA
Manganese	NA	N/A	NA	NA	N/A	NA	NA	NA	NA

Footnote Instructions:

Refer to Section 4 of the Risk Assessment text for the derivation of the "Absorbed Cancer Slope Factor for Dermal".

(1): Oral Absorption Efficiency for Dermal was obtained from EPA's Regional Screening Level (RSL) summary tables (USEPA, May 2019)

NA: Value not available in RSL. CalEPA: California Environmental Protection Agency IRIS: Integrated Risk Information System

USEPA RSL: USEPA Regional Screening Levels N/A: Not applicable

USEPA, 1993. Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons. EPA/600/R-93/089

Table 6.2 - Risk Assessment Guidance for Superfund Part D Table
Cancer Toxicity Data - Inhalation
Site SS025, Former Griffiss Air Force Base, Rome, New York

Chemical of Potential Concern	Unit Risk		Inhalation Cancer Slope Factor (CSF)		Weight of Evidence/ Cancer Guideline Description	Unit Risk: Inhalation CSF	
	Value	Units	Value	Units		Source(s)	Date(s) (MM/DD/YYYY)
Polycyclic Aromatic Hydrocarbons (PAHs)							
Benzo[a]anthracene	6.0E-05	$(\mu g/m3)^{-1}$	N/A	N/A	B2-Based on Relative Potency Factor (RPF)	RPF	1993
Benzo[a]pyrene	6.0E-04	$(\mu g/m3)^{-1}$	N/A	N/A	A-Carcinogenic to humans	IRIS	01/2017
Benzo[b]fluoranthene	6.0E-05	$(\mu g/m3)^{-1}$	N/A	N/A	B2 (Probable human carcinogen - based on sufficient evidence of carcinogenicity in animals)	IRIS and RPF	12/09/90
Dibenz(a,h)anthracene	6.0E-04	$(\mu g/m3)^{-1}$	N/A	N/A	B2 (Probable human carcinogen - based on sufficient evidence of carcinogenicity in animals)	IRIS and RPF	12/01/90
Volatile Chemicals							
Benzene	7.80E-06	$(\mu g/m3)^{-1}$			Human Carcinogen	IRIS	4/17/2003
Trichloroethylene	4.10E-06	$(\mu g/m3)^{-1}$	N/A	N/A	Human Carcinogen	IRIS	9/28/2011
Metals							
Aluminum	NA	N/A	N/A	N/A	NA	NA	NA
Arsenic	4.3E-03	$(\mu g/m3)^{-1}$	N/A	N/A	A-Human carcinogen	IRIS	06/01/1995
Benzene	7.80E-06	$(\mu g/m3)^{-1}$			Human Carcinogen	IRIS	4/17/2003
Chromium (VI)	8.4E-02	$(\mu g/m3)^{-1}$	N/A	N/A	A-Human carcinogen	IRIS	08/1998
Cobalt	9.0E-03	$(\mu g/m3)^{-1}$	N/A	N/A	B2-Probable human carcinogen indicates sufficient evidence in animals and inadequate or no evidence in humans	PPRTV	08/25/2008
Iron	NA	N/A	N/A	N/A	NA	NA	NA
Manganese	NA	N/A	N/A	N/A	NA	NA	NA

Footnote Instructions:

Note that the inhalation risk will be calculated using concentration based "Unit Risk". Therefore, dose based "Inhalation Cancer Slope Factor" is not required.

NA: Toxicity value not available.

IRIS: Integrated Risk Information System

PPRTV: Provisional Peer Reviewed Toxicity Values

N/A: Not applicable

Table 7.1a - Risk Assessment Guidance for Superfund Part D Tables
Calculation of Receptor Risks and Hazard Quotients for COPCs for Soil Concentrations from 0 bgs to 2 Feet bgs (Adult/Child Resident -Cancer and Adult - Non-cancer)
Reasonable Maximum Exposure (RME) - Future Resident
Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Receptor Population: Resident (Soil from 0 bgs to 2 Feet bgs)
Receptor Age: Adult/Child (cancer) and Non-cancer- Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations - Child/Adult					Non-Cancer Hazard Calculations - Adult				
							Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		RfD/RfC		Hazard Quotient
					Value	Units	Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	Soil from 0 to 2 ft bgs	Ingestion	Aluminum	6736	mg/kg	9.69E-03	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	8.07E-03	mg/kg-day	1	(mg/kg-day)	0.01
				Arsenic, Inorganic	4.043	mg/kg	3.49E-06	mg/kg-day	1.5	$(mg/kg-day)^{-1}$	**5.23E-06**	2.91E-06	mg/kg-day	0.0003	(mg/kg-day)	0.01
				Benzene	0.16	mg/kg	3.08E-05	mg/kg-day	0.055	$(mg/kg-day)^{-1}$	1.27E-08	5.65E-07	mg/kg-day	-	(mg/kg-day)	NA
				Benz[a]anthracene	0.471	mg/kg	3.08E-06	mg/kg-day	0.1	$(mg/kg-day)^{-1}$	3.08E-07	1.92E-07	mg/kg-day	0.004	(mg/kg-day)	0.00005
				Benzo[a]pyrene	0.405	mg/kg	2.64E-06	mg/kg-day	1	$(mg/kg-day)^{-1}$	**2.64E-06**	4.85E-07	mg/kg-day	0.0003	(mg/kg-day)	0.002
				Benzo[b]fluoranthene	0.559	mg/kg	3.65E-06	mg/kg-day	0.1	$(mg/kg-day)^{-1}$	3.65E-07	6.70E-07	mg/kg-day	-	(mg/kg-day)	NA
				Chromium (VI)	7.28	mg/kg	4.75E-05	mg/kg-day	0.5	$(mg/kg-day)^{-1}$	**2.38E-05**	8.73E-06	mg/kg-day	0.003	(mg/kg-day)	0.003
				Cobalt	4.782	mg/kg	6.88E-06	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	5.73E-06	mg/kg-day	0.0003	(mg/kg-day)	0.02
				Dibenz[a,h]anthracene	0.0701	mg/kg	4.58E-07	mg/kg-day	1	$(mg/kg-day)^{-1}$	4.58E-07	8.40E-08	mg/kg-day	-	(mg/kg-day)	NA
				Iron	12941	mg/kg	1.86E-02	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	1.55E-02	mg/kg-day	0.7	(mg/kg-day)	0.02
				Manganese (Non-diet)	676.1	mg/kg	9.72E-04	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	8.10E-04	mg/kg-day	0.024	(mg/kg-day)	0.03
				Trichloroethylene	0.08	mg/kg	1.98E-07	mg/kg-day	0.046	$(mg/kg-day)^{-1}$	9.11E-09	9.59E-08	mg/kg-day	0.0005	(mg/kg-day)	0.00
			Exp. Route Total								3.3E-05					0.1
	Soil	Soil from 0 to 2 ft bgs	Dermal	Aluminum	6736	mg/kg	NA	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	-	mg/kg-day	1.00E+00	(mg/kg-day)	NA
				Arsenic, Inorganic	4.043	mg/kg	4.91E-07	mg/kg-day	1.5	$(mg/kg-day)^{-1}$	0.000000736	6.14E-07	mg/kg-day	3.00E-04	(mg/kg-day)	0.002
				Benz[a]anthracene	0.471	mg/kg	1.03E-06	mg/kg-day	0.1	$(mg/kg-day)^{-1}$	0.000000103	3.10E-07	mg/kg-day	NA	(mg/kg-day)	NA
				Benzene	0.16	mg/kg	NA	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	-	mg/kg-day	NA	(mg/kg-day)	NA
				Benzo[a]pyrene	0.405	mg/kg	8.83E-07	mg/kg-day	1	$(mg/kg-day)^{-1}$	0.000000883	2.66E-07	mg/kg-day	3.00E-04	(mg/kg-day)	0.0009
				Benzo[b]fluoranthene	0.559	mg/kg	1.22E-06	mg/kg-day	0.1	$(mg/kg-day)^{-1}$	0.000000122	3.68E-07	mg/kg-day	NA	(mg/kg-day)	NA
				Chromium (VI)	7.28	mg/kg	NA	mg/kg-day	0.5	$(mg/kg-day)^{-1}$	NA	-	mg/kg-day	3.00E-03	(mg/kg-day)	NA
				Cobalt	4.782	mg/kg	NA	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	-	mg/kg-day	3.00E-04	(mg/kg-day)	NA
				Dibenz[a,h]anthracene	0.0701	mg/kg	1.53E-07	mg/kg-day	1	$(mg/kg-day)^{-1}$	0.000000153	4.61E-08	mg/kg-day	NA	(mg/kg-day)	NA

Table 7.1a Continued- Risk Assessment Guidance for Superfund Part D Tables
Calculation of Receptor Risks and Hazard Quotients for COPCs for Soil Concentrations from 0 bgs to 2 Feet bgs (Adult/Child Resident -Cancer and Adult - Non-cancer)
Reasonable Maximum Exposure (RME) - Future Resident
Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Receptor Population: Resident (Soil from 0 bgs to 2 Feet bgs)
Receptor Age: Adult/Child (cancer) and Non-cancer- Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations - Child/Adult					Non-Cancer Hazard Calculations - Adult				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	ke/Exposure Concentra		RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
	Soil	Soil from 0 to 2 ft bgs		Iron	12941	mg/kg	NA	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	-	mg/kg-day	7.00E-01	(mg/kg-day)	NA
				Manganese (Non-diet)	676.1	mg/kg	NA	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	-	mg/kg-day	2.40E-02	(mg/kg-day)	NA
				Trichloroethylene	0.1	mg/kg	NA	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	-	mg/kg-day	NA	(mg/kg-day)	NA
			Exp. Route Total								2.0E-06					0.003
	Ambient air vapors and particulates	Breathing zone	Inhalation	Aluminum	6736	mg/kg	1.76E-03	$\mu g/m^3$	NA	$(\mu g/m^3)^{-1}$	NA	4.75E-06	mg/m^3	5.00E-03	mg/m^3	0.001
				Arsenic, Inorganic	4.043	mg/kg	1.06E-06	$\mu g/m^3$	4.30E-03	$(\mu g/m^3)^{-1}$	4.56E-09	2.85E-09	mg/m^3	1.50E-05	mg/m^3	0.0002
				Benz[a]anthracene	0.471	mg/kg	1.06E-04	$\mu g/m^3$	6.00E-05	$(\mu g/m^3)^{-1}$	6.34E-09	1.03E-07	mg/m^3	NA	mg/m^3	NA
				Benzene	0.16	mg/kg	1.61E-02	$\mu g/m^3$	7.80E-06	$(\mu g/m^3)^{-1}$	0.000000126	4.34E-05	mg/m^3	3.00E-02	mg/m^3	0.001
				Benzo[a]pyrene	0.405	mg/kg	2.94E-07	$\mu g/m^3$	6.00E-04	$(\mu g/m^3)^{-1}$	1.76E-10	2.86E-10	mg/m^3	2.00E-06	mg/m^3	0.0001
				Benzo[b]fluoranthene	0.559	mg/kg	4.06E-07	$\mu g/m^3$	6.00E-05	$(\mu g/m^3)^{-1}$	2.43E-11	3.94E-10	mg/m^3	NA	mg/m^3	NA
				Chromium (VI)	7.28	mg/kg	5.28E-06	$\mu g/m^3$	8.40E-02	$(\mu g/m^3)^{-1}$	0.000000444	5.14E-09	mg/m^3	1.00E-04	mg/m^3	0.00005
				Cobalt	4.782	mg/kg	1.25E-06	$\mu g/m^3$	9.00E-03	$(\mu g/m^3)^{-1}$	1.13E-08	3.37E-09	mg/m^3	6.00E-06	mg/m^3	0.0006
				Dibenz[a,h]anthracene	0.0701	mg/kg	5.09E-08	$\mu g/m^3$	6.00E-04	$(\mu g/m^3)^{-1}$	3.05E-11	4.94E-11	mg/m^3	NA	mg/m^3	NA
				Iron	12941	mg/kg	3.39E-03	$\mu g/m^3$	NA	$(\mu g/m^3)^{-1}$	NA	9.13E-06	mg/m^3	NA	mg/m^3	NA
				Manganese (Non-diet)	676.1	mg/kg	1.77E-04	$\mu g/m^3$	NA	$(\mu g/m^3)^{-1}$	NA	4.77E-07	mg/m^3	5.00E-05	mg/m^3	0.0095
				Trichloroethylene	0.08	mg/kg	1.85E-02	$\mu g/m^3$	4.10E-06	$(\mu g/m^3)^{-1}$	7.57E-08	3.47E-05	mg/m^3	2.00E-03	mg/m^3	0.02
			Exp. Route Total								6.7E-07					0.03
		Exposure Point Total									3.5E-05					1.4E-01
	Exposure Medium Total										3.5E-05					1.4E-01
edium Total											3.5E-05					1.4E-01
										Total of Receptor Risks Across All Media	3.5E-05	Total of Receptor Hazards Across All Media				1.4E-01

Table 7.2a - Risk Assessment Guidance for Superfund Part D Tables
Calculation of Receptor Risks and Hazard Quotients for COPCs for Soil Concentrations from 0 ft bgs to Water Table (Adult/Child Resident -Cancer and Adult - Non-cancer)
Reasonable Maximum Exposure (RME) - Future Resident
Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Receptor Population: Resident (Soil from 0 ft. bgs to Water Table)
Receptor Age: Adult/Child (cancer) and Non-cancer - Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC Value	EPC Units	Cancer Risk Calculations - Child/Adult: Intake/Exposure Concentration Value	Intake/Exposure Concentration Units	CSF/Unit Risk Value	CSF/Unit Risk Units	Cancer Risk	Non-Cancer Hazard Calculations - Adult: Intake/Exposure Concentration Value	Intake/Exposure Concentration Units	RfD/RfC Value	RfD/RfC Units	Hazard Quotient
Soil	Soil	Soil from 0 ft bgs to water table	Ingestion	Aluminum	7,086	mg/kg	1.02E-02	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	0.00849	mg/kg-day	1	(mg/kg-day)	0.00849
				Arsenic, Inorganic	3.928	mg/kg	3.39E-06	mg/kg-day	1.5	$(mg/kg-day)^{-1}$	**5.08E-06**	2.82E-06	mg/kg-day	0.0003	(mg/kg-day)	0.00942
				Benzene	0.16	mg/kg	3.08E-05	mg/kg-day	0.055	$(mg/kg-day)^{-1}$	1.27E-08	1.92E-07	mg/kg-day	0.004	(mg/kg-day)	0.0000479
				Benz[a]anthracene	0.331	mg/kg	2.16E-06	mg/kg-day	0.1	$(mg/kg-day)^{-1}$	2.16E-07	3.97E-07	mg/kg-day	-	(mg/kg-day)	-
				Benzo[a]pyrene	0.285	mg/kg	1.86E-06	mg/kg-day	1	$(mg/kg-day)^{-1}$	**1.86E-06**	3.42E-07	mg/kg-day	0.0003	(mg/kg-day)	0.00114
				Benzo[b]fluoranthene	0.394	mg/kg	2.57E-06	mg/kg-day	0.1	$(mg/kg-day)^{-1}$	2.57E-07	4.72E-07	mg/kg-day	-	(mg/kg-day)	-
				Chromium (VI)	7.737	mg/kg	5.05E-05	mg/kg-day	0.5	$(mg/kg-day)^{-1}$	**2.53E-05**	9.27E-06	mg/kg-day	0.003	(mg/kg-day)	0.00309
				Cobalt	4.974	mg/kg	7.15E-06	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	5.96E-06	mg/kg-day	0.0003	(mg/kg-day)	0.0199
				Dibenz[a,h]anthracene	0.0195	mg/kg	1.27E-07	mg/kg-day	1	$(mg/kg-day)^{-1}$	1.27E-07	2.34E-08	mg/kg-day	-	(mg/kg-day)	-
				Iron	14,025	mg/kg	2.02E-02	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	0.0168	mg/kg-day	0.7	(mg/kg-day)	0.024
				Manganese (Non-diet)	762	mg/kg	1.10E-03	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	0.000913	mg/kg-day	0.024	(mg/kg-day)	0.0381
				Trichloroethylene	0.08	1.98E-07	mg/kg-day	0.046	mg/kg-day)	9.11E-09		9.59E-08	mg/kg-day	0.0005	(mg/kg-day)	0.000192
			Exp. Route Total								3.3E-05					0.1
Soil		Soil from 0 ft bgs to water table	Dermal	Aluminum	7,086	mg/kg	NA	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	-	mg/kg-day	1	$(mg/kg-day)^{-1}$	NA
				Arsenic, Inorganic	3.928	mg/kg	4.77E-07	mg/kg-day	1.5	$(mg/kg-day)^{-1}$	7.15E-07	5.96E-07	mg/kg-day	0.0003	$(mg/kg-day)^{-1}$	0.01
				Benzene	0.16	mg/kg	NA	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	-	mg/kg-day	0.004	$(mg/kg-day)^{-1}$	
				Benz[a]anthracene	0.331	mg/kg	7.21E-07	mg/kg-day	0.1	$(mg/kg-day)^{-1}$	7.21E-08	2.18E-07	mg/kg-day	-	$(mg/kg-day)^{-1}$	NA
				Benzo[a]pyrene	0.285	mg/kg	6.21E-07	mg/kg-day	1	$(mg/kg-day)^{-1}$	6.21E-07	1.88E-07	mg/kg-day	0.0003	$(mg/kg-day)^{-1}$	0.004
				Benzo[b]fluoranthene	0.394	mg/kg	8.59E-07	mg/kg-day	0.1	$(mg/kg-day)^{-1}$	8.59E-08	2.59E-07	mg/kg-day	-	$(mg/kg-day)^{-1}$	NA

Table 7.2a Continued- Risk Assessment Guidance for Superfund Part D Tables
Calculation of Receptor Risks and Hazard Quotients for COPCs for Soil Concentrations from 0 ft bgs to Water Table (Adult/Child Resident -Cancer and Adult - Non-cancer)
Reasonable Maximum Exposure (RME) - Future Resident
Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Receptor Population: Resident (Soil from 0 ft. bgs to Water Table)
Receptor Age: Adult/Child (cancer) and Non-cancer - Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC Value	EPC Units	Cancer Risk Calculations - Child/Adult: Intake/Exposure Concentration Value	Intake/Exposure Concentration Units	CSF/Unit Risk Value	CSF/Unit Risk Units	Cancer Risk	Non-Cancer Hazard Calculations - Adult: Intake/Exposure Concentration Value	Intake/Exposure Concentration Units	RfD/RfC Value	RfD/RfC Units	Hazard Quotient
Soil	Soil	Soil from 0 ft bgs to	Dermal	Chromium (VI)	7.737	mg/kg	NA	mg/kg-day	0.5	$(mg/kg-day)^{-1}$	NA	-	mg/kg-day	0.003	$(mg/kg-day)^{-1}$	NA
				Cobalt	4.974	mg/kg	NA	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	-	mg/kg-day	0.0003	$(mg/kg-day)^{-1}$	NA
				Dibenz[a,h]anthracene	0.0195	mg/kg	4.25E-08	mg/kg-day	1	$(mg/kg-day)^{-1}$	4.25E-08	1.28E-08	mg/kg-day	-	$(mg/kg-day)^{-1}$	NA
				Iron	14,025	mg/kg	NA	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	-	mg/kg-day	0.7	$(mg/kg-day)^{-1}$	NA
				Manganese (Non-diet)	762	mg/kg	NA	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	-	mg/kg-day	0.024	$(mg/kg-day)^{-1}$	NA
				Trichloroethylene	0.08	mg/kg	NA	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	-	mg/kg-day	0.0005	$(mg/kg-day)^{-1}$	NA
			Exp. Route Total								1.5E-06					0.02
				Aluminum	7,086	mg/kg	1.86E-03	$\mu g/m^3$	NA	$(\mu g/m^3)^{-1}$	NA	0.000005	mg/m^3	0.005	mg/m^3	0.001
				Arsenic, Inorganic	3.928	mg/kg	1.03E-06	$\mu g/m^3$	4.30E-03	$(\mu g/m^3)^{-1}$	4.43E-09	2.77E-09	mg/m^3	0.000015	mg/m^3	0.000185
				Benzene	0.16	mg/kg	1.61E-02	$\mu g/m^3$	7.80E-06	$(\mu g/m^3)^{-1}$	1.26E-07	4.34E-05	mg/m^3	0.03	mg/m^3	0.00145
				Benz[a]anthracene	0.331	mg/kg	7.42E-05	$\mu g/m^3$	6.00E-05	$(\mu g/m^3)^{-1}$	4.45E-09	7.22E-08	mg/m^3	-	mg/m^3	-
				Benzo[a]pyrene	0.285	mg/kg	2.07E-07	$\mu g/m^3$	6.00E-04	$(\mu g/m^3)^{-1}$	1.24E-10	2.01E-10	mg/m^3	0.000002	mg/m^3	0.000101
	Ambient air vapors and particulates	Breathing zone	Inhalation	Benzo[b]fluoranthene	0.394	mg/kg	2.86E-07	$\mu g/m^3$	6.00E-05	$(\mu g/m^3)^{-1}$	1.72E-11	2.78E-10	mg/m^3	-	mg/m^3	-
				Chromium (VI)	7.737	mg/kg	5.61E-06	$\mu g/m^3$	8.40E-02	$(\mu g/m^3)^{-1}$	4.72E-07	5.46E-09	mg/m^3	0.0001	mg/m^3	0.0000546
				Cobalt	4.974	mg/kg	1.30E-06	$\mu g/m^3$	9.00E-03	$(\mu g/m^3)^{-1}$	1.17E-08	3.51E-09	mg/m^3	0.000006	mg/m^3	0.000585
				Dibenz[a,h]anthracene	0.0195	mg/kg	1.41E-08	$\mu g/m^3$	6.00E-04	$(\mu g/m^3)^{-1}$	8.49E-12	1.38E-11	mg/m^3	-	mg/m^3	-
				Iron	14,025	mg/kg	3.67E-03	$\mu g/m^3$	NA	$(\mu g/m^3)^{-1}$	NA	9.89E-06	mg/m^3	-	mg/m^3	-
				Manganese (Non-diet)	762	mg/kg	2.00E-04	$\mu g/m^3$	NA	$(\mu g/m^3)^{-1}$	NA	5.38E-07	mg/m^3	0.00005	mg/m^3	0.0108
				Trichloroethylene	0.08	mg/kg	1.85E-02	$\mu g/m^3$	4.10E-06	$(\mu g/m^3)^{-1}$	7.57E-08	3.47E-05	mg/m^3	0.002	mg/m^3	0.0174
			Exp. Route Total								6.9E-07					0.03
		Exposure Point Total									3.5E-05					0.147
	Exposure Medium Total										3.5E-05					1.5E-01
Medium Total											3.5E-05					1.5E-01
Total of Receptor Risks Across All Media											3.5E-05	Total of Receptor Hazards Across All Media				1.5E-01

Table 7.3 - Risk Assessment Guidance for Superfund Part D Tables
Calculation of Receptor Risks and Hazard Quotients for COPCs for Soil Concentrations from 0 bgs to 2 Feet bgs (Future Construction Worker)
Reasonable Maximum Exposure (RME) - Future Construction Worker
Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Receptor Population: Construction Worker (Soil from 0 to 2 ft bgs)
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemicals of Potential Concern	EPC		Cancer Risk Calculations - Adult Construction Worker					Non-Cancer Hazard Calculations - Adult Construction Worker				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		Subchronic RfD/RfC (except where noted)		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Surface Soil	Soil (0 to 2 feet)	Ingestion	Aluminum	6,736	mg/kg	3.26E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NA	1.98E-02	mg/kg-day	1	(mg/kg-day)	0.02
				Arsenic, Inorganic	4.043	mg/kg	1.17E-08	mg/kg-day	1.5	$(mg/kg\text{-}day)^{-1}$	1.8E-08	7.15E-06	mg/kg-day	NA	(mg/kg-day)	NA
				Benz[a]anthracene	0.471	mg/kg	2.28E-09	mg/kg-day	0.1	$(mg/kg\text{-}day)^{-1}$	2.3E-10	1.39E-06	mg/kg-day	NA	(mg/kg-day)	NA
				Benzene	0.16	mg/kg	7.75E-10	mg/kg-day	5.50E-02	$(mg/kg\text{-}day)^{-1}$	4.3E-11	4.71E-07	mg/kg-day	0.01[a]	(mg/kg-day)	0.00005
				Benzo[a]pyrene	0.405	mg/kg	1.96E-09	mg/kg-day	1	$(mg/kg\text{-}day)^{-1}$	2.0E-09	1.19E-06	mg/kg-day	0.0003[a]	(mg/kg-day)	0.004
				Benzo[b]fluoranthene	0.559	mg/kg	2.71E-09	mg/kg-day	0.1	$(mg/kg\text{-}day)^{-1}$	2.7E-10	1.65E-06	mg/kg-day	NA	(mg/kg-day)	NA
				Chromium (VI)	7.28	mg/kg	3.53E-08	mg/kg-day	0.5	$(mg/kg\text{-}day)^{-1}$	1.8E-08	2.15E-05	mg/kg-day	0.005	(mg/kg-day)	0.004
				Cobalt	4.782	mg/kg	2.32E-08	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NA	1.41E-05	mg/kg-day	0.003	(mg/kg-day)	0.005
				Dibenz[a,h]anthracene	0.0701	mg/kg	3.4E-10	mg/kg-day	1	$(mg/kg\text{-}day)^{-1}$	3.4E-10	2.07E-07	mg/kg-day	NA	(mg/kg-day)	NA
				Iron	12,941	mg/kg	6.27E-05	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NA	3.81E-02	mg/kg-day	0.7	(mg/kg-day)	0.05
				Manganese (Non-diet)	676.1	mg/kg	3.27E-06	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NA	1.99E-03	mg/kg-day	0.024[a]	(mg/kg-day)	0.08
				Trichloroethylene	0.06		2.91E-10	mg/kg-day	0.046	$(mg/kg\text{-}day)^{-1}$	1.3E-11	1.77E-07	mg/kg-day	NA	(mg/kg-day)	NA
			Exp. Route Total								3.8E-08					0.17
Soil	Surface Soil	Soil (0 to 2 feet)	Dermal	Aluminum	6,736	mg/kg	NA	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NA	NA	NA	1	(mg/kg-day)	NA
				Arsenic, Inorganic	4.043	mg/kg	1.88E-09	mg/kg-day	1.5	$(mg/kg\text{-}day)^{-1}$	2.8E-09	0.00000115	mg/kg-day	NA	(mg/kg-day)	NA
				Benz[a]anthracene	0.471	mg/kg	9.51E-10	mg/kg-day	0.1	$(mg/kg\text{-}day)^{-1}$	9.5E-11	0.000000578	mg/kg-day	NA	(mg/kg-day)	NA
				Benzene	0.16	mg/kg	NA	mg/kg-day	5.50E-02	(mg/kg-day)-1	NA	NA	mg/kg-day	NA	(mg/kg-day)	NA
				Benzo[a]pyrene	0.405	mg/kg	8.18E-10	mg/kg-day	1	$(mg/kg\text{-}day)^{-1}$	8.2E-10	0.000000497	mg/kg-day	NA	(mg/kg-day)	NA
				Benzo[b]fluoranthene	0.559	mg/kg	1.13E-09	mg/kg-day	0.1	$(mg/kg\text{-}day)^{-1}$	1.1E-10	0.000000687	mg/kg-day	NA	(mg/kg-day)	NA
				Chromium (VI)	7.28	mg/kg	NA	mg/kg-day	0.5	$(mg/kg\text{-}day)^{-1}$	NA	NA	mg/kg-day	0.005	(mg/kg-day)	NA
				Cobalt	4.782	mg/kg	NA	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NA	NA	mg/kg-day	0.003	(mg/kg-day)	NA
				Dibenz[a,h]anthracene	0.0701	mg/kg	1.42E-10	mg/kg-day	1	(mg/kg-day)-1	1.4E-10	8.61E-08	mg/kg-day	NA	(mg/kg-day)	NA
				Iron	12,941	mg/kg	NA	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NA	NA	mg/kg-day	0.7	(mg/kg-day)	NA
				Manganese (Non-diet)	676.1	mg/kg	NA	mg/kg-day	NA	$(mg/kg\text{-}day)^{-1}$	NA	NA	mg/kg-day	NA	(mg/kg-day)	NA
				Trichloroethylene	0.06	mg/kg	NA	mg/kg-day	0.046	$(mg/kg\text{-}day)^{-1}$	NA	NA	mg/kg-day	NA	(mg/kg-day)	NA
			Exp. Route Total								4.0E-09					0.000
Soil	Ambient air vapors and particulates	Breathing Zone	Inhalation	Aluminum	6,736	mg/kg	1.94E-06	$\mu g/m^3$	NA	$(\mu g/m^3)^{-1}$	NA	1.18E-06	mg/m^3	NA	mg/m^3	NA
				Arsenic, Inorganic	4.043	mg/kg	1.16E-09	$\mu g/m^3$	4.30E-03	$(\mu g/m^3)^{-1}$	5.0E-12	7.08E-10	mg/m^3	NA	mg/m^3	NA
				Benz[a]anthracene	0.471	mg/kg	5.7E-07	$\mu g/m^3$	6.00E-05	$(\mu g/m^3)^{-1}$	1.16E-11	1.17E-07	mg/m^3	NA	mg/m^3	NA
				Benzene	0.16	mg/kg	0.000242	$\mu g/m^3$	7.80E-06	$(\mu g/m^3)^{-1}$	6.37E-10	4.97E-05	mg/m^3	0.08	mg/m^3	0.0006
				Benzo[a]pyrene	0.405	mg/kg	1.17E-10	$\mu g/m^3$	6.00E-04	$(\mu g/m^3)^{-1}$	6.99E-14	7.09E-11	mg/m^3	NA	mg/m^3	NA
				Benzo[b]fluoranthene	0.559	mg/kg	1.61E-10	$\mu g/m^3$	6.00E-05	$(\mu g/m^3)^{-1}$	9.65E-15	9.79E-11	mg/m^3	NA	mg/m^3	NA
				Chromium(VI)	7.28	mg/kg	2.1E-09	$\mu g/m^3$	8.40E-02	$(\mu g/m^3)^{-1}$	1.76E-10	1.27E-09	mg/m^3	3.00E-04	mg/m^3	0.000004
				Cobalt	4.782	mg/kg	1.38E-09	$\mu g/m^3$	9.00E-03	$(\mu g/m^3)^{-1}$	1.24E-11	8.37E-10	mg/m^3	2.00E-05	mg/m^3	0.00004
				Dibenz[a,h]anthracene	0.0701	mg/kg	2.02E-11	$\mu g/m^3$	6.00E-04	$(\mu g/m^3)^{-1}$	1.21E-14	1.23E-11	mg/m^3	NA	mg/m^3	NA
				Iron	12,941	mg/kg	3.72E-06	$\mu g/m^3$	NA	$(\mu g/m^3)^{-1}$	NA	2.27E-06	mg/m^3	NA	mg/m^3	NA
				Manganese (Non-diet)	676.1	mg/kg	1.95E-07	$\mu g/m^3$	NA	$(\mu g/m^3)^{-1}$	NA	1.18E-07	mg/m^3	NA	mg/m^3	NA
				Trichloroethylene	0.06	mg/kg	0.000145	$\mu g/m^3$	4.10E-06	$(\mu g/m^3)^{-1}$	2.01E-10	2.98E-05	mg/m^3	2.15E-03	mg/m^3	0.01
			Exp. Route Total								1.0E-09					0.01
		Exposure Point Total									4.3E-08					0.2
	Exposure Medium Total										4.3E-08					0.2
Medium Total											4.3E-08					0.2
								Total of Receptor Risks Across All Media			4.3E-08	Total of Receptor Hazards Across All Media				0.2

[a] Chronic Reference Dose used based on the absence of a subchronic value.

Table 7.4 - Risk Assessment Guidance for Superfund Part D Tables
Calculation of Receptor Risks and Hazard Quotients for COPCs for Soil Concentrations from 0 ft bgs to Water Table (Future Construction Worker)
Reasonable Maximum Exposure (RME) - Future Construction Worker
Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Receptor Population: Construction Worker (Soil from 0 ft bgs to Water Table)
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations - Adult Construction Worker					Non-Cancer Hazard Calculations - Adult Construction Worker				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk	Intake/Exposure Concentration		Subchronic RfD/RfC		Hazard Quotient
							Value	Units	Value	Units		Value	Units	Value	Units	
Soil	Soil	Soil from 0 ft bgs to water table	Ingestion	Aluminum	7,086	mg/kg	3.43E-05	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	0.0209	mg/kg-day	1	(mg/kg-day)	0.02
				Arsenic, Inorganic	3.928	mg/kg	1.14E-08	mg/kg-day	1.5	$(mg/kg-day)^{-1}$	1.71E-08	0.00000694	mg/kg-day	NA	(mg/kg-day)	NA
				Benz[a]anthracene	0.331	mg/kg	1.6E-09	mg/kg-day	0.1	$(mg/kg-day)^{-1}$	1.6E-10	0.000000975	mg/kg-day	NA	(mg/kg-day)	NA
				Benzene	0.08	mg/kg	3.87E-10	mg/kg-day	0.055	$(mg/kg-day)^{-1}$	2.13E-11	0.000000236	mg/kg-day	0.01	(mg/kg-day)	0.00002
				Benzo[a]pyrene	0.285	mg/kg	1.38E-09	mg/kg-day	1	$(mg/kg-day)^{-1}$	1.38E-09	0.00000084	mg/kg-day	0.0003	(mg/kg-day)	0.003
				Benzo[b]fluoranthene	0.394	mg/kg	1.91E-09	mg/kg-day	0.1	$(mg/kg-day)^{-1}$	1.91E-10	0.00000116	mg/kg-day	NA	(mg/kg-day)	NA
				Chromium (VI)	7.737	mg/kg	3.75E-08	mg/kg-day	0.5	$(mg/kg-day)^{-1}$	1.87E-08	0.0000228	mg/kg-day	0.005	(mg/kg-day)	0.005
				Cobalt	4.974	mg/kg	2.41E-08	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	0.0000147	mg/kg-day	0.003	(mg/kg-day)	0.005
				Dibenz[a,h]anthracene	0.0195	mg/kg	9.44E-11	mg/kg-day	1	$(mg/kg-day)^{-1}$	9.44E-11	5.75E-08	mg/kg-day	NA	(mg/kg-day)	NA
				Iron	14,025	mg/kg	0.0000679	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	0.0413	mg/kg-day	0.7	(mg/kg-day)	0.06
				Manganese (Non-diet)	762	mg/kg	0.00000369	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	0.00225	mg/kg-day	0.024	(mg/kg-day)	0.09
				Trichloroethylene	0.16	mg/kg	7.75E-10	mg/kg-day	0.046	$(mg/kg-day)^{-1}$	3.56E-11	0.000000471	mg/kg-day	NA	(mg/kg-day)	NA
			Exp. Route Total								3.8E-08					0.2
Soil	Soil	Soil from 0 ft bgs to water table	Dermal	Aluminum	7,086	mg/kg	-	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	NA	mg/kg-day	1	(mg/kg-day)	NA
				Arsenic, Inorganic	3.928	mg/kg	1.83E-09	mg/kg-day	1.5	(mg/kg-day)-1	2.75E-09	0.00000111	mg/kg-day	NA	(mg/kg-day)	NA
				Benz[a]anthracene	0.331	mg/kg	6.68E-10	mg/kg-day	0.1	(mg/kg-day)-1	6.68E-11	0.000000407	mg/kg-day	NA	(mg/kg-day)	NA
				Benzene	0.08	mg/kg	NA	mg/kg-day	0.055	$(mg/kg-day)^{-1}$	NA	NA	mg/kg-day	NA	(mg/kg-day)	NA
				Benzo[a]pyrene	0.285	mg/kg	5.75E-10	mg/kg-day	1	$(mg/kg-day)^{-1}$	5.75E-10	0.00000035	mg/kg-day	NA	(mg/kg-day)	0.001
				Benzo[b]fluoranthene	0.394	mg/kg	7.95E-10	mg/kg-day	0.1	$(mg/kg-day)^{-1}$	7.95E-11	0.000000484	mg/kg-day	NA	(mg/kg-day)	NA
				Chromium (VI)	7.737	mg/kg	NA	mg/kg-day	0.5	$(mg/kg-day)^{-1}$	NA	NA	mg/kg-day	0.005	(mg/kg-day)	NA
				Cobalt	4.974	mg/kg	NA	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	NA	mg/kg-day	0.003	(mg/kg-day)	NA
				Dibenz[a,h]anthracene	0.0195	mg/kg	3.94E-11	mg/kg-day	1	(mg/kg-day)-1	3.94E-11	2.39E-08	mg/kg-day	NA	(mg/kg-day)	NA
				Iron	14,025	mg/kg	NA	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	NA	mg/kg-day	0.7	(mg/kg-day)	NA
				Manganese (Non-diet)	762	mg/kg	NA	mg/kg-day	NA	$(mg/kg-day)^{-1}$	NA	NA	mg/kg-day	NA	(mg/kg-day)	NA
				Trichloroethylene	0.16	mg/kg	NA	mg/kg-day	0.046	$(mg/kg-day)^{-1}$	NA	NA	mg/kg-day	NA	(mg/kg-day)	NA
			Exp. Route Total								3.5E-09					0.001
Soil	Ambient air vapors and particulates	Breathing zone	Inhalation	Aluminum	7,086	mg/kg	0.00000204	$\mu g/m^3$	NA	$(\mu g/m^3)^{-1}$	NA	0.00000124	mg/m^3	NA	mg/m^3	NA
				Arsenic, Inorganic	3.928	mg/kg	1.13E-09	$\mu g/m^3$	4.30E-03	$(\mu g/m^3)^{-1}$	4.86E-12	6.88E-10	mg/m^3	NA	mg/m^3	NA
				Benz[a]anthracene	0.331	mg/kg	0.000000135	$\mu g/m^3$	6.00E-05	$(\mu g/m^3)^{-1}$	8.13E-12	8.24E-08	mg/m^3	NA	mg/m^3	NA
				Benzene	0.08	mg/kg	0.0000408	$\mu g/m^3$	7.80E-06	$(\mu g/m^3)^{-1}$	3.18E-10	2.48E-05	mg/m^3	0.08	mg/m^3	0.0003
				Benzo[a]pyrene	0.285	mg/kg	8.2E-11	$\mu g/m^3$	6.00E-04	$(\mu g/m^3)^{-1}$	4.92E-14	4.99E-11	mg/m^3	NA	mg/m^3	NA
				Benzo[b]fluoranthene	0.394	mg/kg	1.13E-10	$\mu g/m^3$	6.00E-05	$(\mu g/m^3)^{-1}$	6.8E-15	6.9E-11	mg/m^3	NA	mg/m^3	NA
				Chromium (VI)	7.737	mg/kg	2.23E-09	$\mu g/m^3$	8.40E-02	$(\mu g/m^3)^{-1}$	1.87E-10	1.35E-09	mg/m^3	0.0003	mg/m^3	0.000005
				Cobalt	4.974	mg/kg	1.43E-09	$\mu g/m^3$	9.00E-03	$(\mu g/m^3)^{-1}$	1.29E-11	8.71E-10	mg/m^3	0.00002	mg/m^3	0.00004
				Dibenz[a,h]anthracene	0.0195	mg/kg	5.61E-12	$\mu g/m^3$	6.00E-04	$(\mu g/m^3)^{-1}$	3.37E-15	3.41E-12	mg/m^3	NA	mg/m^3	NA
				Iron	14,025	mg/kg	0.00000404	$\mu g/m^3$	NA	$(\mu g/m^3)^{-1}$	NA	0.00000246	mg/m^3	mig/m^3	mg/m^3	NA
				Manganese (Non-diet)	762	mg/kg	0.000000219	$\mu g/m^3$	NA	$(\mu g/m^3)^{-1}$	NA	0.000000133	mg/m^3	NA	mg/m^3	NA
				Trichloroethylene	0.16	mg/kg	0.000131	$\mu g/m^3$	4.10E-06	$(\mu g/m^3)^{-1}$	5.36E-10	0.0000795	mg/m^3	NA	mg/m^3	NA
			Exp. Route Total								1.1E-09					0.00
		Exposure Point Total									4.2E-08					0.2
Exposure Medium Total											4.2E-08					0.2
Medium Total											4.2E-08					0.2
										Total of Receptor Risks Across All Media	4.2E-08			Total of Receptor Hazards Across All Media		0.2

Table 9.1 - Risk Assessment Guidance for Superfund Part D Tables
Summary of Receptor Risks and Hazard Quotients for COPCs for Soil Concentrations from 0 bgs to 2 Feet bgs (Adult/Child Resident -Cancer and Child - Non-cancer)
Exceeding Risk Range and Goal of Protection for Non-cancer - Future Resident
Site SS025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult and Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient (Child)				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Surface Soil	Soil (0 to 2 feet)	Aluminum	NA	NA	NA		NA	Nervous system and morphological developmental	0.09		0.001	0.09
									Brain (psychomotor and cognitive impairment effects)		0.001		0.001
			Arsenic, Inorganic	5.23E-06	4.56E-09	0.000000736		**6.0E-06**	Skin and blood vessels	**0.1**		0.0002	0.1
									Developmental, cardiovascular, nervous sytem, respiratory system, and skin		0.0002		0.0002
			Benzene	1.27E-08	0.000000126	NA		1.4E-07	Immune System	0.0005		NA	0.0005
									Decreased lymphocyte count		0.001		0.001
			Benz[a]anthracene	3.08E-07	6.34E-09	0.000000103		4.2E-07	NA	NA		NA	NA
			Benzo[a]pyrene	2.64E-06	1.76E-10	0.000000883		**3.5E-06**	Developmental toxicity (nervous system)	0.02		0.0001	0.02
									Developmental toxicity (Reproductive system)		0.0001		0.0001
			Benzo[b]fluoranthene	3.65E-07	2.43E-11	0.000000122		4.9E-07	NA	NA		NA	-
			Chromium (VI)	2.38E-05	0.000000444	NA		**2.4E-05**	Gastrointestinal tract	0.03		0.00005	0.03
									Respiratory System		0.00005		0.00005
			Cobalt	NA	1.13E-08	NA		1.1E-08	Thyroid	**0.2**		0.0006	**0.2**
									Respiratory tract and lung		0.0006		0.0006
			Dibenz[a,h]anthracene	4.58E-07	3.05E-11	0.000000153		6.1E-07	NA	NA		NA	NA
									NA		NA		NA
			Iron	NA	NA	NA		NA	Gastrointestinal tract	**0.2**		NA	**0.2**
									NA		NA		-
			Manganese (Non-diet)	NA	NA	NA		NA	Central Nervous System	**0.4**		0.01	**0.4**
			Trichloroethylene	9.11E-09	7.57E-08	NA		8.5E-08	Central Nervous System	0.002		0.02	0.02
									Increased fetal cardiac malformations		0.02		0.02
								3.5E-05					1.1
	Exposure Point Total							3.5E-05					1.1
	Exposure Medium Total							3.5E-05					1.1
Medium Total								3.5E-05					1.1
Receptor Total						Receptor Risk Total		3.5E-05				Receptor HI Total	1.1

Total Nervous System HI Across All Media =	0.4
Total GI HI Across All Media =	0.3
Total Developmental HI Across All Media =	0.1
Total Respiratory System HI Across All Media =	0.001
Total Skin HI Across All Media =	0.1

TABLE 9.2
Summary of Receptor Risks and Hazard Quotients for COPCs for Soil Concentrations from 0 ft bgs to Water Table (Adult/Child Resident -Cancer and Child - Non-cancer)
Exceeding Risk Range and Goal of Protection for Non-cancer - Future Resident
Site SS025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult and Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient (Child)				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Surface Soiil	Soil (0 ft bgs to Water Table)	Aluminum	NA	NA	NA			Nervous system and morphological developmental	0.09		NA	0.09
									Brain (psychomotor and cognitive impairment effects)		0.001		0.001
			Arsenic, Inorganic	**5.08E-06**	4.43E-09	7.15E-07		5.8E-06	Skin and blood vessels	**0.1**		0.01	0.1
									Developmental, cardiovascular, nervous sytem, respiratory system, and skin		0.0002		0.0002
			Benz[a]anthracene	2.16E-07	4.45E-09	7.21E-08		2.9E-07	NA	NA		NA	NA
									NA		NA		NA
			Benzo[a]pyrene	**1.86E-06**	1.24E-10	6.21E-07		2.5E-06	Developmental toxicity (nervous system)	0.01		0.004	0.02
									Developmental toxicity (Reproductive system)		0.0001		0.0001
			Benzo[b]fluoranthene	2.57E-07	1.72E-11	8.59E-08		3.4E-07	NA	NA		NA	NA
									NA		NA		NA
			Chromium (VI)	**2.53E-05**	4.72E-07	NA		2.6E-05	Gastrointestinal tract	0.03		NA	0.03
									Respiratory System		0.00005		0.00005
			Cobalt	NA	1.17E-08	NA		1.2E-08	Thyroid	**0.2**		NA	0.2
									Respiratory tract and lung		0.0006		0.0006
			Dibenz[a,h]anthracene	1.27E-07	8.49E-12	4.25E-08		1.7E-07	NA	NA		NA	NA
									NA		NA		NA
			Iron	NA	NA	NA		NA	Gastrointestinal tract	**0.3**		NA	0.3
									NA		NA		NA
			Manganese (Non-diet)	NA	NA	NA		NA	Central Nervous System	**0.4**		NA	0.4
									Central Nervous System		0.01		0.01
								3.5E-05					1.1
		Exposure Point Total						3.5E-05					1.1
	Exposure Medium Total							3.5E-05					1.1
Medium Total								3.5E-05					1.1
Receptor Total							Receptor Risk Total	3.5E-05				Receptor HI Total	1.1

Total Nervous System HI Across All Media =	0.4
Total GI HI Across All Media =	0.3
Total Developmental HI Across All Media =	0.1
Total Respiratory System HI Across All Media =	0.001
Total Skin HI Across All Media =	0.1

TABLE 9.3. Risk Assessment Guidance for Superfund Part D Tables
Summary of Receptor Risks and Hazard Quotients for COPCs for Soil Concentrations from 0 to 2 ft bgs
Risk Range and Hazard Index by Health Effect - Future Construction Worker
Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Receptor Population: Future Construction Worker
Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient (Construction Worker)				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Surface Soil	Soil (0 to 2 ft)	Aluminum	NA	NA	NA		NA	Nervous system and morphological developmental	0.02	NA	NA	0.02
			Arsenic, Inorganic	1.8E-08	5.0E-12	2.83E-09		2.0E-08	Skin and blood vessels	NA	NA	NA	NA
			Benz[a]anthracene	2.3E-10	1.2E-11	9.5E-11		3.3E-10	NA	NA	NA	NA	NA
			Benzene	4.3E-11	6.37E-10	NA		6.8E-10	Decreased Lymphocyte Count	0.00005	0.0006	0.002	0.002
			Benzo[a]pyrene	2.0E-09	7.0E-14	8.2E-10		2.8E-09	Developmental toxicity (nervous system)	0.004	NA	NA	0.004
			Benzo[b]fluoranthene	2.71E-10	9.7E-15	1.1E-10		3.8E-10	NA	NA	NA	NA	NA
			Chromium (VI)	1.8E-08	1.8E-10	NA		1.8E-08	Gastrointestinal tract	0.004	NA	NA	0.004
			Cobalt	NA	1.2E-11	NA		1.2E-11	Respiratory System (increased lung weight)		0.000004		0.000004
			Dibenz[a,h]anthracene	3.4E-10	1.21E-14	1.42E-10		4.8E-10	Thyroid	0.005	NA	NA	0.005
			Iron	NA	NA	NA		NA	Respiratory tract and lung (irritation and decreased lung function)		0.00004		0.00004
			Manganese (Non-diet)	NA	NA	NA		NA	NA	NA	NA	NA	NA
			Triichloroethylene	1.3E-11	2.0E-10	NA		2.1E-10	NA	NA	NA	NA	NA
									Gastrointestinal tract	0.05	NA	NA	0.05
									NA		NA		NA
									Central Nervous Syster	0.08	NA	NA	0.08
									NA		NA		NA
									Developmental/immune effects	NA	NA	NA	NA
									Multiple including increased incidence of congenital heart abnormalities/and immune effects		NA		NA
								4.3E-08					0.2
		Exposure Point Total						4.3E-08					0.2
	Exposure Medium Total							4.3E-08					0.2
Medium Total								4.3E-08					0.2
Receptor Total							Receptor Risk Total	4.3E-08				Receptor HI Total	0.2

Total Nervous System HI Across All Media =	0.1
Total GI HI Across All Media =	0.05
Total Developmental HI Across All Media =	0.004
Total Respiratory System HI Across All Media =	0.00004
Total Skin HI Across All Media =	0.000
Total Thyroid Effects =	0.005
Total Congenital Heart Defect =	0.00

TABLE 9.4 Risk Assessment Guidance for Superfund Part D Tables
Summary of Receptor Risks and Hazard Quotients for COPCs for Soil Concentrations from 0 ft bgs to Water Table (Adult Construction Worker)
Risk Range and Hazard Index by Health Effect - Future Construction Worker
Site SS-025, Former Griffiss Air Force Base, Rome, New York

Scenario Timeframe: Future
Receptor Population: Future Construction Worker
Receptor Age: Adult Construction Worker

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient (Child)				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Soil	Surface Soil	Soil (0 ft bgs to Water Table)	Aluminum	NA	NA	NA		NA	Nervous system and morphological developmental	0.02		NA	0.02
									NA		NA		NA
			Arsenic, Inorganic	1.71E-08	4.86E-12	2.75E-09		2.0E-08	Skin and blood vessels	NA		NA	NA
									NA		NA		NA
			Benz[a]anthracene	1.6E-10	8.13E-12	6.68E-11		2.3E-10	NA	NA		NA	NA
									NA		NA		NA
			Benzene	2.13E-11	3.18E-10	NA		3.4E-10	Decreased Lymphocyte Count	0.00002		NA	0.00002
									Decreased Lymphocyte Count		0.0003		0.0003
			Benzo[a]pyrene	1.38E-09	4.92E-14	5.75E-10		2.0E-09	Developmental toxicity (nervous system)	0.003		0.001	0.004
									NA		NA		NA
			Benzo[b]fluoranthene	1.91E-10	6.8E-15	7.95E-11		2.7E-10	NA	NA		NA	NA
									NA		NA		NA
			Chromium (VI)	1.87E-08	1.87E-10	NA		1.9E-08	Gastrointestinal tract	0.005		NA	0.005
									Respiratory System (increased lung weight)		0.000005		0.000005
			Cobalt	NA	1.29E-11	NA		1.3E-11	Thyroid	0.005		NA	0.005
									Respiratory tract and lung (irritation and decreased lung function)		0.00004		0.00004
			Dibenz[a,h]anthracene	9.44E-11	3.37E-15	3.94E-11		1.3E-10	NA	NA		NA	NA
									NA		NA		NA
			Iron	NA	NA	NA		NA	Gastrointestinal tract	0.06		NA	0.06
									NA		NA		NA
			Manganese (Non-diet)	NA	NA	NA		NA	Central Nervous System	0.09		NA	0.09
									NA		NA		NA
			Trichloroethylene	3.56E-11	5.36E-10	NA		5.7E-10	Developmental/immune effects	0.0009		NA	0.0009
									Multiple including increased incidence of congenital heart abnormalities/and immune effects		NA		NA
								4.2E-08					0.2
		Exposure Point Total						4.2E-08					0.2
	Exposure Medium Total							4.2E-08					0.2
Medium Total								4.2E-08					0.2
Receptor Total							Receptor Risk Total	4.2E-08				Receptor HI Total	0.2

Total Nervous System HI Across All Media =	1.14E-01
Total GI HI Across All Media =	6.36E-02
Total Developmental HI Across All Media =	4.91E-03
Total Respiratory System HI Across All Media =	4.80E-05
Total Skin HI Across All Media =	0.00E+00

APPENDIX D
PROUCL OUTPUTS

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Resident - Scenario 1
(soil from 0 ft bgs to 2 ft bgs)

	A	B	C	D	E	F	G	H	I	J	K	L
1	**UCL Statistics for Data Sets with Non-Detects**											
2												
3				User Selected Options								
4				Date/Time of Computation	ProUCL 5.12/9/2018 1:09:42 PM							
5				From File	WorkSheet.xls							
6				Full Precision	OFF							
7				Confidence Coefficient	95%							
8				Number of Bootstrap Operations	2000							
9												
10	**Benzo[a]anthracene**											
11												
12	**General Statistics**											
13				Total Number of Observations	20			Number of Distinct Observations	19			
14				Number of Detects	16			Number of Non-Detects	4			
15				Number of Distinct Detects	16			Number of Distinct Non-Detects	3			
16				Minimum Detect	0.0027			Minimum Non-Detect	0.0028			
17				Maximum Detect	1.4			Maximum Non-Detect	0.003			
18				Variance Detects	0.143			Percent Non-Detects	20%			
19				Mean Detects	0.167			SD Detects	0.378			
20				Median Detects	0.0315			CV Detects	2.26			
21				Skewness Detects	2.884			Kurtosis Detects	8.172			
22				Mean of Logged Detects	-3.587			SD of Logged Detects	1.935			
23												
24	**Normal GOF Test on Detects Only**											
25				Shapiro Wilk Test Statistic	0.493			**Shapiro Wilk GOF Test**				
26				5% Shapiro Wilk Critical Value	0.887			Detected Data Not Normal at 5% Significance Level				
27				Lilliefors Test Statistic	0.393			**Lilliefors GOF Test**				
28				5% Lilliefors Critical Value	0.213			Detected Data Not Normal at 5% Significance Level				
29	**Detected Data Not Normal at 5% Significance Level**											
30												
31	**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**											
32				KM Mean	0.135			KM Standard Error of Mean	0.0772			
33				KM SD	0.334			95% KM (BCA) UCL	0.281			
34				95% KM (t) UCL	0.268			95% KM (Percentile Bootstrap) UCL	0.268			
35				95% KM (z) UCL	0.262			95% KM Bootstrap t UCL	1.098			
36				90% KM Chebyshev UCL	0.366			95% KM Chebyshev UCL	0.471			
37				97.5% KM Chebyshev UCL	0.617			99% KM Chebyshev UCL	0.903			
38												
39	**Gamma GOF Tests on Detected Observations Only**											
40				A-D Test Statistic	1.246			**Anderson-Darling GOF Test**				
41				5% A-D Critical Value	0.823			Detected Data Not Gamma Distributed at 5% Significance Level				
42				K-S Test Statistic	0.242			**Kolmogorov-Smirnov GOF**				
43				5% K-S Critical Value	0.231			Detected Data Not Gamma Distributed at 5% Significance Level				
44	**Detected Data Not Gamma Distributed at 5% Significance Level**											
45												
46	**Gamma Statistics on Detected Data Only**											
47				k hat (MLE)	0.37			k star (bias corrected MLE)	0.342			
48				Theta hat (MLE)	0.452			Theta star (bias corrected MLE)	0.489			
49				nu hat (MLE)	11.84			nu star (bias corrected)	10.96			
50				Mean (detects)	0.167							
51												
52	**Gamma ROS Statistics using Imputed Non-Detects**											

	A	B	C	D	E	F	G	H	I	J	K	L
53	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
54	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
55	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
56	This is especially true when the sample size is small.											
57	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
58					Minimum	0.0027				Mean		0.136
59					Maximum	1.4				Median		0.0165
60					SD	0.342				CV		2.518
61					k hat (MLE)	0.371				k star (bias corrected MLE)		0.349
62					Theta hat (MLE)	0.367				Theta star (bias corrected MLE)		0.39
63					nu hat (MLE)	14.84				nu star (bias corrected)		13.95
64					Adjusted Level of Significance (β)	0.038						
65					Approximate Chi Square Value (13.95, α)	6.535				Adjusted Chi Square Value (13.95, β)		6.137
66					95% Gamma Approximate UCL (use when n>=50)	0.29				95% Gamma Adjusted UCL (use when n<50)		0.309
67												
68	**Estimates of Gamma Parameters using KM Estimates**											
69					Mean (KM)	0.135				SD (KM)		0.334
70					Variance (KM)	0.112				SE of Mean (KM)		0.0772
71					k hat (KM)	0.162				k star (KM)		0.171
72					nu hat (KM)	6.477				nu star (KM)		6.838
73					theta hat (KM)	0.831				theta star (KM)		0.787
74					80% gamma percentile (KM)	0.161				90% gamma percentile (KM)		0.404
75					95% gamma percentile (KM)	0.72				99% gamma percentile (KM)		1.614
76												
77	**Gamma Kaplan-Meier (KM) Statistics**											
78					Approximate Chi Square Value (6.84, α)	2.082				Adjusted Chi Square Value (6.84, β)		1.881
79					95% Gamma Approximate KM-UCL (use when n>=50)	0.442				95% Gamma Adjusted KM-UCL (use when n<50)		0.489
80												
81	**Lognormal GOF Test on Detected Observations Only**											
82					Shapiro Wilk Test Statistic	0.918				**Shapiro Wilk GOF Test**		
83					5% Shapiro Wilk Critical Value	0.887				Detected Data appear Lognormal at 5% Significance Level		
84					Lilliefors Test Statistic	0.15				**Lilliefors GOF Test**		
85					5% Lilliefors Critical Value	0.213				Detected Data appear Lognormal at 5% Significance Level		
86	**Detected Data appear Lognormal at 5% Significance Level**											
87												
88	**Lognormal ROS Statistics Using Imputed Non-Detects**											
89					Mean in Original Scale	0.134				Mean in Log Scale		-4.323
90					SD in Original Scale	0.343				SD in Log Scale		2.294
91					95% t UCL (assumes normality of ROS data)	0.267				95% Percentile Bootstrap UCL		0.271
92					95% BCA Bootstrap UCL	0.347				95% Bootstrap t UCL		1.076
93					95% H-UCL (Log ROS)	2.357						
94												
95	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
96					KM Mean (logged)	-4.053				KM Geo Mean		0.0174
97					KM SD (logged)	1.917				95% Critical H Value (KM-Log)		4.155
98					KM Standard Error of Mean (logged)	0.443				95% H-UCL (KM -Log)		0.678
99					KM SD (logged)	1.917				95% Critical H Value (KM-Log)		4.155
100					KM Standard Error of Mean (logged)	0.443						
101												
102	**DL/2 Statistics**											
103	**DL/2 Normal**						**DL/2 Log-Transformed**					
104					Mean in Original Scale	0.134				Mean in Log Scale		-4.175

105				SD in Original Scale	0.343					SD in Log Scale	2.1	
106				95% t UCL (Assumes normality)	0.267					95% H-Stat UCL	1.213	
107	**DL/2 is not a recommended method, provided for comparisons and historical reasons**											
108												
109	**Nonparametric Distribution Free UCL Statistics**											
110	**Detected Data appear Lognormal Distributed at 5% Significance Level**											
111												
112	**Suggested UCL to Use**											
113				95% KM (Chebyshev) UCL	0.471							
114												
115	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
116	Recommendations are based upon data size, data distribution, and skewness.											
117	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
118	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
119												
120	**Benzo[a]pyrene**											
121												
122	**General Statistics**											
123				Total Number of Observations	20					Number of Distinct Observations	18	
124				Number of Detects	16					Number of Non-Detects	4	
125				Number of Distinct Detects	15					Number of Distinct Non-Detects	3	
126				Minimum Detect	0.0027					Minimum Non-Detect	0.0028	
127				Maximum Detect	1.22					Maximum Non-Detect	0.003	
128				Variance Detects	0.102					Percent Non-Detects	20%	
129				Mean Detects	0.149					SD Detects	0.32	
130				Median Detects	0.0365					CV Detects	2.153	
131				Skewness Detects	3					Kurtosis Detects	9.197	
132				Mean of Logged Detects	-3.51					SD of Logged Detects	1.866	
133												
134	**Normal GOF Test on Detects Only**											
135				Shapiro Wilk Test Statistic	0.509					**Shapiro Wilk GOF Test**		
136				5% Shapiro Wilk Critical Value	0.887					Detected Data Not Normal at 5% Significance Level		
137				Lilliefors Test Statistic	0.365					**Lilliefors GOF Test**		
138				5% Lilliefors Critical Value	0.213					Detected Data Not Normal at 5% Significance Level		
139	**Detected Data Not Normal at 5% Significance Level**											
140												
141	**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**											
142				KM Mean	0.119					KM Standard Error of Mean	0.0654	
143				KM SD	0.283					95% KM (BCA) UCL	0.23	
144				95% KM (t) UCL	0.233					95% KM (Percentile Bootstrap) UCL	0.233	
145				95% KM (z) UCL	0.227					95% KM Bootstrap t UCL	0.772	
146				90% KM Chebyshev UCL	0.316					95% KM Chebyshev UCL	0.405	
147				97.5% KM Chebyshev UCL	0.528					99% KM Chebyshev UCL	0.77	
148												
149	**Gamma GOF Tests on Detected Observations Only**											
150				A-D Test Statistic	1.003					**Anderson-Darling GOF Test**		
151				5% A-D Critical Value	0.815					Detected Data Not Gamma Distributed at 5% Significance Level		
152				K-S Test Statistic	0.251					**Kolmogorov-Smirnov GOF**		
153				5% K-S Critical Value	0.23					Detected Data Not Gamma Distributed at 5% Significance Level		
154	**Detected Data Not Gamma Distributed at 5% Significance Level**											
155												
156	**Gamma Statistics on Detected Data Only**											

157					k hat (MLE)	0.409				k star (bias corrected MLE)		0.374
158					Theta hat (MLE)	0.364				Theta star (bias corrected MLE)		0.398
159					nu hat (MLE)	13.08				nu star (bias corrected)		11.96
160					Mean (detects)	0.149						
161												
162	**Gamma ROS Statistics using Imputed Non-Detects**											
163	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
164	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
165	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
166	This is especially true when the sample size is small.											
167	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
168					Minimum	0.0027				Mean		0.121
169					Maximum	1.22				Median		0.0175
170					SD	0.29				CV		2.399
171					k hat (MLE)	0.406				k star (bias corrected MLE)		0.379
172					Theta hat (MLE)	0.298				Theta star (bias corrected MLE)		0.319
173					nu hat (MLE)	16.24				nu star (bias corrected)		15.14
174					Adjusted Level of Significance (β)	0.038						
175					Approximate Chi Square Value (15.14, α)	7.359				Adjusted Chi Square Value (15.14, β)		6.933
176					95% Gamma Approximate UCL (use when n>=50)	0.249				95% Gamma Adjusted UCL (use when n<50)		0.264
177												
178	**Estimates of Gamma Parameters using KM Estimates**											
179					Mean (KM)	0.119				SD (KM)		0.283
180					Variance (KM)	0.0802				SE of Mean (KM)		0.0654
181					k hat (KM)	0.178				k star (KM)		0.184
182					nu hat (KM)	7.112				nu star (KM)		7.379
183					theta hat (KM)	0.672				theta star (KM)		0.647
184					80% gamma percentile (KM)	0.15				90% gamma percentile (KM)		0.361
185					95% gamma percentile (KM)	0.628				99% gamma percentile (KM)		1.375
186												
187	**Gamma Kaplan-Meier (KM) Statistics**											
188					Approximate Chi Square Value (7.38, α)	2.381				Adjusted Chi Square Value (7.38, β)		2.162
189					95% Gamma Approximate KM-UCL (use when n>=50)	0.37				95% Gamma Adjusted KM-UCL (use when n<50)		0.408
190												
191	**Lognormal GOF Test on Detected Observations Only**											
192					Shapiro Wilk Test Statistic	0.933	**Shapiro Wilk GOF Test**					
193					5% Shapiro Wilk Critical Value	0.887	Detected Data appear Lognormal at 5% Significance Level					
194					Lilliefors Test Statistic	0.143	**Lilliefors GOF Test**					
195					5% Lilliefors Critical Value	0.213	Detected Data appear Lognormal at 5% Significance Level					
196	**Detected Data appear Lognormal at 5% Significance Level**											
197												
198	**Lognormal ROS Statistics Using Imputed Non-Detects**											
199					Mean in Original Scale	0.119				Mean in Log Scale		-4.224
200					SD in Original Scale	0.291				SD in Log Scale		2.219
201					95% t UCL (assumes normality of ROS data)	0.231				95% Percentile Bootstrap UCL		0.237
202					95% BCA Bootstrap UCL	0.311				95% Bootstrap t UCL		0.831
203					95% H-UCL (Log ROS)	1.88						
204												
205	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
206					KM Mean (logged)	-3.991				KM Geo Mean		0.0185
207					KM SD (logged)	1.881				95% Critical H Value (KM-Log)		4.091
208					KM Standard Error of Mean (logged)	0.434				95% H-UCL (KM -Log)		0.633

209					KM SD (logged)	1.881				95% Critical H Value (KM-Log)		4.091
210					KM Standard Error of Mean (logged)	0.434						
211												
212					**DL/2 Statistics**							
213					**DL/2 Normal**					**DL/2 Log-Transformed**		
214					Mean in Original Scale	0.119				Mean in Log Scale		-4.114
215					SD in Original Scale	0.291				SD in Log Scale		2.07
216					95% t UCL (Assumes normality)	0.232				95% H-Stat UCL		1.141
217					**DL/2 is not a recommended method, provided for comparisons and historical reasons**							
218												
219					**Nonparametric Distribution Free UCL Statistics**							
220					**Detected Data appear Lognormal Distributed at 5% Significance Level**							
221												
222					**Suggested UCL to Use**							
223					95% KM (Chebyshev) UCL	0.405						
224												
225					Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.							
226					Recommendations are based upon data size, data distribution, and skewness.							
227					These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).							
228					However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.							
229												
230	**Benzo[b]fluoranthene**											
231												
232					**General Statistics**							
233					Total Number of Observations	20				Number of Distinct Observations		19
234					Number of Detects	16				Number of Non-Detects		4
235					Number of Distinct Detects	16				Number of Distinct Non-Detects		3
236					Minimum Detect	0.004				Minimum Non-Detect		0.0028
237					Maximum Detect	1.71				Maximum Non-Detect		0.003
238					Variance Detects	0.196				Percent Non-Detects		20%
239					Mean Detects	0.206				SD Detects		0.442
240					Median Detects	0.052				CV Detects		2.151
241					Skewness Detects	3.093				Kurtosis Detects		9.912
242					Mean of Logged Detects	-3.109				SD of Logged Detects		1.806
243												
244					**Normal GOF Test on Detects Only**							
245					Shapiro Wilk Test Statistic	0.505				**Shapiro Wilk GOF Test**		
246					5% Shapiro Wilk Critical Value	0.887				Detected Data Not Normal at 5% Significance Level		
247					Lilliefors Test Statistic	0.361				**Lilliefors GOF Test**		
248					5% Lilliefors Critical Value	0.213				Detected Data Not Normal at 5% Significance Level		
249					**Detected Data Not Normal at 5% Significance Level**							
250												
251					**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**							
252					KM Mean	0.165				KM Standard Error of Mean		0.0904
253					KM SD	0.391				95% KM (BCA) UCL		0.338
254					95% KM (t) UCL	0.321				95% KM (Percentile Bootstrap) UCL		0.332
255					95% KM (z) UCL	0.314				95% KM Bootstrap t UCL		1.016
256					90% KM Chebyshev UCL	0.436				95% KM Chebyshev UCL		0.559
257					97.5% KM Chebyshev UCL	0.73				99% KM Chebyshev UCL		1.065
258												
259					**Gamma GOF Tests on Detected Observations Only**							
260					A-D Test Statistic	1.017				**Anderson-Darling GOF Test**		

	A	B	C	D	E	F	G	H	I	J	K	L
261					5% A-D Critical Value	0.812	Detected Data Not Gamma Distributed at 5% Significance Level					
262					K-S Test Statistic	0.248	**Kolmogorov-Smirnov GOF**					
263					5% K-S Critical Value	0.229	Detected Data Not Gamma Distributed at 5% Significance Level					
264	**Detected Data Not Gamma Distributed at 5% Significance Level**											
265												
266	**Gamma Statistics on Detected Data Only**											
267					k hat (MLE)	0.427	k star (bias corrected MLE)					0.388
268					Theta hat (MLE)	0.482	Theta star (bias corrected MLE)					0.53
269					nu hat (MLE)	13.65	nu star (bias corrected)					12.42
270					Mean (detects)	0.206						
271												
272	**Gamma ROS Statistics using Imputed Non-Detects**											
273	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
274	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
275	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
276	This is especially true when the sample size is small.											
277	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
278					Minimum	0.004	Mean					0.166
279					Maximum	1.71	Median					0.0305
280					SD	0.401	CV					2.409
281					k hat (MLE)	0.406	k star (bias corrected MLE)					0.379
282					Theta hat (MLE)	0.41	Theta star (bias corrected MLE)					0.439
283					nu hat (MLE)	16.25	nu star (bias corrected)					15.15
284					Adjusted Level of Significance (β)	0.038						
285					Approximate Chi Square Value (15.15, α)	7.366	Adjusted Chi Square Value (15.15, β)					6.939
286					95% Gamma Approximate UCL (use when n>=50)	0.342	95% Gamma Adjusted UCL (use when n<50)					0.363
287												
288	**Estimates of Gamma Parameters using KM Estimates**											
289					Mean (KM)	0.165	SD (KM)					0.391
290					Variance (KM)	0.153	SE of Mean (KM)					0.0904
291					k hat (KM)	0.178	k star (KM)					0.184
292					nu hat (KM)	7.107	nu star (KM)					7.374
293					theta hat (KM)	0.929	theta star (KM)					0.895
294					80% gamma percentile (KM)	0.208	90% gamma percentile (KM)					0.498
295					95% gamma percentile (KM)	0.868	99% gamma percentile (KM)					1.9
296												
297	**Gamma Kaplan-Meier (KM) Statistics**											
298					Approximate Chi Square Value (7.37, α)	2.378	Adjusted Chi Square Value (7.37, β)					2.16
299					95% Gamma Approximate KM-UCL (use when n>=50)	0.512	95% Gamma Adjusted KM-UCL (use when n<50)					0.563
300												
301	**Lognormal GOF Test on Detected Observations Only**											
302					Shapiro Wilk Test Statistic	0.936	**Shapiro Wilk GOF Test**					
303					5% Shapiro Wilk Critical Value	0.887	Detected Data appear Lognormal at 5% Significance Level					
304					Lilliefors Test Statistic	0.146	**Lilliefors GOF Test**					
305					5% Lilliefors Critical Value	0.213	Detected Data appear Lognormal at 5% Significance Level					
306	**Detected Data appear Lognormal at 5% Significance Level**											
307												
308	**Lognormal ROS Statistics Using Imputed Non-Detects**											
309					Mean in Original Scale	0.165	Mean in Log Scale					-3.946
310					SD in Original Scale	0.402	SD in Log Scale					2.355
311					95% t UCL (assumes normality of ROS data)	0.32	95% Percentile Bootstrap UCL					0.323
312					95% BCA Bootstrap UCL	0.447	95% Bootstrap t UCL					0.986

313				95% H-UCL (Log ROS)		4.509						
314												
315	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
316				KM Mean (logged)		-3.663				KM Geo Mean		0.0257
317				KM SD (logged)		1.916				95% Critical H Value (KM-Log)		4.154
318				KM Standard Error of Mean (logged)		0.443				95% H-UCL (KM -Log)		0.999
319				KM SD (logged)		1.916				95% Critical H Value (KM-Log)		4.154
320				KM Standard Error of Mean (logged)		0.443						
321												
322	**DL/2 Statistics**											
323	**DL/2 Normal**						**DL/2 Log-Transformed**					
324				Mean in Original Scale		0.165				Mean in Log Scale		-3.793
325				SD in Original Scale		0.402				SD in Log Scale		2.131
326				95% t UCL (Assumes normality)		0.32				95% H-Stat UCL		2.014
327	**DL/2 is not a recommended method, provided for comparisons and historical reasons**											
328												
329	**Nonparametric Distribution Free UCL Statistics**											
330	**Detected Data appear Lognormal Distributed at 5% Significance Level**											
331												
332	**Suggested UCL to Use**											
333				95% KM (Chebyshev) UCL		0.559						
334												
335	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
336	Recommendations are based upon data size, data distribution, and skewness.											
337	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
338	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
339												
340	**Dibenz(a,h)anthracene**											
341												
342	**General Statistics**											
343				Total Number of Observations		20				Number of Distinct Observations		17
344				Number of Detects		11				Number of Non-Detects		9
345				Number of Distinct Detects		11				Number of Distinct Non-Detects		6
346				Minimum Detect		0.0015				Minimum Non-Detect		0.0025
347				Maximum Detect		0.212				Maximum Non-Detect		0.003
348				Variance Detects		0.00405				Percent Non-Detects		45%
349				Mean Detects		0.0366				SD Detects		0.0636
350				Median Detects		0.0082				CV Detects		1.74
351				Skewness Detects		2.547				Kurtosis Detects		6.595
352				Mean of Logged Detects		-4.308				SD of Logged Detects		1.403
353												
354	**Normal GOF Test on Detects Only**											
355				Shapiro Wilk Test Statistic		0.59	**Shapiro Wilk GOF Test**					
356				5% Shapiro Wilk Critical Value		0.85	Detected Data Not Normal at 5% Significance Level					
357				Lilliefors Test Statistic		0.347	**Lilliefors GOF Test**					
358				5% Lilliefors Critical Value		0.251	Detected Data Not Normal at 5% Significance Level					
359	**Detected Data Not Normal at 5% Significance Level**											
360												
361	**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**											
362				KM Mean		0.0208				KM Standard Error of Mean		0.0113
363				KM SD		0.0483				95% KM (BCA) UCL		0.0419
364				95% KM (t) UCL		0.0404				95% KM (Percentile Bootstrap) UCL		0.0403

365				95% KM (z) UCL	0.0394					95% KM Bootstrap t UCL	0.117	
366				90% KM Chebyshev UCL	0.0547					95% KM Chebyshev UCL	0.0701	
367				97.5% KM Chebyshev UCL	0.0915					99% KM Chebyshev UCL	0.133	
368												
369				**Gamma GOF Tests on Detected Observations Only**								
370				A-D Test Statistic	0.955	**Anderson-Darling GOF Test**						
371				5% A-D Critical Value	0.772	Detected Data Not Gamma Distributed at 5% Significance Level						
372				K-S Test Statistic	0.293	**Kolmogorov-Smirnov GOF**						
373				5% K-S Critical Value	0.267	Detected Data Not Gamma Distributed at 5% Significance Level						
374				**Detected Data Not Gamma Distributed at 5% Significance Level**								
375												
376				**Gamma Statistics on Detected Data Only**								
377				k hat (MLE)	0.616	k star (bias corrected MLE)	0.509					
378				Theta hat (MLE)	0.0594	Theta star (bias corrected MLE)	0.0719					
379				nu hat (MLE)	13.55	nu star (bias corrected)	11.19					
380				Mean (detects)	0.0366							
381												
382				**Gamma ROS Statistics using Imputed Non-Detects**								
383				GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs								
384				GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)								
385				For such situations, GROS method may yield incorrect values of UCLs and BTVs								
386				This is especially true when the sample size is small.								
387				For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates								
388				Minimum	0.0015	Mean	0.0246					
389				Maximum	0.212	Median	0.01					
390				SD	0.0481	CV	1.955					
391				k hat (MLE)	0.805	k star (bias corrected MLE)	0.717					
392				Theta hat (MLE)	0.0306	Theta star (bias corrected MLE)	0.0343					
393				nu hat (MLE)	32.19	nu star (bias corrected)	28.69					
394				Adjusted Level of Significance (β)	0.038							
395				Approximate Chi Square Value (28.69, α)	17.47	Adjusted Chi Square Value (28.69, β)	16.78					
396				95% Gamma Approximate UCL (use when n>=50)	0.0404	95% Gamma Adjusted UCL (use when n<50)	0.0421					
397												
398				**Estimates of Gamma Parameters using KM Estimates**								
399				Mean (KM)	0.0208	SD (KM)	0.0483					
400				Variance (KM)	0.00233	SE of Mean (KM)	0.0113					
401				k hat (KM)	0.186	k star (KM)	0.191					
402				nu hat (KM)	7.421	nu star (KM)	7.641					
403				theta hat (KM)	0.112	theta star (KM)	0.109					
404				80% gamma percentile (KM)	0.0267	90% gamma percentile (KM)	0.0628					
405				95% gamma percentile (KM)	0.108	99% gamma percentile (KM)	0.235					
406												
407				**Gamma Kaplan-Meier (KM) Statistics**								
408				Approximate Chi Square Value (7.64, α)	2.529	Adjusted Chi Square Value (7.64, β)	2.302					
409				95% Gamma Approximate KM-UCL (use when n>=50)	0.0628	95% Gamma Adjusted KM-UCL (use when n<50)	0.069					
410												
411				**Lognormal GOF Test on Detected Observations Only**								
412				Shapiro Wilk Test Statistic	0.925	**Shapiro Wilk GOF Test**						
413				5% Shapiro Wilk Critical Value	0.85	Detected Data appear Lognormal at 5% Significance Level						
414				Lilliefors Test Statistic	0.23	**Lilliefors GOF Test**						
415				5% Lilliefors Critical Value	0.251	Detected Data appear Lognormal at 5% Significance Level						
416				**Detected Data appear Lognormal at 5% Significance Level**								

417												
418	**Lognormal ROS Statistics Using Imputed Non-Detects**											
419					Mean in Original Scale	0.0205				Mean in Log Scale	-5.547	
420					SD in Original Scale	0.0496				SD in Log Scale	1.764	
421					95% t UCL (assumes normality of ROS data)	0.0397				95% Percentile Bootstrap UCL	0.0401	
422					95% BCA Bootstrap UCL	0.0545				95% Bootstrap t UCL	0.121	
423					95% H-UCL (Log ROS)	0.0889						
424												
425	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
426					KM Mean (logged)	-5.295				KM Geo Mean	0.00502	
427					KM SD (logged)	1.475				95% Critical H Value (KM-Log)	3.384	
428					KM Standard Error of Mean (logged)	0.346				95% H-UCL (KM -Log)	0.0468	
429					KM SD (logged)	1.475				95% Critical H Value (KM-Log)	3.384	
430					KM Standard Error of Mean (logged)	0.346						
431												
432	**DL/2 Statistics**											
433	**DL/2 Normal**						**DL/2 Log-Transformed**					
434					Mean in Original Scale	0.0207				Mean in Log Scale	-5.331	
435					SD in Original Scale	0.0495				SD in Log Scale	1.544	
436					95% t UCL (Assumes normality)	0.0399				95% H-Stat UCL	0.0551	
437	**DL/2 is not a recommended method, provided for comparisons and historical reasons**											
438												
439	**Nonparametric Distribution Free UCL Statistics**											
440	**Detected Data appear Lognormal Distributed at 5% Significance Level**											
441												
442	**Suggested UCL to Use**											
443					95% KM (Chebyshev) UCL	0.0701						
444												
445	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
446	Recommendations are based upon data size, data distribution, and skewness.											
447	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
448	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
449												
450												
451												
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465												
466												
467												
468												

Aluminum

General Statistics

Total Number of Observations	20	Number of Distinct Observations	16
		Number of Missing Observations	0
Minimum	3100	Mean	5780
Maximum	11000	Median	5300
SD	2473	Std. Error of Mean	552.9
Coefficient of Variation	0.428	Skewness	0.806

Normal GOF Test

573	Shapiro Wilk Test Statistic				0.873	**Shapiro Wilk GOF Test**						
574	5% Shapiro Wilk Critical Value				0.905	Data Not Normal at 5% Significance Level						
575	Lilliefors Test Statistic				0.164	**Lilliefors GOF Test**						
576	5% Lilliefors Critical Value				0.192	Data appear Normal at 5% Significance Level						
577	**Data appear Approximate Normal at 5% Significance Level**											
578												
579	**Assuming Normal Distribution**											
580	**95% Normal UCL**					**95% UCLs (Adjusted for Skewness)**						
581	95% Student's-t UCL				6736	95% Adjusted-CLT UCL (Chen-1995)						6796
582						95% Modified-t UCL (Johnson-1978)						6753
583												
584	**Gamma GOF Test**											
585	A-D Test Statistic				0.763	**Anderson-Darling Gamma GOF Test**						
586	5% A-D Critical Value				0.744	Data Not Gamma Distributed at 5% Significance Level						
587	K-S Test Statistic				0.165	**Kolmogorov-Smirnov Gamma GOF Test**						
588	5% K-S Critical Value				0.194	Detected data appear Gamma Distributed at 5% Significance Level						
589	**Detected data follow Appr. Gamma Distribution at 5% Significance Level**											
590												
591	**Gamma Statistics**											
592	k hat (MLE)				6.166	k star (bias corrected MLE)						5.275
593	Theta hat (MLE)				937.3	Theta star (bias corrected MLE)						1096
594	nu hat (MLE)				246.7	nu star (bias corrected)						211
595	MLE Mean (bias corrected)				5780	MLE Sd (bias corrected)						2517
596						Approximate Chi Square Value (0.05)						178.4
597	Adjusted Level of Significance				0.038	Adjusted Chi Square Value						176
598												
599	**Assuming Gamma Distribution**											
600	95% Approximate Gamma UCL (use when n>=50))				6837	95% Adjusted Gamma UCL (use when n<50)						6929
601												
602	**Lognormal GOF Test**											
603	Shapiro Wilk Test Statistic				0.904	**Shapiro Wilk Lognormal GOF Test**						
604	5% Shapiro Wilk Critical Value				0.905	Data Not Lognormal at 5% Significance Level						
605	Lilliefors Test Statistic				0.159	**Lilliefors Lognormal GOF Test**						
606	5% Lilliefors Critical Value				0.192	Data appear Lognormal at 5% Significance Level						
607	**Data appear Approximate Lognormal at 5% Significance Level**											
608												
609	**Lognormal Statistics**											
610	Minimum of Logged Data				8.039	Mean of logged Data						8.579
611	Maximum of Logged Data				9.306	SD of logged Data						0.416
612												
613	**Assuming Lognormal Distribution**											
614	95% H-UCL				6979	90% Chebyshev (MVUE) UCL						7423
615	95% Chebyshev (MVUE) UCL				8172	97.5% Chebyshev (MVUE) UCL						9210
616	99% Chebyshev (MVUE) UCL				11250							
617												
618	**Nonparametric Distribution Free UCL Statistics**											
619	**Data appear to follow a Discernible Distribution at 5% Significance Level**											
620												
621	**Nonparametric Distribution Free UCLs**											
622	95% CLT UCL				6689	95% Jackknife UCL						6736
623	95% Standard Bootstrap UCL				6663	95% Bootstrap-t UCL						6907
624	95% Hall's Bootstrap UCL				6798	95% Percentile Bootstrap UCL						6655

625				95% BCA Bootstrap UCL	6785							
626				90% Chebyshev(Mean, Sd) UCL	7439					95% Chebyshev(Mean, Sd) UCL	8190	
627				97.5% Chebyshev(Mean, Sd) UCL	9233					99% Chebyshev(Mean, Sd) UCL	11281	
628												
629					**Suggested UCL to Use**							
630				95% Student's-t UCL	6736							
631												
632					When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test							
633					When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL							
634												
635					Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.							
636					Recommendations are based upon data size, data distribution, and skewness.							
637					These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).							
638					However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.							
639												
640	**Arsenic**											
641												
642					**General Statistics**							
643				Total Number of Observations	20					Number of Distinct Observations	18	
644				Number of Detects	15					Number of Non-Detects	5	
645				Number of Distinct Detects	14					Number of Distinct Non-Detects	5	
646				Minimum Detect	2.2					Minimum Non-Detect	1.8	
647				Maximum Detect	6.2					Maximum Non-Detect	5.1	
648				Variance Detects	1.787					Percent Non-Detects	25%	
649				Mean Detects	3.933					SD Detects	1.337	
650				Median Detects	4.2					CV Detects	0.34	
651				Skewness Detects	0.406					Kurtosis Detects	-0.912	
652				Mean of Logged Detects	1.315					SD of Logged Detects	0.346	
653												
654					**Normal GOF Test on Detects Only**							
655				Shapiro Wilk Test Statistic	0.922					**Shapiro Wilk GOF Test**		
656				5% Shapiro Wilk Critical Value	0.881					Detected Data appear Normal at 5% Significance Level		
657				Lilliefors Test Statistic	0.135					**Lilliefors GOF Test**		
658				5% Lilliefors Critical Value	0.22					Detected Data appear Normal at 5% Significance Level		
659					**Detected Data appear Normal at 5% Significance Level**							
660												
661					**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**							
662				KM Mean	3.466					KM Standard Error of Mean	0.333	
663				KM SD	1.42					95% KM (BCA) UCL	4.065	
664				95% KM (t) UCL	4.043					95% KM (Percentile Bootstrap) UCL	4.031	
665				95% KM (z) UCL	4.015					95% KM Bootstrap t UCL	4.128	
666				90% KM Chebyshev UCL	4.467					95% KM Chebyshev UCL	4.92	
667				97.5% KM Chebyshev UCL	5.549					99% KM Chebyshev UCL	6.784	
668												
669					**Gamma GOF Tests on Detected Observations Only**							
670				A-D Test Statistic	0.392					**Anderson-Darling GOF Test**		
671				5% A-D Critical Value	0.738					Detected data appear Gamma Distributed at 5% Significance Level		
672				K-S Test Statistic	0.155					**Kolmogorov-Smirnov GOF**		
673				5% K-S Critical Value	0.222					Detected data appear Gamma Distributed at 5% Significance Level		
674					**Detected data appear Gamma Distributed at 5% Significance Level**							
675												
676					**Gamma Statistics on Detected Data Only**							

677					k hat (MLE)	9.27				k star (bias corrected MLE)		7.46
678					Theta hat (MLE)	0.424				Theta star (bias corrected MLE)		0.527
679					nu hat (MLE)	278.1				nu star (bias corrected)		223.8
680					Mean (detects)	3.933						
681												
682	**Gamma ROS Statistics using Imputed Non-Detects**											
683	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
684	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
685	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
686	This is especially true when the sample size is small.											
687	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
688					Minimum	1.46				Mean		3.399
689					Maximum	6.2				Median		3.119
690					SD	1.518				CV		0.447
691					k hat (MLE)	5.088				k star (bias corrected MLE)		4.358
692					Theta hat (MLE)	0.668				Theta star (bias corrected MLE)		0.78
693					nu hat (MLE)	203.5				nu star (bias corrected)		174.3
694					Adjusted Level of Significance (β)	0.038						
695					Approximate Chi Square Value (174.33, α)	144.8				Adjusted Chi Square Value (174.33, β)		142.7
696					95% Gamma Approximate UCL (use when n>=50)	4.092				95% Gamma Adjusted UCL (use when n<50)		4.153
697												
698	**Estimates of Gamma Parameters using KM Estimates**											
699					Mean (KM)	3.466				SD (KM)		1.42
700					Variance (KM)	2.018				SE of Mean (KM)		0.333
701					k hat (KM)	5.955				k star (KM)		5.095
702					nu hat (KM)	238.2				nu star (KM)		203.8
703					theta hat (KM)	0.582				theta star (KM)		0.68
704					80% gamma percentile (KM)	4.65				90% gamma percentile (KM)		5.522
705					95% gamma percentile (KM)	6.316				99% gamma percentile (KM)		7.994
706												
707	**Gamma Kaplan-Meier (KM) Statistics**											
708					Approximate Chi Square Value (203.79, α)	171.8				Adjusted Chi Square Value (203.79, β)		169.4
709					95% Gamma Approximate KM-UCL (use when n>=50)	4.113				95% Gamma Adjusted KM-UCL (use when n<50)		4.169
710												
711	**Lognormal GOF Test on Detected Observations Only**											
712					Shapiro Wilk Test Statistic	0.935				**Shapiro Wilk GOF Test**		
713					5% Shapiro Wilk Critical Value	0.881				Detected Data appear Lognormal at 5% Significance Level		
714					Lilliefors Test Statistic	0.17				**Lilliefors GOF Test**		
715					5% Lilliefors Critical Value	0.22				Detected Data appear Lognormal at 5% Significance Level		
716	**Detected Data appear Lognormal at 5% Significance Level**											
717												
718	**Lognormal ROS Statistics Using Imputed Non-Detects**											
719					Mean in Original Scale	3.449				Mean in Log Scale		1.154
720					SD in Original Scale	1.452				SD in Log Scale		0.424
721					95% t UCL (assumes normality of ROS data)	4.011				95% Percentile Bootstrap UCL		3.969
722					95% BCA Bootstrap UCL	3.997				95% Bootstrap t UCL		4.057
723					95% H-UCL (Log ROS)	4.193						
724												
725	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
726					KM Mean (logged)	1.158				KM Geo Mean		3.185
727					KM SD (logged)	0.414				95% Critical H Value (KM-Log)		1.941
728					KM Standard Error of Mean (logged)	0.0977				95% H-UCL (KM -Log)		4.171

729					KM SD (logged)	0.414			95% Critical H Value (KM-Log)			1.941
730					KM Standard Error of Mean (logged)	0.0977						
731												
732	**DL/2 Statistics**											
733	**DL/2 Normal**						**DL/2 Log-Transformed**					
734					Mean in Original Scale	3.288			Mean in Log Scale			1.042
735					SD in Original Scale	1.652			SD in Log Scale			0.599
736					95% t UCL (Assumes normality)	3.926			95% H-Stat UCL			4.537
737	**DL/2 is not a recommended method, provided for comparisons and historical reasons**											
738												
739	**Nonparametric Distribution Free UCL Statistics**											
740	**Detected Data appear Normal Distributed at 5% Significance Level**											
741												
742	**Suggested UCL to Use**											
743					95% KM (t) UCL	4.043						
744												
745	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
746	Recommendations are based upon data size, data distribution, and skewness.											
747	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
748	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
749												
750	**Chromium VI**											
751												
752	**General Statistics**											
753					Total Number of Observations	20			Number of Distinct Observations			18
754					Number of Detects	18			Number of Non-Detects			2
755					Number of Distinct Detects	16			Number of Distinct Non-Detects			2
756					Minimum Detect	3.6			Minimum Non-Detect			3.8
757					Maximum Detect	12			Maximum Non-Detect			4
758					Variance Detects	6.416			Percent Non-Detects			10%
759					Mean Detects	6.583			SD Detects			2.533
760					Median Detects	6.4			CV Detects			0.385
761					Skewness Detects	0.652			Kurtosis Detects			-0.293
762					Mean of Logged Detects	1.815			SD of Logged Detects			0.384
763												
764	**Normal GOF Test on Detects Only**											
765					Shapiro Wilk Test Statistic	0.922	**Shapiro Wilk GOF Test**					
766					5% Shapiro Wilk Critical Value	0.897	Detected Data appear Normal at 5% Significance Level					
767					Lilliefors Test Statistic	0.136	**Lilliefors GOF Test**					
768					5% Lilliefors Critical Value	0.202	Detected Data appear Normal at 5% Significance Level					
769	**Detected Data appear Normal at 5% Significance Level**											
770												
771	**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**											
772					KM Mean	6.285			KM Standard Error of Mean			0.575
773					KM SD	2.501			95% KM (BCA) UCL			7.245
774					95% KM (t) UCL	7.28			95% KM (Percentile Bootstrap) UCL			7.185
775					95% KM (z) UCL	7.231			95% KM Bootstrap t UCL			7.37
776					90% KM Chebyshev UCL	8.011			95% KM Chebyshev UCL			8.793
777					97.5% KM Chebyshev UCL	9.878			99% KM Chebyshev UCL			12.01
778												
779	**Gamma GOF Tests on Detected Observations Only**											
780					A-D Test Statistic	0.397	**Anderson-Darling GOF Test**					

	A	B	C	D	E	F	G	H	I	J	K	L
781					5% A-D Critical Value	0.741	Detected data appear Gamma Distributed at 5% Significance Level					
782					K-S Test Statistic	0.13	**Kolmogorov-Smirnov GOF**					
783					5% K-S Critical Value	0.204	Detected data appear Gamma Distributed at 5% Significance Level					
784	**Detected data appear Gamma Distributed at 5% Significance Level**											
785												
786	**Gamma Statistics on Detected Data Only**											
787					k hat (MLE)	7.388	k star (bias corrected MLE)					6.193
788					Theta hat (MLE)	0.891	Theta star (bias corrected MLE)					1.063
789					nu hat (MLE)	266	nu star (bias corrected)					223
790					Mean (detects)	6.583						
791												
792	**Gamma ROS Statistics using Imputed Non-Detects**											
793	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
794	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
795	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
796	This is especially true when the sample size is small.											
797	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
798					Minimum	3.19	Mean					6.244
799					Maximum	12	Median					5.85
800					SD	2.614	CV					0.419
801					k hat (MLE)	6.274	k star (bias corrected MLE)					5.366
802					Theta hat (MLE)	0.995	Theta star (bias corrected MLE)					1.164
803					nu hat (MLE)	251	nu star (bias corrected)					214.6
804					Adjusted Level of Significance (β)	0.038						
805					Approximate Chi Square Value (214.64, α)	181.7	Adjusted Chi Square Value (214.64, β)					179.3
806					95% Gamma Approximate UCL (use when n>=50)	7.375	95% Gamma Adjusted UCL (use when n<50)					7.473
807												
808	**Estimates of Gamma Parameters using KM Estimates**											
809					Mean (KM)	6.285	SD (KM)					2.501
810					Variance (KM)	6.254	SE of Mean (KM)					0.575
811					k hat (KM)	6.316	k star (KM)					5.402
812					nu hat (KM)	252.6	nu star (KM)					216.1
813					theta hat (KM)	0.995	theta star (KM)					1.163
814					80% gamma percentile (KM)	8.376	90% gamma percentile (KM)					9.903
815					95% gamma percentile (KM)	11.29	99% gamma percentile (KM)					14.21
816												
817	**Gamma Kaplan-Meier (KM) Statistics**											
818					Approximate Chi Square Value (216.07, α)	183.1	Adjusted Chi Square Value (216.07, β)					180.7
819					95% Gamma Approximate KM-UCL (use when n>=50)	7.419	95% Gamma Adjusted KM-UCL (use when n<50)					7.517
820												
821	**Lognormal GOF Test on Detected Observations Only**											
822					Shapiro Wilk Test Statistic	0.941	**Shapiro Wilk GOF Test**					
823					5% Shapiro Wilk Critical Value	0.897	Detected Data appear Lognormal at 5% Significance Level					
824					Lilliefors Test Statistic	0.143	**Lilliefors GOF Test**					
825					5% Lilliefors Critical Value	0.202	Detected Data appear Lognormal at 5% Significance Level					
826	**Detected Data appear Lognormal at 5% Significance Level**											
827												
828	**Lognormal ROS Statistics Using Imputed Non-Detects**											
829					Mean in Original Scale	6.276	Mean in Log Scale					1.759
830					SD in Original Scale	2.576	SD in Log Scale					0.402
831					95% t UCL (assumes normality of ROS data)	7.272	95% Percentile Bootstrap UCL					7.195
832					95% BCA Bootstrap UCL	7.286	95% Bootstrap t UCL					7.512

833				95% H-UCL (Log ROS)		7.523						
834												
835	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
836				KM Mean (logged)		1.762				KM Geo Mean		5.823
837				KM SD (logged)		0.388				95% Critical H Value (KM-Log)		1.919
838				KM Standard Error of Mean (logged)		0.0894				95% H-UCL (KM -Log)		7.451
839				KM SD (logged)		0.388				95% Critical H Value (KM-Log)		1.919
840				KM Standard Error of Mean (logged)		0.0894						
841												
842	**DL/2 Statistics**											
843	**DL/2 Normal**						**DL/2 Log-Transformed**					
844				Mean in Original Scale		6.12				Mean in Log Scale		1.701
845				SD in Original Scale		2.788				SD in Log Scale		0.507
846				95% t UCL (Assumes normality)		7.198				95% H-Stat UCL		7.879
847	**DL/2 is not a recommended method, provided for comparisons and historical reasons**											
848												
849	**Nonparametric Distribution Free UCL Statistics**											
850	**Detected Data appear Normal Distributed at 5% Significance Level**											
851												
852	**Suggested UCL to Use**											
853				95% KM (t) UCL		7.28						
854												
855	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
856	Recommendations are based upon data size, data distribution, and skewness.											
857	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
858	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
859												
860												
861	**Cobalt**											
862												
863	**General Statistics**											
864				Total Number of Observations		20				Number of Distinct Observations		17
865										Number of Missing Observations		0
866				Minimum		2.4				Mean		4.09
867				Maximum		9.3				Median		3.55
868				SD		1.79				Std. Error of Mean		0.4
869				Coefficient of Variation		0.438				Skewness		1.502
870												
871	**Normal GOF Test**											
872				Shapiro Wilk Test Statistic		0.844	**Shapiro Wilk GOF Test**					
873				5% Shapiro Wilk Critical Value		0.905	Data Not Normal at 5% Significance Level					
874				Lilliefors Test Statistic		0.173	**Lilliefors GOF Test**					
875				5% Lilliefors Critical Value		0.192	Data appear Normal at 5% Significance Level					
876	**Data appear Approximate Normal at 5% Significance Level**											
877												
878	**Assuming Normal Distribution**											
879	**95% Normal UCL**						**95% UCLs (Adjusted for Skewness)**					
880				95% Student's-t UCL		4.782				95% Adjusted-CLT UCL (Chen-1995)		4.892
881										95% Modified-t UCL (Johnson-1978)		4.805
882												
883	**Gamma GOF Test**											
884				A-D Test Statistic		0.641	**Anderson-Darling Gamma GOF Test**					

885				5% A-D Critical Value		0.744	Detected data appear Gamma Distributed at 5% Significance Level					
886				K-S Test Statistic		0.161	**Kolmogorov-Smirnov Gamma GOF Test**					
887				5% K-S Critical Value		0.194	Detected data appear Gamma Distributed at 5% Significance Level					
888	**Detected data appear Gamma Distributed at 5% Significance Level**											
889												
890	**Gamma Statistics**											
891				k hat (MLE)		6.685	k star (bias corrected MLE)					5.715
892				Theta hat (MLE)		0.612	Theta star (bias corrected MLE)					0.716
893				nu hat (MLE)		267.4	nu star (bias corrected)					228.6
894				MLE Mean (bias corrected)		4.09	MLE Sd (bias corrected)					1.711
895							Approximate Chi Square Value (0.05)					194.6
896				Adjusted Level of Significance		0.038	Adjusted Chi Square Value					192.1
897												
898	**Assuming Gamma Distribution**											
899	95% Approximate Gamma UCL (use when n>=50))					4.805	95% Adjusted Gamma UCL (use when n<50)					4.866
900												
901	**Lognormal GOF Test**											
902				Shapiro Wilk Test Statistic		0.92	**Shapiro Wilk Lognormal GOF Test**					
903				5% Shapiro Wilk Critical Value		0.905	Data appear Lognormal at 5% Significance Level					
904				Lilliefors Test Statistic		0.154	**Lilliefors Lognormal GOF Test**					
905				5% Lilliefors Critical Value		0.192	Data appear Lognormal at 5% Significance Level					
906	**Data appear Lognormal at 5% Significance Level**											
907												
908	**Lognormal Statistics**											
909				Minimum of Logged Data		0.875	Mean of logged Data					1.332
910				Maximum of Logged Data		2.23	SD of logged Data					0.388
911												
912	**Assuming Lognormal Distribution**											
913				95% H-UCL		4.845	90% Chebyshev (MVUE) UCL					5.151
914				95% Chebyshev (MVUE) UCL		5.641	97.5% Chebyshev (MVUE) UCL					6.322
915				99% Chebyshev (MVUE) UCL		7.66						
916												
917	**Nonparametric Distribution Free UCL Statistics**											
918	**Data appear to follow a Discernible Distribution at 5% Significance Level**											
919												
920	**Nonparametric Distribution Free UCLs**											
921				95% CLT UCL		4.748	95% Jackknife UCL					4.782
922				95% Standard Bootstrap UCL		4.734	95% Bootstrap-t UCL					5.005
923				95% Hall's Bootstrap UCL		5.199	95% Percentile Bootstrap UCL					4.758
924				95% BCA Bootstrap UCL		4.838						
925				90% Chebyshev(Mean, Sd) UCL		5.291	95% Chebyshev(Mean, Sd) UCL					5.835
926				97.5% Chebyshev(Mean, Sd) UCL		6.59	99% Chebyshev(Mean, Sd) UCL					8.073
927												
928	**Suggested UCL to Use**											
929				95% Student's-t UCL		4.782						
930												
931	When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test											
932	When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL											
933												
934	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
935	Recommendations are based upon data size, data distribution, and skewness.											
936	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											

	A	B	C	D	E	F	G	H	I	J	K	L
937	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
938												
939												
940	**Iron**											
941												
942	**General Statistics**											
943						Total Number of Observations	20				Number of Distinct Observations	16	
944											Number of Missing Observations	0	
945						Minimum	5700				Mean	11280	
946						Maximum	21000				Median	9900	
947						SD	4297				Std. Error of Mean	960.7	
948						Coefficient of Variation	0.381				Skewness	0.708	
949													
950	**Normal GOF Test**											
951						Shapiro Wilk Test Statistic	0.913	**Shapiro Wilk GOF Test**				
952						5% Shapiro Wilk Critical Value	0.905	Data appear Normal at 5% Significance Level				
953						Lilliefors Test Statistic	0.184	**Lilliefors GOF Test**				
954						5% Lilliefors Critical Value	0.192	Data appear Normal at 5% Significance Level				
955	**Data appear Normal at 5% Significance Level**											
956												
957	**Assuming Normal Distribution**											
958	**95% Normal UCL**							**95% UCLs (Adjusted for Skewness)**				
959						95% Student's-t UCL	12941				95% Adjusted-CLT UCL (Chen-1995)	13023	
960											95% Modified-t UCL (Johnson-1978)	12967	
961													
962	**Gamma GOF Test**											
963						A-D Test Statistic	0.551	**Anderson-Darling Gamma GOF Test**				
964						5% A-D Critical Value	0.743	Detected data appear Gamma Distributed at 5% Significance Level				
965						K-S Test Statistic	0.175	**Kolmogorov-Smirnov Gamma GOF Test**				
966						5% K-S Critical Value	0.194	Detected data appear Gamma Distributed at 5% Significance Level				
967	**Detected data appear Gamma Distributed at 5% Significance Level**											
968												
969	**Gamma Statistics**											
970						k hat (MLE)	7.684				k star (bias corrected MLE)	6.565	
971						Theta hat (MLE)	1468				Theta star (bias corrected MLE)	1718	
972						nu hat (MLE)	307.4				nu star (bias corrected)	262.6	
973						MLE Mean (bias corrected)	11280				MLE Sd (bias corrected)	4403	
974											Approximate Chi Square Value (0.05)	226.1	
975						Adjusted Level of Significance	0.038				Adjusted Chi Square Value	223.4	
976													
977	**Assuming Gamma Distribution**											
978						95% Approximate Gamma UCL (use when n>=50))	13102				95% Adjusted Gamma UCL (use when n<50)	13259	
979													
980	**Lognormal GOF Test**											
981						Shapiro Wilk Test Statistic	0.949	**Shapiro Wilk Lognormal GOF Test**				
982						5% Shapiro Wilk Critical Value	0.905	Data appear Lognormal at 5% Significance Level				
983						Lilliefors Test Statistic	0.159	**Lilliefors Lognormal GOF Test**				
984						5% Lilliefors Critical Value	0.192	Data appear Lognormal at 5% Significance Level				
985	**Data appear Lognormal at 5% Significance Level**											
986												
987	**Lognormal Statistics**											
988						Minimum of Logged Data	8.648				Mean of logged Data	9.264	

989				Maximum of Logged Data	9.952					SD of logged Data	0.372	
990												
991				**Assuming Lognormal Distribution**								
992				95% H-UCL	13308					90% Chebyshev (MVUE) UCL	14140	
993				95% Chebyshev (MVUE) UCL	15441					97.5% Chebyshev (MVUE) UCL	17246	
994				99% Chebyshev (MVUE) UCL	20791							
995												
996				**Nonparametric Distribution Free UCL Statistics**								
997				**Data appear to follow a Discernible Distribution at 5% Significance Level**								
998												
999				**Nonparametric Distribution Free UCLs**								
1000				95% CLT UCL	12860					95% Jackknife UCL	12941	
1001				95% Standard Bootstrap UCL	12811					95% Bootstrap-t UCL	13119	
1002				95% Hall's Bootstrap UCL	13086					95% Percentile Bootstrap UCL	12910	
1003				95% BCA Bootstrap UCL	12860							
1004				90% Chebyshev(Mean, Sd) UCL	14162					95% Chebyshev(Mean, Sd) UCL	15468	
1005				97.5% Chebyshev(Mean, Sd) UCL	17280					99% Chebyshev(Mean, Sd) UCL	20839	
1006												
1007				**Suggested UCL to Use**								
1008				95% Student's-t UCL	12941							
1009												
1010	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
1011	Recommendations are based upon data size, data distribution, and skewness.											
1012	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
1013	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
1014												
1015												
1016	**Manganese**											
1017												
1018				**General Statistics**								
1019				Total Number of Observations	20					Number of Distinct Observations	19	
1020										Number of Missing Observations	0	
1021				Minimum	230					Mean	524	
1022				Maximum	1200					Median	415	
1023				SD	295.6					Std. Error of Mean	66.09	
1024				Coefficient of Variation	0.564					Skewness	0.965	
1025												
1026				**Normal GOF Test**								
1027				Shapiro Wilk Test Statistic	0.863					**Shapiro Wilk GOF Test**		
1028				5% Shapiro Wilk Critical Value	0.905					Data Not Normal at 5% Significance Level		
1029				Lilliefors Test Statistic	0.205					**Lilliefors GOF Test**		
1030				5% Lilliefors Critical Value	0.192					Data Not Normal at 5% Significance Level		
1031				**Data Not Normal at 5% Significance Level**								
1032												
1033				**Assuming Normal Distribution**								
1034				**95% Normal UCL**						**95% UCLs (Adjusted for Skewness)**		
1035				95% Student's-t UCL	638.3					95% Adjusted-CLT UCL (Chen-1995)	647.9	
1036										95% Modified-t UCL (Johnson-1978)	640.7	
1037												
1038				**Gamma GOF Test**								
1039				A-D Test Statistic	0.781					**Anderson-Darling Gamma GOF Test**		
1040				5% A-D Critical Value	0.746					Data Not Gamma Distributed at 5% Significance Level		

1041					K-S Test Statistic	0.208	**Kolmogorov-Smirnov Gamma GOF Test**					
1042					5% K-S Critical Value	0.195	Data Not Gamma Distributed at 5% Significance Level					
1043	**Data Not Gamma Distributed at 5% Significance Level**											
1044												
1045	**Gamma Statistics**											
1046					k hat (MLE)	3.721				k star (bias corrected MLE)		3.196
1047					Theta hat (MLE)	140.8				Theta star (bias corrected MLE)		164
1048					nu hat (MLE)	148.8				nu star (bias corrected)		127.8
1049					MLE Mean (bias corrected)	524				MLE Sd (bias corrected)		293.1
1050										Approximate Chi Square Value (0.05)		102.7
1051					Adjusted Level of Significance	0.038				Adjusted Chi Square Value		100.9
1052												
1053	**Assuming Gamma Distribution**											
1054				95% Approximate Gamma UCL (use when n>=50))		652.1				95% Adjusted Gamma UCL (use when n<50)		663.6
1055												
1056	**Lognormal GOF Test**											
1057					Shapiro Wilk Test Statistic	0.911	**Shapiro Wilk Lognormal GOF Test**					
1058					5% Shapiro Wilk Critical Value	0.905	Data appear Lognormal at 5% Significance Level					
1059					Lilliefors Test Statistic	0.195	**Lilliefors Lognormal GOF Test**					
1060					5% Lilliefors Critical Value	0.192	Data Not Lognormal at 5% Significance Level					
1061	**Data appear Approximate Lognormal at 5% Significance Level**											
1062												
1063	**Lognormal Statistics**											
1064					Minimum of Logged Data	5.438				Mean of logged Data		6.121
1065					Maximum of Logged Data	7.09				SD of logged Data		0.535
1066												
1067	**Assuming Lognormal Distribution**											
1068					95% H-UCL	676.1				90% Chebyshev (MVUE) UCL		716.1
1069					95% Chebyshev (MVUE) UCL	804.4				97.5% Chebyshev (MVUE) UCL		926.9
1070					99% Chebyshev (MVUE) UCL	1168						
1071												
1072	**Nonparametric Distribution Free UCL Statistics**											
1073	**Data appear to follow a Discernible Distribution at 5% Significance Level**											
1074												
1075	**Nonparametric Distribution Free UCLs**											
1076					95% CLT UCL	632.7				95% Jackknife UCL		638.3
1077					95% Standard Bootstrap UCL	629				95% Bootstrap-t UCL		650.8
1078					95% Hall's Bootstrap UCL	639.5				95% Percentile Bootstrap UCL		632.5
1079					95% BCA Bootstrap UCL	645						
1080					90% Chebyshev(Mean, Sd) UCL	722.3				95% Chebyshev(Mean, Sd) UCL		812.1
1081					97.5% Chebyshev(Mean, Sd) UCL	936.7				99% Chebyshev(Mean, Sd) UCL		1182
1082												
1083	**Suggested UCL to Use**											
1084					95% H-UCL	676.1						
1085												
1086	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
1087	Recommendations are based upon data size, data distribution, and skewness.											
1088	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
1089	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
1090												
1091	**ProUCL computes and outputs H-statistic based UCLs for historical reasons only.**											
1092	**H-statistic often results in unstable (both high and low) values of UCL95 as shown in examples in the Technical Guide.**											

	A	B	C	D	E	F	G	H	I	J	K	L
1093	It is therefore recommended to avoid the use of H-statistic based 95% UCLs.											
1094	Use of nonparametric methods are preferred to compute UCL95 for skewed data sets which do not follow a gamma distribution.											
1095												

Resident - Scenario 2 and Construction Worker (soil from 0 ft bgs to water table)

UCL Statistics for Data Sets with Non-Detects

User Selected Options	
Date/Time of Computation	ProUCL 5.12/9/2018 10:06:43 AM
From File	WorkSheet.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Benzo(a)anthracene

General Statistics

Total Number of Observations	29	Number of Distinct Observations	24
Number of Detects	19	Number of Non-Detects	10
Number of Distinct Detects	19	Number of Distinct Non-Detects	6
Minimum Detect	0.0013	Minimum Non-Detect	0.0025
Maximum Detect	1.4	Maximum Non-Detect	0.003
Variance Detects	0.122	Percent Non-Detects	34.48%
Mean Detects	0.144	SD Detects	0.35
Median Detects	0.025	CV Detects	2.424
Skewness Detects	3.182	Kurtosis Detects	10.12
Mean of Logged Detects	-3.742	SD of Logged Detects	1.903

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.452	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.901	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.388	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.197	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.095	KM Standard Error of Mean	0.0542
KM SD	0.284	95% KM (BCA) UCL	0.211
95% KM (t) UCL	0.187	95% KM (Percentile Bootstrap) UCL	0.194
95% KM (z) UCL	0.184	95% KM Bootstrap t UCL	0.782
90% KM Chebyshev UCL	0.258	95% KM Chebyshev UCL	0.331
97.5% KM Chebyshev UCL	0.433	99% KM Chebyshev UCL	0.634

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	1.495	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.829	Detected Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.257	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.213	Detected Data Not Gamma Distributed at 5% Significance Level

Detected Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	0.369	k star (bias corrected MLE)	0.346
Theta hat (MLE)	0.391	Theta star (bias corrected MLE)	0.417
nu hat (MLE)	14.02	nu star (bias corrected)	13.14
Mean (detects)	0.144		

Gamma ROS Statistics using Imputed Non-Detects

	A	B	C	D	E	F	G	H	I	J	K	L
53	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
54	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
55	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
56	This is especially true when the sample size is small.											
57	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
58					Minimum	0.0013				Mean	0.098	
59					Maximum	1.4				Median	0.01	
60					SD	0.288				CV	2.938	
61					k hat (MLE)	0.386				k star (bias corrected MLE)	0.369	
62					Theta hat (MLE)	0.254				Theta star (bias corrected MLE)	0.266	
63					nu hat (MLE)	22.36				nu star (bias corrected)	21.38	
64					Adjusted Level of Significance (β)	0.0407						
65					Approximate Chi Square Value (21.38, α)	11.88				Adjusted Chi Square Value (21.38, β)	11.45	
66					95% Gamma Approximate UCL (use when n>=50)	0.176				95% Gamma Adjusted UCL (use when n<50)	0.183	
67												
68	**Estimates of Gamma Parameters using KM Estimates**											
69					Mean (KM)	0.095				SD (KM)	0.284	
70					Variance (KM)	0.0806				SE of Mean (KM)	0.0542	
71					k hat (KM)	0.112				k star (KM)	0.123	
72					nu hat (KM)	6.499				nu star (KM)	7.16	
73					theta hat (KM)	0.848				theta star (KM)	0.77	
74					80% gamma percentile (KM)	0.086				90% gamma percentile (KM)	0.271	
75					95% gamma percentile (KM)	0.54				99% gamma percentile (KM)	1.355	
76												
77	**Gamma Kaplan-Meier (KM) Statistics**											
78					Approximate Chi Square Value (7.16, α)	2.259				Adjusted Chi Square Value (7.16, β)	2.098	
79					95% Gamma Approximate KM-UCL (use when n>=50)	0.301				95% Gamma Adjusted KM-UCL (use when n<50)	0.324	
80												
81	**Lognormal GOF Test on Detected Observations Only**											
82					Shapiro Wilk Test Statistic	0.943				**Shapiro Wilk GOF Test**		
83					5% Shapiro Wilk Critical Value	0.901				Detected Data appear Lognormal at 5% Significance Level		
84					Lilliefors Test Statistic	0.123				**Lilliefors GOF Test**		
85					5% Lilliefors Critical Value	0.197				Detected Data appear Lognormal at 5% Significance Level		
86	**Detected Data appear Lognormal at 5% Significance Level**											
87												
88	**Lognormal ROS Statistics Using Imputed Non-Detects**											
89					Mean in Original Scale	0.0948				Mean in Log Scale	-5.057	
90					SD in Original Scale	0.289				SD in Log Scale	2.422	
91					95% t UCL (assumes normality of ROS data)	0.186				95% Percentile Bootstrap UCL	0.191	
92					95% BCA Bootstrap UCL	0.247				95% Bootstrap t UCL	0.777	
93					95% H-UCL (Log ROS)	0.974						
94												
95	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
96					KM Mean (logged)	-4.725				KM Geo Mean	0.00887	
97					KM SD (logged)	2.024				95% Critical H Value (KM-Log)	3.949	
98					KM Standard Error of Mean (logged)	0.387				95% H-UCL (KM -Log)	0.312	
99					KM SD (logged)	2.024				95% Critical H Value (KM-Log)	3.949	
100					KM Standard Error of Mean (logged)	0.387						
101												
102	**DL/2 Statistics**											
103	**DL/2 Normal**									**DL/2 Log-Transformed**		
104					Mean in Original Scale	0.095				Mean in Log Scale	-4.725	

105				SD in Original Scale	0.289					SD in Log Scale	2.057	
106				95% t UCL (Assumes normality)	0.186					95% H-Stat UCL	0.349	
107	**DL/2 is not a recommended method, provided for comparisons and historical reasons**											
108												
109	**Nonparametric Distribution Free UCL Statistics**											
110	**Detected Data appear Lognormal Distributed at 5% Significance Level**											
111												
112	**Suggested UCL to Use**											
113				95% KM (Chebyshev) UCL	0.331							
114												
115	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
116	Recommendations are based upon data size, data distribution, and skewness.											
117	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
118	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
119												
120	**Benzo[a]pyrene**											
121												
122	**General Statistics**											
123				Total Number of Observations	29					Number of Distinct Observations	23	
124				Number of Detects	20					Number of Non-Detects	9	
125				Number of Distinct Detects	18					Number of Distinct Non-Detects	6	
126				Minimum Detect	8.5000E-4					Minimum Non-Detect	0.0025	
127				Maximum Detect	1.22					Maximum Non-Detect	0.003	
128				Variance Detects	0.0839					Percent Non-Detects	31.03%	
129				Mean Detects	0.122					SD Detects	0.29	
130				Median Detects	0.0295					CV Detects	2.371	
131				Skewness Detects	3.39					Kurtosis Detects	11.89	
132				Mean of Logged Detects	-3.843					SD of Logged Detects	1.955	
133												
134	**Normal GOF Test on Detects Only**											
135				Shapiro Wilk Test Statistic	0.458					**Shapiro Wilk GOF Test**		
136				5% Shapiro Wilk Critical Value	0.905					Detected Data Not Normal at 5% Significance Level		
137				Lilliefors Test Statistic	0.392					**Lilliefors GOF Test**		
138				5% Lilliefors Critical Value	0.192					Detected Data Not Normal at 5% Significance Level		
139	**Detected Data Not Normal at 5% Significance Level**											
140												
141	**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**											
142				KM Mean	0.0846					KM Standard Error of Mean	0.0459	
143				KM SD	0.241					95% KM (BCA) UCL	0.171	
144				95% KM (t) UCL	0.163					95% KM (Percentile Bootstrap) UCL	0.168	
145				95% KM (z) UCL	0.16					95% KM Bootstrap t UCL	0.513	
146				90% KM Chebyshev UCL	0.222					95% KM Chebyshev UCL	0.285	
147				97.5% KM Chebyshev UCL	0.371					99% KM Chebyshev UCL	0.541	
148												
149	**Gamma GOF Tests on Detected Observations Only**											
150				A-D Test Statistic	1.158					**Anderson-Darling GOF Test**		
151				5% A-D Critical Value	0.828					Detected Data Not Gamma Distributed at 5% Significance Level		
152				K-S Test Statistic	0.251					**Kolmogorov-Smirnov GOF**		
153				5% K-S Critical Value	0.208					Detected Data Not Gamma Distributed at 5% Significance Level		
154	**Detected Data Not Gamma Distributed at 5% Significance Level**											
155												
156	**Gamma Statistics on Detected Data Only**											

157					k hat (MLE)	0.381				k star (bias corrected MLE)		0.357
158					Theta hat (MLE)	0.321				Theta star (bias corrected MLE)		0.342
159					nu hat (MLE)	15.24				nu star (bias corrected)		14.29
160					Mean (detects)	0.122						
161												
162	**Gamma ROS Statistics using Imputed Non-Detects**											
163	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
164	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
165	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
166	This is especially true when the sample size is small.											
167	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
168					Minimum	8.5000E-4				Mean		0.0873
169					Maximum	1.22				Median		0.01
170					SD	0.244				CV		2.797
171					k hat (MLE)	0.401				k star (bias corrected MLE)		0.382
172					Theta hat (MLE)	0.218				Theta star (bias corrected MLE)		0.228
173					nu hat (MLE)	23.24				nu star (bias corrected)		22.17
174					Adjusted Level of Significance (β)	0.0407						
175					Approximate Chi Square Value (22.17, α)	12.47				Adjusted Chi Square Value (22.17, β)		12.03
176					95% Gamma Approximate UCL (use when n>=50)	0.155				95% Gamma Adjusted UCL (use when n<50)		0.161
177												
178	**Estimates of Gamma Parameters using KM Estimates**											
179					Mean (KM)	0.0846				SD (KM)		0.241
180					Variance (KM)	0.0581				SE of Mean (KM)		0.0459
181					k hat (KM)	0.123				k star (KM)		0.134
182					nu hat (KM)	7.15				nu star (KM)		7.744
183					theta hat (KM)	0.686				theta star (KM)		0.634
184					80% gamma percentile (KM)	0.083				90% gamma percentile (KM)		0.246
185					95% gamma percentile (KM)	0.475				99% gamma percentile (KM)		1.158
186												
187	**Gamma Kaplan-Meier (KM) Statistics**											
188					Approximate Chi Square Value (7.74, α)	2.588				Adjusted Chi Square Value (7.74, β)		2.413
189					95% Gamma Approximate KM-UCL (use when n>=50)	0.253				95% Gamma Adjusted KM-UCL (use when n<50)		0.272
190												
191	**Lognormal GOF Test on Detected Observations Only**											
192					Shapiro Wilk Test Statistic	0.965				**Shapiro Wilk GOF Test**		
193					5% Shapiro Wilk Critical Value	0.905				Detected Data appear Lognormal at 5% Significance Level		
194					Lilliefors Test Statistic	0.123				**Lilliefors GOF Test**		
195					5% Lilliefors Critical Value	0.192				Detected Data appear Lognormal at 5% Significance Level		
196	**Detected Data appear Lognormal at 5% Significance Level**											
197												
198	**Lognormal ROS Statistics Using Imputed Non-Detects**											
199					Mean in Original Scale	0.0845				Mean in Log Scale		-4.892
200					SD in Original Scale	0.245				SD in Log Scale		2.284
201					95% t UCL (assumes normality of ROS data)	0.162				95% Percentile Bootstrap UCL		0.168
202					95% BCA Bootstrap UCL	0.219				95% Bootstrap t UCL		0.494
203					95% H-UCL (Log ROS)	0.671						
204												
205	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
206					KM Mean (logged)	-4.755				KM Geo Mean		0.00861
207					KM SD (logged)	2.095				95% Critical H Value (KM-Log)		4.06
208					KM Standard Error of Mean (logged)	0.404				95% H-UCL (KM -Log)		0.385

209					KM SD (logged)	2.095				95% Critical H Value (KM-Log)		4.06
210					KM Standard Error of Mean (logged)	0.404						
211												
212					**DL/2 Statistics**							
213					**DL/2 Normal**					**DL/2 Log-Transformed**		
214					Mean in Original Scale	0.0847				Mean in Log Scale		-4.696
215					SD in Original Scale	0.245				SD in Log Scale		2.067
216					95% t UCL (Assumes normality)	0.162				95% H-Stat UCL		0.371
217					**DL/2 is not a recommended method, provided for comparisons and historical reasons**							
218												
219					**Nonparametric Distribution Free UCL Statistics**							
220					**Detected Data appear Lognormal Distributed at 5% Significance Level**							
221												
222					**Suggested UCL to Use**							
223					95% KM (Chebyshev) UCL	0.285						
224												
225					Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.							
226					Recommendations are based upon data size, data distribution, and skewness.							
227					These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).							
228					However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.							
229												
230	**Benzo[b]fluoranthene**											
231												
232					**General Statistics**							
233					Total Number of Observations	29				Number of Distinct Observations		26
234					Number of Detects	20				Number of Non-Detects		9
235					Number of Distinct Detects	20				Number of Distinct Non-Detects		6
236					Minimum Detect	0.0017				Minimum Non-Detect		0.0025
237					Maximum Detect	1.71				Maximum Non-Detect		0.003
238					Variance Detects	0.16				Percent Non-Detects		31.03%
239					Mean Detects	0.17				SD Detects		0.4
240					Median Detects	0.05				CV Detects		2.357
241					Skewness Detects	3.486				Kurtosis Detects		12.72
242					Mean of Logged Detects	-3.419				SD of Logged Detects		1.884
243												
244					**Normal GOF Test on Detects Only**							
245					Shapiro Wilk Test Statistic	0.456				**Shapiro Wilk GOF Test**		
246					5% Shapiro Wilk Critical Value	0.905				Detected Data Not Normal at 5% Significance Level		
247					Lilliefors Test Statistic	0.388				**Lilliefors GOF Test**		
248					5% Lilliefors Critical Value	0.192				Detected Data Not Normal at 5% Significance Level		
249					**Detected Data Not Normal at 5% Significance Level**							
250												
251					**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**							
252					KM Mean	0.118				KM Standard Error of Mean		0.0634
253					KM SD	0.333				95% KM (BCA) UCL		0.225
254					95% KM (t) UCL	0.225				95% KM (Percentile Bootstrap) UCL		0.239
255					95% KM (z) UCL	0.222				95% KM Bootstrap t UCL		0.667
256					90% KM Chebyshev UCL	0.308				95% KM Chebyshev UCL		0.394
257					97.5% KM Chebyshev UCL	0.514				99% KM Chebyshev UCL		0.749
258												
259					**Gamma GOF Tests on Detected Observations Only**							
260					A-D Test Statistic	1.171				**Anderson-Darling GOF Test**		

	A	B	C	D	E	F	G	H	I	J	K	L
261					5% A-D Critical Value	0.824	Detected Data Not Gamma Distributed at 5% Significance Level					
262					K-S Test Statistic	0.249	**Kolmogorov-Smirnov GOF**					
263					5% K-S Critical Value	0.208	Detected Data Not Gamma Distributed at 5% Significance Level					
264	**Detected Data Not Gamma Distributed at 5% Significance Level**											
265												
266	**Gamma Statistics on Detected Data Only**											
267					k hat (MLE)	0.4	k star (bias corrected MLE)					0.373
268					Theta hat (MLE)	0.424	Theta star (bias corrected MLE)					0.455
269					nu hat (MLE)	16	nu star (bias corrected)					14.93
270					Mean (detects)	0.17						
271												
272	**Gamma ROS Statistics using Imputed Non-Detects**											
273	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
274	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
275	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
276	This is especially true when the sample size is small.											
277	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
278					Minimum	0.0017	Mean					0.12
279					Maximum	1.71	Median					0.01
280					SD	0.338	CV					2.813
281					k hat (MLE)	0.395	k star (bias corrected MLE)					0.377
282					Theta hat (MLE)	0.304	Theta star (bias corrected MLE)					0.318
283					nu hat (MLE)	22.93	nu star (bias corrected)					21.89
284					Adjusted Level of Significance (β)	0.0407						
285					Approximate Chi Square Value (21.89, α)	12.25	Adjusted Chi Square Value (21.89, β)					11.82
286					95% Gamma Approximate UCL (use when n>=50)	0.215	95% Gamma Adjusted UCL (use when n<50)					0.222
287												
288	**Estimates of Gamma Parameters using KM Estimates**											
289					Mean (KM)	0.118	SD (KM)					0.333
290					Variance (KM)	0.111	SE of Mean (KM)					0.0634
291					k hat (KM)	0.125	k star (KM)					0.135
292					nu hat (KM)	7.237	nu star (KM)					7.822
293					theta hat (KM)	0.942	theta star (KM)					0.872
294					80% gamma percentile (KM)	0.116	90% gamma percentile (KM)					0.343
295					95% gamma percentile (KM)	0.66	99% gamma percentile (KM)					1.602
296												
297	**Gamma Kaplan-Meier (KM) Statistics**											
298					Approximate Chi Square Value (7.82, α)	2.632	Adjusted Chi Square Value (7.82, β)					2.455
299					95% Gamma Approximate KM-UCL (use when n>=50)	0.349	95% Gamma Adjusted KM-UCL (use when n<50)					0.375
300												
301	**Lognormal GOF Test on Detected Observations Only**											
302					Shapiro Wilk Test Statistic	0.958	**Shapiro Wilk GOF Test**					
303					5% Shapiro Wilk Critical Value	0.905	Detected Data appear Lognormal at 5% Significance Level					
304					Lilliefors Test Statistic	0.135	**Lilliefors GOF Test**					
305					5% Lilliefors Critical Value	0.192	Detected Data appear Lognormal at 5% Significance Level					
306	**Detected Data appear Lognormal at 5% Significance Level**											
307												
308	**Lognormal ROS Statistics Using Imputed Non-Detects**											
309					Mean in Original Scale	0.117	Mean in Log Scale					-4.459
310					SD in Original Scale	0.339	SD in Log Scale					2.231
311					95% t UCL (assumes normality of ROS data)	0.224	95% Percentile Bootstrap UCL					0.23
312					95% BCA Bootstrap UCL	0.311	95% Bootstrap t UCL					0.697

313					95% H-UCL (Log ROS)	0.846						
314												
315	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
316					KM Mean (logged)	-4.312				KM Geo Mean	0.0134	
317					KM SD (logged)	2.025				95% Critical H Value (KM-Log)	3.95	
318					KM Standard Error of Mean (logged)	0.386				95% H-UCL (KM -Log)	0.472	
319					KM SD (logged)	2.025				95% Critical H Value (KM-Log)	3.95	
320					KM Standard Error of Mean (logged)	0.386						
321												
322	**DL/2 Statistics**											
323				**DL/2 Normal**					**DL/2 Log-Transformed**			
324					Mean in Original Scale	0.117				Mean in Log Scale	-4.404	
325					SD in Original Scale	0.339				SD in Log Scale	2.155	
326					95% t UCL (Assumes normality)	0.224				95% H-Stat UCL	0.677	
327	**DL/2 is not a recommended method, provided for comparisons and historical reasons**											
328												
329	**Nonparametric Distribution Free UCL Statistics**											
330	**Detected Data appear Lognormal Distributed at 5% Significance Level**											
331												
332	**Suggested UCL to Use**											
333					95% KM (Chebyshev) UCL	0.394						
334												
335	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
336	Recommendations are based upon data size, data distribution, and skewness.											
337	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
338	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
339												
340	**Dibenz(a,h)anthracene**											
341												
342	**General Statistics**											
343					Total Number of Observations	29				Number of Distinct Observations	20	
344					Number of Detects	13				Number of Non-Detects	16	
345					Number of Distinct Detects	13				Number of Distinct Non-Detects	7	
346					Minimum Detect	0.0015				Minimum Non-Detect	0.0025	
347					Maximum Detect	0.212				Maximum Non-Detect	0.003	
348					Variance Detects	0.0035				Percent Non-Detects	55.17%	
349					Mean Detects	0.032				SD Detects	0.0592	
350					Median Detects	0.0082				CV Detects	1.85	
351					Skewness Detects	2.804				Kurtosis Detects	8.079	
352					Mean of Logged Detects	-4.42				SD of Logged Detects	1.315	
353												
354	**Normal GOF Test on Detects Only**											
355					Shapiro Wilk Test Statistic	0.543				**Shapiro Wilk GOF Test**		
356					5% Shapiro Wilk Critical Value	0.866				Detected Data Not Normal at 5% Significance Level		
357					Lilliefors Test Statistic	0.346				**Lilliefors GOF Test**		
358					5% Lilliefors Critical Value	0.234				Detected Data Not Normal at 5% Significance Level		
359	**Detected Data Not Normal at 5% Significance Level**											
360												
361	**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**											
362					KM Mean	0.0152				KM Standard Error of Mean	0.00792	
363					KM SD	0.041				95% KM (BCA) UCL	0.0304	
364					95% KM (t) UCL	0.0286				95% KM (Percentile Bootstrap) UCL	0.0296	

365				95% KM (z) UCL	0.0282					95% KM Bootstrap t UCL	0.0894	
366				90% KM Chebyshev UCL	0.0389					95% KM Chebyshev UCL	0.0497	
367				97.5% KM Chebyshev UCL	0.0646					99% KM Chebyshev UCL	0.0939	
368												
369				**Gamma GOF Tests on Detected Observations Only**								
370				A-D Test Statistic	1.365	**Anderson-Darling GOF Test**						
371				5% A-D Critical Value	0.78	Detected Data Not Gamma Distributed at 5% Significance Level						
372				K-S Test Statistic	0.327	**Kolmogorov-Smirnov GOF**						
373				5% K-S Critical Value	0.248	Detected Data Not Gamma Distributed at 5% Significance Level						
374				**Detected Data Not Gamma Distributed at 5% Significance Level**								
375												
376				**Gamma Statistics on Detected Data Only**								
377				k hat (MLE)	0.628	k star (bias corrected MLE)	0.534					
378				Theta hat (MLE)	0.0509	Theta star (bias corrected MLE)	0.0598					
379				nu hat (MLE)	16.33	nu star (bias corrected)	13.89					
380				Mean (detects)	0.032							
381												
382				**Gamma ROS Statistics using Imputed Non-Detects**								
383				GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs								
384				GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)								
385				For such situations, GROS method may yield incorrect values of UCLs and BTVs								
386				This is especially true when the sample size is small.								
387				For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates								
388				Minimum	0.0015	Mean	0.0199					
389				Maximum	0.212	Median	0.01					
390				SD	0.0403	CV	2.03					
391				k hat (MLE)	0.962	k star (bias corrected MLE)	0.886					
392				Theta hat (MLE)	0.0206	Theta star (bias corrected MLE)	0.0224					
393				nu hat (MLE)	55.8	nu star (bias corrected)	51.36					
394				Adjusted Level of Significance (β)	0.0407							
395				Approximate Chi Square Value (51.36, α)	35.9	Adjusted Chi Square Value (51.36, β)	35.13					
396				95% Gamma Approximate UCL (use when n>=50)	0.0284	95% Gamma Adjusted UCL (use when n<50)	0.029					
397												
398				**Estimates of Gamma Parameters using KM Estimates**								
399				Mean (KM)	0.0152	SD (KM)	0.041					
400				Variance (KM)	0.00168	SE of Mean (KM)	0.00792					
401				k hat (KM)	0.137	k star (KM)	0.146					
402				nu hat (KM)	7.946	nu star (KM)	8.458					
403				theta hat (KM)	0.111	theta star (KM)	0.104					
404				80% gamma percentile (KM)	0.0161	90% gamma percentile (KM)	0.0448					
405				95% gamma percentile (KM)	0.0839	99% gamma percentile (KM)	0.198					
406												
407				**Gamma Kaplan-Meier (KM) Statistics**								
408				Approximate Chi Square Value (8.46, α)	3.003	Adjusted Chi Square Value (8.46, β)	2.811					
409				95% Gamma Approximate KM-UCL (use when n>=50)	0.0427	95% Gamma Adjusted KM-UCL (use when n<50)	0.0456					
410												
411				**Lognormal GOF Test on Detected Observations Only**								
412				Shapiro Wilk Test Statistic	0.897	**Shapiro Wilk GOF Test**						
413				5% Shapiro Wilk Critical Value	0.866	Detected Data appear Lognormal at 5% Significance Level						
414				Lilliefors Test Statistic	0.259	**Lilliefors GOF Test**						
415				5% Lilliefors Critical Value	0.234	Detected Data Not Lognormal at 5% Significance Level						
416				**Detected Data appear Approximate Lognormal at 5% Significance Level**								

417											
418	**Lognormal ROS Statistics Using Imputed Non-Detects**										
419				Mean in Original Scale	0.0148			Mean in Log Scale	-5.962		
420				SD in Original Scale	0.0418			SD in Log Scale	1.732		
421			95% t UCL (assumes normality of ROS data)		0.028			95% Percentile Bootstrap UCL	0.0295		
422				95% BCA Bootstrap UCL	0.0353			95% Bootstrap t UCL	0.085		
423				95% H-UCL (Log ROS)	0.0362						
424											
425	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**										
426				KM Mean (logged)	-5.569			KM Geo Mean	0.00382		
427				KM SD (logged)	1.337			95% Critical H Value (KM-Log)	2.913		
428			KM Standard Error of Mean (logged)		0.258			95% H-UCL (KM -Log)	0.0195		
429				KM SD (logged)	1.337			95% Critical H Value (KM-Log)	2.913		
430			KM Standard Error of Mean (logged)		0.258						
431											
432	**DL/2 Statistics**										
433	**DL/2 Normal**							**DL/2 Log-Transformed**			
434				Mean in Original Scale	0.0151			Mean in Log Scale	-5.622		
435				SD in Original Scale	0.0417			SD in Log Scale	1.4		
436			95% t UCL (Assumes normality)		0.0283			95% H-Stat UCL	0.0213		
437	**DL/2 is not a recommended method, provided for comparisons and historical reasons**										
438											
439	**Nonparametric Distribution Free UCL Statistics**										
440	**Detected Data appear Approximate Lognormal Distributed at 5% Significance Level**										
441											
442	**Suggested UCL to Use**										
443				KM H-UCL	0.0195						
444											
445	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.										
446	Recommendations are based upon data size, data distribution, and skewness.										
447	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).										
448	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.										
449											
450											
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467											
468											

Aluminum

General Statistics

Total Number of Observations	29	Number of Distinct Observations	23
		Number of Missing Observations	0
Minimum	2500	Mean	6103
Maximum	15000	Median	5500
SD	3054	Std. Error of Mean	567.1
Coefficient of Variation	0.5	Skewness	1.03

Normal GOF Test

573				Shapiro Wilk Test Statistic	0.884	**Shapiro Wilk GOF Test**						
574				5% Shapiro Wilk Critical Value	0.926	Data Not Normal at 5% Significance Level						
575				Lilliefors Test Statistic	0.168	**Lilliefors GOF Test**						
576				5% Lilliefors Critical Value	0.161	Data Not Normal at 5% Significance Level						
577	**Data Not Normal at 5% Significance Level**											
578												
579	**Assuming Normal Distribution**											
580	**95% Normal UCL**					**95% UCLs (Adjusted for Skewness)**						
581				95% Student's-t UCL	7068	95% Adjusted-CLT UCL (Chen-1995)	7152					
582						95% Modified-t UCL (Johnson-1978)	7086					
583												
584	**Gamma GOF Test**											
585				A-D Test Statistic	0.946	**Anderson-Darling Gamma GOF Test**						
586				5% A-D Critical Value	0.749	Data Not Gamma Distributed at 5% Significance Level						
587				K-S Test Statistic	0.174	**Kolmogorov-Smirnov Gamma GOF Test**						
588				5% K-S Critical Value	0.163	Data Not Gamma Distributed at 5% Significance Level						
589	**Data Not Gamma Distributed at 5% Significance Level**											
590												
591	**Gamma Statistics**											
592				k hat (MLE)	4.539	k star (bias corrected MLE)	4.093					
593				Theta hat (MLE)	1345	Theta star (bias corrected MLE)	1491					
594				nu hat (MLE)	263.3	nu star (bias corrected)	237.4					
595				MLE Mean (bias corrected)	6103	MLE Sd (bias corrected)	3017					
596						Approximate Chi Square Value (0.05)	202.7					
597				Adjusted Level of Significance	0.0407	Adjusted Chi Square Value	200.8					
598												
599	**Assuming Gamma Distribution**											
600				95% Approximate Gamma UCL (use when n>=50))	7147	95% Adjusted Gamma UCL (use when n<50)	7215					
601												
602	**Lognormal GOF Test**											
603				Shapiro Wilk Test Statistic	0.927	**Shapiro Wilk Lognormal GOF Test**						
604				5% Shapiro Wilk Critical Value	0.926	Data appear Lognormal at 5% Significance Level						
605				Lilliefors Test Statistic	0.167	**Lilliefors Lognormal GOF Test**						
606				5% Lilliefors Critical Value	0.161	Data Not Lognormal at 5% Significance Level						
607	**Data appear Approximate Lognormal at 5% Significance Level**											
608												
609	**Lognormal Statistics**											
610				Minimum of Logged Data	7.824	Mean of logged Data	8.602					
611				Maximum of Logged Data	9.616	SD of logged Data	0.484					
612												
613	**Assuming Lognormal Distribution**											
614				95% H-UCL	7304	90% Chebyshev (MVUE) UCL	7803					
615				95% Chebyshev (MVUE) UCL	8577	97.5% Chebyshev (MVUE) UCL	9652					
616				99% Chebyshev (MVUE) UCL	11763							
617												
618	**Nonparametric Distribution Free UCL Statistics**											
619	**Data appear to follow a Discernible Distribution at 5% Significance Level**											
620												
621	**Nonparametric Distribution Free UCLs**											
622				95% CLT UCL	7036	95% Jackknife UCL	7068					
623				95% Standard Bootstrap UCL	7034	95% Bootstrap-t UCL	7220					
624				95% Hall's Bootstrap UCL	7277	95% Percentile Bootstrap UCL	7000					

625				95% BCA Bootstrap UCL	7228							
626				90% Chebyshev(Mean, Sd) UCL	7805					95% Chebyshev(Mean, Sd) UCL	8575	
627				97.5% Chebyshev(Mean, Sd) UCL	9645					99% Chebyshev(Mean, Sd) UCL	11746	
628												
629				**Suggested UCL to Use**								
630				95% Student's-t UCL	7068					or 95% Modified-t UCL	7086	
631				or 95% H-UCL	7304							
632												
633	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
634	Recommendations are based upon data size, data distribution, and skewness.											
635	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
636	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
637												
638	**ProUCL computes and outputs H-statistic based UCLs for historical reasons only.**											
639	**H-statistic often results in unstable (both high and low) values of UCL95 as shown in examples in the Technical Guide.**											
640	**It is therefore recommended to avoid the use of H-statistic based 95% UCLs.**											
641	**Use of nonparametric methods are preferred to compute UCL95 for skewed data sets which do not follow a gamma distribution.**											
642												
643	**Arsenic**											
644												
645	**General Statistics**											
646				Total Number of Observations	29					Number of Distinct Observations	25	
647				Number of Detects	20					Number of Non-Detects	9	
648				Number of Distinct Detects	19					Number of Distinct Non-Detects	9	
649				Minimum Detect	2.2					Minimum Non-Detect	1.4	
650				Maximum Detect	6.9					Maximum Non-Detect	5.1	
651				Variance Detects	2.019					Percent Non-Detects	31.03%	
652				Mean Detects	4.125					SD Detects	1.421	
653				Median Detects	4.225					CV Detects	0.344	
654				Skewness Detects	0.416					Kurtosis Detects	-0.866	
655				Mean of Logged Detects	1.36					SD of Logged Detects	0.351	
656												
657	**Normal GOF Test on Detects Only**											
658				Shapiro Wilk Test Statistic	0.938					**Shapiro Wilk GOF Test**		
659				5% Shapiro Wilk Critical Value	0.905					Detected Data appear Normal at 5% Significance Level		
660				Lilliefors Test Statistic	0.124					**Lilliefors GOF Test**		
661				5% Lilliefors Critical Value	0.192					Detected Data appear Normal at 5% Significance Level		
662	**Detected Data appear Normal at 5% Significance Level**											
663												
664	**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**											
665				KM Mean	3.387					KM Standard Error of Mean	0.318	
666				KM SD	1.639					95% KM (BCA) UCL	4.012	
667				95% KM (t) UCL	3.928					95% KM (Percentile Bootstrap) UCL	3.93	
668				95% KM (z) UCL	3.91					95% KM Bootstrap t UCL	3.929	
669				90% KM Chebyshev UCL	4.341					95% KM Chebyshev UCL	4.773	
670				97.5% KM Chebyshev UCL	5.373					99% KM Chebyshev UCL	6.551	
671												
672	**Gamma GOF Tests on Detected Observations Only**											
673				A-D Test Statistic	0.382					**Anderson-Darling GOF Test**		
674				5% A-D Critical Value	0.743					Detected data appear Gamma Distributed at 5% Significance Level		
675				K-S Test Statistic	0.133					**Kolmogorov-Smirnov GOF**		
676				5% K-S Critical Value	0.194					Detected data appear Gamma Distributed at 5% Significance Level		

	A	B	C	D	E	F	G	H	I	J	K	L
677	**Detected data appear Gamma Distributed at 5% Significance Level**											
678												
679	**Gamma Statistics on Detected Data Only**											
680						k hat (MLE)	8.859			k star (bias corrected MLE)		7.563
681						Theta hat (MLE)	0.466			Theta star (bias corrected MLE)		0.545
682						nu hat (MLE)	354.3			nu star (bias corrected)		302.5
683						Mean (detects)	4.125					
684												
685	**Gamma ROS Statistics using Imputed Non-Detects**											
686	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
687	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
688	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
689	This is especially true when the sample size is small.											
690	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
691						Minimum	1.398			Mean		3.395
692						Maximum	6.9			Median		2.827
693						SD	1.635			CV		0.482
694						k hat (MLE)	4.423			k star (bias corrected MLE)		3.988
695						Theta hat (MLE)	0.768			Theta star (bias corrected MLE)		0.851
696						nu hat (MLE)	256.5			nu star (bias corrected)		231.3
697						Adjusted Level of Significance (β)	0.0407					
698						Approximate Chi Square Value (231.33, α)	197.1			Adjusted Chi Square Value (231.33, β)		195.2
699						95% Gamma Approximate UCL (use when n>=50)	3.984			95% Gamma Adjusted UCL (use when n<50)		4.023
700												
701	**Estimates of Gamma Parameters using KM Estimates**											
702						Mean (KM)	3.387			SD (KM)		1.639
703						Variance (KM)	2.686			SE of Mean (KM)		0.318
704						k hat (KM)	4.271			k star (KM)		3.853
705						nu hat (KM)	247.7			nu star (KM)		223.4
706						theta hat (KM)	0.793			theta star (KM)		0.879
707						80% gamma percentile (KM)	4.69			90% gamma percentile (KM)		5.7
708						95% gamma percentile (KM)	6.631			99% gamma percentile (KM)		8.624
709												
710	**Gamma Kaplan-Meier (KM) Statistics**											
711						Approximate Chi Square Value (223.45, α)	189.8			Adjusted Chi Square Value (223.45, β)		188
712						95% Gamma Approximate KM-UCL (use when n>=50)	3.986			95% Gamma Adjusted KM-UCL (use when n<50)		4.026
713												
714	**Lognormal GOF Test on Detected Observations Only**											
715						Shapiro Wilk Test Statistic	0.949			**Shapiro Wilk GOF Test**		
716						5% Shapiro Wilk Critical Value	0.905			Detected Data appear Lognormal at 5% Significance Level		
717						Lilliefors Test Statistic	0.135			**Lilliefors GOF Test**		
718						5% Lilliefors Critical Value	0.192			Detected Data appear Lognormal at 5% Significance Level		
719	**Detected Data appear Lognormal at 5% Significance Level**											
720												
721	**Lognormal ROS Statistics Using Imputed Non-Detects**											
722						Mean in Original Scale	3.471			Mean in Log Scale		1.151
723						SD in Original Scale	1.548			SD in Log Scale		0.438
724						95% t UCL (assumes normality of ROS data)	3.96			95% Percentile Bootstrap UCL		3.969
725						95% BCA Bootstrap UCL	3.948			95% Bootstrap t UCL		4.01
726						95% H-UCL (Log ROS)	4.074					
727												
728	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											

729					KM Mean (logged)	1.093					KM Geo Mean	2.984
730					KM SD (logged)	0.518					95% Critical H Value (KM-Log)	1.961
731					KM Standard Error of Mean (logged)	0.102					95% H-UCL (KM -Log)	4.133
732					KM SD (logged)	0.518					95% Critical H Value (KM-Log)	1.961
733					KM Standard Error of Mean (logged)	0.102						
734												
735					**DL/2 Statistics**							
736					**DL/2 Normal**						**DL/2 Log-Transformed**	
737					Mean in Original Scale	3.259					Mean in Log Scale	1.005
738					SD in Original Scale	1.787					SD in Log Scale	0.646
739					95% t UCL (Assumes normality)	3.823					95% H-Stat UCL	4.333
740					**DL/2 is not a recommended method, provided for comparisons and historical reasons**							
741												
742					**Nonparametric Distribution Free UCL Statistics**							
743					**Detected Data appear Normal Distributed at 5% Significance Level**							
744												
745					**Suggested UCL to Use**							
746					95% KM (t) UCL	3.928						
747												
748					Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.							
749					Recommendations are based upon data size, data distribution, and skewness.							
750					These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).							
751					However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.							
752												
753	**Chromium VI**											
754												
755					**General Statistics**							
756					Total Number of Observations	29					Number of Distinct Observations	25
757					Number of Detects	25					Number of Non-Detects	4
758					Number of Distinct Detects	21					Number of Distinct Non-Detects	4
759					Minimum Detect	3.25					Minimum Non-Detect	2.9
760					Maximum Detect	15					Maximum Non-Detect	4
761					Variance Detects	10.18					Percent Non-Detects	13.79%
762					Mean Detects	7.246					SD Detects	3.191
763					Median Detects	7.5					CV Detects	0.44
764					Skewness Detects	0.614					Kurtosis Detects	-0.255
765					Mean of Logged Detects	1.885					SD of Logged Detects	0.451
766												
767					**Normal GOF Test on Detects Only**							
768					Shapiro Wilk Test Statistic	0.93					**Shapiro Wilk GOF Test**	
769					5% Shapiro Wilk Critical Value	0.918					Detected Data appear Normal at 5% Significance Level	
770					Lilliefors Test Statistic	0.129					**Lilliefors GOF Test**	
771					5% Lilliefors Critical Value	0.173					Detected Data appear Normal at 5% Significance Level	
772					**Detected Data appear Normal at 5% Significance Level**							
773												
774					**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**							
775					KM Mean	6.703					KM Standard Error of Mean	0.608
776					KM SD	3.208					95% KM (BCA) UCL	7.673
777					95% KM (t) UCL	7.737					95% KM (Percentile Bootstrap) UCL	7.677
778					95% KM (z) UCL	7.703					95% KM Bootstrap t UCL	7.817
779					90% KM Chebyshev UCL	8.527					95% KM Chebyshev UCL	9.354
780					97.5% KM Chebyshev UCL	10.5					99% KM Chebyshev UCL	12.75

	A	B	C	D	E	F	G	H	I	J	K	L
781												
782	**Gamma GOF Tests on Detected Observations Only**											
783					A-D Test Statistic	0.494	**Anderson-Darling GOF Test**					
784					5% A-D Critical Value	0.747	Detected data appear Gamma Distributed at 5% Significance Level					
785					K-S Test Statistic	0.12	**Kolmogorov-Smirnov GOF**					
786					5% K-S Critical Value	0.175	Detected data appear Gamma Distributed at 5% Significance Level					
787	**Detected data appear Gamma Distributed at 5% Significance Level**											
788												
789	**Gamma Statistics on Detected Data Only**											
790					k hat (MLE)	5.412	k star (bias corrected MLE)					4.79
791					Theta hat (MLE)	1.339	Theta star (bias corrected MLE)					1.513
792					nu hat (MLE)	270.6	nu star (bias corrected)					239.5
793					Mean (detects)	7.246						
794												
795	**Gamma ROS Statistics using Imputed Non-Detects**											
796	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
797	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
798	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
799	This is especially true when the sample size is small.											
800	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
801					Minimum	1.078	Mean					6.602
802					Maximum	15	Median					6.3
803					SD	3.394	CV					0.514
804					k hat (MLE)	3.648	k star (bias corrected MLE)					3.294
805					Theta hat (MLE)	1.81	Theta star (bias corrected MLE)					2.004
806					nu hat (MLE)	211.6	nu star (bias corrected)					191.1
807					Adjusted Level of Significance (β)	0.0407						
808					Approximate Chi Square Value (191.05, α)	160.1	Adjusted Chi Square Value (191.05, β)					158.4
809					95% Gamma Approximate UCL (use when n>=50)	7.88	95% Gamma Adjusted UCL (use when n<50)					7.964
810												
811	**Estimates of Gamma Parameters using KM Estimates**											
812					Mean (KM)	6.703	SD (KM)					3.208
813					Variance (KM)	10.29	SE of Mean (KM)					0.608
814					k hat (KM)	4.366	k star (KM)					3.938
815					nu hat (KM)	253.2	nu star (KM)					228.4
816					theta hat (KM)	1.535	theta star (KM)					1.702
817					80% gamma percentile (KM)	9.258	90% gamma percentile (KM)					11.23
818					95% gamma percentile (KM)	13.05	99% gamma percentile (KM)					16.93
819												
820	**Gamma Kaplan-Meier (KM) Statistics**											
821					Approximate Chi Square Value (228.38, α)	194.4	Adjusted Chi Square Value (228.38, β)					192.5
822					95% Gamma Approximate KM-UCL (use when n>=50)	7.874	95% Gamma Adjusted KM-UCL (use when n<50)					7.951
823												
824	**Lognormal GOF Test on Detected Observations Only**											
825					Shapiro Wilk Test Statistic	0.942	**Shapiro Wilk GOF Test**					
826					5% Shapiro Wilk Critical Value	0.918	Detected Data appear Lognormal at 5% Significance Level					
827					Lilliefors Test Statistic	0.133	**Lilliefors GOF Test**					
828					5% Lilliefors Critical Value	0.173	Detected Data appear Lognormal at 5% Significance Level					
829	**Detected Data appear Lognormal at 5% Significance Level**											
830												
831	**Lognormal ROS Statistics Using Imputed Non-Detects**											
832					Mean in Original Scale	6.67	Mean in Log Scale					1.777

833				SD in Original Scale	3.305					SD in Log Scale		0.507
834			95% t UCL (assumes normality of ROS data)		7.714					95% Percentile Bootstrap UCL		7.671
835				95% BCA Bootstrap UCL	7.778					95% Bootstrap t UCL		7.828
836				95% H-UCL (Log ROS)	8.104							
837												
838	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
839				KM Mean (logged)	1.789					KM Geo Mean		5.986
840				KM SD (logged)	0.477					95% Critical H Value (KM-Log)		1.928
841			KM Standard Error of Mean (logged)		0.0905					95% H-UCL (KM -Log)		7.977
842				KM SD (logged)	0.477					95% Critical H Value (KM-Log)		1.928
843			KM Standard Error of Mean (logged)		0.0905							
844												
845	**DL/2 Statistics**											
846	**DL/2 Normal**									**DL/2 Log-Transformed**		
847				Mean in Original Scale	6.498					Mean in Log Scale		1.707
848				SD in Original Scale	3.515					SD in Log Scale		0.618
849				95% t UCL (Assumes normality)	7.609					95% H-Stat UCL		8.478
850	**DL/2 is not a recommended method, provided for comparisons and historical reasons**											
851												
852	**Nonparametric Distribution Free UCL Statistics**											
853	**Detected Data appear Normal Distributed at 5% Significance Level**											
854												
855	**Suggested UCL to Use**											
856				95% KM (t) UCL	7.737							
857												
858	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
859	Recommendations are based upon data size, data distribution, and skewness.											
860	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
861	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
862												
863												
864	**Cobalt**											
865												
866	**General Statistics**											
867				Total Number of Observations	29					Number of Distinct Observations		21
868										Number of Missing Observations		0
869				Minimum	2					Mean		4.314
870				Maximum	9.3					Median		3.7
871				SD	2.05					Std. Error of Mean		0.381
872				Coefficient of Variation	0.475					Skewness		1.09
873												
874	**Normal GOF Test**											
875				Shapiro Wilk Test Statistic	0.869					**Shapiro Wilk GOF Test**		
876				5% Shapiro Wilk Critical Value	0.926					Data Not Normal at 5% Significance Level		
877				Lilliefors Test Statistic	0.169					**Lilliefors GOF Test**		
878				5% Lilliefors Critical Value	0.161					Data Not Normal at 5% Significance Level		
879	**Data Not Normal at 5% Significance Level**											
880												
881	**Assuming Normal Distribution**											
882	**95% Normal UCL**									**95% UCLs (Adjusted for Skewness)**		
883				95% Student's-t UCL	4.961					95% Adjusted-CLT UCL (Chen-1995)		5.022
884										95% Modified-t UCL (Johnson-1978)		4.974

	A	B	C	D	E	F	G	H	I	J	K	L
885												
886	**Gamma GOF Test**											
887	A-D Test Statistic					0.805	**Anderson-Darling Gamma GOF Test**					
888	5% A-D Critical Value					0.747	Data Not Gamma Distributed at 5% Significance Level					
889	K-S Test Statistic					0.173	**Kolmogorov-Smirnov Gamma GOF Test**					
890	5% K-S Critical Value					0.163	Data Not Gamma Distributed at 5% Significance Level					
891	**Data Not Gamma Distributed at 5% Significance Level**											
892												
893	**Gamma Statistics**											
894	k hat (MLE)					5.246	k star (bias corrected MLE)					4.726
895	Theta hat (MLE)					0.822	Theta star (bias corrected MLE)					0.913
896	nu hat (MLE)					304.2	nu star (bias corrected)					274.1
897	MLE Mean (bias corrected)					4.314	MLE Sd (bias corrected)					1.984
898							Approximate Chi Square Value (0.05)					236.8
899	Adjusted Level of Significance					0.0407	Adjusted Chi Square Value					234.7
900												
901	**Assuming Gamma Distribution**											
902	95% Approximate Gamma UCL (use when n>=50))					4.994	95% Adjusted Gamma UCL (use when n<50)					5.038
903												
904	**Lognormal GOF Test**											
905	Shapiro Wilk Test Statistic					0.932	**Shapiro Wilk Lognormal GOF Test**					
906	5% Shapiro Wilk Critical Value					0.926	Data appear Lognormal at 5% Significance Level					
907	Lilliefors Test Statistic					0.164	**Lilliefors Lognormal GOF Test**					
908	5% Lilliefors Critical Value					0.161	Data Not Lognormal at 5% Significance Level					
909	**Data appear Approximate Lognormal at 5% Significance Level**											
910												
911	**Lognormal Statistics**											
912	Minimum of Logged Data					0.693	Mean of logged Data					1.363
913	Maximum of Logged Data					2.23	SD of logged Data					0.443
914												
915	**Assuming Lognormal Distribution**											
916	95% H-UCL					5.055	90% Chebyshev (MVUE) UCL					5.392
917	95% Chebyshev (MVUE) UCL					5.888	97.5% Chebyshev (MVUE) UCL					6.577
918	99% Chebyshev (MVUE) UCL					7.93						
919												
920	**Nonparametric Distribution Free UCL Statistics**											
921	**Data appear to follow a Discernible Distribution at 5% Significance Level**											
922												
923	**Nonparametric Distribution Free UCLs**											
924	95% CLT UCL					4.94	95% Jackknife UCL					4.961
925	95% Standard Bootstrap UCL					4.943	95% Bootstrap-t UCL					5.066
926	95% Hall's Bootstrap UCL					5.023	95% Percentile Bootstrap UCL					4.955
927	95% BCA Bootstrap UCL					5.019						
928	90% Chebyshev(Mean, Sd) UCL					5.456	95% Chebyshev(Mean, Sd) UCL					5.973
929	97.5% Chebyshev(Mean, Sd) UCL					6.692	99% Chebyshev(Mean, Sd) UCL					8.102
930												
931	**Suggested UCL to Use**											
932	95% Student's-t UCL					4.961	or 95% Modified-t UCL					4.974
933	or 95% H-UCL					5.055						
934												
935	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
936	Recommendations are based upon data size, data distribution, and skewness.											

	A	B	C	D	E	F	G	H	I	J	K	L
937	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
938	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
939												
940	**ProUCL computes and outputs H-statistic based UCLs for historical reasons only.**											
941	**H-statistic often results in unstable (both high and low) values of UCL95 as shown in examples in the Technical Guide.**											
942	**It is therefore recommended to avoid the use of H-statistic based 95% UCLs.**											
943	**Use of nonparametric methods are preferred to compute UCL95 for skewed data sets which do not follow a gamma distribution.**											
944												
945												
946	**Iron**											
947												
948	**General Statistics**											
949					Total Number of Observations	29			Number of Distinct Observations	19		
950									Number of Missing Observations	0		
951					Minimum	5700			Mean	12219		
952					Maximum	27000			Median	10000		
953					SD	5627			Std. Error of Mean	1045		
954					Coefficient of Variation	0.461			Skewness	0.887		
955												
956	**Normal GOF Test**											
957					Shapiro Wilk Test Statistic	0.891			**Shapiro Wilk GOF Test**			
958					5% Shapiro Wilk Critical Value	0.926			Data Not Normal at 5% Significance Level			
959					Lilliefors Test Statistic	0.188			**Lilliefors GOF Test**			
960					5% Lilliefors Critical Value	0.161			Data Not Normal at 5% Significance Level			
961	**Data Not Normal at 5% Significance Level**											
962												
963	**Assuming Normal Distribution**											
964					**95% Normal UCL**				**95% UCLs (Adjusted for Skewness)**			
965					95% Student's-t UCL	13997			95% Adjusted-CLT UCL (Chen-1995)	14122		
966									95% Modified-t UCL (Johnson-1978)	14025		
967												
968	**Gamma GOF Test**											
969					A-D Test Statistic	0.858			**Anderson-Darling Gamma GOF Test**			
970					5% A-D Critical Value	0.747			Data Not Gamma Distributed at 5% Significance Level			
971					K-S Test Statistic	0.179			**Kolmogorov-Smirnov Gamma GOF Test**			
972					5% K-S Critical Value	0.163			Data Not Gamma Distributed at 5% Significance Level			
973	**Data Not Gamma Distributed at 5% Significance Level**											
974												
975	**Gamma Statistics**											
976					k hat (MLE)	5.316			k star (bias corrected MLE)	4.789		
977					Theta hat (MLE)	2298			Theta star (bias corrected MLE)	2551		
978					nu hat (MLE)	308.3			nu star (bias corrected)	277.8		
979					MLE Mean (bias corrected)	12219			MLE Sd (bias corrected)	5583		
980									Approximate Chi Square Value (0.05)	240.2		
981					Adjusted Level of Significance	0.0407			Adjusted Chi Square Value	238.1		
982												
983	**Assuming Gamma Distribution**											
984					95% Approximate Gamma UCL (use when n>=50))	14132			95% Adjusted Gamma UCL (use when n<50)	14256		
985												
986	**Lognormal GOF Test**											
987					Shapiro Wilk Test Statistic	0.933			**Shapiro Wilk Lognormal GOF Test**			
988					5% Shapiro Wilk Critical Value	0.926			Data appear Lognormal at 5% Significance Level			

989				Lilliefors Test Statistic	0.165	**Lilliefors Lognormal GOF Test**						
990				5% Lilliefors Critical Value	0.161	Data Not Lognormal at 5% Significance Level						
991	**Data appear Approximate Lognormal at 5% Significance Level**											
992												
993	**Lognormal Statistics**											
994				Minimum of Logged Data	8.648	Mean of logged Data	9.314					
995				Maximum of Logged Data	10.2	SD of logged Data	0.445					
996												
997	**Assuming Lognormal Distribution**											
998				95% H-UCL	14365	90% Chebyshev (MVUE) UCL	15323					
999				95% Chebyshev (MVUE) UCL	16739	97.5% Chebyshev (MVUE) UCL	18704					
1000				99% Chebyshev (MVUE) UCL	22565							
1001												
1002	**Nonparametric Distribution Free UCL Statistics**											
1003	**Data appear to follow a Discernible Distribution at 5% Significance Level**											
1004												
1005	**Nonparametric Distribution Free UCLs**											
1006				95% CLT UCL	13938	95% Jackknife UCL	13997					
1007				95% Standard Bootstrap UCL	13885	95% Bootstrap-t UCL	14199					
1008				95% Hall's Bootstrap UCL	14140	95% Percentile Bootstrap UCL	13950					
1009				95% BCA Bootstrap UCL	14076							
1010				90% Chebyshev(Mean, Sd) UCL	15354	95% Chebyshev(Mean, Sd) UCL	16774					
1011				97.5% Chebyshev(Mean, Sd) UCL	18745	99% Chebyshev(Mean, Sd) UCL	22616					
1012												
1013	**Suggested UCL to Use**											
1014				95% Student's-t UCL	13997	or 95% Modified-t UCL	14025					
1015				or 95% H-UCL	14365							
1016												
1017	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
1018	Recommendations are based upon data size, data distribution, and skewness.											
1019	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
1020	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
1021												
1022	**ProUCL computes and outputs H-statistic based UCLs for historical reasons only.**											
1023	**H-statistic often results in unstable (both high and low) values of UCL95 as shown in examples in the Technical Guide.**											
1024	**It is therefore recommended to avoid the use of H-statistic based 95% UCLs.**											
1025	**Use of nonparametric methods are preferred to compute UCL95 for skewed data sets which do not follow a gamma distribution.**											
1026												
1027												
1028	**Manganese**											
1029												
1030	**General Statistics**											
1031				Total Number of Observations	29	Number of Distinct Observations	27					
1032						Number of Missing Observations	0					
1033				Minimum	200	Mean	522.9					
1034				Maximum	1200	Median	400					
1035				SD	295.4	Std. Error of Mean	54.85					
1036				Coefficient of Variation	0.565	Skewness	0.818					
1037												
1038	**Normal GOF Test**											
1039				Shapiro Wilk Test Statistic	0.863	**Shapiro Wilk GOF Test**						
1040				5% Shapiro Wilk Critical Value	0.926	Data Not Normal at 5% Significance Level						

	A	B	C	D	E	F	G	H	I	J	K	L
1041					Lilliefors Test Statistic	0.215	**Lilliefors GOF Test**					
1042					5% Lilliefors Critical Value	0.161	Data Not Normal at 5% Significance Level					
1043	**Data Not Normal at 5% Significance Level**											
1044												
1045	**Assuming Normal Distribution**											
1046	**95% Normal UCL**						**95% UCLs (Adjusted for Skewness)**					
1047					95% Student's-t UCL	616.2				95% Adjusted-CLT UCL (Chen-1995)		622.1
1048										95% Modified-t UCL (Johnson-1978)		617.6
1049												
1050	**Gamma GOF Test**											
1051					A-D Test Statistic	1.14	**Anderson-Darling Gamma GOF Test**					
1052					5% A-D Critical Value	0.751	Data Not Gamma Distributed at 5% Significance Level					
1053					K-S Test Statistic	0.199	**Kolmogorov-Smirnov Gamma GOF Test**					
1054					5% K-S Critical Value	0.164	Data Not Gamma Distributed at 5% Significance Level					
1055	**Data Not Gamma Distributed at 5% Significance Level**											
1056												
1057	**Gamma Statistics**											
1058					k hat (MLE)	3.547				k star (bias corrected MLE)		3.203
1059					Theta hat (MLE)	147.4				Theta star (bias corrected MLE)		163.3
1060					nu hat (MLE)	205.7				nu star (bias corrected)		185.8
1061					MLE Mean (bias corrected)	522.9				MLE Sd (bias corrected)		292.2
1062										Approximate Chi Square Value (0.05)		155.2
1063					Adjusted Level of Significance	0.0407				Adjusted Chi Square Value		153.6
1064												
1065	**Assuming Gamma Distribution**											
1066				95% Approximate Gamma UCL (use when n>=50))		625.8				95% Adjusted Gamma UCL (use when n<50)		632.5
1067												
1068	**Lognormal GOF Test**											
1069					Shapiro Wilk Test Statistic	0.91	**Shapiro Wilk Lognormal GOF Test**					
1070					5% Shapiro Wilk Critical Value	0.926	Data Not Lognormal at 5% Significance Level					
1071					Lilliefors Test Statistic	0.18	**Lilliefors Lognormal GOF Test**					
1072					5% Lilliefors Critical Value	0.161	Data Not Lognormal at 5% Significance Level					
1073	**Data Not Lognormal at 5% Significance Level**											
1074												
1075	**Lognormal Statistics**											
1076					Minimum of Logged Data	5.298				Mean of logged Data		6.112
1077					Maximum of Logged Data	7.09				SD of logged Data		0.548
1078												
1079	**Assuming Lognormal Distribution**											
1080					95% H-UCL	643.8				90% Chebyshev (MVUE) UCL		688.3
1081					95% Chebyshev (MVUE) UCL	764				97.5% Chebyshev (MVUE) UCL		869.1
1082					99% Chebyshev (MVUE) UCL	1076						
1083												
1084	**Nonparametric Distribution Free UCL Statistics**											
1085	**Data do not follow a Discernible Distribution (0.05)**											
1086												
1087	**Nonparametric Distribution Free UCLs**											
1088					95% CLT UCL	613.2				95% Jackknife UCL		616.2
1089					95% Standard Bootstrap UCL	610.8				95% Bootstrap-t UCL		633.8
1090					95% Hall's Bootstrap UCL	619.2				95% Percentile Bootstrap UCL		613.8
1091					95% BCA Bootstrap UCL	617.6						
1092					90% Chebyshev(Mean, Sd) UCL	687.5				95% Chebyshev(Mean, Sd) UCL		762

	A	B	C	D	E	F	G	H	I	J	K	L
1093					97.5% Chebyshev(Mean, Sd) UCL	865.5					99% Chebyshev(Mean, Sd) UCL	1069
1094												
1095						**Suggested UCL to Use**						
1096					95% Chebyshev (Mean, Sd) UCL	762						
1097												
1098	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
1099	Recommendations are based upon data size, data distribution, and skewness.											
1100	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
1101	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
1102												

APPENDIX E
PROUCL OUTPUT

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1	**UCL Statistics for Data Sets with Non-Detects**											
2												
3	User Selected Options											
4	Date/Time of Computation	ProUCL 5.110/19/2018 10:11:34 AM										
5	From File	SS025 ProUCL Analysis_a.xls										
6	Full Precision	OFF										
7	Confidence Coefficient	95%										
8	Number of Bootstrap Operations	2000										
9												
10	**Benzo[k]fluoranthene**											
11												
12	**General Statistics**											
13	Total Number of Observations					29	Number of Distinct Observations					21
14	Number of Detects					18	Number of Non-Detects					11
15	Number of Distinct Detects					18	Number of Distinct Non-Detects					5
16	Minimum Detect					1.6	Minimum Non-Detect					2.5
17	Maximum Detect					1100	Maximum Non-Detect					3
18	Variance Detects					68484	Percent Non-Detects					37.93%
19	Mean Detects					96.42	SD Detects					261.7
20	Median Detects					16.5	CV Detects					2.714
21	Skewness Detects					3.747	Kurtosis Detects					14.58
22	Mean of Logged Detects					2.772	SD of Logged Detects					1.789
23												
24	**Normal GOF Test on Detects Only**											
25	Shapiro Wilk Test Statistic					0.399	**Shapiro Wilk GOF Test**					
26	5% Shapiro Wilk Critical Value					0.897	Detected Data Not Normal at 5% Significance Level					
27	Lilliefors Test Statistic					0.415	**Lilliefors GOF Test**					
28	5% Lilliefors Critical Value					0.202	Detected Data Not Normal at 5% Significance Level					
29	**Detected Data Not Normal at 5% Significance Level**											
30												
31	**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**											
32	KM Mean					60.53	KM Standard Error of Mean					39.28
33	KM SD					205.6	95% KM (BCA) UCL					136.8
34	95% KM (t) UCL					127.3	95% KM (Percentile Bootstrap) UCL					132
35	95% KM (z) UCL					125.1	95% KM Bootstrap t UCL					721.3
36	90% KM Chebyshev UCL					178.4	95% KM Chebyshev UCL					231.7
37	97.5% KM Chebyshev UCL					305.8	99% KM Chebyshev UCL					451.3
38												
39	**Gamma GOF Tests on Detected Observations Only**											
40	A-D Test Statistic					1.75	**Anderson-Darling GOF Test**					
41	5% A-D Critical Value					0.827	Detected Data Not Gamma Distributed at 5% Significance Level					
42	K-S Test Statistic					0.3	**Kolmogorov-Smirnov GOF**					
43	5% K-S Critical Value					0.219	Detected Data Not Gamma Distributed at 5% Significance Level					
44	**Detected Data Not Gamma Distributed at 5% Significance Level**											
45												
46	**Gamma Statistics on Detected Data Only**											
47	k hat (MLE)					0.371	k star (bias corrected MLE)					0.346
48	Theta hat (MLE)					260	Theta star (bias corrected MLE)					278.6
49	nu hat (MLE)					13.35	nu star (bias corrected)					12.46
50	Mean (detects)					96.42						
51												
52	**Gamma ROS Statistics using Imputed Non-Detects**											

	A	B	C	D	E	F	G	H	I	J	K	L
53	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
54	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
55	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
56	This is especially true when the sample size is small.											
57	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
58					Minimum	0.01				Mean		59.85
59					Maximum	1100				Median		2.5
60					SD	209.4				CV		3.499
61					k hat (MLE)	0.181				k star (bias corrected MLE)		0.186
62					Theta hat (MLE)	329.9				Theta star (bias corrected MLE)		322.4
63					nu hat (MLE)	10.52				nu star (bias corrected)		10.77
64					Adjusted Level of Significance (β)	0.0407						
65					Approximate Chi Square Value (10.77, α)	4.427				Adjusted Chi Square Value (10.77, β)		4.185
66					95% Gamma Approximate UCL (use when n>=50)	145.6				95% Gamma Adjusted UCL (use when n<50)		154
67												
68	**Estimates of Gamma Parameters using KM Estimates**											
69					Mean (KM)	60.53				SD (KM)		205.6
70					Variance (KM)	42253				SE of Mean (KM)		39.28
71					k hat (KM)	0.0867				k star (KM)		0.101
72					nu hat (KM)	5.03				nu star (KM)		5.843
73					theta hat (KM)	698				theta star (KM)		600.9
74					80% gamma percentile (KM)	42.45				90% gamma percentile (KM)		161.6
75					95% gamma percentile (KM)	351.2				99% gamma percentile (KM)		958
76												
77	**Gamma Kaplan-Meier (KM) Statistics**											
78					Approximate Chi Square Value (5.84, α)	1.56				Adjusted Chi Square Value (5.84, β)		1.433
79					95% Gamma Approximate KM-UCL (use when n>=50)	226.7				95% Gamma Adjusted KM-UCL (use when n<50)		246.9
80	95% Gamma Adjusted KM-UCL (use when k<=1 and 15 < n < 50)											
81												
82	**Lognormal GOF Test on Detected Observations Only**											
83					Shapiro Wilk Test Statistic	0.923	**Shapiro Wilk GOF Test**					
84					5% Shapiro Wilk Critical Value	0.897	Detected Data appear Lognormal at 5% Significance Level					
85					Lilliefors Test Statistic	0.155	**Lilliefors GOF Test**					
86					5% Lilliefors Critical Value	0.202	Detected Data appear Lognormal at 5% Significance Level					
87	**Detected Data appear Lognormal at 5% Significance Level**											
88												
89	**Lognormal ROS Statistics Using Imputed Non-Detects**											
90					Mean in Original Scale	60.42				Mean in Log Scale		1.809
91					SD in Original Scale	209.2				SD in Log Scale		1.916
92					95% t UCL (assumes normality of ROS data)	126.5				95% Percentile Bootstrap UCL		134.1
93					95% BCA Bootstrap UCL	184.8				95% Bootstrap t UCL		687.2
94					95% H-UCL (Log ROS)	150.1						
95												
96	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
97					KM Mean (logged)	1.943				KM Geo Mean		6.978
98					KM SD (logged)	1.734				95% Critical H Value (KM-Log)		3.498
99					KM Standard Error of Mean (logged)	0.332				95% H-UCL (KM -Log)		98.77
100					KM SD (logged)	1.734				95% Critical H Value (KM-Log)		3.498
101					KM Standard Error of Mean (logged)	0.332						
102												
103	**DL/2 Statistics**											
104	**DL/2 Normal**						**DL/2 Log-Transformed**					

105					Mean in Original Scale	60.37					Mean in Log Scale	1.841
106					SD in Original Scale	209.2					SD in Log Scale	1.847
107					95% t UCL (Assumes normality)	126.5					95% H-Stat UCL	125.2
108	**DL/2 is not a recommended method, provided for comparisons and historical reasons**											
109												
110	**Nonparametric Distribution Free UCL Statistics**											
111	**Detected Data appear Lognormal Distributed at 5% Significance Level**											
112												
113	**Suggested UCL to Use**											
114					95% KM (Chebyshev) UCL	231.7						
115												
116	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
117	Recommendations are based upon data size, data distribution, and skewness.											
118	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
119	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
120												
121	**Chrysene**											
122												
123	**General Statistics**											
124					Total Number of Observations	29					Number of Distinct Observations	25
125					Number of Detects	21					Number of Non-Detects	8
126					Number of Distinct Detects	20					Number of Distinct Non-Detects	5
127					Minimum Detect	1.1					Minimum Non-Detect	2.5
128					Maximum Detect	2700					Maximum Non-Detect	3
129					Variance Detects	358877					Percent Non-Detects	27.59%
130					Mean Detects	202.6					SD Detects	599.1
131					Median Detects	31					CV Detects	2.957
132					Skewness Detects	4.038					Kurtosis Detects	16.98
133					Mean of Logged Detects	3.148					SD of Logged Detects	2.044
134												
135	**Normal GOF Test on Detects Only**											
136					Shapiro Wilk Test Statistic	0.366					**Shapiro Wilk GOF Test**	
137					5% Shapiro Wilk Critical Value	0.908					Detected Data Not Normal at 5% Significance Level	
138					Lilliefors Test Statistic	0.406					**Lilliefors GOF Test**	
139					5% Lilliefors Critical Value	0.188					Detected Data Not Normal at 5% Significance Level	
140	**Detected Data Not Normal at 5% Significance Level**											
141												
142	**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**											
143					KM Mean	147.1					KM Standard Error of Mean	96.2
144					KM SD	505.6					95% KM (BCA) UCL	320.7
145					95% KM (t) UCL	310.7					95% KM (Percentile Bootstrap) UCL	324
146					95% KM (z) UCL	305.3					95% KM Bootstrap t UCL	1696
147					90% KM Chebyshev UCL	435.7					95% KM Chebyshev UCL	566.4
148					97.5% KM Chebyshev UCL	747.8					99% KM Chebyshev UCL	1104
149												
150	**Gamma GOF Tests on Detected Observations Only**											
151					A-D Test Statistic	1.775					**Anderson-Darling GOF Test**	
152					5% A-D Critical Value	0.843					Detected Data Not Gamma Distributed at 5% Significance Level	
153					K-S Test Statistic	0.271					**Kolmogorov-Smirnov GOF**	
154					5% K-S Critical Value	0.205					Detected Data Not Gamma Distributed at 5% Significance Level	
155	**Detected Data Not Gamma Distributed at 5% Significance Level**											
156												

	A	B	C	D	E	F	G	H	I	J	K	L
157	**Gamma Statistics on Detected Data Only**											
158					k hat (MLE)	0.316			k star (bias corrected MLE)			0.303
159					Theta hat (MLE)	640.9			Theta star (bias corrected MLE)			669.3
160					nu hat (MLE)	13.27			nu star (bias corrected)			12.71
161					Mean (detects)	202.6						
162												
163	**Gamma ROS Statistics using Imputed Non-Detects**											
164	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
165	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
166	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
167	This is especially true when the sample size is small.											
168	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
169					Minimum	0.01			Mean			146.7
170					Maximum	2700			Median			5.6
171					SD	514.6			CV			3.508
172					k hat (MLE)	0.187			k star (bias corrected MLE)			0.191
173					Theta hat (MLE)	784.9			Theta star (bias corrected MLE)			769.8
174					nu hat (MLE)	10.84			nu star (bias corrected)			11.05
175					Adjusted Level of Significance (β)	0.0407						
176					Approximate Chi Square Value (11.05, α)	4.609			Adjusted Chi Square Value (11.05, β)			4.362
177					95% Gamma Approximate UCL (use when n>=50)	351.7			95% Gamma Adjusted UCL (use when n<50)			371.6
178												
179	**Estimates of Gamma Parameters using KM Estimates**											
180					Mean (KM)	147.1			SD (KM)			505.6
181					Variance (KM)	255583			SE of Mean (KM)			96.2
182					k hat (KM)	0.0846			k star (KM)			0.0989
183					nu hat (KM)	4.909			nu star (KM)			5.735
184					theta hat (KM)	1738			theta star (KM)			1488
185					80% gamma percentile (KM)	100.4			90% gamma percentile (KM)			389.6
186					95% gamma percentile (KM)	854.3			99% gamma percentile (KM)			2350
187												
188	**Gamma Kaplan-Meier (KM) Statistics**											
189					Approximate Chi Square Value (5.73, α)	1.506			Adjusted Chi Square Value (5.73, β)			1.381
190					95% Gamma Approximate KM-UCL (use when n>=50)	560.1			95% Gamma Adjusted KM-UCL (use when n<50)			610.7
191	95% Gamma Adjusted KM-UCL (use when k<=1 and 15 < n < 50)											
192												
193	**Lognormal GOF Test on Detected Observations Only**											
194					Shapiro Wilk Test Statistic	0.955			**Shapiro Wilk GOF Test**			
195					5% Shapiro Wilk Critical Value	0.908			Detected Data appear Lognormal at 5% Significance Level			
196					Lilliefors Test Statistic	0.12			**Lilliefors GOF Test**			
197					5% Lilliefors Critical Value	0.188			Detected Data appear Lognormal at 5% Significance Level			
198	**Detected Data appear Lognormal at 5% Significance Level**											
199												
200	**Lognormal ROS Statistics Using Imputed Non-Detects**											
201					Mean in Original Scale	147			Mean in Log Scale			2.256
202					SD in Original Scale	514.5			SD in Log Scale			2.286
203					95% t UCL (assumes normality of ROS data)	309.5			95% Percentile Bootstrap UCL			325.8
204					95% BCA Bootstrap UCL	457.1			95% Bootstrap t UCL			1718
205					95% H-UCL (Log ROS)	858.9						
206												
207	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
208					KM Mean (logged)	2.373			KM Geo Mean			10.73

	A	B	C	D	E	F	G	H	I	J	K	L
209					KM SD (logged)	2.114				95% Critical H Value (KM-Log)		4.091
210					KM Standard Error of Mean (logged)	0.404				95% H-UCL (KM -Log)		513.8
211					KM SD (logged)	2.114				95% Critical H Value (KM-Log)		4.091
212					KM Standard Error of Mean (logged)	0.404						
213												
214	**DL/2 Statistics**											
215	**DL/2 Normal**						**DL/2 Log-Transformed**					
216					Mean in Original Scale	147.1				Mean in Log Scale		2.369
217					SD in Original Scale	514.5				SD in Log Scale		2.153
218					95% t UCL (Assumes normality)	309.6				95% H-Stat UCL		587.8
219	**DL/2 is not a recommended method, provided for comparisons and historical reasons**											
220												
221	**Nonparametric Distribution Free UCL Statistics**											
222	**Detected Data appear Lognormal Distributed at 5% Significance Level**											
223												
224	**Suggested UCL to Use**											
225					97.5% KM (Chebyshev) UCL	747.8						
226												
227	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
228	Recommendations are based upon data size, data distribution, and skewness.											
229	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
230	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
231												
232	**Indeno[1,2,3-cd]pyrene**											
233												
234	**General Statistics**											
235					Total Number of Observations	29				Number of Distinct Observations		21
236					Number of Detects	18				Number of Non-Detects		11
237					Number of Distinct Detects	16				Number of Distinct Non-Detects		6
238					Minimum Detect	1.1				Minimum Non-Detect		2.5
239					Maximum Detect	1000				Maximum Non-Detect		3
240					Variance Detects	56425				Percent Non-Detects		37.93%
241					Mean Detects	92.19				SD Detects		237.5
242					Median Detects	19				CV Detects		2.576
243					Skewness Detects	3.71				Kurtosis Detects		14.34
244					Mean of Logged Detects	2.844				SD of Logged Detects		1.801
245												
246	**Normal GOF Test on Detects Only**											
247					Shapiro Wilk Test Statistic	0.416	**Shapiro Wilk GOF Test**					
248					5% Shapiro Wilk Critical Value	0.897	Detected Data Not Normal at 5% Significance Level					
249					Lilliefors Test Statistic	0.394	**Lilliefors GOF Test**					
250					5% Lilliefors Critical Value	0.202	Detected Data Not Normal at 5% Significance Level					
251	**Detected Data Not Normal at 5% Significance Level**											
252												
253	**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**											
254					KM Mean	57.92				KM Standard Error of Mean		35.75
255					KM SD	187.1				95% KM (BCA) UCL		124.1
256					95% KM (t) UCL	118.7				95% KM (Percentile Bootstrap) UCL		122.3
257					95% KM (z) UCL	116.7				95% KM Bootstrap t UCL		541.7
258					90% KM Chebyshev UCL	165.2				95% KM Chebyshev UCL		213.7
259					97.5% KM Chebyshev UCL	281.2				99% KM Chebyshev UCL		413.6
260												

	A	B	C	D	E	F	G	H	I	J	K	L
261	**Gamma GOF Tests on Detected Observations Only**											
262					A-D Test Statistic	1.396	**Anderson-Darling GOF Test**					
263					5% A-D Critical Value	0.823	Detected Data Not Gamma Distributed at 5% Significance Level					
264					K-S Test Statistic	0.251	**Kolmogorov-Smirnov GOF**					
265					5% K-S Critical Value	0.218	Detected Data Not Gamma Distributed at 5% Significance Level					
266	**Detected Data Not Gamma Distributed at 5% Significance Level**											
267												
268	**Gamma Statistics on Detected Data Only**											
269					k hat (MLE)	0.393	k star (bias corrected MLE)					0.364
270					Theta hat (MLE)	234.6	Theta star (bias corrected MLE)					253
271					nu hat (MLE)	14.14	nu star (bias corrected)					13.12
272					Mean (detects)	92.19						
273												
274	**Gamma ROS Statistics using Imputed Non-Detects**											
275	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs											
276	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
277	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
278	This is especially true when the sample size is small.											
279	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
280					Minimum	0.01	Mean					57.23
281					Maximum	1000	Median					2.6
282					SD	190.6	CV					3.331
283					k hat (MLE)	0.185	k star (bias corrected MLE)					0.189
284					Theta hat (MLE)	309.5	Theta star (bias corrected MLE)					303.2
285					nu hat (MLE)	10.72	nu star (bias corrected)					10.95
286					Adjusted Level of Significance (β)	0.0407						
287					Approximate Chi Square Value (10.95, α)	4.543	Adjusted Chi Square Value (10.95, β)					4.298
288					95% Gamma Approximate UCL (use when n>=50)	137.9	95% Gamma Adjusted UCL (use when n<50)					145.8
289												
290	**Estimates of Gamma Parameters using KM Estimates**											
291					Mean (KM)	57.92	SD (KM)					187.1
292					Variance (KM)	34999	SE of Mean (KM)					35.75
293					k hat (KM)	0.0958	k star (KM)					0.109
294					nu hat (KM)	5.559	nu star (KM)					6.317
295					theta hat (KM)	604.3	theta star (KM)					531.8
296					80% gamma percentile (KM)	45.17	90% gamma percentile (KM)					159.2
297					95% gamma percentile (KM)	334	99% gamma percentile (KM)					881.2
298												
299	**Gamma Kaplan-Meier (KM) Statistics**											
300					Approximate Chi Square Value (6.32, α)	1.804	Adjusted Chi Square Value (6.32, β)					1.664
301					95% Gamma Approximate KM-UCL (use when n>=50)	202.8	95% Gamma Adjusted KM-UCL (use when n<50)					219.9
302	95% Gamma Adjusted KM-UCL (use when k<=1 and 15 < n < 50)											
303												
304	**Lognormal GOF Test on Detected Observations Only**											
305					Shapiro Wilk Test Statistic	0.951	**Shapiro Wilk GOF Test**					
306					5% Shapiro Wilk Critical Value	0.897	Detected Data appear Lognormal at 5% Significance Level					
307					Lilliefors Test Statistic	0.137	**Lilliefors GOF Test**					
308					5% Lilliefors Critical Value	0.202	Detected Data appear Lognormal at 5% Significance Level					
309	**Detected Data appear Lognormal at 5% Significance Level**											
310												
311	**Lognormal ROS Statistics Using Imputed Non-Detects**											
312					Mean in Original Scale	57.8	Mean in Log Scale					1.862

	A	B	C	D	E	F	G	H	I	J	K	L
313					SD in Original Scale	190.4					SD in Log Scale	1.932
314				95% t UCL (assumes normality of ROS data)		118					95% Percentile Bootstrap UCL	125.4
315					95% BCA Bootstrap UCL	173.2					95% Bootstrap t UCL	508.3
316					95% H-UCL (Log ROS)	167						
317												
318	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
319					KM Mean (logged)	1.976					KM Geo Mean	7.213
320					KM SD (logged)	1.781					95% Critical H Value (KM-Log)	3.57
321				KM Standard Error of Mean (logged)		0.348					95% H-UCL (KM -Log)	117.2
322					KM SD (logged)	1.781					95% Critical H Value (KM-Log)	3.57
323				KM Standard Error of Mean (logged)		0.348						
324												
325	**DL/2 Statistics**											
326	**DL/2 Normal**						**DL/2 Log-Transformed**					
327					Mean in Original Scale	57.75					Mean in Log Scale	1.887
328					SD in Original Scale	190.4					SD in Log Scale	1.877
329				95% t UCL (Assumes normality)		117.9					95% H-Stat UCL	143.7
330	**DL/2 is not a recommended method, provided for comparisons and historical reasons**											
331												
332	**Nonparametric Distribution Free UCL Statistics**											
333	**Detected Data appear Lognormal Distributed at 5% Significance Level**											
334												
335	**Suggested UCL to Use**											
336					95% KM (Chebyshev) UCL	213.7						
337												
338	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
339	Recommendations are based upon data size, data distribution, and skewness.											
340	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
341	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
342												

UCL Statistics for Data Sets with Non-Detects

User Selected Options	
Date/Time of Computation	ProUCL 5.112/17/2018 11:57:34 PM
From File	SS025 DDE and DDT 95 UCL JMS 12172018 SB01 Primary Removed and dups averaged.xls
Full Precision	ON
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

4,4'-DDE

General Statistics

Total Number of Observations	29.000000	Number of Distinct Observations	21.000000
Number of Detects	9.0000000	Number of Non-Detects	20.000000
Number of Distinct Detects	8.0000000	Number of Distinct Non-Detects	13.000000
Minimum Detect	0.3600000	Minimum Non-Detect	0.6800000
Maximum Detect	3.0000000	Maximum Non-Detect	0.8800000
Variance Detects	0.7918194	Percent Non-Detects	68.965517%
Mean Detects	1.2977778	SD Detects	0.8898424
Median Detects	1.1000000	CV Detects	0.6856662
Skewness Detects	1.0091441	Kurtosis Detects	0.3272402
Mean of Logged Detects	0.0411426	SD of Logged Detects	0.7239501

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.8885765	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.8290000	Detected Data appear Normal at 5% Significance Level
Lilliefors Test Statistic	0.2320492	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.2744000	Detected Data appear Normal at 5% Significance Level

Detected Data appear Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

KM Mean	0.7200000	KM Standard Error of Mean	0.1282572
KM SD	0.6124100	95% KM (BCA) UCL	0.9820690
95% KM (t) UCL	0.9381823	95% KM (Percentile Bootstrap) UCL	0.9535862
95% KM (z) UCL	0.9309643	95% KM Bootstrap t UCL	1.0362417
90% KM Chebyshev UCL	1.1047716	95% KM Chebyshev UCL	1.2790602
97.5% KM Chebyshev UCL	1.5209660	99% KM Chebyshev UCL	1.9961431

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.2822295	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.7284885	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.1535973	**Kolmogorov-Smirnov GOF**
5% K-S Critical Value	0.2819881	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Gamma Statistics on Detected Data Only

k hat (MLE)	2.4314678	k star (bias corrected MLE)	1.6950526
Theta hat (MLE)	0.5337425	Theta star (bias corrected MLE)	0.7656268
nu hat (MLE)	43.766421	nu star (bias corrected)	30.510947
Mean (detects)	1.2977778		

Gamma ROS Statistics using Imputed Non-Detects

GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs

54	GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)											
55	For such situations, GROS method may yield incorrect values of UCLs and BTVs											
56	This is especially true when the sample size is small.											
57	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates											
58						Minimum	0.0100000				Mean	0.6258789
59						Maximum	3.0000000				Median	0.3600000
60						SD	0.6798566				CV	1.0862430
61						k hat (MLE)	1.1303561				k star (bias corrected MLE)	1.0364112
62						Theta hat (MLE)	0.5537006				Theta star (bias corrected MLE)	0.6038905
63						nu hat (MLE)	65.560652				nu star (bias corrected)	60.111849
64						Adjusted Level of Significance (β)	0.0407000					
65						Approximate Chi Square Value (60.11, α)	43.282991				Adjusted Chi Square Value (60.11, β)	42.429484
66						95% Gamma Approximate UCL (use when n>=50)	0.8692268				95% Gamma Adjusted UCL (use when n<50)	0.8867121
67												
68	**Estimates of Gamma Parameters using KM Estimates**											
69						Mean (KM)	0.7200000				SD (KM)	0.6124100
70						Variance (KM)	0.3750460				SE of Mean (KM)	0.1282572
71						k hat (KM)	1.3822305				k star (KM)	1.2622297
72						nu hat (KM)	80.169371				nu star (KM)	73.209321
73						theta hat (KM)	0.5208972				theta star (KM)	0.5704192
74						80% gamma percentile (KM)	1.1343885				90% gamma percentile (KM)	1.5652271
75						95% gamma percentile (KM)	1.9886155				99% gamma percentile (KM)	2.9556792
76												
77	**Gamma Kaplan-Meier (KM) Statistics**											
78						Approximate Chi Square Value (73.21, α)	54.506092				Adjusted Chi Square Value (73.21, β)	53.541837
79						95% Gamma Approximate KM-UCL (use when n>=50)	0.9670609				95% Gamma Adjusted KM-UCL (use when n<50)	0.9844771
80												
81	**Lognormal GOF Test on Detected Observations Only**											
82						Shapiro Wilk Test Statistic	0.9471192	**Shapiro Wilk GOF Test**				
83						5% Shapiro Wilk Critical Value	0.8290000	Detected Data appear Lognormal at 5% Significance Level				
84						Lilliefors Test Statistic	0.1964886	**Lilliefors GOF Test**				
85						5% Lilliefors Critical Value	0.2744000	Detected Data appear Lognormal at 5% Significance Level				
86	**Detected Data appear Lognormal at 5% Significance Level**											
87												
88	**Lognormal ROS Statistics Using Imputed Non-Detects**											
89						Mean in Original Scale	0.7235672				Mean in Log Scale	-0.534223
90						SD in Original Scale	0.6231586				SD in Log Scale	0.5867786
91						95% t UCL (assumes normality of ROS data)	0.9204181				95% Percentile Bootstrap UCL	0.9152455
92						95% BCA Bootstrap UCL	0.9983355				95% Bootstrap t UCL	1.1001451
93						95% H-UCL (Log ROS)	0.8711083					
94												
95	**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**											
96						KM Mean (logged)	-0.537405				KM Geo Mean	0.5842625
97						KM SD (logged)	0.5692029				95% Critical H Value (KM-Log)	2.0051155
98						KM Standard Error of Mean (logged)	0.1453645				95% H-UCL (KM -Log)	0.8523822
99						KM SD (logged)	0.5692029				95% Critical H Value (KM-Log)	2.0051155
100						KM Standard Error of Mean (logged)	0.1453645					
101												
102	**DL/2 Statistics**											
103	**DL/2 Normal**							**DL/2 Log-Transformed**				
104						Mean in Original Scale	0.6577586				Mean in Log Scale	-0.674646
105						SD in Original Scale	0.6461598				SD in Log Scale	0.6253650
106						95% t UCL (Assumes normality)	0.8618754				95% H-Stat UCL	0.7896911

107	**DL/2 is not a recommended method, provided for comparisons and historical reasons**											
108												
109	**Nonparametric Distribution Free UCL Statistics**											
110	**Detected Data appear Normal Distributed at 5% Significance Level**											
111												
112	**Suggested UCL to Use**											
113					95% KM (t) UCL	0.9381823						
114												
115	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
116	Recommendations are based upon data size, data distribution, and skewness.											
117	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
118	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
119												
120	**4,4'-DDT**											
121												
122	**General Statistics**											
123					Total Number of Observations	29.000000			Number of Distinct Observations	11.000000		
124					Number of Detects	6.0000000			Number of Non-Detects	23.000000		
125					Number of Distinct Detects	6.0000000			Number of Distinct Non-Detects	5.0000000		
126					Minimum Detect	0.6800000			Minimum Non-Detect	1.7000000		
127					Maximum Detect	5.1000000			Maximum Non-Detect	2.2000000		
128					Variance Detects	3.5808167			Percent Non-Detects	79.310345%		
129					Mean Detects	2.4883333			SD Detects	1.8923046		
130					Median Detects	1.7000000			CV Detects	0.7604707		
131					Skewness Detects	0.7607462			Kurtosis Detects	-1.755628		
132					Mean of Logged Detects	0.6522830			SD of Logged Detects	0.8022480		
133												
134	**Normal GOF Test on Detects Only**											
135					Shapiro Wilk Test Statistic	0.8410841			**Shapiro Wilk GOF Test**			
136					5% Shapiro Wilk Critical Value	0.7880000			Detected Data appear Normal at 5% Significance Level			
137					Lilliefors Test Statistic	0.2479654			**Lilliefors GOF Test**			
138					5% Lilliefors Critical Value	0.3245000			Detected Data appear Normal at 5% Significance Level			
139	**Detected Data appear Normal at 5% Significance Level**											
140												
141	**Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs**											
142					KM Mean	1.3452138			KM Standard Error of Mean	0.2488033		
143					KM SD	1.0081997			95% KM (BCA) UCL	1.7978056		
144					95% KM (t) UCL	1.7684608			95% KM (Percentile Bootstrap) UCL	1.8310345		
145					95% KM (z) UCL	1.7544588			95% KM Bootstrap t UCL	1.9083807		
146					90% KM Chebyshev UCL	2.0916238			95% KM Chebyshev UCL	2.4297223		
147					97.5% KM Chebyshev UCL	2.8989900			99% KM Chebyshev UCL	3.8207756		
148												
149	**Gamma GOF Tests on Detected Observations Only**											
150					A-D Test Statistic	0.3851953			**Anderson-Darling GOF Test**			
151					5% A-D Critical Value	0.7039815			Detected data appear Gamma Distributed at 5% Significance Level			
152					K-S Test Statistic	0.2263136			**Kolmogorov-Smirnov GOF**			
153					5% K-S Critical Value	0.3357285			Detected data appear Gamma Distributed at 5% Significance Level			
154	**Detected data appear Gamma Distributed at 5% Significance Level**											
155												
156	**Gamma Statistics on Detected Data Only**											
157					k hat (MLE)	2.0793339			k star (bias corrected MLE)	1.1507781		
158					Theta hat (MLE)	1.1966973			Theta star (bias corrected MLE)	2.1623052		
159					nu hat (MLE)	24.952007			nu star (bias corrected)	13.809337		

160					Mean (detects)	2.4883333						
161												
162					**Gamma ROS Statistics using Imputed Non-Detects**							
163					GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs							
164					GROS may not be used when kstar of detects is small such as <1.0, especially when the sample size is small (e.g., <15-20)							
165					For such situations, GROS method may yield incorrect values of UCLs and BTVs							
166					This is especially true when the sample size is small.							
167					For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates							
168					Minimum	0.0100000				Mean	1.3100903	
169					Maximum	5.1000000				Median	1.1397605	
170					SD	1.1677093				CV	0.8913197	
171					k hat (MLE)	1.2647759				k star (bias corrected MLE)	1.1569256	
172					Theta hat (MLE)	1.0358280				Theta star (bias corrected MLE)	1.1323894	
173					nu hat (MLE)	73.357004				nu star (bias corrected)	67.101682	
174					Adjusted Level of Significance (β)	0.0407000						
175					Approximate Chi Square Value (67.10, α)	49.249487				Adjusted Chi Square Value (67.10, β)	48.335533	
176					95% Gamma Approximate UCL (use when n>=50)	1.7849782				95% Gamma Adjusted UCL (use when n<50)	1.8187295	
177												
178					**Estimates of Gamma Parameters using KM Estimates**							
179					Mean (KM)	1.3452138				SD (KM)	1.0081997	
180					Variance (KM)	1.0164666				SE of Mean (KM)	0.2488033	
181					k hat (KM)	1.7802849				k star (KM)	1.6191060	
182					nu hat (KM)	103.25652				nu star (KM)	93.908148	
183					theta hat (KM)	0.7556171				theta star (KM)	0.8308374	
184					80% gamma percentile (KM)	2.0637475				90% gamma percentile (KM)	2.7516046	
185					95% gamma percentile (KM)	3.4163171				99% gamma percentile (KM)	4.9099558	
186												
187					**Gamma Kaplan-Meier (KM) Statistics**							
188					Approximate Chi Square Value (93.91, α)	72.558977				Adjusted Chi Square Value (93.91, β)	71.438183	
189					95% Gamma Approximate KM-UCL (use when n>=50)	1.7410187				95% Gamma Adjusted KM-UCL (use when n<50)	1.7683336	
190												
191					**Lognormal GOF Test on Detected Observations Only**							
192					Shapiro Wilk Test Statistic	0.9265463				**Shapiro Wilk GOF Test**		
193					5% Shapiro Wilk Critical Value	0.7880000				Detected Data appear Lognormal at 5% Significance Level		
194					Lilliefors Test Statistic	0.1952908				**Lilliefors GOF Test**		
195					5% Lilliefors Critical Value	0.3245000				Detected Data appear Lognormal at 5% Significance Level		
196					**Detected Data appear Lognormal at 5% Significance Level**							
197												
198					**Lognormal ROS Statistics Using Imputed Non-Detects**							
199					Mean in Original Scale	1.3783871				Mean in Log Scale	0.1319401	
200					SD in Original Scale	1.0667921				SD in Log Scale	0.5833727	
201					95% t UCL (assumes normality of ROS data)	1.7153783				95% Percentile Bootstrap UCL	1.7110391	
202					95% BCA Bootstrap UCL	1.8303155				95% Bootstrap t UCL	1.9968403	
203					95% H-UCL (Log ROS)	1.6896892						
204												
205					**Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution**							
206					KM Mean (logged)	0.1413392				KM Geo Mean	1.1518152	
207					KM SD (logged)	0.4929515				95% Critical H Value (KM-Log)	1.9409713	
208					KM Standard Error of Mean (logged)	0.1801196				95% H-UCL (KM -Log)	1.5583987	
209					KM SD (logged)	0.4929515				95% Critical H Value (KM-Log)	1.9409713	
210					KM Standard Error of Mean (logged)	0.1801196						
211												
212					**DL/2 Statistics**							

	A	B	C	D	E	F	G	H	I	J	K	L
213	**DL/2 Normal**						**DL/2 Log-Transformed**					
214					Mean in Original Scale	1.2527586				Mean in Log Scale		0.0759079
215					SD in Original Scale	1.0273437				SD in Log Scale		0.4565562
216					95% t UCL (Assumes normality)	1.5772883				95% H-Stat UCL		1.4121759
217	**DL/2 is not a recommended method, provided for comparisons and historical reasons**											
218												
219	**Nonparametric Distribution Free UCL Statistics**											
220	**Detected Data appear Normal Distributed at 5% Significance Level**											
221												
222	**Suggested UCL to Use**											
223					95% KM (t) UCL	1.7684608						
224												
225	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
226	Recommendations are based upon data size, data distribution, and skewness.											
227	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
228	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											